FUNCTIONAL SERVICING AND STORMWATER MANAGEMENT REPORT

BRIDLE PARK

STAYNER
TOWNSHIP OF CLEARVIEW
COUNTY OF SIMCOE

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CROZIER

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TABLE OF CONTENTS

1.0 INTRODUCTION 5

2.0 SITE DESCRIPTION 5

2.1 Existing Land Uses 5
2.2 Surrounding Land Uses 6

3.0 BACKGROUND 6

4.0 SITE GRADING 6

5.0 SANITARY SERVICING 7

5.1 Existing Sanitary Servicing 7
5.2 Proposed Sanitary Servicing 7
5.2.1 External Sanitary Trunk Sewer 8

6.0 WATER SERVICING 8

6.1 Existing Water Servicing 8
6.2 Proposed Water Supply Servicing Strategy 9
6.3 Fire Flow Estimate 10

7.0 STORMWATER MANAGEMENT 11

7.1 Stormwater Management Design Criteria 11
7.2 Existing Drainage Conditions 12
7.3 Proposed Drainage Conditions 14
7.4 Hydrologic Modelling 15
7.4.1 Pre-Development Model Set-Up 16
7.4.2 Post-Development Model Set-Up 17

7.5 Quality and Erosion Control Analysis 20
7.5.1 STM System 1 (SWMF) 20
7.5.2 STM System 2 20
7.5.3 STM System 3 20

7.6 External and Uncontrolled Drainage Management 20
7.6.1 Engineered Drainage Swale 20
7.6.2 STM System 3 21

8.0 PRELIMINARY LOW IMPACT DEVELOPMENT (LID) STRATEGY 22

9.0 EROSION AND SEDIMENT CONTROLS 23

10.0 UTILITIES 23

11.0 CONCLUSIONS AND RECOMMENDATIONS 24

LIST OF TABLES

Table 1: Sanitary Design Criteria – Township of Clearview
Table 2: Drinking Water System Design Criteria
Table 3: Summary of Pre-Development Hydrologic Parameters
Table 4: Summary of Pre-Development Peak Flow Rates
Table 5: Summary of Post-Development Hydrologic Parameters
Table 6: Operating Characteristics and Provided Volume (SWMF)
Table 7: Comparison of Pre-Development and Post-Development Peak Flow Rates
Table 8: Comparison of Pre-Development and Post-Development Peak Flow Rates (Interim Scenario)
Table 9: SWMF Quality and Erosion Control
Table 10: Engineered Swale Parameters

LIST OF APPENDICES

Appendix A: Sanitary Flow Calculations
Appendix B: Water Demand Calculations
Appendix C: Fire Flow Calculations
Appendix D: Hydrologic Parameter Sheets
Appendix E-1: Visual OTTHYMO Files (Ultimate Conditions)
Appendix E-2: Visual OTTHYMO Files (Interim Conditions)
Appendix F-1: SWMF Calculations (Ultimate Conditions)
Appendix F-2: SWMF Calculations (Interim Conditions)
Appendix G: External Flow Management

LIST OF FIGURES

Figure 1: Site Location
Figure 2: Draft Plan
Figure 3: Phasing Plan
Figure 4A-B: General Servicing Plan
Figure 5A: External Servicing Plan
Figure 5B-H: External Servicing Plan & Profiles
Figure 6: Pre-Development Drainage Plan
Figure 7: Grading Plan
Figure 8: Post Development Drainage Plan
Figure 9: SWMF Plan

1.0 Introduction

C.F Crozier & Associates Inc. (Crozier) was retained by 1000983019 Ontario Inc. to complete an updated Functional Servicing and Stormwater Management Report to support a Redline Draft Plan Revision and a Zoning By-Law Amendment for the proposed residential development located within Part of Lot 26, Concession 3 in the Township of Clearview (Township) within the County of Simcoe (County). The proposed residential development will herein be referred to as the Subject Development/Subject Site.

The Subject Development is approximately 68.63 ha, and the existing lands are currently a mix of forested and agricultural lands. Currently there is a residential dwelling along with surrounding agricultural buildings on the east side of the Subject Site located at the municipal address of 7535 ON-26, Stayner. Refer to **Figure 1** for the Site Location Plan.

Per the proposed Draft Plan (MHBC, June 18, 2026), the Subject Development is comprised of 523 single detached residential units, 4 semi-detached residential units, 164 townhouse units, a school block, parkland, open space, a stormwater management facility, environmental protection area, and right-of-way allowances with roads, sidewalk, and parking. The proposed Draft Plan has been provided as **Figure 2** and is anticipated to be divided into three (3) phases, as presented in **Figure 3**.

Crozier is part of a team of consultants providing support for this development. Other members of the consulting team include:

- MHBC (Planner)
- Detritus Consulting Ltd. (Archaeological)
- Azimuth Environmental Consulting Inc. (Environmental)
- AllRock Consulting Ltd. (Geotechnical)
- Crozier (Civil and Transportation Engineering, Hydrogeology).

These consultants have prepared studies/plans to assist with the Draft Plan Redline application. This report prepared by Crozier should be read in conjunction with the work of the other consulting team members. This Functional Servicing and Stormwater Management Report has been prepared to outline the proposed servicing, grading, and stormwater management strategy for the Subject Development. The reader is directed to the Floodplain Report (Crozier, August 2026), Hydrogeological Report (Crozier, July 2026) and Transportation Impact Study (Crozier, July 2026) provided under a separate cover for additional details regarding the Subject Lands.

2.0 Site Description

2.1 Existing Land Uses

The proposed development lands are currently utilized for agricultural activities, with existing structures on-site consisting of a single-storey residential dwelling along with several barns and sheds in the easternmost portion of the site.

The eastern two-thirds of the subject property are free of vegetation and are currently cultivated for agricultural or rural uses. The western third of the site contains woodland and notable environmental features. This treed area has been designated as an Environmental Protection Area and is not proposed for development.

2.2 Surrounding Land Uses

Surrounding land uses include the future Clearview Garden Estates development to the north at 6237 Sideroad 27/28, Stayner, which is progressing toward a draft plan application and is under the same ownership as Bridle Park, allowing for servicing coordination between the two applications. Lands to the south include existing residential areas, the Stayner Community Centre, and the 211 North Street Draft Plan. Red Oak Trail is proposed to extend through the Bridle Park Draft Plan, and the Township has requested a road connection through Legion Park to create an intersection with North Street and East Street. The 211 North Street Draft Plan includes approximately 2.0 ha, 37 residential units, and a public right-of-way connection to the Subject Development, which will require coordination with the owners. Lands to the west consist of woodlands and wetlands, while the Rail Trail and Highway 26 are located adjacent to the east side of the site.

3.0 Background

The current Draft Plan for Bridle Park dated July 6, 2022, consists of 858 units has approved by the Township of Clearview on September 12, 2022, for a 5-year extension. The 2022 Draft Plan addressed some of the draft plan conditions that were imposed in the 2018 draft plan approval.

The Subject Development is currently zoned as Environmental Protection (EP), Development Area (DA)/(DA-2), Residential Large Lot (RS1). There is a portion of the site that is regulated by the Nottawasaga Valley Conservation Authority (NVCA) due to the onsite creeks and wetlands.

Several documents/plans were reviewed during this engineering assessment which include:

- Township of Clearview Engineering Standards (October 2025)
- Addendum to Long -Term Water Supply to Clearview, Schedule B Class EA – Community of Stayner (Township of Clearview, February 2021)
- Scoped Environmental Impact Statement for the Bridle Park Inc. Site, Stayner, Ontario (Dillon Consulting Limited, August 2013)
- Bridle Park II Development Functional Servicing Report (TMIG, August 2013)
- Phase I Environmental Site Assessment, Part of Lot 26, Concession 3, Stayner, Ontario (Pinchin Environmental, February 2010)
- Long Term Sewage Collection and Treatment for Stayner, Schedule B Municipal Class Environmental Assessment (R.J. Burnside & Associates Limited, July 2009)

4.0 Site Grading

The site grading will be influenced by the existing and proposed drainage systems within the Subject Development. Grading will tie into the existing elevations along the property limits, environmental and watercourse buffers, floodplain limits and will match the pre-development overland stormwater flow patterns, where possible. Grading will also provide sufficient cover for the proposed water, sanitary, and storm servicing.

Due to high groundwater levels across the site, proposed grades have been set above existing grade, where possible. Best efforts were also utilized to minimize cut/fill volumes across the site and reduce the area of uncontrolled stormwater runoff to adjacent municipal roadways. Drainage will be directed away from adjacent lands using interceptor swales and drainage infrastructure.

5.0 Sanitary Servicing

This section outlines the existing sanitary servicing conditions and describes the proposed sanitary servicing strategy for the Subject Property.

5.1 Existing Sanitary Servicing

Existing municipal sanitary infrastructure near the Subject Development includes a sanitary sewer along Highway 26 near the southern limits of the site, as well as along Red Oak Trail and North Street.

Sanitary flows from the surrounding areas are currently conveyed via gravity sewer to the south and east, eventually discharging to a sewage pumping station (SPS) situated north of Weir Street and west of Dominion Drive. Flows are then directed to the Stayner Water Pollution Control Plant (WPCP) via forcemain for treatment.

In 2015, the Township installed the Emerald Creek Trunk sewer from the existing sanitary Pumping Station (SPS No.2) located 5825 Sideroad 27/28 to the limits of the future Emerald Creek Subdivision located at 7662 Highway 26. According to the Mowat Street/Emerald Creek Trunk Sewer Design Brief completed by R.J. Burnside dated July 18, 2014, the Emerald Creek trunk sewer consists of 36 m of 525 mm diameter gravity sewer and 600 m of 450 mm diameter gravity sewer. The sewer was sized to accommodate flows from the Bridle Park lands. As per the Mowat Street & Emerald Creek Sanitary Trunk Sewer & Emerald Creek Watermain Loop, R.J Burnisde As-Built Drawings dated April 20, 2014, the invert elevation of the sanitary sewer near the limits of the Emerald Creek Subdivision is 202.86 m.

SPS No.2 discharges sewage to the Wasaga Beach Water Pollution Control Plant (WPCP) Plant using twin forcemains that are located on Sideroad 27/28 to County Road to a SPS located on Knox Road. Pursuant to Township of Clearview By-Law 14-77, the Township of Clearview established an agreement with the Town of Wasaga Beach to jointly manage the sewage collection system serving the Stayner community. This arrangement specifically addresses developments in the northern and eastern regions of Stayner, including the Bridle Park area.

5.2 Proposed Sanitary Servicing

The proposed sanitary strategy for the Subject Development would be service the lands with gravity sanitary sewer with flows discharging from north to south which would outlet at the future sanitary sewer at the Street 'L' and Highway 26 intersection. The internal sanitary sewer layout has been provided on the General Servicing Plan as shown on **Figure 4A-B**.

Sanitary demand was calculated for a total of 523 single-residential units, 4 semi-detached residential units, 164 townhouse units, and a school block accounting for a total area of 39.28 ha including roadways. The single dwelling equivalent (SDE) for the Subject Development was calculated to be 658 SDE. The total daily sanitary design flow was calculated in accordance with the Township of Clearview Engineering Standards section F1.03 – Residential Sewage Flows. Township of Clearview sanitary design criteria can be found below in **Table 1.**

Table 1: Sanitary Design Criteria - Township of Clearview

Criteria	Standard
Average Flow Rate (L/cap/day)	400
Infiltration (L/s/ha)	0.23
Residential Density (PPU)	3.0 – Single Detached 3.0 – Semi-Detached 2.4 – Townhouse

The average daily flow was estimated to be 10.3 L/s, with an estimated total peak daily flow of 45.91 L/s. External total peak daily flows from the future development lands (Clearview Garden Estates Development) are estimated to be 28.76 L/s. Please refer to **Appendix A** for detailed sanitary demand calculations.

5.2.1 External Sanitary Trunk Sewer

Based on the preliminary design of the required external gravity sanitary infrastructure from the existing sanitary sewer stub within the Public Works Yard, a 450 mm diameter sewer is proposed to be extended along Emerald Creek Boulevard, and Birchwood Boulevard within the future Emerald Creek Development and then along Wyant Road. A 375 mm diameter sanitary sewer would then be extended along Highway 26 to Street 'L' within the proposed development. The final design of the external sanitary sewer and coordination with the owner of the Emerald Creek Development is assumed to be completed by the Township's Engineer, R.J. Burnside. The proposed external sanitary sewer layout is shown in the External Servicing Plan in **Figure 5A.** Plan and profiles of the external servicing are shown in **Figures 5B to 5H**. A preliminary sanitary sewer design sheet was completed for the external sanitary route which includes flows from future development areas noted in the Mowat Street/Emerald Creek Trunk Sewer Design Brief (Burnside, July 18, 2014) as well as potential infill west of Highway 26 from 7587 Highway 26 to 7625 Highway 26. Please refer to **Appendix A** for the sanitary design sheet.

6.0 Water Servicing

6.1 Existing Water Servicing

The subject site is currently used for agricultural practices. Buildings on the site are limited to a 1-storey dwelling and several barns and sheds on the east side of the site, with access off Highway 26. The existing buildings are serviced by a well.

The residential subdivision to the south of the subject site is serviced by the municipal water distribution network. A 150 mm diameter watermain terminates adjacent to the site at the north limit of Red Oak Trail. An existing 200 mm diameter watermain is also present in the Highway 26 ROW near North Street.

In March 2023, the Township notified all landowners within the Stayner settlement area that Stayner municipal water had reached its current available capacity. The Township was planning for this issue and in February 2021 it completed a Class EA Addendum for long term water supply for Stayner. The result of the EA was to construct new wells at 1585 Klondike Park Road and extend a 600 mm diameter trunk watermain approximately 7.5 km from 5833 Simcoe County Road 96 (Township Public Works Yard) along County Road 96 to County Road 7, north on County Road 7 to Concession 12 Sunnidale Road then easterly along Concession 12 Sunnidale Road to the new Well House and Pump Station located at 1585 Concession 12, Sunnidale Road (approx. 60m east of Klondike Park Road). The water treatment plant and storage facility at 1585 Klondike Park Road is currently under construction and is anticipated to be completed by the end of 2027. The watermain installation began in 2025 and is anticipated to be completed by the end of 2027.

On October 31st, 2024, the Township entered into a Development Charges Early Prepayment, Project Funding and Water Capacity Allocation Agreement with The Cortel Group, MacPherson Builders and The Kingsmen Group. One of the conditions of the agreement outlines project funding for this Klondike Park water project. Each developer is to contribute $10,077,450 as early payment for Development Charges and future residential water allocation. Therefore, the Subject Development is anticipated to have some capacity for early phases of the development prior to the new watermain and treatment plant being completed. Timing of the interim allocation to be discussed with the Township subject to progress of the external well house, and watermain installation.

6.2 Proposed Water Supply Servicing Strategy

Potable water servicing for the Subject Development will be provided through connections to the existing municipal watermain network. The first connection will link the proposed watermain along Street J to the existing 150 mm diameter watermain on Red Oak Trail.

To service the development, a 300 mm diameter watermain along Highway 26 will be required from the Subject Development to the future Emerald Creek Blvd. This was identified in the Development Charges Background Study (Watson, 2024) in Table 5-8 Project 2. A 200 mm diameter watermain is also proposed along Wyant Road and through the Emerald Creek Subdivision to connect to the 200 mm diameter watermain stub at the Public Works Yard. This 200 mm diameter watermain is proposed to follow the same route as the proposed sanitary trunk sewer but alternative routes can be explored with coordination with the Township. Sizing, routing and phasing of the external watermain infrastructure are to be confirmed with the Township using their water model. The internal watermain layout is shown on the General Servicing Plan in **Figure 4A-B**. The external watermain is shown on the External Servicing Plan in **Figure 5A**. Plan and profiles of the external servicing are shown in **Figures 5B to 5H**.

A future watermain connection will be provided from the watermain stub at the south end of Street D, through Legion Park to the existing watermain on North Street. The timing of this connection will be coordinated with Township. The second future connection will be provided from the proposed watermain stub at the end of Street J through the North Street subdivision to North Street.

Water Demands for the Subject Development have been calculated for a total of 523 single-residential units, 4 semi-detached residential units, 164 townhouse units, and a school block. The single dwelling equivalent (SDE) for the Subject Development was calculated to be 658 SDE. The average daily flow (residential and institutional), max daily demand flow, and peak hour demand flow was calculated in alignment with the Township of Clearview Engineering Standards, Section D1.09 – Domestic Demand, as well as Table 3-1 of the Ministry of the Environment, Conservation and Parks (MECP) Design Guidelines for Drinking Water Systems. Applicable design criteria have been outlined in **Table 2** below.

Table 2: Drinking Water System Design Criteria

Criteria	Standard
Average Residential Flow Rate (L/cap/day)	400
Average Institutional Flow Rate (L/cap/day)	140
Maximum Day/Peak Hour Factors	2.25/3.38
Residential Density (PPU)	3.0 – Single Detached 3.0 – Semi-Detached 2.4 – Townhouse

Using the design criteria put forth in the above table, the following water demands have been calculated for the Subject Development:

- Average Daily Residential Demand – 9.14 L/s
- Average Daily Institutional Demand – 1.13 L/s
- Maximum Daily Demand – 23.13 L/s
- Peak Hour Demand – 34.74 L/s

Please refer to **Appendix B** for detailed water demand calculations.

6.3 Fire Flow Estimate

In accordance with the Township of Clearview Standards, the Water Supply for Fire Protection, A Guide to Recommended Practice (Fire Underwriters Survey (FUS), 2020) is used to estimate the fire flows for the Subject Development. The estimated fire flows are based on the building floor area, the type of construction, and the structure exposure distance.

An investigation of two (2) high risk scenarios, a townhouse block (Block 541) and the school block (Block 561) was completed to determine the required fire flow. The townhouse block is located in the central portion of the Subject Development, containing a six (6) unit townhouse building that is bounded by townhouse units to the north, east, and west and a single detached unit to the south separated by a roadway. As there are no architectural building specifications available, the townhouse building was assumed to have a basement, ground floor, and second storey. Each floor was assumed to be 600 m^2 in area and to be constructed with limited combustible materials. The fire flow for the townhouse block was found to be 183 L/s. The school block is located in the southwestern portion of the Subject Development and is bounded by single detached units to the north and east, townhouse units to the west, and a park block to the south. As there is no architectural building information available, the school building was assumed to occupy 30% of the designated school block area (6000 m^2 in area), have a single storey, and be constructed with limited combustible materials. The fire flow for the school block was found to be 100 L/s.

The fire flows are governed by the six (6) unit townhouse block in the central portion of the site, requiring the highest flows within the development. Therefore, the fire flow required to service the Subject Development is 183 L/s and the total design flow for the internal water distribution system is 218 L/s (peak hour + fire flow).

To ensure that flow is available to provide the required fire flows to the Subject Development a hydrant flow test and watermain analysis must be completed. Refer to **Appendix C** for fire flow demand calculations.

7.0 Stormwater Management

7.1 Stormwater Management Design Criteria

The management of stormwater within the Subject Development must comply with the policies and standards of:

- The Township of Clearview
- Nottawasaga Valley Conservation Authority (NVCA)
- The Ministry of the Environment, Conservation, and Parks (MECP)

A stormwater management strategy and accompanying recommendations regarding the Subject Development have been included below:

- Water Quantity Control
  - Control of the post-development peak flows to pre-development flows for all storms up to and including to the 100-year at selected points of interest.
- Water Quality Control
  - "Enhanced Protection" per MECP
- Erosion Control
  - 48-hour detention of the 25 mm event runoff (NVCA)
  - On-site retention and infiltration of the first 5 mm of stormwater runoff (NVCA)
- Water Balance
  - Best efforts to achieve post-development annual infiltration volumes at or above pre-development levels.
- Development Standard
  - An urban cross-section, complete with a 5-year storm sewer system.
  - Lot grading at 2% optimum.
  - Minor/major drainage system to convey frequent and infrequent rainfall/runoff events.
- External Drainage Management
  - Safely convey external flows across the Subject Development, with no adverse upstream flooding impacts.

7.2 Existing Drainage Conditions

The Subject Development is located within the Lamont Creek watershed, which ultimately drains to McIntyre Creek and discharges to Georgian Bay, and is situated within the jurisdiction of the NVCA. A tributary of the Lamont Creek traverses the eastern portion of the Subject Lands in a south-to-north direction, while three (3) additional tributaries are located on lands to the north, within the Clearview Garden Estates lands.

These tributaries converge in the northeast corner of the Subject Lands, where combined flows pass beneath the Rail Trail through an existing 900 mm diameter corrugated steel pipe culvert, and subsequently through a 1.8 m by 2.2 m arch culvert beneath the former rail line corridor before continuing downstream. These structures act as key hydraulic control points, governing conveyance capacity and influencing upstream water levels during storm events.

Pre-development drainage conditions were determined through review of topographic survey data prepared by R-PE Surveying Ltd. (May 2026) and site reconnaissance. Site observations confirmed that the tributaries are intermitted, conveying flow primarily during significant rainfall events. In upstream areas, channels are poorly defined and runoff is conveyed as shallow overland flow through low-lying areas, while more defined channels are present further downstream.

Based on the existing topography, the Subject Lands and contributing external areas were delineated into a series of catchments to support hydrologic modelling. Onsite drainage generally flows in a northeasterly direction toward the tributary system, with several external drainage areas converging within the site prior to discharge through the rail corridor crossings. The pre-development catchments are summarized as follows:

- **Catchment PRE-1 [46.28 ha]:** Consists of cultivated, woodland, wetland areas, and an existing residential lot. Runoff follows the existing topography, draining overland in a northeast direction toward the on-site tributary. Consists of cultivated land, woodland, wetlands, and a rural residential lot, draining northeast toward the on-site tributary.

- **Catchment EP-1 [6.37 ha]:** Comprises environmental protection lands, including unevaluated wetlands and forested areas. Runoff follows the topography of the land in the northeast direction toward the Clearview Garden Estates lands and enters tributaries located on the adjacent property.

- **Catchment EP-2 [14.85 ha]:** Includes environmental protection lands consisting of unevaluated wetlands and forested areas. Runoff flows northeast toward Clearview Garden Estates lands and enters the southern tributary.

- **Catchment EP-3 [1.13 ha]:** Comprises environmental protection lands, primarily cultivated areas, and includes a portion of the on-site tributary. Runoff follows the topography of the land to the on-site tributary.

- **Catchment FUT-1 [29.16 ha]**: Primarily consists of cultivated lands and encompasses the majority of the three (3) tributaries located north of the Subject Lands, along with limited residential and forested areas. Runoff follows the existing topography in a northeast direction, ultimately entering tributaries within the Clearview Garden Estates lands and draining to the ultimate site outlet.

- **Catchment FUT-EP-1 [1.70 ha]**: Includes environmental protection lands consisting of woodland, cultivated areas, and a portion of an existing residential lot. Runoff drains toward the northernmost tributary within Clearview Garden Estates.

- **Catchment FUT-EP-2 [1.80 ha]**: Comprises environmental protection lands, including unevaluated wetlands and forested areas. Runoff flows northeast to the central tributary within Clearview Garden Estates.

- **Catchment FUT-EP-3 [6.70 ha]**: Consists entirely of environmental protection lands, including wetlands, woodland areas, and tributaries within Clearview Garden Estates. This catchment represents the confluence of upstream tributaries, which ultimately combine with the on-site tributary and discharge under the Rail Trail.

- **Catchment EXT-1 [100.92 ha]**: Includes lands to the west of the Subject Development consisting of residential, agricultural, woodland, meadow, wetland, lawn, and cultivated areas. Runoff drains overland in a northeast direction to the northern tributary within Clearview Garden Estates.

- **Catchment EXT-2 [23.99 ha]**: Comprises central lands west of the Subject Development consisting of woodland, meadow, wetland, and cultivated areas. Runoff drains to the central tributary within Clearview Garden Estates.

- **Catchment EXT-3 [39.68 ha]:** Includes southern lands west of the Subject Development consisting of residential, agricultural, woodland, meadow, wetland, and cultivated areas. Runoff drains to the southern tributary within Clearview Garden Estates.

- **Catchment EXT-4 [0.13 ha]:** Includes the rear lots of existing residential lots along Forest Crescent and a portion of Red Oak Trail. Runoff drains overland to the on-site tributary. Land uses include roadway, building, and lawn areas.

- **Catchment EXT-5 [1.62 ha]:** Includes a portion of the Stayner Community Centre lands and adjacent rear yard areas south of the Subject Lands. Runoff drains overland to the on-site tributary. Land uses include driveway, building, and lawn areas.

- **Catchment EXT-6 [0.59 ha]:** Includes the rear lots of existing residential lots along North Street. Runoff drains overland to the on-site tributary. Land uses include roadway, building, and lawn areas.

- **Catchment EXT-7 [1.38 ha]:** Includes residential lands located at the southeast corner of the Subject Lands. Land uses include driveway, building, and lawn areas. Runoff drains overland to the on-site tributary

Overall, the Subject Lands are predominantly pervious, with runoff governed by natural overland flow toward the tributary system. Multiple upstream drainage areas converge within the site before discharging through the rail corridor culverts, which act as the primary hydraulic controls for the system.

The pre-development catchments as well as existing topographic data for the Subject Development are illustrated on **Figure 6**. The pre-development hydrologic parameter sheets have been included in **Appendix D**.

7.3 Proposed Drainage Conditions

The proposed development will consist of a fully urbanized system incorporating curb and gutter drainage and a dual drainage approach. The minor system, consisting of storm sewers and catchbasins, is designed to convey runoff from the 5-year storm event, while the major system conveys larger events via overland flow routes along the road network toward the stormwater management facilities (SWMF). The preliminary storm servicing layout is presented in **Figure 4A-B**.

Stormwater for the Subject Lands will be directed to three (3) storm systems. The primary storm system (STM System 1) discharges into a stormwater management wet pond (SWMF) and makes up the majority of the development. The SWMF will be shared with the Clearview Garden Estates development to the north. A secondary storm system (STM System 2), consisting of an oil-grit separator (OGS), will service a portion of the development and external drainage area that cannot be routed to the SWMF due to grading constraints. The third storm system (STM System 3) consists of a series of swales/channels capturing external drainage to the west of the site, as well as rear yard drainage, and conveys flows safely between the Bridle Park and Clearview Garden Estates developments. All storm systems will ultimately discharge to Lamont Creek and are positioned on the site to avoid impacts to floodplain limits, environmental features, and other constraints.

Due to elevation constraints along the southeast portion of the site, drainage from this area cannot be conveyed to the SWMF via the major system. This area has therefore been designed as a separate minor and major system draining to STM System 2, where flows are routed to the site outlet. Final storm sewer sizing and outlet configurations will be confirmed at the detailed design stage. Preliminary site grading and storm sewer routing has been completed to ensure the proposed design is feasible. The storm sewer layout has been provided on **Figure 4A-B** and the grading in **Figure 7**.

External drainage has been maintained through a combination of an engineered swale conveyance and a third pipe system. This has been further described in **Section 0**.

To facilitate the post-development stormwater analysis, the pre-development catchments (PRE-1 and FUT-PRE-1) have been replaced with the following catchments based on the proposed drainage conditions. The external and environmental protection areas remain the same as described in **Section 7.2** in post-development conditions. The post-development catchment are as follows:

- **Catchment POST-1 [31.07 ha]:** Consists of the majority of the developable lands, including single detached dwellings, townhouse units, ROW, and the park block. Runoff is conveyed to SWMF via both the minor and major drainage systems.

- **Catchment POST-2 [1.32 ha]:** Consists of rear lot areas of single detached dwelling adjacent to SWMF. Runoff drains overland directly into the SWMF.

- **Catchment POST-3 [1.87 ha]:** Consists of the rear lot areas along the western development boundary. Runoff drains overland to the proposed engineered swale, as described in **Section 0**.

- **Catchment POST-4 [1.93 ha]**: Consists of the uncontrolled rear lots on the eastern development boundary. Runoff drains overland to the existing ditched along the Rail Trail corridor.

- **Catchment POST-5 [1.59 ha]:** Consists of the portion of the Subject Lands draining to a secondary outlet. Runoff is conveyed via the dedicated minor and major drainage systems (SMT System 2), treated by and Oil and Grit Separator (OGS) and is ultimately discharged without quantity control at the site outlet.

- **Catchment POST-6 [2.16 ha]:** Consists of uncontrolled rear lot areas along the eastern development boundary. Runoff drains overland to the southern site boundary and, under interim conditions, is conveyed via a drainage swale to the site outlet. Under ultimate conditions, following development of the 211 North Street lands, flows will be directed to the adjacent SWMF, as previously described.

- **Catchment POST-7 [0.06 ha]:** Consists of a portion of the internal ROW connecting to Highway 26. This catchments flows uncontrolled to Highway 26.

- **Catchment POND [4.16 ha]:** Consists of the SWMF block area. Overland runoff from this catchment is directed into the facility.

- **Catchment SCHOOL [2.12 ha]:** Consists of the proposed school block. An imperviousness of 80% has been assumed for modelling purposes. Runoff is conveyed via the minor and major drainage systems to the SWMF.

- **Catchment POST-FUT-1 [29.16 ha]:** Consists of the Clearview Garden Estates developable area. An imperviousness of 75% has been assumed for modelling purposes. Flow from this catchment will follow the minor and major system of Clearview Garden Estates, into the SWMF.

Refer to **Appendix D** for the post-development hydrologic parameter sheets. The post-development drainage conditions have been presented in **Figure 8**. Further details regarding the external catchments have been provided in **Section 0**.

7.4 Hydrologic Modelling

Hydrologic modelling was completed to assess pre-development and post-development conditions and to determine the detention storage requirements and SWM block sizing necessary to control post-development peak flows to pre-development levels (i.e. quantity control). The analysis was carried out using the SWM hydrologic computer program Visual OTTHYMO (VO) Version 6.2.

The model incorporates both rural and urban hydrologic responses through the use of the NASHYD and STANHYD commands. In alignment with Town standards, various storm events were simulated including the 2-, 5-, 10-, 25-, 50-, and 100-year storm events using a 4-hour Chicago and 24-hour SCS Type II distribution. Rainfall intensities were derived from the MTO IDF tool and increased by 15% to account for climate change in accordance with Township standards. The IDF data can be found in **Appendix E-1**.

7.4.1 Pre-Development Model Set-Up

To establish pre-development flows from the Subject Development, a pre-development hydrologic model was developed in VO. The Subject Development and external drainage areas were separated into a total of thirteen (13) catchments, as described in **Section 7.2** and shown in **Figure 6**. These catchments were delineated based on the existing drainage conditions across the Subject Development. A summary of the hydrologic parameters utilized in the pre-development model as well as the peak flow outputs have been provided in **Table 3** and **Table 4** below.

Table 3: Summary of Pre-Development Hydrologic Parameters

Catchment	Area (ha)	Impervious Area (ha)	Pervious Area (ha)	Composite Curve Number	Initial Abstraction (mm)	Time to Peak (hr)
PRE-1	46.28	0.23	46.05	72.19	7.09	0.30
EP-1	6.37	0	6.37	50.48	15.69	0.77
EP-2	14.85	0	14.85	52.94	13.28	0.89
EP-3	1.13	0	1.13	67.36	7.88	0.43
FUT-1	29.16	0.05	29.11	71.40	7.88	0.68
FUT-EP-1	1.70	0.04	1.66	60.46	9.65	0.40
FUT-EP-2	1.80	0	1.80	50.00	16.00	0.76
FUT-EP-3	6.70	0	6.70	60.00	10.00	1.45
EXT-1	100.92	1.10	99.82	55.94	7.89	1.70
EXT-2	23.99	0	23.99	44.70	10.91	0.97
EXT-3	39.68	0.25	39.43	60.67	8.26	1.18
EXT-4	0.13	0.04	0.09	69.00	5.0	-
EXT-5	1.62	0.79	0.83	69.00	5.0	-
EXT-6	0.59	0.05	0.54	71.46	4.75	0.53
EXT-7	1.38	0.02	1.36	64.14	8.51	0.39

Table 4: Summary of Pre-Development Peak Flow Rates

Return Period (Years)	Pre-Development Peak Flow (m^3/s)
4-Hour Chicago (m^3/s)	
2	0.91
5	1.77
10	2.47
25	3.46
50	4.29
100	5.17
24 Hour SCS Type II (m^3/s)	
2	2.78
5	4.80
10	6.31
25	8.40
50	10.07
100	11.77
25 mm	0.46
Regional	11.45

The pre-hydrologic parameter sheets and the VO model outputs can be found in **Appendix D** and **Appendix E-1**, respectively.

7.4.2 Post-Development Model Set-Up

Post-development hydrologic modelling was developed by replacing the pre-development catchments (PRE-1 and FUT-PRE-1) with the post-development catchments described in **Section 7.3**, while maintaining all external and environmental protection catchments unchanged, with the exception of FUT-1 as it is proposed to be developed. The resulting drainage configuration reflects the proposed catchment and servicing plan, as illustrated on **Figure 8**. A summary of the hydrologic parameters used in the post-development model is provided in **Table 5**, with detailed parameter sheets included in **Appendix D**.

Table 5: Summary of Post-Development Hydrologic Parameters

Catchment	Area (ha)	Impervious Area (ha)	Pervious Area (ha)	Composite Curve Number	Initial Abstraction (mm)	Time to Peak (hr)
POST-1	31.06	16.74	14.32	68.52	5	-
POST-2	1.32	0.73	0.59	68.81	5	-
POST-3	1.87	0.81	1.06	77.98	5	-
POST-4	1.93	1.05	0.88	49.05	5	-
POST-5	1.59	0.93	0.66	66.54	5	-
POST-6	2.16	1.18	0.98	69.00	5	-
POST-7	0.07	0.04	0.03	51.31	5	-
SCHOOL	2.12	1.80	0.32	69.00	5	-
POND	4.16	2.08	2.08	69.00	5	-
POST-FUT-1[1]	29.16	21.87	7.29	71.13	5	-

1 – Assumed percent impervious of 75%.

The proposed SWM strategy incorporates three (3) systems, STM system 1 with the SWMF designed to address both quantity and quality control requirements, STM system 2 designed for just quality control, and STM system 3 for conveyance of clean drainage.

The SWMF in STM system 1 is designed as a "wet" SWM pond with a permanent pool and multi-stage outlet structure. The preliminary outlet configuration includes a 275 mm diameter extended detention orifice located at the permanent pool elevation, and a 0.4 m wide secondary rectangular weir to control discharge from larger storm events exceeding the 25 mm design event. The permanent pool elevation has been established above the 100-year floodplain elevation to ensure adequate freeboard and functionality during extreme events. The preliminary design of SWMF has been presented in **Figure 9**. Supporting design calculations are provided in **Appendix F-1**.

The secondary storm system (STM system 2) consists of an OGS to service the southeast corner that cannot be routed to SWMF due to grading constraints. Discharge from the OGS will be conveyed through an easement, along the eastern property line and to the site discharge location, the Lamont Creek. SWMF is proposed to be overcontrolled to allow for STM System 2 to discharge without quantity control, and the OGS provides quality control for this area. STM system 2 has been presented in **Figure 4A-B**.

Using the ROUTE RESERVOIR command in VO, the volume of detention storage required to attenuate the post-development peak flows from the Subject Development to target peak flow levels was determined based on a storage – discharge relationship. The ROUTE RESERVOIR command was used to model SWMF.

A summary of storage volumes and the operating characteristics for the SWMF can be found in **Table 6**, below.

Table 6: Operating Characteristics and Provided Volume (SWMF)

Return Period (Years)	Storage Volume Used (m^3)	Water Surface Elevation (m)
4-Hour Chicago (m^3/s)		
2	12,879	216.53
5	18,268	216.70
10	21,884	216.82
25	26,485	216.97
50	29,995	217.09
100	33,422	217.20
24 Hour SCS Type II (m^3/s)		
2	19,923	216.76
5	27,423	217.00
10	32,569	217.17
25	39,179	217.39
50	44,242	217.55
100	49,240	217.71
25 mm	8,287	216.38
Regional	70,334	218.40
Provided SWMF Volume (m^3)	69,493	

As demonstrated in **Table 6**, sufficient storage has been provided to accommodate all storm events up to and including the 100-year event. SWMF is also equipped with an emergency spillway designed to safely convey flows to Lamont Creek in the event that storm events exceed the 100-year design event or if the outlet structure becomes obstructed.

Post-to-pre development flow control performance is summarized in **Table 7**, which compares peak flow rates at the site outlet.

Table 7: Comparison of Pre-Development and Post-Development Peak Flow Rates

Return Period (Years)	Pre-Development (m^3/s)	Post-Development (m^3/s)	Peak Flow Reduction (%)
4-Hour Chicago (m^3/s)			
2	0.91	0.66	21%
5	1.77	1.24	30%
10	2.47	1.72	30%
25	3.46	2.41	30%
50	4.29	2.99	30%
100	5.17	3.60	30%
24 Hour SCS Type II (m^3/s)			
2	2.78	1.58	43%
5	4.80	2.83	41%
10	6.31	3.80	40%
25	8.40	5.15	39%
50	10.07	6.26	38%
100	11.77	7.40	37%
25 mm	0.46	0.33	29%
Regional	11.45	9.81	14%

As shown in **Table 7**, post-development peak flows do not exceed pre-development levels for all storm events up to and including the 100-year event, thereby satisfying the required quantity control criteria. Since the flows are overcontrolled by over 10%, there is room for Clearview Garden Estates to increase impervious cover beyond the assumed 75%. Additionally, opportunities to improve the efficiency of the pond grading can be investigated at the detailed design stage.

7.4.3 Interim Scenario

Should Clearview Garden Estates not proceed concurrently with the Subject Development, an interim scenario was assessed to confirm that the proposed SWM Facility can adequately control and store runoff. Under this scenario, the catchment representing Clearview Garden Estates (POST-FUT-1) was replaced and the corresponding pre-development catchment (FUT-1) and was routed as uncontrolled flows.

Based on the interim condition analysis, a 235 mm diameter orifice is required to achieve the minimum 48-hour drawdown period. This outlet configuration would continue to be paired with the weir described in **Section 7.4.2**. Once Clearview Garden Estates is developed and the ultimate condition is achieved, the interim orifice plate would be replaced with the **275 mm diameter orifice** described above.

A comparison of pre-development and post-development peak flow rates for the interim condition is provided in **Table 8**.

Table 8: Comparison of Pre-Development and Post-Development Peak Flow Rates (Interim Scenario)

Return Period (Years)	Pre-Development (m^3/s)	Post-Development (m^3/s)	Peak Flow Reduction (%)
4-Hour Chicago (m^3/s)			
2	0.91	0.74	11%
5	1.77	1.38	22%
10	2.47	1.89	23%
25	3.46	2.64	24%
50	4.29	3.29	23%
100	5.17	3.96	23%
24 Hour SCS Type II (m^3/s)			
2	2.78	1.86	33%
5	4.80	3.27	32%
10	6.31	4.37	31%
25	8.40	5.91	30%
50	10.07	7.16	29%
100	11.77	8.46	28%
25 mm	0.46	0.36	23%
Regional	11.45	10.18	11%

As summarized in **Table 8**, post-development peak flows do not exceed pre-development levels for all storm events up to and including the 100-year event, thereby satisfying the required quantity control criteria. Refer to **Appendix E-2** for the VO outputs and **Appendix F-2** for the SWM Facility calculations for the interim analysis.

7.5 Quality and Erosion Control Analysis

7.5.1 STM System 1 (SWMF)

The conceptual design of the proposed SWMF has incorporated a permanent pool and a sediment forebay to provide "enhanced protection" (*Stormwater Management Planning and Design Manual, Ministry of the Environment*, 2003). A sediment forebay will be provided to facilitate enhanced quality treatment in conformance with MECP forebay design guidelines. Forebay sizing calculations will be completed at detailed design.

The contributing drainage area to the SWMF is 67.57 ha with an associated imperviousness of 63.3%, including allowance for future development to the north (assumed 75% impervious) and within the school block (assumed 80% impervious). Based on these characteristics, the minimum required water quality volume is 209 m³/ha, consisting of 169 m³/ha allocated to the permanent pool and 40 m³/ha for extended detention (*Stormwater Management Planning and Design Manual, Ministry of the Environment*, 2003).

Erosion control is achieved through extended detention of runoff from the 25 mm storm event, with a minimum detention duration of 48 hours. The required and provided permanent pool and extended detention volumes are summarized in **Table 9**, with detailed calculations included in **Appendix F-1**.

Table 9: SWMF Quality and Erosion Control

	Required Volume (m³)	Provided Volume (m³)
Permanent Pool	11,785	17,919
MOE Extended Detention	2,783	11,671
Erosion Control	9,037	11,671

7.5.2 STM System 2

STM System 2 incorporates an OGS designed that is capable of removing a minimum of 80% of total suspended solids, thereby meeting the required water quality objectives for the contributing drainage area. Final sizing and configuration of the OGS system will be confirmed during detailed design.

7.5.3 STM System 3

The third storm system consists of only clean water sources and does not require erosion control or extended detention. This system (STM System 3) is discussed further in **Section 7.5.5**.External and Uncontrolled Drainage Management

7.5.4 Engineered Drainage Swale

The external drainage areas to the west (EXT-2 and EXT-3), as well as the western environmental protection areas (EP-1, EP-2, and FUT-EP-2), will be conveyed through the Subject Lands via an engineered drainage swale. This swale system is divided into three (3) distinct reaches based on drainage inputs and flow paths.

- **Northern Reach:** This reach extends along the lands north of the Subject Development, upstream of the confluence of the northern and southern channels. It conveys flows from catchments FUT-EP-2, EP-1, and EXT-2.

- **Southern Reach:** This reach follows the western boundary of the Subject Lands in a south-to-north direction. It conveys uncontrolled rear lot drainage from PRE-1, in addition to overland flows from catchments EXT-3 and EP-2.

- **Central Reach:** This reach is located downstream of the confluence of the northern and southern reaches and conveys the combined flows from both. The central reach ultimately discharges through three (3) 910 x 1830 mm culvert beneath the road right-of-way and the berm of the SWMF, before discharging directly to Lamont Creek.

The conveyance of EXT-1 will be determined during the Draft Plan Approval process of Clearview Garden Estates. The preliminary engineered swale designs have been summarized in **Table 10**.

Table 10: Engineered Swale Parameters

Parameter	Northern Reach	Southern Reach	Central Reach
Side Slope (%)	33	33	33
Bottom Width (m)	6.50	5.00	4.00
Swale Slope (%)	0.30	0.30	0.26
Normal Depth (m)	0.55	0.45	1.08
Block Width (m)	15.0	10.0	15.0
Swale Top Width (m)	7.06	5.50	4.91
Design Capacity (m^3/s)	4.80	2.66	10.7
Required Capacity (m^3/s)	4.79	2.40	7.14

The modelling of each reach has been provided in **Appendix G**.

7.5.5 STM System 3

A third pipe system, referred to as STM System 3, is proposed to convey clean stormwater runoff from the rear lots of the external catchments located to the south (EXT-6 and EXT-7), as well as from the catchment along the southern property boundary of the Subject Lands (POST-6). Runoff from these areas will be collected by catchbasins and rear lot catchbasins and conveyed through the third pipe system. The system will exit the right-of-way through the same easement utilized by Storm System 2, then continue along the eastern property line before ultimately discharging to the floodplain cut/fill area within Catchment EP-3. Properties along the southern property line will be designed with full roof drainage directed to the front yard.

8.0 Preliminary Low Impact Development (LID) Strategy

A site-specific water balance was completed to determine the annual infiltration deficit of the proposed development in comparison with pre-development levels. The water balance analysis was completed by Crozier and have been provided under a separate cover.

Based on a comparison of the pre-development and post-development water balances, the anticipated infiltration deficit between pre and post development for the Subject Development is 43,277 m^3/year.

To address the identified water balance deficit, a series of Low Impact Development (LID) measures are proposed to be incorporated into the site design to promote infiltration, reduce runoff volumes, and enhance groundwater recharge. These measures have been selected to align with NVCA and MECP guidance and are integrated within the overall stormwater management strategy.

The potential LID measures for the Subject Development could include the following options:

- **Soakaway Pits:** Soakaway pits could be proposed within select rear lots to capture and infiltrate runoff. These systems are designed to store and gradually infiltrate small rainfall events, contributing to restoration of pre-development infiltration volumes.

- **Infiltration Rain Gardens:** Rain gardens could be proposed in the park block as shallow, vegetated landscaped areas designed to capture and infiltrate runoff from adjacent impervious surfaces. These features are designed without subsurface underdrain infrastructure, allowing stormwater to infiltrate directly into native soils and limited maintenance.

Final design details, including location, sizing, configuration, and integration with grading and servicing, will be refined at the detailed design stage in coordination with applicable regulatory requirements.

9.0 Erosion and Sediment Controls

Erosion and sediment control (ESC) measures will be implemented prior to the commencement of any earthworks and will be maintained throughout construction until the site has been fully stabilized, or as otherwise directed by the Engineer, NVCA, and/or the Township. A comprehensive ESC report in support of the Site Alteration Permit will be prepared under separate cover as part of the detailed design submission.

The ESC report will address all phases of site alteration, including Stage 1 (topsoil stripping), Stage 2 (pre-grading), and Stage 3 (post-servicing). All erosion and sediment control measures will be inspected on a regular basis and following significant rainfall events, and will be maintained to ensure proper functionality at all times.

Preliminary erosion and sediment control measures proposed for the Subject Lands include the following:

- **Stone Mud Mat:** A mud mat will be installed at the primary site access location to minimize tracking of mud and debris onto adjacent paved roadways during construction activities.

- **Dust Control:** During earthworks, dust suppression measures will be implemented as required, including the application of water or other approved suppression methods to reduce airborne particulates.

- **Silt Fencing:** Heavy-duty silt fencing will be installed where required to intercept sheet flow and control sediment transport. Silt fencing will be installed along the site perimeter, with additional locations identified and implemented as needed based on field conditions and direction from the Site Engineer during construction.

- **Diversion Swales:** Temporary diversion swales will be constructed to intercept and convey both internal and external runoff toward designated sediment control measures prior to discharge. Rock check dams will be installed within swales to reduce flow velocities, and fiber rolls will be installed in accordance with OPSD 219.120 where required.

- **Silt Sacks:** Silt Sacks will be placed in catch basins adjacent to the development on Highway 26 to prevent silt and sediment from entering the catch basins. The silt sacks will trap silt/sediment while allowing water to pass through into the storm sewer.

10.0 Utilities

The Subject Development will be serviced with natural gas, cable television, hydro, and telephone. The design of these utilities will be coordinated in consultation with the local utility providers servicing the Township of Clearview. Utilities are proposed to be located within the internal road network, with individual service connections to each lot. Utility plans will be prepared at a later date to illustrate the design and layout of utilities throughout the Subject Development.

11.0 Conclusions and Recommendations

Based on the foregoing, we conclude that the Subject Development can be adequately services.

- Access to the Subject Development will be provided by two entrances: Highway 26 and Red Oak Trail. Future connections are also proposed to Clearview Garden Estates to the north and to the south via the East Street Extension and the future North Street subdivision. The internal road network will be designed to Township standards and will accommodate emergency vehicle access.

- Gravity sanitary sewers will be provided throughout the Subject Development which will connect to the existing 450 mm diameter sanitary sewer stub located within the Township of Clearview Public Works Yard by extending sanitary sewers along Highway 26, Wyant Road and through the future Emerald Creek Subdivision.

- The internal watermain will follow the alignment of the internal road network. The proposed watermain will connect to the existing 150 mm diameter watermain adjacent to the site at the north limit of Red Oak Trail and to a proposed 300 mm diameter watermain along Highway 26 or alternative route as determined through coordination with the Township.

- The Subject Development will be designed with a dual drainage system. Minor storm events will be conveyed within a storm sewer system, which follows the alignment of the internal roadways. The major system will be conveyed overland within the internal road network. Both the major and minor storm systems will outlet to the SWM Facility.

- The SWMF will provide both quantity and quality control and will be shared with the Clearview Garden Estates development. The proposed wet pond has been sized to achieve an "Enhanced Protection" level of treatment in accordance with MECP guidelines, while controlling post-development peak flows up to and including the 100-year storm event to pre-development levels. Erosion control is addressed through extended detention of the 25 mm storm event. The SWMF will discharge to Lamont Creek.

- Storm system 2 will provide quality control for a portion of the Subject Lands located in the southeast corner. The facility will consist of an oil-grit separator (OGS). Storm system 2 will ultimately discharge to Lamont Creek.

- Storm system 3 will safely convey external drainage through the site without quality or quantity control, ultimately discharging to Lamont Creek.

- A post-development annual infiltration deficit of approximately 43,277 m^3/year has been identified relative to pre-development conditions. To mitigate this deficit and support water balance objectives, infiltration-based LID measures are proposed. These features are designed to promote infiltration, reduce runoff volumes, and offset the identified deficit while maintaining a low-maintenance, passive operation.

- Erosion and sediment control will be specified as to ensure effective prevention and control of sediment from migrating into nearby swales, ditches, and watercourses.

- The Subject Development will be fully serviced by hydro, natural gas, cable, and telecommunications.

Respectfully submitted,

C.F. CROZIER & ASSOCIATES INC.



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EC/MS

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APPENDIX A

Sanitary Demand Calculations

Project: Bridle Park
Project No.: 1508-7498
Created By: MS
Checked By: AM
Date: 2026-06-26

Bridle Park Sanitary Demand

Developed Site Area		**39.28**	ha
Number of Residential Units and Land Usage			
1) Single Residential		**523**	Units
2) Semi-Detached Residential		**4**	Units
3) Townhouse		**164**	Units
4) Apartment		**0**	Units
5) Institutiuonal		**2.12**	ha
Person Per Residential Unit			
1) Single Residential		**3.00**	persons/unit
2) Semi-Detached Residential		**3.00**	persons/unit
3) Townhouse		**2.40**	persons/unit
4) Apartment		**1.60**	persons/unit
Total Residential Population		**1975**	**Persons**
Single Dwelling Equivilant (SDE)		**658**	**SDE**
School		**700**	students
Unit Sewage Flows			
Residential		400	L/C-day
Institutional		140	L/C-day
Infiltration		0.23	L/s/ha
Total Design Sewage Flows			
Infiltration/Inflow Residential		9.03	L/sec
Average Daily Residential Flow		9.14	L/sec
Average Daily Institutional Flow		1.16	L/sec
Residential Peak Factor	(Harmon Formula)	3.59	
Institutional Peak Factor		3.50	
Total Peak Daily Flow		**45.91**	**L/sec**
Sewage System Requirements			

Project: Bridle Park
Project No.: 1508-7498
Created By: MS
Checked By: AM
Date: 2026-06-26

Future Development (Clearview Garden Estates) Sanitary Demand

Developed Site Area		28.58	ha
Person Per Residential Area			
1) Residential (Official Plan Township of Cleaview Section 2.3.2.3)		**45.00**	persons/ha
Total Residential Population		**1286**	**Persons**
Single Dwelling Equivilant (SDE)		**429**	**SDE**
Unit Sewage Flows			
Residential		400	L/C-day
Infiltration		0.23	L/s/ha
Total Design Sewage Flows			
Infiltration/Inflow Residential		6.57	L/sec
Average Daily Residential Flow		5.95	L/sec
Residential Peak Factor	(Harmon Formula)	3.73	
Total Peak Daily Flow		**28.76**	**L/sec**
Sewage System Requirements			

Project: Bridle Park
Project No.: 1508-7498
Created By: MS
Checked By: AM
Date: 2026-06-26

Total Site Sanitary Demand

Developed Site Area		74.78	ha
Residential Population			
	Bridle Park	1975	Persons
	Clearview Garden Estates	1286	Persons
	Total Residential Population	**3261**	**Persons**
	Single Dwelling Equivilant (SDE)	**1087**	**SDE**
Institutional Population			
	Bridle Park	700	Persons
	Clearview Garden Estates	0	Persons
	Total Institutional Population	**700**	**Persons**
Unit Sewage Flows			
Residential		400	L/C-day
Institutional		140	L/C-day
Infiltration		0.23	L/s/ha
Total Design Sewage Flows			
Infiltration/Inflow Residential		17.20	L/sec
Average Daily Residential Flow		15.10	L/sec
Average Daily Institutional Flow		1.16	L/sec
Residential Peak Factor	(Harmon Formula)	3.41	
Institutional Peak Factor		5.73	
Total Peak Daily Flow		**75.34**	**L/sec**
Sewage System Requirements			

BRIDLE PARK

1508-7499

SANITARY SEWER DESIGN SHEET

CROZIER CONSULTING ENGINEERS

Unit Type	PPU
Singles	3
Semis	3
Townhomes	2.4
Apartments	1.6

Mannings 'n':	0.013
Peak Factor (M):	1+(14/4+(P/1000)^0.5)
Residential Avg. Daily/Capita Flow (L/cap.d):	400
Commercial Avg. Daily/Capita Flow (m^3/ha.d):	
Institutional Avg. Daily/Capita Flow (L/s.UNIT):	
Infiltration Q (L/ha.s):	0.23

DESIGNED BY: AM
CHECKED BY:
DATE: 07-Jul-26
ISSUED FOR: 1st Sub Redline DPA

CATCHMENT I.D.	STREET	FROM MH	TO MH	AREA (Ha)	RESIDENTIAL UNITS SDE	RESIDENTIAL POP.	TOTAL POP.	CUMULATIVE POP.	RESIDENTIAL PEAK FACTOR	RESIDENTIAL AVG. FLOW (l/s)	RESIDENTIAL MAX. FLOW (l/s)	INSTUTIONAL PEAK FACTOR	INSTITUTIONAL AVG. FLOW (l/s)	INSTITUTIONAL MAX. FLOW (l/s)	MAX FLOW (l/s)	INFILT. (l/s)	TOTAL INFILT. (l/s)	TOTAL FLOW (l/s)	LENGTH (m)	PIPE DIAM. (mm)	UPPER INV. EL.	LOWER INV. EL.	UPPER OBV. EL.	LOWER OBV. EL.	SLOPE (%)	CAP. (l/s)	CAP. (%)	FULL FLOW VELOCITY (m/s)	GROUND UPPER	GROUND LOWER	COVER UPPER	COVER LOWER
BP+CGE	Hwy 26	SAMH1	SAMH2	74.78	1087	3261	3261	3261	3.41	15.10	51.50	5.73	1.16	6.65	58.39	17.20	17.20	**75.59**	52.0	375	209.40	209.19	209.78	209.57	0.40%	**110.89**	**68.17%**	1.00				
Lands West of Hwy 26	Hwy 26	SAMH2	SAMH3	8	123	368	368	3629	4.00	16.80	67.20				67.20	1.84	19.04	**86.24**	120.0	375	209.16	208.68	209.54	209.06	0.40%	**110.89**	**77.77%**	1.00				
	Hwy 26	SAMH3	SAMH4															**86.24**	120.0	375	208.65	208.17	209.03	208.55	0.40%	**110.89**	**77.77%**	1.00				
	Hwy 26	SAMH4	SAMH5															**86.24**	120.0	375	208.14	207.66	208.52	208.04	0.40%	**110.89**	**77.77%**	1.00				
CITYSCAPE	Wyant Road	SAMH5	SAMH6				490								19.20			**94.79**	109.8	450	207.58	207.14	208.03	207.59	0.40%	**180.32**	**52.57%**	1.13				
BIRCHWOOD	Wyant Road	SAMH6	SAMH7				260								9.50			**104.29**	120.0	450	207.11	206.63	207.56	207.08	0.40%	**180.32**	**57.84%**	1.13				
	Wyant Road	SAMH7	SAMH8															**104.29**	120.0	450	206.60	206.12	207.05	206.57	0.40%	**180.32**	**57.84%**	1.13				
	Wyant Road	SAMH8	SAMH9															**104.29**	120.0	450	206.12	205.61	206.57	206.06	0.40%	**180.32**	**57.84%**	1.13				
	Birchwood Blvd	SAMH9	SAMH10															**104.29**	83.4	450	205.53	205.20	205.98	205.65	0.40%	**180.32**	**57.84%**	1.13				
EMERALD CREEK	Birchwood Blvd	SAMH10	SAMH11				520								16.50			**120.79**	36.8	450	205.15	205.00	205.60	205.45	0.40%	**180.32**	**66.99%**	1.13				
	Birchwood Blvd	SAMH11	SAMH12															**120.79**	28.0	450	204.95	204.84	205.40	205.29	0.40%	**180.32**	**66.99%**	1.13				
	Birchwood Blvd	SAMH12	SAMH13															**120.79**	86.4	450	204.79	204.44	205.24	204.89	0.40%	**180.32**	**66.99%**	1.13				
	Birchwood Blvd	SAMH13	SAMH14															**120.79**	23.6	450	204.39	204.30	204.84	204.75	0.40%	**180.32**	**66.99%**	1.13				
	Birchwood Blvd	SAMH14	SAMH15															**120.79**	74.7	450	204.25	203.95	204.70	204.40	0.40%	**180.32**	**66.99%**	1.13				
	Emerald Creek Blvd	SAMH15	SAMH16															**120.79**	82.4	450	203.87	203.53	204.32	203.98	0.40%	**180.32**	**66.99%**	1.13				
	Emerald Creek Blvd	SAMH16	SAMH17															**120.79**	41.8	450	203.50	203.34	203.95	203.79	0.40%	**180.32**	**66.99%**	1.13				
		SAMH17	XSAN-PLUG2															**120.79**	100.2	450	203.26	202.86	203.71	203.31	0.40%	**180.32**	**66.99%**	1.13				

APPENDIX B

Water Demand Calculations

CROZIER CONSULTING ENGINEERS

File: 1508-7498
Date: 2026-06-26
By: MS
Check By: AM

Bridle Park Stayner Water Demand

Number of Residential Units and Land Usage

1) Single Residential	**523**	Units
2) Semi-Detached Residential	**4**	Units
3) Townhouse	**164**	Units
4) Apartment	**0**	Units
5) Institutional	**2.12**	ha

Person Per Residential Unit

1) Single Residential	**3.0**	persons/unit
2) Semi-Detached Residential	**3.0**	persons/unit
3) Townhouse	**2.4**	persons/unit
4) Apartment	**1.6**	persons/unit
Total Residential Population	**1975**	**Persons**
Single Dwelling Equivilant (SDE)	**658**	**SDE**

Estimated Institutional Population

1) School	**700**	students
Total Population	**2675**	

Domestic Water Design Flows

Residential	400	L/C-day
Institutional	140	L/C-day

Total Domestic Water Design Flows

Average Daily Residential Flow	9.14	L/sec
Average Daily Commercial Flow	1.13	L/sec
Max Daily Demand Factor	2.25	
Max Daily Demand Flow	**23.13**	**L/sec**
Peak Hour Demand Factor	3.38	
Peak Hour Demand Flow	**34.74**	**L/sec**

CROZIER CONSULTING ENGINEERS

File: 1508-7498
Date: 2026-06-26
By: MS
Check By: AM

Future Development (Clearview Garden Estates Water Demand

Developed Site Area	28.58	ha
Residential Site Area		
1) Single Residential	**28.58**	ha
Person Per Residential Area		
1) Residential (Official Plan Township of Cleaview Section 2.3.2.3)	**45.00**	persons/ha
Total Residential Population	**1286**	**Persons**
Single Dwelling Equivilant (SDE)	**429**	**SDE**
Domestic Water Design Flows		
Residential	400	L/C-day
Total Domestic Water Design Flows		
Average Daily Residential Flow	5.95	L/sec
Max Daily Demand Factor	2.5	
Max Daily Demand Flow	**14.88**	**L/sec**
Peak Hour Demand Factor	3.75	
Peak Hour Demand Flow	**22.33**	**L/sec**

CROZIER CONSULTING ENGINEERS

File: 1508-7498
Date: 2026-06-26
By: MS
Check By: AM

Total Site Water Demand

Residential Population		
Bridle Park	1975	Persons
Clearview Garden Estates	1286	Persons
Total Residential Population	**3261**	**Persons**
Single Dwelling Equivilant (SDE)	**1087**	**SDE**
Institutional Population		
Bridle Park	700	Persons
Clearview Garden Estates	0	Persons
Total Institutional Population	**700**	**Persons**
Domestic Water Design Flows		
Residential	400	L/C-day
Institutional	140	L/C-day
Total Domestic Water Design Flows		
Average Daily Residential Flow	15.10	L/sec
Average Daily Commercial Flow	1.13	L/sec
Max Daily Demand Factor	2.00	
Max Daily Demand Flow	**32.46**	**L/sec**
Peak Hour Demand Factor	3.00	
Peak Hour Demand Flow	**48.69**	**L/sec**

APPENDIX C

Fire Flow Calculations

Project: Bridle Park
Project No.: 1508-7498
Created By: MS
Checked By: AM
Date: 2026.06.26

Fire Flow Determination Per Fire Underwriters Survey (2020)

Water Supply for Public Fire Protection - 2020
Fire Underwriters Survey
Part II - Guide for Determination of Fire Flows for Public Fire Protection in Canada

An estimate of fire flow required for a given area may be determined by the formula:

RFF = 220 * C * sqrt A

where:

RFF = the required fire flow in litres per minute (L/min)
C = the construction coefficient is related to the type of construction of the building
= 1.5 for Type V Wood Frame Construction
= 0.8 for Type IV-A Mass Timber Construction
= 0.9 for Type IV-B Mass Timber Construction
= 1.0 for Type IV-C Mass Timber Construction
= 1.5 for Type IV-D Mass Timber Construction
= 1.0 for Type III Ordinary Construction
= 0.8 for Type II Non-combustible Construction
= 0.6 for Type I Fire Resistive Construction
A = the total effective floor area (effective building area) in square metres (excluding basements at least 50 percent below grade) in the building considered

STEP A: Construction Coefficient (C) 1 Type III Ordinary Construction Assumed

STEP B: Total Effective Floor Area
Proposed Building Townhouse (6 unit) Residential (Block 541)

	Yes/No/Unknown	
Is basement at least 50% below grade?	Yes	If yes, basement floor area excluded
Vertical openings protected?	No	*For consideration for effective area calculations

Calculate Effective Floor Area based on the highlighted cell
-C value from 1.0 to 1.5: 100% of all floor areas are used
-C value below 1 and vertical openings are not protected: Consider two largest floors plus 50% of all floor above to a max of eight
-C value below 1 and vertical openings are protected: Consider single largest floor plus 25% of the two immediately adjoining floors

*A building may be subdivided if there is a vertical firewall with a fire-resistance rating greater than 2 hours, and meets the requirements of the National Building Code.

Floors Above Grade	Total Floor Area (m^2)	% of Area Considered	Effective Floor Area (m^2)
Basement	600	0%	0.0
Ground Floor	600	100%	600.0
Level 2	600	100%	600.0
Level 3		0%	0.0
Level 4		0%	0.0
Level 5		0%	0.0
Level 6		0%	0.0
Level 7		0%	0.0
Level 8		0%	0.0
Total	**1200**		**1200.0**

Total Effective Floor Area 1200 m^2

STEP C: Therefore RFF = 8,000 **L/min (rounded to nearest 1000 L/min)**

STEP D: Occupancy Contents Adjustment Factor

The required fire flow may be reduced by as much as -25% for occupancies having contents with very low fire hazard or may be increased by up to 25% surcharge for occupancies having a high fire hazard.

Occupancy and Contents Adjustment Factor	
Non-Combustible	-25%
Limited Combustible	-15%
Combustible	0%
Free Burning	15%
Rapid Burning	25%

*Refer to Table 3 for recommended Occupancy and Contents Charges by major occupancy examples.

Type of Occupancy	Adjustment Factor	
Residential Occupancy	Limited Combustible	-15%

Total Reduction % -1,200 **L/min (reduction)**

RFF = 6,800 **L/min (not rounded)**

Note: The RFF flow 6800 L/min is used in Step E and F.

Project: Bridle Park
Project No.: 1508-7498
Created By: MS
Checked By: AM
Date: 2026.06.26

Fire Flow Determination Per Fire Underwriters Survey (2020)

STEP E: Automatic Sprinkler Protection

Sprinklers - The required fire flow may be reduced by up to 50% for complete automatic sprinkler protection depending upon adequacy of system.

	Yes/No/Unknown	*Possible Reduction Available	Actual Reduction Provided
Automatic sprinkler protection designed and installed in accordance with NFPA 13?	No	-30%	0%
Water supply is standard for both the system and Fire Department hose lines?	Unknown	-10%	0%
Fully supervised system?	No	-10%	0%

*Reduction available assumes complete building coverage
*30% reduction typical for building requiring sprinkler system

Total Reduction % **0%** **(reduction)**

Total Reduced Flow **0** **L/min (reduction, not rounded)**

STEP F: Exposure Adjustment Charge

Exposure - A percentage of water for the exposures should be added to the required fire flow for the subject building to provide adequate flow rates for hose streams used to reduce the spreading of fire from the subject building to exposed risks. The required fire flow of a subject building may be increased depending on the severity of exposed risks to the subject building and the distance between the exposed risks and the subject building. This charge considers the usage of water supplies to prevent exposed risks from igniting or being damaged during a major fire incident in the subject building.

Separation Distance	Maximum Exposure Adjustment Charge
0 to 3m	25%
3.1 to 10m	20%
10.1 to 20m	15%
20.1 to 30m	10%
Greater than 30m	0%

*If a vertical fire wall is properly constructed and has a rating of no less than 2 hours, then the boundary can be treated as protected with no exposure charge
*The maximum exposure adjustment charge to be applied to a subject building is 75%
*The distance in metres from the subject building facing wall to the exposed building facing wall, measured to the nearest metre, between the nearest points of the buildings. Where either the subject building or the exposed building is at a diagonal to the other building, the shortest distance should be increased by 3 metres and this adjusted value used as exposure distance.

Exposed buildings		Distance	Surcharge Factor	Surcharge (L/min)
North	Adjacent Dwelling	30+	0%	0
East	Adjacent Dwelling	10	20%	1360
South	Adjacent Dwelling	10	20%	1360
West	Adjacent Dwelling	10	20%	1360

Total Reduced Flow **4,080** **L/min Surcharge (not rounded)**

STEP G: Final Required Fire Flow

Step D - Occupancy Adjusted Fire Flow Demand	6,800	L/min
Step E - Sprinkler (Reduction)	0	L/min
Step F - Exposure Charge	4,080	L/min
Final Fire Flow:	**10,880**	**L/min**
	11,000	**L/min (rounded to nearest 1000L/min)**
or	**183**	**L/s**
or	**2,906**	**USGPM**
Required duration:	**2.00**	**hours**

Refer to Table 1 for Duration

Table 1 - FUS 2020

Required Duration of Fire Flow	
Flow Required (L/min)	**Duration (hours)**
2,000 or less	1.00
3,000	1.25
4,000	1.50
5,000	1.75
6,000	2.00
8,000	2.00
10,000	2.00
12,000	2.50
14,000	3.00
16,000	3.50
18,000	4.00
20,000	4.50
22,000	5.00
24,000	5.50
26,000	6.00
28,000	6.50
30,000	7.00
32,000	7.50
34,000	8.00
36,000	8.50
38,000	9.00
40,000 and over	9.50

Interpolate for intermediate figures

Project: Bridle Park
Project No.: 1508-7498
Created By: MS
Checked By: AM
Date: 2026.06.26

Fire Flow Determination Per Fire Underwriters Survey (2020)

Water Supply for Public Fire Protection - 2020
Fire Underwriters Survey
Part II - Guide for Determination of Fire Flows for Public Fire Protection in Canada

An estimate of fire flow required for a given area may be determined by the formula:

RFF = 220 * C * sqrt A

where:

RFF = the required fire flow in litres per minute (L/min)
C = the construction coefficient is related to the type of construction of the building
= 1.5 for Type V Wood Frame Construction
= 0.8 for Type IV-A Mass Timber Construction
= 0.9 for Type IV-B Mass Timber Construction
= 1.0 for Type IV-C Mass Timber Construction
= 1.5 for Type IV-D Mass Timber Construction
= 1.0 for Type III Ordinary Construction
= 0.8 for Type II Non-combustible Construction
= 0.6 for Type I Fire Resistive Construction
A = the total effective floor area (effective building area) in square metres (excluding basements at least 50 percent below grade) in the building considered

STEP A: Construction Coefficient (C) 0.8 Type II Non-combustible Construction Assumed

STEP B: Total Effective Floor Area
Proposed Building Proposed School (Block 561)

	Yes/No/Unknown	
Is basement at least 50% below grade?	No	If yes, basement floor area excluded
Vertical openings protected?	Yes	*For consideration for effective area calculations

Calculate Effective Floor Area based on the highlighted cell
-C value from 1.0 to 1.5: 100% of all floor areas are used
-C value below 1 and vertical openings are not protected: Consider two largest floors plus 50% of all floor above to a max of eight
-C value below 1 and vertical openings are protected: Consider single largest floor plus 25% of the two immediately adjoining floors

*A building may be subdivided if there is a vertical firewall with a fire-resistance rating greater than 2 hours, and meets the requirements of the National Building Code.

Floors Above Grade	Total Floor Area (m^2)	% of Area Considered	Effective Floor Area (m^2)
Ground Floor	6000	100%	6000.0
		0%	0.0
		0%	0.0
		0%	0.0
		0%	0.0
		0%	0.0
		0%	0.0
		0%	0.0
Total	**6000**		**6000.0**

Total Effective Floor Area **6000** m^2

STEP C: Therefore RFF = **14,000** **L/min (rounded to nearest 1000 L/min)**

STEP D: Occupancy Contents Adjustment Factor

The required fire flow may be reduced by as much as -25% for occupancies having contents with very low fire hazard or may be increased by up to 25% surcharge for occupancies having a high fire hazard.

Occupancy and Contents Adjustment Factor	
Non-Combustible	-25%
Limited Combustible	-15%
Combustible	0%
Free Burning	15%
Rapid Burning	25%

*Refer to Table 3 for recommended Occupancy and Contents Charges by major occupancy examples.

Type of Occupancy	Adjustment Factor	
Residential Occupancy	Limited Combustible	-15%

Total Reduction % **-2,100** **L/min (reduction)**

RFF = **11,900** **L/min (not rounded)**

Note: The RFF flow 11900 L/min is used in Step E and F.

Project: Bridle Park
Project No.: 1508-7498
Created By: MS
Checked By: AM
Date: 2026.06.26

Fire Flow Determination Per Fire Underwriters Survey (2020)

STEP E: Automatic Sprinkler Protection

Sprinklers - The required fire flow may be reduced by up to 50% for complete automatic sprinkler protection depending upon adequacy of system.

	Yes/No/Unknown	*Possible Reduction Available	Actual Reduction Provided
Automatic sprinkler protection designed and installed in accordance with NFPA 13?	Yes	-30%	-30%
Water supply is standard for both the system and Fire Department hose lines?	Yes	-10%	-10%
Fully supervised system?	Yes	-10%	-10%

*Reduction available assumes complete building coverage
*30% reduction typical for building requiring sprinkler system

Total Reduction % **-50%** **(reduction)**

Total Reduced Flow **-5,950** **L/min (reduction, not rounded)**

STEP F: Exposure Adjustment Charge

Exposure - A percentage of water for the exposures should be added to the required fire flow for the subject building to provide adequate flow rates for hose streams used to reduce the spreading of fire from the subject building to exposed risks. The required fire flow of a subject building may be increased depending on the severity of exposed risks to the subject building and the distance between the exposed risks and the subject building. This charge considers the usage of water supplies to prevent exposed risks from igniting or being damaged during a major fire incident in the subject building.

Separation Distance	Maximum Exposure Adjustment Charge
0 to 3m	25%
3.1 to 10m	20%
10.1 to 20m	15%
20.1 to 30m	10%
Greater than 30m	0%

*If a vertical fire wall is properly constructed and has a rating of no less than 2 hours, then the boundary can be treated as protected with no exposure charge
*The maximum exposure adjustment charge to be applied to a subject building is 75%
*The distance in metres from the subject building facing wall to the exposed building facing wall, measured to the nearest metre, between the nearest points of the buildings. Where either the subject building or the exposed building is at a diagonal to the other building, the shortest distance should be increased by 3 metres and this adjusted value used as exposure distance.

Exposed buildings		Distance	Surcharge Factor	Surcharge (L/min)
North	Single Detatched Residential	30+	0%	0
East	Single Detatched Residential	30+	0%	0
South	Park Block	N/A	0%	0
West	Townhouse	30+	0%	0

Total Reduced Flow **0** **L/min Surcharge (not rounded)**

STEP G: Final Required Fire Flow

Step D - Occupancy Adjusted Fire Flow Demand	11,900	L/min
Step E - Sprinkler (Reduction)	-5,950	L/min
Step F - Exposure Charge	0	L/min
Final Fire Flow:	**5,950**	**L/min**
	6,000	**L/min (rounded to nearest 1000L/min)**
or	**100**	**L/s**
or	**1,585**	**USGPM**
Required duration:	**2.00**	**hours**

Refer to Table 1 for Duration

Table 1 - FUS 2020

Required Duration of Fire Flow	
Flow Required (L/min)	**Duration (hours)**
2,000 or less	1.00
3,000	1.25
4,000	1.50
5,000	1.75
6,000	2.00
8,000	2.00
10,000	2.00
12,000	2.50
14,000	3.00
16,000	3.50
18,000	4.00
20,000	4.50
22,000	5.00
24,000	5.50
26,000	6.00
28,000	6.50
30,000	7.00
32,000	7.50
34,000	8.00
36,000	8.50
38,000	9.00
40,000 and over	9.50

Interpolate for intermediate figures

APPENDIX D

Hydrologic Parameter Sheets

Project Name: Bridle Park
Project Number: 1508-7498
Date: 2026.05.26
By: EC/NOC

Area Summary

PRE-DEVELOPMENT	
Catchments	**Area (ha)**
EXT-1	100.92
EXT-2	23.99
EXT-3	39.68
EXT-4	0.13
EXT-5	1.62
EXT-6	0.59
EXT-7	1.38
EP-1	6.37
EP-2	14.85
EP-3	1.13
FUT-EP-1	1.7
FUT-EP-2	1.8
FUT-EP-3	6.7
PRE-1	46.28
FUT-1	29.16
Total	**276.3**

POST DEVELOPMENT	
Catchments	**Area (ha)**
EXT-1	100.92
EXT-2	23.99
EXT-3	39.68
EXT-4	0.13
EXT-5	1.62
EXT-6	0.59
EXT-7	1.38
EP-1	6.37
EP-2	14.85
EP-3	1.13
FUT-EP-1	1.7
FUT-EP-2	1.8
FUT-EP-3	6.7
POST-1	31.06
POST-2	1.32
POST-3	1.87
POST-4	1.93
POST-5	1.59
POST-6	2.16
POST-7	0.07
POND	4.16
SCHOOL	2.12
POST-FUT-1	29.16
TOTAL	**276.30**

PRE TO POST COMPARISON	
Scenario	**Area (ha)**
Pre Development	276.3
Post Development	276.30
Difference	0.00

Project Name: Bridle Park
Project Number: 1508-7498
Date: 2026.05.26
By: EC/NOC

D.A. NAME **EXT-1**
D.A. AREA (ha) **100.92**

Hydrologic Parameters: CALIB NASHYD Command
External Drainage Area: Catchment EXT-1

Curve Number Calculation

Soil Types Present:

Type	ID	Hydrologic Group	% Area	Area
Tioga Sandy Loam	**TIG**	**A**	**14.4**	**14.54**
Alliston Sandy Loam	**ALT**	**B**	**0.3**	**0.28**
Granby Sandy Loam	**GNY**	**C**	**4.2**	**4.19**
Edenvale Sandy Loam	**EDV**	**C**	**6.5**	**6.60**
Sargent Gravelly Sandy	**SGT**	**A**	**29.7**	**29.93**
Harriston Loam	**HRR**	**B**	**45.0**	**45.38**
Smithfield Silty Clay	SMF	C	0.0	0.00
Total Area				100.92

Impervious Landuses Present:

	Roadway		Sidewalk		Driveway		Building		SWMF		Subtotals	
Soils	Area	CN	Area (ha)	CN	Area	CN	Area (ha)	CN	Area	CN	Area	A*CN
TIG	0	98	0	98	0	98	0	98	0	98	0	0
ALT	0	98	0	98	0	98	0	98	0	98	0	0
GNY	0	98	0	98	0	98	0	98	0	98	0	0
EDV	0	98	0	98	0	98	0	98	0	98	0	0
SGT	0	98	0	98	0	98	0	98	0	98	0	0
HRR	0	98	0	98	0.71	98	0.39	98	0	98	1.10	107.80
SMF	0	98	0	98	0	98	0	98	0	98	0	0
Subtotal	0		0		0.71		0.39		0			

Pervious Landuses Present:

	Woodland		Meadow		Wetland		Lawn		Cultivated		Subtotals	
Soils	Area	CN	Area (ha)	CN	Area	CN	Area (ha)	CN	Area	CN	Area	A*CN
TIG	8.56	32	5.58	38	0.08	50	0	49	0.32	62	14.54	509.80
ALT	0.28	60	0	65	0	50	0	69	0	74	0.28	16.80
GNY	0.34	73	0	76	0.69	50	0	79	3.16	82	4.19	318.44
EDV	1.06	73	4.71	76	0.83	50	0	79	0	82	6.60	476.84
SGT	6.74	32	23.12	38	0.07	50	0	49	0	62	29.93	1,097.74
HRR	3.74	60	5.90	65	0	50	10.65	69	23.99	74	44.28	3,118.01
SMF	0	73	0	76	0	50	0	79	0	82	0	0
Subtotal	20.72		39.31		1.67		10.65		27.47			

Composite Area Calculations	Total Pervious Area	99.82
	Total Impervious Area	1.10
	% Impervious	1.09
	Composite Curve Number	55.94
	Total Area Check	100.92

Initial Abstraction and Tp Calculations

Initial Abstraction				Composite Runoff Coefficient												
Landuse	IA (mm)	Area (ha)	A * IA	Tioga Sandy		Alliston Sandy		Granby Sandy		Edenvale		Sargent Gravelly		Harriston Loam		Smithfield Silty Clay		
				RC	Area	RC	Area	RC	Area	RC	Area	RC	Area	RC	Area	RC	Area	A*RC
Woodland	10	20.72	207.20	0.08	8.56	0.25	0.28	0.35	0.34	0.35	1.06	0.08	6.74	0.25	3.74	0.35	0	2.72
Meadow	8	39.31	314.48	0.10	5.58	0.28	0	0.40	0	0.40	4.71	0.10	23.12	0.28	5.90	0.40	0	6.41
Wetland	16	1.67	26.72	0.05	0.08	0.05	0	0.05	0.69	0.05	0.83	0.05	0.07	0.05	0	0.05	0	0.08
Lawn	5	10.65	53.25	0.10	0	0.10	0	0.10	0	0.10	0	0.10	0	0.10	10.65	0.10	0	1.07
Cultivated	7	27.47	192.29	0.22	0.32	0.35	0	0.55	3.16	0.55	0	0.22	0	0.35	23.99	0.55	0	10.20
Impervious	2	1.10	2.20	0.95	0	0.95	0	0.95	0	0.95	0	0.95	0	0.95	1.10	0.95	0	1.05
Composite		100.92	7.89													Composite Runoff Coefficient		0.21

Time to Peak Inputs						Uplands			Bransby Williams		Airport	
Flow Path Description	Length (m)	Drop (m)	Slope (%)	$V/S^{0.5}$	Velocity (m/s)	Tc (hr)	Tp(hr)	TOTAL Tp (hr)	Tc (hr)	Tp(hr)	Tc (hr)	Tp(hr)
Overland	1850	10	0.5%	2.7	0.20	2.59	1.73	1.73	1.25	0.84	2.54	1.70

Appropriate calculated time to peak: 1.70 Appropriate Method: Airport

Project Name: Bridle Park
Project Number: 1508-7498
Date: 2026.05.26
By: EC/NOC

D.A. NAME **EXT-2**
D.A. AREA (ha) **23.99**

Hydrologic Parameters: CALIB NASHYD Command
External Drainage Area: Catchment EXT-2

Curve Number Calculation

Soil Types Present:

Type	ID	Hydrologic Group	% Area	Area
Tioga Sandy Loam	**TIG**	**A**	**29.2**	**7.01**
Alliston Sandy Loam	ALT	B	0.0	0.00
Granby Sandy Loam	**GNY**	**C**	**19.8**	**4.75**
Edenvale Sandy Loam	EDV	C	0.0	0.00
Sargent Gravelly Sandy	**SGT**	**A**	**43.3**	**10.38**
Harriston Loam	**HRR**	**B**	**3.3**	**0.78**
Smithfield Silty Clay	**SMF**	**C**	**4.5**	**1.07**
Total Area				23.99

Impervious Landuses Present:

	Roadway		Sidewalk		Driveway		Building		SWMF		Subtotals	
Soils	Area	CN	Area (ha)	CN	Area	CN	Area (ha)	CN	Area	CN	Area	A*CN
TIG	0	98	0	98	0	98	0	98	0	98	0	0
ALT	0	98	0	98	0	98	0	98	0	98	0	0
GNY	0	98	0	98	0	98	0	98	0	98	0	0
EDV	0	98	0	98	0	98	0	98	0	98	0	0
SGT	0	98	0	98	0	98	0	98	0	98	0	0
HRR	0	98	0	98	0	98	0	98	0	98	0	0
SMF	0	98	0	98	0	98	0	98	0	98	0	0
Subtotal	0		0		0		0		0			

Pervious Landuses Present:

	Woodland		Meadow		Wetland		Lawn		Cultivated		Subtotals	
Soils	Area	CN	Area (ha)	CN	Area	CN	Area (ha)	CN	Area	CN	Area	A*CN
TIG	3.68	32	0	38	3.33	50	0	49	0	62	7.01	284.26
ALT	0	60	0	65	0	50	0	69	0	74	0	0
GNY	1.24	73	0	76	3.35	50	0	79	0.16	82	4.75	271.14
EDV	0	73	0	76	0	50	0	79	0	82	0	0
SGT	2.62	32	7.65	38	0.11	50	0	49	0	62	10.38	380.04
HRR	0.27	60	0	65	0	50	0	69	0.51	74	0.78	53.94
SMF	0.52	73	0	76	0	50	0	79	0.55	82	1.07	83.06
Subtotal	8.33		7.65		6.79		0		1.22			

Composite Area Calculations	Total Pervious Area	23.99	
	Total Impervious Area	0	
	% Impervious	0	
	Composite Curve Number	44.70	
	Total Area Check	23.99	

Initial Abstraction and Tp Calculations

Initial Abstraction				Composite Runoff Coefficient												
Landuse	IA (mm)	Area (ha)	A * IA	Tioga Sandy		Alliston Sandy		Granby Sandy		Edenvale		Sargent Gravelly		Harriston Loam		Smithfield Silty Clay		
				RC	Area	RC	Area	RC	Area	RC	Area	RC	Area	RC	Area	RC	Area	A*RC
Woodland	10	8.33	83.30	0.08	3.68	0.25	0	0.35	1.24	0.35	0	0.08	2.62	0.25	0.27	0.35	0.52	1.19
Meadow	8	7.65	61.20	0.10	0	0.28	0	0.40	0	0.40	0	0.10	7.65	0.28	0	0.40	0	0.77
Wetland	16	6.79	108.64	0.05	3.33	0.05	0	0.05	3.35	0.05	0	0.05	0.11	0.05	0	0.05	0	0.34
Lawn	5	0	0	0.10	0	0.10	0	0.10	0	0.10	0	0.10	0	0.10	0	0.10	0	0
Cultivated	7	1.22	8.54	0.22	0	0.35	0	0.55	0.16	0.55	0	0.22	0	0.35	0.51	0.55	0.55	0.57
Impervious	2	0	0	0.95	0	0.95	0	0.95	0	0.95	0	0.95	0	0.95	0	0.95	0	0
Composite		23.99	10.91													Composite Runoff Coefficient		0.12

Time to Peak Inputs						Uplands			Bransby Williams		Airport	
Flow Path Description	Length (m)	Drop (m)	Slope (%)	$V/S^{0.5}$	Velocity (m/s)	Tc (hr)	Tp(hr)	TOTAL Tp (hr)	Tc (hr)	Tp(hr)	Tc (hr)	Tp(hr)
Overland	950	14	1.5%	2.7	0.33	0.81	0.54	0.54	0.61	0.41	1.45	0.97

Appropriate calculated time to peak: 0.97 Appropriate Method: Airport

Project Name: Bridle Park
Project Number: 1508-7498
Date: 2026.05.26
By: EC/NOC

D.A. NAME **EXT-3**
D.A. AREA (ha) **39.68**

Hydrologic Parameters: CALIB NASHYD Command
External Drainage Area: Catchment EXT-3

Curve Number Calculation

Soil Types Present:

Type	ID	Hydrologic Group	% Area	Area
Tioga Sandy Loam	**TIG**	**A**	**7.9**	**3.12**
Alliston Sandy Loam	ALT	B	0.0	0.00
Granby Sandy Loam	GNY	C	0.0	0.00
Edenvale Sandy Loam	EDV	C	0.0	0.00
Sargent Gravelly Sandy	**SGT**	**A**	**24.2**	**9.59**
Harriston Loam	**HRR**	**B**	**48.3**	**19.15**
Smithfield Silty Clay	**SMF**	**C**	**19.7**	**7.82**
Total Area				39.68

Impervious Landuses Present:

	Roadway		Sidewalk		Driveway		Building		SWMF		Subtotals	
Soils	Area	CN	Area (ha)	CN	Area	CN	Area (ha)	CN	Area	CN	Area	A*CN
TIG	0	98	0	98	0	98	0	98	0	98	0	0
ALT	0	98	0	98	0	98	0	98	0	98	0	0
GNY	0	98	0	98	0	98	0	98	0	98	0	0
EDV	0	98	0	98	0	98	0	98	0	98	0	0
SGT	0	98	0	98	0	98	0	98	0	98	0	0
HRR	0.01	98	0	98	0.24	98	0	98	0	98	0.25	24.50
SMF	0	98	0	98	0	98	0	98	0	98	0	0
Subtotal	0.01		0		0.24		0		0			

Pervious Landuses Present:

	Woodland		Meadow		Wetland		Lawn		Cultivated		Subtotals	
Soils	Area	CN	Area (ha)	CN	Area	CN	Area (ha)	CN	Area	CN	Area	A*CN
TIG	2.64	32	0	38	0.48	50	0	49	0	62	3.12	108.48
ALT	0	60	0	65	0	50	0	69	0	74	0	0
GNY	0	73	0	76	0	50	0	79	0	82	0	0
EDV	0	73	0	76	0	50	0	79	0	82	0	0
SGT	8.43	32	1.16	38	0	50	0	49	0	62	9.59	313.84
HRR	0.25	60	0.53	65	0	50	1.28	69	16.84	74	18.90	1,383.93
SMF	0	73	6.02	76	0.88	50	0.08	79	0.84	82	7.82	576.72
Subtotal	11.32		7.71		1.36		1.36		17.68			

Composite Area Calculations	Total Pervious Area	39.43
	Total Impervious Area	0.25
	% Impervious	0.63
	Composite Curve Number	60.67
	Total Area Check	39.68

Initial Abstraction and Tp Calculations

Initial Abstraction				Composite Runoff Coefficient												
Landuse	IA (mm)	Area (ha)	A * IA	Tioga Sandy		Alliston Sandy		Granby Sandy		Edenvale		Sargent Gravelly		Harriston Loam		Smithfield Silty Clay		
				RC	Area	RC	Area	RC	Area	RC	Area	RC	Area	RC	Area	RC	Area	A*RC
Woodland	10	11.32	113.20	0.08	2.64	0.25	0	0.35	0	0.35	0	0.08	8.43	0.25	0.25	0.35	0	0.95
Meadow	8	7.71	61.68	0.10	0	0.28	0	0.40	0	0.40	0	0.10	1.16	0.28	0.53	0.40	6.02	2.67
Wetland	16	1.36	21.76	0.05	0.48	0.05	0	0.05	0	0.05	0	0.05	0	0.05	0	0.05	0.88	0.07
Lawn	5	1.36	6.80	0.10	0	0.10	0	0.10	0	0.10	0	0.10	0	0.10	1.28	0.10	0.08	0.14
Cultivated	7	17.68	123.76	0.22	0	0.35	0	0.55	0	0.55	0	0.22	0	0.35	16.84	0.55	0.84	6.36
Impervious	2	0.25	0.50	0.95	0	0.95	0	0.95	0	0.95	0	0.95	0	0.95	0.25	0.95	0	0.24
Composite		39.68	8.26													Composite Runoff Coefficient		0.26

Time to Peak Inputs						Uplands			Bransby Williams		Airport	
Flow Path Description	Length (m)	Drop (m)	Slope (%)	$V/S^{0.5}$	Velocity (m/s)	Tc (hr)	Tp(hr)	TOTAL Tp (hr)	Tc (hr)	Tp(hr)	Tc (hr)	Tp(hr)
Overland	1500	15	1.0%	2.7	0.27	1.54	1.03	1.03	0.99	0.66	1.76	1.18

Appropriate calculated time to peak: 1.18 Appropriate Method: Airport

CROZIER

Project Name: Bridle Park
Project Number: 1508-7498
Date: 2026.07.08
By: EC/NOC

D.A. NAME **EXT-4**
D.A. AREA (ha) **0.13**

Hydrologic Parameters: CALIB STANDHYD Command
Post Development Drainage Area: Catchment EXT-4

Curve Number Calculation

Soil Types Present:

Type	ID	Hydrologic Group	% Area	Area
Tioga Sandy Loam	TIG	A	0.0	0.00
Alliston Sandy Loam	**ALT**	**B**	**100.0**	**0.13**
Granby Sandy Loam	GNY	C	0.0	0
Edenvale Sandy Loam	EDV	C	0.0	0
Sargent Gravelly Sandy Loam	SGT	A	0.0	0
Harriston Loam	HRR	B	0.0	0
Smithfield Silty Clay Loam	SMF	C	0.0	0
Total Area Check				0.13

Impervious Landuses Present:

	Roadway		Sidewalk		Driveway		Building		SWMF		Subtotals	
Soils	Area (ha)	CN	Area (ha)	CN	Area (ha)	CN	Area (ha)	CN	Area (ha)	CN	Area	A*CN
TIG	0	98	0	98	0	98	0	98	0	98	0	0.00
ALT	0.01	98	0	98	0	98	0.03	98	0	98	0.04	3.92
GNY	0	98	0	98	0	98	0	98	0	98	0	0
EDV	0	98	0	98	0	98	0	98	0	98	0	0
SGT	0	98	0	98	0	98	0	98	0	98	0	0
HRR	0	98	0	98	0	98	0	98	0	98	0	0
SMF	0	98	0	98	0	98	0	98	0	98	0	0
Subtotal Area	0.01		0		0		0.03		0			

Pervious Landuses Present:

	Woodland		Meadow		Wetland		Lawn		Cultivated		Subtotals	
Soils	Area (ha)	CN	Area (ha)	CN	Area (ha)	CN	Area (ha)	CN	Area (ha)	CN	Area	A*CN
TIG	0	32	0	38	0	50	0	49	0	62	0	0.00
ALT	0	60	0	65	0	50	0.09	69	0	74	0.09	6.21
GNY	0	73	0	76	0	50	0	79	0	82	0	0
EDV	0	73	0	76	0	50	0	79	0	82	0	0
SGT	0	32	0	38	0	50	0	49	0	62	0	0
HRR	0	60	0	65	0	50	0	69	0	74	0	0
SMF	0	73	0	76	0	50	0	79	0	82	0	0
Subtotal Area	0		0		0		0.09		0			

Pervious Area Calculations	Total Pervious Area	0.09
	Composite Pervious Curve Number	69.00
Impervious Area Calculations	Total Directly Connected Area	0.01
	Total Indirectly Connected Area	0.03
	Total Impervious Area	0.04
	% X imp	7.69
	% T imp	30.77
	Total Area Check	0.13

Initial Abstraction and Tp Calculations

Landuse	IA (mm)	Area (ha)	A * IA
Woodland	10	0	0
Meadow	8	0	0
Wetland	16	0	0
Lawn	5	0.09	0.45
Cultivated	7	0	0

Land Use	IA (mm)	Slope (%)	Travel Length (m)	Manning's n
Pervious	5.0	0.5	70	0.25
Impervious	2.0	0.5	29	0.013

CROZIER

Project Name: Bridle Park
Project Number: 1508-7498
Date: 2026.07.08
By: EC/NOC

D.A. NAME **EXT-5**
D.A. AREA (ha) **1.62**

Hydrologic Parameters: CALIB STANDHYD Command
Post Development Drainage Area: Catchment EXT-5

Curve Number Calculation

Soil Types Present:

Type	ID	Hydrologic Group	% Area	Area
Tioga Sandy Loam	TIG	A	0.0	0.00
Alliston Sandy Loam	**ALT**	**B**	**100.0**	**1.62**
Granby Sandy Loam	GNY	C	0.0	0
Edenvale Sandy Loam	EDV	C	0.0	0
Sargent Gravelly Sandy Loam	SGT	A	0.0	0
Harriston Loam	HRR	B	0.0	0
Smithfield Silty Clay Loam	SMF	C	0.0	0
Total Area Check				1.62

Impervious Landuses Present:

	Roadway		Sidewalk		Driveway		Building		SWMF		Subtotals	
Soils	Area (ha)	CN	Area (ha)	CN	Area (ha)	CN	Area (ha)	CN	Area (ha)	CN	Area	A*CN
TIG	0	98	0	98	0	98	0	98	0	98	0	0.00
ALT	0	98	0	98	0.50	98	0.29	98	0	98	0.79	77.42
GNY	0	98	0	98	0	98	0	98	0	98	0	0
EDV	0	98	0	98	0	98	0	98	0	98	0	0
SGT	0	98	0	98	0	98	0	98	0	98	0	0
HRR	0	98	0	98	0	98	0	98	0	98	0	0
SMF	0	98	0	98	0	98	0	98	0	98	0	0
Subtotal Area	0		0		0.50		0.29		0			

Pervious Landuses Present:

	Woodland		Meadow		Wetland		Lawn		Cultivated		Subtotals	
Soils	Area (ha)	CN	Area (ha)	CN	Area (ha)	CN	Area (ha)	CN	Area (ha)	CN	Area	A*CN
TIG	0	32	0	38	0	50	0	49	0	62	0	0.00
ALT	0	60	0	65	0	50	0.83	69	0	74	0.83	57.27
GNY	0	73	0	76	0	50	0	79	0	82	0	0
EDV	0	73	0	76	0	50	0	79	0	82	0	0
SGT	0	32	0	38	0	50	0	49	0	62	0	0
HRR	0	60	0	65	0	50	0	69	0	74	0	0
SMF	0	73	0	76	0	50	0	79	0	82	0	0
Subtotal Area	0		0		0		0.83		0			

Pervious Area Calculations	Total Pervious Area		0.83
	Composite Pervious Curve Number		69.00
Impervious Area Calculations	Total Directly Connected Area		0.50
	Total Indirectly Connected Area		0.29
	Total Impervious Area		0.79
	% X imp		30.86
	% T imp		48.77
	Total Area Check		1.62

Initial Abstraction and Tp Calculations

Landuse	IA (mm)	Area (ha)	A * IA
Woodland	10	0	0
Meadow	8	0	0
Wetland	16	0	0
Lawn	5	0.83	4.15
Cultivated	7	0	0

Land Use	IA (mm)	Slope (%)	Travel Length (m)	Manning's n
Pervious	5.0	1.4	400	0.25
Impervious	2.0	0.5	104	0.013

Project Name: Bridle Park
Project Number: 1508-7498
Date: 2026.07.08
By: EC/NOC

D.A. NAME **EXT-6**
D.A. AREA (ha) **0.59**

Hydrologic Parameters: CALIB NASHYD Command
External Drainage Area: Catchment EXT-6

Curve Number Calculation

Soil Types Present:

Type	ID	Hydrologic Group	% Area	Area
Tioga Sandy Loam	TIG	A	0.0	0.00
Alliston Sandy Loam	**ALT**	**B**	**100.0**	**0.59**
Granby Sandy Loam	GNY	C	0.0	0.00
Edenvale Sandy Loam	EDV	C	0.0	0.00
Sargent Gravelly Sandy	SGT	A	0.0	0.00
Harriston Loam	HRR	B	0.0	0.00
Smithfield Silty Clay	SMF	C	0.0	0.00
Total Area				0.59

Impervious Landuses Present:

	Roadway		Sidewalk		Driveway		Building		SWMF		Subtotals	
Soils	Area	CN	Area (ha)	CN	Area	CN	Area (ha)	CN	Area	CN	Area	A*CN
TIG	0	98	0	98	0	98	0	98	0	98	0	0
ALT	0	98	0	98	0.01	98	0.04	98	0	98	0.05	4.90
GNY	0	98	0	98	0	98	0	98	0	98	0	0
EDV	0	98	0	98	0	98	0	98	0	98	0	0
SGT	0	98	0	98	0	98	0	98	0	98	0	0
HRR	0	98	0	98	0	98	0	98	0	98	0	0
SMF	0	98	0	98	0	98	0	98	0	98	0	0
Subtotal	0		0		0.01		0.04		0			

Pervious Landuses Present:

	Woodland		Meadow		Wetland		Lawn		Cultivated		Subtotals	
Soils	Area	CN	Area (ha)	CN	Area	CN	Area (ha)	CN	Area	CN	Area	A*CN
TIG	0	32	0	38	0	50	0	49	0	62	0	0
ALT	0	60	0	65	0	50	0.54	69	0	74	0.54	37.26
GNY	0	73	0	76	0	50	0	79	0	82	0	0
EDV	0	73	0	76	0	50	0	79	0	82	0	0
SGT	0	32	0	38	0	50	0	49	0	62	0	0
HRR	0	60	0	65	0	50	0	69	0	74	0	0
SMF	0	73	0	76	0	50	0	79	0	82	0	0
Subtotal	0		0		0		0.54		0			

Composite Area Calculations	Total Pervious Area	0.54
	Total Impervious Area	0.05
	% Impervious	8.47
	Composite Curve Number	71.46
	Total Area Check	0.59

Initial Abstraction and Tp Calculations

Initial Abstraction				Composite Runoff Coefficient													
Landuse	IA (mm)	Area (ha)	A * IA	Tioga Sandy		Alliston Sandy		Granby Sandy		Edenvale		Sargent Gravelly		Harriston Loam		Smithfield Silty Clay		
				RC	Area	RC	Area	RC	Area	RC	Area	RC	Area	RC	Area	RC	Area	A*RC
Woodland	10	0	0	0.08	0	0.25	0	0.35	0	0.35	0	0.08	0	0.25	0	0.35	0	0
Meadow	8	0	0	0.10	0	0.28	0	0.40	0	0.40	0	0.10	0	0.28	0	0.40	0	0
Wetland	16	0	0	0.05	0	0.05	0	0.05	0	0.05	0	0.05	0	0.05	0	0.05	0	0
Lawn	5	0.54	2.70	0.10	0	0.10	0.54	0.10	0	0.10	0	0.10	0	0.10	0	0.10	0	0.05
Cultivated	7	0	0	0.22	0	0.35	0	0.55	0	0.55	0	0.22	0	0.35	0	0.55	0	0
Impervious	2	0.05	0.10	0.95	0	0.95	0.05	0.95	0	0.95	0	0.95	0	0.95	0	0.95	0	0.05
Composite		0.59	4.75													Composite Runoff Coefficient		0.17

Time to Peak Inputs						Uplands			Bransby Williams		Airport	
Flow Path Description	Length (m)	Drop (m)	Slope (%)	$V/S^{0.5}$	Velocity (m/s)	Tc (hr)	Tp(hr)	TOTAL Tp (hr)	Tc (hr)	Tp(hr)	Tc (hr)	Tp(hr)
Overland	130	0.5	0.4%	2.7	0.17	0.22	0.14	0.14	0.16	0.11	0.79	0.53

Appropriate calculated time to peak: 0.53 Appropriate Method: Airport

Project Name: Bridle Park
Project Number: 1508-7498
Date: 2026.05.26
By: EC/NOC

D.A. NAME **EXT-7**
D.A. AREA (ha) **1.38**

Hydrologic Parameters: CALIB NASHYD Command
External Drainage Area: Catchment EXT-7

Curve Number Calculation

Soil Types Present:

Type	ID	Hydrologic Group	% Area	Area
Tioga Sandy Loam	TIG	A	0.0	0.00
Alliston Sandy Loam	**ALT**	**B**	**100.0**	**1.38**
Granby Sandy Loam	GNY	C	0.0	0.00
Edenvale Sandy Loam	EDV	C	0.0	0.00
Sargent Gravelly Sandy	SGT	A	0.0	0.00
Harriston Loam	HRR	B	0.0	0.00
Smithfield Silty Clay	SMF	C	0.0	0.00
Total Area				1.38

Impervious Landuses Present:

	Roadway		Sidewalk		Driveway		Building		SWMF		Subtotals	
Soils	Area	CN	Area (ha)	CN	Area	CN	Area (ha)	CN	Area	CN	Area	A*CN
TIG	0	98	0	98	0	98	0	98	0	98	0	0
ALT	0	98	0	98	0.01	98	0.01	98	0	98	0.02	1.96
GNY	0	98	0	98	0	98	0	98	0	98	0	0
EDV	0	98	0	98	0	98	0	98	0	98	0	0
SGT	0	98	0	98	0	98	0	98	0	98	0	0
HRR	0	98	0	98	0	98	0	98	0	98	0	0
SMF	0	98	0	98	0	98	0	98	0	98	0	0
Subtotal	0		0		0.01		0.01		0			

Pervious Landuses Present:

	Woodland		Meadow		Wetland		Lawn		Cultivated		Subtotals	
Soils	Area	CN	Area (ha)	CN	Area	CN	Area (ha)	CN	Area	CN	Area	A*CN
TIG	0	32	0	38	0	50	0	49	0	62	0	0
ALT	0.91	60	0	65	0	50	0.27	69	0.18	74	1.36	86.55
GNY	0	73	0	76	0	50	0	79	0	82	0	0
EDV	0	73	0	76	0	50	0	79	0	82	0	0
SGT	0	32	0	38	0	50	0	49	0	62	0	0
HRR	0	60	0	65	0	50	0	69	0	74	0	0
SMF	0	73	0	76	0	50	0	79	0	82	0	0
Subtotal	0.91		0		0		0.27		0.18			

Composite Area Calculations	Total Pervious Area	1.36
	Total Impervious Area	0.02
	% Impervious	1.45
	Composite Curve Number	64.14
	Total Area Check	1.38

Initial Abstraction and Tp Calculations

Initial Abstraction				Composite Runoff Coefficient												
Landuse	IA (mm)	Area (ha)	A * IA	Tioga Sandy		Alliston Sandy		Granby Sandy		Edenvale		Sargent Gravelly		Harriston Loam		Smithfield Silty Clay		
				RC	Area	RC	Area	RC	Area	RC	Area	RC	Area	RC	Area	RC	Area	A*RC
Woodland	10	0.91	9.10	0.08	0	0.25	0.91	0.35	0	0.35	0	0.08	0	0.25	0	0.35	0	0.23
Meadow	8	0	0	0.10	0	0.28	0	0.40	0	0.40	0	0.10	0	0.28	0	0.40	0	0
Wetland	16	0	0	0.05	0	0.05	0	0.05	0	0.05	0	0.05	0	0.05	0	0.05	0	0
Lawn	5	0.27	1.35	0.10	0	0.10	0.27	0.10	0	0.10	0	0.10	0	0.10	0	0.10	0	0.03
Cultivated	7	0.18	1.26	0.22	0	0.35	0.18	0.55	0	0.55	0	0.22	0	0.35	0	0.55	0	0.06
Impervious	2	0.02	0.04	0.95	0	0.95	0.02	0.95	0	0.95	0	0.95	0	0.95	0	0.95	0	0.02
Composite IA		1.38	8.51													Composite Runoff Coefficient		0.24

Time to Peak Inputs						Uplands			Bransby Williams		Airport	
Flow Path Description	Length (m)	Drop (m)	Slope (%)	$V/S^{0.5}$	Velocity (m/s)	Tc (hr)	Tp(hr)	TOTAL Tp (hr)	Tc (hr)	Tp(hr)	Tc (hr)	Tp(hr)
Overland	100	0.5	0.5%	2.7	0.19	0.15	0.10	0.10	0.11	0.07	0.58	0.39

Appropriate calculated time to peak: 0.39 Appropriate Method: Airport

Project Name: Bridle Park
Project Number: 1508-7498
Date: 2026.05.26
By: EC/NOC

D.A. NAME **EP-1**
D.A. AREA (ha) **6.37**

Hydrologic Parameters: CALIB NASHYD Command
Enivronmental Protection (Internal) Drainage Area: Catchment EP-1

Curve Number Calculation

Soil Types Present:

Type	ID	Hydrologic Group	% Area	Area
Tioga Sandy Loam	**TIG**	**A**	**2.4**	**0.15**
Alliston Sandy Loam	ALT	B	0.0	0.00
Granby Sandy Loam	**GNY**	**C**	**97.6**	**6.22**
Edenvale Sandy Loam	EDV	C	0.0	0.00
Sargent Gravelly Sandy	SGT	A	0.0	0.00
Harriston Loam	HRR	B	0.0	0.00
Smithfield Silty Clay	SMF	C	0.0	0.00
Total Area				6.37

Impervious Landuses Present:

	Roadway		Sidewalk		Driveway		Building		SWMF		Subtotals	
Soils	Area	CN	Area (ha)	CN	Area	CN	Area (ha)	CN	Area	CN	Area	A*CN
TIG	0	98	0	98	0	98	0	98	0	98	0	0
ALT	0	98	0	98	0	98	0	98	0	98	0	0
GNY	0	98	0	98	0	98	0	98	0	98	0	0
EDV	0	98	0	98	0	98	0	98	0	98	0	0
SGT	0	98	0	98	0	98	0	98	0	98	0	0
HRR	0	98	0	98	0	98	0	98	0	98	0	0
SMF	0	98	0	98	0	98	0	98	0	98	0	0
Subtotal	0		0		0		0		0			

Pervious Landuses Present:

	Woodland		Meadow		Wetland		Lawn		Cultivated		Subtotals	
Soils	Area	CN	Area (ha)	CN	Area	CN	Area (ha)	CN	Area	CN	Area	A*CN
TIG	0.11	32	0	38	0.04	50	0	49	0	62	0.15	5.52
ALT	0	60	0	65	0	50	0	69	0	74	0	0
GNY	0.22	73	0	76	6.00	50	0	79	0	82	6.22	316.06
EDV	0	73	0	76	0	50	0	79	0	82	0	0
SGT	0	32	0	38	0	50	0	49	0	62	0	0
HRR	0	60	0	65	0	50	0	69	0	74	0	0
SMF	0	73	0	76	0	50	0	79	0	82	0	0
Subtotal	0.33		0		6.04		0		0			

Composite Area Calculations	Total Pervious Area	6.37
	Total Impervious Area	0
	% Impervious	0
	Composite Curve Number	50.48
	Total Area Check	6.37

Initial Abstraction and Tp Calculations

Initial Abstraction				Composite Runoff Coefficient												
Landuse	IA (mm)	Area (ha)	A * IA	Tioga Sandy		Alliston Sandy		Granby Sandy		Edenvale		Sargent Gravelly		Harriston Loam		Smithfield Silty Clay		
				RC	Area	RC	Area	RC	Area	RC	Area	RC	Area	RC	Area	RC	Area	A*RC
Woodland	10	0.33	3.30	0.08	0.11	0.25	0	0.35	0.22	0.35	0	0.08	0	0.25	0	0.35	0	0.09
Meadow	8	0	0	0.10	0	0.28	0	0.40	0	0.40	0	0.10	0	0.28	0	0.40	0	0
Wetland	16	6.04	96.64	0.05	0.04	0.05	0	0.05	6.00	0.05	0	0.05	0	0.05	0	0.05	0	0.30
Lawn	5	0	0	0.10	0	0.10	0	0.10	0	0.10	0	0.10	0	0.10	0	0.10	0	0
Cultivated	7	0	0	0.22	0	0.35	0	0.55	0	0.55	0	0.22	0	0.35	0	0.55	0	0
Impervious	2	0	0	0.95	0	0.95	0	0.95	0	0.95	0	0.95	0	0.95	0	0.95	0	0
Composite IA		6.37	15.69	Composite Runoff Coefficient														0.06

Time to Peak Inputs						Uplands			Bransby Williams		Airport	
Flow Path Description	Length (m)	Drop (m)	Slope (%)	$V/S^{0.5}$	Velocity (m/s)	Tc (hr)	Tp(hr)	TOTAL Tp (hr)	Tc (hr)	Tp(hr)	Tc (hr)	Tp(hr)
Overland	510	7	1.4%	2.7	0.32	0.45	0.30	0.30	0.38	0.25	1.15	0.77

Appropriate calculated time to peak: 0.77 Appropriate Method: Airport

Project Name: Bridle Park
Project Number: 1508-7498
Date: 2026.05.26
By: EC/NOC

D.A. NAME **EP-2**
D.A. AREA (ha) **14.85**

Hydrologic Parameters: CALIB NASHYD Command
Environmental Protection (Internal) Drainage Area: Catchment EP-2

Curve Number Calculation

Soil Types Present:

Type	ID	Hydrologic Group	% Area	Area
Tioga Sandy Loam	**TIG**	**A**	**17.6**	**2.62**
Alliston Sandy Loam	**ALT**	**B**	**8.4**	**1.24**
Granby Sandy Loam	**GNY**	**C**	**74.0**	**10.99**
Edenvale Sandy Loam	EDV	C	0.0	0.00
Sargent Gravelly Sandy	SGT	A	0.0	0.00
Harriston Loam	HRR	B	0.0	0.00
Smithfield Silty Clay	SMF	C	0.0	0.00
Total Area				14.85

Impervious Landuses Present:

	Roadway		Sidewalk		Driveway		Building		SWMF		Subtotals	
Soils	Area	CN	Area (ha)	CN	Area	CN	Area (ha)	CN	Area	CN	Area	A*CN
TIG	0	98	0	98	0	98	0	98	0	98	0	0
ALT	0	98	0	98	0	98	0	98	0	98	0	0
GNY	0	98	0	98	0	98	0	98	0	98	0	0
EDV	0	98	0	98	0	98	0	98	0	98	0	0
SGT	0	98	0	98	0	98	0	98	0	98	0	0
HRR	0	98	0	98	0	98	0	98	0	98	0	0
SMF	0	98	0	98	0	98	0	98	0	98	0	0
Subtotal	0		0		0		0		0			

Pervious Landuses Present:

	Woodland		Meadow		Wetland		Lawn		Cultivated		Subtotals	
Soils	Area	CN	Area (ha)	CN	Area	CN	Area (ha)	CN	Area	CN	Area	A*CN
TIG	2.31	32	0	38	0.31	50	0	49	0	62	2.62	89.42
ALT	1.24	60	0	65	0	50	0	69	0	74	1.24	74.40
GNY	3.17	73	0	76	7.82	50	0	79	0	82	10.99	622.41
EDV	0	73	0	76	0	50	0	79	0	82	0	0
SGT	0	32	0	38	0	50	0	49	0	62	0	0
HRR	0	60	0	65	0	50	0	69	0	74	0	0
SMF	0	73	0	76	0	50	0	79	0	82	0	0
Subtotal	6.72		0		8.13		0		0			

Composite Area Calculations	Total Pervious Area	14.85
	Total Impervious Area	0
	% Impervious	0
	Composite Curve Number	52.94
	Total Area Check	14.85

Initial Abstraction and Tp Calculations

Initial Abstraction				Composite Runoff Coefficient												
Landuse	IA (mm)	Area (ha)	A * IA	Tioga Sandy		Alliston Sandy		Granby Sandy		Edenvale		Sargent Gravelly		Harriston Loam		Smithfield Silty Clay		
				RC	Area	RC	Area	RC	Area	RC	Area	RC	Area	RC	Area	RC	Area	A*RC
Woodland	10	6.72	67.20	0.08	2.31	0.25	1.24	0.35	3.17	0.35	0	0.08	0	0.25	0	0.35	0	1.60
Meadow	8	0	0	0.10	0	0.28	0	0.40	0	0.40	0	0.10	0	0.28	0	0.40	0	0
Wetland	16	8.13	130.08	0.05	0.31	0.05	0	0.05	7.82	0.05	0	0.05	0	0.05	0	0.05	0	0.41
Lawn	5	0	0	0.10	0	0.10	0	0.10	0	0.10	0	0.10	0	0.10	0	0.10	0	0
Cultivated	7	0	0	0.22	0	0.35	0	0.55	0	0.55	0	0.22	0	0.35	0	0.55	0	0
Impervious	2	0	0	0.95	0	0.95	0	0.95	0	0.95	0	0.95	0	0.95	0	0.95	0	0
Composite IA		14.85	13.28	Composite Runoff Coefficient														0.14

Time to Peak Inputs						Uplands			Bransby Williams		Airport	
Flow Path Description	Length (m)	Drop (m)	Slope (%)	$V/S^{0.5}$	Velocity (m/s)	Tc (hr)	Tp(hr)	TOTAL Tp (hr)	Tc (hr)	Tp(hr)	Tc (hr)	Tp(hr)
Overland	700	8	1.1%	2.7	0.29	0.67	0.45	0.45	0.49	0.33	1.33	0.89

Appropriate calculated time to peak: 0.89 Appropriate Method: Airport

Project Name: Bridle Park
Project Number: 1508-7498
Date: 2026.05.26
By: EC/NOC

D.A. NAME **EP-3**
D.A. AREA (ha) **1.13**

Hydrologic Parameters: CALIB NASHYD Command
Environmental Protection (Internal) Drainage Area: Catchment EP-3

Curve Number Calculation

Soil Types Present:

Type	ID	Hydrologic Group	% Area	Area
Tioga Sandy Loam	**TIG**	**A**	**21.2**	**0.24**
Alliston Sandy Loam	**ALT**	**B**	**78.8**	**0.89**
Granby Sandy Loam	GNY	C	0.0	0.00
Edenvale Sandy Loam	EDV	C	0.0	0.00
Sargent Gravelly Sandy	SGT	A	0.0	0.00
Harriston Loam	HRR	B	0.0	0.00
Smithfield Silty Clay	SMF	C	0.0	0.00
Total Area				1.13

Impervious Landuses Present:

	Roadway		Sidewalk		Driveway		Building		SWMF		Subtotals	
Soils	Area	CN	Area (ha)	CN	Area	CN	Area (ha)	CN	Area	CN	Area	A*CN
TIG	0	98	0	98	0	98	0	98	0	98	0	0
ALT	0	98	0	98	0	98	0	98	0	98	0	0
GNY	0	98	0	98	0	98	0	98	0	98	0	0
EDV	0	98	0	98	0	98	0	98	0	98	0	0
SGT	0	98	0	98	0	98	0	98	0	98	0	0
HRR	0	98	0	98	0	98	0	98	0	98	0	0
SMF	0	98	0	98	0	98	0	98	0	98	0	0
Subtotal	0		0		0		0		0			

Pervious Landuses Present:

	Woodland		Meadow		Wetland		Lawn		Cultivated		Subtotals	
Soils	Area	CN	Area (ha)	CN	Area	CN	Area (ha)	CN	Area	CN	Area	A*CN
TIG	0	32	0	38	0	50	0	49	0.24	62	0.24	14.88
ALT	0.33	60	0	65	0	50	0	69	0.56	74	0.89	61.24
GNY	0	73	0	76	0	50	0	79	0	82	0	0
EDV	0	73	0	76	0	50	0	79	0	82	0	0
SGT	0	32	0	38	0	50	0	49	0	62	0	0
HRR	0	60	0	65	0	50	0	69	0	74	0	0
SMF	0	73	0	76	0	50	0	79	0	82	0	0
Subtotal	0.33		0		0		0		0.80			

Composite Area Calculations	Total Pervious Area	1.13
	Total Impervious Area	0
	% Impervious	0
	Composite Curve Number	67.36
	Total Area Check	1.13

Initial Abstraction and Tp Calculations

Initial Abstraction				Composite Runoff Coefficient												
Landuse	IA (mm)	Area (ha)	A * IA	Tioga Sandy		Alliston Sandy		Granby Sandy		Edenvale		Sargent Gravelly		Harriston Loam		Smithfield Silty Clay		
				RC	Area	RC	Area	RC	Area	RC	Area	RC	Area	RC	Area	RC	Area	A*RC
Woodland	10	0.33	3.30	0.08	0	0.25	0.33	0.35	0	0.35	0	0.08	0	0.25	0	0.35	0	0.08
Meadow	8	0	0	0.10	0	0.28	0	0.40	0	0.40	0	0.10	0	0.28	0	0.40	0	0
Wetland	16	0	0	0.05	0	0.05	0	0.05	0	0.05	0	0.05	0	0.05	0	0.05	0	0
Lawn	5	0	0	0.10	0	0.10	0	0.10	0	0.10	0	0.10	0	0.10	0	0.10	0	0
Cultivated	7	0.80	5.60	0.22	0.24	0.35	0.56	0.55	0	0.55	0	0.22	0	0.35	0	0.55	0	0.25
Impervious	2	0	0	0.95	0	0.95	0	0.95	0	0.95	0	0.95	0	0.95	0	0.95	0	0
Composite IA		1.13	7.88	Composite Runoff Coefficient														0.29

Time to Peak Inputs						Uplands			Bransby Williams		Airport	
Flow Path Description	Length (m)	Drop (m)	Slope (%)	$V/S^{0.5}$	Velocity (m/s)	Tc (hr)	Tp(hr)	TOTAL Tp (hr)	Tc (hr)	Tp(hr)	Tc (hr)	Tp(hr)
Overland	260	3.5	1.3%	2.7	0.31	0.23	0.15	0.15	0.23	0.15	0.64	0.43

Appropriate calculated time to peak: 0.43 Appropriate Method: Airport

Project Name: Bridle Park
Project Number: 1508-7498
Date: 2026.05.26
By: EC/NOC

D.A. NAME **FUT-EP-1**
D.A. AREA (ha) **1.70**

Hydrologic Parameters: CALIB NASHYD Command
Environmental Protection (External) Drainage Area: Catchment FUT-EP-1

Curve Number Calculation

Soil Types Present:

Type	ID	Hydrologic Group	% Area	Area
Tioga Sandy Loam	**TIG**	**A**	**5.9**	**0.10**
Alliston Sandy Loam	**ALT**	**B**	**94.1**	**1.60**
Granby Sandy Loam	GNY	C	0.0	0.00
Edenvale Sandy Loam	EDV	C	0.0	0.00
Sargent Gravelly Sandy	SGT	A	0.0	0.00
Harriston Loam	HRR	B	0.0	0.00
Smithfield Silty Clay	SMF	C	0.0	0.00
Total Area				1.70

Impervious Landuses Present:

	Roadway		Sidewalk		Driveway		Building		SWMF		Subtotals	
Soils	Area	CN	Area (ha)	CN	Area	CN	Area (ha)	CN	Area	CN	Area	A*CN
TIG	0	98	0	98	0	98	0	98	0	98	0	0
ALT	0	98	0	98	0.04	98	0	98	0	98	0.04	3.92
GNY	0	98	0	98	0	98	0	98	0	98	0	0
EDV	0	98	0	98	0	98	0	98	0	98	0	0
SGT	0	98	0	98	0	98	0	98	0	98	0	0
HRR	0	98	0	98	0	98	0	98	0	98	0	0
SMF	0	98	0	98	0	98	0	98	0	98	0	0
Subtotal	0		0		0.04		0		0			

Pervious Landuses Present:

	Woodland		Meadow		Wetland		Lawn		Cultivated		Subtotals	
Soils	Area	CN	Area (ha)	CN	Area	CN	Area (ha)	CN	Area	CN	Area	A*CN
TIG	0.05	32	0	38	0	50	0	49	0.05	62	0.10	4.70
ALT	1.52	60	0	65	0	50	0	69	0.04	74	1.56	94.16
GNY	0	73	0	76	0	50	0	79	0	82	0	0
EDV	0	73	0	76	0	50	0	79	0	82	0	0
SGT	0	32	0	38	0	50	0	49	0	62	0	0
HRR	0	60	0	65	0	50	0	69	0	74	0	0
SMF	0	73	0	76	0	50	0	79	0	82	0	0
Subtotal	1.57		0		0		0		0.09			

Composite Area Calculations	Total Pervious Area	1.66
	Total Impervious Area	0.04
	% Impervious	2.35
	Composite Curve Number	60.46
	Total Area Check	1.70

Initial Abstraction and Tp Calculations

Initial Abstraction				Composite Runoff Coefficient												
Landuse	IA (mm)	Area (ha)	A * IA	Tioga Sandy		Alliston Sandy		Granby Sandy		Edenvale		Sargent Gravelly		Harriston Loam		Smithfield Silty Clay		
				RC	Area	RC	Area	RC	Area	RC	Area	RC	Area	RC	Area	RC	Area	A*RC
Woodland	10	1.57	15.70	0.08	0.05	0.25	1.52	0.35	0	0.35	0	0.08	0	0.25	0	0.35	0	0.38
Meadow	8	0	0	0.10	0	0.28	0	0.40	0	0.40	0	0.10	0	0.28	0	0.40	0	0
Wetland	16	0	0	0.05	0	0.05	0	0.05	0	0.05	0	0.05	0	0.05	0	0.05	0	0
Lawn	5	0	0	0.10	0	0.10	0	0.10	0	0.10	0	0.10	0	0.10	0	0.10	0	0
Cultivated	7	0.09	0.63	0.22	0.05	0.35	0.04	0.55	0	0.55	0	0.22	0	0.35	0	0.55	0	0.03
Impervious	2	0.04	0.08	0.95	0	0.95	0.04	0.95	0	0.95	0	0.95	0	0.95	0	0.95	0	0.04
Composite IA		1.70	9.65													Composite Runoff Coefficient		0.26

Time to Peak Inputs						Uplands			Bransby Williams		Airport	
Flow Path Description	Length (m)	Drop (m)	Slope (%)	$V/S^{0.5}$	Velocity (m/s)	Tc (hr)	Tp(hr)	TOTAL Tp (hr)	Tc (hr)	Tp(hr)	Tc (hr)	Tp(hr)
Overland	140	1	0.7%	2.7	0.23	0.17	0.11	0.11	0.13	0.09	0.60	0.40

Appropriate calculated time to peak: 0.40 Appropriate Method: Airport

Project Name: Bridle Park
Project Number: 1508-7498
Date: 2026.05.26
By: EC/NOC

D.A. NAME **FUT-EP-2**
D.A. AREA (ha) **1.80**

Hydrologic Parameters: CALIB NASHYD Command
Environmental Protection (External) Drainage Area: Catchment FUT-EP-2

Curve Number Calculation

Soil Types Present:

Type	ID	Hydrologic Group	% Area	Area
Tioga Sandy Loam	TIG	A	0.0	0.00
Alliston Sandy Loam	ALT	B	0.0	0.00
Granby Sandy Loam	**GNY**	**C**	**100.0**	**1.80**
Edenvale Sandy Loam	EDV	C	0.0	0.00
Sargent Gravelly Sandy	SGT	A	0.0	0.00
Harriston Loam	HRR	B	0.0	0.00
Smithfield Silty Clay	SMF	C	0.0	0.00
Total Area				1.80

Impervious Landuses Present:

	Roadway		Sidewalk		Driveway		Building		SWMF		Subtotals	
Soils	Area	CN	Area (ha)	CN	Area	CN	Area (ha)	CN	Area	CN	Area	A*CN
TIG	0	98	0	98	0	98	0	98	0	98	0	0
ALT	0	98	0	98	0	98	0	98	0	98	0	0
GNY	0	98	0	98	0	98	0	98	0	98	0	0
EDV	0	98	0	98	0	98	0	98	0	98	0	0
SGT	0	98	0	98	0	98	0	98	0	98	0	0
HRR	0	98	0	98	0	98	0	98	0	98	0	0
SMF	0	98	0	98	0	98	0	98	0	98	0	0
Subtotal	0		0		0		0		0			

Pervious Landuses Present:

	Woodland		Meadow		Wetland		Lawn		Cultivated		Subtotals	
Soils	Area	CN	Area (ha)	CN	Area	CN	Area (ha)	CN	Area	CN	Area	A*CN
TIG	0	32	0	38	0	50	0	49	0	62	0	0
ALT	0	60	0	65	0	50	0	69	0	74	0	0
GNY	0	73	0	76	1.80	50	0	79	0	82	1.80	90.00
EDV	0	73	0	76	0	50	0	79	0	82	0	0
SGT	0	32	0	38	0	50	0	49	0	62	0	0
HRR	0	60	0	65	0	50	0	69	0	74	0	0
SMF	0	73	0	76	0	50	0	79	0	82	0	0
Subtotal	0		0		1.80		0		0			

Composite Area Calculations	Total Pervious Area	1.80
	Total Impervious Area	0
	% Impervious	0
	Composite Curve Number	50.00
	Total Area Check	1.80

Initial Abstraction and Tp Calculations

Initial Abstraction				Composite Runoff Coefficient												
Landuse	IA (mm)	Area (ha)	A * IA	Tioga Sandy		Alliston Sandy		Granby Sandy		Edenvale		Sargent Gravelly		Harriston Loam		Smithfield Silty Clay		
				RC	Area	RC	Area	RC	Area	RC	Area	RC	Area	RC	Area	RC	Area	A*RC
Woodland	10	0	0	0.08	0	0.25	0	0.35	0	0.35	0	0.08	0	0.25	0	0.35	0	0
Meadow	8	0	0	0.10	0	0.28	0	0.40	0	0.40	0	0.10	0	0.28	0	0.40	0	0
Wetland	16	1.80	28.80	0.05	0	0.05	0	0.05	1.80	0.05	0	0.05	0	0.05	0	0.05	0	0.09
Lawn	5	0	0	0.10	0	0.10	0	0.10	0	0.10	0	0.10	0	0.10	0	0.10	0	0
Cultivated	7	0	0	0.22	0	0.35	0	0.55	0	0.55	0	0.22	0	0.35	0	0.55	0	0
Impervious	2	0	0	0.95	0	0.95	0	0.95	0	0.95	0	0.95	0	0.95	0	0.95	0	0
Composite IA		1.80	16.00													Composite Runoff Coefficient		0.05

Time to Peak Inputs						Uplands			Bransby Williams		Airport	
Flow Path Description	Length (m)	Drop (m)	Slope (%)	$V/S^{0.5}$	Velocity (m/s)	Tc (hr)	Tp(hr)	TOTAL Tp (hr)	Tc (hr)	Tp(hr)	Tc (hr)	Tp(hr)
Overland	230	1	0.4%	2.7	0.18	0.36	0.24	0.24	0.24	0.16	1.14	0.76

Appropriate calculated time to peak: 0.76 Appropriate Method: Airport

Project Name: Bridle Park
Project Number: 1508-7498
Date: 2026.05.26
By: EC/NOC

D.A. NAME **FUT-EP-3**
D.A. AREA (ha) **6.70**

Hydrologic Parameters: CALIB NASHYD Command
Environmental Protection (External) Drainage Area: Catchment FUT-EP-3

Curve Number Calculation

Soil Types Present:

Type	ID	Hydrologic Group	% Area	Area
Tioga Sandy Loam	TIG	A	0.0	0.00
Alliston Sandy Loam	**ALT**	**B**	**100.0**	**6.70**
Granby Sandy Loam	GNY	C	0.0	0.00
Edenvale Sandy Loam	EDV	C	0.0	0.00
Sargent Gravelly Sandy	SGT	A	0.0	0.00
Harriston Loam	HRR	B	0.0	0.00
Smithfield Silty Clay	SMF	C	0.0	0.00
Total Area				6.70

Impervious Landuses Present:

	Roadway		Sidewalk		Driveway		Building		SWMF		Subtotals	
Soils	Area	CN	Area (ha)	CN	Area	CN	Area (ha)	CN	Area	CN	Area	A*CN
TIG	0	98	0	98	0	98	0	98	0	98	0	0
ALT	0	98	0	98	0	98	0	98	0	98	0	0
GNY	0	98	0	98	0	98	0	98	0	98	0	0
EDV	0	98	0	98	0	98	0	98	0	98	0	0
SGT	0	98	0	98	0	98	0	98	0	98	0	0
HRR	0	98	0	98	0	98	0	98	0	98	0	0
SMF	0	98	0	98	0	98	0	98	0	98	0	0
Subtotal	0		0		0		0		0			

Pervious Landuses Present:

	Woodland		Meadow		Wetland		Lawn		Cultivated		Subtotals	
Soils	Area	CN	Area (ha)	CN	Area	CN	Area (ha)	CN	Area	CN	Area	A*CN
TIG	0	32	0	38	0	50	0	49	0	62	0	0
ALT	6.70	60	0	65	0	50	0	69	0	74	6.70	402.00
GNY	0	73	0	76	0	50	0	79	0	82	0	0
EDV	0	73	0	76	0	50	0	79	0	82	0	0
SGT	0	32	0	38	0	50	0	49	0	62	0	0
HRR	0	60	0	65	0	50	0	69	0	74	0	0
SMF	0	73	0	76	0	50	0	79	0	82	0	0
Subtotal	6.70		0		0		0		0			

Composite Area Calculations	Total Pervious Area	6.70
	Total Impervious Area	0
	% Impervious	0
	Composite Curve Number	60.00
	Total Area Check	6.70

Initial Abstraction and Tp Calculations

Initial Abstraction				Composite Runoff Coefficient												
Landuse	IA (mm)	Area (ha)	A * IA	Tioga Sandy		Alliston Sandy		Granby Sandy		Edenvale		Sargent Gravelly		Harriston Loam		Smithfield Silty Clay		
				RC	Area	RC	Area	RC	Area	RC	Area	RC	Area	RC	Area	RC	Area	A*RC
Woodland	10	6.70	67.00	0.08	0	0.25	6.70	0.35	0	0.35	0	0.08	0	0.25	0	0.35	0	1.68
Meadow	8	0	0	0.10	0	0.28	0	0.40	0	0.40	0	0.10	0	0.28	0	0.40	0	0
Wetland	16	0	0	0.05	0	0.05	0	0.05	0	0.05	0	0.05	0	0.05	0	0.05	0	0
Lawn	5	0	0	0.10	0	0.10	0	0.10	0	0.10	0	0.10	0	0.10	0	0.10	0	0
Cultivated	7	0	0	0.22	0	0.35	0	0.55	0	0.55	0	0.22	0	0.35	0	0.55	0	0
Impervious	2	0	0	0.95	0	0.95	0	0.95	0	0.95	0	0.95	0	0.95	0	0.95	0	0
Composite		6.70	10.00													Composite Runoff Coefficient		0.25

Time to Peak Inputs						Uplands			Bransby Williams		Airport	
Flow Path Description	Length (m)	Drop (m)	Slope (%)	$V/S^{0.5}$	Velocity (m/s)	Tc (hr)	Tp(hr)	TOTAL Tp (hr)	Tc (hr)	Tp(hr)	Tc (hr)	Tp(hr)
Overland/Tributary	490	0.5	0.1%	2.7	0.09	1.58	1.06	1.06	0.61	0.41	2.17	1.45

Appropriate calculated time to peak: 1.45 Appropriate Method: Airport

Project Name: Bridle Park
Project Number: 1508-7498
Date: 2026.05.26
By: EC/NOC

D.A. NAME **PRE-1**
D.A. AREA (ha) **46.28**

Hydrologic Parameters: CALIB NASHYD Command
Pre Development Drainage Area: Catchment PRE-1

Curve Number Calculation

Soil Types Present:

Type	ID	Hydrologic Group	% Area	Area
Tioga Sandy Loam	**TIG**	**A**	**7.9**	**3.67**
Alliston Sandy Loam	**ALT**	**B**	**90.6**	**41.94**
Granby Sandy Loam	**GNY**	**C**	**1.4**	**0.67**
Edenvale Sandy Loam	EDV	C	0.0	0.00
Sargent Gravelly Sandy	SGT	A	0.0	0.00
Harriston Loam	HRR	B	0.0	0.00
Smithfield Silty Clay	SMF	C	0.0	0.00
Total Area				46.28

Impervious Landuses Present:

	Roadway		Sidewalk		Driveway		Building		SWMF		Subtotals	
Soils	Area	CN	Area (ha)	CN	Area	CN	Area (ha)	CN	Area	CN	Area	A*CN
TIG	0	98	0	98	0.06	98	0.16	98	0	98	0.22	21.56
ALT	0	98	0	98	0	98	0.01	98	0	98	0.01	0.98
GNY	0	98	0	98	0	98	0	98	0	98	0	0
EDV	0	98	0	98	0	98	0	98	0	98	0	0
SGT	0	98	0	98	0	98	0	98	0	98	0	0
HRR	0	98	0	98	0	98	0	98	0	98	0	0
SMF	0	98	0	98	0	98	0	98	0	98	0	0
Subtotal	0		0		0.06		0.17		0			

Pervious Landuses Present:

	Woodland		Meadow		Wetland		Lawn		Cultivated		Subtotals	
Soils	Area	CN	Area (ha)	CN	Area	CN	Area (ha)	CN	Area	CN	Area	A*CN
TIG	0	32	0	38	0	50	1.12	49	2.33	62	3.45	199.34
ALT	2.24	60	0	65	0	50	0.43	69	39.26	74	41.93	3,069.31
GNY	0.38	73	0	76	0.06	50	0	79	0.23	82	0.67	49.60
EDV	0	73	0	76	0	50	0	79	0	82	0	0
SGT	0	32	0	38	0	50	0	49	0	62	0	0
HRR	0	60	0	65	0	50	0	69	0	74	0	0
SMF	0	73	0	76	0	50	0	79	0	82	0	0
Subtotal	2.62		0		0.06		1.55		41.82			

Composite Area Calculations	Total Pervious Area	46.05
	Total Impervious Area	0.23
	% Impervious	0.50
	Composite Curve Number	72.19
	Total Area Check	46.28

Initial Abstraction and Tp Calculations

Initial Abstraction				Composite Runoff Coefficient												
Landuse	IA (mm)	Area (ha)	A * IA	Tioga Sandy		Alliston Sandy		Granby Sandy		Edenvale		Sargent Gravelly		Harriston Loam		Smithfield Silty Clay		
				RC	Area	RC	Area	RC	Area	RC	Area	RC	Area	RC	Area	RC	Area	A*RC
Woodland	10	2.62	26.20	0.08	0	0.25	2.24	0.35	0.38	0.35	0	0.08	0	0.25	0	0.35	0	0.69
Meadow	8	0	0	0.10	0	0.28	0	0.40	0	0.40	0	0.10	0	0.28	0	0.40	0	0
Wetland	16	0.06	0.96	0.05	0	0.05	0	0.05	0.06	0.05	0	0.05	0	0.05	0	0.05	0	0.00
Lawn	5	1.55	7.75	0.10	1.12	0.10	0.43	0.10	0	0.10	0	0.10	0	0.10	0	0.10	0	0.16
Cultivated	7	41.82	292.74	0.22	2.33	0.35	39.26	0.55	0.23	0.55	0	0.22	0	0.35	0	0.55	0	14.38
Impervious	2	0.23	0.46	0.95	0.22	0.95	0.01	0.95	0	0.95	0	0.95	0	0.95	0	0.95	0	0.22
Composite IA		46.28	7.09													Composite Runoff Coefficient		0.33

Time to Peak Inputs						Uplands			Bransby Williams		Airport	
Flow Path Description	Length (m)	Drop (m)	Slope (%)	$V/S^{0.5}$	Velocity (m/s)	Tc (hr)	Tp(hr)	TOTAL Tp (hr)	Tc (hr)	Tp(hr)	Tc (hr)	Tp(hr)
Overland/Tributary	260	9	3.5%	2.7	0.50	0.14	0.10	0.10	0.13	0.09	0.45	0.30

Appropriate calculated time to peak: 0.30 Appropriate Method: Airport

Project Name: Bridle Park
Project Number: 1508-7498
Date: 2026.05.26
By: EC/NOC

D.A. NAME **FUT-1**
D.A. AREA (ha) **29.16**

Hydrologic Parameters: CALIB NASHYD Command
Pre Development Drainage Area: Catchment FUT-1

Curve Number Calculation

Soil Types Present:

Type	ID	Hydrologic Group	% Area	Area
Tioga Sandy Loam	**TIG**	**A**	**1.7**	**0.49**
Alliston Sandy Loam	**ALT**	**B**	**73.7**	**21.48**
Granby Sandy Loam	**GNY**	**C**	**24.7**	**7.19**
Edenvale Sandy Loam	EDV	C	0.0	0.00
Sargent Gravelly Sandy	SGT	A	0.0	0.00
Harriston Loam	HRR	B	0.0	0.00
Smithfield Silty Clay	SMF	C	0.0	0.00
Total Area				29.16

Impervious Landuses Present:

	Roadway		Sidewalk		Driveway		Building		SWMF		Subtotals	
Soils	Area	CN	Area (ha)	CN	Area	CN	Area (ha)	CN	Area	CN	Area	A*CN
TIG	0	98	0	98	0	98	0	98	0	98	0	0
ALT	0	98	0	98	0.05	98	0	98	0	98	0.05	4.90
GNY	0	98	0	98	0	98	0	98	0	98	0	0
EDV	0	98	0	98	0	98	0	98	0	98	0	0
SGT	0	98	0	98	0	98	0	98	0	98	0	0
HRR	0	98	0	98	0	98	0	98	0	98	0	0
SMF	0	98	0	98	0	98	0	98	0	98	0	0
Subtotal	0		0		0.05		0		0			

Pervious Landuses Present:

	Woodland		Meadow		Wetland		Lawn		Cultivated		Subtotals	
Soils	Area	CN	Area (ha)	CN	Area	CN	Area (ha)	CN	Area	CN	Area	A*CN
TIG	0	32	0	38	0	50	0	49	0.49	62	0.49	30.38
ALT	8.46	60	0	65	0	50	0.66	69	12.31	74	21.43	1,464.08
GNY	0	73	0	76	0.22	50	0	79	6.97	82	7.19	582.54
EDV	0	73	0	76	0	50	0	79	0	82	0	0
SGT	0	32	0	38	0	50	0	49	0	62	0	0
HRR	0	60	0	65	0	50	0	69	0	74	0	0
SMF	0	73	0	76	0	50	0	79	0	82	0	0
Subtotal	8.46		0		0.22		0.66		19.77			

Composite Area Calculations	Total Pervious Area	29.11
	Total Impervious Area	0.05
	% Impervious	0.17
	Composite Curve Number	71.40
	Total Area Check	29.16

Initial Abstraction and Tp Calculations

Initial Abstraction				Composite Runoff Coefficient												
Landuse	IA (mm)	Area (ha)	A * IA	Tioga Sandy		Alliston Sandy		Granby Sandy		Edenvale		Sargent Gravelly		Harriston Loam		Smithfield Silty Clay		
				RC	Area	RC	Area	RC	Area	RC	Area	RC	Area	RC	Area	RC	Area	A*RC
Woodland	10	8.46	84.60	0.08	0	0.25	8.46	0.35	0	0.35	0	0.08	0	0.25	0	0.35	0	2.12
Meadow	8	0	0	0.10	0	0.28	0	0.40	0	0.40	0	0.10	0	0.28	0	0.40	0	0
Wetland	16	0.22	3.52	0.05	0	0.05	0	0.05	0.22	0.05	0	0.05	0	0.05	0	0.05	0	0.01
Lawn	5	0.66	3.30	0.10	0	0.10	0.66	0.10	0	0.10	0	0.10	0	0.10	0	0.10	0	0.07
Cultivated	7	19.77	138.39	0.22	0.49	0.35	12.31	0.55	6.97	0.55	0	0.22	0	0.35	0	0.55	0	8.25
Impervious	2	0.05	0.10	0.95	0	0.95	0.05	0.95	0	0.95	0	0.95	0	0.95	0	0.95	0	0.05
Composite IA		29.16	7.88													Composite Runoff Coefficient		0.36

Time to Peak Inputs						Uplands			Bransby Williams		Airport	
Flow Path Description	Length (m)	Drop (m)	Slope (%)	$V/S^{0.5}$	Velocity (m/s)	Tc (hr)	Tp(hr)	TOTAL Tp (hr)	Tc (hr)	Tp(hr)	Tc (hr)	Tp(hr)
Overland/Tributary	600	5.5	0.9%	2.7	0.26	0.64	0.43	0.43	0.41	0.28	1.01	0.68

Appropriate calculated time to peak: 0.68 Appropriate Method: Airport

CROZIER

Project Name: Bridle Park
Project Number: 1508-7498
Date: 2026.06.16
By: EC/NOC

D.A. NAME **POST-FUT-1**
D.A. AREA (ha) **29.16**

Hydrologic Parameters: CALIB STANDHYD Command
Post Development Drainage Area: Catchment POST-FUT-1

Curve Number Calculation

Soil Types Present:

Type	ID	Hydrologic Group	% Area	Area
Tioga Sandy Loam	**TIG**	**A**	**1.7**	**0.49**
Alliston Sandy Loam	**ALT**	**B**	**73.7**	**21.48**
Granby Sandy Loam	**GNY**	**C**	**24.7**	**7.19**
Edenvale Sandy Loam	EDV	C	0.0	0
Sargent Gravelly Sandy Loam	SGT	A	0.0	0
Harriston Loam	HRR	B	0.0	0
Smithfield Silty Clay Loam	SMF	C	0.0	0
Total Area Check				29.16

Impervious Landuses Present:

	Roadway		Sidewalk		Driveway		Building		SWMF		Subtotals	
Soils	Area (ha)	CN	Area (ha)	CN	Area (ha)	CN	Area (ha)	CN	Area (ha)	CN	Area	A*CN
TIG	0.15	98	0.02	98	0.07	98	0.13	98	0	98	0.37	36.02
ALT	6.44	98	0.81	98	3.22	98	5.64	98	0	98	16.11	1,578.78
GNY	2.16	98	0.27	98	1.08	98	1.89	98	0	98	5.39	528.47
EDV	0	98	0	98	0	98	0	98	0	98	0	0
SGT	0	98	0	98	0	98	0	98	0	98	0	0
HRR	0	98	0	98	0	98	0	98	0	98	0	0
SMF	0	98	0	98	0	98	0	98	0	98	0	0
Subtotal Area	8.75		1.09		4.37		7.65		0			

Pervious Landuses Present:

	Woodland		Meadow		Wetland		Lawn		Cultivated		Subtotals	
Soils	Area (ha)	CN	Area (ha)	CN	Area (ha)	CN	Area (ha)	CN	Area (ha)	CN	Area	A*CN
TIG	0	32	0	38	0	50	0.12	49	0	62	0.12	6.00
ALT	0	60	0	65	0	50	5.37	69	0	74	5.37	370.53
GNY	0	73	0	76	0	50	1.80	79	0	82	1.80	142.00
EDV	0	73	0	76	0	50	0	79	0	82	0	0
SGT	0	32	0	38	0	50	0	49	0	62	0	0
HRR	0	60	0	65	0	50	0	69	0	74	0	0
SMF	0	73	0	76	0	50	0	79	0	82	0	0
Subtotal Area	0		0		0		7.29		0			

Pervious Area Calculations	Total Pervious Area	7.29
	Composite Pervious Curve Number	71.13
Impervious Area Calculations	Total Directly Connected Area	14.22
	Total Indirectly Connected Area	7.65
	Total Impervious Area	21.87
	% X imp	48.75
	% T imp	75.00
	Total Area Check	29.16

Initial Abstraction and Tp Calculations

Landuse	IA (mm)	Area (ha)	A * IA
Woodland	10	0	0
Meadow	8	0	0
Wetland	16	0	0
Lawn	5	7.29	36.45
Cultivated	7	0	0

Land Use	IA (mm)	Slope (%)	Travel Length (m)	Manning's n
Pervious	5.0	2	30	0.25
Impervious	2.0	0.5	441	0.013

CROZIER

Project Name: Bridle Park
Project Number: 1508-7498
Date: 2026.07.30
By: EC/NOC

D.A. NAME **POST-1**
D.A. AREA (ha) **31.06**

Hydrologic Parameters: CALIB STANDHYD Command
Post Development Drainage Area: Catchment POST-1

Curve Number Calculation

Soil Types Present:

Type	ID	Hydrologic Group	% Area	Area
Tioga Sandy Loam	**TIG**	**A**	**2.6**	**0.82**
Alliston Sandy Loam	**ALT**	**B**	**97.4**	**30.24**
Granby Sandy Loam	GNY	C	0.0	0
Edenvale Sandy Loam	EDV	C	0.0	0
Sargent Gravelly Sandy Loam	SGT	A	0.0	0
Harriston Loam	HRR	B	0.0	0
Smithfield Silty Clay Loam	SMF	C	0.0	0
Total Area Check				31.06

Impervious Landuses Present:

	Roadway		Sidewalk		Driveway		Building		SWMF		Subtotals	
Soils	Area (ha)	CN	Area (ha)	CN	Area (ha)	CN	Area (ha)	CN	Area (ha)	CN	Area	A*CN
TIG	0.23	98	0.04	98	0	98	0.22	98	0	98	0.48	46.80
ALT	5.29	98	0.89	98	0	98	10.08	98	0	98	16.26	1,593.63
GNY	0	98	0	98	0	98	0	98	0	98	0	0
EDV	0	98	0	98	0	98	0	98	0	98	0	0
SGT	0	98	0	98	0	98	0	98	0	98	0	0
HRR	0	98	0	98	0	98	0	98	0	98	0	0
SMF	0	98	0	98	0	98	0	98	0	98	0	0
Subtotal Area	5.52		0.93		0		10.29		0			

Pervious Landuses Present:

	Woodland		Meadow		Wetland		Lawn		Cultivated		Subtotals	
Soils	Area (ha)	CN	Area (ha)	CN	Area (ha)	CN	Area (ha)	CN	Area (ha)	CN	Area	A*CN
TIG	0	32	0	38	0	50	0.34	49	0	62	0.34	16.78
ALT	0	60	0	65	0	50	13.98	69	0	74	13.98	964.51
GNY	0	73	0	76	0	50	0	79	0	82	0	0
EDV	0	73	0	76	0	50	0	79	0	82	0	0
SGT	0	32	0	38	0	50	0	49	0	62	0	0
HRR	0	60	0	65	0	50	0	69	0	74	0	0
SMF	0	73	0	76	0	50	0	79	0	82	0	0
Subtotal Area	0		0		0		14.32		0			

Pervious Area Calculations	Total Pervious Area		14.32
	Composite Pervious Curve Number		68.52
Impervious Area Calculations	Total Directly Connected Area		6.45
	Total Indirectly Connected Area		10.29
	Total Impervious Area		16.74
	% X imp		20.76
	% T imp		53.89
	Total Area Check		31.06

Initial Abstraction and Tp Calculations

Landuse	IA (mm)	Area (ha)	A * IA
Woodland	10	0	0
Meadow	8	0	0
Wetland	16	0	0
Lawn	5	14.32	71.60
Cultivated	7	0	0

Land Use	IA (mm)	Slope (%)	Travel Length (m)	Manning's n
Pervious	5.0	2	30	0.25
Impervious	2.0	0.5	455	0.013

CROZIER

Project Name: Bridle Park
Project Number: 1508-7498
Date: 2026.06.22
By: EC/NOC

D.A. NAME POST-2
D.A. AREA (ha) 1.32

Hydrologic Parameters: CALIB STANDHYD Command
Post Development Drainage Area: Catchment POST-2

Curve Number Calculation

Soil Types Present:

Type	ID	Hydrologic Group	% Area	Area
Tioga Sandy Loam	**TIG**	**A**	**0.8**	**0**
Alliston Sandy Loam	**ALT**	**B**	**99.2**	**1.31**
Granby Sandy Loam	GNY	C	0.0	0
Edenvale Sandy Loam	EDV	C	0.0	0
Sargent Gravelly Sandy Loam	SGT	A	0.0	0
Harriston Loam	HRR	B	0.0	0
Smithfield Silty Clay Loam	SMF	C	0.0	0
Total Area Check				1.32

Impervious Landuses Present:

	Roadway		Sidewalk		Driveway		Building		SWMF		Subtotals	
Soils	Area (ha)	CN	Area (ha)	CN	Area (ha)	CN	Area (ha)	CN	Area (ha)	CN	Area	A*CN
TIG	0	98	0	98	0	98	0.00	98	0	98	0.00	0.43
ALT	0	98	0.02	98	0	98	0.70	98	0	98	0.73	71.40
GNY	0	98	0	98	0	98	0	98	0	98	0	0
EDV	0	98	0	98	0	98	0	98	0	98	0	0
SGT	0	98	0	98	0	98	0	98	0	98	0	0
HRR	0	98	0	98	0	98	0	98	0	98	0	0
SMF	0	98	0	98	0	98	0	98	0	98	0	0
Subtotal Area	0		0.02		0		0.71		0			

Pervious Landuses Present:

	Woodland		Meadow		Wetland		Lawn		Cultivated		Subtotals	
Soils	Area (ha)	CN	Area (ha)	CN	Area (ha)	CN	Area (ha)	CN	Area (ha)	CN	Area	A*CN
TIG	0	32	0	38	0	50	0.01	49	0	62	0.01	0.27
ALT	0	60	0	65	0	50	0.58	69	0	74	0.58	40.12
GNY	0	73	0	76	0	50	0	79	0	82	0	0
EDV	0	73	0	76	0	50	0	79	0	82	0	0
SGT	0	32	0	38	0	50	0	49	0	62	0	0
HRR	0	60	0	65	0	50	0	69	0	74	0	0
SMF	0	73	0	76	0	50	0	79	0	82	0	0
Subtotal Area	0		0		0		0.59		0			

Pervious Area Calculations	Total Pervious Area	0.59
	Composite Pervious Curve Number	68.81
Impervious Area Calculations	Total Directly Connected Area	0.02
	Total Indirectly Connected Area	0.71
	Total Impervious Area	0.73
	% X imp	1.82
	% T imp	55.53
	Total Area Check	1.32

Initial Abstraction and Tp Calculations

Landuse	IA (mm)	Area (ha)	A * IA
Woodland	10	0	0
Meadow	8	0	0
Wetland	16	0	0
Lawn	5	0.59	2.94
Cultivated	7	0	0

Land Use	IA (mm)	Slope (%)	Travel Length (m)	Manning's n
Pervious	5.0	2	23.5	0.25
Impervious	2.0	0.5	94	0.013

CROZIER

Project Name: Bridle Park
Project Number: 1508-7498
Date: 2026.06.22
By: EC/NOC

D.A. NAME **POST-3**
D.A. AREA (ha) **1.87**

Hydrologic Parameters: CALIB STANDHYD Command
Post Development Drainage Area: Catchment POST-3

Curve Number Calculation

Soil Types Present:

Type	ID	Hydrologic Group	% Area	Area
Tioga Sandy Loam	TIG	A	0.0	0
Alliston Sandy Loam	**ALT**	**B**	**76.5**	**1.43**
Granby Sandy Loam	**GNY**	**C**	**23.5**	**0.44**
Edenvale Sandy Loam	EDV	C	0.0	0
Sargent Gravelly Sandy Loam	SGT	A	0.0	0
Harriston Loam	HRR	B	0.0	0
Smithfield Silty Clay Loam	SMF	C	0.0	0
Total Area Check				1.87

Impervious Landuses Present:

	Roadway		Sidewalk		Driveway		Building		SWMF		Subtotals	
Soils	Area (ha)	CN	Area (ha)	CN	Area (ha)	CN	Area (ha)	CN	Area (ha)	CN	Area	A*CN
TIG	0	98	0	98	0	98	0.26	98	0	98	0.26	25.12
ALT	0	98	0.00	98	0	98	0.55	98	0	98	0.55	54.20
GNY	0	98	0	98	0	98	0	98	0	98	0	0
EDV	0	98	0	98	0	98	0	98	0	98	0	0
SGT	0	98	0	98	0	98	0	98	0	98	0	0
HRR	0	98	0	98	0	98	0	98	0	98	0	0
SMF	0	98	0	98	0	98	0	98	0	98	0	0
Subtotal Area	0		0.00		0		0.81		0			

Pervious Landuses Present:

	Woodland		Meadow		Wetland		Lawn		Cultivated		Subtotals	
Soils	Area (ha)	CN	Area (ha)	CN	Area (ha)	CN	Area (ha)	CN	Area (ha)	CN	Area	A*CN
TIG	0	32	0	38	0	50	0	49	0	62	0	-12.56
ALT	0	60	0	65	0	50	0.88	69	0	74	0.88	60.51
GNY	0	73	0	76	0	50	0.44	79	0	82	0.44	34.76
EDV	0	73	0	76	0	50	0	79	0	82	0	0
SGT	0	32	0	38	0	50	0	49	0	62	0	0
HRR	0	60	0	65	0	50	0	69	0	74	0	0
SMF	0	73	0	76	0	50	0	79	0	82	0	0
Subtotal Area	0		0		0		1.06		0			

Pervious Area Calculations	Total Pervious Area	1.06
	Composite Pervious Curve Number	77.98
Impervious Area Calculations	Total Directly Connected Area	0.00
	Total Indirectly Connected Area	0.81
	Total Impervious Area	0.81
	% X imp	0.11
	% T imp	43.28
	Total Area Check	1.87

Initial Abstraction and Tp Calculations

Landuse	IA (mm)	Area (ha)	A * IA
Woodland	10	0	0
Meadow	8	0	0
Wetland	16	0	0
Lawn	5	1.06	5.30
Cultivated	7	0	0

Land Use	IA (mm)	Slope (%)	Travel Length (m)	Manning's n
Pervious	5.0	2	25	0.25
Impervious	2.0	0.5	112	0.013

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Project Name: Bridle Park
Project Number: 1508-7498
Date: 2026.06.22
By: EC/NOC

D.A. NAME **POST-4**
D.A. AREA (ha) **1.93**

Hydrologic Parameters: CALIB STANDHYD Command
Post Development Drainage Area: Catchment POST-4

Curve Number Calculation

Soil Types Present:

Type	ID	Hydrologic Group	% Area	Area
Tioga Sandy Loam	**TIG**	**A**	**99.7**	**2**
Alliston Sandy Loam	**ALT**	**B**	**0.3**	**0.005**
Granby Sandy Loam	GNY	C	0.0	0
Edenvale Sandy Loam	EDV	C	0.0	0
Sargent Gravelly Sandy Loam	SGT	A	0.0	0
Harriston Loam	HRR	B	0.0	0
Smithfield Silty Clay Loam	SMF	C	0.0	0
Total Area Check				1.93

Impervious Landuses Present:

	Roadway		Sidewalk		Driveway		Building		SWMF		Subtotals	
Soils	Area (ha)	CN	Area (ha)	CN	Area (ha)	CN	Area (ha)	CN	Area (ha)	CN	Area	A*CN
TIG	0	98	0	98	0	98	1.05	98	0	98	1.05	103.11
ALT	0	98	0	98	0	98	0.00	98	0	98	0.00	0.27
GNY	0	98	0	98	0	98	0	98	0	98	0	0
EDV	0	98	0	98	0	98	0	98	0	98	0	0
SGT	0	98	0	98	0	98	0	98	0	98	0	0
HRR	0	98	0	98	0	98	0	98	0	98	0	0
SMF	0	98	0	98	0	98	0	98	0	98	0	0
Subtotal Area	0		0		0		1.05		0			

Pervious Landuses Present:

	Woodland		Meadow		Wetland		Lawn		Cultivated		Subtotals	
Soils	Area (ha)	CN	Area (ha)	CN	Area (ha)	CN	Area (ha)	CN	Area (ha)	CN	Area	A*CN
TIG	0	32	0	38	0	50	0.87	49	0	62	0.87	42.77
ALT	0	60	0	65	0	50	0.00	69	0	74	0.00	0.16
GNY	0	73	0	76	0	50	0	79	0	82	0	0
EDV	0	73	0	76	0	50	0	79	0	82	0	0
SGT	0	32	0	38	0	50	0	49	0	62	0	0
HRR	0	60	0	65	0	50	0	69	0	74	0	0
SMF	0	73	0	76	0	50	0	79	0	82	0	0
Subtotal Area	0		0		0		0.88		0			

Pervious Area Calculations	Total Pervious Area	0.88
	Composite Pervious Curve Number	49.05
Impervious Area Calculations	Total Directly Connected Area	0
	Total Indirectly Connected Area	1.05
	Total Impervious Area	1.05
	% X imp	0
	% T imp	54.66
	Total Area Check	1.93

Initial Abstraction and Tp Calculations

Landuse	IA (mm)	Area (ha)	A * IA
Woodland	10	0	0
Meadow	8	0	0
Wetland	16	0	0
Lawn	5	0.88	4.38
Cultivated	7	0	0

Land Use	IA (mm)	Slope (%)	Travel Length (m)	Manning's n
Pervious	5.0	2	45	0.25
Impervious	2.0	0.5	113	0.013

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Project Name: Bridle Park
Project Number: 1508-7498
Date: 2026.06.22
By: EC/NOC

D.A. NAME **POST-5**
D.A. AREA (ha) **1.59**

Hydrologic Parameters: CALIB STANDHYD Command
Post Development Drainage Area: Catchment POST-5

Curve Number Calculation

Soil Types Present:

Type	ID	Hydrologic Group	% Area	Area
Tioga Sandy Loam	**TIG**	**A**	**41.5**	**0.66**
Alliston Sandy Loam	**ALT**	**B**	**58.5**	**0.93**
Granby Sandy Loam	GNY	C	0.0	0
Edenvale Sandy Loam	EDV	C	0.0	0
Sargent Gravelly Sandy Loam	SGT	A	0.0	0
Harriston Loam	HRR	B	0.0	0
Smithfield Silty Clay Loam	SMF	C	0.0	0
Total Area Check				1.59

Impervious Landuses Present:

	Roadway		Sidewalk		Driveway		Building		SWMF		Subtotals	
Soils	Area (ha)	CN	Area (ha)	CN	Area (ha)	CN	Area (ha)	CN	Area (ha)	CN	Area	A*CN
TIG	0.23	98	0.07	98	0	98	0.28	98	0	98	0.58	56.75
ALT	0.12	98	0.02	98	0	98	0.22	98	0	98	0.35	34.52
GNY	0	98	0	98	0	98	0	98	0	98	0	0
EDV	0	98	0	98	0	98	0	98	0	98	0	0
SGT	0	98	0	98	0	98	0	98	0	98	0	0
HRR	0	98	0	98	0	98	0	98	0	98	0	0
SMF	0	98	0	98	0	98	0	98	0	98	0	0
Subtotal Area	0.35		0.08		0		0.50		0			

Pervious Landuses Present:

	Woodland		Meadow		Wetland		Lawn		Cultivated		Subtotals	
Soils	Area (ha)	CN	Area (ha)	CN	Area (ha)	CN	Area (ha)	CN	Area (ha)	CN	Area	A*CN
TIG	0	32	0	38	0	50	0.08	49	0	62	0.08	3.96
ALT	0	60	0	65	0	50	0.58	69	0	74	0.58	39.87
GNY	0	73	0	76	0	50	0	79	0	82	0	0
EDV	0	73	0	76	0	50	0	79	0	82	0	0
SGT	0	32	0	38	0	50	0	49	0	62	0	0
HRR	0	60	0	65	0	50	0	69	0	74	0	0
SMF	0	73	0	76	0	50	0	79	0	82	0	0
Subtotal Area	0		0		0		0.66		0			

Pervious Area Calculations	Total Pervious Area	0.66
	Composite Pervious Curve Number	66.54
Impervious Area Calculations	Total Directly Connected Area	0.43
	Total Indirectly Connected Area	0.50
	Total Impervious Area	0.93
	% X imp	27.10
	% T imp	58.58
	Total Area Check	1.59

Initial Abstraction and Tp Calculations

Landuse	IA (mm)	Area (ha)	A * IA
Woodland	10	0	0
Meadow	8	0	0
Wetland	16	0	0
Lawn	5	0.66	3.29
Cultivated	7	0	0

Land Use	IA (mm)	Slope (%)	Travel Length (m)	Manning's n
Pervious	5.0	2	30	0.25
Impervious	2.0	0.5	103	0.013

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Project Name: Bridle Park
Project Number: 1508-7498
Date: 2026.06.22
By: EC/NOC

D.A. NAME POST-6
D.A. AREA (ha) 2.16

Hydrologic Parameters: CALIB STANDHYD Command
Post Development Drainage Area: Catchment POST-6

Curve Number Calculation

Soil Types Present:

Type	ID	Hydrologic Group	% Area	Area
Tioga Sandy Loam	TIG	A	0.0	0.00
Alliston Sandy Loam	**ALT**	**B**	**100.0**	**2.16**
Granby Sandy Loam	GNY	C	0.0	0
Edenvale Sandy Loam	EDV	C	0.0	0
Sargent Gravelly Sandy Loam	SGT	A	0.0	0
Harriston Loam	HRR	B	0.0	0
Smithfield Silty Clay Loam	SMF	C	0.0	0
Total Area Check				2.16

Impervious Landuses Present:

	Roadway		Sidewalk		Driveway		Building		SWMF		Subtotals	
Soils	Area (ha)	CN	Area (ha)	CN	Area (ha)	CN	Area (ha)	CN	Area (ha)	CN	Area	A*CN
TIG	0	98	0	98	0	98	0	98	0	98	0	0.00
ALT	0.02	98	0.00	98	0	98	1.16	98	0	98	1.18	115.66
GNY	0	98	0	98	0	98	0	98	0	98	0	0
EDV	0	98	0	98	0	98	0	98	0	98	0	0
SGT	0	98	0	98	0	98	0	98	0	98	0	0
HRR	0	98	0	98	0	98	0	98	0	98	0	0
SMF	0	98	0	98	0	98	0	98	0	98	0	0
Subtotal Area	0.02		0.00		0		1.16		0			

Pervious Landuses Present:

	Woodland		Meadow		Wetland		Lawn		Cultivated		Subtotals	
Soils	Area (ha)	CN	Area (ha)	CN	Area (ha)	CN	Area (ha)	CN	Area (ha)	CN	Area	A*CN
TIG	0	32	0	38	0	50	0	49	0	62	0	0.00
ALT	0	60	0	65	0	50	0.98	69	0	74	0.98	67.61
GNY	0	73	0	76	0	50	0	79	0	82	0	0
EDV	0	73	0	76	0	50	0	79	0	82	0	0
SGT	0	32	0	38	0	50	0	49	0	62	0	0
HRR	0	60	0	65	0	50	0	69	0	74	0	0
SMF	0	73	0	76	0	50	0	79	0	82	0	0
Subtotal Area	0		0		0		0.98		0			

Pervious Area Calculations	Total Pervious Area	0.98
	Composite Pervious Curve Number	69.00
Impervious Area Calculations	Total Directly Connected Area	0.03
	Total Indirectly Connected Area	1.16
	Total Impervious Area	1.18
	% X imp	1.17
	% T imp	54.64
	Total Area Check	2.16

Initial Abstraction and Tp Calculations

Landuse	IA (mm)	Area (ha)	A * IA
Woodland	10	0	0
Meadow	8	0	0
Wetland	16	0	0
Lawn	5	0.98	4.90
Cultivated	7	0	0

Land Use	IA (mm)	Slope (%)	Travel Length (m)	Manning's n
Pervious	5.0	2	30	0.25
Impervious	2.0	0.5	120	0.013

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Project Name: Bridle Park
Project Number: 1508-7498
Date: 2026.06.22
By: EC/NOC

D.A. NAME **POST-7**
D.A. AREA (ha) **0.07**

Hydrologic Parameters: CALIB STANDHYD Command
Post Development Drainage Area: Catchment POST-7

Curve Number Calculation

Soil Types Present:

Type	ID	Hydrologic Group	% Area	Area
Tioga Sandy Loam	**TIG**	**A**	**86.7**	**0.06**
Alliston Sandy Loam	**ALT**	**B**	**13.3**	**0.009297**
Granby Sandy Loam	GNY	C	0.0	0
Edenvale Sandy Loam	EDV	C	0.0	0
Sargent Gravelly Sandy Loam	SGT	A	0.0	0
Harriston Loam	HRR	B	0.0	0
Smithfield Silty Clay Loam	SMF	C	0.0	0
Total Area Check				0.07

Impervious Landuses Present:

	Roadway		Sidewalk		Driveway		Building		SWMF		Subtotals	
Soils	Area (ha)	CN	Area (ha)	CN	Area (ha)	CN	Area (ha)	CN	Area (ha)	CN	Area	A*CN
TIG	0.02	98	0.00	98	0	98	0.00	98	0	98	0.03	2.81
ALT	0	98	0	98	0	98	0.01	98	0	98	0.01	0.50
GNY	0	98	0	98	0	98	0	98	0	98	0	0
EDV	0	98	0	98	0	98	0	98	0	98	0	0
SGT	0	98	0	98	0	98	0	98	0	98	0	0
HRR	0	98	0	98	0	98	0	98	0	98	0	0
SMF	0	98	0	98	0	98	0	98	0	98	0	0
Subtotal Area	0.02		0.00		0		0.01		0			

Pervious Landuses Present:

	Woodland		Meadow		Wetland		Lawn		Cultivated		Subtotals	
Soils	Area (ha)	CN	Area (ha)	CN	Area (ha)	CN	Area (ha)	CN	Area (ha)	CN	Area	A*CN
TIG	0	32	0	38	0	50	0.03	49	0	62	0.03	1.57
ALT	0	60	0	65	0	50	0.00	69	0	74	0.00	0.29
GNY	0	73	0	76	0	50	0	79	0	82	0	0
EDV	0	73	0	76	0	50	0	79	0	82	0	0
SGT	0	32	0	38	0	50	0	49	0	62	0	0
HRR	0	60	0	65	0	50	0	69	0	74	0	0
SMF	0	73	0	76	0	50	0	79	0	82	0	0
Subtotal Area	0		0		0		0.04		0			

Pervious Area Calculations	Total Pervious Area	0.04
	Composite Pervious Curve Number	51.31
Impervious Area Calculations	Total Directly Connected Area	0.03
	Total Indirectly Connected Area	0.01
	Total Impervious Area	0.03
	% X imp	39.54
	% T imp	48.26
	Total Area Check	0.07

Initial Abstraction and Tp Calculations

Landuse	IA (mm)	Area (ha)	A * IA
Woodland	10	0	0
Meadow	8	0	0
Wetland	16	0	0
Lawn	5	0.04	0.18
Cultivated	7	0	0

Land Use	IA (mm)	Slope (%)	Travel Length (m)	Manning's n
Pervious	5.0	2	5.6	0.25
Impervious	2.0	0.5	22	0.013

CROZIER

Project Name: Bridle Park
Project Number: 1508-7498
Date: 2026.06.22
By: EC/NOC

D.A. NAME **POND**
D.A. AREA (ha) **4.16**

Hydrologic Parameters: CALIB STANDHYD Command
Post Development Drainage Area: Catchment POND

Curve Number Calculation

Soil Types Present:

Type	ID	Hydrologic Group	% Area	Area
Tioga Sandy Loam	**TIG**	**A**	**0.2**	**0.01**
Alliston Sandy Loam	**ALT**	**B**	**99.8**	**4.151875**
Granby Sandy Loam	GNY	C	0.0	0
Edenvale Sandy Loam	EDV	C	0.0	0
Sargent Gravelly Sandy Loam	SGT	A	0.0	0
Harriston Loam	HRR	B	0.0	0
Smithfield Silty Clay Loam	SMF	C	0.0	0
Total Area Check				4.16

Impervious Landuses Present:

	Roadway		Sidewalk		Driveway		Building		SWMF		Subtotals	
Soils	Area (ha)	CN	Area (ha)	CN	Area (ha)	CN	Area (ha)	CN	Area (ha)	CN	Area	A*CN
TIG	0	98	0	98	0	98	0	98	0.01	98	0.01	0.80
ALT	0	98	0	98	0	98	0	98	2.07	98	2.07	203.04
GNY	0	98	0	98	0	98	0	98	0	98	0	0
EDV	0	98	0	98	0	98	0	98	0	98	0	0
SGT	0	98	0	98	0	98	0	98	0	98	0	0
HRR	0	98	0	98	0	98	0	98	0	98	0	0
SMF	0	98	0	98	0	98	0	98	0	98	0	0
Subtotal Area	0		0		0		0		2.08			

Pervious Landuses Present:

	Woodland		Meadow		Wetland		Lawn		Cultivated		Subtotals	
Soils	Area (ha)	CN	Area (ha)	CN	Area (ha)	CN	Area (ha)	CN	Area (ha)	CN	Area	A*CN
TIG	0	32	0	38	0	50	0	49	0	62	0	0.00
ALT	0	60	0	65	0	50	2.08	69	0	74	2.08	143.52
GNY	0	73	0	76	0	50	0	79	0	82	0	0
EDV	0	73	0	76	0	50	0	79	0	82	0	0
SGT	0	32	0	38	0	50	0	49	0	62	0	0
HRR	0	60	0	65	0	50	0	69	0	74	0	0
SMF	0	73	0	76	0	50	0	79	0	82	0	0
Subtotal Area	0		0		0		2.08		0			

Pervious Area Calculations	Total Pervious Area	2.08
	Composite Pervious Curve Number	69.00
Impervious Area Calculations	Total Directly Connected Area	2.08
	Total Indirectly Connected Area	0
	Total Impervious Area	2.08
	% X imp	50.00
	% T imp	50.00
	Total Area Check	4.16

Initial Abstraction and Tp Calculations

Landuse	IA (mm)	Area (ha)	A * IA
Woodland	10	0	0
Meadow	8	0	0
Wetland	16	0	0
Lawn	5	2.08	10.40
Cultivated	7	0	0

Land Use	IA (mm)	Slope (%)	Travel Length (m)	Manning's n
Pervious	5.0	2	250	0.25
Impervious	2.0	0.5	167	0.013

CROZIER

Project Name: Bridle Park
Project Number: 1508-7498
Date: 2026.06.22
By: EC/NOC

D.A. NAME **SCHOOL**
D.A. AREA (ha) **2.12**

Hydrologic Parameters: CALIB STANDHYD Command
Post Development Drainage Area: Catchment SCHOOL

Curve Number Calculation

Soil Types Present:

Type	ID	Hydrologic Group	% Area	Area
Tioga Sandy Loam	TIG	A	0.0	0.00
Alliston Sandy Loam	**ALT**	**B**	**100.0**	**2.12**
Granby Sandy Loam	GNY	C	0.0	0
Edenvale Sandy Loam	EDV	C	0.0	0
Sargent Gravelly Sandy Loam	SGT	A	0.0	0
Harriston Loam	HRR	B	0.0	0
Smithfield Silty Clay Loam	SMF	C	0.0	0
Total Area Check				2.12

Impervious Landuses Present:

	Roadway		Sidewalk		Driveway		Building		SWMF		Subtotals	
Soils	Area (ha)	CN	Area (ha)	CN	Area (ha)	CN	Area (ha)	CN	Area (ha)	CN	Area	A*CN
TIG	0	98	0	98	0	98	0	98	0	98	0	0.00
ALT	0	98	0	98	0	98	1.80	98	0	98	1.80	176.51
GNY	0	98	0	98	0	98	0	98	0	98	0	0
EDV	0	98	0	98	0	98	0	98	0	98	0	0
SGT	0	98	0	98	0	98	0	98	0	98	0	0
HRR	0	98	0	98	0	98	0	98	0	98	0	0
SMF	0	98	0	98	0	98	0	98	0	98	0	0
Subtotal Area	0		0		0		1.80		0			

Pervious Landuses Present:

	Woodland		Meadow		Wetland		Lawn		Cultivated		Subtotals	
Soils	Area (ha)	CN	Area (ha)	CN	Area (ha)	CN	Area (ha)	CN	Area (ha)	CN	Area	A*CN
TIG	0	32	0	38	0	50	0	49	0	62	0	0.00
ALT	0	60	0	65	0	50	0.32	69	0	74	0.32	22.00
GNY	0	73	0	76	0	50	0	79	0	82	0	0
EDV	0	73	0	76	0	50	0	79	0	82	0	0
SGT	0	32	0	38	0	50	0	49	0	62	0	0
HRR	0	60	0	65	0	50	0	69	0	74	0	0
SMF	0	73	0	76	0	50	0	79	0	82	0	0
Subtotal Area	0		0		0		0.32		0			

Pervious Area Calculations	Total Pervious Area	0.32
	Composite Pervious Curve Number	69.00
Impervious Area Calculations	Total Directly Connected Area	0
	Total Indirectly Connected Area	1.80
	Total Impervious Area	1.80
	% X imp	0
	% T imp	84.96
	Total Area Check	2.12

Initial Abstraction and Tp Calculations

Landuse	IA (mm)	Area (ha)	A * IA
Woodland	10	0	0
Meadow	8	0	0
Wetland	16	0	0
Lawn	5	0.32	1.59
Cultivated	7	0	0

Land Use	IA (mm)	Slope (%)	Travel Length (m)	Manning's n
Pervious	5.0	2	175	0.25
Impervious	2.0	0.5	119	0.013

APPENDIX E-1

Visual OTTHYMO Files (Ultimate Conditions)

Map options: Modify selection | Show/hide gauging stations | Re-center selection

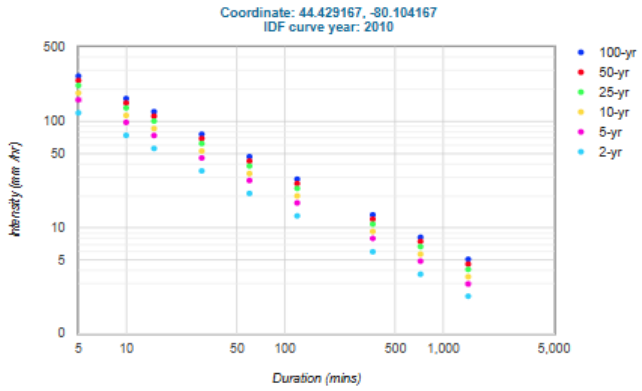
Location summary

These are the locations in the selection.

IDF Curve: 44° 25' 45" N, 80° 6' 14" W (44.429167,-80.104167)

Results

An IDF curve was found.



Switch variable: Intensity or Depth

Coefficient summary

Data year: 2010
IDF curve year: 2010

Click a return period in the table header for more detail.

Return period	2-yr	5-yr	10-yr	25-yr	50-yr	100-yr
A	21.1	27.9	32.4	38.1	42.4	46.6
B	-0.699	-0.699	-0.699	-0.699	-0.699	-0.699

Statistics

Rainfall intensity (mm hr^{-1})

Duration	5-min	10-min	15-min	30-min	1-hr	2-hr	6-hr	12-hr	24-hr
2-yr	119.8	73.8	55.6	34.3	21.1	13.0	6.0	3.7	2.3
5-yr	158.5	97.6	73.5	45.3	27.9	17.2	8.0	4.9	3.0
10-yr	184.0	113.4	85.4	52.6	32.4	20.0	9.3	5.7	3.5
25-yr	216.4	133.3	100.4	61.9	38.1	23.5	10.9	6.7	4.1
50-yr	240.8	148.4	111.7	68.8	42.4	26.1	12.1	7.5	4.6
100-yr	264.7	163.0	122.8	75.6	46.6	28.7	13.3	8.2	5.1

Rainfall depth (mm)

Duration	5-min	10-min	15-min	30-min	1-hr	2-hr	6-hr	12-hr	24-hr
2-yr	10.0	12.3	13.9	17.1	21.1	26.0	36.2	44.6	54.9
5-yr	13.2	16.3	18.4	22.6	27.9	34.4	47.8	58.9	72.6
10-yr	15.3	18.9	21.3	26.3	32.4	39.9	55.6	68.5	84.3
25-yr	18.0	22.2	25.1	30.9	38.1	46.9	65.3	80.5	99.2
50-yr	20.1	24.7	27.9	34.4	42.4	52.2	72.7	89.6	110.4
100-yr	22.1	27.2	30.7	37.8	46.6	57.4	79.9	98.5	121.3

Terms of Use

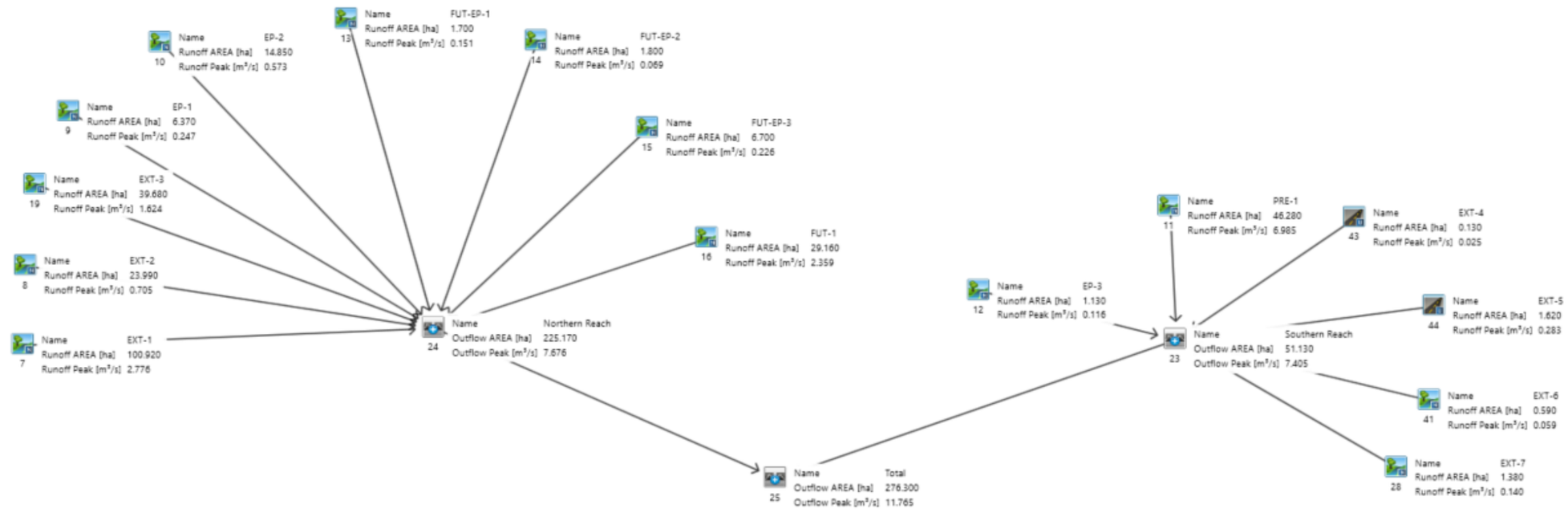
You agree to the Terms of Use of this site by reviewing, using, or interpreting these data.

Original IDF						
	2-year	**5-year**	**10-year**	**25-year**	**50-year**	**100-year**
A	21.1	27.9	32.4	38.1	42.4	46.6
B	-0.699	-0.699	-0.699	-0.699	-0.699	-0.699
100-year SCS rainfall depth		121.29	CGE External			
Increased IDF (Increase A by 15%)						
	2-year	**5-year**	**10-year**	**25-year**	**50-year**	**100-year**
A	24.265	32.085	37.26	43.815	48.76	53.59
B	-0.699	-0.699	-0.699	-0.699	-0.699	-0.699
100-year SCS rainfall depth		139.48				
Increase in Rainfall Depth		15%				

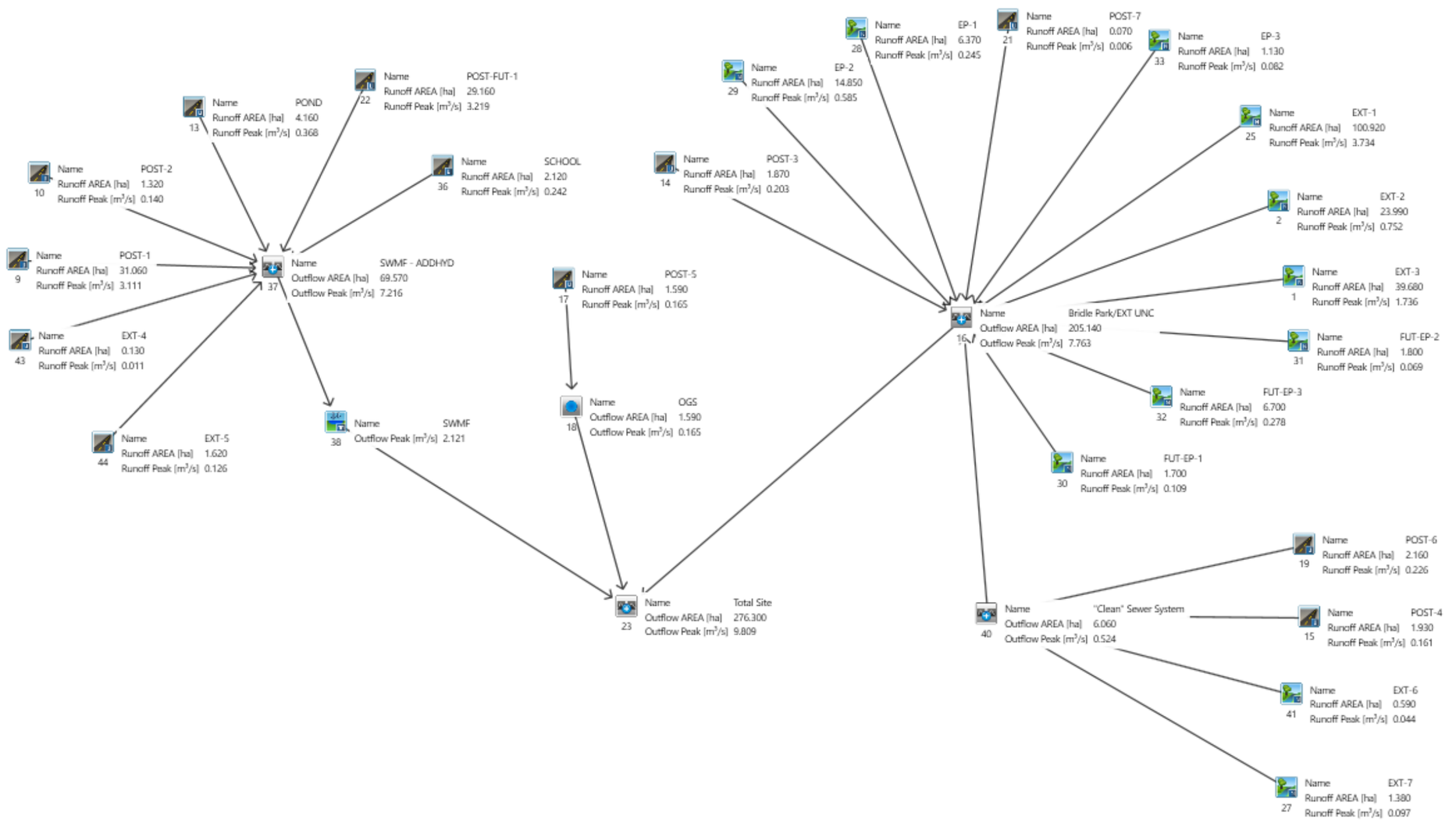
Project:	Bridle Park Stayner
Project No.:	1508-7498
File:	Model Schematic
Design by:	EC/NOC
Date:	2026.07.30

Visual OTTHYMO 6.2 - Model Schematic

Pre-Development



Post-Development



```
*******************************
** SIMULATION:A - 2-year CHI  **
*******************************
--------------------
| CHICAGO STORM    |    IDF curve parameters: A= 424.530
| Ptotal= 36.82 mm |                          B=   0.000
--------------------                          C=   0.699
                       used in:   INTENSITY =  A / (t + B)^C

                       Duration of storm  =  4.00 hrs
                       Storm time step    = 10.00 min
                       Time to peak ratio =  0.33
```

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.00	3.10	1.00	14.65	2.00	6.12	3.00	3.57
0.17	3.46	1.17	84.90	2.17	5.41	3.17	3.36
0.33	3.95	1.33	17.98	2.33	4.86	3.33	3.18
0.50	4.65	1.50	11.34	2.50	4.44	3.50	3.02
0.67	5.76	1.67	8.64	2.67	4.09	3.67	2.88
0.83	7.88	1.83	7.12	2.83	3.81	3.83	2.75

```
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--------------------
| CALIB            |
| NASHYD   (  0007)|   Area    (ha)= 100.92   Curve Number   (CN)= 55.9
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.89   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   1.70

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.
```

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	3.10	1.083	14.65	2.083	6.12	3.08	3.57
0.167	3.10	1.167	14.65	2.167	6.12	3.17	3.57
0.250	3.46	1.250	84.90	2.250	5.41	3.25	3.36
0.333	3.46	1.333	84.90	2.333	5.41	3.33	3.36
0.417	3.95	1.417	17.98	2.417	4.86	3.42	3.18
0.500	3.95	1.500	17.98	2.500	4.86	3.50	3.18
0.583	4.65	1.583	11.34	2.583	4.44	3.58	3.02
0.667	4.65	1.667	11.34	2.667	4.44	3.67	3.02
0.750	5.76	1.750	8.64	2.750	4.09	3.75	2.88
0.833	5.76	1.833	8.64	2.833	4.09	3.83	2.88
0.917	7.88	1.917	7.12	2.917	3.81	3.92	2.75
1.000	7.88	2.000	7.12	3.000	3.81	4.00	2.75


```
     Unit Hyd Qpeak  (cms)=   2.267

     PEAK FLOW       (cms)=   0.253 (i)
     TIME TO PEAK    (hrs)=   4.083
     RUNOFF VOLUME    (mm)=   3.654
     TOTAL RAINFALL   (mm)=  36.816
     RUNOFF COEFFICIENT   =   0.099

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| NASHYD   (  0008)|   Area    (ha)=  23.99   Curve Number   (CN)= 44.7
|ID= 1 DT= 5.0 min |   Ia      (mm)=  10.91   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.97

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.
```

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	3.10	1.083	14.65	2.083	6.12	3.08	3.57
0.167	3.10	1.167	14.65	2.167	6.12	3.17	3.57
0.250	3.46	1.250	84.90	2.250	5.41	3.25	3.36
0.333	3.46	1.333	84.90	2.333	5.41	3.33	3.36
0.417	3.95	1.417	17.98	2.417	4.86	3.42	3.18
0.500	3.95	1.500	17.98	2.500	4.86	3.50	3.18
0.583	4.65	1.583	11.34	2.583	4.44	3.58	3.02
0.667	4.65	1.667	11.34	2.667	4.44	3.67	3.02
0.750	5.76	1.750	8.64	2.750	4.09	3.75	2.88
0.833	5.76	1.833	8.64	2.833	4.09	3.83	2.88
0.917	7.88	1.917	7.12	2.917	3.81	3.92	2.75
1.000	7.88	2.000	7.12	3.000	3.81	4.00	2.75

```
     Unit Hyd Qpeak  (cms)=   0.945

     PEAK FLOW       (cms)=   0.042 (i)
     TIME TO PEAK    (hrs)=   3.000
     RUNOFF VOLUME    (mm)=   1.973
     TOTAL RAINFALL   (mm)=  36.816
     RUNOFF COEFFICIENT   =   0.054

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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CALIB					
NASHYD (0009)	Area (ha)=	6.37	Curve Number (CN)=	50.5	
ID= 1 DT= 5.0 min	Ia (mm)=	15.69	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	0.77			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	3.10	1.083	14.65	2.083	6.12	3.08	3.57
0.167	3.10	1.167	14.65	2.167	6.12	3.17	3.57
0.250	3.46	1.250	84.90	2.250	5.41	3.25	3.36
0.333	3.46	1.333	84.90	2.333	5.41	3.33	3.36
0.417	3.95	1.417	17.98	2.417	4.86	3.42	3.18
0.500	3.95	1.500	17.98	2.500	4.86	3.50	3.18
0.583	4.65	1.583	11.34	2.583	4.44	3.58	3.02
0.667	4.65	1.667	11.34	2.667	4.44	3.67	3.02
0.750	5.76	1.750	8.64	2.750	4.09	3.75	2.88
0.833	5.76	1.833	8.64	2.833	4.09	3.83	2.88
0.917	7.88	1.917	7.12	2.917	3.81	3.92	2.75
1.000	7.88	2.000	7.12	3.000	3.81	4.00	2.75

Unit Hyd Qpeak (cms)= 0.316

PEAK FLOW (cms)= 0.010 (i)
TIME TO PEAK (hrs)= 3.000
RUNOFF VOLUME (mm)= 1.651
TOTAL RAINFALL (mm)= 36.816
RUNOFF COEFFICIENT = 0.045

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0010)	Area (ha)=	14.85	Curve Number (CN)=	52.9	
ID= 1 DT= 5.0 min	Ia (mm)=	13.28	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	0.89			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr

0.083	3.10	1.083	14.65	2.083	6.12	3.08	3.57
0.167	3.10	1.167	14.65	2.167	6.12	3.17	3.57
0.250	3.46	1.250	84.90	2.250	5.41	3.25	3.36
0.333	3.46	1.333	84.90	2.333	5.41	3.33	3.36
0.417	3.95	1.417	17.98	2.417	4.86	3.42	3.18
0.500	3.95	1.500	17.98	2.500	4.86	3.50	3.18
0.583	4.65	1.583	11.34	2.583	4.44	3.58	3.02
0.667	4.65	1.667	11.34	2.667	4.44	3.67	3.02
0.750	5.76	1.750	8.64	2.750	4.09	3.75	2.88
0.833	5.76	1.833	8.64	2.833	4.09	3.83	2.88
0.917	7.88	1.917	7.12	2.917	3.81	3.92	2.75
1.000	7.88	2.000	7.12	3.000	3.81	4.00	2.75

Unit Hyd Qpeak (cms)= 0.637

PEAK FLOW (cms)= 0.030 (i)
TIME TO PEAK (hrs)= 3.000
RUNOFF VOLUME (mm)= 2.222
TOTAL RAINFALL (mm)= 36.816
RUNOFF COEFFICIENT = 0.060

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0013)	Area (ha)=	1.70	Curve Number (CN)=	60.5	
ID= 1 DT= 5.0 min	Ia (mm)=	9.65	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	0.40			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	3.10	1.083	14.65	2.083	6.12	3.08	3.57
0.167	3.10	1.167	14.65	2.167	6.12	3.17	3.57
0.250	3.46	1.250	84.90	2.250	5.41	3.25	3.36
0.333	3.46	1.333	84.90	2.333	5.41	3.33	3.36
0.417	3.95	1.417	17.98	2.417	4.86	3.42	3.18
0.500	3.95	1.500	17.98	2.500	4.86	3.50	3.18
0.583	4.65	1.583	11.34	2.583	4.44	3.58	3.02
0.667	4.65	1.667	11.34	2.667	4.44	3.67	3.02
0.750	5.76	1.750	8.64	2.750	4.09	3.75	2.88
0.833	5.76	1.833	8.64	2.833	4.09	3.83	2.88
0.917	7.88	1.917	7.12	2.917	3.81	3.92	2.75
1.000	7.88	2.000	7.12	3.000	3.81	4.00	2.75

Unit Hyd Qpeak (cms)= 0.162

PEAK FLOW (cms)= 0.009 (i)
TIME TO PEAK (hrs)= 1.917
RUNOFF VOLUME (mm)= 3.817
TOTAL RAINFALL (mm)= 36.816
RUNOFF COEFFICIENT = 0.104

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB NASHYD (0014) ID= 1 DT= 5.0 min	Area (ha)= 1.80 Curve Number (CN)= 50.0 Ia (mm)= 16.00 # of Linear Res.(N)= 3.00 U.H. Tp(hrs)= 0.76

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	3.10	1.083	14.65	2.083	6.12	3.08	3.57
0.167	3.10	1.167	14.65	2.167	6.12	3.17	3.57
0.250	3.46	1.250	84.90	2.250	5.41	3.25	3.36
0.333	3.46	1.333	84.90	2.333	5.41	3.33	3.36
0.417	3.95	1.417	17.98	2.417	4.86	3.42	3.18
0.500	3.95	1.500	17.98	2.500	4.86	3.50	3.18
0.583	4.65	1.583	11.34	2.583	4.44	3.58	3.02
0.667	4.65	1.667	11.34	2.667	4.44	3.67	3.02
0.750	5.76	1.750	8.64	2.750	4.09	3.75	2.88
0.833	5.76	1.833	8.64	2.833	4.09	3.83	2.88
0.917	7.88	1.917	7.12	2.917	3.81	3.92	2.75
1.000	7.88	2.000	7.12	3.000	3.81	4.00	2.75

Unit Hyd Qpeak (cms)= 0.090

PEAK FLOW (cms)= 0.003 (i)
TIME TO PEAK (hrs)= 3.000
RUNOFF VOLUME (mm)= 1.576
TOTAL RAINFALL (mm)= 36.816
RUNOFF COEFFICIENT = 0.043

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB NASHYD (0015) ID= 1 DT= 5.0 min	Area (ha)= 6.70 Curve Number (CN)= 60.0 Ia (mm)= 10.00 # of Linear Res.(N)= 3.00 U.H. Tp(hrs)= 1.45

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	3.10	1.083	14.65	2.083	6.12	3.08	3.57
0.167	3.10	1.167	14.65	2.167	6.12	3.17	3.57
0.250	3.46	1.250	84.90	2.250	5.41	3.25	3.36
0.333	3.46	1.333	84.90	2.333	5.41	3.33	3.36
0.417	3.95	1.417	17.98	2.417	4.86	3.42	3.18
0.500	3.95	1.500	17.98	2.500	4.86	3.50	3.18
0.583	4.65	1.583	11.34	2.583	4.44	3.58	3.02
0.667	4.65	1.667	11.34	2.667	4.44	3.67	3.02
0.750	5.76	1.750	8.64	2.750	4.09	3.75	2.88
0.833	5.76	1.833	8.64	2.833	4.09	3.83	2.88
0.917	7.88	1.917	7.12	2.917	3.81	3.92	2.75
1.000	7.88	2.000	7.12	3.000	3.81	4.00	2.75

Unit Hyd Qpeak (cms)= 0.176

PEAK FLOW (cms)= 0.018 (i)
TIME TO PEAK (hrs)= 3.833
RUNOFF VOLUME (mm)= 3.666
TOTAL RAINFALL (mm)= 36.816
RUNOFF COEFFICIENT = 0.100

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB NASHYD (0016) ID= 1 DT= 5.0 min	Area (ha)= 29.16 Curve Number (CN)= 71.4 Ia (mm)= 7.88 # of Linear Res.(N)= 3.00 U.H. Tp(hrs)= 0.68

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr

0.083	3.10	1.083	14.65	2.083	6.12	3.08	3.57
0.167	3.10	1.167	14.65	2.167	6.12	3.17	3.57
0.250	3.46	1.250	84.90	2.250	5.41	3.25	3.36
0.333	3.46	1.333	84.90	2.333	5.41	3.33	3.36
0.417	3.95	1.417	17.98	2.417	4.86	3.42	3.18
0.500	3.95	1.500	17.98	2.500	4.86	3.50	3.18
0.583	4.65	1.583	11.34	2.583	4.44	3.58	3.02
0.667	4.65	1.667	11.34	2.667	4.44	3.67	3.02
0.750	5.76	1.750	8.64	2.750	4.09	3.75	2.88
0.833	5.76	1.833	8.64	2.833	4.09	3.83	2.88
0.917	7.88	1.917	7.12	2.917	3.81	3.92	2.75
1.000	7.88	2.000	7.12	3.000	3.81	4.00	2.75

Unit Hyd Qpeak (cms)= 1.638

PEAK FLOW (cms)= 0.213 (i)
TIME TO PEAK (hrs)= 2.333
RUNOFF VOLUME (mm)= 6.407
TOTAL RAINFALL (mm)= 36.816
RUNOFF COEFFICIENT = 0.174

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB NASHYD (0019) ID= 1 DT= 5.0 min	Area (ha)= 39.68 Curve Number (CN)= 60.7 Ia (mm)= 8.26 # of Linear Res.(N)= 3.00 U.H. Tp(hrs)= 1.18

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	3.10	1.083	14.65	2.083	6.12	3.08	3.57
0.167	3.10	1.167	14.65	2.167	6.12	3.17	3.57
0.250	3.46	1.250	84.90	2.250	5.41	3.25	3.36
0.333	3.46	1.333	84.90	2.333	5.41	3.33	3.36
0.417	3.95	1.417	17.98	2.417	4.86	3.42	3.18
0.500	3.95	1.500	17.98	2.500	4.86	3.50	3.18
0.583	4.65	1.583	11.34	2.583	4.44	3.58	3.02
0.667	4.65	1.667	11.34	2.667	4.44	3.67	3.02
0.750	5.76	1.750	8.64	2.750	4.09	3.75	2.88
0.833	5.76	1.833	8.64	2.833	4.09	3.83	2.88
0.917	7.88	1.917	7.12	2.917	3.81	3.92	2.75
1.000	7.88	2.000	7.12	3.000	3.81	4.00	2.75

Unit Hyd Qpeak (cms)= 1.284

PEAK FLOW (cms)= 0.139 (i)
TIME TO PEAK (hrs)= 3.167
RUNOFF VOLUME (mm)= 4.220
TOTAL RAINFALL (mm)= 36.816
RUNOFF COEFFICIENT = 0.115

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0024) | 1 + 2 = 3

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0010):	14.85	0.030	3.00	2.22
+ ID2= 2 (0013):	1.70	0.009	1.92	3.82
ID = 3 (0024):	16.55	0.036	2.83	2.39

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024) | 3 + 2 = 1

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0024):	16.55	0.036	2.83	2.39
+ ID2= 2 (0014):	1.80	0.003	3.00	1.58
ID = 1 (0024):	18.35	0.038	2.83	2.31

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024) | 1 + 2 = 3

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0024):	18.35	0.038	2.83	2.31
+ ID2= 2 (0015):	6.70	0.018	3.83	3.67
ID = 3 (0024):	25.05	0.055	3.17	2.67

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
	ID1= 3 (0024):	25.05	0.055	3.17	2.67
	+ ID2= 2 (0016):	29.16	0.213	2.33	6.41
	ID = 1 (0024):	54.21	0.259	2.42	4.68

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
	ID1= 1 (0024):	54.21	0.259	2.42	4.68
	+ ID2= 2 (0019):	39.68	0.139	3.17	4.22
	ID = 3 (0024):	93.89	0.378	2.67	4.49

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
	ID1= 3 (0024):	93.89	0.378	2.67	4.49
	+ ID2= 2 (0007):	100.92	0.253	4.08	3.65
	ID = 1 (0024):	194.81	0.579	3.17	4.06

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
	ID1= 1 (0024):	194.81	0.579	3.17	4.06
	+ ID2= 2 (0008):	23.99	0.042	3.00	1.97
	ID = 3 (0024):	218.80	0.621	3.17	3.83

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
	ID1= 3 (0024):	218.80	0.621	3.17	3.83
	+ ID2= 2 (0009):	6.37	0.010	3.00	1.65
	ID = 1 (0024):	225.17	0.631	3.17	3.77

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB NASHYD (0011) ID= 1 DT= 5.0 min			
	Area (ha)= 46.28	Curve Number (CN)= 72.2	
	Ia (mm)= 7.09	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.30		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	3.10	1.083	14.65	2.083	6.12	3.08	3.57
0.167	3.10	1.167	14.65	2.167	6.12	3.17	3.57
0.250	3.46	1.250	84.90	2.250	5.41	3.25	3.36
0.333	3.46	1.333	84.90	2.333	5.41	3.33	3.36
0.417	3.95	1.417	17.98	2.417	4.86	3.42	3.18
0.500	3.95	1.500	17.98	2.500	4.86	3.50	3.18
0.583	4.65	1.583	11.34	2.583	4.44	3.58	3.02
0.667	4.65	1.667	11.34	2.667	4.44	3.67	3.02
0.750	5.76	1.750	8.64	2.750	4.09	3.75	2.88
0.833	5.76	1.833	8.64	2.833	4.09	3.83	2.88
0.917	7.88	1.917	7.12	2.917	3.81	3.92	2.75
1.000	7.88	2.000	7.12	3.000	3.81	4.00	2.75

Unit Hyd Qpeak (cms)= 5.892

PEAK FLOW (cms)= 0.601 (i)
TIME TO PEAK (hrs)= 1.667
RUNOFF VOLUME (mm)= 6.924
TOTAL RAINFALL (mm)= 36.816
RUNOFF COEFFICIENT = 0.188

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0012)	Area (ha)=	1.13	Curve Number (CN)=	67.4	
ID= 1 DT= 5.0 min	Ia (mm)=	7.88	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	0.43			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	3.10	1.083	14.65	2.083	6.12	3.08	3.57
0.167	3.10	1.167	14.65	2.167	6.12	3.17	3.57
0.250	3.46	1.250	84.90	2.250	5.41	3.25	3.36
0.333	3.46	1.333	84.90	2.333	5.41	3.33	3.36
0.417	3.95	1.417	17.98	2.417	4.86	3.42	3.18
0.500	3.95	1.500	17.98	2.500	4.86	3.50	3.18
0.583	4.65	1.583	11.34	2.583	4.44	3.58	3.02
0.667	4.65	1.667	11.34	2.667	4.44	3.67	3.02
0.750	5.76	1.750	8.64	2.750	4.09	3.75	2.88
0.833	5.76	1.833	8.64	2.833	4.09	3.83	2.88
0.917	7.88	1.917	7.12	2.917	3.81	3.92	2.75
1.000	7.88	2.000	7.12	3.000	3.81	4.00	2.75

Unit Hyd Qpeak (cms)=	0.100	
PEAK FLOW (cms)=	0.009	(i)
TIME TO PEAK (hrs)=	1.917	
RUNOFF VOLUME (mm)=	5.507	
TOTAL RAINFALL (mm)=	36.816	
RUNOFF COEFFICIENT =	0.150	

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
STANDHYD (0043)	Area (ha)=	0.13			
ID= 1 DT= 5.0 min	Total Imp(%)=	30.77	Dir. Conn.(%)=	7.69	

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.04	0.09
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	0.50
Length	(m)=	29.44	70.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	3.10	1.083	14.65	2.083	6.12	3.08	3.57
0.167	3.10	1.167	14.65	2.167	6.12	3.17	3.57
0.250	3.46	1.250	84.90	2.250	5.41	3.25	3.36
0.333	3.46	1.333	84.90	2.333	5.41	3.33	3.36
0.417	3.95	1.417	17.98	2.417	4.86	3.42	3.18
0.500	3.95	1.500	17.98	2.500	4.86	3.50	3.18
0.583	4.65	1.583	11.34	2.583	4.44	3.58	3.02
0.667	4.65	1.667	11.34	2.667	4.44	3.67	3.02
0.750	5.76	1.750	8.64	2.750	4.09	3.75	2.88
0.833	5.76	1.833	8.64	2.833	4.09	3.83	2.88
0.917	7.88	1.917	7.12	2.917	3.81	3.92	2.75
1.000	7.88	2.000	7.12	3.000	3.81	4.00	2.75

				TOTALS
Max.Eff.Inten.(mm/hr)=	84.90	10.21		
over (min)	5.00	40.00		
Storage Coeff. (min)=	1.61 (ii)	38.89 (ii)		
Unit Hyd. Tpeak (min)=	5.00	40.00		
Unit Hyd. peak (cms)=	0.32	0.03		
PEAK FLOW (cms)=	0.00	0.00	0.003	(iii)
TIME TO PEAK (hrs)=	1.33	1.92	1.33	
RUNOFF VOLUME (mm)=	35.82	9.22	11.09	
TOTAL RAINFALL (mm)=	36.82	36.82	36.82	
RUNOFF COEFFICIENT =	0.97	0.25	0.30	

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
STANDHYD (0044)	Area (ha)=	1.62			
ID= 1 DT= 5.0 min	Total Imp(%)=	48.77	Dir. Conn.(%)=	30.86	

IMPERVIOUS PERVIOUS (i)

Surface Area	(ha)=	0.79	0.83
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	1.40
Length	(m)=	103.92	400.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	3.10	1.083	14.65	2.083	6.12	3.08	3.57
0.167	3.10	1.167	14.65	2.167	6.12	3.17	3.57
0.250	3.46	1.250	84.90	2.250	5.41	3.25	3.36
0.333	3.46	1.333	84.90	2.333	5.41	3.33	3.36
0.417	3.95	1.417	17.98	2.417	4.86	3.42	3.18
0.500	3.95	1.500	17.98	2.500	4.86	3.50	3.18
0.583	4.65	1.583	11.34	2.583	4.44	3.58	3.02
0.667	4.65	1.667	11.34	2.667	4.44	3.67	3.02
0.750	5.76	1.750	8.64	2.750	4.09	3.75	2.88
0.833	5.76	1.833	8.64	2.833	4.09	3.83	2.88
0.917	7.88	1.917	7.12	2.917	3.81	3.92	2.75
1.000	7.88	2.000	7.12	3.000	3.81	4.00	2.75

Max.Eff.Inten.	(mm/hr)=	84.90	8.18	
	over (min)	5.00	90.00	
Storage Coeff.	(min)=	3.44 (ii)	88.54 (ii)	
Unit Hyd. Tpeak	(min)=	5.00	90.00	
Unit Hyd. peak	(cms)=	0.26	0.01	
				TOTALS
PEAK FLOW	(cms)=	0.11	0.01	0.113 (iii)
TIME TO PEAK	(hrs)=	1.33	3.00	1.33
RUNOFF VOLUME	(mm)=	35.82	9.32	17.46
TOTAL RAINFALL	(mm)=	36.82	36.82	36.82
RUNOFF COEFFICIENT	=	0.97	0.25	0.47

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB

NASHYD (0041)	Area (ha)= 0.59	Curve Number (CN)= 71.5
ID= 1 DT= 5.0 min	Ia (mm)= 4.75	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.53	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	3.10	1.083	14.65	2.083	6.12	3.08	3.57
0.167	3.10	1.167	14.65	2.167	6.12	3.17	3.57
0.250	3.46	1.250	84.90	2.250	5.41	3.25	3.36
0.333	3.46	1.333	84.90	2.333	5.41	3.33	3.36
0.417	3.95	1.417	17.98	2.417	4.86	3.42	3.18
0.500	3.95	1.500	17.98	2.500	4.86	3.50	3.18
0.583	4.65	1.583	11.34	2.583	4.44	3.58	3.02
0.667	4.65	1.667	11.34	2.667	4.44	3.67	3.02
0.750	5.76	1.750	8.64	2.750	4.09	3.75	2.88
0.833	5.76	1.833	8.64	2.833	4.09	3.83	2.88
0.917	7.88	1.917	7.12	2.917	3.81	3.92	2.75
1.000	7.88	2.000	7.12	3.000	3.81	4.00	2.75

Unit Hyd Qpeak	(cms)=	0.043
PEAK FLOW	(cms)=	0.006 (i)
TIME TO PEAK	(hrs)=	2.000
RUNOFF VOLUME	(mm)=	7.699
TOTAL RAINFALL	(mm)=	36.816
RUNOFF COEFFICIENT	=	0.209

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
NASHYD (0028) | Area (ha)= 1.38 Curve Number (CN)= 64.1
ID= 1 DT= 5.0 min | Ia (mm)= 8.51 # of Linear Res.(N)= 3.00
U.H. Tp(hrs)= 0.39

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	3.10	1.083	14.65	2.083	6.12	3.08	3.57
0.167	3.10	1.167	14.65	2.167	6.12	3.17	3.57

0.250	3.46	1.250	84.90	2.250	5.41	3.25	3.36
0.333	3.46	1.333	84.90	2.333	5.41	3.33	3.36
0.417	3.95	1.417	17.98	2.417	4.86	3.42	3.18
0.500	3.95	1.500	17.98	2.500	4.86	3.50	3.18
0.583	4.65	1.583	11.34	2.583	4.44	3.58	3.02
0.667	4.65	1.667	11.34	2.667	4.44	3.67	3.02
0.750	5.76	1.750	8.64	2.750	4.09	3.75	2.88
0.833	5.76	1.833	8.64	2.833	4.09	3.83	2.88
0.917	7.88	1.917	7.12	2.917	3.81	3.92	2.75
1.000	7.88	2.000	7.12	3.000	3.81	4.00	2.75

Unit Hyd Qpeak (cms)= 0.135

PEAK FLOW (cms)= 0.010 (i)
TIME TO PEAK (hrs)= 1.833
RUNOFF VOLUME (mm)= 4.703
TOTAL RAINFALL (mm)= 36.816
RUNOFF COEFFICIENT = 0.128

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0023)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0011):	46.28	0.601	1.67	6.92
+ ID2= 2 (0012):	1.13	0.009	1.92	5.51
ID = 3 (0023):	47.41	0.609	1.67	6.89

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0023):	47.41	0.609	1.67	6.89
+ ID2= 2 (0028):	1.38	0.010	1.83	4.70
ID = 1 (0023):	48.79	0.618	1.67	6.83

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0023):	48.79	0.618	1.67	6.83
+ ID2= 2 (0041):	0.59	0.006	2.00	7.70
ID = 3 (0023):	49.38	0.623	1.67	6.84

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0023):	49.38	0.623	1.67	6.84
+ ID2= 2 (0043):	0.13	0.003	1.33	11.09
ID = 1 (0023):	49.51	0.624	1.67	6.85

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0023):	49.51	0.624	1.67	6.85
+ ID2= 2 (0044):	1.62	0.113	1.33	17.46
ID = 3 (0023):	51.13	0.642	1.67	7.19

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0025)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0023):	51.13	0.642	1.67	7.19
+ ID2= 2 (0024):	225.17	0.631	3.17	3.77
ID = 3 (0025):	276.30	0.912	1.92	4.40

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

****
** SIMULATION:B - 5-year CHI **

****

CHICAGO STORM	IDF curve parameters: A= 561.345
Ptotal= 48.68 mm	B= 0.000
	C= 0.699

used in: INTENSITY = A / (t + B)^C

Duration of storm = 4.00 hrs
Storm time step = 10.00 min
Time to peak ratio = 0.33

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.00	4.09	1.00	19.37	2.00	8.09	3.00	4.72
0.17	4.57	1.17	112.26	2.17	7.15	3.17	4.44
0.33	5.22	1.33	23.77	2.33	6.43	3.33	4.20
0.50	6.15	1.50	14.99	2.50	5.87	3.50	3.99
0.67	7.61	1.67	11.43	2.67	5.41	3.67	3.81
0.83	10.41	1.83	9.42	2.83	5.04	3.83	3.64

CALIB	
NASHYD (0007)	Area (ha)= 100.92 Curve Number (CN)= 55.9
ID= 1 DT= 5.0 min	Ia (mm)= 7.89 # of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 1.70

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.09	1.083	19.37	2.083	8.09	3.08	4.72
0.167	4.09	1.167	19.37	2.167	8.09	3.17	4.72
0.250	4.57	1.250	112.26	2.250	7.15	3.25	4.44
0.333	4.57	1.333	112.26	2.333	7.15	3.33	4.44
0.417	5.22	1.417	23.77	2.417	6.43	3.42	4.20
0.500	5.22	1.500	23.77	2.500	6.43	3.50	4.20
0.583	6.15	1.583	14.99	2.583	5.87	3.58	3.99
0.667	6.15	1.667	14.99	2.667	5.87	3.67	3.99
0.750	7.61	1.750	11.43	2.750	5.41	3.75	3.81
0.833	7.61	1.833	11.43	2.833	5.41	3.83	3.81
0.917	10.41	1.917	9.42	2.917	5.04	3.92	3.64
1.000	10.41	2.000	9.42	3.000	5.04	4.00	3.64

Unit Hyd Qpeak (cms)= 2.267

PEAK FLOW (cms)= 0.479 (i)
TIME TO PEAK (hrs)= 3.917
RUNOFF VOLUME (mm)= 6.909
TOTAL RAINFALL (mm)= 48.681
RUNOFF COEFFICIENT = 0.142

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	
NASHYD (0008)	Area (ha)= 23.99 Curve Number (CN)= 44.7
ID= 1 DT= 5.0 min	Ia (mm)= 10.91 # of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.97

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.09	1.083	19.37	2.083	8.09	3.08	4.72
0.167	4.09	1.167	19.37	2.167	8.09	3.17	4.72
0.250	4.57	1.250	112.26	2.250	7.15	3.25	4.44
0.333	4.57	1.333	112.26	2.333	7.15	3.33	4.44
0.417	5.22	1.417	23.77	2.417	6.43	3.42	4.20
0.500	5.22	1.500	23.77	2.500	6.43	3.50	4.20
0.583	6.15	1.583	14.99	2.583	5.87	3.58	3.99
0.667	6.15	1.667	14.99	2.667	5.87	3.67	3.99
0.750	7.61	1.750	11.43	2.750	5.41	3.75	3.81
0.833	7.61	1.833	11.43	2.833	5.41	3.83	3.81
0.917	10.41	1.917	9.42	2.917	5.04	3.92	3.64
1.000	10.41	2.000	9.42	3.000	5.04	4.00	3.64

Unit Hyd Qpeak (cms)= 0.945

PEAK FLOW (cms)= 0.089 (i)
TIME TO PEAK (hrs)= 2.833
RUNOFF VOLUME (mm)= 4.053
TOTAL RAINFALL (mm)= 48.681
RUNOFF COEFFICIENT = 0.083

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB

NASHYD (0009)	Area (ha)= 6.37	Curve Number (CN)= 50.5
ID= 1 DT= 5.0 min	Ia (mm)= 15.69	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.77	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.09	1.083	19.37	2.083	8.09	3.08	4.72
0.167	4.09	1.167	19.37	2.167	8.09	3.17	4.72
0.250	4.57	1.250	112.26	2.250	7.15	3.25	4.44
0.333	4.57	1.333	112.26	2.333	7.15	3.33	4.44
0.417	5.22	1.417	23.77	2.417	6.43	3.42	4.20
0.500	5.22	1.500	23.77	2.500	6.43	3.50	4.20
0.583	6.15	1.583	14.99	2.583	5.87	3.58	3.99
0.667	6.15	1.667	14.99	2.667	5.87	3.67	3.99
0.750	7.61	1.750	11.43	2.750	5.41	3.75	3.81
0.833	7.61	1.833	11.43	2.833	5.41	3.83	3.81
0.917	10.41	1.917	9.42	2.917	5.04	3.92	3.64
1.000	10.41	2.000	9.42	3.000	5.04	4.00	3.64

Unit Hyd Qpeak (cms)= 0.316

PEAK FLOW (cms)= 0.024 (i)
TIME TO PEAK (hrs)= 2.667
RUNOFF VOLUME (mm)= 3.857
TOTAL RAINFALL (mm)= 48.681
RUNOFF COEFFICIENT = 0.079

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0010)	Area (ha)= 14.85	Curve Number (CN)= 52.9	
ID= 1 DT= 5.0 min	Ia (mm)= 13.28	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.89		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.09	1.083	19.37	2.083	8.09	3.08	4.72
0.167	4.09	1.167	19.37	2.167	8.09	3.17	4.72
0.250	4.57	1.250	112.26	2.250	7.15	3.25	4.44
0.333	4.57	1.333	112.26	2.333	7.15	3.33	4.44
0.417	5.22	1.417	23.77	2.417	6.43	3.42	4.20
0.500	5.22	1.500	23.77	2.500	6.43	3.50	4.20
0.583	6.15	1.583	14.99	2.583	5.87	3.58	3.99
0.667	6.15	1.667	14.99	2.667	5.87	3.67	3.99
0.750	7.61	1.750	11.43	2.750	5.41	3.75	3.81
0.833	7.61	1.833	11.43	2.833	5.41	3.83	3.81
0.917	10.41	1.917	9.42	2.917	5.04	3.92	3.64
1.000	10.41	2.000	9.42	3.000	5.04	4.00	3.64

Unit Hyd Qpeak (cms)= 0.637

PEAK FLOW (cms)= 0.067 (i)
TIME TO PEAK (hrs)= 2.750
RUNOFF VOLUME (mm)= 4.798
TOTAL RAINFALL (mm)= 48.681
RUNOFF COEFFICIENT = 0.099

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0013)	Area (ha)= 1.70	Curve Number (CN)= 60.5	
ID= 1 DT= 5.0 min	Ia (mm)= 9.65	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.40		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.09	1.083	19.37	2.083	8.09	3.08	4.72
0.167	4.09	1.167	19.37	2.167	8.09	3.17	4.72
0.250	4.57	1.250	112.26	2.250	7.15	3.25	4.44
0.333	4.57	1.333	112.26	2.333	7.15	3.33	4.44
0.417	5.22	1.417	23.77	2.417	6.43	3.42	4.20
0.500	5.22	1.500	23.77	2.500	6.43	3.50	4.20
0.583	6.15	1.583	14.99	2.583	5.87	3.58	3.99
0.667	6.15	1.667	14.99	2.667	5.87	3.67	3.99
0.750	7.61	1.750	11.43	2.750	5.41	3.75	3.81
0.833	7.61	1.833	11.43	2.833	5.41	3.83	3.81
0.917	10.41	1.917	9.42	2.917	5.04	3.92	3.64
1.000	10.41	2.000	9.42	3.000	5.04	4.00	3.64

Unit Hyd Qpeak (cms)= 0.162

PEAK FLOW (cms)= 0.020 (i)
TIME TO PEAK (hrs)= 1.833
RUNOFF VOLUME (mm)= 7.425
TOTAL RAINFALL (mm)= 48.681
RUNOFF COEFFICIENT = 0.153

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

| CALIB | NASHYD (0014) | ID= 1 DT= 5.0 min | Area (ha)= 1.80 | Ia (mm)= 16.00 | U.H. Tp(hrs)= 0.76 | Curve Number (CN)= 50.0 | # of Linear Res.(N)= 3.00 |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.09	1.083	19.37	2.083	8.09	3.08	4.72
0.167	4.09	1.167	19.37	2.167	8.09	3.17	4.72
0.250	4.57	1.250	112.26	2.250	7.15	3.25	4.44
0.333	4.57	1.333	112.26	2.333	7.15	3.33	4.44
0.417	5.22	1.417	23.77	2.417	6.43	3.42	4.20
0.500	5.22	1.500	23.77	2.500	6.43	3.50	4.20
0.583	6.15	1.583	14.99	2.583	5.87	3.58	3.99
0.667	6.15	1.667	14.99	2.667	5.87	3.67	3.99
0.750	7.61	1.750	11.43	2.750	5.41	3.75	3.81
0.833	7.61	1.833	11.43	2.833	5.41	3.83	3.81
0.917	10.41	1.917	9.42	2.917	5.04	3.92	3.64
1.000	10.41	2.000	9.42	3.000	5.04	4.00	3.64

Unit Hyd Qpeak (cms)= 0.090

PEAK FLOW (cms)= 0.007 (i)
TIME TO PEAK (hrs)= 2.667
RUNOFF VOLUME (mm)= 3.725
TOTAL RAINFALL (mm)= 48.681
RUNOFF COEFFICIENT = 0.077

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

| CALIB |

| NASHYD (0015) | ID= 1 DT= 5.0 min | Area (ha)= 6.70 | Ia (mm)= 10.00 | U.H. Tp(hrs)= 1.45 | Curve Number (CN)= 60.0 | # of Linear Res.(N)= 3.00 |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.09	1.083	19.37	2.083	8.09	3.08	4.72
0.167	4.09	1.167	19.37	2.167	8.09	3.17	4.72
0.250	4.57	1.250	112.26	2.250	7.15	3.25	4.44
0.333	4.57	1.333	112.26	2.333	7.15	3.33	4.44
0.417	5.22	1.417	23.77	2.417	6.43	3.42	4.20
0.500	5.22	1.500	23.77	2.500	6.43	3.50	4.20
0.583	6.15	1.583	14.99	2.583	5.87	3.58	3.99
0.667	6.15	1.667	14.99	2.667	5.87	3.67	3.99
0.750	7.61	1.750	11.43	2.750	5.41	3.75	3.81
0.833	7.61	1.833	11.43	2.833	5.41	3.83	3.81
0.917	10.41	1.917	9.42	2.917	5.04	3.92	3.64
1.000	10.41	2.000	9.42	3.000	5.04	4.00	3.64

Unit Hyd Qpeak (cms)= 0.176

PEAK FLOW (cms)= 0.036 (i)
TIME TO PEAK (hrs)= 3.583
RUNOFF VOLUME (mm)= 7.193
TOTAL RAINFALL (mm)= 48.681
RUNOFF COEFFICIENT = 0.148

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

| CALIB | NASHYD (0016) | ID= 1 DT= 5.0 min | Area (ha)= 29.16 | Ia (mm)= 7.88 | U.H. Tp(hrs)= 0.68 | Curve Number (CN)= 71.4 | # of Linear Res.(N)= 3.00 |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.09	1.083	19.37	2.083	8.09	3.08	4.72
0.167	4.09	1.167	19.37	2.167	8.09	3.17	4.72

0.250	4.57	1.250	112.26	2.250	7.15	3.25	4.44
0.333	4.57	1.333	112.26	2.333	7.15	3.33	4.44
0.417	5.22	1.417	23.77	2.417	6.43	3.42	4.20
0.500	5.22	1.500	23.77	2.500	6.43	3.50	4.20
0.583	6.15	1.583	14.99	2.583	5.87	3.58	3.99
0.667	6.15	1.667	14.99	2.667	5.87	3.67	3.99
0.750	7.61	1.750	11.43	2.750	5.41	3.75	3.81
0.833	7.61	1.833	11.43	2.833	5.41	3.83	3.81
0.917	10.41	1.917	9.42	2.917	5.04	3.92	3.64
1.000	10.41	2.000	9.42	3.000	5.04	4.00	3.64

Unit Hyd Qpeak (cms)= 1.638

PEAK FLOW (cms)= 0.406 (i)
TIME TO PEAK (hrs)= 2.250
RUNOFF VOLUME (mm)= 11.679
TOTAL RAINFALL (mm)= 48.681
RUNOFF COEFFICIENT = 0.240

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0019)	Area (ha)= 39.68	Curve Number (CN)= 60.7	
ID= 1 DT= 5.0 min	Ia (mm)= 8.26	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 1.18		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.09	1.083	19.37	2.083	8.09	3.08	4.72
0.167	4.09	1.167	19.37	2.167	8.09	3.17	4.72
0.250	4.57	1.250	112.26	2.250	7.15	3.25	4.44
0.333	4.57	1.333	112.26	2.333	7.15	3.33	4.44
0.417	5.22	1.417	23.77	2.417	6.43	3.42	4.20
0.500	5.22	1.500	23.77	2.500	6.43	3.50	4.20
0.583	6.15	1.583	14.99	2.583	5.87	3.58	3.99
0.667	6.15	1.667	14.99	2.667	5.87	3.67	3.99
0.750	7.61	1.750	11.43	2.750	5.41	3.75	3.81
0.833	7.61	1.833	11.43	2.833	5.41	3.83	3.81
0.917	10.41	1.917	9.42	2.917	5.04	3.92	3.64
1.000	10.41	2.000	9.42	3.000	5.04	4.00	3.64

Unit Hyd Qpeak (cms)= 1.284

PEAK FLOW (cms)= 0.267 (i)
TIME TO PEAK (hrs)= 3.083
RUNOFF VOLUME (mm)= 7.967
TOTAL RAINFALL (mm)= 48.681
RUNOFF COEFFICIENT = 0.164

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0024)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0010):	14.85	0.067	2.75	4.80
+ ID2= 2 (0013):	1.70	0.020	1.83	7.42
ID = 3 (0024):	16.55	0.078	2.67	5.07

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0024):	16.55	0.078	2.67	5.07
+ ID2= 2 (0014):	1.80	0.007	2.67	3.72
ID = 1 (0024):	18.35	0.085	2.67	4.94

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0024):	18.35	0.085	2.67	4.94
+ ID2= 2 (0015):	6.70	0.036	3.58	7.19
ID = 3 (0024):	25.05	0.116	2.92	5.54

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)					
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0024):	25.05	0.116	2.92	5.54
+ ID2= 2 (0016):	29.16	0.406	2.25	11.68
ID = 1 (0024):	54.21	0.508	2.33	8.84

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)					
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0024):	54.21	0.508	2.33	8.84
+ ID2= 2 (0019):	39.68	0.267	3.08	7.97
ID = 3 (0024):	93.89	0.736	2.50	8.47

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)					
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0024):	93.89	0.736	2.50	8.47
+ ID2= 2 (0007):	100.92	0.479	3.92	6.91
ID = 1 (0024):	194.81	1.105	3.00	7.66

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)					
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0024):	194.81	1.105	3.00	7.66
+ ID2= 2 (0008):	23.99	0.089	2.83	4.05
ID = 3 (0024):	218.80	1.194	3.00	7.27

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)					
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0024):	218.80	1.194	3.00	7.27
+ ID2= 2 (0009):	6.37	0.024	2.67	3.86
ID = 1 (0024):	225.17	1.217	3.00	7.17

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB				
NASHYD (0011)	Area (ha)=	46.28	Curve Number (CN)=	72.2
ID= 1 DT= 5.0 min	Ia (mm)=	7.09	# of Linear Res.(N)=	3.00
	U.H. Tp(hrs)=	0.30		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.09	1.083	19.37	2.083	8.09	3.08	4.72
0.167	4.09	1.167	19.37	2.167	8.09	3.17	4.72
0.250	4.57	1.250	112.26	2.250	7.15	3.25	4.44
0.333	4.57	1.333	112.26	2.333	7.15	3.33	4.44
0.417	5.22	1.417	23.77	2.417	6.43	3.42	4.20
0.500	5.22	1.500	23.77	2.500	6.43	3.50	4.20
0.583	6.15	1.583	14.99	2.583	5.87	3.58	3.99
0.667	6.15	1.667	14.99	2.667	5.87	3.67	3.99
0.750	7.61	1.750	11.43	2.750	5.41	3.75	3.81
0.833	7.61	1.833	11.43	2.833	5.41	3.83	3.81
0.917	10.41	1.917	9.42	2.917	5.04	3.92	3.64
1.000	10.41	2.000	9.42	3.000	5.04	4.00	3.64

Unit Hyd Qpeak (cms)= 5.892

PEAK FLOW (cms)= 1.157 (i)
TIME TO PEAK (hrs)= 1.667
RUNOFF VOLUME (mm)= 12.401
TOTAL RAINFALL (mm)= 48.681
RUNOFF COEFFICIENT = 0.255

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB

NASHYD (0012)	Area (ha)= 1.13	Curve Number (CN)= 67.4
ID= 1 DT= 5.0 min	Ia (mm)= 7.88	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.43	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.09	1.083	19.37	2.083	8.09	3.08	4.72
0.167	4.09	1.167	19.37	2.167	8.09	3.17	4.72
0.250	4.57	1.250	112.26	2.250	7.15	3.25	4.44
0.333	4.57	1.333	112.26	2.333	7.15	3.33	4.44
0.417	5.22	1.417	23.77	2.417	6.43	3.42	4.20
0.500	5.22	1.500	23.77	2.500	6.43	3.50	4.20
0.583	6.15	1.583	14.99	2.583	5.87	3.58	3.99
0.667	6.15	1.667	14.99	2.667	5.87	3.67	3.99
0.750	7.61	1.750	11.43	2.750	5.41	3.75	3.81
0.833	7.61	1.833	11.43	2.833	5.41	3.83	3.81
0.917	10.41	1.917	9.42	2.917	5.04	3.92	3.64
1.000	10.41	2.000	9.42	3.000	5.04	4.00	3.64

Unit Hyd Qpeak (cms)=	0.100	
PEAK FLOW (cms)=	0.018 (i)	
TIME TO PEAK (hrs)=	1.833	
RUNOFF VOLUME (mm)=	10.157	
TOTAL RAINFALL (mm)=	48.681	
RUNOFF COEFFICIENT =	0.209	

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB		
STANDHYD (0043)	Area (ha)= 0.13	
ID= 1 DT= 5.0 min	Total Imp(%)= 30.77	Dir. Conn.(%)= 7.69

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	0.04	0.09
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	0.50	0.50
Length (m)=	29.44	70.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.09	1.083	19.37	2.083	8.09	3.08	4.72
0.167	4.09	1.167	19.37	2.167	8.09	3.17	4.72
0.250	4.57	1.250	112.26	2.250	7.15	3.25	4.44
0.333	4.57	1.333	112.26	2.333	7.15	3.33	4.44
0.417	5.22	1.417	23.77	2.417	6.43	3.42	4.20
0.500	5.22	1.500	23.77	2.500	6.43	3.50	4.20
0.583	6.15	1.583	14.99	2.583	5.87	3.58	3.99
0.667	6.15	1.667	14.99	2.667	5.87	3.67	3.99
0.750	7.61	1.750	11.43	2.750	5.41	3.75	3.81
0.833	7.61	1.833	11.43	2.833	5.41	3.83	3.81
0.917	10.41	1.917	9.42	2.917	5.04	3.92	3.64
1.000	10.41	2.000	9.42	3.000	5.04	4.00	3.64

Max.Eff.Inten.(mm/hr)=	112.26	20.98	
over (min)	5.00	30.00	
Storage Coeff. (min)=	1.44 (ii)	29.39 (ii)	
Unit Hyd. Tpeak (min)=	5.00	30.00	
Unit Hyd. peak (cms)=	0.33	0.04	
			TOTALS
PEAK FLOW (cms)=	0.00	0.00	0.004 (iii)
TIME TO PEAK (hrs)=	1.33	1.75	1.33
RUNOFF VOLUME (mm)=	47.68	15.47	17.82
TOTAL RAINFALL (mm)=	48.68	48.68	48.68
RUNOFF COEFFICIENT =	0.98	0.32	0.37

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB		
STANDHYD (0044)	Area (ha)= 1.62	
ID= 1 DT= 5.0 min	Total Imp(%)= 48.77	Dir. Conn.(%)= 30.86

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	0.79	0.83
Dep. Storage (mm)=	1.00	5.00

Average Slope	(%)=	0.50	1.40
Length	(m)=	103.92	400.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.09	1.083	19.37	2.083	8.09	3.08	4.72
0.167	4.09	1.167	19.37	2.167	8.09	3.17	4.72
0.250	4.57	1.250	112.26	2.250	7.15	3.25	4.44
0.333	4.57	1.333	112.26	2.333	7.15	3.33	4.44
0.417	5.22	1.417	23.77	2.417	6.43	3.42	4.20
0.500	5.22	1.500	23.77	2.500	6.43	3.50	4.20
0.583	6.15	1.583	14.99	2.583	5.87	3.58	3.99
0.667	6.15	1.667	14.99	2.667	5.87	3.67	3.99
0.750	7.61	1.750	11.43	2.750	5.41	3.75	3.81
0.833	7.61	1.833	11.43	2.833	5.41	3.83	3.81
0.917	10.41	1.917	9.42	2.917	5.04	3.92	3.64
1.000	10.41	2.000	9.42	3.000	5.04	4.00	3.64

Max.Eff.Inten.(mm/hr)=		112.26	13.90	
over (min)		5.00	75.00	
Storage Coeff. (min)=		3.07 (ii)	71.93 (ii)	
Unit Hyd. Tpeak (min)=		5.00	75.00	
Unit Hyd. peak (cms)=		0.27	0.02	
				TOTALS
PEAK FLOW	(cms)=	0.15	0.02	0.152 (iii)
TIME TO PEAK	(hrs)=	1.33	2.67	1.33
RUNOFF VOLUME	(mm)=	47.68	15.62	25.49
TOTAL RAINFALL	(mm)=	48.68	48.68	48.68
RUNOFF COEFFICIENT	=	0.98	0.32	0.52

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0041)	Area	(ha)=	0.59	Curve Number	(CN)= 71.5
ID= 1 DT= 5.0 min	Ia	(mm)=	4.75	# of Linear Res.(N)=	3.00

U.H. Tp(hrs)= 0.53

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.09	1.083	19.37	2.083	8.09	3.08	4.72
0.167	4.09	1.167	19.37	2.167	8.09	3.17	4.72
0.250	4.57	1.250	112.26	2.250	7.15	3.25	4.44
0.333	4.57	1.333	112.26	2.333	7.15	3.33	4.44
0.417	5.22	1.417	23.77	2.417	6.43	3.42	4.20
0.500	5.22	1.500	23.77	2.500	6.43	3.50	4.20
0.583	6.15	1.583	14.99	2.583	5.87	3.58	3.99
0.667	6.15	1.667	14.99	2.667	5.87	3.67	3.99
0.750	7.61	1.750	11.43	2.750	5.41	3.75	3.81
0.833	7.61	1.833	11.43	2.833	5.41	3.83	3.81
0.917	10.41	1.917	9.42	2.917	5.04	3.92	3.64
1.000	10.41	2.000	9.42	3.000	5.04	4.00	3.64

Unit Hyd Qpeak (cms)= 0.043

PEAK FLOW	(cms)=	0.011 (i)
TIME TO PEAK	(hrs)=	2.000
RUNOFF VOLUME	(mm)=	13.273
TOTAL RAINFALL	(mm)=	48.681
RUNOFF COEFFICIENT	=	0.273

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0028)	Area	(ha)=	1.38	Curve Number	(CN)= 64.1
ID= 1 DT= 5.0 min	Ia	(mm)=	8.51	# of Linear Res.(N)=	3.00
	U.H. Tp(hrs)=		0.39		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.09	1.083	19.37	2.083	8.09	3.08	4.72
0.167	4.09	1.167	19.37	2.167	8.09	3.17	4.72
0.250	4.57	1.250	112.26	2.250	7.15	3.25	4.44
0.333	4.57	1.333	112.26	2.333	7.15	3.33	4.44

0.417	5.22	1.417	23.77	2.417	6.43	3.42	4.20
0.500	5.22	1.500	23.77	2.500	6.43	3.50	4.20
0.583	6.15	1.583	14.99	2.583	5.87	3.58	3.99
0.667	6.15	1.667	14.99	2.667	5.87	3.67	3.99
0.750	7.61	1.750	11.43	2.750	5.41	3.75	3.81
0.833	7.61	1.833	11.43	2.833	5.41	3.83	3.81
0.917	10.41	1.917	9.42	2.917	5.04	3.92	3.64
1.000	10.41	2.000	9.42	3.000	5.04	4.00	3.64

Unit Hyd Qpeak (cms)= 0.135

PEAK FLOW (cms)= 0.020 (i)
TIME TO PEAK (hrs)= 1.833
RUNOFF VOLUME (mm)= 8.856
TOTAL RAINFALL (mm)= 48.681
RUNOFF COEFFICIENT = 0.182

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0023)					
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)	
ID1= 1 (0011):	46.28	1.157	1.67	12.40	
+ ID2= 2 (0012):	1.13	0.018	1.83	10.16	
ID = 3 (0023):	47.41	1.173	1.67	12.35	

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023)					
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)	
ID1= 3 (0023):	47.41	1.173	1.67	12.35	
+ ID2= 2 (0028):	1.38	0.020	1.83	8.86	
ID = 1 (0023):	48.79	1.192	1.67	12.25	

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023)				
1 + 2 = 3	AREA	QPEAK	TPEAK	R.V.

	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0023):	48.79	1.192	1.67	12.25
+ ID2= 2 (0041):	0.59	0.011	2.00	13.27
ID = 3 (0023):	49.38	1.201	1.67	12.26

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0023):	49.38	1.201	1.67	12.26
+ ID2= 2 (0043):	0.13	0.004	1.33	17.82
ID = 1 (0023):	49.51	1.204	1.67	12.28

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0023):	49.51	1.204	1.67	12.28
+ ID2= 2 (0044):	1.62	0.152	1.33	25.49
ID = 3 (0023):	51.13	1.230	1.67	12.69

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0025)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0023):	51.13	1.230	1.67	12.69
+ ID2= 2 (0024):	225.17	1.217	3.00	7.17
ID = 3 (0025):	276.30	1.773	1.83	8.19

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

****
** SIMULATION:C - 10-year CHI **
****

CHICAGO STORM
Ptotal= 56.53 mm

IDF curve parameters: A= 651.884
B= 0.000
C= 0.699
used in: INTENSITY = A / (t + B)^C

Duration of storm = 4.00 hrs
Storm time step = 10.00 min
Time to peak ratio = 0.33

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.00	4.75	1.00	22.49	2.00	9.40	3.00	5.48
0.17	5.31	1.17	130.37	2.17	8.30	3.17	5.16
0.33	6.06	1.33	27.61	2.33	7.47	3.33	4.88
0.50	7.14	1.50	17.41	2.50	6.82	3.50	4.64
0.67	8.84	1.67	13.27	2.67	6.29	3.67	4.42
0.83	12.09	1.83	10.93	2.83	5.85	3.83	4.23

CALIB NASHYD (0007) ID= 1 DT= 5.0 min	Area (ha)= 100.92 Ia (mm)= 7.89 U.H. Tp(hrs)= 1.70	Curve Number (CN)= 55.9 # of Linear Res.(N)= 3.00

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.75	1.083	22.49	2.083	9.40	3.08	5.48
0.167	4.75	1.167	22.49	2.167	9.40	3.17	5.48
0.250	5.31	1.250	130.37	2.250	8.30	3.25	5.16
0.333	5.31	1.333	130.37	2.333	8.30	3.33	5.16
0.417	6.06	1.417	27.61	2.417	7.47	3.42	4.88
0.500	6.06	1.500	27.61	2.500	7.47	3.50	4.88
0.583	7.14	1.583	17.41	2.583	6.82	3.58	4.64
0.667	7.14	1.667	17.41	2.667	6.82	3.67	4.64
0.750	8.84	1.750	13.27	2.750	6.29	3.75	4.42
0.833	8.84	1.833	13.27	2.833	6.29	3.83	4.42
0.917	12.09	1.917	10.93	2.917	5.85	3.92	4.23
1.000	12.09	2.000	10.93	3.000	5.85	4.00	4.23

Unit Hyd Qpeak (cms)= 2.267

PEAK FLOW (cms)= 0.660 (i)

TIME TO PEAK (hrs)= 3.917
RUNOFF VOLUME (mm)= 9.514
TOTAL RAINFALL (mm)= 56.533
RUNOFF COEFFICIENT = 0.168

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB NASHYD (0008) ID= 1 DT= 5.0 min	Area (ha)= 23.99 Ia (mm)= 10.91 U.H. Tp(hrs)= 0.97	Curve Number (CN)= 44.7 # of Linear Res.(N)= 3.00

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.75	1.083	22.49	2.083	9.40	3.08	5.48
0.167	4.75	1.167	22.49	2.167	9.40	3.17	5.48
0.250	5.31	1.250	130.37	2.250	8.30	3.25	5.16
0.333	5.31	1.333	130.37	2.333	8.30	3.33	5.16
0.417	6.06	1.417	27.61	2.417	7.47	3.42	4.88
0.500	6.06	1.500	27.61	2.500	7.47	3.50	4.88
0.583	7.14	1.583	17.41	2.583	6.82	3.58	4.64
0.667	7.14	1.667	17.41	2.667	6.82	3.67	4.64
0.750	8.84	1.750	13.27	2.750	6.29	3.75	4.42
0.833	8.84	1.833	13.27	2.833	6.29	3.83	4.42
0.917	12.09	1.917	10.93	2.917	5.85	3.92	4.23
1.000	12.09	2.000	10.93	3.000	5.85	4.00	4.23

Unit Hyd Qpeak (cms)= 0.945

PEAK FLOW (cms)= 0.129 (i)
TIME TO PEAK (hrs)= 2.833
RUNOFF VOLUME (mm)= 5.784
TOTAL RAINFALL (mm)= 56.533
RUNOFF COEFFICIENT = 0.102

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB NASHYD (0009) ID= 1 DT= 5.0 min	Area (ha)= 6.37 Ia (mm)= 15.69	Curve Number (CN)= 50.5 # of Linear Res.(N)= 3.00

---------- U.H. Tp(hrs)= 0.77

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.75	1.083	22.49	2.083	9.40	3.08	5.48
0.167	4.75	1.167	22.49	2.167	9.40	3.17	5.48
0.250	5.31	1.250	130.37	2.250	8.30	3.25	5.16
0.333	5.31	1.333	130.37	2.333	8.30	3.33	5.16
0.417	6.06	1.417	27.61	2.417	7.47	3.42	4.88
0.500	6.06	1.500	27.61	2.500	7.47	3.50	4.88
0.583	7.14	1.583	17.41	2.583	6.82	3.58	4.64
0.667	7.14	1.667	17.41	2.667	6.82	3.67	4.64
0.750	8.84	1.750	13.27	2.750	6.29	3.75	4.42
0.833	8.84	1.833	13.27	2.833	6.29	3.83	4.42
0.917	12.09	1.917	10.93	2.917	5.85	3.92	4.23
1.000	12.09	2.000	10.93	3.000	5.85	4.00	4.23

Unit Hyd Qpeak (cms)= 0.316

PEAK FLOW (cms)= 0.037 (i)
TIME TO PEAK (hrs)= 2.583
RUNOFF VOLUME (mm)= 5.752
TOTAL RAINFALL (mm)= 56.533
RUNOFF COEFFICIENT = 0.102

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB NASHYD (0010) ID= 1 DT= 5.0 min	Area (ha)= 14.85 Ia (mm)= 13.28 U.H. Tp(hrs)= 0.89	Curve Number (CN)= 52.9 # of Linear Res.(N)= 3.00

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.75	1.083	22.49	2.083	9.40	3.08	5.48
0.167	4.75	1.167	22.49	2.167	9.40	3.17	5.48
0.250	5.31	1.250	130.37	2.250	8.30	3.25	5.16
0.333	5.31	1.333	130.37	2.333	8.30	3.33	5.16

0.417	6.06	1.417	27.61	2.417	7.47	3.42	4.88
0.500	6.06	1.500	27.61	2.500	7.47	3.50	4.88
0.583	7.14	1.583	17.41	2.583	6.82	3.58	4.64
0.667	7.14	1.667	17.41	2.667	6.82	3.67	4.64
0.750	8.84	1.750	13.27	2.750	6.29	3.75	4.42
0.833	8.84	1.833	13.27	2.833	6.29	3.83	4.42
0.917	12.09	1.917	10.93	2.917	5.85	3.92	4.23
1.000	12.09	2.000	10.93	3.000	5.85	4.00	4.23

Unit Hyd Qpeak (cms)= 0.637

PEAK FLOW (cms)= 0.099 (i)
TIME TO PEAK (hrs)= 2.750
RUNOFF VOLUME (mm)= 6.954
TOTAL RAINFALL (mm)= 56.533
RUNOFF COEFFICIENT = 0.123

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB NASHYD (0013) ID= 1 DT= 5.0 min	Area (ha)= 1.70 Ia (mm)= 9.65 U.H. Tp(hrs)= 0.40	Curve Number (CN)= 60.5 # of Linear Res.(N)= 3.00

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.75	1.083	22.49	2.083	9.40	3.08	5.48
0.167	4.75	1.167	22.49	2.167	9.40	3.17	5.48
0.250	5.31	1.250	130.37	2.250	8.30	3.25	5.16
0.333	5.31	1.333	130.37	2.333	8.30	3.33	5.16
0.417	6.06	1.417	27.61	2.417	7.47	3.42	4.88
0.500	6.06	1.500	27.61	2.500	7.47	3.50	4.88
0.583	7.14	1.583	17.41	2.583	6.82	3.58	4.64
0.667	7.14	1.667	17.41	2.667	6.82	3.67	4.64
0.750	8.84	1.750	13.27	2.750	6.29	3.75	4.42
0.833	8.84	1.833	13.27	2.833	6.29	3.83	4.42
0.917	12.09	1.917	10.93	2.917	5.85	3.92	4.23
1.000	12.09	2.000	10.93	3.000	5.85	4.00	4.23

Unit Hyd Qpeak (cms)= 0.162

PEAK FLOW (cms)= 0.028 (i)

TIME TO PEAK (hrs)= 1.833
RUNOFF VOLUME (mm)= 10.318
TOTAL RAINFALL (mm)= 56.533
RUNOFF COEFFICIENT = 0.183

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0014)	Area (ha)=	1.80	Curve Number (CN)=	50.0	
ID= 1 DT= 5.0 min	Ia (mm)=	16.00	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	0.76			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.75	1.083	22.49	2.083	9.40	3.08	5.48
0.167	4.75	1.167	22.49	2.167	9.40	3.17	5.48
0.250	5.31	1.250	130.37	2.250	8.30	3.25	5.16
0.333	5.31	1.333	130.37	2.333	8.30	3.33	5.16
0.417	6.06	1.417	27.61	2.417	7.47	3.42	4.88
0.500	6.06	1.500	27.61	2.500	7.47	3.50	4.88
0.583	7.14	1.583	17.41	2.583	6.82	3.58	4.64
0.667	7.14	1.667	17.41	2.667	6.82	3.67	4.64
0.750	8.84	1.750	13.27	2.750	6.29	3.75	4.42
0.833	8.84	1.833	13.27	2.833	6.29	3.83	4.42
0.917	12.09	1.917	10.93	2.917	5.85	3.92	4.23
1.000	12.09	2.000	10.93	3.000	5.85	4.00	4.23

Unit Hyd Qpeak (cms)= 0.090

PEAK FLOW (cms)= 0.010 (i)
TIME TO PEAK (hrs)= 2.583
RUNOFF VOLUME (mm)= 5.577
TOTAL RAINFALL (mm)= 56.533
RUNOFF COEFFICIENT = 0.099

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0015)	Area (ha)=	6.70	Curve Number (CN)=	60.0	
ID= 1 DT= 5.0 min	Ia (mm)=	10.00	# of Linear Res.(N)=	3.00	

U.H. Tp(hrs)= 1.45

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.75	1.083	22.49	2.083	9.40	3.08	5.48
0.167	4.75	1.167	22.49	2.167	9.40	3.17	5.48
0.250	5.31	1.250	130.37	2.250	8.30	3.25	5.16
0.333	5.31	1.333	130.37	2.333	8.30	3.33	5.16
0.417	6.06	1.417	27.61	2.417	7.47	3.42	4.88
0.500	6.06	1.500	27.61	2.500	7.47	3.50	4.88
0.583	7.14	1.583	17.41	2.583	6.82	3.58	4.64
0.667	7.14	1.667	17.41	2.667	6.82	3.67	4.64
0.750	8.84	1.750	13.27	2.750	6.29	3.75	4.42
0.833	8.84	1.833	13.27	2.833	6.29	3.83	4.42
0.917	12.09	1.917	10.93	2.917	5.85	3.92	4.23
1.000	12.09	2.000	10.93	3.000	5.85	4.00	4.23

Unit Hyd Qpeak (cms)= 0.176

PEAK FLOW (cms)= 0.051 (i)
TIME TO PEAK (hrs)= 3.500
RUNOFF VOLUME (mm)= 10.030
TOTAL RAINFALL (mm)= 56.533
RUNOFF COEFFICIENT = 0.177

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0016)	Area (ha)=	29.16	Curve Number (CN)=	71.4	
ID= 1 DT= 5.0 min	Ia (mm)=	7.88	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	0.68			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.75	1.083	22.49	2.083	9.40	3.08	5.48
0.167	4.75	1.167	22.49	2.167	9.40	3.17	5.48
0.250	5.31	1.250	130.37	2.250	8.30	3.25	5.16
0.333	5.31	1.333	130.37	2.333	8.30	3.33	5.16

0.417	6.06	1.417	27.61	2.417	7.47	3.42	4.88
0.500	6.06	1.500	27.61	2.500	7.47	3.50	4.88
0.583	7.14	1.583	17.41	2.583	6.82	3.58	4.64
0.667	7.14	1.667	17.41	2.667	6.82	3.67	4.64
0.750	8.84	1.750	13.27	2.750	6.29	3.75	4.42
0.833	8.84	1.833	13.27	2.833	6.29	3.83	4.42
0.917	12.09	1.917	10.93	2.917	5.85	3.92	4.23
1.000	12.09	2.000	10.93	3.000	5.85	4.00	4.23

Unit Hyd Qpeak (cms)= 1.638

PEAK FLOW (cms)= 0.558 (i)
TIME TO PEAK (hrs)= 2.250
RUNOFF VOLUME (mm)= 15.739
TOTAL RAINFALL (mm)= 56.533
RUNOFF COEFFICIENT = 0.278

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0019)	Area (ha)= 39.68	Curve Number (CN)= 60.7	
ID= 1 DT= 5.0 min	Ia (mm)= 8.26	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 1.18		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.75	1.083	22.49	2.083	9.40	3.08	5.48
0.167	4.75	1.167	22.49	2.167	9.40	3.17	5.48
0.250	5.31	1.250	130.37	2.250	8.30	3.25	5.16
0.333	5.31	1.333	130.37	2.333	8.30	3.33	5.16
0.417	6.06	1.417	27.61	2.417	7.47	3.42	4.88
0.500	6.06	1.500	27.61	2.500	7.47	3.50	4.88
0.583	7.14	1.583	17.41	2.583	6.82	3.58	4.64
0.667	7.14	1.667	17.41	2.667	6.82	3.67	4.64
0.750	8.84	1.750	13.27	2.750	6.29	3.75	4.42
0.833	8.84	1.833	13.27	2.833	6.29	3.83	4.42
0.917	12.09	1.917	10.93	2.917	5.85	3.92	4.23
1.000	12.09	2.000	10.93	3.000	5.85	4.00	4.23

Unit Hyd Qpeak (cms)= 1.284

PEAK FLOW (cms)= 0.370 (i)

TIME TO PEAK (hrs)= 3.000
RUNOFF VOLUME (mm)= 10.944
TOTAL RAINFALL (mm)= 56.533
RUNOFF COEFFICIENT = 0.194

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0024)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0010):	14.85	0.099	2.75	6.95
+ ID2= 2 (0013):	1.70	0.028	1.83	10.32
ID = 3 (0024):	16.55	0.115	2.58	7.30

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0024):	16.55	0.115	2.58	7.30
+ ID2= 2 (0014):	1.80	0.010	2.58	5.58
ID = 1 (0024):	18.35	0.125	2.58	7.13

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0024):	18.35	0.125	2.58	7.13
+ ID2= 2 (0015):	6.70	0.051	3.50	10.03
ID = 3 (0024):	25.05	0.168	2.83	7.91

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)				
3 + 2 = 1	AREA	QPEAK	TPEAK	R.V.

Post-Development VO Output

	(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0024):	25.05	0.168	2.83	7.91
+ ID2= 2 (0016):	29.16	0.558	2.25	15.74
ID = 1 (0024):	54.21	0.709	2.25	12.12

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)				
1 + 2 = 3	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0024):	54.21	0.709	2.25	12.12
+ ID2= 2 (0019):	39.68	0.370	3.00	10.94
ID = 3 (0024):	93.89	1.025	2.50	11.62

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)				
3 + 2 = 1	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0024):	93.89	1.025	2.50	11.62
+ ID2= 2 (0007):	100.92	0.660	3.92	9.51
ID = 1 (0024):	194.81	1.528	3.00	10.53

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)				
1 + 2 = 3	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0024):	194.81	1.528	3.00	10.53
+ ID2= 2 (0008):	23.99	0.129	2.83	5.78
ID = 3 (0024):	218.80	1.656	2.92	10.01

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)				
3 + 2 = 1	AREA	QPEAK	TPEAK	R.V.

Post-Development VO Output

	(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0024):	218.80	1.656	2.92	10.01
+ ID2= 2 (0009):	6.37	0.037	2.58	5.75
ID = 1 (0024):	225.17	1.692	2.92	9.89

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB				
NASHYD (0011)	Area	(ha)=	46.28	Curve Number (CN)= 72.2
ID= 1 DT= 5.0 min	Ia	(mm)=	7.09	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=		0.30	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.75	1.083	22.49	2.083	9.40	3.08	5.48
0.167	4.75	1.167	22.49	2.167	9.40	3.17	5.48
0.250	5.31	1.250	130.37	2.250	8.30	3.25	5.16
0.333	5.31	1.333	130.37	2.333	8.30	3.33	5.16
0.417	6.06	1.417	27.61	2.417	7.47	3.42	4.88
0.500	6.06	1.500	27.61	2.500	7.47	3.50	4.88
0.583	7.14	1.583	17.41	2.583	6.82	3.58	4.64
0.667	7.14	1.667	17.41	2.667	6.82	3.67	4.64
0.750	8.84	1.750	13.27	2.750	6.29	3.75	4.42
0.833	8.84	1.833	13.27	2.833	6.29	3.83	4.42
0.917	12.09	1.917	10.93	2.917	5.85	3.92	4.23
1.000	12.09	2.000	10.93	3.000	5.85	4.00	4.23

Unit Hyd Qpeak (cms)= 5.892

PEAK FLOW (cms)= 1.594 (i)
TIME TO PEAK (hrs)= 1.667
RUNOFF VOLUME (mm)= 16.591
TOTAL RAINFALL (mm)= 56.533
RUNOFF COEFFICIENT = 0.293

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB				
NASHYD (0012)	Area	(ha)=	1.13	Curve Number (CN)= 67.4
ID= 1 DT= 5.0 min	Ia	(mm)=	7.88	# of Linear Res.(N)= 3.00

---------- U.H. Tp(hrs)= 0.43

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.75	1.083	22.49	2.083	9.40	3.08	5.48
0.167	4.75	1.167	22.49	2.167	9.40	3.17	5.48
0.250	5.31	1.250	130.37	2.250	8.30	3.25	5.16
0.333	5.31	1.333	130.37	2.333	8.30	3.33	5.16
0.417	6.06	1.417	27.61	2.417	7.47	3.42	4.88
0.500	6.06	1.500	27.61	2.500	7.47	3.50	4.88
0.583	7.14	1.583	17.41	2.583	6.82	3.58	4.64
0.667	7.14	1.667	17.41	2.667	6.82	3.67	4.64
0.750	8.84	1.750	13.27	2.750	6.29	3.75	4.42
0.833	8.84	1.833	13.27	2.833	6.29	3.83	4.42
0.917	12.09	1.917	10.93	2.917	5.85	3.92	4.23
1.000	12.09	2.000	10.93	3.000	5.85	4.00	4.23

Unit Hyd Qpeak (cms)= 0.100

PEAK FLOW (cms)= 0.025 (i)
TIME TO PEAK (hrs)= 1.833
RUNOFF VOLUME (mm)= 13.782
TOTAL RAINFALL (mm)= 56.533
RUNOFF COEFFICIENT = 0.244

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	STANDHYD (0043)	ID= 1 DT= 5.0 min

Area (ha)= 0.13
Total Imp(%)= 30.77 Dir. Conn.(%)= 7.69

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	0.04	0.09
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	0.50	0.50
Length (m)=	29.44	70.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.75	1.083	22.49	2.083	9.40	3.08	5.48
0.167	4.75	1.167	22.49	2.167	9.40	3.17	5.48
0.250	5.31	1.250	130.37	2.250	8.30	3.25	5.16
0.333	5.31	1.333	130.37	2.333	8.30	3.33	5.16
0.417	6.06	1.417	27.61	2.417	7.47	3.42	4.88
0.500	6.06	1.500	27.61	2.500	7.47	3.50	4.88
0.583	7.14	1.583	17.41	2.583	6.82	3.58	4.64
0.667	7.14	1.667	17.41	2.667	6.82	3.67	4.64
0.750	8.84	1.750	13.27	2.750	6.29	3.75	4.42
0.833	8.84	1.833	13.27	2.833	6.29	3.83	4.42
0.917	12.09	1.917	10.93	2.917	5.85	3.92	4.23
1.000	12.09	2.000	10.93	3.000	5.85	4.00	4.23

			TOTALS
Max.Eff.Inten.(mm/hr)=	130.37	30.87	
over (min)	5.00	30.00	
Storage Coeff. (min)=	1.36 (ii)	25.31 (ii)	
Unit Hyd. Tpeak (min)=	5.00	30.00	
Unit Hyd. peak (cms)=	0.33	0.04	
PEAK FLOW (cms)=	0.00	0.00	0.005 (iii)
TIME TO PEAK (hrs)=	1.33	1.75	1.75
RUNOFF VOLUME (mm)=	55.53	20.14	22.74
TOTAL RAINFALL (mm)=	56.53	56.53	56.53
RUNOFF COEFFICIENT =	0.98	0.36	0.40

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	STANDHYD (0044)	ID= 1 DT= 5.0 min

Area (ha)= 1.62
Total Imp(%)= 48.77 Dir. Conn.(%)= 30.86

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	0.79	0.83
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	0.50	1.40
Length (m)=	103.92	400.00

Mannings n = 0.013 0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.75	1.083	22.49	2.083	9.40	3.08	5.48
0.167	4.75	1.167	22.49	2.167	9.40	3.17	5.48
0.250	5.31	1.250	130.37	2.250	8.30	3.25	5.16
0.333	5.31	1.333	130.37	2.333	8.30	3.33	5.16
0.417	6.06	1.417	27.61	2.417	7.47	3.42	4.88
0.500	6.06	1.500	27.61	2.500	7.47	3.50	4.88
0.583	7.14	1.583	17.41	2.583	6.82	3.58	4.64
0.667	7.14	1.667	17.41	2.667	6.82	3.67	4.64
0.750	8.84	1.750	13.27	2.750	6.29	3.75	4.42
0.833	8.84	1.833	13.27	2.833	6.29	3.83	4.42
0.917	12.09	1.917	10.93	2.917	5.85	3.92	4.23
1.000	12.09	2.000	10.93	3.000	5.85	4.00	4.23

			TOTALS
Max.Eff.Inten.(mm/hr)=	130.37	18.19	
over (min)	5.00	65.00	
Storage Coeff. (min)=	2.89 (ii)	64.73 (ii)	
Unit Hyd. Tpeak (min)=	5.00	65.00	
Unit Hyd. peak (cms)=	0.28	0.02	
PEAK FLOW (cms)=	0.18	0.02	0.178 (iii)
TIME TO PEAK (hrs)=	1.33	2.42	1.33
RUNOFF VOLUME (mm)=	55.53	20.31	31.16
TOTAL RAINFALL (mm)=	56.53	56.53	56.53
RUNOFF COEFFICIENT =	0.98	0.36	0.55

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB NASHYD (0041) ID= 1 DT= 5.0 min	Area (ha)=	0.59	Curve Number (CN)= 71.5
	Ia (mm)=	4.75	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	0.53	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.75	1.083	22.49	2.083	9.40	3.08	5.48
0.167	4.75	1.167	22.49	2.167	9.40	3.17	5.48
0.250	5.31	1.250	130.37	2.250	8.30	3.25	5.16
0.333	5.31	1.333	130.37	2.333	8.30	3.33	5.16
0.417	6.06	1.417	27.61	2.417	7.47	3.42	4.88
0.500	6.06	1.500	27.61	2.500	7.47	3.50	4.88
0.583	7.14	1.583	17.41	2.583	6.82	3.58	4.64
0.667	7.14	1.667	17.41	2.667	6.82	3.67	4.64
0.750	8.84	1.750	13.27	2.750	6.29	3.75	4.42
0.833	8.84	1.833	13.27	2.833	6.29	3.83	4.42
0.917	12.09	1.917	10.93	2.917	5.85	3.92	4.23
1.000	12.09	2.000	10.93	3.000	5.85	4.00	4.23

Unit Hyd Qpeak (cms)= 0.043

PEAK FLOW (cms)= 0.015 (i)
TIME TO PEAK (hrs)= 1.917
RUNOFF VOLUME (mm)= 17.497
TOTAL RAINFALL (mm)= 56.533
RUNOFF COEFFICIENT = 0.310

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB NASHYD (0028) ID= 1 DT= 5.0 min	Area (ha)=	1.38	Curve Number (CN)= 64.1
	Ia (mm)=	8.51	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	0.39	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.75	1.083	22.49	2.083	9.40	3.08	5.48
0.167	4.75	1.167	22.49	2.167	9.40	3.17	5.48
0.250	5.31	1.250	130.37	2.250	8.30	3.25	5.16
0.333	5.31	1.333	130.37	2.333	8.30	3.33	5.16
0.417	6.06	1.417	27.61	2.417	7.47	3.42	4.88
0.500	6.06	1.500	27.61	2.500	7.47	3.50	4.88

0.583	7.14	1.583	17.41	2.583	6.82	3.58	4.64
0.667	7.14	1.667	17.41	2.667	6.82	3.67	4.64
0.750	8.84	1.750	13.27	2.750	6.29	3.75	4.42
0.833	8.84	1.833	13.27	2.833	6.29	3.83	4.42
0.917	12.09	1.917	10.93	2.917	5.85	3.92	4.23
1.000	12.09	2.000	10.93	3.000	5.85	4.00	4.23

Unit Hyd Qpeak (cms)= 0.135

PEAK FLOW (cms)= 0.028 (i)
TIME TO PEAK (hrs)= 1.750
RUNOFF VOLUME (mm)= 12.134
TOTAL RAINFALL (mm)= 56.533
RUNOFF COEFFICIENT = 0.215

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0023)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0011):	46.28	1.594	1.67	16.59
+ ID2= 2 (0012):	1.13	0.025	1.83	13.78
ID = 3 (0023):	47.41	1.617	1.67	16.52

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0023):	47.41	1.617	1.67	16.52
+ ID2= 2 (0028):	1.38	0.028	1.75	12.13
ID = 1 (0023):	48.79	1.644	1.67	16.40

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0023):	48.79	1.644	1.67	16.40

+ ID2= 2 (0041):	0.59	0.015	1.92	17.50
ID = 3 (0023):	49.38	1.657	1.67	16.41

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0023):	49.38	1.657	1.67	16.41
+ ID2= 2 (0043):	0.13	0.005	1.75	22.74
ID = 1 (0023):	49.51	1.661	1.67	16.43

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0023):	49.51	1.661	1.67	16.43
+ ID2= 2 (0044):	1.62	0.178	1.33	31.16
ID = 3 (0023):	51.13	1.693	1.67	16.90

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0025)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0023):	51.13	1.693	1.67	16.90
+ ID2= 2 (0024):	225.17	1.692	2.92	9.89
ID = 3 (0025):	276.30	2.466	1.83	11.19

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

****
** SIMULATION:D - 25-year CHI **
****

CHICAGO STORM	IDF curve parameters: A= 766.568
Ptotal= 66.48 mm	B= 0.000

C= 0.699

used in: INTENSITY = A / (t + B)^C

Duration of storm = 4.00 hrs
Storm time step = 10.00 min
Time to peak ratio = 0.33

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.00	5.59	1.00	26.45	2.00	11.05	3.00	6.44
0.17	6.25	1.17	153.30	2.17	9.76	3.17	6.06
0.33	7.13	1.33	32.46	2.33	8.78	3.33	5.74
0.50	8.39	1.50	20.47	2.50	8.02	3.50	5.45
0.67	10.40	1.67	15.61	2.67	7.39	3.67	5.20
0.83	14.22	1.83	12.86	2.83	6.88	3.83	4.97

CALIB			
NASHYD (0007)	Area (ha)= 100.92	Curve Number (CN)= 55.9	
ID= 1 DT= 5.0 min	Ia (mm)= 7.89	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 1.70		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	5.59	1.083	26.45	2.083	11.05	3.08	6.44
0.167	5.59	1.167	26.45	2.167	11.05	3.17	6.44
0.250	6.25	1.250	153.30	2.250	9.76	3.25	6.06
0.333	6.25	1.333	153.30	2.333	9.76	3.33	6.06
0.417	7.13	1.417	32.46	2.417	8.78	3.42	5.74
0.500	7.13	1.500	32.46	2.500	8.78	3.50	5.74
0.583	8.39	1.583	20.47	2.583	8.02	3.58	5.45
0.667	8.39	1.667	20.47	2.667	8.02	3.67	5.45
0.750	10.40	1.750	15.61	2.750	7.39	3.75	5.20
0.833	10.40	1.833	15.61	2.833	7.39	3.83	5.20
0.917	14.22	1.917	12.86	2.917	6.88	3.92	4.97
1.000	14.22	2.000	12.86	3.000	6.88	4.00	4.97

Unit Hyd Qpeak (cms)= 2.267

PEAK FLOW (cms)= 0.923 (i)
TIME TO PEAK (hrs)= 3.833
RUNOFF VOLUME (mm)= 13.272

TOTAL RAINFALL (mm)= 66.479
RUNOFF COEFFICIENT = 0.200

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0008)	Area (ha)= 23.99	Curve Number (CN)= 44.7	
ID= 1 DT= 5.0 min	Ia (mm)= 10.91	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.97		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	5.59	1.083	26.45	2.083	11.05	3.08	6.44
0.167	5.59	1.167	26.45	2.167	11.05	3.17	6.44
0.250	6.25	1.250	153.30	2.250	9.76	3.25	6.06
0.333	6.25	1.333	153.30	2.333	9.76	3.33	6.06
0.417	7.13	1.417	32.46	2.417	8.78	3.42	5.74
0.500	7.13	1.500	32.46	2.500	8.78	3.50	5.74
0.583	8.39	1.583	20.47	2.583	8.02	3.58	5.45
0.667	8.39	1.667	20.47	2.667	8.02	3.67	5.45
0.750	10.40	1.750	15.61	2.750	7.39	3.75	5.20
0.833	10.40	1.833	15.61	2.833	7.39	3.83	5.20
0.917	14.22	1.917	12.86	2.917	6.88	3.92	4.97
1.000	14.22	2.000	12.86	3.000	6.88	4.00	4.97

Unit Hyd Qpeak (cms)= 0.945

PEAK FLOW (cms)= 0.188 (i)
TIME TO PEAK (hrs)= 2.750
RUNOFF VOLUME (mm)= 8.350
TOTAL RAINFALL (mm)= 66.479
RUNOFF COEFFICIENT = 0.126

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0009)	Area (ha)= 6.37	Curve Number (CN)= 50.5	
ID= 1 DT= 5.0 min	Ia (mm)= 15.69	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.77		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	5.59	1.083	26.45	2.083	11.05	3.08	6.44
0.167	5.59	1.167	26.45	2.167	11.05	3.17	6.44
0.250	6.25	1.250	153.30	2.250	9.76	3.25	6.06
0.333	6.25	1.333	153.30	2.333	9.76	3.33	6.06
0.417	7.13	1.417	32.46	2.417	8.78	3.42	5.74
0.500	7.13	1.500	32.46	2.500	8.78	3.50	5.74
0.583	8.39	1.583	20.47	2.583	8.02	3.58	5.45
0.667	8.39	1.667	20.47	2.667	8.02	3.67	5.45
0.750	10.40	1.750	15.61	2.750	7.39	3.75	5.20
0.833	10.40	1.833	15.61	2.833	7.39	3.83	5.20
0.917	14.22	1.917	12.86	2.917	6.88	3.92	4.97
1.000	14.22	2.000	12.86	3.000	6.88	4.00	4.97

Unit Hyd Qpeak (cms)= 0.316

PEAK FLOW (cms)= 0.057 (i)
TIME TO PEAK (hrs)= 2.500
RUNOFF VOLUME (mm)= 8.599
TOTAL RAINFALL (mm)= 66.479
RUNOFF COEFFICIENT = 0.129

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0010)	Area (ha)=	14.85	Curve Number (CN)=	52.9	
ID= 1 DT= 5.0 min	Ia (mm)=	13.28	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	0.89			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	5.59	1.083	26.45	2.083	11.05	3.08	6.44
0.167	5.59	1.167	26.45	2.167	11.05	3.17	6.44
0.250	6.25	1.250	153.30	2.250	9.76	3.25	6.06
0.333	6.25	1.333	153.30	2.333	9.76	3.33	6.06
0.417	7.13	1.417	32.46	2.417	8.78	3.42	5.74
0.500	7.13	1.500	32.46	2.500	8.78	3.50	5.74

0.583	8.39	1.583	20.47	2.583	8.02	3.58	5.45
0.667	8.39	1.667	20.47	2.667	8.02	3.67	5.45
0.750	10.40	1.750	15.61	2.750	7.39	3.75	5.20
0.833	10.40	1.833	15.61	2.833	7.39	3.83	5.20
0.917	14.22	1.917	12.86	2.917	6.88	3.92	4.97
1.000	14.22	2.000	12.86	3.000	6.88	4.00	4.97

Unit Hyd Qpeak (cms)= 0.637

PEAK FLOW (cms)= 0.148 (i)
TIME TO PEAK (hrs)= 2.667
RUNOFF VOLUME (mm)= 10.144
TOTAL RAINFALL (mm)= 66.479
RUNOFF COEFFICIENT = 0.153

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0013)	Area (ha)=	1.70	Curve Number (CN)=	60.5	
ID= 1 DT= 5.0 min	Ia (mm)=	9.65	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	0.40			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	5.59	1.083	26.45	2.083	11.05	3.08	6.44
0.167	5.59	1.167	26.45	2.167	11.05	3.17	6.44
0.250	6.25	1.250	153.30	2.250	9.76	3.25	6.06
0.333	6.25	1.333	153.30	2.333	9.76	3.33	6.06
0.417	7.13	1.417	32.46	2.417	8.78	3.42	5.74
0.500	7.13	1.500	32.46	2.500	8.78	3.50	5.74
0.583	8.39	1.583	20.47	2.583	8.02	3.58	5.45
0.667	8.39	1.667	20.47	2.667	8.02	3.67	5.45
0.750	10.40	1.750	15.61	2.750	7.39	3.75	5.20
0.833	10.40	1.833	15.61	2.833	7.39	3.83	5.20
0.917	14.22	1.917	12.86	2.917	6.88	3.92	4.97
1.000	14.22	2.000	12.86	3.000	6.88	4.00	4.97

Unit Hyd Qpeak (cms)= 0.162

PEAK FLOW (cms)= 0.041 (i)
TIME TO PEAK (hrs)= 1.833
RUNOFF VOLUME (mm)= 14.484

TOTAL RAINFALL (mm)= 66.479
RUNOFF COEFFICIENT = 0.218

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB NASHYD (0014) ID= 1 DT= 5.0 min	Area (ha)= 1.80 Ia (mm)= 16.00 U.H. Tp(hrs)= 0.76	Curve Number (CN)= 50.0 # of Linear Res.(N)= 3.00

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	5.59	1.083	26.45	2.083	11.05	3.08	6.44
0.167	5.59	1.167	26.45	2.167	11.05	3.17	6.44
0.250	6.25	1.250	153.30	2.250	9.76	3.25	6.06
0.333	6.25	1.333	153.30	2.333	9.76	3.33	6.06
0.417	7.13	1.417	32.46	2.417	8.78	3.42	5.74
0.500	7.13	1.500	32.46	2.500	8.78	3.50	5.74
0.583	8.39	1.583	20.47	2.583	8.02	3.58	5.45
0.667	8.39	1.667	20.47	2.667	8.02	3.67	5.45
0.750	10.40	1.750	15.61	2.750	7.39	3.75	5.20
0.833	10.40	1.833	15.61	2.833	7.39	3.83	5.20
0.917	14.22	1.917	12.86	2.917	6.88	3.92	4.97
1.000	14.22	2.000	12.86	3.000	6.88	4.00	4.97

Unit Hyd Qpeak (cms)= 0.090

PEAK FLOW (cms)= 0.016 (i)
TIME TO PEAK (hrs)= 2.500
RUNOFF VOLUME (mm)= 8.368
TOTAL RAINFALL (mm)= 66.479
RUNOFF COEFFICIENT = 0.126

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB NASHYD (0015) ID= 1 DT= 5.0 min	Area (ha)= 6.70 Ia (mm)= 10.00 U.H. Tp(hrs)= 1.45	Curve Number (CN)= 60.0 # of Linear Res.(N)= 3.00

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	5.59	1.083	26.45	2.083	11.05	3.08	6.44
0.167	5.59	1.167	26.45	2.167	11.05	3.17	6.44
0.250	6.25	1.250	153.30	2.250	9.76	3.25	6.06
0.333	6.25	1.333	153.30	2.333	9.76	3.33	6.06
0.417	7.13	1.417	32.46	2.417	8.78	3.42	5.74
0.500	7.13	1.500	32.46	2.500	8.78	3.50	5.74
0.583	8.39	1.583	20.47	2.583	8.02	3.58	5.45
0.667	8.39	1.667	20.47	2.667	8.02	3.67	5.45
0.750	10.40	1.750	15.61	2.750	7.39	3.75	5.20
0.833	10.40	1.833	15.61	2.833	7.39	3.83	5.20
0.917	14.22	1.917	12.86	2.917	6.88	3.92	4.97
1.000	14.22	2.000	12.86	3.000	6.88	4.00	4.97

Unit Hyd Qpeak (cms)= 0.176

PEAK FLOW (cms)= 0.072 (i)
TIME TO PEAK (hrs)= 3.500
RUNOFF VOLUME (mm)= 14.126
TOTAL RAINFALL (mm)= 66.479
RUNOFF COEFFICIENT = 0.212

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB NASHYD (0016) ID= 1 DT= 5.0 min	Area (ha)= 29.16 Ia (mm)= 7.88 U.H. Tp(hrs)= 0.68	Curve Number (CN)= 71.4 # of Linear Res.(N)= 3.00

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	5.59	1.083	26.45	2.083	11.05	3.08	6.44
0.167	5.59	1.167	26.45	2.167	11.05	3.17	6.44
0.250	6.25	1.250	153.30	2.250	9.76	3.25	6.06
0.333	6.25	1.333	153.30	2.333	9.76	3.33	6.06
0.417	7.13	1.417	32.46	2.417	8.78	3.42	5.74
0.500	7.13	1.500	32.46	2.500	8.78	3.50	5.74

0.583	8.39	1.583	20.47	2.583	8.02	3.58	5.45
0.667	8.39	1.667	20.47	2.667	8.02	3.67	5.45
0.750	10.40	1.750	15.61	2.750	7.39	3.75	5.20
0.833	10.40	1.833	15.61	2.833	7.39	3.83	5.20
0.917	14.22	1.917	12.86	2.917	6.88	3.92	4.97
1.000	14.22	2.000	12.86	3.000	6.88	4.00	4.97

Unit Hyd Qpeak (cms)= 1.638

PEAK FLOW (cms)= 0.776 (i)
TIME TO PEAK (hrs)= 2.167
RUNOFF VOLUME (mm)= 21.415
TOTAL RAINFALL (mm)= 66.479
RUNOFF COEFFICIENT = 0.322

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0019)	Area (ha)= 39.68	Curve Number (CN)= 60.7	
ID= 1 DT= 5.0 min	Ia (mm)= 8.26	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 1.18		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	5.59	1.083	26.45	2.083	11.05	3.08	6.44
0.167	5.59	1.167	26.45	2.167	11.05	3.17	6.44
0.250	6.25	1.250	153.30	2.250	9.76	3.25	6.06
0.333	6.25	1.333	153.30	2.333	9.76	3.33	6.06
0.417	7.13	1.417	32.46	2.417	8.78	3.42	5.74
0.500	7.13	1.500	32.46	2.500	8.78	3.50	5.74
0.583	8.39	1.583	20.47	2.583	8.02	3.58	5.45
0.667	8.39	1.667	20.47	2.667	8.02	3.67	5.45
0.750	10.40	1.750	15.61	2.750	7.39	3.75	5.20
0.833	10.40	1.833	15.61	2.833	7.39	3.83	5.20
0.917	14.22	1.917	12.86	2.917	6.88	3.92	4.97
1.000	14.22	2.000	12.86	3.000	6.88	4.00	4.97

Unit Hyd Qpeak (cms)= 1.284

PEAK FLOW (cms)= 0.519 (i)
TIME TO PEAK (hrs)= 3.000
RUNOFF VOLUME (mm)= 15.208

TOTAL RAINFALL (mm)= 66.479
RUNOFF COEFFICIENT = 0.229

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0024)		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3	ID1= 1 (0010):	14.85	0.148	2.67	10.14
	+ ID2= 2 (0013):	1.70	0.041	1.83	14.48
	ID = 3 (0024):	16.55	0.171	2.50	10.59

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
3 + 2 = 1	ID1= 3 (0024):	16.55	0.171	2.50	10.59
	+ ID2= 2 (0014):	1.80	0.016	2.50	8.37
	ID = 1 (0024):	18.35	0.186	2.50	10.37

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3	ID1= 1 (0024):	18.35	0.186	2.50	10.37
	+ ID2= 2 (0015):	6.70	0.072	3.50	14.13
	ID = 3 (0024):	25.05	0.246	2.75	11.38

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
3 + 2 = 1	ID1= 3 (0024):	25.05	0.246	2.75	11.38

```
      + ID2= 2 (  0016):    29.16   0.776     2.17    21.42
        ================================================
        ID = 1 (  0024):    54.21   0.999     2.25    16.78

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
```

```
--------------------
| ADD HYD  (  0024)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 1 (  0024):    54.21   0.999     2.25    16.78
      + ID2= 2 (  0019):    39.68   0.519     3.00    15.21
        ================================================
        ID = 3 (  0024):    93.89   1.440     2.50    16.11

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
```

```
--------------------
| ADD HYD  (  0024)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 3 (  0024):    93.89   1.440     2.50    16.11
      + ID2= 2 (  0007):   100.92   0.923     3.83    13.27
        ================================================
        ID = 1 (  0024):   194.81   2.139     2.92    14.64

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
```

```
--------------------
| ADD HYD  (  0024)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 1 (  0024):   194.81   2.139     2.92    14.64
      + ID2= 2 (  0008):    23.99   0.188     2.75     8.35
        ================================================
        ID = 3 (  0024):   218.80   2.326     2.92    13.95

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
```

```
--------------------
| ADD HYD  (  0024)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 3 (  0024):   218.80   2.326     2.92    13.95
```



```
      + ID2= 2 (  0009):     6.37   0.057     2.50     8.60
        ================================================
        ID = 1 (  0024):   225.17   2.380     2.83    13.80

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
```

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--------------------
| CALIB            |
| NASHYD   (  0011)|   Area    (ha)=  46.28   Curve Number   (CN)= 72.2
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.09   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.30

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.
```

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	5.59	1.083	26.45	2.083	11.05	3.08	6.44
0.167	5.59	1.167	26.45	2.167	11.05	3.17	6.44
0.250	6.25	1.250	153.30	2.250	9.76	3.25	6.06
0.333	6.25	1.333	153.30	2.333	9.76	3.33	6.06
0.417	7.13	1.417	32.46	2.417	8.78	3.42	5.74
0.500	7.13	1.500	32.46	2.500	8.78	3.50	5.74
0.583	8.39	1.583	20.47	2.583	8.02	3.58	5.45
0.667	8.39	1.667	20.47	2.667	8.02	3.67	5.45
0.750	10.40	1.750	15.61	2.750	7.39	3.75	5.20
0.833	10.40	1.833	15.61	2.833	7.39	3.83	5.20
0.917	14.22	1.917	12.86	2.917	6.88	3.92	4.97
1.000	14.22	2.000	12.86	3.000	6.88	4.00	4.97

```
     Unit Hyd Qpeak  (cms)=   5.892

     PEAK FLOW       (cms)=   2.220 (i)
     TIME TO PEAK    (hrs)=   1.583
     RUNOFF VOLUME    (mm)=  22.423
     TOTAL RAINFALL   (mm)=  66.479
     RUNOFF COEFFICIENT   =   0.337

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
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| CALIB            |
| NASHYD   (  0012)|   Area    (ha)=   1.13   Curve Number   (CN)= 67.4
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.88   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.43
```

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	5.59	1.083	26.45	2.083	11.05	3.08	6.44
0.167	5.59	1.167	26.45	2.167	11.05	3.17	6.44
0.250	6.25	1.250	153.30	2.250	9.76	3.25	6.06
0.333	6.25	1.333	153.30	2.333	9.76	3.33	6.06
0.417	7.13	1.417	32.46	2.417	8.78	3.42	5.74
0.500	7.13	1.500	32.46	2.500	8.78	3.50	5.74
0.583	8.39	1.583	20.47	2.583	8.02	3.58	5.45
0.667	8.39	1.667	20.47	2.667	8.02	3.67	5.45
0.750	10.40	1.750	15.61	2.750	7.39	3.75	5.20
0.833	10.40	1.833	15.61	2.833	7.39	3.83	5.20
0.917	14.22	1.917	12.86	2.917	6.88	3.92	4.97
1.000	14.22	2.000	12.86	3.000	6.88	4.00	4.97

Unit Hyd Qpeak (cms)= 0.100

PEAK FLOW (cms)= 0.035 (i)
TIME TO PEAK (hrs)= 1.833
RUNOFF VOLUME (mm)= 18.898
TOTAL RAINFALL (mm)= 66.479
RUNOFF COEFFICIENT = 0.284

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	STANDHYD (0043)	ID= 1 DT= 5.0 min

Area (ha)= 0.13
Total Imp(%)= 30.77 Dir. Conn.(%)= 7.69

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	0.04	0.09
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	0.50	0.50
Length (m)=	29.44	70.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr

0.083	5.59	1.083	26.45	2.083	11.05	3.08	6.44
0.167	5.59	1.167	26.45	2.167	11.05	3.17	6.44
0.250	6.25	1.250	153.30	2.250	9.76	3.25	6.06
0.333	6.25	1.333	153.30	2.333	9.76	3.33	6.06
0.417	7.13	1.417	32.46	2.417	8.78	3.42	5.74
0.500	7.13	1.500	32.46	2.500	8.78	3.50	5.74
0.583	8.39	1.583	20.47	2.583	8.02	3.58	5.45
0.667	8.39	1.667	20.47	2.667	8.02	3.67	5.45
0.750	10.40	1.750	15.61	2.750	7.39	3.75	5.20
0.833	10.40	1.833	15.61	2.833	7.39	3.83	5.20
0.917	14.22	1.917	12.86	2.917	6.88	3.92	4.97
1.000	14.22	2.000	12.86	3.000	6.88	4.00	4.97

Max.Eff.Inten.(mm/hr)=	153.30	41.29	
over (min)	5.00	25.00	
Storage Coeff. (min)=	1.27 (ii)	22.59 (ii)	
Unit Hyd. Tpeak (min)=	5.00	25.00	
Unit Hyd. peak (cms)=	0.33	0.05	
			TOTALS
PEAK FLOW (cms)=	0.00	0.01	0.007 (iii)
TIME TO PEAK (hrs)=	1.33	1.67	1.67
RUNOFF VOLUME (mm)=	65.48	26.53	29.42
TOTAL RAINFALL (mm)=	66.48	66.48	66.48
RUNOFF COEFFICIENT =	0.98	0.40	0.44

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	STANDHYD (0044)	ID= 1 DT= 5.0 min

Area (ha)= 1.62
Total Imp(%)= 48.77 Dir. Conn.(%)= 30.86

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	0.79	0.83
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	0.50	1.40
Length (m)=	103.92	400.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	5.59	1.083	26.45	2.083	11.05	3.08	6.44
0.167	5.59	1.167	26.45	2.167	11.05	3.17	6.44
0.250	6.25	1.250	153.30	2.250	9.76	3.25	6.06
0.333	6.25	1.333	153.30	2.333	9.76	3.33	6.06
0.417	7.13	1.417	32.46	2.417	8.78	3.42	5.74
0.500	7.13	1.500	32.46	2.500	8.78	3.50	5.74
0.583	8.39	1.583	20.47	2.583	8.02	3.58	5.45
0.667	8.39	1.667	20.47	2.667	8.02	3.67	5.45
0.750	10.40	1.750	15.61	2.750	7.39	3.75	5.20
0.833	10.40	1.833	15.61	2.833	7.39	3.83	5.20
0.917	14.22	1.917	12.86	2.917	6.88	3.92	4.97
1.000	14.22	2.000	12.86	3.000	6.88	4.00	4.97

Max.Eff.Inten.(mm/hr)=	153.30	25.45		
over (min)	5.00	60.00		
Storage Coeff. (min)=	2.71 (ii)	56.77 (ii)		
Unit Hyd. Tpeak (min)=	5.00	60.00		
Unit Hyd. peak (cms)=	0.29	0.02		
			TOTALS	
PEAK FLOW (cms)=	0.21	0.03	0.211 (iii)	
TIME TO PEAK (hrs)=	1.33	2.25	1.33	
RUNOFF VOLUME (mm)=	65.48	26.75	38.68	
TOTAL RAINFALL (mm)=	66.48	66.48	66.48	
RUNOFF COEFFICIENT =	0.98	0.40	0.58	

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB / NASHYD (0041) / ID= 1 DT= 5.0 min	Area (ha)= 0.59	Curve Number (CN)= 71.5
	Ia (mm)= 4.75	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.53	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	5.59	1.083	26.45	2.083	11.05	3.08	6.44
0.167	5.59	1.167	26.45	2.167	11.05	3.17	6.44
0.250	6.25	1.250	153.30	2.250	9.76	3.25	6.06
0.333	6.25	1.333	153.30	2.333	9.76	3.33	6.06
0.417	7.13	1.417	32.46	2.417	8.78	3.42	5.74
0.500	7.13	1.500	32.46	2.500	8.78	3.50	5.74
0.583	8.39	1.583	20.47	2.583	8.02	3.58	5.45
0.667	8.39	1.667	20.47	2.667	8.02	3.67	5.45
0.750	10.40	1.750	15.61	2.750	7.39	3.75	5.20
0.833	10.40	1.833	15.61	2.833	7.39	3.83	5.20
0.917	14.22	1.917	12.86	2.917	6.88	3.92	4.97
1.000	14.22	2.000	12.86	3.000	6.88	4.00	4.97

Unit Hyd Qpeak (cms)= 0.043

PEAK FLOW (cms)= 0.021 (i)
TIME TO PEAK (hrs)= 1.917
RUNOFF VOLUME (mm)= 23.349
TOTAL RAINFALL (mm)= 66.479
RUNOFF COEFFICIENT = 0.351

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB / NASHYD (0028) / ID= 1 DT= 5.0 min	Area (ha)= 1.38	Curve Number (CN)= 64.1
	Ia (mm)= 8.51	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.39	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	5.59	1.083	26.45	2.083	11.05	3.08	6.44
0.167	5.59	1.167	26.45	2.167	11.05	3.17	6.44
0.250	6.25	1.250	153.30	2.250	9.76	3.25	6.06
0.333	6.25	1.333	153.30	2.333	9.76	3.33	6.06
0.417	7.13	1.417	32.46	2.417	8.78	3.42	5.74
0.500	7.13	1.500	32.46	2.500	8.78	3.50	5.74
0.583	8.39	1.583	20.47	2.583	8.02	3.58	5.45
0.667	8.39	1.667	20.47	2.667	8.02	3.67	5.45

0.750	10.40	1.750	15.61	2.750	7.39	3.75	5.20
0.833	10.40	1.833	15.61	2.833	7.39	3.83	5.20
0.917	14.22	1.917	12.86	2.917	6.88	3.92	4.97
1.000	14.22	2.000	12.86	3.000	6.88	4.00	4.97

Unit Hyd Qpeak (cms)= 0.135

PEAK FLOW (cms)= 0.040 (i)
TIME TO PEAK (hrs)= 1.750
RUNOFF VOLUME (mm)= 16.801
TOTAL RAINFALL (mm)= 66.479
RUNOFF COEFFICIENT = 0.253

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0023)					
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0011):	46.28	2.220	1.58	22.42
+ ID2= 2 (0012):	1.13	0.035	1.83	18.90
ID = 3 (0023):	47.41	2.249	1.58	22.34

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023)					
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0023):	47.41	2.249	1.58	22.34
+ ID2= 2 (0028):	1.38	0.040	1.75	16.80
ID = 1 (0023):	48.79	2.286	1.67	22.18

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023)					
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0023):	48.79	2.286	1.67	22.18
+ ID2= 2 (0041):	0.59	0.021	1.92	23.35
ID = 3 (0023):	49.38	2.303	1.67	22.20

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023)					
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0023):	49.38	2.303	1.67	22.20
+ ID2= 2 (0043):	0.13	0.007	1.67	29.42
ID = 1 (0023):	49.51	2.310	1.67	22.21

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023)					
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0023):	49.51	2.310	1.67	22.21
+ ID2= 2 (0044):	1.62	0.211	1.33	38.68
ID = 3 (0023):	51.13	2.352	1.67	22.74

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0025)					
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0023):	51.13	2.352	1.67	22.74
+ ID2= 2 (0024):	225.17	2.380	2.83	13.80
ID = 3 (0025):	276.30	3.463	1.83	15.45

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

****
** SIMULATION:E - 50-year CHI **
****

CHICAGO STORM	Ptotal= 73.98 mm

IDF curve parameters: A= 853.083
B= 0.000
C= 0.699
used in: INTENSITY = A / (t + B)^C

Duration of storm = 4.00 hrs
Storm time step = 10.00 min
Time to peak ratio = 0.33

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.00	6.22	1.00	29.44	2.00	12.30	3.00	7.17
0.17	6.95	1.17	170.60	2.17	10.86	3.17	6.75
0.33	7.93	1.33	36.13	2.33	9.78	3.33	6.39
0.50	9.34	1.50	22.78	2.50	8.92	3.50	6.07
0.67	11.57	1.67	17.37	2.67	8.23	3.67	5.78
0.83	15.83	1.83	14.31	2.83	7.65	3.83	5.53

CALIB / NASHYD (0007) / ID= 1 DT= 5.0 min	Area (ha)= 100.92	Curve Number (CN)= 55.9
	Ia (mm)= 7.89	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 1.70	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.22	1.083	29.44	2.083	12.30	3.08	7.17
0.167	6.22	1.167	29.44	2.167	12.30	3.17	7.17
0.250	6.95	1.250	170.60	2.250	10.86	3.25	6.75
0.333	6.95	1.333	170.60	2.333	10.86	3.33	6.75
0.417	7.93	1.417	36.13	2.417	9.78	3.42	6.39
0.500	7.93	1.500	36.13	2.500	9.78	3.50	6.39
0.583	9.34	1.583	22.78	2.583	8.92	3.58	6.07
0.667	9.34	1.667	22.78	2.667	8.92	3.67	6.07
0.750	11.57	1.750	17.37	2.750	8.23	3.75	5.78
0.833	11.57	1.833	17.37	2.833	8.23	3.83	5.78
0.917	15.83	1.917	14.31	2.917	7.65	3.92	5.53
1.000	15.83	2.000	14.31	3.000	7.65	4.00	5.53

Unit Hyd Qpeak (cms)= 2.267

PEAK FLOW (cms)= 1.143 (i)
TIME TO PEAK (hrs)= 3.833
RUNOFF VOLUME (mm)= 16.412
TOTAL RAINFALL (mm)= 73.982
RUNOFF COEFFICIENT = 0.222

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB / NASHYD (0008) / ID= 1 DT= 5.0 min	Area (ha)= 23.99	Curve Number (CN)= 44.7
	Ia (mm)= 10.91	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.97	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.22	1.083	29.44	2.083	12.30	3.08	7.17
0.167	6.22	1.167	29.44	2.167	12.30	3.17	7.17
0.250	6.95	1.250	170.60	2.250	10.86	3.25	6.75
0.333	6.95	1.333	170.60	2.333	10.86	3.33	6.75
0.417	7.93	1.417	36.13	2.417	9.78	3.42	6.39
0.500	7.93	1.500	36.13	2.500	9.78	3.50	6.39
0.583	9.34	1.583	22.78	2.583	8.92	3.58	6.07
0.667	9.34	1.667	22.78	2.667	8.92	3.67	6.07
0.750	11.57	1.750	17.37	2.750	8.23	3.75	5.78
0.833	11.57	1.833	17.37	2.833	8.23	3.83	5.78
0.917	15.83	1.917	14.31	2.917	7.65	3.92	5.53
1.000	15.83	2.000	14.31	3.000	7.65	4.00	5.53

Unit Hyd Qpeak (cms)= 0.945

PEAK FLOW (cms)= 0.240 (i)
TIME TO PEAK (hrs)= 2.750
RUNOFF VOLUME (mm)= 10.543
TOTAL RAINFALL (mm)= 73.982
RUNOFF COEFFICIENT = 0.143

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB / NASHYD (0009) / ID= 1 DT= 5.0 min	Area (ha)= 6.37	Curve Number (CN)= 50.5
	Ia (mm)= 15.69	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.77	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.22	1.083	29.44	2.083	12.30	3.08	7.17
0.167	6.22	1.167	29.44	2.167	12.30	3.17	7.17
0.250	6.95	1.250	170.60	2.250	10.86	3.25	6.75
0.333	6.95	1.333	170.60	2.333	10.86	3.33	6.75
0.417	7.93	1.417	36.13	2.417	9.78	3.42	6.39
0.500	7.93	1.500	36.13	2.500	9.78	3.50	6.39
0.583	9.34	1.583	22.78	2.583	8.92	3.58	6.07
0.667	9.34	1.667	22.78	2.667	8.92	3.67	6.07
0.750	11.57	1.750	17.37	2.750	8.23	3.75	5.78
0.833	11.57	1.833	17.37	2.833	8.23	3.83	5.78
0.917	15.83	1.917	14.31	2.917	7.65	3.92	5.53
1.000	15.83	2.000	14.31	3.000	7.65	4.00	5.53

Unit Hyd Qpeak (cms)= 0.316

PEAK FLOW (cms)= 0.074 (i)
TIME TO PEAK (hrs)= 2.500
RUNOFF VOLUME (mm)= 11.051
TOTAL RAINFALL (mm)= 73.982
RUNOFF COEFFICIENT = 0.149

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0010)	Area	(ha)=	14.85	Curve Number	(CN)= 52.9
ID= 1 DT= 5.0 min	Ia	(mm)=	13.28	# of Linear Res.	(N)= 3.00
	U.H. Tp	(hrs)=	0.89		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.22	1.083	29.44	2.083	12.30	3.08	7.17
0.167	6.22	1.167	29.44	2.167	12.30	3.17	7.17
0.250	6.95	1.250	170.60	2.250	10.86	3.25	6.75
0.333	6.95	1.333	170.60	2.333	10.86	3.33	6.75
0.417	7.93	1.417	36.13	2.417	9.78	3.42	6.39
0.500	7.93	1.500	36.13	2.500	9.78	3.50	6.39
0.583	9.34	1.583	22.78	2.583	8.92	3.58	6.07
0.667	9.34	1.667	22.78	2.667	8.92	3.67	6.07

0.750	11.57	1.750	17.37	2.750	8.23	3.75	5.78
0.833	11.57	1.833	17.37	2.833	8.23	3.83	5.78
0.917	15.83	1.917	14.31	2.917	7.65	3.92	5.53
1.000	15.83	2.000	14.31	3.000	7.65	4.00	5.53

Unit Hyd Qpeak (cms)= 0.637

PEAK FLOW (cms)= 0.189 (i)
TIME TO PEAK (hrs)= 2.583
RUNOFF VOLUME (mm)= 12.861
TOTAL RAINFALL (mm)= 73.982
RUNOFF COEFFICIENT = 0.174

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0013)	Area	(ha)=	1.70	Curve Number	(CN)= 60.5
ID= 1 DT= 5.0 min	Ia	(mm)=	9.65	# of Linear Res.	(N)= 3.00
	U.H. Tp	(hrs)=	0.40		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.22	1.083	29.44	2.083	12.30	3.08	7.17
0.167	6.22	1.167	29.44	2.167	12.30	3.17	7.17
0.250	6.95	1.250	170.60	2.250	10.86	3.25	6.75
0.333	6.95	1.333	170.60	2.333	10.86	3.33	6.75
0.417	7.93	1.417	36.13	2.417	9.78	3.42	6.39
0.500	7.93	1.500	36.13	2.500	9.78	3.50	6.39
0.583	9.34	1.583	22.78	2.583	8.92	3.58	6.07
0.667	9.34	1.667	22.78	2.667	8.92	3.67	6.07
0.750	11.57	1.750	17.37	2.750	8.23	3.75	5.78
0.833	11.57	1.833	17.37	2.833	8.23	3.83	5.78
0.917	15.83	1.917	14.31	2.917	7.65	3.92	5.53
1.000	15.83	2.000	14.31	3.000	7.65	4.00	5.53

Unit Hyd Qpeak (cms)= 0.162

PEAK FLOW (cms)= 0.051 (i)
TIME TO PEAK (hrs)= 1.750
RUNOFF VOLUME (mm)= 17.956
TOTAL RAINFALL (mm)= 73.982
RUNOFF COEFFICIENT = 0.243

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB NASHYD (0014) ID= 1 DT= 5.0 min	Area (ha)= 1.80	Curve Number (CN)= 50.0	Ia (mm)= 16.00	# of Linear Res.(N)= 3.00	U.H. Tp(hrs)= 0.76

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.22	1.083	29.44	2.083	12.30	3.08	7.17
0.167	6.22	1.167	29.44	2.167	12.30	3.17	7.17
0.250	6.95	1.250	170.60	2.250	10.86	3.25	6.75
0.333	6.95	1.333	170.60	2.333	10.86	3.33	6.75
0.417	7.93	1.417	36.13	2.417	9.78	3.42	6.39
0.500	7.93	1.500	36.13	2.500	9.78	3.50	6.39
0.583	9.34	1.583	22.78	2.583	8.92	3.58	6.07
0.667	9.34	1.667	22.78	2.667	8.92	3.67	6.07
0.750	11.57	1.750	17.37	2.750	8.23	3.75	5.78
0.833	11.57	1.833	17.37	2.833	8.23	3.83	5.78
0.917	15.83	1.917	14.31	2.917	7.65	3.92	5.53
1.000	15.83	2.000	14.31	3.000	7.65	4.00	5.53

Unit Hyd Qpeak (cms)= 0.090

PEAK FLOW (cms)= 0.021 (i)
TIME TO PEAK (hrs)= 2.417
RUNOFF VOLUME (mm)= 10.775
TOTAL RAINFALL (mm)= 73.982
RUNOFF COEFFICIENT = 0.146

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB NASHYD (0015) ID= 1 DT= 5.0 min	Area (ha)= 6.70	Curve Number (CN)= 60.0	Ia (mm)= 10.00	# of Linear Res.(N)= 3.00	U.H. Tp(hrs)= 1.45

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.22	1.083	29.44	2.083	12.30	3.08	7.17
0.167	6.22	1.167	29.44	2.167	12.30	3.17	7.17
0.250	6.95	1.250	170.60	2.250	10.86	3.25	6.75
0.333	6.95	1.333	170.60	2.333	10.86	3.33	6.75
0.417	7.93	1.417	36.13	2.417	9.78	3.42	6.39
0.500	7.93	1.500	36.13	2.500	9.78	3.50	6.39
0.583	9.34	1.583	22.78	2.583	8.92	3.58	6.07
0.667	9.34	1.667	22.78	2.667	8.92	3.67	6.07
0.750	11.57	1.750	17.37	2.750	8.23	3.75	5.78
0.833	11.57	1.833	17.37	2.833	8.23	3.83	5.78
0.917	15.83	1.917	14.31	2.917	7.65	3.92	5.53
1.000	15.83	2.000	14.31	3.000	7.65	4.00	5.53

Unit Hyd Qpeak (cms)= 0.176

PEAK FLOW (cms)= 0.089 (i)
TIME TO PEAK (hrs)= 3.417
RUNOFF VOLUME (mm)= 17.545
TOTAL RAINFALL (mm)= 73.982
RUNOFF COEFFICIENT = 0.237

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB NASHYD (0016) ID= 1 DT= 5.0 min	Area (ha)= 29.16	Curve Number (CN)= 71.4	Ia (mm)= 7.88	# of Linear Res.(N)= 3.00	U.H. Tp(hrs)= 0.68

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.22	1.083	29.44	2.083	12.30	3.08	7.17
0.167	6.22	1.167	29.44	2.167	12.30	3.17	7.17
0.250	6.95	1.250	170.60	2.250	10.86	3.25	6.75
0.333	6.95	1.333	170.60	2.333	10.86	3.33	6.75
0.417	7.93	1.417	36.13	2.417	9.78	3.42	6.39
0.500	7.93	1.500	36.13	2.500	9.78	3.50	6.39
0.583	9.34	1.583	22.78	2.583	8.92	3.58	6.07
0.667	9.34	1.667	22.78	2.667	8.92	3.67	6.07

0.750	11.57	1.750	17.37	2.750	8.23	3.75	5.78
0.833	11.57	1.833	17.37	2.833	8.23	3.83	5.78
0.917	15.83	1.917	14.31	2.917	7.65	3.92	5.53
1.000	15.83	2.000	14.31	3.000	7.65	4.00	5.53

Unit Hyd Qpeak (cms)= 1.638

PEAK FLOW (cms)= 0.956 (i)
TIME TO PEAK (hrs)= 2.167
RUNOFF VOLUME (mm)= 26.032
TOTAL RAINFALL (mm)= 73.982
RUNOFF COEFFICIENT = 0.352

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB NASHYD (0019)	Area (ha)= 39.68	Curve Number (CN)= 60.7
ID= 1 DT= 5.0 min	Ia (mm)= 8.26	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 1.18	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.22	1.083	29.44	2.083	12.30	3.08	7.17
0.167	6.22	1.167	29.44	2.167	12.30	3.17	7.17
0.250	6.95	1.250	170.60	2.250	10.86	3.25	6.75
0.333	6.95	1.333	170.60	2.333	10.86	3.33	6.75
0.417	7.93	1.417	36.13	2.417	9.78	3.42	6.39
0.500	7.93	1.500	36.13	2.500	9.78	3.50	6.39
0.583	9.34	1.583	22.78	2.583	8.92	3.58	6.07
0.667	9.34	1.667	22.78	2.667	8.92	3.67	6.07
0.750	11.57	1.750	17.37	2.750	8.23	3.75	5.78
0.833	11.57	1.833	17.37	2.833	8.23	3.83	5.78
0.917	15.83	1.917	14.31	2.917	7.65	3.92	5.53
1.000	15.83	2.000	14.31	3.000	7.65	4.00	5.53

Unit Hyd Qpeak (cms)= 1.284

PEAK FLOW (cms)= 0.644 (i)
TIME TO PEAK (hrs)= 3.000
RUNOFF VOLUME (mm)= 18.749
TOTAL RAINFALL (mm)= 73.982
RUNOFF COEFFICIENT = 0.253

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0024)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
	ID1= 1 (0010):	14.85	0.189	2.58	12.86
	+ ID2= 2 (0013):	1.70	0.051	1.75	17.96
	ID = 3 (0024):	16.55	0.218	2.50	13.38

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
	ID1= 3 (0024):	16.55	0.218	2.50	13.38
	+ ID2= 2 (0014):	1.80	0.021	2.42	10.77
	ID = 1 (0024):	18.35	0.239	2.50	13.13

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
	ID1= 1 (0024):	18.35	0.239	2.50	13.13
	+ ID2= 2 (0015):	6.70	0.089	3.42	17.55
	ID = 3 (0024):	25.05	0.313	2.67	14.31

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
	ID1= 3 (0024):	25.05	0.313	2.67	14.31
	+ ID2= 2 (0016):	29.16	0.956	2.17	26.03

ID = 1 (0024): 54.21 1.241 2.25 20.62

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
	ID1= 1 (0024):	54.21	1.241	2.25	20.62
	+ ID2= 2 (0019):	39.68	0.644	3.00	18.75
	ID = 3 (0024):	93.89	1.788	2.42	19.83

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
	ID1= 3 (0024):	93.89	1.788	2.42	19.83
	+ ID2= 2 (0007):	100.92	1.143	3.83	16.41
	ID = 1 (0024):	194.81	2.650	2.83	18.06

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
	ID1= 1 (0024):	194.81	2.650	2.83	18.06
	+ ID2= 2 (0008):	23.99	0.240	2.75	10.54
	ID = 3 (0024):	218.80	2.888	2.83	17.23

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
	ID1= 3 (0024):	218.80	2.888	2.83	17.23
	+ ID2= 2 (0009):	6.37	0.074	2.50	11.05

ID = 1 (0024): 225.17 2.959 2.83 17.06

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB NASHYD (0011) ID= 1 DT= 5.0 min				
	Area (ha)=	46.28	Curve Number (CN)=	72.2
	Ia (mm)=	7.09	# of Linear Res.(N)=	3.00
	U.H. Tp(hrs)=	0.30		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.22	1.083	29.44	2.083	12.30	3.08	7.17
0.167	6.22	1.167	29.44	2.167	12.30	3.17	7.17
0.250	6.95	1.250	170.60	2.250	10.86	3.25	6.75
0.333	6.95	1.333	170.60	2.333	10.86	3.33	6.75
0.417	7.93	1.417	36.13	2.417	9.78	3.42	6.39
0.500	7.93	1.500	36.13	2.500	9.78	3.50	6.39
0.583	9.34	1.583	22.78	2.583	8.92	3.58	6.07
0.667	9.34	1.667	22.78	2.667	8.92	3.67	6.07
0.750	11.57	1.750	17.37	2.750	8.23	3.75	5.78
0.833	11.57	1.833	17.37	2.833	8.23	3.83	5.78
0.917	15.83	1.917	14.31	2.917	7.65	3.92	5.53
1.000	15.83	2.000	14.31	3.000	7.65	4.00	5.53

Unit Hyd Qpeak (cms)= 5.892

PEAK FLOW (cms)= 2.744 (i)
TIME TO PEAK (hrs)= 1.583
RUNOFF VOLUME (mm)= 27.150
TOTAL RAINFALL (mm)= 73.982
RUNOFF COEFFICIENT = 0.367

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB NASHYD (0012) ID= 1 DT= 5.0 min				
	Area (ha)=	1.13	Curve Number (CN)=	67.4
	Ia (mm)=	7.88	# of Linear Res.(N)=	3.00
	U.H. Tp(hrs)=	0.43		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.22	1.083	29.44	2.083	12.30	3.08	7.17
0.167	6.22	1.167	29.44	2.167	12.30	3.17	7.17
0.250	6.95	1.250	170.60	2.250	10.86	3.25	6.75
0.333	6.95	1.333	170.60	2.333	10.86	3.33	6.75
0.417	7.93	1.417	36.13	2.417	9.78	3.42	6.39
0.500	7.93	1.500	36.13	2.500	9.78	3.50	6.39
0.583	9.34	1.583	22.78	2.583	8.92	3.58	6.07
0.667	9.34	1.667	22.78	2.667	8.92	3.67	6.07
0.750	11.57	1.750	17.37	2.750	8.23	3.75	5.78
0.833	11.57	1.833	17.37	2.833	8.23	3.83	5.78
0.917	15.83	1.917	14.31	2.917	7.65	3.92	5.53
1.000	15.83	2.000	14.31	3.000	7.65	4.00	5.53

Unit Hyd Qpeak (cms)= 0.100

PEAK FLOW (cms)= 0.044 (i)
TIME TO PEAK (hrs)= 1.833
RUNOFF VOLUME (mm)= 23.094
TOTAL RAINFALL (mm)= 73.982
RUNOFF COEFFICIENT = 0.312

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	
STANDHYD (0043)	Area (ha)= 0.13
ID= 1 DT= 5.0 min	Total Imp(%)= 30.77 Dir. Conn.(%)= 7.69

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.04	0.09
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	0.50
Length	(m)=	29.44	70.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.22	1.083	29.44	2.083	12.30	3.08	7.17
0.167	6.22	1.167	29.44	2.167	12.30	3.17	7.17

0.250	6.95	1.250	170.60	2.250	10.86	3.25	6.75
0.333	6.95	1.333	170.60	2.333	10.86	3.33	6.75
0.417	7.93	1.417	36.13	2.417	9.78	3.42	6.39
0.500	7.93	1.500	36.13	2.500	9.78	3.50	6.39
0.583	9.34	1.583	22.78	2.583	8.92	3.58	6.07
0.667	9.34	1.667	22.78	2.667	8.92	3.67	6.07
0.750	11.57	1.750	17.37	2.750	8.23	3.75	5.78
0.833	11.57	1.833	17.37	2.833	8.23	3.83	5.78
0.917	15.83	1.917	14.31	2.917	7.65	3.92	5.53
1.000	15.83	2.000	14.31	3.000	7.65	4.00	5.53

Max.Eff.Inten.(mm/hr)=	170.60	57.77		
over (min)	5.00	20.00		
Storage Coeff. (min)=	1.22 (ii)	19.86 (ii)		
Unit Hyd. Tpeak (min)=	5.00	20.00		
Unit Hyd. peak (cms)=	0.33	0.06		
				TOTALS
PEAK FLOW (cms)=	0.00	0.01		0.009 (iii)
TIME TO PEAK (hrs)=	1.33	1.58		1.58
RUNOFF VOLUME (mm)=	72.98	31.66		34.75
TOTAL RAINFALL (mm)=	73.98	73.98		73.98
RUNOFF COEFFICIENT =	0.99	0.43		0.47

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	
STANDHYD (0044)	Area (ha)= 1.62
ID= 1 DT= 5.0 min	Total Imp(%)= 48.77 Dir. Conn.(%)= 30.86

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.79	0.83
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	1.40
Length	(m)=	103.92	400.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.22	1.083	29.44	2.083	12.30	3.08	7.17
0.167	6.22	1.167	29.44	2.167	12.30	3.17	7.17
0.250	6.95	1.250	170.60	2.250	10.86	3.25	6.75
0.333	6.95	1.333	170.60	2.333	10.86	3.33	6.75
0.417	7.93	1.417	36.13	2.417	9.78	3.42	6.39
0.500	7.93	1.500	36.13	2.500	9.78	3.50	6.39
0.583	9.34	1.583	22.78	2.583	8.92	3.58	6.07
0.667	9.34	1.667	22.78	2.667	8.92	3.67	6.07
0.750	11.57	1.750	17.37	2.750	8.23	3.75	5.78
0.833	11.57	1.833	17.37	2.833	8.23	3.83	5.78
0.917	15.83	1.917	14.31	2.917	7.65	3.92	5.53
1.000	15.83	2.000	14.31	3.000	7.65	4.00	5.53

			TOTALS
Max.Eff.Inten.(mm/hr)=	170.60	32.47	
over (min)	5.00	55.00	
Storage Coeff. (min)=	2.60 (ii)	51.64 (ii)	
Unit Hyd. Tpeak (min)=	5.00	55.00	
Unit Hyd. peak (cms)=	0.29	0.02	
PEAK FLOW (cms)=	0.23	0.04	0.237 (iii)
TIME TO PEAK (hrs)=	1.33	2.17	1.33
RUNOFF VOLUME (mm)=	72.98	31.90	44.56
TOTAL RAINFALL (mm)=	73.98	73.98	73.98
RUNOFF COEFFICIENT =	0.99	0.43	0.60

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB NASHYD (0041)	Area (ha)=	0.59	Curve Number (CN)= 71.5
ID= 1 DT= 5.0 min	Ia (mm)=	4.75	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	0.53	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.22	1.083	29.44	2.083	12.30	3.08	7.17
0.167	6.22	1.167	29.44	2.167	12.30	3.17	7.17
0.250	6.95	1.250	170.60	2.250	10.86	3.25	6.75
0.333	6.95	1.333	170.60	2.333	10.86	3.33	6.75
0.417	7.93	1.417	36.13	2.417	9.78	3.42	6.39
0.500	7.93	1.500	36.13	2.500	9.78	3.50	6.39
0.583	9.34	1.583	22.78	2.583	8.92	3.58	6.07
0.667	9.34	1.667	22.78	2.667	8.92	3.67	6.07
0.750	11.57	1.750	17.37	2.750	8.23	3.75	5.78
0.833	11.57	1.833	17.37	2.833	8.23	3.83	5.78
0.917	15.83	1.917	14.31	2.917	7.65	3.92	5.53
1.000	15.83	2.000	14.31	3.000	7.65	4.00	5.53

Unit Hyd Qpeak (cms)= 0.043

PEAK FLOW (cms)= 0.025 (i)
TIME TO PEAK (hrs)= 1.917
RUNOFF VOLUME (mm)= 28.080
TOTAL RAINFALL (mm)= 73.982
RUNOFF COEFFICIENT = 0.380

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB NASHYD (0028)	Area (ha)=	1.38	Curve Number (CN)= 64.1
ID= 1 DT= 5.0 min	Ia (mm)=	8.51	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	0.39	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.22	1.083	29.44	2.083	12.30	3.08	7.17
0.167	6.22	1.167	29.44	2.167	12.30	3.17	7.17
0.250	6.95	1.250	170.60	2.250	10.86	3.25	6.75
0.333	6.95	1.333	170.60	2.333	10.86	3.33	6.75
0.417	7.93	1.417	36.13	2.417	9.78	3.42	6.39
0.500	7.93	1.500	36.13	2.500	9.78	3.50	6.39
0.583	9.34	1.583	22.78	2.583	8.92	3.58	6.07
0.667	9.34	1.667	22.78	2.667	8.92	3.67	6.07
0.750	11.57	1.750	17.37	2.750	8.23	3.75	5.78
0.833	11.57	1.833	17.37	2.833	8.23	3.83	5.78

0.917	15.83	1.917	14.31	2.917	7.65	3.92	5.53
1.000	15.83	2.000	14.31	3.000	7.65	4.00	5.53

Unit Hyd Qpeak (cms)= 0.135

PEAK FLOW (cms)= 0.050 (i)
TIME TO PEAK (hrs)= 1.750
RUNOFF VOLUME (mm)= 20.657
TOTAL RAINFALL (mm)= 73.982
RUNOFF COEFFICIENT = 0.279

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0023)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0011):		46.28	2.744	1.58	27.15
+ ID2= 2 (0012):		1.13	0.044	1.83	23.09
ID = 3 (0023):		47.41	2.780	1.58	27.05

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0023):		47.41	2.780	1.58	27.05
+ ID2= 2 (0028):		1.38	0.050	1.75	20.66
ID = 1 (0023):		48.79	2.825	1.58	26.87

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0023):		48.79	2.825	1.58	26.87
+ ID2= 2 (0041):		0.59	0.025	1.92	28.08
ID = 3 (0023):		49.38	2.843	1.58	26.89

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0023):		49.38	2.843	1.58	26.89
+ ID2= 2 (0043):		0.13	0.009	1.58	34.75
ID = 1 (0023):		49.51	2.852	1.58	26.91

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0023):		49.51	2.852	1.58	26.91
+ ID2= 2 (0044):		1.62	0.237	1.33	44.56
ID = 3 (0023):		51.13	2.902	1.58	27.47

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0025)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0023):		51.13	2.902	1.58	27.47
+ ID2= 2 (0024):		225.17	2.959	2.83	17.06
ID = 3 (0025):		276.30	4.294	1.83	18.98

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

****
** SIMULATION:F - 100-year CHI **
****

CHICAGO STORM	
Ptotal= 81.31 mm	

IDF curve parameters: A= 937.587
B= 0.000
C= 0.699
used in: INTENSITY = A / (t + B)^C

Duration of storm = 4.00 hrs

Post-Development VO Output
Storm time step = 10.00 min
Time to peak ratio = 0.33

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.00	6.84	1.00	32.35	2.00	13.52	3.00	7.88
0.17	7.64	1.17	187.50	2.17	11.94	3.17	7.42
0.33	8.72	1.33	39.70	2.33	10.74	3.33	7.02
0.50	10.26	1.50	25.04	2.50	9.80	3.50	6.67
0.67	12.72	1.67	19.09	2.67	9.04	3.67	6.36
0.83	17.39	1.83	15.73	2.83	8.41	3.83	6.08

CALIB / NASHYD (0007) / ID= 1 DT= 5.0 min	Area (ha)= 100.92	Curve Number (CN)= 55.9
	Ia (mm)= 7.89	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 1.70	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.84	1.083	32.35	2.083	13.52	3.08	7.88
0.167	6.84	1.167	32.35	2.167	13.52	3.17	7.88
0.250	7.64	1.250	187.50	2.250	11.94	3.25	7.42
0.333	7.64	1.333	187.50	2.333	11.94	3.33	7.42
0.417	8.72	1.417	39.70	2.417	10.74	3.42	7.02
0.500	8.72	1.500	39.70	2.500	10.74	3.50	7.02
0.583	10.26	1.583	25.04	2.583	9.80	3.58	6.67
0.667	10.26	1.667	25.04	2.667	9.80	3.67	6.67
0.750	12.72	1.750	19.09	2.750	9.04	3.75	6.36
0.833	12.72	1.833	19.09	2.833	9.04	3.83	6.36
0.917	17.39	1.917	15.73	2.917	8.41	3.92	6.08
1.000	17.39	2.000	15.73	3.000	8.41	4.00	6.08

Unit Hyd Qpeak (cms)= 2.267

PEAK FLOW (cms)= 1.374 (i)
TIME TO PEAK (hrs)= 3.750
RUNOFF VOLUME (mm)= 19.711
TOTAL RAINFALL (mm)= 81.310
RUNOFF COEFFICIENT = 0.242

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB / NASHYD (0008) / ID= 1 DT= 5.0 min	Area (ha)= 23.99	Curve Number (CN)= 44.7
	Ia (mm)= 10.91	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.97	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.84	1.083	32.35	2.083	13.52	3.08	7.88
0.167	6.84	1.167	32.35	2.167	13.52	3.17	7.88
0.250	7.64	1.250	187.50	2.250	11.94	3.25	7.42
0.333	7.64	1.333	187.50	2.333	11.94	3.33	7.42
0.417	8.72	1.417	39.70	2.417	10.74	3.42	7.02
0.500	8.72	1.500	39.70	2.500	10.74	3.50	7.02
0.583	10.26	1.583	25.04	2.583	9.80	3.58	6.67
0.667	10.26	1.667	25.04	2.667	9.80	3.67	6.67
0.750	12.72	1.750	19.09	2.750	9.04	3.75	6.36
0.833	12.72	1.833	19.09	2.833	9.04	3.83	6.36
0.917	17.39	1.917	15.73	2.917	8.41	3.92	6.08
1.000	17.39	2.000	15.73	3.000	8.41	4.00	6.08

Unit Hyd Qpeak (cms)= 0.945

PEAK FLOW (cms)= 0.295 (i)
TIME TO PEAK (hrs)= 2.667
RUNOFF VOLUME (mm)= 12.885
TOTAL RAINFALL (mm)= 81.310
RUNOFF COEFFICIENT = 0.158

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB / NASHYD (0009) / ID= 1 DT= 5.0 min	Area (ha)= 6.37	Curve Number (CN)= 50.5
	Ia (mm)= 15.69	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.77	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.84	1.083	32.35	2.083	13.52	3.08	7.88
0.167	6.84	1.167	32.35	2.167	13.52	3.17	7.88
0.250	7.64	1.250	187.50	2.250	11.94	3.25	7.42
0.333	7.64	1.333	187.50	2.333	11.94	3.33	7.42
0.417	8.72	1.417	39.70	2.417	10.74	3.42	7.02
0.500	8.72	1.500	39.70	2.500	10.74	3.50	7.02
0.583	10.26	1.583	25.04	2.583	9.80	3.58	6.67
0.667	10.26	1.667	25.04	2.667	9.80	3.67	6.67
0.750	12.72	1.750	19.09	2.750	9.04	3.75	6.36
0.833	12.72	1.833	19.09	2.833	9.04	3.83	6.36
0.917	17.39	1.917	15.73	2.917	8.41	3.92	6.08
1.000	17.39	2.000	15.73	3.000	8.41	4.00	6.08

Unit Hyd Qpeak (cms)= 0.316

PEAK FLOW (cms)= 0.093 (i)
TIME TO PEAK (hrs)= 2.417
RUNOFF VOLUME (mm)= 13.679
TOTAL RAINFALL (mm)= 81.310
RUNOFF COEFFICIENT = 0.168

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB NASHYD (0010) ID= 1 DT= 5.0 min	Area (ha)= 14.85	Curve Number (CN)= 52.9
	Ia (mm)= 13.28	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.89	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.84	1.083	32.35	2.083	13.52	3.08	7.88
0.167	6.84	1.167	32.35	2.167	13.52	3.17	7.88
0.250	7.64	1.250	187.50	2.250	11.94	3.25	7.42
0.333	7.64	1.333	187.50	2.333	11.94	3.33	7.42
0.417	8.72	1.417	39.70	2.417	10.74	3.42	7.02
0.500	8.72	1.500	39.70	2.500	10.74	3.50	7.02
0.583	10.26	1.583	25.04	2.583	9.80	3.58	6.67
0.667	10.26	1.667	25.04	2.667	9.80	3.67	6.67
0.750	12.72	1.750	19.09	2.750	9.04	3.75	6.36
0.833	12.72	1.833	19.09	2.833	9.04	3.83	6.36

0.917	17.39	1.917	15.73	2.917	8.41	3.92	6.08
1.000	17.39	2.000	15.73	3.000	8.41	4.00	6.08

Unit Hyd Qpeak (cms)= 0.637

PEAK FLOW (cms)= 0.234 (i)
TIME TO PEAK (hrs)= 2.583
RUNOFF VOLUME (mm)= 15.751
TOTAL RAINFALL (mm)= 81.310
RUNOFF COEFFICIENT = 0.194

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB NASHYD (0013) ID= 1 DT= 5.0 min	Area (ha)= 1.70	Curve Number (CN)= 60.5
	Ia (mm)= 9.65	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.40	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.84	1.083	32.35	2.083	13.52	3.08	7.88
0.167	6.84	1.167	32.35	2.167	13.52	3.17	7.88
0.250	7.64	1.250	187.50	2.250	11.94	3.25	7.42
0.333	7.64	1.333	187.50	2.333	11.94	3.33	7.42
0.417	8.72	1.417	39.70	2.417	10.74	3.42	7.02
0.500	8.72	1.500	39.70	2.500	10.74	3.50	7.02
0.583	10.26	1.583	25.04	2.583	9.80	3.58	6.67
0.667	10.26	1.667	25.04	2.667	9.80	3.67	6.67
0.750	12.72	1.750	19.09	2.750	9.04	3.75	6.36
0.833	12.72	1.833	19.09	2.833	9.04	3.83	6.36
0.917	17.39	1.917	15.73	2.917	8.41	3.92	6.08
1.000	17.39	2.000	15.73	3.000	8.41	4.00	6.08

Unit Hyd Qpeak (cms)= 0.162

PEAK FLOW (cms)= 0.063 (i)
TIME TO PEAK (hrs)= 1.750
RUNOFF VOLUME (mm)= 21.594
TOTAL RAINFALL (mm)= 81.310
RUNOFF COEFFICIENT = 0.266

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB NASHYD (0014) ID= 1 DT= 5.0 min	Area (ha)= 1.80	Curve Number (CN)= 50.0
	Ia (mm)= 16.00	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.76	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.84	1.083	32.35	2.083	13.52	3.08	7.88
0.167	6.84	1.167	32.35	2.167	13.52	3.17	7.88
0.250	7.64	1.250	187.50	2.250	11.94	3.25	7.42
0.333	7.64	1.333	187.50	2.333	11.94	3.33	7.42
0.417	8.72	1.417	39.70	2.417	10.74	3.42	7.02
0.500	8.72	1.500	39.70	2.500	10.74	3.50	7.02
0.583	10.26	1.583	25.04	2.583	9.80	3.58	6.67
0.667	10.26	1.667	25.04	2.667	9.80	3.67	6.67
0.750	12.72	1.750	19.09	2.750	9.04	3.75	6.36
0.833	12.72	1.833	19.09	2.833	9.04	3.83	6.36
0.917	17.39	1.917	15.73	2.917	8.41	3.92	6.08
1.000	17.39	2.000	15.73	3.000	8.41	4.00	6.08

Unit Hyd Qpeak (cms)= 0.090

PEAK FLOW (cms)= 0.026 (i)
TIME TO PEAK (hrs)= 2.417
RUNOFF VOLUME (mm)= 13.357
TOTAL RAINFALL (mm)= 81.310
RUNOFF COEFFICIENT = 0.164

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB NASHYD (0015) ID= 1 DT= 5.0 min	Area (ha)= 6.70	Curve Number (CN)= 60.0
	Ia (mm)= 10.00	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 1.45	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.84	1.083	32.35	2.083	13.52	3.08	7.88
0.167	6.84	1.167	32.35	2.167	13.52	3.17	7.88
0.250	7.64	1.250	187.50	2.250	11.94	3.25	7.42
0.333	7.64	1.333	187.50	2.333	11.94	3.33	7.42
0.417	8.72	1.417	39.70	2.417	10.74	3.42	7.02
0.500	8.72	1.500	39.70	2.500	10.74	3.50	7.02
0.583	10.26	1.583	25.04	2.583	9.80	3.58	6.67
0.667	10.26	1.667	25.04	2.667	9.80	3.67	6.67
0.750	12.72	1.750	19.09	2.750	9.04	3.75	6.36
0.833	12.72	1.833	19.09	2.833	9.04	3.83	6.36
0.917	17.39	1.917	15.73	2.917	8.41	3.92	6.08
1.000	17.39	2.000	15.73	3.000	8.41	4.00	6.08

Unit Hyd Qpeak (cms)= 0.176

PEAK FLOW (cms)= 0.108 (i)
TIME TO PEAK (hrs)= 3.417
RUNOFF VOLUME (mm)= 21.131
TOTAL RAINFALL (mm)= 81.310
RUNOFF COEFFICIENT = 0.260

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB NASHYD (0016) ID= 1 DT= 5.0 min	Area (ha)= 29.16	Curve Number (CN)= 71.4
	Ia (mm)= 7.88	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.68	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.84	1.083	32.35	2.083	13.52	3.08	7.88
0.167	6.84	1.167	32.35	2.167	13.52	3.17	7.88
0.250	7.64	1.250	187.50	2.250	11.94	3.25	7.42
0.333	7.64	1.333	187.50	2.333	11.94	3.33	7.42
0.417	8.72	1.417	39.70	2.417	10.74	3.42	7.02
0.500	8.72	1.500	39.70	2.500	10.74	3.50	7.02
0.583	10.26	1.583	25.04	2.583	9.80	3.58	6.67
0.667	10.26	1.667	25.04	2.667	9.80	3.67	6.67
0.750	12.72	1.750	19.09	2.750	9.04	3.75	6.36
0.833	12.72	1.833	19.09	2.833	9.04	3.83	6.36

0.917	17.39	1.917	15.73	2.917	8.41	3.92	6.08
1.000	17.39	2.000	15.73	3.000	8.41	4.00	6.08

Unit Hyd Qpeak (cms)= 1.638

PEAK FLOW (cms)= 1.142 (i)
TIME TO PEAK (hrs)= 2.167
RUNOFF VOLUME (mm)= 30.781
TOTAL RAINFALL (mm)= 81.310
RUNOFF COEFFICIENT = 0.379

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB NASHYD (0019) ID= 1 DT= 5.0 min	Area (ha)= 39.68 Curve Number (CN)= 60.7 Ia (mm)= 8.26 # of Linear Res.(N)= 3.00 U.H. Tp(hrs)= 1.18

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.84	1.083	32.35	2.083	13.52	3.08	7.88
0.167	6.84	1.167	32.35	2.167	13.52	3.17	7.88
0.250	7.64	1.250	187.50	2.250	11.94	3.25	7.42
0.333	7.64	1.333	187.50	2.333	11.94	3.33	7.42
0.417	8.72	1.417	39.70	2.417	10.74	3.42	7.02
0.500	8.72	1.500	39.70	2.500	10.74	3.50	7.02
0.583	10.26	1.583	25.04	2.583	9.80	3.58	6.67
0.667	10.26	1.667	25.04	2.667	9.80	3.67	6.67
0.750	12.72	1.750	19.09	2.750	9.04	3.75	6.36
0.833	12.72	1.833	19.09	2.833	9.04	3.83	6.36
0.917	17.39	1.917	15.73	2.917	8.41	3.92	6.08
1.000	17.39	2.000	15.73	3.000	8.41	4.00	6.08

Unit Hyd Qpeak (cms)= 1.284

PEAK FLOW (cms)= 0.774 (i)
TIME TO PEAK (hrs)= 2.917
RUNOFF VOLUME (mm)= 22.449
TOTAL RAINFALL (mm)= 81.310
RUNOFF COEFFICIENT = 0.276

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0024)		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3	ID1= 1 (0010):	14.85	0.234	2.58	15.75
	+ ID2= 2 (0013):	1.70	0.063	1.75	21.59
	ID = 3 (0024):	16.55	0.270	2.42	16.35

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
3 + 2 = 1	ID1= 3 (0024):	16.55	0.270	2.42	16.35
	+ ID2= 2 (0014):	1.80	0.026	2.42	13.36
	ID = 1 (0024):	18.35	0.295	2.42	16.06

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3	ID1= 1 (0024):	18.35	0.295	2.42	16.06
	+ ID2= 2 (0015):	6.70	0.108	3.42	21.13
	ID = 3 (0024):	25.05	0.384	2.67	17.41

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
3 + 2 = 1	ID1= 3 (0024):	25.05	0.384	2.67	17.41
	+ ID2= 2 (0016):	29.16	1.142	2.17	30.78
	ID = 1 (0024):	54.21	1.494	2.25	24.60

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024) 1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0024):	54.21	1.494	2.25	24.60
+ ID2= 2 (0019):	39.68	0.774	2.92	22.45
ID = 3 (0024):	93.89	2.153	2.42	23.69

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024) 3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0024):	93.89	2.153	2.42	23.69
+ ID2= 2 (0007):	100.92	1.374	3.75	19.71
ID = 1 (0024):	194.81	3.187	2.83	21.63

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024) 1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0024):	194.81	3.187	2.83	21.63
+ ID2= 2 (0008):	23.99	0.295	2.67	12.89
ID = 3 (0024):	218.80	3.480	2.83	20.67

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024) 3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0024):	218.80	3.480	2.83	20.67
+ ID2= 2 (0009):	6.37	0.093	2.42	13.68
ID = 1 (0024):	225.17	3.567	2.83	20.47

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB NASHYD (0011) ID= 1 DT= 5.0 min | Area (ha)= 46.28 Curve Number (CN)= 72.2
Ia (mm)= 7.09 # of Linear Res.(N)= 3.00
U.H. Tp(hrs)= 0.30

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.84	1.083	32.35	2.083	13.52	3.08	7.88
0.167	6.84	1.167	32.35	2.167	13.52	3.17	7.88
0.250	7.64	1.250	187.50	2.250	11.94	3.25	7.42
0.333	7.64	1.333	187.50	2.333	11.94	3.33	7.42
0.417	8.72	1.417	39.70	2.417	10.74	3.42	7.02
0.500	8.72	1.500	39.70	2.500	10.74	3.50	7.02
0.583	10.26	1.583	25.04	2.583	9.80	3.58	6.67
0.667	10.26	1.667	25.04	2.667	9.80	3.67	6.67
0.750	12.72	1.750	19.09	2.750	9.04	3.75	6.36
0.833	12.72	1.833	19.09	2.833	9.04	3.83	6.36
0.917	17.39	1.917	15.73	2.917	8.41	3.92	6.08
1.000	17.39	2.000	15.73	3.000	8.41	4.00	6.08

Unit Hyd Qpeak (cms)= 5.892

PEAK FLOW (cms)= 3.288 (i)
TIME TO PEAK (hrs)= 1.583
RUNOFF VOLUME (mm)= 32.002
TOTAL RAINFALL (mm)= 81.310
RUNOFF COEFFICIENT = 0.394

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB NASHYD (0012) ID= 1 DT= 5.0 min | Area (ha)= 1.13 Curve Number (CN)= 67.4
Ia (mm)= 7.88 # of Linear Res.(N)= 3.00
U.H. Tp(hrs)= 0.43

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.84	1.083	32.35	2.083	13.52	3.08	7.88
0.167	6.84	1.167	32.35	2.167	13.52	3.17	7.88
0.250	7.64	1.250	187.50	2.250	11.94	3.25	7.42
0.333	7.64	1.333	187.50	2.333	11.94	3.33	7.42
0.417	8.72	1.417	39.70	2.417	10.74	3.42	7.02
0.500	8.72	1.500	39.70	2.500	10.74	3.50	7.02
0.583	10.26	1.583	25.04	2.583	9.80	3.58	6.67
0.667	10.26	1.667	25.04	2.667	9.80	3.67	6.67
0.750	12.72	1.750	19.09	2.750	9.04	3.75	6.36
0.833	12.72	1.833	19.09	2.833	9.04	3.83	6.36
0.917	17.39	1.917	15.73	2.917	8.41	3.92	6.08
1.000	17.39	2.000	15.73	3.000	8.41	4.00	6.08

Unit Hyd Qpeak (cms)= 0.100

PEAK FLOW (cms)= 0.053 (i)
TIME TO PEAK (hrs)= 1.833
RUNOFF VOLUME (mm)= 27.436
TOTAL RAINFALL (mm)= 81.310
RUNOFF COEFFICIENT = 0.337

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
STANDHYD (0043)	Area (ha)=	0.13	
ID= 1 DT= 5.0 min	Total Imp(%)=	30.77	Dir. Conn.(%)= 7.69

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.04	0.09
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	0.50
Length	(m)=	29.44	70.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.84	1.083	32.35	2.083	13.52	3.08	7.88
0.167	6.84	1.167	32.35	2.167	13.52	3.17	7.88
0.250	7.64	1.250	187.50	2.250	11.94	3.25	7.42
0.333	7.64	1.333	187.50	2.333	11.94	3.33	7.42

0.417	8.72	1.417	39.70	2.417	10.74	3.42	7.02
0.500	8.72	1.500	39.70	2.500	10.74	3.50	7.02
0.583	10.26	1.583	25.04	2.583	9.80	3.58	6.67
0.667	10.26	1.667	25.04	2.667	9.80	3.67	6.67
0.750	12.72	1.750	19.09	2.750	9.04	3.75	6.36
0.833	12.72	1.833	19.09	2.833	9.04	3.83	6.36
0.917	17.39	1.917	15.73	2.917	8.41	3.92	6.08
1.000	17.39	2.000	15.73	3.000	8.41	4.00	6.08

Max.Eff.Inten.(mm/hr)=	187.50	67.89		
over (min)	5.00	20.00		
Storage Coeff. (min)=	1.17 (ii)	18.65 (ii)		
Unit Hyd. Tpeak (min)=	5.00	20.00		
Unit Hyd. peak (cms)=	0.34	0.06		
				TOTALS
PEAK FLOW (cms)=	0.01	0.01		0.011 (iii)
TIME TO PEAK (hrs)=	1.33	1.58		1.58
RUNOFF VOLUME (mm)=	80.31	36.87		40.14
TOTAL RAINFALL (mm)=	81.31	81.31		81.31
RUNOFF COEFFICIENT =	0.99	0.45		0.49

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
STANDHYD (0044)	Area (ha)=	1.62	
ID= 1 DT= 5.0 min	Total Imp(%)=	48.77	Dir. Conn.(%)= 30.86

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.79	0.83
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	1.40
Length	(m)=	103.92	400.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.84	1.083	32.35	2.083	13.52	3.08	7.88
0.167	6.84	1.167	32.35	2.167	13.52	3.17	7.88
0.250	7.64	1.250	187.50	2.250	11.94	3.25	7.42
0.333	7.64	1.333	187.50	2.333	11.94	3.33	7.42
0.417	8.72	1.417	39.70	2.417	10.74	3.42	7.02
0.500	8.72	1.500	39.70	2.500	10.74	3.50	7.02
0.583	10.26	1.583	25.04	2.583	9.80	3.58	6.67
0.667	10.26	1.667	25.04	2.667	9.80	3.67	6.67
0.750	12.72	1.750	19.09	2.750	9.04	3.75	6.36
0.833	12.72	1.833	19.09	2.833	9.04	3.83	6.36
0.917	17.39	1.917	15.73	2.917	8.41	3.92	6.08
1.000	17.39	2.000	15.73	3.000	8.41	4.00	6.08

			TOTALS
Max.Eff.Inten.(mm/hr)=	187.50	40.61	
over (min)	5.00	50.00	
Storage Coeff. (min)=	2.50 (ii)	47.34 (ii)	
Unit Hyd. Tpeak (min)=	5.00	50.00	
Unit Hyd. peak (cms)=	0.29	0.02	
PEAK FLOW (cms)=	0.26	0.05	0.263 (iii)
TIME TO PEAK (hrs)=	1.33	2.08	1.33
RUNOFF VOLUME (mm)=	80.31	37.14	50.45
TOTAL RAINFALL (mm)=	81.31	81.31	81.31
RUNOFF COEFFICIENT =	0.99	0.46	0.62

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0041)	Area (ha)=	0.59	Curve Number (CN)= 71.5
ID= 1 DT= 5.0 min	Ia (mm)=	4.75	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	0.53	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.84	1.083	32.35	2.083	13.52	3.08	7.88
0.167	6.84	1.167	32.35	2.167	13.52	3.17	7.88
0.250	7.64	1.250	187.50	2.250	11.94	3.25	7.42
0.333	7.64	1.333	187.50	2.333	11.94	3.33	7.42
0.417	8.72	1.417	39.70	2.417	10.74	3.42	7.02
0.500	8.72	1.500	39.70	2.500	10.74	3.50	7.02
0.583	10.26	1.583	25.04	2.583	9.80	3.58	6.67
0.667	10.26	1.667	25.04	2.667	9.80	3.67	6.67
0.750	12.72	1.750	19.09	2.750	9.04	3.75	6.36
0.833	12.72	1.833	19.09	2.833	9.04	3.83	6.36
0.917	17.39	1.917	15.73	2.917	8.41	3.92	6.08
1.000	17.39	2.000	15.73	3.000	8.41	4.00	6.08

Unit Hyd Qpeak (cms)= 0.043

PEAK FLOW (cms)= 0.030 (i)
TIME TO PEAK (hrs)= 1.917
RUNOFF VOLUME (mm)= 32.925
TOTAL RAINFALL (mm)= 81.310
RUNOFF COEFFICIENT = 0.405

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0028)	Area (ha)=	1.38	Curve Number (CN)= 64.1
ID= 1 DT= 5.0 min	Ia (mm)=	8.51	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	0.39	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.84	1.083	32.35	2.083	13.52	3.08	7.88
0.167	6.84	1.167	32.35	2.167	13.52	3.17	7.88
0.250	7.64	1.250	187.50	2.250	11.94	3.25	7.42
0.333	7.64	1.333	187.50	2.333	11.94	3.33	7.42
0.417	8.72	1.417	39.70	2.417	10.74	3.42	7.02
0.500	8.72	1.500	39.70	2.500	10.74	3.50	7.02
0.583	10.26	1.583	25.04	2.583	9.80	3.58	6.67
0.667	10.26	1.667	25.04	2.667	9.80	3.67	6.67
0.750	12.72	1.750	19.09	2.750	9.04	3.75	6.36
0.833	12.72	1.833	19.09	2.833	9.04	3.83	6.36
0.917	17.39	1.917	15.73	2.917	8.41	3.92	6.08
1.000	17.39	2.000	15.73	3.000	8.41	4.00	6.08

```
     Unit Hyd Qpeak  (cms)=   0.135

     PEAK FLOW       (cms)=   0.061 (i)
     TIME TO PEAK    (hrs)=   1.750
     RUNOFF VOLUME    (mm)=  24.668
     TOTAL RAINFALL   (mm)=  81.310
     RUNOFF COEFFICIENT   =   0.303

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
```

```
--------------------
| ADD HYD  (  0023)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0011):    46.28   3.288     1.58    32.00
     + ID2= 2 (  0012):     1.13   0.053     1.83    27.44
       ================================================
       ID = 3 (  0023):    47.41   3.333     1.58    31.89

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
```

```
--------------------
| ADD HYD  (  0023)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 3 (  0023):    47.41   3.333     1.58    31.89
     + ID2= 2 (  0028):     1.38   0.061     1.75    24.67
       ================================================
       ID = 1 (  0023):    48.79   3.387     1.58    31.69

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
```

```
--------------------
| ADD HYD  (  0023)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0023):    48.79   3.387     1.58    31.69
     + ID2= 2 (  0041):     0.59   0.030     1.92    32.93
       ================================================
       ID = 3 (  0023):    49.38   3.409     1.58    31.70

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
```

```
--------------------
| ADD HYD  (  0023)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 3 (  0023):    49.38   3.409     1.58    31.70
     + ID2= 2 (  0043):     0.13   0.011     1.58    40.14
       ================================================
       ID = 1 (  0023):    49.51   3.420     1.58    31.73

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
```

```
--------------------
| ADD HYD  (  0023)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0023):    49.51   3.420     1.58    31.73
     + ID2= 2 (  0044):     1.62   0.263     1.33    50.45
       ================================================
       ID = 3 (  0023):    51.13   3.479     1.58    32.32

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
```

```
--------------------
| ADD HYD  (  0025)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0023):    51.13   3.479     1.58    32.32
     + ID2= 2 (  0024):   225.17   3.567     2.83    20.47
       ================================================
       ID = 3 (  0025):   276.30   5.166     1.83    22.67

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
```

```
*******************************
** SIMULATION:G - 2-year SCS  **
*******************************

--------------------
|    READ STORM    |    Filename: C:\Users\ecomish\AppD
|                  |              ata\Local\Temp\
|                  |              c819dd95-70ee-48d0-b884-0b24f1308cad\d5860a37
| Ptotal= 63.16 mm |    Comments: 2yr 24hr 15min SCS Type II (MTO) - 15% I
--------------------
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                 hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
```

0.00	0.00	6.25	1.14	12.50	9.10	18.75	1.14
0.25	0.69	6.50	1.14	12.75	4.67	19.00	1.14
0.50	0.69	6.75	1.14	13.00	4.67	19.25	1.14
0.75	0.69	7.00	1.14	13.25	3.41	19.50	1.14
1.00	0.69	7.25	1.39	13.50	3.41	19.75	1.14
1.25	0.69	7.50	1.39	13.75	2.65	20.00	1.14
1.50	0.69	7.75	1.39	14.00	2.65	20.25	0.76
1.75	0.69	8.00	1.39	14.25	1.89	20.50	0.76
2.00	0.69	8.25	1.64	14.50	1.89	20.75	0.76
2.25	0.82	8.50	1.64	14.75	1.89	21.00	0.76
2.50	0.82	8.75	1.77	15.00	1.89	21.25	0.76
2.75	0.82	9.00	1.77	15.25	1.89	21.50	0.76
3.00	0.82	9.25	2.02	15.50	1.89	21.75	0.76
3.25	0.82	9.50	2.02	15.75	1.89	22.00	0.76
3.50	0.82	9.75	2.27	16.00	1.89	22.25	0.76
3.75	0.82	10.00	2.27	16.25	1.14	22.50	0.76
4.00	0.82	10.25	2.91	16.50	1.14	22.75	0.76
4.25	1.01	10.50	2.91	16.75	1.14	23.00	0.76
4.50	1.01	10.75	3.92	17.00	1.14	23.25	0.76
4.75	1.01	11.00	3.92	17.25	1.14	23.50	0.76
5.00	1.01	11.25	6.06	17.50	1.14	23.75	0.76
5.25	1.01	11.50	6.06	17.75	1.14	24.00	0.76
5.50	1.01	11.75	18.70	18.00	1.14		
5.75	1.01	12.00	77.31	18.25	1.14		
6.00	1.01	12.25	9.10	18.50	1.14		

CALIB NASHYD (0007) ID= 1 DT= 5.0 min	Area (ha)= 100.92	Curve Number (CN)= 55.9	
	Ia (mm)= 7.89	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 1.70		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.01	12.250	77.31	18.33	1.14
0.167	0.00	6.250	1.01	12.333	9.10	18.42	1.14
0.250	0.00	6.333	1.14	12.417	9.10	18.50	1.14
0.333	0.69	6.417	1.14	12.500	9.10	18.58	1.14
0.417	0.69	6.500	1.14	12.583	9.10	18.67	1.14
0.500	0.69	6.583	1.14	12.667	9.10	18.75	1.14
0.583	0.69	6.667	1.14	12.750	9.10	18.83	1.14
0.667	0.69	6.750	1.14	12.833	4.67	18.92	1.14

0.750	0.69	6.833	1.14	12.917	4.67	19.00	1.14
0.833	0.69	6.917	1.14	13.000	4.67	19.08	1.14
0.917	0.69	7.000	1.14	13.083	4.67	19.17	1.14
1.000	0.69	7.083	1.14	13.167	4.67	19.25	1.14
1.083	0.69	7.167	1.14	13.250	4.67	19.33	1.14
1.167	0.69	7.250	1.14	13.333	3.41	19.42	1.14
1.250	0.69	7.333	1.39	13.417	3.41	19.50	1.14
1.333	0.69	7.417	1.39	13.500	3.41	19.58	1.14
1.417	0.69	7.500	1.39	13.583	3.41	19.67	1.14
1.500	0.69	7.583	1.39	13.667	3.41	19.75	1.14
1.583	0.69	7.667	1.39	13.750	3.41	19.83	1.14
1.667	0.69	7.750	1.39	13.833	2.65	19.92	1.14
1.750	0.69	7.833	1.39	13.917	2.65	20.00	1.14
1.833	0.69	7.917	1.39	14.000	2.65	20.08	1.14
1.917	0.69	8.000	1.39	14.083	2.65	20.17	1.14
2.000	0.69	8.083	1.39	14.167	2.65	20.25	1.14
2.083	0.69	8.167	1.39	14.250	2.65	20.33	0.76
2.167	0.69	8.250	1.39	14.333	1.89	20.42	0.76
2.250	0.69	8.333	1.64	14.417	1.89	20.50	0.76
2.333	0.82	8.417	1.64	14.500	1.89	20.58	0.76
2.417	0.82	8.500	1.64	14.583	1.89	20.67	0.76
2.500	0.82	8.583	1.64	14.667	1.89	20.75	0.76
2.583	0.82	8.667	1.64	14.750	1.89	20.83	0.76
2.667	0.82	8.750	1.64	14.833	1.89	20.92	0.76
2.750	0.82	8.833	1.77	14.917	1.89	21.00	0.76
2.833	0.82	8.917	1.77	15.000	1.89	21.08	0.76
2.917	0.82	9.000	1.77	15.083	1.89	21.17	0.76
3.000	0.82	9.083	1.77	15.167	1.89	21.25	0.76
3.083	0.82	9.167	1.77	15.250	1.89	21.33	0.76
3.167	0.82	9.250	1.77	15.333	1.89	21.42	0.76
3.250	0.82	9.333	2.02	15.417	1.89	21.50	0.76
3.333	0.82	9.417	2.02	15.500	1.89	21.58	0.76
3.417	0.82	9.500	2.02	15.583	1.89	21.67	0.76
3.500	0.82	9.583	2.02	15.667	1.89	21.75	0.76
3.583	0.82	9.667	2.02	15.750	1.89	21.83	0.76
3.667	0.82	9.750	2.02	15.833	1.89	21.92	0.76
3.750	0.82	9.833	2.27	15.917	1.89	22.00	0.76
3.833	0.82	9.917	2.27	16.000	1.89	22.08	0.76
3.917	0.82	10.000	2.27	16.083	1.89	22.17	0.76
4.000	0.82	10.083	2.27	16.167	1.89	22.25	0.76
4.083	0.82	10.167	2.27	16.250	1.89	22.33	0.76
4.167	0.82	10.250	2.27	16.333	1.14	22.42	0.76
4.250	0.82	10.333	2.91	16.417	1.14	22.50	0.76
4.333	1.01	10.417	2.91	16.500	1.14	22.58	0.76
4.417	1.01	10.500	2.91	16.583	1.14	22.67	0.76
4.500	1.01	10.583	2.91	16.667	1.14	22.75	0.76
4.583	1.01	10.667	2.91	16.750	1.14	22.83	0.76
4.667	1.01	10.750	2.91	16.833	1.14	22.92	0.76

4.750	1.01	10.833	3.92	16.917	1.14	23.00	0.76
4.833	1.01	10.917	3.92	17.000	1.14	23.08	0.76
4.917	1.01	11.000	3.92	17.083	1.14	23.17	0.76
5.000	1.01	11.083	3.92	17.167	1.14	23.25	0.76
5.083	1.01	11.167	3.92	17.250	1.14	23.33	0.76
5.167	1.01	11.250	3.92	17.333	1.14	23.42	0.76
5.250	1.01	11.333	6.06	17.417	1.14	23.50	0.76
5.333	1.01	11.417	6.06	17.500	1.14	23.58	0.76
5.417	1.01	11.500	6.06	17.583	1.14	23.67	0.76
5.500	1.01	11.583	6.06	17.667	1.14	23.75	0.76
5.583	1.01	11.667	6.06	17.750	1.14	23.83	0.76
5.667	1.01	11.750	6.06	17.833	1.14	23.92	0.76
5.750	1.01	11.833	18.69	17.917	1.14	24.00	0.76
5.833	1.01	11.917	18.70	18.000	1.14	24.08	0.76
5.917	1.01	12.000	18.70	18.083	1.14	24.17	0.76
6.000	1.01	12.083	77.30	18.167	1.14	24.25	0.76
6.083	1.01	12.167	77.31	18.250	1.14		

Unit Hyd Qpeak (cms)= 2.267

PEAK FLOW (cms)= 0.607 (i)
TIME TO PEAK (hrs)= 14.167
RUNOFF VOLUME (mm)= 11.964
TOTAL RAINFALL (mm)= 63.160
RUNOFF COEFFICIENT = 0.189

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB NASHYD (0008) | ID= 1 DT= 5.0 min | Area (ha)= 23.99 Curve Number (CN)= 44.7 | Ia (mm)= 10.91 # of Linear Res.(N)= 3.00 | U.H. Tp(hrs)= 0.97

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.01	12.250	77.31	18.33	1.14
0.167	0.00	6.250	1.01	12.333	9.10	18.42	1.14
0.250	0.00	6.333	1.14	12.417	9.10	18.50	1.14
0.333	0.69	6.417	1.14	12.500	9.10	18.58	1.14
0.417	0.69	6.500	1.14	12.583	9.10	18.67	1.14
0.500	0.69	6.583	1.14	12.667	9.10	18.75	1.14
0.583	0.69	6.667	1.14	12.750	9.10	18.83	1.14

0.667	0.69	6.750	1.14	12.833	4.67	18.92	1.14
0.750	0.69	6.833	1.14	12.917	4.67	19.00	1.14
0.833	0.69	6.917	1.14	13.000	4.67	19.08	1.14
0.917	0.69	7.000	1.14	13.083	4.67	19.17	1.14
1.000	0.69	7.083	1.14	13.167	4.67	19.25	1.14
1.083	0.69	7.167	1.14	13.250	4.67	19.33	1.14
1.167	0.69	7.250	1.14	13.333	3.41	19.42	1.14
1.250	0.69	7.333	1.39	13.417	3.41	19.50	1.14
1.333	0.69	7.417	1.39	13.500	3.41	19.58	1.14
1.417	0.69	7.500	1.39	13.583	3.41	19.67	1.14
1.500	0.69	7.583	1.39	13.667	3.41	19.75	1.14
1.583	0.69	7.667	1.39	13.750	3.41	19.83	1.14
1.667	0.69	7.750	1.39	13.833	2.65	19.92	1.14
1.750	0.69	7.833	1.39	13.917	2.65	20.00	1.14
1.833	0.69	7.917	1.39	14.000	2.65	20.08	1.14
1.917	0.69	8.000	1.39	14.083	2.65	20.17	1.14
2.000	0.69	8.083	1.39	14.167	2.65	20.25	1.14
2.083	0.69	8.167	1.39	14.250	2.65	20.33	0.76
2.167	0.69	8.250	1.39	14.333	1.89	20.42	0.76
2.250	0.69	8.333	1.64	14.417	1.89	20.50	0.76
2.333	0.82	8.417	1.64	14.500	1.89	20.58	0.76
2.417	0.82	8.500	1.64	14.583	1.89	20.67	0.76
2.500	0.82	8.583	1.64	14.667	1.89	20.75	0.76
2.583	0.82	8.667	1.64	14.750	1.89	20.83	0.76
2.667	0.82	8.750	1.64	14.833	1.89	20.92	0.76
2.750	0.82	8.833	1.77	14.917	1.89	21.00	0.76
2.833	0.82	8.917	1.77	15.000	1.89	21.08	0.76
2.917	0.82	9.000	1.77	15.083	1.89	21.17	0.76
3.000	0.82	9.083	1.77	15.167	1.89	21.25	0.76
3.083	0.82	9.167	1.77	15.250	1.89	21.33	0.76
3.167	0.82	9.250	1.77	15.333	1.89	21.42	0.76
3.250	0.82	9.333	2.02	15.417	1.89	21.50	0.76
3.333	0.82	9.417	2.02	15.500	1.89	21.58	0.76
3.417	0.82	9.500	2.02	15.583	1.89	21.67	0.76
3.500	0.82	9.583	2.02	15.667	1.89	21.75	0.76
3.583	0.82	9.667	2.02	15.750	1.89	21.83	0.76
3.667	0.82	9.750	2.02	15.833	1.89	21.92	0.76
3.750	0.82	9.833	2.27	15.917	1.89	22.00	0.76
3.833	0.82	9.917	2.27	16.000	1.89	22.08	0.76
3.917	0.82	10.000	2.27	16.083	1.89	22.17	0.76
4.000	0.82	10.083	2.27	16.167	1.89	22.25	0.76
4.083	0.82	10.167	2.27	16.250	1.89	22.33	0.76
4.167	0.82	10.250	2.27	16.333	1.14	22.42	0.76
4.250	0.82	10.333	2.91	16.417	1.14	22.50	0.76
4.333	1.01	10.417	2.91	16.500	1.14	22.58	0.76
4.417	1.01	10.500	2.91	16.583	1.14	22.67	0.76
4.500	1.01	10.583	2.91	16.667	1.14	22.75	0.76
4.583	1.01	10.667	2.91	16.750	1.14	22.83	0.76

4.667	1.01	10.750	2.91	16.833	1.14	22.92	0.76
4.750	1.01	10.833	3.92	16.917	1.14	23.00	0.76
4.833	1.01	10.917	3.92	17.000	1.14	23.08	0.76
4.917	1.01	11.000	3.92	17.083	1.14	23.17	0.76
5.000	1.01	11.083	3.92	17.167	1.14	23.25	0.76
5.083	1.01	11.167	3.92	17.250	1.14	23.33	0.76
5.167	1.01	11.250	3.92	17.333	1.14	23.42	0.76
5.250	1.01	11.333	6.06	17.417	1.14	23.50	0.76
5.333	1.01	11.417	6.06	17.500	1.14	23.58	0.76
5.417	1.01	11.500	6.06	17.583	1.14	23.67	0.76
5.500	1.01	11.583	6.06	17.667	1.14	23.75	0.76
5.583	1.01	11.667	6.06	17.750	1.14	23.83	0.76
5.667	1.01	11.750	6.06	17.833	1.14	23.92	0.76
5.750	1.01	11.833	18.69	17.917	1.14	24.00	0.76
5.833	1.01	11.917	18.70	18.000	1.14	24.08	0.76
5.917	1.01	12.000	18.70	18.083	1.14	24.17	0.76
6.000	1.01	12.083	77.30	18.167	1.14	24.25	0.76
6.083	1.01	12.167	77.31	18.250	1.14		

Unit Hyd Qpeak (cms)= 0.945

PEAK FLOW (cms)= 0.131 (i)
TIME TO PEAK (hrs)= 13.250
RUNOFF VOLUME (mm)= 7.449
TOTAL RAINFALL (mm)= 63.160
RUNOFF COEFFICIENT = 0.118

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0009)	Area (ha)= 6.37	Curve Number (CN)= 50.5	
ID= 1 DT= 5.0 min	Ia (mm)= 15.69	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.77		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.01	12.250	77.31	18.33	1.14
0.167	0.00	6.250	1.01	12.333	9.10	18.42	1.14
0.250	0.00	6.333	1.14	12.417	9.10	18.50	1.14
0.333	0.69	6.417	1.14	12.500	9.10	18.58	1.14
0.417	0.69	6.500	1.14	12.583	9.10	18.67	1.14
0.500	0.69	6.583	1.14	12.667	9.10	18.75	1.14

0.583	0.69	6.667	1.14	12.750	9.10	18.83	1.14
0.667	0.69	6.750	1.14	12.833	4.67	18.92	1.14
0.750	0.69	6.833	1.14	12.917	4.67	19.00	1.14
0.833	0.69	6.917	1.14	13.000	4.67	19.08	1.14
0.917	0.69	7.000	1.14	13.083	4.67	19.17	1.14
1.000	0.69	7.083	1.14	13.167	4.67	19.25	1.14
1.083	0.69	7.167	1.14	13.250	4.67	19.33	1.14
1.167	0.69	7.250	1.14	13.333	3.41	19.42	1.14
1.250	0.69	7.333	1.39	13.417	3.41	19.50	1.14
1.333	0.69	7.417	1.39	13.500	3.41	19.58	1.14
1.417	0.69	7.500	1.39	13.583	3.41	19.67	1.14
1.500	0.69	7.583	1.39	13.667	3.41	19.75	1.14
1.583	0.69	7.667	1.39	13.750	3.41	19.83	1.14
1.667	0.69	7.750	1.39	13.833	2.65	19.92	1.14
1.750	0.69	7.833	1.39	13.917	2.65	20.00	1.14
1.833	0.69	7.917	1.39	14.000	2.65	20.08	1.14
1.917	0.69	8.000	1.39	14.083	2.65	20.17	1.14
2.000	0.69	8.083	1.39	14.167	2.65	20.25	1.14
2.083	0.69	8.167	1.39	14.250	2.65	20.33	0.76
2.167	0.69	8.250	1.39	14.333	1.89	20.42	0.76
2.250	0.69	8.333	1.64	14.417	1.89	20.50	0.76
2.333	0.82	8.417	1.64	14.500	1.89	20.58	0.76
2.417	0.82	8.500	1.64	14.583	1.89	20.67	0.76
2.500	0.82	8.583	1.64	14.667	1.89	20.75	0.76
2.583	0.82	8.667	1.64	14.750	1.89	20.83	0.76
2.667	0.82	8.750	1.64	14.833	1.89	20.92	0.76
2.750	0.82	8.833	1.77	14.917	1.89	21.00	0.76
2.833	0.82	8.917	1.77	15.000	1.89	21.08	0.76
2.917	0.82	9.000	1.77	15.083	1.89	21.17	0.76
3.000	0.82	9.083	1.77	15.167	1.89	21.25	0.76
3.083	0.82	9.167	1.77	15.250	1.89	21.33	0.76
3.167	0.82	9.250	1.77	15.333	1.89	21.42	0.76
3.250	0.82	9.333	2.02	15.417	1.89	21.50	0.76
3.333	0.82	9.417	2.02	15.500	1.89	21.58	0.76
3.417	0.82	9.500	2.02	15.583	1.89	21.67	0.76
3.500	0.82	9.583	2.02	15.667	1.89	21.75	0.76
3.583	0.82	9.667	2.02	15.750	1.89	21.83	0.76
3.667	0.82	9.750	2.02	15.833	1.89	21.92	0.76
3.750	0.82	9.833	2.27	15.917	1.89	22.00	0.76
3.833	0.82	9.917	2.27	16.000	1.89	22.08	0.76
3.917	0.82	10.000	2.27	16.083	1.89	22.17	0.76
4.000	0.82	10.083	2.27	16.167	1.89	22.25	0.76
4.083	0.82	10.167	2.27	16.250	1.89	22.33	0.76
4.167	0.82	10.250	2.27	16.333	1.14	22.42	0.76
4.250	0.82	10.333	2.91	16.417	1.14	22.50	0.76
4.333	1.01	10.417	2.91	16.500	1.14	22.58	0.76
4.417	1.01	10.500	2.91	16.583	1.14	22.67	0.76
4.500	1.01	10.583	2.91	16.667	1.14	22.75	0.76

4.583	1.01	10.667	2.91	16.750	1.14	22.83	0.76
4.667	1.01	10.750	2.91	16.833	1.14	22.92	0.76
4.750	1.01	10.833	3.92	16.917	1.14	23.00	0.76
4.833	1.01	10.917	3.92	17.000	1.14	23.08	0.76
4.917	1.01	11.000	3.92	17.083	1.14	23.17	0.76
5.000	1.01	11.083	3.92	17.167	1.14	23.25	0.76
5.083	1.01	11.167	3.92	17.250	1.14	23.33	0.76
5.167	1.01	11.250	3.92	17.333	1.14	23.42	0.76
5.250	1.01	11.333	6.06	17.417	1.14	23.50	0.76
5.333	1.01	11.417	6.06	17.500	1.14	23.58	0.76
5.417	1.01	11.500	6.06	17.583	1.14	23.67	0.76
5.500	1.01	11.583	6.06	17.667	1.14	23.75	0.76
5.583	1.01	11.667	6.06	17.750	1.14	23.83	0.76
5.667	1.01	11.750	6.06	17.833	1.14	23.92	0.76
5.750	1.01	11.833	18.69	17.917	1.14	24.00	0.76
5.833	1.01	11.917	18.70	18.000	1.14	24.08	0.76
5.917	1.01	12.000	18.70	18.083	1.14	24.17	0.76
6.000	1.01	12.083	77.30	18.167	1.14	24.25	0.76
6.083	1.01	12.167	77.31	18.250	1.14		

Unit Hyd Qpeak (cms)= 0.316

PEAK FLOW (cms)= 0.040 (i)
TIME TO PEAK (hrs)= 13.083
RUNOFF VOLUME (mm)= 7.596
TOTAL RAINFALL (mm)= 63.160
RUNOFF COEFFICIENT = 0.120

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0010)	Area (ha)= 14.85	Curve Number (CN)= 52.9	
ID= 1 DT= 5.0 min	Ia (mm)= 13.28	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.89		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.01	12.250	77.31	18.33	1.14
0.167	0.00	6.250	1.01	12.333	9.10	18.42	1.14
0.250	0.00	6.333	1.14	12.417	9.10	18.50	1.14
0.333	0.69	6.417	1.14	12.500	9.10	18.58	1.14
0.417	0.69	6.500	1.14	12.583	9.10	18.67	1.14

0.500	0.69	6.583	1.14	12.667	9.10	18.75	1.14
0.583	0.69	6.667	1.14	12.750	9.10	18.83	1.14
0.667	0.69	6.750	1.14	12.833	4.67	18.92	1.14
0.750	0.69	6.833	1.14	12.917	4.67	19.00	1.14
0.833	0.69	6.917	1.14	13.000	4.67	19.08	1.14
0.917	0.69	7.000	1.14	13.083	4.67	19.17	1.14
1.000	0.69	7.083	1.14	13.167	4.67	19.25	1.14
1.083	0.69	7.167	1.14	13.250	4.67	19.33	1.14
1.167	0.69	7.250	1.14	13.333	3.41	19.42	1.14
1.250	0.69	7.333	1.39	13.417	3.41	19.50	1.14
1.333	0.69	7.417	1.39	13.500	3.41	19.58	1.14
1.417	0.69	7.500	1.39	13.583	3.41	19.67	1.14
1.500	0.69	7.583	1.39	13.667	3.41	19.75	1.14
1.583	0.69	7.667	1.39	13.750	3.41	19.83	1.14
1.667	0.69	7.750	1.39	13.833	2.65	19.92	1.14
1.750	0.69	7.833	1.39	13.917	2.65	20.00	1.14
1.833	0.69	7.917	1.39	14.000	2.65	20.08	1.14
1.917	0.69	8.000	1.39	14.083	2.65	20.17	1.14
2.000	0.69	8.083	1.39	14.167	2.65	20.25	1.14
2.083	0.69	8.167	1.39	14.250	2.65	20.33	0.76
2.167	0.69	8.250	1.39	14.333	1.89	20.42	0.76
2.250	0.69	8.333	1.64	14.417	1.89	20.50	0.76
2.333	0.82	8.417	1.64	14.500	1.89	20.58	0.76
2.417	0.82	8.500	1.64	14.583	1.89	20.67	0.76
2.500	0.82	8.583	1.64	14.667	1.89	20.75	0.76
2.583	0.82	8.667	1.64	14.750	1.89	20.83	0.76
2.667	0.82	8.750	1.64	14.833	1.89	20.92	0.76
2.750	0.82	8.833	1.77	14.917	1.89	21.00	0.76
2.833	0.82	8.917	1.77	15.000	1.89	21.08	0.76
2.917	0.82	9.000	1.77	15.083	1.89	21.17	0.76
3.000	0.82	9.083	1.77	15.167	1.89	21.25	0.76
3.083	0.82	9.167	1.77	15.250	1.89	21.33	0.76
3.167	0.82	9.250	1.77	15.333	1.89	21.42	0.76
3.250	0.82	9.333	2.02	15.417	1.89	21.50	0.76
3.333	0.82	9.417	2.02	15.500	1.89	21.58	0.76
3.417	0.82	9.500	2.02	15.583	1.89	21.67	0.76
3.500	0.82	9.583	2.02	15.667	1.89	21.75	0.76
3.583	0.82	9.667	2.02	15.750	1.89	21.83	0.76
3.667	0.82	9.750	2.02	15.833	1.89	21.92	0.76
3.750	0.82	9.833	2.27	15.917	1.89	22.00	0.76
3.833	0.82	9.917	2.27	16.000	1.89	22.08	0.76
3.917	0.82	10.000	2.27	16.083	1.89	22.17	0.76
4.000	0.82	10.083	2.27	16.167	1.89	22.25	0.76
4.083	0.82	10.167	2.27	16.250	1.89	22.33	0.76
4.167	0.82	10.250	2.27	16.333	1.14	22.42	0.76
4.250	0.82	10.333	2.91	16.417	1.14	22.50	0.76
4.333	1.01	10.417	2.91	16.500	1.14	22.58	0.76
4.417	1.01	10.500	2.91	16.583	1.14	22.67	0.76

4.500	1.01	10.583	2.91	16.667	1.14	22.75	0.76
4.583	1.01	10.667	2.91	16.750	1.14	22.83	0.76
4.667	1.01	10.750	2.91	16.833	1.14	22.92	0.76
4.750	1.01	10.833	3.92	16.917	1.14	23.00	0.76
4.833	1.01	10.917	3.92	17.000	1.14	23.08	0.76
4.917	1.01	11.000	3.92	17.083	1.14	23.17	0.76
5.000	1.01	11.083	3.92	17.167	1.14	23.25	0.76
5.083	1.01	11.167	3.92	17.250	1.14	23.33	0.76
5.167	1.01	11.250	3.92	17.333	1.14	23.42	0.76
5.250	1.01	11.333	6.06	17.417	1.14	23.50	0.76
5.333	1.01	11.417	6.06	17.500	1.14	23.58	0.76
5.417	1.01	11.500	6.06	17.583	1.14	23.67	0.76
5.500	1.01	11.583	6.06	17.667	1.14	23.75	0.76
5.583	1.01	11.667	6.06	17.750	1.14	23.83	0.76
5.667	1.01	11.750	6.06	17.833	1.14	23.92	0.76
5.750	1.01	11.833	18.69	17.917	1.14	24.00	0.76
5.833	1.01	11.917	18.70	18.000	1.14	24.08	0.76
5.917	1.01	12.000	18.70	18.083	1.14	24.17	0.76
6.000	1.01	12.083	77.30	18.167	1.14	24.25	0.76
6.083	1.01	12.167	77.31	18.250	1.14		

Unit Hyd Qpeak (cms)= 0.637

PEAK FLOW (cms)= 0.104 (i)
TIME TO PEAK (hrs)= 13.167
RUNOFF VOLUME (mm)= 9.025
TOTAL RAINFALL (mm)= 63.160
RUNOFF COEFFICIENT = 0.143

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0013)	Area (ha)= 1.70	Curve Number (CN)= 60.5	
ID= 1 DT= 5.0 min	Ia (mm)= 9.65	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.40		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.01	12.250	77.31	18.33	1.14
0.167	0.00	6.250	1.01	12.333	9.10	18.42	1.14
0.250	0.00	6.333	1.14	12.417	9.10	18.50	1.14
0.333	0.69	6.417	1.14	12.500	9.10	18.58	1.14

0.417	0.69	6.500	1.14	12.583	9.10	18.67	1.14
0.500	0.69	6.583	1.14	12.667	9.10	18.75	1.14
0.583	0.69	6.667	1.14	12.750	9.10	18.83	1.14
0.667	0.69	6.750	1.14	12.833	4.67	18.92	1.14
0.750	0.69	6.833	1.14	12.917	4.67	19.00	1.14
0.833	0.69	6.917	1.14	13.000	4.67	19.08	1.14
0.917	0.69	7.000	1.14	13.083	4.67	19.17	1.14
1.000	0.69	7.083	1.14	13.167	4.67	19.25	1.14
1.083	0.69	7.167	1.14	13.250	4.67	19.33	1.14
1.167	0.69	7.250	1.14	13.333	3.41	19.42	1.14
1.250	0.69	7.333	1.39	13.417	3.41	19.50	1.14
1.333	0.69	7.417	1.39	13.500	3.41	19.58	1.14
1.417	0.69	7.500	1.39	13.583	3.41	19.67	1.14
1.500	0.69	7.583	1.39	13.667	3.41	19.75	1.14
1.583	0.69	7.667	1.39	13.750	3.41	19.83	1.14
1.667	0.69	7.750	1.39	13.833	2.65	19.92	1.14
1.750	0.69	7.833	1.39	13.917	2.65	20.00	1.14
1.833	0.69	7.917	1.39	14.000	2.65	20.08	1.14
1.917	0.69	8.000	1.39	14.083	2.65	20.17	1.14
2.000	0.69	8.083	1.39	14.167	2.65	20.25	1.14
2.083	0.69	8.167	1.39	14.250	2.65	20.33	0.76
2.167	0.69	8.250	1.39	14.333	1.89	20.42	0.76
2.250	0.69	8.333	1.64	14.417	1.89	20.50	0.76
2.333	0.82	8.417	1.64	14.500	1.89	20.58	0.76
2.417	0.82	8.500	1.64	14.583	1.89	20.67	0.76
2.500	0.82	8.583	1.64	14.667	1.89	20.75	0.76
2.583	0.82	8.667	1.64	14.750	1.89	20.83	0.76
2.667	0.82	8.750	1.64	14.833	1.89	20.92	0.76
2.750	0.82	8.833	1.77	14.917	1.89	21.00	0.76
2.833	0.82	8.917	1.77	15.000	1.89	21.08	0.76
2.917	0.82	9.000	1.77	15.083	1.89	21.17	0.76
3.000	0.82	9.083	1.77	15.167	1.89	21.25	0.76
3.083	0.82	9.167	1.77	15.250	1.89	21.33	0.76
3.167	0.82	9.250	1.77	15.333	1.89	21.42	0.76
3.250	0.82	9.333	2.02	15.417	1.89	21.50	0.76
3.333	0.82	9.417	2.02	15.500	1.89	21.58	0.76
3.417	0.82	9.500	2.02	15.583	1.89	21.67	0.76
3.500	0.82	9.583	2.02	15.667	1.89	21.75	0.76
3.583	0.82	9.667	2.02	15.750	1.89	21.83	0.76
3.667	0.82	9.750	2.02	15.833	1.89	21.92	0.76
3.750	0.82	9.833	2.27	15.917	1.89	22.00	0.76
3.833	0.82	9.917	2.27	16.000	1.89	22.08	0.76
3.917	0.82	10.000	2.27	16.083	1.89	22.17	0.76
4.000	0.82	10.083	2.27	16.167	1.89	22.25	0.76
4.083	0.82	10.167	2.27	16.250	1.89	22.33	0.76
4.167	0.82	10.250	2.27	16.333	1.14	22.42	0.76
4.250	0.82	10.333	2.91	16.417	1.14	22.50	0.76
4.333	1.01	10.417	2.91	16.500	1.14	22.58	0.76

4.417	1.01	10.500	2.91	16.583	1.14	22.67	0.76
4.500	1.01	10.583	2.91	16.667	1.14	22.75	0.76
4.583	1.01	10.667	2.91	16.750	1.14	22.83	0.76
4.667	1.01	10.750	2.91	16.833	1.14	22.92	0.76
4.750	1.01	10.833	3.92	16.917	1.14	23.00	0.76
4.833	1.01	10.917	3.92	17.000	1.14	23.08	0.76
4.917	1.01	11.000	3.92	17.083	1.14	23.17	0.76
5.000	1.01	11.083	3.92	17.167	1.14	23.25	0.76
5.083	1.01	11.167	3.92	17.250	1.14	23.33	0.76
5.167	1.01	11.250	3.92	17.333	1.14	23.42	0.76
5.250	1.01	11.333	6.06	17.417	1.14	23.50	0.76
5.333	1.01	11.417	6.06	17.500	1.14	23.58	0.76
5.417	1.01	11.500	6.06	17.583	1.14	23.67	0.76
5.500	1.01	11.583	6.06	17.667	1.14	23.75	0.76
5.583	1.01	11.667	6.06	17.750	1.14	23.83	0.76
5.667	1.01	11.750	6.06	17.833	1.14	23.92	0.76
5.750	1.01	11.833	18.69	17.917	1.14	24.00	0.76
5.833	1.01	11.917	18.70	18.000	1.14	24.08	0.76
5.917	1.01	12.000	18.70	18.083	1.14	24.17	0.76
6.000	1.01	12.083	77.30	18.167	1.14	24.25	0.76
6.083	1.01	12.167	77.31	18.250	1.14		

Unit Hyd Qpeak (cms)= 0.162

PEAK FLOW (cms)= 0.032 (i)
TIME TO PEAK (hrs)= 12.583
RUNOFF VOLUME (mm)= 13.035
TOTAL RAINFALL (mm)= 63.160
RUNOFF COEFFICIENT = 0.206

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0014)	Area (ha)= 1.80	Curve Number (CN)= 50.0	
ID= 1 DT= 5.0 min	Ia (mm)= 16.00	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.76		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.01	12.250	77.31	18.33	1.14
0.167	0.00	6.250	1.01	12.333	9.10	18.42	1.14
0.250	0.00	6.333	1.14	12.417	9.10	18.50	1.14

0.333	0.69	6.417	1.14	12.500	9.10	18.58	1.14
0.417	0.69	6.500	1.14	12.583	9.10	18.67	1.14
0.500	0.69	6.583	1.14	12.667	9.10	18.75	1.14
0.583	0.69	6.667	1.14	12.750	9.10	18.83	1.14
0.667	0.69	6.750	1.14	12.833	4.67	18.92	1.14
0.750	0.69	6.833	1.14	12.917	4.67	19.00	1.14
0.833	0.69	6.917	1.14	13.000	4.67	19.08	1.14
0.917	0.69	7.000	1.14	13.083	4.67	19.17	1.14
1.000	0.69	7.083	1.14	13.167	4.67	19.25	1.14
1.083	0.69	7.167	1.14	13.250	4.67	19.33	1.14
1.167	0.69	7.250	1.14	13.333	3.41	19.42	1.14
1.250	0.69	7.333	1.39	13.417	3.41	19.50	1.14
1.333	0.69	7.417	1.39	13.500	3.41	19.58	1.14
1.417	0.69	7.500	1.39	13.583	3.41	19.67	1.14
1.500	0.69	7.583	1.39	13.667	3.41	19.75	1.14
1.583	0.69	7.667	1.39	13.750	3.41	19.83	1.14
1.667	0.69	7.750	1.39	13.833	2.65	19.92	1.14
1.750	0.69	7.833	1.39	13.917	2.65	20.00	1.14
1.833	0.69	7.917	1.39	14.000	2.65	20.08	1.14
1.917	0.69	8.000	1.39	14.083	2.65	20.17	1.14
2.000	0.69	8.083	1.39	14.167	2.65	20.25	1.14
2.083	0.69	8.167	1.39	14.250	2.65	20.33	0.76
2.167	0.69	8.250	1.39	14.333	1.89	20.42	0.76
2.250	0.69	8.333	1.64	14.417	1.89	20.50	0.76
2.333	0.82	8.417	1.64	14.500	1.89	20.58	0.76
2.417	0.82	8.500	1.64	14.583	1.89	20.67	0.76
2.500	0.82	8.583	1.64	14.667	1.89	20.75	0.76
2.583	0.82	8.667	1.64	14.750	1.89	20.83	0.76
2.667	0.82	8.750	1.64	14.833	1.89	20.92	0.76
2.750	0.82	8.833	1.77	14.917	1.89	21.00	0.76
2.833	0.82	8.917	1.77	15.000	1.89	21.08	0.76
2.917	0.82	9.000	1.77	15.083	1.89	21.17	0.76
3.000	0.82	9.083	1.77	15.167	1.89	21.25	0.76
3.083	0.82	9.167	1.77	15.250	1.89	21.33	0.76
3.167	0.82	9.250	1.77	15.333	1.89	21.42	0.76
3.250	0.82	9.333	2.02	15.417	1.89	21.50	0.76
3.333	0.82	9.417	2.02	15.500	1.89	21.58	0.76
3.417	0.82	9.500	2.02	15.583	1.89	21.67	0.76
3.500	0.82	9.583	2.02	15.667	1.89	21.75	0.76
3.583	0.82	9.667	2.02	15.750	1.89	21.83	0.76
3.667	0.82	9.750	2.02	15.833	1.89	21.92	0.76
3.750	0.82	9.833	2.27	15.917	1.89	22.00	0.76
3.833	0.82	9.917	2.27	16.000	1.89	22.08	0.76
3.917	0.82	10.000	2.27	16.083	1.89	22.17	0.76
4.000	0.82	10.083	2.27	16.167	1.89	22.25	0.76
4.083	0.82	10.167	2.27	16.250	1.89	22.33	0.76
4.167	0.82	10.250	2.27	16.333	1.14	22.42	0.76
4.250	0.82	10.333	2.91	16.417	1.14	22.50	0.76

4.333	1.01	10.417	2.91	16.500	1.14	22.58	0.76
4.417	1.01	10.500	2.91	16.583	1.14	22.67	0.76
4.500	1.01	10.583	2.91	16.667	1.14	22.75	0.76
4.583	1.01	10.667	2.91	16.750	1.14	22.83	0.76
4.667	1.01	10.750	2.91	16.833	1.14	22.92	0.76
4.750	1.01	10.833	3.92	16.917	1.14	23.00	0.76
4.833	1.01	10.917	3.92	17.000	1.14	23.08	0.76
4.917	1.01	11.000	3.92	17.083	1.14	23.17	0.76
5.000	1.01	11.083	3.92	17.167	1.14	23.25	0.76
5.083	1.01	11.167	3.92	17.250	1.14	23.33	0.76
5.167	1.01	11.250	3.92	17.333	1.14	23.42	0.76
5.250	1.01	11.333	6.06	17.417	1.14	23.50	0.76
5.333	1.01	11.417	6.06	17.500	1.14	23.58	0.76
5.417	1.01	11.500	6.06	17.583	1.14	23.67	0.76
5.500	1.01	11.583	6.06	17.667	1.14	23.75	0.76
5.583	1.01	11.667	6.06	17.750	1.14	23.83	0.76
5.667	1.01	11.750	6.06	17.833	1.14	23.92	0.76
5.750	1.01	11.833	18.69	17.917	1.14	24.00	0.76
5.833	1.01	11.917	18.70	18.000	1.14	24.08	0.76
5.917	1.01	12.000	18.70	18.083	1.14	24.17	0.76
6.000	1.01	12.083	77.30	18.167	1.14	24.25	0.76
6.083	1.01	12.167	77.31	18.250	1.14		

Unit Hyd Qpeak (cms)= 0.090

PEAK FLOW (cms)= 0.011 (i)
TIME TO PEAK (hrs)= 13.083
RUNOFF VOLUME (mm)= 7.384
TOTAL RAINFALL (mm)= 63.160
RUNOFF COEFFICIENT = 0.117

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
NASHYD (0015)
ID= 1 DT= 5.0 min

Area (ha)= 6.70 Curve Number (CN)= 60.0
Ia (mm)= 10.00 # of Linear Res.(N)= 3.00
U.H. Tp(hrs)= 1.45

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.01	12.250	77.31	18.33	1.14
0.167	0.00	6.250	1.01	12.333	9.10	18.42	1.14

0.250	0.00	6.333	1.14	12.417	9.10	18.50	1.14
0.333	0.69	6.417	1.14	12.500	9.10	18.58	1.14
0.417	0.69	6.500	1.14	12.583	9.10	18.67	1.14
0.500	0.69	6.583	1.14	12.667	9.10	18.75	1.14
0.583	0.69	6.667	1.14	12.750	9.10	18.83	1.14
0.667	0.69	6.750	1.14	12.833	4.67	18.92	1.14
0.750	0.69	6.833	1.14	12.917	4.67	19.00	1.14
0.833	0.69	6.917	1.14	13.000	4.67	19.08	1.14
0.917	0.69	7.000	1.14	13.083	4.67	19.17	1.14
1.000	0.69	7.083	1.14	13.167	4.67	19.25	1.14
1.083	0.69	7.167	1.14	13.250	4.67	19.33	1.14
1.167	0.69	7.250	1.14	13.333	3.41	19.42	1.14
1.250	0.69	7.333	1.39	13.417	3.41	19.50	1.14
1.333	0.69	7.417	1.39	13.500	3.41	19.58	1.14
1.417	0.69	7.500	1.39	13.583	3.41	19.67	1.14
1.500	0.69	7.583	1.39	13.667	3.41	19.75	1.14
1.583	0.69	7.667	1.39	13.750	3.41	19.83	1.14
1.667	0.69	7.750	1.39	13.833	2.65	19.92	1.14
1.750	0.69	7.833	1.39	13.917	2.65	20.00	1.14
1.833	0.69	7.917	1.39	14.000	2.65	20.08	1.14
1.917	0.69	8.000	1.39	14.083	2.65	20.17	1.14
2.000	0.69	8.083	1.39	14.167	2.65	20.25	1.14
2.083	0.69	8.167	1.39	14.250	2.65	20.33	0.76
2.167	0.69	8.250	1.39	14.333	1.89	20.42	0.76
2.250	0.69	8.333	1.64	14.417	1.89	20.50	0.76
2.333	0.82	8.417	1.64	14.500	1.89	20.58	0.76
2.417	0.82	8.500	1.64	14.583	1.89	20.67	0.76
2.500	0.82	8.583	1.64	14.667	1.89	20.75	0.76
2.583	0.82	8.667	1.64	14.750	1.89	20.83	0.76
2.667	0.82	8.750	1.64	14.833	1.89	20.92	0.76
2.750	0.82	8.833	1.77	14.917	1.89	21.00	0.76
2.833	0.82	8.917	1.77	15.000	1.89	21.08	0.76
2.917	0.82	9.000	1.77	15.083	1.89	21.17	0.76
3.000	0.82	9.083	1.77	15.167	1.89	21.25	0.76
3.083	0.82	9.167	1.77	15.250	1.89	21.33	0.76
3.167	0.82	9.250	1.77	15.333	1.89	21.42	0.76
3.250	0.82	9.333	2.02	15.417	1.89	21.50	0.76
3.333	0.82	9.417	2.02	15.500	1.89	21.58	0.76
3.417	0.82	9.500	2.02	15.583	1.89	21.67	0.76
3.500	0.82	9.583	2.02	15.667	1.89	21.75	0.76
3.583	0.82	9.667	2.02	15.750	1.89	21.83	0.76
3.667	0.82	9.750	2.02	15.833	1.89	21.92	0.76
3.750	0.82	9.833	2.27	15.917	1.89	22.00	0.76
3.833	0.82	9.917	2.27	16.000	1.89	22.08	0.76
3.917	0.82	10.000	2.27	16.083	1.89	22.17	0.76
4.000	0.82	10.083	2.27	16.167	1.89	22.25	0.76
4.083	0.82	10.167	2.27	16.250	1.89	22.33	0.76
4.167	0.82	10.250	2.27	16.333	1.14	22.42	0.76

4.250	0.82	10.333	2.91	16.417	1.14	22.50	0.76
4.333	1.01	10.417	2.91	16.500	1.14	22.58	0.76
4.417	1.01	10.500	2.91	16.583	1.14	22.67	0.76
4.500	1.01	10.583	2.91	16.667	1.14	22.75	0.76
4.583	1.01	10.667	2.91	16.750	1.14	22.83	0.76
4.667	1.01	10.750	2.91	16.833	1.14	22.92	0.76
4.750	1.01	10.833	3.92	16.917	1.14	23.00	0.76
4.833	1.01	10.917	3.92	17.000	1.14	23.08	0.76
4.917	1.01	11.000	3.92	17.083	1.14	23.17	0.76
5.000	1.01	11.083	3.92	17.167	1.14	23.25	0.76
5.083	1.01	11.167	3.92	17.250	1.14	23.33	0.76
5.167	1.01	11.250	3.92	17.333	1.14	23.42	0.76
5.250	1.01	11.333	6.06	17.417	1.14	23.50	0.76
5.333	1.01	11.417	6.06	17.500	1.14	23.58	0.76
5.417	1.01	11.500	6.06	17.583	1.14	23.67	0.76
5.500	1.01	11.583	6.06	17.667	1.14	23.75	0.76
5.583	1.01	11.667	6.06	17.750	1.14	23.83	0.76
5.667	1.01	11.750	6.06	17.833	1.14	23.92	0.76
5.750	1.01	11.833	18.69	17.917	1.14	24.00	0.76
5.833	1.01	11.917	18.70	18.000	1.14	24.08	0.76
5.917	1.01	12.000	18.70	18.083	1.14	24.17	0.76
6.000	1.01	12.083	77.30	18.167	1.14	24.25	0.76
6.083	1.01	12.167	77.31	18.250	1.14		

Unit Hyd Qpeak (cms)= 0.176

PEAK FLOW (cms)= 0.048 (i)
TIME TO PEAK (hrs)= 13.833
RUNOFF VOLUME (mm)= 12.701
TOTAL RAINFALL (mm)= 63.160
RUNOFF COEFFICIENT = 0.201

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0016)	Area (ha)=	29.16	Curve Number (CN)=	71.4	
ID= 1 DT= 5.0 min	Ia (mm)=	7.88	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	0.68			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.01	12.250	77.31	18.33	1.14

0.167	0.00	6.250	1.01	12.333	9.10	18.42	1.14
0.250	0.00	6.333	1.14	12.417	9.10	18.50	1.14
0.333	0.69	6.417	1.14	12.500	9.10	18.58	1.14
0.417	0.69	6.500	1.14	12.583	9.10	18.67	1.14
0.500	0.69	6.583	1.14	12.667	9.10	18.75	1.14
0.583	0.69	6.667	1.14	12.750	9.10	18.83	1.14
0.667	0.69	6.750	1.14	12.833	4.67	18.92	1.14
0.750	0.69	6.833	1.14	12.917	4.67	19.00	1.14
0.833	0.69	6.917	1.14	13.000	4.67	19.08	1.14
0.917	0.69	7.000	1.14	13.083	4.67	19.17	1.14
1.000	0.69	7.083	1.14	13.167	4.67	19.25	1.14
1.083	0.69	7.167	1.14	13.250	4.67	19.33	1.14
1.167	0.69	7.250	1.14	13.333	3.41	19.42	1.14
1.250	0.69	7.333	1.39	13.417	3.41	19.50	1.14
1.333	0.69	7.417	1.39	13.500	3.41	19.58	1.14
1.417	0.69	7.500	1.39	13.583	3.41	19.67	1.14
1.500	0.69	7.583	1.39	13.667	3.41	19.75	1.14
1.583	0.69	7.667	1.39	13.750	3.41	19.83	1.14
1.667	0.69	7.750	1.39	13.833	2.65	19.92	1.14
1.750	0.69	7.833	1.39	13.917	2.65	20.00	1.14
1.833	0.69	7.917	1.39	14.000	2.65	20.08	1.14
1.917	0.69	8.000	1.39	14.083	2.65	20.17	1.14
2.000	0.69	8.083	1.39	14.167	2.65	20.25	1.14
2.083	0.69	8.167	1.39	14.250	2.65	20.33	0.76
2.167	0.69	8.250	1.39	14.333	1.89	20.42	0.76
2.250	0.69	8.333	1.64	14.417	1.89	20.50	0.76
2.333	0.82	8.417	1.64	14.500	1.89	20.58	0.76
2.417	0.82	8.500	1.64	14.583	1.89	20.67	0.76
2.500	0.82	8.583	1.64	14.667	1.89	20.75	0.76
2.583	0.82	8.667	1.64	14.750	1.89	20.83	0.76
2.667	0.82	8.750	1.64	14.833	1.89	20.92	0.76
2.750	0.82	8.833	1.77	14.917	1.89	21.00	0.76
2.833	0.82	8.917	1.77	15.000	1.89	21.08	0.76
2.917	0.82	9.000	1.77	15.083	1.89	21.17	0.76
3.000	0.82	9.083	1.77	15.167	1.89	21.25	0.76
3.083	0.82	9.167	1.77	15.250	1.89	21.33	0.76
3.167	0.82	9.250	1.77	15.333	1.89	21.42	0.76
3.250	0.82	9.333	2.02	15.417	1.89	21.50	0.76
3.333	0.82	9.417	2.02	15.500	1.89	21.58	0.76
3.417	0.82	9.500	2.02	15.583	1.89	21.67	0.76
3.500	0.82	9.583	2.02	15.667	1.89	21.75	0.76
3.583	0.82	9.667	2.02	15.750	1.89	21.83	0.76
3.667	0.82	9.750	2.02	15.833	1.89	21.92	0.76
3.750	0.82	9.833	2.27	15.917	1.89	22.00	0.76
3.833	0.82	9.917	2.27	16.000	1.89	22.08	0.76
3.917	0.82	10.000	2.27	16.083	1.89	22.17	0.76
4.000	0.82	10.083	2.27	16.167	1.89	22.25	0.76
4.083	0.82	10.167	2.27	16.250	1.89	22.33	0.76

4.167	0.82	10.250	2.27	16.333	1.14	22.42	0.76
4.250	0.82	10.333	2.91	16.417	1.14	22.50	0.76
4.333	1.01	10.417	2.91	16.500	1.14	22.58	0.76
4.417	1.01	10.500	2.91	16.583	1.14	22.67	0.76
4.500	1.01	10.583	2.91	16.667	1.14	22.75	0.76
4.583	1.01	10.667	2.91	16.750	1.14	22.83	0.76
4.667	1.01	10.750	2.91	16.833	1.14	22.92	0.76
4.750	1.01	10.833	3.92	16.917	1.14	23.00	0.76
4.833	1.01	10.917	3.92	17.000	1.14	23.08	0.76
4.917	1.01	11.000	3.92	17.083	1.14	23.17	0.76
5.000	1.01	11.083	3.92	17.167	1.14	23.25	0.76
5.083	1.01	11.167	3.92	17.250	1.14	23.33	0.76
5.167	1.01	11.250	3.92	17.333	1.14	23.42	0.76
5.250	1.01	11.333	6.06	17.417	1.14	23.50	0.76
5.333	1.01	11.417	6.06	17.500	1.14	23.58	0.76
5.417	1.01	11.500	6.06	17.583	1.14	23.67	0.76
5.500	1.01	11.583	6.06	17.667	1.14	23.75	0.76
5.583	1.01	11.667	6.06	17.750	1.14	23.83	0.76
5.667	1.01	11.750	6.06	17.833	1.14	23.92	0.76
5.750	1.01	11.833	18.69	17.917	1.14	24.00	0.76
5.833	1.01	11.917	18.70	18.000	1.14	24.08	0.76
5.917	1.01	12.000	18.70	18.083	1.14	24.17	0.76
6.000	1.01	12.083	77.30	18.167	1.14	24.25	0.76
6.083	1.01	12.167	77.31	18.250	1.14		

Unit Hyd Qpeak (cms)= 1.638

PEAK FLOW (cms)= 0.588 (i)
TIME TO PEAK (hrs)= 12.917
RUNOFF VOLUME (mm)= 19.461
TOTAL RAINFALL (mm)= 63.160
RUNOFF COEFFICIENT = 0.308

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	
NASHYD (0019)	Area (ha)= 39.68 Curve Number (CN)= 60.7
ID= 1 DT= 5.0 min	Ia (mm)= 8.26 # of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 1.18

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.01	12.250	77.31	18.33	1.14
0.167	0.00	6.250	1.01	12.333	9.10	18.42	1.14
0.250	0.00	6.333	1.14	12.417	9.10	18.50	1.14
0.333	0.69	6.417	1.14	12.500	9.10	18.58	1.14
0.417	0.69	6.500	1.14	12.583	9.10	18.67	1.14
0.500	0.69	6.583	1.14	12.667	9.10	18.75	1.14
0.583	0.69	6.667	1.14	12.750	9.10	18.83	1.14
0.667	0.69	6.750	1.14	12.833	4.67	18.92	1.14
0.750	0.69	6.833	1.14	12.917	4.67	19.00	1.14
0.833	0.69	6.917	1.14	13.000	4.67	19.08	1.14
0.917	0.69	7.000	1.14	13.083	4.67	19.17	1.14
1.000	0.69	7.083	1.14	13.167	4.67	19.25	1.14
1.083	0.69	7.167	1.14	13.250	4.67	19.33	1.14
1.167	0.69	7.250	1.14	13.333	3.41	19.42	1.14
1.250	0.69	7.333	1.39	13.417	3.41	19.50	1.14
1.333	0.69	7.417	1.39	13.500	3.41	19.58	1.14
1.417	0.69	7.500	1.39	13.583	3.41	19.67	1.14
1.500	0.69	7.583	1.39	13.667	3.41	19.75	1.14
1.583	0.69	7.667	1.39	13.750	3.41	19.83	1.14
1.667	0.69	7.750	1.39	13.833	2.65	19.92	1.14
1.750	0.69	7.833	1.39	13.917	2.65	20.00	1.14
1.833	0.69	7.917	1.39	14.000	2.65	20.08	1.14
1.917	0.69	8.000	1.39	14.083	2.65	20.17	1.14
2.000	0.69	8.083	1.39	14.167	2.65	20.25	1.14
2.083	0.69	8.167	1.39	14.250	2.65	20.33	0.76
2.167	0.69	8.250	1.39	14.333	1.89	20.42	0.76
2.250	0.69	8.333	1.64	14.417	1.89	20.50	0.76
2.333	0.82	8.417	1.64	14.500	1.89	20.58	0.76
2.417	0.82	8.500	1.64	14.583	1.89	20.67	0.76
2.500	0.82	8.583	1.64	14.667	1.89	20.75	0.76
2.583	0.82	8.667	1.64	14.750	1.89	20.83	0.76
2.667	0.82	8.750	1.64	14.833	1.89	20.92	0.76
2.750	0.82	8.833	1.77	14.917	1.89	21.00	0.76
2.833	0.82	8.917	1.77	15.000	1.89	21.08	0.76
2.917	0.82	9.000	1.77	15.083	1.89	21.17	0.76
3.000	0.82	9.083	1.77	15.167	1.89	21.25	0.76
3.083	0.82	9.167	1.77	15.250	1.89	21.33	0.76
3.167	0.82	9.250	1.77	15.333	1.89	21.42	0.76
3.250	0.82	9.333	2.02	15.417	1.89	21.50	0.76
3.333	0.82	9.417	2.02	15.500	1.89	21.58	0.76
3.417	0.82	9.500	2.02	15.583	1.89	21.67	0.76
3.500	0.82	9.583	2.02	15.667	1.89	21.75	0.76
3.583	0.82	9.667	2.02	15.750	1.89	21.83	0.76
3.667	0.82	9.750	2.02	15.833	1.89	21.92	0.76
3.750	0.82	9.833	2.27	15.917	1.89	22.00	0.76
3.833	0.82	9.917	2.27	16.000	1.89	22.08	0.76
3.917	0.82	10.000	2.27	16.083	1.89	22.17	0.76
4.000	0.82	10.083	2.27	16.167	1.89	22.25	0.76

Post-Development VO Output

1508-7498

4.083	0.82	10.167	2.27	16.250	1.89	22.33	0.76
4.167	0.82	10.250	2.27	16.333	1.14	22.42	0.76
4.250	0.82	10.333	2.91	16.417	1.14	22.50	0.76
4.333	1.01	10.417	2.91	16.500	1.14	22.58	0.76
4.417	1.01	10.500	2.91	16.583	1.14	22.67	0.76
4.500	1.01	10.583	2.91	16.667	1.14	22.75	0.76
4.583	1.01	10.667	2.91	16.750	1.14	22.83	0.76
4.667	1.01	10.750	2.91	16.833	1.14	22.92	0.76
4.750	1.01	10.833	3.92	16.917	1.14	23.00	0.76
4.833	1.01	10.917	3.92	17.000	1.14	23.08	0.76
4.917	1.01	11.000	3.92	17.083	1.14	23.17	0.76
5.000	1.01	11.083	3.92	17.167	1.14	23.25	0.76
5.083	1.01	11.167	3.92	17.250	1.14	23.33	0.76
5.167	1.01	11.250	3.92	17.333	1.14	23.42	0.76
5.250	1.01	11.333	6.06	17.417	1.14	23.50	0.76
5.333	1.01	11.417	6.06	17.500	1.14	23.58	0.76
5.417	1.01	11.500	6.06	17.583	1.14	23.67	0.76
5.500	1.01	11.583	6.06	17.667	1.14	23.75	0.76
5.583	1.01	11.667	6.06	17.750	1.14	23.83	0.76
5.667	1.01	11.750	6.06	17.833	1.14	23.92	0.76
5.750	1.01	11.833	18.69	17.917	1.14	24.00	0.76
5.833	1.01	11.917	18.70	18.000	1.14	24.08	0.76
5.917	1.01	12.000	18.70	18.083	1.14	24.17	0.76
6.000	1.01	12.083	77.30	18.167	1.14	24.25	0.76
6.083	1.01	12.167	77.31	18.250	1.14		

Unit Hyd Qpeak (cms)= 1.284

PEAK FLOW (cms)= 0.363 (i)
TIME TO PEAK (hrs)= 13.500
RUNOFF VOLUME (mm)= 13.728
TOTAL RAINFALL (mm)= 63.160
RUNOFF COEFFICIENT = 0.217

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0024)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
	ID1= 1 (0010):	14.85	0.104	13.17	9.03
	+ ID2= 2 (0013):	1.70	0.032	12.58	13.04
	ID = 3 (0024):	16.55	0.122	13.00	9.44

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
	ID1= 3 (0024):	16.55	0.122	13.00	9.44
	+ ID2= 2 (0014):	1.80	0.011	13.08	7.38
	ID = 1 (0024):	18.35	0.132	13.00	9.24

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
	ID1= 1 (0024):	18.35	0.132	13.00	9.24
	+ ID2= 2 (0015):	6.70	0.048	13.83	12.70
	ID = 3 (0024):	25.05	0.170	13.17	10.16

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
	ID1= 3 (0024):	25.05	0.170	13.17	10.16
	+ ID2= 2 (0016):	29.16	0.588	12.92	19.46
	ID = 1 (0024):	54.21	0.751	12.92	15.16

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
	ID1= 1 (0024):	54.21	0.751	12.92	15.16
	+ ID2= 2 (0019):	39.68	0.363	13.50	13.73
	ID = 3 (0024):	93.89	1.060	13.08	14.56

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
	ID1= 3 (0024):	93.89	1.060	13.08	14.56
	+ ID2= 2 (0007):	100.92	0.607	14.17	11.96
	ID = 1 (0024):	194.81	1.508	13.33	13.21

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
	ID1= 1 (0024):	194.81	1.508	13.33	13.21
	+ ID2= 2 (0008):	23.99	0.131	13.25	7.45
	ID = 3 (0024):	218.80	1.639	13.33	12.58

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
	ID1= 3 (0024):	218.80	1.639	13.33	12.58
	+ ID2= 2 (0009):	6.37	0.040	13.08	7.60
	ID = 1 (0024):	225.17	1.677	13.33	12.44

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB				
NASHYD (0011)	Area (ha)=	46.28	Curve Number (CN)=	72.2
ID= 1 DT= 5.0 min	Ia (mm)=	7.09	# of Linear Res.(N)=	3.00
	U.H. Tp(hrs)=	0.30		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	6.167	1.01	12.250	77.31	18.33	1.14
0.167	0.00	6.250	1.01	12.333	9.10	18.42	1.14
0.250	0.00	6.333	1.14	12.417	9.10	18.50	1.14
0.333	0.69	6.417	1.14	12.500	9.10	18.58	1.14
0.417	0.69	6.500	1.14	12.583	9.10	18.67	1.14
0.500	0.69	6.583	1.14	12.667	9.10	18.75	1.14
0.583	0.69	6.667	1.14	12.750	9.10	18.83	1.14
0.667	0.69	6.750	1.14	12.833	4.67	18.92	1.14
0.750	0.69	6.833	1.14	12.917	4.67	19.00	1.14
0.833	0.69	6.917	1.14	13.000	4.67	19.08	1.14
0.917	0.69	7.000	1.14	13.083	4.67	19.17	1.14
1.000	0.69	7.083	1.14	13.167	4.67	19.25	1.14
1.083	0.69	7.167	1.14	13.250	4.67	19.33	1.14
1.167	0.69	7.250	1.14	13.333	3.41	19.42	1.14
1.250	0.69	7.333	1.39	13.417	3.41	19.50	1.14
1.333	0.69	7.417	1.39	13.500	3.41	19.58	1.14
1.417	0.69	7.500	1.39	13.583	3.41	19.67	1.14
1.500	0.69	7.583	1.39	13.667	3.41	19.75	1.14
1.583	0.69	7.667	1.39	13.750	3.41	19.83	1.14
1.667	0.69	7.750	1.39	13.833	2.65	19.92	1.14
1.750	0.69	7.833	1.39	13.917	2.65	20.00	1.14
1.833	0.69	7.917	1.39	14.000	2.65	20.08	1.14
1.917	0.69	8.000	1.39	14.083	2.65	20.17	1.14
2.000	0.69	8.083	1.39	14.167	2.65	20.25	1.14
2.083	0.69	8.167	1.39	14.250	2.65	20.33	0.76
2.167	0.69	8.250	1.39	14.333	1.89	20.42	0.76
2.250	0.69	8.333	1.64	14.417	1.89	20.50	0.76
2.333	0.82	8.417	1.64	14.500	1.89	20.58	0.76
2.417	0.82	8.500	1.64	14.583	1.89	20.67	0.76
2.500	0.82	8.583	1.64	14.667	1.89	20.75	0.76
2.583	0.82	8.667	1.64	14.750	1.89	20.83	0.76
2.667	0.82	8.750	1.64	14.833	1.89	20.92	0.76
2.750	0.82	8.833	1.77	14.917	1.89	21.00	0.76
2.833	0.82	8.917	1.77	15.000	1.89	21.08	0.76
2.917	0.82	9.000	1.77	15.083	1.89	21.17	0.76
3.000	0.82	9.083	1.77	15.167	1.89	21.25	0.76
3.083	0.82	9.167	1.77	15.250	1.89	21.33	0.76
3.167	0.82	9.250	1.77	15.333	1.89	21.42	0.76
3.250	0.82	9.333	2.02	15.417	1.89	21.50	0.76
3.333	0.82	9.417	2.02	15.500	1.89	21.58	0.76
3.417	0.82	9.500	2.02	15.583	1.89	21.67	0.76
3.500	0.82	9.583	2.02	15.667	1.89	21.75	0.76
3.583	0.82	9.667	2.02	15.750	1.89	21.83	0.76
3.667	0.82	9.750	2.02	15.833	1.89	21.92	0.76
3.750	0.82	9.833	2.27	15.917	1.89	22.00	0.76
3.833	0.82	9.917	2.27	16.000	1.89	22.08	0.76
3.917	0.82	10.000	2.27	16.083	1.89	22.17	0.76

Post-Development VO Output

1508-7498

4.000	0.82	10.083	2.27	16.167	1.89	22.25	0.76
4.083	0.82	10.167	2.27	16.250	1.89	22.33	0.76
4.167	0.82	10.250	2.27	16.333	1.14	22.42	0.76
4.250	0.82	10.333	2.91	16.417	1.14	22.50	0.76
4.333	1.01	10.417	2.91	16.500	1.14	22.58	0.76
4.417	1.01	10.500	2.91	16.583	1.14	22.67	0.76
4.500	1.01	10.583	2.91	16.667	1.14	22.75	0.76
4.583	1.01	10.667	2.91	16.750	1.14	22.83	0.76
4.667	1.01	10.750	2.91	16.833	1.14	22.92	0.76
4.750	1.01	10.833	3.92	16.917	1.14	23.00	0.76
4.833	1.01	10.917	3.92	17.000	1.14	23.08	0.76
4.917	1.01	11.000	3.92	17.083	1.14	23.17	0.76
5.000	1.01	11.083	3.92	17.167	1.14	23.25	0.76
5.083	1.01	11.167	3.92	17.250	1.14	23.33	0.76
5.167	1.01	11.250	3.92	17.333	1.14	23.42	0.76
5.250	1.01	11.333	6.06	17.417	1.14	23.50	0.76
5.333	1.01	11.417	6.06	17.500	1.14	23.58	0.76
5.417	1.01	11.500	6.06	17.583	1.14	23.67	0.76
5.500	1.01	11.583	6.06	17.667	1.14	23.75	0.76
5.583	1.01	11.667	6.06	17.750	1.14	23.83	0.76
5.667	1.01	11.750	6.06	17.833	1.14	23.92	0.76
5.750	1.01	11.833	18.69	17.917	1.14	24.00	0.76
5.833	1.01	11.917	18.70	18.000	1.14	24.08	0.76
5.917	1.01	12.000	18.70	18.083	1.14	24.17	0.76
6.000	1.01	12.083	77.30	18.167	1.14	24.25	0.76
6.083	1.01	12.167	77.31	18.250	1.14		

Unit Hyd Qpeak (cms)= 5.892

PEAK FLOW (cms)= 1.799 (i)
TIME TO PEAK (hrs)= 12.417
RUNOFF VOLUME (mm)= 20.417
TOTAL RAINFALL (mm)= 63.160
RUNOFF COEFFICIENT = 0.323

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB NASHYD (0012)	Area (ha)= 1.13	Curve Number (CN)= 67.4
ID= 1 DT= 5.0 min	Ia (mm)= 7.88	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.43	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.01	12.250	77.31	18.33	1.14
0.167	0.00	6.250	1.01	12.333	9.10	18.42	1.14
0.250	0.00	6.333	1.14	12.417	9.10	18.50	1.14
0.333	0.69	6.417	1.14	12.500	9.10	18.58	1.14
0.417	0.69	6.500	1.14	12.583	9.10	18.67	1.14
0.500	0.69	6.583	1.14	12.667	9.10	18.75	1.14
0.583	0.69	6.667	1.14	12.750	9.10	18.83	1.14
0.667	0.69	6.750	1.14	12.833	4.67	18.92	1.14
0.750	0.69	6.833	1.14	12.917	4.67	19.00	1.14
0.833	0.69	6.917	1.14	13.000	4.67	19.08	1.14
0.917	0.69	7.000	1.14	13.083	4.67	19.17	1.14
1.000	0.69	7.083	1.14	13.167	4.67	19.25	1.14
1.083	0.69	7.167	1.14	13.250	4.67	19.33	1.14
1.167	0.69	7.250	1.14	13.333	3.41	19.42	1.14
1.250	0.69	7.333	1.39	13.417	3.41	19.50	1.14
1.333	0.69	7.417	1.39	13.500	3.41	19.58	1.14
1.417	0.69	7.500	1.39	13.583	3.41	19.67	1.14
1.500	0.69	7.583	1.39	13.667	3.41	19.75	1.14
1.583	0.69	7.667	1.39	13.750	3.41	19.83	1.14
1.667	0.69	7.750	1.39	13.833	2.65	19.92	1.14
1.750	0.69	7.833	1.39	13.917	2.65	20.00	1.14
1.833	0.69	7.917	1.39	14.000	2.65	20.08	1.14
1.917	0.69	8.000	1.39	14.083	2.65	20.17	1.14
2.000	0.69	8.083	1.39	14.167	2.65	20.25	1.14
2.083	0.69	8.167	1.39	14.250	2.65	20.33	0.76
2.167	0.69	8.250	1.39	14.333	1.89	20.42	0.76
2.250	0.69	8.333	1.64	14.417	1.89	20.50	0.76
2.333	0.82	8.417	1.64	14.500	1.89	20.58	0.76
2.417	0.82	8.500	1.64	14.583	1.89	20.67	0.76
2.500	0.82	8.583	1.64	14.667	1.89	20.75	0.76
2.583	0.82	8.667	1.64	14.750	1.89	20.83	0.76
2.667	0.82	8.750	1.64	14.833	1.89	20.92	0.76
2.750	0.82	8.833	1.77	14.917	1.89	21.00	0.76
2.833	0.82	8.917	1.77	15.000	1.89	21.08	0.76
2.917	0.82	9.000	1.77	15.083	1.89	21.17	0.76
3.000	0.82	9.083	1.77	15.167	1.89	21.25	0.76
3.083	0.82	9.167	1.77	15.250	1.89	21.33	0.76
3.167	0.82	9.250	1.77	15.333	1.89	21.42	0.76
3.250	0.82	9.333	2.02	15.417	1.89	21.50	0.76
3.333	0.82	9.417	2.02	15.500	1.89	21.58	0.76
3.417	0.82	9.500	2.02	15.583	1.89	21.67	0.76
3.500	0.82	9.583	2.02	15.667	1.89	21.75	0.76
3.583	0.82	9.667	2.02	15.750	1.89	21.83	0.76
3.667	0.82	9.750	2.02	15.833	1.89	21.92	0.76
3.750	0.82	9.833	2.27	15.917	1.89	22.00	0.76
3.833	0.82	9.917	2.27	16.000	1.89	22.08	0.76

3.917	0.82	10.000	2.27	16.083	1.89	22.17	0.76
4.000	0.82	10.083	2.27	16.167	1.89	22.25	0.76
4.083	0.82	10.167	2.27	16.250	1.89	22.33	0.76
4.167	0.82	10.250	2.27	16.333	1.14	22.42	0.76
4.250	0.82	10.333	2.91	16.417	1.14	22.50	0.76
4.333	1.01	10.417	2.91	16.500	1.14	22.58	0.76
4.417	1.01	10.500	2.91	16.583	1.14	22.67	0.76
4.500	1.01	10.583	2.91	16.667	1.14	22.75	0.76
4.583	1.01	10.667	2.91	16.750	1.14	22.83	0.76
4.667	1.01	10.750	2.91	16.833	1.14	22.92	0.76
4.750	1.01	10.833	3.92	16.917	1.14	23.00	0.76
4.833	1.01	10.917	3.92	17.000	1.14	23.08	0.76
4.917	1.01	11.000	3.92	17.083	1.14	23.17	0.76
5.000	1.01	11.083	3.92	17.167	1.14	23.25	0.76
5.083	1.01	11.167	3.92	17.250	1.14	23.33	0.76
5.167	1.01	11.250	3.92	17.333	1.14	23.42	0.76
5.250	1.01	11.333	6.06	17.417	1.14	23.50	0.76
5.333	1.01	11.417	6.06	17.500	1.14	23.58	0.76
5.417	1.01	11.500	6.06	17.583	1.14	23.67	0.76
5.500	1.01	11.583	6.06	17.667	1.14	23.75	0.76
5.583	1.01	11.667	6.06	17.750	1.14	23.83	0.76
5.667	1.01	11.750	6.06	17.833	1.14	23.92	0.76
5.750	1.01	11.833	18.69	17.917	1.14	24.00	0.76
5.833	1.01	11.917	18.70	18.000	1.14	24.08	0.76
5.917	1.01	12.000	18.70	18.083	1.14	24.17	0.76
6.000	1.01	12.083	77.30	18.167	1.14	24.25	0.76
6.083	1.01	12.167	77.31	18.250	1.14		

Unit Hyd Qpeak (cms)= 0.100

PEAK FLOW (cms)= 0.028 (i)
TIME TO PEAK (hrs)= 12.583
RUNOFF VOLUME (mm)= 17.131
TOTAL RAINFALL (mm)= 63.160
RUNOFF COEFFICIENT = 0.271

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	
STANDHYD (0043)	Area (ha)= 0.13
ID= 1 DT= 5.0 min	Total Imp(%)= 30.77 Dir. Conn.(%)= 7.69

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	0.04	0.09
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	0.50	0.50

Length (m)=	29.44	70.00	
Mannings n =	0.013	0.250	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.01	12.250	77.31	18.33	1.14
0.167	0.00	6.250	1.01	12.333	9.10	18.42	1.14
0.250	0.00	6.333	1.14	12.417	9.10	18.50	1.14
0.333	0.69	6.417	1.14	12.500	9.10	18.58	1.14
0.417	0.69	6.500	1.14	12.583	9.10	18.67	1.14
0.500	0.69	6.583	1.14	12.667	9.10	18.75	1.14
0.583	0.69	6.667	1.14	12.750	9.10	18.83	1.14
0.667	0.69	6.750	1.14	12.833	4.67	18.92	1.14
0.750	0.69	6.833	1.14	12.917	4.67	19.00	1.14
0.833	0.69	6.917	1.14	13.000	4.67	19.08	1.14
0.917	0.69	7.000	1.14	13.083	4.67	19.17	1.14
1.000	0.69	7.083	1.14	13.167	4.67	19.25	1.14
1.083	0.69	7.167	1.14	13.250	4.67	19.33	1.14
1.167	0.69	7.250	1.14	13.333	3.41	19.42	1.14
1.250	0.69	7.333	1.39	13.417	3.41	19.50	1.14
1.333	0.69	7.417	1.39	13.500	3.41	19.58	1.14
1.417	0.69	7.500	1.39	13.583	3.41	19.67	1.14
1.500	0.69	7.583	1.39	13.667	3.41	19.75	1.14
1.583	0.69	7.667	1.39	13.750	3.41	19.83	1.14
1.667	0.69	7.750	1.39	13.833	2.65	19.92	1.14
1.750	0.69	7.833	1.39	13.917	2.65	20.00	1.14
1.833	0.69	7.917	1.39	14.000	2.65	20.08	1.14
1.917	0.69	8.000	1.39	14.083	2.65	20.17	1.14
2.000	0.69	8.083	1.39	14.167	2.65	20.25	1.14
2.083	0.69	8.167	1.39	14.250	2.65	20.33	0.76
2.167	0.69	8.250	1.39	14.333	1.89	20.42	0.76
2.250	0.69	8.333	1.64	14.417	1.89	20.50	0.76
2.333	0.82	8.417	1.64	14.500	1.89	20.58	0.76
2.417	0.82	8.500	1.64	14.583	1.89	20.67	0.76
2.500	0.82	8.583	1.64	14.667	1.89	20.75	0.76
2.583	0.82	8.667	1.64	14.750	1.89	20.83	0.76
2.667	0.82	8.750	1.64	14.833	1.89	20.92	0.76
2.750	0.82	8.833	1.77	14.917	1.89	21.00	0.76
2.833	0.82	8.917	1.77	15.000	1.89	21.08	0.76
2.917	0.82	9.000	1.77	15.083	1.89	21.17	0.76
3.000	0.82	9.083	1.77	15.167	1.89	21.25	0.76
3.083	0.82	9.167	1.77	15.250	1.89	21.33	0.76
3.167	0.82	9.250	1.77	15.333	1.89	21.42	0.76
3.250	0.82	9.333	2.02	15.417	1.89	21.50	0.76

3.333	0.82	9.417	2.02	15.500	1.89	21.58	0.76
3.417	0.82	9.500	2.02	15.583	1.89	21.67	0.76
3.500	0.82	9.583	2.02	15.667	1.89	21.75	0.76
3.583	0.82	9.667	2.02	15.750	1.89	21.83	0.76
3.667	0.82	9.750	2.02	15.833	1.89	21.92	0.76
3.750	0.82	9.833	2.27	15.917	1.89	22.00	0.76
3.833	0.82	9.917	2.27	16.000	1.89	22.08	0.76
3.917	0.82	10.000	2.27	16.083	1.89	22.17	0.76
4.000	0.82	10.083	2.27	16.167	1.89	22.25	0.76
4.083	0.82	10.167	2.27	16.250	1.89	22.33	0.76
4.167	0.82	10.250	2.27	16.333	1.14	22.42	0.76
4.250	0.82	10.333	2.91	16.417	1.14	22.50	0.76
4.333	1.01	10.417	2.91	16.500	1.14	22.58	0.76
4.417	1.01	10.500	2.91	16.583	1.14	22.67	0.76
4.500	1.01	10.583	2.91	16.667	1.14	22.75	0.76
4.583	1.01	10.667	2.91	16.750	1.14	22.83	0.76
4.667	1.01	10.750	2.91	16.833	1.14	22.92	0.76
4.750	1.01	10.833	3.92	16.917	1.14	23.00	0.76
4.833	1.01	10.917	3.92	17.000	1.14	23.08	0.76
4.917	1.01	11.000	3.92	17.083	1.14	23.17	0.76
5.000	1.01	11.083	3.92	17.167	1.14	23.25	0.76
5.083	1.01	11.167	3.92	17.250	1.14	23.33	0.76
5.167	1.01	11.250	3.92	17.333	1.14	23.42	0.76
5.250	1.01	11.333	6.06	17.417	1.14	23.50	0.76
5.333	1.01	11.417	6.06	17.500	1.14	23.58	0.76
5.417	1.01	11.500	6.06	17.583	1.14	23.67	0.76
5.500	1.01	11.583	6.06	17.667	1.14	23.75	0.76
5.583	1.01	11.667	6.06	17.750	1.14	23.83	0.76
5.667	1.01	11.750	6.06	17.833	1.14	23.92	0.76
5.750	1.01	11.833	18.69	17.917	1.14	24.00	0.76
5.833	1.01	11.917	18.70	18.000	1.14	24.08	0.76
5.917	1.01	12.000	18.70	18.083	1.14	24.17	0.76
6.000	1.01	12.083	77.30	18.167	1.14	24.25	0.76
6.083	1.01	12.167	77.31	18.250	1.14		

Max.Eff.Inten.(mm/hr)=	77.31	29.83	
over (min)	5.00	30.00	
Storage Coeff. (min)=	1.67 (ii)	25.95 (ii)	
Unit Hyd. Tpeak (min)=	5.00	30.00	
Unit Hyd. peak (cms)=	0.32	0.04	
			TOTALS
PEAK FLOW (cms)=	0.00	0.00	0.005 (iii)
TIME TO PEAK (hrs)=	12.25	12.58	12.58
RUNOFF VOLUME (mm)=	62.16	24.34	27.13
TOTAL RAINFALL (mm)=	63.16	63.16	63.16
RUNOFF COEFFICIENT =	0.98	0.39	0.43

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	
STANDHYD (0044)	Area (ha)= 1.62
ID= 1 DT= 5.0 min	Total Imp(%)= 48.77 Dir. Conn.(%)= 30.86

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.79	0.83
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	1.40
Length	(m)=	103.92	400.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.01	12.250	77.31	18.33	1.14
0.167	0.00	6.250	1.01	12.333	9.10	18.42	1.14
0.250	0.00	6.333	1.14	12.417	9.10	18.50	1.14
0.333	0.69	6.417	1.14	12.500	9.10	18.58	1.14
0.417	0.69	6.500	1.14	12.583	9.10	18.67	1.14
0.500	0.69	6.583	1.14	12.667	9.10	18.75	1.14
0.583	0.69	6.667	1.14	12.750	9.10	18.83	1.14
0.667	0.69	6.750	1.14	12.833	4.67	18.92	1.14
0.750	0.69	6.833	1.14	12.917	4.67	19.00	1.14
0.833	0.69	6.917	1.14	13.000	4.67	19.08	1.14
0.917	0.69	7.000	1.14	13.083	4.67	19.17	1.14
1.000	0.69	7.083	1.14	13.167	4.67	19.25	1.14
1.083	0.69	7.167	1.14	13.250	4.67	19.33	1.14
1.167	0.69	7.250	1.14	13.333	3.41	19.42	1.14
1.250	0.69	7.333	1.39	13.417	3.41	19.50	1.14
1.333	0.69	7.417	1.39	13.500	3.41	19.58	1.14
1.417	0.69	7.500	1.39	13.583	3.41	19.67	1.14
1.500	0.69	7.583	1.39	13.667	3.41	19.75	1.14
1.583	0.69	7.667	1.39	13.750	3.41	19.83	1.14
1.667	0.69	7.750	1.39	13.833	2.65	19.92	1.14

1.750	0.69	7.833	1.39	13.917	2.65	20.00	1.14
1.833	0.69	7.917	1.39	14.000	2.65	20.08	1.14
1.917	0.69	8.000	1.39	14.083	2.65	20.17	1.14
2.000	0.69	8.083	1.39	14.167	2.65	20.25	1.14
2.083	0.69	8.167	1.39	14.250	2.65	20.33	0.76
2.167	0.69	8.250	1.39	14.333	1.89	20.42	0.76
2.250	0.69	8.333	1.64	14.417	1.89	20.50	0.76
2.333	0.82	8.417	1.64	14.500	1.89	20.58	0.76
2.417	0.82	8.500	1.64	14.583	1.89	20.67	0.76
2.500	0.82	8.583	1.64	14.667	1.89	20.75	0.76
2.583	0.82	8.667	1.64	14.750	1.89	20.83	0.76
2.667	0.82	8.750	1.64	14.833	1.89	20.92	0.76
2.750	0.82	8.833	1.77	14.917	1.89	21.00	0.76
2.833	0.82	8.917	1.77	15.000	1.89	21.08	0.76
2.917	0.82	9.000	1.77	15.083	1.89	21.17	0.76
3.000	0.82	9.083	1.77	15.167	1.89	21.25	0.76
3.083	0.82	9.167	1.77	15.250	1.89	21.33	0.76
3.167	0.82	9.250	1.77	15.333	1.89	21.42	0.76
3.250	0.82	9.333	2.02	15.417	1.89	21.50	0.76
3.333	0.82	9.417	2.02	15.500	1.89	21.58	0.76
3.417	0.82	9.500	2.02	15.583	1.89	21.67	0.76
3.500	0.82	9.583	2.02	15.667	1.89	21.75	0.76
3.583	0.82	9.667	2.02	15.750	1.89	21.83	0.76
3.667	0.82	9.750	2.02	15.833	1.89	21.92	0.76
3.750	0.82	9.833	2.27	15.917	1.89	22.00	0.76
3.833	0.82	9.917	2.27	16.000	1.89	22.08	0.76
3.917	0.82	10.000	2.27	16.083	1.89	22.17	0.76
4.000	0.82	10.083	2.27	16.167	1.89	22.25	0.76
4.083	0.82	10.167	2.27	16.250	1.89	22.33	0.76
4.167	0.82	10.250	2.27	16.333	1.14	22.42	0.76
4.250	0.82	10.333	2.91	16.417	1.14	22.50	0.76
4.333	1.01	10.417	2.91	16.500	1.14	22.58	0.76
4.417	1.01	10.500	2.91	16.583	1.14	22.67	0.76
4.500	1.01	10.583	2.91	16.667	1.14	22.75	0.76
4.583	1.01	10.667	2.91	16.750	1.14	22.83	0.76
4.667	1.01	10.750	2.91	16.833	1.14	22.92	0.76
4.750	1.01	10.833	3.92	16.917	1.14	23.00	0.76
4.833	1.01	10.917	3.92	17.000	1.14	23.08	0.76
4.917	1.01	11.000	3.92	17.083	1.14	23.17	0.76
5.000	1.01	11.083	3.92	17.167	1.14	23.25	0.76
5.083	1.01	11.167	3.92	17.250	1.14	23.33	0.76
5.167	1.01	11.250	3.92	17.333	1.14	23.42	0.76
5.250	1.01	11.333	6.06	17.417	1.14	23.50	0.76
5.333	1.01	11.417	6.06	17.500	1.14	23.58	0.76
5.417	1.01	11.500	6.06	17.583	1.14	23.67	0.76
5.500	1.01	11.583	6.06	17.667	1.14	23.75	0.76
5.583	1.01	11.667	6.06	17.750	1.14	23.83	0.76
5.667	1.01	11.750	6.06	17.833	1.14	23.92	0.76

5.750	1.01	11.833	18.69	17.917	1.14	24.00	0.76
5.833	1.01	11.917	18.70	18.000	1.14	24.08	0.76
5.917	1.01	12.000	18.70	18.083	1.14	24.17	0.76
6.000	1.01	12.083	77.30	18.167	1.14	24.25	0.76
6.083	1.01	12.167	77.31	18.250	1.14		

Max.Eff.Inten.(mm/hr)=		77.31	16.61	
over (min)		5.00	70.00	
Storage Coeff. (min)=		3.57 (ii)	67.69 (ii)	
Unit Hyd. Tpeak (min)=		5.00	70.00	
Unit Hyd. peak (cms)=		0.26	0.02	
				TOTALS
PEAK FLOW	(cms)=	0.11	0.02	0.111 (iii)
TIME TO PEAK	(hrs)=	12.25	13.33	12.25
RUNOFF VOLUME	(mm)=	62.16	24.55	36.13
TOTAL RAINFALL	(mm)=	63.16	63.16	63.16
RUNOFF COEFFICIENT	=	0.98	0.39	0.57

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0041)	Area (ha)=	0.59	Curve Number (CN)= 71.5
ID= 1 DT= 5.0 min	Ia (mm)=	4.75	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	0.53	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.01	12.250	77.31	18.33	1.14
0.167	0.00	6.250	1.01	12.333	9.10	18.42	1.14
0.250	0.00	6.333	1.14	12.417	9.10	18.50	1.14
0.333	0.69	6.417	1.14	12.500	9.10	18.58	1.14
0.417	0.69	6.500	1.14	12.583	9.10	18.67	1.14
0.500	0.69	6.583	1.14	12.667	9.10	18.75	1.14
0.583	0.69	6.667	1.14	12.750	9.10	18.83	1.14
0.667	0.69	6.750	1.14	12.833	4.67	18.92	1.14
0.750	0.69	6.833	1.14	12.917	4.67	19.00	1.14

0.833	0.69	6.917	1.14	13.000	4.67	19.08	1.14
0.917	0.69	7.000	1.14	13.083	4.67	19.17	1.14
1.000	0.69	7.083	1.14	13.167	4.67	19.25	1.14
1.083	0.69	7.167	1.14	13.250	4.67	19.33	1.14
1.167	0.69	7.250	1.14	13.333	3.41	19.42	1.14
1.250	0.69	7.333	1.39	13.417	3.41	19.50	1.14
1.333	0.69	7.417	1.39	13.500	3.41	19.58	1.14
1.417	0.69	7.500	1.39	13.583	3.41	19.67	1.14
1.500	0.69	7.583	1.39	13.667	3.41	19.75	1.14
1.583	0.69	7.667	1.39	13.750	3.41	19.83	1.14
1.667	0.69	7.750	1.39	13.833	2.65	19.92	1.14
1.750	0.69	7.833	1.39	13.917	2.65	20.00	1.14
1.833	0.69	7.917	1.39	14.000	2.65	20.08	1.14
1.917	0.69	8.000	1.39	14.083	2.65	20.17	1.14
2.000	0.69	8.083	1.39	14.167	2.65	20.25	1.14
2.083	0.69	8.167	1.39	14.250	2.65	20.33	0.76
2.167	0.69	8.250	1.39	14.333	1.89	20.42	0.76
2.250	0.69	8.333	1.64	14.417	1.89	20.50	0.76
2.333	0.82	8.417	1.64	14.500	1.89	20.58	0.76
2.417	0.82	8.500	1.64	14.583	1.89	20.67	0.76
2.500	0.82	8.583	1.64	14.667	1.89	20.75	0.76
2.583	0.82	8.667	1.64	14.750	1.89	20.83	0.76
2.667	0.82	8.750	1.64	14.833	1.89	20.92	0.76
2.750	0.82	8.833	1.77	14.917	1.89	21.00	0.76
2.833	0.82	8.917	1.77	15.000	1.89	21.08	0.76
2.917	0.82	9.000	1.77	15.083	1.89	21.17	0.76
3.000	0.82	9.083	1.77	15.167	1.89	21.25	0.76
3.083	0.82	9.167	1.77	15.250	1.89	21.33	0.76
3.167	0.82	9.250	1.77	15.333	1.89	21.42	0.76
3.250	0.82	9.333	2.02	15.417	1.89	21.50	0.76
3.333	0.82	9.417	2.02	15.500	1.89	21.58	0.76
3.417	0.82	9.500	2.02	15.583	1.89	21.67	0.76
3.500	0.82	9.583	2.02	15.667	1.89	21.75	0.76
3.583	0.82	9.667	2.02	15.750	1.89	21.83	0.76
3.667	0.82	9.750	2.02	15.833	1.89	21.92	0.76
3.750	0.82	9.833	2.27	15.917	1.89	22.00	0.76
3.833	0.82	9.917	2.27	16.000	1.89	22.08	0.76
3.917	0.82	10.000	2.27	16.083	1.89	22.17	0.76
4.000	0.82	10.083	2.27	16.167	1.89	22.25	0.76
4.083	0.82	10.167	2.27	16.250	1.89	22.33	0.76
4.167	0.82	10.250	2.27	16.333	1.14	22.42	0.76
4.250	0.82	10.333	2.91	16.417	1.14	22.50	0.76
4.333	1.01	10.417	2.91	16.500	1.14	22.58	0.76
4.417	1.01	10.500	2.91	16.583	1.14	22.67	0.76
4.500	1.01	10.583	2.91	16.667	1.14	22.75	0.76
4.583	1.01	10.667	2.91	16.750	1.14	22.83	0.76
4.667	1.01	10.750	2.91	16.833	1.14	22.92	0.76
4.750	1.01	10.833	3.92	16.917	1.14	23.00	0.76

4.833	1.01	10.917	3.92	17.000	1.14	23.08	0.76
4.917	1.01	11.000	3.92	17.083	1.14	23.17	0.76
5.000	1.01	11.083	3.92	17.167	1.14	23.25	0.76
5.083	1.01	11.167	3.92	17.250	1.14	23.33	0.76
5.167	1.01	11.250	3.92	17.333	1.14	23.42	0.76
5.250	1.01	11.333	6.06	17.417	1.14	23.50	0.76
5.333	1.01	11.417	6.06	17.500	1.14	23.58	0.76
5.417	1.01	11.500	6.06	17.583	1.14	23.67	0.76
5.500	1.01	11.583	6.06	17.667	1.14	23.75	0.76
5.583	1.01	11.667	6.06	17.750	1.14	23.83	0.76
5.667	1.01	11.750	6.06	17.833	1.14	23.92	0.76
5.750	1.01	11.833	18.69	17.917	1.14	24.00	0.76
5.833	1.01	11.917	18.70	18.000	1.14	24.08	0.76
5.917	1.01	12.000	18.70	18.083	1.14	24.17	0.76
6.000	1.01	12.083	77.30	18.167	1.14	24.25	0.76
6.083	1.01	12.167	77.31	18.250	1.14		

Unit Hyd Qpeak (cms)= 0.043

PEAK FLOW (cms)= 0.016 (i)
TIME TO PEAK (hrs)= 12.667
RUNOFF VOLUME (mm)= 21.340
TOTAL RAINFALL (mm)= 63.160
RUNOFF COEFFICIENT = 0.338

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0028)	Area (ha)=	1.38	Curve Number (CN)= 64.1
ID= 1 DT= 5.0 min	Ia (mm)=	8.51	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	0.39	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.01	12.250	77.31	18.33	1.14
0.167	0.00	6.250	1.01	12.333	9.10	18.42	1.14
0.250	0.00	6.333	1.14	12.417	9.10	18.50	1.14
0.333	0.69	6.417	1.14	12.500	9.10	18.58	1.14
0.417	0.69	6.500	1.14	12.583	9.10	18.67	1.14
0.500	0.69	6.583	1.14	12.667	9.10	18.75	1.14
0.583	0.69	6.667	1.14	12.750	9.10	18.83	1.14
0.667	0.69	6.750	1.14	12.833	4.67	18.92	1.14

0.750	0.69	6.833	1.14	12.917	4.67	19.00	1.14
0.833	0.69	6.917	1.14	13.000	4.67	19.08	1.14
0.917	0.69	7.000	1.14	13.083	4.67	19.17	1.14
1.000	0.69	7.083	1.14	13.167	4.67	19.25	1.14
1.083	0.69	7.167	1.14	13.250	4.67	19.33	1.14
1.167	0.69	7.250	1.14	13.333	3.41	19.42	1.14
1.250	0.69	7.333	1.39	13.417	3.41	19.50	1.14
1.333	0.69	7.417	1.39	13.500	3.41	19.58	1.14
1.417	0.69	7.500	1.39	13.583	3.41	19.67	1.14
1.500	0.69	7.583	1.39	13.667	3.41	19.75	1.14
1.583	0.69	7.667	1.39	13.750	3.41	19.83	1.14
1.667	0.69	7.750	1.39	13.833	2.65	19.92	1.14
1.750	0.69	7.833	1.39	13.917	2.65	20.00	1.14
1.833	0.69	7.917	1.39	14.000	2.65	20.08	1.14
1.917	0.69	8.000	1.39	14.083	2.65	20.17	1.14
2.000	0.69	8.083	1.39	14.167	2.65	20.25	1.14
2.083	0.69	8.167	1.39	14.250	2.65	20.33	0.76
2.167	0.69	8.250	1.39	14.333	1.89	20.42	0.76
2.250	0.69	8.333	1.64	14.417	1.89	20.50	0.76
2.333	0.82	8.417	1.64	14.500	1.89	20.58	0.76
2.417	0.82	8.500	1.64	14.583	1.89	20.67	0.76
2.500	0.82	8.583	1.64	14.667	1.89	20.75	0.76
2.583	0.82	8.667	1.64	14.750	1.89	20.83	0.76
2.667	0.82	8.750	1.64	14.833	1.89	20.92	0.76
2.750	0.82	8.833	1.77	14.917	1.89	21.00	0.76
2.833	0.82	8.917	1.77	15.000	1.89	21.08	0.76
2.917	0.82	9.000	1.77	15.083	1.89	21.17	0.76
3.000	0.82	9.083	1.77	15.167	1.89	21.25	0.76
3.083	0.82	9.167	1.77	15.250	1.89	21.33	0.76
3.167	0.82	9.250	1.77	15.333	1.89	21.42	0.76
3.250	0.82	9.333	2.02	15.417	1.89	21.50	0.76
3.333	0.82	9.417	2.02	15.500	1.89	21.58	0.76
3.417	0.82	9.500	2.02	15.583	1.89	21.67	0.76
3.500	0.82	9.583	2.02	15.667	1.89	21.75	0.76
3.583	0.82	9.667	2.02	15.750	1.89	21.83	0.76
3.667	0.82	9.750	2.02	15.833	1.89	21.92	0.76
3.750	0.82	9.833	2.27	15.917	1.89	22.00	0.76
3.833	0.82	9.917	2.27	16.000	1.89	22.08	0.76
3.917	0.82	10.000	2.27	16.083	1.89	22.17	0.76
4.000	0.82	10.083	2.27	16.167	1.89	22.25	0.76
4.083	0.82	10.167	2.27	16.250	1.89	22.33	0.76
4.167	0.82	10.250	2.27	16.333	1.14	22.42	0.76
4.250	0.82	10.333	2.91	16.417	1.14	22.50	0.76
4.333	1.01	10.417	2.91	16.500	1.14	22.58	0.76
4.417	1.01	10.500	2.91	16.583	1.14	22.67	0.76
4.500	1.01	10.583	2.91	16.667	1.14	22.75	0.76
4.583	1.01	10.667	2.91	16.750	1.14	22.83	0.76
4.667	1.01	10.750	2.91	16.833	1.14	22.92	0.76

4.750	1.01	10.833	3.92	16.917	1.14	23.00	0.76
4.833	1.01	10.917	3.92	17.000	1.14	23.08	0.76
4.917	1.01	11.000	3.92	17.083	1.14	23.17	0.76
5.000	1.01	11.083	3.92	17.167	1.14	23.25	0.76
5.083	1.01	11.167	3.92	17.250	1.14	23.33	0.76
5.167	1.01	11.250	3.92	17.333	1.14	23.42	0.76
5.250	1.01	11.333	6.06	17.417	1.14	23.50	0.76
5.333	1.01	11.417	6.06	17.500	1.14	23.58	0.76
5.417	1.01	11.500	6.06	17.583	1.14	23.67	0.76
5.500	1.01	11.583	6.06	17.667	1.14	23.75	0.76
5.583	1.01	11.667	6.06	17.750	1.14	23.83	0.76
5.667	1.01	11.750	6.06	17.833	1.14	23.92	0.76
5.750	1.01	11.833	18.69	17.917	1.14	24.00	0.76
5.833	1.01	11.917	18.70	18.000	1.14	24.08	0.76
5.917	1.01	12.000	18.70	18.083	1.14	24.17	0.76
6.000	1.01	12.083	77.30	18.167	1.14	24.25	0.76
6.083	1.01	12.167	77.31	18.250	1.14		

```
     Unit Hyd Qpeak  (cms)=   0.135

     PEAK FLOW       (cms)=   0.032 (i)
     TIME TO PEAK    (hrs)=  12.500
     RUNOFF VOLUME    (mm)=  15.184
     TOTAL RAINFALL   (mm)=  63.160
     RUNOFF COEFFICIENT   =   0.240

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

-------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0023)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 1 (  0011):    46.28   1.799    12.42    20.42
      + ID2= 2 (  0012):     1.13   0.028    12.58    17.13
        ================================================
        ID = 3 (  0023):    47.41   1.824    12.42    20.34

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
-------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0023)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 3 (  0023):    47.41   1.824    12.42    20.34
      + ID2= 2 (  0028):     1.38   0.032    12.50    15.18
```

ID = 1 (0023):	48.79	1.854	12.42	20.19

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0023):	48.79	1.854	12.42	20.19
+ ID2= 2 (0041):	0.59	0.016	12.67	21.34
ID = 3 (0023):	49.38	1.867	12.42	20.21

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0023):	49.38	1.867	12.42	20.21
+ ID2= 2 (0043):	0.13	0.005	12.58	27.13
ID = 1 (0023):	49.51	1.870	12.42	20.23

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0023):	49.51	1.870	12.42	20.23
+ ID2= 2 (0044):	1.62	0.111	12.25	36.13
ID = 3 (0023):	51.13	1.896	12.42	20.73

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0025)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0023):	51.13	1.896	12.42	20.73
+ ID2= 2 (0024):	225.17	1.677	13.33	12.44

ID = 3 (0025):	276.30	2.775	12.50	13.97

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

****
** SIMULATION:H - 5-year SCS **
****

READ STORM	Filename: C:\Users\ecomish\AppData\Local\Temp\c819dd95-70ee-48d0-b884-0b24f1308cad\39aaeae0
Ptotal= 83.51 mm	Comments: 5yr 24hr 15min SCS Type II (MTO) - 15% I

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.00	0.00	6.25	1.50	12.50	12.03	18.75	1.50
0.25	0.92	6.50	1.50	12.75	6.18	19.00	1.50
0.50	0.92	6.75	1.50	13.00	6.18	19.25	1.50
0.75	0.92	7.00	1.50	13.25	4.51	19.50	1.50
1.00	0.92	7.25	1.84	13.50	4.51	19.75	1.50
1.25	0.92	7.50	1.84	13.75	3.51	20.00	1.50
1.50	0.92	7.75	1.84	14.00	3.51	20.25	1.00
1.75	0.92	8.00	1.84	14.25	2.51	20.50	1.00
2.00	0.92	8.25	2.17	14.50	2.51	20.75	1.00
2.25	1.09	8.50	2.17	14.75	2.51	21.00	1.00
2.50	1.09	8.75	2.34	15.00	2.51	21.25	1.00
2.75	1.09	9.00	2.34	15.25	2.51	21.50	1.00
3.00	1.09	9.25	2.67	15.50	2.51	21.75	1.00
3.25	1.09	9.50	2.67	15.75	2.51	22.00	1.00
3.50	1.09	9.75	3.01	16.00	2.51	22.25	1.00
3.75	1.09	10.00	3.01	16.25	1.50	22.50	1.00
4.00	1.09	10.25	3.84	16.50	1.50	22.75	1.00
4.25	1.34	10.50	3.84	16.75	1.50	23.00	1.00
4.50	1.34	10.75	5.18	17.00	1.50	23.25	1.00
4.75	1.34	11.00	5.18	17.25	1.50	23.50	1.00
5.00	1.34	11.25	8.02	17.50	1.50	23.75	1.00
5.25	1.34	11.50	8.02	17.75	1.50	24.00	1.00
5.50	1.34	11.75	24.72	18.00	1.50		
5.75	1.34	12.00	102.22	18.25	1.50		
6.00	1.34	12.25	12.03	18.50	1.50		

CALIB NASHYD (0007)	Area (ha)= 100.92	Curve Number (CN)= 55.9

|ID= 1 DT= 5.0 min | Ia (mm)= 7.89 # of Linear Res.(N)= 3.00

U.H. Tp(hrs)= 1.70

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.34	12.250	102.22	18.33	1.50
0.167	0.00	6.250	1.34	12.333	12.04	18.42	1.50
0.250	0.00	6.333	1.50	12.417	12.03	18.50	1.50
0.333	0.92	6.417	1.50	12.500	12.03	18.58	1.50
0.417	0.92	6.500	1.50	12.583	12.03	18.67	1.50
0.500	0.92	6.583	1.50	12.667	12.03	18.75	1.50
0.583	0.92	6.667	1.50	12.750	12.03	18.83	1.50
0.667	0.92	6.750	1.50	12.833	6.18	18.92	1.50
0.750	0.92	6.833	1.50	12.917	6.18	19.00	1.50
0.833	0.92	6.917	1.50	13.000	6.18	19.08	1.50
0.917	0.92	7.000	1.50	13.083	6.18	19.17	1.50
1.000	0.92	7.083	1.50	13.167	6.18	19.25	1.50
1.083	0.92	7.167	1.50	13.250	6.18	19.33	1.50
1.167	0.92	7.250	1.50	13.333	4.51	19.42	1.50
1.250	0.92	7.333	1.84	13.417	4.51	19.50	1.50
1.333	0.92	7.417	1.84	13.500	4.51	19.58	1.50
1.417	0.92	7.500	1.84	13.583	4.51	19.67	1.50
1.500	0.92	7.583	1.84	13.667	4.51	19.75	1.50
1.583	0.92	7.667	1.84	13.750	4.51	19.83	1.50
1.667	0.92	7.750	1.84	13.833	3.51	19.92	1.50
1.750	0.92	7.833	1.84	13.917	3.51	20.00	1.50
1.833	0.92	7.917	1.84	14.000	3.51	20.08	1.50
1.917	0.92	8.000	1.84	14.083	3.51	20.17	1.50
2.000	0.92	8.083	1.84	14.167	3.51	20.25	1.50
2.083	0.92	8.167	1.84	14.250	3.51	20.33	1.00
2.167	0.92	8.250	1.84	14.333	2.51	20.42	1.00
2.250	0.92	8.333	2.17	14.417	2.51	20.50	1.00
2.333	1.09	8.417	2.17	14.500	2.51	20.58	1.00
2.417	1.09	8.500	2.17	14.583	2.51	20.67	1.00
2.500	1.09	8.583	2.17	14.667	2.51	20.75	1.00
2.583	1.09	8.667	2.17	14.750	2.51	20.83	1.00
2.667	1.09	8.750	2.17	14.833	2.51	20.92	1.00
2.750	1.09	8.833	2.34	14.917	2.51	21.00	1.00
2.833	1.09	8.917	2.34	15.000	2.51	21.08	1.00
2.917	1.09	9.000	2.34	15.083	2.51	21.17	1.00
3.000	1.09	9.083	2.34	15.167	2.51	21.25	1.00
3.083	1.09	9.167	2.34	15.250	2.51	21.33	1.00
3.167	1.09	9.250	2.34	15.333	2.51	21.42	1.00
3.250	1.09	9.333	2.67	15.417	2.51	21.50	1.00

3.333	1.09	9.417	2.67	15.500	2.51	21.58	1.00
3.417	1.09	9.500	2.67	15.583	2.51	21.67	1.00
3.500	1.09	9.583	2.67	15.667	2.51	21.75	1.00
3.583	1.09	9.667	2.67	15.750	2.51	21.83	1.00
3.667	1.09	9.750	2.67	15.833	2.51	21.92	1.00
3.750	1.09	9.833	3.01	15.917	2.51	22.00	1.00
3.833	1.09	9.917	3.01	16.000	2.51	22.08	1.00
3.917	1.09	10.000	3.01	16.083	2.51	22.17	1.00
4.000	1.09	10.083	3.01	16.167	2.51	22.25	1.00
4.083	1.09	10.167	3.01	16.250	2.51	22.33	1.00
4.167	1.09	10.250	3.01	16.333	1.50	22.42	1.00
4.250	1.09	10.333	3.84	16.417	1.50	22.50	1.00
4.333	1.34	10.417	3.84	16.500	1.50	22.58	1.00
4.417	1.34	10.500	3.84	16.583	1.50	22.67	1.00
4.500	1.34	10.583	3.84	16.667	1.50	22.75	1.00
4.583	1.34	10.667	3.84	16.750	1.50	22.83	1.00
4.667	1.34	10.750	3.84	16.833	1.50	22.92	1.00
4.750	1.34	10.833	5.18	16.917	1.50	23.00	1.00
4.833	1.34	10.917	5.18	17.000	1.50	23.08	1.00
4.917	1.34	11.000	5.18	17.083	1.50	23.17	1.00
5.000	1.34	11.083	5.18	17.167	1.50	23.25	1.00
5.083	1.34	11.167	5.18	17.250	1.50	23.33	1.00
5.167	1.34	11.250	5.18	17.333	1.50	23.42	1.00
5.250	1.34	11.333	8.02	17.417	1.50	23.50	1.00
5.333	1.34	11.417	8.02	17.500	1.50	23.58	1.00
5.417	1.34	11.500	8.02	17.583	1.50	23.67	1.00
5.500	1.34	11.583	8.02	17.667	1.50	23.75	1.00
5.583	1.34	11.667	8.02	17.750	1.50	23.83	1.00
5.667	1.34	11.750	8.02	17.833	1.50	23.92	1.00
5.750	1.34	11.833	24.72	17.917	1.50	24.00	1.00
5.833	1.34	11.917	24.72	18.000	1.50	24.08	1.00
5.917	1.34	12.000	24.72	18.083	1.50	24.17	1.00
6.000	1.34	12.083	102.21	18.167	1.50	24.25	1.00
6.083	1.34	12.167	102.22	18.250	1.50		

Unit Hyd Qpeak (cms)= 2.267

PEAK FLOW (cms)= 1.073 (i)
TIME TO PEAK (hrs)= 14.083
RUNOFF VOLUME (mm)= 20.743
TOTAL RAINFALL (mm)= 83.510
RUNOFF COEFFICIENT = 0.248

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB

| NASHYD (0008)| Area (ha)= 23.99 Curve Number (CN)= 44.7
|ID= 1 DT= 5.0 min | Ia (mm)= 10.91 # of Linear Res.(N)= 3.00
--- U.H. Tp(hrs)= 0.97

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.34	12.250	102.22	18.33	1.50
0.167	0.00	6.250	1.34	12.333	12.04	18.42	1.50
0.250	0.00	6.333	1.50	12.417	12.03	18.50	1.50
0.333	0.92	6.417	1.50	12.500	12.03	18.58	1.50
0.417	0.92	6.500	1.50	12.583	12.03	18.67	1.50
0.500	0.92	6.583	1.50	12.667	12.03	18.75	1.50
0.583	0.92	6.667	1.50	12.750	12.03	18.83	1.50
0.667	0.92	6.750	1.50	12.833	6.18	18.92	1.50
0.750	0.92	6.833	1.50	12.917	6.18	19.00	1.50
0.833	0.92	6.917	1.50	13.000	6.18	19.08	1.50
0.917	0.92	7.000	1.50	13.083	6.18	19.17	1.50
1.000	0.92	7.083	1.50	13.167	6.18	19.25	1.50
1.083	0.92	7.167	1.50	13.250	6.18	19.33	1.50
1.167	0.92	7.250	1.50	13.333	4.51	19.42	1.50
1.250	0.92	7.333	1.84	13.417	4.51	19.50	1.50
1.333	0.92	7.417	1.84	13.500	4.51	19.58	1.50
1.417	0.92	7.500	1.84	13.583	4.51	19.67	1.50
1.500	0.92	7.583	1.84	13.667	4.51	19.75	1.50
1.583	0.92	7.667	1.84	13.750	4.51	19.83	1.50
1.667	0.92	7.750	1.84	13.833	3.51	19.92	1.50
1.750	0.92	7.833	1.84	13.917	3.51	20.00	1.50
1.833	0.92	7.917	1.84	14.000	3.51	20.08	1.50
1.917	0.92	8.000	1.84	14.083	3.51	20.17	1.50
2.000	0.92	8.083	1.84	14.167	3.51	20.25	1.50
2.083	0.92	8.167	1.84	14.250	3.51	20.33	1.00
2.167	0.92	8.250	1.84	14.333	2.51	20.42	1.00
2.250	0.92	8.333	2.17	14.417	2.51	20.50	1.00
2.333	1.09	8.417	2.17	14.500	2.51	20.58	1.00
2.417	1.09	8.500	2.17	14.583	2.51	20.67	1.00
2.500	1.09	8.583	2.17	14.667	2.51	20.75	1.00
2.583	1.09	8.667	2.17	14.750	2.51	20.83	1.00
2.667	1.09	8.750	2.17	14.833	2.51	20.92	1.00
2.750	1.09	8.833	2.34	14.917	2.51	21.00	1.00
2.833	1.09	8.917	2.34	15.000	2.51	21.08	1.00
2.917	1.09	9.000	2.34	15.083	2.51	21.17	1.00
3.000	1.09	9.083	2.34	15.167	2.51	21.25	1.00
3.083	1.09	9.167	2.34	15.250	2.51	21.33	1.00
3.167	1.09	9.250	2.34	15.333	2.51	21.42	1.00

3.250	1.09	9.333	2.67	15.417	2.51	21.50	1.00
3.333	1.09	9.417	2.67	15.500	2.51	21.58	1.00
3.417	1.09	9.500	2.67	15.583	2.51	21.67	1.00
3.500	1.09	9.583	2.67	15.667	2.51	21.75	1.00
3.583	1.09	9.667	2.67	15.750	2.51	21.83	1.00
3.667	1.09	9.750	2.67	15.833	2.51	21.92	1.00
3.750	1.09	9.833	3.01	15.917	2.51	22.00	1.00
3.833	1.09	9.917	3.01	16.000	2.51	22.08	1.00
3.917	1.09	10.000	3.01	16.083	2.51	22.17	1.00
4.000	1.09	10.083	3.01	16.167	2.51	22.25	1.00
4.083	1.09	10.167	3.01	16.250	2.51	22.33	1.00
4.167	1.09	10.250	3.01	16.333	1.50	22.42	1.00
4.250	1.09	10.333	3.84	16.417	1.50	22.50	1.00
4.333	1.34	10.417	3.84	16.500	1.50	22.58	1.00
4.417	1.34	10.500	3.84	16.583	1.50	22.67	1.00
4.500	1.34	10.583	3.84	16.667	1.50	22.75	1.00
4.583	1.34	10.667	3.84	16.750	1.50	22.83	1.00
4.667	1.34	10.750	3.84	16.833	1.50	22.92	1.00
4.750	1.34	10.833	5.18	16.917	1.50	23.00	1.00
4.833	1.34	10.917	5.18	17.000	1.50	23.08	1.00
4.917	1.34	11.000	5.18	17.083	1.50	23.17	1.00
5.000	1.34	11.083	5.18	17.167	1.50	23.25	1.00
5.083	1.34	11.167	5.18	17.250	1.50	23.33	1.00
5.167	1.34	11.250	5.18	17.333	1.50	23.42	1.00
5.250	1.34	11.333	8.02	17.417	1.50	23.50	1.00
5.333	1.34	11.417	8.02	17.500	1.50	23.58	1.00
5.417	1.34	11.500	8.02	17.583	1.50	23.67	1.00
5.500	1.34	11.583	8.02	17.667	1.50	23.75	1.00
5.583	1.34	11.667	8.02	17.750	1.50	23.83	1.00
5.667	1.34	11.750	8.02	17.833	1.50	23.92	1.00
5.750	1.34	11.833	24.72	17.917	1.50	24.00	1.00
5.833	1.34	11.917	24.72	18.000	1.50	24.08	1.00
5.917	1.34	12.000	24.72	18.083	1.50	24.17	1.00
6.000	1.34	12.083	102.21	18.167	1.50	24.25	1.00
6.083	1.34	12.167	102.22	18.250	1.50		

Unit Hyd Qpeak (cms)= 0.945

PEAK FLOW (cms)= 0.248 (i)
TIME TO PEAK (hrs)= 13.250
RUNOFF VOLUME (mm)= 13.625
TOTAL RAINFALL (mm)= 83.510
RUNOFF COEFFICIENT = 0.163

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0009)	Area (ha)=	6.37	Curve Number (CN)=	50.5	
ID= 1 DT= 5.0 min	Ia (mm)=	15.69	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	0.77			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.34	12.250	102.22	18.33	1.50
0.167	0.00	6.250	1.34	12.333	12.04	18.42	1.50
0.250	0.00	6.333	1.50	12.417	12.03	18.50	1.50
0.333	0.92	6.417	1.50	12.500	12.03	18.58	1.50
0.417	0.92	6.500	1.50	12.583	12.03	18.67	1.50
0.500	0.92	6.583	1.50	12.667	12.03	18.75	1.50
0.583	0.92	6.667	1.50	12.750	12.03	18.83	1.50
0.667	0.92	6.750	1.50	12.833	6.18	18.92	1.50
0.750	0.92	6.833	1.50	12.917	6.18	19.00	1.50
0.833	0.92	6.917	1.50	13.000	6.18	19.08	1.50
0.917	0.92	7.000	1.50	13.083	6.18	19.17	1.50
1.000	0.92	7.083	1.50	13.167	6.18	19.25	1.50
1.083	0.92	7.167	1.50	13.250	6.18	19.33	1.50
1.167	0.92	7.250	1.50	13.333	4.51	19.42	1.50
1.250	0.92	7.333	1.84	13.417	4.51	19.50	1.50
1.333	0.92	7.417	1.84	13.500	4.51	19.58	1.50
1.417	0.92	7.500	1.84	13.583	4.51	19.67	1.50
1.500	0.92	7.583	1.84	13.667	4.51	19.75	1.50
1.583	0.92	7.667	1.84	13.750	4.51	19.83	1.50
1.667	0.92	7.750	1.84	13.833	3.51	19.92	1.50
1.750	0.92	7.833	1.84	13.917	3.51	20.00	1.50
1.833	0.92	7.917	1.84	14.000	3.51	20.08	1.50
1.917	0.92	8.000	1.84	14.083	3.51	20.17	1.50
2.000	0.92	8.083	1.84	14.167	3.51	20.25	1.50
2.083	0.92	8.167	1.84	14.250	3.51	20.33	1.00
2.167	0.92	8.250	1.84	14.333	2.51	20.42	1.00
2.250	0.92	8.333	2.17	14.417	2.51	20.50	1.00
2.333	1.09	8.417	2.17	14.500	2.51	20.58	1.00
2.417	1.09	8.500	2.17	14.583	2.51	20.67	1.00
2.500	1.09	8.583	2.17	14.667	2.51	20.75	1.00
2.583	1.09	8.667	2.17	14.750	2.51	20.83	1.00
2.667	1.09	8.750	2.17	14.833	2.51	20.92	1.00
2.750	1.09	8.833	2.34	14.917	2.51	21.00	1.00
2.833	1.09	8.917	2.34	15.000	2.51	21.08	1.00
2.917	1.09	9.000	2.34	15.083	2.51	21.17	1.00
3.000	1.09	9.083	2.34	15.167	2.51	21.25	1.00
3.083	1.09	9.167	2.34	15.250	2.51	21.33	1.00

3.167	1.09	9.250	2.34	15.333	2.51	21.42	1.00
3.250	1.09	9.333	2.67	15.417	2.51	21.50	1.00
3.333	1.09	9.417	2.67	15.500	2.51	21.58	1.00
3.417	1.09	9.500	2.67	15.583	2.51	21.67	1.00
3.500	1.09	9.583	2.67	15.667	2.51	21.75	1.00
3.583	1.09	9.667	2.67	15.750	2.51	21.83	1.00
3.667	1.09	9.750	2.67	15.833	2.51	21.92	1.00
3.750	1.09	9.833	3.01	15.917	2.51	22.00	1.00
3.833	1.09	9.917	3.01	16.000	2.51	22.08	1.00
3.917	1.09	10.000	3.01	16.083	2.51	22.17	1.00
4.000	1.09	10.083	3.01	16.167	2.51	22.25	1.00
4.083	1.09	10.167	3.01	16.250	2.51	22.33	1.00
4.167	1.09	10.250	3.01	16.333	1.50	22.42	1.00
4.250	1.09	10.333	3.84	16.417	1.50	22.50	1.00
4.333	1.34	10.417	3.84	16.500	1.50	22.58	1.00
4.417	1.34	10.500	3.84	16.583	1.50	22.67	1.00
4.500	1.34	10.583	3.84	16.667	1.50	22.75	1.00
4.583	1.34	10.667	3.84	16.750	1.50	22.83	1.00
4.667	1.34	10.750	3.84	16.833	1.50	22.92	1.00
4.750	1.34	10.833	5.18	16.917	1.50	23.00	1.00
4.833	1.34	10.917	5.18	17.000	1.50	23.08	1.00
4.917	1.34	11.000	5.18	17.083	1.50	23.17	1.00
5.000	1.34	11.083	5.18	17.167	1.50	23.25	1.00
5.083	1.34	11.167	5.18	17.250	1.50	23.33	1.00
5.167	1.34	11.250	5.18	17.333	1.50	23.42	1.00
5.250	1.34	11.333	8.02	17.417	1.50	23.50	1.00
5.333	1.34	11.417	8.02	17.500	1.50	23.58	1.00
5.417	1.34	11.500	8.02	17.583	1.50	23.67	1.00
5.500	1.34	11.583	8.02	17.667	1.50	23.75	1.00
5.583	1.34	11.667	8.02	17.750	1.50	23.83	1.00
5.667	1.34	11.750	8.02	17.833	1.50	23.92	1.00
5.750	1.34	11.833	24.72	17.917	1.50	24.00	1.00
5.833	1.34	11.917	24.72	18.000	1.50	24.08	1.00
5.917	1.34	12.000	24.72	18.083	1.50	24.17	1.00
6.000	1.34	12.083	102.21	18.167	1.50	24.25	1.00
6.083	1.34	12.167	102.22	18.250	1.50		

Unit Hyd Qpeak (cms)= 0.316

PEAK FLOW (cms)= 0.082 (i)
TIME TO PEAK (hrs)= 13.000
RUNOFF VOLUME (mm)= 14.510
TOTAL RAINFALL (mm)= 83.510
RUNOFF COEFFICIENT = 0.174

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0010)	Area (ha)=	14.85	Curve Number (CN)=	52.9	
ID= 1 DT= 5.0 min	Ia (mm)=	13.28	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	0.89			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.34	12.250	102.22	18.33	1.50
0.167	0.00	6.250	1.34	12.333	12.04	18.42	1.50
0.250	0.00	6.333	1.50	12.417	12.03	18.50	1.50
0.333	0.92	6.417	1.50	12.500	12.03	18.58	1.50
0.417	0.92	6.500	1.50	12.583	12.03	18.67	1.50
0.500	0.92	6.583	1.50	12.667	12.03	18.75	1.50
0.583	0.92	6.667	1.50	12.750	12.03	18.83	1.50
0.667	0.92	6.750	1.50	12.833	6.18	18.92	1.50
0.750	0.92	6.833	1.50	12.917	6.18	19.00	1.50
0.833	0.92	6.917	1.50	13.000	6.18	19.08	1.50
0.917	0.92	7.000	1.50	13.083	6.18	19.17	1.50
1.000	0.92	7.083	1.50	13.167	6.18	19.25	1.50
1.083	0.92	7.167	1.50	13.250	6.18	19.33	1.50
1.167	0.92	7.250	1.50	13.333	4.51	19.42	1.50
1.250	0.92	7.333	1.84	13.417	4.51	19.50	1.50
1.333	0.92	7.417	1.84	13.500	4.51	19.58	1.50
1.417	0.92	7.500	1.84	13.583	4.51	19.67	1.50
1.500	0.92	7.583	1.84	13.667	4.51	19.75	1.50
1.583	0.92	7.667	1.84	13.750	4.51	19.83	1.50
1.667	0.92	7.750	1.84	13.833	3.51	19.92	1.50
1.750	0.92	7.833	1.84	13.917	3.51	20.00	1.50
1.833	0.92	7.917	1.84	14.000	3.51	20.08	1.50
1.917	0.92	8.000	1.84	14.083	3.51	20.17	1.50
2.000	0.92	8.083	1.84	14.167	3.51	20.25	1.50
2.083	0.92	8.167	1.84	14.250	3.51	20.33	1.00
2.167	0.92	8.250	1.84	14.333	2.51	20.42	1.00
2.250	0.92	8.333	2.17	14.417	2.51	20.50	1.00
2.333	1.09	8.417	2.17	14.500	2.51	20.58	1.00
2.417	1.09	8.500	2.17	14.583	2.51	20.67	1.00
2.500	1.09	8.583	2.17	14.667	2.51	20.75	1.00
2.583	1.09	8.667	2.17	14.750	2.51	20.83	1.00
2.667	1.09	8.750	2.17	14.833	2.51	20.92	1.00
2.750	1.09	8.833	2.34	14.917	2.51	21.00	1.00
2.833	1.09	8.917	2.34	15.000	2.51	21.08	1.00
2.917	1.09	9.000	2.34	15.083	2.51	21.17	1.00
3.000	1.09	9.083	2.34	15.167	2.51	21.25	1.00

3.083	1.09	9.167	2.34	15.250	2.51	21.33	1.00
3.167	1.09	9.250	2.34	15.333	2.51	21.42	1.00
3.250	1.09	9.333	2.67	15.417	2.51	21.50	1.00
3.333	1.09	9.417	2.67	15.500	2.51	21.58	1.00
3.417	1.09	9.500	2.67	15.583	2.51	21.67	1.00
3.500	1.09	9.583	2.67	15.667	2.51	21.75	1.00
3.583	1.09	9.667	2.67	15.750	2.51	21.83	1.00
3.667	1.09	9.750	2.67	15.833	2.51	21.92	1.00
3.750	1.09	9.833	3.01	15.917	2.51	22.00	1.00
3.833	1.09	9.917	3.01	16.000	2.51	22.08	1.00
3.917	1.09	10.000	3.01	16.083	2.51	22.17	1.00
4.000	1.09	10.083	3.01	16.167	2.51	22.25	1.00
4.083	1.09	10.167	3.01	16.250	2.51	22.33	1.00
4.167	1.09	10.250	3.01	16.333	1.50	22.42	1.00
4.250	1.09	10.333	3.84	16.417	1.50	22.50	1.00
4.333	1.34	10.417	3.84	16.500	1.50	22.58	1.00
4.417	1.34	10.500	3.84	16.583	1.50	22.67	1.00
4.500	1.34	10.583	3.84	16.667	1.50	22.75	1.00
4.583	1.34	10.667	3.84	16.750	1.50	22.83	1.00
4.667	1.34	10.750	3.84	16.833	1.50	22.92	1.00
4.750	1.34	10.833	5.18	16.917	1.50	23.00	1.00
4.833	1.34	10.917	5.18	17.000	1.50	23.08	1.00
4.917	1.34	11.000	5.18	17.083	1.50	23.17	1.00
5.000	1.34	11.083	5.18	17.167	1.50	23.25	1.00
5.083	1.34	11.167	5.18	17.250	1.50	23.33	1.00
5.167	1.34	11.250	5.18	17.333	1.50	23.42	1.00
5.250	1.34	11.333	8.02	17.417	1.50	23.50	1.00
5.333	1.34	11.417	8.02	17.500	1.50	23.58	1.00
5.417	1.34	11.500	8.02	17.583	1.50	23.67	1.00
5.500	1.34	11.583	8.02	17.667	1.50	23.75	1.00
5.583	1.34	11.667	8.02	17.750	1.50	23.83	1.00
5.667	1.34	11.750	8.02	17.833	1.50	23.92	1.00
5.750	1.34	11.833	24.72	17.917	1.50	24.00	1.00
5.833	1.34	11.917	24.72	18.000	1.50	24.08	1.00
5.917	1.34	12.000	24.72	18.083	1.50	24.17	1.00
6.000	1.34	12.083	102.21	18.167	1.50	24.25	1.00
6.083	1.34	12.167	102.22	18.250	1.50		

Unit Hyd Qpeak (cms)= 0.637

PEAK FLOW (cms)= 0.201 (i)
TIME TO PEAK (hrs)= 13.167
RUNOFF VOLUME (mm)= 16.662
TOTAL RAINFALL (mm)= 83.510
RUNOFF COEFFICIENT = 0.200

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0013)	Area (ha)=	1.70	Curve Number (CN)=	60.5	
ID= 1 DT= 5.0 min	Ia (mm)=	9.65	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	0.40			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.34	12.250	102.22	18.33	1.50
0.167	0.00	6.250	1.34	12.333	12.04	18.42	1.50
0.250	0.00	6.333	1.50	12.417	12.03	18.50	1.50
0.333	0.92	6.417	1.50	12.500	12.03	18.58	1.50
0.417	0.92	6.500	1.50	12.583	12.03	18.67	1.50
0.500	0.92	6.583	1.50	12.667	12.03	18.75	1.50
0.583	0.92	6.667	1.50	12.750	12.03	18.83	1.50
0.667	0.92	6.750	1.50	12.833	6.18	18.92	1.50
0.750	0.92	6.833	1.50	12.917	6.18	19.00	1.50
0.833	0.92	6.917	1.50	13.000	6.18	19.08	1.50
0.917	0.92	7.000	1.50	13.083	6.18	19.17	1.50
1.000	0.92	7.083	1.50	13.167	6.18	19.25	1.50
1.083	0.92	7.167	1.50	13.250	6.18	19.33	1.50
1.167	0.92	7.250	1.50	13.333	4.51	19.42	1.50
1.250	0.92	7.333	1.84	13.417	4.51	19.50	1.50
1.333	0.92	7.417	1.84	13.500	4.51	19.58	1.50
1.417	0.92	7.500	1.84	13.583	4.51	19.67	1.50
1.500	0.92	7.583	1.84	13.667	4.51	19.75	1.50
1.583	0.92	7.667	1.84	13.750	4.51	19.83	1.50
1.667	0.92	7.750	1.84	13.833	3.51	19.92	1.50
1.750	0.92	7.833	1.84	13.917	3.51	20.00	1.50
1.833	0.92	7.917	1.84	14.000	3.51	20.08	1.50
1.917	0.92	8.000	1.84	14.083	3.51	20.17	1.50
2.000	0.92	8.083	1.84	14.167	3.51	20.25	1.50
2.083	0.92	8.167	1.84	14.250	3.51	20.33	1.00
2.167	0.92	8.250	1.84	14.333	2.51	20.42	1.00
2.250	0.92	8.333	2.17	14.417	2.51	20.50	1.00
2.333	1.09	8.417	2.17	14.500	2.51	20.58	1.00
2.417	1.09	8.500	2.17	14.583	2.51	20.67	1.00
2.500	1.09	8.583	2.17	14.667	2.51	20.75	1.00
2.583	1.09	8.667	2.17	14.750	2.51	20.83	1.00
2.667	1.09	8.750	2.17	14.833	2.51	20.92	1.00
2.750	1.09	8.833	2.34	14.917	2.51	21.00	1.00
2.833	1.09	8.917	2.34	15.000	2.51	21.08	1.00
2.917	1.09	9.000	2.34	15.083	2.51	21.17	1.00

3.000	1.09	9.083	2.34	15.167	2.51	21.25	1.00
3.083	1.09	9.167	2.34	15.250	2.51	21.33	1.00
3.167	1.09	9.250	2.34	15.333	2.51	21.42	1.00
3.250	1.09	9.333	2.67	15.417	2.51	21.50	1.00
3.333	1.09	9.417	2.67	15.500	2.51	21.58	1.00
3.417	1.09	9.500	2.67	15.583	2.51	21.67	1.00
3.500	1.09	9.583	2.67	15.667	2.51	21.75	1.00
3.583	1.09	9.667	2.67	15.750	2.51	21.83	1.00
3.667	1.09	9.750	2.67	15.833	2.51	21.92	1.00
3.750	1.09	9.833	3.01	15.917	2.51	22.00	1.00
3.833	1.09	9.917	3.01	16.000	2.51	22.08	1.00
3.917	1.09	10.000	3.01	16.083	2.51	22.17	1.00
4.000	1.09	10.083	3.01	16.167	2.51	22.25	1.00
4.083	1.09	10.167	3.01	16.250	2.51	22.33	1.00
4.167	1.09	10.250	3.01	16.333	1.50	22.42	1.00
4.250	1.09	10.333	3.84	16.417	1.50	22.50	1.00
4.333	1.34	10.417	3.84	16.500	1.50	22.58	1.00
4.417	1.34	10.500	3.84	16.583	1.50	22.67	1.00
4.500	1.34	10.583	3.84	16.667	1.50	22.75	1.00
4.583	1.34	10.667	3.84	16.750	1.50	22.83	1.00
4.667	1.34	10.750	3.84	16.833	1.50	22.92	1.00
4.750	1.34	10.833	5.18	16.917	1.50	23.00	1.00
4.833	1.34	10.917	5.18	17.000	1.50	23.08	1.00
4.917	1.34	11.000	5.18	17.083	1.50	23.17	1.00
5.000	1.34	11.083	5.18	17.167	1.50	23.25	1.00
5.083	1.34	11.167	5.18	17.250	1.50	23.33	1.00
5.167	1.34	11.250	5.18	17.333	1.50	23.42	1.00
5.250	1.34	11.333	8.02	17.417	1.50	23.50	1.00
5.333	1.34	11.417	8.02	17.500	1.50	23.58	1.00
5.417	1.34	11.500	8.02	17.583	1.50	23.67	1.00
5.500	1.34	11.583	8.02	17.667	1.50	23.75	1.00
5.583	1.34	11.667	8.02	17.750	1.50	23.83	1.00
5.667	1.34	11.750	8.02	17.833	1.50	23.92	1.00
5.750	1.34	11.833	24.72	17.917	1.50	24.00	1.00
5.833	1.34	11.917	24.72	18.000	1.50	24.08	1.00
5.917	1.34	12.000	24.72	18.083	1.50	24.17	1.00
6.000	1.34	12.083	102.21	18.167	1.50	24.25	1.00
6.083	1.34	12.167	102.22	18.250	1.50		

Unit Hyd Qpeak (cms)= 0.162

PEAK FLOW (cms)= 0.058 (i)
TIME TO PEAK (hrs)= 12.500
RUNOFF VOLUME (mm)= 22.730
TOTAL RAINFALL (mm)= 83.510
RUNOFF COEFFICIENT = 0.272

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB NASHYD (0014) ID= 1 DT= 5.0 min	Area (ha)= 1.80	Curve Number (CN)= 50.0	# of Linear Res.(N)= 3.00	U.H. Tp(hrs)= 0.76

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.34	12.250	102.22	18.33	1.50
0.167	0.00	6.250	1.34	12.333	12.04	18.42	1.50
0.250	0.00	6.333	1.50	12.417	12.03	18.50	1.50
0.333	0.92	6.417	1.50	12.500	12.03	18.58	1.50
0.417	0.92	6.500	1.50	12.583	12.03	18.67	1.50
0.500	0.92	6.583	1.50	12.667	12.03	18.75	1.50
0.583	0.92	6.667	1.50	12.750	12.03	18.83	1.50
0.667	0.92	6.750	1.50	12.833	6.18	18.92	1.50
0.750	0.92	6.833	1.50	12.917	6.18	19.00	1.50
0.833	0.92	6.917	1.50	13.000	6.18	19.08	1.50
0.917	0.92	7.000	1.50	13.083	6.18	19.17	1.50
1.000	0.92	7.083	1.50	13.167	6.18	19.25	1.50
1.083	0.92	7.167	1.50	13.250	6.18	19.33	1.50
1.167	0.92	7.250	1.50	13.333	4.51	19.42	1.50
1.250	0.92	7.333	1.84	13.417	4.51	19.50	1.50
1.333	0.92	7.417	1.84	13.500	4.51	19.58	1.50
1.417	0.92	7.500	1.84	13.583	4.51	19.67	1.50
1.500	0.92	7.583	1.84	13.667	4.51	19.75	1.50
1.583	0.92	7.667	1.84	13.750	4.51	19.83	1.50
1.667	0.92	7.750	1.84	13.833	3.51	19.92	1.50
1.750	0.92	7.833	1.84	13.917	3.51	20.00	1.50
1.833	0.92	7.917	1.84	14.000	3.51	20.08	1.50
1.917	0.92	8.000	1.84	14.083	3.51	20.17	1.50
2.000	0.92	8.083	1.84	14.167	3.51	20.25	1.50
2.083	0.92	8.167	1.84	14.250	3.51	20.33	1.00
2.167	0.92	8.250	1.84	14.333	2.51	20.42	1.00
2.250	0.92	8.333	2.17	14.417	2.51	20.50	1.00
2.333	1.09	8.417	2.17	14.500	2.51	20.58	1.00
2.417	1.09	8.500	2.17	14.583	2.51	20.67	1.00
2.500	1.09	8.583	2.17	14.667	2.51	20.75	1.00
2.583	1.09	8.667	2.17	14.750	2.51	20.83	1.00
2.667	1.09	8.750	2.17	14.833	2.51	20.92	1.00
2.750	1.09	8.833	2.34	14.917	2.51	21.00	1.00
2.833	1.09	8.917	2.34	15.000	2.51	21.08	1.00

2.917	1.09	9.000	2.34	15.083	2.51	21.17	1.00
3.000	1.09	9.083	2.34	15.167	2.51	21.25	1.00
3.083	1.09	9.167	2.34	15.250	2.51	21.33	1.00
3.167	1.09	9.250	2.34	15.333	2.51	21.42	1.00
3.250	1.09	9.333	2.67	15.417	2.51	21.50	1.00
3.333	1.09	9.417	2.67	15.500	2.51	21.58	1.00
3.417	1.09	9.500	2.67	15.583	2.51	21.67	1.00
3.500	1.09	9.583	2.67	15.667	2.51	21.75	1.00
3.583	1.09	9.667	2.67	15.750	2.51	21.83	1.00
3.667	1.09	9.750	2.67	15.833	2.51	21.92	1.00
3.750	1.09	9.833	3.01	15.917	2.51	22.00	1.00
3.833	1.09	9.917	3.01	16.000	2.51	22.08	1.00
3.917	1.09	10.000	3.01	16.083	2.51	22.17	1.00
4.000	1.09	10.083	3.01	16.167	2.51	22.25	1.00
4.083	1.09	10.167	3.01	16.250	2.51	22.33	1.00
4.167	1.09	10.250	3.01	16.333	1.50	22.42	1.00
4.250	1.09	10.333	3.84	16.417	1.50	22.50	1.00
4.333	1.34	10.417	3.84	16.500	1.50	22.58	1.00
4.417	1.34	10.500	3.84	16.583	1.50	22.67	1.00
4.500	1.34	10.583	3.84	16.667	1.50	22.75	1.00
4.583	1.34	10.667	3.84	16.750	1.50	22.83	1.00
4.667	1.34	10.750	3.84	16.833	1.50	22.92	1.00
4.750	1.34	10.833	5.18	16.917	1.50	23.00	1.00
4.833	1.34	10.917	5.18	17.000	1.50	23.08	1.00
4.917	1.34	11.000	5.18	17.083	1.50	23.17	1.00
5.000	1.34	11.083	5.18	17.167	1.50	23.25	1.00
5.083	1.34	11.167	5.18	17.250	1.50	23.33	1.00
5.167	1.34	11.250	5.18	17.333	1.50	23.42	1.00
5.250	1.34	11.333	8.02	17.417	1.50	23.50	1.00
5.333	1.34	11.417	8.02	17.500	1.50	23.58	1.00
5.417	1.34	11.500	8.02	17.583	1.50	23.67	1.00
5.500	1.34	11.583	8.02	17.667	1.50	23.75	1.00
5.583	1.34	11.667	8.02	17.750	1.50	23.83	1.00
5.667	1.34	11.750	8.02	17.833	1.50	23.92	1.00
5.750	1.34	11.833	24.72	17.917	1.50	24.00	1.00
5.833	1.34	11.917	24.72	18.000	1.50	24.08	1.00
5.917	1.34	12.000	24.72	18.083	1.50	24.17	1.00
6.000	1.34	12.083	102.21	18.167	1.50	24.25	1.00
6.083	1.34	12.167	102.22	18.250	1.50		

Unit Hyd Qpeak (cms)= 0.090

PEAK FLOW (cms)= 0.023 (i)
TIME TO PEAK (hrs)= 13.000
RUNOFF VOLUME (mm)= 14.175
TOTAL RAINFALL (mm)= 83.510
RUNOFF COEFFICIENT = 0.170

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB NASHYD (0015)	Area (ha)= 6.70	Curve Number (CN)= 60.0
ID= 1 DT= 5.0 min	Ia (mm)= 10.00	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 1.45	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.34	12.250	102.22	18.33	1.50
0.167	0.00	6.250	1.34	12.333	12.04	18.42	1.50
0.250	0.00	6.333	1.50	12.417	12.03	18.50	1.50
0.333	0.92	6.417	1.50	12.500	12.03	18.58	1.50
0.417	0.92	6.500	1.50	12.583	12.03	18.67	1.50
0.500	0.92	6.583	1.50	12.667	12.03	18.75	1.50
0.583	0.92	6.667	1.50	12.750	12.03	18.83	1.50
0.667	0.92	6.750	1.50	12.833	6.18	18.92	1.50
0.750	0.92	6.833	1.50	12.917	6.18	19.00	1.50
0.833	0.92	6.917	1.50	13.000	6.18	19.08	1.50
0.917	0.92	7.000	1.50	13.083	6.18	19.17	1.50
1.000	0.92	7.083	1.50	13.167	6.18	19.25	1.50
1.083	0.92	7.167	1.50	13.250	6.18	19.33	1.50
1.167	0.92	7.250	1.50	13.333	4.51	19.42	1.50
1.250	0.92	7.333	1.84	13.417	4.51	19.50	1.50
1.333	0.92	7.417	1.84	13.500	4.51	19.58	1.50
1.417	0.92	7.500	1.84	13.583	4.51	19.67	1.50
1.500	0.92	7.583	1.84	13.667	4.51	19.75	1.50
1.583	0.92	7.667	1.84	13.750	4.51	19.83	1.50
1.667	0.92	7.750	1.84	13.833	3.51	19.92	1.50
1.750	0.92	7.833	1.84	13.917	3.51	20.00	1.50
1.833	0.92	7.917	1.84	14.000	3.51	20.08	1.50
1.917	0.92	8.000	1.84	14.083	3.51	20.17	1.50
2.000	0.92	8.083	1.84	14.167	3.51	20.25	1.50
2.083	0.92	8.167	1.84	14.250	3.51	20.33	1.00
2.167	0.92	8.250	1.84	14.333	2.51	20.42	1.00
2.250	0.92	8.333	2.17	14.417	2.51	20.50	1.00
2.333	1.09	8.417	2.17	14.500	2.51	20.58	1.00
2.417	1.09	8.500	2.17	14.583	2.51	20.67	1.00
2.500	1.09	8.583	2.17	14.667	2.51	20.75	1.00
2.583	1.09	8.667	2.17	14.750	2.51	20.83	1.00
2.667	1.09	8.750	2.17	14.833	2.51	20.92	1.00
2.750	1.09	8.833	2.34	14.917	2.51	21.00	1.00

2.833	1.09	8.917	2.34	15.000	2.51	21.08	1.00
2.917	1.09	9.000	2.34	15.083	2.51	21.17	1.00
3.000	1.09	9.083	2.34	15.167	2.51	21.25	1.00
3.083	1.09	9.167	2.34	15.250	2.51	21.33	1.00
3.167	1.09	9.250	2.34	15.333	2.51	21.42	1.00
3.250	1.09	9.333	2.67	15.417	2.51	21.50	1.00
3.333	1.09	9.417	2.67	15.500	2.51	21.58	1.00
3.417	1.09	9.500	2.67	15.583	2.51	21.67	1.00
3.500	1.09	9.583	2.67	15.667	2.51	21.75	1.00
3.583	1.09	9.667	2.67	15.750	2.51	21.83	1.00
3.667	1.09	9.750	2.67	15.833	2.51	21.92	1.00
3.750	1.09	9.833	3.01	15.917	2.51	22.00	1.00
3.833	1.09	9.917	3.01	16.000	2.51	22.08	1.00
3.917	1.09	10.000	3.01	16.083	2.51	22.17	1.00
4.000	1.09	10.083	3.01	16.167	2.51	22.25	1.00
4.083	1.09	10.167	3.01	16.250	2.51	22.33	1.00
4.167	1.09	10.250	3.01	16.333	1.50	22.42	1.00
4.250	1.09	10.333	3.84	16.417	1.50	22.50	1.00
4.333	1.34	10.417	3.84	16.500	1.50	22.58	1.00
4.417	1.34	10.500	3.84	16.583	1.50	22.67	1.00
4.500	1.34	10.583	3.84	16.667	1.50	22.75	1.00
4.583	1.34	10.667	3.84	16.750	1.50	22.83	1.00
4.667	1.34	10.750	3.84	16.833	1.50	22.92	1.00
4.750	1.34	10.833	5.18	16.917	1.50	23.00	1.00
4.833	1.34	10.917	5.18	17.000	1.50	23.08	1.00
4.917	1.34	11.000	5.18	17.083	1.50	23.17	1.00
5.000	1.34	11.083	5.18	17.167	1.50	23.25	1.00
5.083	1.34	11.167	5.18	17.250	1.50	23.33	1.00
5.167	1.34	11.250	5.18	17.333	1.50	23.42	1.00
5.250	1.34	11.333	8.02	17.417	1.50	23.50	1.00
5.333	1.34	11.417	8.02	17.500	1.50	23.58	1.00
5.417	1.34	11.500	8.02	17.583	1.50	23.67	1.00
5.500	1.34	11.583	8.02	17.667	1.50	23.75	1.00
5.583	1.34	11.667	8.02	17.750	1.50	23.83	1.00
5.667	1.34	11.750	8.02	17.833	1.50	23.92	1.00
5.750	1.34	11.833	24.72	17.917	1.50	24.00	1.00
5.833	1.34	11.917	24.72	18.000	1.50	24.08	1.00
5.917	1.34	12.000	24.72	18.083	1.50	24.17	1.00
6.000	1.34	12.083	102.21	18.167	1.50	24.25	1.00
6.083	1.34	12.167	102.22	18.250	1.50		

Unit Hyd Qpeak (cms)= 0.176

PEAK FLOW (cms)= 0.086 (i)
TIME TO PEAK (hrs)= 13.833
RUNOFF VOLUME (mm)= 22.251
TOTAL RAINFALL (mm)= 83.510
RUNOFF COEFFICIENT = 0.266

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0016)	Area (ha)=	29.16	Curve Number (CN)=	71.4	
ID= 1 DT= 5.0 min	Ia (mm)=	7.88	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	0.68			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.34	12.250	102.22	18.33	1.50
0.167	0.00	6.250	1.34	12.333	12.04	18.42	1.50
0.250	0.00	6.333	1.50	12.417	12.03	18.50	1.50
0.333	0.92	6.417	1.50	12.500	12.03	18.58	1.50
0.417	0.92	6.500	1.50	12.583	12.03	18.67	1.50
0.500	0.92	6.583	1.50	12.667	12.03	18.75	1.50
0.583	0.92	6.667	1.50	12.750	12.03	18.83	1.50
0.667	0.92	6.750	1.50	12.833	6.18	18.92	1.50
0.750	0.92	6.833	1.50	12.917	6.18	19.00	1.50
0.833	0.92	6.917	1.50	13.000	6.18	19.08	1.50
0.917	0.92	7.000	1.50	13.083	6.18	19.17	1.50
1.000	0.92	7.083	1.50	13.167	6.18	19.25	1.50
1.083	0.92	7.167	1.50	13.250	6.18	19.33	1.50
1.167	0.92	7.250	1.50	13.333	4.51	19.42	1.50
1.250	0.92	7.333	1.84	13.417	4.51	19.50	1.50
1.333	0.92	7.417	1.84	13.500	4.51	19.58	1.50
1.417	0.92	7.500	1.84	13.583	4.51	19.67	1.50
1.500	0.92	7.583	1.84	13.667	4.51	19.75	1.50
1.583	0.92	7.667	1.84	13.750	4.51	19.83	1.50
1.667	0.92	7.750	1.84	13.833	3.51	19.92	1.50
1.750	0.92	7.833	1.84	13.917	3.51	20.00	1.50
1.833	0.92	7.917	1.84	14.000	3.51	20.08	1.50
1.917	0.92	8.000	1.84	14.083	3.51	20.17	1.50
2.000	0.92	8.083	1.84	14.167	3.51	20.25	1.50
2.083	0.92	8.167	1.84	14.250	3.51	20.33	1.00
2.167	0.92	8.250	1.84	14.333	2.51	20.42	1.00
2.250	0.92	8.333	2.17	14.417	2.51	20.50	1.00
2.333	1.09	8.417	2.17	14.500	2.51	20.58	1.00
2.417	1.09	8.500	2.17	14.583	2.51	20.67	1.00
2.500	1.09	8.583	2.17	14.667	2.51	20.75	1.00
2.583	1.09	8.667	2.17	14.750	2.51	20.83	1.00
2.667	1.09	8.750	2.17	14.833	2.51	20.92	1.00

2.750	1.09	8.833	2.34	14.917	2.51	21.00	1.00
2.833	1.09	8.917	2.34	15.000	2.51	21.08	1.00
2.917	1.09	9.000	2.34	15.083	2.51	21.17	1.00
3.000	1.09	9.083	2.34	15.167	2.51	21.25	1.00
3.083	1.09	9.167	2.34	15.250	2.51	21.33	1.00
3.167	1.09	9.250	2.34	15.333	2.51	21.42	1.00
3.250	1.09	9.333	2.67	15.417	2.51	21.50	1.00
3.333	1.09	9.417	2.67	15.500	2.51	21.58	1.00
3.417	1.09	9.500	2.67	15.583	2.51	21.67	1.00
3.500	1.09	9.583	2.67	15.667	2.51	21.75	1.00
3.583	1.09	9.667	2.67	15.750	2.51	21.83	1.00
3.667	1.09	9.750	2.67	15.833	2.51	21.92	1.00
3.750	1.09	9.833	3.01	15.917	2.51	22.00	1.00
3.833	1.09	9.917	3.01	16.000	2.51	22.08	1.00
3.917	1.09	10.000	3.01	16.083	2.51	22.17	1.00
4.000	1.09	10.083	3.01	16.167	2.51	22.25	1.00
4.083	1.09	10.167	3.01	16.250	2.51	22.33	1.00
4.167	1.09	10.250	3.01	16.333	1.50	22.42	1.00
4.250	1.09	10.333	3.84	16.417	1.50	22.50	1.00
4.333	1.34	10.417	3.84	16.500	1.50	22.58	1.00
4.417	1.34	10.500	3.84	16.583	1.50	22.67	1.00
4.500	1.34	10.583	3.84	16.667	1.50	22.75	1.00
4.583	1.34	10.667	3.84	16.750	1.50	22.83	1.00
4.667	1.34	10.750	3.84	16.833	1.50	22.92	1.00
4.750	1.34	10.833	5.18	16.917	1.50	23.00	1.00
4.833	1.34	10.917	5.18	17.000	1.50	23.08	1.00
4.917	1.34	11.000	5.18	17.083	1.50	23.17	1.00
5.000	1.34	11.083	5.18	17.167	1.50	23.25	1.00
5.083	1.34	11.167	5.18	17.250	1.50	23.33	1.00
5.167	1.34	11.250	5.18	17.333	1.50	23.42	1.00
5.250	1.34	11.333	8.02	17.417	1.50	23.50	1.00
5.333	1.34	11.417	8.02	17.500	1.50	23.58	1.00
5.417	1.34	11.500	8.02	17.583	1.50	23.67	1.00
5.500	1.34	11.583	8.02	17.667	1.50	23.75	1.00
5.583	1.34	11.667	8.02	17.750	1.50	23.83	1.00
5.667	1.34	11.750	8.02	17.833	1.50	23.92	1.00
5.750	1.34	11.833	24.72	17.917	1.50	24.00	1.00
5.833	1.34	11.917	24.72	18.000	1.50	24.08	1.00
5.917	1.34	12.000	24.72	18.083	1.50	24.17	1.00
6.000	1.34	12.083	102.21	18.167	1.50	24.25	1.00
6.083	1.34	12.167	102.22	18.250	1.50		

Unit Hyd Qpeak	(cms)=	1.638
PEAK FLOW	(cms)=	0.998 (i)
TIME TO PEAK	(hrs)=	12.833
RUNOFF VOLUME	(mm)=	32.247
TOTAL RAINFALL	(mm)=	83.510

RUNOFF COEFFICIENT = 0.386

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB NASHYD (0019) ID= 1 DT= 5.0 min	Area (ha)= 39.68 Curve Number (CN)= 60.7 Ia (mm)= 8.26 # of Linear Res.(N)= 3.00 U.H. Tp(hrs)= 1.18

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.34	12.250	102.22	18.33	1.50
0.167	0.00	6.250	1.34	12.333	12.04	18.42	1.50
0.250	0.00	6.333	1.50	12.417	12.03	18.50	1.50
0.333	0.92	6.417	1.50	12.500	12.03	18.58	1.50
0.417	0.92	6.500	1.50	12.583	12.03	18.67	1.50
0.500	0.92	6.583	1.50	12.667	12.03	18.75	1.50
0.583	0.92	6.667	1.50	12.750	12.03	18.83	1.50
0.667	0.92	6.750	1.50	12.833	6.18	18.92	1.50
0.750	0.92	6.833	1.50	12.917	6.18	19.00	1.50
0.833	0.92	6.917	1.50	13.000	6.18	19.08	1.50
0.917	0.92	7.000	1.50	13.083	6.18	19.17	1.50
1.000	0.92	7.083	1.50	13.167	6.18	19.25	1.50
1.083	0.92	7.167	1.50	13.250	6.18	19.33	1.50
1.167	0.92	7.250	1.50	13.333	4.51	19.42	1.50
1.250	0.92	7.333	1.84	13.417	4.51	19.50	1.50
1.333	0.92	7.417	1.84	13.500	4.51	19.58	1.50
1.417	0.92	7.500	1.84	13.583	4.51	19.67	1.50
1.500	0.92	7.583	1.84	13.667	4.51	19.75	1.50
1.583	0.92	7.667	1.84	13.750	4.51	19.83	1.50
1.667	0.92	7.750	1.84	13.833	3.51	19.92	1.50
1.750	0.92	7.833	1.84	13.917	3.51	20.00	1.50
1.833	0.92	7.917	1.84	14.000	3.51	20.08	1.50
1.917	0.92	8.000	1.84	14.083	3.51	20.17	1.50
2.000	0.92	8.083	1.84	14.167	3.51	20.25	1.50
2.083	0.92	8.167	1.84	14.250	3.51	20.33	1.00
2.167	0.92	8.250	1.84	14.333	2.51	20.42	1.00
2.250	0.92	8.333	2.17	14.417	2.51	20.50	1.00
2.333	1.09	8.417	2.17	14.500	2.51	20.58	1.00
2.417	1.09	8.500	2.17	14.583	2.51	20.67	1.00
2.500	1.09	8.583	2.17	14.667	2.51	20.75	1.00
2.583	1.09	8.667	2.17	14.750	2.51	20.83	1.00

2.667	1.09	8.750	2.17	14.833	2.51	20.92	1.00
2.750	1.09	8.833	2.34	14.917	2.51	21.00	1.00
2.833	1.09	8.917	2.34	15.000	2.51	21.08	1.00
2.917	1.09	9.000	2.34	15.083	2.51	21.17	1.00
3.000	1.09	9.083	2.34	15.167	2.51	21.25	1.00
3.083	1.09	9.167	2.34	15.250	2.51	21.33	1.00
3.167	1.09	9.250	2.34	15.333	2.51	21.42	1.00
3.250	1.09	9.333	2.67	15.417	2.51	21.50	1.00
3.333	1.09	9.417	2.67	15.500	2.51	21.58	1.00
3.417	1.09	9.500	2.67	15.583	2.51	21.67	1.00
3.500	1.09	9.583	2.67	15.667	2.51	21.75	1.00
3.583	1.09	9.667	2.67	15.750	2.51	21.83	1.00
3.667	1.09	9.750	2.67	15.833	2.51	21.92	1.00
3.750	1.09	9.833	3.01	15.917	2.51	22.00	1.00
3.833	1.09	9.917	3.01	16.000	2.51	22.08	1.00
3.917	1.09	10.000	3.01	16.083	2.51	22.17	1.00
4.000	1.09	10.083	3.01	16.167	2.51	22.25	1.00
4.083	1.09	10.167	3.01	16.250	2.51	22.33	1.00
4.167	1.09	10.250	3.01	16.333	1.50	22.42	1.00
4.250	1.09	10.333	3.84	16.417	1.50	22.50	1.00
4.333	1.34	10.417	3.84	16.500	1.50	22.58	1.00
4.417	1.34	10.500	3.84	16.583	1.50	22.67	1.00
4.500	1.34	10.583	3.84	16.667	1.50	22.75	1.00
4.583	1.34	10.667	3.84	16.750	1.50	22.83	1.00
4.667	1.34	10.750	3.84	16.833	1.50	22.92	1.00
4.750	1.34	10.833	5.18	16.917	1.50	23.00	1.00
4.833	1.34	10.917	5.18	17.000	1.50	23.08	1.00
4.917	1.34	11.000	5.18	17.083	1.50	23.17	1.00
5.000	1.34	11.083	5.18	17.167	1.50	23.25	1.00
5.083	1.34	11.167	5.18	17.250	1.50	23.33	1.00
5.167	1.34	11.250	5.18	17.333	1.50	23.42	1.00
5.250	1.34	11.333	8.02	17.417	1.50	23.50	1.00
5.333	1.34	11.417	8.02	17.500	1.50	23.58	1.00
5.417	1.34	11.500	8.02	17.583	1.50	23.67	1.00
5.500	1.34	11.583	8.02	17.667	1.50	23.75	1.00
5.583	1.34	11.667	8.02	17.750	1.50	23.83	1.00
5.667	1.34	11.750	8.02	17.833	1.50	23.92	1.00
5.750	1.34	11.833	24.72	17.917	1.50	24.00	1.00
5.833	1.34	11.917	24.72	18.000	1.50	24.08	1.00
5.917	1.34	12.000	24.72	18.083	1.50	24.17	1.00
6.000	1.34	12.083	102.21	18.167	1.50	24.25	1.00
6.083	1.34	12.167	102.22	18.250	1.50		

Unit Hyd Qpeak (cms)= 1.284

PEAK FLOW (cms)= 0.639 (i)
TIME TO PEAK (hrs)= 13.500
RUNOFF VOLUME (mm)= 23.603

TOTAL RAINFALL (mm)= 83.510
RUNOFF COEFFICIENT = 0.283

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0024)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0010):	14.85	0.201	13.17	16.66
+ ID2= 2 (0013):	1.70	0.058	12.50	22.73
ID = 3 (0024):	16.55	0.234	13.00	17.29

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0024):	16.55	0.234	13.00	17.29
+ ID2= 2 (0014):	1.80	0.023	13.00	14.17
ID = 1 (0024):	18.35	0.257	13.00	16.98

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0024):	18.35	0.257	13.00	16.98
+ ID2= 2 (0015):	6.70	0.086	13.83	22.25
ID = 3 (0024):	25.05	0.325	13.17	18.39

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0024):	25.05	0.325	13.17	18.39

+ ID2= 2 (0016):	29.16	0.998	12.83	32.25
ID = 1 (0024):	54.21	1.310	12.92	25.84

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0024):	54.21	1.310	12.92	25.84
+ ID2= 2 (0019):	39.68	0.639	13.50	23.60
ID = 3 (0024):	93.89	1.857	13.00	24.90

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0024):	93.89	1.857	13.00	24.90
+ ID2= 2 (0007):	100.92	1.073	14.08	20.74
ID = 1 (0024):	194.81	2.654	13.33	22.74

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0024):	194.81	2.654	13.33	22.74
+ ID2= 2 (0008):	23.99	0.248	13.25	13.63
ID = 3 (0024):	218.80	2.902	13.25	21.75

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0024):	218.80	2.902	13.25	21.75

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      + ID2= 2 (  0009):     6.37   0.082    13.00    14.51
        ================================================
        ID = 1 (  0024):   225.17   2.981    13.25    21.54

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
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| CALIB            |
| NASHYD   (  0011)|   Area    (ha)=  46.28   Curve Number   (CN)= 72.2
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.09   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.30

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.
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---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.34	12.250	102.22	18.33	1.50
0.167	0.00	6.250	1.34	12.333	12.04	18.42	1.50
0.250	0.00	6.333	1.50	12.417	12.03	18.50	1.50
0.333	0.92	6.417	1.50	12.500	12.03	18.58	1.50
0.417	0.92	6.500	1.50	12.583	12.03	18.67	1.50
0.500	0.92	6.583	1.50	12.667	12.03	18.75	1.50
0.583	0.92	6.667	1.50	12.750	12.03	18.83	1.50
0.667	0.92	6.750	1.50	12.833	6.18	18.92	1.50
0.750	0.92	6.833	1.50	12.917	6.18	19.00	1.50
0.833	0.92	6.917	1.50	13.000	6.18	19.08	1.50
0.917	0.92	7.000	1.50	13.083	6.18	19.17	1.50
1.000	0.92	7.083	1.50	13.167	6.18	19.25	1.50
1.083	0.92	7.167	1.50	13.250	6.18	19.33	1.50
1.167	0.92	7.250	1.50	13.333	4.51	19.42	1.50
1.250	0.92	7.333	1.84	13.417	4.51	19.50	1.50
1.333	0.92	7.417	1.84	13.500	4.51	19.58	1.50
1.417	0.92	7.500	1.84	13.583	4.51	19.67	1.50
1.500	0.92	7.583	1.84	13.667	4.51	19.75	1.50
1.583	0.92	7.667	1.84	13.750	4.51	19.83	1.50
1.667	0.92	7.750	1.84	13.833	3.51	19.92	1.50
1.750	0.92	7.833	1.84	13.917	3.51	20.00	1.50
1.833	0.92	7.917	1.84	14.000	3.51	20.08	1.50
1.917	0.92	8.000	1.84	14.083	3.51	20.17	1.50
2.000	0.92	8.083	1.84	14.167	3.51	20.25	1.50
2.083	0.92	8.167	1.84	14.250	3.51	20.33	1.00
2.167	0.92	8.250	1.84	14.333	2.51	20.42	1.00
2.250	0.92	8.333	2.17	14.417	2.51	20.50	1.00
2.333	1.09	8.417	2.17	14.500	2.51	20.58	1.00
2.417	1.09	8.500	2.17	14.583	2.51	20.67	1.00
2.500	1.09	8.583	2.17	14.667	2.51	20.75	1.00

2.583	1.09	8.667	2.17	14.750	2.51	20.83	1.00
2.667	1.09	8.750	2.17	14.833	2.51	20.92	1.00
2.750	1.09	8.833	2.34	14.917	2.51	21.00	1.00
2.833	1.09	8.917	2.34	15.000	2.51	21.08	1.00
2.917	1.09	9.000	2.34	15.083	2.51	21.17	1.00
3.000	1.09	9.083	2.34	15.167	2.51	21.25	1.00
3.083	1.09	9.167	2.34	15.250	2.51	21.33	1.00
3.167	1.09	9.250	2.34	15.333	2.51	21.42	1.00
3.250	1.09	9.333	2.67	15.417	2.51	21.50	1.00
3.333	1.09	9.417	2.67	15.500	2.51	21.58	1.00
3.417	1.09	9.500	2.67	15.583	2.51	21.67	1.00
3.500	1.09	9.583	2.67	15.667	2.51	21.75	1.00
3.583	1.09	9.667	2.67	15.750	2.51	21.83	1.00
3.667	1.09	9.750	2.67	15.833	2.51	21.92	1.00
3.750	1.09	9.833	3.01	15.917	2.51	22.00	1.00
3.833	1.09	9.917	3.01	16.000	2.51	22.08	1.00
3.917	1.09	10.000	3.01	16.083	2.51	22.17	1.00
4.000	1.09	10.083	3.01	16.167	2.51	22.25	1.00
4.083	1.09	10.167	3.01	16.250	2.51	22.33	1.00
4.167	1.09	10.250	3.01	16.333	1.50	22.42	1.00
4.250	1.09	10.333	3.84	16.417	1.50	22.50	1.00
4.333	1.34	10.417	3.84	16.500	1.50	22.58	1.00
4.417	1.34	10.500	3.84	16.583	1.50	22.67	1.00
4.500	1.34	10.583	3.84	16.667	1.50	22.75	1.00
4.583	1.34	10.667	3.84	16.750	1.50	22.83	1.00
4.667	1.34	10.750	3.84	16.833	1.50	22.92	1.00
4.750	1.34	10.833	5.18	16.917	1.50	23.00	1.00
4.833	1.34	10.917	5.18	17.000	1.50	23.08	1.00
4.917	1.34	11.000	5.18	17.083	1.50	23.17	1.00
5.000	1.34	11.083	5.18	17.167	1.50	23.25	1.00
5.083	1.34	11.167	5.18	17.250	1.50	23.33	1.00
5.167	1.34	11.250	5.18	17.333	1.50	23.42	1.00
5.250	1.34	11.333	8.02	17.417	1.50	23.50	1.00
5.333	1.34	11.417	8.02	17.500	1.50	23.58	1.00
5.417	1.34	11.500	8.02	17.583	1.50	23.67	1.00
5.500	1.34	11.583	8.02	17.667	1.50	23.75	1.00
5.583	1.34	11.667	8.02	17.750	1.50	23.83	1.00
5.667	1.34	11.750	8.02	17.833	1.50	23.92	1.00
5.750	1.34	11.833	24.72	17.917	1.50	24.00	1.00
5.833	1.34	11.917	24.72	18.000	1.50	24.08	1.00
5.917	1.34	12.000	24.72	18.083	1.50	24.17	1.00
6.000	1.34	12.083	102.21	18.167	1.50	24.25	1.00
6.083	1.34	12.167	102.22	18.250	1.50		

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Unit Hyd Qpeak  (cms)=   5.892

PEAK FLOW       (cms)=   3.011 (i)
TIME TO PEAK    (hrs)=  12.417
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RUNOFF VOLUME (mm)= 33.499
TOTAL RAINFALL (mm)= 83.510
RUNOFF COEFFICIENT = 0.401

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0012)	Area (ha)= 1.13	Curve Number (CN)= 67.4	
ID= 1 DT= 5.0 min	Ia (mm)= 7.88	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.43		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.34	12.250	102.22	18.33	1.50
0.167	0.00	6.250	1.34	12.333	12.04	18.42	1.50
0.250	0.00	6.333	1.50	12.417	12.03	18.50	1.50
0.333	0.92	6.417	1.50	12.500	12.03	18.58	1.50
0.417	0.92	6.500	1.50	12.583	12.03	18.67	1.50
0.500	0.92	6.583	1.50	12.667	12.03	18.75	1.50
0.583	0.92	6.667	1.50	12.750	12.03	18.83	1.50
0.667	0.92	6.750	1.50	12.833	6.18	18.92	1.50
0.750	0.92	6.833	1.50	12.917	6.18	19.00	1.50
0.833	0.92	6.917	1.50	13.000	6.18	19.08	1.50
0.917	0.92	7.000	1.50	13.083	6.18	19.17	1.50
1.000	0.92	7.083	1.50	13.167	6.18	19.25	1.50
1.083	0.92	7.167	1.50	13.250	6.18	19.33	1.50
1.167	0.92	7.250	1.50	13.333	4.51	19.42	1.50
1.250	0.92	7.333	1.84	13.417	4.51	19.50	1.50
1.333	0.92	7.417	1.84	13.500	4.51	19.58	1.50
1.417	0.92	7.500	1.84	13.583	4.51	19.67	1.50
1.500	0.92	7.583	1.84	13.667	4.51	19.75	1.50
1.583	0.92	7.667	1.84	13.750	4.51	19.83	1.50
1.667	0.92	7.750	1.84	13.833	3.51	19.92	1.50
1.750	0.92	7.833	1.84	13.917	3.51	20.00	1.50
1.833	0.92	7.917	1.84	14.000	3.51	20.08	1.50
1.917	0.92	8.000	1.84	14.083	3.51	20.17	1.50
2.000	0.92	8.083	1.84	14.167	3.51	20.25	1.50
2.083	0.92	8.167	1.84	14.250	3.51	20.33	1.00
2.167	0.92	8.250	1.84	14.333	2.51	20.42	1.00
2.250	0.92	8.333	2.17	14.417	2.51	20.50	1.00
2.333	1.09	8.417	2.17	14.500	2.51	20.58	1.00
2.417	1.09	8.500	2.17	14.583	2.51	20.67	1.00

2.500	1.09	8.583	2.17	14.667	2.51	20.75	1.00
2.583	1.09	8.667	2.17	14.750	2.51	20.83	1.00
2.667	1.09	8.750	2.17	14.833	2.51	20.92	1.00
2.750	1.09	8.833	2.34	14.917	2.51	21.00	1.00
2.833	1.09	8.917	2.34	15.000	2.51	21.08	1.00
2.917	1.09	9.000	2.34	15.083	2.51	21.17	1.00
3.000	1.09	9.083	2.34	15.167	2.51	21.25	1.00
3.083	1.09	9.167	2.34	15.250	2.51	21.33	1.00
3.167	1.09	9.250	2.34	15.333	2.51	21.42	1.00
3.250	1.09	9.333	2.67	15.417	2.51	21.50	1.00
3.333	1.09	9.417	2.67	15.500	2.51	21.58	1.00
3.417	1.09	9.500	2.67	15.583	2.51	21.67	1.00
3.500	1.09	9.583	2.67	15.667	2.51	21.75	1.00
3.583	1.09	9.667	2.67	15.750	2.51	21.83	1.00
3.667	1.09	9.750	2.67	15.833	2.51	21.92	1.00
3.750	1.09	9.833	3.01	15.917	2.51	22.00	1.00
3.833	1.09	9.917	3.01	16.000	2.51	22.08	1.00
3.917	1.09	10.000	3.01	16.083	2.51	22.17	1.00
4.000	1.09	10.083	3.01	16.167	2.51	22.25	1.00
4.083	1.09	10.167	3.01	16.250	2.51	22.33	1.00
4.167	1.09	10.250	3.01	16.333	1.50	22.42	1.00
4.250	1.09	10.333	3.84	16.417	1.50	22.50	1.00
4.333	1.34	10.417	3.84	16.500	1.50	22.58	1.00
4.417	1.34	10.500	3.84	16.583	1.50	22.67	1.00
4.500	1.34	10.583	3.84	16.667	1.50	22.75	1.00
4.583	1.34	10.667	3.84	16.750	1.50	22.83	1.00
4.667	1.34	10.750	3.84	16.833	1.50	22.92	1.00
4.750	1.34	10.833	5.18	16.917	1.50	23.00	1.00
4.833	1.34	10.917	5.18	17.000	1.50	23.08	1.00
4.917	1.34	11.000	5.18	17.083	1.50	23.17	1.00
5.000	1.34	11.083	5.18	17.167	1.50	23.25	1.00
5.083	1.34	11.167	5.18	17.250	1.50	23.33	1.00
5.167	1.34	11.250	5.18	17.333	1.50	23.42	1.00
5.250	1.34	11.333	8.02	17.417	1.50	23.50	1.00
5.333	1.34	11.417	8.02	17.500	1.50	23.58	1.00
5.417	1.34	11.500	8.02	17.583	1.50	23.67	1.00
5.500	1.34	11.583	8.02	17.667	1.50	23.75	1.00
5.583	1.34	11.667	8.02	17.750	1.50	23.83	1.00
5.667	1.34	11.750	8.02	17.833	1.50	23.92	1.00
5.750	1.34	11.833	24.72	17.917	1.50	24.00	1.00
5.833	1.34	11.917	24.72	18.000	1.50	24.08	1.00
5.917	1.34	12.000	24.72	18.083	1.50	24.17	1.00
6.000	1.34	12.083	102.21	18.167	1.50	24.25	1.00
6.083	1.34	12.167	102.22	18.250	1.50		

Unit Hyd Qpeak (cms)= 0.100

PEAK FLOW (cms)= 0.048 (i)

TIME TO PEAK (hrs)= 12.583
RUNOFF VOLUME (mm)= 28.782
TOTAL RAINFALL (mm)= 83.510
RUNOFF COEFFICIENT = 0.345

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	
STANDHYD (0043)	Area (ha)= 0.13
ID= 1 DT= 5.0 min	Total Imp(%)= 30.77 Dir. Conn.(%)= 7.69

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.04	0.09
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	0.50
Length	(m)=	29.44	70.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.34	12.250	102.22	18.33	1.50
0.167	0.00	6.250	1.34	12.333	12.04	18.42	1.50
0.250	0.00	6.333	1.50	12.417	12.03	18.50	1.50
0.333	0.92	6.417	1.50	12.500	12.03	18.58	1.50
0.417	0.92	6.500	1.50	12.583	12.03	18.67	1.50
0.500	0.92	6.583	1.50	12.667	12.03	18.75	1.50
0.583	0.92	6.667	1.50	12.750	12.03	18.83	1.50
0.667	0.92	6.750	1.50	12.833	6.18	18.92	1.50
0.750	0.92	6.833	1.50	12.917	6.18	19.00	1.50
0.833	0.92	6.917	1.50	13.000	6.18	19.08	1.50
0.917	0.92	7.000	1.50	13.083	6.18	19.17	1.50
1.000	0.92	7.083	1.50	13.167	6.18	19.25	1.50
1.083	0.92	7.167	1.50	13.250	6.18	19.33	1.50
1.167	0.92	7.250	1.50	13.333	4.51	19.42	1.50
1.250	0.92	7.333	1.84	13.417	4.51	19.50	1.50
1.333	0.92	7.417	1.84	13.500	4.51	19.58	1.50
1.417	0.92	7.500	1.84	13.583	4.51	19.67	1.50
1.500	0.92	7.583	1.84	13.667	4.51	19.75	1.50
1.583	0.92	7.667	1.84	13.750	4.51	19.83	1.50
1.667	0.92	7.750	1.84	13.833	3.51	19.92	1.50
1.750	0.92	7.833	1.84	13.917	3.51	20.00	1.50
1.833	0.92	7.917	1.84	14.000	3.51	20.08	1.50

1.917	0.92	8.000	1.84	14.083	3.51	20.17	1.50
2.000	0.92	8.083	1.84	14.167	3.51	20.25	1.50
2.083	0.92	8.167	1.84	14.250	3.51	20.33	1.00
2.167	0.92	8.250	1.84	14.333	2.51	20.42	1.00
2.250	0.92	8.333	2.17	14.417	2.51	20.50	1.00
2.333	1.09	8.417	2.17	14.500	2.51	20.58	1.00
2.417	1.09	8.500	2.17	14.583	2.51	20.67	1.00
2.500	1.09	8.583	2.17	14.667	2.51	20.75	1.00
2.583	1.09	8.667	2.17	14.750	2.51	20.83	1.00
2.667	1.09	8.750	2.17	14.833	2.51	20.92	1.00
2.750	1.09	8.833	2.34	14.917	2.51	21.00	1.00
2.833	1.09	8.917	2.34	15.000	2.51	21.08	1.00
2.917	1.09	9.000	2.34	15.083	2.51	21.17	1.00
3.000	1.09	9.083	2.34	15.167	2.51	21.25	1.00
3.083	1.09	9.167	2.34	15.250	2.51	21.33	1.00
3.167	1.09	9.250	2.34	15.333	2.51	21.42	1.00
3.250	1.09	9.333	2.67	15.417	2.51	21.50	1.00
3.333	1.09	9.417	2.67	15.500	2.51	21.58	1.00
3.417	1.09	9.500	2.67	15.583	2.51	21.67	1.00
3.500	1.09	9.583	2.67	15.667	2.51	21.75	1.00
3.583	1.09	9.667	2.67	15.750	2.51	21.83	1.00
3.667	1.09	9.750	2.67	15.833	2.51	21.92	1.00
3.750	1.09	9.833	3.01	15.917	2.51	22.00	1.00
3.833	1.09	9.917	3.01	16.000	2.51	22.08	1.00
3.917	1.09	10.000	3.01	16.083	2.51	22.17	1.00
4.000	1.09	10.083	3.01	16.167	2.51	22.25	1.00
4.083	1.09	10.167	3.01	16.250	2.51	22.33	1.00
4.167	1.09	10.250	3.01	16.333	1.50	22.42	1.00
4.250	1.09	10.333	3.84	16.417	1.50	22.50	1.00
4.333	1.34	10.417	3.84	16.500	1.50	22.58	1.00
4.417	1.34	10.500	3.84	16.583	1.50	22.67	1.00
4.500	1.34	10.583	3.84	16.667	1.50	22.75	1.00
4.583	1.34	10.667	3.84	16.750	1.50	22.83	1.00
4.667	1.34	10.750	3.84	16.833	1.50	22.92	1.00
4.750	1.34	10.833	5.18	16.917	1.50	23.00	1.00
4.833	1.34	10.917	5.18	17.000	1.50	23.08	1.00
4.917	1.34	11.000	5.18	17.083	1.50	23.17	1.00
5.000	1.34	11.083	5.18	17.167	1.50	23.25	1.00
5.083	1.34	11.167	5.18	17.250	1.50	23.33	1.00
5.167	1.34	11.250	5.18	17.333	1.50	23.42	1.00
5.250	1.34	11.333	8.02	17.417	1.50	23.50	1.00
5.333	1.34	11.417	8.02	17.500	1.50	23.58	1.00
5.417	1.34	11.500	8.02	17.583	1.50	23.67	1.00
5.500	1.34	11.583	8.02	17.667	1.50	23.75	1.00
5.583	1.34	11.667	8.02	17.750	1.50	23.83	1.00
5.667	1.34	11.750	8.02	17.833	1.50	23.92	1.00
5.750	1.34	11.833	24.72	17.917	1.50	24.00	1.00
5.833	1.34	11.917	24.72	18.000	1.50	24.08	1.00

5.917	1.34	12.000	24.72	18.083	1.50	24.17	1.00
6.000	1.34	12.083	102.21	18.167	1.50	24.25	1.00
6.083	1.34	12.167	102.22	18.250	1.50		

			TOTALS
Max.Eff.Inten.(mm/hr)=	102.22	56.65	
over (min)	5.00	25.00	
Storage Coeff. (min)=	1.50 (ii)	20.28 (ii)	
Unit Hyd. Tpeak (min)=	5.00	25.00	
Unit Hyd. peak (cms)=	0.33	0.05	
PEAK FLOW (cms)=	0.00	0.01	0.009 (iii)
TIME TO PEAK (hrs)=	12.25	12.50	12.50
RUNOFF VOLUME (mm)=	82.51	38.48	41.78
TOTAL RAINFALL (mm)=	83.51	83.51	83.51
RUNOFF COEFFICIENT =	0.99	0.46	0.50

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
STANDHYD (0044)	Area (ha)=	1.62	
ID= 1 DT= 5.0 min	Total Imp(%)=	48.77	Dir. Conn.(%)= 30.86

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	0.79	0.83
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	0.50	1.40
Length (m)=	103.92	400.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.34	12.250	102.22	18.33	1.50
0.167	0.00	6.250	1.34	12.333	12.04	18.42	1.50
0.250	0.00	6.333	1.50	12.417	12.03	18.50	1.50

0.333	0.92	6.417	1.50	12.500	12.03	18.58	1.50
0.417	0.92	6.500	1.50	12.583	12.03	18.67	1.50
0.500	0.92	6.583	1.50	12.667	12.03	18.75	1.50
0.583	0.92	6.667	1.50	12.750	12.03	18.83	1.50
0.667	0.92	6.750	1.50	12.833	6.18	18.92	1.50
0.750	0.92	6.833	1.50	12.917	6.18	19.00	1.50
0.833	0.92	6.917	1.50	13.000	6.18	19.08	1.50
0.917	0.92	7.000	1.50	13.083	6.18	19.17	1.50
1.000	0.92	7.083	1.50	13.167	6.18	19.25	1.50
1.083	0.92	7.167	1.50	13.250	6.18	19.33	1.50
1.167	0.92	7.250	1.50	13.333	4.51	19.42	1.50
1.250	0.92	7.333	1.84	13.417	4.51	19.50	1.50
1.333	0.92	7.417	1.84	13.500	4.51	19.58	1.50
1.417	0.92	7.500	1.84	13.583	4.51	19.67	1.50
1.500	0.92	7.583	1.84	13.667	4.51	19.75	1.50
1.583	0.92	7.667	1.84	13.750	4.51	19.83	1.50
1.667	0.92	7.750	1.84	13.833	3.51	19.92	1.50
1.750	0.92	7.833	1.84	13.917	3.51	20.00	1.50
1.833	0.92	7.917	1.84	14.000	3.51	20.08	1.50
1.917	0.92	8.000	1.84	14.083	3.51	20.17	1.50
2.000	0.92	8.083	1.84	14.167	3.51	20.25	1.50
2.083	0.92	8.167	1.84	14.250	3.51	20.33	1.00
2.167	0.92	8.250	1.84	14.333	2.51	20.42	1.00
2.250	0.92	8.333	2.17	14.417	2.51	20.50	1.00
2.333	1.09	8.417	2.17	14.500	2.51	20.58	1.00
2.417	1.09	8.500	2.17	14.583	2.51	20.67	1.00
2.500	1.09	8.583	2.17	14.667	2.51	20.75	1.00
2.583	1.09	8.667	2.17	14.750	2.51	20.83	1.00
2.667	1.09	8.750	2.17	14.833	2.51	20.92	1.00
2.750	1.09	8.833	2.34	14.917	2.51	21.00	1.00
2.833	1.09	8.917	2.34	15.000	2.51	21.08	1.00
2.917	1.09	9.000	2.34	15.083	2.51	21.17	1.00
3.000	1.09	9.083	2.34	15.167	2.51	21.25	1.00
3.083	1.09	9.167	2.34	15.250	2.51	21.33	1.00
3.167	1.09	9.250	2.34	15.333	2.51	21.42	1.00
3.250	1.09	9.333	2.67	15.417	2.51	21.50	1.00
3.333	1.09	9.417	2.67	15.500	2.51	21.58	1.00
3.417	1.09	9.500	2.67	15.583	2.51	21.67	1.00
3.500	1.09	9.583	2.67	15.667	2.51	21.75	1.00
3.583	1.09	9.667	2.67	15.750	2.51	21.83	1.00
3.667	1.09	9.750	2.67	15.833	2.51	21.92	1.00
3.750	1.09	9.833	3.01	15.917	2.51	22.00	1.00
3.833	1.09	9.917	3.01	16.000	2.51	22.08	1.00
3.917	1.09	10.000	3.01	16.083	2.51	22.17	1.00
4.000	1.09	10.083	3.01	16.167	2.51	22.25	1.00
4.083	1.09	10.167	3.01	16.250	2.51	22.33	1.00
4.167	1.09	10.250	3.01	16.333	1.50	22.42	1.00
4.250	1.09	10.333	3.84	16.417	1.50	22.50	1.00

4.333	1.34	10.417	3.84	16.500	1.50	22.58	1.00
4.417	1.34	10.500	3.84	16.583	1.50	22.67	1.00
4.500	1.34	10.583	3.84	16.667	1.50	22.75	1.00
4.583	1.34	10.667	3.84	16.750	1.50	22.83	1.00
4.667	1.34	10.750	3.84	16.833	1.50	22.92	1.00
4.750	1.34	10.833	5.18	16.917	1.50	23.00	1.00
4.833	1.34	10.917	5.18	17.000	1.50	23.08	1.00
4.917	1.34	11.000	5.18	17.083	1.50	23.17	1.00
5.000	1.34	11.083	5.18	17.167	1.50	23.25	1.00
5.083	1.34	11.167	5.18	17.250	1.50	23.33	1.00
5.167	1.34	11.250	5.18	17.333	1.50	23.42	1.00
5.250	1.34	11.333	8.02	17.417	1.50	23.50	1.00
5.333	1.34	11.417	8.02	17.500	1.50	23.58	1.00
5.417	1.34	11.500	8.02	17.583	1.50	23.67	1.00
5.500	1.34	11.583	8.02	17.667	1.50	23.75	1.00
5.583	1.34	11.667	8.02	17.750	1.50	23.83	1.00
5.667	1.34	11.750	8.02	17.833	1.50	23.92	1.00
5.750	1.34	11.833	24.72	17.917	1.50	24.00	1.00
5.833	1.34	11.917	24.72	18.000	1.50	24.08	1.00
5.917	1.34	12.000	24.72	18.083	1.50	24.17	1.00
6.000	1.34	12.083	102.21	18.167	1.50	24.25	1.00
6.083	1.34	12.167	102.22	18.250	1.50		

Max.Eff.Inten.(mm/hr)=	102.22	27.89	
over (min)	5.00	60.00	
Storage Coeff. (min)=	3.19 (ii)	55.31 (ii)	
Unit Hyd. Tpeak (min)=	5.00	60.00	
Unit Hyd. peak (cms)=	0.27	0.02	
			TOTALS
PEAK FLOW (cms)=	0.14	0.04	0.152 (iii)
TIME TO PEAK (hrs)=	12.25	13.08	12.25
RUNOFF VOLUME (mm)=	82.51	38.75	52.23
TOTAL RAINFALL (mm)=	83.51	83.51	83.51
RUNOFF COEFFICIENT =	0.99	0.46	0.63

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0041)	Area (ha)=	0.59	Curve Number (CN)= 71.5
ID= 1 DT= 5.0 min	Ia (mm)=	4.75	# of Linear Res.(N)= 3.00

U.H. Tp(hrs)= 0.53

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.34	12.250	102.22	18.33	1.50
0.167	0.00	6.250	1.34	12.333	12.04	18.42	1.50
0.250	0.00	6.333	1.50	12.417	12.03	18.50	1.50
0.333	0.92	6.417	1.50	12.500	12.03	18.58	1.50
0.417	0.92	6.500	1.50	12.583	12.03	18.67	1.50
0.500	0.92	6.583	1.50	12.667	12.03	18.75	1.50
0.583	0.92	6.667	1.50	12.750	12.03	18.83	1.50
0.667	0.92	6.750	1.50	12.833	6.18	18.92	1.50
0.750	0.92	6.833	1.50	12.917	6.18	19.00	1.50
0.833	0.92	6.917	1.50	13.000	6.18	19.08	1.50
0.917	0.92	7.000	1.50	13.083	6.18	19.17	1.50
1.000	0.92	7.083	1.50	13.167	6.18	19.25	1.50
1.083	0.92	7.167	1.50	13.250	6.18	19.33	1.50
1.167	0.92	7.250	1.50	13.333	4.51	19.42	1.50
1.250	0.92	7.333	1.84	13.417	4.51	19.50	1.50
1.333	0.92	7.417	1.84	13.500	4.51	19.58	1.50
1.417	0.92	7.500	1.84	13.583	4.51	19.67	1.50
1.500	0.92	7.583	1.84	13.667	4.51	19.75	1.50
1.583	0.92	7.667	1.84	13.750	4.51	19.83	1.50
1.667	0.92	7.750	1.84	13.833	3.51	19.92	1.50
1.750	0.92	7.833	1.84	13.917	3.51	20.00	1.50
1.833	0.92	7.917	1.84	14.000	3.51	20.08	1.50
1.917	0.92	8.000	1.84	14.083	3.51	20.17	1.50
2.000	0.92	8.083	1.84	14.167	3.51	20.25	1.50
2.083	0.92	8.167	1.84	14.250	3.51	20.33	1.00
2.167	0.92	8.250	1.84	14.333	2.51	20.42	1.00
2.250	0.92	8.333	2.17	14.417	2.51	20.50	1.00
2.333	1.09	8.417	2.17	14.500	2.51	20.58	1.00
2.417	1.09	8.500	2.17	14.583	2.51	20.67	1.00
2.500	1.09	8.583	2.17	14.667	2.51	20.75	1.00
2.583	1.09	8.667	2.17	14.750	2.51	20.83	1.00
2.667	1.09	8.750	2.17	14.833	2.51	20.92	1.00
2.750	1.09	8.833	2.34	14.917	2.51	21.00	1.00
2.833	1.09	8.917	2.34	15.000	2.51	21.08	1.00
2.917	1.09	9.000	2.34	15.083	2.51	21.17	1.00
3.000	1.09	9.083	2.34	15.167	2.51	21.25	1.00
3.083	1.09	9.167	2.34	15.250	2.51	21.33	1.00
3.167	1.09	9.250	2.34	15.333	2.51	21.42	1.00
3.250	1.09	9.333	2.67	15.417	2.51	21.50	1.00
3.333	1.09	9.417	2.67	15.500	2.51	21.58	1.00

3.417	1.09	9.500	2.67	15.583	2.51	21.67	1.00
3.500	1.09	9.583	2.67	15.667	2.51	21.75	1.00
3.583	1.09	9.667	2.67	15.750	2.51	21.83	1.00
3.667	1.09	9.750	2.67	15.833	2.51	21.92	1.00
3.750	1.09	9.833	3.01	15.917	2.51	22.00	1.00
3.833	1.09	9.917	3.01	16.000	2.51	22.08	1.00
3.917	1.09	10.000	3.01	16.083	2.51	22.17	1.00
4.000	1.09	10.083	3.01	16.167	2.51	22.25	1.00
4.083	1.09	10.167	3.01	16.250	2.51	22.33	1.00
4.167	1.09	10.250	3.01	16.333	1.50	22.42	1.00
4.250	1.09	10.333	3.84	16.417	1.50	22.50	1.00
4.333	1.34	10.417	3.84	16.500	1.50	22.58	1.00
4.417	1.34	10.500	3.84	16.583	1.50	22.67	1.00
4.500	1.34	10.583	3.84	16.667	1.50	22.75	1.00
4.583	1.34	10.667	3.84	16.750	1.50	22.83	1.00
4.667	1.34	10.750	3.84	16.833	1.50	22.92	1.00
4.750	1.34	10.833	5.18	16.917	1.50	23.00	1.00
4.833	1.34	10.917	5.18	17.000	1.50	23.08	1.00
4.917	1.34	11.000	5.18	17.083	1.50	23.17	1.00
5.000	1.34	11.083	5.18	17.167	1.50	23.25	1.00
5.083	1.34	11.167	5.18	17.250	1.50	23.33	1.00
5.167	1.34	11.250	5.18	17.333	1.50	23.42	1.00
5.250	1.34	11.333	8.02	17.417	1.50	23.50	1.00
5.333	1.34	11.417	8.02	17.500	1.50	23.58	1.00
5.417	1.34	11.500	8.02	17.583	1.50	23.67	1.00
5.500	1.34	11.583	8.02	17.667	1.50	23.75	1.00
5.583	1.34	11.667	8.02	17.750	1.50	23.83	1.00
5.667	1.34	11.750	8.02	17.833	1.50	23.92	1.00
5.750	1.34	11.833	24.72	17.917	1.50	24.00	1.00
5.833	1.34	11.917	24.72	18.000	1.50	24.08	1.00
5.917	1.34	12.000	24.72	18.083	1.50	24.17	1.00
6.000	1.34	12.083	102.21	18.167	1.50	24.25	1.00
6.083	1.34	12.167	102.22	18.250	1.50		

Unit Hyd Qpeak (cms)= 0.043

PEAK FLOW (cms)= 0.026 (i)
TIME TO PEAK (hrs)= 12.667
RUNOFF VOLUME (mm)= 34.420
TOTAL RAINFALL (mm)= 83.510
RUNOFF COEFFICIENT = 0.412

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0028)	Area (ha)= 1.38	Curve Number (CN)= 64.1	

|ID= 1 DT= 5.0 min | Ia (mm)= 8.51 # of Linear Res.(N)= 3.00

U.H. Tp(hrs)= 0.39

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.34	12.250	102.22	18.33	1.50
0.167	0.00	6.250	1.34	12.333	12.04	18.42	1.50
0.250	0.00	6.333	1.50	12.417	12.03	18.50	1.50
0.333	0.92	6.417	1.50	12.500	12.03	18.58	1.50
0.417	0.92	6.500	1.50	12.583	12.03	18.67	1.50
0.500	0.92	6.583	1.50	12.667	12.03	18.75	1.50
0.583	0.92	6.667	1.50	12.750	12.03	18.83	1.50
0.667	0.92	6.750	1.50	12.833	6.18	18.92	1.50
0.750	0.92	6.833	1.50	12.917	6.18	19.00	1.50
0.833	0.92	6.917	1.50	13.000	6.18	19.08	1.50
0.917	0.92	7.000	1.50	13.083	6.18	19.17	1.50
1.000	0.92	7.083	1.50	13.167	6.18	19.25	1.50
1.083	0.92	7.167	1.50	13.250	6.18	19.33	1.50
1.167	0.92	7.250	1.50	13.333	4.51	19.42	1.50
1.250	0.92	7.333	1.84	13.417	4.51	19.50	1.50
1.333	0.92	7.417	1.84	13.500	4.51	19.58	1.50
1.417	0.92	7.500	1.84	13.583	4.51	19.67	1.50
1.500	0.92	7.583	1.84	13.667	4.51	19.75	1.50
1.583	0.92	7.667	1.84	13.750	4.51	19.83	1.50
1.667	0.92	7.750	1.84	13.833	3.51	19.92	1.50
1.750	0.92	7.833	1.84	13.917	3.51	20.00	1.50
1.833	0.92	7.917	1.84	14.000	3.51	20.08	1.50
1.917	0.92	8.000	1.84	14.083	3.51	20.17	1.50
2.000	0.92	8.083	1.84	14.167	3.51	20.25	1.50
2.083	0.92	8.167	1.84	14.250	3.51	20.33	1.00
2.167	0.92	8.250	1.84	14.333	2.51	20.42	1.00
2.250	0.92	8.333	2.17	14.417	2.51	20.50	1.00
2.333	1.09	8.417	2.17	14.500	2.51	20.58	1.00
2.417	1.09	8.500	2.17	14.583	2.51	20.67	1.00
2.500	1.09	8.583	2.17	14.667	2.51	20.75	1.00
2.583	1.09	8.667	2.17	14.750	2.51	20.83	1.00
2.667	1.09	8.750	2.17	14.833	2.51	20.92	1.00
2.750	1.09	8.833	2.34	14.917	2.51	21.00	1.00
2.833	1.09	8.917	2.34	15.000	2.51	21.08	1.00
2.917	1.09	9.000	2.34	15.083	2.51	21.17	1.00
3.000	1.09	9.083	2.34	15.167	2.51	21.25	1.00
3.083	1.09	9.167	2.34	15.250	2.51	21.33	1.00
3.167	1.09	9.250	2.34	15.333	2.51	21.42	1.00
3.250	1.09	9.333	2.67	15.417	2.51	21.50	1.00

3.333	1.09	9.417	2.67	15.500	2.51	21.58	1.00
3.417	1.09	9.500	2.67	15.583	2.51	21.67	1.00
3.500	1.09	9.583	2.67	15.667	2.51	21.75	1.00
3.583	1.09	9.667	2.67	15.750	2.51	21.83	1.00
3.667	1.09	9.750	2.67	15.833	2.51	21.92	1.00
3.750	1.09	9.833	3.01	15.917	2.51	22.00	1.00
3.833	1.09	9.917	3.01	16.000	2.51	22.08	1.00
3.917	1.09	10.000	3.01	16.083	2.51	22.17	1.00
4.000	1.09	10.083	3.01	16.167	2.51	22.25	1.00
4.083	1.09	10.167	3.01	16.250	2.51	22.33	1.00
4.167	1.09	10.250	3.01	16.333	1.50	22.42	1.00
4.250	1.09	10.333	3.84	16.417	1.50	22.50	1.00
4.333	1.34	10.417	3.84	16.500	1.50	22.58	1.00
4.417	1.34	10.500	3.84	16.583	1.50	22.67	1.00
4.500	1.34	10.583	3.84	16.667	1.50	22.75	1.00
4.583	1.34	10.667	3.84	16.750	1.50	22.83	1.00
4.667	1.34	10.750	3.84	16.833	1.50	22.92	1.00
4.750	1.34	10.833	5.18	16.917	1.50	23.00	1.00
4.833	1.34	10.917	5.18	17.000	1.50	23.08	1.00
4.917	1.34	11.000	5.18	17.083	1.50	23.17	1.00
5.000	1.34	11.083	5.18	17.167	1.50	23.25	1.00
5.083	1.34	11.167	5.18	17.250	1.50	23.33	1.00
5.167	1.34	11.250	5.18	17.333	1.50	23.42	1.00
5.250	1.34	11.333	8.02	17.417	1.50	23.50	1.00
5.333	1.34	11.417	8.02	17.500	1.50	23.58	1.00
5.417	1.34	11.500	8.02	17.583	1.50	23.67	1.00
5.500	1.34	11.583	8.02	17.667	1.50	23.75	1.00
5.583	1.34	11.667	8.02	17.750	1.50	23.83	1.00
5.667	1.34	11.750	8.02	17.833	1.50	23.92	1.00
5.750	1.34	11.833	24.72	17.917	1.50	24.00	1.00
5.833	1.34	11.917	24.72	18.000	1.50	24.08	1.00
5.917	1.34	12.000	24.72	18.083	1.50	24.17	1.00
6.000	1.34	12.083	102.21	18.167	1.50	24.25	1.00
6.083	1.34	12.167	102.22	18.250	1.50		

Unit Hyd Qpeak (cms)= 0.135

PEAK FLOW (cms)= 0.056 (i)
TIME TO PEAK (hrs)= 12.500
RUNOFF VOLUME (mm)= 25.917
TOTAL RAINFALL (mm)= 83.510
RUNOFF COEFFICIENT = 0.310

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0023)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0011):	46.28	3.011	12.42	33.50
+ ID2= 2 (0012):	1.13	0.048	12.58	28.78
ID = 3 (0023):	47.41	3.054	12.42	33.39

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0023):	47.41	3.054	12.42	33.39
+ ID2= 2 (0028):	1.38	0.056	12.50	25.92
ID = 1 (0023):	48.79	3.107	12.42	33.17

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0023):	48.79	3.107	12.42	33.17
+ ID2= 2 (0041):	0.59	0.026	12.67	34.42
ID = 3 (0023):	49.38	3.128	12.42	33.19

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0023):	49.38	3.128	12.42	33.19
+ ID2= 2 (0043):	0.13	0.009	12.50	41.78
ID = 1 (0023):	49.51	3.136	12.42	33.21

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023)					
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0023):	49.51	3.136	12.42	33.21
+ ID2= 2 (0044):	1.62	0.152	12.25	52.23
ID = 3 (0023):	51.13	3.175	12.42	33.81

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0025)					
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0023):	51.13	3.175	12.42	33.81
+ ID2= 2 (0024):	225.17	2.981	13.25	21.54
ID = 3 (0025):	276.30	4.795	12.50	23.81

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

****
** SIMULATION:I - 10-year SCS **
****

READ STORM	Filename: C:\Users\ecomish\AppData\Local\Temp\c819dd95-70ee-48d0-b884-0b24f1308cad\fb02d2ed
Ptotal= 96.98 mm	Comments: 10yr 24hr 15min SCS Type II (MTO) - 15%

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.00	0.00	6.25	1.75	12.50	13.97	18.75	1.75
0.25	1.07	6.50	1.75	12.75	7.18	19.00	1.75
0.50	1.07	6.75	1.75	13.00	7.18	19.25	1.75
0.75	1.07	7.00	1.75	13.25	5.24	19.50	1.75
1.00	1.07	7.25	2.13	13.50	5.24	19.75	1.75
1.25	1.07	7.50	2.13	13.75	4.07	20.00	1.75
1.50	1.07	7.75	2.13	14.00	4.07	20.25	1.16
1.75	1.07	8.00	2.13	14.25	2.91	20.50	1.16
2.00	1.07	8.25	2.52	14.50	2.91	20.75	1.16
2.25	1.26	8.50	2.52	14.75	2.91	21.00	1.16
2.50	1.26	8.75	2.72	15.00	2.91	21.25	1.16
2.75	1.26	9.00	2.72	15.25	2.91	21.50	1.16
3.00	1.26	9.25	3.10	15.50	2.91	21.75	1.16
3.25	1.26	9.50	3.10	15.75	2.91	22.00	1.16

3.50	1.26	9.75	3.49	16.00	2.91	22.25	1.16
3.75	1.26	10.00	3.49	16.25	1.75	22.50	1.16
4.00	1.26	10.25	4.46	16.50	1.75	22.75	1.16
4.25	1.55	10.50	4.46	16.75	1.75	23.00	1.16
4.50	1.55	10.75	6.01	17.00	1.75	23.25	1.16
4.75	1.55	11.00	6.01	17.25	1.75	23.50	1.16
5.00	1.55	11.25	9.31	17.50	1.75	23.75	1.16
5.25	1.55	11.50	9.31	17.75	1.75	24.00	1.16
5.50	1.55	11.75	28.71	18.00	1.75		
5.75	1.55	12.00	118.70	18.25	1.75		
6.00	1.55	12.25	13.97	18.50	1.75		

CALIB			
NASHYD (0007)	Area (ha)= 100.92	Curve Number (CN)= 55.9	
ID= 1 DT= 5.0 min	Ia (mm)= 7.89	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 1.70		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.55	12.250	118.70	18.33	1.75
0.167	0.00	6.250	1.55	12.333	13.98	18.42	1.75
0.250	0.00	6.333	1.75	12.417	13.97	18.50	1.75
0.333	1.07	6.417	1.75	12.500	13.97	18.58	1.75
0.417	1.07	6.500	1.75	12.583	13.97	18.67	1.75
0.500	1.07	6.583	1.75	12.667	13.97	18.75	1.75
0.583	1.07	6.667	1.75	12.750	13.97	18.83	1.75
0.667	1.07	6.750	1.75	12.833	7.18	18.92	1.75
0.750	1.07	6.833	1.75	12.917	7.18	19.00	1.75
0.833	1.07	6.917	1.75	13.000	7.18	19.08	1.75
0.917	1.07	7.000	1.75	13.083	7.18	19.17	1.75
1.000	1.07	7.083	1.75	13.167	7.18	19.25	1.75
1.083	1.07	7.167	1.75	13.250	7.18	19.33	1.75
1.167	1.07	7.250	1.75	13.333	5.24	19.42	1.75
1.250	1.07	7.333	2.13	13.417	5.24	19.50	1.75
1.333	1.07	7.417	2.13	13.500	5.24	19.58	1.75
1.417	1.07	7.500	2.13	13.583	5.24	19.67	1.75
1.500	1.07	7.583	2.13	13.667	5.24	19.75	1.75
1.583	1.07	7.667	2.13	13.750	5.24	19.83	1.75
1.667	1.07	7.750	2.13	13.833	4.07	19.92	1.75
1.750	1.07	7.833	2.13	13.917	4.07	20.00	1.75
1.833	1.07	7.917	2.13	14.000	4.07	20.08	1.75

1.917	1.07	8.000	2.13	14.083	4.07	20.17	1.75
2.000	1.07	8.083	2.13	14.167	4.07	20.25	1.75
2.083	1.07	8.167	2.13	14.250	4.07	20.33	1.16
2.167	1.07	8.250	2.13	14.333	2.91	20.42	1.16
2.250	1.07	8.333	2.52	14.417	2.91	20.50	1.16
2.333	1.26	8.417	2.52	14.500	2.91	20.58	1.16
2.417	1.26	8.500	2.52	14.583	2.91	20.67	1.16
2.500	1.26	8.583	2.52	14.667	2.91	20.75	1.16
2.583	1.26	8.667	2.52	14.750	2.91	20.83	1.16
2.667	1.26	8.750	2.52	14.833	2.91	20.92	1.16
2.750	1.26	8.833	2.72	14.917	2.91	21.00	1.16
2.833	1.26	8.917	2.72	15.000	2.91	21.08	1.16
2.917	1.26	9.000	2.72	15.083	2.91	21.17	1.16
3.000	1.26	9.083	2.72	15.167	2.91	21.25	1.16
3.083	1.26	9.167	2.72	15.250	2.91	21.33	1.16
3.167	1.26	9.250	2.72	15.333	2.91	21.42	1.16
3.250	1.26	9.333	3.10	15.417	2.91	21.50	1.16
3.333	1.26	9.417	3.10	15.500	2.91	21.58	1.16
3.417	1.26	9.500	3.10	15.583	2.91	21.67	1.16
3.500	1.26	9.583	3.10	15.667	2.91	21.75	1.16
3.583	1.26	9.667	3.10	15.750	2.91	21.83	1.16
3.667	1.26	9.750	3.10	15.833	2.91	21.92	1.16
3.750	1.26	9.833	3.49	15.917	2.91	22.00	1.16
3.833	1.26	9.917	3.49	16.000	2.91	22.08	1.16
3.917	1.26	10.000	3.49	16.083	2.91	22.17	1.16
4.000	1.26	10.083	3.49	16.167	2.91	22.25	1.16
4.083	1.26	10.167	3.49	16.250	2.91	22.33	1.16
4.167	1.26	10.250	3.49	16.333	1.75	22.42	1.16
4.250	1.26	10.333	4.46	16.417	1.75	22.50	1.16
4.333	1.55	10.417	4.46	16.500	1.75	22.58	1.16
4.417	1.55	10.500	4.46	16.583	1.75	22.67	1.16
4.500	1.55	10.583	4.46	16.667	1.75	22.75	1.16
4.583	1.55	10.667	4.46	16.750	1.75	22.83	1.16
4.667	1.55	10.750	4.46	16.833	1.75	22.92	1.16
4.750	1.55	10.833	6.01	16.917	1.75	23.00	1.16
4.833	1.55	10.917	6.01	17.000	1.75	23.08	1.16
4.917	1.55	11.000	6.01	17.083	1.75	23.17	1.16
5.000	1.55	11.083	6.01	17.167	1.75	23.25	1.16
5.083	1.55	11.167	6.01	17.250	1.75	23.33	1.16
5.167	1.55	11.250	6.01	17.333	1.75	23.42	1.16
5.250	1.55	11.333	9.31	17.417	1.75	23.50	1.16
5.333	1.55	11.417	9.31	17.500	1.75	23.58	1.16
5.417	1.55	11.500	9.31	17.583	1.75	23.67	1.16
5.500	1.55	11.583	9.31	17.667	1.75	23.75	1.16
5.583	1.55	11.667	9.31	17.750	1.75	23.83	1.16
5.667	1.55	11.750	9.31	17.833	1.75	23.92	1.16
5.750	1.55	11.833	28.70	17.917	1.75	24.00	1.16
5.833	1.55	11.917	28.71	18.000	1.75	24.08	1.16

5.917	1.55	12.000	28.71	18.083	1.75	24.17	1.16
6.000	1.55	12.083	118.69	18.167	1.75	24.25	1.16
6.083	1.55	12.167	118.70	18.250	1.75		

Unit Hyd Qpeak (cms)= 2.267

PEAK FLOW (cms)= 1.433 (i)
TIME TO PEAK (hrs)= 14.083
RUNOFF VOLUME (mm)= 27.450
TOTAL RAINFALL (mm)= 96.980
RUNOFF COEFFICIENT = 0.283

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB		
NASHYD (0008)	Area (ha)= 23.99	Curve Number (CN)= 44.7
ID= 1 DT= 5.0 min	Ia (mm)= 10.91	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.97	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.55	12.250	118.70	18.33	1.75
0.167	0.00	6.250	1.55	12.333	13.98	18.42	1.75
0.250	0.00	6.333	1.75	12.417	13.97	18.50	1.75
0.333	1.07	6.417	1.75	12.500	13.97	18.58	1.75
0.417	1.07	6.500	1.75	12.583	13.97	18.67	1.75
0.500	1.07	6.583	1.75	12.667	13.97	18.75	1.75
0.583	1.07	6.667	1.75	12.750	13.97	18.83	1.75
0.667	1.07	6.750	1.75	12.833	7.18	18.92	1.75
0.750	1.07	6.833	1.75	12.917	7.18	19.00	1.75
0.833	1.07	6.917	1.75	13.000	7.18	19.08	1.75
0.917	1.07	7.000	1.75	13.083	7.18	19.17	1.75
1.000	1.07	7.083	1.75	13.167	7.18	19.25	1.75
1.083	1.07	7.167	1.75	13.250	7.18	19.33	1.75
1.167	1.07	7.250	1.75	13.333	5.24	19.42	1.75
1.250	1.07	7.333	2.13	13.417	5.24	19.50	1.75
1.333	1.07	7.417	2.13	13.500	5.24	19.58	1.75
1.417	1.07	7.500	2.13	13.583	5.24	19.67	1.75
1.500	1.07	7.583	2.13	13.667	5.24	19.75	1.75
1.583	1.07	7.667	2.13	13.750	5.24	19.83	1.75
1.667	1.07	7.750	2.13	13.833	4.07	19.92	1.75
1.750	1.07	7.833	2.13	13.917	4.07	20.00	1.75

1.833	1.07	7.917	2.13	14.000	4.07	20.08	1.75
1.917	1.07	8.000	2.13	14.083	4.07	20.17	1.75
2.000	1.07	8.083	2.13	14.167	4.07	20.25	1.75
2.083	1.07	8.167	2.13	14.250	4.07	20.33	1.16
2.167	1.07	8.250	2.13	14.333	2.91	20.42	1.16
2.250	1.07	8.333	2.52	14.417	2.91	20.50	1.16
2.333	1.26	8.417	2.52	14.500	2.91	20.58	1.16
2.417	1.26	8.500	2.52	14.583	2.91	20.67	1.16
2.500	1.26	8.583	2.52	14.667	2.91	20.75	1.16
2.583	1.26	8.667	2.52	14.750	2.91	20.83	1.16
2.667	1.26	8.750	2.52	14.833	2.91	20.92	1.16
2.750	1.26	8.833	2.72	14.917	2.91	21.00	1.16
2.833	1.26	8.917	2.72	15.000	2.91	21.08	1.16
2.917	1.26	9.000	2.72	15.083	2.91	21.17	1.16
3.000	1.26	9.083	2.72	15.167	2.91	21.25	1.16
3.083	1.26	9.167	2.72	15.250	2.91	21.33	1.16
3.167	1.26	9.250	2.72	15.333	2.91	21.42	1.16
3.250	1.26	9.333	3.10	15.417	2.91	21.50	1.16
3.333	1.26	9.417	3.10	15.500	2.91	21.58	1.16
3.417	1.26	9.500	3.10	15.583	2.91	21.67	1.16
3.500	1.26	9.583	3.10	15.667	2.91	21.75	1.16
3.583	1.26	9.667	3.10	15.750	2.91	21.83	1.16
3.667	1.26	9.750	3.10	15.833	2.91	21.92	1.16
3.750	1.26	9.833	3.49	15.917	2.91	22.00	1.16
3.833	1.26	9.917	3.49	16.000	2.91	22.08	1.16
3.917	1.26	10.000	3.49	16.083	2.91	22.17	1.16
4.000	1.26	10.083	3.49	16.167	2.91	22.25	1.16
4.083	1.26	10.167	3.49	16.250	2.91	22.33	1.16
4.167	1.26	10.250	3.49	16.333	1.75	22.42	1.16
4.250	1.26	10.333	4.46	16.417	1.75	22.50	1.16
4.333	1.55	10.417	4.46	16.500	1.75	22.58	1.16
4.417	1.55	10.500	4.46	16.583	1.75	22.67	1.16
4.500	1.55	10.583	4.46	16.667	1.75	22.75	1.16
4.583	1.55	10.667	4.46	16.750	1.75	22.83	1.16
4.667	1.55	10.750	4.46	16.833	1.75	22.92	1.16
4.750	1.55	10.833	6.01	16.917	1.75	23.00	1.16
4.833	1.55	10.917	6.01	17.000	1.75	23.08	1.16
4.917	1.55	11.000	6.01	17.083	1.75	23.17	1.16
5.000	1.55	11.083	6.01	17.167	1.75	23.25	1.16
5.083	1.55	11.167	6.01	17.250	1.75	23.33	1.16
5.167	1.55	11.250	6.01	17.333	1.75	23.42	1.16
5.250	1.55	11.333	9.31	17.417	1.75	23.50	1.16
5.333	1.55	11.417	9.31	17.500	1.75	23.58	1.16
5.417	1.55	11.500	9.31	17.583	1.75	23.67	1.16
5.500	1.55	11.583	9.31	17.667	1.75	23.75	1.16
5.583	1.55	11.667	9.31	17.750	1.75	23.83	1.16
5.667	1.55	11.750	9.31	17.833	1.75	23.92	1.16
5.750	1.55	11.833	28.70	17.917	1.75	24.00	1.16

5.833	1.55	11.917	28.71	18.000	1.75	24.08	1.16
5.917	1.55	12.000	28.71	18.083	1.75	24.17	1.16
6.000	1.55	12.083	118.69	18.167	1.75	24.25	1.16
6.083	1.55	12.167	118.70	18.250	1.75		

Unit Hyd Qpeak (cms)= 0.945

PEAK FLOW (cms)= 0.341 (i)
TIME TO PEAK (hrs)= 13.250
RUNOFF VOLUME (mm)= 18.506
TOTAL RAINFALL (mm)= 96.980
RUNOFF COEFFICIENT = 0.191

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0009)	Area (ha)= 6.37	Curve Number (CN)= 50.5	
ID= 1 DT= 5.0 min	Ia (mm)= 15.69	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.77		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.55	12.250	118.70	18.33	1.75
0.167	0.00	6.250	1.55	12.333	13.98	18.42	1.75
0.250	0.00	6.333	1.75	12.417	13.97	18.50	1.75
0.333	1.07	6.417	1.75	12.500	13.97	18.58	1.75
0.417	1.07	6.500	1.75	12.583	13.97	18.67	1.75
0.500	1.07	6.583	1.75	12.667	13.97	18.75	1.75
0.583	1.07	6.667	1.75	12.750	13.97	18.83	1.75
0.667	1.07	6.750	1.75	12.833	7.18	18.92	1.75
0.750	1.07	6.833	1.75	12.917	7.18	19.00	1.75
0.833	1.07	6.917	1.75	13.000	7.18	19.08	1.75
0.917	1.07	7.000	1.75	13.083	7.18	19.17	1.75
1.000	1.07	7.083	1.75	13.167	7.18	19.25	1.75
1.083	1.07	7.167	1.75	13.250	7.18	19.33	1.75
1.167	1.07	7.250	1.75	13.333	5.24	19.42	1.75
1.250	1.07	7.333	2.13	13.417	5.24	19.50	1.75
1.333	1.07	7.417	2.13	13.500	5.24	19.58	1.75
1.417	1.07	7.500	2.13	13.583	5.24	19.67	1.75
1.500	1.07	7.583	2.13	13.667	5.24	19.75	1.75
1.583	1.07	7.667	2.13	13.750	5.24	19.83	1.75
1.667	1.07	7.750	2.13	13.833	4.07	19.92	1.75

1.750	1.07	7.833	2.13	13.917	4.07	20.00	1.75
1.833	1.07	7.917	2.13	14.000	4.07	20.08	1.75
1.917	1.07	8.000	2.13	14.083	4.07	20.17	1.75
2.000	1.07	8.083	2.13	14.167	4.07	20.25	1.75
2.083	1.07	8.167	2.13	14.250	4.07	20.33	1.16
2.167	1.07	8.250	2.13	14.333	2.91	20.42	1.16
2.250	1.07	8.333	2.52	14.417	2.91	20.50	1.16
2.333	1.26	8.417	2.52	14.500	2.91	20.58	1.16
2.417	1.26	8.500	2.52	14.583	2.91	20.67	1.16
2.500	1.26	8.583	2.52	14.667	2.91	20.75	1.16
2.583	1.26	8.667	2.52	14.750	2.91	20.83	1.16
2.667	1.26	8.750	2.52	14.833	2.91	20.92	1.16
2.750	1.26	8.833	2.72	14.917	2.91	21.00	1.16
2.833	1.26	8.917	2.72	15.000	2.91	21.08	1.16
2.917	1.26	9.000	2.72	15.083	2.91	21.17	1.16
3.000	1.26	9.083	2.72	15.167	2.91	21.25	1.16
3.083	1.26	9.167	2.72	15.250	2.91	21.33	1.16
3.167	1.26	9.250	2.72	15.333	2.91	21.42	1.16
3.250	1.26	9.333	3.10	15.417	2.91	21.50	1.16
3.333	1.26	9.417	3.10	15.500	2.91	21.58	1.16
3.417	1.26	9.500	3.10	15.583	2.91	21.67	1.16
3.500	1.26	9.583	3.10	15.667	2.91	21.75	1.16
3.583	1.26	9.667	3.10	15.750	2.91	21.83	1.16
3.667	1.26	9.750	3.10	15.833	2.91	21.92	1.16
3.750	1.26	9.833	3.49	15.917	2.91	22.00	1.16
3.833	1.26	9.917	3.49	16.000	2.91	22.08	1.16
3.917	1.26	10.000	3.49	16.083	2.91	22.17	1.16
4.000	1.26	10.083	3.49	16.167	2.91	22.25	1.16
4.083	1.26	10.167	3.49	16.250	2.91	22.33	1.16
4.167	1.26	10.250	3.49	16.333	1.75	22.42	1.16
4.250	1.26	10.333	4.46	16.417	1.75	22.50	1.16
4.333	1.55	10.417	4.46	16.500	1.75	22.58	1.16
4.417	1.55	10.500	4.46	16.583	1.75	22.67	1.16
4.500	1.55	10.583	4.46	16.667	1.75	22.75	1.16
4.583	1.55	10.667	4.46	16.750	1.75	22.83	1.16
4.667	1.55	10.750	4.46	16.833	1.75	22.92	1.16
4.750	1.55	10.833	6.01	16.917	1.75	23.00	1.16
4.833	1.55	10.917	6.01	17.000	1.75	23.08	1.16
4.917	1.55	11.000	6.01	17.083	1.75	23.17	1.16
5.000	1.55	11.083	6.01	17.167	1.75	23.25	1.16
5.083	1.55	11.167	6.01	17.250	1.75	23.33	1.16
5.167	1.55	11.250	6.01	17.333	1.75	23.42	1.16
5.250	1.55	11.333	9.31	17.417	1.75	23.50	1.16
5.333	1.55	11.417	9.31	17.500	1.75	23.58	1.16
5.417	1.55	11.500	9.31	17.583	1.75	23.67	1.16
5.500	1.55	11.583	9.31	17.667	1.75	23.75	1.16
5.583	1.55	11.667	9.31	17.750	1.75	23.83	1.16
5.667	1.55	11.750	9.31	17.833	1.75	23.92	1.16

5.750	1.55	11.833	28.70	17.917	1.75	24.00	1.16
5.833	1.55	11.917	28.71	18.000	1.75	24.08	1.16
5.917	1.55	12.000	28.71	18.083	1.75	24.17	1.16
6.000	1.55	12.083	118.69	18.167	1.75	24.25	1.16
6.083	1.55	12.167	118.70	18.250	1.75		

Unit Hyd Qpeak (cms)= 0.316

PEAK FLOW (cms)= 0.115 (i)
TIME TO PEAK (hrs)= 13.000
RUNOFF VOLUME (mm)= 19.996
TOTAL RAINFALL (mm)= 96.980
RUNOFF COEFFICIENT = 0.206

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB NASHYD (0010) ID= 1 DT= 5.0 min	Area (ha)= 14.85 Curve Number (CN)= 52.9 Ia (mm)= 13.28 # of Linear Res.(N)= 3.00 U.H. Tp(hrs)= 0.89

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.55	12.250	118.70	18.33	1.75
0.167	0.00	6.250	1.55	12.333	13.98	18.42	1.75
0.250	0.00	6.333	1.75	12.417	13.97	18.50	1.75
0.333	1.07	6.417	1.75	12.500	13.97	18.58	1.75
0.417	1.07	6.500	1.75	12.583	13.97	18.67	1.75
0.500	1.07	6.583	1.75	12.667	13.97	18.75	1.75
0.583	1.07	6.667	1.75	12.750	13.97	18.83	1.75
0.667	1.07	6.750	1.75	12.833	7.18	18.92	1.75
0.750	1.07	6.833	1.75	12.917	7.18	19.00	1.75
0.833	1.07	6.917	1.75	13.000	7.18	19.08	1.75
0.917	1.07	7.000	1.75	13.083	7.18	19.17	1.75
1.000	1.07	7.083	1.75	13.167	7.18	19.25	1.75
1.083	1.07	7.167	1.75	13.250	7.18	19.33	1.75
1.167	1.07	7.250	1.75	13.333	5.24	19.42	1.75
1.250	1.07	7.333	2.13	13.417	5.24	19.50	1.75
1.333	1.07	7.417	2.13	13.500	5.24	19.58	1.75
1.417	1.07	7.500	2.13	13.583	5.24	19.67	1.75
1.500	1.07	7.583	2.13	13.667	5.24	19.75	1.75
1.583	1.07	7.667	2.13	13.750	5.24	19.83	1.75

1.667	1.07	7.750	2.13	13.833	4.07	19.92	1.75
1.750	1.07	7.833	2.13	13.917	4.07	20.00	1.75
1.833	1.07	7.917	2.13	14.000	4.07	20.08	1.75
1.917	1.07	8.000	2.13	14.083	4.07	20.17	1.75
2.000	1.07	8.083	2.13	14.167	4.07	20.25	1.75
2.083	1.07	8.167	2.13	14.250	4.07	20.33	1.16
2.167	1.07	8.250	2.13	14.333	2.91	20.42	1.16
2.250	1.07	8.333	2.52	14.417	2.91	20.50	1.16
2.333	1.26	8.417	2.52	14.500	2.91	20.58	1.16
2.417	1.26	8.500	2.52	14.583	2.91	20.67	1.16
2.500	1.26	8.583	2.52	14.667	2.91	20.75	1.16
2.583	1.26	8.667	2.52	14.750	2.91	20.83	1.16
2.667	1.26	8.750	2.52	14.833	2.91	20.92	1.16
2.750	1.26	8.833	2.72	14.917	2.91	21.00	1.16
2.833	1.26	8.917	2.72	15.000	2.91	21.08	1.16
2.917	1.26	9.000	2.72	15.083	2.91	21.17	1.16
3.000	1.26	9.083	2.72	15.167	2.91	21.25	1.16
3.083	1.26	9.167	2.72	15.250	2.91	21.33	1.16
3.167	1.26	9.250	2.72	15.333	2.91	21.42	1.16
3.250	1.26	9.333	3.10	15.417	2.91	21.50	1.16
3.333	1.26	9.417	3.10	15.500	2.91	21.58	1.16
3.417	1.26	9.500	3.10	15.583	2.91	21.67	1.16
3.500	1.26	9.583	3.10	15.667	2.91	21.75	1.16
3.583	1.26	9.667	3.10	15.750	2.91	21.83	1.16
3.667	1.26	9.750	3.10	15.833	2.91	21.92	1.16
3.750	1.26	9.833	3.49	15.917	2.91	22.00	1.16
3.833	1.26	9.917	3.49	16.000	2.91	22.08	1.16
3.917	1.26	10.000	3.49	16.083	2.91	22.17	1.16
4.000	1.26	10.083	3.49	16.167	2.91	22.25	1.16
4.083	1.26	10.167	3.49	16.250	2.91	22.33	1.16
4.167	1.26	10.250	3.49	16.333	1.75	22.42	1.16
4.250	1.26	10.333	4.46	16.417	1.75	22.50	1.16
4.333	1.55	10.417	4.46	16.500	1.75	22.58	1.16
4.417	1.55	10.500	4.46	16.583	1.75	22.67	1.16
4.500	1.55	10.583	4.46	16.667	1.75	22.75	1.16
4.583	1.55	10.667	4.46	16.750	1.75	22.83	1.16
4.667	1.55	10.750	4.46	16.833	1.75	22.92	1.16
4.750	1.55	10.833	6.01	16.917	1.75	23.00	1.16
4.833	1.55	10.917	6.01	17.000	1.75	23.08	1.16
4.917	1.55	11.000	6.01	17.083	1.75	23.17	1.16
5.000	1.55	11.083	6.01	17.167	1.75	23.25	1.16
5.083	1.55	11.167	6.01	17.250	1.75	23.33	1.16
5.167	1.55	11.250	6.01	17.333	1.75	23.42	1.16
5.250	1.55	11.333	9.31	17.417	1.75	23.50	1.16
5.333	1.55	11.417	9.31	17.500	1.75	23.58	1.16
5.417	1.55	11.500	9.31	17.583	1.75	23.67	1.16
5.500	1.55	11.583	9.31	17.667	1.75	23.75	1.16
5.583	1.55	11.667	9.31	17.750	1.75	23.83	1.16

5.667	1.55	11.750	9.31	17.833	1.75	23.92	1.16
5.750	1.55	11.833	28.70	17.917	1.75	24.00	1.16
5.833	1.55	11.917	28.71	18.000	1.75	24.08	1.16
5.917	1.55	12.000	28.71	18.083	1.75	24.17	1.16
6.000	1.55	12.083	118.69	18.167	1.75	24.25	1.16
6.083	1.55	12.167	118.70	18.250	1.75		

Unit Hyd Qpeak (cms)= 0.637

PEAK FLOW (cms)= 0.278 (i)
TIME TO PEAK (hrs)= 13.167
RUNOFF VOLUME (mm)= 22.636
TOTAL RAINFALL (mm)= 96.980
RUNOFF COEFFICIENT = 0.233

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	
NASHYD (0013)	Area (ha)= 1.70 Curve Number (CN)= 60.5
ID= 1 DT= 5.0 min	Ia (mm)= 9.65 # of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.40

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.55	12.250	118.70	18.33	1.75
0.167	0.00	6.250	1.55	12.333	13.98	18.42	1.75
0.250	0.00	6.333	1.75	12.417	13.97	18.50	1.75
0.333	1.07	6.417	1.75	12.500	13.97	18.58	1.75
0.417	1.07	6.500	1.75	12.583	13.97	18.67	1.75
0.500	1.07	6.583	1.75	12.667	13.97	18.75	1.75
0.583	1.07	6.667	1.75	12.750	13.97	18.83	1.75
0.667	1.07	6.750	1.75	12.833	7.18	18.92	1.75
0.750	1.07	6.833	1.75	12.917	7.18	19.00	1.75
0.833	1.07	6.917	1.75	13.000	7.18	19.08	1.75
0.917	1.07	7.000	1.75	13.083	7.18	19.17	1.75
1.000	1.07	7.083	1.75	13.167	7.18	19.25	1.75
1.083	1.07	7.167	1.75	13.250	7.18	19.33	1.75
1.167	1.07	7.250	1.75	13.333	5.24	19.42	1.75
1.250	1.07	7.333	2.13	13.417	5.24	19.50	1.75
1.333	1.07	7.417	2.13	13.500	5.24	19.58	1.75
1.417	1.07	7.500	2.13	13.583	5.24	19.67	1.75
1.500	1.07	7.583	2.13	13.667	5.24	19.75	1.75

1.583	1.07	7.667	2.13	13.750	5.24	19.83	1.75
1.667	1.07	7.750	2.13	13.833	4.07	19.92	1.75
1.750	1.07	7.833	2.13	13.917	4.07	20.00	1.75
1.833	1.07	7.917	2.13	14.000	4.07	20.08	1.75
1.917	1.07	8.000	2.13	14.083	4.07	20.17	1.75
2.000	1.07	8.083	2.13	14.167	4.07	20.25	1.75
2.083	1.07	8.167	2.13	14.250	4.07	20.33	1.16
2.167	1.07	8.250	2.13	14.333	2.91	20.42	1.16
2.250	1.07	8.333	2.52	14.417	2.91	20.50	1.16
2.333	1.26	8.417	2.52	14.500	2.91	20.58	1.16
2.417	1.26	8.500	2.52	14.583	2.91	20.67	1.16
2.500	1.26	8.583	2.52	14.667	2.91	20.75	1.16
2.583	1.26	8.667	2.52	14.750	2.91	20.83	1.16
2.667	1.26	8.750	2.52	14.833	2.91	20.92	1.16
2.750	1.26	8.833	2.72	14.917	2.91	21.00	1.16
2.833	1.26	8.917	2.72	15.000	2.91	21.08	1.16
2.917	1.26	9.000	2.72	15.083	2.91	21.17	1.16
3.000	1.26	9.083	2.72	15.167	2.91	21.25	1.16
3.083	1.26	9.167	2.72	15.250	2.91	21.33	1.16
3.167	1.26	9.250	2.72	15.333	2.91	21.42	1.16
3.250	1.26	9.333	3.10	15.417	2.91	21.50	1.16
3.333	1.26	9.417	3.10	15.500	2.91	21.58	1.16
3.417	1.26	9.500	3.10	15.583	2.91	21.67	1.16
3.500	1.26	9.583	3.10	15.667	2.91	21.75	1.16
3.583	1.26	9.667	3.10	15.750	2.91	21.83	1.16
3.667	1.26	9.750	3.10	15.833	2.91	21.92	1.16
3.750	1.26	9.833	3.49	15.917	2.91	22.00	1.16
3.833	1.26	9.917	3.49	16.000	2.91	22.08	1.16
3.917	1.26	10.000	3.49	16.083	2.91	22.17	1.16
4.000	1.26	10.083	3.49	16.167	2.91	22.25	1.16
4.083	1.26	10.167	3.49	16.250	2.91	22.33	1.16
4.167	1.26	10.250	3.49	16.333	1.75	22.42	1.16
4.250	1.26	10.333	4.46	16.417	1.75	22.50	1.16
4.333	1.55	10.417	4.46	16.500	1.75	22.58	1.16
4.417	1.55	10.500	4.46	16.583	1.75	22.67	1.16
4.500	1.55	10.583	4.46	16.667	1.75	22.75	1.16
4.583	1.55	10.667	4.46	16.750	1.75	22.83	1.16
4.667	1.55	10.750	4.46	16.833	1.75	22.92	1.16
4.750	1.55	10.833	6.01	16.917	1.75	23.00	1.16
4.833	1.55	10.917	6.01	17.000	1.75	23.08	1.16
4.917	1.55	11.000	6.01	17.083	1.75	23.17	1.16
5.000	1.55	11.083	6.01	17.167	1.75	23.25	1.16
5.083	1.55	11.167	6.01	17.250	1.75	23.33	1.16
5.167	1.55	11.250	6.01	17.333	1.75	23.42	1.16
5.250	1.55	11.333	9.31	17.417	1.75	23.50	1.16
5.333	1.55	11.417	9.31	17.500	1.75	23.58	1.16
5.417	1.55	11.500	9.31	17.583	1.75	23.67	1.16
5.500	1.55	11.583	9.31	17.667	1.75	23.75	1.16

5.583	1.55	11.667	9.31	17.750	1.75	23.83	1.16
5.667	1.55	11.750	9.31	17.833	1.75	23.92	1.16
5.750	1.55	11.833	28.70	17.917	1.75	24.00	1.16
5.833	1.55	11.917	28.71	18.000	1.75	24.08	1.16
5.917	1.55	12.000	28.71	18.083	1.75	24.17	1.16
6.000	1.55	12.083	118.69	18.167	1.75	24.25	1.16
6.083	1.55	12.167	118.70	18.250	1.75		

Unit Hyd Qpeak (cms)= 0.162

PEAK FLOW (cms)= 0.078 (i)
TIME TO PEAK (hrs)= 12.500
RUNOFF VOLUME (mm)= 30.088
TOTAL RAINFALL (mm)= 96.980
RUNOFF COEFFICIENT = 0.310

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB NASHYD (0014) ID= 1 DT= 5.0 min	Area (ha)= 1.80 Curve Number (CN)= 50.0 Ia (mm)= 16.00 # of Linear Res.(N)= 3.00 U.H. Tp(hrs)= 0.76

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.55	12.250	118.70	18.33	1.75
0.167	0.00	6.250	1.55	12.333	13.98	18.42	1.75
0.250	0.00	6.333	1.75	12.417	13.97	18.50	1.75
0.333	1.07	6.417	1.75	12.500	13.97	18.58	1.75
0.417	1.07	6.500	1.75	12.583	13.97	18.67	1.75
0.500	1.07	6.583	1.75	12.667	13.97	18.75	1.75
0.583	1.07	6.667	1.75	12.750	13.97	18.83	1.75
0.667	1.07	6.750	1.75	12.833	7.18	18.92	1.75
0.750	1.07	6.833	1.75	12.917	7.18	19.00	1.75
0.833	1.07	6.917	1.75	13.000	7.18	19.08	1.75
0.917	1.07	7.000	1.75	13.083	7.18	19.17	1.75
1.000	1.07	7.083	1.75	13.167	7.18	19.25	1.75
1.083	1.07	7.167	1.75	13.250	7.18	19.33	1.75
1.167	1.07	7.250	1.75	13.333	5.24	19.42	1.75
1.250	1.07	7.333	2.13	13.417	5.24	19.50	1.75
1.333	1.07	7.417	2.13	13.500	5.24	19.58	1.75
1.417	1.07	7.500	2.13	13.583	5.24	19.67	1.75

1.500	1.07	7.583	2.13	13.667	5.24	19.75	1.75
1.583	1.07	7.667	2.13	13.750	5.24	19.83	1.75
1.667	1.07	7.750	2.13	13.833	4.07	19.92	1.75
1.750	1.07	7.833	2.13	13.917	4.07	20.00	1.75
1.833	1.07	7.917	2.13	14.000	4.07	20.08	1.75
1.917	1.07	8.000	2.13	14.083	4.07	20.17	1.75
2.000	1.07	8.083	2.13	14.167	4.07	20.25	1.75
2.083	1.07	8.167	2.13	14.250	4.07	20.33	1.16
2.167	1.07	8.250	2.13	14.333	2.91	20.42	1.16
2.250	1.07	8.333	2.52	14.417	2.91	20.50	1.16
2.333	1.26	8.417	2.52	14.500	2.91	20.58	1.16
2.417	1.26	8.500	2.52	14.583	2.91	20.67	1.16
2.500	1.26	8.583	2.52	14.667	2.91	20.75	1.16
2.583	1.26	8.667	2.52	14.750	2.91	20.83	1.16
2.667	1.26	8.750	2.52	14.833	2.91	20.92	1.16
2.750	1.26	8.833	2.72	14.917	2.91	21.00	1.16
2.833	1.26	8.917	2.72	15.000	2.91	21.08	1.16
2.917	1.26	9.000	2.72	15.083	2.91	21.17	1.16
3.000	1.26	9.083	2.72	15.167	2.91	21.25	1.16
3.083	1.26	9.167	2.72	15.250	2.91	21.33	1.16
3.167	1.26	9.250	2.72	15.333	2.91	21.42	1.16
3.250	1.26	9.333	3.10	15.417	2.91	21.50	1.16
3.333	1.26	9.417	3.10	15.500	2.91	21.58	1.16
3.417	1.26	9.500	3.10	15.583	2.91	21.67	1.16
3.500	1.26	9.583	3.10	15.667	2.91	21.75	1.16
3.583	1.26	9.667	3.10	15.750	2.91	21.83	1.16
3.667	1.26	9.750	3.10	15.833	2.91	21.92	1.16
3.750	1.26	9.833	3.49	15.917	2.91	22.00	1.16
3.833	1.26	9.917	3.49	16.000	2.91	22.08	1.16
3.917	1.26	10.000	3.49	16.083	2.91	22.17	1.16
4.000	1.26	10.083	3.49	16.167	2.91	22.25	1.16
4.083	1.26	10.167	3.49	16.250	2.91	22.33	1.16
4.167	1.26	10.250	3.49	16.333	1.75	22.42	1.16
4.250	1.26	10.333	4.46	16.417	1.75	22.50	1.16
4.333	1.55	10.417	4.46	16.500	1.75	22.58	1.16
4.417	1.55	10.500	4.46	16.583	1.75	22.67	1.16
4.500	1.55	10.583	4.46	16.667	1.75	22.75	1.16
4.583	1.55	10.667	4.46	16.750	1.75	22.83	1.16
4.667	1.55	10.750	4.46	16.833	1.75	22.92	1.16
4.750	1.55	10.833	6.01	16.917	1.75	23.00	1.16
4.833	1.55	10.917	6.01	17.000	1.75	23.08	1.16
4.917	1.55	11.000	6.01	17.083	1.75	23.17	1.16
5.000	1.55	11.083	6.01	17.167	1.75	23.25	1.16
5.083	1.55	11.167	6.01	17.250	1.75	23.33	1.16
5.167	1.55	11.250	6.01	17.333	1.75	23.42	1.16
5.250	1.55	11.333	9.31	17.417	1.75	23.50	1.16
5.333	1.55	11.417	9.31	17.500	1.75	23.58	1.16
5.417	1.55	11.500	9.31	17.583	1.75	23.67	1.16

5.500	1.55	11.583	9.31	17.667	1.75	23.75	1.16
5.583	1.55	11.667	9.31	17.750	1.75	23.83	1.16
5.667	1.55	11.750	9.31	17.833	1.75	23.92	1.16
5.750	1.55	11.833	28.70	17.917	1.75	24.00	1.16
5.833	1.55	11.917	28.71	18.000	1.75	24.08	1.16
5.917	1.55	12.000	28.71	18.083	1.75	24.17	1.16
6.000	1.55	12.083	118.69	18.167	1.75	24.25	1.16
6.083	1.55	12.167	118.70	18.250	1.75		

Unit Hyd Qpeak (cms)= 0.090

PEAK FLOW (cms)= 0.032 (i)
TIME TO PEAK (hrs)= 13.000
RUNOFF VOLUME (mm)= 19.575
TOTAL RAINFALL (mm)= 96.980
RUNOFF COEFFICIENT = 0.202

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0015)	Area (ha)= 6.70	Curve Number (CN)= 60.0	
ID= 1 DT= 5.0 min	Ia (mm)= 10.00	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 1.45		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.55	12.250	118.70	18.33	1.75
0.167	0.00	6.250	1.55	12.333	13.98	18.42	1.75
0.250	0.00	6.333	1.75	12.417	13.97	18.50	1.75
0.333	1.07	6.417	1.75	12.500	13.97	18.58	1.75
0.417	1.07	6.500	1.75	12.583	13.97	18.67	1.75
0.500	1.07	6.583	1.75	12.667	13.97	18.75	1.75
0.583	1.07	6.667	1.75	12.750	13.97	18.83	1.75
0.667	1.07	6.750	1.75	12.833	7.18	18.92	1.75
0.750	1.07	6.833	1.75	12.917	7.18	19.00	1.75
0.833	1.07	6.917	1.75	13.000	7.18	19.08	1.75
0.917	1.07	7.000	1.75	13.083	7.18	19.17	1.75
1.000	1.07	7.083	1.75	13.167	7.18	19.25	1.75
1.083	1.07	7.167	1.75	13.250	7.18	19.33	1.75
1.167	1.07	7.250	1.75	13.333	5.24	19.42	1.75
1.250	1.07	7.333	2.13	13.417	5.24	19.50	1.75
1.333	1.07	7.417	2.13	13.500	5.24	19.58	1.75

1.417	1.07	7.500	2.13	13.583	5.24	19.67	1.75
1.500	1.07	7.583	2.13	13.667	5.24	19.75	1.75
1.583	1.07	7.667	2.13	13.750	5.24	19.83	1.75
1.667	1.07	7.750	2.13	13.833	4.07	19.92	1.75
1.750	1.07	7.833	2.13	13.917	4.07	20.00	1.75
1.833	1.07	7.917	2.13	14.000	4.07	20.08	1.75
1.917	1.07	8.000	2.13	14.083	4.07	20.17	1.75
2.000	1.07	8.083	2.13	14.167	4.07	20.25	1.75
2.083	1.07	8.167	2.13	14.250	4.07	20.33	1.16
2.167	1.07	8.250	2.13	14.333	2.91	20.42	1.16
2.250	1.07	8.333	2.52	14.417	2.91	20.50	1.16
2.333	1.26	8.417	2.52	14.500	2.91	20.58	1.16
2.417	1.26	8.500	2.52	14.583	2.91	20.67	1.16
2.500	1.26	8.583	2.52	14.667	2.91	20.75	1.16
2.583	1.26	8.667	2.52	14.750	2.91	20.83	1.16
2.667	1.26	8.750	2.52	14.833	2.91	20.92	1.16
2.750	1.26	8.833	2.72	14.917	2.91	21.00	1.16
2.833	1.26	8.917	2.72	15.000	2.91	21.08	1.16
2.917	1.26	9.000	2.72	15.083	2.91	21.17	1.16
3.000	1.26	9.083	2.72	15.167	2.91	21.25	1.16
3.083	1.26	9.167	2.72	15.250	2.91	21.33	1.16
3.167	1.26	9.250	2.72	15.333	2.91	21.42	1.16
3.250	1.26	9.333	3.10	15.417	2.91	21.50	1.16
3.333	1.26	9.417	3.10	15.500	2.91	21.58	1.16
3.417	1.26	9.500	3.10	15.583	2.91	21.67	1.16
3.500	1.26	9.583	3.10	15.667	2.91	21.75	1.16
3.583	1.26	9.667	3.10	15.750	2.91	21.83	1.16
3.667	1.26	9.750	3.10	15.833	2.91	21.92	1.16
3.750	1.26	9.833	3.49	15.917	2.91	22.00	1.16
3.833	1.26	9.917	3.49	16.000	2.91	22.08	1.16
3.917	1.26	10.000	3.49	16.083	2.91	22.17	1.16
4.000	1.26	10.083	3.49	16.167	2.91	22.25	1.16
4.083	1.26	10.167	3.49	16.250	2.91	22.33	1.16
4.167	1.26	10.250	3.49	16.333	1.75	22.42	1.16
4.250	1.26	10.333	4.46	16.417	1.75	22.50	1.16
4.333	1.55	10.417	4.46	16.500	1.75	22.58	1.16
4.417	1.55	10.500	4.46	16.583	1.75	22.67	1.16
4.500	1.55	10.583	4.46	16.667	1.75	22.75	1.16
4.583	1.55	10.667	4.46	16.750	1.75	22.83	1.16
4.667	1.55	10.750	4.46	16.833	1.75	22.92	1.16
4.750	1.55	10.833	6.01	16.917	1.75	23.00	1.16
4.833	1.55	10.917	6.01	17.000	1.75	23.08	1.16
4.917	1.55	11.000	6.01	17.083	1.75	23.17	1.16
5.000	1.55	11.083	6.01	17.167	1.75	23.25	1.16
5.083	1.55	11.167	6.01	17.250	1.75	23.33	1.16
5.167	1.55	11.250	6.01	17.333	1.75	23.42	1.16
5.250	1.55	11.333	9.31	17.417	1.75	23.50	1.16
5.333	1.55	11.417	9.31	17.500	1.75	23.58	1.16

5.417	1.55	11.500	9.31	17.583	1.75	23.67	1.16
5.500	1.55	11.583	9.31	17.667	1.75	23.75	1.16
5.583	1.55	11.667	9.31	17.750	1.75	23.83	1.16
5.667	1.55	11.750	9.31	17.833	1.75	23.92	1.16
5.750	1.55	11.833	28.70	17.917	1.75	24.00	1.16
5.833	1.55	11.917	28.71	18.000	1.75	24.08	1.16
5.917	1.55	12.000	28.71	18.083	1.75	24.17	1.16
6.000	1.55	12.083	118.69	18.167	1.75	24.25	1.16
6.083	1.55	12.167	118.70	18.250	1.75		

Unit Hyd Qpeak (cms)= 0.176

PEAK FLOW (cms)= 0.116 (i)
TIME TO PEAK (hrs)= 13.833
RUNOFF VOLUME (mm)= 29.516
TOTAL RAINFALL (mm)= 96.980
RUNOFF COEFFICIENT = 0.304

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0016)	Area (ha)= 29.16	Curve Number (CN)= 71.4	
ID= 1 DT= 5.0 min	Ia (mm)= 7.88	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.68		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.55	12.250	118.70	18.33	1.75
0.167	0.00	6.250	1.55	12.333	13.98	18.42	1.75
0.250	0.00	6.333	1.75	12.417	13.97	18.50	1.75
0.333	1.07	6.417	1.75	12.500	13.97	18.58	1.75
0.417	1.07	6.500	1.75	12.583	13.97	18.67	1.75
0.500	1.07	6.583	1.75	12.667	13.97	18.75	1.75
0.583	1.07	6.667	1.75	12.750	13.97	18.83	1.75
0.667	1.07	6.750	1.75	12.833	7.18	18.92	1.75
0.750	1.07	6.833	1.75	12.917	7.18	19.00	1.75
0.833	1.07	6.917	1.75	13.000	7.18	19.08	1.75
0.917	1.07	7.000	1.75	13.083	7.18	19.17	1.75
1.000	1.07	7.083	1.75	13.167	7.18	19.25	1.75
1.083	1.07	7.167	1.75	13.250	7.18	19.33	1.75
1.167	1.07	7.250	1.75	13.333	5.24	19.42	1.75
1.250	1.07	7.333	2.13	13.417	5.24	19.50	1.75

1.333	1.07	7.417	2.13	13.500	5.24	19.58	1.75
1.417	1.07	7.500	2.13	13.583	5.24	19.67	1.75
1.500	1.07	7.583	2.13	13.667	5.24	19.75	1.75
1.583	1.07	7.667	2.13	13.750	5.24	19.83	1.75
1.667	1.07	7.750	2.13	13.833	4.07	19.92	1.75
1.750	1.07	7.833	2.13	13.917	4.07	20.00	1.75
1.833	1.07	7.917	2.13	14.000	4.07	20.08	1.75
1.917	1.07	8.000	2.13	14.083	4.07	20.17	1.75
2.000	1.07	8.083	2.13	14.167	4.07	20.25	1.75
2.083	1.07	8.167	2.13	14.250	4.07	20.33	1.16
2.167	1.07	8.250	2.13	14.333	2.91	20.42	1.16
2.250	1.07	8.333	2.52	14.417	2.91	20.50	1.16
2.333	1.26	8.417	2.52	14.500	2.91	20.58	1.16
2.417	1.26	8.500	2.52	14.583	2.91	20.67	1.16
2.500	1.26	8.583	2.52	14.667	2.91	20.75	1.16
2.583	1.26	8.667	2.52	14.750	2.91	20.83	1.16
2.667	1.26	8.750	2.52	14.833	2.91	20.92	1.16
2.750	1.26	8.833	2.72	14.917	2.91	21.00	1.16
2.833	1.26	8.917	2.72	15.000	2.91	21.08	1.16
2.917	1.26	9.000	2.72	15.083	2.91	21.17	1.16
3.000	1.26	9.083	2.72	15.167	2.91	21.25	1.16
3.083	1.26	9.167	2.72	15.250	2.91	21.33	1.16
3.167	1.26	9.250	2.72	15.333	2.91	21.42	1.16
3.250	1.26	9.333	3.10	15.417	2.91	21.50	1.16
3.333	1.26	9.417	3.10	15.500	2.91	21.58	1.16
3.417	1.26	9.500	3.10	15.583	2.91	21.67	1.16
3.500	1.26	9.583	3.10	15.667	2.91	21.75	1.16
3.583	1.26	9.667	3.10	15.750	2.91	21.83	1.16
3.667	1.26	9.750	3.10	15.833	2.91	21.92	1.16
3.750	1.26	9.833	3.49	15.917	2.91	22.00	1.16
3.833	1.26	9.917	3.49	16.000	2.91	22.08	1.16
3.917	1.26	10.000	3.49	16.083	2.91	22.17	1.16
4.000	1.26	10.083	3.49	16.167	2.91	22.25	1.16
4.083	1.26	10.167	3.49	16.250	2.91	22.33	1.16
4.167	1.26	10.250	3.49	16.333	1.75	22.42	1.16
4.250	1.26	10.333	4.46	16.417	1.75	22.50	1.16
4.333	1.55	10.417	4.46	16.500	1.75	22.58	1.16
4.417	1.55	10.500	4.46	16.583	1.75	22.67	1.16
4.500	1.55	10.583	4.46	16.667	1.75	22.75	1.16
4.583	1.55	10.667	4.46	16.750	1.75	22.83	1.16
4.667	1.55	10.750	4.46	16.833	1.75	22.92	1.16
4.750	1.55	10.833	6.01	16.917	1.75	23.00	1.16
4.833	1.55	10.917	6.01	17.000	1.75	23.08	1.16
4.917	1.55	11.000	6.01	17.083	1.75	23.17	1.16
5.000	1.55	11.083	6.01	17.167	1.75	23.25	1.16
5.083	1.55	11.167	6.01	17.250	1.75	23.33	1.16
5.167	1.55	11.250	6.01	17.333	1.75	23.42	1.16
5.250	1.55	11.333	9.31	17.417	1.75	23.50	1.16

5.333	1.55	11.417	9.31	17.500	1.75	23.58	1.16
5.417	1.55	11.500	9.31	17.583	1.75	23.67	1.16
5.500	1.55	11.583	9.31	17.667	1.75	23.75	1.16
5.583	1.55	11.667	9.31	17.750	1.75	23.83	1.16
5.667	1.55	11.750	9.31	17.833	1.75	23.92	1.16
5.750	1.55	11.833	28.70	17.917	1.75	24.00	1.16
5.833	1.55	11.917	28.71	18.000	1.75	24.08	1.16
5.917	1.55	12.000	28.71	18.083	1.75	24.17	1.16
6.000	1.55	12.083	118.69	18.167	1.75	24.25	1.16
6.083	1.55	12.167	118.70	18.250	1.75		

Unit Hyd Qpeak (cms)= 1.638

PEAK FLOW (cms)= 1.300 (i)
TIME TO PEAK (hrs)= 12.833
RUNOFF VOLUME (mm)= 41.598
TOTAL RAINFALL (mm)= 96.980
RUNOFF COEFFICIENT = 0.429

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB		
NASHYD (0019)	Area (ha)= 39.68	Curve Number (CN)= 60.7
ID= 1 DT= 5.0 min	Ia (mm)= 8.26	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 1.18	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.55	12.250	118.70	18.33	1.75
0.167	0.00	6.250	1.55	12.333	13.98	18.42	1.75
0.250	0.00	6.333	1.75	12.417	13.97	18.50	1.75
0.333	1.07	6.417	1.75	12.500	13.97	18.58	1.75
0.417	1.07	6.500	1.75	12.583	13.97	18.67	1.75
0.500	1.07	6.583	1.75	12.667	13.97	18.75	1.75
0.583	1.07	6.667	1.75	12.750	13.97	18.83	1.75
0.667	1.07	6.750	1.75	12.833	7.18	18.92	1.75
0.750	1.07	6.833	1.75	12.917	7.18	19.00	1.75
0.833	1.07	6.917	1.75	13.000	7.18	19.08	1.75
0.917	1.07	7.000	1.75	13.083	7.18	19.17	1.75
1.000	1.07	7.083	1.75	13.167	7.18	19.25	1.75
1.083	1.07	7.167	1.75	13.250	7.18	19.33	1.75
1.167	1.07	7.250	1.75	13.333	5.24	19.42	1.75

1.250	1.07	7.333	2.13	13.417	5.24	19.50	1.75
1.333	1.07	7.417	2.13	13.500	5.24	19.58	1.75
1.417	1.07	7.500	2.13	13.583	5.24	19.67	1.75
1.500	1.07	7.583	2.13	13.667	5.24	19.75	1.75
1.583	1.07	7.667	2.13	13.750	5.24	19.83	1.75
1.667	1.07	7.750	2.13	13.833	4.07	19.92	1.75
1.750	1.07	7.833	2.13	13.917	4.07	20.00	1.75
1.833	1.07	7.917	2.13	14.000	4.07	20.08	1.75
1.917	1.07	8.000	2.13	14.083	4.07	20.17	1.75
2.000	1.07	8.083	2.13	14.167	4.07	20.25	1.75
2.083	1.07	8.167	2.13	14.250	4.07	20.33	1.16
2.167	1.07	8.250	2.13	14.333	2.91	20.42	1.16
2.250	1.07	8.333	2.52	14.417	2.91	20.50	1.16
2.333	1.26	8.417	2.52	14.500	2.91	20.58	1.16
2.417	1.26	8.500	2.52	14.583	2.91	20.67	1.16
2.500	1.26	8.583	2.52	14.667	2.91	20.75	1.16
2.583	1.26	8.667	2.52	14.750	2.91	20.83	1.16
2.667	1.26	8.750	2.52	14.833	2.91	20.92	1.16
2.750	1.26	8.833	2.72	14.917	2.91	21.00	1.16
2.833	1.26	8.917	2.72	15.000	2.91	21.08	1.16
2.917	1.26	9.000	2.72	15.083	2.91	21.17	1.16
3.000	1.26	9.083	2.72	15.167	2.91	21.25	1.16
3.083	1.26	9.167	2.72	15.250	2.91	21.33	1.16
3.167	1.26	9.250	2.72	15.333	2.91	21.42	1.16
3.250	1.26	9.333	3.10	15.417	2.91	21.50	1.16
3.333	1.26	9.417	3.10	15.500	2.91	21.58	1.16
3.417	1.26	9.500	3.10	15.583	2.91	21.67	1.16
3.500	1.26	9.583	3.10	15.667	2.91	21.75	1.16
3.583	1.26	9.667	3.10	15.750	2.91	21.83	1.16
3.667	1.26	9.750	3.10	15.833	2.91	21.92	1.16
3.750	1.26	9.833	3.49	15.917	2.91	22.00	1.16
3.833	1.26	9.917	3.49	16.000	2.91	22.08	1.16
3.917	1.26	10.000	3.49	16.083	2.91	22.17	1.16
4.000	1.26	10.083	3.49	16.167	2.91	22.25	1.16
4.083	1.26	10.167	3.49	16.250	2.91	22.33	1.16
4.167	1.26	10.250	3.49	16.333	1.75	22.42	1.16
4.250	1.26	10.333	4.46	16.417	1.75	22.50	1.16
4.333	1.55	10.417	4.46	16.500	1.75	22.58	1.16
4.417	1.55	10.500	4.46	16.583	1.75	22.67	1.16
4.500	1.55	10.583	4.46	16.667	1.75	22.75	1.16
4.583	1.55	10.667	4.46	16.750	1.75	22.83	1.16
4.667	1.55	10.750	4.46	16.833	1.75	22.92	1.16
4.750	1.55	10.833	6.01	16.917	1.75	23.00	1.16
4.833	1.55	10.917	6.01	17.000	1.75	23.08	1.16
4.917	1.55	11.000	6.01	17.083	1.75	23.17	1.16
5.000	1.55	11.083	6.01	17.167	1.75	23.25	1.16
5.083	1.55	11.167	6.01	17.250	1.75	23.33	1.16
5.167	1.55	11.250	6.01	17.333	1.75	23.42	1.16

5.250	1.55	11.333	9.31	17.417	1.75	23.50	1.16
5.333	1.55	11.417	9.31	17.500	1.75	23.58	1.16
5.417	1.55	11.500	9.31	17.583	1.75	23.67	1.16
5.500	1.55	11.583	9.31	17.667	1.75	23.75	1.16
5.583	1.55	11.667	9.31	17.750	1.75	23.83	1.16
5.667	1.55	11.750	9.31	17.833	1.75	23.92	1.16
5.750	1.55	11.833	28.70	17.917	1.75	24.00	1.16
5.833	1.55	11.917	28.71	18.000	1.75	24.08	1.16
5.917	1.55	12.000	28.71	18.083	1.75	24.17	1.16
6.000	1.55	12.083	118.69	18.167	1.75	24.25	1.16
6.083	1.55	12.167	118.70	18.250	1.75		

Unit Hyd Qpeak (cms)= 1.284

PEAK FLOW (cms)= 0.849 (i)
TIME TO PEAK (hrs)= 13.500
RUNOFF VOLUME (mm)= 31.065
TOTAL RAINFALL (mm)= 96.980
RUNOFF COEFFICIENT = 0.320

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0024)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0010):	14.85	0.278	13.17	22.64
+ ID2= 2 (0013):	1.70	0.078	12.50	30.09
ID = 3 (0024):	16.55	0.322	13.00	23.40

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0024):	16.55	0.322	13.00	23.40
+ ID2= 2 (0014):	1.80	0.032	13.00	19.58
ID = 1 (0024):	18.35	0.355	13.00	23.03

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024) | 1 + 2 = 3		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
	ID1= 1 (0024):	18.35	0.355	13.00	23.03
+	ID2= 2 (0015):	6.70	0.116	13.83	29.52
	ID = 3 (0024):	25.05	0.446	13.17	24.76

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024) | 3 + 2 = 1		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
	ID1= 3 (0024):	25.05	0.446	13.17	24.76
+	ID2= 2 (0016):	29.16	1.300	12.83	41.60
	ID = 1 (0024):	54.21	1.728	12.92	33.82

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024) | 1 + 2 = 3		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
	ID1= 1 (0024):	54.21	1.728	12.92	33.82
+	ID2= 2 (0019):	39.68	0.849	13.50	31.07
	ID = 3 (0024):	93.89	2.459	13.00	32.65

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024) | 3 + 2 = 1		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
	ID1= 3 (0024):	93.89	2.459	13.00	32.65
+	ID2= 2 (0007):	100.92	1.433	14.08	27.45
	ID = 1 (0024):	194.81	3.529	13.25	29.96

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024) | 1 + 2 = 3		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
	ID1= 1 (0024):	194.81	3.529	13.25	29.96
+	ID2= 2 (0008):	23.99	0.341	13.25	18.51
	ID = 3 (0024):	218.80	3.870	13.25	28.70

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024) | 3 + 2 = 1		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
	ID1= 3 (0024):	218.80	3.870	13.25	28.70
+	ID2= 2 (0009):	6.37	0.115	13.00	20.00
	ID = 1 (0024):	225.17	3.980	13.25	28.46

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB | NASHYD (0011) | ID= 1 DT= 5.0 min				
	Area	(ha)=	46.28	Curve Number (CN)= 72.2
	Ia	(mm)=	7.09	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=		0.30	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.55	12.250	118.70	18.33	1.75
0.167	0.00	6.250	1.55	12.333	13.98	18.42	1.75
0.250	0.00	6.333	1.75	12.417	13.97	18.50	1.75
0.333	1.07	6.417	1.75	12.500	13.97	18.58	1.75
0.417	1.07	6.500	1.75	12.583	13.97	18.67	1.75
0.500	1.07	6.583	1.75	12.667	13.97	18.75	1.75
0.583	1.07	6.667	1.75	12.750	13.97	18.83	1.75
0.667	1.07	6.750	1.75	12.833	7.18	18.92	1.75
0.750	1.07	6.833	1.75	12.917	7.18	19.00	1.75
0.833	1.07	6.917	1.75	13.000	7.18	19.08	1.75
0.917	1.07	7.000	1.75	13.083	7.18	19.17	1.75
1.000	1.07	7.083	1.75	13.167	7.18	19.25	1.75
1.083	1.07	7.167	1.75	13.250	7.18	19.33	1.75

1.167	1.07	7.250	1.75	13.333	5.24	19.42	1.75
1.250	1.07	7.333	2.13	13.417	5.24	19.50	1.75
1.333	1.07	7.417	2.13	13.500	5.24	19.58	1.75
1.417	1.07	7.500	2.13	13.583	5.24	19.67	1.75
1.500	1.07	7.583	2.13	13.667	5.24	19.75	1.75
1.583	1.07	7.667	2.13	13.750	5.24	19.83	1.75
1.667	1.07	7.750	2.13	13.833	4.07	19.92	1.75
1.750	1.07	7.833	2.13	13.917	4.07	20.00	1.75
1.833	1.07	7.917	2.13	14.000	4.07	20.08	1.75
1.917	1.07	8.000	2.13	14.083	4.07	20.17	1.75
2.000	1.07	8.083	2.13	14.167	4.07	20.25	1.75
2.083	1.07	8.167	2.13	14.250	4.07	20.33	1.16
2.167	1.07	8.250	2.13	14.333	2.91	20.42	1.16
2.250	1.07	8.333	2.52	14.417	2.91	20.50	1.16
2.333	1.26	8.417	2.52	14.500	2.91	20.58	1.16
2.417	1.26	8.500	2.52	14.583	2.91	20.67	1.16
2.500	1.26	8.583	2.52	14.667	2.91	20.75	1.16
2.583	1.26	8.667	2.52	14.750	2.91	20.83	1.16
2.667	1.26	8.750	2.52	14.833	2.91	20.92	1.16
2.750	1.26	8.833	2.72	14.917	2.91	21.00	1.16
2.833	1.26	8.917	2.72	15.000	2.91	21.08	1.16
2.917	1.26	9.000	2.72	15.083	2.91	21.17	1.16
3.000	1.26	9.083	2.72	15.167	2.91	21.25	1.16
3.083	1.26	9.167	2.72	15.250	2.91	21.33	1.16
3.167	1.26	9.250	2.72	15.333	2.91	21.42	1.16
3.250	1.26	9.333	3.10	15.417	2.91	21.50	1.16
3.333	1.26	9.417	3.10	15.500	2.91	21.58	1.16
3.417	1.26	9.500	3.10	15.583	2.91	21.67	1.16
3.500	1.26	9.583	3.10	15.667	2.91	21.75	1.16
3.583	1.26	9.667	3.10	15.750	2.91	21.83	1.16
3.667	1.26	9.750	3.10	15.833	2.91	21.92	1.16
3.750	1.26	9.833	3.49	15.917	2.91	22.00	1.16
3.833	1.26	9.917	3.49	16.000	2.91	22.08	1.16
3.917	1.26	10.000	3.49	16.083	2.91	22.17	1.16
4.000	1.26	10.083	3.49	16.167	2.91	22.25	1.16
4.083	1.26	10.167	3.49	16.250	2.91	22.33	1.16
4.167	1.26	10.250	3.49	16.333	1.75	22.42	1.16
4.250	1.26	10.333	4.46	16.417	1.75	22.50	1.16
4.333	1.55	10.417	4.46	16.500	1.75	22.58	1.16
4.417	1.55	10.500	4.46	16.583	1.75	22.67	1.16
4.500	1.55	10.583	4.46	16.667	1.75	22.75	1.16
4.583	1.55	10.667	4.46	16.750	1.75	22.83	1.16
4.667	1.55	10.750	4.46	16.833	1.75	22.92	1.16
4.750	1.55	10.833	6.01	16.917	1.75	23.00	1.16
4.833	1.55	10.917	6.01	17.000	1.75	23.08	1.16
4.917	1.55	11.000	6.01	17.083	1.75	23.17	1.16
5.000	1.55	11.083	6.01	17.167	1.75	23.25	1.16
5.083	1.55	11.167	6.01	17.250	1.75	23.33	1.16

5.167	1.55	11.250	6.01	17.333	1.75	23.42	1.16
5.250	1.55	11.333	9.31	17.417	1.75	23.50	1.16
5.333	1.55	11.417	9.31	17.500	1.75	23.58	1.16
5.417	1.55	11.500	9.31	17.583	1.75	23.67	1.16
5.500	1.55	11.583	9.31	17.667	1.75	23.75	1.16
5.583	1.55	11.667	9.31	17.750	1.75	23.83	1.16
5.667	1.55	11.750	9.31	17.833	1.75	23.92	1.16
5.750	1.55	11.833	28.70	17.917	1.75	24.00	1.16
5.833	1.55	11.917	28.71	18.000	1.75	24.08	1.16
5.917	1.55	12.000	28.71	18.083	1.75	24.17	1.16
6.000	1.55	12.083	118.69	18.167	1.75	24.25	1.16
6.083	1.55	12.167	118.70	18.250	1.75		

Unit Hyd Qpeak (cms)= 5.892

PEAK FLOW (cms)= 3.898 (i)
TIME TO PEAK (hrs)= 12.417
RUNOFF VOLUME (mm)= 43.023
TOTAL RAINFALL (mm)= 96.980
RUNOFF COEFFICIENT = 0.444

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB		
NASHYD (0012)	Area (ha)= 1.13	Curve Number (CN)= 67.4
ID= 1 DT= 5.0 min	Ia (mm)= 7.88	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.43	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.55	12.250	118.70	18.33	1.75
0.167	0.00	6.250	1.55	12.333	13.98	18.42	1.75
0.250	0.00	6.333	1.75	12.417	13.97	18.50	1.75
0.333	1.07	6.417	1.75	12.500	13.97	18.58	1.75
0.417	1.07	6.500	1.75	12.583	13.97	18.67	1.75
0.500	1.07	6.583	1.75	12.667	13.97	18.75	1.75
0.583	1.07	6.667	1.75	12.750	13.97	18.83	1.75
0.667	1.07	6.750	1.75	12.833	7.18	18.92	1.75
0.750	1.07	6.833	1.75	12.917	7.18	19.00	1.75
0.833	1.07	6.917	1.75	13.000	7.18	19.08	1.75
0.917	1.07	7.000	1.75	13.083	7.18	19.17	1.75
1.000	1.07	7.083	1.75	13.167	7.18	19.25	1.75

1.083	1.07	7.167	1.75	13.250	7.18	19.33	1.75
1.167	1.07	7.250	1.75	13.333	5.24	19.42	1.75
1.250	1.07	7.333	2.13	13.417	5.24	19.50	1.75
1.333	1.07	7.417	2.13	13.500	5.24	19.58	1.75
1.417	1.07	7.500	2.13	13.583	5.24	19.67	1.75
1.500	1.07	7.583	2.13	13.667	5.24	19.75	1.75
1.583	1.07	7.667	2.13	13.750	5.24	19.83	1.75
1.667	1.07	7.750	2.13	13.833	4.07	19.92	1.75
1.750	1.07	7.833	2.13	13.917	4.07	20.00	1.75
1.833	1.07	7.917	2.13	14.000	4.07	20.08	1.75
1.917	1.07	8.000	2.13	14.083	4.07	20.17	1.75
2.000	1.07	8.083	2.13	14.167	4.07	20.25	1.75
2.083	1.07	8.167	2.13	14.250	4.07	20.33	1.16
2.167	1.07	8.250	2.13	14.333	2.91	20.42	1.16
2.250	1.07	8.333	2.52	14.417	2.91	20.50	1.16
2.333	1.26	8.417	2.52	14.500	2.91	20.58	1.16
2.417	1.26	8.500	2.52	14.583	2.91	20.67	1.16
2.500	1.26	8.583	2.52	14.667	2.91	20.75	1.16
2.583	1.26	8.667	2.52	14.750	2.91	20.83	1.16
2.667	1.26	8.750	2.52	14.833	2.91	20.92	1.16
2.750	1.26	8.833	2.72	14.917	2.91	21.00	1.16
2.833	1.26	8.917	2.72	15.000	2.91	21.08	1.16
2.917	1.26	9.000	2.72	15.083	2.91	21.17	1.16
3.000	1.26	9.083	2.72	15.167	2.91	21.25	1.16
3.083	1.26	9.167	2.72	15.250	2.91	21.33	1.16
3.167	1.26	9.250	2.72	15.333	2.91	21.42	1.16
3.250	1.26	9.333	3.10	15.417	2.91	21.50	1.16
3.333	1.26	9.417	3.10	15.500	2.91	21.58	1.16
3.417	1.26	9.500	3.10	15.583	2.91	21.67	1.16
3.500	1.26	9.583	3.10	15.667	2.91	21.75	1.16
3.583	1.26	9.667	3.10	15.750	2.91	21.83	1.16
3.667	1.26	9.750	3.10	15.833	2.91	21.92	1.16
3.750	1.26	9.833	3.49	15.917	2.91	22.00	1.16
3.833	1.26	9.917	3.49	16.000	2.91	22.08	1.16
3.917	1.26	10.000	3.49	16.083	2.91	22.17	1.16
4.000	1.26	10.083	3.49	16.167	2.91	22.25	1.16
4.083	1.26	10.167	3.49	16.250	2.91	22.33	1.16
4.167	1.26	10.250	3.49	16.333	1.75	22.42	1.16
4.250	1.26	10.333	4.46	16.417	1.75	22.50	1.16
4.333	1.55	10.417	4.46	16.500	1.75	22.58	1.16
4.417	1.55	10.500	4.46	16.583	1.75	22.67	1.16
4.500	1.55	10.583	4.46	16.667	1.75	22.75	1.16
4.583	1.55	10.667	4.46	16.750	1.75	22.83	1.16
4.667	1.55	10.750	4.46	16.833	1.75	22.92	1.16
4.750	1.55	10.833	6.01	16.917	1.75	23.00	1.16
4.833	1.55	10.917	6.01	17.000	1.75	23.08	1.16
4.917	1.55	11.000	6.01	17.083	1.75	23.17	1.16
5.000	1.55	11.083	6.01	17.167	1.75	23.25	1.16

5.083	1.55	11.167	6.01	17.250	1.75	23.33	1.16
5.167	1.55	11.250	6.01	17.333	1.75	23.42	1.16
5.250	1.55	11.333	9.31	17.417	1.75	23.50	1.16
5.333	1.55	11.417	9.31	17.500	1.75	23.58	1.16
5.417	1.55	11.500	9.31	17.583	1.75	23.67	1.16
5.500	1.55	11.583	9.31	17.667	1.75	23.75	1.16
5.583	1.55	11.667	9.31	17.750	1.75	23.83	1.16
5.667	1.55	11.750	9.31	17.833	1.75	23.92	1.16
5.750	1.55	11.833	28.70	17.917	1.75	24.00	1.16
5.833	1.55	11.917	28.71	18.000	1.75	24.08	1.16
5.917	1.55	12.000	28.71	18.083	1.75	24.17	1.16
6.000	1.55	12.083	118.69	18.167	1.75	24.25	1.16
6.083	1.55	12.167	118.70	18.250	1.75		

Unit Hyd Qpeak (cms)= 0.100

PEAK FLOW (cms)= 0.063 (i)
TIME TO PEAK (hrs)= 12.583
RUNOFF VOLUME (mm)= 37.412
TOTAL RAINFALL (mm)= 96.980
RUNOFF COEFFICIENT = 0.386

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	
STANDHYD (0043)	Area (ha)= 0.13
ID= 1 DT= 5.0 min	Total Imp(%)= 30.77 Dir. Conn.(%)= 7.69

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.04	0.09
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	0.50
Length	(m)=	29.44	70.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.55	12.250	118.70	18.33	1.75
0.167	0.00	6.250	1.55	12.333	13.98	18.42	1.75
0.250	0.00	6.333	1.75	12.417	13.97	18.50	1.75
0.333	1.07	6.417	1.75	12.500	13.97	18.58	1.75
0.417	1.07	6.500	1.75	12.583	13.97	18.67	1.75

0.500	1.07	6.583	1.75	12.667	13.97	18.75	1.75
0.583	1.07	6.667	1.75	12.750	13.97	18.83	1.75
0.667	1.07	6.750	1.75	12.833	7.18	18.92	1.75
0.750	1.07	6.833	1.75	12.917	7.18	19.00	1.75
0.833	1.07	6.917	1.75	13.000	7.18	19.08	1.75
0.917	1.07	7.000	1.75	13.083	7.18	19.17	1.75
1.000	1.07	7.083	1.75	13.167	7.18	19.25	1.75
1.083	1.07	7.167	1.75	13.250	7.18	19.33	1.75
1.167	1.07	7.250	1.75	13.333	5.24	19.42	1.75
1.250	1.07	7.333	2.13	13.417	5.24	19.50	1.75
1.333	1.07	7.417	2.13	13.500	5.24	19.58	1.75
1.417	1.07	7.500	2.13	13.583	5.24	19.67	1.75
1.500	1.07	7.583	2.13	13.667	5.24	19.75	1.75
1.583	1.07	7.667	2.13	13.750	5.24	19.83	1.75
1.667	1.07	7.750	2.13	13.833	4.07	19.92	1.75
1.750	1.07	7.833	2.13	13.917	4.07	20.00	1.75
1.833	1.07	7.917	2.13	14.000	4.07	20.08	1.75
1.917	1.07	8.000	2.13	14.083	4.07	20.17	1.75
2.000	1.07	8.083	2.13	14.167	4.07	20.25	1.75
2.083	1.07	8.167	2.13	14.250	4.07	20.33	1.16
2.167	1.07	8.250	2.13	14.333	2.91	20.42	1.16
2.250	1.07	8.333	2.52	14.417	2.91	20.50	1.16
2.333	1.26	8.417	2.52	14.500	2.91	20.58	1.16
2.417	1.26	8.500	2.52	14.583	2.91	20.67	1.16
2.500	1.26	8.583	2.52	14.667	2.91	20.75	1.16
2.583	1.26	8.667	2.52	14.750	2.91	20.83	1.16
2.667	1.26	8.750	2.52	14.833	2.91	20.92	1.16
2.750	1.26	8.833	2.72	14.917	2.91	21.00	1.16
2.833	1.26	8.917	2.72	15.000	2.91	21.08	1.16
2.917	1.26	9.000	2.72	15.083	2.91	21.17	1.16
3.000	1.26	9.083	2.72	15.167	2.91	21.25	1.16
3.083	1.26	9.167	2.72	15.250	2.91	21.33	1.16
3.167	1.26	9.250	2.72	15.333	2.91	21.42	1.16
3.250	1.26	9.333	3.10	15.417	2.91	21.50	1.16
3.333	1.26	9.417	3.10	15.500	2.91	21.58	1.16
3.417	1.26	9.500	3.10	15.583	2.91	21.67	1.16
3.500	1.26	9.583	3.10	15.667	2.91	21.75	1.16
3.583	1.26	9.667	3.10	15.750	2.91	21.83	1.16
3.667	1.26	9.750	3.10	15.833	2.91	21.92	1.16
3.750	1.26	9.833	3.49	15.917	2.91	22.00	1.16
3.833	1.26	9.917	3.49	16.000	2.91	22.08	1.16
3.917	1.26	10.000	3.49	16.083	2.91	22.17	1.16
4.000	1.26	10.083	3.49	16.167	2.91	22.25	1.16
4.083	1.26	10.167	3.49	16.250	2.91	22.33	1.16
4.167	1.26	10.250	3.49	16.333	1.75	22.42	1.16
4.250	1.26	10.333	4.46	16.417	1.75	22.50	1.16
4.333	1.55	10.417	4.46	16.500	1.75	22.58	1.16
4.417	1.55	10.500	4.46	16.583	1.75	22.67	1.16

4.500	1.55	10.583	4.46	16.667	1.75	22.75	1.16
4.583	1.55	10.667	4.46	16.750	1.75	22.83	1.16
4.667	1.55	10.750	4.46	16.833	1.75	22.92	1.16
4.750	1.55	10.833	6.01	16.917	1.75	23.00	1.16
4.833	1.55	10.917	6.01	17.000	1.75	23.08	1.16
4.917	1.55	11.000	6.01	17.083	1.75	23.17	1.16
5.000	1.55	11.083	6.01	17.167	1.75	23.25	1.16
5.083	1.55	11.167	6.01	17.250	1.75	23.33	1.16
5.167	1.55	11.250	6.01	17.333	1.75	23.42	1.16
5.250	1.55	11.333	9.31	17.417	1.75	23.50	1.16
5.333	1.55	11.417	9.31	17.500	1.75	23.58	1.16
5.417	1.55	11.500	9.31	17.583	1.75	23.67	1.16
5.500	1.55	11.583	9.31	17.667	1.75	23.75	1.16
5.583	1.55	11.667	9.31	17.750	1.75	23.83	1.16
5.667	1.55	11.750	9.31	17.833	1.75	23.92	1.16
5.750	1.55	11.833	28.70	17.917	1.75	24.00	1.16
5.833	1.55	11.917	28.71	18.000	1.75	24.08	1.16
5.917	1.55	12.000	28.71	18.083	1.75	24.17	1.16
6.000	1.55	12.083	118.69	18.167	1.75	24.25	1.16
6.083	1.55	12.167	118.70	18.250	1.75		

Max.Eff.Inten.(mm/hr)=	118.70	71.91	
over (min)	5.00	20.00	
Storage Coeff. (min)=	1.41 (ii)	18.49 (ii)	
Unit Hyd. Tpeak (min)=	5.00	20.00	
Unit Hyd. peak (cms)=	0.33	0.06	
			TOTALS
PEAK FLOW (cms)=	0.00	0.01	0.012 (iii)
TIME TO PEAK (hrs)=	12.25	12.42	12.42
RUNOFF VOLUME (mm)=	95.98	48.61	52.16
TOTAL RAINFALL (mm)=	96.98	96.98	96.98
RUNOFF COEFFICIENT =	0.99	0.50	0.54

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
STANDHYD (0044)	Area (ha)=	1.62	
ID= 1 DT= 5.0 min	Total Imp(%)=	48.77	Dir. Conn.(%)= 30.86

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.79	0.83
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	1.40
Length	(m)=	103.92	400.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	6.167	1.55	12.250	118.70	18.33	1.75
0.167	0.00	6.250	1.55	12.333	13.98	18.42	1.75
0.250	0.00	6.333	1.75	12.417	13.97	18.50	1.75
0.333	1.07	6.417	1.75	12.500	13.97	18.58	1.75
0.417	1.07	6.500	1.75	12.583	13.97	18.67	1.75
0.500	1.07	6.583	1.75	12.667	13.97	18.75	1.75
0.583	1.07	6.667	1.75	12.750	13.97	18.83	1.75
0.667	1.07	6.750	1.75	12.833	7.18	18.92	1.75
0.750	1.07	6.833	1.75	12.917	7.18	19.00	1.75
0.833	1.07	6.917	1.75	13.000	7.18	19.08	1.75
0.917	1.07	7.000	1.75	13.083	7.18	19.17	1.75
1.000	1.07	7.083	1.75	13.167	7.18	19.25	1.75
1.083	1.07	7.167	1.75	13.250	7.18	19.33	1.75
1.167	1.07	7.250	1.75	13.333	5.24	19.42	1.75
1.250	1.07	7.333	2.13	13.417	5.24	19.50	1.75
1.333	1.07	7.417	2.13	13.500	5.24	19.58	1.75
1.417	1.07	7.500	2.13	13.583	5.24	19.67	1.75
1.500	1.07	7.583	2.13	13.667	5.24	19.75	1.75
1.583	1.07	7.667	2.13	13.750	5.24	19.83	1.75
1.667	1.07	7.750	2.13	13.833	4.07	19.92	1.75
1.750	1.07	7.833	2.13	13.917	4.07	20.00	1.75
1.833	1.07	7.917	2.13	14.000	4.07	20.08	1.75
1.917	1.07	8.000	2.13	14.083	4.07	20.17	1.75
2.000	1.07	8.083	2.13	14.167	4.07	20.25	1.75
2.083	1.07	8.167	2.13	14.250	4.07	20.33	1.16
2.167	1.07	8.250	2.13	14.333	2.91	20.42	1.16
2.250	1.07	8.333	2.52	14.417	2.91	20.50	1.16
2.333	1.26	8.417	2.52	14.500	2.91	20.58	1.16
2.417	1.26	8.500	2.52	14.583	2.91	20.67	1.16
2.500	1.26	8.583	2.52	14.667	2.91	20.75	1.16
2.583	1.26	8.667	2.52	14.750	2.91	20.83	1.16
2.667	1.26	8.750	2.52	14.833	2.91	20.92	1.16
2.750	1.26	8.833	2.72	14.917	2.91	21.00	1.16
2.833	1.26	8.917	2.72	15.000	2.91	21.08	1.16

2.917	1.26	9.000	2.72	15.083	2.91	21.17	1.16
3.000	1.26	9.083	2.72	15.167	2.91	21.25	1.16
3.083	1.26	9.167	2.72	15.250	2.91	21.33	1.16
3.167	1.26	9.250	2.72	15.333	2.91	21.42	1.16
3.250	1.26	9.333	3.10	15.417	2.91	21.50	1.16
3.333	1.26	9.417	3.10	15.500	2.91	21.58	1.16
3.417	1.26	9.500	3.10	15.583	2.91	21.67	1.16
3.500	1.26	9.583	3.10	15.667	2.91	21.75	1.16
3.583	1.26	9.667	3.10	15.750	2.91	21.83	1.16
3.667	1.26	9.750	3.10	15.833	2.91	21.92	1.16
3.750	1.26	9.833	3.49	15.917	2.91	22.00	1.16
3.833	1.26	9.917	3.49	16.000	2.91	22.08	1.16
3.917	1.26	10.000	3.49	16.083	2.91	22.17	1.16
4.000	1.26	10.083	3.49	16.167	2.91	22.25	1.16
4.083	1.26	10.167	3.49	16.250	2.91	22.33	1.16
4.167	1.26	10.250	3.49	16.333	1.75	22.42	1.16
4.250	1.26	10.333	4.46	16.417	1.75	22.50	1.16
4.333	1.55	10.417	4.46	16.500	1.75	22.58	1.16
4.417	1.55	10.500	4.46	16.583	1.75	22.67	1.16
4.500	1.55	10.583	4.46	16.667	1.75	22.75	1.16
4.583	1.55	10.667	4.46	16.750	1.75	22.83	1.16
4.667	1.55	10.750	4.46	16.833	1.75	22.92	1.16
4.750	1.55	10.833	6.01	16.917	1.75	23.00	1.16
4.833	1.55	10.917	6.01	17.000	1.75	23.08	1.16
4.917	1.55	11.000	6.01	17.083	1.75	23.17	1.16
5.000	1.55	11.083	6.01	17.167	1.75	23.25	1.16
5.083	1.55	11.167	6.01	17.250	1.75	23.33	1.16
5.167	1.55	11.250	6.01	17.333	1.75	23.42	1.16
5.250	1.55	11.333	9.31	17.417	1.75	23.50	1.16
5.333	1.55	11.417	9.31	17.500	1.75	23.58	1.16
5.417	1.55	11.500	9.31	17.583	1.75	23.67	1.16
5.500	1.55	11.583	9.31	17.667	1.75	23.75	1.16
5.583	1.55	11.667	9.31	17.750	1.75	23.83	1.16
5.667	1.55	11.750	9.31	17.833	1.75	23.92	1.16
5.750	1.55	11.833	28.70	17.917	1.75	24.00	1.16
5.833	1.55	11.917	28.71	18.000	1.75	24.08	1.16
5.917	1.55	12.000	28.71	18.083	1.75	24.17	1.16
6.000	1.55	12.083	118.69	18.167	1.75	24.25	1.16
6.083	1.55	12.167	118.70	18.250	1.75		

Max.Eff.Inten.	(mm/hr)=	118.70	40.35	
over	(min)	5.00	50.00	
Storage Coeff.	(min)=	3.01 (ii)	47.96 (ii)	
Unit Hyd. Tpeak	(min)=	5.00	50.00	
Unit Hyd. peak	(cms)=	0.28	0.02	
				TOTALS
PEAK FLOW	(cms)=	0.16	0.06	0.182 (iii)
TIME TO PEAK	(hrs)=	12.25	12.92	12.25

RUNOFF VOLUME (mm)=	95.98	48.92	63.43
TOTAL RAINFALL (mm)=	96.98	96.98	96.98
RUNOFF COEFFICIENT =	0.99	0.50	0.65

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0041)	Area (ha)=	0.59	Curve Number (CN)= 71.5
ID= 1 DT= 5.0 min	Ia (mm)=	4.75	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	0.53	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.55	12.250	118.70	18.33	1.75
0.167	0.00	6.250	1.55	12.333	13.98	18.42	1.75
0.250	0.00	6.333	1.75	12.417	13.97	18.50	1.75
0.333	1.07	6.417	1.75	12.500	13.97	18.58	1.75
0.417	1.07	6.500	1.75	12.583	13.97	18.67	1.75
0.500	1.07	6.583	1.75	12.667	13.97	18.75	1.75
0.583	1.07	6.667	1.75	12.750	13.97	18.83	1.75
0.667	1.07	6.750	1.75	12.833	7.18	18.92	1.75
0.750	1.07	6.833	1.75	12.917	7.18	19.00	1.75
0.833	1.07	6.917	1.75	13.000	7.18	19.08	1.75
0.917	1.07	7.000	1.75	13.083	7.18	19.17	1.75
1.000	1.07	7.083	1.75	13.167	7.18	19.25	1.75
1.083	1.07	7.167	1.75	13.250	7.18	19.33	1.75
1.167	1.07	7.250	1.75	13.333	5.24	19.42	1.75
1.250	1.07	7.333	2.13	13.417	5.24	19.50	1.75
1.333	1.07	7.417	2.13	13.500	5.24	19.58	1.75
1.417	1.07	7.500	2.13	13.583	5.24	19.67	1.75
1.500	1.07	7.583	2.13	13.667	5.24	19.75	1.75
1.583	1.07	7.667	2.13	13.750	5.24	19.83	1.75
1.667	1.07	7.750	2.13	13.833	4.07	19.92	1.75
1.750	1.07	7.833	2.13	13.917	4.07	20.00	1.75
1.833	1.07	7.917	2.13	14.000	4.07	20.08	1.75
1.917	1.07	8.000	2.13	14.083	4.07	20.17	1.75

2.000	1.07	8.083	2.13	14.167	4.07	20.25	1.75
2.083	1.07	8.167	2.13	14.250	4.07	20.33	1.16
2.167	1.07	8.250	2.13	14.333	2.91	20.42	1.16
2.250	1.07	8.333	2.52	14.417	2.91	20.50	1.16
2.333	1.26	8.417	2.52	14.500	2.91	20.58	1.16
2.417	1.26	8.500	2.52	14.583	2.91	20.67	1.16
2.500	1.26	8.583	2.52	14.667	2.91	20.75	1.16
2.583	1.26	8.667	2.52	14.750	2.91	20.83	1.16
2.667	1.26	8.750	2.52	14.833	2.91	20.92	1.16
2.750	1.26	8.833	2.72	14.917	2.91	21.00	1.16
2.833	1.26	8.917	2.72	15.000	2.91	21.08	1.16
2.917	1.26	9.000	2.72	15.083	2.91	21.17	1.16
3.000	1.26	9.083	2.72	15.167	2.91	21.25	1.16
3.083	1.26	9.167	2.72	15.250	2.91	21.33	1.16
3.167	1.26	9.250	2.72	15.333	2.91	21.42	1.16
3.250	1.26	9.333	3.10	15.417	2.91	21.50	1.16
3.333	1.26	9.417	3.10	15.500	2.91	21.58	1.16
3.417	1.26	9.500	3.10	15.583	2.91	21.67	1.16
3.500	1.26	9.583	3.10	15.667	2.91	21.75	1.16
3.583	1.26	9.667	3.10	15.750	2.91	21.83	1.16
3.667	1.26	9.750	3.10	15.833	2.91	21.92	1.16
3.750	1.26	9.833	3.49	15.917	2.91	22.00	1.16
3.833	1.26	9.917	3.49	16.000	2.91	22.08	1.16
3.917	1.26	10.000	3.49	16.083	2.91	22.17	1.16
4.000	1.26	10.083	3.49	16.167	2.91	22.25	1.16
4.083	1.26	10.167	3.49	16.250	2.91	22.33	1.16
4.167	1.26	10.250	3.49	16.333	1.75	22.42	1.16
4.250	1.26	10.333	4.46	16.417	1.75	22.50	1.16
4.333	1.55	10.417	4.46	16.500	1.75	22.58	1.16
4.417	1.55	10.500	4.46	16.583	1.75	22.67	1.16
4.500	1.55	10.583	4.46	16.667	1.75	22.75	1.16
4.583	1.55	10.667	4.46	16.750	1.75	22.83	1.16
4.667	1.55	10.750	4.46	16.833	1.75	22.92	1.16
4.750	1.55	10.833	6.01	16.917	1.75	23.00	1.16
4.833	1.55	10.917	6.01	17.000	1.75	23.08	1.16
4.917	1.55	11.000	6.01	17.083	1.75	23.17	1.16
5.000	1.55	11.083	6.01	17.167	1.75	23.25	1.16
5.083	1.55	11.167	6.01	17.250	1.75	23.33	1.16
5.167	1.55	11.250	6.01	17.333	1.75	23.42	1.16
5.250	1.55	11.333	9.31	17.417	1.75	23.50	1.16
5.333	1.55	11.417	9.31	17.500	1.75	23.58	1.16
5.417	1.55	11.500	9.31	17.583	1.75	23.67	1.16
5.500	1.55	11.583	9.31	17.667	1.75	23.75	1.16
5.583	1.55	11.667	9.31	17.750	1.75	23.83	1.16
5.667	1.55	11.750	9.31	17.833	1.75	23.92	1.16
5.750	1.55	11.833	28.70	17.917	1.75	24.00	1.16
5.833	1.55	11.917	28.71	18.000	1.75	24.08	1.16
5.917	1.55	12.000	28.71	18.083	1.75	24.17	1.16

6.000	1.55	12.083	118.69	18.167	1.75	24.25	1.16
6.083	1.55	12.167	118.70	18.250	1.75		

Unit Hyd Qpeak (cms)= 0.043

PEAK FLOW (cms)= 0.033 (i)
TIME TO PEAK (hrs)= 12.667
RUNOFF VOLUME (mm)= 43.917
TOTAL RAINFALL (mm)= 96.980
RUNOFF COEFFICIENT = 0.453

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0028)	Area (ha)=	1.38	Curve Number (CN)=	64.1	
ID= 1 DT= 5.0 min	Ia (mm)=	8.51	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	0.39			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.55	12.250	118.70	18.33	1.75
0.167	0.00	6.250	1.55	12.333	13.98	18.42	1.75
0.250	0.00	6.333	1.75	12.417	13.97	18.50	1.75
0.333	1.07	6.417	1.75	12.500	13.97	18.58	1.75
0.417	1.07	6.500	1.75	12.583	13.97	18.67	1.75
0.500	1.07	6.583	1.75	12.667	13.97	18.75	1.75
0.583	1.07	6.667	1.75	12.750	13.97	18.83	1.75
0.667	1.07	6.750	1.75	12.833	7.18	18.92	1.75
0.750	1.07	6.833	1.75	12.917	7.18	19.00	1.75
0.833	1.07	6.917	1.75	13.000	7.18	19.08	1.75
0.917	1.07	7.000	1.75	13.083	7.18	19.17	1.75
1.000	1.07	7.083	1.75	13.167	7.18	19.25	1.75
1.083	1.07	7.167	1.75	13.250	7.18	19.33	1.75
1.167	1.07	7.250	1.75	13.333	5.24	19.42	1.75
1.250	1.07	7.333	2.13	13.417	5.24	19.50	1.75
1.333	1.07	7.417	2.13	13.500	5.24	19.58	1.75
1.417	1.07	7.500	2.13	13.583	5.24	19.67	1.75
1.500	1.07	7.583	2.13	13.667	5.24	19.75	1.75
1.583	1.07	7.667	2.13	13.750	5.24	19.83	1.75
1.667	1.07	7.750	2.13	13.833	4.07	19.92	1.75
1.750	1.07	7.833	2.13	13.917	4.07	20.00	1.75
1.833	1.07	7.917	2.13	14.000	4.07	20.08	1.75

1.917	1.07	8.000	2.13	14.083	4.07	20.17	1.75
2.000	1.07	8.083	2.13	14.167	4.07	20.25	1.75
2.083	1.07	8.167	2.13	14.250	4.07	20.33	1.16
2.167	1.07	8.250	2.13	14.333	2.91	20.42	1.16
2.250	1.07	8.333	2.52	14.417	2.91	20.50	1.16
2.333	1.26	8.417	2.52	14.500	2.91	20.58	1.16
2.417	1.26	8.500	2.52	14.583	2.91	20.67	1.16
2.500	1.26	8.583	2.52	14.667	2.91	20.75	1.16
2.583	1.26	8.667	2.52	14.750	2.91	20.83	1.16
2.667	1.26	8.750	2.52	14.833	2.91	20.92	1.16
2.750	1.26	8.833	2.72	14.917	2.91	21.00	1.16
2.833	1.26	8.917	2.72	15.000	2.91	21.08	1.16
2.917	1.26	9.000	2.72	15.083	2.91	21.17	1.16
3.000	1.26	9.083	2.72	15.167	2.91	21.25	1.16
3.083	1.26	9.167	2.72	15.250	2.91	21.33	1.16
3.167	1.26	9.250	2.72	15.333	2.91	21.42	1.16
3.250	1.26	9.333	3.10	15.417	2.91	21.50	1.16
3.333	1.26	9.417	3.10	15.500	2.91	21.58	1.16
3.417	1.26	9.500	3.10	15.583	2.91	21.67	1.16
3.500	1.26	9.583	3.10	15.667	2.91	21.75	1.16
3.583	1.26	9.667	3.10	15.750	2.91	21.83	1.16
3.667	1.26	9.750	3.10	15.833	2.91	21.92	1.16
3.750	1.26	9.833	3.49	15.917	2.91	22.00	1.16
3.833	1.26	9.917	3.49	16.000	2.91	22.08	1.16
3.917	1.26	10.000	3.49	16.083	2.91	22.17	1.16
4.000	1.26	10.083	3.49	16.167	2.91	22.25	1.16
4.083	1.26	10.167	3.49	16.250	2.91	22.33	1.16
4.167	1.26	10.250	3.49	16.333	1.75	22.42	1.16
4.250	1.26	10.333	4.46	16.417	1.75	22.50	1.16
4.333	1.55	10.417	4.46	16.500	1.75	22.58	1.16
4.417	1.55	10.500	4.46	16.583	1.75	22.67	1.16
4.500	1.55	10.583	4.46	16.667	1.75	22.75	1.16
4.583	1.55	10.667	4.46	16.750	1.75	22.83	1.16
4.667	1.55	10.750	4.46	16.833	1.75	22.92	1.16
4.750	1.55	10.833	6.01	16.917	1.75	23.00	1.16
4.833	1.55	10.917	6.01	17.000	1.75	23.08	1.16
4.917	1.55	11.000	6.01	17.083	1.75	23.17	1.16
5.000	1.55	11.083	6.01	17.167	1.75	23.25	1.16
5.083	1.55	11.167	6.01	17.250	1.75	23.33	1.16
5.167	1.55	11.250	6.01	17.333	1.75	23.42	1.16
5.250	1.55	11.333	9.31	17.417	1.75	23.50	1.16
5.333	1.55	11.417	9.31	17.500	1.75	23.58	1.16
5.417	1.55	11.500	9.31	17.583	1.75	23.67	1.16
5.500	1.55	11.583	9.31	17.667	1.75	23.75	1.16
5.583	1.55	11.667	9.31	17.750	1.75	23.83	1.16
5.667	1.55	11.750	9.31	17.833	1.75	23.92	1.16
5.750	1.55	11.833	28.70	17.917	1.75	24.00	1.16
5.833	1.55	11.917	28.71	18.000	1.75	24.08	1.16

5.917	1.55	12.000	28.71	18.083	1.75	24.17	1.16
6.000	1.55	12.083	118.69	18.167	1.75	24.25	1.16
6.083	1.55	12.167	118.70	18.250	1.75		

Unit Hyd Qpeak (cms)= 0.135

PEAK FLOW (cms)= 0.074 (i)
TIME TO PEAK (hrs)= 12.500
RUNOFF VOLUME (mm)= 33.954
TOTAL RAINFALL (mm)= 96.980
RUNOFF COEFFICIENT = 0.350

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0023)
1 + 2 = 3

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0011):	46.28	3.898	12.42	43.02
+ ID2= 2 (0012):	1.13	0.063	12.58	37.41
ID = 3 (0023):	47.41	3.955	12.42	42.89

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023)
3 + 2 = 1

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0023):	47.41	3.955	12.42	42.89
+ ID2= 2 (0028):	1.38	0.074	12.50	33.95
ID = 1 (0023):	48.79	4.025	12.42	42.64

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023)
1 + 2 = 3

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0023):	48.79	4.025	12.42	42.64
+ ID2= 2 (0041):	0.59	0.033	12.67	43.92
ID = 3 (0023):	49.38	4.052	12.42	42.65

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023)
3 + 2 = 1

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0023):	49.38	4.052	12.42	42.65
+ ID2= 2 (0043):	0.13	0.012	12.42	52.16
ID = 1 (0023):	49.51	4.064	12.42	42.68

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023)
1 + 2 = 3

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0023):	49.51	4.064	12.42	42.68
+ ID2= 2 (0044):	1.62	0.182	12.25	63.43
ID = 3 (0023):	51.13	4.117	12.42	43.33

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0025)
1 + 2 = 3

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0023):	51.13	4.117	12.42	43.33
+ ID2= 2 (0024):	225.17	3.980	13.25	28.46
ID = 3 (0025):	276.30	6.314	12.50	31.21

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

****
** SIMULATION:J - 25-year SCS **
****

READ STORM | Filename: C:\Users\ecomish\AppData\Local\Temp\c819dd95-70ee-48d0-b884-0b24f1308cad\67437f9c
Ptotal=114.04 mm | Comments: 25yr 24hr 15min SCS Type II (MTO) - 15%

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.00	0.00	6.25	2.05	12.50	16.42	18.75	2.05
0.25	1.25	6.50	2.05	12.75	8.44	19.00	2.05
0.50	1.25	6.75	2.05	13.00	8.44	19.25	2.05
0.75	1.25	7.00	2.05	13.25	6.16	19.50	2.05
1.00	1.25	7.25	2.51	13.50	6.16	19.75	2.05
1.25	1.25	7.50	2.51	13.75	4.79	20.00	2.05
1.50	1.25	7.75	2.51	14.00	4.79	20.25	1.37
1.75	1.25	8.00	2.51	14.25	3.42	20.50	1.37
2.00	1.25	8.25	2.97	14.50	3.42	20.75	1.37
2.25	1.48	8.50	2.97	14.75	3.42	21.00	1.37
2.50	1.48	8.75	3.19	15.00	3.42	21.25	1.37
2.75	1.48	9.00	3.19	15.25	3.42	21.50	1.37
3.00	1.48	9.25	3.65	15.50	3.42	21.75	1.37
3.25	1.48	9.50	3.65	15.75	3.42	22.00	1.37
3.50	1.48	9.75	4.11	16.00	3.42	22.25	1.37
3.75	1.48	10.00	4.11	16.25	2.05	22.50	1.37
4.00	1.48	10.25	5.25	16.50	2.05	22.75	1.37
4.25	1.82	10.50	5.25	16.75	2.05	23.00	1.37
4.50	1.82	10.75	7.07	17.00	2.05	23.25	1.37
4.75	1.82	11.00	7.07	17.25	2.05	23.50	1.37
5.00	1.82	11.25	10.95	17.50	2.05	23.75	1.37
5.25	1.82	11.50	10.95	17.75	2.05	24.00	1.37
5.50	1.82	11.75	33.76	18.00	2.05		
5.75	1.82	12.00	139.58	18.25	2.05		
6.00	1.82	12.25	16.42	18.50	2.05		

CALIB			
NASHYD (0007)	Area (ha)= 100.92	Curve Number (CN)= 55.9	
ID= 1 DT= 5.0 min	Ia (mm)= 7.89	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 1.70		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.82	12.250	139.58	18.33	2.05
0.167	0.00	6.250	1.82	12.333	16.44	18.42	2.05
0.250	0.00	6.333	2.05	12.417	16.42	18.50	2.05
0.333	1.25	6.417	2.05	12.500	16.42	18.58	2.05
0.417	1.25	6.500	2.05	12.583	16.42	18.67	2.05

0.500	1.25	6.583	2.05	12.667	16.42	18.75	2.05
0.583	1.25	6.667	2.05	12.750	16.42	18.83	2.05
0.667	1.25	6.750	2.05	12.833	8.44	18.92	2.05
0.750	1.25	6.833	2.05	12.917	8.44	19.00	2.05
0.833	1.25	6.917	2.05	13.000	8.44	19.08	2.05
0.917	1.25	7.000	2.05	13.083	8.44	19.17	2.05
1.000	1.25	7.083	2.05	13.167	8.44	19.25	2.05
1.083	1.25	7.167	2.05	13.250	8.44	19.33	2.05
1.167	1.25	7.250	2.05	13.333	6.16	19.42	2.05
1.250	1.25	7.333	2.51	13.417	6.16	19.50	2.05
1.333	1.25	7.417	2.51	13.500	6.16	19.58	2.05
1.417	1.25	7.500	2.51	13.583	6.16	19.67	2.05
1.500	1.25	7.583	2.51	13.667	6.16	19.75	2.05
1.583	1.25	7.667	2.51	13.750	6.16	19.83	2.05
1.667	1.25	7.750	2.51	13.833	4.79	19.92	2.05
1.750	1.25	7.833	2.51	13.917	4.79	20.00	2.05
1.833	1.25	7.917	2.51	14.000	4.79	20.08	2.05
1.917	1.25	8.000	2.51	14.083	4.79	20.17	2.05
2.000	1.25	8.083	2.51	14.167	4.79	20.25	2.05
2.083	1.25	8.167	2.51	14.250	4.79	20.33	1.37
2.167	1.25	8.250	2.51	14.333	3.42	20.42	1.37
2.250	1.25	8.333	2.97	14.417	3.42	20.50	1.37
2.333	1.48	8.417	2.97	14.500	3.42	20.58	1.37
2.417	1.48	8.500	2.97	14.583	3.42	20.67	1.37
2.500	1.48	8.583	2.97	14.667	3.42	20.75	1.37
2.583	1.48	8.667	2.97	14.750	3.42	20.83	1.37
2.667	1.48	8.750	2.97	14.833	3.42	20.92	1.37
2.750	1.48	8.833	3.19	14.917	3.42	21.00	1.37
2.833	1.48	8.917	3.19	15.000	3.42	21.08	1.37
2.917	1.48	9.000	3.19	15.083	3.42	21.17	1.37
3.000	1.48	9.083	3.19	15.167	3.42	21.25	1.37
3.083	1.48	9.167	3.19	15.250	3.42	21.33	1.37
3.167	1.48	9.250	3.19	15.333	3.42	21.42	1.37
3.250	1.48	9.333	3.65	15.417	3.42	21.50	1.37
3.333	1.48	9.417	3.65	15.500	3.42	21.58	1.37
3.417	1.48	9.500	3.65	15.583	3.42	21.67	1.37
3.500	1.48	9.583	3.65	15.667	3.42	21.75	1.37
3.583	1.48	9.667	3.65	15.750	3.42	21.83	1.37
3.667	1.48	9.750	3.65	15.833	3.42	21.92	1.37
3.750	1.48	9.833	4.11	15.917	3.42	22.00	1.37
3.833	1.48	9.917	4.11	16.000	3.42	22.08	1.37
3.917	1.48	10.000	4.11	16.083	3.42	22.17	1.37
4.000	1.48	10.083	4.11	16.167	3.42	22.25	1.37
4.083	1.48	10.167	4.11	16.250	3.42	22.33	1.37
4.167	1.48	10.250	4.11	16.333	2.05	22.42	1.37
4.250	1.48	10.333	5.25	16.417	2.05	22.50	1.37
4.333	1.82	10.417	5.25	16.500	2.05	22.58	1.37
4.417	1.82	10.500	5.25	16.583	2.05	22.67	1.37

4.500	1.82	10.583	5.25	16.667	2.05	22.75	1.37
4.583	1.82	10.667	5.25	16.750	2.05	22.83	1.37
4.667	1.82	10.750	5.25	16.833	2.05	22.92	1.37
4.750	1.82	10.833	7.07	16.917	2.05	23.00	1.37
4.833	1.82	10.917	7.07	17.000	2.05	23.08	1.37
4.917	1.82	11.000	7.07	17.083	2.05	23.17	1.37
5.000	1.82	11.083	7.07	17.167	2.05	23.25	1.37
5.083	1.82	11.167	7.07	17.250	2.05	23.33	1.37
5.167	1.82	11.250	7.07	17.333	2.05	23.42	1.37
5.250	1.82	11.333	10.95	17.417	2.05	23.50	1.37
5.333	1.82	11.417	10.95	17.500	2.05	23.58	1.37
5.417	1.82	11.500	10.95	17.583	2.05	23.67	1.37
5.500	1.82	11.583	10.95	17.667	2.05	23.75	1.37
5.583	1.82	11.667	10.95	17.750	2.05	23.83	1.37
5.667	1.82	11.750	10.95	17.833	2.05	23.92	1.37
5.750	1.82	11.833	33.75	17.917	2.05	24.00	1.37
5.833	1.82	11.917	33.76	18.000	2.05	24.08	1.37
5.917	1.82	12.000	33.76	18.083	2.05	24.17	1.37
6.000	1.82	12.083	139.57	18.167	2.05	24.25	1.37
6.083	1.82	12.167	139.58	18.250	2.05		

Unit Hyd Qpeak (cms)= 2.267

PEAK FLOW (cms)= 1.938 (i)
TIME TO PEAK (hrs)= 14.083
RUNOFF VOLUME (mm)= 36.798
TOTAL RAINFALL (mm)= 114.040
RUNOFF COEFFICIENT = 0.323

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0008)	Area (ha)= 23.99	Curve Number (CN)= 44.7	
ID= 1 DT= 5.0 min	Ia (mm)= 10.91	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.97		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.82	12.250	139.58	18.33	2.05
0.167	0.00	6.250	1.82	12.333	16.44	18.42	2.05
0.250	0.00	6.333	2.05	12.417	16.42	18.50	2.05
0.333	1.25	6.417	2.05	12.500	16.42	18.58	2.05

0.417	1.25	6.500	2.05	12.583	16.42	18.67	2.05
0.500	1.25	6.583	2.05	12.667	16.42	18.75	2.05
0.583	1.25	6.667	2.05	12.750	16.42	18.83	2.05
0.667	1.25	6.750	2.05	12.833	8.44	18.92	2.05
0.750	1.25	6.833	2.05	12.917	8.44	19.00	2.05
0.833	1.25	6.917	2.05	13.000	8.44	19.08	2.05
0.917	1.25	7.000	2.05	13.083	8.44	19.17	2.05
1.000	1.25	7.083	2.05	13.167	8.44	19.25	2.05
1.083	1.25	7.167	2.05	13.250	8.44	19.33	2.05
1.167	1.25	7.250	2.05	13.333	6.16	19.42	2.05
1.250	1.25	7.333	2.51	13.417	6.16	19.50	2.05
1.333	1.25	7.417	2.51	13.500	6.16	19.58	2.05
1.417	1.25	7.500	2.51	13.583	6.16	19.67	2.05
1.500	1.25	7.583	2.51	13.667	6.16	19.75	2.05
1.583	1.25	7.667	2.51	13.750	6.16	19.83	2.05
1.667	1.25	7.750	2.51	13.833	4.79	19.92	2.05
1.750	1.25	7.833	2.51	13.917	4.79	20.00	2.05
1.833	1.25	7.917	2.51	14.000	4.79	20.08	2.05
1.917	1.25	8.000	2.51	14.083	4.79	20.17	2.05
2.000	1.25	8.083	2.51	14.167	4.79	20.25	2.05
2.083	1.25	8.167	2.51	14.250	4.79	20.33	1.37
2.167	1.25	8.250	2.51	14.333	3.42	20.42	1.37
2.250	1.25	8.333	2.97	14.417	3.42	20.50	1.37
2.333	1.48	8.417	2.97	14.500	3.42	20.58	1.37
2.417	1.48	8.500	2.97	14.583	3.42	20.67	1.37
2.500	1.48	8.583	2.97	14.667	3.42	20.75	1.37
2.583	1.48	8.667	2.97	14.750	3.42	20.83	1.37
2.667	1.48	8.750	2.97	14.833	3.42	20.92	1.37
2.750	1.48	8.833	3.19	14.917	3.42	21.00	1.37
2.833	1.48	8.917	3.19	15.000	3.42	21.08	1.37
2.917	1.48	9.000	3.19	15.083	3.42	21.17	1.37
3.000	1.48	9.083	3.19	15.167	3.42	21.25	1.37
3.083	1.48	9.167	3.19	15.250	3.42	21.33	1.37
3.167	1.48	9.250	3.19	15.333	3.42	21.42	1.37
3.250	1.48	9.333	3.65	15.417	3.42	21.50	1.37
3.333	1.48	9.417	3.65	15.500	3.42	21.58	1.37
3.417	1.48	9.500	3.65	15.583	3.42	21.67	1.37
3.500	1.48	9.583	3.65	15.667	3.42	21.75	1.37
3.583	1.48	9.667	3.65	15.750	3.42	21.83	1.37
3.667	1.48	9.750	3.65	15.833	3.42	21.92	1.37
3.750	1.48	9.833	4.11	15.917	3.42	22.00	1.37
3.833	1.48	9.917	4.11	16.000	3.42	22.08	1.37
3.917	1.48	10.000	4.11	16.083	3.42	22.17	1.37
4.000	1.48	10.083	4.11	16.167	3.42	22.25	1.37
4.083	1.48	10.167	4.11	16.250	3.42	22.33	1.37
4.167	1.48	10.250	4.11	16.333	2.05	22.42	1.37
4.250	1.48	10.333	5.25	16.417	2.05	22.50	1.37
4.333	1.82	10.417	5.25	16.500	2.05	22.58	1.37

4.417	1.82	10.500	5.25	16.583	2.05	22.67	1.37
4.500	1.82	10.583	5.25	16.667	2.05	22.75	1.37
4.583	1.82	10.667	5.25	16.750	2.05	22.83	1.37
4.667	1.82	10.750	5.25	16.833	2.05	22.92	1.37
4.750	1.82	10.833	7.07	16.917	2.05	23.00	1.37
4.833	1.82	10.917	7.07	17.000	2.05	23.08	1.37
4.917	1.82	11.000	7.07	17.083	2.05	23.17	1.37
5.000	1.82	11.083	7.07	17.167	2.05	23.25	1.37
5.083	1.82	11.167	7.07	17.250	2.05	23.33	1.37
5.167	1.82	11.250	7.07	17.333	2.05	23.42	1.37
5.250	1.82	11.333	10.95	17.417	2.05	23.50	1.37
5.333	1.82	11.417	10.95	17.500	2.05	23.58	1.37
5.417	1.82	11.500	10.95	17.583	2.05	23.67	1.37
5.500	1.82	11.583	10.95	17.667	2.05	23.75	1.37
5.583	1.82	11.667	10.95	17.750	2.05	23.83	1.37
5.667	1.82	11.750	10.95	17.833	2.05	23.92	1.37
5.750	1.82	11.833	33.75	17.917	2.05	24.00	1.37
5.833	1.82	11.917	33.76	18.000	2.05	24.08	1.37
5.917	1.82	12.000	33.76	18.083	2.05	24.17	1.37
6.000	1.82	12.083	139.57	18.167	2.05	24.25	1.37
6.083	1.82	12.167	139.58	18.250	2.05		

Unit Hyd Qpeak (cms)= 0.945

PEAK FLOW (cms)= 0.476 (i)
TIME TO PEAK (hrs)= 13.250
RUNOFF VOLUME (mm)= 25.483
TOTAL RAINFALL (mm)= 114.040
RUNOFF COEFFICIENT = 0.223

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB NASHYD (0009)	Area (ha)= 6.37	Curve Number (CN)= 50.5
ID= 1 DT= 5.0 min	Ia (mm)= 15.69	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.77	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.82	12.250	139.58	18.33	2.05
0.167	0.00	6.250	1.82	12.333	16.44	18.42	2.05
0.250	0.00	6.333	2.05	12.417	16.42	18.50	2.05

0.333	1.25	6.417	2.05	12.500	16.42	18.58	2.05
0.417	1.25	6.500	2.05	12.583	16.42	18.67	2.05
0.500	1.25	6.583	2.05	12.667	16.42	18.75	2.05
0.583	1.25	6.667	2.05	12.750	16.42	18.83	2.05
0.667	1.25	6.750	2.05	12.833	8.44	18.92	2.05
0.750	1.25	6.833	2.05	12.917	8.44	19.00	2.05
0.833	1.25	6.917	2.05	13.000	8.44	19.08	2.05
0.917	1.25	7.000	2.05	13.083	8.44	19.17	2.05
1.000	1.25	7.083	2.05	13.167	8.44	19.25	2.05
1.083	1.25	7.167	2.05	13.250	8.44	19.33	2.05
1.167	1.25	7.250	2.05	13.333	6.16	19.42	2.05
1.250	1.25	7.333	2.51	13.417	6.16	19.50	2.05
1.333	1.25	7.417	2.51	13.500	6.16	19.58	2.05
1.417	1.25	7.500	2.51	13.583	6.16	19.67	2.05
1.500	1.25	7.583	2.51	13.667	6.16	19.75	2.05
1.583	1.25	7.667	2.51	13.750	6.16	19.83	2.05
1.667	1.25	7.750	2.51	13.833	4.79	19.92	2.05
1.750	1.25	7.833	2.51	13.917	4.79	20.00	2.05
1.833	1.25	7.917	2.51	14.000	4.79	20.08	2.05
1.917	1.25	8.000	2.51	14.083	4.79	20.17	2.05
2.000	1.25	8.083	2.51	14.167	4.79	20.25	2.05
2.083	1.25	8.167	2.51	14.250	4.79	20.33	1.37
2.167	1.25	8.250	2.51	14.333	3.42	20.42	1.37
2.250	1.25	8.333	2.97	14.417	3.42	20.50	1.37
2.333	1.48	8.417	2.97	14.500	3.42	20.58	1.37
2.417	1.48	8.500	2.97	14.583	3.42	20.67	1.37
2.500	1.48	8.583	2.97	14.667	3.42	20.75	1.37
2.583	1.48	8.667	2.97	14.750	3.42	20.83	1.37
2.667	1.48	8.750	2.97	14.833	3.42	20.92	1.37
2.750	1.48	8.833	3.19	14.917	3.42	21.00	1.37
2.833	1.48	8.917	3.19	15.000	3.42	21.08	1.37
2.917	1.48	9.000	3.19	15.083	3.42	21.17	1.37
3.000	1.48	9.083	3.19	15.167	3.42	21.25	1.37
3.083	1.48	9.167	3.19	15.250	3.42	21.33	1.37
3.167	1.48	9.250	3.19	15.333	3.42	21.42	1.37
3.250	1.48	9.333	3.65	15.417	3.42	21.50	1.37
3.333	1.48	9.417	3.65	15.500	3.42	21.58	1.37
3.417	1.48	9.500	3.65	15.583	3.42	21.67	1.37
3.500	1.48	9.583	3.65	15.667	3.42	21.75	1.37
3.583	1.48	9.667	3.65	15.750	3.42	21.83	1.37
3.667	1.48	9.750	3.65	15.833	3.42	21.92	1.37
3.750	1.48	9.833	4.11	15.917	3.42	22.00	1.37
3.833	1.48	9.917	4.11	16.000	3.42	22.08	1.37
3.917	1.48	10.000	4.11	16.083	3.42	22.17	1.37
4.000	1.48	10.083	4.11	16.167	3.42	22.25	1.37
4.083	1.48	10.167	4.11	16.250	3.42	22.33	1.37
4.167	1.48	10.250	4.11	16.333	2.05	22.42	1.37
4.250	1.48	10.333	5.25	16.417	2.05	22.50	1.37

4.333	1.82	10.417	5.25	16.500	2.05	22.58	1.37
4.417	1.82	10.500	5.25	16.583	2.05	22.67	1.37
4.500	1.82	10.583	5.25	16.667	2.05	22.75	1.37
4.583	1.82	10.667	5.25	16.750	2.05	22.83	1.37
4.667	1.82	10.750	5.25	16.833	2.05	22.92	1.37
4.750	1.82	10.833	7.07	16.917	2.05	23.00	1.37
4.833	1.82	10.917	7.07	17.000	2.05	23.08	1.37
4.917	1.82	11.000	7.07	17.083	2.05	23.17	1.37
5.000	1.82	11.083	7.07	17.167	2.05	23.25	1.37
5.083	1.82	11.167	7.07	17.250	2.05	23.33	1.37
5.167	1.82	11.250	7.07	17.333	2.05	23.42	1.37
5.250	1.82	11.333	10.95	17.417	2.05	23.50	1.37
5.333	1.82	11.417	10.95	17.500	2.05	23.58	1.37
5.417	1.82	11.500	10.95	17.583	2.05	23.67	1.37
5.500	1.82	11.583	10.95	17.667	2.05	23.75	1.37
5.583	1.82	11.667	10.95	17.750	2.05	23.83	1.37
5.667	1.82	11.750	10.95	17.833	2.05	23.92	1.37
5.750	1.82	11.833	33.75	17.917	2.05	24.00	1.37
5.833	1.82	11.917	33.76	18.000	2.05	24.08	1.37
5.917	1.82	12.000	33.76	18.083	2.05	24.17	1.37
6.000	1.82	12.083	139.57	18.167	2.05	24.25	1.37
6.083	1.82	12.167	139.58	18.250	2.05		

Unit Hyd Qpeak (cms)= 0.316

PEAK FLOW (cms)= 0.164 (i)
TIME TO PEAK (hrs)= 13.000
RUNOFF VOLUME (mm)= 27.833
TOTAL RAINFALL (mm)= 114.040
RUNOFF COEFFICIENT = 0.244

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	
NASHYD (0010)	Area (ha)= 14.85 Curve Number (CN)= 52.9
ID= 1 DT= 5.0 min	Ia (mm)= 13.28 # of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.89

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.82	12.250	139.58	18.33	2.05
0.167	0.00	6.250	1.82	12.333	16.44	18.42	2.05

0.250	0.00	6.333	2.05	12.417	16.42	18.50	2.05
0.333	1.25	6.417	2.05	12.500	16.42	18.58	2.05
0.417	1.25	6.500	2.05	12.583	16.42	18.67	2.05
0.500	1.25	6.583	2.05	12.667	16.42	18.75	2.05
0.583	1.25	6.667	2.05	12.750	16.42	18.83	2.05
0.667	1.25	6.750	2.05	12.833	8.44	18.92	2.05
0.750	1.25	6.833	2.05	12.917	8.44	19.00	2.05
0.833	1.25	6.917	2.05	13.000	8.44	19.08	2.05
0.917	1.25	7.000	2.05	13.083	8.44	19.17	2.05
1.000	1.25	7.083	2.05	13.167	8.44	19.25	2.05
1.083	1.25	7.167	2.05	13.250	8.44	19.33	2.05
1.167	1.25	7.250	2.05	13.333	6.16	19.42	2.05
1.250	1.25	7.333	2.51	13.417	6.16	19.50	2.05
1.333	1.25	7.417	2.51	13.500	6.16	19.58	2.05
1.417	1.25	7.500	2.51	13.583	6.16	19.67	2.05
1.500	1.25	7.583	2.51	13.667	6.16	19.75	2.05
1.583	1.25	7.667	2.51	13.750	6.16	19.83	2.05
1.667	1.25	7.750	2.51	13.833	4.79	19.92	2.05
1.750	1.25	7.833	2.51	13.917	4.79	20.00	2.05
1.833	1.25	7.917	2.51	14.000	4.79	20.08	2.05
1.917	1.25	8.000	2.51	14.083	4.79	20.17	2.05
2.000	1.25	8.083	2.51	14.167	4.79	20.25	2.05
2.083	1.25	8.167	2.51	14.250	4.79	20.33	1.37
2.167	1.25	8.250	2.51	14.333	3.42	20.42	1.37
2.250	1.25	8.333	2.97	14.417	3.42	20.50	1.37
2.333	1.48	8.417	2.97	14.500	3.42	20.58	1.37
2.417	1.48	8.500	2.97	14.583	3.42	20.67	1.37
2.500	1.48	8.583	2.97	14.667	3.42	20.75	1.37
2.583	1.48	8.667	2.97	14.750	3.42	20.83	1.37
2.667	1.48	8.750	2.97	14.833	3.42	20.92	1.37
2.750	1.48	8.833	3.19	14.917	3.42	21.00	1.37
2.833	1.48	8.917	3.19	15.000	3.42	21.08	1.37
2.917	1.48	9.000	3.19	15.083	3.42	21.17	1.37
3.000	1.48	9.083	3.19	15.167	3.42	21.25	1.37
3.083	1.48	9.167	3.19	15.250	3.42	21.33	1.37
3.167	1.48	9.250	3.19	15.333	3.42	21.42	1.37
3.250	1.48	9.333	3.65	15.417	3.42	21.50	1.37
3.333	1.48	9.417	3.65	15.500	3.42	21.58	1.37
3.417	1.48	9.500	3.65	15.583	3.42	21.67	1.37
3.500	1.48	9.583	3.65	15.667	3.42	21.75	1.37
3.583	1.48	9.667	3.65	15.750	3.42	21.83	1.37
3.667	1.48	9.750	3.65	15.833	3.42	21.92	1.37
3.750	1.48	9.833	4.11	15.917	3.42	22.00	1.37
3.833	1.48	9.917	4.11	16.000	3.42	22.08	1.37
3.917	1.48	10.000	4.11	16.083	3.42	22.17	1.37
4.000	1.48	10.083	4.11	16.167	3.42	22.25	1.37
4.083	1.48	10.167	4.11	16.250	3.42	22.33	1.37
4.167	1.48	10.250	4.11	16.333	2.05	22.42	1.37

4.250	1.48	10.333	5.25	16.417	2.05	22.50	1.37
4.333	1.82	10.417	5.25	16.500	2.05	22.58	1.37
4.417	1.82	10.500	5.25	16.583	2.05	22.67	1.37
4.500	1.82	10.583	5.25	16.667	2.05	22.75	1.37
4.583	1.82	10.667	5.25	16.750	2.05	22.83	1.37
4.667	1.82	10.750	5.25	16.833	2.05	22.92	1.37
4.750	1.82	10.833	7.07	16.917	2.05	23.00	1.37
4.833	1.82	10.917	7.07	17.000	2.05	23.08	1.37
4.917	1.82	11.000	7.07	17.083	2.05	23.17	1.37
5.000	1.82	11.083	7.07	17.167	2.05	23.25	1.37
5.083	1.82	11.167	7.07	17.250	2.05	23.33	1.37
5.167	1.82	11.250	7.07	17.333	2.05	23.42	1.37
5.250	1.82	11.333	10.95	17.417	2.05	23.50	1.37
5.333	1.82	11.417	10.95	17.500	2.05	23.58	1.37
5.417	1.82	11.500	10.95	17.583	2.05	23.67	1.37
5.500	1.82	11.583	10.95	17.667	2.05	23.75	1.37
5.583	1.82	11.667	10.95	17.750	2.05	23.83	1.37
5.667	1.82	11.750	10.95	17.833	2.05	23.92	1.37
5.750	1.82	11.833	33.75	17.917	2.05	24.00	1.37
5.833	1.82	11.917	33.76	18.000	2.05	24.08	1.37
5.917	1.82	12.000	33.76	18.083	2.05	24.17	1.37
6.000	1.82	12.083	139.57	18.167	2.05	24.25	1.37
6.083	1.82	12.167	139.58	18.250	2.05		

Unit Hyd Qpeak (cms)= 0.637

PEAK FLOW (cms)= 0.388 (i)
TIME TO PEAK (hrs)= 13.167
RUNOFF VOLUME (mm)= 31.091
TOTAL RAINFALL (mm)= 114.040
RUNOFF COEFFICIENT = 0.273

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0013)	Area (ha)= 1.70	Curve Number (CN)= 60.5	
ID= 1 DT= 5.0 min	Ia (mm)= 9.65	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.40		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.82	12.250	139.58	18.33	2.05

0.167	0.00	6.250	1.82	12.333	16.44	18.42	2.05
0.250	0.00	6.333	2.05	12.417	16.42	18.50	2.05
0.333	1.25	6.417	2.05	12.500	16.42	18.58	2.05
0.417	1.25	6.500	2.05	12.583	16.42	18.67	2.05
0.500	1.25	6.583	2.05	12.667	16.42	18.75	2.05
0.583	1.25	6.667	2.05	12.750	16.42	18.83	2.05
0.667	1.25	6.750	2.05	12.833	8.44	18.92	2.05
0.750	1.25	6.833	2.05	12.917	8.44	19.00	2.05
0.833	1.25	6.917	2.05	13.000	8.44	19.08	2.05
0.917	1.25	7.000	2.05	13.083	8.44	19.17	2.05
1.000	1.25	7.083	2.05	13.167	8.44	19.25	2.05
1.083	1.25	7.167	2.05	13.250	8.44	19.33	2.05
1.167	1.25	7.250	2.05	13.333	6.16	19.42	2.05
1.250	1.25	7.333	2.51	13.417	6.16	19.50	2.05
1.333	1.25	7.417	2.51	13.500	6.16	19.58	2.05
1.417	1.25	7.500	2.51	13.583	6.16	19.67	2.05
1.500	1.25	7.583	2.51	13.667	6.16	19.75	2.05
1.583	1.25	7.667	2.51	13.750	6.16	19.83	2.05
1.667	1.25	7.750	2.51	13.833	4.79	19.92	2.05
1.750	1.25	7.833	2.51	13.917	4.79	20.00	2.05
1.833	1.25	7.917	2.51	14.000	4.79	20.08	2.05
1.917	1.25	8.000	2.51	14.083	4.79	20.17	2.05
2.000	1.25	8.083	2.51	14.167	4.79	20.25	2.05
2.083	1.25	8.167	2.51	14.250	4.79	20.33	1.37
2.167	1.25	8.250	2.51	14.333	3.42	20.42	1.37
2.250	1.25	8.333	2.97	14.417	3.42	20.50	1.37
2.333	1.48	8.417	2.97	14.500	3.42	20.58	1.37
2.417	1.48	8.500	2.97	14.583	3.42	20.67	1.37
2.500	1.48	8.583	2.97	14.667	3.42	20.75	1.37
2.583	1.48	8.667	2.97	14.750	3.42	20.83	1.37
2.667	1.48	8.750	2.97	14.833	3.42	20.92	1.37
2.750	1.48	8.833	3.19	14.917	3.42	21.00	1.37
2.833	1.48	8.917	3.19	15.000	3.42	21.08	1.37
2.917	1.48	9.000	3.19	15.083	3.42	21.17	1.37
3.000	1.48	9.083	3.19	15.167	3.42	21.25	1.37
3.083	1.48	9.167	3.19	15.250	3.42	21.33	1.37
3.167	1.48	9.250	3.19	15.333	3.42	21.42	1.37
3.250	1.48	9.333	3.65	15.417	3.42	21.50	1.37
3.333	1.48	9.417	3.65	15.500	3.42	21.58	1.37
3.417	1.48	9.500	3.65	15.583	3.42	21.67	1.37
3.500	1.48	9.583	3.65	15.667	3.42	21.75	1.37
3.583	1.48	9.667	3.65	15.750	3.42	21.83	1.37
3.667	1.48	9.750	3.65	15.833	3.42	21.92	1.37
3.750	1.48	9.833	4.11	15.917	3.42	22.00	1.37
3.833	1.48	9.917	4.11	16.000	3.42	22.08	1.37
3.917	1.48	10.000	4.11	16.083	3.42	22.17	1.37
4.000	1.48	10.083	4.11	16.167	3.42	22.25	1.37
4.083	1.48	10.167	4.11	16.250	3.42	22.33	1.37

4.167	1.48	10.250	4.11	16.333	2.05	22.42	1.37
4.250	1.48	10.333	5.25	16.417	2.05	22.50	1.37
4.333	1.82	10.417	5.25	16.500	2.05	22.58	1.37
4.417	1.82	10.500	5.25	16.583	2.05	22.67	1.37
4.500	1.82	10.583	5.25	16.667	2.05	22.75	1.37
4.583	1.82	10.667	5.25	16.750	2.05	22.83	1.37
4.667	1.82	10.750	5.25	16.833	2.05	22.92	1.37
4.750	1.82	10.833	7.07	16.917	2.05	23.00	1.37
4.833	1.82	10.917	7.07	17.000	2.05	23.08	1.37
4.917	1.82	11.000	7.07	17.083	2.05	23.17	1.37
5.000	1.82	11.083	7.07	17.167	2.05	23.25	1.37
5.083	1.82	11.167	7.07	17.250	2.05	23.33	1.37
5.167	1.82	11.250	7.07	17.333	2.05	23.42	1.37
5.250	1.82	11.333	10.95	17.417	2.05	23.50	1.37
5.333	1.82	11.417	10.95	17.500	2.05	23.58	1.37
5.417	1.82	11.500	10.95	17.583	2.05	23.67	1.37
5.500	1.82	11.583	10.95	17.667	2.05	23.75	1.37
5.583	1.82	11.667	10.95	17.750	2.05	23.83	1.37
5.667	1.82	11.750	10.95	17.833	2.05	23.92	1.37
5.750	1.82	11.833	33.75	17.917	2.05	24.00	1.37
5.833	1.82	11.917	33.76	18.000	2.05	24.08	1.37
5.917	1.82	12.000	33.76	18.083	2.05	24.17	1.37
6.000	1.82	12.083	139.57	18.167	2.05	24.25	1.37
6.083	1.82	12.167	139.58	18.250	2.05		

Unit Hyd Qpeak (cms)= 0.162

PEAK FLOW (cms)= 0.106 (i)
TIME TO PEAK (hrs)= 12.500
RUNOFF VOLUME (mm)= 40.280
TOTAL RAINFALL (mm)= 114.040
RUNOFF COEFFICIENT = 0.353

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	
NASHYD (0014)	Area (ha)= 1.80 Curve Number (CN)= 50.0
ID= 1 DT= 5.0 min	Ia (mm)= 16.00 # of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.76

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.82	12.250	139.58	18.33	2.05
0.167	0.00	6.250	1.82	12.333	16.44	18.42	2.05
0.250	0.00	6.333	2.05	12.417	16.42	18.50	2.05
0.333	1.25	6.417	2.05	12.500	16.42	18.58	2.05
0.417	1.25	6.500	2.05	12.583	16.42	18.67	2.05
0.500	1.25	6.583	2.05	12.667	16.42	18.75	2.05
0.583	1.25	6.667	2.05	12.750	16.42	18.83	2.05
0.667	1.25	6.750	2.05	12.833	8.44	18.92	2.05
0.750	1.25	6.833	2.05	12.917	8.44	19.00	2.05
0.833	1.25	6.917	2.05	13.000	8.44	19.08	2.05
0.917	1.25	7.000	2.05	13.083	8.44	19.17	2.05
1.000	1.25	7.083	2.05	13.167	8.44	19.25	2.05
1.083	1.25	7.167	2.05	13.250	8.44	19.33	2.05
1.167	1.25	7.250	2.05	13.333	6.16	19.42	2.05
1.250	1.25	7.333	2.51	13.417	6.16	19.50	2.05
1.333	1.25	7.417	2.51	13.500	6.16	19.58	2.05
1.417	1.25	7.500	2.51	13.583	6.16	19.67	2.05
1.500	1.25	7.583	2.51	13.667	6.16	19.75	2.05
1.583	1.25	7.667	2.51	13.750	6.16	19.83	2.05
1.667	1.25	7.750	2.51	13.833	4.79	19.92	2.05
1.750	1.25	7.833	2.51	13.917	4.79	20.00	2.05
1.833	1.25	7.917	2.51	14.000	4.79	20.08	2.05
1.917	1.25	8.000	2.51	14.083	4.79	20.17	2.05
2.000	1.25	8.083	2.51	14.167	4.79	20.25	2.05
2.083	1.25	8.167	2.51	14.250	4.79	20.33	1.37
2.167	1.25	8.250	2.51	14.333	3.42	20.42	1.37
2.250	1.25	8.333	2.97	14.417	3.42	20.50	1.37
2.333	1.48	8.417	2.97	14.500	3.42	20.58	1.37
2.417	1.48	8.500	2.97	14.583	3.42	20.67	1.37
2.500	1.48	8.583	2.97	14.667	3.42	20.75	1.37
2.583	1.48	8.667	2.97	14.750	3.42	20.83	1.37
2.667	1.48	8.750	2.97	14.833	3.42	20.92	1.37
2.750	1.48	8.833	3.19	14.917	3.42	21.00	1.37
2.833	1.48	8.917	3.19	15.000	3.42	21.08	1.37
2.917	1.48	9.000	3.19	15.083	3.42	21.17	1.37
3.000	1.48	9.083	3.19	15.167	3.42	21.25	1.37
3.083	1.48	9.167	3.19	15.250	3.42	21.33	1.37
3.167	1.48	9.250	3.19	15.333	3.42	21.42	1.37
3.250	1.48	9.333	3.65	15.417	3.42	21.50	1.37
3.333	1.48	9.417	3.65	15.500	3.42	21.58	1.37
3.417	1.48	9.500	3.65	15.583	3.42	21.67	1.37
3.500	1.48	9.583	3.65	15.667	3.42	21.75	1.37
3.583	1.48	9.667	3.65	15.750	3.42	21.83	1.37
3.667	1.48	9.750	3.65	15.833	3.42	21.92	1.37
3.750	1.48	9.833	4.11	15.917	3.42	22.00	1.37
3.833	1.48	9.917	4.11	16.000	3.42	22.08	1.37
3.917	1.48	10.000	4.11	16.083	3.42	22.17	1.37
4.000	1.48	10.083	4.11	16.167	3.42	22.25	1.37

Post-Development VO Output

1508-7498

4.083	1.48	10.167	4.11	16.250	3.42	22.33	1.37
4.167	1.48	10.250	4.11	16.333	2.05	22.42	1.37
4.250	1.48	10.333	5.25	16.417	2.05	22.50	1.37
4.333	1.82	10.417	5.25	16.500	2.05	22.58	1.37
4.417	1.82	10.500	5.25	16.583	2.05	22.67	1.37
4.500	1.82	10.583	5.25	16.667	2.05	22.75	1.37
4.583	1.82	10.667	5.25	16.750	2.05	22.83	1.37
4.667	1.82	10.750	5.25	16.833	2.05	22.92	1.37
4.750	1.82	10.833	7.07	16.917	2.05	23.00	1.37
4.833	1.82	10.917	7.07	17.000	2.05	23.08	1.37
4.917	1.82	11.000	7.07	17.083	2.05	23.17	1.37
5.000	1.82	11.083	7.07	17.167	2.05	23.25	1.37
5.083	1.82	11.167	7.07	17.250	2.05	23.33	1.37
5.167	1.82	11.250	7.07	17.333	2.05	23.42	1.37
5.250	1.82	11.333	10.95	17.417	2.05	23.50	1.37
5.333	1.82	11.417	10.95	17.500	2.05	23.58	1.37
5.417	1.82	11.500	10.95	17.583	2.05	23.67	1.37
5.500	1.82	11.583	10.95	17.667	2.05	23.75	1.37
5.583	1.82	11.667	10.95	17.750	2.05	23.83	1.37
5.667	1.82	11.750	10.95	17.833	2.05	23.92	1.37
5.750	1.82	11.833	33.75	17.917	2.05	24.00	1.37
5.833	1.82	11.917	33.76	18.000	2.05	24.08	1.37
5.917	1.82	12.000	33.76	18.083	2.05	24.17	1.37
6.000	1.82	12.083	139.57	18.167	2.05	24.25	1.37
6.083	1.82	12.167	139.58	18.250	2.05		

Unit Hyd Qpeak (cms)= 0.090

PEAK FLOW (cms)= 0.046 (i)
TIME TO PEAK (hrs)= 13.000
RUNOFF VOLUME (mm)= 27.302
TOTAL RAINFALL (mm)= 114.040
RUNOFF COEFFICIENT = 0.239

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0015)	Area (ha)=	6.70	Curve Number (CN)=	60.0	
ID= 1 DT= 5.0 min	Ia (mm)=	10.00	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	1.45			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN

hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	6.167	1.82	12.250	139.58	18.33	2.05
0.167	0.00	6.250	1.82	12.333	16.44	18.42	2.05
0.250	0.00	6.333	2.05	12.417	16.42	18.50	2.05
0.333	1.25	6.417	2.05	12.500	16.42	18.58	2.05
0.417	1.25	6.500	2.05	12.583	16.42	18.67	2.05
0.500	1.25	6.583	2.05	12.667	16.42	18.75	2.05
0.583	1.25	6.667	2.05	12.750	16.42	18.83	2.05
0.667	1.25	6.750	2.05	12.833	8.44	18.92	2.05
0.750	1.25	6.833	2.05	12.917	8.44	19.00	2.05
0.833	1.25	6.917	2.05	13.000	8.44	19.08	2.05
0.917	1.25	7.000	2.05	13.083	8.44	19.17	2.05
1.000	1.25	7.083	2.05	13.167	8.44	19.25	2.05
1.083	1.25	7.167	2.05	13.250	8.44	19.33	2.05
1.167	1.25	7.250	2.05	13.333	6.16	19.42	2.05
1.250	1.25	7.333	2.51	13.417	6.16	19.50	2.05
1.333	1.25	7.417	2.51	13.500	6.16	19.58	2.05
1.417	1.25	7.500	2.51	13.583	6.16	19.67	2.05
1.500	1.25	7.583	2.51	13.667	6.16	19.75	2.05
1.583	1.25	7.667	2.51	13.750	6.16	19.83	2.05
1.667	1.25	7.750	2.51	13.833	4.79	19.92	2.05
1.750	1.25	7.833	2.51	13.917	4.79	20.00	2.05
1.833	1.25	7.917	2.51	14.000	4.79	20.08	2.05
1.917	1.25	8.000	2.51	14.083	4.79	20.17	2.05
2.000	1.25	8.083	2.51	14.167	4.79	20.25	2.05
2.083	1.25	8.167	2.51	14.250	4.79	20.33	1.37
2.167	1.25	8.250	2.51	14.333	3.42	20.42	1.37
2.250	1.25	8.333	2.97	14.417	3.42	20.50	1.37
2.333	1.48	8.417	2.97	14.500	3.42	20.58	1.37
2.417	1.48	8.500	2.97	14.583	3.42	20.67	1.37
2.500	1.48	8.583	2.97	14.667	3.42	20.75	1.37
2.583	1.48	8.667	2.97	14.750	3.42	20.83	1.37
2.667	1.48	8.750	2.97	14.833	3.42	20.92	1.37
2.750	1.48	8.833	3.19	14.917	3.42	21.00	1.37
2.833	1.48	8.917	3.19	15.000	3.42	21.08	1.37
2.917	1.48	9.000	3.19	15.083	3.42	21.17	1.37
3.000	1.48	9.083	3.19	15.167	3.42	21.25	1.37
3.083	1.48	9.167	3.19	15.250	3.42	21.33	1.37
3.167	1.48	9.250	3.19	15.333	3.42	21.42	1.37
3.250	1.48	9.333	3.65	15.417	3.42	21.50	1.37
3.333	1.48	9.417	3.65	15.500	3.42	21.58	1.37
3.417	1.48	9.500	3.65	15.583	3.42	21.67	1.37
3.500	1.48	9.583	3.65	15.667	3.42	21.75	1.37
3.583	1.48	9.667	3.65	15.750	3.42	21.83	1.37
3.667	1.48	9.750	3.65	15.833	3.42	21.92	1.37
3.750	1.48	9.833	4.11	15.917	3.42	22.00	1.37
3.833	1.48	9.917	4.11	16.000	3.42	22.08	1.37
3.917	1.48	10.000	4.11	16.083	3.42	22.17	1.37

4.000	1.48	10.083	4.11	16.167	3.42	22.25	1.37
4.083	1.48	10.167	4.11	16.250	3.42	22.33	1.37
4.167	1.48	10.250	4.11	16.333	2.05	22.42	1.37
4.250	1.48	10.333	5.25	16.417	2.05	22.50	1.37
4.333	1.82	10.417	5.25	16.500	2.05	22.58	1.37
4.417	1.82	10.500	5.25	16.583	2.05	22.67	1.37
4.500	1.82	10.583	5.25	16.667	2.05	22.75	1.37
4.583	1.82	10.667	5.25	16.750	2.05	22.83	1.37
4.667	1.82	10.750	5.25	16.833	2.05	22.92	1.37
4.750	1.82	10.833	7.07	16.917	2.05	23.00	1.37
4.833	1.82	10.917	7.07	17.000	2.05	23.08	1.37
4.917	1.82	11.000	7.07	17.083	2.05	23.17	1.37
5.000	1.82	11.083	7.07	17.167	2.05	23.25	1.37
5.083	1.82	11.167	7.07	17.250	2.05	23.33	1.37
5.167	1.82	11.250	7.07	17.333	2.05	23.42	1.37
5.250	1.82	11.333	10.95	17.417	2.05	23.50	1.37
5.333	1.82	11.417	10.95	17.500	2.05	23.58	1.37
5.417	1.82	11.500	10.95	17.583	2.05	23.67	1.37
5.500	1.82	11.583	10.95	17.667	2.05	23.75	1.37
5.583	1.82	11.667	10.95	17.750	2.05	23.83	1.37
5.667	1.82	11.750	10.95	17.833	2.05	23.92	1.37
5.750	1.82	11.833	33.75	17.917	2.05	24.00	1.37
5.833	1.82	11.917	33.76	18.000	2.05	24.08	1.37
5.917	1.82	12.000	33.76	18.083	2.05	24.17	1.37
6.000	1.82	12.083	139.57	18.167	2.05	24.25	1.37
6.083	1.82	12.167	139.58	18.250	2.05		

Unit Hyd Qpeak (cms)= 0.176

PEAK FLOW (cms)= 0.157 (i)
TIME TO PEAK (hrs)= 13.750
RUNOFF VOLUME (mm)= 39.595
TOTAL RAINFALL (mm)= 114.040
RUNOFF COEFFICIENT = 0.347

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB		
NASHYD (0016)	Area (ha)= 29.16	Curve Number (CN)= 71.4
ID= 1 DT= 5.0 min	Ia (mm)= 7.88	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.68	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.82	12.250	139.58	18.33	2.05
0.167	0.00	6.250	1.82	12.333	16.44	18.42	2.05
0.250	0.00	6.333	2.05	12.417	16.42	18.50	2.05
0.333	1.25	6.417	2.05	12.500	16.42	18.58	2.05
0.417	1.25	6.500	2.05	12.583	16.42	18.67	2.05
0.500	1.25	6.583	2.05	12.667	16.42	18.75	2.05
0.583	1.25	6.667	2.05	12.750	16.42	18.83	2.05
0.667	1.25	6.750	2.05	12.833	8.44	18.92	2.05
0.750	1.25	6.833	2.05	12.917	8.44	19.00	2.05
0.833	1.25	6.917	2.05	13.000	8.44	19.08	2.05
0.917	1.25	7.000	2.05	13.083	8.44	19.17	2.05
1.000	1.25	7.083	2.05	13.167	8.44	19.25	2.05
1.083	1.25	7.167	2.05	13.250	8.44	19.33	2.05
1.167	1.25	7.250	2.05	13.333	6.16	19.42	2.05
1.250	1.25	7.333	2.51	13.417	6.16	19.50	2.05
1.333	1.25	7.417	2.51	13.500	6.16	19.58	2.05
1.417	1.25	7.500	2.51	13.583	6.16	19.67	2.05
1.500	1.25	7.583	2.51	13.667	6.16	19.75	2.05
1.583	1.25	7.667	2.51	13.750	6.16	19.83	2.05
1.667	1.25	7.750	2.51	13.833	4.79	19.92	2.05
1.750	1.25	7.833	2.51	13.917	4.79	20.00	2.05
1.833	1.25	7.917	2.51	14.000	4.79	20.08	2.05
1.917	1.25	8.000	2.51	14.083	4.79	20.17	2.05
2.000	1.25	8.083	2.51	14.167	4.79	20.25	2.05
2.083	1.25	8.167	2.51	14.250	4.79	20.33	1.37
2.167	1.25	8.250	2.51	14.333	3.42	20.42	1.37
2.250	1.25	8.333	2.97	14.417	3.42	20.50	1.37
2.333	1.48	8.417	2.97	14.500	3.42	20.58	1.37
2.417	1.48	8.500	2.97	14.583	3.42	20.67	1.37
2.500	1.48	8.583	2.97	14.667	3.42	20.75	1.37
2.583	1.48	8.667	2.97	14.750	3.42	20.83	1.37
2.667	1.48	8.750	2.97	14.833	3.42	20.92	1.37
2.750	1.48	8.833	3.19	14.917	3.42	21.00	1.37
2.833	1.48	8.917	3.19	15.000	3.42	21.08	1.37
2.917	1.48	9.000	3.19	15.083	3.42	21.17	1.37
3.000	1.48	9.083	3.19	15.167	3.42	21.25	1.37
3.083	1.48	9.167	3.19	15.250	3.42	21.33	1.37
3.167	1.48	9.250	3.19	15.333	3.42	21.42	1.37
3.250	1.48	9.333	3.65	15.417	3.42	21.50	1.37
3.333	1.48	9.417	3.65	15.500	3.42	21.58	1.37
3.417	1.48	9.500	3.65	15.583	3.42	21.67	1.37
3.500	1.48	9.583	3.65	15.667	3.42	21.75	1.37
3.583	1.48	9.667	3.65	15.750	3.42	21.83	1.37
3.667	1.48	9.750	3.65	15.833	3.42	21.92	1.37
3.750	1.48	9.833	4.11	15.917	3.42	22.00	1.37
3.833	1.48	9.917	4.11	16.000	3.42	22.08	1.37

3.917	1.48	10.000	4.11	16.083	3.42	22.17	1.37
4.000	1.48	10.083	4.11	16.167	3.42	22.25	1.37
4.083	1.48	10.167	4.11	16.250	3.42	22.33	1.37
4.167	1.48	10.250	4.11	16.333	2.05	22.42	1.37
4.250	1.48	10.333	5.25	16.417	2.05	22.50	1.37
4.333	1.82	10.417	5.25	16.500	2.05	22.58	1.37
4.417	1.82	10.500	5.25	16.583	2.05	22.67	1.37
4.500	1.82	10.583	5.25	16.667	2.05	22.75	1.37
4.583	1.82	10.667	5.25	16.750	2.05	22.83	1.37
4.667	1.82	10.750	5.25	16.833	2.05	22.92	1.37
4.750	1.82	10.833	7.07	16.917	2.05	23.00	1.37
4.833	1.82	10.917	7.07	17.000	2.05	23.08	1.37
4.917	1.82	11.000	7.07	17.083	2.05	23.17	1.37
5.000	1.82	11.083	7.07	17.167	2.05	23.25	1.37
5.083	1.82	11.167	7.07	17.250	2.05	23.33	1.37
5.167	1.82	11.250	7.07	17.333	2.05	23.42	1.37
5.250	1.82	11.333	10.95	17.417	2.05	23.50	1.37
5.333	1.82	11.417	10.95	17.500	2.05	23.58	1.37
5.417	1.82	11.500	10.95	17.583	2.05	23.67	1.37
5.500	1.82	11.583	10.95	17.667	2.05	23.75	1.37
5.583	1.82	11.667	10.95	17.750	2.05	23.83	1.37
5.667	1.82	11.750	10.95	17.833	2.05	23.92	1.37
5.750	1.82	11.833	33.75	17.917	2.05	24.00	1.37
5.833	1.82	11.917	33.76	18.000	2.05	24.08	1.37
5.917	1.82	12.000	33.76	18.083	2.05	24.17	1.37
6.000	1.82	12.083	139.57	18.167	2.05	24.25	1.37
6.083	1.82	12.167	139.58	18.250	2.05		

Unit Hyd Qpeak (cms)= 1.638

PEAK FLOW (cms)= 1.709 (i)
TIME TO PEAK (hrs)= 12.833
RUNOFF VOLUME (mm)= 54.207
TOTAL RAINFALL (mm)= 114.040
RUNOFF COEFFICIENT = 0.475

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0019)	Area (ha)= 39.68	Curve Number (CN)= 60.7	
ID= 1 DT= 5.0 min	Ia (mm)= 8.26	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 1.18		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.82	12.250	139.58	18.33	2.05
0.167	0.00	6.250	1.82	12.333	16.44	18.42	2.05
0.250	0.00	6.333	2.05	12.417	16.42	18.50	2.05
0.333	1.25	6.417	2.05	12.500	16.42	18.58	2.05
0.417	1.25	6.500	2.05	12.583	16.42	18.67	2.05
0.500	1.25	6.583	2.05	12.667	16.42	18.75	2.05
0.583	1.25	6.667	2.05	12.750	16.42	18.83	2.05
0.667	1.25	6.750	2.05	12.833	8.44	18.92	2.05
0.750	1.25	6.833	2.05	12.917	8.44	19.00	2.05
0.833	1.25	6.917	2.05	13.000	8.44	19.08	2.05
0.917	1.25	7.000	2.05	13.083	8.44	19.17	2.05
1.000	1.25	7.083	2.05	13.167	8.44	19.25	2.05
1.083	1.25	7.167	2.05	13.250	8.44	19.33	2.05
1.167	1.25	7.250	2.05	13.333	6.16	19.42	2.05
1.250	1.25	7.333	2.51	13.417	6.16	19.50	2.05
1.333	1.25	7.417	2.51	13.500	6.16	19.58	2.05
1.417	1.25	7.500	2.51	13.583	6.16	19.67	2.05
1.500	1.25	7.583	2.51	13.667	6.16	19.75	2.05
1.583	1.25	7.667	2.51	13.750	6.16	19.83	2.05
1.667	1.25	7.750	2.51	13.833	4.79	19.92	2.05
1.750	1.25	7.833	2.51	13.917	4.79	20.00	2.05
1.833	1.25	7.917	2.51	14.000	4.79	20.08	2.05
1.917	1.25	8.000	2.51	14.083	4.79	20.17	2.05
2.000	1.25	8.083	2.51	14.167	4.79	20.25	2.05
2.083	1.25	8.167	2.51	14.250	4.79	20.33	1.37
2.167	1.25	8.250	2.51	14.333	3.42	20.42	1.37
2.250	1.25	8.333	2.97	14.417	3.42	20.50	1.37
2.333	1.48	8.417	2.97	14.500	3.42	20.58	1.37
2.417	1.48	8.500	2.97	14.583	3.42	20.67	1.37
2.500	1.48	8.583	2.97	14.667	3.42	20.75	1.37
2.583	1.48	8.667	2.97	14.750	3.42	20.83	1.37
2.667	1.48	8.750	2.97	14.833	3.42	20.92	1.37
2.750	1.48	8.833	3.19	14.917	3.42	21.00	1.37
2.833	1.48	8.917	3.19	15.000	3.42	21.08	1.37
2.917	1.48	9.000	3.19	15.083	3.42	21.17	1.37
3.000	1.48	9.083	3.19	15.167	3.42	21.25	1.37
3.083	1.48	9.167	3.19	15.250	3.42	21.33	1.37
3.167	1.48	9.250	3.19	15.333	3.42	21.42	1.37
3.250	1.48	9.333	3.65	15.417	3.42	21.50	1.37
3.333	1.48	9.417	3.65	15.500	3.42	21.58	1.37
3.417	1.48	9.500	3.65	15.583	3.42	21.67	1.37
3.500	1.48	9.583	3.65	15.667	3.42	21.75	1.37
3.583	1.48	9.667	3.65	15.750	3.42	21.83	1.37
3.667	1.48	9.750	3.65	15.833	3.42	21.92	1.37
3.750	1.48	9.833	4.11	15.917	3.42	22.00	1.37

3.833	1.48	9.917	4.11	16.000	3.42	22.08	1.37
3.917	1.48	10.000	4.11	16.083	3.42	22.17	1.37
4.000	1.48	10.083	4.11	16.167	3.42	22.25	1.37
4.083	1.48	10.167	4.11	16.250	3.42	22.33	1.37
4.167	1.48	10.250	4.11	16.333	2.05	22.42	1.37
4.250	1.48	10.333	5.25	16.417	2.05	22.50	1.37
4.333	1.82	10.417	5.25	16.500	2.05	22.58	1.37
4.417	1.82	10.500	5.25	16.583	2.05	22.67	1.37
4.500	1.82	10.583	5.25	16.667	2.05	22.75	1.37
4.583	1.82	10.667	5.25	16.750	2.05	22.83	1.37
4.667	1.82	10.750	5.25	16.833	2.05	22.92	1.37
4.750	1.82	10.833	7.07	16.917	2.05	23.00	1.37
4.833	1.82	10.917	7.07	17.000	2.05	23.08	1.37
4.917	1.82	11.000	7.07	17.083	2.05	23.17	1.37
5.000	1.82	11.083	7.07	17.167	2.05	23.25	1.37
5.083	1.82	11.167	7.07	17.250	2.05	23.33	1.37
5.167	1.82	11.250	7.07	17.333	2.05	23.42	1.37
5.250	1.82	11.333	10.95	17.417	2.05	23.50	1.37
5.333	1.82	11.417	10.95	17.500	2.05	23.58	1.37
5.417	1.82	11.500	10.95	17.583	2.05	23.67	1.37
5.500	1.82	11.583	10.95	17.667	2.05	23.75	1.37
5.583	1.82	11.667	10.95	17.750	2.05	23.83	1.37
5.667	1.82	11.750	10.95	17.833	2.05	23.92	1.37
5.750	1.82	11.833	33.75	17.917	2.05	24.00	1.37
5.833	1.82	11.917	33.76	18.000	2.05	24.08	1.37
5.917	1.82	12.000	33.76	18.083	2.05	24.17	1.37
6.000	1.82	12.083	139.57	18.167	2.05	24.25	1.37
6.083	1.82	12.167	139.58	18.250	2.05		

Unit Hyd Qpeak (cms)= 1.284

PEAK FLOW (cms)= 1.142 (i)
TIME TO PEAK (hrs)= 13.417
RUNOFF VOLUME (mm)= 41.375
TOTAL RAINFALL (mm)= 114.040
RUNOFF COEFFICIENT = 0.363

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0024)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0010):	14.85	0.388	13.17	31.09
+ ID2= 2 (0013):	1.70	0.106	12.50	40.28
ID = 3 (0024):	16.55	0.448	13.00	32.03

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0024):	16.55	0.448	13.00	32.03
+ ID2= 2 (0014):	1.80	0.046	13.00	27.30
ID = 1 (0024):	18.35	0.494	13.00	31.57

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0024):	18.35	0.494	13.00	31.57
+ ID2= 2 (0015):	6.70	0.157	13.75	39.60
ID = 3 (0024):	25.05	0.618	13.08	33.72

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0024):	25.05	0.618	13.08	33.72
+ ID2= 2 (0016):	29.16	1.709	12.83	54.21
ID = 1 (0024):	54.21	2.303	12.92	44.74

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0024):	54.21	2.303	12.92	44.74
+ ID2= 2 (0019):	39.68	1.142	13.42	41.38

```
       ID = 3 (  0024):    93.89   3.290    13.00    43.32

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
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--------------------
| ADD HYD  (  0024)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 3 (  0024):    93.89   3.290    13.00    43.32
     + ID2= 2 (  0007):   100.92   1.938    14.08    36.80
       ================================================
       ID = 1 (  0024):   194.81   4.744    13.25    39.94

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0024)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0024):   194.81   4.744    13.25    39.94
     + ID2= 2 (  0008):    23.99   0.476    13.25    25.48
       ================================================
       ID = 3 (  0024):   218.80   5.219    13.25    38.36

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0024)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 3 (  0024):   218.80   5.219    13.25    38.36
     + ID2= 2 (  0009):     6.37   0.164    13.00    27.83
       ================================================
       ID = 1 (  0024):   225.17   5.375    13.25    38.06

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
------------------------------------------------------------------------------
--------------------
| CALIB            |
| NASHYD   (  0011)|   Area    (ha)=  46.28   Curve Number   (CN)= 72.2
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.09   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.30

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.
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---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.82	12.250	139.58	18.33	2.05
0.167	0.00	6.250	1.82	12.333	16.44	18.42	2.05
0.250	0.00	6.333	2.05	12.417	16.42	18.50	2.05
0.333	1.25	6.417	2.05	12.500	16.42	18.58	2.05
0.417	1.25	6.500	2.05	12.583	16.42	18.67	2.05
0.500	1.25	6.583	2.05	12.667	16.42	18.75	2.05
0.583	1.25	6.667	2.05	12.750	16.42	18.83	2.05
0.667	1.25	6.750	2.05	12.833	8.44	18.92	2.05
0.750	1.25	6.833	2.05	12.917	8.44	19.00	2.05
0.833	1.25	6.917	2.05	13.000	8.44	19.08	2.05
0.917	1.25	7.000	2.05	13.083	8.44	19.17	2.05
1.000	1.25	7.083	2.05	13.167	8.44	19.25	2.05
1.083	1.25	7.167	2.05	13.250	8.44	19.33	2.05
1.167	1.25	7.250	2.05	13.333	6.16	19.42	2.05
1.250	1.25	7.333	2.51	13.417	6.16	19.50	2.05
1.333	1.25	7.417	2.51	13.500	6.16	19.58	2.05
1.417	1.25	7.500	2.51	13.583	6.16	19.67	2.05
1.500	1.25	7.583	2.51	13.667	6.16	19.75	2.05
1.583	1.25	7.667	2.51	13.750	6.16	19.83	2.05
1.667	1.25	7.750	2.51	13.833	4.79	19.92	2.05
1.750	1.25	7.833	2.51	13.917	4.79	20.00	2.05
1.833	1.25	7.917	2.51	14.000	4.79	20.08	2.05
1.917	1.25	8.000	2.51	14.083	4.79	20.17	2.05
2.000	1.25	8.083	2.51	14.167	4.79	20.25	2.05
2.083	1.25	8.167	2.51	14.250	4.79	20.33	1.37
2.167	1.25	8.250	2.51	14.333	3.42	20.42	1.37
2.250	1.25	8.333	2.97	14.417	3.42	20.50	1.37
2.333	1.48	8.417	2.97	14.500	3.42	20.58	1.37
2.417	1.48	8.500	2.97	14.583	3.42	20.67	1.37
2.500	1.48	8.583	2.97	14.667	3.42	20.75	1.37
2.583	1.48	8.667	2.97	14.750	3.42	20.83	1.37
2.667	1.48	8.750	2.97	14.833	3.42	20.92	1.37
2.750	1.48	8.833	3.19	14.917	3.42	21.00	1.37
2.833	1.48	8.917	3.19	15.000	3.42	21.08	1.37
2.917	1.48	9.000	3.19	15.083	3.42	21.17	1.37
3.000	1.48	9.083	3.19	15.167	3.42	21.25	1.37
3.083	1.48	9.167	3.19	15.250	3.42	21.33	1.37
3.167	1.48	9.250	3.19	15.333	3.42	21.42	1.37
3.250	1.48	9.333	3.65	15.417	3.42	21.50	1.37
3.333	1.48	9.417	3.65	15.500	3.42	21.58	1.37
3.417	1.48	9.500	3.65	15.583	3.42	21.67	1.37
3.500	1.48	9.583	3.65	15.667	3.42	21.75	1.37
3.583	1.48	9.667	3.65	15.750	3.42	21.83	1.37
3.667	1.48	9.750	3.65	15.833	3.42	21.92	1.37

3.750	1.48	9.833	4.11	15.917	3.42	22.00	1.37
3.833	1.48	9.917	4.11	16.000	3.42	22.08	1.37
3.917	1.48	10.000	4.11	16.083	3.42	22.17	1.37
4.000	1.48	10.083	4.11	16.167	3.42	22.25	1.37
4.083	1.48	10.167	4.11	16.250	3.42	22.33	1.37
4.167	1.48	10.250	4.11	16.333	2.05	22.42	1.37
4.250	1.48	10.333	5.25	16.417	2.05	22.50	1.37
4.333	1.82	10.417	5.25	16.500	2.05	22.58	1.37
4.417	1.82	10.500	5.25	16.583	2.05	22.67	1.37
4.500	1.82	10.583	5.25	16.667	2.05	22.75	1.37
4.583	1.82	10.667	5.25	16.750	2.05	22.83	1.37
4.667	1.82	10.750	5.25	16.833	2.05	22.92	1.37
4.750	1.82	10.833	7.07	16.917	2.05	23.00	1.37
4.833	1.82	10.917	7.07	17.000	2.05	23.08	1.37
4.917	1.82	11.000	7.07	17.083	2.05	23.17	1.37
5.000	1.82	11.083	7.07	17.167	2.05	23.25	1.37
5.083	1.82	11.167	7.07	17.250	2.05	23.33	1.37
5.167	1.82	11.250	7.07	17.333	2.05	23.42	1.37
5.250	1.82	11.333	10.95	17.417	2.05	23.50	1.37
5.333	1.82	11.417	10.95	17.500	2.05	23.58	1.37
5.417	1.82	11.500	10.95	17.583	2.05	23.67	1.37
5.500	1.82	11.583	10.95	17.667	2.05	23.75	1.37
5.583	1.82	11.667	10.95	17.750	2.05	23.83	1.37
5.667	1.82	11.750	10.95	17.833	2.05	23.92	1.37
5.750	1.82	11.833	33.75	17.917	2.05	24.00	1.37
5.833	1.82	11.917	33.76	18.000	2.05	24.08	1.37
5.917	1.82	12.000	33.76	18.083	2.05	24.17	1.37
6.000	1.82	12.083	139.57	18.167	2.05	24.25	1.37
6.083	1.82	12.167	139.58	18.250	2.05		

Unit Hyd Qpeak (cms)= 5.892

PEAK FLOW (cms)= 5.093 (i)
TIME TO PEAK (hrs)= 12.417
RUNOFF VOLUME (mm)= 55.830
TOTAL RAINFALL (mm)= 114.040
RUNOFF COEFFICIENT = 0.490

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0012)	Area (ha)= 1.13	Curve Number (CN)= 67.4	
ID= 1 DT= 5.0 min	Ia (mm)= 7.88	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.43		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	6.167	1.82	12.250	139.58	18.33	2.05
0.167	0.00	6.250	1.82	12.333	16.44	18.42	2.05
0.250	0.00	6.333	2.05	12.417	16.42	18.50	2.05
0.333	1.25	6.417	2.05	12.500	16.42	18.58	2.05
0.417	1.25	6.500	2.05	12.583	16.42	18.67	2.05
0.500	1.25	6.583	2.05	12.667	16.42	18.75	2.05
0.583	1.25	6.667	2.05	12.750	16.42	18.83	2.05
0.667	1.25	6.750	2.05	12.833	8.44	18.92	2.05
0.750	1.25	6.833	2.05	12.917	8.44	19.00	2.05
0.833	1.25	6.917	2.05	13.000	8.44	19.08	2.05
0.917	1.25	7.000	2.05	13.083	8.44	19.17	2.05
1.000	1.25	7.083	2.05	13.167	8.44	19.25	2.05
1.083	1.25	7.167	2.05	13.250	8.44	19.33	2.05
1.167	1.25	7.250	2.05	13.333	6.16	19.42	2.05
1.250	1.25	7.333	2.51	13.417	6.16	19.50	2.05
1.333	1.25	7.417	2.51	13.500	6.16	19.58	2.05
1.417	1.25	7.500	2.51	13.583	6.16	19.67	2.05
1.500	1.25	7.583	2.51	13.667	6.16	19.75	2.05
1.583	1.25	7.667	2.51	13.750	6.16	19.83	2.05
1.667	1.25	7.750	2.51	13.833	4.79	19.92	2.05
1.750	1.25	7.833	2.51	13.917	4.79	20.00	2.05
1.833	1.25	7.917	2.51	14.000	4.79	20.08	2.05
1.917	1.25	8.000	2.51	14.083	4.79	20.17	2.05
2.000	1.25	8.083	2.51	14.167	4.79	20.25	2.05
2.083	1.25	8.167	2.51	14.250	4.79	20.33	1.37
2.167	1.25	8.250	2.51	14.333	3.42	20.42	1.37
2.250	1.25	8.333	2.97	14.417	3.42	20.50	1.37
2.333	1.48	8.417	2.97	14.500	3.42	20.58	1.37
2.417	1.48	8.500	2.97	14.583	3.42	20.67	1.37
2.500	1.48	8.583	2.97	14.667	3.42	20.75	1.37
2.583	1.48	8.667	2.97	14.750	3.42	20.83	1.37
2.667	1.48	8.750	2.97	14.833	3.42	20.92	1.37
2.750	1.48	8.833	3.19	14.917	3.42	21.00	1.37
2.833	1.48	8.917	3.19	15.000	3.42	21.08	1.37
2.917	1.48	9.000	3.19	15.083	3.42	21.17	1.37
3.000	1.48	9.083	3.19	15.167	3.42	21.25	1.37
3.083	1.48	9.167	3.19	15.250	3.42	21.33	1.37
3.167	1.48	9.250	3.19	15.333	3.42	21.42	1.37
3.250	1.48	9.333	3.65	15.417	3.42	21.50	1.37
3.333	1.48	9.417	3.65	15.500	3.42	21.58	1.37
3.417	1.48	9.500	3.65	15.583	3.42	21.67	1.37
3.500	1.48	9.583	3.65	15.667	3.42	21.75	1.37
3.583	1.48	9.667	3.65	15.750	3.42	21.83	1.37

3.667	1.48	9.750	3.65	15.833	3.42	21.92	1.37
3.750	1.48	9.833	4.11	15.917	3.42	22.00	1.37
3.833	1.48	9.917	4.11	16.000	3.42	22.08	1.37
3.917	1.48	10.000	4.11	16.083	3.42	22.17	1.37
4.000	1.48	10.083	4.11	16.167	3.42	22.25	1.37
4.083	1.48	10.167	4.11	16.250	3.42	22.33	1.37
4.167	1.48	10.250	4.11	16.333	2.05	22.42	1.37
4.250	1.48	10.333	5.25	16.417	2.05	22.50	1.37
4.333	1.82	10.417	5.25	16.500	2.05	22.58	1.37
4.417	1.82	10.500	5.25	16.583	2.05	22.67	1.37
4.500	1.82	10.583	5.25	16.667	2.05	22.75	1.37
4.583	1.82	10.667	5.25	16.750	2.05	22.83	1.37
4.667	1.82	10.750	5.25	16.833	2.05	22.92	1.37
4.750	1.82	10.833	7.07	16.917	2.05	23.00	1.37
4.833	1.82	10.917	7.07	17.000	2.05	23.08	1.37
4.917	1.82	11.000	7.07	17.083	2.05	23.17	1.37
5.000	1.82	11.083	7.07	17.167	2.05	23.25	1.37
5.083	1.82	11.167	7.07	17.250	2.05	23.33	1.37
5.167	1.82	11.250	7.07	17.333	2.05	23.42	1.37
5.250	1.82	11.333	10.95	17.417	2.05	23.50	1.37
5.333	1.82	11.417	10.95	17.500	2.05	23.58	1.37
5.417	1.82	11.500	10.95	17.583	2.05	23.67	1.37
5.500	1.82	11.583	10.95	17.667	2.05	23.75	1.37
5.583	1.82	11.667	10.95	17.750	2.05	23.83	1.37
5.667	1.82	11.750	10.95	17.833	2.05	23.92	1.37
5.750	1.82	11.833	33.75	17.917	2.05	24.00	1.37
5.833	1.82	11.917	33.76	18.000	2.05	24.08	1.37
5.917	1.82	12.000	33.76	18.083	2.05	24.17	1.37
6.000	1.82	12.083	139.57	18.167	2.05	24.25	1.37
6.083	1.82	12.167	139.58	18.250	2.05		

Unit Hyd Qpeak (cms)= 0.100

PEAK FLOW (cms)= 0.083 (i)
TIME TO PEAK (hrs)= 12.583
RUNOFF VOLUME (mm)= 49.157
TOTAL RAINFALL (mm)= 114.040
RUNOFF COEFFICIENT = 0.431

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	
STANDHYD (0043)	Area (ha)= 0.13
ID= 1 DT= 5.0 min	Total Imp(%)= 30.77 Dir. Conn.(%)= 7.69

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	0.04	0.09
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	0.50	0.50
Length (m)=	29.44	70.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.82	12.250	139.58	18.33	2.05
0.167	0.00	6.250	1.82	12.333	16.44	18.42	2.05
0.250	0.00	6.333	2.05	12.417	16.42	18.50	2.05
0.333	1.25	6.417	2.05	12.500	16.42	18.58	2.05
0.417	1.25	6.500	2.05	12.583	16.42	18.67	2.05
0.500	1.25	6.583	2.05	12.667	16.42	18.75	2.05
0.583	1.25	6.667	2.05	12.750	16.42	18.83	2.05
0.667	1.25	6.750	2.05	12.833	8.44	18.92	2.05
0.750	1.25	6.833	2.05	12.917	8.44	19.00	2.05
0.833	1.25	6.917	2.05	13.000	8.44	19.08	2.05
0.917	1.25	7.000	2.05	13.083	8.44	19.17	2.05
1.000	1.25	7.083	2.05	13.167	8.44	19.25	2.05
1.083	1.25	7.167	2.05	13.250	8.44	19.33	2.05
1.167	1.25	7.250	2.05	13.333	6.16	19.42	2.05
1.250	1.25	7.333	2.51	13.417	6.16	19.50	2.05
1.333	1.25	7.417	2.51	13.500	6.16	19.58	2.05
1.417	1.25	7.500	2.51	13.583	6.16	19.67	2.05
1.500	1.25	7.583	2.51	13.667	6.16	19.75	2.05
1.583	1.25	7.667	2.51	13.750	6.16	19.83	2.05
1.667	1.25	7.750	2.51	13.833	4.79	19.92	2.05
1.750	1.25	7.833	2.51	13.917	4.79	20.00	2.05
1.833	1.25	7.917	2.51	14.000	4.79	20.08	2.05
1.917	1.25	8.000	2.51	14.083	4.79	20.17	2.05
2.000	1.25	8.083	2.51	14.167	4.79	20.25	2.05
2.083	1.25	8.167	2.51	14.250	4.79	20.33	1.37
2.167	1.25	8.250	2.51	14.333	3.42	20.42	1.37
2.250	1.25	8.333	2.97	14.417	3.42	20.50	1.37
2.333	1.48	8.417	2.97	14.500	3.42	20.58	1.37
2.417	1.48	8.500	2.97	14.583	3.42	20.67	1.37
2.500	1.48	8.583	2.97	14.667	3.42	20.75	1.37
2.583	1.48	8.667	2.97	14.750	3.42	20.83	1.37
2.667	1.48	8.750	2.97	14.833	3.42	20.92	1.37
2.750	1.48	8.833	3.19	14.917	3.42	21.00	1.37
2.833	1.48	8.917	3.19	15.000	3.42	21.08	1.37
2.917	1.48	9.000	3.19	15.083	3.42	21.17	1.37
3.000	1.48	9.083	3.19	15.167	3.42	21.25	1.37

3.083	1.48	9.167	3.19	15.250	3.42	21.33	1.37
3.167	1.48	9.250	3.19	15.333	3.42	21.42	1.37
3.250	1.48	9.333	3.65	15.417	3.42	21.50	1.37
3.333	1.48	9.417	3.65	15.500	3.42	21.58	1.37
3.417	1.48	9.500	3.65	15.583	3.42	21.67	1.37
3.500	1.48	9.583	3.65	15.667	3.42	21.75	1.37
3.583	1.48	9.667	3.65	15.750	3.42	21.83	1.37
3.667	1.48	9.750	3.65	15.833	3.42	21.92	1.37
3.750	1.48	9.833	4.11	15.917	3.42	22.00	1.37
3.833	1.48	9.917	4.11	16.000	3.42	22.08	1.37
3.917	1.48	10.000	4.11	16.083	3.42	22.17	1.37
4.000	1.48	10.083	4.11	16.167	3.42	22.25	1.37
4.083	1.48	10.167	4.11	16.250	3.42	22.33	1.37
4.167	1.48	10.250	4.11	16.333	2.05	22.42	1.37
4.250	1.48	10.333	5.25	16.417	2.05	22.50	1.37
4.333	1.82	10.417	5.25	16.500	2.05	22.58	1.37
4.417	1.82	10.500	5.25	16.583	2.05	22.67	1.37
4.500	1.82	10.583	5.25	16.667	2.05	22.75	1.37
4.583	1.82	10.667	5.25	16.750	2.05	22.83	1.37
4.667	1.82	10.750	5.25	16.833	2.05	22.92	1.37
4.750	1.82	10.833	7.07	16.917	2.05	23.00	1.37
4.833	1.82	10.917	7.07	17.000	2.05	23.08	1.37
4.917	1.82	11.000	7.07	17.083	2.05	23.17	1.37
5.000	1.82	11.083	7.07	17.167	2.05	23.25	1.37
5.083	1.82	11.167	7.07	17.250	2.05	23.33	1.37
5.167	1.82	11.250	7.07	17.333	2.05	23.42	1.37
5.250	1.82	11.333	10.95	17.417	2.05	23.50	1.37
5.333	1.82	11.417	10.95	17.500	2.05	23.58	1.37
5.417	1.82	11.500	10.95	17.583	2.05	23.67	1.37
5.500	1.82	11.583	10.95	17.667	2.05	23.75	1.37
5.583	1.82	11.667	10.95	17.750	2.05	23.83	1.37
5.667	1.82	11.750	10.95	17.833	2.05	23.92	1.37
5.750	1.82	11.833	33.75	17.917	2.05	24.00	1.37
5.833	1.82	11.917	33.76	18.000	2.05	24.08	1.37
5.917	1.82	12.000	33.76	18.083	2.05	24.17	1.37
6.000	1.82	12.083	139.57	18.167	2.05	24.25	1.37
6.083	1.82	12.167	139.58	18.250	2.05		

Max.Eff.Inten.(mm/hr)=	139.58	115.46	
over (min)	5.00	20.00	
Storage Coeff. (min)=	1.32 (ii)	15.45 (ii)	
Unit Hyd. Tpeak (min)=	5.00	20.00	
Unit Hyd. peak (cms)=	0.33	0.07	
			TOTALS
PEAK FLOW (cms)=	0.00	0.02	0.016 (iii)
TIME TO PEAK (hrs)=	12.25	12.42	12.42
RUNOFF VOLUME (mm)=	113.04	62.10	65.94
TOTAL RAINFALL (mm)=	114.04	114.04	114.04

RUNOFF COEFFICIENT = 0.99 0.54 0.58

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
STANDHYD (0044)	Area (ha)=	1.62	
ID= 1 DT= 5.0 min	Total Imp(%)=	48.77	Dir. Conn.(%)= 30.86

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.79	0.83
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	1.40
Length	(m)=	103.92	400.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.82	12.250	139.58	18.33	2.05
0.167	0.00	6.250	1.82	12.333	16.44	18.42	2.05
0.250	0.00	6.333	2.05	12.417	16.42	18.50	2.05
0.333	1.25	6.417	2.05	12.500	16.42	18.58	2.05
0.417	1.25	6.500	2.05	12.583	16.42	18.67	2.05
0.500	1.25	6.583	2.05	12.667	16.42	18.75	2.05
0.583	1.25	6.667	2.05	12.750	16.42	18.83	2.05
0.667	1.25	6.750	2.05	12.833	8.44	18.92	2.05
0.750	1.25	6.833	2.05	12.917	8.44	19.00	2.05
0.833	1.25	6.917	2.05	13.000	8.44	19.08	2.05
0.917	1.25	7.000	2.05	13.083	8.44	19.17	2.05
1.000	1.25	7.083	2.05	13.167	8.44	19.25	2.05
1.083	1.25	7.167	2.05	13.250	8.44	19.33	2.05
1.167	1.25	7.250	2.05	13.333	6.16	19.42	2.05
1.250	1.25	7.333	2.51	13.417	6.16	19.50	2.05
1.333	1.25	7.417	2.51	13.500	6.16	19.58	2.05
1.417	1.25	7.500	2.51	13.583	6.16	19.67	2.05

1.500	1.25	7.583	2.51	13.667	6.16	19.75	2.05
1.583	1.25	7.667	2.51	13.750	6.16	19.83	2.05
1.667	1.25	7.750	2.51	13.833	4.79	19.92	2.05
1.750	1.25	7.833	2.51	13.917	4.79	20.00	2.05
1.833	1.25	7.917	2.51	14.000	4.79	20.08	2.05
1.917	1.25	8.000	2.51	14.083	4.79	20.17	2.05
2.000	1.25	8.083	2.51	14.167	4.79	20.25	2.05
2.083	1.25	8.167	2.51	14.250	4.79	20.33	1.37
2.167	1.25	8.250	2.51	14.333	3.42	20.42	1.37
2.250	1.25	8.333	2.97	14.417	3.42	20.50	1.37
2.333	1.48	8.417	2.97	14.500	3.42	20.58	1.37
2.417	1.48	8.500	2.97	14.583	3.42	20.67	1.37
2.500	1.48	8.583	2.97	14.667	3.42	20.75	1.37
2.583	1.48	8.667	2.97	14.750	3.42	20.83	1.37
2.667	1.48	8.750	2.97	14.833	3.42	20.92	1.37
2.750	1.48	8.833	3.19	14.917	3.42	21.00	1.37
2.833	1.48	8.917	3.19	15.000	3.42	21.08	1.37
2.917	1.48	9.000	3.19	15.083	3.42	21.17	1.37
3.000	1.48	9.083	3.19	15.167	3.42	21.25	1.37
3.083	1.48	9.167	3.19	15.250	3.42	21.33	1.37
3.167	1.48	9.250	3.19	15.333	3.42	21.42	1.37
3.250	1.48	9.333	3.65	15.417	3.42	21.50	1.37
3.333	1.48	9.417	3.65	15.500	3.42	21.58	1.37
3.417	1.48	9.500	3.65	15.583	3.42	21.67	1.37
3.500	1.48	9.583	3.65	15.667	3.42	21.75	1.37
3.583	1.48	9.667	3.65	15.750	3.42	21.83	1.37
3.667	1.48	9.750	3.65	15.833	3.42	21.92	1.37
3.750	1.48	9.833	4.11	15.917	3.42	22.00	1.37
3.833	1.48	9.917	4.11	16.000	3.42	22.08	1.37
3.917	1.48	10.000	4.11	16.083	3.42	22.17	1.37
4.000	1.48	10.083	4.11	16.167	3.42	22.25	1.37
4.083	1.48	10.167	4.11	16.250	3.42	22.33	1.37
4.167	1.48	10.250	4.11	16.333	2.05	22.42	1.37
4.250	1.48	10.333	5.25	16.417	2.05	22.50	1.37
4.333	1.82	10.417	5.25	16.500	2.05	22.58	1.37
4.417	1.82	10.500	5.25	16.583	2.05	22.67	1.37
4.500	1.82	10.583	5.25	16.667	2.05	22.75	1.37
4.583	1.82	10.667	5.25	16.750	2.05	22.83	1.37
4.667	1.82	10.750	5.25	16.833	2.05	22.92	1.37
4.750	1.82	10.833	7.07	16.917	2.05	23.00	1.37
4.833	1.82	10.917	7.07	17.000	2.05	23.08	1.37
4.917	1.82	11.000	7.07	17.083	2.05	23.17	1.37
5.000	1.82	11.083	7.07	17.167	2.05	23.25	1.37
5.083	1.82	11.167	7.07	17.250	2.05	23.33	1.37
5.167	1.82	11.250	7.07	17.333	2.05	23.42	1.37
5.250	1.82	11.333	10.95	17.417	2.05	23.50	1.37
5.333	1.82	11.417	10.95	17.500	2.05	23.58	1.37
5.417	1.82	11.500	10.95	17.583	2.05	23.67	1.37

5.500	1.82	11.583	10.95	17.667	2.05	23.75	1.37
5.583	1.82	11.667	10.95	17.750	2.05	23.83	1.37
5.667	1.82	11.750	10.95	17.833	2.05	23.92	1.37
5.750	1.82	11.833	33.75	17.917	2.05	24.00	1.37
5.833	1.82	11.917	33.76	18.000	2.05	24.08	1.37
5.917	1.82	12.000	33.76	18.083	2.05	24.17	1.37
6.000	1.82	12.083	139.57	18.167	2.05	24.25	1.37
6.083	1.82	12.167	139.58	18.250	2.05		

Max.Eff.Inten.(mm/hr)=	139.58	56.24	
over (min)	5.00	45.00	
Storage Coeff. (min)=	2.82 (ii)	42.18 (ii)	
Unit Hyd. Tpeak (min)=	5.00	45.00	
Unit Hyd. peak (cms)=	0.28	0.03	
			TOTALS
PEAK FLOW (cms)=	0.19	0.08	0.221 (iii)
TIME TO PEAK (hrs)=	12.25	12.83	12.25
RUNOFF VOLUME (mm)=	113.04	62.46	78.06
TOTAL RAINFALL (mm)=	114.04	114.04	114.04
RUNOFF COEFFICIENT =	0.99	0.55	0.68

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0041)	Area (ha)=	0.59	Curve Number (CN)= 71.5
ID= 1 DT= 5.0 min	Ia (mm)=	4.75	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	0.53	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.82	12.250	139.58	18.33	2.05
0.167	0.00	6.250	1.82	12.333	16.44	18.42	2.05
0.250	0.00	6.333	2.05	12.417	16.42	18.50	2.05
0.333	1.25	6.417	2.05	12.500	16.42	18.58	2.05
0.417	1.25	6.500	2.05	12.583	16.42	18.67	2.05
0.500	1.25	6.583	2.05	12.667	16.42	18.75	2.05

0.583	1.25	6.667	2.05	12.750	16.42	18.83	2.05
0.667	1.25	6.750	2.05	12.833	8.44	18.92	2.05
0.750	1.25	6.833	2.05	12.917	8.44	19.00	2.05
0.833	1.25	6.917	2.05	13.000	8.44	19.08	2.05
0.917	1.25	7.000	2.05	13.083	8.44	19.17	2.05
1.000	1.25	7.083	2.05	13.167	8.44	19.25	2.05
1.083	1.25	7.167	2.05	13.250	8.44	19.33	2.05
1.167	1.25	7.250	2.05	13.333	6.16	19.42	2.05
1.250	1.25	7.333	2.51	13.417	6.16	19.50	2.05
1.333	1.25	7.417	2.51	13.500	6.16	19.58	2.05
1.417	1.25	7.500	2.51	13.583	6.16	19.67	2.05
1.500	1.25	7.583	2.51	13.667	6.16	19.75	2.05
1.583	1.25	7.667	2.51	13.750	6.16	19.83	2.05
1.667	1.25	7.750	2.51	13.833	4.79	19.92	2.05
1.750	1.25	7.833	2.51	13.917	4.79	20.00	2.05
1.833	1.25	7.917	2.51	14.000	4.79	20.08	2.05
1.917	1.25	8.000	2.51	14.083	4.79	20.17	2.05
2.000	1.25	8.083	2.51	14.167	4.79	20.25	2.05
2.083	1.25	8.167	2.51	14.250	4.79	20.33	1.37
2.167	1.25	8.250	2.51	14.333	3.42	20.42	1.37
2.250	1.25	8.333	2.97	14.417	3.42	20.50	1.37
2.333	1.48	8.417	2.97	14.500	3.42	20.58	1.37
2.417	1.48	8.500	2.97	14.583	3.42	20.67	1.37
2.500	1.48	8.583	2.97	14.667	3.42	20.75	1.37
2.583	1.48	8.667	2.97	14.750	3.42	20.83	1.37
2.667	1.48	8.750	2.97	14.833	3.42	20.92	1.37
2.750	1.48	8.833	3.19	14.917	3.42	21.00	1.37
2.833	1.48	8.917	3.19	15.000	3.42	21.08	1.37
2.917	1.48	9.000	3.19	15.083	3.42	21.17	1.37
3.000	1.48	9.083	3.19	15.167	3.42	21.25	1.37
3.083	1.48	9.167	3.19	15.250	3.42	21.33	1.37
3.167	1.48	9.250	3.19	15.333	3.42	21.42	1.37
3.250	1.48	9.333	3.65	15.417	3.42	21.50	1.37
3.333	1.48	9.417	3.65	15.500	3.42	21.58	1.37
3.417	1.48	9.500	3.65	15.583	3.42	21.67	1.37
3.500	1.48	9.583	3.65	15.667	3.42	21.75	1.37
3.583	1.48	9.667	3.65	15.750	3.42	21.83	1.37
3.667	1.48	9.750	3.65	15.833	3.42	21.92	1.37
3.750	1.48	9.833	4.11	15.917	3.42	22.00	1.37
3.833	1.48	9.917	4.11	16.000	3.42	22.08	1.37
3.917	1.48	10.000	4.11	16.083	3.42	22.17	1.37
4.000	1.48	10.083	4.11	16.167	3.42	22.25	1.37
4.083	1.48	10.167	4.11	16.250	3.42	22.33	1.37
4.167	1.48	10.250	4.11	16.333	2.05	22.42	1.37
4.250	1.48	10.333	5.25	16.417	2.05	22.50	1.37
4.333	1.82	10.417	5.25	16.500	2.05	22.58	1.37
4.417	1.82	10.500	5.25	16.583	2.05	22.67	1.37
4.500	1.82	10.583	5.25	16.667	2.05	22.75	1.37

4.583	1.82	10.667	5.25	16.750	2.05	22.83	1.37
4.667	1.82	10.750	5.25	16.833	2.05	22.92	1.37
4.750	1.82	10.833	7.07	16.917	2.05	23.00	1.37
4.833	1.82	10.917	7.07	17.000	2.05	23.08	1.37
4.917	1.82	11.000	7.07	17.083	2.05	23.17	1.37
5.000	1.82	11.083	7.07	17.167	2.05	23.25	1.37
5.083	1.82	11.167	7.07	17.250	2.05	23.33	1.37
5.167	1.82	11.250	7.07	17.333	2.05	23.42	1.37
5.250	1.82	11.333	10.95	17.417	2.05	23.50	1.37
5.333	1.82	11.417	10.95	17.500	2.05	23.58	1.37
5.417	1.82	11.500	10.95	17.583	2.05	23.67	1.37
5.500	1.82	11.583	10.95	17.667	2.05	23.75	1.37
5.583	1.82	11.667	10.95	17.750	2.05	23.83	1.37
5.667	1.82	11.750	10.95	17.833	2.05	23.92	1.37
5.750	1.82	11.833	33.75	17.917	2.05	24.00	1.37
5.833	1.82	11.917	33.76	18.000	2.05	24.08	1.37
5.917	1.82	12.000	33.76	18.083	2.05	24.17	1.37
6.000	1.82	12.083	139.57	18.167	2.05	24.25	1.37
6.083	1.82	12.167	139.58	18.250	2.05		

Unit Hyd Qpeak (cms)= 0.043

PEAK FLOW (cms)= 0.043 (i)
TIME TO PEAK (hrs)= 12.667
RUNOFF VOLUME (mm)= 56.676
TOTAL RAINFALL (mm)= 114.040
RUNOFF COEFFICIENT = 0.497

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB NASHYD (0028) ID= 1 DT= 5.0 min	Area (ha)= 1.38	Curve Number (CN)= 64.1	
	Ia (mm)= 8.51	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.39		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.82	12.250	139.58	18.33	2.05
0.167	0.00	6.250	1.82	12.333	16.44	18.42	2.05
0.250	0.00	6.333	2.05	12.417	16.42	18.50	2.05
0.333	1.25	6.417	2.05	12.500	16.42	18.58	2.05
0.417	1.25	6.500	2.05	12.583	16.42	18.67	2.05

0.500	1.25	6.583	2.05	12.667	16.42	18.75	2.05
0.583	1.25	6.667	2.05	12.750	16.42	18.83	2.05
0.667	1.25	6.750	2.05	12.833	8.44	18.92	2.05
0.750	1.25	6.833	2.05	12.917	8.44	19.00	2.05
0.833	1.25	6.917	2.05	13.000	8.44	19.08	2.05
0.917	1.25	7.000	2.05	13.083	8.44	19.17	2.05
1.000	1.25	7.083	2.05	13.167	8.44	19.25	2.05
1.083	1.25	7.167	2.05	13.250	8.44	19.33	2.05
1.167	1.25	7.250	2.05	13.333	6.16	19.42	2.05
1.250	1.25	7.333	2.51	13.417	6.16	19.50	2.05
1.333	1.25	7.417	2.51	13.500	6.16	19.58	2.05
1.417	1.25	7.500	2.51	13.583	6.16	19.67	2.05
1.500	1.25	7.583	2.51	13.667	6.16	19.75	2.05
1.583	1.25	7.667	2.51	13.750	6.16	19.83	2.05
1.667	1.25	7.750	2.51	13.833	4.79	19.92	2.05
1.750	1.25	7.833	2.51	13.917	4.79	20.00	2.05
1.833	1.25	7.917	2.51	14.000	4.79	20.08	2.05
1.917	1.25	8.000	2.51	14.083	4.79	20.17	2.05
2.000	1.25	8.083	2.51	14.167	4.79	20.25	2.05
2.083	1.25	8.167	2.51	14.250	4.79	20.33	1.37
2.167	1.25	8.250	2.51	14.333	3.42	20.42	1.37
2.250	1.25	8.333	2.97	14.417	3.42	20.50	1.37
2.333	1.48	8.417	2.97	14.500	3.42	20.58	1.37
2.417	1.48	8.500	2.97	14.583	3.42	20.67	1.37
2.500	1.48	8.583	2.97	14.667	3.42	20.75	1.37
2.583	1.48	8.667	2.97	14.750	3.42	20.83	1.37
2.667	1.48	8.750	2.97	14.833	3.42	20.92	1.37
2.750	1.48	8.833	3.19	14.917	3.42	21.00	1.37
2.833	1.48	8.917	3.19	15.000	3.42	21.08	1.37
2.917	1.48	9.000	3.19	15.083	3.42	21.17	1.37
3.000	1.48	9.083	3.19	15.167	3.42	21.25	1.37
3.083	1.48	9.167	3.19	15.250	3.42	21.33	1.37
3.167	1.48	9.250	3.19	15.333	3.42	21.42	1.37
3.250	1.48	9.333	3.65	15.417	3.42	21.50	1.37
3.333	1.48	9.417	3.65	15.500	3.42	21.58	1.37
3.417	1.48	9.500	3.65	15.583	3.42	21.67	1.37
3.500	1.48	9.583	3.65	15.667	3.42	21.75	1.37
3.583	1.48	9.667	3.65	15.750	3.42	21.83	1.37
3.667	1.48	9.750	3.65	15.833	3.42	21.92	1.37
3.750	1.48	9.833	4.11	15.917	3.42	22.00	1.37
3.833	1.48	9.917	4.11	16.000	3.42	22.08	1.37
3.917	1.48	10.000	4.11	16.083	3.42	22.17	1.37
4.000	1.48	10.083	4.11	16.167	3.42	22.25	1.37
4.083	1.48	10.167	4.11	16.250	3.42	22.33	1.37
4.167	1.48	10.250	4.11	16.333	2.05	22.42	1.37
4.250	1.48	10.333	5.25	16.417	2.05	22.50	1.37
4.333	1.82	10.417	5.25	16.500	2.05	22.58	1.37
4.417	1.82	10.500	5.25	16.583	2.05	22.67	1.37

4.500	1.82	10.583	5.25	16.667	2.05	22.75	1.37
4.583	1.82	10.667	5.25	16.750	2.05	22.83	1.37
4.667	1.82	10.750	5.25	16.833	2.05	22.92	1.37
4.750	1.82	10.833	7.07	16.917	2.05	23.00	1.37
4.833	1.82	10.917	7.07	17.000	2.05	23.08	1.37
4.917	1.82	11.000	7.07	17.083	2.05	23.17	1.37
5.000	1.82	11.083	7.07	17.167	2.05	23.25	1.37
5.083	1.82	11.167	7.07	17.250	2.05	23.33	1.37
5.167	1.82	11.250	7.07	17.333	2.05	23.42	1.37
5.250	1.82	11.333	10.95	17.417	2.05	23.50	1.37
5.333	1.82	11.417	10.95	17.500	2.05	23.58	1.37
5.417	1.82	11.500	10.95	17.583	2.05	23.67	1.37
5.500	1.82	11.583	10.95	17.667	2.05	23.75	1.37
5.583	1.82	11.667	10.95	17.750	2.05	23.83	1.37
5.667	1.82	11.750	10.95	17.833	2.05	23.92	1.37
5.750	1.82	11.833	33.75	17.917	2.05	24.00	1.37
5.833	1.82	11.917	33.76	18.000	2.05	24.08	1.37
5.917	1.82	12.000	33.76	18.083	2.05	24.17	1.37
6.000	1.82	12.083	139.57	18.167	2.05	24.25	1.37
6.083	1.82	12.167	139.58	18.250	2.05		

Unit Hyd Qpeak (cms)= 0.135

PEAK FLOW (cms)= 0.099 (i)
TIME TO PEAK (hrs)= 12.500
RUNOFF VOLUME (mm)= 44.983
TOTAL RAINFALL (mm)= 114.040
RUNOFF COEFFICIENT = 0.394

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0023)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0011):	46.28	5.093	12.42	55.83
+ ID2= 2 (0012):	1.13	0.083	12.58	49.16
ID = 3 (0023):	47.41	5.169	12.42	55.67

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023)				
3 + 2 = 1	AREA	QPEAK	TPEAK	R.V.

	(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0023):	47.41	5.169	12.42	55.67
+ ID2= 2 (0028):	1.38	0.099	12.50	44.98
ID = 1 (0023):	48.79	5.264	12.42	55.37

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023)				
1 + 2 = 3	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0023):	48.79	5.264	12.42	55.37
+ ID2= 2 (0041):	0.59	0.043	12.67	56.68
ID = 3 (0023):	49.38	5.299	12.42	55.38

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023)				
3 + 2 = 1	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0023):	49.38	5.299	12.42	55.38
+ ID2= 2 (0043):	0.13	0.016	12.42	65.94
ID = 1 (0023):	49.51	5.316	12.42	55.41

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023)				
1 + 2 = 3	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0023):	49.51	5.316	12.42	55.41
+ ID2= 2 (0044):	1.62	0.221	12.25	78.06
ID = 3 (0023):	51.13	5.388	12.42	56.13

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0025)				
1 + 2 = 3	AREA	QPEAK	TPEAK	R.V.

	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0023):	51.13	5.388	12.42	56.13
+ ID2= 2 (0024):	225.17	5.375	13.25	38.06
ID = 3 (0025):	276.30	8.396	12.50	41.40

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

****
** SIMULATION:K - 50-year SCS **
****

READ STORM	Filename: C:\Users\ecomish\AppData\Local\Temp\c819dd95-70ee-48d0-b884-0b24f1308cad\0c38785b
Ptotal=126.91 mm	Comments: 50yr 24hr 15min SCS Type II (MTO) - 15%

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.00	0.00	6.25	2.28	12.50	18.28	18.75	2.28
0.25	1.40	6.50	2.28	12.75	9.39	19.00	2.28
0.50	1.40	6.75	2.28	13.00	9.39	19.25	2.28
0.75	1.40	7.00	2.28	13.25	6.85	19.50	2.28
1.00	1.40	7.25	2.79	13.50	6.85	19.75	2.28
1.25	1.40	7.50	2.79	13.75	5.33	20.00	2.28
1.50	1.40	7.75	2.79	14.00	5.33	20.25	1.52
1.75	1.40	8.00	2.79	14.25	3.81	20.50	1.52
2.00	1.40	8.25	3.30	14.50	3.81	20.75	1.52
2.25	1.65	8.50	3.30	14.75	3.81	21.00	1.52
2.50	1.65	8.75	3.55	15.00	3.81	21.25	1.52
2.75	1.65	9.00	3.55	15.25	3.81	21.50	1.52
3.00	1.65	9.25	4.06	15.50	3.81	21.75	1.52
3.25	1.65	9.50	4.06	15.75	3.81	22.00	1.52
3.50	1.65	9.75	4.57	16.00	3.81	22.25	1.52
3.75	1.65	10.00	4.57	16.25	2.28	22.50	1.52
4.00	1.65	10.25	5.84	16.50	2.28	22.75	1.52
4.25	2.03	10.50	5.84	16.75	2.28	23.00	1.52
4.50	2.03	10.75	7.87	17.00	2.28	23.25	1.52
4.75	2.03	11.00	7.87	17.25	2.28	23.50	1.52
5.00	2.03	11.25	12.18	17.50	2.28	23.75	1.52
5.25	2.03	11.50	12.18	17.75	2.28	24.00	1.52
5.50	2.03	11.75	37.57	18.00	2.28		
5.75	2.03	12.00	155.34	18.25	2.28		
6.00	2.03	12.25	18.28	18.50	2.28		

CALIB			
NASHYD (0007)	Area (ha)= 100.92	Curve Number (CN)= 55.9	
ID= 1 DT= 5.0 min	Ia (mm)= 7.89	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 1.70		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.03	12.250	155.34	18.33	2.28
0.167	0.00	6.250	2.03	12.333	18.29	18.42	2.28
0.250	0.00	6.333	2.28	12.417	18.28	18.50	2.28
0.333	1.40	6.417	2.28	12.500	18.28	18.58	2.28
0.417	1.40	6.500	2.28	12.583	18.27	18.67	2.28
0.500	1.40	6.583	2.28	12.667	18.28	18.75	2.28
0.583	1.40	6.667	2.28	12.750	18.28	18.83	2.28
0.667	1.40	6.750	2.28	12.833	9.39	18.92	2.28
0.750	1.40	6.833	2.28	12.917	9.39	19.00	2.28
0.833	1.40	6.917	2.28	13.000	9.39	19.08	2.28
0.917	1.40	7.000	2.28	13.083	9.39	19.17	2.28
1.000	1.40	7.083	2.28	13.167	9.39	19.25	2.28
1.083	1.40	7.167	2.28	13.250	9.39	19.33	2.28
1.167	1.40	7.250	2.28	13.333	6.85	19.42	2.28
1.250	1.40	7.333	2.79	13.417	6.85	19.50	2.28
1.333	1.40	7.417	2.79	13.500	6.85	19.58	2.28
1.417	1.40	7.500	2.79	13.583	6.85	19.67	2.28
1.500	1.40	7.583	2.79	13.667	6.85	19.75	2.28
1.583	1.40	7.667	2.79	13.750	6.85	19.83	2.28
1.667	1.40	7.750	2.79	13.833	5.33	19.92	2.28
1.750	1.40	7.833	2.79	13.917	5.33	20.00	2.28
1.833	1.40	7.917	2.79	14.000	5.33	20.08	2.28
1.917	1.40	8.000	2.79	14.083	5.33	20.17	2.28
2.000	1.40	8.083	2.79	14.167	5.33	20.25	2.28
2.083	1.40	8.167	2.79	14.250	5.33	20.33	1.52
2.167	1.40	8.250	2.79	14.333	3.81	20.42	1.52
2.250	1.40	8.333	3.30	14.417	3.81	20.50	1.52
2.333	1.65	8.417	3.30	14.500	3.81	20.58	1.52
2.417	1.65	8.500	3.30	14.583	3.81	20.67	1.52
2.500	1.65	8.583	3.30	14.667	3.81	20.75	1.52
2.583	1.65	8.667	3.30	14.750	3.81	20.83	1.52
2.667	1.65	8.750	3.30	14.833	3.81	20.92	1.52
2.750	1.65	8.833	3.55	14.917	3.81	21.00	1.52
2.833	1.65	8.917	3.55	15.000	3.81	21.08	1.52
2.917	1.65	9.000	3.55	15.083	3.81	21.17	1.52
3.000	1.65	9.083	3.55	15.167	3.81	21.25	1.52

3.083	1.65	9.167	3.55	15.250	3.81	21.33	1.52
3.167	1.65	9.250	3.55	15.333	3.81	21.42	1.52
3.250	1.65	9.333	4.06	15.417	3.81	21.50	1.52
3.333	1.65	9.417	4.06	15.500	3.81	21.58	1.52
3.417	1.65	9.500	4.06	15.583	3.81	21.67	1.52
3.500	1.65	9.583	4.06	15.667	3.81	21.75	1.52
3.583	1.65	9.667	4.06	15.750	3.81	21.83	1.52
3.667	1.65	9.750	4.06	15.833	3.81	21.92	1.52
3.750	1.65	9.833	4.57	15.917	3.81	22.00	1.52
3.833	1.65	9.917	4.57	16.000	3.81	22.08	1.52
3.917	1.65	10.000	4.57	16.083	3.81	22.17	1.52
4.000	1.65	10.083	4.57	16.167	3.81	22.25	1.52
4.083	1.65	10.167	4.57	16.250	3.81	22.33	1.52
4.167	1.65	10.250	4.57	16.333	2.28	22.42	1.52
4.250	1.65	10.333	5.84	16.417	2.28	22.50	1.52
4.333	2.03	10.417	5.84	16.500	2.28	22.58	1.52
4.417	2.03	10.500	5.84	16.583	2.28	22.67	1.52
4.500	2.03	10.583	5.84	16.667	2.28	22.75	1.52
4.583	2.03	10.667	5.84	16.750	2.28	22.83	1.52
4.667	2.03	10.750	5.84	16.833	2.28	22.92	1.52
4.750	2.03	10.833	7.87	16.917	2.28	23.00	1.52
4.833	2.03	10.917	7.87	17.000	2.28	23.08	1.52
4.917	2.03	11.000	7.87	17.083	2.28	23.17	1.52
5.000	2.03	11.083	7.87	17.167	2.28	23.25	1.52
5.083	2.03	11.167	7.87	17.250	2.28	23.33	1.52
5.167	2.03	11.250	7.87	17.333	2.28	23.42	1.52
5.250	2.03	11.333	12.18	17.417	2.28	23.50	1.52
5.333	2.03	11.417	12.18	17.500	2.28	23.58	1.52
5.417	2.03	11.500	12.18	17.583	2.28	23.67	1.52
5.500	2.03	11.583	12.18	17.667	2.28	23.75	1.52
5.583	2.03	11.667	12.18	17.750	2.28	23.83	1.52
5.667	2.03	11.750	12.18	17.833	2.28	23.92	1.52
5.750	2.03	11.833	37.56	17.917	2.28	24.00	1.52
5.833	2.03	11.917	37.57	18.000	2.28	24.08	1.52
5.917	2.03	12.000	37.57	18.083	2.28	24.17	1.52
6.000	2.03	12.083	155.32	18.167	2.28	24.25	1.52
6.083	2.03	12.167	155.34	18.250	2.28		

Unit Hyd Qpeak (cms)= 2.267

PEAK FLOW (cms)= 2.350 (i)
TIME TO PEAK (hrs)= 14.083
RUNOFF VOLUME (mm)= 44.396
TOTAL RAINFALL (mm)= 126.910
RUNOFF COEFFICIENT = 0.350

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0008)	Area (ha)= 23.99	Curve Number (CN)= 44.7			
ID= 1 DT= 5.0 min	Ia (mm)= 10.91	# of Linear Res.(N)= 3.00			
	U.H. Tp(hrs)= 0.97				

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.03	12.250	155.34	18.33	2.28
0.167	0.00	6.250	2.03	12.333	18.29	18.42	2.28
0.250	0.00	6.333	2.28	12.417	18.28	18.50	2.28
0.333	1.40	6.417	2.28	12.500	18.28	18.58	2.28
0.417	1.40	6.500	2.28	12.583	18.27	18.67	2.28
0.500	1.40	6.583	2.28	12.667	18.28	18.75	2.28
0.583	1.40	6.667	2.28	12.750	18.28	18.83	2.28
0.667	1.40	6.750	2.28	12.833	9.39	18.92	2.28
0.750	1.40	6.833	2.28	12.917	9.39	19.00	2.28
0.833	1.40	6.917	2.28	13.000	9.39	19.08	2.28
0.917	1.40	7.000	2.28	13.083	9.39	19.17	2.28
1.000	1.40	7.083	2.28	13.167	9.39	19.25	2.28
1.083	1.40	7.167	2.28	13.250	9.39	19.33	2.28
1.167	1.40	7.250	2.28	13.333	6.85	19.42	2.28
1.250	1.40	7.333	2.79	13.417	6.85	19.50	2.28
1.333	1.40	7.417	2.79	13.500	6.85	19.58	2.28
1.417	1.40	7.500	2.79	13.583	6.85	19.67	2.28
1.500	1.40	7.583	2.79	13.667	6.85	19.75	2.28
1.583	1.40	7.667	2.79	13.750	6.85	19.83	2.28
1.667	1.40	7.750	2.79	13.833	5.33	19.92	2.28
1.750	1.40	7.833	2.79	13.917	5.33	20.00	2.28
1.833	1.40	7.917	2.79	14.000	5.33	20.08	2.28
1.917	1.40	8.000	2.79	14.083	5.33	20.17	2.28
2.000	1.40	8.083	2.79	14.167	5.33	20.25	2.28
2.083	1.40	8.167	2.79	14.250	5.33	20.33	1.52
2.167	1.40	8.250	2.79	14.333	3.81	20.42	1.52
2.250	1.40	8.333	3.30	14.417	3.81	20.50	1.52
2.333	1.65	8.417	3.30	14.500	3.81	20.58	1.52
2.417	1.65	8.500	3.30	14.583	3.81	20.67	1.52
2.500	1.65	8.583	3.30	14.667	3.81	20.75	1.52
2.583	1.65	8.667	3.30	14.750	3.81	20.83	1.52
2.667	1.65	8.750	3.30	14.833	3.81	20.92	1.52
2.750	1.65	8.833	3.55	14.917	3.81	21.00	1.52
2.833	1.65	8.917	3.55	15.000	3.81	21.08	1.52
2.917	1.65	9.000	3.55	15.083	3.81	21.17	1.52

3.000	1.65	9.083	3.55	15.167	3.81	21.25	1.52
3.083	1.65	9.167	3.55	15.250	3.81	21.33	1.52
3.167	1.65	9.250	3.55	15.333	3.81	21.42	1.52
3.250	1.65	9.333	4.06	15.417	3.81	21.50	1.52
3.333	1.65	9.417	4.06	15.500	3.81	21.58	1.52
3.417	1.65	9.500	4.06	15.583	3.81	21.67	1.52
3.500	1.65	9.583	4.06	15.667	3.81	21.75	1.52
3.583	1.65	9.667	4.06	15.750	3.81	21.83	1.52
3.667	1.65	9.750	4.06	15.833	3.81	21.92	1.52
3.750	1.65	9.833	4.57	15.917	3.81	22.00	1.52
3.833	1.65	9.917	4.57	16.000	3.81	22.08	1.52
3.917	1.65	10.000	4.57	16.083	3.81	22.17	1.52
4.000	1.65	10.083	4.57	16.167	3.81	22.25	1.52
4.083	1.65	10.167	4.57	16.250	3.81	22.33	1.52
4.167	1.65	10.250	4.57	16.333	2.28	22.42	1.52
4.250	1.65	10.333	5.84	16.417	2.28	22.50	1.52
4.333	2.03	10.417	5.84	16.500	2.28	22.58	1.52
4.417	2.03	10.500	5.84	16.583	2.28	22.67	1.52
4.500	2.03	10.583	5.84	16.667	2.28	22.75	1.52
4.583	2.03	10.667	5.84	16.750	2.28	22.83	1.52
4.667	2.03	10.750	5.84	16.833	2.28	22.92	1.52
4.750	2.03	10.833	7.87	16.917	2.28	23.00	1.52
4.833	2.03	10.917	7.87	17.000	2.28	23.08	1.52
4.917	2.03	11.000	7.87	17.083	2.28	23.17	1.52
5.000	2.03	11.083	7.87	17.167	2.28	23.25	1.52
5.083	2.03	11.167	7.87	17.250	2.28	23.33	1.52
5.167	2.03	11.250	7.87	17.333	2.28	23.42	1.52
5.250	2.03	11.333	12.18	17.417	2.28	23.50	1.52
5.333	2.03	11.417	12.18	17.500	2.28	23.58	1.52
5.417	2.03	11.500	12.18	17.583	2.28	23.67	1.52
5.500	2.03	11.583	12.18	17.667	2.28	23.75	1.52
5.583	2.03	11.667	12.18	17.750	2.28	23.83	1.52
5.667	2.03	11.750	12.18	17.833	2.28	23.92	1.52
5.750	2.03	11.833	37.56	17.917	2.28	24.00	1.52
5.833	2.03	11.917	37.57	18.000	2.28	24.08	1.52
5.917	2.03	12.000	37.57	18.083	2.28	24.17	1.52
6.000	2.03	12.083	155.32	18.167	2.28	24.25	1.52
6.083	2.03	12.167	155.34	18.250	2.28		

Unit Hyd Qpeak (cms)= 0.945

PEAK FLOW (cms)= 0.588 (i)
TIME TO PEAK (hrs)= 13.250
RUNOFF VOLUME (mm)= 31.276
TOTAL RAINFALL (mm)= 126.910
RUNOFF COEFFICIENT = 0.246

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB NASHYD (0009) ID= 1 DT= 5.0 min	Area (ha)= 6.37	Curve Number (CN)= 50.5	Ia (mm)= 15.69	# of Linear Res.(N)= 3.00	U.H. Tp(hrs)= 0.77

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.03	12.250	155.34	18.33	2.28
0.167	0.00	6.250	2.03	12.333	18.29	18.42	2.28
0.250	0.00	6.333	2.28	12.417	18.28	18.50	2.28
0.333	1.40	6.417	2.28	12.500	18.28	18.58	2.28
0.417	1.40	6.500	2.28	12.583	18.27	18.67	2.28
0.500	1.40	6.583	2.28	12.667	18.28	18.75	2.28
0.583	1.40	6.667	2.28	12.750	18.28	18.83	2.28
0.667	1.40	6.750	2.28	12.833	9.39	18.92	2.28
0.750	1.40	6.833	2.28	12.917	9.39	19.00	2.28
0.833	1.40	6.917	2.28	13.000	9.39	19.08	2.28
0.917	1.40	7.000	2.28	13.083	9.39	19.17	2.28
1.000	1.40	7.083	2.28	13.167	9.39	19.25	2.28
1.083	1.40	7.167	2.28	13.250	9.39	19.33	2.28
1.167	1.40	7.250	2.28	13.333	6.85	19.42	2.28
1.250	1.40	7.333	2.79	13.417	6.85	19.50	2.28
1.333	1.40	7.417	2.79	13.500	6.85	19.58	2.28
1.417	1.40	7.500	2.79	13.583	6.85	19.67	2.28
1.500	1.40	7.583	2.79	13.667	6.85	19.75	2.28
1.583	1.40	7.667	2.79	13.750	6.85	19.83	2.28
1.667	1.40	7.750	2.79	13.833	5.33	19.92	2.28
1.750	1.40	7.833	2.79	13.917	5.33	20.00	2.28
1.833	1.40	7.917	2.79	14.000	5.33	20.08	2.28
1.917	1.40	8.000	2.79	14.083	5.33	20.17	2.28
2.000	1.40	8.083	2.79	14.167	5.33	20.25	2.28
2.083	1.40	8.167	2.79	14.250	5.33	20.33	1.52
2.167	1.40	8.250	2.79	14.333	3.81	20.42	1.52
2.250	1.40	8.333	3.30	14.417	3.81	20.50	1.52
2.333	1.65	8.417	3.30	14.500	3.81	20.58	1.52
2.417	1.65	8.500	3.30	14.583	3.81	20.67	1.52
2.500	1.65	8.583	3.30	14.667	3.81	20.75	1.52
2.583	1.65	8.667	3.30	14.750	3.81	20.83	1.52
2.667	1.65	8.750	3.30	14.833	3.81	20.92	1.52
2.750	1.65	8.833	3.55	14.917	3.81	21.00	1.52
2.833	1.65	8.917	3.55	15.000	3.81	21.08	1.52

2.917	1.65	9.000	3.55	15.083	3.81	21.17	1.52
3.000	1.65	9.083	3.55	15.167	3.81	21.25	1.52
3.083	1.65	9.167	3.55	15.250	3.81	21.33	1.52
3.167	1.65	9.250	3.55	15.333	3.81	21.42	1.52
3.250	1.65	9.333	4.06	15.417	3.81	21.50	1.52
3.333	1.65	9.417	4.06	15.500	3.81	21.58	1.52
3.417	1.65	9.500	4.06	15.583	3.81	21.67	1.52
3.500	1.65	9.583	4.06	15.667	3.81	21.75	1.52
3.583	1.65	9.667	4.06	15.750	3.81	21.83	1.52
3.667	1.65	9.750	4.06	15.833	3.81	21.92	1.52
3.750	1.65	9.833	4.57	15.917	3.81	22.00	1.52
3.833	1.65	9.917	4.57	16.000	3.81	22.08	1.52
3.917	1.65	10.000	4.57	16.083	3.81	22.17	1.52
4.000	1.65	10.083	4.57	16.167	3.81	22.25	1.52
4.083	1.65	10.167	4.57	16.250	3.81	22.33	1.52
4.167	1.65	10.250	4.57	16.333	2.28	22.42	1.52
4.250	1.65	10.333	5.84	16.417	2.28	22.50	1.52
4.333	2.03	10.417	5.84	16.500	2.28	22.58	1.52
4.417	2.03	10.500	5.84	16.583	2.28	22.67	1.52
4.500	2.03	10.583	5.84	16.667	2.28	22.75	1.52
4.583	2.03	10.667	5.84	16.750	2.28	22.83	1.52
4.667	2.03	10.750	5.84	16.833	2.28	22.92	1.52
4.750	2.03	10.833	7.87	16.917	2.28	23.00	1.52
4.833	2.03	10.917	7.87	17.000	2.28	23.08	1.52
4.917	2.03	11.000	7.87	17.083	2.28	23.17	1.52
5.000	2.03	11.083	7.87	17.167	2.28	23.25	1.52
5.083	2.03	11.167	7.87	17.250	2.28	23.33	1.52
5.167	2.03	11.250	7.87	17.333	2.28	23.42	1.52
5.250	2.03	11.333	12.18	17.417	2.28	23.50	1.52
5.333	2.03	11.417	12.18	17.500	2.28	23.58	1.52
5.417	2.03	11.500	12.18	17.583	2.28	23.67	1.52
5.500	2.03	11.583	12.18	17.667	2.28	23.75	1.52
5.583	2.03	11.667	12.18	17.750	2.28	23.83	1.52
5.667	2.03	11.750	12.18	17.833	2.28	23.92	1.52
5.750	2.03	11.833	37.56	17.917	2.28	24.00	1.52
5.833	2.03	11.917	37.57	18.000	2.28	24.08	1.52
5.917	2.03	12.000	37.57	18.083	2.28	24.17	1.52
6.000	2.03	12.083	155.32	18.167	2.28	24.25	1.52
6.083	2.03	12.167	155.34	18.250	2.28		

Unit Hyd Qpeak (cms)= 0.316

PEAK FLOW (cms)= 0.205 (i)
TIME TO PEAK (hrs)= 13.000
RUNOFF VOLUME (mm)= 34.323
TOTAL RAINFALL (mm)= 126.910
RUNOFF COEFFICIENT = 0.270

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB NASHYD (0010)	Area (ha)= 14.85	Curve Number (CN)= 52.9
ID= 1 DT= 5.0 min	Ia (mm)= 13.28	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.89	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.03	12.250	155.34	18.33	2.28
0.167	0.00	6.250	2.03	12.333	18.29	18.42	2.28
0.250	0.00	6.333	2.28	12.417	18.28	18.50	2.28
0.333	1.40	6.417	2.28	12.500	18.28	18.58	2.28
0.417	1.40	6.500	2.28	12.583	18.27	18.67	2.28
0.500	1.40	6.583	2.28	12.667	18.28	18.75	2.28
0.583	1.40	6.667	2.28	12.750	18.28	18.83	2.28
0.667	1.40	6.750	2.28	12.833	9.39	18.92	2.28
0.750	1.40	6.833	2.28	12.917	9.39	19.00	2.28
0.833	1.40	6.917	2.28	13.000	9.39	19.08	2.28
0.917	1.40	7.000	2.28	13.083	9.39	19.17	2.28
1.000	1.40	7.083	2.28	13.167	9.39	19.25	2.28
1.083	1.40	7.167	2.28	13.250	9.39	19.33	2.28
1.167	1.40	7.250	2.28	13.333	6.85	19.42	2.28
1.250	1.40	7.333	2.79	13.417	6.85	19.50	2.28
1.333	1.40	7.417	2.79	13.500	6.85	19.58	2.28
1.417	1.40	7.500	2.79	13.583	6.85	19.67	2.28
1.500	1.40	7.583	2.79	13.667	6.85	19.75	2.28
1.583	1.40	7.667	2.79	13.750	6.85	19.83	2.28
1.667	1.40	7.750	2.79	13.833	5.33	19.92	2.28
1.750	1.40	7.833	2.79	13.917	5.33	20.00	2.28
1.833	1.40	7.917	2.79	14.000	5.33	20.08	2.28
1.917	1.40	8.000	2.79	14.083	5.33	20.17	2.28
2.000	1.40	8.083	2.79	14.167	5.33	20.25	2.28
2.083	1.40	8.167	2.79	14.250	5.33	20.33	1.52
2.167	1.40	8.250	2.79	14.333	3.81	20.42	1.52
2.250	1.40	8.333	3.30	14.417	3.81	20.50	1.52
2.333	1.65	8.417	3.30	14.500	3.81	20.58	1.52
2.417	1.65	8.500	3.30	14.583	3.81	20.67	1.52
2.500	1.65	8.583	3.30	14.667	3.81	20.75	1.52
2.583	1.65	8.667	3.30	14.750	3.81	20.83	1.52
2.667	1.65	8.750	3.30	14.833	3.81	20.92	1.52
2.750	1.65	8.833	3.55	14.917	3.81	21.00	1.52

2.833	1.65	8.917	3.55	15.000	3.81	21.08	1.52
2.917	1.65	9.000	3.55	15.083	3.81	21.17	1.52
3.000	1.65	9.083	3.55	15.167	3.81	21.25	1.52
3.083	1.65	9.167	3.55	15.250	3.81	21.33	1.52
3.167	1.65	9.250	3.55	15.333	3.81	21.42	1.52
3.250	1.65	9.333	4.06	15.417	3.81	21.50	1.52
3.333	1.65	9.417	4.06	15.500	3.81	21.58	1.52
3.417	1.65	9.500	4.06	15.583	3.81	21.67	1.52
3.500	1.65	9.583	4.06	15.667	3.81	21.75	1.52
3.583	1.65	9.667	4.06	15.750	3.81	21.83	1.52
3.667	1.65	9.750	4.06	15.833	3.81	21.92	1.52
3.750	1.65	9.833	4.57	15.917	3.81	22.00	1.52
3.833	1.65	9.917	4.57	16.000	3.81	22.08	1.52
3.917	1.65	10.000	4.57	16.083	3.81	22.17	1.52
4.000	1.65	10.083	4.57	16.167	3.81	22.25	1.52
4.083	1.65	10.167	4.57	16.250	3.81	22.33	1.52
4.167	1.65	10.250	4.57	16.333	2.28	22.42	1.52
4.250	1.65	10.333	5.84	16.417	2.28	22.50	1.52
4.333	2.03	10.417	5.84	16.500	2.28	22.58	1.52
4.417	2.03	10.500	5.84	16.583	2.28	22.67	1.52
4.500	2.03	10.583	5.84	16.667	2.28	22.75	1.52
4.583	2.03	10.667	5.84	16.750	2.28	22.83	1.52
4.667	2.03	10.750	5.84	16.833	2.28	22.92	1.52
4.750	2.03	10.833	7.87	16.917	2.28	23.00	1.52
4.833	2.03	10.917	7.87	17.000	2.28	23.08	1.52
4.917	2.03	11.000	7.87	17.083	2.28	23.17	1.52
5.000	2.03	11.083	7.87	17.167	2.28	23.25	1.52
5.083	2.03	11.167	7.87	17.250	2.28	23.33	1.52
5.167	2.03	11.250	7.87	17.333	2.28	23.42	1.52
5.250	2.03	11.333	12.18	17.417	2.28	23.50	1.52
5.333	2.03	11.417	12.18	17.500	2.28	23.58	1.52
5.417	2.03	11.500	12.18	17.583	2.28	23.67	1.52
5.500	2.03	11.583	12.18	17.667	2.28	23.75	1.52
5.583	2.03	11.667	12.18	17.750	2.28	23.83	1.52
5.667	2.03	11.750	12.18	17.833	2.28	23.92	1.52
5.750	2.03	11.833	37.56	17.917	2.28	24.00	1.52
5.833	2.03	11.917	37.57	18.000	2.28	24.08	1.52
5.917	2.03	12.000	37.57	18.083	2.28	24.17	1.52
6.000	2.03	12.083	155.32	18.167	2.28	24.25	1.52
6.083	2.03	12.167	155.34	18.250	2.28		

Unit Hyd Qpeak (cms)= 0.637

PEAK FLOW (cms)= 0.478 (i)
TIME TO PEAK (hrs)= 13.083
RUNOFF VOLUME (mm)= 38.041
TOTAL RAINFALL (mm)= 126.910
RUNOFF COEFFICIENT = 0.300

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0013)	Area (ha)= 1.70	Curve Number (CN)= 60.5			
ID= 1 DT= 5.0 min	Ia (mm)= 9.65	# of Linear Res.(N)= 3.00			
	U.H. Tp(hrs)= 0.40				

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.03	12.250	155.34	18.33	2.28
0.167	0.00	6.250	2.03	12.333	18.29	18.42	2.28
0.250	0.00	6.333	2.28	12.417	18.28	18.50	2.28
0.333	1.40	6.417	2.28	12.500	18.28	18.58	2.28
0.417	1.40	6.500	2.28	12.583	18.27	18.67	2.28
0.500	1.40	6.583	2.28	12.667	18.28	18.75	2.28
0.583	1.40	6.667	2.28	12.750	18.28	18.83	2.28
0.667	1.40	6.750	2.28	12.833	9.39	18.92	2.28
0.750	1.40	6.833	2.28	12.917	9.39	19.00	2.28
0.833	1.40	6.917	2.28	13.000	9.39	19.08	2.28
0.917	1.40	7.000	2.28	13.083	9.39	19.17	2.28
1.000	1.40	7.083	2.28	13.167	9.39	19.25	2.28
1.083	1.40	7.167	2.28	13.250	9.39	19.33	2.28
1.167	1.40	7.250	2.28	13.333	6.85	19.42	2.28
1.250	1.40	7.333	2.79	13.417	6.85	19.50	2.28
1.333	1.40	7.417	2.79	13.500	6.85	19.58	2.28
1.417	1.40	7.500	2.79	13.583	6.85	19.67	2.28
1.500	1.40	7.583	2.79	13.667	6.85	19.75	2.28
1.583	1.40	7.667	2.79	13.750	6.85	19.83	2.28
1.667	1.40	7.750	2.79	13.833	5.33	19.92	2.28
1.750	1.40	7.833	2.79	13.917	5.33	20.00	2.28
1.833	1.40	7.917	2.79	14.000	5.33	20.08	2.28
1.917	1.40	8.000	2.79	14.083	5.33	20.17	2.28
2.000	1.40	8.083	2.79	14.167	5.33	20.25	2.28
2.083	1.40	8.167	2.79	14.250	5.33	20.33	1.52
2.167	1.40	8.250	2.79	14.333	3.81	20.42	1.52
2.250	1.40	8.333	3.30	14.417	3.81	20.50	1.52
2.333	1.65	8.417	3.30	14.500	3.81	20.58	1.52
2.417	1.65	8.500	3.30	14.583	3.81	20.67	1.52
2.500	1.65	8.583	3.30	14.667	3.81	20.75	1.52
2.583	1.65	8.667	3.30	14.750	3.81	20.83	1.52
2.667	1.65	8.750	3.30	14.833	3.81	20.92	1.52

2.750	1.65	8.833	3.55	14.917	3.81	21.00	1.52
2.833	1.65	8.917	3.55	15.000	3.81	21.08	1.52
2.917	1.65	9.000	3.55	15.083	3.81	21.17	1.52
3.000	1.65	9.083	3.55	15.167	3.81	21.25	1.52
3.083	1.65	9.167	3.55	15.250	3.81	21.33	1.52
3.167	1.65	9.250	3.55	15.333	3.81	21.42	1.52
3.250	1.65	9.333	4.06	15.417	3.81	21.50	1.52
3.333	1.65	9.417	4.06	15.500	3.81	21.58	1.52
3.417	1.65	9.500	4.06	15.583	3.81	21.67	1.52
3.500	1.65	9.583	4.06	15.667	3.81	21.75	1.52
3.583	1.65	9.667	4.06	15.750	3.81	21.83	1.52
3.667	1.65	9.750	4.06	15.833	3.81	21.92	1.52
3.750	1.65	9.833	4.57	15.917	3.81	22.00	1.52
3.833	1.65	9.917	4.57	16.000	3.81	22.08	1.52
3.917	1.65	10.000	4.57	16.083	3.81	22.17	1.52
4.000	1.65	10.083	4.57	16.167	3.81	22.25	1.52
4.083	1.65	10.167	4.57	16.250	3.81	22.33	1.52
4.167	1.65	10.250	4.57	16.333	2.28	22.42	1.52
4.250	1.65	10.333	5.84	16.417	2.28	22.50	1.52
4.333	2.03	10.417	5.84	16.500	2.28	22.58	1.52
4.417	2.03	10.500	5.84	16.583	2.28	22.67	1.52
4.500	2.03	10.583	5.84	16.667	2.28	22.75	1.52
4.583	2.03	10.667	5.84	16.750	2.28	22.83	1.52
4.667	2.03	10.750	5.84	16.833	2.28	22.92	1.52
4.750	2.03	10.833	7.87	16.917	2.28	23.00	1.52
4.833	2.03	10.917	7.87	17.000	2.28	23.08	1.52
4.917	2.03	11.000	7.87	17.083	2.28	23.17	1.52
5.000	2.03	11.083	7.87	17.167	2.28	23.25	1.52
5.083	2.03	11.167	7.87	17.250	2.28	23.33	1.52
5.167	2.03	11.250	7.87	17.333	2.28	23.42	1.52
5.250	2.03	11.333	12.18	17.417	2.28	23.50	1.52
5.333	2.03	11.417	12.18	17.500	2.28	23.58	1.52
5.417	2.03	11.500	12.18	17.583	2.28	23.67	1.52
5.500	2.03	11.583	12.18	17.667	2.28	23.75	1.52
5.583	2.03	11.667	12.18	17.750	2.28	23.83	1.52
5.667	2.03	11.750	12.18	17.833	2.28	23.92	1.52
5.750	2.03	11.833	37.56	17.917	2.28	24.00	1.52
5.833	2.03	11.917	37.57	18.000	2.28	24.08	1.52
5.917	2.03	12.000	37.57	18.083	2.28	24.17	1.52
6.000	2.03	12.083	155.32	18.167	2.28	24.25	1.52
6.083	2.03	12.167	155.34	18.250	2.28		

Unit Hyd Qpeak (cms)= 0.162

PEAK FLOW (cms)= 0.128 (i)
TIME TO PEAK (hrs)= 12.500
RUNOFF VOLUME (mm)= 48.516
TOTAL RAINFALL (mm)= 126.910

RUNOFF COEFFICIENT = 0.382

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0014)	Area (ha)=	1.80	Curve Number (CN)=	50.0	
ID= 1 DT= 5.0 min	Ia (mm)=	16.00	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	0.76			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.03	12.250	155.34	18.33	2.28
0.167	0.00	6.250	2.03	12.333	18.29	18.42	2.28
0.250	0.00	6.333	2.28	12.417	18.28	18.50	2.28
0.333	1.40	6.417	2.28	12.500	18.28	18.58	2.28
0.417	1.40	6.500	2.28	12.583	18.27	18.67	2.28
0.500	1.40	6.583	2.28	12.667	18.28	18.75	2.28
0.583	1.40	6.667	2.28	12.750	18.28	18.83	2.28
0.667	1.40	6.750	2.28	12.833	9.39	18.92	2.28
0.750	1.40	6.833	2.28	12.917	9.39	19.00	2.28
0.833	1.40	6.917	2.28	13.000	9.39	19.08	2.28
0.917	1.40	7.000	2.28	13.083	9.39	19.17	2.28
1.000	1.40	7.083	2.28	13.167	9.39	19.25	2.28
1.083	1.40	7.167	2.28	13.250	9.39	19.33	2.28
1.167	1.40	7.250	2.28	13.333	6.85	19.42	2.28
1.250	1.40	7.333	2.79	13.417	6.85	19.50	2.28
1.333	1.40	7.417	2.79	13.500	6.85	19.58	2.28
1.417	1.40	7.500	2.79	13.583	6.85	19.67	2.28
1.500	1.40	7.583	2.79	13.667	6.85	19.75	2.28
1.583	1.40	7.667	2.79	13.750	6.85	19.83	2.28
1.667	1.40	7.750	2.79	13.833	5.33	19.92	2.28
1.750	1.40	7.833	2.79	13.917	5.33	20.00	2.28
1.833	1.40	7.917	2.79	14.000	5.33	20.08	2.28
1.917	1.40	8.000	2.79	14.083	5.33	20.17	2.28
2.000	1.40	8.083	2.79	14.167	5.33	20.25	2.28
2.083	1.40	8.167	2.79	14.250	5.33	20.33	1.52
2.167	1.40	8.250	2.79	14.333	3.81	20.42	1.52
2.250	1.40	8.333	3.30	14.417	3.81	20.50	1.52
2.333	1.65	8.417	3.30	14.500	3.81	20.58	1.52
2.417	1.65	8.500	3.30	14.583	3.81	20.67	1.52
2.500	1.65	8.583	3.30	14.667	3.81	20.75	1.52
2.583	1.65	8.667	3.30	14.750	3.81	20.83	1.52

2.667	1.65	8.750	3.30	14.833	3.81	20.92	1.52
2.750	1.65	8.833	3.55	14.917	3.81	21.00	1.52
2.833	1.65	8.917	3.55	15.000	3.81	21.08	1.52
2.917	1.65	9.000	3.55	15.083	3.81	21.17	1.52
3.000	1.65	9.083	3.55	15.167	3.81	21.25	1.52
3.083	1.65	9.167	3.55	15.250	3.81	21.33	1.52
3.167	1.65	9.250	3.55	15.333	3.81	21.42	1.52
3.250	1.65	9.333	4.06	15.417	3.81	21.50	1.52
3.333	1.65	9.417	4.06	15.500	3.81	21.58	1.52
3.417	1.65	9.500	4.06	15.583	3.81	21.67	1.52
3.500	1.65	9.583	4.06	15.667	3.81	21.75	1.52
3.583	1.65	9.667	4.06	15.750	3.81	21.83	1.52
3.667	1.65	9.750	4.06	15.833	3.81	21.92	1.52
3.750	1.65	9.833	4.57	15.917	3.81	22.00	1.52
3.833	1.65	9.917	4.57	16.000	3.81	22.08	1.52
3.917	1.65	10.000	4.57	16.083	3.81	22.17	1.52
4.000	1.65	10.083	4.57	16.167	3.81	22.25	1.52
4.083	1.65	10.167	4.57	16.250	3.81	22.33	1.52
4.167	1.65	10.250	4.57	16.333	2.28	22.42	1.52
4.250	1.65	10.333	5.84	16.417	2.28	22.50	1.52
4.333	2.03	10.417	5.84	16.500	2.28	22.58	1.52
4.417	2.03	10.500	5.84	16.583	2.28	22.67	1.52
4.500	2.03	10.583	5.84	16.667	2.28	22.75	1.52
4.583	2.03	10.667	5.84	16.750	2.28	22.83	1.52
4.667	2.03	10.750	5.84	16.833	2.28	22.92	1.52
4.750	2.03	10.833	7.87	16.917	2.28	23.00	1.52
4.833	2.03	10.917	7.87	17.000	2.28	23.08	1.52
4.917	2.03	11.000	7.87	17.083	2.28	23.17	1.52
5.000	2.03	11.083	7.87	17.167	2.28	23.25	1.52
5.083	2.03	11.167	7.87	17.250	2.28	23.33	1.52
5.167	2.03	11.250	7.87	17.333	2.28	23.42	1.52
5.250	2.03	11.333	12.18	17.417	2.28	23.50	1.52
5.333	2.03	11.417	12.18	17.500	2.28	23.58	1.52
5.417	2.03	11.500	12.18	17.583	2.28	23.67	1.52
5.500	2.03	11.583	12.18	17.667	2.28	23.75	1.52
5.583	2.03	11.667	12.18	17.750	2.28	23.83	1.52
5.667	2.03	11.750	12.18	17.833	2.28	23.92	1.52
5.750	2.03	11.833	37.56	17.917	2.28	24.00	1.52
5.833	2.03	11.917	37.57	18.000	2.28	24.08	1.52
5.917	2.03	12.000	37.57	18.083	2.28	24.17	1.52
6.000	2.03	12.083	155.32	18.167	2.28	24.25	1.52
6.083	2.03	12.167	155.34	18.250	2.28		

Unit Hyd Qpeak (cms)= 0.090

PEAK FLOW (cms)= 0.057 (i)
TIME TO PEAK (hrs)= 13.000
RUNOFF VOLUME (mm)= 33.708

TOTAL RAINFALL (mm)= 126.910
RUNOFF COEFFICIENT = 0.266

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB NASHYD (0015)	Area (ha)= 6.70	Curve Number (CN)= 60.0
ID= 1 DT= 5.0 min	Ia (mm)= 10.00	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 1.45	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.03	12.250	155.34	18.33	2.28
0.167	0.00	6.250	2.03	12.333	18.29	18.42	2.28
0.250	0.00	6.333	2.28	12.417	18.28	18.50	2.28
0.333	1.40	6.417	2.28	12.500	18.28	18.58	2.28
0.417	1.40	6.500	2.28	12.583	18.27	18.67	2.28
0.500	1.40	6.583	2.28	12.667	18.28	18.75	2.28
0.583	1.40	6.667	2.28	12.750	18.28	18.83	2.28
0.667	1.40	6.750	2.28	12.833	9.39	18.92	2.28
0.750	1.40	6.833	2.28	12.917	9.39	19.00	2.28
0.833	1.40	6.917	2.28	13.000	9.39	19.08	2.28
0.917	1.40	7.000	2.28	13.083	9.39	19.17	2.28
1.000	1.40	7.083	2.28	13.167	9.39	19.25	2.28
1.083	1.40	7.167	2.28	13.250	9.39	19.33	2.28
1.167	1.40	7.250	2.28	13.333	6.85	19.42	2.28
1.250	1.40	7.333	2.79	13.417	6.85	19.50	2.28
1.333	1.40	7.417	2.79	13.500	6.85	19.58	2.28
1.417	1.40	7.500	2.79	13.583	6.85	19.67	2.28
1.500	1.40	7.583	2.79	13.667	6.85	19.75	2.28
1.583	1.40	7.667	2.79	13.750	6.85	19.83	2.28
1.667	1.40	7.750	2.79	13.833	5.33	19.92	2.28
1.750	1.40	7.833	2.79	13.917	5.33	20.00	2.28
1.833	1.40	7.917	2.79	14.000	5.33	20.08	2.28
1.917	1.40	8.000	2.79	14.083	5.33	20.17	2.28
2.000	1.40	8.083	2.79	14.167	5.33	20.25	2.28
2.083	1.40	8.167	2.79	14.250	5.33	20.33	1.52
2.167	1.40	8.250	2.79	14.333	3.81	20.42	1.52
2.250	1.40	8.333	3.30	14.417	3.81	20.50	1.52
2.333	1.65	8.417	3.30	14.500	3.81	20.58	1.52
2.417	1.65	8.500	3.30	14.583	3.81	20.67	1.52
2.500	1.65	8.583	3.30	14.667	3.81	20.75	1.52

2.583	1.65	8.667	3.30	14.750	3.81	20.83	1.52
2.667	1.65	8.750	3.30	14.833	3.81	20.92	1.52
2.750	1.65	8.833	3.55	14.917	3.81	21.00	1.52
2.833	1.65	8.917	3.55	15.000	3.81	21.08	1.52
2.917	1.65	9.000	3.55	15.083	3.81	21.17	1.52
3.000	1.65	9.083	3.55	15.167	3.81	21.25	1.52
3.083	1.65	9.167	3.55	15.250	3.81	21.33	1.52
3.167	1.65	9.250	3.55	15.333	3.81	21.42	1.52
3.250	1.65	9.333	4.06	15.417	3.81	21.50	1.52
3.333	1.65	9.417	4.06	15.500	3.81	21.58	1.52
3.417	1.65	9.500	4.06	15.583	3.81	21.67	1.52
3.500	1.65	9.583	4.06	15.667	3.81	21.75	1.52
3.583	1.65	9.667	4.06	15.750	3.81	21.83	1.52
3.667	1.65	9.750	4.06	15.833	3.81	21.92	1.52
3.750	1.65	9.833	4.57	15.917	3.81	22.00	1.52
3.833	1.65	9.917	4.57	16.000	3.81	22.08	1.52
3.917	1.65	10.000	4.57	16.083	3.81	22.17	1.52
4.000	1.65	10.083	4.57	16.167	3.81	22.25	1.52
4.083	1.65	10.167	4.57	16.250	3.81	22.33	1.52
4.167	1.65	10.250	4.57	16.333	2.28	22.42	1.52
4.250	1.65	10.333	5.84	16.417	2.28	22.50	1.52
4.333	2.03	10.417	5.84	16.500	2.28	22.58	1.52
4.417	2.03	10.500	5.84	16.583	2.28	22.67	1.52
4.500	2.03	10.583	5.84	16.667	2.28	22.75	1.52
4.583	2.03	10.667	5.84	16.750	2.28	22.83	1.52
4.667	2.03	10.750	5.84	16.833	2.28	22.92	1.52
4.750	2.03	10.833	7.87	16.917	2.28	23.00	1.52
4.833	2.03	10.917	7.87	17.000	2.28	23.08	1.52
4.917	2.03	11.000	7.87	17.083	2.28	23.17	1.52
5.000	2.03	11.083	7.87	17.167	2.28	23.25	1.52
5.083	2.03	11.167	7.87	17.250	2.28	23.33	1.52
5.167	2.03	11.250	7.87	17.333	2.28	23.42	1.52
5.250	2.03	11.333	12.18	17.417	2.28	23.50	1.52
5.333	2.03	11.417	12.18	17.500	2.28	23.58	1.52
5.417	2.03	11.500	12.18	17.583	2.28	23.67	1.52
5.500	2.03	11.583	12.18	17.667	2.28	23.75	1.52
5.583	2.03	11.667	12.18	17.750	2.28	23.83	1.52
5.667	2.03	11.750	12.18	17.833	2.28	23.92	1.52
5.750	2.03	11.833	37.56	17.917	2.28	24.00	1.52
5.833	2.03	11.917	37.57	18.000	2.28	24.08	1.52
5.917	2.03	12.000	37.57	18.083	2.28	24.17	1.52
6.000	2.03	12.083	155.32	18.167	2.28	24.25	1.52
6.083	2.03	12.167	155.34	18.250	2.28		

Unit Hyd Qpeak (cms)= 0.176

PEAK FLOW (cms)= 0.191 (i)
TIME TO PEAK (hrs)= 13.750

RUNOFF VOLUME (mm)= 47.749
TOTAL RAINFALL (mm)= 126.910
RUNOFF COEFFICIENT = 0.376

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0016)	Area (ha)= 29.16	Curve Number (CN)= 71.4	
ID= 1 DT= 5.0 min	Ia (mm)= 7.88	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.68		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.03	12.250	155.34	18.33	2.28
0.167	0.00	6.250	2.03	12.333	18.29	18.42	2.28
0.250	0.00	6.333	2.28	12.417	18.28	18.50	2.28
0.333	1.40	6.417	2.28	12.500	18.28	18.58	2.28
0.417	1.40	6.500	2.28	12.583	18.27	18.67	2.28
0.500	1.40	6.583	2.28	12.667	18.28	18.75	2.28
0.583	1.40	6.667	2.28	12.750	18.28	18.83	2.28
0.667	1.40	6.750	2.28	12.833	9.39	18.92	2.28
0.750	1.40	6.833	2.28	12.917	9.39	19.00	2.28
0.833	1.40	6.917	2.28	13.000	9.39	19.08	2.28
0.917	1.40	7.000	2.28	13.083	9.39	19.17	2.28
1.000	1.40	7.083	2.28	13.167	9.39	19.25	2.28
1.083	1.40	7.167	2.28	13.250	9.39	19.33	2.28
1.167	1.40	7.250	2.28	13.333	6.85	19.42	2.28
1.250	1.40	7.333	2.79	13.417	6.85	19.50	2.28
1.333	1.40	7.417	2.79	13.500	6.85	19.58	2.28
1.417	1.40	7.500	2.79	13.583	6.85	19.67	2.28
1.500	1.40	7.583	2.79	13.667	6.85	19.75	2.28
1.583	1.40	7.667	2.79	13.750	6.85	19.83	2.28
1.667	1.40	7.750	2.79	13.833	5.33	19.92	2.28
1.750	1.40	7.833	2.79	13.917	5.33	20.00	2.28
1.833	1.40	7.917	2.79	14.000	5.33	20.08	2.28
1.917	1.40	8.000	2.79	14.083	5.33	20.17	2.28
2.000	1.40	8.083	2.79	14.167	5.33	20.25	2.28
2.083	1.40	8.167	2.79	14.250	5.33	20.33	1.52
2.167	1.40	8.250	2.79	14.333	3.81	20.42	1.52
2.250	1.40	8.333	3.30	14.417	3.81	20.50	1.52
2.333	1.65	8.417	3.30	14.500	3.81	20.58	1.52
2.417	1.65	8.500	3.30	14.583	3.81	20.67	1.52

2.500	1.65	8.583	3.30	14.667	3.81	20.75	1.52
2.583	1.65	8.667	3.30	14.750	3.81	20.83	1.52
2.667	1.65	8.750	3.30	14.833	3.81	20.92	1.52
2.750	1.65	8.833	3.55	14.917	3.81	21.00	1.52
2.833	1.65	8.917	3.55	15.000	3.81	21.08	1.52
2.917	1.65	9.000	3.55	15.083	3.81	21.17	1.52
3.000	1.65	9.083	3.55	15.167	3.81	21.25	1.52
3.083	1.65	9.167	3.55	15.250	3.81	21.33	1.52
3.167	1.65	9.250	3.55	15.333	3.81	21.42	1.52
3.250	1.65	9.333	4.06	15.417	3.81	21.50	1.52
3.333	1.65	9.417	4.06	15.500	3.81	21.58	1.52
3.417	1.65	9.500	4.06	15.583	3.81	21.67	1.52
3.500	1.65	9.583	4.06	15.667	3.81	21.75	1.52
3.583	1.65	9.667	4.06	15.750	3.81	21.83	1.52
3.667	1.65	9.750	4.06	15.833	3.81	21.92	1.52
3.750	1.65	9.833	4.57	15.917	3.81	22.00	1.52
3.833	1.65	9.917	4.57	16.000	3.81	22.08	1.52
3.917	1.65	10.000	4.57	16.083	3.81	22.17	1.52
4.000	1.65	10.083	4.57	16.167	3.81	22.25	1.52
4.083	1.65	10.167	4.57	16.250	3.81	22.33	1.52
4.167	1.65	10.250	4.57	16.333	2.28	22.42	1.52
4.250	1.65	10.333	5.84	16.417	2.28	22.50	1.52
4.333	2.03	10.417	5.84	16.500	2.28	22.58	1.52
4.417	2.03	10.500	5.84	16.583	2.28	22.67	1.52
4.500	2.03	10.583	5.84	16.667	2.28	22.75	1.52
4.583	2.03	10.667	5.84	16.750	2.28	22.83	1.52
4.667	2.03	10.750	5.84	16.833	2.28	22.92	1.52
4.750	2.03	10.833	7.87	16.917	2.28	23.00	1.52
4.833	2.03	10.917	7.87	17.000	2.28	23.08	1.52
4.917	2.03	11.000	7.87	17.083	2.28	23.17	1.52
5.000	2.03	11.083	7.87	17.167	2.28	23.25	1.52
5.083	2.03	11.167	7.87	17.250	2.28	23.33	1.52
5.167	2.03	11.250	7.87	17.333	2.28	23.42	1.52
5.250	2.03	11.333	12.18	17.417	2.28	23.50	1.52
5.333	2.03	11.417	12.18	17.500	2.28	23.58	1.52
5.417	2.03	11.500	12.18	17.583	2.28	23.67	1.52
5.500	2.03	11.583	12.18	17.667	2.28	23.75	1.52
5.583	2.03	11.667	12.18	17.750	2.28	23.83	1.52
5.667	2.03	11.750	12.18	17.833	2.28	23.92	1.52
5.750	2.03	11.833	37.56	17.917	2.28	24.00	1.52
5.833	2.03	11.917	37.57	18.000	2.28	24.08	1.52
5.917	2.03	12.000	37.57	18.083	2.28	24.17	1.52
6.000	2.03	12.083	155.32	18.167	2.28	24.25	1.52
6.083	2.03	12.167	155.34	18.250	2.28		

Unit Hyd Qpeak (cms)= 1.638

PEAK FLOW (cms)= 2.033 (i)

TIME TO PEAK (hrs)= 12.833
RUNOFF VOLUME (mm)= 64.174
TOTAL RAINFALL (mm)= 126.910
RUNOFF COEFFICIENT = 0.506

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	
NASHYD (0019)	Area (ha)= 39.68 Curve Number (CN)= 60.7
ID= 1 DT= 5.0 min	Ia (mm)= 8.26 # of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 1.18

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.03	12.250	155.34	18.33	2.28
0.167	0.00	6.250	2.03	12.333	18.29	18.42	2.28
0.250	0.00	6.333	2.28	12.417	18.28	18.50	2.28
0.333	1.40	6.417	2.28	12.500	18.28	18.58	2.28
0.417	1.40	6.500	2.28	12.583	18.27	18.67	2.28
0.500	1.40	6.583	2.28	12.667	18.28	18.75	2.28
0.583	1.40	6.667	2.28	12.750	18.28	18.83	2.28
0.667	1.40	6.750	2.28	12.833	9.39	18.92	2.28
0.750	1.40	6.833	2.28	12.917	9.39	19.00	2.28
0.833	1.40	6.917	2.28	13.000	9.39	19.08	2.28
0.917	1.40	7.000	2.28	13.083	9.39	19.17	2.28
1.000	1.40	7.083	2.28	13.167	9.39	19.25	2.28
1.083	1.40	7.167	2.28	13.250	9.39	19.33	2.28
1.167	1.40	7.250	2.28	13.333	6.85	19.42	2.28
1.250	1.40	7.333	2.79	13.417	6.85	19.50	2.28
1.333	1.40	7.417	2.79	13.500	6.85	19.58	2.28
1.417	1.40	7.500	2.79	13.583	6.85	19.67	2.28
1.500	1.40	7.583	2.79	13.667	6.85	19.75	2.28
1.583	1.40	7.667	2.79	13.750	6.85	19.83	2.28
1.667	1.40	7.750	2.79	13.833	5.33	19.92	2.28
1.750	1.40	7.833	2.79	13.917	5.33	20.00	2.28
1.833	1.40	7.917	2.79	14.000	5.33	20.08	2.28
1.917	1.40	8.000	2.79	14.083	5.33	20.17	2.28
2.000	1.40	8.083	2.79	14.167	5.33	20.25	2.28
2.083	1.40	8.167	2.79	14.250	5.33	20.33	1.52
2.167	1.40	8.250	2.79	14.333	3.81	20.42	1.52
2.250	1.40	8.333	3.30	14.417	3.81	20.50	1.52
2.333	1.65	8.417	3.30	14.500	3.81	20.58	1.52

2.417	1.65	8.500	3.30	14.583	3.81	20.67	1.52
2.500	1.65	8.583	3.30	14.667	3.81	20.75	1.52
2.583	1.65	8.667	3.30	14.750	3.81	20.83	1.52
2.667	1.65	8.750	3.30	14.833	3.81	20.92	1.52
2.750	1.65	8.833	3.55	14.917	3.81	21.00	1.52
2.833	1.65	8.917	3.55	15.000	3.81	21.08	1.52
2.917	1.65	9.000	3.55	15.083	3.81	21.17	1.52
3.000	1.65	9.083	3.55	15.167	3.81	21.25	1.52
3.083	1.65	9.167	3.55	15.250	3.81	21.33	1.52
3.167	1.65	9.250	3.55	15.333	3.81	21.42	1.52
3.250	1.65	9.333	4.06	15.417	3.81	21.50	1.52
3.333	1.65	9.417	4.06	15.500	3.81	21.58	1.52
3.417	1.65	9.500	4.06	15.583	3.81	21.67	1.52
3.500	1.65	9.583	4.06	15.667	3.81	21.75	1.52
3.583	1.65	9.667	4.06	15.750	3.81	21.83	1.52
3.667	1.65	9.750	4.06	15.833	3.81	21.92	1.52
3.750	1.65	9.833	4.57	15.917	3.81	22.00	1.52
3.833	1.65	9.917	4.57	16.000	3.81	22.08	1.52
3.917	1.65	10.000	4.57	16.083	3.81	22.17	1.52
4.000	1.65	10.083	4.57	16.167	3.81	22.25	1.52
4.083	1.65	10.167	4.57	16.250	3.81	22.33	1.52
4.167	1.65	10.250	4.57	16.333	2.28	22.42	1.52
4.250	1.65	10.333	5.84	16.417	2.28	22.50	1.52
4.333	2.03	10.417	5.84	16.500	2.28	22.58	1.52
4.417	2.03	10.500	5.84	16.583	2.28	22.67	1.52
4.500	2.03	10.583	5.84	16.667	2.28	22.75	1.52
4.583	2.03	10.667	5.84	16.750	2.28	22.83	1.52
4.667	2.03	10.750	5.84	16.833	2.28	22.92	1.52
4.750	2.03	10.833	7.87	16.917	2.28	23.00	1.52
4.833	2.03	10.917	7.87	17.000	2.28	23.08	1.52
4.917	2.03	11.000	7.87	17.083	2.28	23.17	1.52
5.000	2.03	11.083	7.87	17.167	2.28	23.25	1.52
5.083	2.03	11.167	7.87	17.250	2.28	23.33	1.52
5.167	2.03	11.250	7.87	17.333	2.28	23.42	1.52
5.250	2.03	11.333	12.18	17.417	2.28	23.50	1.52
5.333	2.03	11.417	12.18	17.500	2.28	23.58	1.52
5.417	2.03	11.500	12.18	17.583	2.28	23.67	1.52
5.500	2.03	11.583	12.18	17.667	2.28	23.75	1.52
5.583	2.03	11.667	12.18	17.750	2.28	23.83	1.52
5.667	2.03	11.750	12.18	17.833	2.28	23.92	1.52
5.750	2.03	11.833	37.56	17.917	2.28	24.00	1.52
5.833	2.03	11.917	37.57	18.000	2.28	24.08	1.52
5.917	2.03	12.000	37.57	18.083	2.28	24.17	1.52
6.000	2.03	12.083	155.32	18.167	2.28	24.25	1.52
6.083	2.03	12.167	155.34	18.250	2.28		

Unit Hyd Qpeak (cms)= 1.284

PEAK FLOW (cms)= 1.380 (i)
TIME TO PEAK (hrs)= 13.417
RUNOFF VOLUME (mm)= 49.691
TOTAL RAINFALL (mm)= 126.910
RUNOFF COEFFICIENT = 0.392

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0024)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0010):	14.85	0.478	13.08	38.04
+ ID2= 2 (0013):	1.70	0.128	12.50	48.52
ID = 3 (0024):	16.55	0.552	13.00	39.12

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0024):	16.55	0.552	13.00	39.12
+ ID2= 2 (0014):	1.80	0.057	13.00	33.71
ID = 1 (0024):	18.35	0.609	13.00	38.59

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0024):	18.35	0.609	13.00	38.59
+ ID2= 2 (0015):	6.70	0.191	13.75	47.75
ID = 3 (0024):	25.05	0.761	13.08	41.04

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)

3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0024):	25.05	0.761	13.08	41.04
+ ID2= 2 (0016):	29.16	2.033	12.83	64.17
ID = 1 (0024):	54.21	2.763	12.92	53.48

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0024):	54.21	2.763	12.92	53.48
+ ID2= 2 (0019):	39.68	1.380	13.42	49.69
ID = 3 (0024):	93.89	3.958	13.00	51.88

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0024):	93.89	3.958	13.00	51.88
+ ID2= 2 (0007):	100.92	2.350	14.08	44.40
ID = 1 (0024):	194.81	5.728	13.25	48.00

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0024):	194.81	5.728	13.25	48.00
+ ID2= 2 (0008):	23.99	0.588	13.25	31.28
ID = 3 (0024):	218.80	6.316	13.25	46.17

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)

3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0024):	218.80	6.316	13.25	46.17
+ ID2= 2 (0009):	6.37	0.205	13.00	34.32
ID = 1 (0024):	225.17	6.509	13.25	45.83

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB / NASHYD (0011) / ID= 1 DT= 5.0 min			
Area (ha)=	46.28	Curve Number (CN)=	72.2
Ia (mm)=	7.09	# of Linear Res.(N)=	3.00
U.H. Tp(hrs)=	0.30		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.03	12.250	155.34	18.33	2.28
0.167	0.00	6.250	2.03	12.333	18.29	18.42	2.28
0.250	0.00	6.333	2.28	12.417	18.28	18.50	2.28
0.333	1.40	6.417	2.28	12.500	18.28	18.58	2.28
0.417	1.40	6.500	2.28	12.583	18.27	18.67	2.28
0.500	1.40	6.583	2.28	12.667	18.28	18.75	2.28
0.583	1.40	6.667	2.28	12.750	18.28	18.83	2.28
0.667	1.40	6.750	2.28	12.833	9.39	18.92	2.28
0.750	1.40	6.833	2.28	12.917	9.39	19.00	2.28
0.833	1.40	6.917	2.28	13.000	9.39	19.08	2.28
0.917	1.40	7.000	2.28	13.083	9.39	19.17	2.28
1.000	1.40	7.083	2.28	13.167	9.39	19.25	2.28
1.083	1.40	7.167	2.28	13.250	9.39	19.33	2.28
1.167	1.40	7.250	2.28	13.333	6.85	19.42	2.28
1.250	1.40	7.333	2.79	13.417	6.85	19.50	2.28
1.333	1.40	7.417	2.79	13.500	6.85	19.58	2.28
1.417	1.40	7.500	2.79	13.583	6.85	19.67	2.28
1.500	1.40	7.583	2.79	13.667	6.85	19.75	2.28
1.583	1.40	7.667	2.79	13.750	6.85	19.83	2.28
1.667	1.40	7.750	2.79	13.833	5.33	19.92	2.28
1.750	1.40	7.833	2.79	13.917	5.33	20.00	2.28
1.833	1.40	7.917	2.79	14.000	5.33	20.08	2.28
1.917	1.40	8.000	2.79	14.083	5.33	20.17	2.28
2.000	1.40	8.083	2.79	14.167	5.33	20.25	2.28
2.083	1.40	8.167	2.79	14.250	5.33	20.33	1.52
2.167	1.40	8.250	2.79	14.333	3.81	20.42	1.52
2.250	1.40	8.333	3.30	14.417	3.81	20.50	1.52

2.333	1.65	8.417	3.30	14.500	3.81	20.58	1.52
2.417	1.65	8.500	3.30	14.583	3.81	20.67	1.52
2.500	1.65	8.583	3.30	14.667	3.81	20.75	1.52
2.583	1.65	8.667	3.30	14.750	3.81	20.83	1.52
2.667	1.65	8.750	3.30	14.833	3.81	20.92	1.52
2.750	1.65	8.833	3.55	14.917	3.81	21.00	1.52
2.833	1.65	8.917	3.55	15.000	3.81	21.08	1.52
2.917	1.65	9.000	3.55	15.083	3.81	21.17	1.52
3.000	1.65	9.083	3.55	15.167	3.81	21.25	1.52
3.083	1.65	9.167	3.55	15.250	3.81	21.33	1.52
3.167	1.65	9.250	3.55	15.333	3.81	21.42	1.52
3.250	1.65	9.333	4.06	15.417	3.81	21.50	1.52
3.333	1.65	9.417	4.06	15.500	3.81	21.58	1.52
3.417	1.65	9.500	4.06	15.583	3.81	21.67	1.52
3.500	1.65	9.583	4.06	15.667	3.81	21.75	1.52
3.583	1.65	9.667	4.06	15.750	3.81	21.83	1.52
3.667	1.65	9.750	4.06	15.833	3.81	21.92	1.52
3.750	1.65	9.833	4.57	15.917	3.81	22.00	1.52
3.833	1.65	9.917	4.57	16.000	3.81	22.08	1.52
3.917	1.65	10.000	4.57	16.083	3.81	22.17	1.52
4.000	1.65	10.083	4.57	16.167	3.81	22.25	1.52
4.083	1.65	10.167	4.57	16.250	3.81	22.33	1.52
4.167	1.65	10.250	4.57	16.333	2.28	22.42	1.52
4.250	1.65	10.333	5.84	16.417	2.28	22.50	1.52
4.333	2.03	10.417	5.84	16.500	2.28	22.58	1.52
4.417	2.03	10.500	5.84	16.583	2.28	22.67	1.52
4.500	2.03	10.583	5.84	16.667	2.28	22.75	1.52
4.583	2.03	10.667	5.84	16.750	2.28	22.83	1.52
4.667	2.03	10.750	5.84	16.833	2.28	22.92	1.52
4.750	2.03	10.833	7.87	16.917	2.28	23.00	1.52
4.833	2.03	10.917	7.87	17.000	2.28	23.08	1.52
4.917	2.03	11.000	7.87	17.083	2.28	23.17	1.52
5.000	2.03	11.083	7.87	17.167	2.28	23.25	1.52
5.083	2.03	11.167	7.87	17.250	2.28	23.33	1.52
5.167	2.03	11.250	7.87	17.333	2.28	23.42	1.52
5.250	2.03	11.333	12.18	17.417	2.28	23.50	1.52
5.333	2.03	11.417	12.18	17.500	2.28	23.58	1.52
5.417	2.03	11.500	12.18	17.583	2.28	23.67	1.52
5.500	2.03	11.583	12.18	17.667	2.28	23.75	1.52
5.583	2.03	11.667	12.18	17.750	2.28	23.83	1.52
5.667	2.03	11.750	12.18	17.833	2.28	23.92	1.52
5.750	2.03	11.833	37.56	17.917	2.28	24.00	1.52
5.833	2.03	11.917	37.57	18.000	2.28	24.08	1.52
5.917	2.03	12.000	37.57	18.083	2.28	24.17	1.52
6.000	2.03	12.083	155.32	18.167	2.28	24.25	1.52
6.083	2.03	12.167	155.34	18.250	2.28		

Unit Hyd Qpeak (cms)= 5.892

PEAK FLOW (cms)= 6.036 (i)
TIME TO PEAK (hrs)= 12.417
RUNOFF VOLUME (mm)= 65.931
TOTAL RAINFALL (mm)= 126.910
RUNOFF COEFFICIENT = 0.520

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0012)	Area (ha)=	1.13	Curve Number (CN)=	67.4	
ID= 1 DT= 5.0 min	Ia (mm)=	7.88	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	0.43			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.03	12.250	155.34	18.33	2.28
0.167	0.00	6.250	2.03	12.333	18.29	18.42	2.28
0.250	0.00	6.333	2.28	12.417	18.28	18.50	2.28
0.333	1.40	6.417	2.28	12.500	18.28	18.58	2.28
0.417	1.40	6.500	2.28	12.583	18.27	18.67	2.28
0.500	1.40	6.583	2.28	12.667	18.28	18.75	2.28
0.583	1.40	6.667	2.28	12.750	18.28	18.83	2.28
0.667	1.40	6.750	2.28	12.833	9.39	18.92	2.28
0.750	1.40	6.833	2.28	12.917	9.39	19.00	2.28
0.833	1.40	6.917	2.28	13.000	9.39	19.08	2.28
0.917	1.40	7.000	2.28	13.083	9.39	19.17	2.28
1.000	1.40	7.083	2.28	13.167	9.39	19.25	2.28
1.083	1.40	7.167	2.28	13.250	9.39	19.33	2.28
1.167	1.40	7.250	2.28	13.333	6.85	19.42	2.28
1.250	1.40	7.333	2.79	13.417	6.85	19.50	2.28
1.333	1.40	7.417	2.79	13.500	6.85	19.58	2.28
1.417	1.40	7.500	2.79	13.583	6.85	19.67	2.28
1.500	1.40	7.583	2.79	13.667	6.85	19.75	2.28
1.583	1.40	7.667	2.79	13.750	6.85	19.83	2.28
1.667	1.40	7.750	2.79	13.833	5.33	19.92	2.28
1.750	1.40	7.833	2.79	13.917	5.33	20.00	2.28
1.833	1.40	7.917	2.79	14.000	5.33	20.08	2.28
1.917	1.40	8.000	2.79	14.083	5.33	20.17	2.28
2.000	1.40	8.083	2.79	14.167	5.33	20.25	2.28
2.083	1.40	8.167	2.79	14.250	5.33	20.33	1.52
2.167	1.40	8.250	2.79	14.333	3.81	20.42	1.52

2.250	1.40	8.333	3.30	14.417	3.81	20.50	1.52
2.333	1.65	8.417	3.30	14.500	3.81	20.58	1.52
2.417	1.65	8.500	3.30	14.583	3.81	20.67	1.52
2.500	1.65	8.583	3.30	14.667	3.81	20.75	1.52
2.583	1.65	8.667	3.30	14.750	3.81	20.83	1.52
2.667	1.65	8.750	3.30	14.833	3.81	20.92	1.52
2.750	1.65	8.833	3.55	14.917	3.81	21.00	1.52
2.833	1.65	8.917	3.55	15.000	3.81	21.08	1.52
2.917	1.65	9.000	3.55	15.083	3.81	21.17	1.52
3.000	1.65	9.083	3.55	15.167	3.81	21.25	1.52
3.083	1.65	9.167	3.55	15.250	3.81	21.33	1.52
3.167	1.65	9.250	3.55	15.333	3.81	21.42	1.52
3.250	1.65	9.333	4.06	15.417	3.81	21.50	1.52
3.333	1.65	9.417	4.06	15.500	3.81	21.58	1.52
3.417	1.65	9.500	4.06	15.583	3.81	21.67	1.52
3.500	1.65	9.583	4.06	15.667	3.81	21.75	1.52
3.583	1.65	9.667	4.06	15.750	3.81	21.83	1.52
3.667	1.65	9.750	4.06	15.833	3.81	21.92	1.52
3.750	1.65	9.833	4.57	15.917	3.81	22.00	1.52
3.833	1.65	9.917	4.57	16.000	3.81	22.08	1.52
3.917	1.65	10.000	4.57	16.083	3.81	22.17	1.52
4.000	1.65	10.083	4.57	16.167	3.81	22.25	1.52
4.083	1.65	10.167	4.57	16.250	3.81	22.33	1.52
4.167	1.65	10.250	4.57	16.333	2.28	22.42	1.52
4.250	1.65	10.333	5.84	16.417	2.28	22.50	1.52
4.333	2.03	10.417	5.84	16.500	2.28	22.58	1.52
4.417	2.03	10.500	5.84	16.583	2.28	22.67	1.52
4.500	2.03	10.583	5.84	16.667	2.28	22.75	1.52
4.583	2.03	10.667	5.84	16.750	2.28	22.83	1.52
4.667	2.03	10.750	5.84	16.833	2.28	22.92	1.52
4.750	2.03	10.833	7.87	16.917	2.28	23.00	1.52
4.833	2.03	10.917	7.87	17.000	2.28	23.08	1.52
4.917	2.03	11.000	7.87	17.083	2.28	23.17	1.52
5.000	2.03	11.083	7.87	17.167	2.28	23.25	1.52
5.083	2.03	11.167	7.87	17.250	2.28	23.33	1.52
5.167	2.03	11.250	7.87	17.333	2.28	23.42	1.52
5.250	2.03	11.333	12.18	17.417	2.28	23.50	1.52
5.333	2.03	11.417	12.18	17.500	2.28	23.58	1.52
5.417	2.03	11.500	12.18	17.583	2.28	23.67	1.52
5.500	2.03	11.583	12.18	17.667	2.28	23.75	1.52
5.583	2.03	11.667	12.18	17.750	2.28	23.83	1.52
5.667	2.03	11.750	12.18	17.833	2.28	23.92	1.52
5.750	2.03	11.833	37.56	17.917	2.28	24.00	1.52
5.833	2.03	11.917	37.57	18.000	2.28	24.08	1.52
5.917	2.03	12.000	37.57	18.083	2.28	24.17	1.52
6.000	2.03	12.083	155.32	18.167	2.28	24.25	1.52
6.083	2.03	12.167	155.34	18.250	2.28		

Unit Hyd Qpeak (cms)= 0.100

PEAK FLOW (cms)= 0.099 (i)
TIME TO PEAK (hrs)= 12.583
RUNOFF VOLUME (mm)= 58.514
TOTAL RAINFALL (mm)= 126.910
RUNOFF COEFFICIENT = 0.461

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	
STANDHYD (0043)	Area (ha)= 0.13
ID= 1 DT= 5.0 min	Total Imp(%)= 30.77 Dir. Conn.(%)= 7.69

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.04	0.09
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	0.50
Length	(m)=	29.44	70.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.03	12.250	155.34	18.33	2.28
0.167	0.00	6.250	2.03	12.333	18.29	18.42	2.28
0.250	0.00	6.333	2.28	12.417	18.28	18.50	2.28
0.333	1.40	6.417	2.28	12.500	18.28	18.58	2.28
0.417	1.40	6.500	2.28	12.583	18.27	18.67	2.28
0.500	1.40	6.583	2.28	12.667	18.28	18.75	2.28
0.583	1.40	6.667	2.28	12.750	18.28	18.83	2.28
0.667	1.40	6.750	2.28	12.833	9.39	18.92	2.28
0.750	1.40	6.833	2.28	12.917	9.39	19.00	2.28
0.833	1.40	6.917	2.28	13.000	9.39	19.08	2.28
0.917	1.40	7.000	2.28	13.083	9.39	19.17	2.28
1.000	1.40	7.083	2.28	13.167	9.39	19.25	2.28
1.083	1.40	7.167	2.28	13.250	9.39	19.33	2.28
1.167	1.40	7.250	2.28	13.333	6.85	19.42	2.28
1.250	1.40	7.333	2.79	13.417	6.85	19.50	2.28
1.333	1.40	7.417	2.79	13.500	6.85	19.58	2.28
1.417	1.40	7.500	2.79	13.583	6.85	19.67	2.28
1.500	1.40	7.583	2.79	13.667	6.85	19.75	2.28
1.583	1.40	7.667	2.79	13.750	6.85	19.83	2.28

1.667	1.40	7.750	2.79	13.833	5.33	19.92	2.28
1.750	1.40	7.833	2.79	13.917	5.33	20.00	2.28
1.833	1.40	7.917	2.79	14.000	5.33	20.08	2.28
1.917	1.40	8.000	2.79	14.083	5.33	20.17	2.28
2.000	1.40	8.083	2.79	14.167	5.33	20.25	2.28
2.083	1.40	8.167	2.79	14.250	5.33	20.33	1.52
2.167	1.40	8.250	2.79	14.333	3.81	20.42	1.52
2.250	1.40	8.333	3.30	14.417	3.81	20.50	1.52
2.333	1.65	8.417	3.30	14.500	3.81	20.58	1.52
2.417	1.65	8.500	3.30	14.583	3.81	20.67	1.52
2.500	1.65	8.583	3.30	14.667	3.81	20.75	1.52
2.583	1.65	8.667	3.30	14.750	3.81	20.83	1.52
2.667	1.65	8.750	3.30	14.833	3.81	20.92	1.52
2.750	1.65	8.833	3.55	14.917	3.81	21.00	1.52
2.833	1.65	8.917	3.55	15.000	3.81	21.08	1.52
2.917	1.65	9.000	3.55	15.083	3.81	21.17	1.52
3.000	1.65	9.083	3.55	15.167	3.81	21.25	1.52
3.083	1.65	9.167	3.55	15.250	3.81	21.33	1.52
3.167	1.65	9.250	3.55	15.333	3.81	21.42	1.52
3.250	1.65	9.333	4.06	15.417	3.81	21.50	1.52
3.333	1.65	9.417	4.06	15.500	3.81	21.58	1.52
3.417	1.65	9.500	4.06	15.583	3.81	21.67	1.52
3.500	1.65	9.583	4.06	15.667	3.81	21.75	1.52
3.583	1.65	9.667	4.06	15.750	3.81	21.83	1.52
3.667	1.65	9.750	4.06	15.833	3.81	21.92	1.52
3.750	1.65	9.833	4.57	15.917	3.81	22.00	1.52
3.833	1.65	9.917	4.57	16.000	3.81	22.08	1.52
3.917	1.65	10.000	4.57	16.083	3.81	22.17	1.52
4.000	1.65	10.083	4.57	16.167	3.81	22.25	1.52
4.083	1.65	10.167	4.57	16.250	3.81	22.33	1.52
4.167	1.65	10.250	4.57	16.333	2.28	22.42	1.52
4.250	1.65	10.333	5.84	16.417	2.28	22.50	1.52
4.333	2.03	10.417	5.84	16.500	2.28	22.58	1.52
4.417	2.03	10.500	5.84	16.583	2.28	22.67	1.52
4.500	2.03	10.583	5.84	16.667	2.28	22.75	1.52
4.583	2.03	10.667	5.84	16.750	2.28	22.83	1.52
4.667	2.03	10.750	5.84	16.833	2.28	22.92	1.52
4.750	2.03	10.833	7.87	16.917	2.28	23.00	1.52
4.833	2.03	10.917	7.87	17.000	2.28	23.08	1.52
4.917	2.03	11.000	7.87	17.083	2.28	23.17	1.52
5.000	2.03	11.083	7.87	17.167	2.28	23.25	1.52
5.083	2.03	11.167	7.87	17.250	2.28	23.33	1.52
5.167	2.03	11.250	7.87	17.333	2.28	23.42	1.52
5.250	2.03	11.333	12.18	17.417	2.28	23.50	1.52
5.333	2.03	11.417	12.18	17.500	2.28	23.58	1.52
5.417	2.03	11.500	12.18	17.583	2.28	23.67	1.52
5.500	2.03	11.583	12.18	17.667	2.28	23.75	1.52
5.583	2.03	11.667	12.18	17.750	2.28	23.83	1.52

5.667	2.03	11.750	12.18	17.833	2.28	23.92	1.52
5.750	2.03	11.833	37.56	17.917	2.28	24.00	1.52
5.833	2.03	11.917	37.57	18.000	2.28	24.08	1.52
5.917	2.03	12.000	37.57	18.083	2.28	24.17	1.52
6.000	2.03	12.083	155.32	18.167	2.28	24.25	1.52
6.083	2.03	12.167	155.34	18.250	2.28		

Max.Eff.Inten.(mm/hr)=	155.34	135.23	
over (min)	5.00	15.00	
Storage Coeff. (min)=	1.27 (ii)	14.53 (ii)	
Unit Hyd. Tpeak (min)=	5.00	15.00	
Unit Hyd. peak (cms)=	0.33	0.08	
			TOTALS
PEAK FLOW (cms)=	0.00	0.02	0.022 (iii)
TIME TO PEAK (hrs)=	12.25	12.33	12.25
RUNOFF VOLUME (mm)=	125.91	72.67	76.69
TOTAL RAINFALL (mm)=	126.91	126.91	126.91
RUNOFF COEFFICIENT =	0.99	0.57	0.60

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
STANDHYD (0044)	Area (ha)=	1.62	
ID= 1 DT= 5.0 min	Total Imp(%)=	48.77	Dir. Conn.(%)= 30.86

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.79	0.83
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	1.40
Length	(m)=	103.92	400.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.03	12.250	155.34	18.33	2.28
0.167	0.00	6.250	2.03	12.333	18.29	18.42	2.28
0.250	0.00	6.333	2.28	12.417	18.28	18.50	2.28
0.333	1.40	6.417	2.28	12.500	18.28	18.58	2.28
0.417	1.40	6.500	2.28	12.583	18.27	18.67	2.28
0.500	1.40	6.583	2.28	12.667	18.28	18.75	2.28
0.583	1.40	6.667	2.28	12.750	18.28	18.83	2.28
0.667	1.40	6.750	2.28	12.833	9.39	18.92	2.28
0.750	1.40	6.833	2.28	12.917	9.39	19.00	2.28
0.833	1.40	6.917	2.28	13.000	9.39	19.08	2.28
0.917	1.40	7.000	2.28	13.083	9.39	19.17	2.28
1.000	1.40	7.083	2.28	13.167	9.39	19.25	2.28
1.083	1.40	7.167	2.28	13.250	9.39	19.33	2.28
1.167	1.40	7.250	2.28	13.333	6.85	19.42	2.28
1.250	1.40	7.333	2.79	13.417	6.85	19.50	2.28
1.333	1.40	7.417	2.79	13.500	6.85	19.58	2.28
1.417	1.40	7.500	2.79	13.583	6.85	19.67	2.28
1.500	1.40	7.583	2.79	13.667	6.85	19.75	2.28
1.583	1.40	7.667	2.79	13.750	6.85	19.83	2.28
1.667	1.40	7.750	2.79	13.833	5.33	19.92	2.28
1.750	1.40	7.833	2.79	13.917	5.33	20.00	2.28
1.833	1.40	7.917	2.79	14.000	5.33	20.08	2.28
1.917	1.40	8.000	2.79	14.083	5.33	20.17	2.28
2.000	1.40	8.083	2.79	14.167	5.33	20.25	2.28
2.083	1.40	8.167	2.79	14.250	5.33	20.33	1.52
2.167	1.40	8.250	2.79	14.333	3.81	20.42	1.52
2.250	1.40	8.333	3.30	14.417	3.81	20.50	1.52
2.333	1.65	8.417	3.30	14.500	3.81	20.58	1.52
2.417	1.65	8.500	3.30	14.583	3.81	20.67	1.52
2.500	1.65	8.583	3.30	14.667	3.81	20.75	1.52
2.583	1.65	8.667	3.30	14.750	3.81	20.83	1.52
2.667	1.65	8.750	3.30	14.833	3.81	20.92	1.52
2.750	1.65	8.833	3.55	14.917	3.81	21.00	1.52
2.833	1.65	8.917	3.55	15.000	3.81	21.08	1.52
2.917	1.65	9.000	3.55	15.083	3.81	21.17	1.52
3.000	1.65	9.083	3.55	15.167	3.81	21.25	1.52
3.083	1.65	9.167	3.55	15.250	3.81	21.33	1.52
3.167	1.65	9.250	3.55	15.333	3.81	21.42	1.52
3.250	1.65	9.333	4.06	15.417	3.81	21.50	1.52
3.333	1.65	9.417	4.06	15.500	3.81	21.58	1.52
3.417	1.65	9.500	4.06	15.583	3.81	21.67	1.52
3.500	1.65	9.583	4.06	15.667	3.81	21.75	1.52
3.583	1.65	9.667	4.06	15.750	3.81	21.83	1.52
3.667	1.65	9.750	4.06	15.833	3.81	21.92	1.52
3.750	1.65	9.833	4.57	15.917	3.81	22.00	1.52
3.833	1.65	9.917	4.57	16.000	3.81	22.08	1.52
3.917	1.65	10.000	4.57	16.083	3.81	22.17	1.52
4.000	1.65	10.083	4.57	16.167	3.81	22.25	1.52

Post-Development VO Output

1508-7498

4.083	1.65	10.167	4.57	16.250	3.81	22.33	1.52
4.167	1.65	10.250	4.57	16.333	2.28	22.42	1.52
4.250	1.65	10.333	5.84	16.417	2.28	22.50	1.52
4.333	2.03	10.417	5.84	16.500	2.28	22.58	1.52
4.417	2.03	10.500	5.84	16.583	2.28	22.67	1.52
4.500	2.03	10.583	5.84	16.667	2.28	22.75	1.52
4.583	2.03	10.667	5.84	16.750	2.28	22.83	1.52
4.667	2.03	10.750	5.84	16.833	2.28	22.92	1.52
4.750	2.03	10.833	7.87	16.917	2.28	23.00	1.52
4.833	2.03	10.917	7.87	17.000	2.28	23.08	1.52
4.917	2.03	11.000	7.87	17.083	2.28	23.17	1.52
5.000	2.03	11.083	7.87	17.167	2.28	23.25	1.52
5.083	2.03	11.167	7.87	17.250	2.28	23.33	1.52
5.167	2.03	11.250	7.87	17.333	2.28	23.42	1.52
5.250	2.03	11.333	12.18	17.417	2.28	23.50	1.52
5.333	2.03	11.417	12.18	17.500	2.28	23.58	1.52
5.417	2.03	11.500	12.18	17.583	2.28	23.67	1.52
5.500	2.03	11.583	12.18	17.667	2.28	23.75	1.52
5.583	2.03	11.667	12.18	17.750	2.28	23.83	1.52
5.667	2.03	11.750	12.18	17.833	2.28	23.92	1.52
5.750	2.03	11.833	37.56	17.917	2.28	24.00	1.52
5.833	2.03	11.917	37.57	18.000	2.28	24.08	1.52
5.917	2.03	12.000	37.57	18.083	2.28	24.17	1.52
6.000	2.03	12.083	155.32	18.167	2.28	24.25	1.52
6.083	2.03	12.167	155.34	18.250	2.28		

			TOTALS
Max.Eff.Inten.(mm/hr)=	155.34	65.97	
over (min)	5.00	40.00	
Storage Coeff. (min)=	2.70 (ii)	39.63 (ii)	
Unit Hyd. Tpeak (min)=	5.00	40.00	
Unit Hyd. peak (cms)=	0.29	0.03	
PEAK FLOW (cms)=	0.22	0.10	0.254 (iii)
TIME TO PEAK (hrs)=	12.25	12.75	12.25
RUNOFF VOLUME (mm)=	125.91	73.06	89.36
TOTAL RAINFALL (mm)=	126.91	126.91	126.91
RUNOFF COEFFICIENT =	0.99	0.58	0.70

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0041)	Area	(ha)=	0.59	Curve Number	(CN)= 71.5
ID= 1 DT= 5.0 min	Ia	(mm)=	4.75	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)=		0.53		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.03	12.250	155.34	18.33	2.28
0.167	0.00	6.250	2.03	12.333	18.29	18.42	2.28
0.250	0.00	6.333	2.28	12.417	18.28	18.50	2.28
0.333	1.40	6.417	2.28	12.500	18.28	18.58	2.28
0.417	1.40	6.500	2.28	12.583	18.27	18.67	2.28
0.500	1.40	6.583	2.28	12.667	18.28	18.75	2.28
0.583	1.40	6.667	2.28	12.750	18.28	18.83	2.28
0.667	1.40	6.750	2.28	12.833	9.39	18.92	2.28
0.750	1.40	6.833	2.28	12.917	9.39	19.00	2.28
0.833	1.40	6.917	2.28	13.000	9.39	19.08	2.28
0.917	1.40	7.000	2.28	13.083	9.39	19.17	2.28
1.000	1.40	7.083	2.28	13.167	9.39	19.25	2.28
1.083	1.40	7.167	2.28	13.250	9.39	19.33	2.28
1.167	1.40	7.250	2.28	13.333	6.85	19.42	2.28
1.250	1.40	7.333	2.79	13.417	6.85	19.50	2.28
1.333	1.40	7.417	2.79	13.500	6.85	19.58	2.28
1.417	1.40	7.500	2.79	13.583	6.85	19.67	2.28
1.500	1.40	7.583	2.79	13.667	6.85	19.75	2.28
1.583	1.40	7.667	2.79	13.750	6.85	19.83	2.28
1.667	1.40	7.750	2.79	13.833	5.33	19.92	2.28
1.750	1.40	7.833	2.79	13.917	5.33	20.00	2.28
1.833	1.40	7.917	2.79	14.000	5.33	20.08	2.28
1.917	1.40	8.000	2.79	14.083	5.33	20.17	2.28
2.000	1.40	8.083	2.79	14.167	5.33	20.25	2.28
2.083	1.40	8.167	2.79	14.250	5.33	20.33	1.52
2.167	1.40	8.250	2.79	14.333	3.81	20.42	1.52
2.250	1.40	8.333	3.30	14.417	3.81	20.50	1.52
2.333	1.65	8.417	3.30	14.500	3.81	20.58	1.52
2.417	1.65	8.500	3.30	14.583	3.81	20.67	1.52
2.500	1.65	8.583	3.30	14.667	3.81	20.75	1.52
2.583	1.65	8.667	3.30	14.750	3.81	20.83	1.52
2.667	1.65	8.750	3.30	14.833	3.81	20.92	1.52
2.750	1.65	8.833	3.55	14.917	3.81	21.00	1.52
2.833	1.65	8.917	3.55	15.000	3.81	21.08	1.52
2.917	1.65	9.000	3.55	15.083	3.81	21.17	1.52
3.000	1.65	9.083	3.55	15.167	3.81	21.25	1.52
3.083	1.65	9.167	3.55	15.250	3.81	21.33	1.52

3.167	1.65	9.250	3.55	15.333	3.81	21.42	1.52
3.250	1.65	9.333	4.06	15.417	3.81	21.50	1.52
3.333	1.65	9.417	4.06	15.500	3.81	21.58	1.52
3.417	1.65	9.500	4.06	15.583	3.81	21.67	1.52
3.500	1.65	9.583	4.06	15.667	3.81	21.75	1.52
3.583	1.65	9.667	4.06	15.750	3.81	21.83	1.52
3.667	1.65	9.750	4.06	15.833	3.81	21.92	1.52
3.750	1.65	9.833	4.57	15.917	3.81	22.00	1.52
3.833	1.65	9.917	4.57	16.000	3.81	22.08	1.52
3.917	1.65	10.000	4.57	16.083	3.81	22.17	1.52
4.000	1.65	10.083	4.57	16.167	3.81	22.25	1.52
4.083	1.65	10.167	4.57	16.250	3.81	22.33	1.52
4.167	1.65	10.250	4.57	16.333	2.28	22.42	1.52
4.250	1.65	10.333	5.84	16.417	2.28	22.50	1.52
4.333	2.03	10.417	5.84	16.500	2.28	22.58	1.52
4.417	2.03	10.500	5.84	16.583	2.28	22.67	1.52
4.500	2.03	10.583	5.84	16.667	2.28	22.75	1.52
4.583	2.03	10.667	5.84	16.750	2.28	22.83	1.52
4.667	2.03	10.750	5.84	16.833	2.28	22.92	1.52
4.750	2.03	10.833	7.87	16.917	2.28	23.00	1.52
4.833	2.03	10.917	7.87	17.000	2.28	23.08	1.52
4.917	2.03	11.000	7.87	17.083	2.28	23.17	1.52
5.000	2.03	11.083	7.87	17.167	2.28	23.25	1.52
5.083	2.03	11.167	7.87	17.250	2.28	23.33	1.52
5.167	2.03	11.250	7.87	17.333	2.28	23.42	1.52
5.250	2.03	11.333	12.18	17.417	2.28	23.50	1.52
5.333	2.03	11.417	12.18	17.500	2.28	23.58	1.52
5.417	2.03	11.500	12.18	17.583	2.28	23.67	1.52
5.500	2.03	11.583	12.18	17.667	2.28	23.75	1.52
5.583	2.03	11.667	12.18	17.750	2.28	23.83	1.52
5.667	2.03	11.750	12.18	17.833	2.28	23.92	1.52
5.750	2.03	11.833	37.56	17.917	2.28	24.00	1.52
5.833	2.03	11.917	37.57	18.000	2.28	24.08	1.52
5.917	2.03	12.000	37.57	18.083	2.28	24.17	1.52
6.000	2.03	12.083	155.32	18.167	2.28	24.25	1.52
6.083	2.03	12.167	155.34	18.250	2.28		

Unit Hyd Qpeak (cms)= 0.043

PEAK FLOW (cms)= 0.051 (i)
TIME TO PEAK (hrs)= 12.667
RUNOFF VOLUME (mm)= 66.734
TOTAL RAINFALL (mm)= 126.910
RUNOFF COEFFICIENT = 0.526

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0028)	Area (ha)= 1.38	Curve Number (CN)= 64.1	
ID= 1 DT= 5.0 min	Ia (mm)= 8.51	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.39		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.03	12.250	155.34	18.33	2.28
0.167	0.00	6.250	2.03	12.333	18.29	18.42	2.28
0.250	0.00	6.333	2.28	12.417	18.28	18.50	2.28
0.333	1.40	6.417	2.28	12.500	18.28	18.58	2.28
0.417	1.40	6.500	2.28	12.583	18.27	18.67	2.28
0.500	1.40	6.583	2.28	12.667	18.28	18.75	2.28
0.583	1.40	6.667	2.28	12.750	18.28	18.83	2.28
0.667	1.40	6.750	2.28	12.833	9.39	18.92	2.28
0.750	1.40	6.833	2.28	12.917	9.39	19.00	2.28
0.833	1.40	6.917	2.28	13.000	9.39	19.08	2.28
0.917	1.40	7.000	2.28	13.083	9.39	19.17	2.28
1.000	1.40	7.083	2.28	13.167	9.39	19.25	2.28
1.083	1.40	7.167	2.28	13.250	9.39	19.33	2.28
1.167	1.40	7.250	2.28	13.333	6.85	19.42	2.28
1.250	1.40	7.333	2.79	13.417	6.85	19.50	2.28
1.333	1.40	7.417	2.79	13.500	6.85	19.58	2.28
1.417	1.40	7.500	2.79	13.583	6.85	19.67	2.28
1.500	1.40	7.583	2.79	13.667	6.85	19.75	2.28
1.583	1.40	7.667	2.79	13.750	6.85	19.83	2.28
1.667	1.40	7.750	2.79	13.833	5.33	19.92	2.28
1.750	1.40	7.833	2.79	13.917	5.33	20.00	2.28
1.833	1.40	7.917	2.79	14.000	5.33	20.08	2.28
1.917	1.40	8.000	2.79	14.083	5.33	20.17	2.28
2.000	1.40	8.083	2.79	14.167	5.33	20.25	2.28
2.083	1.40	8.167	2.79	14.250	5.33	20.33	1.52
2.167	1.40	8.250	2.79	14.333	3.81	20.42	1.52
2.250	1.40	8.333	3.30	14.417	3.81	20.50	1.52
2.333	1.65	8.417	3.30	14.500	3.81	20.58	1.52
2.417	1.65	8.500	3.30	14.583	3.81	20.67	1.52
2.500	1.65	8.583	3.30	14.667	3.81	20.75	1.52
2.583	1.65	8.667	3.30	14.750	3.81	20.83	1.52
2.667	1.65	8.750	3.30	14.833	3.81	20.92	1.52
2.750	1.65	8.833	3.55	14.917	3.81	21.00	1.52
2.833	1.65	8.917	3.55	15.000	3.81	21.08	1.52
2.917	1.65	9.000	3.55	15.083	3.81	21.17	1.52
3.000	1.65	9.083	3.55	15.167	3.81	21.25	1.52

3.083	1.65	9.167	3.55	15.250	3.81	21.33	1.52
3.167	1.65	9.250	3.55	15.333	3.81	21.42	1.52
3.250	1.65	9.333	4.06	15.417	3.81	21.50	1.52
3.333	1.65	9.417	4.06	15.500	3.81	21.58	1.52
3.417	1.65	9.500	4.06	15.583	3.81	21.67	1.52
3.500	1.65	9.583	4.06	15.667	3.81	21.75	1.52
3.583	1.65	9.667	4.06	15.750	3.81	21.83	1.52
3.667	1.65	9.750	4.06	15.833	3.81	21.92	1.52
3.750	1.65	9.833	4.57	15.917	3.81	22.00	1.52
3.833	1.65	9.917	4.57	16.000	3.81	22.08	1.52
3.917	1.65	10.000	4.57	16.083	3.81	22.17	1.52
4.000	1.65	10.083	4.57	16.167	3.81	22.25	1.52
4.083	1.65	10.167	4.57	16.250	3.81	22.33	1.52
4.167	1.65	10.250	4.57	16.333	2.28	22.42	1.52
4.250	1.65	10.333	5.84	16.417	2.28	22.50	1.52
4.333	2.03	10.417	5.84	16.500	2.28	22.58	1.52
4.417	2.03	10.500	5.84	16.583	2.28	22.67	1.52
4.500	2.03	10.583	5.84	16.667	2.28	22.75	1.52
4.583	2.03	10.667	5.84	16.750	2.28	22.83	1.52
4.667	2.03	10.750	5.84	16.833	2.28	22.92	1.52
4.750	2.03	10.833	7.87	16.917	2.28	23.00	1.52
4.833	2.03	10.917	7.87	17.000	2.28	23.08	1.52
4.917	2.03	11.000	7.87	17.083	2.28	23.17	1.52
5.000	2.03	11.083	7.87	17.167	2.28	23.25	1.52
5.083	2.03	11.167	7.87	17.250	2.28	23.33	1.52
5.167	2.03	11.250	7.87	17.333	2.28	23.42	1.52
5.250	2.03	11.333	12.18	17.417	2.28	23.50	1.52
5.333	2.03	11.417	12.18	17.500	2.28	23.58	1.52
5.417	2.03	11.500	12.18	17.583	2.28	23.67	1.52
5.500	2.03	11.583	12.18	17.667	2.28	23.75	1.52
5.583	2.03	11.667	12.18	17.750	2.28	23.83	1.52
5.667	2.03	11.750	12.18	17.833	2.28	23.92	1.52
5.750	2.03	11.833	37.56	17.917	2.28	24.00	1.52
5.833	2.03	11.917	37.57	18.000	2.28	24.08	1.52
5.917	2.03	12.000	37.57	18.083	2.28	24.17	1.52
6.000	2.03	12.083	155.32	18.167	2.28	24.25	1.52
6.083	2.03	12.167	155.34	18.250	2.28		

Unit Hyd Qpeak (cms)= 0.135

PEAK FLOW (cms)= 0.119 (i)
TIME TO PEAK (hrs)= 12.500
RUNOFF VOLUME (mm)= 53.825
TOTAL RAINFALL (mm)= 126.910
RUNOFF COEFFICIENT = 0.424

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0023)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
	ID1= 1 (0011):	46.28	6.036	12.42	65.93
	+ ID2= 2 (0012):	1.13	0.099	12.58	58.51
	ID = 3 (0023):	47.41	6.128	12.42	65.75

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
	ID1= 3 (0023):	47.41	6.128	12.42	65.75
	+ ID2= 2 (0028):	1.38	0.119	12.50	53.82
	ID = 1 (0023):	48.79	6.242	12.42	65.42

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
	ID1= 1 (0023):	48.79	6.242	12.42	65.42
	+ ID2= 2 (0041):	0.59	0.051	12.67	66.73
	ID = 3 (0023):	49.38	6.284	12.42	65.43

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
	ID1= 3 (0023):	49.38	6.284	12.42	65.43
	+ ID2= 2 (0043):	0.13	0.022	12.25	76.69
	ID = 1 (0023):	49.51	6.304	12.42	65.46

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
	ID1= 1 (0023):	49.51	6.304	12.42	65.46
	+ ID2= 2 (0044):	1.62	0.254	12.25	89.36
	ID = 3 (0023):	51.13	6.396	12.42	66.22

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0025)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
	ID1= 1 (0023):	51.13	6.396	12.42	66.22
	+ ID2= 2 (0024):	225.17	6.509	13.25	45.83
	ID = 3 (0025):	276.30	10.067	12.50	49.61

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

****
** SIMULATION:L - 100-year SCS **
****

READ STORM	Filename: C:\Users\ecomish\AppData\Local\Temp\c819dd95-70ee-48d0-b884-0b24f1308cad\6e9bf3ab
Ptotal=139.48 mm	Comments: 100yr 24hr 15min SCS Type II (MTO) - 15%

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.00	0.00	6.25	2.51	12.50	20.09	18.75	2.51
0.25	1.53	6.50	2.51	12.75	10.32	19.00	2.51
0.50	1.53	6.75	2.51	13.00	10.32	19.25	2.51
0.75	1.53	7.00	2.51	13.25	7.53	19.50	2.51
1.00	1.53	7.25	3.07	13.50	7.53	19.75	2.51
1.25	1.53	7.50	3.07	13.75	5.86	20.00	2.51
1.50	1.53	7.75	3.07	14.00	5.86	20.25	1.67
1.75	1.53	8.00	3.07	14.25	4.18	20.50	1.67
2.00	1.53	8.25	3.63	14.50	4.18	20.75	1.67
2.25	1.81	8.50	3.63	14.75	4.18	21.00	1.67
2.50	1.81	8.75	3.91	15.00	4.18	21.25	1.67

2.75	1.81	9.00	3.91	15.25	4.18	21.50	1.67
3.00	1.81	9.25	4.46	15.50	4.18	21.75	1.67
3.25	1.81	9.50	4.46	15.75	4.18	22.00	1.67
3.50	1.81	9.75	5.02	16.00	4.18	22.25	1.67
3.75	1.81	10.00	5.02	16.25	2.51	22.50	1.67
4.00	1.81	10.25	6.42	16.50	2.51	22.75	1.67
4.25	2.23	10.50	6.42	16.75	2.51	23.00	1.67
4.50	2.23	10.75	8.65	17.00	2.51	23.25	1.67
4.75	2.23	11.00	8.65	17.25	2.51	23.50	1.67
5.00	2.23	11.25	13.39	17.50	2.51	23.75	1.67
5.25	2.23	11.50	13.39	17.75	2.51	24.00	1.67
5.50	2.23	11.75	41.29	18.00	2.51		
5.75	2.23	12.00	170.72	18.25	2.51		
6.00	2.23	12.25	20.09	18.50	2.51		

CALIB NASHYD (0007) ID= 1 DT= 5.0 min	Area (ha)= 100.92	Curve Number (CN)= 55.9
	Ia (mm)= 7.89	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 1.70	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.23	12.250	170.72	18.33	2.51
0.167	0.00	6.250	2.23	12.333	20.10	18.42	2.51
0.250	0.00	6.333	2.51	12.417	20.09	18.50	2.51
0.333	1.53	6.417	2.51	12.500	20.09	18.58	2.51
0.417	1.53	6.500	2.51	12.583	20.09	18.67	2.51
0.500	1.53	6.583	2.51	12.667	20.09	18.75	2.51
0.583	1.53	6.667	2.51	12.750	20.09	18.83	2.51
0.667	1.53	6.750	2.51	12.833	10.32	18.92	2.51
0.750	1.53	6.833	2.51	12.917	10.32	19.00	2.51
0.833	1.53	6.917	2.51	13.000	10.32	19.08	2.51
0.917	1.53	7.000	2.51	13.083	10.32	19.17	2.51
1.000	1.53	7.083	2.51	13.167	10.32	19.25	2.51
1.083	1.53	7.167	2.51	13.250	10.32	19.33	2.51
1.167	1.53	7.250	2.51	13.333	7.53	19.42	2.51
1.250	1.53	7.333	3.07	13.417	7.53	19.50	2.51
1.333	1.53	7.417	3.07	13.500	7.53	19.58	2.51
1.417	1.53	7.500	3.07	13.583	7.53	19.67	2.51
1.500	1.53	7.583	3.07	13.667	7.53	19.75	2.51
1.583	1.53	7.667	3.07	13.750	7.53	19.83	2.51

1.667	1.53	7.750	3.07	13.833	5.86	19.92	2.51
1.750	1.53	7.833	3.07	13.917	5.86	20.00	2.51
1.833	1.53	7.917	3.07	14.000	5.86	20.08	2.51
1.917	1.53	8.000	3.07	14.083	5.86	20.17	2.51
2.000	1.53	8.083	3.07	14.167	5.86	20.25	2.51
2.083	1.53	8.167	3.07	14.250	5.86	20.33	1.67
2.167	1.53	8.250	3.07	14.333	4.18	20.42	1.67
2.250	1.53	8.333	3.63	14.417	4.18	20.50	1.67
2.333	1.81	8.417	3.63	14.500	4.18	20.58	1.67
2.417	1.81	8.500	3.63	14.583	4.18	20.67	1.67
2.500	1.81	8.583	3.63	14.667	4.18	20.75	1.67
2.583	1.81	8.667	3.63	14.750	4.18	20.83	1.67
2.667	1.81	8.750	3.63	14.833	4.18	20.92	1.67
2.750	1.81	8.833	3.91	14.917	4.18	21.00	1.67
2.833	1.81	8.917	3.91	15.000	4.18	21.08	1.67
2.917	1.81	9.000	3.91	15.083	4.18	21.17	1.67
3.000	1.81	9.083	3.91	15.167	4.18	21.25	1.67
3.083	1.81	9.167	3.91	15.250	4.18	21.33	1.67
3.167	1.81	9.250	3.91	15.333	4.18	21.42	1.67
3.250	1.81	9.333	4.46	15.417	4.18	21.50	1.67
3.333	1.81	9.417	4.46	15.500	4.18	21.58	1.67
3.417	1.81	9.500	4.46	15.583	4.18	21.67	1.67
3.500	1.81	9.583	4.46	15.667	4.18	21.75	1.67
3.583	1.81	9.667	4.46	15.750	4.18	21.83	1.67
3.667	1.81	9.750	4.46	15.833	4.18	21.92	1.67
3.750	1.81	9.833	5.02	15.917	4.18	22.00	1.67
3.833	1.81	9.917	5.02	16.000	4.18	22.08	1.67
3.917	1.81	10.000	5.02	16.083	4.18	22.17	1.67
4.000	1.81	10.083	5.02	16.167	4.18	22.25	1.67
4.083	1.81	10.167	5.02	16.250	4.18	22.33	1.67
4.167	1.81	10.250	5.02	16.333	2.51	22.42	1.67
4.250	1.81	10.333	6.42	16.417	2.51	22.50	1.67
4.333	2.23	10.417	6.42	16.500	2.51	22.58	1.67
4.417	2.23	10.500	6.42	16.583	2.51	22.67	1.67
4.500	2.23	10.583	6.42	16.667	2.51	22.75	1.67
4.583	2.23	10.667	6.42	16.750	2.51	22.83	1.67
4.667	2.23	10.750	6.42	16.833	2.51	22.92	1.67
4.750	2.23	10.833	8.65	16.917	2.51	23.00	1.67
4.833	2.23	10.917	8.65	17.000	2.51	23.08	1.67
4.917	2.23	11.000	8.65	17.083	2.51	23.17	1.67
5.000	2.23	11.083	8.65	17.167	2.51	23.25	1.67
5.083	2.23	11.167	8.65	17.250	2.51	23.33	1.67
5.167	2.23	11.250	8.65	17.333	2.51	23.42	1.67
5.250	2.23	11.333	13.39	17.417	2.51	23.50	1.67
5.333	2.23	11.417	13.39	17.500	2.51	23.58	1.67
5.417	2.23	11.500	13.39	17.583	2.51	23.67	1.67
5.500	2.23	11.583	13.39	17.667	2.51	23.75	1.67
5.583	2.23	11.667	13.39	17.750	2.51	23.83	1.67

5.667	2.23	11.750	13.39	17.833	2.51	23.92	1.67
5.750	2.23	11.833	41.28	17.917	2.51	24.00	1.67
5.833	2.23	11.917	41.29	18.000	2.51	24.08	1.67
5.917	2.23	12.000	41.29	18.083	2.51	24.17	1.67
6.000	2.23	12.083	170.71	18.167	2.51	24.25	1.67
6.083	2.23	12.167	170.72	18.250	2.51		

Unit Hyd Qpeak (cms)= 2.267

PEAK FLOW (cms)= 2.776 (i)
TIME TO PEAK (hrs)= 14.083
RUNOFF VOLUME (mm)= 52.212
TOTAL RAINFALL (mm)= 139.480
RUNOFF COEFFICIENT = 0.374

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0008)	Area (ha)= 23.99	Curve Number (CN)= 44.7	
ID= 1 DT= 5.0 min	Ia (mm)= 10.91	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.97		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.23	12.250	170.72	18.33	2.51
0.167	0.00	6.250	2.23	12.333	20.10	18.42	2.51
0.250	0.00	6.333	2.51	12.417	20.09	18.50	2.51
0.333	1.53	6.417	2.51	12.500	20.09	18.58	2.51
0.417	1.53	6.500	2.51	12.583	20.09	18.67	2.51
0.500	1.53	6.583	2.51	12.667	20.09	18.75	2.51
0.583	1.53	6.667	2.51	12.750	20.09	18.83	2.51
0.667	1.53	6.750	2.51	12.833	10.32	18.92	2.51
0.750	1.53	6.833	2.51	12.917	10.32	19.00	2.51
0.833	1.53	6.917	2.51	13.000	10.32	19.08	2.51
0.917	1.53	7.000	2.51	13.083	10.32	19.17	2.51
1.000	1.53	7.083	2.51	13.167	10.32	19.25	2.51
1.083	1.53	7.167	2.51	13.250	10.32	19.33	2.51
1.167	1.53	7.250	2.51	13.333	7.53	19.42	2.51
1.250	1.53	7.333	3.07	13.417	7.53	19.50	2.51
1.333	1.53	7.417	3.07	13.500	7.53	19.58	2.51
1.417	1.53	7.500	3.07	13.583	7.53	19.67	2.51
1.500	1.53	7.583	3.07	13.667	7.53	19.75	2.51

1.583	1.53	7.667	3.07	13.750	7.53	19.83	2.51
1.667	1.53	7.750	3.07	13.833	5.86	19.92	2.51
1.750	1.53	7.833	3.07	13.917	5.86	20.00	2.51
1.833	1.53	7.917	3.07	14.000	5.86	20.08	2.51
1.917	1.53	8.000	3.07	14.083	5.86	20.17	2.51
2.000	1.53	8.083	3.07	14.167	5.86	20.25	2.51
2.083	1.53	8.167	3.07	14.250	5.86	20.33	1.67
2.167	1.53	8.250	3.07	14.333	4.18	20.42	1.67
2.250	1.53	8.333	3.63	14.417	4.18	20.50	1.67
2.333	1.81	8.417	3.63	14.500	4.18	20.58	1.67
2.417	1.81	8.500	3.63	14.583	4.18	20.67	1.67
2.500	1.81	8.583	3.63	14.667	4.18	20.75	1.67
2.583	1.81	8.667	3.63	14.750	4.18	20.83	1.67
2.667	1.81	8.750	3.63	14.833	4.18	20.92	1.67
2.750	1.81	8.833	3.91	14.917	4.18	21.00	1.67
2.833	1.81	8.917	3.91	15.000	4.18	21.08	1.67
2.917	1.81	9.000	3.91	15.083	4.18	21.17	1.67
3.000	1.81	9.083	3.91	15.167	4.18	21.25	1.67
3.083	1.81	9.167	3.91	15.250	4.18	21.33	1.67
3.167	1.81	9.250	3.91	15.333	4.18	21.42	1.67
3.250	1.81	9.333	4.46	15.417	4.18	21.50	1.67
3.333	1.81	9.417	4.46	15.500	4.18	21.58	1.67
3.417	1.81	9.500	4.46	15.583	4.18	21.67	1.67
3.500	1.81	9.583	4.46	15.667	4.18	21.75	1.67
3.583	1.81	9.667	4.46	15.750	4.18	21.83	1.67
3.667	1.81	9.750	4.46	15.833	4.18	21.92	1.67
3.750	1.81	9.833	5.02	15.917	4.18	22.00	1.67
3.833	1.81	9.917	5.02	16.000	4.18	22.08	1.67
3.917	1.81	10.000	5.02	16.083	4.18	22.17	1.67
4.000	1.81	10.083	5.02	16.167	4.18	22.25	1.67
4.083	1.81	10.167	5.02	16.250	4.18	22.33	1.67
4.167	1.81	10.250	5.02	16.333	2.51	22.42	1.67
4.250	1.81	10.333	6.42	16.417	2.51	22.50	1.67
4.333	2.23	10.417	6.42	16.500	2.51	22.58	1.67
4.417	2.23	10.500	6.42	16.583	2.51	22.67	1.67
4.500	2.23	10.583	6.42	16.667	2.51	22.75	1.67
4.583	2.23	10.667	6.42	16.750	2.51	22.83	1.67
4.667	2.23	10.750	6.42	16.833	2.51	22.92	1.67
4.750	2.23	10.833	8.65	16.917	2.51	23.00	1.67
4.833	2.23	10.917	8.65	17.000	2.51	23.08	1.67
4.917	2.23	11.000	8.65	17.083	2.51	23.17	1.67
5.000	2.23	11.083	8.65	17.167	2.51	23.25	1.67
5.083	2.23	11.167	8.65	17.250	2.51	23.33	1.67
5.167	2.23	11.250	8.65	17.333	2.51	23.42	1.67
5.250	2.23	11.333	13.39	17.417	2.51	23.50	1.67
5.333	2.23	11.417	13.39	17.500	2.51	23.58	1.67
5.417	2.23	11.500	13.39	17.583	2.51	23.67	1.67
5.500	2.23	11.583	13.39	17.667	2.51	23.75	1.67

5.583	2.23	11.667	13.39	17.750	2.51	23.83	1.67
5.667	2.23	11.750	13.39	17.833	2.51	23.92	1.67
5.750	2.23	11.833	41.28	17.917	2.51	24.00	1.67
5.833	2.23	11.917	41.29	18.000	2.51	24.08	1.67
5.917	2.23	12.000	41.29	18.083	2.51	24.17	1.67
6.000	2.23	12.083	170.71	18.167	2.51	24.25	1.67
6.083	2.23	12.167	170.72	18.250	2.51		

Unit Hyd Qpeak (cms)= 0.945

PEAK FLOW (cms)= 0.705 (i)
TIME TO PEAK (hrs)= 13.250
RUNOFF VOLUME (mm)= 37.331
TOTAL RAINFALL (mm)= 139.480
RUNOFF COEFFICIENT = 0.268

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB NASHYD (0009) ID= 1 DT= 5.0 min	Area (ha)= 6.37	Curve Number (CN)= 50.5
	Ia (mm)= 15.69	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.77	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.23	12.250	170.72	18.33	2.51
0.167	0.00	6.250	2.23	12.333	20.10	18.42	2.51
0.250	0.00	6.333	2.51	12.417	20.09	18.50	2.51
0.333	1.53	6.417	2.51	12.500	20.09	18.58	2.51
0.417	1.53	6.500	2.51	12.583	20.09	18.67	2.51
0.500	1.53	6.583	2.51	12.667	20.09	18.75	2.51
0.583	1.53	6.667	2.51	12.750	20.09	18.83	2.51
0.667	1.53	6.750	2.51	12.833	10.32	18.92	2.51
0.750	1.53	6.833	2.51	12.917	10.32	19.00	2.51
0.833	1.53	6.917	2.51	13.000	10.32	19.08	2.51
0.917	1.53	7.000	2.51	13.083	10.32	19.17	2.51
1.000	1.53	7.083	2.51	13.167	10.32	19.25	2.51
1.083	1.53	7.167	2.51	13.250	10.32	19.33	2.51
1.167	1.53	7.250	2.51	13.333	7.53	19.42	2.51
1.250	1.53	7.333	3.07	13.417	7.53	19.50	2.51
1.333	1.53	7.417	3.07	13.500	7.53	19.58	2.51
1.417	1.53	7.500	3.07	13.583	7.53	19.67	2.51

1.500	1.53	7.583	3.07	13.667	7.53	19.75	2.51
1.583	1.53	7.667	3.07	13.750	7.53	19.83	2.51
1.667	1.53	7.750	3.07	13.833	5.86	19.92	2.51
1.750	1.53	7.833	3.07	13.917	5.86	20.00	2.51
1.833	1.53	7.917	3.07	14.000	5.86	20.08	2.51
1.917	1.53	8.000	3.07	14.083	5.86	20.17	2.51
2.000	1.53	8.083	3.07	14.167	5.86	20.25	2.51
2.083	1.53	8.167	3.07	14.250	5.86	20.33	1.67
2.167	1.53	8.250	3.07	14.333	4.18	20.42	1.67
2.250	1.53	8.333	3.63	14.417	4.18	20.50	1.67
2.333	1.81	8.417	3.63	14.500	4.18	20.58	1.67
2.417	1.81	8.500	3.63	14.583	4.18	20.67	1.67
2.500	1.81	8.583	3.63	14.667	4.18	20.75	1.67
2.583	1.81	8.667	3.63	14.750	4.18	20.83	1.67
2.667	1.81	8.750	3.63	14.833	4.18	20.92	1.67
2.750	1.81	8.833	3.91	14.917	4.18	21.00	1.67
2.833	1.81	8.917	3.91	15.000	4.18	21.08	1.67
2.917	1.81	9.000	3.91	15.083	4.18	21.17	1.67
3.000	1.81	9.083	3.91	15.167	4.18	21.25	1.67
3.083	1.81	9.167	3.91	15.250	4.18	21.33	1.67
3.167	1.81	9.250	3.91	15.333	4.18	21.42	1.67
3.250	1.81	9.333	4.46	15.417	4.18	21.50	1.67
3.333	1.81	9.417	4.46	15.500	4.18	21.58	1.67
3.417	1.81	9.500	4.46	15.583	4.18	21.67	1.67
3.500	1.81	9.583	4.46	15.667	4.18	21.75	1.67
3.583	1.81	9.667	4.46	15.750	4.18	21.83	1.67
3.667	1.81	9.750	4.46	15.833	4.18	21.92	1.67
3.750	1.81	9.833	5.02	15.917	4.18	22.00	1.67
3.833	1.81	9.917	5.02	16.000	4.18	22.08	1.67
3.917	1.81	10.000	5.02	16.083	4.18	22.17	1.67
4.000	1.81	10.083	5.02	16.167	4.18	22.25	1.67
4.083	1.81	10.167	5.02	16.250	4.18	22.33	1.67
4.167	1.81	10.250	5.02	16.333	2.51	22.42	1.67
4.250	1.81	10.333	6.42	16.417	2.51	22.50	1.67
4.333	2.23	10.417	6.42	16.500	2.51	22.58	1.67
4.417	2.23	10.500	6.42	16.583	2.51	22.67	1.67
4.500	2.23	10.583	6.42	16.667	2.51	22.75	1.67
4.583	2.23	10.667	6.42	16.750	2.51	22.83	1.67
4.667	2.23	10.750	6.42	16.833	2.51	22.92	1.67
4.750	2.23	10.833	8.65	16.917	2.51	23.00	1.67
4.833	2.23	10.917	8.65	17.000	2.51	23.08	1.67
4.917	2.23	11.000	8.65	17.083	2.51	23.17	1.67
5.000	2.23	11.083	8.65	17.167	2.51	23.25	1.67
5.083	2.23	11.167	8.65	17.250	2.51	23.33	1.67
5.167	2.23	11.250	8.65	17.333	2.51	23.42	1.67
5.250	2.23	11.333	13.39	17.417	2.51	23.50	1.67
5.333	2.23	11.417	13.39	17.500	2.51	23.58	1.67
5.417	2.23	11.500	13.39	17.583	2.51	23.67	1.67

5.500	2.23	11.583	13.39	17.667	2.51	23.75	1.67
5.583	2.23	11.667	13.39	17.750	2.51	23.83	1.67
5.667	2.23	11.750	13.39	17.833	2.51	23.92	1.67
5.750	2.23	11.833	41.28	17.917	2.51	24.00	1.67
5.833	2.23	11.917	41.29	18.000	2.51	24.08	1.67
5.917	2.23	12.000	41.29	18.083	2.51	24.17	1.67
6.000	2.23	12.083	170.71	18.167	2.51	24.25	1.67
6.083	2.23	12.167	170.72	18.250	2.51		

Unit Hyd Qpeak (cms)= 0.316

PEAK FLOW (cms)= 0.247 (i)
TIME TO PEAK (hrs)= 13.000
RUNOFF VOLUME (mm)= 41.087
TOTAL RAINFALL (mm)= 139.480
RUNOFF COEFFICIENT = 0.295

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0010)	Area (ha)= 14.85	Curve Number (CN)= 52.9	
ID= 1 DT= 5.0 min	Ia (mm)= 13.28	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.89		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.23	12.250	170.72	18.33	2.51
0.167	0.00	6.250	2.23	12.333	20.10	18.42	2.51
0.250	0.00	6.333	2.51	12.417	20.09	18.50	2.51
0.333	1.53	6.417	2.51	12.500	20.09	18.58	2.51
0.417	1.53	6.500	2.51	12.583	20.09	18.67	2.51
0.500	1.53	6.583	2.51	12.667	20.09	18.75	2.51
0.583	1.53	6.667	2.51	12.750	20.09	18.83	2.51
0.667	1.53	6.750	2.51	12.833	10.32	18.92	2.51
0.750	1.53	6.833	2.51	12.917	10.32	19.00	2.51
0.833	1.53	6.917	2.51	13.000	10.32	19.08	2.51
0.917	1.53	7.000	2.51	13.083	10.32	19.17	2.51
1.000	1.53	7.083	2.51	13.167	10.32	19.25	2.51
1.083	1.53	7.167	2.51	13.250	10.32	19.33	2.51
1.167	1.53	7.250	2.51	13.333	7.53	19.42	2.51
1.250	1.53	7.333	3.07	13.417	7.53	19.50	2.51
1.333	1.53	7.417	3.07	13.500	7.53	19.58	2.51

1.417	1.53	7.500	3.07	13.583	7.53	19.67	2.51
1.500	1.53	7.583	3.07	13.667	7.53	19.75	2.51
1.583	1.53	7.667	3.07	13.750	7.53	19.83	2.51
1.667	1.53	7.750	3.07	13.833	5.86	19.92	2.51
1.750	1.53	7.833	3.07	13.917	5.86	20.00	2.51
1.833	1.53	7.917	3.07	14.000	5.86	20.08	2.51
1.917	1.53	8.000	3.07	14.083	5.86	20.17	2.51
2.000	1.53	8.083	3.07	14.167	5.86	20.25	2.51
2.083	1.53	8.167	3.07	14.250	5.86	20.33	1.67
2.167	1.53	8.250	3.07	14.333	4.18	20.42	1.67
2.250	1.53	8.333	3.63	14.417	4.18	20.50	1.67
2.333	1.81	8.417	3.63	14.500	4.18	20.58	1.67
2.417	1.81	8.500	3.63	14.583	4.18	20.67	1.67
2.500	1.81	8.583	3.63	14.667	4.18	20.75	1.67
2.583	1.81	8.667	3.63	14.750	4.18	20.83	1.67
2.667	1.81	8.750	3.63	14.833	4.18	20.92	1.67
2.750	1.81	8.833	3.91	14.917	4.18	21.00	1.67
2.833	1.81	8.917	3.91	15.000	4.18	21.08	1.67
2.917	1.81	9.000	3.91	15.083	4.18	21.17	1.67
3.000	1.81	9.083	3.91	15.167	4.18	21.25	1.67
3.083	1.81	9.167	3.91	15.250	4.18	21.33	1.67
3.167	1.81	9.250	3.91	15.333	4.18	21.42	1.67
3.250	1.81	9.333	4.46	15.417	4.18	21.50	1.67
3.333	1.81	9.417	4.46	15.500	4.18	21.58	1.67
3.417	1.81	9.500	4.46	15.583	4.18	21.67	1.67
3.500	1.81	9.583	4.46	15.667	4.18	21.75	1.67
3.583	1.81	9.667	4.46	15.750	4.18	21.83	1.67
3.667	1.81	9.750	4.46	15.833	4.18	21.92	1.67
3.750	1.81	9.833	5.02	15.917	4.18	22.00	1.67
3.833	1.81	9.917	5.02	16.000	4.18	22.08	1.67
3.917	1.81	10.000	5.02	16.083	4.18	22.17	1.67
4.000	1.81	10.083	5.02	16.167	4.18	22.25	1.67
4.083	1.81	10.167	5.02	16.250	4.18	22.33	1.67
4.167	1.81	10.250	5.02	16.333	2.51	22.42	1.67
4.250	1.81	10.333	6.42	16.417	2.51	22.50	1.67
4.333	2.23	10.417	6.42	16.500	2.51	22.58	1.67
4.417	2.23	10.500	6.42	16.583	2.51	22.67	1.67
4.500	2.23	10.583	6.42	16.667	2.51	22.75	1.67
4.583	2.23	10.667	6.42	16.750	2.51	22.83	1.67
4.667	2.23	10.750	6.42	16.833	2.51	22.92	1.67
4.750	2.23	10.833	8.65	16.917	2.51	23.00	1.67
4.833	2.23	10.917	8.65	17.000	2.51	23.08	1.67
4.917	2.23	11.000	8.65	17.083	2.51	23.17	1.67
5.000	2.23	11.083	8.65	17.167	2.51	23.25	1.67
5.083	2.23	11.167	8.65	17.250	2.51	23.33	1.67
5.167	2.23	11.250	8.65	17.333	2.51	23.42	1.67
5.250	2.23	11.333	13.39	17.417	2.51	23.50	1.67
5.333	2.23	11.417	13.39	17.500	2.51	23.58	1.67

5.417	2.23	11.500	13.39	17.583	2.51	23.67	1.67
5.500	2.23	11.583	13.39	17.667	2.51	23.75	1.67
5.583	2.23	11.667	13.39	17.750	2.51	23.83	1.67
5.667	2.23	11.750	13.39	17.833	2.51	23.92	1.67
5.750	2.23	11.833	41.28	17.917	2.51	24.00	1.67
5.833	2.23	11.917	41.29	18.000	2.51	24.08	1.67
5.917	2.23	12.000	41.29	18.083	2.51	24.17	1.67
6.000	2.23	12.083	170.71	18.167	2.51	24.25	1.67
6.083	2.23	12.167	170.72	18.250	2.51		

Unit Hyd Qpeak (cms)= 0.637

PEAK FLOW (cms)= 0.573 (i)
TIME TO PEAK (hrs)= 13.083
RUNOFF VOLUME (mm)= 45.247
TOTAL RAINFALL (mm)= 139.480
RUNOFF COEFFICIENT = 0.324

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0013)	Area (ha)=	1.70	Curve Number (CN)= 60.5
ID= 1 DT= 5.0 min	Ia (mm)=	9.65	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	0.40	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.23	12.250	170.72	18.33	2.51
0.167	0.00	6.250	2.23	12.333	20.10	18.42	2.51
0.250	0.00	6.333	2.51	12.417	20.09	18.50	2.51
0.333	1.53	6.417	2.51	12.500	20.09	18.58	2.51
0.417	1.53	6.500	2.51	12.583	20.09	18.67	2.51
0.500	1.53	6.583	2.51	12.667	20.09	18.75	2.51
0.583	1.53	6.667	2.51	12.750	20.09	18.83	2.51
0.667	1.53	6.750	2.51	12.833	10.32	18.92	2.51
0.750	1.53	6.833	2.51	12.917	10.32	19.00	2.51
0.833	1.53	6.917	2.51	13.000	10.32	19.08	2.51
0.917	1.53	7.000	2.51	13.083	10.32	19.17	2.51
1.000	1.53	7.083	2.51	13.167	10.32	19.25	2.51
1.083	1.53	7.167	2.51	13.250	10.32	19.33	2.51
1.167	1.53	7.250	2.51	13.333	7.53	19.42	2.51
1.250	1.53	7.333	3.07	13.417	7.53	19.50	2.51

1.333	1.53	7.417	3.07	13.500	7.53	19.58	2.51
1.417	1.53	7.500	3.07	13.583	7.53	19.67	2.51
1.500	1.53	7.583	3.07	13.667	7.53	19.75	2.51
1.583	1.53	7.667	3.07	13.750	7.53	19.83	2.51
1.667	1.53	7.750	3.07	13.833	5.86	19.92	2.51
1.750	1.53	7.833	3.07	13.917	5.86	20.00	2.51
1.833	1.53	7.917	3.07	14.000	5.86	20.08	2.51
1.917	1.53	8.000	3.07	14.083	5.86	20.17	2.51
2.000	1.53	8.083	3.07	14.167	5.86	20.25	2.51
2.083	1.53	8.167	3.07	14.250	5.86	20.33	1.67
2.167	1.53	8.250	3.07	14.333	4.18	20.42	1.67
2.250	1.53	8.333	3.63	14.417	4.18	20.50	1.67
2.333	1.81	8.417	3.63	14.500	4.18	20.58	1.67
2.417	1.81	8.500	3.63	14.583	4.18	20.67	1.67
2.500	1.81	8.583	3.63	14.667	4.18	20.75	1.67
2.583	1.81	8.667	3.63	14.750	4.18	20.83	1.67
2.667	1.81	8.750	3.63	14.833	4.18	20.92	1.67
2.750	1.81	8.833	3.91	14.917	4.18	21.00	1.67
2.833	1.81	8.917	3.91	15.000	4.18	21.08	1.67
2.917	1.81	9.000	3.91	15.083	4.18	21.17	1.67
3.000	1.81	9.083	3.91	15.167	4.18	21.25	1.67
3.083	1.81	9.167	3.91	15.250	4.18	21.33	1.67
3.167	1.81	9.250	3.91	15.333	4.18	21.42	1.67
3.250	1.81	9.333	4.46	15.417	4.18	21.50	1.67
3.333	1.81	9.417	4.46	15.500	4.18	21.58	1.67
3.417	1.81	9.500	4.46	15.583	4.18	21.67	1.67
3.500	1.81	9.583	4.46	15.667	4.18	21.75	1.67
3.583	1.81	9.667	4.46	15.750	4.18	21.83	1.67
3.667	1.81	9.750	4.46	15.833	4.18	21.92	1.67
3.750	1.81	9.833	5.02	15.917	4.18	22.00	1.67
3.833	1.81	9.917	5.02	16.000	4.18	22.08	1.67
3.917	1.81	10.000	5.02	16.083	4.18	22.17	1.67
4.000	1.81	10.083	5.02	16.167	4.18	22.25	1.67
4.083	1.81	10.167	5.02	16.250	4.18	22.33	1.67
4.167	1.81	10.250	5.02	16.333	2.51	22.42	1.67
4.250	1.81	10.333	6.42	16.417	2.51	22.50	1.67
4.333	2.23	10.417	6.42	16.500	2.51	22.58	1.67
4.417	2.23	10.500	6.42	16.583	2.51	22.67	1.67
4.500	2.23	10.583	6.42	16.667	2.51	22.75	1.67
4.583	2.23	10.667	6.42	16.750	2.51	22.83	1.67
4.667	2.23	10.750	6.42	16.833	2.51	22.92	1.67
4.750	2.23	10.833	8.65	16.917	2.51	23.00	1.67
4.833	2.23	10.917	8.65	17.000	2.51	23.08	1.67
4.917	2.23	11.000	8.65	17.083	2.51	23.17	1.67
5.000	2.23	11.083	8.65	17.167	2.51	23.25	1.67
5.083	2.23	11.167	8.65	17.250	2.51	23.33	1.67
5.167	2.23	11.250	8.65	17.333	2.51	23.42	1.67
5.250	2.23	11.333	13.39	17.417	2.51	23.50	1.67

5.333	2.23	11.417	13.39	17.500	2.51	23.58	1.67
5.417	2.23	11.500	13.39	17.583	2.51	23.67	1.67
5.500	2.23	11.583	13.39	17.667	2.51	23.75	1.67
5.583	2.23	11.667	13.39	17.750	2.51	23.83	1.67
5.667	2.23	11.750	13.39	17.833	2.51	23.92	1.67
5.750	2.23	11.833	41.28	17.917	2.51	24.00	1.67
5.833	2.23	11.917	41.29	18.000	2.51	24.08	1.67
5.917	2.23	12.000	41.29	18.083	2.51	24.17	1.67
6.000	2.23	12.083	170.71	18.167	2.51	24.25	1.67
6.083	2.23	12.167	170.72	18.250	2.51		

Unit Hyd Qpeak (cms)= 0.162

PEAK FLOW (cms)= 0.151 (i)
TIME TO PEAK (hrs)= 12.500
RUNOFF VOLUME (mm)= 56.949
TOTAL RAINFALL (mm)= 139.480
RUNOFF COEFFICIENT = 0.408

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0014)	Area (ha)= 1.80	Curve Number (CN)= 50.0	
ID= 1 DT= 5.0 min	Ia (mm)= 16.00	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.76		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.23	12.250	170.72	18.33	2.51
0.167	0.00	6.250	2.23	12.333	20.10	18.42	2.51
0.250	0.00	6.333	2.51	12.417	20.09	18.50	2.51
0.333	1.53	6.417	2.51	12.500	20.09	18.58	2.51
0.417	1.53	6.500	2.51	12.583	20.09	18.67	2.51
0.500	1.53	6.583	2.51	12.667	20.09	18.75	2.51
0.583	1.53	6.667	2.51	12.750	20.09	18.83	2.51
0.667	1.53	6.750	2.51	12.833	10.32	18.92	2.51
0.750	1.53	6.833	2.51	12.917	10.32	19.00	2.51
0.833	1.53	6.917	2.51	13.000	10.32	19.08	2.51
0.917	1.53	7.000	2.51	13.083	10.32	19.17	2.51
1.000	1.53	7.083	2.51	13.167	10.32	19.25	2.51
1.083	1.53	7.167	2.51	13.250	10.32	19.33	2.51
1.167	1.53	7.250	2.51	13.333	7.53	19.42	2.51

1.250	1.53	7.333	3.07	13.417	7.53	19.50	2.51
1.333	1.53	7.417	3.07	13.500	7.53	19.58	2.51
1.417	1.53	7.500	3.07	13.583	7.53	19.67	2.51
1.500	1.53	7.583	3.07	13.667	7.53	19.75	2.51
1.583	1.53	7.667	3.07	13.750	7.53	19.83	2.51
1.667	1.53	7.750	3.07	13.833	5.86	19.92	2.51
1.750	1.53	7.833	3.07	13.917	5.86	20.00	2.51
1.833	1.53	7.917	3.07	14.000	5.86	20.08	2.51
1.917	1.53	8.000	3.07	14.083	5.86	20.17	2.51
2.000	1.53	8.083	3.07	14.167	5.86	20.25	2.51
2.083	1.53	8.167	3.07	14.250	5.86	20.33	1.67
2.167	1.53	8.250	3.07	14.333	4.18	20.42	1.67
2.250	1.53	8.333	3.63	14.417	4.18	20.50	1.67
2.333	1.81	8.417	3.63	14.500	4.18	20.58	1.67
2.417	1.81	8.500	3.63	14.583	4.18	20.67	1.67
2.500	1.81	8.583	3.63	14.667	4.18	20.75	1.67
2.583	1.81	8.667	3.63	14.750	4.18	20.83	1.67
2.667	1.81	8.750	3.63	14.833	4.18	20.92	1.67
2.750	1.81	8.833	3.91	14.917	4.18	21.00	1.67
2.833	1.81	8.917	3.91	15.000	4.18	21.08	1.67
2.917	1.81	9.000	3.91	15.083	4.18	21.17	1.67
3.000	1.81	9.083	3.91	15.167	4.18	21.25	1.67
3.083	1.81	9.167	3.91	15.250	4.18	21.33	1.67
3.167	1.81	9.250	3.91	15.333	4.18	21.42	1.67
3.250	1.81	9.333	4.46	15.417	4.18	21.50	1.67
3.333	1.81	9.417	4.46	15.500	4.18	21.58	1.67
3.417	1.81	9.500	4.46	15.583	4.18	21.67	1.67
3.500	1.81	9.583	4.46	15.667	4.18	21.75	1.67
3.583	1.81	9.667	4.46	15.750	4.18	21.83	1.67
3.667	1.81	9.750	4.46	15.833	4.18	21.92	1.67
3.750	1.81	9.833	5.02	15.917	4.18	22.00	1.67
3.833	1.81	9.917	5.02	16.000	4.18	22.08	1.67
3.917	1.81	10.000	5.02	16.083	4.18	22.17	1.67
4.000	1.81	10.083	5.02	16.167	4.18	22.25	1.67
4.083	1.81	10.167	5.02	16.250	4.18	22.33	1.67
4.167	1.81	10.250	5.02	16.333	2.51	22.42	1.67
4.250	1.81	10.333	6.42	16.417	2.51	22.50	1.67
4.333	2.23	10.417	6.42	16.500	2.51	22.58	1.67
4.417	2.23	10.500	6.42	16.583	2.51	22.67	1.67
4.500	2.23	10.583	6.42	16.667	2.51	22.75	1.67
4.583	2.23	10.667	6.42	16.750	2.51	22.83	1.67
4.667	2.23	10.750	6.42	16.833	2.51	22.92	1.67
4.750	2.23	10.833	8.65	16.917	2.51	23.00	1.67
4.833	2.23	10.917	8.65	17.000	2.51	23.08	1.67
4.917	2.23	11.000	8.65	17.083	2.51	23.17	1.67
5.000	2.23	11.083	8.65	17.167	2.51	23.25	1.67
5.083	2.23	11.167	8.65	17.250	2.51	23.33	1.67
5.167	2.23	11.250	8.65	17.333	2.51	23.42	1.67

5.250	2.23	11.333	13.39	17.417	2.51	23.50	1.67
5.333	2.23	11.417	13.39	17.500	2.51	23.58	1.67
5.417	2.23	11.500	13.39	17.583	2.51	23.67	1.67
5.500	2.23	11.583	13.39	17.667	2.51	23.75	1.67
5.583	2.23	11.667	13.39	17.750	2.51	23.83	1.67
5.667	2.23	11.750	13.39	17.833	2.51	23.92	1.67
5.750	2.23	11.833	41.28	17.917	2.51	24.00	1.67
5.833	2.23	11.917	41.29	18.000	2.51	24.08	1.67
5.917	2.23	12.000	41.29	18.083	2.51	24.17	1.67
6.000	2.23	12.083	170.71	18.167	2.51	24.25	1.67
6.083	2.23	12.167	170.72	18.250	2.51		

Unit Hyd Qpeak (cms)= 0.090

PEAK FLOW (cms)= 0.069 (i)
TIME TO PEAK (hrs)= 13.000
RUNOFF VOLUME (mm)= 40.391
TOTAL RAINFALL (mm)= 139.480
RUNOFF COEFFICIENT = 0.290

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	
NASHYD (0015)	Area (ha)= 6.70 Curve Number (CN)= 60.0
ID= 1 DT= 5.0 min	Ia (mm)= 10.00 # of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 1.45

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.23	12.250	170.72	18.33	2.51
0.167	0.00	6.250	2.23	12.333	20.10	18.42	2.51
0.250	0.00	6.333	2.51	12.417	20.09	18.50	2.51
0.333	1.53	6.417	2.51	12.500	20.09	18.58	2.51
0.417	1.53	6.500	2.51	12.583	20.09	18.67	2.51
0.500	1.53	6.583	2.51	12.667	20.09	18.75	2.51
0.583	1.53	6.667	2.51	12.750	20.09	18.83	2.51
0.667	1.53	6.750	2.51	12.833	10.32	18.92	2.51
0.750	1.53	6.833	2.51	12.917	10.32	19.00	2.51
0.833	1.53	6.917	2.51	13.000	10.32	19.08	2.51
0.917	1.53	7.000	2.51	13.083	10.32	19.17	2.51
1.000	1.53	7.083	2.51	13.167	10.32	19.25	2.51
1.083	1.53	7.167	2.51	13.250	10.32	19.33	2.51

1.167	1.53	7.250	2.51	13.333	7.53	19.42	2.51
1.250	1.53	7.333	3.07	13.417	7.53	19.50	2.51
1.333	1.53	7.417	3.07	13.500	7.53	19.58	2.51
1.417	1.53	7.500	3.07	13.583	7.53	19.67	2.51
1.500	1.53	7.583	3.07	13.667	7.53	19.75	2.51
1.583	1.53	7.667	3.07	13.750	7.53	19.83	2.51
1.667	1.53	7.750	3.07	13.833	5.86	19.92	2.51
1.750	1.53	7.833	3.07	13.917	5.86	20.00	2.51
1.833	1.53	7.917	3.07	14.000	5.86	20.08	2.51
1.917	1.53	8.000	3.07	14.083	5.86	20.17	2.51
2.000	1.53	8.083	3.07	14.167	5.86	20.25	2.51
2.083	1.53	8.167	3.07	14.250	5.86	20.33	1.67
2.167	1.53	8.250	3.07	14.333	4.18	20.42	1.67
2.250	1.53	8.333	3.63	14.417	4.18	20.50	1.67
2.333	1.81	8.417	3.63	14.500	4.18	20.58	1.67
2.417	1.81	8.500	3.63	14.583	4.18	20.67	1.67
2.500	1.81	8.583	3.63	14.667	4.18	20.75	1.67
2.583	1.81	8.667	3.63	14.750	4.18	20.83	1.67
2.667	1.81	8.750	3.63	14.833	4.18	20.92	1.67
2.750	1.81	8.833	3.91	14.917	4.18	21.00	1.67
2.833	1.81	8.917	3.91	15.000	4.18	21.08	1.67
2.917	1.81	9.000	3.91	15.083	4.18	21.17	1.67
3.000	1.81	9.083	3.91	15.167	4.18	21.25	1.67
3.083	1.81	9.167	3.91	15.250	4.18	21.33	1.67
3.167	1.81	9.250	3.91	15.333	4.18	21.42	1.67
3.250	1.81	9.333	4.46	15.417	4.18	21.50	1.67
3.333	1.81	9.417	4.46	15.500	4.18	21.58	1.67
3.417	1.81	9.500	4.46	15.583	4.18	21.67	1.67
3.500	1.81	9.583	4.46	15.667	4.18	21.75	1.67
3.583	1.81	9.667	4.46	15.750	4.18	21.83	1.67
3.667	1.81	9.750	4.46	15.833	4.18	21.92	1.67
3.750	1.81	9.833	5.02	15.917	4.18	22.00	1.67
3.833	1.81	9.917	5.02	16.000	4.18	22.08	1.67
3.917	1.81	10.000	5.02	16.083	4.18	22.17	1.67
4.000	1.81	10.083	5.02	16.167	4.18	22.25	1.67
4.083	1.81	10.167	5.02	16.250	4.18	22.33	1.67
4.167	1.81	10.250	5.02	16.333	2.51	22.42	1.67
4.250	1.81	10.333	6.42	16.417	2.51	22.50	1.67
4.333	2.23	10.417	6.42	16.500	2.51	22.58	1.67
4.417	2.23	10.500	6.42	16.583	2.51	22.67	1.67
4.500	2.23	10.583	6.42	16.667	2.51	22.75	1.67
4.583	2.23	10.667	6.42	16.750	2.51	22.83	1.67
4.667	2.23	10.750	6.42	16.833	2.51	22.92	1.67
4.750	2.23	10.833	8.65	16.917	2.51	23.00	1.67
4.833	2.23	10.917	8.65	17.000	2.51	23.08	1.67
4.917	2.23	11.000	8.65	17.083	2.51	23.17	1.67
5.000	2.23	11.083	8.65	17.167	2.51	23.25	1.67
5.083	2.23	11.167	8.65	17.250	2.51	23.33	1.67

5.167	2.23	11.250	8.65	17.333	2.51	23.42	1.67
5.250	2.23	11.333	13.39	17.417	2.51	23.50	1.67
5.333	2.23	11.417	13.39	17.500	2.51	23.58	1.67
5.417	2.23	11.500	13.39	17.583	2.51	23.67	1.67
5.500	2.23	11.583	13.39	17.667	2.51	23.75	1.67
5.583	2.23	11.667	13.39	17.750	2.51	23.83	1.67
5.667	2.23	11.750	13.39	17.833	2.51	23.92	1.67
5.750	2.23	11.833	41.28	17.917	2.51	24.00	1.67
5.833	2.23	11.917	41.29	18.000	2.51	24.08	1.67
5.917	2.23	12.000	41.29	18.083	2.51	24.17	1.67
6.000	2.23	12.083	170.71	18.167	2.51	24.25	1.67
6.083	2.23	12.167	170.72	18.250	2.51		

Unit Hyd Qpeak (cms)= 0.176

PEAK FLOW (cms)= 0.226 (i)
TIME TO PEAK (hrs)= 13.750
RUNOFF VOLUME (mm)= 56.105
TOTAL RAINFALL (mm)= 139.480
RUNOFF COEFFICIENT = 0.402

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0016)	Area (ha)= 29.16	Curve Number (CN)= 71.4	
ID= 1 DT= 5.0 min	Ia (mm)= 7.88	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.68		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.23	12.250	170.72	18.33	2.51
0.167	0.00	6.250	2.23	12.333	20.10	18.42	2.51
0.250	0.00	6.333	2.51	12.417	20.09	18.50	2.51
0.333	1.53	6.417	2.51	12.500	20.09	18.58	2.51
0.417	1.53	6.500	2.51	12.583	20.09	18.67	2.51
0.500	1.53	6.583	2.51	12.667	20.09	18.75	2.51
0.583	1.53	6.667	2.51	12.750	20.09	18.83	2.51
0.667	1.53	6.750	2.51	12.833	10.32	18.92	2.51
0.750	1.53	6.833	2.51	12.917	10.32	19.00	2.51
0.833	1.53	6.917	2.51	13.000	10.32	19.08	2.51
0.917	1.53	7.000	2.51	13.083	10.32	19.17	2.51
1.000	1.53	7.083	2.51	13.167	10.32	19.25	2.51

1.083	1.53	7.167	2.51	13.250	10.32	19.33	2.51
1.167	1.53	7.250	2.51	13.333	7.53	19.42	2.51
1.250	1.53	7.333	3.07	13.417	7.53	19.50	2.51
1.333	1.53	7.417	3.07	13.500	7.53	19.58	2.51
1.417	1.53	7.500	3.07	13.583	7.53	19.67	2.51
1.500	1.53	7.583	3.07	13.667	7.53	19.75	2.51
1.583	1.53	7.667	3.07	13.750	7.53	19.83	2.51
1.667	1.53	7.750	3.07	13.833	5.86	19.92	2.51
1.750	1.53	7.833	3.07	13.917	5.86	20.00	2.51
1.833	1.53	7.917	3.07	14.000	5.86	20.08	2.51
1.917	1.53	8.000	3.07	14.083	5.86	20.17	2.51
2.000	1.53	8.083	3.07	14.167	5.86	20.25	2.51
2.083	1.53	8.167	3.07	14.250	5.86	20.33	1.67
2.167	1.53	8.250	3.07	14.333	4.18	20.42	1.67
2.250	1.53	8.333	3.63	14.417	4.18	20.50	1.67
2.333	1.81	8.417	3.63	14.500	4.18	20.58	1.67
2.417	1.81	8.500	3.63	14.583	4.18	20.67	1.67
2.500	1.81	8.583	3.63	14.667	4.18	20.75	1.67
2.583	1.81	8.667	3.63	14.750	4.18	20.83	1.67
2.667	1.81	8.750	3.63	14.833	4.18	20.92	1.67
2.750	1.81	8.833	3.91	14.917	4.18	21.00	1.67
2.833	1.81	8.917	3.91	15.000	4.18	21.08	1.67
2.917	1.81	9.000	3.91	15.083	4.18	21.17	1.67
3.000	1.81	9.083	3.91	15.167	4.18	21.25	1.67
3.083	1.81	9.167	3.91	15.250	4.18	21.33	1.67
3.167	1.81	9.250	3.91	15.333	4.18	21.42	1.67
3.250	1.81	9.333	4.46	15.417	4.18	21.50	1.67
3.333	1.81	9.417	4.46	15.500	4.18	21.58	1.67
3.417	1.81	9.500	4.46	15.583	4.18	21.67	1.67
3.500	1.81	9.583	4.46	15.667	4.18	21.75	1.67
3.583	1.81	9.667	4.46	15.750	4.18	21.83	1.67
3.667	1.81	9.750	4.46	15.833	4.18	21.92	1.67
3.750	1.81	9.833	5.02	15.917	4.18	22.00	1.67
3.833	1.81	9.917	5.02	16.000	4.18	22.08	1.67
3.917	1.81	10.000	5.02	16.083	4.18	22.17	1.67
4.000	1.81	10.083	5.02	16.167	4.18	22.25	1.67
4.083	1.81	10.167	5.02	16.250	4.18	22.33	1.67
4.167	1.81	10.250	5.02	16.333	2.51	22.42	1.67
4.250	1.81	10.333	6.42	16.417	2.51	22.50	1.67
4.333	2.23	10.417	6.42	16.500	2.51	22.58	1.67
4.417	2.23	10.500	6.42	16.583	2.51	22.67	1.67
4.500	2.23	10.583	6.42	16.667	2.51	22.75	1.67
4.583	2.23	10.667	6.42	16.750	2.51	22.83	1.67
4.667	2.23	10.750	6.42	16.833	2.51	22.92	1.67
4.750	2.23	10.833	8.65	16.917	2.51	23.00	1.67
4.833	2.23	10.917	8.65	17.000	2.51	23.08	1.67
4.917	2.23	11.000	8.65	17.083	2.51	23.17	1.67
5.000	2.23	11.083	8.65	17.167	2.51	23.25	1.67

5.083	2.23	11.167	8.65	17.250	2.51	23.33	1.67
5.167	2.23	11.250	8.65	17.333	2.51	23.42	1.67
5.250	2.23	11.333	13.39	17.417	2.51	23.50	1.67
5.333	2.23	11.417	13.39	17.500	2.51	23.58	1.67
5.417	2.23	11.500	13.39	17.583	2.51	23.67	1.67
5.500	2.23	11.583	13.39	17.667	2.51	23.75	1.67
5.583	2.23	11.667	13.39	17.750	2.51	23.83	1.67
5.667	2.23	11.750	13.39	17.833	2.51	23.92	1.67
5.750	2.23	11.833	41.28	17.917	2.51	24.00	1.67
5.833	2.23	11.917	41.29	18.000	2.51	24.08	1.67
5.917	2.23	12.000	41.29	18.083	2.51	24.17	1.67
6.000	2.23	12.083	170.71	18.167	2.51	24.25	1.67
6.083	2.23	12.167	170.72	18.250	2.51		

Unit Hyd Qpeak (cms)= 1.638

PEAK FLOW (cms)= 2.359 (i)
TIME TO PEAK (hrs)= 12.833
RUNOFF VOLUME (mm)= 74.218
TOTAL RAINFALL (mm)= 139.480
RUNOFF COEFFICIENT = 0.532

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0019)	Area (ha)= 39.68	Curve Number (CN)= 60.7	
ID= 1 DT= 5.0 min	Ia (mm)= 8.26	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 1.18		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.23	12.250	170.72	18.33	2.51
0.167	0.00	6.250	2.23	12.333	20.10	18.42	2.51
0.250	0.00	6.333	2.51	12.417	20.09	18.50	2.51
0.333	1.53	6.417	2.51	12.500	20.09	18.58	2.51
0.417	1.53	6.500	2.51	12.583	20.09	18.67	2.51
0.500	1.53	6.583	2.51	12.667	20.09	18.75	2.51
0.583	1.53	6.667	2.51	12.750	20.09	18.83	2.51
0.667	1.53	6.750	2.51	12.833	10.32	18.92	2.51
0.750	1.53	6.833	2.51	12.917	10.32	19.00	2.51
0.833	1.53	6.917	2.51	13.000	10.32	19.08	2.51
0.917	1.53	7.000	2.51	13.083	10.32	19.17	2.51

1.000	1.53	7.083	2.51	13.167	10.32	19.25	2.51
1.083	1.53	7.167	2.51	13.250	10.32	19.33	2.51
1.167	1.53	7.250	2.51	13.333	7.53	19.42	2.51
1.250	1.53	7.333	3.07	13.417	7.53	19.50	2.51
1.333	1.53	7.417	3.07	13.500	7.53	19.58	2.51
1.417	1.53	7.500	3.07	13.583	7.53	19.67	2.51
1.500	1.53	7.583	3.07	13.667	7.53	19.75	2.51
1.583	1.53	7.667	3.07	13.750	7.53	19.83	2.51
1.667	1.53	7.750	3.07	13.833	5.86	19.92	2.51
1.750	1.53	7.833	3.07	13.917	5.86	20.00	2.51
1.833	1.53	7.917	3.07	14.000	5.86	20.08	2.51
1.917	1.53	8.000	3.07	14.083	5.86	20.17	2.51
2.000	1.53	8.083	3.07	14.167	5.86	20.25	2.51
2.083	1.53	8.167	3.07	14.250	5.86	20.33	1.67
2.167	1.53	8.250	3.07	14.333	4.18	20.42	1.67
2.250	1.53	8.333	3.63	14.417	4.18	20.50	1.67
2.333	1.81	8.417	3.63	14.500	4.18	20.58	1.67
2.417	1.81	8.500	3.63	14.583	4.18	20.67	1.67
2.500	1.81	8.583	3.63	14.667	4.18	20.75	1.67
2.583	1.81	8.667	3.63	14.750	4.18	20.83	1.67
2.667	1.81	8.750	3.63	14.833	4.18	20.92	1.67
2.750	1.81	8.833	3.91	14.917	4.18	21.00	1.67
2.833	1.81	8.917	3.91	15.000	4.18	21.08	1.67
2.917	1.81	9.000	3.91	15.083	4.18	21.17	1.67
3.000	1.81	9.083	3.91	15.167	4.18	21.25	1.67
3.083	1.81	9.167	3.91	15.250	4.18	21.33	1.67
3.167	1.81	9.250	3.91	15.333	4.18	21.42	1.67
3.250	1.81	9.333	4.46	15.417	4.18	21.50	1.67
3.333	1.81	9.417	4.46	15.500	4.18	21.58	1.67
3.417	1.81	9.500	4.46	15.583	4.18	21.67	1.67
3.500	1.81	9.583	4.46	15.667	4.18	21.75	1.67
3.583	1.81	9.667	4.46	15.750	4.18	21.83	1.67
3.667	1.81	9.750	4.46	15.833	4.18	21.92	1.67
3.750	1.81	9.833	5.02	15.917	4.18	22.00	1.67
3.833	1.81	9.917	5.02	16.000	4.18	22.08	1.67
3.917	1.81	10.000	5.02	16.083	4.18	22.17	1.67
4.000	1.81	10.083	5.02	16.167	4.18	22.25	1.67
4.083	1.81	10.167	5.02	16.250	4.18	22.33	1.67
4.167	1.81	10.250	5.02	16.333	2.51	22.42	1.67
4.250	1.81	10.333	6.42	16.417	2.51	22.50	1.67
4.333	2.23	10.417	6.42	16.500	2.51	22.58	1.67
4.417	2.23	10.500	6.42	16.583	2.51	22.67	1.67
4.500	2.23	10.583	6.42	16.667	2.51	22.75	1.67
4.583	2.23	10.667	6.42	16.750	2.51	22.83	1.67
4.667	2.23	10.750	6.42	16.833	2.51	22.92	1.67
4.750	2.23	10.833	8.65	16.917	2.51	23.00	1.67
4.833	2.23	10.917	8.65	17.000	2.51	23.08	1.67
4.917	2.23	11.000	8.65	17.083	2.51	23.17	1.67

5.000	2.23	11.083	8.65	17.167	2.51	23.25	1.67
5.083	2.23	11.167	8.65	17.250	2.51	23.33	1.67
5.167	2.23	11.250	8.65	17.333	2.51	23.42	1.67
5.250	2.23	11.333	13.39	17.417	2.51	23.50	1.67
5.333	2.23	11.417	13.39	17.500	2.51	23.58	1.67
5.417	2.23	11.500	13.39	17.583	2.51	23.67	1.67
5.500	2.23	11.583	13.39	17.667	2.51	23.75	1.67
5.583	2.23	11.667	13.39	17.750	2.51	23.83	1.67
5.667	2.23	11.750	13.39	17.833	2.51	23.92	1.67
5.750	2.23	11.833	41.28	17.917	2.51	24.00	1.67
5.833	2.23	11.917	41.29	18.000	2.51	24.08	1.67
5.917	2.23	12.000	41.29	18.083	2.51	24.17	1.67
6.000	2.23	12.083	170.71	18.167	2.51	24.25	1.67
6.083	2.23	12.167	170.72	18.250	2.51		

Unit Hyd Qpeak (cms)= 1.284

PEAK FLOW (cms)= 1.624 (i)
TIME TO PEAK (hrs)= 13.417
RUNOFF VOLUME (mm)= 58.195
TOTAL RAINFALL (mm)= 139.480
RUNOFF COEFFICIENT = 0.417

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0024)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0010):		14.85	0.573	13.08	45.25
+ ID2= 2 (0013):		1.70	0.151	12.50	56.95
ID = 3 (0024):		16.55	0.660	13.00	46.45

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0024):		16.55	0.660	13.00	46.45
+ ID2= 2 (0014):		1.80	0.069	13.00	40.39
ID = 1 (0024):		18.35	0.729	13.00	45.85

Post-Development VO Output

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
	ID1= 1 (0024):	18.35	0.729	13.00	45.85
	+ ID2= 2 (0015):	6.70	0.226	13.75	56.10
	ID = 3 (0024):	25.05	0.909	13.08	48.60

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
	ID1= 3 (0024):	25.05	0.909	13.08	48.60
	+ ID2= 2 (0016):	29.16	2.359	12.83	74.22
	ID = 1 (0024):	54.21	3.231	12.92	62.38

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
	ID1= 1 (0024):	54.21	3.231	12.92	62.38
	+ ID2= 2 (0019):	39.68	1.624	13.42	58.19
	ID = 3 (0024):	93.89	4.641	13.00	60.61

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
	ID1= 3 (0024):	93.89	4.641	13.00	60.61
	+ ID2= 2 (0007):	100.92	2.776	14.08	52.21
	ID = 1 (0024):	194.81	6.739	13.25	56.26

Post-Development VO Output

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
	ID1= 1 (0024):	194.81	6.739	13.25	56.26
	+ ID2= 2 (0008):	23.99	0.705	13.25	37.33
	ID = 3 (0024):	218.80	7.444	13.25	54.18

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
	ID1= 3 (0024):	218.80	7.444	13.25	54.18
	+ ID2= 2 (0009):	6.37	0.247	13.00	41.09
	ID = 1 (0024):	225.17	7.676	13.25	53.81

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB				
NASHYD (0011)	Area (ha)= 46.28	Curve Number (CN)= 72.2		
ID= 1 DT= 5.0 min	Ia (mm)= 7.09	# of Linear Res.(N)= 3.00		
	U.H. Tp(hrs)= 0.30			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.23	12.250	170.72	18.33	2.51
0.167	0.00	6.250	2.23	12.333	20.10	18.42	2.51
0.250	0.00	6.333	2.51	12.417	20.09	18.50	2.51
0.333	1.53	6.417	2.51	12.500	20.09	18.58	2.51
0.417	1.53	6.500	2.51	12.583	20.09	18.67	2.51
0.500	1.53	6.583	2.51	12.667	20.09	18.75	2.51
0.583	1.53	6.667	2.51	12.750	20.09	18.83	2.51
0.667	1.53	6.750	2.51	12.833	10.32	18.92	2.51
0.750	1.53	6.833	2.51	12.917	10.32	19.00	2.51
0.833	1.53	6.917	2.51	13.000	10.32	19.08	2.51

0.917	1.53	7.000	2.51	13.083	10.32	19.17	2.51
1.000	1.53	7.083	2.51	13.167	10.32	19.25	2.51
1.083	1.53	7.167	2.51	13.250	10.32	19.33	2.51
1.167	1.53	7.250	2.51	13.333	7.53	19.42	2.51
1.250	1.53	7.333	3.07	13.417	7.53	19.50	2.51
1.333	1.53	7.417	3.07	13.500	7.53	19.58	2.51
1.417	1.53	7.500	3.07	13.583	7.53	19.67	2.51
1.500	1.53	7.583	3.07	13.667	7.53	19.75	2.51
1.583	1.53	7.667	3.07	13.750	7.53	19.83	2.51
1.667	1.53	7.750	3.07	13.833	5.86	19.92	2.51
1.750	1.53	7.833	3.07	13.917	5.86	20.00	2.51
1.833	1.53	7.917	3.07	14.000	5.86	20.08	2.51
1.917	1.53	8.000	3.07	14.083	5.86	20.17	2.51
2.000	1.53	8.083	3.07	14.167	5.86	20.25	2.51
2.083	1.53	8.167	3.07	14.250	5.86	20.33	1.67
2.167	1.53	8.250	3.07	14.333	4.18	20.42	1.67
2.250	1.53	8.333	3.63	14.417	4.18	20.50	1.67
2.333	1.81	8.417	3.63	14.500	4.18	20.58	1.67
2.417	1.81	8.500	3.63	14.583	4.18	20.67	1.67
2.500	1.81	8.583	3.63	14.667	4.18	20.75	1.67
2.583	1.81	8.667	3.63	14.750	4.18	20.83	1.67
2.667	1.81	8.750	3.63	14.833	4.18	20.92	1.67
2.750	1.81	8.833	3.91	14.917	4.18	21.00	1.67
2.833	1.81	8.917	3.91	15.000	4.18	21.08	1.67
2.917	1.81	9.000	3.91	15.083	4.18	21.17	1.67
3.000	1.81	9.083	3.91	15.167	4.18	21.25	1.67
3.083	1.81	9.167	3.91	15.250	4.18	21.33	1.67
3.167	1.81	9.250	3.91	15.333	4.18	21.42	1.67
3.250	1.81	9.333	4.46	15.417	4.18	21.50	1.67
3.333	1.81	9.417	4.46	15.500	4.18	21.58	1.67
3.417	1.81	9.500	4.46	15.583	4.18	21.67	1.67
3.500	1.81	9.583	4.46	15.667	4.18	21.75	1.67
3.583	1.81	9.667	4.46	15.750	4.18	21.83	1.67
3.667	1.81	9.750	4.46	15.833	4.18	21.92	1.67
3.750	1.81	9.833	5.02	15.917	4.18	22.00	1.67
3.833	1.81	9.917	5.02	16.000	4.18	22.08	1.67
3.917	1.81	10.000	5.02	16.083	4.18	22.17	1.67
4.000	1.81	10.083	5.02	16.167	4.18	22.25	1.67
4.083	1.81	10.167	5.02	16.250	4.18	22.33	1.67
4.167	1.81	10.250	5.02	16.333	2.51	22.42	1.67
4.250	1.81	10.333	6.42	16.417	2.51	22.50	1.67
4.333	2.23	10.417	6.42	16.500	2.51	22.58	1.67
4.417	2.23	10.500	6.42	16.583	2.51	22.67	1.67
4.500	2.23	10.583	6.42	16.667	2.51	22.75	1.67
4.583	2.23	10.667	6.42	16.750	2.51	22.83	1.67
4.667	2.23	10.750	6.42	16.833	2.51	22.92	1.67
4.750	2.23	10.833	8.65	16.917	2.51	23.00	1.67
4.833	2.23	10.917	8.65	17.000	2.51	23.08	1.67

4.917	2.23	11.000	8.65	17.083	2.51	23.17	1.67
5.000	2.23	11.083	8.65	17.167	2.51	23.25	1.67
5.083	2.23	11.167	8.65	17.250	2.51	23.33	1.67
5.167	2.23	11.250	8.65	17.333	2.51	23.42	1.67
5.250	2.23	11.333	13.39	17.417	2.51	23.50	1.67
5.333	2.23	11.417	13.39	17.500	2.51	23.58	1.67
5.417	2.23	11.500	13.39	17.583	2.51	23.67	1.67
5.500	2.23	11.583	13.39	17.667	2.51	23.75	1.67
5.583	2.23	11.667	13.39	17.750	2.51	23.83	1.67
5.667	2.23	11.750	13.39	17.833	2.51	23.92	1.67
5.750	2.23	11.833	41.28	17.917	2.51	24.00	1.67
5.833	2.23	11.917	41.29	18.000	2.51	24.08	1.67
5.917	2.23	12.000	41.29	18.083	2.51	24.17	1.67
6.000	2.23	12.083	170.71	18.167	2.51	24.25	1.67
6.083	2.23	12.167	170.72	18.250	2.51		

Unit Hyd Qpeak (cms)= 5.892

PEAK FLOW (cms)= 6.985 (i)
TIME TO PEAK (hrs)= 12.417
RUNOFF VOLUME (mm)= 76.096
TOTAL RAINFALL (mm)= 139.480
RUNOFF COEFFICIENT = 0.546

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB NASHYD (0012) ID= 1 DT= 5.0 min	Area (ha)=	1.13	Curve Number (CN)= 67.4
	Ia (mm)=	7.88	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	0.43	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.23	12.250	170.72	18.33	2.51
0.167	0.00	6.250	2.23	12.333	20.10	18.42	2.51
0.250	0.00	6.333	2.51	12.417	20.09	18.50	2.51
0.333	1.53	6.417	2.51	12.500	20.09	18.58	2.51
0.417	1.53	6.500	2.51	12.583	20.09	18.67	2.51
0.500	1.53	6.583	2.51	12.667	20.09	18.75	2.51
0.583	1.53	6.667	2.51	12.750	20.09	18.83	2.51
0.667	1.53	6.750	2.51	12.833	10.32	18.92	2.51
0.750	1.53	6.833	2.51	12.917	10.32	19.00	2.51

0.833	1.53	6.917	2.51	13.000	10.32	19.08	2.51
0.917	1.53	7.000	2.51	13.083	10.32	19.17	2.51
1.000	1.53	7.083	2.51	13.167	10.32	19.25	2.51
1.083	1.53	7.167	2.51	13.250	10.32	19.33	2.51
1.167	1.53	7.250	2.51	13.333	7.53	19.42	2.51
1.250	1.53	7.333	3.07	13.417	7.53	19.50	2.51
1.333	1.53	7.417	3.07	13.500	7.53	19.58	2.51
1.417	1.53	7.500	3.07	13.583	7.53	19.67	2.51
1.500	1.53	7.583	3.07	13.667	7.53	19.75	2.51
1.583	1.53	7.667	3.07	13.750	7.53	19.83	2.51
1.667	1.53	7.750	3.07	13.833	5.86	19.92	2.51
1.750	1.53	7.833	3.07	13.917	5.86	20.00	2.51
1.833	1.53	7.917	3.07	14.000	5.86	20.08	2.51
1.917	1.53	8.000	3.07	14.083	5.86	20.17	2.51
2.000	1.53	8.083	3.07	14.167	5.86	20.25	2.51
2.083	1.53	8.167	3.07	14.250	5.86	20.33	1.67
2.167	1.53	8.250	3.07	14.333	4.18	20.42	1.67
2.250	1.53	8.333	3.63	14.417	4.18	20.50	1.67
2.333	1.81	8.417	3.63	14.500	4.18	20.58	1.67
2.417	1.81	8.500	3.63	14.583	4.18	20.67	1.67
2.500	1.81	8.583	3.63	14.667	4.18	20.75	1.67
2.583	1.81	8.667	3.63	14.750	4.18	20.83	1.67
2.667	1.81	8.750	3.63	14.833	4.18	20.92	1.67
2.750	1.81	8.833	3.91	14.917	4.18	21.00	1.67
2.833	1.81	8.917	3.91	15.000	4.18	21.08	1.67
2.917	1.81	9.000	3.91	15.083	4.18	21.17	1.67
3.000	1.81	9.083	3.91	15.167	4.18	21.25	1.67
3.083	1.81	9.167	3.91	15.250	4.18	21.33	1.67
3.167	1.81	9.250	3.91	15.333	4.18	21.42	1.67
3.250	1.81	9.333	4.46	15.417	4.18	21.50	1.67
3.333	1.81	9.417	4.46	15.500	4.18	21.58	1.67
3.417	1.81	9.500	4.46	15.583	4.18	21.67	1.67
3.500	1.81	9.583	4.46	15.667	4.18	21.75	1.67
3.583	1.81	9.667	4.46	15.750	4.18	21.83	1.67
3.667	1.81	9.750	4.46	15.833	4.18	21.92	1.67
3.750	1.81	9.833	5.02	15.917	4.18	22.00	1.67
3.833	1.81	9.917	5.02	16.000	4.18	22.08	1.67
3.917	1.81	10.000	5.02	16.083	4.18	22.17	1.67
4.000	1.81	10.083	5.02	16.167	4.18	22.25	1.67
4.083	1.81	10.167	5.02	16.250	4.18	22.33	1.67
4.167	1.81	10.250	5.02	16.333	2.51	22.42	1.67
4.250	1.81	10.333	6.42	16.417	2.51	22.50	1.67
4.333	2.23	10.417	6.42	16.500	2.51	22.58	1.67
4.417	2.23	10.500	6.42	16.583	2.51	22.67	1.67
4.500	2.23	10.583	6.42	16.667	2.51	22.75	1.67
4.583	2.23	10.667	6.42	16.750	2.51	22.83	1.67
4.667	2.23	10.750	6.42	16.833	2.51	22.92	1.67
4.750	2.23	10.833	8.65	16.917	2.51	23.00	1.67

4.833	2.23	10.917	8.65	17.000	2.51	23.08	1.67
4.917	2.23	11.000	8.65	17.083	2.51	23.17	1.67
5.000	2.23	11.083	8.65	17.167	2.51	23.25	1.67
5.083	2.23	11.167	8.65	17.250	2.51	23.33	1.67
5.167	2.23	11.250	8.65	17.333	2.51	23.42	1.67
5.250	2.23	11.333	13.39	17.417	2.51	23.50	1.67
5.333	2.23	11.417	13.39	17.500	2.51	23.58	1.67
5.417	2.23	11.500	13.39	17.583	2.51	23.67	1.67
5.500	2.23	11.583	13.39	17.667	2.51	23.75	1.67
5.583	2.23	11.667	13.39	17.750	2.51	23.83	1.67
5.667	2.23	11.750	13.39	17.833	2.51	23.92	1.67
5.750	2.23	11.833	41.28	17.917	2.51	24.00	1.67
5.833	2.23	11.917	41.29	18.000	2.51	24.08	1.67
5.917	2.23	12.000	41.29	18.083	2.51	24.17	1.67
6.000	2.23	12.083	170.71	18.167	2.51	24.25	1.67
6.083	2.23	12.167	170.72	18.250	2.51		

Unit Hyd Qpeak (cms)= 0.100

PEAK FLOW (cms)= 0.116 (i)
TIME TO PEAK (hrs)= 12.583
RUNOFF VOLUME (mm)= 67.994
TOTAL RAINFALL (mm)= 139.480
RUNOFF COEFFICIENT = 0.487

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	
STANDHYD (0043)	Area (ha)= 0.13
ID= 1 DT= 5.0 min	Total Imp(%)= 30.77 Dir. Conn.(%)= 7.69

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.04	0.09
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	0.50
Length	(m)=	29.44	70.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.23	12.250	170.72	18.33	2.51
0.167	0.00	6.250	2.23	12.333	20.10	18.42	2.51

0.250	0.00	6.333	2.51	12.417	20.09	18.50	2.51
0.333	1.53	6.417	2.51	12.500	20.09	18.58	2.51
0.417	1.53	6.500	2.51	12.583	20.09	18.67	2.51
0.500	1.53	6.583	2.51	12.667	20.09	18.75	2.51
0.583	1.53	6.667	2.51	12.750	20.09	18.83	2.51
0.667	1.53	6.750	2.51	12.833	10.32	18.92	2.51
0.750	1.53	6.833	2.51	12.917	10.32	19.00	2.51
0.833	1.53	6.917	2.51	13.000	10.32	19.08	2.51
0.917	1.53	7.000	2.51	13.083	10.32	19.17	2.51
1.000	1.53	7.083	2.51	13.167	10.32	19.25	2.51
1.083	1.53	7.167	2.51	13.250	10.32	19.33	2.51
1.167	1.53	7.250	2.51	13.333	7.53	19.42	2.51
1.250	1.53	7.333	3.07	13.417	7.53	19.50	2.51
1.333	1.53	7.417	3.07	13.500	7.53	19.58	2.51
1.417	1.53	7.500	3.07	13.583	7.53	19.67	2.51
1.500	1.53	7.583	3.07	13.667	7.53	19.75	2.51
1.583	1.53	7.667	3.07	13.750	7.53	19.83	2.51
1.667	1.53	7.750	3.07	13.833	5.86	19.92	2.51
1.750	1.53	7.833	3.07	13.917	5.86	20.00	2.51
1.833	1.53	7.917	3.07	14.000	5.86	20.08	2.51
1.917	1.53	8.000	3.07	14.083	5.86	20.17	2.51
2.000	1.53	8.083	3.07	14.167	5.86	20.25	2.51
2.083	1.53	8.167	3.07	14.250	5.86	20.33	1.67
2.167	1.53	8.250	3.07	14.333	4.18	20.42	1.67
2.250	1.53	8.333	3.63	14.417	4.18	20.50	1.67
2.333	1.81	8.417	3.63	14.500	4.18	20.58	1.67
2.417	1.81	8.500	3.63	14.583	4.18	20.67	1.67
2.500	1.81	8.583	3.63	14.667	4.18	20.75	1.67
2.583	1.81	8.667	3.63	14.750	4.18	20.83	1.67
2.667	1.81	8.750	3.63	14.833	4.18	20.92	1.67
2.750	1.81	8.833	3.91	14.917	4.18	21.00	1.67
2.833	1.81	8.917	3.91	15.000	4.18	21.08	1.67
2.917	1.81	9.000	3.91	15.083	4.18	21.17	1.67
3.000	1.81	9.083	3.91	15.167	4.18	21.25	1.67
3.083	1.81	9.167	3.91	15.250	4.18	21.33	1.67
3.167	1.81	9.250	3.91	15.333	4.18	21.42	1.67
3.250	1.81	9.333	4.46	15.417	4.18	21.50	1.67
3.333	1.81	9.417	4.46	15.500	4.18	21.58	1.67
3.417	1.81	9.500	4.46	15.583	4.18	21.67	1.67
3.500	1.81	9.583	4.46	15.667	4.18	21.75	1.67
3.583	1.81	9.667	4.46	15.750	4.18	21.83	1.67
3.667	1.81	9.750	4.46	15.833	4.18	21.92	1.67
3.750	1.81	9.833	5.02	15.917	4.18	22.00	1.67
3.833	1.81	9.917	5.02	16.000	4.18	22.08	1.67
3.917	1.81	10.000	5.02	16.083	4.18	22.17	1.67
4.000	1.81	10.083	5.02	16.167	4.18	22.25	1.67
4.083	1.81	10.167	5.02	16.250	4.18	22.33	1.67
4.167	1.81	10.250	5.02	16.333	2.51	22.42	1.67

4.250	1.81	10.333	6.42	16.417	2.51	22.50	1.67
4.333	2.23	10.417	6.42	16.500	2.51	22.58	1.67
4.417	2.23	10.500	6.42	16.583	2.51	22.67	1.67
4.500	2.23	10.583	6.42	16.667	2.51	22.75	1.67
4.583	2.23	10.667	6.42	16.750	2.51	22.83	1.67
4.667	2.23	10.750	6.42	16.833	2.51	22.92	1.67
4.750	2.23	10.833	8.65	16.917	2.51	23.00	1.67
4.833	2.23	10.917	8.65	17.000	2.51	23.08	1.67
4.917	2.23	11.000	8.65	17.083	2.51	23.17	1.67
5.000	2.23	11.083	8.65	17.167	2.51	23.25	1.67
5.083	2.23	11.167	8.65	17.250	2.51	23.33	1.67
5.167	2.23	11.250	8.65	17.333	2.51	23.42	1.67
5.250	2.23	11.333	13.39	17.417	2.51	23.50	1.67
5.333	2.23	11.417	13.39	17.500	2.51	23.58	1.67
5.417	2.23	11.500	13.39	17.583	2.51	23.67	1.67
5.500	2.23	11.583	13.39	17.667	2.51	23.75	1.67
5.583	2.23	11.667	13.39	17.750	2.51	23.83	1.67
5.667	2.23	11.750	13.39	17.833	2.51	23.92	1.67
5.750	2.23	11.833	41.28	17.917	2.51	24.00	1.67
5.833	2.23	11.917	41.29	18.000	2.51	24.08	1.67
5.917	2.23	12.000	41.29	18.083	2.51	24.17	1.67
6.000	2.23	12.083	170.71	18.167	2.51	24.25	1.67
6.083	2.23	12.167	170.72	18.250	2.51		

Max.Eff.Inten.(mm/hr)=	170.72	154.96		
over (min)	5.00	15.00		
Storage Coeff. (min)=	1.22 (ii)	13.78 (ii)		
Unit Hyd. Tpeak (min)=	5.00	15.00		
Unit Hyd. peak (cms)=	0.33	0.08		
			TOTALS	
PEAK FLOW (cms)=	0.00	0.02	0.025 (iii)	
TIME TO PEAK (hrs)=	12.25	12.33	12.25	
RUNOFF VOLUME (mm)=	138.48	83.24	87.43	
TOTAL RAINFALL (mm)=	139.48	139.48	139.48	
RUNOFF COEFFICIENT =	0.99	0.60	0.63	

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	
STANDHYD (0044)	Area (ha)= 1.62
ID= 1 DT= 5.0 min	Total Imp(%)= 48.77 Dir. Conn.(%)= 30.86

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.79	0.83
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	1.40
Length	(m)=	103.92	400.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.23	12.250	170.72	18.33	2.51
0.167	0.00	6.250	2.23	12.333	20.10	18.42	2.51
0.250	0.00	6.333	2.51	12.417	20.09	18.50	2.51
0.333	1.53	6.417	2.51	12.500	20.09	18.58	2.51
0.417	1.53	6.500	2.51	12.583	20.09	18.67	2.51
0.500	1.53	6.583	2.51	12.667	20.09	18.75	2.51
0.583	1.53	6.667	2.51	12.750	20.09	18.83	2.51
0.667	1.53	6.750	2.51	12.833	10.32	18.92	2.51
0.750	1.53	6.833	2.51	12.917	10.32	19.00	2.51
0.833	1.53	6.917	2.51	13.000	10.32	19.08	2.51
0.917	1.53	7.000	2.51	13.083	10.32	19.17	2.51
1.000	1.53	7.083	2.51	13.167	10.32	19.25	2.51
1.083	1.53	7.167	2.51	13.250	10.32	19.33	2.51
1.167	1.53	7.250	2.51	13.333	7.53	19.42	2.51
1.250	1.53	7.333	3.07	13.417	7.53	19.50	2.51
1.333	1.53	7.417	3.07	13.500	7.53	19.58	2.51
1.417	1.53	7.500	3.07	13.583	7.53	19.67	2.51
1.500	1.53	7.583	3.07	13.667	7.53	19.75	2.51
1.583	1.53	7.667	3.07	13.750	7.53	19.83	2.51
1.667	1.53	7.750	3.07	13.833	5.86	19.92	2.51
1.750	1.53	7.833	3.07	13.917	5.86	20.00	2.51
1.833	1.53	7.917	3.07	14.000	5.86	20.08	2.51
1.917	1.53	8.000	3.07	14.083	5.86	20.17	2.51
2.000	1.53	8.083	3.07	14.167	5.86	20.25	2.51
2.083	1.53	8.167	3.07	14.250	5.86	20.33	1.67
2.167	1.53	8.250	3.07	14.333	4.18	20.42	1.67
2.250	1.53	8.333	3.63	14.417	4.18	20.50	1.67
2.333	1.81	8.417	3.63	14.500	4.18	20.58	1.67
2.417	1.81	8.500	3.63	14.583	4.18	20.67	1.67
2.500	1.81	8.583	3.63	14.667	4.18	20.75	1.67
2.583	1.81	8.667	3.63	14.750	4.18	20.83	1.67

2.667	1.81	8.750	3.63	14.833	4.18	20.92	1.67
2.750	1.81	8.833	3.91	14.917	4.18	21.00	1.67
2.833	1.81	8.917	3.91	15.000	4.18	21.08	1.67
2.917	1.81	9.000	3.91	15.083	4.18	21.17	1.67
3.000	1.81	9.083	3.91	15.167	4.18	21.25	1.67
3.083	1.81	9.167	3.91	15.250	4.18	21.33	1.67
3.167	1.81	9.250	3.91	15.333	4.18	21.42	1.67
3.250	1.81	9.333	4.46	15.417	4.18	21.50	1.67
3.333	1.81	9.417	4.46	15.500	4.18	21.58	1.67
3.417	1.81	9.500	4.46	15.583	4.18	21.67	1.67
3.500	1.81	9.583	4.46	15.667	4.18	21.75	1.67
3.583	1.81	9.667	4.46	15.750	4.18	21.83	1.67
3.667	1.81	9.750	4.46	15.833	4.18	21.92	1.67
3.750	1.81	9.833	5.02	15.917	4.18	22.00	1.67
3.833	1.81	9.917	5.02	16.000	4.18	22.08	1.67
3.917	1.81	10.000	5.02	16.083	4.18	22.17	1.67
4.000	1.81	10.083	5.02	16.167	4.18	22.25	1.67
4.083	1.81	10.167	5.02	16.250	4.18	22.33	1.67
4.167	1.81	10.250	5.02	16.333	2.51	22.42	1.67
4.250	1.81	10.333	6.42	16.417	2.51	22.50	1.67
4.333	2.23	10.417	6.42	16.500	2.51	22.58	1.67
4.417	2.23	10.500	6.42	16.583	2.51	22.67	1.67
4.500	2.23	10.583	6.42	16.667	2.51	22.75	1.67
4.583	2.23	10.667	6.42	16.750	2.51	22.83	1.67
4.667	2.23	10.750	6.42	16.833	2.51	22.92	1.67
4.750	2.23	10.833	8.65	16.917	2.51	23.00	1.67
4.833	2.23	10.917	8.65	17.000	2.51	23.08	1.67
4.917	2.23	11.000	8.65	17.083	2.51	23.17	1.67
5.000	2.23	11.083	8.65	17.167	2.51	23.25	1.67
5.083	2.23	11.167	8.65	17.250	2.51	23.33	1.67
5.167	2.23	11.250	8.65	17.333	2.51	23.42	1.67
5.250	2.23	11.333	13.39	17.417	2.51	23.50	1.67
5.333	2.23	11.417	13.39	17.500	2.51	23.58	1.67
5.417	2.23	11.500	13.39	17.583	2.51	23.67	1.67
5.500	2.23	11.583	13.39	17.667	2.51	23.75	1.67
5.583	2.23	11.667	13.39	17.750	2.51	23.83	1.67
5.667	2.23	11.750	13.39	17.833	2.51	23.92	1.67
5.750	2.23	11.833	41.28	17.917	2.51	24.00	1.67
5.833	2.23	11.917	41.29	18.000	2.51	24.08	1.67
5.917	2.23	12.000	41.29	18.083	2.51	24.17	1.67
6.000	2.23	12.083	170.71	18.167	2.51	24.25	1.67
6.083	2.23	12.167	170.72	18.250	2.51		

Max.Eff.Inten.(mm/hr)=	170.72		83.55
over (min)	5.00		40.00
Storage Coeff. (min)=	2.60 (ii)		36.20 (ii)
Unit Hyd. Tpeak (min)=	5.00		40.00
Unit Hyd. peak (cms)=	0.29		0.03

				TOTALS	
PEAK FLOW	(cms)=	0.24	0.12	0.283	(iii)
TIME TO PEAK	(hrs)=	12.25	12.75	12.25	
RUNOFF VOLUME	(mm)=	138.48	83.67	100.57	
TOTAL RAINFALL	(mm)=	139.48	139.48	139.48	
RUNOFF COEFFICIENT	=	0.99	0.60	0.72	

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0041)	Area	(ha)=	0.59	Curve Number	(CN)= 71.5
ID= 1 DT= 5.0 min	Ia	(mm)=	4.75	# of Linear Res.(N)=	3.00
	U.H. Tp(hrs)=		0.53		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.23	12.250	170.72	18.33	2.51
0.167	0.00	6.250	2.23	12.333	20.10	18.42	2.51
0.250	0.00	6.333	2.51	12.417	20.09	18.50	2.51
0.333	1.53	6.417	2.51	12.500	20.09	18.58	2.51
0.417	1.53	6.500	2.51	12.583	20.09	18.67	2.51
0.500	1.53	6.583	2.51	12.667	20.09	18.75	2.51
0.583	1.53	6.667	2.51	12.750	20.09	18.83	2.51
0.667	1.53	6.750	2.51	12.833	10.32	18.92	2.51
0.750	1.53	6.833	2.51	12.917	10.32	19.00	2.51
0.833	1.53	6.917	2.51	13.000	10.32	19.08	2.51
0.917	1.53	7.000	2.51	13.083	10.32	19.17	2.51
1.000	1.53	7.083	2.51	13.167	10.32	19.25	2.51
1.083	1.53	7.167	2.51	13.250	10.32	19.33	2.51
1.167	1.53	7.250	2.51	13.333	7.53	19.42	2.51
1.250	1.53	7.333	3.07	13.417	7.53	19.50	2.51
1.333	1.53	7.417	3.07	13.500	7.53	19.58	2.51
1.417	1.53	7.500	3.07	13.583	7.53	19.67	2.51
1.500	1.53	7.583	3.07	13.667	7.53	19.75	2.51
1.583	1.53	7.667	3.07	13.750	7.53	19.83	2.51
1.667	1.53	7.750	3.07	13.833	5.86	19.92	2.51

1.750	1.53	7.833	3.07	13.917	5.86	20.00	2.51
1.833	1.53	7.917	3.07	14.000	5.86	20.08	2.51
1.917	1.53	8.000	3.07	14.083	5.86	20.17	2.51
2.000	1.53	8.083	3.07	14.167	5.86	20.25	2.51
2.083	1.53	8.167	3.07	14.250	5.86	20.33	1.67
2.167	1.53	8.250	3.07	14.333	4.18	20.42	1.67
2.250	1.53	8.333	3.63	14.417	4.18	20.50	1.67
2.333	1.81	8.417	3.63	14.500	4.18	20.58	1.67
2.417	1.81	8.500	3.63	14.583	4.18	20.67	1.67
2.500	1.81	8.583	3.63	14.667	4.18	20.75	1.67
2.583	1.81	8.667	3.63	14.750	4.18	20.83	1.67
2.667	1.81	8.750	3.63	14.833	4.18	20.92	1.67
2.750	1.81	8.833	3.91	14.917	4.18	21.00	1.67
2.833	1.81	8.917	3.91	15.000	4.18	21.08	1.67
2.917	1.81	9.000	3.91	15.083	4.18	21.17	1.67
3.000	1.81	9.083	3.91	15.167	4.18	21.25	1.67
3.083	1.81	9.167	3.91	15.250	4.18	21.33	1.67
3.167	1.81	9.250	3.91	15.333	4.18	21.42	1.67
3.250	1.81	9.333	4.46	15.417	4.18	21.50	1.67
3.333	1.81	9.417	4.46	15.500	4.18	21.58	1.67
3.417	1.81	9.500	4.46	15.583	4.18	21.67	1.67
3.500	1.81	9.583	4.46	15.667	4.18	21.75	1.67
3.583	1.81	9.667	4.46	15.750	4.18	21.83	1.67
3.667	1.81	9.750	4.46	15.833	4.18	21.92	1.67
3.750	1.81	9.833	5.02	15.917	4.18	22.00	1.67
3.833	1.81	9.917	5.02	16.000	4.18	22.08	1.67
3.917	1.81	10.000	5.02	16.083	4.18	22.17	1.67
4.000	1.81	10.083	5.02	16.167	4.18	22.25	1.67
4.083	1.81	10.167	5.02	16.250	4.18	22.33	1.67
4.167	1.81	10.250	5.02	16.333	2.51	22.42	1.67
4.250	1.81	10.333	6.42	16.417	2.51	22.50	1.67
4.333	2.23	10.417	6.42	16.500	2.51	22.58	1.67
4.417	2.23	10.500	6.42	16.583	2.51	22.67	1.67
4.500	2.23	10.583	6.42	16.667	2.51	22.75	1.67
4.583	2.23	10.667	6.42	16.750	2.51	22.83	1.67
4.667	2.23	10.750	6.42	16.833	2.51	22.92	1.67
4.750	2.23	10.833	8.65	16.917	2.51	23.00	1.67
4.833	2.23	10.917	8.65	17.000	2.51	23.08	1.67
4.917	2.23	11.000	8.65	17.083	2.51	23.17	1.67
5.000	2.23	11.083	8.65	17.167	2.51	23.25	1.67
5.083	2.23	11.167	8.65	17.250	2.51	23.33	1.67
5.167	2.23	11.250	8.65	17.333	2.51	23.42	1.67
5.250	2.23	11.333	13.39	17.417	2.51	23.50	1.67
5.333	2.23	11.417	13.39	17.500	2.51	23.58	1.67
5.417	2.23	11.500	13.39	17.583	2.51	23.67	1.67
5.500	2.23	11.583	13.39	17.667	2.51	23.75	1.67
5.583	2.23	11.667	13.39	17.750	2.51	23.83	1.67
5.667	2.23	11.750	13.39	17.833	2.51	23.92	1.67

5.750	2.23	11.833	41.28	17.917	2.51	24.00	1.67
5.833	2.23	11.917	41.29	18.000	2.51	24.08	1.67
5.917	2.23	12.000	41.29	18.083	2.51	24.17	1.67
6.000	2.23	12.083	170.71	18.167	2.51	24.25	1.67
6.083	2.23	12.167	170.72	18.250	2.51		

Unit Hyd Qpeak (cms)= 0.043

PEAK FLOW (cms)= 0.059 (i)
TIME TO PEAK (hrs)= 12.667
RUNOFF VOLUME (mm)= 76.854
TOTAL RAINFALL (mm)= 139.480
RUNOFF COEFFICIENT = 0.551

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0028)	Area (ha)=	1.38	Curve Number (CN)= 64.1
ID= 1 DT= 5.0 min	Ia (mm)=	8.51	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	0.39	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.23	12.250	170.72	18.33	2.51
0.167	0.00	6.250	2.23	12.333	20.10	18.42	2.51
0.250	0.00	6.333	2.51	12.417	20.09	18.50	2.51
0.333	1.53	6.417	2.51	12.500	20.09	18.58	2.51
0.417	1.53	6.500	2.51	12.583	20.09	18.67	2.51
0.500	1.53	6.583	2.51	12.667	20.09	18.75	2.51
0.583	1.53	6.667	2.51	12.750	20.09	18.83	2.51
0.667	1.53	6.750	2.51	12.833	10.32	18.92	2.51
0.750	1.53	6.833	2.51	12.917	10.32	19.00	2.51
0.833	1.53	6.917	2.51	13.000	10.32	19.08	2.51
0.917	1.53	7.000	2.51	13.083	10.32	19.17	2.51
1.000	1.53	7.083	2.51	13.167	10.32	19.25	2.51
1.083	1.53	7.167	2.51	13.250	10.32	19.33	2.51
1.167	1.53	7.250	2.51	13.333	7.53	19.42	2.51
1.250	1.53	7.333	3.07	13.417	7.53	19.50	2.51
1.333	1.53	7.417	3.07	13.500	7.53	19.58	2.51
1.417	1.53	7.500	3.07	13.583	7.53	19.67	2.51
1.500	1.53	7.583	3.07	13.667	7.53	19.75	2.51
1.583	1.53	7.667	3.07	13.750	7.53	19.83	2.51

1.667	1.53	7.750	3.07	13.833	5.86	19.92	2.51
1.750	1.53	7.833	3.07	13.917	5.86	20.00	2.51
1.833	1.53	7.917	3.07	14.000	5.86	20.08	2.51
1.917	1.53	8.000	3.07	14.083	5.86	20.17	2.51
2.000	1.53	8.083	3.07	14.167	5.86	20.25	2.51
2.083	1.53	8.167	3.07	14.250	5.86	20.33	1.67
2.167	1.53	8.250	3.07	14.333	4.18	20.42	1.67
2.250	1.53	8.333	3.63	14.417	4.18	20.50	1.67
2.333	1.81	8.417	3.63	14.500	4.18	20.58	1.67
2.417	1.81	8.500	3.63	14.583	4.18	20.67	1.67
2.500	1.81	8.583	3.63	14.667	4.18	20.75	1.67
2.583	1.81	8.667	3.63	14.750	4.18	20.83	1.67
2.667	1.81	8.750	3.63	14.833	4.18	20.92	1.67
2.750	1.81	8.833	3.91	14.917	4.18	21.00	1.67
2.833	1.81	8.917	3.91	15.000	4.18	21.08	1.67
2.917	1.81	9.000	3.91	15.083	4.18	21.17	1.67
3.000	1.81	9.083	3.91	15.167	4.18	21.25	1.67
3.083	1.81	9.167	3.91	15.250	4.18	21.33	1.67
3.167	1.81	9.250	3.91	15.333	4.18	21.42	1.67
3.250	1.81	9.333	4.46	15.417	4.18	21.50	1.67
3.333	1.81	9.417	4.46	15.500	4.18	21.58	1.67
3.417	1.81	9.500	4.46	15.583	4.18	21.67	1.67
3.500	1.81	9.583	4.46	15.667	4.18	21.75	1.67
3.583	1.81	9.667	4.46	15.750	4.18	21.83	1.67
3.667	1.81	9.750	4.46	15.833	4.18	21.92	1.67
3.750	1.81	9.833	5.02	15.917	4.18	22.00	1.67
3.833	1.81	9.917	5.02	16.000	4.18	22.08	1.67
3.917	1.81	10.000	5.02	16.083	4.18	22.17	1.67
4.000	1.81	10.083	5.02	16.167	4.18	22.25	1.67
4.083	1.81	10.167	5.02	16.250	4.18	22.33	1.67
4.167	1.81	10.250	5.02	16.333	2.51	22.42	1.67
4.250	1.81	10.333	6.42	16.417	2.51	22.50	1.67
4.333	2.23	10.417	6.42	16.500	2.51	22.58	1.67
4.417	2.23	10.500	6.42	16.583	2.51	22.67	1.67
4.500	2.23	10.583	6.42	16.667	2.51	22.75	1.67
4.583	2.23	10.667	6.42	16.750	2.51	22.83	1.67
4.667	2.23	10.750	6.42	16.833	2.51	22.92	1.67
4.750	2.23	10.833	8.65	16.917	2.51	23.00	1.67
4.833	2.23	10.917	8.65	17.000	2.51	23.08	1.67
4.917	2.23	11.000	8.65	17.083	2.51	23.17	1.67
5.000	2.23	11.083	8.65	17.167	2.51	23.25	1.67
5.083	2.23	11.167	8.65	17.250	2.51	23.33	1.67
5.167	2.23	11.250	8.65	17.333	2.51	23.42	1.67
5.250	2.23	11.333	13.39	17.417	2.51	23.50	1.67
5.333	2.23	11.417	13.39	17.500	2.51	23.58	1.67
5.417	2.23	11.500	13.39	17.583	2.51	23.67	1.67
5.500	2.23	11.583	13.39	17.667	2.51	23.75	1.67
5.583	2.23	11.667	13.39	17.750	2.51	23.83	1.67

5.667	2.23	11.750	13.39	17.833	2.51	23.92	1.67
5.750	2.23	11.833	41.28	17.917	2.51	24.00	1.67
5.833	2.23	11.917	41.29	18.000	2.51	24.08	1.67
5.917	2.23	12.000	41.29	18.083	2.51	24.17	1.67
6.000	2.23	12.083	170.71	18.167	2.51	24.25	1.67
6.083	2.23	12.167	170.72	18.250	2.51		

Unit Hyd Qpeak (cms)= 0.135

PEAK FLOW (cms)= 0.140 (i)
TIME TO PEAK (hrs)= 12.500
RUNOFF VOLUME (mm)= 62.828
TOTAL RAINFALL (mm)= 139.480
RUNOFF COEFFICIENT = 0.450

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0023)
1 + 2 = 3

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0011):	46.28	6.985	12.42	76.10
+ ID2= 2 (0012):	1.13	0.116	12.58	67.99
ID = 3 (0023):	47.41	7.092	12.42	75.90

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023)
3 + 2 = 1

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0023):	47.41	7.092	12.42	75.90
+ ID2= 2 (0028):	1.38	0.140	12.50	62.83
ID = 1 (0023):	48.79	7.226	12.42	75.53

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023)
1 + 2 = 3

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0023):	48.79	7.226	12.42	75.53

+ ID2= 2 (0041):	0.59	0.059	12.67	76.85
ID = 3 (0023):	49.38	7.275	12.42	75.55

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023)
3 + 2 = 1

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0023):	49.38	7.275	12.42	75.55
+ ID2= 2 (0043):	0.13	0.025	12.25	87.43
ID = 1 (0023):	49.51	7.298	12.42	75.58

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023)
1 + 2 = 3

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0023):	49.51	7.298	12.42	75.58
+ ID2= 2 (0044):	1.62	0.283	12.25	100.57
ID = 3 (0023):	51.13	7.405	12.42	76.37

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0025)
1 + 2 = 3

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0023):	51.13	7.405	12.42	76.37
+ ID2= 2 (0024):	225.17	7.676	13.25	53.81
ID = 3 (0025):	276.30	11.765	12.50	57.99

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

****
** SIMULATION:M - 25 mm **
****

READ STORM | Filename: C:\Users\ecomish\AppD

	ata\Local\Temp\ c819dd95-70ee-48d0-b884-0b24f1308cad\6deeea8b
Ptotal= 26.26 mm	Comments: 25mm

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.00	2.10	0.83	30.00	1.67	4.67	2.50	2.37
0.08	2.29	0.92	80.70	1.75	4.23	2.58	2.26
0.17	2.52	1.00	37.00	1.83	3.88	2.67	2.17
0.25	2.81	1.08	20.30	1.92	3.58	2.75	2.08
0.33	3.18	1.17	13.27	2.00	3.33	2.83	2.00
0.42	3.68	1.25	10.09	2.08	3.11	2.92	1.93
0.50	4.39	1.33	8.15	2.17	2.92	3.00	1.93
0.58	5.49	1.42	6.85	2.25	2.76	3.08	1.93
0.67	7.40	1.50	5.92	2.33	2.61	3.17	1.93
0.75	11.54	1.58	5.22	2.42	2.48		

CALIB					
NASHYD (0007)	Area (ha)= 100.92	Curve Number (CN)= 55.9
ID= 1 DT= 5.0 min	Ia (mm)= 7.89	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 1.70	

Unit Hyd Qpeak (cms)= 2.267

PEAK FLOW (cms)= 0.117 (i)
TIME TO PEAK (hrs)= 3.583
RUNOFF VOLUME (mm)= 1.544
TOTAL RAINFALL (mm)= 26.256
RUNOFF COEFFICIENT = 0.059

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0008)	Area (ha)= 23.99	Curve Number (CN)= 44.7
ID= 1 DT= 5.0 min	Ia (mm)= 10.91	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.97	

Unit Hyd Qpeak (cms)= 0.945

PEAK FLOW (cms)= 0.018 (i)
TIME TO PEAK (hrs)= 2.750
RUNOFF VOLUME (mm)= 0.714
TOTAL RAINFALL (mm)= 26.256

RUNOFF COEFFICIENT = 0.027

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0009)	Area (ha)= 6.37	Curve Number (CN)= 50.5
ID= 1 DT= 5.0 min	Ia (mm)= 15.69	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.77	

Unit Hyd Qpeak (cms)= 0.316

PEAK FLOW (cms)= 0.003 (i)
TIME TO PEAK (hrs)= 2.917
RUNOFF VOLUME (mm)= 0.430
TOTAL RAINFALL (mm)= 26.256
RUNOFF COEFFICIENT = 0.016

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0010)	Area (ha)= 14.85	Curve Number (CN)= 52.9
ID= 1 DT= 5.0 min	Ia (mm)= 13.28	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.89	

Unit Hyd Qpeak (cms)= 0.637

PEAK FLOW (cms)= 0.011 (i)
TIME TO PEAK (hrs)= 2.833
RUNOFF VOLUME (mm)= 0.705
TOTAL RAINFALL (mm)= 26.256
RUNOFF COEFFICIENT = 0.027

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0013)	Area (ha)= 1.70	Curve Number (CN)= 60.5
ID= 1 DT= 5.0 min	Ia (mm)= 9.65	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.40	

Unit Hyd Qpeak (cms)= 0.162

PEAK FLOW (cms)= 0.004 (i)

```
     TIME TO PEAK    (hrs)=   1.667
     RUNOFF VOLUME    (mm)=   1.509
     TOTAL RAINFALL   (mm)=  26.256
     RUNOFF COEFFICIENT   =   0.057

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| NASHYD   (  0014)|   Area    (ha)=   1.80   Curve Number   (CN)= 50.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=  16.00   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.76

     Unit Hyd Qpeak  (cms)=   0.090

     PEAK FLOW       (cms)=   0.001 (i)
     TIME TO PEAK    (hrs)=   2.917
     RUNOFF VOLUME    (mm)=   0.397
     TOTAL RAINFALL   (mm)=  26.256
     RUNOFF COEFFICIENT   =   0.015

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| NASHYD   (  0015)|   Area    (ha)=   6.70   Curve Number   (CN)= 60.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=  10.00   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   1.45

     Unit Hyd Qpeak  (cms)=   0.176

     PEAK FLOW       (cms)=   0.008 (i)
     TIME TO PEAK    (hrs)=   3.417
     RUNOFF VOLUME    (mm)=   1.423
     TOTAL RAINFALL   (mm)=  26.256
     RUNOFF COEFFICIENT   =   0.054

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| NASHYD   (  0016)|   Area    (ha)=  29.16   Curve Number   (CN)= 71.4
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.88   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.68
```



```
     Unit Hyd Qpeak  (cms)=   1.638

     PEAK FLOW       (cms)=   0.107 (i)
     TIME TO PEAK    (hrs)=   2.083
     RUNOFF VOLUME    (mm)=   2.811
     TOTAL RAINFALL   (mm)=  26.256
     RUNOFF COEFFICIENT   =   0.107

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| NASHYD   (  0019)|   Area    (ha)=  39.68   Curve Number   (CN)= 60.7
|ID= 1 DT= 5.0 min |   Ia      (mm)=   8.26   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   1.18

     Unit Hyd Qpeak  (cms)=   1.284

     PEAK FLOW       (cms)=   0.066 (i)
     TIME TO PEAK    (hrs)=   2.917
     RUNOFF VOLUME    (mm)=   1.773
     TOTAL RAINFALL   (mm)=  26.256
     RUNOFF COEFFICIENT   =   0.068

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0024)|
|   1 +  2 =  3    |          AREA    QPEAK    TPEAK     R.V.
--------------------          (ha)    (cms)    (hrs)     (mm)
        ID1= 1 (  0010):    14.85   0.011     2.83     0.71
      + ID2= 2 (  0013):     1.70   0.004     1.67     1.51
        ================================================
        ID = 3 (  0024):    16.55   0.014     2.58     0.79

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0024)|
|   3 +  2 =  1    |          AREA    QPEAK    TPEAK     R.V.
--------------------          (ha)    (cms)    (hrs)     (mm)
        ID1= 3 (  0024):    16.55   0.014     2.58     0.79
      + ID2= 2 (  0014):     1.80   0.001     2.92     0.40
        ================================================
```

```
       ID = 1 (  0024):    18.35   0.014     2.67     0.75

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0024)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0024):    18.35   0.014     2.67     0.75
     + ID2= 2 (  0015):     6.70   0.008     3.42     1.42
       ================================================
       ID = 3 (  0024):    25.05   0.022     2.92     0.93

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0024)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 3 (  0024):    25.05   0.022     2.92     0.93
     + ID2= 2 (  0016):    29.16   0.107     2.08     2.81
       ================================================
       ID = 1 (  0024):    54.21   0.124     2.17     1.94

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0024)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0024):    54.21   0.124     2.17     1.94
     + ID2= 2 (  0019):    39.68   0.066     2.92     1.77
       ================================================
       ID = 3 (  0024):    93.89   0.181     2.33     1.87

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0024)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 3 (  0024):    93.89   0.181     2.33     1.87
     + ID2= 2 (  0007):   100.92   0.117     3.58     1.54
       ================================================
```



```
       ID = 1 (  0024):   194.81   0.273     2.83     1.70

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0024)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0024):   194.81   0.273     2.83     1.70
     + ID2= 2 (  0008):    23.99   0.018     2.75     0.71
       ================================================
       ID = 3 (  0024):   218.80   0.290     2.83     1.59

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0024)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 3 (  0024):   218.80   0.290     2.83     1.59
     + ID2= 2 (  0009):     6.37   0.003     2.92     0.43
       ================================================
       ID = 1 (  0024):   225.17   0.294     2.83     1.56

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
------------------------------------------------------------------------------
--------------------
| CALIB            |
| NASHYD   (  0011)|   Area    (ha)=  46.28   Curve Number   (CN)= 72.2
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.09   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.30

    Unit Hyd Qpeak  (cms)=   5.892

    PEAK FLOW       (cms)=   0.302 (i)
    TIME TO PEAK    (hrs)=   1.417
    RUNOFF VOLUME    (mm)=   3.138
    TOTAL RAINFALL   (mm)=  26.256
    RUNOFF COEFFICIENT   =   0.120

    (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

------------------------------------------------------------------------------
--------------------
| CALIB            |
| NASHYD   (  0012)|   Area    (ha)=   1.13   Curve Number   (CN)= 67.4
```

|ID= 1 DT= 5.0 min | Ia (mm)= 7.88 # of Linear Res.(N)= 3.00
U.H. Tp(hrs)= 0.43

Unit Hyd Qpeak (cms)= 0.100

PEAK FLOW (cms)= 0.005 (i)
TIME TO PEAK (hrs)= 1.667
RUNOFF VOLUME (mm)= 2.386
TOTAL RAINFALL (mm)= 26.256
RUNOFF COEFFICIENT = 0.091

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

| CALIB |
| STANDHYD (0043)| Area (ha)= 0.13
|ID= 1 DT= 5.0 min | Total Imp(%)= 30.77 Dir. Conn.(%)= 7.69

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	0.04	0.09
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	0.50	0.50
Length (m)=	29.44	70.00
Mannings n =	0.013	0.250
Max.Eff.Inten.(mm/hr)=	80.70	5.17
over (min)	5.00	55.00
Storage Coeff. (min)=	1.65 (ii)	50.59 (ii)
Unit Hyd. Tpeak (min)=	5.00	55.00
Unit Hyd. peak (cms)=	0.32	0.02

			TOTALS
PEAK FLOW (cms)=	0.00	0.00	0.002 (iii)
TIME TO PEAK (hrs)=	1.00	2.00	1.00
RUNOFF VOLUME (mm)=	25.26	4.69	6.04
TOTAL RAINFALL (mm)=	26.26	26.26	26.26
RUNOFF COEFFICIENT =	0.96	0.18	0.23

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

| CALIB |
| STANDHYD (0044)| Area (ha)= 1.62
|ID= 1 DT= 5.0 min | Total Imp(%)= 48.77 Dir. Conn.(%)= 30.86

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	0.79	0.83
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	0.50	1.40
Length (m)=	103.92	400.00
Mannings n =	0.013	0.250
Max.Eff.Inten.(mm/hr)=	80.70	4.72
over (min)	5.00	110.00
Storage Coeff. (min)=	3.51 (ii)	109.54 (ii)
Unit Hyd. Tpeak (min)=	5.00	110.00
Unit Hyd. peak (cms)=	0.26	0.01

			TOTALS
PEAK FLOW (cms)=	0.09	0.00	0.094 (iii)
TIME TO PEAK (hrs)=	1.00	3.08	1.00
RUNOFF VOLUME (mm)=	25.26	4.75	11.04
TOTAL RAINFALL (mm)=	26.26	26.26	26.26
RUNOFF COEFFICIENT =	0.96	0.18	0.42

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

| CALIB |
| NASHYD (0041)| Area (ha)= 0.59 Curve Number (CN)= 71.5
|ID= 1 DT= 5.0 min | Ia (mm)= 4.75 # of Linear Res.(N)= 3.00
U.H. Tp(hrs)= 0.53

Unit Hyd Qpeak (cms)= 0.043

PEAK FLOW (cms)= 0.004 (i)
TIME TO PEAK (hrs)= 1.750
RUNOFF VOLUME (mm)= 3.760
TOTAL RAINFALL (mm)= 26.256
RUNOFF COEFFICIENT = 0.143

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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--------------------------------------------------------------------------------
--------------------
| CALIB            |
| NASHYD   (  0028)|   Area    (ha)=   1.38   Curve Number   (CN)= 64.1
|ID= 1 DT= 5.0 min |   Ia      (mm)=   8.51   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.39

     Unit Hyd Qpeak  (cms)=   0.135

     PEAK FLOW       (cms)=   0.005 (i)
     TIME TO PEAK    (hrs)=   1.667
     RUNOFF VOLUME    (mm)=   1.970
     TOTAL RAINFALL   (mm)=  26.256
     RUNOFF COEFFICIENT   =   0.075

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0023)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0011):    46.28   0.302     1.42     3.14
     + ID2= 2 (  0012):     1.13   0.005     1.67     2.39
       ================================================
       ID = 3 (  0023):    47.41   0.306     1.50     3.12

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0023)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 3 (  0023):    47.41   0.306     1.50     3.12
     + ID2= 2 (  0028):     1.38   0.005     1.67     1.97
       ================================================
       ID = 1 (  0023):    48.79   0.311     1.50     3.09

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0023)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
```



```
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0023):    48.79   0.311     1.50     3.09
     + ID2= 2 (  0041):     0.59   0.004     1.75     3.76
       ================================================
       ID = 3 (  0023):    49.38   0.314     1.50     3.10

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0023)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 3 (  0023):    49.38   0.314     1.50     3.10
     + ID2= 2 (  0043):     0.13   0.002     1.00     6.04
       ================================================
       ID = 1 (  0023):    49.51   0.314     1.50     3.10

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0023)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0023):    49.51   0.314     1.50     3.10
     + ID2= 2 (  0044):     1.62   0.094     1.00    11.04
       ================================================
       ID = 3 (  0023):    51.13   0.326     1.42     3.35

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0025)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0023):    51.13   0.326     1.42     3.35
     + ID2= 2 (  0024):   225.17   0.294     2.83     1.56
       ================================================
       ID = 3 (  0025):   276.30   0.459     1.67     1.89

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
******************************
** SIMULATION:N - Timmins     **
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READ STORM	Filename: C:\Users\ecomish\AppData\Local\Temp\c819dd95-70ee-48d0-b884-0b24f1308cad\e3c6c2ae
Ptotal=193.00 mm	Comments: tim

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.00	15.00	3.00	3.00	6.00	43.00	9.00	13.00
1.00	20.00	4.00	5.00	7.00	20.00	10.00	13.00
2.00	10.00	5.00	20.00	8.00	23.00	11.00	8.00

CALIB NASHYD (0007) ID= 1 DT= 5.0 min	Area (ha)= 100.92	Curve Number (CN)= 55.9
	Ia (mm)= 7.89	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 1.70	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	15.00	3.083	3.00	6.083	43.00	9.08	13.00
0.167	15.00	3.167	3.00	6.167	43.00	9.17	13.00
0.250	15.00	3.250	3.00	6.250	43.00	9.25	13.00
0.333	15.00	3.333	3.00	6.333	43.00	9.33	13.00
0.417	15.00	3.417	3.00	6.417	43.00	9.42	13.00
0.500	15.00	3.500	3.00	6.500	43.00	9.50	13.00
0.583	15.00	3.583	3.00	6.583	43.00	9.58	13.00
0.667	15.00	3.667	3.00	6.667	43.00	9.67	13.00
0.750	15.00	3.750	3.00	6.750	43.00	9.75	13.00
0.833	15.00	3.833	3.00	6.833	43.00	9.83	13.00
0.917	15.00	3.917	3.00	6.917	43.00	9.92	13.00
1.000	15.00	4.000	3.00	7.000	43.00	10.00	13.00
1.083	20.00	4.083	5.00	7.083	20.00	10.08	13.00
1.167	20.00	4.167	5.00	7.167	20.00	10.17	13.00
1.250	20.00	4.250	5.00	7.250	20.00	10.25	13.00
1.333	20.00	4.333	5.00	7.333	20.00	10.33	13.00
1.417	20.00	4.417	5.00	7.417	20.00	10.42	13.00
1.500	20.00	4.500	5.00	7.500	20.00	10.50	13.00
1.583	20.00	4.583	5.00	7.583	20.00	10.58	13.00
1.667	20.00	4.667	5.00	7.667	20.00	10.67	13.00
1.750	20.00	4.750	5.00	7.750	20.00	10.75	13.00
1.833	20.00	4.833	5.00	7.833	20.00	10.83	13.00

1.917	20.00	4.917	5.00	7.917	20.00	10.92	13.00
2.000	20.00	5.000	5.00	8.000	20.00	11.00	13.00
2.083	10.00	5.083	20.00	8.083	23.00	11.08	8.00
2.167	10.00	5.167	20.00	8.167	23.00	11.17	8.00
2.250	10.00	5.250	20.00	8.250	23.00	11.25	8.00
2.333	10.00	5.333	20.00	8.333	23.00	11.33	8.00
2.417	10.00	5.417	20.00	8.417	23.00	11.42	8.00
2.500	10.00	5.500	20.00	8.500	23.00	11.50	8.00
2.583	10.00	5.583	20.00	8.583	23.00	11.58	8.00
2.667	10.00	5.667	20.00	8.667	23.00	11.67	8.00
2.750	10.00	5.750	20.00	8.750	23.00	11.75	8.00
2.833	10.00	5.833	20.00	8.833	23.00	11.83	8.00
2.917	10.00	5.917	20.00	8.917	23.00	11.92	8.00
3.000	10.00	6.000	20.00	9.000	23.00	12.00	8.00

Unit Hyd Qpeak (cms)= 2.267

PEAK FLOW (cms)= 3.734 (i)
TIME TO PEAK (hrs)= 9.583
RUNOFF VOLUME (mm)= 88.963
TOTAL RAINFALL (mm)= 193.000
RUNOFF COEFFICIENT = 0.461

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB NASHYD (0008) ID= 1 DT= 5.0 min	Area (ha)= 23.99	Curve Number (CN)= 44.7
	Ia (mm)= 10.91	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.97	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	15.00	3.083	3.00	6.083	43.00	9.08	13.00
0.167	15.00	3.167	3.00	6.167	43.00	9.17	13.00
0.250	15.00	3.250	3.00	6.250	43.00	9.25	13.00
0.333	15.00	3.333	3.00	6.333	43.00	9.33	13.00
0.417	15.00	3.417	3.00	6.417	43.00	9.42	13.00
0.500	15.00	3.500	3.00	6.500	43.00	9.50	13.00
0.583	15.00	3.583	3.00	6.583	43.00	9.58	13.00
0.667	15.00	3.667	3.00	6.667	43.00	9.67	13.00
0.750	15.00	3.750	3.00	6.750	43.00	9.75	13.00
0.833	15.00	3.833	3.00	6.833	43.00	9.83	13.00

0.917	15.00	3.917	3.00	6.917	43.00	9.92	13.00
1.000	15.00	4.000	3.00	7.000	43.00	10.00	13.00
1.083	20.00	4.083	5.00	7.083	20.00	10.08	13.00
1.167	20.00	4.167	5.00	7.167	20.00	10.17	13.00
1.250	20.00	4.250	5.00	7.250	20.00	10.25	13.00
1.333	20.00	4.333	5.00	7.333	20.00	10.33	13.00
1.417	20.00	4.417	5.00	7.417	20.00	10.42	13.00
1.500	20.00	4.500	5.00	7.500	20.00	10.50	13.00
1.583	20.00	4.583	5.00	7.583	20.00	10.58	13.00
1.667	20.00	4.667	5.00	7.667	20.00	10.67	13.00
1.750	20.00	4.750	5.00	7.750	20.00	10.75	13.00
1.833	20.00	4.833	5.00	7.833	20.00	10.83	13.00
1.917	20.00	4.917	5.00	7.917	20.00	10.92	13.00
2.000	20.00	5.000	5.00	8.000	20.00	11.00	13.00
2.083	10.00	5.083	20.00	8.083	23.00	11.08	8.00
2.167	10.00	5.167	20.00	8.167	23.00	11.17	8.00
2.250	10.00	5.250	20.00	8.250	23.00	11.25	8.00
2.333	10.00	5.333	20.00	8.333	23.00	11.33	8.00
2.417	10.00	5.417	20.00	8.417	23.00	11.42	8.00
2.500	10.00	5.500	20.00	8.500	23.00	11.50	8.00
2.583	10.00	5.583	20.00	8.583	23.00	11.58	8.00
2.667	10.00	5.667	20.00	8.667	23.00	11.67	8.00
2.750	10.00	5.750	20.00	8.750	23.00	11.75	8.00
2.833	10.00	5.833	20.00	8.833	23.00	11.83	8.00
2.917	10.00	5.917	20.00	8.917	23.00	11.92	8.00
3.000	10.00	6.000	20.00	9.000	23.00	12.00	8.00

Unit Hyd Qpeak (cms)= 0.945

PEAK FLOW (cms)= 0.752 (i)
TIME TO PEAK (hrs)= 7.917
RUNOFF VOLUME (mm)= 66.804
TOTAL RAINFALL (mm)= 193.000
RUNOFF COEFFICIENT = 0.346

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0009)	Area (ha)= 6.37	Curve Number (CN)= 50.5	
ID= 1 DT= 5.0 min	Ia (mm)= 15.69	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.77		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	15.00	3.083	3.00	6.083	43.00	9.08	13.00
0.167	15.00	3.167	3.00	6.167	43.00	9.17	13.00
0.250	15.00	3.250	3.00	6.250	43.00	9.25	13.00
0.333	15.00	3.333	3.00	6.333	43.00	9.33	13.00
0.417	15.00	3.417	3.00	6.417	43.00	9.42	13.00
0.500	15.00	3.500	3.00	6.500	43.00	9.50	13.00
0.583	15.00	3.583	3.00	6.583	43.00	9.58	13.00
0.667	15.00	3.667	3.00	6.667	43.00	9.67	13.00
0.750	15.00	3.750	3.00	6.750	43.00	9.75	13.00
0.833	15.00	3.833	3.00	6.833	43.00	9.83	13.00
0.917	15.00	3.917	3.00	6.917	43.00	9.92	13.00
1.000	15.00	4.000	3.00	7.000	43.00	10.00	13.00
1.083	20.00	4.083	5.00	7.083	20.00	10.08	13.00
1.167	20.00	4.167	5.00	7.167	20.00	10.17	13.00
1.250	20.00	4.250	5.00	7.250	20.00	10.25	13.00
1.333	20.00	4.333	5.00	7.333	20.00	10.33	13.00
1.417	20.00	4.417	5.00	7.417	20.00	10.42	13.00
1.500	20.00	4.500	5.00	7.500	20.00	10.50	13.00
1.583	20.00	4.583	5.00	7.583	20.00	10.58	13.00
1.667	20.00	4.667	5.00	7.667	20.00	10.67	13.00
1.750	20.00	4.750	5.00	7.750	20.00	10.75	13.00
1.833	20.00	4.833	5.00	7.833	20.00	10.83	13.00
1.917	20.00	4.917	5.00	7.917	20.00	10.92	13.00
2.000	20.00	5.000	5.00	8.000	20.00	11.00	13.00
2.083	10.00	5.083	20.00	8.083	23.00	11.08	8.00
2.167	10.00	5.167	20.00	8.167	23.00	11.17	8.00
2.250	10.00	5.250	20.00	8.250	23.00	11.25	8.00
2.333	10.00	5.333	20.00	8.333	23.00	11.33	8.00
2.417	10.00	5.417	20.00	8.417	23.00	11.42	8.00
2.500	10.00	5.500	20.00	8.500	23.00	11.50	8.00
2.583	10.00	5.583	20.00	8.583	23.00	11.58	8.00
2.667	10.00	5.667	20.00	8.667	23.00	11.67	8.00
2.750	10.00	5.750	20.00	8.750	23.00	11.75	8.00
2.833	10.00	5.833	20.00	8.833	23.00	11.83	8.00
2.917	10.00	5.917	20.00	8.917	23.00	11.92	8.00
3.000	10.00	6.000	20.00	9.000	23.00	12.00	8.00

Unit Hyd Qpeak (cms)= 0.316

PEAK FLOW (cms)= 0.245 (i)
TIME TO PEAK (hrs)= 7.500
RUNOFF VOLUME (mm)= 73.716
TOTAL RAINFALL (mm)= 193.000
RUNOFF COEFFICIENT = 0.382

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB NASHYD (0010) ID= 1 DT= 5.0 min	Area (ha)= 14.85	Curve Number (CN)= 52.9
	Ia (mm)= 13.28	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.89	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	15.00	3.083	3.00	6.083	43.00	9.08	13.00
0.167	15.00	3.167	3.00	6.167	43.00	9.17	13.00
0.250	15.00	3.250	3.00	6.250	43.00	9.25	13.00
0.333	15.00	3.333	3.00	6.333	43.00	9.33	13.00
0.417	15.00	3.417	3.00	6.417	43.00	9.42	13.00
0.500	15.00	3.500	3.00	6.500	43.00	9.50	13.00
0.583	15.00	3.583	3.00	6.583	43.00	9.58	13.00
0.667	15.00	3.667	3.00	6.667	43.00	9.67	13.00
0.750	15.00	3.750	3.00	6.750	43.00	9.75	13.00
0.833	15.00	3.833	3.00	6.833	43.00	9.83	13.00
0.917	15.00	3.917	3.00	6.917	43.00	9.92	13.00
1.000	15.00	4.000	3.00	7.000	43.00	10.00	13.00
1.083	20.00	4.083	5.00	7.083	20.00	10.08	13.00
1.167	20.00	4.167	5.00	7.167	20.00	10.17	13.00
1.250	20.00	4.250	5.00	7.250	20.00	10.25	13.00
1.333	20.00	4.333	5.00	7.333	20.00	10.33	13.00
1.417	20.00	4.417	5.00	7.417	20.00	10.42	13.00
1.500	20.00	4.500	5.00	7.500	20.00	10.50	13.00
1.583	20.00	4.583	5.00	7.583	20.00	10.58	13.00
1.667	20.00	4.667	5.00	7.667	20.00	10.67	13.00
1.750	20.00	4.750	5.00	7.750	20.00	10.75	13.00
1.833	20.00	4.833	5.00	7.833	20.00	10.83	13.00
1.917	20.00	4.917	5.00	7.917	20.00	10.92	13.00
2.000	20.00	5.000	5.00	8.000	20.00	11.00	13.00
2.083	10.00	5.083	20.00	8.083	23.00	11.08	8.00
2.167	10.00	5.167	20.00	8.167	23.00	11.17	8.00
2.250	10.00	5.250	20.00	8.250	23.00	11.25	8.00
2.333	10.00	5.333	20.00	8.333	23.00	11.33	8.00
2.417	10.00	5.417	20.00	8.417	23.00	11.42	8.00
2.500	10.00	5.500	20.00	8.500	23.00	11.50	8.00
2.583	10.00	5.583	20.00	8.583	23.00	11.58	8.00
2.667	10.00	5.667	20.00	8.667	23.00	11.67	8.00
2.750	10.00	5.750	20.00	8.750	23.00	11.75	8.00
2.833	10.00	5.833	20.00	8.833	23.00	11.83	8.00

2.917	10.00	5.917	20.00	8.917	23.00	11.92	8.00
3.000	10.00	6.000	20.00	9.000	23.00	12.00	8.00

Unit Hyd Qpeak (cms)= 0.637

PEAK FLOW (cms)= 0.585 (i)
TIME TO PEAK (hrs)= 7.750
RUNOFF VOLUME (mm)= 79.651
TOTAL RAINFALL (mm)= 193.000
RUNOFF COEFFICIENT = 0.413

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB NASHYD (0013) ID= 1 DT= 5.0 min	Area (ha)= 1.70	Curve Number (CN)= 60.5
	Ia (mm)= 9.65	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.40	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	15.00	3.083	3.00	6.083	43.00	9.08	13.00
0.167	15.00	3.167	3.00	6.167	43.00	9.17	13.00
0.250	15.00	3.250	3.00	6.250	43.00	9.25	13.00
0.333	15.00	3.333	3.00	6.333	43.00	9.33	13.00
0.417	15.00	3.417	3.00	6.417	43.00	9.42	13.00
0.500	15.00	3.500	3.00	6.500	43.00	9.50	13.00
0.583	15.00	3.583	3.00	6.583	43.00	9.58	13.00
0.667	15.00	3.667	3.00	6.667	43.00	9.67	13.00
0.750	15.00	3.750	3.00	6.750	43.00	9.75	13.00
0.833	15.00	3.833	3.00	6.833	43.00	9.83	13.00
0.917	15.00	3.917	3.00	6.917	43.00	9.92	13.00
1.000	15.00	4.000	3.00	7.000	43.00	10.00	13.00
1.083	20.00	4.083	5.00	7.083	20.00	10.08	13.00
1.167	20.00	4.167	5.00	7.167	20.00	10.17	13.00
1.250	20.00	4.250	5.00	7.250	20.00	10.25	13.00
1.333	20.00	4.333	5.00	7.333	20.00	10.33	13.00
1.417	20.00	4.417	5.00	7.417	20.00	10.42	13.00
1.500	20.00	4.500	5.00	7.500	20.00	10.50	13.00
1.583	20.00	4.583	5.00	7.583	20.00	10.58	13.00
1.667	20.00	4.667	5.00	7.667	20.00	10.67	13.00
1.750	20.00	4.750	5.00	7.750	20.00	10.75	13.00
1.833	20.00	4.833	5.00	7.833	20.00	10.83	13.00

1.917	20.00	4.917	5.00	7.917	20.00	10.92	13.00
2.000	20.00	5.000	5.00	8.000	20.00	11.00	13.00
2.083	10.00	5.083	20.00	8.083	23.00	11.08	8.00
2.167	10.00	5.167	20.00	8.167	23.00	11.17	8.00
2.250	10.00	5.250	20.00	8.250	23.00	11.25	8.00
2.333	10.00	5.333	20.00	8.333	23.00	11.33	8.00
2.417	10.00	5.417	20.00	8.417	23.00	11.42	8.00
2.500	10.00	5.500	20.00	8.500	23.00	11.50	8.00
2.583	10.00	5.583	20.00	8.583	23.00	11.58	8.00
2.667	10.00	5.667	20.00	8.667	23.00	11.67	8.00
2.750	10.00	5.750	20.00	8.750	23.00	11.75	8.00
2.833	10.00	5.833	20.00	8.833	23.00	11.83	8.00
2.917	10.00	5.917	20.00	8.917	23.00	11.92	8.00
3.000	10.00	6.000	20.00	9.000	23.00	12.00	8.00

Unit Hyd Qpeak (cms)= 0.162

PEAK FLOW (cms)= 0.109 (i)
TIME TO PEAK (hrs)= 7.083
RUNOFF VOLUME (mm)= 96.184
TOTAL RAINFALL (mm)= 193.000
RUNOFF COEFFICIENT = 0.498

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0014)	Area	(ha)= 1.80	Curve Number	(CN)= 50.0	
ID= 1 DT= 5.0 min	Ia	(mm)= 16.00	# of Linear Res.(N)= 3.00		
	U.H. Tp(hrs)= 0.76				

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	15.00	3.083	3.00	6.083	43.00	9.08	13.00
0.167	15.00	3.167	3.00	6.167	43.00	9.17	13.00
0.250	15.00	3.250	3.00	6.250	43.00	9.25	13.00
0.333	15.00	3.333	3.00	6.333	43.00	9.33	13.00
0.417	15.00	3.417	3.00	6.417	43.00	9.42	13.00
0.500	15.00	3.500	3.00	6.500	43.00	9.50	13.00
0.583	15.00	3.583	3.00	6.583	43.00	9.58	13.00
0.667	15.00	3.667	3.00	6.667	43.00	9.67	13.00
0.750	15.00	3.750	3.00	6.750	43.00	9.75	13.00
0.833	15.00	3.833	3.00	6.833	43.00	9.83	13.00

0.917	15.00	3.917	3.00	6.917	43.00	9.92	13.00
1.000	15.00	4.000	3.00	7.000	43.00	10.00	13.00
1.083	20.00	4.083	5.00	7.083	20.00	10.08	13.00
1.167	20.00	4.167	5.00	7.167	20.00	10.17	13.00
1.250	20.00	4.250	5.00	7.250	20.00	10.25	13.00
1.333	20.00	4.333	5.00	7.333	20.00	10.33	13.00
1.417	20.00	4.417	5.00	7.417	20.00	10.42	13.00
1.500	20.00	4.500	5.00	7.500	20.00	10.50	13.00
1.583	20.00	4.583	5.00	7.583	20.00	10.58	13.00
1.667	20.00	4.667	5.00	7.667	20.00	10.67	13.00
1.750	20.00	4.750	5.00	7.750	20.00	10.75	13.00
1.833	20.00	4.833	5.00	7.833	20.00	10.83	13.00
1.917	20.00	4.917	5.00	7.917	20.00	10.92	13.00
2.000	20.00	5.000	5.00	8.000	20.00	11.00	13.00
2.083	10.00	5.083	20.00	8.083	23.00	11.08	8.00
2.167	10.00	5.167	20.00	8.167	23.00	11.17	8.00
2.250	10.00	5.250	20.00	8.250	23.00	11.25	8.00
2.333	10.00	5.333	20.00	8.333	23.00	11.33	8.00
2.417	10.00	5.417	20.00	8.417	23.00	11.42	8.00
2.500	10.00	5.500	20.00	8.500	23.00	11.50	8.00
2.583	10.00	5.583	20.00	8.583	23.00	11.58	8.00
2.667	10.00	5.667	20.00	8.667	23.00	11.67	8.00
2.750	10.00	5.750	20.00	8.750	23.00	11.75	8.00
2.833	10.00	5.833	20.00	8.833	23.00	11.83	8.00
2.917	10.00	5.917	20.00	8.917	23.00	11.92	8.00
3.000	10.00	6.000	20.00	9.000	23.00	12.00	8.00

Unit Hyd Qpeak (cms)= 0.090

PEAK FLOW (cms)= 0.069 (i)
TIME TO PEAK (hrs)= 7.500
RUNOFF VOLUME (mm)= 72.687
TOTAL RAINFALL (mm)= 193.000
RUNOFF COEFFICIENT = 0.377

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0015)	Area	(ha)= 6.70	Curve Number	(CN)= 60.0	
ID= 1 DT= 5.0 min	Ia	(mm)= 10.00	# of Linear Res.(N)= 3.00		
	U.H. Tp(hrs)= 1.45				

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	15.00	3.083	3.00	6.083	43.00	9.08	13.00
0.167	15.00	3.167	3.00	6.167	43.00	9.17	13.00
0.250	15.00	3.250	3.00	6.250	43.00	9.25	13.00
0.333	15.00	3.333	3.00	6.333	43.00	9.33	13.00
0.417	15.00	3.417	3.00	6.417	43.00	9.42	13.00
0.500	15.00	3.500	3.00	6.500	43.00	9.50	13.00
0.583	15.00	3.583	3.00	6.583	43.00	9.58	13.00
0.667	15.00	3.667	3.00	6.667	43.00	9.67	13.00
0.750	15.00	3.750	3.00	6.750	43.00	9.75	13.00
0.833	15.00	3.833	3.00	6.833	43.00	9.83	13.00
0.917	15.00	3.917	3.00	6.917	43.00	9.92	13.00
1.000	15.00	4.000	3.00	7.000	43.00	10.00	13.00
1.083	20.00	4.083	5.00	7.083	20.00	10.08	13.00
1.167	20.00	4.167	5.00	7.167	20.00	10.17	13.00
1.250	20.00	4.250	5.00	7.250	20.00	10.25	13.00
1.333	20.00	4.333	5.00	7.333	20.00	10.33	13.00
1.417	20.00	4.417	5.00	7.417	20.00	10.42	13.00
1.500	20.00	4.500	5.00	7.500	20.00	10.50	13.00
1.583	20.00	4.583	5.00	7.583	20.00	10.58	13.00
1.667	20.00	4.667	5.00	7.667	20.00	10.67	13.00
1.750	20.00	4.750	5.00	7.750	20.00	10.75	13.00
1.833	20.00	4.833	5.00	7.833	20.00	10.83	13.00
1.917	20.00	4.917	5.00	7.917	20.00	10.92	13.00
2.000	20.00	5.000	5.00	8.000	20.00	11.00	13.00
2.083	10.00	5.083	20.00	8.083	23.00	11.08	8.00
2.167	10.00	5.167	20.00	8.167	23.00	11.17	8.00
2.250	10.00	5.250	20.00	8.250	23.00	11.25	8.00
2.333	10.00	5.333	20.00	8.333	23.00	11.33	8.00
2.417	10.00	5.417	20.00	8.417	23.00	11.42	8.00
2.500	10.00	5.500	20.00	8.500	23.00	11.50	8.00
2.583	10.00	5.583	20.00	8.583	23.00	11.58	8.00
2.667	10.00	5.667	20.00	8.667	23.00	11.67	8.00
2.750	10.00	5.750	20.00	8.750	23.00	11.75	8.00
2.833	10.00	5.833	20.00	8.833	23.00	11.83	8.00
2.917	10.00	5.917	20.00	8.917	23.00	11.92	8.00
3.000	10.00	6.000	20.00	9.000	23.00	12.00	8.00

Unit Hyd Qpeak (cms)= 0.176

PEAK FLOW (cms)= 0.278 (i)
TIME TO PEAK (hrs)= 9.333
RUNOFF VOLUME (mm)= 95.049
TOTAL RAINFALL (mm)= 193.000
RUNOFF COEFFICIENT = 0.492

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0016)	Area (ha)= 29.16	Curve Number (CN)= 71.4	
ID= 1 DT= 5.0 min	Ia (mm)= 7.88	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.68		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	15.00	3.083	3.00	6.083	43.00	9.08	13.00
0.167	15.00	3.167	3.00	6.167	43.00	9.17	13.00
0.250	15.00	3.250	3.00	6.250	43.00	9.25	13.00
0.333	15.00	3.333	3.00	6.333	43.00	9.33	13.00
0.417	15.00	3.417	3.00	6.417	43.00	9.42	13.00
0.500	15.00	3.500	3.00	6.500	43.00	9.50	13.00
0.583	15.00	3.583	3.00	6.583	43.00	9.58	13.00
0.667	15.00	3.667	3.00	6.667	43.00	9.67	13.00
0.750	15.00	3.750	3.00	6.750	43.00	9.75	13.00
0.833	15.00	3.833	3.00	6.833	43.00	9.83	13.00
0.917	15.00	3.917	3.00	6.917	43.00	9.92	13.00
1.000	15.00	4.000	3.00	7.000	43.00	10.00	13.00
1.083	20.00	4.083	5.00	7.083	20.00	10.08	13.00
1.167	20.00	4.167	5.00	7.167	20.00	10.17	13.00
1.250	20.00	4.250	5.00	7.250	20.00	10.25	13.00
1.333	20.00	4.333	5.00	7.333	20.00	10.33	13.00
1.417	20.00	4.417	5.00	7.417	20.00	10.42	13.00
1.500	20.00	4.500	5.00	7.500	20.00	10.50	13.00
1.583	20.00	4.583	5.00	7.583	20.00	10.58	13.00
1.667	20.00	4.667	5.00	7.667	20.00	10.67	13.00
1.750	20.00	4.750	5.00	7.750	20.00	10.75	13.00
1.833	20.00	4.833	5.00	7.833	20.00	10.83	13.00
1.917	20.00	4.917	5.00	7.917	20.00	10.92	13.00
2.000	20.00	5.000	5.00	8.000	20.00	11.00	13.00
2.083	10.00	5.083	20.00	8.083	23.00	11.08	8.00
2.167	10.00	5.167	20.00	8.167	23.00	11.17	8.00
2.250	10.00	5.250	20.00	8.250	23.00	11.25	8.00
2.333	10.00	5.333	20.00	8.333	23.00	11.33	8.00
2.417	10.00	5.417	20.00	8.417	23.00	11.42	8.00
2.500	10.00	5.500	20.00	8.500	23.00	11.50	8.00
2.583	10.00	5.583	20.00	8.583	23.00	11.58	8.00
2.667	10.00	5.667	20.00	8.667	23.00	11.67	8.00
2.750	10.00	5.750	20.00	8.750	23.00	11.75	8.00
2.833	10.00	5.833	20.00	8.833	23.00	11.83	8.00

2.917	10.00	5.917	20.00	8.917	23.00	11.92	8.00
3.000	10.00	6.000	20.00	9.000	23.00	12.00	8.00

Unit Hyd Qpeak (cms)= 1.638

PEAK FLOW (cms)= 1.977 (i)
TIME TO PEAK (hrs)= 7.333
RUNOFF VOLUME (mm)= 119.461
TOTAL RAINFALL (mm)= 193.000
RUNOFF COEFFICIENT = 0.619

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0019)	Area (ha)=	39.68	Curve Number (CN)=	60.7	
ID= 1 DT= 5.0 min	Ia (mm)=	8.26	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	1.18			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	15.00	3.083	3.00	6.083	43.00	9.08	13.00
0.167	15.00	3.167	3.00	6.167	43.00	9.17	13.00
0.250	15.00	3.250	3.00	6.250	43.00	9.25	13.00
0.333	15.00	3.333	3.00	6.333	43.00	9.33	13.00
0.417	15.00	3.417	3.00	6.417	43.00	9.42	13.00
0.500	15.00	3.500	3.00	6.500	43.00	9.50	13.00
0.583	15.00	3.583	3.00	6.583	43.00	9.58	13.00
0.667	15.00	3.667	3.00	6.667	43.00	9.67	13.00
0.750	15.00	3.750	3.00	6.750	43.00	9.75	13.00
0.833	15.00	3.833	3.00	6.833	43.00	9.83	13.00
0.917	15.00	3.917	3.00	6.917	43.00	9.92	13.00
1.000	15.00	4.000	3.00	7.000	43.00	10.00	13.00
1.083	20.00	4.083	5.00	7.083	20.00	10.08	13.00
1.167	20.00	4.167	5.00	7.167	20.00	10.17	13.00
1.250	20.00	4.250	5.00	7.250	20.00	10.25	13.00
1.333	20.00	4.333	5.00	7.333	20.00	10.33	13.00
1.417	20.00	4.417	5.00	7.417	20.00	10.42	13.00
1.500	20.00	4.500	5.00	7.500	20.00	10.50	13.00
1.583	20.00	4.583	5.00	7.583	20.00	10.58	13.00
1.667	20.00	4.667	5.00	7.667	20.00	10.67	13.00
1.750	20.00	4.750	5.00	7.750	20.00	10.75	13.00
1.833	20.00	4.833	5.00	7.833	20.00	10.83	13.00

1.917	20.00	4.917	5.00	7.917	20.00	10.92	13.00
2.000	20.00	5.000	5.00	8.000	20.00	11.00	13.00
2.083	10.00	5.083	20.00	8.083	23.00	11.08	8.00
2.167	10.00	5.167	20.00	8.167	23.00	11.17	8.00
2.250	10.00	5.250	20.00	8.250	23.00	11.25	8.00
2.333	10.00	5.333	20.00	8.333	23.00	11.33	8.00
2.417	10.00	5.417	20.00	8.417	23.00	11.42	8.00
2.500	10.00	5.500	20.00	8.500	23.00	11.50	8.00
2.583	10.00	5.583	20.00	8.583	23.00	11.58	8.00
2.667	10.00	5.667	20.00	8.667	23.00	11.67	8.00
2.750	10.00	5.750	20.00	8.750	23.00	11.75	8.00
2.833	10.00	5.833	20.00	8.833	23.00	11.83	8.00
2.917	10.00	5.917	20.00	8.917	23.00	11.92	8.00
3.000	10.00	6.000	20.00	9.000	23.00	12.00	8.00

Unit Hyd Qpeak (cms)= 1.284

PEAK FLOW (cms)= 1.736 (i)
TIME TO PEAK (hrs)= 9.083
RUNOFF VOLUME (mm)= 97.679
TOTAL RAINFALL (mm)= 193.000
RUNOFF COEFFICIENT = 0.506

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0024)		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3	ID1= 1 (0010):	14.85	0.585	7.75	79.65
	+ ID2= 2 (0013):	1.70	0.109	7.08	96.18
	ID = 3 (0024):	16.55	0.665	7.58	81.35

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
3 + 2 = 1	ID1= 3 (0024):	16.55	0.665	7.58	81.35
	+ ID2= 2 (0014):	1.80	0.069	7.50	72.69
	ID = 1 (0024):	18.35	0.734	7.58	80.50

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
	ID1= 1 (0024):	18.35	0.734	7.58	80.50
	+ ID2= 2 (0015):	6.70	0.278	9.33	95.05
	ID = 3 (0024):	25.05	0.961	9.08	84.39

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
	ID1= 3 (0024):	25.05	0.961	9.08	84.39
	+ ID2= 2 (0016):	29.16	1.977	7.33	119.46
	ID = 1 (0024):	54.21	2.897	7.42	103.26

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
	ID1= 1 (0024):	54.21	2.897	7.42	103.26
	+ ID2= 2 (0019):	39.68	1.736	9.08	97.68
	ID = 3 (0024):	93.89	4.467	7.58	100.90

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
	ID1= 3 (0024):	93.89	4.467	7.58	100.90
	+ ID2= 2 (0007):	100.92	3.734	9.58	88.96
	ID = 1 (0024):	194.81	7.839	9.17	94.72

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
	ID1= 1 (0024):	194.81	7.839	9.17	94.72
	+ ID2= 2 (0008):	23.99	0.752	7.92	66.80
	ID = 3 (0024):	218.80	8.581	9.17	91.66

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
	ID1= 3 (0024):	218.80	8.581	9.17	91.66
	+ ID2= 2 (0009):	6.37	0.245	7.50	73.72
	ID = 1 (0024):	225.17	8.802	9.17	91.15

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB NASHYD (0011)	ID= 1 DT= 5.0 min	Area (ha)= 46.28	Curve Number (CN)= 72.2
		Ia (mm)= 7.09	# of Linear Res.(N)= 3.00
		U.H. Tp(hrs)= 0.30	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	15.00	3.083	3.00	6.083	43.00	9.08	13.00
0.167	15.00	3.167	3.00	6.167	43.00	9.17	13.00
0.250	15.00	3.250	3.00	6.250	43.00	9.25	13.00
0.333	15.00	3.333	3.00	6.333	43.00	9.33	13.00
0.417	15.00	3.417	3.00	6.417	43.00	9.42	13.00
0.500	15.00	3.500	3.00	6.500	43.00	9.50	13.00
0.583	15.00	3.583	3.00	6.583	43.00	9.58	13.00
0.667	15.00	3.667	3.00	6.667	43.00	9.67	13.00
0.750	15.00	3.750	3.00	6.750	43.00	9.75	13.00
0.833	15.00	3.833	3.00	6.833	43.00	9.83	13.00

Post-Development VO Output

0.917	15.00	3.917	3.00	6.917	43.00	9.92	13.00
1.000	15.00	4.000	3.00	7.000	43.00	10.00	13.00
1.083	20.00	4.083	5.00	7.083	20.00	10.08	13.00
1.167	20.00	4.167	5.00	7.167	20.00	10.17	13.00
1.250	20.00	4.250	5.00	7.250	20.00	10.25	13.00
1.333	20.00	4.333	5.00	7.333	20.00	10.33	13.00
1.417	20.00	4.417	5.00	7.417	20.00	10.42	13.00
1.500	20.00	4.500	5.00	7.500	20.00	10.50	13.00
1.583	20.00	4.583	5.00	7.583	20.00	10.58	13.00
1.667	20.00	4.667	5.00	7.667	20.00	10.67	13.00
1.750	20.00	4.750	5.00	7.750	20.00	10.75	13.00
1.833	20.00	4.833	5.00	7.833	20.00	10.83	13.00
1.917	20.00	4.917	5.00	7.917	20.00	10.92	13.00
2.000	20.00	5.000	5.00	8.000	20.00	11.00	13.00
2.083	10.00	5.083	20.00	8.083	23.00	11.08	8.00
2.167	10.00	5.167	20.00	8.167	23.00	11.17	8.00
2.250	10.00	5.250	20.00	8.250	23.00	11.25	8.00
2.333	10.00	5.333	20.00	8.333	23.00	11.33	8.00
2.417	10.00	5.417	20.00	8.417	23.00	11.42	8.00
2.500	10.00	5.500	20.00	8.500	23.00	11.50	8.00
2.583	10.00	5.583	20.00	8.583	23.00	11.58	8.00
2.667	10.00	5.667	20.00	8.667	23.00	11.67	8.00
2.750	10.00	5.750	20.00	8.750	23.00	11.75	8.00
2.833	10.00	5.833	20.00	8.833	23.00	11.83	8.00
2.917	10.00	5.917	20.00	8.917	23.00	11.92	8.00
3.000	10.00	6.000	20.00	9.000	23.00	12.00	8.00

Unit Hyd Qpeak (cms)= 5.892

PEAK FLOW (cms)= 3.978 (i)
TIME TO PEAK (hrs)= 7.000
RUNOFF VOLUME (mm)= 121.755
TOTAL RAINFALL (mm)= 193.000
RUNOFF COEFFICIENT = 0.631

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB NASHYD (0012) ID= 1 DT= 5.0 min	Area (ha)= 1.13	Curve Number (CN)= 67.4
	Ia (mm)= 7.88	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.43	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

Post-Development VO Output

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	15.00	3.083	3.00	6.083	43.00	9.08	13.00
0.167	15.00	3.167	3.00	6.167	43.00	9.17	13.00
0.250	15.00	3.250	3.00	6.250	43.00	9.25	13.00
0.333	15.00	3.333	3.00	6.333	43.00	9.33	13.00
0.417	15.00	3.417	3.00	6.417	43.00	9.42	13.00
0.500	15.00	3.500	3.00	6.500	43.00	9.50	13.00
0.583	15.00	3.583	3.00	6.583	43.00	9.58	13.00
0.667	15.00	3.667	3.00	6.667	43.00	9.67	13.00
0.750	15.00	3.750	3.00	6.750	43.00	9.75	13.00
0.833	15.00	3.833	3.00	6.833	43.00	9.83	13.00
0.917	15.00	3.917	3.00	6.917	43.00	9.92	13.00
1.000	15.00	4.000	3.00	7.000	43.00	10.00	13.00
1.083	20.00	4.083	5.00	7.083	20.00	10.08	13.00
1.167	20.00	4.167	5.00	7.167	20.00	10.17	13.00
1.250	20.00	4.250	5.00	7.250	20.00	10.25	13.00
1.333	20.00	4.333	5.00	7.333	20.00	10.33	13.00
1.417	20.00	4.417	5.00	7.417	20.00	10.42	13.00
1.500	20.00	4.500	5.00	7.500	20.00	10.50	13.00
1.583	20.00	4.583	5.00	7.583	20.00	10.58	13.00
1.667	20.00	4.667	5.00	7.667	20.00	10.67	13.00
1.750	20.00	4.750	5.00	7.750	20.00	10.75	13.00
1.833	20.00	4.833	5.00	7.833	20.00	10.83	13.00
1.917	20.00	4.917	5.00	7.917	20.00	10.92	13.00
2.000	20.00	5.000	5.00	8.000	20.00	11.00	13.00
2.083	10.00	5.083	20.00	8.083	23.00	11.08	8.00
2.167	10.00	5.167	20.00	8.167	23.00	11.17	8.00
2.250	10.00	5.250	20.00	8.250	23.00	11.25	8.00
2.333	10.00	5.333	20.00	8.333	23.00	11.33	8.00
2.417	10.00	5.417	20.00	8.417	23.00	11.42	8.00
2.500	10.00	5.500	20.00	8.500	23.00	11.50	8.00
2.583	10.00	5.583	20.00	8.583	23.00	11.58	8.00
2.667	10.00	5.667	20.00	8.667	23.00	11.67	8.00
2.750	10.00	5.750	20.00	8.750	23.00	11.75	8.00
2.833	10.00	5.833	20.00	8.833	23.00	11.83	8.00
2.917	10.00	5.917	20.00	8.917	23.00	11.92	8.00
3.000	10.00	6.000	20.00	9.000	23.00	12.00	8.00

Unit Hyd Qpeak (cms)= 0.100

PEAK FLOW (cms)= 0.082 (i)
TIME TO PEAK (hrs)= 7.083
RUNOFF VOLUME (mm)= 111.181
TOTAL RAINFALL (mm)= 193.000
RUNOFF COEFFICIENT = 0.576

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

1508-7498

CALIB									
STANDHYD (0043)	Area (ha)= 0.13								
ID= 1 DT= 5.0 min	Total Imp(%)= 30.77	Dir. Conn.(%)= 7.69							

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.04	0.09
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	0.50
Length	(m)=	29.44	70.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	15.00	3.083	3.00	6.083	43.00	9.08	13.00
0.167	15.00	3.167	3.00	6.167	43.00	9.17	13.00
0.250	15.00	3.250	3.00	6.250	43.00	9.25	13.00
0.333	15.00	3.333	3.00	6.333	43.00	9.33	13.00
0.417	15.00	3.417	3.00	6.417	43.00	9.42	13.00
0.500	15.00	3.500	3.00	6.500	43.00	9.50	13.00
0.583	15.00	3.583	3.00	6.583	43.00	9.58	13.00
0.667	15.00	3.667	3.00	6.667	43.00	9.67	13.00
0.750	15.00	3.750	3.00	6.750	43.00	9.75	13.00
0.833	15.00	3.833	3.00	6.833	43.00	9.83	13.00
0.917	15.00	3.917	3.00	6.917	43.00	9.92	13.00
1.000	15.00	4.000	3.00	7.000	43.00	10.00	13.00
1.083	20.00	4.083	5.00	7.083	20.00	10.08	13.00
1.167	20.00	4.167	5.00	7.167	20.00	10.17	13.00
1.250	20.00	4.250	5.00	7.250	20.00	10.25	13.00
1.333	20.00	4.333	5.00	7.333	20.00	10.33	13.00
1.417	20.00	4.417	5.00	7.417	20.00	10.42	13.00
1.500	20.00	4.500	5.00	7.500	20.00	10.50	13.00
1.583	20.00	4.583	5.00	7.583	20.00	10.58	13.00
1.667	20.00	4.667	5.00	7.667	20.00	10.67	13.00
1.750	20.00	4.750	5.00	7.750	20.00	10.75	13.00
1.833	20.00	4.833	5.00	7.833	20.00	10.83	13.00
1.917	20.00	4.917	5.00	7.917	20.00	10.92	13.00
2.000	20.00	5.000	5.00	8.000	20.00	11.00	13.00
2.083	10.00	5.083	20.00	8.083	23.00	11.08	8.00
2.167	10.00	5.167	20.00	8.167	23.00	11.17	8.00
2.250	10.00	5.250	20.00	8.250	23.00	11.25	8.00
2.333	10.00	5.333	20.00	8.333	23.00	11.33	8.00

2.417	10.00	5.417	20.00	8.417	23.00	11.42	8.00
2.500	10.00	5.500	20.00	8.500	23.00	11.50	8.00
2.583	10.00	5.583	20.00	8.583	23.00	11.58	8.00
2.667	10.00	5.667	20.00	8.667	23.00	11.67	8.00
2.750	10.00	5.750	20.00	8.750	23.00	11.75	8.00
2.833	10.00	5.833	20.00	8.833	23.00	11.83	8.00
2.917	10.00	5.917	20.00	8.917	23.00	11.92	8.00
3.000	10.00	6.000	20.00	9.000	23.00	12.00	8.00

Max.Eff.Inten.(mm/hr)=		43.00	45.54	
over (min)		5.00	25.00	
Storage Coeff. (min)=		2.12 (ii)	22.62 (ii)	
Unit Hyd. Tpeak (min)=		5.00	25.00	
Unit Hyd. peak (cms)=		0.31	0.05	
				TOTALS
PEAK FLOW	(cms)=	0.00	0.01	0.011 (iii)
TIME TO PEAK	(hrs)=	6.42	7.08	7.00
RUNOFF VOLUME	(mm)=	192.00	130.32	134.97
TOTAL RAINFALL	(mm)=	193.00	193.00	193.00
RUNOFF COEFFICIENT	=	0.99	0.68	0.70

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB									
STANDHYD (0044)	Area (ha)= 1.62								
ID= 1 DT= 5.0 min	Total Imp(%)= 48.77	Dir. Conn.(%)= 30.86							

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.79	0.83
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	1.40
Length	(m)=	103.92	400.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	15.00	3.083	3.00	6.083	43.00	9.08	13.00
0.167	15.00	3.167	3.00	6.167	43.00	9.17	13.00
0.250	15.00	3.250	3.00	6.250	43.00	9.25	13.00
0.333	15.00	3.333	3.00	6.333	43.00	9.33	13.00
0.417	15.00	3.417	3.00	6.417	43.00	9.42	13.00
0.500	15.00	3.500	3.00	6.500	43.00	9.50	13.00
0.583	15.00	3.583	3.00	6.583	43.00	9.58	13.00
0.667	15.00	3.667	3.00	6.667	43.00	9.67	13.00
0.750	15.00	3.750	3.00	6.750	43.00	9.75	13.00
0.833	15.00	3.833	3.00	6.833	43.00	9.83	13.00
0.917	15.00	3.917	3.00	6.917	43.00	9.92	13.00
1.000	15.00	4.000	3.00	7.000	43.00	10.00	13.00
1.083	20.00	4.083	5.00	7.083	20.00	10.08	13.00
1.167	20.00	4.167	5.00	7.167	20.00	10.17	13.00
1.250	20.00	4.250	5.00	7.250	20.00	10.25	13.00
1.333	20.00	4.333	5.00	7.333	20.00	10.33	13.00
1.417	20.00	4.417	5.00	7.417	20.00	10.42	13.00
1.500	20.00	4.500	5.00	7.500	20.00	10.50	13.00
1.583	20.00	4.583	5.00	7.583	20.00	10.58	13.00
1.667	20.00	4.667	5.00	7.667	20.00	10.67	13.00
1.750	20.00	4.750	5.00	7.750	20.00	10.75	13.00
1.833	20.00	4.833	5.00	7.833	20.00	10.83	13.00
1.917	20.00	4.917	5.00	7.917	20.00	10.92	13.00
2.000	20.00	5.000	5.00	8.000	20.00	11.00	13.00
2.083	10.00	5.083	20.00	8.083	23.00	11.08	8.00
2.167	10.00	5.167	20.00	8.167	23.00	11.17	8.00
2.250	10.00	5.250	20.00	8.250	23.00	11.25	8.00
2.333	10.00	5.333	20.00	8.333	23.00	11.33	8.00
2.417	10.00	5.417	20.00	8.417	23.00	11.42	8.00
2.500	10.00	5.500	20.00	8.500	23.00	11.50	8.00
2.583	10.00	5.583	20.00	8.583	23.00	11.58	8.00
2.667	10.00	5.667	20.00	8.667	23.00	11.67	8.00
2.750	10.00	5.750	20.00	8.750	23.00	11.75	8.00
2.833	10.00	5.833	20.00	8.833	23.00	11.83	8.00
2.917	10.00	5.917	20.00	8.917	23.00	11.92	8.00
3.000	10.00	6.000	20.00	9.000	23.00	12.00	8.00

Max.Eff.Inten.(mm/hr)=	43.00	45.23	
over (min)	5.00	50.00	
Storage Coeff. (min)=	4.51 (ii)	47.46 (ii)	
Unit Hyd. Tpeak (min)=	5.00	50.00	
Unit Hyd. peak (cms)=	0.23	0.02	
			TOTALS
PEAK FLOW (cms)=	0.06	0.08	0.126 (iii)
TIME TO PEAK (hrs)=	6.92	7.50	7.00
RUNOFF VOLUME (mm)=	192.00	130.85	149.70

TOTAL RAINFALL (mm)=	193.00	193.00	193.00
RUNOFF COEFFICIENT =	0.99	0.68	0.78

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB		
NASHYD (0041)	Area (ha)= 0.59	Curve Number (CN)= 71.5
ID= 1 DT= 5.0 min	Ia (mm)= 4.75	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.53	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	15.00	3.083	3.00	6.083	43.00	9.08	13.00
0.167	15.00	3.167	3.00	6.167	43.00	9.17	13.00
0.250	15.00	3.250	3.00	6.250	43.00	9.25	13.00
0.333	15.00	3.333	3.00	6.333	43.00	9.33	13.00
0.417	15.00	3.417	3.00	6.417	43.00	9.42	13.00
0.500	15.00	3.500	3.00	6.500	43.00	9.50	13.00
0.583	15.00	3.583	3.00	6.583	43.00	9.58	13.00
0.667	15.00	3.667	3.00	6.667	43.00	9.67	13.00
0.750	15.00	3.750	3.00	6.750	43.00	9.75	13.00
0.833	15.00	3.833	3.00	6.833	43.00	9.83	13.00
0.917	15.00	3.917	3.00	6.917	43.00	9.92	13.00
1.000	15.00	4.000	3.00	7.000	43.00	10.00	13.00
1.083	20.00	4.083	5.00	7.083	20.00	10.08	13.00
1.167	20.00	4.167	5.00	7.167	20.00	10.17	13.00
1.250	20.00	4.250	5.00	7.250	20.00	10.25	13.00
1.333	20.00	4.333	5.00	7.333	20.00	10.33	13.00
1.417	20.00	4.417	5.00	7.417	20.00	10.42	13.00
1.500	20.00	4.500	5.00	7.500	20.00	10.50	13.00
1.583	20.00	4.583	5.00	7.583	20.00	10.58	13.00
1.667	20.00	4.667	5.00	7.667	20.00	10.67	13.00
1.750	20.00	4.750	5.00	7.750	20.00	10.75	13.00
1.833	20.00	4.833	5.00	7.833	20.00	10.83	13.00
1.917	20.00	4.917	5.00	7.917	20.00	10.92	13.00
2.000	20.00	5.000	5.00	8.000	20.00	11.00	13.00

2.083	10.00	5.083	20.00	8.083	23.00	11.08	8.00
2.167	10.00	5.167	20.00	8.167	23.00	11.17	8.00
2.250	10.00	5.250	20.00	8.250	23.00	11.25	8.00
2.333	10.00	5.333	20.00	8.333	23.00	11.33	8.00
2.417	10.00	5.417	20.00	8.417	23.00	11.42	8.00
2.500	10.00	5.500	20.00	8.500	23.00	11.50	8.00
2.583	10.00	5.583	20.00	8.583	23.00	11.58	8.00
2.667	10.00	5.667	20.00	8.667	23.00	11.67	8.00
2.750	10.00	5.750	20.00	8.750	23.00	11.75	8.00
2.833	10.00	5.833	20.00	8.833	23.00	11.83	8.00
2.917	10.00	5.917	20.00	8.917	23.00	11.92	8.00
3.000	10.00	6.000	20.00	9.000	23.00	12.00	8.00

Unit Hyd Qpeak (cms)= 0.043

PEAK FLOW (cms)= 0.044 (i)
TIME TO PEAK (hrs)= 7.167
RUNOFF VOLUME (mm)= 122.322
TOTAL RAINFALL (mm)= 193.000
RUNOFF COEFFICIENT = 0.634

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0028)	Area (ha)=	1.38	Curve Number (CN)= 64.1
ID= 1 DT= 5.0 min	Ia (mm)=	8.51	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	0.39	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	15.00	3.083	3.00	6.083	43.00	9.08	13.00
0.167	15.00	3.167	3.00	6.167	43.00	9.17	13.00
0.250	15.00	3.250	3.00	6.250	43.00	9.25	13.00
0.333	15.00	3.333	3.00	6.333	43.00	9.33	13.00
0.417	15.00	3.417	3.00	6.417	43.00	9.42	13.00
0.500	15.00	3.500	3.00	6.500	43.00	9.50	13.00
0.583	15.00	3.583	3.00	6.583	43.00	9.58	13.00
0.667	15.00	3.667	3.00	6.667	43.00	9.67	13.00
0.750	15.00	3.750	3.00	6.750	43.00	9.75	13.00
0.833	15.00	3.833	3.00	6.833	43.00	9.83	13.00
0.917	15.00	3.917	3.00	6.917	43.00	9.92	13.00
1.000	15.00	4.000	3.00	7.000	43.00	10.00	13.00

1.083	20.00	4.083	5.00	7.083	20.00	10.08	13.00
1.167	20.00	4.167	5.00	7.167	20.00	10.17	13.00
1.250	20.00	4.250	5.00	7.250	20.00	10.25	13.00
1.333	20.00	4.333	5.00	7.333	20.00	10.33	13.00
1.417	20.00	4.417	5.00	7.417	20.00	10.42	13.00
1.500	20.00	4.500	5.00	7.500	20.00	10.50	13.00
1.583	20.00	4.583	5.00	7.583	20.00	10.58	13.00
1.667	20.00	4.667	5.00	7.667	20.00	10.67	13.00
1.750	20.00	4.750	5.00	7.750	20.00	10.75	13.00
1.833	20.00	4.833	5.00	7.833	20.00	10.83	13.00
1.917	20.00	4.917	5.00	7.917	20.00	10.92	13.00
2.000	20.00	5.000	5.00	8.000	20.00	11.00	13.00
2.083	10.00	5.083	20.00	8.083	23.00	11.08	8.00
2.167	10.00	5.167	20.00	8.167	23.00	11.17	8.00
2.250	10.00	5.250	20.00	8.250	23.00	11.25	8.00
2.333	10.00	5.333	20.00	8.333	23.00	11.33	8.00
2.417	10.00	5.417	20.00	8.417	23.00	11.42	8.00
2.500	10.00	5.500	20.00	8.500	23.00	11.50	8.00
2.583	10.00	5.583	20.00	8.583	23.00	11.58	8.00
2.667	10.00	5.667	20.00	8.667	23.00	11.67	8.00
2.750	10.00	5.750	20.00	8.750	23.00	11.75	8.00
2.833	10.00	5.833	20.00	8.833	23.00	11.83	8.00
2.917	10.00	5.917	20.00	8.917	23.00	11.92	8.00
3.000	10.00	6.000	20.00	9.000	23.00	12.00	8.00

Unit Hyd Qpeak (cms)= 0.135

PEAK FLOW (cms)= 0.097 (i)
TIME TO PEAK (hrs)= 7.083
RUNOFF VOLUME (mm)= 104.232
TOTAL RAINFALL (mm)= 193.000
RUNOFF COEFFICIENT = 0.540

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0023)		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3	ID1= 1 (0011):	46.28	3.978	7.00	121.75
	+ ID2= 2 (0012):	1.13	0.082	7.08	111.18
	ID = 3 (0023):	47.41	4.058	7.00	121.50

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0023):		47.41	4.058	7.00	121.50
+ ID2= 2 (0028):		1.38	0.097	7.08	104.23
ID = 1 (0023):		48.79	4.153	7.00	121.01

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0023):		48.79	4.153	7.00	121.01
+ ID2= 2 (0041):		0.59	0.044	7.17	122.32
ID = 3 (0023):		49.38	4.196	7.00	121.03

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0023):		49.38	4.196	7.00	121.03
+ ID2= 2 (0043):		0.13	0.011	7.00	134.97
ID = 1 (0023):		49.51	4.207	7.00	121.07

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0023):		49.51	4.207	7.00	121.07
+ ID2= 2 (0044):		1.62	0.126	7.00	149.70
ID = 3 (0023):		51.13	4.333	7.00	121.97

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0025)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0023):		51.13	4.333	7.00	121.97
+ ID2= 2 (0024):		225.17	8.802	9.17	91.15
ID = 3 (0025):		276.30	11.450	9.00	96.85

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

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       V    V   I    SSSSS  U   U    A    L             (v 6.2.2020)
       V    V   I    SS     U   U   A A   L
        V  V    I     SS    U   U  AAAAA  L
        V  V    I      SS   U   U  A   A  L
         VV     I    SSSSS  UUUUU  A   A  LLLLL

        OOO   TTTTT  TTTTT  H   H  Y   Y  M   M   OOO    TM
       O   O    T      T    H   H   Y Y   MM MM  O   O
       O   O    T      T    H   H    Y    M   M  O   O
        OOO     T      T    H   H    Y    M   M   OOO
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                  *****  D E T A I L E D   O U T P U T *****


  Input   filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat

  Output  filename:
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  Summary filename:
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da2-e0fd-40ea-a3f3-7f14884e67fa\scena


DATE: 07-15-2026                          TIME: 03:17:58

USER:



COMMENTS: _____________________________________________________________


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  ***********************************************
  ** SIMULATION : A - 2-year CHI                **
  ***********************************************

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| CHICAGO STORM    |    IDF curve parameters: A= 424.530
| Ptotal= 36.82 mm |                          B=   0.000
--------------------                          C=   0.699
```

used in: INTENSITY = A / (t + B)^C

Duration of storm = 4.00 hrs
Storm time step = 10.00 min
Time to peak ratio = 0.33

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.00	3.10	1.00	14.65	2.00	6.12	3.00	3.57
0.17	3.46	1.17	84.90	2.17	5.41	3.17	3.36
0.33	3.95	1.33	17.98	2.33	4.86	3.33	3.18
0.50	4.65	1.50	11.34	2.50	4.44	3.50	3.02
0.67	5.76	1.67	8.64	2.67	4.09	3.67	2.88
0.83	7.88	1.83	7.12	2.83	3.81	3.83	2.75

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| CALIB            |
| NASHYD   (  0007)|   Area    (ha)= 100.92   Curve Number   (CN)= 55.9
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.89   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   1.70

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.
```

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	3.10	1.083	14.65	2.083	6.12	3.08	3.57
0.167	3.10	1.167	14.65	2.167	6.12	3.17	3.57
0.250	3.46	1.250	84.90	2.250	5.41	3.25	3.36
0.333	3.46	1.333	84.90	2.333	5.41	3.33	3.36
0.417	3.95	1.417	17.98	2.417	4.86	3.42	3.18
0.500	3.95	1.500	17.98	2.500	4.86	3.50	3.18
0.583	4.65	1.583	11.34	2.583	4.44	3.58	3.02
0.667	4.65	1.667	11.34	2.667	4.44	3.67	3.02
0.750	5.76	1.750	8.64	2.750	4.09	3.75	2.88
0.833	5.76	1.833	8.64	2.833	4.09	3.83	2.88
0.917	7.88	1.917	7.12	2.917	3.81	3.92	2.75
1.000	7.88	2.000	7.12	3.000	3.81	4.00	2.75

```
     Unit Hyd Qpeak  (cms)=   2.267

     PEAK FLOW       (cms)=   0.253 (i)
     TIME TO PEAK    (hrs)=   4.083
     RUNOFF VOLUME    (mm)=   3.654
     TOTAL RAINFALL   (mm)=  36.816
     RUNOFF COEFFICIENT   =   0.099
```

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0008)	Area (ha)= 23.99	Curve Number (CN)= 44.7			
ID= 1 DT= 5.0 min	Ia (mm)= 10.91	# of Linear Res.(N)= 3.00			
	U.H. Tp(hrs)= 0.97				

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	3.10	1.083	14.65	2.083	6.12	3.08	3.57
0.167	3.10	1.167	14.65	2.167	6.12	3.17	3.57
0.250	3.46	1.250	84.90	2.250	5.41	3.25	3.36
0.333	3.46	1.333	84.90	2.333	5.41	3.33	3.36
0.417	3.95	1.417	17.98	2.417	4.86	3.42	3.18
0.500	3.95	1.500	17.98	2.500	4.86	3.50	3.18
0.583	4.65	1.583	11.34	2.583	4.44	3.58	3.02
0.667	4.65	1.667	11.34	2.667	4.44	3.67	3.02
0.750	5.76	1.750	8.64	2.750	4.09	3.75	2.88
0.833	5.76	1.833	8.64	2.833	4.09	3.83	2.88
0.917	7.88	1.917	7.12	2.917	3.81	3.92	2.75
1.000	7.88	2.000	7.12	3.000	3.81	4.00	2.75

Unit Hyd Qpeak (cms)= 0.945

PEAK FLOW (cms)= 0.042 (i)
TIME TO PEAK (hrs)= 3.000
RUNOFF VOLUME (mm)= 1.973
TOTAL RAINFALL (mm)= 36.816
RUNOFF COEFFICIENT = 0.054

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0009)	Area (ha)= 6.37	Curve Number (CN)= 50.5			
ID= 1 DT= 5.0 min	Ia (mm)= 15.69	# of Linear Res.(N)= 3.00			
	U.H. Tp(hrs)= 0.77				

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	3.10	1.083	14.65	2.083	6.12	3.08	3.57
0.167	3.10	1.167	14.65	2.167	6.12	3.17	3.57
0.250	3.46	1.250	84.90	2.250	5.41	3.25	3.36
0.333	3.46	1.333	84.90	2.333	5.41	3.33	3.36
0.417	3.95	1.417	17.98	2.417	4.86	3.42	3.18
0.500	3.95	1.500	17.98	2.500	4.86	3.50	3.18
0.583	4.65	1.583	11.34	2.583	4.44	3.58	3.02
0.667	4.65	1.667	11.34	2.667	4.44	3.67	3.02
0.750	5.76	1.750	8.64	2.750	4.09	3.75	2.88
0.833	5.76	1.833	8.64	2.833	4.09	3.83	2.88
0.917	7.88	1.917	7.12	2.917	3.81	3.92	2.75
1.000	7.88	2.000	7.12	3.000	3.81	4.00	2.75

Unit Hyd Qpeak (cms)= 0.316

PEAK FLOW (cms)= 0.010 (i)
TIME TO PEAK (hrs)= 3.000
RUNOFF VOLUME (mm)= 1.651
TOTAL RAINFALL (mm)= 36.816
RUNOFF COEFFICIENT = 0.045

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0010)	Area (ha)= 14.85	Curve Number (CN)= 52.9			
ID= 1 DT= 5.0 min	Ia (mm)= 13.28	# of Linear Res.(N)= 3.00			
	U.H. Tp(hrs)= 0.89				

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	3.10	1.083	14.65	2.083	6.12	3.08	3.57
0.167	3.10	1.167	14.65	2.167	6.12	3.17	3.57
0.250	3.46	1.250	84.90	2.250	5.41	3.25	3.36
0.333	3.46	1.333	84.90	2.333	5.41	3.33	3.36
0.417	3.95	1.417	17.98	2.417	4.86	3.42	3.18
0.500	3.95	1.500	17.98	2.500	4.86	3.50	3.18
0.583	4.65	1.583	11.34	2.583	4.44	3.58	3.02
0.667	4.65	1.667	11.34	2.667	4.44	3.67	3.02
0.750	5.76	1.750	8.64	2.750	4.09	3.75	2.88
0.833	5.76	1.833	8.64	2.833	4.09	3.83	2.88
0.917	7.88	1.917	7.12	2.917	3.81	3.92	2.75
1.000	7.88	2.000	7.12	3.000	3.81	4.00	2.75

Unit Hyd Qpeak (cms)= 0.637

PEAK FLOW (cms)= 0.030 (i)
TIME TO PEAK (hrs)= 3.000
RUNOFF VOLUME (mm)= 2.222
TOTAL RAINFALL (mm)= 36.816
RUNOFF COEFFICIENT = 0.060

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB								
NASHYD (0013)	Area (ha)=	1.70	Curve Number (CN)=	60.5				
ID= 1 DT= 5.0 min	Ia (mm)=	9.65	# of Linear Res.(N)=	3.00				
	U.H. Tp(hrs)=	0.40						

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	3.10	1.083	14.65	2.083	6.12	3.08	3.57
0.167	3.10	1.167	14.65	2.167	6.12	3.17	3.57
0.250	3.46	1.250	84.90	2.250	5.41	3.25	3.36
0.333	3.46	1.333	84.90	2.333	5.41	3.33	3.36
0.417	3.95	1.417	17.98	2.417	4.86	3.42	3.18
0.500	3.95	1.500	17.98	2.500	4.86	3.50	3.18
0.583	4.65	1.583	11.34	2.583	4.44	3.58	3.02
0.667	4.65	1.667	11.34	2.667	4.44	3.67	3.02
0.750	5.76	1.750	8.64	2.750	4.09	3.75	2.88
0.833	5.76	1.833	8.64	2.833	4.09	3.83	2.88
0.917	7.88	1.917	7.12	2.917	3.81	3.92	2.75
1.000	7.88	2.000	7.12	3.000	3.81	4.00	2.75

Unit Hyd Qpeak (cms)= 0.162

PEAK FLOW (cms)= 0.009 (i)
TIME TO PEAK (hrs)= 1.917
RUNOFF VOLUME (mm)= 3.817
TOTAL RAINFALL (mm)= 36.816
RUNOFF COEFFICIENT = 0.104

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB								
NASHYD (0014)	Area (ha)=	1.80	Curve Number (CN)=	50.0				
ID= 1 DT= 5.0 min	Ia (mm)=	16.00	# of Linear Res.(N)=	3.00				
	U.H. Tp(hrs)=	0.76						

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	3.10	1.083	14.65	2.083	6.12	3.08	3.57
0.167	3.10	1.167	14.65	2.167	6.12	3.17	3.57
0.250	3.46	1.250	84.90	2.250	5.41	3.25	3.36
0.333	3.46	1.333	84.90	2.333	5.41	3.33	3.36
0.417	3.95	1.417	17.98	2.417	4.86	3.42	3.18
0.500	3.95	1.500	17.98	2.500	4.86	3.50	3.18
0.583	4.65	1.583	11.34	2.583	4.44	3.58	3.02
0.667	4.65	1.667	11.34	2.667	4.44	3.67	3.02
0.750	5.76	1.750	8.64	2.750	4.09	3.75	2.88
0.833	5.76	1.833	8.64	2.833	4.09	3.83	2.88
0.917	7.88	1.917	7.12	2.917	3.81	3.92	2.75
1.000	7.88	2.000	7.12	3.000	3.81	4.00	2.75

Unit Hyd Qpeak (cms)= 0.090

PEAK FLOW (cms)= 0.003 (i)
TIME TO PEAK (hrs)= 3.000
RUNOFF VOLUME (mm)= 1.576
TOTAL RAINFALL (mm)= 36.816
RUNOFF COEFFICIENT = 0.043

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB								
NASHYD (0015)	Area (ha)=	6.70	Curve Number (CN)=	60.0				
ID= 1 DT= 5.0 min	Ia (mm)=	10.00	# of Linear Res.(N)=	3.00				
	U.H. Tp(hrs)=	1.45						

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	3.10	1.083	14.65	2.083	6.12	3.08	3.57
0.167	3.10	1.167	14.65	2.167	6.12	3.17	3.57
0.250	3.46	1.250	84.90	2.250	5.41	3.25	3.36
0.333	3.46	1.333	84.90	2.333	5.41	3.33	3.36
0.417	3.95	1.417	17.98	2.417	4.86	3.42	3.18

0.500	3.95	1.500	17.98	2.500	4.86	3.50	3.18
0.583	4.65	1.583	11.34	2.583	4.44	3.58	3.02
0.667	4.65	1.667	11.34	2.667	4.44	3.67	3.02
0.750	5.76	1.750	8.64	2.750	4.09	3.75	2.88
0.833	5.76	1.833	8.64	2.833	4.09	3.83	2.88
0.917	7.88	1.917	7.12	2.917	3.81	3.92	2.75
1.000	7.88	2.000	7.12	3.000	3.81	4.00	2.75

Unit Hyd Qpeak (cms)= 0.176

PEAK FLOW (cms)= 0.018 (i)
TIME TO PEAK (hrs)= 3.833
RUNOFF VOLUME (mm)= 3.666
TOTAL RAINFALL (mm)= 36.816
RUNOFF COEFFICIENT = 0.100

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0016)	Area (ha)=	29.16	Curve Number (CN)= 71.4
ID= 1 DT= 5.0 min	Ia (mm)=	7.88	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	0.68	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	3.10	1.083	14.65	2.083	6.12	3.08	3.57
0.167	3.10	1.167	14.65	2.167	6.12	3.17	3.57
0.250	3.46	1.250	84.90	2.250	5.41	3.25	3.36
0.333	3.46	1.333	84.90	2.333	5.41	3.33	3.36
0.417	3.95	1.417	17.98	2.417	4.86	3.42	3.18
0.500	3.95	1.500	17.98	2.500	4.86	3.50	3.18
0.583	4.65	1.583	11.34	2.583	4.44	3.58	3.02
0.667	4.65	1.667	11.34	2.667	4.44	3.67	3.02
0.750	5.76	1.750	8.64	2.750	4.09	3.75	2.88
0.833	5.76	1.833	8.64	2.833	4.09	3.83	2.88
0.917	7.88	1.917	7.12	2.917	3.81	3.92	2.75
1.000	7.88	2.000	7.12	3.000	3.81	4.00	2.75

Unit Hyd Qpeak (cms)= 1.638

PEAK FLOW (cms)= 0.213 (i)
TIME TO PEAK (hrs)= 2.333
RUNOFF VOLUME (mm)= 6.407
TOTAL RAINFALL (mm)= 36.816
RUNOFF COEFFICIENT = 0.174

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0019)	Area (ha)=	39.68	Curve Number (CN)= 60.7
ID= 1 DT= 5.0 min	Ia (mm)=	8.26	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	1.18	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	3.10	1.083	14.65	2.083	6.12	3.08	3.57
0.167	3.10	1.167	14.65	2.167	6.12	3.17	3.57
0.250	3.46	1.250	84.90	2.250	5.41	3.25	3.36
0.333	3.46	1.333	84.90	2.333	5.41	3.33	3.36
0.417	3.95	1.417	17.98	2.417	4.86	3.42	3.18
0.500	3.95	1.500	17.98	2.500	4.86	3.50	3.18
0.583	4.65	1.583	11.34	2.583	4.44	3.58	3.02
0.667	4.65	1.667	11.34	2.667	4.44	3.67	3.02
0.750	5.76	1.750	8.64	2.750	4.09	3.75	2.88
0.833	5.76	1.833	8.64	2.833	4.09	3.83	2.88
0.917	7.88	1.917	7.12	2.917	3.81	3.92	2.75
1.000	7.88	2.000	7.12	3.000	3.81	4.00	2.75

Unit Hyd Qpeak (cms)= 1.284

PEAK FLOW (cms)= 0.139 (i)
TIME TO PEAK (hrs)= 3.167
RUNOFF VOLUME (mm)= 4.220
TOTAL RAINFALL (mm)= 36.816
RUNOFF COEFFICIENT = 0.115

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0024)		AREA	QPEAK	TPEAK	R.V.
		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0010):		14.85	0.030	3.00	2.22
1 + 2 = 3	ID2= 2 (0013):	1.70	0.009	1.92	3.82
ID = 3 (0024):		16.55	0.036	2.83	2.39

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0024):		16.55	0.036	2.83	2.39
+ ID2= 2 (0014):		1.80	0.003	3.00	1.58
ID = 1 (0024):		18.35	0.038	2.83	2.31

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0024):		18.35	0.038	2.83	2.31
+ ID2= 2 (0015):		6.70	0.018	3.83	3.67
ID = 3 (0024):		25.05	0.055	3.17	2.67

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0024):		25.05	0.055	3.17	2.67
+ ID2= 2 (0016):		29.16	0.213	2.33	6.41
ID = 1 (0024):		54.21	0.259	2.42	4.68

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0024):		54.21	0.259	2.42	4.68
+ ID2= 2 (0019):		39.68	0.139	3.17	4.22
ID = 3 (0024):		93.89	0.378	2.67	4.49

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0024):		93.89	0.378	2.67	4.49
+ ID2= 2 (0007):		100.92	0.253	4.08	3.65
ID = 1 (0024):		194.81	0.579	3.17	4.06

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0024):		194.81	0.579	3.17	4.06
+ ID2= 2 (0008):		23.99	0.042	3.00	1.97
ID = 3 (0024):		218.80	0.621	3.17	3.83

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0024):		218.80	0.621	3.17	3.83
+ ID2= 2 (0009):		6.37	0.010	3.00	1.65
ID = 1 (0024):		225.17	0.631	3.17	3.77

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB					
NASHYD (0011)		Area	(ha)=	46.28	Curve Number (CN)= 72.2
ID= 1 DT= 5.0 min		Ia	(mm)=	7.09	# of Linear Res.(N)= 3.00
		U.H. Tp(hrs)=		0.30	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	3.10	1.083	14.65	2.083	6.12	3.08	3.57

0.167	3.10	1.167	14.65	2.167	6.12	3.17	3.57
0.250	3.46	1.250	84.90	2.250	5.41	3.25	3.36
0.333	3.46	1.333	84.90	2.333	5.41	3.33	3.36
0.417	3.95	1.417	17.98	2.417	4.86	3.42	3.18
0.500	3.95	1.500	17.98	2.500	4.86	3.50	3.18
0.583	4.65	1.583	11.34	2.583	4.44	3.58	3.02
0.667	4.65	1.667	11.34	2.667	4.44	3.67	3.02
0.750	5.76	1.750	8.64	2.750	4.09	3.75	2.88
0.833	5.76	1.833	8.64	2.833	4.09	3.83	2.88
0.917	7.88	1.917	7.12	2.917	3.81	3.92	2.75
1.000	7.88	2.000	7.12	3.000	3.81	4.00	2.75

Unit Hyd Qpeak (cms)= 5.892

PEAK FLOW (cms)= 0.601 (i)
TIME TO PEAK (hrs)= 1.667
RUNOFF VOLUME (mm)= 6.924
TOTAL RAINFALL (mm)= 36.816
RUNOFF COEFFICIENT = 0.188

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0012)	Area (ha)=	1.13	Curve Number (CN)=	67.4	
ID= 1 DT= 5.0 min	Ia (mm)=	7.88	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	0.43			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	3.10	1.083	14.65	2.083	6.12	3.08	3.57
0.167	3.10	1.167	14.65	2.167	6.12	3.17	3.57
0.250	3.46	1.250	84.90	2.250	5.41	3.25	3.36
0.333	3.46	1.333	84.90	2.333	5.41	3.33	3.36
0.417	3.95	1.417	17.98	2.417	4.86	3.42	3.18
0.500	3.95	1.500	17.98	2.500	4.86	3.50	3.18
0.583	4.65	1.583	11.34	2.583	4.44	3.58	3.02
0.667	4.65	1.667	11.34	2.667	4.44	3.67	3.02
0.750	5.76	1.750	8.64	2.750	4.09	3.75	2.88
0.833	5.76	1.833	8.64	2.833	4.09	3.83	2.88
0.917	7.88	1.917	7.12	2.917	3.81	3.92	2.75
1.000	7.88	2.000	7.12	3.000	3.81	4.00	2.75

Unit Hyd Qpeak (cms)= 0.100

PEAK FLOW (cms)= 0.009 (i)
TIME TO PEAK (hrs)= 1.917
RUNOFF VOLUME (mm)= 5.507
TOTAL RAINFALL (mm)= 36.816
RUNOFF COEFFICIENT = 0.150

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0041)	Area (ha)=	0.59	Curve Number (CN)=	71.5	
ID= 1 DT= 5.0 min	Ia (mm)=	4.75	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	0.53			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	3.10	1.083	14.65	2.083	6.12	3.08	3.57
0.167	3.10	1.167	14.65	2.167	6.12	3.17	3.57
0.250	3.46	1.250	84.90	2.250	5.41	3.25	3.36
0.333	3.46	1.333	84.90	2.333	5.41	3.33	3.36
0.417	3.95	1.417	17.98	2.417	4.86	3.42	3.18
0.500	3.95	1.500	17.98	2.500	4.86	3.50	3.18
0.583	4.65	1.583	11.34	2.583	4.44	3.58	3.02
0.667	4.65	1.667	11.34	2.667	4.44	3.67	3.02
0.750	5.76	1.750	8.64	2.750	4.09	3.75	2.88
0.833	5.76	1.833	8.64	2.833	4.09	3.83	2.88
0.917	7.88	1.917	7.12	2.917	3.81	3.92	2.75
1.000	7.88	2.000	7.12	3.000	3.81	4.00	2.75

Unit Hyd Qpeak (cms)= 0.043

PEAK FLOW (cms)= 0.006 (i)
TIME TO PEAK (hrs)= 2.000
RUNOFF VOLUME (mm)= 7.699
TOTAL RAINFALL (mm)= 36.816
RUNOFF COEFFICIENT = 0.209

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0028)	Area (ha)=	1.38	Curve Number (CN)=	64.1	
ID= 1 DT= 5.0 min	Ia (mm)=	8.51	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	0.39			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	3.10	1.083	14.65	2.083	6.12	3.08	3.57
0.167	3.10	1.167	14.65	2.167	6.12	3.17	3.57
0.250	3.46	1.250	84.90	2.250	5.41	3.25	3.36
0.333	3.46	1.333	84.90	2.333	5.41	3.33	3.36
0.417	3.95	1.417	17.98	2.417	4.86	3.42	3.18
0.500	3.95	1.500	17.98	2.500	4.86	3.50	3.18
0.583	4.65	1.583	11.34	2.583	4.44	3.58	3.02
0.667	4.65	1.667	11.34	2.667	4.44	3.67	3.02
0.750	5.76	1.750	8.64	2.750	4.09	3.75	2.88
0.833	5.76	1.833	8.64	2.833	4.09	3.83	2.88
0.917	7.88	1.917	7.12	2.917	3.81	3.92	2.75
1.000	7.88	2.000	7.12	3.000	3.81	4.00	2.75

Unit Hyd Qpeak (cms)= 0.135

PEAK FLOW (cms)= 0.010 (i)
TIME TO PEAK (hrs)= 1.833
RUNOFF VOLUME (mm)= 4.703
TOTAL RAINFALL (mm)= 36.816
RUNOFF COEFFICIENT = 0.128

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	
STANDHYD (0044)	Area (ha)= 1.62
ID= 1 DT= 5.0 min	Total Imp(%)= 48.77 Dir. Conn.(%)= 30.86

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.79	0.83
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	1.40
Length	(m)=	103.92	400.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	3.10	1.083	14.65	2.083	6.12	3.08	3.57
0.167	3.10	1.167	14.65	2.167	6.12	3.17	3.57
0.250	3.46	1.250	84.90	2.250	5.41	3.25	3.36
0.333	3.46	1.333	84.90	2.333	5.41	3.33	3.36
0.417	3.95	1.417	17.98	2.417	4.86	3.42	3.18
0.500	3.95	1.500	17.98	2.500	4.86	3.50	3.18
0.583	4.65	1.583	11.34	2.583	4.44	3.58	3.02
0.667	4.65	1.667	11.34	2.667	4.44	3.67	3.02
0.750	5.76	1.750	8.64	2.750	4.09	3.75	2.88
0.833	5.76	1.833	8.64	2.833	4.09	3.83	2.88
0.917	7.88	1.917	7.12	2.917	3.81	3.92	2.75
1.000	7.88	2.000	7.12	3.000	3.81	4.00	2.75

				TOTALS
Max.Eff.Inten.(mm/hr)=	84.90	8.18		
over (min)	5.00	90.00		
Storage Coeff. (min)=	3.44 (ii)	88.54 (ii)		
Unit Hyd. Tpeak (min)=	5.00	90.00		
Unit Hyd. peak (cms)=	0.26	0.01		
PEAK FLOW (cms)=	0.11	0.01		0.113 (iii)
TIME TO PEAK (hrs)=	1.33	3.00		1.33
RUNOFF VOLUME (mm)=	35.82	9.32		17.46
TOTAL RAINFALL (mm)=	36.82	36.82		36.82
RUNOFF COEFFICIENT =	0.97	0.25		0.47

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	
STANDHYD (0043)	Area (ha)= 0.13
ID= 1 DT= 5.0 min	Total Imp(%)= 30.77 Dir. Conn.(%)= 7.69

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.04	0.09
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	0.50
Length	(m)=	29.44	70.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN

hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	3.10	1.083	14.65	2.083	6.12	3.08	3.57
0.167	3.10	1.167	14.65	2.167	6.12	3.17	3.57
0.250	3.46	1.250	84.90	2.250	5.41	3.25	3.36
0.333	3.46	1.333	84.90	2.333	5.41	3.33	3.36
0.417	3.95	1.417	17.98	2.417	4.86	3.42	3.18
0.500	3.95	1.500	17.98	2.500	4.86	3.50	3.18
0.583	4.65	1.583	11.34	2.583	4.44	3.58	3.02
0.667	4.65	1.667	11.34	2.667	4.44	3.67	3.02
0.750	5.76	1.750	8.64	2.750	4.09	3.75	2.88
0.833	5.76	1.833	8.64	2.833	4.09	3.83	2.88
0.917	7.88	1.917	7.12	2.917	3.81	3.92	2.75
1.000	7.88	2.000	7.12	3.000	3.81	4.00	2.75

			TOTALS
Max.Eff.Inten.(mm/hr)=	84.90	10.21	
over (min)	5.00	40.00	
Storage Coeff. (min)=	1.61 (ii)	38.89 (ii)	
Unit Hyd. Tpeak (min)=	5.00	40.00	
Unit Hyd. peak (cms)=	0.32	0.03	
PEAK FLOW (cms)=	0.00	0.00	0.003 (iii)
TIME TO PEAK (hrs)=	1.33	1.92	1.33
RUNOFF VOLUME (mm)=	35.82	9.22	11.09
TOTAL RAINFALL (mm)=	36.82	36.82	36.82
RUNOFF COEFFICIENT =	0.97	0.25	0.30

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0023)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0011):	46.28	0.601	1.67	6.92
+ ID2= 2 (0012):	1.13	0.009	1.92	5.51
ID = 3 (0023):	47.41	0.609	1.67	6.89

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0023):	47.41	0.609	1.67	6.89
+ ID2= 2 (0028):	1.38	0.010	1.83	4.70
ID = 1 (0023):	48.79	0.618	1.67	6.83

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0023):	48.79	0.618	1.67	6.83
+ ID2= 2 (0041):	0.59	0.006	2.00	7.70
ID = 3 (0023):	49.38	0.623	1.67	6.84

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0023):	49.38	0.623	1.67	6.84
+ ID2= 2 (0043):	0.13	0.003	1.33	11.09
ID = 1 (0023):	49.51	0.624	1.67	6.85

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0023):	49.51	0.624	1.67	6.85
+ ID2= 2 (0044):	1.62	0.113	1.33	17.46
ID = 3 (0023):	51.13	0.642	1.67	7.19

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0025)

```
|   1 +  2 =  3    |        AREA    QPEAK    TPEAK     R.V.
-------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0023):    51.13   0.642     1.67     7.19
     + ID2= 2 (  0024):   225.17   0.631     3.17     3.77
       ========================================================
       ID = 3 (  0025):   276.30   0.912     1.92     4.40

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
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      V    V   I    SSSSS  U   U    A    L             (v 6.2.2020)
      V    V   I    SS     U   U   A A   L
       V  V    I     SS    U   U  AAAAA  L
       V  V    I      SS   U   U  A   A  L
        VV     I    SSSSS  UUUUU  A   A  LLLLL

       OOO   TTTTT  TTTTT  H   H  Y   Y  M   M   OOO    TM
      O   O    T      T    H   H   Y Y   MM MM  O   O
      O   O    T      T    H   H    Y    M   M  O   O
       OOO     T      T    H   H    Y    M   M   OOO
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                *****  D E T A I L E D   O U T P U T *****


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  Output  filename:
C:\Users\msimon\AppData\Local\Civica\VH5\a122c840-259d-4b92-8a43-b1e7a592bdea\a5bad
9ff-6989-4e7e-a583-d0bbc624d10d\scena
  Summary filename:
C:\Users\msimon\AppData\Local\Civica\VH5\a122c840-259d-4b92-8a43-b1e7a592bdea\a5bad
9ff-6989-4e7e-a583-d0bbc624d10d\scena


DATE: 07-15-2026                          TIME: 03:17:56

USER:
```

COMMENTS: _____

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  ***********************************************
  ** SIMULATION : B - 5-year CHI                **
  ***********************************************

--------------------
| CHICAGO STORM    |    IDF curve parameters: A= 561.345
| Ptotal= 48.68 mm |                          B=   0.000
--------------------                          C=   0.699
                       used in:   INTENSITY =  A / (t + B)^C

                       Duration of storm  =  4.00 hrs
                       Storm time step    = 10.00 min
                       Time to peak ratio =  0.33
```

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.00	4.09	1.00	19.37	2.00	8.09	3.00	4.72
0.17	4.57	1.17	112.26	2.17	7.15	3.17	4.44
0.33	5.22	1.33	23.77	2.33	6.43	3.33	4.20
0.50	6.15	1.50	14.99	2.50	5.87	3.50	3.99
0.67	7.61	1.67	11.43	2.67	5.41	3.67	3.81
0.83	10.41	1.83	9.42	2.83	5.04	3.83	3.64

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--------------------
| CALIB            |
| NASHYD   (  0007)|   Area    (ha)= 100.92   Curve Number   (CN)= 55.9
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.89   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   1.70

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.
```

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.09	1.083	19.37	2.083	8.09	3.08	4.72
0.167	4.09	1.167	19.37	2.167	8.09	3.17	4.72
0.250	4.57	1.250	112.26	2.250	7.15	3.25	4.44
0.333	4.57	1.333	112.26	2.333	7.15	3.33	4.44
0.417	5.22	1.417	23.77	2.417	6.43	3.42	4.20
0.500	5.22	1.500	23.77	2.500	6.43	3.50	4.20
0.583	6.15	1.583	14.99	2.583	5.87	3.58	3.99

0.667	6.15	1.667	14.99	2.667	5.87	3.67	3.99
0.750	7.61	1.750	11.43	2.750	5.41	3.75	3.81
0.833	7.61	1.833	11.43	2.833	5.41	3.83	3.81
0.917	10.41	1.917	9.42	2.917	5.04	3.92	3.64
1.000	10.41	2.000	9.42	3.000	5.04	4.00	3.64

Unit Hyd Qpeak (cms)= 2.267

PEAK FLOW (cms)= 0.479 (i)
TIME TO PEAK (hrs)= 3.917
RUNOFF VOLUME (mm)= 6.909
TOTAL RAINFALL (mm)= 48.681
RUNOFF COEFFICIENT = 0.142

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB							
NASHYD (0008)	Area (ha)= 23.99	Curve Number (CN)= 44.7					
ID= 1 DT= 5.0 min	Ia (mm)= 10.91	# of Linear Res.(N)= 3.00					
	U.H. Tp(hrs)= 0.97						

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.09	1.083	19.37	2.083	8.09	3.08	4.72
0.167	4.09	1.167	19.37	2.167	8.09	3.17	4.72
0.250	4.57	1.250	112.26	2.250	7.15	3.25	4.44
0.333	4.57	1.333	112.26	2.333	7.15	3.33	4.44
0.417	5.22	1.417	23.77	2.417	6.43	3.42	4.20
0.500	5.22	1.500	23.77	2.500	6.43	3.50	4.20
0.583	6.15	1.583	14.99	2.583	5.87	3.58	3.99
0.667	6.15	1.667	14.99	2.667	5.87	3.67	3.99
0.750	7.61	1.750	11.43	2.750	5.41	3.75	3.81
0.833	7.61	1.833	11.43	2.833	5.41	3.83	3.81
0.917	10.41	1.917	9.42	2.917	5.04	3.92	3.64
1.000	10.41	2.000	9.42	3.000	5.04	4.00	3.64

Unit Hyd Qpeak (cms)= 0.945

PEAK FLOW (cms)= 0.089 (i)
TIME TO PEAK (hrs)= 2.833
RUNOFF VOLUME (mm)= 4.053
TOTAL RAINFALL (mm)= 48.681
RUNOFF COEFFICIENT = 0.083

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB							
NASHYD (0009)	Area (ha)= 6.37	Curve Number (CN)= 50.5					
ID= 1 DT= 5.0 min	Ia (mm)= 15.69	# of Linear Res.(N)= 3.00					
	U.H. Tp(hrs)= 0.77						

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.09	1.083	19.37	2.083	8.09	3.08	4.72
0.167	4.09	1.167	19.37	2.167	8.09	3.17	4.72
0.250	4.57	1.250	112.26	2.250	7.15	3.25	4.44
0.333	4.57	1.333	112.26	2.333	7.15	3.33	4.44
0.417	5.22	1.417	23.77	2.417	6.43	3.42	4.20
0.500	5.22	1.500	23.77	2.500	6.43	3.50	4.20
0.583	6.15	1.583	14.99	2.583	5.87	3.58	3.99
0.667	6.15	1.667	14.99	2.667	5.87	3.67	3.99
0.750	7.61	1.750	11.43	2.750	5.41	3.75	3.81
0.833	7.61	1.833	11.43	2.833	5.41	3.83	3.81
0.917	10.41	1.917	9.42	2.917	5.04	3.92	3.64
1.000	10.41	2.000	9.42	3.000	5.04	4.00	3.64

Unit Hyd Qpeak (cms)= 0.316

PEAK FLOW (cms)= 0.024 (i)
TIME TO PEAK (hrs)= 2.667
RUNOFF VOLUME (mm)= 3.857
TOTAL RAINFALL (mm)= 48.681
RUNOFF COEFFICIENT = 0.079

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB							
NASHYD (0010)	Area (ha)= 14.85	Curve Number (CN)= 52.9					
ID= 1 DT= 5.0 min	Ia (mm)= 13.28	# of Linear Res.(N)= 3.00					
	U.H. Tp(hrs)= 0.89						

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.09	1.083	19.37	2.083	8.09	3.08	4.72
0.167	4.09	1.167	19.37	2.167	8.09	3.17	4.72
0.250	4.57	1.250	112.26	2.250	7.15	3.25	4.44
0.333	4.57	1.333	112.26	2.333	7.15	3.33	4.44
0.417	5.22	1.417	23.77	2.417	6.43	3.42	4.20
0.500	5.22	1.500	23.77	2.500	6.43	3.50	4.20
0.583	6.15	1.583	14.99	2.583	5.87	3.58	3.99
0.667	6.15	1.667	14.99	2.667	5.87	3.67	3.99
0.750	7.61	1.750	11.43	2.750	5.41	3.75	3.81
0.833	7.61	1.833	11.43	2.833	5.41	3.83	3.81
0.917	10.41	1.917	9.42	2.917	5.04	3.92	3.64
1.000	10.41	2.000	9.42	3.000	5.04	4.00	3.64

Unit Hyd Qpeak (cms)= 0.637

PEAK FLOW (cms)= 0.067 (i)
TIME TO PEAK (hrs)= 2.750
RUNOFF VOLUME (mm)= 4.798
TOTAL RAINFALL (mm)= 48.681
RUNOFF COEFFICIENT = 0.099

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB				
NASHYD (0013)	Area (ha)=	1.70	Curve Number (CN)=	60.5
ID= 1 DT= 5.0 min	Ia (mm)=	9.65	# of Linear Res.(N)=	3.00
	U.H. Tp(hrs)=	0.40		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.09	1.083	19.37	2.083	8.09	3.08	4.72
0.167	4.09	1.167	19.37	2.167	8.09	3.17	4.72
0.250	4.57	1.250	112.26	2.250	7.15	3.25	4.44
0.333	4.57	1.333	112.26	2.333	7.15	3.33	4.44
0.417	5.22	1.417	23.77	2.417	6.43	3.42	4.20
0.500	5.22	1.500	23.77	2.500	6.43	3.50	4.20
0.583	6.15	1.583	14.99	2.583	5.87	3.58	3.99
0.667	6.15	1.667	14.99	2.667	5.87	3.67	3.99
0.750	7.61	1.750	11.43	2.750	5.41	3.75	3.81
0.833	7.61	1.833	11.43	2.833	5.41	3.83	3.81
0.917	10.41	1.917	9.42	2.917	5.04	3.92	3.64
1.000	10.41	2.000	9.42	3.000	5.04	4.00	3.64

Unit Hyd Qpeak (cms)= 0.162

PEAK FLOW (cms)= 0.020 (i)
TIME TO PEAK (hrs)= 1.833
RUNOFF VOLUME (mm)= 7.425
TOTAL RAINFALL (mm)= 48.681
RUNOFF COEFFICIENT = 0.153

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB				
NASHYD (0014)	Area (ha)=	1.80	Curve Number (CN)=	50.0
ID= 1 DT= 5.0 min	Ia (mm)=	16.00	# of Linear Res.(N)=	3.00
	U.H. Tp(hrs)=	0.76		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.09	1.083	19.37	2.083	8.09	3.08	4.72
0.167	4.09	1.167	19.37	2.167	8.09	3.17	4.72
0.250	4.57	1.250	112.26	2.250	7.15	3.25	4.44
0.333	4.57	1.333	112.26	2.333	7.15	3.33	4.44
0.417	5.22	1.417	23.77	2.417	6.43	3.42	4.20
0.500	5.22	1.500	23.77	2.500	6.43	3.50	4.20
0.583	6.15	1.583	14.99	2.583	5.87	3.58	3.99
0.667	6.15	1.667	14.99	2.667	5.87	3.67	3.99
0.750	7.61	1.750	11.43	2.750	5.41	3.75	3.81
0.833	7.61	1.833	11.43	2.833	5.41	3.83	3.81
0.917	10.41	1.917	9.42	2.917	5.04	3.92	3.64
1.000	10.41	2.000	9.42	3.000	5.04	4.00	3.64

Unit Hyd Qpeak (cms)= 0.090

PEAK FLOW (cms)= 0.007 (i)
TIME TO PEAK (hrs)= 2.667
RUNOFF VOLUME (mm)= 3.725
TOTAL RAINFALL (mm)= 48.681
RUNOFF COEFFICIENT = 0.077

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB				
NASHYD (0015)	Area (ha)=	6.70	Curve Number (CN)=	60.0

|ID= 1 DT= 5.0 min | Ia (mm)= 10.00 # of Linear Res.(N)= 3.00

U.H. Tp(hrs)= 1.45

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.09	1.083	19.37	2.083	8.09	3.08	4.72
0.167	4.09	1.167	19.37	2.167	8.09	3.17	4.72
0.250	4.57	1.250	112.26	2.250	7.15	3.25	4.44
0.333	4.57	1.333	112.26	2.333	7.15	3.33	4.44
0.417	5.22	1.417	23.77	2.417	6.43	3.42	4.20
0.500	5.22	1.500	23.77	2.500	6.43	3.50	4.20
0.583	6.15	1.583	14.99	2.583	5.87	3.58	3.99
0.667	6.15	1.667	14.99	2.667	5.87	3.67	3.99
0.750	7.61	1.750	11.43	2.750	5.41	3.75	3.81
0.833	7.61	1.833	11.43	2.833	5.41	3.83	3.81
0.917	10.41	1.917	9.42	2.917	5.04	3.92	3.64
1.000	10.41	2.000	9.42	3.000	5.04	4.00	3.64

Unit Hyd Qpeak (cms)= 0.176

PEAK FLOW (cms)= 0.036 (i)
TIME TO PEAK (hrs)= 3.583
RUNOFF VOLUME (mm)= 7.193
TOTAL RAINFALL (mm)= 48.681
RUNOFF COEFFICIENT = 0.148

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
NASHYD (0016)

|ID= 1 DT= 5.0 min | Area (ha)= 29.16 Curve Number (CN)= 71.4

Ia (mm)= 7.88 # of Linear Res.(N)= 3.00
U.H. Tp(hrs)= 0.68

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.09	1.083	19.37	2.083	8.09	3.08	4.72
0.167	4.09	1.167	19.37	2.167	8.09	3.17	4.72
0.250	4.57	1.250	112.26	2.250	7.15	3.25	4.44
0.333	4.57	1.333	112.26	2.333	7.15	3.33	4.44
0.417	5.22	1.417	23.77	2.417	6.43	3.42	4.20
0.500	5.22	1.500	23.77	2.500	6.43	3.50	4.20
0.583	6.15	1.583	14.99	2.583	5.87	3.58	3.99
0.667	6.15	1.667	14.99	2.667	5.87	3.67	3.99
0.750	7.61	1.750	11.43	2.750	5.41	3.75	3.81
0.833	7.61	1.833	11.43	2.833	5.41	3.83	3.81
0.917	10.41	1.917	9.42	2.917	5.04	3.92	3.64
1.000	10.41	2.000	9.42	3.000	5.04	4.00	3.64

Unit Hyd Qpeak (cms)= 1.638

PEAK FLOW (cms)= 0.406 (i)
TIME TO PEAK (hrs)= 2.250
RUNOFF VOLUME (mm)= 11.679
TOTAL RAINFALL (mm)= 48.681
RUNOFF COEFFICIENT = 0.240

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
NASHYD (0019)

|ID= 1 DT= 5.0 min | Area (ha)= 39.68 Curve Number (CN)= 60.7

Ia (mm)= 8.26 # of Linear Res.(N)= 3.00
U.H. Tp(hrs)= 1.18

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.09	1.083	19.37	2.083	8.09	3.08	4.72
0.167	4.09	1.167	19.37	2.167	8.09	3.17	4.72
0.250	4.57	1.250	112.26	2.250	7.15	3.25	4.44
0.333	4.57	1.333	112.26	2.333	7.15	3.33	4.44
0.417	5.22	1.417	23.77	2.417	6.43	3.42	4.20
0.500	5.22	1.500	23.77	2.500	6.43	3.50	4.20
0.583	6.15	1.583	14.99	2.583	5.87	3.58	3.99
0.667	6.15	1.667	14.99	2.667	5.87	3.67	3.99
0.750	7.61	1.750	11.43	2.750	5.41	3.75	3.81
0.833	7.61	1.833	11.43	2.833	5.41	3.83	3.81
0.917	10.41	1.917	9.42	2.917	5.04	3.92	3.64
1.000	10.41	2.000	9.42	3.000	5.04	4.00	3.64

Unit Hyd Qpeak (cms)= 1.284

PEAK FLOW (cms)= 0.267 (i)
TIME TO PEAK (hrs)= 3.083
RUNOFF VOLUME (mm)= 7.967
TOTAL RAINFALL (mm)= 48.681

RUNOFF COEFFICIENT = 0.164

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0024)					
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0010):	14.85	0.067	2.75	4.80
+ ID2= 2 (0013):	1.70	0.020	1.83	7.42
ID = 3 (0024):	16.55	0.078	2.67	5.07

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)					
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0024):	16.55	0.078	2.67	5.07
+ ID2= 2 (0014):	1.80	0.007	2.67	3.72
ID = 1 (0024):	18.35	0.085	2.67	4.94

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)					
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0024):	18.35	0.085	2.67	4.94
+ ID2= 2 (0015):	6.70	0.036	3.58	7.19
ID = 3 (0024):	25.05	0.116	2.92	5.54

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)					
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0024):	25.05	0.116	2.92	5.54
+ ID2= 2 (0016):	29.16	0.406	2.25	11.68
ID = 1 (0024):	54.21	0.508	2.33	8.84

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)					
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0024):	54.21	0.508	2.33	8.84
+ ID2= 2 (0019):	39.68	0.267	3.08	7.97
ID = 3 (0024):	93.89	0.736	2.50	8.47

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)					
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0024):	93.89	0.736	2.50	8.47
+ ID2= 2 (0007):	100.92	0.479	3.92	6.91
ID = 1 (0024):	194.81	1.105	3.00	7.66

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)					
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0024):	194.81	1.105	3.00	7.66
+ ID2= 2 (0008):	23.99	0.089	2.83	4.05
ID = 3 (0024):	218.80	1.194	3.00	7.27

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)					
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0024):	218.80	1.194	3.00	7.27
+ ID2= 2 (0009):	6.37	0.024	2.67	3.86
ID = 1 (0024):	225.17	1.217	3.00	7.17

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB								
NASHYD (0011)	Area (ha)= 46.28	Curve Number (CN)= 72.2						
ID= 1 DT= 5.0 min	Ia (mm)= 7.09	# of Linear Res.(N)= 3.00						
	U.H. Tp(hrs)= 0.30							

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.09	1.083	19.37	2.083	8.09	3.08	4.72
0.167	4.09	1.167	19.37	2.167	8.09	3.17	4.72
0.250	4.57	1.250	112.26	2.250	7.15	3.25	4.44
0.333	4.57	1.333	112.26	2.333	7.15	3.33	4.44
0.417	5.22	1.417	23.77	2.417	6.43	3.42	4.20
0.500	5.22	1.500	23.77	2.500	6.43	3.50	4.20
0.583	6.15	1.583	14.99	2.583	5.87	3.58	3.99
0.667	6.15	1.667	14.99	2.667	5.87	3.67	3.99
0.750	7.61	1.750	11.43	2.750	5.41	3.75	3.81
0.833	7.61	1.833	11.43	2.833	5.41	3.83	3.81
0.917	10.41	1.917	9.42	2.917	5.04	3.92	3.64
1.000	10.41	2.000	9.42	3.000	5.04	4.00	3.64

Unit Hyd Qpeak (cms)= 5.892

PEAK FLOW (cms)= 1.157 (i)
TIME TO PEAK (hrs)= 1.667
RUNOFF VOLUME (mm)= 12.401
TOTAL RAINFALL (mm)= 48.681
RUNOFF COEFFICIENT = 0.255

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB								
NASHYD (0012)	Area (ha)= 1.13	Curve Number (CN)= 67.4						
ID= 1 DT= 5.0 min	Ia (mm)= 7.88	# of Linear Res.(N)= 3.00						
	U.H. Tp(hrs)= 0.43							

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.09	1.083	19.37	2.083	8.09	3.08	4.72
0.167	4.09	1.167	19.37	2.167	8.09	3.17	4.72
0.250	4.57	1.250	112.26	2.250	7.15	3.25	4.44
0.333	4.57	1.333	112.26	2.333	7.15	3.33	4.44
0.417	5.22	1.417	23.77	2.417	6.43	3.42	4.20
0.500	5.22	1.500	23.77	2.500	6.43	3.50	4.20
0.583	6.15	1.583	14.99	2.583	5.87	3.58	3.99
0.667	6.15	1.667	14.99	2.667	5.87	3.67	3.99
0.750	7.61	1.750	11.43	2.750	5.41	3.75	3.81
0.833	7.61	1.833	11.43	2.833	5.41	3.83	3.81
0.917	10.41	1.917	9.42	2.917	5.04	3.92	3.64
1.000	10.41	2.000	9.42	3.000	5.04	4.00	3.64

Unit Hyd Qpeak (cms)= 0.100

PEAK FLOW (cms)= 0.018 (i)
TIME TO PEAK (hrs)= 1.833
RUNOFF VOLUME (mm)= 10.157
TOTAL RAINFALL (mm)= 48.681
RUNOFF COEFFICIENT = 0.209

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB								
NASHYD (0041)	Area (ha)= 0.59	Curve Number (CN)= 71.5						
ID= 1 DT= 5.0 min	Ia (mm)= 4.75	# of Linear Res.(N)= 3.00						
	U.H. Tp(hrs)= 0.53							

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.09	1.083	19.37	2.083	8.09	3.08	4.72
0.167	4.09	1.167	19.37	2.167	8.09	3.17	4.72
0.250	4.57	1.250	112.26	2.250	7.15	3.25	4.44
0.333	4.57	1.333	112.26	2.333	7.15	3.33	4.44
0.417	5.22	1.417	23.77	2.417	6.43	3.42	4.20
0.500	5.22	1.500	23.77	2.500	6.43	3.50	4.20
0.583	6.15	1.583	14.99	2.583	5.87	3.58	3.99
0.667	6.15	1.667	14.99	2.667	5.87	3.67	3.99
0.750	7.61	1.750	11.43	2.750	5.41	3.75	3.81
0.833	7.61	1.833	11.43	2.833	5.41	3.83	3.81
0.917	10.41	1.917	9.42	2.917	5.04	3.92	3.64
1.000	10.41	2.000	9.42	3.000	5.04	4.00	3.64

Unit Hyd Qpeak (cms)= 0.043

PEAK FLOW (cms)= 0.011 (i)
TIME TO PEAK (hrs)= 2.000
RUNOFF VOLUME (mm)= 13.273
TOTAL RAINFALL (mm)= 48.681
RUNOFF COEFFICIENT = 0.273

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0028)	Area (ha)= 1.38	Curve Number (CN)= 64.1			
ID= 1 DT= 5.0 min	Ia (mm)= 8.51	# of Linear Res.(N)= 3.00			
	U.H. Tp(hrs)= 0.39				

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.09	1.083	19.37	2.083	8.09	3.08	4.72
0.167	4.09	1.167	19.37	2.167	8.09	3.17	4.72
0.250	4.57	1.250	112.26	2.250	7.15	3.25	4.44
0.333	4.57	1.333	112.26	2.333	7.15	3.33	4.44
0.417	5.22	1.417	23.77	2.417	6.43	3.42	4.20
0.500	5.22	1.500	23.77	2.500	6.43	3.50	4.20
0.583	6.15	1.583	14.99	2.583	5.87	3.58	3.99
0.667	6.15	1.667	14.99	2.667	5.87	3.67	3.99
0.750	7.61	1.750	11.43	2.750	5.41	3.75	3.81
0.833	7.61	1.833	11.43	2.833	5.41	3.83	3.81
0.917	10.41	1.917	9.42	2.917	5.04	3.92	3.64
1.000	10.41	2.000	9.42	3.000	5.04	4.00	3.64

Unit Hyd Qpeak (cms)= 0.135

PEAK FLOW (cms)= 0.020 (i)
TIME TO PEAK (hrs)= 1.833
RUNOFF VOLUME (mm)= 8.856
TOTAL RAINFALL (mm)= 48.681
RUNOFF COEFFICIENT = 0.182

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
STANDHYD (0044)	Area (ha)= 1.62		
ID= 1 DT= 5.0 min	Total Imp(%)= 48.77	Dir. Conn.(%)= 30.86	

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	0.79	0.83
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	0.50	1.40
Length (m)=	103.92	400.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.09	1.083	19.37	2.083	8.09	3.08	4.72
0.167	4.09	1.167	19.37	2.167	8.09	3.17	4.72
0.250	4.57	1.250	112.26	2.250	7.15	3.25	4.44
0.333	4.57	1.333	112.26	2.333	7.15	3.33	4.44
0.417	5.22	1.417	23.77	2.417	6.43	3.42	4.20
0.500	5.22	1.500	23.77	2.500	6.43	3.50	4.20
0.583	6.15	1.583	14.99	2.583	5.87	3.58	3.99
0.667	6.15	1.667	14.99	2.667	5.87	3.67	3.99
0.750	7.61	1.750	11.43	2.750	5.41	3.75	3.81
0.833	7.61	1.833	11.43	2.833	5.41	3.83	3.81
0.917	10.41	1.917	9.42	2.917	5.04	3.92	3.64
1.000	10.41	2.000	9.42	3.000	5.04	4.00	3.64

Max.Eff.Inten.(mm/hr)=	112.26	13.90		
over (min)	5.00	75.00		
Storage Coeff. (min)=	3.07 (ii)	71.93 (ii)		
Unit Hyd. Tpeak (min)=	5.00	75.00		
Unit Hyd. peak (cms)=	0.27	0.02		
			TOTALS	
PEAK FLOW (cms)=	0.15	0.02	0.152 (iii)	
TIME TO PEAK (hrs)=	1.33	2.67	1.33	
RUNOFF VOLUME (mm)=	47.68	15.62	25.49	
TOTAL RAINFALL (mm)=	48.68	48.68	48.68	
RUNOFF COEFFICIENT =	0.98	0.32	0.52	

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	
STANDHYD (0043)	Area (ha)= 0.13

|ID= 1 DT= 5.0 min | Total Imp(%)= 30.77 Dir. Conn.(%)= 7.69

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.04	0.09
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	0.50
Length	(m)=	29.44	70.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.09	1.083	19.37	2.083	8.09	3.08	4.72
0.167	4.09	1.167	19.37	2.167	8.09	3.17	4.72
0.250	4.57	1.250	112.26	2.250	7.15	3.25	4.44
0.333	4.57	1.333	112.26	2.333	7.15	3.33	4.44
0.417	5.22	1.417	23.77	2.417	6.43	3.42	4.20
0.500	5.22	1.500	23.77	2.500	6.43	3.50	4.20
0.583	6.15	1.583	14.99	2.583	5.87	3.58	3.99
0.667	6.15	1.667	14.99	2.667	5.87	3.67	3.99
0.750	7.61	1.750	11.43	2.750	5.41	3.75	3.81
0.833	7.61	1.833	11.43	2.833	5.41	3.83	3.81
0.917	10.41	1.917	9.42	2.917	5.04	3.92	3.64
1.000	10.41	2.000	9.42	3.000	5.04	4.00	3.64

Max.Eff.Inten.(mm/hr)=		112.26	20.98	
over (min)		5.00	30.00	
Storage Coeff. (min)=		1.44 (ii)	29.39 (ii)	
Unit Hyd. Tpeak (min)=		5.00	30.00	
Unit Hyd. peak (cms)=		0.33	0.04	
				TOTALS
PEAK FLOW	(cms)=	0.00	0.00	0.004 (iii)
TIME TO PEAK	(hrs)=	1.33	1.75	1.33
RUNOFF VOLUME	(mm)=	47.68	15.47	17.82
TOTAL RAINFALL	(mm)=	48.68	48.68	48.68
RUNOFF COEFFICIENT	=	0.98	0.32	0.37

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0023)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
	ID1= 1 (0011):	46.28	1.157	1.67	12.40
	+ ID2= 2 (0012):	1.13	0.018	1.83	10.16
	ID = 3 (0023):	47.41	1.173	1.67	12.35

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
	ID1= 3 (0023):	47.41	1.173	1.67	12.35
	+ ID2= 2 (0028):	1.38	0.020	1.83	8.86
	ID = 1 (0023):	48.79	1.192	1.67	12.25

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
	ID1= 1 (0023):	48.79	1.192	1.67	12.25
	+ ID2= 2 (0041):	0.59	0.011	2.00	13.27
	ID = 3 (0023):	49.38	1.201	1.67	12.26

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
	ID1= 3 (0023):	49.38	1.201	1.67	12.26
	+ ID2= 2 (0043):	0.13	0.004	1.33	17.82
	ID = 1 (0023):	49.51	1.204	1.67	12.28

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

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--------------------
| ADD HYD  (  0023)|
|   1 +  2 =  3    |          AREA    QPEAK    TPEAK     R.V.
--------------------          (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0023):    49.51   1.204     1.67    12.28
     + ID2= 2 (  0044):     1.62   0.152     1.33    25.49
       ================================================
       ID = 3 (  0023):    51.13   1.230     1.67    12.69

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0025)|
|   1 +  2 =  3    |          AREA    QPEAK    TPEAK     R.V.
--------------------          (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0023):    51.13   1.230     1.67    12.69
     + ID2= 2 (  0024):   225.17   1.217     3.00     7.17
       ================================================
       ID = 3 (  0025):   276.30   1.773     1.83     8.19

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
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      V    V   I    SSSSS  U   U    A    L             (v 6.2.2020)
      V    V   I    SS     U   U   A A   L
       V  V    I     SS    U   U  AAAAA  L
       V  V    I      SS   U   U  A   A  L
        VV     I    SSSSS  UUUUU  A   A  LLLLL

       OOO   TTTTT  TTTTT  H   H  Y   Y  M   M   OOO    TM
      O   O    T      T    H   H   Y Y   MM MM  O   O
      O   O    T      T    H   H    Y    M   M  O   O
       OOO     T      T    H   H    Y    M   M   OOO
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                 *****  D E T A I L E D   O U T P U T *****


  Input   filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat

  Output  filename:
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ab6-fdb1-4d8c-8eb6-03ab538ecf40\scena
  Summary filename:
```

```
C:\Users\msimon\AppData\Local\Civica\VH5\a122c840-259d-4b92-8a43-b1e7a592bdea\04469
ab6-fdb1-4d8c-8eb6-03ab538ecf40\scena


DATE: 07-15-2026                          TIME: 03:17:48

USER:


COMMENTS: _____________________________________________________________


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  ***********************************************
  ** SIMULATION : C - 10-year CHI               **
  ***********************************************

--------------------
| CHICAGO STORM    |    IDF curve parameters: A= 651.884
| Ptotal= 56.53 mm |                          B=   0.000
--------------------                          C=   0.699
                       used in:   INTENSITY =  A / (t + B)^C

                       Duration of storm  =  4.00 hrs
                       Storm time step    = 10.00 min
                       Time to peak ratio =  0.33

               TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
               0.00    4.75 |  1.00   22.49 |  2.00    9.40 |  3.00    5.48
               0.17    5.31 |  1.17  130.37 |  2.17    8.30 |  3.17    5.16
               0.33    6.06 |  1.33   27.61 |  2.33    7.47 |  3.33    4.88
               0.50    7.14 |  1.50   17.41 |  2.50    6.82 |  3.50    4.64
               0.67    8.84 |  1.67   13.27 |  2.67    6.29 |  3.67    4.42
               0.83   12.09 |  1.83   10.93 |  2.83    5.85 |  3.83    4.23


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| CALIB            |
| NASHYD   (  0007)|   Area    (ha)= 100.92   Curve Number   (CN)= 55.9
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.89   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   1.70

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                              ---- TRANSFORMED HYETOGRAPH ----
```

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.75	1.083	22.49	2.083	9.40	3.08	5.48
0.167	4.75	1.167	22.49	2.167	9.40	3.17	5.48
0.250	5.31	1.250	130.37	2.250	8.30	3.25	5.16
0.333	5.31	1.333	130.37	2.333	8.30	3.33	5.16
0.417	6.06	1.417	27.61	2.417	7.47	3.42	4.88
0.500	6.06	1.500	27.61	2.500	7.47	3.50	4.88
0.583	7.14	1.583	17.41	2.583	6.82	3.58	4.64
0.667	7.14	1.667	17.41	2.667	6.82	3.67	4.64
0.750	8.84	1.750	13.27	2.750	6.29	3.75	4.42
0.833	8.84	1.833	13.27	2.833	6.29	3.83	4.42
0.917	12.09	1.917	10.93	2.917	5.85	3.92	4.23
1.000	12.09	2.000	10.93	3.000	5.85	4.00	4.23

Unit Hyd Qpeak (cms)= 2.267

PEAK FLOW (cms)= 0.660 (i)
TIME TO PEAK (hrs)= 3.917
RUNOFF VOLUME (mm)= 9.514
TOTAL RAINFALL (mm)= 56.533
RUNOFF COEFFICIENT = 0.168

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB				
NASHYD (0008)	Area (ha)= 23.99	Curve Number (CN)= 44.7		
ID= 1 DT= 5.0 min	Ia (mm)= 10.91	# of Linear Res.(N)= 3.00		
	U.H. Tp(hrs)= 0.97			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.75	1.083	22.49	2.083	9.40	3.08	5.48
0.167	4.75	1.167	22.49	2.167	9.40	3.17	5.48
0.250	5.31	1.250	130.37	2.250	8.30	3.25	5.16
0.333	5.31	1.333	130.37	2.333	8.30	3.33	5.16
0.417	6.06	1.417	27.61	2.417	7.47	3.42	4.88
0.500	6.06	1.500	27.61	2.500	7.47	3.50	4.88
0.583	7.14	1.583	17.41	2.583	6.82	3.58	4.64
0.667	7.14	1.667	17.41	2.667	6.82	3.67	4.64
0.750	8.84	1.750	13.27	2.750	6.29	3.75	4.42
0.833	8.84	1.833	13.27	2.833	6.29	3.83	4.42
0.917	12.09	1.917	10.93	2.917	5.85	3.92	4.23
1.000	12.09	2.000	10.93	3.000	5.85	4.00	4.23

Unit Hyd Qpeak (cms)= 0.945

PEAK FLOW (cms)= 0.129 (i)
TIME TO PEAK (hrs)= 2.833
RUNOFF VOLUME (mm)= 5.784
TOTAL RAINFALL (mm)= 56.533
RUNOFF COEFFICIENT = 0.102

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB				
NASHYD (0009)	Area (ha)= 6.37	Curve Number (CN)= 50.5		
ID= 1 DT= 5.0 min	Ia (mm)= 15.69	# of Linear Res.(N)= 3.00		
	U.H. Tp(hrs)= 0.77			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.75	1.083	22.49	2.083	9.40	3.08	5.48
0.167	4.75	1.167	22.49	2.167	9.40	3.17	5.48
0.250	5.31	1.250	130.37	2.250	8.30	3.25	5.16
0.333	5.31	1.333	130.37	2.333	8.30	3.33	5.16
0.417	6.06	1.417	27.61	2.417	7.47	3.42	4.88
0.500	6.06	1.500	27.61	2.500	7.47	3.50	4.88
0.583	7.14	1.583	17.41	2.583	6.82	3.58	4.64
0.667	7.14	1.667	17.41	2.667	6.82	3.67	4.64
0.750	8.84	1.750	13.27	2.750	6.29	3.75	4.42
0.833	8.84	1.833	13.27	2.833	6.29	3.83	4.42
0.917	12.09	1.917	10.93	2.917	5.85	3.92	4.23
1.000	12.09	2.000	10.93	3.000	5.85	4.00	4.23

Unit Hyd Qpeak (cms)= 0.316

PEAK FLOW (cms)= 0.037 (i)
TIME TO PEAK (hrs)= 2.583
RUNOFF VOLUME (mm)= 5.752
TOTAL RAINFALL (mm)= 56.533
RUNOFF COEFFICIENT = 0.102

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB

| NASHYD (0010) | Area (ha)= 14.85 | Curve Number (CN)= 52.9
|ID= 1 DT= 5.0 min | Ia (mm)= 13.28 | # of Linear Res.(N)= 3.00
| | U.H. Tp(hrs)= 0.89

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.75	1.083	22.49	2.083	9.40	3.08	5.48
0.167	4.75	1.167	22.49	2.167	9.40	3.17	5.48
0.250	5.31	1.250	130.37	2.250	8.30	3.25	5.16
0.333	5.31	1.333	130.37	2.333	8.30	3.33	5.16
0.417	6.06	1.417	27.61	2.417	7.47	3.42	4.88
0.500	6.06	1.500	27.61	2.500	7.47	3.50	4.88
0.583	7.14	1.583	17.41	2.583	6.82	3.58	4.64
0.667	7.14	1.667	17.41	2.667	6.82	3.67	4.64
0.750	8.84	1.750	13.27	2.750	6.29	3.75	4.42
0.833	8.84	1.833	13.27	2.833	6.29	3.83	4.42
0.917	12.09	1.917	10.93	2.917	5.85	3.92	4.23
1.000	12.09	2.000	10.93	3.000	5.85	4.00	4.23

Unit Hyd Qpeak (cms)= 0.637

PEAK FLOW (cms)= 0.099 (i)
TIME TO PEAK (hrs)= 2.750
RUNOFF VOLUME (mm)= 6.954
TOTAL RAINFALL (mm)= 56.533
RUNOFF COEFFICIENT = 0.123

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	
NASHYD (0013)	Area (ha)= 1.70
ID= 1 DT= 5.0 min	Ia (mm)= 9.65
	U.H. Tp(hrs)= 0.40

| Curve Number (CN)= 60.5
|---|
| # of Linear Res.(N)= 3.00 |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.75	1.083	22.49	2.083	9.40	3.08	5.48
0.167	4.75	1.167	22.49	2.167	9.40	3.17	5.48
0.250	5.31	1.250	130.37	2.250	8.30	3.25	5.16
0.333	5.31	1.333	130.37	2.333	8.30	3.33	5.16
0.417	6.06	1.417	27.61	2.417	7.47	3.42	4.88
0.500	6.06	1.500	27.61	2.500	7.47	3.50	4.88
0.583	7.14	1.583	17.41	2.583	6.82	3.58	4.64
0.667	7.14	1.667	17.41	2.667	6.82	3.67	4.64
0.750	8.84	1.750	13.27	2.750	6.29	3.75	4.42
0.833	8.84	1.833	13.27	2.833	6.29	3.83	4.42
0.917	12.09	1.917	10.93	2.917	5.85	3.92	4.23
1.000	12.09	2.000	10.93	3.000	5.85	4.00	4.23

Unit Hyd Qpeak (cms)= 0.162

PEAK FLOW (cms)= 0.028 (i)
TIME TO PEAK (hrs)= 1.833
RUNOFF VOLUME (mm)= 10.318
TOTAL RAINFALL (mm)= 56.533
RUNOFF COEFFICIENT = 0.183

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	
NASHYD (0014)	Area (ha)= 1.80
ID= 1 DT= 5.0 min	Ia (mm)= 16.00
	U.H. Tp(hrs)= 0.76

| Curve Number (CN)= 50.0
|---|
| # of Linear Res.(N)= 3.00 |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.75	1.083	22.49	2.083	9.40	3.08	5.48
0.167	4.75	1.167	22.49	2.167	9.40	3.17	5.48
0.250	5.31	1.250	130.37	2.250	8.30	3.25	5.16
0.333	5.31	1.333	130.37	2.333	8.30	3.33	5.16
0.417	6.06	1.417	27.61	2.417	7.47	3.42	4.88
0.500	6.06	1.500	27.61	2.500	7.47	3.50	4.88
0.583	7.14	1.583	17.41	2.583	6.82	3.58	4.64
0.667	7.14	1.667	17.41	2.667	6.82	3.67	4.64
0.750	8.84	1.750	13.27	2.750	6.29	3.75	4.42
0.833	8.84	1.833	13.27	2.833	6.29	3.83	4.42
0.917	12.09	1.917	10.93	2.917	5.85	3.92	4.23
1.000	12.09	2.000	10.93	3.000	5.85	4.00	4.23

Unit Hyd Qpeak (cms)= 0.090

PEAK FLOW (cms)= 0.010 (i)
TIME TO PEAK (hrs)= 2.583
RUNOFF VOLUME (mm)= 5.577

TOTAL RAINFALL (mm)= 56.533
RUNOFF COEFFICIENT = 0.099

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0015)	Area	(ha)=	6.70	Curve Number (CN)=	60.0
ID= 1 DT= 5.0 min	Ia	(mm)=	10.00	# of Linear Res.(N)=	3.00
	U.H. Tp(hrs)=		1.45		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.75	1.083	22.49	2.083	9.40	3.08	5.48
0.167	4.75	1.167	22.49	2.167	9.40	3.17	5.48
0.250	5.31	1.250	130.37	2.250	8.30	3.25	5.16
0.333	5.31	1.333	130.37	2.333	8.30	3.33	5.16
0.417	6.06	1.417	27.61	2.417	7.47	3.42	4.88
0.500	6.06	1.500	27.61	2.500	7.47	3.50	4.88
0.583	7.14	1.583	17.41	2.583	6.82	3.58	4.64
0.667	7.14	1.667	17.41	2.667	6.82	3.67	4.64
0.750	8.84	1.750	13.27	2.750	6.29	3.75	4.42
0.833	8.84	1.833	13.27	2.833	6.29	3.83	4.42
0.917	12.09	1.917	10.93	2.917	5.85	3.92	4.23
1.000	12.09	2.000	10.93	3.000	5.85	4.00	4.23

Unit Hyd Qpeak (cms)= 0.176

PEAK FLOW (cms)= 0.051 (i)
TIME TO PEAK (hrs)= 3.500
RUNOFF VOLUME (mm)= 10.030
TOTAL RAINFALL (mm)= 56.533
RUNOFF COEFFICIENT = 0.177

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0016)	Area	(ha)=	29.16	Curve Number (CN)=	71.4
ID= 1 DT= 5.0 min	Ia	(mm)=	7.88	# of Linear Res.(N)=	3.00
	U.H. Tp(hrs)=		0.68		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.75	1.083	22.49	2.083	9.40	3.08	5.48
0.167	4.75	1.167	22.49	2.167	9.40	3.17	5.48
0.250	5.31	1.250	130.37	2.250	8.30	3.25	5.16
0.333	5.31	1.333	130.37	2.333	8.30	3.33	5.16
0.417	6.06	1.417	27.61	2.417	7.47	3.42	4.88
0.500	6.06	1.500	27.61	2.500	7.47	3.50	4.88
0.583	7.14	1.583	17.41	2.583	6.82	3.58	4.64
0.667	7.14	1.667	17.41	2.667	6.82	3.67	4.64
0.750	8.84	1.750	13.27	2.750	6.29	3.75	4.42
0.833	8.84	1.833	13.27	2.833	6.29	3.83	4.42
0.917	12.09	1.917	10.93	2.917	5.85	3.92	4.23
1.000	12.09	2.000	10.93	3.000	5.85	4.00	4.23

Unit Hyd Qpeak (cms)= 1.638

PEAK FLOW (cms)= 0.558 (i)
TIME TO PEAK (hrs)= 2.250
RUNOFF VOLUME (mm)= 15.739
TOTAL RAINFALL (mm)= 56.533
RUNOFF COEFFICIENT = 0.278

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0019)	Area	(ha)=	39.68	Curve Number (CN)=	60.7
ID= 1 DT= 5.0 min	Ia	(mm)=	8.26	# of Linear Res.(N)=	3.00
	U.H. Tp(hrs)=		1.18		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.75	1.083	22.49	2.083	9.40	3.08	5.48
0.167	4.75	1.167	22.49	2.167	9.40	3.17	5.48
0.250	5.31	1.250	130.37	2.250	8.30	3.25	5.16
0.333	5.31	1.333	130.37	2.333	8.30	3.33	5.16
0.417	6.06	1.417	27.61	2.417	7.47	3.42	4.88
0.500	6.06	1.500	27.61	2.500	7.47	3.50	4.88
0.583	7.14	1.583	17.41	2.583	6.82	3.58	4.64
0.667	7.14	1.667	17.41	2.667	6.82	3.67	4.64
0.750	8.84	1.750	13.27	2.750	6.29	3.75	4.42
0.833	8.84	1.833	13.27	2.833	6.29	3.83	4.42

```
              0.917   12.09 | 1.917   10.93 | 2.917    5.85 |  3.92    4.23
              1.000   12.09 | 2.000   10.93 | 3.000    5.85 |  4.00    4.23

     Unit Hyd Qpeak  (cms)=   1.284

     PEAK FLOW       (cms)=   0.370 (i)
     TIME TO PEAK    (hrs)=   3.000
     RUNOFF VOLUME    (mm)=  10.944
     TOTAL RAINFALL   (mm)=  56.533
     RUNOFF COEFFICIENT   =   0.194

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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--------------------
| ADD HYD  (  0024)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 1 (  0010):    14.85   0.099     2.75     6.95
      + ID2= 2 (  0013):     1.70   0.028     1.83    10.32
        ================================================
        ID = 3 (  0024):    16.55   0.115     2.58     7.30

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0024)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 3 (  0024):    16.55   0.115     2.58     7.30
      + ID2= 2 (  0014):     1.80   0.010     2.58     5.58
        ================================================
        ID = 1 (  0024):    18.35   0.125     2.58     7.13

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0024)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 1 (  0024):    18.35   0.125     2.58     7.13
      + ID2= 2 (  0015):     6.70   0.051     3.50    10.03
        ================================================
        ID = 3 (  0024):    25.05   0.168     2.83     7.91

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0024)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 3 (  0024):    25.05   0.168     2.83     7.91
      + ID2= 2 (  0016):    29.16   0.558     2.25    15.74
        ================================================
        ID = 1 (  0024):    54.21   0.709     2.25    12.12

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0024)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 1 (  0024):    54.21   0.709     2.25    12.12
      + ID2= 2 (  0019):    39.68   0.370     3.00    10.94
        ================================================
        ID = 3 (  0024):    93.89   1.025     2.50    11.62

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
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--------------------
| ADD HYD  (  0024)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 3 (  0024):    93.89   1.025     2.50    11.62
      + ID2= 2 (  0007):   100.92   0.660     3.92     9.51
        ================================================
        ID = 1 (  0024):   194.81   1.528     3.00    10.53

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0024)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 1 (  0024):   194.81   1.528     3.00    10.53
      + ID2= 2 (  0008):    23.99   0.129     2.83     5.78
        ================================================
        ID = 3 (  0024):   218.80   1.656     2.92    10.01

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
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| ADD HYD (0024)|
| 3 + 2 = 1 | AREA QPEAK TPEAK R.V.
---------- (ha) (cms) (hrs) (mm)
ID1= 3 (0024): 218.80 1.656 2.92 10.01
+ ID2= 2 (0009): 6.37 0.037 2.58 5.75
==========
ID = 1 (0024): 225.17 1.692 2.92 9.89

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

| CALIB |
| NASHYD (0011)| Area (ha)= 46.28 Curve Number (CN)= 72.2
|ID= 1 DT= 5.0 min | Ia (mm)= 7.09 # of Linear Res.(N)= 3.00
---------- U.H. Tp(hrs)= 0.30

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.75	1.083	22.49	2.083	9.40	3.08	5.48
0.167	4.75	1.167	22.49	2.167	9.40	3.17	5.48
0.250	5.31	1.250	130.37	2.250	8.30	3.25	5.16
0.333	5.31	1.333	130.37	2.333	8.30	3.33	5.16
0.417	6.06	1.417	27.61	2.417	7.47	3.42	4.88
0.500	6.06	1.500	27.61	2.500	7.47	3.50	4.88
0.583	7.14	1.583	17.41	2.583	6.82	3.58	4.64
0.667	7.14	1.667	17.41	2.667	6.82	3.67	4.64
0.750	8.84	1.750	13.27	2.750	6.29	3.75	4.42
0.833	8.84	1.833	13.27	2.833	6.29	3.83	4.42
0.917	12.09	1.917	10.93	2.917	5.85	3.92	4.23
1.000	12.09	2.000	10.93	3.000	5.85	4.00	4.23

Unit Hyd Qpeak (cms)= 5.892

PEAK FLOW (cms)= 1.594 (i)
TIME TO PEAK (hrs)= 1.667
RUNOFF VOLUME (mm)= 16.591
TOTAL RAINFALL (mm)= 56.533
RUNOFF COEFFICIENT = 0.293

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

| CALIB |
| NASHYD (0012)| Area (ha)= 1.13 Curve Number (CN)= 67.4
|ID= 1 DT= 5.0 min | Ia (mm)= 7.88 # of Linear Res.(N)= 3.00
---------- U.H. Tp(hrs)= 0.43

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.75	1.083	22.49	2.083	9.40	3.08	5.48
0.167	4.75	1.167	22.49	2.167	9.40	3.17	5.48
0.250	5.31	1.250	130.37	2.250	8.30	3.25	5.16
0.333	5.31	1.333	130.37	2.333	8.30	3.33	5.16
0.417	6.06	1.417	27.61	2.417	7.47	3.42	4.88
0.500	6.06	1.500	27.61	2.500	7.47	3.50	4.88
0.583	7.14	1.583	17.41	2.583	6.82	3.58	4.64
0.667	7.14	1.667	17.41	2.667	6.82	3.67	4.64
0.750	8.84	1.750	13.27	2.750	6.29	3.75	4.42
0.833	8.84	1.833	13.27	2.833	6.29	3.83	4.42
0.917	12.09	1.917	10.93	2.917	5.85	3.92	4.23
1.000	12.09	2.000	10.93	3.000	5.85	4.00	4.23

Unit Hyd Qpeak (cms)= 0.100

PEAK FLOW (cms)= 0.025 (i)
TIME TO PEAK (hrs)= 1.833
RUNOFF VOLUME (mm)= 13.782
TOTAL RAINFALL (mm)= 56.533
RUNOFF COEFFICIENT = 0.244

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

| CALIB |
| NASHYD (0041)| Area (ha)= 0.59 Curve Number (CN)= 71.5
|ID= 1 DT= 5.0 min | Ia (mm)= 4.75 # of Linear Res.(N)= 3.00
---------- U.H. Tp(hrs)= 0.53

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.75	1.083	22.49	2.083	9.40	3.08	5.48
0.167	4.75	1.167	22.49	2.167	9.40	3.17	5.48
0.250	5.31	1.250	130.37	2.250	8.30	3.25	5.16
0.333	5.31	1.333	130.37	2.333	8.30	3.33	5.16
0.417	6.06	1.417	27.61	2.417	7.47	3.42	4.88
0.500	6.06	1.500	27.61	2.500	7.47	3.50	4.88

0.583	7.14	1.583	17.41	2.583	6.82	3.58	4.64
0.667	7.14	1.667	17.41	2.667	6.82	3.67	4.64
0.750	8.84	1.750	13.27	2.750	6.29	3.75	4.42
0.833	8.84	1.833	13.27	2.833	6.29	3.83	4.42
0.917	12.09	1.917	10.93	2.917	5.85	3.92	4.23
1.000	12.09	2.000	10.93	3.000	5.85	4.00	4.23

Unit Hyd Qpeak (cms)= 0.043

PEAK FLOW (cms)= 0.015 (i)
TIME TO PEAK (hrs)= 1.917
RUNOFF VOLUME (mm)= 17.497
TOTAL RAINFALL (mm)= 56.533
RUNOFF COEFFICIENT = 0.310

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
NASHYD (0028) | Area (ha)= 1.38 Curve Number (CN)= 64.1
ID= 1 DT= 5.0 min | Ia (mm)= 8.51 # of Linear Res.(N)= 3.00
U.H. Tp(hrs)= 0.39

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.75	1.083	22.49	2.083	9.40	3.08	5.48
0.167	4.75	1.167	22.49	2.167	9.40	3.17	5.48
0.250	5.31	1.250	130.37	2.250	8.30	3.25	5.16
0.333	5.31	1.333	130.37	2.333	8.30	3.33	5.16
0.417	6.06	1.417	27.61	2.417	7.47	3.42	4.88
0.500	6.06	1.500	27.61	2.500	7.47	3.50	4.88
0.583	7.14	1.583	17.41	2.583	6.82	3.58	4.64
0.667	7.14	1.667	17.41	2.667	6.82	3.67	4.64
0.750	8.84	1.750	13.27	2.750	6.29	3.75	4.42
0.833	8.84	1.833	13.27	2.833	6.29	3.83	4.42
0.917	12.09	1.917	10.93	2.917	5.85	3.92	4.23
1.000	12.09	2.000	10.93	3.000	5.85	4.00	4.23

Unit Hyd Qpeak (cms)= 0.135

PEAK FLOW (cms)= 0.028 (i)
TIME TO PEAK (hrs)= 1.750
RUNOFF VOLUME (mm)= 12.134
TOTAL RAINFALL (mm)= 56.533
RUNOFF COEFFICIENT = 0.215

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (0044) | Area (ha)= 1.62
ID= 1 DT= 5.0 min | Total Imp(%)= 48.77 Dir. Conn.(%)= 30.86

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	0.79	0.83
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	0.50	1.40
Length (m)=	103.92	400.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.75	1.083	22.49	2.083	9.40	3.08	5.48
0.167	4.75	1.167	22.49	2.167	9.40	3.17	5.48
0.250	5.31	1.250	130.37	2.250	8.30	3.25	5.16
0.333	5.31	1.333	130.37	2.333	8.30	3.33	5.16
0.417	6.06	1.417	27.61	2.417	7.47	3.42	4.88
0.500	6.06	1.500	27.61	2.500	7.47	3.50	4.88
0.583	7.14	1.583	17.41	2.583	6.82	3.58	4.64
0.667	7.14	1.667	17.41	2.667	6.82	3.67	4.64
0.750	8.84	1.750	13.27	2.750	6.29	3.75	4.42
0.833	8.84	1.833	13.27	2.833	6.29	3.83	4.42
0.917	12.09	1.917	10.93	2.917	5.85	3.92	4.23
1.000	12.09	2.000	10.93	3.000	5.85	4.00	4.23

Max.Eff.Inten.(mm/hr)=	130.37	18.19		
over (min)	5.00	65.00		
Storage Coeff. (min)=	2.89 (ii)	64.73 (ii)		
Unit Hyd. Tpeak (min)=	5.00	65.00		
Unit Hyd. peak (cms)=	0.28	0.02		
			TOTALS	
PEAK FLOW (cms)=	0.18	0.02	0.178 (iii)	
TIME TO PEAK (hrs)=	1.33	2.42	1.33	
RUNOFF VOLUME (mm)=	55.53	20.31	31.16	
TOTAL RAINFALL (mm)=	56.53	56.53	56.53	
RUNOFF COEFFICIENT =	0.98	0.36	0.55	

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:

```
           CN*  =  69.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| STANDHYD (  0043)|   Area    (ha)=   0.13
|ID= 1 DT= 5.0 min |   Total Imp(%)=  30.77   Dir. Conn.(%)=   7.69
--------------------
                            IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       0.04         0.09
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       0.50         0.50
     Length            (m)=      29.44        70.00
     Mannings n           =      0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                          ---- TRANSFORMED HYETOGRAPH ----
               TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
              0.083    4.75 | 1.083   22.49 | 2.083    9.40 |  3.08    5.48
              0.167    4.75 | 1.167   22.49 | 2.167    9.40 |  3.17    5.48
              0.250    5.31 | 1.250  130.37 | 2.250    8.30 |  3.25    5.16
              0.333    5.31 | 1.333  130.37 | 2.333    8.30 |  3.33    5.16
              0.417    6.06 | 1.417   27.61 | 2.417    7.47 |  3.42    4.88
              0.500    6.06 | 1.500   27.61 | 2.500    7.47 |  3.50    4.88
              0.583    7.14 | 1.583   17.41 | 2.583    6.82 |  3.58    4.64
              0.667    7.14 | 1.667   17.41 | 2.667    6.82 |  3.67    4.64
              0.750    8.84 | 1.750   13.27 | 2.750    6.29 |  3.75    4.42
              0.833    8.84 | 1.833   13.27 | 2.833    6.29 |  3.83    4.42
              0.917   12.09 | 1.917   10.93 | 2.917    5.85 |  3.92    4.23
              1.000   12.09 | 2.000   10.93 | 3.000    5.85 |  4.00    4.23

     Max.Eff.Inten.(mm/hr)=     130.37        30.87
               over (min)        5.00        30.00
     Storage Coeff.  (min)=      1.36 (ii)   25.31 (ii)
     Unit Hyd. Tpeak (min)=      5.00        30.00
     Unit Hyd. peak  (cms)=      0.33         0.04
                                                  *TOTALS*
     PEAK FLOW       (cms)=      0.00         0.00          0.005 (iii)
     TIME TO PEAK    (hrs)=      1.33         1.75           1.75
     RUNOFF VOLUME    (mm)=     55.53        20.14          22.74
     TOTAL RAINFALL   (mm)=     56.53        56.53          56.53
     RUNOFF COEFFICIENT   =      0.98         0.36           0.40

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
```

```
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
              YOU SHOULD CONSIDER SPLITTING THE AREA.

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  69.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0023)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 1 (  0011):    46.28   1.594     1.67    16.59
      + ID2= 2 (  0012):     1.13   0.025     1.83    13.78
        ==================================================
        ID = 3 (  0023):    47.41   1.617     1.67    16.52

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0023)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 3 (  0023):    47.41   1.617     1.67    16.52
      + ID2= 2 (  0028):     1.38   0.028     1.75    12.13
        ==================================================
        ID = 1 (  0023):    48.79   1.644     1.67    16.40

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0023)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 1 (  0023):    48.79   1.644     1.67    16.40
      + ID2= 2 (  0041):     0.59   0.015     1.92    17.50
        ==================================================
        ID = 3 (  0023):    49.38   1.657     1.67    16.41

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0023)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
```

```
--------------------          (ha)    (cms)    (hrs)     (mm)
       ID1= 3 (  0023):    49.38   1.657     1.67    16.41
     + ID2= 2 (  0043):     0.13   0.005     1.75    22.74
       ================================================
       ID = 1 (  0023):    49.51   1.661     1.67    16.43

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0023)|
|   1 +  2 =  3    |          AREA    QPEAK    TPEAK     R.V.
--------------------          (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0023):    49.51   1.661     1.67    16.43
     + ID2= 2 (  0044):     1.62   0.178     1.33    31.16
       ================================================
       ID = 3 (  0023):    51.13   1.693     1.67    16.90

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0025)|
|   1 +  2 =  3    |          AREA    QPEAK    TPEAK     R.V.
--------------------          (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0023):    51.13   1.693     1.67    16.90
     + ID2= 2 (  0024):   225.17   1.692     2.92     9.89
       ================================================
       ID = 3 (  0025):   276.30   2.466     1.83    11.19

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
================================================================================
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       V    V   I    SSSSS  U   U    A    L             (v 6.2.2020)
       V    V   I    SS     U   U   A A   L
        V  V    I     SS    U   U  AAAAA  L
        V  V    I      SS   U   U  A   A  L
         VV     I    SSSSS  UUUUU  A   A  LLLLL

        OOO   TTTTT  TTTTT  H   H  Y   Y  M   M   OOO    TM
       O   O    T      T    H   H   Y Y   MM MM  O   O
       O   O    T      T    H   H    Y    M   M  O   O
        OOO     T      T    H   H    Y    M   M   OOO
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                *****  D E T A I L E D   O U T P U T *****


  Input   filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat

  Output  filename:
C:\Users\msimon\AppData\Local\Civica\VH5\a122c840-259d-4b92-8a43-b1e7a592bdea\641e2
41a-4fbb-4469-924f-b1f43febc3c0\scena
  Summary filename:
C:\Users\msimon\AppData\Local\Civica\VH5\a122c840-259d-4b92-8a43-b1e7a592bdea\641e2
41a-4fbb-4469-924f-b1f43febc3c0\scena


DATE: 07-15-2026                          TIME: 03:17:52

USER:


COMMENTS: _____________________________________________________________


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  **********************************************
  ** SIMULATION : D - 25-year CHI               **
  **********************************************

--------------------
| CHICAGO STORM    |    IDF curve parameters: A= 766.568
| Ptotal= 66.48 mm |                          B=   0.000
--------------------                          C=   0.699
                       used in:   INTENSITY =  A / (t + B)^C

                       Duration of storm  =  4.00 hrs
                       Storm time step    = 10.00 min
                       Time to peak ratio =  0.33

     TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
      hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
     0.00    5.59 |  1.00   26.45 |  2.00   11.05 |  3.00    6.44
     0.17    6.25 |  1.17  153.30 |  2.17    9.76 |  3.17    6.06
     0.33    7.13 |  1.33   32.46 |  2.33    8.78 |  3.33    5.74
     0.50    8.39 |  1.50   20.47 |  2.50    8.02 |  3.50    5.45
     0.67   10.40 |  1.67   15.61 |  2.67    7.39 |  3.67    5.20
     0.83   14.22 |  1.83   12.86 |  2.83    6.88 |  3.83    4.97


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CALIB	
NASHYD (0007)	Area (ha)= 100.92 Curve Number (CN)= 55.9
ID= 1 DT= 5.0 min	Ia (mm)= 7.89 # of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 1.70

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	5.59	1.083	26.45	2.083	11.05	3.08	6.44
0.167	5.59	1.167	26.45	2.167	11.05	3.17	6.44
0.250	6.25	1.250	153.30	2.250	9.76	3.25	6.06
0.333	6.25	1.333	153.30	2.333	9.76	3.33	6.06
0.417	7.13	1.417	32.46	2.417	8.78	3.42	5.74
0.500	7.13	1.500	32.46	2.500	8.78	3.50	5.74
0.583	8.39	1.583	20.47	2.583	8.02	3.58	5.45
0.667	8.39	1.667	20.47	2.667	8.02	3.67	5.45
0.750	10.40	1.750	15.61	2.750	7.39	3.75	5.20
0.833	10.40	1.833	15.61	2.833	7.39	3.83	5.20
0.917	14.22	1.917	12.86	2.917	6.88	3.92	4.97
1.000	14.22	2.000	12.86	3.000	6.88	4.00	4.97

Unit Hyd Qpeak (cms)= 2.267

PEAK FLOW (cms)= 0.923 (i)
TIME TO PEAK (hrs)= 3.833
RUNOFF VOLUME (mm)= 13.272
TOTAL RAINFALL (mm)= 66.479
RUNOFF COEFFICIENT = 0.200

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	
NASHYD (0008)	Area (ha)= 23.99 Curve Number (CN)= 44.7
ID= 1 DT= 5.0 min	Ia (mm)= 10.91 # of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.97

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	5.59	1.083	26.45	2.083	11.05	3.08	6.44
0.167	5.59	1.167	26.45	2.167	11.05	3.17	6.44
0.250	6.25	1.250	153.30	2.250	9.76	3.25	6.06
0.333	6.25	1.333	153.30	2.333	9.76	3.33	6.06
0.417	7.13	1.417	32.46	2.417	8.78	3.42	5.74
0.500	7.13	1.500	32.46	2.500	8.78	3.50	5.74
0.583	8.39	1.583	20.47	2.583	8.02	3.58	5.45
0.667	8.39	1.667	20.47	2.667	8.02	3.67	5.45
0.750	10.40	1.750	15.61	2.750	7.39	3.75	5.20
0.833	10.40	1.833	15.61	2.833	7.39	3.83	5.20
0.917	14.22	1.917	12.86	2.917	6.88	3.92	4.97
1.000	14.22	2.000	12.86	3.000	6.88	4.00	4.97

Unit Hyd Qpeak (cms)= 0.945

PEAK FLOW (cms)= 0.188 (i)
TIME TO PEAK (hrs)= 2.750
RUNOFF VOLUME (mm)= 8.350
TOTAL RAINFALL (mm)= 66.479
RUNOFF COEFFICIENT = 0.126

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	
NASHYD (0009)	Area (ha)= 6.37 Curve Number (CN)= 50.5
ID= 1 DT= 5.0 min	Ia (mm)= 15.69 # of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.77

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	5.59	1.083	26.45	2.083	11.05	3.08	6.44
0.167	5.59	1.167	26.45	2.167	11.05	3.17	6.44
0.250	6.25	1.250	153.30	2.250	9.76	3.25	6.06
0.333	6.25	1.333	153.30	2.333	9.76	3.33	6.06
0.417	7.13	1.417	32.46	2.417	8.78	3.42	5.74
0.500	7.13	1.500	32.46	2.500	8.78	3.50	5.74
0.583	8.39	1.583	20.47	2.583	8.02	3.58	5.45
0.667	8.39	1.667	20.47	2.667	8.02	3.67	5.45
0.750	10.40	1.750	15.61	2.750	7.39	3.75	5.20
0.833	10.40	1.833	15.61	2.833	7.39	3.83	5.20
0.917	14.22	1.917	12.86	2.917	6.88	3.92	4.97
1.000	14.22	2.000	12.86	3.000	6.88	4.00	4.97

Unit Hyd Qpeak (cms)= 0.316

PEAK FLOW (cms)= 0.057 (i)
TIME TO PEAK (hrs)= 2.500

RUNOFF VOLUME (mm)= 8.599
TOTAL RAINFALL (mm)= 66.479
RUNOFF COEFFICIENT = 0.129

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB NASHYD (0010) ID= 1 DT= 5.0 min	Area (ha)= 14.85 Curve Number (CN)= 52.9 Ia (mm)= 13.28 # of Linear Res.(N)= 3.00 U.H. Tp(hrs)= 0.89

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	5.59	1.083	26.45	2.083	11.05	3.08	6.44
0.167	5.59	1.167	26.45	2.167	11.05	3.17	6.44
0.250	6.25	1.250	153.30	2.250	9.76	3.25	6.06
0.333	6.25	1.333	153.30	2.333	9.76	3.33	6.06
0.417	7.13	1.417	32.46	2.417	8.78	3.42	5.74
0.500	7.13	1.500	32.46	2.500	8.78	3.50	5.74
0.583	8.39	1.583	20.47	2.583	8.02	3.58	5.45
0.667	8.39	1.667	20.47	2.667	8.02	3.67	5.45
0.750	10.40	1.750	15.61	2.750	7.39	3.75	5.20
0.833	10.40	1.833	15.61	2.833	7.39	3.83	5.20
0.917	14.22	1.917	12.86	2.917	6.88	3.92	4.97
1.000	14.22	2.000	12.86	3.000	6.88	4.00	4.97

Unit Hyd Qpeak (cms)= 0.637

PEAK FLOW (cms)= 0.148 (i)
TIME TO PEAK (hrs)= 2.667
RUNOFF VOLUME (mm)= 10.144
TOTAL RAINFALL (mm)= 66.479
RUNOFF COEFFICIENT = 0.153

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB NASHYD (0013) ID= 1 DT= 5.0 min	Area (ha)= 1.70 Curve Number (CN)= 60.5 Ia (mm)= 9.65 # of Linear Res.(N)= 3.00 U.H. Tp(hrs)= 0.40

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	5.59	1.083	26.45	2.083	11.05	3.08	6.44
0.167	5.59	1.167	26.45	2.167	11.05	3.17	6.44
0.250	6.25	1.250	153.30	2.250	9.76	3.25	6.06
0.333	6.25	1.333	153.30	2.333	9.76	3.33	6.06
0.417	7.13	1.417	32.46	2.417	8.78	3.42	5.74
0.500	7.13	1.500	32.46	2.500	8.78	3.50	5.74
0.583	8.39	1.583	20.47	2.583	8.02	3.58	5.45
0.667	8.39	1.667	20.47	2.667	8.02	3.67	5.45
0.750	10.40	1.750	15.61	2.750	7.39	3.75	5.20
0.833	10.40	1.833	15.61	2.833	7.39	3.83	5.20
0.917	14.22	1.917	12.86	2.917	6.88	3.92	4.97
1.000	14.22	2.000	12.86	3.000	6.88	4.00	4.97

Unit Hyd Qpeak (cms)= 0.162

PEAK FLOW (cms)= 0.041 (i)
TIME TO PEAK (hrs)= 1.833
RUNOFF VOLUME (mm)= 14.484
TOTAL RAINFALL (mm)= 66.479
RUNOFF COEFFICIENT = 0.218

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB NASHYD (0014) ID= 1 DT= 5.0 min	Area (ha)= 1.80 Curve Number (CN)= 50.0 Ia (mm)= 16.00 # of Linear Res.(N)= 3.00 U.H. Tp(hrs)= 0.76

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	5.59	1.083	26.45	2.083	11.05	3.08	6.44
0.167	5.59	1.167	26.45	2.167	11.05	3.17	6.44
0.250	6.25	1.250	153.30	2.250	9.76	3.25	6.06
0.333	6.25	1.333	153.30	2.333	9.76	3.33	6.06
0.417	7.13	1.417	32.46	2.417	8.78	3.42	5.74
0.500	7.13	1.500	32.46	2.500	8.78	3.50	5.74
0.583	8.39	1.583	20.47	2.583	8.02	3.58	5.45
0.667	8.39	1.667	20.47	2.667	8.02	3.67	5.45
0.750	10.40	1.750	15.61	2.750	7.39	3.75	5.20

0.833	10.40	1.833	15.61	2.833	7.39	3.83	5.20
0.917	14.22	1.917	12.86	2.917	6.88	3.92	4.97
1.000	14.22	2.000	12.86	3.000	6.88	4.00	4.97

Unit Hyd Qpeak (cms)= 0.090

PEAK FLOW (cms)= 0.016 (i)
TIME TO PEAK (hrs)= 2.500
RUNOFF VOLUME (mm)= 8.368
TOTAL RAINFALL (mm)= 66.479
RUNOFF COEFFICIENT = 0.126

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB							
NASHYD (0015)	Area (ha)= 6.70	Curve Number (CN)= 60.0					
ID= 1 DT= 5.0 min	Ia (mm)= 10.00	# of Linear Res.(N)= 3.00					
	U.H. Tp(hrs)= 1.45						

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	5.59	1.083	26.45	2.083	11.05	3.08	6.44
0.167	5.59	1.167	26.45	2.167	11.05	3.17	6.44
0.250	6.25	1.250	153.30	2.250	9.76	3.25	6.06
0.333	6.25	1.333	153.30	2.333	9.76	3.33	6.06
0.417	7.13	1.417	32.46	2.417	8.78	3.42	5.74
0.500	7.13	1.500	32.46	2.500	8.78	3.50	5.74
0.583	8.39	1.583	20.47	2.583	8.02	3.58	5.45
0.667	8.39	1.667	20.47	2.667	8.02	3.67	5.45
0.750	10.40	1.750	15.61	2.750	7.39	3.75	5.20
0.833	10.40	1.833	15.61	2.833	7.39	3.83	5.20
0.917	14.22	1.917	12.86	2.917	6.88	3.92	4.97
1.000	14.22	2.000	12.86	3.000	6.88	4.00	4.97

Unit Hyd Qpeak (cms)= 0.176

PEAK FLOW (cms)= 0.072 (i)
TIME TO PEAK (hrs)= 3.500
RUNOFF VOLUME (mm)= 14.126
TOTAL RAINFALL (mm)= 66.479
RUNOFF COEFFICIENT = 0.212

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB							
NASHYD (0016)	Area (ha)= 29.16	Curve Number (CN)= 71.4					
ID= 1 DT= 5.0 min	Ia (mm)= 7.88	# of Linear Res.(N)= 3.00					
	U.H. Tp(hrs)= 0.68						

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	5.59	1.083	26.45	2.083	11.05	3.08	6.44
0.167	5.59	1.167	26.45	2.167	11.05	3.17	6.44
0.250	6.25	1.250	153.30	2.250	9.76	3.25	6.06
0.333	6.25	1.333	153.30	2.333	9.76	3.33	6.06
0.417	7.13	1.417	32.46	2.417	8.78	3.42	5.74
0.500	7.13	1.500	32.46	2.500	8.78	3.50	5.74
0.583	8.39	1.583	20.47	2.583	8.02	3.58	5.45
0.667	8.39	1.667	20.47	2.667	8.02	3.67	5.45
0.750	10.40	1.750	15.61	2.750	7.39	3.75	5.20
0.833	10.40	1.833	15.61	2.833	7.39	3.83	5.20
0.917	14.22	1.917	12.86	2.917	6.88	3.92	4.97
1.000	14.22	2.000	12.86	3.000	6.88	4.00	4.97

Unit Hyd Qpeak (cms)= 1.638

PEAK FLOW (cms)= 0.776 (i)
TIME TO PEAK (hrs)= 2.167
RUNOFF VOLUME (mm)= 21.415
TOTAL RAINFALL (mm)= 66.479
RUNOFF COEFFICIENT = 0.322

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB							
NASHYD (0019)	Area (ha)= 39.68	Curve Number (CN)= 60.7					
ID= 1 DT= 5.0 min	Ia (mm)= 8.26	# of Linear Res.(N)= 3.00					
	U.H. Tp(hrs)= 1.18						

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	5.59	1.083	26.45	2.083	11.05	3.08	6.44

```
              0.167    5.59 | 1.167   26.45 | 2.167   11.05 |  3.17    6.44
              0.250    6.25 | 1.250  153.30 | 2.250    9.76 |  3.25    6.06
              0.333    6.25 | 1.333  153.30 | 2.333    9.76 |  3.33    6.06
              0.417    7.13 | 1.417   32.46 | 2.417    8.78 |  3.42    5.74
              0.500    7.13 | 1.500   32.46 | 2.500    8.78 |  3.50    5.74
              0.583    8.39 | 1.583   20.47 | 2.583    8.02 |  3.58    5.45
              0.667    8.39 | 1.667   20.47 | 2.667    8.02 |  3.67    5.45
              0.750   10.40 | 1.750   15.61 | 2.750    7.39 |  3.75    5.20
              0.833   10.40 | 1.833   15.61 | 2.833    7.39 |  3.83    5.20
              0.917   14.22 | 1.917   12.86 | 2.917    6.88 |  3.92    4.97
              1.000   14.22 | 2.000   12.86 | 3.000    6.88 |  4.00    4.97

    Unit Hyd Qpeak  (cms)=   1.284

    PEAK FLOW       (cms)=   0.519 (i)
    TIME TO PEAK    (hrs)=   3.000
    RUNOFF VOLUME    (mm)=  15.208
    TOTAL RAINFALL   (mm)=  66.479
    RUNOFF COEFFICIENT   =   0.229

    (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0024)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0010):    14.85   0.148     2.67    10.14
     + ID2= 2 (  0013):     1.70   0.041     1.83    14.48
       ====================================================
       ID = 3 (  0024):    16.55   0.171     2.50    10.59

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0024)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 3 (  0024):    16.55   0.171     2.50    10.59
     + ID2= 2 (  0014):     1.80   0.016     2.50     8.37
       ====================================================
       ID = 1 (  0024):    18.35   0.186     2.50    10.37

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0024)|
```

```
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0024):    18.35   0.186     2.50    10.37
     + ID2= 2 (  0015):     6.70   0.072     3.50    14.13
       ====================================================
       ID = 3 (  0024):    25.05   0.246     2.75    11.38

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0024)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 3 (  0024):    25.05   0.246     2.75    11.38
     + ID2= 2 (  0016):    29.16   0.776     2.17    21.42
       ====================================================
       ID = 1 (  0024):    54.21   0.999     2.25    16.78

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0024)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0024):    54.21   0.999     2.25    16.78
     + ID2= 2 (  0019):    39.68   0.519     3.00    15.21
       ====================================================
       ID = 3 (  0024):    93.89   1.440     2.50    16.11

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0024)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 3 (  0024):    93.89   1.440     2.50    16.11
     + ID2= 2 (  0007):   100.92   0.923     3.83    13.27
       ====================================================
       ID = 1 (  0024):   194.81   2.139     2.92    14.64

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0024)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
```

```
        ID1= 1 (  0024):   194.81   2.139     2.92    14.64
      + ID2= 2 (  0008):    23.99   0.188     2.75     8.35
        ================================================
        ID = 3 (  0024):   218.80   2.326     2.92    13.95

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0024)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 3 (  0024):   218.80   2.326     2.92    13.95
      + ID2= 2 (  0009):     6.37   0.057     2.50     8.60
        ================================================
        ID = 1 (  0024):   225.17   2.380     2.83    13.80

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
--------------------
| CALIB            |
| NASHYD   (  0011)|   Area    (ha)=  46.28   Curve Number   (CN)= 72.2
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.09   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.30

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                         ---- TRANSFORMED HYETOGRAPH ----
               TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
              0.083    5.59 | 1.083   26.45 | 2.083   11.05 |  3.08    6.44
              0.167    5.59 | 1.167   26.45 | 2.167   11.05 |  3.17    6.44
              0.250    6.25 | 1.250  153.30 | 2.250    9.76 |  3.25    6.06
              0.333    6.25 | 1.333  153.30 | 2.333    9.76 |  3.33    6.06
              0.417    7.13 | 1.417   32.46 | 2.417    8.78 |  3.42    5.74
              0.500    7.13 | 1.500   32.46 | 2.500    8.78 |  3.50    5.74
              0.583    8.39 | 1.583   20.47 | 2.583    8.02 |  3.58    5.45
              0.667    8.39 | 1.667   20.47 | 2.667    8.02 |  3.67    5.45
              0.750   10.40 | 1.750   15.61 | 2.750    7.39 |  3.75    5.20
              0.833   10.40 | 1.833   15.61 | 2.833    7.39 |  3.83    5.20
              0.917   14.22 | 1.917   12.86 | 2.917    6.88 |  3.92    4.97
              1.000   14.22 | 2.000   12.86 | 3.000    6.88 |  4.00    4.97

     Unit Hyd Qpeak  (cms)=   5.892

     PEAK FLOW       (cms)=   2.220 (i)
     TIME TO PEAK    (hrs)=   1.583
     RUNOFF VOLUME    (mm)=  22.423
     TOTAL RAINFALL   (mm)=  66.479
     RUNOFF COEFFICIENT   =   0.337

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| NASHYD   (  0012)|   Area    (ha)=   1.13   Curve Number   (CN)= 67.4
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.88   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.43

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                         ---- TRANSFORMED HYETOGRAPH ----
               TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
              0.083    5.59 | 1.083   26.45 | 2.083   11.05 |  3.08    6.44
              0.167    5.59 | 1.167   26.45 | 2.167   11.05 |  3.17    6.44
              0.250    6.25 | 1.250  153.30 | 2.250    9.76 |  3.25    6.06
              0.333    6.25 | 1.333  153.30 | 2.333    9.76 |  3.33    6.06
              0.417    7.13 | 1.417   32.46 | 2.417    8.78 |  3.42    5.74
              0.500    7.13 | 1.500   32.46 | 2.500    8.78 |  3.50    5.74
              0.583    8.39 | 1.583   20.47 | 2.583    8.02 |  3.58    5.45
              0.667    8.39 | 1.667   20.47 | 2.667    8.02 |  3.67    5.45
              0.750   10.40 | 1.750   15.61 | 2.750    7.39 |  3.75    5.20
              0.833   10.40 | 1.833   15.61 | 2.833    7.39 |  3.83    5.20
              0.917   14.22 | 1.917   12.86 | 2.917    6.88 |  3.92    4.97
              1.000   14.22 | 2.000   12.86 | 3.000    6.88 |  4.00    4.97

     Unit Hyd Qpeak  (cms)=   0.100

     PEAK FLOW       (cms)=   0.035 (i)
     TIME TO PEAK    (hrs)=   1.833
     RUNOFF VOLUME    (mm)=  18.898
     TOTAL RAINFALL   (mm)=  66.479
     RUNOFF COEFFICIENT   =   0.284

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| NASHYD   (  0041)|   Area    (ha)=   0.59   Curve Number   (CN)= 71.5
|ID= 1 DT= 5.0 min |   Ia      (mm)=   4.75   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.53

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.
```

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	5.59	1.083	26.45	2.083	11.05	3.08	6.44
0.167	5.59	1.167	26.45	2.167	11.05	3.17	6.44
0.250	6.25	1.250	153.30	2.250	9.76	3.25	6.06
0.333	6.25	1.333	153.30	2.333	9.76	3.33	6.06
0.417	7.13	1.417	32.46	2.417	8.78	3.42	5.74
0.500	7.13	1.500	32.46	2.500	8.78	3.50	5.74
0.583	8.39	1.583	20.47	2.583	8.02	3.58	5.45
0.667	8.39	1.667	20.47	2.667	8.02	3.67	5.45
0.750	10.40	1.750	15.61	2.750	7.39	3.75	5.20
0.833	10.40	1.833	15.61	2.833	7.39	3.83	5.20
0.917	14.22	1.917	12.86	2.917	6.88	3.92	4.97
1.000	14.22	2.000	12.86	3.000	6.88	4.00	4.97

Unit Hyd Qpeak (cms)= 0.043

PEAK FLOW (cms)= 0.021 (i)
TIME TO PEAK (hrs)= 1.917
RUNOFF VOLUME (mm)= 23.349
TOTAL RAINFALL (mm)= 66.479
RUNOFF COEFFICIENT = 0.351

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	NASHYD (0028)	ID= 1 DT= 5.0 min

Area (ha)= 1.38 Curve Number (CN)= 64.1
Ia (mm)= 8.51 # of Linear Res.(N)= 3.00
U.H. Tp(hrs)= 0.39

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	5.59	1.083	26.45	2.083	11.05	3.08	6.44
0.167	5.59	1.167	26.45	2.167	11.05	3.17	6.44
0.250	6.25	1.250	153.30	2.250	9.76	3.25	6.06
0.333	6.25	1.333	153.30	2.333	9.76	3.33	6.06
0.417	7.13	1.417	32.46	2.417	8.78	3.42	5.74
0.500	7.13	1.500	32.46	2.500	8.78	3.50	5.74
0.583	8.39	1.583	20.47	2.583	8.02	3.58	5.45
0.667	8.39	1.667	20.47	2.667	8.02	3.67	5.45
0.750	10.40	1.750	15.61	2.750	7.39	3.75	5.20
0.833	10.40	1.833	15.61	2.833	7.39	3.83	5.20
0.917	14.22	1.917	12.86	2.917	6.88	3.92	4.97
1.000	14.22	2.000	12.86	3.000	6.88	4.00	4.97

Unit Hyd Qpeak (cms)= 0.135

PEAK FLOW (cms)= 0.040 (i)
TIME TO PEAK (hrs)= 1.750
RUNOFF VOLUME (mm)= 16.801
TOTAL RAINFALL (mm)= 66.479
RUNOFF COEFFICIENT = 0.253

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	STANDHYD (0044)	ID= 1 DT= 5.0 min

Area (ha)= 1.62
Total Imp(%)= 48.77 Dir. Conn.(%)= 30.86

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.79	0.83
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	1.40
Length	(m)=	103.92	400.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	5.59	1.083	26.45	2.083	11.05	3.08	6.44
0.167	5.59	1.167	26.45	2.167	11.05	3.17	6.44
0.250	6.25	1.250	153.30	2.250	9.76	3.25	6.06
0.333	6.25	1.333	153.30	2.333	9.76	3.33	6.06
0.417	7.13	1.417	32.46	2.417	8.78	3.42	5.74
0.500	7.13	1.500	32.46	2.500	8.78	3.50	5.74
0.583	8.39	1.583	20.47	2.583	8.02	3.58	5.45
0.667	8.39	1.667	20.47	2.667	8.02	3.67	5.45
0.750	10.40	1.750	15.61	2.750	7.39	3.75	5.20
0.833	10.40	1.833	15.61	2.833	7.39	3.83	5.20
0.917	14.22	1.917	12.86	2.917	6.88	3.92	4.97
1.000	14.22	2.000	12.86	3.000	6.88	4.00	4.97

Max.Eff.Inten.(mm/hr)=	153.30	25.45		
over (min)	5.00	60.00		
Storage Coeff. (min)=	2.71 (ii)	56.77 (ii)		
Unit Hyd. Tpeak (min)=	5.00	60.00		
Unit Hyd. peak (cms)=	0.29	0.02		
				TOTALS

```
     PEAK FLOW       (cms)=       0.21         0.03          0.211 (iii)
     TIME TO PEAK    (hrs)=       1.33         2.25           1.33
     RUNOFF VOLUME    (mm)=      65.48        26.75          38.68
     TOTAL RAINFALL   (mm)=      66.48        66.48          66.48
     RUNOFF COEFFICIENT   =       0.98         0.40           0.58

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  69.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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--------------------
| CALIB            |
| STANDHYD (  0043)|   Area    (ha)=   0.13
|ID= 1 DT= 5.0 min |   Total Imp(%)=  30.77   Dir. Conn.(%)=   7.69
--------------------
                          IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       0.04         0.09
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       0.50         0.50
     Length            (m)=      29.44        70.00
     Mannings n           =      0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                          ---- TRANSFORMED HYETOGRAPH ----
               TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
              0.083    5.59 | 1.083   26.45 | 2.083   11.05 |  3.08    6.44
              0.167    5.59 | 1.167   26.45 | 2.167   11.05 |  3.17    6.44
              0.250    6.25 | 1.250  153.30 | 2.250    9.76 |  3.25    6.06
              0.333    6.25 | 1.333  153.30 | 2.333    9.76 |  3.33    6.06
              0.417    7.13 | 1.417   32.46 | 2.417    8.78 |  3.42    5.74
              0.500    7.13 | 1.500   32.46 | 2.500    8.78 |  3.50    5.74
              0.583    8.39 | 1.583   20.47 | 2.583    8.02 |  3.58    5.45
              0.667    8.39 | 1.667   20.47 | 2.667    8.02 |  3.67    5.45
              0.750   10.40 | 1.750   15.61 | 2.750    7.39 |  3.75    5.20
              0.833   10.40 | 1.833   15.61 | 2.833    7.39 |  3.83    5.20
              0.917   14.22 | 1.917   12.86 | 2.917    6.88 |  3.92    4.97
              1.000   14.22 | 2.000   12.86 | 3.000    6.88 |  4.00    4.97

     Max.Eff.Inten.(mm/hr)=     153.30        41.29
               over (min)        5.00        25.00
     Storage Coeff.  (min)=       1.27 (ii)   22.59 (ii)
     Unit Hyd. Tpeak (min)=       5.00        25.00

     Unit Hyd. peak  (cms)=       0.33         0.05
                                                          *TOTALS*
     PEAK FLOW       (cms)=       0.00         0.01           0.007 (iii)
     TIME TO PEAK    (hrs)=       1.33         1.67           1.67
     RUNOFF VOLUME    (mm)=      65.48        26.53          29.42
     TOTAL RAINFALL   (mm)=      66.48        66.48          66.48
     RUNOFF COEFFICIENT   =       0.98         0.40           0.44

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
              YOU SHOULD CONSIDER SPLITTING THE AREA.

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  69.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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--------------------
| ADD HYD  (  0023)|
|   1 +  2 =  3    |          AREA    QPEAK    TPEAK     R.V.
--------------------          (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0011):    46.28   2.220     1.58    22.42
     + ID2= 2 (  0012):     1.13   0.035     1.83    18.90
       ================================================
       ID = 3 (  0023):    47.41   2.249     1.58    22.34

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0023)|
|   3 +  2 =  1    |          AREA    QPEAK    TPEAK     R.V.
--------------------          (ha)    (cms)    (hrs)     (mm)
       ID1= 3 (  0023):    47.41   2.249     1.58    22.34
     + ID2= 2 (  0028):     1.38   0.040     1.75    16.80
       ================================================
       ID = 1 (  0023):    48.79   2.286     1.67    22.18

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0023)|
|   1 +  2 =  3    |          AREA    QPEAK    TPEAK     R.V.
--------------------          (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0023):    48.79   2.286     1.67    22.18
     + ID2= 2 (  0041):     0.59   0.021     1.92    23.35
```

```
       ================================================
       ID = 3 (  0023):    49.38   2.303     1.67    22.20

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0023)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 3 (  0023):    49.38   2.303     1.67    22.20
     + ID2= 2 (  0043):     0.13   0.007     1.67    29.42
       ================================================
       ID = 1 (  0023):    49.51   2.310     1.67    22.21

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0023)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0023):    49.51   2.310     1.67    22.21
     + ID2= 2 (  0044):     1.62   0.211     1.33    38.68
       ================================================
       ID = 3 (  0023):    51.13   2.352     1.67    22.74

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0025)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0023):    51.13   2.352     1.67    22.74
     + ID2= 2 (  0024):   225.17   2.380     2.83    13.80
       ================================================
       ID = 3 (  0025):   276.30   3.463     1.83    15.45

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
================================================================================
======================

      V    V   I    SSSSS  U   U    A    L             (v 6.2.2020)
      V    V   I    SS     U   U   A A   L
       V  V    I     SS    U   U  AAAAA  L
       V  V    I      SS   U   U  A   A  L
        VV     I    SSSSS  UUUUU  A   A  LLLLL
```

```
       OOO   TTTTT  TTTTT  H   H  Y   Y  M   M   OOO    TM
      O   O    T      T    H   H   Y Y   MM MM  O   O
      O   O    T      T    H   H    Y    M   M  O   O
       OOO     T      T    H   H    Y    M   M   OOO
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                  *****  D E T A I L E D   O U T P U T *****


  Input   filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat

  Output  filename:
C:\Users\msimon\AppData\Local\Civica\VH5\a122c840-259d-4b92-8a43-b1e7a592bdea\7575b
d72-1d1d-4a63-af6c-cddb60a892df\scena
  Summary filename:
C:\Users\msimon\AppData\Local\Civica\VH5\a122c840-259d-4b92-8a43-b1e7a592bdea\7575b
d72-1d1d-4a63-af6c-cddb60a892df\scena


DATE: 07-15-2026                          TIME: 03:17:53

USER:


COMMENTS: _____________________________________________________________


--------------------------------------------------------------------------------
------------------------
  ***********************************************
  ** SIMULATION : E - 50-year CHI               **
  ***********************************************

--------------------
| CHICAGO STORM    |    IDF curve parameters: A= 853.083
| Ptotal= 73.98 mm |                          B=   0.000
--------------------                          C=   0.699
                       used in:   INTENSITY =  A / (t + B)^C

                       Duration of storm  =  4.00 hrs
                       Storm time step    = 10.00 min
                       Time to peak ratio =  0.33

                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                 hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
                0.00    6.22 |  1.00   29.44 |  2.00   12.30 |  3.00    7.17
```

0.17	6.95	1.17	170.60	2.17	10.86	3.17	6.75
0.33	7.93	1.33	36.13	2.33	9.78	3.33	6.39
0.50	9.34	1.50	22.78	2.50	8.92	3.50	6.07
0.67	11.57	1.67	17.37	2.67	8.23	3.67	5.78
0.83	15.83	1.83	14.31	2.83	7.65	3.83	5.53

CALIB			
NASHYD (0007)	Area (ha)= 100.92	Curve Number (CN)= 55.9	
ID= 1 DT= 5.0 min	Ia (mm)= 7.89	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 1.70		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.22	1.083	29.44	2.083	12.30	3.08	7.17
0.167	6.22	1.167	29.44	2.167	12.30	3.17	7.17
0.250	6.95	1.250	170.60	2.250	10.86	3.25	6.75
0.333	6.95	1.333	170.60	2.333	10.86	3.33	6.75
0.417	7.93	1.417	36.13	2.417	9.78	3.42	6.39
0.500	7.93	1.500	36.13	2.500	9.78	3.50	6.39
0.583	9.34	1.583	22.78	2.583	8.92	3.58	6.07
0.667	9.34	1.667	22.78	2.667	8.92	3.67	6.07
0.750	11.57	1.750	17.37	2.750	8.23	3.75	5.78
0.833	11.57	1.833	17.37	2.833	8.23	3.83	5.78
0.917	15.83	1.917	14.31	2.917	7.65	3.92	5.53
1.000	15.83	2.000	14.31	3.000	7.65	4.00	5.53

Unit Hyd Qpeak (cms)= 2.267

PEAK FLOW (cms)= 1.143 (i)
TIME TO PEAK (hrs)= 3.833
RUNOFF VOLUME (mm)= 16.412
TOTAL RAINFALL (mm)= 73.982
RUNOFF COEFFICIENT = 0.222

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0008)	Area (ha)= 23.99	Curve Number (CN)= 44.7	
ID= 1 DT= 5.0 min	Ia (mm)= 10.91	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.97		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.22	1.083	29.44	2.083	12.30	3.08	7.17
0.167	6.22	1.167	29.44	2.167	12.30	3.17	7.17
0.250	6.95	1.250	170.60	2.250	10.86	3.25	6.75
0.333	6.95	1.333	170.60	2.333	10.86	3.33	6.75
0.417	7.93	1.417	36.13	2.417	9.78	3.42	6.39
0.500	7.93	1.500	36.13	2.500	9.78	3.50	6.39
0.583	9.34	1.583	22.78	2.583	8.92	3.58	6.07
0.667	9.34	1.667	22.78	2.667	8.92	3.67	6.07
0.750	11.57	1.750	17.37	2.750	8.23	3.75	5.78
0.833	11.57	1.833	17.37	2.833	8.23	3.83	5.78
0.917	15.83	1.917	14.31	2.917	7.65	3.92	5.53
1.000	15.83	2.000	14.31	3.000	7.65	4.00	5.53

Unit Hyd Qpeak (cms)= 0.945

PEAK FLOW (cms)= 0.240 (i)
TIME TO PEAK (hrs)= 2.750
RUNOFF VOLUME (mm)= 10.543
TOTAL RAINFALL (mm)= 73.982
RUNOFF COEFFICIENT = 0.143

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0009)	Area (ha)= 6.37	Curve Number (CN)= 50.5	
ID= 1 DT= 5.0 min	Ia (mm)= 15.69	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.77		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.22	1.083	29.44	2.083	12.30	3.08	7.17
0.167	6.22	1.167	29.44	2.167	12.30	3.17	7.17
0.250	6.95	1.250	170.60	2.250	10.86	3.25	6.75
0.333	6.95	1.333	170.60	2.333	10.86	3.33	6.75
0.417	7.93	1.417	36.13	2.417	9.78	3.42	6.39
0.500	7.93	1.500	36.13	2.500	9.78	3.50	6.39
0.583	9.34	1.583	22.78	2.583	8.92	3.58	6.07
0.667	9.34	1.667	22.78	2.667	8.92	3.67	6.07

0.750	11.57	1.750	17.37	2.750	8.23	3.75	5.78
0.833	11.57	1.833	17.37	2.833	8.23	3.83	5.78
0.917	15.83	1.917	14.31	2.917	7.65	3.92	5.53
1.000	15.83	2.000	14.31	3.000	7.65	4.00	5.53

Unit Hyd Qpeak (cms)= 0.316

PEAK FLOW (cms)= 0.074 (i)
TIME TO PEAK (hrs)= 2.500
RUNOFF VOLUME (mm)= 11.051
TOTAL RAINFALL (mm)= 73.982
RUNOFF COEFFICIENT = 0.149

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB							
NASHYD (0010)	Area (ha)= 14.85		Curve Number (CN)= 52.9				
ID= 1 DT= 5.0 min	Ia (mm)= 13.28		# of Linear Res.(N)= 3.00				
	U.H. Tp(hrs)= 0.89						

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.22	1.083	29.44	2.083	12.30	3.08	7.17
0.167	6.22	1.167	29.44	2.167	12.30	3.17	7.17
0.250	6.95	1.250	170.60	2.250	10.86	3.25	6.75
0.333	6.95	1.333	170.60	2.333	10.86	3.33	6.75
0.417	7.93	1.417	36.13	2.417	9.78	3.42	6.39
0.500	7.93	1.500	36.13	2.500	9.78	3.50	6.39
0.583	9.34	1.583	22.78	2.583	8.92	3.58	6.07
0.667	9.34	1.667	22.78	2.667	8.92	3.67	6.07
0.750	11.57	1.750	17.37	2.750	8.23	3.75	5.78
0.833	11.57	1.833	17.37	2.833	8.23	3.83	5.78
0.917	15.83	1.917	14.31	2.917	7.65	3.92	5.53
1.000	15.83	2.000	14.31	3.000	7.65	4.00	5.53

Unit Hyd Qpeak (cms)= 0.637

PEAK FLOW (cms)= 0.189 (i)
TIME TO PEAK (hrs)= 2.583
RUNOFF VOLUME (mm)= 12.861
TOTAL RAINFALL (mm)= 73.982
RUNOFF COEFFICIENT = 0.174

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB							
NASHYD (0013)	Area (ha)= 1.70		Curve Number (CN)= 60.5				
ID= 1 DT= 5.0 min	Ia (mm)= 9.65		# of Linear Res.(N)= 3.00				
	U.H. Tp(hrs)= 0.40						

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.22	1.083	29.44	2.083	12.30	3.08	7.17
0.167	6.22	1.167	29.44	2.167	12.30	3.17	7.17
0.250	6.95	1.250	170.60	2.250	10.86	3.25	6.75
0.333	6.95	1.333	170.60	2.333	10.86	3.33	6.75
0.417	7.93	1.417	36.13	2.417	9.78	3.42	6.39
0.500	7.93	1.500	36.13	2.500	9.78	3.50	6.39
0.583	9.34	1.583	22.78	2.583	8.92	3.58	6.07
0.667	9.34	1.667	22.78	2.667	8.92	3.67	6.07
0.750	11.57	1.750	17.37	2.750	8.23	3.75	5.78
0.833	11.57	1.833	17.37	2.833	8.23	3.83	5.78
0.917	15.83	1.917	14.31	2.917	7.65	3.92	5.53
1.000	15.83	2.000	14.31	3.000	7.65	4.00	5.53

Unit Hyd Qpeak (cms)= 0.162

PEAK FLOW (cms)= 0.051 (i)
TIME TO PEAK (hrs)= 1.750
RUNOFF VOLUME (mm)= 17.956
TOTAL RAINFALL (mm)= 73.982
RUNOFF COEFFICIENT = 0.243

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB							
NASHYD (0014)	Area (ha)= 1.80		Curve Number (CN)= 50.0				
ID= 1 DT= 5.0 min	Ia (mm)= 16.00		# of Linear Res.(N)= 3.00				
	U.H. Tp(hrs)= 0.76						

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr

0.083	6.22	1.083	29.44	2.083	12.30	3.08	7.17
0.167	6.22	1.167	29.44	2.167	12.30	3.17	7.17
0.250	6.95	1.250	170.60	2.250	10.86	3.25	6.75
0.333	6.95	1.333	170.60	2.333	10.86	3.33	6.75
0.417	7.93	1.417	36.13	2.417	9.78	3.42	6.39
0.500	7.93	1.500	36.13	2.500	9.78	3.50	6.39
0.583	9.34	1.583	22.78	2.583	8.92	3.58	6.07
0.667	9.34	1.667	22.78	2.667	8.92	3.67	6.07
0.750	11.57	1.750	17.37	2.750	8.23	3.75	5.78
0.833	11.57	1.833	17.37	2.833	8.23	3.83	5.78
0.917	15.83	1.917	14.31	2.917	7.65	3.92	5.53
1.000	15.83	2.000	14.31	3.000	7.65	4.00	5.53

Unit Hyd Qpeak (cms)= 0.090

PEAK FLOW (cms)= 0.021 (i)
TIME TO PEAK (hrs)= 2.417
RUNOFF VOLUME (mm)= 10.775
TOTAL RAINFALL (mm)= 73.982
RUNOFF COEFFICIENT = 0.146

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0015)	Area (ha)=	6.70	Curve Number (CN)=	60.0	
ID= 1 DT= 5.0 min	Ia (mm)=	10.00	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	1.45			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.22	1.083	29.44	2.083	12.30	3.08	7.17
0.167	6.22	1.167	29.44	2.167	12.30	3.17	7.17
0.250	6.95	1.250	170.60	2.250	10.86	3.25	6.75
0.333	6.95	1.333	170.60	2.333	10.86	3.33	6.75
0.417	7.93	1.417	36.13	2.417	9.78	3.42	6.39
0.500	7.93	1.500	36.13	2.500	9.78	3.50	6.39
0.583	9.34	1.583	22.78	2.583	8.92	3.58	6.07
0.667	9.34	1.667	22.78	2.667	8.92	3.67	6.07
0.750	11.57	1.750	17.37	2.750	8.23	3.75	5.78
0.833	11.57	1.833	17.37	2.833	8.23	3.83	5.78
0.917	15.83	1.917	14.31	2.917	7.65	3.92	5.53
1.000	15.83	2.000	14.31	3.000	7.65	4.00	5.53

Unit Hyd Qpeak (cms)= 0.176

PEAK FLOW (cms)= 0.089 (i)
TIME TO PEAK (hrs)= 3.417
RUNOFF VOLUME (mm)= 17.545
TOTAL RAINFALL (mm)= 73.982
RUNOFF COEFFICIENT = 0.237

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0016)	Area (ha)=	29.16	Curve Number (CN)=	71.4	
ID= 1 DT= 5.0 min	Ia (mm)=	7.88	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	0.68			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.22	1.083	29.44	2.083	12.30	3.08	7.17
0.167	6.22	1.167	29.44	2.167	12.30	3.17	7.17
0.250	6.95	1.250	170.60	2.250	10.86	3.25	6.75
0.333	6.95	1.333	170.60	2.333	10.86	3.33	6.75
0.417	7.93	1.417	36.13	2.417	9.78	3.42	6.39
0.500	7.93	1.500	36.13	2.500	9.78	3.50	6.39
0.583	9.34	1.583	22.78	2.583	8.92	3.58	6.07
0.667	9.34	1.667	22.78	2.667	8.92	3.67	6.07
0.750	11.57	1.750	17.37	2.750	8.23	3.75	5.78
0.833	11.57	1.833	17.37	2.833	8.23	3.83	5.78
0.917	15.83	1.917	14.31	2.917	7.65	3.92	5.53
1.000	15.83	2.000	14.31	3.000	7.65	4.00	5.53

Unit Hyd Qpeak (cms)= 1.638

PEAK FLOW (cms)= 0.956 (i)
TIME TO PEAK (hrs)= 2.167
RUNOFF VOLUME (mm)= 26.032
TOTAL RAINFALL (mm)= 73.982
RUNOFF COEFFICIENT = 0.352

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0019)	Area (ha)=	39.68	Curve Number (CN)=	60.7	
ID= 1 DT= 5.0 min	Ia (mm)=	8.26	# of Linear Res.(N)=	3.00	

-------------------- U.H. Tp(hrs)= 1.18

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.22	1.083	29.44	2.083	12.30	3.08	7.17
0.167	6.22	1.167	29.44	2.167	12.30	3.17	7.17
0.250	6.95	1.250	170.60	2.250	10.86	3.25	6.75
0.333	6.95	1.333	170.60	2.333	10.86	3.33	6.75
0.417	7.93	1.417	36.13	2.417	9.78	3.42	6.39
0.500	7.93	1.500	36.13	2.500	9.78	3.50	6.39
0.583	9.34	1.583	22.78	2.583	8.92	3.58	6.07
0.667	9.34	1.667	22.78	2.667	8.92	3.67	6.07
0.750	11.57	1.750	17.37	2.750	8.23	3.75	5.78
0.833	11.57	1.833	17.37	2.833	8.23	3.83	5.78
0.917	15.83	1.917	14.31	2.917	7.65	3.92	5.53
1.000	15.83	2.000	14.31	3.000	7.65	4.00	5.53

Unit Hyd Qpeak (cms)= 1.284

PEAK FLOW (cms)= 0.644 (i)
TIME TO PEAK (hrs)= 3.000
RUNOFF VOLUME (mm)= 18.749
TOTAL RAINFALL (mm)= 73.982
RUNOFF COEFFICIENT = 0.253

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0024)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0010):		14.85	0.189	2.58	12.86
+ ID2= 2 (0013):		1.70	0.051	1.75	17.96
ID = 3 (0024):		16.55	0.218	2.50	13.38

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0024):		16.55	0.218	2.50	13.38
+ ID2= 2 (0014):		1.80	0.021	2.42	10.77
ID = 1 (0024):		18.35	0.239	2.50	13.13

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0024):		18.35	0.239	2.50	13.13
+ ID2= 2 (0015):		6.70	0.089	3.42	17.55
ID = 3 (0024):		25.05	0.313	2.67	14.31

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0024):		25.05	0.313	2.67	14.31
+ ID2= 2 (0016):		29.16	0.956	2.17	26.03
ID = 1 (0024):		54.21	1.241	2.25	20.62

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0024):		54.21	1.241	2.25	20.62
+ ID2= 2 (0019):		39.68	0.644	3.00	18.75
ID = 3 (0024):		93.89	1.788	2.42	19.83

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0024):		93.89	1.788	2.42	19.83
+ ID2= 2 (0007):		100.92	1.143	3.83	16.41

```
        ID = 1 (  0024):   194.81   2.650     2.83    18.06

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0024)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 1 (  0024):   194.81   2.650     2.83    18.06
      + ID2= 2 (  0008):    23.99   0.240     2.75    10.54
        ================================================
        ID = 3 (  0024):   218.80   2.888     2.83    17.23

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0024)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 3 (  0024):   218.80   2.888     2.83    17.23
      + ID2= 2 (  0009):     6.37   0.074     2.50    11.05
        ================================================
        ID = 1 (  0024):   225.17   2.959     2.83    17.06

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
--------------------
| CALIB            |
| NASHYD   (  0011)|   Area    (ha)=  46.28   Curve Number   (CN)= 72.2
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.09   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.30

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                        ---- TRANSFORMED HYETOGRAPH ----
  TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
   hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
 0.083    6.22 | 1.083   29.44 | 2.083   12.30 |  3.08    7.17
 0.167    6.22 | 1.167   29.44 | 2.167   12.30 |  3.17    7.17
 0.250    6.95 | 1.250  170.60 | 2.250   10.86 |  3.25    6.75
 0.333    6.95 | 1.333  170.60 | 2.333   10.86 |  3.33    6.75
 0.417    7.93 | 1.417   36.13 | 2.417    9.78 |  3.42    6.39
 0.500    7.93 | 1.500   36.13 | 2.500    9.78 |  3.50    6.39
 0.583    9.34 | 1.583   22.78 | 2.583    8.92 |  3.58    6.07
 0.667    9.34 | 1.667   22.78 | 2.667    8.92 |  3.67    6.07
 0.750   11.57 | 1.750   17.37 | 2.750    8.23 |  3.75    5.78
 0.833   11.57 | 1.833   17.37 | 2.833    8.23 |  3.83    5.78
 0.917   15.83 | 1.917   14.31 | 2.917    7.65 |  3.92    5.53
 1.000   15.83 | 2.000   14.31 | 3.000    7.65 |  4.00    5.53

     Unit Hyd Qpeak  (cms)=   5.892

     PEAK FLOW       (cms)=   2.744 (i)
     TIME TO PEAK    (hrs)=   1.583
     RUNOFF VOLUME    (mm)=  27.150
     TOTAL RAINFALL   (mm)=  73.982
     RUNOFF COEFFICIENT   =   0.367

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| NASHYD   (  0012)|   Area    (ha)=   1.13   Curve Number   (CN)= 67.4
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.88   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.43

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                        ---- TRANSFORMED HYETOGRAPH ----
  TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
   hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
 0.083    6.22 | 1.083   29.44 | 2.083   12.30 |  3.08    7.17
 0.167    6.22 | 1.167   29.44 | 2.167   12.30 |  3.17    7.17
 0.250    6.95 | 1.250  170.60 | 2.250   10.86 |  3.25    6.75
 0.333    6.95 | 1.333  170.60 | 2.333   10.86 |  3.33    6.75
 0.417    7.93 | 1.417   36.13 | 2.417    9.78 |  3.42    6.39
 0.500    7.93 | 1.500   36.13 | 2.500    9.78 |  3.50    6.39
 0.583    9.34 | 1.583   22.78 | 2.583    8.92 |  3.58    6.07
 0.667    9.34 | 1.667   22.78 | 2.667    8.92 |  3.67    6.07
 0.750   11.57 | 1.750   17.37 | 2.750    8.23 |  3.75    5.78
 0.833   11.57 | 1.833   17.37 | 2.833    8.23 |  3.83    5.78
 0.917   15.83 | 1.917   14.31 | 2.917    7.65 |  3.92    5.53
 1.000   15.83 | 2.000   14.31 | 3.000    7.65 |  4.00    5.53

     Unit Hyd Qpeak  (cms)=   0.100

     PEAK FLOW       (cms)=   0.044 (i)
     TIME TO PEAK    (hrs)=   1.833
     RUNOFF VOLUME    (mm)=  23.094
     TOTAL RAINFALL   (mm)=  73.982
     RUNOFF COEFFICIENT   =   0.312

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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--------------------
| CALIB            |
| NASHYD   (  0041)|   Area    (ha)=   0.59   Curve Number   (CN)= 71.5
|ID= 1 DT= 5.0 min |   Ia      (mm)=   4.75   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.53

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.
```

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.22	1.083	29.44	2.083	12.30	3.08	7.17
0.167	6.22	1.167	29.44	2.167	12.30	3.17	7.17
0.250	6.95	1.250	170.60	2.250	10.86	3.25	6.75
0.333	6.95	1.333	170.60	2.333	10.86	3.33	6.75
0.417	7.93	1.417	36.13	2.417	9.78	3.42	6.39
0.500	7.93	1.500	36.13	2.500	9.78	3.50	6.39
0.583	9.34	1.583	22.78	2.583	8.92	3.58	6.07
0.667	9.34	1.667	22.78	2.667	8.92	3.67	6.07
0.750	11.57	1.750	17.37	2.750	8.23	3.75	5.78
0.833	11.57	1.833	17.37	2.833	8.23	3.83	5.78
0.917	15.83	1.917	14.31	2.917	7.65	3.92	5.53
1.000	15.83	2.000	14.31	3.000	7.65	4.00	5.53

```
    Unit Hyd Qpeak  (cms)=   0.043

    PEAK FLOW       (cms)=   0.025 (i)
    TIME TO PEAK    (hrs)=   1.917
    RUNOFF VOLUME    (mm)=  28.080
    TOTAL RAINFALL   (mm)=  73.982
    RUNOFF COEFFICIENT   =   0.380

    (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| NASHYD   (  0028)|   Area    (ha)=   1.38   Curve Number   (CN)= 64.1
|ID= 1 DT= 5.0 min |   Ia      (mm)=   8.51   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.39

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.
```

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.22	1.083	29.44	2.083	12.30	3.08	7.17
0.167	6.22	1.167	29.44	2.167	12.30	3.17	7.17
0.250	6.95	1.250	170.60	2.250	10.86	3.25	6.75
0.333	6.95	1.333	170.60	2.333	10.86	3.33	6.75
0.417	7.93	1.417	36.13	2.417	9.78	3.42	6.39
0.500	7.93	1.500	36.13	2.500	9.78	3.50	6.39
0.583	9.34	1.583	22.78	2.583	8.92	3.58	6.07
0.667	9.34	1.667	22.78	2.667	8.92	3.67	6.07
0.750	11.57	1.750	17.37	2.750	8.23	3.75	5.78
0.833	11.57	1.833	17.37	2.833	8.23	3.83	5.78
0.917	15.83	1.917	14.31	2.917	7.65	3.92	5.53
1.000	15.83	2.000	14.31	3.000	7.65	4.00	5.53

```
    Unit Hyd Qpeak  (cms)=   0.135

    PEAK FLOW       (cms)=   0.050 (i)
    TIME TO PEAK    (hrs)=   1.750
    RUNOFF VOLUME    (mm)=  20.657
    TOTAL RAINFALL   (mm)=  73.982
    RUNOFF COEFFICIENT   =   0.279

    (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| STANDHYD (  0044)|   Area    (ha)=   1.62
|ID= 1 DT= 5.0 min |   Total Imp(%)=  48.77   Dir. Conn.(%)=  30.86
--------------------

                             IMPERVIOUS    PERVIOUS (i)
    Surface Area     (ha)=       0.79         0.83
    Dep. Storage     (mm)=       1.00         5.00
    Average Slope     (%)=       0.50         1.40
    Length            (m)=     103.92       400.00
    Mannings n           =      0.013        0.250

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.
```

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.22	1.083	29.44	2.083	12.30	3.08	7.17
0.167	6.22	1.167	29.44	2.167	12.30	3.17	7.17
0.250	6.95	1.250	170.60	2.250	10.86	3.25	6.75
0.333	6.95	1.333	170.60	2.333	10.86	3.33	6.75
0.417	7.93	1.417	36.13	2.417	9.78	3.42	6.39
0.500	7.93	1.500	36.13	2.500	9.78	3.50	6.39
0.583	9.34	1.583	22.78	2.583	8.92	3.58	6.07
0.667	9.34	1.667	22.78	2.667	8.92	3.67	6.07
0.750	11.57	1.750	17.37	2.750	8.23	3.75	5.78
0.833	11.57	1.833	17.37	2.833	8.23	3.83	5.78

```
              0.917   15.83 | 1.917   14.31 | 2.917    7.65 |  3.92    5.53
              1.000   15.83 | 2.000   14.31 | 3.000    7.65 |  4.00    5.53

     Max.Eff.Inten.(mm/hr)=     170.60        32.47
               over (min)        5.00        55.00
     Storage Coeff.  (min)=       2.60 (ii)   51.64 (ii)
     Unit Hyd. Tpeak (min)=       5.00        55.00
     Unit Hyd. peak  (cms)=       0.29         0.02
                                                      *TOTALS*
     PEAK FLOW       (cms)=       0.23         0.04          0.237 (iii)
     TIME TO PEAK    (hrs)=       1.33         2.17           1.33
     RUNOFF VOLUME    (mm)=      72.98        31.90          44.56
     TOTAL RAINFALL   (mm)=      73.98        73.98          73.98
     RUNOFF COEFFICIENT   =       0.99         0.43           0.60

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  69.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| STANDHYD (  0043)|   Area    (ha)=   0.13
|ID= 1 DT= 5.0 min |   Total Imp(%)=  30.77   Dir. Conn.(%)=   7.69
--------------------
                            IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       0.04         0.09
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       0.50         0.50
     Length            (m)=      29.44        70.00
     Mannings n            =      0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                          ---- TRANSFORMED HYETOGRAPH ----
               TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
              0.083    6.22 | 1.083   29.44 | 2.083   12.30 |  3.08    7.17
              0.167    6.22 | 1.167   29.44 | 2.167   12.30 |  3.17    7.17
              0.250    6.95 | 1.250  170.60 | 2.250   10.86 |  3.25    6.75
              0.333    6.95 | 1.333  170.60 | 2.333   10.86 |  3.33    6.75
              0.417    7.93 | 1.417   36.13 | 2.417    9.78 |  3.42    6.39
              0.500    7.93 | 1.500   36.13 | 2.500    9.78 |  3.50    6.39
              0.583    9.34 | 1.583   22.78 | 2.583    8.92 |  3.58    6.07
              0.667    9.34 | 1.667   22.78 | 2.667    8.92 |  3.67    6.07
              0.750   11.57 | 1.750   17.37 | 2.750    8.23 |  3.75    5.78
              0.833   11.57 | 1.833   17.37 | 2.833    8.23 |  3.83    5.78
              0.917   15.83 | 1.917   14.31 | 2.917    7.65 |  3.92    5.53
              1.000   15.83 | 2.000   14.31 | 3.000    7.65 |  4.00    5.53

     Max.Eff.Inten.(mm/hr)=     170.60        57.77
               over (min)        5.00        20.00
     Storage Coeff.  (min)=       1.22 (ii)   19.86 (ii)
     Unit Hyd. Tpeak (min)=       5.00        20.00
     Unit Hyd. peak  (cms)=       0.33         0.06
                                                      *TOTALS*
     PEAK FLOW       (cms)=       0.00         0.01          0.009 (iii)
     TIME TO PEAK    (hrs)=       1.33         1.58           1.58
     RUNOFF VOLUME    (mm)=      72.98        31.66          34.75
     TOTAL RAINFALL   (mm)=      73.98        73.98          73.98
     RUNOFF COEFFICIENT   =       0.99         0.43           0.47

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
              YOU SHOULD CONSIDER SPLITTING THE AREA.

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  69.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0023)|
|   1 +  2 =  3    |          AREA    QPEAK    TPEAK     R.V.
--------------------          (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0011):    46.28   2.744     1.58    27.15
     + ID2= 2 (  0012):     1.13   0.044     1.83    23.09
       ================================================
       ID = 3 (  0023):    47.41   2.780     1.58    27.05

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0023)|
|   3 +  2 =  1    |          AREA    QPEAK    TPEAK     R.V.
--------------------          (ha)    (cms)    (hrs)     (mm)
       ID1= 3 (  0023):    47.41   2.780     1.58    27.05
     + ID2= 2 (  0028):     1.38   0.050     1.75    20.66
       ================================================
       ID = 1 (  0023):    48.79   2.825     1.58    26.87
```

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023)					
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0023):	48.79	2.825	1.58	26.87
+ ID2= 2 (0041):	0.59	0.025	1.92	28.08
ID = 3 (0023):	49.38	2.843	1.58	26.89

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023)					
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0023):	49.38	2.843	1.58	26.89
+ ID2= 2 (0043):	0.13	0.009	1.58	34.75
ID = 1 (0023):	49.51	2.852	1.58	26.91

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023)					
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0023):	49.51	2.852	1.58	26.91
+ ID2= 2 (0044):	1.62	0.237	1.33	44.56
ID = 3 (0023):	51.13	2.902	1.58	27.47

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0025)					
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0023):	51.13	2.902	1.58	27.47
+ ID2= 2 (0024):	225.17	2.959	2.83	17.06
ID = 3 (0025):	276.30	4.294	1.83	18.98

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

```
V    V   I    SSSSS  U   U    A    L             (v 6.2.2020)
V    V   I    SS     U   U   A A   L
 V  V    I     SS    U   U  AAAAA  L
 V  V    I      SS   U   U  A   A  L
  VV     I    SSSSS  UUUUU  A   A  LLLLL

 OOO   TTTTT  TTTTT  H   H  Y   Y  M   M   OOO    TM
O   O    T      T    H   H   Y Y   MM MM  O   O
O   O    T      T    H   H    Y    M   M  O   O
 OOO     T      T    H   H    Y    M   M   OOO
```

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***** D E T A I L E D O U T P U T *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat

Output filename:
C:\Users\msimon\AppData\Local\Civica\VH5\a122c840-259d-4b92-8a43-b1e7a592bdea\4246ff7d-f153-4d4c-a144-fc729462b6da\scena
Summary filename:
C:\Users\msimon\AppData\Local\Civica\VH5\a122c840-259d-4b92-8a43-b1e7a592bdea\4246ff7d-f153-4d4c-a144-fc729462b6da\scena

DATE: 07-15-2026 TIME: 03:17:50

USER:

COMMENTS: _____

** SIMULATION : F - 100-year CHI **

CHICAGO STORM	Ptotal= 81.31 mm	IDF curve parameters: A= 937.587 B= 0.000 C= 0.699

used in: INTENSITY = A / (t + B)^C

Duration of storm = 4.00 hrs
Storm time step = 10.00 min
Time to peak ratio = 0.33

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.00	6.84	1.00	32.35	2.00	13.52	3.00	7.88
0.17	7.64	1.17	187.50	2.17	11.94	3.17	7.42
0.33	8.72	1.33	39.70	2.33	10.74	3.33	7.02
0.50	10.26	1.50	25.04	2.50	9.80	3.50	6.67
0.67	12.72	1.67	19.09	2.67	9.04	3.67	6.36
0.83	17.39	1.83	15.73	2.83	8.41	3.83	6.08

CALIB / NASHYD (0007)			
ID= 1 DT= 5.0 min	Area (ha)= 100.92	Curve Number (CN)= 55.9	
	Ia (mm)= 7.89	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 1.70		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.84	1.083	32.35	2.083	13.52	3.08	7.88
0.167	6.84	1.167	32.35	2.167	13.52	3.17	7.88
0.250	7.64	1.250	187.50	2.250	11.94	3.25	7.42
0.333	7.64	1.333	187.50	2.333	11.94	3.33	7.42
0.417	8.72	1.417	39.70	2.417	10.74	3.42	7.02
0.500	8.72	1.500	39.70	2.500	10.74	3.50	7.02
0.583	10.26	1.583	25.04	2.583	9.80	3.58	6.67
0.667	10.26	1.667	25.04	2.667	9.80	3.67	6.67
0.750	12.72	1.750	19.09	2.750	9.04	3.75	6.36
0.833	12.72	1.833	19.09	2.833	9.04	3.83	6.36
0.917	17.39	1.917	15.73	2.917	8.41	3.92	6.08
1.000	17.39	2.000	15.73	3.000	8.41	4.00	6.08

Unit Hyd Qpeak (cms)= 2.267

PEAK FLOW (cms)= 1.374 (i)
TIME TO PEAK (hrs)= 3.750
RUNOFF VOLUME (mm)= 19.711
TOTAL RAINFALL (mm)= 81.310
RUNOFF COEFFICIENT = 0.242

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB / NASHYD (0008)			
ID= 1 DT= 5.0 min	Area (ha)= 23.99	Curve Number (CN)= 44.7	
	Ia (mm)= 10.91	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.97		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.84	1.083	32.35	2.083	13.52	3.08	7.88
0.167	6.84	1.167	32.35	2.167	13.52	3.17	7.88
0.250	7.64	1.250	187.50	2.250	11.94	3.25	7.42
0.333	7.64	1.333	187.50	2.333	11.94	3.33	7.42
0.417	8.72	1.417	39.70	2.417	10.74	3.42	7.02
0.500	8.72	1.500	39.70	2.500	10.74	3.50	7.02
0.583	10.26	1.583	25.04	2.583	9.80	3.58	6.67
0.667	10.26	1.667	25.04	2.667	9.80	3.67	6.67
0.750	12.72	1.750	19.09	2.750	9.04	3.75	6.36
0.833	12.72	1.833	19.09	2.833	9.04	3.83	6.36
0.917	17.39	1.917	15.73	2.917	8.41	3.92	6.08
1.000	17.39	2.000	15.73	3.000	8.41	4.00	6.08

Unit Hyd Qpeak (cms)= 0.945

PEAK FLOW (cms)= 0.295 (i)
TIME TO PEAK (hrs)= 2.667
RUNOFF VOLUME (mm)= 12.885
TOTAL RAINFALL (mm)= 81.310
RUNOFF COEFFICIENT = 0.158

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB / NASHYD (0009)			
ID= 1 DT= 5.0 min	Area (ha)= 6.37	Curve Number (CN)= 50.5	
	Ia (mm)= 15.69	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.77		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.84	1.083	32.35	2.083	13.52	3.08	7.88
0.167	6.84	1.167	32.35	2.167	13.52	3.17	7.88
0.250	7.64	1.250	187.50	2.250	11.94	3.25	7.42
0.333	7.64	1.333	187.50	2.333	11.94	3.33	7.42
0.417	8.72	1.417	39.70	2.417	10.74	3.42	7.02
0.500	8.72	1.500	39.70	2.500	10.74	3.50	7.02
0.583	10.26	1.583	25.04	2.583	9.80	3.58	6.67
0.667	10.26	1.667	25.04	2.667	9.80	3.67	6.67
0.750	12.72	1.750	19.09	2.750	9.04	3.75	6.36
0.833	12.72	1.833	19.09	2.833	9.04	3.83	6.36
0.917	17.39	1.917	15.73	2.917	8.41	3.92	6.08
1.000	17.39	2.000	15.73	3.000	8.41	4.00	6.08

Unit Hyd Qpeak (cms)= 0.316

PEAK FLOW (cms)= 0.093 (i)
TIME TO PEAK (hrs)= 2.417
RUNOFF VOLUME (mm)= 13.679
TOTAL RAINFALL (mm)= 81.310
RUNOFF COEFFICIENT = 0.168

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0010)	Area (ha)=	14.85	Curve Number (CN)=	52.9	
ID= 1 DT= 5.0 min	Ia (mm)=	13.28	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	0.89			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.84	1.083	32.35	2.083	13.52	3.08	7.88
0.167	6.84	1.167	32.35	2.167	13.52	3.17	7.88
0.250	7.64	1.250	187.50	2.250	11.94	3.25	7.42
0.333	7.64	1.333	187.50	2.333	11.94	3.33	7.42
0.417	8.72	1.417	39.70	2.417	10.74	3.42	7.02
0.500	8.72	1.500	39.70	2.500	10.74	3.50	7.02
0.583	10.26	1.583	25.04	2.583	9.80	3.58	6.67
0.667	10.26	1.667	25.04	2.667	9.80	3.67	6.67
0.750	12.72	1.750	19.09	2.750	9.04	3.75	6.36
0.833	12.72	1.833	19.09	2.833	9.04	3.83	6.36
0.917	17.39	1.917	15.73	2.917	8.41	3.92	6.08
1.000	17.39	2.000	15.73	3.000	8.41	4.00	6.08

Unit Hyd Qpeak (cms)= 0.637

PEAK FLOW (cms)= 0.234 (i)
TIME TO PEAK (hrs)= 2.583
RUNOFF VOLUME (mm)= 15.751
TOTAL RAINFALL (mm)= 81.310
RUNOFF COEFFICIENT = 0.194

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0013)	Area (ha)=	1.70	Curve Number (CN)=	60.5	
ID= 1 DT= 5.0 min	Ia (mm)=	9.65	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	0.40			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.84	1.083	32.35	2.083	13.52	3.08	7.88
0.167	6.84	1.167	32.35	2.167	13.52	3.17	7.88
0.250	7.64	1.250	187.50	2.250	11.94	3.25	7.42
0.333	7.64	1.333	187.50	2.333	11.94	3.33	7.42
0.417	8.72	1.417	39.70	2.417	10.74	3.42	7.02
0.500	8.72	1.500	39.70	2.500	10.74	3.50	7.02
0.583	10.26	1.583	25.04	2.583	9.80	3.58	6.67
0.667	10.26	1.667	25.04	2.667	9.80	3.67	6.67
0.750	12.72	1.750	19.09	2.750	9.04	3.75	6.36
0.833	12.72	1.833	19.09	2.833	9.04	3.83	6.36
0.917	17.39	1.917	15.73	2.917	8.41	3.92	6.08
1.000	17.39	2.000	15.73	3.000	8.41	4.00	6.08

Unit Hyd Qpeak (cms)= 0.162

PEAK FLOW (cms)= 0.063 (i)
TIME TO PEAK (hrs)= 1.750
RUNOFF VOLUME (mm)= 21.594
TOTAL RAINFALL (mm)= 81.310
RUNOFF COEFFICIENT = 0.266

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0014)	Area (ha)=	1.80	Curve Number (CN)=	50.0	

|ID= 1 DT= 5.0 min | Ia (mm)= 16.00 # of Linear Res.(N)= 3.00

U.H. Tp(hrs)= 0.76

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.84	1.083	32.35	2.083	13.52	3.08	7.88
0.167	6.84	1.167	32.35	2.167	13.52	3.17	7.88
0.250	7.64	1.250	187.50	2.250	11.94	3.25	7.42
0.333	7.64	1.333	187.50	2.333	11.94	3.33	7.42
0.417	8.72	1.417	39.70	2.417	10.74	3.42	7.02
0.500	8.72	1.500	39.70	2.500	10.74	3.50	7.02
0.583	10.26	1.583	25.04	2.583	9.80	3.58	6.67
0.667	10.26	1.667	25.04	2.667	9.80	3.67	6.67
0.750	12.72	1.750	19.09	2.750	9.04	3.75	6.36
0.833	12.72	1.833	19.09	2.833	9.04	3.83	6.36
0.917	17.39	1.917	15.73	2.917	8.41	3.92	6.08
1.000	17.39	2.000	15.73	3.000	8.41	4.00	6.08

Unit Hyd Qpeak (cms)= 0.090

PEAK FLOW (cms)= 0.026 (i)
TIME TO PEAK (hrs)= 2.417
RUNOFF VOLUME (mm)= 13.357
TOTAL RAINFALL (mm)= 81.310
RUNOFF COEFFICIENT = 0.164

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	NASHYD (0015)	ID= 1 DT= 5.0 min	Area (ha)= 6.70 Curve Number (CN)= 60.0 Ia (mm)= 10.00 # of Linear Res.(N)= 3.00 U.H. Tp(hrs)= 1.45

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.84	1.083	32.35	2.083	13.52	3.08	7.88
0.167	6.84	1.167	32.35	2.167	13.52	3.17	7.88
0.250	7.64	1.250	187.50	2.250	11.94	3.25	7.42
0.333	7.64	1.333	187.50	2.333	11.94	3.33	7.42
0.417	8.72	1.417	39.70	2.417	10.74	3.42	7.02
0.500	8.72	1.500	39.70	2.500	10.74	3.50	7.02
0.583	10.26	1.583	25.04	2.583	9.80	3.58	6.67
0.667	10.26	1.667	25.04	2.667	9.80	3.67	6.67
0.750	12.72	1.750	19.09	2.750	9.04	3.75	6.36
0.833	12.72	1.833	19.09	2.833	9.04	3.83	6.36
0.917	17.39	1.917	15.73	2.917	8.41	3.92	6.08
1.000	17.39	2.000	15.73	3.000	8.41	4.00	6.08

Unit Hyd Qpeak (cms)= 0.176

PEAK FLOW (cms)= 0.108 (i)
TIME TO PEAK (hrs)= 3.417
RUNOFF VOLUME (mm)= 21.131
TOTAL RAINFALL (mm)= 81.310
RUNOFF COEFFICIENT = 0.260

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	NASHYD (0016)	ID= 1 DT= 5.0 min	Area (ha)= 29.16 Curve Number (CN)= 71.4 Ia (mm)= 7.88 # of Linear Res.(N)= 3.00 U.H. Tp(hrs)= 0.68

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.84	1.083	32.35	2.083	13.52	3.08	7.88
0.167	6.84	1.167	32.35	2.167	13.52	3.17	7.88
0.250	7.64	1.250	187.50	2.250	11.94	3.25	7.42
0.333	7.64	1.333	187.50	2.333	11.94	3.33	7.42
0.417	8.72	1.417	39.70	2.417	10.74	3.42	7.02
0.500	8.72	1.500	39.70	2.500	10.74	3.50	7.02
0.583	10.26	1.583	25.04	2.583	9.80	3.58	6.67
0.667	10.26	1.667	25.04	2.667	9.80	3.67	6.67
0.750	12.72	1.750	19.09	2.750	9.04	3.75	6.36
0.833	12.72	1.833	19.09	2.833	9.04	3.83	6.36
0.917	17.39	1.917	15.73	2.917	8.41	3.92	6.08
1.000	17.39	2.000	15.73	3.000	8.41	4.00	6.08

Unit Hyd Qpeak (cms)= 1.638

PEAK FLOW (cms)= 1.142 (i)
TIME TO PEAK (hrs)= 2.167
RUNOFF VOLUME (mm)= 30.781
TOTAL RAINFALL (mm)= 81.310

RUNOFF COEFFICIENT = 0.379

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB NASHYD (0019) ID= 1 DT= 5.0 min	Area (ha)= 39.68 Curve Number (CN)= 60.7 Ia (mm)= 8.26 # of Linear Res.(N)= 3.00 U.H. Tp(hrs)= 1.18

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.84	1.083	32.35	2.083	13.52	3.08	7.88
0.167	6.84	1.167	32.35	2.167	13.52	3.17	7.88
0.250	7.64	1.250	187.50	2.250	11.94	3.25	7.42
0.333	7.64	1.333	187.50	2.333	11.94	3.33	7.42
0.417	8.72	1.417	39.70	2.417	10.74	3.42	7.02
0.500	8.72	1.500	39.70	2.500	10.74	3.50	7.02
0.583	10.26	1.583	25.04	2.583	9.80	3.58	6.67
0.667	10.26	1.667	25.04	2.667	9.80	3.67	6.67
0.750	12.72	1.750	19.09	2.750	9.04	3.75	6.36
0.833	12.72	1.833	19.09	2.833	9.04	3.83	6.36
0.917	17.39	1.917	15.73	2.917	8.41	3.92	6.08
1.000	17.39	2.000	15.73	3.000	8.41	4.00	6.08

Unit Hyd Qpeak (cms)= 1.284

PEAK FLOW (cms)= 0.774 (i)
TIME TO PEAK (hrs)= 2.917
RUNOFF VOLUME (mm)= 22.449
TOTAL RAINFALL (mm)= 81.310
RUNOFF COEFFICIENT = 0.276

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0024) 1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0010):	14.85	0.234	2.58	15.75
+ ID2= 2 (0013):	1.70	0.063	1.75	21.59
ID = 3 (0024):	16.55	0.270	2.42	16.35

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024) 3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0024):	16.55	0.270	2.42	16.35
+ ID2= 2 (0014):	1.80	0.026	2.42	13.36
ID = 1 (0024):	18.35	0.295	2.42	16.06

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024) 1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0024):	18.35	0.295	2.42	16.06
+ ID2= 2 (0015):	6.70	0.108	3.42	21.13
ID = 3 (0024):	25.05	0.384	2.67	17.41

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024) 3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0024):	25.05	0.384	2.67	17.41
+ ID2= 2 (0016):	29.16	1.142	2.17	30.78
ID = 1 (0024):	54.21	1.494	2.25	24.60

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024) 1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0024):	54.21	1.494	2.25	24.60
+ ID2= 2 (0019):	39.68	0.774	2.92	22.45
ID = 3 (0024):	93.89	2.153	2.42	23.69

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

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--------------------
| ADD HYD  (  0024)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 3 (  0024):    93.89   2.153     2.42    23.69
     + ID2= 2 (  0007):   100.92   1.374     3.75    19.71
       ====================================================
       ID = 1 (  0024):   194.81   3.187     2.83    21.63

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
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--------------------
| ADD HYD  (  0024)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0024):   194.81   3.187     2.83    21.63
     + ID2= 2 (  0008):    23.99   0.295     2.67    12.89
       ====================================================
       ID = 3 (  0024):   218.80   3.480     2.83    20.67

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
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--------------------
| ADD HYD  (  0024)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 3 (  0024):   218.80   3.480     2.83    20.67
     + ID2= 2 (  0009):     6.37   0.093     2.42    13.68
       ====================================================
       ID = 1 (  0024):   225.17   3.567     2.83    20.47

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
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| CALIB            |
| NASHYD   (  0011)|   Area    (ha)=  46.28   Curve Number   (CN)= 72.2
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.09   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.30

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                        ---- TRANSFORMED HYETOGRAPH ----
              TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
             0.083    6.84 | 1.083   32.35 | 2.083   13.52 |  3.08    7.88
             0.167    6.84 | 1.167   32.35 | 2.167   13.52 |  3.17    7.88
             0.250    7.64 | 1.250  187.50 | 2.250   11.94 |  3.25    7.42
             0.333    7.64 | 1.333  187.50 | 2.333   11.94 |  3.33    7.42
             0.417    8.72 | 1.417   39.70 | 2.417   10.74 |  3.42    7.02
             0.500    8.72 | 1.500   39.70 | 2.500   10.74 |  3.50    7.02
             0.583   10.26 | 1.583   25.04 | 2.583    9.80 |  3.58    6.67
             0.667   10.26 | 1.667   25.04 | 2.667    9.80 |  3.67    6.67
             0.750   12.72 | 1.750   19.09 | 2.750    9.04 |  3.75    6.36
             0.833   12.72 | 1.833   19.09 | 2.833    9.04 |  3.83    6.36
             0.917   17.39 | 1.917   15.73 | 2.917    8.41 |  3.92    6.08
             1.000   17.39 | 2.000   15.73 | 3.000    8.41 |  4.00    6.08

    Unit Hyd Qpeak  (cms)=   5.892

    PEAK FLOW       (cms)=   3.288 (i)
    TIME TO PEAK    (hrs)=   1.583
    RUNOFF VOLUME    (mm)=  32.002
    TOTAL RAINFALL   (mm)=  81.310
    RUNOFF COEFFICIENT   =   0.394

    (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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| CALIB            |
| NASHYD   (  0012)|   Area    (ha)=   1.13   Curve Number   (CN)= 67.4
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.88   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.43

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                        ---- TRANSFORMED HYETOGRAPH ----
              TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
             0.083    6.84 | 1.083   32.35 | 2.083   13.52 |  3.08    7.88
             0.167    6.84 | 1.167   32.35 | 2.167   13.52 |  3.17    7.88
             0.250    7.64 | 1.250  187.50 | 2.250   11.94 |  3.25    7.42
             0.333    7.64 | 1.333  187.50 | 2.333   11.94 |  3.33    7.42
             0.417    8.72 | 1.417   39.70 | 2.417   10.74 |  3.42    7.02
             0.500    8.72 | 1.500   39.70 | 2.500   10.74 |  3.50    7.02
             0.583   10.26 | 1.583   25.04 | 2.583    9.80 |  3.58    6.67
             0.667   10.26 | 1.667   25.04 | 2.667    9.80 |  3.67    6.67
             0.750   12.72 | 1.750   19.09 | 2.750    9.04 |  3.75    6.36
             0.833   12.72 | 1.833   19.09 | 2.833    9.04 |  3.83    6.36
             0.917   17.39 | 1.917   15.73 | 2.917    8.41 |  3.92    6.08
             1.000   17.39 | 2.000   15.73 | 3.000    8.41 |  4.00    6.08

    Unit Hyd Qpeak  (cms)=   0.100
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PEAK FLOW (cms)= 0.053 (i)
TIME TO PEAK (hrs)= 1.833
RUNOFF VOLUME (mm)= 27.436
TOTAL RAINFALL (mm)= 81.310
RUNOFF COEFFICIENT = 0.337

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0041)	Area (ha)=	0.59	Curve Number (CN)=	71.5	
ID= 1 DT= 5.0 min	Ia (mm)=	4.75	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	0.53			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.84	1.083	32.35	2.083	13.52	3.08	7.88
0.167	6.84	1.167	32.35	2.167	13.52	3.17	7.88
0.250	7.64	1.250	187.50	2.250	11.94	3.25	7.42
0.333	7.64	1.333	187.50	2.333	11.94	3.33	7.42
0.417	8.72	1.417	39.70	2.417	10.74	3.42	7.02
0.500	8.72	1.500	39.70	2.500	10.74	3.50	7.02
0.583	10.26	1.583	25.04	2.583	9.80	3.58	6.67
0.667	10.26	1.667	25.04	2.667	9.80	3.67	6.67
0.750	12.72	1.750	19.09	2.750	9.04	3.75	6.36
0.833	12.72	1.833	19.09	2.833	9.04	3.83	6.36
0.917	17.39	1.917	15.73	2.917	8.41	3.92	6.08
1.000	17.39	2.000	15.73	3.000	8.41	4.00	6.08

Unit Hyd Qpeak (cms)= 0.043

PEAK FLOW (cms)= 0.030 (i)
TIME TO PEAK (hrs)= 1.917
RUNOFF VOLUME (mm)= 32.925
TOTAL RAINFALL (mm)= 81.310
RUNOFF COEFFICIENT = 0.405

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0028)	Area (ha)=	1.38	Curve Number (CN)=	64.1	
ID= 1 DT= 5.0 min	Ia (mm)=	8.51	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	0.39			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.84	1.083	32.35	2.083	13.52	3.08	7.88
0.167	6.84	1.167	32.35	2.167	13.52	3.17	7.88
0.250	7.64	1.250	187.50	2.250	11.94	3.25	7.42
0.333	7.64	1.333	187.50	2.333	11.94	3.33	7.42
0.417	8.72	1.417	39.70	2.417	10.74	3.42	7.02
0.500	8.72	1.500	39.70	2.500	10.74	3.50	7.02
0.583	10.26	1.583	25.04	2.583	9.80	3.58	6.67
0.667	10.26	1.667	25.04	2.667	9.80	3.67	6.67
0.750	12.72	1.750	19.09	2.750	9.04	3.75	6.36
0.833	12.72	1.833	19.09	2.833	9.04	3.83	6.36
0.917	17.39	1.917	15.73	2.917	8.41	3.92	6.08
1.000	17.39	2.000	15.73	3.000	8.41	4.00	6.08

Unit Hyd Qpeak (cms)= 0.135

PEAK FLOW (cms)= 0.061 (i)
TIME TO PEAK (hrs)= 1.750
RUNOFF VOLUME (mm)= 24.668
TOTAL RAINFALL (mm)= 81.310
RUNOFF COEFFICIENT = 0.303

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
STANDHYD (0044)	Area (ha)=	1.62			
ID= 1 DT= 5.0 min	Total Imp(%)=	48.77	Dir. Conn.(%)=	30.86	

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.79	0.83
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	1.40
Length	(m)=	103.92	400.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.84	1.083	32.35	2.083	13.52	3.08	7.88

```
              0.167    6.84 | 1.167   32.35 | 2.167   13.52 |  3.17    7.88
              0.250    7.64 | 1.250  187.50 | 2.250   11.94 |  3.25    7.42
              0.333    7.64 | 1.333  187.50 | 2.333   11.94 |  3.33    7.42
              0.417    8.72 | 1.417   39.70 | 2.417   10.74 |  3.42    7.02
              0.500    8.72 | 1.500   39.70 | 2.500   10.74 |  3.50    7.02
              0.583   10.26 | 1.583   25.04 | 2.583    9.80 |  3.58    6.67
              0.667   10.26 | 1.667   25.04 | 2.667    9.80 |  3.67    6.67
              0.750   12.72 | 1.750   19.09 | 2.750    9.04 |  3.75    6.36
              0.833   12.72 | 1.833   19.09 | 2.833    9.04 |  3.83    6.36
              0.917   17.39 | 1.917   15.73 | 2.917    8.41 |  3.92    6.08
              1.000   17.39 | 2.000   15.73 | 3.000    8.41 |  4.00    6.08

     Max.Eff.Inten.(mm/hr)=     187.50        40.61
               over (min)        5.00        50.00
     Storage Coeff.  (min)=       2.50 (ii)   47.34 (ii)
     Unit Hyd. Tpeak (min)=       5.00        50.00
     Unit Hyd. peak  (cms)=       0.29         0.02
                                                        *TOTALS*
     PEAK FLOW       (cms)=       0.26         0.05          0.263 (iii)
     TIME TO PEAK    (hrs)=       1.33         2.08           1.33
     RUNOFF VOLUME    (mm)=      80.31        37.14          50.45
     TOTAL RAINFALL   (mm)=      81.31        81.31          81.31
     RUNOFF COEFFICIENT   =       0.99         0.46           0.62

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  69.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| STANDHYD (  0043)|   Area    (ha)=   0.13
|ID= 1 DT= 5.0 min |   Total Imp(%)=  30.77   Dir. Conn.(%)=   7.69
--------------------
                             IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       0.04         0.09
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       0.50         0.50
     Length            (m)=      29.44        70.00
     Mannings n             =    0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                          ---- TRANSFORMED HYETOGRAPH ----
               TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
```

```
                 hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
               0.083    6.84 | 1.083   32.35 | 2.083   13.52 |  3.08    7.88
               0.167    6.84 | 1.167   32.35 | 2.167   13.52 |  3.17    7.88
               0.250    7.64 | 1.250  187.50 | 2.250   11.94 |  3.25    7.42
               0.333    7.64 | 1.333  187.50 | 2.333   11.94 |  3.33    7.42
               0.417    8.72 | 1.417   39.70 | 2.417   10.74 |  3.42    7.02
               0.500    8.72 | 1.500   39.70 | 2.500   10.74 |  3.50    7.02
               0.583   10.26 | 1.583   25.04 | 2.583    9.80 |  3.58    6.67
               0.667   10.26 | 1.667   25.04 | 2.667    9.80 |  3.67    6.67
               0.750   12.72 | 1.750   19.09 | 2.750    9.04 |  3.75    6.36
               0.833   12.72 | 1.833   19.09 | 2.833    9.04 |  3.83    6.36
               0.917   17.39 | 1.917   15.73 | 2.917    8.41 |  3.92    6.08
               1.000   17.39 | 2.000   15.73 | 3.000    8.41 |  4.00    6.08

     Max.Eff.Inten.(mm/hr)=     187.50        67.89
               over (min)        5.00        20.00
     Storage Coeff.  (min)=       1.17 (ii)   18.65 (ii)
     Unit Hyd. Tpeak (min)=       5.00        20.00
     Unit Hyd. peak  (cms)=       0.34         0.06
                                                        *TOTALS*
     PEAK FLOW       (cms)=       0.01         0.01          0.011 (iii)
     TIME TO PEAK    (hrs)=       1.33         1.58           1.58
     RUNOFF VOLUME    (mm)=      80.31        36.87          40.14
     TOTAL RAINFALL   (mm)=      81.31        81.31          81.31
     RUNOFF COEFFICIENT   =       0.99         0.45           0.49

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
              YOU SHOULD CONSIDER SPLITTING THE AREA.

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  69.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0023)|
|   1 +  2 =  3    |          AREA    QPEAK    TPEAK     R.V.
--------------------          (ha)    (cms)    (hrs)     (mm)
        ID1= 1 (  0011):    46.28   3.288     1.58    32.00
      + ID2= 2 (  0012):     1.13   0.053     1.83    27.44
        ================================================
        ID = 3 (  0023):    47.41   3.333     1.58    31.89

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
```

```
--------------------
| ADD HYD  (  0023)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 3 (  0023):    47.41   3.333     1.58    31.89
      + ID2= 2 (  0028):     1.38   0.061     1.75    24.67
        ================================================
        ID = 1 (  0023):    48.79   3.387     1.58    31.69

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0023)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 1 (  0023):    48.79   3.387     1.58    31.69
      + ID2= 2 (  0041):     0.59   0.030     1.92    32.93
        ================================================
        ID = 3 (  0023):    49.38   3.409     1.58    31.70

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0023)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 3 (  0023):    49.38   3.409     1.58    31.70
      + ID2= 2 (  0043):     0.13   0.011     1.58    40.14
        ================================================
        ID = 1 (  0023):    49.51   3.420     1.58    31.73

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0023)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 1 (  0023):    49.51   3.420     1.58    31.73
      + ID2= 2 (  0044):     1.62   0.263     1.33    50.45
        ================================================
        ID = 3 (  0023):    51.13   3.479     1.58    32.32

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0025)|
```

```
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 1 (  0023):    51.13   3.479     1.58    32.32
      + ID2= 2 (  0024):   225.17   3.567     2.83    20.47
        ================================================
        ID = 3 (  0025):   276.30   5.166     1.83    22.67

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
================================================================================
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       V    V   I    SSSSS  U   U    A    L             (v 6.2.2020)
       V    V   I    SS     U   U   A A   L
        V  V    I     SS    U   U  AAAAA  L
        V  V    I      SS   U   U  A   A  L
         VV     I    SSSSS  UUUUU  A   A  LLLLL

        OOO   TTTTT  TTTTT  H   H  Y   Y  M   M   OOO    TM
       O   O    T      T    H   H   Y Y   MM MM  O   O
       O   O    T      T    H   H    Y    M   M  O   O
        OOO     T      T    H   H    Y    M   M   OOO
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                  *****  D E T A I L E D   O U T P U T *****


  Input   filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat

  Output  filename:
C:\Users\msimon\AppData\Local\Civica\VH5\a122c840-259d-4b92-8a43-b1e7a592bdea\82046
784-c0b4-4407-a4ad-d1a70ec6f1a6\scena
  Summary filename:
C:\Users\msimon\AppData\Local\Civica\VH5\a122c840-259d-4b92-8a43-b1e7a592bdea\82046
784-c0b4-4407-a4ad-d1a70ec6f1a6\scena


DATE: 07-15-2026                          TIME: 03:17:54

USER:


COMMENTS: _____

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  ***********************************************
  ** SIMULATION : G - 2-year SCS                **
  ***********************************************


--------------------
|    READ STORM    |    Filename: C:\Users\msimon\AppD
|                  |              ata\Local\Temp\
|                  |              2578c1bc-683b-4555-9960-7d3c657f7fff\d5860a37
| Ptotal= 63.16 mm |    Comments: 2yr 24hr 15min SCS Type II (MTO) - 15% I
--------------------
```

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.00	0.00	6.25	1.14	12.50	9.10	18.75	1.14
0.25	0.69	6.50	1.14	12.75	4.67	19.00	1.14
0.50	0.69	6.75	1.14	13.00	4.67	19.25	1.14
0.75	0.69	7.00	1.14	13.25	3.41	19.50	1.14
1.00	0.69	7.25	1.39	13.50	3.41	19.75	1.14
1.25	0.69	7.50	1.39	13.75	2.65	20.00	1.14
1.50	0.69	7.75	1.39	14.00	2.65	20.25	0.76
1.75	0.69	8.00	1.39	14.25	1.89	20.50	0.76
2.00	0.69	8.25	1.64	14.50	1.89	20.75	0.76
2.25	0.82	8.50	1.64	14.75	1.89	21.00	0.76
2.50	0.82	8.75	1.77	15.00	1.89	21.25	0.76
2.75	0.82	9.00	1.77	15.25	1.89	21.50	0.76
3.00	0.82	9.25	2.02	15.50	1.89	21.75	0.76
3.25	0.82	9.50	2.02	15.75	1.89	22.00	0.76
3.50	0.82	9.75	2.27	16.00	1.89	22.25	0.76
3.75	0.82	10.00	2.27	16.25	1.14	22.50	0.76
4.00	0.82	10.25	2.91	16.50	1.14	22.75	0.76
4.25	1.01	10.50	2.91	16.75	1.14	23.00	0.76
4.50	1.01	10.75	3.92	17.00	1.14	23.25	0.76
4.75	1.01	11.00	3.92	17.25	1.14	23.50	0.76
5.00	1.01	11.25	6.06	17.50	1.14	23.75	0.76
5.25	1.01	11.50	6.06	17.75	1.14	24.00	0.76
5.50	1.01	11.75	18.70	18.00	1.14		
5.75	1.01	12.00	77.31	18.25	1.14		
6.00	1.01	12.25	9.10	18.50	1.14		

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--------------------
| CALIB            |
| NASHYD   (  0007)|   Area    (ha)= 100.92   Curve Number   (CN)= 55.9
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.89   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   1.70

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.
```

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.01	12.250	77.31	18.33	1.14
0.167	0.00	6.250	1.01	12.333	9.10	18.42	1.14
0.250	0.00	6.333	1.14	12.417	9.10	18.50	1.14
0.333	0.69	6.417	1.14	12.500	9.10	18.58	1.14
0.417	0.69	6.500	1.14	12.583	9.10	18.67	1.14
0.500	0.69	6.583	1.14	12.667	9.10	18.75	1.14
0.583	0.69	6.667	1.14	12.750	9.10	18.83	1.14
0.667	0.69	6.750	1.14	12.833	4.67	18.92	1.14
0.750	0.69	6.833	1.14	12.917	4.67	19.00	1.14
0.833	0.69	6.917	1.14	13.000	4.67	19.08	1.14
0.917	0.69	7.000	1.14	13.083	4.67	19.17	1.14
1.000	0.69	7.083	1.14	13.167	4.67	19.25	1.14
1.083	0.69	7.167	1.14	13.250	4.67	19.33	1.14
1.167	0.69	7.250	1.14	13.333	3.41	19.42	1.14
1.250	0.69	7.333	1.39	13.417	3.41	19.50	1.14
1.333	0.69	7.417	1.39	13.500	3.41	19.58	1.14
1.417	0.69	7.500	1.39	13.583	3.41	19.67	1.14
1.500	0.69	7.583	1.39	13.667	3.41	19.75	1.14
1.583	0.69	7.667	1.39	13.750	3.41	19.83	1.14
1.667	0.69	7.750	1.39	13.833	2.65	19.92	1.14
1.750	0.69	7.833	1.39	13.917	2.65	20.00	1.14
1.833	0.69	7.917	1.39	14.000	2.65	20.08	1.14
1.917	0.69	8.000	1.39	14.083	2.65	20.17	1.14
2.000	0.69	8.083	1.39	14.167	2.65	20.25	1.14
2.083	0.69	8.167	1.39	14.250	2.65	20.33	0.76
2.167	0.69	8.250	1.39	14.333	1.89	20.42	0.76
2.250	0.69	8.333	1.64	14.417	1.89	20.50	0.76
2.333	0.82	8.417	1.64	14.500	1.89	20.58	0.76
2.417	0.82	8.500	1.64	14.583	1.89	20.67	0.76
2.500	0.82	8.583	1.64	14.667	1.89	20.75	0.76
2.583	0.82	8.667	1.64	14.750	1.89	20.83	0.76
2.667	0.82	8.750	1.64	14.833	1.89	20.92	0.76
2.750	0.82	8.833	1.77	14.917	1.89	21.00	0.76
2.833	0.82	8.917	1.77	15.000	1.89	21.08	0.76
2.917	0.82	9.000	1.77	15.083	1.89	21.17	0.76
3.000	0.82	9.083	1.77	15.167	1.89	21.25	0.76
3.083	0.82	9.167	1.77	15.250	1.89	21.33	0.76
3.167	0.82	9.250	1.77	15.333	1.89	21.42	0.76
3.250	0.82	9.333	2.02	15.417	1.89	21.50	0.76
3.333	0.82	9.417	2.02	15.500	1.89	21.58	0.76
3.417	0.82	9.500	2.02	15.583	1.89	21.67	0.76
3.500	0.82	9.583	2.02	15.667	1.89	21.75	0.76
3.583	0.82	9.667	2.02	15.750	1.89	21.83	0.76
3.667	0.82	9.750	2.02	15.833	1.89	21.92	0.76
3.750	0.82	9.833	2.27	15.917	1.89	22.00	0.76
3.833	0.82	9.917	2.27	16.000	1.89	22.08	0.76

3.917	0.82	10.000	2.27	16.083	1.89	22.17	0.76
4.000	0.82	10.083	2.27	16.167	1.89	22.25	0.76
4.083	0.82	10.167	2.27	16.250	1.89	22.33	0.76
4.167	0.82	10.250	2.27	16.333	1.14	22.42	0.76
4.250	0.82	10.333	2.91	16.417	1.14	22.50	0.76
4.333	1.01	10.417	2.91	16.500	1.14	22.58	0.76
4.417	1.01	10.500	2.91	16.583	1.14	22.67	0.76
4.500	1.01	10.583	2.91	16.667	1.14	22.75	0.76
4.583	1.01	10.667	2.91	16.750	1.14	22.83	0.76
4.667	1.01	10.750	2.91	16.833	1.14	22.92	0.76
4.750	1.01	10.833	3.92	16.917	1.14	23.00	0.76
4.833	1.01	10.917	3.92	17.000	1.14	23.08	0.76
4.917	1.01	11.000	3.92	17.083	1.14	23.17	0.76
5.000	1.01	11.083	3.92	17.167	1.14	23.25	0.76
5.083	1.01	11.167	3.92	17.250	1.14	23.33	0.76
5.167	1.01	11.250	3.92	17.333	1.14	23.42	0.76
5.250	1.01	11.333	6.06	17.417	1.14	23.50	0.76
5.333	1.01	11.417	6.06	17.500	1.14	23.58	0.76
5.417	1.01	11.500	6.06	17.583	1.14	23.67	0.76
5.500	1.01	11.583	6.06	17.667	1.14	23.75	0.76
5.583	1.01	11.667	6.06	17.750	1.14	23.83	0.76
5.667	1.01	11.750	6.06	17.833	1.14	23.92	0.76
5.750	1.01	11.833	18.69	17.917	1.14	24.00	0.76
5.833	1.01	11.917	18.70	18.000	1.14	24.08	0.76
5.917	1.01	12.000	18.70	18.083	1.14	24.17	0.76
6.000	1.01	12.083	77.30	18.167	1.14	24.25	0.76
6.083	1.01	12.167	77.31	18.250	1.14		

Unit Hyd Qpeak (cms)= 2.267

PEAK FLOW (cms)= 0.607 (i)
TIME TO PEAK (hrs)= 14.167
RUNOFF VOLUME (mm)= 11.964
TOTAL RAINFALL (mm)= 63.160
RUNOFF COEFFICIENT = 0.189

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0008)	Area (ha)= 23.99	Curve Number (CN)= 44.7	
ID= 1 DT= 5.0 min	Ia (mm)= 10.91	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.97		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	6.167	1.01	12.250	77.31	18.33	1.14
0.167	0.00	6.250	1.01	12.333	9.10	18.42	1.14
0.250	0.00	6.333	1.14	12.417	9.10	18.50	1.14
0.333	0.69	6.417	1.14	12.500	9.10	18.58	1.14
0.417	0.69	6.500	1.14	12.583	9.10	18.67	1.14
0.500	0.69	6.583	1.14	12.667	9.10	18.75	1.14
0.583	0.69	6.667	1.14	12.750	9.10	18.83	1.14
0.667	0.69	6.750	1.14	12.833	4.67	18.92	1.14
0.750	0.69	6.833	1.14	12.917	4.67	19.00	1.14
0.833	0.69	6.917	1.14	13.000	4.67	19.08	1.14
0.917	0.69	7.000	1.14	13.083	4.67	19.17	1.14
1.000	0.69	7.083	1.14	13.167	4.67	19.25	1.14
1.083	0.69	7.167	1.14	13.250	4.67	19.33	1.14
1.167	0.69	7.250	1.14	13.333	3.41	19.42	1.14
1.250	0.69	7.333	1.39	13.417	3.41	19.50	1.14
1.333	0.69	7.417	1.39	13.500	3.41	19.58	1.14
1.417	0.69	7.500	1.39	13.583	3.41	19.67	1.14
1.500	0.69	7.583	1.39	13.667	3.41	19.75	1.14
1.583	0.69	7.667	1.39	13.750	3.41	19.83	1.14
1.667	0.69	7.750	1.39	13.833	2.65	19.92	1.14
1.750	0.69	7.833	1.39	13.917	2.65	20.00	1.14
1.833	0.69	7.917	1.39	14.000	2.65	20.08	1.14
1.917	0.69	8.000	1.39	14.083	2.65	20.17	1.14
2.000	0.69	8.083	1.39	14.167	2.65	20.25	1.14
2.083	0.69	8.167	1.39	14.250	2.65	20.33	0.76
2.167	0.69	8.250	1.39	14.333	1.89	20.42	0.76
2.250	0.69	8.333	1.64	14.417	1.89	20.50	0.76
2.333	0.82	8.417	1.64	14.500	1.89	20.58	0.76
2.417	0.82	8.500	1.64	14.583	1.89	20.67	0.76
2.500	0.82	8.583	1.64	14.667	1.89	20.75	0.76
2.583	0.82	8.667	1.64	14.750	1.89	20.83	0.76
2.667	0.82	8.750	1.64	14.833	1.89	20.92	0.76
2.750	0.82	8.833	1.77	14.917	1.89	21.00	0.76
2.833	0.82	8.917	1.77	15.000	1.89	21.08	0.76
2.917	0.82	9.000	1.77	15.083	1.89	21.17	0.76
3.000	0.82	9.083	1.77	15.167	1.89	21.25	0.76
3.083	0.82	9.167	1.77	15.250	1.89	21.33	0.76
3.167	0.82	9.250	1.77	15.333	1.89	21.42	0.76
3.250	0.82	9.333	2.02	15.417	1.89	21.50	0.76
3.333	0.82	9.417	2.02	15.500	1.89	21.58	0.76
3.417	0.82	9.500	2.02	15.583	1.89	21.67	0.76
3.500	0.82	9.583	2.02	15.667	1.89	21.75	0.76
3.583	0.82	9.667	2.02	15.750	1.89	21.83	0.76
3.667	0.82	9.750	2.02	15.833	1.89	21.92	0.76
3.750	0.82	9.833	2.27	15.917	1.89	22.00	0.76
3.833	0.82	9.917	2.27	16.000	1.89	22.08	0.76
3.917	0.82	10.000	2.27	16.083	1.89	22.17	0.76
4.000	0.82	10.083	2.27	16.167	1.89	22.25	0.76
4.083	0.82	10.167	2.27	16.250	1.89	22.33	0.76

4.167	0.82	10.250	2.27	16.333	1.14	22.42	0.76
4.250	0.82	10.333	2.91	16.417	1.14	22.50	0.76
4.333	1.01	10.417	2.91	16.500	1.14	22.58	0.76
4.417	1.01	10.500	2.91	16.583	1.14	22.67	0.76
4.500	1.01	10.583	2.91	16.667	1.14	22.75	0.76
4.583	1.01	10.667	2.91	16.750	1.14	22.83	0.76
4.667	1.01	10.750	2.91	16.833	1.14	22.92	0.76
4.750	1.01	10.833	3.92	16.917	1.14	23.00	0.76
4.833	1.01	10.917	3.92	17.000	1.14	23.08	0.76
4.917	1.01	11.000	3.92	17.083	1.14	23.17	0.76
5.000	1.01	11.083	3.92	17.167	1.14	23.25	0.76
5.083	1.01	11.167	3.92	17.250	1.14	23.33	0.76
5.167	1.01	11.250	3.92	17.333	1.14	23.42	0.76
5.250	1.01	11.333	6.06	17.417	1.14	23.50	0.76
5.333	1.01	11.417	6.06	17.500	1.14	23.58	0.76
5.417	1.01	11.500	6.06	17.583	1.14	23.67	0.76
5.500	1.01	11.583	6.06	17.667	1.14	23.75	0.76
5.583	1.01	11.667	6.06	17.750	1.14	23.83	0.76
5.667	1.01	11.750	6.06	17.833	1.14	23.92	0.76
5.750	1.01	11.833	18.69	17.917	1.14	24.00	0.76
5.833	1.01	11.917	18.70	18.000	1.14	24.08	0.76
5.917	1.01	12.000	18.70	18.083	1.14	24.17	0.76
6.000	1.01	12.083	77.30	18.167	1.14	24.25	0.76
6.083	1.01	12.167	77.31	18.250	1.14		

Unit Hyd Qpeak (cms)= 0.945

PEAK FLOW (cms)= 0.131 (i)
TIME TO PEAK (hrs)= 13.250
RUNOFF VOLUME (mm)= 7.449
TOTAL RAINFALL (mm)= 63.160
RUNOFF COEFFICIENT = 0.118

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0009)	Area (ha)= 6.37	Curve Number (CN)= 50.5	
ID= 1 DT= 5.0 min	Ia (mm)= 15.69	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.77		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.01	12.250	77.31	18.33	1.14
0.167	0.00	6.250	1.01	12.333	9.10	18.42	1.14
0.250	0.00	6.333	1.14	12.417	9.10	18.50	1.14
0.333	0.69	6.417	1.14	12.500	9.10	18.58	1.14
0.417	0.69	6.500	1.14	12.583	9.10	18.67	1.14
0.500	0.69	6.583	1.14	12.667	9.10	18.75	1.14
0.583	0.69	6.667	1.14	12.750	9.10	18.83	1.14
0.667	0.69	6.750	1.14	12.833	4.67	18.92	1.14
0.750	0.69	6.833	1.14	12.917	4.67	19.00	1.14
0.833	0.69	6.917	1.14	13.000	4.67	19.08	1.14
0.917	0.69	7.000	1.14	13.083	4.67	19.17	1.14
1.000	0.69	7.083	1.14	13.167	4.67	19.25	1.14
1.083	0.69	7.167	1.14	13.250	4.67	19.33	1.14
1.167	0.69	7.250	1.14	13.333	3.41	19.42	1.14
1.250	0.69	7.333	1.39	13.417	3.41	19.50	1.14
1.333	0.69	7.417	1.39	13.500	3.41	19.58	1.14
1.417	0.69	7.500	1.39	13.583	3.41	19.67	1.14
1.500	0.69	7.583	1.39	13.667	3.41	19.75	1.14
1.583	0.69	7.667	1.39	13.750	3.41	19.83	1.14
1.667	0.69	7.750	1.39	13.833	2.65	19.92	1.14
1.750	0.69	7.833	1.39	13.917	2.65	20.00	1.14
1.833	0.69	7.917	1.39	14.000	2.65	20.08	1.14
1.917	0.69	8.000	1.39	14.083	2.65	20.17	1.14
2.000	0.69	8.083	1.39	14.167	2.65	20.25	1.14
2.083	0.69	8.167	1.39	14.250	2.65	20.33	0.76
2.167	0.69	8.250	1.39	14.333	1.89	20.42	0.76
2.250	0.69	8.333	1.64	14.417	1.89	20.50	0.76
2.333	0.82	8.417	1.64	14.500	1.89	20.58	0.76
2.417	0.82	8.500	1.64	14.583	1.89	20.67	0.76
2.500	0.82	8.583	1.64	14.667	1.89	20.75	0.76
2.583	0.82	8.667	1.64	14.750	1.89	20.83	0.76
2.667	0.82	8.750	1.64	14.833	1.89	20.92	0.76
2.750	0.82	8.833	1.77	14.917	1.89	21.00	0.76
2.833	0.82	8.917	1.77	15.000	1.89	21.08	0.76
2.917	0.82	9.000	1.77	15.083	1.89	21.17	0.76
3.000	0.82	9.083	1.77	15.167	1.89	21.25	0.76
3.083	0.82	9.167	1.77	15.250	1.89	21.33	0.76
3.167	0.82	9.250	1.77	15.333	1.89	21.42	0.76
3.250	0.82	9.333	2.02	15.417	1.89	21.50	0.76
3.333	0.82	9.417	2.02	15.500	1.89	21.58	0.76
3.417	0.82	9.500	2.02	15.583	1.89	21.67	0.76
3.500	0.82	9.583	2.02	15.667	1.89	21.75	0.76
3.583	0.82	9.667	2.02	15.750	1.89	21.83	0.76
3.667	0.82	9.750	2.02	15.833	1.89	21.92	0.76
3.750	0.82	9.833	2.27	15.917	1.89	22.00	0.76
3.833	0.82	9.917	2.27	16.000	1.89	22.08	0.76
3.917	0.82	10.000	2.27	16.083	1.89	22.17	0.76
4.000	0.82	10.083	2.27	16.167	1.89	22.25	0.76
4.083	0.82	10.167	2.27	16.250	1.89	22.33	0.76
4.167	0.82	10.250	2.27	16.333	1.14	22.42	0.76
4.250	0.82	10.333	2.91	16.417	1.14	22.50	0.76
4.333	1.01	10.417	2.91	16.500	1.14	22.58	0.76

4.417	1.01	10.500	2.91	16.583	1.14	22.67	0.76
4.500	1.01	10.583	2.91	16.667	1.14	22.75	0.76
4.583	1.01	10.667	2.91	16.750	1.14	22.83	0.76
4.667	1.01	10.750	2.91	16.833	1.14	22.92	0.76
4.750	1.01	10.833	3.92	16.917	1.14	23.00	0.76
4.833	1.01	10.917	3.92	17.000	1.14	23.08	0.76
4.917	1.01	11.000	3.92	17.083	1.14	23.17	0.76
5.000	1.01	11.083	3.92	17.167	1.14	23.25	0.76
5.083	1.01	11.167	3.92	17.250	1.14	23.33	0.76
5.167	1.01	11.250	3.92	17.333	1.14	23.42	0.76
5.250	1.01	11.333	6.06	17.417	1.14	23.50	0.76
5.333	1.01	11.417	6.06	17.500	1.14	23.58	0.76
5.417	1.01	11.500	6.06	17.583	1.14	23.67	0.76
5.500	1.01	11.583	6.06	17.667	1.14	23.75	0.76
5.583	1.01	11.667	6.06	17.750	1.14	23.83	0.76
5.667	1.01	11.750	6.06	17.833	1.14	23.92	0.76
5.750	1.01	11.833	18.69	17.917	1.14	24.00	0.76
5.833	1.01	11.917	18.70	18.000	1.14	24.08	0.76
5.917	1.01	12.000	18.70	18.083	1.14	24.17	0.76
6.000	1.01	12.083	77.30	18.167	1.14	24.25	0.76
6.083	1.01	12.167	77.31	18.250	1.14		

Unit Hyd Qpeak (cms)= 0.316

PEAK FLOW (cms)= 0.040 (i)
TIME TO PEAK (hrs)= 13.083
RUNOFF VOLUME (mm)= 7.596
TOTAL RAINFALL (mm)= 63.160
RUNOFF COEFFICIENT = 0.120

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
NASHYD (0010)
ID= 1 DT= 5.0 min

Area (ha)= 14.85 Curve Number (CN)= 52.9
Ia (mm)= 13.28 # of Linear Res.(N)= 3.00
U.H. Tp(hrs)= 0.89

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.01	12.250	77.31	18.33	1.14
0.167	0.00	6.250	1.01	12.333	9.10	18.42	1.14
0.250	0.00	6.333	1.14	12.417	9.10	18.50	1.14
0.333	0.69	6.417	1.14	12.500	9.10	18.58	1.14
0.417	0.69	6.500	1.14	12.583	9.10	18.67	1.14
0.500	0.69	6.583	1.14	12.667	9.10	18.75	1.14
0.583	0.69	6.667	1.14	12.750	9.10	18.83	1.14
0.667	0.69	6.750	1.14	12.833	4.67	18.92	1.14
0.750	0.69	6.833	1.14	12.917	4.67	19.00	1.14
0.833	0.69	6.917	1.14	13.000	4.67	19.08	1.14
0.917	0.69	7.000	1.14	13.083	4.67	19.17	1.14
1.000	0.69	7.083	1.14	13.167	4.67	19.25	1.14
1.083	0.69	7.167	1.14	13.250	4.67	19.33	1.14
1.167	0.69	7.250	1.14	13.333	3.41	19.42	1.14
1.250	0.69	7.333	1.39	13.417	3.41	19.50	1.14
1.333	0.69	7.417	1.39	13.500	3.41	19.58	1.14
1.417	0.69	7.500	1.39	13.583	3.41	19.67	1.14
1.500	0.69	7.583	1.39	13.667	3.41	19.75	1.14
1.583	0.69	7.667	1.39	13.750	3.41	19.83	1.14
1.667	0.69	7.750	1.39	13.833	2.65	19.92	1.14
1.750	0.69	7.833	1.39	13.917	2.65	20.00	1.14
1.833	0.69	7.917	1.39	14.000	2.65	20.08	1.14
1.917	0.69	8.000	1.39	14.083	2.65	20.17	1.14
2.000	0.69	8.083	1.39	14.167	2.65	20.25	1.14
2.083	0.69	8.167	1.39	14.250	2.65	20.33	0.76
2.167	0.69	8.250	1.39	14.333	1.89	20.42	0.76
2.250	0.69	8.333	1.64	14.417	1.89	20.50	0.76
2.333	0.82	8.417	1.64	14.500	1.89	20.58	0.76
2.417	0.82	8.500	1.64	14.583	1.89	20.67	0.76
2.500	0.82	8.583	1.64	14.667	1.89	20.75	0.76
2.583	0.82	8.667	1.64	14.750	1.89	20.83	0.76
2.667	0.82	8.750	1.64	14.833	1.89	20.92	0.76
2.750	0.82	8.833	1.77	14.917	1.89	21.00	0.76
2.833	0.82	8.917	1.77	15.000	1.89	21.08	0.76
2.917	0.82	9.000	1.77	15.083	1.89	21.17	0.76
3.000	0.82	9.083	1.77	15.167	1.89	21.25	0.76
3.083	0.82	9.167	1.77	15.250	1.89	21.33	0.76
3.167	0.82	9.250	1.77	15.333	1.89	21.42	0.76
3.250	0.82	9.333	2.02	15.417	1.89	21.50	0.76
3.333	0.82	9.417	2.02	15.500	1.89	21.58	0.76
3.417	0.82	9.500	2.02	15.583	1.89	21.67	0.76
3.500	0.82	9.583	2.02	15.667	1.89	21.75	0.76
3.583	0.82	9.667	2.02	15.750	1.89	21.83	0.76
3.667	0.82	9.750	2.02	15.833	1.89	21.92	0.76
3.750	0.82	9.833	2.27	15.917	1.89	22.00	0.76
3.833	0.82	9.917	2.27	16.000	1.89	22.08	0.76
3.917	0.82	10.000	2.27	16.083	1.89	22.17	0.76
4.000	0.82	10.083	2.27	16.167	1.89	22.25	0.76
4.083	0.82	10.167	2.27	16.250	1.89	22.33	0.76
4.167	0.82	10.250	2.27	16.333	1.14	22.42	0.76
4.250	0.82	10.333	2.91	16.417	1.14	22.50	0.76
4.333	1.01	10.417	2.91	16.500	1.14	22.58	0.76
4.417	1.01	10.500	2.91	16.583	1.14	22.67	0.76
4.500	1.01	10.583	2.91	16.667	1.14	22.75	0.76
4.583	1.01	10.667	2.91	16.750	1.14	22.83	0.76

4.667	1.01	10.750	2.91	16.833	1.14	22.92	0.76
4.750	1.01	10.833	3.92	16.917	1.14	23.00	0.76
4.833	1.01	10.917	3.92	17.000	1.14	23.08	0.76
4.917	1.01	11.000	3.92	17.083	1.14	23.17	0.76
5.000	1.01	11.083	3.92	17.167	1.14	23.25	0.76
5.083	1.01	11.167	3.92	17.250	1.14	23.33	0.76
5.167	1.01	11.250	3.92	17.333	1.14	23.42	0.76
5.250	1.01	11.333	6.06	17.417	1.14	23.50	0.76
5.333	1.01	11.417	6.06	17.500	1.14	23.58	0.76
5.417	1.01	11.500	6.06	17.583	1.14	23.67	0.76
5.500	1.01	11.583	6.06	17.667	1.14	23.75	0.76
5.583	1.01	11.667	6.06	17.750	1.14	23.83	0.76
5.667	1.01	11.750	6.06	17.833	1.14	23.92	0.76
5.750	1.01	11.833	18.69	17.917	1.14	24.00	0.76
5.833	1.01	11.917	18.70	18.000	1.14	24.08	0.76
5.917	1.01	12.000	18.70	18.083	1.14	24.17	0.76
6.000	1.01	12.083	77.30	18.167	1.14	24.25	0.76
6.083	1.01	12.167	77.31	18.250	1.14		

Unit Hyd Qpeak (cms)= 0.637

PEAK FLOW (cms)= 0.104 (i)
TIME TO PEAK (hrs)= 13.167
RUNOFF VOLUME (mm)= 9.025
TOTAL RAINFALL (mm)= 63.160
RUNOFF COEFFICIENT = 0.143

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB NASHYD (0013) ID= 1 DT= 5.0 min	Area (ha)= 1.70	Curve Number (CN)= 60.5
	Ia (mm)= 9.65	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.40	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.01	12.250	77.31	18.33	1.14
0.167	0.00	6.250	1.01	12.333	9.10	18.42	1.14
0.250	0.00	6.333	1.14	12.417	9.10	18.50	1.14
0.333	0.69	6.417	1.14	12.500	9.10	18.58	1.14
0.417	0.69	6.500	1.14	12.583	9.10	18.67	1.14
0.500	0.69	6.583	1.14	12.667	9.10	18.75	1.14
0.583	0.69	6.667	1.14	12.750	9.10	18.83	1.14
0.667	0.69	6.750	1.14	12.833	4.67	18.92	1.14
0.750	0.69	6.833	1.14	12.917	4.67	19.00	1.14
0.833	0.69	6.917	1.14	13.000	4.67	19.08	1.14
0.917	0.69	7.000	1.14	13.083	4.67	19.17	1.14
1.000	0.69	7.083	1.14	13.167	4.67	19.25	1.14
1.083	0.69	7.167	1.14	13.250	4.67	19.33	1.14
1.167	0.69	7.250	1.14	13.333	3.41	19.42	1.14
1.250	0.69	7.333	1.39	13.417	3.41	19.50	1.14
1.333	0.69	7.417	1.39	13.500	3.41	19.58	1.14
1.417	0.69	7.500	1.39	13.583	3.41	19.67	1.14
1.500	0.69	7.583	1.39	13.667	3.41	19.75	1.14
1.583	0.69	7.667	1.39	13.750	3.41	19.83	1.14
1.667	0.69	7.750	1.39	13.833	2.65	19.92	1.14
1.750	0.69	7.833	1.39	13.917	2.65	20.00	1.14
1.833	0.69	7.917	1.39	14.000	2.65	20.08	1.14
1.917	0.69	8.000	1.39	14.083	2.65	20.17	1.14
2.000	0.69	8.083	1.39	14.167	2.65	20.25	1.14
2.083	0.69	8.167	1.39	14.250	2.65	20.33	0.76
2.167	0.69	8.250	1.39	14.333	1.89	20.42	0.76
2.250	0.69	8.333	1.64	14.417	1.89	20.50	0.76
2.333	0.82	8.417	1.64	14.500	1.89	20.58	0.76
2.417	0.82	8.500	1.64	14.583	1.89	20.67	0.76
2.500	0.82	8.583	1.64	14.667	1.89	20.75	0.76
2.583	0.82	8.667	1.64	14.750	1.89	20.83	0.76
2.667	0.82	8.750	1.64	14.833	1.89	20.92	0.76
2.750	0.82	8.833	1.77	14.917	1.89	21.00	0.76
2.833	0.82	8.917	1.77	15.000	1.89	21.08	0.76
2.917	0.82	9.000	1.77	15.083	1.89	21.17	0.76
3.000	0.82	9.083	1.77	15.167	1.89	21.25	0.76
3.083	0.82	9.167	1.77	15.250	1.89	21.33	0.76
3.167	0.82	9.250	1.77	15.333	1.89	21.42	0.76
3.250	0.82	9.333	2.02	15.417	1.89	21.50	0.76
3.333	0.82	9.417	2.02	15.500	1.89	21.58	0.76
3.417	0.82	9.500	2.02	15.583	1.89	21.67	0.76
3.500	0.82	9.583	2.02	15.667	1.89	21.75	0.76
3.583	0.82	9.667	2.02	15.750	1.89	21.83	0.76
3.667	0.82	9.750	2.02	15.833	1.89	21.92	0.76
3.750	0.82	9.833	2.27	15.917	1.89	22.00	0.76
3.833	0.82	9.917	2.27	16.000	1.89	22.08	0.76
3.917	0.82	10.000	2.27	16.083	1.89	22.17	0.76
4.000	0.82	10.083	2.27	16.167	1.89	22.25	0.76
4.083	0.82	10.167	2.27	16.250	1.89	22.33	0.76
4.167	0.82	10.250	2.27	16.333	1.14	22.42	0.76
4.250	0.82	10.333	2.91	16.417	1.14	22.50	0.76
4.333	1.01	10.417	2.91	16.500	1.14	22.58	0.76
4.417	1.01	10.500	2.91	16.583	1.14	22.67	0.76
4.500	1.01	10.583	2.91	16.667	1.14	22.75	0.76
4.583	1.01	10.667	2.91	16.750	1.14	22.83	0.76
4.667	1.01	10.750	2.91	16.833	1.14	22.92	0.76
4.750	1.01	10.833	3.92	16.917	1.14	23.00	0.76
4.833	1.01	10.917	3.92	17.000	1.14	23.08	0.76

4.917	1.01	11.000	3.92	17.083	1.14	23.17	0.76
5.000	1.01	11.083	3.92	17.167	1.14	23.25	0.76
5.083	1.01	11.167	3.92	17.250	1.14	23.33	0.76
5.167	1.01	11.250	3.92	17.333	1.14	23.42	0.76
5.250	1.01	11.333	6.06	17.417	1.14	23.50	0.76
5.333	1.01	11.417	6.06	17.500	1.14	23.58	0.76
5.417	1.01	11.500	6.06	17.583	1.14	23.67	0.76
5.500	1.01	11.583	6.06	17.667	1.14	23.75	0.76
5.583	1.01	11.667	6.06	17.750	1.14	23.83	0.76
5.667	1.01	11.750	6.06	17.833	1.14	23.92	0.76
5.750	1.01	11.833	18.69	17.917	1.14	24.00	0.76
5.833	1.01	11.917	18.70	18.000	1.14	24.08	0.76
5.917	1.01	12.000	18.70	18.083	1.14	24.17	0.76
6.000	1.01	12.083	77.30	18.167	1.14	24.25	0.76
6.083	1.01	12.167	77.31	18.250	1.14		

Unit Hyd Qpeak (cms)= 0.162

PEAK FLOW (cms)= 0.032 (i)
TIME TO PEAK (hrs)= 12.583
RUNOFF VOLUME (mm)= 13.035
TOTAL RAINFALL (mm)= 63.160
RUNOFF COEFFICIENT = 0.206

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB NASHYD (0014) ID= 1 DT= 5.0 min	Area (ha)= 1.80 Curve Number (CN)= 50.0 Ia (mm)= 16.00 # of Linear Res.(N)= 3.00 U.H. Tp(hrs)= 0.76

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.01	12.250	77.31	18.33	1.14
0.167	0.00	6.250	1.01	12.333	9.10	18.42	1.14
0.250	0.00	6.333	1.14	12.417	9.10	18.50	1.14
0.333	0.69	6.417	1.14	12.500	9.10	18.58	1.14
0.417	0.69	6.500	1.14	12.583	9.10	18.67	1.14
0.500	0.69	6.583	1.14	12.667	9.10	18.75	1.14
0.583	0.69	6.667	1.14	12.750	9.10	18.83	1.14
0.667	0.69	6.750	1.14	12.833	4.67	18.92	1.14
0.750	0.69	6.833	1.14	12.917	4.67	19.00	1.14
0.833	0.69	6.917	1.14	13.000	4.67	19.08	1.14
0.917	0.69	7.000	1.14	13.083	4.67	19.17	1.14
1.000	0.69	7.083	1.14	13.167	4.67	19.25	1.14
1.083	0.69	7.167	1.14	13.250	4.67	19.33	1.14
1.167	0.69	7.250	1.14	13.333	3.41	19.42	1.14
1.250	0.69	7.333	1.39	13.417	3.41	19.50	1.14
1.333	0.69	7.417	1.39	13.500	3.41	19.58	1.14
1.417	0.69	7.500	1.39	13.583	3.41	19.67	1.14
1.500	0.69	7.583	1.39	13.667	3.41	19.75	1.14
1.583	0.69	7.667	1.39	13.750	3.41	19.83	1.14
1.667	0.69	7.750	1.39	13.833	2.65	19.92	1.14
1.750	0.69	7.833	1.39	13.917	2.65	20.00	1.14
1.833	0.69	7.917	1.39	14.000	2.65	20.08	1.14
1.917	0.69	8.000	1.39	14.083	2.65	20.17	1.14
2.000	0.69	8.083	1.39	14.167	2.65	20.25	1.14
2.083	0.69	8.167	1.39	14.250	2.65	20.33	0.76
2.167	0.69	8.250	1.39	14.333	1.89	20.42	0.76
2.250	0.69	8.333	1.64	14.417	1.89	20.50	0.76
2.333	0.82	8.417	1.64	14.500	1.89	20.58	0.76
2.417	0.82	8.500	1.64	14.583	1.89	20.67	0.76
2.500	0.82	8.583	1.64	14.667	1.89	20.75	0.76
2.583	0.82	8.667	1.64	14.750	1.89	20.83	0.76
2.667	0.82	8.750	1.64	14.833	1.89	20.92	0.76
2.750	0.82	8.833	1.77	14.917	1.89	21.00	0.76
2.833	0.82	8.917	1.77	15.000	1.89	21.08	0.76
2.917	0.82	9.000	1.77	15.083	1.89	21.17	0.76
3.000	0.82	9.083	1.77	15.167	1.89	21.25	0.76
3.083	0.82	9.167	1.77	15.250	1.89	21.33	0.76
3.167	0.82	9.250	1.77	15.333	1.89	21.42	0.76
3.250	0.82	9.333	2.02	15.417	1.89	21.50	0.76
3.333	0.82	9.417	2.02	15.500	1.89	21.58	0.76
3.417	0.82	9.500	2.02	15.583	1.89	21.67	0.76
3.500	0.82	9.583	2.02	15.667	1.89	21.75	0.76
3.583	0.82	9.667	2.02	15.750	1.89	21.83	0.76
3.667	0.82	9.750	2.02	15.833	1.89	21.92	0.76
3.750	0.82	9.833	2.27	15.917	1.89	22.00	0.76
3.833	0.82	9.917	2.27	16.000	1.89	22.08	0.76
3.917	0.82	10.000	2.27	16.083	1.89	22.17	0.76
4.000	0.82	10.083	2.27	16.167	1.89	22.25	0.76
4.083	0.82	10.167	2.27	16.250	1.89	22.33	0.76
4.167	0.82	10.250	2.27	16.333	1.14	22.42	0.76
4.250	0.82	10.333	2.91	16.417	1.14	22.50	0.76
4.333	1.01	10.417	2.91	16.500	1.14	22.58	0.76
4.417	1.01	10.500	2.91	16.583	1.14	22.67	0.76
4.500	1.01	10.583	2.91	16.667	1.14	22.75	0.76
4.583	1.01	10.667	2.91	16.750	1.14	22.83	0.76
4.667	1.01	10.750	2.91	16.833	1.14	22.92	0.76
4.750	1.01	10.833	3.92	16.917	1.14	23.00	0.76
4.833	1.01	10.917	3.92	17.000	1.14	23.08	0.76
4.917	1.01	11.000	3.92	17.083	1.14	23.17	0.76
5.000	1.01	11.083	3.92	17.167	1.14	23.25	0.76
5.083	1.01	11.167	3.92	17.250	1.14	23.33	0.76

5.167	1.01	11.250	3.92	17.333	1.14	23.42	0.76
5.250	1.01	11.333	6.06	17.417	1.14	23.50	0.76
5.333	1.01	11.417	6.06	17.500	1.14	23.58	0.76
5.417	1.01	11.500	6.06	17.583	1.14	23.67	0.76
5.500	1.01	11.583	6.06	17.667	1.14	23.75	0.76
5.583	1.01	11.667	6.06	17.750	1.14	23.83	0.76
5.667	1.01	11.750	6.06	17.833	1.14	23.92	0.76
5.750	1.01	11.833	18.69	17.917	1.14	24.00	0.76
5.833	1.01	11.917	18.70	18.000	1.14	24.08	0.76
5.917	1.01	12.000	18.70	18.083	1.14	24.17	0.76
6.000	1.01	12.083	77.30	18.167	1.14	24.25	0.76
6.083	1.01	12.167	77.31	18.250	1.14		

Unit Hyd Qpeak (cms)= 0.090

PEAK FLOW (cms)= 0.011 (i)
TIME TO PEAK (hrs)= 13.083
RUNOFF VOLUME (mm)= 7.384
TOTAL RAINFALL (mm)= 63.160
RUNOFF COEFFICIENT = 0.117

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0015)	Area (ha)=	6.70	Curve Number (CN)=	60.0	
ID= 1 DT= 5.0 min	Ia (mm)=	10.00	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	1.45			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.01	12.250	77.31	18.33	1.14
0.167	0.00	6.250	1.01	12.333	9.10	18.42	1.14
0.250	0.00	6.333	1.14	12.417	9.10	18.50	1.14
0.333	0.69	6.417	1.14	12.500	9.10	18.58	1.14
0.417	0.69	6.500	1.14	12.583	9.10	18.67	1.14
0.500	0.69	6.583	1.14	12.667	9.10	18.75	1.14
0.583	0.69	6.667	1.14	12.750	9.10	18.83	1.14
0.667	0.69	6.750	1.14	12.833	4.67	18.92	1.14
0.750	0.69	6.833	1.14	12.917	4.67	19.00	1.14
0.833	0.69	6.917	1.14	13.000	4.67	19.08	1.14
0.917	0.69	7.000	1.14	13.083	4.67	19.17	1.14
1.000	0.69	7.083	1.14	13.167	4.67	19.25	1.14
1.083	0.69	7.167	1.14	13.250	4.67	19.33	1.14
1.167	0.69	7.250	1.14	13.333	3.41	19.42	1.14
1.250	0.69	7.333	1.39	13.417	3.41	19.50	1.14
1.333	0.69	7.417	1.39	13.500	3.41	19.58	1.14
1.417	0.69	7.500	1.39	13.583	3.41	19.67	1.14
1.500	0.69	7.583	1.39	13.667	3.41	19.75	1.14
1.583	0.69	7.667	1.39	13.750	3.41	19.83	1.14
1.667	0.69	7.750	1.39	13.833	2.65	19.92	1.14
1.750	0.69	7.833	1.39	13.917	2.65	20.00	1.14
1.833	0.69	7.917	1.39	14.000	2.65	20.08	1.14
1.917	0.69	8.000	1.39	14.083	2.65	20.17	1.14
2.000	0.69	8.083	1.39	14.167	2.65	20.25	1.14
2.083	0.69	8.167	1.39	14.250	2.65	20.33	0.76
2.167	0.69	8.250	1.39	14.333	1.89	20.42	0.76
2.250	0.69	8.333	1.64	14.417	1.89	20.50	0.76
2.333	0.82	8.417	1.64	14.500	1.89	20.58	0.76
2.417	0.82	8.500	1.64	14.583	1.89	20.67	0.76
2.500	0.82	8.583	1.64	14.667	1.89	20.75	0.76
2.583	0.82	8.667	1.64	14.750	1.89	20.83	0.76
2.667	0.82	8.750	1.64	14.833	1.89	20.92	0.76
2.750	0.82	8.833	1.77	14.917	1.89	21.00	0.76
2.833	0.82	8.917	1.77	15.000	1.89	21.08	0.76
2.917	0.82	9.000	1.77	15.083	1.89	21.17	0.76
3.000	0.82	9.083	1.77	15.167	1.89	21.25	0.76
3.083	0.82	9.167	1.77	15.250	1.89	21.33	0.76
3.167	0.82	9.250	1.77	15.333	1.89	21.42	0.76
3.250	0.82	9.333	2.02	15.417	1.89	21.50	0.76
3.333	0.82	9.417	2.02	15.500	1.89	21.58	0.76
3.417	0.82	9.500	2.02	15.583	1.89	21.67	0.76
3.500	0.82	9.583	2.02	15.667	1.89	21.75	0.76
3.583	0.82	9.667	2.02	15.750	1.89	21.83	0.76
3.667	0.82	9.750	2.02	15.833	1.89	21.92	0.76
3.750	0.82	9.833	2.27	15.917	1.89	22.00	0.76
3.833	0.82	9.917	2.27	16.000	1.89	22.08	0.76
3.917	0.82	10.000	2.27	16.083	1.89	22.17	0.76
4.000	0.82	10.083	2.27	16.167	1.89	22.25	0.76
4.083	0.82	10.167	2.27	16.250	1.89	22.33	0.76
4.167	0.82	10.250	2.27	16.333	1.14	22.42	0.76
4.250	0.82	10.333	2.91	16.417	1.14	22.50	0.76
4.333	1.01	10.417	2.91	16.500	1.14	22.58	0.76
4.417	1.01	10.500	2.91	16.583	1.14	22.67	0.76
4.500	1.01	10.583	2.91	16.667	1.14	22.75	0.76
4.583	1.01	10.667	2.91	16.750	1.14	22.83	0.76
4.667	1.01	10.750	2.91	16.833	1.14	22.92	0.76
4.750	1.01	10.833	3.92	16.917	1.14	23.00	0.76
4.833	1.01	10.917	3.92	17.000	1.14	23.08	0.76
4.917	1.01	11.000	3.92	17.083	1.14	23.17	0.76
5.000	1.01	11.083	3.92	17.167	1.14	23.25	0.76
5.083	1.01	11.167	3.92	17.250	1.14	23.33	0.76
5.167	1.01	11.250	3.92	17.333	1.14	23.42	0.76
5.250	1.01	11.333	6.06	17.417	1.14	23.50	0.76
5.333	1.01	11.417	6.06	17.500	1.14	23.58	0.76

5.417	1.01	11.500	6.06	17.583	1.14	23.67	0.76
5.500	1.01	11.583	6.06	17.667	1.14	23.75	0.76
5.583	1.01	11.667	6.06	17.750	1.14	23.83	0.76
5.667	1.01	11.750	6.06	17.833	1.14	23.92	0.76
5.750	1.01	11.833	18.69	17.917	1.14	24.00	0.76
5.833	1.01	11.917	18.70	18.000	1.14	24.08	0.76
5.917	1.01	12.000	18.70	18.083	1.14	24.17	0.76
6.000	1.01	12.083	77.30	18.167	1.14	24.25	0.76
6.083	1.01	12.167	77.31	18.250	1.14		

Unit Hyd Qpeak (cms)= 0.176

PEAK FLOW (cms)= 0.048 (i)
TIME TO PEAK (hrs)= 13.833
RUNOFF VOLUME (mm)= 12.701
TOTAL RAINFALL (mm)= 63.160
RUNOFF COEFFICIENT = 0.201

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB NASHYD (0016) | ID= 1 DT= 5.0 min | Area (ha)= 29.16 Curve Number (CN)= 71.4 | Ia (mm)= 7.88 # of Linear Res.(N)= 3.00 | U.H. Tp(hrs)= 0.68

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.01	12.250	77.31	18.33	1.14
0.167	0.00	6.250	1.01	12.333	9.10	18.42	1.14
0.250	0.00	6.333	1.14	12.417	9.10	18.50	1.14
0.333	0.69	6.417	1.14	12.500	9.10	18.58	1.14
0.417	0.69	6.500	1.14	12.583	9.10	18.67	1.14
0.500	0.69	6.583	1.14	12.667	9.10	18.75	1.14
0.583	0.69	6.667	1.14	12.750	9.10	18.83	1.14
0.667	0.69	6.750	1.14	12.833	4.67	18.92	1.14
0.750	0.69	6.833	1.14	12.917	4.67	19.00	1.14
0.833	0.69	6.917	1.14	13.000	4.67	19.08	1.14
0.917	0.69	7.000	1.14	13.083	4.67	19.17	1.14
1.000	0.69	7.083	1.14	13.167	4.67	19.25	1.14
1.083	0.69	7.167	1.14	13.250	4.67	19.33	1.14
1.167	0.69	7.250	1.14	13.333	3.41	19.42	1.14
1.250	0.69	7.333	1.39	13.417	3.41	19.50	1.14
1.333	0.69	7.417	1.39	13.500	3.41	19.58	1.14
1.417	0.69	7.500	1.39	13.583	3.41	19.67	1.14
1.500	0.69	7.583	1.39	13.667	3.41	19.75	1.14
1.583	0.69	7.667	1.39	13.750	3.41	19.83	1.14
1.667	0.69	7.750	1.39	13.833	2.65	19.92	1.14
1.750	0.69	7.833	1.39	13.917	2.65	20.00	1.14
1.833	0.69	7.917	1.39	14.000	2.65	20.08	1.14
1.917	0.69	8.000	1.39	14.083	2.65	20.17	1.14
2.000	0.69	8.083	1.39	14.167	2.65	20.25	1.14
2.083	0.69	8.167	1.39	14.250	2.65	20.33	0.76
2.167	0.69	8.250	1.39	14.333	1.89	20.42	0.76
2.250	0.69	8.333	1.64	14.417	1.89	20.50	0.76
2.333	0.82	8.417	1.64	14.500	1.89	20.58	0.76
2.417	0.82	8.500	1.64	14.583	1.89	20.67	0.76
2.500	0.82	8.583	1.64	14.667	1.89	20.75	0.76
2.583	0.82	8.667	1.64	14.750	1.89	20.83	0.76
2.667	0.82	8.750	1.64	14.833	1.89	20.92	0.76
2.750	0.82	8.833	1.77	14.917	1.89	21.00	0.76
2.833	0.82	8.917	1.77	15.000	1.89	21.08	0.76
2.917	0.82	9.000	1.77	15.083	1.89	21.17	0.76
3.000	0.82	9.083	1.77	15.167	1.89	21.25	0.76
3.083	0.82	9.167	1.77	15.250	1.89	21.33	0.76
3.167	0.82	9.250	1.77	15.333	1.89	21.42	0.76
3.250	0.82	9.333	2.02	15.417	1.89	21.50	0.76
3.333	0.82	9.417	2.02	15.500	1.89	21.58	0.76
3.417	0.82	9.500	2.02	15.583	1.89	21.67	0.76
3.500	0.82	9.583	2.02	15.667	1.89	21.75	0.76
3.583	0.82	9.667	2.02	15.750	1.89	21.83	0.76
3.667	0.82	9.750	2.02	15.833	1.89	21.92	0.76
3.750	0.82	9.833	2.27	15.917	1.89	22.00	0.76
3.833	0.82	9.917	2.27	16.000	1.89	22.08	0.76
3.917	0.82	10.000	2.27	16.083	1.89	22.17	0.76
4.000	0.82	10.083	2.27	16.167	1.89	22.25	0.76
4.083	0.82	10.167	2.27	16.250	1.89	22.33	0.76
4.167	0.82	10.250	2.27	16.333	1.14	22.42	0.76
4.250	0.82	10.333	2.91	16.417	1.14	22.50	0.76
4.333	1.01	10.417	2.91	16.500	1.14	22.58	0.76
4.417	1.01	10.500	2.91	16.583	1.14	22.67	0.76
4.500	1.01	10.583	2.91	16.667	1.14	22.75	0.76
4.583	1.01	10.667	2.91	16.750	1.14	22.83	0.76
4.667	1.01	10.750	2.91	16.833	1.14	22.92	0.76
4.750	1.01	10.833	3.92	16.917	1.14	23.00	0.76
4.833	1.01	10.917	3.92	17.000	1.14	23.08	0.76
4.917	1.01	11.000	3.92	17.083	1.14	23.17	0.76
5.000	1.01	11.083	3.92	17.167	1.14	23.25	0.76
5.083	1.01	11.167	3.92	17.250	1.14	23.33	0.76
5.167	1.01	11.250	3.92	17.333	1.14	23.42	0.76
5.250	1.01	11.333	6.06	17.417	1.14	23.50	0.76
5.333	1.01	11.417	6.06	17.500	1.14	23.58	0.76
5.417	1.01	11.500	6.06	17.583	1.14	23.67	0.76
5.500	1.01	11.583	6.06	17.667	1.14	23.75	0.76
5.583	1.01	11.667	6.06	17.750	1.14	23.83	0.76

5.667	1.01	11.750	6.06	17.833	1.14	23.92	0.76
5.750	1.01	11.833	18.69	17.917	1.14	24.00	0.76
5.833	1.01	11.917	18.70	18.000	1.14	24.08	0.76
5.917	1.01	12.000	18.70	18.083	1.14	24.17	0.76
6.000	1.01	12.083	77.30	18.167	1.14	24.25	0.76
6.083	1.01	12.167	77.31	18.250	1.14		

Unit Hyd Qpeak (cms)= 1.638

PEAK FLOW (cms)= 0.588 (i)
TIME TO PEAK (hrs)= 12.917
RUNOFF VOLUME (mm)= 19.461
TOTAL RAINFALL (mm)= 63.160
RUNOFF COEFFICIENT = 0.308

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0019)	Area (ha)= 39.68	Curve Number (CN)= 60.7	
ID= 1 DT= 5.0 min	Ia (mm)= 8.26	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 1.18		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.01	12.250	77.31	18.33	1.14
0.167	0.00	6.250	1.01	12.333	9.10	18.42	1.14
0.250	0.00	6.333	1.14	12.417	9.10	18.50	1.14
0.333	0.69	6.417	1.14	12.500	9.10	18.58	1.14
0.417	0.69	6.500	1.14	12.583	9.10	18.67	1.14
0.500	0.69	6.583	1.14	12.667	9.10	18.75	1.14
0.583	0.69	6.667	1.14	12.750	9.10	18.83	1.14
0.667	0.69	6.750	1.14	12.833	4.67	18.92	1.14
0.750	0.69	6.833	1.14	12.917	4.67	19.00	1.14
0.833	0.69	6.917	1.14	13.000	4.67	19.08	1.14
0.917	0.69	7.000	1.14	13.083	4.67	19.17	1.14
1.000	0.69	7.083	1.14	13.167	4.67	19.25	1.14
1.083	0.69	7.167	1.14	13.250	4.67	19.33	1.14
1.167	0.69	7.250	1.14	13.333	3.41	19.42	1.14
1.250	0.69	7.333	1.39	13.417	3.41	19.50	1.14
1.333	0.69	7.417	1.39	13.500	3.41	19.58	1.14
1.417	0.69	7.500	1.39	13.583	3.41	19.67	1.14
1.500	0.69	7.583	1.39	13.667	3.41	19.75	1.14
1.583	0.69	7.667	1.39	13.750	3.41	19.83	1.14
1.667	0.69	7.750	1.39	13.833	2.65	19.92	1.14
1.750	0.69	7.833	1.39	13.917	2.65	20.00	1.14
1.833	0.69	7.917	1.39	14.000	2.65	20.08	1.14
1.917	0.69	8.000	1.39	14.083	2.65	20.17	1.14
2.000	0.69	8.083	1.39	14.167	2.65	20.25	1.14
2.083	0.69	8.167	1.39	14.250	2.65	20.33	0.76
2.167	0.69	8.250	1.39	14.333	1.89	20.42	0.76
2.250	0.69	8.333	1.64	14.417	1.89	20.50	0.76
2.333	0.82	8.417	1.64	14.500	1.89	20.58	0.76
2.417	0.82	8.500	1.64	14.583	1.89	20.67	0.76
2.500	0.82	8.583	1.64	14.667	1.89	20.75	0.76
2.583	0.82	8.667	1.64	14.750	1.89	20.83	0.76
2.667	0.82	8.750	1.64	14.833	1.89	20.92	0.76
2.750	0.82	8.833	1.77	14.917	1.89	21.00	0.76
2.833	0.82	8.917	1.77	15.000	1.89	21.08	0.76
2.917	0.82	9.000	1.77	15.083	1.89	21.17	0.76
3.000	0.82	9.083	1.77	15.167	1.89	21.25	0.76
3.083	0.82	9.167	1.77	15.250	1.89	21.33	0.76
3.167	0.82	9.250	1.77	15.333	1.89	21.42	0.76
3.250	0.82	9.333	2.02	15.417	1.89	21.50	0.76
3.333	0.82	9.417	2.02	15.500	1.89	21.58	0.76
3.417	0.82	9.500	2.02	15.583	1.89	21.67	0.76
3.500	0.82	9.583	2.02	15.667	1.89	21.75	0.76
3.583	0.82	9.667	2.02	15.750	1.89	21.83	0.76
3.667	0.82	9.750	2.02	15.833	1.89	21.92	0.76
3.750	0.82	9.833	2.27	15.917	1.89	22.00	0.76
3.833	0.82	9.917	2.27	16.000	1.89	22.08	0.76
3.917	0.82	10.000	2.27	16.083	1.89	22.17	0.76
4.000	0.82	10.083	2.27	16.167	1.89	22.25	0.76
4.083	0.82	10.167	2.27	16.250	1.89	22.33	0.76
4.167	0.82	10.250	2.27	16.333	1.14	22.42	0.76
4.250	0.82	10.333	2.91	16.417	1.14	22.50	0.76
4.333	1.01	10.417	2.91	16.500	1.14	22.58	0.76
4.417	1.01	10.500	2.91	16.583	1.14	22.67	0.76
4.500	1.01	10.583	2.91	16.667	1.14	22.75	0.76
4.583	1.01	10.667	2.91	16.750	1.14	22.83	0.76
4.667	1.01	10.750	2.91	16.833	1.14	22.92	0.76
4.750	1.01	10.833	3.92	16.917	1.14	23.00	0.76
4.833	1.01	10.917	3.92	17.000	1.14	23.08	0.76
4.917	1.01	11.000	3.92	17.083	1.14	23.17	0.76
5.000	1.01	11.083	3.92	17.167	1.14	23.25	0.76
5.083	1.01	11.167	3.92	17.250	1.14	23.33	0.76
5.167	1.01	11.250	3.92	17.333	1.14	23.42	0.76
5.250	1.01	11.333	6.06	17.417	1.14	23.50	0.76
5.333	1.01	11.417	6.06	17.500	1.14	23.58	0.76
5.417	1.01	11.500	6.06	17.583	1.14	23.67	0.76
5.500	1.01	11.583	6.06	17.667	1.14	23.75	0.76
5.583	1.01	11.667	6.06	17.750	1.14	23.83	0.76
5.667	1.01	11.750	6.06	17.833	1.14	23.92	0.76
5.750	1.01	11.833	18.69	17.917	1.14	24.00	0.76
5.833	1.01	11.917	18.70	18.000	1.14	24.08	0.76

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              5.917    1.01 |12.000   18.70 |18.083    1.14 | 24.17    0.76
              6.000    1.01 |12.083   77.30 |18.167    1.14 | 24.25    0.76
              6.083    1.01 |12.167   77.31 |18.250    1.14 |
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Unit Hyd Qpeak (cms)= 1.284

PEAK FLOW (cms)= 0.363 (i)
TIME TO PEAK (hrs)= 13.500
RUNOFF VOLUME (mm)= 13.728
TOTAL RAINFALL (mm)= 63.160
RUNOFF COEFFICIENT = 0.217

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0024)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0010):		14.85	0.104	13.17	9.03
+ ID2= 2 (0013):		1.70	0.032	12.58	13.04
ID = 3 (0024):		16.55	0.122	13.00	9.44

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0024):		16.55	0.122	13.00	9.44
+ ID2= 2 (0014):		1.80	0.011	13.08	7.38
ID = 1 (0024):		18.35	0.132	13.00	9.24

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0024):		18.35	0.132	13.00	9.24
+ ID2= 2 (0015):		6.70	0.048	13.83	12.70
ID = 3 (0024):		25.05	0.170	13.17	10.16

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0024):		25.05	0.170	13.17	10.16
+ ID2= 2 (0016):		29.16	0.588	12.92	19.46
ID = 1 (0024):		54.21	0.751	12.92	15.16

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0024):		54.21	0.751	12.92	15.16
+ ID2= 2 (0019):		39.68	0.363	13.50	13.73
ID = 3 (0024):		93.89	1.060	13.08	14.56

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0024):		93.89	1.060	13.08	14.56
+ ID2= 2 (0007):		100.92	0.607	14.17	11.96
ID = 1 (0024):		194.81	1.508	13.33	13.21

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0024):		194.81	1.508	13.33	13.21
+ ID2= 2 (0008):		23.99	0.131	13.25	7.45
ID = 3 (0024):		218.80	1.639	13.33	12.58

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

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| ADD HYD  (  0024)|
|   3 +  2 =  1    |          AREA    QPEAK    TPEAK     R.V.
--------------------          (ha)    (cms)    (hrs)     (mm)
        ID1= 3 (  0024):   218.80   1.639    13.33    12.58
      + ID2= 2 (  0009):     6.37   0.040    13.08     7.60
        ================================================
        ID = 1 (  0024):   225.17   1.677    13.33    12.44

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
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| CALIB            |
| NASHYD   (  0011)|   Area    (ha)=  46.28   Curve Number   (CN)= 72.2
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.09   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.30

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                        ---- TRANSFORMED HYETOGRAPH ----
 TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
  hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
0.083    0.00 | 6.167    1.01 |12.250   77.31 | 18.33    1.14
0.167    0.00 | 6.250    1.01 |12.333    9.10 | 18.42    1.14
0.250    0.00 | 6.333    1.14 |12.417    9.10 | 18.50    1.14
0.333    0.69 | 6.417    1.14 |12.500    9.10 | 18.58    1.14
0.417    0.69 | 6.500    1.14 |12.583    9.10 | 18.67    1.14
0.500    0.69 | 6.583    1.14 |12.667    9.10 | 18.75    1.14
0.583    0.69 | 6.667    1.14 |12.750    9.10 | 18.83    1.14
0.667    0.69 | 6.750    1.14 |12.833    4.67 | 18.92    1.14
0.750    0.69 | 6.833    1.14 |12.917    4.67 | 19.00    1.14
0.833    0.69 | 6.917    1.14 |13.000    4.67 | 19.08    1.14
0.917    0.69 | 7.000    1.14 |13.083    4.67 | 19.17    1.14
1.000    0.69 | 7.083    1.14 |13.167    4.67 | 19.25    1.14
1.083    0.69 | 7.167    1.14 |13.250    4.67 | 19.33    1.14
1.167    0.69 | 7.250    1.14 |13.333    3.41 | 19.42    1.14
1.250    0.69 | 7.333    1.39 |13.417    3.41 | 19.50    1.14
1.333    0.69 | 7.417    1.39 |13.500    3.41 | 19.58    1.14
1.417    0.69 | 7.500    1.39 |13.583    3.41 | 19.67    1.14
1.500    0.69 | 7.583    1.39 |13.667    3.41 | 19.75    1.14
1.583    0.69 | 7.667    1.39 |13.750    3.41 | 19.83    1.14
1.667    0.69 | 7.750    1.39 |13.833    2.65 | 19.92    1.14
1.750    0.69 | 7.833    1.39 |13.917    2.65 | 20.00    1.14
1.833    0.69 | 7.917    1.39 |14.000    2.65 | 20.08    1.14
1.917    0.69 | 8.000    1.39 |14.083    2.65 | 20.17    1.14
2.000    0.69 | 8.083    1.39 |14.167    2.65 | 20.25    1.14
2.083    0.69 | 8.167    1.39 |14.250    2.65 | 20.33    0.76
2.167    0.69 | 8.250    1.39 |14.333    1.89 | 20.42    0.76
2.250    0.69 | 8.333    1.64 |14.417    1.89 | 20.50    0.76
2.333    0.82 | 8.417    1.64 |14.500    1.89 | 20.58    0.76
2.417    0.82 | 8.500    1.64 |14.583    1.89 | 20.67    0.76
2.500    0.82 | 8.583    1.64 |14.667    1.89 | 20.75    0.76
2.583    0.82 | 8.667    1.64 |14.750    1.89 | 20.83    0.76
2.667    0.82 | 8.750    1.64 |14.833    1.89 | 20.92    0.76
2.750    0.82 | 8.833    1.77 |14.917    1.89 | 21.00    0.76
2.833    0.82 | 8.917    1.77 |15.000    1.89 | 21.08    0.76
2.917    0.82 | 9.000    1.77 |15.083    1.89 | 21.17    0.76
3.000    0.82 | 9.083    1.77 |15.167    1.89 | 21.25    0.76
3.083    0.82 | 9.167    1.77 |15.250    1.89 | 21.33    0.76
3.167    0.82 | 9.250    1.77 |15.333    1.89 | 21.42    0.76
3.250    0.82 | 9.333    2.02 |15.417    1.89 | 21.50    0.76
3.333    0.82 | 9.417    2.02 |15.500    1.89 | 21.58    0.76
3.417    0.82 | 9.500    2.02 |15.583    1.89 | 21.67    0.76
3.500    0.82 | 9.583    2.02 |15.667    1.89 | 21.75    0.76
3.583    0.82 | 9.667    2.02 |15.750    1.89 | 21.83    0.76
3.667    0.82 | 9.750    2.02 |15.833    1.89 | 21.92    0.76
3.750    0.82 | 9.833    2.27 |15.917    1.89 | 22.00    0.76
3.833    0.82 | 9.917    2.27 |16.000    1.89 | 22.08    0.76
3.917    0.82 |10.000    2.27 |16.083    1.89 | 22.17    0.76
4.000    0.82 |10.083    2.27 |16.167    1.89 | 22.25    0.76
4.083    0.82 |10.167    2.27 |16.250    1.89 | 22.33    0.76
4.167    0.82 |10.250    2.27 |16.333    1.14 | 22.42    0.76
4.250    0.82 |10.333    2.91 |16.417    1.14 | 22.50    0.76
4.333    1.01 |10.417    2.91 |16.500    1.14 | 22.58    0.76
4.417    1.01 |10.500    2.91 |16.583    1.14 | 22.67    0.76
4.500    1.01 |10.583    2.91 |16.667    1.14 | 22.75    0.76
4.583    1.01 |10.667    2.91 |16.750    1.14 | 22.83    0.76
4.667    1.01 |10.750    2.91 |16.833    1.14 | 22.92    0.76
4.750    1.01 |10.833    3.92 |16.917    1.14 | 23.00    0.76
4.833    1.01 |10.917    3.92 |17.000    1.14 | 23.08    0.76
4.917    1.01 |11.000    3.92 |17.083    1.14 | 23.17    0.76
5.000    1.01 |11.083    3.92 |17.167    1.14 | 23.25    0.76
5.083    1.01 |11.167    3.92 |17.250    1.14 | 23.33    0.76
5.167    1.01 |11.250    3.92 |17.333    1.14 | 23.42    0.76
5.250    1.01 |11.333    6.06 |17.417    1.14 | 23.50    0.76
5.333    1.01 |11.417    6.06 |17.500    1.14 | 23.58    0.76
5.417    1.01 |11.500    6.06 |17.583    1.14 | 23.67    0.76
5.500    1.01 |11.583    6.06 |17.667    1.14 | 23.75    0.76
5.583    1.01 |11.667    6.06 |17.750    1.14 | 23.83    0.76
5.667    1.01 |11.750    6.06 |17.833    1.14 | 23.92    0.76
5.750    1.01 |11.833   18.69 |17.917    1.14 | 24.00    0.76
5.833    1.01 |11.917   18.70 |18.000    1.14 | 24.08    0.76
5.917    1.01 |12.000   18.70 |18.083    1.14 | 24.17    0.76
6.000    1.01 |12.083   77.30 |18.167    1.14 | 24.25    0.76
6.083    1.01 |12.167   77.31 |18.250    1.14 |

Unit Hyd Qpeak  (cms)=   5.892

PEAK FLOW       (cms)=   1.799 (i)
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TIME TO PEAK (hrs)= 12.417
RUNOFF VOLUME (mm)= 20.417
TOTAL RAINFALL (mm)= 63.160
RUNOFF COEFFICIENT = 0.323

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0012)	Area (ha)=	1.13	Curve Number (CN)=	67.4	
ID= 1 DT= 5.0 min	Ia (mm)=	7.88	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	0.43			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.01	12.250	77.31	18.33	1.14
0.167	0.00	6.250	1.01	12.333	9.10	18.42	1.14
0.250	0.00	6.333	1.14	12.417	9.10	18.50	1.14
0.333	0.69	6.417	1.14	12.500	9.10	18.58	1.14
0.417	0.69	6.500	1.14	12.583	9.10	18.67	1.14
0.500	0.69	6.583	1.14	12.667	9.10	18.75	1.14
0.583	0.69	6.667	1.14	12.750	9.10	18.83	1.14
0.667	0.69	6.750	1.14	12.833	4.67	18.92	1.14
0.750	0.69	6.833	1.14	12.917	4.67	19.00	1.14
0.833	0.69	6.917	1.14	13.000	4.67	19.08	1.14
0.917	0.69	7.000	1.14	13.083	4.67	19.17	1.14
1.000	0.69	7.083	1.14	13.167	4.67	19.25	1.14
1.083	0.69	7.167	1.14	13.250	4.67	19.33	1.14
1.167	0.69	7.250	1.14	13.333	3.41	19.42	1.14
1.250	0.69	7.333	1.39	13.417	3.41	19.50	1.14
1.333	0.69	7.417	1.39	13.500	3.41	19.58	1.14
1.417	0.69	7.500	1.39	13.583	3.41	19.67	1.14
1.500	0.69	7.583	1.39	13.667	3.41	19.75	1.14
1.583	0.69	7.667	1.39	13.750	3.41	19.83	1.14
1.667	0.69	7.750	1.39	13.833	2.65	19.92	1.14
1.750	0.69	7.833	1.39	13.917	2.65	20.00	1.14
1.833	0.69	7.917	1.39	14.000	2.65	20.08	1.14
1.917	0.69	8.000	1.39	14.083	2.65	20.17	1.14
2.000	0.69	8.083	1.39	14.167	2.65	20.25	1.14
2.083	0.69	8.167	1.39	14.250	2.65	20.33	0.76
2.167	0.69	8.250	1.39	14.333	1.89	20.42	0.76
2.250	0.69	8.333	1.64	14.417	1.89	20.50	0.76
2.333	0.82	8.417	1.64	14.500	1.89	20.58	0.76
2.417	0.82	8.500	1.64	14.583	1.89	20.67	0.76
2.500	0.82	8.583	1.64	14.667	1.89	20.75	0.76
2.583	0.82	8.667	1.64	14.750	1.89	20.83	0.76
2.667	0.82	8.750	1.64	14.833	1.89	20.92	0.76
2.750	0.82	8.833	1.77	14.917	1.89	21.00	0.76
2.833	0.82	8.917	1.77	15.000	1.89	21.08	0.76
2.917	0.82	9.000	1.77	15.083	1.89	21.17	0.76
3.000	0.82	9.083	1.77	15.167	1.89	21.25	0.76
3.083	0.82	9.167	1.77	15.250	1.89	21.33	0.76
3.167	0.82	9.250	1.77	15.333	1.89	21.42	0.76
3.250	0.82	9.333	2.02	15.417	1.89	21.50	0.76
3.333	0.82	9.417	2.02	15.500	1.89	21.58	0.76
3.417	0.82	9.500	2.02	15.583	1.89	21.67	0.76
3.500	0.82	9.583	2.02	15.667	1.89	21.75	0.76
3.583	0.82	9.667	2.02	15.750	1.89	21.83	0.76
3.667	0.82	9.750	2.02	15.833	1.89	21.92	0.76
3.750	0.82	9.833	2.27	15.917	1.89	22.00	0.76
3.833	0.82	9.917	2.27	16.000	1.89	22.08	0.76
3.917	0.82	10.000	2.27	16.083	1.89	22.17	0.76
4.000	0.82	10.083	2.27	16.167	1.89	22.25	0.76
4.083	0.82	10.167	2.27	16.250	1.89	22.33	0.76
4.167	0.82	10.250	2.27	16.333	1.14	22.42	0.76
4.250	0.82	10.333	2.91	16.417	1.14	22.50	0.76
4.333	1.01	10.417	2.91	16.500	1.14	22.58	0.76
4.417	1.01	10.500	2.91	16.583	1.14	22.67	0.76
4.500	1.01	10.583	2.91	16.667	1.14	22.75	0.76
4.583	1.01	10.667	2.91	16.750	1.14	22.83	0.76
4.667	1.01	10.750	2.91	16.833	1.14	22.92	0.76
4.750	1.01	10.833	3.92	16.917	1.14	23.00	0.76
4.833	1.01	10.917	3.92	17.000	1.14	23.08	0.76
4.917	1.01	11.000	3.92	17.083	1.14	23.17	0.76
5.000	1.01	11.083	3.92	17.167	1.14	23.25	0.76
5.083	1.01	11.167	3.92	17.250	1.14	23.33	0.76
5.167	1.01	11.250	3.92	17.333	1.14	23.42	0.76
5.250	1.01	11.333	6.06	17.417	1.14	23.50	0.76
5.333	1.01	11.417	6.06	17.500	1.14	23.58	0.76
5.417	1.01	11.500	6.06	17.583	1.14	23.67	0.76
5.500	1.01	11.583	6.06	17.667	1.14	23.75	0.76
5.583	1.01	11.667	6.06	17.750	1.14	23.83	0.76
5.667	1.01	11.750	6.06	17.833	1.14	23.92	0.76
5.750	1.01	11.833	18.69	17.917	1.14	24.00	0.76
5.833	1.01	11.917	18.70	18.000	1.14	24.08	0.76
5.917	1.01	12.000	18.70	18.083	1.14	24.17	0.76
6.000	1.01	12.083	77.30	18.167	1.14	24.25	0.76
6.083	1.01	12.167	77.31	18.250	1.14		

Unit Hyd Qpeak (cms)= 0.100

PEAK FLOW (cms)= 0.028 (i)
TIME TO PEAK (hrs)= 12.583
RUNOFF VOLUME (mm)= 17.131
TOTAL RAINFALL (mm)= 63.160

RUNOFF COEFFICIENT = 0.271

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB NASHYD (0041) ID= 1 DT= 5.0 min	Area (ha)= 0.59 Curve Number (CN)= 71.5 Ia (mm)= 4.75 # of Linear Res.(N)= 3.00 U.H. Tp(hrs)= 0.53

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.01	12.250	77.31	18.33	1.14
0.167	0.00	6.250	1.01	12.333	9.10	18.42	1.14
0.250	0.00	6.333	1.14	12.417	9.10	18.50	1.14
0.333	0.69	6.417	1.14	12.500	9.10	18.58	1.14
0.417	0.69	6.500	1.14	12.583	9.10	18.67	1.14
0.500	0.69	6.583	1.14	12.667	9.10	18.75	1.14
0.583	0.69	6.667	1.14	12.750	9.10	18.83	1.14
0.667	0.69	6.750	1.14	12.833	4.67	18.92	1.14
0.750	0.69	6.833	1.14	12.917	4.67	19.00	1.14
0.833	0.69	6.917	1.14	13.000	4.67	19.08	1.14
0.917	0.69	7.000	1.14	13.083	4.67	19.17	1.14
1.000	0.69	7.083	1.14	13.167	4.67	19.25	1.14
1.083	0.69	7.167	1.14	13.250	4.67	19.33	1.14
1.167	0.69	7.250	1.14	13.333	3.41	19.42	1.14
1.250	0.69	7.333	1.39	13.417	3.41	19.50	1.14
1.333	0.69	7.417	1.39	13.500	3.41	19.58	1.14
1.417	0.69	7.500	1.39	13.583	3.41	19.67	1.14
1.500	0.69	7.583	1.39	13.667	3.41	19.75	1.14
1.583	0.69	7.667	1.39	13.750	3.41	19.83	1.14
1.667	0.69	7.750	1.39	13.833	2.65	19.92	1.14
1.750	0.69	7.833	1.39	13.917	2.65	20.00	1.14
1.833	0.69	7.917	1.39	14.000	2.65	20.08	1.14
1.917	0.69	8.000	1.39	14.083	2.65	20.17	1.14
2.000	0.69	8.083	1.39	14.167	2.65	20.25	1.14
2.083	0.69	8.167	1.39	14.250	2.65	20.33	0.76
2.167	0.69	8.250	1.39	14.333	1.89	20.42	0.76
2.250	0.69	8.333	1.64	14.417	1.89	20.50	0.76
2.333	0.82	8.417	1.64	14.500	1.89	20.58	0.76
2.417	0.82	8.500	1.64	14.583	1.89	20.67	0.76
2.500	0.82	8.583	1.64	14.667	1.89	20.75	0.76
2.583	0.82	8.667	1.64	14.750	1.89	20.83	0.76
2.667	0.82	8.750	1.64	14.833	1.89	20.92	0.76
2.750	0.82	8.833	1.77	14.917	1.89	21.00	0.76
2.833	0.82	8.917	1.77	15.000	1.89	21.08	0.76
2.917	0.82	9.000	1.77	15.083	1.89	21.17	0.76
3.000	0.82	9.083	1.77	15.167	1.89	21.25	0.76
3.083	0.82	9.167	1.77	15.250	1.89	21.33	0.76
3.167	0.82	9.250	1.77	15.333	1.89	21.42	0.76
3.250	0.82	9.333	2.02	15.417	1.89	21.50	0.76
3.333	0.82	9.417	2.02	15.500	1.89	21.58	0.76
3.417	0.82	9.500	2.02	15.583	1.89	21.67	0.76
3.500	0.82	9.583	2.02	15.667	1.89	21.75	0.76
3.583	0.82	9.667	2.02	15.750	1.89	21.83	0.76
3.667	0.82	9.750	2.02	15.833	1.89	21.92	0.76
3.750	0.82	9.833	2.27	15.917	1.89	22.00	0.76
3.833	0.82	9.917	2.27	16.000	1.89	22.08	0.76
3.917	0.82	10.000	2.27	16.083	1.89	22.17	0.76
4.000	0.82	10.083	2.27	16.167	1.89	22.25	0.76
4.083	0.82	10.167	2.27	16.250	1.89	22.33	0.76
4.167	0.82	10.250	2.27	16.333	1.14	22.42	0.76
4.250	0.82	10.333	2.91	16.417	1.14	22.50	0.76
4.333	1.01	10.417	2.91	16.500	1.14	22.58	0.76
4.417	1.01	10.500	2.91	16.583	1.14	22.67	0.76
4.500	1.01	10.583	2.91	16.667	1.14	22.75	0.76
4.583	1.01	10.667	2.91	16.750	1.14	22.83	0.76
4.667	1.01	10.750	2.91	16.833	1.14	22.92	0.76
4.750	1.01	10.833	3.92	16.917	1.14	23.00	0.76
4.833	1.01	10.917	3.92	17.000	1.14	23.08	0.76
4.917	1.01	11.000	3.92	17.083	1.14	23.17	0.76
5.000	1.01	11.083	3.92	17.167	1.14	23.25	0.76
5.083	1.01	11.167	3.92	17.250	1.14	23.33	0.76
5.167	1.01	11.250	3.92	17.333	1.14	23.42	0.76
5.250	1.01	11.333	6.06	17.417	1.14	23.50	0.76
5.333	1.01	11.417	6.06	17.500	1.14	23.58	0.76
5.417	1.01	11.500	6.06	17.583	1.14	23.67	0.76
5.500	1.01	11.583	6.06	17.667	1.14	23.75	0.76
5.583	1.01	11.667	6.06	17.750	1.14	23.83	0.76
5.667	1.01	11.750	6.06	17.833	1.14	23.92	0.76
5.750	1.01	11.833	18.69	17.917	1.14	24.00	0.76
5.833	1.01	11.917	18.70	18.000	1.14	24.08	0.76
5.917	1.01	12.000	18.70	18.083	1.14	24.17	0.76
6.000	1.01	12.083	77.30	18.167	1.14	24.25	0.76
6.083	1.01	12.167	77.31	18.250	1.14		

Unit Hyd Qpeak (cms)= 0.043

PEAK FLOW (cms)= 0.016 (i)
TIME TO PEAK (hrs)= 12.667
RUNOFF VOLUME (mm)= 21.340
TOTAL RAINFALL (mm)= 63.160
RUNOFF COEFFICIENT = 0.338

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB								
NASHYD (0028)	Area (ha)= 1.38	Curve Number (CN)= 64.1						
ID= 1 DT= 5.0 min	Ia (mm)= 8.51	# of Linear Res.(N)= 3.00						
	U.H. Tp(hrs)= 0.39							

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.01	12.250	77.31	18.33	1.14
0.167	0.00	6.250	1.01	12.333	9.10	18.42	1.14
0.250	0.00	6.333	1.14	12.417	9.10	18.50	1.14
0.333	0.69	6.417	1.14	12.500	9.10	18.58	1.14
0.417	0.69	6.500	1.14	12.583	9.10	18.67	1.14
0.500	0.69	6.583	1.14	12.667	9.10	18.75	1.14
0.583	0.69	6.667	1.14	12.750	9.10	18.83	1.14
0.667	0.69	6.750	1.14	12.833	4.67	18.92	1.14
0.750	0.69	6.833	1.14	12.917	4.67	19.00	1.14
0.833	0.69	6.917	1.14	13.000	4.67	19.08	1.14
0.917	0.69	7.000	1.14	13.083	4.67	19.17	1.14
1.000	0.69	7.083	1.14	13.167	4.67	19.25	1.14
1.083	0.69	7.167	1.14	13.250	4.67	19.33	1.14
1.167	0.69	7.250	1.14	13.333	3.41	19.42	1.14
1.250	0.69	7.333	1.39	13.417	3.41	19.50	1.14
1.333	0.69	7.417	1.39	13.500	3.41	19.58	1.14
1.417	0.69	7.500	1.39	13.583	3.41	19.67	1.14
1.500	0.69	7.583	1.39	13.667	3.41	19.75	1.14
1.583	0.69	7.667	1.39	13.750	3.41	19.83	1.14
1.667	0.69	7.750	1.39	13.833	2.65	19.92	1.14
1.750	0.69	7.833	1.39	13.917	2.65	20.00	1.14
1.833	0.69	7.917	1.39	14.000	2.65	20.08	1.14
1.917	0.69	8.000	1.39	14.083	2.65	20.17	1.14
2.000	0.69	8.083	1.39	14.167	2.65	20.25	1.14
2.083	0.69	8.167	1.39	14.250	2.65	20.33	0.76
2.167	0.69	8.250	1.39	14.333	1.89	20.42	0.76
2.250	0.69	8.333	1.64	14.417	1.89	20.50	0.76
2.333	0.82	8.417	1.64	14.500	1.89	20.58	0.76
2.417	0.82	8.500	1.64	14.583	1.89	20.67	0.76
2.500	0.82	8.583	1.64	14.667	1.89	20.75	0.76
2.583	0.82	8.667	1.64	14.750	1.89	20.83	0.76
2.667	0.82	8.750	1.64	14.833	1.89	20.92	0.76
2.750	0.82	8.833	1.77	14.917	1.89	21.00	0.76
2.833	0.82	8.917	1.77	15.000	1.89	21.08	0.76
2.917	0.82	9.000	1.77	15.083	1.89	21.17	0.76
3.000	0.82	9.083	1.77	15.167	1.89	21.25	0.76
3.083	0.82	9.167	1.77	15.250	1.89	21.33	0.76
3.167	0.82	9.250	1.77	15.333	1.89	21.42	0.76
3.250	0.82	9.333	2.02	15.417	1.89	21.50	0.76
3.333	0.82	9.417	2.02	15.500	1.89	21.58	0.76
3.417	0.82	9.500	2.02	15.583	1.89	21.67	0.76
3.500	0.82	9.583	2.02	15.667	1.89	21.75	0.76
3.583	0.82	9.667	2.02	15.750	1.89	21.83	0.76
3.667	0.82	9.750	2.02	15.833	1.89	21.92	0.76
3.750	0.82	9.833	2.27	15.917	1.89	22.00	0.76
3.833	0.82	9.917	2.27	16.000	1.89	22.08	0.76
3.917	0.82	10.000	2.27	16.083	1.89	22.17	0.76
4.000	0.82	10.083	2.27	16.167	1.89	22.25	0.76
4.083	0.82	10.167	2.27	16.250	1.89	22.33	0.76
4.167	0.82	10.250	2.27	16.333	1.14	22.42	0.76
4.250	0.82	10.333	2.91	16.417	1.14	22.50	0.76
4.333	1.01	10.417	2.91	16.500	1.14	22.58	0.76
4.417	1.01	10.500	2.91	16.583	1.14	22.67	0.76
4.500	1.01	10.583	2.91	16.667	1.14	22.75	0.76
4.583	1.01	10.667	2.91	16.750	1.14	22.83	0.76
4.667	1.01	10.750	2.91	16.833	1.14	22.92	0.76
4.750	1.01	10.833	3.92	16.917	1.14	23.00	0.76
4.833	1.01	10.917	3.92	17.000	1.14	23.08	0.76
4.917	1.01	11.000	3.92	17.083	1.14	23.17	0.76
5.000	1.01	11.083	3.92	17.167	1.14	23.25	0.76
5.083	1.01	11.167	3.92	17.250	1.14	23.33	0.76
5.167	1.01	11.250	3.92	17.333	1.14	23.42	0.76
5.250	1.01	11.333	6.06	17.417	1.14	23.50	0.76
5.333	1.01	11.417	6.06	17.500	1.14	23.58	0.76
5.417	1.01	11.500	6.06	17.583	1.14	23.67	0.76
5.500	1.01	11.583	6.06	17.667	1.14	23.75	0.76
5.583	1.01	11.667	6.06	17.750	1.14	23.83	0.76
5.667	1.01	11.750	6.06	17.833	1.14	23.92	0.76
5.750	1.01	11.833	18.69	17.917	1.14	24.00	0.76
5.833	1.01	11.917	18.70	18.000	1.14	24.08	0.76
5.917	1.01	12.000	18.70	18.083	1.14	24.17	0.76
6.000	1.01	12.083	77.30	18.167	1.14	24.25	0.76
6.083	1.01	12.167	77.31	18.250	1.14		

Unit Hyd Qpeak (cms)= 0.135

PEAK FLOW (cms)= 0.032 (i)
TIME TO PEAK (hrs)= 12.500
RUNOFF VOLUME (mm)= 15.184
TOTAL RAINFALL (mm)= 63.160
RUNOFF COEFFICIENT = 0.240

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	
STANDHYD (0044)	Area (ha)= 1.62
ID= 1 DT= 5.0 min	Total Imp(%)= 48.77 Dir. Conn.(%)= 30.86

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.79	0.83
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	1.40
Length	(m)=	103.92	400.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.01	12.250	77.31	18.33	1.14
0.167	0.00	6.250	1.01	12.333	9.10	18.42	1.14
0.250	0.00	6.333	1.14	12.417	9.10	18.50	1.14
0.333	0.69	6.417	1.14	12.500	9.10	18.58	1.14
0.417	0.69	6.500	1.14	12.583	9.10	18.67	1.14
0.500	0.69	6.583	1.14	12.667	9.10	18.75	1.14
0.583	0.69	6.667	1.14	12.750	9.10	18.83	1.14
0.667	0.69	6.750	1.14	12.833	4.67	18.92	1.14
0.750	0.69	6.833	1.14	12.917	4.67	19.00	1.14
0.833	0.69	6.917	1.14	13.000	4.67	19.08	1.14
0.917	0.69	7.000	1.14	13.083	4.67	19.17	1.14
1.000	0.69	7.083	1.14	13.167	4.67	19.25	1.14
1.083	0.69	7.167	1.14	13.250	4.67	19.33	1.14
1.167	0.69	7.250	1.14	13.333	3.41	19.42	1.14
1.250	0.69	7.333	1.39	13.417	3.41	19.50	1.14
1.333	0.69	7.417	1.39	13.500	3.41	19.58	1.14
1.417	0.69	7.500	1.39	13.583	3.41	19.67	1.14
1.500	0.69	7.583	1.39	13.667	3.41	19.75	1.14
1.583	0.69	7.667	1.39	13.750	3.41	19.83	1.14
1.667	0.69	7.750	1.39	13.833	2.65	19.92	1.14
1.750	0.69	7.833	1.39	13.917	2.65	20.00	1.14
1.833	0.69	7.917	1.39	14.000	2.65	20.08	1.14
1.917	0.69	8.000	1.39	14.083	2.65	20.17	1.14
2.000	0.69	8.083	1.39	14.167	2.65	20.25	1.14
2.083	0.69	8.167	1.39	14.250	2.65	20.33	0.76
2.167	0.69	8.250	1.39	14.333	1.89	20.42	0.76
2.250	0.69	8.333	1.64	14.417	1.89	20.50	0.76
2.333	0.82	8.417	1.64	14.500	1.89	20.58	0.76
2.417	0.82	8.500	1.64	14.583	1.89	20.67	0.76
2.500	0.82	8.583	1.64	14.667	1.89	20.75	0.76
2.583	0.82	8.667	1.64	14.750	1.89	20.83	0.76
2.667	0.82	8.750	1.64	14.833	1.89	20.92	0.76
2.750	0.82	8.833	1.77	14.917	1.89	21.00	0.76
2.833	0.82	8.917	1.77	15.000	1.89	21.08	0.76
2.917	0.82	9.000	1.77	15.083	1.89	21.17	0.76
3.000	0.82	9.083	1.77	15.167	1.89	21.25	0.76
3.083	0.82	9.167	1.77	15.250	1.89	21.33	0.76
3.167	0.82	9.250	1.77	15.333	1.89	21.42	0.76
3.250	0.82	9.333	2.02	15.417	1.89	21.50	0.76
3.333	0.82	9.417	2.02	15.500	1.89	21.58	0.76
3.417	0.82	9.500	2.02	15.583	1.89	21.67	0.76
3.500	0.82	9.583	2.02	15.667	1.89	21.75	0.76
3.583	0.82	9.667	2.02	15.750	1.89	21.83	0.76
3.667	0.82	9.750	2.02	15.833	1.89	21.92	0.76
3.750	0.82	9.833	2.27	15.917	1.89	22.00	0.76
3.833	0.82	9.917	2.27	16.000	1.89	22.08	0.76
3.917	0.82	10.000	2.27	16.083	1.89	22.17	0.76
4.000	0.82	10.083	2.27	16.167	1.89	22.25	0.76
4.083	0.82	10.167	2.27	16.250	1.89	22.33	0.76
4.167	0.82	10.250	2.27	16.333	1.14	22.42	0.76
4.250	0.82	10.333	2.91	16.417	1.14	22.50	0.76
4.333	1.01	10.417	2.91	16.500	1.14	22.58	0.76
4.417	1.01	10.500	2.91	16.583	1.14	22.67	0.76
4.500	1.01	10.583	2.91	16.667	1.14	22.75	0.76
4.583	1.01	10.667	2.91	16.750	1.14	22.83	0.76
4.667	1.01	10.750	2.91	16.833	1.14	22.92	0.76
4.750	1.01	10.833	3.92	16.917	1.14	23.00	0.76
4.833	1.01	10.917	3.92	17.000	1.14	23.08	0.76
4.917	1.01	11.000	3.92	17.083	1.14	23.17	0.76
5.000	1.01	11.083	3.92	17.167	1.14	23.25	0.76
5.083	1.01	11.167	3.92	17.250	1.14	23.33	0.76
5.167	1.01	11.250	3.92	17.333	1.14	23.42	0.76
5.250	1.01	11.333	6.06	17.417	1.14	23.50	0.76
5.333	1.01	11.417	6.06	17.500	1.14	23.58	0.76
5.417	1.01	11.500	6.06	17.583	1.14	23.67	0.76
5.500	1.01	11.583	6.06	17.667	1.14	23.75	0.76
5.583	1.01	11.667	6.06	17.750	1.14	23.83	0.76
5.667	1.01	11.750	6.06	17.833	1.14	23.92	0.76
5.750	1.01	11.833	18.69	17.917	1.14	24.00	0.76
5.833	1.01	11.917	18.70	18.000	1.14	24.08	0.76
5.917	1.01	12.000	18.70	18.083	1.14	24.17	0.76
6.000	1.01	12.083	77.30	18.167	1.14	24.25	0.76
6.083	1.01	12.167	77.31	18.250	1.14		

Max.Eff.Inten.(mm/hr)=		77.31	16.61	
over (min)		5.00	70.00	
Storage Coeff. (min)=		3.57 (ii)	67.69 (ii)	
Unit Hyd. Tpeak (min)=		5.00	70.00	
Unit Hyd. peak (cms)=		0.26	0.02	
				TOTALS
PEAK FLOW	(cms)=	0.11	0.02	0.111 (iii)
TIME TO PEAK	(hrs)=	12.25	13.33	12.25
RUNOFF VOLUME	(mm)=	62.16	24.55	36.13

TOTAL RAINFALL (mm)=	63.16	63.16	63.16
RUNOFF COEFFICIENT =	0.98	0.39	0.57

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB		
STANDHYD (0043)	Area (ha)=	0.13
ID= 1 DT= 5.0 min	Total Imp(%)=	30.77 Dir. Conn.(%)= 7.69

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	0.04	0.09
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	0.50	0.50
Length (m)=	29.44	70.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.01	12.250	77.31	18.33	1.14
0.167	0.00	6.250	1.01	12.333	9.10	18.42	1.14
0.250	0.00	6.333	1.14	12.417	9.10	18.50	1.14
0.333	0.69	6.417	1.14	12.500	9.10	18.58	1.14
0.417	0.69	6.500	1.14	12.583	9.10	18.67	1.14
0.500	0.69	6.583	1.14	12.667	9.10	18.75	1.14
0.583	0.69	6.667	1.14	12.750	9.10	18.83	1.14
0.667	0.69	6.750	1.14	12.833	4.67	18.92	1.14
0.750	0.69	6.833	1.14	12.917	4.67	19.00	1.14
0.833	0.69	6.917	1.14	13.000	4.67	19.08	1.14
0.917	0.69	7.000	1.14	13.083	4.67	19.17	1.14
1.000	0.69	7.083	1.14	13.167	4.67	19.25	1.14
1.083	0.69	7.167	1.14	13.250	4.67	19.33	1.14
1.167	0.69	7.250	1.14	13.333	3.41	19.42	1.14
1.250	0.69	7.333	1.39	13.417	3.41	19.50	1.14
1.333	0.69	7.417	1.39	13.500	3.41	19.58	1.14
1.417	0.69	7.500	1.39	13.583	3.41	19.67	1.14
1.500	0.69	7.583	1.39	13.667	3.41	19.75	1.14
1.583	0.69	7.667	1.39	13.750	3.41	19.83	1.14
1.667	0.69	7.750	1.39	13.833	2.65	19.92	1.14
1.750	0.69	7.833	1.39	13.917	2.65	20.00	1.14
1.833	0.69	7.917	1.39	14.000	2.65	20.08	1.14
1.917	0.69	8.000	1.39	14.083	2.65	20.17	1.14
2.000	0.69	8.083	1.39	14.167	2.65	20.25	1.14
2.083	0.69	8.167	1.39	14.250	2.65	20.33	0.76
2.167	0.69	8.250	1.39	14.333	1.89	20.42	0.76
2.250	0.69	8.333	1.64	14.417	1.89	20.50	0.76
2.333	0.82	8.417	1.64	14.500	1.89	20.58	0.76
2.417	0.82	8.500	1.64	14.583	1.89	20.67	0.76
2.500	0.82	8.583	1.64	14.667	1.89	20.75	0.76
2.583	0.82	8.667	1.64	14.750	1.89	20.83	0.76
2.667	0.82	8.750	1.64	14.833	1.89	20.92	0.76
2.750	0.82	8.833	1.77	14.917	1.89	21.00	0.76
2.833	0.82	8.917	1.77	15.000	1.89	21.08	0.76
2.917	0.82	9.000	1.77	15.083	1.89	21.17	0.76
3.000	0.82	9.083	1.77	15.167	1.89	21.25	0.76
3.083	0.82	9.167	1.77	15.250	1.89	21.33	0.76
3.167	0.82	9.250	1.77	15.333	1.89	21.42	0.76
3.250	0.82	9.333	2.02	15.417	1.89	21.50	0.76
3.333	0.82	9.417	2.02	15.500	1.89	21.58	0.76
3.417	0.82	9.500	2.02	15.583	1.89	21.67	0.76
3.500	0.82	9.583	2.02	15.667	1.89	21.75	0.76
3.583	0.82	9.667	2.02	15.750	1.89	21.83	0.76
3.667	0.82	9.750	2.02	15.833	1.89	21.92	0.76
3.750	0.82	9.833	2.27	15.917	1.89	22.00	0.76
3.833	0.82	9.917	2.27	16.000	1.89	22.08	0.76
3.917	0.82	10.000	2.27	16.083	1.89	22.17	0.76
4.000	0.82	10.083	2.27	16.167	1.89	22.25	0.76
4.083	0.82	10.167	2.27	16.250	1.89	22.33	0.76
4.167	0.82	10.250	2.27	16.333	1.14	22.42	0.76
4.250	0.82	10.333	2.91	16.417	1.14	22.50	0.76
4.333	1.01	10.417	2.91	16.500	1.14	22.58	0.76
4.417	1.01	10.500	2.91	16.583	1.14	22.67	0.76
4.500	1.01	10.583	2.91	16.667	1.14	22.75	0.76
4.583	1.01	10.667	2.91	16.750	1.14	22.83	0.76
4.667	1.01	10.750	2.91	16.833	1.14	22.92	0.76
4.750	1.01	10.833	3.92	16.917	1.14	23.00	0.76
4.833	1.01	10.917	3.92	17.000	1.14	23.08	0.76
4.917	1.01	11.000	3.92	17.083	1.14	23.17	0.76
5.000	1.01	11.083	3.92	17.167	1.14	23.25	0.76
5.083	1.01	11.167	3.92	17.250	1.14	23.33	0.76
5.167	1.01	11.250	3.92	17.333	1.14	23.42	0.76
5.250	1.01	11.333	6.06	17.417	1.14	23.50	0.76
5.333	1.01	11.417	6.06	17.500	1.14	23.58	0.76
5.417	1.01	11.500	6.06	17.583	1.14	23.67	0.76
5.500	1.01	11.583	6.06	17.667	1.14	23.75	0.76
5.583	1.01	11.667	6.06	17.750	1.14	23.83	0.76
5.667	1.01	11.750	6.06	17.833	1.14	23.92	0.76
5.750	1.01	11.833	18.69	17.917	1.14	24.00	0.76
5.833	1.01	11.917	18.70	18.000	1.14	24.08	0.76

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               5.917    1.01 |12.000   18.70 |18.083    1.14 | 24.17    0.76
               6.000    1.01 |12.083   77.30 |18.167    1.14 | 24.25    0.76
               6.083    1.01 |12.167   77.31 |18.250    1.14 |

     Max.Eff.Inten.(mm/hr)=      77.31        29.83
               over (min)         5.00        30.00
     Storage Coeff.  (min)=       1.67 (ii)   25.95 (ii)
     Unit Hyd. Tpeak (min)=       5.00        30.00
     Unit Hyd. peak  (cms)=       0.32         0.04
                                                          *TOTALS*
     PEAK FLOW       (cms)=       0.00         0.00          0.005 (iii)
     TIME TO PEAK    (hrs)=      12.25        12.58          12.58
     RUNOFF VOLUME    (mm)=      62.16        24.34          27.13
     TOTAL RAINFALL   (mm)=      63.16        63.16          63.16
     RUNOFF COEFFICIENT   =       0.98         0.39           0.43

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
              YOU SHOULD CONSIDER SPLITTING THE AREA.

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  69.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0023)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 1 (  0011):    46.28   1.799    12.42    20.42
      + ID2= 2 (  0012):     1.13   0.028    12.58    17.13
        ====================================================
        ID = 3 (  0023):    47.41   1.824    12.42    20.34

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0023)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 3 (  0023):    47.41   1.824    12.42    20.34
      + ID2= 2 (  0028):     1.38   0.032    12.50    15.18
        ====================================================
        ID = 1 (  0023):    48.79   1.854    12.42    20.19

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

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--------------------
| ADD HYD  (  0023)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 1 (  0023):    48.79   1.854    12.42    20.19
      + ID2= 2 (  0041):     0.59   0.016    12.67    21.34
        ====================================================
        ID = 3 (  0023):    49.38   1.867    12.42    20.21

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
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--------------------
| ADD HYD  (  0023)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 3 (  0023):    49.38   1.867    12.42    20.21
      + ID2= 2 (  0043):     0.13   0.005    12.58    27.13
        ====================================================
        ID = 1 (  0023):    49.51   1.870    12.42    20.23

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0023)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 1 (  0023):    49.51   1.870    12.42    20.23
      + ID2= 2 (  0044):     1.62   0.111    12.25    36.13
        ====================================================
        ID = 3 (  0023):    51.13   1.896    12.42    20.73

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0025)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 1 (  0023):    51.13   1.896    12.42    20.73
      + ID2= 2 (  0024):   225.17   1.677    13.33    12.44
        ====================================================
        ID = 3 (  0025):   276.30   2.775    12.50    13.97

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
================================================================================
```

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       V    V   I    SSSSS  U   U    A    L             (v 6.2.2020)
       V    V   I    SS     U   U   A A   L
        V  V    I     SS    U   U  AAAAA  L
        V  V    I      SS   U   U  A   A  L
         VV     I    SSSSS  UUUUU  A   A  LLLLL

        OOO   TTTTT  TTTTT  H   H  Y   Y  M   M   OOO    TM
       O   O    T      T    H   H   Y Y   MM MM  O   O
       O   O    T      T    H   H    Y    M   M  O   O
        OOO     T      T    H   H    Y    M   M   OOO
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                  *****  D E T A I L E D   O U T P U T *****


  Input   filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat

  Output  filename:
C:\Users\msimon\AppData\Local\Civica\VH5\a122c840-259d-4b92-8a43-b1e7a592bdea\7c64c
5b0-a7c5-4776-868f-2eb8ec438986\scena
  Summary filename:
C:\Users\msimon\AppData\Local\Civica\VH5\a122c840-259d-4b92-8a43-b1e7a592bdea\7c64c
5b0-a7c5-4776-868f-2eb8ec438986\scena


DATE: 07-15-2026                          TIME: 03:17:53

USER:



COMMENTS: _____________________________________________________________


--------------------------------------------------------------------------------
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  ***********************************************
  ** SIMULATION : H - 5-year SCS                **
  ***********************************************


--------------------
|    READ STORM    |    Filename: C:\Users\msimon\AppD
|                  |              ata\Local\Temp\
|                  |              2578c1bc-683b-4555-9960-7d3c657f7fff\39aaeae0
```

```
| Ptotal= 83.51 mm |    Comments: 5yr 24hr 15min SCS Type II (MTO) - 15% I
--------------------
```

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.00	0.00	6.25	1.50	12.50	12.03	18.75	1.50
0.25	0.92	6.50	1.50	12.75	6.18	19.00	1.50
0.50	0.92	6.75	1.50	13.00	6.18	19.25	1.50
0.75	0.92	7.00	1.50	13.25	4.51	19.50	1.50
1.00	0.92	7.25	1.84	13.50	4.51	19.75	1.50
1.25	0.92	7.50	1.84	13.75	3.51	20.00	1.50
1.50	0.92	7.75	1.84	14.00	3.51	20.25	1.00
1.75	0.92	8.00	1.84	14.25	2.51	20.50	1.00
2.00	0.92	8.25	2.17	14.50	2.51	20.75	1.00
2.25	1.09	8.50	2.17	14.75	2.51	21.00	1.00
2.50	1.09	8.75	2.34	15.00	2.51	21.25	1.00
2.75	1.09	9.00	2.34	15.25	2.51	21.50	1.00
3.00	1.09	9.25	2.67	15.50	2.51	21.75	1.00
3.25	1.09	9.50	2.67	15.75	2.51	22.00	1.00
3.50	1.09	9.75	3.01	16.00	2.51	22.25	1.00
3.75	1.09	10.00	3.01	16.25	1.50	22.50	1.00
4.00	1.09	10.25	3.84	16.50	1.50	22.75	1.00
4.25	1.34	10.50	3.84	16.75	1.50	23.00	1.00
4.50	1.34	10.75	5.18	17.00	1.50	23.25	1.00
4.75	1.34	11.00	5.18	17.25	1.50	23.50	1.00
5.00	1.34	11.25	8.02	17.50	1.50	23.75	1.00
5.25	1.34	11.50	8.02	17.75	1.50	24.00	1.00
5.50	1.34	11.75	24.72	18.00	1.50		
5.75	1.34	12.00	102.22	18.25	1.50		
6.00	1.34	12.25	12.03	18.50	1.50		

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| CALIB            |
| NASHYD   (  0007)|   Area    (ha)= 100.92   Curve Number   (CN)= 55.9
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.89   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   1.70

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.
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---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.34	12.250	102.22	18.33	1.50
0.167	0.00	6.250	1.34	12.333	12.04	18.42	1.50
0.250	0.00	6.333	1.50	12.417	12.03	18.50	1.50
0.333	0.92	6.417	1.50	12.500	12.03	18.58	1.50
0.417	0.92	6.500	1.50	12.583	12.03	18.67	1.50
0.500	0.92	6.583	1.50	12.667	12.03	18.75	1.50

0.583	0.92	6.667	1.50	12.750	12.03	18.83	1.50
0.667	0.92	6.750	1.50	12.833	6.18	18.92	1.50
0.750	0.92	6.833	1.50	12.917	6.18	19.00	1.50
0.833	0.92	6.917	1.50	13.000	6.18	19.08	1.50
0.917	0.92	7.000	1.50	13.083	6.18	19.17	1.50
1.000	0.92	7.083	1.50	13.167	6.18	19.25	1.50
1.083	0.92	7.167	1.50	13.250	6.18	19.33	1.50
1.167	0.92	7.250	1.50	13.333	4.51	19.42	1.50
1.250	0.92	7.333	1.84	13.417	4.51	19.50	1.50
1.333	0.92	7.417	1.84	13.500	4.51	19.58	1.50
1.417	0.92	7.500	1.84	13.583	4.51	19.67	1.50
1.500	0.92	7.583	1.84	13.667	4.51	19.75	1.50
1.583	0.92	7.667	1.84	13.750	4.51	19.83	1.50
1.667	0.92	7.750	1.84	13.833	3.51	19.92	1.50
1.750	0.92	7.833	1.84	13.917	3.51	20.00	1.50
1.833	0.92	7.917	1.84	14.000	3.51	20.08	1.50
1.917	0.92	8.000	1.84	14.083	3.51	20.17	1.50
2.000	0.92	8.083	1.84	14.167	3.51	20.25	1.50
2.083	0.92	8.167	1.84	14.250	3.51	20.33	1.00
2.167	0.92	8.250	1.84	14.333	2.51	20.42	1.00
2.250	0.92	8.333	2.17	14.417	2.51	20.50	1.00
2.333	1.09	8.417	2.17	14.500	2.51	20.58	1.00
2.417	1.09	8.500	2.17	14.583	2.51	20.67	1.00
2.500	1.09	8.583	2.17	14.667	2.51	20.75	1.00
2.583	1.09	8.667	2.17	14.750	2.51	20.83	1.00
2.667	1.09	8.750	2.17	14.833	2.51	20.92	1.00
2.750	1.09	8.833	2.34	14.917	2.51	21.00	1.00
2.833	1.09	8.917	2.34	15.000	2.51	21.08	1.00
2.917	1.09	9.000	2.34	15.083	2.51	21.17	1.00
3.000	1.09	9.083	2.34	15.167	2.51	21.25	1.00
3.083	1.09	9.167	2.34	15.250	2.51	21.33	1.00
3.167	1.09	9.250	2.34	15.333	2.51	21.42	1.00
3.250	1.09	9.333	2.67	15.417	2.51	21.50	1.00
3.333	1.09	9.417	2.67	15.500	2.51	21.58	1.00
3.417	1.09	9.500	2.67	15.583	2.51	21.67	1.00
3.500	1.09	9.583	2.67	15.667	2.51	21.75	1.00
3.583	1.09	9.667	2.67	15.750	2.51	21.83	1.00
3.667	1.09	9.750	2.67	15.833	2.51	21.92	1.00
3.750	1.09	9.833	3.01	15.917	2.51	22.00	1.00
3.833	1.09	9.917	3.01	16.000	2.51	22.08	1.00
3.917	1.09	10.000	3.01	16.083	2.51	22.17	1.00
4.000	1.09	10.083	3.01	16.167	2.51	22.25	1.00
4.083	1.09	10.167	3.01	16.250	2.51	22.33	1.00
4.167	1.09	10.250	3.01	16.333	1.50	22.42	1.00
4.250	1.09	10.333	3.84	16.417	1.50	22.50	1.00
4.333	1.34	10.417	3.84	16.500	1.50	22.58	1.00
4.417	1.34	10.500	3.84	16.583	1.50	22.67	1.00
4.500	1.34	10.583	3.84	16.667	1.50	22.75	1.00
4.583	1.34	10.667	3.84	16.750	1.50	22.83	1.00
4.667	1.34	10.750	3.84	16.833	1.50	22.92	1.00
4.750	1.34	10.833	5.18	16.917	1.50	23.00	1.00
4.833	1.34	10.917	5.18	17.000	1.50	23.08	1.00
4.917	1.34	11.000	5.18	17.083	1.50	23.17	1.00
5.000	1.34	11.083	5.18	17.167	1.50	23.25	1.00
5.083	1.34	11.167	5.18	17.250	1.50	23.33	1.00
5.167	1.34	11.250	5.18	17.333	1.50	23.42	1.00
5.250	1.34	11.333	8.02	17.417	1.50	23.50	1.00
5.333	1.34	11.417	8.02	17.500	1.50	23.58	1.00
5.417	1.34	11.500	8.02	17.583	1.50	23.67	1.00
5.500	1.34	11.583	8.02	17.667	1.50	23.75	1.00
5.583	1.34	11.667	8.02	17.750	1.50	23.83	1.00
5.667	1.34	11.750	8.02	17.833	1.50	23.92	1.00
5.750	1.34	11.833	24.72	17.917	1.50	24.00	1.00
5.833	1.34	11.917	24.72	18.000	1.50	24.08	1.00
5.917	1.34	12.000	24.72	18.083	1.50	24.17	1.00
6.000	1.34	12.083	102.21	18.167	1.50	24.25	1.00
6.083	1.34	12.167	102.22	18.250	1.50		

Unit Hyd Qpeak (cms)= 2.267

PEAK FLOW (cms)= 1.073 (i)
TIME TO PEAK (hrs)= 14.083
RUNOFF VOLUME (mm)= 20.743
TOTAL RAINFALL (mm)= 83.510
RUNOFF COEFFICIENT = 0.248

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0008)	Area (ha)= 23.99	Curve Number (CN)= 44.7	
ID= 1 DT= 5.0 min	Ia (mm)= 10.91	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.97		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.34	12.250	102.22	18.33	1.50
0.167	0.00	6.250	1.34	12.333	12.04	18.42	1.50
0.250	0.00	6.333	1.50	12.417	12.03	18.50	1.50
0.333	0.92	6.417	1.50	12.500	12.03	18.58	1.50
0.417	0.92	6.500	1.50	12.583	12.03	18.67	1.50
0.500	0.92	6.583	1.50	12.667	12.03	18.75	1.50
0.583	0.92	6.667	1.50	12.750	12.03	18.83	1.50
0.667	0.92	6.750	1.50	12.833	6.18	18.92	1.50
0.750	0.92	6.833	1.50	12.917	6.18	19.00	1.50

0.833	0.92	6.917	1.50	13.000	6.18	19.08	1.50
0.917	0.92	7.000	1.50	13.083	6.18	19.17	1.50
1.000	0.92	7.083	1.50	13.167	6.18	19.25	1.50
1.083	0.92	7.167	1.50	13.250	6.18	19.33	1.50
1.167	0.92	7.250	1.50	13.333	4.51	19.42	1.50
1.250	0.92	7.333	1.84	13.417	4.51	19.50	1.50
1.333	0.92	7.417	1.84	13.500	4.51	19.58	1.50
1.417	0.92	7.500	1.84	13.583	4.51	19.67	1.50
1.500	0.92	7.583	1.84	13.667	4.51	19.75	1.50
1.583	0.92	7.667	1.84	13.750	4.51	19.83	1.50
1.667	0.92	7.750	1.84	13.833	3.51	19.92	1.50
1.750	0.92	7.833	1.84	13.917	3.51	20.00	1.50
1.833	0.92	7.917	1.84	14.000	3.51	20.08	1.50
1.917	0.92	8.000	1.84	14.083	3.51	20.17	1.50
2.000	0.92	8.083	1.84	14.167	3.51	20.25	1.50
2.083	0.92	8.167	1.84	14.250	3.51	20.33	1.00
2.167	0.92	8.250	1.84	14.333	2.51	20.42	1.00
2.250	0.92	8.333	2.17	14.417	2.51	20.50	1.00
2.333	1.09	8.417	2.17	14.500	2.51	20.58	1.00
2.417	1.09	8.500	2.17	14.583	2.51	20.67	1.00
2.500	1.09	8.583	2.17	14.667	2.51	20.75	1.00
2.583	1.09	8.667	2.17	14.750	2.51	20.83	1.00
2.667	1.09	8.750	2.17	14.833	2.51	20.92	1.00
2.750	1.09	8.833	2.34	14.917	2.51	21.00	1.00
2.833	1.09	8.917	2.34	15.000	2.51	21.08	1.00
2.917	1.09	9.000	2.34	15.083	2.51	21.17	1.00
3.000	1.09	9.083	2.34	15.167	2.51	21.25	1.00
3.083	1.09	9.167	2.34	15.250	2.51	21.33	1.00
3.167	1.09	9.250	2.34	15.333	2.51	21.42	1.00
3.250	1.09	9.333	2.67	15.417	2.51	21.50	1.00
3.333	1.09	9.417	2.67	15.500	2.51	21.58	1.00
3.417	1.09	9.500	2.67	15.583	2.51	21.67	1.00
3.500	1.09	9.583	2.67	15.667	2.51	21.75	1.00
3.583	1.09	9.667	2.67	15.750	2.51	21.83	1.00
3.667	1.09	9.750	2.67	15.833	2.51	21.92	1.00
3.750	1.09	9.833	3.01	15.917	2.51	22.00	1.00
3.833	1.09	9.917	3.01	16.000	2.51	22.08	1.00
3.917	1.09	10.000	3.01	16.083	2.51	22.17	1.00
4.000	1.09	10.083	3.01	16.167	2.51	22.25	1.00
4.083	1.09	10.167	3.01	16.250	2.51	22.33	1.00
4.167	1.09	10.250	3.01	16.333	1.50	22.42	1.00
4.250	1.09	10.333	3.84	16.417	1.50	22.50	1.00
4.333	1.34	10.417	3.84	16.500	1.50	22.58	1.00
4.417	1.34	10.500	3.84	16.583	1.50	22.67	1.00
4.500	1.34	10.583	3.84	16.667	1.50	22.75	1.00
4.583	1.34	10.667	3.84	16.750	1.50	22.83	1.00
4.667	1.34	10.750	3.84	16.833	1.50	22.92	1.00
4.750	1.34	10.833	5.18	16.917	1.50	23.00	1.00
4.833	1.34	10.917	5.18	17.000	1.50	23.08	1.00
4.917	1.34	11.000	5.18	17.083	1.50	23.17	1.00
5.000	1.34	11.083	5.18	17.167	1.50	23.25	1.00
5.083	1.34	11.167	5.18	17.250	1.50	23.33	1.00
5.167	1.34	11.250	5.18	17.333	1.50	23.42	1.00
5.250	1.34	11.333	8.02	17.417	1.50	23.50	1.00
5.333	1.34	11.417	8.02	17.500	1.50	23.58	1.00
5.417	1.34	11.500	8.02	17.583	1.50	23.67	1.00
5.500	1.34	11.583	8.02	17.667	1.50	23.75	1.00
5.583	1.34	11.667	8.02	17.750	1.50	23.83	1.00
5.667	1.34	11.750	8.02	17.833	1.50	23.92	1.00
5.750	1.34	11.833	24.72	17.917	1.50	24.00	1.00
5.833	1.34	11.917	24.72	18.000	1.50	24.08	1.00
5.917	1.34	12.000	24.72	18.083	1.50	24.17	1.00
6.000	1.34	12.083	102.21	18.167	1.50	24.25	1.00
6.083	1.34	12.167	102.22	18.250	1.50		

Unit Hyd Qpeak (cms)= 0.945

PEAK FLOW (cms)= 0.248 (i)
TIME TO PEAK (hrs)= 13.250
RUNOFF VOLUME (mm)= 13.625
TOTAL RAINFALL (mm)= 83.510
RUNOFF COEFFICIENT = 0.163

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0009)	Area (ha)= 6.37	Curve Number (CN)= 50.5	
ID= 1 DT= 5.0 min	Ia (mm)= 15.69	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.77		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.34	12.250	102.22	18.33	1.50
0.167	0.00	6.250	1.34	12.333	12.04	18.42	1.50
0.250	0.00	6.333	1.50	12.417	12.03	18.50	1.50
0.333	0.92	6.417	1.50	12.500	12.03	18.58	1.50
0.417	0.92	6.500	1.50	12.583	12.03	18.67	1.50
0.500	0.92	6.583	1.50	12.667	12.03	18.75	1.50
0.583	0.92	6.667	1.50	12.750	12.03	18.83	1.50
0.667	0.92	6.750	1.50	12.833	6.18	18.92	1.50
0.750	0.92	6.833	1.50	12.917	6.18	19.00	1.50
0.833	0.92	6.917	1.50	13.000	6.18	19.08	1.50
0.917	0.92	7.000	1.50	13.083	6.18	19.17	1.50
1.000	0.92	7.083	1.50	13.167	6.18	19.25	1.50

1.083	0.92	7.167	1.50	13.250	6.18	19.33	1.50
1.167	0.92	7.250	1.50	13.333	4.51	19.42	1.50
1.250	0.92	7.333	1.84	13.417	4.51	19.50	1.50
1.333	0.92	7.417	1.84	13.500	4.51	19.58	1.50
1.417	0.92	7.500	1.84	13.583	4.51	19.67	1.50
1.500	0.92	7.583	1.84	13.667	4.51	19.75	1.50
1.583	0.92	7.667	1.84	13.750	4.51	19.83	1.50
1.667	0.92	7.750	1.84	13.833	3.51	19.92	1.50
1.750	0.92	7.833	1.84	13.917	3.51	20.00	1.50
1.833	0.92	7.917	1.84	14.000	3.51	20.08	1.50
1.917	0.92	8.000	1.84	14.083	3.51	20.17	1.50
2.000	0.92	8.083	1.84	14.167	3.51	20.25	1.50
2.083	0.92	8.167	1.84	14.250	3.51	20.33	1.00
2.167	0.92	8.250	1.84	14.333	2.51	20.42	1.00
2.250	0.92	8.333	2.17	14.417	2.51	20.50	1.00
2.333	1.09	8.417	2.17	14.500	2.51	20.58	1.00
2.417	1.09	8.500	2.17	14.583	2.51	20.67	1.00
2.500	1.09	8.583	2.17	14.667	2.51	20.75	1.00
2.583	1.09	8.667	2.17	14.750	2.51	20.83	1.00
2.667	1.09	8.750	2.17	14.833	2.51	20.92	1.00
2.750	1.09	8.833	2.34	14.917	2.51	21.00	1.00
2.833	1.09	8.917	2.34	15.000	2.51	21.08	1.00
2.917	1.09	9.000	2.34	15.083	2.51	21.17	1.00
3.000	1.09	9.083	2.34	15.167	2.51	21.25	1.00
3.083	1.09	9.167	2.34	15.250	2.51	21.33	1.00
3.167	1.09	9.250	2.34	15.333	2.51	21.42	1.00
3.250	1.09	9.333	2.67	15.417	2.51	21.50	1.00
3.333	1.09	9.417	2.67	15.500	2.51	21.58	1.00
3.417	1.09	9.500	2.67	15.583	2.51	21.67	1.00
3.500	1.09	9.583	2.67	15.667	2.51	21.75	1.00
3.583	1.09	9.667	2.67	15.750	2.51	21.83	1.00
3.667	1.09	9.750	2.67	15.833	2.51	21.92	1.00
3.750	1.09	9.833	3.01	15.917	2.51	22.00	1.00
3.833	1.09	9.917	3.01	16.000	2.51	22.08	1.00
3.917	1.09	10.000	3.01	16.083	2.51	22.17	1.00
4.000	1.09	10.083	3.01	16.167	2.51	22.25	1.00
4.083	1.09	10.167	3.01	16.250	2.51	22.33	1.00
4.167	1.09	10.250	3.01	16.333	1.50	22.42	1.00
4.250	1.09	10.333	3.84	16.417	1.50	22.50	1.00
4.333	1.34	10.417	3.84	16.500	1.50	22.58	1.00
4.417	1.34	10.500	3.84	16.583	1.50	22.67	1.00
4.500	1.34	10.583	3.84	16.667	1.50	22.75	1.00
4.583	1.34	10.667	3.84	16.750	1.50	22.83	1.00
4.667	1.34	10.750	3.84	16.833	1.50	22.92	1.00
4.750	1.34	10.833	5.18	16.917	1.50	23.00	1.00
4.833	1.34	10.917	5.18	17.000	1.50	23.08	1.00
4.917	1.34	11.000	5.18	17.083	1.50	23.17	1.00
5.000	1.34	11.083	5.18	17.167	1.50	23.25	1.00
5.083	1.34	11.167	5.18	17.250	1.50	23.33	1.00
5.167	1.34	11.250	5.18	17.333	1.50	23.42	1.00
5.250	1.34	11.333	8.02	17.417	1.50	23.50	1.00
5.333	1.34	11.417	8.02	17.500	1.50	23.58	1.00
5.417	1.34	11.500	8.02	17.583	1.50	23.67	1.00
5.500	1.34	11.583	8.02	17.667	1.50	23.75	1.00
5.583	1.34	11.667	8.02	17.750	1.50	23.83	1.00
5.667	1.34	11.750	8.02	17.833	1.50	23.92	1.00
5.750	1.34	11.833	24.72	17.917	1.50	24.00	1.00
5.833	1.34	11.917	24.72	18.000	1.50	24.08	1.00
5.917	1.34	12.000	24.72	18.083	1.50	24.17	1.00
6.000	1.34	12.083	102.21	18.167	1.50	24.25	1.00
6.083	1.34	12.167	102.22	18.250	1.50		

Unit Hyd Qpeak (cms)= 0.316

PEAK FLOW (cms)= 0.082 (i)
TIME TO PEAK (hrs)= 13.000
RUNOFF VOLUME (mm)= 14.510
TOTAL RAINFALL (mm)= 83.510
RUNOFF COEFFICIENT = 0.174

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0010)	Area (ha)= 14.85	Curve Number (CN)= 52.9	
ID= 1 DT= 5.0 min	Ia (mm)= 13.28	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.89		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.34	12.250	102.22	18.33	1.50
0.167	0.00	6.250	1.34	12.333	12.04	18.42	1.50
0.250	0.00	6.333	1.50	12.417	12.03	18.50	1.50
0.333	0.92	6.417	1.50	12.500	12.03	18.58	1.50
0.417	0.92	6.500	1.50	12.583	12.03	18.67	1.50
0.500	0.92	6.583	1.50	12.667	12.03	18.75	1.50
0.583	0.92	6.667	1.50	12.750	12.03	18.83	1.50
0.667	0.92	6.750	1.50	12.833	6.18	18.92	1.50
0.750	0.92	6.833	1.50	12.917	6.18	19.00	1.50
0.833	0.92	6.917	1.50	13.000	6.18	19.08	1.50
0.917	0.92	7.000	1.50	13.083	6.18	19.17	1.50
1.000	0.92	7.083	1.50	13.167	6.18	19.25	1.50
1.083	0.92	7.167	1.50	13.250	6.18	19.33	1.50
1.167	0.92	7.250	1.50	13.333	4.51	19.42	1.50
1.250	0.92	7.333	1.84	13.417	4.51	19.50	1.50

1.333	0.92	7.417	1.84	13.500	4.51	19.58	1.50
1.417	0.92	7.500	1.84	13.583	4.51	19.67	1.50
1.500	0.92	7.583	1.84	13.667	4.51	19.75	1.50
1.583	0.92	7.667	1.84	13.750	4.51	19.83	1.50
1.667	0.92	7.750	1.84	13.833	3.51	19.92	1.50
1.750	0.92	7.833	1.84	13.917	3.51	20.00	1.50
1.833	0.92	7.917	1.84	14.000	3.51	20.08	1.50
1.917	0.92	8.000	1.84	14.083	3.51	20.17	1.50
2.000	0.92	8.083	1.84	14.167	3.51	20.25	1.50
2.083	0.92	8.167	1.84	14.250	3.51	20.33	1.00
2.167	0.92	8.250	1.84	14.333	2.51	20.42	1.00
2.250	0.92	8.333	2.17	14.417	2.51	20.50	1.00
2.333	1.09	8.417	2.17	14.500	2.51	20.58	1.00
2.417	1.09	8.500	2.17	14.583	2.51	20.67	1.00
2.500	1.09	8.583	2.17	14.667	2.51	20.75	1.00
2.583	1.09	8.667	2.17	14.750	2.51	20.83	1.00
2.667	1.09	8.750	2.17	14.833	2.51	20.92	1.00
2.750	1.09	8.833	2.34	14.917	2.51	21.00	1.00
2.833	1.09	8.917	2.34	15.000	2.51	21.08	1.00
2.917	1.09	9.000	2.34	15.083	2.51	21.17	1.00
3.000	1.09	9.083	2.34	15.167	2.51	21.25	1.00
3.083	1.09	9.167	2.34	15.250	2.51	21.33	1.00
3.167	1.09	9.250	2.34	15.333	2.51	21.42	1.00
3.250	1.09	9.333	2.67	15.417	2.51	21.50	1.00
3.333	1.09	9.417	2.67	15.500	2.51	21.58	1.00
3.417	1.09	9.500	2.67	15.583	2.51	21.67	1.00
3.500	1.09	9.583	2.67	15.667	2.51	21.75	1.00
3.583	1.09	9.667	2.67	15.750	2.51	21.83	1.00
3.667	1.09	9.750	2.67	15.833	2.51	21.92	1.00
3.750	1.09	9.833	3.01	15.917	2.51	22.00	1.00
3.833	1.09	9.917	3.01	16.000	2.51	22.08	1.00
3.917	1.09	10.000	3.01	16.083	2.51	22.17	1.00
4.000	1.09	10.083	3.01	16.167	2.51	22.25	1.00
4.083	1.09	10.167	3.01	16.250	2.51	22.33	1.00
4.167	1.09	10.250	3.01	16.333	1.50	22.42	1.00
4.250	1.09	10.333	3.84	16.417	1.50	22.50	1.00
4.333	1.34	10.417	3.84	16.500	1.50	22.58	1.00
4.417	1.34	10.500	3.84	16.583	1.50	22.67	1.00
4.500	1.34	10.583	3.84	16.667	1.50	22.75	1.00
4.583	1.34	10.667	3.84	16.750	1.50	22.83	1.00
4.667	1.34	10.750	3.84	16.833	1.50	22.92	1.00
4.750	1.34	10.833	5.18	16.917	1.50	23.00	1.00
4.833	1.34	10.917	5.18	17.000	1.50	23.08	1.00
4.917	1.34	11.000	5.18	17.083	1.50	23.17	1.00
5.000	1.34	11.083	5.18	17.167	1.50	23.25	1.00
5.083	1.34	11.167	5.18	17.250	1.50	23.33	1.00
5.167	1.34	11.250	5.18	17.333	1.50	23.42	1.00
5.250	1.34	11.333	8.02	17.417	1.50	23.50	1.00
5.333	1.34	11.417	8.02	17.500	1.50	23.58	1.00
5.417	1.34	11.500	8.02	17.583	1.50	23.67	1.00
5.500	1.34	11.583	8.02	17.667	1.50	23.75	1.00
5.583	1.34	11.667	8.02	17.750	1.50	23.83	1.00
5.667	1.34	11.750	8.02	17.833	1.50	23.92	1.00
5.750	1.34	11.833	24.72	17.917	1.50	24.00	1.00
5.833	1.34	11.917	24.72	18.000	1.50	24.08	1.00
5.917	1.34	12.000	24.72	18.083	1.50	24.17	1.00
6.000	1.34	12.083	102.21	18.167	1.50	24.25	1.00
6.083	1.34	12.167	102.22	18.250	1.50		

Unit Hyd Qpeak (cms)= 0.637

PEAK FLOW (cms)= 0.201 (i)
TIME TO PEAK (hrs)= 13.167
RUNOFF VOLUME (mm)= 16.662
TOTAL RAINFALL (mm)= 83.510
RUNOFF COEFFICIENT = 0.200

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0013)	Area (ha)= 1.70	Curve Number (CN)= 60.5	
ID= 1 DT= 5.0 min	Ia (mm)= 9.65	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.40		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.34	12.250	102.22	18.33	1.50
0.167	0.00	6.250	1.34	12.333	12.04	18.42	1.50
0.250	0.00	6.333	1.50	12.417	12.03	18.50	1.50
0.333	0.92	6.417	1.50	12.500	12.03	18.58	1.50
0.417	0.92	6.500	1.50	12.583	12.03	18.67	1.50
0.500	0.92	6.583	1.50	12.667	12.03	18.75	1.50
0.583	0.92	6.667	1.50	12.750	12.03	18.83	1.50
0.667	0.92	6.750	1.50	12.833	6.18	18.92	1.50
0.750	0.92	6.833	1.50	12.917	6.18	19.00	1.50
0.833	0.92	6.917	1.50	13.000	6.18	19.08	1.50
0.917	0.92	7.000	1.50	13.083	6.18	19.17	1.50
1.000	0.92	7.083	1.50	13.167	6.18	19.25	1.50
1.083	0.92	7.167	1.50	13.250	6.18	19.33	1.50
1.167	0.92	7.250	1.50	13.333	4.51	19.42	1.50
1.250	0.92	7.333	1.84	13.417	4.51	19.50	1.50
1.333	0.92	7.417	1.84	13.500	4.51	19.58	1.50
1.417	0.92	7.500	1.84	13.583	4.51	19.67	1.50
1.500	0.92	7.583	1.84	13.667	4.51	19.75	1.50

1.583	0.92	7.667	1.84	13.750	4.51	19.83	1.50
1.667	0.92	7.750	1.84	13.833	3.51	19.92	1.50
1.750	0.92	7.833	1.84	13.917	3.51	20.00	1.50
1.833	0.92	7.917	1.84	14.000	3.51	20.08	1.50
1.917	0.92	8.000	1.84	14.083	3.51	20.17	1.50
2.000	0.92	8.083	1.84	14.167	3.51	20.25	1.50
2.083	0.92	8.167	1.84	14.250	3.51	20.33	1.00
2.167	0.92	8.250	1.84	14.333	2.51	20.42	1.00
2.250	0.92	8.333	2.17	14.417	2.51	20.50	1.00
2.333	1.09	8.417	2.17	14.500	2.51	20.58	1.00
2.417	1.09	8.500	2.17	14.583	2.51	20.67	1.00
2.500	1.09	8.583	2.17	14.667	2.51	20.75	1.00
2.583	1.09	8.667	2.17	14.750	2.51	20.83	1.00
2.667	1.09	8.750	2.17	14.833	2.51	20.92	1.00
2.750	1.09	8.833	2.34	14.917	2.51	21.00	1.00
2.833	1.09	8.917	2.34	15.000	2.51	21.08	1.00
2.917	1.09	9.000	2.34	15.083	2.51	21.17	1.00
3.000	1.09	9.083	2.34	15.167	2.51	21.25	1.00
3.083	1.09	9.167	2.34	15.250	2.51	21.33	1.00
3.167	1.09	9.250	2.34	15.333	2.51	21.42	1.00
3.250	1.09	9.333	2.67	15.417	2.51	21.50	1.00
3.333	1.09	9.417	2.67	15.500	2.51	21.58	1.00
3.417	1.09	9.500	2.67	15.583	2.51	21.67	1.00
3.500	1.09	9.583	2.67	15.667	2.51	21.75	1.00
3.583	1.09	9.667	2.67	15.750	2.51	21.83	1.00
3.667	1.09	9.750	2.67	15.833	2.51	21.92	1.00
3.750	1.09	9.833	3.01	15.917	2.51	22.00	1.00
3.833	1.09	9.917	3.01	16.000	2.51	22.08	1.00
3.917	1.09	10.000	3.01	16.083	2.51	22.17	1.00
4.000	1.09	10.083	3.01	16.167	2.51	22.25	1.00
4.083	1.09	10.167	3.01	16.250	2.51	22.33	1.00
4.167	1.09	10.250	3.01	16.333	1.50	22.42	1.00
4.250	1.09	10.333	3.84	16.417	1.50	22.50	1.00
4.333	1.34	10.417	3.84	16.500	1.50	22.58	1.00
4.417	1.34	10.500	3.84	16.583	1.50	22.67	1.00
4.500	1.34	10.583	3.84	16.667	1.50	22.75	1.00
4.583	1.34	10.667	3.84	16.750	1.50	22.83	1.00
4.667	1.34	10.750	3.84	16.833	1.50	22.92	1.00
4.750	1.34	10.833	5.18	16.917	1.50	23.00	1.00
4.833	1.34	10.917	5.18	17.000	1.50	23.08	1.00
4.917	1.34	11.000	5.18	17.083	1.50	23.17	1.00
5.000	1.34	11.083	5.18	17.167	1.50	23.25	1.00
5.083	1.34	11.167	5.18	17.250	1.50	23.33	1.00
5.167	1.34	11.250	5.18	17.333	1.50	23.42	1.00
5.250	1.34	11.333	8.02	17.417	1.50	23.50	1.00
5.333	1.34	11.417	8.02	17.500	1.50	23.58	1.00
5.417	1.34	11.500	8.02	17.583	1.50	23.67	1.00
5.500	1.34	11.583	8.02	17.667	1.50	23.75	1.00
5.583	1.34	11.667	8.02	17.750	1.50	23.83	1.00
5.667	1.34	11.750	8.02	17.833	1.50	23.92	1.00
5.750	1.34	11.833	24.72	17.917	1.50	24.00	1.00
5.833	1.34	11.917	24.72	18.000	1.50	24.08	1.00
5.917	1.34	12.000	24.72	18.083	1.50	24.17	1.00
6.000	1.34	12.083	102.21	18.167	1.50	24.25	1.00
6.083	1.34	12.167	102.22	18.250	1.50		

Unit Hyd Qpeak (cms)= 0.162

PEAK FLOW (cms)= 0.058 (i)
TIME TO PEAK (hrs)= 12.500
RUNOFF VOLUME (mm)= 22.730
TOTAL RAINFALL (mm)= 83.510
RUNOFF COEFFICIENT = 0.272

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0014)	Area (ha)=	1.80	Curve Number (CN)=	50.0	
ID= 1 DT= 5.0 min	Ia (mm)=	16.00	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	0.76			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.34	12.250	102.22	18.33	1.50
0.167	0.00	6.250	1.34	12.333	12.04	18.42	1.50
0.250	0.00	6.333	1.50	12.417	12.03	18.50	1.50
0.333	0.92	6.417	1.50	12.500	12.03	18.58	1.50
0.417	0.92	6.500	1.50	12.583	12.03	18.67	1.50
0.500	0.92	6.583	1.50	12.667	12.03	18.75	1.50
0.583	0.92	6.667	1.50	12.750	12.03	18.83	1.50
0.667	0.92	6.750	1.50	12.833	6.18	18.92	1.50
0.750	0.92	6.833	1.50	12.917	6.18	19.00	1.50
0.833	0.92	6.917	1.50	13.000	6.18	19.08	1.50
0.917	0.92	7.000	1.50	13.083	6.18	19.17	1.50
1.000	0.92	7.083	1.50	13.167	6.18	19.25	1.50
1.083	0.92	7.167	1.50	13.250	6.18	19.33	1.50
1.167	0.92	7.250	1.50	13.333	4.51	19.42	1.50
1.250	0.92	7.333	1.84	13.417	4.51	19.50	1.50
1.333	0.92	7.417	1.84	13.500	4.51	19.58	1.50
1.417	0.92	7.500	1.84	13.583	4.51	19.67	1.50
1.500	0.92	7.583	1.84	13.667	4.51	19.75	1.50
1.583	0.92	7.667	1.84	13.750	4.51	19.83	1.50
1.667	0.92	7.750	1.84	13.833	3.51	19.92	1.50
1.750	0.92	7.833	1.84	13.917	3.51	20.00	1.50

1.833	0.92	7.917	1.84	14.000	3.51	20.08	1.50
1.917	0.92	8.000	1.84	14.083	3.51	20.17	1.50
2.000	0.92	8.083	1.84	14.167	3.51	20.25	1.50
2.083	0.92	8.167	1.84	14.250	3.51	20.33	1.00
2.167	0.92	8.250	1.84	14.333	2.51	20.42	1.00
2.250	0.92	8.333	2.17	14.417	2.51	20.50	1.00
2.333	1.09	8.417	2.17	14.500	2.51	20.58	1.00
2.417	1.09	8.500	2.17	14.583	2.51	20.67	1.00
2.500	1.09	8.583	2.17	14.667	2.51	20.75	1.00
2.583	1.09	8.667	2.17	14.750	2.51	20.83	1.00
2.667	1.09	8.750	2.17	14.833	2.51	20.92	1.00
2.750	1.09	8.833	2.34	14.917	2.51	21.00	1.00
2.833	1.09	8.917	2.34	15.000	2.51	21.08	1.00
2.917	1.09	9.000	2.34	15.083	2.51	21.17	1.00
3.000	1.09	9.083	2.34	15.167	2.51	21.25	1.00
3.083	1.09	9.167	2.34	15.250	2.51	21.33	1.00
3.167	1.09	9.250	2.34	15.333	2.51	21.42	1.00
3.250	1.09	9.333	2.67	15.417	2.51	21.50	1.00
3.333	1.09	9.417	2.67	15.500	2.51	21.58	1.00
3.417	1.09	9.500	2.67	15.583	2.51	21.67	1.00
3.500	1.09	9.583	2.67	15.667	2.51	21.75	1.00
3.583	1.09	9.667	2.67	15.750	2.51	21.83	1.00
3.667	1.09	9.750	2.67	15.833	2.51	21.92	1.00
3.750	1.09	9.833	3.01	15.917	2.51	22.00	1.00
3.833	1.09	9.917	3.01	16.000	2.51	22.08	1.00
3.917	1.09	10.000	3.01	16.083	2.51	22.17	1.00
4.000	1.09	10.083	3.01	16.167	2.51	22.25	1.00
4.083	1.09	10.167	3.01	16.250	2.51	22.33	1.00
4.167	1.09	10.250	3.01	16.333	1.50	22.42	1.00
4.250	1.09	10.333	3.84	16.417	1.50	22.50	1.00
4.333	1.34	10.417	3.84	16.500	1.50	22.58	1.00
4.417	1.34	10.500	3.84	16.583	1.50	22.67	1.00
4.500	1.34	10.583	3.84	16.667	1.50	22.75	1.00
4.583	1.34	10.667	3.84	16.750	1.50	22.83	1.00
4.667	1.34	10.750	3.84	16.833	1.50	22.92	1.00
4.750	1.34	10.833	5.18	16.917	1.50	23.00	1.00
4.833	1.34	10.917	5.18	17.000	1.50	23.08	1.00
4.917	1.34	11.000	5.18	17.083	1.50	23.17	1.00
5.000	1.34	11.083	5.18	17.167	1.50	23.25	1.00
5.083	1.34	11.167	5.18	17.250	1.50	23.33	1.00
5.167	1.34	11.250	5.18	17.333	1.50	23.42	1.00
5.250	1.34	11.333	8.02	17.417	1.50	23.50	1.00
5.333	1.34	11.417	8.02	17.500	1.50	23.58	1.00
5.417	1.34	11.500	8.02	17.583	1.50	23.67	1.00
5.500	1.34	11.583	8.02	17.667	1.50	23.75	1.00
5.583	1.34	11.667	8.02	17.750	1.50	23.83	1.00
5.667	1.34	11.750	8.02	17.833	1.50	23.92	1.00
5.750	1.34	11.833	24.72	17.917	1.50	24.00	1.00
5.833	1.34	11.917	24.72	18.000	1.50	24.08	1.00
5.917	1.34	12.000	24.72	18.083	1.50	24.17	1.00
6.000	1.34	12.083	102.21	18.167	1.50	24.25	1.00
6.083	1.34	12.167	102.22	18.250	1.50		

Unit Hyd Qpeak (cms)= 0.090

PEAK FLOW (cms)= 0.023 (i)
TIME TO PEAK (hrs)= 13.000
RUNOFF VOLUME (mm)= 14.175
TOTAL RAINFALL (mm)= 83.510
RUNOFF COEFFICIENT = 0.170

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0015)	Area (ha)= 6.70	Curve Number (CN)= 60.0	
ID= 1 DT= 5.0 min	Ia (mm)= 10.00	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 1.45		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.34	12.250	102.22	18.33	1.50
0.167	0.00	6.250	1.34	12.333	12.04	18.42	1.50
0.250	0.00	6.333	1.50	12.417	12.03	18.50	1.50
0.333	0.92	6.417	1.50	12.500	12.03	18.58	1.50
0.417	0.92	6.500	1.50	12.583	12.03	18.67	1.50
0.500	0.92	6.583	1.50	12.667	12.03	18.75	1.50
0.583	0.92	6.667	1.50	12.750	12.03	18.83	1.50
0.667	0.92	6.750	1.50	12.833	6.18	18.92	1.50
0.750	0.92	6.833	1.50	12.917	6.18	19.00	1.50
0.833	0.92	6.917	1.50	13.000	6.18	19.08	1.50
0.917	0.92	7.000	1.50	13.083	6.18	19.17	1.50
1.000	0.92	7.083	1.50	13.167	6.18	19.25	1.50
1.083	0.92	7.167	1.50	13.250	6.18	19.33	1.50
1.167	0.92	7.250	1.50	13.333	4.51	19.42	1.50
1.250	0.92	7.333	1.84	13.417	4.51	19.50	1.50
1.333	0.92	7.417	1.84	13.500	4.51	19.58	1.50
1.417	0.92	7.500	1.84	13.583	4.51	19.67	1.50
1.500	0.92	7.583	1.84	13.667	4.51	19.75	1.50
1.583	0.92	7.667	1.84	13.750	4.51	19.83	1.50
1.667	0.92	7.750	1.84	13.833	3.51	19.92	1.50
1.750	0.92	7.833	1.84	13.917	3.51	20.00	1.50
1.833	0.92	7.917	1.84	14.000	3.51	20.08	1.50
1.917	0.92	8.000	1.84	14.083	3.51	20.17	1.50
2.000	0.92	8.083	1.84	14.167	3.51	20.25	1.50

2.083	0.92	8.167	1.84	14.250	3.51	20.33	1.00
2.167	0.92	8.250	1.84	14.333	2.51	20.42	1.00
2.250	0.92	8.333	2.17	14.417	2.51	20.50	1.00
2.333	1.09	8.417	2.17	14.500	2.51	20.58	1.00
2.417	1.09	8.500	2.17	14.583	2.51	20.67	1.00
2.500	1.09	8.583	2.17	14.667	2.51	20.75	1.00
2.583	1.09	8.667	2.17	14.750	2.51	20.83	1.00
2.667	1.09	8.750	2.17	14.833	2.51	20.92	1.00
2.750	1.09	8.833	2.34	14.917	2.51	21.00	1.00
2.833	1.09	8.917	2.34	15.000	2.51	21.08	1.00
2.917	1.09	9.000	2.34	15.083	2.51	21.17	1.00
3.000	1.09	9.083	2.34	15.167	2.51	21.25	1.00
3.083	1.09	9.167	2.34	15.250	2.51	21.33	1.00
3.167	1.09	9.250	2.34	15.333	2.51	21.42	1.00
3.250	1.09	9.333	2.67	15.417	2.51	21.50	1.00
3.333	1.09	9.417	2.67	15.500	2.51	21.58	1.00
3.417	1.09	9.500	2.67	15.583	2.51	21.67	1.00
3.500	1.09	9.583	2.67	15.667	2.51	21.75	1.00
3.583	1.09	9.667	2.67	15.750	2.51	21.83	1.00
3.667	1.09	9.750	2.67	15.833	2.51	21.92	1.00
3.750	1.09	9.833	3.01	15.917	2.51	22.00	1.00
3.833	1.09	9.917	3.01	16.000	2.51	22.08	1.00
3.917	1.09	10.000	3.01	16.083	2.51	22.17	1.00
4.000	1.09	10.083	3.01	16.167	2.51	22.25	1.00
4.083	1.09	10.167	3.01	16.250	2.51	22.33	1.00
4.167	1.09	10.250	3.01	16.333	1.50	22.42	1.00
4.250	1.09	10.333	3.84	16.417	1.50	22.50	1.00
4.333	1.34	10.417	3.84	16.500	1.50	22.58	1.00
4.417	1.34	10.500	3.84	16.583	1.50	22.67	1.00
4.500	1.34	10.583	3.84	16.667	1.50	22.75	1.00
4.583	1.34	10.667	3.84	16.750	1.50	22.83	1.00
4.667	1.34	10.750	3.84	16.833	1.50	22.92	1.00
4.750	1.34	10.833	5.18	16.917	1.50	23.00	1.00
4.833	1.34	10.917	5.18	17.000	1.50	23.08	1.00
4.917	1.34	11.000	5.18	17.083	1.50	23.17	1.00
5.000	1.34	11.083	5.18	17.167	1.50	23.25	1.00
5.083	1.34	11.167	5.18	17.250	1.50	23.33	1.00
5.167	1.34	11.250	5.18	17.333	1.50	23.42	1.00
5.250	1.34	11.333	8.02	17.417	1.50	23.50	1.00
5.333	1.34	11.417	8.02	17.500	1.50	23.58	1.00
5.417	1.34	11.500	8.02	17.583	1.50	23.67	1.00
5.500	1.34	11.583	8.02	17.667	1.50	23.75	1.00
5.583	1.34	11.667	8.02	17.750	1.50	23.83	1.00
5.667	1.34	11.750	8.02	17.833	1.50	23.92	1.00
5.750	1.34	11.833	24.72	17.917	1.50	24.00	1.00
5.833	1.34	11.917	24.72	18.000	1.50	24.08	1.00
5.917	1.34	12.000	24.72	18.083	1.50	24.17	1.00
6.000	1.34	12.083	102.21	18.167	1.50	24.25	1.00
6.083	1.34	12.167	102.22	18.250	1.50		

Unit Hyd Qpeak (cms)= 0.176

PEAK FLOW (cms)= 0.086 (i)
TIME TO PEAK (hrs)= 13.833
RUNOFF VOLUME (mm)= 22.251
TOTAL RAINFALL (mm)= 83.510
RUNOFF COEFFICIENT = 0.266

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB NASHYD (0016) ID= 1 DT= 5.0 min	Area (ha)= 29.16 Curve Number (CN)= 71.4 Ia (mm)= 7.88 # of Linear Res.(N)= 3.00 U.H. Tp(hrs)= 0.68

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.34	12.250	102.22	18.33	1.50
0.167	0.00	6.250	1.34	12.333	12.04	18.42	1.50
0.250	0.00	6.333	1.50	12.417	12.03	18.50	1.50
0.333	0.92	6.417	1.50	12.500	12.03	18.58	1.50
0.417	0.92	6.500	1.50	12.583	12.03	18.67	1.50
0.500	0.92	6.583	1.50	12.667	12.03	18.75	1.50
0.583	0.92	6.667	1.50	12.750	12.03	18.83	1.50
0.667	0.92	6.750	1.50	12.833	6.18	18.92	1.50
0.750	0.92	6.833	1.50	12.917	6.18	19.00	1.50
0.833	0.92	6.917	1.50	13.000	6.18	19.08	1.50
0.917	0.92	7.000	1.50	13.083	6.18	19.17	1.50
1.000	0.92	7.083	1.50	13.167	6.18	19.25	1.50
1.083	0.92	7.167	1.50	13.250	6.18	19.33	1.50
1.167	0.92	7.250	1.50	13.333	4.51	19.42	1.50
1.250	0.92	7.333	1.84	13.417	4.51	19.50	1.50
1.333	0.92	7.417	1.84	13.500	4.51	19.58	1.50
1.417	0.92	7.500	1.84	13.583	4.51	19.67	1.50
1.500	0.92	7.583	1.84	13.667	4.51	19.75	1.50
1.583	0.92	7.667	1.84	13.750	4.51	19.83	1.50
1.667	0.92	7.750	1.84	13.833	3.51	19.92	1.50
1.750	0.92	7.833	1.84	13.917	3.51	20.00	1.50
1.833	0.92	7.917	1.84	14.000	3.51	20.08	1.50
1.917	0.92	8.000	1.84	14.083	3.51	20.17	1.50
2.000	0.92	8.083	1.84	14.167	3.51	20.25	1.50
2.083	0.92	8.167	1.84	14.250	3.51	20.33	1.00
2.167	0.92	8.250	1.84	14.333	2.51	20.42	1.00
2.250	0.92	8.333	2.17	14.417	2.51	20.50	1.00

2.333	1.09	8.417	2.17	14.500	2.51	20.58	1.00
2.417	1.09	8.500	2.17	14.583	2.51	20.67	1.00
2.500	1.09	8.583	2.17	14.667	2.51	20.75	1.00
2.583	1.09	8.667	2.17	14.750	2.51	20.83	1.00
2.667	1.09	8.750	2.17	14.833	2.51	20.92	1.00
2.750	1.09	8.833	2.34	14.917	2.51	21.00	1.00
2.833	1.09	8.917	2.34	15.000	2.51	21.08	1.00
2.917	1.09	9.000	2.34	15.083	2.51	21.17	1.00
3.000	1.09	9.083	2.34	15.167	2.51	21.25	1.00
3.083	1.09	9.167	2.34	15.250	2.51	21.33	1.00
3.167	1.09	9.250	2.34	15.333	2.51	21.42	1.00
3.250	1.09	9.333	2.67	15.417	2.51	21.50	1.00
3.333	1.09	9.417	2.67	15.500	2.51	21.58	1.00
3.417	1.09	9.500	2.67	15.583	2.51	21.67	1.00
3.500	1.09	9.583	2.67	15.667	2.51	21.75	1.00
3.583	1.09	9.667	2.67	15.750	2.51	21.83	1.00
3.667	1.09	9.750	2.67	15.833	2.51	21.92	1.00
3.750	1.09	9.833	3.01	15.917	2.51	22.00	1.00
3.833	1.09	9.917	3.01	16.000	2.51	22.08	1.00
3.917	1.09	10.000	3.01	16.083	2.51	22.17	1.00
4.000	1.09	10.083	3.01	16.167	2.51	22.25	1.00
4.083	1.09	10.167	3.01	16.250	2.51	22.33	1.00
4.167	1.09	10.250	3.01	16.333	1.50	22.42	1.00
4.250	1.09	10.333	3.84	16.417	1.50	22.50	1.00
4.333	1.34	10.417	3.84	16.500	1.50	22.58	1.00
4.417	1.34	10.500	3.84	16.583	1.50	22.67	1.00
4.500	1.34	10.583	3.84	16.667	1.50	22.75	1.00
4.583	1.34	10.667	3.84	16.750	1.50	22.83	1.00
4.667	1.34	10.750	3.84	16.833	1.50	22.92	1.00
4.750	1.34	10.833	5.18	16.917	1.50	23.00	1.00
4.833	1.34	10.917	5.18	17.000	1.50	23.08	1.00
4.917	1.34	11.000	5.18	17.083	1.50	23.17	1.00
5.000	1.34	11.083	5.18	17.167	1.50	23.25	1.00
5.083	1.34	11.167	5.18	17.250	1.50	23.33	1.00
5.167	1.34	11.250	5.18	17.333	1.50	23.42	1.00
5.250	1.34	11.333	8.02	17.417	1.50	23.50	1.00
5.333	1.34	11.417	8.02	17.500	1.50	23.58	1.00
5.417	1.34	11.500	8.02	17.583	1.50	23.67	1.00
5.500	1.34	11.583	8.02	17.667	1.50	23.75	1.00
5.583	1.34	11.667	8.02	17.750	1.50	23.83	1.00
5.667	1.34	11.750	8.02	17.833	1.50	23.92	1.00
5.750	1.34	11.833	24.72	17.917	1.50	24.00	1.00
5.833	1.34	11.917	24.72	18.000	1.50	24.08	1.00
5.917	1.34	12.000	24.72	18.083	1.50	24.17	1.00
6.000	1.34	12.083	102.21	18.167	1.50	24.25	1.00
6.083	1.34	12.167	102.22	18.250	1.50		

Unit Hyd Qpeak (cms)= 1.638

PEAK FLOW (cms)= 0.998 (i)

TIME TO PEAK (hrs)= 12.833
RUNOFF VOLUME (mm)= 32.247
TOTAL RAINFALL (mm)= 83.510
RUNOFF COEFFICIENT = 0.386

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0019)	Area (ha)= 39.68	Curve Number (CN)= 60.7	
ID= 1 DT= 5.0 min	Ia (mm)= 8.26	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 1.18		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.34	12.250	102.22	18.33	1.50
0.167	0.00	6.250	1.34	12.333	12.04	18.42	1.50
0.250	0.00	6.333	1.50	12.417	12.03	18.50	1.50
0.333	0.92	6.417	1.50	12.500	12.03	18.58	1.50
0.417	0.92	6.500	1.50	12.583	12.03	18.67	1.50
0.500	0.92	6.583	1.50	12.667	12.03	18.75	1.50
0.583	0.92	6.667	1.50	12.750	12.03	18.83	1.50
0.667	0.92	6.750	1.50	12.833	6.18	18.92	1.50
0.750	0.92	6.833	1.50	12.917	6.18	19.00	1.50
0.833	0.92	6.917	1.50	13.000	6.18	19.08	1.50
0.917	0.92	7.000	1.50	13.083	6.18	19.17	1.50
1.000	0.92	7.083	1.50	13.167	6.18	19.25	1.50
1.083	0.92	7.167	1.50	13.250	6.18	19.33	1.50
1.167	0.92	7.250	1.50	13.333	4.51	19.42	1.50
1.250	0.92	7.333	1.84	13.417	4.51	19.50	1.50
1.333	0.92	7.417	1.84	13.500	4.51	19.58	1.50
1.417	0.92	7.500	1.84	13.583	4.51	19.67	1.50
1.500	0.92	7.583	1.84	13.667	4.51	19.75	1.50
1.583	0.92	7.667	1.84	13.750	4.51	19.83	1.50
1.667	0.92	7.750	1.84	13.833	3.51	19.92	1.50
1.750	0.92	7.833	1.84	13.917	3.51	20.00	1.50
1.833	0.92	7.917	1.84	14.000	3.51	20.08	1.50
1.917	0.92	8.000	1.84	14.083	3.51	20.17	1.50
2.000	0.92	8.083	1.84	14.167	3.51	20.25	1.50
2.083	0.92	8.167	1.84	14.250	3.51	20.33	1.00
2.167	0.92	8.250	1.84	14.333	2.51	20.42	1.00
2.250	0.92	8.333	2.17	14.417	2.51	20.50	1.00
2.333	1.09	8.417	2.17	14.500	2.51	20.58	1.00
2.417	1.09	8.500	2.17	14.583	2.51	20.67	1.00
2.500	1.09	8.583	2.17	14.667	2.51	20.75	1.00

2.583	1.09	8.667	2.17	14.750	2.51	20.83	1.00
2.667	1.09	8.750	2.17	14.833	2.51	20.92	1.00
2.750	1.09	8.833	2.34	14.917	2.51	21.00	1.00
2.833	1.09	8.917	2.34	15.000	2.51	21.08	1.00
2.917	1.09	9.000	2.34	15.083	2.51	21.17	1.00
3.000	1.09	9.083	2.34	15.167	2.51	21.25	1.00
3.083	1.09	9.167	2.34	15.250	2.51	21.33	1.00
3.167	1.09	9.250	2.34	15.333	2.51	21.42	1.00
3.250	1.09	9.333	2.67	15.417	2.51	21.50	1.00
3.333	1.09	9.417	2.67	15.500	2.51	21.58	1.00
3.417	1.09	9.500	2.67	15.583	2.51	21.67	1.00
3.500	1.09	9.583	2.67	15.667	2.51	21.75	1.00
3.583	1.09	9.667	2.67	15.750	2.51	21.83	1.00
3.667	1.09	9.750	2.67	15.833	2.51	21.92	1.00
3.750	1.09	9.833	3.01	15.917	2.51	22.00	1.00
3.833	1.09	9.917	3.01	16.000	2.51	22.08	1.00
3.917	1.09	10.000	3.01	16.083	2.51	22.17	1.00
4.000	1.09	10.083	3.01	16.167	2.51	22.25	1.00
4.083	1.09	10.167	3.01	16.250	2.51	22.33	1.00
4.167	1.09	10.250	3.01	16.333	1.50	22.42	1.00
4.250	1.09	10.333	3.84	16.417	1.50	22.50	1.00
4.333	1.34	10.417	3.84	16.500	1.50	22.58	1.00
4.417	1.34	10.500	3.84	16.583	1.50	22.67	1.00
4.500	1.34	10.583	3.84	16.667	1.50	22.75	1.00
4.583	1.34	10.667	3.84	16.750	1.50	22.83	1.00
4.667	1.34	10.750	3.84	16.833	1.50	22.92	1.00
4.750	1.34	10.833	5.18	16.917	1.50	23.00	1.00
4.833	1.34	10.917	5.18	17.000	1.50	23.08	1.00
4.917	1.34	11.000	5.18	17.083	1.50	23.17	1.00
5.000	1.34	11.083	5.18	17.167	1.50	23.25	1.00
5.083	1.34	11.167	5.18	17.250	1.50	23.33	1.00
5.167	1.34	11.250	5.18	17.333	1.50	23.42	1.00
5.250	1.34	11.333	8.02	17.417	1.50	23.50	1.00
5.333	1.34	11.417	8.02	17.500	1.50	23.58	1.00
5.417	1.34	11.500	8.02	17.583	1.50	23.67	1.00
5.500	1.34	11.583	8.02	17.667	1.50	23.75	1.00
5.583	1.34	11.667	8.02	17.750	1.50	23.83	1.00
5.667	1.34	11.750	8.02	17.833	1.50	23.92	1.00
5.750	1.34	11.833	24.72	17.917	1.50	24.00	1.00
5.833	1.34	11.917	24.72	18.000	1.50	24.08	1.00
5.917	1.34	12.000	24.72	18.083	1.50	24.17	1.00
6.000	1.34	12.083	102.21	18.167	1.50	24.25	1.00
6.083	1.34	12.167	102.22	18.250	1.50		

Unit Hyd Qpeak (cms)= 1.284

PEAK FLOW (cms)= 0.639 (i)
TIME TO PEAK (hrs)= 13.500
RUNOFF VOLUME (mm)= 23.603
TOTAL RAINFALL (mm)= 83.510

RUNOFF COEFFICIENT = 0.283

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0024)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0010):	14.85	0.201	13.17	16.66
+ ID2= 2 (0013):	1.70	0.058	12.50	22.73
ID = 3 (0024):	16.55	0.234	13.00	17.29

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0024):	16.55	0.234	13.00	17.29
+ ID2= 2 (0014):	1.80	0.023	13.00	14.17
ID = 1 (0024):	18.35	0.257	13.00	16.98

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0024):	18.35	0.257	13.00	16.98
+ ID2= 2 (0015):	6.70	0.086	13.83	22.25
ID = 3 (0024):	25.05	0.325	13.17	18.39

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0024):	25.05	0.325	13.17	18.39
+ ID2= 2 (0016):	29.16	0.998	12.83	32.25
ID = 1 (0024):	54.21	1.310	12.92	25.84

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)					
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)	
ID1= 1 (0024):	54.21	1.310	12.92	25.84	
+ ID2= 2 (0019):	39.68	0.639	13.50	23.60	
ID = 3 (0024):	93.89	1.857	13.00	24.90	

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)					
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)	
ID1= 3 (0024):	93.89	1.857	13.00	24.90	
+ ID2= 2 (0007):	100.92	1.073	14.08	20.74	
ID = 1 (0024):	194.81	2.654	13.33	22.74	

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)					
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)	
ID1= 1 (0024):	194.81	2.654	13.33	22.74	
+ ID2= 2 (0008):	23.99	0.248	13.25	13.63	
ID = 3 (0024):	218.80	2.902	13.25	21.75	

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)					
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)	
ID1= 3 (0024):	218.80	2.902	13.25	21.75	
+ ID2= 2 (0009):	6.37	0.082	13.00	14.51	
ID = 1 (0024):	225.17	2.981	13.25	21.54	

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB			
NASHYD (0011)	Area (ha)= 46.28	Curve Number (CN)= 72.2	
ID= 1 DT= 5.0 min	Ia (mm)= 7.09	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.30		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.34	12.250	102.22	18.33	1.50
0.167	0.00	6.250	1.34	12.333	12.04	18.42	1.50
0.250	0.00	6.333	1.50	12.417	12.03	18.50	1.50
0.333	0.92	6.417	1.50	12.500	12.03	18.58	1.50
0.417	0.92	6.500	1.50	12.583	12.03	18.67	1.50
0.500	0.92	6.583	1.50	12.667	12.03	18.75	1.50
0.583	0.92	6.667	1.50	12.750	12.03	18.83	1.50
0.667	0.92	6.750	1.50	12.833	6.18	18.92	1.50
0.750	0.92	6.833	1.50	12.917	6.18	19.00	1.50
0.833	0.92	6.917	1.50	13.000	6.18	19.08	1.50
0.917	0.92	7.000	1.50	13.083	6.18	19.17	1.50
1.000	0.92	7.083	1.50	13.167	6.18	19.25	1.50
1.083	0.92	7.167	1.50	13.250	6.18	19.33	1.50
1.167	0.92	7.250	1.50	13.333	4.51	19.42	1.50
1.250	0.92	7.333	1.84	13.417	4.51	19.50	1.50
1.333	0.92	7.417	1.84	13.500	4.51	19.58	1.50
1.417	0.92	7.500	1.84	13.583	4.51	19.67	1.50
1.500	0.92	7.583	1.84	13.667	4.51	19.75	1.50
1.583	0.92	7.667	1.84	13.750	4.51	19.83	1.50
1.667	0.92	7.750	1.84	13.833	3.51	19.92	1.50
1.750	0.92	7.833	1.84	13.917	3.51	20.00	1.50
1.833	0.92	7.917	1.84	14.000	3.51	20.08	1.50
1.917	0.92	8.000	1.84	14.083	3.51	20.17	1.50
2.000	0.92	8.083	1.84	14.167	3.51	20.25	1.50
2.083	0.92	8.167	1.84	14.250	3.51	20.33	1.00
2.167	0.92	8.250	1.84	14.333	2.51	20.42	1.00
2.250	0.92	8.333	2.17	14.417	2.51	20.50	1.00
2.333	1.09	8.417	2.17	14.500	2.51	20.58	1.00
2.417	1.09	8.500	2.17	14.583	2.51	20.67	1.00
2.500	1.09	8.583	2.17	14.667	2.51	20.75	1.00
2.583	1.09	8.667	2.17	14.750	2.51	20.83	1.00
2.667	1.09	8.750	2.17	14.833	2.51	20.92	1.00
2.750	1.09	8.833	2.34	14.917	2.51	21.00	1.00
2.833	1.09	8.917	2.34	15.000	2.51	21.08	1.00
2.917	1.09	9.000	2.34	15.083	2.51	21.17	1.00
3.000	1.09	9.083	2.34	15.167	2.51	21.25	1.00
3.083	1.09	9.167	2.34	15.250	2.51	21.33	1.00

3.167	1.09	9.250	2.34	15.333	2.51	21.42	1.00
3.250	1.09	9.333	2.67	15.417	2.51	21.50	1.00
3.333	1.09	9.417	2.67	15.500	2.51	21.58	1.00
3.417	1.09	9.500	2.67	15.583	2.51	21.67	1.00
3.500	1.09	9.583	2.67	15.667	2.51	21.75	1.00
3.583	1.09	9.667	2.67	15.750	2.51	21.83	1.00
3.667	1.09	9.750	2.67	15.833	2.51	21.92	1.00
3.750	1.09	9.833	3.01	15.917	2.51	22.00	1.00
3.833	1.09	9.917	3.01	16.000	2.51	22.08	1.00
3.917	1.09	10.000	3.01	16.083	2.51	22.17	1.00
4.000	1.09	10.083	3.01	16.167	2.51	22.25	1.00
4.083	1.09	10.167	3.01	16.250	2.51	22.33	1.00
4.167	1.09	10.250	3.01	16.333	1.50	22.42	1.00
4.250	1.09	10.333	3.84	16.417	1.50	22.50	1.00
4.333	1.34	10.417	3.84	16.500	1.50	22.58	1.00
4.417	1.34	10.500	3.84	16.583	1.50	22.67	1.00
4.500	1.34	10.583	3.84	16.667	1.50	22.75	1.00
4.583	1.34	10.667	3.84	16.750	1.50	22.83	1.00
4.667	1.34	10.750	3.84	16.833	1.50	22.92	1.00
4.750	1.34	10.833	5.18	16.917	1.50	23.00	1.00
4.833	1.34	10.917	5.18	17.000	1.50	23.08	1.00
4.917	1.34	11.000	5.18	17.083	1.50	23.17	1.00
5.000	1.34	11.083	5.18	17.167	1.50	23.25	1.00
5.083	1.34	11.167	5.18	17.250	1.50	23.33	1.00
5.167	1.34	11.250	5.18	17.333	1.50	23.42	1.00
5.250	1.34	11.333	8.02	17.417	1.50	23.50	1.00
5.333	1.34	11.417	8.02	17.500	1.50	23.58	1.00
5.417	1.34	11.500	8.02	17.583	1.50	23.67	1.00
5.500	1.34	11.583	8.02	17.667	1.50	23.75	1.00
5.583	1.34	11.667	8.02	17.750	1.50	23.83	1.00
5.667	1.34	11.750	8.02	17.833	1.50	23.92	1.00
5.750	1.34	11.833	24.72	17.917	1.50	24.00	1.00
5.833	1.34	11.917	24.72	18.000	1.50	24.08	1.00
5.917	1.34	12.000	24.72	18.083	1.50	24.17	1.00
6.000	1.34	12.083	102.21	18.167	1.50	24.25	1.00
6.083	1.34	12.167	102.22	18.250	1.50		

Unit Hyd Qpeak (cms)= 5.892

PEAK FLOW (cms)= 3.011 (i)
TIME TO PEAK (hrs)= 12.417
RUNOFF VOLUME (mm)= 33.499
TOTAL RAINFALL (mm)= 83.510
RUNOFF COEFFICIENT = 0.401

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB

NASHYD (0012)	Area (ha)= 1.13 Curve Number (CN)= 67.4
ID= 1 DT= 5.0 min	Ia (mm)= 7.88 # of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.43

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.34	12.250	102.22	18.33	1.50
0.167	0.00	6.250	1.34	12.333	12.04	18.42	1.50
0.250	0.00	6.333	1.50	12.417	12.03	18.50	1.50
0.333	0.92	6.417	1.50	12.500	12.03	18.58	1.50
0.417	0.92	6.500	1.50	12.583	12.03	18.67	1.50
0.500	0.92	6.583	1.50	12.667	12.03	18.75	1.50
0.583	0.92	6.667	1.50	12.750	12.03	18.83	1.50
0.667	0.92	6.750	1.50	12.833	6.18	18.92	1.50
0.750	0.92	6.833	1.50	12.917	6.18	19.00	1.50
0.833	0.92	6.917	1.50	13.000	6.18	19.08	1.50
0.917	0.92	7.000	1.50	13.083	6.18	19.17	1.50
1.000	0.92	7.083	1.50	13.167	6.18	19.25	1.50
1.083	0.92	7.167	1.50	13.250	6.18	19.33	1.50
1.167	0.92	7.250	1.50	13.333	4.51	19.42	1.50
1.250	0.92	7.333	1.84	13.417	4.51	19.50	1.50
1.333	0.92	7.417	1.84	13.500	4.51	19.58	1.50
1.417	0.92	7.500	1.84	13.583	4.51	19.67	1.50
1.500	0.92	7.583	1.84	13.667	4.51	19.75	1.50
1.583	0.92	7.667	1.84	13.750	4.51	19.83	1.50
1.667	0.92	7.750	1.84	13.833	3.51	19.92	1.50
1.750	0.92	7.833	1.84	13.917	3.51	20.00	1.50
1.833	0.92	7.917	1.84	14.000	3.51	20.08	1.50
1.917	0.92	8.000	1.84	14.083	3.51	20.17	1.50
2.000	0.92	8.083	1.84	14.167	3.51	20.25	1.50
2.083	0.92	8.167	1.84	14.250	3.51	20.33	1.00
2.167	0.92	8.250	1.84	14.333	2.51	20.42	1.00
2.250	0.92	8.333	2.17	14.417	2.51	20.50	1.00
2.333	1.09	8.417	2.17	14.500	2.51	20.58	1.00
2.417	1.09	8.500	2.17	14.583	2.51	20.67	1.00
2.500	1.09	8.583	2.17	14.667	2.51	20.75	1.00
2.583	1.09	8.667	2.17	14.750	2.51	20.83	1.00
2.667	1.09	8.750	2.17	14.833	2.51	20.92	1.00
2.750	1.09	8.833	2.34	14.917	2.51	21.00	1.00
2.833	1.09	8.917	2.34	15.000	2.51	21.08	1.00
2.917	1.09	9.000	2.34	15.083	2.51	21.17	1.00
3.000	1.09	9.083	2.34	15.167	2.51	21.25	1.00
3.083	1.09	9.167	2.34	15.250	2.51	21.33	1.00
3.167	1.09	9.250	2.34	15.333	2.51	21.42	1.00
3.250	1.09	9.333	2.67	15.417	2.51	21.50	1.00
3.333	1.09	9.417	2.67	15.500	2.51	21.58	1.00

3.417	1.09	9.500	2.67	15.583	2.51	21.67	1.00
3.500	1.09	9.583	2.67	15.667	2.51	21.75	1.00
3.583	1.09	9.667	2.67	15.750	2.51	21.83	1.00
3.667	1.09	9.750	2.67	15.833	2.51	21.92	1.00
3.750	1.09	9.833	3.01	15.917	2.51	22.00	1.00
3.833	1.09	9.917	3.01	16.000	2.51	22.08	1.00
3.917	1.09	10.000	3.01	16.083	2.51	22.17	1.00
4.000	1.09	10.083	3.01	16.167	2.51	22.25	1.00
4.083	1.09	10.167	3.01	16.250	2.51	22.33	1.00
4.167	1.09	10.250	3.01	16.333	1.50	22.42	1.00
4.250	1.09	10.333	3.84	16.417	1.50	22.50	1.00
4.333	1.34	10.417	3.84	16.500	1.50	22.58	1.00
4.417	1.34	10.500	3.84	16.583	1.50	22.67	1.00
4.500	1.34	10.583	3.84	16.667	1.50	22.75	1.00
4.583	1.34	10.667	3.84	16.750	1.50	22.83	1.00
4.667	1.34	10.750	3.84	16.833	1.50	22.92	1.00
4.750	1.34	10.833	5.18	16.917	1.50	23.00	1.00
4.833	1.34	10.917	5.18	17.000	1.50	23.08	1.00
4.917	1.34	11.000	5.18	17.083	1.50	23.17	1.00
5.000	1.34	11.083	5.18	17.167	1.50	23.25	1.00
5.083	1.34	11.167	5.18	17.250	1.50	23.33	1.00
5.167	1.34	11.250	5.18	17.333	1.50	23.42	1.00
5.250	1.34	11.333	8.02	17.417	1.50	23.50	1.00
5.333	1.34	11.417	8.02	17.500	1.50	23.58	1.00
5.417	1.34	11.500	8.02	17.583	1.50	23.67	1.00
5.500	1.34	11.583	8.02	17.667	1.50	23.75	1.00
5.583	1.34	11.667	8.02	17.750	1.50	23.83	1.00
5.667	1.34	11.750	8.02	17.833	1.50	23.92	1.00
5.750	1.34	11.833	24.72	17.917	1.50	24.00	1.00
5.833	1.34	11.917	24.72	18.000	1.50	24.08	1.00
5.917	1.34	12.000	24.72	18.083	1.50	24.17	1.00
6.000	1.34	12.083	102.21	18.167	1.50	24.25	1.00
6.083	1.34	12.167	102.22	18.250	1.50		

Unit Hyd Qpeak (cms)= 0.100

PEAK FLOW (cms)= 0.048 (i)
TIME TO PEAK (hrs)= 12.583
RUNOFF VOLUME (mm)= 28.782
TOTAL RAINFALL (mm)= 83.510
RUNOFF COEFFICIENT = 0.345

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0041)	Area (ha)=	0.59	Curve Number (CN)=	71.5	
ID= 1 DT= 5.0 min	Ia (mm)=	4.75	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	0.53			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.34	12.250	102.22	18.33	1.50
0.167	0.00	6.250	1.34	12.333	12.04	18.42	1.50
0.250	0.00	6.333	1.50	12.417	12.03	18.50	1.50
0.333	0.92	6.417	1.50	12.500	12.03	18.58	1.50
0.417	0.92	6.500	1.50	12.583	12.03	18.67	1.50
0.500	0.92	6.583	1.50	12.667	12.03	18.75	1.50
0.583	0.92	6.667	1.50	12.750	12.03	18.83	1.50
0.667	0.92	6.750	1.50	12.833	6.18	18.92	1.50
0.750	0.92	6.833	1.50	12.917	6.18	19.00	1.50
0.833	0.92	6.917	1.50	13.000	6.18	19.08	1.50
0.917	0.92	7.000	1.50	13.083	6.18	19.17	1.50
1.000	0.92	7.083	1.50	13.167	6.18	19.25	1.50
1.083	0.92	7.167	1.50	13.250	6.18	19.33	1.50
1.167	0.92	7.250	1.50	13.333	4.51	19.42	1.50
1.250	0.92	7.333	1.84	13.417	4.51	19.50	1.50
1.333	0.92	7.417	1.84	13.500	4.51	19.58	1.50
1.417	0.92	7.500	1.84	13.583	4.51	19.67	1.50
1.500	0.92	7.583	1.84	13.667	4.51	19.75	1.50
1.583	0.92	7.667	1.84	13.750	4.51	19.83	1.50
1.667	0.92	7.750	1.84	13.833	3.51	19.92	1.50
1.750	0.92	7.833	1.84	13.917	3.51	20.00	1.50
1.833	0.92	7.917	1.84	14.000	3.51	20.08	1.50
1.917	0.92	8.000	1.84	14.083	3.51	20.17	1.50
2.000	0.92	8.083	1.84	14.167	3.51	20.25	1.50
2.083	0.92	8.167	1.84	14.250	3.51	20.33	1.00
2.167	0.92	8.250	1.84	14.333	2.51	20.42	1.00
2.250	0.92	8.333	2.17	14.417	2.51	20.50	1.00
2.333	1.09	8.417	2.17	14.500	2.51	20.58	1.00
2.417	1.09	8.500	2.17	14.583	2.51	20.67	1.00
2.500	1.09	8.583	2.17	14.667	2.51	20.75	1.00
2.583	1.09	8.667	2.17	14.750	2.51	20.83	1.00
2.667	1.09	8.750	2.17	14.833	2.51	20.92	1.00
2.750	1.09	8.833	2.34	14.917	2.51	21.00	1.00
2.833	1.09	8.917	2.34	15.000	2.51	21.08	1.00
2.917	1.09	9.000	2.34	15.083	2.51	21.17	1.00
3.000	1.09	9.083	2.34	15.167	2.51	21.25	1.00
3.083	1.09	9.167	2.34	15.250	2.51	21.33	1.00
3.167	1.09	9.250	2.34	15.333	2.51	21.42	1.00
3.250	1.09	9.333	2.67	15.417	2.51	21.50	1.00
3.333	1.09	9.417	2.67	15.500	2.51	21.58	1.00
3.417	1.09	9.500	2.67	15.583	2.51	21.67	1.00
3.500	1.09	9.583	2.67	15.667	2.51	21.75	1.00
3.583	1.09	9.667	2.67	15.750	2.51	21.83	1.00

3.667	1.09	9.750	2.67	15.833	2.51	21.92	1.00
3.750	1.09	9.833	3.01	15.917	2.51	22.00	1.00
3.833	1.09	9.917	3.01	16.000	2.51	22.08	1.00
3.917	1.09	10.000	3.01	16.083	2.51	22.17	1.00
4.000	1.09	10.083	3.01	16.167	2.51	22.25	1.00
4.083	1.09	10.167	3.01	16.250	2.51	22.33	1.00
4.167	1.09	10.250	3.01	16.333	1.50	22.42	1.00
4.250	1.09	10.333	3.84	16.417	1.50	22.50	1.00
4.333	1.34	10.417	3.84	16.500	1.50	22.58	1.00
4.417	1.34	10.500	3.84	16.583	1.50	22.67	1.00
4.500	1.34	10.583	3.84	16.667	1.50	22.75	1.00
4.583	1.34	10.667	3.84	16.750	1.50	22.83	1.00
4.667	1.34	10.750	3.84	16.833	1.50	22.92	1.00
4.750	1.34	10.833	5.18	16.917	1.50	23.00	1.00
4.833	1.34	10.917	5.18	17.000	1.50	23.08	1.00
4.917	1.34	11.000	5.18	17.083	1.50	23.17	1.00
5.000	1.34	11.083	5.18	17.167	1.50	23.25	1.00
5.083	1.34	11.167	5.18	17.250	1.50	23.33	1.00
5.167	1.34	11.250	5.18	17.333	1.50	23.42	1.00
5.250	1.34	11.333	8.02	17.417	1.50	23.50	1.00
5.333	1.34	11.417	8.02	17.500	1.50	23.58	1.00
5.417	1.34	11.500	8.02	17.583	1.50	23.67	1.00
5.500	1.34	11.583	8.02	17.667	1.50	23.75	1.00
5.583	1.34	11.667	8.02	17.750	1.50	23.83	1.00
5.667	1.34	11.750	8.02	17.833	1.50	23.92	1.00
5.750	1.34	11.833	24.72	17.917	1.50	24.00	1.00
5.833	1.34	11.917	24.72	18.000	1.50	24.08	1.00
5.917	1.34	12.000	24.72	18.083	1.50	24.17	1.00
6.000	1.34	12.083	102.21	18.167	1.50	24.25	1.00
6.083	1.34	12.167	102.22	18.250	1.50		

Unit Hyd Qpeak (cms)= 0.043

PEAK FLOW (cms)= 0.026 (i)
TIME TO PEAK (hrs)= 12.667
RUNOFF VOLUME (mm)= 34.420
TOTAL RAINFALL (mm)= 83.510
RUNOFF COEFFICIENT = 0.412

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0028)	Area (ha)=	1.38	Curve Number (CN)= 64.1
ID= 1 DT= 5.0 min	Ia (mm)=	8.51	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	0.39	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.34	12.250	102.22	18.33	1.50
0.167	0.00	6.250	1.34	12.333	12.04	18.42	1.50
0.250	0.00	6.333	1.50	12.417	12.03	18.50	1.50
0.333	0.92	6.417	1.50	12.500	12.03	18.58	1.50
0.417	0.92	6.500	1.50	12.583	12.03	18.67	1.50
0.500	0.92	6.583	1.50	12.667	12.03	18.75	1.50
0.583	0.92	6.667	1.50	12.750	12.03	18.83	1.50
0.667	0.92	6.750	1.50	12.833	6.18	18.92	1.50
0.750	0.92	6.833	1.50	12.917	6.18	19.00	1.50
0.833	0.92	6.917	1.50	13.000	6.18	19.08	1.50
0.917	0.92	7.000	1.50	13.083	6.18	19.17	1.50
1.000	0.92	7.083	1.50	13.167	6.18	19.25	1.50
1.083	0.92	7.167	1.50	13.250	6.18	19.33	1.50
1.167	0.92	7.250	1.50	13.333	4.51	19.42	1.50
1.250	0.92	7.333	1.84	13.417	4.51	19.50	1.50
1.333	0.92	7.417	1.84	13.500	4.51	19.58	1.50
1.417	0.92	7.500	1.84	13.583	4.51	19.67	1.50
1.500	0.92	7.583	1.84	13.667	4.51	19.75	1.50
1.583	0.92	7.667	1.84	13.750	4.51	19.83	1.50
1.667	0.92	7.750	1.84	13.833	3.51	19.92	1.50
1.750	0.92	7.833	1.84	13.917	3.51	20.00	1.50
1.833	0.92	7.917	1.84	14.000	3.51	20.08	1.50
1.917	0.92	8.000	1.84	14.083	3.51	20.17	1.50
2.000	0.92	8.083	1.84	14.167	3.51	20.25	1.50
2.083	0.92	8.167	1.84	14.250	3.51	20.33	1.00
2.167	0.92	8.250	1.84	14.333	2.51	20.42	1.00
2.250	0.92	8.333	2.17	14.417	2.51	20.50	1.00
2.333	1.09	8.417	2.17	14.500	2.51	20.58	1.00
2.417	1.09	8.500	2.17	14.583	2.51	20.67	1.00
2.500	1.09	8.583	2.17	14.667	2.51	20.75	1.00
2.583	1.09	8.667	2.17	14.750	2.51	20.83	1.00
2.667	1.09	8.750	2.17	14.833	2.51	20.92	1.00
2.750	1.09	8.833	2.34	14.917	2.51	21.00	1.00
2.833	1.09	8.917	2.34	15.000	2.51	21.08	1.00
2.917	1.09	9.000	2.34	15.083	2.51	21.17	1.00
3.000	1.09	9.083	2.34	15.167	2.51	21.25	1.00
3.083	1.09	9.167	2.34	15.250	2.51	21.33	1.00
3.167	1.09	9.250	2.34	15.333	2.51	21.42	1.00
3.250	1.09	9.333	2.67	15.417	2.51	21.50	1.00
3.333	1.09	9.417	2.67	15.500	2.51	21.58	1.00
3.417	1.09	9.500	2.67	15.583	2.51	21.67	1.00
3.500	1.09	9.583	2.67	15.667	2.51	21.75	1.00
3.583	1.09	9.667	2.67	15.750	2.51	21.83	1.00
3.667	1.09	9.750	2.67	15.833	2.51	21.92	1.00
3.750	1.09	9.833	3.01	15.917	2.51	22.00	1.00
3.833	1.09	9.917	3.01	16.000	2.51	22.08	1.00

3.917	1.09	10.000	3.01	16.083	2.51	22.17	1.00
4.000	1.09	10.083	3.01	16.167	2.51	22.25	1.00
4.083	1.09	10.167	3.01	16.250	2.51	22.33	1.00
4.167	1.09	10.250	3.01	16.333	1.50	22.42	1.00
4.250	1.09	10.333	3.84	16.417	1.50	22.50	1.00
4.333	1.34	10.417	3.84	16.500	1.50	22.58	1.00
4.417	1.34	10.500	3.84	16.583	1.50	22.67	1.00
4.500	1.34	10.583	3.84	16.667	1.50	22.75	1.00
4.583	1.34	10.667	3.84	16.750	1.50	22.83	1.00
4.667	1.34	10.750	3.84	16.833	1.50	22.92	1.00
4.750	1.34	10.833	5.18	16.917	1.50	23.00	1.00
4.833	1.34	10.917	5.18	17.000	1.50	23.08	1.00
4.917	1.34	11.000	5.18	17.083	1.50	23.17	1.00
5.000	1.34	11.083	5.18	17.167	1.50	23.25	1.00
5.083	1.34	11.167	5.18	17.250	1.50	23.33	1.00
5.167	1.34	11.250	5.18	17.333	1.50	23.42	1.00
5.250	1.34	11.333	8.02	17.417	1.50	23.50	1.00
5.333	1.34	11.417	8.02	17.500	1.50	23.58	1.00
5.417	1.34	11.500	8.02	17.583	1.50	23.67	1.00
5.500	1.34	11.583	8.02	17.667	1.50	23.75	1.00
5.583	1.34	11.667	8.02	17.750	1.50	23.83	1.00
5.667	1.34	11.750	8.02	17.833	1.50	23.92	1.00
5.750	1.34	11.833	24.72	17.917	1.50	24.00	1.00
5.833	1.34	11.917	24.72	18.000	1.50	24.08	1.00
5.917	1.34	12.000	24.72	18.083	1.50	24.17	1.00
6.000	1.34	12.083	102.21	18.167	1.50	24.25	1.00
6.083	1.34	12.167	102.22	18.250	1.50		

Unit Hyd Qpeak (cms)= 0.135

PEAK FLOW (cms)= 0.056 (i)
TIME TO PEAK (hrs)= 12.500
RUNOFF VOLUME (mm)= 25.917
TOTAL RAINFALL (mm)= 83.510
RUNOFF COEFFICIENT = 0.310

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	
STANDHYD (0044)	Area (ha)= 1.62
ID= 1 DT= 5.0 min	Total Imp(%)= 48.77 Dir. Conn.(%)= 30.86

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.79	0.83
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	1.40
Length	(m)=	103.92	400.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.34	12.250	102.22	18.33	1.50
0.167	0.00	6.250	1.34	12.333	12.04	18.42	1.50
0.250	0.00	6.333	1.50	12.417	12.03	18.50	1.50
0.333	0.92	6.417	1.50	12.500	12.03	18.58	1.50
0.417	0.92	6.500	1.50	12.583	12.03	18.67	1.50
0.500	0.92	6.583	1.50	12.667	12.03	18.75	1.50
0.583	0.92	6.667	1.50	12.750	12.03	18.83	1.50
0.667	0.92	6.750	1.50	12.833	6.18	18.92	1.50
0.750	0.92	6.833	1.50	12.917	6.18	19.00	1.50
0.833	0.92	6.917	1.50	13.000	6.18	19.08	1.50
0.917	0.92	7.000	1.50	13.083	6.18	19.17	1.50
1.000	0.92	7.083	1.50	13.167	6.18	19.25	1.50
1.083	0.92	7.167	1.50	13.250	6.18	19.33	1.50
1.167	0.92	7.250	1.50	13.333	4.51	19.42	1.50
1.250	0.92	7.333	1.84	13.417	4.51	19.50	1.50
1.333	0.92	7.417	1.84	13.500	4.51	19.58	1.50
1.417	0.92	7.500	1.84	13.583	4.51	19.67	1.50
1.500	0.92	7.583	1.84	13.667	4.51	19.75	1.50
1.583	0.92	7.667	1.84	13.750	4.51	19.83	1.50
1.667	0.92	7.750	1.84	13.833	3.51	19.92	1.50
1.750	0.92	7.833	1.84	13.917	3.51	20.00	1.50
1.833	0.92	7.917	1.84	14.000	3.51	20.08	1.50
1.917	0.92	8.000	1.84	14.083	3.51	20.17	1.50
2.000	0.92	8.083	1.84	14.167	3.51	20.25	1.50
2.083	0.92	8.167	1.84	14.250	3.51	20.33	1.00
2.167	0.92	8.250	1.84	14.333	2.51	20.42	1.00
2.250	0.92	8.333	2.17	14.417	2.51	20.50	1.00
2.333	1.09	8.417	2.17	14.500	2.51	20.58	1.00
2.417	1.09	8.500	2.17	14.583	2.51	20.67	1.00
2.500	1.09	8.583	2.17	14.667	2.51	20.75	1.00
2.583	1.09	8.667	2.17	14.750	2.51	20.83	1.00
2.667	1.09	8.750	2.17	14.833	2.51	20.92	1.00
2.750	1.09	8.833	2.34	14.917	2.51	21.00	1.00
2.833	1.09	8.917	2.34	15.000	2.51	21.08	1.00
2.917	1.09	9.000	2.34	15.083	2.51	21.17	1.00
3.000	1.09	9.083	2.34	15.167	2.51	21.25	1.00
3.083	1.09	9.167	2.34	15.250	2.51	21.33	1.00
3.167	1.09	9.250	2.34	15.333	2.51	21.42	1.00
3.250	1.09	9.333	2.67	15.417	2.51	21.50	1.00
3.333	1.09	9.417	2.67	15.500	2.51	21.58	1.00
3.417	1.09	9.500	2.67	15.583	2.51	21.67	1.00
3.500	1.09	9.583	2.67	15.667	2.51	21.75	1.00
3.583	1.09	9.667	2.67	15.750	2.51	21.83	1.00

3.667	1.09	9.750	2.67	15.833	2.51	21.92	1.00
3.750	1.09	9.833	3.01	15.917	2.51	22.00	1.00
3.833	1.09	9.917	3.01	16.000	2.51	22.08	1.00
3.917	1.09	10.000	3.01	16.083	2.51	22.17	1.00
4.000	1.09	10.083	3.01	16.167	2.51	22.25	1.00
4.083	1.09	10.167	3.01	16.250	2.51	22.33	1.00
4.167	1.09	10.250	3.01	16.333	1.50	22.42	1.00
4.250	1.09	10.333	3.84	16.417	1.50	22.50	1.00
4.333	1.34	10.417	3.84	16.500	1.50	22.58	1.00
4.417	1.34	10.500	3.84	16.583	1.50	22.67	1.00
4.500	1.34	10.583	3.84	16.667	1.50	22.75	1.00
4.583	1.34	10.667	3.84	16.750	1.50	22.83	1.00
4.667	1.34	10.750	3.84	16.833	1.50	22.92	1.00
4.750	1.34	10.833	5.18	16.917	1.50	23.00	1.00
4.833	1.34	10.917	5.18	17.000	1.50	23.08	1.00
4.917	1.34	11.000	5.18	17.083	1.50	23.17	1.00
5.000	1.34	11.083	5.18	17.167	1.50	23.25	1.00
5.083	1.34	11.167	5.18	17.250	1.50	23.33	1.00
5.167	1.34	11.250	5.18	17.333	1.50	23.42	1.00
5.250	1.34	11.333	8.02	17.417	1.50	23.50	1.00
5.333	1.34	11.417	8.02	17.500	1.50	23.58	1.00
5.417	1.34	11.500	8.02	17.583	1.50	23.67	1.00
5.500	1.34	11.583	8.02	17.667	1.50	23.75	1.00
5.583	1.34	11.667	8.02	17.750	1.50	23.83	1.00
5.667	1.34	11.750	8.02	17.833	1.50	23.92	1.00
5.750	1.34	11.833	24.72	17.917	1.50	24.00	1.00
5.833	1.34	11.917	24.72	18.000	1.50	24.08	1.00
5.917	1.34	12.000	24.72	18.083	1.50	24.17	1.00
6.000	1.34	12.083	102.21	18.167	1.50	24.25	1.00
6.083	1.34	12.167	102.22	18.250	1.50		

Max.Eff.Inten.(mm/hr)=	102.22	27.89	
over (min)	5.00	60.00	
Storage Coeff. (min)=	3.19 (ii)	55.31 (ii)	
Unit Hyd. Tpeak (min)=	5.00	60.00	
Unit Hyd. peak (cms)=	0.27	0.02	
			TOTALS
PEAK FLOW (cms)=	0.14	0.04	0.152 (iii)
TIME TO PEAK (hrs)=	12.25	13.08	12.25
RUNOFF VOLUME (mm)=	82.51	38.75	52.23
TOTAL RAINFALL (mm)=	83.51	83.51	83.51
RUNOFF COEFFICIENT =	0.99	0.46	0.63

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	
STANDHYD (0043)	Area (ha)= 0.13
ID= 1 DT= 5.0 min	Total Imp(%)= 30.77 Dir. Conn.(%)= 7.69

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.04	0.09
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	0.50
Length	(m)=	29.44	70.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.34	12.250	102.22	18.33	1.50
0.167	0.00	6.250	1.34	12.333	12.04	18.42	1.50
0.250	0.00	6.333	1.50	12.417	12.03	18.50	1.50
0.333	0.92	6.417	1.50	12.500	12.03	18.58	1.50
0.417	0.92	6.500	1.50	12.583	12.03	18.67	1.50
0.500	0.92	6.583	1.50	12.667	12.03	18.75	1.50
0.583	0.92	6.667	1.50	12.750	12.03	18.83	1.50
0.667	0.92	6.750	1.50	12.833	6.18	18.92	1.50
0.750	0.92	6.833	1.50	12.917	6.18	19.00	1.50
0.833	0.92	6.917	1.50	13.000	6.18	19.08	1.50
0.917	0.92	7.000	1.50	13.083	6.18	19.17	1.50
1.000	0.92	7.083	1.50	13.167	6.18	19.25	1.50
1.083	0.92	7.167	1.50	13.250	6.18	19.33	1.50
1.167	0.92	7.250	1.50	13.333	4.51	19.42	1.50
1.250	0.92	7.333	1.84	13.417	4.51	19.50	1.50
1.333	0.92	7.417	1.84	13.500	4.51	19.58	1.50
1.417	0.92	7.500	1.84	13.583	4.51	19.67	1.50
1.500	0.92	7.583	1.84	13.667	4.51	19.75	1.50
1.583	0.92	7.667	1.84	13.750	4.51	19.83	1.50
1.667	0.92	7.750	1.84	13.833	3.51	19.92	1.50
1.750	0.92	7.833	1.84	13.917	3.51	20.00	1.50
1.833	0.92	7.917	1.84	14.000	3.51	20.08	1.50
1.917	0.92	8.000	1.84	14.083	3.51	20.17	1.50
2.000	0.92	8.083	1.84	14.167	3.51	20.25	1.50
2.083	0.92	8.167	1.84	14.250	3.51	20.33	1.00
2.167	0.92	8.250	1.84	14.333	2.51	20.42	1.00
2.250	0.92	8.333	2.17	14.417	2.51	20.50	1.00
2.333	1.09	8.417	2.17	14.500	2.51	20.58	1.00
2.417	1.09	8.500	2.17	14.583	2.51	20.67	1.00
2.500	1.09	8.583	2.17	14.667	2.51	20.75	1.00

2.583	1.09	8.667	2.17	14.750	2.51	20.83	1.00
2.667	1.09	8.750	2.17	14.833	2.51	20.92	1.00
2.750	1.09	8.833	2.34	14.917	2.51	21.00	1.00
2.833	1.09	8.917	2.34	15.000	2.51	21.08	1.00
2.917	1.09	9.000	2.34	15.083	2.51	21.17	1.00
3.000	1.09	9.083	2.34	15.167	2.51	21.25	1.00
3.083	1.09	9.167	2.34	15.250	2.51	21.33	1.00
3.167	1.09	9.250	2.34	15.333	2.51	21.42	1.00
3.250	1.09	9.333	2.67	15.417	2.51	21.50	1.00
3.333	1.09	9.417	2.67	15.500	2.51	21.58	1.00
3.417	1.09	9.500	2.67	15.583	2.51	21.67	1.00
3.500	1.09	9.583	2.67	15.667	2.51	21.75	1.00
3.583	1.09	9.667	2.67	15.750	2.51	21.83	1.00
3.667	1.09	9.750	2.67	15.833	2.51	21.92	1.00
3.750	1.09	9.833	3.01	15.917	2.51	22.00	1.00
3.833	1.09	9.917	3.01	16.000	2.51	22.08	1.00
3.917	1.09	10.000	3.01	16.083	2.51	22.17	1.00
4.000	1.09	10.083	3.01	16.167	2.51	22.25	1.00
4.083	1.09	10.167	3.01	16.250	2.51	22.33	1.00
4.167	1.09	10.250	3.01	16.333	1.50	22.42	1.00
4.250	1.09	10.333	3.84	16.417	1.50	22.50	1.00
4.333	1.34	10.417	3.84	16.500	1.50	22.58	1.00
4.417	1.34	10.500	3.84	16.583	1.50	22.67	1.00
4.500	1.34	10.583	3.84	16.667	1.50	22.75	1.00
4.583	1.34	10.667	3.84	16.750	1.50	22.83	1.00
4.667	1.34	10.750	3.84	16.833	1.50	22.92	1.00
4.750	1.34	10.833	5.18	16.917	1.50	23.00	1.00
4.833	1.34	10.917	5.18	17.000	1.50	23.08	1.00
4.917	1.34	11.000	5.18	17.083	1.50	23.17	1.00
5.000	1.34	11.083	5.18	17.167	1.50	23.25	1.00
5.083	1.34	11.167	5.18	17.250	1.50	23.33	1.00
5.167	1.34	11.250	5.18	17.333	1.50	23.42	1.00
5.250	1.34	11.333	8.02	17.417	1.50	23.50	1.00
5.333	1.34	11.417	8.02	17.500	1.50	23.58	1.00
5.417	1.34	11.500	8.02	17.583	1.50	23.67	1.00
5.500	1.34	11.583	8.02	17.667	1.50	23.75	1.00
5.583	1.34	11.667	8.02	17.750	1.50	23.83	1.00
5.667	1.34	11.750	8.02	17.833	1.50	23.92	1.00
5.750	1.34	11.833	24.72	17.917	1.50	24.00	1.00
5.833	1.34	11.917	24.72	18.000	1.50	24.08	1.00
5.917	1.34	12.000	24.72	18.083	1.50	24.17	1.00
6.000	1.34	12.083	102.21	18.167	1.50	24.25	1.00
6.083	1.34	12.167	102.22	18.250	1.50		

Max.Eff.Inten.(mm/hr)=	102.22	56.65	
over (min)	5.00	25.00	
Storage Coeff. (min)=	1.50 (ii)	20.28 (ii)	
Unit Hyd. Tpeak (min)=	5.00	25.00	
Unit Hyd. peak (cms)=	0.33	0.05	
			TOTALS

PEAK FLOW (cms)=	0.00	0.01	0.009 (iii)
TIME TO PEAK (hrs)=	12.25	12.50	12.50
RUNOFF VOLUME (mm)=	82.51	38.48	41.78
TOTAL RAINFALL (mm)=	83.51	83.51	83.51
RUNOFF COEFFICIENT =	0.99	0.46	0.50

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0023)				
1 + 2 = 3	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0011):	46.28	3.011	12.42	33.50
+ ID2= 2 (0012):	1.13	0.048	12.58	28.78
ID = 3 (0023):	47.41	3.054	12.42	33.39

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023)				
3 + 2 = 1	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0023):	47.41	3.054	12.42	33.39
+ ID2= 2 (0028):	1.38	0.056	12.50	25.92
ID = 1 (0023):	48.79	3.107	12.42	33.17

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023)				
1 + 2 = 3	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0023):	48.79	3.107	12.42	33.17
+ ID2= 2 (0041):	0.59	0.026	12.67	34.42
ID = 3 (0023):	49.38	3.128	12.42	33.19

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023)					
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0023):	49.38	3.128	12.42	33.19
+ ID2= 2 (0043):	0.13	0.009	12.50	41.78
ID = 1 (0023):	49.51	3.136	12.42	33.21

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023)					
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0023):	49.51	3.136	12.42	33.21
+ ID2= 2 (0044):	1.62	0.152	12.25	52.23
ID = 3 (0023):	51.13	3.175	12.42	33.81

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0025)					
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0023):	51.13	3.175	12.42	33.81
+ ID2= 2 (0024):	225.17	2.981	13.25	21.54
ID = 3 (0025):	276.30	4.795	12.50	23.81

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

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V    V   I    SSSSS  U   U    A    L             (v 6.2.2020)
V    V   I    SS     U   U   A A   L
 V  V    I     SS    U   U  AAAAA  L
 V  V    I      SS   U   U  A   A  L
  VV     I    SSSSS  UUUUU  A   A  LLLLL

 OOO   TTTTT  TTTTT  H   H  Y   Y  M   M   OOO    TM
O   O    T      T    H   H   Y Y   MM MM  O   O
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O   O    T     T    H   H    Y    M   M  O   O
 OOO     T     T    H   H    Y    M   M   OOO
```

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***** D E T A I L E D O U T P U T *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat

Output filename:
C:\Users\msimon\AppData\Local\Civica\VH5\a122c840-259d-4b92-8a43-b1e7a592bdea\479995b1-c3f5-47c0-85dc-70377360b1e3\scena
Summary filename:
C:\Users\msimon\AppData\Local\Civica\VH5\a122c840-259d-4b92-8a43-b1e7a592bdea\479995b1-c3f5-47c0-85dc-70377360b1e3\scena

DATE: 07-15-2026 TIME: 03:17:51

USER:

COMMENTS: _____

****
** SIMULATION : I - 10-year SCS **
****

READ STORM	Filename: C:\Users\msimon\AppData\Local\Temp\2578c1bc-683b-4555-9960-7d3c657f7fff\fb02d2ed
Ptotal= 96.98 mm	Comments: 10yr 24hr 15min SCS Type II (MTO) - 15%

TIME (hrs)	RAIN (mm/hr)	TIME (hrs)	RAIN (mm/hr)	TIME (hrs)	RAIN (mm/hr)	TIME (hrs)	RAIN (mm/hr)
0.00	0.00	6.25	1.75	12.50	13.97	18.75	1.75
0.25	1.07	6.50	1.75	12.75	7.18	19.00	1.75
0.50	1.07	6.75	1.75	13.00	7.18	19.25	1.75
0.75	1.07	7.00	1.75	13.25	5.24	19.50	1.75
1.00	1.07	7.25	2.13	13.50	5.24	19.75	1.75
1.25	1.07	7.50	2.13	13.75	4.07	20.00	1.75

1.50	1.07	7.75	2.13	14.00	4.07	20.25	1.16
1.75	1.07	8.00	2.13	14.25	2.91	20.50	1.16
2.00	1.07	8.25	2.52	14.50	2.91	20.75	1.16
2.25	1.26	8.50	2.52	14.75	2.91	21.00	1.16
2.50	1.26	8.75	2.72	15.00	2.91	21.25	1.16
2.75	1.26	9.00	2.72	15.25	2.91	21.50	1.16
3.00	1.26	9.25	3.10	15.50	2.91	21.75	1.16
3.25	1.26	9.50	3.10	15.75	2.91	22.00	1.16
3.50	1.26	9.75	3.49	16.00	2.91	22.25	1.16
3.75	1.26	10.00	3.49	16.25	1.75	22.50	1.16
4.00	1.26	10.25	4.46	16.50	1.75	22.75	1.16
4.25	1.55	10.50	4.46	16.75	1.75	23.00	1.16
4.50	1.55	10.75	6.01	17.00	1.75	23.25	1.16
4.75	1.55	11.00	6.01	17.25	1.75	23.50	1.16
5.00	1.55	11.25	9.31	17.50	1.75	23.75	1.16
5.25	1.55	11.50	9.31	17.75	1.75	24.00	1.16
5.50	1.55	11.75	28.71	18.00	1.75		
5.75	1.55	12.00	118.70	18.25	1.75		
6.00	1.55	12.25	13.97	18.50	1.75		

CALIB			
NASHYD (0007)	Area (ha)= 100.92	Curve Number (CN)= 55.9	
ID= 1 DT= 5.0 min	Ia (mm)= 7.89	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 1.70		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.55	12.250	118.70	18.33	1.75
0.167	0.00	6.250	1.55	12.333	13.98	18.42	1.75
0.250	0.00	6.333	1.75	12.417	13.97	18.50	1.75
0.333	1.07	6.417	1.75	12.500	13.97	18.58	1.75
0.417	1.07	6.500	1.75	12.583	13.97	18.67	1.75
0.500	1.07	6.583	1.75	12.667	13.97	18.75	1.75
0.583	1.07	6.667	1.75	12.750	13.97	18.83	1.75
0.667	1.07	6.750	1.75	12.833	7.18	18.92	1.75
0.750	1.07	6.833	1.75	12.917	7.18	19.00	1.75
0.833	1.07	6.917	1.75	13.000	7.18	19.08	1.75
0.917	1.07	7.000	1.75	13.083	7.18	19.17	1.75
1.000	1.07	7.083	1.75	13.167	7.18	19.25	1.75
1.083	1.07	7.167	1.75	13.250	7.18	19.33	1.75
1.167	1.07	7.250	1.75	13.333	5.24	19.42	1.75
1.250	1.07	7.333	2.13	13.417	5.24	19.50	1.75
1.333	1.07	7.417	2.13	13.500	5.24	19.58	1.75
1.417	1.07	7.500	2.13	13.583	5.24	19.67	1.75
1.500	1.07	7.583	2.13	13.667	5.24	19.75	1.75
1.583	1.07	7.667	2.13	13.750	5.24	19.83	1.75
1.667	1.07	7.750	2.13	13.833	4.07	19.92	1.75
1.750	1.07	7.833	2.13	13.917	4.07	20.00	1.75
1.833	1.07	7.917	2.13	14.000	4.07	20.08	1.75
1.917	1.07	8.000	2.13	14.083	4.07	20.17	1.75
2.000	1.07	8.083	2.13	14.167	4.07	20.25	1.75
2.083	1.07	8.167	2.13	14.250	4.07	20.33	1.16
2.167	1.07	8.250	2.13	14.333	2.91	20.42	1.16
2.250	1.07	8.333	2.52	14.417	2.91	20.50	1.16
2.333	1.26	8.417	2.52	14.500	2.91	20.58	1.16
2.417	1.26	8.500	2.52	14.583	2.91	20.67	1.16
2.500	1.26	8.583	2.52	14.667	2.91	20.75	1.16
2.583	1.26	8.667	2.52	14.750	2.91	20.83	1.16
2.667	1.26	8.750	2.52	14.833	2.91	20.92	1.16
2.750	1.26	8.833	2.72	14.917	2.91	21.00	1.16
2.833	1.26	8.917	2.72	15.000	2.91	21.08	1.16
2.917	1.26	9.000	2.72	15.083	2.91	21.17	1.16
3.000	1.26	9.083	2.72	15.167	2.91	21.25	1.16
3.083	1.26	9.167	2.72	15.250	2.91	21.33	1.16
3.167	1.26	9.250	2.72	15.333	2.91	21.42	1.16
3.250	1.26	9.333	3.10	15.417	2.91	21.50	1.16
3.333	1.26	9.417	3.10	15.500	2.91	21.58	1.16
3.417	1.26	9.500	3.10	15.583	2.91	21.67	1.16
3.500	1.26	9.583	3.10	15.667	2.91	21.75	1.16
3.583	1.26	9.667	3.10	15.750	2.91	21.83	1.16
3.667	1.26	9.750	3.10	15.833	2.91	21.92	1.16
3.750	1.26	9.833	3.49	15.917	2.91	22.00	1.16
3.833	1.26	9.917	3.49	16.000	2.91	22.08	1.16
3.917	1.26	10.000	3.49	16.083	2.91	22.17	1.16
4.000	1.26	10.083	3.49	16.167	2.91	22.25	1.16
4.083	1.26	10.167	3.49	16.250	2.91	22.33	1.16
4.167	1.26	10.250	3.49	16.333	1.75	22.42	1.16
4.250	1.26	10.333	4.46	16.417	1.75	22.50	1.16
4.333	1.55	10.417	4.46	16.500	1.75	22.58	1.16
4.417	1.55	10.500	4.46	16.583	1.75	22.67	1.16
4.500	1.55	10.583	4.46	16.667	1.75	22.75	1.16
4.583	1.55	10.667	4.46	16.750	1.75	22.83	1.16
4.667	1.55	10.750	4.46	16.833	1.75	22.92	1.16
4.750	1.55	10.833	6.01	16.917	1.75	23.00	1.16
4.833	1.55	10.917	6.01	17.000	1.75	23.08	1.16
4.917	1.55	11.000	6.01	17.083	1.75	23.17	1.16
5.000	1.55	11.083	6.01	17.167	1.75	23.25	1.16
5.083	1.55	11.167	6.01	17.250	1.75	23.33	1.16
5.167	1.55	11.250	6.01	17.333	1.75	23.42	1.16
5.250	1.55	11.333	9.31	17.417	1.75	23.50	1.16
5.333	1.55	11.417	9.31	17.500	1.75	23.58	1.16
5.417	1.55	11.500	9.31	17.583	1.75	23.67	1.16
5.500	1.55	11.583	9.31	17.667	1.75	23.75	1.16

5.583	1.55	11.667	9.31	17.750	1.75	23.83	1.16
5.667	1.55	11.750	9.31	17.833	1.75	23.92	1.16
5.750	1.55	11.833	28.70	17.917	1.75	24.00	1.16
5.833	1.55	11.917	28.71	18.000	1.75	24.08	1.16
5.917	1.55	12.000	28.71	18.083	1.75	24.17	1.16
6.000	1.55	12.083	118.69	18.167	1.75	24.25	1.16
6.083	1.55	12.167	118.70	18.250	1.75		

Unit Hyd Qpeak (cms)= 2.267

PEAK FLOW (cms)= 1.433 (i)
TIME TO PEAK (hrs)= 14.083
RUNOFF VOLUME (mm)= 27.450
TOTAL RAINFALL (mm)= 96.980
RUNOFF COEFFICIENT = 0.283

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0008)	Area (ha)= 23.99	Curve Number (CN)= 44.7	
ID= 1 DT= 5.0 min	Ia (mm)= 10.91	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.97		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.55	12.250	118.70	18.33	1.75
0.167	0.00	6.250	1.55	12.333	13.98	18.42	1.75
0.250	0.00	6.333	1.75	12.417	13.97	18.50	1.75
0.333	1.07	6.417	1.75	12.500	13.97	18.58	1.75
0.417	1.07	6.500	1.75	12.583	13.97	18.67	1.75
0.500	1.07	6.583	1.75	12.667	13.97	18.75	1.75
0.583	1.07	6.667	1.75	12.750	13.97	18.83	1.75
0.667	1.07	6.750	1.75	12.833	7.18	18.92	1.75
0.750	1.07	6.833	1.75	12.917	7.18	19.00	1.75
0.833	1.07	6.917	1.75	13.000	7.18	19.08	1.75
0.917	1.07	7.000	1.75	13.083	7.18	19.17	1.75
1.000	1.07	7.083	1.75	13.167	7.18	19.25	1.75
1.083	1.07	7.167	1.75	13.250	7.18	19.33	1.75
1.167	1.07	7.250	1.75	13.333	5.24	19.42	1.75
1.250	1.07	7.333	2.13	13.417	5.24	19.50	1.75
1.333	1.07	7.417	2.13	13.500	5.24	19.58	1.75
1.417	1.07	7.500	2.13	13.583	5.24	19.67	1.75
1.500	1.07	7.583	2.13	13.667	5.24	19.75	1.75
1.583	1.07	7.667	2.13	13.750	5.24	19.83	1.75
1.667	1.07	7.750	2.13	13.833	4.07	19.92	1.75
1.750	1.07	7.833	2.13	13.917	4.07	20.00	1.75
1.833	1.07	7.917	2.13	14.000	4.07	20.08	1.75
1.917	1.07	8.000	2.13	14.083	4.07	20.17	1.75
2.000	1.07	8.083	2.13	14.167	4.07	20.25	1.75
2.083	1.07	8.167	2.13	14.250	4.07	20.33	1.16
2.167	1.07	8.250	2.13	14.333	2.91	20.42	1.16
2.250	1.07	8.333	2.52	14.417	2.91	20.50	1.16
2.333	1.26	8.417	2.52	14.500	2.91	20.58	1.16
2.417	1.26	8.500	2.52	14.583	2.91	20.67	1.16
2.500	1.26	8.583	2.52	14.667	2.91	20.75	1.16
2.583	1.26	8.667	2.52	14.750	2.91	20.83	1.16
2.667	1.26	8.750	2.52	14.833	2.91	20.92	1.16
2.750	1.26	8.833	2.72	14.917	2.91	21.00	1.16
2.833	1.26	8.917	2.72	15.000	2.91	21.08	1.16
2.917	1.26	9.000	2.72	15.083	2.91	21.17	1.16
3.000	1.26	9.083	2.72	15.167	2.91	21.25	1.16
3.083	1.26	9.167	2.72	15.250	2.91	21.33	1.16
3.167	1.26	9.250	2.72	15.333	2.91	21.42	1.16
3.250	1.26	9.333	3.10	15.417	2.91	21.50	1.16
3.333	1.26	9.417	3.10	15.500	2.91	21.58	1.16
3.417	1.26	9.500	3.10	15.583	2.91	21.67	1.16
3.500	1.26	9.583	3.10	15.667	2.91	21.75	1.16
3.583	1.26	9.667	3.10	15.750	2.91	21.83	1.16
3.667	1.26	9.750	3.10	15.833	2.91	21.92	1.16
3.750	1.26	9.833	3.49	15.917	2.91	22.00	1.16
3.833	1.26	9.917	3.49	16.000	2.91	22.08	1.16
3.917	1.26	10.000	3.49	16.083	2.91	22.17	1.16
4.000	1.26	10.083	3.49	16.167	2.91	22.25	1.16
4.083	1.26	10.167	3.49	16.250	2.91	22.33	1.16
4.167	1.26	10.250	3.49	16.333	1.75	22.42	1.16
4.250	1.26	10.333	4.46	16.417	1.75	22.50	1.16
4.333	1.55	10.417	4.46	16.500	1.75	22.58	1.16
4.417	1.55	10.500	4.46	16.583	1.75	22.67	1.16
4.500	1.55	10.583	4.46	16.667	1.75	22.75	1.16
4.583	1.55	10.667	4.46	16.750	1.75	22.83	1.16
4.667	1.55	10.750	4.46	16.833	1.75	22.92	1.16
4.750	1.55	10.833	6.01	16.917	1.75	23.00	1.16
4.833	1.55	10.917	6.01	17.000	1.75	23.08	1.16
4.917	1.55	11.000	6.01	17.083	1.75	23.17	1.16
5.000	1.55	11.083	6.01	17.167	1.75	23.25	1.16
5.083	1.55	11.167	6.01	17.250	1.75	23.33	1.16
5.167	1.55	11.250	6.01	17.333	1.75	23.42	1.16
5.250	1.55	11.333	9.31	17.417	1.75	23.50	1.16
5.333	1.55	11.417	9.31	17.500	1.75	23.58	1.16
5.417	1.55	11.500	9.31	17.583	1.75	23.67	1.16
5.500	1.55	11.583	9.31	17.667	1.75	23.75	1.16
5.583	1.55	11.667	9.31	17.750	1.75	23.83	1.16
5.667	1.55	11.750	9.31	17.833	1.75	23.92	1.16
5.750	1.55	11.833	28.70	17.917	1.75	24.00	1.16

5.833	1.55	11.917	28.71	18.000	1.75	24.08	1.16
5.917	1.55	12.000	28.71	18.083	1.75	24.17	1.16
6.000	1.55	12.083	118.69	18.167	1.75	24.25	1.16
6.083	1.55	12.167	118.70	18.250	1.75		

Unit Hyd Qpeak (cms)= 0.945

PEAK FLOW (cms)= 0.341 (i)
TIME TO PEAK (hrs)= 13.250
RUNOFF VOLUME (mm)= 18.506
TOTAL RAINFALL (mm)= 96.980
RUNOFF COEFFICIENT = 0.191

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB NASHYD (0009)	Area (ha)= 6.37	Curve Number (CN)= 50.5
ID= 1 DT= 5.0 min	Ia (mm)= 15.69	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.77	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.55	12.250	118.70	18.33	1.75
0.167	0.00	6.250	1.55	12.333	13.98	18.42	1.75
0.250	0.00	6.333	1.75	12.417	13.97	18.50	1.75
0.333	1.07	6.417	1.75	12.500	13.97	18.58	1.75
0.417	1.07	6.500	1.75	12.583	13.97	18.67	1.75
0.500	1.07	6.583	1.75	12.667	13.97	18.75	1.75
0.583	1.07	6.667	1.75	12.750	13.97	18.83	1.75
0.667	1.07	6.750	1.75	12.833	7.18	18.92	1.75
0.750	1.07	6.833	1.75	12.917	7.18	19.00	1.75
0.833	1.07	6.917	1.75	13.000	7.18	19.08	1.75
0.917	1.07	7.000	1.75	13.083	7.18	19.17	1.75
1.000	1.07	7.083	1.75	13.167	7.18	19.25	1.75
1.083	1.07	7.167	1.75	13.250	7.18	19.33	1.75
1.167	1.07	7.250	1.75	13.333	5.24	19.42	1.75
1.250	1.07	7.333	2.13	13.417	5.24	19.50	1.75
1.333	1.07	7.417	2.13	13.500	5.24	19.58	1.75
1.417	1.07	7.500	2.13	13.583	5.24	19.67	1.75
1.500	1.07	7.583	2.13	13.667	5.24	19.75	1.75
1.583	1.07	7.667	2.13	13.750	5.24	19.83	1.75
1.667	1.07	7.750	2.13	13.833	4.07	19.92	1.75
1.750	1.07	7.833	2.13	13.917	4.07	20.00	1.75
1.833	1.07	7.917	2.13	14.000	4.07	20.08	1.75
1.917	1.07	8.000	2.13	14.083	4.07	20.17	1.75
2.000	1.07	8.083	2.13	14.167	4.07	20.25	1.75
2.083	1.07	8.167	2.13	14.250	4.07	20.33	1.16
2.167	1.07	8.250	2.13	14.333	2.91	20.42	1.16
2.250	1.07	8.333	2.52	14.417	2.91	20.50	1.16
2.333	1.26	8.417	2.52	14.500	2.91	20.58	1.16
2.417	1.26	8.500	2.52	14.583	2.91	20.67	1.16
2.500	1.26	8.583	2.52	14.667	2.91	20.75	1.16
2.583	1.26	8.667	2.52	14.750	2.91	20.83	1.16
2.667	1.26	8.750	2.52	14.833	2.91	20.92	1.16
2.750	1.26	8.833	2.72	14.917	2.91	21.00	1.16
2.833	1.26	8.917	2.72	15.000	2.91	21.08	1.16
2.917	1.26	9.000	2.72	15.083	2.91	21.17	1.16
3.000	1.26	9.083	2.72	15.167	2.91	21.25	1.16
3.083	1.26	9.167	2.72	15.250	2.91	21.33	1.16
3.167	1.26	9.250	2.72	15.333	2.91	21.42	1.16
3.250	1.26	9.333	3.10	15.417	2.91	21.50	1.16
3.333	1.26	9.417	3.10	15.500	2.91	21.58	1.16
3.417	1.26	9.500	3.10	15.583	2.91	21.67	1.16
3.500	1.26	9.583	3.10	15.667	2.91	21.75	1.16
3.583	1.26	9.667	3.10	15.750	2.91	21.83	1.16
3.667	1.26	9.750	3.10	15.833	2.91	21.92	1.16
3.750	1.26	9.833	3.49	15.917	2.91	22.00	1.16
3.833	1.26	9.917	3.49	16.000	2.91	22.08	1.16
3.917	1.26	10.000	3.49	16.083	2.91	22.17	1.16
4.000	1.26	10.083	3.49	16.167	2.91	22.25	1.16
4.083	1.26	10.167	3.49	16.250	2.91	22.33	1.16
4.167	1.26	10.250	3.49	16.333	1.75	22.42	1.16
4.250	1.26	10.333	4.46	16.417	1.75	22.50	1.16
4.333	1.55	10.417	4.46	16.500	1.75	22.58	1.16
4.417	1.55	10.500	4.46	16.583	1.75	22.67	1.16
4.500	1.55	10.583	4.46	16.667	1.75	22.75	1.16
4.583	1.55	10.667	4.46	16.750	1.75	22.83	1.16
4.667	1.55	10.750	4.46	16.833	1.75	22.92	1.16
4.750	1.55	10.833	6.01	16.917	1.75	23.00	1.16
4.833	1.55	10.917	6.01	17.000	1.75	23.08	1.16
4.917	1.55	11.000	6.01	17.083	1.75	23.17	1.16
5.000	1.55	11.083	6.01	17.167	1.75	23.25	1.16
5.083	1.55	11.167	6.01	17.250	1.75	23.33	1.16
5.167	1.55	11.250	6.01	17.333	1.75	23.42	1.16
5.250	1.55	11.333	9.31	17.417	1.75	23.50	1.16
5.333	1.55	11.417	9.31	17.500	1.75	23.58	1.16
5.417	1.55	11.500	9.31	17.583	1.75	23.67	1.16
5.500	1.55	11.583	9.31	17.667	1.75	23.75	1.16
5.583	1.55	11.667	9.31	17.750	1.75	23.83	1.16
5.667	1.55	11.750	9.31	17.833	1.75	23.92	1.16
5.750	1.55	11.833	28.70	17.917	1.75	24.00	1.16
5.833	1.55	11.917	28.71	18.000	1.75	24.08	1.16
5.917	1.55	12.000	28.71	18.083	1.75	24.17	1.16
6.000	1.55	12.083	118.69	18.167	1.75	24.25	1.16

6.083	1.55	12.167	118.70	18.250	1.75						

Unit Hyd Qpeak (cms)= 0.316

PEAK FLOW (cms)= 0.115 (i)
TIME TO PEAK (hrs)= 13.000
RUNOFF VOLUME (mm)= 19.996
TOTAL RAINFALL (mm)= 96.980
RUNOFF COEFFICIENT = 0.206

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
NASHYD (0010) | Area (ha)= 14.85 Curve Number (CN)= 52.9
ID= 1 DT= 5.0 min | Ia (mm)= 13.28 # of Linear Res.(N)= 3.00
U.H. Tp(hrs)= 0.89

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.55	12.250	118.70	18.33	1.75
0.167	0.00	6.250	1.55	12.333	13.98	18.42	1.75
0.250	0.00	6.333	1.75	12.417	13.97	18.50	1.75
0.333	1.07	6.417	1.75	12.500	13.97	18.58	1.75
0.417	1.07	6.500	1.75	12.583	13.97	18.67	1.75
0.500	1.07	6.583	1.75	12.667	13.97	18.75	1.75
0.583	1.07	6.667	1.75	12.750	13.97	18.83	1.75
0.667	1.07	6.750	1.75	12.833	7.18	18.92	1.75
0.750	1.07	6.833	1.75	12.917	7.18	19.00	1.75
0.833	1.07	6.917	1.75	13.000	7.18	19.08	1.75
0.917	1.07	7.000	1.75	13.083	7.18	19.17	1.75
1.000	1.07	7.083	1.75	13.167	7.18	19.25	1.75
1.083	1.07	7.167	1.75	13.250	7.18	19.33	1.75
1.167	1.07	7.250	1.75	13.333	5.24	19.42	1.75
1.250	1.07	7.333	2.13	13.417	5.24	19.50	1.75
1.333	1.07	7.417	2.13	13.500	5.24	19.58	1.75
1.417	1.07	7.500	2.13	13.583	5.24	19.67	1.75
1.500	1.07	7.583	2.13	13.667	5.24	19.75	1.75
1.583	1.07	7.667	2.13	13.750	5.24	19.83	1.75
1.667	1.07	7.750	2.13	13.833	4.07	19.92	1.75
1.750	1.07	7.833	2.13	13.917	4.07	20.00	1.75
1.833	1.07	7.917	2.13	14.000	4.07	20.08	1.75
1.917	1.07	8.000	2.13	14.083	4.07	20.17	1.75
2.000	1.07	8.083	2.13	14.167	4.07	20.25	1.75
2.083	1.07	8.167	2.13	14.250	4.07	20.33	1.16
2.167	1.07	8.250	2.13	14.333	2.91	20.42	1.16
2.250	1.07	8.333	2.52	14.417	2.91	20.50	1.16
2.333	1.26	8.417	2.52	14.500	2.91	20.58	1.16
2.417	1.26	8.500	2.52	14.583	2.91	20.67	1.16
2.500	1.26	8.583	2.52	14.667	2.91	20.75	1.16
2.583	1.26	8.667	2.52	14.750	2.91	20.83	1.16
2.667	1.26	8.750	2.52	14.833	2.91	20.92	1.16
2.750	1.26	8.833	2.72	14.917	2.91	21.00	1.16
2.833	1.26	8.917	2.72	15.000	2.91	21.08	1.16
2.917	1.26	9.000	2.72	15.083	2.91	21.17	1.16
3.000	1.26	9.083	2.72	15.167	2.91	21.25	1.16
3.083	1.26	9.167	2.72	15.250	2.91	21.33	1.16
3.167	1.26	9.250	2.72	15.333	2.91	21.42	1.16
3.250	1.26	9.333	3.10	15.417	2.91	21.50	1.16
3.333	1.26	9.417	3.10	15.500	2.91	21.58	1.16
3.417	1.26	9.500	3.10	15.583	2.91	21.67	1.16
3.500	1.26	9.583	3.10	15.667	2.91	21.75	1.16
3.583	1.26	9.667	3.10	15.750	2.91	21.83	1.16
3.667	1.26	9.750	3.10	15.833	2.91	21.92	1.16
3.750	1.26	9.833	3.49	15.917	2.91	22.00	1.16
3.833	1.26	9.917	3.49	16.000	2.91	22.08	1.16
3.917	1.26	10.000	3.49	16.083	2.91	22.17	1.16
4.000	1.26	10.083	3.49	16.167	2.91	22.25	1.16
4.083	1.26	10.167	3.49	16.250	2.91	22.33	1.16
4.167	1.26	10.250	3.49	16.333	1.75	22.42	1.16
4.250	1.26	10.333	4.46	16.417	1.75	22.50	1.16
4.333	1.55	10.417	4.46	16.500	1.75	22.58	1.16
4.417	1.55	10.500	4.46	16.583	1.75	22.67	1.16
4.500	1.55	10.583	4.46	16.667	1.75	22.75	1.16
4.583	1.55	10.667	4.46	16.750	1.75	22.83	1.16
4.667	1.55	10.750	4.46	16.833	1.75	22.92	1.16
4.750	1.55	10.833	6.01	16.917	1.75	23.00	1.16
4.833	1.55	10.917	6.01	17.000	1.75	23.08	1.16
4.917	1.55	11.000	6.01	17.083	1.75	23.17	1.16
5.000	1.55	11.083	6.01	17.167	1.75	23.25	1.16
5.083	1.55	11.167	6.01	17.250	1.75	23.33	1.16
5.167	1.55	11.250	6.01	17.333	1.75	23.42	1.16
5.250	1.55	11.333	9.31	17.417	1.75	23.50	1.16
5.333	1.55	11.417	9.31	17.500	1.75	23.58	1.16
5.417	1.55	11.500	9.31	17.583	1.75	23.67	1.16
5.500	1.55	11.583	9.31	17.667	1.75	23.75	1.16
5.583	1.55	11.667	9.31	17.750	1.75	23.83	1.16
5.667	1.55	11.750	9.31	17.833	1.75	23.92	1.16
5.750	1.55	11.833	28.70	17.917	1.75	24.00	1.16
5.833	1.55	11.917	28.71	18.000	1.75	24.08	1.16
5.917	1.55	12.000	28.71	18.083	1.75	24.17	1.16
6.000	1.55	12.083	118.69	18.167	1.75	24.25	1.16
6.083	1.55	12.167	118.70	18.250	1.75		

Unit Hyd Qpeak (cms)= 0.637

PEAK FLOW (cms)= 0.278 (i)
TIME TO PEAK (hrs)= 13.167
RUNOFF VOLUME (mm)= 22.636
TOTAL RAINFALL (mm)= 96.980
RUNOFF COEFFICIENT = 0.233

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0013)	Area (ha)=	1.70	Curve Number (CN)=	60.5	
ID= 1 DT= 5.0 min	Ia (mm)=	9.65	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	0.40			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.55	12.250	118.70	18.33	1.75
0.167	0.00	6.250	1.55	12.333	13.98	18.42	1.75
0.250	0.00	6.333	1.75	12.417	13.97	18.50	1.75
0.333	1.07	6.417	1.75	12.500	13.97	18.58	1.75
0.417	1.07	6.500	1.75	12.583	13.97	18.67	1.75
0.500	1.07	6.583	1.75	12.667	13.97	18.75	1.75
0.583	1.07	6.667	1.75	12.750	13.97	18.83	1.75
0.667	1.07	6.750	1.75	12.833	7.18	18.92	1.75
0.750	1.07	6.833	1.75	12.917	7.18	19.00	1.75
0.833	1.07	6.917	1.75	13.000	7.18	19.08	1.75
0.917	1.07	7.000	1.75	13.083	7.18	19.17	1.75
1.000	1.07	7.083	1.75	13.167	7.18	19.25	1.75
1.083	1.07	7.167	1.75	13.250	7.18	19.33	1.75
1.167	1.07	7.250	1.75	13.333	5.24	19.42	1.75
1.250	1.07	7.333	2.13	13.417	5.24	19.50	1.75
1.333	1.07	7.417	2.13	13.500	5.24	19.58	1.75
1.417	1.07	7.500	2.13	13.583	5.24	19.67	1.75
1.500	1.07	7.583	2.13	13.667	5.24	19.75	1.75
1.583	1.07	7.667	2.13	13.750	5.24	19.83	1.75
1.667	1.07	7.750	2.13	13.833	4.07	19.92	1.75
1.750	1.07	7.833	2.13	13.917	4.07	20.00	1.75
1.833	1.07	7.917	2.13	14.000	4.07	20.08	1.75
1.917	1.07	8.000	2.13	14.083	4.07	20.17	1.75
2.000	1.07	8.083	2.13	14.167	4.07	20.25	1.75
2.083	1.07	8.167	2.13	14.250	4.07	20.33	1.16
2.167	1.07	8.250	2.13	14.333	2.91	20.42	1.16
2.250	1.07	8.333	2.52	14.417	2.91	20.50	1.16
2.333	1.26	8.417	2.52	14.500	2.91	20.58	1.16
2.417	1.26	8.500	2.52	14.583	2.91	20.67	1.16
2.500	1.26	8.583	2.52	14.667	2.91	20.75	1.16
2.583	1.26	8.667	2.52	14.750	2.91	20.83	1.16
2.667	1.26	8.750	2.52	14.833	2.91	20.92	1.16
2.750	1.26	8.833	2.72	14.917	2.91	21.00	1.16
2.833	1.26	8.917	2.72	15.000	2.91	21.08	1.16
2.917	1.26	9.000	2.72	15.083	2.91	21.17	1.16
3.000	1.26	9.083	2.72	15.167	2.91	21.25	1.16
3.083	1.26	9.167	2.72	15.250	2.91	21.33	1.16
3.167	1.26	9.250	2.72	15.333	2.91	21.42	1.16
3.250	1.26	9.333	3.10	15.417	2.91	21.50	1.16
3.333	1.26	9.417	3.10	15.500	2.91	21.58	1.16
3.417	1.26	9.500	3.10	15.583	2.91	21.67	1.16
3.500	1.26	9.583	3.10	15.667	2.91	21.75	1.16
3.583	1.26	9.667	3.10	15.750	2.91	21.83	1.16
3.667	1.26	9.750	3.10	15.833	2.91	21.92	1.16
3.750	1.26	9.833	3.49	15.917	2.91	22.00	1.16
3.833	1.26	9.917	3.49	16.000	2.91	22.08	1.16
3.917	1.26	10.000	3.49	16.083	2.91	22.17	1.16
4.000	1.26	10.083	3.49	16.167	2.91	22.25	1.16
4.083	1.26	10.167	3.49	16.250	2.91	22.33	1.16
4.167	1.26	10.250	3.49	16.333	1.75	22.42	1.16
4.250	1.26	10.333	4.46	16.417	1.75	22.50	1.16
4.333	1.55	10.417	4.46	16.500	1.75	22.58	1.16
4.417	1.55	10.500	4.46	16.583	1.75	22.67	1.16
4.500	1.55	10.583	4.46	16.667	1.75	22.75	1.16
4.583	1.55	10.667	4.46	16.750	1.75	22.83	1.16
4.667	1.55	10.750	4.46	16.833	1.75	22.92	1.16
4.750	1.55	10.833	6.01	16.917	1.75	23.00	1.16
4.833	1.55	10.917	6.01	17.000	1.75	23.08	1.16
4.917	1.55	11.000	6.01	17.083	1.75	23.17	1.16
5.000	1.55	11.083	6.01	17.167	1.75	23.25	1.16
5.083	1.55	11.167	6.01	17.250	1.75	23.33	1.16
5.167	1.55	11.250	6.01	17.333	1.75	23.42	1.16
5.250	1.55	11.333	9.31	17.417	1.75	23.50	1.16
5.333	1.55	11.417	9.31	17.500	1.75	23.58	1.16
5.417	1.55	11.500	9.31	17.583	1.75	23.67	1.16
5.500	1.55	11.583	9.31	17.667	1.75	23.75	1.16
5.583	1.55	11.667	9.31	17.750	1.75	23.83	1.16
5.667	1.55	11.750	9.31	17.833	1.75	23.92	1.16
5.750	1.55	11.833	28.70	17.917	1.75	24.00	1.16
5.833	1.55	11.917	28.71	18.000	1.75	24.08	1.16
5.917	1.55	12.000	28.71	18.083	1.75	24.17	1.16
6.000	1.55	12.083	118.69	18.167	1.75	24.25	1.16
6.083	1.55	12.167	118.70	18.250	1.75		

Unit Hyd Qpeak (cms)= 0.162

PEAK FLOW (cms)= 0.078 (i)
TIME TO PEAK (hrs)= 12.500

RUNOFF VOLUME (mm)= 30.088
TOTAL RAINFALL (mm)= 96.980
RUNOFF COEFFICIENT = 0.310

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0014)	Area (ha)= 1.80	Curve Number (CN)= 50.0			
ID= 1 DT= 5.0 min	Ia (mm)= 16.00	# of Linear Res.(N)= 3.00			
	U.H. Tp(hrs)= 0.76				

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.55	12.250	118.70	18.33	1.75
0.167	0.00	6.250	1.55	12.333	13.98	18.42	1.75
0.250	0.00	6.333	1.75	12.417	13.97	18.50	1.75
0.333	1.07	6.417	1.75	12.500	13.97	18.58	1.75
0.417	1.07	6.500	1.75	12.583	13.97	18.67	1.75
0.500	1.07	6.583	1.75	12.667	13.97	18.75	1.75
0.583	1.07	6.667	1.75	12.750	13.97	18.83	1.75
0.667	1.07	6.750	1.75	12.833	7.18	18.92	1.75
0.750	1.07	6.833	1.75	12.917	7.18	19.00	1.75
0.833	1.07	6.917	1.75	13.000	7.18	19.08	1.75
0.917	1.07	7.000	1.75	13.083	7.18	19.17	1.75
1.000	1.07	7.083	1.75	13.167	7.18	19.25	1.75
1.083	1.07	7.167	1.75	13.250	7.18	19.33	1.75
1.167	1.07	7.250	1.75	13.333	5.24	19.42	1.75
1.250	1.07	7.333	2.13	13.417	5.24	19.50	1.75
1.333	1.07	7.417	2.13	13.500	5.24	19.58	1.75
1.417	1.07	7.500	2.13	13.583	5.24	19.67	1.75
1.500	1.07	7.583	2.13	13.667	5.24	19.75	1.75
1.583	1.07	7.667	2.13	13.750	5.24	19.83	1.75
1.667	1.07	7.750	2.13	13.833	4.07	19.92	1.75
1.750	1.07	7.833	2.13	13.917	4.07	20.00	1.75
1.833	1.07	7.917	2.13	14.000	4.07	20.08	1.75
1.917	1.07	8.000	2.13	14.083	4.07	20.17	1.75
2.000	1.07	8.083	2.13	14.167	4.07	20.25	1.75
2.083	1.07	8.167	2.13	14.250	4.07	20.33	1.16
2.167	1.07	8.250	2.13	14.333	2.91	20.42	1.16
2.250	1.07	8.333	2.52	14.417	2.91	20.50	1.16
2.333	1.26	8.417	2.52	14.500	2.91	20.58	1.16
2.417	1.26	8.500	2.52	14.583	2.91	20.67	1.16
2.500	1.26	8.583	2.52	14.667	2.91	20.75	1.16
2.583	1.26	8.667	2.52	14.750	2.91	20.83	1.16
2.667	1.26	8.750	2.52	14.833	2.91	20.92	1.16
2.750	1.26	8.833	2.72	14.917	2.91	21.00	1.16
2.833	1.26	8.917	2.72	15.000	2.91	21.08	1.16
2.917	1.26	9.000	2.72	15.083	2.91	21.17	1.16
3.000	1.26	9.083	2.72	15.167	2.91	21.25	1.16
3.083	1.26	9.167	2.72	15.250	2.91	21.33	1.16
3.167	1.26	9.250	2.72	15.333	2.91	21.42	1.16
3.250	1.26	9.333	3.10	15.417	2.91	21.50	1.16
3.333	1.26	9.417	3.10	15.500	2.91	21.58	1.16
3.417	1.26	9.500	3.10	15.583	2.91	21.67	1.16
3.500	1.26	9.583	3.10	15.667	2.91	21.75	1.16
3.583	1.26	9.667	3.10	15.750	2.91	21.83	1.16
3.667	1.26	9.750	3.10	15.833	2.91	21.92	1.16
3.750	1.26	9.833	3.49	15.917	2.91	22.00	1.16
3.833	1.26	9.917	3.49	16.000	2.91	22.08	1.16
3.917	1.26	10.000	3.49	16.083	2.91	22.17	1.16
4.000	1.26	10.083	3.49	16.167	2.91	22.25	1.16
4.083	1.26	10.167	3.49	16.250	2.91	22.33	1.16
4.167	1.26	10.250	3.49	16.333	1.75	22.42	1.16
4.250	1.26	10.333	4.46	16.417	1.75	22.50	1.16
4.333	1.55	10.417	4.46	16.500	1.75	22.58	1.16
4.417	1.55	10.500	4.46	16.583	1.75	22.67	1.16
4.500	1.55	10.583	4.46	16.667	1.75	22.75	1.16
4.583	1.55	10.667	4.46	16.750	1.75	22.83	1.16
4.667	1.55	10.750	4.46	16.833	1.75	22.92	1.16
4.750	1.55	10.833	6.01	16.917	1.75	23.00	1.16
4.833	1.55	10.917	6.01	17.000	1.75	23.08	1.16
4.917	1.55	11.000	6.01	17.083	1.75	23.17	1.16
5.000	1.55	11.083	6.01	17.167	1.75	23.25	1.16
5.083	1.55	11.167	6.01	17.250	1.75	23.33	1.16
5.167	1.55	11.250	6.01	17.333	1.75	23.42	1.16
5.250	1.55	11.333	9.31	17.417	1.75	23.50	1.16
5.333	1.55	11.417	9.31	17.500	1.75	23.58	1.16
5.417	1.55	11.500	9.31	17.583	1.75	23.67	1.16
5.500	1.55	11.583	9.31	17.667	1.75	23.75	1.16
5.583	1.55	11.667	9.31	17.750	1.75	23.83	1.16
5.667	1.55	11.750	9.31	17.833	1.75	23.92	1.16
5.750	1.55	11.833	28.70	17.917	1.75	24.00	1.16
5.833	1.55	11.917	28.71	18.000	1.75	24.08	1.16
5.917	1.55	12.000	28.71	18.083	1.75	24.17	1.16
6.000	1.55	12.083	118.69	18.167	1.75	24.25	1.16
6.083	1.55	12.167	118.70	18.250	1.75		

Unit Hyd Qpeak (cms)= 0.090

PEAK FLOW (cms)= 0.032 (i)
TIME TO PEAK (hrs)= 13.000
RUNOFF VOLUME (mm)= 19.575
TOTAL RAINFALL (mm)= 96.980
RUNOFF COEFFICIENT = 0.202

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0015)	Area (ha)= 6.70	Curve Number (CN)= 60.0			
ID= 1 DT= 5.0 min	Ia (mm)= 10.00	# of Linear Res.(N)= 3.00			
	U.H. Tp(hrs)= 1.45				

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.55	12.250	118.70	18.33	1.75
0.167	0.00	6.250	1.55	12.333	13.98	18.42	1.75
0.250	0.00	6.333	1.75	12.417	13.97	18.50	1.75
0.333	1.07	6.417	1.75	12.500	13.97	18.58	1.75
0.417	1.07	6.500	1.75	12.583	13.97	18.67	1.75
0.500	1.07	6.583	1.75	12.667	13.97	18.75	1.75
0.583	1.07	6.667	1.75	12.750	13.97	18.83	1.75
0.667	1.07	6.750	1.75	12.833	7.18	18.92	1.75
0.750	1.07	6.833	1.75	12.917	7.18	19.00	1.75
0.833	1.07	6.917	1.75	13.000	7.18	19.08	1.75
0.917	1.07	7.000	1.75	13.083	7.18	19.17	1.75
1.000	1.07	7.083	1.75	13.167	7.18	19.25	1.75
1.083	1.07	7.167	1.75	13.250	7.18	19.33	1.75
1.167	1.07	7.250	1.75	13.333	5.24	19.42	1.75
1.250	1.07	7.333	2.13	13.417	5.24	19.50	1.75
1.333	1.07	7.417	2.13	13.500	5.24	19.58	1.75
1.417	1.07	7.500	2.13	13.583	5.24	19.67	1.75
1.500	1.07	7.583	2.13	13.667	5.24	19.75	1.75
1.583	1.07	7.667	2.13	13.750	5.24	19.83	1.75
1.667	1.07	7.750	2.13	13.833	4.07	19.92	1.75
1.750	1.07	7.833	2.13	13.917	4.07	20.00	1.75
1.833	1.07	7.917	2.13	14.000	4.07	20.08	1.75
1.917	1.07	8.000	2.13	14.083	4.07	20.17	1.75
2.000	1.07	8.083	2.13	14.167	4.07	20.25	1.75
2.083	1.07	8.167	2.13	14.250	4.07	20.33	1.16
2.167	1.07	8.250	2.13	14.333	2.91	20.42	1.16
2.250	1.07	8.333	2.52	14.417	2.91	20.50	1.16
2.333	1.26	8.417	2.52	14.500	2.91	20.58	1.16
2.417	1.26	8.500	2.52	14.583	2.91	20.67	1.16
2.500	1.26	8.583	2.52	14.667	2.91	20.75	1.16
2.583	1.26	8.667	2.52	14.750	2.91	20.83	1.16
2.667	1.26	8.750	2.52	14.833	2.91	20.92	1.16
2.750	1.26	8.833	2.72	14.917	2.91	21.00	1.16
2.833	1.26	8.917	2.72	15.000	2.91	21.08	1.16
2.917	1.26	9.000	2.72	15.083	2.91	21.17	1.16
3.000	1.26	9.083	2.72	15.167	2.91	21.25	1.16
3.083	1.26	9.167	2.72	15.250	2.91	21.33	1.16
3.167	1.26	9.250	2.72	15.333	2.91	21.42	1.16
3.250	1.26	9.333	3.10	15.417	2.91	21.50	1.16
3.333	1.26	9.417	3.10	15.500	2.91	21.58	1.16
3.417	1.26	9.500	3.10	15.583	2.91	21.67	1.16
3.500	1.26	9.583	3.10	15.667	2.91	21.75	1.16
3.583	1.26	9.667	3.10	15.750	2.91	21.83	1.16
3.667	1.26	9.750	3.10	15.833	2.91	21.92	1.16
3.750	1.26	9.833	3.49	15.917	2.91	22.00	1.16
3.833	1.26	9.917	3.49	16.000	2.91	22.08	1.16
3.917	1.26	10.000	3.49	16.083	2.91	22.17	1.16
4.000	1.26	10.083	3.49	16.167	2.91	22.25	1.16
4.083	1.26	10.167	3.49	16.250	2.91	22.33	1.16
4.167	1.26	10.250	3.49	16.333	1.75	22.42	1.16
4.250	1.26	10.333	4.46	16.417	1.75	22.50	1.16
4.333	1.55	10.417	4.46	16.500	1.75	22.58	1.16
4.417	1.55	10.500	4.46	16.583	1.75	22.67	1.16
4.500	1.55	10.583	4.46	16.667	1.75	22.75	1.16
4.583	1.55	10.667	4.46	16.750	1.75	22.83	1.16
4.667	1.55	10.750	4.46	16.833	1.75	22.92	1.16
4.750	1.55	10.833	6.01	16.917	1.75	23.00	1.16
4.833	1.55	10.917	6.01	17.000	1.75	23.08	1.16
4.917	1.55	11.000	6.01	17.083	1.75	23.17	1.16
5.000	1.55	11.083	6.01	17.167	1.75	23.25	1.16
5.083	1.55	11.167	6.01	17.250	1.75	23.33	1.16
5.167	1.55	11.250	6.01	17.333	1.75	23.42	1.16
5.250	1.55	11.333	9.31	17.417	1.75	23.50	1.16
5.333	1.55	11.417	9.31	17.500	1.75	23.58	1.16
5.417	1.55	11.500	9.31	17.583	1.75	23.67	1.16
5.500	1.55	11.583	9.31	17.667	1.75	23.75	1.16
5.583	1.55	11.667	9.31	17.750	1.75	23.83	1.16
5.667	1.55	11.750	9.31	17.833	1.75	23.92	1.16
5.750	1.55	11.833	28.70	17.917	1.75	24.00	1.16
5.833	1.55	11.917	28.71	18.000	1.75	24.08	1.16
5.917	1.55	12.000	28.71	18.083	1.75	24.17	1.16
6.000	1.55	12.083	118.69	18.167	1.75	24.25	1.16
6.083	1.55	12.167	118.70	18.250	1.75		

Unit Hyd Qpeak (cms)= 0.176

PEAK FLOW (cms)= 0.116 (i)
TIME TO PEAK (hrs)= 13.833
RUNOFF VOLUME (mm)= 29.516
TOTAL RAINFALL (mm)= 96.980
RUNOFF COEFFICIENT = 0.304

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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| CALIB            |
| NASHYD   (  0016)|   Area    (ha)=  29.16   Curve Number   (CN)= 71.4
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.88   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.68

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.
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---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.55	12.250	118.70	18.33	1.75
0.167	0.00	6.250	1.55	12.333	13.98	18.42	1.75
0.250	0.00	6.333	1.75	12.417	13.97	18.50	1.75
0.333	1.07	6.417	1.75	12.500	13.97	18.58	1.75
0.417	1.07	6.500	1.75	12.583	13.97	18.67	1.75
0.500	1.07	6.583	1.75	12.667	13.97	18.75	1.75
0.583	1.07	6.667	1.75	12.750	13.97	18.83	1.75
0.667	1.07	6.750	1.75	12.833	7.18	18.92	1.75
0.750	1.07	6.833	1.75	12.917	7.18	19.00	1.75
0.833	1.07	6.917	1.75	13.000	7.18	19.08	1.75
0.917	1.07	7.000	1.75	13.083	7.18	19.17	1.75
1.000	1.07	7.083	1.75	13.167	7.18	19.25	1.75
1.083	1.07	7.167	1.75	13.250	7.18	19.33	1.75
1.167	1.07	7.250	1.75	13.333	5.24	19.42	1.75
1.250	1.07	7.333	2.13	13.417	5.24	19.50	1.75
1.333	1.07	7.417	2.13	13.500	5.24	19.58	1.75
1.417	1.07	7.500	2.13	13.583	5.24	19.67	1.75
1.500	1.07	7.583	2.13	13.667	5.24	19.75	1.75
1.583	1.07	7.667	2.13	13.750	5.24	19.83	1.75
1.667	1.07	7.750	2.13	13.833	4.07	19.92	1.75
1.750	1.07	7.833	2.13	13.917	4.07	20.00	1.75
1.833	1.07	7.917	2.13	14.000	4.07	20.08	1.75
1.917	1.07	8.000	2.13	14.083	4.07	20.17	1.75
2.000	1.07	8.083	2.13	14.167	4.07	20.25	1.75
2.083	1.07	8.167	2.13	14.250	4.07	20.33	1.16
2.167	1.07	8.250	2.13	14.333	2.91	20.42	1.16
2.250	1.07	8.333	2.52	14.417	2.91	20.50	1.16
2.333	1.26	8.417	2.52	14.500	2.91	20.58	1.16
2.417	1.26	8.500	2.52	14.583	2.91	20.67	1.16
2.500	1.26	8.583	2.52	14.667	2.91	20.75	1.16
2.583	1.26	8.667	2.52	14.750	2.91	20.83	1.16
2.667	1.26	8.750	2.52	14.833	2.91	20.92	1.16
2.750	1.26	8.833	2.72	14.917	2.91	21.00	1.16
2.833	1.26	8.917	2.72	15.000	2.91	21.08	1.16
2.917	1.26	9.000	2.72	15.083	2.91	21.17	1.16
3.000	1.26	9.083	2.72	15.167	2.91	21.25	1.16
3.083	1.26	9.167	2.72	15.250	2.91	21.33	1.16
3.167	1.26	9.250	2.72	15.333	2.91	21.42	1.16
3.250	1.26	9.333	3.10	15.417	2.91	21.50	1.16
3.333	1.26	9.417	3.10	15.500	2.91	21.58	1.16
3.417	1.26	9.500	3.10	15.583	2.91	21.67	1.16
3.500	1.26	9.583	3.10	15.667	2.91	21.75	1.16
3.583	1.26	9.667	3.10	15.750	2.91	21.83	1.16
3.667	1.26	9.750	3.10	15.833	2.91	21.92	1.16
3.750	1.26	9.833	3.49	15.917	2.91	22.00	1.16
3.833	1.26	9.917	3.49	16.000	2.91	22.08	1.16
3.917	1.26	10.000	3.49	16.083	2.91	22.17	1.16
4.000	1.26	10.083	3.49	16.167	2.91	22.25	1.16
4.083	1.26	10.167	3.49	16.250	2.91	22.33	1.16
4.167	1.26	10.250	3.49	16.333	1.75	22.42	1.16
4.250	1.26	10.333	4.46	16.417	1.75	22.50	1.16
4.333	1.55	10.417	4.46	16.500	1.75	22.58	1.16
4.417	1.55	10.500	4.46	16.583	1.75	22.67	1.16
4.500	1.55	10.583	4.46	16.667	1.75	22.75	1.16
4.583	1.55	10.667	4.46	16.750	1.75	22.83	1.16
4.667	1.55	10.750	4.46	16.833	1.75	22.92	1.16
4.750	1.55	10.833	6.01	16.917	1.75	23.00	1.16
4.833	1.55	10.917	6.01	17.000	1.75	23.08	1.16
4.917	1.55	11.000	6.01	17.083	1.75	23.17	1.16
5.000	1.55	11.083	6.01	17.167	1.75	23.25	1.16
5.083	1.55	11.167	6.01	17.250	1.75	23.33	1.16
5.167	1.55	11.250	6.01	17.333	1.75	23.42	1.16
5.250	1.55	11.333	9.31	17.417	1.75	23.50	1.16
5.333	1.55	11.417	9.31	17.500	1.75	23.58	1.16
5.417	1.55	11.500	9.31	17.583	1.75	23.67	1.16
5.500	1.55	11.583	9.31	17.667	1.75	23.75	1.16
5.583	1.55	11.667	9.31	17.750	1.75	23.83	1.16
5.667	1.55	11.750	9.31	17.833	1.75	23.92	1.16
5.750	1.55	11.833	28.70	17.917	1.75	24.00	1.16
5.833	1.55	11.917	28.71	18.000	1.75	24.08	1.16
5.917	1.55	12.000	28.71	18.083	1.75	24.17	1.16
6.000	1.55	12.083	118.69	18.167	1.75	24.25	1.16
6.083	1.55	12.167	118.70	18.250	1.75		

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     Unit Hyd Qpeak  (cms)=   1.638

     PEAK FLOW       (cms)=   1.300 (i)
     TIME TO PEAK    (hrs)=  12.833
     RUNOFF VOLUME    (mm)=  41.598
     TOTAL RAINFALL   (mm)=  96.980
     RUNOFF COEFFICIENT   =   0.429

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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| CALIB            |
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| NASHYD (0019)| Area (ha)= 39.68 Curve Number (CN)= 60.7
|ID= 1 DT= 5.0 min | Ia (mm)= 8.26 # of Linear Res.(N)= 3.00
---------- U.H. Tp(hrs)= 1.18

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.55	12.250	118.70	18.33	1.75
0.167	0.00	6.250	1.55	12.333	13.98	18.42	1.75
0.250	0.00	6.333	1.75	12.417	13.97	18.50	1.75
0.333	1.07	6.417	1.75	12.500	13.97	18.58	1.75
0.417	1.07	6.500	1.75	12.583	13.97	18.67	1.75
0.500	1.07	6.583	1.75	12.667	13.97	18.75	1.75
0.583	1.07	6.667	1.75	12.750	13.97	18.83	1.75
0.667	1.07	6.750	1.75	12.833	7.18	18.92	1.75
0.750	1.07	6.833	1.75	12.917	7.18	19.00	1.75
0.833	1.07	6.917	1.75	13.000	7.18	19.08	1.75
0.917	1.07	7.000	1.75	13.083	7.18	19.17	1.75
1.000	1.07	7.083	1.75	13.167	7.18	19.25	1.75
1.083	1.07	7.167	1.75	13.250	7.18	19.33	1.75
1.167	1.07	7.250	1.75	13.333	5.24	19.42	1.75
1.250	1.07	7.333	2.13	13.417	5.24	19.50	1.75
1.333	1.07	7.417	2.13	13.500	5.24	19.58	1.75
1.417	1.07	7.500	2.13	13.583	5.24	19.67	1.75
1.500	1.07	7.583	2.13	13.667	5.24	19.75	1.75
1.583	1.07	7.667	2.13	13.750	5.24	19.83	1.75
1.667	1.07	7.750	2.13	13.833	4.07	19.92	1.75
1.750	1.07	7.833	2.13	13.917	4.07	20.00	1.75
1.833	1.07	7.917	2.13	14.000	4.07	20.08	1.75
1.917	1.07	8.000	2.13	14.083	4.07	20.17	1.75
2.000	1.07	8.083	2.13	14.167	4.07	20.25	1.75
2.083	1.07	8.167	2.13	14.250	4.07	20.33	1.16
2.167	1.07	8.250	2.13	14.333	2.91	20.42	1.16
2.250	1.07	8.333	2.52	14.417	2.91	20.50	1.16
2.333	1.26	8.417	2.52	14.500	2.91	20.58	1.16
2.417	1.26	8.500	2.52	14.583	2.91	20.67	1.16
2.500	1.26	8.583	2.52	14.667	2.91	20.75	1.16
2.583	1.26	8.667	2.52	14.750	2.91	20.83	1.16
2.667	1.26	8.750	2.52	14.833	2.91	20.92	1.16
2.750	1.26	8.833	2.72	14.917	2.91	21.00	1.16
2.833	1.26	8.917	2.72	15.000	2.91	21.08	1.16
2.917	1.26	9.000	2.72	15.083	2.91	21.17	1.16
3.000	1.26	9.083	2.72	15.167	2.91	21.25	1.16
3.083	1.26	9.167	2.72	15.250	2.91	21.33	1.16
3.167	1.26	9.250	2.72	15.333	2.91	21.42	1.16
3.250	1.26	9.333	3.10	15.417	2.91	21.50	1.16
3.333	1.26	9.417	3.10	15.500	2.91	21.58	1.16
3.417	1.26	9.500	3.10	15.583	2.91	21.67	1.16
3.500	1.26	9.583	3.10	15.667	2.91	21.75	1.16
3.583	1.26	9.667	3.10	15.750	2.91	21.83	1.16
3.667	1.26	9.750	3.10	15.833	2.91	21.92	1.16
3.750	1.26	9.833	3.49	15.917	2.91	22.00	1.16
3.833	1.26	9.917	3.49	16.000	2.91	22.08	1.16
3.917	1.26	10.000	3.49	16.083	2.91	22.17	1.16
4.000	1.26	10.083	3.49	16.167	2.91	22.25	1.16
4.083	1.26	10.167	3.49	16.250	2.91	22.33	1.16
4.167	1.26	10.250	3.49	16.333	1.75	22.42	1.16
4.250	1.26	10.333	4.46	16.417	1.75	22.50	1.16
4.333	1.55	10.417	4.46	16.500	1.75	22.58	1.16
4.417	1.55	10.500	4.46	16.583	1.75	22.67	1.16
4.500	1.55	10.583	4.46	16.667	1.75	22.75	1.16
4.583	1.55	10.667	4.46	16.750	1.75	22.83	1.16
4.667	1.55	10.750	4.46	16.833	1.75	22.92	1.16
4.750	1.55	10.833	6.01	16.917	1.75	23.00	1.16
4.833	1.55	10.917	6.01	17.000	1.75	23.08	1.16
4.917	1.55	11.000	6.01	17.083	1.75	23.17	1.16
5.000	1.55	11.083	6.01	17.167	1.75	23.25	1.16
5.083	1.55	11.167	6.01	17.250	1.75	23.33	1.16
5.167	1.55	11.250	6.01	17.333	1.75	23.42	1.16
5.250	1.55	11.333	9.31	17.417	1.75	23.50	1.16
5.333	1.55	11.417	9.31	17.500	1.75	23.58	1.16
5.417	1.55	11.500	9.31	17.583	1.75	23.67	1.16
5.500	1.55	11.583	9.31	17.667	1.75	23.75	1.16
5.583	1.55	11.667	9.31	17.750	1.75	23.83	1.16
5.667	1.55	11.750	9.31	17.833	1.75	23.92	1.16
5.750	1.55	11.833	28.70	17.917	1.75	24.00	1.16
5.833	1.55	11.917	28.71	18.000	1.75	24.08	1.16
5.917	1.55	12.000	28.71	18.083	1.75	24.17	1.16
6.000	1.55	12.083	118.69	18.167	1.75	24.25	1.16
6.083	1.55	12.167	118.70	18.250	1.75		

Unit Hyd Qpeak (cms)= 1.284

PEAK FLOW (cms)= 0.849 (i)
TIME TO PEAK (hrs)= 13.500
RUNOFF VOLUME (mm)= 31.065
TOTAL RAINFALL (mm)= 96.980
RUNOFF COEFFICIENT = 0.320

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0024)|	AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3	(ha)	(cms)	(hrs)	(mm)

```
        ID1= 1 (  0010):    14.85   0.278    13.17    22.64
      + ID2= 2 (  0013):     1.70   0.078    12.50    30.09
        ================================================
        ID = 3 (  0024):    16.55   0.322    13.00    23.40

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
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--------------------
| ADD HYD  (  0024)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 3 (  0024):    16.55   0.322    13.00    23.40
      + ID2= 2 (  0014):     1.80   0.032    13.00    19.58
        ================================================
        ID = 1 (  0024):    18.35   0.355    13.00    23.03

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0024)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 1 (  0024):    18.35   0.355    13.00    23.03
      + ID2= 2 (  0015):     6.70   0.116    13.83    29.52
        ================================================
        ID = 3 (  0024):    25.05   0.446    13.17    24.76

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
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--------------------
| ADD HYD  (  0024)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 3 (  0024):    25.05   0.446    13.17    24.76
      + ID2= 2 (  0016):    29.16   1.300    12.83    41.60
        ================================================
        ID = 1 (  0024):    54.21   1.728    12.92    33.82

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
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--------------------
| ADD HYD  (  0024)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 1 (  0024):    54.21   1.728    12.92    33.82
      + ID2= 2 (  0019):    39.68   0.849    13.50    31.07
        ================================================
        ID = 3 (  0024):    93.89   2.459    13.00    32.65

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
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--------------------
| ADD HYD  (  0024)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 3 (  0024):    93.89   2.459    13.00    32.65
      + ID2= 2 (  0007):   100.92   1.433    14.08    27.45
        ================================================
        ID = 1 (  0024):   194.81   3.529    13.25    29.96

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0024)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 1 (  0024):   194.81   3.529    13.25    29.96
      + ID2= 2 (  0008):    23.99   0.341    13.25    18.51
        ================================================
        ID = 3 (  0024):   218.80   3.870    13.25    28.70

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
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--------------------
| ADD HYD  (  0024)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 3 (  0024):   218.80   3.870    13.25    28.70
      + ID2= 2 (  0009):     6.37   0.115    13.00    20.00
        ================================================
        ID = 1 (  0024):   225.17   3.980    13.25    28.46

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
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--------------------
| CALIB            |
| NASHYD   (  0011)|   Area    (ha)=  46.28   Curve Number   (CN)= 72.2
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.09   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.30

          NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.
```

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.55	12.250	118.70	18.33	1.75
0.167	0.00	6.250	1.55	12.333	13.98	18.42	1.75
0.250	0.00	6.333	1.75	12.417	13.97	18.50	1.75
0.333	1.07	6.417	1.75	12.500	13.97	18.58	1.75
0.417	1.07	6.500	1.75	12.583	13.97	18.67	1.75
0.500	1.07	6.583	1.75	12.667	13.97	18.75	1.75
0.583	1.07	6.667	1.75	12.750	13.97	18.83	1.75
0.667	1.07	6.750	1.75	12.833	7.18	18.92	1.75
0.750	1.07	6.833	1.75	12.917	7.18	19.00	1.75
0.833	1.07	6.917	1.75	13.000	7.18	19.08	1.75
0.917	1.07	7.000	1.75	13.083	7.18	19.17	1.75
1.000	1.07	7.083	1.75	13.167	7.18	19.25	1.75
1.083	1.07	7.167	1.75	13.250	7.18	19.33	1.75
1.167	1.07	7.250	1.75	13.333	5.24	19.42	1.75
1.250	1.07	7.333	2.13	13.417	5.24	19.50	1.75
1.333	1.07	7.417	2.13	13.500	5.24	19.58	1.75
1.417	1.07	7.500	2.13	13.583	5.24	19.67	1.75
1.500	1.07	7.583	2.13	13.667	5.24	19.75	1.75
1.583	1.07	7.667	2.13	13.750	5.24	19.83	1.75
1.667	1.07	7.750	2.13	13.833	4.07	19.92	1.75
1.750	1.07	7.833	2.13	13.917	4.07	20.00	1.75
1.833	1.07	7.917	2.13	14.000	4.07	20.08	1.75
1.917	1.07	8.000	2.13	14.083	4.07	20.17	1.75
2.000	1.07	8.083	2.13	14.167	4.07	20.25	1.75
2.083	1.07	8.167	2.13	14.250	4.07	20.33	1.16
2.167	1.07	8.250	2.13	14.333	2.91	20.42	1.16
2.250	1.07	8.333	2.52	14.417	2.91	20.50	1.16
2.333	1.26	8.417	2.52	14.500	2.91	20.58	1.16
2.417	1.26	8.500	2.52	14.583	2.91	20.67	1.16
2.500	1.26	8.583	2.52	14.667	2.91	20.75	1.16
2.583	1.26	8.667	2.52	14.750	2.91	20.83	1.16
2.667	1.26	8.750	2.52	14.833	2.91	20.92	1.16
2.750	1.26	8.833	2.72	14.917	2.91	21.00	1.16
2.833	1.26	8.917	2.72	15.000	2.91	21.08	1.16
2.917	1.26	9.000	2.72	15.083	2.91	21.17	1.16
3.000	1.26	9.083	2.72	15.167	2.91	21.25	1.16
3.083	1.26	9.167	2.72	15.250	2.91	21.33	1.16
3.167	1.26	9.250	2.72	15.333	2.91	21.42	1.16
3.250	1.26	9.333	3.10	15.417	2.91	21.50	1.16
3.333	1.26	9.417	3.10	15.500	2.91	21.58	1.16
3.417	1.26	9.500	3.10	15.583	2.91	21.67	1.16
3.500	1.26	9.583	3.10	15.667	2.91	21.75	1.16
3.583	1.26	9.667	3.10	15.750	2.91	21.83	1.16
3.667	1.26	9.750	3.10	15.833	2.91	21.92	1.16
3.750	1.26	9.833	3.49	15.917	2.91	22.00	1.16
3.833	1.26	9.917	3.49	16.000	2.91	22.08	1.16
3.917	1.26	10.000	3.49	16.083	2.91	22.17	1.16
4.000	1.26	10.083	3.49	16.167	2.91	22.25	1.16
4.083	1.26	10.167	3.49	16.250	2.91	22.33	1.16
4.167	1.26	10.250	3.49	16.333	1.75	22.42	1.16
4.250	1.26	10.333	4.46	16.417	1.75	22.50	1.16
4.333	1.55	10.417	4.46	16.500	1.75	22.58	1.16
4.417	1.55	10.500	4.46	16.583	1.75	22.67	1.16
4.500	1.55	10.583	4.46	16.667	1.75	22.75	1.16
4.583	1.55	10.667	4.46	16.750	1.75	22.83	1.16
4.667	1.55	10.750	4.46	16.833	1.75	22.92	1.16
4.750	1.55	10.833	6.01	16.917	1.75	23.00	1.16
4.833	1.55	10.917	6.01	17.000	1.75	23.08	1.16
4.917	1.55	11.000	6.01	17.083	1.75	23.17	1.16
5.000	1.55	11.083	6.01	17.167	1.75	23.25	1.16
5.083	1.55	11.167	6.01	17.250	1.75	23.33	1.16
5.167	1.55	11.250	6.01	17.333	1.75	23.42	1.16
5.250	1.55	11.333	9.31	17.417	1.75	23.50	1.16
5.333	1.55	11.417	9.31	17.500	1.75	23.58	1.16
5.417	1.55	11.500	9.31	17.583	1.75	23.67	1.16
5.500	1.55	11.583	9.31	17.667	1.75	23.75	1.16
5.583	1.55	11.667	9.31	17.750	1.75	23.83	1.16
5.667	1.55	11.750	9.31	17.833	1.75	23.92	1.16
5.750	1.55	11.833	28.70	17.917	1.75	24.00	1.16
5.833	1.55	11.917	28.71	18.000	1.75	24.08	1.16
5.917	1.55	12.000	28.71	18.083	1.75	24.17	1.16
6.000	1.55	12.083	118.69	18.167	1.75	24.25	1.16
6.083	1.55	12.167	118.70	18.250	1.75		

Unit Hyd Qpeak (cms)= 5.892

PEAK FLOW (cms)= 3.898 (i)
TIME TO PEAK (hrs)= 12.417
RUNOFF VOLUME (mm)= 43.023
TOTAL RAINFALL (mm)= 96.980
RUNOFF COEFFICIENT = 0.444

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0012)	Area (ha)=	1.13	Curve Number (CN)=	67.4	
ID= 1 DT= 5.0 min	Ia (mm)=	7.88	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	0.43			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr

0.083	0.00	6.167	1.55	12.250	118.70	18.33	1.75
0.167	0.00	6.250	1.55	12.333	13.98	18.42	1.75
0.250	0.00	6.333	1.75	12.417	13.97	18.50	1.75
0.333	1.07	6.417	1.75	12.500	13.97	18.58	1.75
0.417	1.07	6.500	1.75	12.583	13.97	18.67	1.75
0.500	1.07	6.583	1.75	12.667	13.97	18.75	1.75
0.583	1.07	6.667	1.75	12.750	13.97	18.83	1.75
0.667	1.07	6.750	1.75	12.833	7.18	18.92	1.75
0.750	1.07	6.833	1.75	12.917	7.18	19.00	1.75
0.833	1.07	6.917	1.75	13.000	7.18	19.08	1.75
0.917	1.07	7.000	1.75	13.083	7.18	19.17	1.75
1.000	1.07	7.083	1.75	13.167	7.18	19.25	1.75
1.083	1.07	7.167	1.75	13.250	7.18	19.33	1.75
1.167	1.07	7.250	1.75	13.333	5.24	19.42	1.75
1.250	1.07	7.333	2.13	13.417	5.24	19.50	1.75
1.333	1.07	7.417	2.13	13.500	5.24	19.58	1.75
1.417	1.07	7.500	2.13	13.583	5.24	19.67	1.75
1.500	1.07	7.583	2.13	13.667	5.24	19.75	1.75
1.583	1.07	7.667	2.13	13.750	5.24	19.83	1.75
1.667	1.07	7.750	2.13	13.833	4.07	19.92	1.75
1.750	1.07	7.833	2.13	13.917	4.07	20.00	1.75
1.833	1.07	7.917	2.13	14.000	4.07	20.08	1.75
1.917	1.07	8.000	2.13	14.083	4.07	20.17	1.75
2.000	1.07	8.083	2.13	14.167	4.07	20.25	1.75
2.083	1.07	8.167	2.13	14.250	4.07	20.33	1.16
2.167	1.07	8.250	2.13	14.333	2.91	20.42	1.16
2.250	1.07	8.333	2.52	14.417	2.91	20.50	1.16
2.333	1.26	8.417	2.52	14.500	2.91	20.58	1.16
2.417	1.26	8.500	2.52	14.583	2.91	20.67	1.16
2.500	1.26	8.583	2.52	14.667	2.91	20.75	1.16
2.583	1.26	8.667	2.52	14.750	2.91	20.83	1.16
2.667	1.26	8.750	2.52	14.833	2.91	20.92	1.16
2.750	1.26	8.833	2.72	14.917	2.91	21.00	1.16
2.833	1.26	8.917	2.72	15.000	2.91	21.08	1.16
2.917	1.26	9.000	2.72	15.083	2.91	21.17	1.16
3.000	1.26	9.083	2.72	15.167	2.91	21.25	1.16
3.083	1.26	9.167	2.72	15.250	2.91	21.33	1.16
3.167	1.26	9.250	2.72	15.333	2.91	21.42	1.16
3.250	1.26	9.333	3.10	15.417	2.91	21.50	1.16
3.333	1.26	9.417	3.10	15.500	2.91	21.58	1.16
3.417	1.26	9.500	3.10	15.583	2.91	21.67	1.16
3.500	1.26	9.583	3.10	15.667	2.91	21.75	1.16
3.583	1.26	9.667	3.10	15.750	2.91	21.83	1.16
3.667	1.26	9.750	3.10	15.833	2.91	21.92	1.16
3.750	1.26	9.833	3.49	15.917	2.91	22.00	1.16
3.833	1.26	9.917	3.49	16.000	2.91	22.08	1.16
3.917	1.26	10.000	3.49	16.083	2.91	22.17	1.16
4.000	1.26	10.083	3.49	16.167	2.91	22.25	1.16
4.083	1.26	10.167	3.49	16.250	2.91	22.33	1.16
4.167	1.26	10.250	3.49	16.333	1.75	22.42	1.16
4.250	1.26	10.333	4.46	16.417	1.75	22.50	1.16
4.333	1.55	10.417	4.46	16.500	1.75	22.58	1.16
4.417	1.55	10.500	4.46	16.583	1.75	22.67	1.16
4.500	1.55	10.583	4.46	16.667	1.75	22.75	1.16
4.583	1.55	10.667	4.46	16.750	1.75	22.83	1.16
4.667	1.55	10.750	4.46	16.833	1.75	22.92	1.16
4.750	1.55	10.833	6.01	16.917	1.75	23.00	1.16
4.833	1.55	10.917	6.01	17.000	1.75	23.08	1.16
4.917	1.55	11.000	6.01	17.083	1.75	23.17	1.16
5.000	1.55	11.083	6.01	17.167	1.75	23.25	1.16
5.083	1.55	11.167	6.01	17.250	1.75	23.33	1.16
5.167	1.55	11.250	6.01	17.333	1.75	23.42	1.16
5.250	1.55	11.333	9.31	17.417	1.75	23.50	1.16
5.333	1.55	11.417	9.31	17.500	1.75	23.58	1.16
5.417	1.55	11.500	9.31	17.583	1.75	23.67	1.16
5.500	1.55	11.583	9.31	17.667	1.75	23.75	1.16
5.583	1.55	11.667	9.31	17.750	1.75	23.83	1.16
5.667	1.55	11.750	9.31	17.833	1.75	23.92	1.16
5.750	1.55	11.833	28.70	17.917	1.75	24.00	1.16
5.833	1.55	11.917	28.71	18.000	1.75	24.08	1.16
5.917	1.55	12.000	28.71	18.083	1.75	24.17	1.16
6.000	1.55	12.083	118.69	18.167	1.75	24.25	1.16
6.083	1.55	12.167	118.70	18.250	1.75		

Unit Hyd Qpeak (cms)= 0.100

PEAK FLOW (cms)= 0.063 (i)
TIME TO PEAK (hrs)= 12.583
RUNOFF VOLUME (mm)= 37.412
TOTAL RAINFALL (mm)= 96.980
RUNOFF COEFFICIENT = 0.386

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0041)	Area (ha)=	0.59	Curve Number (CN)= 71.5
ID= 1 DT= 5.0 min	Ia (mm)=	4.75	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	0.53	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.55	12.250	118.70	18.33	1.75
0.167	0.00	6.250	1.55	12.333	13.98	18.42	1.75
0.250	0.00	6.333	1.75	12.417	13.97	18.50	1.75

0.333	1.07	6.417	1.75	12.500	13.97	18.58	1.75
0.417	1.07	6.500	1.75	12.583	13.97	18.67	1.75
0.500	1.07	6.583	1.75	12.667	13.97	18.75	1.75
0.583	1.07	6.667	1.75	12.750	13.97	18.83	1.75
0.667	1.07	6.750	1.75	12.833	7.18	18.92	1.75
0.750	1.07	6.833	1.75	12.917	7.18	19.00	1.75
0.833	1.07	6.917	1.75	13.000	7.18	19.08	1.75
0.917	1.07	7.000	1.75	13.083	7.18	19.17	1.75
1.000	1.07	7.083	1.75	13.167	7.18	19.25	1.75
1.083	1.07	7.167	1.75	13.250	7.18	19.33	1.75
1.167	1.07	7.250	1.75	13.333	5.24	19.42	1.75
1.250	1.07	7.333	2.13	13.417	5.24	19.50	1.75
1.333	1.07	7.417	2.13	13.500	5.24	19.58	1.75
1.417	1.07	7.500	2.13	13.583	5.24	19.67	1.75
1.500	1.07	7.583	2.13	13.667	5.24	19.75	1.75
1.583	1.07	7.667	2.13	13.750	5.24	19.83	1.75
1.667	1.07	7.750	2.13	13.833	4.07	19.92	1.75
1.750	1.07	7.833	2.13	13.917	4.07	20.00	1.75
1.833	1.07	7.917	2.13	14.000	4.07	20.08	1.75
1.917	1.07	8.000	2.13	14.083	4.07	20.17	1.75
2.000	1.07	8.083	2.13	14.167	4.07	20.25	1.75
2.083	1.07	8.167	2.13	14.250	4.07	20.33	1.16
2.167	1.07	8.250	2.13	14.333	2.91	20.42	1.16
2.250	1.07	8.333	2.52	14.417	2.91	20.50	1.16
2.333	1.26	8.417	2.52	14.500	2.91	20.58	1.16
2.417	1.26	8.500	2.52	14.583	2.91	20.67	1.16
2.500	1.26	8.583	2.52	14.667	2.91	20.75	1.16
2.583	1.26	8.667	2.52	14.750	2.91	20.83	1.16
2.667	1.26	8.750	2.52	14.833	2.91	20.92	1.16
2.750	1.26	8.833	2.72	14.917	2.91	21.00	1.16
2.833	1.26	8.917	2.72	15.000	2.91	21.08	1.16
2.917	1.26	9.000	2.72	15.083	2.91	21.17	1.16
3.000	1.26	9.083	2.72	15.167	2.91	21.25	1.16
3.083	1.26	9.167	2.72	15.250	2.91	21.33	1.16
3.167	1.26	9.250	2.72	15.333	2.91	21.42	1.16
3.250	1.26	9.333	3.10	15.417	2.91	21.50	1.16
3.333	1.26	9.417	3.10	15.500	2.91	21.58	1.16
3.417	1.26	9.500	3.10	15.583	2.91	21.67	1.16
3.500	1.26	9.583	3.10	15.667	2.91	21.75	1.16
3.583	1.26	9.667	3.10	15.750	2.91	21.83	1.16
3.667	1.26	9.750	3.10	15.833	2.91	21.92	1.16
3.750	1.26	9.833	3.49	15.917	2.91	22.00	1.16
3.833	1.26	9.917	3.49	16.000	2.91	22.08	1.16
3.917	1.26	10.000	3.49	16.083	2.91	22.17	1.16
4.000	1.26	10.083	3.49	16.167	2.91	22.25	1.16
4.083	1.26	10.167	3.49	16.250	2.91	22.33	1.16
4.167	1.26	10.250	3.49	16.333	1.75	22.42	1.16
4.250	1.26	10.333	4.46	16.417	1.75	22.50	1.16
4.333	1.55	10.417	4.46	16.500	1.75	22.58	1.16
4.417	1.55	10.500	4.46	16.583	1.75	22.67	1.16
4.500	1.55	10.583	4.46	16.667	1.75	22.75	1.16
4.583	1.55	10.667	4.46	16.750	1.75	22.83	1.16
4.667	1.55	10.750	4.46	16.833	1.75	22.92	1.16
4.750	1.55	10.833	6.01	16.917	1.75	23.00	1.16
4.833	1.55	10.917	6.01	17.000	1.75	23.08	1.16
4.917	1.55	11.000	6.01	17.083	1.75	23.17	1.16
5.000	1.55	11.083	6.01	17.167	1.75	23.25	1.16
5.083	1.55	11.167	6.01	17.250	1.75	23.33	1.16
5.167	1.55	11.250	6.01	17.333	1.75	23.42	1.16
5.250	1.55	11.333	9.31	17.417	1.75	23.50	1.16
5.333	1.55	11.417	9.31	17.500	1.75	23.58	1.16
5.417	1.55	11.500	9.31	17.583	1.75	23.67	1.16
5.500	1.55	11.583	9.31	17.667	1.75	23.75	1.16
5.583	1.55	11.667	9.31	17.750	1.75	23.83	1.16
5.667	1.55	11.750	9.31	17.833	1.75	23.92	1.16
5.750	1.55	11.833	28.70	17.917	1.75	24.00	1.16
5.833	1.55	11.917	28.71	18.000	1.75	24.08	1.16
5.917	1.55	12.000	28.71	18.083	1.75	24.17	1.16
6.000	1.55	12.083	118.69	18.167	1.75	24.25	1.16
6.083	1.55	12.167	118.70	18.250	1.75		

Unit Hyd Qpeak (cms)= 0.043

PEAK FLOW (cms)= 0.033 (i)
TIME TO PEAK (hrs)= 12.667
RUNOFF VOLUME (mm)= 43.917
TOTAL RAINFALL (mm)= 96.980
RUNOFF COEFFICIENT = 0.453

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB				
NASHYD (0028)	Area (ha)= 1.38	Curve Number (CN)= 64.1		
ID= 1 DT= 5.0 min	Ia (mm)= 8.51	# of Linear Res.(N)= 3.00		
	U.H. Tp(hrs)= 0.39			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.55	12.250	118.70	18.33	1.75
0.167	0.00	6.250	1.55	12.333	13.98	18.42	1.75
0.250	0.00	6.333	1.75	12.417	13.97	18.50	1.75
0.333	1.07	6.417	1.75	12.500	13.97	18.58	1.75
0.417	1.07	6.500	1.75	12.583	13.97	18.67	1.75
0.500	1.07	6.583	1.75	12.667	13.97	18.75	1.75

0.583	1.07	6.667	1.75	12.750	13.97	18.83	1.75
0.667	1.07	6.750	1.75	12.833	7.18	18.92	1.75
0.750	1.07	6.833	1.75	12.917	7.18	19.00	1.75
0.833	1.07	6.917	1.75	13.000	7.18	19.08	1.75
0.917	1.07	7.000	1.75	13.083	7.18	19.17	1.75
1.000	1.07	7.083	1.75	13.167	7.18	19.25	1.75
1.083	1.07	7.167	1.75	13.250	7.18	19.33	1.75
1.167	1.07	7.250	1.75	13.333	5.24	19.42	1.75
1.250	1.07	7.333	2.13	13.417	5.24	19.50	1.75
1.333	1.07	7.417	2.13	13.500	5.24	19.58	1.75
1.417	1.07	7.500	2.13	13.583	5.24	19.67	1.75
1.500	1.07	7.583	2.13	13.667	5.24	19.75	1.75
1.583	1.07	7.667	2.13	13.750	5.24	19.83	1.75
1.667	1.07	7.750	2.13	13.833	4.07	19.92	1.75
1.750	1.07	7.833	2.13	13.917	4.07	20.00	1.75
1.833	1.07	7.917	2.13	14.000	4.07	20.08	1.75
1.917	1.07	8.000	2.13	14.083	4.07	20.17	1.75
2.000	1.07	8.083	2.13	14.167	4.07	20.25	1.75
2.083	1.07	8.167	2.13	14.250	4.07	20.33	1.16
2.167	1.07	8.250	2.13	14.333	2.91	20.42	1.16
2.250	1.07	8.333	2.52	14.417	2.91	20.50	1.16
2.333	1.26	8.417	2.52	14.500	2.91	20.58	1.16
2.417	1.26	8.500	2.52	14.583	2.91	20.67	1.16
2.500	1.26	8.583	2.52	14.667	2.91	20.75	1.16
2.583	1.26	8.667	2.52	14.750	2.91	20.83	1.16
2.667	1.26	8.750	2.52	14.833	2.91	20.92	1.16
2.750	1.26	8.833	2.72	14.917	2.91	21.00	1.16
2.833	1.26	8.917	2.72	15.000	2.91	21.08	1.16
2.917	1.26	9.000	2.72	15.083	2.91	21.17	1.16
3.000	1.26	9.083	2.72	15.167	2.91	21.25	1.16
3.083	1.26	9.167	2.72	15.250	2.91	21.33	1.16
3.167	1.26	9.250	2.72	15.333	2.91	21.42	1.16
3.250	1.26	9.333	3.10	15.417	2.91	21.50	1.16
3.333	1.26	9.417	3.10	15.500	2.91	21.58	1.16
3.417	1.26	9.500	3.10	15.583	2.91	21.67	1.16
3.500	1.26	9.583	3.10	15.667	2.91	21.75	1.16
3.583	1.26	9.667	3.10	15.750	2.91	21.83	1.16
3.667	1.26	9.750	3.10	15.833	2.91	21.92	1.16
3.750	1.26	9.833	3.49	15.917	2.91	22.00	1.16
3.833	1.26	9.917	3.49	16.000	2.91	22.08	1.16
3.917	1.26	10.000	3.49	16.083	2.91	22.17	1.16
4.000	1.26	10.083	3.49	16.167	2.91	22.25	1.16
4.083	1.26	10.167	3.49	16.250	2.91	22.33	1.16
4.167	1.26	10.250	3.49	16.333	1.75	22.42	1.16
4.250	1.26	10.333	4.46	16.417	1.75	22.50	1.16
4.333	1.55	10.417	4.46	16.500	1.75	22.58	1.16
4.417	1.55	10.500	4.46	16.583	1.75	22.67	1.16
4.500	1.55	10.583	4.46	16.667	1.75	22.75	1.16
4.583	1.55	10.667	4.46	16.750	1.75	22.83	1.16
4.667	1.55	10.750	4.46	16.833	1.75	22.92	1.16
4.750	1.55	10.833	6.01	16.917	1.75	23.00	1.16
4.833	1.55	10.917	6.01	17.000	1.75	23.08	1.16
4.917	1.55	11.000	6.01	17.083	1.75	23.17	1.16
5.000	1.55	11.083	6.01	17.167	1.75	23.25	1.16
5.083	1.55	11.167	6.01	17.250	1.75	23.33	1.16
5.167	1.55	11.250	6.01	17.333	1.75	23.42	1.16
5.250	1.55	11.333	9.31	17.417	1.75	23.50	1.16
5.333	1.55	11.417	9.31	17.500	1.75	23.58	1.16
5.417	1.55	11.500	9.31	17.583	1.75	23.67	1.16
5.500	1.55	11.583	9.31	17.667	1.75	23.75	1.16
5.583	1.55	11.667	9.31	17.750	1.75	23.83	1.16
5.667	1.55	11.750	9.31	17.833	1.75	23.92	1.16
5.750	1.55	11.833	28.70	17.917	1.75	24.00	1.16
5.833	1.55	11.917	28.71	18.000	1.75	24.08	1.16
5.917	1.55	12.000	28.71	18.083	1.75	24.17	1.16
6.000	1.55	12.083	118.69	18.167	1.75	24.25	1.16
6.083	1.55	12.167	118.70	18.250	1.75		

Unit Hyd Qpeak (cms)= 0.135

PEAK FLOW (cms)= 0.074 (i)
TIME TO PEAK (hrs)= 12.500
RUNOFF VOLUME (mm)= 33.954
TOTAL RAINFALL (mm)= 96.980
RUNOFF COEFFICIENT = 0.350

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	
STANDHYD (0044)	Area (ha)= 1.62
ID= 1 DT= 5.0 min	Total Imp(%)= 48.77 Dir. Conn.(%)= 30.86

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.79	0.83
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	1.40
Length	(m)=	103.92	400.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.55	12.250	118.70	18.33	1.75
0.167	0.00	6.250	1.55	12.333	13.98	18.42	1.75
0.250	0.00	6.333	1.75	12.417	13.97	18.50	1.75

0.333	1.07	6.417	1.75	12.500	13.97	18.58	1.75
0.417	1.07	6.500	1.75	12.583	13.97	18.67	1.75
0.500	1.07	6.583	1.75	12.667	13.97	18.75	1.75
0.583	1.07	6.667	1.75	12.750	13.97	18.83	1.75
0.667	1.07	6.750	1.75	12.833	7.18	18.92	1.75
0.750	1.07	6.833	1.75	12.917	7.18	19.00	1.75
0.833	1.07	6.917	1.75	13.000	7.18	19.08	1.75
0.917	1.07	7.000	1.75	13.083	7.18	19.17	1.75
1.000	1.07	7.083	1.75	13.167	7.18	19.25	1.75
1.083	1.07	7.167	1.75	13.250	7.18	19.33	1.75
1.167	1.07	7.250	1.75	13.333	5.24	19.42	1.75
1.250	1.07	7.333	2.13	13.417	5.24	19.50	1.75
1.333	1.07	7.417	2.13	13.500	5.24	19.58	1.75
1.417	1.07	7.500	2.13	13.583	5.24	19.67	1.75
1.500	1.07	7.583	2.13	13.667	5.24	19.75	1.75
1.583	1.07	7.667	2.13	13.750	5.24	19.83	1.75
1.667	1.07	7.750	2.13	13.833	4.07	19.92	1.75
1.750	1.07	7.833	2.13	13.917	4.07	20.00	1.75
1.833	1.07	7.917	2.13	14.000	4.07	20.08	1.75
1.917	1.07	8.000	2.13	14.083	4.07	20.17	1.75
2.000	1.07	8.083	2.13	14.167	4.07	20.25	1.75
2.083	1.07	8.167	2.13	14.250	4.07	20.33	1.16
2.167	1.07	8.250	2.13	14.333	2.91	20.42	1.16
2.250	1.07	8.333	2.52	14.417	2.91	20.50	1.16
2.333	1.26	8.417	2.52	14.500	2.91	20.58	1.16
2.417	1.26	8.500	2.52	14.583	2.91	20.67	1.16
2.500	1.26	8.583	2.52	14.667	2.91	20.75	1.16
2.583	1.26	8.667	2.52	14.750	2.91	20.83	1.16
2.667	1.26	8.750	2.52	14.833	2.91	20.92	1.16
2.750	1.26	8.833	2.72	14.917	2.91	21.00	1.16
2.833	1.26	8.917	2.72	15.000	2.91	21.08	1.16
2.917	1.26	9.000	2.72	15.083	2.91	21.17	1.16
3.000	1.26	9.083	2.72	15.167	2.91	21.25	1.16
3.083	1.26	9.167	2.72	15.250	2.91	21.33	1.16
3.167	1.26	9.250	2.72	15.333	2.91	21.42	1.16
3.250	1.26	9.333	3.10	15.417	2.91	21.50	1.16
3.333	1.26	9.417	3.10	15.500	2.91	21.58	1.16
3.417	1.26	9.500	3.10	15.583	2.91	21.67	1.16
3.500	1.26	9.583	3.10	15.667	2.91	21.75	1.16
3.583	1.26	9.667	3.10	15.750	2.91	21.83	1.16
3.667	1.26	9.750	3.10	15.833	2.91	21.92	1.16
3.750	1.26	9.833	3.49	15.917	2.91	22.00	1.16
3.833	1.26	9.917	3.49	16.000	2.91	22.08	1.16
3.917	1.26	10.000	3.49	16.083	2.91	22.17	1.16
4.000	1.26	10.083	3.49	16.167	2.91	22.25	1.16
4.083	1.26	10.167	3.49	16.250	2.91	22.33	1.16
4.167	1.26	10.250	3.49	16.333	1.75	22.42	1.16
4.250	1.26	10.333	4.46	16.417	1.75	22.50	1.16
4.333	1.55	10.417	4.46	16.500	1.75	22.58	1.16
4.417	1.55	10.500	4.46	16.583	1.75	22.67	1.16
4.500	1.55	10.583	4.46	16.667	1.75	22.75	1.16
4.583	1.55	10.667	4.46	16.750	1.75	22.83	1.16
4.667	1.55	10.750	4.46	16.833	1.75	22.92	1.16
4.750	1.55	10.833	6.01	16.917	1.75	23.00	1.16
4.833	1.55	10.917	6.01	17.000	1.75	23.08	1.16
4.917	1.55	11.000	6.01	17.083	1.75	23.17	1.16
5.000	1.55	11.083	6.01	17.167	1.75	23.25	1.16
5.083	1.55	11.167	6.01	17.250	1.75	23.33	1.16
5.167	1.55	11.250	6.01	17.333	1.75	23.42	1.16
5.250	1.55	11.333	9.31	17.417	1.75	23.50	1.16
5.333	1.55	11.417	9.31	17.500	1.75	23.58	1.16
5.417	1.55	11.500	9.31	17.583	1.75	23.67	1.16
5.500	1.55	11.583	9.31	17.667	1.75	23.75	1.16
5.583	1.55	11.667	9.31	17.750	1.75	23.83	1.16
5.667	1.55	11.750	9.31	17.833	1.75	23.92	1.16
5.750	1.55	11.833	28.70	17.917	1.75	24.00	1.16
5.833	1.55	11.917	28.71	18.000	1.75	24.08	1.16
5.917	1.55	12.000	28.71	18.083	1.75	24.17	1.16
6.000	1.55	12.083	118.69	18.167	1.75	24.25	1.16
6.083	1.55	12.167	118.70	18.250	1.75		

Max.Eff.Inten.(mm/hr)=		118.70	40.35	
over (min)		5.00	50.00	
Storage Coeff. (min)=		3.01 (ii)	47.96 (ii)	
Unit Hyd. Tpeak (min)=		5.00	50.00	
Unit Hyd. peak (cms)=		0.28	0.02	
				TOTALS
PEAK FLOW	(cms)=	0.16	0.06	0.182 (iii)
TIME TO PEAK	(hrs)=	12.25	12.92	12.25
RUNOFF VOLUME	(mm)=	95.98	48.92	63.43
TOTAL RAINFALL	(mm)=	96.98	96.98	96.98
RUNOFF COEFFICIENT	=	0.99	0.50	0.65

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
STANDHYD (0043)	Area	(ha)=	0.13
ID= 1 DT= 5.0 min	Total Imp(%)=	30.77	Dir. Conn.(%)= 7.69

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.04	0.09
Dep. Storage	(mm)=	1.00	5.00

Average Slope	(%)=	0.50	0.50
Length	(m)=	29.44	70.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.55	12.250	118.70	18.33	1.75
0.167	0.00	6.250	1.55	12.333	13.98	18.42	1.75
0.250	0.00	6.333	1.75	12.417	13.97	18.50	1.75
0.333	1.07	6.417	1.75	12.500	13.97	18.58	1.75
0.417	1.07	6.500	1.75	12.583	13.97	18.67	1.75
0.500	1.07	6.583	1.75	12.667	13.97	18.75	1.75
0.583	1.07	6.667	1.75	12.750	13.97	18.83	1.75
0.667	1.07	6.750	1.75	12.833	7.18	18.92	1.75
0.750	1.07	6.833	1.75	12.917	7.18	19.00	1.75
0.833	1.07	6.917	1.75	13.000	7.18	19.08	1.75
0.917	1.07	7.000	1.75	13.083	7.18	19.17	1.75
1.000	1.07	7.083	1.75	13.167	7.18	19.25	1.75
1.083	1.07	7.167	1.75	13.250	7.18	19.33	1.75
1.167	1.07	7.250	1.75	13.333	5.24	19.42	1.75
1.250	1.07	7.333	2.13	13.417	5.24	19.50	1.75
1.333	1.07	7.417	2.13	13.500	5.24	19.58	1.75
1.417	1.07	7.500	2.13	13.583	5.24	19.67	1.75
1.500	1.07	7.583	2.13	13.667	5.24	19.75	1.75
1.583	1.07	7.667	2.13	13.750	5.24	19.83	1.75
1.667	1.07	7.750	2.13	13.833	4.07	19.92	1.75
1.750	1.07	7.833	2.13	13.917	4.07	20.00	1.75
1.833	1.07	7.917	2.13	14.000	4.07	20.08	1.75
1.917	1.07	8.000	2.13	14.083	4.07	20.17	1.75
2.000	1.07	8.083	2.13	14.167	4.07	20.25	1.75
2.083	1.07	8.167	2.13	14.250	4.07	20.33	1.16
2.167	1.07	8.250	2.13	14.333	2.91	20.42	1.16
2.250	1.07	8.333	2.52	14.417	2.91	20.50	1.16
2.333	1.26	8.417	2.52	14.500	2.91	20.58	1.16
2.417	1.26	8.500	2.52	14.583	2.91	20.67	1.16
2.500	1.26	8.583	2.52	14.667	2.91	20.75	1.16
2.583	1.26	8.667	2.52	14.750	2.91	20.83	1.16
2.667	1.26	8.750	2.52	14.833	2.91	20.92	1.16
2.750	1.26	8.833	2.72	14.917	2.91	21.00	1.16
2.833	1.26	8.917	2.72	15.000	2.91	21.08	1.16
2.917	1.26	9.000	2.72	15.083	2.91	21.17	1.16
3.000	1.26	9.083	2.72	15.167	2.91	21.25	1.16
3.083	1.26	9.167	2.72	15.250	2.91	21.33	1.16
3.167	1.26	9.250	2.72	15.333	2.91	21.42	1.16
3.250	1.26	9.333	3.10	15.417	2.91	21.50	1.16
3.333	1.26	9.417	3.10	15.500	2.91	21.58	1.16
3.417	1.26	9.500	3.10	15.583	2.91	21.67	1.16
3.500	1.26	9.583	3.10	15.667	2.91	21.75	1.16
3.583	1.26	9.667	3.10	15.750	2.91	21.83	1.16
3.667	1.26	9.750	3.10	15.833	2.91	21.92	1.16
3.750	1.26	9.833	3.49	15.917	2.91	22.00	1.16
3.833	1.26	9.917	3.49	16.000	2.91	22.08	1.16
3.917	1.26	10.000	3.49	16.083	2.91	22.17	1.16
4.000	1.26	10.083	3.49	16.167	2.91	22.25	1.16
4.083	1.26	10.167	3.49	16.250	2.91	22.33	1.16
4.167	1.26	10.250	3.49	16.333	1.75	22.42	1.16
4.250	1.26	10.333	4.46	16.417	1.75	22.50	1.16
4.333	1.55	10.417	4.46	16.500	1.75	22.58	1.16
4.417	1.55	10.500	4.46	16.583	1.75	22.67	1.16
4.500	1.55	10.583	4.46	16.667	1.75	22.75	1.16
4.583	1.55	10.667	4.46	16.750	1.75	22.83	1.16
4.667	1.55	10.750	4.46	16.833	1.75	22.92	1.16
4.750	1.55	10.833	6.01	16.917	1.75	23.00	1.16
4.833	1.55	10.917	6.01	17.000	1.75	23.08	1.16
4.917	1.55	11.000	6.01	17.083	1.75	23.17	1.16
5.000	1.55	11.083	6.01	17.167	1.75	23.25	1.16
5.083	1.55	11.167	6.01	17.250	1.75	23.33	1.16
5.167	1.55	11.250	6.01	17.333	1.75	23.42	1.16
5.250	1.55	11.333	9.31	17.417	1.75	23.50	1.16
5.333	1.55	11.417	9.31	17.500	1.75	23.58	1.16
5.417	1.55	11.500	9.31	17.583	1.75	23.67	1.16
5.500	1.55	11.583	9.31	17.667	1.75	23.75	1.16
5.583	1.55	11.667	9.31	17.750	1.75	23.83	1.16
5.667	1.55	11.750	9.31	17.833	1.75	23.92	1.16
5.750	1.55	11.833	28.70	17.917	1.75	24.00	1.16
5.833	1.55	11.917	28.71	18.000	1.75	24.08	1.16
5.917	1.55	12.000	28.71	18.083	1.75	24.17	1.16
6.000	1.55	12.083	118.69	18.167	1.75	24.25	1.16
6.083	1.55	12.167	118.70	18.250	1.75		

Max.Eff.Inten.(mm/hr)=		118.70	71.91	
over (min)		5.00	20.00	
Storage Coeff. (min)=		1.41 (ii)	18.49 (ii)	
Unit Hyd. Tpeak (min)=		5.00	20.00	
Unit Hyd. peak (cms)=		0.33	0.06	
				TOTALS
PEAK FLOW	(cms)=	0.00	0.01	0.012 (iii)
TIME TO PEAK	(hrs)=	12.25	12.42	12.42
RUNOFF VOLUME	(mm)=	95.98	48.61	52.16
TOTAL RAINFALL	(mm)=	96.98	96.98	96.98
RUNOFF COEFFICIENT	=	0.99	0.50	0.54

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

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       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  69.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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--------------------
| ADD HYD  (  0023)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 1 (  0011):    46.28   3.898    12.42    43.02
      + ID2= 2 (  0012):     1.13   0.063    12.58    37.41
        ================================================
        ID = 3 (  0023):    47.41   3.955    12.42    42.89

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
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--------------------
| ADD HYD  (  0023)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 3 (  0023):    47.41   3.955    12.42    42.89
      + ID2= 2 (  0028):     1.38   0.074    12.50    33.95
        ================================================
        ID = 1 (  0023):    48.79   4.025    12.42    42.64

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0023)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 1 (  0023):    48.79   4.025    12.42    42.64
      + ID2= 2 (  0041):     0.59   0.033    12.67    43.92
        ================================================
        ID = 3 (  0023):    49.38   4.052    12.42    42.65

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0023)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 3 (  0023):    49.38   4.052    12.42    42.65
      + ID2= 2 (  0043):     0.13   0.012    12.42    52.16
        ================================================
        ID = 1 (  0023):    49.51   4.064    12.42    42.68

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0023)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 1 (  0023):    49.51   4.064    12.42    42.68
      + ID2= 2 (  0044):     1.62   0.182    12.25    63.43
        ================================================
        ID = 3 (  0023):    51.13   4.117    12.42    43.33

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0025)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 1 (  0023):    51.13   4.117    12.42    43.33
      + ID2= 2 (  0024):   225.17   3.980    13.25    28.46
        ================================================
        ID = 3 (  0025):   276.30   6.314    12.50    31.21

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
================================================================================
========================

       V    V   I    SSSSS  U   U    A    L              (v 6.2.2020)
       V    V   I    SS     U   U   A A   L
        V  V    I     SS    U   U  AAAAA  L
        V  V    I      SS   U   U  A   A  L
         VV     I    SSSSS  UUUUU  A   A  LLLLL

        OOO   TTTTT  TTTTT  H   H  Y   Y  M   M   OOO    TM
       O   O    T      T    H   H   Y Y   MM MM  O   O
       O   O    T      T    H   H    Y    M   M  O   O
        OOO     T      T    H   H    Y    M   M   OOO
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                    *****  D E T A I L E D   O U T P U T *****
```

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat

Output filename:
C:\Users\msimon\AppData\Local\Civica\VH5\a122c840-259d-4b92-8a43-b1e7a592bdea\ba0bf4a2-cf08-4585-9721-844fd2856908\scena
Summary filename:
C:\Users\msimon\AppData\Local\Civica\VH5\a122c840-259d-4b92-8a43-b1e7a592bdea\ba0bf4a2-cf08-4585-9721-844fd2856908\scena

DATE: 07-15-2026 TIME: 03:17:57

USER:

COMMENTS: _____

****
** SIMULATION : J - 25-year SCS **
****

READ STORM	Filename: C:\Users\msimon\AppData\Local\Temp\2578c1bc-683b-4555-9960-7d3c657f7fff\67437f9c
Ptotal=114.04 mm	Comments: 25yr 24hr 15min SCS Type II (MTO) - 15%

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.00	0.00	6.25	2.05	12.50	16.42	18.75	2.05
0.25	1.25	6.50	2.05	12.75	8.44	19.00	2.05
0.50	1.25	6.75	2.05	13.00	8.44	19.25	2.05
0.75	1.25	7.00	2.05	13.25	6.16	19.50	2.05
1.00	1.25	7.25	2.51	13.50	6.16	19.75	2.05
1.25	1.25	7.50	2.51	13.75	4.79	20.00	2.05
1.50	1.25	7.75	2.51	14.00	4.79	20.25	1.37
1.75	1.25	8.00	2.51	14.25	3.42	20.50	1.37
2.00	1.25	8.25	2.97	14.50	3.42	20.75	1.37
2.25	1.48	8.50	2.97	14.75	3.42	21.00	1.37
2.50	1.48	8.75	3.19	15.00	3.42	21.25	1.37
2.75	1.48	9.00	3.19	15.25	3.42	21.50	1.37
3.00	1.48	9.25	3.65	15.50	3.42	21.75	1.37
3.25	1.48	9.50	3.65	15.75	3.42	22.00	1.37
3.50	1.48	9.75	4.11	16.00	3.42	22.25	1.37
3.75	1.48	10.00	4.11	16.25	2.05	22.50	1.37
4.00	1.48	10.25	5.25	16.50	2.05	22.75	1.37
4.25	1.82	10.50	5.25	16.75	2.05	23.00	1.37
4.50	1.82	10.75	7.07	17.00	2.05	23.25	1.37
4.75	1.82	11.00	7.07	17.25	2.05	23.50	1.37
5.00	1.82	11.25	10.95	17.50	2.05	23.75	1.37
5.25	1.82	11.50	10.95	17.75	2.05	24.00	1.37
5.50	1.82	11.75	33.76	18.00	2.05		
5.75	1.82	12.00	139.58	18.25	2.05		
6.00	1.82	12.25	16.42	18.50	2.05		

CALIB			
NASHYD (0007)	Area (ha)= 100.92	Curve Number (CN)= 55.9	
ID= 1 DT= 5.0 min	Ia (mm)= 7.89	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 1.70		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.82	12.250	139.58	18.33	2.05
0.167	0.00	6.250	1.82	12.333	16.44	18.42	2.05
0.250	0.00	6.333	2.05	12.417	16.42	18.50	2.05
0.333	1.25	6.417	2.05	12.500	16.42	18.58	2.05
0.417	1.25	6.500	2.05	12.583	16.42	18.67	2.05
0.500	1.25	6.583	2.05	12.667	16.42	18.75	2.05
0.583	1.25	6.667	2.05	12.750	16.42	18.83	2.05
0.667	1.25	6.750	2.05	12.833	8.44	18.92	2.05
0.750	1.25	6.833	2.05	12.917	8.44	19.00	2.05
0.833	1.25	6.917	2.05	13.000	8.44	19.08	2.05
0.917	1.25	7.000	2.05	13.083	8.44	19.17	2.05
1.000	1.25	7.083	2.05	13.167	8.44	19.25	2.05
1.083	1.25	7.167	2.05	13.250	8.44	19.33	2.05
1.167	1.25	7.250	2.05	13.333	6.16	19.42	2.05
1.250	1.25	7.333	2.51	13.417	6.16	19.50	2.05
1.333	1.25	7.417	2.51	13.500	6.16	19.58	2.05
1.417	1.25	7.500	2.51	13.583	6.16	19.67	2.05
1.500	1.25	7.583	2.51	13.667	6.16	19.75	2.05
1.583	1.25	7.667	2.51	13.750	6.16	19.83	2.05
1.667	1.25	7.750	2.51	13.833	4.79	19.92	2.05
1.750	1.25	7.833	2.51	13.917	4.79	20.00	2.05
1.833	1.25	7.917	2.51	14.000	4.79	20.08	2.05
1.917	1.25	8.000	2.51	14.083	4.79	20.17	2.05
2.000	1.25	8.083	2.51	14.167	4.79	20.25	2.05
2.083	1.25	8.167	2.51	14.250	4.79	20.33	1.37
2.167	1.25	8.250	2.51	14.333	3.42	20.42	1.37

2.250	1.25	8.333	2.97	14.417	3.42	20.50	1.37
2.333	1.48	8.417	2.97	14.500	3.42	20.58	1.37
2.417	1.48	8.500	2.97	14.583	3.42	20.67	1.37
2.500	1.48	8.583	2.97	14.667	3.42	20.75	1.37
2.583	1.48	8.667	2.97	14.750	3.42	20.83	1.37
2.667	1.48	8.750	2.97	14.833	3.42	20.92	1.37
2.750	1.48	8.833	3.19	14.917	3.42	21.00	1.37
2.833	1.48	8.917	3.19	15.000	3.42	21.08	1.37
2.917	1.48	9.000	3.19	15.083	3.42	21.17	1.37
3.000	1.48	9.083	3.19	15.167	3.42	21.25	1.37
3.083	1.48	9.167	3.19	15.250	3.42	21.33	1.37
3.167	1.48	9.250	3.19	15.333	3.42	21.42	1.37
3.250	1.48	9.333	3.65	15.417	3.42	21.50	1.37
3.333	1.48	9.417	3.65	15.500	3.42	21.58	1.37
3.417	1.48	9.500	3.65	15.583	3.42	21.67	1.37
3.500	1.48	9.583	3.65	15.667	3.42	21.75	1.37
3.583	1.48	9.667	3.65	15.750	3.42	21.83	1.37
3.667	1.48	9.750	3.65	15.833	3.42	21.92	1.37
3.750	1.48	9.833	4.11	15.917	3.42	22.00	1.37
3.833	1.48	9.917	4.11	16.000	3.42	22.08	1.37
3.917	1.48	10.000	4.11	16.083	3.42	22.17	1.37
4.000	1.48	10.083	4.11	16.167	3.42	22.25	1.37
4.083	1.48	10.167	4.11	16.250	3.42	22.33	1.37
4.167	1.48	10.250	4.11	16.333	2.05	22.42	1.37
4.250	1.48	10.333	5.25	16.417	2.05	22.50	1.37
4.333	1.82	10.417	5.25	16.500	2.05	22.58	1.37
4.417	1.82	10.500	5.25	16.583	2.05	22.67	1.37
4.500	1.82	10.583	5.25	16.667	2.05	22.75	1.37
4.583	1.82	10.667	5.25	16.750	2.05	22.83	1.37
4.667	1.82	10.750	5.25	16.833	2.05	22.92	1.37
4.750	1.82	10.833	7.07	16.917	2.05	23.00	1.37
4.833	1.82	10.917	7.07	17.000	2.05	23.08	1.37
4.917	1.82	11.000	7.07	17.083	2.05	23.17	1.37
5.000	1.82	11.083	7.07	17.167	2.05	23.25	1.37
5.083	1.82	11.167	7.07	17.250	2.05	23.33	1.37
5.167	1.82	11.250	7.07	17.333	2.05	23.42	1.37
5.250	1.82	11.333	10.95	17.417	2.05	23.50	1.37
5.333	1.82	11.417	10.95	17.500	2.05	23.58	1.37
5.417	1.82	11.500	10.95	17.583	2.05	23.67	1.37
5.500	1.82	11.583	10.95	17.667	2.05	23.75	1.37
5.583	1.82	11.667	10.95	17.750	2.05	23.83	1.37
5.667	1.82	11.750	10.95	17.833	2.05	23.92	1.37
5.750	1.82	11.833	33.75	17.917	2.05	24.00	1.37
5.833	1.82	11.917	33.76	18.000	2.05	24.08	1.37
5.917	1.82	12.000	33.76	18.083	2.05	24.17	1.37
6.000	1.82	12.083	139.57	18.167	2.05	24.25	1.37
6.083	1.82	12.167	139.58	18.250	2.05		

Unit Hyd Qpeak (cms)= 2.267

PEAK FLOW (cms)= 1.938 (i)
TIME TO PEAK (hrs)= 14.083
RUNOFF VOLUME (mm)= 36.798
TOTAL RAINFALL (mm)= 114.040
RUNOFF COEFFICIENT = 0.323

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0008)	Area (ha)= 23.99	Curve Number (CN)= 44.7	
ID= 1 DT= 5.0 min	Ia (mm)= 10.91	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.97		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.82	12.250	139.58	18.33	2.05
0.167	0.00	6.250	1.82	12.333	16.44	18.42	2.05
0.250	0.00	6.333	2.05	12.417	16.42	18.50	2.05
0.333	1.25	6.417	2.05	12.500	16.42	18.58	2.05
0.417	1.25	6.500	2.05	12.583	16.42	18.67	2.05
0.500	1.25	6.583	2.05	12.667	16.42	18.75	2.05
0.583	1.25	6.667	2.05	12.750	16.42	18.83	2.05
0.667	1.25	6.750	2.05	12.833	8.44	18.92	2.05
0.750	1.25	6.833	2.05	12.917	8.44	19.00	2.05
0.833	1.25	6.917	2.05	13.000	8.44	19.08	2.05
0.917	1.25	7.000	2.05	13.083	8.44	19.17	2.05
1.000	1.25	7.083	2.05	13.167	8.44	19.25	2.05
1.083	1.25	7.167	2.05	13.250	8.44	19.33	2.05
1.167	1.25	7.250	2.05	13.333	6.16	19.42	2.05
1.250	1.25	7.333	2.51	13.417	6.16	19.50	2.05
1.333	1.25	7.417	2.51	13.500	6.16	19.58	2.05
1.417	1.25	7.500	2.51	13.583	6.16	19.67	2.05
1.500	1.25	7.583	2.51	13.667	6.16	19.75	2.05
1.583	1.25	7.667	2.51	13.750	6.16	19.83	2.05
1.667	1.25	7.750	2.51	13.833	4.79	19.92	2.05
1.750	1.25	7.833	2.51	13.917	4.79	20.00	2.05
1.833	1.25	7.917	2.51	14.000	4.79	20.08	2.05
1.917	1.25	8.000	2.51	14.083	4.79	20.17	2.05
2.000	1.25	8.083	2.51	14.167	4.79	20.25	2.05
2.083	1.25	8.167	2.51	14.250	4.79	20.33	1.37
2.167	1.25	8.250	2.51	14.333	3.42	20.42	1.37
2.250	1.25	8.333	2.97	14.417	3.42	20.50	1.37
2.333	1.48	8.417	2.97	14.500	3.42	20.58	1.37
2.417	1.48	8.500	2.97	14.583	3.42	20.67	1.37

2.500	1.48	8.583	2.97	14.667	3.42	20.75	1.37
2.583	1.48	8.667	2.97	14.750	3.42	20.83	1.37
2.667	1.48	8.750	2.97	14.833	3.42	20.92	1.37
2.750	1.48	8.833	3.19	14.917	3.42	21.00	1.37
2.833	1.48	8.917	3.19	15.000	3.42	21.08	1.37
2.917	1.48	9.000	3.19	15.083	3.42	21.17	1.37
3.000	1.48	9.083	3.19	15.167	3.42	21.25	1.37
3.083	1.48	9.167	3.19	15.250	3.42	21.33	1.37
3.167	1.48	9.250	3.19	15.333	3.42	21.42	1.37
3.250	1.48	9.333	3.65	15.417	3.42	21.50	1.37
3.333	1.48	9.417	3.65	15.500	3.42	21.58	1.37
3.417	1.48	9.500	3.65	15.583	3.42	21.67	1.37
3.500	1.48	9.583	3.65	15.667	3.42	21.75	1.37
3.583	1.48	9.667	3.65	15.750	3.42	21.83	1.37
3.667	1.48	9.750	3.65	15.833	3.42	21.92	1.37
3.750	1.48	9.833	4.11	15.917	3.42	22.00	1.37
3.833	1.48	9.917	4.11	16.000	3.42	22.08	1.37
3.917	1.48	10.000	4.11	16.083	3.42	22.17	1.37
4.000	1.48	10.083	4.11	16.167	3.42	22.25	1.37
4.083	1.48	10.167	4.11	16.250	3.42	22.33	1.37
4.167	1.48	10.250	4.11	16.333	2.05	22.42	1.37
4.250	1.48	10.333	5.25	16.417	2.05	22.50	1.37
4.333	1.82	10.417	5.25	16.500	2.05	22.58	1.37
4.417	1.82	10.500	5.25	16.583	2.05	22.67	1.37
4.500	1.82	10.583	5.25	16.667	2.05	22.75	1.37
4.583	1.82	10.667	5.25	16.750	2.05	22.83	1.37
4.667	1.82	10.750	5.25	16.833	2.05	22.92	1.37
4.750	1.82	10.833	7.07	16.917	2.05	23.00	1.37
4.833	1.82	10.917	7.07	17.000	2.05	23.08	1.37
4.917	1.82	11.000	7.07	17.083	2.05	23.17	1.37
5.000	1.82	11.083	7.07	17.167	2.05	23.25	1.37
5.083	1.82	11.167	7.07	17.250	2.05	23.33	1.37
5.167	1.82	11.250	7.07	17.333	2.05	23.42	1.37
5.250	1.82	11.333	10.95	17.417	2.05	23.50	1.37
5.333	1.82	11.417	10.95	17.500	2.05	23.58	1.37
5.417	1.82	11.500	10.95	17.583	2.05	23.67	1.37
5.500	1.82	11.583	10.95	17.667	2.05	23.75	1.37
5.583	1.82	11.667	10.95	17.750	2.05	23.83	1.37
5.667	1.82	11.750	10.95	17.833	2.05	23.92	1.37
5.750	1.82	11.833	33.75	17.917	2.05	24.00	1.37
5.833	1.82	11.917	33.76	18.000	2.05	24.08	1.37
5.917	1.82	12.000	33.76	18.083	2.05	24.17	1.37
6.000	1.82	12.083	139.57	18.167	2.05	24.25	1.37
6.083	1.82	12.167	139.58	18.250	2.05		

Unit Hyd Qpeak (cms)= 0.945

PEAK FLOW (cms)= 0.476 (i)
TIME TO PEAK (hrs)= 13.250
RUNOFF VOLUME (mm)= 25.483

TOTAL RAINFALL (mm)= 114.040
RUNOFF COEFFICIENT = 0.223

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB NASHYD (0009)	Area (ha)= 6.37	Curve Number (CN)= 50.5
ID= 1 DT= 5.0 min	Ia (mm)= 15.69	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.77	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.82	12.250	139.58	18.33	2.05
0.167	0.00	6.250	1.82	12.333	16.44	18.42	2.05
0.250	0.00	6.333	2.05	12.417	16.42	18.50	2.05
0.333	1.25	6.417	2.05	12.500	16.42	18.58	2.05
0.417	1.25	6.500	2.05	12.583	16.42	18.67	2.05
0.500	1.25	6.583	2.05	12.667	16.42	18.75	2.05
0.583	1.25	6.667	2.05	12.750	16.42	18.83	2.05
0.667	1.25	6.750	2.05	12.833	8.44	18.92	2.05
0.750	1.25	6.833	2.05	12.917	8.44	19.00	2.05
0.833	1.25	6.917	2.05	13.000	8.44	19.08	2.05
0.917	1.25	7.000	2.05	13.083	8.44	19.17	2.05
1.000	1.25	7.083	2.05	13.167	8.44	19.25	2.05
1.083	1.25	7.167	2.05	13.250	8.44	19.33	2.05
1.167	1.25	7.250	2.05	13.333	6.16	19.42	2.05
1.250	1.25	7.333	2.51	13.417	6.16	19.50	2.05
1.333	1.25	7.417	2.51	13.500	6.16	19.58	2.05
1.417	1.25	7.500	2.51	13.583	6.16	19.67	2.05
1.500	1.25	7.583	2.51	13.667	6.16	19.75	2.05
1.583	1.25	7.667	2.51	13.750	6.16	19.83	2.05
1.667	1.25	7.750	2.51	13.833	4.79	19.92	2.05
1.750	1.25	7.833	2.51	13.917	4.79	20.00	2.05
1.833	1.25	7.917	2.51	14.000	4.79	20.08	2.05
1.917	1.25	8.000	2.51	14.083	4.79	20.17	2.05
2.000	1.25	8.083	2.51	14.167	4.79	20.25	2.05
2.083	1.25	8.167	2.51	14.250	4.79	20.33	1.37
2.167	1.25	8.250	2.51	14.333	3.42	20.42	1.37
2.250	1.25	8.333	2.97	14.417	3.42	20.50	1.37
2.333	1.48	8.417	2.97	14.500	3.42	20.58	1.37
2.417	1.48	8.500	2.97	14.583	3.42	20.67	1.37
2.500	1.48	8.583	2.97	14.667	3.42	20.75	1.37
2.583	1.48	8.667	2.97	14.750	3.42	20.83	1.37
2.667	1.48	8.750	2.97	14.833	3.42	20.92	1.37

2.750	1.48	8.833	3.19	14.917	3.42	21.00	1.37
2.833	1.48	8.917	3.19	15.000	3.42	21.08	1.37
2.917	1.48	9.000	3.19	15.083	3.42	21.17	1.37
3.000	1.48	9.083	3.19	15.167	3.42	21.25	1.37
3.083	1.48	9.167	3.19	15.250	3.42	21.33	1.37
3.167	1.48	9.250	3.19	15.333	3.42	21.42	1.37
3.250	1.48	9.333	3.65	15.417	3.42	21.50	1.37
3.333	1.48	9.417	3.65	15.500	3.42	21.58	1.37
3.417	1.48	9.500	3.65	15.583	3.42	21.67	1.37
3.500	1.48	9.583	3.65	15.667	3.42	21.75	1.37
3.583	1.48	9.667	3.65	15.750	3.42	21.83	1.37
3.667	1.48	9.750	3.65	15.833	3.42	21.92	1.37
3.750	1.48	9.833	4.11	15.917	3.42	22.00	1.37
3.833	1.48	9.917	4.11	16.000	3.42	22.08	1.37
3.917	1.48	10.000	4.11	16.083	3.42	22.17	1.37
4.000	1.48	10.083	4.11	16.167	3.42	22.25	1.37
4.083	1.48	10.167	4.11	16.250	3.42	22.33	1.37
4.167	1.48	10.250	4.11	16.333	2.05	22.42	1.37
4.250	1.48	10.333	5.25	16.417	2.05	22.50	1.37
4.333	1.82	10.417	5.25	16.500	2.05	22.58	1.37
4.417	1.82	10.500	5.25	16.583	2.05	22.67	1.37
4.500	1.82	10.583	5.25	16.667	2.05	22.75	1.37
4.583	1.82	10.667	5.25	16.750	2.05	22.83	1.37
4.667	1.82	10.750	5.25	16.833	2.05	22.92	1.37
4.750	1.82	10.833	7.07	16.917	2.05	23.00	1.37
4.833	1.82	10.917	7.07	17.000	2.05	23.08	1.37
4.917	1.82	11.000	7.07	17.083	2.05	23.17	1.37
5.000	1.82	11.083	7.07	17.167	2.05	23.25	1.37
5.083	1.82	11.167	7.07	17.250	2.05	23.33	1.37
5.167	1.82	11.250	7.07	17.333	2.05	23.42	1.37
5.250	1.82	11.333	10.95	17.417	2.05	23.50	1.37
5.333	1.82	11.417	10.95	17.500	2.05	23.58	1.37
5.417	1.82	11.500	10.95	17.583	2.05	23.67	1.37
5.500	1.82	11.583	10.95	17.667	2.05	23.75	1.37
5.583	1.82	11.667	10.95	17.750	2.05	23.83	1.37
5.667	1.82	11.750	10.95	17.833	2.05	23.92	1.37
5.750	1.82	11.833	33.75	17.917	2.05	24.00	1.37
5.833	1.82	11.917	33.76	18.000	2.05	24.08	1.37
5.917	1.82	12.000	33.76	18.083	2.05	24.17	1.37
6.000	1.82	12.083	139.57	18.167	2.05	24.25	1.37
6.083	1.82	12.167	139.58	18.250	2.05		

Unit Hyd Qpeak (cms)= 0.316

PEAK FLOW (cms)= 0.164 (i)
TIME TO PEAK (hrs)= 13.000
RUNOFF VOLUME (mm)= 27.833
TOTAL RAINFALL (mm)= 114.040
RUNOFF COEFFICIENT = 0.244

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0010)	Area (ha)= 14.85	Curve Number (CN)= 52.9	
ID= 1 DT= 5.0 min	Ia (mm)= 13.28	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.89		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.82	12.250	139.58	18.33	2.05
0.167	0.00	6.250	1.82	12.333	16.44	18.42	2.05
0.250	0.00	6.333	2.05	12.417	16.42	18.50	2.05
0.333	1.25	6.417	2.05	12.500	16.42	18.58	2.05
0.417	1.25	6.500	2.05	12.583	16.42	18.67	2.05
0.500	1.25	6.583	2.05	12.667	16.42	18.75	2.05
0.583	1.25	6.667	2.05	12.750	16.42	18.83	2.05
0.667	1.25	6.750	2.05	12.833	8.44	18.92	2.05
0.750	1.25	6.833	2.05	12.917	8.44	19.00	2.05
0.833	1.25	6.917	2.05	13.000	8.44	19.08	2.05
0.917	1.25	7.000	2.05	13.083	8.44	19.17	2.05
1.000	1.25	7.083	2.05	13.167	8.44	19.25	2.05
1.083	1.25	7.167	2.05	13.250	8.44	19.33	2.05
1.167	1.25	7.250	2.05	13.333	6.16	19.42	2.05
1.250	1.25	7.333	2.51	13.417	6.16	19.50	2.05
1.333	1.25	7.417	2.51	13.500	6.16	19.58	2.05
1.417	1.25	7.500	2.51	13.583	6.16	19.67	2.05
1.500	1.25	7.583	2.51	13.667	6.16	19.75	2.05
1.583	1.25	7.667	2.51	13.750	6.16	19.83	2.05
1.667	1.25	7.750	2.51	13.833	4.79	19.92	2.05
1.750	1.25	7.833	2.51	13.917	4.79	20.00	2.05
1.833	1.25	7.917	2.51	14.000	4.79	20.08	2.05
1.917	1.25	8.000	2.51	14.083	4.79	20.17	2.05
2.000	1.25	8.083	2.51	14.167	4.79	20.25	2.05
2.083	1.25	8.167	2.51	14.250	4.79	20.33	1.37
2.167	1.25	8.250	2.51	14.333	3.42	20.42	1.37
2.250	1.25	8.333	2.97	14.417	3.42	20.50	1.37
2.333	1.48	8.417	2.97	14.500	3.42	20.58	1.37
2.417	1.48	8.500	2.97	14.583	3.42	20.67	1.37
2.500	1.48	8.583	2.97	14.667	3.42	20.75	1.37
2.583	1.48	8.667	2.97	14.750	3.42	20.83	1.37
2.667	1.48	8.750	2.97	14.833	3.42	20.92	1.37
2.750	1.48	8.833	3.19	14.917	3.42	21.00	1.37
2.833	1.48	8.917	3.19	15.000	3.42	21.08	1.37
2.917	1.48	9.000	3.19	15.083	3.42	21.17	1.37

3.000	1.48	9.083	3.19	15.167	3.42	21.25	1.37
3.083	1.48	9.167	3.19	15.250	3.42	21.33	1.37
3.167	1.48	9.250	3.19	15.333	3.42	21.42	1.37
3.250	1.48	9.333	3.65	15.417	3.42	21.50	1.37
3.333	1.48	9.417	3.65	15.500	3.42	21.58	1.37
3.417	1.48	9.500	3.65	15.583	3.42	21.67	1.37
3.500	1.48	9.583	3.65	15.667	3.42	21.75	1.37
3.583	1.48	9.667	3.65	15.750	3.42	21.83	1.37
3.667	1.48	9.750	3.65	15.833	3.42	21.92	1.37
3.750	1.48	9.833	4.11	15.917	3.42	22.00	1.37
3.833	1.48	9.917	4.11	16.000	3.42	22.08	1.37
3.917	1.48	10.000	4.11	16.083	3.42	22.17	1.37
4.000	1.48	10.083	4.11	16.167	3.42	22.25	1.37
4.083	1.48	10.167	4.11	16.250	3.42	22.33	1.37
4.167	1.48	10.250	4.11	16.333	2.05	22.42	1.37
4.250	1.48	10.333	5.25	16.417	2.05	22.50	1.37
4.333	1.82	10.417	5.25	16.500	2.05	22.58	1.37
4.417	1.82	10.500	5.25	16.583	2.05	22.67	1.37
4.500	1.82	10.583	5.25	16.667	2.05	22.75	1.37
4.583	1.82	10.667	5.25	16.750	2.05	22.83	1.37
4.667	1.82	10.750	5.25	16.833	2.05	22.92	1.37
4.750	1.82	10.833	7.07	16.917	2.05	23.00	1.37
4.833	1.82	10.917	7.07	17.000	2.05	23.08	1.37
4.917	1.82	11.000	7.07	17.083	2.05	23.17	1.37
5.000	1.82	11.083	7.07	17.167	2.05	23.25	1.37
5.083	1.82	11.167	7.07	17.250	2.05	23.33	1.37
5.167	1.82	11.250	7.07	17.333	2.05	23.42	1.37
5.250	1.82	11.333	10.95	17.417	2.05	23.50	1.37
5.333	1.82	11.417	10.95	17.500	2.05	23.58	1.37
5.417	1.82	11.500	10.95	17.583	2.05	23.67	1.37
5.500	1.82	11.583	10.95	17.667	2.05	23.75	1.37
5.583	1.82	11.667	10.95	17.750	2.05	23.83	1.37
5.667	1.82	11.750	10.95	17.833	2.05	23.92	1.37
5.750	1.82	11.833	33.75	17.917	2.05	24.00	1.37
5.833	1.82	11.917	33.76	18.000	2.05	24.08	1.37
5.917	1.82	12.000	33.76	18.083	2.05	24.17	1.37
6.000	1.82	12.083	139.57	18.167	2.05	24.25	1.37
6.083	1.82	12.167	139.58	18.250	2.05		

Unit Hyd Qpeak (cms)= 0.637

PEAK FLOW (cms)= 0.388 (i)
TIME TO PEAK (hrs)= 13.167
RUNOFF VOLUME (mm)= 31.091
TOTAL RAINFALL (mm)= 114.040
RUNOFF COEFFICIENT = 0.273

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0013)	Area (ha)=	1.70	Curve Number (CN)= 60.5
ID= 1 DT= 5.0 min	Ia (mm)=	9.65	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	0.40	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.82	12.250	139.58	18.33	2.05
0.167	0.00	6.250	1.82	12.333	16.44	18.42	2.05
0.250	0.00	6.333	2.05	12.417	16.42	18.50	2.05
0.333	1.25	6.417	2.05	12.500	16.42	18.58	2.05
0.417	1.25	6.500	2.05	12.583	16.42	18.67	2.05
0.500	1.25	6.583	2.05	12.667	16.42	18.75	2.05
0.583	1.25	6.667	2.05	12.750	16.42	18.83	2.05
0.667	1.25	6.750	2.05	12.833	8.44	18.92	2.05
0.750	1.25	6.833	2.05	12.917	8.44	19.00	2.05
0.833	1.25	6.917	2.05	13.000	8.44	19.08	2.05
0.917	1.25	7.000	2.05	13.083	8.44	19.17	2.05
1.000	1.25	7.083	2.05	13.167	8.44	19.25	2.05
1.083	1.25	7.167	2.05	13.250	8.44	19.33	2.05
1.167	1.25	7.250	2.05	13.333	6.16	19.42	2.05
1.250	1.25	7.333	2.51	13.417	6.16	19.50	2.05
1.333	1.25	7.417	2.51	13.500	6.16	19.58	2.05
1.417	1.25	7.500	2.51	13.583	6.16	19.67	2.05
1.500	1.25	7.583	2.51	13.667	6.16	19.75	2.05
1.583	1.25	7.667	2.51	13.750	6.16	19.83	2.05
1.667	1.25	7.750	2.51	13.833	4.79	19.92	2.05
1.750	1.25	7.833	2.51	13.917	4.79	20.00	2.05
1.833	1.25	7.917	2.51	14.000	4.79	20.08	2.05
1.917	1.25	8.000	2.51	14.083	4.79	20.17	2.05
2.000	1.25	8.083	2.51	14.167	4.79	20.25	2.05
2.083	1.25	8.167	2.51	14.250	4.79	20.33	1.37
2.167	1.25	8.250	2.51	14.333	3.42	20.42	1.37
2.250	1.25	8.333	2.97	14.417	3.42	20.50	1.37
2.333	1.48	8.417	2.97	14.500	3.42	20.58	1.37
2.417	1.48	8.500	2.97	14.583	3.42	20.67	1.37
2.500	1.48	8.583	2.97	14.667	3.42	20.75	1.37
2.583	1.48	8.667	2.97	14.750	3.42	20.83	1.37
2.667	1.48	8.750	2.97	14.833	3.42	20.92	1.37
2.750	1.48	8.833	3.19	14.917	3.42	21.00	1.37
2.833	1.48	8.917	3.19	15.000	3.42	21.08	1.37
2.917	1.48	9.000	3.19	15.083	3.42	21.17	1.37
3.000	1.48	9.083	3.19	15.167	3.42	21.25	1.37
3.083	1.48	9.167	3.19	15.250	3.42	21.33	1.37
3.167	1.48	9.250	3.19	15.333	3.42	21.42	1.37

3.250	1.48	9.333	3.65	15.417	3.42	21.50	1.37
3.333	1.48	9.417	3.65	15.500	3.42	21.58	1.37
3.417	1.48	9.500	3.65	15.583	3.42	21.67	1.37
3.500	1.48	9.583	3.65	15.667	3.42	21.75	1.37
3.583	1.48	9.667	3.65	15.750	3.42	21.83	1.37
3.667	1.48	9.750	3.65	15.833	3.42	21.92	1.37
3.750	1.48	9.833	4.11	15.917	3.42	22.00	1.37
3.833	1.48	9.917	4.11	16.000	3.42	22.08	1.37
3.917	1.48	10.000	4.11	16.083	3.42	22.17	1.37
4.000	1.48	10.083	4.11	16.167	3.42	22.25	1.37
4.083	1.48	10.167	4.11	16.250	3.42	22.33	1.37
4.167	1.48	10.250	4.11	16.333	2.05	22.42	1.37
4.250	1.48	10.333	5.25	16.417	2.05	22.50	1.37
4.333	1.82	10.417	5.25	16.500	2.05	22.58	1.37
4.417	1.82	10.500	5.25	16.583	2.05	22.67	1.37
4.500	1.82	10.583	5.25	16.667	2.05	22.75	1.37
4.583	1.82	10.667	5.25	16.750	2.05	22.83	1.37
4.667	1.82	10.750	5.25	16.833	2.05	22.92	1.37
4.750	1.82	10.833	7.07	16.917	2.05	23.00	1.37
4.833	1.82	10.917	7.07	17.000	2.05	23.08	1.37
4.917	1.82	11.000	7.07	17.083	2.05	23.17	1.37
5.000	1.82	11.083	7.07	17.167	2.05	23.25	1.37
5.083	1.82	11.167	7.07	17.250	2.05	23.33	1.37
5.167	1.82	11.250	7.07	17.333	2.05	23.42	1.37
5.250	1.82	11.333	10.95	17.417	2.05	23.50	1.37
5.333	1.82	11.417	10.95	17.500	2.05	23.58	1.37
5.417	1.82	11.500	10.95	17.583	2.05	23.67	1.37
5.500	1.82	11.583	10.95	17.667	2.05	23.75	1.37
5.583	1.82	11.667	10.95	17.750	2.05	23.83	1.37
5.667	1.82	11.750	10.95	17.833	2.05	23.92	1.37
5.750	1.82	11.833	33.75	17.917	2.05	24.00	1.37
5.833	1.82	11.917	33.76	18.000	2.05	24.08	1.37
5.917	1.82	12.000	33.76	18.083	2.05	24.17	1.37
6.000	1.82	12.083	139.57	18.167	2.05	24.25	1.37
6.083	1.82	12.167	139.58	18.250	2.05		

Unit Hyd Qpeak (cms)= 0.162

PEAK FLOW (cms)= 0.106 (i)
TIME TO PEAK (hrs)= 12.500
RUNOFF VOLUME (mm)= 40.280
TOTAL RAINFALL (mm)= 114.040
RUNOFF COEFFICIENT = 0.353

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB							
NASHYD (0014)	Area (ha)= 1.80	Curve Number (CN)= 50.0					
ID= 1 DT= 5.0 min	Ia (mm)= 16.00	# of Linear Res.(N)= 3.00					
	U.H. Tp(hrs)= 0.76						

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.82	12.250	139.58	18.33	2.05
0.167	0.00	6.250	1.82	12.333	16.44	18.42	2.05
0.250	0.00	6.333	2.05	12.417	16.42	18.50	2.05
0.333	1.25	6.417	2.05	12.500	16.42	18.58	2.05
0.417	1.25	6.500	2.05	12.583	16.42	18.67	2.05
0.500	1.25	6.583	2.05	12.667	16.42	18.75	2.05
0.583	1.25	6.667	2.05	12.750	16.42	18.83	2.05
0.667	1.25	6.750	2.05	12.833	8.44	18.92	2.05
0.750	1.25	6.833	2.05	12.917	8.44	19.00	2.05
0.833	1.25	6.917	2.05	13.000	8.44	19.08	2.05
0.917	1.25	7.000	2.05	13.083	8.44	19.17	2.05
1.000	1.25	7.083	2.05	13.167	8.44	19.25	2.05
1.083	1.25	7.167	2.05	13.250	8.44	19.33	2.05
1.167	1.25	7.250	2.05	13.333	6.16	19.42	2.05
1.250	1.25	7.333	2.51	13.417	6.16	19.50	2.05
1.333	1.25	7.417	2.51	13.500	6.16	19.58	2.05
1.417	1.25	7.500	2.51	13.583	6.16	19.67	2.05
1.500	1.25	7.583	2.51	13.667	6.16	19.75	2.05
1.583	1.25	7.667	2.51	13.750	6.16	19.83	2.05
1.667	1.25	7.750	2.51	13.833	4.79	19.92	2.05
1.750	1.25	7.833	2.51	13.917	4.79	20.00	2.05
1.833	1.25	7.917	2.51	14.000	4.79	20.08	2.05
1.917	1.25	8.000	2.51	14.083	4.79	20.17	2.05
2.000	1.25	8.083	2.51	14.167	4.79	20.25	2.05
2.083	1.25	8.167	2.51	14.250	4.79	20.33	1.37
2.167	1.25	8.250	2.51	14.333	3.42	20.42	1.37
2.250	1.25	8.333	2.97	14.417	3.42	20.50	1.37
2.333	1.48	8.417	2.97	14.500	3.42	20.58	1.37
2.417	1.48	8.500	2.97	14.583	3.42	20.67	1.37
2.500	1.48	8.583	2.97	14.667	3.42	20.75	1.37
2.583	1.48	8.667	2.97	14.750	3.42	20.83	1.37
2.667	1.48	8.750	2.97	14.833	3.42	20.92	1.37
2.750	1.48	8.833	3.19	14.917	3.42	21.00	1.37
2.833	1.48	8.917	3.19	15.000	3.42	21.08	1.37
2.917	1.48	9.000	3.19	15.083	3.42	21.17	1.37
3.000	1.48	9.083	3.19	15.167	3.42	21.25	1.37
3.083	1.48	9.167	3.19	15.250	3.42	21.33	1.37
3.167	1.48	9.250	3.19	15.333	3.42	21.42	1.37
3.250	1.48	9.333	3.65	15.417	3.42	21.50	1.37
3.333	1.48	9.417	3.65	15.500	3.42	21.58	1.37
3.417	1.48	9.500	3.65	15.583	3.42	21.67	1.37

3.500	1.48	9.583	3.65	15.667	3.42	21.75	1.37
3.583	1.48	9.667	3.65	15.750	3.42	21.83	1.37
3.667	1.48	9.750	3.65	15.833	3.42	21.92	1.37
3.750	1.48	9.833	4.11	15.917	3.42	22.00	1.37
3.833	1.48	9.917	4.11	16.000	3.42	22.08	1.37
3.917	1.48	10.000	4.11	16.083	3.42	22.17	1.37
4.000	1.48	10.083	4.11	16.167	3.42	22.25	1.37
4.083	1.48	10.167	4.11	16.250	3.42	22.33	1.37
4.167	1.48	10.250	4.11	16.333	2.05	22.42	1.37
4.250	1.48	10.333	5.25	16.417	2.05	22.50	1.37
4.333	1.82	10.417	5.25	16.500	2.05	22.58	1.37
4.417	1.82	10.500	5.25	16.583	2.05	22.67	1.37
4.500	1.82	10.583	5.25	16.667	2.05	22.75	1.37
4.583	1.82	10.667	5.25	16.750	2.05	22.83	1.37
4.667	1.82	10.750	5.25	16.833	2.05	22.92	1.37
4.750	1.82	10.833	7.07	16.917	2.05	23.00	1.37
4.833	1.82	10.917	7.07	17.000	2.05	23.08	1.37
4.917	1.82	11.000	7.07	17.083	2.05	23.17	1.37
5.000	1.82	11.083	7.07	17.167	2.05	23.25	1.37
5.083	1.82	11.167	7.07	17.250	2.05	23.33	1.37
5.167	1.82	11.250	7.07	17.333	2.05	23.42	1.37
5.250	1.82	11.333	10.95	17.417	2.05	23.50	1.37
5.333	1.82	11.417	10.95	17.500	2.05	23.58	1.37
5.417	1.82	11.500	10.95	17.583	2.05	23.67	1.37
5.500	1.82	11.583	10.95	17.667	2.05	23.75	1.37
5.583	1.82	11.667	10.95	17.750	2.05	23.83	1.37
5.667	1.82	11.750	10.95	17.833	2.05	23.92	1.37
5.750	1.82	11.833	33.75	17.917	2.05	24.00	1.37
5.833	1.82	11.917	33.76	18.000	2.05	24.08	1.37
5.917	1.82	12.000	33.76	18.083	2.05	24.17	1.37
6.000	1.82	12.083	139.57	18.167	2.05	24.25	1.37
6.083	1.82	12.167	139.58	18.250	2.05		

Unit Hyd Qpeak (cms)= 0.090

PEAK FLOW (cms)= 0.046 (i)
TIME TO PEAK (hrs)= 13.000
RUNOFF VOLUME (mm)= 27.302
TOTAL RAINFALL (mm)= 114.040
RUNOFF COEFFICIENT = 0.239

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0015)	Area (ha)=	6.70	Curve Number (CN)=	60.0	
ID= 1 DT= 5.0 min	Ia (mm)=	10.00	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	1.45			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.82	12.250	139.58	18.33	2.05
0.167	0.00	6.250	1.82	12.333	16.44	18.42	2.05
0.250	0.00	6.333	2.05	12.417	16.42	18.50	2.05
0.333	1.25	6.417	2.05	12.500	16.42	18.58	2.05
0.417	1.25	6.500	2.05	12.583	16.42	18.67	2.05
0.500	1.25	6.583	2.05	12.667	16.42	18.75	2.05
0.583	1.25	6.667	2.05	12.750	16.42	18.83	2.05
0.667	1.25	6.750	2.05	12.833	8.44	18.92	2.05
0.750	1.25	6.833	2.05	12.917	8.44	19.00	2.05
0.833	1.25	6.917	2.05	13.000	8.44	19.08	2.05
0.917	1.25	7.000	2.05	13.083	8.44	19.17	2.05
1.000	1.25	7.083	2.05	13.167	8.44	19.25	2.05
1.083	1.25	7.167	2.05	13.250	8.44	19.33	2.05
1.167	1.25	7.250	2.05	13.333	6.16	19.42	2.05
1.250	1.25	7.333	2.51	13.417	6.16	19.50	2.05
1.333	1.25	7.417	2.51	13.500	6.16	19.58	2.05
1.417	1.25	7.500	2.51	13.583	6.16	19.67	2.05
1.500	1.25	7.583	2.51	13.667	6.16	19.75	2.05
1.583	1.25	7.667	2.51	13.750	6.16	19.83	2.05
1.667	1.25	7.750	2.51	13.833	4.79	19.92	2.05
1.750	1.25	7.833	2.51	13.917	4.79	20.00	2.05
1.833	1.25	7.917	2.51	14.000	4.79	20.08	2.05
1.917	1.25	8.000	2.51	14.083	4.79	20.17	2.05
2.000	1.25	8.083	2.51	14.167	4.79	20.25	2.05
2.083	1.25	8.167	2.51	14.250	4.79	20.33	1.37
2.167	1.25	8.250	2.51	14.333	3.42	20.42	1.37
2.250	1.25	8.333	2.97	14.417	3.42	20.50	1.37
2.333	1.48	8.417	2.97	14.500	3.42	20.58	1.37
2.417	1.48	8.500	2.97	14.583	3.42	20.67	1.37
2.500	1.48	8.583	2.97	14.667	3.42	20.75	1.37
2.583	1.48	8.667	2.97	14.750	3.42	20.83	1.37
2.667	1.48	8.750	2.97	14.833	3.42	20.92	1.37
2.750	1.48	8.833	3.19	14.917	3.42	21.00	1.37
2.833	1.48	8.917	3.19	15.000	3.42	21.08	1.37
2.917	1.48	9.000	3.19	15.083	3.42	21.17	1.37
3.000	1.48	9.083	3.19	15.167	3.42	21.25	1.37
3.083	1.48	9.167	3.19	15.250	3.42	21.33	1.37
3.167	1.48	9.250	3.19	15.333	3.42	21.42	1.37
3.250	1.48	9.333	3.65	15.417	3.42	21.50	1.37
3.333	1.48	9.417	3.65	15.500	3.42	21.58	1.37
3.417	1.48	9.500	3.65	15.583	3.42	21.67	1.37
3.500	1.48	9.583	3.65	15.667	3.42	21.75	1.37
3.583	1.48	9.667	3.65	15.750	3.42	21.83	1.37
3.667	1.48	9.750	3.65	15.833	3.42	21.92	1.37

3.750	1.48	9.833	4.11	15.917	3.42	22.00	1.37
3.833	1.48	9.917	4.11	16.000	3.42	22.08	1.37
3.917	1.48	10.000	4.11	16.083	3.42	22.17	1.37
4.000	1.48	10.083	4.11	16.167	3.42	22.25	1.37
4.083	1.48	10.167	4.11	16.250	3.42	22.33	1.37
4.167	1.48	10.250	4.11	16.333	2.05	22.42	1.37
4.250	1.48	10.333	5.25	16.417	2.05	22.50	1.37
4.333	1.82	10.417	5.25	16.500	2.05	22.58	1.37
4.417	1.82	10.500	5.25	16.583	2.05	22.67	1.37
4.500	1.82	10.583	5.25	16.667	2.05	22.75	1.37
4.583	1.82	10.667	5.25	16.750	2.05	22.83	1.37
4.667	1.82	10.750	5.25	16.833	2.05	22.92	1.37
4.750	1.82	10.833	7.07	16.917	2.05	23.00	1.37
4.833	1.82	10.917	7.07	17.000	2.05	23.08	1.37
4.917	1.82	11.000	7.07	17.083	2.05	23.17	1.37
5.000	1.82	11.083	7.07	17.167	2.05	23.25	1.37
5.083	1.82	11.167	7.07	17.250	2.05	23.33	1.37
5.167	1.82	11.250	7.07	17.333	2.05	23.42	1.37
5.250	1.82	11.333	10.95	17.417	2.05	23.50	1.37
5.333	1.82	11.417	10.95	17.500	2.05	23.58	1.37
5.417	1.82	11.500	10.95	17.583	2.05	23.67	1.37
5.500	1.82	11.583	10.95	17.667	2.05	23.75	1.37
5.583	1.82	11.667	10.95	17.750	2.05	23.83	1.37
5.667	1.82	11.750	10.95	17.833	2.05	23.92	1.37
5.750	1.82	11.833	33.75	17.917	2.05	24.00	1.37
5.833	1.82	11.917	33.76	18.000	2.05	24.08	1.37
5.917	1.82	12.000	33.76	18.083	2.05	24.17	1.37
6.000	1.82	12.083	139.57	18.167	2.05	24.25	1.37
6.083	1.82	12.167	139.58	18.250	2.05		

Unit Hyd Qpeak (cms)= 0.176

PEAK FLOW (cms)= 0.157 (i)
TIME TO PEAK (hrs)= 13.750
RUNOFF VOLUME (mm)= 39.595
TOTAL RAINFALL (mm)= 114.040
RUNOFF COEFFICIENT = 0.347

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0016)	Area (ha)= 29.16	Curve Number (CN)= 71.4	
ID= 1 DT= 5.0 min	Ia (mm)= 7.88	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.68		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.82	12.250	139.58	18.33	2.05
0.167	0.00	6.250	1.82	12.333	16.44	18.42	2.05
0.250	0.00	6.333	2.05	12.417	16.42	18.50	2.05
0.333	1.25	6.417	2.05	12.500	16.42	18.58	2.05
0.417	1.25	6.500	2.05	12.583	16.42	18.67	2.05
0.500	1.25	6.583	2.05	12.667	16.42	18.75	2.05
0.583	1.25	6.667	2.05	12.750	16.42	18.83	2.05
0.667	1.25	6.750	2.05	12.833	8.44	18.92	2.05
0.750	1.25	6.833	2.05	12.917	8.44	19.00	2.05
0.833	1.25	6.917	2.05	13.000	8.44	19.08	2.05
0.917	1.25	7.000	2.05	13.083	8.44	19.17	2.05
1.000	1.25	7.083	2.05	13.167	8.44	19.25	2.05
1.083	1.25	7.167	2.05	13.250	8.44	19.33	2.05
1.167	1.25	7.250	2.05	13.333	6.16	19.42	2.05
1.250	1.25	7.333	2.51	13.417	6.16	19.50	2.05
1.333	1.25	7.417	2.51	13.500	6.16	19.58	2.05
1.417	1.25	7.500	2.51	13.583	6.16	19.67	2.05
1.500	1.25	7.583	2.51	13.667	6.16	19.75	2.05
1.583	1.25	7.667	2.51	13.750	6.16	19.83	2.05
1.667	1.25	7.750	2.51	13.833	4.79	19.92	2.05
1.750	1.25	7.833	2.51	13.917	4.79	20.00	2.05
1.833	1.25	7.917	2.51	14.000	4.79	20.08	2.05
1.917	1.25	8.000	2.51	14.083	4.79	20.17	2.05
2.000	1.25	8.083	2.51	14.167	4.79	20.25	2.05
2.083	1.25	8.167	2.51	14.250	4.79	20.33	1.37
2.167	1.25	8.250	2.51	14.333	3.42	20.42	1.37
2.250	1.25	8.333	2.97	14.417	3.42	20.50	1.37
2.333	1.48	8.417	2.97	14.500	3.42	20.58	1.37
2.417	1.48	8.500	2.97	14.583	3.42	20.67	1.37
2.500	1.48	8.583	2.97	14.667	3.42	20.75	1.37
2.583	1.48	8.667	2.97	14.750	3.42	20.83	1.37
2.667	1.48	8.750	2.97	14.833	3.42	20.92	1.37
2.750	1.48	8.833	3.19	14.917	3.42	21.00	1.37
2.833	1.48	8.917	3.19	15.000	3.42	21.08	1.37
2.917	1.48	9.000	3.19	15.083	3.42	21.17	1.37
3.000	1.48	9.083	3.19	15.167	3.42	21.25	1.37
3.083	1.48	9.167	3.19	15.250	3.42	21.33	1.37
3.167	1.48	9.250	3.19	15.333	3.42	21.42	1.37
3.250	1.48	9.333	3.65	15.417	3.42	21.50	1.37
3.333	1.48	9.417	3.65	15.500	3.42	21.58	1.37
3.417	1.48	9.500	3.65	15.583	3.42	21.67	1.37
3.500	1.48	9.583	3.65	15.667	3.42	21.75	1.37
3.583	1.48	9.667	3.65	15.750	3.42	21.83	1.37
3.667	1.48	9.750	3.65	15.833	3.42	21.92	1.37
3.750	1.48	9.833	4.11	15.917	3.42	22.00	1.37
3.833	1.48	9.917	4.11	16.000	3.42	22.08	1.37
3.917	1.48	10.000	4.11	16.083	3.42	22.17	1.37

4.000	1.48	10.083	4.11	16.167	3.42	22.25	1.37
4.083	1.48	10.167	4.11	16.250	3.42	22.33	1.37
4.167	1.48	10.250	4.11	16.333	2.05	22.42	1.37
4.250	1.48	10.333	5.25	16.417	2.05	22.50	1.37
4.333	1.82	10.417	5.25	16.500	2.05	22.58	1.37
4.417	1.82	10.500	5.25	16.583	2.05	22.67	1.37
4.500	1.82	10.583	5.25	16.667	2.05	22.75	1.37
4.583	1.82	10.667	5.25	16.750	2.05	22.83	1.37
4.667	1.82	10.750	5.25	16.833	2.05	22.92	1.37
4.750	1.82	10.833	7.07	16.917	2.05	23.00	1.37
4.833	1.82	10.917	7.07	17.000	2.05	23.08	1.37
4.917	1.82	11.000	7.07	17.083	2.05	23.17	1.37
5.000	1.82	11.083	7.07	17.167	2.05	23.25	1.37
5.083	1.82	11.167	7.07	17.250	2.05	23.33	1.37
5.167	1.82	11.250	7.07	17.333	2.05	23.42	1.37
5.250	1.82	11.333	10.95	17.417	2.05	23.50	1.37
5.333	1.82	11.417	10.95	17.500	2.05	23.58	1.37
5.417	1.82	11.500	10.95	17.583	2.05	23.67	1.37
5.500	1.82	11.583	10.95	17.667	2.05	23.75	1.37
5.583	1.82	11.667	10.95	17.750	2.05	23.83	1.37
5.667	1.82	11.750	10.95	17.833	2.05	23.92	1.37
5.750	1.82	11.833	33.75	17.917	2.05	24.00	1.37
5.833	1.82	11.917	33.76	18.000	2.05	24.08	1.37
5.917	1.82	12.000	33.76	18.083	2.05	24.17	1.37
6.000	1.82	12.083	139.57	18.167	2.05	24.25	1.37
6.083	1.82	12.167	139.58	18.250	2.05		

Unit Hyd Qpeak (cms)= 1.638

PEAK FLOW (cms)= 1.709 (i)
TIME TO PEAK (hrs)= 12.833
RUNOFF VOLUME (mm)= 54.207
TOTAL RAINFALL (mm)= 114.040
RUNOFF COEFFICIENT = 0.475

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0019)	Area (ha)=	39.68	Curve Number (CN)=	60.7	
ID= 1 DT= 5.0 min	Ia (mm)=	8.26	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	1.18			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.82	12.250	139.58	18.33	2.05
0.167	0.00	6.250	1.82	12.333	16.44	18.42	2.05
0.250	0.00	6.333	2.05	12.417	16.42	18.50	2.05
0.333	1.25	6.417	2.05	12.500	16.42	18.58	2.05
0.417	1.25	6.500	2.05	12.583	16.42	18.67	2.05
0.500	1.25	6.583	2.05	12.667	16.42	18.75	2.05
0.583	1.25	6.667	2.05	12.750	16.42	18.83	2.05
0.667	1.25	6.750	2.05	12.833	8.44	18.92	2.05
0.750	1.25	6.833	2.05	12.917	8.44	19.00	2.05
0.833	1.25	6.917	2.05	13.000	8.44	19.08	2.05
0.917	1.25	7.000	2.05	13.083	8.44	19.17	2.05
1.000	1.25	7.083	2.05	13.167	8.44	19.25	2.05
1.083	1.25	7.167	2.05	13.250	8.44	19.33	2.05
1.167	1.25	7.250	2.05	13.333	6.16	19.42	2.05
1.250	1.25	7.333	2.51	13.417	6.16	19.50	2.05
1.333	1.25	7.417	2.51	13.500	6.16	19.58	2.05
1.417	1.25	7.500	2.51	13.583	6.16	19.67	2.05
1.500	1.25	7.583	2.51	13.667	6.16	19.75	2.05
1.583	1.25	7.667	2.51	13.750	6.16	19.83	2.05
1.667	1.25	7.750	2.51	13.833	4.79	19.92	2.05
1.750	1.25	7.833	2.51	13.917	4.79	20.00	2.05
1.833	1.25	7.917	2.51	14.000	4.79	20.08	2.05
1.917	1.25	8.000	2.51	14.083	4.79	20.17	2.05
2.000	1.25	8.083	2.51	14.167	4.79	20.25	2.05
2.083	1.25	8.167	2.51	14.250	4.79	20.33	1.37
2.167	1.25	8.250	2.51	14.333	3.42	20.42	1.37
2.250	1.25	8.333	2.97	14.417	3.42	20.50	1.37
2.333	1.48	8.417	2.97	14.500	3.42	20.58	1.37
2.417	1.48	8.500	2.97	14.583	3.42	20.67	1.37
2.500	1.48	8.583	2.97	14.667	3.42	20.75	1.37
2.583	1.48	8.667	2.97	14.750	3.42	20.83	1.37
2.667	1.48	8.750	2.97	14.833	3.42	20.92	1.37
2.750	1.48	8.833	3.19	14.917	3.42	21.00	1.37
2.833	1.48	8.917	3.19	15.000	3.42	21.08	1.37
2.917	1.48	9.000	3.19	15.083	3.42	21.17	1.37
3.000	1.48	9.083	3.19	15.167	3.42	21.25	1.37
3.083	1.48	9.167	3.19	15.250	3.42	21.33	1.37
3.167	1.48	9.250	3.19	15.333	3.42	21.42	1.37
3.250	1.48	9.333	3.65	15.417	3.42	21.50	1.37
3.333	1.48	9.417	3.65	15.500	3.42	21.58	1.37
3.417	1.48	9.500	3.65	15.583	3.42	21.67	1.37
3.500	1.48	9.583	3.65	15.667	3.42	21.75	1.37
3.583	1.48	9.667	3.65	15.750	3.42	21.83	1.37
3.667	1.48	9.750	3.65	15.833	3.42	21.92	1.37
3.750	1.48	9.833	4.11	15.917	3.42	22.00	1.37
3.833	1.48	9.917	4.11	16.000	3.42	22.08	1.37
3.917	1.48	10.000	4.11	16.083	3.42	22.17	1.37
4.000	1.48	10.083	4.11	16.167	3.42	22.25	1.37
4.083	1.48	10.167	4.11	16.250	3.42	22.33	1.37
4.167	1.48	10.250	4.11	16.333	2.05	22.42	1.37

```
                4.250    1.48 |10.333    5.25 |16.417    2.05 | 22.50    1.37
                4.333    1.82 |10.417    5.25 |16.500    2.05 | 22.58    1.37
                4.417    1.82 |10.500    5.25 |16.583    2.05 | 22.67    1.37
                4.500    1.82 |10.583    5.25 |16.667    2.05 | 22.75    1.37
                4.583    1.82 |10.667    5.25 |16.750    2.05 | 22.83    1.37
                4.667    1.82 |10.750    5.25 |16.833    2.05 | 22.92    1.37
                4.750    1.82 |10.833    7.07 |16.917    2.05 | 23.00    1.37
                4.833    1.82 |10.917    7.07 |17.000    2.05 | 23.08    1.37
                4.917    1.82 |11.000    7.07 |17.083    2.05 | 23.17    1.37
                5.000    1.82 |11.083    7.07 |17.167    2.05 | 23.25    1.37
                5.083    1.82 |11.167    7.07 |17.250    2.05 | 23.33    1.37
                5.167    1.82 |11.250    7.07 |17.333    2.05 | 23.42    1.37
                5.250    1.82 |11.333   10.95 |17.417    2.05 | 23.50    1.37
                5.333    1.82 |11.417   10.95 |17.500    2.05 | 23.58    1.37
                5.417    1.82 |11.500   10.95 |17.583    2.05 | 23.67    1.37
                5.500    1.82 |11.583   10.95 |17.667    2.05 | 23.75    1.37
                5.583    1.82 |11.667   10.95 |17.750    2.05 | 23.83    1.37
                5.667    1.82 |11.750   10.95 |17.833    2.05 | 23.92    1.37
                5.750    1.82 |11.833   33.75 |17.917    2.05 | 24.00    1.37
                5.833    1.82 |11.917   33.76 |18.000    2.05 | 24.08    1.37
                5.917    1.82 |12.000   33.76 |18.083    2.05 | 24.17    1.37
                6.000    1.82 |12.083  139.57 |18.167    2.05 | 24.25    1.37
                6.083    1.82 |12.167  139.58 |18.250    2.05 |

     Unit Hyd Qpeak  (cms)=   1.284

     PEAK FLOW       (cms)=   1.142 (i)
     TIME TO PEAK    (hrs)=  13.417
     RUNOFF VOLUME    (mm)=  41.375
     TOTAL RAINFALL   (mm)= 114.040
     RUNOFF COEFFICIENT   =   0.363

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0024)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 1 (  0010):    14.85   0.388    13.17    31.09
      + ID2= 2 (  0013):     1.70   0.106    12.50    40.28
        ================================================
        ID = 3 (  0024):    16.55   0.448    13.00    32.03

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0024)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 3 (  0024):    16.55   0.448    13.00    32.03
      + ID2= 2 (  0014):     1.80   0.046    13.00    27.30
        ================================================
        ID = 1 (  0024):    18.35   0.494    13.00    31.57

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0024)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 1 (  0024):    18.35   0.494    13.00    31.57
      + ID2= 2 (  0015):     6.70   0.157    13.75    39.60
        ================================================
        ID = 3 (  0024):    25.05   0.618    13.08    33.72

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0024)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 3 (  0024):    25.05   0.618    13.08    33.72
      + ID2= 2 (  0016):    29.16   1.709    12.83    54.21
        ================================================
        ID = 1 (  0024):    54.21   2.303    12.92    44.74

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0024)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 1 (  0024):    54.21   2.303    12.92    44.74
      + ID2= 2 (  0019):    39.68   1.142    13.42    41.38
        ================================================
        ID = 3 (  0024):    93.89   3.290    13.00    43.32

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0024)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
```

```
        ID1= 3 (  0024):    93.89   3.290    13.00    43.32
      + ID2= 2 (  0007):   100.92   1.938    14.08    36.80
        ================================================
        ID = 1 (  0024):   194.81   4.744    13.25    39.94

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0024)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 1 (  0024):   194.81   4.744    13.25    39.94
      + ID2= 2 (  0008):    23.99   0.476    13.25    25.48
        ================================================
        ID = 3 (  0024):   218.80   5.219    13.25    38.36

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0024)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 3 (  0024):   218.80   5.219    13.25    38.36
      + ID2= 2 (  0009):     6.37   0.164    13.00    27.83
        ================================================
        ID = 1 (  0024):   225.17   5.375    13.25    38.06

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
--------------------
| CALIB            |
| NASHYD   (  0011)|   Area    (ha)=  46.28   Curve Number   (CN)= 72.2
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.09   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.30

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                        ---- TRANSFORMED HYETOGRAPH ----
  TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
   hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
 0.083    0.00 | 6.167    1.82 |12.250  139.58 | 18.33    2.05
 0.167    0.00 | 6.250    1.82 |12.333   16.44 | 18.42    2.05
 0.250    0.00 | 6.333    2.05 |12.417   16.42 | 18.50    2.05
 0.333    1.25 | 6.417    2.05 |12.500   16.42 | 18.58    2.05
 0.417    1.25 | 6.500    2.05 |12.583   16.42 | 18.67    2.05
 0.500    1.25 | 6.583    2.05 |12.667   16.42 | 18.75    2.05
 0.583    1.25 | 6.667    2.05 |12.750   16.42 | 18.83    2.05
 0.667    1.25 | 6.750    2.05 |12.833    8.44 | 18.92    2.05
 0.750    1.25 | 6.833    2.05 |12.917    8.44 | 19.00    2.05
 0.833    1.25 | 6.917    2.05 |13.000    8.44 | 19.08    2.05
 0.917    1.25 | 7.000    2.05 |13.083    8.44 | 19.17    2.05
 1.000    1.25 | 7.083    2.05 |13.167    8.44 | 19.25    2.05
 1.083    1.25 | 7.167    2.05 |13.250    8.44 | 19.33    2.05
 1.167    1.25 | 7.250    2.05 |13.333    6.16 | 19.42    2.05
 1.250    1.25 | 7.333    2.51 |13.417    6.16 | 19.50    2.05
 1.333    1.25 | 7.417    2.51 |13.500    6.16 | 19.58    2.05
 1.417    1.25 | 7.500    2.51 |13.583    6.16 | 19.67    2.05
 1.500    1.25 | 7.583    2.51 |13.667    6.16 | 19.75    2.05
 1.583    1.25 | 7.667    2.51 |13.750    6.16 | 19.83    2.05
 1.667    1.25 | 7.750    2.51 |13.833    4.79 | 19.92    2.05
 1.750    1.25 | 7.833    2.51 |13.917    4.79 | 20.00    2.05
 1.833    1.25 | 7.917    2.51 |14.000    4.79 | 20.08    2.05
 1.917    1.25 | 8.000    2.51 |14.083    4.79 | 20.17    2.05
 2.000    1.25 | 8.083    2.51 |14.167    4.79 | 20.25    2.05
 2.083    1.25 | 8.167    2.51 |14.250    4.79 | 20.33    1.37
 2.167    1.25 | 8.250    2.51 |14.333    3.42 | 20.42    1.37
 2.250    1.25 | 8.333    2.97 |14.417    3.42 | 20.50    1.37
 2.333    1.48 | 8.417    2.97 |14.500    3.42 | 20.58    1.37
 2.417    1.48 | 8.500    2.97 |14.583    3.42 | 20.67    1.37
 2.500    1.48 | 8.583    2.97 |14.667    3.42 | 20.75    1.37
 2.583    1.48 | 8.667    2.97 |14.750    3.42 | 20.83    1.37
 2.667    1.48 | 8.750    2.97 |14.833    3.42 | 20.92    1.37
 2.750    1.48 | 8.833    3.19 |14.917    3.42 | 21.00    1.37
 2.833    1.48 | 8.917    3.19 |15.000    3.42 | 21.08    1.37
 2.917    1.48 | 9.000    3.19 |15.083    3.42 | 21.17    1.37
 3.000    1.48 | 9.083    3.19 |15.167    3.42 | 21.25    1.37
 3.083    1.48 | 9.167    3.19 |15.250    3.42 | 21.33    1.37
 3.167    1.48 | 9.250    3.19 |15.333    3.42 | 21.42    1.37
 3.250    1.48 | 9.333    3.65 |15.417    3.42 | 21.50    1.37
 3.333    1.48 | 9.417    3.65 |15.500    3.42 | 21.58    1.37
 3.417    1.48 | 9.500    3.65 |15.583    3.42 | 21.67    1.37
 3.500    1.48 | 9.583    3.65 |15.667    3.42 | 21.75    1.37
 3.583    1.48 | 9.667    3.65 |15.750    3.42 | 21.83    1.37
 3.667    1.48 | 9.750    3.65 |15.833    3.42 | 21.92    1.37
 3.750    1.48 | 9.833    4.11 |15.917    3.42 | 22.00    1.37
 3.833    1.48 | 9.917    4.11 |16.000    3.42 | 22.08    1.37
 3.917    1.48 |10.000    4.11 |16.083    3.42 | 22.17    1.37
 4.000    1.48 |10.083    4.11 |16.167    3.42 | 22.25    1.37
 4.083    1.48 |10.167    4.11 |16.250    3.42 | 22.33    1.37
 4.167    1.48 |10.250    4.11 |16.333    2.05 | 22.42    1.37
 4.250    1.48 |10.333    5.25 |16.417    2.05 | 22.50    1.37
 4.333    1.82 |10.417    5.25 |16.500    2.05 | 22.58    1.37
 4.417    1.82 |10.500    5.25 |16.583    2.05 | 22.67    1.37
 4.500    1.82 |10.583    5.25 |16.667    2.05 | 22.75    1.37
 4.583    1.82 |10.667    5.25 |16.750    2.05 | 22.83    1.37
 4.667    1.82 |10.750    5.25 |16.833    2.05 | 22.92    1.37
 4.750    1.82 |10.833    7.07 |16.917    2.05 | 23.00    1.37
```

4.833	1.82	10.917	7.07	17.000	2.05	23.08	1.37
4.917	1.82	11.000	7.07	17.083	2.05	23.17	1.37
5.000	1.82	11.083	7.07	17.167	2.05	23.25	1.37
5.083	1.82	11.167	7.07	17.250	2.05	23.33	1.37
5.167	1.82	11.250	7.07	17.333	2.05	23.42	1.37
5.250	1.82	11.333	10.95	17.417	2.05	23.50	1.37
5.333	1.82	11.417	10.95	17.500	2.05	23.58	1.37
5.417	1.82	11.500	10.95	17.583	2.05	23.67	1.37
5.500	1.82	11.583	10.95	17.667	2.05	23.75	1.37
5.583	1.82	11.667	10.95	17.750	2.05	23.83	1.37
5.667	1.82	11.750	10.95	17.833	2.05	23.92	1.37
5.750	1.82	11.833	33.75	17.917	2.05	24.00	1.37
5.833	1.82	11.917	33.76	18.000	2.05	24.08	1.37
5.917	1.82	12.000	33.76	18.083	2.05	24.17	1.37
6.000	1.82	12.083	139.57	18.167	2.05	24.25	1.37
6.083	1.82	12.167	139.58	18.250	2.05		

Unit Hyd Qpeak (cms)= 5.892

PEAK FLOW (cms)= 5.093 (i)
TIME TO PEAK (hrs)= 12.417
RUNOFF VOLUME (mm)= 55.830
TOTAL RAINFALL (mm)= 114.040
RUNOFF COEFFICIENT = 0.490

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0012)	Area (ha)= 1.13	Curve Number (CN)= 67.4	
ID= 1 DT= 5.0 min	Ia (mm)= 7.88	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.43		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.82	12.250	139.58	18.33	2.05
0.167	0.00	6.250	1.82	12.333	16.44	18.42	2.05
0.250	0.00	6.333	2.05	12.417	16.42	18.50	2.05
0.333	1.25	6.417	2.05	12.500	16.42	18.58	2.05
0.417	1.25	6.500	2.05	12.583	16.42	18.67	2.05
0.500	1.25	6.583	2.05	12.667	16.42	18.75	2.05
0.583	1.25	6.667	2.05	12.750	16.42	18.83	2.05
0.667	1.25	6.750	2.05	12.833	8.44	18.92	2.05
0.750	1.25	6.833	2.05	12.917	8.44	19.00	2.05
0.833	1.25	6.917	2.05	13.000	8.44	19.08	2.05
0.917	1.25	7.000	2.05	13.083	8.44	19.17	2.05
1.000	1.25	7.083	2.05	13.167	8.44	19.25	2.05
1.083	1.25	7.167	2.05	13.250	8.44	19.33	2.05
1.167	1.25	7.250	2.05	13.333	6.16	19.42	2.05
1.250	1.25	7.333	2.51	13.417	6.16	19.50	2.05
1.333	1.25	7.417	2.51	13.500	6.16	19.58	2.05
1.417	1.25	7.500	2.51	13.583	6.16	19.67	2.05
1.500	1.25	7.583	2.51	13.667	6.16	19.75	2.05
1.583	1.25	7.667	2.51	13.750	6.16	19.83	2.05
1.667	1.25	7.750	2.51	13.833	4.79	19.92	2.05
1.750	1.25	7.833	2.51	13.917	4.79	20.00	2.05
1.833	1.25	7.917	2.51	14.000	4.79	20.08	2.05
1.917	1.25	8.000	2.51	14.083	4.79	20.17	2.05
2.000	1.25	8.083	2.51	14.167	4.79	20.25	2.05
2.083	1.25	8.167	2.51	14.250	4.79	20.33	1.37
2.167	1.25	8.250	2.51	14.333	3.42	20.42	1.37
2.250	1.25	8.333	2.97	14.417	3.42	20.50	1.37
2.333	1.48	8.417	2.97	14.500	3.42	20.58	1.37
2.417	1.48	8.500	2.97	14.583	3.42	20.67	1.37
2.500	1.48	8.583	2.97	14.667	3.42	20.75	1.37
2.583	1.48	8.667	2.97	14.750	3.42	20.83	1.37
2.667	1.48	8.750	2.97	14.833	3.42	20.92	1.37
2.750	1.48	8.833	3.19	14.917	3.42	21.00	1.37
2.833	1.48	8.917	3.19	15.000	3.42	21.08	1.37
2.917	1.48	9.000	3.19	15.083	3.42	21.17	1.37
3.000	1.48	9.083	3.19	15.167	3.42	21.25	1.37
3.083	1.48	9.167	3.19	15.250	3.42	21.33	1.37
3.167	1.48	9.250	3.19	15.333	3.42	21.42	1.37
3.250	1.48	9.333	3.65	15.417	3.42	21.50	1.37
3.333	1.48	9.417	3.65	15.500	3.42	21.58	1.37
3.417	1.48	9.500	3.65	15.583	3.42	21.67	1.37
3.500	1.48	9.583	3.65	15.667	3.42	21.75	1.37
3.583	1.48	9.667	3.65	15.750	3.42	21.83	1.37
3.667	1.48	9.750	3.65	15.833	3.42	21.92	1.37
3.750	1.48	9.833	4.11	15.917	3.42	22.00	1.37
3.833	1.48	9.917	4.11	16.000	3.42	22.08	1.37
3.917	1.48	10.000	4.11	16.083	3.42	22.17	1.37
4.000	1.48	10.083	4.11	16.167	3.42	22.25	1.37
4.083	1.48	10.167	4.11	16.250	3.42	22.33	1.37
4.167	1.48	10.250	4.11	16.333	2.05	22.42	1.37
4.250	1.48	10.333	5.25	16.417	2.05	22.50	1.37
4.333	1.82	10.417	5.25	16.500	2.05	22.58	1.37
4.417	1.82	10.500	5.25	16.583	2.05	22.67	1.37
4.500	1.82	10.583	5.25	16.667	2.05	22.75	1.37
4.583	1.82	10.667	5.25	16.750	2.05	22.83	1.37
4.667	1.82	10.750	5.25	16.833	2.05	22.92	1.37
4.750	1.82	10.833	7.07	16.917	2.05	23.00	1.37
4.833	1.82	10.917	7.07	17.000	2.05	23.08	1.37
4.917	1.82	11.000	7.07	17.083	2.05	23.17	1.37
5.000	1.82	11.083	7.07	17.167	2.05	23.25	1.37

5.083	1.82	11.167	7.07	17.250	2.05	23.33	1.37
5.167	1.82	11.250	7.07	17.333	2.05	23.42	1.37
5.250	1.82	11.333	10.95	17.417	2.05	23.50	1.37
5.333	1.82	11.417	10.95	17.500	2.05	23.58	1.37
5.417	1.82	11.500	10.95	17.583	2.05	23.67	1.37
5.500	1.82	11.583	10.95	17.667	2.05	23.75	1.37
5.583	1.82	11.667	10.95	17.750	2.05	23.83	1.37
5.667	1.82	11.750	10.95	17.833	2.05	23.92	1.37
5.750	1.82	11.833	33.75	17.917	2.05	24.00	1.37
5.833	1.82	11.917	33.76	18.000	2.05	24.08	1.37
5.917	1.82	12.000	33.76	18.083	2.05	24.17	1.37
6.000	1.82	12.083	139.57	18.167	2.05	24.25	1.37
6.083	1.82	12.167	139.58	18.250	2.05		

Unit Hyd Qpeak (cms)= 0.100

PEAK FLOW (cms)= 0.083 (i)
TIME TO PEAK (hrs)= 12.583
RUNOFF VOLUME (mm)= 49.157
TOTAL RAINFALL (mm)= 114.040
RUNOFF COEFFICIENT = 0.431

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB NASHYD (0041) ID= 1 DT= 5.0 min	Area (ha)=	0.59	Curve Number (CN)= 71.5
	Ia (mm)=	4.75	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	0.53	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.82	12.250	139.58	18.33	2.05
0.167	0.00	6.250	1.82	12.333	16.44	18.42	2.05
0.250	0.00	6.333	2.05	12.417	16.42	18.50	2.05
0.333	1.25	6.417	2.05	12.500	16.42	18.58	2.05
0.417	1.25	6.500	2.05	12.583	16.42	18.67	2.05
0.500	1.25	6.583	2.05	12.667	16.42	18.75	2.05
0.583	1.25	6.667	2.05	12.750	16.42	18.83	2.05
0.667	1.25	6.750	2.05	12.833	8.44	18.92	2.05
0.750	1.25	6.833	2.05	12.917	8.44	19.00	2.05
0.833	1.25	6.917	2.05	13.000	8.44	19.08	2.05
0.917	1.25	7.000	2.05	13.083	8.44	19.17	2.05
1.000	1.25	7.083	2.05	13.167	8.44	19.25	2.05
1.083	1.25	7.167	2.05	13.250	8.44	19.33	2.05
1.167	1.25	7.250	2.05	13.333	6.16	19.42	2.05
1.250	1.25	7.333	2.51	13.417	6.16	19.50	2.05
1.333	1.25	7.417	2.51	13.500	6.16	19.58	2.05
1.417	1.25	7.500	2.51	13.583	6.16	19.67	2.05
1.500	1.25	7.583	2.51	13.667	6.16	19.75	2.05
1.583	1.25	7.667	2.51	13.750	6.16	19.83	2.05
1.667	1.25	7.750	2.51	13.833	4.79	19.92	2.05
1.750	1.25	7.833	2.51	13.917	4.79	20.00	2.05
1.833	1.25	7.917	2.51	14.000	4.79	20.08	2.05
1.917	1.25	8.000	2.51	14.083	4.79	20.17	2.05
2.000	1.25	8.083	2.51	14.167	4.79	20.25	2.05
2.083	1.25	8.167	2.51	14.250	4.79	20.33	1.37
2.167	1.25	8.250	2.51	14.333	3.42	20.42	1.37
2.250	1.25	8.333	2.97	14.417	3.42	20.50	1.37
2.333	1.48	8.417	2.97	14.500	3.42	20.58	1.37
2.417	1.48	8.500	2.97	14.583	3.42	20.67	1.37
2.500	1.48	8.583	2.97	14.667	3.42	20.75	1.37
2.583	1.48	8.667	2.97	14.750	3.42	20.83	1.37
2.667	1.48	8.750	2.97	14.833	3.42	20.92	1.37
2.750	1.48	8.833	3.19	14.917	3.42	21.00	1.37
2.833	1.48	8.917	3.19	15.000	3.42	21.08	1.37
2.917	1.48	9.000	3.19	15.083	3.42	21.17	1.37
3.000	1.48	9.083	3.19	15.167	3.42	21.25	1.37
3.083	1.48	9.167	3.19	15.250	3.42	21.33	1.37
3.167	1.48	9.250	3.19	15.333	3.42	21.42	1.37
3.250	1.48	9.333	3.65	15.417	3.42	21.50	1.37
3.333	1.48	9.417	3.65	15.500	3.42	21.58	1.37
3.417	1.48	9.500	3.65	15.583	3.42	21.67	1.37
3.500	1.48	9.583	3.65	15.667	3.42	21.75	1.37
3.583	1.48	9.667	3.65	15.750	3.42	21.83	1.37
3.667	1.48	9.750	3.65	15.833	3.42	21.92	1.37
3.750	1.48	9.833	4.11	15.917	3.42	22.00	1.37
3.833	1.48	9.917	4.11	16.000	3.42	22.08	1.37
3.917	1.48	10.000	4.11	16.083	3.42	22.17	1.37
4.000	1.48	10.083	4.11	16.167	3.42	22.25	1.37
4.083	1.48	10.167	4.11	16.250	3.42	22.33	1.37
4.167	1.48	10.250	4.11	16.333	2.05	22.42	1.37
4.250	1.48	10.333	5.25	16.417	2.05	22.50	1.37
4.333	1.82	10.417	5.25	16.500	2.05	22.58	1.37
4.417	1.82	10.500	5.25	16.583	2.05	22.67	1.37
4.500	1.82	10.583	5.25	16.667	2.05	22.75	1.37
4.583	1.82	10.667	5.25	16.750	2.05	22.83	1.37
4.667	1.82	10.750	5.25	16.833	2.05	22.92	1.37
4.750	1.82	10.833	7.07	16.917	2.05	23.00	1.37
4.833	1.82	10.917	7.07	17.000	2.05	23.08	1.37
4.917	1.82	11.000	7.07	17.083	2.05	23.17	1.37
5.000	1.82	11.083	7.07	17.167	2.05	23.25	1.37
5.083	1.82	11.167	7.07	17.250	2.05	23.33	1.37
5.167	1.82	11.250	7.07	17.333	2.05	23.42	1.37
5.250	1.82	11.333	10.95	17.417	2.05	23.50	1.37

5.333	1.82	11.417	10.95	17.500	2.05	23.58	1.37
5.417	1.82	11.500	10.95	17.583	2.05	23.67	1.37
5.500	1.82	11.583	10.95	17.667	2.05	23.75	1.37
5.583	1.82	11.667	10.95	17.750	2.05	23.83	1.37
5.667	1.82	11.750	10.95	17.833	2.05	23.92	1.37
5.750	1.82	11.833	33.75	17.917	2.05	24.00	1.37
5.833	1.82	11.917	33.76	18.000	2.05	24.08	1.37
5.917	1.82	12.000	33.76	18.083	2.05	24.17	1.37
6.000	1.82	12.083	139.57	18.167	2.05	24.25	1.37
6.083	1.82	12.167	139.58	18.250	2.05		

Unit Hyd Qpeak (cms)= 0.043

PEAK FLOW (cms)= 0.043 (i)
TIME TO PEAK (hrs)= 12.667
RUNOFF VOLUME (mm)= 56.676
TOTAL RAINFALL (mm)= 114.040
RUNOFF COEFFICIENT = 0.497

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
NASHYD (0028)
ID= 1 DT= 5.0 min

Area (ha)= 1.38 Curve Number (CN)= 64.1
Ia (mm)= 8.51 # of Linear Res.(N)= 3.00
U.H. Tp(hrs)= 0.39

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.82	12.250	139.58	18.33	2.05
0.167	0.00	6.250	1.82	12.333	16.44	18.42	2.05
0.250	0.00	6.333	2.05	12.417	16.42	18.50	2.05
0.333	1.25	6.417	2.05	12.500	16.42	18.58	2.05
0.417	1.25	6.500	2.05	12.583	16.42	18.67	2.05
0.500	1.25	6.583	2.05	12.667	16.42	18.75	2.05
0.583	1.25	6.667	2.05	12.750	16.42	18.83	2.05
0.667	1.25	6.750	2.05	12.833	8.44	18.92	2.05
0.750	1.25	6.833	2.05	12.917	8.44	19.00	2.05
0.833	1.25	6.917	2.05	13.000	8.44	19.08	2.05
0.917	1.25	7.000	2.05	13.083	8.44	19.17	2.05
1.000	1.25	7.083	2.05	13.167	8.44	19.25	2.05
1.083	1.25	7.167	2.05	13.250	8.44	19.33	2.05
1.167	1.25	7.250	2.05	13.333	6.16	19.42	2.05
1.250	1.25	7.333	2.51	13.417	6.16	19.50	2.05
1.333	1.25	7.417	2.51	13.500	6.16	19.58	2.05
1.417	1.25	7.500	2.51	13.583	6.16	19.67	2.05
1.500	1.25	7.583	2.51	13.667	6.16	19.75	2.05
1.583	1.25	7.667	2.51	13.750	6.16	19.83	2.05
1.667	1.25	7.750	2.51	13.833	4.79	19.92	2.05
1.750	1.25	7.833	2.51	13.917	4.79	20.00	2.05
1.833	1.25	7.917	2.51	14.000	4.79	20.08	2.05
1.917	1.25	8.000	2.51	14.083	4.79	20.17	2.05
2.000	1.25	8.083	2.51	14.167	4.79	20.25	2.05
2.083	1.25	8.167	2.51	14.250	4.79	20.33	1.37
2.167	1.25	8.250	2.51	14.333	3.42	20.42	1.37
2.250	1.25	8.333	2.97	14.417	3.42	20.50	1.37
2.333	1.48	8.417	2.97	14.500	3.42	20.58	1.37
2.417	1.48	8.500	2.97	14.583	3.42	20.67	1.37
2.500	1.48	8.583	2.97	14.667	3.42	20.75	1.37
2.583	1.48	8.667	2.97	14.750	3.42	20.83	1.37
2.667	1.48	8.750	2.97	14.833	3.42	20.92	1.37
2.750	1.48	8.833	3.19	14.917	3.42	21.00	1.37
2.833	1.48	8.917	3.19	15.000	3.42	21.08	1.37
2.917	1.48	9.000	3.19	15.083	3.42	21.17	1.37
3.000	1.48	9.083	3.19	15.167	3.42	21.25	1.37
3.083	1.48	9.167	3.19	15.250	3.42	21.33	1.37
3.167	1.48	9.250	3.19	15.333	3.42	21.42	1.37
3.250	1.48	9.333	3.65	15.417	3.42	21.50	1.37
3.333	1.48	9.417	3.65	15.500	3.42	21.58	1.37
3.417	1.48	9.500	3.65	15.583	3.42	21.67	1.37
3.500	1.48	9.583	3.65	15.667	3.42	21.75	1.37
3.583	1.48	9.667	3.65	15.750	3.42	21.83	1.37
3.667	1.48	9.750	3.65	15.833	3.42	21.92	1.37
3.750	1.48	9.833	4.11	15.917	3.42	22.00	1.37
3.833	1.48	9.917	4.11	16.000	3.42	22.08	1.37
3.917	1.48	10.000	4.11	16.083	3.42	22.17	1.37
4.000	1.48	10.083	4.11	16.167	3.42	22.25	1.37
4.083	1.48	10.167	4.11	16.250	3.42	22.33	1.37
4.167	1.48	10.250	4.11	16.333	2.05	22.42	1.37
4.250	1.48	10.333	5.25	16.417	2.05	22.50	1.37
4.333	1.82	10.417	5.25	16.500	2.05	22.58	1.37
4.417	1.82	10.500	5.25	16.583	2.05	22.67	1.37
4.500	1.82	10.583	5.25	16.667	2.05	22.75	1.37
4.583	1.82	10.667	5.25	16.750	2.05	22.83	1.37
4.667	1.82	10.750	5.25	16.833	2.05	22.92	1.37
4.750	1.82	10.833	7.07	16.917	2.05	23.00	1.37
4.833	1.82	10.917	7.07	17.000	2.05	23.08	1.37
4.917	1.82	11.000	7.07	17.083	2.05	23.17	1.37
5.000	1.82	11.083	7.07	17.167	2.05	23.25	1.37
5.083	1.82	11.167	7.07	17.250	2.05	23.33	1.37
5.167	1.82	11.250	7.07	17.333	2.05	23.42	1.37
5.250	1.82	11.333	10.95	17.417	2.05	23.50	1.37
5.333	1.82	11.417	10.95	17.500	2.05	23.58	1.37
5.417	1.82	11.500	10.95	17.583	2.05	23.67	1.37
5.500	1.82	11.583	10.95	17.667	2.05	23.75	1.37

5.583	1.82	11.667	10.95	17.750	2.05	23.83	1.37
5.667	1.82	11.750	10.95	17.833	2.05	23.92	1.37
5.750	1.82	11.833	33.75	17.917	2.05	24.00	1.37
5.833	1.82	11.917	33.76	18.000	2.05	24.08	1.37
5.917	1.82	12.000	33.76	18.083	2.05	24.17	1.37
6.000	1.82	12.083	139.57	18.167	2.05	24.25	1.37
6.083	1.82	12.167	139.58	18.250	2.05		

Unit Hyd Qpeak (cms)= 0.135

PEAK FLOW (cms)= 0.099 (i)
TIME TO PEAK (hrs)= 12.500
RUNOFF VOLUME (mm)= 44.983
TOTAL RAINFALL (mm)= 114.040
RUNOFF COEFFICIENT = 0.394

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (0044) | Area (ha)= 1.62
ID= 1 DT= 5.0 min | Total Imp(%)= 48.77 Dir. Conn.(%)= 30.86

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	0.79	0.83
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	0.50	1.40
Length (m)=	103.92	400.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.82	12.250	139.58	18.33	2.05
0.167	0.00	6.250	1.82	12.333	16.44	18.42	2.05
0.250	0.00	6.333	2.05	12.417	16.42	18.50	2.05
0.333	1.25	6.417	2.05	12.500	16.42	18.58	2.05
0.417	1.25	6.500	2.05	12.583	16.42	18.67	2.05
0.500	1.25	6.583	2.05	12.667	16.42	18.75	2.05
0.583	1.25	6.667	2.05	12.750	16.42	18.83	2.05
0.667	1.25	6.750	2.05	12.833	8.44	18.92	2.05
0.750	1.25	6.833	2.05	12.917	8.44	19.00	2.05
0.833	1.25	6.917	2.05	13.000	8.44	19.08	2.05
0.917	1.25	7.000	2.05	13.083	8.44	19.17	2.05
1.000	1.25	7.083	2.05	13.167	8.44	19.25	2.05
1.083	1.25	7.167	2.05	13.250	8.44	19.33	2.05
1.167	1.25	7.250	2.05	13.333	6.16	19.42	2.05
1.250	1.25	7.333	2.51	13.417	6.16	19.50	2.05
1.333	1.25	7.417	2.51	13.500	6.16	19.58	2.05
1.417	1.25	7.500	2.51	13.583	6.16	19.67	2.05
1.500	1.25	7.583	2.51	13.667	6.16	19.75	2.05
1.583	1.25	7.667	2.51	13.750	6.16	19.83	2.05
1.667	1.25	7.750	2.51	13.833	4.79	19.92	2.05
1.750	1.25	7.833	2.51	13.917	4.79	20.00	2.05
1.833	1.25	7.917	2.51	14.000	4.79	20.08	2.05
1.917	1.25	8.000	2.51	14.083	4.79	20.17	2.05
2.000	1.25	8.083	2.51	14.167	4.79	20.25	2.05
2.083	1.25	8.167	2.51	14.250	4.79	20.33	1.37
2.167	1.25	8.250	2.51	14.333	3.42	20.42	1.37
2.250	1.25	8.333	2.97	14.417	3.42	20.50	1.37
2.333	1.48	8.417	2.97	14.500	3.42	20.58	1.37
2.417	1.48	8.500	2.97	14.583	3.42	20.67	1.37
2.500	1.48	8.583	2.97	14.667	3.42	20.75	1.37
2.583	1.48	8.667	2.97	14.750	3.42	20.83	1.37
2.667	1.48	8.750	2.97	14.833	3.42	20.92	1.37
2.750	1.48	8.833	3.19	14.917	3.42	21.00	1.37
2.833	1.48	8.917	3.19	15.000	3.42	21.08	1.37
2.917	1.48	9.000	3.19	15.083	3.42	21.17	1.37
3.000	1.48	9.083	3.19	15.167	3.42	21.25	1.37
3.083	1.48	9.167	3.19	15.250	3.42	21.33	1.37
3.167	1.48	9.250	3.19	15.333	3.42	21.42	1.37
3.250	1.48	9.333	3.65	15.417	3.42	21.50	1.37
3.333	1.48	9.417	3.65	15.500	3.42	21.58	1.37
3.417	1.48	9.500	3.65	15.583	3.42	21.67	1.37
3.500	1.48	9.583	3.65	15.667	3.42	21.75	1.37
3.583	1.48	9.667	3.65	15.750	3.42	21.83	1.37
3.667	1.48	9.750	3.65	15.833	3.42	21.92	1.37
3.750	1.48	9.833	4.11	15.917	3.42	22.00	1.37
3.833	1.48	9.917	4.11	16.000	3.42	22.08	1.37
3.917	1.48	10.000	4.11	16.083	3.42	22.17	1.37
4.000	1.48	10.083	4.11	16.167	3.42	22.25	1.37
4.083	1.48	10.167	4.11	16.250	3.42	22.33	1.37
4.167	1.48	10.250	4.11	16.333	2.05	22.42	1.37
4.250	1.48	10.333	5.25	16.417	2.05	22.50	1.37
4.333	1.82	10.417	5.25	16.500	2.05	22.58	1.37
4.417	1.82	10.500	5.25	16.583	2.05	22.67	1.37
4.500	1.82	10.583	5.25	16.667	2.05	22.75	1.37
4.583	1.82	10.667	5.25	16.750	2.05	22.83	1.37
4.667	1.82	10.750	5.25	16.833	2.05	22.92	1.37
4.750	1.82	10.833	7.07	16.917	2.05	23.00	1.37
4.833	1.82	10.917	7.07	17.000	2.05	23.08	1.37
4.917	1.82	11.000	7.07	17.083	2.05	23.17	1.37
5.000	1.82	11.083	7.07	17.167	2.05	23.25	1.37
5.083	1.82	11.167	7.07	17.250	2.05	23.33	1.37
5.167	1.82	11.250	7.07	17.333	2.05	23.42	1.37
5.250	1.82	11.333	10.95	17.417	2.05	23.50	1.37

5.333	1.82	11.417	10.95	17.500	2.05	23.58	1.37
5.417	1.82	11.500	10.95	17.583	2.05	23.67	1.37
5.500	1.82	11.583	10.95	17.667	2.05	23.75	1.37
5.583	1.82	11.667	10.95	17.750	2.05	23.83	1.37
5.667	1.82	11.750	10.95	17.833	2.05	23.92	1.37
5.750	1.82	11.833	33.75	17.917	2.05	24.00	1.37
5.833	1.82	11.917	33.76	18.000	2.05	24.08	1.37
5.917	1.82	12.000	33.76	18.083	2.05	24.17	1.37
6.000	1.82	12.083	139.57	18.167	2.05	24.25	1.37
6.083	1.82	12.167	139.58	18.250	2.05		

Max.Eff.Inten.(mm/hr)=	139.58	56.24	
over (min)	5.00	45.00	
Storage Coeff. (min)=	2.82 (ii)	42.18 (ii)	
Unit Hyd. Tpeak (min)=	5.00	45.00	
Unit Hyd. peak (cms)=	0.28	0.03	
			TOTALS
PEAK FLOW (cms)=	0.19	0.08	0.221 (iii)
TIME TO PEAK (hrs)=	12.25	12.83	12.25
RUNOFF VOLUME (mm)=	113.04	62.46	78.06
TOTAL RAINFALL (mm)=	114.04	114.04	114.04
RUNOFF COEFFICIENT =	0.99	0.55	0.68

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
STANDHYD (0043)	Area (ha)=	0.13			
ID= 1 DT= 5.0 min	Total Imp(%)=	30.77	Dir. Conn.(%)=	7.69	

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.04	0.09
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	0.50
Length	(m)=	29.44	70.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.82	12.250	139.58	18.33	2.05
0.167	0.00	6.250	1.82	12.333	16.44	18.42	2.05
0.250	0.00	6.333	2.05	12.417	16.42	18.50	2.05
0.333	1.25	6.417	2.05	12.500	16.42	18.58	2.05
0.417	1.25	6.500	2.05	12.583	16.42	18.67	2.05
0.500	1.25	6.583	2.05	12.667	16.42	18.75	2.05
0.583	1.25	6.667	2.05	12.750	16.42	18.83	2.05
0.667	1.25	6.750	2.05	12.833	8.44	18.92	2.05
0.750	1.25	6.833	2.05	12.917	8.44	19.00	2.05
0.833	1.25	6.917	2.05	13.000	8.44	19.08	2.05
0.917	1.25	7.000	2.05	13.083	8.44	19.17	2.05
1.000	1.25	7.083	2.05	13.167	8.44	19.25	2.05
1.083	1.25	7.167	2.05	13.250	8.44	19.33	2.05
1.167	1.25	7.250	2.05	13.333	6.16	19.42	2.05
1.250	1.25	7.333	2.51	13.417	6.16	19.50	2.05
1.333	1.25	7.417	2.51	13.500	6.16	19.58	2.05
1.417	1.25	7.500	2.51	13.583	6.16	19.67	2.05
1.500	1.25	7.583	2.51	13.667	6.16	19.75	2.05
1.583	1.25	7.667	2.51	13.750	6.16	19.83	2.05
1.667	1.25	7.750	2.51	13.833	4.79	19.92	2.05
1.750	1.25	7.833	2.51	13.917	4.79	20.00	2.05
1.833	1.25	7.917	2.51	14.000	4.79	20.08	2.05
1.917	1.25	8.000	2.51	14.083	4.79	20.17	2.05
2.000	1.25	8.083	2.51	14.167	4.79	20.25	2.05
2.083	1.25	8.167	2.51	14.250	4.79	20.33	1.37
2.167	1.25	8.250	2.51	14.333	3.42	20.42	1.37
2.250	1.25	8.333	2.97	14.417	3.42	20.50	1.37
2.333	1.48	8.417	2.97	14.500	3.42	20.58	1.37
2.417	1.48	8.500	2.97	14.583	3.42	20.67	1.37
2.500	1.48	8.583	2.97	14.667	3.42	20.75	1.37
2.583	1.48	8.667	2.97	14.750	3.42	20.83	1.37
2.667	1.48	8.750	2.97	14.833	3.42	20.92	1.37
2.750	1.48	8.833	3.19	14.917	3.42	21.00	1.37
2.833	1.48	8.917	3.19	15.000	3.42	21.08	1.37
2.917	1.48	9.000	3.19	15.083	3.42	21.17	1.37
3.000	1.48	9.083	3.19	15.167	3.42	21.25	1.37
3.083	1.48	9.167	3.19	15.250	3.42	21.33	1.37
3.167	1.48	9.250	3.19	15.333	3.42	21.42	1.37
3.250	1.48	9.333	3.65	15.417	3.42	21.50	1.37
3.333	1.48	9.417	3.65	15.500	3.42	21.58	1.37
3.417	1.48	9.500	3.65	15.583	3.42	21.67	1.37
3.500	1.48	9.583	3.65	15.667	3.42	21.75	1.37
3.583	1.48	9.667	3.65	15.750	3.42	21.83	1.37
3.667	1.48	9.750	3.65	15.833	3.42	21.92	1.37
3.750	1.48	9.833	4.11	15.917	3.42	22.00	1.37
3.833	1.48	9.917	4.11	16.000	3.42	22.08	1.37
3.917	1.48	10.000	4.11	16.083	3.42	22.17	1.37
4.000	1.48	10.083	4.11	16.167	3.42	22.25	1.37
4.083	1.48	10.167	4.11	16.250	3.42	22.33	1.37
4.167	1.48	10.250	4.11	16.333	2.05	22.42	1.37

```
                4.250    1.48 |10.333    5.25 |16.417    2.05 | 22.50    1.37
                4.333    1.82 |10.417    5.25 |16.500    2.05 | 22.58    1.37
                4.417    1.82 |10.500    5.25 |16.583    2.05 | 22.67    1.37
                4.500    1.82 |10.583    5.25 |16.667    2.05 | 22.75    1.37
                4.583    1.82 |10.667    5.25 |16.750    2.05 | 22.83    1.37
                4.667    1.82 |10.750    5.25 |16.833    2.05 | 22.92    1.37
                4.750    1.82 |10.833    7.07 |16.917    2.05 | 23.00    1.37
                4.833    1.82 |10.917    7.07 |17.000    2.05 | 23.08    1.37
                4.917    1.82 |11.000    7.07 |17.083    2.05 | 23.17    1.37
                5.000    1.82 |11.083    7.07 |17.167    2.05 | 23.25    1.37
                5.083    1.82 |11.167    7.07 |17.250    2.05 | 23.33    1.37
                5.167    1.82 |11.250    7.07 |17.333    2.05 | 23.42    1.37
                5.250    1.82 |11.333   10.95 |17.417    2.05 | 23.50    1.37
                5.333    1.82 |11.417   10.95 |17.500    2.05 | 23.58    1.37
                5.417    1.82 |11.500   10.95 |17.583    2.05 | 23.67    1.37
                5.500    1.82 |11.583   10.95 |17.667    2.05 | 23.75    1.37
                5.583    1.82 |11.667   10.95 |17.750    2.05 | 23.83    1.37
                5.667    1.82 |11.750   10.95 |17.833    2.05 | 23.92    1.37
                5.750    1.82 |11.833   33.75 |17.917    2.05 | 24.00    1.37
                5.833    1.82 |11.917   33.76 |18.000    2.05 | 24.08    1.37
                5.917    1.82 |12.000   33.76 |18.083    2.05 | 24.17    1.37
                6.000    1.82 |12.083  139.57 |18.167    2.05 | 24.25    1.37
                6.083    1.82 |12.167  139.58 |18.250    2.05 |

     Max.Eff.Inten.(mm/hr)=     139.58       115.46
               over (min)        5.00        20.00
     Storage Coeff.  (min)=       1.32 (ii)   15.45 (ii)
     Unit Hyd. Tpeak (min)=       5.00        20.00
     Unit Hyd. peak  (cms)=       0.33         0.07
                                                      *TOTALS*
     PEAK FLOW       (cms)=       0.00         0.02          0.016 (iii)
     TIME TO PEAK    (hrs)=      12.25        12.42          12.42
     RUNOFF VOLUME    (mm)=     113.04        62.10          65.94
     TOTAL RAINFALL   (mm)=     114.04       114.04         114.04
     RUNOFF COEFFICIENT   =       0.99         0.54           0.58

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
              YOU SHOULD CONSIDER SPLITTING THE AREA.

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  69.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0023)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 1 (  0011):    46.28   5.093    12.42    55.83
      + ID2= 2 (  0012):     1.13   0.083    12.58    49.16
        ==================================================
        ID = 3 (  0023):    47.41   5.169    12.42    55.67

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0023)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 3 (  0023):    47.41   5.169    12.42    55.67
      + ID2= 2 (  0028):     1.38   0.099    12.50    44.98
        ==================================================
        ID = 1 (  0023):    48.79   5.264    12.42    55.37

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0023)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 1 (  0023):    48.79   5.264    12.42    55.37
      + ID2= 2 (  0041):     0.59   0.043    12.67    56.68
        ==================================================
        ID = 3 (  0023):    49.38   5.299    12.42    55.38

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0023)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 3 (  0023):    49.38   5.299    12.42    55.38
      + ID2= 2 (  0043):     0.13   0.016    12.42    65.94
        ==================================================
        ID = 1 (  0023):    49.51   5.316    12.42    55.41

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0023)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
```

```
        ID1= 1 (  0023):    49.51   5.316    12.42    55.41
      + ID2= 2 (  0044):     1.62   0.221    12.25    78.06
        ================================================
        ID = 3 (  0023):    51.13   5.388    12.42    56.13

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0025)|
|   1 +  2 =  3    |          AREA    QPEAK    TPEAK     R.V.
--------------------          (ha)    (cms)    (hrs)     (mm)
        ID1= 1 (  0023):    51.13   5.388    12.42    56.13
      + ID2= 2 (  0024):   225.17   5.375    13.25    38.06
        ================================================
        ID = 3 (  0025):   276.30   8.396    12.50    41.40

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
================================================================================
======================

       V    V   I    SSSSS  U   U    A    L             (v 6.2.2020)
       V    V   I    SS     U   U   A A   L
        V  V    I     SS    U   U  AAAAA  L
        V  V    I      SS   U   U  A   A  L
         VV     I    SSSSS  UUUUU  A   A  LLLLL

        OOO   TTTTT  TTTTT  H   H  Y   Y  M   M   OOO    TM
       O   O    T      T    H   H   Y Y   MM MM  O   O
       O   O    T      T    H   H    Y    M   M  O   O
        OOO     T      T    H   H    Y    M   M   OOO
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                  *****  D E T A I L E D   O U T P U T *****


  Input   filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat

  Output  filename:
C:\Users\msimon\AppData\Local\Civica\VH5\a122c840-259d-4b92-8a43-b1e7a592bdea\b96db
a88-7cef-4bd6-be34-a081e27746cf\scena
  Summary filename:
C:\Users\msimon\AppData\Local\Civica\VH5\a122c840-259d-4b92-8a43-b1e7a592bdea\b96db
a88-7cef-4bd6-be34-a081e27746cf\scena
```

DATE: 07-15-2026 TIME: 03:17:57

USER:

COMMENTS: _____

```
--------------------------------------------------------------------------------
------------------------
  ***********************************************
  ** SIMULATION : K - 50-year SCS               **
  ***********************************************


--------------------
|    READ STORM    |    Filename: C:\Users\msimon\AppD
|                  |              ata\Local\Temp\
|                  |              2578c1bc-683b-4555-9960-7d3c657f7fff\0c38785b
| Ptotal=126.91 mm |    Comments: 50yr 24hr 15min SCS Type II (MTO) - 15%
--------------------
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                 hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
                0.00    0.00 |  6.25    2.28 | 12.50   18.28 | 18.75    2.28
                0.25    1.40 |  6.50    2.28 | 12.75    9.39 | 19.00    2.28
                0.50    1.40 |  6.75    2.28 | 13.00    9.39 | 19.25    2.28
                0.75    1.40 |  7.00    2.28 | 13.25    6.85 | 19.50    2.28
                1.00    1.40 |  7.25    2.79 | 13.50    6.85 | 19.75    2.28
                1.25    1.40 |  7.50    2.79 | 13.75    5.33 | 20.00    2.28
                1.50    1.40 |  7.75    2.79 | 14.00    5.33 | 20.25    1.52
                1.75    1.40 |  8.00    2.79 | 14.25    3.81 | 20.50    1.52
                2.00    1.40 |  8.25    3.30 | 14.50    3.81 | 20.75    1.52
                2.25    1.65 |  8.50    3.30 | 14.75    3.81 | 21.00    1.52
                2.50    1.65 |  8.75    3.55 | 15.00    3.81 | 21.25    1.52
                2.75    1.65 |  9.00    3.55 | 15.25    3.81 | 21.50    1.52
                3.00    1.65 |  9.25    4.06 | 15.50    3.81 | 21.75    1.52
                3.25    1.65 |  9.50    4.06 | 15.75    3.81 | 22.00    1.52
                3.50    1.65 |  9.75    4.57 | 16.00    3.81 | 22.25    1.52
                3.75    1.65 | 10.00    4.57 | 16.25    2.28 | 22.50    1.52
                4.00    1.65 | 10.25    5.84 | 16.50    2.28 | 22.75    1.52
                4.25    2.03 | 10.50    5.84 | 16.75    2.28 | 23.00    1.52
                4.50    2.03 | 10.75    7.87 | 17.00    2.28 | 23.25    1.52
                4.75    2.03 | 11.00    7.87 | 17.25    2.28 | 23.50    1.52
                5.00    2.03 | 11.25   12.18 | 17.50    2.28 | 23.75    1.52
                5.25    2.03 | 11.50   12.18 | 17.75    2.28 | 24.00    1.52
                5.50    2.03 | 11.75   37.57 | 18.00    2.28 |
                5.75    2.03 | 12.00  155.34 | 18.25    2.28 |
                6.00    2.03 | 12.25   18.28 | 18.50    2.28 |
```

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--------------------
| CALIB            |
| NASHYD   (  0007)|   Area    (ha)= 100.92   Curve Number   (CN)= 55.9
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.89   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   1.70

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.
```

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.03	12.250	155.34	18.33	2.28
0.167	0.00	6.250	2.03	12.333	18.29	18.42	2.28
0.250	0.00	6.333	2.28	12.417	18.28	18.50	2.28
0.333	1.40	6.417	2.28	12.500	18.28	18.58	2.28
0.417	1.40	6.500	2.28	12.583	18.27	18.67	2.28
0.500	1.40	6.583	2.28	12.667	18.28	18.75	2.28
0.583	1.40	6.667	2.28	12.750	18.28	18.83	2.28
0.667	1.40	6.750	2.28	12.833	9.39	18.92	2.28
0.750	1.40	6.833	2.28	12.917	9.39	19.00	2.28
0.833	1.40	6.917	2.28	13.000	9.39	19.08	2.28
0.917	1.40	7.000	2.28	13.083	9.39	19.17	2.28
1.000	1.40	7.083	2.28	13.167	9.39	19.25	2.28
1.083	1.40	7.167	2.28	13.250	9.39	19.33	2.28
1.167	1.40	7.250	2.28	13.333	6.85	19.42	2.28
1.250	1.40	7.333	2.79	13.417	6.85	19.50	2.28
1.333	1.40	7.417	2.79	13.500	6.85	19.58	2.28
1.417	1.40	7.500	2.79	13.583	6.85	19.67	2.28
1.500	1.40	7.583	2.79	13.667	6.85	19.75	2.28
1.583	1.40	7.667	2.79	13.750	6.85	19.83	2.28
1.667	1.40	7.750	2.79	13.833	5.33	19.92	2.28
1.750	1.40	7.833	2.79	13.917	5.33	20.00	2.28
1.833	1.40	7.917	2.79	14.000	5.33	20.08	2.28
1.917	1.40	8.000	2.79	14.083	5.33	20.17	2.28
2.000	1.40	8.083	2.79	14.167	5.33	20.25	2.28
2.083	1.40	8.167	2.79	14.250	5.33	20.33	1.52
2.167	1.40	8.250	2.79	14.333	3.81	20.42	1.52
2.250	1.40	8.333	3.30	14.417	3.81	20.50	1.52
2.333	1.65	8.417	3.30	14.500	3.81	20.58	1.52
2.417	1.65	8.500	3.30	14.583	3.81	20.67	1.52
2.500	1.65	8.583	3.30	14.667	3.81	20.75	1.52
2.583	1.65	8.667	3.30	14.750	3.81	20.83	1.52
2.667	1.65	8.750	3.30	14.833	3.81	20.92	1.52
2.750	1.65	8.833	3.55	14.917	3.81	21.00	1.52
2.833	1.65	8.917	3.55	15.000	3.81	21.08	1.52
2.917	1.65	9.000	3.55	15.083	3.81	21.17	1.52
3.000	1.65	9.083	3.55	15.167	3.81	21.25	1.52
3.083	1.65	9.167	3.55	15.250	3.81	21.33	1.52
3.167	1.65	9.250	3.55	15.333	3.81	21.42	1.52
3.250	1.65	9.333	4.06	15.417	3.81	21.50	1.52
3.333	1.65	9.417	4.06	15.500	3.81	21.58	1.52
3.417	1.65	9.500	4.06	15.583	3.81	21.67	1.52
3.500	1.65	9.583	4.06	15.667	3.81	21.75	1.52
3.583	1.65	9.667	4.06	15.750	3.81	21.83	1.52
3.667	1.65	9.750	4.06	15.833	3.81	21.92	1.52
3.750	1.65	9.833	4.57	15.917	3.81	22.00	1.52
3.833	1.65	9.917	4.57	16.000	3.81	22.08	1.52
3.917	1.65	10.000	4.57	16.083	3.81	22.17	1.52
4.000	1.65	10.083	4.57	16.167	3.81	22.25	1.52
4.083	1.65	10.167	4.57	16.250	3.81	22.33	1.52
4.167	1.65	10.250	4.57	16.333	2.28	22.42	1.52
4.250	1.65	10.333	5.84	16.417	2.28	22.50	1.52
4.333	2.03	10.417	5.84	16.500	2.28	22.58	1.52
4.417	2.03	10.500	5.84	16.583	2.28	22.67	1.52
4.500	2.03	10.583	5.84	16.667	2.28	22.75	1.52
4.583	2.03	10.667	5.84	16.750	2.28	22.83	1.52
4.667	2.03	10.750	5.84	16.833	2.28	22.92	1.52
4.750	2.03	10.833	7.87	16.917	2.28	23.00	1.52
4.833	2.03	10.917	7.87	17.000	2.28	23.08	1.52
4.917	2.03	11.000	7.87	17.083	2.28	23.17	1.52
5.000	2.03	11.083	7.87	17.167	2.28	23.25	1.52
5.083	2.03	11.167	7.87	17.250	2.28	23.33	1.52
5.167	2.03	11.250	7.87	17.333	2.28	23.42	1.52
5.250	2.03	11.333	12.18	17.417	2.28	23.50	1.52
5.333	2.03	11.417	12.18	17.500	2.28	23.58	1.52
5.417	2.03	11.500	12.18	17.583	2.28	23.67	1.52
5.500	2.03	11.583	12.18	17.667	2.28	23.75	1.52
5.583	2.03	11.667	12.18	17.750	2.28	23.83	1.52
5.667	2.03	11.750	12.18	17.833	2.28	23.92	1.52
5.750	2.03	11.833	37.56	17.917	2.28	24.00	1.52
5.833	2.03	11.917	37.57	18.000	2.28	24.08	1.52
5.917	2.03	12.000	37.57	18.083	2.28	24.17	1.52
6.000	2.03	12.083	155.32	18.167	2.28	24.25	1.52
6.083	2.03	12.167	155.34	18.250	2.28		

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     Unit Hyd Qpeak  (cms)=   2.267

     PEAK FLOW       (cms)=   2.350 (i)
     TIME TO PEAK    (hrs)=  14.083
     RUNOFF VOLUME    (mm)=  44.396
     TOTAL RAINFALL   (mm)= 126.910
     RUNOFF COEFFICIENT   =   0.350

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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CALIB								
NASHYD (0008)	Area (ha)= 23.99	Curve Number (CN)= 44.7						
ID= 1 DT= 5.0 min	Ia (mm)= 10.91	# of Linear Res.(N)= 3.00						
	U.H. Tp(hrs)= 0.97							

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.03	12.250	155.34	18.33	2.28
0.167	0.00	6.250	2.03	12.333	18.29	18.42	2.28
0.250	0.00	6.333	2.28	12.417	18.28	18.50	2.28
0.333	1.40	6.417	2.28	12.500	18.28	18.58	2.28
0.417	1.40	6.500	2.28	12.583	18.27	18.67	2.28
0.500	1.40	6.583	2.28	12.667	18.28	18.75	2.28
0.583	1.40	6.667	2.28	12.750	18.28	18.83	2.28
0.667	1.40	6.750	2.28	12.833	9.39	18.92	2.28
0.750	1.40	6.833	2.28	12.917	9.39	19.00	2.28
0.833	1.40	6.917	2.28	13.000	9.39	19.08	2.28
0.917	1.40	7.000	2.28	13.083	9.39	19.17	2.28
1.000	1.40	7.083	2.28	13.167	9.39	19.25	2.28
1.083	1.40	7.167	2.28	13.250	9.39	19.33	2.28
1.167	1.40	7.250	2.28	13.333	6.85	19.42	2.28
1.250	1.40	7.333	2.79	13.417	6.85	19.50	2.28
1.333	1.40	7.417	2.79	13.500	6.85	19.58	2.28
1.417	1.40	7.500	2.79	13.583	6.85	19.67	2.28
1.500	1.40	7.583	2.79	13.667	6.85	19.75	2.28
1.583	1.40	7.667	2.79	13.750	6.85	19.83	2.28
1.667	1.40	7.750	2.79	13.833	5.33	19.92	2.28
1.750	1.40	7.833	2.79	13.917	5.33	20.00	2.28
1.833	1.40	7.917	2.79	14.000	5.33	20.08	2.28
1.917	1.40	8.000	2.79	14.083	5.33	20.17	2.28
2.000	1.40	8.083	2.79	14.167	5.33	20.25	2.28
2.083	1.40	8.167	2.79	14.250	5.33	20.33	1.52
2.167	1.40	8.250	2.79	14.333	3.81	20.42	1.52
2.250	1.40	8.333	3.30	14.417	3.81	20.50	1.52
2.333	1.65	8.417	3.30	14.500	3.81	20.58	1.52
2.417	1.65	8.500	3.30	14.583	3.81	20.67	1.52
2.500	1.65	8.583	3.30	14.667	3.81	20.75	1.52
2.583	1.65	8.667	3.30	14.750	3.81	20.83	1.52
2.667	1.65	8.750	3.30	14.833	3.81	20.92	1.52
2.750	1.65	8.833	3.55	14.917	3.81	21.00	1.52
2.833	1.65	8.917	3.55	15.000	3.81	21.08	1.52
2.917	1.65	9.000	3.55	15.083	3.81	21.17	1.52
3.000	1.65	9.083	3.55	15.167	3.81	21.25	1.52
3.083	1.65	9.167	3.55	15.250	3.81	21.33	1.52
3.167	1.65	9.250	3.55	15.333	3.81	21.42	1.52
3.250	1.65	9.333	4.06	15.417	3.81	21.50	1.52
3.333	1.65	9.417	4.06	15.500	3.81	21.58	1.52
3.417	1.65	9.500	4.06	15.583	3.81	21.67	1.52
3.500	1.65	9.583	4.06	15.667	3.81	21.75	1.52
3.583	1.65	9.667	4.06	15.750	3.81	21.83	1.52
3.667	1.65	9.750	4.06	15.833	3.81	21.92	1.52
3.750	1.65	9.833	4.57	15.917	3.81	22.00	1.52
3.833	1.65	9.917	4.57	16.000	3.81	22.08	1.52
3.917	1.65	10.000	4.57	16.083	3.81	22.17	1.52
4.000	1.65	10.083	4.57	16.167	3.81	22.25	1.52
4.083	1.65	10.167	4.57	16.250	3.81	22.33	1.52
4.167	1.65	10.250	4.57	16.333	2.28	22.42	1.52
4.250	1.65	10.333	5.84	16.417	2.28	22.50	1.52
4.333	2.03	10.417	5.84	16.500	2.28	22.58	1.52
4.417	2.03	10.500	5.84	16.583	2.28	22.67	1.52
4.500	2.03	10.583	5.84	16.667	2.28	22.75	1.52
4.583	2.03	10.667	5.84	16.750	2.28	22.83	1.52
4.667	2.03	10.750	5.84	16.833	2.28	22.92	1.52
4.750	2.03	10.833	7.87	16.917	2.28	23.00	1.52
4.833	2.03	10.917	7.87	17.000	2.28	23.08	1.52
4.917	2.03	11.000	7.87	17.083	2.28	23.17	1.52
5.000	2.03	11.083	7.87	17.167	2.28	23.25	1.52
5.083	2.03	11.167	7.87	17.250	2.28	23.33	1.52
5.167	2.03	11.250	7.87	17.333	2.28	23.42	1.52
5.250	2.03	11.333	12.18	17.417	2.28	23.50	1.52
5.333	2.03	11.417	12.18	17.500	2.28	23.58	1.52
5.417	2.03	11.500	12.18	17.583	2.28	23.67	1.52
5.500	2.03	11.583	12.18	17.667	2.28	23.75	1.52
5.583	2.03	11.667	12.18	17.750	2.28	23.83	1.52
5.667	2.03	11.750	12.18	17.833	2.28	23.92	1.52
5.750	2.03	11.833	37.56	17.917	2.28	24.00	1.52
5.833	2.03	11.917	37.57	18.000	2.28	24.08	1.52
5.917	2.03	12.000	37.57	18.083	2.28	24.17	1.52
6.000	2.03	12.083	155.32	18.167	2.28	24.25	1.52
6.083	2.03	12.167	155.34	18.250	2.28		

Unit Hyd Qpeak (cms)= 0.945

PEAK FLOW (cms)= 0.588 (i)
TIME TO PEAK (hrs)= 13.250
RUNOFF VOLUME (mm)= 31.276
TOTAL RAINFALL (mm)= 126.910
RUNOFF COEFFICIENT = 0.246

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB								
NASHYD (0009)	Area (ha)= 6.37	Curve Number (CN)= 50.5						
ID= 1 DT= 5.0 min	Ia (mm)= 15.69	# of Linear Res.(N)= 3.00						

---------- U.H. Tp(hrs)= 0.77

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.03	12.250	155.34	18.33	2.28
0.167	0.00	6.250	2.03	12.333	18.29	18.42	2.28
0.250	0.00	6.333	2.28	12.417	18.28	18.50	2.28
0.333	1.40	6.417	2.28	12.500	18.28	18.58	2.28
0.417	1.40	6.500	2.28	12.583	18.27	18.67	2.28
0.500	1.40	6.583	2.28	12.667	18.28	18.75	2.28
0.583	1.40	6.667	2.28	12.750	18.28	18.83	2.28
0.667	1.40	6.750	2.28	12.833	9.39	18.92	2.28
0.750	1.40	6.833	2.28	12.917	9.39	19.00	2.28
0.833	1.40	6.917	2.28	13.000	9.39	19.08	2.28
0.917	1.40	7.000	2.28	13.083	9.39	19.17	2.28
1.000	1.40	7.083	2.28	13.167	9.39	19.25	2.28
1.083	1.40	7.167	2.28	13.250	9.39	19.33	2.28
1.167	1.40	7.250	2.28	13.333	6.85	19.42	2.28
1.250	1.40	7.333	2.79	13.417	6.85	19.50	2.28
1.333	1.40	7.417	2.79	13.500	6.85	19.58	2.28
1.417	1.40	7.500	2.79	13.583	6.85	19.67	2.28
1.500	1.40	7.583	2.79	13.667	6.85	19.75	2.28
1.583	1.40	7.667	2.79	13.750	6.85	19.83	2.28
1.667	1.40	7.750	2.79	13.833	5.33	19.92	2.28
1.750	1.40	7.833	2.79	13.917	5.33	20.00	2.28
1.833	1.40	7.917	2.79	14.000	5.33	20.08	2.28
1.917	1.40	8.000	2.79	14.083	5.33	20.17	2.28
2.000	1.40	8.083	2.79	14.167	5.33	20.25	2.28
2.083	1.40	8.167	2.79	14.250	5.33	20.33	1.52
2.167	1.40	8.250	2.79	14.333	3.81	20.42	1.52
2.250	1.40	8.333	3.30	14.417	3.81	20.50	1.52
2.333	1.65	8.417	3.30	14.500	3.81	20.58	1.52
2.417	1.65	8.500	3.30	14.583	3.81	20.67	1.52
2.500	1.65	8.583	3.30	14.667	3.81	20.75	1.52
2.583	1.65	8.667	3.30	14.750	3.81	20.83	1.52
2.667	1.65	8.750	3.30	14.833	3.81	20.92	1.52
2.750	1.65	8.833	3.55	14.917	3.81	21.00	1.52
2.833	1.65	8.917	3.55	15.000	3.81	21.08	1.52
2.917	1.65	9.000	3.55	15.083	3.81	21.17	1.52
3.000	1.65	9.083	3.55	15.167	3.81	21.25	1.52
3.083	1.65	9.167	3.55	15.250	3.81	21.33	1.52
3.167	1.65	9.250	3.55	15.333	3.81	21.42	1.52
3.250	1.65	9.333	4.06	15.417	3.81	21.50	1.52
3.333	1.65	9.417	4.06	15.500	3.81	21.58	1.52
3.417	1.65	9.500	4.06	15.583	3.81	21.67	1.52
3.500	1.65	9.583	4.06	15.667	3.81	21.75	1.52
3.583	1.65	9.667	4.06	15.750	3.81	21.83	1.52
3.667	1.65	9.750	4.06	15.833	3.81	21.92	1.52
3.750	1.65	9.833	4.57	15.917	3.81	22.00	1.52
3.833	1.65	9.917	4.57	16.000	3.81	22.08	1.52
3.917	1.65	10.000	4.57	16.083	3.81	22.17	1.52
4.000	1.65	10.083	4.57	16.167	3.81	22.25	1.52
4.083	1.65	10.167	4.57	16.250	3.81	22.33	1.52
4.167	1.65	10.250	4.57	16.333	2.28	22.42	1.52
4.250	1.65	10.333	5.84	16.417	2.28	22.50	1.52
4.333	2.03	10.417	5.84	16.500	2.28	22.58	1.52
4.417	2.03	10.500	5.84	16.583	2.28	22.67	1.52
4.500	2.03	10.583	5.84	16.667	2.28	22.75	1.52
4.583	2.03	10.667	5.84	16.750	2.28	22.83	1.52
4.667	2.03	10.750	5.84	16.833	2.28	22.92	1.52
4.750	2.03	10.833	7.87	16.917	2.28	23.00	1.52
4.833	2.03	10.917	7.87	17.000	2.28	23.08	1.52
4.917	2.03	11.000	7.87	17.083	2.28	23.17	1.52
5.000	2.03	11.083	7.87	17.167	2.28	23.25	1.52
5.083	2.03	11.167	7.87	17.250	2.28	23.33	1.52
5.167	2.03	11.250	7.87	17.333	2.28	23.42	1.52
5.250	2.03	11.333	12.18	17.417	2.28	23.50	1.52
5.333	2.03	11.417	12.18	17.500	2.28	23.58	1.52
5.417	2.03	11.500	12.18	17.583	2.28	23.67	1.52
5.500	2.03	11.583	12.18	17.667	2.28	23.75	1.52
5.583	2.03	11.667	12.18	17.750	2.28	23.83	1.52
5.667	2.03	11.750	12.18	17.833	2.28	23.92	1.52
5.750	2.03	11.833	37.56	17.917	2.28	24.00	1.52
5.833	2.03	11.917	37.57	18.000	2.28	24.08	1.52
5.917	2.03	12.000	37.57	18.083	2.28	24.17	1.52
6.000	2.03	12.083	155.32	18.167	2.28	24.25	1.52
6.083	2.03	12.167	155.34	18.250	2.28		

Unit Hyd Qpeak (cms)= 0.316

PEAK FLOW (cms)= 0.205 (i)
TIME TO PEAK (hrs)= 13.000
RUNOFF VOLUME (mm)= 34.323
TOTAL RAINFALL (mm)= 126.910
RUNOFF COEFFICIENT = 0.270

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB NASHYD (0010) ID= 1 DT= 5.0 min	Area (ha)= 14.85	Curve Number (CN)= 52.9
	Ia (mm)= 13.28	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.89	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.03	12.250	155.34	18.33	2.28
0.167	0.00	6.250	2.03	12.333	18.29	18.42	2.28
0.250	0.00	6.333	2.28	12.417	18.28	18.50	2.28
0.333	1.40	6.417	2.28	12.500	18.28	18.58	2.28
0.417	1.40	6.500	2.28	12.583	18.27	18.67	2.28
0.500	1.40	6.583	2.28	12.667	18.28	18.75	2.28
0.583	1.40	6.667	2.28	12.750	18.28	18.83	2.28
0.667	1.40	6.750	2.28	12.833	9.39	18.92	2.28
0.750	1.40	6.833	2.28	12.917	9.39	19.00	2.28
0.833	1.40	6.917	2.28	13.000	9.39	19.08	2.28
0.917	1.40	7.000	2.28	13.083	9.39	19.17	2.28
1.000	1.40	7.083	2.28	13.167	9.39	19.25	2.28
1.083	1.40	7.167	2.28	13.250	9.39	19.33	2.28
1.167	1.40	7.250	2.28	13.333	6.85	19.42	2.28
1.250	1.40	7.333	2.79	13.417	6.85	19.50	2.28
1.333	1.40	7.417	2.79	13.500	6.85	19.58	2.28
1.417	1.40	7.500	2.79	13.583	6.85	19.67	2.28
1.500	1.40	7.583	2.79	13.667	6.85	19.75	2.28
1.583	1.40	7.667	2.79	13.750	6.85	19.83	2.28
1.667	1.40	7.750	2.79	13.833	5.33	19.92	2.28
1.750	1.40	7.833	2.79	13.917	5.33	20.00	2.28
1.833	1.40	7.917	2.79	14.000	5.33	20.08	2.28
1.917	1.40	8.000	2.79	14.083	5.33	20.17	2.28
2.000	1.40	8.083	2.79	14.167	5.33	20.25	2.28
2.083	1.40	8.167	2.79	14.250	5.33	20.33	1.52
2.167	1.40	8.250	2.79	14.333	3.81	20.42	1.52
2.250	1.40	8.333	3.30	14.417	3.81	20.50	1.52
2.333	1.65	8.417	3.30	14.500	3.81	20.58	1.52
2.417	1.65	8.500	3.30	14.583	3.81	20.67	1.52
2.500	1.65	8.583	3.30	14.667	3.81	20.75	1.52
2.583	1.65	8.667	3.30	14.750	3.81	20.83	1.52
2.667	1.65	8.750	3.30	14.833	3.81	20.92	1.52
2.750	1.65	8.833	3.55	14.917	3.81	21.00	1.52
2.833	1.65	8.917	3.55	15.000	3.81	21.08	1.52
2.917	1.65	9.000	3.55	15.083	3.81	21.17	1.52
3.000	1.65	9.083	3.55	15.167	3.81	21.25	1.52
3.083	1.65	9.167	3.55	15.250	3.81	21.33	1.52
3.167	1.65	9.250	3.55	15.333	3.81	21.42	1.52
3.250	1.65	9.333	4.06	15.417	3.81	21.50	1.52
3.333	1.65	9.417	4.06	15.500	3.81	21.58	1.52
3.417	1.65	9.500	4.06	15.583	3.81	21.67	1.52
3.500	1.65	9.583	4.06	15.667	3.81	21.75	1.52
3.583	1.65	9.667	4.06	15.750	3.81	21.83	1.52
3.667	1.65	9.750	4.06	15.833	3.81	21.92	1.52
3.750	1.65	9.833	4.57	15.917	3.81	22.00	1.52
3.833	1.65	9.917	4.57	16.000	3.81	22.08	1.52
3.917	1.65	10.000	4.57	16.083	3.81	22.17	1.52
4.000	1.65	10.083	4.57	16.167	3.81	22.25	1.52
4.083	1.65	10.167	4.57	16.250	3.81	22.33	1.52
4.167	1.65	10.250	4.57	16.333	2.28	22.42	1.52
4.250	1.65	10.333	5.84	16.417	2.28	22.50	1.52
4.333	2.03	10.417	5.84	16.500	2.28	22.58	1.52
4.417	2.03	10.500	5.84	16.583	2.28	22.67	1.52
4.500	2.03	10.583	5.84	16.667	2.28	22.75	1.52
4.583	2.03	10.667	5.84	16.750	2.28	22.83	1.52
4.667	2.03	10.750	5.84	16.833	2.28	22.92	1.52
4.750	2.03	10.833	7.87	16.917	2.28	23.00	1.52
4.833	2.03	10.917	7.87	17.000	2.28	23.08	1.52
4.917	2.03	11.000	7.87	17.083	2.28	23.17	1.52
5.000	2.03	11.083	7.87	17.167	2.28	23.25	1.52
5.083	2.03	11.167	7.87	17.250	2.28	23.33	1.52
5.167	2.03	11.250	7.87	17.333	2.28	23.42	1.52
5.250	2.03	11.333	12.18	17.417	2.28	23.50	1.52
5.333	2.03	11.417	12.18	17.500	2.28	23.58	1.52
5.417	2.03	11.500	12.18	17.583	2.28	23.67	1.52
5.500	2.03	11.583	12.18	17.667	2.28	23.75	1.52
5.583	2.03	11.667	12.18	17.750	2.28	23.83	1.52
5.667	2.03	11.750	12.18	17.833	2.28	23.92	1.52
5.750	2.03	11.833	37.56	17.917	2.28	24.00	1.52
5.833	2.03	11.917	37.57	18.000	2.28	24.08	1.52
5.917	2.03	12.000	37.57	18.083	2.28	24.17	1.52
6.000	2.03	12.083	155.32	18.167	2.28	24.25	1.52
6.083	2.03	12.167	155.34	18.250	2.28		

Unit Hyd Qpeak (cms)= 0.637

PEAK FLOW (cms)= 0.478 (i)
TIME TO PEAK (hrs)= 13.083
RUNOFF VOLUME (mm)= 38.041
TOTAL RAINFALL (mm)= 126.910
RUNOFF COEFFICIENT = 0.300

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0013)	Area (ha)=	1.70	Curve Number (CN)=	60.5
ID= 1 DT= 5.0 min	Ia (mm)=	9.65	# of Linear Res.(N)=	3.00
	U.H. Tp(hrs)=	0.40		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.03	12.250	155.34	18.33	2.28
0.167	0.00	6.250	2.03	12.333	18.29	18.42	2.28
0.250	0.00	6.333	2.28	12.417	18.28	18.50	2.28
0.333	1.40	6.417	2.28	12.500	18.28	18.58	2.28
0.417	1.40	6.500	2.28	12.583	18.27	18.67	2.28
0.500	1.40	6.583	2.28	12.667	18.28	18.75	2.28
0.583	1.40	6.667	2.28	12.750	18.28	18.83	2.28
0.667	1.40	6.750	2.28	12.833	9.39	18.92	2.28
0.750	1.40	6.833	2.28	12.917	9.39	19.00	2.28
0.833	1.40	6.917	2.28	13.000	9.39	19.08	2.28
0.917	1.40	7.000	2.28	13.083	9.39	19.17	2.28
1.000	1.40	7.083	2.28	13.167	9.39	19.25	2.28
1.083	1.40	7.167	2.28	13.250	9.39	19.33	2.28
1.167	1.40	7.250	2.28	13.333	6.85	19.42	2.28
1.250	1.40	7.333	2.79	13.417	6.85	19.50	2.28
1.333	1.40	7.417	2.79	13.500	6.85	19.58	2.28
1.417	1.40	7.500	2.79	13.583	6.85	19.67	2.28
1.500	1.40	7.583	2.79	13.667	6.85	19.75	2.28
1.583	1.40	7.667	2.79	13.750	6.85	19.83	2.28
1.667	1.40	7.750	2.79	13.833	5.33	19.92	2.28
1.750	1.40	7.833	2.79	13.917	5.33	20.00	2.28
1.833	1.40	7.917	2.79	14.000	5.33	20.08	2.28
1.917	1.40	8.000	2.79	14.083	5.33	20.17	2.28
2.000	1.40	8.083	2.79	14.167	5.33	20.25	2.28
2.083	1.40	8.167	2.79	14.250	5.33	20.33	1.52
2.167	1.40	8.250	2.79	14.333	3.81	20.42	1.52
2.250	1.40	8.333	3.30	14.417	3.81	20.50	1.52
2.333	1.65	8.417	3.30	14.500	3.81	20.58	1.52
2.417	1.65	8.500	3.30	14.583	3.81	20.67	1.52
2.500	1.65	8.583	3.30	14.667	3.81	20.75	1.52
2.583	1.65	8.667	3.30	14.750	3.81	20.83	1.52
2.667	1.65	8.750	3.30	14.833	3.81	20.92	1.52
2.750	1.65	8.833	3.55	14.917	3.81	21.00	1.52
2.833	1.65	8.917	3.55	15.000	3.81	21.08	1.52
2.917	1.65	9.000	3.55	15.083	3.81	21.17	1.52
3.000	1.65	9.083	3.55	15.167	3.81	21.25	1.52
3.083	1.65	9.167	3.55	15.250	3.81	21.33	1.52
3.167	1.65	9.250	3.55	15.333	3.81	21.42	1.52
3.250	1.65	9.333	4.06	15.417	3.81	21.50	1.52
3.333	1.65	9.417	4.06	15.500	3.81	21.58	1.52
3.417	1.65	9.500	4.06	15.583	3.81	21.67	1.52
3.500	1.65	9.583	4.06	15.667	3.81	21.75	1.52
3.583	1.65	9.667	4.06	15.750	3.81	21.83	1.52
3.667	1.65	9.750	4.06	15.833	3.81	21.92	1.52
3.750	1.65	9.833	4.57	15.917	3.81	22.00	1.52
3.833	1.65	9.917	4.57	16.000	3.81	22.08	1.52
3.917	1.65	10.000	4.57	16.083	3.81	22.17	1.52
4.000	1.65	10.083	4.57	16.167	3.81	22.25	1.52
4.083	1.65	10.167	4.57	16.250	3.81	22.33	1.52
4.167	1.65	10.250	4.57	16.333	2.28	22.42	1.52
4.250	1.65	10.333	5.84	16.417	2.28	22.50	1.52
4.333	2.03	10.417	5.84	16.500	2.28	22.58	1.52
4.417	2.03	10.500	5.84	16.583	2.28	22.67	1.52
4.500	2.03	10.583	5.84	16.667	2.28	22.75	1.52
4.583	2.03	10.667	5.84	16.750	2.28	22.83	1.52
4.667	2.03	10.750	5.84	16.833	2.28	22.92	1.52
4.750	2.03	10.833	7.87	16.917	2.28	23.00	1.52
4.833	2.03	10.917	7.87	17.000	2.28	23.08	1.52
4.917	2.03	11.000	7.87	17.083	2.28	23.17	1.52
5.000	2.03	11.083	7.87	17.167	2.28	23.25	1.52
5.083	2.03	11.167	7.87	17.250	2.28	23.33	1.52
5.167	2.03	11.250	7.87	17.333	2.28	23.42	1.52
5.250	2.03	11.333	12.18	17.417	2.28	23.50	1.52
5.333	2.03	11.417	12.18	17.500	2.28	23.58	1.52
5.417	2.03	11.500	12.18	17.583	2.28	23.67	1.52
5.500	2.03	11.583	12.18	17.667	2.28	23.75	1.52
5.583	2.03	11.667	12.18	17.750	2.28	23.83	1.52
5.667	2.03	11.750	12.18	17.833	2.28	23.92	1.52
5.750	2.03	11.833	37.56	17.917	2.28	24.00	1.52
5.833	2.03	11.917	37.57	18.000	2.28	24.08	1.52
5.917	2.03	12.000	37.57	18.083	2.28	24.17	1.52
6.000	2.03	12.083	155.32	18.167	2.28	24.25	1.52
6.083	2.03	12.167	155.34	18.250	2.28		

Unit Hyd Qpeak (cms)= 0.162

PEAK FLOW (cms)= 0.128 (i)
TIME TO PEAK (hrs)= 12.500
RUNOFF VOLUME (mm)= 48.516
TOTAL RAINFALL (mm)= 126.910
RUNOFF COEFFICIENT = 0.382

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	
NASHYD (0014)	Area (ha)= 1.80 Curve Number (CN)= 50.0
ID= 1 DT= 5.0 min	Ia (mm)= 16.00 # of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.76

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.03	12.250	155.34	18.33	2.28

0.167	0.00	6.250	2.03	12.333	18.29	18.42	2.28
0.250	0.00	6.333	2.28	12.417	18.28	18.50	2.28
0.333	1.40	6.417	2.28	12.500	18.28	18.58	2.28
0.417	1.40	6.500	2.28	12.583	18.27	18.67	2.28
0.500	1.40	6.583	2.28	12.667	18.28	18.75	2.28
0.583	1.40	6.667	2.28	12.750	18.28	18.83	2.28
0.667	1.40	6.750	2.28	12.833	9.39	18.92	2.28
0.750	1.40	6.833	2.28	12.917	9.39	19.00	2.28
0.833	1.40	6.917	2.28	13.000	9.39	19.08	2.28
0.917	1.40	7.000	2.28	13.083	9.39	19.17	2.28
1.000	1.40	7.083	2.28	13.167	9.39	19.25	2.28
1.083	1.40	7.167	2.28	13.250	9.39	19.33	2.28
1.167	1.40	7.250	2.28	13.333	6.85	19.42	2.28
1.250	1.40	7.333	2.79	13.417	6.85	19.50	2.28
1.333	1.40	7.417	2.79	13.500	6.85	19.58	2.28
1.417	1.40	7.500	2.79	13.583	6.85	19.67	2.28
1.500	1.40	7.583	2.79	13.667	6.85	19.75	2.28
1.583	1.40	7.667	2.79	13.750	6.85	19.83	2.28
1.667	1.40	7.750	2.79	13.833	5.33	19.92	2.28
1.750	1.40	7.833	2.79	13.917	5.33	20.00	2.28
1.833	1.40	7.917	2.79	14.000	5.33	20.08	2.28
1.917	1.40	8.000	2.79	14.083	5.33	20.17	2.28
2.000	1.40	8.083	2.79	14.167	5.33	20.25	2.28
2.083	1.40	8.167	2.79	14.250	5.33	20.33	1.52
2.167	1.40	8.250	2.79	14.333	3.81	20.42	1.52
2.250	1.40	8.333	3.30	14.417	3.81	20.50	1.52
2.333	1.65	8.417	3.30	14.500	3.81	20.58	1.52
2.417	1.65	8.500	3.30	14.583	3.81	20.67	1.52
2.500	1.65	8.583	3.30	14.667	3.81	20.75	1.52
2.583	1.65	8.667	3.30	14.750	3.81	20.83	1.52
2.667	1.65	8.750	3.30	14.833	3.81	20.92	1.52
2.750	1.65	8.833	3.55	14.917	3.81	21.00	1.52
2.833	1.65	8.917	3.55	15.000	3.81	21.08	1.52
2.917	1.65	9.000	3.55	15.083	3.81	21.17	1.52
3.000	1.65	9.083	3.55	15.167	3.81	21.25	1.52
3.083	1.65	9.167	3.55	15.250	3.81	21.33	1.52
3.167	1.65	9.250	3.55	15.333	3.81	21.42	1.52
3.250	1.65	9.333	4.06	15.417	3.81	21.50	1.52
3.333	1.65	9.417	4.06	15.500	3.81	21.58	1.52
3.417	1.65	9.500	4.06	15.583	3.81	21.67	1.52
3.500	1.65	9.583	4.06	15.667	3.81	21.75	1.52
3.583	1.65	9.667	4.06	15.750	3.81	21.83	1.52
3.667	1.65	9.750	4.06	15.833	3.81	21.92	1.52
3.750	1.65	9.833	4.57	15.917	3.81	22.00	1.52
3.833	1.65	9.917	4.57	16.000	3.81	22.08	1.52
3.917	1.65	10.000	4.57	16.083	3.81	22.17	1.52
4.000	1.65	10.083	4.57	16.167	3.81	22.25	1.52
4.083	1.65	10.167	4.57	16.250	3.81	22.33	1.52
4.167	1.65	10.250	4.57	16.333	2.28	22.42	1.52
4.250	1.65	10.333	5.84	16.417	2.28	22.50	1.52
4.333	2.03	10.417	5.84	16.500	2.28	22.58	1.52
4.417	2.03	10.500	5.84	16.583	2.28	22.67	1.52
4.500	2.03	10.583	5.84	16.667	2.28	22.75	1.52
4.583	2.03	10.667	5.84	16.750	2.28	22.83	1.52
4.667	2.03	10.750	5.84	16.833	2.28	22.92	1.52
4.750	2.03	10.833	7.87	16.917	2.28	23.00	1.52
4.833	2.03	10.917	7.87	17.000	2.28	23.08	1.52
4.917	2.03	11.000	7.87	17.083	2.28	23.17	1.52
5.000	2.03	11.083	7.87	17.167	2.28	23.25	1.52
5.083	2.03	11.167	7.87	17.250	2.28	23.33	1.52
5.167	2.03	11.250	7.87	17.333	2.28	23.42	1.52
5.250	2.03	11.333	12.18	17.417	2.28	23.50	1.52
5.333	2.03	11.417	12.18	17.500	2.28	23.58	1.52
5.417	2.03	11.500	12.18	17.583	2.28	23.67	1.52
5.500	2.03	11.583	12.18	17.667	2.28	23.75	1.52
5.583	2.03	11.667	12.18	17.750	2.28	23.83	1.52
5.667	2.03	11.750	12.18	17.833	2.28	23.92	1.52
5.750	2.03	11.833	37.56	17.917	2.28	24.00	1.52
5.833	2.03	11.917	37.57	18.000	2.28	24.08	1.52
5.917	2.03	12.000	37.57	18.083	2.28	24.17	1.52
6.000	2.03	12.083	155.32	18.167	2.28	24.25	1.52
6.083	2.03	12.167	155.34	18.250	2.28		

Unit Hyd Qpeak (cms)= 0.090

PEAK FLOW (cms)= 0.057 (i)
TIME TO PEAK (hrs)= 13.000
RUNOFF VOLUME (mm)= 33.708
TOTAL RAINFALL (mm)= 126.910
RUNOFF COEFFICIENT = 0.266

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0015)	Area (ha)= 6.70	Curve Number (CN)= 60.0	
ID= 1 DT= 5.0 min	Ia (mm)= 10.00	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 1.45		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.03	12.250	155.34	18.33	2.28
0.167	0.00	6.250	2.03	12.333	18.29	18.42	2.28
0.250	0.00	6.333	2.28	12.417	18.28	18.50	2.28
0.333	1.40	6.417	2.28	12.500	18.28	18.58	2.28

0.417	1.40	6.500	2.28	12.583	18.27	18.67	2.28
0.500	1.40	6.583	2.28	12.667	18.28	18.75	2.28
0.583	1.40	6.667	2.28	12.750	18.28	18.83	2.28
0.667	1.40	6.750	2.28	12.833	9.39	18.92	2.28
0.750	1.40	6.833	2.28	12.917	9.39	19.00	2.28
0.833	1.40	6.917	2.28	13.000	9.39	19.08	2.28
0.917	1.40	7.000	2.28	13.083	9.39	19.17	2.28
1.000	1.40	7.083	2.28	13.167	9.39	19.25	2.28
1.083	1.40	7.167	2.28	13.250	9.39	19.33	2.28
1.167	1.40	7.250	2.28	13.333	6.85	19.42	2.28
1.250	1.40	7.333	2.79	13.417	6.85	19.50	2.28
1.333	1.40	7.417	2.79	13.500	6.85	19.58	2.28
1.417	1.40	7.500	2.79	13.583	6.85	19.67	2.28
1.500	1.40	7.583	2.79	13.667	6.85	19.75	2.28
1.583	1.40	7.667	2.79	13.750	6.85	19.83	2.28
1.667	1.40	7.750	2.79	13.833	5.33	19.92	2.28
1.750	1.40	7.833	2.79	13.917	5.33	20.00	2.28
1.833	1.40	7.917	2.79	14.000	5.33	20.08	2.28
1.917	1.40	8.000	2.79	14.083	5.33	20.17	2.28
2.000	1.40	8.083	2.79	14.167	5.33	20.25	2.28
2.083	1.40	8.167	2.79	14.250	5.33	20.33	1.52
2.167	1.40	8.250	2.79	14.333	3.81	20.42	1.52
2.250	1.40	8.333	3.30	14.417	3.81	20.50	1.52
2.333	1.65	8.417	3.30	14.500	3.81	20.58	1.52
2.417	1.65	8.500	3.30	14.583	3.81	20.67	1.52
2.500	1.65	8.583	3.30	14.667	3.81	20.75	1.52
2.583	1.65	8.667	3.30	14.750	3.81	20.83	1.52
2.667	1.65	8.750	3.30	14.833	3.81	20.92	1.52
2.750	1.65	8.833	3.55	14.917	3.81	21.00	1.52
2.833	1.65	8.917	3.55	15.000	3.81	21.08	1.52
2.917	1.65	9.000	3.55	15.083	3.81	21.17	1.52
3.000	1.65	9.083	3.55	15.167	3.81	21.25	1.52
3.083	1.65	9.167	3.55	15.250	3.81	21.33	1.52
3.167	1.65	9.250	3.55	15.333	3.81	21.42	1.52
3.250	1.65	9.333	4.06	15.417	3.81	21.50	1.52
3.333	1.65	9.417	4.06	15.500	3.81	21.58	1.52
3.417	1.65	9.500	4.06	15.583	3.81	21.67	1.52
3.500	1.65	9.583	4.06	15.667	3.81	21.75	1.52
3.583	1.65	9.667	4.06	15.750	3.81	21.83	1.52
3.667	1.65	9.750	4.06	15.833	3.81	21.92	1.52
3.750	1.65	9.833	4.57	15.917	3.81	22.00	1.52
3.833	1.65	9.917	4.57	16.000	3.81	22.08	1.52
3.917	1.65	10.000	4.57	16.083	3.81	22.17	1.52
4.000	1.65	10.083	4.57	16.167	3.81	22.25	1.52
4.083	1.65	10.167	4.57	16.250	3.81	22.33	1.52
4.167	1.65	10.250	4.57	16.333	2.28	22.42	1.52
4.250	1.65	10.333	5.84	16.417	2.28	22.50	1.52
4.333	2.03	10.417	5.84	16.500	2.28	22.58	1.52
4.417	2.03	10.500	5.84	16.583	2.28	22.67	1.52
4.500	2.03	10.583	5.84	16.667	2.28	22.75	1.52
4.583	2.03	10.667	5.84	16.750	2.28	22.83	1.52
4.667	2.03	10.750	5.84	16.833	2.28	22.92	1.52
4.750	2.03	10.833	7.87	16.917	2.28	23.00	1.52
4.833	2.03	10.917	7.87	17.000	2.28	23.08	1.52
4.917	2.03	11.000	7.87	17.083	2.28	23.17	1.52
5.000	2.03	11.083	7.87	17.167	2.28	23.25	1.52
5.083	2.03	11.167	7.87	17.250	2.28	23.33	1.52
5.167	2.03	11.250	7.87	17.333	2.28	23.42	1.52
5.250	2.03	11.333	12.18	17.417	2.28	23.50	1.52
5.333	2.03	11.417	12.18	17.500	2.28	23.58	1.52
5.417	2.03	11.500	12.18	17.583	2.28	23.67	1.52
5.500	2.03	11.583	12.18	17.667	2.28	23.75	1.52
5.583	2.03	11.667	12.18	17.750	2.28	23.83	1.52
5.667	2.03	11.750	12.18	17.833	2.28	23.92	1.52
5.750	2.03	11.833	37.56	17.917	2.28	24.00	1.52
5.833	2.03	11.917	37.57	18.000	2.28	24.08	1.52
5.917	2.03	12.000	37.57	18.083	2.28	24.17	1.52
6.000	2.03	12.083	155.32	18.167	2.28	24.25	1.52
6.083	2.03	12.167	155.34	18.250	2.28		

Unit Hyd Qpeak (cms)= 0.176

PEAK FLOW (cms)= 0.191 (i)
TIME TO PEAK (hrs)= 13.750
RUNOFF VOLUME (mm)= 47.749
TOTAL RAINFALL (mm)= 126.910
RUNOFF COEFFICIENT = 0.376

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	
NASHYD (0016)	Area (ha)= 29.16 Curve Number (CN)= 71.4
ID= 1 DT= 5.0 min	Ia (mm)= 7.88 # of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.68

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.03	12.250	155.34	18.33	2.28
0.167	0.00	6.250	2.03	12.333	18.29	18.42	2.28
0.250	0.00	6.333	2.28	12.417	18.28	18.50	2.28
0.333	1.40	6.417	2.28	12.500	18.28	18.58	2.28
0.417	1.40	6.500	2.28	12.583	18.27	18.67	2.28
0.500	1.40	6.583	2.28	12.667	18.28	18.75	2.28
0.583	1.40	6.667	2.28	12.750	18.28	18.83	2.28

0.667	1.40	6.750	2.28	12.833	9.39	18.92	2.28
0.750	1.40	6.833	2.28	12.917	9.39	19.00	2.28
0.833	1.40	6.917	2.28	13.000	9.39	19.08	2.28
0.917	1.40	7.000	2.28	13.083	9.39	19.17	2.28
1.000	1.40	7.083	2.28	13.167	9.39	19.25	2.28
1.083	1.40	7.167	2.28	13.250	9.39	19.33	2.28
1.167	1.40	7.250	2.28	13.333	6.85	19.42	2.28
1.250	1.40	7.333	2.79	13.417	6.85	19.50	2.28
1.333	1.40	7.417	2.79	13.500	6.85	19.58	2.28
1.417	1.40	7.500	2.79	13.583	6.85	19.67	2.28
1.500	1.40	7.583	2.79	13.667	6.85	19.75	2.28
1.583	1.40	7.667	2.79	13.750	6.85	19.83	2.28
1.667	1.40	7.750	2.79	13.833	5.33	19.92	2.28
1.750	1.40	7.833	2.79	13.917	5.33	20.00	2.28
1.833	1.40	7.917	2.79	14.000	5.33	20.08	2.28
1.917	1.40	8.000	2.79	14.083	5.33	20.17	2.28
2.000	1.40	8.083	2.79	14.167	5.33	20.25	2.28
2.083	1.40	8.167	2.79	14.250	5.33	20.33	1.52
2.167	1.40	8.250	2.79	14.333	3.81	20.42	1.52
2.250	1.40	8.333	3.30	14.417	3.81	20.50	1.52
2.333	1.65	8.417	3.30	14.500	3.81	20.58	1.52
2.417	1.65	8.500	3.30	14.583	3.81	20.67	1.52
2.500	1.65	8.583	3.30	14.667	3.81	20.75	1.52
2.583	1.65	8.667	3.30	14.750	3.81	20.83	1.52
2.667	1.65	8.750	3.30	14.833	3.81	20.92	1.52
2.750	1.65	8.833	3.55	14.917	3.81	21.00	1.52
2.833	1.65	8.917	3.55	15.000	3.81	21.08	1.52
2.917	1.65	9.000	3.55	15.083	3.81	21.17	1.52
3.000	1.65	9.083	3.55	15.167	3.81	21.25	1.52
3.083	1.65	9.167	3.55	15.250	3.81	21.33	1.52
3.167	1.65	9.250	3.55	15.333	3.81	21.42	1.52
3.250	1.65	9.333	4.06	15.417	3.81	21.50	1.52
3.333	1.65	9.417	4.06	15.500	3.81	21.58	1.52
3.417	1.65	9.500	4.06	15.583	3.81	21.67	1.52
3.500	1.65	9.583	4.06	15.667	3.81	21.75	1.52
3.583	1.65	9.667	4.06	15.750	3.81	21.83	1.52
3.667	1.65	9.750	4.06	15.833	3.81	21.92	1.52
3.750	1.65	9.833	4.57	15.917	3.81	22.00	1.52
3.833	1.65	9.917	4.57	16.000	3.81	22.08	1.52
3.917	1.65	10.000	4.57	16.083	3.81	22.17	1.52
4.000	1.65	10.083	4.57	16.167	3.81	22.25	1.52
4.083	1.65	10.167	4.57	16.250	3.81	22.33	1.52
4.167	1.65	10.250	4.57	16.333	2.28	22.42	1.52
4.250	1.65	10.333	5.84	16.417	2.28	22.50	1.52
4.333	2.03	10.417	5.84	16.500	2.28	22.58	1.52
4.417	2.03	10.500	5.84	16.583	2.28	22.67	1.52
4.500	2.03	10.583	5.84	16.667	2.28	22.75	1.52
4.583	2.03	10.667	5.84	16.750	2.28	22.83	1.52
4.667	2.03	10.750	5.84	16.833	2.28	22.92	1.52
4.750	2.03	10.833	7.87	16.917	2.28	23.00	1.52
4.833	2.03	10.917	7.87	17.000	2.28	23.08	1.52
4.917	2.03	11.000	7.87	17.083	2.28	23.17	1.52
5.000	2.03	11.083	7.87	17.167	2.28	23.25	1.52
5.083	2.03	11.167	7.87	17.250	2.28	23.33	1.52
5.167	2.03	11.250	7.87	17.333	2.28	23.42	1.52
5.250	2.03	11.333	12.18	17.417	2.28	23.50	1.52
5.333	2.03	11.417	12.18	17.500	2.28	23.58	1.52
5.417	2.03	11.500	12.18	17.583	2.28	23.67	1.52
5.500	2.03	11.583	12.18	17.667	2.28	23.75	1.52
5.583	2.03	11.667	12.18	17.750	2.28	23.83	1.52
5.667	2.03	11.750	12.18	17.833	2.28	23.92	1.52
5.750	2.03	11.833	37.56	17.917	2.28	24.00	1.52
5.833	2.03	11.917	37.57	18.000	2.28	24.08	1.52
5.917	2.03	12.000	37.57	18.083	2.28	24.17	1.52
6.000	2.03	12.083	155.32	18.167	2.28	24.25	1.52
6.083	2.03	12.167	155.34	18.250	2.28		

Unit Hyd Qpeak (cms)= 1.638

PEAK FLOW (cms)= 2.033 (i)
TIME TO PEAK (hrs)= 12.833
RUNOFF VOLUME (mm)= 64.174
TOTAL RAINFALL (mm)= 126.910
RUNOFF COEFFICIENT = 0.506

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0019)	Area (ha)= 39.68	Curve Number (CN)= 60.7	
ID= 1 DT= 5.0 min	Ia (mm)= 8.26	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 1.18		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.03	12.250	155.34	18.33	2.28
0.167	0.00	6.250	2.03	12.333	18.29	18.42	2.28
0.250	0.00	6.333	2.28	12.417	18.28	18.50	2.28
0.333	1.40	6.417	2.28	12.500	18.28	18.58	2.28
0.417	1.40	6.500	2.28	12.583	18.27	18.67	2.28
0.500	1.40	6.583	2.28	12.667	18.28	18.75	2.28
0.583	1.40	6.667	2.28	12.750	18.28	18.83	2.28
0.667	1.40	6.750	2.28	12.833	9.39	18.92	2.28
0.750	1.40	6.833	2.28	12.917	9.39	19.00	2.28
0.833	1.40	6.917	2.28	13.000	9.39	19.08	2.28

0.917	1.40	7.000	2.28	13.083	9.39	19.17	2.28
1.000	1.40	7.083	2.28	13.167	9.39	19.25	2.28
1.083	1.40	7.167	2.28	13.250	9.39	19.33	2.28
1.167	1.40	7.250	2.28	13.333	6.85	19.42	2.28
1.250	1.40	7.333	2.79	13.417	6.85	19.50	2.28
1.333	1.40	7.417	2.79	13.500	6.85	19.58	2.28
1.417	1.40	7.500	2.79	13.583	6.85	19.67	2.28
1.500	1.40	7.583	2.79	13.667	6.85	19.75	2.28
1.583	1.40	7.667	2.79	13.750	6.85	19.83	2.28
1.667	1.40	7.750	2.79	13.833	5.33	19.92	2.28
1.750	1.40	7.833	2.79	13.917	5.33	20.00	2.28
1.833	1.40	7.917	2.79	14.000	5.33	20.08	2.28
1.917	1.40	8.000	2.79	14.083	5.33	20.17	2.28
2.000	1.40	8.083	2.79	14.167	5.33	20.25	2.28
2.083	1.40	8.167	2.79	14.250	5.33	20.33	1.52
2.167	1.40	8.250	2.79	14.333	3.81	20.42	1.52
2.250	1.40	8.333	3.30	14.417	3.81	20.50	1.52
2.333	1.65	8.417	3.30	14.500	3.81	20.58	1.52
2.417	1.65	8.500	3.30	14.583	3.81	20.67	1.52
2.500	1.65	8.583	3.30	14.667	3.81	20.75	1.52
2.583	1.65	8.667	3.30	14.750	3.81	20.83	1.52
2.667	1.65	8.750	3.30	14.833	3.81	20.92	1.52
2.750	1.65	8.833	3.55	14.917	3.81	21.00	1.52
2.833	1.65	8.917	3.55	15.000	3.81	21.08	1.52
2.917	1.65	9.000	3.55	15.083	3.81	21.17	1.52
3.000	1.65	9.083	3.55	15.167	3.81	21.25	1.52
3.083	1.65	9.167	3.55	15.250	3.81	21.33	1.52
3.167	1.65	9.250	3.55	15.333	3.81	21.42	1.52
3.250	1.65	9.333	4.06	15.417	3.81	21.50	1.52
3.333	1.65	9.417	4.06	15.500	3.81	21.58	1.52
3.417	1.65	9.500	4.06	15.583	3.81	21.67	1.52
3.500	1.65	9.583	4.06	15.667	3.81	21.75	1.52
3.583	1.65	9.667	4.06	15.750	3.81	21.83	1.52
3.667	1.65	9.750	4.06	15.833	3.81	21.92	1.52
3.750	1.65	9.833	4.57	15.917	3.81	22.00	1.52
3.833	1.65	9.917	4.57	16.000	3.81	22.08	1.52
3.917	1.65	10.000	4.57	16.083	3.81	22.17	1.52
4.000	1.65	10.083	4.57	16.167	3.81	22.25	1.52
4.083	1.65	10.167	4.57	16.250	3.81	22.33	1.52
4.167	1.65	10.250	4.57	16.333	2.28	22.42	1.52
4.250	1.65	10.333	5.84	16.417	2.28	22.50	1.52
4.333	2.03	10.417	5.84	16.500	2.28	22.58	1.52
4.417	2.03	10.500	5.84	16.583	2.28	22.67	1.52
4.500	2.03	10.583	5.84	16.667	2.28	22.75	1.52
4.583	2.03	10.667	5.84	16.750	2.28	22.83	1.52
4.667	2.03	10.750	5.84	16.833	2.28	22.92	1.52
4.750	2.03	10.833	7.87	16.917	2.28	23.00	1.52
4.833	2.03	10.917	7.87	17.000	2.28	23.08	1.52
4.917	2.03	11.000	7.87	17.083	2.28	23.17	1.52
5.000	2.03	11.083	7.87	17.167	2.28	23.25	1.52
5.083	2.03	11.167	7.87	17.250	2.28	23.33	1.52
5.167	2.03	11.250	7.87	17.333	2.28	23.42	1.52
5.250	2.03	11.333	12.18	17.417	2.28	23.50	1.52
5.333	2.03	11.417	12.18	17.500	2.28	23.58	1.52
5.417	2.03	11.500	12.18	17.583	2.28	23.67	1.52
5.500	2.03	11.583	12.18	17.667	2.28	23.75	1.52
5.583	2.03	11.667	12.18	17.750	2.28	23.83	1.52
5.667	2.03	11.750	12.18	17.833	2.28	23.92	1.52
5.750	2.03	11.833	37.56	17.917	2.28	24.00	1.52
5.833	2.03	11.917	37.57	18.000	2.28	24.08	1.52
5.917	2.03	12.000	37.57	18.083	2.28	24.17	1.52
6.000	2.03	12.083	155.32	18.167	2.28	24.25	1.52
6.083	2.03	12.167	155.34	18.250	2.28		

Unit Hyd Qpeak (cms)= 1.284

PEAK FLOW (cms)= 1.380 (i)
TIME TO PEAK (hrs)= 13.417
RUNOFF VOLUME (mm)= 49.691
TOTAL RAINFALL (mm)= 126.910
RUNOFF COEFFICIENT = 0.392

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0024)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0010):	14.85	0.478	13.08	38.04
+ ID2= 2 (0013):	1.70	0.128	12.50	48.52
ID = 3 (0024):	16.55	0.552	13.00	39.12

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0024):	16.55	0.552	13.00	39.12
+ ID2= 2 (0014):	1.80	0.057	13.00	33.71
ID = 1 (0024):	18.35	0.609	13.00	38.59

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

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--------------------
| ADD HYD  (  0024)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 1 (  0024):    18.35   0.609    13.00    38.59
      + ID2= 2 (  0015):     6.70   0.191    13.75    47.75
        ================================================
        ID = 3 (  0024):    25.05   0.761    13.08    41.04

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0024)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 3 (  0024):    25.05   0.761    13.08    41.04
      + ID2= 2 (  0016):    29.16   2.033    12.83    64.17
        ================================================
        ID = 1 (  0024):    54.21   2.763    12.92    53.48

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0024)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 1 (  0024):    54.21   2.763    12.92    53.48
      + ID2= 2 (  0019):    39.68   1.380    13.42    49.69
        ================================================
        ID = 3 (  0024):    93.89   3.958    13.00    51.88

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
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--------------------
| ADD HYD  (  0024)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 3 (  0024):    93.89   3.958    13.00    51.88
      + ID2= 2 (  0007):   100.92   2.350    14.08    44.40
        ================================================
        ID = 1 (  0024):   194.81   5.728    13.25    48.00

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
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--------------------
| ADD HYD  (  0024)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 1 (  0024):   194.81   5.728    13.25    48.00
      + ID2= 2 (  0008):    23.99   0.588    13.25    31.28
        ================================================
        ID = 3 (  0024):   218.80   6.316    13.25    46.17

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
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--------------------
| ADD HYD  (  0024)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 3 (  0024):   218.80   6.316    13.25    46.17
      + ID2= 2 (  0009):     6.37   0.205    13.00    34.32
        ================================================
        ID = 1 (  0024):   225.17   6.509    13.25    45.83

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
--------------------
| CALIB            |
| NASHYD   (  0011)|   Area    (ha)=  46.28   Curve Number   (CN)= 72.2
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.09   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.30

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                              ---- TRANSFORMED HYETOGRAPH ----
  TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
   hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
 0.083    0.00 | 6.167    2.03 |12.250  155.34 | 18.33    2.28
 0.167    0.00 | 6.250    2.03 |12.333   18.29 | 18.42    2.28
 0.250    0.00 | 6.333    2.28 |12.417   18.28 | 18.50    2.28
 0.333    1.40 | 6.417    2.28 |12.500   18.28 | 18.58    2.28
 0.417    1.40 | 6.500    2.28 |12.583   18.27 | 18.67    2.28
 0.500    1.40 | 6.583    2.28 |12.667   18.28 | 18.75    2.28
 0.583    1.40 | 6.667    2.28 |12.750   18.28 | 18.83    2.28
 0.667    1.40 | 6.750    2.28 |12.833    9.39 | 18.92    2.28
 0.750    1.40 | 6.833    2.28 |12.917    9.39 | 19.00    2.28
 0.833    1.40 | 6.917    2.28 |13.000    9.39 | 19.08    2.28
 0.917    1.40 | 7.000    2.28 |13.083    9.39 | 19.17    2.28
 1.000    1.40 | 7.083    2.28 |13.167    9.39 | 19.25    2.28
 1.083    1.40 | 7.167    2.28 |13.250    9.39 | 19.33    2.28
 1.167    1.40 | 7.250    2.28 |13.333    6.85 | 19.42    2.28
 1.250    1.40 | 7.333    2.79 |13.417    6.85 | 19.50    2.28
 1.333    1.40 | 7.417    2.79 |13.500    6.85 | 19.58    2.28
 1.417    1.40 | 7.500    2.79 |13.583    6.85 | 19.67    2.28
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1.500	1.40	7.583	2.79	13.667	6.85	19.75	2.28
1.583	1.40	7.667	2.79	13.750	6.85	19.83	2.28
1.667	1.40	7.750	2.79	13.833	5.33	19.92	2.28
1.750	1.40	7.833	2.79	13.917	5.33	20.00	2.28
1.833	1.40	7.917	2.79	14.000	5.33	20.08	2.28
1.917	1.40	8.000	2.79	14.083	5.33	20.17	2.28
2.000	1.40	8.083	2.79	14.167	5.33	20.25	2.28
2.083	1.40	8.167	2.79	14.250	5.33	20.33	1.52
2.167	1.40	8.250	2.79	14.333	3.81	20.42	1.52
2.250	1.40	8.333	3.30	14.417	3.81	20.50	1.52
2.333	1.65	8.417	3.30	14.500	3.81	20.58	1.52
2.417	1.65	8.500	3.30	14.583	3.81	20.67	1.52
2.500	1.65	8.583	3.30	14.667	3.81	20.75	1.52
2.583	1.65	8.667	3.30	14.750	3.81	20.83	1.52
2.667	1.65	8.750	3.30	14.833	3.81	20.92	1.52
2.750	1.65	8.833	3.55	14.917	3.81	21.00	1.52
2.833	1.65	8.917	3.55	15.000	3.81	21.08	1.52
2.917	1.65	9.000	3.55	15.083	3.81	21.17	1.52
3.000	1.65	9.083	3.55	15.167	3.81	21.25	1.52
3.083	1.65	9.167	3.55	15.250	3.81	21.33	1.52
3.167	1.65	9.250	3.55	15.333	3.81	21.42	1.52
3.250	1.65	9.333	4.06	15.417	3.81	21.50	1.52
3.333	1.65	9.417	4.06	15.500	3.81	21.58	1.52
3.417	1.65	9.500	4.06	15.583	3.81	21.67	1.52
3.500	1.65	9.583	4.06	15.667	3.81	21.75	1.52
3.583	1.65	9.667	4.06	15.750	3.81	21.83	1.52
3.667	1.65	9.750	4.06	15.833	3.81	21.92	1.52
3.750	1.65	9.833	4.57	15.917	3.81	22.00	1.52
3.833	1.65	9.917	4.57	16.000	3.81	22.08	1.52
3.917	1.65	10.000	4.57	16.083	3.81	22.17	1.52
4.000	1.65	10.083	4.57	16.167	3.81	22.25	1.52
4.083	1.65	10.167	4.57	16.250	3.81	22.33	1.52
4.167	1.65	10.250	4.57	16.333	2.28	22.42	1.52
4.250	1.65	10.333	5.84	16.417	2.28	22.50	1.52
4.333	2.03	10.417	5.84	16.500	2.28	22.58	1.52
4.417	2.03	10.500	5.84	16.583	2.28	22.67	1.52
4.500	2.03	10.583	5.84	16.667	2.28	22.75	1.52
4.583	2.03	10.667	5.84	16.750	2.28	22.83	1.52
4.667	2.03	10.750	5.84	16.833	2.28	22.92	1.52
4.750	2.03	10.833	7.87	16.917	2.28	23.00	1.52
4.833	2.03	10.917	7.87	17.000	2.28	23.08	1.52
4.917	2.03	11.000	7.87	17.083	2.28	23.17	1.52
5.000	2.03	11.083	7.87	17.167	2.28	23.25	1.52
5.083	2.03	11.167	7.87	17.250	2.28	23.33	1.52
5.167	2.03	11.250	7.87	17.333	2.28	23.42	1.52
5.250	2.03	11.333	12.18	17.417	2.28	23.50	1.52
5.333	2.03	11.417	12.18	17.500	2.28	23.58	1.52
5.417	2.03	11.500	12.18	17.583	2.28	23.67	1.52
5.500	2.03	11.583	12.18	17.667	2.28	23.75	1.52
5.583	2.03	11.667	12.18	17.750	2.28	23.83	1.52
5.667	2.03	11.750	12.18	17.833	2.28	23.92	1.52
5.750	2.03	11.833	37.56	17.917	2.28	24.00	1.52
5.833	2.03	11.917	37.57	18.000	2.28	24.08	1.52
5.917	2.03	12.000	37.57	18.083	2.28	24.17	1.52
6.000	2.03	12.083	155.32	18.167	2.28	24.25	1.52
6.083	2.03	12.167	155.34	18.250	2.28		

Unit Hyd Qpeak (cms)= 5.892

PEAK FLOW (cms)= 6.036 (i)
TIME TO PEAK (hrs)= 12.417
RUNOFF VOLUME (mm)= 65.931
TOTAL RAINFALL (mm)= 126.910
RUNOFF COEFFICIENT = 0.520

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0012)	Area (ha)= 1.13	Curve Number (CN)= 67.4	
ID= 1 DT= 5.0 min	Ia (mm)= 7.88	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.43		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.03	12.250	155.34	18.33	2.28
0.167	0.00	6.250	2.03	12.333	18.29	18.42	2.28
0.250	0.00	6.333	2.28	12.417	18.28	18.50	2.28
0.333	1.40	6.417	2.28	12.500	18.28	18.58	2.28
0.417	1.40	6.500	2.28	12.583	18.27	18.67	2.28
0.500	1.40	6.583	2.28	12.667	18.28	18.75	2.28
0.583	1.40	6.667	2.28	12.750	18.28	18.83	2.28
0.667	1.40	6.750	2.28	12.833	9.39	18.92	2.28
0.750	1.40	6.833	2.28	12.917	9.39	19.00	2.28
0.833	1.40	6.917	2.28	13.000	9.39	19.08	2.28
0.917	1.40	7.000	2.28	13.083	9.39	19.17	2.28
1.000	1.40	7.083	2.28	13.167	9.39	19.25	2.28
1.083	1.40	7.167	2.28	13.250	9.39	19.33	2.28
1.167	1.40	7.250	2.28	13.333	6.85	19.42	2.28
1.250	1.40	7.333	2.79	13.417	6.85	19.50	2.28
1.333	1.40	7.417	2.79	13.500	6.85	19.58	2.28
1.417	1.40	7.500	2.79	13.583	6.85	19.67	2.28
1.500	1.40	7.583	2.79	13.667	6.85	19.75	2.28
1.583	1.40	7.667	2.79	13.750	6.85	19.83	2.28
1.667	1.40	7.750	2.79	13.833	5.33	19.92	2.28

1.750	1.40	7.833	2.79	13.917	5.33	20.00	2.28
1.833	1.40	7.917	2.79	14.000	5.33	20.08	2.28
1.917	1.40	8.000	2.79	14.083	5.33	20.17	2.28
2.000	1.40	8.083	2.79	14.167	5.33	20.25	2.28
2.083	1.40	8.167	2.79	14.250	5.33	20.33	1.52
2.167	1.40	8.250	2.79	14.333	3.81	20.42	1.52
2.250	1.40	8.333	3.30	14.417	3.81	20.50	1.52
2.333	1.65	8.417	3.30	14.500	3.81	20.58	1.52
2.417	1.65	8.500	3.30	14.583	3.81	20.67	1.52
2.500	1.65	8.583	3.30	14.667	3.81	20.75	1.52
2.583	1.65	8.667	3.30	14.750	3.81	20.83	1.52
2.667	1.65	8.750	3.30	14.833	3.81	20.92	1.52
2.750	1.65	8.833	3.55	14.917	3.81	21.00	1.52
2.833	1.65	8.917	3.55	15.000	3.81	21.08	1.52
2.917	1.65	9.000	3.55	15.083	3.81	21.17	1.52
3.000	1.65	9.083	3.55	15.167	3.81	21.25	1.52
3.083	1.65	9.167	3.55	15.250	3.81	21.33	1.52
3.167	1.65	9.250	3.55	15.333	3.81	21.42	1.52
3.250	1.65	9.333	4.06	15.417	3.81	21.50	1.52
3.333	1.65	9.417	4.06	15.500	3.81	21.58	1.52
3.417	1.65	9.500	4.06	15.583	3.81	21.67	1.52
3.500	1.65	9.583	4.06	15.667	3.81	21.75	1.52
3.583	1.65	9.667	4.06	15.750	3.81	21.83	1.52
3.667	1.65	9.750	4.06	15.833	3.81	21.92	1.52
3.750	1.65	9.833	4.57	15.917	3.81	22.00	1.52
3.833	1.65	9.917	4.57	16.000	3.81	22.08	1.52
3.917	1.65	10.000	4.57	16.083	3.81	22.17	1.52
4.000	1.65	10.083	4.57	16.167	3.81	22.25	1.52
4.083	1.65	10.167	4.57	16.250	3.81	22.33	1.52
4.167	1.65	10.250	4.57	16.333	2.28	22.42	1.52
4.250	1.65	10.333	5.84	16.417	2.28	22.50	1.52
4.333	2.03	10.417	5.84	16.500	2.28	22.58	1.52
4.417	2.03	10.500	5.84	16.583	2.28	22.67	1.52
4.500	2.03	10.583	5.84	16.667	2.28	22.75	1.52
4.583	2.03	10.667	5.84	16.750	2.28	22.83	1.52
4.667	2.03	10.750	5.84	16.833	2.28	22.92	1.52
4.750	2.03	10.833	7.87	16.917	2.28	23.00	1.52
4.833	2.03	10.917	7.87	17.000	2.28	23.08	1.52
4.917	2.03	11.000	7.87	17.083	2.28	23.17	1.52
5.000	2.03	11.083	7.87	17.167	2.28	23.25	1.52
5.083	2.03	11.167	7.87	17.250	2.28	23.33	1.52
5.167	2.03	11.250	7.87	17.333	2.28	23.42	1.52
5.250	2.03	11.333	12.18	17.417	2.28	23.50	1.52
5.333	2.03	11.417	12.18	17.500	2.28	23.58	1.52
5.417	2.03	11.500	12.18	17.583	2.28	23.67	1.52
5.500	2.03	11.583	12.18	17.667	2.28	23.75	1.52
5.583	2.03	11.667	12.18	17.750	2.28	23.83	1.52
5.667	2.03	11.750	12.18	17.833	2.28	23.92	1.52
5.750	2.03	11.833	37.56	17.917	2.28	24.00	1.52
5.833	2.03	11.917	37.57	18.000	2.28	24.08	1.52
5.917	2.03	12.000	37.57	18.083	2.28	24.17	1.52
6.000	2.03	12.083	155.32	18.167	2.28	24.25	1.52
6.083	2.03	12.167	155.34	18.250	2.28		

Unit Hyd Qpeak (cms)= 0.100

PEAK FLOW (cms)= 0.099 (i)
TIME TO PEAK (hrs)= 12.583
RUNOFF VOLUME (mm)= 58.514
TOTAL RAINFALL (mm)= 126.910
RUNOFF COEFFICIENT = 0.461

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0041)	Area (ha)=	0.59	Curve Number (CN)= 71.5
ID= 1 DT= 5.0 min	Ia (mm)=	4.75	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	0.53	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.03	12.250	155.34	18.33	2.28
0.167	0.00	6.250	2.03	12.333	18.29	18.42	2.28
0.250	0.00	6.333	2.28	12.417	18.28	18.50	2.28
0.333	1.40	6.417	2.28	12.500	18.28	18.58	2.28
0.417	1.40	6.500	2.28	12.583	18.27	18.67	2.28
0.500	1.40	6.583	2.28	12.667	18.28	18.75	2.28
0.583	1.40	6.667	2.28	12.750	18.28	18.83	2.28
0.667	1.40	6.750	2.28	12.833	9.39	18.92	2.28
0.750	1.40	6.833	2.28	12.917	9.39	19.00	2.28
0.833	1.40	6.917	2.28	13.000	9.39	19.08	2.28
0.917	1.40	7.000	2.28	13.083	9.39	19.17	2.28
1.000	1.40	7.083	2.28	13.167	9.39	19.25	2.28
1.083	1.40	7.167	2.28	13.250	9.39	19.33	2.28
1.167	1.40	7.250	2.28	13.333	6.85	19.42	2.28
1.250	1.40	7.333	2.79	13.417	6.85	19.50	2.28
1.333	1.40	7.417	2.79	13.500	6.85	19.58	2.28
1.417	1.40	7.500	2.79	13.583	6.85	19.67	2.28
1.500	1.40	7.583	2.79	13.667	6.85	19.75	2.28
1.583	1.40	7.667	2.79	13.750	6.85	19.83	2.28
1.667	1.40	7.750	2.79	13.833	5.33	19.92	2.28
1.750	1.40	7.833	2.79	13.917	5.33	20.00	2.28
1.833	1.40	7.917	2.79	14.000	5.33	20.08	2.28
1.917	1.40	8.000	2.79	14.083	5.33	20.17	2.28

2.000	1.40	8.083	2.79	14.167	5.33	20.25	2.28
2.083	1.40	8.167	2.79	14.250	5.33	20.33	1.52
2.167	1.40	8.250	2.79	14.333	3.81	20.42	1.52
2.250	1.40	8.333	3.30	14.417	3.81	20.50	1.52
2.333	1.65	8.417	3.30	14.500	3.81	20.58	1.52
2.417	1.65	8.500	3.30	14.583	3.81	20.67	1.52
2.500	1.65	8.583	3.30	14.667	3.81	20.75	1.52
2.583	1.65	8.667	3.30	14.750	3.81	20.83	1.52
2.667	1.65	8.750	3.30	14.833	3.81	20.92	1.52
2.750	1.65	8.833	3.55	14.917	3.81	21.00	1.52
2.833	1.65	8.917	3.55	15.000	3.81	21.08	1.52
2.917	1.65	9.000	3.55	15.083	3.81	21.17	1.52
3.000	1.65	9.083	3.55	15.167	3.81	21.25	1.52
3.083	1.65	9.167	3.55	15.250	3.81	21.33	1.52
3.167	1.65	9.250	3.55	15.333	3.81	21.42	1.52
3.250	1.65	9.333	4.06	15.417	3.81	21.50	1.52
3.333	1.65	9.417	4.06	15.500	3.81	21.58	1.52
3.417	1.65	9.500	4.06	15.583	3.81	21.67	1.52
3.500	1.65	9.583	4.06	15.667	3.81	21.75	1.52
3.583	1.65	9.667	4.06	15.750	3.81	21.83	1.52
3.667	1.65	9.750	4.06	15.833	3.81	21.92	1.52
3.750	1.65	9.833	4.57	15.917	3.81	22.00	1.52
3.833	1.65	9.917	4.57	16.000	3.81	22.08	1.52
3.917	1.65	10.000	4.57	16.083	3.81	22.17	1.52
4.000	1.65	10.083	4.57	16.167	3.81	22.25	1.52
4.083	1.65	10.167	4.57	16.250	3.81	22.33	1.52
4.167	1.65	10.250	4.57	16.333	2.28	22.42	1.52
4.250	1.65	10.333	5.84	16.417	2.28	22.50	1.52
4.333	2.03	10.417	5.84	16.500	2.28	22.58	1.52
4.417	2.03	10.500	5.84	16.583	2.28	22.67	1.52
4.500	2.03	10.583	5.84	16.667	2.28	22.75	1.52
4.583	2.03	10.667	5.84	16.750	2.28	22.83	1.52
4.667	2.03	10.750	5.84	16.833	2.28	22.92	1.52
4.750	2.03	10.833	7.87	16.917	2.28	23.00	1.52
4.833	2.03	10.917	7.87	17.000	2.28	23.08	1.52
4.917	2.03	11.000	7.87	17.083	2.28	23.17	1.52
5.000	2.03	11.083	7.87	17.167	2.28	23.25	1.52
5.083	2.03	11.167	7.87	17.250	2.28	23.33	1.52
5.167	2.03	11.250	7.87	17.333	2.28	23.42	1.52
5.250	2.03	11.333	12.18	17.417	2.28	23.50	1.52
5.333	2.03	11.417	12.18	17.500	2.28	23.58	1.52
5.417	2.03	11.500	12.18	17.583	2.28	23.67	1.52
5.500	2.03	11.583	12.18	17.667	2.28	23.75	1.52
5.583	2.03	11.667	12.18	17.750	2.28	23.83	1.52
5.667	2.03	11.750	12.18	17.833	2.28	23.92	1.52
5.750	2.03	11.833	37.56	17.917	2.28	24.00	1.52
5.833	2.03	11.917	37.57	18.000	2.28	24.08	1.52
5.917	2.03	12.000	37.57	18.083	2.28	24.17	1.52
6.000	2.03	12.083	155.32	18.167	2.28	24.25	1.52
6.083	2.03	12.167	155.34	18.250	2.28		

Unit Hyd Qpeak (cms)= 0.043

PEAK FLOW (cms)= 0.051 (i)
TIME TO PEAK (hrs)= 12.667
RUNOFF VOLUME (mm)= 66.734
TOTAL RAINFALL (mm)= 126.910
RUNOFF COEFFICIENT = 0.526

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0028)	Area (ha)=	1.38	Curve Number (CN)= 64.1
ID= 1 DT= 5.0 min	Ia (mm)=	8.51	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	0.39	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.03	12.250	155.34	18.33	2.28
0.167	0.00	6.250	2.03	12.333	18.29	18.42	2.28
0.250	0.00	6.333	2.28	12.417	18.28	18.50	2.28
0.333	1.40	6.417	2.28	12.500	18.28	18.58	2.28
0.417	1.40	6.500	2.28	12.583	18.27	18.67	2.28
0.500	1.40	6.583	2.28	12.667	18.28	18.75	2.28
0.583	1.40	6.667	2.28	12.750	18.28	18.83	2.28
0.667	1.40	6.750	2.28	12.833	9.39	18.92	2.28
0.750	1.40	6.833	2.28	12.917	9.39	19.00	2.28
0.833	1.40	6.917	2.28	13.000	9.39	19.08	2.28
0.917	1.40	7.000	2.28	13.083	9.39	19.17	2.28
1.000	1.40	7.083	2.28	13.167	9.39	19.25	2.28
1.083	1.40	7.167	2.28	13.250	9.39	19.33	2.28
1.167	1.40	7.250	2.28	13.333	6.85	19.42	2.28
1.250	1.40	7.333	2.79	13.417	6.85	19.50	2.28
1.333	1.40	7.417	2.79	13.500	6.85	19.58	2.28
1.417	1.40	7.500	2.79	13.583	6.85	19.67	2.28
1.500	1.40	7.583	2.79	13.667	6.85	19.75	2.28
1.583	1.40	7.667	2.79	13.750	6.85	19.83	2.28
1.667	1.40	7.750	2.79	13.833	5.33	19.92	2.28
1.750	1.40	7.833	2.79	13.917	5.33	20.00	2.28
1.833	1.40	7.917	2.79	14.000	5.33	20.08	2.28
1.917	1.40	8.000	2.79	14.083	5.33	20.17	2.28
2.000	1.40	8.083	2.79	14.167	5.33	20.25	2.28
2.083	1.40	8.167	2.79	14.250	5.33	20.33	1.52
2.167	1.40	8.250	2.79	14.333	3.81	20.42	1.52

2.250	1.40	8.333	3.30	14.417	3.81	20.50	1.52
2.333	1.65	8.417	3.30	14.500	3.81	20.58	1.52
2.417	1.65	8.500	3.30	14.583	3.81	20.67	1.52
2.500	1.65	8.583	3.30	14.667	3.81	20.75	1.52
2.583	1.65	8.667	3.30	14.750	3.81	20.83	1.52
2.667	1.65	8.750	3.30	14.833	3.81	20.92	1.52
2.750	1.65	8.833	3.55	14.917	3.81	21.00	1.52
2.833	1.65	8.917	3.55	15.000	3.81	21.08	1.52
2.917	1.65	9.000	3.55	15.083	3.81	21.17	1.52
3.000	1.65	9.083	3.55	15.167	3.81	21.25	1.52
3.083	1.65	9.167	3.55	15.250	3.81	21.33	1.52
3.167	1.65	9.250	3.55	15.333	3.81	21.42	1.52
3.250	1.65	9.333	4.06	15.417	3.81	21.50	1.52
3.333	1.65	9.417	4.06	15.500	3.81	21.58	1.52
3.417	1.65	9.500	4.06	15.583	3.81	21.67	1.52
3.500	1.65	9.583	4.06	15.667	3.81	21.75	1.52
3.583	1.65	9.667	4.06	15.750	3.81	21.83	1.52
3.667	1.65	9.750	4.06	15.833	3.81	21.92	1.52
3.750	1.65	9.833	4.57	15.917	3.81	22.00	1.52
3.833	1.65	9.917	4.57	16.000	3.81	22.08	1.52
3.917	1.65	10.000	4.57	16.083	3.81	22.17	1.52
4.000	1.65	10.083	4.57	16.167	3.81	22.25	1.52
4.083	1.65	10.167	4.57	16.250	3.81	22.33	1.52
4.167	1.65	10.250	4.57	16.333	2.28	22.42	1.52
4.250	1.65	10.333	5.84	16.417	2.28	22.50	1.52
4.333	2.03	10.417	5.84	16.500	2.28	22.58	1.52
4.417	2.03	10.500	5.84	16.583	2.28	22.67	1.52
4.500	2.03	10.583	5.84	16.667	2.28	22.75	1.52
4.583	2.03	10.667	5.84	16.750	2.28	22.83	1.52
4.667	2.03	10.750	5.84	16.833	2.28	22.92	1.52
4.750	2.03	10.833	7.87	16.917	2.28	23.00	1.52
4.833	2.03	10.917	7.87	17.000	2.28	23.08	1.52
4.917	2.03	11.000	7.87	17.083	2.28	23.17	1.52
5.000	2.03	11.083	7.87	17.167	2.28	23.25	1.52
5.083	2.03	11.167	7.87	17.250	2.28	23.33	1.52
5.167	2.03	11.250	7.87	17.333	2.28	23.42	1.52
5.250	2.03	11.333	12.18	17.417	2.28	23.50	1.52
5.333	2.03	11.417	12.18	17.500	2.28	23.58	1.52
5.417	2.03	11.500	12.18	17.583	2.28	23.67	1.52
5.500	2.03	11.583	12.18	17.667	2.28	23.75	1.52
5.583	2.03	11.667	12.18	17.750	2.28	23.83	1.52
5.667	2.03	11.750	12.18	17.833	2.28	23.92	1.52
5.750	2.03	11.833	37.56	17.917	2.28	24.00	1.52
5.833	2.03	11.917	37.57	18.000	2.28	24.08	1.52
5.917	2.03	12.000	37.57	18.083	2.28	24.17	1.52
6.000	2.03	12.083	155.32	18.167	2.28	24.25	1.52
6.083	2.03	12.167	155.34	18.250	2.28		

Unit Hyd Qpeak (cms)= 0.135

PEAK FLOW (cms)= 0.119 (i)
TIME TO PEAK (hrs)= 12.500
RUNOFF VOLUME (mm)= 53.825
TOTAL RAINFALL (mm)= 126.910
RUNOFF COEFFICIENT = 0.424

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	
STANDHYD (0044)	Area (ha)= 1.62
ID= 1 DT= 5.0 min	Total Imp(%)= 48.77 Dir. Conn.(%)= 30.86

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.79	0.83
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	1.40
Length	(m)=	103.92	400.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.03	12.250	155.34	18.33	2.28
0.167	0.00	6.250	2.03	12.333	18.29	18.42	2.28
0.250	0.00	6.333	2.28	12.417	18.28	18.50	2.28
0.333	1.40	6.417	2.28	12.500	18.28	18.58	2.28
0.417	1.40	6.500	2.28	12.583	18.27	18.67	2.28
0.500	1.40	6.583	2.28	12.667	18.28	18.75	2.28
0.583	1.40	6.667	2.28	12.750	18.28	18.83	2.28
0.667	1.40	6.750	2.28	12.833	9.39	18.92	2.28
0.750	1.40	6.833	2.28	12.917	9.39	19.00	2.28
0.833	1.40	6.917	2.28	13.000	9.39	19.08	2.28
0.917	1.40	7.000	2.28	13.083	9.39	19.17	2.28
1.000	1.40	7.083	2.28	13.167	9.39	19.25	2.28
1.083	1.40	7.167	2.28	13.250	9.39	19.33	2.28
1.167	1.40	7.250	2.28	13.333	6.85	19.42	2.28
1.250	1.40	7.333	2.79	13.417	6.85	19.50	2.28
1.333	1.40	7.417	2.79	13.500	6.85	19.58	2.28
1.417	1.40	7.500	2.79	13.583	6.85	19.67	2.28
1.500	1.40	7.583	2.79	13.667	6.85	19.75	2.28
1.583	1.40	7.667	2.79	13.750	6.85	19.83	2.28
1.667	1.40	7.750	2.79	13.833	5.33	19.92	2.28
1.750	1.40	7.833	2.79	13.917	5.33	20.00	2.28
1.833	1.40	7.917	2.79	14.000	5.33	20.08	2.28
1.917	1.40	8.000	2.79	14.083	5.33	20.17	2.28

2.000	1.40	8.083	2.79	14.167	5.33	20.25	2.28
2.083	1.40	8.167	2.79	14.250	5.33	20.33	1.52
2.167	1.40	8.250	2.79	14.333	3.81	20.42	1.52
2.250	1.40	8.333	3.30	14.417	3.81	20.50	1.52
2.333	1.65	8.417	3.30	14.500	3.81	20.58	1.52
2.417	1.65	8.500	3.30	14.583	3.81	20.67	1.52
2.500	1.65	8.583	3.30	14.667	3.81	20.75	1.52
2.583	1.65	8.667	3.30	14.750	3.81	20.83	1.52
2.667	1.65	8.750	3.30	14.833	3.81	20.92	1.52
2.750	1.65	8.833	3.55	14.917	3.81	21.00	1.52
2.833	1.65	8.917	3.55	15.000	3.81	21.08	1.52
2.917	1.65	9.000	3.55	15.083	3.81	21.17	1.52
3.000	1.65	9.083	3.55	15.167	3.81	21.25	1.52
3.083	1.65	9.167	3.55	15.250	3.81	21.33	1.52
3.167	1.65	9.250	3.55	15.333	3.81	21.42	1.52
3.250	1.65	9.333	4.06	15.417	3.81	21.50	1.52
3.333	1.65	9.417	4.06	15.500	3.81	21.58	1.52
3.417	1.65	9.500	4.06	15.583	3.81	21.67	1.52
3.500	1.65	9.583	4.06	15.667	3.81	21.75	1.52
3.583	1.65	9.667	4.06	15.750	3.81	21.83	1.52
3.667	1.65	9.750	4.06	15.833	3.81	21.92	1.52
3.750	1.65	9.833	4.57	15.917	3.81	22.00	1.52
3.833	1.65	9.917	4.57	16.000	3.81	22.08	1.52
3.917	1.65	10.000	4.57	16.083	3.81	22.17	1.52
4.000	1.65	10.083	4.57	16.167	3.81	22.25	1.52
4.083	1.65	10.167	4.57	16.250	3.81	22.33	1.52
4.167	1.65	10.250	4.57	16.333	2.28	22.42	1.52
4.250	1.65	10.333	5.84	16.417	2.28	22.50	1.52
4.333	2.03	10.417	5.84	16.500	2.28	22.58	1.52
4.417	2.03	10.500	5.84	16.583	2.28	22.67	1.52
4.500	2.03	10.583	5.84	16.667	2.28	22.75	1.52
4.583	2.03	10.667	5.84	16.750	2.28	22.83	1.52
4.667	2.03	10.750	5.84	16.833	2.28	22.92	1.52
4.750	2.03	10.833	7.87	16.917	2.28	23.00	1.52
4.833	2.03	10.917	7.87	17.000	2.28	23.08	1.52
4.917	2.03	11.000	7.87	17.083	2.28	23.17	1.52
5.000	2.03	11.083	7.87	17.167	2.28	23.25	1.52
5.083	2.03	11.167	7.87	17.250	2.28	23.33	1.52
5.167	2.03	11.250	7.87	17.333	2.28	23.42	1.52
5.250	2.03	11.333	12.18	17.417	2.28	23.50	1.52
5.333	2.03	11.417	12.18	17.500	2.28	23.58	1.52
5.417	2.03	11.500	12.18	17.583	2.28	23.67	1.52
5.500	2.03	11.583	12.18	17.667	2.28	23.75	1.52
5.583	2.03	11.667	12.18	17.750	2.28	23.83	1.52
5.667	2.03	11.750	12.18	17.833	2.28	23.92	1.52
5.750	2.03	11.833	37.56	17.917	2.28	24.00	1.52
5.833	2.03	11.917	37.57	18.000	2.28	24.08	1.52
5.917	2.03	12.000	37.57	18.083	2.28	24.17	1.52
6.000	2.03	12.083	155.32	18.167	2.28	24.25	1.52
6.083	2.03	12.167	155.34	18.250	2.28		

Max.Eff.Inten.(mm/hr)=	155.34	65.97	
over (min)	5.00	40.00	
Storage Coeff. (min)=	2.70 (ii)	39.63 (ii)	
Unit Hyd. Tpeak (min)=	5.00	40.00	
Unit Hyd. peak (cms)=	0.29	0.03	
			TOTALS
PEAK FLOW (cms)=	0.22	0.10	0.254 (iii)
TIME TO PEAK (hrs)=	12.25	12.75	12.25
RUNOFF VOLUME (mm)=	125.91	73.06	89.36
TOTAL RAINFALL (mm)=	126.91	126.91	126.91
RUNOFF COEFFICIENT =	0.99	0.58	0.70

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (0043)
ID= 1 DT= 5.0 min

Area (ha)= 0.13
Total Imp(%)= 30.77 Dir. Conn.(%)= 7.69

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.04	0.09
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	0.50
Length	(m)=	29.44	70.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.03	12.250	155.34	18.33	2.28
0.167	0.00	6.250	2.03	12.333	18.29	18.42	2.28
0.250	0.00	6.333	2.28	12.417	18.28	18.50	2.28
0.333	1.40	6.417	2.28	12.500	18.28	18.58	2.28
0.417	1.40	6.500	2.28	12.583	18.27	18.67	2.28
0.500	1.40	6.583	2.28	12.667	18.28	18.75	2.28
0.583	1.40	6.667	2.28	12.750	18.28	18.83	2.28
0.667	1.40	6.750	2.28	12.833	9.39	18.92	2.28
0.750	1.40	6.833	2.28	12.917	9.39	19.00	2.28
0.833	1.40	6.917	2.28	13.000	9.39	19.08	2.28

0.917	1.40	7.000	2.28	13.083	9.39	19.17	2.28
1.000	1.40	7.083	2.28	13.167	9.39	19.25	2.28
1.083	1.40	7.167	2.28	13.250	9.39	19.33	2.28
1.167	1.40	7.250	2.28	13.333	6.85	19.42	2.28
1.250	1.40	7.333	2.79	13.417	6.85	19.50	2.28
1.333	1.40	7.417	2.79	13.500	6.85	19.58	2.28
1.417	1.40	7.500	2.79	13.583	6.85	19.67	2.28
1.500	1.40	7.583	2.79	13.667	6.85	19.75	2.28
1.583	1.40	7.667	2.79	13.750	6.85	19.83	2.28
1.667	1.40	7.750	2.79	13.833	5.33	19.92	2.28
1.750	1.40	7.833	2.79	13.917	5.33	20.00	2.28
1.833	1.40	7.917	2.79	14.000	5.33	20.08	2.28
1.917	1.40	8.000	2.79	14.083	5.33	20.17	2.28
2.000	1.40	8.083	2.79	14.167	5.33	20.25	2.28
2.083	1.40	8.167	2.79	14.250	5.33	20.33	1.52
2.167	1.40	8.250	2.79	14.333	3.81	20.42	1.52
2.250	1.40	8.333	3.30	14.417	3.81	20.50	1.52
2.333	1.65	8.417	3.30	14.500	3.81	20.58	1.52
2.417	1.65	8.500	3.30	14.583	3.81	20.67	1.52
2.500	1.65	8.583	3.30	14.667	3.81	20.75	1.52
2.583	1.65	8.667	3.30	14.750	3.81	20.83	1.52
2.667	1.65	8.750	3.30	14.833	3.81	20.92	1.52
2.750	1.65	8.833	3.55	14.917	3.81	21.00	1.52
2.833	1.65	8.917	3.55	15.000	3.81	21.08	1.52
2.917	1.65	9.000	3.55	15.083	3.81	21.17	1.52
3.000	1.65	9.083	3.55	15.167	3.81	21.25	1.52
3.083	1.65	9.167	3.55	15.250	3.81	21.33	1.52
3.167	1.65	9.250	3.55	15.333	3.81	21.42	1.52
3.250	1.65	9.333	4.06	15.417	3.81	21.50	1.52
3.333	1.65	9.417	4.06	15.500	3.81	21.58	1.52
3.417	1.65	9.500	4.06	15.583	3.81	21.67	1.52
3.500	1.65	9.583	4.06	15.667	3.81	21.75	1.52
3.583	1.65	9.667	4.06	15.750	3.81	21.83	1.52
3.667	1.65	9.750	4.06	15.833	3.81	21.92	1.52
3.750	1.65	9.833	4.57	15.917	3.81	22.00	1.52
3.833	1.65	9.917	4.57	16.000	3.81	22.08	1.52
3.917	1.65	10.000	4.57	16.083	3.81	22.17	1.52
4.000	1.65	10.083	4.57	16.167	3.81	22.25	1.52
4.083	1.65	10.167	4.57	16.250	3.81	22.33	1.52
4.167	1.65	10.250	4.57	16.333	2.28	22.42	1.52
4.250	1.65	10.333	5.84	16.417	2.28	22.50	1.52
4.333	2.03	10.417	5.84	16.500	2.28	22.58	1.52
4.417	2.03	10.500	5.84	16.583	2.28	22.67	1.52
4.500	2.03	10.583	5.84	16.667	2.28	22.75	1.52
4.583	2.03	10.667	5.84	16.750	2.28	22.83	1.52
4.667	2.03	10.750	5.84	16.833	2.28	22.92	1.52
4.750	2.03	10.833	7.87	16.917	2.28	23.00	1.52
4.833	2.03	10.917	7.87	17.000	2.28	23.08	1.52
4.917	2.03	11.000	7.87	17.083	2.28	23.17	1.52
5.000	2.03	11.083	7.87	17.167	2.28	23.25	1.52
5.083	2.03	11.167	7.87	17.250	2.28	23.33	1.52
5.167	2.03	11.250	7.87	17.333	2.28	23.42	1.52
5.250	2.03	11.333	12.18	17.417	2.28	23.50	1.52
5.333	2.03	11.417	12.18	17.500	2.28	23.58	1.52
5.417	2.03	11.500	12.18	17.583	2.28	23.67	1.52
5.500	2.03	11.583	12.18	17.667	2.28	23.75	1.52
5.583	2.03	11.667	12.18	17.750	2.28	23.83	1.52
5.667	2.03	11.750	12.18	17.833	2.28	23.92	1.52
5.750	2.03	11.833	37.56	17.917	2.28	24.00	1.52
5.833	2.03	11.917	37.57	18.000	2.28	24.08	1.52
5.917	2.03	12.000	37.57	18.083	2.28	24.17	1.52
6.000	2.03	12.083	155.32	18.167	2.28	24.25	1.52
6.083	2.03	12.167	155.34	18.250	2.28		

Max.Eff.Inten.(mm/hr)=	155.34	135.23	
over (min)	5.00	15.00	
Storage Coeff. (min)=	1.27 (ii)	14.53 (ii)	
Unit Hyd. Tpeak (min)=	5.00	15.00	
Unit Hyd. peak (cms)=	0.33	0.08	
			TOTALS
PEAK FLOW (cms)=	0.00	0.02	0.022 (iii)
TIME TO PEAK (hrs)=	12.25	12.33	12.25
RUNOFF VOLUME (mm)=	125.91	72.67	76.69
TOTAL RAINFALL (mm)=	126.91	126.91	126.91
RUNOFF COEFFICIENT =	0.99	0.57	0.60

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0023) 1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0011):	46.28	6.036	12.42	65.93
+ ID2= 2 (0012):	1.13	0.099	12.58	58.51
ID = 3 (0023):	47.41	6.128	12.42	65.75

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

```
--------------------
| ADD HYD  (  0023)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 3 (  0023):    47.41   6.128    12.42    65.75
      + ID2= 2 (  0028):     1.38   0.119    12.50    53.82
        ================================================
        ID = 1 (  0023):    48.79   6.242    12.42    65.42

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0023)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 1 (  0023):    48.79   6.242    12.42    65.42
      + ID2= 2 (  0041):     0.59   0.051    12.67    66.73
        ================================================
        ID = 3 (  0023):    49.38   6.284    12.42    65.43

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0023)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 3 (  0023):    49.38   6.284    12.42    65.43
      + ID2= 2 (  0043):     0.13   0.022    12.25    76.69
        ================================================
        ID = 1 (  0023):    49.51   6.304    12.42    65.46

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0023)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 1 (  0023):    49.51   6.304    12.42    65.46
      + ID2= 2 (  0044):     1.62   0.254    12.25    89.36
        ================================================
        ID = 3 (  0023):    51.13   6.396    12.42    66.22

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0025)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 1 (  0023):    51.13   6.396    12.42    66.22
      + ID2= 2 (  0024):   225.17   6.509    13.25    45.83
        ================================================
        ID = 3 (  0025):   276.30  10.067    12.50    49.61

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
================================================================================
========================

       V    V   I    SSSSS  U   U    A    L             (v 6.2.2020)
       V    V   I    SS     U   U   A A   L
        V  V    I     SS    U   U  AAAAA  L
        V  V    I      SS   U   U  A   A  L
         VV     I    SSSSS  UUUUU  A   A  LLLLL

        OOO   TTTTT  TTTTT  H   H  Y   Y  M   M   OOO    TM
       O   O    T      T    H   H   Y Y   MM MM  O   O
       O   O    T      T    H   H    Y    M   M  O   O
        OOO     T      T    H   H    Y    M   M   OOO
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                  *****  D E T A I L E D   O U T P U T *****


  Input   filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat

  Output  filename:
C:\Users\msimon\AppData\Local\Civica\VH5\a122c840-259d-4b92-8a43-b1e7a592bdea\3c4af
9c3-1cc3-4766-89f0-e2a2229c65d4\scena
  Summary filename:
C:\Users\msimon\AppData\Local\Civica\VH5\a122c840-259d-4b92-8a43-b1e7a592bdea\3c4af
9c3-1cc3-4766-89f0-e2a2229c65d4\scena


DATE: 07-15-2026                          TIME: 03:17:49

USER:


COMMENTS: _____________________________________________________________

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  ***********************************************
  ** SIMULATION : L - 100-year SCS              **
  ***********************************************


--------------------
|    READ STORM    |    Filename: C:\Users\msimon\AppD
|                  |              ata\Local\Temp\
|                  |              2578c1bc-683b-4555-9960-7d3c657f7fff\6e9bf3ab
| Ptotal=139.48 mm |    Comments: 100yr 24hr 15min SCS Type II (MTO) - 15%
--------------------
```

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.00	0.00	6.25	2.51	12.50	20.09	18.75	2.51
0.25	1.53	6.50	2.51	12.75	10.32	19.00	2.51
0.50	1.53	6.75	2.51	13.00	10.32	19.25	2.51
0.75	1.53	7.00	2.51	13.25	7.53	19.50	2.51
1.00	1.53	7.25	3.07	13.50	7.53	19.75	2.51
1.25	1.53	7.50	3.07	13.75	5.86	20.00	2.51
1.50	1.53	7.75	3.07	14.00	5.86	20.25	1.67
1.75	1.53	8.00	3.07	14.25	4.18	20.50	1.67
2.00	1.53	8.25	3.63	14.50	4.18	20.75	1.67
2.25	1.81	8.50	3.63	14.75	4.18	21.00	1.67
2.50	1.81	8.75	3.91	15.00	4.18	21.25	1.67
2.75	1.81	9.00	3.91	15.25	4.18	21.50	1.67
3.00	1.81	9.25	4.46	15.50	4.18	21.75	1.67
3.25	1.81	9.50	4.46	15.75	4.18	22.00	1.67
3.50	1.81	9.75	5.02	16.00	4.18	22.25	1.67
3.75	1.81	10.00	5.02	16.25	2.51	22.50	1.67
4.00	1.81	10.25	6.42	16.50	2.51	22.75	1.67
4.25	2.23	10.50	6.42	16.75	2.51	23.00	1.67
4.50	2.23	10.75	8.65	17.00	2.51	23.25	1.67
4.75	2.23	11.00	8.65	17.25	2.51	23.50	1.67
5.00	2.23	11.25	13.39	17.50	2.51	23.75	1.67
5.25	2.23	11.50	13.39	17.75	2.51	24.00	1.67
5.50	2.23	11.75	41.29	18.00	2.51		
5.75	2.23	12.00	170.72	18.25	2.51		
6.00	2.23	12.25	20.09	18.50	2.51		

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--------------------------------------------------------------------------------


--------------------
| CALIB            |
| NASHYD   (  0007)|   Area    (ha)= 100.92   Curve Number   (CN)= 55.9
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.89   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   1.70

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.
```

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.23	12.250	170.72	18.33	2.51
0.167	0.00	6.250	2.23	12.333	20.10	18.42	2.51
0.250	0.00	6.333	2.51	12.417	20.09	18.50	2.51
0.333	1.53	6.417	2.51	12.500	20.09	18.58	2.51
0.417	1.53	6.500	2.51	12.583	20.09	18.67	2.51
0.500	1.53	6.583	2.51	12.667	20.09	18.75	2.51
0.583	1.53	6.667	2.51	12.750	20.09	18.83	2.51
0.667	1.53	6.750	2.51	12.833	10.32	18.92	2.51
0.750	1.53	6.833	2.51	12.917	10.32	19.00	2.51
0.833	1.53	6.917	2.51	13.000	10.32	19.08	2.51
0.917	1.53	7.000	2.51	13.083	10.32	19.17	2.51
1.000	1.53	7.083	2.51	13.167	10.32	19.25	2.51
1.083	1.53	7.167	2.51	13.250	10.32	19.33	2.51
1.167	1.53	7.250	2.51	13.333	7.53	19.42	2.51
1.250	1.53	7.333	3.07	13.417	7.53	19.50	2.51
1.333	1.53	7.417	3.07	13.500	7.53	19.58	2.51
1.417	1.53	7.500	3.07	13.583	7.53	19.67	2.51
1.500	1.53	7.583	3.07	13.667	7.53	19.75	2.51
1.583	1.53	7.667	3.07	13.750	7.53	19.83	2.51
1.667	1.53	7.750	3.07	13.833	5.86	19.92	2.51
1.750	1.53	7.833	3.07	13.917	5.86	20.00	2.51
1.833	1.53	7.917	3.07	14.000	5.86	20.08	2.51
1.917	1.53	8.000	3.07	14.083	5.86	20.17	2.51
2.000	1.53	8.083	3.07	14.167	5.86	20.25	2.51
2.083	1.53	8.167	3.07	14.250	5.86	20.33	1.67
2.167	1.53	8.250	3.07	14.333	4.18	20.42	1.67
2.250	1.53	8.333	3.63	14.417	4.18	20.50	1.67
2.333	1.81	8.417	3.63	14.500	4.18	20.58	1.67
2.417	1.81	8.500	3.63	14.583	4.18	20.67	1.67
2.500	1.81	8.583	3.63	14.667	4.18	20.75	1.67
2.583	1.81	8.667	3.63	14.750	4.18	20.83	1.67
2.667	1.81	8.750	3.63	14.833	4.18	20.92	1.67
2.750	1.81	8.833	3.91	14.917	4.18	21.00	1.67
2.833	1.81	8.917	3.91	15.000	4.18	21.08	1.67
2.917	1.81	9.000	3.91	15.083	4.18	21.17	1.67
3.000	1.81	9.083	3.91	15.167	4.18	21.25	1.67
3.083	1.81	9.167	3.91	15.250	4.18	21.33	1.67
3.167	1.81	9.250	3.91	15.333	4.18	21.42	1.67
3.250	1.81	9.333	4.46	15.417	4.18	21.50	1.67
3.333	1.81	9.417	4.46	15.500	4.18	21.58	1.67
3.417	1.81	9.500	4.46	15.583	4.18	21.67	1.67
3.500	1.81	9.583	4.46	15.667	4.18	21.75	1.67
3.583	1.81	9.667	4.46	15.750	4.18	21.83	1.67
3.667	1.81	9.750	4.46	15.833	4.18	21.92	1.67
3.750	1.81	9.833	5.02	15.917	4.18	22.00	1.67
3.833	1.81	9.917	5.02	16.000	4.18	22.08	1.67

3.917	1.81	10.000	5.02	16.083	4.18	22.17	1.67
4.000	1.81	10.083	5.02	16.167	4.18	22.25	1.67
4.083	1.81	10.167	5.02	16.250	4.18	22.33	1.67
4.167	1.81	10.250	5.02	16.333	2.51	22.42	1.67
4.250	1.81	10.333	6.42	16.417	2.51	22.50	1.67
4.333	2.23	10.417	6.42	16.500	2.51	22.58	1.67
4.417	2.23	10.500	6.42	16.583	2.51	22.67	1.67
4.500	2.23	10.583	6.42	16.667	2.51	22.75	1.67
4.583	2.23	10.667	6.42	16.750	2.51	22.83	1.67
4.667	2.23	10.750	6.42	16.833	2.51	22.92	1.67
4.750	2.23	10.833	8.65	16.917	2.51	23.00	1.67
4.833	2.23	10.917	8.65	17.000	2.51	23.08	1.67
4.917	2.23	11.000	8.65	17.083	2.51	23.17	1.67
5.000	2.23	11.083	8.65	17.167	2.51	23.25	1.67
5.083	2.23	11.167	8.65	17.250	2.51	23.33	1.67
5.167	2.23	11.250	8.65	17.333	2.51	23.42	1.67
5.250	2.23	11.333	13.39	17.417	2.51	23.50	1.67
5.333	2.23	11.417	13.39	17.500	2.51	23.58	1.67
5.417	2.23	11.500	13.39	17.583	2.51	23.67	1.67
5.500	2.23	11.583	13.39	17.667	2.51	23.75	1.67
5.583	2.23	11.667	13.39	17.750	2.51	23.83	1.67
5.667	2.23	11.750	13.39	17.833	2.51	23.92	1.67
5.750	2.23	11.833	41.28	17.917	2.51	24.00	1.67
5.833	2.23	11.917	41.29	18.000	2.51	24.08	1.67
5.917	2.23	12.000	41.29	18.083	2.51	24.17	1.67
6.000	2.23	12.083	170.71	18.167	2.51	24.25	1.67
6.083	2.23	12.167	170.72	18.250	2.51		

Unit Hyd Qpeak (cms)= 2.267

PEAK FLOW (cms)= 2.776 (i)
TIME TO PEAK (hrs)= 14.083
RUNOFF VOLUME (mm)= 52.212
TOTAL RAINFALL (mm)= 139.480
RUNOFF COEFFICIENT = 0.374

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0008)	Area (ha)= 23.99	Curve Number (CN)= 44.7	
ID= 1 DT= 5.0 min	Ia (mm)= 10.91	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.97		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	6.167	2.23	12.250	170.72	18.33	2.51
0.167	0.00	6.250	2.23	12.333	20.10	18.42	2.51
0.250	0.00	6.333	2.51	12.417	20.09	18.50	2.51
0.333	1.53	6.417	2.51	12.500	20.09	18.58	2.51
0.417	1.53	6.500	2.51	12.583	20.09	18.67	2.51
0.500	1.53	6.583	2.51	12.667	20.09	18.75	2.51
0.583	1.53	6.667	2.51	12.750	20.09	18.83	2.51
0.667	1.53	6.750	2.51	12.833	10.32	18.92	2.51
0.750	1.53	6.833	2.51	12.917	10.32	19.00	2.51
0.833	1.53	6.917	2.51	13.000	10.32	19.08	2.51
0.917	1.53	7.000	2.51	13.083	10.32	19.17	2.51
1.000	1.53	7.083	2.51	13.167	10.32	19.25	2.51
1.083	1.53	7.167	2.51	13.250	10.32	19.33	2.51
1.167	1.53	7.250	2.51	13.333	7.53	19.42	2.51
1.250	1.53	7.333	3.07	13.417	7.53	19.50	2.51
1.333	1.53	7.417	3.07	13.500	7.53	19.58	2.51
1.417	1.53	7.500	3.07	13.583	7.53	19.67	2.51
1.500	1.53	7.583	3.07	13.667	7.53	19.75	2.51
1.583	1.53	7.667	3.07	13.750	7.53	19.83	2.51
1.667	1.53	7.750	3.07	13.833	5.86	19.92	2.51
1.750	1.53	7.833	3.07	13.917	5.86	20.00	2.51
1.833	1.53	7.917	3.07	14.000	5.86	20.08	2.51
1.917	1.53	8.000	3.07	14.083	5.86	20.17	2.51
2.000	1.53	8.083	3.07	14.167	5.86	20.25	2.51
2.083	1.53	8.167	3.07	14.250	5.86	20.33	1.67
2.167	1.53	8.250	3.07	14.333	4.18	20.42	1.67
2.250	1.53	8.333	3.63	14.417	4.18	20.50	1.67
2.333	1.81	8.417	3.63	14.500	4.18	20.58	1.67
2.417	1.81	8.500	3.63	14.583	4.18	20.67	1.67
2.500	1.81	8.583	3.63	14.667	4.18	20.75	1.67
2.583	1.81	8.667	3.63	14.750	4.18	20.83	1.67
2.667	1.81	8.750	3.63	14.833	4.18	20.92	1.67
2.750	1.81	8.833	3.91	14.917	4.18	21.00	1.67
2.833	1.81	8.917	3.91	15.000	4.18	21.08	1.67
2.917	1.81	9.000	3.91	15.083	4.18	21.17	1.67
3.000	1.81	9.083	3.91	15.167	4.18	21.25	1.67
3.083	1.81	9.167	3.91	15.250	4.18	21.33	1.67
3.167	1.81	9.250	3.91	15.333	4.18	21.42	1.67
3.250	1.81	9.333	4.46	15.417	4.18	21.50	1.67
3.333	1.81	9.417	4.46	15.500	4.18	21.58	1.67
3.417	1.81	9.500	4.46	15.583	4.18	21.67	1.67
3.500	1.81	9.583	4.46	15.667	4.18	21.75	1.67
3.583	1.81	9.667	4.46	15.750	4.18	21.83	1.67
3.667	1.81	9.750	4.46	15.833	4.18	21.92	1.67
3.750	1.81	9.833	5.02	15.917	4.18	22.00	1.67
3.833	1.81	9.917	5.02	16.000	4.18	22.08	1.67
3.917	1.81	10.000	5.02	16.083	4.18	22.17	1.67
4.000	1.81	10.083	5.02	16.167	4.18	22.25	1.67
4.083	1.81	10.167	5.02	16.250	4.18	22.33	1.67

4.167	1.81	10.250	5.02	16.333	2.51	22.42	1.67
4.250	1.81	10.333	6.42	16.417	2.51	22.50	1.67
4.333	2.23	10.417	6.42	16.500	2.51	22.58	1.67
4.417	2.23	10.500	6.42	16.583	2.51	22.67	1.67
4.500	2.23	10.583	6.42	16.667	2.51	22.75	1.67
4.583	2.23	10.667	6.42	16.750	2.51	22.83	1.67
4.667	2.23	10.750	6.42	16.833	2.51	22.92	1.67
4.750	2.23	10.833	8.65	16.917	2.51	23.00	1.67
4.833	2.23	10.917	8.65	17.000	2.51	23.08	1.67
4.917	2.23	11.000	8.65	17.083	2.51	23.17	1.67
5.000	2.23	11.083	8.65	17.167	2.51	23.25	1.67
5.083	2.23	11.167	8.65	17.250	2.51	23.33	1.67
5.167	2.23	11.250	8.65	17.333	2.51	23.42	1.67
5.250	2.23	11.333	13.39	17.417	2.51	23.50	1.67
5.333	2.23	11.417	13.39	17.500	2.51	23.58	1.67
5.417	2.23	11.500	13.39	17.583	2.51	23.67	1.67
5.500	2.23	11.583	13.39	17.667	2.51	23.75	1.67
5.583	2.23	11.667	13.39	17.750	2.51	23.83	1.67
5.667	2.23	11.750	13.39	17.833	2.51	23.92	1.67
5.750	2.23	11.833	41.28	17.917	2.51	24.00	1.67
5.833	2.23	11.917	41.29	18.000	2.51	24.08	1.67
5.917	2.23	12.000	41.29	18.083	2.51	24.17	1.67
6.000	2.23	12.083	170.71	18.167	2.51	24.25	1.67
6.083	2.23	12.167	170.72	18.250	2.51		

Unit Hyd Qpeak (cms)= 0.945

PEAK FLOW (cms)= 0.705 (i)
TIME TO PEAK (hrs)= 13.250
RUNOFF VOLUME (mm)= 37.331
TOTAL RAINFALL (mm)= 139.480
RUNOFF COEFFICIENT = 0.268

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0009)	Area (ha)= 6.37	Curve Number (CN)= 50.5	
ID= 1 DT= 5.0 min	Ia (mm)= 15.69	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.77		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.23	12.250	170.72	18.33	2.51
0.167	0.00	6.250	2.23	12.333	20.10	18.42	2.51
0.250	0.00	6.333	2.51	12.417	20.09	18.50	2.51
0.333	1.53	6.417	2.51	12.500	20.09	18.58	2.51
0.417	1.53	6.500	2.51	12.583	20.09	18.67	2.51
0.500	1.53	6.583	2.51	12.667	20.09	18.75	2.51
0.583	1.53	6.667	2.51	12.750	20.09	18.83	2.51
0.667	1.53	6.750	2.51	12.833	10.32	18.92	2.51
0.750	1.53	6.833	2.51	12.917	10.32	19.00	2.51
0.833	1.53	6.917	2.51	13.000	10.32	19.08	2.51
0.917	1.53	7.000	2.51	13.083	10.32	19.17	2.51
1.000	1.53	7.083	2.51	13.167	10.32	19.25	2.51
1.083	1.53	7.167	2.51	13.250	10.32	19.33	2.51
1.167	1.53	7.250	2.51	13.333	7.53	19.42	2.51
1.250	1.53	7.333	3.07	13.417	7.53	19.50	2.51
1.333	1.53	7.417	3.07	13.500	7.53	19.58	2.51
1.417	1.53	7.500	3.07	13.583	7.53	19.67	2.51
1.500	1.53	7.583	3.07	13.667	7.53	19.75	2.51
1.583	1.53	7.667	3.07	13.750	7.53	19.83	2.51
1.667	1.53	7.750	3.07	13.833	5.86	19.92	2.51
1.750	1.53	7.833	3.07	13.917	5.86	20.00	2.51
1.833	1.53	7.917	3.07	14.000	5.86	20.08	2.51
1.917	1.53	8.000	3.07	14.083	5.86	20.17	2.51
2.000	1.53	8.083	3.07	14.167	5.86	20.25	2.51
2.083	1.53	8.167	3.07	14.250	5.86	20.33	1.67
2.167	1.53	8.250	3.07	14.333	4.18	20.42	1.67
2.250	1.53	8.333	3.63	14.417	4.18	20.50	1.67
2.333	1.81	8.417	3.63	14.500	4.18	20.58	1.67
2.417	1.81	8.500	3.63	14.583	4.18	20.67	1.67
2.500	1.81	8.583	3.63	14.667	4.18	20.75	1.67
2.583	1.81	8.667	3.63	14.750	4.18	20.83	1.67
2.667	1.81	8.750	3.63	14.833	4.18	20.92	1.67
2.750	1.81	8.833	3.91	14.917	4.18	21.00	1.67
2.833	1.81	8.917	3.91	15.000	4.18	21.08	1.67
2.917	1.81	9.000	3.91	15.083	4.18	21.17	1.67
3.000	1.81	9.083	3.91	15.167	4.18	21.25	1.67
3.083	1.81	9.167	3.91	15.250	4.18	21.33	1.67
3.167	1.81	9.250	3.91	15.333	4.18	21.42	1.67
3.250	1.81	9.333	4.46	15.417	4.18	21.50	1.67
3.333	1.81	9.417	4.46	15.500	4.18	21.58	1.67
3.417	1.81	9.500	4.46	15.583	4.18	21.67	1.67
3.500	1.81	9.583	4.46	15.667	4.18	21.75	1.67
3.583	1.81	9.667	4.46	15.750	4.18	21.83	1.67
3.667	1.81	9.750	4.46	15.833	4.18	21.92	1.67
3.750	1.81	9.833	5.02	15.917	4.18	22.00	1.67
3.833	1.81	9.917	5.02	16.000	4.18	22.08	1.67
3.917	1.81	10.000	5.02	16.083	4.18	22.17	1.67
4.000	1.81	10.083	5.02	16.167	4.18	22.25	1.67
4.083	1.81	10.167	5.02	16.250	4.18	22.33	1.67
4.167	1.81	10.250	5.02	16.333	2.51	22.42	1.67
4.250	1.81	10.333	6.42	16.417	2.51	22.50	1.67
4.333	2.23	10.417	6.42	16.500	2.51	22.58	1.67

4.417	2.23	10.500	6.42	16.583	2.51	22.67	1.67
4.500	2.23	10.583	6.42	16.667	2.51	22.75	1.67
4.583	2.23	10.667	6.42	16.750	2.51	22.83	1.67
4.667	2.23	10.750	6.42	16.833	2.51	22.92	1.67
4.750	2.23	10.833	8.65	16.917	2.51	23.00	1.67
4.833	2.23	10.917	8.65	17.000	2.51	23.08	1.67
4.917	2.23	11.000	8.65	17.083	2.51	23.17	1.67
5.000	2.23	11.083	8.65	17.167	2.51	23.25	1.67
5.083	2.23	11.167	8.65	17.250	2.51	23.33	1.67
5.167	2.23	11.250	8.65	17.333	2.51	23.42	1.67
5.250	2.23	11.333	13.39	17.417	2.51	23.50	1.67
5.333	2.23	11.417	13.39	17.500	2.51	23.58	1.67
5.417	2.23	11.500	13.39	17.583	2.51	23.67	1.67
5.500	2.23	11.583	13.39	17.667	2.51	23.75	1.67
5.583	2.23	11.667	13.39	17.750	2.51	23.83	1.67
5.667	2.23	11.750	13.39	17.833	2.51	23.92	1.67
5.750	2.23	11.833	41.28	17.917	2.51	24.00	1.67
5.833	2.23	11.917	41.29	18.000	2.51	24.08	1.67
5.917	2.23	12.000	41.29	18.083	2.51	24.17	1.67
6.000	2.23	12.083	170.71	18.167	2.51	24.25	1.67
6.083	2.23	12.167	170.72	18.250	2.51		

Unit Hyd Qpeak (cms)= 0.316

PEAK FLOW (cms)= 0.247 (i)
TIME TO PEAK (hrs)= 13.000
RUNOFF VOLUME (mm)= 41.087
TOTAL RAINFALL (mm)= 139.480
RUNOFF COEFFICIENT = 0.295

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0010)	Area (ha)= 14.85	Curve Number (CN)= 52.9	
ID= 1 DT= 5.0 min	Ia (mm)= 13.28	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.89		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.23	12.250	170.72	18.33	2.51
0.167	0.00	6.250	2.23	12.333	20.10	18.42	2.51
0.250	0.00	6.333	2.51	12.417	20.09	18.50	2.51
0.333	1.53	6.417	2.51	12.500	20.09	18.58	2.51
0.417	1.53	6.500	2.51	12.583	20.09	18.67	2.51
0.500	1.53	6.583	2.51	12.667	20.09	18.75	2.51
0.583	1.53	6.667	2.51	12.750	20.09	18.83	2.51
0.667	1.53	6.750	2.51	12.833	10.32	18.92	2.51
0.750	1.53	6.833	2.51	12.917	10.32	19.00	2.51
0.833	1.53	6.917	2.51	13.000	10.32	19.08	2.51
0.917	1.53	7.000	2.51	13.083	10.32	19.17	2.51
1.000	1.53	7.083	2.51	13.167	10.32	19.25	2.51
1.083	1.53	7.167	2.51	13.250	10.32	19.33	2.51
1.167	1.53	7.250	2.51	13.333	7.53	19.42	2.51
1.250	1.53	7.333	3.07	13.417	7.53	19.50	2.51
1.333	1.53	7.417	3.07	13.500	7.53	19.58	2.51
1.417	1.53	7.500	3.07	13.583	7.53	19.67	2.51
1.500	1.53	7.583	3.07	13.667	7.53	19.75	2.51
1.583	1.53	7.667	3.07	13.750	7.53	19.83	2.51
1.667	1.53	7.750	3.07	13.833	5.86	19.92	2.51
1.750	1.53	7.833	3.07	13.917	5.86	20.00	2.51
1.833	1.53	7.917	3.07	14.000	5.86	20.08	2.51
1.917	1.53	8.000	3.07	14.083	5.86	20.17	2.51
2.000	1.53	8.083	3.07	14.167	5.86	20.25	2.51
2.083	1.53	8.167	3.07	14.250	5.86	20.33	1.67
2.167	1.53	8.250	3.07	14.333	4.18	20.42	1.67
2.250	1.53	8.333	3.63	14.417	4.18	20.50	1.67
2.333	1.81	8.417	3.63	14.500	4.18	20.58	1.67
2.417	1.81	8.500	3.63	14.583	4.18	20.67	1.67
2.500	1.81	8.583	3.63	14.667	4.18	20.75	1.67
2.583	1.81	8.667	3.63	14.750	4.18	20.83	1.67
2.667	1.81	8.750	3.63	14.833	4.18	20.92	1.67
2.750	1.81	8.833	3.91	14.917	4.18	21.00	1.67
2.833	1.81	8.917	3.91	15.000	4.18	21.08	1.67
2.917	1.81	9.000	3.91	15.083	4.18	21.17	1.67
3.000	1.81	9.083	3.91	15.167	4.18	21.25	1.67
3.083	1.81	9.167	3.91	15.250	4.18	21.33	1.67
3.167	1.81	9.250	3.91	15.333	4.18	21.42	1.67
3.250	1.81	9.333	4.46	15.417	4.18	21.50	1.67
3.333	1.81	9.417	4.46	15.500	4.18	21.58	1.67
3.417	1.81	9.500	4.46	15.583	4.18	21.67	1.67
3.500	1.81	9.583	4.46	15.667	4.18	21.75	1.67
3.583	1.81	9.667	4.46	15.750	4.18	21.83	1.67
3.667	1.81	9.750	4.46	15.833	4.18	21.92	1.67
3.750	1.81	9.833	5.02	15.917	4.18	22.00	1.67
3.833	1.81	9.917	5.02	16.000	4.18	22.08	1.67
3.917	1.81	10.000	5.02	16.083	4.18	22.17	1.67
4.000	1.81	10.083	5.02	16.167	4.18	22.25	1.67
4.083	1.81	10.167	5.02	16.250	4.18	22.33	1.67
4.167	1.81	10.250	5.02	16.333	2.51	22.42	1.67
4.250	1.81	10.333	6.42	16.417	2.51	22.50	1.67
4.333	2.23	10.417	6.42	16.500	2.51	22.58	1.67
4.417	2.23	10.500	6.42	16.583	2.51	22.67	1.67
4.500	2.23	10.583	6.42	16.667	2.51	22.75	1.67
4.583	2.23	10.667	6.42	16.750	2.51	22.83	1.67

4.667	2.23	10.750	6.42	16.833	2.51	22.92	1.67
4.750	2.23	10.833	8.65	16.917	2.51	23.00	1.67
4.833	2.23	10.917	8.65	17.000	2.51	23.08	1.67
4.917	2.23	11.000	8.65	17.083	2.51	23.17	1.67
5.000	2.23	11.083	8.65	17.167	2.51	23.25	1.67
5.083	2.23	11.167	8.65	17.250	2.51	23.33	1.67
5.167	2.23	11.250	8.65	17.333	2.51	23.42	1.67
5.250	2.23	11.333	13.39	17.417	2.51	23.50	1.67
5.333	2.23	11.417	13.39	17.500	2.51	23.58	1.67
5.417	2.23	11.500	13.39	17.583	2.51	23.67	1.67
5.500	2.23	11.583	13.39	17.667	2.51	23.75	1.67
5.583	2.23	11.667	13.39	17.750	2.51	23.83	1.67
5.667	2.23	11.750	13.39	17.833	2.51	23.92	1.67
5.750	2.23	11.833	41.28	17.917	2.51	24.00	1.67
5.833	2.23	11.917	41.29	18.000	2.51	24.08	1.67
5.917	2.23	12.000	41.29	18.083	2.51	24.17	1.67
6.000	2.23	12.083	170.71	18.167	2.51	24.25	1.67
6.083	2.23	12.167	170.72	18.250	2.51		

Unit Hyd Qpeak (cms)= 0.637

PEAK FLOW (cms)= 0.573 (i)
TIME TO PEAK (hrs)= 13.083
RUNOFF VOLUME (mm)= 45.247
TOTAL RAINFALL (mm)= 139.480
RUNOFF COEFFICIENT = 0.324

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0013)	Area (ha)=	1.70	Curve Number (CN)= 60.5
ID= 1 DT= 5.0 min	Ia (mm)=	9.65	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	0.40	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.23	12.250	170.72	18.33	2.51
0.167	0.00	6.250	2.23	12.333	20.10	18.42	2.51
0.250	0.00	6.333	2.51	12.417	20.09	18.50	2.51
0.333	1.53	6.417	2.51	12.500	20.09	18.58	2.51
0.417	1.53	6.500	2.51	12.583	20.09	18.67	2.51
0.500	1.53	6.583	2.51	12.667	20.09	18.75	2.51
0.583	1.53	6.667	2.51	12.750	20.09	18.83	2.51
0.667	1.53	6.750	2.51	12.833	10.32	18.92	2.51
0.750	1.53	6.833	2.51	12.917	10.32	19.00	2.51
0.833	1.53	6.917	2.51	13.000	10.32	19.08	2.51
0.917	1.53	7.000	2.51	13.083	10.32	19.17	2.51
1.000	1.53	7.083	2.51	13.167	10.32	19.25	2.51
1.083	1.53	7.167	2.51	13.250	10.32	19.33	2.51
1.167	1.53	7.250	2.51	13.333	7.53	19.42	2.51
1.250	1.53	7.333	3.07	13.417	7.53	19.50	2.51
1.333	1.53	7.417	3.07	13.500	7.53	19.58	2.51
1.417	1.53	7.500	3.07	13.583	7.53	19.67	2.51
1.500	1.53	7.583	3.07	13.667	7.53	19.75	2.51
1.583	1.53	7.667	3.07	13.750	7.53	19.83	2.51
1.667	1.53	7.750	3.07	13.833	5.86	19.92	2.51
1.750	1.53	7.833	3.07	13.917	5.86	20.00	2.51
1.833	1.53	7.917	3.07	14.000	5.86	20.08	2.51
1.917	1.53	8.000	3.07	14.083	5.86	20.17	2.51
2.000	1.53	8.083	3.07	14.167	5.86	20.25	2.51
2.083	1.53	8.167	3.07	14.250	5.86	20.33	1.67
2.167	1.53	8.250	3.07	14.333	4.18	20.42	1.67
2.250	1.53	8.333	3.63	14.417	4.18	20.50	1.67
2.333	1.81	8.417	3.63	14.500	4.18	20.58	1.67
2.417	1.81	8.500	3.63	14.583	4.18	20.67	1.67
2.500	1.81	8.583	3.63	14.667	4.18	20.75	1.67
2.583	1.81	8.667	3.63	14.750	4.18	20.83	1.67
2.667	1.81	8.750	3.63	14.833	4.18	20.92	1.67
2.750	1.81	8.833	3.91	14.917	4.18	21.00	1.67
2.833	1.81	8.917	3.91	15.000	4.18	21.08	1.67
2.917	1.81	9.000	3.91	15.083	4.18	21.17	1.67
3.000	1.81	9.083	3.91	15.167	4.18	21.25	1.67
3.083	1.81	9.167	3.91	15.250	4.18	21.33	1.67
3.167	1.81	9.250	3.91	15.333	4.18	21.42	1.67
3.250	1.81	9.333	4.46	15.417	4.18	21.50	1.67
3.333	1.81	9.417	4.46	15.500	4.18	21.58	1.67
3.417	1.81	9.500	4.46	15.583	4.18	21.67	1.67
3.500	1.81	9.583	4.46	15.667	4.18	21.75	1.67
3.583	1.81	9.667	4.46	15.750	4.18	21.83	1.67
3.667	1.81	9.750	4.46	15.833	4.18	21.92	1.67
3.750	1.81	9.833	5.02	15.917	4.18	22.00	1.67
3.833	1.81	9.917	5.02	16.000	4.18	22.08	1.67
3.917	1.81	10.000	5.02	16.083	4.18	22.17	1.67
4.000	1.81	10.083	5.02	16.167	4.18	22.25	1.67
4.083	1.81	10.167	5.02	16.250	4.18	22.33	1.67
4.167	1.81	10.250	5.02	16.333	2.51	22.42	1.67
4.250	1.81	10.333	6.42	16.417	2.51	22.50	1.67
4.333	2.23	10.417	6.42	16.500	2.51	22.58	1.67
4.417	2.23	10.500	6.42	16.583	2.51	22.67	1.67
4.500	2.23	10.583	6.42	16.667	2.51	22.75	1.67
4.583	2.23	10.667	6.42	16.750	2.51	22.83	1.67
4.667	2.23	10.750	6.42	16.833	2.51	22.92	1.67
4.750	2.23	10.833	8.65	16.917	2.51	23.00	1.67
4.833	2.23	10.917	8.65	17.000	2.51	23.08	1.67

4.917	2.23	11.000	8.65	17.083	2.51	23.17	1.67
5.000	2.23	11.083	8.65	17.167	2.51	23.25	1.67
5.083	2.23	11.167	8.65	17.250	2.51	23.33	1.67
5.167	2.23	11.250	8.65	17.333	2.51	23.42	1.67
5.250	2.23	11.333	13.39	17.417	2.51	23.50	1.67
5.333	2.23	11.417	13.39	17.500	2.51	23.58	1.67
5.417	2.23	11.500	13.39	17.583	2.51	23.67	1.67
5.500	2.23	11.583	13.39	17.667	2.51	23.75	1.67
5.583	2.23	11.667	13.39	17.750	2.51	23.83	1.67
5.667	2.23	11.750	13.39	17.833	2.51	23.92	1.67
5.750	2.23	11.833	41.28	17.917	2.51	24.00	1.67
5.833	2.23	11.917	41.29	18.000	2.51	24.08	1.67
5.917	2.23	12.000	41.29	18.083	2.51	24.17	1.67
6.000	2.23	12.083	170.71	18.167	2.51	24.25	1.67
6.083	2.23	12.167	170.72	18.250	2.51		

Unit Hyd Qpeak (cms)= 0.162

PEAK FLOW (cms)= 0.151 (i)
TIME TO PEAK (hrs)= 12.500
RUNOFF VOLUME (mm)= 56.949
TOTAL RAINFALL (mm)= 139.480
RUNOFF COEFFICIENT = 0.408

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	
NASHYD (0014)	Area (ha)= 1.80 Curve Number (CN)= 50.0
ID= 1 DT= 5.0 min	Ia (mm)= 16.00 # of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.76

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.23	12.250	170.72	18.33	2.51
0.167	0.00	6.250	2.23	12.333	20.10	18.42	2.51
0.250	0.00	6.333	2.51	12.417	20.09	18.50	2.51
0.333	1.53	6.417	2.51	12.500	20.09	18.58	2.51
0.417	1.53	6.500	2.51	12.583	20.09	18.67	2.51
0.500	1.53	6.583	2.51	12.667	20.09	18.75	2.51
0.583	1.53	6.667	2.51	12.750	20.09	18.83	2.51
0.667	1.53	6.750	2.51	12.833	10.32	18.92	2.51
0.750	1.53	6.833	2.51	12.917	10.32	19.00	2.51
0.833	1.53	6.917	2.51	13.000	10.32	19.08	2.51
0.917	1.53	7.000	2.51	13.083	10.32	19.17	2.51
1.000	1.53	7.083	2.51	13.167	10.32	19.25	2.51
1.083	1.53	7.167	2.51	13.250	10.32	19.33	2.51
1.167	1.53	7.250	2.51	13.333	7.53	19.42	2.51
1.250	1.53	7.333	3.07	13.417	7.53	19.50	2.51
1.333	1.53	7.417	3.07	13.500	7.53	19.58	2.51
1.417	1.53	7.500	3.07	13.583	7.53	19.67	2.51
1.500	1.53	7.583	3.07	13.667	7.53	19.75	2.51
1.583	1.53	7.667	3.07	13.750	7.53	19.83	2.51
1.667	1.53	7.750	3.07	13.833	5.86	19.92	2.51
1.750	1.53	7.833	3.07	13.917	5.86	20.00	2.51
1.833	1.53	7.917	3.07	14.000	5.86	20.08	2.51
1.917	1.53	8.000	3.07	14.083	5.86	20.17	2.51
2.000	1.53	8.083	3.07	14.167	5.86	20.25	2.51
2.083	1.53	8.167	3.07	14.250	5.86	20.33	1.67
2.167	1.53	8.250	3.07	14.333	4.18	20.42	1.67
2.250	1.53	8.333	3.63	14.417	4.18	20.50	1.67
2.333	1.81	8.417	3.63	14.500	4.18	20.58	1.67
2.417	1.81	8.500	3.63	14.583	4.18	20.67	1.67
2.500	1.81	8.583	3.63	14.667	4.18	20.75	1.67
2.583	1.81	8.667	3.63	14.750	4.18	20.83	1.67
2.667	1.81	8.750	3.63	14.833	4.18	20.92	1.67
2.750	1.81	8.833	3.91	14.917	4.18	21.00	1.67
2.833	1.81	8.917	3.91	15.000	4.18	21.08	1.67
2.917	1.81	9.000	3.91	15.083	4.18	21.17	1.67
3.000	1.81	9.083	3.91	15.167	4.18	21.25	1.67
3.083	1.81	9.167	3.91	15.250	4.18	21.33	1.67
3.167	1.81	9.250	3.91	15.333	4.18	21.42	1.67
3.250	1.81	9.333	4.46	15.417	4.18	21.50	1.67
3.333	1.81	9.417	4.46	15.500	4.18	21.58	1.67
3.417	1.81	9.500	4.46	15.583	4.18	21.67	1.67
3.500	1.81	9.583	4.46	15.667	4.18	21.75	1.67
3.583	1.81	9.667	4.46	15.750	4.18	21.83	1.67
3.667	1.81	9.750	4.46	15.833	4.18	21.92	1.67
3.750	1.81	9.833	5.02	15.917	4.18	22.00	1.67
3.833	1.81	9.917	5.02	16.000	4.18	22.08	1.67
3.917	1.81	10.000	5.02	16.083	4.18	22.17	1.67
4.000	1.81	10.083	5.02	16.167	4.18	22.25	1.67
4.083	1.81	10.167	5.02	16.250	4.18	22.33	1.67
4.167	1.81	10.250	5.02	16.333	2.51	22.42	1.67
4.250	1.81	10.333	6.42	16.417	2.51	22.50	1.67
4.333	2.23	10.417	6.42	16.500	2.51	22.58	1.67
4.417	2.23	10.500	6.42	16.583	2.51	22.67	1.67
4.500	2.23	10.583	6.42	16.667	2.51	22.75	1.67
4.583	2.23	10.667	6.42	16.750	2.51	22.83	1.67
4.667	2.23	10.750	6.42	16.833	2.51	22.92	1.67
4.750	2.23	10.833	8.65	16.917	2.51	23.00	1.67
4.833	2.23	10.917	8.65	17.000	2.51	23.08	1.67
4.917	2.23	11.000	8.65	17.083	2.51	23.17	1.67
5.000	2.23	11.083	8.65	17.167	2.51	23.25	1.67
5.083	2.23	11.167	8.65	17.250	2.51	23.33	1.67

5.167	2.23	11.250	8.65	17.333	2.51	23.42	1.67
5.250	2.23	11.333	13.39	17.417	2.51	23.50	1.67
5.333	2.23	11.417	13.39	17.500	2.51	23.58	1.67
5.417	2.23	11.500	13.39	17.583	2.51	23.67	1.67
5.500	2.23	11.583	13.39	17.667	2.51	23.75	1.67
5.583	2.23	11.667	13.39	17.750	2.51	23.83	1.67
5.667	2.23	11.750	13.39	17.833	2.51	23.92	1.67
5.750	2.23	11.833	41.28	17.917	2.51	24.00	1.67
5.833	2.23	11.917	41.29	18.000	2.51	24.08	1.67
5.917	2.23	12.000	41.29	18.083	2.51	24.17	1.67
6.000	2.23	12.083	170.71	18.167	2.51	24.25	1.67
6.083	2.23	12.167	170.72	18.250	2.51		

Unit Hyd Qpeak (cms)= 0.090

PEAK FLOW (cms)= 0.069 (i)
TIME TO PEAK (hrs)= 13.000
RUNOFF VOLUME (mm)= 40.391
TOTAL RAINFALL (mm)= 139.480
RUNOFF COEFFICIENT = 0.290

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0015)	Area (ha)=	6.70	Curve Number (CN)=	60.0	
ID= 1 DT= 5.0 min	Ia (mm)=	10.00	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	1.45			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.23	12.250	170.72	18.33	2.51
0.167	0.00	6.250	2.23	12.333	20.10	18.42	2.51
0.250	0.00	6.333	2.51	12.417	20.09	18.50	2.51
0.333	1.53	6.417	2.51	12.500	20.09	18.58	2.51
0.417	1.53	6.500	2.51	12.583	20.09	18.67	2.51
0.500	1.53	6.583	2.51	12.667	20.09	18.75	2.51
0.583	1.53	6.667	2.51	12.750	20.09	18.83	2.51
0.667	1.53	6.750	2.51	12.833	10.32	18.92	2.51
0.750	1.53	6.833	2.51	12.917	10.32	19.00	2.51
0.833	1.53	6.917	2.51	13.000	10.32	19.08	2.51
0.917	1.53	7.000	2.51	13.083	10.32	19.17	2.51
1.000	1.53	7.083	2.51	13.167	10.32	19.25	2.51
1.083	1.53	7.167	2.51	13.250	10.32	19.33	2.51
1.167	1.53	7.250	2.51	13.333	7.53	19.42	2.51
1.250	1.53	7.333	3.07	13.417	7.53	19.50	2.51
1.333	1.53	7.417	3.07	13.500	7.53	19.58	2.51
1.417	1.53	7.500	3.07	13.583	7.53	19.67	2.51
1.500	1.53	7.583	3.07	13.667	7.53	19.75	2.51
1.583	1.53	7.667	3.07	13.750	7.53	19.83	2.51
1.667	1.53	7.750	3.07	13.833	5.86	19.92	2.51
1.750	1.53	7.833	3.07	13.917	5.86	20.00	2.51
1.833	1.53	7.917	3.07	14.000	5.86	20.08	2.51
1.917	1.53	8.000	3.07	14.083	5.86	20.17	2.51
2.000	1.53	8.083	3.07	14.167	5.86	20.25	2.51
2.083	1.53	8.167	3.07	14.250	5.86	20.33	1.67
2.167	1.53	8.250	3.07	14.333	4.18	20.42	1.67
2.250	1.53	8.333	3.63	14.417	4.18	20.50	1.67
2.333	1.81	8.417	3.63	14.500	4.18	20.58	1.67
2.417	1.81	8.500	3.63	14.583	4.18	20.67	1.67
2.500	1.81	8.583	3.63	14.667	4.18	20.75	1.67
2.583	1.81	8.667	3.63	14.750	4.18	20.83	1.67
2.667	1.81	8.750	3.63	14.833	4.18	20.92	1.67
2.750	1.81	8.833	3.91	14.917	4.18	21.00	1.67
2.833	1.81	8.917	3.91	15.000	4.18	21.08	1.67
2.917	1.81	9.000	3.91	15.083	4.18	21.17	1.67
3.000	1.81	9.083	3.91	15.167	4.18	21.25	1.67
3.083	1.81	9.167	3.91	15.250	4.18	21.33	1.67
3.167	1.81	9.250	3.91	15.333	4.18	21.42	1.67
3.250	1.81	9.333	4.46	15.417	4.18	21.50	1.67
3.333	1.81	9.417	4.46	15.500	4.18	21.58	1.67
3.417	1.81	9.500	4.46	15.583	4.18	21.67	1.67
3.500	1.81	9.583	4.46	15.667	4.18	21.75	1.67
3.583	1.81	9.667	4.46	15.750	4.18	21.83	1.67
3.667	1.81	9.750	4.46	15.833	4.18	21.92	1.67
3.750	1.81	9.833	5.02	15.917	4.18	22.00	1.67
3.833	1.81	9.917	5.02	16.000	4.18	22.08	1.67
3.917	1.81	10.000	5.02	16.083	4.18	22.17	1.67
4.000	1.81	10.083	5.02	16.167	4.18	22.25	1.67
4.083	1.81	10.167	5.02	16.250	4.18	22.33	1.67
4.167	1.81	10.250	5.02	16.333	2.51	22.42	1.67
4.250	1.81	10.333	6.42	16.417	2.51	22.50	1.67
4.333	2.23	10.417	6.42	16.500	2.51	22.58	1.67
4.417	2.23	10.500	6.42	16.583	2.51	22.67	1.67
4.500	2.23	10.583	6.42	16.667	2.51	22.75	1.67
4.583	2.23	10.667	6.42	16.750	2.51	22.83	1.67
4.667	2.23	10.750	6.42	16.833	2.51	22.92	1.67
4.750	2.23	10.833	8.65	16.917	2.51	23.00	1.67
4.833	2.23	10.917	8.65	17.000	2.51	23.08	1.67
4.917	2.23	11.000	8.65	17.083	2.51	23.17	1.67
5.000	2.23	11.083	8.65	17.167	2.51	23.25	1.67
5.083	2.23	11.167	8.65	17.250	2.51	23.33	1.67
5.167	2.23	11.250	8.65	17.333	2.51	23.42	1.67
5.250	2.23	11.333	13.39	17.417	2.51	23.50	1.67
5.333	2.23	11.417	13.39	17.500	2.51	23.58	1.67

5.417	2.23	11.500	13.39	17.583	2.51	23.67	1.67
5.500	2.23	11.583	13.39	17.667	2.51	23.75	1.67
5.583	2.23	11.667	13.39	17.750	2.51	23.83	1.67
5.667	2.23	11.750	13.39	17.833	2.51	23.92	1.67
5.750	2.23	11.833	41.28	17.917	2.51	24.00	1.67
5.833	2.23	11.917	41.29	18.000	2.51	24.08	1.67
5.917	2.23	12.000	41.29	18.083	2.51	24.17	1.67
6.000	2.23	12.083	170.71	18.167	2.51	24.25	1.67
6.083	2.23	12.167	170.72	18.250	2.51		

Unit Hyd Qpeak (cms)= 0.176

PEAK FLOW (cms)= 0.226 (i)
TIME TO PEAK (hrs)= 13.750
RUNOFF VOLUME (mm)= 56.105
TOTAL RAINFALL (mm)= 139.480
RUNOFF COEFFICIENT = 0.402

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB NASHYD (0016)	Area (ha)= 29.16	Curve Number (CN)= 71.4
ID= 1 DT= 5.0 min	Ia (mm)= 7.88	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.68	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.23	12.250	170.72	18.33	2.51
0.167	0.00	6.250	2.23	12.333	20.10	18.42	2.51
0.250	0.00	6.333	2.51	12.417	20.09	18.50	2.51
0.333	1.53	6.417	2.51	12.500	20.09	18.58	2.51
0.417	1.53	6.500	2.51	12.583	20.09	18.67	2.51
0.500	1.53	6.583	2.51	12.667	20.09	18.75	2.51
0.583	1.53	6.667	2.51	12.750	20.09	18.83	2.51
0.667	1.53	6.750	2.51	12.833	10.32	18.92	2.51
0.750	1.53	6.833	2.51	12.917	10.32	19.00	2.51
0.833	1.53	6.917	2.51	13.000	10.32	19.08	2.51
0.917	1.53	7.000	2.51	13.083	10.32	19.17	2.51
1.000	1.53	7.083	2.51	13.167	10.32	19.25	2.51
1.083	1.53	7.167	2.51	13.250	10.32	19.33	2.51
1.167	1.53	7.250	2.51	13.333	7.53	19.42	2.51
1.250	1.53	7.333	3.07	13.417	7.53	19.50	2.51
1.333	1.53	7.417	3.07	13.500	7.53	19.58	2.51
1.417	1.53	7.500	3.07	13.583	7.53	19.67	2.51
1.500	1.53	7.583	3.07	13.667	7.53	19.75	2.51
1.583	1.53	7.667	3.07	13.750	7.53	19.83	2.51
1.667	1.53	7.750	3.07	13.833	5.86	19.92	2.51
1.750	1.53	7.833	3.07	13.917	5.86	20.00	2.51
1.833	1.53	7.917	3.07	14.000	5.86	20.08	2.51
1.917	1.53	8.000	3.07	14.083	5.86	20.17	2.51
2.000	1.53	8.083	3.07	14.167	5.86	20.25	2.51
2.083	1.53	8.167	3.07	14.250	5.86	20.33	1.67
2.167	1.53	8.250	3.07	14.333	4.18	20.42	1.67
2.250	1.53	8.333	3.63	14.417	4.18	20.50	1.67
2.333	1.81	8.417	3.63	14.500	4.18	20.58	1.67
2.417	1.81	8.500	3.63	14.583	4.18	20.67	1.67
2.500	1.81	8.583	3.63	14.667	4.18	20.75	1.67
2.583	1.81	8.667	3.63	14.750	4.18	20.83	1.67
2.667	1.81	8.750	3.63	14.833	4.18	20.92	1.67
2.750	1.81	8.833	3.91	14.917	4.18	21.00	1.67
2.833	1.81	8.917	3.91	15.000	4.18	21.08	1.67
2.917	1.81	9.000	3.91	15.083	4.18	21.17	1.67
3.000	1.81	9.083	3.91	15.167	4.18	21.25	1.67
3.083	1.81	9.167	3.91	15.250	4.18	21.33	1.67
3.167	1.81	9.250	3.91	15.333	4.18	21.42	1.67
3.250	1.81	9.333	4.46	15.417	4.18	21.50	1.67
3.333	1.81	9.417	4.46	15.500	4.18	21.58	1.67
3.417	1.81	9.500	4.46	15.583	4.18	21.67	1.67
3.500	1.81	9.583	4.46	15.667	4.18	21.75	1.67
3.583	1.81	9.667	4.46	15.750	4.18	21.83	1.67
3.667	1.81	9.750	4.46	15.833	4.18	21.92	1.67
3.750	1.81	9.833	5.02	15.917	4.18	22.00	1.67
3.833	1.81	9.917	5.02	16.000	4.18	22.08	1.67
3.917	1.81	10.000	5.02	16.083	4.18	22.17	1.67
4.000	1.81	10.083	5.02	16.167	4.18	22.25	1.67
4.083	1.81	10.167	5.02	16.250	4.18	22.33	1.67
4.167	1.81	10.250	5.02	16.333	2.51	22.42	1.67
4.250	1.81	10.333	6.42	16.417	2.51	22.50	1.67
4.333	2.23	10.417	6.42	16.500	2.51	22.58	1.67
4.417	2.23	10.500	6.42	16.583	2.51	22.67	1.67
4.500	2.23	10.583	6.42	16.667	2.51	22.75	1.67
4.583	2.23	10.667	6.42	16.750	2.51	22.83	1.67
4.667	2.23	10.750	6.42	16.833	2.51	22.92	1.67
4.750	2.23	10.833	8.65	16.917	2.51	23.00	1.67
4.833	2.23	10.917	8.65	17.000	2.51	23.08	1.67
4.917	2.23	11.000	8.65	17.083	2.51	23.17	1.67
5.000	2.23	11.083	8.65	17.167	2.51	23.25	1.67
5.083	2.23	11.167	8.65	17.250	2.51	23.33	1.67
5.167	2.23	11.250	8.65	17.333	2.51	23.42	1.67
5.250	2.23	11.333	13.39	17.417	2.51	23.50	1.67
5.333	2.23	11.417	13.39	17.500	2.51	23.58	1.67
5.417	2.23	11.500	13.39	17.583	2.51	23.67	1.67
5.500	2.23	11.583	13.39	17.667	2.51	23.75	1.67
5.583	2.23	11.667	13.39	17.750	2.51	23.83	1.67

5.667	2.23	11.750	13.39	17.833	2.51	23.92	1.67
5.750	2.23	11.833	41.28	17.917	2.51	24.00	1.67
5.833	2.23	11.917	41.29	18.000	2.51	24.08	1.67
5.917	2.23	12.000	41.29	18.083	2.51	24.17	1.67
6.000	2.23	12.083	170.71	18.167	2.51	24.25	1.67
6.083	2.23	12.167	170.72	18.250	2.51		

Unit Hyd Qpeak (cms)= 1.638

PEAK FLOW (cms)= 2.359 (i)
TIME TO PEAK (hrs)= 12.833
RUNOFF VOLUME (mm)= 74.218
TOTAL RAINFALL (mm)= 139.480
RUNOFF COEFFICIENT = 0.532

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0019)	Area (ha)= 39.68	Curve Number (CN)= 60.7	
ID= 1 DT= 5.0 min	Ia (mm)= 8.26	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 1.18		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.23	12.250	170.72	18.33	2.51
0.167	0.00	6.250	2.23	12.333	20.10	18.42	2.51
0.250	0.00	6.333	2.51	12.417	20.09	18.50	2.51
0.333	1.53	6.417	2.51	12.500	20.09	18.58	2.51
0.417	1.53	6.500	2.51	12.583	20.09	18.67	2.51
0.500	1.53	6.583	2.51	12.667	20.09	18.75	2.51
0.583	1.53	6.667	2.51	12.750	20.09	18.83	2.51
0.667	1.53	6.750	2.51	12.833	10.32	18.92	2.51
0.750	1.53	6.833	2.51	12.917	10.32	19.00	2.51
0.833	1.53	6.917	2.51	13.000	10.32	19.08	2.51
0.917	1.53	7.000	2.51	13.083	10.32	19.17	2.51
1.000	1.53	7.083	2.51	13.167	10.32	19.25	2.51
1.083	1.53	7.167	2.51	13.250	10.32	19.33	2.51
1.167	1.53	7.250	2.51	13.333	7.53	19.42	2.51
1.250	1.53	7.333	3.07	13.417	7.53	19.50	2.51
1.333	1.53	7.417	3.07	13.500	7.53	19.58	2.51
1.417	1.53	7.500	3.07	13.583	7.53	19.67	2.51
1.500	1.53	7.583	3.07	13.667	7.53	19.75	2.51
1.583	1.53	7.667	3.07	13.750	7.53	19.83	2.51
1.667	1.53	7.750	3.07	13.833	5.86	19.92	2.51
1.750	1.53	7.833	3.07	13.917	5.86	20.00	2.51
1.833	1.53	7.917	3.07	14.000	5.86	20.08	2.51
1.917	1.53	8.000	3.07	14.083	5.86	20.17	2.51
2.000	1.53	8.083	3.07	14.167	5.86	20.25	2.51
2.083	1.53	8.167	3.07	14.250	5.86	20.33	1.67
2.167	1.53	8.250	3.07	14.333	4.18	20.42	1.67
2.250	1.53	8.333	3.63	14.417	4.18	20.50	1.67
2.333	1.81	8.417	3.63	14.500	4.18	20.58	1.67
2.417	1.81	8.500	3.63	14.583	4.18	20.67	1.67
2.500	1.81	8.583	3.63	14.667	4.18	20.75	1.67
2.583	1.81	8.667	3.63	14.750	4.18	20.83	1.67
2.667	1.81	8.750	3.63	14.833	4.18	20.92	1.67
2.750	1.81	8.833	3.91	14.917	4.18	21.00	1.67
2.833	1.81	8.917	3.91	15.000	4.18	21.08	1.67
2.917	1.81	9.000	3.91	15.083	4.18	21.17	1.67
3.000	1.81	9.083	3.91	15.167	4.18	21.25	1.67
3.083	1.81	9.167	3.91	15.250	4.18	21.33	1.67
3.167	1.81	9.250	3.91	15.333	4.18	21.42	1.67
3.250	1.81	9.333	4.46	15.417	4.18	21.50	1.67
3.333	1.81	9.417	4.46	15.500	4.18	21.58	1.67
3.417	1.81	9.500	4.46	15.583	4.18	21.67	1.67
3.500	1.81	9.583	4.46	15.667	4.18	21.75	1.67
3.583	1.81	9.667	4.46	15.750	4.18	21.83	1.67
3.667	1.81	9.750	4.46	15.833	4.18	21.92	1.67
3.750	1.81	9.833	5.02	15.917	4.18	22.00	1.67
3.833	1.81	9.917	5.02	16.000	4.18	22.08	1.67
3.917	1.81	10.000	5.02	16.083	4.18	22.17	1.67
4.000	1.81	10.083	5.02	16.167	4.18	22.25	1.67
4.083	1.81	10.167	5.02	16.250	4.18	22.33	1.67
4.167	1.81	10.250	5.02	16.333	2.51	22.42	1.67
4.250	1.81	10.333	6.42	16.417	2.51	22.50	1.67
4.333	2.23	10.417	6.42	16.500	2.51	22.58	1.67
4.417	2.23	10.500	6.42	16.583	2.51	22.67	1.67
4.500	2.23	10.583	6.42	16.667	2.51	22.75	1.67
4.583	2.23	10.667	6.42	16.750	2.51	22.83	1.67
4.667	2.23	10.750	6.42	16.833	2.51	22.92	1.67
4.750	2.23	10.833	8.65	16.917	2.51	23.00	1.67
4.833	2.23	10.917	8.65	17.000	2.51	23.08	1.67
4.917	2.23	11.000	8.65	17.083	2.51	23.17	1.67
5.000	2.23	11.083	8.65	17.167	2.51	23.25	1.67
5.083	2.23	11.167	8.65	17.250	2.51	23.33	1.67
5.167	2.23	11.250	8.65	17.333	2.51	23.42	1.67
5.250	2.23	11.333	13.39	17.417	2.51	23.50	1.67
5.333	2.23	11.417	13.39	17.500	2.51	23.58	1.67
5.417	2.23	11.500	13.39	17.583	2.51	23.67	1.67
5.500	2.23	11.583	13.39	17.667	2.51	23.75	1.67
5.583	2.23	11.667	13.39	17.750	2.51	23.83	1.67
5.667	2.23	11.750	13.39	17.833	2.51	23.92	1.67
5.750	2.23	11.833	41.28	17.917	2.51	24.00	1.67
5.833	2.23	11.917	41.29	18.000	2.51	24.08	1.67

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              5.917    2.23 |12.000   41.29 |18.083    2.51 | 24.17    1.67
              6.000    2.23 |12.083  170.71 |18.167    2.51 | 24.25    1.67
              6.083    2.23 |12.167  170.72 |18.250    2.51 |
```

Unit Hyd Qpeak (cms)= 1.284

PEAK FLOW (cms)= 1.624 (i)
TIME TO PEAK (hrs)= 13.417
RUNOFF VOLUME (mm)= 58.195
TOTAL RAINFALL (mm)= 139.480
RUNOFF COEFFICIENT = 0.417

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0024)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0010):	14.85	0.573	13.08	45.25
+ ID2= 2 (0013):	1.70	0.151	12.50	56.95
ID = 3 (0024):	16.55	0.660	13.00	46.45

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0024):	16.55	0.660	13.00	46.45
+ ID2= 2 (0014):	1.80	0.069	13.00	40.39
ID = 1 (0024):	18.35	0.729	13.00	45.85

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0024):	18.35	0.729	13.00	45.85
+ ID2= 2 (0015):	6.70	0.226	13.75	56.10
ID = 3 (0024):	25.05	0.909	13.08	48.60

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0024):	25.05	0.909	13.08	48.60
+ ID2= 2 (0016):	29.16	2.359	12.83	74.22
ID = 1 (0024):	54.21	3.231	12.92	62.38

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0024):	54.21	3.231	12.92	62.38
+ ID2= 2 (0019):	39.68	1.624	13.42	58.19
ID = 3 (0024):	93.89	4.641	13.00	60.61

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0024):	93.89	4.641	13.00	60.61
+ ID2= 2 (0007):	100.92	2.776	14.08	52.21
ID = 1 (0024):	194.81	6.739	13.25	56.26

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0024):	194.81	6.739	13.25	56.26
+ ID2= 2 (0008):	23.99	0.705	13.25	37.33
ID = 3 (0024):	218.80	7.444	13.25	54.18

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

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--------------------
| ADD HYD  (  0024)|
|   3 +  2 =  1    |          AREA    QPEAK    TPEAK     R.V.
--------------------          (ha)    (cms)    (hrs)     (mm)
        ID1= 3 (  0024):   218.80   7.444    13.25    54.18
      + ID2= 2 (  0009):     6.37   0.247    13.00    41.09
        ================================================
        ID = 1 (  0024):   225.17   7.676    13.25    53.81

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
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--------------------
| CALIB            |
| NASHYD   (  0011)|   Area    (ha)=  46.28   Curve Number   (CN)= 72.2
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.09   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.30

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                        ---- TRANSFORMED HYETOGRAPH ----
 TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
  hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
0.083    0.00 | 6.167    2.23 |12.250  170.72 | 18.33    2.51
0.167    0.00 | 6.250    2.23 |12.333   20.10 | 18.42    2.51
0.250    0.00 | 6.333    2.51 |12.417   20.09 | 18.50    2.51
0.333    1.53 | 6.417    2.51 |12.500   20.09 | 18.58    2.51
0.417    1.53 | 6.500    2.51 |12.583   20.09 | 18.67    2.51
0.500    1.53 | 6.583    2.51 |12.667   20.09 | 18.75    2.51
0.583    1.53 | 6.667    2.51 |12.750   20.09 | 18.83    2.51
0.667    1.53 | 6.750    2.51 |12.833   10.32 | 18.92    2.51
0.750    1.53 | 6.833    2.51 |12.917   10.32 | 19.00    2.51
0.833    1.53 | 6.917    2.51 |13.000   10.32 | 19.08    2.51
0.917    1.53 | 7.000    2.51 |13.083   10.32 | 19.17    2.51
1.000    1.53 | 7.083    2.51 |13.167   10.32 | 19.25    2.51
1.083    1.53 | 7.167    2.51 |13.250   10.32 | 19.33    2.51
1.167    1.53 | 7.250    2.51 |13.333    7.53 | 19.42    2.51
1.250    1.53 | 7.333    3.07 |13.417    7.53 | 19.50    2.51
1.333    1.53 | 7.417    3.07 |13.500    7.53 | 19.58    2.51
1.417    1.53 | 7.500    3.07 |13.583    7.53 | 19.67    2.51
1.500    1.53 | 7.583    3.07 |13.667    7.53 | 19.75    2.51
1.583    1.53 | 7.667    3.07 |13.750    7.53 | 19.83    2.51
1.667    1.53 | 7.750    3.07 |13.833    5.86 | 19.92    2.51
1.750    1.53 | 7.833    3.07 |13.917    5.86 | 20.00    2.51
1.833    1.53 | 7.917    3.07 |14.000    5.86 | 20.08    2.51
1.917    1.53 | 8.000    3.07 |14.083    5.86 | 20.17    2.51
2.000    1.53 | 8.083    3.07 |14.167    5.86 | 20.25    2.51
2.083    1.53 | 8.167    3.07 |14.250    5.86 | 20.33    1.67
2.167    1.53 | 8.250    3.07 |14.333    4.18 | 20.42    1.67
2.250    1.53 | 8.333    3.63 |14.417    4.18 | 20.50    1.67
2.333    1.81 | 8.417    3.63 |14.500    4.18 | 20.58    1.67
2.417    1.81 | 8.500    3.63 |14.583    4.18 | 20.67    1.67
2.500    1.81 | 8.583    3.63 |14.667    4.18 | 20.75    1.67
2.583    1.81 | 8.667    3.63 |14.750    4.18 | 20.83    1.67
2.667    1.81 | 8.750    3.63 |14.833    4.18 | 20.92    1.67
2.750    1.81 | 8.833    3.91 |14.917    4.18 | 21.00    1.67
2.833    1.81 | 8.917    3.91 |15.000    4.18 | 21.08    1.67
2.917    1.81 | 9.000    3.91 |15.083    4.18 | 21.17    1.67
3.000    1.81 | 9.083    3.91 |15.167    4.18 | 21.25    1.67
3.083    1.81 | 9.167    3.91 |15.250    4.18 | 21.33    1.67
3.167    1.81 | 9.250    3.91 |15.333    4.18 | 21.42    1.67
3.250    1.81 | 9.333    4.46 |15.417    4.18 | 21.50    1.67
3.333    1.81 | 9.417    4.46 |15.500    4.18 | 21.58    1.67
3.417    1.81 | 9.500    4.46 |15.583    4.18 | 21.67    1.67
3.500    1.81 | 9.583    4.46 |15.667    4.18 | 21.75    1.67
3.583    1.81 | 9.667    4.46 |15.750    4.18 | 21.83    1.67
3.667    1.81 | 9.750    4.46 |15.833    4.18 | 21.92    1.67
3.750    1.81 | 9.833    5.02 |15.917    4.18 | 22.00    1.67
3.833    1.81 | 9.917    5.02 |16.000    4.18 | 22.08    1.67
3.917    1.81 |10.000    5.02 |16.083    4.18 | 22.17    1.67
4.000    1.81 |10.083    5.02 |16.167    4.18 | 22.25    1.67
4.083    1.81 |10.167    5.02 |16.250    4.18 | 22.33    1.67
4.167    1.81 |10.250    5.02 |16.333    2.51 | 22.42    1.67
4.250    1.81 |10.333    6.42 |16.417    2.51 | 22.50    1.67
4.333    2.23 |10.417    6.42 |16.500    2.51 | 22.58    1.67
4.417    2.23 |10.500    6.42 |16.583    2.51 | 22.67    1.67
4.500    2.23 |10.583    6.42 |16.667    2.51 | 22.75    1.67
4.583    2.23 |10.667    6.42 |16.750    2.51 | 22.83    1.67
4.667    2.23 |10.750    6.42 |16.833    2.51 | 22.92    1.67
4.750    2.23 |10.833    8.65 |16.917    2.51 | 23.00    1.67
4.833    2.23 |10.917    8.65 |17.000    2.51 | 23.08    1.67
4.917    2.23 |11.000    8.65 |17.083    2.51 | 23.17    1.67
5.000    2.23 |11.083    8.65 |17.167    2.51 | 23.25    1.67
5.083    2.23 |11.167    8.65 |17.250    2.51 | 23.33    1.67
5.167    2.23 |11.250    8.65 |17.333    2.51 | 23.42    1.67
5.250    2.23 |11.333   13.39 |17.417    2.51 | 23.50    1.67
5.333    2.23 |11.417   13.39 |17.500    2.51 | 23.58    1.67
5.417    2.23 |11.500   13.39 |17.583    2.51 | 23.67    1.67
5.500    2.23 |11.583   13.39 |17.667    2.51 | 23.75    1.67
5.583    2.23 |11.667   13.39 |17.750    2.51 | 23.83    1.67
5.667    2.23 |11.750   13.39 |17.833    2.51 | 23.92    1.67
5.750    2.23 |11.833   41.28 |17.917    2.51 | 24.00    1.67
5.833    2.23 |11.917   41.29 |18.000    2.51 | 24.08    1.67
5.917    2.23 |12.000   41.29 |18.083    2.51 | 24.17    1.67
6.000    2.23 |12.083  170.71 |18.167    2.51 | 24.25    1.67
6.083    2.23 |12.167  170.72 |18.250    2.51 |

Unit Hyd Qpeak  (cms)=   5.892

PEAK FLOW       (cms)=   6.985 (i)
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TIME TO PEAK (hrs)= 12.417
RUNOFF VOLUME (mm)= 76.096
TOTAL RAINFALL (mm)= 139.480
RUNOFF COEFFICIENT = 0.546

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0012)	Area (ha)=	1.13	Curve Number (CN)=	67.4	
ID= 1 DT= 5.0 min	Ia (mm)=	7.88	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	0.43			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.23	12.250	170.72	18.33	2.51
0.167	0.00	6.250	2.23	12.333	20.10	18.42	2.51
0.250	0.00	6.333	2.51	12.417	20.09	18.50	2.51
0.333	1.53	6.417	2.51	12.500	20.09	18.58	2.51
0.417	1.53	6.500	2.51	12.583	20.09	18.67	2.51
0.500	1.53	6.583	2.51	12.667	20.09	18.75	2.51
0.583	1.53	6.667	2.51	12.750	20.09	18.83	2.51
0.667	1.53	6.750	2.51	12.833	10.32	18.92	2.51
0.750	1.53	6.833	2.51	12.917	10.32	19.00	2.51
0.833	1.53	6.917	2.51	13.000	10.32	19.08	2.51
0.917	1.53	7.000	2.51	13.083	10.32	19.17	2.51
1.000	1.53	7.083	2.51	13.167	10.32	19.25	2.51
1.083	1.53	7.167	2.51	13.250	10.32	19.33	2.51
1.167	1.53	7.250	2.51	13.333	7.53	19.42	2.51
1.250	1.53	7.333	3.07	13.417	7.53	19.50	2.51
1.333	1.53	7.417	3.07	13.500	7.53	19.58	2.51
1.417	1.53	7.500	3.07	13.583	7.53	19.67	2.51
1.500	1.53	7.583	3.07	13.667	7.53	19.75	2.51
1.583	1.53	7.667	3.07	13.750	7.53	19.83	2.51
1.667	1.53	7.750	3.07	13.833	5.86	19.92	2.51
1.750	1.53	7.833	3.07	13.917	5.86	20.00	2.51
1.833	1.53	7.917	3.07	14.000	5.86	20.08	2.51
1.917	1.53	8.000	3.07	14.083	5.86	20.17	2.51
2.000	1.53	8.083	3.07	14.167	5.86	20.25	2.51
2.083	1.53	8.167	3.07	14.250	5.86	20.33	1.67
2.167	1.53	8.250	3.07	14.333	4.18	20.42	1.67
2.250	1.53	8.333	3.63	14.417	4.18	20.50	1.67
2.333	1.81	8.417	3.63	14.500	4.18	20.58	1.67
2.417	1.81	8.500	3.63	14.583	4.18	20.67	1.67
2.500	1.81	8.583	3.63	14.667	4.18	20.75	1.67
2.583	1.81	8.667	3.63	14.750	4.18	20.83	1.67
2.667	1.81	8.750	3.63	14.833	4.18	20.92	1.67
2.750	1.81	8.833	3.91	14.917	4.18	21.00	1.67
2.833	1.81	8.917	3.91	15.000	4.18	21.08	1.67
2.917	1.81	9.000	3.91	15.083	4.18	21.17	1.67
3.000	1.81	9.083	3.91	15.167	4.18	21.25	1.67
3.083	1.81	9.167	3.91	15.250	4.18	21.33	1.67
3.167	1.81	9.250	3.91	15.333	4.18	21.42	1.67
3.250	1.81	9.333	4.46	15.417	4.18	21.50	1.67
3.333	1.81	9.417	4.46	15.500	4.18	21.58	1.67
3.417	1.81	9.500	4.46	15.583	4.18	21.67	1.67
3.500	1.81	9.583	4.46	15.667	4.18	21.75	1.67
3.583	1.81	9.667	4.46	15.750	4.18	21.83	1.67
3.667	1.81	9.750	4.46	15.833	4.18	21.92	1.67
3.750	1.81	9.833	5.02	15.917	4.18	22.00	1.67
3.833	1.81	9.917	5.02	16.000	4.18	22.08	1.67
3.917	1.81	10.000	5.02	16.083	4.18	22.17	1.67
4.000	1.81	10.083	5.02	16.167	4.18	22.25	1.67
4.083	1.81	10.167	5.02	16.250	4.18	22.33	1.67
4.167	1.81	10.250	5.02	16.333	2.51	22.42	1.67
4.250	1.81	10.333	6.42	16.417	2.51	22.50	1.67
4.333	2.23	10.417	6.42	16.500	2.51	22.58	1.67
4.417	2.23	10.500	6.42	16.583	2.51	22.67	1.67
4.500	2.23	10.583	6.42	16.667	2.51	22.75	1.67
4.583	2.23	10.667	6.42	16.750	2.51	22.83	1.67
4.667	2.23	10.750	6.42	16.833	2.51	22.92	1.67
4.750	2.23	10.833	8.65	16.917	2.51	23.00	1.67
4.833	2.23	10.917	8.65	17.000	2.51	23.08	1.67
4.917	2.23	11.000	8.65	17.083	2.51	23.17	1.67
5.000	2.23	11.083	8.65	17.167	2.51	23.25	1.67
5.083	2.23	11.167	8.65	17.250	2.51	23.33	1.67
5.167	2.23	11.250	8.65	17.333	2.51	23.42	1.67
5.250	2.23	11.333	13.39	17.417	2.51	23.50	1.67
5.333	2.23	11.417	13.39	17.500	2.51	23.58	1.67
5.417	2.23	11.500	13.39	17.583	2.51	23.67	1.67
5.500	2.23	11.583	13.39	17.667	2.51	23.75	1.67
5.583	2.23	11.667	13.39	17.750	2.51	23.83	1.67
5.667	2.23	11.750	13.39	17.833	2.51	23.92	1.67
5.750	2.23	11.833	41.28	17.917	2.51	24.00	1.67
5.833	2.23	11.917	41.29	18.000	2.51	24.08	1.67
5.917	2.23	12.000	41.29	18.083	2.51	24.17	1.67
6.000	2.23	12.083	170.71	18.167	2.51	24.25	1.67
6.083	2.23	12.167	170.72	18.250	2.51		

Unit Hyd Qpeak (cms)= 0.100

PEAK FLOW (cms)= 0.116 (i)
TIME TO PEAK (hrs)= 12.583
RUNOFF VOLUME (mm)= 67.994
TOTAL RAINFALL (mm)= 139.480

RUNOFF COEFFICIENT = 0.487

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB NASHYD (0041) ID= 1 DT= 5.0 min	Area (ha)= 0.59 Curve Number (CN)= 71.5 Ia (mm)= 4.75 # of Linear Res.(N)= 3.00 U.H. Tp(hrs)= 0.53

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.23	12.250	170.72	18.33	2.51
0.167	0.00	6.250	2.23	12.333	20.10	18.42	2.51
0.250	0.00	6.333	2.51	12.417	20.09	18.50	2.51
0.333	1.53	6.417	2.51	12.500	20.09	18.58	2.51
0.417	1.53	6.500	2.51	12.583	20.09	18.67	2.51
0.500	1.53	6.583	2.51	12.667	20.09	18.75	2.51
0.583	1.53	6.667	2.51	12.750	20.09	18.83	2.51
0.667	1.53	6.750	2.51	12.833	10.32	18.92	2.51
0.750	1.53	6.833	2.51	12.917	10.32	19.00	2.51
0.833	1.53	6.917	2.51	13.000	10.32	19.08	2.51
0.917	1.53	7.000	2.51	13.083	10.32	19.17	2.51
1.000	1.53	7.083	2.51	13.167	10.32	19.25	2.51
1.083	1.53	7.167	2.51	13.250	10.32	19.33	2.51
1.167	1.53	7.250	2.51	13.333	7.53	19.42	2.51
1.250	1.53	7.333	3.07	13.417	7.53	19.50	2.51
1.333	1.53	7.417	3.07	13.500	7.53	19.58	2.51
1.417	1.53	7.500	3.07	13.583	7.53	19.67	2.51
1.500	1.53	7.583	3.07	13.667	7.53	19.75	2.51
1.583	1.53	7.667	3.07	13.750	7.53	19.83	2.51
1.667	1.53	7.750	3.07	13.833	5.86	19.92	2.51
1.750	1.53	7.833	3.07	13.917	5.86	20.00	2.51
1.833	1.53	7.917	3.07	14.000	5.86	20.08	2.51
1.917	1.53	8.000	3.07	14.083	5.86	20.17	2.51
2.000	1.53	8.083	3.07	14.167	5.86	20.25	2.51
2.083	1.53	8.167	3.07	14.250	5.86	20.33	1.67
2.167	1.53	8.250	3.07	14.333	4.18	20.42	1.67
2.250	1.53	8.333	3.63	14.417	4.18	20.50	1.67
2.333	1.81	8.417	3.63	14.500	4.18	20.58	1.67
2.417	1.81	8.500	3.63	14.583	4.18	20.67	1.67
2.500	1.81	8.583	3.63	14.667	4.18	20.75	1.67
2.583	1.81	8.667	3.63	14.750	4.18	20.83	1.67
2.667	1.81	8.750	3.63	14.833	4.18	20.92	1.67
2.750	1.81	8.833	3.91	14.917	4.18	21.00	1.67
2.833	1.81	8.917	3.91	15.000	4.18	21.08	1.67
2.917	1.81	9.000	3.91	15.083	4.18	21.17	1.67
3.000	1.81	9.083	3.91	15.167	4.18	21.25	1.67
3.083	1.81	9.167	3.91	15.250	4.18	21.33	1.67
3.167	1.81	9.250	3.91	15.333	4.18	21.42	1.67
3.250	1.81	9.333	4.46	15.417	4.18	21.50	1.67
3.333	1.81	9.417	4.46	15.500	4.18	21.58	1.67
3.417	1.81	9.500	4.46	15.583	4.18	21.67	1.67
3.500	1.81	9.583	4.46	15.667	4.18	21.75	1.67
3.583	1.81	9.667	4.46	15.750	4.18	21.83	1.67
3.667	1.81	9.750	4.46	15.833	4.18	21.92	1.67
3.750	1.81	9.833	5.02	15.917	4.18	22.00	1.67
3.833	1.81	9.917	5.02	16.000	4.18	22.08	1.67
3.917	1.81	10.000	5.02	16.083	4.18	22.17	1.67
4.000	1.81	10.083	5.02	16.167	4.18	22.25	1.67
4.083	1.81	10.167	5.02	16.250	4.18	22.33	1.67
4.167	1.81	10.250	5.02	16.333	2.51	22.42	1.67
4.250	1.81	10.333	6.42	16.417	2.51	22.50	1.67
4.333	2.23	10.417	6.42	16.500	2.51	22.58	1.67
4.417	2.23	10.500	6.42	16.583	2.51	22.67	1.67
4.500	2.23	10.583	6.42	16.667	2.51	22.75	1.67
4.583	2.23	10.667	6.42	16.750	2.51	22.83	1.67
4.667	2.23	10.750	6.42	16.833	2.51	22.92	1.67
4.750	2.23	10.833	8.65	16.917	2.51	23.00	1.67
4.833	2.23	10.917	8.65	17.000	2.51	23.08	1.67
4.917	2.23	11.000	8.65	17.083	2.51	23.17	1.67
5.000	2.23	11.083	8.65	17.167	2.51	23.25	1.67
5.083	2.23	11.167	8.65	17.250	2.51	23.33	1.67
5.167	2.23	11.250	8.65	17.333	2.51	23.42	1.67
5.250	2.23	11.333	13.39	17.417	2.51	23.50	1.67
5.333	2.23	11.417	13.39	17.500	2.51	23.58	1.67
5.417	2.23	11.500	13.39	17.583	2.51	23.67	1.67
5.500	2.23	11.583	13.39	17.667	2.51	23.75	1.67
5.583	2.23	11.667	13.39	17.750	2.51	23.83	1.67
5.667	2.23	11.750	13.39	17.833	2.51	23.92	1.67
5.750	2.23	11.833	41.28	17.917	2.51	24.00	1.67
5.833	2.23	11.917	41.29	18.000	2.51	24.08	1.67
5.917	2.23	12.000	41.29	18.083	2.51	24.17	1.67
6.000	2.23	12.083	170.71	18.167	2.51	24.25	1.67
6.083	2.23	12.167	170.72	18.250	2.51		

Unit Hyd Qpeak (cms)= 0.043

PEAK FLOW (cms)= 0.059 (i)
TIME TO PEAK (hrs)= 12.667
RUNOFF VOLUME (mm)= 76.854
TOTAL RAINFALL (mm)= 139.480
RUNOFF COEFFICIENT = 0.551

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB								
NASHYD (0028)	Area (ha)= 1.38	Curve Number (CN)= 64.1						
ID= 1 DT= 5.0 min	Ia (mm)= 8.51	# of Linear Res.(N)= 3.00						
	U.H. Tp(hrs)= 0.39							

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.23	12.250	170.72	18.33	2.51
0.167	0.00	6.250	2.23	12.333	20.10	18.42	2.51
0.250	0.00	6.333	2.51	12.417	20.09	18.50	2.51
0.333	1.53	6.417	2.51	12.500	20.09	18.58	2.51
0.417	1.53	6.500	2.51	12.583	20.09	18.67	2.51
0.500	1.53	6.583	2.51	12.667	20.09	18.75	2.51
0.583	1.53	6.667	2.51	12.750	20.09	18.83	2.51
0.667	1.53	6.750	2.51	12.833	10.32	18.92	2.51
0.750	1.53	6.833	2.51	12.917	10.32	19.00	2.51
0.833	1.53	6.917	2.51	13.000	10.32	19.08	2.51
0.917	1.53	7.000	2.51	13.083	10.32	19.17	2.51
1.000	1.53	7.083	2.51	13.167	10.32	19.25	2.51
1.083	1.53	7.167	2.51	13.250	10.32	19.33	2.51
1.167	1.53	7.250	2.51	13.333	7.53	19.42	2.51
1.250	1.53	7.333	3.07	13.417	7.53	19.50	2.51
1.333	1.53	7.417	3.07	13.500	7.53	19.58	2.51
1.417	1.53	7.500	3.07	13.583	7.53	19.67	2.51
1.500	1.53	7.583	3.07	13.667	7.53	19.75	2.51
1.583	1.53	7.667	3.07	13.750	7.53	19.83	2.51
1.667	1.53	7.750	3.07	13.833	5.86	19.92	2.51
1.750	1.53	7.833	3.07	13.917	5.86	20.00	2.51
1.833	1.53	7.917	3.07	14.000	5.86	20.08	2.51
1.917	1.53	8.000	3.07	14.083	5.86	20.17	2.51
2.000	1.53	8.083	3.07	14.167	5.86	20.25	2.51
2.083	1.53	8.167	3.07	14.250	5.86	20.33	1.67
2.167	1.53	8.250	3.07	14.333	4.18	20.42	1.67
2.250	1.53	8.333	3.63	14.417	4.18	20.50	1.67
2.333	1.81	8.417	3.63	14.500	4.18	20.58	1.67
2.417	1.81	8.500	3.63	14.583	4.18	20.67	1.67
2.500	1.81	8.583	3.63	14.667	4.18	20.75	1.67
2.583	1.81	8.667	3.63	14.750	4.18	20.83	1.67
2.667	1.81	8.750	3.63	14.833	4.18	20.92	1.67
2.750	1.81	8.833	3.91	14.917	4.18	21.00	1.67
2.833	1.81	8.917	3.91	15.000	4.18	21.08	1.67
2.917	1.81	9.000	3.91	15.083	4.18	21.17	1.67
3.000	1.81	9.083	3.91	15.167	4.18	21.25	1.67
3.083	1.81	9.167	3.91	15.250	4.18	21.33	1.67
3.167	1.81	9.250	3.91	15.333	4.18	21.42	1.67
3.250	1.81	9.333	4.46	15.417	4.18	21.50	1.67
3.333	1.81	9.417	4.46	15.500	4.18	21.58	1.67
3.417	1.81	9.500	4.46	15.583	4.18	21.67	1.67
3.500	1.81	9.583	4.46	15.667	4.18	21.75	1.67
3.583	1.81	9.667	4.46	15.750	4.18	21.83	1.67
3.667	1.81	9.750	4.46	15.833	4.18	21.92	1.67
3.750	1.81	9.833	5.02	15.917	4.18	22.00	1.67
3.833	1.81	9.917	5.02	16.000	4.18	22.08	1.67
3.917	1.81	10.000	5.02	16.083	4.18	22.17	1.67
4.000	1.81	10.083	5.02	16.167	4.18	22.25	1.67
4.083	1.81	10.167	5.02	16.250	4.18	22.33	1.67
4.167	1.81	10.250	5.02	16.333	2.51	22.42	1.67
4.250	1.81	10.333	6.42	16.417	2.51	22.50	1.67
4.333	2.23	10.417	6.42	16.500	2.51	22.58	1.67
4.417	2.23	10.500	6.42	16.583	2.51	22.67	1.67
4.500	2.23	10.583	6.42	16.667	2.51	22.75	1.67
4.583	2.23	10.667	6.42	16.750	2.51	22.83	1.67
4.667	2.23	10.750	6.42	16.833	2.51	22.92	1.67
4.750	2.23	10.833	8.65	16.917	2.51	23.00	1.67
4.833	2.23	10.917	8.65	17.000	2.51	23.08	1.67
4.917	2.23	11.000	8.65	17.083	2.51	23.17	1.67
5.000	2.23	11.083	8.65	17.167	2.51	23.25	1.67
5.083	2.23	11.167	8.65	17.250	2.51	23.33	1.67
5.167	2.23	11.250	8.65	17.333	2.51	23.42	1.67
5.250	2.23	11.333	13.39	17.417	2.51	23.50	1.67
5.333	2.23	11.417	13.39	17.500	2.51	23.58	1.67
5.417	2.23	11.500	13.39	17.583	2.51	23.67	1.67
5.500	2.23	11.583	13.39	17.667	2.51	23.75	1.67
5.583	2.23	11.667	13.39	17.750	2.51	23.83	1.67
5.667	2.23	11.750	13.39	17.833	2.51	23.92	1.67
5.750	2.23	11.833	41.28	17.917	2.51	24.00	1.67
5.833	2.23	11.917	41.29	18.000	2.51	24.08	1.67
5.917	2.23	12.000	41.29	18.083	2.51	24.17	1.67
6.000	2.23	12.083	170.71	18.167	2.51	24.25	1.67
6.083	2.23	12.167	170.72	18.250	2.51		

Unit Hyd Qpeak (cms)= 0.135

PEAK FLOW (cms)= 0.140 (i)
TIME TO PEAK (hrs)= 12.500
RUNOFF VOLUME (mm)= 62.828
TOTAL RAINFALL (mm)= 139.480
RUNOFF COEFFICIENT = 0.450

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	
STANDHYD (0044)	Area (ha)= 1.62
ID= 1 DT= 5.0 min	Total Imp(%)= 48.77 Dir. Conn.(%)= 30.86

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.79	0.83
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	1.40
Length	(m)=	103.92	400.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.23	12.250	170.72	18.33	2.51
0.167	0.00	6.250	2.23	12.333	20.10	18.42	2.51
0.250	0.00	6.333	2.51	12.417	20.09	18.50	2.51
0.333	1.53	6.417	2.51	12.500	20.09	18.58	2.51
0.417	1.53	6.500	2.51	12.583	20.09	18.67	2.51
0.500	1.53	6.583	2.51	12.667	20.09	18.75	2.51
0.583	1.53	6.667	2.51	12.750	20.09	18.83	2.51
0.667	1.53	6.750	2.51	12.833	10.32	18.92	2.51
0.750	1.53	6.833	2.51	12.917	10.32	19.00	2.51
0.833	1.53	6.917	2.51	13.000	10.32	19.08	2.51
0.917	1.53	7.000	2.51	13.083	10.32	19.17	2.51
1.000	1.53	7.083	2.51	13.167	10.32	19.25	2.51
1.083	1.53	7.167	2.51	13.250	10.32	19.33	2.51
1.167	1.53	7.250	2.51	13.333	7.53	19.42	2.51
1.250	1.53	7.333	3.07	13.417	7.53	19.50	2.51
1.333	1.53	7.417	3.07	13.500	7.53	19.58	2.51
1.417	1.53	7.500	3.07	13.583	7.53	19.67	2.51
1.500	1.53	7.583	3.07	13.667	7.53	19.75	2.51
1.583	1.53	7.667	3.07	13.750	7.53	19.83	2.51
1.667	1.53	7.750	3.07	13.833	5.86	19.92	2.51
1.750	1.53	7.833	3.07	13.917	5.86	20.00	2.51
1.833	1.53	7.917	3.07	14.000	5.86	20.08	2.51
1.917	1.53	8.000	3.07	14.083	5.86	20.17	2.51
2.000	1.53	8.083	3.07	14.167	5.86	20.25	2.51
2.083	1.53	8.167	3.07	14.250	5.86	20.33	1.67
2.167	1.53	8.250	3.07	14.333	4.18	20.42	1.67
2.250	1.53	8.333	3.63	14.417	4.18	20.50	1.67
2.333	1.81	8.417	3.63	14.500	4.18	20.58	1.67
2.417	1.81	8.500	3.63	14.583	4.18	20.67	1.67
2.500	1.81	8.583	3.63	14.667	4.18	20.75	1.67
2.583	1.81	8.667	3.63	14.750	4.18	20.83	1.67
2.667	1.81	8.750	3.63	14.833	4.18	20.92	1.67
2.750	1.81	8.833	3.91	14.917	4.18	21.00	1.67
2.833	1.81	8.917	3.91	15.000	4.18	21.08	1.67
2.917	1.81	9.000	3.91	15.083	4.18	21.17	1.67
3.000	1.81	9.083	3.91	15.167	4.18	21.25	1.67
3.083	1.81	9.167	3.91	15.250	4.18	21.33	1.67
3.167	1.81	9.250	3.91	15.333	4.18	21.42	1.67
3.250	1.81	9.333	4.46	15.417	4.18	21.50	1.67
3.333	1.81	9.417	4.46	15.500	4.18	21.58	1.67
3.417	1.81	9.500	4.46	15.583	4.18	21.67	1.67
3.500	1.81	9.583	4.46	15.667	4.18	21.75	1.67
3.583	1.81	9.667	4.46	15.750	4.18	21.83	1.67
3.667	1.81	9.750	4.46	15.833	4.18	21.92	1.67
3.750	1.81	9.833	5.02	15.917	4.18	22.00	1.67
3.833	1.81	9.917	5.02	16.000	4.18	22.08	1.67
3.917	1.81	10.000	5.02	16.083	4.18	22.17	1.67
4.000	1.81	10.083	5.02	16.167	4.18	22.25	1.67
4.083	1.81	10.167	5.02	16.250	4.18	22.33	1.67
4.167	1.81	10.250	5.02	16.333	2.51	22.42	1.67
4.250	1.81	10.333	6.42	16.417	2.51	22.50	1.67
4.333	2.23	10.417	6.42	16.500	2.51	22.58	1.67
4.417	2.23	10.500	6.42	16.583	2.51	22.67	1.67
4.500	2.23	10.583	6.42	16.667	2.51	22.75	1.67
4.583	2.23	10.667	6.42	16.750	2.51	22.83	1.67
4.667	2.23	10.750	6.42	16.833	2.51	22.92	1.67
4.750	2.23	10.833	8.65	16.917	2.51	23.00	1.67
4.833	2.23	10.917	8.65	17.000	2.51	23.08	1.67
4.917	2.23	11.000	8.65	17.083	2.51	23.17	1.67
5.000	2.23	11.083	8.65	17.167	2.51	23.25	1.67
5.083	2.23	11.167	8.65	17.250	2.51	23.33	1.67
5.167	2.23	11.250	8.65	17.333	2.51	23.42	1.67
5.250	2.23	11.333	13.39	17.417	2.51	23.50	1.67
5.333	2.23	11.417	13.39	17.500	2.51	23.58	1.67
5.417	2.23	11.500	13.39	17.583	2.51	23.67	1.67
5.500	2.23	11.583	13.39	17.667	2.51	23.75	1.67
5.583	2.23	11.667	13.39	17.750	2.51	23.83	1.67
5.667	2.23	11.750	13.39	17.833	2.51	23.92	1.67
5.750	2.23	11.833	41.28	17.917	2.51	24.00	1.67
5.833	2.23	11.917	41.29	18.000	2.51	24.08	1.67
5.917	2.23	12.000	41.29	18.083	2.51	24.17	1.67
6.000	2.23	12.083	170.71	18.167	2.51	24.25	1.67
6.083	2.23	12.167	170.72	18.250	2.51		

				TOTALS
Max.Eff.Inten.(mm/hr)=		170.72	83.55	
over (min)		5.00	40.00	
Storage Coeff.	(min)=	2.60 (ii)	36.20 (ii)	
Unit Hyd. Tpeak	(min)=	5.00	40.00	
Unit Hyd. peak	(cms)=	0.29	0.03	
PEAK FLOW	(cms)=	0.24	0.12	0.283 (iii)
TIME TO PEAK	(hrs)=	12.25	12.75	12.25
RUNOFF VOLUME	(mm)=	138.48	83.67	100.57

```
     TOTAL RAINFALL   (mm)=     139.48       139.48         139.48
     RUNOFF COEFFICIENT   =       0.99         0.60           0.72

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  69.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| STANDHYD (  0043)|   Area    (ha)=   0.13
|ID= 1 DT= 5.0 min |   Total Imp(%)=  30.77   Dir. Conn.(%)=   7.69
--------------------
                          IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       0.04         0.09
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       0.50         0.50
     Length            (m)=      29.44        70.00
     Mannings n           =      0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                         ---- TRANSFORMED HYETOGRAPH ----
  TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
   hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
 0.083    0.00 | 6.167    2.23 |12.250  170.72 | 18.33    2.51
 0.167    0.00 | 6.250    2.23 |12.333   20.10 | 18.42    2.51
 0.250    0.00 | 6.333    2.51 |12.417   20.09 | 18.50    2.51
 0.333    1.53 | 6.417    2.51 |12.500   20.09 | 18.58    2.51
 0.417    1.53 | 6.500    2.51 |12.583   20.09 | 18.67    2.51
 0.500    1.53 | 6.583    2.51 |12.667   20.09 | 18.75    2.51
 0.583    1.53 | 6.667    2.51 |12.750   20.09 | 18.83    2.51
 0.667    1.53 | 6.750    2.51 |12.833   10.32 | 18.92    2.51
 0.750    1.53 | 6.833    2.51 |12.917   10.32 | 19.00    2.51
 0.833    1.53 | 6.917    2.51 |13.000   10.32 | 19.08    2.51
 0.917    1.53 | 7.000    2.51 |13.083   10.32 | 19.17    2.51
 1.000    1.53 | 7.083    2.51 |13.167   10.32 | 19.25    2.51
 1.083    1.53 | 7.167    2.51 |13.250   10.32 | 19.33    2.51
 1.167    1.53 | 7.250    2.51 |13.333    7.53 | 19.42    2.51
 1.250    1.53 | 7.333    3.07 |13.417    7.53 | 19.50    2.51
 1.333    1.53 | 7.417    3.07 |13.500    7.53 | 19.58    2.51
 1.417    1.53 | 7.500    3.07 |13.583    7.53 | 19.67    2.51
 1.500    1.53 | 7.583    3.07 |13.667    7.53 | 19.75    2.51
 1.583    1.53 | 7.667    3.07 |13.750    7.53 | 19.83    2.51
 1.667    1.53 | 7.750    3.07 |13.833    5.86 | 19.92    2.51
 1.750    1.53 | 7.833    3.07 |13.917    5.86 | 20.00    2.51
 1.833    1.53 | 7.917    3.07 |14.000    5.86 | 20.08    2.51
 1.917    1.53 | 8.000    3.07 |14.083    5.86 | 20.17    2.51
 2.000    1.53 | 8.083    3.07 |14.167    5.86 | 20.25    2.51
 2.083    1.53 | 8.167    3.07 |14.250    5.86 | 20.33    1.67
 2.167    1.53 | 8.250    3.07 |14.333    4.18 | 20.42    1.67
 2.250    1.53 | 8.333    3.63 |14.417    4.18 | 20.50    1.67
 2.333    1.81 | 8.417    3.63 |14.500    4.18 | 20.58    1.67
 2.417    1.81 | 8.500    3.63 |14.583    4.18 | 20.67    1.67
 2.500    1.81 | 8.583    3.63 |14.667    4.18 | 20.75    1.67
 2.583    1.81 | 8.667    3.63 |14.750    4.18 | 20.83    1.67
 2.667    1.81 | 8.750    3.63 |14.833    4.18 | 20.92    1.67
 2.750    1.81 | 8.833    3.91 |14.917    4.18 | 21.00    1.67
 2.833    1.81 | 8.917    3.91 |15.000    4.18 | 21.08    1.67
 2.917    1.81 | 9.000    3.91 |15.083    4.18 | 21.17    1.67
 3.000    1.81 | 9.083    3.91 |15.167    4.18 | 21.25    1.67
 3.083    1.81 | 9.167    3.91 |15.250    4.18 | 21.33    1.67
 3.167    1.81 | 9.250    3.91 |15.333    4.18 | 21.42    1.67
 3.250    1.81 | 9.333    4.46 |15.417    4.18 | 21.50    1.67
 3.333    1.81 | 9.417    4.46 |15.500    4.18 | 21.58    1.67
 3.417    1.81 | 9.500    4.46 |15.583    4.18 | 21.67    1.67
 3.500    1.81 | 9.583    4.46 |15.667    4.18 | 21.75    1.67
 3.583    1.81 | 9.667    4.46 |15.750    4.18 | 21.83    1.67
 3.667    1.81 | 9.750    4.46 |15.833    4.18 | 21.92    1.67
 3.750    1.81 | 9.833    5.02 |15.917    4.18 | 22.00    1.67
 3.833    1.81 | 9.917    5.02 |16.000    4.18 | 22.08    1.67
 3.917    1.81 |10.000    5.02 |16.083    4.18 | 22.17    1.67
 4.000    1.81 |10.083    5.02 |16.167    4.18 | 22.25    1.67
 4.083    1.81 |10.167    5.02 |16.250    4.18 | 22.33    1.67
 4.167    1.81 |10.250    5.02 |16.333    2.51 | 22.42    1.67
 4.250    1.81 |10.333    6.42 |16.417    2.51 | 22.50    1.67
 4.333    2.23 |10.417    6.42 |16.500    2.51 | 22.58    1.67
 4.417    2.23 |10.500    6.42 |16.583    2.51 | 22.67    1.67
 4.500    2.23 |10.583    6.42 |16.667    2.51 | 22.75    1.67
 4.583    2.23 |10.667    6.42 |16.750    2.51 | 22.83    1.67
 4.667    2.23 |10.750    6.42 |16.833    2.51 | 22.92    1.67
 4.750    2.23 |10.833    8.65 |16.917    2.51 | 23.00    1.67
 4.833    2.23 |10.917    8.65 |17.000    2.51 | 23.08    1.67
 4.917    2.23 |11.000    8.65 |17.083    2.51 | 23.17    1.67
 5.000    2.23 |11.083    8.65 |17.167    2.51 | 23.25    1.67
 5.083    2.23 |11.167    8.65 |17.250    2.51 | 23.33    1.67
 5.167    2.23 |11.250    8.65 |17.333    2.51 | 23.42    1.67
 5.250    2.23 |11.333   13.39 |17.417    2.51 | 23.50    1.67
 5.333    2.23 |11.417   13.39 |17.500    2.51 | 23.58    1.67
 5.417    2.23 |11.500   13.39 |17.583    2.51 | 23.67    1.67
 5.500    2.23 |11.583   13.39 |17.667    2.51 | 23.75    1.67
 5.583    2.23 |11.667   13.39 |17.750    2.51 | 23.83    1.67
 5.667    2.23 |11.750   13.39 |17.833    2.51 | 23.92    1.67
 5.750    2.23 |11.833   41.28 |17.917    2.51 | 24.00    1.67
 5.833    2.23 |11.917   41.29 |18.000    2.51 | 24.08    1.67
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               5.917    2.23 |12.000   41.29 |18.083    2.51 | 24.17    1.67
               6.000    2.23 |12.083  170.71 |18.167    2.51 | 24.25    1.67
               6.083    2.23 |12.167  170.72 |18.250    2.51 |
```

Max.Eff.Inten.(mm/hr)=	170.72	154.96	
over (min)	5.00	15.00	
Storage Coeff. (min)=	1.22 (ii)	13.78 (ii)	
Unit Hyd. Tpeak (min)=	5.00	15.00	
Unit Hyd. peak (cms)=	0.33	0.08	
			TOTALS
PEAK FLOW (cms)=	0.00	0.02	0.025 (iii)
TIME TO PEAK (hrs)=	12.25	12.33	12.25
RUNOFF VOLUME (mm)=	138.48	83.24	87.43
TOTAL RAINFALL (mm)=	139.48	139.48	139.48
RUNOFF COEFFICIENT =	0.99	0.60	0.63

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0023)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
	ID1= 1 (0011):	46.28	6.985	12.42	76.10
+	ID2= 2 (0012):	1.13	0.116	12.58	67.99
	ID = 3 (0023):	47.41	7.092	12.42	75.90

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
	ID1= 3 (0023):	47.41	7.092	12.42	75.90
+	ID2= 2 (0028):	1.38	0.140	12.50	62.83
	ID = 1 (0023):	48.79	7.226	12.42	75.53

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
	ID1= 1 (0023):	48.79	7.226	12.42	75.53
+	ID2= 2 (0041):	0.59	0.059	12.67	76.85
	ID = 3 (0023):	49.38	7.275	12.42	75.55

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
	ID1= 3 (0023):	49.38	7.275	12.42	75.55
+	ID2= 2 (0043):	0.13	0.025	12.25	87.43
	ID = 1 (0023):	49.51	7.298	12.42	75.58

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
	ID1= 1 (0023):	49.51	7.298	12.42	75.58
+	ID2= 2 (0044):	1.62	0.283	12.25	100.57
	ID = 3 (0023):	51.13	7.405	12.42	76.37

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0025)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
	ID1= 1 (0023):	51.13	7.405	12.42	76.37
+	ID2= 2 (0024):	225.17	7.676	13.25	53.81
	ID = 3 (0025):	276.30	11.765	12.50	57.99

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

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       V    V   I    SSSSS  U   U    A    L             (v 6.2.2020)
       V    V   I    SS     U   U   A A   L
        V  V    I     SS    U   U  AAAAA  L
        V  V    I      SS   U   U  A   A  L
         VV     I    SSSSS  UUUUU  A   A  LLLLL

        OOO   TTTTT  TTTTT  H   H  Y   Y  M   M   OOO    TM
       O   O    T      T    H   H   Y Y   MM MM  O   O
       O   O    T      T    H   H    Y    M   M  O   O
        OOO     T      T    H   H    Y    M   M   OOO
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                 *****  D E T A I L E D   O U T P U T *****


  Input   filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat

  Output  filename:
C:\Users\msimon\AppData\Local\Civica\VH5\a122c840-259d-4b92-8a43-b1e7a592bdea\a5941
975-7f98-45ca-9a96-fdd7c924e004\scena
  Summary filename:
C:\Users\msimon\AppData\Local\Civica\VH5\a122c840-259d-4b92-8a43-b1e7a592bdea\a5941
975-7f98-45ca-9a96-fdd7c924e004\scena


DATE: 07-15-2026                          TIME: 03:17:55

USER:


COMMENTS: _____________________________________________________________


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  ************************************************
  ** SIMULATION : M - 25 mm                     **
  ************************************************


--------------------
|    READ STORM    |    Filename: C:\Users\msimon\AppD
|                  |              ata\Local\Temp\
|                  |              2578c1bc-683b-4555-9960-7d3c657f7fff\6deeea8b

| Ptotal= 26.26 mm |    Comments: 25mm
--------------------
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                 hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
                0.00    2.10 |  0.83   30.00 |  1.67    4.67 |  2.50    2.37
                0.08    2.29 |  0.92   80.70 |  1.75    4.23 |  2.58    2.26
                0.17    2.52 |  1.00   37.00 |  1.83    3.88 |  2.67    2.17
                0.25    2.81 |  1.08   20.30 |  1.92    3.58 |  2.75    2.08
                0.33    3.18 |  1.17   13.27 |  2.00    3.33 |  2.83    2.00
                0.42    3.68 |  1.25   10.09 |  2.08    3.11 |  2.92    1.93
                0.50    4.39 |  1.33    8.15 |  2.17    2.92 |  3.00    1.93
                0.58    5.49 |  1.42    6.85 |  2.25    2.76 |  3.08    1.93
                0.67    7.40 |  1.50    5.92 |  2.33    2.61 |  3.17    1.93
                0.75   11.54 |  1.58    5.22 |  2.42    2.48 |

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--------------------
| CALIB            |
| NASHYD   (  0007)|   Area    (ha)= 100.92   Curve Number   (CN)= 55.9
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.89   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   1.70

     Unit Hyd Qpeak  (cms)=   2.267

     PEAK FLOW       (cms)=   0.117 (i)
     TIME TO PEAK    (hrs)=   3.583
     RUNOFF VOLUME    (mm)=   1.544
     TOTAL RAINFALL   (mm)=  26.256
     RUNOFF COEFFICIENT   =   0.059

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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--------------------
| CALIB            |
| NASHYD   (  0008)|   Area    (ha)=  23.99   Curve Number   (CN)= 44.7
|ID= 1 DT= 5.0 min |   Ia      (mm)=  10.91   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.97

     Unit Hyd Qpeak  (cms)=   0.945

     PEAK FLOW       (cms)=   0.018 (i)
     TIME TO PEAK    (hrs)=   2.750
     RUNOFF VOLUME    (mm)=   0.714
     TOTAL RAINFALL   (mm)=  26.256
     RUNOFF COEFFICIENT   =   0.027

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
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--------------------
| CALIB            |
| NASHYD   (  0009)|   Area    (ha)=   6.37   Curve Number   (CN)= 50.5
|ID= 1 DT= 5.0 min |   Ia      (mm)=  15.69   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.77

     Unit Hyd Qpeak  (cms)=   0.316

     PEAK FLOW       (cms)=   0.003 (i)
     TIME TO PEAK    (hrs)=   2.917
     RUNOFF VOLUME    (mm)=   0.430
     TOTAL RAINFALL   (mm)=  26.256
     RUNOFF COEFFICIENT   =   0.016

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| NASHYD   (  0010)|   Area    (ha)=  14.85   Curve Number   (CN)= 52.9
|ID= 1 DT= 5.0 min |   Ia      (mm)=  13.28   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.89

     Unit Hyd Qpeak  (cms)=   0.637

     PEAK FLOW       (cms)=   0.011 (i)
     TIME TO PEAK    (hrs)=   2.833
     RUNOFF VOLUME    (mm)=   0.705
     TOTAL RAINFALL   (mm)=  26.256
     RUNOFF COEFFICIENT   =   0.027

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| NASHYD   (  0013)|   Area    (ha)=   1.70   Curve Number   (CN)= 60.5
|ID= 1 DT= 5.0 min |   Ia      (mm)=   9.65   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.40

     Unit Hyd Qpeak  (cms)=   0.162

     PEAK FLOW       (cms)=   0.004 (i)
     TIME TO PEAK    (hrs)=   1.667
     RUNOFF VOLUME    (mm)=   1.509
     TOTAL RAINFALL   (mm)=  26.256
     RUNOFF COEFFICIENT   =   0.057

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
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| CALIB            |
| NASHYD   (  0014)|   Area    (ha)=   1.80   Curve Number   (CN)= 50.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=  16.00   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.76

     Unit Hyd Qpeak  (cms)=   0.090

     PEAK FLOW       (cms)=   0.001 (i)
     TIME TO PEAK    (hrs)=   2.917
     RUNOFF VOLUME    (mm)=   0.397
     TOTAL RAINFALL   (mm)=  26.256
     RUNOFF COEFFICIENT   =   0.015

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| NASHYD   (  0015)|   Area    (ha)=   6.70   Curve Number   (CN)= 60.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=  10.00   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   1.45

     Unit Hyd Qpeak  (cms)=   0.176

     PEAK FLOW       (cms)=   0.008 (i)
     TIME TO PEAK    (hrs)=   3.417
     RUNOFF VOLUME    (mm)=   1.423
     TOTAL RAINFALL   (mm)=  26.256
     RUNOFF COEFFICIENT   =   0.054

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| NASHYD   (  0016)|   Area    (ha)=  29.16   Curve Number   (CN)= 71.4
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.88   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.68

     Unit Hyd Qpeak  (cms)=   1.638

     PEAK FLOW       (cms)=   0.107 (i)
     TIME TO PEAK    (hrs)=   2.083
     RUNOFF VOLUME    (mm)=   2.811
     TOTAL RAINFALL   (mm)=  26.256
     RUNOFF COEFFICIENT   =   0.107
```

```
     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| NASHYD   (  0019)|   Area    (ha)=  39.68   Curve Number   (CN)= 60.7
|ID= 1 DT= 5.0 min |   Ia      (mm)=   8.26   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   1.18

     Unit Hyd Qpeak  (cms)=   1.284

     PEAK FLOW       (cms)=   0.066 (i)
     TIME TO PEAK    (hrs)=   2.917
     RUNOFF VOLUME    (mm)=   1.773
     TOTAL RAINFALL   (mm)=  26.256
     RUNOFF COEFFICIENT   =   0.068

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0024)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 1 (  0010):    14.85   0.011     2.83     0.71
      + ID2= 2 (  0013):     1.70   0.004     1.67     1.51
        ================================================
        ID = 3 (  0024):    16.55   0.014     2.58     0.79

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0024)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 3 (  0024):    16.55   0.014     2.58     0.79
      + ID2= 2 (  0014):     1.80   0.001     2.92     0.40
        ================================================
        ID = 1 (  0024):    18.35   0.014     2.67     0.75

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0024)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 1 (  0024):    18.35   0.014     2.67     0.75
      + ID2= 2 (  0015):     6.70   0.008     3.42     1.42
        ================================================
        ID = 3 (  0024):    25.05   0.022     2.92     0.93

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0024)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 3 (  0024):    25.05   0.022     2.92     0.93
      + ID2= 2 (  0016):    29.16   0.107     2.08     2.81
        ================================================
        ID = 1 (  0024):    54.21   0.124     2.17     1.94

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0024)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 1 (  0024):    54.21   0.124     2.17     1.94
      + ID2= 2 (  0019):    39.68   0.066     2.92     1.77
        ================================================
        ID = 3 (  0024):    93.89   0.181     2.33     1.87

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0024)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 3 (  0024):    93.89   0.181     2.33     1.87
      + ID2= 2 (  0007):   100.92   0.117     3.58     1.54
        ================================================
        ID = 1 (  0024):   194.81   0.273     2.83     1.70

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0024)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 1 (  0024):   194.81   0.273     2.83     1.70
      + ID2= 2 (  0008):    23.99   0.018     2.75     0.71
        ================================================
```

```
        ID = 3 (  0024):   218.80   0.290     2.83     1.59

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0024)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 3 (  0024):   218.80   0.290     2.83     1.59
      + ID2= 2 (  0009):     6.37   0.003     2.92     0.43
        ================================================
        ID = 1 (  0024):   225.17   0.294     2.83     1.56

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
--------------------
| CALIB            |
| NASHYD   (  0011)|   Area    (ha)=  46.28   Curve Number   (CN)= 72.2
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.09   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.30

     Unit Hyd Qpeak  (cms)=   5.892

     PEAK FLOW       (cms)=   0.302 (i)
     TIME TO PEAK    (hrs)=   1.417
     RUNOFF VOLUME    (mm)=   3.138
     TOTAL RAINFALL   (mm)=  26.256
     RUNOFF COEFFICIENT   =   0.120

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| NASHYD   (  0012)|   Area    (ha)=   1.13   Curve Number   (CN)= 67.4
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.88   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.43

     Unit Hyd Qpeak  (cms)=   0.100

     PEAK FLOW       (cms)=   0.005 (i)
     TIME TO PEAK    (hrs)=   1.667
     RUNOFF VOLUME    (mm)=   2.386
     TOTAL RAINFALL   (mm)=  26.256
     RUNOFF COEFFICIENT   =   0.091

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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```

```
--------------------
| CALIB            |
| NASHYD   (  0041)|   Area    (ha)=   0.59   Curve Number   (CN)= 71.5
|ID= 1 DT= 5.0 min |   Ia      (mm)=   4.75   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.53

     Unit Hyd Qpeak  (cms)=   0.043

     PEAK FLOW       (cms)=   0.004 (i)
     TIME TO PEAK    (hrs)=   1.750
     RUNOFF VOLUME    (mm)=   3.760
     TOTAL RAINFALL   (mm)=  26.256
     RUNOFF COEFFICIENT   =   0.143

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| NASHYD   (  0028)|   Area    (ha)=   1.38   Curve Number   (CN)= 64.1
|ID= 1 DT= 5.0 min |   Ia      (mm)=   8.51   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.39

     Unit Hyd Qpeak  (cms)=   0.135

     PEAK FLOW       (cms)=   0.005 (i)
     TIME TO PEAK    (hrs)=   1.667
     RUNOFF VOLUME    (mm)=   1.970
     TOTAL RAINFALL   (mm)=  26.256
     RUNOFF COEFFICIENT   =   0.075

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| STANDHYD (  0044)|   Area    (ha)=   1.62
|ID= 1 DT= 5.0 min |   Total Imp(%)=  48.77   Dir. Conn.(%)=  30.86
--------------------

                              IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       0.79         0.83
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       0.50         1.40
     Length            (m)=     103.92       400.00
     Mannings n           =      0.013        0.250

     Max.Eff.Inten.(mm/hr)=      80.70         4.72
               over (min)        5.00       110.00
     Storage Coeff.  (min)=       3.51 (ii)  109.54 (ii)
     Unit Hyd. Tpeak (min)=       5.00       110.00
```

```
     Unit Hyd. peak  (cms)=       0.26         0.01
                                                          *TOTALS*
     PEAK FLOW       (cms)=       0.09         0.00          0.094 (iii)
     TIME TO PEAK    (hrs)=       1.00         3.08           1.00
     RUNOFF VOLUME    (mm)=      25.26         4.75          11.04
     TOTAL RAINFALL   (mm)=      26.26        26.26          26.26
     RUNOFF COEFFICIENT   =       0.96         0.18           0.42

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  69.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| STANDHYD (  0043)|   Area    (ha)=   0.13
|ID= 1 DT= 5.0 min |   Total Imp(%)=  30.77   Dir. Conn.(%)=   7.69
--------------------
                           IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       0.04         0.09
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       0.50         0.50
     Length            (m)=      29.44        70.00
     Mannings n            =      0.013        0.250

     Max.Eff.Inten.(mm/hr)=      80.70         5.17
               over (min)        5.00        55.00
     Storage Coeff.  (min)=       1.65 (ii)   50.59 (ii)
     Unit Hyd. Tpeak (min)=       5.00        55.00
     Unit Hyd. peak  (cms)=       0.32         0.02
                                                          *TOTALS*
     PEAK FLOW       (cms)=       0.00         0.00          0.002 (iii)
     TIME TO PEAK    (hrs)=       1.00         2.00           1.00
     RUNOFF VOLUME    (mm)=      25.26         4.69           6.04
     TOTAL RAINFALL   (mm)=      26.26        26.26          26.26
     RUNOFF COEFFICIENT   =       0.96         0.18           0.23

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
              YOU SHOULD CONSIDER SPLITTING THE AREA.

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  69.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
```

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--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0023)|
|   1 +  2 =  3    |          AREA    QPEAK    TPEAK     R.V.
--------------------          (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0011):    46.28   0.302     1.42     3.14
     + ID2= 2 (  0012):     1.13   0.005     1.67     2.39
       ================================================
       ID = 3 (  0023):    47.41   0.306     1.50     3.12

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0023)|
|   3 +  2 =  1    |          AREA    QPEAK    TPEAK     R.V.
--------------------          (ha)    (cms)    (hrs)     (mm)
       ID1= 3 (  0023):    47.41   0.306     1.50     3.12
     + ID2= 2 (  0028):     1.38   0.005     1.67     1.97
       ================================================
       ID = 1 (  0023):    48.79   0.311     1.50     3.09

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0023)|
|   1 +  2 =  3    |          AREA    QPEAK    TPEAK     R.V.
--------------------          (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0023):    48.79   0.311     1.50     3.09
     + ID2= 2 (  0041):     0.59   0.004     1.75     3.76
       ================================================
       ID = 3 (  0023):    49.38   0.314     1.50     3.10

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0023)|
|   3 +  2 =  1    |          AREA    QPEAK    TPEAK     R.V.
--------------------          (ha)    (cms)    (hrs)     (mm)
       ID1= 3 (  0023):    49.38   0.314     1.50     3.10
     + ID2= 2 (  0043):     0.13   0.002     1.00     6.04
       ================================================
       ID = 1 (  0023):    49.51   0.314     1.50     3.10

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
```

```
--------------------
| ADD HYD  (  0023)|
|   1 +  2 =  3    |          AREA    QPEAK    TPEAK     R.V.
--------------------          (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0023):    49.51   0.314     1.50     3.10
     + ID2= 2 (  0044):     1.62   0.094     1.00    11.04
       ================================================
       ID = 3 (  0023):    51.13   0.326     1.42     3.35

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0025)|
|   1 +  2 =  3    |          AREA    QPEAK    TPEAK     R.V.
--------------------          (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0023):    51.13   0.326     1.42     3.35
     + ID2= 2 (  0024):   225.17   0.294     2.83     1.56
       ================================================
       ID = 3 (  0025):   276.30   0.459     1.67     1.89

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
================================================================================
========================

      V    V   I    SSSSS  U   U    A    L             (v 6.2.2020)
      V    V   I    SS     U   U   A A   L
       V  V    I     SS    U   U  AAAAA  L
       V  V    I      SS   U   U  A   A  L
        VV     I    SSSSS  UUUUU  A   A  LLLLL

       OOO   TTTTT  TTTTT  H   H  Y   Y  M   M   OOO    TM
      O   O    T      T    H   H   Y Y   MM MM  O   O
      O   O    T      T    H   H    Y    M   M  O   O
       OOO     T      T    H   H    Y    M   M   OOO
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                 *****  D E T A I L E D   O U T P U T *****

  Input   filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat

  Output  filename:
C:\Users\msimon\AppData\Local\Civica\VH5\a122c840-259d-4b92-8a43-b1e7a592bdea\19795
627-ab07-4947-bcb7-deb20f8c684f\scena

  Summary filename:
C:\Users\msimon\AppData\Local\Civica\VH5\a122c840-259d-4b92-8a43-b1e7a592bdea\19795
627-ab07-4947-bcb7-deb20f8c684f\scena

DATE: 07-15-2026                          TIME: 03:17:49

USER:


COMMENTS: _____________________________________________________

--------------------------------------------------------------------------------
------------------------
  ********************************************
  ** SIMULATION : N - Timmins                **
  ********************************************


--------------------
|    READ STORM    |    Filename: C:\Users\msimon\AppD
|                  |              ata\Local\Temp\
|                  |              2578c1bc-683b-4555-9960-7d3c657f7fff\e3c6c2ae
| Ptotal=193.00 mm |    Comments: tim
--------------------
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                 hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
                0.00   15.00 |  3.00    3.00 |  6.00   43.00 |  9.00   13.00
                1.00   20.00 |  4.00    5.00 |  7.00   20.00 | 10.00   13.00
                2.00   10.00 |  5.00   20.00 |  8.00   23.00 | 11.00    8.00

--------------------------------------------------------------------------------

--------------------
| CALIB            |
| NASHYD   (  0007)|   Area    (ha)= 100.92   Curve Number   (CN)= 55.9
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.89   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   1.70

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                          ---- TRANSFORMED HYETOGRAPH ----
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                 hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
                0.083   15.00 | 3.083    3.00 | 6.083   43.00 |  9.08   13.00
                0.167   15.00 | 3.167    3.00 | 6.167   43.00 |  9.17   13.00
                0.250   15.00 | 3.250    3.00 | 6.250   43.00 |  9.25   13.00
```

0.333	15.00	3.333	3.00	6.333	43.00	9.33	13.00
0.417	15.00	3.417	3.00	6.417	43.00	9.42	13.00
0.500	15.00	3.500	3.00	6.500	43.00	9.50	13.00
0.583	15.00	3.583	3.00	6.583	43.00	9.58	13.00
0.667	15.00	3.667	3.00	6.667	43.00	9.67	13.00
0.750	15.00	3.750	3.00	6.750	43.00	9.75	13.00
0.833	15.00	3.833	3.00	6.833	43.00	9.83	13.00
0.917	15.00	3.917	3.00	6.917	43.00	9.92	13.00
1.000	15.00	4.000	3.00	7.000	43.00	10.00	13.00
1.083	20.00	4.083	5.00	7.083	20.00	10.08	13.00
1.167	20.00	4.167	5.00	7.167	20.00	10.17	13.00
1.250	20.00	4.250	5.00	7.250	20.00	10.25	13.00
1.333	20.00	4.333	5.00	7.333	20.00	10.33	13.00
1.417	20.00	4.417	5.00	7.417	20.00	10.42	13.00
1.500	20.00	4.500	5.00	7.500	20.00	10.50	13.00
1.583	20.00	4.583	5.00	7.583	20.00	10.58	13.00
1.667	20.00	4.667	5.00	7.667	20.00	10.67	13.00
1.750	20.00	4.750	5.00	7.750	20.00	10.75	13.00
1.833	20.00	4.833	5.00	7.833	20.00	10.83	13.00
1.917	20.00	4.917	5.00	7.917	20.00	10.92	13.00
2.000	20.00	5.000	5.00	8.000	20.00	11.00	13.00
2.083	10.00	5.083	20.00	8.083	23.00	11.08	8.00
2.167	10.00	5.167	20.00	8.167	23.00	11.17	8.00
2.250	10.00	5.250	20.00	8.250	23.00	11.25	8.00
2.333	10.00	5.333	20.00	8.333	23.00	11.33	8.00
2.417	10.00	5.417	20.00	8.417	23.00	11.42	8.00
2.500	10.00	5.500	20.00	8.500	23.00	11.50	8.00
2.583	10.00	5.583	20.00	8.583	23.00	11.58	8.00
2.667	10.00	5.667	20.00	8.667	23.00	11.67	8.00
2.750	10.00	5.750	20.00	8.750	23.00	11.75	8.00
2.833	10.00	5.833	20.00	8.833	23.00	11.83	8.00
2.917	10.00	5.917	20.00	8.917	23.00	11.92	8.00
3.000	10.00	6.000	20.00	9.000	23.00	12.00	8.00

Unit Hyd Qpeak (cms)= 2.267

PEAK FLOW (cms)= 3.734 (i)
TIME TO PEAK (hrs)= 9.583
RUNOFF VOLUME (mm)= 88.963
TOTAL RAINFALL (mm)= 193.000
RUNOFF COEFFICIENT = 0.461

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0008)	Area (ha)= 23.99	Curve Number (CN)= 44.7	
ID= 1 DT= 5.0 min	Ia (mm)= 10.91	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.97		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	15.00	3.083	3.00	6.083	43.00	9.08	13.00
0.167	15.00	3.167	3.00	6.167	43.00	9.17	13.00
0.250	15.00	3.250	3.00	6.250	43.00	9.25	13.00
0.333	15.00	3.333	3.00	6.333	43.00	9.33	13.00
0.417	15.00	3.417	3.00	6.417	43.00	9.42	13.00
0.500	15.00	3.500	3.00	6.500	43.00	9.50	13.00
0.583	15.00	3.583	3.00	6.583	43.00	9.58	13.00
0.667	15.00	3.667	3.00	6.667	43.00	9.67	13.00
0.750	15.00	3.750	3.00	6.750	43.00	9.75	13.00
0.833	15.00	3.833	3.00	6.833	43.00	9.83	13.00
0.917	15.00	3.917	3.00	6.917	43.00	9.92	13.00
1.000	15.00	4.000	3.00	7.000	43.00	10.00	13.00
1.083	20.00	4.083	5.00	7.083	20.00	10.08	13.00
1.167	20.00	4.167	5.00	7.167	20.00	10.17	13.00
1.250	20.00	4.250	5.00	7.250	20.00	10.25	13.00
1.333	20.00	4.333	5.00	7.333	20.00	10.33	13.00
1.417	20.00	4.417	5.00	7.417	20.00	10.42	13.00
1.500	20.00	4.500	5.00	7.500	20.00	10.50	13.00
1.583	20.00	4.583	5.00	7.583	20.00	10.58	13.00
1.667	20.00	4.667	5.00	7.667	20.00	10.67	13.00
1.750	20.00	4.750	5.00	7.750	20.00	10.75	13.00
1.833	20.00	4.833	5.00	7.833	20.00	10.83	13.00
1.917	20.00	4.917	5.00	7.917	20.00	10.92	13.00
2.000	20.00	5.000	5.00	8.000	20.00	11.00	13.00
2.083	10.00	5.083	20.00	8.083	23.00	11.08	8.00
2.167	10.00	5.167	20.00	8.167	23.00	11.17	8.00
2.250	10.00	5.250	20.00	8.250	23.00	11.25	8.00
2.333	10.00	5.333	20.00	8.333	23.00	11.33	8.00
2.417	10.00	5.417	20.00	8.417	23.00	11.42	8.00
2.500	10.00	5.500	20.00	8.500	23.00	11.50	8.00
2.583	10.00	5.583	20.00	8.583	23.00	11.58	8.00
2.667	10.00	5.667	20.00	8.667	23.00	11.67	8.00
2.750	10.00	5.750	20.00	8.750	23.00	11.75	8.00
2.833	10.00	5.833	20.00	8.833	23.00	11.83	8.00
2.917	10.00	5.917	20.00	8.917	23.00	11.92	8.00
3.000	10.00	6.000	20.00	9.000	23.00	12.00	8.00

Unit Hyd Qpeak (cms)= 0.945

PEAK FLOW (cms)= 0.752 (i)
TIME TO PEAK (hrs)= 7.917
RUNOFF VOLUME (mm)= 66.804
TOTAL RAINFALL (mm)= 193.000

RUNOFF COEFFICIENT = 0.346

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB NASHYD (0009) ID= 1 DT= 5.0 min	Area (ha)= 6.37 Curve Number (CN)= 50.5 Ia (mm)= 15.69 # of Linear Res.(N)= 3.00 U.H. Tp(hrs)= 0.77

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	15.00	3.083	3.00	6.083	43.00	9.08	13.00
0.167	15.00	3.167	3.00	6.167	43.00	9.17	13.00
0.250	15.00	3.250	3.00	6.250	43.00	9.25	13.00
0.333	15.00	3.333	3.00	6.333	43.00	9.33	13.00
0.417	15.00	3.417	3.00	6.417	43.00	9.42	13.00
0.500	15.00	3.500	3.00	6.500	43.00	9.50	13.00
0.583	15.00	3.583	3.00	6.583	43.00	9.58	13.00
0.667	15.00	3.667	3.00	6.667	43.00	9.67	13.00
0.750	15.00	3.750	3.00	6.750	43.00	9.75	13.00
0.833	15.00	3.833	3.00	6.833	43.00	9.83	13.00
0.917	15.00	3.917	3.00	6.917	43.00	9.92	13.00
1.000	15.00	4.000	3.00	7.000	43.00	10.00	13.00
1.083	20.00	4.083	5.00	7.083	20.00	10.08	13.00
1.167	20.00	4.167	5.00	7.167	20.00	10.17	13.00
1.250	20.00	4.250	5.00	7.250	20.00	10.25	13.00
1.333	20.00	4.333	5.00	7.333	20.00	10.33	13.00
1.417	20.00	4.417	5.00	7.417	20.00	10.42	13.00
1.500	20.00	4.500	5.00	7.500	20.00	10.50	13.00
1.583	20.00	4.583	5.00	7.583	20.00	10.58	13.00
1.667	20.00	4.667	5.00	7.667	20.00	10.67	13.00
1.750	20.00	4.750	5.00	7.750	20.00	10.75	13.00
1.833	20.00	4.833	5.00	7.833	20.00	10.83	13.00
1.917	20.00	4.917	5.00	7.917	20.00	10.92	13.00
2.000	20.00	5.000	5.00	8.000	20.00	11.00	13.00
2.083	10.00	5.083	20.00	8.083	23.00	11.08	8.00
2.167	10.00	5.167	20.00	8.167	23.00	11.17	8.00
2.250	10.00	5.250	20.00	8.250	23.00	11.25	8.00
2.333	10.00	5.333	20.00	8.333	23.00	11.33	8.00
2.417	10.00	5.417	20.00	8.417	23.00	11.42	8.00
2.500	10.00	5.500	20.00	8.500	23.00	11.50	8.00
2.583	10.00	5.583	20.00	8.583	23.00	11.58	8.00
2.667	10.00	5.667	20.00	8.667	23.00	11.67	8.00
2.750	10.00	5.750	20.00	8.750	23.00	11.75	8.00
2.833	10.00	5.833	20.00	8.833	23.00	11.83	8.00
2.917	10.00	5.917	20.00	8.917	23.00	11.92	8.00
3.000	10.00	6.000	20.00	9.000	23.00	12.00	8.00

Unit Hyd Qpeak (cms)= 0.316

PEAK FLOW (cms)= 0.245 (i)
TIME TO PEAK (hrs)= 7.500
RUNOFF VOLUME (mm)= 73.716
TOTAL RAINFALL (mm)= 193.000
RUNOFF COEFFICIENT = 0.382

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB NASHYD (0010) ID= 1 DT= 5.0 min	Area (ha)= 14.85 Curve Number (CN)= 52.9 Ia (mm)= 13.28 # of Linear Res.(N)= 3.00 U.H. Tp(hrs)= 0.89

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	15.00	3.083	3.00	6.083	43.00	9.08	13.00
0.167	15.00	3.167	3.00	6.167	43.00	9.17	13.00
0.250	15.00	3.250	3.00	6.250	43.00	9.25	13.00
0.333	15.00	3.333	3.00	6.333	43.00	9.33	13.00
0.417	15.00	3.417	3.00	6.417	43.00	9.42	13.00
0.500	15.00	3.500	3.00	6.500	43.00	9.50	13.00
0.583	15.00	3.583	3.00	6.583	43.00	9.58	13.00
0.667	15.00	3.667	3.00	6.667	43.00	9.67	13.00
0.750	15.00	3.750	3.00	6.750	43.00	9.75	13.00
0.833	15.00	3.833	3.00	6.833	43.00	9.83	13.00
0.917	15.00	3.917	3.00	6.917	43.00	9.92	13.00
1.000	15.00	4.000	3.00	7.000	43.00	10.00	13.00
1.083	20.00	4.083	5.00	7.083	20.00	10.08	13.00
1.167	20.00	4.167	5.00	7.167	20.00	10.17	13.00
1.250	20.00	4.250	5.00	7.250	20.00	10.25	13.00
1.333	20.00	4.333	5.00	7.333	20.00	10.33	13.00
1.417	20.00	4.417	5.00	7.417	20.00	10.42	13.00
1.500	20.00	4.500	5.00	7.500	20.00	10.50	13.00
1.583	20.00	4.583	5.00	7.583	20.00	10.58	13.00
1.667	20.00	4.667	5.00	7.667	20.00	10.67	13.00
1.750	20.00	4.750	5.00	7.750	20.00	10.75	13.00
1.833	20.00	4.833	5.00	7.833	20.00	10.83	13.00
1.917	20.00	4.917	5.00	7.917	20.00	10.92	13.00

2.000	20.00	5.000	5.00	8.000	20.00	11.00	13.00
2.083	10.00	5.083	20.00	8.083	23.00	11.08	8.00
2.167	10.00	5.167	20.00	8.167	23.00	11.17	8.00
2.250	10.00	5.250	20.00	8.250	23.00	11.25	8.00
2.333	10.00	5.333	20.00	8.333	23.00	11.33	8.00
2.417	10.00	5.417	20.00	8.417	23.00	11.42	8.00
2.500	10.00	5.500	20.00	8.500	23.00	11.50	8.00
2.583	10.00	5.583	20.00	8.583	23.00	11.58	8.00
2.667	10.00	5.667	20.00	8.667	23.00	11.67	8.00
2.750	10.00	5.750	20.00	8.750	23.00	11.75	8.00
2.833	10.00	5.833	20.00	8.833	23.00	11.83	8.00
2.917	10.00	5.917	20.00	8.917	23.00	11.92	8.00
3.000	10.00	6.000	20.00	9.000	23.00	12.00	8.00

Unit Hyd Qpeak (cms)= 0.637

PEAK FLOW (cms)= 0.585 (i)
TIME TO PEAK (hrs)= 7.750
RUNOFF VOLUME (mm)= 79.651
TOTAL RAINFALL (mm)= 193.000
RUNOFF COEFFICIENT = 0.413

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB				
NASHYD (0013)	Area (ha)=	1.70	Curve Number (CN)=	60.5
ID= 1 DT= 5.0 min	Ia (mm)=	9.65	# of Linear Res.(N)=	3.00
	U.H. Tp(hrs)=	0.40		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	15.00	3.083	3.00	6.083	43.00	9.08	13.00
0.167	15.00	3.167	3.00	6.167	43.00	9.17	13.00
0.250	15.00	3.250	3.00	6.250	43.00	9.25	13.00
0.333	15.00	3.333	3.00	6.333	43.00	9.33	13.00
0.417	15.00	3.417	3.00	6.417	43.00	9.42	13.00
0.500	15.00	3.500	3.00	6.500	43.00	9.50	13.00
0.583	15.00	3.583	3.00	6.583	43.00	9.58	13.00
0.667	15.00	3.667	3.00	6.667	43.00	9.67	13.00
0.750	15.00	3.750	3.00	6.750	43.00	9.75	13.00
0.833	15.00	3.833	3.00	6.833	43.00	9.83	13.00
0.917	15.00	3.917	3.00	6.917	43.00	9.92	13.00
1.000	15.00	4.000	3.00	7.000	43.00	10.00	13.00
1.083	20.00	4.083	5.00	7.083	20.00	10.08	13.00
1.167	20.00	4.167	5.00	7.167	20.00	10.17	13.00
1.250	20.00	4.250	5.00	7.250	20.00	10.25	13.00
1.333	20.00	4.333	5.00	7.333	20.00	10.33	13.00
1.417	20.00	4.417	5.00	7.417	20.00	10.42	13.00
1.500	20.00	4.500	5.00	7.500	20.00	10.50	13.00
1.583	20.00	4.583	5.00	7.583	20.00	10.58	13.00
1.667	20.00	4.667	5.00	7.667	20.00	10.67	13.00
1.750	20.00	4.750	5.00	7.750	20.00	10.75	13.00
1.833	20.00	4.833	5.00	7.833	20.00	10.83	13.00
1.917	20.00	4.917	5.00	7.917	20.00	10.92	13.00
2.000	20.00	5.000	5.00	8.000	20.00	11.00	13.00
2.083	10.00	5.083	20.00	8.083	23.00	11.08	8.00
2.167	10.00	5.167	20.00	8.167	23.00	11.17	8.00
2.250	10.00	5.250	20.00	8.250	23.00	11.25	8.00
2.333	10.00	5.333	20.00	8.333	23.00	11.33	8.00
2.417	10.00	5.417	20.00	8.417	23.00	11.42	8.00
2.500	10.00	5.500	20.00	8.500	23.00	11.50	8.00
2.583	10.00	5.583	20.00	8.583	23.00	11.58	8.00
2.667	10.00	5.667	20.00	8.667	23.00	11.67	8.00
2.750	10.00	5.750	20.00	8.750	23.00	11.75	8.00
2.833	10.00	5.833	20.00	8.833	23.00	11.83	8.00
2.917	10.00	5.917	20.00	8.917	23.00	11.92	8.00
3.000	10.00	6.000	20.00	9.000	23.00	12.00	8.00

Unit Hyd Qpeak (cms)= 0.162

PEAK FLOW (cms)= 0.109 (i)
TIME TO PEAK (hrs)= 7.083
RUNOFF VOLUME (mm)= 96.184
TOTAL RAINFALL (mm)= 193.000
RUNOFF COEFFICIENT = 0.498

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB				
NASHYD (0014)	Area (ha)=	1.80	Curve Number (CN)=	50.0
ID= 1 DT= 5.0 min	Ia (mm)=	16.00	# of Linear Res.(N)=	3.00
	U.H. Tp(hrs)=	0.76		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	15.00	3.083	3.00	6.083	43.00	9.08	13.00
0.167	15.00	3.167	3.00	6.167	43.00	9.17	13.00
0.250	15.00	3.250	3.00	6.250	43.00	9.25	13.00

0.333	15.00	3.333	3.00	6.333	43.00	9.33	13.00
0.417	15.00	3.417	3.00	6.417	43.00	9.42	13.00
0.500	15.00	3.500	3.00	6.500	43.00	9.50	13.00
0.583	15.00	3.583	3.00	6.583	43.00	9.58	13.00
0.667	15.00	3.667	3.00	6.667	43.00	9.67	13.00
0.750	15.00	3.750	3.00	6.750	43.00	9.75	13.00
0.833	15.00	3.833	3.00	6.833	43.00	9.83	13.00
0.917	15.00	3.917	3.00	6.917	43.00	9.92	13.00
1.000	15.00	4.000	3.00	7.000	43.00	10.00	13.00
1.083	20.00	4.083	5.00	7.083	20.00	10.08	13.00
1.167	20.00	4.167	5.00	7.167	20.00	10.17	13.00
1.250	20.00	4.250	5.00	7.250	20.00	10.25	13.00
1.333	20.00	4.333	5.00	7.333	20.00	10.33	13.00
1.417	20.00	4.417	5.00	7.417	20.00	10.42	13.00
1.500	20.00	4.500	5.00	7.500	20.00	10.50	13.00
1.583	20.00	4.583	5.00	7.583	20.00	10.58	13.00
1.667	20.00	4.667	5.00	7.667	20.00	10.67	13.00
1.750	20.00	4.750	5.00	7.750	20.00	10.75	13.00
1.833	20.00	4.833	5.00	7.833	20.00	10.83	13.00
1.917	20.00	4.917	5.00	7.917	20.00	10.92	13.00
2.000	20.00	5.000	5.00	8.000	20.00	11.00	13.00
2.083	10.00	5.083	20.00	8.083	23.00	11.08	8.00
2.167	10.00	5.167	20.00	8.167	23.00	11.17	8.00
2.250	10.00	5.250	20.00	8.250	23.00	11.25	8.00
2.333	10.00	5.333	20.00	8.333	23.00	11.33	8.00
2.417	10.00	5.417	20.00	8.417	23.00	11.42	8.00
2.500	10.00	5.500	20.00	8.500	23.00	11.50	8.00
2.583	10.00	5.583	20.00	8.583	23.00	11.58	8.00
2.667	10.00	5.667	20.00	8.667	23.00	11.67	8.00
2.750	10.00	5.750	20.00	8.750	23.00	11.75	8.00
2.833	10.00	5.833	20.00	8.833	23.00	11.83	8.00
2.917	10.00	5.917	20.00	8.917	23.00	11.92	8.00
3.000	10.00	6.000	20.00	9.000	23.00	12.00	8.00

Unit Hyd Qpeak (cms)= 0.090

PEAK FLOW (cms)= 0.069 (i)
TIME TO PEAK (hrs)= 7.500
RUNOFF VOLUME (mm)= 72.687
TOTAL RAINFALL (mm)= 193.000
RUNOFF COEFFICIENT = 0.377

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0015)	Area (ha)=	6.70	Curve Number (CN)=	60.0	
ID= 1 DT= 5.0 min	Ia (mm)=	10.00	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	1.45			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	15.00	3.083	3.00	6.083	43.00	9.08	13.00
0.167	15.00	3.167	3.00	6.167	43.00	9.17	13.00
0.250	15.00	3.250	3.00	6.250	43.00	9.25	13.00
0.333	15.00	3.333	3.00	6.333	43.00	9.33	13.00
0.417	15.00	3.417	3.00	6.417	43.00	9.42	13.00
0.500	15.00	3.500	3.00	6.500	43.00	9.50	13.00
0.583	15.00	3.583	3.00	6.583	43.00	9.58	13.00
0.667	15.00	3.667	3.00	6.667	43.00	9.67	13.00
0.750	15.00	3.750	3.00	6.750	43.00	9.75	13.00
0.833	15.00	3.833	3.00	6.833	43.00	9.83	13.00
0.917	15.00	3.917	3.00	6.917	43.00	9.92	13.00
1.000	15.00	4.000	3.00	7.000	43.00	10.00	13.00
1.083	20.00	4.083	5.00	7.083	20.00	10.08	13.00
1.167	20.00	4.167	5.00	7.167	20.00	10.17	13.00
1.250	20.00	4.250	5.00	7.250	20.00	10.25	13.00
1.333	20.00	4.333	5.00	7.333	20.00	10.33	13.00
1.417	20.00	4.417	5.00	7.417	20.00	10.42	13.00
1.500	20.00	4.500	5.00	7.500	20.00	10.50	13.00
1.583	20.00	4.583	5.00	7.583	20.00	10.58	13.00
1.667	20.00	4.667	5.00	7.667	20.00	10.67	13.00
1.750	20.00	4.750	5.00	7.750	20.00	10.75	13.00
1.833	20.00	4.833	5.00	7.833	20.00	10.83	13.00
1.917	20.00	4.917	5.00	7.917	20.00	10.92	13.00
2.000	20.00	5.000	5.00	8.000	20.00	11.00	13.00
2.083	10.00	5.083	20.00	8.083	23.00	11.08	8.00
2.167	10.00	5.167	20.00	8.167	23.00	11.17	8.00
2.250	10.00	5.250	20.00	8.250	23.00	11.25	8.00
2.333	10.00	5.333	20.00	8.333	23.00	11.33	8.00
2.417	10.00	5.417	20.00	8.417	23.00	11.42	8.00
2.500	10.00	5.500	20.00	8.500	23.00	11.50	8.00
2.583	10.00	5.583	20.00	8.583	23.00	11.58	8.00
2.667	10.00	5.667	20.00	8.667	23.00	11.67	8.00
2.750	10.00	5.750	20.00	8.750	23.00	11.75	8.00
2.833	10.00	5.833	20.00	8.833	23.00	11.83	8.00
2.917	10.00	5.917	20.00	8.917	23.00	11.92	8.00
3.000	10.00	6.000	20.00	9.000	23.00	12.00	8.00

Unit Hyd Qpeak (cms)= 0.176

PEAK FLOW (cms)= 0.278 (i)
TIME TO PEAK (hrs)= 9.333
RUNOFF VOLUME (mm)= 95.049
TOTAL RAINFALL (mm)= 193.000

RUNOFF COEFFICIENT = 0.492

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB NASHYD (0016) ID= 1 DT= 5.0 min	Area (ha)= 29.16 Curve Number (CN)= 71.4 Ia (mm)= 7.88 # of Linear Res.(N)= 3.00 U.H. Tp(hrs)= 0.68

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	15.00	3.083	3.00	6.083	43.00	9.08	13.00
0.167	15.00	3.167	3.00	6.167	43.00	9.17	13.00
0.250	15.00	3.250	3.00	6.250	43.00	9.25	13.00
0.333	15.00	3.333	3.00	6.333	43.00	9.33	13.00
0.417	15.00	3.417	3.00	6.417	43.00	9.42	13.00
0.500	15.00	3.500	3.00	6.500	43.00	9.50	13.00
0.583	15.00	3.583	3.00	6.583	43.00	9.58	13.00
0.667	15.00	3.667	3.00	6.667	43.00	9.67	13.00
0.750	15.00	3.750	3.00	6.750	43.00	9.75	13.00
0.833	15.00	3.833	3.00	6.833	43.00	9.83	13.00
0.917	15.00	3.917	3.00	6.917	43.00	9.92	13.00
1.000	15.00	4.000	3.00	7.000	43.00	10.00	13.00
1.083	20.00	4.083	5.00	7.083	20.00	10.08	13.00
1.167	20.00	4.167	5.00	7.167	20.00	10.17	13.00
1.250	20.00	4.250	5.00	7.250	20.00	10.25	13.00
1.333	20.00	4.333	5.00	7.333	20.00	10.33	13.00
1.417	20.00	4.417	5.00	7.417	20.00	10.42	13.00
1.500	20.00	4.500	5.00	7.500	20.00	10.50	13.00
1.583	20.00	4.583	5.00	7.583	20.00	10.58	13.00
1.667	20.00	4.667	5.00	7.667	20.00	10.67	13.00
1.750	20.00	4.750	5.00	7.750	20.00	10.75	13.00
1.833	20.00	4.833	5.00	7.833	20.00	10.83	13.00
1.917	20.00	4.917	5.00	7.917	20.00	10.92	13.00
2.000	20.00	5.000	5.00	8.000	20.00	11.00	13.00
2.083	10.00	5.083	20.00	8.083	23.00	11.08	8.00
2.167	10.00	5.167	20.00	8.167	23.00	11.17	8.00
2.250	10.00	5.250	20.00	8.250	23.00	11.25	8.00
2.333	10.00	5.333	20.00	8.333	23.00	11.33	8.00
2.417	10.00	5.417	20.00	8.417	23.00	11.42	8.00
2.500	10.00	5.500	20.00	8.500	23.00	11.50	8.00
2.583	10.00	5.583	20.00	8.583	23.00	11.58	8.00
2.667	10.00	5.667	20.00	8.667	23.00	11.67	8.00
2.750	10.00	5.750	20.00	8.750	23.00	11.75	8.00
2.833	10.00	5.833	20.00	8.833	23.00	11.83	8.00
2.917	10.00	5.917	20.00	8.917	23.00	11.92	8.00
3.000	10.00	6.000	20.00	9.000	23.00	12.00	8.00

Unit Hyd Qpeak (cms)= 1.638

PEAK FLOW (cms)= 1.977 (i)
TIME TO PEAK (hrs)= 7.333
RUNOFF VOLUME (mm)= 119.461
TOTAL RAINFALL (mm)= 193.000
RUNOFF COEFFICIENT = 0.619

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB NASHYD (0019) ID= 1 DT= 5.0 min	Area (ha)= 39.68 Curve Number (CN)= 60.7 Ia (mm)= 8.26 # of Linear Res.(N)= 3.00 U.H. Tp(hrs)= 1.18

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	15.00	3.083	3.00	6.083	43.00	9.08	13.00
0.167	15.00	3.167	3.00	6.167	43.00	9.17	13.00
0.250	15.00	3.250	3.00	6.250	43.00	9.25	13.00
0.333	15.00	3.333	3.00	6.333	43.00	9.33	13.00
0.417	15.00	3.417	3.00	6.417	43.00	9.42	13.00
0.500	15.00	3.500	3.00	6.500	43.00	9.50	13.00
0.583	15.00	3.583	3.00	6.583	43.00	9.58	13.00
0.667	15.00	3.667	3.00	6.667	43.00	9.67	13.00
0.750	15.00	3.750	3.00	6.750	43.00	9.75	13.00
0.833	15.00	3.833	3.00	6.833	43.00	9.83	13.00
0.917	15.00	3.917	3.00	6.917	43.00	9.92	13.00
1.000	15.00	4.000	3.00	7.000	43.00	10.00	13.00
1.083	20.00	4.083	5.00	7.083	20.00	10.08	13.00
1.167	20.00	4.167	5.00	7.167	20.00	10.17	13.00
1.250	20.00	4.250	5.00	7.250	20.00	10.25	13.00
1.333	20.00	4.333	5.00	7.333	20.00	10.33	13.00
1.417	20.00	4.417	5.00	7.417	20.00	10.42	13.00
1.500	20.00	4.500	5.00	7.500	20.00	10.50	13.00
1.583	20.00	4.583	5.00	7.583	20.00	10.58	13.00
1.667	20.00	4.667	5.00	7.667	20.00	10.67	13.00
1.750	20.00	4.750	5.00	7.750	20.00	10.75	13.00
1.833	20.00	4.833	5.00	7.833	20.00	10.83	13.00
1.917	20.00	4.917	5.00	7.917	20.00	10.92	13.00

2.000	20.00	5.000	5.00	8.000	20.00	11.00	13.00
2.083	10.00	5.083	20.00	8.083	23.00	11.08	8.00
2.167	10.00	5.167	20.00	8.167	23.00	11.17	8.00
2.250	10.00	5.250	20.00	8.250	23.00	11.25	8.00
2.333	10.00	5.333	20.00	8.333	23.00	11.33	8.00
2.417	10.00	5.417	20.00	8.417	23.00	11.42	8.00
2.500	10.00	5.500	20.00	8.500	23.00	11.50	8.00
2.583	10.00	5.583	20.00	8.583	23.00	11.58	8.00
2.667	10.00	5.667	20.00	8.667	23.00	11.67	8.00
2.750	10.00	5.750	20.00	8.750	23.00	11.75	8.00
2.833	10.00	5.833	20.00	8.833	23.00	11.83	8.00
2.917	10.00	5.917	20.00	8.917	23.00	11.92	8.00
3.000	10.00	6.000	20.00	9.000	23.00	12.00	8.00

Unit Hyd Qpeak (cms)= 1.284

PEAK FLOW (cms)= 1.736 (i)
TIME TO PEAK (hrs)= 9.083
RUNOFF VOLUME (mm)= 97.679
TOTAL RAINFALL (mm)= 193.000
RUNOFF COEFFICIENT = 0.506

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0024)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0010):		14.85	0.585	7.75	79.65
+ ID2= 2 (0013):		1.70	0.109	7.08	96.18
ID = 3 (0024):		16.55	0.665	7.58	81.35

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0024):		16.55	0.665	7.58	81.35
+ ID2= 2 (0014):		1.80	0.069	7.50	72.69
ID = 1 (0024):		18.35	0.734	7.58	80.50

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0024):		18.35	0.734	7.58	80.50
+ ID2= 2 (0015):		6.70	0.278	9.33	95.05
ID = 3 (0024):		25.05	0.961	9.08	84.39

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0024):		25.05	0.961	9.08	84.39
+ ID2= 2 (0016):		29.16	1.977	7.33	119.46
ID = 1 (0024):		54.21	2.897	7.42	103.26

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0024):		54.21	2.897	7.42	103.26
+ ID2= 2 (0019):		39.68	1.736	9.08	97.68
ID = 3 (0024):		93.89	4.467	7.58	100.90

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0024):		93.89	4.467	7.58	100.90
+ ID2= 2 (0007):		100.92	3.734	9.58	88.96
ID = 1 (0024):		194.81	7.839	9.17	94.72

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)

```
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 1 (  0024):   194.81   7.839     9.17    94.72
      + ID2= 2 (  0008):    23.99   0.752     7.92    66.80
        ====================================================
        ID = 3 (  0024):   218.80   8.581     9.17    91.66

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
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| ADD HYD  (  0024)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 3 (  0024):   218.80   8.581     9.17    91.66
      + ID2= 2 (  0009):     6.37   0.245     7.50    73.72
        ====================================================
        ID = 1 (  0024):   225.17   8.802     9.17    91.15

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
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| CALIB            |
| NASHYD   (  0011)|   Area    (ha)=  46.28   Curve Number   (CN)= 72.2
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.09   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.30

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.

                        ---- TRANSFORMED HYETOGRAPH ----
  TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
   hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
 0.083   15.00 | 3.083    3.00 | 6.083   43.00 |  9.08   13.00
 0.167   15.00 | 3.167    3.00 | 6.167   43.00 |  9.17   13.00
 0.250   15.00 | 3.250    3.00 | 6.250   43.00 |  9.25   13.00
 0.333   15.00 | 3.333    3.00 | 6.333   43.00 |  9.33   13.00
 0.417   15.00 | 3.417    3.00 | 6.417   43.00 |  9.42   13.00
 0.500   15.00 | 3.500    3.00 | 6.500   43.00 |  9.50   13.00
 0.583   15.00 | 3.583    3.00 | 6.583   43.00 |  9.58   13.00
 0.667   15.00 | 3.667    3.00 | 6.667   43.00 |  9.67   13.00
 0.750   15.00 | 3.750    3.00 | 6.750   43.00 |  9.75   13.00
 0.833   15.00 | 3.833    3.00 | 6.833   43.00 |  9.83   13.00
 0.917   15.00 | 3.917    3.00 | 6.917   43.00 |  9.92   13.00
 1.000   15.00 | 4.000    3.00 | 7.000   43.00 | 10.00   13.00
 1.083   20.00 | 4.083    5.00 | 7.083   20.00 | 10.08   13.00
 1.167   20.00 | 4.167    5.00 | 7.167   20.00 | 10.17   13.00
 1.250   20.00 | 4.250    5.00 | 7.250   20.00 | 10.25   13.00
 1.333   20.00 | 4.333    5.00 | 7.333   20.00 | 10.33   13.00
 1.417   20.00 | 4.417    5.00 | 7.417   20.00 | 10.42   13.00
 1.500   20.00 | 4.500    5.00 | 7.500   20.00 | 10.50   13.00
 1.583   20.00 | 4.583    5.00 | 7.583   20.00 | 10.58   13.00
 1.667   20.00 | 4.667    5.00 | 7.667   20.00 | 10.67   13.00
 1.750   20.00 | 4.750    5.00 | 7.750   20.00 | 10.75   13.00
 1.833   20.00 | 4.833    5.00 | 7.833   20.00 | 10.83   13.00
 1.917   20.00 | 4.917    5.00 | 7.917   20.00 | 10.92   13.00
 2.000   20.00 | 5.000    5.00 | 8.000   20.00 | 11.00   13.00
 2.083   10.00 | 5.083   20.00 | 8.083   23.00 | 11.08    8.00
 2.167   10.00 | 5.167   20.00 | 8.167   23.00 | 11.17    8.00
 2.250   10.00 | 5.250   20.00 | 8.250   23.00 | 11.25    8.00
 2.333   10.00 | 5.333   20.00 | 8.333   23.00 | 11.33    8.00
 2.417   10.00 | 5.417   20.00 | 8.417   23.00 | 11.42    8.00
 2.500   10.00 | 5.500   20.00 | 8.500   23.00 | 11.50    8.00
 2.583   10.00 | 5.583   20.00 | 8.583   23.00 | 11.58    8.00
 2.667   10.00 | 5.667   20.00 | 8.667   23.00 | 11.67    8.00
 2.750   10.00 | 5.750   20.00 | 8.750   23.00 | 11.75    8.00
 2.833   10.00 | 5.833   20.00 | 8.833   23.00 | 11.83    8.00
 2.917   10.00 | 5.917   20.00 | 8.917   23.00 | 11.92    8.00
 3.000   10.00 | 6.000   20.00 | 9.000   23.00 | 12.00    8.00

     Unit Hyd Qpeak  (cms)=   5.892

     PEAK FLOW       (cms)=   3.978 (i)
     TIME TO PEAK    (hrs)=   7.000
     RUNOFF VOLUME    (mm)= 121.755
     TOTAL RAINFALL   (mm)= 193.000
     RUNOFF COEFFICIENT   =   0.631

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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| CALIB            |
| NASHYD   (  0012)|   Area    (ha)=   1.13   Curve Number   (CN)= 67.4
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.88   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.43

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.

                        ---- TRANSFORMED HYETOGRAPH ----
  TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
   hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
 0.083   15.00 | 3.083    3.00 | 6.083   43.00 |  9.08   13.00
 0.167   15.00 | 3.167    3.00 | 6.167   43.00 |  9.17   13.00
 0.250   15.00 | 3.250    3.00 | 6.250   43.00 |  9.25   13.00
 0.333   15.00 | 3.333    3.00 | 6.333   43.00 |  9.33   13.00
 0.417   15.00 | 3.417    3.00 | 6.417   43.00 |  9.42   13.00
 0.500   15.00 | 3.500    3.00 | 6.500   43.00 |  9.50   13.00
 0.583   15.00 | 3.583    3.00 | 6.583   43.00 |  9.58   13.00
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0.667	15.00	3.667	3.00	6.667	43.00	9.67	13.00
0.750	15.00	3.750	3.00	6.750	43.00	9.75	13.00
0.833	15.00	3.833	3.00	6.833	43.00	9.83	13.00
0.917	15.00	3.917	3.00	6.917	43.00	9.92	13.00
1.000	15.00	4.000	3.00	7.000	43.00	10.00	13.00
1.083	20.00	4.083	5.00	7.083	20.00	10.08	13.00
1.167	20.00	4.167	5.00	7.167	20.00	10.17	13.00
1.250	20.00	4.250	5.00	7.250	20.00	10.25	13.00
1.333	20.00	4.333	5.00	7.333	20.00	10.33	13.00
1.417	20.00	4.417	5.00	7.417	20.00	10.42	13.00
1.500	20.00	4.500	5.00	7.500	20.00	10.50	13.00
1.583	20.00	4.583	5.00	7.583	20.00	10.58	13.00
1.667	20.00	4.667	5.00	7.667	20.00	10.67	13.00
1.750	20.00	4.750	5.00	7.750	20.00	10.75	13.00
1.833	20.00	4.833	5.00	7.833	20.00	10.83	13.00
1.917	20.00	4.917	5.00	7.917	20.00	10.92	13.00
2.000	20.00	5.000	5.00	8.000	20.00	11.00	13.00
2.083	10.00	5.083	20.00	8.083	23.00	11.08	8.00
2.167	10.00	5.167	20.00	8.167	23.00	11.17	8.00
2.250	10.00	5.250	20.00	8.250	23.00	11.25	8.00
2.333	10.00	5.333	20.00	8.333	23.00	11.33	8.00
2.417	10.00	5.417	20.00	8.417	23.00	11.42	8.00
2.500	10.00	5.500	20.00	8.500	23.00	11.50	8.00
2.583	10.00	5.583	20.00	8.583	23.00	11.58	8.00
2.667	10.00	5.667	20.00	8.667	23.00	11.67	8.00
2.750	10.00	5.750	20.00	8.750	23.00	11.75	8.00
2.833	10.00	5.833	20.00	8.833	23.00	11.83	8.00
2.917	10.00	5.917	20.00	8.917	23.00	11.92	8.00
3.000	10.00	6.000	20.00	9.000	23.00	12.00	8.00

Unit Hyd Qpeak (cms)= 0.100

PEAK FLOW (cms)= 0.082 (i)
TIME TO PEAK (hrs)= 7.083
RUNOFF VOLUME (mm)= 111.181
TOTAL RAINFALL (mm)= 193.000
RUNOFF COEFFICIENT = 0.576

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0041)	Area (ha)= 0.59	Curve Number (CN)= 71.5	
ID= 1 DT= 5.0 min	Ia (mm)= 4.75	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.53		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	15.00	3.083	3.00	6.083	43.00	9.08	13.00
0.167	15.00	3.167	3.00	6.167	43.00	9.17	13.00
0.250	15.00	3.250	3.00	6.250	43.00	9.25	13.00
0.333	15.00	3.333	3.00	6.333	43.00	9.33	13.00
0.417	15.00	3.417	3.00	6.417	43.00	9.42	13.00
0.500	15.00	3.500	3.00	6.500	43.00	9.50	13.00
0.583	15.00	3.583	3.00	6.583	43.00	9.58	13.00
0.667	15.00	3.667	3.00	6.667	43.00	9.67	13.00
0.750	15.00	3.750	3.00	6.750	43.00	9.75	13.00
0.833	15.00	3.833	3.00	6.833	43.00	9.83	13.00
0.917	15.00	3.917	3.00	6.917	43.00	9.92	13.00
1.000	15.00	4.000	3.00	7.000	43.00	10.00	13.00
1.083	20.00	4.083	5.00	7.083	20.00	10.08	13.00
1.167	20.00	4.167	5.00	7.167	20.00	10.17	13.00
1.250	20.00	4.250	5.00	7.250	20.00	10.25	13.00
1.333	20.00	4.333	5.00	7.333	20.00	10.33	13.00
1.417	20.00	4.417	5.00	7.417	20.00	10.42	13.00
1.500	20.00	4.500	5.00	7.500	20.00	10.50	13.00
1.583	20.00	4.583	5.00	7.583	20.00	10.58	13.00
1.667	20.00	4.667	5.00	7.667	20.00	10.67	13.00
1.750	20.00	4.750	5.00	7.750	20.00	10.75	13.00
1.833	20.00	4.833	5.00	7.833	20.00	10.83	13.00
1.917	20.00	4.917	5.00	7.917	20.00	10.92	13.00
2.000	20.00	5.000	5.00	8.000	20.00	11.00	13.00
2.083	10.00	5.083	20.00	8.083	23.00	11.08	8.00
2.167	10.00	5.167	20.00	8.167	23.00	11.17	8.00
2.250	10.00	5.250	20.00	8.250	23.00	11.25	8.00
2.333	10.00	5.333	20.00	8.333	23.00	11.33	8.00
2.417	10.00	5.417	20.00	8.417	23.00	11.42	8.00
2.500	10.00	5.500	20.00	8.500	23.00	11.50	8.00
2.583	10.00	5.583	20.00	8.583	23.00	11.58	8.00
2.667	10.00	5.667	20.00	8.667	23.00	11.67	8.00
2.750	10.00	5.750	20.00	8.750	23.00	11.75	8.00
2.833	10.00	5.833	20.00	8.833	23.00	11.83	8.00
2.917	10.00	5.917	20.00	8.917	23.00	11.92	8.00
3.000	10.00	6.000	20.00	9.000	23.00	12.00	8.00

Unit Hyd Qpeak (cms)= 0.043

PEAK FLOW (cms)= 0.044 (i)
TIME TO PEAK (hrs)= 7.167
RUNOFF VOLUME (mm)= 122.322
TOTAL RAINFALL (mm)= 193.000
RUNOFF COEFFICIENT = 0.634

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

```
--------------------------------------------------------------------------------
--------------------
| CALIB            |
| NASHYD   (  0028)|   Area    (ha)=   1.38   Curve Number   (CN)= 64.1
|ID= 1 DT= 5.0 min |   Ia      (mm)=   8.51   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.39

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.
```

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	15.00	3.083	3.00	6.083	43.00	9.08	13.00
0.167	15.00	3.167	3.00	6.167	43.00	9.17	13.00
0.250	15.00	3.250	3.00	6.250	43.00	9.25	13.00
0.333	15.00	3.333	3.00	6.333	43.00	9.33	13.00
0.417	15.00	3.417	3.00	6.417	43.00	9.42	13.00
0.500	15.00	3.500	3.00	6.500	43.00	9.50	13.00
0.583	15.00	3.583	3.00	6.583	43.00	9.58	13.00
0.667	15.00	3.667	3.00	6.667	43.00	9.67	13.00
0.750	15.00	3.750	3.00	6.750	43.00	9.75	13.00
0.833	15.00	3.833	3.00	6.833	43.00	9.83	13.00
0.917	15.00	3.917	3.00	6.917	43.00	9.92	13.00
1.000	15.00	4.000	3.00	7.000	43.00	10.00	13.00
1.083	20.00	4.083	5.00	7.083	20.00	10.08	13.00
1.167	20.00	4.167	5.00	7.167	20.00	10.17	13.00
1.250	20.00	4.250	5.00	7.250	20.00	10.25	13.00
1.333	20.00	4.333	5.00	7.333	20.00	10.33	13.00
1.417	20.00	4.417	5.00	7.417	20.00	10.42	13.00
1.500	20.00	4.500	5.00	7.500	20.00	10.50	13.00
1.583	20.00	4.583	5.00	7.583	20.00	10.58	13.00
1.667	20.00	4.667	5.00	7.667	20.00	10.67	13.00
1.750	20.00	4.750	5.00	7.750	20.00	10.75	13.00
1.833	20.00	4.833	5.00	7.833	20.00	10.83	13.00
1.917	20.00	4.917	5.00	7.917	20.00	10.92	13.00
2.000	20.00	5.000	5.00	8.000	20.00	11.00	13.00
2.083	10.00	5.083	20.00	8.083	23.00	11.08	8.00
2.167	10.00	5.167	20.00	8.167	23.00	11.17	8.00
2.250	10.00	5.250	20.00	8.250	23.00	11.25	8.00
2.333	10.00	5.333	20.00	8.333	23.00	11.33	8.00
2.417	10.00	5.417	20.00	8.417	23.00	11.42	8.00
2.500	10.00	5.500	20.00	8.500	23.00	11.50	8.00
2.583	10.00	5.583	20.00	8.583	23.00	11.58	8.00
2.667	10.00	5.667	20.00	8.667	23.00	11.67	8.00
2.750	10.00	5.750	20.00	8.750	23.00	11.75	8.00
2.833	10.00	5.833	20.00	8.833	23.00	11.83	8.00
2.917	10.00	5.917	20.00	8.917	23.00	11.92	8.00
3.000	10.00	6.000	20.00	9.000	23.00	12.00	8.00

```
     Unit Hyd Qpeak  (cms)=   0.135

     PEAK FLOW       (cms)=   0.097 (i)
     TIME TO PEAK    (hrs)=   7.083
     RUNOFF VOLUME    (mm)= 104.232
     TOTAL RAINFALL   (mm)= 193.000
     RUNOFF COEFFICIENT   =   0.540

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| STANDHYD (  0044)|   Area    (ha)=   1.62
|ID= 1 DT= 5.0 min |   Total Imp(%)=  48.77   Dir. Conn.(%)=  30.86
--------------------

                              IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       0.79         0.83
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       0.50         1.40
     Length            (m)=     103.92       400.00
     Mannings n           =      0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.
```

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	15.00	3.083	3.00	6.083	43.00	9.08	13.00
0.167	15.00	3.167	3.00	6.167	43.00	9.17	13.00
0.250	15.00	3.250	3.00	6.250	43.00	9.25	13.00
0.333	15.00	3.333	3.00	6.333	43.00	9.33	13.00
0.417	15.00	3.417	3.00	6.417	43.00	9.42	13.00
0.500	15.00	3.500	3.00	6.500	43.00	9.50	13.00
0.583	15.00	3.583	3.00	6.583	43.00	9.58	13.00
0.667	15.00	3.667	3.00	6.667	43.00	9.67	13.00
0.750	15.00	3.750	3.00	6.750	43.00	9.75	13.00
0.833	15.00	3.833	3.00	6.833	43.00	9.83	13.00
0.917	15.00	3.917	3.00	6.917	43.00	9.92	13.00
1.000	15.00	4.000	3.00	7.000	43.00	10.00	13.00
1.083	20.00	4.083	5.00	7.083	20.00	10.08	13.00
1.167	20.00	4.167	5.00	7.167	20.00	10.17	13.00
1.250	20.00	4.250	5.00	7.250	20.00	10.25	13.00
1.333	20.00	4.333	5.00	7.333	20.00	10.33	13.00
1.417	20.00	4.417	5.00	7.417	20.00	10.42	13.00
1.500	20.00	4.500	5.00	7.500	20.00	10.50	13.00
1.583	20.00	4.583	5.00	7.583	20.00	10.58	13.00
1.667	20.00	4.667	5.00	7.667	20.00	10.67	13.00
1.750	20.00	4.750	5.00	7.750	20.00	10.75	13.00

1.833	20.00	4.833	5.00	7.833	20.00	10.83	13.00
1.917	20.00	4.917	5.00	7.917	20.00	10.92	13.00
2.000	20.00	5.000	5.00	8.000	20.00	11.00	13.00
2.083	10.00	5.083	20.00	8.083	23.00	11.08	8.00
2.167	10.00	5.167	20.00	8.167	23.00	11.17	8.00
2.250	10.00	5.250	20.00	8.250	23.00	11.25	8.00
2.333	10.00	5.333	20.00	8.333	23.00	11.33	8.00
2.417	10.00	5.417	20.00	8.417	23.00	11.42	8.00
2.500	10.00	5.500	20.00	8.500	23.00	11.50	8.00
2.583	10.00	5.583	20.00	8.583	23.00	11.58	8.00
2.667	10.00	5.667	20.00	8.667	23.00	11.67	8.00
2.750	10.00	5.750	20.00	8.750	23.00	11.75	8.00
2.833	10.00	5.833	20.00	8.833	23.00	11.83	8.00
2.917	10.00	5.917	20.00	8.917	23.00	11.92	8.00
3.000	10.00	6.000	20.00	9.000	23.00	12.00	8.00

Max.Eff.Inten.(mm/hr)=	43.00	45.23	
over (min)	5.00	50.00	
Storage Coeff. (min)=	4.51 (ii)	47.46 (ii)	
Unit Hyd. Tpeak (min)=	5.00	50.00	
Unit Hyd. peak (cms)=	0.23	0.02	
			TOTALS
PEAK FLOW (cms)=	0.06	0.08	0.126 (iii)
TIME TO PEAK (hrs)=	6.92	7.50	7.00
RUNOFF VOLUME (mm)=	192.00	130.85	149.70
TOTAL RAINFALL (mm)=	193.00	193.00	193.00
RUNOFF COEFFICIENT =	0.99	0.68	0.78

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
STANDHYD (0043)	Area (ha)=	0.13	
ID= 1 DT= 5.0 min	Total Imp(%)=	30.77	Dir. Conn.(%)= 7.69

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.04	0.09
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	0.50
Length	(m)=	29.44	70.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	15.00	3.083	3.00	6.083	43.00	9.08	13.00
0.167	15.00	3.167	3.00	6.167	43.00	9.17	13.00
0.250	15.00	3.250	3.00	6.250	43.00	9.25	13.00
0.333	15.00	3.333	3.00	6.333	43.00	9.33	13.00
0.417	15.00	3.417	3.00	6.417	43.00	9.42	13.00
0.500	15.00	3.500	3.00	6.500	43.00	9.50	13.00
0.583	15.00	3.583	3.00	6.583	43.00	9.58	13.00
0.667	15.00	3.667	3.00	6.667	43.00	9.67	13.00
0.750	15.00	3.750	3.00	6.750	43.00	9.75	13.00
0.833	15.00	3.833	3.00	6.833	43.00	9.83	13.00
0.917	15.00	3.917	3.00	6.917	43.00	9.92	13.00
1.000	15.00	4.000	3.00	7.000	43.00	10.00	13.00
1.083	20.00	4.083	5.00	7.083	20.00	10.08	13.00
1.167	20.00	4.167	5.00	7.167	20.00	10.17	13.00
1.250	20.00	4.250	5.00	7.250	20.00	10.25	13.00
1.333	20.00	4.333	5.00	7.333	20.00	10.33	13.00
1.417	20.00	4.417	5.00	7.417	20.00	10.42	13.00
1.500	20.00	4.500	5.00	7.500	20.00	10.50	13.00
1.583	20.00	4.583	5.00	7.583	20.00	10.58	13.00
1.667	20.00	4.667	5.00	7.667	20.00	10.67	13.00
1.750	20.00	4.750	5.00	7.750	20.00	10.75	13.00
1.833	20.00	4.833	5.00	7.833	20.00	10.83	13.00
1.917	20.00	4.917	5.00	7.917	20.00	10.92	13.00
2.000	20.00	5.000	5.00	8.000	20.00	11.00	13.00
2.083	10.00	5.083	20.00	8.083	23.00	11.08	8.00
2.167	10.00	5.167	20.00	8.167	23.00	11.17	8.00
2.250	10.00	5.250	20.00	8.250	23.00	11.25	8.00
2.333	10.00	5.333	20.00	8.333	23.00	11.33	8.00
2.417	10.00	5.417	20.00	8.417	23.00	11.42	8.00
2.500	10.00	5.500	20.00	8.500	23.00	11.50	8.00
2.583	10.00	5.583	20.00	8.583	23.00	11.58	8.00
2.667	10.00	5.667	20.00	8.667	23.00	11.67	8.00
2.750	10.00	5.750	20.00	8.750	23.00	11.75	8.00
2.833	10.00	5.833	20.00	8.833	23.00	11.83	8.00
2.917	10.00	5.917	20.00	8.917	23.00	11.92	8.00
3.000	10.00	6.000	20.00	9.000	23.00	12.00	8.00

Max.Eff.Inten.(mm/hr)=	43.00	45.54	
over (min)	5.00	25.00	
Storage Coeff. (min)=	2.12 (ii)	22.62 (ii)	
Unit Hyd. Tpeak (min)=	5.00	25.00	
Unit Hyd. peak (cms)=	0.31	0.05	
			TOTALS
PEAK FLOW (cms)=	0.00	0.01	0.011 (iii)
TIME TO PEAK (hrs)=	6.42	7.08	7.00

```
     RUNOFF VOLUME    (mm)=     192.00       130.32         134.97
     TOTAL RAINFALL   (mm)=     193.00       193.00         193.00
     RUNOFF COEFFICIENT   =       0.99         0.68           0.70

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
              YOU SHOULD CONSIDER SPLITTING THE AREA.

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  69.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0023)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 1 (  0011):    46.28   3.978     7.00   121.75
      + ID2= 2 (  0012):     1.13   0.082     7.08   111.18
        ================================================
        ID = 3 (  0023):    47.41   4.058     7.00   121.50

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0023)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 3 (  0023):    47.41   4.058     7.00   121.50
      + ID2= 2 (  0028):     1.38   0.097     7.08   104.23
        ================================================
        ID = 1 (  0023):    48.79   4.153     7.00   121.01

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0023)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 1 (  0023):    48.79   4.153     7.00   121.01
      + ID2= 2 (  0041):     0.59   0.044     7.17   122.32
        ================================================
        ID = 3 (  0023):    49.38   4.196     7.00   121.03

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0023)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 3 (  0023):    49.38   4.196     7.00   121.03
      + ID2= 2 (  0043):     0.13   0.011     7.00   134.97
        ================================================
        ID = 1 (  0023):    49.51   4.207     7.00   121.07

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0023)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 1 (  0023):    49.51   4.207     7.00   121.07
      + ID2= 2 (  0044):     1.62   0.126     7.00   149.70
        ================================================
        ID = 3 (  0023):    51.13   4.333     7.00   121.97

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0025)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 1 (  0023):    51.13   4.333     7.00   121.97
      + ID2= 2 (  0024):   225.17   8.802     9.17    91.15
        ================================================
        ID = 3 (  0025):   276.30  11.450     9.00    96.85

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
```

APPENDIX E-2

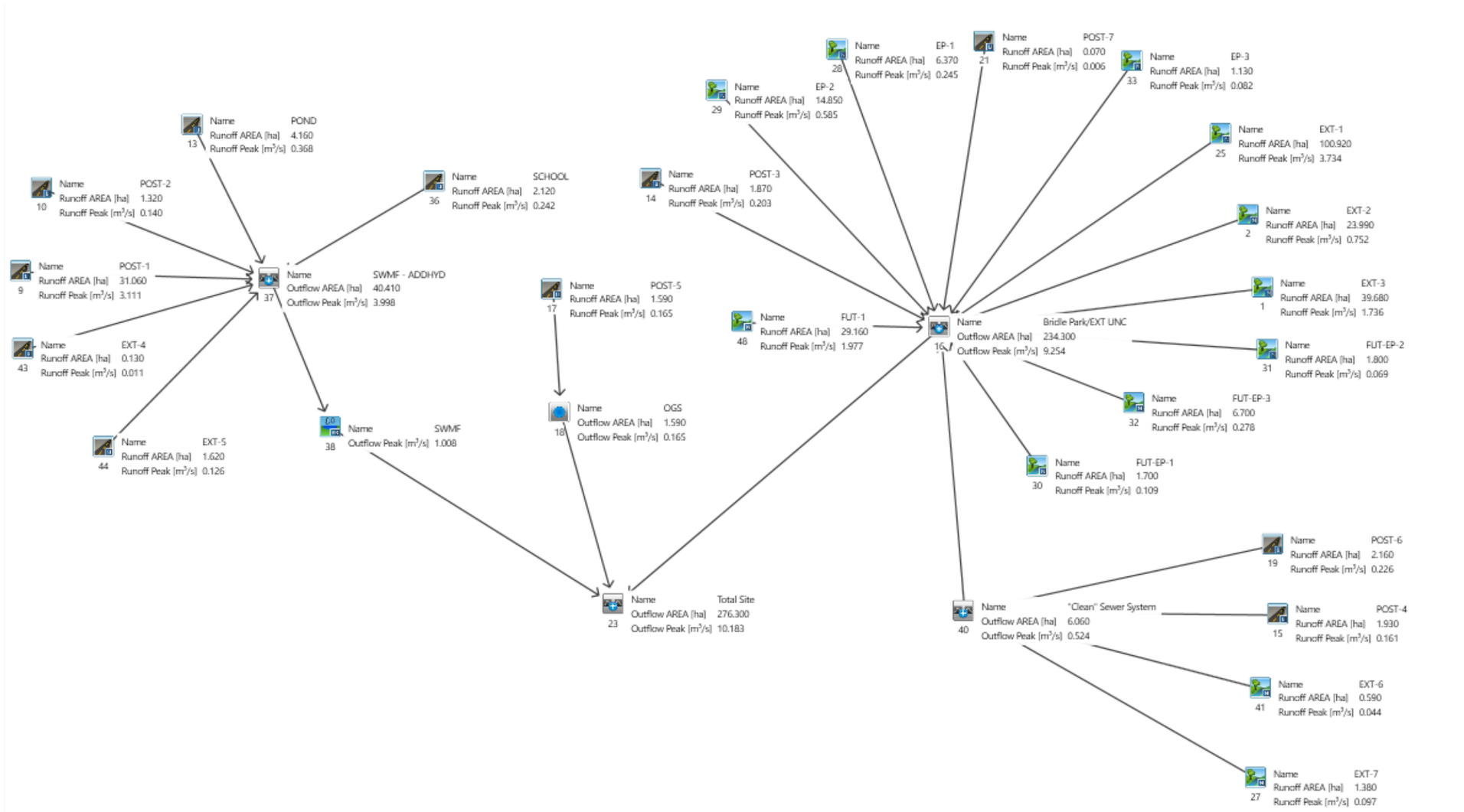
Visual OTTHYMO Files (Interim Conditions)

CROZIER

Project: Bridle Park Stayner
Project No.: 1508-7498
File: Model Schematic Interim
Design by: EC/NOC
Date: 2026.08.07

Visual OTTHYMO 6.2 - Model Schematic

Post-Development (INT)



```
**********
** SIMULATION:A - 2-year CHI  **
**********
```

CHICAGO STORM	Ptotal= 36.82 mm

IDF curve parameters: A= 424.530
B= 0.000
C= 0.699
used in: INTENSITY = A / (t + B)^C

Duration of storm = 4.00 hrs
Storm time step = 10.00 min
Time to peak ratio = 0.33

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.00	3.10	1.00	14.65	2.00	6.12	3.00	3.57
0.17	3.46	1.17	84.90	2.17	5.41	3.17	3.36
0.33	3.95	1.33	17.98	2.33	4.86	3.33	3.18
0.50	4.65	1.50	11.34	2.50	4.44	3.50	3.02
0.67	5.76	1.67	8.64	2.67	4.09	3.67	2.88
0.83	7.88	1.83	7.12	2.83	3.81	3.83	2.75

CALIB	NASHYD (0025)	ID= 1 DT= 5.0 min

Area (ha)= 100.92 Curve Number (CN)= 55.9
Ia (mm)= 7.89 # of Linear Res.(N)= 3.00
U.H. Tp(hrs)= 1.70

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	3.10	1.083	14.65	2.083	6.12	3.08	3.57
0.167	3.10	1.167	14.65	2.167	6.12	3.17	3.57
0.250	3.46	1.250	84.90	2.250	5.41	3.25	3.36
0.333	3.46	1.333	84.90	2.333	5.41	3.33	3.36
0.417	3.95	1.417	17.98	2.417	4.86	3.42	3.18
0.500	3.95	1.500	17.98	2.500	4.86	3.50	3.18
0.583	4.65	1.583	11.34	2.583	4.44	3.58	3.02
0.667	4.65	1.667	11.34	2.667	4.44	3.67	3.02
0.750	5.76	1.750	8.64	2.750	4.09	3.75	2.88
0.833	5.76	1.833	8.64	2.833	4.09	3.83	2.88
0.917	7.88	1.917	7.12	2.917	3.81	3.92	2.75
1.000	7.88	2.000	7.12	3.000	3.81	4.00	2.75

Unit Hyd Qpeak (cms)= 2.267

PEAK FLOW (cms)= 0.253 (i)
TIME TO PEAK (hrs)= 4.083
RUNOFF VOLUME (mm)= 3.654
TOTAL RAINFALL (mm)= 36.816
RUNOFF COEFFICIENT = 0.099

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	NASHYD (0002)	ID= 1 DT= 5.0 min

Area (ha)= 23.99 Curve Number (CN)= 44.7
Ia (mm)= 10.91 # of Linear Res.(N)= 3.00
U.H. Tp(hrs)= 0.97

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	3.10	1.083	14.65	2.083	6.12	3.08	3.57
0.167	3.10	1.167	14.65	2.167	6.12	3.17	3.57
0.250	3.46	1.250	84.90	2.250	5.41	3.25	3.36
0.333	3.46	1.333	84.90	2.333	5.41	3.33	3.36
0.417	3.95	1.417	17.98	2.417	4.86	3.42	3.18
0.500	3.95	1.500	17.98	2.500	4.86	3.50	3.18
0.583	4.65	1.583	11.34	2.583	4.44	3.58	3.02
0.667	4.65	1.667	11.34	2.667	4.44	3.67	3.02
0.750	5.76	1.750	8.64	2.750	4.09	3.75	2.88
0.833	5.76	1.833	8.64	2.833	4.09	3.83	2.88
0.917	7.88	1.917	7.12	2.917	3.81	3.92	2.75
1.000	7.88	2.000	7.12	3.000	3.81	4.00	2.75

Unit Hyd Qpeak (cms)= 0.945

PEAK FLOW (cms)= 0.042 (i)
TIME TO PEAK (hrs)= 3.000
RUNOFF VOLUME (mm)= 1.973
TOTAL RAINFALL (mm)= 36.816
RUNOFF COEFFICIENT = 0.054

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	NASHYD (0001)	ID= 1 DT= 5.0 min

Area (ha)= 39.68 Curve Number (CN)= 60.7
Ia (mm)= 8.26 # of Linear Res.(N)= 3.00
U.H. Tp(hrs)= 1.18

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	3.10	1.083	14.65	2.083	6.12	3.08	3.57
0.167	3.10	1.167	14.65	2.167	6.12	3.17	3.57
0.250	3.46	1.250	84.90	2.250	5.41	3.25	3.36
0.333	3.46	1.333	84.90	2.333	5.41	3.33	3.36
0.417	3.95	1.417	17.98	2.417	4.86	3.42	3.18
0.500	3.95	1.500	17.98	2.500	4.86	3.50	3.18
0.583	4.65	1.583	11.34	2.583	4.44	3.58	3.02
0.667	4.65	1.667	11.34	2.667	4.44	3.67	3.02
0.750	5.76	1.750	8.64	2.750	4.09	3.75	2.88
0.833	5.76	1.833	8.64	2.833	4.09	3.83	2.88
0.917	7.88	1.917	7.12	2.917	3.81	3.92	2.75
1.000	7.88	2.000	7.12	3.000	3.81	4.00	2.75

Unit Hyd Qpeak (cms)= 1.284

PEAK FLOW (cms)= 0.139 (i)
TIME TO PEAK (hrs)= 3.167
RUNOFF VOLUME (mm)= 4.222
TOTAL RAINFALL (mm)= 36.816
RUNOFF COEFFICIENT = 0.115

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	NASHYD (0028)	ID= 1 DT= 5.0 min

Area (ha)= 6.37 Curve Number (CN)= 50.5
Ia (mm)= 15.69 # of Linear Res.(N)= 3.00
U.H. Tp(hrs)= 0.77

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	3.10	1.083	14.65	2.083	6.12	3.08	3.57
0.167	3.10	1.167	14.65	2.167	6.12	3.17	3.57
0.250	3.46	1.250	84.90	2.250	5.41	3.25	3.36
0.333	3.46	1.333	84.90	2.333	5.41	3.33	3.36
0.417	3.95	1.417	17.98	2.417	4.86	3.42	3.18
0.500	3.95	1.500	17.98	2.500	4.86	3.50	3.18
0.583	4.65	1.583	11.34	2.583	4.44	3.58	3.02
0.667	4.65	1.667	11.34	2.667	4.44	3.67	3.02
0.750	5.76	1.750	8.64	2.750	4.09	3.75	2.88
0.833	5.76	1.833	8.64	2.833	4.09	3.83	2.88
0.917	7.88	1.917	7.12	2.917	3.81	3.92	2.75
1.000	7.88	2.000	7.12	3.000	3.81	4.00	2.75

Unit Hyd Qpeak (cms)= 0.316

PEAK FLOW (cms)= 0.010 (i)
TIME TO PEAK (hrs)= 3.000
RUNOFF VOLUME (mm)= 1.651
TOTAL RAINFALL (mm)= 36.816
RUNOFF COEFFICIENT = 0.045

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	NASHYD (0029)	ID= 1 DT= 5.0 min

Area (ha)= 14.85 Curve Number (CN)= 52.9
Ia (mm)= 13.28 # of Linear Res.(N)= 3.00
U.H. Tp(hrs)= 0.89

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	3.10	1.083	14.65	2.083	6.12	3.08	3.57
0.167	3.10	1.167	14.65	2.167	6.12	3.17	3.57
0.250	3.46	1.250	84.90	2.250	5.41	3.25	3.36
0.333	3.46	1.333	84.90	2.333	5.41	3.33	3.36
0.417	3.95	1.417	17.98	2.417	4.86	3.42	3.18
0.500	3.95	1.500	17.98	2.500	4.86	3.50	3.18
0.583	4.65	1.583	11.34	2.583	4.44	3.58	3.02
0.667	4.65	1.667	11.34	2.667	4.44	3.67	3.02
0.750	5.76	1.750	8.64	2.750	4.09	3.75	2.88
0.833	5.76	1.833	8.64	2.833	4.09	3.83	2.88
0.917	7.88	1.917	7.12	2.917	3.81	3.92	2.75
1.000	7.88	2.000	7.12	3.000	3.81	4.00	2.75

Unit Hyd Qpeak (cms)= 0.637

PEAK FLOW (cms)= 0.030 (i)
TIME TO PEAK (hrs)= 3.000
RUNOFF VOLUME (mm)= 2.222
TOTAL RAINFALL (mm)= 36.816
RUNOFF COEFFICIENT = 0.060

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB								
NASHYD (0030)	Area (ha)= 1.70	Curve Number (CN)= 60.5						
ID= 1 DT= 5.0 min	Ia (mm)= 9.65	# of Linear Res.(N)= 3.00						
	U.H. Tp(hrs)= 0.40							

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	3.10	1.083	14.65	2.083	6.12	3.08	3.57
0.167	3.10	1.167	14.65	2.167	6.12	3.17	3.57
0.250	3.46	1.250	84.90	2.250	5.41	3.25	3.36
0.333	3.46	1.333	84.90	2.333	5.41	3.33	3.36
0.417	3.95	1.417	17.98	2.417	4.86	3.42	3.18
0.500	3.95	1.500	17.98	2.500	4.86	3.50	3.18
0.583	4.65	1.583	11.34	2.583	4.44	3.58	3.02
0.667	4.65	1.667	11.34	2.667	4.44	3.67	3.02
0.750	5.76	1.750	8.64	2.750	4.09	3.75	2.88
0.833	5.76	1.833	8.64	2.833	4.09	3.83	2.88
0.917	7.88	1.917	7.12	2.917	3.81	3.92	2.75
1.000	7.88	2.000	7.12	3.000	3.81	4.00	2.75

Unit Hyd Qpeak (cms)= 0.162

PEAK FLOW (cms)= 0.009 (i)
TIME TO PEAK (hrs)= 1.917
RUNOFF VOLUME (mm)= 3.817
TOTAL RAINFALL (mm)= 36.816
RUNOFF COEFFICIENT = 0.104

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB								
NASHYD (0031)	Area (ha)= 1.80	Curve Number (CN)= 50.0						
ID= 1 DT= 5.0 min	Ia (mm)= 16.00	# of Linear Res.(N)= 3.00						
	U.H. Tp(hrs)= 0.76							

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	3.10	1.083	14.65	2.083	6.12	3.08	3.57
0.167	3.10	1.167	14.65	2.167	6.12	3.17	3.57
0.250	3.46	1.250	84.90	2.250	5.41	3.25	3.36
0.333	3.46	1.333	84.90	2.333	5.41	3.33	3.36
0.417	3.95	1.417	17.98	2.417	4.86	3.42	3.18
0.500	3.95	1.500	17.98	2.500	4.86	3.50	3.18
0.583	4.65	1.583	11.34	2.583	4.44	3.58	3.02
0.667	4.65	1.667	11.34	2.667	4.44	3.67	3.02
0.750	5.76	1.750	8.64	2.750	4.09	3.75	2.88
0.833	5.76	1.833	8.64	2.833	4.09	3.83	2.88
0.917	7.88	1.917	7.12	2.917	3.81	3.92	2.75
1.000	7.88	2.000	7.12	3.000	3.81	4.00	2.75

Unit Hyd Qpeak (cms)= 0.090

PEAK FLOW (cms)= 0.003 (i)
TIME TO PEAK (hrs)= 3.000
RUNOFF VOLUME (mm)= 1.576
TOTAL RAINFALL (mm)= 36.816
RUNOFF COEFFICIENT = 0.043

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB								
NASHYD (0032)	Area (ha)= 6.70	Curve Number (CN)= 60.0						
ID= 1 DT= 5.0 min	Ia (mm)= 10.00	# of Linear Res.(N)= 3.00						
	U.H. Tp(hrs)= 1.45							

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr

0.083	3.10	1.083	14.65	2.083	6.12	3.08	3.57
0.167	3.10	1.167	14.65	2.167	6.12	3.17	3.57
0.250	3.46	1.250	84.90	2.250	5.41	3.25	3.36
0.333	3.46	1.333	84.90	2.333	5.41	3.33	3.36
0.417	3.95	1.417	17.98	2.417	4.86	3.42	3.18
0.500	3.95	1.500	17.98	2.500	4.86	3.50	3.18
0.583	4.65	1.583	11.34	2.583	4.44	3.58	3.02
0.667	4.65	1.667	11.34	2.667	4.44	3.67	3.02
0.750	5.76	1.750	8.64	2.750	4.09	3.75	2.88
0.833	5.76	1.833	8.64	2.833	4.09	3.83	2.88
0.917	7.88	1.917	7.12	2.917	3.81	3.92	2.75
1.000	7.88	2.000	7.12	3.000	3.81	4.00	2.75

Unit Hyd Qpeak (cms)= 0.176

PEAK FLOW (cms)= 0.018 (i)
TIME TO PEAK (hrs)= 3.833
RUNOFF VOLUME (mm)= 3.666
TOTAL RAINFALL (mm)= 36.816
RUNOFF COEFFICIENT = 0.100

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB								
NASHYD (0033)	Area (ha)= 1.13	Curve Number (CN)= 67.4						
ID= 1 DT= 5.0 min	Ia (mm)= 7.88	# of Linear Res.(N)= 3.00						
	U.H. Tp(hrs)= 0.43							

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	3.10	1.083	14.65	2.083	6.12	3.08	3.57
0.167	3.10	1.167	14.65	2.167	6.12	3.17	3.57
0.250	3.46	1.250	84.90	2.250	5.41	3.25	3.36
0.333	3.46	1.333	84.90	2.333	5.41	3.33	3.36
0.417	3.95	1.417	17.98	2.417	4.86	3.42	3.18
0.500	3.95	1.500	17.98	2.500	4.86	3.50	3.18
0.583	4.65	1.583	11.34	2.583	4.44	3.58	3.02
0.667	4.65	1.667	11.34	2.667	4.44	3.67	3.02
0.750	5.76	1.750	8.64	2.750	4.09	3.75	2.88
0.833	5.76	1.833	8.64	2.833	4.09	3.83	2.88
0.917	7.88	1.917	7.12	2.917	3.81	3.92	2.75
1.000	7.88	2.000	7.12	3.000	3.81	4.00	2.75

Unit Hyd Qpeak (cms)= 0.100

PEAK FLOW (cms)= 0.009 (i)
TIME TO PEAK (hrs)= 1.917
RUNOFF VOLUME (mm)= 5.507
TOTAL RAINFALL (mm)= 36.816
RUNOFF COEFFICIENT = 0.150

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB								
NASHYD (0027)	Area (ha)= 1.38	Curve Number (CN)= 64.1						
ID= 1 DT= 5.0 min	Ia (mm)= 8.51	# of Linear Res.(N)= 3.00						
	U.H. Tp(hrs)= 0.39							

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	3.10	1.083	14.65	2.083	6.12	3.08	3.57
0.167	3.10	1.167	14.65	2.167	6.12	3.17	3.57
0.250	3.46	1.250	84.90	2.250	5.41	3.25	3.36
0.333	3.46	1.333	84.90	2.333	5.41	3.33	3.36
0.417	3.95	1.417	17.98	2.417	4.86	3.42	3.18
0.500	3.95	1.500	17.98	2.500	4.86	3.50	3.18
0.583	4.65	1.583	11.34	2.583	4.44	3.58	3.02
0.667	4.65	1.667	11.34	2.667	4.44	3.67	3.02
0.750	5.76	1.750	8.64	2.750	4.09	3.75	2.88
0.833	5.76	1.833	8.64	2.833	4.09	3.83	2.88
0.917	7.88	1.917	7.12	2.917	3.81	3.92	2.75
1.000	7.88	2.000	7.12	3.000	3.81	4.00	2.75

Unit Hyd Qpeak (cms)= 0.135

PEAK FLOW (cms)= 0.010 (i)
TIME TO PEAK (hrs)= 1.833
RUNOFF VOLUME (mm)= 4.703
TOTAL RAINFALL (mm)= 36.816
RUNOFF COEFFICIENT = 0.128

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0041)	Area (ha)=	0.59	Curve Number (CN)=	71.5	
ID= 1 DT= 5.0 min	Ia (mm)=	4.75	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	0.53			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	3.10	1.083	14.65	2.083	6.12	3.08	3.57
0.167	3.10	1.167	14.65	2.167	6.12	3.17	3.57
0.250	3.46	1.250	84.90	2.250	5.41	3.25	3.36
0.333	3.46	1.333	84.90	2.333	5.41	3.33	3.36
0.417	3.95	1.417	17.98	2.417	4.86	3.42	3.18
0.500	3.95	1.500	17.98	2.500	4.86	3.50	3.18
0.583	4.65	1.583	11.34	2.583	4.44	3.58	3.02
0.667	4.65	1.667	11.34	2.667	4.44	3.67	3.02
0.750	5.76	1.750	8.64	2.750	4.09	3.75	2.88
0.833	5.76	1.833	8.64	2.833	4.09	3.83	2.88
0.917	7.88	1.917	7.12	2.917	3.81	3.92	2.75
1.000	7.88	2.000	7.12	3.000	3.81	4.00	2.75

Unit Hyd Qpeak (cms)=	0.043		
PEAK FLOW (cms)=	0.006 (i)		
TIME TO PEAK (hrs)=	2.000		
RUNOFF VOLUME (mm)=	7.699		
TOTAL RAINFALL (mm)=	36.816		
RUNOFF COEFFICIENT =	0.209		

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
STANDHYD (0015)	Area (ha)=	1.93			
ID= 1 DT= 5.0 min	Total Imp(%)=	54.66	Dir. Conn.(%)=	10.00	

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	1.05	0.88
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	113.43	45.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	3.10	1.083	14.65	2.083	6.12	3.08	3.57
0.167	3.10	1.167	14.65	2.167	6.12	3.17	3.57
0.250	3.46	1.250	84.90	2.250	5.41	3.25	3.36
0.333	3.46	1.333	84.90	2.333	5.41	3.33	3.36
0.417	3.95	1.417	17.98	2.417	4.86	3.42	3.18
0.500	3.95	1.500	17.98	2.500	4.86	3.50	3.18
0.583	4.65	1.583	11.34	2.583	4.44	3.58	3.02
0.667	4.65	1.667	11.34	2.667	4.44	3.67	3.02
0.750	5.76	1.750	8.64	2.750	4.09	3.75	2.88
0.833	5.76	1.833	8.64	2.833	4.09	3.83	2.88
0.917	7.88	1.917	7.12	2.917	3.81	3.92	2.75
1.000	7.88	2.000	7.12	3.000	3.81	4.00	2.75

				TOTALS
Max.Eff.Inten.(mm/hr)=		84.90	20.20	
over (min)		5.00	20.00	
Storage Coeff. (min)=		3.62 (ii)	17.98 (ii)	
Unit Hyd. Tpeak (min)=		5.00	20.00	
Unit Hyd. peak (cms)=		0.25	0.06	
PEAK FLOW	(cms)=	0.04	0.03	0.052 (iii)
TIME TO PEAK	(hrs)=	1.33	1.58	1.33
RUNOFF VOLUME	(mm)=	35.82	7.03	9.91
TOTAL RAINFALL	(mm)=	36.82	36.82	36.82
RUNOFF COEFFICIENT	=	0.97	0.19	0.27

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 49.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
STANDHYD (0019)	Area (ha)=	2.16			
ID= 1 DT= 5.0 min	Total Imp(%)=	54.64	Dir. Conn.(%)=	10.00	

IMPERVIOUS PERVIOUS (i)

Surface Area	(ha)=	1.18	0.98
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	120.00	30.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	3.10	1.083	14.65	2.083	6.12	3.08	3.57
0.167	3.10	1.167	14.65	2.167	6.12	3.17	3.57
0.250	3.46	1.250	84.90	2.250	5.41	3.25	3.36
0.333	3.46	1.333	84.90	2.333	5.41	3.33	3.36
0.417	3.95	1.417	17.98	2.417	4.86	3.42	3.18
0.500	3.95	1.500	17.98	2.500	4.86	3.50	3.18
0.583	4.65	1.583	11.34	2.583	4.44	3.58	3.02
0.667	4.65	1.667	11.34	2.667	4.44	3.67	3.02
0.750	5.76	1.750	8.64	2.750	4.09	3.75	2.88
0.833	5.76	1.833	8.64	2.833	4.09	3.83	2.88
0.917	7.88	1.917	7.12	2.917	3.81	3.92	2.75
1.000	7.88	2.000	7.12	3.000	3.81	4.00	2.75

				TOTALS
Max.Eff.Inten.(mm/hr)=		84.90	51.23	
over (min)		5.00	15.00	
Storage Coeff. (min)=		3.75 (ii)	11.51 (ii)	
Unit Hyd. Tpeak (min)=		5.00	15.00	
Unit Hyd. peak (cms)=		0.25	0.09	
PEAK FLOW	(cms)=	0.05	0.08	0.089 (iii)
TIME TO PEAK	(hrs)=	1.33	1.50	1.50
RUNOFF VOLUME	(mm)=	35.82	12.81	15.11
TOTAL RAINFALL	(mm)=	36.82	36.82	36.82
RUNOFF COEFFICIENT	=	0.97	0.35	0.41

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0040)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
	ID1= 1 (0015):	1.93	0.052	1.33	9.91
	+ ID2= 2 (0019):	2.16	0.089	1.50	15.11
	ID = 3 (0040):	4.09	0.138	1.33	12.65

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0040)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
	ID1= 3 (0040):	4.09	0.138	1.33	12.65
	+ ID2= 2 (0027):	1.38	0.010	1.83	4.70
	ID = 1 (0040):	5.47	0.140	1.33	10.65

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0040)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
	ID1= 1 (0040):	5.47	0.140	1.33	10.65
	+ ID2= 2 (0041):	0.59	0.006	2.00	7.70
	ID = 3 (0040):	6.06	0.141	1.33	10.36

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB					
NASHYD (0048)	Area (ha)=	29.16	Curve Number (CN)=	71.4	
ID= 1 DT= 5.0 min	Ia (mm)=	7.88	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	0.68			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr

0.083	3.10	1.083	14.65	2.083	6.12	3.08	3.57
0.167	3.10	1.167	14.65	2.167	6.12	3.17	3.57
0.250	3.46	1.250	84.90	2.250	5.41	3.25	3.36
0.333	3.46	1.333	84.90	2.333	5.41	3.33	3.36
0.417	3.95	1.417	17.98	2.417	4.86	3.42	3.18
0.500	3.95	1.500	17.98	2.500	4.86	3.50	3.18
0.583	4.65	1.583	11.34	2.583	4.44	3.58	3.02
0.667	4.65	1.667	11.34	2.667	4.44	3.67	3.02
0.750	5.76	1.750	8.64	2.750	4.09	3.75	2.88
0.833	5.76	1.833	8.64	2.833	4.09	3.83	2.88
0.917	7.88	1.917	7.12	2.917	3.81	3.92	2.75
1.000	7.88	2.000	7.12	3.000	3.81	4.00	2.75

Unit Hyd Qpeak (cms)= 1.638

PEAK FLOW (cms)= 0.213 (i)
TIME TO PEAK (hrs)= 2.333
RUNOFF VOLUME (mm)= 6.407
TOTAL RAINFALL (mm)= 36.816
RUNOFF COEFFICIENT = 0.174

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	
STANDHYD (0014)	Area (ha)= 1.87
ID= 1 DT= 5.0 min	Total Imp(%)= 43.28 Dir. Conn.(%)= 10.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.81	1.06
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	111.65	25.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	3.10	1.083	14.65	2.083	6.12	3.08	3.57
0.167	3.10	1.167	14.65	2.167	6.12	3.17	3.57
0.250	3.46	1.250	84.90	2.250	5.41	3.25	3.36
0.333	3.46	1.333	84.90	2.333	5.41	3.33	3.36
0.417	3.95	1.417	17.98	2.417	4.86	3.42	3.18
0.500	3.95	1.500	17.98	2.500	4.86	3.50	3.18

0.583	4.65	1.583	11.34	2.583	4.44	3.58	3.02
0.667	4.65	1.667	11.34	2.667	4.44	3.67	3.02
0.750	5.76	1.750	8.64	2.750	4.09	3.75	2.88
0.833	5.76	1.833	8.64	2.833	4.09	3.83	2.88
0.917	7.88	1.917	7.12	2.917	3.81	3.92	2.75
1.000	7.88	2.000	7.12	3.000	3.81	4.00	2.75

				TOTALS
Max.Eff.Inten.(mm/hr)=		84.90	46.69	
over (min)		5.00	15.00	
Storage Coeff. (min)=		3.59 (ii)	10.81 (ii)	
Unit Hyd. Tpeak (min)=		5.00	15.00	
Unit Hyd. peak (cms)=		0.26	0.09	
PEAK FLOW	(cms)=	0.04	0.08	0.088 (iii)
TIME TO PEAK	(hrs)=	1.33	1.50	1.50
RUNOFF VOLUME	(mm)=	35.82	14.37	16.51
TOTAL RAINFALL	(mm)=	36.82	36.82	36.82
RUNOFF COEFFICIENT	=	0.97	0.39	0.45

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 78.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	
STANDHYD (0021)	Area (ha)= 0.07
ID= 1 DT= 5.0 min	Total Imp(%)= 48.26 Dir. Conn.(%)= 39.54

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.03	0.04
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	21.60	5.60
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr

0.083	3.10	1.083	14.65	2.083	6.12	3.08	3.57
0.167	3.10	1.167	14.65	2.167	6.12	3.17	3.57
0.250	3.46	1.250	84.90	2.250	5.41	3.25	3.36
0.333	3.46	1.333	84.90	2.333	5.41	3.33	3.36
0.417	3.95	1.417	17.98	2.417	4.86	3.42	3.18
0.500	3.95	1.500	17.98	2.500	4.86	3.50	3.18
0.583	4.65	1.583	11.34	2.583	4.44	3.58	3.02
0.667	4.65	1.667	11.34	2.667	4.44	3.67	3.02
0.750	5.76	1.750	8.64	2.750	4.09	3.75	2.88
0.833	5.76	1.833	8.64	2.833	4.09	3.83	2.88
0.917	7.88	1.917	7.12	2.917	3.81	3.92	2.75
1.000	7.88	2.000	7.12	3.000	3.81	4.00	2.75

				TOTALS
Max.Eff.Inten.(mm/hr)=		84.90	9.19	
over (min)		5.00	5.00	
Storage Coeff. (min)=		1.34 (ii)	3.92 (ii)	
Unit Hyd. Tpeak (min)=		5.00	5.00	
Unit Hyd. peak (cms)=		0.33	0.24	
PEAK FLOW	(cms)=	0.01	0.00	0.008 (iii)
TIME TO PEAK	(hrs)=	1.33	1.33	1.33
RUNOFF VOLUME	(mm)=	35.82	4.57	16.91
TOTAL RAINFALL	(mm)=	36.82	36.82	36.82
RUNOFF COEFFICIENT	=	0.97	0.12	0.46

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 52.2 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0016)					
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)	
ID1= 1 (0001):	39.68	0.139	3.17	4.22	
+ ID2= 2 (0014):	1.87	0.088	1.50	16.51	
ID = 3 (0016):	41.55	0.153	3.17	4.78	

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)					
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)	
ID1= 3 (0016):	41.55	0.153	3.17	4.78	
+ ID2= 2 (0002):	23.99	0.042	3.00	1.97	
ID = 1 (0016):	65.54	0.195	3.08	3.75	

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)					
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)	
ID1= 1 (0016):	65.54	0.195	3.08	3.75	
+ ID2= 2 (0021):	0.07	0.008	1.33	16.91	
ID = 3 (0016):	65.61	0.195	3.08	3.76	

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)					
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)	
ID1= 3 (0016):	65.61	0.195	3.08	3.76	
+ ID2= 2 (0025):	100.92	0.253	4.08	3.65	
ID = 1 (0016):	166.53	0.433	3.67	3.70	

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)					
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)	
ID1= 1 (0016):	166.53	0.433	3.67	3.70	
+ ID2= 2 (0028):	6.37	0.010	3.00	1.65	
ID = 3 (0016):	172.90	0.442	3.67	3.62	

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0016):	172.90	0.442	3.67	3.62
+ ID2= 2 (0029):	14.85	0.030	3.00	2.22
ID = 1 (0016):	187.75	0.471	3.58	3.51

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0016):	187.75	0.471	3.58	3.51
+ ID2= 2 (0030):	1.70	0.009	1.92	3.82
ID = 3 (0016):	189.45	0.475	3.58	3.51

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0016):	189.45	0.475	3.58	3.51
+ ID2= 2 (0031):	1.80	0.003	3.00	1.58
ID = 1 (0016):	191.25	0.478	3.58	3.50

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0016):	191.25	0.478	3.58	3.50
+ ID2= 2 (0032):	6.70	0.018	3.83	3.67
ID = 3 (0016):	197.95	0.496	3.58	3.50

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0016):	197.95	0.496	3.58	3.50
+ ID2= 2 (0033):	1.13	0.009	1.92	5.51
ID = 1 (0016):	199.08	0.500	3.58	3.51

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0016):	199.08	0.500	3.58	3.51
+ ID2= 2 (0040):	6.06	0.141	1.33	10.36
ID = 3 (0016):	205.14	0.527	3.50	3.72

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0016):	205.14	0.527	3.50	3.72
+ ID2= 2 (0048):	29.16	0.213	2.33	6.41
ID = 1 (0016):	234.30	0.681	3.00	4.05

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB	
STANDHYD (0009)	Area (ha)= 31.06
ID= 1 DT= 5.0 min	Total Imp(%)= 53.89 Dir. Conn.(%)= 20.76

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	16.74	14.32
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	455.05	30.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	3.10	1.083	14.65	2.083	6.12	3.08	3.57
0.167	3.10	1.167	14.65	2.167	6.12	3.17	3.57
0.250	3.46	1.250	84.90	2.250	5.41	3.25	3.36
0.333	3.46	1.333	84.90	2.333	5.41	3.33	3.36
0.417	3.95	1.417	17.98	2.417	4.86	3.42	3.18
0.500	3.95	1.500	17.98	2.500	4.86	3.50	3.18
0.583	4.65	1.583	11.34	2.583	4.44	3.58	3.02
0.667	4.65	1.667	11.34	2.667	4.44	3.67	3.02
0.750	5.76	1.750	8.64	2.750	4.09	3.75	2.88
0.833	5.76	1.833	8.64	2.833	4.09	3.83	2.88
0.917	7.88	1.917	7.12	2.917	3.81	3.92	2.75
1.000	7.88	2.000	7.12	3.000	3.81	4.00	2.75

				TOTALS
Max.Eff.Inten.(mm/hr)=		84.90	38.08	
over (min)		10.00	20.00	
Storage Coeff. (min)=		8.34 (ii)	17.07 (ii)	
Unit Hyd. Tpeak (min)=		10.00	20.00	
Unit Hyd. peak (cms)=		0.13	0.06	
PEAK FLOW	(cms)=	0.98	0.65	1.365 (iii)
TIME TO PEAK	(hrs)=	1.42	1.58	1.42
RUNOFF VOLUME	(mm)=	35.82	11.29	16.38
TOTAL RAINFALL	(mm)=	36.82	36.82	36.82
RUNOFF COEFFICIENT	=	0.97	0.31	0.44

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 68.5 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	
STANDHYD (0010)	Area (ha)= 1.32
ID= 1 DT= 5.0 min	Total Imp(%)= 55.27 Dir. Conn.(%)= 1.52

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.73	0.59
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	93.81	23.50
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	3.10	1.083	14.65	2.083	6.12	3.08	3.57
0.167	3.10	1.167	14.65	2.167	6.12	3.17	3.57
0.250	3.46	1.250	84.90	2.250	5.41	3.25	3.36
0.333	3.46	1.333	84.90	2.333	5.41	3.33	3.36
0.417	3.95	1.417	17.98	2.417	4.86	3.42	3.18
0.500	3.95	1.500	17.98	2.500	4.86	3.50	3.18
0.583	4.65	1.583	11.34	2.583	4.44	3.58	3.02
0.667	4.65	1.667	11.34	2.667	4.44	3.67	3.02
0.750	5.76	1.750	8.64	2.750	4.09	3.75	2.88
0.833	5.76	1.833	8.64	2.833	4.09	3.83	2.88
0.917	7.88	1.917	7.12	2.917	3.81	3.92	2.75
1.000	7.88	2.000	7.12	3.000	3.81	4.00	2.75

				TOTALS
Max.Eff.Inten.(mm/hr)=		84.90	62.00	
over (min)		5.00	10.00	
Storage Coeff. (min)=		3.23 (ii)	9.44 (ii)	
Unit Hyd. Tpeak (min)=		5.00	10.00	
Unit Hyd. peak (cms)=		0.27	0.12	
PEAK FLOW	(cms)=	0.00	0.07	0.067 (iii)
TIME TO PEAK	(hrs)=	1.33	1.42	1.42
RUNOFF VOLUME	(mm)=	35.82	13.76	14.09
TOTAL RAINFALL	(mm)=	36.82	36.82	36.82
RUNOFF COEFFICIENT	=	0.97	0.37	0.38

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 68.8 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	
STANDHYD (0013)	Area (ha)= 4.16
ID= 1 DT= 5.0 min	Total Imp(%)= 50.00 Dir. Conn.(%)= 50.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	2.08	2.08
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	166.53	250.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	3.10	1.083	14.65	2.083	6.12	3.08	3.57
0.167	3.10	1.167	14.65	2.167	6.12	3.17	3.57
0.250	3.46	1.250	84.90	2.250	5.41	3.25	3.36
0.333	3.46	1.333	84.90	2.333	5.41	3.33	3.36
0.417	3.95	1.417	17.98	2.417	4.86	3.42	3.18
0.500	3.95	1.500	17.98	2.500	4.86	3.50	3.18
0.583	4.65	1.583	11.34	2.583	4.44	3.58	3.02
0.667	4.65	1.667	11.34	2.667	4.44	3.67	3.02
0.750	5.76	1.750	8.64	2.750	4.09	3.75	2.88
0.833	5.76	1.833	8.64	2.833	4.09	3.83	2.88
0.917	7.88	1.917	7.12	2.917	3.81	3.92	2.75
1.000	7.88	2.000	7.12	3.000	3.81	4.00	2.75

				TOTALS
Max.Eff.Inten.(mm/hr)=		84.90	4.42	
over (min)		5.00	80.00	
Storage Coeff. (min)=		4.56 (ii)	78.37 (ii)	
Unit Hyd. Tpeak (min)=		5.00	80.00	
Unit Hyd. peak (cms)=		0.23	0.01	
PEAK FLOW	(cms)=	0.44	0.01	0.445 (iii)
TIME TO PEAK	(hrs)=	1.33	2.83	1.33
RUNOFF VOLUME	(mm)=	35.82	6.93	21.36
TOTAL RAINFALL	(mm)=	36.82	36.82	36.82
RUNOFF COEFFICIENT	=	0.97	0.19	0.58

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	
STANDHYD (0036)	Area (ha)= 2.12
ID= 1 DT= 5.0 min	Total Imp(%)= 85.04 Dir. Conn.(%)= 0.10

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	1.80	0.32
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	118.88	175.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	3.10	1.083	14.65	2.083	6.12	3.08	3.57
0.167	3.10	1.167	14.65	2.167	6.12	3.17	3.57
0.250	3.46	1.250	84.90	2.250	5.41	3.25	3.36
0.333	3.46	1.333	84.90	2.333	5.41	3.33	3.36
0.417	3.95	1.417	17.98	2.417	4.86	3.42	3.18
0.500	3.95	1.500	17.98	2.500	4.86	3.50	3.18
0.583	4.65	1.583	11.34	2.583	4.44	3.58	3.02
0.667	4.65	1.667	11.34	2.667	4.44	3.67	3.02
0.750	5.76	1.750	8.64	2.750	4.09	3.75	2.88
0.833	5.76	1.833	8.64	2.833	4.09	3.83	2.88
0.917	7.88	1.917	7.12	2.917	3.81	3.92	2.75
1.000	7.88	2.000	7.12	3.000	3.81	4.00	2.75

				TOTALS
Max.Eff.Inten.(mm/hr)=		84.90	286.01	
over (min)		5.00	15.00	
Storage Coeff. (min)=		3.73 (ii)	14.96 (ii)	
Unit Hyd. Tpeak (min)=		5.00	15.00	
Unit Hyd. peak (cms)=		0.25	0.08	
PEAK FLOW	(cms)=	0.00	0.16	0.158 (iii)
TIME TO PEAK	(hrs)=	1.33	1.50	1.50
RUNOFF VOLUME	(mm)=	35.82	24.47	24.48
TOTAL RAINFALL	(mm)=	36.82	36.82	36.82
RUNOFF COEFFICIENT	=	0.97	0.66	0.66

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)

(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	
STANDHYD (0043)	Area (ha)= 0.13
ID= 1 DT= 5.0 min	Total Imp(%)= 30.77 Dir. Conn.(%)= 7.69

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.04	0.09
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	0.50
Length	(m)=	29.44	70.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	3.10	1.083	14.65	2.083	6.12	3.08	3.57
0.167	3.10	1.167	14.65	2.167	6.12	3.17	3.57
0.250	3.46	1.250	84.90	2.250	5.41	3.25	3.36
0.333	3.46	1.333	84.90	2.333	5.41	3.33	3.36
0.417	3.95	1.417	17.98	2.417	4.86	3.42	3.18
0.500	3.95	1.500	17.98	2.500	4.86	3.50	3.18
0.583	4.65	1.583	11.34	2.583	4.44	3.58	3.02
0.667	4.65	1.667	11.34	2.667	4.44	3.67	3.02
0.750	5.76	1.750	8.64	2.750	4.09	3.75	2.88
0.833	5.76	1.833	8.64	2.833	4.09	3.83	2.88
0.917	7.88	1.917	7.12	2.917	3.81	3.92	2.75
1.000	7.88	2.000	7.12	3.000	3.81	4.00	2.75

				TOTALS
Max.Eff.Inten.(mm/hr)=		84.90	10.21	
over (min)		5.00	40.00	
Storage Coeff. (min)=		1.61 (ii)	38.89 (ii)	
Unit Hyd. Tpeak (min)=		5.00	40.00	
Unit Hyd. peak (cms)=		0.32	0.03	
PEAK FLOW	(cms)=	0.00	0.00	0.003 (iii)
TIME TO PEAK	(hrs)=	1.33	1.92	1.33
RUNOFF VOLUME	(mm)=	35.82	9.22	11.09
TOTAL RAINFALL	(mm)=	36.82	36.82	36.82
RUNOFF COEFFICIENT	=	0.97	0.25	0.30

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	
STANDHYD (0044)	Area (ha)= 1.62
ID= 1 DT= 5.0 min	Total Imp(%)= 48.77 Dir. Conn.(%)= 30.86

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.79	0.83
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	1.40
Length	(m)=	103.92	400.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	3.10	1.083	14.65	2.083	6.12	3.08	3.57
0.167	3.10	1.167	14.65	2.167	6.12	3.17	3.57
0.250	3.46	1.250	84.90	2.250	5.41	3.25	3.36
0.333	3.46	1.333	84.90	2.333	5.41	3.33	3.36
0.417	3.95	1.417	17.98	2.417	4.86	3.42	3.18
0.500	3.95	1.500	17.98	2.500	4.86	3.50	3.18
0.583	4.65	1.583	11.34	2.583	4.44	3.58	3.02
0.667	4.65	1.667	11.34	2.667	4.44	3.67	3.02
0.750	5.76	1.750	8.64	2.750	4.09	3.75	2.88
0.833	5.76	1.833	8.64	2.833	4.09	3.83	2.88
0.917	7.88	1.917	7.12	2.917	3.81	3.92	2.75
1.000	7.88	2.000	7.12	3.000	3.81	4.00	2.75

				TOTALS
Max.Eff.Inten.(mm/hr)=		84.90	8.18	
over (min)		5.00	90.00	
Storage Coeff. (min)=		3.44 (ii)	88.54 (ii)	
Unit Hyd. Tpeak (min)=		5.00	90.00	
Unit Hyd. peak (cms)=		0.26	0.01	

TOTALS

PEAK FLOW (cms)=	0.11	0.01	0.113 (iii)
TIME TO PEAK (hrs)=	1.33	3.00	1.33
RUNOFF VOLUME (mm)=	35.82	9.32	17.46
TOTAL RAINFALL (mm)=	36.82	36.82	36.82
RUNOFF COEFFICIENT =	0.97	0.25	0.47

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0037)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0010):	1.32	0.067	1.42	14.09
+ ID2= 2 (0013):	4.16	0.445	1.33	21.36
ID = 3 (0037):	5.48	0.500	1.33	19.61

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0037)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0037):	5.48	0.500	1.33	19.61
+ ID2= 2 (0036):	2.12	0.158	1.50	24.48
ID = 1 (0037):	7.60	0.590	1.33	20.97

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0037)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0037):	7.60	0.590	1.33	20.97
+ ID2= 2 (0043):	0.13	0.003	1.33	11.09
ID = 3 (0037):	7.73	0.592	1.33	20.80

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0037)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0037):	7.73	0.592	1.33	20.80
+ ID2= 2 (0044):	1.62	0.113	1.33	17.46
ID = 1 (0037):	9.35	0.705	1.33	20.22

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0037)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0037):	9.35	0.705	1.33	20.22
+ ID2= 2 (0009):	31.06	1.365	1.42	16.38
ID = 3 (0037):	40.41	1.867	1.33	17.27

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

RESERVOIR(0038)	OVERFLOW IS OFF			
IN= 2---> OUT= 1				
DT= 5.0 min	OUTFLOW (cms)	STORAGE (ha.m.)	OUTFLOW (cms)	STORAGE (ha.m.)
	0.0000	0.0000	0.5076	2.8989
	0.0000	0.2023	0.6060	3.2065
	0.0353	0.4202	0.7105	3.5196
	0.0525	0.6536	0.8207	3.8381
	0.0654	0.9026	0.9365	4.1621
	0.0843	1.1671	1.0574	4.4915
	0.1858	1.7227	1.1833	4.8263
	0.2540	2.0086	1.3139	5.1665
	0.3309	2.2999	1.4492	5.5122
	0.4157	2.5967	1.5890	5.8633

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
INFLOW : ID= 2 (0037)	40.410	1.867	1.33	17.27
OUTFLOW: ID= 1 (0038)	40.410	0.052	4.50	12.23

PEAK FLOW REDUCTION [Qout/Qin](%)= 2.76
TIME SHIFT OF PEAK FLOW (min)=190.00
MAXIMUM STORAGE USED (ha.m.)= 0.6411

CALIB		
STANDHYD (0017)	Area (ha)=	1.59
ID= 1 DT= 5.0 min	Total Imp(%)=	58.58 Dir. Conn.(%)= 27.10

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	0.93	0.66
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	0.50	2.00
Length (m)=	102.96	30.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	3.10	1.083	14.65	2.083	6.12	3.08	3.57
0.167	3.10	1.167	14.65	2.167	6.12	3.17	3.57
0.250	3.46	1.250	84.90	2.250	5.41	3.25	3.36
0.333	3.46	1.333	84.90	2.333	5.41	3.33	3.36
0.417	3.95	1.417	17.98	2.417	4.86	3.42	3.18
0.500	3.95	1.500	17.98	2.500	4.86	3.50	3.18
0.583	4.65	1.583	11.34	2.583	4.44	3.58	3.02
0.667	4.65	1.667	11.34	2.667	4.44	3.67	3.02
0.750	5.76	1.750	8.64	2.750	4.09	3.75	2.88
0.833	5.76	1.833	8.64	2.833	4.09	3.83	2.88
0.917	7.88	1.917	7.12	2.917	3.81	3.92	2.75
1.000	7.88	2.000	7.12	3.000	3.81	4.00	2.75

			TOTALS
Max.Eff.Inten.(mm/hr)=	84.90	37.22	
over (min)	5.00	15.00	
Storage Coeff. (min)=	3.42 (ii)	12.24 (ii)	
Unit Hyd. Tpeak (min)=	5.00	15.00	
Unit Hyd. peak (cms)=	0.26	0.09	
PEAK FLOW (cms)=	0.10	0.04	0.115 (iii)
TIME TO PEAK (hrs)=	1.33	1.50	1.33
RUNOFF VOLUME (mm)=	35.82	10.83	17.60
TOTAL RAINFALL (mm)=	36.82	36.82	36.82
RUNOFF COEFFICIENT =	0.97	0.29	0.48

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 66.5 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

Junction Command(0018)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
INFLOW : ID= 2(0017)	1.59	0.11	1.33	17.60
OUTFLOW: ID= 2(0018)	1.59	0.11	1.33	17.60

ADD HYD (0023)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0016):	234.30	0.681	3.00	4.05
+ ID2= 2 (0018):	1.59	0.115	1.33	17.60
ID = 3 (0023):	235.89	0.693	3.00	4.14

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0023):	235.89	0.693	3.00	4.14
+ ID2= 2 (0038):	40.41	0.052	4.50	12.23
ID = 1 (0023):	276.30	0.738	3.00	5.32

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

****
** SIMULATION:B - 5-year CHI **
****

| CHICAGO STORM | IDF curve parameters: A= 561.345
| Ptotal= 48.68 mm | B= 0.000
C= 0.699
used in: INTENSITY = A / (t + B)^C

Duration of storm = 4.00 hrs
Storm time step = 10.00 min
Time to peak ratio = 0.33

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.00	4.09	1.00	19.37	2.00	8.09	3.00	4.72
0.17	4.57	1.17	112.26	2.17	7.15	3.17	4.44
0.33	5.22	1.33	23.77	2.33	6.43	3.33	4.20
0.50	6.15	1.50	14.99	2.50	5.87	3.50	3.99
0.67	7.61	1.67	11.43	2.67	5.41	3.67	3.81
0.83	10.41	1.83	9.42	2.83	5.04	3.83	3.64

| CALIB | Area (ha)= 100.92 Curve Number (CN)= 55.9
| NASHYD (0025) | Ia (mm)= 7.89 # of Linear Res.(N)= 3.00
| ID= 1 DT= 5.0 min | U.H. Tp(hrs)= 1.70

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.09	1.083	19.37	2.083	8.09	3.08	4.72
0.167	4.09	1.167	19.37	2.167	8.09	3.17	4.72
0.250	4.57	1.250	112.26	2.250	7.15	3.25	4.44
0.333	4.57	1.333	112.26	2.333	7.15	3.33	4.44
0.417	5.22	1.417	23.77	2.417	6.43	3.42	4.20
0.500	5.22	1.500	23.77	2.500	6.43	3.50	4.20
0.583	6.15	1.583	14.99	2.583	5.87	3.58	3.99
0.667	6.15	1.667	14.99	2.667	5.87	3.67	3.99
0.750	7.61	1.750	11.43	2.750	5.41	3.75	3.81
0.833	7.61	1.833	11.43	2.833	5.41	3.83	3.81
0.917	10.41	1.917	9.42	2.917	5.04	3.92	3.64
1.000	10.41	2.000	9.42	3.000	5.04	4.00	3.64

Unit Hyd Qpeak (cms)= 2.267

PEAK FLOW (cms)= 0.479 (i)

TIME TO PEAK (hrs)= 3.917
RUNOFF VOLUME (mm)= 6.909
TOTAL RAINFALL (mm)= 48.681
RUNOFF COEFFICIENT = 0.142

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

| CALIB | Area (ha)= 23.99 Curve Number (CN)= 44.7
| NASHYD (0002) | Ia (mm)= 10.91 # of Linear Res.(N)= 3.00
| ID= 1 DT= 5.0 min | U.H. Tp(hrs)= 0.97

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.09	1.083	19.37	2.083	8.09	3.08	4.72
0.167	4.09	1.167	19.37	2.167	8.09	3.17	4.72
0.250	4.57	1.250	112.26	2.250	7.15	3.25	4.44
0.333	4.57	1.333	112.26	2.333	7.15	3.33	4.44
0.417	5.22	1.417	23.77	2.417	6.43	3.42	4.20
0.500	5.22	1.500	23.77	2.500	6.43	3.50	4.20
0.583	6.15	1.583	14.99	2.583	5.87	3.58	3.99
0.667	6.15	1.667	14.99	2.667	5.87	3.67	3.99
0.750	7.61	1.750	11.43	2.750	5.41	3.75	3.81
0.833	7.61	1.833	11.43	2.833	5.41	3.83	3.81
0.917	10.41	1.917	9.42	2.917	5.04	3.92	3.64
1.000	10.41	2.000	9.42	3.000	5.04	4.00	3.64

Unit Hyd Qpeak (cms)= 0.945

PEAK FLOW (cms)= 0.089 (i)
TIME TO PEAK (hrs)= 2.833
RUNOFF VOLUME (mm)= 4.053
TOTAL RAINFALL (mm)= 48.681
RUNOFF COEFFICIENT = 0.083

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

| CALIB | Area (ha)= 39.68 Curve Number (CN)= 60.7
| NASHYD (0001) | Ia (mm)= 8.26 # of Linear Res.(N)= 3.00
| ID= 1 DT= 5.0 min |

U.H. Tp(hrs)= 1.18

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.09	1.083	19.37	2.083	8.09	3.08	4.72
0.167	4.09	1.167	19.37	2.167	8.09	3.17	4.72
0.250	4.57	1.250	112.26	2.250	7.15	3.25	4.44
0.333	4.57	1.333	112.26	2.333	7.15	3.33	4.44
0.417	5.22	1.417	23.77	2.417	6.43	3.42	4.20
0.500	5.22	1.500	23.77	2.500	6.43	3.50	4.20
0.583	6.15	1.583	14.99	2.583	5.87	3.58	3.99
0.667	6.15	1.667	14.99	2.667	5.87	3.67	3.99
0.750	7.61	1.750	11.43	2.750	5.41	3.75	3.81
0.833	7.61	1.833	11.43	2.833	5.41	3.83	3.81
0.917	10.41	1.917	9.42	2.917	5.04	3.92	3.64
1.000	10.41	2.000	9.42	3.000	5.04	4.00	3.64

Unit Hyd Qpeak (cms)= 1.284

PEAK FLOW (cms)= 0.267 (i)
TIME TO PEAK (hrs)= 3.083
RUNOFF VOLUME (mm)= 7.970
TOTAL RAINFALL (mm)= 48.681
RUNOFF COEFFICIENT = 0.164

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

| CALIB | Area (ha)= 6.37 Curve Number (CN)= 50.5
| NASHYD (0028) | Ia (mm)= 15.69 # of Linear Res.(N)= 3.00
| ID= 1 DT= 5.0 min | U.H. Tp(hrs)= 0.77

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.09	1.083	19.37	2.083	8.09	3.08	4.72
0.167	4.09	1.167	19.37	2.167	8.09	3.17	4.72
0.250	4.57	1.250	112.26	2.250	7.15	3.25	4.44
0.333	4.57	1.333	112.26	2.333	7.15	3.33	4.44

0.417	5.22	1.417	23.77	2.417	6.43	3.42	4.20
0.500	5.22	1.500	23.77	2.500	6.43	3.50	4.20
0.583	6.15	1.583	14.99	2.583	5.87	3.58	3.99
0.667	6.15	1.667	14.99	2.667	5.87	3.67	3.99
0.750	7.61	1.750	11.43	2.750	5.41	3.75	3.81
0.833	7.61	1.833	11.43	2.833	5.41	3.83	3.81
0.917	10.41	1.917	9.42	2.917	5.04	3.92	3.64
1.000	10.41	2.000	9.42	3.000	5.04	4.00	3.64

Unit Hyd Qpeak (cms)= 0.316

PEAK FLOW (cms)= 0.024 (i)
TIME TO PEAK (hrs)= 2.667
RUNOFF VOLUME (mm)= 3.857
TOTAL RAINFALL (mm)= 48.681
RUNOFF COEFFICIENT = 0.079

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

| CALIB | Area (ha)= 14.85 Curve Number (CN)= 52.9
| NASHYD (0029) | Ia (mm)= 13.28 # of Linear Res.(N)= 3.00
| ID= 1 DT= 5.0 min | U.H. Tp(hrs)= 0.89

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.09	1.083	19.37	2.083	8.09	3.08	4.72
0.167	4.09	1.167	19.37	2.167	8.09	3.17	4.72
0.250	4.57	1.250	112.26	2.250	7.15	3.25	4.44
0.333	4.57	1.333	112.26	2.333	7.15	3.33	4.44
0.417	5.22	1.417	23.77	2.417	6.43	3.42	4.20
0.500	5.22	1.500	23.77	2.500	6.43	3.50	4.20
0.583	6.15	1.583	14.99	2.583	5.87	3.58	3.99
0.667	6.15	1.667	14.99	2.667	5.87	3.67	3.99
0.750	7.61	1.750	11.43	2.750	5.41	3.75	3.81
0.833	7.61	1.833	11.43	2.833	5.41	3.83	3.81
0.917	10.41	1.917	9.42	2.917	5.04	3.92	3.64
1.000	10.41	2.000	9.42	3.000	5.04	4.00	3.64

Unit Hyd Qpeak (cms)= 0.637

PEAK FLOW (cms)= 0.067 (i)

TIME TO PEAK (hrs)= 2.750
RUNOFF VOLUME (mm)= 4.798
TOTAL RAINFALL (mm)= 48.681
RUNOFF COEFFICIENT = 0.099

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0030)	Area (ha)=	1.70	Curve Number (CN)= 60.5
ID= 1 DT= 5.0 min	Ia (mm)=	9.65	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	0.40	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.09	1.083	19.37	2.083	8.09	3.08	4.72
0.167	4.09	1.167	19.37	2.167	8.09	3.17	4.72
0.250	4.57	1.250	112.26	2.250	7.15	3.25	4.44
0.333	4.57	1.333	112.26	2.333	7.15	3.33	4.44
0.417	5.22	1.417	23.77	2.417	6.43	3.42	4.20
0.500	5.22	1.500	23.77	2.500	6.43	3.50	4.20
0.583	6.15	1.583	14.99	2.583	5.87	3.58	3.99
0.667	6.15	1.667	14.99	2.667	5.87	3.67	3.99
0.750	7.61	1.750	11.43	2.750	5.41	3.75	3.81
0.833	7.61	1.833	11.43	2.833	5.41	3.83	3.81
0.917	10.41	1.917	9.42	2.917	5.04	3.92	3.64
1.000	10.41	2.000	9.42	3.000	5.04	4.00	3.64

Unit Hyd Qpeak (cms)= 0.162

PEAK FLOW (cms)= 0.020 (i)
TIME TO PEAK (hrs)= 1.833
RUNOFF VOLUME (mm)= 7.425
TOTAL RAINFALL (mm)= 48.681
RUNOFF COEFFICIENT = 0.153

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0031)	Area (ha)=	1.80	Curve Number (CN)= 50.0
ID= 1 DT= 5.0 min	Ia (mm)=	16.00	# of Linear Res.(N)= 3.00

U.H. Tp(hrs)= 0.76

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.09	1.083	19.37	2.083	8.09	3.08	4.72
0.167	4.09	1.167	19.37	2.167	8.09	3.17	4.72
0.250	4.57	1.250	112.26	2.250	7.15	3.25	4.44
0.333	4.57	1.333	112.26	2.333	7.15	3.33	4.44
0.417	5.22	1.417	23.77	2.417	6.43	3.42	4.20
0.500	5.22	1.500	23.77	2.500	6.43	3.50	4.20
0.583	6.15	1.583	14.99	2.583	5.87	3.58	3.99
0.667	6.15	1.667	14.99	2.667	5.87	3.67	3.99
0.750	7.61	1.750	11.43	2.750	5.41	3.75	3.81
0.833	7.61	1.833	11.43	2.833	5.41	3.83	3.81
0.917	10.41	1.917	9.42	2.917	5.04	3.92	3.64
1.000	10.41	2.000	9.42	3.000	5.04	4.00	3.64

Unit Hyd Qpeak (cms)= 0.090

PEAK FLOW (cms)= 0.007 (i)
TIME TO PEAK (hrs)= 2.667
RUNOFF VOLUME (mm)= 3.725
TOTAL RAINFALL (mm)= 48.681
RUNOFF COEFFICIENT = 0.077

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0032)	Area (ha)=	6.70	Curve Number (CN)= 60.0
ID= 1 DT= 5.0 min	Ia (mm)=	10.00	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	1.45	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.09	1.083	19.37	2.083	8.09	3.08	4.72
0.167	4.09	1.167	19.37	2.167	8.09	3.17	4.72
0.250	4.57	1.250	112.26	2.250	7.15	3.25	4.44
0.333	4.57	1.333	112.26	2.333	7.15	3.33	4.44

0.417	5.22	1.417	23.77	2.417	6.43	3.42	4.20
0.500	5.22	1.500	23.77	2.500	6.43	3.50	4.20
0.583	6.15	1.583	14.99	2.583	5.87	3.58	3.99
0.667	6.15	1.667	14.99	2.667	5.87	3.67	3.99
0.750	7.61	1.750	11.43	2.750	5.41	3.75	3.81
0.833	7.61	1.833	11.43	2.833	5.41	3.83	3.81
0.917	10.41	1.917	9.42	2.917	5.04	3.92	3.64
1.000	10.41	2.000	9.42	3.000	5.04	4.00	3.64

Unit Hyd Qpeak (cms)= 0.176

PEAK FLOW (cms)= 0.036 (i)
TIME TO PEAK (hrs)= 3.583
RUNOFF VOLUME (mm)= 7.193
TOTAL RAINFALL (mm)= 48.681
RUNOFF COEFFICIENT = 0.148

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0033)	Area (ha)=	1.13	Curve Number (CN)= 67.4
ID= 1 DT= 5.0 min	Ia (mm)=	7.88	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	0.43	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.09	1.083	19.37	2.083	8.09	3.08	4.72
0.167	4.09	1.167	19.37	2.167	8.09	3.17	4.72
0.250	4.57	1.250	112.26	2.250	7.15	3.25	4.44
0.333	4.57	1.333	112.26	2.333	7.15	3.33	4.44
0.417	5.22	1.417	23.77	2.417	6.43	3.42	4.20
0.500	5.22	1.500	23.77	2.500	6.43	3.50	4.20
0.583	6.15	1.583	14.99	2.583	5.87	3.58	3.99
0.667	6.15	1.667	14.99	2.667	5.87	3.67	3.99
0.750	7.61	1.750	11.43	2.750	5.41	3.75	3.81
0.833	7.61	1.833	11.43	2.833	5.41	3.83	3.81
0.917	10.41	1.917	9.42	2.917	5.04	3.92	3.64
1.000	10.41	2.000	9.42	3.000	5.04	4.00	3.64

Unit Hyd Qpeak (cms)= 0.100

PEAK FLOW (cms)= 0.018 (i)

TIME TO PEAK (hrs)= 1.833
RUNOFF VOLUME (mm)= 10.157
TOTAL RAINFALL (mm)= 48.681
RUNOFF COEFFICIENT = 0.209

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0027)	Area (ha)=	1.38	Curve Number (CN)= 64.1
ID= 1 DT= 5.0 min	Ia (mm)=	8.51	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	0.39	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.09	1.083	19.37	2.083	8.09	3.08	4.72
0.167	4.09	1.167	19.37	2.167	8.09	3.17	4.72
0.250	4.57	1.250	112.26	2.250	7.15	3.25	4.44
0.333	4.57	1.333	112.26	2.333	7.15	3.33	4.44
0.417	5.22	1.417	23.77	2.417	6.43	3.42	4.20
0.500	5.22	1.500	23.77	2.500	6.43	3.50	4.20
0.583	6.15	1.583	14.99	2.583	5.87	3.58	3.99
0.667	6.15	1.667	14.99	2.667	5.87	3.67	3.99
0.750	7.61	1.750	11.43	2.750	5.41	3.75	3.81
0.833	7.61	1.833	11.43	2.833	5.41	3.83	3.81
0.917	10.41	1.917	9.42	2.917	5.04	3.92	3.64
1.000	10.41	2.000	9.42	3.000	5.04	4.00	3.64

Unit Hyd Qpeak (cms)= 0.135

PEAK FLOW (cms)= 0.020 (i)
TIME TO PEAK (hrs)= 1.833
RUNOFF VOLUME (mm)= 8.856
TOTAL RAINFALL (mm)= 48.681
RUNOFF COEFFICIENT = 0.182

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0041)	Area (ha)=	0.59	Curve Number (CN)= 71.5
ID= 1 DT= 5.0 min	Ia (mm)=	4.75	# of Linear Res.(N)= 3.00

-------------------- U.H. Tp(hrs)= 0.53

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.09	1.083	19.37	2.083	8.09	3.08	4.72
0.167	4.09	1.167	19.37	2.167	8.09	3.17	4.72
0.250	4.57	1.250	112.26	2.250	7.15	3.25	4.44
0.333	4.57	1.333	112.26	2.333	7.15	3.33	4.44
0.417	5.22	1.417	23.77	2.417	6.43	3.42	4.20
0.500	5.22	1.500	23.77	2.500	6.43	3.50	4.20
0.583	6.15	1.583	14.99	2.583	5.87	3.58	3.99
0.667	6.15	1.667	14.99	2.667	5.87	3.67	3.99
0.750	7.61	1.750	11.43	2.750	5.41	3.75	3.81
0.833	7.61	1.833	11.43	2.833	5.41	3.83	3.81
0.917	10.41	1.917	9.42	2.917	5.04	3.92	3.64
1.000	10.41	2.000	9.42	3.000	5.04	4.00	3.64

Unit Hyd Qpeak (cms)= 0.043

PEAK FLOW (cms)= 0.011 (i)
TIME TO PEAK (hrs)= 2.000
RUNOFF VOLUME (mm)= 13.273
TOTAL RAINFALL (mm)= 48.681
RUNOFF COEFFICIENT = 0.273

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (0015) | Area (ha)= 1.93
ID= 1 DT= 5.0 min | Total Imp(%)= 54.66 Dir. Conn.(%)= 10.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	1.05	0.88
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	113.43	45.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.09	1.083	19.37	2.083	8.09	3.08	4.72
0.167	4.09	1.167	19.37	2.167	8.09	3.17	4.72
0.250	4.57	1.250	112.26	2.250	7.15	3.25	4.44
0.333	4.57	1.333	112.26	2.333	7.15	3.33	4.44
0.417	5.22	1.417	23.77	2.417	6.43	3.42	4.20
0.500	5.22	1.500	23.77	2.500	6.43	3.50	4.20
0.583	6.15	1.583	14.99	2.583	5.87	3.58	3.99
0.667	6.15	1.667	14.99	2.667	5.87	3.67	3.99
0.750	7.61	1.750	11.43	2.750	5.41	3.75	3.81
0.833	7.61	1.833	11.43	2.833	5.41	3.83	3.81
0.917	10.41	1.917	9.42	2.917	5.04	3.92	3.64
1.000	10.41	2.000	9.42	3.000	5.04	4.00	3.64

Max.Eff.Inten.(mm/hr)= 112.26 35.22
over (min) 5.00 15.00
Storage Coeff. (min)= 3.24 (ii) 14.74 (ii)
Unit Hyd. Tpeak (min)= 5.00 15.00
Unit Hyd. peak (cms)= 0.27 0.08

				TOTALS
PEAK FLOW	(cms)=	0.06	0.05	0.084 (iii)
TIME TO PEAK	(hrs)=	1.33	1.50	1.33
RUNOFF VOLUME	(mm)=	47.68	11.90	15.47
TOTAL RAINFALL	(mm)=	48.68	48.68	48.68
RUNOFF COEFFICIENT	=	0.98	0.24	0.32

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 49.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (0019) | Area (ha)= 2.16
ID= 1 DT= 5.0 min | Total Imp(%)= 54.64 Dir. Conn.(%)= 10.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	1.18	0.98
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	120.00	30.00

Mannings n = 0.013 0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.09	1.083	19.37	2.083	8.09	3.08	4.72
0.167	4.09	1.167	19.37	2.167	8.09	3.17	4.72
0.250	4.57	1.250	112.26	2.250	7.15	3.25	4.44
0.333	4.57	1.333	112.26	2.333	7.15	3.33	4.44
0.417	5.22	1.417	23.77	2.417	6.43	3.42	4.20
0.500	5.22	1.500	23.77	2.500	6.43	3.50	4.20
0.583	6.15	1.583	14.99	2.583	5.87	3.58	3.99
0.667	6.15	1.667	14.99	2.667	5.87	3.67	3.99
0.750	7.61	1.750	11.43	2.750	5.41	3.75	3.81
0.833	7.61	1.833	11.43	2.833	5.41	3.83	3.81
0.917	10.41	1.917	9.42	2.917	5.04	3.92	3.64
1.000	10.41	2.000	9.42	3.000	5.04	4.00	3.64

Max.Eff.Inten.(mm/hr)= 112.26 85.71
over (min) 5.00 10.00
Storage Coeff. (min)= 3.35 (ii) 9.67 (ii)
Unit Hyd. Tpeak (min)= 5.00 10.00
Unit Hyd. peak (cms)= 0.26 0.11

				TOTALS
PEAK FLOW	(cms)=	0.06	0.15	0.181 (iii)
TIME TO PEAK	(hrs)=	1.33	1.42	1.33
RUNOFF VOLUME	(mm)=	47.68	20.55	23.26
TOTAL RAINFALL	(mm)=	48.68	48.68	48.68
RUNOFF COEFFICIENT	=	0.98	0.42	0.48

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0040) |		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3					

		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0015):		1.93	0.084	1.33	15.47
+ ID2= 2 (0019):		2.16	0.181	1.33	23.26
ID = 3 (0040):		4.09	0.265	1.33	19.59

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0040) |		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0040):		4.09	0.265	1.33	19.59
+ ID2= 2 (0027):		1.38	0.020	1.83	8.86
ID = 1 (0040):		5.47	0.269	1.33	16.88

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0040) |		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0040):		5.47	0.269	1.33	16.88
+ ID2= 2 (0041):		0.59	0.011	2.00	13.27
ID = 3 (0040):		6.06	0.271	1.33	16.53

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB
NASHYD (0048) | Area (ha)= 29.16 Curve Number (CN)= 71.4
ID= 1 DT= 5.0 min | Ia (mm)= 7.88 # of Linear Res.(N)= 3.00
-------------------- U.H. Tp(hrs)= 0.68

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.09	1.083	19.37	2.083	8.09	3.08	4.72
0.167	4.09	1.167	19.37	2.167	8.09	3.17	4.72
0.250	4.57	1.250	112.26	2.250	7.15	3.25	4.44
0.333	4.57	1.333	112.26	2.333	7.15	3.33	4.44

0.417	5.22	1.417	23.77	2.417	6.43	3.42	4.20
0.500	5.22	1.500	23.77	2.500	6.43	3.50	4.20
0.583	6.15	1.583	14.99	2.583	5.87	3.58	3.99
0.667	6.15	1.667	14.99	2.667	5.87	3.67	3.99
0.750	7.61	1.750	11.43	2.750	5.41	3.75	3.81
0.833	7.61	1.833	11.43	2.833	5.41	3.83	3.81
0.917	10.41	1.917	9.42	2.917	5.04	3.92	3.64
1.000	10.41	2.000	9.42	3.000	5.04	4.00	3.64

Unit Hyd Qpeak (cms)= 1.638

PEAK FLOW (cms)= 0.406 (i)
TIME TO PEAK (hrs)= 2.250
RUNOFF VOLUME (mm)= 11.679
TOTAL RAINFALL (mm)= 48.681
RUNOFF COEFFICIENT = 0.240

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	
STANDHYD (0014)	Area (ha)= 1.87
ID= 1 DT= 5.0 min	Total Imp(%)= 43.28 Dir. Conn.(%)= 10.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	0.81	1.06
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	0.50	2.00
Length (m)=	111.65	25.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.09	1.083	19.37	2.083	8.09	3.08	4.72
0.167	4.09	1.167	19.37	2.167	8.09	3.17	4.72
0.250	4.57	1.250	112.26	2.250	7.15	3.25	4.44
0.333	4.57	1.333	112.26	2.333	7.15	3.33	4.44
0.417	5.22	1.417	23.77	2.417	6.43	3.42	4.20
0.500	5.22	1.500	23.77	2.500	6.43	3.50	4.20
0.583	6.15	1.583	14.99	2.583	5.87	3.58	3.99
0.667	6.15	1.667	14.99	2.667	5.87	3.67	3.99
0.750	7.61	1.750	11.43	2.750	5.41	3.75	3.81
0.833	7.61	1.833	11.43	2.833	5.41	3.83	3.81

0.917	10.41	1.917	9.42	2.917	5.04	3.92	3.64
1.000	10.41	2.000	9.42	3.000	5.04	4.00	3.64

			TOTALS
Max.Eff.Inten.(mm/hr)=	112.26	77.89	
over (min)	5.00	10.00	
Storage Coeff. (min)=	3.21 (ii)	9.09 (ii)	
Unit Hyd. Tpeak (min)=	5.00	10.00	
Unit Hyd. peak (cms)=	0.27	0.12	
PEAK FLOW (cms)=	0.06	0.15	0.174 (iii)
TIME TO PEAK (hrs)=	1.33	1.42	1.33
RUNOFF VOLUME (mm)=	47.68	22.85	25.33
TOTAL RAINFALL (mm)=	48.68	48.68	48.68
RUNOFF COEFFICIENT =	0.98	0.47	0.52

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 78.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	
STANDHYD (0021)	Area (ha)= 0.07
ID= 1 DT= 5.0 min	Total Imp(%)= 48.26 Dir. Conn.(%)= 39.54

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	0.03	0.04
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	0.50	2.00
Length (m)=	21.60	5.60
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.09	1.083	19.37	2.083	8.09	3.08	4.72
0.167	4.09	1.167	19.37	2.167	8.09	3.17	4.72
0.250	4.57	1.250	112.26	2.250	7.15	3.25	4.44
0.333	4.57	1.333	112.26	2.333	7.15	3.33	4.44

0.417	5.22	1.417	23.77	2.417	6.43	3.42	4.20
0.500	5.22	1.500	23.77	2.500	6.43	3.50	4.20
0.583	6.15	1.583	14.99	2.583	5.87	3.58	3.99
0.667	6.15	1.667	14.99	2.667	5.87	3.67	3.99
0.750	7.61	1.750	11.43	2.750	5.41	3.75	3.81
0.833	7.61	1.833	11.43	2.833	5.41	3.83	3.81
0.917	10.41	1.917	9.42	2.917	5.04	3.92	3.64
1.000	10.41	2.000	9.42	3.000	5.04	4.00	3.64

			TOTALS
Max.Eff.Inten.(mm/hr)=	112.26	17.14	
over (min)	5.00	5.00	
Storage Coeff. (min)=	1.20 (ii)	3.50 (ii)	
Unit Hyd. Tpeak (min)=	5.00	5.00	
Unit Hyd. peak (cms)=	0.33	0.26	
PEAK FLOW (cms)=	0.01	0.00	0.011 (iii)
TIME TO PEAK (hrs)=	1.33	1.33	1.33
RUNOFF VOLUME (mm)=	47.68	8.10	23.73
TOTAL RAINFALL (mm)=	48.68	48.68	48.68
RUNOFF COEFFICIENT =	0.98	0.17	0.49

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 52.2 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0016)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0001):	39.68	0.267	3.08	7.97
+ ID2= 2 (0014):	1.87	0.174	1.33	25.33
ID = 3 (0016):	41.55	0.287	3.00	8.75

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0016):	41.55	0.287	3.00	8.75

+ ID2= 2 (0002):	23.99	0.089	2.83	4.05
ID = 1 (0016):	65.54	0.376	3.00	7.03

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0016):	65.54	0.376	3.00	7.03
+ ID2= 2 (0021):	0.07	0.011	1.33	23.73
ID = 3 (0016):	65.61	0.377	3.00	7.05

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0016):	65.61	0.377	3.00	7.05
+ ID2= 2 (0025):	100.92	0.479	3.92	6.91
ID = 1 (0016):	166.53	0.823	3.50	6.96

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0016):	166.53	0.823	3.50	6.96
+ ID2= 2 (0028):	6.37	0.024	2.67	3.86
ID = 3 (0016):	172.90	0.844	3.50	6.85

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0016):	172.90	0.844	3.50	6.85

+ ID2= 2 (0029):	14.85	0.067	2.75	4.80
ID = 1 (0016):	187.75	0.905	3.42	6.69

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0016):	187.75	0.905	3.42	6.69
+ ID2= 2 (0030):	1.70	0.020	1.83	7.42
ID = 3 (0016):	189.45	0.913	3.42	6.69

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0016):	189.45	0.913	3.42	6.69
+ ID2= 2 (0031):	1.80	0.007	2.67	3.72
ID = 1 (0016):	191.25	0.919	3.42	6.67

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0016):	191.25	0.919	3.42	6.67
+ ID2= 2 (0032):	6.70	0.036	3.58	7.19
ID = 3 (0016):	197.95	0.955	3.42	6.68

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0016):	197.95	0.955	3.42	6.68

+ ID2= 2 (0033):	1.13	0.018	1.83	10.16
ID = 1 (0016):	199.08	0.962	3.42	6.70

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0016):	199.08	0.962	3.42	6.70
+ ID2= 2 (0040):	6.06	0.271	1.33	16.53
ID = 3 (0016):	205.14	1.006	3.33	6.99

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0016):	205.14	1.006	3.33	6.99
+ ID2= 2 (0048):	29.16	0.406	2.25	11.68
ID = 1 (0016):	234.30	1.300	2.92	7.58

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB			
STANDHYD (0009)	Area (ha)= 31.06		
ID= 1 DT= 5.0 min	Total Imp(%)= 53.89	Dir. Conn.(%)= 20.76	

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	16.74	14.32
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	455.05	30.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.09	1.083	19.37	2.083	8.09	3.08	4.72
0.167	4.09	1.167	19.37	2.167	8.09	3.17	4.72
0.250	4.57	1.250	112.26	2.250	7.15	3.25	4.44
0.333	4.57	1.333	112.26	2.333	7.15	3.33	4.44
0.417	5.22	1.417	23.77	2.417	6.43	3.42	4.20
0.500	5.22	1.500	23.77	2.500	6.43	3.50	4.20
0.583	6.15	1.583	14.99	2.583	5.87	3.58	3.99
0.667	6.15	1.667	14.99	2.667	5.87	3.67	3.99
0.750	7.61	1.750	11.43	2.750	5.41	3.75	3.81
0.833	7.61	1.833	11.43	2.833	5.41	3.83	3.81
0.917	10.41	1.917	9.42	2.917	5.04	3.92	3.64
1.000	10.41	2.000	9.42	3.000	5.04	4.00	3.64

Max.Eff.Inten.(mm/hr)=	112.26	65.02		
over (min)	5.00	15.00		
Storage Coeff. (min)=	7.45 (ii)	14.51 (ii)		
Unit Hyd. Tpeak (min)=	5.00	15.00		
Unit Hyd. peak (cms)=	0.17	0.08		
			TOTALS	
PEAK FLOW (cms)=	1.56	1.25	2.186 (iii)	
TIME TO PEAK (hrs)=	1.33	1.50	1.33	
RUNOFF VOLUME (mm)=	47.68	18.43	24.50	
TOTAL RAINFALL (mm)=	48.68	48.68	48.68	
RUNOFF COEFFICIENT =	0.98	0.38	0.50	

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 68.5 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
STANDHYD (0010)	Area (ha)= 1.32		
ID= 1 DT= 5.0 min	Total Imp(%)= 55.27	Dir. Conn.(%)= 1.52	

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.73	0.59
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	93.81	23.50
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.09	1.083	19.37	2.083	8.09	3.08	4.72
0.167	4.09	1.167	19.37	2.167	8.09	3.17	4.72
0.250	4.57	1.250	112.26	2.250	7.15	3.25	4.44
0.333	4.57	1.333	112.26	2.333	7.15	3.33	4.44
0.417	5.22	1.417	23.77	2.417	6.43	3.42	4.20
0.500	5.22	1.500	23.77	2.500	6.43	3.50	4.20
0.583	6.15	1.583	14.99	2.583	5.87	3.58	3.99
0.667	6.15	1.667	14.99	2.667	5.87	3.67	3.99
0.750	7.61	1.750	11.43	2.750	5.41	3.75	3.81
0.833	7.61	1.833	11.43	2.833	5.41	3.83	3.81
0.917	10.41	1.917	9.42	2.917	5.04	3.92	3.64
1.000	10.41	2.000	9.42	3.000	5.04	4.00	3.64

Max.Eff.Inten.(mm/hr)=	112.26	102.44		
over (min)	5.00	10.00		
Storage Coeff. (min)=	2.89 (ii)	7.97 (ii)		
Unit Hyd. Tpeak (min)=	5.00	10.00		
Unit Hyd. peak (cms)=	0.28	0.13		
			TOTALS	
PEAK FLOW (cms)=	0.01	0.11	0.117 (iii)	
TIME TO PEAK (hrs)=	1.33	1.42	1.42	
RUNOFF VOLUME (mm)=	47.68	21.84	22.23	
TOTAL RAINFALL (mm)=	48.68	48.68	48.68	
RUNOFF COEFFICIENT =	0.98	0.45	0.46	

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 68.8 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
STANDHYD (0013)	Area (ha)= 4.16		
ID= 1 DT= 5.0 min	Total Imp(%)= 50.00	Dir. Conn.(%)= 50.00	

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	2.08	2.08
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00

Post-Development VO Output (INT)

Length	(m)=	166.53	250.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.09	1.083	19.37	2.083	8.09	3.08	4.72
0.167	4.09	1.167	19.37	2.167	8.09	3.17	4.72
0.250	4.57	1.250	112.26	2.250	7.15	3.25	4.44
0.333	4.57	1.333	112.26	2.333	7.15	3.33	4.44
0.417	5.22	1.417	23.77	2.417	6.43	3.42	4.20
0.500	5.22	1.500	23.77	2.500	6.43	3.50	4.20
0.583	6.15	1.583	14.99	2.583	5.87	3.58	3.99
0.667	6.15	1.667	14.99	2.667	5.87	3.67	3.99
0.750	7.61	1.750	11.43	2.750	5.41	3.75	3.81
0.833	7.61	1.833	11.43	2.833	5.41	3.83	3.81
0.917	10.41	1.917	9.42	2.917	5.04	3.92	3.64
1.000	10.41	2.000	9.42	3.000	5.04	4.00	3.64

Max.Eff.Inten.(mm/hr)=		112.26	7.85	
over (min)		5.00	65.00	
Storage Coeff. (min)=		4.08 (ii)	62.73 (ii)	
Unit Hyd. Tpeak (min)=		5.00	65.00	
Unit Hyd. peak (cms)=		0.24	0.02	
				TOTALS
PEAK FLOW	(cms)=	0.60	0.02	0.604 (iii)
TIME TO PEAK	(hrs)=	1.33	2.50	1.33
RUNOFF VOLUME	(mm)=	47.68	12.08	29.87
TOTAL RAINFALL	(mm)=	48.68	48.68	48.68
RUNOFF COEFFICIENT	=	0.98	0.25	0.61

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
STANDHYD (0036)	Area	(ha)=	2.12
ID= 1 DT= 5.0 min	Total Imp	(%)=	85.04
	Dir. Conn.	(%)=	0.10

Post-Development VO Output (INT)

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	1.80	0.32
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	118.88	175.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.09	1.083	19.37	2.083	8.09	3.08	4.72
0.167	4.09	1.167	19.37	2.167	8.09	3.17	4.72
0.250	4.57	1.250	112.26	2.250	7.15	3.25	4.44
0.333	4.57	1.333	112.26	2.333	7.15	3.33	4.44
0.417	5.22	1.417	23.77	2.417	6.43	3.42	4.20
0.500	5.22	1.500	23.77	2.500	6.43	3.50	4.20
0.583	6.15	1.583	14.99	2.583	5.87	3.58	3.99
0.667	6.15	1.667	14.99	2.667	5.87	3.67	3.99
0.750	7.61	1.750	11.43	2.750	5.41	3.75	3.81
0.833	7.61	1.833	11.43	2.833	5.41	3.83	3.81
0.917	10.41	1.917	9.42	2.917	5.04	3.92	3.64
1.000	10.41	2.000	9.42	3.000	5.04	4.00	3.64

Max.Eff.Inten.(mm/hr)=		112.26	560.32	
over (min)		5.00	15.00	
Storage Coeff. (min)=		3.33 (ii)	11.92 (ii)	
Unit Hyd. Tpeak (min)=		5.00	15.00	
Unit Hyd. peak (cms)=		0.26	0.09	
				TOTALS
PEAK FLOW	(cms)=	0.00	0.26	0.257 (iii)
TIME TO PEAK	(hrs)=	1.33	1.50	1.50
RUNOFF VOLUME	(mm)=	47.68	35.34	35.34
TOTAL RAINFALL	(mm)=	48.68	48.68	48.68
RUNOFF COEFFICIENT	=	0.98	0.73	0.73

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

Post-Development VO Output (INT)

CALIB			
STANDHYD (0043)	Area	(ha)=	0.13
ID= 1 DT= 5.0 min	Total Imp	(%)=	30.77
	Dir. Conn.	(%)=	7.69

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.04	0.09
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	0.50
Length	(m)=	29.44	70.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.09	1.083	19.37	2.083	8.09	3.08	4.72
0.167	4.09	1.167	19.37	2.167	8.09	3.17	4.72
0.250	4.57	1.250	112.26	2.250	7.15	3.25	4.44
0.333	4.57	1.333	112.26	2.333	7.15	3.33	4.44
0.417	5.22	1.417	23.77	2.417	6.43	3.42	4.20
0.500	5.22	1.500	23.77	2.500	6.43	3.50	4.20
0.583	6.15	1.583	14.99	2.583	5.87	3.58	3.99
0.667	6.15	1.667	14.99	2.667	5.87	3.67	3.99
0.750	7.61	1.750	11.43	2.750	5.41	3.75	3.81
0.833	7.61	1.833	11.43	2.833	5.41	3.83	3.81
0.917	10.41	1.917	9.42	2.917	5.04	3.92	3.64
1.000	10.41	2.000	9.42	3.000	5.04	4.00	3.64

Max.Eff.Inten.(mm/hr)=		112.26	20.98	
over (min)		5.00	30.00	
Storage Coeff. (min)=		1.44 (ii)	29.39 (ii)	
Unit Hyd. Tpeak (min)=		5.00	30.00	
Unit Hyd. peak (cms)=		0.33	0.04	
				TOTALS
PEAK FLOW	(cms)=	0.00	0.00	0.004 (iii)
TIME TO PEAK	(hrs)=	1.33	1.75	1.33
RUNOFF VOLUME	(mm)=	47.68	15.47	17.82
TOTAL RAINFALL	(mm)=	48.68	48.68	48.68
RUNOFF COEFFICIENT	=	0.98	0.32	0.37

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

Post-Development VO Output (INT)

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
STANDHYD (0044)	Area	(ha)=	1.62
ID= 1 DT= 5.0 min	Total Imp	(%)=	48.77
	Dir. Conn.	(%)=	30.86

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.79	0.83
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	1.40
Length	(m)=	103.92	400.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.09	1.083	19.37	2.083	8.09	3.08	4.72
0.167	4.09	1.167	19.37	2.167	8.09	3.17	4.72
0.250	4.57	1.250	112.26	2.250	7.15	3.25	4.44
0.333	4.57	1.333	112.26	2.333	7.15	3.33	4.44
0.417	5.22	1.417	23.77	2.417	6.43	3.42	4.20
0.500	5.22	1.500	23.77	2.500	6.43	3.50	4.20
0.583	6.15	1.583	14.99	2.583	5.87	3.58	3.99
0.667	6.15	1.667	14.99	2.667	5.87	3.67	3.99
0.750	7.61	1.750	11.43	2.750	5.41	3.75	3.81
0.833	7.61	1.833	11.43	2.833	5.41	3.83	3.81
0.917	10.41	1.917	9.42	2.917	5.04	3.92	3.64
1.000	10.41	2.000	9.42	3.000	5.04	4.00	3.64

Max.Eff.Inten.(mm/hr)=		112.26	13.90	
over (min)		5.00	75.00	
Storage Coeff. (min)=		3.07 (ii)	71.93 (ii)	
Unit Hyd. Tpeak (min)=		5.00	75.00	
Unit Hyd. peak (cms)=		0.27	0.02	
				TOTALS
PEAK FLOW	(cms)=	0.15	0.02	0.152 (iii)
TIME TO PEAK	(hrs)=	1.33	2.67	1.33
RUNOFF VOLUME	(mm)=	47.68	15.62	25.49
TOTAL RAINFALL	(mm)=	48.68	48.68	48.68

```
     RUNOFF COEFFICIENT   =       0.98         0.32          0.52

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  69.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0037)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0010):     1.32   0.117     1.42    22.23
     + ID2= 2 (  0013):     4.16   0.604     1.33    29.87
       ====================================================
       ID = 3 (  0037):     5.48   0.703     1.33    28.03

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0037)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 3 (  0037):     5.48   0.703     1.33    28.03
     + ID2= 2 (  0036):     2.12   0.257     1.50    35.34
       ====================================================
       ID = 1 (  0037):     7.60   0.857     1.33    30.07

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0037)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0037):     7.60   0.857     1.33    30.07
     + ID2= 2 (  0043):     0.13   0.004     1.33    17.82
       ====================================================
       ID = 3 (  0037):     7.73   0.860     1.33    29.86

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
```



```
--------------------
| ADD HYD  (  0037)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 3 (  0037):     7.73   0.860     1.33    29.86
     + ID2= 2 (  0044):     1.62   0.152     1.33    25.49
       ====================================================
       ID = 1 (  0037):     9.35   1.012     1.33    29.11

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0037)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0037):     9.35   1.012     1.33    29.11
     + ID2= 2 (  0009):    31.06   2.186     1.33    24.50
       ====================================================
       ID = 3 (  0037):    40.41   3.199     1.33    25.57

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
--------------------
| RESERVOIR(  0038)|     OVERFLOW IS OFF
| IN= 2---> OUT= 1 |
| DT=  5.0 min     |     OUTFLOW    STORAGE   |  OUTFLOW    STORAGE
--------------------      (cms)     (ha.m.)   |   (cms)     (ha.m.)
                           0.0000      0.0000   |    0.5076      2.8989
                           0.0000      0.2023   |    0.6060      3.2065
                           0.0353      0.4202   |    0.7105      3.5196
                           0.0525      0.6536   |    0.8207      3.8381
                           0.0654      0.9026   |    0.9365      4.1621
                           0.0843      1.1671   |    1.0574      4.4915
                           0.1858      1.7227   |    1.1833      4.8263
                           0.2540      2.0086   |    1.3139      5.1665
                           0.3309      2.2999   |    1.4492      5.5122
                           0.4157      2.5967   |    1.5890      5.8633

                                AREA     QPEAK     TPEAK       R.V.
                                (ha)     (cms)     (hrs)       (mm)
   INFLOW : ID= 2 (  0037)     40.410     3.199      1.33      25.57
   OUTFLOW: ID= 1 (  0038)     40.410     0.069      4.42      20.52

                  PEAK   FLOW   REDUCTION [Qout/Qin](%)=  2.16
                  TIME SHIFT OF PEAK FLOW         (min)=185.00
                  MAXIMUM  STORAGE   USED       (ha.m.)=  0.9556
```



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--------------------------------------------------------------------------------
--------------------
| CALIB            |
| STANDHYD (  0017)|   Area    (ha)=   1.59
|ID= 1 DT= 5.0 min |   Total Imp(%)=  58.58   Dir. Conn.(%)=  27.10
--------------------

                           IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       0.93         0.66
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       0.50         2.00
     Length            (m)=     102.96        30.00
     Mannings n           =      0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                          ---- TRANSFORMED HYETOGRAPH ----
               TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
              0.083    4.09 | 1.083   19.37 | 2.083    8.09 |  3.08    4.72
              0.167    4.09 | 1.167   19.37 | 2.167    8.09 |  3.17    4.72
              0.250    4.57 | 1.250  112.26 | 2.250    7.15 |  3.25    4.44
              0.333    4.57 | 1.333  112.26 | 2.333    7.15 |  3.33    4.44
              0.417    5.22 | 1.417   23.77 | 2.417    6.43 |  3.42    4.20
              0.500    5.22 | 1.500   23.77 | 2.500    6.43 |  3.50    4.20
              0.583    6.15 | 1.583   14.99 | 2.583    5.87 |  3.58    3.99
              0.667    6.15 | 1.667   14.99 | 2.667    5.87 |  3.67    3.99
              0.750    7.61 | 1.750   11.43 | 2.750    5.41 |  3.75    3.81
              0.833    7.61 | 1.833   11.43 | 2.833    5.41 |  3.83    3.81
              0.917   10.41 | 1.917    9.42 | 2.917    5.04 |  3.92    3.64
              1.000   10.41 | 2.000    9.42 | 3.000    5.04 |  4.00    3.64

     Max.Eff.Inten.(mm/hr)=     112.26        63.70
               over (min)        5.00        15.00
     Storage Coeff.  (min)=      3.06 (ii)   10.17 (ii)
     Unit Hyd. Tpeak (min)=      5.00        15.00
     Unit Hyd. peak  (cms)=      0.27         0.10
                                                        *TOTALS*
     PEAK FLOW       (cms)=      0.13         0.07         0.164 (iii)
     TIME TO PEAK    (hrs)=      1.33         1.50          1.33
     RUNOFF VOLUME    (mm)=     47.68        17.75         25.86
     TOTAL RAINFALL   (mm)=     48.68        48.68         48.68
     RUNOFF COEFFICIENT   =      0.98         0.36          0.53

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  66.5    Ia = Dep. Storage  (Above)
```



```
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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  -------------------------
  | Junction Command(0018) |
  -------------------------

                          AREA     QPEAK   TPEAK     R.V.
                          (ha)     (cms)   (hrs)     (mm)
  INFLOW : ID= 2(  0017)    1.59     0.16    1.33    25.86
  OUTFLOW: ID= 2(  0018)    1.59     0.16    1.33    25.86

  --------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0023)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0016):   234.30   1.300     2.92     7.58
     + ID2= 2 (  0018):     1.59   0.164     1.33    25.86
       ====================================================
       ID = 3 (  0023):   235.89   1.317     2.83     7.70

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0023)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 3 (  0023):   235.89   1.317     2.83     7.70
     + ID2= 2 (  0038):    40.41   0.069     4.42    20.52
       ====================================================
       ID = 1 (  0023):   276.30   1.378     2.92     9.58

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
*********************************
** SIMULATION:C - 10-year CHI **
*********************************
--------------------
| CHICAGO STORM    |    IDF curve parameters: A= 651.884
| Ptotal= 56.53 mm |                          B=   0.000
--------------------                          C=   0.699
                         used in:   INTENSITY =  A / (t + B)^C
```

Duration of storm = 4.00 hrs
Storm time step = 10.00 min
Time to peak ratio = 0.33

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.00	4.75	1.00	22.49	2.00	9.40	3.00	5.48
0.17	5.31	1.17	130.37	2.17	8.30	3.17	5.16
0.33	6.06	1.33	27.61	2.33	7.47	3.33	4.88
0.50	7.14	1.50	17.41	2.50	6.82	3.50	4.64
0.67	8.84	1.67	13.27	2.67	6.29	3.67	4.42
0.83	12.09	1.83	10.93	2.83	5.85	3.83	4.23

CALIB			
NASHYD (0025)	Area (ha)= 100.92	Curve Number (CN)= 55.9	
ID= 1 DT= 5.0 min	Ia (mm)= 7.89	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 1.70		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.75	1.083	22.49	2.083	9.40	3.08	5.48
0.167	4.75	1.167	22.49	2.167	9.40	3.17	5.48
0.250	5.31	1.250	130.37	2.250	8.30	3.25	5.16
0.333	5.31	1.333	130.37	2.333	8.30	3.33	5.16
0.417	6.06	1.417	27.61	2.417	7.47	3.42	4.88
0.500	6.06	1.500	27.61	2.500	7.47	3.50	4.88
0.583	7.14	1.583	17.41	2.583	6.82	3.58	4.64
0.667	7.14	1.667	17.41	2.667	6.82	3.67	4.64
0.750	8.84	1.750	13.27	2.750	6.29	3.75	4.42
0.833	8.84	1.833	13.27	2.833	6.29	3.83	4.42
0.917	12.09	1.917	10.93	2.917	5.85	3.92	4.23
1.000	12.09	2.000	10.93	3.000	5.85	4.00	4.23

Unit Hyd Qpeak (cms)= 2.267

PEAK FLOW (cms)= 0.660 (i)
TIME TO PEAK (hrs)= 3.917
RUNOFF VOLUME (mm)= 9.514
TOTAL RAINFALL (mm)= 56.533
RUNOFF COEFFICIENT = 0.168

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0002)	Area (ha)= 23.99	Curve Number (CN)= 44.7	
ID= 1 DT= 5.0 min	Ia (mm)= 10.91	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.97		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.75	1.083	22.49	2.083	9.40	3.08	5.48
0.167	4.75	1.167	22.49	2.167	9.40	3.17	5.48
0.250	5.31	1.250	130.37	2.250	8.30	3.25	5.16
0.333	5.31	1.333	130.37	2.333	8.30	3.33	5.16
0.417	6.06	1.417	27.61	2.417	7.47	3.42	4.88
0.500	6.06	1.500	27.61	2.500	7.47	3.50	4.88
0.583	7.14	1.583	17.41	2.583	6.82	3.58	4.64
0.667	7.14	1.667	17.41	2.667	6.82	3.67	4.64
0.750	8.84	1.750	13.27	2.750	6.29	3.75	4.42
0.833	8.84	1.833	13.27	2.833	6.29	3.83	4.42
0.917	12.09	1.917	10.93	2.917	5.85	3.92	4.23
1.000	12.09	2.000	10.93	3.000	5.85	4.00	4.23

Unit Hyd Qpeak (cms)= 0.945

PEAK FLOW (cms)= 0.129 (i)
TIME TO PEAK (hrs)= 2.833
RUNOFF VOLUME (mm)= 5.784
TOTAL RAINFALL (mm)= 56.533
RUNOFF COEFFICIENT = 0.102

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0001)	Area (ha)= 39.68	Curve Number (CN)= 60.7	
ID= 1 DT= 5.0 min	Ia (mm)= 8.26	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 1.18		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.75	1.083	22.49	2.083	9.40	3.08	5.48
0.167	4.75	1.167	22.49	2.167	9.40	3.17	5.48
0.250	5.31	1.250	130.37	2.250	8.30	3.25	5.16
0.333	5.31	1.333	130.37	2.333	8.30	3.33	5.16
0.417	6.06	1.417	27.61	2.417	7.47	3.42	4.88
0.500	6.06	1.500	27.61	2.500	7.47	3.50	4.88
0.583	7.14	1.583	17.41	2.583	6.82	3.58	4.64
0.667	7.14	1.667	17.41	2.667	6.82	3.67	4.64
0.750	8.84	1.750	13.27	2.750	6.29	3.75	4.42
0.833	8.84	1.833	13.27	2.833	6.29	3.83	4.42
0.917	12.09	1.917	10.93	2.917	5.85	3.92	4.23
1.000	12.09	2.000	10.93	3.000	5.85	4.00	4.23

Unit Hyd Qpeak (cms)= 1.284

PEAK FLOW (cms)= 0.370 (i)
TIME TO PEAK (hrs)= 3.000
RUNOFF VOLUME (mm)= 10.947
TOTAL RAINFALL (mm)= 56.533
RUNOFF COEFFICIENT = 0.194

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0028)	Area (ha)= 6.37	Curve Number (CN)= 50.5	
ID= 1 DT= 5.0 min	Ia (mm)= 15.69	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.77		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.75	1.083	22.49	2.083	9.40	3.08	5.48
0.167	4.75	1.167	22.49	2.167	9.40	3.17	5.48
0.250	5.31	1.250	130.37	2.250	8.30	3.25	5.16
0.333	5.31	1.333	130.37	2.333	8.30	3.33	5.16
0.417	6.06	1.417	27.61	2.417	7.47	3.42	4.88
0.500	6.06	1.500	27.61	2.500	7.47	3.50	4.88
0.583	7.14	1.583	17.41	2.583	6.82	3.58	4.64
0.667	7.14	1.667	17.41	2.667	6.82	3.67	4.64

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.750	8.84	1.750	13.27	2.750	6.29	3.75	4.42
0.833	8.84	1.833	13.27	2.833	6.29	3.83	4.42
0.917	12.09	1.917	10.93	2.917	5.85	3.92	4.23
1.000	12.09	2.000	10.93	3.000	5.85	4.00	4.23

Unit Hyd Qpeak (cms)= 0.316

PEAK FLOW (cms)= 0.037 (i)
TIME TO PEAK (hrs)= 2.583
RUNOFF VOLUME (mm)= 5.752
TOTAL RAINFALL (mm)= 56.533
RUNOFF COEFFICIENT = 0.102

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0029)	Area (ha)= 14.85	Curve Number (CN)= 52.9	
ID= 1 DT= 5.0 min	Ia (mm)= 13.28	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.89		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.75	1.083	22.49	2.083	9.40	3.08	5.48
0.167	4.75	1.167	22.49	2.167	9.40	3.17	5.48
0.250	5.31	1.250	130.37	2.250	8.30	3.25	5.16
0.333	5.31	1.333	130.37	2.333	8.30	3.33	5.16
0.417	6.06	1.417	27.61	2.417	7.47	3.42	4.88
0.500	6.06	1.500	27.61	2.500	7.47	3.50	4.88
0.583	7.14	1.583	17.41	2.583	6.82	3.58	4.64
0.667	7.14	1.667	17.41	2.667	6.82	3.67	4.64
0.750	8.84	1.750	13.27	2.750	6.29	3.75	4.42
0.833	8.84	1.833	13.27	2.833	6.29	3.83	4.42
0.917	12.09	1.917	10.93	2.917	5.85	3.92	4.23
1.000	12.09	2.000	10.93	3.000	5.85	4.00	4.23

Unit Hyd Qpeak (cms)= 0.637

PEAK FLOW (cms)= 0.099 (i)
TIME TO PEAK (hrs)= 2.750
RUNOFF VOLUME (mm)= 6.954
TOTAL RAINFALL (mm)= 56.533
RUNOFF COEFFICIENT = 0.123

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0030)	Area (ha)=	1.70	Curve Number (CN)=	60.5	
ID= 1 DT= 5.0 min	Ia (mm)=	9.65	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	0.40			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.75	1.083	22.49	2.083	9.40	3.08	5.48
0.167	4.75	1.167	22.49	2.167	9.40	3.17	5.48
0.250	5.31	1.250	130.37	2.250	8.30	3.25	5.16
0.333	5.31	1.333	130.37	2.333	8.30	3.33	5.16
0.417	6.06	1.417	27.61	2.417	7.47	3.42	4.88
0.500	6.06	1.500	27.61	2.500	7.47	3.50	4.88
0.583	7.14	1.583	17.41	2.583	6.82	3.58	4.64
0.667	7.14	1.667	17.41	2.667	6.82	3.67	4.64
0.750	8.84	1.750	13.27	2.750	6.29	3.75	4.42
0.833	8.84	1.833	13.27	2.833	6.29	3.83	4.42
0.917	12.09	1.917	10.93	2.917	5.85	3.92	4.23
1.000	12.09	2.000	10.93	3.000	5.85	4.00	4.23

Unit Hyd Qpeak (cms)= 0.162

PEAK FLOW (cms)= 0.028 (i)
TIME TO PEAK (hrs)= 1.833
RUNOFF VOLUME (mm)= 10.318
TOTAL RAINFALL (mm)= 56.533
RUNOFF COEFFICIENT = 0.183

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0031)	Area (ha)=	1.80	Curve Number (CN)=	50.0	
ID= 1 DT= 5.0 min	Ia (mm)=	16.00	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	0.76			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.75	1.083	22.49	2.083	9.40	3.08	5.48
0.167	4.75	1.167	22.49	2.167	9.40	3.17	5.48
0.250	5.31	1.250	130.37	2.250	8.30	3.25	5.16
0.333	5.31	1.333	130.37	2.333	8.30	3.33	5.16
0.417	6.06	1.417	27.61	2.417	7.47	3.42	4.88
0.500	6.06	1.500	27.61	2.500	7.47	3.50	4.88
0.583	7.14	1.583	17.41	2.583	6.82	3.58	4.64
0.667	7.14	1.667	17.41	2.667	6.82	3.67	4.64
0.750	8.84	1.750	13.27	2.750	6.29	3.75	4.42
0.833	8.84	1.833	13.27	2.833	6.29	3.83	4.42
0.917	12.09	1.917	10.93	2.917	5.85	3.92	4.23
1.000	12.09	2.000	10.93	3.000	5.85	4.00	4.23

Unit Hyd Qpeak (cms)= 0.090

PEAK FLOW (cms)= 0.010 (i)
TIME TO PEAK (hrs)= 2.583
RUNOFF VOLUME (mm)= 5.577
TOTAL RAINFALL (mm)= 56.533
RUNOFF COEFFICIENT = 0.099

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0032)	Area (ha)=	6.70	Curve Number (CN)=	60.0	
ID= 1 DT= 5.0 min	Ia (mm)=	10.00	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	1.45			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.75	1.083	22.49	2.083	9.40	3.08	5.48
0.167	4.75	1.167	22.49	2.167	9.40	3.17	5.48
0.250	5.31	1.250	130.37	2.250	8.30	3.25	5.16
0.333	5.31	1.333	130.37	2.333	8.30	3.33	5.16
0.417	6.06	1.417	27.61	2.417	7.47	3.42	4.88
0.500	6.06	1.500	27.61	2.500	7.47	3.50	4.88
0.583	7.14	1.583	17.41	2.583	6.82	3.58	4.64
0.667	7.14	1.667	17.41	2.667	6.82	3.67	4.64

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.750	8.84	1.750	13.27	2.750	6.29	3.75	4.42
0.833	8.84	1.833	13.27	2.833	6.29	3.83	4.42
0.917	12.09	1.917	10.93	2.917	5.85	3.92	4.23
1.000	12.09	2.000	10.93	3.000	5.85	4.00	4.23

Unit Hyd Qpeak (cms)= 0.176

PEAK FLOW (cms)= 0.051 (i)
TIME TO PEAK (hrs)= 3.500
RUNOFF VOLUME (mm)= 10.030
TOTAL RAINFALL (mm)= 56.533
RUNOFF COEFFICIENT = 0.177

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0033)	Area (ha)=	1.13	Curve Number (CN)=	67.4	
ID= 1 DT= 5.0 min	Ia (mm)=	7.88	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	0.43			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.75	1.083	22.49	2.083	9.40	3.08	5.48
0.167	4.75	1.167	22.49	2.167	9.40	3.17	5.48
0.250	5.31	1.250	130.37	2.250	8.30	3.25	5.16
0.333	5.31	1.333	130.37	2.333	8.30	3.33	5.16
0.417	6.06	1.417	27.61	2.417	7.47	3.42	4.88
0.500	6.06	1.500	27.61	2.500	7.47	3.50	4.88
0.583	7.14	1.583	17.41	2.583	6.82	3.58	4.64
0.667	7.14	1.667	17.41	2.667	6.82	3.67	4.64
0.750	8.84	1.750	13.27	2.750	6.29	3.75	4.42
0.833	8.84	1.833	13.27	2.833	6.29	3.83	4.42
0.917	12.09	1.917	10.93	2.917	5.85	3.92	4.23
1.000	12.09	2.000	10.93	3.000	5.85	4.00	4.23

Unit Hyd Qpeak (cms)= 0.100

PEAK FLOW (cms)= 0.025 (i)
TIME TO PEAK (hrs)= 1.833
RUNOFF VOLUME (mm)= 13.782
TOTAL RAINFALL (mm)= 56.533
RUNOFF COEFFICIENT = 0.244

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0027)	Area (ha)=	1.38	Curve Number (CN)=	64.1	
ID= 1 DT= 5.0 min	Ia (mm)=	8.51	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	0.39			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.75	1.083	22.49	2.083	9.40	3.08	5.48
0.167	4.75	1.167	22.49	2.167	9.40	3.17	5.48
0.250	5.31	1.250	130.37	2.250	8.30	3.25	5.16
0.333	5.31	1.333	130.37	2.333	8.30	3.33	5.16
0.417	6.06	1.417	27.61	2.417	7.47	3.42	4.88
0.500	6.06	1.500	27.61	2.500	7.47	3.50	4.88
0.583	7.14	1.583	17.41	2.583	6.82	3.58	4.64
0.667	7.14	1.667	17.41	2.667	6.82	3.67	4.64
0.750	8.84	1.750	13.27	2.750	6.29	3.75	4.42
0.833	8.84	1.833	13.27	2.833	6.29	3.83	4.42
0.917	12.09	1.917	10.93	2.917	5.85	3.92	4.23
1.000	12.09	2.000	10.93	3.000	5.85	4.00	4.23

Unit Hyd Qpeak (cms)= 0.135

PEAK FLOW (cms)= 0.028 (i)
TIME TO PEAK (hrs)= 1.750
RUNOFF VOLUME (mm)= 12.134
TOTAL RAINFALL (mm)= 56.533
RUNOFF COEFFICIENT = 0.215

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0041)	Area (ha)=	0.59	Curve Number (CN)=	71.5	
ID= 1 DT= 5.0 min	Ia (mm)=	4.75	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	0.53			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.75	1.083	22.49	2.083	9.40	3.08	5.48
0.167	4.75	1.167	22.49	2.167	9.40	3.17	5.48
0.250	5.31	1.250	130.37	2.250	8.30	3.25	5.16
0.333	5.31	1.333	130.37	2.333	8.30	3.33	5.16
0.417	6.06	1.417	27.61	2.417	7.47	3.42	4.88
0.500	6.06	1.500	27.61	2.500	7.47	3.50	4.88
0.583	7.14	1.583	17.41	2.583	6.82	3.58	4.64
0.667	7.14	1.667	17.41	2.667	6.82	3.67	4.64
0.750	8.84	1.750	13.27	2.750	6.29	3.75	4.42
0.833	8.84	1.833	13.27	2.833	6.29	3.83	4.42
0.917	12.09	1.917	10.93	2.917	5.85	3.92	4.23
1.000	12.09	2.000	10.93	3.000	5.85	4.00	4.23

Unit Hyd Qpeak (cms)= 0.043

PEAK FLOW (cms)= 0.015 (i)
TIME TO PEAK (hrs)= 1.917
RUNOFF VOLUME (mm)= 17.497
TOTAL RAINFALL (mm)= 56.533
RUNOFF COEFFICIENT = 0.310

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (0015)
ID= 1 DT= 5.0 min

Area (ha)= 1.93
Total Imp(%)= 54.66 Dir. Conn.(%)= 10.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	1.05	0.88
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	0.50	2.00
Length (m)=	113.43	45.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.75	1.083	22.49	2.083	9.40	3.08	5.48
0.167	4.75	1.167	22.49	2.167	9.40	3.17	5.48

0.250	5.31	1.250	130.37	2.250	8.30	3.25	5.16
0.333	5.31	1.333	130.37	2.333	8.30	3.33	5.16
0.417	6.06	1.417	27.61	2.417	7.47	3.42	4.88
0.500	6.06	1.500	27.61	2.500	7.47	3.50	4.88
0.583	7.14	1.583	17.41	2.583	6.82	3.58	4.64
0.667	7.14	1.667	17.41	2.667	6.82	3.67	4.64
0.750	8.84	1.750	13.27	2.750	6.29	3.75	4.42
0.833	8.84	1.833	13.27	2.833	6.29	3.83	4.42
0.917	12.09	1.917	10.93	2.917	5.85	3.92	4.23
1.000	12.09	2.000	10.93	3.000	5.85	4.00	4.23

			TOTALS
Max.Eff.Inten.(mm/hr)=	130.37	60.87	
over (min)	5.00	15.00	
Storage Coeff. (min)=	3.05 (ii)	12.29 (ii)	
Unit Hyd. Tpeak (min)=	5.00	15.00	
Unit Hyd. peak (cms)=	0.27	0.09	
PEAK FLOW (cms)=	0.07	0.08	0.107 (iii)
TIME TO PEAK (hrs)=	1.33	1.50	1.33
RUNOFF VOLUME (mm)=	55.53	15.61	19.60
TOTAL RAINFALL (mm)=	56.53	56.53	56.53
RUNOFF COEFFICIENT =	0.98	0.28	0.35

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 49.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (0019)
ID= 1 DT= 5.0 min

Area (ha)= 2.16
Total Imp(%)= 54.64 Dir. Conn.(%)= 10.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	1.18	0.98
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	0.50	2.00
Length (m)=	120.00	30.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.75	1.083	22.49	2.083	9.40	3.08	5.48
0.167	4.75	1.167	22.49	2.167	9.40	3.17	5.48
0.250	5.31	1.250	130.37	2.250	8.30	3.25	5.16
0.333	5.31	1.333	130.37	2.333	8.30	3.33	5.16
0.417	6.06	1.417	27.61	2.417	7.47	3.42	4.88
0.500	6.06	1.500	27.61	2.500	7.47	3.50	4.88
0.583	7.14	1.583	17.41	2.583	6.82	3.58	4.64
0.667	7.14	1.667	17.41	2.667	6.82	3.67	4.64
0.750	8.84	1.750	13.27	2.750	6.29	3.75	4.42
0.833	8.84	1.833	13.27	2.833	6.29	3.83	4.42
0.917	12.09	1.917	10.93	2.917	5.85	3.92	4.23
1.000	12.09	2.000	10.93	3.000	5.85	4.00	4.23

			TOTALS
Max.Eff.Inten.(mm/hr)=	130.37	111.32	
over (min)	5.00	10.00	
Storage Coeff. (min)=	3.16 (ii)	8.85 (ii)	
Unit Hyd. Tpeak (min)=	5.00	10.00	
Unit Hyd. peak (cms)=	0.27	0.12	
PEAK FLOW (cms)=	0.08	0.20	0.236 (iii)
TIME TO PEAK (hrs)=	1.33	1.42	1.33
RUNOFF VOLUME (mm)=	55.53	26.16	29.09
TOTAL RAINFALL (mm)=	56.53	56.53	56.53
RUNOFF COEFFICIENT =	0.98	0.46	0.51

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0040)
1 + 2 = 3

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0015):	1.93	0.107	1.33	19.60
+ ID2= 2 (0019):	2.16	0.236	1.33	29.09
ID = 3 (0040):	4.09	0.343	1.33	24.61

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0040)
3 + 2 = 1

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0040):	4.09	0.343	1.33	24.61
+ ID2= 2 (0027):	1.38	0.028	1.75	12.13
ID = 1 (0040):	5.47	0.349	1.33	21.46

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0040)
1 + 2 = 3

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0040):	5.47	0.349	1.33	21.46
+ ID2= 2 (0041):	0.59	0.015	1.92	17.50
ID = 3 (0040):	6.06	0.352	1.33	21.08

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB
NASHYD (0048)
ID= 1 DT= 5.0 min

Area (ha)= 29.16 Curve Number (CN)= 71.4
Ia (mm)= 7.88 # of Linear Res.(N)= 3.00
U.H. Tp(hrs)= 0.68

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.75	1.083	22.49	2.083	9.40	3.08	5.48
0.167	4.75	1.167	22.49	2.167	9.40	3.17	5.48
0.250	5.31	1.250	130.37	2.250	8.30	3.25	5.16
0.333	5.31	1.333	130.37	2.333	8.30	3.33	5.16
0.417	6.06	1.417	27.61	2.417	7.47	3.42	4.88
0.500	6.06	1.500	27.61	2.500	7.47	3.50	4.88
0.583	7.14	1.583	17.41	2.583	6.82	3.58	4.64
0.667	7.14	1.667	17.41	2.667	6.82	3.67	4.64

0.750	8.84	1.750	13.27	2.750	6.29	3.75	4.42
0.833	8.84	1.833	13.27	2.833	6.29	3.83	4.42
0.917	12.09	1.917	10.93	2.917	5.85	3.92	4.23
1.000	12.09	2.000	10.93	3.000	5.85	4.00	4.23

Unit Hyd Qpeak (cms)= 1.638

PEAK FLOW (cms)= 0.558 (i)
TIME TO PEAK (hrs)= 2.250
RUNOFF VOLUME (mm)= 15.739
TOTAL RAINFALL (mm)= 56.533
RUNOFF COEFFICIENT = 0.278

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (0014)
ID= 1 DT= 5.0 min

Area (ha)= 1.87
Total Imp(%)= 43.28 Dir. Conn.(%)= 10.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	0.81	1.06
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	0.50	2.00
Length (m)=	111.65	25.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.75	1.083	22.49	2.083	9.40	3.08	5.48
0.167	4.75	1.167	22.49	2.167	9.40	3.17	5.48
0.250	5.31	1.250	130.37	2.250	8.30	3.25	5.16
0.333	5.31	1.333	130.37	2.333	8.30	3.33	5.16
0.417	6.06	1.417	27.61	2.417	7.47	3.42	4.88
0.500	6.06	1.500	27.61	2.500	7.47	3.50	4.88
0.583	7.14	1.583	17.41	2.583	6.82	3.58	4.64
0.667	7.14	1.667	17.41	2.667	6.82	3.67	4.64
0.750	8.84	1.750	13.27	2.750	6.29	3.75	4.42
0.833	8.84	1.833	13.27	2.833	6.29	3.83	4.42
0.917	12.09	1.917	10.93	2.917	5.85	3.92	4.23
1.000	12.09	2.000	10.93	3.000	5.85	4.00	4.23

Max.Eff.Inten.(mm/hr)= 130.37 100.71

over (min)	5.00	10.00
Storage Coeff. (min)=	3.02 (ii)	8.33 (ii)
Unit Hyd. Tpeak (min)=	5.00	10.00
Unit Hyd. peak (cms)=	0.27	0.13

			TOTALS
PEAK FLOW (cms)=	0.07	0.20	0.228 (iii)
TIME TO PEAK (hrs)=	1.33	1.42	1.33
RUNOFF VOLUME (mm)=	55.53	28.91	31.57
TOTAL RAINFALL (mm)=	56.53	56.53	56.53
RUNOFF COEFFICIENT =	0.98	0.51	0.56

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 78.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (0021)
ID= 1 DT= 5.0 min

Area (ha)= 0.07
Total Imp(%)= 48.26 Dir. Conn.(%)= 39.54

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	0.03	0.04
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	0.50	2.00
Length (m)=	21.60	5.60
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.75	1.083	22.49	2.083	9.40	3.08	5.48
0.167	4.75	1.167	22.49	2.167	9.40	3.17	5.48
0.250	5.31	1.250	130.37	2.250	8.30	3.25	5.16
0.333	5.31	1.333	130.37	2.333	8.30	3.33	5.16
0.417	6.06	1.417	27.61	2.417	7.47	3.42	4.88
0.500	6.06	1.500	27.61	2.500	7.47	3.50	4.88
0.583	7.14	1.583	17.41	2.583	6.82	3.58	4.64
0.667	7.14	1.667	17.41	2.667	6.82	3.67	4.64

0.750	8.84	1.750	13.27	2.750	6.29	3.75	4.42
0.833	8.84	1.833	13.27	2.833	6.29	3.83	4.42
0.917	12.09	1.917	10.93	2.917	5.85	3.92	4.23
1.000	12.09	2.000	10.93	3.000	5.85	4.00	4.23

Max.Eff.Inten.(mm/hr)=	130.37	23.53		
over (min)	5.00	5.00		
Storage Coeff. (min)=	1.13 (ii)	3.30 (ii)		
Unit Hyd. Tpeak (min)=	5.00	5.00		
Unit Hyd. peak (cms)=	0.34	0.27		

			TOTALS
PEAK FLOW (cms)=	0.01	0.00	0.013 (iii)
TIME TO PEAK (hrs)=	1.33	1.33	1.33
RUNOFF VOLUME (mm)=	55.53	10.86	28.50
TOTAL RAINFALL (mm)=	56.53	56.53	56.53
RUNOFF COEFFICIENT =	0.98	0.19	0.50

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 52.2 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0016)					
1 + 2 = 3		AREA	QPEAK	TPEAK	R.V.
		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0001):		39.68	0.370	3.00	10.95
+ ID2= 2 (0014):		1.87	0.228	1.33	31.57
ID = 3 (0016):		41.55	0.395	3.00	11.88

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)					
3 + 2 = 1		AREA	QPEAK	TPEAK	R.V.
		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0016):		41.55	0.395	3.00	11.88
+ ID2= 2 (0002):		23.99	0.129	2.83	5.78
ID = 1 (0016):		65.54	0.523	2.92	9.65

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)					
1 + 2 = 3		AREA	QPEAK	TPEAK	R.V.
		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0016):		65.54	0.523	2.92	9.65
+ ID2= 2 (0021):		0.07	0.013	1.33	28.50
ID = 3 (0016):		65.61	0.524	2.92	9.67

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)					
3 + 2 = 1		AREA	QPEAK	TPEAK	R.V.
		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0016):		65.61	0.524	2.92	9.67
+ ID2= 2 (0025):		100.92	0.660	3.92	9.51
ID = 1 (0016):		166.53	1.138	3.42	9.57

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)					
1 + 2 = 3		AREA	QPEAK	TPEAK	R.V.
		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0016):		166.53	1.138	3.42	9.57
+ ID2= 2 (0028):		6.37	0.037	2.58	5.75
ID = 3 (0016):		172.90	1.169	3.42	9.43

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)					
3 + 2 = 1		AREA	QPEAK	TPEAK	R.V.
		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0016):		172.90	1.169	3.42	9.43
+ ID2= 2 (0029):		14.85	0.099	2.75	6.95
ID = 1 (0016):		187.75	1.258	3.33	9.24

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0016):		187.75	1.258	3.33	9.24
+ ID2= 2 (0030):		1.70	0.028	1.83	10.32
ID = 3 (0016):		189.45	1.269	3.33	9.25

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0016):		189.45	1.269	3.33	9.25
+ ID2= 2 (0031):		1.80	0.010	2.58	5.58
ID = 1 (0016):		191.25	1.277	3.33	9.21

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0016):		191.25	1.277	3.33	9.21
+ ID2= 2 (0032):		6.70	0.051	3.50	10.03
ID = 3 (0016):		197.95	1.328	3.33	9.24

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0016):		197.95	1.328	3.33	9.24
+ ID2= 2 (0033):		1.13	0.025	1.83	13.78
ID = 1 (0016):		199.08	1.337	3.33	9.27

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0016):		199.08	1.337	3.33	9.27
+ ID2= 2 (0040):		6.06	0.352	1.33	21.08
ID = 3 (0016):		205.14	1.393	3.25	9.61

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0016):		205.14	1.393	3.25	9.61
+ ID2= 2 (0048):		29.16	0.558	2.25	15.74
ID = 1 (0016):		234.30	1.799	2.83	10.38

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB			
STANDHYD (0009)	Area (ha)= 31.06		
ID= 1 DT= 5.0 min	Total Imp(%)= 53.89	Dir. Conn.(%)= 20.76	

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	16.74	14.32
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	455.05	30.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.75	1.083	22.49	2.083	9.40	3.08	5.48
0.167	4.75	1.167	22.49	2.167	9.40	3.17	5.48
0.250	5.31	1.250	130.37	2.250	8.30	3.25	5.16
0.333	5.31	1.333	130.37	2.333	8.30	3.33	5.16

0.417	6.06	1.417	27.61	2.417	7.47	3.42	4.88
0.500	6.06	1.500	27.61	2.500	7.47	3.50	4.88
0.583	7.14	1.583	17.41	2.583	6.82	3.58	4.64
0.667	7.14	1.667	17.41	2.667	6.82	3.67	4.64
0.750	8.84	1.750	13.27	2.750	6.29	3.75	4.42
0.833	8.84	1.833	13.27	2.833	6.29	3.83	4.42
0.917	12.09	1.917	10.93	2.917	5.85	3.92	4.23
1.000	12.09	2.000	10.93	3.000	5.85	4.00	4.23

			TOTALS
Max.Eff.Inten.(mm/hr)=	130.37	85.31	
over (min)	5.00	15.00	
Storage Coeff. (min)=	7.02 (ii)	13.35 (ii)	
Unit Hyd. Tpeak (min)=	5.00	15.00	
Unit Hyd. peak (cms)=	0.17	0.08	
PEAK FLOW (cms)=	1.86	1.71	2.733 (iii)
TIME TO PEAK (hrs)=	1.33	1.50	1.33
RUNOFF VOLUME (mm)=	55.53	23.66	30.28
TOTAL RAINFALL (mm)=	56.53	56.53	56.53
RUNOFF COEFFICIENT =	0.98	0.42	0.54

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 68.5 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
STANDHYD (0010)	Area (ha)= 1.32		
ID= 1 DT= 5.0 min	Total Imp(%)= 55.27	Dir. Conn.(%)= 1.52	

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.73	0.59
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	93.81	23.50
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.75	1.083	22.49	2.083	9.40	3.08	5.48

0.167	4.75	1.167	22.49	2.167	9.40	3.17	5.48
0.250	5.31	1.250	130.37	2.250	8.30	3.25	5.16
0.333	5.31	1.333	130.37	2.333	8.30	3.33	5.16
0.417	6.06	1.417	27.61	2.417	7.47	3.42	4.88
0.500	6.06	1.500	27.61	2.500	7.47	3.50	4.88
0.583	7.14	1.583	17.41	2.583	6.82	3.58	4.64
0.667	7.14	1.667	17.41	2.667	6.82	3.67	4.64
0.750	8.84	1.750	13.27	2.750	6.29	3.75	4.42
0.833	8.84	1.833	13.27	2.833	6.29	3.83	4.42
0.917	12.09	1.917	10.93	2.917	5.85	3.92	4.23
1.000	12.09	2.000	10.93	3.000	5.85	4.00	4.23

			TOTALS
Max.Eff.Inten.(mm/hr)=	130.37	132.25	
over (min)	5.00	10.00	
Storage Coeff. (min)=	2.72 (ii)	7.31 (ii)	
Unit Hyd. Tpeak (min)=	5.00	10.00	
Unit Hyd. peak (cms)=	0.29	0.13	
PEAK FLOW (cms)=	0.01	0.15	0.155 (iii)
TIME TO PEAK (hrs)=	1.33	1.42	1.42
RUNOFF VOLUME (mm)=	55.53	27.66	28.08
TOTAL RAINFALL (mm)=	56.53	56.53	56.53
RUNOFF COEFFICIENT =	0.98	0.49	0.50

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 68.8 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
STANDHYD (0013)	Area (ha)= 4.16		
ID= 1 DT= 5.0 min	Total Imp(%)= 50.00	Dir. Conn.(%)= 50.00	

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	2.08	2.08
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	166.53	250.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.75	1.083	22.49	2.083	9.40	3.08	5.48
0.167	4.75	1.167	22.49	2.167	9.40	3.17	5.48
0.250	5.31	1.250	130.37	2.250	8.30	3.25	5.16
0.333	5.31	1.333	130.37	2.333	8.30	3.33	5.16
0.417	6.06	1.417	27.61	2.417	7.47	3.42	4.88
0.500	6.06	1.500	27.61	2.500	7.47	3.50	4.88
0.583	7.14	1.583	17.41	2.583	6.82	3.58	4.64
0.667	7.14	1.667	17.41	2.667	6.82	3.67	4.64
0.750	8.84	1.750	13.27	2.750	6.29	3.75	4.42
0.833	8.84	1.833	13.27	2.833	6.29	3.83	4.42
0.917	12.09	1.917	10.93	2.917	5.85	3.92	4.23
1.000	12.09	2.000	10.93	3.000	5.85	4.00	4.23

Max.Eff.Inten.(mm/hr)=		130.37	11.73	
over (min)		5.00	55.00	
Storage Coeff. (min)=		3.84 (ii)	53.78 (ii)	
Unit Hyd. Tpeak (min)=		5.00	55.00	
Unit Hyd. peak (cms)=		0.25	0.02	
				TOTALS
PEAK FLOW	(cms)=	0.71	0.04	0.710 (iii)
TIME TO PEAK	(hrs)=	1.33	2.25	1.33
RUNOFF VOLUME	(mm)=	55.53	16.01	35.76
TOTAL RAINFALL	(mm)=	56.53	56.53	56.53
RUNOFF COEFFICIENT	=	0.98	0.28	0.63

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (0036) | Area (ha)= 2.12
ID= 1 DT= 5.0 min | Total Imp(%)= 85.04 Dir. Conn.(%)= 0.10

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	1.80	0.32
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00

Length	(m)=	118.88	175.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.75	1.083	22.49	2.083	9.40	3.08	5.48
0.167	4.75	1.167	22.49	2.167	9.40	3.17	5.48
0.250	5.31	1.250	130.37	2.250	8.30	3.25	5.16
0.333	5.31	1.333	130.37	2.333	8.30	3.33	5.16
0.417	6.06	1.417	27.61	2.417	7.47	3.42	4.88
0.500	6.06	1.500	27.61	2.500	7.47	3.50	4.88
0.583	7.14	1.583	17.41	2.583	6.82	3.58	4.64
0.667	7.14	1.667	17.41	2.667	6.82	3.67	4.64
0.750	8.84	1.750	13.27	2.750	6.29	3.75	4.42
0.833	8.84	1.833	13.27	2.833	6.29	3.83	4.42
0.917	12.09	1.917	10.93	2.917	5.85	3.92	4.23
1.000	12.09	2.000	10.93	3.000	5.85	4.00	4.23

Max.Eff.Inten.(mm/hr)=		130.37	682.30	
over (min)		5.00	15.00	
Storage Coeff. (min)=		3.14 (ii)	11.08 (ii)	
Unit Hyd. Tpeak (min)=		5.00	15.00	
Unit Hyd. peak (cms)=		0.27	0.09	
				TOTALS
PEAK FLOW	(cms)=	0.00	0.32	0.321 (iii)
TIME TO PEAK	(hrs)=	1.33	1.50	1.50
RUNOFF VOLUME	(mm)=	55.53	42.70	42.71
TOTAL RAINFALL	(mm)=	56.53	56.53	56.53
RUNOFF COEFFICIENT	=	0.98	0.76	0.76

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (0043) | Area (ha)= 0.13

ID= 1 DT= 5.0 min | Total Imp(%)= 30.77 Dir. Conn.(%)= 7.69

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.04	0.09
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	0.50
Length	(m)=	29.44	70.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.75	1.083	22.49	2.083	9.40	3.08	5.48
0.167	4.75	1.167	22.49	2.167	9.40	3.17	5.48
0.250	5.31	1.250	130.37	2.250	8.30	3.25	5.16
0.333	5.31	1.333	130.37	2.333	8.30	3.33	5.16
0.417	6.06	1.417	27.61	2.417	7.47	3.42	4.88
0.500	6.06	1.500	27.61	2.500	7.47	3.50	4.88
0.583	7.14	1.583	17.41	2.583	6.82	3.58	4.64
0.667	7.14	1.667	17.41	2.667	6.82	3.67	4.64
0.750	8.84	1.750	13.27	2.750	6.29	3.75	4.42
0.833	8.84	1.833	13.27	2.833	6.29	3.83	4.42
0.917	12.09	1.917	10.93	2.917	5.85	3.92	4.23
1.000	12.09	2.000	10.93	3.000	5.85	4.00	4.23

Max.Eff.Inten.(mm/hr)=		130.37	30.87	
over (min)		5.00	30.00	
Storage Coeff. (min)=		1.36 (ii)	25.31 (ii)	
Unit Hyd. Tpeak (min)=		5.00	30.00	
Unit Hyd. peak (cms)=		0.33	0.04	
				TOTALS
PEAK FLOW	(cms)=	0.00	0.00	0.005 (iii)
TIME TO PEAK	(hrs)=	1.33	1.75	1.75
RUNOFF VOLUME	(mm)=	55.53	20.14	22.74
TOTAL RAINFALL	(mm)=	56.53	56.53	56.53
RUNOFF COEFFICIENT	=	0.98	0.36	0.40

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.

(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (0044) | Area (ha)= 1.62
ID= 1 DT= 5.0 min | Total Imp(%)= 48.77 Dir. Conn.(%)= 30.86

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.79	0.83
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	1.40
Length	(m)=	103.92	400.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.75	1.083	22.49	2.083	9.40	3.08	5.48
0.167	4.75	1.167	22.49	2.167	9.40	3.17	5.48
0.250	5.31	1.250	130.37	2.250	8.30	3.25	5.16
0.333	5.31	1.333	130.37	2.333	8.30	3.33	5.16
0.417	6.06	1.417	27.61	2.417	7.47	3.42	4.88
0.500	6.06	1.500	27.61	2.500	7.47	3.50	4.88
0.583	7.14	1.583	17.41	2.583	6.82	3.58	4.64
0.667	7.14	1.667	17.41	2.667	6.82	3.67	4.64
0.750	8.84	1.750	13.27	2.750	6.29	3.75	4.42
0.833	8.84	1.833	13.27	2.833	6.29	3.83	4.42
0.917	12.09	1.917	10.93	2.917	5.85	3.92	4.23
1.000	12.09	2.000	10.93	3.000	5.85	4.00	4.23

Max.Eff.Inten.(mm/hr)=		130.37	18.19	
over (min)		5.00	65.00	
Storage Coeff. (min)=		2.89 (ii)	64.73 (ii)	
Unit Hyd. Tpeak (min)=		5.00	65.00	
Unit Hyd. peak (cms)=		0.28	0.02	
				TOTALS
PEAK FLOW	(cms)=	0.18	0.02	0.178 (iii)
TIME TO PEAK	(hrs)=	1.33	2.42	1.33
RUNOFF VOLUME	(mm)=	55.53	20.31	31.16
TOTAL RAINFALL	(mm)=	56.53	56.53	56.53
RUNOFF COEFFICIENT	=	0.98	0.36	0.55

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0037)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0010):		1.32	0.155	1.42	28.08
+ ID2= 2 (0013):		4.16	0.710	1.33	35.76
ID = 3 (0037):		5.48	0.845	1.33	33.91

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0037)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0037):		5.48	0.845	1.33	33.91
+ ID2= 2 (0036):		2.12	0.321	1.50	42.71
ID = 1 (0037):		7.60	1.041	1.33	36.37

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0037)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0037):		7.60	1.041	1.33	36.37
+ ID2= 2 (0043):		0.13	0.005	1.75	22.74
ID = 3 (0037):		7.73	1.046	1.33	36.14

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0037)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)

ID1= 3 (0037):		7.73	1.046	1.33	36.14
+ ID2= 2 (0044):		1.62	0.178	1.33	31.16
ID = 1 (0037):		9.35	1.224	1.33	35.28

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0037)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0037):		9.35	1.224	1.33	35.28
+ ID2= 2 (0009):		31.06	2.733	1.33	30.28
ID = 3 (0037):		40.41	3.956	1.33	31.43

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

RESERVOIR(0038)	OVERFLOW IS OFF
IN= 2---> OUT= 1	
DT= 5.0 min	

OUTFLOW (cms)	STORAGE (ha.m.)	OUTFLOW (cms)	STORAGE (ha.m.)
0.0000	0.0000	0.5076	2.8989
0.0000	0.2023	0.6060	3.2065
0.0353	0.4202	0.7105	3.5196
0.0525	0.6536	0.8207	3.8381
0.0654	0.9026	0.9365	4.1621
0.0843	1.1671	1.0574	4.4915
0.1858	1.7227	1.1833	4.8263
0.2540	2.0086	1.3139	5.1665
0.3309	2.2999	1.4492	5.5122
0.4157	2.5967	1.5890	5.8633

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
INFLOW : ID= 2 (0037)	40.410	3.956	1.33	31.43
OUTFLOW: ID= 1 (0038)	40.410	0.086	4.42	26.39

PEAK FLOW REDUCTION [Qout/Qin](%)= 2.18
TIME SHIFT OF PEAK FLOW (min)=185.00
MAXIMUM STORAGE USED (ha.m.)= 1.1786

CALIB	
STANDHYD (0017)	Area (ha)= 1.59

|ID= 1 DT= 5.0 min | Total Imp(%)= 58.58 Dir. Conn.(%)= 27.10

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.93	0.66
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	102.96	30.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.75	1.083	22.49	2.083	9.40	3.08	5.48
0.167	4.75	1.167	22.49	2.167	9.40	3.17	5.48
0.250	5.31	1.250	130.37	2.250	8.30	3.25	5.16
0.333	5.31	1.333	130.37	2.333	8.30	3.33	5.16
0.417	6.06	1.417	27.61	2.417	7.47	3.42	4.88
0.500	6.06	1.500	27.61	2.500	7.47	3.50	4.88
0.583	7.14	1.583	17.41	2.583	6.82	3.58	4.64
0.667	7.14	1.667	17.41	2.667	6.82	3.67	4.64
0.750	8.84	1.750	13.27	2.750	6.29	3.75	4.42
0.833	8.84	1.833	13.27	2.833	6.29	3.83	4.42
0.917	12.09	1.917	10.93	2.917	5.85	3.92	4.23
1.000	12.09	2.000	10.93	3.000	5.85	4.00	4.23

Max.Eff.Inten.(mm/hr)=		130.37	83.73
over (min)		5.00	10.00
Storage Coeff. (min)=		2.88 (ii)	9.25 (ii)
Unit Hyd. Tpeak (min)=		5.00	10.00
Unit Hyd. peak (cms)=		0.28	0.12
			TOTALS
PEAK FLOW	(cms)=	0.15	0.10 0.230 (iii)
TIME TO PEAK	(hrs)=	1.33	1.42 1.33
RUNOFF VOLUME	(mm)=	55.53	22.83 31.69
TOTAL RAINFALL	(mm)=	56.53	56.53 56.53
RUNOFF COEFFICIENT	=	0.98	0.40 0.56

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 66.5 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

Junction Command(0018)		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
INFLOW : ID= 2(0017)		1.59	0.23	1.33	31.69
OUTFLOW: ID= 2(0018)		1.59	0.23	1.33	31.69

ADD HYD (0023)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0016):		234.30	1.799	2.83	10.38
+ ID2= 2 (0018):		1.59	0.230	1.33	31.69
ID = 3 (0023):		235.89	1.820	2.83	10.52

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0023):		235.89	1.820	2.83	10.52
+ ID2= 2 (0038):		40.41	0.086	4.42	26.39
ID = 1 (0023):		276.30	1.892	2.83	12.84

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

****
** SIMULATION:D - 25-year CHI **
****

CHICAGO STORM	IDF curve parameters: A= 766.568
Ptotal= 66.48 mm	B= 0.000
	C= 0.699
	used in: INTENSITY = A / (t + B)^C

Duration of storm = 4.00 hrs
Storm time step = 10.00 min
Time to peak ratio = 0.33

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.00	5.59	1.00	26.45	2.00	11.05	3.00	6.44
0.17	6.25	1.17	153.30	2.17	9.76	3.17	6.06
0.33	7.13	1.33	32.46	2.33	8.78	3.33	5.74
0.50	8.39	1.50	20.47	2.50	8.02	3.50	5.45
0.67	10.40	1.67	15.61	2.67	7.39	3.67	5.20
0.83	14.22	1.83	12.86	2.83	6.88	3.83	4.97

CALIB			
NASHYD (0025)	Area (ha)= 100.92	Curve Number (CN)= 55.9	
ID= 1 DT= 5.0 min	Ia (mm)= 7.89	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 1.70		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	5.59	1.083	26.45	2.083	11.05	3.08	6.44
0.167	5.59	1.167	26.45	2.167	11.05	3.17	6.44
0.250	6.25	1.250	153.30	2.250	9.76	3.25	6.06
0.333	6.25	1.333	153.30	2.333	9.76	3.33	6.06
0.417	7.13	1.417	32.46	2.417	8.78	3.42	5.74
0.500	7.13	1.500	32.46	2.500	8.78	3.50	5.74
0.583	8.39	1.583	20.47	2.583	8.02	3.58	5.45
0.667	8.39	1.667	20.47	2.667	8.02	3.67	5.45
0.750	10.40	1.750	15.61	2.750	7.39	3.75	5.20
0.833	10.40	1.833	15.61	2.833	7.39	3.83	5.20
0.917	14.22	1.917	12.86	2.917	6.88	3.92	4.97
1.000	14.22	2.000	12.86	3.000	6.88	4.00	4.97

Unit Hyd Qpeak (cms)= 2.267

PEAK FLOW (cms)= 0.923 (i)
TIME TO PEAK (hrs)= 3.833
RUNOFF VOLUME (mm)= 13.272
TOTAL RAINFALL (mm)= 66.479
RUNOFF COEFFICIENT = 0.200

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0002)	Area (ha)= 23.99	Curve Number (CN)= 44.7	
ID= 1 DT= 5.0 min	Ia (mm)= 10.91	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.97		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	5.59	1.083	26.45	2.083	11.05	3.08	6.44
0.167	5.59	1.167	26.45	2.167	11.05	3.17	6.44
0.250	6.25	1.250	153.30	2.250	9.76	3.25	6.06
0.333	6.25	1.333	153.30	2.333	9.76	3.33	6.06
0.417	7.13	1.417	32.46	2.417	8.78	3.42	5.74
0.500	7.13	1.500	32.46	2.500	8.78	3.50	5.74
0.583	8.39	1.583	20.47	2.583	8.02	3.58	5.45
0.667	8.39	1.667	20.47	2.667	8.02	3.67	5.45
0.750	10.40	1.750	15.61	2.750	7.39	3.75	5.20
0.833	10.40	1.833	15.61	2.833	7.39	3.83	5.20
0.917	14.22	1.917	12.86	2.917	6.88	3.92	4.97
1.000	14.22	2.000	12.86	3.000	6.88	4.00	4.97

Unit Hyd Qpeak (cms)= 0.945

PEAK FLOW (cms)= 0.188 (i)
TIME TO PEAK (hrs)= 2.750
RUNOFF VOLUME (mm)= 8.350
TOTAL RAINFALL (mm)= 66.479
RUNOFF COEFFICIENT = 0.126

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0001)	Area (ha)= 39.68	Curve Number (CN)= 60.7	
ID= 1 DT= 5.0 min	Ia (mm)= 8.26	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 1.18		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr

0.083	5.59	1.083	26.45	2.083	11.05	3.08	6.44
0.167	5.59	1.167	26.45	2.167	11.05	3.17	6.44
0.250	6.25	1.250	153.30	2.250	9.76	3.25	6.06
0.333	6.25	1.333	153.30	2.333	9.76	3.33	6.06
0.417	7.13	1.417	32.46	2.417	8.78	3.42	5.74
0.500	7.13	1.500	32.46	2.500	8.78	3.50	5.74
0.583	8.39	1.583	20.47	2.583	8.02	3.58	5.45
0.667	8.39	1.667	20.47	2.667	8.02	3.67	5.45
0.750	10.40	1.750	15.61	2.750	7.39	3.75	5.20
0.833	10.40	1.833	15.61	2.833	7.39	3.83	5.20
0.917	14.22	1.917	12.86	2.917	6.88	3.92	4.97
1.000	14.22	2.000	12.86	3.000	6.88	4.00	4.97

Unit Hyd Qpeak (cms)= 1.284

PEAK FLOW (cms)= 0.519 (i)
TIME TO PEAK (hrs)= 3.000
RUNOFF VOLUME (mm)= 15.212
TOTAL RAINFALL (mm)= 66.479
RUNOFF COEFFICIENT = 0.229

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0028)	Area (ha)= 6.37	Curve Number (CN)= 50.5	
ID= 1 DT= 5.0 min	Ia (mm)= 15.69	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.77		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	5.59	1.083	26.45	2.083	11.05	3.08	6.44
0.167	5.59	1.167	26.45	2.167	11.05	3.17	6.44
0.250	6.25	1.250	153.30	2.250	9.76	3.25	6.06
0.333	6.25	1.333	153.30	2.333	9.76	3.33	6.06
0.417	7.13	1.417	32.46	2.417	8.78	3.42	5.74
0.500	7.13	1.500	32.46	2.500	8.78	3.50	5.74
0.583	8.39	1.583	20.47	2.583	8.02	3.58	5.45
0.667	8.39	1.667	20.47	2.667	8.02	3.67	5.45
0.750	10.40	1.750	15.61	2.750	7.39	3.75	5.20
0.833	10.40	1.833	15.61	2.833	7.39	3.83	5.20
0.917	14.22	1.917	12.86	2.917	6.88	3.92	4.97
1.000	14.22	2.000	12.86	3.000	6.88	4.00	4.97

Unit Hyd Qpeak (cms)= 0.316

PEAK FLOW (cms)= 0.057 (i)
TIME TO PEAK (hrs)= 2.500
RUNOFF VOLUME (mm)= 8.599
TOTAL RAINFALL (mm)= 66.479
RUNOFF COEFFICIENT = 0.129

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0029)	Area (ha)= 14.85	Curve Number (CN)= 52.9	
ID= 1 DT= 5.0 min	Ia (mm)= 13.28	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.89		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	5.59	1.083	26.45	2.083	11.05	3.08	6.44
0.167	5.59	1.167	26.45	2.167	11.05	3.17	6.44
0.250	6.25	1.250	153.30	2.250	9.76	3.25	6.06
0.333	6.25	1.333	153.30	2.333	9.76	3.33	6.06
0.417	7.13	1.417	32.46	2.417	8.78	3.42	5.74
0.500	7.13	1.500	32.46	2.500	8.78	3.50	5.74
0.583	8.39	1.583	20.47	2.583	8.02	3.58	5.45
0.667	8.39	1.667	20.47	2.667	8.02	3.67	5.45
0.750	10.40	1.750	15.61	2.750	7.39	3.75	5.20
0.833	10.40	1.833	15.61	2.833	7.39	3.83	5.20
0.917	14.22	1.917	12.86	2.917	6.88	3.92	4.97
1.000	14.22	2.000	12.86	3.000	6.88	4.00	4.97

Unit Hyd Qpeak (cms)= 0.637

PEAK FLOW (cms)= 0.148 (i)
TIME TO PEAK (hrs)= 2.667
RUNOFF VOLUME (mm)= 10.144
TOTAL RAINFALL (mm)= 66.479
RUNOFF COEFFICIENT = 0.153

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0030)	Area (ha)= 1.70	Curve Number (CN)= 60.5			
ID= 1 DT= 5.0 min	Ia (mm)= 9.65	# of Linear Res.(N)= 3.00			
	U.H. Tp(hrs)= 0.40				

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	5.59	1.083	26.45	2.083	11.05	3.08	6.44
0.167	5.59	1.167	26.45	2.167	11.05	3.17	6.44
0.250	6.25	1.250	153.30	2.250	9.76	3.25	6.06
0.333	6.25	1.333	153.30	2.333	9.76	3.33	6.06
0.417	7.13	1.417	32.46	2.417	8.78	3.42	5.74
0.500	7.13	1.500	32.46	2.500	8.78	3.50	5.74
0.583	8.39	1.583	20.47	2.583	8.02	3.58	5.45
0.667	8.39	1.667	20.47	2.667	8.02	3.67	5.45
0.750	10.40	1.750	15.61	2.750	7.39	3.75	5.20
0.833	10.40	1.833	15.61	2.833	7.39	3.83	5.20
0.917	14.22	1.917	12.86	2.917	6.88	3.92	4.97
1.000	14.22	2.000	12.86	3.000	6.88	4.00	4.97

Unit Hyd Qpeak (cms)= 0.162

PEAK FLOW (cms)= 0.041 (i)
TIME TO PEAK (hrs)= 1.833
RUNOFF VOLUME (mm)= 14.484
TOTAL RAINFALL (mm)= 66.479
RUNOFF COEFFICIENT = 0.218

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0031)	Area (ha)= 1.80	Curve Number (CN)= 50.0			
ID= 1 DT= 5.0 min	Ia (mm)= 16.00	# of Linear Res.(N)= 3.00			
	U.H. Tp(hrs)= 0.76				

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr

0.083	5.59	1.083	26.45	2.083	11.05	3.08	6.44
0.167	5.59	1.167	26.45	2.167	11.05	3.17	6.44
0.250	6.25	1.250	153.30	2.250	9.76	3.25	6.06
0.333	6.25	1.333	153.30	2.333	9.76	3.33	6.06
0.417	7.13	1.417	32.46	2.417	8.78	3.42	5.74
0.500	7.13	1.500	32.46	2.500	8.78	3.50	5.74
0.583	8.39	1.583	20.47	2.583	8.02	3.58	5.45
0.667	8.39	1.667	20.47	2.667	8.02	3.67	5.45
0.750	10.40	1.750	15.61	2.750	7.39	3.75	5.20
0.833	10.40	1.833	15.61	2.833	7.39	3.83	5.20
0.917	14.22	1.917	12.86	2.917	6.88	3.92	4.97
1.000	14.22	2.000	12.86	3.000	6.88	4.00	4.97

Unit Hyd Qpeak (cms)= 0.090

PEAK FLOW (cms)= 0.016 (i)
TIME TO PEAK (hrs)= 2.500
RUNOFF VOLUME (mm)= 8.368
TOTAL RAINFALL (mm)= 66.479
RUNOFF COEFFICIENT = 0.126

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0032)	Area (ha)= 6.70	Curve Number (CN)= 60.0			
ID= 1 DT= 5.0 min	Ia (mm)= 10.00	# of Linear Res.(N)= 3.00			
	U.H. Tp(hrs)= 1.45				

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	5.59	1.083	26.45	2.083	11.05	3.08	6.44
0.167	5.59	1.167	26.45	2.167	11.05	3.17	6.44
0.250	6.25	1.250	153.30	2.250	9.76	3.25	6.06
0.333	6.25	1.333	153.30	2.333	9.76	3.33	6.06
0.417	7.13	1.417	32.46	2.417	8.78	3.42	5.74
0.500	7.13	1.500	32.46	2.500	8.78	3.50	5.74
0.583	8.39	1.583	20.47	2.583	8.02	3.58	5.45
0.667	8.39	1.667	20.47	2.667	8.02	3.67	5.45
0.750	10.40	1.750	15.61	2.750	7.39	3.75	5.20
0.833	10.40	1.833	15.61	2.833	7.39	3.83	5.20
0.917	14.22	1.917	12.86	2.917	6.88	3.92	4.97
1.000	14.22	2.000	12.86	3.000	6.88	4.00	4.97

Unit Hyd Qpeak (cms)= 0.176

PEAK FLOW (cms)= 0.072 (i)
TIME TO PEAK (hrs)= 3.500
RUNOFF VOLUME (mm)= 14.126
TOTAL RAINFALL (mm)= 66.479
RUNOFF COEFFICIENT = 0.212

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0033)	Area (ha)= 1.13	Curve Number (CN)= 67.4			
ID= 1 DT= 5.0 min	Ia (mm)= 7.88	# of Linear Res.(N)= 3.00			
	U.H. Tp(hrs)= 0.43				

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	5.59	1.083	26.45	2.083	11.05	3.08	6.44
0.167	5.59	1.167	26.45	2.167	11.05	3.17	6.44
0.250	6.25	1.250	153.30	2.250	9.76	3.25	6.06
0.333	6.25	1.333	153.30	2.333	9.76	3.33	6.06
0.417	7.13	1.417	32.46	2.417	8.78	3.42	5.74
0.500	7.13	1.500	32.46	2.500	8.78	3.50	5.74
0.583	8.39	1.583	20.47	2.583	8.02	3.58	5.45
0.667	8.39	1.667	20.47	2.667	8.02	3.67	5.45
0.750	10.40	1.750	15.61	2.750	7.39	3.75	5.20
0.833	10.40	1.833	15.61	2.833	7.39	3.83	5.20
0.917	14.22	1.917	12.86	2.917	6.88	3.92	4.97
1.000	14.22	2.000	12.86	3.000	6.88	4.00	4.97

Unit Hyd Qpeak (cms)= 0.100

PEAK FLOW (cms)= 0.035 (i)
TIME TO PEAK (hrs)= 1.833
RUNOFF VOLUME (mm)= 18.898
TOTAL RAINFALL (mm)= 66.479
RUNOFF COEFFICIENT = 0.284

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0027)	Area (ha)= 1.38	Curve Number (CN)= 64.1			
ID= 1 DT= 5.0 min	Ia (mm)= 8.51	# of Linear Res.(N)= 3.00			
	U.H. Tp(hrs)= 0.39				

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	5.59	1.083	26.45	2.083	11.05	3.08	6.44
0.167	5.59	1.167	26.45	2.167	11.05	3.17	6.44
0.250	6.25	1.250	153.30	2.250	9.76	3.25	6.06
0.333	6.25	1.333	153.30	2.333	9.76	3.33	6.06
0.417	7.13	1.417	32.46	2.417	8.78	3.42	5.74
0.500	7.13	1.500	32.46	2.500	8.78	3.50	5.74
0.583	8.39	1.583	20.47	2.583	8.02	3.58	5.45
0.667	8.39	1.667	20.47	2.667	8.02	3.67	5.45
0.750	10.40	1.750	15.61	2.750	7.39	3.75	5.20
0.833	10.40	1.833	15.61	2.833	7.39	3.83	5.20
0.917	14.22	1.917	12.86	2.917	6.88	3.92	4.97
1.000	14.22	2.000	12.86	3.000	6.88	4.00	4.97

Unit Hyd Qpeak (cms)= 0.135

PEAK FLOW (cms)= 0.040 (i)
TIME TO PEAK (hrs)= 1.750
RUNOFF VOLUME (mm)= 16.801
TOTAL RAINFALL (mm)= 66.479
RUNOFF COEFFICIENT = 0.253

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0041)	Area (ha)= 0.59	Curve Number (CN)= 71.5			
ID= 1 DT= 5.0 min	Ia (mm)= 4.75	# of Linear Res.(N)= 3.00			
	U.H. Tp(hrs)= 0.53				

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr

0.083	5.59	1.083	26.45	2.083	11.05	3.08	6.44
0.167	5.59	1.167	26.45	2.167	11.05	3.17	6.44
0.250	6.25	1.250	153.30	2.250	9.76	3.25	6.06
0.333	6.25	1.333	153.30	2.333	9.76	3.33	6.06
0.417	7.13	1.417	32.46	2.417	8.78	3.42	5.74
0.500	7.13	1.500	32.46	2.500	8.78	3.50	5.74
0.583	8.39	1.583	20.47	2.583	8.02	3.58	5.45
0.667	8.39	1.667	20.47	2.667	8.02	3.67	5.45
0.750	10.40	1.750	15.61	2.750	7.39	3.75	5.20
0.833	10.40	1.833	15.61	2.833	7.39	3.83	5.20
0.917	14.22	1.917	12.86	2.917	6.88	3.92	4.97
1.000	14.22	2.000	12.86	3.000	6.88	4.00	4.97

Unit Hyd Qpeak (cms)= 0.043

PEAK FLOW (cms)= 0.021 (i)
TIME TO PEAK (hrs)= 1.917
RUNOFF VOLUME (mm)= 23.349
TOTAL RAINFALL (mm)= 66.479
RUNOFF COEFFICIENT = 0.351

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	
STANDHYD (0015)	Area (ha)= 1.93
ID= 1 DT= 5.0 min	Total Imp(%)= 54.66 Dir. Conn.(%)= 10.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	1.05	0.88
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	113.43	45.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	5.59	1.083	26.45	2.083	11.05	3.08	6.44
0.167	5.59	1.167	26.45	2.167	11.05	3.17	6.44
0.250	6.25	1.250	153.30	2.250	9.76	3.25	6.06
0.333	6.25	1.333	153.30	2.333	9.76	3.33	6.06
0.417	7.13	1.417	32.46	2.417	8.78	3.42	5.74
0.500	7.13	1.500	32.46	2.500	8.78	3.50	5.74

0.583	8.39	1.583	20.47	2.583	8.02	3.58	5.45
0.667	8.39	1.667	20.47	2.667	8.02	3.67	5.45
0.750	10.40	1.750	15.61	2.750	7.39	3.75	5.20
0.833	10.40	1.833	15.61	2.833	7.39	3.83	5.20
0.917	14.22	1.917	12.86	2.917	6.88	3.92	4.97
1.000	14.22	2.000	12.86	3.000	6.88	4.00	4.97

Max.Eff.Inten.(mm/hr)= 153.30 82.60
over (min) 5.00 15.00
Storage Coeff. (min)= 2.86 (ii) 11.04 (ii)
Unit Hyd. Tpeak (min)= 5.00 15.00
Unit Hyd. peak (cms)= 0.28 0.09

				TOTALS
PEAK FLOW	(cms)=	0.08	0.11	0.137 (iii)
TIME TO PEAK	(hrs)=	1.33	1.50	1.33
RUNOFF VOLUME	(mm)=	65.48	20.78	25.25
TOTAL RAINFALL	(mm)=	66.48	66.48	66.48
RUNOFF COEFFICIENT	=	0.98	0.31	0.38

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 49.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	
STANDHYD (0019)	Area (ha)= 2.16
ID= 1 DT= 5.0 min	Total Imp(%)= 54.64 Dir. Conn.(%)= 10.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	1.18	0.98
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	120.00	30.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr

0.083	5.59	1.083	26.45	2.083	11.05	3.08	6.44
0.167	5.59	1.167	26.45	2.167	11.05	3.17	6.44
0.250	6.25	1.250	153.30	2.250	9.76	3.25	6.06
0.333	6.25	1.333	153.30	2.333	9.76	3.33	6.06
0.417	7.13	1.417	32.46	2.417	8.78	3.42	5.74
0.500	7.13	1.500	32.46	2.500	8.78	3.50	5.74
0.583	8.39	1.583	20.47	2.583	8.02	3.58	5.45
0.667	8.39	1.667	20.47	2.667	8.02	3.67	5.45
0.750	10.40	1.750	15.61	2.750	7.39	3.75	5.20
0.833	10.40	1.833	15.61	2.833	7.39	3.83	5.20
0.917	14.22	1.917	12.86	2.917	6.88	3.92	4.97
1.000	14.22	2.000	12.86	3.000	6.88	4.00	4.97

Max.Eff.Inten.(mm/hr)= 153.30 146.27
over (min) 5.00 10.00
Storage Coeff. (min)= 2.96 (ii) 8.06 (ii)
Unit Hyd. Tpeak (min)= 5.00 10.00
Unit Hyd. peak (cms)= 0.28 0.13

				TOTALS
PEAK FLOW	(cms)=	0.09	0.27	0.313 (iii)
TIME TO PEAK	(hrs)=	1.33	1.42	1.33
RUNOFF VOLUME	(mm)=	65.48	33.68	36.85
TOTAL RAINFALL	(mm)=	66.48	66.48	66.48
RUNOFF COEFFICIENT	=	0.98	0.51	0.55

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0040)					
1 + 2 = 3		AREA	QPEAK	TPEAK	R.V.
		(ha)	(cms)	(hrs)	(mm)
ID1=	1 (0015):	1.93	0.137	1.33	25.25
+ ID2=	2 (0019):	2.16	0.313	1.33	36.85
ID =	3 (0040):	4.09	0.450	1.33	31.38

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0040)					
3 + 2 = 1		AREA	QPEAK	TPEAK	R.V.
		(ha)	(cms)	(hrs)	(mm)
ID1=	3 (0040):	4.09	0.450	1.33	31.38
+ ID2=	2 (0027):	1.38	0.040	1.75	16.80
ID =	1 (0040):	5.47	0.460	1.33	27.70

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0040)					
1 + 2 = 3		AREA	QPEAK	TPEAK	R.V.
		(ha)	(cms)	(hrs)	(mm)
ID1=	1 (0040):	5.47	0.460	1.33	27.70
+ ID2=	2 (0041):	0.59	0.021	1.92	23.35
ID =	3 (0040):	6.06	0.464	1.33	27.28

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB	
NASHYD (0048)	Area (ha)= 29.16 Curve Number (CN)= 71.4
ID= 1 DT= 5.0 min	Ia (mm)= 7.88 # of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.68

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	5.59	1.083	26.45	2.083	11.05	3.08	6.44
0.167	5.59	1.167	26.45	2.167	11.05	3.17	6.44
0.250	6.25	1.250	153.30	2.250	9.76	3.25	6.06
0.333	6.25	1.333	153.30	2.333	9.76	3.33	6.06
0.417	7.13	1.417	32.46	2.417	8.78	3.42	5.74
0.500	7.13	1.500	32.46	2.500	8.78	3.50	5.74
0.583	8.39	1.583	20.47	2.583	8.02	3.58	5.45
0.667	8.39	1.667	20.47	2.667	8.02	3.67	5.45
0.750	10.40	1.750	15.61	2.750	7.39	3.75	5.20
0.833	10.40	1.833	15.61	2.833	7.39	3.83	5.20
0.917	14.22	1.917	12.86	2.917	6.88	3.92	4.97
1.000	14.22	2.000	12.86	3.000	6.88	4.00	4.97

Unit Hyd Qpeak (cms)= 1.638

PEAK FLOW (cms)= 0.776 (i)
TIME TO PEAK (hrs)= 2.167
RUNOFF VOLUME (mm)= 21.415
TOTAL RAINFALL (mm)= 66.479
RUNOFF COEFFICIENT = 0.322

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	
STANDHYD (0014)	Area (ha)= 1.87
ID= 1 DT= 5.0 min	Total Imp(%)= 43.28 Dir. Conn.(%)= 10.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	0.81	1.06
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	0.50	2.00
Length (m)=	111.65	25.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	5.59	1.083	26.45	2.083	11.05	3.08	6.44
0.167	5.59	1.167	26.45	2.167	11.05	3.17	6.44
0.250	6.25	1.250	153.30	2.250	9.76	3.25	6.06
0.333	6.25	1.333	153.30	2.333	9.76	3.33	6.06
0.417	7.13	1.417	32.46	2.417	8.78	3.42	5.74
0.500	7.13	1.500	32.46	2.500	8.78	3.50	5.74
0.583	8.39	1.583	20.47	2.583	8.02	3.58	5.45
0.667	8.39	1.667	20.47	2.667	8.02	3.67	5.45
0.750	10.40	1.750	15.61	2.750	7.39	3.75	5.20
0.833	10.40	1.833	15.61	2.833	7.39	3.83	5.20
0.917	14.22	1.917	12.86	2.917	6.88	3.92	4.97
1.000	14.22	2.000	12.86	3.000	6.88	4.00	4.97

Max.Eff.Inten.(mm/hr)=	153.30	131.48
over (min)	5.00	10.00
Storage Coeff. (min)=	2.83 (ii)	7.60 (ii)
Unit Hyd. Tpeak (min)=	5.00	10.00
Unit Hyd. peak (cms)=	0.28	0.13

			TOTALS
PEAK FLOW (cms)=	0.08	0.27	0.303 (iii)
TIME TO PEAK (hrs)=	1.33	1.42	1.33
RUNOFF VOLUME (mm)=	65.48	36.95	39.80
TOTAL RAINFALL (mm)=	66.48	66.48	66.48
RUNOFF COEFFICIENT =	0.98	0.56	0.60

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 78.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	
STANDHYD (0021)	Area (ha)= 0.07
ID= 1 DT= 5.0 min	Total Imp(%)= 48.26 Dir. Conn.(%)= 39.54

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	0.03	0.04
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	0.50	2.00
Length (m)=	21.60	5.60
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	5.59	1.083	26.45	2.083	11.05	3.08	6.44
0.167	5.59	1.167	26.45	2.167	11.05	3.17	6.44
0.250	6.25	1.250	153.30	2.250	9.76	3.25	6.06
0.333	6.25	1.333	153.30	2.333	9.76	3.33	6.06
0.417	7.13	1.417	32.46	2.417	8.78	3.42	5.74
0.500	7.13	1.500	32.46	2.500	8.78	3.50	5.74
0.583	8.39	1.583	20.47	2.583	8.02	3.58	5.45
0.667	8.39	1.667	20.47	2.667	8.02	3.67	5.45
0.750	10.40	1.750	15.61	2.750	7.39	3.75	5.20
0.833	10.40	1.833	15.61	2.833	7.39	3.83	5.20
0.917	14.22	1.917	12.86	2.917	6.88	3.92	4.97
1.000	14.22	2.000	12.86	3.000	6.88	4.00	4.97

			TOTALS
Max.Eff.Inten.(mm/hr)=	153.30	32.81	
over (min)	5.00	5.00	
Storage Coeff. (min)=	1.06 (ii)	3.09 (ii)	
Unit Hyd. Tpeak (min)=	5.00	5.00	
Unit Hyd. peak (cms)=	0.34	0.27	
PEAK FLOW (cms)=	0.01	0.00	0.016 (iii)
TIME TO PEAK (hrs)=	1.33	1.33	1.33
RUNOFF VOLUME (mm)=	65.48	14.80	34.81
TOTAL RAINFALL (mm)=	66.48	66.48	66.48
RUNOFF COEFFICIENT =	0.98	0.22	0.52

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 52.2 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0016)					
1 + 2 = 3		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0001):		39.68	0.519	3.00	15.21
+ ID2= 2 (0014):		1.87	0.303	1.33	39.80
ID = 3 (0016):		41.55	0.550	2.92	16.32

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)					
3 + 2 = 1		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0016):		41.55	0.550	2.92	16.32
+ ID2= 2 (0002):		23.99	0.188	2.75	8.35
ID = 1 (0016):		65.54	0.737	2.92	13.40

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)					
1 + 2 = 3		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0016):		65.54	0.738	2.92	13.40
+ ID2= 2 (0021):		0.07	0.016	1.33	34.81
ID = 3 (0016):		65.61	0.738	2.92	13.42

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)					
3 + 2 = 1		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0016):		65.61	0.738	2.92	13.42
+ ID2= 2 (0025):		100.92	0.923	3.83	13.27
ID = 1 (0016):		166.53	1.594	3.42	13.33

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)					
1 + 2 = 3		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0016):		166.53	1.594	3.42	13.33
+ ID2= 2 (0028):		6.37	0.057	2.50	8.60
ID = 3 (0016):		172.90	1.640	3.33	13.16

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)					
3 + 2 = 1		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0016):		172.90	1.640	3.33	13.16
+ ID2= 2 (0029):		14.85	0.148	2.67	10.14
ID = 1 (0016):		187.75	1.771	3.25	12.92

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016) | 1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0016):	187.75	1.771	3.25	12.92
+ ID2= 2 (0030):	1.70	0.041	1.83	14.48
ID = 3 (0016):	189.45	1.786	3.25	12.93

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016) | 3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0016):	189.45	1.786	3.25	12.93
+ ID2= 2 (0031):	1.80	0.016	2.50	8.37
ID = 1 (0016):	191.25	1.799	3.25	12.89

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016) | 1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0016):	191.25	1.799	3.25	12.89
+ ID2= 2 (0032):	6.70	0.072	3.50	14.13
ID = 3 (0016):	197.95	1.870	3.25	12.93

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016) | 3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0016):	197.95	1.870	3.25	12.93
+ ID2= 2 (0033):	1.13	0.035	1.83	18.90
ID = 1 (0016):	199.08	1.883	3.25	12.97

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016) | 1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0016):	199.08	1.883	3.25	12.97
+ ID2= 2 (0040):	6.06	0.464	1.33	27.28
ID = 3 (0016):	205.14	1.956	3.17	13.39

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016) | 3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0016):	205.14	1.956	3.17	13.39
+ ID2= 2 (0048):	29.16	0.776	2.17	21.42
ID = 1 (0016):	234.30	2.519	2.83	14.39

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB | STANDHYD (0009) | ID= 1 DT= 5.0 min	Area (ha)= 31.06	Total Imp(%)= 53.89	Dir. Conn.(%)= 20.76

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	16.74	14.32
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	455.05	30.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	5.59	1.083	26.45	2.083	11.05	3.08	6.44
0.167	5.59	1.167	26.45	2.167	11.05	3.17	6.44
0.250	6.25	1.250	153.30	2.250	9.76	3.25	6.06
0.333	6.25	1.333	153.30	2.333	9.76	3.33	6.06
0.417	7.13	1.417	32.46	2.417	8.78	3.42	5.74
0.500	7.13	1.500	32.46	2.500	8.78	3.50	5.74
0.583	8.39	1.583	20.47	2.583	8.02	3.58	5.45
0.667	8.39	1.667	20.47	2.667	8.02	3.67	5.45

0.750	10.40	1.750	15.61	2.750	7.39	3.75	5.20
0.833	10.40	1.833	15.61	2.833	7.39	3.83	5.20
0.917	14.22	1.917	12.86	2.917	6.88	3.92	4.97
1.000	14.22	2.000	12.86	3.000	6.88	4.00	4.97

Max.Eff.Inten.(mm/hr)=		153.30	113.27	
over (min)		5.00	15.00	
Storage Coeff. (min)=		6.58 (ii)	12.23 (ii)	
Unit Hyd. Tpeak (min)=		5.00	15.00	
Unit Hyd. peak (cms)=		0.18	0.09	
				TOTALS
PEAK FLOW	(cms)=	2.24	2.36	3.480 (iii)
TIME TO PEAK	(hrs)=	1.33	1.50	1.33
RUNOFF VOLUME	(mm)=	65.48	30.74	37.95
TOTAL RAINFALL	(mm)=	66.48	66.48	66.48
RUNOFF COEFFICIENT	=	0.98	0.46	0.57

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 68.5 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB | STANDHYD (0010) | ID= 1 DT= 5.0 min	Area (ha)= 1.32	Total Imp(%)= 55.27	Dir. Conn.(%)= 1.52

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.73	0.59
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	93.81	23.50
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	5.59	1.083	26.45	2.083	11.05	3.08	6.44
0.167	5.59	1.167	26.45	2.167	11.05	3.17	6.44
0.250	6.25	1.250	153.30	2.250	9.76	3.25	6.06
0.333	6.25	1.333	153.30	2.333	9.76	3.33	6.06
0.417	7.13	1.417	32.46	2.417	8.78	3.42	5.74

0.500	7.13	1.500	32.46	2.500	8.78	3.50	5.74
0.583	8.39	1.583	20.47	2.583	8.02	3.58	5.45
0.667	8.39	1.667	20.47	2.667	8.02	3.67	5.45
0.750	10.40	1.750	15.61	2.750	7.39	3.75	5.20
0.833	10.40	1.833	15.61	2.833	7.39	3.83	5.20
0.917	14.22	1.917	12.86	2.917	6.88	3.92	4.97
1.000	14.22	2.000	12.86	3.000	6.88	4.00	4.97

Max.Eff.Inten.(mm/hr)=		153.30	172.67	
over (min)		5.00	10.00	
Storage Coeff. (min)=		2.55 (ii)	6.67 (ii)	
Unit Hyd. Tpeak (min)=		5.00	10.00	
Unit Hyd. peak (cms)=		0.29	0.14	
				TOTALS
PEAK FLOW	(cms)=	0.01	0.20	0.207 (iii)
TIME TO PEAK	(hrs)=	1.33	1.42	1.42
RUNOFF VOLUME	(mm)=	65.48	35.42	35.87
TOTAL RAINFALL	(mm)=	66.48	66.48	66.48
RUNOFF COEFFICIENT	=	0.98	0.53	0.54

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 68.8 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB | STANDHYD (0013) | ID= 1 DT= 5.0 min	Area (ha)= 4.16	Total Imp(%)= 50.00	Dir. Conn.(%)= 50.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	2.08	2.08
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	166.53	250.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN

hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	5.59	1.083	26.45	2.083	11.05	3.08	6.44
0.167	5.59	1.167	26.45	2.167	11.05	3.17	6.44
0.250	6.25	1.250	153.30	2.250	9.76	3.25	6.06
0.333	6.25	1.333	153.30	2.333	9.76	3.33	6.06
0.417	7.13	1.417	32.46	2.417	8.78	3.42	5.74
0.500	7.13	1.500	32.46	2.500	8.78	3.50	5.74
0.583	8.39	1.583	20.47	2.583	8.02	3.58	5.45
0.667	8.39	1.667	20.47	2.667	8.02	3.67	5.45
0.750	10.40	1.750	15.61	2.750	7.39	3.75	5.20
0.833	10.40	1.833	15.61	2.833	7.39	3.83	5.20
0.917	14.22	1.917	12.86	2.917	6.88	3.92	4.97
1.000	14.22	2.000	12.86	3.000	6.88	4.00	4.97

Max.Eff.Inten.(mm/hr)=	153.30	16.96	
over (min)	5.00	50.00	
Storage Coeff. (min)=	3.60 (ii)	46.69 (ii)	
Unit Hyd. Tpeak (min)=	5.00	50.00	
Unit Hyd. peak (cms)=	0.26	0.02	
			TOTALS
PEAK FLOW (cms)=	0.84	0.05	0.846 (iii)
TIME TO PEAK (hrs)=	1.33	2.08	1.33
RUNOFF VOLUME (mm)=	65.48	21.50	43.48
TOTAL RAINFALL (mm)=	66.48	66.48	66.48
RUNOFF COEFFICIENT =	0.98	0.32	0.65

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
STANDHYD (0036)	Area (ha)=	2.12	
ID= 1 DT= 5.0 min	Total Imp(%)=	85.04	Dir. Conn.(%)= 0.10

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	1.80	0.32
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	0.50	2.00
Length (m)=	118.88	175.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	5.59	1.083	26.45	2.083	11.05	3.08	6.44
0.167	5.59	1.167	26.45	2.167	11.05	3.17	6.44
0.250	6.25	1.250	153.30	2.250	9.76	3.25	6.06
0.333	6.25	1.333	153.30	2.333	9.76	3.33	6.06
0.417	7.13	1.417	32.46	2.417	8.78	3.42	5.74
0.500	7.13	1.500	32.46	2.500	8.78	3.50	5.74
0.583	8.39	1.583	20.47	2.583	8.02	3.58	5.45
0.667	8.39	1.667	20.47	2.667	8.02	3.67	5.45
0.750	10.40	1.750	15.61	2.750	7.39	3.75	5.20
0.833	10.40	1.833	15.61	2.833	7.39	3.83	5.20
0.917	14.22	1.917	12.86	2.917	6.88	3.92	4.97
1.000	14.22	2.000	12.86	3.000	6.88	4.00	4.97

Max.Eff.Inten.(mm/hr)=	153.30	838.78	
over (min)	5.00	15.00	
Storage Coeff. (min)=	2.94 (ii)	10.25 (ii)	
Unit Hyd. Tpeak (min)=	5.00	15.00	
Unit Hyd. peak (cms)=	0.28	0.09	
			TOTALS
PEAK FLOW (cms)=	0.00	0.41	0.406 (iii)
TIME TO PEAK (hrs)=	1.33	1.50	1.50
RUNOFF VOLUME (mm)=	65.48	52.17	52.18
TOTAL RAINFALL (mm)=	66.48	66.48	66.48
RUNOFF COEFFICIENT =	0.98	0.78	0.78

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
STANDHYD (0043)	Area (ha)=	0.13	
ID= 1 DT= 5.0 min	Total Imp(%)=	30.77	Dir. Conn.(%)= 7.69

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	0.04	0.09

Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	0.50	0.50
Length (m)=	29.44	70.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	5.59	1.083	26.45	2.083	11.05	3.08	6.44
0.167	5.59	1.167	26.45	2.167	11.05	3.17	6.44
0.250	6.25	1.250	153.30	2.250	9.76	3.25	6.06
0.333	6.25	1.333	153.30	2.333	9.76	3.33	6.06
0.417	7.13	1.417	32.46	2.417	8.78	3.42	5.74
0.500	7.13	1.500	32.46	2.500	8.78	3.50	5.74
0.583	8.39	1.583	20.47	2.583	8.02	3.58	5.45
0.667	8.39	1.667	20.47	2.667	8.02	3.67	5.45
0.750	10.40	1.750	15.61	2.750	7.39	3.75	5.20
0.833	10.40	1.833	15.61	2.833	7.39	3.83	5.20
0.917	14.22	1.917	12.86	2.917	6.88	3.92	4.97
1.000	14.22	2.000	12.86	3.000	6.88	4.00	4.97

Max.Eff.Inten.(mm/hr)=	153.30	41.29	
over (min)	5.00	25.00	
Storage Coeff. (min)=	1.27 (ii)	22.59 (ii)	
Unit Hyd. Tpeak (min)=	5.00	25.00	
Unit Hyd. peak (cms)=	0.33	0.05	
			TOTALS
PEAK FLOW (cms)=	0.00	0.01	0.007 (iii)
TIME TO PEAK (hrs)=	1.33	1.67	1.67
RUNOFF VOLUME (mm)=	65.48	26.53	29.42
TOTAL RAINFALL (mm)=	66.48	66.48	66.48
RUNOFF COEFFICIENT =	0.98	0.40	0.44

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
STANDHYD (0044)	Area (ha)=	1.62	
ID= 1 DT= 5.0 min	Total Imp(%)=	48.77	Dir. Conn.(%)= 30.86

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	0.79	0.83
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	0.50	1.40
Length (m)=	103.92	400.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	5.59	1.083	26.45	2.083	11.05	3.08	6.44
0.167	5.59	1.167	26.45	2.167	11.05	3.17	6.44
0.250	6.25	1.250	153.30	2.250	9.76	3.25	6.06
0.333	6.25	1.333	153.30	2.333	9.76	3.33	6.06
0.417	7.13	1.417	32.46	2.417	8.78	3.42	5.74
0.500	7.13	1.500	32.46	2.500	8.78	3.50	5.74
0.583	8.39	1.583	20.47	2.583	8.02	3.58	5.45
0.667	8.39	1.667	20.47	2.667	8.02	3.67	5.45
0.750	10.40	1.750	15.61	2.750	7.39	3.75	5.20
0.833	10.40	1.833	15.61	2.833	7.39	3.83	5.20
0.917	14.22	1.917	12.86	2.917	6.88	3.92	4.97
1.000	14.22	2.000	12.86	3.000	6.88	4.00	4.97

Max.Eff.Inten.(mm/hr)=	153.30	25.45	
over (min)	5.00	60.00	
Storage Coeff. (min)=	2.71 (ii)	56.77 (ii)	
Unit Hyd. Tpeak (min)=	5.00	60.00	
Unit Hyd. peak (cms)=	0.29	0.02	
			TOTALS
PEAK FLOW (cms)=	0.21	0.03	0.211 (iii)
TIME TO PEAK (hrs)=	1.33	2.25	1.33
RUNOFF VOLUME (mm)=	65.48	26.75	38.68
TOTAL RAINFALL (mm)=	66.48	66.48	66.48
RUNOFF COEFFICIENT =	0.98	0.40	0.58

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.

(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0037)					
1 + 2 = 3		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
	ID1= 1 (0010):	1.32	0.207	1.42	35.87
+	ID2= 2 (0013):	4.16	0.846	1.33	43.48
	ID = 3 (0037):	5.48	1.030	1.33	41.65

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0037)					
3 + 2 = 1		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
	ID1= 3 (0037):	5.48	1.030	1.33	41.65
+	ID2= 2 (0036):	2.12	0.406	1.50	52.18
	ID = 1 (0037):	7.60	1.284	1.33	44.59

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0037)					
1 + 2 = 3		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
	ID1= 1 (0037):	7.60	1.284	1.33	44.59
+	ID2= 2 (0043):	0.13	0.007	1.67	29.42
	ID = 3 (0037):	7.73	1.290	1.33	44.33

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0037)					
3 + 2 = 1		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
	ID1= 3 (0037):	7.73	1.290	1.33	44.33
+	ID2= 2 (0044):	1.62	0.211	1.33	38.68
	ID = 1 (0037):	9.35	1.501	1.33	43.35

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0037)					
1 + 2 = 3		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
	ID1= 1 (0037):	9.35	1.501	1.33	43.35
+	ID2= 2 (0009):	31.06	3.480	1.33	37.95
	ID = 3 (0037):	40.41	4.981	1.33	39.20

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

RESERVOIR(0038) | IN= 2---> OUT= 1 | DT= 5.0 min	OVERFLOW IS OFF			
	OUTFLOW (cms)	STORAGE (ha.m.)	OUTFLOW (cms)	STORAGE (ha.m.)
	0.0000	0.0000	0.5076	2.8989
	0.0000	0.2023	0.6060	3.2065
	0.0353	0.4202	0.7105	3.5196
	0.0525	0.6536	0.8207	3.8381
	0.0654	0.9026	0.9365	4.1621
	0.0843	1.1671	1.0574	4.4915
	0.1858	1.7227	1.1833	4.8263
	0.2540	2.0086	1.3139	5.1665
	0.3309	2.2999	1.4492	5.5122
	0.4157	2.5967	1.5890	5.8633

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
INFLOW : ID= 2 (0037)	40.410	4.981	1.33	39.20
OUTFLOW: ID= 1 (0038)	40.410	0.138	4.33	34.15

PEAK FLOW REDUCTION [Qout/Qin](%)= 2.77
TIME SHIFT OF PEAK FLOW (min)=180.00
MAXIMUM STORAGE USED (ha.m.)= 1.4598

CALIB | STANDHYD (0017) | ID= 1 DT= 5.0 min	Area (ha)= 1.59	Total Imp(%)= 58.58	Dir. Conn.(%)= 27.10

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	0.93	0.66

Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	102.96	30.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	5.59	1.083	26.45	2.083	11.05	3.08	6.44
0.167	5.59	1.167	26.45	2.167	11.05	3.17	6.44
0.250	6.25	1.250	153.30	2.250	9.76	3.25	6.06
0.333	6.25	1.333	153.30	2.333	9.76	3.33	6.06
0.417	7.13	1.417	32.46	2.417	8.78	3.42	5.74
0.500	7.13	1.500	32.46	2.500	8.78	3.50	5.74
0.583	8.39	1.583	20.47	2.583	8.02	3.58	5.45
0.667	8.39	1.667	20.47	2.667	8.02	3.67	5.45
0.750	10.40	1.750	15.61	2.750	7.39	3.75	5.20
0.833	10.40	1.833	15.61	2.833	7.39	3.83	5.20
0.917	14.22	1.917	12.86	2.917	6.88	3.92	4.97
1.000	14.22	2.000	12.86	3.000	6.88	4.00	4.97

				TOTALS
Max.Eff.Inten.(mm/hr)=		153.30	111.43	
over (min)		5.00	10.00	
Storage Coeff. (min)=		2.70 (ii)	8.39 (ii)	
Unit Hyd. Tpeak (min)=		5.00	10.00	
Unit Hyd. peak (cms)=		0.29	0.12	
PEAK FLOW	(cms)=	0.18	0.14	0.291 (iii)
TIME TO PEAK	(hrs)=	1.33	1.42	1.33
RUNOFF VOLUME	(mm)=	65.48	29.73	39.42
TOTAL RAINFALL	(mm)=	66.48	66.48	66.48
RUNOFF COEFFICIENT	=	0.98	0.45	0.59

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 66.5 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

Junction Command(0018)

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
INFLOW : ID= 2(0017)	1.59	0.29	1.33	39.42
OUTFLOW: ID= 2(0018)	1.59	0.29	1.33	39.42

ADD HYD (0023)					
1 + 2 = 3		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
	ID1= 1 (0016):	234.30	2.519	2.83	14.39
+	ID2= 2 (0018):	1.59	0.291	1.33	39.42
	ID = 3 (0023):	235.89	2.546	2.75	14.56

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023)					
3 + 2 = 1		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
	ID1= 3 (0023):	235.89	2.546	2.75	14.56
+	ID2= 2 (0038):	40.41	0.138	4.33	34.15
	ID = 1 (0023):	276.30	2.644	2.83	17.42

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

****
** SIMULATION:E - 50-year CHI **
****

CHICAGO STORM | Ptotal= 73.98 mm	IDF curve parameters: A= 853.083 B= 0.000 C= 0.699

used in: INTENSITY = A / (t + B)^C

Duration of storm = 4.00 hrs
Storm time step = 10.00 min
Time to peak ratio = 0.33

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.00	6.22	1.00	29.44	2.00	12.30	3.00	7.17

0.17	6.95	1.17	170.60	2.17	10.86	3.17	6.75
0.33	7.93	1.33	36.13	2.33	9.78	3.33	6.39
0.50	9.34	1.50	22.78	2.50	8.92	3.50	6.07
0.67	11.57	1.67	17.37	2.67	8.23	3.67	5.78
0.83	15.83	1.83	14.31	2.83	7.65	3.83	5.53

CALIB					
NASHYD (0025)	Area (ha)= 100.92	Curve Number (CN)= 55.9			
ID= 1 DT= 5.0 min	Ia (mm)= 7.89	# of Linear Res.(N)= 3.00			
	U.H. Tp(hrs)= 1.70				

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.22	1.083	29.44	2.083	12.30	3.08	7.17
0.167	6.22	1.167	29.44	2.167	12.30	3.17	7.17
0.250	6.95	1.250	170.60	2.250	10.86	3.25	6.75
0.333	6.95	1.333	170.60	2.333	10.86	3.33	6.75
0.417	7.93	1.417	36.13	2.417	9.78	3.42	6.39
0.500	7.93	1.500	36.13	2.500	9.78	3.50	6.39
0.583	9.34	1.583	22.78	2.583	8.92	3.58	6.07
0.667	9.34	1.667	22.78	2.667	8.92	3.67	6.07
0.750	11.57	1.750	17.37	2.750	8.23	3.75	5.78
0.833	11.57	1.833	17.37	2.833	8.23	3.83	5.78
0.917	15.83	1.917	14.31	2.917	7.65	3.92	5.53
1.000	15.83	2.000	14.31	3.000	7.65	4.00	5.53

Unit Hyd Qpeak (cms)= 2.267

PEAK FLOW (cms)= 1.143 (i)
TIME TO PEAK (hrs)= 3.833
RUNOFF VOLUME (mm)= 16.412
TOTAL RAINFALL (mm)= 73.982
RUNOFF COEFFICIENT = 0.222

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0002)	Area (ha)= 23.99	Curve Number (CN)= 44.7			
ID= 1 DT= 5.0 min	Ia (mm)= 10.91	# of Linear Res.(N)= 3.00			

U.H. Tp(hrs)= 0.97

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.22	1.083	29.44	2.083	12.30	3.08	7.17
0.167	6.22	1.167	29.44	2.167	12.30	3.17	7.17
0.250	6.95	1.250	170.60	2.250	10.86	3.25	6.75
0.333	6.95	1.333	170.60	2.333	10.86	3.33	6.75
0.417	7.93	1.417	36.13	2.417	9.78	3.42	6.39
0.500	7.93	1.500	36.13	2.500	9.78	3.50	6.39
0.583	9.34	1.583	22.78	2.583	8.92	3.58	6.07
0.667	9.34	1.667	22.78	2.667	8.92	3.67	6.07
0.750	11.57	1.750	17.37	2.750	8.23	3.75	5.78
0.833	11.57	1.833	17.37	2.833	8.23	3.83	5.78
0.917	15.83	1.917	14.31	2.917	7.65	3.92	5.53
1.000	15.83	2.000	14.31	3.000	7.65	4.00	5.53

Unit Hyd Qpeak (cms)= 0.945

PEAK FLOW (cms)= 0.240 (i)
TIME TO PEAK (hrs)= 2.750
RUNOFF VOLUME (mm)= 10.543
TOTAL RAINFALL (mm)= 73.982
RUNOFF COEFFICIENT = 0.143

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0001)	Area (ha)= 39.68	Curve Number (CN)= 60.7			
ID= 1 DT= 5.0 min	Ia (mm)= 8.26	# of Linear Res.(N)= 3.00			
	U.H. Tp(hrs)= 1.18				

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.22	1.083	29.44	2.083	12.30	3.08	7.17
0.167	6.22	1.167	29.44	2.167	12.30	3.17	7.17
0.250	6.95	1.250	170.60	2.250	10.86	3.25	6.75
0.333	6.95	1.333	170.60	2.333	10.86	3.33	6.75

0.417	7.93	1.417	36.13	2.417	9.78	3.42	6.39
0.500	7.93	1.500	36.13	2.500	9.78	3.50	6.39
0.583	9.34	1.583	22.78	2.583	8.92	3.58	6.07
0.667	9.34	1.667	22.78	2.667	8.92	3.67	6.07
0.750	11.57	1.750	17.37	2.750	8.23	3.75	5.78
0.833	11.57	1.833	17.37	2.833	8.23	3.83	5.78
0.917	15.83	1.917	14.31	2.917	7.65	3.92	5.53
1.000	15.83	2.000	14.31	3.000	7.65	4.00	5.53

Unit Hyd Qpeak (cms)= 1.284

PEAK FLOW (cms)= 0.644 (i)
TIME TO PEAK (hrs)= 3.000
RUNOFF VOLUME (mm)= 18.754
TOTAL RAINFALL (mm)= 73.982
RUNOFF COEFFICIENT = 0.253

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0028)	Area (ha)= 6.37	Curve Number (CN)= 50.5			
ID= 1 DT= 5.0 min	Ia (mm)= 15.69	# of Linear Res.(N)= 3.00			
	U.H. Tp(hrs)= 0.77				

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.22	1.083	29.44	2.083	12.30	3.08	7.17
0.167	6.22	1.167	29.44	2.167	12.30	3.17	7.17
0.250	6.95	1.250	170.60	2.250	10.86	3.25	6.75
0.333	6.95	1.333	170.60	2.333	10.86	3.33	6.75
0.417	7.93	1.417	36.13	2.417	9.78	3.42	6.39
0.500	7.93	1.500	36.13	2.500	9.78	3.50	6.39
0.583	9.34	1.583	22.78	2.583	8.92	3.58	6.07
0.667	9.34	1.667	22.78	2.667	8.92	3.67	6.07
0.750	11.57	1.750	17.37	2.750	8.23	3.75	5.78
0.833	11.57	1.833	17.37	2.833	8.23	3.83	5.78
0.917	15.83	1.917	14.31	2.917	7.65	3.92	5.53
1.000	15.83	2.000	14.31	3.000	7.65	4.00	5.53

Unit Hyd Qpeak (cms)= 0.316

PEAK FLOW (cms)= 0.074 (i)

TIME TO PEAK (hrs)= 2.500
RUNOFF VOLUME (mm)= 11.051
TOTAL RAINFALL (mm)= 73.982
RUNOFF COEFFICIENT = 0.149

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0029)	Area (ha)= 14.85	Curve Number (CN)= 52.9			
ID= 1 DT= 5.0 min	Ia (mm)= 13.28	# of Linear Res.(N)= 3.00			
	U.H. Tp(hrs)= 0.89				

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.22	1.083	29.44	2.083	12.30	3.08	7.17
0.167	6.22	1.167	29.44	2.167	12.30	3.17	7.17
0.250	6.95	1.250	170.60	2.250	10.86	3.25	6.75
0.333	6.95	1.333	170.60	2.333	10.86	3.33	6.75
0.417	7.93	1.417	36.13	2.417	9.78	3.42	6.39
0.500	7.93	1.500	36.13	2.500	9.78	3.50	6.39
0.583	9.34	1.583	22.78	2.583	8.92	3.58	6.07
0.667	9.34	1.667	22.78	2.667	8.92	3.67	6.07
0.750	11.57	1.750	17.37	2.750	8.23	3.75	5.78
0.833	11.57	1.833	17.37	2.833	8.23	3.83	5.78
0.917	15.83	1.917	14.31	2.917	7.65	3.92	5.53
1.000	15.83	2.000	14.31	3.000	7.65	4.00	5.53

Unit Hyd Qpeak (cms)= 0.637

PEAK FLOW (cms)= 0.189 (i)
TIME TO PEAK (hrs)= 2.583
RUNOFF VOLUME (mm)= 12.861
TOTAL RAINFALL (mm)= 73.982
RUNOFF COEFFICIENT = 0.174

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0030)	Area (ha)= 1.70	Curve Number (CN)= 60.5			
ID= 1 DT= 5.0 min	Ia (mm)= 9.65	# of Linear Res.(N)= 3.00			

---------- U.H. Tp(hrs)= 0.40

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.22	1.083	29.44	2.083	12.30	3.08	7.17
0.167	6.22	1.167	29.44	2.167	12.30	3.17	7.17
0.250	6.95	1.250	170.60	2.250	10.86	3.25	6.75
0.333	6.95	1.333	170.60	2.333	10.86	3.33	6.75
0.417	7.93	1.417	36.13	2.417	9.78	3.42	6.39
0.500	7.93	1.500	36.13	2.500	9.78	3.50	6.39
0.583	9.34	1.583	22.78	2.583	8.92	3.58	6.07
0.667	9.34	1.667	22.78	2.667	8.92	3.67	6.07
0.750	11.57	1.750	17.37	2.750	8.23	3.75	5.78
0.833	11.57	1.833	17.37	2.833	8.23	3.83	5.78
0.917	15.83	1.917	14.31	2.917	7.65	3.92	5.53
1.000	15.83	2.000	14.31	3.000	7.65	4.00	5.53

Unit Hyd Qpeak (cms)= 0.162

PEAK FLOW (cms)= 0.051 (i)
TIME TO PEAK (hrs)= 1.750
RUNOFF VOLUME (mm)= 17.956
TOTAL RAINFALL (mm)= 73.982
RUNOFF COEFFICIENT = 0.243

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	
NASHYD (0031)	Area (ha)= 1.80 Curve Number (CN)= 50.0
ID= 1 DT= 5.0 min	Ia (mm)= 16.00 # of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.76

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.22	1.083	29.44	2.083	12.30	3.08	7.17
0.167	6.22	1.167	29.44	2.167	12.30	3.17	7.17
0.250	6.95	1.250	170.60	2.250	10.86	3.25	6.75
0.333	6.95	1.333	170.60	2.333	10.86	3.33	6.75

0.417	7.93	1.417	36.13	2.417	9.78	3.42	6.39
0.500	7.93	1.500	36.13	2.500	9.78	3.50	6.39
0.583	9.34	1.583	22.78	2.583	8.92	3.58	6.07
0.667	9.34	1.667	22.78	2.667	8.92	3.67	6.07
0.750	11.57	1.750	17.37	2.750	8.23	3.75	5.78
0.833	11.57	1.833	17.37	2.833	8.23	3.83	5.78
0.917	15.83	1.917	14.31	2.917	7.65	3.92	5.53
1.000	15.83	2.000	14.31	3.000	7.65	4.00	5.53

Unit Hyd Qpeak (cms)= 0.090

PEAK FLOW (cms)= 0.021 (i)
TIME TO PEAK (hrs)= 2.417
RUNOFF VOLUME (mm)= 10.775
TOTAL RAINFALL (mm)= 73.982
RUNOFF COEFFICIENT = 0.146

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	
NASHYD (0032)	Area (ha)= 6.70 Curve Number (CN)= 60.0
ID= 1 DT= 5.0 min	Ia (mm)= 10.00 # of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 1.45

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.22	1.083	29.44	2.083	12.30	3.08	7.17
0.167	6.22	1.167	29.44	2.167	12.30	3.17	7.17
0.250	6.95	1.250	170.60	2.250	10.86	3.25	6.75
0.333	6.95	1.333	170.60	2.333	10.86	3.33	6.75
0.417	7.93	1.417	36.13	2.417	9.78	3.42	6.39
0.500	7.93	1.500	36.13	2.500	9.78	3.50	6.39
0.583	9.34	1.583	22.78	2.583	8.92	3.58	6.07
0.667	9.34	1.667	22.78	2.667	8.92	3.67	6.07
0.750	11.57	1.750	17.37	2.750	8.23	3.75	5.78
0.833	11.57	1.833	17.37	2.833	8.23	3.83	5.78
0.917	15.83	1.917	14.31	2.917	7.65	3.92	5.53
1.000	15.83	2.000	14.31	3.000	7.65	4.00	5.53

Unit Hyd Qpeak (cms)= 0.176

PEAK FLOW (cms)= 0.089 (i)

TIME TO PEAK (hrs)= 3.417
RUNOFF VOLUME (mm)= 17.545
TOTAL RAINFALL (mm)= 73.982
RUNOFF COEFFICIENT = 0.237

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	
NASHYD (0033)	Area (ha)= 1.13 Curve Number (CN)= 67.4
ID= 1 DT= 5.0 min	Ia (mm)= 7.88 # of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.43

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.22	1.083	29.44	2.083	12.30	3.08	7.17
0.167	6.22	1.167	29.44	2.167	12.30	3.17	7.17
0.250	6.95	1.250	170.60	2.250	10.86	3.25	6.75
0.333	6.95	1.333	170.60	2.333	10.86	3.33	6.75
0.417	7.93	1.417	36.13	2.417	9.78	3.42	6.39
0.500	7.93	1.500	36.13	2.500	9.78	3.50	6.39
0.583	9.34	1.583	22.78	2.583	8.92	3.58	6.07
0.667	9.34	1.667	22.78	2.667	8.92	3.67	6.07
0.750	11.57	1.750	17.37	2.750	8.23	3.75	5.78
0.833	11.57	1.833	17.37	2.833	8.23	3.83	5.78
0.917	15.83	1.917	14.31	2.917	7.65	3.92	5.53
1.000	15.83	2.000	14.31	3.000	7.65	4.00	5.53

Unit Hyd Qpeak (cms)= 0.100

PEAK FLOW (cms)= 0.044 (i)
TIME TO PEAK (hrs)= 1.833
RUNOFF VOLUME (mm)= 23.094
TOTAL RAINFALL (mm)= 73.982
RUNOFF COEFFICIENT = 0.312

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	
NASHYD (0027)	Area (ha)= 1.38 Curve Number (CN)= 64.1
ID= 1 DT= 5.0 min	Ia (mm)= 8.51 # of Linear Res.(N)= 3.00

---------- U.H. Tp(hrs)= 0.39

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.22	1.083	29.44	2.083	12.30	3.08	7.17
0.167	6.22	1.167	29.44	2.167	12.30	3.17	7.17
0.250	6.95	1.250	170.60	2.250	10.86	3.25	6.75
0.333	6.95	1.333	170.60	2.333	10.86	3.33	6.75
0.417	7.93	1.417	36.13	2.417	9.78	3.42	6.39
0.500	7.93	1.500	36.13	2.500	9.78	3.50	6.39
0.583	9.34	1.583	22.78	2.583	8.92	3.58	6.07
0.667	9.34	1.667	22.78	2.667	8.92	3.67	6.07
0.750	11.57	1.750	17.37	2.750	8.23	3.75	5.78
0.833	11.57	1.833	17.37	2.833	8.23	3.83	5.78
0.917	15.83	1.917	14.31	2.917	7.65	3.92	5.53
1.000	15.83	2.000	14.31	3.000	7.65	4.00	5.53

Unit Hyd Qpeak (cms)= 0.135

PEAK FLOW (cms)= 0.050 (i)
TIME TO PEAK (hrs)= 1.750
RUNOFF VOLUME (mm)= 20.657
TOTAL RAINFALL (mm)= 73.982
RUNOFF COEFFICIENT = 0.279

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	
NASHYD (0041)	Area (ha)= 0.59 Curve Number (CN)= 71.5
ID= 1 DT= 5.0 min	Ia (mm)= 4.75 # of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.53

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.22	1.083	29.44	2.083	12.30	3.08	7.17
0.167	6.22	1.167	29.44	2.167	12.30	3.17	7.17
0.250	6.95	1.250	170.60	2.250	10.86	3.25	6.75
0.333	6.95	1.333	170.60	2.333	10.86	3.33	6.75

0.417	7.93	1.417	36.13	2.417	9.78	3.42	6.39
0.500	7.93	1.500	36.13	2.500	9.78	3.50	6.39
0.583	9.34	1.583	22.78	2.583	8.92	3.58	6.07
0.667	9.34	1.667	22.78	2.667	8.92	3.67	6.07
0.750	11.57	1.750	17.37	2.750	8.23	3.75	5.78
0.833	11.57	1.833	17.37	2.833	8.23	3.83	5.78
0.917	15.83	1.917	14.31	2.917	7.65	3.92	5.53
1.000	15.83	2.000	14.31	3.000	7.65	4.00	5.53

Unit Hyd Qpeak (cms)= 0.043

PEAK FLOW (cms)= 0.025 (i)
TIME TO PEAK (hrs)= 1.917
RUNOFF VOLUME (mm)= 28.080
TOTAL RAINFALL (mm)= 73.982
RUNOFF COEFFICIENT = 0.380

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	
STANDHYD (0015)	Area (ha)= 1.93
ID= 1 DT= 5.0 min	Total Imp(%)= 54.66 Dir. Conn.(%)= 10.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	1.05	0.88
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	0.50	2.00
Length (m)=	113.43	45.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.22	1.083	29.44	2.083	12.30	3.08	7.17
0.167	6.22	1.167	29.44	2.167	12.30	3.17	7.17
0.250	6.95	1.250	170.60	2.250	10.86	3.25	6.75
0.333	6.95	1.333	170.60	2.333	10.86	3.33	6.75
0.417	7.93	1.417	36.13	2.417	9.78	3.42	6.39
0.500	7.93	1.500	36.13	2.500	9.78	3.50	6.39
0.583	9.34	1.583	22.78	2.583	8.92	3.58	6.07
0.667	9.34	1.667	22.78	2.667	8.92	3.67	6.07
0.750	11.57	1.750	17.37	2.750	8.23	3.75	5.78
0.833	11.57	1.833	17.37	2.833	8.23	3.83	5.78

0.917	15.83	1.917	14.31	2.917	7.65	3.92	5.53
1.000	15.83	2.000	14.31	3.000	7.65	4.00	5.53

Max.Eff.Inten.(mm/hr)= 170.60 100.57
over (min) 5.00 15.00
Storage Coeff. (min)= 2.74 (ii) 10.30 (ii)
Unit Hyd. Tpeak (min)= 5.00 15.00
Unit Hyd. peak (cms)= 0.29 0.09

			TOTALS
PEAK FLOW	(cms)=	0.09	0.14	0.162 (iii)
TIME TO PEAK	(hrs)=	1.33	1.50	1.33
RUNOFF VOLUME	(mm)=	72.98	24.99	29.78
TOTAL RAINFALL	(mm)=	73.98	73.98	73.98
RUNOFF COEFFICIENT	=	0.99	0.34	0.40

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 49.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	
STANDHYD (0019)	Area (ha)= 2.16
ID= 1 DT= 5.0 min	Total Imp(%)= 54.64 Dir. Conn.(%)= 10.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	1.18	0.98
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	0.50	2.00
Length (m)=	120.00	30.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.22	1.083	29.44	2.083	12.30	3.08	7.17
0.167	6.22	1.167	29.44	2.167	12.30	3.17	7.17
0.250	6.95	1.250	170.60	2.250	10.86	3.25	6.75
0.333	6.95	1.333	170.60	2.333	10.86	3.33	6.75

0.417	7.93	1.417	36.13	2.417	9.78	3.42	6.39
0.500	7.93	1.500	36.13	2.500	9.78	3.50	6.39
0.583	9.34	1.583	22.78	2.583	8.92	3.58	6.07
0.667	9.34	1.667	22.78	2.667	8.92	3.67	6.07
0.750	11.57	1.750	17.37	2.750	8.23	3.75	5.78
0.833	11.57	1.833	17.37	2.833	8.23	3.83	5.78
0.917	15.83	1.917	14.31	2.917	7.65	3.92	5.53
1.000	15.83	2.000	14.31	3.000	7.65	4.00	5.53

Max.Eff.Inten.(mm/hr)= 170.60 174.15
over (min) 5.00 10.00
Storage Coeff. (min)= 2.83 (ii) 7.59 (ii)
Unit Hyd. Tpeak (min)= 5.00 10.00
Unit Hyd. peak (cms)= 0.28 0.13

			TOTALS
PEAK FLOW	(cms)=	0.10	0.33	0.376 (iii)
TIME TO PEAK	(hrs)=	1.33	1.42	1.33
RUNOFF VOLUME	(mm)=	72.98	39.59	42.93
TOTAL RAINFALL	(mm)=	73.98	73.98	73.98
RUNOFF COEFFICIENT	=	0.99	0.54	0.58

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0040)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0015):	1.93	0.162	1.33	29.78
+ ID2= 2 (0019):	2.16	0.376	1.33	42.93
ID = 3 (0040):	4.09	0.539	1.33	36.73

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0040)				
3 + 2 = 1	AREA	QPEAK	TPEAK	R.V.

	(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0040):	4.09	0.539	1.33	36.73
+ ID2= 2 (0027):	1.38	0.050	1.75	20.66
ID = 1 (0040):	5.47	0.552	1.33	32.67

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0040)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0040):	5.47	0.552	1.33	32.67
+ ID2= 2 (0041):	0.59	0.025	1.92	28.08
ID = 3 (0040):	6.06	0.557	1.33	32.23

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB	
NASHYD (0048)	Area (ha)= 29.16 Curve Number (CN)= 71.4
ID= 1 DT= 5.0 min	Ia (mm)= 7.88 # of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.68

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.22	1.083	29.44	2.083	12.30	3.08	7.17
0.167	6.22	1.167	29.44	2.167	12.30	3.17	7.17
0.250	6.95	1.250	170.60	2.250	10.86	3.25	6.75
0.333	6.95	1.333	170.60	2.333	10.86	3.33	6.75
0.417	7.93	1.417	36.13	2.417	9.78	3.42	6.39
0.500	7.93	1.500	36.13	2.500	9.78	3.50	6.39
0.583	9.34	1.583	22.78	2.583	8.92	3.58	6.07
0.667	9.34	1.667	22.78	2.667	8.92	3.67	6.07
0.750	11.57	1.750	17.37	2.750	8.23	3.75	5.78
0.833	11.57	1.833	17.37	2.833	8.23	3.83	5.78
0.917	15.83	1.917	14.31	2.917	7.65	3.92	5.53
1.000	15.83	2.000	14.31	3.000	7.65	4.00	5.53

Unit Hyd Qpeak (cms)= 1.638

PEAK FLOW (cms)= 0.956 (i)

```
     TIME TO PEAK    (hrs)=   2.167
     RUNOFF VOLUME    (mm)=  26.032
     TOTAL RAINFALL   (mm)=  73.982
     RUNOFF COEFFICIENT   =   0.352

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

-------------------------------------------------------------------------------
--------------------
| CALIB            |
| STANDHYD (  0014)|   Area    (ha)=   1.87
|ID= 1 DT= 5.0 min |   Total Imp(%)=  43.28   Dir. Conn.(%)=  10.00
--------------------
                          IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=      0.81         1.06
     Dep. Storage     (mm)=      1.00         5.00
     Average Slope     (%)=      0.50         2.00
     Length            (m)=    111.65        25.00
     Mannings n            =     0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                          ---- TRANSFORMED HYETOGRAPH ----
               TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
              0.083    6.22 | 1.083   29.44 | 2.083   12.30 |  3.08    7.17
              0.167    6.22 | 1.167   29.44 | 2.167   12.30 |  3.17    7.17
              0.250    6.95 | 1.250  170.60 | 2.250   10.86 |  3.25    6.75
              0.333    6.95 | 1.333  170.60 | 2.333   10.86 |  3.33    6.75
              0.417    7.93 | 1.417   36.13 | 2.417    9.78 |  3.42    6.39
              0.500    7.93 | 1.500   36.13 | 2.500    9.78 |  3.50    6.39
              0.583    9.34 | 1.583   22.78 | 2.583    8.92 |  3.58    6.07
              0.667    9.34 | 1.667   22.78 | 2.667    8.92 |  3.67    6.07
              0.750   11.57 | 1.750   17.37 | 2.750    8.23 |  3.75    5.78
              0.833   11.57 | 1.833   17.37 | 2.833    8.23 |  3.83    5.78
              0.917   15.83 | 1.917   14.31 | 2.917    7.65 |  3.92    5.53
              1.000   15.83 | 2.000   14.31 | 3.000    7.65 |  4.00    5.53

     Max.Eff.Inten.(mm/hr)=     170.60       155.77
               over (min)        5.00        10.00
     Storage Coeff.  (min)=      2.71 (ii)    7.17 (ii)
     Unit Hyd. Tpeak (min)=      5.00        10.00
     Unit Hyd. peak  (cms)=      0.29         0.14
                                                    *TOTALS*
     PEAK FLOW       (cms)=      0.09         0.32          0.363 (iii)
     TIME TO PEAK    (hrs)=      1.33         1.42           1.33
     RUNOFF VOLUME    (mm)=     72.98        43.24          46.21
```



```
     TOTAL RAINFALL   (mm)=     73.98        73.98         73.98
     RUNOFF COEFFICIENT   =      0.99         0.58          0.62

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
              YOU SHOULD CONSIDER SPLITTING THE AREA.

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  78.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

-------------------------------------------------------------------------------
--------------------
| CALIB            |
| STANDHYD (  0021)|   Area    (ha)=   0.07
|ID= 1 DT= 5.0 min |   Total Imp(%)=  48.26   Dir. Conn.(%)=  39.54
--------------------
                          IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=      0.03         0.04
     Dep. Storage     (mm)=      1.00         5.00
     Average Slope     (%)=      0.50         2.00
     Length            (m)=     21.60         5.60
     Mannings n            =     0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                          ---- TRANSFORMED HYETOGRAPH ----
               TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
              0.083    6.22 | 1.083   29.44 | 2.083   12.30 |  3.08    7.17
              0.167    6.22 | 1.167   29.44 | 2.167   12.30 |  3.17    7.17
              0.250    6.95 | 1.250  170.60 | 2.250   10.86 |  3.25    6.75
              0.333    6.95 | 1.333  170.60 | 2.333   10.86 |  3.33    6.75
              0.417    7.93 | 1.417   36.13 | 2.417    9.78 |  3.42    6.39
              0.500    7.93 | 1.500   36.13 | 2.500    9.78 |  3.50    6.39
              0.583    9.34 | 1.583   22.78 | 2.583    8.92 |  3.58    6.07
              0.667    9.34 | 1.667   22.78 | 2.667    8.92 |  3.67    6.07
              0.750   11.57 | 1.750   17.37 | 2.750    8.23 |  3.75    5.78
              0.833   11.57 | 1.833   17.37 | 2.833    8.23 |  3.83    5.78
              0.917   15.83 | 1.917   14.31 | 2.917    7.65 |  3.92    5.53
              1.000   15.83 | 2.000   14.31 | 3.000    7.65 |  4.00    5.53

     Max.Eff.Inten.(mm/hr)=     170.60        40.63
               over (min)        5.00         5.00
     Storage Coeff.  (min)=      1.01 (ii)    2.96 (ii)
```



```
     Unit Hyd. Tpeak (min)=      5.00         5.00
     Unit Hyd. peak  (cms)=      0.34         0.28
                                                    *TOTALS*
     PEAK FLOW       (cms)=      0.01         0.00          0.018 (iii)
     TIME TO PEAK    (hrs)=      1.33         1.33           1.33
     RUNOFF VOLUME    (mm)=     72.98        18.07          39.75
     TOTAL RAINFALL   (mm)=     73.98        73.98          73.98
     RUNOFF COEFFICIENT   =      0.99         0.24           0.54

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  52.2    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

-------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0016)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0001):    39.68   0.644     3.00    18.75
     + ID2= 2 (  0014):     1.87   0.363     1.33    46.21
       ========================================================
       ID = 3 (  0016):    41.55   0.679     2.92    19.99

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
-------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0016)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 3 (  0016):    41.55   0.679     2.92    19.99
     + ID2= 2 (  0002):    23.99   0.240     2.75    10.54
       ========================================================
       ID = 1 (  0016):    65.54   0.916     2.83    16.53

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
-------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0016)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0016):    65.54   0.916     2.83    16.53
```



```
     + ID2= 2 (  0021):     0.07   0.018     1.33    39.75
       ========================================================
       ID = 3 (  0016):    65.61   0.917     2.83    16.56

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
-------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0016)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 3 (  0016):    65.61   0.917     2.83    16.56
     + ID2= 2 (  0025):   100.92   1.143     3.83    16.41
       ========================================================
       ID = 1 (  0016):   166.53   1.977     3.33    16.47

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
-------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0016)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0016):   166.53   1.977     3.33    16.47
     + ID2= 2 (  0028):     6.37   0.074     2.50    11.05
       ========================================================
       ID = 3 (  0016):   172.90   2.037     3.33    16.27

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
-------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0016)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 3 (  0016):   172.90   2.037     3.33    16.27
     + ID2= 2 (  0029):    14.85   0.189     2.58    12.86
       ========================================================
       ID = 1 (  0016):   187.75   2.204     3.25    16.00

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
-------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0016)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0016):   187.75   2.204     3.25    16.00
```

```
      + ID2= 2 (  0030):     1.70   0.051     1.75    17.96
        ================================================
        ID = 3 (  0016):   189.45   2.222     3.25    16.02

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
```

```
-------------------
| ADD HYD  (  0016)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
-------------------          (ha)    (cms)    (hrs)     (mm)
       ID1= 3 (  0016):   189.45   2.222     3.25    16.02
      + ID2= 2 (  0031):     1.80   0.021     2.42    10.77
        ================================================
        ID = 1 (  0016):   191.25   2.239     3.25    15.97

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
```

```
-------------------
| ADD HYD  (  0016)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
-------------------          (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0016):   191.25   2.239     3.25    15.97
      + ID2= 2 (  0032):     6.70   0.089     3.42    17.55
        ================================================
        ID = 3 (  0016):   197.95   2.328     3.25    16.02

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
```

```
-------------------
| ADD HYD  (  0016)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
-------------------          (ha)    (cms)    (hrs)     (mm)
       ID1= 3 (  0016):   197.95   2.328     3.25    16.02
      + ID2= 2 (  0033):     1.13   0.044     1.83    23.09
        ================================================
        ID = 1 (  0016):   199.08   2.343     3.25    16.06

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
```

```
-------------------
| ADD HYD  (  0016)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
-------------------          (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0016):   199.08   2.343     3.25    16.06
```



```
      + ID2= 2 (  0040):     6.06   0.557     1.33    32.23
        ================================================
        ID = 3 (  0016):   205.14   2.431     3.17    16.54

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
```

```
-------------------
| ADD HYD  (  0016)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
-------------------          (ha)    (cms)    (hrs)     (mm)
       ID1= 3 (  0016):   205.14   2.431     3.17    16.54
      + ID2= 2 (  0048):    29.16   0.956     2.17    26.03
        ================================================
        ID = 1 (  0016):   234.30   3.124     2.75    17.72

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
```

```
-------------------
| CALIB            |
| STANDHYD (  0009)|   Area    (ha)=  31.06
|ID= 1 DT= 5.0 min |   Total Imp(%)=  53.89   Dir. Conn.(%)=  20.76
-------------------
                          IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=      16.74         14.32
     Dep. Storage     (mm)=       1.00          5.00
     Average Slope     (%)=       0.50          2.00
     Length            (m)=     455.05         30.00
     Mannings n           =      0.013         0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.
```

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.22	1.083	29.44	2.083	12.30	3.08	7.17
0.167	6.22	1.167	29.44	2.167	12.30	3.17	7.17
0.250	6.95	1.250	170.60	2.250	10.86	3.25	6.75
0.333	6.95	1.333	170.60	2.333	10.86	3.33	6.75
0.417	7.93	1.417	36.13	2.417	9.78	3.42	6.39
0.500	7.93	1.500	36.13	2.500	9.78	3.50	6.39
0.583	9.34	1.583	22.78	2.583	8.92	3.58	6.07
0.667	9.34	1.667	22.78	2.667	8.92	3.67	6.07
0.750	11.57	1.750	17.37	2.750	8.23	3.75	5.78
0.833	11.57	1.833	17.37	2.833	8.23	3.83	5.78
0.917	15.83	1.917	14.31	2.917	7.65	3.92	5.53
1.000	15.83	2.000	14.31	3.000	7.65	4.00	5.53


```
     Max.Eff.Inten.(mm/hr)=     170.60       135.78
                over (min)        5.00        15.00
     Storage Coeff.  (min)=       6.31 (ii)   11.56 (ii)
     Unit Hyd. Tpeak (min)=       5.00        15.00
     Unit Hyd. peak  (cms)=       0.19         0.09
                                                        *TOTALS*
     PEAK FLOW       (cms)=       2.53         2.90          4.080 (iii)
     TIME TO PEAK    (hrs)=       1.33         1.50           1.33
     RUNOFF VOLUME    (mm)=      72.98        36.35          43.95
     TOTAL RAINFALL   (mm)=      73.98        73.98          73.98
     RUNOFF COEFFICIENT   =       0.99         0.49           0.59


       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  68.5    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
```

```
-------------------
| CALIB            |
| STANDHYD (  0010)|   Area    (ha)=   1.32
|ID= 1 DT= 5.0 min |   Total Imp(%)=  55.27   Dir. Conn.(%)=   1.52
-------------------
                          IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       0.73          0.59
     Dep. Storage     (mm)=       1.00          5.00
     Average Slope     (%)=       0.50          2.00
     Length            (m)=      93.81         23.50
     Mannings n           =      0.013         0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.
```

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.22	1.083	29.44	2.083	12.30	3.08	7.17
0.167	6.22	1.167	29.44	2.167	12.30	3.17	7.17
0.250	6.95	1.250	170.60	2.250	10.86	3.25	6.75
0.333	6.95	1.333	170.60	2.333	10.86	3.33	6.75
0.417	7.93	1.417	36.13	2.417	9.78	3.42	6.39
0.500	7.93	1.500	36.13	2.500	9.78	3.50	6.39
0.583	9.34	1.583	22.78	2.583	8.92	3.58	6.07
0.667	9.34	1.667	22.78	2.667	8.92	3.67	6.07
0.750	11.57	1.750	17.37	2.750	8.23	3.75	5.78

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.833	11.57	1.833	17.37	2.833	8.23	3.83	5.78
0.917	15.83	1.917	14.31	2.917	7.65	3.92	5.53
1.000	15.83	2.000	14.31	3.000	7.65	4.00	5.53

```
     Max.Eff.Inten.(mm/hr)=     170.60       204.76
                over (min)        5.00        10.00
     Storage Coeff.  (min)=       2.44 (ii)    6.30 (ii)
     Unit Hyd. Tpeak (min)=       5.00        10.00
     Unit Hyd. peak  (cms)=       0.30         0.15
                                                        *TOTALS*
     PEAK FLOW       (cms)=       0.01         0.25          0.249 (iii)
     TIME TO PEAK    (hrs)=       1.33         1.42           1.42
     RUNOFF VOLUME    (mm)=      72.98        41.50          41.98
     TOTAL RAINFALL   (mm)=      73.98        73.98          73.98
     RUNOFF COEFFICIENT   =       0.99         0.56           0.57

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
              YOU SHOULD CONSIDER SPLITTING THE AREA.

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  68.8    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
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| CALIB            |
| STANDHYD (  0013)|   Area    (ha)=   4.16
|ID= 1 DT= 5.0 min |   Total Imp(%)=  50.00   Dir. Conn.(%)=  50.00
-------------------
                          IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       2.08          2.08
     Dep. Storage     (mm)=       1.00          5.00
     Average Slope     (%)=       0.50          2.00
     Length            (m)=     166.53        250.00
     Mannings n           =      0.013         0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.
```

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.22	1.083	29.44	2.083	12.30	3.08	7.17
0.167	6.22	1.167	29.44	2.167	12.30	3.17	7.17
0.250	6.95	1.250	170.60	2.250	10.86	3.25	6.75

0.333	6.95	1.333	170.60	2.333	10.86	3.33	6.75
0.417	7.93	1.417	36.13	2.417	9.78	3.42	6.39
0.500	7.93	1.500	36.13	2.500	9.78	3.50	6.39
0.583	9.34	1.583	22.78	2.583	8.92	3.58	6.07
0.667	9.34	1.667	22.78	2.667	8.92	3.67	6.07
0.750	11.57	1.750	17.37	2.750	8.23	3.75	5.78
0.833	11.57	1.833	17.37	2.833	8.23	3.83	5.78
0.917	15.83	1.917	14.31	2.917	7.65	3.92	5.53
1.000	15.83	2.000	14.31	3.000	7.65	4.00	5.53

Max.Eff.Inten.(mm/hr)=	170.60	22.25	
over (min)	5.00	45.00	
Storage Coeff. (min)=	3.45 (ii)	42.11 (ii)	
Unit Hyd. Tpeak (min)=	5.00	45.00	
Unit Hyd. peak (cms)=	0.26	0.03	
			TOTALS
PEAK FLOW (cms)=	0.94	0.07	0.950 (iii)
TIME TO PEAK (hrs)=	1.33	2.00	1.33
RUNOFF VOLUME (mm)=	72.98	25.96	49.46
TOTAL RAINFALL (mm)=	73.98	73.98	73.98
RUNOFF COEFFICIENT =	0.99	0.35	0.67

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
STANDHYD (0036)	Area (ha)=	2.12	
ID= 1 DT= 5.0 min	Total Imp(%)=	85.04	Dir. Conn.(%)= 0.10

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	1.80	0.32
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	118.88	175.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	6.22	1.083	29.44	2.083	12.30	3.08	7.17
0.167	6.22	1.167	29.44	2.167	12.30	3.17	7.17
0.250	6.95	1.250	170.60	2.250	10.86	3.25	6.75
0.333	6.95	1.333	170.60	2.333	10.86	3.33	6.75
0.417	7.93	1.417	36.13	2.417	9.78	3.42	6.39
0.500	7.93	1.500	36.13	2.500	9.78	3.50	6.39
0.583	9.34	1.583	22.78	2.583	8.92	3.58	6.07
0.667	9.34	1.667	22.78	2.667	8.92	3.67	6.07
0.750	11.57	1.750	17.37	2.750	8.23	3.75	5.78
0.833	11.57	1.833	17.37	2.833	8.23	3.83	5.78
0.917	15.83	1.917	14.31	2.917	7.65	3.92	5.53
1.000	15.83	2.000	14.31	3.000	7.65	4.00	5.53

0.083	6.22	1.083	29.44	2.083	12.30	3.08	7.17
0.167	6.22	1.167	29.44	2.167	12.30	3.17	7.17
0.250	6.95	1.250	170.60	2.250	10.86	3.25	6.75
0.333	6.95	1.333	170.60	2.333	10.86	3.33	6.75
0.417	7.93	1.417	36.13	2.417	9.78	3.42	6.39
0.500	7.93	1.500	36.13	2.500	9.78	3.50	6.39
0.583	9.34	1.583	22.78	2.583	8.92	3.58	6.07
0.667	9.34	1.667	22.78	2.667	8.92	3.67	6.07
0.750	11.57	1.750	17.37	2.750	8.23	3.75	5.78
0.833	11.57	1.833	17.37	2.833	8.23	3.83	5.78
0.917	15.83	1.917	14.31	2.917	7.65	3.92	5.53
1.000	15.83	2.000	14.31	3.000	7.65	4.00	5.53

Max.Eff.Inten.(mm/hr)=	170.60	957.68	
over (min)	5.00	10.00	
Storage Coeff. (min)=	2.82 (ii)	9.75 (ii)	
Unit Hyd. Tpeak (min)=	5.00	10.00	
Unit Hyd. peak (cms)=	0.28	0.11	
			TOTALS
PEAK FLOW (cms)=	0.00	0.52	0.516 (iii)
TIME TO PEAK (hrs)=	1.33	1.42	1.42
RUNOFF VOLUME (mm)=	72.98	59.38	59.39
TOTAL RAINFALL (mm)=	73.98	73.98	73.98
RUNOFF COEFFICIENT =	0.99	0.80	0.80

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
STANDHYD (0043)	Area (ha)=	0.13	
ID= 1 DT= 5.0 min	Total Imp(%)=	30.77	Dir. Conn.(%)= 7.69

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.04	0.09
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	0.50
Length	(m)=	29.44	70.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	6.22	1.083	29.44	2.083	12.30	3.08	7.17
0.167	6.22	1.167	29.44	2.167	12.30	3.17	7.17
0.250	6.95	1.250	170.60	2.250	10.86	3.25	6.75
0.333	6.95	1.333	170.60	2.333	10.86	3.33	6.75
0.417	7.93	1.417	36.13	2.417	9.78	3.42	6.39
0.500	7.93	1.500	36.13	2.500	9.78	3.50	6.39
0.583	9.34	1.583	22.78	2.583	8.92	3.58	6.07
0.667	9.34	1.667	22.78	2.667	8.92	3.67	6.07
0.750	11.57	1.750	17.37	2.750	8.23	3.75	5.78
0.833	11.57	1.833	17.37	2.833	8.23	3.83	5.78
0.917	15.83	1.917	14.31	2.917	7.65	3.92	5.53
1.000	15.83	2.000	14.31	3.000	7.65	4.00	5.53

Max.Eff.Inten.(mm/hr)=	170.60	57.77	
over (min)	5.00	20.00	
Storage Coeff. (min)=	1.22 (ii)	19.86 (ii)	
Unit Hyd. Tpeak (min)=	5.00	20.00	
Unit Hyd. peak (cms)=	0.33	0.06	
			TOTALS
PEAK FLOW (cms)=	0.00	0.01	0.009 (iii)
TIME TO PEAK (hrs)=	1.33	1.58	1.58
RUNOFF VOLUME (mm)=	72.98	31.66	34.75
TOTAL RAINFALL (mm)=	73.98	73.98	73.98
RUNOFF COEFFICIENT =	0.99	0.43	0.47

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
STANDHYD (0044)	Area (ha)=	1.62	
ID= 1 DT= 5.0 min	Total Imp(%)=	48.77	Dir. Conn.(%)= 30.86

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.79	0.83
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	1.40
Length	(m)=	103.92	400.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	6.22	1.083	29.44	2.083	12.30	3.08	7.17
0.167	6.22	1.167	29.44	2.167	12.30	3.17	7.17
0.250	6.95	1.250	170.60	2.250	10.86	3.25	6.75
0.333	6.95	1.333	170.60	2.333	10.86	3.33	6.75
0.417	7.93	1.417	36.13	2.417	9.78	3.42	6.39
0.500	7.93	1.500	36.13	2.500	9.78	3.50	6.39
0.583	9.34	1.583	22.78	2.583	8.92	3.58	6.07
0.667	9.34	1.667	22.78	2.667	8.92	3.67	6.07
0.750	11.57	1.750	17.37	2.750	8.23	3.75	5.78
0.833	11.57	1.833	17.37	2.833	8.23	3.83	5.78
0.917	15.83	1.917	14.31	2.917	7.65	3.92	5.53
1.000	15.83	2.000	14.31	3.000	7.65	4.00	5.53

Max.Eff.Inten.(mm/hr)=	170.60	32.47	
over (min)	5.00	55.00	
Storage Coeff. (min)=	2.60 (ii)	51.64 (ii)	
Unit Hyd. Tpeak (min)=	5.00	55.00	
Unit Hyd. peak (cms)=	0.29	0.02	
			TOTALS
PEAK FLOW (cms)=	0.23	0.04	0.237 (iii)
TIME TO PEAK (hrs)=	1.33	2.17	1.33
RUNOFF VOLUME (mm)=	72.98	31.90	44.56
TOTAL RAINFALL (mm)=	73.98	73.98	73.98
RUNOFF COEFFICIENT =	0.99	0.43	0.60

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0037)					
1 + 2 = 3		AREA	QPEAK	TPEAK	R.V.
		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0010):		1.32	0.249	1.42	41.98
+ ID2= 2 (0013):		4.16	0.950	1.33	49.46
ID = 3 (0037):		5.48	1.174	1.33	47.66

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0037)					
3 + 2 = 1		AREA	QPEAK	TPEAK	R.V.
		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0037):		5.48	1.174	1.33	47.66
+ ID2= 2 (0036):		2.12	0.516	1.42	59.39
ID = 1 (0037):		7.60	1.633	1.33	50.93

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0037)					
1 + 2 = 3		AREA	QPEAK	TPEAK	R.V.
		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0037):		7.60	1.633	1.33	50.93
+ ID2= 2 (0043):		0.13	0.009	1.58	34.75
ID = 3 (0037):		7.73	1.641	1.33	50.66

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0037)					
3 + 2 = 1		AREA	QPEAK	TPEAK	R.V.
		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0037):		7.73	1.641	1.33	50.66
+ ID2= 2 (0044):		1.62	0.237	1.33	44.56
ID = 1 (0037):		9.35	1.878	1.33	49.60

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0037)					
1 + 2 = 3		AREA	QPEAK	TPEAK	R.V.
		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0037):		9.35	1.878	1.33	49.60
+ ID2= 2 (0009):		31.06	4.080	1.33	43.95
ID = 3 (0037):		40.41	5.958	1.33	45.26

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

RESERVOIR(0038)	OVERFLOW IS OFF			
IN= 2---> OUT= 1				
DT= 5.0 min	OUTFLOW	STORAGE	OUTFLOW	STORAGE
	(cms)	(ha.m.)	(cms)	(ha.m.)
	0.0000	0.0000	0.5076	2.8989
	0.0000	0.2023	0.6060	3.2065
	0.0353	0.4202	0.7105	3.5196
	0.0525	0.6536	0.8207	3.8381
	0.0654	0.9026	0.9365	4.1621
	0.0843	1.1671	1.0574	4.4915
	0.1858	1.7227	1.1833	4.8263
	0.2540	2.0086	1.3139	5.1665
	0.3309	2.2999	1.4492	5.5122
	0.4157	2.5967	1.5890	5.8633

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
INFLOW : ID= 2 (0037)	40.410	5.958	1.33	45.26
OUTFLOW: ID= 1 (0038)	40.410	0.177	4.33	40.21

PEAK FLOW REDUCTION [Qout/Qin](%)= 2.97
TIME SHIFT OF PEAK FLOW (min)=180.00
MAXIMUM STORAGE USED (ha.m.)= 1.6741

CALIB			
STANDHYD (0017)	Area (ha)= 1.59		
ID= 1 DT= 5.0 min	Total Imp(%)= 58.58	Dir. Conn.(%)= 27.10	
		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.93	0.66
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	102.96	30.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

	---- TRANSFORMED HYETOGRAPH ----						
TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.22	1.083	29.44	2.083	12.30	3.08	7.17
0.167	6.22	1.167	29.44	2.167	12.30	3.17	7.17
0.250	6.95	1.250	170.60	2.250	10.86	3.25	6.75
0.333	6.95	1.333	170.60	2.333	10.86	3.33	6.75
0.417	7.93	1.417	36.13	2.417	9.78	3.42	6.39
0.500	7.93	1.500	36.13	2.500	9.78	3.50	6.39
0.583	9.34	1.583	22.78	2.583	8.92	3.58	6.07
0.667	9.34	1.667	22.78	2.667	8.92	3.67	6.07
0.750	11.57	1.750	17.37	2.750	8.23	3.75	5.78
0.833	11.57	1.833	17.37	2.833	8.23	3.83	5.78
0.917	15.83	1.917	14.31	2.917	7.65	3.92	5.53
1.000	15.83	2.000	14.31	3.000	7.65	4.00	5.53

Max.Eff.Inten.(mm/hr)=	170.60	133.79	
over (min)	5.00	10.00	
Storage Coeff. (min)=	2.58 (ii)	7.87 (ii)	
Unit Hyd. Tpeak (min)=	5.00	10.00	
Unit Hyd. peak (cms)=	0.29	0.13	
			TOTALS
PEAK FLOW (cms)=	0.20	0.17	0.339 (iii)
TIME TO PEAK (hrs)=	1.33	1.42	1.33
RUNOFF VOLUME (mm)=	72.98	35.22	45.45
TOTAL RAINFALL (mm)=	73.98	73.98	73.98
RUNOFF COEFFICIENT =	0.99	0.48	0.61

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 66.5 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

Junction Command(0018)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
INFLOW : ID= 2(0017)	1.59	0.34	1.33	45.45
OUTFLOW: ID= 2(0018)	1.59	0.34	1.33	45.45

ADD HYD (0023)					
1 + 2 = 3		AREA	QPEAK	TPEAK	R.V.
		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0016):		234.30	3.124	2.75	17.72
+ ID2= 2 (0018):		1.59	0.339	1.33	45.45
ID = 3 (0023):		235.89	3.155	2.75	17.91

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023)					
3 + 2 = 1		AREA	QPEAK	TPEAK	R.V.
		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0023):		235.89	3.155	2.75	17.91
+ ID2= 2 (0038):		40.41	0.177	4.33	40.21
ID = 1 (0023):		276.30	3.286	2.83	21.17

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

****
** SIMULATION:F - 100-year CHI **
****

CHICAGO STORM	IDF curve parameters: A= 937.587
Ptotal= 81.31 mm	B= 0.000
	C= 0.699

used in: INTENSITY = A / (t + B)^C

Duration of storm = 4.00 hrs
Storm time step = 10.00 min
Time to peak ratio = 0.33

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.00	6.84	1.00	32.35	2.00	13.52	3.00	7.88
0.17	7.64	1.17	187.50	2.17	11.94	3.17	7.42
0.33	8.72	1.33	39.70	2.33	10.74	3.33	7.02
0.50	10.26	1.50	25.04	2.50	9.80	3.50	6.67
0.67	12.72	1.67	19.09	2.67	9.04	3.67	6.36

0.83	17.39	1.83	15.73	2.83	8.41	3.83	6.08

CALIB			
NASHYD (0025)	Area (ha)=	100.92	Curve Number (CN)= 55.9
ID= 1 DT= 5.0 min	Ia (mm)=	7.89	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	1.70	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.84	1.083	32.35	2.083	13.52	3.08	7.88
0.167	6.84	1.167	32.35	2.167	13.52	3.17	7.88
0.250	7.64	1.250	187.50	2.250	11.94	3.25	7.42
0.333	7.64	1.333	187.50	2.333	11.94	3.33	7.42
0.417	8.72	1.417	39.70	2.417	10.74	3.42	7.02
0.500	8.72	1.500	39.70	2.500	10.74	3.50	7.02
0.583	10.26	1.583	25.04	2.583	9.80	3.58	6.67
0.667	10.26	1.667	25.04	2.667	9.80	3.67	6.67
0.750	12.72	1.750	19.09	2.750	9.04	3.75	6.36
0.833	12.72	1.833	19.09	2.833	9.04	3.83	6.36
0.917	17.39	1.917	15.73	2.917	8.41	3.92	6.08
1.000	17.39	2.000	15.73	3.000	8.41	4.00	6.08

Unit Hyd Qpeak (cms)= 2.267

PEAK FLOW (cms)= 1.374 (i)
TIME TO PEAK (hrs)= 3.750
RUNOFF VOLUME (mm)= 19.711
TOTAL RAINFALL (mm)= 81.310
RUNOFF COEFFICIENT = 0.242

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0002)	Area (ha)=	23.99	Curve Number (CN)= 44.7
ID= 1 DT= 5.0 min	Ia (mm)=	10.91	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	0.97	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.84	1.083	32.35	2.083	13.52	3.08	7.88
0.167	6.84	1.167	32.35	2.167	13.52	3.17	7.88
0.250	7.64	1.250	187.50	2.250	11.94	3.25	7.42
0.333	7.64	1.333	187.50	2.333	11.94	3.33	7.42
0.417	8.72	1.417	39.70	2.417	10.74	3.42	7.02
0.500	8.72	1.500	39.70	2.500	10.74	3.50	7.02
0.583	10.26	1.583	25.04	2.583	9.80	3.58	6.67
0.667	10.26	1.667	25.04	2.667	9.80	3.67	6.67
0.750	12.72	1.750	19.09	2.750	9.04	3.75	6.36
0.833	12.72	1.833	19.09	2.833	9.04	3.83	6.36
0.917	17.39	1.917	15.73	2.917	8.41	3.92	6.08
1.000	17.39	2.000	15.73	3.000	8.41	4.00	6.08

Unit Hyd Qpeak (cms)= 0.945

PEAK FLOW (cms)= 0.295 (i)
TIME TO PEAK (hrs)= 2.667
RUNOFF VOLUME (mm)= 12.885
TOTAL RAINFALL (mm)= 81.310
RUNOFF COEFFICIENT = 0.158

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0001)	Area (ha)=	39.68	Curve Number (CN)= 60.7
ID= 1 DT= 5.0 min	Ia (mm)=	8.26	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	1.18	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.84	1.083	32.35	2.083	13.52	3.08	7.88
0.167	6.84	1.167	32.35	2.167	13.52	3.17	7.88
0.250	7.64	1.250	187.50	2.250	11.94	3.25	7.42
0.333	7.64	1.333	187.50	2.333	11.94	3.33	7.42
0.417	8.72	1.417	39.70	2.417	10.74	3.42	7.02
0.500	8.72	1.500	39.70	2.500	10.74	3.50	7.02
0.583	10.26	1.583	25.04	2.583	9.80	3.58	6.67
0.667	10.26	1.667	25.04	2.667	9.80	3.67	6.67

0.750	12.72	1.750	19.09	2.750	9.04	3.75	6.36
0.833	12.72	1.833	19.09	2.833	9.04	3.83	6.36
0.917	17.39	1.917	15.73	2.917	8.41	3.92	6.08
1.000	17.39	2.000	15.73	3.000	8.41	4.00	6.08

Unit Hyd Qpeak (cms)= 1.284

PEAK FLOW (cms)= 0.775 (i)
TIME TO PEAK (hrs)= 2.917
RUNOFF VOLUME (mm)= 22.455
TOTAL RAINFALL (mm)= 81.310
RUNOFF COEFFICIENT = 0.276

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0028)	Area (ha)=	6.37	Curve Number (CN)= 50.5
ID= 1 DT= 5.0 min	Ia (mm)=	15.69	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	0.77	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.84	1.083	32.35	2.083	13.52	3.08	7.88
0.167	6.84	1.167	32.35	2.167	13.52	3.17	7.88
0.250	7.64	1.250	187.50	2.250	11.94	3.25	7.42
0.333	7.64	1.333	187.50	2.333	11.94	3.33	7.42
0.417	8.72	1.417	39.70	2.417	10.74	3.42	7.02
0.500	8.72	1.500	39.70	2.500	10.74	3.50	7.02
0.583	10.26	1.583	25.04	2.583	9.80	3.58	6.67
0.667	10.26	1.667	25.04	2.667	9.80	3.67	6.67
0.750	12.72	1.750	19.09	2.750	9.04	3.75	6.36
0.833	12.72	1.833	19.09	2.833	9.04	3.83	6.36
0.917	17.39	1.917	15.73	2.917	8.41	3.92	6.08
1.000	17.39	2.000	15.73	3.000	8.41	4.00	6.08

Unit Hyd Qpeak (cms)= 0.316

PEAK FLOW (cms)= 0.093 (i)
TIME TO PEAK (hrs)= 2.417
RUNOFF VOLUME (mm)= 13.679
TOTAL RAINFALL (mm)= 81.310
RUNOFF COEFFICIENT = 0.168

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0029)	Area (ha)=	14.85	Curve Number (CN)= 52.9
ID= 1 DT= 5.0 min	Ia (mm)=	13.28	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	0.89	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.84	1.083	32.35	2.083	13.52	3.08	7.88
0.167	6.84	1.167	32.35	2.167	13.52	3.17	7.88
0.250	7.64	1.250	187.50	2.250	11.94	3.25	7.42
0.333	7.64	1.333	187.50	2.333	11.94	3.33	7.42
0.417	8.72	1.417	39.70	2.417	10.74	3.42	7.02
0.500	8.72	1.500	39.70	2.500	10.74	3.50	7.02
0.583	10.26	1.583	25.04	2.583	9.80	3.58	6.67
0.667	10.26	1.667	25.04	2.667	9.80	3.67	6.67
0.750	12.72	1.750	19.09	2.750	9.04	3.75	6.36
0.833	12.72	1.833	19.09	2.833	9.04	3.83	6.36
0.917	17.39	1.917	15.73	2.917	8.41	3.92	6.08
1.000	17.39	2.000	15.73	3.000	8.41	4.00	6.08

Unit Hyd Qpeak (cms)= 0.637

PEAK FLOW (cms)= 0.234 (i)
TIME TO PEAK (hrs)= 2.583
RUNOFF VOLUME (mm)= 15.751
TOTAL RAINFALL (mm)= 81.310
RUNOFF COEFFICIENT = 0.194

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0030)	Area (ha)=	1.70	Curve Number (CN)= 60.5
ID= 1 DT= 5.0 min	Ia (mm)=	9.65	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	0.40	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.84	1.083	32.35	2.083	13.52	3.08	7.88
0.167	6.84	1.167	32.35	2.167	13.52	3.17	7.88
0.250	7.64	1.250	187.50	2.250	11.94	3.25	7.42
0.333	7.64	1.333	187.50	2.333	11.94	3.33	7.42
0.417	8.72	1.417	39.70	2.417	10.74	3.42	7.02
0.500	8.72	1.500	39.70	2.500	10.74	3.50	7.02
0.583	10.26	1.583	25.04	2.583	9.80	3.58	6.67
0.667	10.26	1.667	25.04	2.667	9.80	3.67	6.67
0.750	12.72	1.750	19.09	2.750	9.04	3.75	6.36
0.833	12.72	1.833	19.09	2.833	9.04	3.83	6.36
0.917	17.39	1.917	15.73	2.917	8.41	3.92	6.08
1.000	17.39	2.000	15.73	3.000	8.41	4.00	6.08

Unit Hyd Qpeak (cms)= 0.162

PEAK FLOW (cms)= 0.063 (i)
TIME TO PEAK (hrs)= 1.750
RUNOFF VOLUME (mm)= 21.594
TOTAL RAINFALL (mm)= 81.310
RUNOFF COEFFICIENT = 0.266

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0031)	Area (ha)=	1.80	Curve Number (CN)= 50.0
ID= 1 DT= 5.0 min	Ia (mm)=	16.00	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	0.76	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.84	1.083	32.35	2.083	13.52	3.08	7.88
0.167	6.84	1.167	32.35	2.167	13.52	3.17	7.88
0.250	7.64	1.250	187.50	2.250	11.94	3.25	7.42
0.333	7.64	1.333	187.50	2.333	11.94	3.33	7.42
0.417	8.72	1.417	39.70	2.417	10.74	3.42	7.02
0.500	8.72	1.500	39.70	2.500	10.74	3.50	7.02
0.583	10.26	1.583	25.04	2.583	9.80	3.58	6.67
0.667	10.26	1.667	25.04	2.667	9.80	3.67	6.67

0.750	12.72	1.750	19.09	2.750	9.04	3.75	6.36
0.833	12.72	1.833	19.09	2.833	9.04	3.83	6.36
0.917	17.39	1.917	15.73	2.917	8.41	3.92	6.08
1.000	17.39	2.000	15.73	3.000	8.41	4.00	6.08

Unit Hyd Qpeak (cms)= 0.090

PEAK FLOW (cms)= 0.026 (i)
TIME TO PEAK (hrs)= 2.417
RUNOFF VOLUME (mm)= 13.357
TOTAL RAINFALL (mm)= 81.310
RUNOFF COEFFICIENT = 0.164

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0032)	Area (ha)=	6.70	Curve Number (CN)= 60.0
ID= 1 DT= 5.0 min	Ia (mm)=	10.00	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	1.45	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.84	1.083	32.35	2.083	13.52	3.08	7.88
0.167	6.84	1.167	32.35	2.167	13.52	3.17	7.88
0.250	7.64	1.250	187.50	2.250	11.94	3.25	7.42
0.333	7.64	1.333	187.50	2.333	11.94	3.33	7.42
0.417	8.72	1.417	39.70	2.417	10.74	3.42	7.02
0.500	8.72	1.500	39.70	2.500	10.74	3.50	7.02
0.583	10.26	1.583	25.04	2.583	9.80	3.58	6.67
0.667	10.26	1.667	25.04	2.667	9.80	3.67	6.67
0.750	12.72	1.750	19.09	2.750	9.04	3.75	6.36
0.833	12.72	1.833	19.09	2.833	9.04	3.83	6.36
0.917	17.39	1.917	15.73	2.917	8.41	3.92	6.08
1.000	17.39	2.000	15.73	3.000	8.41	4.00	6.08

Unit Hyd Qpeak (cms)= 0.176

PEAK FLOW (cms)= 0.108 (i)
TIME TO PEAK (hrs)= 3.417
RUNOFF VOLUME (mm)= 21.131
TOTAL RAINFALL (mm)= 81.310
RUNOFF COEFFICIENT = 0.260

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0033)	Area (ha)=	1.13	Curve Number (CN)= 67.4
ID= 1 DT= 5.0 min	Ia (mm)=	7.88	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	0.43	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.84	1.083	32.35	2.083	13.52	3.08	7.88
0.167	6.84	1.167	32.35	2.167	13.52	3.17	7.88
0.250	7.64	1.250	187.50	2.250	11.94	3.25	7.42
0.333	7.64	1.333	187.50	2.333	11.94	3.33	7.42
0.417	8.72	1.417	39.70	2.417	10.74	3.42	7.02
0.500	8.72	1.500	39.70	2.500	10.74	3.50	7.02
0.583	10.26	1.583	25.04	2.583	9.80	3.58	6.67
0.667	10.26	1.667	25.04	2.667	9.80	3.67	6.67
0.750	12.72	1.750	19.09	2.750	9.04	3.75	6.36
0.833	12.72	1.833	19.09	2.833	9.04	3.83	6.36
0.917	17.39	1.917	15.73	2.917	8.41	3.92	6.08
1.000	17.39	2.000	15.73	3.000	8.41	4.00	6.08

Unit Hyd Qpeak (cms)= 0.100

PEAK FLOW (cms)= 0.053 (i)
TIME TO PEAK (hrs)= 1.833
RUNOFF VOLUME (mm)= 27.436
TOTAL RAINFALL (mm)= 81.310
RUNOFF COEFFICIENT = 0.337

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0027)	Area (ha)=	1.38	Curve Number (CN)= 64.1
ID= 1 DT= 5.0 min	Ia (mm)=	8.51	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	0.39	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.84	1.083	32.35	2.083	13.52	3.08	7.88
0.167	6.84	1.167	32.35	2.167	13.52	3.17	7.88
0.250	7.64	1.250	187.50	2.250	11.94	3.25	7.42
0.333	7.64	1.333	187.50	2.333	11.94	3.33	7.42
0.417	8.72	1.417	39.70	2.417	10.74	3.42	7.02
0.500	8.72	1.500	39.70	2.500	10.74	3.50	7.02
0.583	10.26	1.583	25.04	2.583	9.80	3.58	6.67
0.667	10.26	1.667	25.04	2.667	9.80	3.67	6.67
0.750	12.72	1.750	19.09	2.750	9.04	3.75	6.36
0.833	12.72	1.833	19.09	2.833	9.04	3.83	6.36
0.917	17.39	1.917	15.73	2.917	8.41	3.92	6.08
1.000	17.39	2.000	15.73	3.000	8.41	4.00	6.08

Unit Hyd Qpeak (cms)= 0.135

PEAK FLOW (cms)= 0.061 (i)
TIME TO PEAK (hrs)= 1.750
RUNOFF VOLUME (mm)= 24.668
TOTAL RAINFALL (mm)= 81.310
RUNOFF COEFFICIENT = 0.303

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0041)	Area (ha)=	0.59	Curve Number (CN)= 71.5
ID= 1 DT= 5.0 min	Ia (mm)=	4.75	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	0.53	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.84	1.083	32.35	2.083	13.52	3.08	7.88
0.167	6.84	1.167	32.35	2.167	13.52	3.17	7.88
0.250	7.64	1.250	187.50	2.250	11.94	3.25	7.42
0.333	7.64	1.333	187.50	2.333	11.94	3.33	7.42
0.417	8.72	1.417	39.70	2.417	10.74	3.42	7.02
0.500	8.72	1.500	39.70	2.500	10.74	3.50	7.02
0.583	10.26	1.583	25.04	2.583	9.80	3.58	6.67
0.667	10.26	1.667	25.04	2.667	9.80	3.67	6.67

0.750	12.72	1.750	19.09	2.750	9.04	3.75	6.36
0.833	12.72	1.833	19.09	2.833	9.04	3.83	6.36
0.917	17.39	1.917	15.73	2.917	8.41	3.92	6.08
1.000	17.39	2.000	15.73	3.000	8.41	4.00	6.08

Unit Hyd Qpeak (cms)= 0.043

PEAK FLOW (cms)= 0.030 (i)
TIME TO PEAK (hrs)= 1.917
RUNOFF VOLUME (mm)= 32.925
TOTAL RAINFALL (mm)= 81.310
RUNOFF COEFFICIENT = 0.405

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (0015)
ID= 1 DT= 5.0 min

Area (ha)= 1.93
Total Imp(%)= 54.66 Dir. Conn.(%)= 10.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	1.05	0.88
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	0.50	2.00
Length (m)=	113.43	45.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.84	1.083	32.35	2.083	13.52	3.08	7.88
0.167	6.84	1.167	32.35	2.167	13.52	3.17	7.88
0.250	7.64	1.250	187.50	2.250	11.94	3.25	7.42
0.333	7.64	1.333	187.50	2.333	11.94	3.33	7.42
0.417	8.72	1.417	39.70	2.417	10.74	3.42	7.02
0.500	8.72	1.500	39.70	2.500	10.74	3.50	7.02
0.583	10.26	1.583	25.04	2.583	9.80	3.58	6.67
0.667	10.26	1.667	25.04	2.667	9.80	3.67	6.67
0.750	12.72	1.750	19.09	2.750	9.04	3.75	6.36
0.833	12.72	1.833	19.09	2.833	9.04	3.83	6.36
0.917	17.39	1.917	15.73	2.917	8.41	3.92	6.08
1.000	17.39	2.000	15.73	3.000	8.41	4.00	6.08

Max.Eff.Inten.(mm/hr)= 187.50 119.32

over (min)	5.00	10.00
Storage Coeff. (min)=	2.64 (ii)	9.70 (ii)
Unit Hyd. Tpeak (min)=	5.00	10.00
Unit Hyd. peak (cms)=	0.29	0.11

			TOTALS
PEAK FLOW (cms)=	0.10	0.18	0.243 (iii)
TIME TO PEAK (hrs)=	1.33	1.42	1.33
RUNOFF VOLUME (mm)=	80.31	29.32	34.42
TOTAL RAINFALL (mm)=	81.31	81.31	81.31
RUNOFF COEFFICIENT =	0.99	0.36	0.42

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 49.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (0019)
ID= 1 DT= 5.0 min

Area (ha)= 2.16
Total Imp(%)= 54.64 Dir. Conn.(%)= 10.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	1.18	0.98
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	0.50	2.00
Length (m)=	120.00	30.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.84	1.083	32.35	2.083	13.52	3.08	7.88
0.167	6.84	1.167	32.35	2.167	13.52	3.17	7.88
0.250	7.64	1.250	187.50	2.250	11.94	3.25	7.42
0.333	7.64	1.333	187.50	2.333	11.94	3.33	7.42
0.417	8.72	1.417	39.70	2.417	10.74	3.42	7.02
0.500	8.72	1.500	39.70	2.500	10.74	3.50	7.02
0.583	10.26	1.583	25.04	2.583	9.80	3.58	6.67
0.667	10.26	1.667	25.04	2.667	9.80	3.67	6.67

0.750	12.72	1.750	19.09	2.750	9.04	3.75	6.36
0.833	12.72	1.833	19.09	2.833	9.04	3.83	6.36
0.917	17.39	1.917	15.73	2.917	8.41	3.92	6.08
1.000	17.39	2.000	15.73	3.000	8.41	4.00	6.08

Max.Eff.Inten.(mm/hr)=	187.50	202.44	
over (min)	5.00	10.00	
Storage Coeff. (min)=	2.73 (ii)	7.21 (ii)	
Unit Hyd. Tpeak (min)=	5.00	10.00	
Unit Hyd. peak (cms)=	0.29	0.14	

			TOTALS
PEAK FLOW (cms)=	0.11	0.39	0.441 (iii)
TIME TO PEAK (hrs)=	1.33	1.42	1.33
RUNOFF VOLUME (mm)=	80.31	45.54	49.02
TOTAL RAINFALL (mm)=	81.31	81.31	81.31
RUNOFF COEFFICIENT =	0.99	0.56	0.60

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0040)				
1 + 2 = 3	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0015):	1.93	0.243	1.33	34.42
+ ID2= 2 (0019):	2.16	0.441	1.33	49.02
ID = 3 (0040):	4.09	0.685	1.33	42.13

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0040)				
3 + 2 = 1	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0040):	4.09	0.685	1.33	42.13
+ ID2= 2 (0027):	1.38	0.061	1.75	24.67

ID = 1 (0040):	5.47	0.701	1.33	37.72

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0040)				
1 + 2 = 3	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0040):	5.47	0.701	1.33	37.72
+ ID2= 2 (0041):	0.59	0.030	1.92	32.93
ID = 3 (0040):	6.06	0.707	1.33	37.26

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB
NASHYD (0048)
ID= 1 DT= 5.0 min

Area (ha)= 29.16 Curve Number (CN)= 71.4
Ia (mm)= 7.88 # of Linear Res.(N)= 3.00
U.H. Tp(hrs)= 0.68

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.84	1.083	32.35	2.083	13.52	3.08	7.88
0.167	6.84	1.167	32.35	2.167	13.52	3.17	7.88
0.250	7.64	1.250	187.50	2.250	11.94	3.25	7.42
0.333	7.64	1.333	187.50	2.333	11.94	3.33	7.42
0.417	8.72	1.417	39.70	2.417	10.74	3.42	7.02
0.500	8.72	1.500	39.70	2.500	10.74	3.50	7.02
0.583	10.26	1.583	25.04	2.583	9.80	3.58	6.67
0.667	10.26	1.667	25.04	2.667	9.80	3.67	6.67
0.750	12.72	1.750	19.09	2.750	9.04	3.75	6.36
0.833	12.72	1.833	19.09	2.833	9.04	3.83	6.36
0.917	17.39	1.917	15.73	2.917	8.41	3.92	6.08
1.000	17.39	2.000	15.73	3.000	8.41	4.00	6.08

Unit Hyd Qpeak (cms)= 1.638

PEAK FLOW (cms)= 1.142 (i)
TIME TO PEAK (hrs)= 2.167
RUNOFF VOLUME (mm)= 30.781
TOTAL RAINFALL (mm)= 81.310
RUNOFF COEFFICIENT = 0.379

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
STANDHYD (0014)	Area (ha)= 1.87		
ID= 1 DT= 5.0 min	Total Imp(%)= 43.28	Dir. Conn.(%)= 10.00	

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.81	1.06
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	111.65	25.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.84	1.083	32.35	2.083	13.52	3.08	7.88
0.167	6.84	1.167	32.35	2.167	13.52	3.17	7.88
0.250	7.64	1.250	187.50	2.250	11.94	3.25	7.42
0.333	7.64	1.333	187.50	2.333	11.94	3.33	7.42
0.417	8.72	1.417	39.70	2.417	10.74	3.42	7.02
0.500	8.72	1.500	39.70	2.500	10.74	3.50	7.02
0.583	10.26	1.583	25.04	2.583	9.80	3.58	6.67
0.667	10.26	1.667	25.04	2.667	9.80	3.67	6.67
0.750	12.72	1.750	19.09	2.750	9.04	3.75	6.36
0.833	12.72	1.833	19.09	2.833	9.04	3.83	6.36
0.917	17.39	1.917	15.73	2.917	8.41	3.92	6.08
1.000	17.39	2.000	15.73	3.000	8.41	4.00	6.08

				TOTALS
Max.Eff.Inten.	(mm/hr)=	187.50	180.21	
	over (min)	5.00	10.00	
Storage Coeff.	(min)=	2.61 (ii)	6.82 (ii)	
Unit Hyd. Tpeak	(min)=	5.00	10.00	
Unit Hyd. peak	(cms)=	0.29	0.14	
PEAK FLOW	(cms)=	0.10	0.38	0.426 (iii)
TIME TO PEAK	(hrs)=	1.33	1.42	1.33
RUNOFF VOLUME	(mm)=	80.31	49.52	52.60
TOTAL RAINFALL	(mm)=	81.31	81.31	81.31
RUNOFF COEFFICIENT	=	0.99	0.61	0.65

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 78.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
STANDHYD (0021)	Area (ha)= 0.07		
ID= 1 DT= 5.0 min	Total Imp(%)= 48.26	Dir. Conn.(%)= 39.54	

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.03	0.04
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	21.60	5.60
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.84	1.083	32.35	2.083	13.52	3.08	7.88
0.167	6.84	1.167	32.35	2.167	13.52	3.17	7.88
0.250	7.64	1.250	187.50	2.250	11.94	3.25	7.42
0.333	7.64	1.333	187.50	2.333	11.94	3.33	7.42
0.417	8.72	1.417	39.70	2.417	10.74	3.42	7.02
0.500	8.72	1.500	39.70	2.500	10.74	3.50	7.02
0.583	10.26	1.583	25.04	2.583	9.80	3.58	6.67
0.667	10.26	1.667	25.04	2.667	9.80	3.67	6.67
0.750	12.72	1.750	19.09	2.750	9.04	3.75	6.36
0.833	12.72	1.833	19.09	2.833	9.04	3.83	6.36
0.917	17.39	1.917	15.73	2.917	8.41	3.92	6.08
1.000	17.39	2.000	15.73	3.000	8.41	4.00	6.08

				TOTALS
Max.Eff.Inten.	(mm/hr)=	187.50	48.89	
	over (min)	5.00	5.00	
Storage Coeff.	(min)=	0.98 (ii)	2.85 (ii)	
Unit Hyd. Tpeak	(min)=	5.00	5.00	
Unit Hyd. peak	(cms)=	0.34	0.28	
PEAK FLOW	(cms)=	0.01	0.01	0.020 (iii)

TIME TO PEAK	(hrs)=	1.33	1.33	1.33
RUNOFF VOLUME	(mm)=	80.31	21.49	44.71
TOTAL RAINFALL	(mm)=	81.31	81.31	81.31
RUNOFF COEFFICIENT	=	0.99	0.26	0.55

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 52.2 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0016)					
1 + 2 = 3		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
	ID1= 1 (0001):	39.68	0.775	2.92	22.46
	+ ID2= 2 (0014):	1.87	0.426	1.33	52.60
	ID = 3 (0016):	41.55	0.815	2.92	23.81

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)					
3 + 2 = 1		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
	ID1= 3 (0016):	41.55	0.815	2.92	23.81
	+ ID2= 2 (0002):	23.99	0.295	2.67	12.89
	ID = 1 (0016):	65.54	1.107	2.83	19.81

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)					
1 + 2 = 3		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
	ID1= 1 (0016):	65.54	1.107	2.83	19.81
	+ ID2= 2 (0021):	0.07	0.020	1.33	44.71
	ID = 3 (0016):	65.61	1.108	2.83	19.84

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)					
3 + 2 = 1		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
	ID1= 3 (0016):	65.61	1.108	2.83	19.84
	+ ID2= 2 (0025):	100.92	1.374	3.75	19.71
	ID = 1 (0016):	166.53	2.381	3.33	19.76

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)					
1 + 2 = 3		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
	ID1= 1 (0016):	166.53	2.381	3.33	19.76
	+ ID2= 2 (0028):	6.37	0.093	2.42	13.68
	ID = 3 (0016):	172.90	2.454	3.25	19.54

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)					
3 + 2 = 1		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
	ID1= 3 (0016):	172.90	2.454	3.25	19.54
	+ ID2= 2 (0029):	14.85	0.234	2.58	15.75
	ID = 1 (0016):	187.75	2.660	3.17	19.24

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)					
1 + 2 = 3		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
	ID1= 1 (0016):	187.75	2.660	3.17	19.24
	+ ID2= 2 (0030):	1.70	0.063	1.75	21.59
	ID = 3 (0016):	189.45	2.682	3.17	19.26

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016) | 3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0016):	189.45	2.682	3.17	19.26
+ ID2= 2 (0031):	1.80	0.026	2.42	13.36
ID = 1 (0016):	191.25	2.704	3.17	19.20

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016) | 1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0016):	191.25	2.704	3.17	19.20
+ ID2= 2 (0032):	6.70	0.108	3.42	21.13
ID = 3 (0016):	197.95	2.810	3.17	19.27

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016) | 3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0016):	197.95	2.810	3.17	19.27
+ ID2= 2 (0033):	1.13	0.053	1.83	27.44
ID = 1 (0016):	199.08	2.829	3.17	19.32

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016) | 1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0016):	199.08	2.829	3.17	19.32
+ ID2= 2 (0040):	6.06	0.707	1.33	37.26
ID = 3 (0016):	205.14	2.929	3.17	19.85

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016) | 3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0016):	205.14	2.929	3.17	19.85
+ ID2= 2 (0048):	29.16	1.142	2.17	30.78
ID = 1 (0016):	234.30	3.758	2.75	21.21

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB | STANDHYD (0009) | ID= 1 DT= 5.0 min	Area (ha)= 31.06	Total Imp(%)= 53.89	Dir. Conn.(%)= 20.76

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	16.74	14.32
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	455.05	30.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.84	1.083	32.35	2.083	13.52	3.08	7.88
0.167	6.84	1.167	32.35	2.167	13.52	3.17	7.88
0.250	7.64	1.250	187.50	2.250	11.94	3.25	7.42
0.333	7.64	1.333	187.50	2.333	11.94	3.33	7.42
0.417	8.72	1.417	39.70	2.417	10.74	3.42	7.02
0.500	8.72	1.500	39.70	2.500	10.74	3.50	7.02
0.583	10.26	1.583	25.04	2.583	9.80	3.58	6.67
0.667	10.26	1.667	25.04	2.667	9.80	3.67	6.67
0.750	12.72	1.750	19.09	2.750	9.04	3.75	6.36
0.833	12.72	1.833	19.09	2.833	9.04	3.83	6.36
0.917	17.39	1.917	15.73	2.917	8.41	3.92	6.08
1.000	17.39	2.000	15.73	3.000	8.41	4.00	6.08

Max.Eff.Inten.(mm/hr)=	187.50	158.75	
over (min)	5.00	15.00	
Storage Coeff. (min)=	6.07 (ii)	11.01 (ii)	

Unit Hyd. Tpeak (min)=	5.00	15.00	
Unit Hyd. peak (cms)=	0.19	0.09	
			TOTALS
PEAK FLOW (cms)=	2.81	3.45	4.694 (iii)
TIME TO PEAK (hrs)=	1.33	1.50	1.33
RUNOFF VOLUME (mm)=	80.31	42.01	49.96
TOTAL RAINFALL (mm)=	81.31	81.31	81.31
RUNOFF COEFFICIENT =	0.99	0.52	0.61

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 68.5 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB | STANDHYD (0010) | ID= 1 DT= 5.0 min	Area (ha)= 1.32	Total Imp(%)= 55.27	Dir. Conn.(%)= 1.52

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.73	0.59
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	93.81	23.50
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.84	1.083	32.35	2.083	13.52	3.08	7.88
0.167	6.84	1.167	32.35	2.167	13.52	3.17	7.88
0.250	7.64	1.250	187.50	2.250	11.94	3.25	7.42
0.333	7.64	1.333	187.50	2.333	11.94	3.33	7.42
0.417	8.72	1.417	39.70	2.417	10.74	3.42	7.02
0.500	8.72	1.500	39.70	2.500	10.74	3.50	7.02
0.583	10.26	1.583	25.04	2.583	9.80	3.58	6.67
0.667	10.26	1.667	25.04	2.667	9.80	3.67	6.67
0.750	12.72	1.750	19.09	2.750	9.04	3.75	6.36
0.833	12.72	1.833	19.09	2.833	9.04	3.83	6.36
0.917	17.39	1.917	15.73	2.917	8.41	3.92	6.08
1.000	17.39	2.000	15.73	3.000	8.41	4.00	6.08

Max.Eff.Inten.(mm/hr)=	187.50	237.20	
over (min)	5.00	10.00	
Storage Coeff. (min)=	2.35 (ii)	5.98 (ii)	
Unit Hyd. Tpeak (min)=	5.00	10.00	
Unit Hyd. peak (cms)=	0.30	0.15	
			TOTALS
PEAK FLOW (cms)=	0.01	0.29	0.291 (iii)
TIME TO PEAK (hrs)=	1.33	1.42	1.42
RUNOFF VOLUME (mm)=	80.31	47.60	48.10
TOTAL RAINFALL (mm)=	81.31	81.31	81.31
RUNOFF COEFFICIENT =	0.99	0.59	0.59

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 68.8 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB | STANDHYD (0013) | ID= 1 DT= 5.0 min	Area (ha)= 4.16	Total Imp(%)= 50.00	Dir. Conn.(%)= 50.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	2.08	2.08
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	166.53	250.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.84	1.083	32.35	2.083	13.52	3.08	7.88
0.167	6.84	1.167	32.35	2.167	13.52	3.17	7.88
0.250	7.64	1.250	187.50	2.250	11.94	3.25	7.42
0.333	7.64	1.333	187.50	2.333	11.94	3.33	7.42
0.417	8.72	1.417	39.70	2.417	10.74	3.42	7.02
0.500	8.72	1.500	39.70	2.500	10.74	3.50	7.02
0.583	10.26	1.583	25.04	2.583	9.80	3.58	6.67

0.667	10.26	1.667	25.04	2.667	9.80	3.67	6.67
0.750	12.72	1.750	19.09	2.750	9.04	3.75	6.36
0.833	12.72	1.833	19.09	2.833	9.04	3.83	6.36
0.917	17.39	1.917	15.73	2.917	8.41	3.92	6.08
1.000	17.39	2.000	15.73	3.000	8.41	4.00	6.08

Max.Eff.Inten.(mm/hr)=	187.50	28.62	
over (min)	5.00	40.00	
Storage Coeff. (min)=	3.32 (ii)	38.28 (ii)	
Unit Hyd. Tpeak (min)=	5.00	40.00	
Unit Hyd. peak (cms)=	0.26	0.03	
			TOTALS
PEAK FLOW (cms)=	1.04	0.09	1.053 (iii)
TIME TO PEAK (hrs)=	1.33	1.92	1.33
RUNOFF VOLUME (mm)=	80.31	30.55	55.42
TOTAL RAINFALL (mm)=	81.31	81.31	81.31
RUNOFF COEFFICIENT =	0.99	0.38	0.68

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
STANDHYD (0036)	Area (ha)=	2.12	
ID= 1 DT= 5.0 min	Total Imp(%)=	85.04	Dir. Conn.(%)= 0.10

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	1.80	0.32
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	118.88	175.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.84	1.083	32.35	2.083	13.52	3.08	7.88
0.167	6.84	1.167	32.35	2.167	13.52	3.17	7.88
0.250	7.64	1.250	187.50	2.250	11.94	3.25	7.42

0.333	7.64	1.333	187.50	2.333	11.94	3.33	7.42
0.417	8.72	1.417	39.70	2.417	10.74	3.42	7.02
0.500	8.72	1.500	39.70	2.500	10.74	3.50	7.02
0.583	10.26	1.583	25.04	2.583	9.80	3.58	6.67
0.667	10.26	1.667	25.04	2.667	9.80	3.67	6.67
0.750	12.72	1.750	19.09	2.750	9.04	3.75	6.36
0.833	12.72	1.833	19.09	2.833	9.04	3.83	6.36
0.917	17.39	1.917	15.73	2.917	8.41	3.92	6.08
1.000	17.39	2.000	15.73	3.000	8.41	4.00	6.08

Max.Eff.Inten.(mm/hr)=	187.50	1074.21	
over (min)	5.00	10.00	
Storage Coeff. (min)=	2.71 (ii)	9.33 (ii)	
Unit Hyd. Tpeak (min)=	5.00	10.00	
Unit Hyd. peak (cms)=	0.29	0.12	
			TOTALS
PEAK FLOW (cms)=	0.00	0.59	0.589 (iii)
TIME TO PEAK (hrs)=	1.33	1.42	1.42
RUNOFF VOLUME (mm)=	80.31	66.46	66.47
TOTAL RAINFALL (mm)=	81.31	81.31	81.31
RUNOFF COEFFICIENT =	0.99	0.82	0.82

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
STANDHYD (0043)	Area (ha)=	0.13	
ID= 1 DT= 5.0 min	Total Imp(%)=	30.77	Dir. Conn.(%)= 7.69

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.04	0.09
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	0.50
Length	(m)=	29.44	70.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.84	1.083	32.35	2.083	13.52	3.08	7.88
0.167	6.84	1.167	32.35	2.167	13.52	3.17	7.88
0.250	7.64	1.250	187.50	2.250	11.94	3.25	7.42
0.333	7.64	1.333	187.50	2.333	11.94	3.33	7.42
0.417	8.72	1.417	39.70	2.417	10.74	3.42	7.02
0.500	8.72	1.500	39.70	2.500	10.74	3.50	7.02
0.583	10.26	1.583	25.04	2.583	9.80	3.58	6.67
0.667	10.26	1.667	25.04	2.667	9.80	3.67	6.67
0.750	12.72	1.750	19.09	2.750	9.04	3.75	6.36
0.833	12.72	1.833	19.09	2.833	9.04	3.83	6.36
0.917	17.39	1.917	15.73	2.917	8.41	3.92	6.08
1.000	17.39	2.000	15.73	3.000	8.41	4.00	6.08

Max.Eff.Inten.(mm/hr)=	187.50	67.89	
over (min)	5.00	20.00	
Storage Coeff. (min)=	1.17 (ii)	18.65 (ii)	
Unit Hyd. Tpeak (min)=	5.00	20.00	
Unit Hyd. peak (cms)=	0.34	0.06	
			TOTALS
PEAK FLOW (cms)=	0.01	0.01	0.011 (iii)
TIME TO PEAK (hrs)=	1.33	1.58	1.58
RUNOFF VOLUME (mm)=	80.31	36.87	40.14
TOTAL RAINFALL (mm)=	81.31	81.31	81.31
RUNOFF COEFFICIENT =	0.99	0.45	0.49

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
STANDHYD (0044)	Area (ha)=	1.62	
ID= 1 DT= 5.0 min	Total Imp(%)=	48.77	Dir. Conn.(%)= 30.86

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.79	0.83
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	1.40

Length	(m)=	103.92	400.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.84	1.083	32.35	2.083	13.52	3.08	7.88
0.167	6.84	1.167	32.35	2.167	13.52	3.17	7.88
0.250	7.64	1.250	187.50	2.250	11.94	3.25	7.42
0.333	7.64	1.333	187.50	2.333	11.94	3.33	7.42
0.417	8.72	1.417	39.70	2.417	10.74	3.42	7.02
0.500	8.72	1.500	39.70	2.500	10.74	3.50	7.02
0.583	10.26	1.583	25.04	2.583	9.80	3.58	6.67
0.667	10.26	1.667	25.04	2.667	9.80	3.67	6.67
0.750	12.72	1.750	19.09	2.750	9.04	3.75	6.36
0.833	12.72	1.833	19.09	2.833	9.04	3.83	6.36
0.917	17.39	1.917	15.73	2.917	8.41	3.92	6.08
1.000	17.39	2.000	15.73	3.000	8.41	4.00	6.08

Max.Eff.Inten.(mm/hr)=	187.50	40.61	
over (min)	5.00	50.00	
Storage Coeff. (min)=	2.50 (ii)	47.34 (ii)	
Unit Hyd. Tpeak (min)=	5.00	50.00	
Unit Hyd. peak (cms)=	0.29	0.02	
			TOTALS
PEAK FLOW (cms)=	0.26	0.05	0.263 (iii)
TIME TO PEAK (hrs)=	1.33	2.08	1.33
RUNOFF VOLUME (mm)=	80.31	37.14	50.45
TOTAL RAINFALL (mm)=	81.31	81.31	81.31
RUNOFF COEFFICIENT =	0.99	0.46	0.62

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0037)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)

ID1= 1 (0010):	1.32	0.291	1.42	48.10
+ ID2= 2 (0013):	4.16	1.053	1.33	55.42
ID = 3 (0037):	5.48	1.320	1.33	53.66

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0037)

	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0037):	5.48	1.320	1.33	53.66
+ ID2= 2 (0036):	2.12	0.589	1.42	66.47
ID = 1 (0037):	7.60	1.848	1.33	57.23

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0037)

	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0037):	7.60	1.848	1.33	57.23
+ ID2= 2 (0043):	0.13	0.011	1.58	40.14
ID = 3 (0037):	7.73	1.858	1.33	56.95

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0037)

	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0037):	7.73	1.858	1.33	56.95
+ ID2= 2 (0044):	1.62	0.263	1.33	50.45
ID = 1 (0037):	9.35	2.121	1.33	55.82

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0037)

	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)

ID1= 1 (0037):	9.35	2.121	1.33	55.82
+ ID2= 2 (0009):	31.06	4.694	1.33	49.96
ID = 3 (0037):	40.41	6.815	1.33	51.32

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

RESERVOIR (0038) | OVERFLOW IS OFF
IN= 2---> OUT= 1
DT= 5.0 min

OUTFLOW (cms)	STORAGE (ha.m.)	OUTFLOW (cms)	STORAGE (ha.m.)
0.0000	0.0000	0.5076	2.8989
0.0000	0.2023	0.6060	3.2065
0.0353	0.4202	0.7105	3.5196
0.0525	0.6536	0.8207	3.8381
0.0654	0.9026	0.9365	4.1621
0.0843	1.1671	1.0574	4.4915
0.1858	1.7227	1.1833	4.8263
0.2540	2.0086	1.3139	5.1665
0.3309	2.2999	1.4492	5.5122
0.4157	2.5967	1.5890	5.8633

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
INFLOW : ID= 2 (0037)	40.410	6.815	1.33	51.32
OUTFLOW: ID= 1 (0038)	40.410	0.224	4.25	46.27

PEAK FLOW REDUCTION [Qout/Qin](%)= 3.29
TIME SHIFT OF PEAK FLOW (min)=175.00
MAXIMUM STORAGE USED (ha.m.)= 1.8844

CALIB
STANDHYD (0017) | Area (ha)= 1.59
ID= 1 DT= 5.0 min | Total Imp(%)= 58.58 Dir. Conn.(%)= 27.10

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.93	0.66
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	102.96	30.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.84	1.083	32.35	2.083	13.52	3.08	7.88
0.167	6.84	1.167	32.35	2.167	13.52	3.17	7.88
0.250	7.64	1.250	187.50	2.250	11.94	3.25	7.42
0.333	7.64	1.333	187.50	2.333	11.94	3.33	7.42
0.417	8.72	1.417	39.70	2.417	10.74	3.42	7.02
0.500	8.72	1.500	39.70	2.500	10.74	3.50	7.02
0.583	10.26	1.583	25.04	2.583	9.80	3.58	6.67
0.667	10.26	1.667	25.04	2.667	9.80	3.67	6.67
0.750	12.72	1.750	19.09	2.750	9.04	3.75	6.36
0.833	12.72	1.833	19.09	2.833	9.04	3.83	6.36
0.917	17.39	1.917	15.73	2.917	8.41	3.92	6.08
1.000	17.39	2.000	15.73	3.000	8.41	4.00	6.08

Max.Eff.Inten.(mm/hr)=	187.50	156.66	
over (min)	5.00	10.00	
Storage Coeff. (min)=	2.49 (ii)	7.45 (ii)	
Unit Hyd. Tpeak (min)=	5.00	10.00	
Unit Hyd. peak (cms)=	0.29	0.13	
			TOTALS
PEAK FLOW (cms)=	0.22	0.20	0.389 (iii)
TIME TO PEAK (hrs)=	1.33	1.42	1.33
RUNOFF VOLUME (mm)=	80.31	40.77	51.48
TOTAL RAINFALL (mm)=	81.31	81.31	81.31
RUNOFF COEFFICIENT =	0.99	0.50	0.63

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 66.5 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

Junction Command(0018)

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
INFLOW : ID= 2(0017)	1.59	0.39	1.33	51.48
OUTFLOW: ID= 2(0018)	1.59	0.39	1.33	51.48

ADD HYD (0023)

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0016):	234.30	3.758	2.75	21.21
+ ID2= 2 (0018):	1.59	0.389	1.33	51.48
ID = 3 (0023):	235.89	3.793	2.75	21.41

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023)

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0023):	235.89	3.793	2.75	21.41
+ ID2= 2 (0038):	40.41	0.224	4.25	46.27
ID = 1 (0023):	276.30	3.959	2.75	25.05

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

****
** SIMULATION:G - 2-year SCS **
****

READ STORM | Filename: C:\Users\ecomish\AppData\Local\Temp\bd70dd54-263f-4ef7-b852-c48fc040cbd3\d5860a37
Ptotal= 63.16 mm | Comments: 2yr 24hr 15min SCS Type II (MTO) - 15% I

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.00	0.00	6.25	1.14	12.50	9.10	18.75	1.14
0.25	0.69	6.50	1.14	12.75	4.67	19.00	1.14
0.50	0.69	6.75	1.14	13.00	4.67	19.25	1.14
0.75	0.69	7.00	1.14	13.25	3.41	19.50	1.14
1.00	0.69	7.25	1.39	13.50	3.41	19.75	1.14
1.25	0.69	7.50	1.39	13.75	2.65	20.00	1.14
1.50	0.69	7.75	1.39	14.00	2.65	20.25	0.76
1.75	0.69	8.00	1.39	14.25	1.89	20.50	0.76
2.00	0.69	8.25	1.64	14.50	1.89	20.75	0.76
2.25	0.82	8.50	1.64	14.75	1.89	21.00	0.76
2.50	0.82	8.75	1.77	15.00	1.89	21.25	0.76
2.75	0.82	9.00	1.77	15.25	1.89	21.50	0.76

3.00	0.82	9.25	2.02	15.50	1.89	21.75	0.76
3.25	0.82	9.50	2.02	15.75	1.89	22.00	0.76
3.50	0.82	9.75	2.27	16.00	1.89	22.25	0.76
3.75	0.82	10.00	2.27	16.25	1.14	22.50	0.76
4.00	0.82	10.25	2.91	16.50	1.14	22.75	0.76
4.25	1.01	10.50	2.91	16.75	1.14	23.00	0.76
4.50	1.01	10.75	3.92	17.00	1.14	23.25	0.76
4.75	1.01	11.00	3.92	17.25	1.14	23.50	0.76
5.00	1.01	11.25	6.06	17.50	1.14	23.75	0.76
5.25	1.01	11.50	6.06	17.75	1.14	24.00	0.76
5.50	1.01	11.75	18.70	18.00	1.14		
5.75	1.01	12.00	77.31	18.25	1.14		
6.00	1.01	12.25	9.10	18.50	1.14		

CALIB			
NASHYD (0025)	Area (ha)= 100.92	Curve Number (CN)= 55.9	
ID= 1 DT= 5.0 min	Ia (mm)= 7.89	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 1.70		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.01	12.250	77.31	18.33	1.14
0.167	0.00	6.250	1.01	12.333	9.10	18.42	1.14
0.250	0.00	6.333	1.14	12.417	9.10	18.50	1.14
0.333	0.69	6.417	1.14	12.500	9.10	18.58	1.14
0.417	0.69	6.500	1.14	12.583	9.10	18.67	1.14
0.500	0.69	6.583	1.14	12.667	9.10	18.75	1.14
0.583	0.69	6.667	1.14	12.750	9.10	18.83	1.14
0.667	0.69	6.750	1.14	12.833	4.67	18.92	1.14
0.750	0.69	6.833	1.14	12.917	4.67	19.00	1.14
0.833	0.69	6.917	1.14	13.000	4.67	19.08	1.14
0.917	0.69	7.000	1.14	13.083	4.67	19.17	1.14
1.000	0.69	7.083	1.14	13.167	4.67	19.25	1.14
1.083	0.69	7.167	1.14	13.250	4.67	19.33	1.14
1.167	0.69	7.250	1.14	13.333	3.41	19.42	1.14
1.250	0.69	7.333	1.39	13.417	3.41	19.50	1.14
1.333	0.69	7.417	1.39	13.500	3.41	19.58	1.14
1.417	0.69	7.500	1.39	13.583	3.41	19.67	1.14
1.500	0.69	7.583	1.39	13.667	3.41	19.75	1.14
1.583	0.69	7.667	1.39	13.750	3.41	19.83	1.14
1.667	0.69	7.750	1.39	13.833	2.65	19.92	1.14

1.750	0.69	7.833	1.39	13.917	2.65	20.00	1.14
1.833	0.69	7.917	1.39	14.000	2.65	20.08	1.14
1.917	0.69	8.000	1.39	14.083	2.65	20.17	1.14
2.000	0.69	8.083	1.39	14.167	2.65	20.25	1.14
2.083	0.69	8.167	1.39	14.250	2.65	20.33	0.76
2.167	0.69	8.250	1.39	14.333	1.89	20.42	0.76
2.250	0.69	8.333	1.64	14.417	1.89	20.50	0.76
2.333	0.82	8.417	1.64	14.500	1.89	20.58	0.76
2.417	0.82	8.500	1.64	14.583	1.89	20.67	0.76
2.500	0.82	8.583	1.64	14.667	1.89	20.75	0.76
2.583	0.82	8.667	1.64	14.750	1.89	20.83	0.76
2.667	0.82	8.750	1.64	14.833	1.89	20.92	0.76
2.750	0.82	8.833	1.77	14.917	1.89	21.00	0.76
2.833	0.82	8.917	1.77	15.000	1.89	21.08	0.76
2.917	0.82	9.000	1.77	15.083	1.89	21.17	0.76
3.000	0.82	9.083	1.77	15.167	1.89	21.25	0.76
3.083	0.82	9.167	1.77	15.250	1.89	21.33	0.76
3.167	0.82	9.250	1.77	15.333	1.89	21.42	0.76
3.250	0.82	9.333	2.02	15.417	1.89	21.50	0.76
3.333	0.82	9.417	2.02	15.500	1.89	21.58	0.76
3.417	0.82	9.500	2.02	15.583	1.89	21.67	0.76
3.500	0.82	9.583	2.02	15.667	1.89	21.75	0.76
3.583	0.82	9.667	2.02	15.750	1.89	21.83	0.76
3.667	0.82	9.750	2.02	15.833	1.89	21.92	0.76
3.750	0.82	9.833	2.27	15.917	1.89	22.00	0.76
3.833	0.82	9.917	2.27	16.000	1.89	22.08	0.76
3.917	0.82	10.000	2.27	16.083	1.89	22.17	0.76
4.000	0.82	10.083	2.27	16.167	1.89	22.25	0.76
4.083	0.82	10.167	2.27	16.250	1.89	22.33	0.76
4.167	0.82	10.250	2.27	16.333	1.14	22.42	0.76
4.250	0.82	10.333	2.91	16.417	1.14	22.50	0.76
4.333	1.01	10.417	2.91	16.500	1.14	22.58	0.76
4.417	1.01	10.500	2.91	16.583	1.14	22.67	0.76
4.500	1.01	10.583	2.91	16.667	1.14	22.75	0.76
4.583	1.01	10.667	2.91	16.750	1.14	22.83	0.76
4.667	1.01	10.750	2.91	16.833	1.14	22.92	0.76
4.750	1.01	10.833	3.92	16.917	1.14	23.00	0.76
4.833	1.01	10.917	3.92	17.000	1.14	23.08	0.76
4.917	1.01	11.000	3.92	17.083	1.14	23.17	0.76
5.000	1.01	11.083	3.92	17.167	1.14	23.25	0.76
5.083	1.01	11.167	3.92	17.250	1.14	23.33	0.76
5.167	1.01	11.250	3.92	17.333	1.14	23.42	0.76
5.250	1.01	11.333	6.06	17.417	1.14	23.50	0.76
5.333	1.01	11.417	6.06	17.500	1.14	23.58	0.76
5.417	1.01	11.500	6.06	17.583	1.14	23.67	0.76
5.500	1.01	11.583	6.06	17.667	1.14	23.75	0.76
5.583	1.01	11.667	6.06	17.750	1.14	23.83	0.76
5.667	1.01	11.750	6.06	17.833	1.14	23.92	0.76

5.750	1.01	11.833	18.69	17.917	1.14	24.00	0.76
5.833	1.01	11.917	18.70	18.000	1.14	24.08	0.76
5.917	1.01	12.000	18.70	18.083	1.14	24.17	0.76
6.000	1.01	12.083	77.30	18.167	1.14	24.25	0.76
6.083	1.01	12.167	77.31	18.250	1.14		

Unit Hyd Qpeak (cms)= 2.267

PEAK FLOW (cms)= 0.607 (i)
TIME TO PEAK (hrs)= 14.167
RUNOFF VOLUME (mm)= 11.964
TOTAL RAINFALL (mm)= 63.160
RUNOFF COEFFICIENT = 0.189

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0002)	Area (ha)= 23.99	Curve Number (CN)= 44.7	
ID= 1 DT= 5.0 min	Ia (mm)= 10.91	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.97		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.01	12.250	77.31	18.33	1.14
0.167	0.00	6.250	1.01	12.333	9.10	18.42	1.14
0.250	0.00	6.333	1.14	12.417	9.10	18.50	1.14
0.333	0.69	6.417	1.14	12.500	9.10	18.58	1.14
0.417	0.69	6.500	1.14	12.583	9.10	18.67	1.14
0.500	0.69	6.583	1.14	12.667	9.10	18.75	1.14
0.583	0.69	6.667	1.14	12.750	9.10	18.83	1.14
0.667	0.69	6.750	1.14	12.833	4.67	18.92	1.14
0.750	0.69	6.833	1.14	12.917	4.67	19.00	1.14
0.833	0.69	6.917	1.14	13.000	4.67	19.08	1.14
0.917	0.69	7.000	1.14	13.083	4.67	19.17	1.14
1.000	0.69	7.083	1.14	13.167	4.67	19.25	1.14
1.083	0.69	7.167	1.14	13.250	4.67	19.33	1.14
1.167	0.69	7.250	1.14	13.333	3.41	19.42	1.14
1.250	0.69	7.333	1.39	13.417	3.41	19.50	1.14
1.333	0.69	7.417	1.39	13.500	3.41	19.58	1.14
1.417	0.69	7.500	1.39	13.583	3.41	19.67	1.14
1.500	0.69	7.583	1.39	13.667	3.41	19.75	1.14
1.583	0.69	7.667	1.39	13.750	3.41	19.83	1.14

1.667	0.69	7.750	1.39	13.833	2.65	19.92	1.14
1.750	0.69	7.833	1.39	13.917	2.65	20.00	1.14
1.833	0.69	7.917	1.39	14.000	2.65	20.08	1.14
1.917	0.69	8.000	1.39	14.083	2.65	20.17	1.14
2.000	0.69	8.083	1.39	14.167	2.65	20.25	1.14
2.083	0.69	8.167	1.39	14.250	2.65	20.33	0.76
2.167	0.69	8.250	1.39	14.333	1.89	20.42	0.76
2.250	0.69	8.333	1.64	14.417	1.89	20.50	0.76
2.333	0.82	8.417	1.64	14.500	1.89	20.58	0.76
2.417	0.82	8.500	1.64	14.583	1.89	20.67	0.76
2.500	0.82	8.583	1.64	14.667	1.89	20.75	0.76
2.583	0.82	8.667	1.64	14.750	1.89	20.83	0.76
2.667	0.82	8.750	1.64	14.833	1.89	20.92	0.76
2.750	0.82	8.833	1.77	14.917	1.89	21.00	0.76
2.833	0.82	8.917	1.77	15.000	1.89	21.08	0.76
2.917	0.82	9.000	1.77	15.083	1.89	21.17	0.76
3.000	0.82	9.083	1.77	15.167	1.89	21.25	0.76
3.083	0.82	9.167	1.77	15.250	1.89	21.33	0.76
3.167	0.82	9.250	1.77	15.333	1.89	21.42	0.76
3.250	0.82	9.333	2.02	15.417	1.89	21.50	0.76
3.333	0.82	9.417	2.02	15.500	1.89	21.58	0.76
3.417	0.82	9.500	2.02	15.583	1.89	21.67	0.76
3.500	0.82	9.583	2.02	15.667	1.89	21.75	0.76
3.583	0.82	9.667	2.02	15.750	1.89	21.83	0.76
3.667	0.82	9.750	2.02	15.833	1.89	21.92	0.76
3.750	0.82	9.833	2.27	15.917	1.89	22.00	0.76
3.833	0.82	9.917	2.27	16.000	1.89	22.08	0.76
3.917	0.82	10.000	2.27	16.083	1.89	22.17	0.76
4.000	0.82	10.083	2.27	16.167	1.89	22.25	0.76
4.083	0.82	10.167	2.27	16.250	1.89	22.33	0.76
4.167	0.82	10.250	2.27	16.333	1.14	22.42	0.76
4.250	0.82	10.333	2.91	16.417	1.14	22.50	0.76
4.333	1.01	10.417	2.91	16.500	1.14	22.58	0.76
4.417	1.01	10.500	2.91	16.583	1.14	22.67	0.76
4.500	1.01	10.583	2.91	16.667	1.14	22.75	0.76
4.583	1.01	10.667	2.91	16.750	1.14	22.83	0.76
4.667	1.01	10.750	2.91	16.833	1.14	22.92	0.76
4.750	1.01	10.833	3.92	16.917	1.14	23.00	0.76
4.833	1.01	10.917	3.92	17.000	1.14	23.08	0.76
4.917	1.01	11.000	3.92	17.083	1.14	23.17	0.76
5.000	1.01	11.083	3.92	17.167	1.14	23.25	0.76
5.083	1.01	11.167	3.92	17.250	1.14	23.33	0.76
5.167	1.01	11.250	3.92	17.333	1.14	23.42	0.76
5.250	1.01	11.333	6.06	17.417	1.14	23.50	0.76
5.333	1.01	11.417	6.06	17.500	1.14	23.58	0.76
5.417	1.01	11.500	6.06	17.583	1.14	23.67	0.76
5.500	1.01	11.583	6.06	17.667	1.14	23.75	0.76
5.583	1.01	11.667	6.06	17.750	1.14	23.83	0.76

5.667	1.01	11.750	6.06	17.833	1.14	23.92	0.76
5.750	1.01	11.833	18.69	17.917	1.14	24.00	0.76
5.833	1.01	11.917	18.70	18.000	1.14	24.08	0.76
5.917	1.01	12.000	18.70	18.083	1.14	24.17	0.76
6.000	1.01	12.083	77.30	18.167	1.14	24.25	0.76
6.083	1.01	12.167	77.31	18.250	1.14		

Unit Hyd Qpeak (cms)= 0.945

PEAK FLOW (cms)= 0.131 (i)
TIME TO PEAK (hrs)= 13.250
RUNOFF VOLUME (mm)= 7.449
TOTAL RAINFALL (mm)= 63.160
RUNOFF COEFFICIENT = 0.118

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0001)	Area (ha)=	39.68	Curve Number (CN)= 60.7
ID= 1 DT= 5.0 min	Ia (mm)=	8.26	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	1.18	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.01	12.250	77.31	18.33	1.14
0.167	0.00	6.250	1.01	12.333	9.10	18.42	1.14
0.250	0.00	6.333	1.14	12.417	9.10	18.50	1.14
0.333	0.69	6.417	1.14	12.500	9.10	18.58	1.14
0.417	0.69	6.500	1.14	12.583	9.10	18.67	1.14
0.500	0.69	6.583	1.14	12.667	9.10	18.75	1.14
0.583	0.69	6.667	1.14	12.750	9.10	18.83	1.14
0.667	0.69	6.750	1.14	12.833	4.67	18.92	1.14
0.750	0.69	6.833	1.14	12.917	4.67	19.00	1.14
0.833	0.69	6.917	1.14	13.000	4.67	19.08	1.14
0.917	0.69	7.000	1.14	13.083	4.67	19.17	1.14
1.000	0.69	7.083	1.14	13.167	4.67	19.25	1.14
1.083	0.69	7.167	1.14	13.250	4.67	19.33	1.14
1.167	0.69	7.250	1.14	13.333	3.41	19.42	1.14
1.250	0.69	7.333	1.39	13.417	3.41	19.50	1.14
1.333	0.69	7.417	1.39	13.500	3.41	19.58	1.14
1.417	0.69	7.500	1.39	13.583	3.41	19.67	1.14
1.500	0.69	7.583	1.39	13.667	3.41	19.75	1.14

1.583	0.69	7.667	1.39	13.750	3.41	19.83	1.14
1.667	0.69	7.750	1.39	13.833	2.65	19.92	1.14
1.750	0.69	7.833	1.39	13.917	2.65	20.00	1.14
1.833	0.69	7.917	1.39	14.000	2.65	20.08	1.14
1.917	0.69	8.000	1.39	14.083	2.65	20.17	1.14
2.000	0.69	8.083	1.39	14.167	2.65	20.25	1.14
2.083	0.69	8.167	1.39	14.250	2.65	20.33	0.76
2.167	0.69	8.250	1.39	14.333	1.89	20.42	0.76
2.250	0.69	8.333	1.64	14.417	1.89	20.50	0.76
2.333	0.82	8.417	1.64	14.500	1.89	20.58	0.76
2.417	0.82	8.500	1.64	14.583	1.89	20.67	0.76
2.500	0.82	8.583	1.64	14.667	1.89	20.75	0.76
2.583	0.82	8.667	1.64	14.750	1.89	20.83	0.76
2.667	0.82	8.750	1.64	14.833	1.89	20.92	0.76
2.750	0.82	8.833	1.77	14.917	1.89	21.00	0.76
2.833	0.82	8.917	1.77	15.000	1.89	21.08	0.76
2.917	0.82	9.000	1.77	15.083	1.89	21.17	0.76
3.000	0.82	9.083	1.77	15.167	1.89	21.25	0.76
3.083	0.82	9.167	1.77	15.250	1.89	21.33	0.76
3.167	0.82	9.250	1.77	15.333	1.89	21.42	0.76
3.250	0.82	9.333	2.02	15.417	1.89	21.50	0.76
3.333	0.82	9.417	2.02	15.500	1.89	21.58	0.76
3.417	0.82	9.500	2.02	15.583	1.89	21.67	0.76
3.500	0.82	9.583	2.02	15.667	1.89	21.75	0.76
3.583	0.82	9.667	2.02	15.750	1.89	21.83	0.76
3.667	0.82	9.750	2.02	15.833	1.89	21.92	0.76
3.750	0.82	9.833	2.27	15.917	1.89	22.00	0.76
3.833	0.82	9.917	2.27	16.000	1.89	22.08	0.76
3.917	0.82	10.000	2.27	16.083	1.89	22.17	0.76
4.000	0.82	10.083	2.27	16.167	1.89	22.25	0.76
4.083	0.82	10.167	2.27	16.250	1.89	22.33	0.76
4.167	0.82	10.250	2.27	16.333	1.14	22.42	0.76
4.250	0.82	10.333	2.91	16.417	1.14	22.50	0.76
4.333	1.01	10.417	2.91	16.500	1.14	22.58	0.76
4.417	1.01	10.500	2.91	16.583	1.14	22.67	0.76
4.500	1.01	10.583	2.91	16.667	1.14	22.75	0.76
4.583	1.01	10.667	2.91	16.750	1.14	22.83	0.76
4.667	1.01	10.750	2.91	16.833	1.14	22.92	0.76
4.750	1.01	10.833	3.92	16.917	1.14	23.00	0.76
4.833	1.01	10.917	3.92	17.000	1.14	23.08	0.76
4.917	1.01	11.000	3.92	17.083	1.14	23.17	0.76
5.000	1.01	11.083	3.92	17.167	1.14	23.25	0.76
5.083	1.01	11.167	3.92	17.250	1.14	23.33	0.76
5.167	1.01	11.250	3.92	17.333	1.14	23.42	0.76
5.250	1.01	11.333	6.06	17.417	1.14	23.50	0.76
5.333	1.01	11.417	6.06	17.500	1.14	23.58	0.76
5.417	1.01	11.500	6.06	17.583	1.14	23.67	0.76
5.500	1.01	11.583	6.06	17.667	1.14	23.75	0.76

5.583	1.01	11.667	6.06	17.750	1.14	23.83	0.76
5.667	1.01	11.750	6.06	17.833	1.14	23.92	0.76
5.750	1.01	11.833	18.69	17.917	1.14	24.00	0.76
5.833	1.01	11.917	18.70	18.000	1.14	24.08	0.76
5.917	1.01	12.000	18.70	18.083	1.14	24.17	0.76
6.000	1.01	12.083	77.30	18.167	1.14	24.25	0.76
6.083	1.01	12.167	77.31	18.250	1.14		

Unit Hyd Qpeak (cms)= 1.284

PEAK FLOW (cms)= 0.363 (i)
TIME TO PEAK (hrs)= 13.500
RUNOFF VOLUME (mm)= 13.732
TOTAL RAINFALL (mm)= 63.160
RUNOFF COEFFICIENT = 0.217

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0028)	Area (ha)=	6.37	Curve Number (CN)= 50.5
ID= 1 DT= 5.0 min	Ia (mm)=	15.69	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	0.77	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.01	12.250	77.31	18.33	1.14
0.167	0.00	6.250	1.01	12.333	9.10	18.42	1.14
0.250	0.00	6.333	1.14	12.417	9.10	18.50	1.14
0.333	0.69	6.417	1.14	12.500	9.10	18.58	1.14
0.417	0.69	6.500	1.14	12.583	9.10	18.67	1.14
0.500	0.69	6.583	1.14	12.667	9.10	18.75	1.14
0.583	0.69	6.667	1.14	12.750	9.10	18.83	1.14
0.667	0.69	6.750	1.14	12.833	4.67	18.92	1.14
0.750	0.69	6.833	1.14	12.917	4.67	19.00	1.14
0.833	0.69	6.917	1.14	13.000	4.67	19.08	1.14
0.917	0.69	7.000	1.14	13.083	4.67	19.17	1.14
1.000	0.69	7.083	1.14	13.167	4.67	19.25	1.14
1.083	0.69	7.167	1.14	13.250	4.67	19.33	1.14
1.167	0.69	7.250	1.14	13.333	3.41	19.42	1.14
1.250	0.69	7.333	1.39	13.417	3.41	19.50	1.14
1.333	0.69	7.417	1.39	13.500	3.41	19.58	1.14
1.417	0.69	7.500	1.39	13.583	3.41	19.67	1.14

1.500	0.69	7.583	1.39	13.667	3.41	19.75	1.14
1.583	0.69	7.667	1.39	13.750	3.41	19.83	1.14
1.667	0.69	7.750	1.39	13.833	2.65	19.92	1.14
1.750	0.69	7.833	1.39	13.917	2.65	20.00	1.14
1.833	0.69	7.917	1.39	14.000	2.65	20.08	1.14
1.917	0.69	8.000	1.39	14.083	2.65	20.17	1.14
2.000	0.69	8.083	1.39	14.167	2.65	20.25	1.14
2.083	0.69	8.167	1.39	14.250	2.65	20.33	0.76
2.167	0.69	8.250	1.39	14.333	1.89	20.42	0.76
2.250	0.69	8.333	1.64	14.417	1.89	20.50	0.76
2.333	0.82	8.417	1.64	14.500	1.89	20.58	0.76
2.417	0.82	8.500	1.64	14.583	1.89	20.67	0.76
2.500	0.82	8.583	1.64	14.667	1.89	20.75	0.76
2.583	0.82	8.667	1.64	14.750	1.89	20.83	0.76
2.667	0.82	8.750	1.64	14.833	1.89	20.92	0.76
2.750	0.82	8.833	1.77	14.917	1.89	21.00	0.76
2.833	0.82	8.917	1.77	15.000	1.89	21.08	0.76
2.917	0.82	9.000	1.77	15.083	1.89	21.17	0.76
3.000	0.82	9.083	1.77	15.167	1.89	21.25	0.76
3.083	0.82	9.167	1.77	15.250	1.89	21.33	0.76
3.167	0.82	9.250	1.77	15.333	1.89	21.42	0.76
3.250	0.82	9.333	2.02	15.417	1.89	21.50	0.76
3.333	0.82	9.417	2.02	15.500	1.89	21.58	0.76
3.417	0.82	9.500	2.02	15.583	1.89	21.67	0.76
3.500	0.82	9.583	2.02	15.667	1.89	21.75	0.76
3.583	0.82	9.667	2.02	15.750	1.89	21.83	0.76
3.667	0.82	9.750	2.02	15.833	1.89	21.92	0.76
3.750	0.82	9.833	2.27	15.917	1.89	22.00	0.76
3.833	0.82	9.917	2.27	16.000	1.89	22.08	0.76
3.917	0.82	10.000	2.27	16.083	1.89	22.17	0.76
4.000	0.82	10.083	2.27	16.167	1.89	22.25	0.76
4.083	0.82	10.167	2.27	16.250	1.89	22.33	0.76
4.167	0.82	10.250	2.27	16.333	1.14	22.42	0.76
4.250	0.82	10.333	2.91	16.417	1.14	22.50	0.76
4.333	1.01	10.417	2.91	16.500	1.14	22.58	0.76
4.417	1.01	10.500	2.91	16.583	1.14	22.67	0.76
4.500	1.01	10.583	2.91	16.667	1.14	22.75	0.76
4.583	1.01	10.667	2.91	16.750	1.14	22.83	0.76
4.667	1.01	10.750	2.91	16.833	1.14	22.92	0.76
4.750	1.01	10.833	3.92	16.917	1.14	23.00	0.76
4.833	1.01	10.917	3.92	17.000	1.14	23.08	0.76
4.917	1.01	11.000	3.92	17.083	1.14	23.17	0.76
5.000	1.01	11.083	3.92	17.167	1.14	23.25	0.76
5.083	1.01	11.167	3.92	17.250	1.14	23.33	0.76
5.167	1.01	11.250	3.92	17.333	1.14	23.42	0.76
5.250	1.01	11.333	6.06	17.417	1.14	23.50	0.76
5.333	1.01	11.417	6.06	17.500	1.14	23.58	0.76
5.417	1.01	11.500	6.06	17.583	1.14	23.67	0.76

5.500	1.01	11.583	6.06	17.667	1.14	23.75	0.76
5.583	1.01	11.667	6.06	17.750	1.14	23.83	0.76
5.667	1.01	11.750	6.06	17.833	1.14	23.92	0.76
5.750	1.01	11.833	18.69	17.917	1.14	24.00	0.76
5.833	1.01	11.917	18.70	18.000	1.14	24.08	0.76
5.917	1.01	12.000	18.70	18.083	1.14	24.17	0.76
6.000	1.01	12.083	77.30	18.167	1.14	24.25	0.76
6.083	1.01	12.167	77.31	18.250	1.14		

Unit Hyd Qpeak (cms)= 0.316

PEAK FLOW (cms)= 0.040 (i)
TIME TO PEAK (hrs)= 13.083
RUNOFF VOLUME (mm)= 7.596
TOTAL RAINFALL (mm)= 63.160
RUNOFF COEFFICIENT = 0.120

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0029)	Area (ha)=	14.85	Curve Number (CN)= 52.9
ID= 1 DT= 5.0 min	Ia (mm)=	13.28	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	0.89	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.01	12.250	77.31	18.33	1.14
0.167	0.00	6.250	1.01	12.333	9.10	18.42	1.14
0.250	0.00	6.333	1.14	12.417	9.10	18.50	1.14
0.333	0.69	6.417	1.14	12.500	9.10	18.58	1.14
0.417	0.69	6.500	1.14	12.583	9.10	18.67	1.14
0.500	0.69	6.583	1.14	12.667	9.10	18.75	1.14
0.583	0.69	6.667	1.14	12.750	9.10	18.83	1.14
0.667	0.69	6.750	1.14	12.833	4.67	18.92	1.14
0.750	0.69	6.833	1.14	12.917	4.67	19.00	1.14
0.833	0.69	6.917	1.14	13.000	4.67	19.08	1.14
0.917	0.69	7.000	1.14	13.083	4.67	19.17	1.14
1.000	0.69	7.083	1.14	13.167	4.67	19.25	1.14
1.083	0.69	7.167	1.14	13.250	4.67	19.33	1.14
1.167	0.69	7.250	1.14	13.333	3.41	19.42	1.14
1.250	0.69	7.333	1.39	13.417	3.41	19.50	1.14
1.333	0.69	7.417	1.39	13.500	3.41	19.58	1.14

1.417	0.69	7.500	1.39	13.583	3.41	19.67	1.14
1.500	0.69	7.583	1.39	13.667	3.41	19.75	1.14
1.583	0.69	7.667	1.39	13.750	3.41	19.83	1.14
1.667	0.69	7.750	1.39	13.833	2.65	19.92	1.14
1.750	0.69	7.833	1.39	13.917	2.65	20.00	1.14
1.833	0.69	7.917	1.39	14.000	2.65	20.08	1.14
1.917	0.69	8.000	1.39	14.083	2.65	20.17	1.14
2.000	0.69	8.083	1.39	14.167	2.65	20.25	1.14
2.083	0.69	8.167	1.39	14.250	2.65	20.33	0.76
2.167	0.69	8.250	1.39	14.333	1.89	20.42	0.76
2.250	0.69	8.333	1.64	14.417	1.89	20.50	0.76
2.333	0.82	8.417	1.64	14.500	1.89	20.58	0.76
2.417	0.82	8.500	1.64	14.583	1.89	20.67	0.76
2.500	0.82	8.583	1.64	14.667	1.89	20.75	0.76
2.583	0.82	8.667	1.64	14.750	1.89	20.83	0.76
2.667	0.82	8.750	1.64	14.833	1.89	20.92	0.76
2.750	0.82	8.833	1.77	14.917	1.89	21.00	0.76
2.833	0.82	8.917	1.77	15.000	1.89	21.08	0.76
2.917	0.82	9.000	1.77	15.083	1.89	21.17	0.76
3.000	0.82	9.083	1.77	15.167	1.89	21.25	0.76
3.083	0.82	9.167	1.77	15.250	1.89	21.33	0.76
3.167	0.82	9.250	1.77	15.333	1.89	21.42	0.76
3.250	0.82	9.333	2.02	15.417	1.89	21.50	0.76
3.333	0.82	9.417	2.02	15.500	1.89	21.58	0.76
3.417	0.82	9.500	2.02	15.583	1.89	21.67	0.76
3.500	0.82	9.583	2.02	15.667	1.89	21.75	0.76
3.583	0.82	9.667	2.02	15.750	1.89	21.83	0.76
3.667	0.82	9.750	2.02	15.833	1.89	21.92	0.76
3.750	0.82	9.833	2.27	15.917	1.89	22.00	0.76
3.833	0.82	9.917	2.27	16.000	1.89	22.08	0.76
3.917	0.82	10.000	2.27	16.083	1.89	22.17	0.76
4.000	0.82	10.083	2.27	16.167	1.89	22.25	0.76
4.083	0.82	10.167	2.27	16.250	1.89	22.33	0.76
4.167	0.82	10.250	2.27	16.333	1.14	22.42	0.76
4.250	0.82	10.333	2.91	16.417	1.14	22.50	0.76
4.333	1.01	10.417	2.91	16.500	1.14	22.58	0.76
4.417	1.01	10.500	2.91	16.583	1.14	22.67	0.76
4.500	1.01	10.583	2.91	16.667	1.14	22.75	0.76
4.583	1.01	10.667	2.91	16.750	1.14	22.83	0.76
4.667	1.01	10.750	2.91	16.833	1.14	22.92	0.76
4.750	1.01	10.833	3.92	16.917	1.14	23.00	0.76
4.833	1.01	10.917	3.92	17.000	1.14	23.08	0.76
4.917	1.01	11.000	3.92	17.083	1.14	23.17	0.76
5.000	1.01	11.083	3.92	17.167	1.14	23.25	0.76
5.083	1.01	11.167	3.92	17.250	1.14	23.33	0.76
5.167	1.01	11.250	3.92	17.333	1.14	23.42	0.76
5.250	1.01	11.333	6.06	17.417	1.14	23.50	0.76
5.333	1.01	11.417	6.06	17.500	1.14	23.58	0.76

5.417	1.01	11.500	6.06	17.583	1.14	23.67	0.76
5.500	1.01	11.583	6.06	17.667	1.14	23.75	0.76
5.583	1.01	11.667	6.06	17.750	1.14	23.83	0.76
5.667	1.01	11.750	6.06	17.833	1.14	23.92	0.76
5.750	1.01	11.833	18.69	17.917	1.14	24.00	0.76
5.833	1.01	11.917	18.70	18.000	1.14	24.08	0.76
5.917	1.01	12.000	18.70	18.083	1.14	24.17	0.76
6.000	1.01	12.083	77.30	18.167	1.14	24.25	0.76
6.083	1.01	12.167	77.31	18.250	1.14		

Unit Hyd Qpeak (cms)= 0.637

PEAK FLOW (cms)= 0.104 (i)
TIME TO PEAK (hrs)= 13.167
RUNOFF VOLUME (mm)= 9.025
TOTAL RAINFALL (mm)= 63.160
RUNOFF COEFFICIENT = 0.143

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0030)	Area (ha)=	1.70	Curve Number (CN)= 60.5
ID= 1 DT= 5.0 min	Ia (mm)=	9.65	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	0.40	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.01	12.250	77.31	18.33	1.14
0.167	0.00	6.250	1.01	12.333	9.10	18.42	1.14
0.250	0.00	6.333	1.14	12.417	9.10	18.50	1.14
0.333	0.69	6.417	1.14	12.500	9.10	18.58	1.14
0.417	0.69	6.500	1.14	12.583	9.10	18.67	1.14
0.500	0.69	6.583	1.14	12.667	9.10	18.75	1.14
0.583	0.69	6.667	1.14	12.750	9.10	18.83	1.14
0.667	0.69	6.750	1.14	12.833	4.67	18.92	1.14
0.750	0.69	6.833	1.14	12.917	4.67	19.00	1.14
0.833	0.69	6.917	1.14	13.000	4.67	19.08	1.14
0.917	0.69	7.000	1.14	13.083	4.67	19.17	1.14
1.000	0.69	7.083	1.14	13.167	4.67	19.25	1.14
1.083	0.69	7.167	1.14	13.250	4.67	19.33	1.14
1.167	0.69	7.250	1.14	13.333	3.41	19.42	1.14
1.250	0.69	7.333	1.39	13.417	3.41	19.50	1.14

1.333	0.69	7.417	1.39	13.500	3.41	19.58	1.14
1.417	0.69	7.500	1.39	13.583	3.41	19.67	1.14
1.500	0.69	7.583	1.39	13.667	3.41	19.75	1.14
1.583	0.69	7.667	1.39	13.750	3.41	19.83	1.14
1.667	0.69	7.750	1.39	13.833	2.65	19.92	1.14
1.750	0.69	7.833	1.39	13.917	2.65	20.00	1.14
1.833	0.69	7.917	1.39	14.000	2.65	20.08	1.14
1.917	0.69	8.000	1.39	14.083	2.65	20.17	1.14
2.000	0.69	8.083	1.39	14.167	2.65	20.25	1.14
2.083	0.69	8.167	1.39	14.250	2.65	20.33	0.76
2.167	0.69	8.250	1.39	14.333	1.89	20.42	0.76
2.250	0.69	8.333	1.64	14.417	1.89	20.50	0.76
2.333	0.82	8.417	1.64	14.500	1.89	20.58	0.76
2.417	0.82	8.500	1.64	14.583	1.89	20.67	0.76
2.500	0.82	8.583	1.64	14.667	1.89	20.75	0.76
2.583	0.82	8.667	1.64	14.750	1.89	20.83	0.76
2.667	0.82	8.750	1.64	14.833	1.89	20.92	0.76
2.750	0.82	8.833	1.77	14.917	1.89	21.00	0.76
2.833	0.82	8.917	1.77	15.000	1.89	21.08	0.76
2.917	0.82	9.000	1.77	15.083	1.89	21.17	0.76
3.000	0.82	9.083	1.77	15.167	1.89	21.25	0.76
3.083	0.82	9.167	1.77	15.250	1.89	21.33	0.76
3.167	0.82	9.250	1.77	15.333	1.89	21.42	0.76
3.250	0.82	9.333	2.02	15.417	1.89	21.50	0.76
3.333	0.82	9.417	2.02	15.500	1.89	21.58	0.76
3.417	0.82	9.500	2.02	15.583	1.89	21.67	0.76
3.500	0.82	9.583	2.02	15.667	1.89	21.75	0.76
3.583	0.82	9.667	2.02	15.750	1.89	21.83	0.76
3.667	0.82	9.750	2.02	15.833	1.89	21.92	0.76
3.750	0.82	9.833	2.27	15.917	1.89	22.00	0.76
3.833	0.82	9.917	2.27	16.000	1.89	22.08	0.76
3.917	0.82	10.000	2.27	16.083	1.89	22.17	0.76
4.000	0.82	10.083	2.27	16.167	1.89	22.25	0.76
4.083	0.82	10.167	2.27	16.250	1.89	22.33	0.76
4.167	0.82	10.250	2.27	16.333	1.14	22.42	0.76
4.250	0.82	10.333	2.91	16.417	1.14	22.50	0.76
4.333	1.01	10.417	2.91	16.500	1.14	22.58	0.76
4.417	1.01	10.500	2.91	16.583	1.14	22.67	0.76
4.500	1.01	10.583	2.91	16.667	1.14	22.75	0.76
4.583	1.01	10.667	2.91	16.750	1.14	22.83	0.76
4.667	1.01	10.750	2.91	16.833	1.14	22.92	0.76
4.750	1.01	10.833	3.92	16.917	1.14	23.00	0.76
4.833	1.01	10.917	3.92	17.000	1.14	23.08	0.76
4.917	1.01	11.000	3.92	17.083	1.14	23.17	0.76
5.000	1.01	11.083	3.92	17.167	1.14	23.25	0.76
5.083	1.01	11.167	3.92	17.250	1.14	23.33	0.76
5.167	1.01	11.250	3.92	17.333	1.14	23.42	0.76
5.250	1.01	11.333	6.06	17.417	1.14	23.50	0.76

5.333	1.01	11.417	6.06	17.500	1.14	23.58	0.76
5.417	1.01	11.500	6.06	17.583	1.14	23.67	0.76
5.500	1.01	11.583	6.06	17.667	1.14	23.75	0.76
5.583	1.01	11.667	6.06	17.750	1.14	23.83	0.76
5.667	1.01	11.750	6.06	17.833	1.14	23.92	0.76
5.750	1.01	11.833	18.69	17.917	1.14	24.00	0.76
5.833	1.01	11.917	18.70	18.000	1.14	24.08	0.76
5.917	1.01	12.000	18.70	18.083	1.14	24.17	0.76
6.000	1.01	12.083	77.30	18.167	1.14	24.25	0.76
6.083	1.01	12.167	77.31	18.250	1.14		

Unit Hyd Qpeak (cms)= 0.162

PEAK FLOW (cms)= 0.032 (i)
TIME TO PEAK (hrs)= 12.583
RUNOFF VOLUME (mm)= 13.035
TOTAL RAINFALL (mm)= 63.160
RUNOFF COEFFICIENT = 0.206

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB							
NASHYD (0031)	Area (ha)= 1.80	Curve Number (CN)= 50.0					
ID= 1 DT= 5.0 min	Ia (mm)= 16.00	# of Linear Res.(N)= 3.00					
	U.H. Tp(hrs)= 0.76						

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.01	12.250	77.31	18.33	1.14
0.167	0.00	6.250	1.01	12.333	9.10	18.42	1.14
0.250	0.00	6.333	1.14	12.417	9.10	18.50	1.14
0.333	0.69	6.417	1.14	12.500	9.10	18.58	1.14
0.417	0.69	6.500	1.14	12.583	9.10	18.67	1.14
0.500	0.69	6.583	1.14	12.667	9.10	18.75	1.14
0.583	0.69	6.667	1.14	12.750	9.10	18.83	1.14
0.667	0.69	6.750	1.14	12.833	4.67	18.92	1.14
0.750	0.69	6.833	1.14	12.917	4.67	19.00	1.14
0.833	0.69	6.917	1.14	13.000	4.67	19.08	1.14
0.917	0.69	7.000	1.14	13.083	4.67	19.17	1.14
1.000	0.69	7.083	1.14	13.167	4.67	19.25	1.14
1.083	0.69	7.167	1.14	13.250	4.67	19.33	1.14
1.167	0.69	7.250	1.14	13.333	3.41	19.42	1.14
1.250	0.69	7.333	1.39	13.417	3.41	19.50	1.14
1.333	0.69	7.417	1.39	13.500	3.41	19.58	1.14
1.417	0.69	7.500	1.39	13.583	3.41	19.67	1.14
1.500	0.69	7.583	1.39	13.667	3.41	19.75	1.14
1.583	0.69	7.667	1.39	13.750	3.41	19.83	1.14
1.667	0.69	7.750	1.39	13.833	2.65	19.92	1.14
1.750	0.69	7.833	1.39	13.917	2.65	20.00	1.14
1.833	0.69	7.917	1.39	14.000	2.65	20.08	1.14
1.917	0.69	8.000	1.39	14.083	2.65	20.17	1.14
2.000	0.69	8.083	1.39	14.167	2.65	20.25	1.14
2.083	0.69	8.167	1.39	14.250	2.65	20.33	0.76
2.167	0.69	8.250	1.39	14.333	1.89	20.42	0.76
2.250	0.69	8.333	1.64	14.417	1.89	20.50	0.76
2.333	0.82	8.417	1.64	14.500	1.89	20.58	0.76
2.417	0.82	8.500	1.64	14.583	1.89	20.67	0.76
2.500	0.82	8.583	1.64	14.667	1.89	20.75	0.76
2.583	0.82	8.667	1.64	14.750	1.89	20.83	0.76
2.667	0.82	8.750	1.64	14.833	1.89	20.92	0.76
2.750	0.82	8.833	1.77	14.917	1.89	21.00	0.76
2.833	0.82	8.917	1.77	15.000	1.89	21.08	0.76
2.917	0.82	9.000	1.77	15.083	1.89	21.17	0.76
3.000	0.82	9.083	1.77	15.167	1.89	21.25	0.76
3.083	0.82	9.167	1.77	15.250	1.89	21.33	0.76
3.167	0.82	9.250	1.77	15.333	1.89	21.42	0.76
3.250	0.82	9.333	2.02	15.417	1.89	21.50	0.76
3.333	0.82	9.417	2.02	15.500	1.89	21.58	0.76
3.417	0.82	9.500	2.02	15.583	1.89	21.67	0.76
3.500	0.82	9.583	2.02	15.667	1.89	21.75	0.76
3.583	0.82	9.667	2.02	15.750	1.89	21.83	0.76
3.667	0.82	9.750	2.02	15.833	1.89	21.92	0.76
3.750	0.82	9.833	2.27	15.917	1.89	22.00	0.76
3.833	0.82	9.917	2.27	16.000	1.89	22.08	0.76
3.917	0.82	10.000	2.27	16.083	1.89	22.17	0.76
4.000	0.82	10.083	2.27	16.167	1.89	22.25	0.76
4.083	0.82	10.167	2.27	16.250	1.89	22.33	0.76
4.167	0.82	10.250	2.27	16.333	1.14	22.42	0.76
4.250	0.82	10.333	2.91	16.417	1.14	22.50	0.76
4.333	1.01	10.417	2.91	16.500	1.14	22.58	0.76
4.417	1.01	10.500	2.91	16.583	1.14	22.67	0.76
4.500	1.01	10.583	2.91	16.667	1.14	22.75	0.76
4.583	1.01	10.667	2.91	16.750	1.14	22.83	0.76
4.667	1.01	10.750	2.91	16.833	1.14	22.92	0.76
4.750	1.01	10.833	3.92	16.917	1.14	23.00	0.76
4.833	1.01	10.917	3.92	17.000	1.14	23.08	0.76
4.917	1.01	11.000	3.92	17.083	1.14	23.17	0.76
5.000	1.01	11.083	3.92	17.167	1.14	23.25	0.76
5.083	1.01	11.167	3.92	17.250	1.14	23.33	0.76
5.167	1.01	11.250	3.92	17.333	1.14	23.42	0.76

Post-Development VO Output (INT)

5.250	1.01	11.333	6.06	17.417	1.14	23.50	0.76
5.333	1.01	11.417	6.06	17.500	1.14	23.58	0.76
5.417	1.01	11.500	6.06	17.583	1.14	23.67	0.76
5.500	1.01	11.583	6.06	17.667	1.14	23.75	0.76
5.583	1.01	11.667	6.06	17.750	1.14	23.83	0.76
5.667	1.01	11.750	6.06	17.833	1.14	23.92	0.76
5.750	1.01	11.833	18.69	17.917	1.14	24.00	0.76
5.833	1.01	11.917	18.70	18.000	1.14	24.08	0.76
5.917	1.01	12.000	18.70	18.083	1.14	24.17	0.76
6.000	1.01	12.083	77.30	18.167	1.14	24.25	0.76
6.083	1.01	12.167	77.31	18.250	1.14		

Unit Hyd Qpeak (cms)= 0.090

PEAK FLOW (cms)= 0.011 (i)
TIME TO PEAK (hrs)= 13.083
RUNOFF VOLUME (mm)= 7.384
TOTAL RAINFALL (mm)= 63.160
RUNOFF COEFFICIENT = 0.117

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB							
NASHYD (0032)	Area (ha)= 6.70	Curve Number (CN)= 60.0					
ID= 1 DT= 5.0 min	Ia (mm)= 10.00	# of Linear Res.(N)= 3.00					
	U.H. Tp(hrs)= 1.45						

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.01	12.250	77.31	18.33	1.14
0.167	0.00	6.250	1.01	12.333	9.10	18.42	1.14
0.250	0.00	6.333	1.14	12.417	9.10	18.50	1.14
0.333	0.69	6.417	1.14	12.500	9.10	18.58	1.14
0.417	0.69	6.500	1.14	12.583	9.10	18.67	1.14
0.500	0.69	6.583	1.14	12.667	9.10	18.75	1.14
0.583	0.69	6.667	1.14	12.750	9.10	18.83	1.14
0.667	0.69	6.750	1.14	12.833	4.67	18.92	1.14
0.750	0.69	6.833	1.14	12.917	4.67	19.00	1.14
0.833	0.69	6.917	1.14	13.000	4.67	19.08	1.14
0.917	0.69	7.000	1.14	13.083	4.67	19.17	1.14
1.000	0.69	7.083	1.14	13.167	4.67	19.25	1.14
1.083	0.69	7.167	1.14	13.250	4.67	19.33	1.14
1.167	0.69	7.250	1.14	13.333	3.41	19.42	1.14
1.250	0.69	7.333	1.39	13.417	3.41	19.50	1.14
1.333	0.69	7.417	1.39	13.500	3.41	19.58	1.14
1.417	0.69	7.500	1.39	13.583	3.41	19.67	1.14
1.500	0.69	7.583	1.39	13.667	3.41	19.75	1.14
1.583	0.69	7.667	1.39	13.750	3.41	19.83	1.14
1.667	0.69	7.750	1.39	13.833	2.65	19.92	1.14
1.750	0.69	7.833	1.39	13.917	2.65	20.00	1.14
1.833	0.69	7.917	1.39	14.000	2.65	20.08	1.14
1.917	0.69	8.000	1.39	14.083	2.65	20.17	1.14
2.000	0.69	8.083	1.39	14.167	2.65	20.25	1.14
2.083	0.69	8.167	1.39	14.250	2.65	20.33	0.76
2.167	0.69	8.250	1.39	14.333	1.89	20.42	0.76
2.250	0.69	8.333	1.64	14.417	1.89	20.50	0.76
2.333	0.82	8.417	1.64	14.500	1.89	20.58	0.76
2.417	0.82	8.500	1.64	14.583	1.89	20.67	0.76
2.500	0.82	8.583	1.64	14.667	1.89	20.75	0.76
2.583	0.82	8.667	1.64	14.750	1.89	20.83	0.76
2.667	0.82	8.750	1.64	14.833	1.89	20.92	0.76
2.750	0.82	8.833	1.77	14.917	1.89	21.00	0.76
2.833	0.82	8.917	1.77	15.000	1.89	21.08	0.76
2.917	0.82	9.000	1.77	15.083	1.89	21.17	0.76
3.000	0.82	9.083	1.77	15.167	1.89	21.25	0.76
3.083	0.82	9.167	1.77	15.250	1.89	21.33	0.76
3.167	0.82	9.250	1.77	15.333	1.89	21.42	0.76
3.250	0.82	9.333	2.02	15.417	1.89	21.50	0.76
3.333	0.82	9.417	2.02	15.500	1.89	21.58	0.76
3.417	0.82	9.500	2.02	15.583	1.89	21.67	0.76
3.500	0.82	9.583	2.02	15.667	1.89	21.75	0.76
3.583	0.82	9.667	2.02	15.750	1.89	21.83	0.76
3.667	0.82	9.750	2.02	15.833	1.89	21.92	0.76
3.750	0.82	9.833	2.27	15.917	1.89	22.00	0.76
3.833	0.82	9.917	2.27	16.000	1.89	22.08	0.76
3.917	0.82	10.000	2.27	16.083	1.89	22.17	0.76
4.000	0.82	10.083	2.27	16.167	1.89	22.25	0.76
4.083	0.82	10.167	2.27	16.250	1.89	22.33	0.76
4.167	0.82	10.250	2.27	16.333	1.14	22.42	0.76
4.250	0.82	10.333	2.91	16.417	1.14	22.50	0.76
4.333	1.01	10.417	2.91	16.500	1.14	22.58	0.76
4.417	1.01	10.500	2.91	16.583	1.14	22.67	0.76
4.500	1.01	10.583	2.91	16.667	1.14	22.75	0.76
4.583	1.01	10.667	2.91	16.750	1.14	22.83	0.76
4.667	1.01	10.750	2.91	16.833	1.14	22.92	0.76
4.750	1.01	10.833	3.92	16.917	1.14	23.00	0.76
4.833	1.01	10.917	3.92	17.000	1.14	23.08	0.76
4.917	1.01	11.000	3.92	17.083	1.14	23.17	0.76
5.000	1.01	11.083	3.92	17.167	1.14	23.25	0.76
5.083	1.01	11.167	3.92	17.250	1.14	23.33	0.76

5.167	1.01	11.250	3.92	17.333	1.14	23.42	0.76
5.250	1.01	11.333	6.06	17.417	1.14	23.50	0.76
5.333	1.01	11.417	6.06	17.500	1.14	23.58	0.76
5.417	1.01	11.500	6.06	17.583	1.14	23.67	0.76
5.500	1.01	11.583	6.06	17.667	1.14	23.75	0.76
5.583	1.01	11.667	6.06	17.750	1.14	23.83	0.76
5.667	1.01	11.750	6.06	17.833	1.14	23.92	0.76
5.750	1.01	11.833	18.69	17.917	1.14	24.00	0.76
5.833	1.01	11.917	18.70	18.000	1.14	24.08	0.76
5.917	1.01	12.000	18.70	18.083	1.14	24.17	0.76
6.000	1.01	12.083	77.30	18.167	1.14	24.25	0.76
6.083	1.01	12.167	77.31	18.250	1.14		

Unit Hyd Qpeak (cms)= 0.176

PEAK FLOW (cms)= 0.048 (i)
TIME TO PEAK (hrs)= 13.833
RUNOFF VOLUME (mm)= 12.701
TOTAL RAINFALL (mm)= 63.160
RUNOFF COEFFICIENT = 0.201

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0033)	Area	(ha)=	1.13	Curve Number (CN)=	67.4
ID= 1 DT= 5.0 min	Ia	(mm)=	7.88	# of Linear Res.(N)=	3.00
	U.H. Tp(hrs)=		0.43		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.01	12.250	77.31	18.33	1.14
0.167	0.00	6.250	1.01	12.333	9.10	18.42	1.14
0.250	0.00	6.333	1.14	12.417	9.10	18.50	1.14
0.333	0.69	6.417	1.14	12.500	9.10	18.58	1.14
0.417	0.69	6.500	1.14	12.583	9.10	18.67	1.14
0.500	0.69	6.583	1.14	12.667	9.10	18.75	1.14
0.583	0.69	6.667	1.14	12.750	9.10	18.83	1.14
0.667	0.69	6.750	1.14	12.833	4.67	18.92	1.14
0.750	0.69	6.833	1.14	12.917	4.67	19.00	1.14
0.833	0.69	6.917	1.14	13.000	4.67	19.08	1.14
0.917	0.69	7.000	1.14	13.083	4.67	19.17	1.14
1.000	0.69	7.083	1.14	13.167	4.67	19.25	1.14
1.083	0.69	7.167	1.14	13.250	4.67	19.33	1.14
1.167	0.69	7.250	1.14	13.333	3.41	19.42	1.14
1.250	0.69	7.333	1.39	13.417	3.41	19.50	1.14
1.333	0.69	7.417	1.39	13.500	3.41	19.58	1.14
1.417	0.69	7.500	1.39	13.583	3.41	19.67	1.14
1.500	0.69	7.583	1.39	13.667	3.41	19.75	1.14
1.583	0.69	7.667	1.39	13.750	3.41	19.83	1.14
1.667	0.69	7.750	1.39	13.833	2.65	19.92	1.14
1.750	0.69	7.833	1.39	13.917	2.65	20.00	1.14
1.833	0.69	7.917	1.39	14.000	2.65	20.08	1.14
1.917	0.69	8.000	1.39	14.083	2.65	20.17	1.14
2.000	0.69	8.083	1.39	14.167	2.65	20.25	1.14
2.083	0.69	8.167	1.39	14.250	2.65	20.33	0.76
2.167	0.69	8.250	1.39	14.333	1.89	20.42	0.76
2.250	0.69	8.333	1.64	14.417	1.89	20.50	0.76
2.333	0.82	8.417	1.64	14.500	1.89	20.58	0.76
2.417	0.82	8.500	1.64	14.583	1.89	20.67	0.76
2.500	0.82	8.583	1.64	14.667	1.89	20.75	0.76
2.583	0.82	8.667	1.64	14.750	1.89	20.83	0.76
2.667	0.82	8.750	1.64	14.833	1.89	20.92	0.76
2.750	0.82	8.833	1.77	14.917	1.89	21.00	0.76
2.833	0.82	8.917	1.77	15.000	1.89	21.08	0.76
2.917	0.82	9.000	1.77	15.083	1.89	21.17	0.76
3.000	0.82	9.083	1.77	15.167	1.89	21.25	0.76
3.083	0.82	9.167	1.77	15.250	1.89	21.33	0.76
3.167	0.82	9.250	1.77	15.333	1.89	21.42	0.76
3.250	0.82	9.333	2.02	15.417	1.89	21.50	0.76
3.333	0.82	9.417	2.02	15.500	1.89	21.58	0.76
3.417	0.82	9.500	2.02	15.583	1.89	21.67	0.76
3.500	0.82	9.583	2.02	15.667	1.89	21.75	0.76
3.583	0.82	9.667	2.02	15.750	1.89	21.83	0.76
3.667	0.82	9.750	2.02	15.833	1.89	21.92	0.76
3.750	0.82	9.833	2.27	15.917	1.89	22.00	0.76
3.833	0.82	9.917	2.27	16.000	1.89	22.08	0.76
3.917	0.82	10.000	2.27	16.083	1.89	22.17	0.76
4.000	0.82	10.083	2.27	16.167	1.89	22.25	0.76
4.083	0.82	10.167	2.27	16.250	1.89	22.33	0.76
4.167	0.82	10.250	2.27	16.333	1.14	22.42	0.76
4.250	0.82	10.333	2.91	16.417	1.14	22.50	0.76
4.333	1.01	10.417	2.91	16.500	1.14	22.58	0.76
4.417	1.01	10.500	2.91	16.583	1.14	22.67	0.76
4.500	1.01	10.583	2.91	16.667	1.14	22.75	0.76
4.583	1.01	10.667	2.91	16.750	1.14	22.83	0.76
4.667	1.01	10.750	2.91	16.833	1.14	22.92	0.76
4.750	1.01	10.833	3.92	16.917	1.14	23.00	0.76
4.833	1.01	10.917	3.92	17.000	1.14	23.08	0.76
4.917	1.01	11.000	3.92	17.083	1.14	23.17	0.76
5.000	1.01	11.083	3.92	17.167	1.14	23.25	0.76

Post-Development VO Output (INT)

5.083	1.01	11.167	3.92	17.250	1.14	23.33	0.76
5.167	1.01	11.250	3.92	17.333	1.14	23.42	0.76
5.250	1.01	11.333	6.06	17.417	1.14	23.50	0.76
5.333	1.01	11.417	6.06	17.500	1.14	23.58	0.76
5.417	1.01	11.500	6.06	17.583	1.14	23.67	0.76
5.500	1.01	11.583	6.06	17.667	1.14	23.75	0.76
5.583	1.01	11.667	6.06	17.750	1.14	23.83	0.76
5.667	1.01	11.750	6.06	17.833	1.14	23.92	0.76
5.750	1.01	11.833	18.69	17.917	1.14	24.00	0.76
5.833	1.01	11.917	18.70	18.000	1.14	24.08	0.76
5.917	1.01	12.000	18.70	18.083	1.14	24.17	0.76
6.000	1.01	12.083	77.30	18.167	1.14	24.25	0.76
6.083	1.01	12.167	77.31	18.250	1.14		

Unit Hyd Qpeak (cms)= 0.100

PEAK FLOW (cms)= 0.028 (i)
TIME TO PEAK (hrs)= 12.583
RUNOFF VOLUME (mm)= 17.131
TOTAL RAINFALL (mm)= 63.160
RUNOFF COEFFICIENT = 0.271

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0027)	Area	(ha)=	1.38	Curve Number (CN)=	64.1
ID= 1 DT= 5.0 min	Ia	(mm)=	8.51	# of Linear Res.(N)=	3.00
	U.H. Tp(hrs)=		0.39		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.01	12.250	77.31	18.33	1.14
0.167	0.00	6.250	1.01	12.333	9.10	18.42	1.14
0.250	0.00	6.333	1.14	12.417	9.10	18.50	1.14
0.333	0.69	6.417	1.14	12.500	9.10	18.58	1.14
0.417	0.69	6.500	1.14	12.583	9.10	18.67	1.14
0.500	0.69	6.583	1.14	12.667	9.10	18.75	1.14
0.583	0.69	6.667	1.14	12.750	9.10	18.83	1.14
0.667	0.69	6.750	1.14	12.833	4.67	18.92	1.14
0.750	0.69	6.833	1.14	12.917	4.67	19.00	1.14
0.833	0.69	6.917	1.14	13.000	4.67	19.08	1.14
0.917	0.69	7.000	1.14	13.083	4.67	19.17	1.14
1.000	0.69	7.083	1.14	13.167	4.67	19.25	1.14
1.083	0.69	7.167	1.14	13.250	4.67	19.33	1.14
1.167	0.69	7.250	1.14	13.333	3.41	19.42	1.14
1.250	0.69	7.333	1.39	13.417	3.41	19.50	1.14
1.333	0.69	7.417	1.39	13.500	3.41	19.58	1.14
1.417	0.69	7.500	1.39	13.583	3.41	19.67	1.14
1.500	0.69	7.583	1.39	13.667	3.41	19.75	1.14
1.583	0.69	7.667	1.39	13.750	3.41	19.83	1.14
1.667	0.69	7.750	1.39	13.833	2.65	19.92	1.14
1.750	0.69	7.833	1.39	13.917	2.65	20.00	1.14
1.833	0.69	7.917	1.39	14.000	2.65	20.08	1.14
1.917	0.69	8.000	1.39	14.083	2.65	20.17	1.14
2.000	0.69	8.083	1.39	14.167	2.65	20.25	1.14
2.083	0.69	8.167	1.39	14.250	2.65	20.33	0.76
2.167	0.69	8.250	1.39	14.333	1.89	20.42	0.76
2.250	0.69	8.333	1.64	14.417	1.89	20.50	0.76
2.333	0.82	8.417	1.64	14.500	1.89	20.58	0.76
2.417	0.82	8.500	1.64	14.583	1.89	20.67	0.76
2.500	0.82	8.583	1.64	14.667	1.89	20.75	0.76
2.583	0.82	8.667	1.64	14.750	1.89	20.83	0.76
2.667	0.82	8.750	1.64	14.833	1.89	20.92	0.76
2.750	0.82	8.833	1.77	14.917	1.89	21.00	0.76
2.833	0.82	8.917	1.77	15.000	1.89	21.08	0.76
2.917	0.82	9.000	1.77	15.083	1.89	21.17	0.76
3.000	0.82	9.083	1.77	15.167	1.89	21.25	0.76
3.083	0.82	9.167	1.77	15.250	1.89	21.33	0.76
3.167	0.82	9.250	1.77	15.333	1.89	21.42	0.76
3.250	0.82	9.333	2.02	15.417	1.89	21.50	0.76
3.333	0.82	9.417	2.02	15.500	1.89	21.58	0.76
3.417	0.82	9.500	2.02	15.583	1.89	21.67	0.76
3.500	0.82	9.583	2.02	15.667	1.89	21.75	0.76
3.583	0.82	9.667	2.02	15.750	1.89	21.83	0.76
3.667	0.82	9.750	2.02	15.833	1.89	21.92	0.76
3.750	0.82	9.833	2.27	15.917	1.89	22.00	0.76
3.833	0.82	9.917	2.27	16.000	1.89	22.08	0.76
3.917	0.82	10.000	2.27	16.083	1.89	22.17	0.76
4.000	0.82	10.083	2.27	16.167	1.89	22.25	0.76
4.083	0.82	10.167	2.27	16.250	1.89	22.33	0.76
4.167	0.82	10.250	2.27	16.333	1.14	22.42	0.76
4.250	0.82	10.333	2.91	16.417	1.14	22.50	0.76
4.333	1.01	10.417	2.91	16.500	1.14	22.58	0.76
4.417	1.01	10.500	2.91	16.583	1.14	22.67	0.76
4.500	1.01	10.583	2.91	16.667	1.14	22.75	0.76
4.583	1.01	10.667	2.91	16.750	1.14	22.83	0.76
4.667	1.01	10.750	2.91	16.833	1.14	22.92	0.76
4.750	1.01	10.833	3.92	16.917	1.14	23.00	0.76
4.833	1.01	10.917	3.92	17.000	1.14	23.08	0.76
4.917	1.01	11.000	3.92	17.083	1.14	23.17	0.76

Post-Development VO Output (INT)

1.000	0.69	7.083	1.14	13.167	4.67	19.25	1.14
1.083	0.69	7.167	1.14	13.250	4.67	19.33	1.14
1.167	0.69	7.250	1.14	13.333	3.41	19.42	1.14
1.250	0.69	7.333	1.39	13.417	3.41	19.50	1.14
1.333	0.69	7.417	1.39	13.500	3.41	19.58	1.14
1.417	0.69	7.500	1.39	13.583	3.41	19.67	1.14
1.500	0.69	7.583	1.39	13.667	3.41	19.75	1.14
1.583	0.69	7.667	1.39	13.750	3.41	19.83	1.14
1.667	0.69	7.750	1.39	13.833	2.65	19.92	1.14
1.750	0.69	7.833	1.39	13.917	2.65	20.00	1.14
1.833	0.69	7.917	1.39	14.000	2.65	20.08	1.14
1.917	0.69	8.000	1.39	14.083	2.65	20.17	1.14
2.000	0.69	8.083	1.39	14.167	2.65	20.25	1.14
2.083	0.69	8.167	1.39	14.250	2.65	20.33	0.76
2.167	0.69	8.250	1.39	14.333	1.89	20.42	0.76
2.250	0.69	8.333	1.64	14.417	1.89	20.50	0.76
2.333	0.82	8.417	1.64	14.500	1.89	20.58	0.76
2.417	0.82	8.500	1.64	14.583	1.89	20.67	0.76
2.500	0.82	8.583	1.64	14.667	1.89	20.75	0.76
2.583	0.82	8.667	1.64	14.750	1.89	20.83	0.76
2.667	0.82	8.750	1.64	14.833	1.89	20.92	0.76
2.750	0.82	8.833	1.77	14.917	1.89	21.00	0.76
2.833	0.82	8.917	1.77	15.000	1.89	21.08	0.76
2.917	0.82	9.000	1.77	15.083	1.89	21.17	0.76
3.000	0.82	9.083	1.77	15.167	1.89	21.25	0.76
3.083	0.82	9.167	1.77	15.250	1.89	21.33	0.76
3.167	0.82	9.250	1.77	15.333	1.89	21.42	0.76
3.250	0.82	9.333	2.02	15.417	1.89	21.50	0.76
3.333	0.82	9.417	2.02	15.500	1.89	21.58	0.76
3.417	0.82	9.500	2.02	15.583	1.89	21.67	0.76
3.500	0.82	9.583	2.02	15.667	1.89	21.75	0.76
3.583	0.82	9.667	2.02	15.750	1.89	21.83	0.76
3.667	0.82	9.750	2.02	15.833	1.89	21.92	0.76
3.750	0.82	9.833	2.27	15.917	1.89	22.00	0.76
3.833	0.82	9.917	2.27	16.000	1.89	22.08	0.76
3.917	0.82	10.000	2.27	16.083	1.89	22.17	0.76
4.000	0.82	10.083	2.27	16.167	1.89	22.25	0.76
4.083	0.82	10.167	2.27	16.250	1.89	22.33	0.76
4.167	0.82	10.250	2.27	16.333	1.14	22.42	0.76
4.250	0.82	10.333	2.91	16.417	1.14	22.50	0.76
4.333	1.01	10.417	2.91	16.500	1.14	22.58	0.76
4.417	1.01	10.500	2.91	16.583	1.14	22.67	0.76
4.500	1.01	10.583	2.91	16.667	1.14	22.75	0.76
4.583	1.01	10.667	2.91	16.750	1.14	22.83	0.76
4.667	1.01	10.750	2.91	16.833	1.14	22.92	0.76
4.750	1.01	10.833	3.92	16.917	1.14	23.00	0.76
4.833	1.01	10.917	3.92	17.000	1.14	23.08	0.76
4.917	1.01	11.000	3.92	17.083	1.14	23.17	0.76

5.000	1.01	11.083	3.92	17.167	1.14	23.25	0.76
5.083	1.01	11.167	3.92	17.250	1.14	23.33	0.76
5.167	1.01	11.250	3.92	17.333	1.14	23.42	0.76
5.250	1.01	11.333	6.06	17.417	1.14	23.50	0.76
5.333	1.01	11.417	6.06	17.500	1.14	23.58	0.76
5.417	1.01	11.500	6.06	17.583	1.14	23.67	0.76
5.500	1.01	11.583	6.06	17.667	1.14	23.75	0.76
5.583	1.01	11.667	6.06	17.750	1.14	23.83	0.76
5.667	1.01	11.750	6.06	17.833	1.14	23.92	0.76
5.750	1.01	11.833	18.69	17.917	1.14	24.00	0.76
5.833	1.01	11.917	18.70	18.000	1.14	24.08	0.76
5.917	1.01	12.000	18.70	18.083	1.14	24.17	0.76
6.000	1.01	12.083	77.30	18.167	1.14	24.25	0.76
6.083	1.01	12.167	77.31	18.250	1.14		

Unit Hyd Qpeak (cms)= 0.135

PEAK FLOW (cms)= 0.032 (i)
TIME TO PEAK (hrs)= 12.500
RUNOFF VOLUME (mm)= 15.184
TOTAL RAINFALL (mm)= 63.160
RUNOFF COEFFICIENT = 0.240

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0041)	Area (ha)=	0.59	Curve Number (CN)= 71.5
ID= 1 DT= 5.0 min	Ia (mm)=	4.75	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	0.53	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.01	12.250	77.31	18.33	1.14
0.167	0.00	6.250	1.01	12.333	9.10	18.42	1.14
0.250	0.00	6.333	1.14	12.417	9.10	18.50	1.14
0.333	0.69	6.417	1.14	12.500	9.10	18.58	1.14
0.417	0.69	6.500	1.14	12.583	9.10	18.67	1.14
0.500	0.69	6.583	1.14	12.667	9.10	18.75	1.14
0.583	0.69	6.667	1.14	12.750	9.10	18.83	1.14
0.667	0.69	6.750	1.14	12.833	4.67	18.92	1.14
0.750	0.69	6.833	1.14	12.917	4.67	19.00	1.14
0.833	0.69	6.917	1.14	13.000	4.67	19.08	1.14

0.917	0.69	7.000	1.14	13.083	4.67	19.17	1.14
1.000	0.69	7.083	1.14	13.167	4.67	19.25	1.14
1.083	0.69	7.167	1.14	13.250	4.67	19.33	1.14
1.167	0.69	7.250	1.14	13.333	3.41	19.42	1.14
1.250	0.69	7.333	1.39	13.417	3.41	19.50	1.14
1.333	0.69	7.417	1.39	13.500	3.41	19.58	1.14
1.417	0.69	7.500	1.39	13.583	3.41	19.67	1.14
1.500	0.69	7.583	1.39	13.667	3.41	19.75	1.14
1.583	0.69	7.667	1.39	13.750	3.41	19.83	1.14
1.667	0.69	7.750	1.39	13.833	2.65	19.92	1.14
1.750	0.69	7.833	1.39	13.917	2.65	20.00	1.14
1.833	0.69	7.917	1.39	14.000	2.65	20.08	1.14
1.917	0.69	8.000	1.39	14.083	2.65	20.17	1.14
2.000	0.69	8.083	1.39	14.167	2.65	20.25	1.14
2.083	0.69	8.167	1.39	14.250	2.65	20.33	0.76
2.167	0.69	8.250	1.39	14.333	1.89	20.42	0.76
2.250	0.69	8.333	1.64	14.417	1.89	20.50	0.76
2.333	0.82	8.417	1.64	14.500	1.89	20.58	0.76
2.417	0.82	8.500	1.64	14.583	1.89	20.67	0.76
2.500	0.82	8.583	1.64	14.667	1.89	20.75	0.76
2.583	0.82	8.667	1.64	14.750	1.89	20.83	0.76
2.667	0.82	8.750	1.64	14.833	1.89	20.92	0.76
2.750	0.82	8.833	1.77	14.917	1.89	21.00	0.76
2.833	0.82	8.917	1.77	15.000	1.89	21.08	0.76
2.917	0.82	9.000	1.77	15.083	1.89	21.17	0.76
3.000	0.82	9.083	1.77	15.167	1.89	21.25	0.76
3.083	0.82	9.167	1.77	15.250	1.89	21.33	0.76
3.167	0.82	9.250	1.77	15.333	1.89	21.42	0.76
3.250	0.82	9.333	2.02	15.417	1.89	21.50	0.76
3.333	0.82	9.417	2.02	15.500	1.89	21.58	0.76
3.417	0.82	9.500	2.02	15.583	1.89	21.67	0.76
3.500	0.82	9.583	2.02	15.667	1.89	21.75	0.76
3.583	0.82	9.667	2.02	15.750	1.89	21.83	0.76
3.667	0.82	9.750	2.02	15.833	1.89	21.92	0.76
3.750	0.82	9.833	2.27	15.917	1.89	22.00	0.76
3.833	0.82	9.917	2.27	16.000	1.89	22.08	0.76
3.917	0.82	10.000	2.27	16.083	1.89	22.17	0.76
4.000	0.82	10.083	2.27	16.167	1.89	22.25	0.76
4.083	0.82	10.167	2.27	16.250	1.89	22.33	0.76
4.167	0.82	10.250	2.27	16.333	1.14	22.42	0.76
4.250	0.82	10.333	2.91	16.417	1.14	22.50	0.76
4.333	1.01	10.417	2.91	16.500	1.14	22.58	0.76
4.417	1.01	10.500	2.91	16.583	1.14	22.67	0.76
4.500	1.01	10.583	2.91	16.667	1.14	22.75	0.76
4.583	1.01	10.667	2.91	16.750	1.14	22.83	0.76
4.667	1.01	10.750	2.91	16.833	1.14	22.92	0.76
4.750	1.01	10.833	3.92	16.917	1.14	23.00	0.76
4.833	1.01	10.917	3.92	17.000	1.14	23.08	0.76

4.917	1.01	11.000	3.92	17.083	1.14	23.17	0.76
5.000	1.01	11.083	3.92	17.167	1.14	23.25	0.76
5.083	1.01	11.167	3.92	17.250	1.14	23.33	0.76
5.167	1.01	11.250	3.92	17.333	1.14	23.42	0.76
5.250	1.01	11.333	6.06	17.417	1.14	23.50	0.76
5.333	1.01	11.417	6.06	17.500	1.14	23.58	0.76
5.417	1.01	11.500	6.06	17.583	1.14	23.67	0.76
5.500	1.01	11.583	6.06	17.667	1.14	23.75	0.76
5.583	1.01	11.667	6.06	17.750	1.14	23.83	0.76
5.667	1.01	11.750	6.06	17.833	1.14	23.92	0.76
5.750	1.01	11.833	18.69	17.917	1.14	24.00	0.76
5.833	1.01	11.917	18.70	18.000	1.14	24.08	0.76
5.917	1.01	12.000	18.70	18.083	1.14	24.17	0.76
6.000	1.01	12.083	77.30	18.167	1.14	24.25	0.76
6.083	1.01	12.167	77.31	18.250	1.14		

Unit Hyd Qpeak (cms)= 0.043

PEAK FLOW (cms)= 0.016 (i)
TIME TO PEAK (hrs)= 12.667
RUNOFF VOLUME (mm)= 21.340
TOTAL RAINFALL (mm)= 63.160
RUNOFF COEFFICIENT = 0.338

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
STANDHYD (0015)	Area (ha)=	1.93	
ID= 1 DT= 5.0 min	Total Imp(%)=	54.66	Dir. Conn.(%)= 10.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	1.05	0.88
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	0.50	2.00
Length (m)=	113.43	45.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.01	12.250	77.31	18.33	1.14
0.167	0.00	6.250	1.01	12.333	9.10	18.42	1.14
0.250	0.00	6.333	1.14	12.417	9.10	18.50	1.14

0.333	0.69	6.417	1.14	12.500	9.10	18.58	1.14
0.417	0.69	6.500	1.14	12.583	9.10	18.67	1.14
0.500	0.69	6.583	1.14	12.667	9.10	18.75	1.14
0.583	0.69	6.667	1.14	12.750	9.10	18.83	1.14
0.667	0.69	6.750	1.14	12.833	4.67	18.92	1.14
0.750	0.69	6.833	1.14	12.917	4.67	19.00	1.14
0.833	0.69	6.917	1.14	13.000	4.67	19.08	1.14
0.917	0.69	7.000	1.14	13.083	4.67	19.17	1.14
1.000	0.69	7.083	1.14	13.167	4.67	19.25	1.14
1.083	0.69	7.167	1.14	13.250	4.67	19.33	1.14
1.167	0.69	7.250	1.14	13.333	3.41	19.42	1.14
1.250	0.69	7.333	1.39	13.417	3.41	19.50	1.14
1.333	0.69	7.417	1.39	13.500	3.41	19.58	1.14
1.417	0.69	7.500	1.39	13.583	3.41	19.67	1.14
1.500	0.69	7.583	1.39	13.667	3.41	19.75	1.14
1.583	0.69	7.667	1.39	13.750	3.41	19.83	1.14
1.667	0.69	7.750	1.39	13.833	2.65	19.92	1.14
1.750	0.69	7.833	1.39	13.917	2.65	20.00	1.14
1.833	0.69	7.917	1.39	14.000	2.65	20.08	1.14
1.917	0.69	8.000	1.39	14.083	2.65	20.17	1.14
2.000	0.69	8.083	1.39	14.167	2.65	20.25	1.14
2.083	0.69	8.167	1.39	14.250	2.65	20.33	0.76
2.167	0.69	8.250	1.39	14.333	1.89	20.42	0.76
2.250	0.69	8.333	1.64	14.417	1.89	20.50	0.76
2.333	0.82	8.417	1.64	14.500	1.89	20.58	0.76
2.417	0.82	8.500	1.64	14.583	1.89	20.67	0.76
2.500	0.82	8.583	1.64	14.667	1.89	20.75	0.76
2.583	0.82	8.667	1.64	14.750	1.89	20.83	0.76
2.667	0.82	8.750	1.64	14.833	1.89	20.92	0.76
2.750	0.82	8.833	1.77	14.917	1.89	21.00	0.76
2.833	0.82	8.917	1.77	15.000	1.89	21.08	0.76
2.917	0.82	9.000	1.77	15.083	1.89	21.17	0.76
3.000	0.82	9.083	1.77	15.167	1.89	21.25	0.76
3.083	0.82	9.167	1.77	15.250	1.89	21.33	0.76
3.167	0.82	9.250	1.77	15.333	1.89	21.42	0.76
3.250	0.82	9.333	2.02	15.417	1.89	21.50	0.76
3.333	0.82	9.417	2.02	15.500	1.89	21.58	0.76
3.417	0.82	9.500	2.02	15.583	1.89	21.67	0.76
3.500	0.82	9.583	2.02	15.667	1.89	21.75	0.76
3.583	0.82	9.667	2.02	15.750	1.89	21.83	0.76
3.667	0.82	9.750	2.02	15.833	1.89	21.92	0.76
3.750	0.82	9.833	2.27	15.917	1.89	22.00	0.76
3.833	0.82	9.917	2.27	16.000	1.89	22.08	0.76
3.917	0.82	10.000	2.27	16.083	1.89	22.17	0.76
4.000	0.82	10.083	2.27	16.167	1.89	22.25	0.76
4.083	0.82	10.167	2.27	16.250	1.89	22.33	0.76
4.167	0.82	10.250	2.27	16.333	1.14	22.42	0.76
4.250	0.82	10.333	2.91	16.417	1.14	22.50	0.76

4.333	1.01	10.417	2.91	16.500	1.14	22.58	0.76
4.417	1.01	10.500	2.91	16.583	1.14	22.67	0.76
4.500	1.01	10.583	2.91	16.667	1.14	22.75	0.76
4.583	1.01	10.667	2.91	16.750	1.14	22.83	0.76
4.667	1.01	10.750	2.91	16.833	1.14	22.92	0.76
4.750	1.01	10.833	3.92	16.917	1.14	23.00	0.76
4.833	1.01	10.917	3.92	17.000	1.14	23.08	0.76
4.917	1.01	11.000	3.92	17.083	1.14	23.17	0.76
5.000	1.01	11.083	3.92	17.167	1.14	23.25	0.76
5.083	1.01	11.167	3.92	17.250	1.14	23.33	0.76
5.167	1.01	11.250	3.92	17.333	1.14	23.42	0.76
5.250	1.01	11.333	6.06	17.417	1.14	23.50	0.76
5.333	1.01	11.417	6.06	17.500	1.14	23.58	0.76
5.417	1.01	11.500	6.06	17.583	1.14	23.67	0.76
5.500	1.01	11.583	6.06	17.667	1.14	23.75	0.76
5.583	1.01	11.667	6.06	17.750	1.14	23.83	0.76
5.667	1.01	11.750	6.06	17.833	1.14	23.92	0.76
5.750	1.01	11.833	18.69	17.917	1.14	24.00	0.76
5.833	1.01	11.917	18.70	18.000	1.14	24.08	0.76
5.917	1.01	12.000	18.70	18.083	1.14	24.17	0.76
6.000	1.01	12.083	77.30	18.167	1.14	24.25	0.76
6.083	1.01	12.167	77.31	18.250	1.14		

Max.Eff.Inten.(mm/hr)=	77.31	54.72	
over (min)	5.00	15.00	
Storage Coeff. (min)=	3.76 (ii)	13.40 (ii)	
Unit Hyd. Tpeak (min)=	5.00	15.00	
Unit Hyd. peak (cms)=	0.25	0.08	
			TOTALS
PEAK FLOW (cms)=	0.04	0.08	0.104 (iii)
TIME TO PEAK (hrs)=	12.25	12.33	12.25
RUNOFF VOLUME (mm)=	62.16	19.00	23.31
TOTAL RAINFALL (mm)=	63.16	63.16	63.16
RUNOFF COEFFICIENT =	0.98	0.30	0.37

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 49.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB

STANDHYD (0019)	Area (ha)= 2.16
ID= 1 DT= 5.0 min	Total Imp(%)= 54.64 Dir. Conn.(%)= 10.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	1.18	0.98
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	120.00	30.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.01	12.250	77.31	18.33	1.14
0.167	0.00	6.250	1.01	12.333	9.10	18.42	1.14
0.250	0.00	6.333	1.14	12.417	9.10	18.50	1.14
0.333	0.69	6.417	1.14	12.500	9.10	18.58	1.14
0.417	0.69	6.500	1.14	12.583	9.10	18.67	1.14
0.500	0.69	6.583	1.14	12.667	9.10	18.75	1.14
0.583	0.69	6.667	1.14	12.750	9.10	18.83	1.14
0.667	0.69	6.750	1.14	12.833	4.67	18.92	1.14
0.750	0.69	6.833	1.14	12.917	4.67	19.00	1.14
0.833	0.69	6.917	1.14	13.000	4.67	19.08	1.14
0.917	0.69	7.000	1.14	13.083	4.67	19.17	1.14
1.000	0.69	7.083	1.14	13.167	4.67	19.25	1.14
1.083	0.69	7.167	1.14	13.250	4.67	19.33	1.14
1.167	0.69	7.250	1.14	13.333	3.41	19.42	1.14
1.250	0.69	7.333	1.39	13.417	3.41	19.50	1.14
1.333	0.69	7.417	1.39	13.500	3.41	19.58	1.14
1.417	0.69	7.500	1.39	13.583	3.41	19.67	1.14
1.500	0.69	7.583	1.39	13.667	3.41	19.75	1.14
1.583	0.69	7.667	1.39	13.750	3.41	19.83	1.14
1.667	0.69	7.750	1.39	13.833	2.65	19.92	1.14
1.750	0.69	7.833	1.39	13.917	2.65	20.00	1.14
1.833	0.69	7.917	1.39	14.000	2.65	20.08	1.14
1.917	0.69	8.000	1.39	14.083	2.65	20.17	1.14
2.000	0.69	8.083	1.39	14.167	2.65	20.25	1.14
2.083	0.69	8.167	1.39	14.250	2.65	20.33	0.76
2.167	0.69	8.250	1.39	14.333	1.89	20.42	0.76
2.250	0.69	8.333	1.64	14.417	1.89	20.50	0.76
2.333	0.82	8.417	1.64	14.500	1.89	20.58	0.76
2.417	0.82	8.500	1.64	14.583	1.89	20.67	0.76
2.500	0.82	8.583	1.64	14.667	1.89	20.75	0.76
2.583	0.82	8.667	1.64	14.750	1.89	20.83	0.76
2.667	0.82	8.750	1.64	14.833	1.89	20.92	0.76

2.750	0.82	8.833	1.77	14.917	1.89	21.00	0.76
2.833	0.82	8.917	1.77	15.000	1.89	21.08	0.76
2.917	0.82	9.000	1.77	15.083	1.89	21.17	0.76
3.000	0.82	9.083	1.77	15.167	1.89	21.25	0.76
3.083	0.82	9.167	1.77	15.250	1.89	21.33	0.76
3.167	0.82	9.250	1.77	15.333	1.89	21.42	0.76
3.250	0.82	9.333	2.02	15.417	1.89	21.50	0.76
3.333	0.82	9.417	2.02	15.500	1.89	21.58	0.76
3.417	0.82	9.500	2.02	15.583	1.89	21.67	0.76
3.500	0.82	9.583	2.02	15.667	1.89	21.75	0.76
3.583	0.82	9.667	2.02	15.750	1.89	21.83	0.76
3.667	0.82	9.750	2.02	15.833	1.89	21.92	0.76
3.750	0.82	9.833	2.27	15.917	1.89	22.00	0.76
3.833	0.82	9.917	2.27	16.000	1.89	22.08	0.76
3.917	0.82	10.000	2.27	16.083	1.89	22.17	0.76
4.000	0.82	10.083	2.27	16.167	1.89	22.25	0.76
4.083	0.82	10.167	2.27	16.250	1.89	22.33	0.76
4.167	0.82	10.250	2.27	16.333	1.14	22.42	0.76
4.250	0.82	10.333	2.91	16.417	1.14	22.50	0.76
4.333	1.01	10.417	2.91	16.500	1.14	22.58	0.76
4.417	1.01	10.500	2.91	16.583	1.14	22.67	0.76
4.500	1.01	10.583	2.91	16.667	1.14	22.75	0.76
4.583	1.01	10.667	2.91	16.750	1.14	22.83	0.76
4.667	1.01	10.750	2.91	16.833	1.14	22.92	0.76
4.750	1.01	10.833	3.92	16.917	1.14	23.00	0.76
4.833	1.01	10.917	3.92	17.000	1.14	23.08	0.76
4.917	1.01	11.000	3.92	17.083	1.14	23.17	0.76
5.000	1.01	11.083	3.92	17.167	1.14	23.25	0.76
5.083	1.01	11.167	3.92	17.250	1.14	23.33	0.76
5.167	1.01	11.250	3.92	17.333	1.14	23.42	0.76
5.250	1.01	11.333	6.06	17.417	1.14	23.50	0.76
5.333	1.01	11.417	6.06	17.500	1.14	23.58	0.76
5.417	1.01	11.500	6.06	17.583	1.14	23.67	0.76
5.500	1.01	11.583	6.06	17.667	1.14	23.75	0.76
5.583	1.01	11.667	6.06	17.750	1.14	23.83	0.76
5.667	1.01	11.750	6.06	17.833	1.14	23.92	0.76
5.750	1.01	11.833	18.69	17.917	1.14	24.00	0.76
5.833	1.01	11.917	18.70	18.000	1.14	24.08	0.76
5.917	1.01	12.000	18.70	18.083	1.14	24.17	0.76
6.000	1.01	12.083	77.30	18.167	1.14	24.25	0.76
6.083	1.01	12.167	77.31	18.250	1.14		

Max.Eff.Inten.(mm/hr)=	77.31	91.02	
over (min)	5.00	15.00	
Storage Coeff. (min)=	3.89 (ii)	10.06 (ii)	
Unit Hyd. Tpeak (min)=	5.00	15.00	
Unit Hyd. peak (cms)=	0.25	0.10	
			TOTALS

PEAK FLOW (cms)=	0.05	0.16	0.188 (iii)
TIME TO PEAK (hrs)=	12.25	12.33	12.25
RUNOFF VOLUME (mm)=	62.16	31.12	34.22
TOTAL RAINFALL (mm)=	63.16	63.16	63.16
RUNOFF COEFFICIENT =	0.98	0.49	0.54

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0040)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0015):	1.93	0.104	12.25	23.31
+ ID2= 2 (0019):	2.16	0.188	12.25	34.22
ID = 3 (0040):	4.09	0.292	12.25	29.07

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0040)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0040):	4.09	0.292	12.25	29.07
+ ID2= 2 (0027):	1.38	0.032	12.50	15.18
ID = 1 (0040):	5.47	0.310	12.25	25.57

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0040)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0040):	5.47	0.310	12.25	25.57
+ ID2= 2 (0041):	0.59	0.016	12.67	21.34

ID = 3 (0040): 6.06 0.317 12.25 25.16

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB											
NASHYD (0048)	Area (ha)= 29.16	Curve Number (CN)= 71.4									
ID= 1 DT= 5.0 min	Ia (mm)= 7.88	# of Linear Res.(N)= 3.00									
	U.H. Tp(hrs)= 0.68										

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.01	12.250	77.31	18.33	1.14
0.167	0.00	6.250	1.01	12.333	9.10	18.42	1.14
0.250	0.00	6.333	1.14	12.417	9.10	18.50	1.14
0.333	0.69	6.417	1.14	12.500	9.10	18.58	1.14
0.417	0.69	6.500	1.14	12.583	9.10	18.67	1.14
0.500	0.69	6.583	1.14	12.667	9.10	18.75	1.14
0.583	0.69	6.667	1.14	12.750	9.10	18.83	1.14
0.667	0.69	6.750	1.14	12.833	4.67	18.92	1.14
0.750	0.69	6.833	1.14	12.917	4.67	19.00	1.14
0.833	0.69	6.917	1.14	13.000	4.67	19.08	1.14
0.917	0.69	7.000	1.14	13.083	4.67	19.17	1.14
1.000	0.69	7.083	1.14	13.167	4.67	19.25	1.14
1.083	0.69	7.167	1.14	13.250	4.67	19.33	1.14
1.167	0.69	7.250	1.14	13.333	3.41	19.42	1.14
1.250	0.69	7.333	1.39	13.417	3.41	19.50	1.14
1.333	0.69	7.417	1.39	13.500	3.41	19.58	1.14
1.417	0.69	7.500	1.39	13.583	3.41	19.67	1.14
1.500	0.69	7.583	1.39	13.667	3.41	19.75	1.14
1.583	0.69	7.667	1.39	13.750	3.41	19.83	1.14
1.667	0.69	7.750	1.39	13.833	2.65	19.92	1.14
1.750	0.69	7.833	1.39	13.917	2.65	20.00	1.14
1.833	0.69	7.917	1.39	14.000	2.65	20.08	1.14
1.917	0.69	8.000	1.39	14.083	2.65	20.17	1.14
2.000	0.69	8.083	1.39	14.167	2.65	20.25	1.14
2.083	0.69	8.167	1.39	14.250	2.65	20.33	0.76
2.167	0.69	8.250	1.39	14.333	1.89	20.42	0.76
2.250	0.69	8.333	1.64	14.417	1.89	20.50	0.76
2.333	0.82	8.417	1.64	14.500	1.89	20.58	0.76
2.417	0.82	8.500	1.64	14.583	1.89	20.67	0.76
2.500	0.82	8.583	1.64	14.667	1.89	20.75	0.76
2.583	0.82	8.667	1.64	14.750	1.89	20.83	0.76

2.667	0.82	8.750	1.64	14.833	1.89	20.92	0.76
2.750	0.82	8.833	1.77	14.917	1.89	21.00	0.76
2.833	0.82	8.917	1.77	15.000	1.89	21.08	0.76
2.917	0.82	9.000	1.77	15.083	1.89	21.17	0.76
3.000	0.82	9.083	1.77	15.167	1.89	21.25	0.76
3.083	0.82	9.167	1.77	15.250	1.89	21.33	0.76
3.167	0.82	9.250	1.77	15.333	1.89	21.42	0.76
3.250	0.82	9.333	2.02	15.417	1.89	21.50	0.76
3.333	0.82	9.417	2.02	15.500	1.89	21.58	0.76
3.417	0.82	9.500	2.02	15.583	1.89	21.67	0.76
3.500	0.82	9.583	2.02	15.667	1.89	21.75	0.76
3.583	0.82	9.667	2.02	15.750	1.89	21.83	0.76
3.667	0.82	9.750	2.02	15.833	1.89	21.92	0.76
3.750	0.82	9.833	2.27	15.917	1.89	22.00	0.76
3.833	0.82	9.917	2.27	16.000	1.89	22.08	0.76
3.917	0.82	10.000	2.27	16.083	1.89	22.17	0.76
4.000	0.82	10.083	2.27	16.167	1.89	22.25	0.76
4.083	0.82	10.167	2.27	16.250	1.89	22.33	0.76
4.167	0.82	10.250	2.27	16.333	1.14	22.42	0.76
4.250	0.82	10.333	2.91	16.417	1.14	22.50	0.76
4.333	1.01	10.417	2.91	16.500	1.14	22.58	0.76
4.417	1.01	10.500	2.91	16.583	1.14	22.67	0.76
4.500	1.01	10.583	2.91	16.667	1.14	22.75	0.76
4.583	1.01	10.667	2.91	16.750	1.14	22.83	0.76
4.667	1.01	10.750	2.91	16.833	1.14	22.92	0.76
4.750	1.01	10.833	3.92	16.917	1.14	23.00	0.76
4.833	1.01	10.917	3.92	17.000	1.14	23.08	0.76
4.917	1.01	11.000	3.92	17.083	1.14	23.17	0.76
5.000	1.01	11.083	3.92	17.167	1.14	23.25	0.76
5.083	1.01	11.167	3.92	17.250	1.14	23.33	0.76
5.167	1.01	11.250	3.92	17.333	1.14	23.42	0.76
5.250	1.01	11.333	6.06	17.417	1.14	23.50	0.76
5.333	1.01	11.417	6.06	17.500	1.14	23.58	0.76
5.417	1.01	11.500	6.06	17.583	1.14	23.67	0.76
5.500	1.01	11.583	6.06	17.667	1.14	23.75	0.76
5.583	1.01	11.667	6.06	17.750	1.14	23.83	0.76
5.667	1.01	11.750	6.06	17.833	1.14	23.92	0.76
5.750	1.01	11.833	18.69	17.917	1.14	24.00	0.76
5.833	1.01	11.917	18.70	18.000	1.14	24.08	0.76
5.917	1.01	12.000	18.70	18.083	1.14	24.17	0.76
6.000	1.01	12.083	77.30	18.167	1.14	24.25	0.76
6.083	1.01	12.167	77.31	18.250	1.14		

Unit Hyd Qpeak (cms)= 1.638

PEAK FLOW (cms)= 0.588 (i)
TIME TO PEAK (hrs)= 12.917
RUNOFF VOLUME (mm)= 19.461

TOTAL RAINFALL (mm)= 63.160
RUNOFF COEFFICIENT = 0.308

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB											
STANDHYD (0014)	Area (ha)= 1.87										
ID= 1 DT= 5.0 min	Total Imp(%)= 43.28	Dir. Conn.(%)= 10.00									

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.81	1.06
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	111.65	25.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.01	12.250	77.31	18.33	1.14
0.167	0.00	6.250	1.01	12.333	9.10	18.42	1.14
0.250	0.00	6.333	1.14	12.417	9.10	18.50	1.14
0.333	0.69	6.417	1.14	12.500	9.10	18.58	1.14
0.417	0.69	6.500	1.14	12.583	9.10	18.67	1.14
0.500	0.69	6.583	1.14	12.667	9.10	18.75	1.14
0.583	0.69	6.667	1.14	12.750	9.10	18.83	1.14
0.667	0.69	6.750	1.14	12.833	4.67	18.92	1.14
0.750	0.69	6.833	1.14	12.917	4.67	19.00	1.14
0.833	0.69	6.917	1.14	13.000	4.67	19.08	1.14
0.917	0.69	7.000	1.14	13.083	4.67	19.17	1.14
1.000	0.69	7.083	1.14	13.167	4.67	19.25	1.14
1.083	0.69	7.167	1.14	13.250	4.67	19.33	1.14
1.167	0.69	7.250	1.14	13.333	3.41	19.42	1.14
1.250	0.69	7.333	1.39	13.417	3.41	19.50	1.14
1.333	0.69	7.417	1.39	13.500	3.41	19.58	1.14
1.417	0.69	7.500	1.39	13.583	3.41	19.67	1.14
1.500	0.69	7.583	1.39	13.667	3.41	19.75	1.14
1.583	0.69	7.667	1.39	13.750	3.41	19.83	1.14
1.667	0.69	7.750	1.39	13.833	2.65	19.92	1.14
1.750	0.69	7.833	1.39	13.917	2.65	20.00	1.14
1.833	0.69	7.917	1.39	14.000	2.65	20.08	1.14
1.917	0.69	8.000	1.39	14.083	2.65	20.17	1.14
2.000	0.69	8.083	1.39	14.167	2.65	20.25	1.14

2.083	0.69	8.167	1.39	14.250	2.65	20.33	0.76
2.167	0.69	8.250	1.39	14.333	1.89	20.42	0.76
2.250	0.69	8.333	1.64	14.417	1.89	20.50	0.76
2.333	0.82	8.417	1.64	14.500	1.89	20.58	0.76
2.417	0.82	8.500	1.64	14.583	1.89	20.67	0.76
2.500	0.82	8.583	1.64	14.667	1.89	20.75	0.76
2.583	0.82	8.667	1.64	14.750	1.89	20.83	0.76
2.667	0.82	8.750	1.64	14.833	1.89	20.92	0.76
2.750	0.82	8.833	1.77	14.917	1.89	21.00	0.76
2.833	0.82	8.917	1.77	15.000	1.89	21.08	0.76
2.917	0.82	9.000	1.77	15.083	1.89	21.17	0.76
3.000	0.82	9.083	1.77	15.167	1.89	21.25	0.76
3.083	0.82	9.167	1.77	15.250	1.89	21.33	0.76
3.167	0.82	9.250	1.77	15.333	1.89	21.42	0.76
3.250	0.82	9.333	2.02	15.417	1.89	21.50	0.76
3.333	0.82	9.417	2.02	15.500	1.89	21.58	0.76
3.417	0.82	9.500	2.02	15.583	1.89	21.67	0.76
3.500	0.82	9.583	2.02	15.667	1.89	21.75	0.76
3.583	0.82	9.667	2.02	15.750	1.89	21.83	0.76
3.667	0.82	9.750	2.02	15.833	1.89	21.92	0.76
3.750	0.82	9.833	2.27	15.917	1.89	22.00	0.76
3.833	0.82	9.917	2.27	16.000	1.89	22.08	0.76
3.917	0.82	10.000	2.27	16.083	1.89	22.17	0.76
4.000	0.82	10.083	2.27	16.167	1.89	22.25	0.76
4.083	0.82	10.167	2.27	16.250	1.89	22.33	0.76
4.167	0.82	10.250	2.27	16.333	1.14	22.42	0.76
4.250	0.82	10.333	2.91	16.417	1.14	22.50	0.76
4.333	1.01	10.417	2.91	16.500	1.14	22.58	0.76
4.417	1.01	10.500	2.91	16.583	1.14	22.67	0.76
4.500	1.01	10.583	2.91	16.667	1.14	22.75	0.76
4.583	1.01	10.667	2.91	16.750	1.14	22.83	0.76
4.667	1.01	10.750	2.91	16.833	1.14	22.92	0.76
4.750	1.01	10.833	3.92	16.917	1.14	23.00	0.76
4.833	1.01	10.917	3.92	17.000	1.14	23.08	0.76
4.917	1.01	11.000	3.92	17.083	1.14	23.17	0.76
5.000	1.01	11.083	3.92	17.167	1.14	23.25	0.76
5.083	1.01	11.167	3.92	17.250	1.14	23.33	0.76
5.167	1.01	11.250	3.92	17.333	1.14	23.42	0.76
5.250	1.01	11.333	6.06	17.417	1.14	23.50	0.76
5.333	1.01	11.417	6.06	17.500	1.14	23.58	0.76
5.417	1.01	11.500	6.06	17.583	1.14	23.67	0.76
5.500	1.01	11.583	6.06	17.667	1.14	23.75	0.76
5.583	1.01	11.667	6.06	17.750	1.14	23.83	0.76
5.667	1.01	11.750	6.06	17.833	1.14	23.92	0.76
5.750	1.01	11.833	18.69	17.917	1.14	24.00	0.76
5.833	1.01	11.917	18.70	18.000	1.14	24.08	0.76
5.917	1.01	12.000	18.70	18.083	1.14	24.17	0.76
6.000	1.01	12.083	77.30	18.167	1.14	24.25	0.76

6.083	1.01	12.167	77.31	18.250	1.14		

Max.Eff.Inten.(mm/hr)=	77.31	80.63	
over (min)	5.00	10.00	
Storage Coeff. (min)=	3.72 (ii)	9.53 (ii)	
Unit Hyd. Tpeak (min)=	5.00	10.00	
Unit Hyd. peak (cms)=	0.25	0.12	
			TOTALS
PEAK FLOW (cms)=	0.04	0.17	0.209 (iii)
TIME TO PEAK (hrs)=	12.25	12.25	12.25
RUNOFF VOLUME (mm)=	62.16	34.23	37.02
TOTAL RAINFALL (mm)=	63.16	63.16	63.16
RUNOFF COEFFICIENT =	0.98	0.54	0.59

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 78.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
STANDHYD (0021)	Area (ha)= 0.07		
ID= 1 DT= 5.0 min	Total Imp(%)= 48.26	Dir. Conn.(%)= 39.54	
	IMPERVIOUS	PERVIOUS (i)	
Surface Area (ha)=	0.03	0.04	
Dep. Storage (mm)=	1.00	5.00	
Average Slope (%)=	0.50	2.00	
Length (m)=	21.60	5.60	
Mannings n =	0.013	0.250	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.01	12.250	77.31	18.33	1.14
0.167	0.00	6.250	1.01	12.333	9.10	18.42	1.14
0.250	0.00	6.333	1.14	12.417	9.10	18.50	1.14
0.333	0.69	6.417	1.14	12.500	9.10	18.58	1.14
0.417	0.69	6.500	1.14	12.583	9.10	18.67	1.14

0.500	0.69	6.583	1.14	12.667	9.10	18.75	1.14
0.583	0.69	6.667	1.14	12.750	9.10	18.83	1.14
0.667	0.69	6.750	1.14	12.833	4.67	18.92	1.14
0.750	0.69	6.833	1.14	12.917	4.67	19.00	1.14
0.833	0.69	6.917	1.14	13.000	4.67	19.08	1.14
0.917	0.69	7.000	1.14	13.083	4.67	19.17	1.14
1.000	0.69	7.083	1.14	13.167	4.67	19.25	1.14
1.083	0.69	7.167	1.14	13.250	4.67	19.33	1.14
1.167	0.69	7.250	1.14	13.333	3.41	19.42	1.14
1.250	0.69	7.333	1.39	13.417	3.41	19.50	1.14
1.333	0.69	7.417	1.39	13.500	3.41	19.58	1.14
1.417	0.69	7.500	1.39	13.583	3.41	19.67	1.14
1.500	0.69	7.583	1.39	13.667	3.41	19.75	1.14
1.583	0.69	7.667	1.39	13.750	3.41	19.83	1.14
1.667	0.69	7.750	1.39	13.833	2.65	19.92	1.14
1.750	0.69	7.833	1.39	13.917	2.65	20.00	1.14
1.833	0.69	7.917	1.39	14.000	2.65	20.08	1.14
1.917	0.69	8.000	1.39	14.083	2.65	20.17	1.14
2.000	0.69	8.083	1.39	14.167	2.65	20.25	1.14
2.083	0.69	8.167	1.39	14.250	2.65	20.33	0.76
2.167	0.69	8.250	1.39	14.333	1.89	20.42	0.76
2.250	0.69	8.333	1.64	14.417	1.89	20.50	0.76
2.333	0.82	8.417	1.64	14.500	1.89	20.58	0.76
2.417	0.82	8.500	1.64	14.583	1.89	20.67	0.76
2.500	0.82	8.583	1.64	14.667	1.89	20.75	0.76
2.583	0.82	8.667	1.64	14.750	1.89	20.83	0.76
2.667	0.82	8.750	1.64	14.833	1.89	20.92	0.76
2.750	0.82	8.833	1.77	14.917	1.89	21.00	0.76
2.833	0.82	8.917	1.77	15.000	1.89	21.08	0.76
2.917	0.82	9.000	1.77	15.083	1.89	21.17	0.76
3.000	0.82	9.083	1.77	15.167	1.89	21.25	0.76
3.083	0.82	9.167	1.77	15.250	1.89	21.33	0.76
3.167	0.82	9.250	1.77	15.333	1.89	21.42	0.76
3.250	0.82	9.333	2.02	15.417	1.89	21.50	0.76
3.333	0.82	9.417	2.02	15.500	1.89	21.58	0.76
3.417	0.82	9.500	2.02	15.583	1.89	21.67	0.76
3.500	0.82	9.583	2.02	15.667	1.89	21.75	0.76
3.583	0.82	9.667	2.02	15.750	1.89	21.83	0.76
3.667	0.82	9.750	2.02	15.833	1.89	21.92	0.76
3.750	0.82	9.833	2.27	15.917	1.89	22.00	0.76
3.833	0.82	9.917	2.27	16.000	1.89	22.08	0.76
3.917	0.82	10.000	2.27	16.083	1.89	22.17	0.76
4.000	0.82	10.083	2.27	16.167	1.89	22.25	0.76
4.083	0.82	10.167	2.27	16.250	1.89	22.33	0.76
4.167	0.82	10.250	2.27	16.333	1.14	22.42	0.76
4.250	0.82	10.333	2.91	16.417	1.14	22.50	0.76
4.333	1.01	10.417	2.91	16.500	1.14	22.58	0.76
4.417	1.01	10.500	2.91	16.583	1.14	22.67	0.76

4.500	1.01	10.583	2.91	16.667	1.14	22.75	0.76
4.583	1.01	10.667	2.91	16.750	1.14	22.83	0.76
4.667	1.01	10.750	2.91	16.833	1.14	22.92	0.76
4.750	1.01	10.833	3.92	16.917	1.14	23.00	0.76
4.833	1.01	10.917	3.92	17.000	1.14	23.08	0.76
4.917	1.01	11.000	3.92	17.083	1.14	23.17	0.76
5.000	1.01	11.083	3.92	17.167	1.14	23.25	0.76
5.083	1.01	11.167	3.92	17.250	1.14	23.33	0.76
5.167	1.01	11.250	3.92	17.333	1.14	23.42	0.76
5.250	1.01	11.333	6.06	17.417	1.14	23.50	0.76
5.333	1.01	11.417	6.06	17.500	1.14	23.58	0.76
5.417	1.01	11.500	6.06	17.583	1.14	23.67	0.76
5.500	1.01	11.583	6.06	17.667	1.14	23.75	0.76
5.583	1.01	11.667	6.06	17.750	1.14	23.83	0.76
5.667	1.01	11.750	6.06	17.833	1.14	23.92	0.76
5.750	1.01	11.833	18.69	17.917	1.14	24.00	0.76
5.833	1.01	11.917	18.70	18.000	1.14	24.08	0.76
5.917	1.01	12.000	18.70	18.083	1.14	24.17	0.76
6.000	1.01	12.083	77.30	18.167	1.14	24.25	0.76
6.083	1.01	12.167	77.31	18.250	1.14		

Max.Eff.Inten.(mm/hr)=	77.31	22.74	
over (min)	5.00	5.00	
Storage Coeff. (min)=	1.39 (ii)	4.07 (ii)	
Unit Hyd. Tpeak (min)=	5.00	5.00	
Unit Hyd. peak (cms)=	0.33	0.24	
			TOTALS
PEAK FLOW (cms)=	0.01	0.00	0.008 (iii)
TIME TO PEAK (hrs)=	12.25	12.25	12.25
RUNOFF VOLUME (mm)=	62.16	13.44	30.77
TOTAL RAINFALL (mm)=	63.16	63.16	63.16
RUNOFF COEFFICIENT =	0.98	0.21	0.49

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 52.2 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0016)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0001):	39.68	0.363	13.50	13.73

+ ID2= 2 (0014):	1.87	0.209	12.25	37.02
ID = 3 (0016):	41.55	0.379	13.50	14.78

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0016):	41.55	0.379	13.50	14.78
+ ID2= 2 (0002):	23.99	0.131	13.25	7.45
ID = 1 (0016):	65.54	0.508	13.42	12.10

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0016):	65.54	0.508	13.42	12.10
+ ID2= 2 (0021):	0.07	0.008	12.25	30.77
ID = 3 (0016):	65.61	0.509	13.42	12.12

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0016):	65.61	0.509	13.42	12.12
+ ID2= 2 (0025):	100.92	0.607	14.17	11.96
ID = 1 (0016):	166.53	1.070	13.75	12.02

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0016):	166.53	1.070	13.75	12.02

+ ID2= 2 (0028):	6.37	0.040	13.08	7.60
ID = 3 (0016):	172.90	1.101	13.75	11.86

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0016):	172.90	1.101	13.75	11.86
+ ID2= 2 (0029):	14.85	0.104	13.17	9.03
ID = 1 (0016):	187.75	1.191	13.67	11.64

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0016):	187.75	1.191	13.67	11.64
+ ID2= 2 (0030):	1.70	0.032	12.58	13.04
ID = 3 (0016):	189.45	1.200	13.67	11.65

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0016):	189.45	1.200	13.67	11.65
+ ID2= 2 (0031):	1.80	0.011	13.08	7.38
ID = 1 (0016):	191.25	1.208	13.67	11.61

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0016):	191.25	1.208	13.67	11.61

+ ID2= 2 (0032):	6.70	0.048	13.83	12.70
ID = 3 (0016):	197.95	1.256	13.67	11.65

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0016):	197.95	1.256	13.67	11.65
+ ID2= 2 (0033):	1.13	0.028	12.58	17.13
ID = 1 (0016):	199.08	1.264	13.67	11.68

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0016):	199.08	1.264	13.67	11.68
+ ID2= 2 (0040):	6.06	0.317	12.25	25.16
ID = 3 (0016):	205.14	1.305	13.58	12.08

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0016):	205.14	1.305	13.58	12.08
+ ID2= 2 (0048):	29.16	0.588	12.92	19.46
ID = 1 (0016):	234.30	1.772	13.25	12.99

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB			
STANDHYD (0009)	Area (ha)=	31.06	
ID= 1 DT= 5.0 min	Total Imp(%)=	53.89	Dir. Conn.(%)= 20.76

	IMPERVIOUS	PERVIOUS (i)

Surface Area	(ha)=	16.74	14.32
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	455.05	30.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.01	12.250	77.31	18.33	1.14
0.167	0.00	6.250	1.01	12.333	9.10	18.42	1.14
0.250	0.00	6.333	1.14	12.417	9.10	18.50	1.14
0.333	0.69	6.417	1.14	12.500	9.10	18.58	1.14
0.417	0.69	6.500	1.14	12.583	9.10	18.67	1.14
0.500	0.69	6.583	1.14	12.667	9.10	18.75	1.14
0.583	0.69	6.667	1.14	12.750	9.10	18.83	1.14
0.667	0.69	6.750	1.14	12.833	4.67	18.92	1.14
0.750	0.69	6.833	1.14	12.917	4.67	19.00	1.14
0.833	0.69	6.917	1.14	13.000	4.67	19.08	1.14
0.917	0.69	7.000	1.14	13.083	4.67	19.17	1.14
1.000	0.69	7.083	1.14	13.167	4.67	19.25	1.14
1.083	0.69	7.167	1.14	13.250	4.67	19.33	1.14
1.167	0.69	7.250	1.14	13.333	3.41	19.42	1.14
1.250	0.69	7.333	1.39	13.417	3.41	19.50	1.14
1.333	0.69	7.417	1.39	13.500	3.41	19.58	1.14
1.417	0.69	7.500	1.39	13.583	3.41	19.67	1.14
1.500	0.69	7.583	1.39	13.667	3.41	19.75	1.14
1.583	0.69	7.667	1.39	13.750	3.41	19.83	1.14
1.667	0.69	7.750	1.39	13.833	2.65	19.92	1.14
1.750	0.69	7.833	1.39	13.917	2.65	20.00	1.14
1.833	0.69	7.917	1.39	14.000	2.65	20.08	1.14
1.917	0.69	8.000	1.39	14.083	2.65	20.17	1.14
2.000	0.69	8.083	1.39	14.167	2.65	20.25	1.14
2.083	0.69	8.167	1.39	14.250	2.65	20.33	0.76
2.167	0.69	8.250	1.39	14.333	1.89	20.42	0.76
2.250	0.69	8.333	1.64	14.417	1.89	20.50	0.76
2.333	0.82	8.417	1.64	14.500	1.89	20.58	0.76
2.417	0.82	8.500	1.64	14.583	1.89	20.67	0.76
2.500	0.82	8.583	1.64	14.667	1.89	20.75	0.76
2.583	0.82	8.667	1.64	14.750	1.89	20.83	0.76
2.667	0.82	8.750	1.64	14.833	1.89	20.92	0.76
2.750	0.82	8.833	1.77	14.917	1.89	21.00	0.76
2.833	0.82	8.917	1.77	15.000	1.89	21.08	0.76
2.917	0.82	9.000	1.77	15.083	1.89	21.17	0.76
3.000	0.82	9.083	1.77	15.167	1.89	21.25	0.76

3.083	0.82	9.167	1.77	15.250	1.89	21.33	0.76
3.167	0.82	9.250	1.77	15.333	1.89	21.42	0.76
3.250	0.82	9.333	2.02	15.417	1.89	21.50	0.76
3.333	0.82	9.417	2.02	15.500	1.89	21.58	0.76
3.417	0.82	9.500	2.02	15.583	1.89	21.67	0.76
3.500	0.82	9.583	2.02	15.667	1.89	21.75	0.76
3.583	0.82	9.667	2.02	15.750	1.89	21.83	0.76
3.667	0.82	9.750	2.02	15.833	1.89	21.92	0.76
3.750	0.82	9.833	2.27	15.917	1.89	22.00	0.76
3.833	0.82	9.917	2.27	16.000	1.89	22.08	0.76
3.917	0.82	10.000	2.27	16.083	1.89	22.17	0.76
4.000	0.82	10.083	2.27	16.167	1.89	22.25	0.76
4.083	0.82	10.167	2.27	16.250	1.89	22.33	0.76
4.167	0.82	10.250	2.27	16.333	1.14	22.42	0.76
4.250	0.82	10.333	2.91	16.417	1.14	22.50	0.76
4.333	1.01	10.417	2.91	16.500	1.14	22.58	0.76
4.417	1.01	10.500	2.91	16.583	1.14	22.67	0.76
4.500	1.01	10.583	2.91	16.667	1.14	22.75	0.76
4.583	1.01	10.667	2.91	16.750	1.14	22.83	0.76
4.667	1.01	10.750	2.91	16.833	1.14	22.92	0.76
4.750	1.01	10.833	3.92	16.917	1.14	23.00	0.76
4.833	1.01	10.917	3.92	17.000	1.14	23.08	0.76
4.917	1.01	11.000	3.92	17.083	1.14	23.17	0.76
5.000	1.01	11.083	3.92	17.167	1.14	23.25	0.76
5.083	1.01	11.167	3.92	17.250	1.14	23.33	0.76
5.167	1.01	11.250	3.92	17.333	1.14	23.42	0.76
5.250	1.01	11.333	6.06	17.417	1.14	23.50	0.76
5.333	1.01	11.417	6.06	17.500	1.14	23.58	0.76
5.417	1.01	11.500	6.06	17.583	1.14	23.67	0.76
5.500	1.01	11.583	6.06	17.667	1.14	23.75	0.76
5.583	1.01	11.667	6.06	17.750	1.14	23.83	0.76
5.667	1.01	11.750	6.06	17.833	1.14	23.92	0.76
5.750	1.01	11.833	18.69	17.917	1.14	24.00	0.76
5.833	1.01	11.917	18.70	18.000	1.14	24.08	0.76
5.917	1.01	12.000	18.70	18.083	1.14	24.17	0.76
6.000	1.01	12.083	77.30	18.167	1.14	24.25	0.76
6.083	1.01	12.167	77.31	18.250	1.14		

Max.Eff.Inten.(mm/hr)=		77.31	71.86
over (min)		10.00	20.00
Storage Coeff. (min)=		8.65 (ii)	15.43 (ii)
Unit Hyd. Tpeak (min)=		10.00	20.00
Unit Hyd. peak (cms)=		0.12	0.07
			TOTALS
PEAK FLOW	(cms)=	1.10	1.48 2.344 (iii)
TIME TO PEAK	(hrs)=	12.25	12.42 12.33
RUNOFF VOLUME	(mm)=	62.16	28.33 35.35
TOTAL RAINFALL	(mm)=	63.16	63.16 63.16

RUNOFF COEFFICIENT = 0.98 0.45 0.56

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 68.5 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
STANDHYD (0010)	Area (ha)=	1.32			
ID= 1 DT= 5.0 min	Total Imp(%)=	55.27	Dir. Conn.(%)=	1.52	

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.73	0.59
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	93.81	23.50
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.01	12.250	77.31	18.33	1.14
0.167	0.00	6.250	1.01	12.333	9.10	18.42	1.14
0.250	0.00	6.333	1.14	12.417	9.10	18.50	1.14
0.333	0.69	6.417	1.14	12.500	9.10	18.58	1.14
0.417	0.69	6.500	1.14	12.583	9.10	18.67	1.14
0.500	0.69	6.583	1.14	12.667	9.10	18.75	1.14
0.583	0.69	6.667	1.14	12.750	9.10	18.83	1.14
0.667	0.69	6.750	1.14	12.833	4.67	18.92	1.14
0.750	0.69	6.833	1.14	12.917	4.67	19.00	1.14
0.833	0.69	6.917	1.14	13.000	4.67	19.08	1.14
0.917	0.69	7.000	1.14	13.083	4.67	19.17	1.14
1.000	0.69	7.083	1.14	13.167	4.67	19.25	1.14
1.083	0.69	7.167	1.14	13.250	4.67	19.33	1.14
1.167	0.69	7.250	1.14	13.333	3.41	19.42	1.14
1.250	0.69	7.333	1.39	13.417	3.41	19.50	1.14
1.333	0.69	7.417	1.39	13.500	3.41	19.58	1.14
1.417	0.69	7.500	1.39	13.583	3.41	19.67	1.14
1.500	0.69	7.583	1.39	13.667	3.41	19.75	1.14
1.583	0.69	7.667	1.39	13.750	3.41	19.83	1.14
1.667	0.69	7.750	1.39	13.833	2.65	19.92	1.14

1.750	0.69	7.833	1.39	13.917	2.65	20.00	1.14
1.833	0.69	7.917	1.39	14.000	2.65	20.08	1.14
1.917	0.69	8.000	1.39	14.083	2.65	20.17	1.14
2.000	0.69	8.083	1.39	14.167	2.65	20.25	1.14
2.083	0.69	8.167	1.39	14.250	2.65	20.33	0.76
2.167	0.69	8.250	1.39	14.333	1.89	20.42	0.76
2.250	0.69	8.333	1.64	14.417	1.89	20.50	0.76
2.333	0.82	8.417	1.64	14.500	1.89	20.58	0.76
2.417	0.82	8.500	1.64	14.583	1.89	20.67	0.76
2.500	0.82	8.583	1.64	14.667	1.89	20.75	0.76
2.583	0.82	8.667	1.64	14.750	1.89	20.83	0.76
2.667	0.82	8.750	1.64	14.833	1.89	20.92	0.76
2.750	0.82	8.833	1.77	14.917	1.89	21.00	0.76
2.833	0.82	8.917	1.77	15.000	1.89	21.08	0.76
2.917	0.82	9.000	1.77	15.083	1.89	21.17	0.76
3.000	0.82	9.083	1.77	15.167	1.89	21.25	0.76
3.083	0.82	9.167	1.77	15.250	1.89	21.33	0.76
3.167	0.82	9.250	1.77	15.333	1.89	21.42	0.76
3.250	0.82	9.333	2.02	15.417	1.89	21.50	0.76
3.333	0.82	9.417	2.02	15.500	1.89	21.58	0.76
3.417	0.82	9.500	2.02	15.583	1.89	21.67	0.76
3.500	0.82	9.583	2.02	15.667	1.89	21.75	0.76
3.583	0.82	9.667	2.02	15.750	1.89	21.83	0.76
3.667	0.82	9.750	2.02	15.833	1.89	21.92	0.76
3.750	0.82	9.833	2.27	15.917	1.89	22.00	0.76
3.833	0.82	9.917	2.27	16.000	1.89	22.08	0.76
3.917	0.82	10.000	2.27	16.083	1.89	22.17	0.76
4.000	0.82	10.083	2.27	16.167	1.89	22.25	0.76
4.083	0.82	10.167	2.27	16.250	1.89	22.33	0.76
4.167	0.82	10.250	2.27	16.333	1.14	22.42	0.76
4.250	0.82	10.333	2.91	16.417	1.14	22.50	0.76
4.333	1.01	10.417	2.91	16.500	1.14	22.58	0.76
4.417	1.01	10.500	2.91	16.583	1.14	22.67	0.76
4.500	1.01	10.583	2.91	16.667	1.14	22.75	0.76
4.583	1.01	10.667	2.91	16.750	1.14	22.83	0.76
4.667	1.01	10.750	2.91	16.833	1.14	22.92	0.76
4.750	1.01	10.833	3.92	16.917	1.14	23.00	0.76
4.833	1.01	10.917	3.92	17.000	1.14	23.08	0.76
4.917	1.01	11.000	3.92	17.083	1.14	23.17	0.76
5.000	1.01	11.083	3.92	17.167	1.14	23.25	0.76
5.083	1.01	11.167	3.92	17.250	1.14	23.33	0.76
5.167	1.01	11.250	3.92	17.333	1.14	23.42	0.76
5.250	1.01	11.333	6.06	17.417	1.14	23.50	0.76
5.333	1.01	11.417	6.06	17.500	1.14	23.58	0.76
5.417	1.01	11.500	6.06	17.583	1.14	23.67	0.76
5.500	1.01	11.583	6.06	17.667	1.14	23.75	0.76
5.583	1.01	11.667	6.06	17.750	1.14	23.83	0.76
5.667	1.01	11.750	6.06	17.833	1.14	23.92	0.76

5.750	1.01	11.833	18.69	17.917	1.14	24.00	0.76
5.833	1.01	11.917	18.70	18.000	1.14	24.08	0.76
5.917	1.01	12.000	18.70	18.083	1.14	24.17	0.76
6.000	1.01	12.083	77.30	18.167	1.14	24.25	0.76
6.083	1.01	12.167	77.31	18.250	1.14		

Max.Eff.Inten.(mm/hr)=		77.31	106.19	
over (min)		5.00	10.00	
Storage Coeff. (min)=		3.36 (ii)	8.36 (ii)	
Unit Hyd. Tpeak (min)=		5.00	10.00	
Unit Hyd. peak (cms)=		0.26	0.12	
				TOTALS
PEAK FLOW	(cms)=	0.00	0.13	0.135 (iii)
TIME TO PEAK	(hrs)=	12.25	12.25	12.25
RUNOFF VOLUME	(mm)=	62.16	32.78	33.23
TOTAL RAINFALL	(mm)=	63.16	63.16	63.16
RUNOFF COEFFICIENT	=	0.98	0.52	0.53

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 68.8 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
STANDHYD (0013)	Area (ha)=	4.16			
ID= 1 DT= 5.0 min	Total Imp(%)=	50.00	Dir. Conn.(%)=	50.00	

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	2.08	2.08
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	166.53	250.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.01	12.250	77.31	18.33	1.14

0.167	0.00	6.250	1.01	12.333	9.10	18.42	1.14
0.250	0.00	6.333	1.14	12.417	9.10	18.50	1.14
0.333	0.69	6.417	1.14	12.500	9.10	18.58	1.14
0.417	0.69	6.500	1.14	12.583	9.10	18.67	1.14
0.500	0.69	6.583	1.14	12.667	9.10	18.75	1.14
0.583	0.69	6.667	1.14	12.750	9.10	18.83	1.14
0.667	0.69	6.750	1.14	12.833	4.67	18.92	1.14
0.750	0.69	6.833	1.14	12.917	4.67	19.00	1.14
0.833	0.69	6.917	1.14	13.000	4.67	19.08	1.14
0.917	0.69	7.000	1.14	13.083	4.67	19.17	1.14
1.000	0.69	7.083	1.14	13.167	4.67	19.25	1.14
1.083	0.69	7.167	1.14	13.250	4.67	19.33	1.14
1.167	0.69	7.250	1.14	13.333	3.41	19.42	1.14
1.250	0.69	7.333	1.39	13.417	3.41	19.50	1.14
1.333	0.69	7.417	1.39	13.500	3.41	19.58	1.14
1.417	0.69	7.500	1.39	13.583	3.41	19.67	1.14
1.500	0.69	7.583	1.39	13.667	3.41	19.75	1.14
1.583	0.69	7.667	1.39	13.750	3.41	19.83	1.14
1.667	0.69	7.750	1.39	13.833	2.65	19.92	1.14
1.750	0.69	7.833	1.39	13.917	2.65	20.00	1.14
1.833	0.69	7.917	1.39	14.000	2.65	20.08	1.14
1.917	0.69	8.000	1.39	14.083	2.65	20.17	1.14
2.000	0.69	8.083	1.39	14.167	2.65	20.25	1.14
2.083	0.69	8.167	1.39	14.250	2.65	20.33	0.76
2.167	0.69	8.250	1.39	14.333	1.89	20.42	0.76
2.250	0.69	8.333	1.64	14.417	1.89	20.50	0.76
2.333	0.82	8.417	1.64	14.500	1.89	20.58	0.76
2.417	0.82	8.500	1.64	14.583	1.89	20.67	0.76
2.500	0.82	8.583	1.64	14.667	1.89	20.75	0.76
2.583	0.82	8.667	1.64	14.750	1.89	20.83	0.76
2.667	0.82	8.750	1.64	14.833	1.89	20.92	0.76
2.750	0.82	8.833	1.77	14.917	1.89	21.00	0.76
2.833	0.82	8.917	1.77	15.000	1.89	21.08	0.76
2.917	0.82	9.000	1.77	15.083	1.89	21.17	0.76
3.000	0.82	9.083	1.77	15.167	1.89	21.25	0.76
3.083	0.82	9.167	1.77	15.250	1.89	21.33	0.76
3.167	0.82	9.250	1.77	15.333	1.89	21.42	0.76
3.250	0.82	9.333	2.02	15.417	1.89	21.50	0.76
3.333	0.82	9.417	2.02	15.500	1.89	21.58	0.76
3.417	0.82	9.500	2.02	15.583	1.89	21.67	0.76
3.500	0.82	9.583	2.02	15.667	1.89	21.75	0.76
3.583	0.82	9.667	2.02	15.750	1.89	21.83	0.76
3.667	0.82	9.750	2.02	15.833	1.89	21.92	0.76
3.750	0.82	9.833	2.27	15.917	1.89	22.00	0.76
3.833	0.82	9.917	2.27	16.000	1.89	22.08	0.76
3.917	0.82	10.000	2.27	16.083	1.89	22.17	0.76
4.000	0.82	10.083	2.27	16.167	1.89	22.25	0.76
4.083	0.82	10.167	2.27	16.250	1.89	22.33	0.76

4.167	0.82	10.250	2.27	16.333	1.14	22.42	0.76
4.250	0.82	10.333	2.91	16.417	1.14	22.50	0.76
4.333	1.01	10.417	2.91	16.500	1.14	22.58	0.76
4.417	1.01	10.500	2.91	16.583	1.14	22.67	0.76
4.500	1.01	10.583	2.91	16.667	1.14	22.75	0.76
4.583	1.01	10.667	2.91	16.750	1.14	22.83	0.76
4.667	1.01	10.750	2.91	16.833	1.14	22.92	0.76
4.750	1.01	10.833	3.92	16.917	1.14	23.00	0.76
4.833	1.01	10.917	3.92	17.000	1.14	23.08	0.76
4.917	1.01	11.000	3.92	17.083	1.14	23.17	0.76
5.000	1.01	11.083	3.92	17.167	1.14	23.25	0.76
5.083	1.01	11.167	3.92	17.250	1.14	23.33	0.76
5.167	1.01	11.250	3.92	17.333	1.14	23.42	0.76
5.250	1.01	11.333	6.06	17.417	1.14	23.50	0.76
5.333	1.01	11.417	6.06	17.500	1.14	23.58	0.76
5.417	1.01	11.500	6.06	17.583	1.14	23.67	0.76
5.500	1.01	11.583	6.06	17.667	1.14	23.75	0.76
5.583	1.01	11.667	6.06	17.750	1.14	23.83	0.76
5.667	1.01	11.750	6.06	17.833	1.14	23.92	0.76
5.750	1.01	11.833	18.69	17.917	1.14	24.00	0.76
5.833	1.01	11.917	18.70	18.000	1.14	24.08	0.76
5.917	1.01	12.000	18.70	18.083	1.14	24.17	0.76
6.000	1.01	12.083	77.30	18.167	1.14	24.25	0.76
6.083	1.01	12.167	77.31	18.250	1.14		

Max.Eff.Inten.(mm/hr)=	77.31	10.25	
over (min)	5.00	60.00	
Storage Coeff. (min)=	4.73 (ii)	57.44 (ii)	
Unit Hyd. Tpeak (min)=	5.00	60.00	
Unit Hyd. peak (cms)=	0.22	0.02	
			TOTALS
PEAK FLOW (cms)=	0.43	0.04	0.441 (iii)
TIME TO PEAK (hrs)=	12.25	13.17	12.25
RUNOFF VOLUME (mm)=	62.16	19.61	40.88
TOTAL RAINFALL (mm)=	63.16	63.16	63.16
RUNOFF COEFFICIENT =	0.98	0.31	0.65

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB

STANDHYD (0036)	Area (ha)= 2.12	
ID= 1 DT= 5.0 min	Total Imp(%)= 85.04	Dir. Conn.(%)= 0.10

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	1.80	0.32
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	118.88	175.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.01	12.250	77.31	18.33	1.14
0.167	0.00	6.250	1.01	12.333	9.10	18.42	1.14
0.250	0.00	6.333	1.14	12.417	9.10	18.50	1.14
0.333	0.69	6.417	1.14	12.500	9.10	18.58	1.14
0.417	0.69	6.500	1.14	12.583	9.10	18.67	1.14
0.500	0.69	6.583	1.14	12.667	9.10	18.75	1.14
0.583	0.69	6.667	1.14	12.750	9.10	18.83	1.14
0.667	0.69	6.750	1.14	12.833	4.67	18.92	1.14
0.750	0.69	6.833	1.14	12.917	4.67	19.00	1.14
0.833	0.69	6.917	1.14	13.000	4.67	19.08	1.14
0.917	0.69	7.000	1.14	13.083	4.67	19.17	1.14
1.000	0.69	7.083	1.14	13.167	4.67	19.25	1.14
1.083	0.69	7.167	1.14	13.250	4.67	19.33	1.14
1.167	0.69	7.250	1.14	13.333	3.41	19.42	1.14
1.250	0.69	7.333	1.39	13.417	3.41	19.50	1.14
1.333	0.69	7.417	1.39	13.500	3.41	19.58	1.14
1.417	0.69	7.500	1.39	13.583	3.41	19.67	1.14
1.500	0.69	7.583	1.39	13.667	3.41	19.75	1.14
1.583	0.69	7.667	1.39	13.750	3.41	19.83	1.14
1.667	0.69	7.750	1.39	13.833	2.65	19.92	1.14
1.750	0.69	7.833	1.39	13.917	2.65	20.00	1.14
1.833	0.69	7.917	1.39	14.000	2.65	20.08	1.14
1.917	0.69	8.000	1.39	14.083	2.65	20.17	1.14
2.000	0.69	8.083	1.39	14.167	2.65	20.25	1.14
2.083	0.69	8.167	1.39	14.250	2.65	20.33	0.76
2.167	0.69	8.250	1.39	14.333	1.89	20.42	0.76
2.250	0.69	8.333	1.64	14.417	1.89	20.50	0.76
2.333	0.82	8.417	1.64	14.500	1.89	20.58	0.76
2.417	0.82	8.500	1.64	14.583	1.89	20.67	0.76
2.500	0.82	8.583	1.64	14.667	1.89	20.75	0.76
2.583	0.82	8.667	1.64	14.750	1.89	20.83	0.76
2.667	0.82	8.750	1.64	14.833	1.89	20.92	0.76

2.750	0.82	8.833	1.77	14.917	1.89	21.00	0.76
2.833	0.82	8.917	1.77	15.000	1.89	21.08	0.76
2.917	0.82	9.000	1.77	15.083	1.89	21.17	0.76
3.000	0.82	9.083	1.77	15.167	1.89	21.25	0.76
3.083	0.82	9.167	1.77	15.250	1.89	21.33	0.76
3.167	0.82	9.250	1.77	15.333	1.89	21.42	0.76
3.250	0.82	9.333	2.02	15.417	1.89	21.50	0.76
3.333	0.82	9.417	2.02	15.500	1.89	21.58	0.76
3.417	0.82	9.500	2.02	15.583	1.89	21.67	0.76
3.500	0.82	9.583	2.02	15.667	1.89	21.75	0.76
3.583	0.82	9.667	2.02	15.750	1.89	21.83	0.76
3.667	0.82	9.750	2.02	15.833	1.89	21.92	0.76
3.750	0.82	9.833	2.27	15.917	1.89	22.00	0.76
3.833	0.82	9.917	2.27	16.000	1.89	22.08	0.76
3.917	0.82	10.000	2.27	16.083	1.89	22.17	0.76
4.000	0.82	10.083	2.27	16.167	1.89	22.25	0.76
4.083	0.82	10.167	2.27	16.250	1.89	22.33	0.76
4.167	0.82	10.250	2.27	16.333	1.14	22.42	0.76
4.250	0.82	10.333	2.91	16.417	1.14	22.50	0.76
4.333	1.01	10.417	2.91	16.500	1.14	22.58	0.76
4.417	1.01	10.500	2.91	16.583	1.14	22.67	0.76
4.500	1.01	10.583	2.91	16.667	1.14	22.75	0.76
4.583	1.01	10.667	2.91	16.750	1.14	22.83	0.76
4.667	1.01	10.750	2.91	16.833	1.14	22.92	0.76
4.750	1.01	10.833	3.92	16.917	1.14	23.00	0.76
4.833	1.01	10.917	3.92	17.000	1.14	23.08	0.76
4.917	1.01	11.000	3.92	17.083	1.14	23.17	0.76
5.000	1.01	11.083	3.92	17.167	1.14	23.25	0.76
5.083	1.01	11.167	3.92	17.250	1.14	23.33	0.76
5.167	1.01	11.250	3.92	17.333	1.14	23.42	0.76
5.250	1.01	11.333	6.06	17.417	1.14	23.50	0.76
5.333	1.01	11.417	6.06	17.500	1.14	23.58	0.76
5.417	1.01	11.500	6.06	17.583	1.14	23.67	0.76
5.500	1.01	11.583	6.06	17.667	1.14	23.75	0.76
5.583	1.01	11.667	6.06	17.750	1.14	23.83	0.76
5.667	1.01	11.750	6.06	17.833	1.14	23.92	0.76
5.750	1.01	11.833	18.69	17.917	1.14	24.00	0.76
5.833	1.01	11.917	18.70	18.000	1.14	24.08	0.76
5.917	1.01	12.000	18.70	18.083	1.14	24.17	0.76
6.000	1.01	12.083	77.30	18.167	1.14	24.25	0.76
6.083	1.01	12.167	77.31	18.250	1.14		

Max.Eff.Inten.(mm/hr)=	77.31	459.12	
over (min)	5.00	15.00	
Storage Coeff. (min)=	3.87 (ii)	13.17 (ii)	
Unit Hyd. Tpeak (min)=	5.00	15.00	
Unit Hyd. peak (cms)=	0.25	0.08	
			TOTALS

PEAK FLOW (cms)=	0.00	0.25	0.251 (iii)
TIME TO PEAK (hrs)=	12.25	12.33	12.33
RUNOFF VOLUME (mm)=	62.16	49.00	49.01
TOTAL RAINFALL (mm)=	63.16	63.16	63.16
RUNOFF COEFFICIENT =	0.98	0.78	0.78

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB

STANDHYD (0043)	Area (ha)= 0.13	
ID= 1 DT= 5.0 min	Total Imp(%)= 30.77	Dir. Conn.(%)= 7.69

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.04	0.09
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	0.50
Length	(m)=	29.44	70.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.01	12.250	77.31	18.33	1.14
0.167	0.00	6.250	1.01	12.333	9.10	18.42	1.14
0.250	0.00	6.333	1.14	12.417	9.10	18.50	1.14
0.333	0.69	6.417	1.14	12.500	9.10	18.58	1.14
0.417	0.69	6.500	1.14	12.583	9.10	18.67	1.14
0.500	0.69	6.583	1.14	12.667	9.10	18.75	1.14
0.583	0.69	6.667	1.14	12.750	9.10	18.83	1.14
0.667	0.69	6.750	1.14	12.833	4.67	18.92	1.14
0.750	0.69	6.833	1.14	12.917	4.67	19.00	1.14
0.833	0.69	6.917	1.14	13.000	4.67	19.08	1.14
0.917	0.69	7.000	1.14	13.083	4.67	19.17	1.14
1.000	0.69	7.083	1.14	13.167	4.67	19.25	1.14
1.083	0.69	7.167	1.14	13.250	4.67	19.33	1.14

1.167	0.69	7.250	1.14	13.333	3.41	19.42	1.14
1.250	0.69	7.333	1.39	13.417	3.41	19.50	1.14
1.333	0.69	7.417	1.39	13.500	3.41	19.58	1.14
1.417	0.69	7.500	1.39	13.583	3.41	19.67	1.14
1.500	0.69	7.583	1.39	13.667	3.41	19.75	1.14
1.583	0.69	7.667	1.39	13.750	3.41	19.83	1.14
1.667	0.69	7.750	1.39	13.833	2.65	19.92	1.14
1.750	0.69	7.833	1.39	13.917	2.65	20.00	1.14
1.833	0.69	7.917	1.39	14.000	2.65	20.08	1.14
1.917	0.69	8.000	1.39	14.083	2.65	20.17	1.14
2.000	0.69	8.083	1.39	14.167	2.65	20.25	1.14
2.083	0.69	8.167	1.39	14.250	2.65	20.33	0.76
2.167	0.69	8.250	1.39	14.333	1.89	20.42	0.76
2.250	0.69	8.333	1.64	14.417	1.89	20.50	0.76
2.333	0.82	8.417	1.64	14.500	1.89	20.58	0.76
2.417	0.82	8.500	1.64	14.583	1.89	20.67	0.76
2.500	0.82	8.583	1.64	14.667	1.89	20.75	0.76
2.583	0.82	8.667	1.64	14.750	1.89	20.83	0.76
2.667	0.82	8.750	1.64	14.833	1.89	20.92	0.76
2.750	0.82	8.833	1.77	14.917	1.89	21.00	0.76
2.833	0.82	8.917	1.77	15.000	1.89	21.08	0.76
2.917	0.82	9.000	1.77	15.083	1.89	21.17	0.76
3.000	0.82	9.083	1.77	15.167	1.89	21.25	0.76
3.083	0.82	9.167	1.77	15.250	1.89	21.33	0.76
3.167	0.82	9.250	1.77	15.333	1.89	21.42	0.76
3.250	0.82	9.333	2.02	15.417	1.89	21.50	0.76
3.333	0.82	9.417	2.02	15.500	1.89	21.58	0.76
3.417	0.82	9.500	2.02	15.583	1.89	21.67	0.76
3.500	0.82	9.583	2.02	15.667	1.89	21.75	0.76
3.583	0.82	9.667	2.02	15.750	1.89	21.83	0.76
3.667	0.82	9.750	2.02	15.833	1.89	21.92	0.76
3.750	0.82	9.833	2.27	15.917	1.89	22.00	0.76
3.833	0.82	9.917	2.27	16.000	1.89	22.08	0.76
3.917	0.82	10.000	2.27	16.083	1.89	22.17	0.76
4.000	0.82	10.083	2.27	16.167	1.89	22.25	0.76
4.083	0.82	10.167	2.27	16.250	1.89	22.33	0.76
4.167	0.82	10.250	2.27	16.333	1.14	22.42	0.76
4.250	0.82	10.333	2.91	16.417	1.14	22.50	0.76
4.333	1.01	10.417	2.91	16.500	1.14	22.58	0.76
4.417	1.01	10.500	2.91	16.583	1.14	22.67	0.76
4.500	1.01	10.583	2.91	16.667	1.14	22.75	0.76
4.583	1.01	10.667	2.91	16.750	1.14	22.83	0.76
4.667	1.01	10.750	2.91	16.833	1.14	22.92	0.76
4.750	1.01	10.833	3.92	16.917	1.14	23.00	0.76
4.833	1.01	10.917	3.92	17.000	1.14	23.08	0.76
4.917	1.01	11.000	3.92	17.083	1.14	23.17	0.76
5.000	1.01	11.083	3.92	17.167	1.14	23.25	0.76
5.083	1.01	11.167	3.92	17.250	1.14	23.33	0.76

5.167	1.01	11.250	3.92	17.333	1.14	23.42	0.76
5.250	1.01	11.333	6.06	17.417	1.14	23.50	0.76
5.333	1.01	11.417	6.06	17.500	1.14	23.58	0.76
5.417	1.01	11.500	6.06	17.583	1.14	23.67	0.76
5.500	1.01	11.583	6.06	17.667	1.14	23.75	0.76
5.583	1.01	11.667	6.06	17.750	1.14	23.83	0.76
5.667	1.01	11.750	6.06	17.833	1.14	23.92	0.76
5.750	1.01	11.833	18.69	17.917	1.14	24.00	0.76
5.833	1.01	11.917	18.70	18.000	1.14	24.08	0.76
5.917	1.01	12.000	18.70	18.083	1.14	24.17	0.76
6.000	1.01	12.083	77.30	18.167	1.14	24.25	0.76
6.083	1.01	12.167	77.31	18.250	1.14		

Max.Eff.Inten.(mm/hr)=	77.31	29.83	
over (min)	5.00	30.00	
Storage Coeff. (min)=	1.67 (ii)	25.95 (ii)	
Unit Hyd. Tpeak (min)=	5.00	30.00	
Unit Hyd. peak (cms)=	0.32	0.04	
			TOTALS
PEAK FLOW (cms)=	0.00	0.00	0.005 (iii)
TIME TO PEAK (hrs)=	12.25	12.58	12.58
RUNOFF VOLUME (mm)=	62.16	24.34	27.13
TOTAL RAINFALL (mm)=	63.16	63.16	63.16
RUNOFF COEFFICIENT =	0.98	0.39	0.43

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
STANDHYD (0044)	Area (ha)=	1.62	
ID= 1 DT= 5.0 min	Total Imp(%)=	48.77	Dir. Conn.(%)= 30.86

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.79	0.83
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	1.40
Length	(m)=	103.92	400.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.01	12.250	77.31	18.33	1.14
0.167	0.00	6.250	1.01	12.333	9.10	18.42	1.14
0.250	0.00	6.333	1.14	12.417	9.10	18.50	1.14
0.333	0.69	6.417	1.14	12.500	9.10	18.58	1.14
0.417	0.69	6.500	1.14	12.583	9.10	18.67	1.14
0.500	0.69	6.583	1.14	12.667	9.10	18.75	1.14
0.583	0.69	6.667	1.14	12.750	9.10	18.83	1.14
0.667	0.69	6.750	1.14	12.833	4.67	18.92	1.14
0.750	0.69	6.833	1.14	12.917	4.67	19.00	1.14
0.833	0.69	6.917	1.14	13.000	4.67	19.08	1.14
0.917	0.69	7.000	1.14	13.083	4.67	19.17	1.14
1.000	0.69	7.083	1.14	13.167	4.67	19.25	1.14
1.083	0.69	7.167	1.14	13.250	4.67	19.33	1.14
1.167	0.69	7.250	1.14	13.333	3.41	19.42	1.14
1.250	0.69	7.333	1.39	13.417	3.41	19.50	1.14
1.333	0.69	7.417	1.39	13.500	3.41	19.58	1.14
1.417	0.69	7.500	1.39	13.583	3.41	19.67	1.14
1.500	0.69	7.583	1.39	13.667	3.41	19.75	1.14
1.583	0.69	7.667	1.39	13.750	3.41	19.83	1.14
1.667	0.69	7.750	1.39	13.833	2.65	19.92	1.14
1.750	0.69	7.833	1.39	13.917	2.65	20.00	1.14
1.833	0.69	7.917	1.39	14.000	2.65	20.08	1.14
1.917	0.69	8.000	1.39	14.083	2.65	20.17	1.14
2.000	0.69	8.083	1.39	14.167	2.65	20.25	1.14
2.083	0.69	8.167	1.39	14.250	2.65	20.33	0.76
2.167	0.69	8.250	1.39	14.333	1.89	20.42	0.76
2.250	0.69	8.333	1.64	14.417	1.89	20.50	0.76
2.333	0.82	8.417	1.64	14.500	1.89	20.58	0.76
2.417	0.82	8.500	1.64	14.583	1.89	20.67	0.76
2.500	0.82	8.583	1.64	14.667	1.89	20.75	0.76
2.583	0.82	8.667	1.64	14.750	1.89	20.83	0.76
2.667	0.82	8.750	1.64	14.833	1.89	20.92	0.76
2.750	0.82	8.833	1.77	14.917	1.89	21.00	0.76
2.833	0.82	8.917	1.77	15.000	1.89	21.08	0.76
2.917	0.82	9.000	1.77	15.083	1.89	21.17	0.76
3.000	0.82	9.083	1.77	15.167	1.89	21.25	0.76
3.083	0.82	9.167	1.77	15.250	1.89	21.33	0.76
3.167	0.82	9.250	1.77	15.333	1.89	21.42	0.76
3.250	0.82	9.333	2.02	15.417	1.89	21.50	0.76
3.333	0.82	9.417	2.02	15.500	1.89	21.58	0.76
3.417	0.82	9.500	2.02	15.583	1.89	21.67	0.76
3.500	0.82	9.583	2.02	15.667	1.89	21.75	0.76

3.583	0.82	9.667	2.02	15.750	1.89	21.83	0.76
3.667	0.82	9.750	2.02	15.833	1.89	21.92	0.76
3.750	0.82	9.833	2.27	15.917	1.89	22.00	0.76
3.833	0.82	9.917	2.27	16.000	1.89	22.08	0.76
3.917	0.82	10.000	2.27	16.083	1.89	22.17	0.76
4.000	0.82	10.083	2.27	16.167	1.89	22.25	0.76
4.083	0.82	10.167	2.27	16.250	1.89	22.33	0.76
4.167	0.82	10.250	2.27	16.333	1.14	22.42	0.76
4.250	0.82	10.333	2.91	16.417	1.14	22.50	0.76
4.333	1.01	10.417	2.91	16.500	1.14	22.58	0.76
4.417	1.01	10.500	2.91	16.583	1.14	22.67	0.76
4.500	1.01	10.583	2.91	16.667	1.14	22.75	0.76
4.583	1.01	10.667	2.91	16.750	1.14	22.83	0.76
4.667	1.01	10.750	2.91	16.833	1.14	22.92	0.76
4.750	1.01	10.833	3.92	16.917	1.14	23.00	0.76
4.833	1.01	10.917	3.92	17.000	1.14	23.08	0.76
4.917	1.01	11.000	3.92	17.083	1.14	23.17	0.76
5.000	1.01	11.083	3.92	17.167	1.14	23.25	0.76
5.083	1.01	11.167	3.92	17.250	1.14	23.33	0.76
5.167	1.01	11.250	3.92	17.333	1.14	23.42	0.76
5.250	1.01	11.333	6.06	17.417	1.14	23.50	0.76
5.333	1.01	11.417	6.06	17.500	1.14	23.58	0.76
5.417	1.01	11.500	6.06	17.583	1.14	23.67	0.76
5.500	1.01	11.583	6.06	17.667	1.14	23.75	0.76
5.583	1.01	11.667	6.06	17.750	1.14	23.83	0.76
5.667	1.01	11.750	6.06	17.833	1.14	23.92	0.76
5.750	1.01	11.833	18.69	17.917	1.14	24.00	0.76
5.833	1.01	11.917	18.70	18.000	1.14	24.08	0.76
5.917	1.01	12.000	18.70	18.083	1.14	24.17	0.76
6.000	1.01	12.083	77.30	18.167	1.14	24.25	0.76
6.083	1.01	12.167	77.31	18.250	1.14		

Max.Eff.Inten.(mm/hr)=	77.31	16.61	
over (min)	5.00	70.00	
Storage Coeff. (min)=	3.57 (ii)	67.69 (ii)	
Unit Hyd. Tpeak (min)=	5.00	70.00	
Unit Hyd. peak (cms)=	0.26	0.02	
			TOTALS
PEAK FLOW (cms)=	0.11	0.02	0.111 (iii)
TIME TO PEAK (hrs)=	12.25	13.33	12.25
RUNOFF VOLUME (mm)=	62.16	24.55	36.13
TOTAL RAINFALL (mm)=	63.16	63.16	63.16
RUNOFF COEFFICIENT =	0.98	0.39	0.57

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)

(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0037)		AREA	QPEAK	TPEAK	R.V.
		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0010):		1.32	0.135	12.25	33.23
+ ID2= 2 (0013):		4.16	0.441	12.25	40.88
ID = 3 (0037):		5.48	0.576	12.25	39.03

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0037)		AREA	QPEAK	TPEAK	R.V.
		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0037):		5.48	0.576	12.25	39.03
+ ID2= 2 (0036):		2.12	0.251	12.33	49.01
ID = 1 (0037):		7.60	0.799	12.25	41.82

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0037)		AREA	QPEAK	TPEAK	R.V.
		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0037):		7.60	0.799	12.25	41.82
+ ID2= 2 (0043):		0.13	0.005	12.58	27.13
ID = 3 (0037):		7.73	0.803	12.25	41.57

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0037)		AREA	QPEAK	TPEAK	R.V.
		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0037):		7.73	0.803	12.25	41.57
+ ID2= 2 (0044):		1.62	0.111	12.25	36.13

ID = 1 (0037):		9.35	0.914	12.25	40.63

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0037)		AREA	QPEAK	TPEAK	R.V.
		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0037):		9.35	0.914	12.25	40.63
+ ID2= 2 (0009):		31.06	2.344	12.33	35.35
ID = 3 (0037):		40.41	3.009	12.25	36.57

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

RESERVOIR(0038) | OVERFLOW IS OFF
IN= 2---> OUT= 1
DT= 5.0 min

OUTFLOW (cms)	STORAGE (ha.m.)	OUTFLOW (cms)	STORAGE (ha.m.)
0.0000	0.0000	0.5076	2.8989
0.0000	0.2023	0.6060	3.2065
0.0353	0.4202	0.7105	3.5196
0.0525	0.6536	0.8207	3.8381
0.0654	0.9026	0.9365	4.1621
0.0843	1.1671	1.0574	4.4915
0.1858	1.7227	1.1833	4.8263
0.2540	2.0086	1.3139	5.1665
0.3309	2.2999	1.4492	5.5122
0.4157	2.5967	1.5890	5.8633

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
INFLOW : ID= 2 (0037)	40.410	3.009	12.25	36.57
OUTFLOW: ID= 1 (0038)	40.410	0.083	20.50	31.53

PEAK FLOW REDUCTION [Qout/Qin](%)= 2.75
TIME SHIFT OF PEAK FLOW (min)=495.00
MAXIMUM STORAGE USED (ha.m.)= 1.1462

CALIB
STANDHYD (0017) | Area (ha)= 1.59
ID= 1 DT= 5.0 min | Total Imp(%)= 58.58 Dir. Conn.(%)= 27.10

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.93	0.66
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	102.96	30.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.01	12.250	77.31	18.33	1.14
0.167	0.00	6.250	1.01	12.333	9.10	18.42	1.14
0.250	0.00	6.333	1.14	12.417	9.10	18.50	1.14
0.333	0.69	6.417	1.14	12.500	9.10	18.58	1.14
0.417	0.69	6.500	1.14	12.583	9.10	18.67	1.14
0.500	0.69	6.583	1.14	12.667	9.10	18.75	1.14
0.583	0.69	6.667	1.14	12.750	9.10	18.83	1.14
0.667	0.69	6.750	1.14	12.833	4.67	18.92	1.14
0.750	0.69	6.833	1.14	12.917	4.67	19.00	1.14
0.833	0.69	6.917	1.14	13.000	4.67	19.08	1.14
0.917	0.69	7.000	1.14	13.083	4.67	19.17	1.14
1.000	0.69	7.083	1.14	13.167	4.67	19.25	1.14
1.083	0.69	7.167	1.14	13.250	4.67	19.33	1.14
1.167	0.69	7.250	1.14	13.333	3.41	19.42	1.14
1.250	0.69	7.333	1.39	13.417	3.41	19.50	1.14
1.333	0.69	7.417	1.39	13.500	3.41	19.58	1.14
1.417	0.69	7.500	1.39	13.583	3.41	19.67	1.14
1.500	0.69	7.583	1.39	13.667	3.41	19.75	1.14
1.583	0.69	7.667	1.39	13.750	3.41	19.83	1.14
1.667	0.69	7.750	1.39	13.833	2.65	19.92	1.14
1.750	0.69	7.833	1.39	13.917	2.65	20.00	1.14
1.833	0.69	7.917	1.39	14.000	2.65	20.08	1.14
1.917	0.69	8.000	1.39	14.083	2.65	20.17	1.14
2.000	0.69	8.083	1.39	14.167	2.65	20.25	1.14
2.083	0.69	8.167	1.39	14.250	2.65	20.33	0.76
2.167	0.69	8.250	1.39	14.333	1.89	20.42	0.76
2.250	0.69	8.333	1.64	14.417	1.89	20.50	0.76
2.333	0.82	8.417	1.64	14.500	1.89	20.58	0.76
2.417	0.82	8.500	1.64	14.583	1.89	20.67	0.76
2.500	0.82	8.583	1.64	14.667	1.89	20.75	0.76
2.583	0.82	8.667	1.64	14.750	1.89	20.83	0.76
2.667	0.82	8.750	1.64	14.833	1.89	20.92	0.76
2.750	0.82	8.833	1.77	14.917	1.89	21.00	0.76
2.833	0.82	8.917	1.77	15.000	1.89	21.08	0.76
2.917	0.82	9.000	1.77	15.083	1.89	21.17	0.76

3.000	0.82	9.083	1.77	15.167	1.89	21.25	0.76
3.083	0.82	9.167	1.77	15.250	1.89	21.33	0.76
3.167	0.82	9.250	1.77	15.333	1.89	21.42	0.76
3.250	0.82	9.333	2.02	15.417	1.89	21.50	0.76
3.333	0.82	9.417	2.02	15.500	1.89	21.58	0.76
3.417	0.82	9.500	2.02	15.583	1.89	21.67	0.76
3.500	0.82	9.583	2.02	15.667	1.89	21.75	0.76
3.583	0.82	9.667	2.02	15.750	1.89	21.83	0.76
3.667	0.82	9.750	2.02	15.833	1.89	21.92	0.76
3.750	0.82	9.833	2.27	15.917	1.89	22.00	0.76
3.833	0.82	9.917	2.27	16.000	1.89	22.08	0.76
3.917	0.82	10.000	2.27	16.083	1.89	22.17	0.76
4.000	0.82	10.083	2.27	16.167	1.89	22.25	0.76
4.083	0.82	10.167	2.27	16.250	1.89	22.33	0.76
4.167	0.82	10.250	2.27	16.333	1.14	22.42	0.76
4.250	0.82	10.333	2.91	16.417	1.14	22.50	0.76
4.333	1.01	10.417	2.91	16.500	1.14	22.58	0.76
4.417	1.01	10.500	2.91	16.583	1.14	22.67	0.76
4.500	1.01	10.583	2.91	16.667	1.14	22.75	0.76
4.583	1.01	10.667	2.91	16.750	1.14	22.83	0.76
4.667	1.01	10.750	2.91	16.833	1.14	22.92	0.76
4.750	1.01	10.833	3.92	16.917	1.14	23.00	0.76
4.833	1.01	10.917	3.92	17.000	1.14	23.08	0.76
4.917	1.01	11.000	3.92	17.083	1.14	23.17	0.76
5.000	1.01	11.083	3.92	17.167	1.14	23.25	0.76
5.083	1.01	11.167	3.92	17.250	1.14	23.33	0.76
5.167	1.01	11.250	3.92	17.333	1.14	23.42	0.76
5.250	1.01	11.333	6.06	17.417	1.14	23.50	0.76
5.333	1.01	11.417	6.06	17.500	1.14	23.58	0.76
5.417	1.01	11.500	6.06	17.583	1.14	23.67	0.76
5.500	1.01	11.583	6.06	17.667	1.14	23.75	0.76
5.583	1.01	11.667	6.06	17.750	1.14	23.83	0.76
5.667	1.01	11.750	6.06	17.833	1.14	23.92	0.76
5.750	1.01	11.833	18.69	17.917	1.14	24.00	0.76
5.833	1.01	11.917	18.70	18.000	1.14	24.08	0.76
5.917	1.01	12.000	18.70	18.083	1.14	24.17	0.76
6.000	1.01	12.083	77.30	18.167	1.14	24.25	0.76
6.083	1.01	12.167	77.31	18.250	1.14		

Max.Eff.Inten.(mm/hr)=		77.31	71.02	
over (min)		5.00	15.00	
Storage Coeff. (min)=		3.55 (ii)	10.36 (ii)	
Unit Hyd. Tpeak (min)=		5.00	15.00	
Unit Hyd. peak (cms)=		0.26	0.09	
				TOTALS
PEAK FLOW	(cms)=	0.09	0.08	0.164 (iii)
TIME TO PEAK	(hrs)=	12.25	12.33	12.25
RUNOFF VOLUME	(mm)=	62.16	27.38	36.80

TOTAL RAINFALL (mm)=	63.16	63.16	63.16
RUNOFF COEFFICIENT =	0.98	0.43	0.58

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 66.5 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

Junction Command(0018)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
INFLOW : ID= 2(0017)	1.59	0.16	12.25	36.80
OUTFLOW: ID= 2(0018)	1.59	0.16	12.25	36.80

ADD HYD (0023) 1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0016):	234.30	1.772	13.25	12.99
+ ID2= 2 (0018):	1.59	0.164	12.25	36.80
ID = 3 (0023):	235.89	1.788	13.25	13.16

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023) 3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0023):	235.89	1.788	13.25	13.16
+ ID2= 2 (0038):	40.41	0.083	20.50	31.53
ID = 1 (0023):	276.30	1.856	13.25	15.84

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

****

** SIMULATION:H - 5-year SCS **
****

READ STORM	Filename: C:\Users\ecomish\AppData\Local\Temp\bd70dd54-263f-4ef7-b852-c48fc040cbd3\39aaeae0
Ptotal= 83.51 mm	Comments: 5yr 24hr 15min SCS Type II (MTO) - 15% I

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.00	0.00	6.25	1.50	12.50	12.03	18.75	1.50
0.25	0.92	6.50	1.50	12.75	6.18	19.00	1.50
0.50	0.92	6.75	1.50	13.00	6.18	19.25	1.50
0.75	0.92	7.00	1.50	13.25	4.51	19.50	1.50
1.00	0.92	7.25	1.84	13.50	4.51	19.75	1.50
1.25	0.92	7.50	1.84	13.75	3.51	20.00	1.50
1.50	0.92	7.75	1.84	14.00	3.51	20.25	1.00
1.75	0.92	8.00	1.84	14.25	2.51	20.50	1.00
2.00	0.92	8.25	2.17	14.50	2.51	20.75	1.00
2.25	1.09	8.50	2.17	14.75	2.51	21.00	1.00
2.50	1.09	8.75	2.34	15.00	2.51	21.25	1.00
2.75	1.09	9.00	2.34	15.25	2.51	21.50	1.00
3.00	1.09	9.25	2.67	15.50	2.51	21.75	1.00
3.25	1.09	9.50	2.67	15.75	2.51	22.00	1.00
3.50	1.09	9.75	3.01	16.00	2.51	22.25	1.00
3.75	1.09	10.00	3.01	16.25	1.50	22.50	1.00
4.00	1.09	10.25	3.84	16.50	1.50	22.75	1.00
4.25	1.34	10.50	3.84	16.75	1.50	23.00	1.00
4.50	1.34	10.75	5.18	17.00	1.50	23.25	1.00
4.75	1.34	11.00	5.18	17.25	1.50	23.50	1.00
5.00	1.34	11.25	8.02	17.50	1.50	23.75	1.00
5.25	1.34	11.50	8.02	17.75	1.50	24.00	1.00
5.50	1.34	11.75	24.72	18.00	1.50		
5.75	1.34	12.00	102.22	18.25	1.50		
6.00	1.34	12.25	12.03	18.50	1.50		

CALIB	NASHYD (0025)	ID= 1 DT= 5.0 min	Area (ha)= 100.92	Ia (mm)= 7.89	U.H. Tp(hrs)= 1.70	Curve Number (CN)= 55.9	# of Linear Res.(N)= 3.00

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.34	12.250	102.22	18.33	1.50
0.167	0.00	6.250	1.34	12.333	12.04	18.42	1.50
0.250	0.00	6.333	1.50	12.417	12.03	18.50	1.50
0.333	0.92	6.417	1.50	12.500	12.03	18.58	1.50
0.417	0.92	6.500	1.50	12.583	12.03	18.67	1.50
0.500	0.92	6.583	1.50	12.667	12.03	18.75	1.50
0.583	0.92	6.667	1.50	12.750	12.03	18.83	1.50
0.667	0.92	6.750	1.50	12.833	6.18	18.92	1.50
0.750	0.92	6.833	1.50	12.917	6.18	19.00	1.50
0.833	0.92	6.917	1.50	13.000	6.18	19.08	1.50
0.917	0.92	7.000	1.50	13.083	6.18	19.17	1.50
1.000	0.92	7.083	1.50	13.167	6.18	19.25	1.50
1.083	0.92	7.167	1.50	13.250	6.18	19.33	1.50
1.167	0.92	7.250	1.50	13.333	4.51	19.42	1.50
1.250	0.92	7.333	1.84	13.417	4.51	19.50	1.50
1.333	0.92	7.417	1.84	13.500	4.51	19.58	1.50
1.417	0.92	7.500	1.84	13.583	4.51	19.67	1.50
1.500	0.92	7.583	1.84	13.667	4.51	19.75	1.50
1.583	0.92	7.667	1.84	13.750	4.51	19.83	1.50
1.667	0.92	7.750	1.84	13.833	3.51	19.92	1.50
1.750	0.92	7.833	1.84	13.917	3.51	20.00	1.50
1.833	0.92	7.917	1.84	14.000	3.51	20.08	1.50
1.917	0.92	8.000	1.84	14.083	3.51	20.17	1.50
2.000	0.92	8.083	1.84	14.167	3.51	20.25	1.50
2.083	0.92	8.167	1.84	14.250	3.51	20.33	1.00
2.167	0.92	8.250	1.84	14.333	2.51	20.42	1.00
2.250	0.92	8.333	2.17	14.417	2.51	20.50	1.00
2.333	1.09	8.417	2.17	14.500	2.51	20.58	1.00
2.417	1.09	8.500	2.17	14.583	2.51	20.67	1.00
2.500	1.09	8.583	2.17	14.667	2.51	20.75	1.00
2.583	1.09	8.667	2.17	14.750	2.51	20.83	1.00
2.667	1.09	8.750	2.17	14.833	2.51	20.92	1.00
2.750	1.09	8.833	2.34	14.917	2.51	21.00	1.00
2.833	1.09	8.917	2.34	15.000	2.51	21.08	1.00
2.917	1.09	9.000	2.34	15.083	2.51	21.17	1.00
3.000	1.09	9.083	2.34	15.167	2.51	21.25	1.00
3.083	1.09	9.167	2.34	15.250	2.51	21.33	1.00
3.167	1.09	9.250	2.34	15.333	2.51	21.42	1.00
3.250	1.09	9.333	2.67	15.417	2.51	21.50	1.00
3.333	1.09	9.417	2.67	15.500	2.51	21.58	1.00
3.417	1.09	9.500	2.67	15.583	2.51	21.67	1.00
3.500	1.09	9.583	2.67	15.667	2.51	21.75	1.00
3.583	1.09	9.667	2.67	15.750	2.51	21.83	1.00
3.667	1.09	9.750	2.67	15.833	2.51	21.92	1.00
3.750	1.09	9.833	3.01	15.917	2.51	22.00	1.00

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
3.833	1.09	9.917	3.01	16.000	2.51	22.08	1.00
3.917	1.09	10.000	3.01	16.083	2.51	22.17	1.00
4.000	1.09	10.083	3.01	16.167	2.51	22.25	1.00
4.083	1.09	10.167	3.01	16.250	2.51	22.33	1.00
4.167	1.09	10.250	3.01	16.333	1.50	22.42	1.00
4.250	1.09	10.333	3.84	16.417	1.50	22.50	1.00
4.333	1.34	10.417	3.84	16.500	1.50	22.58	1.00
4.417	1.34	10.500	3.84	16.583	1.50	22.67	1.00
4.500	1.34	10.583	3.84	16.667	1.50	22.75	1.00
4.583	1.34	10.667	3.84	16.750	1.50	22.83	1.00
4.667	1.34	10.750	3.84	16.833	1.50	22.92	1.00
4.750	1.34	10.833	5.18	16.917	1.50	23.00	1.00
4.833	1.34	10.917	5.18	17.000	1.50	23.08	1.00
4.917	1.34	11.000	5.18	17.083	1.50	23.17	1.00
5.000	1.34	11.083	5.18	17.167	1.50	23.25	1.00
5.083	1.34	11.167	5.18	17.250	1.50	23.33	1.00
5.167	1.34	11.250	5.18	17.333	1.50	23.42	1.00
5.250	1.34	11.333	8.02	17.417	1.50	23.50	1.00
5.333	1.34	11.417	8.02	17.500	1.50	23.58	1.00
5.417	1.34	11.500	8.02	17.583	1.50	23.67	1.00
5.500	1.34	11.583	8.02	17.667	1.50	23.75	1.00
5.583	1.34	11.667	8.02	17.750	1.50	23.83	1.00
5.667	1.34	11.750	8.02	17.833	1.50	23.92	1.00
5.750	1.34	11.833	24.72	17.917	1.50	24.00	1.00
5.833	1.34	11.917	24.72	18.000	1.50	24.08	1.00
5.917	1.34	12.000	24.72	18.083	1.50	24.17	1.00
6.000	1.34	12.083	102.21	18.167	1.50	24.25	1.00
6.083	1.34	12.167	102.22	18.250	1.50		

Unit Hyd Qpeak (cms)= 2.267

PEAK FLOW (cms)= 1.073 (i)
TIME TO PEAK (hrs)= 14.083
RUNOFF VOLUME (mm)= 20.743
TOTAL RAINFALL (mm)= 83.510
RUNOFF COEFFICIENT = 0.248

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	NASHYD (0002)	ID= 1 DT= 5.0 min	Area (ha)= 23.99	Ia (mm)= 10.91	U.H. Tp(hrs)= 0.97	Curve Number (CN)= 44.7	# of Linear Res.(N)= 3.00

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.34	12.250	102.22	18.33	1.50
0.167	0.00	6.250	1.34	12.333	12.04	18.42	1.50
0.250	0.00	6.333	1.50	12.417	12.03	18.50	1.50
0.333	0.92	6.417	1.50	12.500	12.03	18.58	1.50
0.417	0.92	6.500	1.50	12.583	12.03	18.67	1.50
0.500	0.92	6.583	1.50	12.667	12.03	18.75	1.50
0.583	0.92	6.667	1.50	12.750	12.03	18.83	1.50
0.667	0.92	6.750	1.50	12.833	6.18	18.92	1.50
0.750	0.92	6.833	1.50	12.917	6.18	19.00	1.50
0.833	0.92	6.917	1.50	13.000	6.18	19.08	1.50
0.917	0.92	7.000	1.50	13.083	6.18	19.17	1.50
1.000	0.92	7.083	1.50	13.167	6.18	19.25	1.50
1.083	0.92	7.167	1.50	13.250	6.18	19.33	1.50
1.167	0.92	7.250	1.50	13.333	4.51	19.42	1.50
1.250	0.92	7.333	1.84	13.417	4.51	19.50	1.50
1.333	0.92	7.417	1.84	13.500	4.51	19.58	1.50
1.417	0.92	7.500	1.84	13.583	4.51	19.67	1.50
1.500	0.92	7.583	1.84	13.667	4.51	19.75	1.50
1.583	0.92	7.667	1.84	13.750	4.51	19.83	1.50
1.667	0.92	7.750	1.84	13.833	3.51	19.92	1.50
1.750	0.92	7.833	1.84	13.917	3.51	20.00	1.50
1.833	0.92	7.917	1.84	14.000	3.51	20.08	1.50
1.917	0.92	8.000	1.84	14.083	3.51	20.17	1.50
2.000	0.92	8.083	1.84	14.167	3.51	20.25	1.50
2.083	0.92	8.167	1.84	14.250	3.51	20.33	1.00
2.167	0.92	8.250	1.84	14.333	2.51	20.42	1.00
2.250	0.92	8.333	2.17	14.417	2.51	20.50	1.00
2.333	1.09	8.417	2.17	14.500	2.51	20.58	1.00
2.417	1.09	8.500	2.17	14.583	2.51	20.67	1.00
2.500	1.09	8.583	2.17	14.667	2.51	20.75	1.00
2.583	1.09	8.667	2.17	14.750	2.51	20.83	1.00
2.667	1.09	8.750	2.17	14.833	2.51	20.92	1.00
2.750	1.09	8.833	2.34	14.917	2.51	21.00	1.00
2.833	1.09	8.917	2.34	15.000	2.51	21.08	1.00
2.917	1.09	9.000	2.34	15.083	2.51	21.17	1.00
3.000	1.09	9.083	2.34	15.167	2.51	21.25	1.00
3.083	1.09	9.167	2.34	15.250	2.51	21.33	1.00
3.167	1.09	9.250	2.34	15.333	2.51	21.42	1.00
3.250	1.09	9.333	2.67	15.417	2.51	21.50	1.00
3.333	1.09	9.417	2.67	15.500	2.51	21.58	1.00
3.417	1.09	9.500	2.67	15.583	2.51	21.67	1.00
3.500	1.09	9.583	2.67	15.667	2.51	21.75	1.00
3.583	1.09	9.667	2.67	15.750	2.51	21.83	1.00
3.667	1.09	9.750	2.67	15.833	2.51	21.92	1.00
3.750	1.09	9.833	3.01	15.917	2.51	22.00	1.00
3.833	1.09	9.917	3.01	16.000	2.51	22.08	1.00
3.917	1.09	10.000	3.01	16.083	2.51	22.17	1.00
4.000	1.09	10.083	3.01	16.167	2.51	22.25	1.00
4.083	1.09	10.167	3.01	16.250	2.51	22.33	1.00
4.167	1.09	10.250	3.01	16.333	1.50	22.42	1.00
4.250	1.09	10.333	3.84	16.417	1.50	22.50	1.00
4.333	1.34	10.417	3.84	16.500	1.50	22.58	1.00
4.417	1.34	10.500	3.84	16.583	1.50	22.67	1.00
4.500	1.34	10.583	3.84	16.667	1.50	22.75	1.00
4.583	1.34	10.667	3.84	16.750	1.50	22.83	1.00
4.667	1.34	10.750	3.84	16.833	1.50	22.92	1.00
4.750	1.34	10.833	5.18	16.917	1.50	23.00	1.00
4.833	1.34	10.917	5.18	17.000	1.50	23.08	1.00
4.917	1.34	11.000	5.18	17.083	1.50	23.17	1.00
5.000	1.34	11.083	5.18	17.167	1.50	23.25	1.00
5.083	1.34	11.167	5.18	17.250	1.50	23.33	1.00
5.167	1.34	11.250	5.18	17.333	1.50	23.42	1.00
5.250	1.34	11.333	8.02	17.417	1.50	23.50	1.00
5.333	1.34	11.417	8.02	17.500	1.50	23.58	1.00
5.417	1.34	11.500	8.02	17.583	1.50	23.67	1.00
5.500	1.34	11.583	8.02	17.667	1.50	23.75	1.00
5.583	1.34	11.667	8.02	17.750	1.50	23.83	1.00
5.667	1.34	11.750	8.02	17.833	1.50	23.92	1.00
5.750	1.34	11.833	24.72	17.917	1.50	24.00	1.00
5.833	1.34	11.917	24.72	18.000	1.50	24.08	1.00
5.917	1.34	12.000	24.72	18.083	1.50	24.17	1.00
6.000	1.34	12.083	102.21	18.167	1.50	24.25	1.00
6.083	1.34	12.167	102.22	18.250	1.50		

Unit Hyd Qpeak (cms)= 0.945

PEAK FLOW (cms)= 0.248 (i)
TIME TO PEAK (hrs)= 13.250
RUNOFF VOLUME (mm)= 13.625
TOTAL RAINFALL (mm)= 83.510
RUNOFF COEFFICIENT = 0.163

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	
NASHYD (0001)	Area (ha)= 39.68 Curve Number (CN)= 60.7
ID= 1 DT= 5.0 min	Ia (mm)= 8.26 # of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 1.18

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

Post-Development VO Output (INT)

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.34	12.250	102.22	18.33	1.50
0.167	0.00	6.250	1.34	12.333	12.04	18.42	1.50
0.250	0.00	6.333	1.50	12.417	12.03	18.50	1.50
0.333	0.92	6.417	1.50	12.500	12.03	18.58	1.50
0.417	0.92	6.500	1.50	12.583	12.03	18.67	1.50
0.500	0.92	6.583	1.50	12.667	12.03	18.75	1.50
0.583	0.92	6.667	1.50	12.750	12.03	18.83	1.50
0.667	0.92	6.750	1.50	12.833	6.18	18.92	1.50
0.750	0.92	6.833	1.50	12.917	6.18	19.00	1.50
0.833	0.92	6.917	1.50	13.000	6.18	19.08	1.50
0.917	0.92	7.000	1.50	13.083	6.18	19.17	1.50
1.000	0.92	7.083	1.50	13.167	6.18	19.25	1.50
1.083	0.92	7.167	1.50	13.250	6.18	19.33	1.50
1.167	0.92	7.250	1.50	13.333	4.51	19.42	1.50
1.250	0.92	7.333	1.84	13.417	4.51	19.50	1.50
1.333	0.92	7.417	1.84	13.500	4.51	19.58	1.50
1.417	0.92	7.500	1.84	13.583	4.51	19.67	1.50
1.500	0.92	7.583	1.84	13.667	4.51	19.75	1.50
1.583	0.92	7.667	1.84	13.750	4.51	19.83	1.50
1.667	0.92	7.750	1.84	13.833	3.51	19.92	1.50
1.750	0.92	7.833	1.84	13.917	3.51	20.00	1.50
1.833	0.92	7.917	1.84	14.000	3.51	20.08	1.50
1.917	0.92	8.000	1.84	14.083	3.51	20.17	1.50
2.000	0.92	8.083	1.84	14.167	3.51	20.25	1.50
2.083	0.92	8.167	1.84	14.250	3.51	20.33	1.00
2.167	0.92	8.250	1.84	14.333	2.51	20.42	1.00
2.250	0.92	8.333	2.17	14.417	2.51	20.50	1.00
2.333	1.09	8.417	2.17	14.500	2.51	20.58	1.00
2.417	1.09	8.500	2.17	14.583	2.51	20.67	1.00
2.500	1.09	8.583	2.17	14.667	2.51	20.75	1.00
2.583	1.09	8.667	2.17	14.750	2.51	20.83	1.00
2.667	1.09	8.750	2.17	14.833	2.51	20.92	1.00
2.750	1.09	8.833	2.34	14.917	2.51	21.00	1.00
2.833	1.09	8.917	2.34	15.000	2.51	21.08	1.00
2.917	1.09	9.000	2.34	15.083	2.51	21.17	1.00
3.000	1.09	9.083	2.34	15.167	2.51	21.25	1.00
3.083	1.09	9.167	2.34	15.250	2.51	21.33	1.00
3.167	1.09	9.250	2.34	15.333	2.51	21.42	1.00
3.250	1.09	9.333	2.67	15.417	2.51	21.50	1.00
3.333	1.09	9.417	2.67	15.500	2.51	21.58	1.00
3.417	1.09	9.500	2.67	15.583	2.51	21.67	1.00
3.500	1.09	9.583	2.67	15.667	2.51	21.75	1.00
3.583	1.09	9.667	2.67	15.750	2.51	21.83	1.00

Post-Development VO Output (INT)

3.667	1.09	9.750	2.67	15.833	2.51	21.92	1.00
3.750	1.09	9.833	3.01	15.917	2.51	22.00	1.00
3.833	1.09	9.917	3.01	16.000	2.51	22.08	1.00
3.917	1.09	10.000	3.01	16.083	2.51	22.17	1.00
4.000	1.09	10.083	3.01	16.167	2.51	22.25	1.00
4.083	1.09	10.167	3.01	16.250	2.51	22.33	1.00
4.167	1.09	10.250	3.01	16.333	1.50	22.42	1.00
4.250	1.09	10.333	3.84	16.417	1.50	22.50	1.00
4.333	1.34	10.417	3.84	16.500	1.50	22.58	1.00
4.417	1.34	10.500	3.84	16.583	1.50	22.67	1.00
4.500	1.34	10.583	3.84	16.667	1.50	22.75	1.00
4.583	1.34	10.667	3.84	16.750	1.50	22.83	1.00
4.667	1.34	10.750	3.84	16.833	1.50	22.92	1.00
4.750	1.34	10.833	5.18	16.917	1.50	23.00	1.00
4.833	1.34	10.917	5.18	17.000	1.50	23.08	1.00
4.917	1.34	11.000	5.18	17.083	1.50	23.17	1.00
5.000	1.34	11.083	5.18	17.167	1.50	23.25	1.00
5.083	1.34	11.167	5.18	17.250	1.50	23.33	1.00
5.167	1.34	11.250	5.18	17.333	1.50	23.42	1.00
5.250	1.34	11.333	8.02	17.417	1.50	23.50	1.00
5.333	1.34	11.417	8.02	17.500	1.50	23.58	1.00
5.417	1.34	11.500	8.02	17.583	1.50	23.67	1.00
5.500	1.34	11.583	8.02	17.667	1.50	23.75	1.00
5.583	1.34	11.667	8.02	17.750	1.50	23.83	1.00
5.667	1.34	11.750	8.02	17.833	1.50	23.92	1.00
5.750	1.34	11.833	24.72	17.917	1.50	24.00	1.00
5.833	1.34	11.917	24.72	18.000	1.50	24.08	1.00
5.917	1.34	12.000	24.72	18.083	1.50	24.17	1.00
6.000	1.34	12.083	102.21	18.167	1.50	24.25	1.00
6.083	1.34	12.167	102.22	18.250	1.50		

Unit Hyd Qpeak (cms)= 1.284

PEAK FLOW (cms)= 0.639 (i)
TIME TO PEAK (hrs)= 13.500
RUNOFF VOLUME (mm)= 23.610
TOTAL RAINFALL (mm)= 83.510
RUNOFF COEFFICIENT = 0.283

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	
NASHYD (0028)	Area (ha)= 6.37 Curve Number (CN)= 50.5
ID= 1 DT= 5.0 min	Ia (mm)= 15.69 # of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.77

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.34	12.250	102.22	18.33	1.50
0.167	0.00	6.250	1.34	12.333	12.04	18.42	1.50
0.250	0.00	6.333	1.50	12.417	12.03	18.50	1.50
0.333	0.92	6.417	1.50	12.500	12.03	18.58	1.50
0.417	0.92	6.500	1.50	12.583	12.03	18.67	1.50
0.500	0.92	6.583	1.50	12.667	12.03	18.75	1.50
0.583	0.92	6.667	1.50	12.750	12.03	18.83	1.50
0.667	0.92	6.750	1.50	12.833	6.18	18.92	1.50
0.750	0.92	6.833	1.50	12.917	6.18	19.00	1.50
0.833	0.92	6.917	1.50	13.000	6.18	19.08	1.50
0.917	0.92	7.000	1.50	13.083	6.18	19.17	1.50
1.000	0.92	7.083	1.50	13.167	6.18	19.25	1.50
1.083	0.92	7.167	1.50	13.250	6.18	19.33	1.50
1.167	0.92	7.250	1.50	13.333	4.51	19.42	1.50
1.250	0.92	7.333	1.84	13.417	4.51	19.50	1.50
1.333	0.92	7.417	1.84	13.500	4.51	19.58	1.50
1.417	0.92	7.500	1.84	13.583	4.51	19.67	1.50
1.500	0.92	7.583	1.84	13.667	4.51	19.75	1.50
1.583	0.92	7.667	1.84	13.750	4.51	19.83	1.50
1.667	0.92	7.750	1.84	13.833	3.51	19.92	1.50
1.750	0.92	7.833	1.84	13.917	3.51	20.00	1.50
1.833	0.92	7.917	1.84	14.000	3.51	20.08	1.50
1.917	0.92	8.000	1.84	14.083	3.51	20.17	1.50
2.000	0.92	8.083	1.84	14.167	3.51	20.25	1.50
2.083	0.92	8.167	1.84	14.250	3.51	20.33	1.00
2.167	0.92	8.250	1.84	14.333	2.51	20.42	1.00
2.250	0.92	8.333	2.17	14.417	2.51	20.50	1.00
2.333	1.09	8.417	2.17	14.500	2.51	20.58	1.00
2.417	1.09	8.500	2.17	14.583	2.51	20.67	1.00
2.500	1.09	8.583	2.17	14.667	2.51	20.75	1.00
2.583	1.09	8.667	2.17	14.750	2.51	20.83	1.00
2.667	1.09	8.750	2.17	14.833	2.51	20.92	1.00
2.750	1.09	8.833	2.34	14.917	2.51	21.00	1.00
2.833	1.09	8.917	2.34	15.000	2.51	21.08	1.00
2.917	1.09	9.000	2.34	15.083	2.51	21.17	1.00
3.000	1.09	9.083	2.34	15.167	2.51	21.25	1.00
3.083	1.09	9.167	2.34	15.250	2.51	21.33	1.00
3.167	1.09	9.250	2.34	15.333	2.51	21.42	1.00
3.250	1.09	9.333	2.67	15.417	2.51	21.50	1.00
3.333	1.09	9.417	2.67	15.500	2.51	21.58	1.00
3.417	1.09	9.500	2.67	15.583	2.51	21.67	1.00
3.500	1.09	9.583	2.67	15.667	2.51	21.75	1.00

3.583	1.09	9.667	2.67	15.750	2.51	21.83	1.00
3.667	1.09	9.750	2.67	15.833	2.51	21.92	1.00
3.750	1.09	9.833	3.01	15.917	2.51	22.00	1.00
3.833	1.09	9.917	3.01	16.000	2.51	22.08	1.00
3.917	1.09	10.000	3.01	16.083	2.51	22.17	1.00
4.000	1.09	10.083	3.01	16.167	2.51	22.25	1.00
4.083	1.09	10.167	3.01	16.250	2.51	22.33	1.00
4.167	1.09	10.250	3.01	16.333	1.50	22.42	1.00
4.250	1.09	10.333	3.84	16.417	1.50	22.50	1.00
4.333	1.34	10.417	3.84	16.500	1.50	22.58	1.00
4.417	1.34	10.500	3.84	16.583	1.50	22.67	1.00
4.500	1.34	10.583	3.84	16.667	1.50	22.75	1.00
4.583	1.34	10.667	3.84	16.750	1.50	22.83	1.00
4.667	1.34	10.750	3.84	16.833	1.50	22.92	1.00
4.750	1.34	10.833	5.18	16.917	1.50	23.00	1.00
4.833	1.34	10.917	5.18	17.000	1.50	23.08	1.00
4.917	1.34	11.000	5.18	17.083	1.50	23.17	1.00
5.000	1.34	11.083	5.18	17.167	1.50	23.25	1.00
5.083	1.34	11.167	5.18	17.250	1.50	23.33	1.00
5.167	1.34	11.250	5.18	17.333	1.50	23.42	1.00
5.250	1.34	11.333	8.02	17.417	1.50	23.50	1.00
5.333	1.34	11.417	8.02	17.500	1.50	23.58	1.00
5.417	1.34	11.500	8.02	17.583	1.50	23.67	1.00
5.500	1.34	11.583	8.02	17.667	1.50	23.75	1.00
5.583	1.34	11.667	8.02	17.750	1.50	23.83	1.00
5.667	1.34	11.750	8.02	17.833	1.50	23.92	1.00
5.750	1.34	11.833	24.72	17.917	1.50	24.00	1.00
5.833	1.34	11.917	24.72	18.000	1.50	24.08	1.00
5.917	1.34	12.000	24.72	18.083	1.50	24.17	1.00
6.000	1.34	12.083	102.21	18.167	1.50	24.25	1.00
6.083	1.34	12.167	102.22	18.250	1.50		

Unit Hyd Qpeak (cms)= 0.316

PEAK FLOW (cms)= 0.082 (i)
TIME TO PEAK (hrs)= 13.000
RUNOFF VOLUME (mm)= 14.510
TOTAL RAINFALL (mm)= 83.510
RUNOFF COEFFICIENT = 0.174

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0029)	Area (ha)= 14.85	Curve Number (CN)= 52.9	
ID= 1 DT= 5.0 min	Ia (mm)= 13.28	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.89		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.34	12.250	102.22	18.33	1.50
0.167	0.00	6.250	1.34	12.333	12.04	18.42	1.50
0.250	0.00	6.333	1.50	12.417	12.03	18.50	1.50
0.333	0.92	6.417	1.50	12.500	12.03	18.58	1.50
0.417	0.92	6.500	1.50	12.583	12.03	18.67	1.50
0.500	0.92	6.583	1.50	12.667	12.03	18.75	1.50
0.583	0.92	6.667	1.50	12.750	12.03	18.83	1.50
0.667	0.92	6.750	1.50	12.833	6.18	18.92	1.50
0.750	0.92	6.833	1.50	12.917	6.18	19.00	1.50
0.833	0.92	6.917	1.50	13.000	6.18	19.08	1.50
0.917	0.92	7.000	1.50	13.083	6.18	19.17	1.50
1.000	0.92	7.083	1.50	13.167	6.18	19.25	1.50
1.083	0.92	7.167	1.50	13.250	6.18	19.33	1.50
1.167	0.92	7.250	1.50	13.333	4.51	19.42	1.50
1.250	0.92	7.333	1.84	13.417	4.51	19.50	1.50
1.333	0.92	7.417	1.84	13.500	4.51	19.58	1.50
1.417	0.92	7.500	1.84	13.583	4.51	19.67	1.50
1.500	0.92	7.583	1.84	13.667	4.51	19.75	1.50
1.583	0.92	7.667	1.84	13.750	4.51	19.83	1.50
1.667	0.92	7.750	1.84	13.833	3.51	19.92	1.50
1.750	0.92	7.833	1.84	13.917	3.51	20.00	1.50
1.833	0.92	7.917	1.84	14.000	3.51	20.08	1.50
1.917	0.92	8.000	1.84	14.083	3.51	20.17	1.50
2.000	0.92	8.083	1.84	14.167	3.51	20.25	1.50
2.083	0.92	8.167	1.84	14.250	3.51	20.33	1.00
2.167	0.92	8.250	1.84	14.333	2.51	20.42	1.00
2.250	0.92	8.333	2.17	14.417	2.51	20.50	1.00
2.333	1.09	8.417	2.17	14.500	2.51	20.58	1.00
2.417	1.09	8.500	2.17	14.583	2.51	20.67	1.00
2.500	1.09	8.583	2.17	14.667	2.51	20.75	1.00
2.583	1.09	8.667	2.17	14.750	2.51	20.83	1.00
2.667	1.09	8.750	2.17	14.833	2.51	20.92	1.00
2.750	1.09	8.833	2.34	14.917	2.51	21.00	1.00
2.833	1.09	8.917	2.34	15.000	2.51	21.08	1.00
2.917	1.09	9.000	2.34	15.083	2.51	21.17	1.00
3.000	1.09	9.083	2.34	15.167	2.51	21.25	1.00
3.083	1.09	9.167	2.34	15.250	2.51	21.33	1.00
3.167	1.09	9.250	2.34	15.333	2.51	21.42	1.00
3.250	1.09	9.333	2.67	15.417	2.51	21.50	1.00
3.333	1.09	9.417	2.67	15.500	2.51	21.58	1.00
3.417	1.09	9.500	2.67	15.583	2.51	21.67	1.00

3.500	1.09	9.583	2.67	15.667	2.51	21.75	1.00
3.583	1.09	9.667	2.67	15.750	2.51	21.83	1.00
3.667	1.09	9.750	2.67	15.833	2.51	21.92	1.00
3.750	1.09	9.833	3.01	15.917	2.51	22.00	1.00
3.833	1.09	9.917	3.01	16.000	2.51	22.08	1.00
3.917	1.09	10.000	3.01	16.083	2.51	22.17	1.00
4.000	1.09	10.083	3.01	16.167	2.51	22.25	1.00
4.083	1.09	10.167	3.01	16.250	2.51	22.33	1.00
4.167	1.09	10.250	3.01	16.333	1.50	22.42	1.00
4.250	1.09	10.333	3.84	16.417	1.50	22.50	1.00
4.333	1.34	10.417	3.84	16.500	1.50	22.58	1.00
4.417	1.34	10.500	3.84	16.583	1.50	22.67	1.00
4.500	1.34	10.583	3.84	16.667	1.50	22.75	1.00
4.583	1.34	10.667	3.84	16.750	1.50	22.83	1.00
4.667	1.34	10.750	3.84	16.833	1.50	22.92	1.00
4.750	1.34	10.833	5.18	16.917	1.50	23.00	1.00
4.833	1.34	10.917	5.18	17.000	1.50	23.08	1.00
4.917	1.34	11.000	5.18	17.083	1.50	23.17	1.00
5.000	1.34	11.083	5.18	17.167	1.50	23.25	1.00
5.083	1.34	11.167	5.18	17.250	1.50	23.33	1.00
5.167	1.34	11.250	5.18	17.333	1.50	23.42	1.00
5.250	1.34	11.333	8.02	17.417	1.50	23.50	1.00
5.333	1.34	11.417	8.02	17.500	1.50	23.58	1.00
5.417	1.34	11.500	8.02	17.583	1.50	23.67	1.00
5.500	1.34	11.583	8.02	17.667	1.50	23.75	1.00
5.583	1.34	11.667	8.02	17.750	1.50	23.83	1.00
5.667	1.34	11.750	8.02	17.833	1.50	23.92	1.00
5.750	1.34	11.833	24.72	17.917	1.50	24.00	1.00
5.833	1.34	11.917	24.72	18.000	1.50	24.08	1.00
5.917	1.34	12.000	24.72	18.083	1.50	24.17	1.00
6.000	1.34	12.083	102.21	18.167	1.50	24.25	1.00
6.083	1.34	12.167	102.22	18.250	1.50		

Unit Hyd Qpeak (cms)= 0.637

PEAK FLOW (cms)= 0.201 (i)
TIME TO PEAK (hrs)= 13.167
RUNOFF VOLUME (mm)= 16.662
TOTAL RAINFALL (mm)= 83.510
RUNOFF COEFFICIENT = 0.200

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0030)	Area (ha)= 1.70	Curve Number (CN)= 60.5	
ID= 1 DT= 5.0 min	Ia (mm)= 9.65	# of Linear Res.(N)= 3.00	

--- U.H. Tp(hrs)= 0.40

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.34	12.250	102.22	18.33	1.50
0.167	0.00	6.250	1.34	12.333	12.04	18.42	1.50
0.250	0.00	6.333	1.50	12.417	12.03	18.50	1.50
0.333	0.92	6.417	1.50	12.500	12.03	18.58	1.50
0.417	0.92	6.500	1.50	12.583	12.03	18.67	1.50
0.500	0.92	6.583	1.50	12.667	12.03	18.75	1.50
0.583	0.92	6.667	1.50	12.750	12.03	18.83	1.50
0.667	0.92	6.750	1.50	12.833	6.18	18.92	1.50
0.750	0.92	6.833	1.50	12.917	6.18	19.00	1.50
0.833	0.92	6.917	1.50	13.000	6.18	19.08	1.50
0.917	0.92	7.000	1.50	13.083	6.18	19.17	1.50
1.000	0.92	7.083	1.50	13.167	6.18	19.25	1.50
1.083	0.92	7.167	1.50	13.250	6.18	19.33	1.50
1.167	0.92	7.250	1.50	13.333	4.51	19.42	1.50
1.250	0.92	7.333	1.84	13.417	4.51	19.50	1.50
1.333	0.92	7.417	1.84	13.500	4.51	19.58	1.50
1.417	0.92	7.500	1.84	13.583	4.51	19.67	1.50
1.500	0.92	7.583	1.84	13.667	4.51	19.75	1.50
1.583	0.92	7.667	1.84	13.750	4.51	19.83	1.50
1.667	0.92	7.750	1.84	13.833	3.51	19.92	1.50
1.750	0.92	7.833	1.84	13.917	3.51	20.00	1.50
1.833	0.92	7.917	1.84	14.000	3.51	20.08	1.50
1.917	0.92	8.000	1.84	14.083	3.51	20.17	1.50
2.000	0.92	8.083	1.84	14.167	3.51	20.25	1.50
2.083	0.92	8.167	1.84	14.250	3.51	20.33	1.00
2.167	0.92	8.250	1.84	14.333	2.51	20.42	1.00
2.250	0.92	8.333	2.17	14.417	2.51	20.50	1.00
2.333	1.09	8.417	2.17	14.500	2.51	20.58	1.00
2.417	1.09	8.500	2.17	14.583	2.51	20.67	1.00
2.500	1.09	8.583	2.17	14.667	2.51	20.75	1.00
2.583	1.09	8.667	2.17	14.750	2.51	20.83	1.00
2.667	1.09	8.750	2.17	14.833	2.51	20.92	1.00
2.750	1.09	8.833	2.34	14.917	2.51	21.00	1.00
2.833	1.09	8.917	2.34	15.000	2.51	21.08	1.00
2.917	1.09	9.000	2.34	15.083	2.51	21.17	1.00
3.000	1.09	9.083	2.34	15.167	2.51	21.25	1.00
3.083	1.09	9.167	2.34	15.250	2.51	21.33	1.00
3.167	1.09	9.250	2.34	15.333	2.51	21.42	1.00
3.250	1.09	9.333	2.67	15.417	2.51	21.50	1.00
3.333	1.09	9.417	2.67	15.500	2.51	21.58	1.00

3.417	1.09	9.500	2.67	15.583	2.51	21.67	1.00
3.500	1.09	9.583	2.67	15.667	2.51	21.75	1.00
3.583	1.09	9.667	2.67	15.750	2.51	21.83	1.00
3.667	1.09	9.750	2.67	15.833	2.51	21.92	1.00
3.750	1.09	9.833	3.01	15.917	2.51	22.00	1.00
3.833	1.09	9.917	3.01	16.000	2.51	22.08	1.00
3.917	1.09	10.000	3.01	16.083	2.51	22.17	1.00
4.000	1.09	10.083	3.01	16.167	2.51	22.25	1.00
4.083	1.09	10.167	3.01	16.250	2.51	22.33	1.00
4.167	1.09	10.250	3.01	16.333	1.50	22.42	1.00
4.250	1.09	10.333	3.84	16.417	1.50	22.50	1.00
4.333	1.34	10.417	3.84	16.500	1.50	22.58	1.00
4.417	1.34	10.500	3.84	16.583	1.50	22.67	1.00
4.500	1.34	10.583	3.84	16.667	1.50	22.75	1.00
4.583	1.34	10.667	3.84	16.750	1.50	22.83	1.00
4.667	1.34	10.750	3.84	16.833	1.50	22.92	1.00
4.750	1.34	10.833	5.18	16.917	1.50	23.00	1.00
4.833	1.34	10.917	5.18	17.000	1.50	23.08	1.00
4.917	1.34	11.000	5.18	17.083	1.50	23.17	1.00
5.000	1.34	11.083	5.18	17.167	1.50	23.25	1.00
5.083	1.34	11.167	5.18	17.250	1.50	23.33	1.00
5.167	1.34	11.250	5.18	17.333	1.50	23.42	1.00
5.250	1.34	11.333	8.02	17.417	1.50	23.50	1.00
5.333	1.34	11.417	8.02	17.500	1.50	23.58	1.00
5.417	1.34	11.500	8.02	17.583	1.50	23.67	1.00
5.500	1.34	11.583	8.02	17.667	1.50	23.75	1.00
5.583	1.34	11.667	8.02	17.750	1.50	23.83	1.00
5.667	1.34	11.750	8.02	17.833	1.50	23.92	1.00
5.750	1.34	11.833	24.72	17.917	1.50	24.00	1.00
5.833	1.34	11.917	24.72	18.000	1.50	24.08	1.00
5.917	1.34	12.000	24.72	18.083	1.50	24.17	1.00
6.000	1.34	12.083	102.21	18.167	1.50	24.25	1.00
6.083	1.34	12.167	102.22	18.250	1.50		

Unit Hyd Qpeak (cms)= 0.162

PEAK FLOW (cms)= 0.058 (i)
TIME TO PEAK (hrs)= 12.500
RUNOFF VOLUME (mm)= 22.730
TOTAL RAINFALL (mm)= 83.510
RUNOFF COEFFICIENT = 0.272

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0031)	Area (ha)= 1.80	Curve Number (CN)= 50.0	

|ID= 1 DT= 5.0 min | Ia (mm)= 16.00 # of Linear Res.(N)= 3.00

--- U.H. Tp(hrs)= 0.76

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.34	12.250	102.22	18.33	1.50
0.167	0.00	6.250	1.34	12.333	12.04	18.42	1.50
0.250	0.00	6.333	1.50	12.417	12.03	18.50	1.50
0.333	0.92	6.417	1.50	12.500	12.03	18.58	1.50
0.417	0.92	6.500	1.50	12.583	12.03	18.67	1.50
0.500	0.92	6.583	1.50	12.667	12.03	18.75	1.50
0.583	0.92	6.667	1.50	12.750	12.03	18.83	1.50
0.667	0.92	6.750	1.50	12.833	6.18	18.92	1.50
0.750	0.92	6.833	1.50	12.917	6.18	19.00	1.50
0.833	0.92	6.917	1.50	13.000	6.18	19.08	1.50
0.917	0.92	7.000	1.50	13.083	6.18	19.17	1.50
1.000	0.92	7.083	1.50	13.167	6.18	19.25	1.50
1.083	0.92	7.167	1.50	13.250	6.18	19.33	1.50
1.167	0.92	7.250	1.50	13.333	4.51	19.42	1.50
1.250	0.92	7.333	1.84	13.417	4.51	19.50	1.50
1.333	0.92	7.417	1.84	13.500	4.51	19.58	1.50
1.417	0.92	7.500	1.84	13.583	4.51	19.67	1.50
1.500	0.92	7.583	1.84	13.667	4.51	19.75	1.50
1.583	0.92	7.667	1.84	13.750	4.51	19.83	1.50
1.667	0.92	7.750	1.84	13.833	3.51	19.92	1.50
1.750	0.92	7.833	1.84	13.917	3.51	20.00	1.50
1.833	0.92	7.917	1.84	14.000	3.51	20.08	1.50
1.917	0.92	8.000	1.84	14.083	3.51	20.17	1.50
2.000	0.92	8.083	1.84	14.167	3.51	20.25	1.50
2.083	0.92	8.167	1.84	14.250	3.51	20.33	1.00
2.167	0.92	8.250	1.84	14.333	2.51	20.42	1.00
2.250	0.92	8.333	2.17	14.417	2.51	20.50	1.00
2.333	1.09	8.417	2.17	14.500	2.51	20.58	1.00
2.417	1.09	8.500	2.17	14.583	2.51	20.67	1.00
2.500	1.09	8.583	2.17	14.667	2.51	20.75	1.00
2.583	1.09	8.667	2.17	14.750	2.51	20.83	1.00
2.667	1.09	8.750	2.17	14.833	2.51	20.92	1.00
2.750	1.09	8.833	2.34	14.917	2.51	21.00	1.00
2.833	1.09	8.917	2.34	15.000	2.51	21.08	1.00
2.917	1.09	9.000	2.34	15.083	2.51	21.17	1.00
3.000	1.09	9.083	2.34	15.167	2.51	21.25	1.00
3.083	1.09	9.167	2.34	15.250	2.51	21.33	1.00
3.167	1.09	9.250	2.34	15.333	2.51	21.42	1.00
3.250	1.09	9.333	2.67	15.417	2.51	21.50	1.00

3.333	1.09	9.417	2.67	15.500	2.51	21.58	1.00
3.417	1.09	9.500	2.67	15.583	2.51	21.67	1.00
3.500	1.09	9.583	2.67	15.667	2.51	21.75	1.00
3.583	1.09	9.667	2.67	15.750	2.51	21.83	1.00
3.667	1.09	9.750	2.67	15.833	2.51	21.92	1.00
3.750	1.09	9.833	3.01	15.917	2.51	22.00	1.00
3.833	1.09	9.917	3.01	16.000	2.51	22.08	1.00
3.917	1.09	10.000	3.01	16.083	2.51	22.17	1.00
4.000	1.09	10.083	3.01	16.167	2.51	22.25	1.00
4.083	1.09	10.167	3.01	16.250	2.51	22.33	1.00
4.167	1.09	10.250	3.01	16.333	1.50	22.42	1.00
4.250	1.09	10.333	3.84	16.417	1.50	22.50	1.00
4.333	1.34	10.417	3.84	16.500	1.50	22.58	1.00
4.417	1.34	10.500	3.84	16.583	1.50	22.67	1.00
4.500	1.34	10.583	3.84	16.667	1.50	22.75	1.00
4.583	1.34	10.667	3.84	16.750	1.50	22.83	1.00
4.667	1.34	10.750	3.84	16.833	1.50	22.92	1.00
4.750	1.34	10.833	5.18	16.917	1.50	23.00	1.00
4.833	1.34	10.917	5.18	17.000	1.50	23.08	1.00
4.917	1.34	11.000	5.18	17.083	1.50	23.17	1.00
5.000	1.34	11.083	5.18	17.167	1.50	23.25	1.00
5.083	1.34	11.167	5.18	17.250	1.50	23.33	1.00
5.167	1.34	11.250	5.18	17.333	1.50	23.42	1.00
5.250	1.34	11.333	8.02	17.417	1.50	23.50	1.00
5.333	1.34	11.417	8.02	17.500	1.50	23.58	1.00
5.417	1.34	11.500	8.02	17.583	1.50	23.67	1.00
5.500	1.34	11.583	8.02	17.667	1.50	23.75	1.00
5.583	1.34	11.667	8.02	17.750	1.50	23.83	1.00
5.667	1.34	11.750	8.02	17.833	1.50	23.92	1.00
5.750	1.34	11.833	24.72	17.917	1.50	24.00	1.00
5.833	1.34	11.917	24.72	18.000	1.50	24.08	1.00
5.917	1.34	12.000	24.72	18.083	1.50	24.17	1.00
6.000	1.34	12.083	102.21	18.167	1.50	24.25	1.00
6.083	1.34	12.167	102.22	18.250	1.50		

Unit Hyd Qpeak (cms)= 0.090

PEAK FLOW (cms)= 0.023 (i)
TIME TO PEAK (hrs)= 13.000
RUNOFF VOLUME (mm)= 14.175
TOTAL RAINFALL (mm)= 83.510
RUNOFF COEFFICIENT = 0.170

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB

Post-Development VO Output (INT)

| NASHYD (0032)| Area (ha)= 6.70 Curve Number (CN)= 60.0
|ID= 1 DT= 5.0 min | Ia (mm)= 10.00 # of Linear Res.(N)= 3.00
---------- U.H. Tp(hrs)= 1.45

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.34	12.250	102.22	18.33	1.50
0.167	0.00	6.250	1.34	12.333	12.04	18.42	1.50
0.250	0.00	6.333	1.50	12.417	12.03	18.50	1.50
0.333	0.92	6.417	1.50	12.500	12.03	18.58	1.50
0.417	0.92	6.500	1.50	12.583	12.03	18.67	1.50
0.500	0.92	6.583	1.50	12.667	12.03	18.75	1.50
0.583	0.92	6.667	1.50	12.750	12.03	18.83	1.50
0.667	0.92	6.750	1.50	12.833	6.18	18.92	1.50
0.750	0.92	6.833	1.50	12.917	6.18	19.00	1.50
0.833	0.92	6.917	1.50	13.000	6.18	19.08	1.50
0.917	0.92	7.000	1.50	13.083	6.18	19.17	1.50
1.000	0.92	7.083	1.50	13.167	6.18	19.25	1.50
1.083	0.92	7.167	1.50	13.250	6.18	19.33	1.50
1.167	0.92	7.250	1.50	13.333	4.51	19.42	1.50
1.250	0.92	7.333	1.84	13.417	4.51	19.50	1.50
1.333	0.92	7.417	1.84	13.500	4.51	19.58	1.50
1.417	0.92	7.500	1.84	13.583	4.51	19.67	1.50
1.500	0.92	7.583	1.84	13.667	4.51	19.75	1.50
1.583	0.92	7.667	1.84	13.750	4.51	19.83	1.50
1.667	0.92	7.750	1.84	13.833	3.51	19.92	1.50
1.750	0.92	7.833	1.84	13.917	3.51	20.00	1.50
1.833	0.92	7.917	1.84	14.000	3.51	20.08	1.50
1.917	0.92	8.000	1.84	14.083	3.51	20.17	1.50
2.000	0.92	8.083	1.84	14.167	3.51	20.25	1.50
2.083	0.92	8.167	1.84	14.250	3.51	20.33	1.00
2.167	0.92	8.250	1.84	14.333	2.51	20.42	1.00
2.250	0.92	8.333	2.17	14.417	2.51	20.50	1.00
2.333	1.09	8.417	2.17	14.500	2.51	20.58	1.00
2.417	1.09	8.500	2.17	14.583	2.51	20.67	1.00
2.500	1.09	8.583	2.17	14.667	2.51	20.75	1.00
2.583	1.09	8.667	2.17	14.750	2.51	20.83	1.00
2.667	1.09	8.750	2.17	14.833	2.51	20.92	1.00
2.750	1.09	8.833	2.34	14.917	2.51	21.00	1.00
2.833	1.09	8.917	2.34	15.000	2.51	21.08	1.00
2.917	1.09	9.000	2.34	15.083	2.51	21.17	1.00
3.000	1.09	9.083	2.34	15.167	2.51	21.25	1.00
3.083	1.09	9.167	2.34	15.250	2.51	21.33	1.00
3.167	1.09	9.250	2.34	15.333	2.51	21.42	1.00

3.250	1.09	9.333	2.67	15.417	2.51	21.50	1.00
3.333	1.09	9.417	2.67	15.500	2.51	21.58	1.00
3.417	1.09	9.500	2.67	15.583	2.51	21.67	1.00
3.500	1.09	9.583	2.67	15.667	2.51	21.75	1.00
3.583	1.09	9.667	2.67	15.750	2.51	21.83	1.00
3.667	1.09	9.750	2.67	15.833	2.51	21.92	1.00
3.750	1.09	9.833	3.01	15.917	2.51	22.00	1.00
3.833	1.09	9.917	3.01	16.000	2.51	22.08	1.00
3.917	1.09	10.000	3.01	16.083	2.51	22.17	1.00
4.000	1.09	10.083	3.01	16.167	2.51	22.25	1.00
4.083	1.09	10.167	3.01	16.250	2.51	22.33	1.00
4.167	1.09	10.250	3.01	16.333	1.50	22.42	1.00
4.250	1.09	10.333	3.84	16.417	1.50	22.50	1.00
4.333	1.34	10.417	3.84	16.500	1.50	22.58	1.00
4.417	1.34	10.500	3.84	16.583	1.50	22.67	1.00
4.500	1.34	10.583	3.84	16.667	1.50	22.75	1.00
4.583	1.34	10.667	3.84	16.750	1.50	22.83	1.00
4.667	1.34	10.750	3.84	16.833	1.50	22.92	1.00
4.750	1.34	10.833	5.18	16.917	1.50	23.00	1.00
4.833	1.34	10.917	5.18	17.000	1.50	23.08	1.00
4.917	1.34	11.000	5.18	17.083	1.50	23.17	1.00
5.000	1.34	11.083	5.18	17.167	1.50	23.25	1.00
5.083	1.34	11.167	5.18	17.250	1.50	23.33	1.00
5.167	1.34	11.250	5.18	17.333	1.50	23.42	1.00
5.250	1.34	11.333	8.02	17.417	1.50	23.50	1.00
5.333	1.34	11.417	8.02	17.500	1.50	23.58	1.00
5.417	1.34	11.500	8.02	17.583	1.50	23.67	1.00
5.500	1.34	11.583	8.02	17.667	1.50	23.75	1.00
5.583	1.34	11.667	8.02	17.750	1.50	23.83	1.00
5.667	1.34	11.750	8.02	17.833	1.50	23.92	1.00
5.750	1.34	11.833	24.72	17.917	1.50	24.00	1.00
5.833	1.34	11.917	24.72	18.000	1.50	24.08	1.00
5.917	1.34	12.000	24.72	18.083	1.50	24.17	1.00
6.000	1.34	12.083	102.21	18.167	1.50	24.25	1.00
6.083	1.34	12.167	102.22	18.250	1.50		

Unit Hyd Qpeak (cms)= 0.176

PEAK FLOW (cms)= 0.086 (i)
TIME TO PEAK (hrs)= 13.833
RUNOFF VOLUME (mm)= 22.251
TOTAL RAINFALL (mm)= 83.510
RUNOFF COEFFICIENT = 0.266

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
NASHYD (0033)| Area (ha)= 1.13 Curve Number (CN)= 67.4
ID= 1 DT= 5.0 min	Ia (mm)= 7.88 # of Linear Res.(N)= 3.00
---------- U.H. Tp(hrs)= 0.43

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.34	12.250	102.22	18.33	1.50
0.167	0.00	6.250	1.34	12.333	12.04	18.42	1.50
0.250	0.00	6.333	1.50	12.417	12.03	18.50	1.50
0.333	0.92	6.417	1.50	12.500	12.03	18.58	1.50
0.417	0.92	6.500	1.50	12.583	12.03	18.67	1.50
0.500	0.92	6.583	1.50	12.667	12.03	18.75	1.50
0.583	0.92	6.667	1.50	12.750	12.03	18.83	1.50
0.667	0.92	6.750	1.50	12.833	6.18	18.92	1.50
0.750	0.92	6.833	1.50	12.917	6.18	19.00	1.50
0.833	0.92	6.917	1.50	13.000	6.18	19.08	1.50
0.917	0.92	7.000	1.50	13.083	6.18	19.17	1.50
1.000	0.92	7.083	1.50	13.167	6.18	19.25	1.50
1.083	0.92	7.167	1.50	13.250	6.18	19.33	1.50
1.167	0.92	7.250	1.50	13.333	4.51	19.42	1.50
1.250	0.92	7.333	1.84	13.417	4.51	19.50	1.50
1.333	0.92	7.417	1.84	13.500	4.51	19.58	1.50
1.417	0.92	7.500	1.84	13.583	4.51	19.67	1.50
1.500	0.92	7.583	1.84	13.667	4.51	19.75	1.50
1.583	0.92	7.667	1.84	13.750	4.51	19.83	1.50
1.667	0.92	7.750	1.84	13.833	3.51	19.92	1.50
1.750	0.92	7.833	1.84	13.917	3.51	20.00	1.50
1.833	0.92	7.917	1.84	14.000	3.51	20.08	1.50
1.917	0.92	8.000	1.84	14.083	3.51	20.17	1.50
2.000	0.92	8.083	1.84	14.167	3.51	20.25	1.50
2.083	0.92	8.167	1.84	14.250	3.51	20.33	1.00
2.167	0.92	8.250	1.84	14.333	2.51	20.42	1.00
2.250	0.92	8.333	2.17	14.417	2.51	20.50	1.00
2.333	1.09	8.417	2.17	14.500	2.51	20.58	1.00
2.417	1.09	8.500	2.17	14.583	2.51	20.67	1.00
2.500	1.09	8.583	2.17	14.667	2.51	20.75	1.00
2.583	1.09	8.667	2.17	14.750	2.51	20.83	1.00
2.667	1.09	8.750	2.17	14.833	2.51	20.92	1.00
2.750	1.09	8.833	2.34	14.917	2.51	21.00	1.00
2.833	1.09	8.917	2.34	15.000	2.51	21.08	1.00
2.917	1.09	9.000	2.34	15.083	2.51	21.17	1.00
3.000	1.09	9.083	2.34	15.167	2.51	21.25	1.00
3.083	1.09	9.167	2.34	15.250	2.51	21.33	1.00

3.167	1.09	9.250	2.34	15.333	2.51	21.42	1.00
3.250	1.09	9.333	2.67	15.417	2.51	21.50	1.00
3.333	1.09	9.417	2.67	15.500	2.51	21.58	1.00
3.417	1.09	9.500	2.67	15.583	2.51	21.67	1.00
3.500	1.09	9.583	2.67	15.667	2.51	21.75	1.00
3.583	1.09	9.667	2.67	15.750	2.51	21.83	1.00
3.667	1.09	9.750	2.67	15.833	2.51	21.92	1.00
3.750	1.09	9.833	3.01	15.917	2.51	22.00	1.00
3.833	1.09	9.917	3.01	16.000	2.51	22.08	1.00
3.917	1.09	10.000	3.01	16.083	2.51	22.17	1.00
4.000	1.09	10.083	3.01	16.167	2.51	22.25	1.00
4.083	1.09	10.167	3.01	16.250	2.51	22.33	1.00
4.167	1.09	10.250	3.01	16.333	1.50	22.42	1.00
4.250	1.09	10.333	3.84	16.417	1.50	22.50	1.00
4.333	1.34	10.417	3.84	16.500	1.50	22.58	1.00
4.417	1.34	10.500	3.84	16.583	1.50	22.67	1.00
4.500	1.34	10.583	3.84	16.667	1.50	22.75	1.00
4.583	1.34	10.667	3.84	16.750	1.50	22.83	1.00
4.667	1.34	10.750	3.84	16.833	1.50	22.92	1.00
4.750	1.34	10.833	5.18	16.917	1.50	23.00	1.00
4.833	1.34	10.917	5.18	17.000	1.50	23.08	1.00
4.917	1.34	11.000	5.18	17.083	1.50	23.17	1.00
5.000	1.34	11.083	5.18	17.167	1.50	23.25	1.00
5.083	1.34	11.167	5.18	17.250	1.50	23.33	1.00
5.167	1.34	11.250	5.18	17.333	1.50	23.42	1.00
5.250	1.34	11.333	8.02	17.417	1.50	23.50	1.00
5.333	1.34	11.417	8.02	17.500	1.50	23.58	1.00
5.417	1.34	11.500	8.02	17.583	1.50	23.67	1.00
5.500	1.34	11.583	8.02	17.667	1.50	23.75	1.00
5.583	1.34	11.667	8.02	17.750	1.50	23.83	1.00
5.667	1.34	11.750	8.02	17.833	1.50	23.92	1.00
5.750	1.34	11.833	24.72	17.917	1.50	24.00	1.00
5.833	1.34	11.917	24.72	18.000	1.50	24.08	1.00
5.917	1.34	12.000	24.72	18.083	1.50	24.17	1.00
6.000	1.34	12.083	102.21	18.167	1.50	24.25	1.00
6.083	1.34	12.167	102.22	18.250	1.50		

Unit Hyd Qpeak (cms)= 0.100

PEAK FLOW (cms)= 0.048 (i)
TIME TO PEAK (hrs)= 12.583
RUNOFF VOLUME (mm)= 28.782
TOTAL RAINFALL (mm)= 83.510
RUNOFF COEFFICIENT = 0.345

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0027)	Area (ha)=	1.38	Curve Number (CN)=	64.1	
ID= 1 DT= 5.0 min	Ia (mm)=	8.51	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	0.39			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.34	12.250	102.22	18.33	1.50
0.167	0.00	6.250	1.34	12.333	12.04	18.42	1.50
0.250	0.00	6.333	1.50	12.417	12.03	18.50	1.50
0.333	0.92	6.417	1.50	12.500	12.03	18.58	1.50
0.417	0.92	6.500	1.50	12.583	12.03	18.67	1.50
0.500	0.92	6.583	1.50	12.667	12.03	18.75	1.50
0.583	0.92	6.667	1.50	12.750	12.03	18.83	1.50
0.667	0.92	6.750	1.50	12.833	6.18	18.92	1.50
0.750	0.92	6.833	1.50	12.917	6.18	19.00	1.50
0.833	0.92	6.917	1.50	13.000	6.18	19.08	1.50
0.917	0.92	7.000	1.50	13.083	6.18	19.17	1.50
1.000	0.92	7.083	1.50	13.167	6.18	19.25	1.50
1.083	0.92	7.167	1.50	13.250	6.18	19.33	1.50
1.167	0.92	7.250	1.50	13.333	4.51	19.42	1.50
1.250	0.92	7.333	1.84	13.417	4.51	19.50	1.50
1.333	0.92	7.417	1.84	13.500	4.51	19.58	1.50
1.417	0.92	7.500	1.84	13.583	4.51	19.67	1.50
1.500	0.92	7.583	1.84	13.667	4.51	19.75	1.50
1.583	0.92	7.667	1.84	13.750	4.51	19.83	1.50
1.667	0.92	7.750	1.84	13.833	3.51	19.92	1.50
1.750	0.92	7.833	1.84	13.917	3.51	20.00	1.50
1.833	0.92	7.917	1.84	14.000	3.51	20.08	1.50
1.917	0.92	8.000	1.84	14.083	3.51	20.17	1.50
2.000	0.92	8.083	1.84	14.167	3.51	20.25	1.50
2.083	0.92	8.167	1.84	14.250	3.51	20.33	1.00
2.167	0.92	8.250	1.84	14.333	2.51	20.42	1.00
2.250	0.92	8.333	2.17	14.417	2.51	20.50	1.00
2.333	1.09	8.417	2.17	14.500	2.51	20.58	1.00
2.417	1.09	8.500	2.17	14.583	2.51	20.67	1.00
2.500	1.09	8.583	2.17	14.667	2.51	20.75	1.00
2.583	1.09	8.667	2.17	14.750	2.51	20.83	1.00
2.667	1.09	8.750	2.17	14.833	2.51	20.92	1.00
2.750	1.09	8.833	2.34	14.917	2.51	21.00	1.00
2.833	1.09	8.917	2.34	15.000	2.51	21.08	1.00
2.917	1.09	9.000	2.34	15.083	2.51	21.17	1.00
3.000	1.09	9.083	2.34	15.167	2.51	21.25	1.00
3.083	1.09	9.167	2.34	15.250	2.51	21.33	1.00
3.167	1.09	9.250	2.34	15.333	2.51	21.42	1.00
3.250	1.09	9.333	2.67	15.417	2.51	21.50	1.00
3.333	1.09	9.417	2.67	15.500	2.51	21.58	1.00
3.417	1.09	9.500	2.67	15.583	2.51	21.67	1.00
3.500	1.09	9.583	2.67	15.667	2.51	21.75	1.00
3.583	1.09	9.667	2.67	15.750	2.51	21.83	1.00
3.667	1.09	9.750	2.67	15.833	2.51	21.92	1.00
3.750	1.09	9.833	3.01	15.917	2.51	22.00	1.00
3.833	1.09	9.917	3.01	16.000	2.51	22.08	1.00
3.917	1.09	10.000	3.01	16.083	2.51	22.17	1.00
4.000	1.09	10.083	3.01	16.167	2.51	22.25	1.00
4.083	1.09	10.167	3.01	16.250	2.51	22.33	1.00
4.167	1.09	10.250	3.01	16.333	1.50	22.42	1.00
4.250	1.09	10.333	3.84	16.417	1.50	22.50	1.00
4.333	1.34	10.417	3.84	16.500	1.50	22.58	1.00
4.417	1.34	10.500	3.84	16.583	1.50	22.67	1.00
4.500	1.34	10.583	3.84	16.667	1.50	22.75	1.00
4.583	1.34	10.667	3.84	16.750	1.50	22.83	1.00
4.667	1.34	10.750	3.84	16.833	1.50	22.92	1.00
4.750	1.34	10.833	5.18	16.917	1.50	23.00	1.00
4.833	1.34	10.917	5.18	17.000	1.50	23.08	1.00
4.917	1.34	11.000	5.18	17.083	1.50	23.17	1.00
5.000	1.34	11.083	5.18	17.167	1.50	23.25	1.00
5.083	1.34	11.167	5.18	17.250	1.50	23.33	1.00
5.167	1.34	11.250	5.18	17.333	1.50	23.42	1.00
5.250	1.34	11.333	8.02	17.417	1.50	23.50	1.00
5.333	1.34	11.417	8.02	17.500	1.50	23.58	1.00
5.417	1.34	11.500	8.02	17.583	1.50	23.67	1.00
5.500	1.34	11.583	8.02	17.667	1.50	23.75	1.00
5.583	1.34	11.667	8.02	17.750	1.50	23.83	1.00
5.667	1.34	11.750	8.02	17.833	1.50	23.92	1.00
5.750	1.34	11.833	24.72	17.917	1.50	24.00	1.00
5.833	1.34	11.917	24.72	18.000	1.50	24.08	1.00
5.917	1.34	12.000	24.72	18.083	1.50	24.17	1.00
6.000	1.34	12.083	102.21	18.167	1.50	24.25	1.00
6.083	1.34	12.167	102.22	18.250	1.50		

Unit Hyd Qpeak (cms)= 0.135

PEAK FLOW (cms)= 0.056 (i)
TIME TO PEAK (hrs)= 12.500
RUNOFF VOLUME (mm)= 25.917
TOTAL RAINFALL (mm)= 83.510
RUNOFF COEFFICIENT = 0.310

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

Post-Development VO Output (INT)

CALIB					
NASHYD (0041)	Area (ha)=	0.59	Curve Number (CN)=	71.5	
ID= 1 DT= 5.0 min	Ia (mm)=	4.75	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	0.53			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.34	12.250	102.22	18.33	1.50
0.167	0.00	6.250	1.34	12.333	12.04	18.42	1.50
0.250	0.00	6.333	1.50	12.417	12.03	18.50	1.50
0.333	0.92	6.417	1.50	12.500	12.03	18.58	1.50
0.417	0.92	6.500	1.50	12.583	12.03	18.67	1.50
0.500	0.92	6.583	1.50	12.667	12.03	18.75	1.50
0.583	0.92	6.667	1.50	12.750	12.03	18.83	1.50
0.667	0.92	6.750	1.50	12.833	6.18	18.92	1.50
0.750	0.92	6.833	1.50	12.917	6.18	19.00	1.50
0.833	0.92	6.917	1.50	13.000	6.18	19.08	1.50
0.917	0.92	7.000	1.50	13.083	6.18	19.17	1.50
1.000	0.92	7.083	1.50	13.167	6.18	19.25	1.50
1.083	0.92	7.167	1.50	13.250	6.18	19.33	1.50
1.167	0.92	7.250	1.50	13.333	4.51	19.42	1.50
1.250	0.92	7.333	1.84	13.417	4.51	19.50	1.50
1.333	0.92	7.417	1.84	13.500	4.51	19.58	1.50
1.417	0.92	7.500	1.84	13.583	4.51	19.67	1.50
1.500	0.92	7.583	1.84	13.667	4.51	19.75	1.50
1.583	0.92	7.667	1.84	13.750	4.51	19.83	1.50
1.667	0.92	7.750	1.84	13.833	3.51	19.92	1.50
1.750	0.92	7.833	1.84	13.917	3.51	20.00	1.50
1.833	0.92	7.917	1.84	14.000	3.51	20.08	1.50
1.917	0.92	8.000	1.84	14.083	3.51	20.17	1.50
2.000	0.92	8.083	1.84	14.167	3.51	20.25	1.50
2.083	0.92	8.167	1.84	14.250	3.51	20.33	1.00
2.167	0.92	8.250	1.84	14.333	2.51	20.42	1.00
2.250	0.92	8.333	2.17	14.417	2.51	20.50	1.00
2.333	1.09	8.417	2.17	14.500	2.51	20.58	1.00
2.417	1.09	8.500	2.17	14.583	2.51	20.67	1.00
2.500	1.09	8.583	2.17	14.667	2.51	20.75	1.00
2.583	1.09	8.667	2.17	14.750	2.51	20.83	1.00
2.667	1.09	8.750	2.17	14.833	2.51	20.92	1.00
2.750	1.09	8.833	2.34	14.917	2.51	21.00	1.00
2.833	1.09	8.917	2.34	15.000	2.51	21.08	1.00
2.917	1.09	9.000	2.34	15.083	2.51	21.17	1.00
3.000	1.09	9.083	2.34	15.167	2.51	21.25	1.00
3.083	1.09	9.167	2.34	15.250	2.51	21.33	1.00
3.167	1.09	9.250	2.34	15.333	2.51	21.42	1.00
3.250	1.09	9.333	2.67	15.417	2.51	21.50	1.00
3.333	1.09	9.417	2.67	15.500	2.51	21.58	1.00
3.417	1.09	9.500	2.67	15.583	2.51	21.67	1.00
3.500	1.09	9.583	2.67	15.667	2.51	21.75	1.00
3.583	1.09	9.667	2.67	15.750	2.51	21.83	1.00
3.667	1.09	9.750	2.67	15.833	2.51	21.92	1.00
3.750	1.09	9.833	3.01	15.917	2.51	22.00	1.00
3.833	1.09	9.917	3.01	16.000	2.51	22.08	1.00
3.917	1.09	10.000	3.01	16.083	2.51	22.17	1.00
4.000	1.09	10.083	3.01	16.167	2.51	22.25	1.00
4.083	1.09	10.167	3.01	16.250	2.51	22.33	1.00
4.167	1.09	10.250	3.01	16.333	1.50	22.42	1.00
4.250	1.09	10.333	3.84	16.417	1.50	22.50	1.00
4.333	1.34	10.417	3.84	16.500	1.50	22.58	1.00
4.417	1.34	10.500	3.84	16.583	1.50	22.67	1.00
4.500	1.34	10.583	3.84	16.667	1.50	22.75	1.00
4.583	1.34	10.667	3.84	16.750	1.50	22.83	1.00
4.667	1.34	10.750	3.84	16.833	1.50	22.92	1.00
4.750	1.34	10.833	5.18	16.917	1.50	23.00	1.00
4.833	1.34	10.917	5.18	17.000	1.50	23.08	1.00
4.917	1.34	11.000	5.18	17.083	1.50	23.17	1.00
5.000	1.34	11.083	5.18	17.167	1.50	23.25	1.00
5.083	1.34	11.167	5.18	17.250	1.50	23.33	1.00
5.167	1.34	11.250	5.18	17.333	1.50	23.42	1.00
5.250	1.34	11.333	8.02	17.417	1.50	23.50	1.00
5.333	1.34	11.417	8.02	17.500	1.50	23.58	1.00
5.417	1.34	11.500	8.02	17.583	1.50	23.67	1.00
5.500	1.34	11.583	8.02	17.667	1.50	23.75	1.00
5.583	1.34	11.667	8.02	17.750	1.50	23.83	1.00
5.667	1.34	11.750	8.02	17.833	1.50	23.92	1.00
5.750	1.34	11.833	24.72	17.917	1.50	24.00	1.00
5.833	1.34	11.917	24.72	18.000	1.50	24.08	1.00
5.917	1.34	12.000	24.72	18.083	1.50	24.17	1.00
6.000	1.34	12.083	102.21	18.167	1.50	24.25	1.00
6.083	1.34	12.167	102.22	18.250	1.50		

Unit Hyd Qpeak (cms)= 0.043

PEAK FLOW (cms)= 0.026 (i)
TIME TO PEAK (hrs)= 12.667
RUNOFF VOLUME (mm)= 34.420
TOTAL RAINFALL (mm)= 83.510
RUNOFF COEFFICIENT = 0.412

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

1508-7498

CALIB									
STANDHYD (0015)	Area (ha)= 1.93								
ID= 1 DT= 5.0 min	Total Imp(%)= 54.66	Dir. Conn.(%)= 10.00							

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	1.05	0.88
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	113.43	45.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.34	12.250	102.22	18.33	1.50
0.167	0.00	6.250	1.34	12.333	12.04	18.42	1.50
0.250	0.00	6.333	1.50	12.417	12.03	18.50	1.50
0.333	0.92	6.417	1.50	12.500	12.03	18.58	1.50
0.417	0.92	6.500	1.50	12.583	12.03	18.67	1.50
0.500	0.92	6.583	1.50	12.667	12.03	18.75	1.50
0.583	0.92	6.667	1.50	12.750	12.03	18.83	1.50
0.667	0.92	6.750	1.50	12.833	6.18	18.92	1.50
0.750	0.92	6.833	1.50	12.917	6.18	19.00	1.50
0.833	0.92	6.917	1.50	13.000	6.18	19.08	1.50
0.917	0.92	7.000	1.50	13.083	6.18	19.17	1.50
1.000	0.92	7.083	1.50	13.167	6.18	19.25	1.50
1.083	0.92	7.167	1.50	13.250	6.18	19.33	1.50
1.167	0.92	7.250	1.50	13.333	4.51	19.42	1.50
1.250	0.92	7.333	1.84	13.417	4.51	19.50	1.50
1.333	0.92	7.417	1.84	13.500	4.51	19.58	1.50
1.417	0.92	7.500	1.84	13.583	4.51	19.67	1.50
1.500	0.92	7.583	1.84	13.667	4.51	19.75	1.50
1.583	0.92	7.667	1.84	13.750	4.51	19.83	1.50
1.667	0.92	7.750	1.84	13.833	3.51	19.92	1.50
1.750	0.92	7.833	1.84	13.917	3.51	20.00	1.50
1.833	0.92	7.917	1.84	14.000	3.51	20.08	1.50
1.917	0.92	8.000	1.84	14.083	3.51	20.17	1.50
2.000	0.92	8.083	1.84	14.167	3.51	20.25	1.50
2.083	0.92	8.167	1.84	14.250	3.51	20.33	1.00
2.167	0.92	8.250	1.84	14.333	2.51	20.42	1.00
2.250	0.92	8.333	2.17	14.417	2.51	20.50	1.00
2.333	1.09	8.417	2.17	14.500	2.51	20.58	1.00
2.417	1.09	8.500	2.17	14.583	2.51	20.67	1.00
2.500	1.09	8.583	2.17	14.667	2.51	20.75	1.00
2.583	1.09	8.667	2.17	14.750	2.51	20.83	1.00
2.667	1.09	8.750	2.17	14.833	2.51	20.92	1.00
2.750	1.09	8.833	2.34	14.917	2.51	21.00	1.00
2.833	1.09	8.917	2.34	15.000	2.51	21.08	1.00
2.917	1.09	9.000	2.34	15.083	2.51	21.17	1.00
3.000	1.09	9.083	2.34	15.167	2.51	21.25	1.00
3.083	1.09	9.167	2.34	15.250	2.51	21.33	1.00
3.167	1.09	9.250	2.34	15.333	2.51	21.42	1.00
3.250	1.09	9.333	2.67	15.417	2.51	21.50	1.00
3.333	1.09	9.417	2.67	15.500	2.51	21.58	1.00
3.417	1.09	9.500	2.67	15.583	2.51	21.67	1.00
3.500	1.09	9.583	2.67	15.667	2.51	21.75	1.00
3.583	1.09	9.667	2.67	15.750	2.51	21.83	1.00
3.667	1.09	9.750	2.67	15.833	2.51	21.92	1.00
3.750	1.09	9.833	3.01	15.917	2.51	22.00	1.00
3.833	1.09	9.917	3.01	16.000	2.51	22.08	1.00
3.917	1.09	10.000	3.01	16.083	2.51	22.17	1.00
4.000	1.09	10.083	3.01	16.167	2.51	22.25	1.00
4.083	1.09	10.167	3.01	16.250	2.51	22.33	1.00
4.167	1.09	10.250	3.01	16.333	1.50	22.42	1.00
4.250	1.09	10.333	3.84	16.417	1.50	22.50	1.00
4.333	1.34	10.417	3.84	16.500	1.50	22.58	1.00
4.417	1.34	10.500	3.84	16.583	1.50	22.67	1.00
4.500	1.34	10.583	3.84	16.667	1.50	22.75	1.00
4.583	1.34	10.667	3.84	16.750	1.50	22.83	1.00
4.667	1.34	10.750	3.84	16.833	1.50	22.92	1.00
4.750	1.34	10.833	5.18	16.917	1.50	23.00	1.00
4.833	1.34	10.917	5.18	17.000	1.50	23.08	1.00
4.917	1.34	11.000	5.18	17.083	1.50	23.17	1.00
5.000	1.34	11.083	5.18	17.167	1.50	23.25	1.00
5.083	1.34	11.167	5.18	17.250	1.50	23.33	1.00
5.167	1.34	11.250	5.18	17.333	1.50	23.42	1.00
5.250	1.34	11.333	8.02	17.417	1.50	23.50	1.00
5.333	1.34	11.417	8.02	17.500	1.50	23.58	1.00
5.417	1.34	11.500	8.02	17.583	1.50	23.67	1.00
5.500	1.34	11.583	8.02	17.667	1.50	23.75	1.00
5.583	1.34	11.667	8.02	17.750	1.50	23.83	1.00
5.667	1.34	11.750	8.02	17.833	1.50	23.92	1.00
5.750	1.34	11.833	24.72	17.917	1.50	24.00	1.00
5.833	1.34	11.917	24.72	18.000	1.50	24.08	1.00
5.917	1.34	12.000	24.72	18.083	1.50	24.17	1.00
6.000	1.34	12.083	102.21	18.167	1.50	24.25	1.00
6.083	1.34	12.167	102.22	18.250	1.50		

Max.Eff.Inten.(mm/hr)=	102.22	88.54	
over (min)	5.00	15.00	

Storage Coeff. (min)=	3.36 (ii)	11.32 (ii)		
Unit Hyd. Tpeak (min)=	5.00	15.00		
Unit Hyd. peak (cms)=	0.26	0.09		
			TOTALS	
PEAK FLOW (cms)=	0.05	0.13	0.168 (iii)	
TIME TO PEAK (hrs)=	12.25	12.33	12.25	
RUNOFF VOLUME (mm)=	82.51	30.67	35.85	
TOTAL RAINFALL (mm)=	83.51	83.51	83.51	
RUNOFF COEFFICIENT =	0.99	0.37	0.43	

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 49.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB									
STANDHYD (0019)	Area (ha)= 2.16								
ID= 1 DT= 5.0 min	Total Imp(%)= 54.64	Dir. Conn.(%)= 10.00							

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	1.18	0.98
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	120.00	30.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.34	12.250	102.22	18.33	1.50
0.167	0.00	6.250	1.34	12.333	12.04	18.42	1.50
0.250	0.00	6.333	1.50	12.417	12.03	18.50	1.50
0.333	0.92	6.417	1.50	12.500	12.03	18.58	1.50
0.417	0.92	6.500	1.50	12.583	12.03	18.67	1.50
0.500	0.92	6.583	1.50	12.667	12.03	18.75	1.50
0.583	0.92	6.667	1.50	12.750	12.03	18.83	1.50
0.667	0.92	6.750	1.50	12.833	6.18	18.92	1.50
0.750	0.92	6.833	1.50	12.917	6.18	19.00	1.50

0.833	0.92	6.917	1.50	13.000	6.18	19.08	1.50
0.917	0.92	7.000	1.50	13.083	6.18	19.17	1.50
1.000	0.92	7.083	1.50	13.167	6.18	19.25	1.50
1.083	0.92	7.167	1.50	13.250	6.18	19.33	1.50
1.167	0.92	7.250	1.50	13.333	4.51	19.42	1.50
1.250	0.92	7.333	1.84	13.417	4.51	19.50	1.50
1.333	0.92	7.417	1.84	13.500	4.51	19.58	1.50
1.417	0.92	7.500	1.84	13.583	4.51	19.67	1.50
1.500	0.92	7.583	1.84	13.667	4.51	19.75	1.50
1.583	0.92	7.667	1.84	13.750	4.51	19.83	1.50
1.667	0.92	7.750	1.84	13.833	3.51	19.92	1.50
1.750	0.92	7.833	1.84	13.917	3.51	20.00	1.50
1.833	0.92	7.917	1.84	14.000	3.51	20.08	1.50
1.917	0.92	8.000	1.84	14.083	3.51	20.17	1.50
2.000	0.92	8.083	1.84	14.167	3.51	20.25	1.50
2.083	0.92	8.167	1.84	14.250	3.51	20.33	1.00
2.167	0.92	8.250	1.84	14.333	2.51	20.42	1.00
2.250	0.92	8.333	2.17	14.417	2.51	20.50	1.00
2.333	1.09	8.417	2.17	14.500	2.51	20.58	1.00
2.417	1.09	8.500	2.17	14.583	2.51	20.67	1.00
2.500	1.09	8.583	2.17	14.667	2.51	20.75	1.00
2.583	1.09	8.667	2.17	14.750	2.51	20.83	1.00
2.667	1.09	8.750	2.17	14.833	2.51	20.92	1.00
2.750	1.09	8.833	2.34	14.917	2.51	21.00	1.00
2.833	1.09	8.917	2.34	15.000	2.51	21.08	1.00
2.917	1.09	9.000	2.34	15.083	2.51	21.17	1.00
3.000	1.09	9.083	2.34	15.167	2.51	21.25	1.00
3.083	1.09	9.167	2.34	15.250	2.51	21.33	1.00
3.167	1.09	9.250	2.34	15.333	2.51	21.42	1.00
3.250	1.09	9.333	2.67	15.417	2.51	21.50	1.00
3.333	1.09	9.417	2.67	15.500	2.51	21.58	1.00
3.417	1.09	9.500	2.67	15.583	2.51	21.67	1.00
3.500	1.09	9.583	2.67	15.667	2.51	21.75	1.00
3.583	1.09	9.667	2.67	15.750	2.51	21.83	1.00
3.667	1.09	9.750	2.67	15.833	2.51	21.92	1.00
3.750	1.09	9.833	3.01	15.917	2.51	22.00	1.00
3.833	1.09	9.917	3.01	16.000	2.51	22.08	1.00
3.917	1.09	10.000	3.01	16.083	2.51	22.17	1.00
4.000	1.09	10.083	3.01	16.167	2.51	22.25	1.00
4.083	1.09	10.167	3.01	16.250	2.51	22.33	1.00
4.167	1.09	10.250	3.01	16.333	1.50	22.42	1.00
4.250	1.09	10.333	3.84	16.417	1.50	22.50	1.00
4.333	1.34	10.417	3.84	16.500	1.50	22.58	1.00
4.417	1.34	10.500	3.84	16.583	1.50	22.67	1.00
4.500	1.34	10.583	3.84	16.667	1.50	22.75	1.00
4.583	1.34	10.667	3.84	16.750	1.50	22.83	1.00
4.667	1.34	10.750	3.84	16.833	1.50	22.92	1.00
4.750	1.34	10.833	5.18	16.917	1.50	23.00	1.00

4.833	1.34	10.917	5.18	17.000	1.50	23.08	1.00
4.917	1.34	11.000	5.18	17.083	1.50	23.17	1.00
5.000	1.34	11.083	5.18	17.167	1.50	23.25	1.00
5.083	1.34	11.167	5.18	17.250	1.50	23.33	1.00
5.167	1.34	11.250	5.18	17.333	1.50	23.42	1.00
5.250	1.34	11.333	8.02	17.417	1.50	23.50	1.00
5.333	1.34	11.417	8.02	17.500	1.50	23.58	1.00
5.417	1.34	11.500	8.02	17.583	1.50	23.67	1.00
5.500	1.34	11.583	8.02	17.667	1.50	23.75	1.00
5.583	1.34	11.667	8.02	17.750	1.50	23.83	1.00
5.667	1.34	11.750	8.02	17.833	1.50	23.92	1.00
5.750	1.34	11.833	24.72	17.917	1.50	24.00	1.00
5.833	1.34	11.917	24.72	18.000	1.50	24.08	1.00
5.917	1.34	12.000	24.72	18.083	1.50	24.17	1.00
6.000	1.34	12.083	102.21	18.167	1.50	24.25	1.00
6.083	1.34	12.167	102.22	18.250	1.50		

Max.Eff.Inten.(mm/hr)= 102.22 137.67
over (min) 5.00 10.00
Storage Coeff. (min)= 3.48 (ii) 8.70 (ii)
Unit Hyd. Tpeak (min)= 5.00 10.00
Unit Hyd. peak (cms)= 0.26 0.12

TOTALS
PEAK FLOW (cms)= 0.06 0.28 0.340 (iii)
TIME TO PEAK (hrs)= 12.25 12.25 12.25
RUNOFF VOLUME (mm)= 82.51 47.36 50.87
TOTAL RAINFALL (mm)= 83.51 83.51 83.51
RUNOFF COEFFICIENT = 0.99 0.57 0.61

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0040)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0015):		1.93	0.168	12.25	35.85
+ ID2= 2 (0019):		2.16	0.340	12.25	50.87

ID = 3 (0040): 4.09 0.508 12.25 43.78

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0040)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0040):		4.09	0.508	12.25	43.78
+ ID2= 2 (0027):		1.38	0.056	12.50	25.92
ID = 1 (0040):		5.47	0.541	12.25	39.27

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0040)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0040):		5.47	0.541	12.25	39.27
+ ID2= 2 (0041):		0.59	0.026	12.67	34.42
ID = 3 (0040):		6.06	0.553	12.25	38.80

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB					
NASHYD (0048)	Area (ha)= 29.16	Curve Number (CN)= 71.4			
ID= 1 DT= 5.0 min	Ia (mm)= 7.88	# of Linear Res.(N)= 3.00			
	U.H. Tp(hrs)= 0.68				

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.34	12.250	102.22	18.33	1.50
0.167	0.00	6.250	1.34	12.333	12.04	18.42	1.50
0.250	0.00	6.333	1.50	12.417	12.03	18.50	1.50
0.333	0.92	6.417	1.50	12.500	12.03	18.58	1.50
0.417	0.92	6.500	1.50	12.583	12.03	18.67	1.50
0.500	0.92	6.583	1.50	12.667	12.03	18.75	1.50
0.583	0.92	6.667	1.50	12.750	12.03	18.83	1.50
0.667	0.92	6.750	1.50	12.833	6.18	18.92	1.50

0.750	0.92	6.833	1.50	12.917	6.18	19.00	1.50
0.833	0.92	6.917	1.50	13.000	6.18	19.08	1.50
0.917	0.92	7.000	1.50	13.083	6.18	19.17	1.50
1.000	0.92	7.083	1.50	13.167	6.18	19.25	1.50
1.083	0.92	7.167	1.50	13.250	6.18	19.33	1.50
1.167	0.92	7.250	1.50	13.333	4.51	19.42	1.50
1.250	0.92	7.333	1.84	13.417	4.51	19.50	1.50
1.333	0.92	7.417	1.84	13.500	4.51	19.58	1.50
1.417	0.92	7.500	1.84	13.583	4.51	19.67	1.50
1.500	0.92	7.583	1.84	13.667	4.51	19.75	1.50
1.583	0.92	7.667	1.84	13.750	4.51	19.83	1.50
1.667	0.92	7.750	1.84	13.833	3.51	19.92	1.50
1.750	0.92	7.833	1.84	13.917	3.51	20.00	1.50
1.833	0.92	7.917	1.84	14.000	3.51	20.08	1.50
1.917	0.92	8.000	1.84	14.083	3.51	20.17	1.50
2.000	0.92	8.083	1.84	14.167	3.51	20.25	1.50
2.083	0.92	8.167	1.84	14.250	3.51	20.33	1.00
2.167	0.92	8.250	1.84	14.333	2.51	20.42	1.00
2.250	0.92	8.333	2.17	14.417	2.51	20.50	1.00
2.333	1.09	8.417	2.17	14.500	2.51	20.58	1.00
2.417	1.09	8.500	2.17	14.583	2.51	20.67	1.00
2.500	1.09	8.583	2.17	14.667	2.51	20.75	1.00
2.583	1.09	8.667	2.17	14.750	2.51	20.83	1.00
2.667	1.09	8.750	2.17	14.833	2.51	20.92	1.00
2.750	1.09	8.833	2.34	14.917	2.51	21.00	1.00
2.833	1.09	8.917	2.34	15.000	2.51	21.08	1.00
2.917	1.09	9.000	2.34	15.083	2.51	21.17	1.00
3.000	1.09	9.083	2.34	15.167	2.51	21.25	1.00
3.083	1.09	9.167	2.34	15.250	2.51	21.33	1.00
3.167	1.09	9.250	2.34	15.333	2.51	21.42	1.00
3.250	1.09	9.333	2.67	15.417	2.51	21.50	1.00
3.333	1.09	9.417	2.67	15.500	2.51	21.58	1.00
3.417	1.09	9.500	2.67	15.583	2.51	21.67	1.00
3.500	1.09	9.583	2.67	15.667	2.51	21.75	1.00
3.583	1.09	9.667	2.67	15.750	2.51	21.83	1.00
3.667	1.09	9.750	2.67	15.833	2.51	21.92	1.00
3.750	1.09	9.833	3.01	15.917	2.51	22.00	1.00
3.833	1.09	9.917	3.01	16.000	2.51	22.08	1.00
3.917	1.09	10.000	3.01	16.083	2.51	22.17	1.00
4.000	1.09	10.083	3.01	16.167	2.51	22.25	1.00
4.083	1.09	10.167	3.01	16.250	2.51	22.33	1.00
4.167	1.09	10.250	3.01	16.333	1.50	22.42	1.00
4.250	1.09	10.333	3.84	16.417	1.50	22.50	1.00
4.333	1.34	10.417	3.84	16.500	1.50	22.58	1.00
4.417	1.34	10.500	3.84	16.583	1.50	22.67	1.00
4.500	1.34	10.583	3.84	16.667	1.50	22.75	1.00
4.583	1.34	10.667	3.84	16.750	1.50	22.83	1.00
4.667	1.34	10.750	3.84	16.833	1.50	22.92	1.00

4.750	1.34	10.833	5.18	16.917	1.50	23.00	1.00
4.833	1.34	10.917	5.18	17.000	1.50	23.08	1.00
4.917	1.34	11.000	5.18	17.083	1.50	23.17	1.00
5.000	1.34	11.083	5.18	17.167	1.50	23.25	1.00
5.083	1.34	11.167	5.18	17.250	1.50	23.33	1.00
5.167	1.34	11.250	5.18	17.333	1.50	23.42	1.00
5.250	1.34	11.333	8.02	17.417	1.50	23.50	1.00
5.333	1.34	11.417	8.02	17.500	1.50	23.58	1.00
5.417	1.34	11.500	8.02	17.583	1.50	23.67	1.00
5.500	1.34	11.583	8.02	17.667	1.50	23.75	1.00
5.583	1.34	11.667	8.02	17.750	1.50	23.83	1.00
5.667	1.34	11.750	8.02	17.833	1.50	23.92	1.00
5.750	1.34	11.833	24.72	17.917	1.50	24.00	1.00
5.833	1.34	11.917	24.72	18.000	1.50	24.08	1.00
5.917	1.34	12.000	24.72	18.083	1.50	24.17	1.00
6.000	1.34	12.083	102.21	18.167	1.50	24.25	1.00
6.083	1.34	12.167	102.22	18.250	1.50		

Unit Hyd Qpeak (cms)= 1.638

PEAK FLOW (cms)= 0.998 (i)
TIME TO PEAK (hrs)= 12.833
RUNOFF VOLUME (mm)= 32.247
TOTAL RAINFALL (mm)= 83.510
RUNOFF COEFFICIENT = 0.386

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
STANDHYD (0014)	Area (ha)= 1.87		
ID= 1 DT= 5.0 min	Total Imp(%)= 43.28	Dir. Conn.(%)= 10.00	
	IMPERVIOUS	PERVIOUS (i)	
Surface Area (ha)=	0.81	1.06	
Dep. Storage (mm)=	1.00	5.00	
Average Slope (%)=	0.50	2.00	
Length (m)=	111.65	25.00	
Mannings n =	0.013	0.250	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.34	12.250	102.22	18.33	1.50

0.167	0.00	6.250	1.34	12.333	12.04	18.42	1.50
0.250	0.00	6.333	1.50	12.417	12.03	18.50	1.50
0.333	0.92	6.417	1.50	12.500	12.03	18.58	1.50
0.417	0.92	6.500	1.50	12.583	12.03	18.67	1.50
0.500	0.92	6.583	1.50	12.667	12.03	18.75	1.50
0.583	0.92	6.667	1.50	12.750	12.03	18.83	1.50
0.667	0.92	6.750	1.50	12.833	6.18	18.92	1.50
0.750	0.92	6.833	1.50	12.917	6.18	19.00	1.50
0.833	0.92	6.917	1.50	13.000	6.18	19.08	1.50
0.917	0.92	7.000	1.50	13.083	6.18	19.17	1.50
1.000	0.92	7.083	1.50	13.167	6.18	19.25	1.50
1.083	0.92	7.167	1.50	13.250	6.18	19.33	1.50
1.167	0.92	7.250	1.50	13.333	4.51	19.42	1.50
1.250	0.92	7.333	1.84	13.417	4.51	19.50	1.50
1.333	0.92	7.417	1.84	13.500	4.51	19.58	1.50
1.417	0.92	7.500	1.84	13.583	4.51	19.67	1.50
1.500	0.92	7.583	1.84	13.667	4.51	19.75	1.50
1.583	0.92	7.667	1.84	13.750	4.51	19.83	1.50
1.667	0.92	7.750	1.84	13.833	3.51	19.92	1.50
1.750	0.92	7.833	1.84	13.917	3.51	20.00	1.50
1.833	0.92	7.917	1.84	14.000	3.51	20.08	1.50
1.917	0.92	8.000	1.84	14.083	3.51	20.17	1.50
2.000	0.92	8.083	1.84	14.167	3.51	20.25	1.50
2.083	0.92	8.167	1.84	14.250	3.51	20.33	1.00
2.167	0.92	8.250	1.84	14.333	2.51	20.42	1.00
2.250	0.92	8.333	2.17	14.417	2.51	20.50	1.00
2.333	1.09	8.417	2.17	14.500	2.51	20.58	1.00
2.417	1.09	8.500	2.17	14.583	2.51	20.67	1.00
2.500	1.09	8.583	2.17	14.667	2.51	20.75	1.00
2.583	1.09	8.667	2.17	14.750	2.51	20.83	1.00
2.667	1.09	8.750	2.17	14.833	2.51	20.92	1.00
2.750	1.09	8.833	2.34	14.917	2.51	21.00	1.00
2.833	1.09	8.917	2.34	15.000	2.51	21.08	1.00
2.917	1.09	9.000	2.34	15.083	2.51	21.17	1.00
3.000	1.09	9.083	2.34	15.167	2.51	21.25	1.00
3.083	1.09	9.167	2.34	15.250	2.51	21.33	1.00
3.167	1.09	9.250	2.34	15.333	2.51	21.42	1.00
3.250	1.09	9.333	2.67	15.417	2.51	21.50	1.00
3.333	1.09	9.417	2.67	15.500	2.51	21.58	1.00
3.417	1.09	9.500	2.67	15.583	2.51	21.67	1.00
3.500	1.09	9.583	2.67	15.667	2.51	21.75	1.00
3.583	1.09	9.667	2.67	15.750	2.51	21.83	1.00
3.667	1.09	9.750	2.67	15.833	2.51	21.92	1.00
3.750	1.09	9.833	3.01	15.917	2.51	22.00	1.00
3.833	1.09	9.917	3.01	16.000	2.51	22.08	1.00
3.917	1.09	10.000	3.01	16.083	2.51	22.17	1.00
4.000	1.09	10.083	3.01	16.167	2.51	22.25	1.00
4.083	1.09	10.167	3.01	16.250	2.51	22.33	1.00

4.167	1.09	10.250	3.01	16.333	1.50	22.42	1.00
4.250	1.09	10.333	3.84	16.417	1.50	22.50	1.00
4.333	1.34	10.417	3.84	16.500	1.50	22.58	1.00
4.417	1.34	10.500	3.84	16.583	1.50	22.67	1.00
4.500	1.34	10.583	3.84	16.667	1.50	22.75	1.00
4.583	1.34	10.667	3.84	16.750	1.50	22.83	1.00
4.667	1.34	10.750	3.84	16.833	1.50	22.92	1.00
4.750	1.34	10.833	5.18	16.917	1.50	23.00	1.00
4.833	1.34	10.917	5.18	17.000	1.50	23.08	1.00
4.917	1.34	11.000	5.18	17.083	1.50	23.17	1.00
5.000	1.34	11.083	5.18	17.167	1.50	23.25	1.00
5.083	1.34	11.167	5.18	17.250	1.50	23.33	1.00
5.167	1.34	11.250	5.18	17.333	1.50	23.42	1.00
5.250	1.34	11.333	8.02	17.417	1.50	23.50	1.00
5.333	1.34	11.417	8.02	17.500	1.50	23.58	1.00
5.417	1.34	11.500	8.02	17.583	1.50	23.67	1.00
5.500	1.34	11.583	8.02	17.667	1.50	23.75	1.00
5.583	1.34	11.667	8.02	17.750	1.50	23.83	1.00
5.667	1.34	11.750	8.02	17.833	1.50	23.92	1.00
5.750	1.34	11.833	24.72	17.917	1.50	24.00	1.00
5.833	1.34	11.917	24.72	18.000	1.50	24.08	1.00
5.917	1.34	12.000	24.72	18.083	1.50	24.17	1.00
6.000	1.34	12.083	102.21	18.167	1.50	24.25	1.00
6.083	1.34	12.167	102.22	18.250	1.50		

Max.Eff.Inten.(mm/hr)=	102.22	119.87	
over (min)	5.00	10.00	
Storage Coeff. (min)=	3.33 (ii)	8.28 (ii)	
Unit Hyd. Tpeak (min)=	5.00	10.00	
Unit Hyd. peak (cms)=	0.26	0.13	
			TOTALS
PEAK FLOW (cms)=	0.05	0.27	0.323 (iii)
TIME TO PEAK (hrs)=	12.25	12.25	12.25
RUNOFF VOLUME (mm)=	82.51	51.43	54.53
TOTAL RAINFALL (mm)=	83.51	83.51	83.51
RUNOFF COEFFICIENT =	0.99	0.62	0.65

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 78.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (0021)
ID= 1 DT= 5.0 min

Area (ha)= 0.07
Total Imp(%)= 48.26 Dir. Conn.(%)= 39.54

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.03	0.04
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	21.60	5.60
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.34	12.250	102.22	18.33	1.50
0.167	0.00	6.250	1.34	12.333	12.04	18.42	1.50
0.250	0.00	6.333	1.50	12.417	12.03	18.50	1.50
0.333	0.92	6.417	1.50	12.500	12.03	18.58	1.50
0.417	0.92	6.500	1.50	12.583	12.03	18.67	1.50
0.500	0.92	6.583	1.50	12.667	12.03	18.75	1.50
0.583	0.92	6.667	1.50	12.750	12.03	18.83	1.50
0.667	0.92	6.750	1.50	12.833	6.18	18.92	1.50
0.750	0.92	6.833	1.50	12.917	6.18	19.00	1.50
0.833	0.92	6.917	1.50	13.000	6.18	19.08	1.50
0.917	0.92	7.000	1.50	13.083	6.18	19.17	1.50
1.000	0.92	7.083	1.50	13.167	6.18	19.25	1.50
1.083	0.92	7.167	1.50	13.250	6.18	19.33	1.50
1.167	0.92	7.250	1.50	13.333	4.51	19.42	1.50
1.250	0.92	7.333	1.84	13.417	4.51	19.50	1.50
1.333	0.92	7.417	1.84	13.500	4.51	19.58	1.50
1.417	0.92	7.500	1.84	13.583	4.51	19.67	1.50
1.500	0.92	7.583	1.84	13.667	4.51	19.75	1.50
1.583	0.92	7.667	1.84	13.750	4.51	19.83	1.50
1.667	0.92	7.750	1.84	13.833	3.51	19.92	1.50
1.750	0.92	7.833	1.84	13.917	3.51	20.00	1.50
1.833	0.92	7.917	1.84	14.000	3.51	20.08	1.50
1.917	0.92	8.000	1.84	14.083	3.51	20.17	1.50
2.000	0.92	8.083	1.84	14.167	3.51	20.25	1.50
2.083	0.92	8.167	1.84	14.250	3.51	20.33	1.00
2.167	0.92	8.250	1.84	14.333	2.51	20.42	1.00
2.250	0.92	8.333	2.17	14.417	2.51	20.50	1.00
2.333	1.09	8.417	2.17	14.500	2.51	20.58	1.00
2.417	1.09	8.500	2.17	14.583	2.51	20.67	1.00
2.500	1.09	8.583	2.17	14.667	2.51	20.75	1.00

2.583	1.09	8.667	2.17	14.750	2.51	20.83	1.00
2.667	1.09	8.750	2.17	14.833	2.51	20.92	1.00
2.750	1.09	8.833	2.34	14.917	2.51	21.00	1.00
2.833	1.09	8.917	2.34	15.000	2.51	21.08	1.00
2.917	1.09	9.000	2.34	15.083	2.51	21.17	1.00
3.000	1.09	9.083	2.34	15.167	2.51	21.25	1.00
3.083	1.09	9.167	2.34	15.250	2.51	21.33	1.00
3.167	1.09	9.250	2.34	15.333	2.51	21.42	1.00
3.250	1.09	9.333	2.67	15.417	2.51	21.50	1.00
3.333	1.09	9.417	2.67	15.500	2.51	21.58	1.00
3.417	1.09	9.500	2.67	15.583	2.51	21.67	1.00
3.500	1.09	9.583	2.67	15.667	2.51	21.75	1.00
3.583	1.09	9.667	2.67	15.750	2.51	21.83	1.00
3.667	1.09	9.750	2.67	15.833	2.51	21.92	1.00
3.750	1.09	9.833	3.01	15.917	2.51	22.00	1.00
3.833	1.09	9.917	3.01	16.000	2.51	22.08	1.00
3.917	1.09	10.000	3.01	16.083	2.51	22.17	1.00
4.000	1.09	10.083	3.01	16.167	2.51	22.25	1.00
4.083	1.09	10.167	3.01	16.250	2.51	22.33	1.00
4.167	1.09	10.250	3.01	16.333	2.51	22.42	1.00
4.250	1.09	10.333	3.84	16.417	2.51	22.50	1.00
4.333	1.34	10.417	3.84	16.500	2.51	22.58	1.00
4.417	1.34	10.500	3.84	16.583	2.51	22.67	1.00
4.500	1.34	10.583	3.84	16.667	2.51	22.75	1.00
4.583	1.34	10.667	3.84	16.750	2.51	22.83	1.00
4.667	1.34	10.750	3.84	16.833	2.51	22.92	1.00
4.750	1.34	10.833	5.18	16.917	2.51	23.00	1.00
4.833	1.34	10.917	5.18	17.000	2.51	23.08	1.00
4.917	1.34	11.000	5.18	17.083	2.51	23.17	1.00
5.000	1.34	11.083	5.18	17.167	2.51	23.25	1.00
5.083	1.34	11.167	5.18	17.250	2.51	23.33	1.00
5.167	1.34	11.250	5.18	17.333	2.51	23.42	1.00
5.250	1.34	11.333	8.02	17.417	2.51	23.50	1.00
5.333	1.34	11.417	8.02	17.500	2.51	23.58	1.00
5.417	1.34	11.500	8.02	17.583	2.51	23.67	1.00
5.500	1.34	11.583	8.02	17.667	2.51	23.75	1.00
5.583	1.34	11.667	8.02	17.750	2.51	23.83	1.00
5.667	1.34	11.750	8.02	17.833	2.51	23.92	1.00
5.750	1.34	11.833	24.72	17.917	2.51	24.00	1.00
5.833	1.34	11.917	24.72	18.000	2.51	24.08	1.00
5.917	1.34	12.000	24.72	18.083	2.51	24.17	1.00
6.000	1.34	12.083	102.21	18.167	2.51	24.25	1.00
6.083	1.34	12.167	102.22	18.250	2.51		

Max.Eff.Inten.(mm/hr)=	102.22	38.27
over (min)	5.00	5.00
Storage Coeff. (min)=	1.24 (ii)	3.64 (ii)
Unit Hyd. Tpeak (min)=	5.00	5.00

Unit Hyd. peak	(cms)=	0.33	0.25	
				TOTALS
PEAK FLOW	(cms)=	0.01	0.00	0.012 (iii)
TIME TO PEAK	(hrs)=	12.25	12.25	12.25
RUNOFF VOLUME	(mm)=	82.51	22.55	46.25
TOTAL RAINFALL	(mm)=	83.51	83.51	83.51
RUNOFF COEFFICIENT	=	0.99	0.27	0.55

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 52.2 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0016)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0001):	39.68	0.639	13.50	23.61
+ ID2= 2 (0014):	1.87	0.323	12.25	54.53
ID = 3 (0016):	41.55	0.661	13.42	25.00

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0016):	41.55	0.661	13.42	25.00
+ ID2= 2 (0002):	23.99	0.248	13.25	13.63
ID = 1 (0016):	65.54	0.906	13.33	20.84

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0016):	65.54	0.906	13.33	20.84
+ ID2= 2 (0021):	0.07	0.012	12.25	46.25

ID = 3 (0016):	65.61	0.906	13.33	20.86

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0016):	65.61	0.906	13.33	20.86
+ ID2= 2 (0025):	100.92	1.073	14.08	20.74
ID = 1 (0016):	166.53	1.899	13.75	20.79

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0016):	166.53	1.899	13.75	20.79
+ ID2= 2 (0028):	6.37	0.082	13.00	14.51
ID = 3 (0016):	172.90	1.960	13.67	20.56

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0016):	172.90	1.960	13.67	20.56
+ ID2= 2 (0029):	14.85	0.201	13.17	16.66
ID = 1 (0016):	187.75	2.134	13.58	20.25

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0016):	187.75	2.134	13.58	20.25
+ ID2= 2 (0030):	1.70	0.058	12.50	22.73

ID = 3 (0016):	189.45	2.150	13.58	20.27

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0016):	189.45	2.150	13.58	20.27
+ ID2= 2 (0031):	1.80	0.023	13.00	14.17
ID = 1 (0016):	191.25	2.169	13.58	20.22

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0016):	191.25	2.169	13.58	20.22
+ ID2= 2 (0032):	6.70	0.086	13.83	22.25
ID = 3 (0016):	197.95	2.253	13.58	20.28

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0016):	197.95	2.253	13.58	20.28
+ ID2= 2 (0033):	1.13	0.048	12.58	28.78
ID = 1 (0016):	199.08	2.268	13.58	20.33

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0016):	199.08	2.268	13.58	20.33
+ ID2= 2 (0040):	6.06	0.553	12.25	38.80

ID = 3 (0016):	205.14	2.332	13.58	20.88

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0016):	205.14	2.332	13.58	20.88
+ ID2= 2 (0048):	29.16	0.998	12.83	32.25
ID = 1 (0016):	234.30	3.125	13.25	22.29

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB		
STANDHYD (0009)	Area (ha)=	31.06
ID= 1 DT= 5.0 min	Total Imp(%)=	53.89 Dir. Conn.(%)= 20.76

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	16.74	14.32
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	455.05	30.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.34	12.250	102.22	18.33	1.50
0.167	0.00	6.250	1.34	12.333	12.04	18.42	1.50
0.250	0.00	6.333	1.50	12.417	12.03	18.50	1.50
0.333	0.92	6.417	1.50	12.500	12.03	18.58	1.50
0.417	0.92	6.500	1.50	12.583	12.03	18.67	1.50
0.500	0.92	6.583	1.50	12.667	12.03	18.75	1.50
0.583	0.92	6.667	1.50	12.750	12.03	18.83	1.50
0.667	0.92	6.750	1.50	12.833	6.18	18.92	1.50
0.750	0.92	6.833	1.50	12.917	6.18	19.00	1.50
0.833	0.92	6.917	1.50	13.000	6.18	19.08	1.50
0.917	0.92	7.000	1.50	13.083	6.18	19.17	1.50
1.000	0.92	7.083	1.50	13.167	6.18	19.25	1.50
1.083	0.92	7.167	1.50	13.250	6.18	19.33	1.50

1.167	0.92	7.250	1.50	13.333	4.51	19.42	1.50
1.250	0.92	7.333	1.84	13.417	4.51	19.50	1.50
1.333	0.92	7.417	1.84	13.500	4.51	19.58	1.50
1.417	0.92	7.500	1.84	13.583	4.51	19.67	1.50
1.500	0.92	7.583	1.84	13.667	4.51	19.75	1.50
1.583	0.92	7.667	1.84	13.750	4.51	19.83	1.50
1.667	0.92	7.750	1.84	13.833	3.51	19.92	1.50
1.750	0.92	7.833	1.84	13.917	3.51	20.00	1.50
1.833	0.92	7.917	1.84	14.000	3.51	20.08	1.50
1.917	0.92	8.000	1.84	14.083	3.51	20.17	1.50
2.000	0.92	8.083	1.84	14.167	3.51	20.25	1.50
2.083	0.92	8.167	1.84	14.250	3.51	20.33	1.00
2.167	0.92	8.250	1.84	14.333	2.51	20.42	1.00
2.250	0.92	8.333	2.17	14.417	2.51	20.50	1.00
2.333	1.09	8.417	2.17	14.500	2.51	20.58	1.00
2.417	1.09	8.500	2.17	14.583	2.51	20.67	1.00
2.500	1.09	8.583	2.17	14.667	2.51	20.75	1.00
2.583	1.09	8.667	2.17	14.750	2.51	20.83	1.00
2.667	1.09	8.750	2.17	14.833	2.51	20.92	1.00
2.750	1.09	8.833	2.34	14.917	2.51	21.00	1.00
2.833	1.09	8.917	2.34	15.000	2.51	21.08	1.00
2.917	1.09	9.000	2.34	15.083	2.51	21.17	1.00
3.000	1.09	9.083	2.34	15.167	2.51	21.25	1.00
3.083	1.09	9.167	2.34	15.250	2.51	21.33	1.00
3.167	1.09	9.250	2.34	15.333	2.51	21.42	1.00
3.250	1.09	9.333	2.67	15.417	2.51	21.50	1.00
3.333	1.09	9.417	2.67	15.500	2.51	21.58	1.00
3.417	1.09	9.500	2.67	15.583	2.51	21.67	1.00
3.500	1.09	9.583	2.67	15.667	2.51	21.75	1.00
3.583	1.09	9.667	2.67	15.750	2.51	21.83	1.00
3.667	1.09	9.750	2.67	15.833	2.51	21.92	1.00
3.750	1.09	9.833	3.01	15.917	2.51	22.00	1.00
3.833	1.09	9.917	3.01	16.000	2.51	22.08	1.00
3.917	1.09	10.000	3.01	16.083	2.51	22.17	1.00
4.000	1.09	10.083	3.01	16.167	2.51	22.25	1.00
4.083	1.09	10.167	3.01	16.250	2.51	22.33	1.00
4.167	1.09	10.250	3.01	16.333	1.50	22.42	1.00
4.250	1.09	10.333	3.84	16.417	1.50	22.50	1.00
4.333	1.34	10.417	3.84	16.500	1.50	22.58	1.00
4.417	1.34	10.500	3.84	16.583	1.50	22.67	1.00
4.500	1.34	10.583	3.84	16.667	1.50	22.75	1.00
4.583	1.34	10.667	3.84	16.750	1.50	22.83	1.00
4.667	1.34	10.750	3.84	16.833	1.50	22.92	1.00
4.750	1.34	10.833	5.18	16.917	1.50	23.00	1.00
4.833	1.34	10.917	5.18	17.000	1.50	23.08	1.00
4.917	1.34	11.000	5.18	17.083	1.50	23.17	1.00
5.000	1.34	11.083	5.18	17.167	1.50	23.25	1.00
5.083	1.34	11.167	5.18	17.250	1.50	23.33	1.00

5.167	1.34	11.250	5.18	17.333	1.50	23.42	1.00
5.250	1.34	11.333	8.02	17.417	1.50	23.50	1.00
5.333	1.34	11.417	8.02	17.500	1.50	23.58	1.00
5.417	1.34	11.500	8.02	17.583	1.50	23.67	1.00
5.500	1.34	11.583	8.02	17.667	1.50	23.75	1.00
5.583	1.34	11.667	8.02	17.750	1.50	23.83	1.00
5.667	1.34	11.750	8.02	17.833	1.50	23.92	1.00
5.750	1.34	11.833	24.72	17.917	1.50	24.00	1.00
5.833	1.34	11.917	24.72	18.000	1.50	24.08	1.00
5.917	1.34	12.000	24.72	18.083	1.50	24.17	1.00
6.000	1.34	12.083	102.21	18.167	1.50	24.25	1.00
6.083	1.34	12.167	102.22	18.250	1.50		

Max.Eff.Inten.(mm/hr)=	102.22	110.53	
over (min)	10.00	15.00	
Storage Coeff. (min)=	7.74 (ii)	13.44 (ii)	
Unit Hyd. Tpeak (min)=	10.00	15.00	
Unit Hyd. peak (cms)=	0.13	0.08	
			TOTALS
PEAK FLOW (cms)=	1.51	2.58	3.937 (iii)
TIME TO PEAK (hrs)=	12.25	12.33	12.33
RUNOFF VOLUME (mm)=	82.51	43.75	51.79
TOTAL RAINFALL (mm)=	83.51	83.51	83.51
RUNOFF COEFFICIENT =	0.99	0.52	0.62

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 68.5 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
STANDHYD (0010)	Area (ha)=	1.32	
ID= 1 DT= 5.0 min	Total Imp(%)=	55.27	Dir. Conn.(%)= 1.52

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.73	0.59
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	93.81	23.50
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.34	12.250	102.22	18.33	1.50
0.167	0.00	6.250	1.34	12.333	12.04	18.42	1.50
0.250	0.00	6.333	1.50	12.417	12.03	18.50	1.50
0.333	0.92	6.417	1.50	12.500	12.03	18.58	1.50
0.417	0.92	6.500	1.50	12.583	12.03	18.67	1.50
0.500	0.92	6.583	1.50	12.667	12.03	18.75	1.50
0.583	0.92	6.667	1.50	12.750	12.03	18.83	1.50
0.667	0.92	6.750	1.50	12.833	6.18	18.92	1.50
0.750	0.92	6.833	1.50	12.917	6.18	19.00	1.50
0.833	0.92	6.917	1.50	13.000	6.18	19.08	1.50
0.917	0.92	7.000	1.50	13.083	6.18	19.17	1.50
1.000	0.92	7.083	1.50	13.167	6.18	19.25	1.50
1.083	0.92	7.167	1.50	13.250	6.18	19.33	1.50
1.167	0.92	7.250	1.50	13.333	4.51	19.42	1.50
1.250	0.92	7.333	1.84	13.417	4.51	19.50	1.50
1.333	0.92	7.417	1.84	13.500	4.51	19.58	1.50
1.417	0.92	7.500	1.84	13.583	4.51	19.67	1.50
1.500	0.92	7.583	1.84	13.667	4.51	19.75	1.50
1.583	0.92	7.667	1.84	13.750	4.51	19.83	1.50
1.667	0.92	7.750	1.84	13.833	3.51	19.92	1.50
1.750	0.92	7.833	1.84	13.917	3.51	20.00	1.50
1.833	0.92	7.917	1.84	14.000	3.51	20.08	1.50
1.917	0.92	8.000	1.84	14.083	3.51	20.17	1.50
2.000	0.92	8.083	1.84	14.167	3.51	20.25	1.50
2.083	0.92	8.167	1.84	14.250	3.51	20.33	1.00
2.167	0.92	8.250	1.84	14.333	2.51	20.42	1.00
2.250	0.92	8.333	2.17	14.417	2.51	20.50	1.00
2.333	1.09	8.417	2.17	14.500	2.51	20.58	1.00
2.417	1.09	8.500	2.17	14.583	2.51	20.67	1.00
2.500	1.09	8.583	2.17	14.667	2.51	20.75	1.00
2.583	1.09	8.667	2.17	14.750	2.51	20.83	1.00
2.667	1.09	8.750	2.17	14.833	2.51	20.92	1.00
2.750	1.09	8.833	2.34	14.917	2.51	21.00	1.00
2.833	1.09	8.917	2.34	15.000	2.51	21.08	1.00
2.917	1.09	9.000	2.34	15.083	2.51	21.17	1.00
3.000	1.09	9.083	2.34	15.167	2.51	21.25	1.00
3.083	1.09	9.167	2.34	15.250	2.51	21.33	1.00
3.167	1.09	9.250	2.34	15.333	2.51	21.42	1.00
3.250	1.09	9.333	2.67	15.417	2.51	21.50	1.00
3.333	1.09	9.417	2.67	15.500	2.51	21.58	1.00
3.417	1.09	9.500	2.67	15.583	2.51	21.67	1.00
3.500	1.09	9.583	2.67	15.667	2.51	21.75	1.00
3.583	1.09	9.667	2.67	15.750	2.51	21.83	1.00
3.667	1.09	9.750	2.67	15.833	2.51	21.92	1.00
3.750	1.09	9.833	3.01	15.917	2.51	22.00	1.00

3.833	1.09	9.917	3.01	16.000	2.51	22.08	1.00
3.917	1.09	10.000	3.01	16.083	2.51	22.17	1.00
4.000	1.09	10.083	3.01	16.167	2.51	22.25	1.00
4.083	1.09	10.167	3.01	16.250	2.51	22.33	1.00
4.167	1.09	10.250	3.01	16.333	1.50	22.42	1.00
4.250	1.09	10.333	3.84	16.417	1.50	22.50	1.00
4.333	1.34	10.417	3.84	16.500	1.50	22.58	1.00
4.417	1.34	10.500	3.84	16.583	1.50	22.67	1.00
4.500	1.34	10.583	3.84	16.667	1.50	22.75	1.00
4.583	1.34	10.667	3.84	16.750	1.50	22.83	1.00
4.667	1.34	10.750	3.84	16.833	1.50	22.92	1.00
4.750	1.34	10.833	5.18	16.917	1.50	23.00	1.00
4.833	1.34	10.917	5.18	17.000	1.50	23.08	1.00
4.917	1.34	11.000	5.18	17.083	1.50	23.17	1.00
5.000	1.34	11.083	5.18	17.167	1.50	23.25	1.00
5.083	1.34	11.167	5.18	17.250	1.50	23.33	1.00
5.167	1.34	11.250	5.18	17.333	1.50	23.42	1.00
5.250	1.34	11.333	8.02	17.417	1.50	23.50	1.00
5.333	1.34	11.417	8.02	17.500	1.50	23.58	1.00
5.417	1.34	11.500	8.02	17.583	1.50	23.67	1.00
5.500	1.34	11.583	8.02	17.667	1.50	23.75	1.00
5.583	1.34	11.667	8.02	17.750	1.50	23.83	1.00
5.667	1.34	11.750	8.02	17.833	1.50	23.92	1.00
5.750	1.34	11.833	24.72	17.917	1.50	24.00	1.00
5.833	1.34	11.917	24.72	18.000	1.50	24.08	1.00
5.917	1.34	12.000	24.72	18.083	1.50	24.17	1.00
6.000	1.34	12.083	102.21	18.167	1.50	24.25	1.00
6.083	1.34	12.167	102.22	18.250	1.50		

Max.Eff.Inten.(mm/hr)=	102.22	159.06	
over (min)	5.00	10.00	
Storage Coeff. (min)=	3.00 (ii)	7.26 (ii)	
Unit Hyd. Tpeak (min)=	5.00	10.00	
Unit Hyd. peak (cms)=	0.28	0.14	
			TOTALS
PEAK FLOW (cms)=	0.01	0.21	0.214 (iii)
TIME TO PEAK (hrs)=	12.25	12.25	12.25
RUNOFF VOLUME (mm)=	82.51	49.46	49.96
TOTAL RAINFALL (mm)=	83.51	83.51	83.51
RUNOFF COEFFICIENT =	0.99	0.59	0.60

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 68.8 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL

THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
STANDHYD (0013)	Area (ha)=	4.16			
ID= 1 DT= 5.0 min	Total Imp(%)=	50.00	Dir. Conn.(%)=	50.00	

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	2.08	2.08
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	166.53	250.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.34	12.250	102.22	18.33	1.50
0.167	0.00	6.250	1.34	12.333	12.04	18.42	1.50
0.250	0.00	6.333	1.50	12.417	12.03	18.50	1.50
0.333	0.92	6.417	1.50	12.500	12.03	18.58	1.50
0.417	0.92	6.500	1.50	12.583	12.03	18.67	1.50
0.500	0.92	6.583	1.50	12.667	12.03	18.75	1.50
0.583	0.92	6.667	1.50	12.750	12.03	18.83	1.50
0.667	0.92	6.750	1.50	12.833	6.18	18.92	1.50
0.750	0.92	6.833	1.50	12.917	6.18	19.00	1.50
0.833	0.92	6.917	1.50	13.000	6.18	19.08	1.50
0.917	0.92	7.000	1.50	13.083	6.18	19.17	1.50
1.000	0.92	7.083	1.50	13.167	6.18	19.25	1.50
1.083	0.92	7.167	1.50	13.250	6.18	19.33	1.50
1.167	0.92	7.250	1.50	13.333	4.51	19.42	1.50
1.250	0.92	7.333	1.84	13.417	4.51	19.50	1.50
1.333	0.92	7.417	1.84	13.500	4.51	19.58	1.50
1.417	0.92	7.500	1.84	13.583	4.51	19.67	1.50
1.500	0.92	7.583	1.84	13.667	4.51	19.75	1.50
1.583	0.92	7.667	1.84	13.750	4.51	19.83	1.50
1.667	0.92	7.750	1.84	13.833	3.51	19.92	1.50
1.750	0.92	7.833	1.84	13.917	3.51	20.00	1.50
1.833	0.92	7.917	1.84	14.000	3.51	20.08	1.50
1.917	0.92	8.000	1.84	14.083	3.51	20.17	1.50
2.000	0.92	8.083	1.84	14.167	3.51	20.25	1.50
2.083	0.92	8.167	1.84	14.250	3.51	20.33	1.00
2.167	0.92	8.250	1.84	14.333	2.51	20.42	1.00

2.250	0.92	8.333	2.17	14.417	2.51	20.50	1.00
2.333	1.09	8.417	2.17	14.500	2.51	20.58	1.00
2.417	1.09	8.500	2.17	14.583	2.51	20.67	1.00
2.500	1.09	8.583	2.17	14.667	2.51	20.75	1.00
2.583	1.09	8.667	2.17	14.750	2.51	20.83	1.00
2.667	1.09	8.750	2.17	14.833	2.51	20.92	1.00
2.750	1.09	8.833	2.34	14.917	2.51	21.00	1.00
2.833	1.09	8.917	2.34	15.000	2.51	21.08	1.00
2.917	1.09	9.000	2.34	15.083	2.51	21.17	1.00
3.000	1.09	9.083	2.34	15.167	2.51	21.25	1.00
3.083	1.09	9.167	2.34	15.250	2.51	21.33	1.00
3.167	1.09	9.250	2.34	15.333	2.51	21.42	1.00
3.250	1.09	9.333	2.67	15.417	2.51	21.50	1.00
3.333	1.09	9.417	2.67	15.500	2.51	21.58	1.00
3.417	1.09	9.500	2.67	15.583	2.51	21.67	1.00
3.500	1.09	9.583	2.67	15.667	2.51	21.75	1.00
3.583	1.09	9.667	2.67	15.750	2.51	21.83	1.00
3.667	1.09	9.750	2.67	15.833	2.51	21.92	1.00
3.750	1.09	9.833	3.01	15.917	2.51	22.00	1.00
3.833	1.09	9.917	3.01	16.000	2.51	22.08	1.00
3.917	1.09	10.000	3.01	16.083	2.51	22.17	1.00
4.000	1.09	10.083	3.01	16.167	2.51	22.25	1.00
4.083	1.09	10.167	3.01	16.250	2.51	22.33	1.00
4.167	1.09	10.250	3.01	16.333	1.50	22.42	1.00
4.250	1.09	10.333	3.84	16.417	1.50	22.50	1.00
4.333	1.34	10.417	3.84	16.500	1.50	22.58	1.00
4.417	1.34	10.500	3.84	16.583	1.50	22.67	1.00
4.500	1.34	10.583	3.84	16.667	1.50	22.75	1.00
4.583	1.34	10.667	3.84	16.750	1.50	22.83	1.00
4.667	1.34	10.750	3.84	16.833	1.50	22.92	1.00
4.750	1.34	10.833	5.18	16.917	1.50	23.00	1.00
4.833	1.34	10.917	5.18	17.000	1.50	23.08	1.00
4.917	1.34	11.000	5.18	17.083	1.50	23.17	1.00
5.000	1.34	11.083	5.18	17.167	1.50	23.25	1.00
5.083	1.34	11.167	5.18	17.250	1.50	23.33	1.00
5.167	1.34	11.250	5.18	17.333	1.50	23.42	1.00
5.250	1.34	11.333	8.02	17.417	1.50	23.50	1.00
5.333	1.34	11.417	8.02	17.500	1.50	23.58	1.00
5.417	1.34	11.500	8.02	17.583	1.50	23.67	1.00
5.500	1.34	11.583	8.02	17.667	1.50	23.75	1.00
5.583	1.34	11.667	8.02	17.750	1.50	23.83	1.00
5.667	1.34	11.750	8.02	17.833	1.50	23.92	1.00
5.750	1.34	11.833	24.72	17.917	1.50	24.00	1.00
5.833	1.34	11.917	24.72	18.000	1.50	24.08	1.00
5.917	1.34	12.000	24.72	18.083	1.50	24.17	1.00
6.000	1.34	12.083	102.21	18.167	1.50	24.25	1.00
6.083	1.34	12.167	102.22	18.250	1.50		

Max.Eff.Inten.(mm/hr)=	102.22	20.76		
over (min)	5.00	45.00		
Storage Coeff. (min)=	4.23 (ii)	43.98 (ii)		
Unit Hyd. Tpeak (min)=	5.00	45.00		
Unit Hyd. peak (cms)=	0.24	0.03		
			TOTALS	
PEAK FLOW (cms)=	0.58	0.07	0.601 (iii)	
TIME TO PEAK (hrs)=	12.25	12.83	12.25	
RUNOFF VOLUME (mm)=	82.51	31.96	57.23	
TOTAL RAINFALL (mm)=	83.51	83.51	83.51	
RUNOFF COEFFICIENT =	0.99	0.38	0.69	

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
STANDHYD (0036)	Area (ha)=	2.12			
ID= 1 DT= 5.0 min	Total Imp(%)=	85.04	Dir. Conn.(%)=	0.10	

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	1.80	0.32
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	118.88	175.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.34	12.250	102.22	18.33	1.50
0.167	0.00	6.250	1.34	12.333	12.04	18.42	1.50
0.250	0.00	6.333	1.50	12.417	12.03	18.50	1.50
0.333	0.92	6.417	1.50	12.500	12.03	18.58	1.50
0.417	0.92	6.500	1.50	12.583	12.03	18.67	1.50
0.500	0.92	6.583	1.50	12.667	12.03	18.75	1.50
0.583	0.92	6.667	1.50	12.750	12.03	18.83	1.50
0.667	0.92	6.750	1.50	12.833	6.18	18.92	1.50
0.750	0.92	6.833	1.50	12.917	6.18	19.00	1.50

0.833	0.92	6.917	1.50	13.000	6.18	19.08	1.50
0.917	0.92	7.000	1.50	13.083	6.18	19.17	1.50
1.000	0.92	7.083	1.50	13.167	6.18	19.25	1.50
1.083	0.92	7.167	1.50	13.250	6.18	19.33	1.50
1.167	0.92	7.250	1.50	13.333	4.51	19.42	1.50
1.250	0.92	7.333	1.84	13.417	4.51	19.50	1.50
1.333	0.92	7.417	1.84	13.500	4.51	19.58	1.50
1.417	0.92	7.500	1.84	13.583	4.51	19.67	1.50
1.500	0.92	7.583	1.84	13.667	4.51	19.75	1.50
1.583	0.92	7.667	1.84	13.750	4.51	19.83	1.50
1.667	0.92	7.750	1.84	13.833	3.51	19.92	1.50
1.750	0.92	7.833	1.84	13.917	3.51	20.00	1.50
1.833	0.92	7.917	1.84	14.000	3.51	20.08	1.50
1.917	0.92	8.000	1.84	14.083	3.51	20.17	1.50
2.000	0.92	8.083	1.84	14.167	3.51	20.25	1.50
2.083	0.92	8.167	1.84	14.250	3.51	20.33	1.00
2.167	0.92	8.250	1.84	14.333	2.51	20.42	1.00
2.250	0.92	8.333	2.17	14.417	2.51	20.50	1.00
2.333	1.09	8.417	2.17	14.500	2.51	20.58	1.00
2.417	1.09	8.500	2.17	14.583	2.51	20.67	1.00
2.500	1.09	8.583	2.17	14.667	2.51	20.75	1.00
2.583	1.09	8.667	2.17	14.750	2.51	20.83	1.00
2.667	1.09	8.750	2.17	14.833	2.51	20.92	1.00
2.750	1.09	8.833	2.34	14.917	2.51	21.00	1.00
2.833	1.09	8.917	2.34	15.000	2.51	21.08	1.00
2.917	1.09	9.000	2.34	15.083	2.51	21.17	1.00
3.000	1.09	9.083	2.34	15.167	2.51	21.25	1.00
3.083	1.09	9.167	2.34	15.250	2.51	21.33	1.00
3.167	1.09	9.250	2.34	15.333	2.51	21.42	1.00
3.250	1.09	9.333	2.67	15.417	2.51	21.50	1.00
3.333	1.09	9.417	2.67	15.500	2.51	21.58	1.00
3.417	1.09	9.500	2.67	15.583	2.51	21.67	1.00
3.500	1.09	9.583	2.67	15.667	2.51	21.75	1.00
3.583	1.09	9.667	2.67	15.750	2.51	21.83	1.00
3.667	1.09	9.750	2.67	15.833	2.51	21.92	1.00
3.750	1.09	9.833	3.01	15.917	2.51	22.00	1.00
3.833	1.09	9.917	3.01	16.000	2.51	22.08	1.00
3.917	1.09	10.000	3.01	16.083	2.51	22.17	1.00
4.000	1.09	10.083	3.01	16.167	2.51	22.25	1.00
4.083	1.09	10.167	3.01	16.250	2.51	22.33	1.00
4.167	1.09	10.250	3.01	16.333	1.50	22.42	1.00
4.250	1.09	10.333	3.84	16.417	1.50	22.50	1.00
4.333	1.34	10.417	3.84	16.500	1.50	22.58	1.00
4.417	1.34	10.500	3.84	16.583	1.50	22.67	1.00
4.500	1.34	10.583	3.84	16.667	1.50	22.75	1.00
4.583	1.34	10.667	3.84	16.750	1.50	22.83	1.00
4.667	1.34	10.750	3.84	16.833	1.50	22.92	1.00
4.750	1.34	10.833	5.18	16.917	1.50	23.00	1.00

4.833	1.34	10.917	5.18	17.000	1.50	23.08	1.00
4.917	1.34	11.000	5.18	17.083	1.50	23.17	1.00
5.000	1.34	11.083	5.18	17.167	1.50	23.25	1.00
5.083	1.34	11.167	5.18	17.250	1.50	23.33	1.00
5.167	1.34	11.250	5.18	17.333	1.50	23.42	1.00
5.250	1.34	11.333	8.02	17.417	1.50	23.50	1.00
5.333	1.34	11.417	8.02	17.500	1.50	23.58	1.00
5.417	1.34	11.500	8.02	17.583	1.50	23.67	1.00
5.500	1.34	11.583	8.02	17.667	1.50	23.75	1.00
5.583	1.34	11.667	8.02	17.750	1.50	23.83	1.00
5.667	1.34	11.750	8.02	17.833	1.50	23.92	1.00
5.750	1.34	11.833	24.72	17.917	1.50	24.00	1.00
5.833	1.34	11.917	24.72	18.000	1.50	24.08	1.00
5.917	1.34	12.000	24.72	18.083	1.50	24.17	1.00
6.000	1.34	12.083	102.21	18.167	1.50	24.25	1.00
6.083	1.34	12.167	102.22	18.250	1.50		

Max.Eff.Inten.(mm/hr)=	102.22	631.73	
over (min)	5.00	15.00	
Storage Coeff. (min)=	3.46 (ii)	11.64 (ii)	
Unit Hyd. Tpeak (min)=	5.00	15.00	
Unit Hyd. peak (cms)=	0.26	0.09	
			TOTALS
PEAK FLOW (cms)=	0.00	0.37	0.366 (iii)
TIME TO PEAK (hrs)=	12.25	12.33	12.33
RUNOFF VOLUME (mm)=	82.51	68.60	68.61
TOTAL RAINFALL (mm)=	83.51	83.51	83.51
RUNOFF COEFFICIENT =	0.99	0.82	0.82

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
STANDHYD (0043)	Area (ha)=	0.13	
ID= 1 DT= 5.0 min	Total Imp(%)=	30.77	Dir. Conn.(%)= 7.69

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	0.04	0.09
Dep. Storage (mm)=	1.00	5.00

Average Slope (%)=	0.50	0.50
Length (m)=	29.44	70.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.34	12.250	102.22	18.33	1.50
0.167	0.00	6.250	1.34	12.333	12.04	18.42	1.50
0.250	0.00	6.333	1.50	12.417	12.03	18.50	1.50
0.333	0.92	6.417	1.50	12.500	12.03	18.58	1.50
0.417	0.92	6.500	1.50	12.583	12.03	18.67	1.50
0.500	0.92	6.583	1.50	12.667	12.03	18.75	1.50
0.583	0.92	6.667	1.50	12.750	12.03	18.83	1.50
0.667	0.92	6.750	1.50	12.833	6.18	18.92	1.50
0.750	0.92	6.833	1.50	12.917	6.18	19.00	1.50
0.833	0.92	6.917	1.50	13.000	6.18	19.08	1.50
0.917	0.92	7.000	1.50	13.083	6.18	19.17	1.50
1.000	0.92	7.083	1.50	13.167	6.18	19.25	1.50
1.083	0.92	7.167	1.50	13.250	6.18	19.33	1.50
1.167	0.92	7.250	1.50	13.333	4.51	19.42	1.50
1.250	0.92	7.333	1.84	13.417	4.51	19.50	1.50
1.333	0.92	7.417	1.84	13.500	4.51	19.58	1.50
1.417	0.92	7.500	1.84	13.583	4.51	19.67	1.50
1.500	0.92	7.583	1.84	13.667	4.51	19.75	1.50
1.583	0.92	7.667	1.84	13.750	4.51	19.83	1.50
1.667	0.92	7.750	1.84	13.833	3.51	19.92	1.50
1.750	0.92	7.833	1.84	13.917	3.51	20.00	1.50
1.833	0.92	7.917	1.84	14.000	3.51	20.08	1.50
1.917	0.92	8.000	1.84	14.083	3.51	20.17	1.50
2.000	0.92	8.083	1.84	14.167	3.51	20.25	1.50
2.083	0.92	8.167	1.84	14.250	3.51	20.33	1.00
2.167	0.92	8.250	1.84	14.333	2.51	20.42	1.00
2.250	0.92	8.333	2.17	14.417	2.51	20.50	1.00
2.333	1.09	8.417	2.17	14.500	2.51	20.58	1.00
2.417	1.09	8.500	2.17	14.583	2.51	20.67	1.00
2.500	1.09	8.583	2.17	14.667	2.51	20.75	1.00
2.583	1.09	8.667	2.17	14.750	2.51	20.83	1.00
2.667	1.09	8.750	2.17	14.833	2.51	20.92	1.00
2.750	1.09	8.833	2.34	14.917	2.51	21.00	1.00
2.833	1.09	8.917	2.34	15.000	2.51	21.08	1.00
2.917	1.09	9.000	2.34	15.083	2.51	21.17	1.00
3.000	1.09	9.083	2.34	15.167	2.51	21.25	1.00
3.083	1.09	9.167	2.34	15.250	2.51	21.33	1.00
3.167	1.09	9.250	2.34	15.333	2.51	21.42	1.00

3.250	1.09	9.333	2.67	15.417	2.51	21.50	1.00
3.333	1.09	9.417	2.67	15.500	2.51	21.58	1.00
3.417	1.09	9.500	2.67	15.583	2.51	21.67	1.00
3.500	1.09	9.583	2.67	15.667	2.51	21.75	1.00
3.583	1.09	9.667	2.67	15.750	2.51	21.83	1.00
3.667	1.09	9.750	2.67	15.833	2.51	21.92	1.00
3.750	1.09	9.833	3.01	15.917	2.51	22.00	1.00
3.833	1.09	9.917	3.01	16.000	2.51	22.08	1.00
3.917	1.09	10.000	3.01	16.083	2.51	22.17	1.00
4.000	1.09	10.083	3.01	16.167	2.51	22.25	1.00
4.083	1.09	10.167	3.01	16.250	2.51	22.33	1.00
4.167	1.09	10.250	3.01	16.333	1.50	22.42	1.00
4.250	1.09	10.333	3.84	16.417	1.50	22.50	1.00
4.333	1.34	10.417	3.84	16.500	1.50	22.58	1.00
4.417	1.34	10.500	3.84	16.583	1.50	22.67	1.00
4.500	1.34	10.583	3.84	16.667	1.50	22.75	1.00
4.583	1.34	10.667	3.84	16.750	1.50	22.83	1.00
4.667	1.34	10.750	3.84	16.833	1.50	22.92	1.00
4.750	1.34	10.833	5.18	16.917	1.50	23.00	1.00
4.833	1.34	10.917	5.18	17.000	1.50	23.08	1.00
4.917	1.34	11.000	5.18	17.083	1.50	23.17	1.00
5.000	1.34	11.083	5.18	17.167	1.50	23.25	1.00
5.083	1.34	11.167	5.18	17.250	1.50	23.33	1.00
5.167	1.34	11.250	5.18	17.333	1.50	23.42	1.00
5.250	1.34	11.333	8.02	17.417	1.50	23.50	1.00
5.333	1.34	11.417	8.02	17.500	1.50	23.58	1.00
5.417	1.34	11.500	8.02	17.583	1.50	23.67	1.00
5.500	1.34	11.583	8.02	17.667	1.50	23.75	1.00
5.583	1.34	11.667	8.02	17.750	1.50	23.83	1.00
5.667	1.34	11.750	8.02	17.833	1.50	23.92	1.00
5.750	1.34	11.833	24.72	17.917	1.50	24.00	1.00
5.833	1.34	11.917	24.72	18.000	1.50	24.08	1.00
5.917	1.34	12.000	24.72	18.083	1.50	24.17	1.00
6.000	1.34	12.083	102.21	18.167	1.50	24.25	1.00
6.083	1.34	12.167	102.22	18.250	1.50		

Max.Eff.Inten.(mm/hr)=	102.22	56.65	
over (min)	5.00	25.00	
Storage Coeff. (min)=	1.50 (ii)	20.28 (ii)	
Unit Hyd. Tpeak (min)=	5.00	25.00	
Unit Hyd. peak (cms)=	0.33	0.05	
			TOTALS
PEAK FLOW (cms)=	0.00	0.01	0.009 (iii)
TIME TO PEAK (hrs)=	12.25	12.50	12.50
RUNOFF VOLUME (mm)=	82.51	38.48	41.78
TOTAL RAINFALL (mm)=	83.51	83.51	83.51
RUNOFF COEFFICIENT =	0.99	0.46	0.50

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
STANDHYD (0044)	Area (ha)=	1.62	
ID= 1 DT= 5.0 min	Total Imp(%)=	48.77	Dir. Conn.(%)= 30.86

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	0.79	0.83
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	0.50	1.40
Length (m)=	103.92	400.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.34	12.250	102.22	18.33	1.50
0.167	0.00	6.250	1.34	12.333	12.04	18.42	1.50
0.250	0.00	6.333	1.50	12.417	12.03	18.50	1.50
0.333	0.92	6.417	1.50	12.500	12.03	18.58	1.50
0.417	0.92	6.500	1.50	12.583	12.03	18.67	1.50
0.500	0.92	6.583	1.50	12.667	12.03	18.75	1.50
0.583	0.92	6.667	1.50	12.750	12.03	18.83	1.50
0.667	0.92	6.750	1.50	12.833	6.18	18.92	1.50
0.750	0.92	6.833	1.50	12.917	6.18	19.00	1.50
0.833	0.92	6.917	1.50	13.000	6.18	19.08	1.50
0.917	0.92	7.000	1.50	13.083	6.18	19.17	1.50
1.000	0.92	7.083	1.50	13.167	6.18	19.25	1.50
1.083	0.92	7.167	1.50	13.250	6.18	19.33	1.50
1.167	0.92	7.250	1.50	13.333	4.51	19.42	1.50
1.250	0.92	7.333	1.84	13.417	4.51	19.50	1.50
1.333	0.92	7.417	1.84	13.500	4.51	19.58	1.50
1.417	0.92	7.500	1.84	13.583	4.51	19.67	1.50
1.500	0.92	7.583	1.84	13.667	4.51	19.75	1.50
1.583	0.92	7.667	1.84	13.750	4.51	19.83	1.50

1.667	0.92	7.750	1.84	13.833	3.51	19.92	1.50
1.750	0.92	7.833	1.84	13.917	3.51	20.00	1.50
1.833	0.92	7.917	1.84	14.000	3.51	20.08	1.50
1.917	0.92	8.000	1.84	14.083	3.51	20.17	1.50
2.000	0.92	8.083	1.84	14.167	3.51	20.25	1.50
2.083	0.92	8.167	1.84	14.250	3.51	20.33	1.00
2.167	0.92	8.250	1.84	14.333	2.51	20.42	1.00
2.250	0.92	8.333	2.17	14.417	2.51	20.50	1.00
2.333	1.09	8.417	2.17	14.500	2.51	20.58	1.00
2.417	1.09	8.500	2.17	14.583	2.51	20.67	1.00
2.500	1.09	8.583	2.17	14.667	2.51	20.75	1.00
2.583	1.09	8.667	2.17	14.750	2.51	20.83	1.00
2.667	1.09	8.750	2.17	14.833	2.51	20.92	1.00
2.750	1.09	8.833	2.34	14.917	2.51	21.00	1.00
2.833	1.09	8.917	2.34	15.000	2.51	21.08	1.00
2.917	1.09	9.000	2.34	15.083	2.51	21.17	1.00
3.000	1.09	9.083	2.34	15.167	2.51	21.25	1.00
3.083	1.09	9.167	2.34	15.250	2.51	21.33	1.00
3.167	1.09	9.250	2.34	15.333	2.51	21.42	1.00
3.250	1.09	9.333	2.67	15.417	2.51	21.50	1.00
3.333	1.09	9.417	2.67	15.500	2.51	21.58	1.00
3.417	1.09	9.500	2.67	15.583	2.51	21.67	1.00
3.500	1.09	9.583	2.67	15.667	2.51	21.75	1.00
3.583	1.09	9.667	2.67	15.750	2.51	21.83	1.00
3.667	1.09	9.750	2.67	15.833	2.51	21.92	1.00
3.750	1.09	9.833	3.01	15.917	2.51	22.00	1.00
3.833	1.09	9.917	3.01	16.000	2.51	22.08	1.00
3.917	1.09	10.000	3.01	16.083	2.51	22.17	1.00
4.000	1.09	10.083	3.01	16.167	2.51	22.25	1.00
4.083	1.09	10.167	3.01	16.250	2.51	22.33	1.00
4.167	1.09	10.250	3.01	16.333	1.50	22.42	1.00
4.250	1.09	10.333	3.84	16.417	1.50	22.50	1.00
4.333	1.34	10.417	3.84	16.500	1.50	22.58	1.00
4.417	1.34	10.500	3.84	16.583	1.50	22.67	1.00
4.500	1.34	10.583	3.84	16.667	1.50	22.75	1.00
4.583	1.34	10.667	3.84	16.750	1.50	22.83	1.00
4.667	1.34	10.750	3.84	16.833	1.50	22.92	1.00
4.750	1.34	10.833	5.18	16.917	1.50	23.00	1.00
4.833	1.34	10.917	5.18	17.000	1.50	23.08	1.00
4.917	1.34	11.000	5.18	17.083	1.50	23.17	1.00
5.000	1.34	11.083	5.18	17.167	1.50	23.25	1.00
5.083	1.34	11.167	5.18	17.250	1.50	23.33	1.00
5.167	1.34	11.250	5.18	17.333	1.50	23.42	1.00
5.250	1.34	11.333	8.02	17.417	1.50	23.50	1.00
5.333	1.34	11.417	8.02	17.500	1.50	23.58	1.00
5.417	1.34	11.500	8.02	17.583	1.50	23.67	1.00
5.500	1.34	11.583	8.02	17.667	1.50	23.75	1.00
5.583	1.34	11.667	8.02	17.750	1.50	23.83	1.00

5.667	1.34	11.750	8.02	17.833	1.50	23.92	1.00
5.750	1.34	11.833	24.72	17.917	1.50	24.00	1.00
5.833	1.34	11.917	24.72	18.000	1.50	24.08	1.00
5.917	1.34	12.000	24.72	18.083	1.50	24.17	1.00
6.000	1.34	12.083	102.21	18.167	1.50	24.25	1.00
6.083	1.34	12.167	102.22	18.250	1.50		

Max.Eff.Inten.(mm/hr)=	102.22	27.89	
over (min)	5.00	60.00	
Storage Coeff. (min)=	3.19 (ii)	55.31 (ii)	
Unit Hyd. Tpeak (min)=	5.00	60.00	
Unit Hyd. peak (cms)=	0.27	0.02	
			TOTALS
PEAK FLOW (cms)=	0.14	0.04	0.152 (iii)
TIME TO PEAK (hrs)=	12.25	13.08	12.25
RUNOFF VOLUME (mm)=	82.51	38.75	52.23
TOTAL RAINFALL (mm)=	83.51	83.51	83.51
RUNOFF COEFFICIENT =	0.99	0.46	0.63

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0037)				
1 + 2 = 3	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0010):	1.32	0.214	12.25	49.96
+ ID2= 2 (0013):	4.16	0.601	12.25	57.23
ID = 3 (0037):	5.48	0.815	12.25	55.48

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0037)				
3 + 2 = 1	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0037):	5.48	0.815	12.25	55.48
+ ID2= 2 (0036):	2.12	0.366	12.33	68.61

ADD HYD (0037)				
1 + 2 = 3	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID = 1 (0037):	7.60	1.145	12.25	59.14

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0037)				
1 + 2 = 3	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0037):	7.60	1.145	12.25	59.14
+ ID2= 2 (0043):	0.13	0.009	12.50	41.78
ID = 3 (0037):	7.73	1.152	12.25	58.85

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0037)				
3 + 2 = 1	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0037):	7.73	1.152	12.25	58.85
+ ID2= 2 (0044):	1.62	0.152	12.25	52.23
ID = 1 (0037):	9.35	1.304	12.25	57.70

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0037)				
1 + 2 = 3	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0037):	9.35	1.304	12.25	57.70
+ ID2= 2 (0009):	31.06	3.937	12.33	51.79
ID = 3 (0037):	40.41	5.029	12.25	53.16

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

RESERVOIR (0038)	OVERFLOW IS OFF			
IN= 2---> OUT= 1				
DT= 5.0 min	OUTFLOW	STORAGE	OUTFLOW	STORAGE
	(cms)	(ha.m.)	(cms)	(ha.m.)
	0.0000	0.0000	0.5076	2.8989
	0.0000	0.2023	0.6060	3.2065
	0.0353	0.4202	0.7105	3.5196

0.0525	0.6536	0.8207	3.8381
0.0654	0.9026	0.9365	4.1621
0.0843	1.1671	1.0574	4.4915
0.1858	1.7227	1.1833	4.8263
0.2540	2.0086	1.3139	5.1665
0.3309	2.2999	1.4492	5.5122
0.4157	2.5967	1.5890	5.8633

	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
INFLOW : ID= 2 (0037)	40.410	5.029	12.25	53.16
OUTFLOW: ID= 1 (0038)	40.410	0.161	16.67	48.12

PEAK FLOW REDUCTION [Qout/Qin](%)= 3.20
TIME SHIFT OF PEAK FLOW (min)=265.00
MAXIMUM STORAGE USED (ha.m.)= 1.5862

CALIB			
STANDHYD (0017)	Area (ha)=	1.59	
ID= 1 DT= 5.0 min	Total Imp(%)=	58.58	Dir. Conn.(%)= 27.10

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	0.93	0.66
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	0.50	2.00
Length (m)=	102.96	30.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.34	12.250	102.22	18.33	1.50
0.167	0.00	6.250	1.34	12.333	12.04	18.42	1.50
0.250	0.00	6.333	1.50	12.417	12.03	18.50	1.50
0.333	0.92	6.417	1.50	12.500	12.03	18.58	1.50
0.417	0.92	6.500	1.50	12.583	12.03	18.67	1.50
0.500	0.92	6.583	1.50	12.667	12.03	18.75	1.50
0.583	0.92	6.667	1.50	12.750	12.03	18.83	1.50
0.667	0.92	6.750	1.50	12.833	6.18	18.92	1.50
0.750	0.92	6.833	1.50	12.917	6.18	19.00	1.50
0.833	0.92	6.917	1.50	13.000	6.18	19.08	1.50
0.917	0.92	7.000	1.50	13.083	6.18	19.17	1.50
1.000	0.92	7.083	1.50	13.167	6.18	19.25	1.50

1.083	0.92	7.167	1.50	13.250	6.18	19.33	1.50
1.167	0.92	7.250	1.50	13.333	4.51	19.42	1.50
1.250	0.92	7.333	1.84	13.417	4.51	19.50	1.50
1.333	0.92	7.417	1.84	13.500	4.51	19.58	1.50
1.417	0.92	7.500	1.84	13.583	4.51	19.67	1.50
1.500	0.92	7.583	1.84	13.667	4.51	19.75	1.50
1.583	0.92	7.667	1.84	13.750	4.51	19.83	1.50
1.667	0.92	7.750	1.84	13.833	3.51	19.92	1.50
1.750	0.92	7.833	1.84	13.917	3.51	20.00	1.50
1.833	0.92	7.917	1.84	14.000	3.51	20.08	1.50
1.917	0.92	8.000	1.84	14.083	3.51	20.17	1.50
2.000	0.92	8.083	1.84	14.167	3.51	20.25	1.50
2.083	0.92	8.167	1.84	14.250	3.51	20.33	1.00
2.167	0.92	8.250	1.84	14.333	2.51	20.42	1.00
2.250	0.92	8.333	2.17	14.417	2.51	20.50	1.00
2.333	1.09	8.417	2.17	14.500	2.51	20.58	1.00
2.417	1.09	8.500	2.17	14.583	2.51	20.67	1.00
2.500	1.09	8.583	2.17	14.667	2.51	20.75	1.00
2.583	1.09	8.667	2.17	14.750	2.51	20.83	1.00
2.667	1.09	8.750	2.17	14.833	2.51	20.92	1.00
2.750	1.09	8.833	2.34	14.917	2.51	21.00	1.00
2.833	1.09	8.917	2.34	15.000	2.51	21.08	1.00
2.917	1.09	9.000	2.34	15.083	2.51	21.17	1.00
3.000	1.09	9.083	2.34	15.167	2.51	21.25	1.00
3.083	1.09	9.167	2.34	15.250	2.51	21.33	1.00
3.167	1.09	9.250	2.34	15.333	2.51	21.42	1.00
3.250	1.09	9.333	2.67	15.417	2.51	21.50	1.00
3.333	1.09	9.417	2.67	15.500	2.51	21.58	1.00
3.417	1.09	9.500	2.67	15.583	2.51	21.67	1.00
3.500	1.09	9.583	2.67	15.667	2.51	21.75	1.00
3.583	1.09	9.667	2.67	15.750	2.51	21.83	1.00
3.667	1.09	9.750	2.67	15.833	2.51	21.92	1.00
3.750	1.09	9.833	3.01	15.917	2.51	22.00	1.00
3.833	1.09	9.917	3.01	16.000	2.51	22.08	1.00
3.917	1.09	10.000	3.01	16.083	2.51	22.17	1.00
4.000	1.09	10.083	3.01	16.167	2.51	22.25	1.00
4.083	1.09	10.167	3.01	16.250	2.51	22.33	1.00
4.167	1.09	10.250	3.01	16.333	1.50	22.42	1.00
4.250	1.09	10.333	3.84	16.417	1.50	22.50	1.00
4.333	1.34	10.417	3.84	16.500	1.50	22.58	1.00
4.417	1.34	10.500	3.84	16.583	1.50	22.67	1.00
4.500	1.34	10.583	3.84	16.667	1.50	22.75	1.00
4.583	1.34	10.667	3.84	16.750	1.50	22.83	1.00
4.667	1.34	10.750	3.84	16.833	1.50	22.92	1.00
4.750	1.34	10.833	5.18	16.917	1.50	23.00	1.00
4.833	1.34	10.917	5.18	17.000	1.50	23.08	1.00
4.917	1.34	11.000	5.18	17.083	1.50	23.17	1.00
5.000	1.34	11.083	5.18	17.167	1.50	23.25	1.00

5.083	1.34	11.167	5.18	17.250	1.50	23.33	1.00
5.167	1.34	11.250	5.18	17.333	1.50	23.42	1.00
5.250	1.34	11.333	8.02	17.417	1.50	23.50	1.00
5.333	1.34	11.417	8.02	17.500	1.50	23.58	1.00
5.417	1.34	11.500	8.02	17.583	1.50	23.67	1.00
5.500	1.34	11.583	8.02	17.667	1.50	23.75	1.00
5.583	1.34	11.667	8.02	17.750	1.50	23.83	1.00
5.667	1.34	11.750	8.02	17.833	1.50	23.92	1.00
5.750	1.34	11.833	24.72	17.917	1.50	24.00	1.00
5.833	1.34	11.917	24.72	18.000	1.50	24.08	1.00
5.917	1.34	12.000	24.72	18.083	1.50	24.17	1.00
6.000	1.34	12.083	102.21	18.167	1.50	24.25	1.00
6.083	1.34	12.167	102.22	18.250	1.50		

```
    Max.Eff.Inten.(mm/hr)=     102.22       109.81
               over (min)        5.00        10.00
    Storage Coeff.  (min)=       3.17 (ii)    8.89 (ii)
    Unit Hyd. Tpeak (min)=       5.00        10.00
    Unit Hyd. peak  (cms)=       0.27         0.12
                                                    *TOTALS*
    PEAK FLOW       (cms)=       0.12         0.15          0.269 (iii)
    TIME TO PEAK    (hrs)=      12.25        12.25          12.25
    RUNOFF VOLUME    (mm)=      82.51        42.47          53.31
    TOTAL RAINFALL   (mm)=      83.51        83.51          83.51
    RUNOFF COEFFICIENT   =       0.99         0.51           0.64

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  66.5    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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  -------------------------
  | Junction Command(0018) |
  -------------------------

                          AREA     QPEAK   TPEAK     R.V.
                          (ha)     (cms)    (hrs)    (mm)
  INFLOW : ID= 2(  0017)    1.59     0.27   12.25    53.31
  OUTFLOW: ID= 2(  0018)    1.59     0.27   12.25    53.31

  --------------------------------------------------------------------------------

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```
| ADD HYD  (  0023)|
|   1 +  2 =  3    |        AREA    QPEAK    TPEAK     R.V.
--------------------        (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0016):   234.30   3.125    13.25    22.29
     + ID2= 2 (  0018):     1.59   0.269    12.25    53.31
       ==================================================
       ID = 3 (  0023):   235.89   3.147    13.25    22.50

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
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--------------------
| ADD HYD  (  0023)|
|   3 +  2 =  1    |        AREA    QPEAK    TPEAK     R.V.
--------------------        (ha)    (cms)    (hrs)     (mm)
       ID1= 3 (  0023):   235.89   3.147    13.25    22.50
     + ID2= 2 (  0038):    40.41   0.161    16.67    48.12
       ==================================================
       ID = 1 (  0023):   276.30   3.271    13.25    26.25

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
*******************************
** SIMULATION:I - 10-year SCS **
*******************************

--------------------
|    READ STORM    |    Filename: C:\Users\ecomish\AppD
|                  |              ata\Local\Temp\
|                  |              bd70dd54-263f-4ef7-b852-c48fc040cbd3\fb02d2ed
| Ptotal= 96.98 mm |    Comments: 10yr 24hr 15min SCS Type II (MTO) - 15%
--------------------
```

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.00	0.00	6.25	1.75	12.50	13.97	18.75	1.75
0.25	1.07	6.50	1.75	12.75	7.18	19.00	1.75
0.50	1.07	6.75	1.75	13.00	7.18	19.25	1.75
0.75	1.07	7.00	1.75	13.25	5.24	19.50	1.75
1.00	1.07	7.25	2.13	13.50	5.24	19.75	1.75
1.25	1.07	7.50	2.13	13.75	4.07	20.00	1.75
1.50	1.07	7.75	2.13	14.00	4.07	20.25	1.16
1.75	1.07	8.00	2.13	14.25	2.91	20.50	1.16
2.00	1.07	8.25	2.52	14.50	2.91	20.75	1.16
2.25	1.26	8.50	2.52	14.75	2.91	21.00	1.16
2.50	1.26	8.75	2.72	15.00	2.91	21.25	1.16
2.75	1.26	9.00	2.72	15.25	2.91	21.50	1.16
3.00	1.26	9.25	3.10	15.50	2.91	21.75	1.16
3.25	1.26	9.50	3.10	15.75	2.91	22.00	1.16

3.50	1.26	9.75	3.49	16.00	2.91	22.25	1.16
3.75	1.26	10.00	3.49	16.25	1.75	22.50	1.16
4.00	1.26	10.25	4.46	16.50	1.75	22.75	1.16
4.25	1.55	10.50	4.46	16.75	1.75	23.00	1.16
4.50	1.55	10.75	6.01	17.00	1.75	23.25	1.16
4.75	1.55	11.00	6.01	17.25	1.75	23.50	1.16
5.00	1.55	11.25	9.31	17.50	1.75	23.75	1.16
5.25	1.55	11.50	9.31	17.75	1.75	24.00	1.16
5.50	1.55	11.75	28.71	18.00	1.75		
5.75	1.55	12.00	118.70	18.25	1.75		
6.00	1.55	12.25	13.97	18.50	1.75		

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| CALIB            |
| NASHYD   (  0025)|   Area    (ha)= 100.92   Curve Number   (CN)= 55.9
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.89   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   1.70

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.
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---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.55	12.250	118.70	18.33	1.75
0.167	0.00	6.250	1.55	12.333	13.98	18.42	1.75
0.250	0.00	6.333	1.75	12.417	13.97	18.50	1.75
0.333	1.07	6.417	1.75	12.500	13.97	18.58	1.75
0.417	1.07	6.500	1.75	12.583	13.97	18.67	1.75
0.500	1.07	6.583	1.75	12.667	13.97	18.75	1.75
0.583	1.07	6.667	1.75	12.750	13.97	18.83	1.75
0.667	1.07	6.750	1.75	12.833	7.18	18.92	1.75
0.750	1.07	6.833	1.75	12.917	7.18	19.00	1.75
0.833	1.07	6.917	1.75	13.000	7.18	19.08	1.75
0.917	1.07	7.000	1.75	13.083	7.18	19.17	1.75
1.000	1.07	7.083	1.75	13.167	7.18	19.25	1.75
1.083	1.07	7.167	1.75	13.250	7.18	19.33	1.75
1.167	1.07	7.250	1.75	13.333	5.24	19.42	1.75
1.250	1.07	7.333	2.13	13.417	5.24	19.50	1.75
1.333	1.07	7.417	2.13	13.500	5.24	19.58	1.75
1.417	1.07	7.500	2.13	13.583	5.24	19.67	1.75
1.500	1.07	7.583	2.13	13.667	5.24	19.75	1.75
1.583	1.07	7.667	2.13	13.750	5.24	19.83	1.75
1.667	1.07	7.750	2.13	13.833	4.07	19.92	1.75
1.750	1.07	7.833	2.13	13.917	4.07	20.00	1.75
1.833	1.07	7.917	2.13	14.000	4.07	20.08	1.75

1.917	1.07	8.000	2.13	14.083	4.07	20.17	1.75
2.000	1.07	8.083	2.13	14.167	4.07	20.25	1.75
2.083	1.07	8.167	2.13	14.250	4.07	20.33	1.16
2.167	1.07	8.250	2.13	14.333	2.91	20.42	1.16
2.250	1.07	8.333	2.52	14.417	2.91	20.50	1.16
2.333	1.26	8.417	2.52	14.500	2.91	20.58	1.16
2.417	1.26	8.500	2.52	14.583	2.91	20.67	1.16
2.500	1.26	8.583	2.52	14.667	2.91	20.75	1.16
2.583	1.26	8.667	2.52	14.750	2.91	20.83	1.16
2.667	1.26	8.750	2.52	14.833	2.91	20.92	1.16
2.750	1.26	8.833	2.72	14.917	2.91	21.00	1.16
2.833	1.26	8.917	2.72	15.000	2.91	21.08	1.16
2.917	1.26	9.000	2.72	15.083	2.91	21.17	1.16
3.000	1.26	9.083	2.72	15.167	2.91	21.25	1.16
3.083	1.26	9.167	2.72	15.250	2.91	21.33	1.16
3.167	1.26	9.250	2.72	15.333	2.91	21.42	1.16
3.250	1.26	9.333	3.10	15.417	2.91	21.50	1.16
3.333	1.26	9.417	3.10	15.500	2.91	21.58	1.16
3.417	1.26	9.500	3.10	15.583	2.91	21.67	1.16
3.500	1.26	9.583	3.10	15.667	2.91	21.75	1.16
3.583	1.26	9.667	3.10	15.750	2.91	21.83	1.16
3.667	1.26	9.750	3.10	15.833	2.91	21.92	1.16
3.750	1.26	9.833	3.49	15.917	2.91	22.00	1.16
3.833	1.26	9.917	3.49	16.000	2.91	22.08	1.16
3.917	1.26	10.000	3.49	16.083	2.91	22.17	1.16
4.000	1.26	10.083	3.49	16.167	2.91	22.25	1.16
4.083	1.26	10.167	3.49	16.250	2.91	22.33	1.16
4.167	1.26	10.250	3.49	16.333	1.75	22.42	1.16
4.250	1.26	10.333	4.46	16.417	1.75	22.50	1.16
4.333	1.55	10.417	4.46	16.500	1.75	22.58	1.16
4.417	1.55	10.500	4.46	16.583	1.75	22.67	1.16
4.500	1.55	10.583	4.46	16.667	1.75	22.75	1.16
4.583	1.55	10.667	4.46	16.750	1.75	22.83	1.16
4.667	1.55	10.750	4.46	16.833	1.75	22.92	1.16
4.750	1.55	10.833	6.01	16.917	1.75	23.00	1.16
4.833	1.55	10.917	6.01	17.000	1.75	23.08	1.16
4.917	1.55	11.000	6.01	17.083	1.75	23.17	1.16
5.000	1.55	11.083	6.01	17.167	1.75	23.25	1.16
5.083	1.55	11.167	6.01	17.250	1.75	23.33	1.16
5.167	1.55	11.250	6.01	17.333	1.75	23.42	1.16
5.250	1.55	11.333	9.31	17.417	1.75	23.50	1.16
5.333	1.55	11.417	9.31	17.500	1.75	23.58	1.16
5.417	1.55	11.500	9.31	17.583	1.75	23.67	1.16
5.500	1.55	11.583	9.31	17.667	1.75	23.75	1.16
5.583	1.55	11.667	9.31	17.750	1.75	23.83	1.16
5.667	1.55	11.750	9.31	17.833	1.75	23.92	1.16
5.750	1.55	11.833	28.70	17.917	1.75	24.00	1.16
5.833	1.55	11.917	28.71	18.000	1.75	24.08	1.16

5.917	1.55	12.000	28.71	18.083	1.75	24.17	1.16
6.000	1.55	12.083	118.69	18.167	1.75	24.25	1.16
6.083	1.55	12.167	118.70	18.250	1.75		

Unit Hyd Qpeak (cms)= 2.267

PEAK FLOW (cms)= 1.433 (i)
TIME TO PEAK (hrs)= 14.083
RUNOFF VOLUME (mm)= 27.450
TOTAL RAINFALL (mm)= 96.980
RUNOFF COEFFICIENT = 0.283

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0002)	Area (ha)= 23.99	Curve Number (CN)= 44.7	
ID= 1 DT= 5.0 min	Ia (mm)= 10.91	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.97		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.55	12.250	118.70	18.33	1.75
0.167	0.00	6.250	1.55	12.333	13.98	18.42	1.75
0.250	0.00	6.333	1.75	12.417	13.97	18.50	1.75
0.333	1.07	6.417	1.75	12.500	13.97	18.58	1.75
0.417	1.07	6.500	1.75	12.583	13.97	18.67	1.75
0.500	1.07	6.583	1.75	12.667	13.97	18.75	1.75
0.583	1.07	6.667	1.75	12.750	13.97	18.83	1.75
0.667	1.07	6.750	1.75	12.833	7.18	18.92	1.75
0.750	1.07	6.833	1.75	12.917	7.18	19.00	1.75
0.833	1.07	6.917	1.75	13.000	7.18	19.08	1.75
0.917	1.07	7.000	1.75	13.083	7.18	19.17	1.75
1.000	1.07	7.083	1.75	13.167	7.18	19.25	1.75
1.083	1.07	7.167	1.75	13.250	7.18	19.33	1.75
1.167	1.07	7.250	1.75	13.333	5.24	19.42	1.75
1.250	1.07	7.333	2.13	13.417	5.24	19.50	1.75
1.333	1.07	7.417	2.13	13.500	5.24	19.58	1.75
1.417	1.07	7.500	2.13	13.583	5.24	19.67	1.75
1.500	1.07	7.583	2.13	13.667	5.24	19.75	1.75
1.583	1.07	7.667	2.13	13.750	5.24	19.83	1.75
1.667	1.07	7.750	2.13	13.833	4.07	19.92	1.75
1.750	1.07	7.833	2.13	13.917	4.07	20.00	1.75

1.833	1.07	7.917	2.13	14.000	4.07	20.08	1.75
1.917	1.07	8.000	2.13	14.083	4.07	20.17	1.75
2.000	1.07	8.083	2.13	14.167	4.07	20.25	1.75
2.083	1.07	8.167	2.13	14.250	4.07	20.33	1.16
2.167	1.07	8.250	2.13	14.333	2.91	20.42	1.16
2.250	1.07	8.333	2.52	14.417	2.91	20.50	1.16
2.333	1.26	8.417	2.52	14.500	2.91	20.58	1.16
2.417	1.26	8.500	2.52	14.583	2.91	20.67	1.16
2.500	1.26	8.583	2.52	14.667	2.91	20.75	1.16
2.583	1.26	8.667	2.52	14.750	2.91	20.83	1.16
2.667	1.26	8.750	2.52	14.833	2.91	20.92	1.16
2.750	1.26	8.833	2.72	14.917	2.91	21.00	1.16
2.833	1.26	8.917	2.72	15.000	2.91	21.08	1.16
2.917	1.26	9.000	2.72	15.083	2.91	21.17	1.16
3.000	1.26	9.083	2.72	15.167	2.91	21.25	1.16
3.083	1.26	9.167	2.72	15.250	2.91	21.33	1.16
3.167	1.26	9.250	2.72	15.333	2.91	21.42	1.16
3.250	1.26	9.333	3.10	15.417	2.91	21.50	1.16
3.333	1.26	9.417	3.10	15.500	2.91	21.58	1.16
3.417	1.26	9.500	3.10	15.583	2.91	21.67	1.16
3.500	1.26	9.583	3.10	15.667	2.91	21.75	1.16
3.583	1.26	9.667	3.10	15.750	2.91	21.83	1.16
3.667	1.26	9.750	3.10	15.833	2.91	21.92	1.16
3.750	1.26	9.833	3.49	15.917	2.91	22.00	1.16
3.833	1.26	9.917	3.49	16.000	2.91	22.08	1.16
3.917	1.26	10.000	3.49	16.083	2.91	22.17	1.16
4.000	1.26	10.083	3.49	16.167	2.91	22.25	1.16
4.083	1.26	10.167	3.49	16.250	2.91	22.33	1.16
4.167	1.26	10.250	3.49	16.333	1.75	22.42	1.16
4.250	1.26	10.333	4.46	16.417	1.75	22.50	1.16
4.333	1.55	10.417	4.46	16.500	1.75	22.58	1.16
4.417	1.55	10.500	4.46	16.583	1.75	22.67	1.16
4.500	1.55	10.583	4.46	16.667	1.75	22.75	1.16
4.583	1.55	10.667	4.46	16.750	1.75	22.83	1.16
4.667	1.55	10.750	4.46	16.833	1.75	22.92	1.16
4.750	1.55	10.833	6.01	16.917	1.75	23.00	1.16
4.833	1.55	10.917	6.01	17.000	1.75	23.08	1.16
4.917	1.55	11.000	6.01	17.083	1.75	23.17	1.16
5.000	1.55	11.083	6.01	17.167	1.75	23.25	1.16
5.083	1.55	11.167	6.01	17.250	1.75	23.33	1.16
5.167	1.55	11.250	6.01	17.333	1.75	23.42	1.16
5.250	1.55	11.333	9.31	17.417	1.75	23.50	1.16
5.333	1.55	11.417	9.31	17.500	1.75	23.58	1.16
5.417	1.55	11.500	9.31	17.583	1.75	23.67	1.16
5.500	1.55	11.583	9.31	17.667	1.75	23.75	1.16
5.583	1.55	11.667	9.31	17.750	1.75	23.83	1.16
5.667	1.55	11.750	9.31	17.833	1.75	23.92	1.16
5.750	1.55	11.833	28.70	17.917	1.75	24.00	1.16

5.833	1.55	11.917	28.71	18.000	1.75	24.08	1.16
5.917	1.55	12.000	28.71	18.083	1.75	24.17	1.16
6.000	1.55	12.083	118.69	18.167	1.75	24.25	1.16
6.083	1.55	12.167	118.70	18.250	1.75		

Unit Hyd Qpeak (cms)= 0.945

PEAK FLOW (cms)= 0.341 (i)
TIME TO PEAK (hrs)= 13.250
RUNOFF VOLUME (mm)= 18.506
TOTAL RAINFALL (mm)= 96.980
RUNOFF COEFFICIENT = 0.191

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0001)	Area (ha)= 39.68	Curve Number (CN)= 60.7	
ID= 1 DT= 5.0 min	Ia (mm)= 8.26	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 1.18		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.55	12.250	118.70	18.33	1.75
0.167	0.00	6.250	1.55	12.333	13.98	18.42	1.75
0.250	0.00	6.333	1.75	12.417	13.97	18.50	1.75
0.333	1.07	6.417	1.75	12.500	13.97	18.58	1.75
0.417	1.07	6.500	1.75	12.583	13.97	18.67	1.75
0.500	1.07	6.583	1.75	12.667	13.97	18.75	1.75
0.583	1.07	6.667	1.75	12.750	13.97	18.83	1.75
0.667	1.07	6.750	1.75	12.833	7.18	18.92	1.75
0.750	1.07	6.833	1.75	12.917	7.18	19.00	1.75
0.833	1.07	6.917	1.75	13.000	7.18	19.08	1.75
0.917	1.07	7.000	1.75	13.083	7.18	19.17	1.75
1.000	1.07	7.083	1.75	13.167	7.18	19.25	1.75
1.083	1.07	7.167	1.75	13.250	7.18	19.33	1.75
1.167	1.07	7.250	1.75	13.333	5.24	19.42	1.75
1.250	1.07	7.333	2.13	13.417	5.24	19.50	1.75
1.333	1.07	7.417	2.13	13.500	5.24	19.58	1.75
1.417	1.07	7.500	2.13	13.583	5.24	19.67	1.75
1.500	1.07	7.583	2.13	13.667	5.24	19.75	1.75
1.583	1.07	7.667	2.13	13.750	5.24	19.83	1.75
1.667	1.07	7.750	2.13	13.833	4.07	19.92	1.75

1.750	1.07	7.833	2.13	13.917	4.07	20.00	1.75
1.833	1.07	7.917	2.13	14.000	4.07	20.08	1.75
1.917	1.07	8.000	2.13	14.083	4.07	20.17	1.75
2.000	1.07	8.083	2.13	14.167	4.07	20.25	1.75
2.083	1.07	8.167	2.13	14.250	4.07	20.33	1.16
2.167	1.07	8.250	2.13	14.333	2.91	20.42	1.16
2.250	1.07	8.333	2.52	14.417	2.91	20.50	1.16
2.333	1.26	8.417	2.52	14.500	2.91	20.58	1.16
2.417	1.26	8.500	2.52	14.583	2.91	20.67	1.16
2.500	1.26	8.583	2.52	14.667	2.91	20.75	1.16
2.583	1.26	8.667	2.52	14.750	2.91	20.83	1.16
2.667	1.26	8.750	2.52	14.833	2.91	20.92	1.16
2.750	1.26	8.833	2.72	14.917	2.91	21.00	1.16
2.833	1.26	8.917	2.72	15.000	2.91	21.08	1.16
2.917	1.26	9.000	2.72	15.083	2.91	21.17	1.16
3.000	1.26	9.083	2.72	15.167	2.91	21.25	1.16
3.083	1.26	9.167	2.72	15.250	2.91	21.33	1.16
3.167	1.26	9.250	2.72	15.333	2.91	21.42	1.16
3.250	1.26	9.333	3.10	15.417	2.91	21.50	1.16
3.333	1.26	9.417	3.10	15.500	2.91	21.58	1.16
3.417	1.26	9.500	3.10	15.583	2.91	21.67	1.16
3.500	1.26	9.583	3.10	15.667	2.91	21.75	1.16
3.583	1.26	9.667	3.10	15.750	2.91	21.83	1.16
3.667	1.26	9.750	3.10	15.833	2.91	21.92	1.16
3.750	1.26	9.833	3.49	15.917	2.91	22.00	1.16
3.833	1.26	9.917	3.49	16.000	2.91	22.08	1.16
3.917	1.26	10.000	3.49	16.083	2.91	22.17	1.16
4.000	1.26	10.083	3.49	16.167	2.91	22.25	1.16
4.083	1.26	10.167	3.49	16.250	2.91	22.33	1.16
4.167	1.26	10.250	3.49	16.333	1.75	22.42	1.16
4.250	1.26	10.333	4.46	16.417	1.75	22.50	1.16
4.333	1.55	10.417	4.46	16.500	1.75	22.58	1.16
4.417	1.55	10.500	4.46	16.583	1.75	22.67	1.16
4.500	1.55	10.583	4.46	16.667	1.75	22.75	1.16
4.583	1.55	10.667	4.46	16.750	1.75	22.83	1.16
4.667	1.55	10.750	4.46	16.833	1.75	22.92	1.16
4.750	1.55	10.833	6.01	16.917	1.75	23.00	1.16
4.833	1.55	10.917	6.01	17.000	1.75	23.08	1.16
4.917	1.55	11.000	6.01	17.083	1.75	23.17	1.16
5.000	1.55	11.083	6.01	17.167	1.75	23.25	1.16
5.083	1.55	11.167	6.01	17.250	1.75	23.33	1.16
5.167	1.55	11.250	6.01	17.333	1.75	23.42	1.16
5.250	1.55	11.333	9.31	17.417	1.75	23.50	1.16
5.333	1.55	11.417	9.31	17.500	1.75	23.58	1.16
5.417	1.55	11.500	9.31	17.583	1.75	23.67	1.16
5.500	1.55	11.583	9.31	17.667	1.75	23.75	1.16
5.583	1.55	11.667	9.31	17.750	1.75	23.83	1.16
5.667	1.55	11.750	9.31	17.833	1.75	23.92	1.16

5.750	1.55	11.833	28.70	17.917	1.75	24.00	1.16
5.833	1.55	11.917	28.71	18.000	1.75	24.08	1.16
5.917	1.55	12.000	28.71	18.083	1.75	24.17	1.16
6.000	1.55	12.083	118.69	18.167	1.75	24.25	1.16
6.083	1.55	12.167	118.70	18.250	1.75		

Unit Hyd Qpeak (cms)= 1.284

PEAK FLOW (cms)= 0.849 (i)
TIME TO PEAK (hrs)= 13.500
RUNOFF VOLUME (mm)= 31.074
TOTAL RAINFALL (mm)= 96.980
RUNOFF COEFFICIENT = 0.320

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0028)	Area (ha)=	6.37	Curve Number (CN)=	50.5	
ID= 1 DT= 5.0 min	Ia (mm)=	15.69	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	0.77			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.55	12.250	118.70	18.33	1.75
0.167	0.00	6.250	1.55	12.333	13.98	18.42	1.75
0.250	0.00	6.333	1.75	12.417	13.97	18.50	1.75
0.333	1.07	6.417	1.75	12.500	13.97	18.58	1.75
0.417	1.07	6.500	1.75	12.583	13.97	18.67	1.75
0.500	1.07	6.583	1.75	12.667	13.97	18.75	1.75
0.583	1.07	6.667	1.75	12.750	13.97	18.83	1.75
0.667	1.07	6.750	1.75	12.833	7.18	18.92	1.75
0.750	1.07	6.833	1.75	12.917	7.18	19.00	1.75
0.833	1.07	6.917	1.75	13.000	7.18	19.08	1.75
0.917	1.07	7.000	1.75	13.083	7.18	19.17	1.75
1.000	1.07	7.083	1.75	13.167	7.18	19.25	1.75
1.083	1.07	7.167	1.75	13.250	7.18	19.33	1.75
1.167	1.07	7.250	1.75	13.333	5.24	19.42	1.75
1.250	1.07	7.333	2.13	13.417	5.24	19.50	1.75
1.333	1.07	7.417	2.13	13.500	5.24	19.58	1.75
1.417	1.07	7.500	2.13	13.583	5.24	19.67	1.75
1.500	1.07	7.583	2.13	13.667	5.24	19.75	1.75
1.583	1.07	7.667	2.13	13.750	5.24	19.83	1.75

1.667	1.07	7.750	2.13	13.833	4.07	19.92	1.75
1.750	1.07	7.833	2.13	13.917	4.07	20.00	1.75
1.833	1.07	7.917	2.13	14.000	4.07	20.08	1.75
1.917	1.07	8.000	2.13	14.083	4.07	20.17	1.75
2.000	1.07	8.083	2.13	14.167	4.07	20.25	1.75
2.083	1.07	8.167	2.13	14.250	4.07	20.33	1.16
2.167	1.07	8.250	2.13	14.333	2.91	20.42	1.16
2.250	1.07	8.333	2.52	14.417	2.91	20.50	1.16
2.333	1.26	8.417	2.52	14.500	2.91	20.58	1.16
2.417	1.26	8.500	2.52	14.583	2.91	20.67	1.16
2.500	1.26	8.583	2.52	14.667	2.91	20.75	1.16
2.583	1.26	8.667	2.52	14.750	2.91	20.83	1.16
2.667	1.26	8.750	2.52	14.833	2.91	20.92	1.16
2.750	1.26	8.833	2.72	14.917	2.91	21.00	1.16
2.833	1.26	8.917	2.72	15.000	2.91	21.08	1.16
2.917	1.26	9.000	2.72	15.083	2.91	21.17	1.16
3.000	1.26	9.083	2.72	15.167	2.91	21.25	1.16
3.083	1.26	9.167	2.72	15.250	2.91	21.33	1.16
3.167	1.26	9.250	2.72	15.333	2.91	21.42	1.16
3.250	1.26	9.333	3.10	15.417	2.91	21.50	1.16
3.333	1.26	9.417	3.10	15.500	2.91	21.58	1.16
3.417	1.26	9.500	3.10	15.583	2.91	21.67	1.16
3.500	1.26	9.583	3.10	15.667	2.91	21.75	1.16
3.583	1.26	9.667	3.10	15.750	2.91	21.83	1.16
3.667	1.26	9.750	3.10	15.833	2.91	21.92	1.16
3.750	1.26	9.833	3.49	15.917	2.91	22.00	1.16
3.833	1.26	9.917	3.49	16.000	2.91	22.08	1.16
3.917	1.26	10.000	3.49	16.083	2.91	22.17	1.16
4.000	1.26	10.083	3.49	16.167	2.91	22.25	1.16
4.083	1.26	10.167	3.49	16.250	2.91	22.33	1.16
4.167	1.26	10.250	3.49	16.333	1.75	22.42	1.16
4.250	1.26	10.333	4.46	16.417	1.75	22.50	1.16
4.333	1.55	10.417	4.46	16.500	1.75	22.58	1.16
4.417	1.55	10.500	4.46	16.583	1.75	22.67	1.16
4.500	1.55	10.583	4.46	16.667	1.75	22.75	1.16
4.583	1.55	10.667	4.46	16.750	1.75	22.83	1.16
4.667	1.55	10.750	4.46	16.833	1.75	22.92	1.16
4.750	1.55	10.833	6.01	16.917	1.75	23.00	1.16
4.833	1.55	10.917	6.01	17.000	1.75	23.08	1.16
4.917	1.55	11.000	6.01	17.083	1.75	23.17	1.16
5.000	1.55	11.083	6.01	17.167	1.75	23.25	1.16
5.083	1.55	11.167	6.01	17.250	1.75	23.33	1.16
5.167	1.55	11.250	6.01	17.333	1.75	23.42	1.16
5.250	1.55	11.333	9.31	17.417	1.75	23.50	1.16
5.333	1.55	11.417	9.31	17.500	1.75	23.58	1.16
5.417	1.55	11.500	9.31	17.583	1.75	23.67	1.16
5.500	1.55	11.583	9.31	17.667	1.75	23.75	1.16
5.583	1.55	11.667	9.31	17.750	1.75	23.83	1.16

5.667	1.55	11.750	9.31	17.833	1.75	23.92	1.16
5.750	1.55	11.833	28.70	17.917	1.75	24.00	1.16
5.833	1.55	11.917	28.71	18.000	1.75	24.08	1.16
5.917	1.55	12.000	28.71	18.083	1.75	24.17	1.16
6.000	1.55	12.083	118.69	18.167	1.75	24.25	1.16
6.083	1.55	12.167	118.70	18.250	1.75		

Unit Hyd Qpeak (cms)= 0.316

PEAK FLOW (cms)= 0.115 (i)
TIME TO PEAK (hrs)= 13.000
RUNOFF VOLUME (mm)= 19.996
TOTAL RAINFALL (mm)= 96.980
RUNOFF COEFFICIENT = 0.206

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0029)	Area (ha)=	14.85	Curve Number (CN)=	52.9	
ID= 1 DT= 5.0 min	Ia (mm)=	13.28	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	0.89			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.55	12.250	118.70	18.33	1.75
0.167	0.00	6.250	1.55	12.333	13.98	18.42	1.75
0.250	0.00	6.333	1.75	12.417	13.97	18.50	1.75
0.333	1.07	6.417	1.75	12.500	13.97	18.58	1.75
0.417	1.07	6.500	1.75	12.583	13.97	18.67	1.75
0.500	1.07	6.583	1.75	12.667	13.97	18.75	1.75
0.583	1.07	6.667	1.75	12.750	13.97	18.83	1.75
0.667	1.07	6.750	1.75	12.833	7.18	18.92	1.75
0.750	1.07	6.833	1.75	12.917	7.18	19.00	1.75
0.833	1.07	6.917	1.75	13.000	7.18	19.08	1.75
0.917	1.07	7.000	1.75	13.083	7.18	19.17	1.75
1.000	1.07	7.083	1.75	13.167	7.18	19.25	1.75
1.083	1.07	7.167	1.75	13.250	7.18	19.33	1.75
1.167	1.07	7.250	1.75	13.333	5.24	19.42	1.75
1.250	1.07	7.333	2.13	13.417	5.24	19.50	1.75
1.333	1.07	7.417	2.13	13.500	5.24	19.58	1.75
1.417	1.07	7.500	2.13	13.583	5.24	19.67	1.75
1.500	1.07	7.583	2.13	13.667	5.24	19.75	1.75

1.583	1.07	7.667	2.13	13.750	5.24	19.83	1.75
1.667	1.07	7.750	2.13	13.833	4.07	19.92	1.75
1.750	1.07	7.833	2.13	13.917	4.07	20.00	1.75
1.833	1.07	7.917	2.13	14.000	4.07	20.08	1.75
1.917	1.07	8.000	2.13	14.083	4.07	20.17	1.75
2.000	1.07	8.083	2.13	14.167	4.07	20.25	1.75
2.083	1.07	8.167	2.13	14.250	4.07	20.33	1.16
2.167	1.07	8.250	2.13	14.333	2.91	20.42	1.16
2.250	1.07	8.333	2.52	14.417	2.91	20.50	1.16
2.333	1.26	8.417	2.52	14.500	2.91	20.58	1.16
2.417	1.26	8.500	2.52	14.583	2.91	20.67	1.16
2.500	1.26	8.583	2.52	14.667	2.91	20.75	1.16
2.583	1.26	8.667	2.52	14.750	2.91	20.83	1.16
2.667	1.26	8.750	2.52	14.833	2.91	20.92	1.16
2.750	1.26	8.833	2.72	14.917	2.91	21.00	1.16
2.833	1.26	8.917	2.72	15.000	2.91	21.08	1.16
2.917	1.26	9.000	2.72	15.083	2.91	21.17	1.16
3.000	1.26	9.083	2.72	15.167	2.91	21.25	1.16
3.083	1.26	9.167	2.72	15.250	2.91	21.33	1.16
3.167	1.26	9.250	2.72	15.333	2.91	21.42	1.16
3.250	1.26	9.333	3.10	15.417	2.91	21.50	1.16
3.333	1.26	9.417	3.10	15.500	2.91	21.58	1.16
3.417	1.26	9.500	3.10	15.583	2.91	21.67	1.16
3.500	1.26	9.583	3.10	15.667	2.91	21.75	1.16
3.583	1.26	9.667	3.10	15.750	2.91	21.83	1.16
3.667	1.26	9.750	3.10	15.833	2.91	21.92	1.16
3.750	1.26	9.833	3.49	15.917	2.91	22.00	1.16
3.833	1.26	9.917	3.49	16.000	2.91	22.08	1.16
3.917	1.26	10.000	3.49	16.083	2.91	22.17	1.16
4.000	1.26	10.083	3.49	16.167	2.91	22.25	1.16
4.083	1.26	10.167	3.49	16.250	2.91	22.33	1.16
4.167	1.26	10.250	3.49	16.333	1.75	22.42	1.16
4.250	1.26	10.333	4.46	16.417	1.75	22.50	1.16
4.333	1.55	10.417	4.46	16.500	1.75	22.58	1.16
4.417	1.55	10.500	4.46	16.583	1.75	22.67	1.16
4.500	1.55	10.583	4.46	16.667	1.75	22.75	1.16
4.583	1.55	10.667	4.46	16.750	1.75	22.83	1.16
4.667	1.55	10.750	4.46	16.833	1.75	22.92	1.16
4.750	1.55	10.833	6.01	16.917	1.75	23.00	1.16
4.833	1.55	10.917	6.01	17.000	1.75	23.08	1.16
4.917	1.55	11.000	6.01	17.083	1.75	23.17	1.16
5.000	1.55	11.083	6.01	17.167	1.75	23.25	1.16
5.083	1.55	11.167	6.01	17.250	1.75	23.33	1.16
5.167	1.55	11.250	6.01	17.333	1.75	23.42	1.16
5.250	1.55	11.333	9.31	17.417	1.75	23.50	1.16
5.333	1.55	11.417	9.31	17.500	1.75	23.58	1.16
5.417	1.55	11.500	9.31	17.583	1.75	23.67	1.16
5.500	1.55	11.583	9.31	17.667	1.75	23.75	1.16
5.583	1.55	11.667	9.31	17.750	1.75	23.83	1.16
5.667	1.55	11.750	9.31	17.833	1.75	23.92	1.16
5.750	1.55	11.833	28.70	17.917	1.75	24.00	1.16
5.833	1.55	11.917	28.71	18.000	1.75	24.08	1.16
5.917	1.55	12.000	28.71	18.083	1.75	24.17	1.16
6.000	1.55	12.083	118.69	18.167	1.75	24.25	1.16
6.083	1.55	12.167	118.70	18.250	1.75		

Unit Hyd Qpeak (cms)= 0.637

PEAK FLOW (cms)= 0.278 (i)
TIME TO PEAK (hrs)= 13.167
RUNOFF VOLUME (mm)= 22.636
TOTAL RAINFALL (mm)= 96.980
RUNOFF COEFFICIENT = 0.233

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0030)	Area (ha)=	1.70	Curve Number (CN)= 60.5
ID= 1 DT= 5.0 min	Ia (mm)=	9.65	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	0.40	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.55	12.250	118.70	18.33	1.75
0.167	0.00	6.250	1.55	12.333	13.98	18.42	1.75
0.250	0.00	6.333	1.75	12.417	13.97	18.50	1.75
0.333	1.07	6.417	1.75	12.500	13.97	18.58	1.75
0.417	1.07	6.500	1.75	12.583	13.97	18.67	1.75
0.500	1.07	6.583	1.75	12.667	13.97	18.75	1.75
0.583	1.07	6.667	1.75	12.750	13.97	18.83	1.75
0.667	1.07	6.750	1.75	12.833	7.18	18.92	1.75
0.750	1.07	6.833	1.75	12.917	7.18	19.00	1.75
0.833	1.07	6.917	1.75	13.000	7.18	19.08	1.75
0.917	1.07	7.000	1.75	13.083	7.18	19.17	1.75
1.000	1.07	7.083	1.75	13.167	7.18	19.25	1.75
1.083	1.07	7.167	1.75	13.250	7.18	19.33	1.75
1.167	1.07	7.250	1.75	13.333	5.24	19.42	1.75
1.250	1.07	7.333	2.13	13.417	5.24	19.50	1.75
1.333	1.07	7.417	2.13	13.500	5.24	19.58	1.75
1.417	1.07	7.500	2.13	13.583	5.24	19.67	1.75

1.500	1.07	7.583	2.13	13.667	5.24	19.75	1.75
1.583	1.07	7.667	2.13	13.750	5.24	19.83	1.75
1.667	1.07	7.750	2.13	13.833	4.07	19.92	1.75
1.750	1.07	7.833	2.13	13.917	4.07	20.00	1.75
1.833	1.07	7.917	2.13	14.000	4.07	20.08	1.75
1.917	1.07	8.000	2.13	14.083	4.07	20.17	1.75
2.000	1.07	8.083	2.13	14.167	4.07	20.25	1.75
2.083	1.07	8.167	2.13	14.250	4.07	20.33	1.16
2.167	1.07	8.250	2.13	14.333	2.91	20.42	1.16
2.250	1.07	8.333	2.52	14.417	2.91	20.50	1.16
2.333	1.26	8.417	2.52	14.500	2.91	20.58	1.16
2.417	1.26	8.500	2.52	14.583	2.91	20.67	1.16
2.500	1.26	8.583	2.52	14.667	2.91	20.75	1.16
2.583	1.26	8.667	2.52	14.750	2.91	20.83	1.16
2.667	1.26	8.750	2.52	14.833	2.91	20.92	1.16
2.750	1.26	8.833	2.72	14.917	2.91	21.00	1.16
2.833	1.26	8.917	2.72	15.000	2.91	21.08	1.16
2.917	1.26	9.000	2.72	15.083	2.91	21.17	1.16
3.000	1.26	9.083	2.72	15.167	2.91	21.25	1.16
3.083	1.26	9.167	2.72	15.250	2.91	21.33	1.16
3.167	1.26	9.250	2.72	15.333	2.91	21.42	1.16
3.250	1.26	9.333	3.10	15.417	2.91	21.50	1.16
3.333	1.26	9.417	3.10	15.500	2.91	21.58	1.16
3.417	1.26	9.500	3.10	15.583	2.91	21.67	1.16
3.500	1.26	9.583	3.10	15.667	2.91	21.75	1.16
3.583	1.26	9.667	3.10	15.750	2.91	21.83	1.16
3.667	1.26	9.750	3.10	15.833	2.91	21.92	1.16
3.750	1.26	9.833	3.49	15.917	2.91	22.00	1.16
3.833	1.26	9.917	3.49	16.000	2.91	22.08	1.16
3.917	1.26	10.000	3.49	16.083	2.91	22.17	1.16
4.000	1.26	10.083	3.49	16.167	2.91	22.25	1.16
4.083	1.26	10.167	3.49	16.250	2.91	22.33	1.16
4.167	1.26	10.250	3.49	16.333	1.75	22.42	1.16
4.250	1.26	10.333	4.46	16.417	1.75	22.50	1.16
4.333	1.55	10.417	4.46	16.500	1.75	22.58	1.16
4.417	1.55	10.500	4.46	16.583	1.75	22.67	1.16
4.500	1.55	10.583	4.46	16.667	1.75	22.75	1.16
4.583	1.55	10.667	4.46	16.750	1.75	22.83	1.16
4.667	1.55	10.750	4.46	16.833	1.75	22.92	1.16
4.750	1.55	10.833	6.01	16.917	1.75	23.00	1.16
4.833	1.55	10.917	6.01	17.000	1.75	23.08	1.16
4.917	1.55	11.000	6.01	17.083	1.75	23.17	1.16
5.000	1.55	11.083	6.01	17.167	1.75	23.25	1.16
5.083	1.55	11.167	6.01	17.250	1.75	23.33	1.16
5.167	1.55	11.250	6.01	17.333	1.75	23.42	1.16
5.250	1.55	11.333	9.31	17.417	1.75	23.50	1.16
5.333	1.55	11.417	9.31	17.500	1.75	23.58	1.16
5.417	1.55	11.500	9.31	17.583	1.75	23.67	1.16
5.500	1.55	11.583	9.31	17.667	1.75	23.75	1.16
5.583	1.55	11.667	9.31	17.750	1.75	23.83	1.16
5.667	1.55	11.750	9.31	17.833	1.75	23.92	1.16
5.750	1.55	11.833	28.70	17.917	1.75	24.00	1.16
5.833	1.55	11.917	28.71	18.000	1.75	24.08	1.16
5.917	1.55	12.000	28.71	18.083	1.75	24.17	1.16
6.000	1.55	12.083	118.69	18.167	1.75	24.25	1.16
6.083	1.55	12.167	118.70	18.250	1.75		

Unit Hyd Qpeak (cms)= 0.162

PEAK FLOW (cms)= 0.078 (i)
TIME TO PEAK (hrs)= 12.500
RUNOFF VOLUME (mm)= 30.088
TOTAL RAINFALL (mm)= 96.980
RUNOFF COEFFICIENT = 0.310

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0031)	Area (ha)=	1.80	Curve Number (CN)= 50.0
ID= 1 DT= 5.0 min	Ia (mm)=	16.00	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	0.76	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.55	12.250	118.70	18.33	1.75
0.167	0.00	6.250	1.55	12.333	13.98	18.42	1.75
0.250	0.00	6.333	1.75	12.417	13.97	18.50	1.75
0.333	1.07	6.417	1.75	12.500	13.97	18.58	1.75
0.417	1.07	6.500	1.75	12.583	13.97	18.67	1.75
0.500	1.07	6.583	1.75	12.667	13.97	18.75	1.75
0.583	1.07	6.667	1.75	12.750	13.97	18.83	1.75
0.667	1.07	6.750	1.75	12.833	7.18	18.92	1.75
0.750	1.07	6.833	1.75	12.917	7.18	19.00	1.75
0.833	1.07	6.917	1.75	13.000	7.18	19.08	1.75
0.917	1.07	7.000	1.75	13.083	7.18	19.17	1.75
1.000	1.07	7.083	1.75	13.167	7.18	19.25	1.75
1.083	1.07	7.167	1.75	13.250	7.18	19.33	1.75
1.167	1.07	7.250	1.75	13.333	5.24	19.42	1.75
1.250	1.07	7.333	2.13	13.417	5.24	19.50	1.75
1.333	1.07	7.417	2.13	13.500	5.24	19.58	1.75

1.417	1.07	7.500	2.13	13.583	5.24	19.67	1.75
1.500	1.07	7.583	2.13	13.667	5.24	19.75	1.75
1.583	1.07	7.667	2.13	13.750	5.24	19.83	1.75
1.667	1.07	7.750	2.13	13.833	4.07	19.92	1.75
1.750	1.07	7.833	2.13	13.917	4.07	20.00	1.75
1.833	1.07	7.917	2.13	14.000	4.07	20.08	1.75
1.917	1.07	8.000	2.13	14.083	4.07	20.17	1.75
2.000	1.07	8.083	2.13	14.167	4.07	20.25	1.75
2.083	1.07	8.167	2.13	14.250	4.07	20.33	1.16
2.167	1.07	8.250	2.13	14.333	2.91	20.42	1.16
2.250	1.07	8.333	2.52	14.417	2.91	20.50	1.16
2.333	1.26	8.417	2.52	14.500	2.91	20.58	1.16
2.417	1.26	8.500	2.52	14.583	2.91	20.67	1.16
2.500	1.26	8.583	2.52	14.667	2.91	20.75	1.16
2.583	1.26	8.667	2.52	14.750	2.91	20.83	1.16
2.667	1.26	8.750	2.52	14.833	2.91	20.92	1.16
2.750	1.26	8.833	2.72	14.917	2.91	21.00	1.16
2.833	1.26	8.917	2.72	15.000	2.91	21.08	1.16
2.917	1.26	9.000	2.72	15.083	2.91	21.17	1.16
3.000	1.26	9.083	2.72	15.167	2.91	21.25	1.16
3.083	1.26	9.167	2.72	15.250	2.91	21.33	1.16
3.167	1.26	9.250	2.72	15.333	2.91	21.42	1.16
3.250	1.26	9.333	3.10	15.417	2.91	21.50	1.16
3.333	1.26	9.417	3.10	15.500	2.91	21.58	1.16
3.417	1.26	9.500	3.10	15.583	2.91	21.67	1.16
3.500	1.26	9.583	3.10	15.667	2.91	21.75	1.16
3.583	1.26	9.667	3.10	15.750	2.91	21.83	1.16
3.667	1.26	9.750	3.10	15.833	2.91	21.92	1.16
3.750	1.26	9.833	3.49	15.917	2.91	22.00	1.16
3.833	1.26	9.917	3.49	16.000	2.91	22.08	1.16
3.917	1.26	10.000	3.49	16.083	2.91	22.17	1.16
4.000	1.26	10.083	3.49	16.167	2.91	22.25	1.16
4.083	1.26	10.167	3.49	16.250	2.91	22.33	1.16
4.167	1.26	10.250	3.49	16.333	1.75	22.42	1.16
4.250	1.26	10.333	4.46	16.417	1.75	22.50	1.16
4.333	1.55	10.417	4.46	16.500	1.75	22.58	1.16
4.417	1.55	10.500	4.46	16.583	1.75	22.67	1.16
4.500	1.55	10.583	4.46	16.667	1.75	22.75	1.16
4.583	1.55	10.667	4.46	16.750	1.75	22.83	1.16
4.667	1.55	10.750	4.46	16.833	1.75	22.92	1.16
4.750	1.55	10.833	6.01	16.917	1.75	23.00	1.16
4.833	1.55	10.917	6.01	17.000	1.75	23.08	1.16
4.917	1.55	11.000	6.01	17.083	1.75	23.17	1.16
5.000	1.55	11.083	6.01	17.167	1.75	23.25	1.16
5.083	1.55	11.167	6.01	17.250	1.75	23.33	1.16
5.167	1.55	11.250	6.01	17.333	1.75	23.42	1.16
5.250	1.55	11.333	9.31	17.417	1.75	23.50	1.16
5.333	1.55	11.417	9.31	17.500	1.75	23.58	1.16

5.417	1.55	11.500	9.31	17.583	1.75	23.67	1.16
5.500	1.55	11.583	9.31	17.667	1.75	23.75	1.16
5.583	1.55	11.667	9.31	17.750	1.75	23.83	1.16
5.667	1.55	11.750	9.31	17.833	1.75	23.92	1.16
5.750	1.55	11.833	28.70	17.917	1.75	24.00	1.16
5.833	1.55	11.917	28.71	18.000	1.75	24.08	1.16
5.917	1.55	12.000	28.71	18.083	1.75	24.17	1.16
6.000	1.55	12.083	118.69	18.167	1.75	24.25	1.16
6.083	1.55	12.167	118.70	18.250	1.75		

Unit Hyd Qpeak (cms)= 0.090

PEAK FLOW (cms)= 0.032 (i)
TIME TO PEAK (hrs)= 13.000
RUNOFF VOLUME (mm)= 19.575
TOTAL RAINFALL (mm)= 96.980
RUNOFF COEFFICIENT = 0.202

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0032)	Area (ha)=	6.70	Curve Number (CN)= 60.0
ID= 1 DT= 5.0 min	Ia (mm)=	10.00	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	1.45	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.55	12.250	118.70	18.33	1.75
0.167	0.00	6.250	1.55	12.333	13.98	18.42	1.75
0.250	0.00	6.333	1.75	12.417	13.97	18.50	1.75
0.333	1.07	6.417	1.75	12.500	13.97	18.58	1.75
0.417	1.07	6.500	1.75	12.583	13.97	18.67	1.75
0.500	1.07	6.583	1.75	12.667	13.97	18.75	1.75
0.583	1.07	6.667	1.75	12.750	13.97	18.83	1.75
0.667	1.07	6.750	1.75	12.833	7.18	18.92	1.75
0.750	1.07	6.833	1.75	12.917	7.18	19.00	1.75
0.833	1.07	6.917	1.75	13.000	7.18	19.08	1.75
0.917	1.07	7.000	1.75	13.083	7.18	19.17	1.75
1.000	1.07	7.083	1.75	13.167	7.18	19.25	1.75
1.083	1.07	7.167	1.75	13.250	7.18	19.33	1.75
1.167	1.07	7.250	1.75	13.333	5.24	19.42	1.75
1.250	1.07	7.333	2.13	13.417	5.24	19.50	1.75

1.333	1.07	7.417	2.13	13.500	5.24	19.58	1.75
1.417	1.07	7.500	2.13	13.583	5.24	19.67	1.75
1.500	1.07	7.583	2.13	13.667	5.24	19.75	1.75
1.583	1.07	7.667	2.13	13.750	5.24	19.83	1.75
1.667	1.07	7.750	2.13	13.833	4.07	19.92	1.75
1.750	1.07	7.833	2.13	13.917	4.07	20.00	1.75
1.833	1.07	7.917	2.13	14.000	4.07	20.08	1.75
1.917	1.07	8.000	2.13	14.083	4.07	20.17	1.75
2.000	1.07	8.083	2.13	14.167	4.07	20.25	1.75
2.083	1.07	8.167	2.13	14.250	4.07	20.33	1.16
2.167	1.07	8.250	2.13	14.333	2.91	20.42	1.16
2.250	1.07	8.333	2.52	14.417	2.91	20.50	1.16
2.333	1.26	8.417	2.52	14.500	2.91	20.58	1.16
2.417	1.26	8.500	2.52	14.583	2.91	20.67	1.16
2.500	1.26	8.583	2.52	14.667	2.91	20.75	1.16
2.583	1.26	8.667	2.52	14.750	2.91	20.83	1.16
2.667	1.26	8.750	2.52	14.833	2.91	20.92	1.16
2.750	1.26	8.833	2.72	14.917	2.91	21.00	1.16
2.833	1.26	8.917	2.72	15.000	2.91	21.08	1.16
2.917	1.26	9.000	2.72	15.083	2.91	21.17	1.16
3.000	1.26	9.083	2.72	15.167	2.91	21.25	1.16
3.083	1.26	9.167	2.72	15.250	2.91	21.33	1.16
3.167	1.26	9.250	2.72	15.333	2.91	21.42	1.16
3.250	1.26	9.333	3.10	15.417	2.91	21.50	1.16
3.333	1.26	9.417	3.10	15.500	2.91	21.58	1.16
3.417	1.26	9.500	3.10	15.583	2.91	21.67	1.16
3.500	1.26	9.583	3.10	15.667	2.91	21.75	1.16
3.583	1.26	9.667	3.10	15.750	2.91	21.83	1.16
3.667	1.26	9.750	3.10	15.833	2.91	21.92	1.16
3.750	1.26	9.833	3.49	15.917	2.91	22.00	1.16
3.833	1.26	9.917	3.49	16.000	2.91	22.08	1.16
3.917	1.26	10.000	3.49	16.083	2.91	22.17	1.16
4.000	1.26	10.083	3.49	16.167	2.91	22.25	1.16
4.083	1.26	10.167	3.49	16.250	2.91	22.33	1.16
4.167	1.26	10.250	3.49	16.333	1.75	22.42	1.16
4.250	1.26	10.333	4.46	16.417	1.75	22.50	1.16
4.333	1.55	10.417	4.46	16.500	1.75	22.58	1.16
4.417	1.55	10.500	4.46	16.583	1.75	22.67	1.16
4.500	1.55	10.583	4.46	16.667	1.75	22.75	1.16
4.583	1.55	10.667	4.46	16.750	1.75	22.83	1.16
4.667	1.55	10.750	4.46	16.833	1.75	22.92	1.16
4.750	1.55	10.833	6.01	16.917	1.75	23.00	1.16
4.833	1.55	10.917	6.01	17.000	1.75	23.08	1.16
4.917	1.55	11.000	6.01	17.083	1.75	23.17	1.16
5.000	1.55	11.083	6.01	17.167	1.75	23.25	1.16
5.083	1.55	11.167	6.01	17.250	1.75	23.33	1.16
5.167	1.55	11.250	6.01	17.333	1.75	23.42	1.16
5.250	1.55	11.333	9.31	17.417	1.75	23.50	1.16

5.333	1.55	11.417	9.31	17.500	1.75	23.58	1.16
5.417	1.55	11.500	9.31	17.583	1.75	23.67	1.16
5.500	1.55	11.583	9.31	17.667	1.75	23.75	1.16
5.583	1.55	11.667	9.31	17.750	1.75	23.83	1.16
5.667	1.55	11.750	9.31	17.833	1.75	23.92	1.16
5.750	1.55	11.833	28.70	17.917	1.75	24.00	1.16
5.833	1.55	11.917	28.71	18.000	1.75	24.08	1.16
5.917	1.55	12.000	28.71	18.083	1.75	24.17	1.16
6.000	1.55	12.083	118.69	18.167	1.75	24.25	1.16
6.083	1.55	12.167	118.70	18.250	1.75		

Unit Hyd Qpeak (cms)= 0.176

PEAK FLOW (cms)= 0.116 (i)
TIME TO PEAK (hrs)= 13.833
RUNOFF VOLUME (mm)= 29.516
TOTAL RAINFALL (mm)= 96.980
RUNOFF COEFFICIENT = 0.304

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0033)	Area (ha)=	1.13	Curve Number (CN)= 67.4
ID= 1 DT= 5.0 min	Ia (mm)=	7.88	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	0.43	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.55	12.250	118.70	18.33	1.75
0.167	0.00	6.250	1.55	12.333	13.98	18.42	1.75
0.250	0.00	6.333	1.75	12.417	13.97	18.50	1.75
0.333	1.07	6.417	1.75	12.500	13.97	18.58	1.75
0.417	1.07	6.500	1.75	12.583	13.97	18.67	1.75
0.500	1.07	6.583	1.75	12.667	13.97	18.75	1.75
0.583	1.07	6.667	1.75	12.750	13.97	18.83	1.75
0.667	1.07	6.750	1.75	12.833	7.18	18.92	1.75
0.750	1.07	6.833	1.75	12.917	7.18	19.00	1.75
0.833	1.07	6.917	1.75	13.000	7.18	19.08	1.75
0.917	1.07	7.000	1.75	13.083	7.18	19.17	1.75
1.000	1.07	7.083	1.75	13.167	7.18	19.25	1.75
1.083	1.07	7.167	1.75	13.250	7.18	19.33	1.75
1.167	1.07	7.250	1.75	13.333	5.24	19.42	1.75

1.250	1.07	7.333	2.13	13.417	5.24	19.50	1.75
1.333	1.07	7.417	2.13	13.500	5.24	19.58	1.75
1.417	1.07	7.500	2.13	13.583	5.24	19.67	1.75
1.500	1.07	7.583	2.13	13.667	5.24	19.75	1.75
1.583	1.07	7.667	2.13	13.750	5.24	19.83	1.75
1.667	1.07	7.750	2.13	13.833	4.07	19.92	1.75
1.750	1.07	7.833	2.13	13.917	4.07	20.00	1.75
1.833	1.07	7.917	2.13	14.000	4.07	20.08	1.75
1.917	1.07	8.000	2.13	14.083	4.07	20.17	1.75
2.000	1.07	8.083	2.13	14.167	4.07	20.25	1.75
2.083	1.07	8.167	2.13	14.250	4.07	20.33	1.16
2.167	1.07	8.250	2.13	14.333	2.91	20.42	1.16
2.250	1.07	8.333	2.52	14.417	2.91	20.50	1.16
2.333	1.26	8.417	2.52	14.500	2.91	20.58	1.16
2.417	1.26	8.500	2.52	14.583	2.91	20.67	1.16
2.500	1.26	8.583	2.52	14.667	2.91	20.75	1.16
2.583	1.26	8.667	2.52	14.750	2.91	20.83	1.16
2.667	1.26	8.750	2.52	14.833	2.91	20.92	1.16
2.750	1.26	8.833	2.72	14.917	2.91	21.00	1.16
2.833	1.26	8.917	2.72	15.000	2.91	21.08	1.16
2.917	1.26	9.000	2.72	15.083	2.91	21.17	1.16
3.000	1.26	9.083	2.72	15.167	2.91	21.25	1.16
3.083	1.26	9.167	2.72	15.250	2.91	21.33	1.16
3.167	1.26	9.250	2.72	15.333	2.91	21.42	1.16
3.250	1.26	9.333	3.10	15.417	2.91	21.50	1.16
3.333	1.26	9.417	3.10	15.500	2.91	21.58	1.16
3.417	1.26	9.500	3.10	15.583	2.91	21.67	1.16
3.500	1.26	9.583	3.10	15.667	2.91	21.75	1.16
3.583	1.26	9.667	3.10	15.750	2.91	21.83	1.16
3.667	1.26	9.750	3.10	15.833	2.91	21.92	1.16
3.750	1.26	9.833	3.49	15.917	2.91	22.00	1.16
3.833	1.26	9.917	3.49	16.000	2.91	22.08	1.16
3.917	1.26	10.000	3.49	16.083	2.91	22.17	1.16
4.000	1.26	10.083	3.49	16.167	2.91	22.25	1.16
4.083	1.26	10.167	3.49	16.250	2.91	22.33	1.16
4.167	1.26	10.250	3.49	16.333	1.75	22.42	1.16
4.250	1.26	10.333	4.46	16.417	1.75	22.50	1.16
4.333	1.55	10.417	4.46	16.500	1.75	22.58	1.16
4.417	1.55	10.500	4.46	16.583	1.75	22.67	1.16
4.500	1.55	10.583	4.46	16.667	1.75	22.75	1.16
4.583	1.55	10.667	4.46	16.750	1.75	22.83	1.16
4.667	1.55	10.750	4.46	16.833	1.75	22.92	1.16
4.750	1.55	10.833	6.01	16.917	1.75	23.00	1.16
4.833	1.55	10.917	6.01	17.000	1.75	23.08	1.16
4.917	1.55	11.000	6.01	17.083	1.75	23.17	1.16
5.000	1.55	11.083	6.01	17.167	1.75	23.25	1.16
5.083	1.55	11.167	6.01	17.250	1.75	23.33	1.16
5.167	1.55	11.250	6.01	17.333	1.75	23.42	1.16

5.250	1.55	11.333	9.31	17.417	1.75	23.50	1.16
5.333	1.55	11.417	9.31	17.500	1.75	23.58	1.16
5.417	1.55	11.500	9.31	17.583	1.75	23.67	1.16
5.500	1.55	11.583	9.31	17.667	1.75	23.75	1.16
5.583	1.55	11.667	9.31	17.750	1.75	23.83	1.16
5.667	1.55	11.750	9.31	17.833	1.75	23.92	1.16
5.750	1.55	11.833	28.70	17.917	1.75	24.00	1.16
5.833	1.55	11.917	28.71	18.000	1.75	24.08	1.16
5.917	1.55	12.000	28.71	18.083	1.75	24.17	1.16
6.000	1.55	12.083	118.69	18.167	1.75	24.25	1.16
6.083	1.55	12.167	118.70	18.250	1.75		

Unit Hyd Qpeak (cms)= 0.100

PEAK FLOW (cms)= 0.063 (i)
TIME TO PEAK (hrs)= 12.583
RUNOFF VOLUME (mm)= 37.412
TOTAL RAINFALL (mm)= 96.980
RUNOFF COEFFICIENT = 0.386

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0027)	Area (ha)=	1.38	Curve Number (CN)= 64.1
ID= 1 DT= 5.0 min	Ia (mm)=	8.51	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	0.39	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.55	12.250	118.70	18.33	1.75
0.167	0.00	6.250	1.55	12.333	13.98	18.42	1.75
0.250	0.00	6.333	1.75	12.417	13.97	18.50	1.75
0.333	1.07	6.417	1.75	12.500	13.97	18.58	1.75
0.417	1.07	6.500	1.75	12.583	13.97	18.67	1.75
0.500	1.07	6.583	1.75	12.667	13.97	18.75	1.75
0.583	1.07	6.667	1.75	12.750	13.97	18.83	1.75
0.667	1.07	6.750	1.75	12.833	7.18	18.92	1.75
0.750	1.07	6.833	1.75	12.917	7.18	19.00	1.75
0.833	1.07	6.917	1.75	13.000	7.18	19.08	1.75
0.917	1.07	7.000	1.75	13.083	7.18	19.17	1.75
1.000	1.07	7.083	1.75	13.167	7.18	19.25	1.75
1.083	1.07	7.167	1.75	13.250	7.18	19.33	1.75

1.167	1.07	7.250	1.75	13.333	5.24	19.42	1.75
1.250	1.07	7.333	2.13	13.417	5.24	19.50	1.75
1.333	1.07	7.417	2.13	13.500	5.24	19.58	1.75
1.417	1.07	7.500	2.13	13.583	5.24	19.67	1.75
1.500	1.07	7.583	2.13	13.667	5.24	19.75	1.75
1.583	1.07	7.667	2.13	13.750	5.24	19.83	1.75
1.667	1.07	7.750	2.13	13.833	4.07	19.92	1.75
1.750	1.07	7.833	2.13	13.917	4.07	20.00	1.75
1.833	1.07	7.917	2.13	14.000	4.07	20.08	1.75
1.917	1.07	8.000	2.13	14.083	4.07	20.17	1.75
2.000	1.07	8.083	2.13	14.167	4.07	20.25	1.75
2.083	1.07	8.167	2.13	14.250	4.07	20.33	1.16
2.167	1.07	8.250	2.13	14.333	2.91	20.42	1.16
2.250	1.07	8.333	2.52	14.417	2.91	20.50	1.16
2.333	1.26	8.417	2.52	14.500	2.91	20.58	1.16
2.417	1.26	8.500	2.52	14.583	2.91	20.67	1.16
2.500	1.26	8.583	2.52	14.667	2.91	20.75	1.16
2.583	1.26	8.667	2.52	14.750	2.91	20.83	1.16
2.667	1.26	8.750	2.52	14.833	2.91	20.92	1.16
2.750	1.26	8.833	2.72	14.917	2.91	21.00	1.16
2.833	1.26	8.917	2.72	15.000	2.91	21.08	1.16
2.917	1.26	9.000	2.72	15.083	2.91	21.17	1.16
3.000	1.26	9.083	2.72	15.167	2.91	21.25	1.16
3.083	1.26	9.167	2.72	15.250	2.91	21.33	1.16
3.167	1.26	9.250	2.72	15.333	2.91	21.42	1.16
3.250	1.26	9.333	3.10	15.417	2.91	21.50	1.16
3.333	1.26	9.417	3.10	15.500	2.91	21.58	1.16
3.417	1.26	9.500	3.10	15.583	2.91	21.67	1.16
3.500	1.26	9.583	3.10	15.667	2.91	21.75	1.16
3.583	1.26	9.667	3.10	15.750	2.91	21.83	1.16
3.667	1.26	9.750	3.10	15.833	2.91	21.92	1.16
3.750	1.26	9.833	3.49	15.917	2.91	22.00	1.16
3.833	1.26	9.917	3.49	16.000	2.91	22.08	1.16
3.917	1.26	10.000	3.49	16.083	2.91	22.17	1.16
4.000	1.26	10.083	3.49	16.167	2.91	22.25	1.16
4.083	1.26	10.167	3.49	16.250	2.91	22.33	1.16
4.167	1.26	10.250	3.49	16.333	1.75	22.42	1.16
4.250	1.26	10.333	4.46	16.417	1.75	22.50	1.16
4.333	1.55	10.417	4.46	16.500	1.75	22.58	1.16
4.417	1.55	10.500	4.46	16.583	1.75	22.67	1.16
4.500	1.55	10.583	4.46	16.667	1.75	22.75	1.16
4.583	1.55	10.667	4.46	16.750	1.75	22.83	1.16
4.667	1.55	10.750	4.46	16.833	1.75	22.92	1.16
4.750	1.55	10.833	6.01	16.917	1.75	23.00	1.16
4.833	1.55	10.917	6.01	17.000	1.75	23.08	1.16
4.917	1.55	11.000	6.01	17.083	1.75	23.17	1.16
5.000	1.55	11.083	6.01	17.167	1.75	23.25	1.16
5.083	1.55	11.167	6.01	17.250	1.75	23.33	1.16

5.167	1.55	11.250	6.01	17.333	1.75	23.42	1.16
5.250	1.55	11.333	9.31	17.417	1.75	23.50	1.16
5.333	1.55	11.417	9.31	17.500	1.75	23.58	1.16
5.417	1.55	11.500	9.31	17.583	1.75	23.67	1.16
5.500	1.55	11.583	9.31	17.667	1.75	23.75	1.16
5.583	1.55	11.667	9.31	17.750	1.75	23.83	1.16
5.667	1.55	11.750	9.31	17.833	1.75	23.92	1.16
5.750	1.55	11.833	28.70	17.917	1.75	24.00	1.16
5.833	1.55	11.917	28.71	18.000	1.75	24.08	1.16
5.917	1.55	12.000	28.71	18.083	1.75	24.17	1.16
6.000	1.55	12.083	118.69	18.167	1.75	24.25	1.16
6.083	1.55	12.167	118.70	18.250	1.75		

Unit Hyd Qpeak (cms)= 0.135

PEAK FLOW (cms)= 0.074 (i)
TIME TO PEAK (hrs)= 12.500
RUNOFF VOLUME (mm)= 33.954
TOTAL RAINFALL (mm)= 96.980
RUNOFF COEFFICIENT = 0.350

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0041)	Area (ha)=	0.59	Curve Number (CN)= 71.5
ID= 1 DT= 5.0 min	Ia (mm)=	4.75	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	0.53	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.55	12.250	118.70	18.33	1.75
0.167	0.00	6.250	1.55	12.333	13.98	18.42	1.75
0.250	0.00	6.333	1.75	12.417	13.97	18.50	1.75
0.333	1.07	6.417	1.75	12.500	13.97	18.58	1.75
0.417	1.07	6.500	1.75	12.583	13.97	18.67	1.75
0.500	1.07	6.583	1.75	12.667	13.97	18.75	1.75
0.583	1.07	6.667	1.75	12.750	13.97	18.83	1.75
0.667	1.07	6.750	1.75	12.833	7.18	18.92	1.75
0.750	1.07	6.833	1.75	12.917	7.18	19.00	1.75
0.833	1.07	6.917	1.75	13.000	7.18	19.08	1.75
0.917	1.07	7.000	1.75	13.083	7.18	19.17	1.75
1.000	1.07	7.083	1.75	13.167	7.18	19.25	1.75

1.083	1.07	7.167	1.75	13.250	7.18	19.33	1.75
1.167	1.07	7.250	1.75	13.333	5.24	19.42	1.75
1.250	1.07	7.333	2.13	13.417	5.24	19.50	1.75
1.333	1.07	7.417	2.13	13.500	5.24	19.58	1.75
1.417	1.07	7.500	2.13	13.583	5.24	19.67	1.75
1.500	1.07	7.583	2.13	13.667	5.24	19.75	1.75
1.583	1.07	7.667	2.13	13.750	5.24	19.83	1.75
1.667	1.07	7.750	2.13	13.833	4.07	19.92	1.75
1.750	1.07	7.833	2.13	13.917	4.07	20.00	1.75
1.833	1.07	7.917	2.13	14.000	4.07	20.08	1.75
1.917	1.07	8.000	2.13	14.083	4.07	20.17	1.75
2.000	1.07	8.083	2.13	14.167	4.07	20.25	1.75
2.083	1.07	8.167	2.13	14.250	4.07	20.33	1.16
2.167	1.07	8.250	2.13	14.333	2.91	20.42	1.16
2.250	1.07	8.333	2.52	14.417	2.91	20.50	1.16
2.333	1.26	8.417	2.52	14.500	2.91	20.58	1.16
2.417	1.26	8.500	2.52	14.583	2.91	20.67	1.16
2.500	1.26	8.583	2.52	14.667	2.91	20.75	1.16
2.583	1.26	8.667	2.52	14.750	2.91	20.83	1.16
2.667	1.26	8.750	2.52	14.833	2.91	20.92	1.16
2.750	1.26	8.833	2.72	14.917	2.91	21.00	1.16
2.833	1.26	8.917	2.72	15.000	2.91	21.08	1.16
2.917	1.26	9.000	2.72	15.083	2.91	21.17	1.16
3.000	1.26	9.083	2.72	15.167	2.91	21.25	1.16
3.083	1.26	9.167	2.72	15.250	2.91	21.33	1.16
3.167	1.26	9.250	2.72	15.333	2.91	21.42	1.16
3.250	1.26	9.333	3.10	15.417	2.91	21.50	1.16
3.333	1.26	9.417	3.10	15.500	2.91	21.58	1.16
3.417	1.26	9.500	3.10	15.583	2.91	21.67	1.16
3.500	1.26	9.583	3.10	15.667	2.91	21.75	1.16
3.583	1.26	9.667	3.10	15.750	2.91	21.83	1.16
3.667	1.26	9.750	3.10	15.833	2.91	21.92	1.16
3.750	1.26	9.833	3.49	15.917	2.91	22.00	1.16
3.833	1.26	9.917	3.49	16.000	2.91	22.08	1.16
3.917	1.26	10.000	3.49	16.083	2.91	22.17	1.16
4.000	1.26	10.083	3.49	16.167	2.91	22.25	1.16
4.083	1.26	10.167	3.49	16.250	2.91	22.33	1.16
4.167	1.26	10.250	3.49	16.333	1.75	22.42	1.16
4.250	1.26	10.333	4.46	16.417	1.75	22.50	1.16
4.333	1.55	10.417	4.46	16.500	1.75	22.58	1.16
4.417	1.55	10.500	4.46	16.583	1.75	22.67	1.16
4.500	1.55	10.583	4.46	16.667	1.75	22.75	1.16
4.583	1.55	10.667	4.46	16.750	1.75	22.83	1.16
4.667	1.55	10.750	4.46	16.833	1.75	22.92	1.16
4.750	1.55	10.833	6.01	16.917	1.75	23.00	1.16
4.833	1.55	10.917	6.01	17.000	1.75	23.08	1.16
4.917	1.55	11.000	6.01	17.083	1.75	23.17	1.16
5.000	1.55	11.083	6.01	17.167	1.75	23.25	1.16

5.083	1.55	11.167	6.01	17.250	1.75	23.33	1.16
5.167	1.55	11.250	6.01	17.333	1.75	23.42	1.16
5.250	1.55	11.333	9.31	17.417	1.75	23.50	1.16
5.333	1.55	11.417	9.31	17.500	1.75	23.58	1.16
5.417	1.55	11.500	9.31	17.583	1.75	23.67	1.16
5.500	1.55	11.583	9.31	17.667	1.75	23.75	1.16
5.583	1.55	11.667	9.31	17.750	1.75	23.83	1.16
5.667	1.55	11.750	9.31	17.833	1.75	23.92	1.16
5.750	1.55	11.833	28.70	17.917	1.75	24.00	1.16
5.833	1.55	11.917	28.71	18.000	1.75	24.08	1.16
5.917	1.55	12.000	28.71	18.083	1.75	24.17	1.16
6.000	1.55	12.083	118.69	18.167	1.75	24.25	1.16
6.083	1.55	12.167	118.70	18.250	1.75		

Unit Hyd Qpeak (cms)= 0.043

PEAK FLOW (cms)= 0.033 (i)
TIME TO PEAK (hrs)= 12.667
RUNOFF VOLUME (mm)= 43.917
TOTAL RAINFALL (mm)= 96.980
RUNOFF COEFFICIENT = 0.453

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
STANDHYD (0015)	Area (ha)=	1.93	
ID= 1 DT= 5.0 min	Total Imp(%)=	54.66	Dir. Conn.(%)= 10.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	1.05	0.88
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	113.43	45.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.55	12.250	118.70	18.33	1.75
0.167	0.00	6.250	1.55	12.333	13.98	18.42	1.75
0.250	0.00	6.333	1.75	12.417	13.97	18.50	1.75
0.333	1.07	6.417	1.75	12.500	13.97	18.58	1.75
0.417	1.07	6.500	1.75	12.583	13.97	18.67	1.75

0.500	1.07	6.583	1.75	12.667	13.97	18.75	1.75
0.583	1.07	6.667	1.75	12.750	13.97	18.83	1.75
0.667	1.07	6.750	1.75	12.833	7.18	18.92	1.75
0.750	1.07	6.833	1.75	12.917	7.18	19.00	1.75
0.833	1.07	6.917	1.75	13.000	7.18	19.08	1.75
0.917	1.07	7.000	1.75	13.083	7.18	19.17	1.75
1.000	1.07	7.083	1.75	13.167	7.18	19.25	1.75
1.083	1.07	7.167	1.75	13.250	7.18	19.33	1.75
1.167	1.07	7.250	1.75	13.333	5.24	19.42	1.75
1.250	1.07	7.333	2.13	13.417	5.24	19.50	1.75
1.333	1.07	7.417	2.13	13.500	5.24	19.58	1.75
1.417	1.07	7.500	2.13	13.583	5.24	19.67	1.75
1.500	1.07	7.583	2.13	13.667	5.24	19.75	1.75
1.583	1.07	7.667	2.13	13.750	5.24	19.83	1.75
1.667	1.07	7.750	2.13	13.833	4.07	19.92	1.75
1.750	1.07	7.833	2.13	13.917	4.07	20.00	1.75
1.833	1.07	7.917	2.13	14.000	4.07	20.08	1.75
1.917	1.07	8.000	2.13	14.083	4.07	20.17	1.75
2.000	1.07	8.083	2.13	14.167	4.07	20.25	1.75
2.083	1.07	8.167	2.13	14.250	4.07	20.33	1.16
2.167	1.07	8.250	2.13	14.333	2.91	20.42	1.16
2.250	1.07	8.333	2.52	14.417	2.91	20.50	1.16
2.333	1.26	8.417	2.52	14.500	2.91	20.58	1.16
2.417	1.26	8.500	2.52	14.583	2.91	20.67	1.16
2.500	1.26	8.583	2.52	14.667	2.91	20.75	1.16
2.583	1.26	8.667	2.52	14.750	2.91	20.83	1.16
2.667	1.26	8.750	2.52	14.833	2.91	20.92	1.16
2.750	1.26	8.833	2.72	14.917	2.91	21.00	1.16
2.833	1.26	8.917	2.72	15.000	2.91	21.08	1.16
2.917	1.26	9.000	2.72	15.083	2.91	21.17	1.16
3.000	1.26	9.083	2.72	15.167	2.91	21.25	1.16
3.083	1.26	9.167	2.72	15.250	2.91	21.33	1.16
3.167	1.26	9.250	2.72	15.333	2.91	21.42	1.16
3.250	1.26	9.333	3.10	15.417	2.91	21.50	1.16
3.333	1.26	9.417	3.10	15.500	2.91	21.58	1.16
3.417	1.26	9.500	3.10	15.583	2.91	21.67	1.16
3.500	1.26	9.583	3.10	15.667	2.91	21.75	1.16
3.583	1.26	9.667	3.10	15.750	2.91	21.83	1.16
3.667	1.26	9.750	3.10	15.833	2.91	21.92	1.16
3.750	1.26	9.833	3.49	15.917	2.91	22.00	1.16
3.833	1.26	9.917	3.49	16.000	2.91	22.08	1.16
3.917	1.26	10.000	3.49	16.083	2.91	22.17	1.16
4.000	1.26	10.083	3.49	16.167	2.91	22.25	1.16
4.083	1.26	10.167	3.49	16.250	2.91	22.33	1.16
4.167	1.26	10.250	3.49	16.333	1.75	22.42	1.16
4.250	1.26	10.333	4.46	16.417	1.75	22.50	1.16
4.333	1.55	10.417	4.46	16.500	1.75	22.58	1.16
4.417	1.55	10.500	4.46	16.583	1.75	22.67	1.16

4.500	1.55	10.583	4.46	16.667	1.75	22.75	1.16
4.583	1.55	10.667	4.46	16.750	1.75	22.83	1.16
4.667	1.55	10.750	4.46	16.833	1.75	22.92	1.16
4.750	1.55	10.833	6.01	16.917	1.75	23.00	1.16
4.833	1.55	10.917	6.01	17.000	1.75	23.08	1.16
4.917	1.55	11.000	6.01	17.083	1.75	23.17	1.16
5.000	1.55	11.083	6.01	17.167	1.75	23.25	1.16
5.083	1.55	11.167	6.01	17.250	1.75	23.33	1.16
5.167	1.55	11.250	6.01	17.333	1.75	23.42	1.16
5.250	1.55	11.333	9.31	17.417	1.75	23.50	1.16
5.333	1.55	11.417	9.31	17.500	1.75	23.58	1.16
5.417	1.55	11.500	9.31	17.583	1.75	23.67	1.16
5.500	1.55	11.583	9.31	17.667	1.75	23.75	1.16
5.583	1.55	11.667	9.31	17.750	1.75	23.83	1.16
5.667	1.55	11.750	9.31	17.833	1.75	23.92	1.16
5.750	1.55	11.833	28.70	17.917	1.75	24.00	1.16
5.833	1.55	11.917	28.71	18.000	1.75	24.08	1.16
5.917	1.55	12.000	28.71	18.083	1.75	24.17	1.16
6.000	1.55	12.083	118.69	18.167	1.75	24.25	1.16
6.083	1.55	12.167	118.70	18.250	1.75		

			TOTALS
Max.Eff.Inten.(mm/hr)=	118.70	113.39	
over (min)	5.00	15.00	
Storage Coeff. (min)=	3.17 (ii)	10.37 (ii)	
Unit Hyd. Tpeak (min)=	5.00	15.00	
Unit Hyd. peak (cms)=	0.27	0.09	
PEAK FLOW (cms)=	0.06	0.18	0.216 (iii)
TIME TO PEAK (hrs)=	12.25	12.33	12.25
RUNOFF VOLUME (mm)=	95.98	39.24	44.91
TOTAL RAINFALL (mm)=	96.98	96.98	96.98
RUNOFF COEFFICIENT =	0.99	0.40	0.46

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 49.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
STANDHYD (0019)	Area (ha)=	2.16	
ID= 1 DT= 5.0 min	Total Imp(%)=	54.64	Dir. Conn.(%)= 10.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	1.18	0.98
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	120.00	30.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.55	12.250	118.70	18.33	1.75
0.167	0.00	6.250	1.55	12.333	13.98	18.42	1.75
0.250	0.00	6.333	1.75	12.417	13.97	18.50	1.75
0.333	1.07	6.417	1.75	12.500	13.97	18.58	1.75
0.417	1.07	6.500	1.75	12.583	13.97	18.67	1.75
0.500	1.07	6.583	1.75	12.667	13.97	18.75	1.75
0.583	1.07	6.667	1.75	12.750	13.97	18.83	1.75
0.667	1.07	6.750	1.75	12.833	7.18	18.92	1.75
0.750	1.07	6.833	1.75	12.917	7.18	19.00	1.75
0.833	1.07	6.917	1.75	13.000	7.18	19.08	1.75
0.917	1.07	7.000	1.75	13.083	7.18	19.17	1.75
1.000	1.07	7.083	1.75	13.167	7.18	19.25	1.75
1.083	1.07	7.167	1.75	13.250	7.18	19.33	1.75
1.167	1.07	7.250	1.75	13.333	5.24	19.42	1.75
1.250	1.07	7.333	2.13	13.417	5.24	19.50	1.75
1.333	1.07	7.417	2.13	13.500	5.24	19.58	1.75
1.417	1.07	7.500	2.13	13.583	5.24	19.67	1.75
1.500	1.07	7.583	2.13	13.667	5.24	19.75	1.75
1.583	1.07	7.667	2.13	13.750	5.24	19.83	1.75
1.667	1.07	7.750	2.13	13.833	4.07	19.92	1.75
1.750	1.07	7.833	2.13	13.917	4.07	20.00	1.75
1.833	1.07	7.917	2.13	14.000	4.07	20.08	1.75
1.917	1.07	8.000	2.13	14.083	4.07	20.17	1.75
2.000	1.07	8.083	2.13	14.167	4.07	20.25	1.75
2.083	1.07	8.167	2.13	14.250	4.07	20.33	1.16
2.167	1.07	8.250	2.13	14.333	2.91	20.42	1.16
2.250	1.07	8.333	2.52	14.417	2.91	20.50	1.16
2.333	1.26	8.417	2.52	14.500	2.91	20.58	1.16
2.417	1.26	8.500	2.52	14.583	2.91	20.67	1.16
2.500	1.26	8.583	2.52	14.667	2.91	20.75	1.16
2.583	1.26	8.667	2.52	14.750	2.91	20.83	1.16
2.667	1.26	8.750	2.52	14.833	2.91	20.92	1.16
2.750	1.26	8.833	2.72	14.917	2.91	21.00	1.16
2.833	1.26	8.917	2.72	15.000	2.91	21.08	1.16

2.917	1.26	9.000	2.72	15.083	2.91	21.17	1.16
3.000	1.26	9.083	2.72	15.167	2.91	21.25	1.16
3.083	1.26	9.167	2.72	15.250	2.91	21.33	1.16
3.167	1.26	9.250	2.72	15.333	2.91	21.42	1.16
3.250	1.26	9.333	3.10	15.417	2.91	21.50	1.16
3.333	1.26	9.417	3.10	15.500	2.91	21.58	1.16
3.417	1.26	9.500	3.10	15.583	2.91	21.67	1.16
3.500	1.26	9.583	3.10	15.667	2.91	21.75	1.16
3.583	1.26	9.667	3.10	15.750	2.91	21.83	1.16
3.667	1.26	9.750	3.10	15.833	2.91	21.92	1.16
3.750	1.26	9.833	3.49	15.917	2.91	22.00	1.16
3.833	1.26	9.917	3.49	16.000	2.91	22.08	1.16
3.917	1.26	10.000	3.49	16.083	2.91	22.17	1.16
4.000	1.26	10.083	3.49	16.167	2.91	22.25	1.16
4.083	1.26	10.167	3.49	16.250	2.91	22.33	1.16
4.167	1.26	10.250	3.49	16.333	1.75	22.42	1.16
4.250	1.26	10.333	4.46	16.417	1.75	22.50	1.16
4.333	1.55	10.417	4.46	16.500	1.75	22.58	1.16
4.417	1.55	10.500	4.46	16.583	1.75	22.67	1.16
4.500	1.55	10.583	4.46	16.667	1.75	22.75	1.16
4.583	1.55	10.667	4.46	16.750	1.75	22.83	1.16
4.667	1.55	10.750	4.46	16.833	1.75	22.92	1.16
4.750	1.55	10.833	6.01	16.917	1.75	23.00	1.16
4.833	1.55	10.917	6.01	17.000	1.75	23.08	1.16
4.917	1.55	11.000	6.01	17.083	1.75	23.17	1.16
5.000	1.55	11.083	6.01	17.167	1.75	23.25	1.16
5.083	1.55	11.167	6.01	17.250	1.75	23.33	1.16
5.167	1.55	11.250	6.01	17.333	1.75	23.42	1.16
5.250	1.55	11.333	9.31	17.417	1.75	23.50	1.16
5.333	1.55	11.417	9.31	17.500	1.75	23.58	1.16
5.417	1.55	11.500	9.31	17.583	1.75	23.67	1.16
5.500	1.55	11.583	9.31	17.667	1.75	23.75	1.16
5.583	1.55	11.667	9.31	17.750	1.75	23.83	1.16
5.667	1.55	11.750	9.31	17.833	1.75	23.92	1.16
5.750	1.55	11.833	28.70	17.917	1.75	24.00	1.16
5.833	1.55	11.917	28.71	18.000	1.75	24.08	1.16
5.917	1.55	12.000	28.71	18.083	1.75	24.17	1.16
6.000	1.55	12.083	118.69	18.167	1.75	24.25	1.16
6.083	1.55	12.167	118.70	18.250	1.75		

Max.Eff.Inten.	(mm/hr)=	118.70	169.89	
over	(min)	5.00	10.00	
Storage Coeff.	(min)=	3.28 (ii)	8.08 (ii)	
Unit Hyd. Tpeak	(min)=	5.00	10.00	
Unit Hyd. peak	(cms)=	0.27	0.13	
				TOTALS
PEAK FLOW	(cms)=	0.07	0.36	0.427 (iii)
TIME TO PEAK	(hrs)=	12.25	12.25	12.25

RUNOFF VOLUME	(mm)=	95.98	58.71	62.44
TOTAL RAINFALL	(mm)=	96.98	96.98	96.98
RUNOFF COEFFICIENT	=	0.99	0.61	0.64

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0040)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0015):		1.93	0.216	12.25	44.91
+ ID2= 2 (0019):		2.16	0.427	12.25	62.44
ID = 3 (0040):		4.09	0.644	12.25	54.17

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0040)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0040):		4.09	0.644	12.25	54.17
+ ID2= 2 (0027):		1.38	0.074	12.50	33.95
ID = 1 (0040):		5.47	0.688	12.25	49.07

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0040)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0040):		5.47	0.688	12.25	49.07
+ ID2= 2 (0041):		0.59	0.033	12.67	43.92
ID = 3 (0040):		6.06	0.704	12.25	48.57

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB			
NASHYD (0048)	Area	(ha)= 29.16	Curve Number (CN)= 71.4
ID= 1 DT= 5.0 min	Ia	(mm)= 7.88	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	0.68	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.55	12.250	118.70	18.33	1.75
0.167	0.00	6.250	1.55	12.333	13.98	18.42	1.75
0.250	0.00	6.333	1.75	12.417	13.97	18.50	1.75
0.333	1.07	6.417	1.75	12.500	13.97	18.58	1.75
0.417	1.07	6.500	1.75	12.583	13.97	18.67	1.75
0.500	1.07	6.583	1.75	12.667	13.97	18.75	1.75
0.583	1.07	6.667	1.75	12.750	13.97	18.83	1.75
0.667	1.07	6.750	1.75	12.833	7.18	18.92	1.75
0.750	1.07	6.833	1.75	12.917	7.18	19.00	1.75
0.833	1.07	6.917	1.75	13.000	7.18	19.08	1.75
0.917	1.07	7.000	1.75	13.083	7.18	19.17	1.75
1.000	1.07	7.083	1.75	13.167	7.18	19.25	1.75
1.083	1.07	7.167	1.75	13.250	7.18	19.33	1.75
1.167	1.07	7.250	1.75	13.333	5.24	19.42	1.75
1.250	1.07	7.333	2.13	13.417	5.24	19.50	1.75
1.333	1.07	7.417	2.13	13.500	5.24	19.58	1.75
1.417	1.07	7.500	2.13	13.583	5.24	19.67	1.75
1.500	1.07	7.583	2.13	13.667	5.24	19.75	1.75
1.583	1.07	7.667	2.13	13.750	5.24	19.83	1.75
1.667	1.07	7.750	2.13	13.833	4.07	19.92	1.75
1.750	1.07	7.833	2.13	13.917	4.07	20.00	1.75
1.833	1.07	7.917	2.13	14.000	4.07	20.08	1.75
1.917	1.07	8.000	2.13	14.083	4.07	20.17	1.75
2.000	1.07	8.083	2.13	14.167	4.07	20.25	1.75
2.083	1.07	8.167	2.13	14.250	4.07	20.33	1.16
2.167	1.07	8.250	2.13	14.333	2.91	20.42	1.16
2.250	1.07	8.333	2.52	14.417	2.91	20.50	1.16
2.333	1.26	8.417	2.52	14.500	2.91	20.58	1.16
2.417	1.26	8.500	2.52	14.583	2.91	20.67	1.16
2.500	1.26	8.583	2.52	14.667	2.91	20.75	1.16
2.583	1.26	8.667	2.52	14.750	2.91	20.83	1.16
2.667	1.26	8.750	2.52	14.833	2.91	20.92	1.16
2.750	1.26	8.833	2.72	14.917	2.91	21.00	1.16

2.833	1.26	8.917	2.72	15.000	2.91	21.08	1.16
2.917	1.26	9.000	2.72	15.083	2.91	21.17	1.16
3.000	1.26	9.083	2.72	15.167	2.91	21.25	1.16
3.083	1.26	9.167	2.72	15.250	2.91	21.33	1.16
3.167	1.26	9.250	2.72	15.333	2.91	21.42	1.16
3.250	1.26	9.333	3.10	15.417	2.91	21.50	1.16
3.333	1.26	9.417	3.10	15.500	2.91	21.58	1.16
3.417	1.26	9.500	3.10	15.583	2.91	21.67	1.16
3.500	1.26	9.583	3.10	15.667	2.91	21.75	1.16
3.583	1.26	9.667	3.10	15.750	2.91	21.83	1.16
3.667	1.26	9.750	3.10	15.833	2.91	21.92	1.16
3.750	1.26	9.833	3.49	15.917	2.91	22.00	1.16
3.833	1.26	9.917	3.49	16.000	2.91	22.08	1.16
3.917	1.26	10.000	3.49	16.083	2.91	22.17	1.16
4.000	1.26	10.083	3.49	16.167	2.91	22.25	1.16
4.083	1.26	10.167	3.49	16.250	2.91	22.33	1.16
4.167	1.26	10.250	3.49	16.333	1.75	22.42	1.16
4.250	1.26	10.333	4.46	16.417	1.75	22.50	1.16
4.333	1.55	10.417	4.46	16.500	1.75	22.58	1.16
4.417	1.55	10.500	4.46	16.583	1.75	22.67	1.16
4.500	1.55	10.583	4.46	16.667	1.75	22.75	1.16
4.583	1.55	10.667	4.46	16.750	1.75	22.83	1.16
4.667	1.55	10.750	4.46	16.833	1.75	22.92	1.16
4.750	1.55	10.833	6.01	16.917	1.75	23.00	1.16
4.833	1.55	10.917	6.01	17.000	1.75	23.08	1.16
4.917	1.55	11.000	6.01	17.083	1.75	23.17	1.16
5.000	1.55	11.083	6.01	17.167	1.75	23.25	1.16
5.083	1.55	11.167	6.01	17.250	1.75	23.33	1.16
5.167	1.55	11.250	6.01	17.333	1.75	23.42	1.16
5.250	1.55	11.333	9.31	17.417	1.75	23.50	1.16
5.333	1.55	11.417	9.31	17.500	1.75	23.58	1.16
5.417	1.55	11.500	9.31	17.583	1.75	23.67	1.16
5.500	1.55	11.583	9.31	17.667	1.75	23.75	1.16
5.583	1.55	11.667	9.31	17.750	1.75	23.83	1.16
5.667	1.55	11.750	9.31	17.833	1.75	23.92	1.16
5.750	1.55	11.833	28.70	17.917	1.75	24.00	1.16
5.833	1.55	11.917	28.71	18.000	1.75	24.08	1.16
5.917	1.55	12.000	28.71	18.083	1.75	24.17	1.16
6.000	1.55	12.083	118.69	18.167	1.75	24.25	1.16
6.083	1.55	12.167	118.70	18.250	1.75		

Unit Hyd Qpeak (cms)= 1.638

PEAK FLOW (cms)= 1.300 (i)
TIME TO PEAK (hrs)= 12.833
RUNOFF VOLUME (mm)= 41.598
TOTAL RAINFALL (mm)= 96.980
RUNOFF COEFFICIENT = 0.429

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	
STANDHYD (0014)	Area (ha)= 1.87
ID= 1 DT= 5.0 min	Total Imp(%)= 43.28 Dir. Conn.(%)= 10.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.81	1.06
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	111.65	25.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.55	12.250	118.70	18.33	1.75
0.167	0.00	6.250	1.55	12.333	13.98	18.42	1.75
0.250	0.00	6.333	1.75	12.417	13.97	18.50	1.75
0.333	1.07	6.417	1.75	12.500	13.97	18.58	1.75
0.417	1.07	6.500	1.75	12.583	13.97	18.67	1.75
0.500	1.07	6.583	1.75	12.667	13.97	18.75	1.75
0.583	1.07	6.667	1.75	12.750	13.97	18.83	1.75
0.667	1.07	6.750	1.75	12.833	7.18	18.92	1.75
0.750	1.07	6.833	1.75	12.917	7.18	19.00	1.75
0.833	1.07	6.917	1.75	13.000	7.18	19.08	1.75
0.917	1.07	7.000	1.75	13.083	7.18	19.17	1.75
1.000	1.07	7.083	1.75	13.167	7.18	19.25	1.75
1.083	1.07	7.167	1.75	13.250	7.18	19.33	1.75
1.167	1.07	7.250	1.75	13.333	5.24	19.42	1.75
1.250	1.07	7.333	2.13	13.417	5.24	19.50	1.75
1.333	1.07	7.417	2.13	13.500	5.24	19.58	1.75
1.417	1.07	7.500	2.13	13.583	5.24	19.67	1.75
1.500	1.07	7.583	2.13	13.667	5.24	19.75	1.75
1.583	1.07	7.667	2.13	13.750	5.24	19.83	1.75
1.667	1.07	7.750	2.13	13.833	4.07	19.92	1.75
1.750	1.07	7.833	2.13	13.917	4.07	20.00	1.75
1.833	1.07	7.917	2.13	14.000	4.07	20.08	1.75
1.917	1.07	8.000	2.13	14.083	4.07	20.17	1.75
2.000	1.07	8.083	2.13	14.167	4.07	20.25	1.75
2.083	1.07	8.167	2.13	14.250	4.07	20.33	1.16
2.167	1.07	8.250	2.13	14.333	2.91	20.42	1.16

2.250	1.07	8.333	2.52	14.417	2.91	20.50	1.16
2.333	1.26	8.417	2.52	14.500	2.91	20.58	1.16
2.417	1.26	8.500	2.52	14.583	2.91	20.67	1.16
2.500	1.26	8.583	2.52	14.667	2.91	20.75	1.16
2.583	1.26	8.667	2.52	14.750	2.91	20.83	1.16
2.667	1.26	8.750	2.52	14.833	2.91	20.92	1.16
2.750	1.26	8.833	2.72	14.917	2.91	21.00	1.16
2.833	1.26	8.917	2.72	15.000	2.91	21.08	1.16
2.917	1.26	9.000	2.72	15.083	2.91	21.17	1.16
3.000	1.26	9.083	2.72	15.167	2.91	21.25	1.16
3.083	1.26	9.167	2.72	15.250	2.91	21.33	1.16
3.167	1.26	9.250	2.72	15.333	2.91	21.42	1.16
3.250	1.26	9.333	3.10	15.417	2.91	21.50	1.16
3.333	1.26	9.417	3.10	15.500	2.91	21.58	1.16
3.417	1.26	9.500	3.10	15.583	2.91	21.67	1.16
3.500	1.26	9.583	3.10	15.667	2.91	21.75	1.16
3.583	1.26	9.667	3.10	15.750	2.91	21.83	1.16
3.667	1.26	9.750	3.10	15.833	2.91	21.92	1.16
3.750	1.26	9.833	3.49	15.917	2.91	22.00	1.16
3.833	1.26	9.917	3.49	16.000	2.91	22.08	1.16
3.917	1.26	10.000	3.49	16.083	2.91	22.17	1.16
4.000	1.26	10.083	3.49	16.167	2.91	22.25	1.16
4.083	1.26	10.167	3.49	16.250	2.91	22.33	1.16
4.167	1.26	10.250	3.49	16.333	1.75	22.42	1.16
4.250	1.26	10.333	4.46	16.417	1.75	22.50	1.16
4.333	1.55	10.417	4.46	16.500	1.75	22.58	1.16
4.417	1.55	10.500	4.46	16.583	1.75	22.67	1.16
4.500	1.55	10.583	4.46	16.667	1.75	22.75	1.16
4.583	1.55	10.667	4.46	16.750	1.75	22.83	1.16
4.667	1.55	10.750	4.46	16.833	1.75	22.92	1.16
4.750	1.55	10.833	6.01	16.917	1.75	23.00	1.16
4.833	1.55	10.917	6.01	17.000	1.75	23.08	1.16
4.917	1.55	11.000	6.01	17.083	1.75	23.17	1.16
5.000	1.55	11.083	6.01	17.167	1.75	23.25	1.16
5.083	1.55	11.167	6.01	17.250	1.75	23.33	1.16
5.167	1.55	11.250	6.01	17.333	1.75	23.42	1.16
5.250	1.55	11.333	9.31	17.417	1.75	23.50	1.16
5.333	1.55	11.417	9.31	17.500	1.75	23.58	1.16
5.417	1.55	11.500	9.31	17.583	1.75	23.67	1.16
5.500	1.55	11.583	9.31	17.667	1.75	23.75	1.16
5.583	1.55	11.667	9.31	17.750	1.75	23.83	1.16
5.667	1.55	11.750	9.31	17.833	1.75	23.92	1.16
5.750	1.55	11.833	28.70	17.917	1.75	24.00	1.16
5.833	1.55	11.917	28.71	18.000	1.75	24.08	1.16
5.917	1.55	12.000	28.71	18.083	1.75	24.17	1.16
6.000	1.55	12.083	118.69	18.167	1.75	24.25	1.16
6.083	1.55	12.167	118.70	18.250	1.75		

Max.Eff.Inten.(mm/hr)=	118.70	146.55	
over (min)	5.00	10.00	
Storage Coeff. (min)=	3.14 (ii)	7.71 (ii)	
Unit Hyd. Tpeak (min)=	5.00	10.00	
Unit Hyd. peak (cms)=	0.27	0.13	
			TOTALS
PEAK FLOW (cms)=	0.06	0.34	0.402 (iii)
TIME TO PEAK (hrs)=	12.25	12.25	12.25
RUNOFF VOLUME (mm)=	95.98	63.32	66.59
TOTAL RAINFALL (mm)=	96.98	96.98	96.98
RUNOFF COEFFICIENT =	0.99	0.65	0.69

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 78.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	
STANDHYD (0021)	Area (ha)= 0.07
ID= 1 DT= 5.0 min	Total Imp(%)= 48.26 Dir. Conn.(%)= 39.54

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.03	0.04
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	21.60	5.60
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.55	12.250	118.70	18.33	1.75
0.167	0.00	6.250	1.55	12.333	13.98	18.42	1.75
0.250	0.00	6.333	1.75	12.417	13.97	18.50	1.75
0.333	1.07	6.417	1.75	12.500	13.97	18.58	1.75
0.417	1.07	6.500	1.75	12.583	13.97	18.67	1.75
0.500	1.07	6.583	1.75	12.667	13.97	18.75	1.75
0.583	1.07	6.667	1.75	12.750	13.97	18.83	1.75

0.667	1.07	6.750	1.75	12.833	7.18	18.92	1.75
0.750	1.07	6.833	1.75	12.917	7.18	19.00	1.75
0.833	1.07	6.917	1.75	13.000	7.18	19.08	1.75
0.917	1.07	7.000	1.75	13.083	7.18	19.17	1.75
1.000	1.07	7.083	1.75	13.167	7.18	19.25	1.75
1.083	1.07	7.167	1.75	13.250	7.18	19.33	1.75
1.167	1.07	7.250	1.75	13.333	5.24	19.42	1.75
1.250	1.07	7.333	2.13	13.417	5.24	19.50	1.75
1.333	1.07	7.417	2.13	13.500	5.24	19.58	1.75
1.417	1.07	7.500	2.13	13.583	5.24	19.67	1.75
1.500	1.07	7.583	2.13	13.667	5.24	19.75	1.75
1.583	1.07	7.667	2.13	13.750	5.24	19.83	1.75
1.667	1.07	7.750	2.13	13.833	4.07	19.92	1.75
1.750	1.07	7.833	2.13	13.917	4.07	20.00	1.75
1.833	1.07	7.917	2.13	14.000	4.07	20.08	1.75
1.917	1.07	8.000	2.13	14.083	4.07	20.17	1.75
2.000	1.07	8.083	2.13	14.167	4.07	20.25	1.75
2.083	1.07	8.167	2.13	14.250	4.07	20.33	1.16
2.167	1.07	8.250	2.13	14.333	2.91	20.42	1.16
2.250	1.07	8.333	2.52	14.417	2.91	20.50	1.16
2.333	1.26	8.417	2.52	14.500	2.91	20.58	1.16
2.417	1.26	8.500	2.52	14.583	2.91	20.67	1.16
2.500	1.26	8.583	2.52	14.667	2.91	20.75	1.16
2.583	1.26	8.667	2.52	14.750	2.91	20.83	1.16
2.667	1.26	8.750	2.52	14.833	2.91	20.92	1.16
2.750	1.26	8.833	2.72	14.917	2.91	21.00	1.16
2.833	1.26	8.917	2.72	15.000	2.91	21.08	1.16
2.917	1.26	9.000	2.72	15.083	2.91	21.17	1.16
3.000	1.26	9.083	2.72	15.167	2.91	21.25	1.16
3.083	1.26	9.167	2.72	15.250	2.91	21.33	1.16
3.167	1.26	9.250	2.72	15.333	2.91	21.42	1.16
3.250	1.26	9.333	3.10	15.417	2.91	21.50	1.16
3.333	1.26	9.417	3.10	15.500	2.91	21.58	1.16
3.417	1.26	9.500	3.10	15.583	2.91	21.67	1.16
3.500	1.26	9.583	3.10	15.667	2.91	21.75	1.16
3.583	1.26	9.667	3.10	15.750	2.91	21.83	1.16
3.667	1.26	9.750	3.10	15.833	2.91	21.92	1.16
3.750	1.26	9.833	3.49	15.917	2.91	22.00	1.16
3.833	1.26	9.917	3.49	16.000	2.91	22.08	1.16
3.917	1.26	10.000	3.49	16.083	2.91	22.17	1.16
4.000	1.26	10.083	3.49	16.167	2.91	22.25	1.16
4.083	1.26	10.167	3.49	16.250	2.91	22.33	1.16
4.167	1.26	10.250	3.49	16.333	1.75	22.42	1.16
4.250	1.26	10.333	4.46	16.417	1.75	22.50	1.16
4.333	1.55	10.417	4.46	16.500	1.75	22.58	1.16
4.417	1.55	10.500	4.46	16.583	1.75	22.67	1.16
4.500	1.55	10.583	4.46	16.667	1.75	22.75	1.16
4.583	1.55	10.667	4.46	16.750	1.75	22.83	1.16

4.667	1.55	10.750	4.46	16.833	1.75	22.92	1.16
4.750	1.55	10.833	6.01	16.917	1.75	23.00	1.16
4.833	1.55	10.917	6.01	17.000	1.75	23.08	1.16
4.917	1.55	11.000	6.01	17.083	1.75	23.17	1.16
5.000	1.55	11.083	6.01	17.167	1.75	23.25	1.16
5.083	1.55	11.167	6.01	17.250	1.75	23.33	1.16
5.167	1.55	11.250	6.01	17.333	1.75	23.42	1.16
5.250	1.55	11.333	9.31	17.417	1.75	23.50	1.16
5.333	1.55	11.417	9.31	17.500	1.75	23.58	1.16
5.417	1.55	11.500	9.31	17.583	1.75	23.67	1.16
5.500	1.55	11.583	9.31	17.667	1.75	23.75	1.16
5.583	1.55	11.667	9.31	17.750	1.75	23.83	1.16
5.667	1.55	11.750	9.31	17.833	1.75	23.92	1.16
5.750	1.55	11.833	28.70	17.917	1.75	24.00	1.16
5.833	1.55	11.917	28.71	18.000	1.75	24.08	1.16
5.917	1.55	12.000	28.71	18.083	1.75	24.17	1.16
6.000	1.55	12.083	118.69	18.167	1.75	24.25	1.16
6.083	1.55	12.167	118.70	18.250	1.75		

Max.Eff.Inten.(mm/hr)=	118.70	50.04	
over (min)	5.00	5.00	
Storage Coeff. (min)=	1.17 (ii)	3.43 (ii)	
Unit Hyd. Tpeak (min)=	5.00	5.00	
Unit Hyd. peak (cms)=	0.34	0.26	
			TOTALS
PEAK FLOW (cms)=	0.01	0.01	0.014 (iii)
TIME TO PEAK (hrs)=	12.25	12.25	12.25
RUNOFF VOLUME (mm)=	95.98	29.45	55.74
TOTAL RAINFALL (mm)=	96.98	96.98	96.98
RUNOFF COEFFICIENT =	0.99	0.30	0.57

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 52.2 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0016)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0001):	39.68	0.849	13.50	31.07
+ ID2= 2 (0014):	1.87	0.402	12.25	66.59
ID = 3 (0016):	41.55	0.876	13.42	32.67

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0016):	41.55	0.876	13.42	32.67
+ ID2= 2 (0002):	23.99	0.341	13.25	18.51
ID = 1 (0016):	65.54	1.213	13.33	27.49

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0016):	65.54	1.213	13.33	27.49
+ ID2= 2 (0021):	0.07	0.014	12.25	55.74
ID = 3 (0016):	65.61	1.214	13.33	27.52

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0016):	65.61	1.214	13.33	27.52
+ ID2= 2 (0025):	100.92	1.433	14.08	27.45
ID = 1 (0016):	166.53	2.538	13.75	27.48

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0016):	166.53	2.538	13.75	27.48
+ ID2= 2 (0028):	6.37	0.115	13.00	20.00

ADD HYD (0016)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0016):	172.90	2.624	13.67	27.20
+ ID2= 2 (0029):	14.85	0.278	13.17	22.64
ID = 1 (0016):	187.75	2.867	13.58	26.84

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0016):	187.75	2.867	13.58	26.84
+ ID2= 2 (0030):	1.70	0.078	12.50	30.09
ID = 3 (0016):	189.45	2.887	13.58	26.87

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0016):	189.45	2.887	13.58	26.87
+ ID2= 2 (0031):	1.80	0.032	13.00	19.58
ID = 1 (0016):	191.25	2.913	13.58	26.80

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0016):	191.25	2.913	13.58	26.80
+ ID2= 2 (0032):	6.70	0.116	13.83	29.52

```
       ID = 3 (  0016):   197.95   3.027    13.58    26.89

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0016)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 3 (  0016):   197.95   3.027    13.58    26.89
     + ID2= 2 (  0033):     1.13   0.063    12.58    37.41
       ================================================
       ID = 1 (  0016):   199.08   3.045    13.58    26.95

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0016)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0016):   199.08   3.045    13.58    26.95
     + ID2= 2 (  0040):     6.06   0.704    12.25    48.57
       ================================================
       ID = 3 (  0016):   205.14   3.125    13.50    27.59

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0016)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 3 (  0016):   205.14   3.125    13.50    27.59
     + ID2= 2 (  0048):    29.16   1.300    12.83    41.60
       ================================================
       ID = 1 (  0016):   234.30   4.158    13.25    29.33

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
--------------------
| CALIB            |
| STANDHYD (  0009)|   Area    (ha)=  31.06
|ID= 1 DT= 5.0 min |   Total Imp(%)=  53.89   Dir. Conn.(%)=  20.76
--------------------
                          IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=      16.74         14.32
     Dep. Storage     (mm)=       1.00          5.00
```



```
     Average Slope     (%)=       0.50          2.00
     Length            (m)=     455.05         30.00
     Mannings n           =      0.013         0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.
```

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.55	12.250	118.70	18.33	1.75
0.167	0.00	6.250	1.55	12.333	13.98	18.42	1.75
0.250	0.00	6.333	1.75	12.417	13.97	18.50	1.75
0.333	1.07	6.417	1.75	12.500	13.97	18.58	1.75
0.417	1.07	6.500	1.75	12.583	13.97	18.67	1.75
0.500	1.07	6.583	1.75	12.667	13.97	18.75	1.75
0.583	1.07	6.667	1.75	12.750	13.97	18.83	1.75
0.667	1.07	6.750	1.75	12.833	7.18	18.92	1.75
0.750	1.07	6.833	1.75	12.917	7.18	19.00	1.75
0.833	1.07	6.917	1.75	13.000	7.18	19.08	1.75
0.917	1.07	7.000	1.75	13.083	7.18	19.17	1.75
1.000	1.07	7.083	1.75	13.167	7.18	19.25	1.75
1.083	1.07	7.167	1.75	13.250	7.18	19.33	1.75
1.167	1.07	7.250	1.75	13.333	5.24	19.42	1.75
1.250	1.07	7.333	2.13	13.417	5.24	19.50	1.75
1.333	1.07	7.417	2.13	13.500	5.24	19.58	1.75
1.417	1.07	7.500	2.13	13.583	5.24	19.67	1.75
1.500	1.07	7.583	2.13	13.667	5.24	19.75	1.75
1.583	1.07	7.667	2.13	13.750	5.24	19.83	1.75
1.667	1.07	7.750	2.13	13.833	4.07	19.92	1.75
1.750	1.07	7.833	2.13	13.917	4.07	20.00	1.75
1.833	1.07	7.917	2.13	14.000	4.07	20.08	1.75
1.917	1.07	8.000	2.13	14.083	4.07	20.17	1.75
2.000	1.07	8.083	2.13	14.167	4.07	20.25	1.75
2.083	1.07	8.167	2.13	14.250	4.07	20.33	1.16
2.167	1.07	8.250	2.13	14.333	2.91	20.42	1.16
2.250	1.07	8.333	2.52	14.417	2.91	20.50	1.16
2.333	1.26	8.417	2.52	14.500	2.91	20.58	1.16
2.417	1.26	8.500	2.52	14.583	2.91	20.67	1.16
2.500	1.26	8.583	2.52	14.667	2.91	20.75	1.16
2.583	1.26	8.667	2.52	14.750	2.91	20.83	1.16
2.667	1.26	8.750	2.52	14.833	2.91	20.92	1.16
2.750	1.26	8.833	2.72	14.917	2.91	21.00	1.16
2.833	1.26	8.917	2.72	15.000	2.91	21.08	1.16
2.917	1.26	9.000	2.72	15.083	2.91	21.17	1.16
3.000	1.26	9.083	2.72	15.167	2.91	21.25	1.16
3.083	1.26	9.167	2.72	15.250	2.91	21.33	1.16
3.167	1.26	9.250	2.72	15.333	2.91	21.42	1.16

3.250	1.26	9.333	3.10	15.417	2.91	21.50	1.16
3.333	1.26	9.417	3.10	15.500	2.91	21.58	1.16
3.417	1.26	9.500	3.10	15.583	2.91	21.67	1.16
3.500	1.26	9.583	3.10	15.667	2.91	21.75	1.16
3.583	1.26	9.667	3.10	15.750	2.91	21.83	1.16
3.667	1.26	9.750	3.10	15.833	2.91	21.92	1.16
3.750	1.26	9.833	3.49	15.917	2.91	22.00	1.16
3.833	1.26	9.917	3.49	16.000	2.91	22.08	1.16
3.917	1.26	10.000	3.49	16.083	2.91	22.17	1.16
4.000	1.26	10.083	3.49	16.167	2.91	22.25	1.16
4.083	1.26	10.167	3.49	16.250	2.91	22.33	1.16
4.167	1.26	10.250	3.49	16.333	1.75	22.42	1.16
4.250	1.26	10.333	4.46	16.417	1.75	22.50	1.16
4.333	1.55	10.417	4.46	16.500	1.75	22.58	1.16
4.417	1.55	10.500	4.46	16.583	1.75	22.67	1.16
4.500	1.55	10.583	4.46	16.667	1.75	22.75	1.16
4.583	1.55	10.667	4.46	16.750	1.75	22.83	1.16
4.667	1.55	10.750	4.46	16.833	1.75	22.92	1.16
4.750	1.55	10.833	6.01	16.917	1.75	23.00	1.16
4.833	1.55	10.917	6.01	17.000	1.75	23.08	1.16
4.917	1.55	11.000	6.01	17.083	1.75	23.17	1.16
5.000	1.55	11.083	6.01	17.167	1.75	23.25	1.16
5.083	1.55	11.167	6.01	17.250	1.75	23.33	1.16
5.167	1.55	11.250	6.01	17.333	1.75	23.42	1.16
5.250	1.55	11.333	9.31	17.417	1.75	23.50	1.16
5.333	1.55	11.417	9.31	17.500	1.75	23.58	1.16
5.417	1.55	11.500	9.31	17.583	1.75	23.67	1.16
5.500	1.55	11.583	9.31	17.667	1.75	23.75	1.16
5.583	1.55	11.667	9.31	17.750	1.75	23.83	1.16
5.667	1.55	11.750	9.31	17.833	1.75	23.92	1.16
5.750	1.55	11.833	28.70	17.917	1.75	24.00	1.16
5.833	1.55	11.917	28.71	18.000	1.75	24.08	1.16
5.917	1.55	12.000	28.71	18.083	1.75	24.17	1.16
6.000	1.55	12.083	118.69	18.167	1.75	24.25	1.16
6.083	1.55	12.167	118.70	18.250	1.75		

```
     Max.Eff.Inten.(mm/hr)=     118.70       137.56
               over (min)        5.00        15.00
     Storage Coeff.  (min)=       7.29 (ii)   12.52 (ii)
     Unit Hyd. Tpeak (min)=       5.00        15.00
     Unit Hyd. peak  (cms)=       0.17         0.08
                                                      *TOTALS*
     PEAK FLOW       (cms)=       1.91         3.34          4.803 (iii)
     TIME TO PEAK    (hrs)=      12.25        12.33         12.25
     RUNOFF VOLUME    (mm)=      95.98        54.63         63.22
     TOTAL RAINFALL   (mm)=      96.98        96.98         96.98
     RUNOFF COEFFICIENT   =       0.99         0.56          0.65
```



```
       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  68.5    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| STANDHYD (  0010)|   Area    (ha)=   1.32
|ID= 1 DT= 5.0 min |   Total Imp(%)=  55.27   Dir. Conn.(%)=   1.52
--------------------
                          IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       0.73          0.59
     Dep. Storage     (mm)=       1.00          5.00
     Average Slope     (%)=       0.50          2.00
     Length            (m)=      93.81         23.50
     Mannings n           =      0.013         0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.
```

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.55	12.250	118.70	18.33	1.75
0.167	0.00	6.250	1.55	12.333	13.98	18.42	1.75
0.250	0.00	6.333	1.75	12.417	13.97	18.50	1.75
0.333	1.07	6.417	1.75	12.500	13.97	18.58	1.75
0.417	1.07	6.500	1.75	12.583	13.97	18.67	1.75
0.500	1.07	6.583	1.75	12.667	13.97	18.75	1.75
0.583	1.07	6.667	1.75	12.750	13.97	18.83	1.75
0.667	1.07	6.750	1.75	12.833	7.18	18.92	1.75
0.750	1.07	6.833	1.75	12.917	7.18	19.00	1.75
0.833	1.07	6.917	1.75	13.000	7.18	19.08	1.75
0.917	1.07	7.000	1.75	13.083	7.18	19.17	1.75
1.000	1.07	7.083	1.75	13.167	7.18	19.25	1.75
1.083	1.07	7.167	1.75	13.250	7.18	19.33	1.75
1.167	1.07	7.250	1.75	13.333	5.24	19.42	1.75
1.250	1.07	7.333	2.13	13.417	5.24	19.50	1.75
1.333	1.07	7.417	2.13	13.500	5.24	19.58	1.75
1.417	1.07	7.500	2.13	13.583	5.24	19.67	1.75
1.500	1.07	7.583	2.13	13.667	5.24	19.75	1.75
1.583	1.07	7.667	2.13	13.750	5.24	19.83	1.75
1.667	1.07	7.750	2.13	13.833	4.07	19.92	1.75
1.750	1.07	7.833	2.13	13.917	4.07	20.00	1.75
1.833	1.07	7.917	2.13	14.000	4.07	20.08	1.75

1.917	1.07	8.000	2.13	14.083	4.07	20.17	1.75
2.000	1.07	8.083	2.13	14.167	4.07	20.25	1.75
2.083	1.07	8.167	2.13	14.250	4.07	20.33	1.16
2.167	1.07	8.250	2.13	14.333	2.91	20.42	1.16
2.250	1.07	8.333	2.52	14.417	2.91	20.50	1.16
2.333	1.26	8.417	2.52	14.500	2.91	20.58	1.16
2.417	1.26	8.500	2.52	14.583	2.91	20.67	1.16
2.500	1.26	8.583	2.52	14.667	2.91	20.75	1.16
2.583	1.26	8.667	2.52	14.750	2.91	20.83	1.16
2.667	1.26	8.750	2.52	14.833	2.91	20.92	1.16
2.750	1.26	8.833	2.72	14.917	2.91	21.00	1.16
2.833	1.26	8.917	2.72	15.000	2.91	21.08	1.16
2.917	1.26	9.000	2.72	15.083	2.91	21.17	1.16
3.000	1.26	9.083	2.72	15.167	2.91	21.25	1.16
3.083	1.26	9.167	2.72	15.250	2.91	21.33	1.16
3.167	1.26	9.250	2.72	15.333	2.91	21.42	1.16
3.250	1.26	9.333	3.10	15.417	2.91	21.50	1.16
3.333	1.26	9.417	3.10	15.500	2.91	21.58	1.16
3.417	1.26	9.500	3.10	15.583	2.91	21.67	1.16
3.500	1.26	9.583	3.10	15.667	2.91	21.75	1.16
3.583	1.26	9.667	3.10	15.750	2.91	21.83	1.16
3.667	1.26	9.750	3.10	15.833	2.91	21.92	1.16
3.750	1.26	9.833	3.49	15.917	2.91	22.00	1.16
3.833	1.26	9.917	3.49	16.000	2.91	22.08	1.16
3.917	1.26	10.000	3.49	16.083	2.91	22.17	1.16
4.000	1.26	10.083	3.49	16.167	2.91	22.25	1.16
4.083	1.26	10.167	3.49	16.250	2.91	22.33	1.16
4.167	1.26	10.250	3.49	16.333	1.75	22.42	1.16
4.250	1.26	10.333	4.46	16.417	1.75	22.50	1.16
4.333	1.55	10.417	4.46	16.500	1.75	22.58	1.16
4.417	1.55	10.500	4.46	16.583	1.75	22.67	1.16
4.500	1.55	10.583	4.46	16.667	1.75	22.75	1.16
4.583	1.55	10.667	4.46	16.750	1.75	22.83	1.16
4.667	1.55	10.750	4.46	16.833	1.75	22.92	1.16
4.750	1.55	10.833	6.01	16.917	1.75	23.00	1.16
4.833	1.55	10.917	6.01	17.000	1.75	23.08	1.16
4.917	1.55	11.000	6.01	17.083	1.75	23.17	1.16
5.000	1.55	11.083	6.01	17.167	1.75	23.25	1.16
5.083	1.55	11.167	6.01	17.250	1.75	23.33	1.16
5.167	1.55	11.250	6.01	17.333	1.75	23.42	1.16
5.250	1.55	11.333	9.31	17.417	1.75	23.50	1.16
5.333	1.55	11.417	9.31	17.500	1.75	23.58	1.16
5.417	1.55	11.500	9.31	17.583	1.75	23.67	1.16
5.500	1.55	11.583	9.31	17.667	1.75	23.75	1.16
5.583	1.55	11.667	9.31	17.750	1.75	23.83	1.16
5.667	1.55	11.750	9.31	17.833	1.75	23.92	1.16
5.750	1.55	11.833	28.70	17.917	1.75	24.00	1.16
5.833	1.55	11.917	28.71	18.000	1.75	24.08	1.16

5.917	1.55	12.000	28.71	18.083	1.75	24.17	1.16
6.000	1.55	12.083	118.69	18.167	1.75	24.25	1.16
6.083	1.55	12.167	118.70	18.250	1.75		

Max.Eff.Inten.(mm/hr)=	118.70	195.34	
over (min)	5.00	10.00	
Storage Coeff. (min)=	2.83 (ii)	6.75 (ii)	
Unit Hyd. Tpeak (min)=	5.00	10.00	
Unit Hyd. peak (cms)=	0.28	0.14	
			TOTALS
PEAK FLOW (cms)=	0.01	0.26	0.270 (iii)
TIME TO PEAK (hrs)=	12.25	12.25	12.25
RUNOFF VOLUME (mm)=	95.98	61.06	61.59
TOTAL RAINFALL (mm)=	96.98	96.98	96.98
RUNOFF COEFFICIENT =	0.99	0.63	0.64

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 68.8 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
STANDHYD (0013)	Area (ha)=	4.16	
ID= 1 DT= 5.0 min	Total Imp(%)=	50.00	Dir. Conn.(%)= 50.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	2.08	2.08
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	166.53	250.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.55	12.250	118.70	18.33	1.75
0.167	0.00	6.250	1.55	12.333	13.98	18.42	1.75
0.250	0.00	6.333	1.75	12.417	13.97	18.50	1.75

0.333	1.07	6.417	1.75	12.500	13.97	18.58	1.75
0.417	1.07	6.500	1.75	12.583	13.97	18.67	1.75
0.500	1.07	6.583	1.75	12.667	13.97	18.75	1.75
0.583	1.07	6.667	1.75	12.750	13.97	18.83	1.75
0.667	1.07	6.750	1.75	12.833	7.18	18.92	1.75
0.750	1.07	6.833	1.75	12.917	7.18	19.00	1.75
0.833	1.07	6.917	1.75	13.000	7.18	19.08	1.75
0.917	1.07	7.000	1.75	13.083	7.18	19.17	1.75
1.000	1.07	7.083	1.75	13.167	7.18	19.25	1.75
1.083	1.07	7.167	1.75	13.250	7.18	19.33	1.75
1.167	1.07	7.250	1.75	13.333	5.24	19.42	1.75
1.250	1.07	7.333	2.13	13.417	5.24	19.50	1.75
1.333	1.07	7.417	2.13	13.500	5.24	19.58	1.75
1.417	1.07	7.500	2.13	13.583	5.24	19.67	1.75
1.500	1.07	7.583	2.13	13.667	5.24	19.75	1.75
1.583	1.07	7.667	2.13	13.750	5.24	19.83	1.75
1.667	1.07	7.750	2.13	13.833	4.07	19.92	1.75
1.750	1.07	7.833	2.13	13.917	4.07	20.00	1.75
1.833	1.07	7.917	2.13	14.000	4.07	20.08	1.75
1.917	1.07	8.000	2.13	14.083	4.07	20.17	1.75
2.000	1.07	8.083	2.13	14.167	4.07	20.25	1.75
2.083	1.07	8.167	2.13	14.250	4.07	20.33	1.16
2.167	1.07	8.250	2.13	14.333	2.91	20.42	1.16
2.250	1.07	8.333	2.52	14.417	2.91	20.50	1.16
2.333	1.26	8.417	2.52	14.500	2.91	20.58	1.16
2.417	1.26	8.500	2.52	14.583	2.91	20.67	1.16
2.500	1.26	8.583	2.52	14.667	2.91	20.75	1.16
2.583	1.26	8.667	2.52	14.750	2.91	20.83	1.16
2.667	1.26	8.750	2.52	14.833	2.91	20.92	1.16
2.750	1.26	8.833	2.72	14.917	2.91	21.00	1.16
2.833	1.26	8.917	2.72	15.000	2.91	21.08	1.16
2.917	1.26	9.000	2.72	15.083	2.91	21.17	1.16
3.000	1.26	9.083	2.72	15.167	2.91	21.25	1.16
3.083	1.26	9.167	2.72	15.250	2.91	21.33	1.16
3.167	1.26	9.250	2.72	15.333	2.91	21.42	1.16
3.250	1.26	9.333	3.10	15.417	2.91	21.50	1.16
3.333	1.26	9.417	3.10	15.500	2.91	21.58	1.16
3.417	1.26	9.500	3.10	15.583	2.91	21.67	1.16
3.500	1.26	9.583	3.10	15.667	2.91	21.75	1.16
3.583	1.26	9.667	3.10	15.750	2.91	21.83	1.16
3.667	1.26	9.750	3.10	15.833	2.91	21.92	1.16
3.750	1.26	9.833	3.49	15.917	2.91	22.00	1.16
3.833	1.26	9.917	3.49	16.000	2.91	22.08	1.16
3.917	1.26	10.000	3.49	16.083	2.91	22.17	1.16
4.000	1.26	10.083	3.49	16.167	2.91	22.25	1.16
4.083	1.26	10.167	3.49	16.250	2.91	22.33	1.16
4.167	1.26	10.250	3.49	16.333	1.75	22.42	1.16
4.250	1.26	10.333	4.46	16.417	1.75	22.50	1.16

4.333	1.55	10.417	4.46	16.500	1.75	22.58	1.16
4.417	1.55	10.500	4.46	16.583	1.75	22.67	1.16
4.500	1.55	10.583	4.46	16.667	1.75	22.75	1.16
4.583	1.55	10.667	4.46	16.750	1.75	22.83	1.16
4.667	1.55	10.750	4.46	16.833	1.75	22.92	1.16
4.750	1.55	10.833	6.01	16.917	1.75	23.00	1.16
4.833	1.55	10.917	6.01	17.000	1.75	23.08	1.16
4.917	1.55	11.000	6.01	17.083	1.75	23.17	1.16
5.000	1.55	11.083	6.01	17.167	1.75	23.25	1.16
5.083	1.55	11.167	6.01	17.250	1.75	23.33	1.16
5.167	1.55	11.250	6.01	17.333	1.75	23.42	1.16
5.250	1.55	11.333	9.31	17.417	1.75	23.50	1.16
5.333	1.55	11.417	9.31	17.500	1.75	23.58	1.16
5.417	1.55	11.500	9.31	17.583	1.75	23.67	1.16
5.500	1.55	11.583	9.31	17.667	1.75	23.75	1.16
5.583	1.55	11.667	9.31	17.750	1.75	23.83	1.16
5.667	1.55	11.750	9.31	17.833	1.75	23.92	1.16
5.750	1.55	11.833	28.70	17.917	1.75	24.00	1.16
5.833	1.55	11.917	28.71	18.000	1.75	24.08	1.16
5.917	1.55	12.000	28.71	18.083	1.75	24.17	1.16
6.000	1.55	12.083	118.69	18.167	1.75	24.25	1.16
6.083	1.55	12.167	118.70	18.250	1.75		

Max.Eff.Inten.(mm/hr)=	118.70	29.54	
over (min)	5.00	40.00	
Storage Coeff. (min)=	3.99 (ii)	38.51 (ii)	
Unit Hyd. Tpeak (min)=	5.00	40.00	
Unit Hyd. peak (cms)=	0.24	0.03	
			TOTALS
PEAK FLOW (cms)=	0.67	0.10	0.711 (iii)
TIME TO PEAK (hrs)=	12.25	12.75	12.25
RUNOFF VOLUME (mm)=	95.98	41.01	68.49
TOTAL RAINFALL (mm)=	96.98	96.98	96.98
RUNOFF COEFFICIENT =	0.99	0.42	0.71

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
STANDHYD (0036)	Area (ha)=	2.12	
ID= 1 DT= 5.0 min	Total Imp(%)=	85.04	Dir. Conn.(%)= 0.10

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	1.80	0.32
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	118.88	175.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.55	12.250	118.70	18.33	1.75
0.167	0.00	6.250	1.55	12.333	13.98	18.42	1.75
0.250	0.00	6.333	1.75	12.417	13.97	18.50	1.75
0.333	1.07	6.417	1.75	12.500	13.97	18.58	1.75
0.417	1.07	6.500	1.75	12.583	13.97	18.67	1.75
0.500	1.07	6.583	1.75	12.667	13.97	18.75	1.75
0.583	1.07	6.667	1.75	12.750	13.97	18.83	1.75
0.667	1.07	6.750	1.75	12.833	7.18	18.92	1.75
0.750	1.07	6.833	1.75	12.917	7.18	19.00	1.75
0.833	1.07	6.917	1.75	13.000	7.18	19.08	1.75
0.917	1.07	7.000	1.75	13.083	7.18	19.17	1.75
1.000	1.07	7.083	1.75	13.167	7.18	19.25	1.75
1.083	1.07	7.167	1.75	13.250	7.18	19.33	1.75
1.167	1.07	7.250	1.75	13.333	5.24	19.42	1.75
1.250	1.07	7.333	2.13	13.417	5.24	19.50	1.75
1.333	1.07	7.417	2.13	13.500	5.24	19.58	1.75
1.417	1.07	7.500	2.13	13.583	5.24	19.67	1.75
1.500	1.07	7.583	2.13	13.667	5.24	19.75	1.75
1.583	1.07	7.667	2.13	13.750	5.24	19.83	1.75
1.667	1.07	7.750	2.13	13.833	4.07	19.92	1.75
1.750	1.07	7.833	2.13	13.917	4.07	20.00	1.75
1.833	1.07	7.917	2.13	14.000	4.07	20.08	1.75
1.917	1.07	8.000	2.13	14.083	4.07	20.17	1.75
2.000	1.07	8.083	2.13	14.167	4.07	20.25	1.75
2.083	1.07	8.167	2.13	14.250	4.07	20.33	1.16
2.167	1.07	8.250	2.13	14.333	2.91	20.42	1.16
2.250	1.07	8.333	2.52	14.417	2.91	20.50	1.16
2.333	1.26	8.417	2.52	14.500	2.91	20.58	1.16
2.417	1.26	8.500	2.52	14.583	2.91	20.67	1.16
2.500	1.26	8.583	2.52	14.667	2.91	20.75	1.16
2.583	1.26	8.667	2.52	14.750	2.91	20.83	1.16
2.667	1.26	8.750	2.52	14.833	2.91	20.92	1.16
2.750	1.26	8.833	2.72	14.917	2.91	21.00	1.16
2.833	1.26	8.917	2.72	15.000	2.91	21.08	1.16

2.917	1.26	9.000	2.72	15.083	2.91	21.17	1.16
3.000	1.26	9.083	2.72	15.167	2.91	21.25	1.16
3.083	1.26	9.167	2.72	15.250	2.91	21.33	1.16
3.167	1.26	9.250	2.72	15.333	2.91	21.42	1.16
3.250	1.26	9.333	3.10	15.417	2.91	21.50	1.16
3.333	1.26	9.417	3.10	15.500	2.91	21.58	1.16
3.417	1.26	9.500	3.10	15.583	2.91	21.67	1.16
3.500	1.26	9.583	3.10	15.667	2.91	21.75	1.16
3.583	1.26	9.667	3.10	15.750	2.91	21.83	1.16
3.667	1.26	9.750	3.10	15.833	2.91	21.92	1.16
3.750	1.26	9.833	3.49	15.917	2.91	22.00	1.16
3.833	1.26	9.917	3.49	16.000	2.91	22.08	1.16
3.917	1.26	10.000	3.49	16.083	2.91	22.17	1.16
4.000	1.26	10.083	3.49	16.167	2.91	22.25	1.16
4.083	1.26	10.167	3.49	16.250	2.91	22.33	1.16
4.167	1.26	10.250	3.49	16.333	1.75	22.42	1.16
4.250	1.26	10.333	4.46	16.417	1.75	22.50	1.16
4.333	1.55	10.417	4.46	16.500	1.75	22.58	1.16
4.417	1.55	10.500	4.46	16.583	1.75	22.67	1.16
4.500	1.55	10.583	4.46	16.667	1.75	22.75	1.16
4.583	1.55	10.667	4.46	16.750	1.75	22.83	1.16
4.667	1.55	10.750	4.46	16.833	1.75	22.92	1.16
4.750	1.55	10.833	6.01	16.917	1.75	23.00	1.16
4.833	1.55	10.917	6.01	17.000	1.75	23.08	1.16
4.917	1.55	11.000	6.01	17.083	1.75	23.17	1.16
5.000	1.55	11.083	6.01	17.167	1.75	23.25	1.16
5.083	1.55	11.167	6.01	17.250	1.75	23.33	1.16
5.167	1.55	11.250	6.01	17.333	1.75	23.42	1.16
5.250	1.55	11.333	9.31	17.417	1.75	23.50	1.16
5.333	1.55	11.417	9.31	17.500	1.75	23.58	1.16
5.417	1.55	11.500	9.31	17.583	1.75	23.67	1.16
5.500	1.55	11.583	9.31	17.667	1.75	23.75	1.16
5.583	1.55	11.667	9.31	17.750	1.75	23.83	1.16
5.667	1.55	11.750	9.31	17.833	1.75	23.92	1.16
5.750	1.55	11.833	28.70	17.917	1.75	24.00	1.16
5.833	1.55	11.917	28.71	18.000	1.75	24.08	1.16
5.917	1.55	12.000	28.71	18.083	1.75	24.17	1.16
6.000	1.55	12.083	118.69	18.167	1.75	24.25	1.16
6.083	1.55	12.167	118.70	18.250	1.75		

Max.Eff.Inten.	(mm/hr)=	118.70	745.50	
over	(min)	5.00	15.00	
Storage Coeff.	(min)=	3.26 (ii)	10.92 (ii)	
Unit Hyd. Tpeak	(min)=	5.00	15.00	
Unit Hyd. peak	(cms)=	0.27	0.09	
				TOTALS
PEAK FLOW	(cms)=	0.00	0.44	0.444 (iii)
TIME TO PEAK	(hrs)=	12.25	12.33	12.33

RUNOFF VOLUME	(mm)=	95.98	81.72	81.73
TOTAL RAINFALL	(mm)=	96.98	96.98	96.98
RUNOFF COEFFICIENT	=	0.99	0.84	0.84

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	
STANDHYD (0043)	Area (ha)= 0.13
ID= 1 DT= 5.0 min	Total Imp(%)= 30.77 Dir. Conn.(%)= 7.69

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.04	0.09
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	0.50
Length	(m)=	29.44	70.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.55	12.250	118.70	18.33	1.75
0.167	0.00	6.250	1.55	12.333	13.98	18.42	1.75
0.250	0.00	6.333	1.75	12.417	13.97	18.50	1.75
0.333	1.07	6.417	1.75	12.500	13.97	18.58	1.75
0.417	1.07	6.500	1.75	12.583	13.97	18.67	1.75
0.500	1.07	6.583	1.75	12.667	13.97	18.75	1.75
0.583	1.07	6.667	1.75	12.750	13.97	18.83	1.75
0.667	1.07	6.750	1.75	12.833	7.18	18.92	1.75
0.750	1.07	6.833	1.75	12.917	7.18	19.00	1.75
0.833	1.07	6.917	1.75	13.000	7.18	19.08	1.75
0.917	1.07	7.000	1.75	13.083	7.18	19.17	1.75
1.000	1.07	7.083	1.75	13.167	7.18	19.25	1.75
1.083	1.07	7.167	1.75	13.250	7.18	19.33	1.75
1.167	1.07	7.250	1.75	13.333	5.24	19.42	1.75
1.250	1.07	7.333	2.13	13.417	5.24	19.50	1.75

1.333	1.07	7.417	2.13	13.500	5.24	19.58	1.75
1.417	1.07	7.500	2.13	13.583	5.24	19.67	1.75
1.500	1.07	7.583	2.13	13.667	5.24	19.75	1.75
1.583	1.07	7.667	2.13	13.750	5.24	19.83	1.75
1.667	1.07	7.750	2.13	13.833	4.07	19.92	1.75
1.750	1.07	7.833	2.13	13.917	4.07	20.00	1.75
1.833	1.07	7.917	2.13	14.000	4.07	20.08	1.75
1.917	1.07	8.000	2.13	14.083	4.07	20.17	1.75
2.000	1.07	8.083	2.13	14.167	4.07	20.25	1.75
2.083	1.07	8.167	2.13	14.250	4.07	20.33	1.16
2.167	1.07	8.250	2.13	14.333	2.91	20.42	1.16
2.250	1.07	8.333	2.52	14.417	2.91	20.50	1.16
2.333	1.26	8.417	2.52	14.500	2.91	20.58	1.16
2.417	1.26	8.500	2.52	14.583	2.91	20.67	1.16
2.500	1.26	8.583	2.52	14.667	2.91	20.75	1.16
2.583	1.26	8.667	2.52	14.750	2.91	20.83	1.16
2.667	1.26	8.750	2.52	14.833	2.91	20.92	1.16
2.750	1.26	8.833	2.72	14.917	2.91	21.00	1.16
2.833	1.26	8.917	2.72	15.000	2.91	21.08	1.16
2.917	1.26	9.000	2.72	15.083	2.91	21.17	1.16
3.000	1.26	9.083	2.72	15.167	2.91	21.25	1.16
3.083	1.26	9.167	2.72	15.250	2.91	21.33	1.16
3.167	1.26	9.250	2.72	15.333	2.91	21.42	1.16
3.250	1.26	9.333	3.10	15.417	2.91	21.50	1.16
3.333	1.26	9.417	3.10	15.500	2.91	21.58	1.16
3.417	1.26	9.500	3.10	15.583	2.91	21.67	1.16
3.500	1.26	9.583	3.10	15.667	2.91	21.75	1.16
3.583	1.26	9.667	3.10	15.750	2.91	21.83	1.16
3.667	1.26	9.750	3.10	15.833	2.91	21.92	1.16
3.750	1.26	9.833	3.49	15.917	2.91	22.00	1.16
3.833	1.26	9.917	3.49	16.000	2.91	22.08	1.16
3.917	1.26	10.000	3.49	16.083	2.91	22.17	1.16
4.000	1.26	10.083	3.49	16.167	2.91	22.25	1.16
4.083	1.26	10.167	3.49	16.250	2.91	22.33	1.16
4.167	1.26	10.250	3.49	16.333	1.75	22.42	1.16
4.250	1.26	10.333	4.46	16.417	1.75	22.50	1.16
4.333	1.55	10.417	4.46	16.500	1.75	22.58	1.16
4.417	1.55	10.500	4.46	16.583	1.75	22.67	1.16
4.500	1.55	10.583	4.46	16.667	1.75	22.75	1.16
4.583	1.55	10.667	4.46	16.750	1.75	22.83	1.16
4.667	1.55	10.750	4.46	16.833	1.75	22.92	1.16
4.750	1.55	10.833	6.01	16.917	1.75	23.00	1.16
4.833	1.55	10.917	6.01	17.000	1.75	23.08	1.16
4.917	1.55	11.000	6.01	17.083	1.75	23.17	1.16
5.000	1.55	11.083	6.01	17.167	1.75	23.25	1.16
5.083	1.55	11.167	6.01	17.250	1.75	23.33	1.16
5.167	1.55	11.250	6.01	17.333	1.75	23.42	1.16
5.250	1.55	11.333	9.31	17.417	1.75	23.50	1.16

5.333	1.55	11.417	9.31	17.500	1.75	23.58	1.16
5.417	1.55	11.500	9.31	17.583	1.75	23.67	1.16
5.500	1.55	11.583	9.31	17.667	1.75	23.75	1.16
5.583	1.55	11.667	9.31	17.750	1.75	23.83	1.16
5.667	1.55	11.750	9.31	17.833	1.75	23.92	1.16
5.750	1.55	11.833	28.70	17.917	1.75	24.00	1.16
5.833	1.55	11.917	28.71	18.000	1.75	24.08	1.16
5.917	1.55	12.000	28.71	18.083	1.75	24.17	1.16
6.000	1.55	12.083	118.69	18.167	1.75	24.25	1.16
6.083	1.55	12.167	118.70	18.250	1.75		

Max.Eff.Inten.(mm/hr)=	118.70	71.91	
over (min)	5.00	20.00	
Storage Coeff. (min)=	1.41 (ii)	18.49 (ii)	
Unit Hyd. Tpeak (min)=	5.00	20.00	
Unit Hyd. peak (cms)=	0.33	0.06	
			TOTALS
PEAK FLOW (cms)=	0.00	0.01	0.012 (iii)
TIME TO PEAK (hrs)=	12.25	12.42	12.42
RUNOFF VOLUME (mm)=	95.98	48.61	52.16
TOTAL RAINFALL (mm)=	96.98	96.98	96.98
RUNOFF COEFFICIENT =	0.99	0.50	0.54

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (0044) | Area (ha)= 1.62
ID= 1 DT= 5.0 min | Total Imp(%)= 48.77 Dir. Conn.(%)= 30.86

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.79	0.83
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	1.40
Length	(m)=	103.92	400.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.55	12.250	118.70	18.33	1.75
0.167	0.00	6.250	1.55	12.333	13.98	18.42	1.75
0.250	0.00	6.333	1.75	12.417	13.97	18.50	1.75
0.333	1.07	6.417	1.75	12.500	13.97	18.58	1.75
0.417	1.07	6.500	1.75	12.583	13.97	18.67	1.75
0.500	1.07	6.583	1.75	12.667	13.97	18.75	1.75
0.583	1.07	6.667	1.75	12.750	13.97	18.83	1.75
0.667	1.07	6.750	1.75	12.833	7.18	18.92	1.75
0.750	1.07	6.833	1.75	12.917	7.18	19.00	1.75
0.833	1.07	6.917	1.75	13.000	7.18	19.08	1.75
0.917	1.07	7.000	1.75	13.083	7.18	19.17	1.75
1.000	1.07	7.083	1.75	13.167	7.18	19.25	1.75
1.083	1.07	7.167	1.75	13.250	7.18	19.33	1.75
1.167	1.07	7.250	1.75	13.333	5.24	19.42	1.75
1.250	1.07	7.333	2.13	13.417	5.24	19.50	1.75
1.333	1.07	7.417	2.13	13.500	5.24	19.58	1.75
1.417	1.07	7.500	2.13	13.583	5.24	19.67	1.75
1.500	1.07	7.583	2.13	13.667	5.24	19.75	1.75
1.583	1.07	7.667	2.13	13.750	5.24	19.83	1.75
1.667	1.07	7.750	2.13	13.833	4.07	19.92	1.75
1.750	1.07	7.833	2.13	13.917	4.07	20.00	1.75
1.833	1.07	7.917	2.13	14.000	4.07	20.08	1.75
1.917	1.07	8.000	2.13	14.083	4.07	20.17	1.75
2.000	1.07	8.083	2.13	14.167	4.07	20.25	1.75
2.083	1.07	8.167	2.13	14.250	4.07	20.33	1.16
2.167	1.07	8.250	2.13	14.333	2.91	20.42	1.16
2.250	1.07	8.333	2.52	14.417	2.91	20.50	1.16
2.333	1.26	8.417	2.52	14.500	2.91	20.58	1.16
2.417	1.26	8.500	2.52	14.583	2.91	20.67	1.16
2.500	1.26	8.583	2.52	14.667	2.91	20.75	1.16
2.583	1.26	8.667	2.52	14.750	2.91	20.83	1.16
2.667	1.26	8.750	2.52	14.833	2.91	20.92	1.16
2.750	1.26	8.833	2.72	14.917	2.91	21.00	1.16
2.833	1.26	8.917	2.72	15.000	2.91	21.08	1.16
2.917	1.26	9.000	2.72	15.083	2.91	21.17	1.16
3.000	1.26	9.083	2.72	15.167	2.91	21.25	1.16
3.083	1.26	9.167	2.72	15.250	2.91	21.33	1.16
3.167	1.26	9.250	2.72	15.333	2.91	21.42	1.16
3.250	1.26	9.333	3.10	15.417	2.91	21.50	1.16
3.333	1.26	9.417	3.10	15.500	2.91	21.58	1.16
3.417	1.26	9.500	3.10	15.583	2.91	21.67	1.16
3.500	1.26	9.583	3.10	15.667	2.91	21.75	1.16
3.583	1.26	9.667	3.10	15.750	2.91	21.83	1.16
3.667	1.26	9.750	3.10	15.833	2.91	21.92	1.16

3.750	1.26	9.833	3.49	15.917	2.91	22.00	1.16
3.833	1.26	9.917	3.49	16.000	2.91	22.08	1.16
3.917	1.26	10.000	3.49	16.083	2.91	22.17	1.16
4.000	1.26	10.083	3.49	16.167	2.91	22.25	1.16
4.083	1.26	10.167	3.49	16.250	2.91	22.33	1.16
4.167	1.26	10.250	3.49	16.333	1.75	22.42	1.16
4.250	1.26	10.333	4.46	16.417	1.75	22.50	1.16
4.333	1.55	10.417	4.46	16.500	1.75	22.58	1.16
4.417	1.55	10.500	4.46	16.583	1.75	22.67	1.16
4.500	1.55	10.583	4.46	16.667	1.75	22.75	1.16
4.583	1.55	10.667	4.46	16.750	1.75	22.83	1.16
4.667	1.55	10.750	4.46	16.833	1.75	22.92	1.16
4.750	1.55	10.833	6.01	16.917	1.75	23.00	1.16
4.833	1.55	10.917	6.01	17.000	1.75	23.08	1.16
4.917	1.55	11.000	6.01	17.083	1.75	23.17	1.16
5.000	1.55	11.083	6.01	17.167	1.75	23.25	1.16
5.083	1.55	11.167	6.01	17.250	1.75	23.33	1.16
5.167	1.55	11.250	6.01	17.333	1.75	23.42	1.16
5.250	1.55	11.333	9.31	17.417	1.75	23.50	1.16
5.333	1.55	11.417	9.31	17.500	1.75	23.58	1.16
5.417	1.55	11.500	9.31	17.583	1.75	23.67	1.16
5.500	1.55	11.583	9.31	17.667	1.75	23.75	1.16
5.583	1.55	11.667	9.31	17.750	1.75	23.83	1.16
5.667	1.55	11.750	9.31	17.833	1.75	23.92	1.16
5.750	1.55	11.833	28.70	17.917	1.75	24.00	1.16
5.833	1.55	11.917	28.71	18.000	1.75	24.08	1.16
5.917	1.55	12.000	28.71	18.083	1.75	24.17	1.16
6.000	1.55	12.083	118.69	18.167	1.75	24.25	1.16
6.083	1.55	12.167	118.70	18.250	1.75		

Max.Eff.Inten.(mm/hr)=	118.70	40.35	
over (min)	5.00	50.00	
Storage Coeff. (min)=	3.01 (ii)	47.96 (ii)	
Unit Hyd. Tpeak (min)=	5.00	50.00	
Unit Hyd. peak (cms)=	0.28	0.02	
			TOTALS
PEAK FLOW (cms)=	0.16	0.06	0.182 (iii)
TIME TO PEAK (hrs)=	12.25	12.92	12.25
RUNOFF VOLUME (mm)=	95.98	48.92	63.43
TOTAL RAINFALL (mm)=	96.98	96.98	96.98
RUNOFF COEFFICIENT =	0.99	0.50	0.65

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.

(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0037) | 1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0010):	1.32	0.270	12.25	61.59
+ ID2= 2 (0013):	4.16	0.711	12.25	68.49
ID = 3 (0037):	5.48	0.981	12.25	66.83

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0037) | 3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0037):	5.48	0.981	12.25	66.83
+ ID2= 2 (0036):	2.12	0.444	12.33	81.73
ID = 1 (0037):	7.60	1.384	12.25	70.98

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0037) | 1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0037):	7.60	1.384	12.25	70.98
+ ID2= 2 (0043):	0.13	0.012	12.42	52.16
ID = 3 (0037):	7.73	1.395	12.25	70.67

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0037) | 3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0037):	7.73	1.395	12.25	70.67
+ ID2= 2 (0044):	1.62	0.182	12.25	63.43
ID = 1 (0037):	9.35	1.577	12.25	69.41

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0037)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0037):		9.35	1.577	12.25	69.41
+ ID2= 2 (0009):		31.06	4.803	12.25	63.22
ID = 3 (0037):		40.41	6.380	12.25	64.65

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

RESERVOIR(0038)	OVERFLOW IS OFF			
IN= 2---> OUT= 1				
DT= 5.0 min	OUTFLOW (cms)	STORAGE (ha.m.)	OUTFLOW (cms)	STORAGE (ha.m.)
	0.0000	0.0000	0.5076	2.8989
	0.0000	0.2023	0.6060	3.2065
	0.0353	0.4202	0.7105	3.5196
	0.0525	0.6536	0.8207	3.8381
	0.0654	0.9026	0.9365	4.1621
	0.0843	1.1671	1.0574	4.4915
	0.1858	1.7227	1.1833	4.8263
	0.2540	2.0086	1.3139	5.1665
	0.3309	2.2999	1.4492	5.5122
	0.4157	2.5967	1.5890	5.8633

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
INFLOW : ID= 2 (0037)	40.410	6.380	12.25	64.65
OUTFLOW: ID= 1 (0038)	40.410	0.225	16.42	59.61

PEAK FLOW REDUCTION [Qout/Qin](%)= 3.53
TIME SHIFT OF PEAK FLOW (min)=250.00
MAXIMUM STORAGE USED (ha.m.)= 1.8880

CALIB	
STANDHYD (0017)	Area (ha)= 1.59
ID= 1 DT= 5.0 min	Total Imp(%)= 58.58 Dir. Conn.(%)= 27.10

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	0.93	0.66

Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	0.50	2.00
Length (m)=	102.96	30.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.55	12.250	118.70	18.33	1.75
0.167	0.00	6.250	1.55	12.333	13.98	18.42	1.75
0.250	0.00	6.333	1.75	12.417	13.97	18.50	1.75
0.333	1.07	6.417	1.75	12.500	13.97	18.58	1.75
0.417	1.07	6.500	1.75	12.583	13.97	18.67	1.75
0.500	1.07	6.583	1.75	12.667	13.97	18.75	1.75
0.583	1.07	6.667	1.75	12.750	13.97	18.83	1.75
0.667	1.07	6.750	1.75	12.833	7.18	18.92	1.75
0.750	1.07	6.833	1.75	12.917	7.18	19.00	1.75
0.833	1.07	6.917	1.75	13.000	7.18	19.08	1.75
0.917	1.07	7.000	1.75	13.083	7.18	19.17	1.75
1.000	1.07	7.083	1.75	13.167	7.18	19.25	1.75
1.083	1.07	7.167	1.75	13.250	7.18	19.33	1.75
1.167	1.07	7.250	1.75	13.333	5.24	19.42	1.75
1.250	1.07	7.333	2.13	13.417	5.24	19.50	1.75
1.333	1.07	7.417	2.13	13.500	5.24	19.58	1.75
1.417	1.07	7.500	2.13	13.583	5.24	19.67	1.75
1.500	1.07	7.583	2.13	13.667	5.24	19.75	1.75
1.583	1.07	7.667	2.13	13.750	5.24	19.83	1.75
1.667	1.07	7.750	2.13	13.833	4.07	19.92	1.75
1.750	1.07	7.833	2.13	13.917	4.07	20.00	1.75
1.833	1.07	7.917	2.13	14.000	4.07	20.08	1.75
1.917	1.07	8.000	2.13	14.083	4.07	20.17	1.75
2.000	1.07	8.083	2.13	14.167	4.07	20.25	1.75
2.083	1.07	8.167	2.13	14.250	4.07	20.33	1.16
2.167	1.07	8.250	2.13	14.333	2.91	20.42	1.16
2.250	1.07	8.333	2.52	14.417	2.91	20.50	1.16
2.333	1.26	8.417	2.52	14.500	2.91	20.58	1.16
2.417	1.26	8.500	2.52	14.583	2.91	20.67	1.16
2.500	1.26	8.583	2.52	14.667	2.91	20.75	1.16
2.583	1.26	8.667	2.52	14.750	2.91	20.83	1.16
2.667	1.26	8.750	2.52	14.833	2.91	20.92	1.16
2.750	1.26	8.833	2.72	14.917	2.91	21.00	1.16
2.833	1.26	8.917	2.72	15.000	2.91	21.08	1.16
2.917	1.26	9.000	2.72	15.083	2.91	21.17	1.16
3.000	1.26	9.083	2.72	15.167	2.91	21.25	1.16
3.083	1.26	9.167	2.72	15.250	2.91	21.33	1.16

3.167	1.26	9.250	2.72	15.333	2.91	21.42	1.16
3.250	1.26	9.333	3.10	15.417	2.91	21.50	1.16
3.333	1.26	9.417	3.10	15.500	2.91	21.58	1.16
3.417	1.26	9.500	3.10	15.583	2.91	21.67	1.16
3.500	1.26	9.583	3.10	15.667	2.91	21.75	1.16
3.583	1.26	9.667	3.10	15.750	2.91	21.83	1.16
3.667	1.26	9.750	3.10	15.833	2.91	21.92	1.16
3.750	1.26	9.833	3.49	15.917	2.91	22.00	1.16
3.833	1.26	9.917	3.49	16.000	2.91	22.08	1.16
3.917	1.26	10.000	3.49	16.083	2.91	22.17	1.16
4.000	1.26	10.083	3.49	16.167	2.91	22.25	1.16
4.083	1.26	10.167	3.49	16.250	2.91	22.33	1.16
4.167	1.26	10.250	3.49	16.333	1.75	22.42	1.16
4.250	1.26	10.333	4.46	16.417	1.75	22.50	1.16
4.333	1.55	10.417	4.46	16.500	1.75	22.58	1.16
4.417	1.55	10.500	4.46	16.583	1.75	22.67	1.16
4.500	1.55	10.583	4.46	16.667	1.75	22.75	1.16
4.583	1.55	10.667	4.46	16.750	1.75	22.83	1.16
4.667	1.55	10.750	4.46	16.833	1.75	22.92	1.16
4.750	1.55	10.833	6.01	16.917	1.75	23.00	1.16
4.833	1.55	10.917	6.01	17.000	1.75	23.08	1.16
4.917	1.55	11.000	6.01	17.083	1.75	23.17	1.16
5.000	1.55	11.083	6.01	17.167	1.75	23.25	1.16
5.083	1.55	11.167	6.01	17.250	1.75	23.33	1.16
5.167	1.55	11.250	6.01	17.333	1.75	23.42	1.16
5.250	1.55	11.333	9.31	17.417	1.75	23.50	1.16
5.333	1.55	11.417	9.31	17.500	1.75	23.58	1.16
5.417	1.55	11.500	9.31	17.583	1.75	23.67	1.16
5.500	1.55	11.583	9.31	17.667	1.75	23.75	1.16
5.583	1.55	11.667	9.31	17.750	1.75	23.83	1.16
5.667	1.55	11.750	9.31	17.833	1.75	23.92	1.16
5.750	1.55	11.833	28.70	17.917	1.75	24.00	1.16
5.833	1.55	11.917	28.71	18.000	1.75	24.08	1.16
5.917	1.55	12.000	28.71	18.083	1.75	24.17	1.16
6.000	1.55	12.083	118.69	18.167	1.75	24.25	1.16
6.083	1.55	12.167	118.70	18.250	1.75		

Max.Eff.Inten.(mm/hr)=	118.70	137.06	
over (min)	5.00	10.00	
Storage Coeff. (min)=	2.99 (ii)	8.22 (ii)	
Unit Hyd. Tpeak (min)=	5.00	10.00	
Unit Hyd. peak (cms)=	0.28	0.13	
			TOTALS
PEAK FLOW (cms)=	0.14	0.19	0.332 (iii)
TIME TO PEAK (hrs)=	12.25	12.25	12.25
RUNOFF VOLUME (mm)=	95.98	53.16	64.76
TOTAL RAINFALL (mm)=	96.98	96.98	96.98
RUNOFF COEFFICIENT =	0.99	0.55	0.67

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 66.5 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

Junction Command(0018)

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
INFLOW : ID= 2(0017)	1.59	0.33	12.25	64.76
OUTFLOW: ID= 2(0018)	1.59	0.33	12.25	64.76

ADD HYD (0023)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0016):		234.30	4.158	13.25	29.33
+ ID2= 2 (0018):		1.59	0.332	12.25	64.76
ID = 3 (0023):		235.89	4.185	13.25	29.57

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0023):		235.89	4.185	13.25	29.57
+ ID2= 2 (0038):		40.41	0.225	16.42	59.61
ID = 1 (0023):		276.30	4.366	13.25	33.96

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

****
** SIMULATION:J - 25-year SCS **
****

READ STORM	Filename: C:\Users\ecomish\AppData\Local\Temp\bd70dd54-263f-4ef7-b852-c48fc040cbd3\67437f9c
Ptotal=114.04 mm	Comments: 25yr 24hr 15min SCS Type II (MTO) - 15%

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.00	0.00	6.25	2.05	12.50	16.42	18.75	2.05
0.25	1.25	6.50	2.05	12.75	8.44	19.00	2.05
0.50	1.25	6.75	2.05	13.00	8.44	19.25	2.05
0.75	1.25	7.00	2.05	13.25	6.16	19.50	2.05
1.00	1.25	7.25	2.51	13.50	6.16	19.75	2.05
1.25	1.25	7.50	2.51	13.75	4.79	20.00	2.05
1.50	1.25	7.75	2.51	14.00	4.79	20.25	1.37
1.75	1.25	8.00	2.51	14.25	3.42	20.50	1.37
2.00	1.25	8.25	2.97	14.50	3.42	20.75	1.37
2.25	1.48	8.50	2.97	14.75	3.42	21.00	1.37
2.50	1.48	8.75	3.19	15.00	3.42	21.25	1.37
2.75	1.48	9.00	3.19	15.25	3.42	21.50	1.37
3.00	1.48	9.25	3.65	15.50	3.42	21.75	1.37
3.25	1.48	9.50	3.65	15.75	3.42	22.00	1.37
3.50	1.48	9.75	4.11	16.00	3.42	22.25	1.37
3.75	1.48	10.00	4.11	16.25	2.05	22.50	1.37
4.00	1.48	10.25	5.25	16.50	2.05	22.75	1.37
4.25	1.82	10.50	5.25	16.75	2.05	23.00	1.37
4.50	1.82	10.75	7.07	17.00	2.05	23.25	1.37
4.75	1.82	11.00	7.07	17.25	2.05	23.50	1.37
5.00	1.82	11.25	10.95	17.50	2.05	23.75	1.37
5.25	1.82	11.50	10.95	17.75	2.05	24.00	1.37
5.50	1.82	11.75	33.76	18.00	2.05		
5.75	1.82	12.00	139.58	18.25	2.05		
6.00	1.82	12.25	16.42	18.50	2.05		

CALIB			
NASHYD (0025)	Area (ha)= 100.92	Curve Number (CN)= 55.9	
ID= 1 DT= 5.0 min	Ia (mm)= 7.89	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 1.70		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
0.083	0.00	6.167	1.82	12.250	139.58	18.33	2.05
0.167	0.00	6.250	1.82	12.333	16.44	18.42	2.05
0.250	0.00	6.333	2.05	12.417	16.42	18.50	2.05
0.333	1.25	6.417	2.05	12.500	16.42	18.58	2.05
0.417	1.25	6.500	2.05	12.583	16.42	18.67	2.05
0.500	1.25	6.583	2.05	12.667	16.42	18.75	2.05
0.583	1.25	6.667	2.05	12.750	16.42	18.83	2.05
0.667	1.25	6.750	2.05	12.833	8.44	18.92	2.05
0.750	1.25	6.833	2.05	12.917	8.44	19.00	2.05
0.833	1.25	6.917	2.05	13.000	8.44	19.08	2.05
0.917	1.25	7.000	2.05	13.083	8.44	19.17	2.05
1.000	1.25	7.083	2.05	13.167	8.44	19.25	2.05
1.083	1.25	7.167	2.05	13.250	8.44	19.33	2.05
1.167	1.25	7.250	2.05	13.333	6.16	19.42	2.05
1.250	1.25	7.333	2.51	13.417	6.16	19.50	2.05
1.333	1.25	7.417	2.51	13.500	6.16	19.58	2.05
1.417	1.25	7.500	2.51	13.583	6.16	19.67	2.05
1.500	1.25	7.583	2.51	13.667	6.16	19.75	2.05
1.583	1.25	7.667	2.51	13.750	6.16	19.83	2.05
1.667	1.25	7.750	2.51	13.833	4.79	19.92	2.05
1.750	1.25	7.833	2.51	13.917	4.79	20.00	2.05
1.833	1.25	7.917	2.51	14.000	4.79	20.08	2.05
1.917	1.25	8.000	2.51	14.083	4.79	20.17	2.05
2.000	1.25	8.083	2.51	14.167	4.79	20.25	2.05
2.083	1.25	8.167	2.51	14.250	4.79	20.33	1.37
2.167	1.25	8.250	2.51	14.333	3.42	20.42	1.37
2.250	1.25	8.333	2.97	14.417	3.42	20.50	1.37
2.333	1.48	8.417	2.97	14.500	3.42	20.58	1.37
2.417	1.48	8.500	2.97	14.583	3.42	20.67	1.37
2.500	1.48	8.583	2.97	14.667	3.42	20.75	1.37
2.583	1.48	8.667	2.97	14.750	3.42	20.83	1.37
2.667	1.48	8.750	2.97	14.833	3.42	20.92	1.37
2.750	1.48	8.833	3.19	14.917	3.42	21.00	1.37
2.833	1.48	8.917	3.19	15.000	3.42	21.08	1.37
2.917	1.48	9.000	3.19	15.083	3.42	21.17	1.37
3.000	1.48	9.083	3.19	15.167	3.42	21.25	1.37
3.083	1.48	9.167	3.19	15.250	3.42	21.33	1.37
3.167	1.48	9.250	3.19	15.333	3.42	21.42	1.37
3.250	1.48	9.333	3.65	15.417	3.42	21.50	1.37
3.333	1.48	9.417	3.65	15.500	3.42	21.58	1.37
3.417	1.48	9.500	3.65	15.583	3.42	21.67	1.37
3.500	1.48	9.583	3.65	15.667	3.42	21.75	1.37
3.583	1.48	9.667	3.65	15.750	3.42	21.83	1.37
3.667	1.48	9.750	3.65	15.833	3.42	21.92	1.37
3.750	1.48	9.833	4.11	15.917	3.42	22.00	1.37
3.833	1.48	9.917	4.11	16.000	3.42	22.08	1.37
3.917	1.48	10.000	4.11	16.083	3.42	22.17	1.37
4.000	1.48	10.083	4.11	16.167	3.42	22.25	1.37
4.083	1.48	10.167	4.11	16.250	3.42	22.33	1.37
4.167	1.48	10.250	4.11	16.333	2.05	22.42	1.37
4.250	1.48	10.333	5.25	16.417	2.05	22.50	1.37
4.333	1.82	10.417	5.25	16.500	2.05	22.58	1.37
4.417	1.82	10.500	5.25	16.583	2.05	22.67	1.37
4.500	1.82	10.583	5.25	16.667	2.05	22.75	1.37
4.583	1.82	10.667	5.25	16.750	2.05	22.83	1.37
4.667	1.82	10.750	5.25	16.833	2.05	22.92	1.37
4.750	1.82	10.833	7.07	16.917	2.05	23.00	1.37
4.833	1.82	10.917	7.07	17.000	2.05	23.08	1.37
4.917	1.82	11.000	7.07	17.083	2.05	23.17	1.37
5.000	1.82	11.083	7.07	17.167	2.05	23.25	1.37
5.083	1.82	11.167	7.07	17.250	2.05	23.33	1.37
5.167	1.82	11.250	7.07	17.333	2.05	23.42	1.37
5.250	1.82	11.333	10.95	17.417	2.05	23.50	1.37
5.333	1.82	11.417	10.95	17.500	2.05	23.58	1.37
5.417	1.82	11.500	10.95	17.583	2.05	23.67	1.37
5.500	1.82	11.583	10.95	17.667	2.05	23.75	1.37
5.583	1.82	11.667	10.95	17.750	2.05	23.83	1.37
5.667	1.82	11.750	10.95	17.833	2.05	23.92	1.37
5.750	1.82	11.833	33.75	17.917	2.05	24.00	1.37
5.833	1.82	11.917	33.76	18.000	2.05	24.08	1.37
5.917	1.82	12.000	33.76	18.083	2.05	24.17	1.37
6.000	1.82	12.083	139.57	18.167	2.05	24.25	1.37
6.083	1.82	12.167	139.58	18.250	2.05		

Unit Hyd Qpeak (cms)= 2.267

PEAK FLOW (cms)= 1.938 (i)
TIME TO PEAK (hrs)= 14.083
RUNOFF VOLUME (mm)= 36.798
TOTAL RAINFALL (mm)= 114.040
RUNOFF COEFFICIENT = 0.323

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0002)	Area (ha)= 23.99	Curve Number (CN)= 44.7	
ID= 1 DT= 5.0 min	Ia (mm)= 10.91	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.97		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
0.083	0.00	6.167	1.82	12.250	139.58	18.33	2.05
0.167	0.00	6.250	1.82	12.333	16.44	18.42	2.05
0.250	0.00	6.333	2.05	12.417	16.42	18.50	2.05
0.333	1.25	6.417	2.05	12.500	16.42	18.58	2.05
0.417	1.25	6.500	2.05	12.583	16.42	18.67	2.05
0.500	1.25	6.583	2.05	12.667	16.42	18.75	2.05
0.583	1.25	6.667	2.05	12.750	16.42	18.83	2.05
0.667	1.25	6.750	2.05	12.833	8.44	18.92	2.05
0.750	1.25	6.833	2.05	12.917	8.44	19.00	2.05
0.833	1.25	6.917	2.05	13.000	8.44	19.08	2.05
0.917	1.25	7.000	2.05	13.083	8.44	19.17	2.05
1.000	1.25	7.083	2.05	13.167	8.44	19.25	2.05
1.083	1.25	7.167	2.05	13.250	8.44	19.33	2.05
1.167	1.25	7.250	2.05	13.333	6.16	19.42	2.05
1.250	1.25	7.333	2.51	13.417	6.16	19.50	2.05
1.333	1.25	7.417	2.51	13.500	6.16	19.58	2.05
1.417	1.25	7.500	2.51	13.583	6.16	19.67	2.05
1.500	1.25	7.583	2.51	13.667	6.16	19.75	2.05
1.583	1.25	7.667	2.51	13.750	6.16	19.83	2.05
1.667	1.25	7.750	2.51	13.833	4.79	19.92	2.05
1.750	1.25	7.833	2.51	13.917	4.79	20.00	2.05
1.833	1.25	7.917	2.51	14.000	4.79	20.08	2.05
1.917	1.25	8.000	2.51	14.083	4.79	20.17	2.05
2.000	1.25	8.083	2.51	14.167	4.79	20.25	2.05
2.083	1.25	8.167	2.51	14.250	4.79	20.33	1.37
2.167	1.25	8.250	2.51	14.333	3.42	20.42	1.37
2.250	1.25	8.333	2.97	14.417	3.42	20.50	1.37
2.333	1.48	8.417	2.97	14.500	3.42	20.58	1.37
2.417	1.48	8.500	2.97	14.583	3.42	20.67	1.37
2.500	1.48	8.583	2.97	14.667	3.42	20.75	1.37
2.583	1.48	8.667	2.97	14.750	3.42	20.83	1.37
2.667	1.48	8.750	2.97	14.833	3.42	20.92	1.37
2.750	1.48	8.833	3.19	14.917	3.42	21.00	1.37
2.833	1.48	8.917	3.19	15.000	3.42	21.08	1.37
2.917	1.48	9.000	3.19	15.083	3.42	21.17	1.37
3.000	1.48	9.083	3.19	15.167	3.42	21.25	1.37
3.083	1.48	9.167	3.19	15.250	3.42	21.33	1.37
3.167	1.48	9.250	3.19	15.333	3.42	21.42	1.37
3.250	1.48	9.333	3.65	15.417	3.42	21.50	1.37
3.333	1.48	9.417	3.65	15.500	3.42	21.58	1.37
3.417	1.48	9.500	3.65	15.583	3.42	21.67	1.37
3.500	1.48	9.583	3.65	15.667	3.42	21.75	1.37
3.583	1.48	9.667	3.65	15.750	3.42	21.83	1.37
3.667	1.48	9.750	3.65	15.833	3.42	21.92	1.37
3.750	1.48	9.833	4.11	15.917	3.42	22.00	1.37
3.833	1.48	9.917	4.11	16.000	3.42	22.08	1.37

3.917	1.48	10.000	4.11	16.083	3.42	22.17	1.37
4.000	1.48	10.083	4.11	16.167	3.42	22.25	1.37
4.083	1.48	10.167	4.11	16.250	3.42	22.33	1.37
4.167	1.48	10.250	4.11	16.333	2.05	22.42	1.37
4.250	1.48	10.333	5.25	16.417	2.05	22.50	1.37
4.333	1.82	10.417	5.25	16.500	2.05	22.58	1.37
4.417	1.82	10.500	5.25	16.583	2.05	22.67	1.37
4.500	1.82	10.583	5.25	16.667	2.05	22.75	1.37
4.583	1.82	10.667	5.25	16.750	2.05	22.83	1.37
4.667	1.82	10.750	5.25	16.833	2.05	22.92	1.37
4.750	1.82	10.833	7.07	16.917	2.05	23.00	1.37
4.833	1.82	10.917	7.07	17.000	2.05	23.08	1.37
4.917	1.82	11.000	7.07	17.083	2.05	23.17	1.37
5.000	1.82	11.083	7.07	17.167	2.05	23.25	1.37
5.083	1.82	11.167	7.07	17.250	2.05	23.33	1.37
5.167	1.82	11.250	7.07	17.333	2.05	23.42	1.37
5.250	1.82	11.333	10.95	17.417	2.05	23.50	1.37
5.333	1.82	11.417	10.95	17.500	2.05	23.58	1.37
5.417	1.82	11.500	10.95	17.583	2.05	23.67	1.37
5.500	1.82	11.583	10.95	17.667	2.05	23.75	1.37
5.583	1.82	11.667	10.95	17.750	2.05	23.83	1.37
5.667	1.82	11.750	10.95	17.833	2.05	23.92	1.37
5.750	1.82	11.833	33.75	17.917	2.05	24.00	1.37
5.833	1.82	11.917	33.76	18.000	2.05	24.08	1.37
5.917	1.82	12.000	33.76	18.083	2.05	24.17	1.37
6.000	1.82	12.083	139.57	18.167	2.05	24.25	1.37
6.083	1.82	12.167	139.58	18.250	2.05		

Unit Hyd Qpeak (cms)= 0.945

PEAK FLOW (cms)= 0.476 (i)
TIME TO PEAK (hrs)= 13.250
RUNOFF VOLUME (mm)= 25.483
TOTAL RAINFALL (mm)= 114.040
RUNOFF COEFFICIENT = 0.223

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0001)	Area	(ha)= 39.68	Curve Number	(CN)= 60.7
ID= 1 DT= 5.0 min	Ia	(mm)= 8.26	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 1.18		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	6.167	1.82	12.250	139.58	18.33	2.05
0.167	0.00	6.250	1.82	12.333	16.44	18.42	2.05
0.250	0.00	6.333	2.05	12.417	16.42	18.50	2.05
0.333	1.25	6.417	2.05	12.500	16.42	18.58	2.05
0.417	1.25	6.500	2.05	12.583	16.42	18.67	2.05
0.500	1.25	6.583	2.05	12.667	16.42	18.75	2.05
0.583	1.25	6.667	2.05	12.750	16.42	18.83	2.05
0.667	1.25	6.750	2.05	12.833	8.44	18.92	2.05
0.750	1.25	6.833	2.05	12.917	8.44	19.00	2.05
0.833	1.25	6.917	2.05	13.000	8.44	19.08	2.05
0.917	1.25	7.000	2.05	13.083	8.44	19.17	2.05
1.000	1.25	7.083	2.05	13.167	8.44	19.25	2.05
1.083	1.25	7.167	2.05	13.250	8.44	19.33	2.05
1.167	1.25	7.250	2.05	13.333	6.16	19.42	2.05
1.250	1.25	7.333	2.51	13.417	6.16	19.50	2.05
1.333	1.25	7.417	2.51	13.500	6.16	19.58	2.05
1.417	1.25	7.500	2.51	13.583	6.16	19.67	2.05
1.500	1.25	7.583	2.51	13.667	6.16	19.75	2.05
1.583	1.25	7.667	2.51	13.750	6.16	19.83	2.05
1.667	1.25	7.750	2.51	13.833	4.79	19.92	2.05
1.750	1.25	7.833	2.51	13.917	4.79	20.00	2.05
1.833	1.25	7.917	2.51	14.000	4.79	20.08	2.05
1.917	1.25	8.000	2.51	14.083	4.79	20.17	2.05
2.000	1.25	8.083	2.51	14.167	4.79	20.25	2.05
2.083	1.25	8.167	2.51	14.250	4.79	20.33	1.37
2.167	1.25	8.250	2.51	14.333	3.42	20.42	1.37
2.250	1.25	8.333	2.97	14.417	3.42	20.50	1.37
2.333	1.48	8.417	2.97	14.500	3.42	20.58	1.37
2.417	1.48	8.500	2.97	14.583	3.42	20.67	1.37
2.500	1.48	8.583	2.97	14.667	3.42	20.75	1.37
2.583	1.48	8.667	2.97	14.750	3.42	20.83	1.37
2.667	1.48	8.750	2.97	14.833	3.42	20.92	1.37
2.750	1.48	8.833	3.19	14.917	3.42	21.00	1.37
2.833	1.48	8.917	3.19	15.000	3.42	21.08	1.37
2.917	1.48	9.000	3.19	15.083	3.42	21.17	1.37
3.000	1.48	9.083	3.19	15.167	3.42	21.25	1.37
3.083	1.48	9.167	3.19	15.250	3.42	21.33	1.37
3.167	1.48	9.250	3.19	15.333	3.42	21.42	1.37
3.250	1.48	9.333	3.65	15.417	3.42	21.50	1.37
3.333	1.48	9.417	3.65	15.500	3.42	21.58	1.37
3.417	1.48	9.500	3.65	15.583	3.42	21.67	1.37
3.500	1.48	9.583	3.65	15.667	3.42	21.75	1.37
3.583	1.48	9.667	3.65	15.750	3.42	21.83	1.37
3.667	1.48	9.750	3.65	15.833	3.42	21.92	1.37
3.750	1.48	9.833	4.11	15.917	3.42	22.00	1.37

3.833	1.48	9.917	4.11	16.000	3.42	22.08	1.37
3.917	1.48	10.000	4.11	16.083	3.42	22.17	1.37
4.000	1.48	10.083	4.11	16.167	3.42	22.25	1.37
4.083	1.48	10.167	4.11	16.250	3.42	22.33	1.37
4.167	1.48	10.250	4.11	16.333	2.05	22.42	1.37
4.250	1.48	10.333	5.25	16.417	2.05	22.50	1.37
4.333	1.82	10.417	5.25	16.500	2.05	22.58	1.37
4.417	1.82	10.500	5.25	16.583	2.05	22.67	1.37
4.500	1.82	10.583	5.25	16.667	2.05	22.75	1.37
4.583	1.82	10.667	5.25	16.750	2.05	22.83	1.37
4.667	1.82	10.750	5.25	16.833	2.05	22.92	1.37
4.750	1.82	10.833	7.07	16.917	2.05	23.00	1.37
4.833	1.82	10.917	7.07	17.000	2.05	23.08	1.37
4.917	1.82	11.000	7.07	17.083	2.05	23.17	1.37
5.000	1.82	11.083	7.07	17.167	2.05	23.25	1.37
5.083	1.82	11.167	7.07	17.250	2.05	23.33	1.37
5.167	1.82	11.250	7.07	17.333	2.05	23.42	1.37
5.250	1.82	11.333	10.95	17.417	2.05	23.50	1.37
5.333	1.82	11.417	10.95	17.500	2.05	23.58	1.37
5.417	1.82	11.500	10.95	17.583	2.05	23.67	1.37
5.500	1.82	11.583	10.95	17.667	2.05	23.75	1.37
5.583	1.82	11.667	10.95	17.750	2.05	23.83	1.37
5.667	1.82	11.750	10.95	17.833	2.05	23.92	1.37
5.750	1.82	11.833	33.75	17.917	2.05	24.00	1.37
5.833	1.82	11.917	33.76	18.000	2.05	24.08	1.37
5.917	1.82	12.000	33.76	18.083	2.05	24.17	1.37
6.000	1.82	12.083	139.57	18.167	2.05	24.25	1.37
6.083	1.82	12.167	139.58	18.250	2.05		

Unit Hyd Qpeak (cms)= 1.284

PEAK FLOW (cms)= 1.142 (i)
TIME TO PEAK (hrs)= 13.417
RUNOFF VOLUME (mm)= 41.386
TOTAL RAINFALL (mm)= 114.040
RUNOFF COEFFICIENT = 0.363

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0028)	Area	(ha)= 6.37	Curve Number	(CN)= 50.5
ID= 1 DT= 5.0 min	Ia	(mm)= 15.69	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.77		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	6.167	1.82	12.250	139.58	18.33	2.05
0.167	0.00	6.250	1.82	12.333	16.44	18.42	2.05
0.250	0.00	6.333	2.05	12.417	16.42	18.50	2.05
0.333	1.25	6.417	2.05	12.500	16.42	18.58	2.05
0.417	1.25	6.500	2.05	12.583	16.42	18.67	2.05
0.500	1.25	6.583	2.05	12.667	16.42	18.75	2.05
0.583	1.25	6.667	2.05	12.750	16.42	18.83	2.05
0.667	1.25	6.750	2.05	12.833	8.44	18.92	2.05
0.750	1.25	6.833	2.05	12.917	8.44	19.00	2.05
0.833	1.25	6.917	2.05	13.000	8.44	19.08	2.05
0.917	1.25	7.000	2.05	13.083	8.44	19.17	2.05
1.000	1.25	7.083	2.05	13.167	8.44	19.25	2.05
1.083	1.25	7.167	2.05	13.250	8.44	19.33	2.05
1.167	1.25	7.250	2.05	13.333	6.16	19.42	2.05
1.250	1.25	7.333	2.51	13.417	6.16	19.50	2.05
1.333	1.25	7.417	2.51	13.500	6.16	19.58	2.05
1.417	1.25	7.500	2.51	13.583	6.16	19.67	2.05
1.500	1.25	7.583	2.51	13.667	6.16	19.75	2.05
1.583	1.25	7.667	2.51	13.750	6.16	19.83	2.05
1.667	1.25	7.750	2.51	13.833	4.79	19.92	2.05
1.750	1.25	7.833	2.51	13.917	4.79	20.00	2.05
1.833	1.25	7.917	2.51	14.000	4.79	20.08	2.05
1.917	1.25	8.000	2.51	14.083	4.79	20.17	2.05
2.000	1.25	8.083	2.51	14.167	4.79	20.25	2.05
2.083	1.25	8.167	2.51	14.250	4.79	20.33	1.37
2.167	1.25	8.250	2.51	14.333	3.42	20.42	1.37
2.250	1.25	8.333	2.97	14.417	3.42	20.50	1.37
2.333	1.48	8.417	2.97	14.500	3.42	20.58	1.37
2.417	1.48	8.500	2.97	14.583	3.42	20.67	1.37
2.500	1.48	8.583	2.97	14.667	3.42	20.75	1.37
2.583	1.48	8.667	2.97	14.750	3.42	20.83	1.37
2.667	1.48	8.750	2.97	14.833	3.42	20.92	1.37
2.750	1.48	8.833	3.19	14.917	3.42	21.00	1.37
2.833	1.48	8.917	3.19	15.000	3.42	21.08	1.37
2.917	1.48	9.000	3.19	15.083	3.42	21.17	1.37
3.000	1.48	9.083	3.19	15.167	3.42	21.25	1.37
3.083	1.48	9.167	3.19	15.250	3.42	21.33	1.37
3.167	1.48	9.250	3.19	15.333	3.42	21.42	1.37
3.250	1.48	9.333	3.65	15.417	3.42	21.50	1.37
3.333	1.48	9.417	3.65	15.500	3.42	21.58	1.37
3.417	1.48	9.500	3.65	15.583	3.42	21.67	1.37
3.500	1.48	9.583	3.65	15.667	3.42	21.75	1.37
3.583	1.48	9.667	3.65	15.750	3.42	21.83	1.37
3.667	1.48	9.750	3.65	15.833	3.42	21.92	1.37

3.750	1.48	9.833	4.11	15.917	3.42	22.00	1.37
3.833	1.48	9.917	4.11	16.000	3.42	22.08	1.37
3.917	1.48	10.000	4.11	16.083	3.42	22.17	1.37
4.000	1.48	10.083	4.11	16.167	3.42	22.25	1.37
4.083	1.48	10.167	4.11	16.250	3.42	22.33	1.37
4.167	1.48	10.250	4.11	16.333	2.05	22.42	1.37
4.250	1.48	10.333	5.25	16.417	2.05	22.50	1.37
4.333	1.82	10.417	5.25	16.500	2.05	22.58	1.37
4.417	1.82	10.500	5.25	16.583	2.05	22.67	1.37
4.500	1.82	10.583	5.25	16.667	2.05	22.75	1.37
4.583	1.82	10.667	5.25	16.750	2.05	22.83	1.37
4.667	1.82	10.750	5.25	16.833	2.05	22.92	1.37
4.750	1.82	10.833	7.07	16.917	2.05	23.00	1.37
4.833	1.82	10.917	7.07	17.000	2.05	23.08	1.37
4.917	1.82	11.000	7.07	17.083	2.05	23.17	1.37
5.000	1.82	11.083	7.07	17.167	2.05	23.25	1.37
5.083	1.82	11.167	7.07	17.250	2.05	23.33	1.37
5.167	1.82	11.250	7.07	17.333	2.05	23.42	1.37
5.250	1.82	11.333	10.95	17.417	2.05	23.50	1.37
5.333	1.82	11.417	10.95	17.500	2.05	23.58	1.37
5.417	1.82	11.500	10.95	17.583	2.05	23.67	1.37
5.500	1.82	11.583	10.95	17.667	2.05	23.75	1.37
5.583	1.82	11.667	10.95	17.750	2.05	23.83	1.37
5.667	1.82	11.750	10.95	17.833	2.05	23.92	1.37
5.750	1.82	11.833	33.75	17.917	2.05	24.00	1.37
5.833	1.82	11.917	33.76	18.000	2.05	24.08	1.37
5.917	1.82	12.000	33.76	18.083	2.05	24.17	1.37
6.000	1.82	12.083	139.57	18.167	2.05	24.25	1.37
6.083	1.82	12.167	139.58	18.250	2.05		

Unit Hyd Qpeak (cms)= 0.316

PEAK FLOW (cms)= 0.164 (i)
TIME TO PEAK (hrs)= 13.000
RUNOFF VOLUME (mm)= 27.833
TOTAL RAINFALL (mm)= 114.040
RUNOFF COEFFICIENT = 0.244

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0029)	Area	(ha)= 14.85	Curve Number	(CN)= 52.9	
ID= 1 DT= 5.0 min	Ia	(mm)= 13.28	# of Linear Res.(N)= 3.00		
	U.H. Tp(hrs)= 0.89				

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.82	12.250	139.58	18.33	2.05
0.167	0.00	6.250	1.82	12.333	16.44	18.42	2.05
0.250	0.00	6.333	2.05	12.417	16.42	18.50	2.05
0.333	1.25	6.417	2.05	12.500	16.42	18.58	2.05
0.417	1.25	6.500	2.05	12.583	16.42	18.67	2.05
0.500	1.25	6.583	2.05	12.667	16.42	18.75	2.05
0.583	1.25	6.667	2.05	12.750	16.42	18.83	2.05
0.667	1.25	6.750	2.05	12.833	8.44	18.92	2.05
0.750	1.25	6.833	2.05	12.917	8.44	19.00	2.05
0.833	1.25	6.917	2.05	13.000	8.44	19.08	2.05
0.917	1.25	7.000	2.05	13.083	8.44	19.17	2.05
1.000	1.25	7.083	2.05	13.167	8.44	19.25	2.05
1.083	1.25	7.167	2.05	13.250	8.44	19.33	2.05
1.167	1.25	7.250	2.05	13.333	6.16	19.42	2.05
1.250	1.25	7.333	2.51	13.417	6.16	19.50	2.05
1.333	1.25	7.417	2.51	13.500	6.16	19.58	2.05
1.417	1.25	7.500	2.51	13.583	6.16	19.67	2.05
1.500	1.25	7.583	2.51	13.667	6.16	19.75	2.05
1.583	1.25	7.667	2.51	13.750	6.16	19.83	2.05
1.667	1.25	7.750	2.51	13.833	4.79	19.92	2.05
1.750	1.25	7.833	2.51	13.917	4.79	20.00	2.05
1.833	1.25	7.917	2.51	14.000	4.79	20.08	2.05
1.917	1.25	8.000	2.51	14.083	4.79	20.17	2.05
2.000	1.25	8.083	2.51	14.167	4.79	20.25	2.05
2.083	1.25	8.167	2.51	14.250	4.79	20.33	1.37
2.167	1.25	8.250	2.51	14.333	3.42	20.42	1.37
2.250	1.25	8.333	2.97	14.417	3.42	20.50	1.37
2.333	1.48	8.417	2.97	14.500	3.42	20.58	1.37
2.417	1.48	8.500	2.97	14.583	3.42	20.67	1.37
2.500	1.48	8.583	2.97	14.667	3.42	20.75	1.37
2.583	1.48	8.667	2.97	14.750	3.42	20.83	1.37
2.667	1.48	8.750	2.97	14.833	3.42	20.92	1.37
2.750	1.48	8.833	3.19	14.917	3.42	21.00	1.37
2.833	1.48	8.917	3.19	15.000	3.42	21.08	1.37
2.917	1.48	9.000	3.19	15.083	3.42	21.17	1.37
3.000	1.48	9.083	3.19	15.167	3.42	21.25	1.37
3.083	1.48	9.167	3.19	15.250	3.42	21.33	1.37
3.167	1.48	9.250	3.19	15.333	3.42	21.42	1.37
3.250	1.48	9.333	3.65	15.417	3.42	21.50	1.37
3.333	1.48	9.417	3.65	15.500	3.42	21.58	1.37
3.417	1.48	9.500	3.65	15.583	3.42	21.67	1.37
3.500	1.48	9.583	3.65	15.667	3.42	21.75	1.37
3.583	1.48	9.667	3.65	15.750	3.42	21.83	1.37

3.667	1.48	9.750	3.65	15.833	3.42	21.92	1.37
3.750	1.48	9.833	4.11	15.917	3.42	22.00	1.37
3.833	1.48	9.917	4.11	16.000	3.42	22.08	1.37
3.917	1.48	10.000	4.11	16.083	3.42	22.17	1.37
4.000	1.48	10.083	4.11	16.167	3.42	22.25	1.37
4.083	1.48	10.167	4.11	16.250	3.42	22.33	1.37
4.167	1.48	10.250	4.11	16.333	2.05	22.42	1.37
4.250	1.48	10.333	5.25	16.417	2.05	22.50	1.37
4.333	1.82	10.417	5.25	16.500	2.05	22.58	1.37
4.417	1.82	10.500	5.25	16.583	2.05	22.67	1.37
4.500	1.82	10.583	5.25	16.667	2.05	22.75	1.37
4.583	1.82	10.667	5.25	16.750	2.05	22.83	1.37
4.667	1.82	10.750	5.25	16.833	2.05	22.92	1.37
4.750	1.82	10.833	7.07	16.917	2.05	23.00	1.37
4.833	1.82	10.917	7.07	17.000	2.05	23.08	1.37
4.917	1.82	11.000	7.07	17.083	2.05	23.17	1.37
5.000	1.82	11.083	7.07	17.167	2.05	23.25	1.37
5.083	1.82	11.167	7.07	17.250	2.05	23.33	1.37
5.167	1.82	11.250	7.07	17.333	2.05	23.42	1.37
5.250	1.82	11.333	10.95	17.417	2.05	23.50	1.37
5.333	1.82	11.417	10.95	17.500	2.05	23.58	1.37
5.417	1.82	11.500	10.95	17.583	2.05	23.67	1.37
5.500	1.82	11.583	10.95	17.667	2.05	23.75	1.37
5.583	1.82	11.667	10.95	17.750	2.05	23.83	1.37
5.667	1.82	11.750	10.95	17.833	2.05	23.92	1.37
5.750	1.82	11.833	33.75	17.917	2.05	24.00	1.37
5.833	1.82	11.917	33.76	18.000	2.05	24.08	1.37
5.917	1.82	12.000	33.76	18.083	2.05	24.17	1.37
6.000	1.82	12.083	139.57	18.167	2.05	24.25	1.37
6.083	1.82	12.167	139.58	18.250	2.05		

Unit Hyd Qpeak (cms)= 0.637

PEAK FLOW (cms)= 0.388 (i)
TIME TO PEAK (hrs)= 13.167
RUNOFF VOLUME (mm)= 31.091
TOTAL RAINFALL (mm)= 114.040
RUNOFF COEFFICIENT = 0.273

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0030)	Area	(ha)= 1.70	Curve Number	(CN)= 60.5	
ID= 1 DT= 5.0 min	Ia	(mm)= 9.65	# of Linear Res.(N)= 3.00		
	U.H. Tp(hrs)= 0.40				

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.82	12.250	139.58	18.33	2.05
0.167	0.00	6.250	1.82	12.333	16.44	18.42	2.05
0.250	0.00	6.333	2.05	12.417	16.42	18.50	2.05
0.333	1.25	6.417	2.05	12.500	16.42	18.58	2.05
0.417	1.25	6.500	2.05	12.583	16.42	18.67	2.05
0.500	1.25	6.583	2.05	12.667	16.42	18.75	2.05
0.583	1.25	6.667	2.05	12.750	16.42	18.83	2.05
0.667	1.25	6.750	2.05	12.833	8.44	18.92	2.05
0.750	1.25	6.833	2.05	12.917	8.44	19.00	2.05
0.833	1.25	6.917	2.05	13.000	8.44	19.08	2.05
0.917	1.25	7.000	2.05	13.083	8.44	19.17	2.05
1.000	1.25	7.083	2.05	13.167	8.44	19.25	2.05
1.083	1.25	7.167	2.05	13.250	8.44	19.33	2.05
1.167	1.25	7.250	2.05	13.333	6.16	19.42	2.05
1.250	1.25	7.333	2.51	13.417	6.16	19.50	2.05
1.333	1.25	7.417	2.51	13.500	6.16	19.58	2.05
1.417	1.25	7.500	2.51	13.583	6.16	19.67	2.05
1.500	1.25	7.583	2.51	13.667	6.16	19.75	2.05
1.583	1.25	7.667	2.51	13.750	6.16	19.83	2.05
1.667	1.25	7.750	2.51	13.833	4.79	19.92	2.05
1.750	1.25	7.833	2.51	13.917	4.79	20.00	2.05
1.833	1.25	7.917	2.51	14.000	4.79	20.08	2.05
1.917	1.25	8.000	2.51	14.083	4.79	20.17	2.05
2.000	1.25	8.083	2.51	14.167	4.79	20.25	2.05
2.083	1.25	8.167	2.51	14.250	4.79	20.33	1.37
2.167	1.25	8.250	2.51	14.333	3.42	20.42	1.37
2.250	1.25	8.333	2.97	14.417	3.42	20.50	1.37
2.333	1.48	8.417	2.97	14.500	3.42	20.58	1.37
2.417	1.48	8.500	2.97	14.583	3.42	20.67	1.37
2.500	1.48	8.583	2.97	14.667	3.42	20.75	1.37
2.583	1.48	8.667	2.97	14.750	3.42	20.83	1.37
2.667	1.48	8.750	2.97	14.833	3.42	20.92	1.37
2.750	1.48	8.833	3.19	14.917	3.42	21.00	1.37
2.833	1.48	8.917	3.19	15.000	3.42	21.08	1.37
2.917	1.48	9.000	3.19	15.083	3.42	21.17	1.37
3.000	1.48	9.083	3.19	15.167	3.42	21.25	1.37
3.083	1.48	9.167	3.19	15.250	3.42	21.33	1.37
3.167	1.48	9.250	3.19	15.333	3.42	21.42	1.37
3.250	1.48	9.333	3.65	15.417	3.42	21.50	1.37
3.333	1.48	9.417	3.65	15.500	3.42	21.58	1.37
3.417	1.48	9.500	3.65	15.583	3.42	21.67	1.37
3.500	1.48	9.583	3.65	15.667	3.42	21.75	1.37

3.583	1.48	9.667	3.65	15.750	3.42	21.83	1.37
3.667	1.48	9.750	3.65	15.833	3.42	21.92	1.37
3.750	1.48	9.833	4.11	15.917	3.42	22.00	1.37
3.833	1.48	9.917	4.11	16.000	3.42	22.08	1.37
3.917	1.48	10.000	4.11	16.083	3.42	22.17	1.37
4.000	1.48	10.083	4.11	16.167	3.42	22.25	1.37
4.083	1.48	10.167	4.11	16.250	3.42	22.33	1.37
4.167	1.48	10.250	4.11	16.333	2.05	22.42	1.37
4.250	1.48	10.333	5.25	16.417	2.05	22.50	1.37
4.333	1.82	10.417	5.25	16.500	2.05	22.58	1.37
4.417	1.82	10.500	5.25	16.583	2.05	22.67	1.37
4.500	1.82	10.583	5.25	16.667	2.05	22.75	1.37
4.583	1.82	10.667	5.25	16.750	2.05	22.83	1.37
4.667	1.82	10.750	5.25	16.833	2.05	22.92	1.37
4.750	1.82	10.833	7.07	16.917	2.05	23.00	1.37
4.833	1.82	10.917	7.07	17.000	2.05	23.08	1.37
4.917	1.82	11.000	7.07	17.083	2.05	23.17	1.37
5.000	1.82	11.083	7.07	17.167	2.05	23.25	1.37
5.083	1.82	11.167	7.07	17.250	2.05	23.33	1.37
5.167	1.82	11.250	7.07	17.333	2.05	23.42	1.37
5.250	1.82	11.333	10.95	17.417	2.05	23.50	1.37
5.333	1.82	11.417	10.95	17.500	2.05	23.58	1.37
5.417	1.82	11.500	10.95	17.583	2.05	23.67	1.37
5.500	1.82	11.583	10.95	17.667	2.05	23.75	1.37
5.583	1.82	11.667	10.95	17.750	2.05	23.83	1.37
5.667	1.82	11.750	10.95	17.833	2.05	23.92	1.37
5.750	1.82	11.833	33.75	17.917	2.05	24.00	1.37
5.833	1.82	11.917	33.76	18.000	2.05	24.08	1.37
5.917	1.82	12.000	33.76	18.083	2.05	24.17	1.37
6.000	1.82	12.083	139.57	18.167	2.05	24.25	1.37
6.083	1.82	12.167	139.58	18.250	2.05		

Unit Hyd Qpeak (cms)= 0.162

PEAK FLOW (cms)= 0.106 (i)
TIME TO PEAK (hrs)= 12.500
RUNOFF VOLUME (mm)= 40.280
TOTAL RAINFALL (mm)= 114.040
RUNOFF COEFFICIENT = 0.353

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0031)	Area (ha)= 1.80	Curve Number (CN)= 50.0	
ID= 1 DT= 5.0 min	Ia (mm)= 16.00	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.76		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.82	12.250	139.58	18.33	2.05
0.167	0.00	6.250	1.82	12.333	16.44	18.42	2.05
0.250	0.00	6.333	2.05	12.417	16.42	18.50	2.05
0.333	1.25	6.417	2.05	12.500	16.42	18.58	2.05
0.417	1.25	6.500	2.05	12.583	16.42	18.67	2.05
0.500	1.25	6.583	2.05	12.667	16.42	18.75	2.05
0.583	1.25	6.667	2.05	12.750	16.42	18.83	2.05
0.667	1.25	6.750	2.05	12.833	8.44	18.92	2.05
0.750	1.25	6.833	2.05	12.917	8.44	19.00	2.05
0.833	1.25	6.917	2.05	13.000	8.44	19.08	2.05
0.917	1.25	7.000	2.05	13.083	8.44	19.17	2.05
1.000	1.25	7.083	2.05	13.167	8.44	19.25	2.05
1.083	1.25	7.167	2.05	13.250	8.44	19.33	2.05
1.167	1.25	7.250	2.05	13.333	6.16	19.42	2.05
1.250	1.25	7.333	2.51	13.417	6.16	19.50	2.05
1.333	1.25	7.417	2.51	13.500	6.16	19.58	2.05
1.417	1.25	7.500	2.51	13.583	6.16	19.67	2.05
1.500	1.25	7.583	2.51	13.667	6.16	19.75	2.05
1.583	1.25	7.667	2.51	13.750	6.16	19.83	2.05
1.667	1.25	7.750	2.51	13.833	4.79	19.92	2.05
1.750	1.25	7.833	2.51	13.917	4.79	20.00	2.05
1.833	1.25	7.917	2.51	14.000	4.79	20.08	2.05
1.917	1.25	8.000	2.51	14.083	4.79	20.17	2.05
2.000	1.25	8.083	2.51	14.167	4.79	20.25	2.05
2.083	1.25	8.167	2.51	14.250	4.79	20.33	1.37
2.167	1.25	8.250	2.51	14.333	3.42	20.42	1.37
2.250	1.25	8.333	2.97	14.417	3.42	20.50	1.37
2.333	1.48	8.417	2.97	14.500	3.42	20.58	1.37
2.417	1.48	8.500	2.97	14.583	3.42	20.67	1.37
2.500	1.48	8.583	2.97	14.667	3.42	20.75	1.37
2.583	1.48	8.667	2.97	14.750	3.42	20.83	1.37
2.667	1.48	8.750	2.97	14.833	3.42	20.92	1.37
2.750	1.48	8.833	3.19	14.917	3.42	21.00	1.37
2.833	1.48	8.917	3.19	15.000	3.42	21.08	1.37
2.917	1.48	9.000	3.19	15.083	3.42	21.17	1.37
3.000	1.48	9.083	3.19	15.167	3.42	21.25	1.37
3.083	1.48	9.167	3.19	15.250	3.42	21.33	1.37
3.167	1.48	9.250	3.19	15.333	3.42	21.42	1.37
3.250	1.48	9.333	3.65	15.417	3.42	21.50	1.37
3.333	1.48	9.417	3.65	15.500	3.42	21.58	1.37
3.417	1.48	9.500	3.65	15.583	3.42	21.67	1.37

3.500	1.48	9.583	3.65	15.667	3.42	21.75	1.37
3.583	1.48	9.667	3.65	15.750	3.42	21.83	1.37
3.667	1.48	9.750	3.65	15.833	3.42	21.92	1.37
3.750	1.48	9.833	4.11	15.917	3.42	22.00	1.37
3.833	1.48	9.917	4.11	16.000	3.42	22.08	1.37
3.917	1.48	10.000	4.11	16.083	3.42	22.17	1.37
4.000	1.48	10.083	4.11	16.167	3.42	22.25	1.37
4.083	1.48	10.167	4.11	16.250	3.42	22.33	1.37
4.167	1.48	10.250	4.11	16.333	2.05	22.42	1.37
4.250	1.48	10.333	5.25	16.417	2.05	22.50	1.37
4.333	1.82	10.417	5.25	16.500	2.05	22.58	1.37
4.417	1.82	10.500	5.25	16.583	2.05	22.67	1.37
4.500	1.82	10.583	5.25	16.667	2.05	22.75	1.37
4.583	1.82	10.667	5.25	16.750	2.05	22.83	1.37
4.667	1.82	10.750	5.25	16.833	2.05	22.92	1.37
4.750	1.82	10.833	7.07	16.917	2.05	23.00	1.37
4.833	1.82	10.917	7.07	17.000	2.05	23.08	1.37
4.917	1.82	11.000	7.07	17.083	2.05	23.17	1.37
5.000	1.82	11.083	7.07	17.167	2.05	23.25	1.37
5.083	1.82	11.167	7.07	17.250	2.05	23.33	1.37
5.167	1.82	11.250	7.07	17.333	2.05	23.42	1.37
5.250	1.82	11.333	10.95	17.417	2.05	23.50	1.37
5.333	1.82	11.417	10.95	17.500	2.05	23.58	1.37
5.417	1.82	11.500	10.95	17.583	2.05	23.67	1.37
5.500	1.82	11.583	10.95	17.667	2.05	23.75	1.37
5.583	1.82	11.667	10.95	17.750	2.05	23.83	1.37
5.667	1.82	11.750	10.95	17.833	2.05	23.92	1.37
5.750	1.82	11.833	33.75	17.917	2.05	24.00	1.37
5.833	1.82	11.917	33.76	18.000	2.05	24.08	1.37
5.917	1.82	12.000	33.76	18.083	2.05	24.17	1.37
6.000	1.82	12.083	139.57	18.167	2.05	24.25	1.37
6.083	1.82	12.167	139.58	18.250	2.05		

Unit Hyd Qpeak (cms)= 0.090

PEAK FLOW (cms)= 0.046 (i)
TIME TO PEAK (hrs)= 13.000
RUNOFF VOLUME (mm)= 27.302
TOTAL RAINFALL (mm)= 114.040
RUNOFF COEFFICIENT = 0.239

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0032)	Area (ha)= 6.70	Curve Number (CN)= 60.0	
ID= 1 DT= 5.0 min	Ia (mm)= 10.00	# of Linear Res.(N)= 3.00	

U.H. Tp(hrs)= 1.45

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.82	12.250	139.58	18.33	2.05
0.167	0.00	6.250	1.82	12.333	16.44	18.42	2.05
0.250	0.00	6.333	2.05	12.417	16.42	18.50	2.05
0.333	1.25	6.417	2.05	12.500	16.42	18.58	2.05
0.417	1.25	6.500	2.05	12.583	16.42	18.67	2.05
0.500	1.25	6.583	2.05	12.667	16.42	18.75	2.05
0.583	1.25	6.667	2.05	12.750	16.42	18.83	2.05
0.667	1.25	6.750	2.05	12.833	8.44	18.92	2.05
0.750	1.25	6.833	2.05	12.917	8.44	19.00	2.05
0.833	1.25	6.917	2.05	13.000	8.44	19.08	2.05
0.917	1.25	7.000	2.05	13.083	8.44	19.17	2.05
1.000	1.25	7.083	2.05	13.167	8.44	19.25	2.05
1.083	1.25	7.167	2.05	13.250	8.44	19.33	2.05
1.167	1.25	7.250	2.05	13.333	6.16	19.42	2.05
1.250	1.25	7.333	2.51	13.417	6.16	19.50	2.05
1.333	1.25	7.417	2.51	13.500	6.16	19.58	2.05
1.417	1.25	7.500	2.51	13.583	6.16	19.67	2.05
1.500	1.25	7.583	2.51	13.667	6.16	19.75	2.05
1.583	1.25	7.667	2.51	13.750	6.16	19.83	2.05
1.667	1.25	7.750	2.51	13.833	4.79	19.92	2.05
1.750	1.25	7.833	2.51	13.917	4.79	20.00	2.05
1.833	1.25	7.917	2.51	14.000	4.79	20.08	2.05
1.917	1.25	8.000	2.51	14.083	4.79	20.17	2.05
2.000	1.25	8.083	2.51	14.167	4.79	20.25	2.05
2.083	1.25	8.167	2.51	14.250	4.79	20.33	1.37
2.167	1.25	8.250	2.51	14.333	3.42	20.42	1.37
2.250	1.25	8.333	2.97	14.417	3.42	20.50	1.37
2.333	1.48	8.417	2.97	14.500	3.42	20.58	1.37
2.417	1.48	8.500	2.97	14.583	3.42	20.67	1.37
2.500	1.48	8.583	2.97	14.667	3.42	20.75	1.37
2.583	1.48	8.667	2.97	14.750	3.42	20.83	1.37
2.667	1.48	8.750	2.97	14.833	3.42	20.92	1.37
2.750	1.48	8.833	3.19	14.917	3.42	21.00	1.37
2.833	1.48	8.917	3.19	15.000	3.42	21.08	1.37
2.917	1.48	9.000	3.19	15.083	3.42	21.17	1.37
3.000	1.48	9.083	3.19	15.167	3.42	21.25	1.37
3.083	1.48	9.167	3.19	15.250	3.42	21.33	1.37
3.167	1.48	9.250	3.19	15.333	3.42	21.42	1.37
3.250	1.48	9.333	3.65	15.417	3.42	21.50	1.37
3.333	1.48	9.417	3.65	15.500	3.42	21.58	1.37

3.417	1.48	9.500	3.65	15.583	3.42	21.67	1.37
3.500	1.48	9.583	3.65	15.667	3.42	21.75	1.37
3.583	1.48	9.667	3.65	15.750	3.42	21.83	1.37
3.667	1.48	9.750	3.65	15.833	3.42	21.92	1.37
3.750	1.48	9.833	4.11	15.917	3.42	22.00	1.37
3.833	1.48	9.917	4.11	16.000	3.42	22.08	1.37
3.917	1.48	10.000	4.11	16.083	3.42	22.17	1.37
4.000	1.48	10.083	4.11	16.167	3.42	22.25	1.37
4.083	1.48	10.167	4.11	16.250	3.42	22.33	1.37
4.167	1.48	10.250	4.11	16.333	2.05	22.42	1.37
4.250	1.48	10.333	5.25	16.417	2.05	22.50	1.37
4.333	1.82	10.417	5.25	16.500	2.05	22.58	1.37
4.417	1.82	10.500	5.25	16.583	2.05	22.67	1.37
4.500	1.82	10.583	5.25	16.667	2.05	22.75	1.37
4.583	1.82	10.667	5.25	16.750	2.05	22.83	1.37
4.667	1.82	10.750	5.25	16.833	2.05	22.92	1.37
4.750	1.82	10.833	7.07	16.917	2.05	23.00	1.37
4.833	1.82	10.917	7.07	17.000	2.05	23.08	1.37
4.917	1.82	11.000	7.07	17.083	2.05	23.17	1.37
5.000	1.82	11.083	7.07	17.167	2.05	23.25	1.37
5.083	1.82	11.167	7.07	17.250	2.05	23.33	1.37
5.167	1.82	11.250	7.07	17.333	2.05	23.42	1.37
5.250	1.82	11.333	10.95	17.417	2.05	23.50	1.37
5.333	1.82	11.417	10.95	17.500	2.05	23.58	1.37
5.417	1.82	11.500	10.95	17.583	2.05	23.67	1.37
5.500	1.82	11.583	10.95	17.667	2.05	23.75	1.37
5.583	1.82	11.667	10.95	17.750	2.05	23.83	1.37
5.667	1.82	11.750	10.95	17.833	2.05	23.92	1.37
5.750	1.82	11.833	33.75	17.917	2.05	24.00	1.37
5.833	1.82	11.917	33.76	18.000	2.05	24.08	1.37
5.917	1.82	12.000	33.76	18.083	2.05	24.17	1.37
6.000	1.82	12.083	139.57	18.167	2.05	24.25	1.37
6.083	1.82	12.167	139.58	18.250	2.05		

Unit Hyd Qpeak (cms)= 0.176

PEAK FLOW (cms)= 0.157 (i)
TIME TO PEAK (hrs)= 13.750
RUNOFF VOLUME (mm)= 39.595
TOTAL RAINFALL (mm)= 114.040
RUNOFF COEFFICIENT = 0.347

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB							
NASHYD (0033)	Area (ha)= 1.13		Curve Number (CN)= 67.4				

ID= 1 DT= 5.0 min | Ia (mm)= 7.88 # of Linear Res.(N)= 3.00
U.H. Tp(hrs)= 0.43

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.82	12.250	139.58	18.33	2.05
0.167	0.00	6.250	1.82	12.333	16.44	18.42	2.05
0.250	0.00	6.333	2.05	12.417	16.42	18.50	2.05
0.333	1.25	6.417	2.05	12.500	16.42	18.58	2.05
0.417	1.25	6.500	2.05	12.583	16.42	18.67	2.05
0.500	1.25	6.583	2.05	12.667	16.42	18.75	2.05
0.583	1.25	6.667	2.05	12.750	16.42	18.83	2.05
0.667	1.25	6.750	2.05	12.833	8.44	18.92	2.05
0.750	1.25	6.833	2.05	12.917	8.44	19.00	2.05
0.833	1.25	6.917	2.05	13.000	8.44	19.08	2.05
0.917	1.25	7.000	2.05	13.083	8.44	19.17	2.05
1.000	1.25	7.083	2.05	13.167	8.44	19.25	2.05
1.083	1.25	7.167	2.05	13.250	8.44	19.33	2.05
1.167	1.25	7.250	2.05	13.333	6.16	19.42	2.05
1.250	1.25	7.333	2.51	13.417	6.16	19.50	2.05
1.333	1.25	7.417	2.51	13.500	6.16	19.58	2.05
1.417	1.25	7.500	2.51	13.583	6.16	19.67	2.05
1.500	1.25	7.583	2.51	13.667	6.16	19.75	2.05
1.583	1.25	7.667	2.51	13.750	6.16	19.83	2.05
1.667	1.25	7.750	2.51	13.833	4.79	19.92	2.05
1.750	1.25	7.833	2.51	13.917	4.79	20.00	2.05
1.833	1.25	7.917	2.51	14.000	4.79	20.08	2.05
1.917	1.25	8.000	2.51	14.083	4.79	20.17	2.05
2.000	1.25	8.083	2.51	14.167	4.79	20.25	2.05
2.083	1.25	8.167	2.51	14.250	4.79	20.33	1.37
2.167	1.25	8.250	2.51	14.333	3.42	20.42	1.37
2.250	1.25	8.333	2.97	14.417	3.42	20.50	1.37
2.333	1.48	8.417	2.97	14.500	3.42	20.58	1.37
2.417	1.48	8.500	2.97	14.583	3.42	20.67	1.37
2.500	1.48	8.583	2.97	14.667	3.42	20.75	1.37
2.583	1.48	8.667	2.97	14.750	3.42	20.83	1.37
2.667	1.48	8.750	2.97	14.833	3.42	20.92	1.37
2.750	1.48	8.833	3.19	14.917	3.42	21.00	1.37
2.833	1.48	8.917	3.19	15.000	3.42	21.08	1.37
2.917	1.48	9.000	3.19	15.083	3.42	21.17	1.37
3.000	1.48	9.083	3.19	15.167	3.42	21.25	1.37
3.083	1.48	9.167	3.19	15.250	3.42	21.33	1.37
3.167	1.48	9.250	3.19	15.333	3.42	21.42	1.37
3.250	1.48	9.333	3.65	15.417	3.42	21.50	1.37

3.333	1.48	9.417	3.65	15.500	3.42	21.58	1.37
3.417	1.48	9.500	3.65	15.583	3.42	21.67	1.37
3.500	1.48	9.583	3.65	15.667	3.42	21.75	1.37
3.583	1.48	9.667	3.65	15.750	3.42	21.83	1.37
3.667	1.48	9.750	3.65	15.833	3.42	21.92	1.37
3.750	1.48	9.833	4.11	15.917	3.42	22.00	1.37
3.833	1.48	9.917	4.11	16.000	3.42	22.08	1.37
3.917	1.48	10.000	4.11	16.083	3.42	22.17	1.37
4.000	1.48	10.083	4.11	16.167	3.42	22.25	1.37
4.083	1.48	10.167	4.11	16.250	3.42	22.33	1.37
4.167	1.48	10.250	4.11	16.333	2.05	22.42	1.37
4.250	1.48	10.333	5.25	16.417	2.05	22.50	1.37
4.333	1.82	10.417	5.25	16.500	2.05	22.58	1.37
4.417	1.82	10.500	5.25	16.583	2.05	22.67	1.37
4.500	1.82	10.583	5.25	16.667	2.05	22.75	1.37
4.583	1.82	10.667	5.25	16.750	2.05	22.83	1.37
4.667	1.82	10.750	5.25	16.833	2.05	22.92	1.37
4.750	1.82	10.833	7.07	16.917	2.05	23.00	1.37
4.833	1.82	10.917	7.07	17.000	2.05	23.08	1.37
4.917	1.82	11.000	7.07	17.083	2.05	23.17	1.37
5.000	1.82	11.083	7.07	17.167	2.05	23.25	1.37
5.083	1.82	11.167	7.07	17.250	2.05	23.33	1.37
5.167	1.82	11.250	7.07	17.333	2.05	23.42	1.37
5.250	1.82	11.333	10.95	17.417	2.05	23.50	1.37
5.333	1.82	11.417	10.95	17.500	2.05	23.58	1.37
5.417	1.82	11.500	10.95	17.583	2.05	23.67	1.37
5.500	1.82	11.583	10.95	17.667	2.05	23.75	1.37
5.583	1.82	11.667	10.95	17.750	2.05	23.83	1.37
5.667	1.82	11.750	10.95	17.833	2.05	23.92	1.37
5.750	1.82	11.833	33.75	17.917	2.05	24.00	1.37
5.833	1.82	11.917	33.76	18.000	2.05	24.08	1.37
5.917	1.82	12.000	33.76	18.083	2.05	24.17	1.37
6.000	1.82	12.083	139.57	18.167	2.05	24.25	1.37
6.083	1.82	12.167	139.58	18.250	2.05		

Unit Hyd Qpeak (cms)= 0.100

PEAK FLOW (cms)= 0.083 (i)
TIME TO PEAK (hrs)= 12.583
RUNOFF VOLUME (mm)= 49.157
TOTAL RAINFALL (mm)= 114.040
RUNOFF COEFFICIENT = 0.431

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	

NASHYD (0027) | Area (ha)= 1.38 Curve Number (CN)= 64.1
ID= 1 DT= 5.0 min | Ia (mm)= 8.51 # of Linear Res.(N)= 3.00
U.H. Tp(hrs)= 0.39

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.82	12.250	139.58	18.33	2.05
0.167	0.00	6.250	1.82	12.333	16.44	18.42	2.05
0.250	0.00	6.333	2.05	12.417	16.42	18.50	2.05
0.333	1.25	6.417	2.05	12.500	16.42	18.58	2.05
0.417	1.25	6.500	2.05	12.583	16.42	18.67	2.05
0.500	1.25	6.583	2.05	12.667	16.42	18.75	2.05
0.583	1.25	6.667	2.05	12.750	16.42	18.83	2.05
0.667	1.25	6.750	2.05	12.833	8.44	18.92	2.05
0.750	1.25	6.833	2.05	12.917	8.44	19.00	2.05
0.833	1.25	6.917	2.05	13.000	8.44	19.08	2.05
0.917	1.25	7.000	2.05	13.083	8.44	19.17	2.05
1.000	1.25	7.083	2.05	13.167	8.44	19.25	2.05
1.083	1.25	7.167	2.05	13.250	8.44	19.33	2.05
1.167	1.25	7.250	2.05	13.333	6.16	19.42	2.05
1.250	1.25	7.333	2.51	13.417	6.16	19.50	2.05
1.333	1.25	7.417	2.51	13.500	6.16	19.58	2.05
1.417	1.25	7.500	2.51	13.583	6.16	19.67	2.05
1.500	1.25	7.583	2.51	13.667	6.16	19.75	2.05
1.583	1.25	7.667	2.51	13.750	6.16	19.83	2.05
1.667	1.25	7.750	2.51	13.833	4.79	19.92	2.05
1.750	1.25	7.833	2.51	13.917	4.79	20.00	2.05
1.833	1.25	7.917	2.51	14.000	4.79	20.08	2.05
1.917	1.25	8.000	2.51	14.083	4.79	20.17	2.05
2.000	1.25	8.083	2.51	14.167	4.79	20.25	2.05
2.083	1.25	8.167	2.51	14.250	4.79	20.33	1.37
2.167	1.25	8.250	2.51	14.333	3.42	20.42	1.37
2.250	1.25	8.333	2.97	14.417	3.42	20.50	1.37
2.333	1.48	8.417	2.97	14.500	3.42	20.58	1.37
2.417	1.48	8.500	2.97	14.583	3.42	20.67	1.37
2.500	1.48	8.583	2.97	14.667	3.42	20.75	1.37
2.583	1.48	8.667	2.97	14.750	3.42	20.83	1.37
2.667	1.48	8.750	2.97	14.833	3.42	20.92	1.37
2.750	1.48	8.833	3.19	14.917	3.42	21.00	1.37
2.833	1.48	8.917	3.19	15.000	3.42	21.08	1.37
2.917	1.48	9.000	3.19	15.083	3.42	21.17	1.37
3.000	1.48	9.083	3.19	15.167	3.42	21.25	1.37
3.083	1.48	9.167	3.19	15.250	3.42	21.33	1.37
3.167	1.48	9.250	3.19	15.333	3.42	21.42	1.37

3.250	1.48	9.333	3.65	15.417	3.42	21.50	1.37
3.333	1.48	9.417	3.65	15.500	3.42	21.58	1.37
3.417	1.48	9.500	3.65	15.583	3.42	21.67	1.37
3.500	1.48	9.583	3.65	15.667	3.42	21.75	1.37
3.583	1.48	9.667	3.65	15.750	3.42	21.83	1.37
3.667	1.48	9.750	3.65	15.833	3.42	21.92	1.37
3.750	1.48	9.833	4.11	15.917	3.42	22.00	1.37
3.833	1.48	9.917	4.11	16.000	3.42	22.08	1.37
3.917	1.48	10.000	4.11	16.083	3.42	22.17	1.37
4.000	1.48	10.083	4.11	16.167	3.42	22.25	1.37
4.083	1.48	10.167	4.11	16.250	3.42	22.33	1.37
4.167	1.48	10.250	4.11	16.333	2.05	22.42	1.37
4.250	1.48	10.333	5.25	16.417	2.05	22.50	1.37
4.333	1.82	10.417	5.25	16.500	2.05	22.58	1.37
4.417	1.82	10.500	5.25	16.583	2.05	22.67	1.37
4.500	1.82	10.583	5.25	16.667	2.05	22.75	1.37
4.583	1.82	10.667	5.25	16.750	2.05	22.83	1.37
4.667	1.82	10.750	5.25	16.833	2.05	22.92	1.37
4.750	1.82	10.833	7.07	16.917	2.05	23.00	1.37
4.833	1.82	10.917	7.07	17.000	2.05	23.08	1.37
4.917	1.82	11.000	7.07	17.083	2.05	23.17	1.37
5.000	1.82	11.083	7.07	17.167	2.05	23.25	1.37
5.083	1.82	11.167	7.07	17.250	2.05	23.33	1.37
5.167	1.82	11.250	7.07	17.333	2.05	23.42	1.37
5.250	1.82	11.333	10.95	17.417	2.05	23.50	1.37
5.333	1.82	11.417	10.95	17.500	2.05	23.58	1.37
5.417	1.82	11.500	10.95	17.583	2.05	23.67	1.37
5.500	1.82	11.583	10.95	17.667	2.05	23.75	1.37
5.583	1.82	11.667	10.95	17.750	2.05	23.83	1.37
5.667	1.82	11.750	10.95	17.833	2.05	23.92	1.37
5.750	1.82	11.833	33.75	17.917	2.05	24.00	1.37
5.833	1.82	11.917	33.76	18.000	2.05	24.08	1.37
5.917	1.82	12.000	33.76	18.083	2.05	24.17	1.37
6.000	1.82	12.083	139.57	18.167	2.05	24.25	1.37
6.083	1.82	12.167	139.58	18.250	2.05		

Unit Hyd Qpeak (cms)= 0.135

PEAK FLOW (cms)= 0.099 (i)
TIME TO PEAK (hrs)= 12.500
RUNOFF VOLUME (mm)= 44.983
TOTAL RAINFALL (mm)= 114.040
RUNOFF COEFFICIENT = 0.394

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB							
NASHYD (0041)	Area (ha)= 0.59	Curve Number (CN)= 71.5					
ID= 1 DT= 5.0 min	Ia (mm)= 4.75	# of Linear Res.(N)= 3.00					
	U.H. Tp(hrs)= 0.53						

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.82	12.250	139.58	18.33	2.05
0.167	0.00	6.250	1.82	12.333	16.44	18.42	2.05
0.250	0.00	6.333	2.05	12.417	16.42	18.50	2.05
0.333	1.25	6.417	2.05	12.500	16.42	18.58	2.05
0.417	1.25	6.500	2.05	12.583	16.42	18.67	2.05
0.500	1.25	6.583	2.05	12.667	16.42	18.75	2.05
0.583	1.25	6.667	2.05	12.750	16.42	18.83	2.05
0.667	1.25	6.750	2.05	12.833	8.44	18.92	2.05
0.750	1.25	6.833	2.05	12.917	8.44	19.00	2.05
0.833	1.25	6.917	2.05	13.000	8.44	19.08	2.05
0.917	1.25	7.000	2.05	13.083	8.44	19.17	2.05
1.000	1.25	7.083	2.05	13.167	8.44	19.25	2.05
1.083	1.25	7.167	2.05	13.250	8.44	19.33	2.05
1.167	1.25	7.250	2.05	13.333	6.16	19.42	2.05
1.250	1.25	7.333	2.51	13.417	6.16	19.50	2.05
1.333	1.25	7.417	2.51	13.500	6.16	19.58	2.05
1.417	1.25	7.500	2.51	13.583	6.16	19.67	2.05
1.500	1.25	7.583	2.51	13.667	6.16	19.75	2.05
1.583	1.25	7.667	2.51	13.750	6.16	19.83	2.05
1.667	1.25	7.750	2.51	13.833	4.79	19.92	2.05
1.750	1.25	7.833	2.51	13.917	4.79	20.00	2.05
1.833	1.25	7.917	2.51	14.000	4.79	20.08	2.05
1.917	1.25	8.000	2.51	14.083	4.79	20.17	2.05
2.000	1.25	8.083	2.51	14.167	4.79	20.25	2.05
2.083	1.25	8.167	2.51	14.250	4.79	20.33	1.37
2.167	1.25	8.250	2.51	14.333	3.42	20.42	1.37
2.250	1.25	8.333	2.97	14.417	3.42	20.50	1.37
2.333	1.48	8.417	2.97	14.500	3.42	20.58	1.37
2.417	1.48	8.500	2.97	14.583	3.42	20.67	1.37
2.500	1.48	8.583	2.97	14.667	3.42	20.75	1.37
2.583	1.48	8.667	2.97	14.750	3.42	20.83	1.37
2.667	1.48	8.750	2.97	14.833	3.42	20.92	1.37
2.750	1.48	8.833	3.19	14.917	3.42	21.00	1.37
2.833	1.48	8.917	3.19	15.000	3.42	21.08	1.37
2.917	1.48	9.000	3.19	15.083	3.42	21.17	1.37
3.000	1.48	9.083	3.19	15.167	3.42	21.25	1.37
3.083	1.48	9.167	3.19	15.250	3.42	21.33	1.37

3.167	1.48	9.250	3.19	15.333	3.42	21.42	1.37
3.250	1.48	9.333	3.65	15.417	3.42	21.50	1.37
3.333	1.48	9.417	3.65	15.500	3.42	21.58	1.37
3.417	1.48	9.500	3.65	15.583	3.42	21.67	1.37
3.500	1.48	9.583	3.65	15.667	3.42	21.75	1.37
3.583	1.48	9.667	3.65	15.750	3.42	21.83	1.37
3.667	1.48	9.750	3.65	15.833	3.42	21.92	1.37
3.750	1.48	9.833	4.11	15.917	3.42	22.00	1.37
3.833	1.48	9.917	4.11	16.000	3.42	22.08	1.37
3.917	1.48	10.000	4.11	16.083	3.42	22.17	1.37
4.000	1.48	10.083	4.11	16.167	3.42	22.25	1.37
4.083	1.48	10.167	4.11	16.250	3.42	22.33	1.37
4.167	1.48	10.250	4.11	16.333	2.05	22.42	1.37
4.250	1.48	10.333	5.25	16.417	2.05	22.50	1.37
4.333	1.82	10.417	5.25	16.500	2.05	22.58	1.37
4.417	1.82	10.500	5.25	16.583	2.05	22.67	1.37
4.500	1.82	10.583	5.25	16.667	2.05	22.75	1.37
4.583	1.82	10.667	5.25	16.750	2.05	22.83	1.37
4.667	1.82	10.750	5.25	16.833	2.05	22.92	1.37
4.750	1.82	10.833	7.07	16.917	2.05	23.00	1.37
4.833	1.82	10.917	7.07	17.000	2.05	23.08	1.37
4.917	1.82	11.000	7.07	17.083	2.05	23.17	1.37
5.000	1.82	11.083	7.07	17.167	2.05	23.25	1.37
5.083	1.82	11.167	7.07	17.250	2.05	23.33	1.37
5.167	1.82	11.250	7.07	17.333	2.05	23.42	1.37
5.250	1.82	11.333	10.95	17.417	2.05	23.50	1.37
5.333	1.82	11.417	10.95	17.500	2.05	23.58	1.37
5.417	1.82	11.500	10.95	17.583	2.05	23.67	1.37
5.500	1.82	11.583	10.95	17.667	2.05	23.75	1.37
5.583	1.82	11.667	10.95	17.750	2.05	23.83	1.37
5.667	1.82	11.750	10.95	17.833	2.05	23.92	1.37
5.750	1.82	11.833	33.75	17.917	2.05	24.00	1.37
5.833	1.82	11.917	33.76	18.000	2.05	24.08	1.37
5.917	1.82	12.000	33.76	18.083	2.05	24.17	1.37
6.000	1.82	12.083	139.57	18.167	2.05	24.25	1.37
6.083	1.82	12.167	139.58	18.250	2.05		

Unit Hyd Qpeak (cms)= 0.043

PEAK FLOW (cms)= 0.043 (i)
TIME TO PEAK (hrs)= 12.667
RUNOFF VOLUME (mm)= 56.676
TOTAL RAINFALL (mm)= 114.040
RUNOFF COEFFICIENT = 0.497

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
STANDHYD (0015)	Area (ha)= 1.93		
ID= 1 DT= 5.0 min	Total Imp(%)= 54.66	Dir. Conn.(%)= 10.00	

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	1.05	0.88
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	113.43	45.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.82	12.250	139.58	18.33	2.05
0.167	0.00	6.250	1.82	12.333	16.44	18.42	2.05
0.250	0.00	6.333	2.05	12.417	16.42	18.50	2.05
0.333	1.25	6.417	2.05	12.500	16.42	18.58	2.05
0.417	1.25	6.500	2.05	12.583	16.42	18.67	2.05
0.500	1.25	6.583	2.05	12.667	16.42	18.75	2.05
0.583	1.25	6.667	2.05	12.750	16.42	18.83	2.05
0.667	1.25	6.750	2.05	12.833	8.44	18.92	2.05
0.750	1.25	6.833	2.05	12.917	8.44	19.00	2.05
0.833	1.25	6.917	2.05	13.000	8.44	19.08	2.05
0.917	1.25	7.000	2.05	13.083	8.44	19.17	2.05
1.000	1.25	7.083	2.05	13.167	8.44	19.25	2.05
1.083	1.25	7.167	2.05	13.250	8.44	19.33	2.05
1.167	1.25	7.250	2.05	13.333	6.16	19.42	2.05
1.250	1.25	7.333	2.51	13.417	6.16	19.50	2.05
1.333	1.25	7.417	2.51	13.500	6.16	19.58	2.05
1.417	1.25	7.500	2.51	13.583	6.16	19.67	2.05
1.500	1.25	7.583	2.51	13.667	6.16	19.75	2.05
1.583	1.25	7.667	2.51	13.750	6.16	19.83	2.05
1.667	1.25	7.750	2.51	13.833	4.79	19.92	2.05
1.750	1.25	7.833	2.51	13.917	4.79	20.00	2.05
1.833	1.25	7.917	2.51	14.000	4.79	20.08	2.05
1.917	1.25	8.000	2.51	14.083	4.79	20.17	2.05
2.000	1.25	8.083	2.51	14.167	4.79	20.25	2.05
2.083	1.25	8.167	2.51	14.250	4.79	20.33	1.37
2.167	1.25	8.250	2.51	14.333	3.42	20.42	1.37
2.250	1.25	8.333	2.97	14.417	3.42	20.50	1.37
2.333	1.48	8.417	2.97	14.500	3.42	20.58	1.37
2.417	1.48	8.500	2.97	14.583	3.42	20.67	1.37
2.500	1.48	8.583	2.97	14.667	3.42	20.75	1.37

2.583	1.48	8.667	2.97	14.750	3.42	20.83	1.37
2.667	1.48	8.750	2.97	14.833	3.42	20.92	1.37
2.750	1.48	8.833	3.19	14.917	3.42	21.00	1.37
2.833	1.48	8.917	3.19	15.000	3.42	21.08	1.37
2.917	1.48	9.000	3.19	15.083	3.42	21.17	1.37
3.000	1.48	9.083	3.19	15.167	3.42	21.25	1.37
3.083	1.48	9.167	3.19	15.250	3.42	21.33	1.37
3.167	1.48	9.250	3.19	15.333	3.42	21.42	1.37
3.250	1.48	9.333	3.65	15.417	3.42	21.50	1.37
3.333	1.48	9.417	3.65	15.500	3.42	21.58	1.37
3.417	1.48	9.500	3.65	15.583	3.42	21.67	1.37
3.500	1.48	9.583	3.65	15.667	3.42	21.75	1.37
3.583	1.48	9.667	3.65	15.750	3.42	21.83	1.37
3.667	1.48	9.750	3.65	15.833	3.42	21.92	1.37
3.750	1.48	9.833	4.11	15.917	3.42	22.00	1.37
3.833	1.48	9.917	4.11	16.000	3.42	22.08	1.37
3.917	1.48	10.000	4.11	16.083	3.42	22.17	1.37
4.000	1.48	10.083	4.11	16.167	3.42	22.25	1.37
4.083	1.48	10.167	4.11	16.250	3.42	22.33	1.37
4.167	1.48	10.250	4.11	16.333	2.05	22.42	1.37
4.250	1.48	10.333	5.25	16.417	2.05	22.50	1.37
4.333	1.82	10.417	5.25	16.500	2.05	22.58	1.37
4.417	1.82	10.500	5.25	16.583	2.05	22.67	1.37
4.500	1.82	10.583	5.25	16.667	2.05	22.75	1.37
4.583	1.82	10.667	5.25	16.750	2.05	22.83	1.37
4.667	1.82	10.750	5.25	16.833	2.05	22.92	1.37
4.750	1.82	10.833	7.07	16.917	2.05	23.00	1.37
4.833	1.82	10.917	7.07	17.000	2.05	23.08	1.37
4.917	1.82	11.000	7.07	17.083	2.05	23.17	1.37
5.000	1.82	11.083	7.07	17.167	2.05	23.25	1.37
5.083	1.82	11.167	7.07	17.250	2.05	23.33	1.37
5.167	1.82	11.250	7.07	17.333	2.05	23.42	1.37
5.250	1.82	11.333	10.95	17.417	2.05	23.50	1.37
5.333	1.82	11.417	10.95	17.500	2.05	23.58	1.37
5.417	1.82	11.500	10.95	17.583	2.05	23.67	1.37
5.500	1.82	11.583	10.95	17.667	2.05	23.75	1.37
5.583	1.82	11.667	10.95	17.750	2.05	23.83	1.37
5.667	1.82	11.750	10.95	17.833	2.05	23.92	1.37
5.750	1.82	11.833	33.75	17.917	2.05	24.00	1.37
5.833	1.82	11.917	33.76	18.000	2.05	24.08	1.37
5.917	1.82	12.000	33.76	18.083	2.05	24.17	1.37
6.000	1.82	12.083	139.57	18.167	2.05	24.25	1.37
6.083	1.82	12.167	139.58	18.250	2.05		

Max.Eff.Inten.(mm/hr)= 139.58 147.05
over (min) 5.00 10.00
Storage Coeff. (min)= 2.97 (ii) 9.46 (ii)
Unit Hyd. Tpeak (min)= 5.00 10.00

Unit Hyd. peak (cms)= 0.28 0.12

		TOTALS
PEAK FLOW	(cms)=	0.07	0.25	0.328 (iii)
TIME TO PEAK	(hrs)=	12.25	12.25	12.25
RUNOFF VOLUME	(mm)=	113.04	50.88	57.09
TOTAL RAINFALL	(mm)=	114.04	114.04	114.04
RUNOFF COEFFICIENT	=	0.99	0.45	0.50

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 49.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	
STANDHYD (0019)	Area (ha)= 2.16
ID= 1 DT= 5.0 min	Total Imp(%)= 54.64 Dir. Conn.(%)= 10.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	1.18	0.98
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	120.00	30.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.82	12.250	139.58	18.33	2.05
0.167	0.00	6.250	1.82	12.333	16.44	18.42	2.05
0.250	0.00	6.333	2.05	12.417	16.42	18.50	2.05
0.333	1.25	6.417	2.05	12.500	16.42	18.58	2.05
0.417	1.25	6.500	2.05	12.583	16.42	18.67	2.05
0.500	1.25	6.583	2.05	12.667	16.42	18.75	2.05
0.583	1.25	6.667	2.05	12.750	16.42	18.83	2.05
0.667	1.25	6.750	2.05	12.833	8.44	18.92	2.05
0.750	1.25	6.833	2.05	12.917	8.44	19.00	2.05
0.833	1.25	6.917	2.05	13.000	8.44	19.08	2.05
0.917	1.25	7.000	2.05	13.083	8.44	19.17	2.05

1.000	1.25	7.083	2.05	13.167	8.44	19.25	2.05
1.083	1.25	7.167	2.05	13.250	8.44	19.33	2.05
1.167	1.25	7.250	2.05	13.333	6.16	19.42	2.05
1.250	1.25	7.333	2.51	13.417	6.16	19.50	2.05
1.333	1.25	7.417	2.51	13.500	6.16	19.58	2.05
1.417	1.25	7.500	2.51	13.583	6.16	19.67	2.05
1.500	1.25	7.583	2.51	13.667	6.16	19.75	2.05
1.583	1.25	7.667	2.51	13.750	6.16	19.83	2.05
1.667	1.25	7.750	2.51	13.833	4.79	19.92	2.05
1.750	1.25	7.833	2.51	13.917	4.79	20.00	2.05
1.833	1.25	7.917	2.51	14.000	4.79	20.08	2.05
1.917	1.25	8.000	2.51	14.083	4.79	20.17	2.05
2.000	1.25	8.083	2.51	14.167	4.79	20.25	2.05
2.083	1.25	8.167	2.51	14.250	4.79	20.33	1.37
2.167	1.25	8.250	2.51	14.333	3.42	20.42	1.37
2.250	1.25	8.333	2.97	14.417	3.42	20.50	1.37
2.333	1.48	8.417	2.97	14.500	3.42	20.58	1.37
2.417	1.48	8.500	2.97	14.583	3.42	20.67	1.37
2.500	1.48	8.583	2.97	14.667	3.42	20.75	1.37
2.583	1.48	8.667	2.97	14.750	3.42	20.83	1.37
2.667	1.48	8.750	2.97	14.833	3.42	20.92	1.37
2.750	1.48	8.833	3.19	14.917	3.42	21.00	1.37
2.833	1.48	8.917	3.19	15.000	3.42	21.08	1.37
2.917	1.48	9.000	3.19	15.083	3.42	21.17	1.37
3.000	1.48	9.083	3.19	15.167	3.42	21.25	1.37
3.083	1.48	9.167	3.19	15.250	3.42	21.33	1.37
3.167	1.48	9.250	3.19	15.333	3.42	21.42	1.37
3.250	1.48	9.333	3.65	15.417	3.42	21.50	1.37
3.333	1.48	9.417	3.65	15.500	3.42	21.58	1.37
3.417	1.48	9.500	3.65	15.583	3.42	21.67	1.37
3.500	1.48	9.583	3.65	15.667	3.42	21.75	1.37
3.583	1.48	9.667	3.65	15.750	3.42	21.83	1.37
3.667	1.48	9.750	3.65	15.833	3.42	21.92	1.37
3.750	1.48	9.833	4.11	15.917	3.42	22.00	1.37
3.833	1.48	9.917	4.11	16.000	3.42	22.08	1.37
3.917	1.48	10.000	4.11	16.083	3.42	22.17	1.37
4.000	1.48	10.083	4.11	16.167	3.42	22.25	1.37
4.083	1.48	10.167	4.11	16.250	3.42	22.33	1.37
4.167	1.48	10.250	4.11	16.333	2.05	22.42	1.37
4.250	1.48	10.333	5.25	16.417	2.05	22.50	1.37
4.333	1.82	10.417	5.25	16.500	2.05	22.58	1.37
4.417	1.82	10.500	5.25	16.583	2.05	22.67	1.37
4.500	1.82	10.583	5.25	16.667	2.05	22.75	1.37
4.583	1.82	10.667	5.25	16.750	2.05	22.83	1.37
4.667	1.82	10.750	5.25	16.833	2.05	22.92	1.37
4.750	1.82	10.833	7.07	16.917	2.05	23.00	1.37
4.833	1.82	10.917	7.07	17.000	2.05	23.08	1.37
4.917	1.82	11.000	7.07	17.083	2.05	23.17	1.37
5.000	1.82	11.083	7.07	17.167	2.05	23.25	1.37
5.083	1.82	11.167	7.07	17.250	2.05	23.33	1.37
5.167	1.82	11.250	7.07	17.333	2.05	23.42	1.37
5.250	1.82	11.333	10.95	17.417	2.05	23.50	1.37
5.333	1.82	11.417	10.95	17.500	2.05	23.58	1.37
5.417	1.82	11.500	10.95	17.583	2.05	23.67	1.37
5.500	1.82	11.583	10.95	17.667	2.05	23.75	1.37
5.583	1.82	11.667	10.95	17.750	2.05	23.83	1.37
5.667	1.82	11.750	10.95	17.833	2.05	23.92	1.37
5.750	1.82	11.833	33.75	17.917	2.05	24.00	1.37
5.833	1.82	11.917	33.76	18.000	2.05	24.08	1.37
5.917	1.82	12.000	33.76	18.083	2.05	24.17	1.37
6.000	1.82	12.083	139.57	18.167	2.05	24.25	1.37
6.083	1.82	12.167	139.58	18.250	2.05		

Max.Eff.Inten.(mm/hr)= 139.58 211.60
over (min) 5.00 10.00
Storage Coeff. (min)= 3.07 (ii) 7.47 (ii)
Unit Hyd. Tpeak (min)= 5.00 10.00
Unit Hyd. peak (cms)= 0.27 0.13

		TOTALS
PEAK FLOW	(cms)=	0.08	0.46	0.543 (iii)
TIME TO PEAK	(hrs)=	12.25	12.25	12.25
RUNOFF VOLUME	(mm)=	113.04	73.57	77.52
TOTAL RAINFALL	(mm)=	114.04	114.04	114.04
RUNOFF COEFFICIENT	=	0.99	0.65	0.68

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0040)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
	ID1= 1 (0015):	1.93	0.328	12.25	57.09
	+ ID2= 2 (0019):	2.16	0.543	12.25	77.52
	ID = 3 (0040):	4.09	0.870	12.25	67.88

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0040)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
	ID1= 3 (0040):	4.09	0.870	12.25	67.88
	+ ID2= 2 (0027):	1.38	0.099	12.50	44.98
	ID = 1 (0040):	5.47	0.930	12.25	62.10

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0040)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
	ID1= 1 (0040):	5.47	0.930	12.25	62.10
	+ ID2= 2 (0041):	0.59	0.043	12.67	56.68
	ID = 3 (0040):	6.06	0.951	12.25	61.57

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB			
NASHYD (0048)	Area (ha)= 29.16	Curve Number (CN)= 71.4	
ID= 1 DT= 5.0 min	Ia (mm)= 7.88	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.68		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.82	12.250	139.58	18.33	2.05
0.167	0.00	6.250	1.82	12.333	16.44	18.42	2.05
0.250	0.00	6.333	2.05	12.417	16.42	18.50	2.05
0.333	1.25	6.417	2.05	12.500	16.42	18.58	2.05
0.417	1.25	6.500	2.05	12.583	16.42	18.67	2.05
0.500	1.25	6.583	2.05	12.667	16.42	18.75	2.05
0.583	1.25	6.667	2.05	12.750	16.42	18.83	2.05
0.667	1.25	6.750	2.05	12.833	8.44	18.92	2.05
0.750	1.25	6.833	2.05	12.917	8.44	19.00	2.05
0.833	1.25	6.917	2.05	13.000	8.44	19.08	2.05

0.917	1.25	7.000	2.05	13.083	8.44	19.17	2.05
1.000	1.25	7.083	2.05	13.167	8.44	19.25	2.05
1.083	1.25	7.167	2.05	13.250	8.44	19.33	2.05
1.167	1.25	7.250	2.05	13.333	6.16	19.42	2.05
1.250	1.25	7.333	2.51	13.417	6.16	19.50	2.05
1.333	1.25	7.417	2.51	13.500	6.16	19.58	2.05
1.417	1.25	7.500	2.51	13.583	6.16	19.67	2.05
1.500	1.25	7.583	2.51	13.667	6.16	19.75	2.05
1.583	1.25	7.667	2.51	13.750	6.16	19.83	2.05
1.667	1.25	7.750	2.51	13.833	4.79	19.92	2.05
1.750	1.25	7.833	2.51	13.917	4.79	20.00	2.05
1.833	1.25	7.917	2.51	14.000	4.79	20.08	2.05
1.917	1.25	8.000	2.51	14.083	4.79	20.17	2.05
2.000	1.25	8.083	2.51	14.167	4.79	20.25	2.05
2.083	1.25	8.167	2.51	14.250	4.79	20.33	1.37
2.167	1.25	8.250	2.51	14.333	3.42	20.42	1.37
2.250	1.25	8.333	2.97	14.417	3.42	20.50	1.37
2.333	1.48	8.417	2.97	14.500	3.42	20.58	1.37
2.417	1.48	8.500	2.97	14.583	3.42	20.67	1.37
2.500	1.48	8.583	2.97	14.667	3.42	20.75	1.37
2.583	1.48	8.667	2.97	14.750	3.42	20.83	1.37
2.667	1.48	8.750	2.97	14.833	3.42	20.92	1.37
2.750	1.48	8.833	3.19	14.917	3.42	21.00	1.37
2.833	1.48	8.917	3.19	15.000	3.42	21.08	1.37
2.917	1.48	9.000	3.19	15.083	3.42	21.17	1.37
3.000	1.48	9.083	3.19	15.167	3.42	21.25	1.37
3.083	1.48	9.167	3.19	15.250	3.42	21.33	1.37
3.167	1.48	9.250	3.19	15.333	3.42	21.42	1.37
3.250	1.48	9.333	3.65	15.417	3.42	21.50	1.37
3.333	1.48	9.417	3.65	15.500	3.42	21.58	1.37
3.417	1.48	9.500	3.65	15.583	3.42	21.67	1.37
3.500	1.48	9.583	3.65	15.667	3.42	21.75	1.37
3.583	1.48	9.667	3.65	15.750	3.42	21.83	1.37
3.667	1.48	9.750	3.65	15.833	3.42	21.92	1.37
3.750	1.48	9.833	4.11	15.917	3.42	22.00	1.37
3.833	1.48	9.917	4.11	16.000	3.42	22.08	1.37
3.917	1.48	10.000	4.11	16.083	3.42	22.17	1.37
4.000	1.48	10.083	4.11	16.167	3.42	22.25	1.37
4.083	1.48	10.167	4.11	16.250	3.42	22.33	1.37
4.167	1.48	10.250	4.11	16.333	2.05	22.42	1.37
4.250	1.48	10.333	5.25	16.417	2.05	22.50	1.37
4.333	1.82	10.417	5.25	16.500	2.05	22.58	1.37
4.417	1.82	10.500	5.25	16.583	2.05	22.67	1.37
4.500	1.82	10.583	5.25	16.667	2.05	22.75	1.37
4.583	1.82	10.667	5.25	16.750	2.05	22.83	1.37
4.667	1.82	10.750	5.25	16.833	2.05	22.92	1.37
4.750	1.82	10.833	7.07	16.917	2.05	23.00	1.37
4.833	1.82	10.917	7.07	17.000	2.05	23.08	1.37

4.917	1.82	11.000	7.07	17.083	2.05	23.17	1.37
5.000	1.82	11.083	7.07	17.167	2.05	23.25	1.37
5.083	1.82	11.167	7.07	17.250	2.05	23.33	1.37
5.167	1.82	11.250	7.07	17.333	2.05	23.42	1.37
5.250	1.82	11.333	10.95	17.417	2.05	23.50	1.37
5.333	1.82	11.417	10.95	17.500	2.05	23.58	1.37
5.417	1.82	11.500	10.95	17.583	2.05	23.67	1.37
5.500	1.82	11.583	10.95	17.667	2.05	23.75	1.37
5.583	1.82	11.667	10.95	17.750	2.05	23.83	1.37
5.667	1.82	11.750	10.95	17.833	2.05	23.92	1.37
5.750	1.82	11.833	33.75	17.917	2.05	24.00	1.37
5.833	1.82	11.917	33.76	18.000	2.05	24.08	1.37
5.917	1.82	12.000	33.76	18.083	2.05	24.17	1.37
6.000	1.82	12.083	139.57	18.167	2.05	24.25	1.37
6.083	1.82	12.167	139.58	18.250	2.05		

Unit Hyd Qpeak (cms)= 1.638

PEAK FLOW (cms)= 1.709 (i)
TIME TO PEAK (hrs)= 12.833
RUNOFF VOLUME (mm)= 54.207
TOTAL RAINFALL (mm)= 114.040
RUNOFF COEFFICIENT = 0.475

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
STANDHYD (0014)	Area (ha)= 1.87		
ID= 1 DT= 5.0 min	Total Imp(%)= 43.28	Dir. Conn.(%)= 10.00	

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	0.81	1.06
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	0.50	2.00
Length (m)=	111.65	25.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.82	12.250	139.58	18.33	2.05
0.167	0.00	6.250	1.82	12.333	16.44	18.42	2.05
0.250	0.00	6.333	2.05	12.417	16.42	18.50	2.05

0.333	1.25	6.417	2.05	12.500	16.42	18.58	2.05
0.417	1.25	6.500	2.05	12.583	16.42	18.67	2.05
0.500	1.25	6.583	2.05	12.667	16.42	18.75	2.05
0.583	1.25	6.667	2.05	12.750	16.42	18.83	2.05
0.667	1.25	6.750	2.05	12.833	8.44	18.92	2.05
0.750	1.25	6.833	2.05	12.917	8.44	19.00	2.05
0.833	1.25	6.917	2.05	13.000	8.44	19.08	2.05
0.917	1.25	7.000	2.05	13.083	8.44	19.17	2.05
1.000	1.25	7.083	2.05	13.167	8.44	19.25	2.05
1.083	1.25	7.167	2.05	13.250	8.44	19.33	2.05
1.167	1.25	7.250	2.05	13.333	6.16	19.42	2.05
1.250	1.25	7.333	2.51	13.417	6.16	19.50	2.05
1.333	1.25	7.417	2.51	13.500	6.16	19.58	2.05
1.417	1.25	7.500	2.51	13.583	6.16	19.67	2.05
1.500	1.25	7.583	2.51	13.667	6.16	19.75	2.05
1.583	1.25	7.667	2.51	13.750	6.16	19.83	2.05
1.667	1.25	7.750	2.51	13.833	4.79	19.92	2.05
1.750	1.25	7.833	2.51	13.917	4.79	20.00	2.05
1.833	1.25	7.917	2.51	14.000	4.79	20.08	2.05
1.917	1.25	8.000	2.51	14.083	4.79	20.17	2.05
2.000	1.25	8.083	2.51	14.167	4.79	20.25	2.05
2.083	1.25	8.167	2.51	14.250	4.79	20.33	1.37
2.167	1.25	8.250	2.51	14.333	3.42	20.42	1.37
2.250	1.25	8.333	2.97	14.417	3.42	20.50	1.37
2.333	1.48	8.417	2.97	14.500	3.42	20.58	1.37
2.417	1.48	8.500	2.97	14.583	3.42	20.67	1.37
2.500	1.48	8.583	2.97	14.667	3.42	20.75	1.37
2.583	1.48	8.667	2.97	14.750	3.42	20.83	1.37
2.667	1.48	8.750	2.97	14.833	3.42	20.92	1.37
2.750	1.48	8.833	3.19	14.917	3.42	21.00	1.37
2.833	1.48	8.917	3.19	15.000	3.42	21.08	1.37
2.917	1.48	9.000	3.19	15.083	3.42	21.17	1.37
3.000	1.48	9.083	3.19	15.167	3.42	21.25	1.37
3.083	1.48	9.167	3.19	15.250	3.42	21.33	1.37
3.167	1.48	9.250	3.19	15.333	3.42	21.42	1.37
3.250	1.48	9.333	3.65	15.417	3.42	21.50	1.37
3.333	1.48	9.417	3.65	15.500	3.42	21.58	1.37
3.417	1.48	9.500	3.65	15.583	3.42	21.67	1.37
3.500	1.48	9.583	3.65	15.667	3.42	21.75	1.37
3.583	1.48	9.667	3.65	15.750	3.42	21.83	1.37
3.667	1.48	9.750	3.65	15.833	3.42	21.92	1.37
3.750	1.48	9.833	4.11	15.917	3.42	22.00	1.37
3.833	1.48	9.917	4.11	16.000	3.42	22.08	1.37
3.917	1.48	10.000	4.11	16.083	3.42	22.17	1.37
4.000	1.48	10.083	4.11	16.167	3.42	22.25	1.37
4.083	1.48	10.167	4.11	16.250	3.42	22.33	1.37
4.167	1.48	10.250	4.11	16.333	2.05	22.42	1.37
4.250	1.48	10.333	5.25	16.417	2.05	22.50	1.37

4.333	1.82	10.417	5.25	16.500	2.05	22.58	1.37
4.417	1.82	10.500	5.25	16.583	2.05	22.67	1.37
4.500	1.82	10.583	5.25	16.667	2.05	22.75	1.37
4.583	1.82	10.667	5.25	16.750	2.05	22.83	1.37
4.667	1.82	10.750	5.25	16.833	2.05	22.92	1.37
4.750	1.82	10.833	7.07	16.917	2.05	23.00	1.37
4.833	1.82	10.917	7.07	17.000	2.05	23.08	1.37
4.917	1.82	11.000	7.07	17.083	2.05	23.17	1.37
5.000	1.82	11.083	7.07	17.167	2.05	23.25	1.37
5.083	1.82	11.167	7.07	17.250	2.05	23.33	1.37
5.167	1.82	11.250	7.07	17.333	2.05	23.42	1.37
5.250	1.82	11.333	10.95	17.417	2.05	23.50	1.37
5.333	1.82	11.417	10.95	17.500	2.05	23.58	1.37
5.417	1.82	11.500	10.95	17.583	2.05	23.67	1.37
5.500	1.82	11.583	10.95	17.667	2.05	23.75	1.37
5.583	1.82	11.667	10.95	17.750	2.05	23.83	1.37
5.667	1.82	11.750	10.95	17.833	2.05	23.92	1.37
5.750	1.82	11.833	33.75	17.917	2.05	24.00	1.37
5.833	1.82	11.917	33.76	18.000	2.05	24.08	1.37
5.917	1.82	12.000	33.76	18.083	2.05	24.17	1.37
6.000	1.82	12.083	139.57	18.167	2.05	24.25	1.37
6.083	1.82	12.167	139.58	18.250	2.05		

Max.Eff.Inten.(mm/hr)=	139.58	180.74	
over (min)	5.00	10.00	
Storage Coeff. (min)=	2.94 (ii)	7.14 (ii)	
Unit Hyd. Tpeak (min)=	5.00	10.00	
Unit Hyd. peak (cms)=	0.28	0.14	
		TOTALS	
PEAK FLOW (cms)=	0.07	0.43	0.506 (iii)
TIME TO PEAK (hrs)=	12.25	12.25	12.25
RUNOFF VOLUME (mm)=	113.04	78.78	82.20
TOTAL RAINFALL (mm)=	114.04	114.04	114.04
RUNOFF COEFFICIENT =	0.99	0.69	0.72

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 78.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB

STANDHYD (0021)	Area (ha)= 0.07
ID= 1 DT= 5.0 min	Total Imp(%)= 48.26 Dir. Conn.(%)= 39.54

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.03	0.04
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	21.60	5.60
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.82	12.250	139.58	18.33	2.05
0.167	0.00	6.250	1.82	12.333	16.44	18.42	2.05
0.250	0.00	6.333	2.05	12.417	16.42	18.50	2.05
0.333	1.25	6.417	2.05	12.500	16.42	18.58	2.05
0.417	1.25	6.500	2.05	12.583	16.42	18.67	2.05
0.500	1.25	6.583	2.05	12.667	16.42	18.75	2.05
0.583	1.25	6.667	2.05	12.750	16.42	18.83	2.05
0.667	1.25	6.750	2.05	12.833	8.44	18.92	2.05
0.750	1.25	6.833	2.05	12.917	8.44	19.00	2.05
0.833	1.25	6.917	2.05	13.000	8.44	19.08	2.05
0.917	1.25	7.000	2.05	13.083	8.44	19.17	2.05
1.000	1.25	7.083	2.05	13.167	8.44	19.25	2.05
1.083	1.25	7.167	2.05	13.250	8.44	19.33	2.05
1.167	1.25	7.250	2.05	13.333	6.16	19.42	2.05
1.250	1.25	7.333	2.51	13.417	6.16	19.50	2.05
1.333	1.25	7.417	2.51	13.500	6.16	19.58	2.05
1.417	1.25	7.500	2.51	13.583	6.16	19.67	2.05
1.500	1.25	7.583	2.51	13.667	6.16	19.75	2.05
1.583	1.25	7.667	2.51	13.750	6.16	19.83	2.05
1.667	1.25	7.750	2.51	13.833	4.79	19.92	2.05
1.750	1.25	7.833	2.51	13.917	4.79	20.00	2.05
1.833	1.25	7.917	2.51	14.000	4.79	20.08	2.05
1.917	1.25	8.000	2.51	14.083	4.79	20.17	2.05
2.000	1.25	8.083	2.51	14.167	4.79	20.25	2.05
2.083	1.25	8.167	2.51	14.250	4.79	20.33	1.37
2.167	1.25	8.250	2.51	14.333	3.42	20.42	1.37
2.250	1.25	8.333	2.97	14.417	3.42	20.50	1.37
2.333	1.48	8.417	2.97	14.500	3.42	20.58	1.37
2.417	1.48	8.500	2.97	14.583	3.42	20.67	1.37
2.500	1.48	8.583	2.97	14.667	3.42	20.75	1.37
2.583	1.48	8.667	2.97	14.750	3.42	20.83	1.37
2.667	1.48	8.750	2.97	14.833	3.42	20.92	1.37

2.750	1.48	8.833	3.19	14.917	3.42	21.00	1.37
2.833	1.48	8.917	3.19	15.000	3.42	21.08	1.37
2.917	1.48	9.000	3.19	15.083	3.42	21.17	1.37
3.000	1.48	9.083	3.19	15.167	3.42	21.25	1.37
3.083	1.48	9.167	3.19	15.250	3.42	21.33	1.37
3.167	1.48	9.250	3.19	15.333	3.42	21.42	1.37
3.250	1.48	9.333	3.65	15.417	3.42	21.50	1.37
3.333	1.48	9.417	3.65	15.500	3.42	21.58	1.37
3.417	1.48	9.500	3.65	15.583	3.42	21.67	1.37
3.500	1.48	9.583	3.65	15.667	3.42	21.75	1.37
3.583	1.48	9.667	3.65	15.750	3.42	21.83	1.37
3.667	1.48	9.750	3.65	15.833	3.42	21.92	1.37
3.750	1.48	9.833	4.11	15.917	3.42	22.00	1.37
3.833	1.48	9.917	4.11	16.000	3.42	22.08	1.37
3.917	1.48	10.000	4.11	16.083	3.42	22.17	1.37
4.000	1.48	10.083	4.11	16.167	3.42	22.25	1.37
4.083	1.48	10.167	4.11	16.250	3.42	22.33	1.37
4.167	1.48	10.250	4.11	16.333	2.05	22.42	1.37
4.250	1.48	10.333	5.25	16.417	2.05	22.50	1.37
4.333	1.82	10.417	5.25	16.500	2.05	22.58	1.37
4.417	1.82	10.500	5.25	16.583	2.05	22.67	1.37
4.500	1.82	10.583	5.25	16.667	2.05	22.75	1.37
4.583	1.82	10.667	5.25	16.750	2.05	22.83	1.37
4.667	1.82	10.750	5.25	16.833	2.05	22.92	1.37
4.750	1.82	10.833	7.07	16.917	2.05	23.00	1.37
4.833	1.82	10.917	7.07	17.000	2.05	23.08	1.37
4.917	1.82	11.000	7.07	17.083	2.05	23.17	1.37
5.000	1.82	11.083	7.07	17.167	2.05	23.25	1.37
5.083	1.82	11.167	7.07	17.250	2.05	23.33	1.37
5.167	1.82	11.250	7.07	17.333	2.05	23.42	1.37
5.250	1.82	11.333	10.95	17.417	2.05	23.50	1.37
5.333	1.82	11.417	10.95	17.500	2.05	23.58	1.37
5.417	1.82	11.500	10.95	17.583	2.05	23.67	1.37
5.500	1.82	11.583	10.95	17.667	2.05	23.75	1.37
5.583	1.82	11.667	10.95	17.750	2.05	23.83	1.37
5.667	1.82	11.750	10.95	17.833	2.05	23.92	1.37
5.750	1.82	11.833	33.75	17.917	2.05	24.00	1.37
5.833	1.82	11.917	33.76	18.000	2.05	24.08	1.37
5.917	1.82	12.000	33.76	18.083	2.05	24.17	1.37
6.000	1.82	12.083	139.57	18.167	2.05	24.25	1.37
6.083	1.82	12.167	139.58	18.250	2.05		

Max.Eff.Inten.(mm/hr)=	139.58	66.37	
over (min)	5.00	5.00	
Storage Coeff. (min)=	1.10 (ii)	3.21 (ii)	
Unit Hyd. Tpeak (min)=	5.00	5.00	
Unit Hyd. peak (cms)=	0.34	0.27	
		TOTALS	

PEAK FLOW (cms)=	0.01	0.01	0.018 (iii)
TIME TO PEAK (hrs)=	12.25	12.25	12.25
RUNOFF VOLUME (mm)=	113.04	39.00	68.27
TOTAL RAINFALL (mm)=	114.04	114.04	114.04
RUNOFF COEFFICIENT =	0.99	0.34	0.60

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 52.2 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0016)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0001):	39.68	1.142	13.42	41.39
+ ID2= 2 (0014):	1.87	0.506	12.25	82.20
ID = 3 (0016):	41.55	1.175	13.42	43.22

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0016):	41.55	1.175	13.42	43.22
+ ID2= 2 (0002):	23.99	0.476	13.25	25.48
ID = 1 (0016):	65.54	1.645	13.33	36.73

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0016):	65.54	1.645	13.33	36.73
+ ID2= 2 (0021):	0.07	0.018	12.25	68.27
ID = 3 (0016):	65.61	1.645	13.33	36.76

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016) 3 + 2 = 1		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0016):		65.61	1.645	13.33	36.76
+ ID2= 2 (0025):		100.92	1.938	14.08	36.80
ID = 1 (0016):		166.53	3.436	13.67	36.78

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016) 1 + 2 = 3		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0016):		166.53	3.436	13.67	36.78
+ ID2= 2 (0028):		6.37	0.164	13.00	27.83
ID = 3 (0016):		172.90	3.558	13.67	36.45

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016) 3 + 2 = 1		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0016):		172.90	3.558	13.67	36.45
+ ID2= 2 (0029):		14.85	0.388	13.17	31.09
ID = 1 (0016):		187.75	3.896	13.58	36.03

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016) 1 + 2 = 3		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0016):		187.75	3.896	13.58	36.03
+ ID2= 2 (0030):		1.70	0.106	12.50	40.28
ID = 3 (0016):		189.45	3.924	13.58	36.07

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016) 3 + 2 = 1		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0016):		189.45	3.924	13.58	36.07
+ ID2= 2 (0031):		1.80	0.046	13.00	27.30
ID = 1 (0016):		191.25	3.960	13.58	35.99

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016) 1 + 2 = 3		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0016):		191.25	3.960	13.58	35.99
+ ID2= 2 (0032):		6.70	0.157	13.75	39.60
ID = 3 (0016):		197.95	4.115	13.58	36.11

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016) 3 + 2 = 1		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0016):		197.95	4.115	13.58	36.11
+ ID2= 2 (0033):		1.13	0.083	12.58	49.16
ID = 1 (0016):		199.08	4.139	13.58	36.18

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016) 1 + 2 = 3		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0016):		199.08	4.139	13.58	36.18
+ ID2= 2 (0040):		6.06	0.951	12.25	61.57
ID = 3 (0016):		205.14	4.242	13.50	36.93

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016) 3 + 2 = 1		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0016):		205.14	4.242	13.50	36.93
+ ID2= 2 (0048):		29.16	1.709	12.83	54.21
ID = 1 (0016):		234.30	5.597	13.25	39.08

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB / STANDHYD (0009) ID= 1 DT= 5.0 min	Area (ha)= 31.06	Total Imp(%)= 53.89	Dir. Conn.(%)= 20.76

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	16.74	14.32
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	455.05	30.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.82	12.250	139.58	18.33	2.05
0.167	0.00	6.250	1.82	12.333	16.44	18.42	2.05
0.250	0.00	6.333	2.05	12.417	16.42	18.50	2.05
0.333	1.25	6.417	2.05	12.500	16.42	18.58	2.05
0.417	1.25	6.500	2.05	12.583	16.42	18.67	2.05
0.500	1.25	6.583	2.05	12.667	16.42	18.75	2.05
0.583	1.25	6.667	2.05	12.750	16.42	18.83	2.05
0.667	1.25	6.750	2.05	12.833	8.44	18.92	2.05
0.750	1.25	6.833	2.05	12.917	8.44	19.00	2.05
0.833	1.25	6.917	2.05	13.000	8.44	19.08	2.05
0.917	1.25	7.000	2.05	13.083	8.44	19.17	2.05
1.000	1.25	7.083	2.05	13.167	8.44	19.25	2.05
1.083	1.25	7.167	2.05	13.250	8.44	19.33	2.05
1.167	1.25	7.250	2.05	13.333	6.16	19.42	2.05
1.250	1.25	7.333	2.51	13.417	6.16	19.50	2.05

1.333	1.25	7.417	2.51	13.500	6.16	19.58	2.05
1.417	1.25	7.500	2.51	13.583	6.16	19.67	2.05
1.500	1.25	7.583	2.51	13.667	6.16	19.75	2.05
1.583	1.25	7.667	2.51	13.750	6.16	19.83	2.05
1.667	1.25	7.750	2.51	13.833	4.79	19.92	2.05
1.750	1.25	7.833	2.51	13.917	4.79	20.00	2.05
1.833	1.25	7.917	2.51	14.000	4.79	20.08	2.05
1.917	1.25	8.000	2.51	14.083	4.79	20.17	2.05
2.000	1.25	8.083	2.51	14.167	4.79	20.25	2.05
2.083	1.25	8.167	2.51	14.250	4.79	20.33	1.37
2.167	1.25	8.250	2.51	14.333	3.42	20.42	1.37
2.250	1.25	8.333	2.97	14.417	3.42	20.50	1.37
2.333	1.48	8.417	2.97	14.500	3.42	20.58	1.37
2.417	1.48	8.500	2.97	14.583	3.42	20.67	1.37
2.500	1.48	8.583	2.97	14.667	3.42	20.75	1.37
2.583	1.48	8.667	2.97	14.750	3.42	20.83	1.37
2.667	1.48	8.750	2.97	14.833	3.42	20.92	1.37
2.750	1.48	8.833	3.19	14.917	3.42	21.00	1.37
2.833	1.48	8.917	3.19	15.000	3.42	21.08	1.37
2.917	1.48	9.000	3.19	15.083	3.42	21.17	1.37
3.000	1.48	9.083	3.19	15.167	3.42	21.25	1.37
3.083	1.48	9.167	3.19	15.250	3.42	21.33	1.37
3.167	1.48	9.250	3.19	15.333	3.42	21.42	1.37
3.250	1.48	9.333	3.65	15.417	3.42	21.50	1.37
3.333	1.48	9.417	3.65	15.500	3.42	21.58	1.37
3.417	1.48	9.500	3.65	15.583	3.42	21.67	1.37
3.500	1.48	9.583	3.65	15.667	3.42	21.75	1.37
3.583	1.48	9.667	3.65	15.750	3.42	21.83	1.37
3.667	1.48	9.750	3.65	15.833	3.42	21.92	1.37
3.750	1.48	9.833	4.11	15.917	3.42	22.00	1.37
3.833	1.48	9.917	4.11	16.000	3.42	22.08	1.37
3.917	1.48	10.000	4.11	16.083	3.42	22.17	1.37
4.000	1.48	10.083	4.11	16.167	3.42	22.25	1.37
4.083	1.48	10.167	4.11	16.250	3.42	22.33	1.37
4.167	1.48	10.250	4.11	16.333	2.05	22.42	1.37
4.250	1.48	10.333	5.25	16.417	2.05	22.50	1.37
4.333	1.82	10.417	5.25	16.500	2.05	22.58	1.37
4.417	1.82	10.500	5.25	16.583	2.05	22.67	1.37
4.500	1.82	10.583	5.25	16.667	2.05	22.75	1.37
4.583	1.82	10.667	5.25	16.750	2.05	22.83	1.37
4.667	1.82	10.750	5.25	16.833	2.05	22.92	1.37
4.750	1.82	10.833	7.07	16.917	2.05	23.00	1.37
4.833	1.82	10.917	7.07	17.000	2.05	23.08	1.37
4.917	1.82	11.000	7.07	17.083	2.05	23.17	1.37
5.000	1.82	11.083	7.07	17.167	2.05	23.25	1.37
5.083	1.82	11.167	7.07	17.250	2.05	23.33	1.37
5.167	1.82	11.250	7.07	17.333	2.05	23.42	1.37
5.250	1.82	11.333	10.95	17.417	2.05	23.50	1.37

5.333	1.82	11.417	10.95	17.500	2.05	23.58	1.37
5.417	1.82	11.500	10.95	17.583	2.05	23.67	1.37
5.500	1.82	11.583	10.95	17.667	2.05	23.75	1.37
5.583	1.82	11.667	10.95	17.750	2.05	23.83	1.37
5.667	1.82	11.750	10.95	17.833	2.05	23.92	1.37
5.750	1.82	11.833	33.75	17.917	2.05	24.00	1.37
5.833	1.82	11.917	33.76	18.000	2.05	24.08	1.37
5.917	1.82	12.000	33.76	18.083	2.05	24.17	1.37
6.000	1.82	12.083	139.57	18.167	2.05	24.25	1.37
6.083	1.82	12.167	139.58	18.250	2.05		

Max.Eff.Inten.(mm/hr)=	139.58	172.83	
over (min)	5.00	15.00	
Storage Coeff. (min)=	6.83 (ii)	11.60 (ii)	
Unit Hyd. Tpeak (min)=	5.00	15.00	
Unit Hyd. peak (cms)=	0.18	0.09	
			TOTALS
PEAK FLOW (cms)=	2.28	4.36	6.098 (iii)
TIME TO PEAK (hrs)=	12.25	12.33	12.25
RUNOFF VOLUME (mm)=	113.04	68.98	78.13
TOTAL RAINFALL (mm)=	114.04	114.04	114.04
RUNOFF COEFFICIENT =	0.99	0.60	0.69

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 68.5 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
STANDHYD (0010)	Area (ha)=	1.32	
ID= 1 DT= 5.0 min	Total Imp(%)=	55.27	Dir. Conn.(%)= 1.52

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.73	0.59
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	93.81	23.50
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	6.167	1.82	12.250	139.58	18.33	2.05
0.167	0.00	6.250	1.82	12.333	16.44	18.42	2.05
0.250	0.00	6.333	2.05	12.417	16.42	18.50	2.05
0.333	1.25	6.417	2.05	12.500	16.42	18.58	2.05
0.417	1.25	6.500	2.05	12.583	16.42	18.67	2.05
0.500	1.25	6.583	2.05	12.667	16.42	18.75	2.05
0.583	1.25	6.667	2.05	12.750	16.42	18.83	2.05
0.667	1.25	6.750	2.05	12.833	8.44	18.92	2.05
0.750	1.25	6.833	2.05	12.917	8.44	19.00	2.05
0.833	1.25	6.917	2.05	13.000	8.44	19.08	2.05
0.917	1.25	7.000	2.05	13.083	8.44	19.17	2.05
1.000	1.25	7.083	2.05	13.167	8.44	19.25	2.05
1.083	1.25	7.167	2.05	13.250	8.44	19.33	2.05
1.167	1.25	7.250	2.05	13.333	6.16	19.42	2.05
1.250	1.25	7.333	2.51	13.417	6.16	19.50	2.05
1.333	1.25	7.417	2.51	13.500	6.16	19.58	2.05
1.417	1.25	7.500	2.51	13.583	6.16	19.67	2.05
1.500	1.25	7.583	2.51	13.667	6.16	19.75	2.05
1.583	1.25	7.667	2.51	13.750	6.16	19.83	2.05
1.667	1.25	7.750	2.51	13.833	4.79	19.92	2.05
1.750	1.25	7.833	2.51	13.917	4.79	20.00	2.05
1.833	1.25	7.917	2.51	14.000	4.79	20.08	2.05
1.917	1.25	8.000	2.51	14.083	4.79	20.17	2.05
2.000	1.25	8.083	2.51	14.167	4.79	20.25	2.05
2.083	1.25	8.167	2.51	14.250	4.79	20.33	1.37
2.167	1.25	8.250	2.51	14.333	3.42	20.42	1.37
2.250	1.25	8.333	2.97	14.417	3.42	20.50	1.37
2.333	1.48	8.417	2.97	14.500	3.42	20.58	1.37
2.417	1.48	8.500	2.97	14.583	3.42	20.67	1.37
2.500	1.48	8.583	2.97	14.667	3.42	20.75	1.37
2.583	1.48	8.667	2.97	14.750	3.42	20.83	1.37
2.667	1.48	8.750	2.97	14.833	3.42	20.92	1.37
2.750	1.48	8.833	3.19	14.917	3.42	21.00	1.37
2.833	1.48	8.917	3.19	15.000	3.42	21.08	1.37
2.917	1.48	9.000	3.19	15.083	3.42	21.17	1.37
3.000	1.48	9.083	3.19	15.167	3.42	21.25	1.37
3.083	1.48	9.167	3.19	15.250	3.42	21.33	1.37
3.167	1.48	9.250	3.19	15.333	3.42	21.42	1.37
3.250	1.48	9.333	3.65	15.417	3.42	21.50	1.37
3.333	1.48	9.417	3.65	15.500	3.42	21.58	1.37
3.417	1.48	9.500	3.65	15.583	3.42	21.67	1.37
3.500	1.48	9.583	3.65	15.667	3.42	21.75	1.37
3.583	1.48	9.667	3.65	15.750	3.42	21.83	1.37
3.667	1.48	9.750	3.65	15.833	3.42	21.92	1.37
3.750	1.48	9.833	4.11	15.917	3.42	22.00	1.37
3.833	1.48	9.917	4.11	16.000	3.42	22.08	1.37
3.917	1.48	10.000	4.11	16.083	3.42	22.17	1.37

Post-Development VO Output (INT)

4.000	1.48	10.083	4.11	16.167	3.42	22.25	1.37
4.083	1.48	10.167	4.11	16.250	3.42	22.33	1.37
4.167	1.48	10.250	4.11	16.333	2.05	22.42	1.37
4.250	1.48	10.333	5.25	16.417	2.05	22.50	1.37
4.333	1.82	10.417	5.25	16.500	2.05	22.58	1.37
4.417	1.82	10.500	5.25	16.583	2.05	22.67	1.37
4.500	1.82	10.583	5.25	16.667	2.05	22.75	1.37
4.583	1.82	10.667	5.25	16.750	2.05	22.83	1.37
4.667	1.82	10.750	5.25	16.833	2.05	22.92	1.37
4.750	1.82	10.833	7.07	16.917	2.05	23.00	1.37
4.833	1.82	10.917	7.07	17.000	2.05	23.08	1.37
4.917	1.82	11.000	7.07	17.083	2.05	23.17	1.37
5.000	1.82	11.083	7.07	17.167	2.05	23.25	1.37
5.083	1.82	11.167	7.07	17.250	2.05	23.33	1.37
5.167	1.82	11.250	7.07	17.333	2.05	23.42	1.37
5.250	1.82	11.333	10.95	17.417	2.05	23.50	1.37
5.333	1.82	11.417	10.95	17.500	2.05	23.58	1.37
5.417	1.82	11.500	10.95	17.583	2.05	23.67	1.37
5.500	1.82	11.583	10.95	17.667	2.05	23.75	1.37
5.583	1.82	11.667	10.95	17.750	2.05	23.83	1.37
5.667	1.82	11.750	10.95	17.833	2.05	23.92	1.37
5.750	1.82	11.833	33.75	17.917	2.05	24.00	1.37
5.833	1.82	11.917	33.76	18.000	2.05	24.08	1.37
5.917	1.82	12.000	33.76	18.083	2.05	24.17	1.37
6.000	1.82	12.083	139.57	18.167	2.05	24.25	1.37
6.083	1.82	12.167	139.58	18.250	2.05		

Max.Eff.Inten.(mm/hr)=	139.58	242.10	
over (min)	5.00	10.00	
Storage Coeff. (min)=	2.65 (ii)	6.25 (ii)	
Unit Hyd. Tpeak (min)=	5.00	10.00	
Unit Hyd. peak (cms)=	0.29	0.15	
			TOTALS
PEAK FLOW (cms)=	0.01	0.34	0.343 (iii)
TIME TO PEAK (hrs)=	12.25	12.25	12.25
RUNOFF VOLUME (mm)=	113.04	76.19	76.75
TOTAL RAINFALL (mm)=	114.04	114.04	114.04
RUNOFF COEFFICIENT =	0.99	0.67	0.67

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 68.8 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

Post-Development VO Output (INT)

CALIB			
STANDHYD (0013)	Area (ha)=	4.16	
ID= 1 DT= 5.0 min	Total Imp(%)=	50.00	Dir. Conn.(%)= 50.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	2.08	2.08
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	166.53	250.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	6.167	1.82	12.250	139.58	18.33	2.05
0.167	0.00	6.250	1.82	12.333	16.44	18.42	2.05
0.250	0.00	6.333	2.05	12.417	16.42	18.50	2.05
0.333	1.25	6.417	2.05	12.500	16.42	18.58	2.05
0.417	1.25	6.500	2.05	12.583	16.42	18.67	2.05
0.500	1.25	6.583	2.05	12.667	16.42	18.75	2.05
0.583	1.25	6.667	2.05	12.750	16.42	18.83	2.05
0.667	1.25	6.750	2.05	12.833	8.44	18.92	2.05
0.750	1.25	6.833	2.05	12.917	8.44	19.00	2.05
0.833	1.25	6.917	2.05	13.000	8.44	19.08	2.05
0.917	1.25	7.000	2.05	13.083	8.44	19.17	2.05
1.000	1.25	7.083	2.05	13.167	8.44	19.25	2.05
1.083	1.25	7.167	2.05	13.250	8.44	19.33	2.05
1.167	1.25	7.250	2.05	13.333	6.16	19.42	2.05
1.250	1.25	7.333	2.51	13.417	6.16	19.50	2.05
1.333	1.25	7.417	2.51	13.500	6.16	19.58	2.05
1.417	1.25	7.500	2.51	13.583	6.16	19.67	2.05
1.500	1.25	7.583	2.51	13.667	6.16	19.75	2.05
1.583	1.25	7.667	2.51	13.750	6.16	19.83	2.05
1.667	1.25	7.750	2.51	13.833	4.79	19.92	2.05
1.750	1.25	7.833	2.51	13.917	4.79	20.00	2.05
1.833	1.25	7.917	2.51	14.000	4.79	20.08	2.05
1.917	1.25	8.000	2.51	14.083	4.79	20.17	2.05
2.000	1.25	8.083	2.51	14.167	4.79	20.25	2.05
2.083	1.25	8.167	2.51	14.250	4.79	20.33	1.37
2.167	1.25	8.250	2.51	14.333	3.42	20.42	1.37
2.250	1.25	8.333	2.97	14.417	3.42	20.50	1.37
2.333	1.48	8.417	2.97	14.500	3.42	20.58	1.37

2.417	1.48	8.500	2.97	14.583	3.42	20.67	1.37
2.500	1.48	8.583	2.97	14.667	3.42	20.75	1.37
2.583	1.48	8.667	2.97	14.750	3.42	20.83	1.37
2.667	1.48	8.750	2.97	14.833	3.42	20.92	1.37
2.750	1.48	8.833	3.19	14.917	3.42	21.00	1.37
2.833	1.48	8.917	3.19	15.000	3.42	21.08	1.37
2.917	1.48	9.000	3.19	15.083	3.42	21.17	1.37
3.000	1.48	9.083	3.19	15.167	3.42	21.25	1.37
3.083	1.48	9.167	3.19	15.250	3.42	21.33	1.37
3.167	1.48	9.250	3.19	15.333	3.42	21.42	1.37
3.250	1.48	9.333	3.65	15.417	3.42	21.50	1.37
3.333	1.48	9.417	3.65	15.500	3.42	21.58	1.37
3.417	1.48	9.500	3.65	15.583	3.42	21.67	1.37
3.500	1.48	9.583	3.65	15.667	3.42	21.75	1.37
3.583	1.48	9.667	3.65	15.750	3.42	21.83	1.37
3.667	1.48	9.750	3.65	15.833	3.42	21.92	1.37
3.750	1.48	9.833	4.11	15.917	3.42	22.00	1.37
3.833	1.48	9.917	4.11	16.000	3.42	22.08	1.37
3.917	1.48	10.000	4.11	16.083	3.42	22.17	1.37
4.000	1.48	10.083	4.11	16.167	3.42	22.25	1.37
4.083	1.48	10.167	4.11	16.250	3.42	22.33	1.37
4.167	1.48	10.250	4.11	16.333	2.05	22.42	1.37
4.250	1.48	10.333	5.25	16.417	2.05	22.50	1.37
4.333	1.82	10.417	5.25	16.500	2.05	22.58	1.37
4.417	1.82	10.500	5.25	16.583	2.05	22.67	1.37
4.500	1.82	10.583	5.25	16.667	2.05	22.75	1.37
4.583	1.82	10.667	5.25	16.750	2.05	22.83	1.37
4.667	1.82	10.750	5.25	16.833	2.05	22.92	1.37
4.750	1.82	10.833	7.07	16.917	2.05	23.00	1.37
4.833	1.82	10.917	7.07	17.000	2.05	23.08	1.37
4.917	1.82	11.000	7.07	17.083	2.05	23.17	1.37
5.000	1.82	11.083	7.07	17.167	2.05	23.25	1.37
5.083	1.82	11.167	7.07	17.250	2.05	23.33	1.37
5.167	1.82	11.250	7.07	17.333	2.05	23.42	1.37
5.250	1.82	11.333	10.95	17.417	2.05	23.50	1.37
5.333	1.82	11.417	10.95	17.500	2.05	23.58	1.37
5.417	1.82	11.500	10.95	17.583	2.05	23.67	1.37
5.500	1.82	11.583	10.95	17.667	2.05	23.75	1.37
5.583	1.82	11.667	10.95	17.750	2.05	23.83	1.37
5.667	1.82	11.750	10.95	17.833	2.05	23.92	1.37
5.750	1.82	11.833	33.75	17.917	2.05	24.00	1.37
5.833	1.82	11.917	33.76	18.000	2.05	24.08	1.37
5.917	1.82	12.000	33.76	18.083	2.05	24.17	1.37
6.000	1.82	12.083	139.57	18.167	2.05	24.25	1.37
6.083	1.82	12.167	139.58	18.250	2.05		

Max.Eff.Inten.(mm/hr)= 139.58 43.41
over (min) 5.00 35.00

Storage Coeff. (min)= 3.74 (ii) 33.33 (ii)
Unit Hyd. Tpeak (min)= 5.00 35.00
Unit Hyd. peak (cms)= 0.25 0.03

			TOTALS
PEAK FLOW	(cms)=	0.80	0.15	0.857 (iii)
TIME TO PEAK	(hrs)=	12.25	12.67	12.25
RUNOFF VOLUME	(mm)=	113.04	53.23	83.13
TOTAL RAINFALL	(mm)=	114.04	114.04	114.04
RUNOFF COEFFICIENT	=	0.99	0.47	0.73

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	
STANDHYD (0036)	Area (ha)= 2.12
ID= 1 DT= 5.0 min	Total Imp(%)= 85.04 Dir. Conn.(%)= 0.10

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	1.80	0.32
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	118.88	175.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.82	12.250	139.58	18.33	2.05
0.167	0.00	6.250	1.82	12.333	16.44	18.42	2.05
0.250	0.00	6.333	2.05	12.417	16.42	18.50	2.05
0.333	1.25	6.417	2.05	12.500	16.42	18.58	2.05
0.417	1.25	6.500	2.05	12.583	16.42	18.67	2.05
0.500	1.25	6.583	2.05	12.667	16.42	18.75	2.05
0.583	1.25	6.667	2.05	12.750	16.42	18.83	2.05
0.667	1.25	6.750	2.05	12.833	8.44	18.92	2.05
0.750	1.25	6.833	2.05	12.917	8.44	19.00	2.05
0.833	1.25	6.917	2.05	13.000	8.44	19.08	2.05
0.917	1.25	7.000	2.05	13.083	8.44	19.17	2.05

1.000	1.25	7.083	2.05	13.167	8.44	19.25	2.05
1.083	1.25	7.167	2.05	13.250	8.44	19.33	2.05
1.167	1.25	7.250	2.05	13.333	6.16	19.42	2.05
1.250	1.25	7.333	2.51	13.417	6.16	19.50	2.05
1.333	1.25	7.417	2.51	13.500	6.16	19.58	2.05
1.417	1.25	7.500	2.51	13.583	6.16	19.67	2.05
1.500	1.25	7.583	2.51	13.667	6.16	19.75	2.05
1.583	1.25	7.667	2.51	13.750	6.16	19.83	2.05
1.667	1.25	7.750	2.51	13.833	4.79	19.92	2.05
1.750	1.25	7.833	2.51	13.917	4.79	20.00	2.05
1.833	1.25	7.917	2.51	14.000	4.79	20.08	2.05
1.917	1.25	8.000	2.51	14.083	4.79	20.17	2.05
2.000	1.25	8.083	2.51	14.167	4.79	20.25	2.05
2.083	1.25	8.167	2.51	14.250	4.79	20.33	1.37
2.167	1.25	8.250	2.51	14.333	3.42	20.42	1.37
2.250	1.25	8.333	2.97	14.417	3.42	20.50	1.37
2.333	1.48	8.417	2.97	14.500	3.42	20.58	1.37
2.417	1.48	8.500	2.97	14.583	3.42	20.67	1.37
2.500	1.48	8.583	2.97	14.667	3.42	20.75	1.37
2.583	1.48	8.667	2.97	14.750	3.42	20.83	1.37
2.667	1.48	8.750	2.97	14.833	3.42	20.92	1.37
2.750	1.48	8.833	3.19	14.917	3.42	21.00	1.37
2.833	1.48	8.917	3.19	15.000	3.42	21.08	1.37
2.917	1.48	9.000	3.19	15.083	3.42	21.17	1.37
3.000	1.48	9.083	3.19	15.167	3.42	21.25	1.37
3.083	1.48	9.167	3.19	15.250	3.42	21.33	1.37
3.167	1.48	9.250	3.19	15.333	3.42	21.42	1.37
3.250	1.48	9.333	3.65	15.417	3.42	21.50	1.37
3.333	1.48	9.417	3.65	15.500	3.42	21.58	1.37
3.417	1.48	9.500	3.65	15.583	3.42	21.67	1.37
3.500	1.48	9.583	3.65	15.667	3.42	21.75	1.37
3.583	1.48	9.667	3.65	15.750	3.42	21.83	1.37
3.667	1.48	9.750	3.65	15.833	3.42	21.92	1.37
3.750	1.48	9.833	4.11	15.917	3.42	22.00	1.37
3.833	1.48	9.917	4.11	16.000	3.42	22.08	1.37
3.917	1.48	10.000	4.11	16.083	3.42	22.17	1.37
4.000	1.48	10.083	4.11	16.167	3.42	22.25	1.37
4.083	1.48	10.167	4.11	16.250	3.42	22.33	1.37
4.167	1.48	10.250	4.11	16.333	2.05	22.42	1.37
4.250	1.48	10.333	5.25	16.417	2.05	22.50	1.37
4.333	1.82	10.417	5.25	16.500	2.05	22.58	1.37
4.417	1.82	10.500	5.25	16.583	2.05	22.67	1.37
4.500	1.82	10.583	5.25	16.667	2.05	22.75	1.37
4.583	1.82	10.667	5.25	16.750	2.05	22.83	1.37
4.667	1.82	10.750	5.25	16.833	2.05	22.92	1.37
4.750	1.82	10.833	7.07	16.917	2.05	23.00	1.37
4.833	1.82	10.917	7.07	17.000	2.05	23.08	1.37
4.917	1.82	11.000	7.07	17.083	2.05	23.17	1.37
5.000	1.82	11.083	7.07	17.167	2.05	23.25	1.37
5.083	1.82	11.167	7.07	17.250	2.05	23.33	1.37
5.167	1.82	11.250	7.07	17.333	2.05	23.42	1.37
5.250	1.82	11.333	10.95	17.417	2.05	23.50	1.37
5.333	1.82	11.417	10.95	17.500	2.05	23.58	1.37
5.417	1.82	11.500	10.95	17.583	2.05	23.67	1.37
5.500	1.82	11.583	10.95	17.667	2.05	23.75	1.37
5.583	1.82	11.667	10.95	17.750	2.05	23.83	1.37
5.667	1.82	11.750	10.95	17.833	2.05	23.92	1.37
5.750	1.82	11.833	33.75	17.917	2.05	24.00	1.37
5.833	1.82	11.917	33.76	18.000	2.05	24.08	1.37
5.917	1.82	12.000	33.76	18.083	2.05	24.17	1.37
6.000	1.82	12.083	139.57	18.167	2.05	24.25	1.37
6.083	1.82	12.167	139.58	18.250	2.05		

Max.Eff.Inten.(mm/hr)= 139.58 889.02
over (min) 5.00 15.00
Storage Coeff. (min)= 3.05 (ii) 10.19 (ii)
Unit Hyd. Tpeak (min)= 5.00 15.00
Unit Hyd. peak (cms)= 0.27 0.09

			TOTALS
PEAK FLOW	(cms)=	0.00	0.54	0.544 (iii)
TIME TO PEAK	(hrs)=	12.25	12.33	12.33
RUNOFF VOLUME	(mm)=	113.04	98.44	98.45
TOTAL RAINFALL	(mm)=	114.04	114.04	114.04
RUNOFF COEFFICIENT	=	0.99	0.86	0.86

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	
STANDHYD (0043)	Area (ha)= 0.13
ID= 1 DT= 5.0 min	Total Imp(%)= 30.77 Dir. Conn.(%)= 7.69

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.04	0.09
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	0.50
Length	(m)=	29.44	70.00

Mannings n = 0.013 0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.82	12.250	139.58	18.33	2.05
0.167	0.00	6.250	1.82	12.333	16.44	18.42	2.05
0.250	0.00	6.333	2.05	12.417	16.42	18.50	2.05
0.333	1.25	6.417	2.05	12.500	16.42	18.58	2.05
0.417	1.25	6.500	2.05	12.583	16.42	18.67	2.05
0.500	1.25	6.583	2.05	12.667	16.42	18.75	2.05
0.583	1.25	6.667	2.05	12.750	16.42	18.83	2.05
0.667	1.25	6.750	2.05	12.833	8.44	18.92	2.05
0.750	1.25	6.833	2.05	12.917	8.44	19.00	2.05
0.833	1.25	6.917	2.05	13.000	8.44	19.08	2.05
0.917	1.25	7.000	2.05	13.083	8.44	19.17	2.05
1.000	1.25	7.083	2.05	13.167	8.44	19.25	2.05
1.083	1.25	7.167	2.05	13.250	8.44	19.33	2.05
1.167	1.25	7.250	2.05	13.333	6.16	19.42	2.05
1.250	1.25	7.333	2.51	13.417	6.16	19.50	2.05
1.333	1.25	7.417	2.51	13.500	6.16	19.58	2.05
1.417	1.25	7.500	2.51	13.583	6.16	19.67	2.05
1.500	1.25	7.583	2.51	13.667	6.16	19.75	2.05
1.583	1.25	7.667	2.51	13.750	6.16	19.83	2.05
1.667	1.25	7.750	2.51	13.833	4.79	19.92	2.05
1.750	1.25	7.833	2.51	13.917	4.79	20.00	2.05
1.833	1.25	7.917	2.51	14.000	4.79	20.08	2.05
1.917	1.25	8.000	2.51	14.083	4.79	20.17	2.05
2.000	1.25	8.083	2.51	14.167	4.79	20.25	2.05
2.083	1.25	8.167	2.51	14.250	4.79	20.33	1.37
2.167	1.25	8.250	2.51	14.333	3.42	20.42	1.37
2.250	1.25	8.333	2.97	14.417	3.42	20.50	1.37
2.333	1.48	8.417	2.97	14.500	3.42	20.58	1.37
2.417	1.48	8.500	2.97	14.583	3.42	20.67	1.37
2.500	1.48	8.583	2.97	14.667	3.42	20.75	1.37
2.583	1.48	8.667	2.97	14.750	3.42	20.83	1.37
2.667	1.48	8.750	2.97	14.833	3.42	20.92	1.37
2.750	1.48	8.833	3.19	14.917	3.42	21.00	1.37
2.833	1.48	8.917	3.19	15.000	3.42	21.08	1.37
2.917	1.48	9.000	3.19	15.083	3.42	21.17	1.37
3.000	1.48	9.083	3.19	15.167	3.42	21.25	1.37
3.083	1.48	9.167	3.19	15.250	3.42	21.33	1.37
3.167	1.48	9.250	3.19	15.333	3.42	21.42	1.37
3.250	1.48	9.333	3.65	15.417	3.42	21.50	1.37
3.333	1.48	9.417	3.65	15.500	3.42	21.58	1.37

3.417	1.48	9.500	3.65	15.583	3.42	21.67	1.37
3.500	1.48	9.583	3.65	15.667	3.42	21.75	1.37
3.583	1.48	9.667	3.65	15.750	3.42	21.83	1.37
3.667	1.48	9.750	3.65	15.833	3.42	21.92	1.37
3.750	1.48	9.833	4.11	15.917	3.42	22.00	1.37
3.833	1.48	9.917	4.11	16.000	3.42	22.08	1.37
3.917	1.48	10.000	4.11	16.083	3.42	22.17	1.37
4.000	1.48	10.083	4.11	16.167	3.42	22.25	1.37
4.083	1.48	10.167	4.11	16.250	3.42	22.33	1.37
4.167	1.48	10.250	4.11	16.333	2.05	22.42	1.37
4.250	1.48	10.333	5.25	16.417	2.05	22.50	1.37
4.333	1.82	10.417	5.25	16.500	2.05	22.58	1.37
4.417	1.82	10.500	5.25	16.583	2.05	22.67	1.37
4.500	1.82	10.583	5.25	16.667	2.05	22.75	1.37
4.583	1.82	10.667	5.25	16.750	2.05	22.83	1.37
4.667	1.82	10.750	5.25	16.833	2.05	22.92	1.37
4.750	1.82	10.833	7.07	16.917	2.05	23.00	1.37
4.833	1.82	10.917	7.07	17.000	2.05	23.08	1.37
4.917	1.82	11.000	7.07	17.083	2.05	23.17	1.37
5.000	1.82	11.083	7.07	17.167	2.05	23.25	1.37
5.083	1.82	11.167	7.07	17.250	2.05	23.33	1.37
5.167	1.82	11.250	7.07	17.333	2.05	23.42	1.37
5.250	1.82	11.333	10.95	17.417	2.05	23.50	1.37
5.333	1.82	11.417	10.95	17.500	2.05	23.58	1.37
5.417	1.82	11.500	10.95	17.583	2.05	23.67	1.37
5.500	1.82	11.583	10.95	17.667	2.05	23.75	1.37
5.583	1.82	11.667	10.95	17.750	2.05	23.83	1.37
5.667	1.82	11.750	10.95	17.833	2.05	23.92	1.37
5.750	1.82	11.833	33.75	17.917	2.05	24.00	1.37
5.833	1.82	11.917	33.76	18.000	2.05	24.08	1.37
5.917	1.82	12.000	33.76	18.083	2.05	24.17	1.37
6.000	1.82	12.083	139.57	18.167	2.05	24.25	1.37
6.083	1.82	12.167	139.58	18.250	2.05		

Max.Eff.Inten.(mm/hr)=	139.58	115.46	
over (min)	5.00	20.00	
Storage Coeff. (min)=	1.32 (ii)	15.45 (ii)	
Unit Hyd. Tpeak (min)=	5.00	20.00	
Unit Hyd. peak (cms)=	0.33	0.07	
			TOTALS
PEAK FLOW (cms)=	0.00	0.02	0.016 (iii)
TIME TO PEAK (hrs)=	12.25	12.42	12.42
RUNOFF VOLUME (mm)=	113.04	62.10	65.94
TOTAL RAINFALL (mm)=	114.04	114.04	114.04
RUNOFF COEFFICIENT =	0.99	0.54	0.58

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%

YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
STANDHYD (0044)	Area (ha)=	1.62	
ID= 1 DT= 5.0 min	Total Imp(%)=	48.77	Dir. Conn.(%)= 30.86

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.79	0.83
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	1.40
Length	(m)=	103.92	400.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.82	12.250	139.58	18.33	2.05
0.167	0.00	6.250	1.82	12.333	16.44	18.42	2.05
0.250	0.00	6.333	2.05	12.417	16.42	18.50	2.05
0.333	1.25	6.417	2.05	12.500	16.42	18.58	2.05
0.417	1.25	6.500	2.05	12.583	16.42	18.67	2.05
0.500	1.25	6.583	2.05	12.667	16.42	18.75	2.05
0.583	1.25	6.667	2.05	12.750	16.42	18.83	2.05
0.667	1.25	6.750	2.05	12.833	8.44	18.92	2.05
0.750	1.25	6.833	2.05	12.917	8.44	19.00	2.05
0.833	1.25	6.917	2.05	13.000	8.44	19.08	2.05
0.917	1.25	7.000	2.05	13.083	8.44	19.17	2.05
1.000	1.25	7.083	2.05	13.167	8.44	19.25	2.05
1.083	1.25	7.167	2.05	13.250	8.44	19.33	2.05
1.167	1.25	7.250	2.05	13.333	6.16	19.42	2.05
1.250	1.25	7.333	2.51	13.417	6.16	19.50	2.05
1.333	1.25	7.417	2.51	13.500	6.16	19.58	2.05
1.417	1.25	7.500	2.51	13.583	6.16	19.67	2.05
1.500	1.25	7.583	2.51	13.667	6.16	19.75	2.05
1.583	1.25	7.667	2.51	13.750	6.16	19.83	2.05
1.667	1.25	7.750	2.51	13.833	4.79	19.92	2.05
1.750	1.25	7.833	2.51	13.917	4.79	20.00	2.05

1.833	1.25	7.917	2.51	14.000	4.79	20.08	2.05
1.917	1.25	8.000	2.51	14.083	4.79	20.17	2.05
2.000	1.25	8.083	2.51	14.167	4.79	20.25	2.05
2.083	1.25	8.167	2.51	14.250	4.79	20.33	1.37
2.167	1.25	8.250	2.51	14.333	3.42	20.42	1.37
2.250	1.25	8.333	2.97	14.417	3.42	20.50	1.37
2.333	1.48	8.417	2.97	14.500	3.42	20.58	1.37
2.417	1.48	8.500	2.97	14.583	3.42	20.67	1.37
2.500	1.48	8.583	2.97	14.667	3.42	20.75	1.37
2.583	1.48	8.667	2.97	14.750	3.42	20.83	1.37
2.667	1.48	8.750	2.97	14.833	3.42	20.92	1.37
2.750	1.48	8.833	3.19	14.917	3.42	21.00	1.37
2.833	1.48	8.917	3.19	15.000	3.42	21.08	1.37
2.917	1.48	9.000	3.19	15.083	3.42	21.17	1.37
3.000	1.48	9.083	3.19	15.167	3.42	21.25	1.37
3.083	1.48	9.167	3.19	15.250	3.42	21.33	1.37
3.167	1.48	9.250	3.19	15.333	3.42	21.42	1.37
3.250	1.48	9.333	3.65	15.417	3.42	21.50	1.37
3.333	1.48	9.417	3.65	15.500	3.42	21.58	1.37
3.417	1.48	9.500	3.65	15.583	3.42	21.67	1.37
3.500	1.48	9.583	3.65	15.667	3.42	21.75	1.37
3.583	1.48	9.667	3.65	15.750	3.42	21.83	1.37
3.667	1.48	9.750	3.65	15.833	3.42	21.92	1.37
3.750	1.48	9.833	4.11	15.917	3.42	22.00	1.37
3.833	1.48	9.917	4.11	16.000	3.42	22.08	1.37
3.917	1.48	10.000	4.11	16.083	3.42	22.17	1.37
4.000	1.48	10.083	4.11	16.167	3.42	22.25	1.37
4.083	1.48	10.167	4.11	16.250	3.42	22.33	1.37
4.167	1.48	10.250	4.11	16.333	2.05	22.42	1.37
4.250	1.48	10.333	5.25	16.417	2.05	22.50	1.37
4.333	1.82	10.417	5.25	16.500	2.05	22.58	1.37
4.417	1.82	10.500	5.25	16.583	2.05	22.67	1.37
4.500	1.82	10.583	5.25	16.667	2.05	22.75	1.37
4.583	1.82	10.667	5.25	16.750	2.05	22.83	1.37
4.667	1.82	10.750	5.25	16.833	2.05	22.92	1.37
4.750	1.82	10.833	7.07	16.917	2.05	23.00	1.37
4.833	1.82	10.917	7.07	17.000	2.05	23.08	1.37
4.917	1.82	11.000	7.07	17.083	2.05	23.17	1.37
5.000	1.82	11.083	7.07	17.167	2.05	23.25	1.37
5.083	1.82	11.167	7.07	17.250	2.05	23.33	1.37
5.167	1.82	11.250	7.07	17.333	2.05	23.42	1.37
5.250	1.82	11.333	10.95	17.417	2.05	23.50	1.37
5.333	1.82	11.417	10.95	17.500	2.05	23.58	1.37
5.417	1.82	11.500	10.95	17.583	2.05	23.67	1.37
5.500	1.82	11.583	10.95	17.667	2.05	23.75	1.37
5.583	1.82	11.667	10.95	17.750	2.05	23.83	1.37
5.667	1.82	11.750	10.95	17.833	2.05	23.92	1.37
5.750	1.82	11.833	33.75	17.917	2.05	24.00	1.37

5.833	1.82	11.917	33.76	18.000	2.05	24.08	1.37
5.917	1.82	12.000	33.76	18.083	2.05	24.17	1.37
6.000	1.82	12.083	139.57	18.167	2.05	24.25	1.37
6.083	1.82	12.167	139.58	18.250	2.05		

Max.Eff.Inten.(mm/hr)=	139.58	56.24	
over (min)	5.00	45.00	
Storage Coeff. (min)=	2.82 (ii)	42.18 (ii)	
Unit Hyd. Tpeak (min)=	5.00	45.00	
Unit Hyd. peak (cms)=	0.28	0.03	
			TOTALS
PEAK FLOW (cms)=	0.19	0.08	0.221 (iii)
TIME TO PEAK (hrs)=	12.25	12.83	12.25
RUNOFF VOLUME (mm)=	113.04	62.46	78.06
TOTAL RAINFALL (mm)=	114.04	114.04	114.04
RUNOFF COEFFICIENT =	0.99	0.55	0.68

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0037)					
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0010):	1.32	0.343	12.25	76.75
+ ID2= 2 (0013):	4.16	0.857	12.25	83.13
ID = 3 (0037):	5.48	1.200	12.25	81.59

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0037)					
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0037):	5.48	1.200	12.25	81.59
+ ID2= 2 (0036):	2.12	0.544	12.33	98.45
ID = 1 (0037):	7.60	1.698	12.25	86.30

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0037)					
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0037):	7.60	1.698	12.25	86.30
+ ID2= 2 (0043):	0.13	0.016	12.42	65.94
ID = 3 (0037):	7.73	1.712	12.25	85.95

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0037)					
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0037):	7.73	1.712	12.25	85.95
+ ID2= 2 (0044):	1.62	0.221	12.25	78.06
ID = 1 (0037):	9.35	1.934	12.25	84.59

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0037)					
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0037):	9.35	1.934	12.25	84.59
+ ID2= 2 (0009):	31.06	6.098	12.25	78.13
ID = 3 (0037):	40.41	8.032	12.25	79.62

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

RESERVOIR(0038)	OVERFLOW IS OFF			
IN= 2---> OUT= 1				
DT= 5.0 min	OUTFLOW (cms)	STORAGE (ha.m.)	OUTFLOW (cms)	STORAGE (ha.m.)
	0.0000	0.0000	0.5076	2.8989
	0.0000	0.2023	0.6060	3.2065
	0.0353	0.4202	0.7105	3.5196
	0.0525	0.6536	0.8207	3.8381
	0.0654	0.9026	0.9365	4.1621

0.0843	1.1671	1.0574	4.4915
0.1858	1.7227	1.1833	4.8263
0.2540	2.0086	1.3139	5.1665
0.3309	2.2999	1.4492	5.5122
0.4157	2.5967	1.5890	5.8633

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
INFLOW : ID= 2 (0037)	40.410	8.032	12.25	79.62
OUTFLOW: ID= 1 (0038)	40.410	0.320	16.33	74.58

PEAK FLOW REDUCTION [Qout/Qin](%)= 3.99
TIME SHIFT OF PEAK FLOW (min)=245.00
MAXIMUM STORAGE USED (ha.m.)= 2.2600

CALIB			
STANDHYD (0017)	Area (ha)= 1.59		
ID= 1 DT= 5.0 min	Total Imp(%)= 58.58	Dir. Conn.(%)= 27.10	

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	0.93	0.66
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	0.50	2.00
Length (m)=	102.96	30.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.82	12.250	139.58	18.33	2.05
0.167	0.00	6.250	1.82	12.333	16.44	18.42	2.05
0.250	0.00	6.333	2.05	12.417	16.42	18.50	2.05
0.333	1.25	6.417	2.05	12.500	16.42	18.58	2.05
0.417	1.25	6.500	2.05	12.583	16.42	18.67	2.05
0.500	1.25	6.583	2.05	12.667	16.42	18.75	2.05
0.583	1.25	6.667	2.05	12.750	16.42	18.83	2.05
0.667	1.25	6.750	2.05	12.833	8.44	18.92	2.05
0.750	1.25	6.833	2.05	12.917	8.44	19.00	2.05
0.833	1.25	6.917	2.05	13.000	8.44	19.08	2.05
0.917	1.25	7.000	2.05	13.083	8.44	19.17	2.05
1.000	1.25	7.083	2.05	13.167	8.44	19.25	2.05
1.083	1.25	7.167	2.05	13.250	8.44	19.33	2.05
1.167	1.25	7.250	2.05	13.333	6.16	19.42	2.05

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
1.250	1.25	7.333	2.51	13.417	6.16	19.50	2.05
1.333	1.25	7.417	2.51	13.500	6.16	19.58	2.05
1.417	1.25	7.500	2.51	13.583	6.16	19.67	2.05
1.500	1.25	7.583	2.51	13.667	6.16	19.75	2.05
1.583	1.25	7.667	2.51	13.750	6.16	19.83	2.05
1.667	1.25	7.750	2.51	13.833	4.79	19.92	2.05
1.750	1.25	7.833	2.51	13.917	4.79	20.00	2.05
1.833	1.25	7.917	2.51	14.000	4.79	20.08	2.05
1.917	1.25	8.000	2.51	14.083	4.79	20.17	2.05
2.000	1.25	8.083	2.51	14.167	4.79	20.25	2.05
2.083	1.25	8.167	2.51	14.250	4.79	20.33	1.37
2.167	1.25	8.250	2.51	14.333	3.42	20.42	1.37
2.250	1.25	8.333	2.97	14.417	3.42	20.50	1.37
2.333	1.48	8.417	2.97	14.500	3.42	20.58	1.37
2.417	1.48	8.500	2.97	14.583	3.42	20.67	1.37
2.500	1.48	8.583	2.97	14.667	3.42	20.75	1.37
2.583	1.48	8.667	2.97	14.750	3.42	20.83	1.37
2.667	1.48	8.750	2.97	14.833	3.42	20.92	1.37
2.750	1.48	8.833	3.19	14.917	3.42	21.00	1.37
2.833	1.48	8.917	3.19	15.000	3.42	21.08	1.37
2.917	1.48	9.000	3.19	15.083	3.42	21.17	1.37
3.000	1.48	9.083	3.19	15.167	3.42	21.25	1.37
3.083	1.48	9.167	3.19	15.250	3.42	21.33	1.37
3.167	1.48	9.250	3.19	15.333	3.42	21.42	1.37
3.250	1.48	9.333	3.65	15.417	3.42	21.50	1.37
3.333	1.48	9.417	3.65	15.500	3.42	21.58	1.37
3.417	1.48	9.500	3.65	15.583	3.42	21.67	1.37
3.500	1.48	9.583	3.65	15.667	3.42	21.75	1.37
3.583	1.48	9.667	3.65	15.750	3.42	21.83	1.37
3.667	1.48	9.750	3.65	15.833	3.42	21.92	1.37
3.750	1.48	9.833	4.11	15.917	3.42	22.00	1.37
3.833	1.48	9.917	4.11	16.000	3.42	22.08	1.37
3.917	1.48	10.000	4.11	16.083	3.42	22.17	1.37
4.000	1.48	10.083	4.11	16.167	3.42	22.25	1.37
4.083	1.48	10.167	4.11	16.250	3.42	22.33	1.37
4.167	1.48	10.250	4.11	16.333	2.05	22.42	1.37
4.250	1.48	10.333	5.25	16.417	2.05	22.50	1.37
4.333	1.82	10.417	5.25	16.500	2.05	22.58	1.37
4.417	1.82	10.500	5.25	16.583	2.05	22.67	1.37
4.500	1.82	10.583	5.25	16.667	2.05	22.75	1.37
4.583	1.82	10.667	5.25	16.750	2.05	22.83	1.37
4.667	1.82	10.750	5.25	16.833	2.05	22.92	1.37
4.750	1.82	10.833	7.07	16.917	2.05	23.00	1.37
4.833	1.82	10.917	7.07	17.000	2.05	23.08	1.37
4.917	1.82	11.000	7.07	17.083	2.05	23.17	1.37
5.000	1.82	11.083	7.07	17.167	2.05	23.25	1.37
5.083	1.82	11.167	7.07	17.250	2.05	23.33	1.37
5.167	1.82	11.250	7.07	17.333	2.05	23.42	1.37

5.250	1.82	11.333	10.95	17.417	2.05	23.50	1.37
5.333	1.82	11.417	10.95	17.500	2.05	23.58	1.37
5.417	1.82	11.500	10.95	17.583	2.05	23.67	1.37
5.500	1.82	11.583	10.95	17.667	2.05	23.75	1.37
5.583	1.82	11.667	10.95	17.750	2.05	23.83	1.37
5.667	1.82	11.750	10.95	17.833	2.05	23.92	1.37
5.750	1.82	11.833	33.75	17.917	2.05	24.00	1.37
5.833	1.82	11.917	33.76	18.000	2.05	24.08	1.37
5.917	1.82	12.000	33.76	18.083	2.05	24.17	1.37
6.000	1.82	12.083	139.57	18.167	2.05	24.25	1.37
6.083	1.82	12.167	139.58	18.250	2.05		

Max.Eff.Inten.(mm/hr)=	139.58	172.75	
over (min)	5.00	10.00	
Storage Coeff. (min)=	2.80 (ii)	7.57 (ii)	
Unit Hyd. Tpeak (min)=	5.00	10.00	
Unit Hyd. peak (cms)=	0.28	0.13	
			TOTALS
PEAK FLOW (cms)=	0.17	0.25	0.415 (iii)
TIME TO PEAK (hrs)=	12.25	12.25	12.25
RUNOFF VOLUME (mm)=	113.04	67.29	79.68
TOTAL RAINFALL (mm)=	114.04	114.04	114.04
RUNOFF COEFFICIENT =	0.99	0.59	0.70

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 66.5 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

Junction Command(0018)

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
INFLOW : ID= 2(0017)	1.59	0.42	12.25	79.68
OUTFLOW: ID= 2(0018)	1.59	0.42	12.25	79.68

ADD HYD (0023)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3					

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0016):	234.30	5.597	13.25	39.08
+ ID2= 2 (0018):	1.59	0.415	12.25	79.68
ID = 3 (0023):	235.89	5.629	13.25	39.36

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023)		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
3 + 2 = 1					
ID1= 3 (0023):		235.89	5.629	13.25	39.36
+ ID2= 2 (0038):		40.41	0.320	16.33	74.58
ID = 1 (0023):		276.30	5.905	13.25	44.51

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

****
** SIMULATION:K - 50-year SCS **
****

READ STORM	Filename: C:\Users\ecomish\AppD ata\Local\Temp\ bd70dd54-263f-4ef7-b852-c48fc040cbd3\0c38785b
Ptotal=126.91 mm	Comments: 50yr 24hr 15min SCS Type II (MTO) - 15%

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.00	0.00	6.25	2.28	12.50	18.28	18.75	2.28
0.25	1.40	6.50	2.28	12.75	9.39	19.00	2.28
0.50	1.40	6.75	2.28	13.00	9.39	19.25	2.28
0.75	1.40	7.00	2.28	13.25	6.85	19.50	2.28
1.00	1.40	7.25	2.79	13.50	6.85	19.75	2.28
1.25	1.40	7.50	2.79	13.75	5.33	20.00	2.28
1.50	1.40	7.75	2.79	14.00	5.33	20.25	1.52
1.75	1.40	8.00	2.79	14.25	3.81	20.50	1.52
2.00	1.40	8.25	3.30	14.50	3.81	20.75	1.52
2.25	1.65	8.50	3.30	14.75	3.81	21.00	1.52
2.50	1.65	8.75	3.55	15.00	3.81	21.25	1.52
2.75	1.65	9.00	3.55	15.25	3.81	21.50	1.52
3.00	1.65	9.25	4.06	15.50	3.81	21.75	1.52
3.25	1.65	9.50	4.06	15.75	3.81	22.00	1.52
3.50	1.65	9.75	4.57	16.00	3.81	22.25	1.52
3.75	1.65	10.00	4.57	16.25	2.28	22.50	1.52

4.00	1.65	10.25	5.84	16.50	2.28	22.75	1.52
4.25	2.03	10.50	5.84	16.75	2.28	23.00	1.52
4.50	2.03	10.75	7.87	17.00	2.28	23.25	1.52
4.75	2.03	11.00	7.87	17.25	2.28	23.50	1.52
5.00	2.03	11.25	12.18	17.50	2.28	23.75	1.52
5.25	2.03	11.50	12.18	17.75	2.28	24.00	1.52
5.50	2.03	11.75	37.57	18.00	2.28		
5.75	2.03	12.00	155.34	18.25	2.28		
6.00	2.03	12.25	18.28	18.50	2.28		

CALIB	
NASHYD (0025)	Area (ha)= 100.92 Curve Number (CN)= 55.9
ID= 1 DT= 5.0 min	Ia (mm)= 7.89 # of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 1.70

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.03	12.250	155.34	18.33	2.28
0.167	0.00	6.250	2.03	12.333	18.29	18.42	2.28
0.250	0.00	6.333	2.28	12.417	18.28	18.50	2.28
0.333	1.40	6.417	2.28	12.500	18.28	18.58	2.28
0.417	1.40	6.500	2.28	12.583	18.27	18.67	2.28
0.500	1.40	6.583	2.28	12.667	18.28	18.75	2.28
0.583	1.40	6.667	2.28	12.750	18.28	18.83	2.28
0.667	1.40	6.750	2.28	12.833	9.39	18.92	2.28
0.750	1.40	6.833	2.28	12.917	9.39	19.00	2.28
0.833	1.40	6.917	2.28	13.000	9.39	19.08	2.28
0.917	1.40	7.000	2.28	13.083	9.39	19.17	2.28
1.000	1.40	7.083	2.28	13.167	9.39	19.25	2.28
1.083	1.40	7.167	2.28	13.250	9.39	19.33	2.28
1.167	1.40	7.250	2.28	13.333	6.85	19.42	2.28
1.250	1.40	7.333	2.79	13.417	6.85	19.50	2.28
1.333	1.40	7.417	2.79	13.500	6.85	19.58	2.28
1.417	1.40	7.500	2.79	13.583	6.85	19.67	2.28
1.500	1.40	7.583	2.79	13.667	6.85	19.75	2.28
1.583	1.40	7.667	2.79	13.750	6.85	19.83	2.28
1.667	1.40	7.750	2.79	13.833	5.33	19.92	2.28
1.750	1.40	7.833	2.79	13.917	5.33	20.00	2.28
1.833	1.40	7.917	2.79	14.000	5.33	20.08	2.28
1.917	1.40	8.000	2.79	14.083	5.33	20.17	2.28
2.000	1.40	8.083	2.79	14.167	5.33	20.25	2.28

2.083	1.40	8.167	2.79	14.250	5.33	20.33	1.52
2.167	1.40	8.250	2.79	14.333	3.81	20.42	1.52
2.250	1.40	8.333	3.30	14.417	3.81	20.50	1.52
2.333	1.65	8.417	3.30	14.500	3.81	20.58	1.52
2.417	1.65	8.500	3.30	14.583	3.81	20.67	1.52
2.500	1.65	8.583	3.30	14.667	3.81	20.75	1.52
2.583	1.65	8.667	3.30	14.750	3.81	20.83	1.52
2.667	1.65	8.750	3.30	14.833	3.81	20.92	1.52
2.750	1.65	8.833	3.55	14.917	3.81	21.00	1.52
2.833	1.65	8.917	3.55	15.000	3.81	21.08	1.52
2.917	1.65	9.000	3.55	15.083	3.81	21.17	1.52
3.000	1.65	9.083	3.55	15.167	3.81	21.25	1.52
3.083	1.65	9.167	3.55	15.250	3.81	21.33	1.52
3.167	1.65	9.250	3.55	15.333	3.81	21.42	1.52
3.250	1.65	9.333	4.06	15.417	3.81	21.50	1.52
3.333	1.65	9.417	4.06	15.500	3.81	21.58	1.52
3.417	1.65	9.500	4.06	15.583	3.81	21.67	1.52
3.500	1.65	9.583	4.06	15.667	3.81	21.75	1.52
3.583	1.65	9.667	4.06	15.750	3.81	21.83	1.52
3.667	1.65	9.750	4.06	15.833	3.81	21.92	1.52
3.750	1.65	9.833	4.57	15.917	3.81	22.00	1.52
3.833	1.65	9.917	4.57	16.000	3.81	22.08	1.52
3.917	1.65	10.000	4.57	16.083	3.81	22.17	1.52
4.000	1.65	10.083	4.57	16.167	3.81	22.25	1.52
4.083	1.65	10.167	4.57	16.250	3.81	22.33	1.52
4.167	1.65	10.250	4.57	16.333	2.28	22.42	1.52
4.250	1.65	10.333	5.84	16.417	2.28	22.50	1.52
4.333	2.03	10.417	5.84	16.500	2.28	22.58	1.52
4.417	2.03	10.500	5.84	16.583	2.28	22.67	1.52
4.500	2.03	10.583	5.84	16.667	2.28	22.75	1.52
4.583	2.03	10.667	5.84	16.750	2.28	22.83	1.52
4.667	2.03	10.750	5.84	16.833	2.28	22.92	1.52
4.750	2.03	10.833	7.87	16.917	2.28	23.00	1.52
4.833	2.03	10.917	7.87	17.000	2.28	23.08	1.52
4.917	2.03	11.000	7.87	17.083	2.28	23.17	1.52
5.000	2.03	11.083	7.87	17.167	2.28	23.25	1.52
5.083	2.03	11.167	7.87	17.250	2.28	23.33	1.52
5.167	2.03	11.250	7.87	17.333	2.28	23.42	1.52
5.250	2.03	11.333	12.18	17.417	2.28	23.50	1.52
5.333	2.03	11.417	12.18	17.500	2.28	23.58	1.52
5.417	2.03	11.500	12.18	17.583	2.28	23.67	1.52
5.500	2.03	11.583	12.18	17.667	2.28	23.75	1.52
5.583	2.03	11.667	12.18	17.750	2.28	23.83	1.52
5.667	2.03	11.750	12.18	17.833	2.28	23.92	1.52
5.750	2.03	11.833	37.56	17.917	2.28	24.00	1.52
5.833	2.03	11.917	37.57	18.000	2.28	24.08	1.52
5.917	2.03	12.000	37.57	18.083	2.28	24.17	1.52
6.000	2.03	12.083	155.32	18.167	2.28	24.25	1.52

6.083	2.03	12.167	155.34	18.250	2.28		

Unit Hyd Qpeak (cms)= 2.267

PEAK FLOW (cms)= 2.350 (i)
TIME TO PEAK (hrs)= 14.083
RUNOFF VOLUME (mm)= 44.396
TOTAL RAINFALL (mm)= 126.910
RUNOFF COEFFICIENT = 0.350

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0002)	Area (ha)= 23.99	Curve Number (CN)= 44.7	
ID= 1 DT= 5.0 min	Ia (mm)= 10.91	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.97		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.03	12.250	155.34	18.33	2.28
0.167	0.00	6.250	2.03	12.333	18.29	18.42	2.28
0.250	0.00	6.333	2.28	12.417	18.28	18.50	2.28
0.333	1.40	6.417	2.28	12.500	18.28	18.58	2.28
0.417	1.40	6.500	2.28	12.583	18.27	18.67	2.28
0.500	1.40	6.583	2.28	12.667	18.28	18.75	2.28
0.583	1.40	6.667	2.28	12.750	18.28	18.83	2.28
0.667	1.40	6.750	2.28	12.833	9.39	18.92	2.28
0.750	1.40	6.833	2.28	12.917	9.39	19.00	2.28
0.833	1.40	6.917	2.28	13.000	9.39	19.08	2.28
0.917	1.40	7.000	2.28	13.083	9.39	19.17	2.28
1.000	1.40	7.083	2.28	13.167	9.39	19.25	2.28
1.083	1.40	7.167	2.28	13.250	9.39	19.33	2.28
1.167	1.40	7.250	2.28	13.333	6.85	19.42	2.28
1.250	1.40	7.333	2.79	13.417	6.85	19.50	2.28
1.333	1.40	7.417	2.79	13.500	6.85	19.58	2.28
1.417	1.40	7.500	2.79	13.583	6.85	19.67	2.28
1.500	1.40	7.583	2.79	13.667	6.85	19.75	2.28
1.583	1.40	7.667	2.79	13.750	6.85	19.83	2.28
1.667	1.40	7.750	2.79	13.833	5.33	19.92	2.28
1.750	1.40	7.833	2.79	13.917	5.33	20.00	2.28
1.833	1.40	7.917	2.79	14.000	5.33	20.08	2.28
1.917	1.40	8.000	2.79	14.083	5.33	20.17	2.28

2.000	1.40	8.083	2.79	14.167	5.33	20.25	2.28
2.083	1.40	8.167	2.79	14.250	5.33	20.33	1.52
2.167	1.40	8.250	2.79	14.333	3.81	20.42	1.52
2.250	1.40	8.333	3.30	14.417	3.81	20.50	1.52
2.333	1.65	8.417	3.30	14.500	3.81	20.58	1.52
2.417	1.65	8.500	3.30	14.583	3.81	20.67	1.52
2.500	1.65	8.583	3.30	14.667	3.81	20.75	1.52
2.583	1.65	8.667	3.30	14.750	3.81	20.83	1.52
2.667	1.65	8.750	3.30	14.833	3.81	20.92	1.52
2.750	1.65	8.833	3.55	14.917	3.81	21.00	1.52
2.833	1.65	8.917	3.55	15.000	3.81	21.08	1.52
2.917	1.65	9.000	3.55	15.083	3.81	21.17	1.52
3.000	1.65	9.083	3.55	15.167	3.81	21.25	1.52
3.083	1.65	9.167	3.55	15.250	3.81	21.33	1.52
3.167	1.65	9.250	3.55	15.333	3.81	21.42	1.52
3.250	1.65	9.333	4.06	15.417	3.81	21.50	1.52
3.333	1.65	9.417	4.06	15.500	3.81	21.58	1.52
3.417	1.65	9.500	4.06	15.583	3.81	21.67	1.52
3.500	1.65	9.583	4.06	15.667	3.81	21.75	1.52
3.583	1.65	9.667	4.06	15.750	3.81	21.83	1.52
3.667	1.65	9.750	4.06	15.833	3.81	21.92	1.52
3.750	1.65	9.833	4.57	15.917	3.81	22.00	1.52
3.833	1.65	9.917	4.57	16.000	3.81	22.08	1.52
3.917	1.65	10.000	4.57	16.083	3.81	22.17	1.52
4.000	1.65	10.083	4.57	16.167	3.81	22.25	1.52
4.083	1.65	10.167	4.57	16.250	3.81	22.33	1.52
4.167	1.65	10.250	4.57	16.333	2.28	22.42	1.52
4.250	1.65	10.333	5.84	16.417	2.28	22.50	1.52
4.333	2.03	10.417	5.84	16.500	2.28	22.58	1.52
4.417	2.03	10.500	5.84	16.583	2.28	22.67	1.52
4.500	2.03	10.583	5.84	16.667	2.28	22.75	1.52
4.583	2.03	10.667	5.84	16.750	2.28	22.83	1.52
4.667	2.03	10.750	5.84	16.833	2.28	22.92	1.52
4.750	2.03	10.833	7.87	16.917	2.28	23.00	1.52
4.833	2.03	10.917	7.87	17.000	2.28	23.08	1.52
4.917	2.03	11.000	7.87	17.083	2.28	23.17	1.52
5.000	2.03	11.083	7.87	17.167	2.28	23.25	1.52
5.083	2.03	11.167	7.87	17.250	2.28	23.33	1.52
5.167	2.03	11.250	7.87	17.333	2.28	23.42	1.52
5.250	2.03	11.333	12.18	17.417	2.28	23.50	1.52
5.333	2.03	11.417	12.18	17.500	2.28	23.58	1.52
5.417	2.03	11.500	12.18	17.583	2.28	23.67	1.52
5.500	2.03	11.583	12.18	17.667	2.28	23.75	1.52
5.583	2.03	11.667	12.18	17.750	2.28	23.83	1.52
5.667	2.03	11.750	12.18	17.833	2.28	23.92	1.52
5.750	2.03	11.833	37.56	17.917	2.28	24.00	1.52
5.833	2.03	11.917	37.57	18.000	2.28	24.08	1.52
5.917	2.03	12.000	37.57	18.083	2.28	24.17	1.52

6.000	2.03	12.083	155.32	18.167	2.28	24.25	1.52
6.083	2.03	12.167	155.34	18.250	2.28		

Unit Hyd Qpeak (cms)= 0.945

PEAK FLOW (cms)= 0.588 (i)
TIME TO PEAK (hrs)= 13.250
RUNOFF VOLUME (mm)= 31.276
TOTAL RAINFALL (mm)= 126.910
RUNOFF COEFFICIENT = 0.246

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0001)	Area (ha)= 39.68	Curve Number (CN)= 60.7	
ID= 1 DT= 5.0 min	Ia (mm)= 8.26	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 1.18		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.03	12.250	155.34	18.33	2.28
0.167	0.00	6.250	2.03	12.333	18.29	18.42	2.28
0.250	0.00	6.333	2.28	12.417	18.28	18.50	2.28
0.333	1.40	6.417	2.28	12.500	18.28	18.58	2.28
0.417	1.40	6.500	2.28	12.583	18.27	18.67	2.28
0.500	1.40	6.583	2.28	12.667	18.28	18.75	2.28
0.583	1.40	6.667	2.28	12.750	18.28	18.83	2.28
0.667	1.40	6.750	2.28	12.833	9.39	18.92	2.28
0.750	1.40	6.833	2.28	12.917	9.39	19.00	2.28
0.833	1.40	6.917	2.28	13.000	9.39	19.08	2.28
0.917	1.40	7.000	2.28	13.083	9.39	19.17	2.28
1.000	1.40	7.083	2.28	13.167	9.39	19.25	2.28
1.083	1.40	7.167	2.28	13.250	9.39	19.33	2.28
1.167	1.40	7.250	2.28	13.333	6.85	19.42	2.28
1.250	1.40	7.333	2.79	13.417	6.85	19.50	2.28
1.333	1.40	7.417	2.79	13.500	6.85	19.58	2.28
1.417	1.40	7.500	2.79	13.583	6.85	19.67	2.28
1.500	1.40	7.583	2.79	13.667	6.85	19.75	2.28
1.583	1.40	7.667	2.79	13.750	6.85	19.83	2.28
1.667	1.40	7.750	2.79	13.833	5.33	19.92	2.28
1.750	1.40	7.833	2.79	13.917	5.33	20.00	2.28
1.833	1.40	7.917	2.79	14.000	5.33	20.08	2.28

1.917	1.40	8.000	2.79	14.083	5.33	20.17	2.28
2.000	1.40	8.083	2.79	14.167	5.33	20.25	2.28
2.083	1.40	8.167	2.79	14.250	5.33	20.33	1.52
2.167	1.40	8.250	2.79	14.333	3.81	20.42	1.52
2.250	1.40	8.333	3.30	14.417	3.81	20.50	1.52
2.333	1.65	8.417	3.30	14.500	3.81	20.58	1.52
2.417	1.65	8.500	3.30	14.583	3.81	20.67	1.52
2.500	1.65	8.583	3.30	14.667	3.81	20.75	1.52
2.583	1.65	8.667	3.30	14.750	3.81	20.83	1.52
2.667	1.65	8.750	3.30	14.833	3.81	20.92	1.52
2.750	1.65	8.833	3.55	14.917	3.81	21.00	1.52
2.833	1.65	8.917	3.55	15.000	3.81	21.08	1.52
2.917	1.65	9.000	3.55	15.083	3.81	21.17	1.52
3.000	1.65	9.083	3.55	15.167	3.81	21.25	1.52
3.083	1.65	9.167	3.55	15.250	3.81	21.33	1.52
3.167	1.65	9.250	3.55	15.333	3.81	21.42	1.52
3.250	1.65	9.333	4.06	15.417	3.81	21.50	1.52
3.333	1.65	9.417	4.06	15.500	3.81	21.58	1.52
3.417	1.65	9.500	4.06	15.583	3.81	21.67	1.52
3.500	1.65	9.583	4.06	15.667	3.81	21.75	1.52
3.583	1.65	9.667	4.06	15.750	3.81	21.83	1.52
3.667	1.65	9.750	4.06	15.833	3.81	21.92	1.52
3.750	1.65	9.833	4.57	15.917	3.81	22.00	1.52
3.833	1.65	9.917	4.57	16.000	3.81	22.08	1.52
3.917	1.65	10.000	4.57	16.083	3.81	22.17	1.52
4.000	1.65	10.083	4.57	16.167	3.81	22.25	1.52
4.083	1.65	10.167	4.57	16.250	3.81	22.33	1.52
4.167	1.65	10.250	4.57	16.333	2.28	22.42	1.52
4.250	1.65	10.333	5.84	16.417	2.28	22.50	1.52
4.333	2.03	10.417	5.84	16.500	2.28	22.58	1.52
4.417	2.03	10.500	5.84	16.583	2.28	22.67	1.52
4.500	2.03	10.583	5.84	16.667	2.28	22.75	1.52
4.583	2.03	10.667	5.84	16.750	2.28	22.83	1.52
4.667	2.03	10.750	5.84	16.833	2.28	22.92	1.52
4.750	2.03	10.833	7.87	16.917	2.28	23.00	1.52
4.833	2.03	10.917	7.87	17.000	2.28	23.08	1.52
4.917	2.03	11.000	7.87	17.083	2.28	23.17	1.52
5.000	2.03	11.083	7.87	17.167	2.28	23.25	1.52
5.083	2.03	11.167	7.87	17.250	2.28	23.33	1.52
5.167	2.03	11.250	7.87	17.333	2.28	23.42	1.52
5.250	2.03	11.333	12.18	17.417	2.28	23.50	1.52
5.333	2.03	11.417	12.18	17.500	2.28	23.58	1.52
5.417	2.03	11.500	12.18	17.583	2.28	23.67	1.52
5.500	2.03	11.583	12.18	17.667	2.28	23.75	1.52
5.583	2.03	11.667	12.18	17.750	2.28	23.83	1.52
5.667	2.03	11.750	12.18	17.833	2.28	23.92	1.52
5.750	2.03	11.833	37.56	17.917	2.28	24.00	1.52
5.833	2.03	11.917	37.57	18.000	2.28	24.08	1.52

5.917	2.03	12.000	37.57	18.083	2.28	24.17	1.52
6.000	2.03	12.083	155.32	18.167	2.28	24.25	1.52
6.083	2.03	12.167	155.34	18.250	2.28		

Unit Hyd Qpeak (cms)= 1.284

PEAK FLOW (cms)= 1.380 (i)
TIME TO PEAK (hrs)= 13.417
RUNOFF VOLUME (mm)= 49.703
TOTAL RAINFALL (mm)= 126.910
RUNOFF COEFFICIENT = 0.392

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
NASHYD (0028) | Area (ha)= 6.37 Curve Number (CN)= 50.5
ID= 1 DT= 5.0 min | Ia (mm)= 15.69 # of Linear Res.(N)= 3.00
U.H. Tp(hrs)= 0.77

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.03	12.250	155.34	18.33	2.28
0.167	0.00	6.250	2.03	12.333	18.29	18.42	2.28
0.250	0.00	6.333	2.28	12.417	18.28	18.50	2.28
0.333	1.40	6.417	2.28	12.500	18.28	18.58	2.28
0.417	1.40	6.500	2.28	12.583	18.27	18.67	2.28
0.500	1.40	6.583	2.28	12.667	18.28	18.75	2.28
0.583	1.40	6.667	2.28	12.750	18.28	18.83	2.28
0.667	1.40	6.750	2.28	12.833	9.39	18.92	2.28
0.750	1.40	6.833	2.28	12.917	9.39	19.00	2.28
0.833	1.40	6.917	2.28	13.000	9.39	19.08	2.28
0.917	1.40	7.000	2.28	13.083	9.39	19.17	2.28
1.000	1.40	7.083	2.28	13.167	9.39	19.25	2.28
1.083	1.40	7.167	2.28	13.250	9.39	19.33	2.28
1.167	1.40	7.250	2.28	13.333	6.85	19.42	2.28
1.250	1.40	7.333	2.79	13.417	6.85	19.50	2.28
1.333	1.40	7.417	2.79	13.500	6.85	19.58	2.28
1.417	1.40	7.500	2.79	13.583	6.85	19.67	2.28
1.500	1.40	7.583	2.79	13.667	6.85	19.75	2.28
1.583	1.40	7.667	2.79	13.750	6.85	19.83	2.28
1.667	1.40	7.750	2.79	13.833	5.33	19.92	2.28
1.750	1.40	7.833	2.79	13.917	5.33	20.00	2.28

1.833	1.40	7.917	2.79	14.000	5.33	20.08	2.28
1.917	1.40	8.000	2.79	14.083	5.33	20.17	2.28
2.000	1.40	8.083	2.79	14.167	5.33	20.25	2.28
2.083	1.40	8.167	2.79	14.250	5.33	20.33	1.52
2.167	1.40	8.250	2.79	14.333	3.81	20.42	1.52
2.250	1.40	8.333	3.30	14.417	3.81	20.50	1.52
2.333	1.65	8.417	3.30	14.500	3.81	20.58	1.52
2.417	1.65	8.500	3.30	14.583	3.81	20.67	1.52
2.500	1.65	8.583	3.30	14.667	3.81	20.75	1.52
2.583	1.65	8.667	3.30	14.750	3.81	20.83	1.52
2.667	1.65	8.750	3.30	14.833	3.81	20.92	1.52
2.750	1.65	8.833	3.55	14.917	3.81	21.00	1.52
2.833	1.65	8.917	3.55	15.000	3.81	21.08	1.52
2.917	1.65	9.000	3.55	15.083	3.81	21.17	1.52
3.000	1.65	9.083	3.55	15.167	3.81	21.25	1.52
3.083	1.65	9.167	3.55	15.250	3.81	21.33	1.52
3.167	1.65	9.250	3.55	15.333	3.81	21.42	1.52
3.250	1.65	9.333	4.06	15.417	3.81	21.50	1.52
3.333	1.65	9.417	4.06	15.500	3.81	21.58	1.52
3.417	1.65	9.500	4.06	15.583	3.81	21.67	1.52
3.500	1.65	9.583	4.06	15.667	3.81	21.75	1.52
3.583	1.65	9.667	4.06	15.750	3.81	21.83	1.52
3.667	1.65	9.750	4.06	15.833	3.81	21.92	1.52
3.750	1.65	9.833	4.57	15.917	3.81	22.00	1.52
3.833	1.65	9.917	4.57	16.000	3.81	22.08	1.52
3.917	1.65	10.000	4.57	16.083	3.81	22.17	1.52
4.000	1.65	10.083	4.57	16.167	3.81	22.25	1.52
4.083	1.65	10.167	4.57	16.250	3.81	22.33	1.52
4.167	1.65	10.250	4.57	16.333	2.28	22.42	1.52
4.250	1.65	10.333	5.84	16.417	2.28	22.50	1.52
4.333	2.03	10.417	5.84	16.500	2.28	22.58	1.52
4.417	2.03	10.500	5.84	16.583	2.28	22.67	1.52
4.500	2.03	10.583	5.84	16.667	2.28	22.75	1.52
4.583	2.03	10.667	5.84	16.750	2.28	22.83	1.52
4.667	2.03	10.750	5.84	16.833	2.28	22.92	1.52
4.750	2.03	10.833	7.87	16.917	2.28	23.00	1.52
4.833	2.03	10.917	7.87	17.000	2.28	23.08	1.52
4.917	2.03	11.000	7.87	17.083	2.28	23.17	1.52
5.000	2.03	11.083	7.87	17.167	2.28	23.25	1.52
5.083	2.03	11.167	7.87	17.250	2.28	23.33	1.52
5.167	2.03	11.250	7.87	17.333	2.28	23.42	1.52
5.250	2.03	11.333	12.18	17.417	2.28	23.50	1.52
5.333	2.03	11.417	12.18	17.500	2.28	23.58	1.52
5.417	2.03	11.500	12.18	17.583	2.28	23.67	1.52
5.500	2.03	11.583	12.18	17.667	2.28	23.75	1.52
5.583	2.03	11.667	12.18	17.750	2.28	23.83	1.52
5.667	2.03	11.750	12.18	17.833	2.28	23.92	1.52
5.750	2.03	11.833	37.56	17.917	2.28	24.00	1.52

5.833	2.03	11.917	37.57	18.000	2.28	24.08	1.52
5.917	2.03	12.000	37.57	18.083	2.28	24.17	1.52
6.000	2.03	12.083	155.32	18.167	2.28	24.25	1.52
6.083	2.03	12.167	155.34	18.250	2.28		

Unit Hyd Qpeak (cms)= 0.316

PEAK FLOW (cms)= 0.205 (i)
TIME TO PEAK (hrs)= 13.000
RUNOFF VOLUME (mm)= 34.323
TOTAL RAINFALL (mm)= 126.910
RUNOFF COEFFICIENT = 0.270

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
NASHYD (0029) | Area (ha)= 14.85 Curve Number (CN)= 52.9
ID= 1 DT= 5.0 min | Ia (mm)= 13.28 # of Linear Res.(N)= 3.00
U.H. Tp(hrs)= 0.89

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.03	12.250	155.34	18.33	2.28
0.167	0.00	6.250	2.03	12.333	18.29	18.42	2.28
0.250	0.00	6.333	2.28	12.417	18.28	18.50	2.28
0.333	1.40	6.417	2.28	12.500	18.28	18.58	2.28
0.417	1.40	6.500	2.28	12.583	18.27	18.67	2.28
0.500	1.40	6.583	2.28	12.667	18.28	18.75	2.28
0.583	1.40	6.667	2.28	12.750	18.28	18.83	2.28
0.667	1.40	6.750	2.28	12.833	9.39	18.92	2.28
0.750	1.40	6.833	2.28	12.917	9.39	19.00	2.28
0.833	1.40	6.917	2.28	13.000	9.39	19.08	2.28
0.917	1.40	7.000	2.28	13.083	9.39	19.17	2.28
1.000	1.40	7.083	2.28	13.167	9.39	19.25	2.28
1.083	1.40	7.167	2.28	13.250	9.39	19.33	2.28
1.167	1.40	7.250	2.28	13.333	6.85	19.42	2.28
1.250	1.40	7.333	2.79	13.417	6.85	19.50	2.28
1.333	1.40	7.417	2.79	13.500	6.85	19.58	2.28
1.417	1.40	7.500	2.79	13.583	6.85	19.67	2.28
1.500	1.40	7.583	2.79	13.667	6.85	19.75	2.28
1.583	1.40	7.667	2.79	13.750	6.85	19.83	2.28
1.667	1.40	7.750	2.79	13.833	5.33	19.92	2.28

1.750	1.40	7.833	2.79	13.917	5.33	20.00	2.28
1.833	1.40	7.917	2.79	14.000	5.33	20.08	2.28
1.917	1.40	8.000	2.79	14.083	5.33	20.17	2.28
2.000	1.40	8.083	2.79	14.167	5.33	20.25	2.28
2.083	1.40	8.167	2.79	14.250	5.33	20.33	1.52
2.167	1.40	8.250	2.79	14.333	3.81	20.42	1.52
2.250	1.40	8.333	3.30	14.417	3.81	20.50	1.52
2.333	1.65	8.417	3.30	14.500	3.81	20.58	1.52
2.417	1.65	8.500	3.30	14.583	3.81	20.67	1.52
2.500	1.65	8.583	3.30	14.667	3.81	20.75	1.52
2.583	1.65	8.667	3.30	14.750	3.81	20.83	1.52
2.667	1.65	8.750	3.30	14.833	3.81	20.92	1.52
2.750	1.65	8.833	3.55	14.917	3.81	21.00	1.52
2.833	1.65	8.917	3.55	15.000	3.81	21.08	1.52
2.917	1.65	9.000	3.55	15.083	3.81	21.17	1.52
3.000	1.65	9.083	3.55	15.167	3.81	21.25	1.52
3.083	1.65	9.167	3.55	15.250	3.81	21.33	1.52
3.167	1.65	9.250	3.55	15.333	3.81	21.42	1.52
3.250	1.65	9.333	4.06	15.417	3.81	21.50	1.52
3.333	1.65	9.417	4.06	15.500	3.81	21.58	1.52
3.417	1.65	9.500	4.06	15.583	3.81	21.67	1.52
3.500	1.65	9.583	4.06	15.667	3.81	21.75	1.52
3.583	1.65	9.667	4.06	15.750	3.81	21.83	1.52
3.667	1.65	9.750	4.06	15.833	3.81	21.92	1.52
3.750	1.65	9.833	4.57	15.917	3.81	22.00	1.52
3.833	1.65	9.917	4.57	16.000	3.81	22.08	1.52
3.917	1.65	10.000	4.57	16.083	3.81	22.17	1.52
4.000	1.65	10.083	4.57	16.167	3.81	22.25	1.52
4.083	1.65	10.167	4.57	16.250	3.81	22.33	1.52
4.167	1.65	10.250	4.57	16.333	2.28	22.42	1.52
4.250	1.65	10.333	5.84	16.417	2.28	22.50	1.52
4.333	2.03	10.417	5.84	16.500	2.28	22.58	1.52
4.417	2.03	10.500	5.84	16.583	2.28	22.67	1.52
4.500	2.03	10.583	5.84	16.667	2.28	22.75	1.52
4.583	2.03	10.667	5.84	16.750	2.28	22.83	1.52
4.667	2.03	10.750	5.84	16.833	2.28	22.92	1.52
4.750	2.03	10.833	7.87	16.917	2.28	23.00	1.52
4.833	2.03	10.917	7.87	17.000	2.28	23.08	1.52
4.917	2.03	11.000	7.87	17.083	2.28	23.17	1.52
5.000	2.03	11.083	7.87	17.167	2.28	23.25	1.52
5.083	2.03	11.167	7.87	17.250	2.28	23.33	1.52
5.167	2.03	11.250	7.87	17.333	2.28	23.42	1.52
5.250	2.03	11.333	12.18	17.417	2.28	23.50	1.52
5.333	2.03	11.417	12.18	17.500	2.28	23.58	1.52
5.417	2.03	11.500	12.18	17.583	2.28	23.67	1.52
5.500	2.03	11.583	12.18	17.667	2.28	23.75	1.52
5.583	2.03	11.667	12.18	17.750	2.28	23.83	1.52
5.667	2.03	11.750	12.18	17.833	2.28	23.92	1.52

5.750	2.03	11.833	37.56	17.917	2.28	24.00	1.52
5.833	2.03	11.917	37.57	18.000	2.28	24.08	1.52
5.917	2.03	12.000	37.57	18.083	2.28	24.17	1.52
6.000	2.03	12.083	155.32	18.167	2.28	24.25	1.52
6.083	2.03	12.167	155.34	18.250	2.28		

Unit Hyd Qpeak (cms)= 0.637

PEAK FLOW (cms)= 0.478 (i)
TIME TO PEAK (hrs)= 13.083
RUNOFF VOLUME (mm)= 38.041
TOTAL RAINFALL (mm)= 126.910
RUNOFF COEFFICIENT = 0.300

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0030)	Area (ha)=	1.70	Curve Number (CN)=	60.5	
ID= 1 DT= 5.0 min	Ia (mm)=	9.65	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	0.40			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.03	12.250	155.34	18.33	2.28
0.167	0.00	6.250	2.03	12.333	18.29	18.42	2.28
0.250	0.00	6.333	2.28	12.417	18.28	18.50	2.28
0.333	1.40	6.417	2.28	12.500	18.28	18.58	2.28
0.417	1.40	6.500	2.28	12.583	18.27	18.67	2.28
0.500	1.40	6.583	2.28	12.667	18.28	18.75	2.28
0.583	1.40	6.667	2.28	12.750	18.28	18.83	2.28
0.667	1.40	6.750	2.28	12.833	9.39	18.92	2.28
0.750	1.40	6.833	2.28	12.917	9.39	19.00	2.28
0.833	1.40	6.917	2.28	13.000	9.39	19.08	2.28
0.917	1.40	7.000	2.28	13.083	9.39	19.17	2.28
1.000	1.40	7.083	2.28	13.167	9.39	19.25	2.28
1.083	1.40	7.167	2.28	13.250	9.39	19.33	2.28
1.167	1.40	7.250	2.28	13.333	6.85	19.42	2.28
1.250	1.40	7.333	2.79	13.417	6.85	19.50	2.28
1.333	1.40	7.417	2.79	13.500	6.85	19.58	2.28
1.417	1.40	7.500	2.79	13.583	6.85	19.67	2.28
1.500	1.40	7.583	2.79	13.667	6.85	19.75	2.28
1.583	1.40	7.667	2.79	13.750	6.85	19.83	2.28

1.667	1.40	7.750	2.79	13.833	5.33	19.92	2.28
1.750	1.40	7.833	2.79	13.917	5.33	20.00	2.28
1.833	1.40	7.917	2.79	14.000	5.33	20.08	2.28
1.917	1.40	8.000	2.79	14.083	5.33	20.17	2.28
2.000	1.40	8.083	2.79	14.167	5.33	20.25	2.28
2.083	1.40	8.167	2.79	14.250	5.33	20.33	1.52
2.167	1.40	8.250	2.79	14.333	3.81	20.42	1.52
2.250	1.40	8.333	3.30	14.417	3.81	20.50	1.52
2.333	1.65	8.417	3.30	14.500	3.81	20.58	1.52
2.417	1.65	8.500	3.30	14.583	3.81	20.67	1.52
2.500	1.65	8.583	3.30	14.667	3.81	20.75	1.52
2.583	1.65	8.667	3.30	14.750	3.81	20.83	1.52
2.667	1.65	8.750	3.30	14.833	3.81	20.92	1.52
2.750	1.65	8.833	3.55	14.917	3.81	21.00	1.52
2.833	1.65	8.917	3.55	15.000	3.81	21.08	1.52
2.917	1.65	9.000	3.55	15.083	3.81	21.17	1.52
3.000	1.65	9.083	3.55	15.167	3.81	21.25	1.52
3.083	1.65	9.167	3.55	15.250	3.81	21.33	1.52
3.167	1.65	9.250	3.55	15.333	3.81	21.42	1.52
3.250	1.65	9.333	4.06	15.417	3.81	21.50	1.52
3.333	1.65	9.417	4.06	15.500	3.81	21.58	1.52
3.417	1.65	9.500	4.06	15.583	3.81	21.67	1.52
3.500	1.65	9.583	4.06	15.667	3.81	21.75	1.52
3.583	1.65	9.667	4.06	15.750	3.81	21.83	1.52
3.667	1.65	9.750	4.06	15.833	3.81	21.92	1.52
3.750	1.65	9.833	4.57	15.917	3.81	22.00	1.52
3.833	1.65	9.917	4.57	16.000	3.81	22.08	1.52
3.917	1.65	10.000	4.57	16.083	3.81	22.17	1.52
4.000	1.65	10.083	4.57	16.167	3.81	22.25	1.52
4.083	1.65	10.167	4.57	16.250	3.81	22.33	1.52
4.167	1.65	10.250	4.57	16.333	2.28	22.42	1.52
4.250	1.65	10.333	5.84	16.417	2.28	22.50	1.52
4.333	2.03	10.417	5.84	16.500	2.28	22.58	1.52
4.417	2.03	10.500	5.84	16.583	2.28	22.67	1.52
4.500	2.03	10.583	5.84	16.667	2.28	22.75	1.52
4.583	2.03	10.667	5.84	16.750	2.28	22.83	1.52
4.667	2.03	10.750	5.84	16.833	2.28	22.92	1.52
4.750	2.03	10.833	7.87	16.917	2.28	23.00	1.52
4.833	2.03	10.917	7.87	17.000	2.28	23.08	1.52
4.917	2.03	11.000	7.87	17.083	2.28	23.17	1.52
5.000	2.03	11.083	7.87	17.167	2.28	23.25	1.52
5.083	2.03	11.167	7.87	17.250	2.28	23.33	1.52
5.167	2.03	11.250	7.87	17.333	2.28	23.42	1.52
5.250	2.03	11.333	12.18	17.417	2.28	23.50	1.52
5.333	2.03	11.417	12.18	17.500	2.28	23.58	1.52
5.417	2.03	11.500	12.18	17.583	2.28	23.67	1.52
5.500	2.03	11.583	12.18	17.667	2.28	23.75	1.52
5.583	2.03	11.667	12.18	17.750	2.28	23.83	1.52

5.667	2.03	11.750	12.18	17.833	2.28	23.92	1.52
5.750	2.03	11.833	37.56	17.917	2.28	24.00	1.52
5.833	2.03	11.917	37.57	18.000	2.28	24.08	1.52
5.917	2.03	12.000	37.57	18.083	2.28	24.17	1.52
6.000	2.03	12.083	155.32	18.167	2.28	24.25	1.52
6.083	2.03	12.167	155.34	18.250	2.28		

Unit Hyd Qpeak (cms)= 0.162

PEAK FLOW (cms)= 0.128 (i)
TIME TO PEAK (hrs)= 12.500
RUNOFF VOLUME (mm)= 48.516
TOTAL RAINFALL (mm)= 126.910
RUNOFF COEFFICIENT = 0.382

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0031)	Area (ha)=	1.80	Curve Number (CN)=	50.0	
ID= 1 DT= 5.0 min	Ia (mm)=	16.00	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	0.76			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.03	12.250	155.34	18.33	2.28
0.167	0.00	6.250	2.03	12.333	18.29	18.42	2.28
0.250	0.00	6.333	2.28	12.417	18.28	18.50	2.28
0.333	1.40	6.417	2.28	12.500	18.28	18.58	2.28
0.417	1.40	6.500	2.28	12.583	18.27	18.67	2.28
0.500	1.40	6.583	2.28	12.667	18.28	18.75	2.28
0.583	1.40	6.667	2.28	12.750	18.28	18.83	2.28
0.667	1.40	6.750	2.28	12.833	9.39	18.92	2.28
0.750	1.40	6.833	2.28	12.917	9.39	19.00	2.28
0.833	1.40	6.917	2.28	13.000	9.39	19.08	2.28
0.917	1.40	7.000	2.28	13.083	9.39	19.17	2.28
1.000	1.40	7.083	2.28	13.167	9.39	19.25	2.28
1.083	1.40	7.167	2.28	13.250	9.39	19.33	2.28
1.167	1.40	7.250	2.28	13.333	6.85	19.42	2.28
1.250	1.40	7.333	2.79	13.417	6.85	19.50	2.28
1.333	1.40	7.417	2.79	13.500	6.85	19.58	2.28
1.417	1.40	7.500	2.79	13.583	6.85	19.67	2.28
1.500	1.40	7.583	2.79	13.667	6.85	19.75	2.28
1.583	1.40	7.667	2.79	13.750	6.85	19.83	2.28

1.667	1.40	7.750	2.79	13.833	5.33	19.92	2.28
1.750	1.40	7.833	2.79	13.917	5.33	20.00	2.28
1.833	1.40	7.917	2.79	14.000	5.33	20.08	2.28
1.917	1.40	8.000	2.79	14.083	5.33	20.17	2.28
2.000	1.40	8.083	2.79	14.167	5.33	20.25	2.28
2.083	1.40	8.167	2.79	14.250	5.33	20.33	1.52
2.167	1.40	8.250	2.79	14.333	3.81	20.42	1.52
2.250	1.40	8.333	3.30	14.417	3.81	20.50	1.52
2.333	1.65	8.417	3.30	14.500	3.81	20.58	1.52
2.417	1.65	8.500	3.30	14.583	3.81	20.67	1.52
2.500	1.65	8.583	3.30	14.667	3.81	20.75	1.52
2.583	1.65	8.667	3.30	14.750	3.81	20.83	1.52
2.667	1.65	8.750	3.30	14.833	3.81	20.92	1.52
2.750	1.65	8.833	3.55	14.917	3.81	21.00	1.52
2.833	1.65	8.917	3.55	15.000	3.81	21.08	1.52
2.917	1.65	9.000	3.55	15.083	3.81	21.17	1.52
3.000	1.65	9.083	3.55	15.167	3.81	21.25	1.52
3.083	1.65	9.167	3.55	15.250	3.81	21.33	1.52
3.167	1.65	9.250	3.55	15.333	3.81	21.42	1.52
3.250	1.65	9.333	4.06	15.417	3.81	21.50	1.52
3.333	1.65	9.417	4.06	15.500	3.81	21.58	1.52
3.417	1.65	9.500	4.06	15.583	3.81	21.67	1.52
3.500	1.65	9.583	4.06	15.667	3.81	21.75	1.52
3.583	1.65	9.667	4.06	15.750	3.81	21.83	1.52
3.667	1.65	9.750	4.06	15.833	3.81	21.92	1.52
3.750	1.65	9.833	4.57	15.917	3.81	22.00	1.52
3.833	1.65	9.917	4.57	16.000	3.81	22.08	1.52
3.917	1.65	10.000	4.57	16.083	3.81	22.17	1.52
4.000	1.65	10.083	4.57	16.167	3.81	22.25	1.52
4.083	1.65	10.167	4.57	16.250	3.81	22.33	1.52
4.167	1.65	10.250	4.57	16.333	2.28	22.42	1.52
4.250	1.65	10.333	5.84	16.417	2.28	22.50	1.52
4.333	2.03	10.417	5.84	16.500	2.28	22.58	1.52
4.417	2.03	10.500	5.84	16.583	2.28	22.67	1.52
4.500	2.03	10.583	5.84	16.667	2.28	22.75	1.52
4.583	2.03	10.667	5.84	16.750	2.28	22.83	1.52
4.667	2.03	10.750	5.84	16.833	2.28	22.92	1.52
4.750	2.03	10.833	7.87	16.917	2.28	23.00	1.52
4.833	2.03	10.917	7.87	17.000	2.28	23.08	1.52
4.917	2.03	11.000	7.87	17.083	2.28	23.17	1.52
5.000	2.03	11.083	7.87	17.167	2.28	23.25	1.52
5.083	2.03	11.167	7.87	17.250	2.28	23.33	1.52
5.167	2.03	11.250	7.87	17.333	2.28	23.42	1.52
5.250	2.03	11.333	12.18	17.417	2.28	23.50	1.52
5.333	2.03	11.417	12.18	17.500	2.28	23.58	1.52
5.417	2.03	11.500	12.18	17.583	2.28	23.67	1.52
5.500	2.03	11.583	12.18	17.667	2.28	23.75	1.52

5.583	2.03	11.667	12.18	17.750	2.28	23.83	1.52
5.667	2.03	11.750	12.18	17.833	2.28	23.92	1.52
5.750	2.03	11.833	37.56	17.917	2.28	24.00	1.52
5.833	2.03	11.917	37.57	18.000	2.28	24.08	1.52
5.917	2.03	12.000	37.57	18.083	2.28	24.17	1.52
6.000	2.03	12.083	155.32	18.167	2.28	24.25	1.52
6.083	2.03	12.167	155.34	18.250	2.28		

Unit Hyd Qpeak (cms)= 0.090

PEAK FLOW (cms)= 0.057 (i)
TIME TO PEAK (hrs)= 13.000
RUNOFF VOLUME (mm)= 33.708
TOTAL RAINFALL (mm)= 126.910
RUNOFF COEFFICIENT = 0.266

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0032)	Area	(ha)= 6.70	Curve Number	(CN)= 60.0	
ID= 1 DT= 5.0 min	Ia	(mm)= 10.00	# of Linear Res.(N)= 3.00		
	U.H. Tp(hrs)= 1.45				

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.03	12.250	155.34	18.33	2.28
0.167	0.00	6.250	2.03	12.333	18.29	18.42	2.28
0.250	0.00	6.333	2.28	12.417	18.28	18.50	2.28
0.333	1.40	6.417	2.28	12.500	18.28	18.58	2.28
0.417	1.40	6.500	2.28	12.583	18.27	18.67	2.28
0.500	1.40	6.583	2.28	12.667	18.28	18.75	2.28
0.583	1.40	6.667	2.28	12.750	18.28	18.83	2.28
0.667	1.40	6.750	2.28	12.833	9.39	18.92	2.28
0.750	1.40	6.833	2.28	12.917	9.39	19.00	2.28
0.833	1.40	6.917	2.28	13.000	9.39	19.08	2.28
0.917	1.40	7.000	2.28	13.083	9.39	19.17	2.28
1.000	1.40	7.083	2.28	13.167	9.39	19.25	2.28
1.083	1.40	7.167	2.28	13.250	9.39	19.33	2.28
1.167	1.40	7.250	2.28	13.333	6.85	19.42	2.28
1.250	1.40	7.333	2.79	13.417	6.85	19.50	2.28
1.333	1.40	7.417	2.79	13.500	6.85	19.58	2.28
1.417	1.40	7.500	2.79	13.583	6.85	19.67	2.28

1.500	1.40	7.583	2.79	13.667	6.85	19.75	2.28
1.583	1.40	7.667	2.79	13.750	6.85	19.83	2.28
1.667	1.40	7.750	2.79	13.833	5.33	19.92	2.28
1.750	1.40	7.833	2.79	13.917	5.33	20.00	2.28
1.833	1.40	7.917	2.79	14.000	5.33	20.08	2.28
1.917	1.40	8.000	2.79	14.083	5.33	20.17	2.28
2.000	1.40	8.083	2.79	14.167	5.33	20.25	2.28
2.083	1.40	8.167	2.79	14.250	5.33	20.33	1.52
2.167	1.40	8.250	2.79	14.333	3.81	20.42	1.52
2.250	1.40	8.333	3.30	14.417	3.81	20.50	1.52
2.333	1.65	8.417	3.30	14.500	3.81	20.58	1.52
2.417	1.65	8.500	3.30	14.583	3.81	20.67	1.52
2.500	1.65	8.583	3.30	14.667	3.81	20.75	1.52
2.583	1.65	8.667	3.30	14.750	3.81	20.83	1.52
2.667	1.65	8.750	3.30	14.833	3.81	20.92	1.52
2.750	1.65	8.833	3.55	14.917	3.81	21.00	1.52
2.833	1.65	8.917	3.55	15.000	3.81	21.08	1.52
2.917	1.65	9.000	3.55	15.083	3.81	21.17	1.52
3.000	1.65	9.083	3.55	15.167	3.81	21.25	1.52
3.083	1.65	9.167	3.55	15.250	3.81	21.33	1.52
3.167	1.65	9.250	3.55	15.333	3.81	21.42	1.52
3.250	1.65	9.333	4.06	15.417	3.81	21.50	1.52
3.333	1.65	9.417	4.06	15.500	3.81	21.58	1.52
3.417	1.65	9.500	4.06	15.583	3.81	21.67	1.52
3.500	1.65	9.583	4.06	15.667	3.81	21.75	1.52
3.583	1.65	9.667	4.06	15.750	3.81	21.83	1.52
3.667	1.65	9.750	4.06	15.833	3.81	21.92	1.52
3.750	1.65	9.833	4.57	15.917	3.81	22.00	1.52
3.833	1.65	9.917	4.57	16.000	3.81	22.08	1.52
3.917	1.65	10.000	4.57	16.083	3.81	22.17	1.52
4.000	1.65	10.083	4.57	16.167	3.81	22.25	1.52
4.083	1.65	10.167	4.57	16.250	3.81	22.33	1.52
4.167	1.65	10.250	4.57	16.333	2.28	22.42	1.52
4.250	1.65	10.333	5.84	16.417	2.28	22.50	1.52
4.333	2.03	10.417	5.84	16.500	2.28	22.58	1.52
4.417	2.03	10.500	5.84	16.583	2.28	22.67	1.52
4.500	2.03	10.583	5.84	16.667	2.28	22.75	1.52
4.583	2.03	10.667	5.84	16.750	2.28	22.83	1.52
4.667	2.03	10.750	5.84	16.833	2.28	22.92	1.52
4.750	2.03	10.833	7.87	16.917	2.28	23.00	1.52
4.833	2.03	10.917	7.87	17.000	2.28	23.08	1.52
4.917	2.03	11.000	7.87	17.083	2.28	23.17	1.52
5.000	2.03	11.083	7.87	17.167	2.28	23.25	1.52
5.083	2.03	11.167	7.87	17.250	2.28	23.33	1.52
5.167	2.03	11.250	7.87	17.333	2.28	23.42	1.52
5.250	2.03	11.333	12.18	17.417	2.28	23.50	1.52
5.333	2.03	11.417	12.18	17.500	2.28	23.58	1.52
5.417	2.03	11.500	12.18	17.583	2.28	23.67	1.52

5.500	2.03	11.583	12.18	17.667	2.28	23.75	1.52
5.583	2.03	11.667	12.18	17.750	2.28	23.83	1.52
5.667	2.03	11.750	12.18	17.833	2.28	23.92	1.52
5.750	2.03	11.833	37.56	17.917	2.28	24.00	1.52
5.833	2.03	11.917	37.57	18.000	2.28	24.08	1.52
5.917	2.03	12.000	37.57	18.083	2.28	24.17	1.52
6.000	2.03	12.083	155.32	18.167	2.28	24.25	1.52
6.083	2.03	12.167	155.34	18.250	2.28		

Unit Hyd Qpeak (cms)= 0.176

PEAK FLOW (cms)= 0.191 (i)
TIME TO PEAK (hrs)= 13.750
RUNOFF VOLUME (mm)= 47.749
TOTAL RAINFALL (mm)= 126.910
RUNOFF COEFFICIENT = 0.376

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0033)	Area	(ha)= 1.13	Curve Number	(CN)= 67.4	
ID= 1 DT= 5.0 min	Ia	(mm)= 7.88	# of Linear Res.(N)= 3.00		
	U.H. Tp(hrs)= 0.43				

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.03	12.250	155.34	18.33	2.28
0.167	0.00	6.250	2.03	12.333	18.29	18.42	2.28
0.250	0.00	6.333	2.28	12.417	18.28	18.50	2.28
0.333	1.40	6.417	2.28	12.500	18.28	18.58	2.28
0.417	1.40	6.500	2.28	12.583	18.27	18.67	2.28
0.500	1.40	6.583	2.28	12.667	18.28	18.75	2.28
0.583	1.40	6.667	2.28	12.750	18.28	18.83	2.28
0.667	1.40	6.750	2.28	12.833	9.39	18.92	2.28
0.750	1.40	6.833	2.28	12.917	9.39	19.00	2.28
0.833	1.40	6.917	2.28	13.000	9.39	19.08	2.28
0.917	1.40	7.000	2.28	13.083	9.39	19.17	2.28
1.000	1.40	7.083	2.28	13.167	9.39	19.25	2.28
1.083	1.40	7.167	2.28	13.250	9.39	19.33	2.28
1.167	1.40	7.250	2.28	13.333	6.85	19.42	2.28
1.250	1.40	7.333	2.79	13.417	6.85	19.50	2.28
1.333	1.40	7.417	2.79	13.500	6.85	19.58	2.28

1.417	1.40	7.500	2.79	13.583	6.85	19.67	2.28
1.500	1.40	7.583	2.79	13.667	6.85	19.75	2.28
1.583	1.40	7.667	2.79	13.750	6.85	19.83	2.28
1.667	1.40	7.750	2.79	13.833	5.33	19.92	2.28
1.750	1.40	7.833	2.79	13.917	5.33	20.00	2.28
1.833	1.40	7.917	2.79	14.000	5.33	20.08	2.28
1.917	1.40	8.000	2.79	14.083	5.33	20.17	2.28
2.000	1.40	8.083	2.79	14.167	5.33	20.25	2.28
2.083	1.40	8.167	2.79	14.250	5.33	20.33	1.52
2.167	1.40	8.250	2.79	14.333	3.81	20.42	1.52
2.250	1.40	8.333	3.30	14.417	3.81	20.50	1.52
2.333	1.65	8.417	3.30	14.500	3.81	20.58	1.52
2.417	1.65	8.500	3.30	14.583	3.81	20.67	1.52
2.500	1.65	8.583	3.30	14.667	3.81	20.75	1.52
2.583	1.65	8.667	3.30	14.750	3.81	20.83	1.52
2.667	1.65	8.750	3.30	14.833	3.81	20.92	1.52
2.750	1.65	8.833	3.55	14.917	3.81	21.00	1.52
2.833	1.65	8.917	3.55	15.000	3.81	21.08	1.52
2.917	1.65	9.000	3.55	15.083	3.81	21.17	1.52
3.000	1.65	9.083	3.55	15.167	3.81	21.25	1.52
3.083	1.65	9.167	3.55	15.250	3.81	21.33	1.52
3.167	1.65	9.250	3.55	15.333	3.81	21.42	1.52
3.250	1.65	9.333	4.06	15.417	3.81	21.50	1.52
3.333	1.65	9.417	4.06	15.500	3.81	21.58	1.52
3.417	1.65	9.500	4.06	15.583	3.81	21.67	1.52
3.500	1.65	9.583	4.06	15.667	3.81	21.75	1.52
3.583	1.65	9.667	4.06	15.750	3.81	21.83	1.52
3.667	1.65	9.750	4.06	15.833	3.81	21.92	1.52
3.750	1.65	9.833	4.57	15.917	3.81	22.00	1.52
3.833	1.65	9.917	4.57	16.000	3.81	22.08	1.52
3.917	1.65	10.000	4.57	16.083	3.81	22.17	1.52
4.000	1.65	10.083	4.57	16.167	3.81	22.25	1.52
4.083	1.65	10.167	4.57	16.250	3.81	22.33	1.52
4.167	1.65	10.250	4.57	16.333	2.28	22.42	1.52
4.250	1.65	10.333	5.84	16.417	2.28	22.50	1.52
4.333	2.03	10.417	5.84	16.500	2.28	22.58	1.52
4.417	2.03	10.500	5.84	16.583	2.28	22.67	1.52
4.500	2.03	10.583	5.84	16.667	2.28	22.75	1.52
4.583	2.03	10.667	5.84	16.750	2.28	22.83	1.52
4.667	2.03	10.750	5.84	16.833	2.28	22.92	1.52
4.750	2.03	10.833	7.87	16.917	2.28	23.00	1.52
4.833	2.03	10.917	7.87	17.000	2.28	23.08	1.52
4.917	2.03	11.000	7.87	17.083	2.28	23.17	1.52
5.000	2.03	11.083	7.87	17.167	2.28	23.25	1.52
5.083	2.03	11.167	7.87	17.250	2.28	23.33	1.52
5.167	2.03	11.250	7.87	17.333	2.28	23.42	1.52
5.250	2.03	11.333	12.18	17.417	2.28	23.50	1.52
5.333	2.03	11.417	12.18	17.500	2.28	23.58	1.52

5.417	2.03	11.500	12.18	17.583	2.28	23.67	1.52
5.500	2.03	11.583	12.18	17.667	2.28	23.75	1.52
5.583	2.03	11.667	12.18	17.750	2.28	23.83	1.52
5.667	2.03	11.750	12.18	17.833	2.28	23.92	1.52
5.750	2.03	11.833	37.56	17.917	2.28	24.00	1.52
5.833	2.03	11.917	37.57	18.000	2.28	24.08	1.52
5.917	2.03	12.000	37.57	18.083	2.28	24.17	1.52
6.000	2.03	12.083	155.32	18.167	2.28	24.25	1.52
6.083	2.03	12.167	155.34	18.250	2.28		

Unit Hyd Qpeak (cms)= 0.100

PEAK FLOW (cms)= 0.099 (i)
TIME TO PEAK (hrs)= 12.583
RUNOFF VOLUME (mm)= 58.514
TOTAL RAINFALL (mm)= 126.910
RUNOFF COEFFICIENT = 0.461

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0027)	Area (ha)=	1.38	Curve Number (CN)= 64.1
ID= 1 DT= 5.0 min	Ia (mm)=	8.51	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	0.39	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.03	12.250	155.34	18.33	2.28
0.167	0.00	6.250	2.03	12.333	18.29	18.42	2.28
0.250	0.00	6.333	2.28	12.417	18.28	18.50	2.28
0.333	1.40	6.417	2.28	12.500	18.28	18.58	2.28
0.417	1.40	6.500	2.28	12.583	18.27	18.67	2.28
0.500	1.40	6.583	2.28	12.667	18.28	18.75	2.28
0.583	1.40	6.667	2.28	12.750	18.28	18.83	2.28
0.667	1.40	6.750	2.28	12.833	9.39	18.92	2.28
0.750	1.40	6.833	2.28	12.917	9.39	19.00	2.28
0.833	1.40	6.917	2.28	13.000	9.39	19.08	2.28
0.917	1.40	7.000	2.28	13.083	9.39	19.17	2.28
1.000	1.40	7.083	2.28	13.167	9.39	19.25	2.28
1.083	1.40	7.167	2.28	13.250	9.39	19.33	2.28
1.167	1.40	7.250	2.28	13.333	6.85	19.42	2.28
1.250	1.40	7.333	2.79	13.417	6.85	19.50	2.28

1.333	1.40	7.417	2.79	13.500	6.85	19.58	2.28
1.417	1.40	7.500	2.79	13.583	6.85	19.67	2.28
1.500	1.40	7.583	2.79	13.667	6.85	19.75	2.28
1.583	1.40	7.667	2.79	13.750	6.85	19.83	2.28
1.667	1.40	7.750	2.79	13.833	5.33	19.92	2.28
1.750	1.40	7.833	2.79	13.917	5.33	20.00	2.28
1.833	1.40	7.917	2.79	14.000	5.33	20.08	2.28
1.917	1.40	8.000	2.79	14.083	5.33	20.17	2.28
2.000	1.40	8.083	2.79	14.167	5.33	20.25	2.28
2.083	1.40	8.167	2.79	14.250	5.33	20.33	1.52
2.167	1.40	8.250	2.79	14.333	3.81	20.42	1.52
2.250	1.40	8.333	3.30	14.417	3.81	20.50	1.52
2.333	1.65	8.417	3.30	14.500	3.81	20.58	1.52
2.417	1.65	8.500	3.30	14.583	3.81	20.67	1.52
2.500	1.65	8.583	3.30	14.667	3.81	20.75	1.52
2.583	1.65	8.667	3.30	14.750	3.81	20.83	1.52
2.667	1.65	8.750	3.30	14.833	3.81	20.92	1.52
2.750	1.65	8.833	3.55	14.917	3.81	21.00	1.52
2.833	1.65	8.917	3.55	15.000	3.81	21.08	1.52
2.917	1.65	9.000	3.55	15.083	3.81	21.17	1.52
3.000	1.65	9.083	3.55	15.167	3.81	21.25	1.52
3.083	1.65	9.167	3.55	15.250	3.81	21.33	1.52
3.167	1.65	9.250	3.55	15.333	3.81	21.42	1.52
3.250	1.65	9.333	4.06	15.417	3.81	21.50	1.52
3.333	1.65	9.417	4.06	15.500	3.81	21.58	1.52
3.417	1.65	9.500	4.06	15.583	3.81	21.67	1.52
3.500	1.65	9.583	4.06	15.667	3.81	21.75	1.52
3.583	1.65	9.667	4.06	15.750	3.81	21.83	1.52
3.667	1.65	9.750	4.06	15.833	3.81	21.92	1.52
3.750	1.65	9.833	4.57	15.917	3.81	22.00	1.52
3.833	1.65	9.917	4.57	16.000	3.81	22.08	1.52
3.917	1.65	10.000	4.57	16.083	3.81	22.17	1.52
4.000	1.65	10.083	4.57	16.167	3.81	22.25	1.52
4.083	1.65	10.167	4.57	16.250	3.81	22.33	1.52
4.167	1.65	10.250	4.57	16.333	2.28	22.42	1.52
4.250	1.65	10.333	5.84	16.417	2.28	22.50	1.52
4.333	2.03	10.417	5.84	16.500	2.28	22.58	1.52
4.417	2.03	10.500	5.84	16.583	2.28	22.67	1.52
4.500	2.03	10.583	5.84	16.667	2.28	22.75	1.52
4.583	2.03	10.667	5.84	16.750	2.28	22.83	1.52
4.667	2.03	10.750	5.84	16.833	2.28	22.92	1.52
4.750	2.03	10.833	7.87	16.917	2.28	23.00	1.52
4.833	2.03	10.917	7.87	17.000	2.28	23.08	1.52
4.917	2.03	11.000	7.87	17.083	2.28	23.17	1.52
5.000	2.03	11.083	7.87	17.167	2.28	23.25	1.52
5.083	2.03	11.167	7.87	17.250	2.28	23.33	1.52
5.167	2.03	11.250	7.87	17.333	2.28	23.42	1.52
5.250	2.03	11.333	12.18	17.417	2.28	23.50	1.52

5.333	2.03	11.417	12.18	17.500	2.28	23.58	1.52
5.417	2.03	11.500	12.18	17.583	2.28	23.67	1.52
5.500	2.03	11.583	12.18	17.667	2.28	23.75	1.52
5.583	2.03	11.667	12.18	17.750	2.28	23.83	1.52
5.667	2.03	11.750	12.18	17.833	2.28	23.92	1.52
5.750	2.03	11.833	37.56	17.917	2.28	24.00	1.52
5.833	2.03	11.917	37.57	18.000	2.28	24.08	1.52
5.917	2.03	12.000	37.57	18.083	2.28	24.17	1.52
6.000	2.03	12.083	155.32	18.167	2.28	24.25	1.52
6.083	2.03	12.167	155.34	18.250	2.28		

Unit Hyd Qpeak (cms)= 0.135

PEAK FLOW (cms)= 0.119 (i)
TIME TO PEAK (hrs)= 12.500
RUNOFF VOLUME (mm)= 53.825
TOTAL RAINFALL (mm)= 126.910
RUNOFF COEFFICIENT = 0.424

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0041)	Area (ha)=	0.59	Curve Number (CN)= 71.5
ID= 1 DT= 5.0 min	Ia (mm)=	4.75	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	0.53	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.03	12.250	155.34	18.33	2.28
0.167	0.00	6.250	2.03	12.333	18.29	18.42	2.28
0.250	0.00	6.333	2.28	12.417	18.28	18.50	2.28
0.333	1.40	6.417	2.28	12.500	18.28	18.58	2.28
0.417	1.40	6.500	2.28	12.583	18.27	18.67	2.28
0.500	1.40	6.583	2.28	12.667	18.28	18.75	2.28
0.583	1.40	6.667	2.28	12.750	18.28	18.83	2.28
0.667	1.40	6.750	2.28	12.833	9.39	18.92	2.28
0.750	1.40	6.833	2.28	12.917	9.39	19.00	2.28
0.833	1.40	6.917	2.28	13.000	9.39	19.08	2.28
0.917	1.40	7.000	2.28	13.083	9.39	19.17	2.28
1.000	1.40	7.083	2.28	13.167	9.39	19.25	2.28
1.083	1.40	7.167	2.28	13.250	9.39	19.33	2.28
1.167	1.40	7.250	2.28	13.333	6.85	19.42	2.28

1.250	1.40	7.333	2.79	13.417	6.85	19.50	2.28
1.333	1.40	7.417	2.79	13.500	6.85	19.58	2.28
1.417	1.40	7.500	2.79	13.583	6.85	19.67	2.28
1.500	1.40	7.583	2.79	13.667	6.85	19.75	2.28
1.583	1.40	7.667	2.79	13.750	6.85	19.83	2.28
1.667	1.40	7.750	2.79	13.833	5.33	19.92	2.28
1.750	1.40	7.833	2.79	13.917	5.33	20.00	2.28
1.833	1.40	7.917	2.79	14.000	5.33	20.08	2.28
1.917	1.40	8.000	2.79	14.083	5.33	20.17	2.28
2.000	1.40	8.083	2.79	14.167	5.33	20.25	2.28
2.083	1.40	8.167	2.79	14.250	5.33	20.33	1.52
2.167	1.40	8.250	2.79	14.333	3.81	20.42	1.52
2.250	1.40	8.333	3.30	14.417	3.81	20.50	1.52
2.333	1.65	8.417	3.30	14.500	3.81	20.58	1.52
2.417	1.65	8.500	3.30	14.583	3.81	20.67	1.52
2.500	1.65	8.583	3.30	14.667	3.81	20.75	1.52
2.583	1.65	8.667	3.30	14.750	3.81	20.83	1.52
2.667	1.65	8.750	3.30	14.833	3.81	20.92	1.52
2.750	1.65	8.833	3.55	14.917	3.81	21.00	1.52
2.833	1.65	8.917	3.55	15.000	3.81	21.08	1.52
2.917	1.65	9.000	3.55	15.083	3.81	21.17	1.52
3.000	1.65	9.083	3.55	15.167	3.81	21.25	1.52
3.083	1.65	9.167	3.55	15.250	3.81	21.33	1.52
3.167	1.65	9.250	3.55	15.333	3.81	21.42	1.52
3.250	1.65	9.333	4.06	15.417	3.81	21.50	1.52
3.333	1.65	9.417	4.06	15.500	3.81	21.58	1.52
3.417	1.65	9.500	4.06	15.583	3.81	21.67	1.52
3.500	1.65	9.583	4.06	15.667	3.81	21.75	1.52
3.583	1.65	9.667	4.06	15.750	3.81	21.83	1.52
3.667	1.65	9.750	4.06	15.833	3.81	21.92	1.52
3.750	1.65	9.833	4.57	15.917	3.81	22.00	1.52
3.833	1.65	9.917	4.57	16.000	3.81	22.08	1.52
3.917	1.65	10.000	4.57	16.083	3.81	22.17	1.52
4.000	1.65	10.083	4.57	16.167	3.81	22.25	1.52
4.083	1.65	10.167	4.57	16.250	3.81	22.33	1.52
4.167	1.65	10.250	4.57	16.333	2.28	22.42	1.52
4.250	1.65	10.333	5.84	16.417	2.28	22.50	1.52
4.333	2.03	10.417	5.84	16.500	2.28	22.58	1.52
4.417	2.03	10.500	5.84	16.583	2.28	22.67	1.52
4.500	2.03	10.583	5.84	16.667	2.28	22.75	1.52
4.583	2.03	10.667	5.84	16.750	2.28	22.83	1.52
4.667	2.03	10.750	5.84	16.833	2.28	22.92	1.52
4.750	2.03	10.833	7.87	16.917	2.28	23.00	1.52
4.833	2.03	10.917	7.87	17.000	2.28	23.08	1.52
4.917	2.03	11.000	7.87	17.083	2.28	23.17	1.52
5.000	2.03	11.083	7.87	17.167	2.28	23.25	1.52
5.083	2.03	11.167	7.87	17.250	2.28	23.33	1.52
5.167	2.03	11.250	7.87	17.333	2.28	23.42	1.52

5.250	2.03	11.333	12.18	17.417	2.28	23.50	1.52
5.333	2.03	11.417	12.18	17.500	2.28	23.58	1.52
5.417	2.03	11.500	12.18	17.583	2.28	23.67	1.52
5.500	2.03	11.583	12.18	17.667	2.28	23.75	1.52
5.583	2.03	11.667	12.18	17.750	2.28	23.83	1.52
5.667	2.03	11.750	12.18	17.833	2.28	23.92	1.52
5.750	2.03	11.833	37.56	17.917	2.28	24.00	1.52
5.833	2.03	11.917	37.57	18.000	2.28	24.08	1.52
5.917	2.03	12.000	37.57	18.083	2.28	24.17	1.52
6.000	2.03	12.083	155.32	18.167	2.28	24.25	1.52
6.083	2.03	12.167	155.34	18.250	2.28		

Unit Hyd Qpeak (cms)= 0.043

PEAK FLOW (cms)= 0.051 (i)
TIME TO PEAK (hrs)= 12.667
RUNOFF VOLUME (mm)= 66.734
TOTAL RAINFALL (mm)= 126.910
RUNOFF COEFFICIENT = 0.526

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	
STANDHYD (0015)	Area (ha)= 1.93
ID= 1 DT= 5.0 min	Total Imp(%)= 54.66 Dir. Conn.(%)= 10.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	1.05	0.88
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	0.50	2.00
Length (m)=	113.43	45.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.03	12.250	155.34	18.33	2.28
0.167	0.00	6.250	2.03	12.333	18.29	18.42	2.28
0.250	0.00	6.333	2.28	12.417	18.28	18.50	2.28
0.333	1.40	6.417	2.28	12.500	18.28	18.58	2.28
0.417	1.40	6.500	2.28	12.583	18.27	18.67	2.28
0.500	1.40	6.583	2.28	12.667	18.28	18.75	2.28
0.583	1.40	6.667	2.28	12.750	18.28	18.83	2.28

0.667	1.40	6.750	2.28	12.833	9.39	18.92	2.28
0.750	1.40	6.833	2.28	12.917	9.39	19.00	2.28
0.833	1.40	6.917	2.28	13.000	9.39	19.08	2.28
0.917	1.40	7.000	2.28	13.083	9.39	19.17	2.28
1.000	1.40	7.083	2.28	13.167	9.39	19.25	2.28
1.083	1.40	7.167	2.28	13.250	9.39	19.33	2.28
1.167	1.40	7.250	2.28	13.333	6.85	19.42	2.28
1.250	1.40	7.333	2.79	13.417	6.85	19.50	2.28
1.333	1.40	7.417	2.79	13.500	6.85	19.58	2.28
1.417	1.40	7.500	2.79	13.583	6.85	19.67	2.28
1.500	1.40	7.583	2.79	13.667	6.85	19.75	2.28
1.583	1.40	7.667	2.79	13.750	6.85	19.83	2.28
1.667	1.40	7.750	2.79	13.833	5.33	19.92	2.28
1.750	1.40	7.833	2.79	13.917	5.33	20.00	2.28
1.833	1.40	7.917	2.79	14.000	5.33	20.08	2.28
1.917	1.40	8.000	2.79	14.083	5.33	20.17	2.28
2.000	1.40	8.083	2.79	14.167	5.33	20.25	2.28
2.083	1.40	8.167	2.79	14.250	5.33	20.33	1.52
2.167	1.40	8.250	2.79	14.333	3.81	20.42	1.52
2.250	1.40	8.333	3.30	14.417	3.81	20.50	1.52
2.333	1.65	8.417	3.30	14.500	3.81	20.58	1.52
2.417	1.65	8.500	3.30	14.583	3.81	20.67	1.52
2.500	1.65	8.583	3.30	14.667	3.81	20.75	1.52
2.583	1.65	8.667	3.30	14.750	3.81	20.83	1.52
2.667	1.65	8.750	3.30	14.833	3.81	20.92	1.52
2.750	1.65	8.833	3.55	14.917	3.81	21.00	1.52
2.833	1.65	8.917	3.55	15.000	3.81	21.08	1.52
2.917	1.65	9.000	3.55	15.083	3.81	21.17	1.52
3.000	1.65	9.083	3.55	15.167	3.81	21.25	1.52
3.083	1.65	9.167	3.55	15.250	3.81	21.33	1.52
3.167	1.65	9.250	3.55	15.333	3.81	21.42	1.52
3.250	1.65	9.333	4.06	15.417	3.81	21.50	1.52
3.333	1.65	9.417	4.06	15.500	3.81	21.58	1.52
3.417	1.65	9.500	4.06	15.583	3.81	21.67	1.52
3.500	1.65	9.583	4.06	15.667	3.81	21.75	1.52
3.583	1.65	9.667	4.06	15.750	3.81	21.83	1.52
3.667	1.65	9.750	4.06	15.833	3.81	21.92	1.52
3.750	1.65	9.833	4.57	15.917	3.81	22.00	1.52
3.833	1.65	9.917	4.57	16.000	3.81	22.08	1.52
3.917	1.65	10.000	4.57	16.083	3.81	22.17	1.52
4.000	1.65	10.083	4.57	16.167	3.81	22.25	1.52
4.083	1.65	10.167	4.57	16.250	3.81	22.33	1.52
4.167	1.65	10.250	4.57	16.333	2.28	22.42	1.52
4.250	1.65	10.333	5.84	16.417	2.28	22.50	1.52
4.333	2.03	10.417	5.84	16.500	2.28	22.58	1.52
4.417	2.03	10.500	5.84	16.583	2.28	22.67	1.52
4.500	2.03	10.583	5.84	16.667	2.28	22.75	1.52
4.583	2.03	10.667	5.84	16.750	2.28	22.83	1.52

4.667	2.03	10.750	5.84	16.833	2.28	22.92	1.52
4.750	2.03	10.833	7.87	16.917	2.28	23.00	1.52
4.833	2.03	10.917	7.87	17.000	2.28	23.08	1.52
4.917	2.03	11.000	7.87	17.083	2.28	23.17	1.52
5.000	2.03	11.083	7.87	17.167	2.28	23.25	1.52
5.083	2.03	11.167	7.87	17.250	2.28	23.33	1.52
5.167	2.03	11.250	7.87	17.333	2.28	23.42	1.52
5.250	2.03	11.333	12.18	17.417	2.28	23.50	1.52
5.333	2.03	11.417	12.18	17.500	2.28	23.58	1.52
5.417	2.03	11.500	12.18	17.583	2.28	23.67	1.52
5.500	2.03	11.583	12.18	17.667	2.28	23.75	1.52
5.583	2.03	11.667	12.18	17.750	2.28	23.83	1.52
5.667	2.03	11.750	12.18	17.833	2.28	23.92	1.52
5.750	2.03	11.833	37.56	17.917	2.28	24.00	1.52
5.833	2.03	11.917	37.57	18.000	2.28	24.08	1.52
5.917	2.03	12.000	37.57	18.083	2.28	24.17	1.52
6.000	2.03	12.083	155.32	18.167	2.28	24.25	1.52
6.083	2.03	12.167	155.34	18.250	2.28		

			TOTALS
Max.Eff.Inten.(mm/hr)=	155.34	173.75	
over (min)	5.00	10.00	
Storage Coeff. (min)=	2.84 (ii)	8.92 (ii)	
Unit Hyd. Tpeak (min)=	5.00	10.00	
Unit Hyd. peak (cms)=	0.28	0.12	
PEAK FLOW (cms)=	0.08	0.31	0.391 (iii)
TIME TO PEAK (hrs)=	12.25	12.25	12.25
RUNOFF VOLUME (mm)=	125.91	60.13	66.71
TOTAL RAINFALL (mm)=	126.91	126.91	126.91
RUNOFF COEFFICIENT =	0.99	0.47	0.53

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 49.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	
STANDHYD (0019)	Area (ha)= 2.16
ID= 1 DT= 5.0 min	Total Imp(%)= 54.64 Dir. Conn.(%)= 10.00

	IMPERVIOUS	PERVIOUS (i)

Surface Area (ha)=	1.18	0.98	
Dep. Storage (mm)=	1.00	5.00	
Average Slope (%)=	0.50	2.00	
Length (m)=	120.00	30.00	
Mannings n =	0.013	0.250	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.03	12.250	155.34	18.33	2.28
0.167	0.00	6.250	2.03	12.333	18.29	18.42	2.28
0.250	0.00	6.333	2.28	12.417	18.28	18.50	2.28
0.333	1.40	6.417	2.28	12.500	18.28	18.58	2.28
0.417	1.40	6.500	2.28	12.583	18.27	18.67	2.28
0.500	1.40	6.583	2.28	12.667	18.28	18.75	2.28
0.583	1.40	6.667	2.28	12.750	18.28	18.83	2.28
0.667	1.40	6.750	2.28	12.833	9.39	18.92	2.28
0.750	1.40	6.833	2.28	12.917	9.39	19.00	2.28
0.833	1.40	6.917	2.28	13.000	9.39	19.08	2.28
0.917	1.40	7.000	2.28	13.083	9.39	19.17	2.28
1.000	1.40	7.083	2.28	13.167	9.39	19.25	2.28
1.083	1.40	7.167	2.28	13.250	9.39	19.33	2.28
1.167	1.40	7.250	2.28	13.333	6.85	19.42	2.28
1.250	1.40	7.333	2.79	13.417	6.85	19.50	2.28
1.333	1.40	7.417	2.79	13.500	6.85	19.58	2.28
1.417	1.40	7.500	2.79	13.583	6.85	19.67	2.28
1.500	1.40	7.583	2.79	13.667	6.85	19.75	2.28
1.583	1.40	7.667	2.79	13.750	6.85	19.83	2.28
1.667	1.40	7.750	2.79	13.833	5.33	19.92	2.28
1.750	1.40	7.833	2.79	13.917	5.33	20.00	2.28
1.833	1.40	7.917	2.79	14.000	5.33	20.08	2.28
1.917	1.40	8.000	2.79	14.083	5.33	20.17	2.28
2.000	1.40	8.083	2.79	14.167	5.33	20.25	2.28
2.083	1.40	8.167	2.79	14.250	5.33	20.33	1.52
2.167	1.40	8.250	2.79	14.333	3.81	20.42	1.52
2.250	1.40	8.333	3.30	14.417	3.81	20.50	1.52
2.333	1.65	8.417	3.30	14.500	3.81	20.58	1.52
2.417	1.65	8.500	3.30	14.583	3.81	20.67	1.52
2.500	1.65	8.583	3.30	14.667	3.81	20.75	1.52
2.583	1.65	8.667	3.30	14.750	3.81	20.83	1.52
2.667	1.65	8.750	3.30	14.833	3.81	20.92	1.52
2.750	1.65	8.833	3.55	14.917	3.81	21.00	1.52
2.833	1.65	8.917	3.55	15.000	3.81	21.08	1.52
2.917	1.65	9.000	3.55	15.083	3.81	21.17	1.52
3.000	1.65	9.083	3.55	15.167	3.81	21.25	1.52

3.083	1.65	9.167	3.55	15.250	3.81	21.33	1.52
3.167	1.65	9.250	3.55	15.333	3.81	21.42	1.52
3.250	1.65	9.333	4.06	15.417	3.81	21.50	1.52
3.333	1.65	9.417	4.06	15.500	3.81	21.58	1.52
3.417	1.65	9.500	4.06	15.583	3.81	21.67	1.52
3.500	1.65	9.583	4.06	15.667	3.81	21.75	1.52
3.583	1.65	9.667	4.06	15.750	3.81	21.83	1.52
3.667	1.65	9.750	4.06	15.833	3.81	21.92	1.52
3.750	1.65	9.833	4.57	15.917	3.81	22.00	1.52
3.833	1.65	9.917	4.57	16.000	3.81	22.08	1.52
3.917	1.65	10.000	4.57	16.083	3.81	22.17	1.52
4.000	1.65	10.083	4.57	16.167	3.81	22.25	1.52
4.083	1.65	10.167	4.57	16.250	3.81	22.33	1.52
4.167	1.65	10.250	4.57	16.333	2.28	22.42	1.52
4.250	1.65	10.333	5.84	16.417	2.28	22.50	1.52
4.333	2.03	10.417	5.84	16.500	2.28	22.58	1.52
4.417	2.03	10.500	5.84	16.583	2.28	22.67	1.52
4.500	2.03	10.583	5.84	16.667	2.28	22.75	1.52
4.583	2.03	10.667	5.84	16.750	2.28	22.83	1.52
4.667	2.03	10.750	5.84	16.833	2.28	22.92	1.52
4.750	2.03	10.833	7.87	16.917	2.28	23.00	1.52
4.833	2.03	10.917	7.87	17.000	2.28	23.08	1.52
4.917	2.03	11.000	7.87	17.083	2.28	23.17	1.52
5.000	2.03	11.083	7.87	17.167	2.28	23.25	1.52
5.083	2.03	11.167	7.87	17.250	2.28	23.33	1.52
5.167	2.03	11.250	7.87	17.333	2.28	23.42	1.52
5.250	2.03	11.333	12.18	17.417	2.28	23.50	1.52
5.333	2.03	11.417	12.18	17.500	2.28	23.58	1.52
5.417	2.03	11.500	12.18	17.583	2.28	23.67	1.52
5.500	2.03	11.583	12.18	17.667	2.28	23.75	1.52
5.583	2.03	11.667	12.18	17.750	2.28	23.83	1.52
5.667	2.03	11.750	12.18	17.833	2.28	23.92	1.52
5.750	2.03	11.833	37.56	17.917	2.28	24.00	1.52
5.833	2.03	11.917	37.57	18.000	2.28	24.08	1.52
5.917	2.03	12.000	37.57	18.083	2.28	24.17	1.52
6.000	2.03	12.083	155.32	18.167	2.28	24.25	1.52
6.083	2.03	12.167	155.34	18.250	2.28		

Max.Eff.Inten.(mm/hr)=	155.34	243.50	
over (min)	5.00	10.00	
Storage Coeff. (min)=	2.94 (ii)	7.10 (ii)	
Unit Hyd. Tpeak (min)=	5.00	10.00	
Unit Hyd. peak (cms)=	0.28	0.14	
			TOTALS
PEAK FLOW (cms)=	0.09	0.54	0.632 (iii)
TIME TO PEAK (hrs)=	12.25	12.25	12.25
RUNOFF VOLUME (mm)=	125.91	85.06	89.14
TOTAL RAINFALL (mm)=	126.91	126.91	126.91

RUNOFF COEFFICIENT = 0.99 0.67 0.70

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0040)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0015):	1.93	0.391	12.25	66.71
+ ID2= 2 (0019):	2.16	0.632	12.25	89.14
ID = 3 (0040):	4.09	1.023	12.25	78.56

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0040)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0040):	4.09	1.023	12.25	78.56
+ ID2= 2 (0027):	1.38	0.119	12.50	53.82
ID = 1 (0040):	5.47	1.096	12.25	72.32

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0040)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0040):	5.47	1.096	12.25	72.32
+ ID2= 2 (0041):	0.59	0.051	12.67	66.73
ID = 3 (0040):	6.06	1.121	12.25	71.77

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB				
NASHYD (0048)	Area (ha)=	29.16	Curve Number (CN)=	71.4
ID= 1 DT= 5.0 min	Ia (mm)=	7.88	# of Linear Res.(N)=	3.00
	U.H. Tp(hrs)=	0.68		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.03	12.250	155.34	18.33	2.28
0.167	0.00	6.250	2.03	12.333	18.29	18.42	2.28
0.250	0.00	6.333	2.28	12.417	18.28	18.50	2.28
0.333	1.40	6.417	2.28	12.500	18.28	18.58	2.28
0.417	1.40	6.500	2.28	12.583	18.27	18.67	2.28
0.500	1.40	6.583	2.28	12.667	18.28	18.75	2.28
0.583	1.40	6.667	2.28	12.750	18.28	18.83	2.28
0.667	1.40	6.750	2.28	12.833	9.39	18.92	2.28
0.750	1.40	6.833	2.28	12.917	9.39	19.00	2.28
0.833	1.40	6.917	2.28	13.000	9.39	19.08	2.28
0.917	1.40	7.000	2.28	13.083	9.39	19.17	2.28
1.000	1.40	7.083	2.28	13.167	9.39	19.25	2.28
1.083	1.40	7.167	2.28	13.250	9.39	19.33	2.28
1.167	1.40	7.250	2.28	13.333	6.85	19.42	2.28
1.250	1.40	7.333	2.79	13.417	6.85	19.50	2.28
1.333	1.40	7.417	2.79	13.500	6.85	19.58	2.28
1.417	1.40	7.500	2.79	13.583	6.85	19.67	2.28
1.500	1.40	7.583	2.79	13.667	6.85	19.75	2.28
1.583	1.40	7.667	2.79	13.750	6.85	19.83	2.28
1.667	1.40	7.750	2.79	13.833	5.33	19.92	2.28
1.750	1.40	7.833	2.79	13.917	5.33	20.00	2.28
1.833	1.40	7.917	2.79	14.000	5.33	20.08	2.28
1.917	1.40	8.000	2.79	14.083	5.33	20.17	2.28
2.000	1.40	8.083	2.79	14.167	5.33	20.25	2.28
2.083	1.40	8.167	2.79	14.250	5.33	20.33	1.52
2.167	1.40	8.250	2.79	14.333	3.81	20.42	1.52
2.250	1.40	8.333	3.30	14.417	3.81	20.50	1.52
2.333	1.65	8.417	3.30	14.500	3.81	20.58	1.52
2.417	1.65	8.500	3.30	14.583	3.81	20.67	1.52
2.500	1.65	8.583	3.30	14.667	3.81	20.75	1.52
2.583	1.65	8.667	3.30	14.750	3.81	20.83	1.52
2.667	1.65	8.750	3.30	14.833	3.81	20.92	1.52
2.750	1.65	8.833	3.55	14.917	3.81	21.00	1.52
2.833	1.65	8.917	3.55	15.000	3.81	21.08	1.52
2.917	1.65	9.000	3.55	15.083	3.81	21.17	1.52

3.000	1.65	9.083	3.55	15.167	3.81	21.25	1.52
3.083	1.65	9.167	3.55	15.250	3.81	21.33	1.52
3.167	1.65	9.250	3.55	15.333	3.81	21.42	1.52
3.250	1.65	9.333	4.06	15.417	3.81	21.50	1.52
3.333	1.65	9.417	4.06	15.500	3.81	21.58	1.52
3.417	1.65	9.500	4.06	15.583	3.81	21.67	1.52
3.500	1.65	9.583	4.06	15.667	3.81	21.75	1.52
3.583	1.65	9.667	4.06	15.750	3.81	21.83	1.52
3.667	1.65	9.750	4.06	15.833	3.81	21.92	1.52
3.750	1.65	9.833	4.57	15.917	3.81	22.00	1.52
3.833	1.65	9.917	4.57	16.000	3.81	22.08	1.52
3.917	1.65	10.000	4.57	16.083	3.81	22.17	1.52
4.000	1.65	10.083	4.57	16.167	3.81	22.25	1.52
4.083	1.65	10.167	4.57	16.250	3.81	22.33	1.52
4.167	1.65	10.250	4.57	16.333	2.28	22.42	1.52
4.250	1.65	10.333	5.84	16.417	2.28	22.50	1.52
4.333	2.03	10.417	5.84	16.500	2.28	22.58	1.52
4.417	2.03	10.500	5.84	16.583	2.28	22.67	1.52
4.500	2.03	10.583	5.84	16.667	2.28	22.75	1.52
4.583	2.03	10.667	5.84	16.750	2.28	22.83	1.52
4.667	2.03	10.750	5.84	16.833	2.28	22.92	1.52
4.750	2.03	10.833	7.87	16.917	2.28	23.00	1.52
4.833	2.03	10.917	7.87	17.000	2.28	23.08	1.52
4.917	2.03	11.000	7.87	17.083	2.28	23.17	1.52
5.000	2.03	11.083	7.87	17.167	2.28	23.25	1.52
5.083	2.03	11.167	7.87	17.250	2.28	23.33	1.52
5.167	2.03	11.250	7.87	17.333	2.28	23.42	1.52
5.250	2.03	11.333	12.18	17.417	2.28	23.50	1.52
5.333	2.03	11.417	12.18	17.500	2.28	23.58	1.52
5.417	2.03	11.500	12.18	17.583	2.28	23.67	1.52
5.500	2.03	11.583	12.18	17.667	2.28	23.75	1.52
5.583	2.03	11.667	12.18	17.750	2.28	23.83	1.52
5.667	2.03	11.750	12.18	17.833	2.28	23.92	1.52
5.750	2.03	11.833	37.56	17.917	2.28	24.00	1.52
5.833	2.03	11.917	37.57	18.000	2.28	24.08	1.52
5.917	2.03	12.000	37.57	18.083	2.28	24.17	1.52
6.000	2.03	12.083	155.32	18.167	2.28	24.25	1.52
6.083	2.03	12.167	155.34	18.250	2.28		

Unit Hyd Qpeak (cms)= 1.638

PEAK FLOW (cms)= 2.033 (i)
TIME TO PEAK (hrs)= 12.833
RUNOFF VOLUME (mm)= 64.174
TOTAL RAINFALL (mm)= 126.910
RUNOFF COEFFICIENT = 0.506

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB									
STANDHYD (0014)	Area (ha)= 1.87								
ID= 1 DT= 5.0 min	Total Imp(%)= 43.28		Dir. Conn.(%)= 10.00						

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.81	1.06
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	111.65	25.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.03	12.250	155.34	18.33	2.28
0.167	0.00	6.250	2.03	12.333	18.29	18.42	2.28
0.250	0.00	6.333	2.28	12.417	18.28	18.50	2.28
0.333	1.40	6.417	2.28	12.500	18.28	18.58	2.28
0.417	1.40	6.500	2.28	12.583	18.27	18.67	2.28
0.500	1.40	6.583	2.28	12.667	18.28	18.75	2.28
0.583	1.40	6.667	2.28	12.750	18.28	18.83	2.28
0.667	1.40	6.750	2.28	12.833	9.39	18.92	2.28
0.750	1.40	6.833	2.28	12.917	9.39	19.00	2.28
0.833	1.40	6.917	2.28	13.000	9.39	19.08	2.28
0.917	1.40	7.000	2.28	13.083	9.39	19.17	2.28
1.000	1.40	7.083	2.28	13.167	9.39	19.25	2.28
1.083	1.40	7.167	2.28	13.250	9.39	19.33	2.28
1.167	1.40	7.250	2.28	13.333	6.85	19.42	2.28
1.250	1.40	7.333	2.79	13.417	6.85	19.50	2.28
1.333	1.40	7.417	2.79	13.500	6.85	19.58	2.28
1.417	1.40	7.500	2.79	13.583	6.85	19.67	2.28
1.500	1.40	7.583	2.79	13.667	6.85	19.75	2.28
1.583	1.40	7.667	2.79	13.750	6.85	19.83	2.28
1.667	1.40	7.750	2.79	13.833	5.33	19.92	2.28
1.750	1.40	7.833	2.79	13.917	5.33	20.00	2.28
1.833	1.40	7.917	2.79	14.000	5.33	20.08	2.28
1.917	1.40	8.000	2.79	14.083	5.33	20.17	2.28
2.000	1.40	8.083	2.79	14.167	5.33	20.25	2.28
2.083	1.40	8.167	2.79	14.250	5.33	20.33	1.52
2.167	1.40	8.250	2.79	14.333	3.81	20.42	1.52
2.250	1.40	8.333	3.30	14.417	3.81	20.50	1.52
2.333	1.65	8.417	3.30	14.500	3.81	20.58	1.52

2.417	1.65	8.500	3.30	14.583	3.81	20.67	1.52
2.500	1.65	8.583	3.30	14.667	3.81	20.75	1.52
2.583	1.65	8.667	3.30	14.750	3.81	20.83	1.52
2.667	1.65	8.750	3.30	14.833	3.81	20.92	1.52
2.750	1.65	8.833	3.55	14.917	3.81	21.00	1.52
2.833	1.65	8.917	3.55	15.000	3.81	21.08	1.52
2.917	1.65	9.000	3.55	15.083	3.81	21.17	1.52
3.000	1.65	9.083	3.55	15.167	3.81	21.25	1.52
3.083	1.65	9.167	3.55	15.250	3.81	21.33	1.52
3.167	1.65	9.250	3.55	15.333	3.81	21.42	1.52
3.250	1.65	9.333	4.06	15.417	3.81	21.50	1.52
3.333	1.65	9.417	4.06	15.500	3.81	21.58	1.52
3.417	1.65	9.500	4.06	15.583	3.81	21.67	1.52
3.500	1.65	9.583	4.06	15.667	3.81	21.75	1.52
3.583	1.65	9.667	4.06	15.750	3.81	21.83	1.52
3.667	1.65	9.750	4.06	15.833	3.81	21.92	1.52
3.750	1.65	9.833	4.57	15.917	3.81	22.00	1.52
3.833	1.65	9.917	4.57	16.000	3.81	22.08	1.52
3.917	1.65	10.000	4.57	16.083	3.81	22.17	1.52
4.000	1.65	10.083	4.57	16.167	3.81	22.25	1.52
4.083	1.65	10.167	4.57	16.250	3.81	22.33	1.52
4.167	1.65	10.250	4.57	16.333	2.28	22.42	1.52
4.250	1.65	10.333	5.84	16.417	2.28	22.50	1.52
4.333	2.03	10.417	5.84	16.500	2.28	22.58	1.52
4.417	2.03	10.500	5.84	16.583	2.28	22.67	1.52
4.500	2.03	10.583	5.84	16.667	2.28	22.75	1.52
4.583	2.03	10.667	5.84	16.750	2.28	22.83	1.52
4.667	2.03	10.750	5.84	16.833	2.28	22.92	1.52
4.750	2.03	10.833	7.87	16.917	2.28	23.00	1.52
4.833	2.03	10.917	7.87	17.000	2.28	23.08	1.52
4.917	2.03	11.000	7.87	17.083	2.28	23.17	1.52
5.000	2.03	11.083	7.87	17.167	2.28	23.25	1.52
5.083	2.03	11.167	7.87	17.250	2.28	23.33	1.52
5.167	2.03	11.250	7.87	17.333	2.28	23.42	1.52
5.250	2.03	11.333	12.18	17.417	2.28	23.50	1.52
5.333	2.03	11.417	12.18	17.500	2.28	23.58	1.52
5.417	2.03	11.500	12.18	17.583	2.28	23.67	1.52
5.500	2.03	11.583	12.18	17.667	2.28	23.75	1.52
5.583	2.03	11.667	12.18	17.750	2.28	23.83	1.52
5.667	2.03	11.750	12.18	17.833	2.28	23.92	1.52
5.750	2.03	11.833	37.56	17.917	2.28	24.00	1.52
5.833	2.03	11.917	37.57	18.000	2.28	24.08	1.52
5.917	2.03	12.000	37.57	18.083	2.28	24.17	1.52
6.000	2.03	12.083	155.32	18.167	2.28	24.25	1.52
6.083	2.03	12.167	155.34	18.250	2.28		

Max.Eff.Inten.(mm/hr)=	155.34	206.69	
over (min)	5.00	10.00	

Storage Coeff. (min)=	2.82 (ii)	6.80 (ii)			
Unit Hyd. Tpeak (min)=	5.00	10.00			
Unit Hyd. peak (cms)=	0.28	0.14			
			TOTALS		
PEAK FLOW (cms)=	0.08	0.51	0.586 (iii)		
TIME TO PEAK (hrs)=	12.25	12.25	12.25		
RUNOFF VOLUME (mm)=	125.91	90.65	94.17		
TOTAL RAINFALL (mm)=	126.91	126.91	126.91		
RUNOFF COEFFICIENT =	0.99	0.71	0.74		

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 78.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB									
STANDHYD (0021)	Area (ha)= 0.07								
ID= 1 DT= 5.0 min	Total Imp(%)= 48.26		Dir. Conn.(%)= 39.54						

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.03	0.04
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	21.60	5.60
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.03	12.250	155.34	18.33	2.28
0.167	0.00	6.250	2.03	12.333	18.29	18.42	2.28
0.250	0.00	6.333	2.28	12.417	18.28	18.50	2.28
0.333	1.40	6.417	2.28	12.500	18.28	18.58	2.28
0.417	1.40	6.500	2.28	12.583	18.27	18.67	2.28
0.500	1.40	6.583	2.28	12.667	18.28	18.75	2.28
0.583	1.40	6.667	2.28	12.750	18.28	18.83	2.28
0.667	1.40	6.750	2.28	12.833	9.39	18.92	2.28
0.750	1.40	6.833	2.28	12.917	9.39	19.00	2.28

0.833	1.40	6.917	2.28	13.000	9.39	19.08	2.28
0.917	1.40	7.000	2.28	13.083	9.39	19.17	2.28
1.000	1.40	7.083	2.28	13.167	9.39	19.25	2.28
1.083	1.40	7.167	2.28	13.250	9.39	19.33	2.28
1.167	1.40	7.250	2.28	13.333	6.85	19.42	2.28
1.250	1.40	7.333	2.79	13.417	6.85	19.50	2.28
1.333	1.40	7.417	2.79	13.500	6.85	19.58	2.28
1.417	1.40	7.500	2.79	13.583	6.85	19.67	2.28
1.500	1.40	7.583	2.79	13.667	6.85	19.75	2.28
1.583	1.40	7.667	2.79	13.750	6.85	19.83	2.28
1.667	1.40	7.750	2.79	13.833	5.33	19.92	2.28
1.750	1.40	7.833	2.79	13.917	5.33	20.00	2.28
1.833	1.40	7.917	2.79	14.000	5.33	20.08	2.28
1.917	1.40	8.000	2.79	14.083	5.33	20.17	2.28
2.000	1.40	8.083	2.79	14.167	5.33	20.25	2.28
2.083	1.40	8.167	2.79	14.250	5.33	20.33	1.52
2.167	1.40	8.250	2.79	14.333	3.81	20.42	1.52
2.250	1.40	8.333	3.30	14.417	3.81	20.50	1.52
2.333	1.65	8.417	3.30	14.500	3.81	20.58	1.52
2.417	1.65	8.500	3.30	14.583	3.81	20.67	1.52
2.500	1.65	8.583	3.30	14.667	3.81	20.75	1.52
2.583	1.65	8.667	3.30	14.750	3.81	20.83	1.52
2.667	1.65	8.750	3.30	14.833	3.81	20.92	1.52
2.750	1.65	8.833	3.55	14.917	3.81	21.00	1.52
2.833	1.65	8.917	3.55	15.000	3.81	21.08	1.52
2.917	1.65	9.000	3.55	15.083	3.81	21.17	1.52
3.000	1.65	9.083	3.55	15.167	3.81	21.25	1.52
3.083	1.65	9.167	3.55	15.250	3.81	21.33	1.52
3.167	1.65	9.250	3.55	15.333	3.81	21.42	1.52
3.250	1.65	9.333	4.06	15.417	3.81	21.50	1.52
3.333	1.65	9.417	4.06	15.500	3.81	21.58	1.52
3.417	1.65	9.500	4.06	15.583	3.81	21.67	1.52
3.500	1.65	9.583	4.06	15.667	3.81	21.75	1.52
3.583	1.65	9.667	4.06	15.750	3.81	21.83	1.52
3.667	1.65	9.750	4.06	15.833	3.81	21.92	1.52
3.750	1.65	9.833	4.57	15.917	3.81	22.00	1.52
3.833	1.65	9.917	4.57	16.000	3.81	22.08	1.52
3.917	1.65	10.000	4.57	16.083	3.81	22.17	1.52
4.000	1.65	10.083	4.57	16.167	3.81	22.25	1.52
4.083	1.65	10.167	4.57	16.250	3.81	22.33	1.52
4.167	1.65	10.250	4.57	16.333	2.28	22.42	1.52
4.250	1.65	10.333	5.84	16.417	2.28	22.50	1.52
4.333	2.03	10.417	5.84	16.500	2.28	22.58	1.52
4.417	2.03	10.500	5.84	16.583	2.28	22.67	1.52
4.500	2.03	10.583	5.84	16.667	2.28	22.75	1.52
4.583	2.03	10.667	5.84	16.750	2.28	22.83	1.52
4.667	2.03	10.750	5.84	16.833	2.28	22.92	1.52
4.750	2.03	10.833	7.87	16.917	2.28	23.00	1.52

4.833	2.03	10.917	7.87	17.000	2.28	23.08	1.52
4.917	2.03	11.000	7.87	17.083	2.28	23.17	1.52
5.000	2.03	11.083	7.87	17.167	2.28	23.25	1.52
5.083	2.03	11.167	7.87	17.250	2.28	23.33	1.52
5.167	2.03	11.250	7.87	17.333	2.28	23.42	1.52
5.250	2.03	11.333	12.18	17.417	2.28	23.50	1.52
5.333	2.03	11.417	12.18	17.500	2.28	23.58	1.52
5.417	2.03	11.500	12.18	17.583	2.28	23.67	1.52
5.500	2.03	11.583	12.18	17.667	2.28	23.75	1.52
5.583	2.03	11.667	12.18	17.750	2.28	23.83	1.52
5.667	2.03	11.750	12.18	17.833	2.28	23.92	1.52
5.750	2.03	11.833	37.56	17.917	2.28	24.00	1.52
5.833	2.03	11.917	37.57	18.000	2.28	24.08	1.52
5.917	2.03	12.000	37.57	18.083	2.28	24.17	1.52
6.000	2.03	12.083	155.32	18.167	2.28	24.25	1.52
6.083	2.03	12.167	155.34	18.250	2.28		

Max.Eff.Inten.(mm/hr)=	155.34	79.59	
over (min)	5.00	5.00	
Storage Coeff. (min)=	1.05 (ii)	3.08 (ii)	
Unit Hyd. Tpeak (min)=	5.00	5.00	
Unit Hyd. peak (cms)=	0.34	0.27	
			TOTALS
PEAK FLOW (cms)=	0.01	0.01	0.020 (iii)
TIME TO PEAK (hrs)=	12.25	12.25	12.25
RUNOFF VOLUME (mm)=	125.91	46.74	78.03
TOTAL RAINFALL (mm)=	126.91	126.91	126.91
RUNOFF COEFFICIENT =	0.99	0.37	0.61

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 52.2 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0016)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0001):	39.68	1.380	13.42	49.70
+ ID2= 2 (0014):	1.87	0.586	12.25	94.17
ID = 3 (0016):	41.55	1.416	13.42	51.70

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0016):	41.55	1.416	13.42	51.70
+ ID2= 2 (0002):	23.99	0.588	13.25	31.28
ID = 1 (0016):	65.54	1.997	13.33	44.23

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0016):	65.54	1.997	13.33	44.23
+ ID2= 2 (0021):	0.07	0.020	12.25	78.03
ID = 3 (0016):	65.61	1.998	13.33	44.26

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0016):	65.61	1.998	13.33	44.26
+ ID2= 2 (0025):	100.92	2.350	14.08	44.40
ID = 1 (0016):	166.53	4.170	13.67	44.34

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0016):	166.53	4.170	13.67	44.34
+ ID2= 2 (0028):	6.37	0.205	13.00	34.32
ID = 3 (0016):	172.90	4.321	13.67	43.97

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0016):	172.90	4.321	13.67	43.97
+ ID2= 2 (0029):	14.85	0.478	13.08	38.04
ID = 1 (0016):	187.75	4.740	13.58	43.50

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0016):	187.75	4.740	13.58	43.50
+ ID2= 2 (0030):	1.70	0.128	12.50	48.52
ID = 3 (0016):	189.45	4.772	13.58	43.55

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0016):	189.45	4.772	13.58	43.55
+ ID2= 2 (0031):	1.80	0.057	13.00	33.71
ID = 1 (0016):	191.25	4.817	13.58	43.46

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0016):	191.25	4.817	13.58	43.46
+ ID2= 2 (0032):	6.70	0.191	13.75	47.75
ID = 3 (0016):	197.95	5.005	13.58	43.60

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0016):	197.95	5.005	13.58	43.60
+ ID2= 2 (0033):	1.13	0.099	12.58	58.51
ID = 1 (0016):	199.08	5.034	13.50	43.69

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0016):	199.08	5.034	13.50	43.69
+ ID2= 2 (0040):	6.06	1.121	12.25	71.77
ID = 3 (0016):	205.14	5.156	13.50	44.52

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0016):	205.14	5.156	13.50	44.52
+ ID2= 2 (0048):	29.16	2.033	12.83	64.17
ID = 1 (0016):	234.30	6.766	13.25	46.96

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB				
STANDHYD (0009)	Area (ha)= 31.06			
ID= 1 DT= 5.0 min	Total Imp(%)= 53.89	Dir. Conn.(%)= 20.76		

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	16.74	14.32
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	455.05	30.00

Mannings n = 0.013 0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.03	12.250	155.34	18.33	2.28
0.167	0.00	6.250	2.03	12.333	18.29	18.42	2.28
0.250	0.00	6.333	2.28	12.417	18.28	18.50	2.28
0.333	1.40	6.417	2.28	12.500	18.28	18.58	2.28
0.417	1.40	6.500	2.28	12.583	18.27	18.67	2.28
0.500	1.40	6.583	2.28	12.667	18.28	18.75	2.28
0.583	1.40	6.667	2.28	12.750	18.28	18.83	2.28
0.667	1.40	6.750	2.28	12.833	9.39	18.92	2.28
0.750	1.40	6.833	2.28	12.917	9.39	19.00	2.28
0.833	1.40	6.917	2.28	13.000	9.39	19.08	2.28
0.917	1.40	7.000	2.28	13.083	9.39	19.17	2.28
1.000	1.40	7.083	2.28	13.167	9.39	19.25	2.28
1.083	1.40	7.167	2.28	13.250	9.39	19.33	2.28
1.167	1.40	7.250	2.28	13.333	6.85	19.42	2.28
1.250	1.40	7.333	2.79	13.417	6.85	19.50	2.28
1.333	1.40	7.417	2.79	13.500	6.85	19.58	2.28
1.417	1.40	7.500	2.79	13.583	6.85	19.67	2.28
1.500	1.40	7.583	2.79	13.667	6.85	19.75	2.28
1.583	1.40	7.667	2.79	13.750	6.85	19.83	2.28
1.667	1.40	7.750	2.79	13.833	5.33	19.92	2.28
1.750	1.40	7.833	2.79	13.917	5.33	20.00	2.28
1.833	1.40	7.917	2.79	14.000	5.33	20.08	2.28
1.917	1.40	8.000	2.79	14.083	5.33	20.17	2.28
2.000	1.40	8.083	2.79	14.167	5.33	20.25	2.28
2.083	1.40	8.167	2.79	14.250	5.33	20.33	1.52
2.167	1.40	8.250	2.79	14.333	3.81	20.42	1.52
2.250	1.40	8.333	3.30	14.417	3.81	20.50	1.52
2.333	1.65	8.417	3.30	14.500	3.81	20.58	1.52
2.417	1.65	8.500	3.30	14.583	3.81	20.67	1.52
2.500	1.65	8.583	3.30	14.667	3.81	20.75	1.52
2.583	1.65	8.667	3.30	14.750	3.81	20.83	1.52
2.667	1.65	8.750	3.30	14.833	3.81	20.92	1.52
2.750	1.65	8.833	3.55	14.917	3.81	21.00	1.52
2.833	1.65	8.917	3.55	15.000	3.81	21.08	1.52
2.917	1.65	9.000	3.55	15.083	3.81	21.17	1.52
3.000	1.65	9.083	3.55	15.167	3.81	21.25	1.52
3.083	1.65	9.167	3.55	15.250	3.81	21.33	1.52
3.167	1.65	9.250	3.55	15.333	3.81	21.42	1.52
3.250	1.65	9.333	4.06	15.417	3.81	21.50	1.52
3.333	1.65	9.417	4.06	15.500	3.81	21.58	1.52

3.417	1.65	9.500	4.06	15.583	3.81	21.67	1.52
3.500	1.65	9.583	4.06	15.667	3.81	21.75	1.52
3.583	1.65	9.667	4.06	15.750	3.81	21.83	1.52
3.667	1.65	9.750	4.06	15.833	3.81	21.92	1.52
3.750	1.65	9.833	4.57	15.917	3.81	22.00	1.52
3.833	1.65	9.917	4.57	16.000	3.81	22.08	1.52
3.917	1.65	10.000	4.57	16.083	3.81	22.17	1.52
4.000	1.65	10.083	4.57	16.167	3.81	22.25	1.52
4.083	1.65	10.167	4.57	16.250	3.81	22.33	1.52
4.167	1.65	10.250	4.57	16.333	2.28	22.42	1.52
4.250	1.65	10.333	5.84	16.417	2.28	22.50	1.52
4.333	2.03	10.417	5.84	16.500	2.28	22.58	1.52
4.417	2.03	10.500	5.84	16.583	2.28	22.67	1.52
4.500	2.03	10.583	5.84	16.667	2.28	22.75	1.52
4.583	2.03	10.667	5.84	16.750	2.28	22.83	1.52
4.667	2.03	10.750	5.84	16.833	2.28	22.92	1.52
4.750	2.03	10.833	7.87	16.917	2.28	23.00	1.52
4.833	2.03	10.917	7.87	17.000	2.28	23.08	1.52
4.917	2.03	11.000	7.87	17.083	2.28	23.17	1.52
5.000	2.03	11.083	7.87	17.167	2.28	23.25	1.52
5.083	2.03	11.167	7.87	17.250	2.28	23.33	1.52
5.167	2.03	11.250	7.87	17.333	2.28	23.42	1.52
5.250	2.03	11.333	12.18	17.417	2.28	23.50	1.52
5.333	2.03	11.417	12.18	17.500	2.28	23.58	1.52
5.417	2.03	11.500	12.18	17.583	2.28	23.67	1.52
5.500	2.03	11.583	12.18	17.667	2.28	23.75	1.52
5.583	2.03	11.667	12.18	17.750	2.28	23.83	1.52
5.667	2.03	11.750	12.18	17.833	2.28	23.92	1.52
5.750	2.03	11.833	37.56	17.917	2.28	24.00	1.52
5.833	2.03	11.917	37.57	18.000	2.28	24.08	1.52
5.917	2.03	12.000	37.57	18.083	2.28	24.17	1.52
6.000	2.03	12.083	155.32	18.167	2.28	24.25	1.52
6.083	2.03	12.167	155.34	18.250	2.28		

Max.Eff.Inten.(mm/hr)=	155.34	199.98	
over (min)	5.00	15.00	
Storage Coeff. (min)=	6.55 (ii)	11.05 (ii)	
Unit Hyd. Tpeak (min)=	5.00	15.00	
Unit Hyd. peak (cms)=	0.18	0.09	
			TOTALS
PEAK FLOW (cms)=	2.56	5.16	7.117 (iii)
TIME TO PEAK (hrs)=	12.25	12.33	12.25
RUNOFF VOLUME (mm)=	125.91	80.12	89.63
TOTAL RAINFALL (mm)=	126.91	126.91	126.91
RUNOFF COEFFICIENT =	0.99	0.63	0.71

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:

CN* = 68.5 Ia = Dep. Storage (Above)

(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.

(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
STANDHYD (0010)	Area (ha)=	1.32	
ID= 1 DT= 5.0 min	Total Imp(%)=	55.27	Dir. Conn.(%)= 1.52

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.73	0.59
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	93.81	23.50
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.03	12.250	155.34	18.33	2.28
0.167	0.00	6.250	2.03	12.333	18.29	18.42	2.28
0.250	0.00	6.333	2.28	12.417	18.28	18.50	2.28
0.333	1.40	6.417	2.28	12.500	18.28	18.58	2.28
0.417	1.40	6.500	2.28	12.583	18.27	18.67	2.28
0.500	1.40	6.583	2.28	12.667	18.28	18.75	2.28
0.583	1.40	6.667	2.28	12.750	18.28	18.83	2.28
0.667	1.40	6.750	2.28	12.833	9.39	18.92	2.28
0.750	1.40	6.833	2.28	12.917	9.39	19.00	2.28
0.833	1.40	6.917	2.28	13.000	9.39	19.08	2.28
0.917	1.40	7.000	2.28	13.083	9.39	19.17	2.28
1.000	1.40	7.083	2.28	13.167	9.39	19.25	2.28
1.083	1.40	7.167	2.28	13.250	9.39	19.33	2.28
1.167	1.40	7.250	2.28	13.333	6.85	19.42	2.28
1.250	1.40	7.333	2.79	13.417	6.85	19.50	2.28
1.333	1.40	7.417	2.79	13.500	6.85	19.58	2.28
1.417	1.40	7.500	2.79	13.583	6.85	19.67	2.28
1.500	1.40	7.583	2.79	13.667	6.85	19.75	2.28
1.583	1.40	7.667	2.79	13.750	6.85	19.83	2.28
1.667	1.40	7.750	2.79	13.833	5.33	19.92	2.28
1.750	1.40	7.833	2.79	13.917	5.33	20.00	2.28
1.833	1.40	7.917	2.79	14.000	5.33	20.08	2.28
1.917	1.40	8.000	2.79	14.083	5.33	20.17	2.28
2.000	1.40	8.083	2.79	14.167	5.33	20.25	2.28

2.083	1.40	8.167	2.79	14.250	5.33	20.33	1.52
2.167	1.40	8.250	2.79	14.333	3.81	20.42	1.52
2.250	1.40	8.333	3.30	14.417	3.81	20.50	1.52
2.333	1.65	8.417	3.30	14.500	3.81	20.58	1.52
2.417	1.65	8.500	3.30	14.583	3.81	20.67	1.52
2.500	1.65	8.583	3.30	14.667	3.81	20.75	1.52
2.583	1.65	8.667	3.30	14.750	3.81	20.83	1.52
2.667	1.65	8.750	3.30	14.833	3.81	20.92	1.52
2.750	1.65	8.833	3.55	14.917	3.81	21.00	1.52
2.833	1.65	8.917	3.55	15.000	3.81	21.08	1.52
2.917	1.65	9.000	3.55	15.083	3.81	21.17	1.52
3.000	1.65	9.083	3.55	15.167	3.81	21.25	1.52
3.083	1.65	9.167	3.55	15.250	3.81	21.33	1.52
3.167	1.65	9.250	3.55	15.333	3.81	21.42	1.52
3.250	1.65	9.333	4.06	15.417	3.81	21.50	1.52
3.333	1.65	9.417	4.06	15.500	3.81	21.58	1.52
3.417	1.65	9.500	4.06	15.583	3.81	21.67	1.52
3.500	1.65	9.583	4.06	15.667	3.81	21.75	1.52
3.583	1.65	9.667	4.06	15.750	3.81	21.83	1.52
3.667	1.65	9.750	4.06	15.833	3.81	21.92	1.52
3.750	1.65	9.833	4.57	15.917	3.81	22.00	1.52
3.833	1.65	9.917	4.57	16.000	3.81	22.08	1.52
3.917	1.65	10.000	4.57	16.083	3.81	22.17	1.52
4.000	1.65	10.083	4.57	16.167	3.81	22.25	1.52
4.083	1.65	10.167	4.57	16.250	3.81	22.33	1.52
4.167	1.65	10.250	4.57	16.333	2.28	22.42	1.52
4.250	1.65	10.333	5.84	16.417	2.28	22.50	1.52
4.333	2.03	10.417	5.84	16.500	2.28	22.58	1.52
4.417	2.03	10.500	5.84	16.583	2.28	22.67	1.52
4.500	2.03	10.583	5.84	16.667	2.28	22.75	1.52
4.583	2.03	10.667	5.84	16.750	2.28	22.83	1.52
4.667	2.03	10.750	5.84	16.833	2.28	22.92	1.52
4.750	2.03	10.833	7.87	16.917	2.28	23.00	1.52
4.833	2.03	10.917	7.87	17.000	2.28	23.08	1.52
4.917	2.03	11.000	7.87	17.083	2.28	23.17	1.52
5.000	2.03	11.083	7.87	17.167	2.28	23.25	1.52
5.083	2.03	11.167	7.87	17.250	2.28	23.33	1.52
5.167	2.03	11.250	7.87	17.333	2.28	23.42	1.52
5.250	2.03	11.333	12.18	17.417	2.28	23.50	1.52
5.333	2.03	11.417	12.18	17.500	2.28	23.58	1.52
5.417	2.03	11.500	12.18	17.583	2.28	23.67	1.52
5.500	2.03	11.583	12.18	17.667	2.28	23.75	1.52
5.583	2.03	11.667	12.18	17.750	2.28	23.83	1.52
5.667	2.03	11.750	12.18	17.833	2.28	23.92	1.52
5.750	2.03	11.833	37.56	17.917	2.28	24.00	1.52
5.833	2.03	11.917	37.57	18.000	2.28	24.08	1.52
5.917	2.03	12.000	37.57	18.083	2.28	24.17	1.52
6.000	2.03	12.083	155.32	18.167	2.28	24.25	1.52

6.083	2.03	12.167	155.34	18.250	2.28		

Max.Eff.Inten.(mm/hr)=	155.34	277.75	
over (min)	5.00	10.00	
Storage Coeff. (min)=	2.54 (ii)	5.95 (ii)	
Unit Hyd. Tpeak (min)=	5.00	10.00	
Unit Hyd. peak (cms)=	0.29	0.15	
			TOTALS
PEAK FLOW (cms)=	0.01	0.39	0.400 (iii)
TIME TO PEAK (hrs)=	12.25	12.25	12.25
RUNOFF VOLUME (mm)=	125.91	87.85	88.43
TOTAL RAINFALL (mm)=	126.91	126.91	126.91
RUNOFF COEFFICIENT =	0.99	0.69	0.70

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 68.8 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
STANDHYD (0013)	Area (ha)=	4.16	
ID= 1 DT= 5.0 min	Total Imp(%)=	50.00	Dir. Conn.(%)= 50.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	2.08	2.08
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	0.50	2.00
Length (m)=	166.53	250.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.03	12.250	155.34	18.33	2.28
0.167	0.00	6.250	2.03	12.333	18.29	18.42	2.28
0.250	0.00	6.333	2.28	12.417	18.28	18.50	2.28
0.333	1.40	6.417	2.28	12.500	18.28	18.58	2.28
0.417	1.40	6.500	2.28	12.583	18.27	18.67	2.28

0.500	1.40	6.583	2.28	12.667	18.28	18.75	2.28
0.583	1.40	6.667	2.28	12.750	18.28	18.83	2.28
0.667	1.40	6.750	2.28	12.833	9.39	18.92	2.28
0.750	1.40	6.833	2.28	12.917	9.39	19.00	2.28
0.833	1.40	6.917	2.28	13.000	9.39	19.08	2.28
0.917	1.40	7.000	2.28	13.083	9.39	19.17	2.28
1.000	1.40	7.083	2.28	13.167	9.39	19.25	2.28
1.083	1.40	7.167	2.28	13.250	9.39	19.33	2.28
1.167	1.40	7.250	2.28	13.333	6.85	19.42	2.28
1.250	1.40	7.333	2.79	13.417	6.85	19.50	2.28
1.333	1.40	7.417	2.79	13.500	6.85	19.58	2.28
1.417	1.40	7.500	2.79	13.583	6.85	19.67	2.28
1.500	1.40	7.583	2.79	13.667	6.85	19.75	2.28
1.583	1.40	7.667	2.79	13.750	6.85	19.83	2.28
1.667	1.40	7.750	2.79	13.833	5.33	19.92	2.28
1.750	1.40	7.833	2.79	13.917	5.33	20.00	2.28
1.833	1.40	7.917	2.79	14.000	5.33	20.08	2.28
1.917	1.40	8.000	2.79	14.083	5.33	20.17	2.28
2.000	1.40	8.083	2.79	14.167	5.33	20.25	2.28
2.083	1.40	8.167	2.79	14.250	5.33	20.33	1.52
2.167	1.40	8.250	2.79	14.333	3.81	20.42	1.52
2.250	1.40	8.333	3.30	14.417	3.81	20.50	1.52
2.333	1.65	8.417	3.30	14.500	3.81	20.58	1.52
2.417	1.65	8.500	3.30	14.583	3.81	20.67	1.52
2.500	1.65	8.583	3.30	14.667	3.81	20.75	1.52
2.583	1.65	8.667	3.30	14.750	3.81	20.83	1.52
2.667	1.65	8.750	3.30	14.833	3.81	20.92	1.52
2.750	1.65	8.833	3.55	14.917	3.81	21.00	1.52
2.833	1.65	8.917	3.55	15.000	3.81	21.08	1.52
2.917	1.65	9.000	3.55	15.083	3.81	21.17	1.52
3.000	1.65	9.083	3.55	15.167	3.81	21.25	1.52
3.083	1.65	9.167	3.55	15.250	3.81	21.33	1.52
3.167	1.65	9.250	3.55	15.333	3.81	21.42	1.52
3.250	1.65	9.333	4.06	15.417	3.81	21.50	1.52
3.333	1.65	9.417	4.06	15.500	3.81	21.58	1.52
3.417	1.65	9.500	4.06	15.583	3.81	21.67	1.52
3.500	1.65	9.583	4.06	15.667	3.81	21.75	1.52
3.583	1.65	9.667	4.06	15.750	3.81	21.83	1.52
3.667	1.65	9.750	4.06	15.833	3.81	21.92	1.52
3.750	1.65	9.833	4.57	15.917	3.81	22.00	1.52
3.833	1.65	9.917	4.57	16.000	3.81	22.08	1.52
3.917	1.65	10.000	4.57	16.083	3.81	22.17	1.52
4.000	1.65	10.083	4.57	16.167	3.81	22.25	1.52
4.083	1.65	10.167	4.57	16.250	3.81	22.33	1.52
4.167	1.65	10.250	4.57	16.333	2.28	22.42	1.52
4.250	1.65	10.333	5.84	16.417	2.28	22.50	1.52
4.333	2.03	10.417	5.84	16.500	2.28	22.58	1.52
4.417	2.03	10.500	5.84	16.583	2.28	22.67	1.52

4.500	2.03	10.583	5.84	16.667	2.28	22.75	1.52
4.583	2.03	10.667	5.84	16.750	2.28	22.83	1.52
4.667	2.03	10.750	5.84	16.833	2.28	22.92	1.52
4.750	2.03	10.833	7.87	16.917	2.28	23.00	1.52
4.833	2.03	10.917	7.87	17.000	2.28	23.08	1.52
4.917	2.03	11.000	7.87	17.083	2.28	23.17	1.52
5.000	2.03	11.083	7.87	17.167	2.28	23.25	1.52
5.083	2.03	11.167	7.87	17.250	2.28	23.33	1.52
5.167	2.03	11.250	7.87	17.333	2.28	23.42	1.52
5.250	2.03	11.333	12.18	17.417	2.28	23.50	1.52
5.333	2.03	11.417	12.18	17.500	2.28	23.58	1.52
5.417	2.03	11.500	12.18	17.583	2.28	23.67	1.52
5.500	2.03	11.583	12.18	17.667	2.28	23.75	1.52
5.583	2.03	11.667	12.18	17.750	2.28	23.83	1.52
5.667	2.03	11.750	12.18	17.833	2.28	23.92	1.52
5.750	2.03	11.833	37.56	17.917	2.28	24.00	1.52
5.833	2.03	11.917	37.57	18.000	2.28	24.08	1.52
5.917	2.03	12.000	37.57	18.083	2.28	24.17	1.52
6.000	2.03	12.083	155.32	18.167	2.28	24.25	1.52
6.083	2.03	12.167	155.34	18.250	2.28		

Max.Eff.Inten.(mm/hr)=	155.34	51.58	
over (min)	5.00	35.00	
Storage Coeff. (min)=	3.58 (ii)	31.20 (ii)	
Unit Hyd. Tpeak (min)=	5.00	35.00	
Unit Hyd. peak (cms)=	0.26	0.03	
			TOTALS
PEAK FLOW (cms)=	0.89	0.18	0.963 (iii)
TIME TO PEAK (hrs)=	12.25	12.67	12.25
RUNOFF VOLUME (mm)=	125.91	62.91	94.41
TOTAL RAINFALL (mm)=	126.91	126.91	126.91
RUNOFF COEFFICIENT =	0.99	0.50	0.74

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
STANDHYD (0036)	Area (ha)=	2.12	
ID= 1 DT= 5.0 min	Total Imp(%)=	85.04	Dir. Conn.(%)= 0.10

	IMPERVIOUS	PERVIOUS (i)

Surface Area (ha)=	1.80	0.32
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	0.50	2.00
Length (m)=	118.88	175.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.03	12.250	155.34	18.33	2.28
0.167	0.00	6.250	2.03	12.333	18.29	18.42	2.28
0.250	0.00	6.333	2.28	12.417	18.28	18.50	2.28
0.333	1.40	6.417	2.28	12.500	18.28	18.58	2.28
0.417	1.40	6.500	2.28	12.583	18.27	18.67	2.28
0.500	1.40	6.583	2.28	12.667	18.28	18.75	2.28
0.583	1.40	6.667	2.28	12.750	18.28	18.83	2.28
0.667	1.40	6.750	2.28	12.833	9.39	18.92	2.28
0.750	1.40	6.833	2.28	12.917	9.39	19.00	2.28
0.833	1.40	6.917	2.28	13.000	9.39	19.08	2.28
0.917	1.40	7.000	2.28	13.083	9.39	19.17	2.28
1.000	1.40	7.083	2.28	13.167	9.39	19.25	2.28
1.083	1.40	7.167	2.28	13.250	9.39	19.33	2.28
1.167	1.40	7.250	2.28	13.333	6.85	19.42	2.28
1.250	1.40	7.333	2.79	13.417	6.85	19.50	2.28
1.333	1.40	7.417	2.79	13.500	6.85	19.58	2.28
1.417	1.40	7.500	2.79	13.583	6.85	19.67	2.28
1.500	1.40	7.583	2.79	13.667	6.85	19.75	2.28
1.583	1.40	7.667	2.79	13.750	6.85	19.83	2.28
1.667	1.40	7.750	2.79	13.833	5.33	19.92	2.28
1.750	1.40	7.833	2.79	13.917	5.33	20.00	2.28
1.833	1.40	7.917	2.79	14.000	5.33	20.08	2.28
1.917	1.40	8.000	2.79	14.083	5.33	20.17	2.28
2.000	1.40	8.083	2.79	14.167	5.33	20.25	2.28
2.083	1.40	8.167	2.79	14.250	5.33	20.33	1.52
2.167	1.40	8.250	2.79	14.333	3.81	20.42	1.52
2.250	1.40	8.333	3.30	14.417	3.81	20.50	1.52
2.333	1.65	8.417	3.30	14.500	3.81	20.58	1.52
2.417	1.65	8.500	3.30	14.583	3.81	20.67	1.52
2.500	1.65	8.583	3.30	14.667	3.81	20.75	1.52
2.583	1.65	8.667	3.30	14.750	3.81	20.83	1.52
2.667	1.65	8.750	3.30	14.833	3.81	20.92	1.52
2.750	1.65	8.833	3.55	14.917	3.81	21.00	1.52
2.833	1.65	8.917	3.55	15.000	3.81	21.08	1.52
2.917	1.65	9.000	3.55	15.083	3.81	21.17	1.52
3.000	1.65	9.083	3.55	15.167	3.81	21.25	1.52

3.083	1.65	9.167	3.55	15.250	3.81	21.33	1.52
3.167	1.65	9.250	3.55	15.333	3.81	21.42	1.52
3.250	1.65	9.333	4.06	15.417	3.81	21.50	1.52
3.333	1.65	9.417	4.06	15.500	3.81	21.58	1.52
3.417	1.65	9.500	4.06	15.583	3.81	21.67	1.52
3.500	1.65	9.583	4.06	15.667	3.81	21.75	1.52
3.583	1.65	9.667	4.06	15.750	3.81	21.83	1.52
3.667	1.65	9.750	4.06	15.833	3.81	21.92	1.52
3.750	1.65	9.833	4.57	15.917	3.81	22.00	1.52
3.833	1.65	9.917	4.57	16.000	3.81	22.08	1.52
3.917	1.65	10.000	4.57	16.083	3.81	22.17	1.52
4.000	1.65	10.083	4.57	16.167	3.81	22.25	1.52
4.083	1.65	10.167	4.57	16.250	3.81	22.33	1.52
4.167	1.65	10.250	4.57	16.333	2.28	22.42	1.52
4.250	1.65	10.333	5.84	16.417	2.28	22.50	1.52
4.333	2.03	10.417	5.84	16.500	2.28	22.58	1.52
4.417	2.03	10.500	5.84	16.583	2.28	22.67	1.52
4.500	2.03	10.583	5.84	16.667	2.28	22.75	1.52
4.583	2.03	10.667	5.84	16.750	2.28	22.83	1.52
4.667	2.03	10.750	5.84	16.833	2.28	22.92	1.52
4.750	2.03	10.833	7.87	16.917	2.28	23.00	1.52
4.833	2.03	10.917	7.87	17.000	2.28	23.08	1.52
4.917	2.03	11.000	7.87	17.083	2.28	23.17	1.52
5.000	2.03	11.083	7.87	17.167	2.28	23.25	1.52
5.083	2.03	11.167	7.87	17.250	2.28	23.33	1.52
5.167	2.03	11.250	7.87	17.333	2.28	23.42	1.52
5.250	2.03	11.333	12.18	17.417	2.28	23.50	1.52
5.333	2.03	11.417	12.18	17.500	2.28	23.58	1.52
5.417	2.03	11.500	12.18	17.583	2.28	23.67	1.52
5.500	2.03	11.583	12.18	17.667	2.28	23.75	1.52
5.583	2.03	11.667	12.18	17.750	2.28	23.83	1.52
5.667	2.03	11.750	12.18	17.833	2.28	23.92	1.52
5.750	2.03	11.833	37.56	17.917	2.28	24.00	1.52
5.833	2.03	11.917	37.57	18.000	2.28	24.08	1.52
5.917	2.03	12.000	37.57	18.083	2.28	24.17	1.52
6.000	2.03	12.083	155.32	18.167	2.28	24.25	1.52
6.083	2.03	12.167	155.34	18.250	2.28		

Max.Eff.Inten.(mm/hr)=	155.34	996.90	
over (min)	5.00	10.00	
Storage Coeff. (min)=	2.93 (ii)	9.75 (ii)	
Unit Hyd. Tpeak (min)=	5.00	10.00	
Unit Hyd. peak (cms)=	0.28	0.11	
			TOTALS
PEAK FLOW (cms)=	0.00	0.66	0.663 (iii)
TIME TO PEAK (hrs)=	12.25	12.25	12.25
RUNOFF VOLUME (mm)=	125.91	111.11	111.12
TOTAL RAINFALL (mm)=	126.91	126.91	126.91

RUNOFF COEFFICIENT = 0.99 0.88 0.88

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
STANDHYD (0043)	Area (ha)=	0.13	
ID= 1 DT= 5.0 min	Total Imp(%)=	30.77	Dir. Conn.(%)= 7.69

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.04	0.09
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	0.50
Length	(m)=	29.44	70.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.03	12.250	155.34	18.33	2.28
0.167	0.00	6.250	2.03	12.333	18.29	18.42	2.28
0.250	0.00	6.333	2.28	12.417	18.28	18.50	2.28
0.333	1.40	6.417	2.28	12.500	18.28	18.58	2.28
0.417	1.40	6.500	2.28	12.583	18.27	18.67	2.28
0.500	1.40	6.583	2.28	12.667	18.28	18.75	2.28
0.583	1.40	6.667	2.28	12.750	18.28	18.83	2.28
0.667	1.40	6.750	2.28	12.833	9.39	18.92	2.28
0.750	1.40	6.833	2.28	12.917	9.39	19.00	2.28
0.833	1.40	6.917	2.28	13.000	9.39	19.08	2.28
0.917	1.40	7.000	2.28	13.083	9.39	19.17	2.28
1.000	1.40	7.083	2.28	13.167	9.39	19.25	2.28
1.083	1.40	7.167	2.28	13.250	9.39	19.33	2.28
1.167	1.40	7.250	2.28	13.333	6.85	19.42	2.28
1.250	1.40	7.333	2.79	13.417	6.85	19.50	2.28
1.333	1.40	7.417	2.79	13.500	6.85	19.58	2.28
1.417	1.40	7.500	2.79	13.583	6.85	19.67	2.28

1.500	1.40	7.583	2.79	13.667	6.85	19.75	2.28
1.583	1.40	7.667	2.79	13.750	6.85	19.83	2.28
1.667	1.40	7.750	2.79	13.833	5.33	19.92	2.28
1.750	1.40	7.833	2.79	13.917	5.33	20.00	2.28
1.833	1.40	7.917	2.79	14.000	5.33	20.08	2.28
1.917	1.40	8.000	2.79	14.083	5.33	20.17	2.28
2.000	1.40	8.083	2.79	14.167	5.33	20.25	2.28
2.083	1.40	8.167	2.79	14.250	5.33	20.33	1.52
2.167	1.40	8.250	2.79	14.333	3.81	20.42	1.52
2.250	1.40	8.333	3.30	14.417	3.81	20.50	1.52
2.333	1.65	8.417	3.30	14.500	3.81	20.58	1.52
2.417	1.65	8.500	3.30	14.583	3.81	20.67	1.52
2.500	1.65	8.583	3.30	14.667	3.81	20.75	1.52
2.583	1.65	8.667	3.30	14.750	3.81	20.83	1.52
2.667	1.65	8.750	3.30	14.833	3.81	20.92	1.52
2.750	1.65	8.833	3.55	14.917	3.81	21.00	1.52
2.833	1.65	8.917	3.55	15.000	3.81	21.08	1.52
2.917	1.65	9.000	3.55	15.083	3.81	21.17	1.52
3.000	1.65	9.083	3.55	15.167	3.81	21.25	1.52
3.083	1.65	9.167	3.55	15.250	3.81	21.33	1.52
3.167	1.65	9.250	3.55	15.333	3.81	21.42	1.52
3.250	1.65	9.333	4.06	15.417	3.81	21.50	1.52
3.333	1.65	9.417	4.06	15.500	3.81	21.58	1.52
3.417	1.65	9.500	4.06	15.583	3.81	21.67	1.52
3.500	1.65	9.583	4.06	15.667	3.81	21.75	1.52
3.583	1.65	9.667	4.06	15.750	3.81	21.83	1.52
3.667	1.65	9.750	4.06	15.833	3.81	21.92	1.52
3.750	1.65	9.833	4.57	15.917	3.81	22.00	1.52
3.833	1.65	9.917	4.57	16.000	3.81	22.08	1.52
3.917	1.65	10.000	4.57	16.083	3.81	22.17	1.52
4.000	1.65	10.083	4.57	16.167	3.81	22.25	1.52
4.083	1.65	10.167	4.57	16.250	3.81	22.33	1.52
4.167	1.65	10.250	4.57	16.333	2.28	22.42	1.52
4.250	1.65	10.333	5.84	16.417	2.28	22.50	1.52
4.333	2.03	10.417	5.84	16.500	2.28	22.58	1.52
4.417	2.03	10.500	5.84	16.583	2.28	22.67	1.52
4.500	2.03	10.583	5.84	16.667	2.28	22.75	1.52
4.583	2.03	10.667	5.84	16.750	2.28	22.83	1.52
4.667	2.03	10.750	5.84	16.833	2.28	22.92	1.52
4.750	2.03	10.833	7.87	16.917	2.28	23.00	1.52
4.833	2.03	10.917	7.87	17.000	2.28	23.08	1.52
4.917	2.03	11.000	7.87	17.083	2.28	23.17	1.52
5.000	2.03	11.083	7.87	17.167	2.28	23.25	1.52
5.083	2.03	11.167	7.87	17.250	2.28	23.33	1.52
5.167	2.03	11.250	7.87	17.333	2.28	23.42	1.52
5.250	2.03	11.333	12.18	17.417	2.28	23.50	1.52
5.333	2.03	11.417	12.18	17.500	2.28	23.58	1.52
5.417	2.03	11.500	12.18	17.583	2.28	23.67	1.52

5.500	2.03	11.583	12.18	17.667	2.28	23.75	1.52
5.583	2.03	11.667	12.18	17.750	2.28	23.83	1.52
5.667	2.03	11.750	12.18	17.833	2.28	23.92	1.52
5.750	2.03	11.833	37.56	17.917	2.28	24.00	1.52
5.833	2.03	11.917	37.57	18.000	2.28	24.08	1.52
5.917	2.03	12.000	37.57	18.083	2.28	24.17	1.52
6.000	2.03	12.083	155.32	18.167	2.28	24.25	1.52
6.083	2.03	12.167	155.34	18.250	2.28		

Max.Eff.Inten.(mm/hr)=	155.34	135.23	
over (min)	5.00	15.00	
Storage Coeff. (min)=	1.27 (ii)	14.53 (ii)	
Unit Hyd. Tpeak (min)=	5.00	15.00	
Unit Hyd. peak (cms)=	0.33	0.08	
			TOTALS
PEAK FLOW (cms)=	0.00	0.02	0.022 (iii)
TIME TO PEAK (hrs)=	12.25	12.33	12.25
RUNOFF VOLUME (mm)=	125.91	72.67	76.69
TOTAL RAINFALL (mm)=	126.91	126.91	126.91
RUNOFF COEFFICIENT =	0.99	0.57	0.60

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
STANDHYD (0044)	Area (ha)=	1.62	
ID= 1 DT= 5.0 min	Total Imp(%)=	48.77	Dir. Conn.(%)= 30.86

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.79	0.83
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	1.40
Length	(m)=	103.92	400.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.03	12.250	155.34	18.33	2.28
0.167	0.00	6.250	2.03	12.333	18.29	18.42	2.28
0.250	0.00	6.333	2.28	12.417	18.28	18.50	2.28
0.333	1.40	6.417	2.28	12.500	18.28	18.58	2.28
0.417	1.40	6.500	2.28	12.583	18.27	18.67	2.28
0.500	1.40	6.583	2.28	12.667	18.28	18.75	2.28
0.583	1.40	6.667	2.28	12.750	18.28	18.83	2.28
0.667	1.40	6.750	2.28	12.833	9.39	18.92	2.28
0.750	1.40	6.833	2.28	12.917	9.39	19.00	2.28
0.833	1.40	6.917	2.28	13.000	9.39	19.08	2.28
0.917	1.40	7.000	2.28	13.083	9.39	19.17	2.28
1.000	1.40	7.083	2.28	13.167	9.39	19.25	2.28
1.083	1.40	7.167	2.28	13.250	9.39	19.33	2.28
1.167	1.40	7.250	2.28	13.333	6.85	19.42	2.28
1.250	1.40	7.333	2.79	13.417	6.85	19.50	2.28
1.333	1.40	7.417	2.79	13.500	6.85	19.58	2.28
1.417	1.40	7.500	2.79	13.583	6.85	19.67	2.28
1.500	1.40	7.583	2.79	13.667	6.85	19.75	2.28
1.583	1.40	7.667	2.79	13.750	6.85	19.83	2.28
1.667	1.40	7.750	2.79	13.833	5.33	19.92	2.28
1.750	1.40	7.833	2.79	13.917	5.33	20.00	2.28
1.833	1.40	7.917	2.79	14.000	5.33	20.08	2.28
1.917	1.40	8.000	2.79	14.083	5.33	20.17	2.28
2.000	1.40	8.083	2.79	14.167	5.33	20.25	2.28
2.083	1.40	8.167	2.79	14.250	5.33	20.33	1.52
2.167	1.40	8.250	2.79	14.333	3.81	20.42	1.52
2.250	1.40	8.333	3.30	14.417	3.81	20.50	1.52
2.333	1.65	8.417	3.30	14.500	3.81	20.58	1.52
2.417	1.65	8.500	3.30	14.583	3.81	20.67	1.52
2.500	1.65	8.583	3.30	14.667	3.81	20.75	1.52
2.583	1.65	8.667	3.30	14.750	3.81	20.83	1.52
2.667	1.65	8.750	3.30	14.833	3.81	20.92	1.52
2.750	1.65	8.833	3.55	14.917	3.81	21.00	1.52
2.833	1.65	8.917	3.55	15.000	3.81	21.08	1.52
2.917	1.65	9.000	3.55	15.083	3.81	21.17	1.52
3.000	1.65	9.083	3.55	15.167	3.81	21.25	1.52
3.083	1.65	9.167	3.55	15.250	3.81	21.33	1.52
3.167	1.65	9.250	3.55	15.333	3.81	21.42	1.52
3.250	1.65	9.333	4.06	15.417	3.81	21.50	1.52
3.333	1.65	9.417	4.06	15.500	3.81	21.58	1.52
3.417	1.65	9.500	4.06	15.583	3.81	21.67	1.52
3.500	1.65	9.583	4.06	15.667	3.81	21.75	1.52
3.583	1.65	9.667	4.06	15.750	3.81	21.83	1.52
3.667	1.65	9.750	4.06	15.833	3.81	21.92	1.52
3.750	1.65	9.833	4.57	15.917	3.81	22.00	1.52
3.833	1.65	9.917	4.57	16.000	3.81	22.08	1.52

3.917	1.65	10.000	4.57	16.083	3.81	22.17	1.52
4.000	1.65	10.083	4.57	16.167	3.81	22.25	1.52
4.083	1.65	10.167	4.57	16.250	3.81	22.33	1.52
4.167	1.65	10.250	4.57	16.333	2.28	22.42	1.52
4.250	1.65	10.333	5.84	16.417	2.28	22.50	1.52
4.333	2.03	10.417	5.84	16.500	2.28	22.58	1.52
4.417	2.03	10.500	5.84	16.583	2.28	22.67	1.52
4.500	2.03	10.583	5.84	16.667	2.28	22.75	1.52
4.583	2.03	10.667	5.84	16.750	2.28	22.83	1.52
4.667	2.03	10.750	5.84	16.833	2.28	22.92	1.52
4.750	2.03	10.833	7.87	16.917	2.28	23.00	1.52
4.833	2.03	10.917	7.87	17.000	2.28	23.08	1.52
4.917	2.03	11.000	7.87	17.083	2.28	23.17	1.52
5.000	2.03	11.083	7.87	17.167	2.28	23.25	1.52
5.083	2.03	11.167	7.87	17.250	2.28	23.33	1.52
5.167	2.03	11.250	7.87	17.333	2.28	23.42	1.52
5.250	2.03	11.333	12.18	17.417	2.28	23.50	1.52
5.333	2.03	11.417	12.18	17.500	2.28	23.58	1.52
5.417	2.03	11.500	12.18	17.583	2.28	23.67	1.52
5.500	2.03	11.583	12.18	17.667	2.28	23.75	1.52
5.583	2.03	11.667	12.18	17.750	2.28	23.83	1.52
5.667	2.03	11.750	12.18	17.833	2.28	23.92	1.52
5.750	2.03	11.833	37.56	17.917	2.28	24.00	1.52
5.833	2.03	11.917	37.57	18.000	2.28	24.08	1.52
5.917	2.03	12.000	37.57	18.083	2.28	24.17	1.52
6.000	2.03	12.083	155.32	18.167	2.28	24.25	1.52
6.083	2.03	12.167	155.34	18.250	2.28		

Max.Eff.Inten.(mm/hr)=		155.34	65.97	
over (min)		5.00	40.00	
Storage Coeff. (min)=		2.70 (ii)	39.63 (ii)	
Unit Hyd. Tpeak (min)=		5.00	40.00	
Unit Hyd. peak (cms)=		0.29	0.03	
				TOTALS
PEAK FLOW	(cms)=	0.22	0.10	0.254 (iii)
TIME TO PEAK	(hrs)=	12.25	12.75	12.25
RUNOFF VOLUME	(mm)=	125.91	73.06	89.36
TOTAL RAINFALL	(mm)=	126.91	126.91	126.91
RUNOFF COEFFICIENT	=	0.99	0.58	0.70

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0037)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0010):		1.32	0.400	12.25	88.43
+ ID2= 2 (0013):		4.16	0.963	12.25	94.41
		==========	==========	==========	==========
ID = 3 (0037):		5.48	1.364	12.25	92.97

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0037)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0037):		5.48	1.364	12.25	92.97
+ ID2= 2 (0036):		2.12	0.663	12.25	111.12
		==========	==========	==========	==========
ID = 1 (0037):		7.60	2.026	12.25	98.03

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0037)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0037):		7.60	2.026	12.25	98.03
+ ID2= 2 (0043):		0.13	0.022	12.25	76.69
		==========	==========	==========	==========
ID = 3 (0037):		7.73	2.048	12.25	97.67

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0037)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0037):		7.73	2.048	12.25	97.67
+ ID2= 2 (0044):		1.62	0.254	12.25	89.36
		==========	==========	==========	==========
ID = 1 (0037):		9.35	2.302	12.25	96.23

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0037)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0037):		9.35	2.302	12.25	96.23
+ ID2= 2 (0009):		31.06	7.117	12.25	89.63
		==========	==========	==========	==========
ID = 3 (0037):		40.41	9.418	12.25	91.16

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

RESERVOIR(0038)	OVERFLOW IS OFF			
IN= 2---> OUT= 1				
DT= 5.0 min	OUTFLOW (cms)	STORAGE (ha.m.)	OUTFLOW (cms)	STORAGE (ha.m.)
	0.0000	0.0000	0.5076	2.8989
	0.0000	0.2023	0.6060	3.2065
	0.0353	0.4202	0.7105	3.5196
	0.0525	0.6536	0.8207	3.8381
	0.0654	0.9026	0.9365	4.1621
	0.0843	1.1671	1.0574	4.4915
	0.1858	1.7227	1.1833	4.8263
	0.2540	2.0086	1.3139	5.1665
	0.3309	2.2999	1.4492	5.5122
	0.4157	2.5967	1.5890	5.8633

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
INFLOW : ID= 2 (0037)	40.410	9.418	12.25	91.16
OUTFLOW: ID= 1 (0038)	40.410	0.401	14.83	86.11

PEAK FLOW REDUCTION [Qout/Qin](%)= 4.26
TIME SHIFT OF PEAK FLOW (min)=155.00
MAXIMUM STORAGE USED (ha.m.)= 2.5453

CALIB			
STANDHYD (0017)	Area (ha)=	1.59	
ID= 1 DT= 5.0 min	Total Imp(%)=	58.58	Dir. Conn.(%)= 27.10

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.93	0.66
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00

Length (m)= 102.96 30.00
Mannings n = 0.013 0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.03	12.250	155.34	18.33	2.28
0.167	0.00	6.250	2.03	12.333	18.29	18.42	2.28
0.250	0.00	6.333	2.28	12.417	18.28	18.50	2.28
0.333	1.40	6.417	2.28	12.500	18.28	18.58	2.28
0.417	1.40	6.500	2.28	12.583	18.27	18.67	2.28
0.500	1.40	6.583	2.28	12.667	18.28	18.75	2.28
0.583	1.40	6.667	2.28	12.750	18.28	18.83	2.28
0.667	1.40	6.750	2.28	12.833	9.39	18.92	2.28
0.750	1.40	6.833	2.28	12.917	9.39	19.00	2.28
0.833	1.40	6.917	2.28	13.000	9.39	19.08	2.28
0.917	1.40	7.000	2.28	13.083	9.39	19.17	2.28
1.000	1.40	7.083	2.28	13.167	9.39	19.25	2.28
1.083	1.40	7.167	2.28	13.250	9.39	19.33	2.28
1.167	1.40	7.250	2.28	13.333	6.85	19.42	2.28
1.250	1.40	7.333	2.79	13.417	6.85	19.50	2.28
1.333	1.40	7.417	2.79	13.500	6.85	19.58	2.28
1.417	1.40	7.500	2.79	13.583	6.85	19.67	2.28
1.500	1.40	7.583	2.79	13.667	6.85	19.75	2.28
1.583	1.40	7.667	2.79	13.750	6.85	19.83	2.28
1.667	1.40	7.750	2.79	13.833	5.33	19.92	2.28
1.750	1.40	7.833	2.79	13.917	5.33	20.00	2.28
1.833	1.40	7.917	2.79	14.000	5.33	20.08	2.28
1.917	1.40	8.000	2.79	14.083	5.33	20.17	2.28
2.000	1.40	8.083	2.79	14.167	5.33	20.25	2.28
2.083	1.40	8.167	2.79	14.250	5.33	20.33	1.52
2.167	1.40	8.250	2.79	14.333	3.81	20.42	1.52
2.250	1.40	8.333	3.30	14.417	3.81	20.50	1.52
2.333	1.65	8.417	3.30	14.500	3.81	20.58	1.52
2.417	1.65	8.500	3.30	14.583	3.81	20.67	1.52
2.500	1.65	8.583	3.30	14.667	3.81	20.75	1.52
2.583	1.65	8.667	3.30	14.750	3.81	20.83	1.52
2.667	1.65	8.750	3.30	14.833	3.81	20.92	1.52
2.750	1.65	8.833	3.55	14.917	3.81	21.00	1.52
2.833	1.65	8.917	3.55	15.000	3.81	21.08	1.52
2.917	1.65	9.000	3.55	15.083	3.81	21.17	1.52
3.000	1.65	9.083	3.55	15.167	3.81	21.25	1.52
3.083	1.65	9.167	3.55	15.250	3.81	21.33	1.52
3.167	1.65	9.250	3.55	15.333	3.81	21.42	1.52
3.250	1.65	9.333	4.06	15.417	3.81	21.50	1.52

3.333	1.65	9.417	4.06	15.500	3.81	21.58	1.52
3.417	1.65	9.500	4.06	15.583	3.81	21.67	1.52
3.500	1.65	9.583	4.06	15.667	3.81	21.75	1.52
3.583	1.65	9.667	4.06	15.750	3.81	21.83	1.52
3.667	1.65	9.750	4.06	15.833	3.81	21.92	1.52
3.750	1.65	9.833	4.57	15.917	3.81	22.00	1.52
3.833	1.65	9.917	4.57	16.000	3.81	22.08	1.52
3.917	1.65	10.000	4.57	16.083	3.81	22.17	1.52
4.000	1.65	10.083	4.57	16.167	3.81	22.25	1.52
4.083	1.65	10.167	4.57	16.250	3.81	22.33	1.52
4.167	1.65	10.250	4.57	16.333	2.28	22.42	1.52
4.250	1.65	10.333	5.84	16.417	2.28	22.50	1.52
4.333	2.03	10.417	5.84	16.500	2.28	22.58	1.52
4.417	2.03	10.500	5.84	16.583	2.28	22.67	1.52
4.500	2.03	10.583	5.84	16.667	2.28	22.75	1.52
4.583	2.03	10.667	5.84	16.750	2.28	22.83	1.52
4.667	2.03	10.750	5.84	16.833	2.28	22.92	1.52
4.750	2.03	10.833	7.87	16.917	2.28	23.00	1.52
4.833	2.03	10.917	7.87	17.000	2.28	23.08	1.52
4.917	2.03	11.000	7.87	17.083	2.28	23.17	1.52
5.000	2.03	11.083	7.87	17.167	2.28	23.25	1.52
5.083	2.03	11.167	7.87	17.250	2.28	23.33	1.52
5.167	2.03	11.250	7.87	17.333	2.28	23.42	1.52
5.250	2.03	11.333	12.18	17.417	2.28	23.50	1.52
5.333	2.03	11.417	12.18	17.500	2.28	23.58	1.52
5.417	2.03	11.500	12.18	17.583	2.28	23.67	1.52
5.500	2.03	11.583	12.18	17.667	2.28	23.75	1.52
5.583	2.03	11.667	12.18	17.750	2.28	23.83	1.52
5.667	2.03	11.750	12.18	17.833	2.28	23.92	1.52
5.750	2.03	11.833	37.56	17.917	2.28	24.00	1.52
5.833	2.03	11.917	37.57	18.000	2.28	24.08	1.52
5.917	2.03	12.000	37.57	18.083	2.28	24.17	1.52
6.000	2.03	12.083	155.32	18.167	2.28	24.25	1.52
6.083	2.03	12.167	155.34	18.250	2.28		

			TOTALS
Max.Eff.Inten.(mm/hr)=	155.34	200.28	
over (min)	5.00	10.00	
Storage Coeff. (min)=	2.68 (ii)	7.18 (ii)	
Unit Hyd. Tpeak (min)=	5.00	10.00	
Unit Hyd. peak (cms)=	0.29	0.14	
PEAK FLOW (cms)=	0.19	0.29	0.480 (iii)
TIME TO PEAK (hrs)=	12.25	12.25	12.25
RUNOFF VOLUME (mm)=	125.91	78.28	91.19
TOTAL RAINFALL (mm)=	126.91	126.91	126.91
RUNOFF COEFFICIENT =	0.99	0.62	0.72

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 66.5 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

Junction Command(0018)

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
INFLOW : ID= 2(0017)	1.59	0.48	12.25	91.19
OUTFLOW: ID= 2(0018)	1.59	0.48	12.25	91.19

ADD HYD (0023) | 1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0016):	234.30	6.766	13.25	46.96
+ ID2= 2 (0018):	1.59	0.480	12.25	91.19
ID = 3 (0023):	235.89	6.803	13.17	47.26

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023) | 3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0023):	235.89	6.803	13.17	47.26
+ ID2= 2 (0038):	40.41	0.401	14.83	86.11
ID = 1 (0023):	276.30	7.161	13.25	52.94

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

****
** SIMULATION:L - 100-year SCS **
****

READ STORM	Filename: C:\Users\ecomish\AppData\Local\Temp\bd70dd54-263f-4ef7-b852-c48fc040cbd3\6e9bf3ab
Ptotal=139.48 mm	Comments: 100yr 24hr 15min SCS Type II (MTO) - 15%

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.00	0.00	6.25	2.51	12.50	20.09	18.75	2.51
0.25	1.53	6.50	2.51	12.75	10.32	19.00	2.51
0.50	1.53	6.75	2.51	13.00	10.32	19.25	2.51
0.75	1.53	7.00	2.51	13.25	7.53	19.50	2.51
1.00	1.53	7.25	3.07	13.50	7.53	19.75	2.51
1.25	1.53	7.50	3.07	13.75	5.86	20.00	2.51
1.50	1.53	7.75	3.07	14.00	5.86	20.25	1.67
1.75	1.53	8.00	3.07	14.25	4.18	20.50	1.67
2.00	1.53	8.25	3.63	14.50	4.18	20.75	1.67
2.25	1.81	8.50	3.63	14.75	4.18	21.00	1.67
2.50	1.81	8.75	3.91	15.00	4.18	21.25	1.67
2.75	1.81	9.00	3.91	15.25	4.18	21.50	1.67
3.00	1.81	9.25	4.46	15.50	4.18	21.75	1.67
3.25	1.81	9.50	4.46	15.75	4.18	22.00	1.67
3.50	1.81	9.75	5.02	16.00	4.18	22.25	1.67
3.75	1.81	10.00	5.02	16.25	2.51	22.50	1.67
4.00	1.81	10.25	6.42	16.50	2.51	22.75	1.67
4.25	2.23	10.50	6.42	16.75	2.51	23.00	1.67
4.50	2.23	10.75	8.65	17.00	2.51	23.25	1.67
4.75	2.23	11.00	8.65	17.25	2.51	23.50	1.67
5.00	2.23	11.25	13.39	17.50	2.51	23.75	1.67
5.25	2.23	11.50	13.39	17.75	2.51	24.00	1.67
5.50	2.23	11.75	41.29	18.00	2.51		
5.75	2.23	12.00	170.72	18.25	2.51		
6.00	2.23	12.25	20.09	18.50	2.51		

CALIB | NASHYD (0025) |ID= 1 DT= 5.0 min	Area (ha)= 100.92 Curve Number (CN)= 55.9 Ia (mm)= 7.89 # of Linear Res.(N)= 3.00 U.H. Tp(hrs)= 1.70

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.23	12.250	170.72	18.33	2.51

0.167	0.00	6.250	2.23	12.333	20.10	18.42	2.51
0.250	0.00	6.333	2.51	12.417	20.09	18.50	2.51
0.333	1.53	6.417	2.51	12.500	20.09	18.58	2.51
0.417	1.53	6.500	2.51	12.583	20.09	18.67	2.51
0.500	1.53	6.583	2.51	12.667	20.09	18.75	2.51
0.583	1.53	6.667	2.51	12.750	20.09	18.83	2.51
0.667	1.53	6.750	2.51	12.833	10.32	18.92	2.51
0.750	1.53	6.833	2.51	12.917	10.32	19.00	2.51
0.833	1.53	6.917	2.51	13.000	10.32	19.08	2.51
0.917	1.53	7.000	2.51	13.083	10.32	19.17	2.51
1.000	1.53	7.083	2.51	13.167	10.32	19.25	2.51
1.083	1.53	7.167	2.51	13.250	10.32	19.33	2.51
1.167	1.53	7.250	2.51	13.333	7.53	19.42	2.51
1.250	1.53	7.333	3.07	13.417	7.53	19.50	2.51
1.333	1.53	7.417	3.07	13.500	7.53	19.58	2.51
1.417	1.53	7.500	3.07	13.583	7.53	19.67	2.51
1.500	1.53	7.583	3.07	13.667	7.53	19.75	2.51
1.583	1.53	7.667	3.07	13.750	7.53	19.83	2.51
1.667	1.53	7.750	3.07	13.833	5.86	19.92	2.51
1.750	1.53	7.833	3.07	13.917	5.86	20.00	2.51
1.833	1.53	7.917	3.07	14.000	5.86	20.08	2.51
1.917	1.53	8.000	3.07	14.083	5.86	20.17	2.51
2.000	1.53	8.083	3.07	14.167	5.86	20.25	2.51
2.083	1.53	8.167	3.07	14.250	5.86	20.33	1.67
2.167	1.53	8.250	3.07	14.333	4.18	20.42	1.67
2.250	1.53	8.333	3.63	14.417	4.18	20.50	1.67
2.333	1.81	8.417	3.63	14.500	4.18	20.58	1.67
2.417	1.81	8.500	3.63	14.583	4.18	20.67	1.67
2.500	1.81	8.583	3.63	14.667	4.18	20.75	1.67
2.583	1.81	8.667	3.63	14.750	4.18	20.83	1.67
2.667	1.81	8.750	3.63	14.833	4.18	20.92	1.67
2.750	1.81	8.833	3.91	14.917	4.18	21.00	1.67
2.833	1.81	8.917	3.91	15.000	4.18	21.08	1.67
2.917	1.81	9.000	3.91	15.083	4.18	21.17	1.67
3.000	1.81	9.083	3.91	15.167	4.18	21.25	1.67
3.083	1.81	9.167	3.91	15.250	4.18	21.33	1.67
3.167	1.81	9.250	3.91	15.333	4.18	21.42	1.67
3.250	1.81	9.333	4.46	15.417	4.18	21.50	1.67
3.333	1.81	9.417	4.46	15.500	4.18	21.58	1.67
3.417	1.81	9.500	4.46	15.583	4.18	21.67	1.67
3.500	1.81	9.583	4.46	15.667	4.18	21.75	1.67
3.583	1.81	9.667	4.46	15.750	4.18	21.83	1.67
3.667	1.81	9.750	4.46	15.833	4.18	21.92	1.67
3.750	1.81	9.833	5.02	15.917	4.18	22.00	1.67
3.833	1.81	9.917	5.02	16.000	4.18	22.08	1.67
3.917	1.81	10.000	5.02	16.083	4.18	22.17	1.67
4.000	1.81	10.083	5.02	16.167	4.18	22.25	1.67
4.083	1.81	10.167	5.02	16.250	4.18	22.33	1.67

4.167	1.81	10.250	5.02	16.333	2.51	22.42	1.67
4.250	1.81	10.333	6.42	16.417	2.51	22.50	1.67
4.333	2.23	10.417	6.42	16.500	2.51	22.58	1.67
4.417	2.23	10.500	6.42	16.583	2.51	22.67	1.67
4.500	2.23	10.583	6.42	16.667	2.51	22.75	1.67
4.583	2.23	10.667	6.42	16.750	2.51	22.83	1.67
4.667	2.23	10.750	6.42	16.833	2.51	22.92	1.67
4.750	2.23	10.833	8.65	16.917	2.51	23.00	1.67
4.833	2.23	10.917	8.65	17.000	2.51	23.08	1.67
4.917	2.23	11.000	8.65	17.083	2.51	23.17	1.67
5.000	2.23	11.083	8.65	17.167	2.51	23.25	1.67
5.083	2.23	11.167	8.65	17.250	2.51	23.33	1.67
5.167	2.23	11.250	8.65	17.333	2.51	23.42	1.67
5.250	2.23	11.333	13.39	17.417	2.51	23.50	1.67
5.333	2.23	11.417	13.39	17.500	2.51	23.58	1.67
5.417	2.23	11.500	13.39	17.583	2.51	23.67	1.67
5.500	2.23	11.583	13.39	17.667	2.51	23.75	1.67
5.583	2.23	11.667	13.39	17.750	2.51	23.83	1.67
5.667	2.23	11.750	13.39	17.833	2.51	23.92	1.67
5.750	2.23	11.833	41.28	17.917	2.51	24.00	1.67
5.833	2.23	11.917	41.29	18.000	2.51	24.08	1.67
5.917	2.23	12.000	41.29	18.083	2.51	24.17	1.67
6.000	2.23	12.083	170.71	18.167	2.51	24.25	1.67
6.083	2.23	12.167	170.72	18.250	2.51		

Unit Hyd Qpeak (cms)= 2.267

PEAK FLOW (cms)= 2.776 (i)
TIME TO PEAK (hrs)= 14.083
RUNOFF VOLUME (mm)= 52.212
TOTAL RAINFALL (mm)= 139.480
RUNOFF COEFFICIENT = 0.374

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0002)	Area (ha)=	23.99	Curve Number (CN)=	44.7	
ID= 1 DT= 5.0 min	Ia (mm)=	10.91	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	0.97			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr

0.083	0.00	6.167	2.23	12.250	170.72	18.33	2.51
0.167	0.00	6.250	2.23	12.333	20.10	18.42	2.51
0.250	0.00	6.333	2.51	12.417	20.09	18.50	2.51
0.333	1.53	6.417	2.51	12.500	20.09	18.58	2.51
0.417	1.53	6.500	2.51	12.583	20.09	18.67	2.51
0.500	1.53	6.583	2.51	12.667	20.09	18.75	2.51
0.583	1.53	6.667	2.51	12.750	20.09	18.83	2.51
0.667	1.53	6.750	2.51	12.833	10.32	18.92	2.51
0.750	1.53	6.833	2.51	12.917	10.32	19.00	2.51
0.833	1.53	6.917	2.51	13.000	10.32	19.08	2.51
0.917	1.53	7.000	2.51	13.083	10.32	19.17	2.51
1.000	1.53	7.083	2.51	13.167	10.32	19.25	2.51
1.083	1.53	7.167	2.51	13.250	10.32	19.33	2.51
1.167	1.53	7.250	2.51	13.333	7.53	19.42	2.51
1.250	1.53	7.333	3.07	13.417	7.53	19.50	2.51
1.333	1.53	7.417	3.07	13.500	7.53	19.58	2.51
1.417	1.53	7.500	3.07	13.583	7.53	19.67	2.51
1.500	1.53	7.583	3.07	13.667	7.53	19.75	2.51
1.583	1.53	7.667	3.07	13.750	7.53	19.83	2.51
1.667	1.53	7.750	3.07	13.833	5.86	19.92	2.51
1.750	1.53	7.833	3.07	13.917	5.86	20.00	2.51
1.833	1.53	7.917	3.07	14.000	5.86	20.08	2.51
1.917	1.53	8.000	3.07	14.083	5.86	20.17	2.51
2.000	1.53	8.083	3.07	14.167	5.86	20.25	2.51
2.083	1.53	8.167	3.07	14.250	5.86	20.33	1.67
2.167	1.53	8.250	3.07	14.333	4.18	20.42	1.67
2.250	1.53	8.333	3.63	14.417	4.18	20.50	1.67
2.333	1.81	8.417	3.63	14.500	4.18	20.58	1.67
2.417	1.81	8.500	3.63	14.583	4.18	20.67	1.67
2.500	1.81	8.583	3.63	14.667	4.18	20.75	1.67
2.583	1.81	8.667	3.63	14.750	4.18	20.83	1.67
2.667	1.81	8.750	3.63	14.833	4.18	20.92	1.67
2.750	1.81	8.833	3.91	14.917	4.18	21.00	1.67
2.833	1.81	8.917	3.91	15.000	4.18	21.08	1.67
2.917	1.81	9.000	3.91	15.083	4.18	21.17	1.67
3.000	1.81	9.083	3.91	15.167	4.18	21.25	1.67
3.083	1.81	9.167	3.91	15.250	4.18	21.33	1.67
3.167	1.81	9.250	3.91	15.333	4.18	21.42	1.67
3.250	1.81	9.333	4.46	15.417	4.18	21.50	1.67
3.333	1.81	9.417	4.46	15.500	4.18	21.58	1.67
3.417	1.81	9.500	4.46	15.583	4.18	21.67	1.67
3.500	1.81	9.583	4.46	15.667	4.18	21.75	1.67
3.583	1.81	9.667	4.46	15.750	4.18	21.83	1.67
3.667	1.81	9.750	4.46	15.833	4.18	21.92	1.67
3.750	1.81	9.833	5.02	15.917	4.18	22.00	1.67
3.833	1.81	9.917	5.02	16.000	4.18	22.08	1.67
3.917	1.81	10.000	5.02	16.083	4.18	22.17	1.67
4.000	1.81	10.083	5.02	16.167	4.18	22.25	1.67

4.083	1.81	10.167	5.02	16.250	4.18	22.33	1.67
4.167	1.81	10.250	5.02	16.333	2.51	22.42	1.67
4.250	1.81	10.333	6.42	16.417	2.51	22.50	1.67
4.333	2.23	10.417	6.42	16.500	2.51	22.58	1.67
4.417	2.23	10.500	6.42	16.583	2.51	22.67	1.67
4.500	2.23	10.583	6.42	16.667	2.51	22.75	1.67
4.583	2.23	10.667	6.42	16.750	2.51	22.83	1.67
4.667	2.23	10.750	6.42	16.833	2.51	22.92	1.67
4.750	2.23	10.833	8.65	16.917	2.51	23.00	1.67
4.833	2.23	10.917	8.65	17.000	2.51	23.08	1.67
4.917	2.23	11.000	8.65	17.083	2.51	23.17	1.67
5.000	2.23	11.083	8.65	17.167	2.51	23.25	1.67
5.083	2.23	11.167	8.65	17.250	2.51	23.33	1.67
5.167	2.23	11.250	8.65	17.333	2.51	23.42	1.67
5.250	2.23	11.333	13.39	17.417	2.51	23.50	1.67
5.333	2.23	11.417	13.39	17.500	2.51	23.58	1.67
5.417	2.23	11.500	13.39	17.583	2.51	23.67	1.67
5.500	2.23	11.583	13.39	17.667	2.51	23.75	1.67
5.583	2.23	11.667	13.39	17.750	2.51	23.83	1.67
5.667	2.23	11.750	13.39	17.833	2.51	23.92	1.67
5.750	2.23	11.833	41.28	17.917	2.51	24.00	1.67
5.833	2.23	11.917	41.29	18.000	2.51	24.08	1.67
5.917	2.23	12.000	41.29	18.083	2.51	24.17	1.67
6.000	2.23	12.083	170.71	18.167	2.51	24.25	1.67
6.083	2.23	12.167	170.72	18.250	2.51		

Unit Hyd Qpeak (cms)= 0.945

PEAK FLOW (cms)= 0.705 (i)
TIME TO PEAK (hrs)= 13.250
RUNOFF VOLUME (mm)= 37.331
TOTAL RAINFALL (mm)= 139.480
RUNOFF COEFFICIENT = 0.268

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0001)	Area (ha)=	39.68	Curve Number (CN)=	60.7	
ID= 1 DT= 5.0 min	Ia (mm)=	8.26	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	1.18			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN

Post-Development VO Output (INT)

hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	6.167	2.23	12.250	170.72	18.33	2.51
0.167	0.00	6.250	2.23	12.333	20.10	18.42	2.51
0.250	0.00	6.333	2.51	12.417	20.09	18.50	2.51
0.333	1.53	6.417	2.51	12.500	20.09	18.58	2.51
0.417	1.53	6.500	2.51	12.583	20.09	18.67	2.51
0.500	1.53	6.583	2.51	12.667	20.09	18.75	2.51
0.583	1.53	6.667	2.51	12.750	20.09	18.83	2.51
0.667	1.53	6.750	2.51	12.833	10.32	18.92	2.51
0.750	1.53	6.833	2.51	12.917	10.32	19.00	2.51
0.833	1.53	6.917	2.51	13.000	10.32	19.08	2.51
0.917	1.53	7.000	2.51	13.083	10.32	19.17	2.51
1.000	1.53	7.083	2.51	13.167	10.32	19.25	2.51
1.083	1.53	7.167	2.51	13.250	10.32	19.33	2.51
1.167	1.53	7.250	2.51	13.333	7.53	19.42	2.51
1.250	1.53	7.333	3.07	13.417	7.53	19.50	2.51
1.333	1.53	7.417	3.07	13.500	7.53	19.58	2.51
1.417	1.53	7.500	3.07	13.583	7.53	19.67	2.51
1.500	1.53	7.583	3.07	13.667	7.53	19.75	2.51
1.583	1.53	7.667	3.07	13.750	7.53	19.83	2.51
1.667	1.53	7.750	3.07	13.833	5.86	19.92	2.51
1.750	1.53	7.833	3.07	13.917	5.86	20.00	2.51
1.833	1.53	7.917	3.07	14.000	5.86	20.08	2.51
1.917	1.53	8.000	3.07	14.083	5.86	20.17	2.51
2.000	1.53	8.083	3.07	14.167	5.86	20.25	2.51
2.083	1.53	8.167	3.07	14.250	5.86	20.33	1.67
2.167	1.53	8.250	3.07	14.333	4.18	20.42	1.67
2.250	1.53	8.333	3.63	14.417	4.18	20.50	1.67
2.333	1.81	8.417	3.63	14.500	4.18	20.58	1.67
2.417	1.81	8.500	3.63	14.583	4.18	20.67	1.67
2.500	1.81	8.583	3.63	14.667	4.18	20.75	1.67
2.583	1.81	8.667	3.63	14.750	4.18	20.83	1.67
2.667	1.81	8.750	3.63	14.833	4.18	20.92	1.67
2.750	1.81	8.833	3.91	14.917	4.18	21.00	1.67
2.833	1.81	8.917	3.91	15.000	4.18	21.08	1.67
2.917	1.81	9.000	3.91	15.083	4.18	21.17	1.67
3.000	1.81	9.083	3.91	15.167	4.18	21.25	1.67
3.083	1.81	9.167	3.91	15.250	4.18	21.33	1.67
3.167	1.81	9.250	3.91	15.333	4.18	21.42	1.67
3.250	1.81	9.333	4.46	15.417	4.18	21.50	1.67
3.333	1.81	9.417	4.46	15.500	4.18	21.58	1.67
3.417	1.81	9.500	4.46	15.583	4.18	21.67	1.67
3.500	1.81	9.583	4.46	15.667	4.18	21.75	1.67
3.583	1.81	9.667	4.46	15.750	4.18	21.83	1.67
3.667	1.81	9.750	4.46	15.833	4.18	21.92	1.67
3.750	1.81	9.833	5.02	15.917	4.18	22.00	1.67
3.833	1.81	9.917	5.02	16.000	4.18	22.08	1.67
3.917	1.81	10.000	5.02	16.083	4.18	22.17	1.67

4.000	1.81	10.083	5.02	16.167	4.18	22.25	1.67
4.083	1.81	10.167	5.02	16.250	4.18	22.33	1.67
4.167	1.81	10.250	5.02	16.333	2.51	22.42	1.67
4.250	1.81	10.333	6.42	16.417	2.51	22.50	1.67
4.333	2.23	10.417	6.42	16.500	2.51	22.58	1.67
4.417	2.23	10.500	6.42	16.583	2.51	22.67	1.67
4.500	2.23	10.583	6.42	16.667	2.51	22.75	1.67
4.583	2.23	10.667	6.42	16.750	2.51	22.83	1.67
4.667	2.23	10.750	6.42	16.833	2.51	22.92	1.67
4.750	2.23	10.833	8.65	16.917	2.51	23.00	1.67
4.833	2.23	10.917	8.65	17.000	2.51	23.08	1.67
4.917	2.23	11.000	8.65	17.083	2.51	23.17	1.67
5.000	2.23	11.083	8.65	17.167	2.51	23.25	1.67
5.083	2.23	11.167	8.65	17.250	2.51	23.33	1.67
5.167	2.23	11.250	8.65	17.333	2.51	23.42	1.67
5.250	2.23	11.333	13.39	17.417	2.51	23.50	1.67
5.333	2.23	11.417	13.39	17.500	2.51	23.58	1.67
5.417	2.23	11.500	13.39	17.583	2.51	23.67	1.67
5.500	2.23	11.583	13.39	17.667	2.51	23.75	1.67
5.583	2.23	11.667	13.39	17.750	2.51	23.83	1.67
5.667	2.23	11.750	13.39	17.833	2.51	23.92	1.67
5.750	2.23	11.833	41.28	17.917	2.51	24.00	1.67
5.833	2.23	11.917	41.29	18.000	2.51	24.08	1.67
5.917	2.23	12.000	41.29	18.083	2.51	24.17	1.67
6.000	2.23	12.083	170.71	18.167	2.51	24.25	1.67
6.083	2.23	12.167	170.72	18.250	2.51		

Unit Hyd Qpeak (cms)= 1.284

PEAK FLOW (cms)= 1.624 (i)
TIME TO PEAK (hrs)= 13.417
RUNOFF VOLUME (mm)= 58.208
TOTAL RAINFALL (mm)= 139.480
RUNOFF COEFFICIENT = 0.417

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0028)	Area (ha)=	6.37	Curve Number (CN)=	50.5	
ID= 1 DT= 5.0 min	Ia (mm)=	15.69	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	0.77			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	6.167	2.23	12.250	170.72	18.33	2.51
0.167	0.00	6.250	2.23	12.333	20.10	18.42	2.51
0.250	0.00	6.333	2.51	12.417	20.09	18.50	2.51
0.333	1.53	6.417	2.51	12.500	20.09	18.58	2.51
0.417	1.53	6.500	2.51	12.583	20.09	18.67	2.51
0.500	1.53	6.583	2.51	12.667	20.09	18.75	2.51
0.583	1.53	6.667	2.51	12.750	20.09	18.83	2.51
0.667	1.53	6.750	2.51	12.833	10.32	18.92	2.51
0.750	1.53	6.833	2.51	12.917	10.32	19.00	2.51
0.833	1.53	6.917	2.51	13.000	10.32	19.08	2.51
0.917	1.53	7.000	2.51	13.083	10.32	19.17	2.51
1.000	1.53	7.083	2.51	13.167	10.32	19.25	2.51
1.083	1.53	7.167	2.51	13.250	10.32	19.33	2.51
1.167	1.53	7.250	2.51	13.333	7.53	19.42	2.51
1.250	1.53	7.333	3.07	13.417	7.53	19.50	2.51
1.333	1.53	7.417	3.07	13.500	7.53	19.58	2.51
1.417	1.53	7.500	3.07	13.583	7.53	19.67	2.51
1.500	1.53	7.583	3.07	13.667	7.53	19.75	2.51
1.583	1.53	7.667	3.07	13.750	7.53	19.83	2.51
1.667	1.53	7.750	3.07	13.833	5.86	19.92	2.51
1.750	1.53	7.833	3.07	13.917	5.86	20.00	2.51
1.833	1.53	7.917	3.07	14.000	5.86	20.08	2.51
1.917	1.53	8.000	3.07	14.083	5.86	20.17	2.51
2.000	1.53	8.083	3.07	14.167	5.86	20.25	2.51
2.083	1.53	8.167	3.07	14.250	5.86	20.33	1.67
2.167	1.53	8.250	3.07	14.333	4.18	20.42	1.67
2.250	1.53	8.333	3.63	14.417	4.18	20.50	1.67
2.333	1.81	8.417	3.63	14.500	4.18	20.58	1.67
2.417	1.81	8.500	3.63	14.583	4.18	20.67	1.67
2.500	1.81	8.583	3.63	14.667	4.18	20.75	1.67
2.583	1.81	8.667	3.63	14.750	4.18	20.83	1.67
2.667	1.81	8.750	3.63	14.833	4.18	20.92	1.67
2.750	1.81	8.833	3.91	14.917	4.18	21.00	1.67
2.833	1.81	8.917	3.91	15.000	4.18	21.08	1.67
2.917	1.81	9.000	3.91	15.083	4.18	21.17	1.67
3.000	1.81	9.083	3.91	15.167	4.18	21.25	1.67
3.083	1.81	9.167	3.91	15.250	4.18	21.33	1.67
3.167	1.81	9.250	3.91	15.333	4.18	21.42	1.67
3.250	1.81	9.333	4.46	15.417	4.18	21.50	1.67
3.333	1.81	9.417	4.46	15.500	4.18	21.58	1.67
3.417	1.81	9.500	4.46	15.583	4.18	21.67	1.67
3.500	1.81	9.583	4.46	15.667	4.18	21.75	1.67
3.583	1.81	9.667	4.46	15.750	4.18	21.83	1.67
3.667	1.81	9.750	4.46	15.833	4.18	21.92	1.67
3.750	1.81	9.833	5.02	15.917	4.18	22.00	1.67
3.833	1.81	9.917	5.02	16.000	4.18	22.08	1.67

3.917	1.81	10.000	5.02	16.083	4.18	22.17	1.67
4.000	1.81	10.083	5.02	16.167	4.18	22.25	1.67
4.083	1.81	10.167	5.02	16.250	4.18	22.33	1.67
4.167	1.81	10.250	5.02	16.333	2.51	22.42	1.67
4.250	1.81	10.333	6.42	16.417	2.51	22.50	1.67
4.333	2.23	10.417	6.42	16.500	2.51	22.58	1.67
4.417	2.23	10.500	6.42	16.583	2.51	22.67	1.67
4.500	2.23	10.583	6.42	16.667	2.51	22.75	1.67
4.583	2.23	10.667	6.42	16.750	2.51	22.83	1.67
4.667	2.23	10.750	6.42	16.833	2.51	22.92	1.67
4.750	2.23	10.833	8.65	16.917	2.51	23.00	1.67
4.833	2.23	10.917	8.65	17.000	2.51	23.08	1.67
4.917	2.23	11.000	8.65	17.083	2.51	23.17	1.67
5.000	2.23	11.083	8.65	17.167	2.51	23.25	1.67
5.083	2.23	11.167	8.65	17.250	2.51	23.33	1.67
5.167	2.23	11.250	8.65	17.333	2.51	23.42	1.67
5.250	2.23	11.333	13.39	17.417	2.51	23.50	1.67
5.333	2.23	11.417	13.39	17.500	2.51	23.58	1.67
5.417	2.23	11.500	13.39	17.583	2.51	23.67	1.67
5.500	2.23	11.583	13.39	17.667	2.51	23.75	1.67
5.583	2.23	11.667	13.39	17.750	2.51	23.83	1.67
5.667	2.23	11.750	13.39	17.833	2.51	23.92	1.67
5.750	2.23	11.833	41.28	17.917	2.51	24.00	1.67
5.833	2.23	11.917	41.29	18.000	2.51	24.08	1.67
5.917	2.23	12.000	41.29	18.083	2.51	24.17	1.67
6.000	2.23	12.083	170.71	18.167	2.51	24.25	1.67
6.083	2.23	12.167	170.72	18.250	2.51		

Unit Hyd Qpeak (cms)= 0.316

PEAK FLOW (cms)= 0.247 (i)
TIME TO PEAK (hrs)= 13.000
RUNOFF VOLUME (mm)= 41.087
TOTAL RAINFALL (mm)= 139.480
RUNOFF COEFFICIENT = 0.295

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0029)	Area (ha)=	14.85	Curve Number (CN)=	52.9	
ID= 1 DT= 5.0 min	Ia (mm)=	13.28	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	0.89			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.23	12.250	170.72	18.33	2.51
0.167	0.00	6.250	2.23	12.333	20.10	18.42	2.51
0.250	0.00	6.333	2.51	12.417	20.09	18.50	2.51
0.333	1.53	6.417	2.51	12.500	20.09	18.58	2.51
0.417	1.53	6.500	2.51	12.583	20.09	18.67	2.51
0.500	1.53	6.583	2.51	12.667	20.09	18.75	2.51
0.583	1.53	6.667	2.51	12.750	20.09	18.83	2.51
0.667	1.53	6.750	2.51	12.833	10.32	18.92	2.51
0.750	1.53	6.833	2.51	12.917	10.32	19.00	2.51
0.833	1.53	6.917	2.51	13.000	10.32	19.08	2.51
0.917	1.53	7.000	2.51	13.083	10.32	19.17	2.51
1.000	1.53	7.083	2.51	13.167	10.32	19.25	2.51
1.083	1.53	7.167	2.51	13.250	10.32	19.33	2.51
1.167	1.53	7.250	2.51	13.333	7.53	19.42	2.51
1.250	1.53	7.333	3.07	13.417	7.53	19.50	2.51
1.333	1.53	7.417	3.07	13.500	7.53	19.58	2.51
1.417	1.53	7.500	3.07	13.583	7.53	19.67	2.51
1.500	1.53	7.583	3.07	13.667	7.53	19.75	2.51
1.583	1.53	7.667	3.07	13.750	7.53	19.83	2.51
1.667	1.53	7.750	3.07	13.833	5.86	19.92	2.51
1.750	1.53	7.833	3.07	13.917	5.86	20.00	2.51
1.833	1.53	7.917	3.07	14.000	5.86	20.08	2.51
1.917	1.53	8.000	3.07	14.083	5.86	20.17	2.51
2.000	1.53	8.083	3.07	14.167	5.86	20.25	2.51
2.083	1.53	8.167	3.07	14.250	5.86	20.33	1.67
2.167	1.53	8.250	3.07	14.333	4.18	20.42	1.67
2.250	1.53	8.333	3.63	14.417	4.18	20.50	1.67
2.333	1.81	8.417	3.63	14.500	4.18	20.58	1.67
2.417	1.81	8.500	3.63	14.583	4.18	20.67	1.67
2.500	1.81	8.583	3.63	14.667	4.18	20.75	1.67
2.583	1.81	8.667	3.63	14.750	4.18	20.83	1.67
2.667	1.81	8.750	3.63	14.833	4.18	20.92	1.67
2.750	1.81	8.833	3.91	14.917	4.18	21.00	1.67
2.833	1.81	8.917	3.91	15.000	4.18	21.08	1.67
2.917	1.81	9.000	3.91	15.083	4.18	21.17	1.67
3.000	1.81	9.083	3.91	15.167	4.18	21.25	1.67
3.083	1.81	9.167	3.91	15.250	4.18	21.33	1.67
3.167	1.81	9.250	3.91	15.333	4.18	21.42	1.67
3.250	1.81	9.333	4.46	15.417	4.18	21.50	1.67
3.333	1.81	9.417	4.46	15.500	4.18	21.58	1.67
3.417	1.81	9.500	4.46	15.583	4.18	21.67	1.67
3.500	1.81	9.583	4.46	15.667	4.18	21.75	1.67
3.583	1.81	9.667	4.46	15.750	4.18	21.83	1.67
3.667	1.81	9.750	4.46	15.833	4.18	21.92	1.67
3.750	1.81	9.833	5.02	15.917	4.18	22.00	1.67

3.833	1.81	9.917	5.02	16.000	4.18	22.08	1.67
3.917	1.81	10.000	5.02	16.083	4.18	22.17	1.67
4.000	1.81	10.083	5.02	16.167	4.18	22.25	1.67
4.083	1.81	10.167	5.02	16.250	4.18	22.33	1.67
4.167	1.81	10.250	5.02	16.333	2.51	22.42	1.67
4.250	1.81	10.333	6.42	16.417	2.51	22.50	1.67
4.333	2.23	10.417	6.42	16.500	2.51	22.58	1.67
4.417	2.23	10.500	6.42	16.583	2.51	22.67	1.67
4.500	2.23	10.583	6.42	16.667	2.51	22.75	1.67
4.583	2.23	10.667	6.42	16.750	2.51	22.83	1.67
4.667	2.23	10.750	6.42	16.833	2.51	22.92	1.67
4.750	2.23	10.833	8.65	16.917	2.51	23.00	1.67
4.833	2.23	10.917	8.65	17.000	2.51	23.08	1.67
4.917	2.23	11.000	8.65	17.083	2.51	23.17	1.67
5.000	2.23	11.083	8.65	17.167	2.51	23.25	1.67
5.083	2.23	11.167	8.65	17.250	2.51	23.33	1.67
5.167	2.23	11.250	8.65	17.333	2.51	23.42	1.67
5.250	2.23	11.333	13.39	17.417	2.51	23.50	1.67
5.333	2.23	11.417	13.39	17.500	2.51	23.58	1.67
5.417	2.23	11.500	13.39	17.583	2.51	23.67	1.67
5.500	2.23	11.583	13.39	17.667	2.51	23.75	1.67
5.583	2.23	11.667	13.39	17.750	2.51	23.83	1.67
5.667	2.23	11.750	13.39	17.833	2.51	23.92	1.67
5.750	2.23	11.833	41.28	17.917	2.51	24.00	1.67
5.833	2.23	11.917	41.29	18.000	2.51	24.08	1.67
5.917	2.23	12.000	41.29	18.083	2.51	24.17	1.67
6.000	2.23	12.083	170.71	18.167	2.51	24.25	1.67
6.083	2.23	12.167	170.72	18.250	2.51		

Unit Hyd Qpeak (cms)= 0.637

PEAK FLOW (cms)= 0.573 (i)
TIME TO PEAK (hrs)= 13.083
RUNOFF VOLUME (mm)= 45.247
TOTAL RAINFALL (mm)= 139.480
RUNOFF COEFFICIENT = 0.324

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0030)	Area (ha)=	1.70	Curve Number (CN)= 60.5
ID= 1 DT= 5.0 min	Ia (mm)=	9.65	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	0.40	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.23	12.250	170.72	18.33	2.51
0.167	0.00	6.250	2.23	12.333	20.10	18.42	2.51
0.250	0.00	6.333	2.51	12.417	20.09	18.50	2.51
0.333	1.53	6.417	2.51	12.500	20.09	18.58	2.51
0.417	1.53	6.500	2.51	12.583	20.09	18.67	2.51
0.500	1.53	6.583	2.51	12.667	20.09	18.75	2.51
0.583	1.53	6.667	2.51	12.750	20.09	18.83	2.51
0.667	1.53	6.750	2.51	12.833	10.32	18.92	2.51
0.750	1.53	6.833	2.51	12.917	10.32	19.00	2.51
0.833	1.53	6.917	2.51	13.000	10.32	19.08	2.51
0.917	1.53	7.000	2.51	13.083	10.32	19.17	2.51
1.000	1.53	7.083	2.51	13.167	10.32	19.25	2.51
1.083	1.53	7.167	2.51	13.250	10.32	19.33	2.51
1.167	1.53	7.250	2.51	13.333	7.53	19.42	2.51
1.250	1.53	7.333	3.07	13.417	7.53	19.50	2.51
1.333	1.53	7.417	3.07	13.500	7.53	19.58	2.51
1.417	1.53	7.500	3.07	13.583	7.53	19.67	2.51
1.500	1.53	7.583	3.07	13.667	7.53	19.75	2.51
1.583	1.53	7.667	3.07	13.750	7.53	19.83	2.51
1.667	1.53	7.750	3.07	13.833	5.86	19.92	2.51
1.750	1.53	7.833	3.07	13.917	5.86	20.00	2.51
1.833	1.53	7.917	3.07	14.000	5.86	20.08	2.51
1.917	1.53	8.000	3.07	14.083	5.86	20.17	2.51
2.000	1.53	8.083	3.07	14.167	5.86	20.25	2.51
2.083	1.53	8.167	3.07	14.250	5.86	20.33	1.67
2.167	1.53	8.250	3.07	14.333	4.18	20.42	1.67
2.250	1.53	8.333	3.63	14.417	4.18	20.50	1.67
2.333	1.81	8.417	3.63	14.500	4.18	20.58	1.67
2.417	1.81	8.500	3.63	14.583	4.18	20.67	1.67
2.500	1.81	8.583	3.63	14.667	4.18	20.75	1.67
2.583	1.81	8.667	3.63	14.750	4.18	20.83	1.67
2.667	1.81	8.750	3.63	14.833	4.18	20.92	1.67
2.750	1.81	8.833	3.91	14.917	4.18	21.00	1.67
2.833	1.81	8.917	3.91	15.000	4.18	21.08	1.67
2.917	1.81	9.000	3.91	15.083	4.18	21.17	1.67
3.000	1.81	9.083	3.91	15.167	4.18	21.25	1.67
3.083	1.81	9.167	3.91	15.250	4.18	21.33	1.67
3.167	1.81	9.250	3.91	15.333	4.18	21.42	1.67
3.250	1.81	9.333	4.46	15.417	4.18	21.50	1.67
3.333	1.81	9.417	4.46	15.500	4.18	21.58	1.67
3.417	1.81	9.500	4.46	15.583	4.18	21.67	1.67
3.500	1.81	9.583	4.46	15.667	4.18	21.75	1.67
3.583	1.81	9.667	4.46	15.750	4.18	21.83	1.67
3.667	1.81	9.750	4.46	15.833	4.18	21.92	1.67

3.750	1.81	9.833	5.02	15.917	4.18	22.00	1.67
3.833	1.81	9.917	5.02	16.000	4.18	22.08	1.67
3.917	1.81	10.000	5.02	16.083	4.18	22.17	1.67
4.000	1.81	10.083	5.02	16.167	4.18	22.25	1.67
4.083	1.81	10.167	5.02	16.250	4.18	22.33	1.67
4.167	1.81	10.250	5.02	16.333	2.51	22.42	1.67
4.250	1.81	10.333	6.42	16.417	2.51	22.50	1.67
4.333	2.23	10.417	6.42	16.500	2.51	22.58	1.67
4.417	2.23	10.500	6.42	16.583	2.51	22.67	1.67
4.500	2.23	10.583	6.42	16.667	2.51	22.75	1.67
4.583	2.23	10.667	6.42	16.750	2.51	22.83	1.67
4.667	2.23	10.750	6.42	16.833	2.51	22.92	1.67
4.750	2.23	10.833	8.65	16.917	2.51	23.00	1.67
4.833	2.23	10.917	8.65	17.000	2.51	23.08	1.67
4.917	2.23	11.000	8.65	17.083	2.51	23.17	1.67
5.000	2.23	11.083	8.65	17.167	2.51	23.25	1.67
5.083	2.23	11.167	8.65	17.250	2.51	23.33	1.67
5.167	2.23	11.250	8.65	17.333	2.51	23.42	1.67
5.250	2.23	11.333	13.39	17.417	2.51	23.50	1.67
5.333	2.23	11.417	13.39	17.500	2.51	23.58	1.67
5.417	2.23	11.500	13.39	17.583	2.51	23.67	1.67
5.500	2.23	11.583	13.39	17.667	2.51	23.75	1.67
5.583	2.23	11.667	13.39	17.750	2.51	23.83	1.67
5.667	2.23	11.750	13.39	17.833	2.51	23.92	1.67
5.750	2.23	11.833	41.28	17.917	2.51	24.00	1.67
5.833	2.23	11.917	41.29	18.000	2.51	24.08	1.67
5.917	2.23	12.000	41.29	18.083	2.51	24.17	1.67
6.000	2.23	12.083	170.71	18.167	2.51	24.25	1.67
6.083	2.23	12.167	170.72	18.250	2.51		

Unit Hyd Qpeak (cms)= 0.162

PEAK FLOW (cms)= 0.151 (i)
TIME TO PEAK (hrs)= 12.500
RUNOFF VOLUME (mm)= 56.949
TOTAL RAINFALL (mm)= 139.480
RUNOFF COEFFICIENT = 0.408

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0031)	Area (ha)=	1.80	Curve Number (CN)= 50.0
ID= 1 DT= 5.0 min	Ia (mm)=	16.00	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	0.76	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.23	12.250	170.72	18.33	2.51
0.167	0.00	6.250	2.23	12.333	20.10	18.42	2.51
0.250	0.00	6.333	2.51	12.417	20.09	18.50	2.51
0.333	1.53	6.417	2.51	12.500	20.09	18.58	2.51
0.417	1.53	6.500	2.51	12.583	20.09	18.67	2.51
0.500	1.53	6.583	2.51	12.667	20.09	18.75	2.51
0.583	1.53	6.667	2.51	12.750	20.09	18.83	2.51
0.667	1.53	6.750	2.51	12.833	10.32	18.92	2.51
0.750	1.53	6.833	2.51	12.917	10.32	19.00	2.51
0.833	1.53	6.917	2.51	13.000	10.32	19.08	2.51
0.917	1.53	7.000	2.51	13.083	10.32	19.17	2.51
1.000	1.53	7.083	2.51	13.167	10.32	19.25	2.51
1.083	1.53	7.167	2.51	13.250	10.32	19.33	2.51
1.167	1.53	7.250	2.51	13.333	7.53	19.42	2.51
1.250	1.53	7.333	3.07	13.417	7.53	19.50	2.51
1.333	1.53	7.417	3.07	13.500	7.53	19.58	2.51
1.417	1.53	7.500	3.07	13.583	7.53	19.67	2.51
1.500	1.53	7.583	3.07	13.667	7.53	19.75	2.51
1.583	1.53	7.667	3.07	13.750	7.53	19.83	2.51
1.667	1.53	7.750	3.07	13.833	5.86	19.92	2.51
1.750	1.53	7.833	3.07	13.917	5.86	20.00	2.51
1.833	1.53	7.917	3.07	14.000	5.86	20.08	2.51
1.917	1.53	8.000	3.07	14.083	5.86	20.17	2.51
2.000	1.53	8.083	3.07	14.167	5.86	20.25	2.51
2.083	1.53	8.167	3.07	14.250	5.86	20.33	1.67
2.167	1.53	8.250	3.07	14.333	4.18	20.42	1.67
2.250	1.53	8.333	3.63	14.417	4.18	20.50	1.67
2.333	1.81	8.417	3.63	14.500	4.18	20.58	1.67
2.417	1.81	8.500	3.63	14.583	4.18	20.67	1.67
2.500	1.81	8.583	3.63	14.667	4.18	20.75	1.67
2.583	1.81	8.667	3.63	14.750	4.18	20.83	1.67
2.667	1.81	8.750	3.63	14.833	4.18	20.92	1.67
2.750	1.81	8.833	3.91	14.917	4.18	21.00	1.67
2.833	1.81	8.917	3.91	15.000	4.18	21.08	1.67
2.917	1.81	9.000	3.91	15.083	4.18	21.17	1.67
3.000	1.81	9.083	3.91	15.167	4.18	21.25	1.67
3.083	1.81	9.167	3.91	15.250	4.18	21.33	1.67
3.167	1.81	9.250	3.91	15.333	4.18	21.42	1.67
3.250	1.81	9.333	4.46	15.417	4.18	21.50	1.67
3.333	1.81	9.417	4.46	15.500	4.18	21.58	1.67
3.417	1.81	9.500	4.46	15.583	4.18	21.67	1.67
3.500	1.81	9.583	4.46	15.667	4.18	21.75	1.67
3.583	1.81	9.667	4.46	15.750	4.18	21.83	1.67
3.667	1.81	9.750	4.46	15.833	4.18	21.92	1.67
3.750	1.81	9.833	5.02	15.917	4.18	22.00	1.67
3.833	1.81	9.917	5.02	16.000	4.18	22.08	1.67
3.917	1.81	10.000	5.02	16.083	4.18	22.17	1.67
4.000	1.81	10.083	5.02	16.167	4.18	22.25	1.67
4.083	1.81	10.167	5.02	16.250	4.18	22.33	1.67
4.167	1.81	10.250	5.02	16.333	2.51	22.42	1.67
4.250	1.81	10.333	6.42	16.417	2.51	22.50	1.67
4.333	2.23	10.417	6.42	16.500	2.51	22.58	1.67
4.417	2.23	10.500	6.42	16.583	2.51	22.67	1.67
4.500	2.23	10.583	6.42	16.667	2.51	22.75	1.67
4.583	2.23	10.667	6.42	16.750	2.51	22.83	1.67
4.667	2.23	10.750	6.42	16.833	2.51	22.92	1.67
4.750	2.23	10.833	8.65	16.917	2.51	23.00	1.67
4.833	2.23	10.917	8.65	17.000	2.51	23.08	1.67
4.917	2.23	11.000	8.65	17.083	2.51	23.17	1.67
5.000	2.23	11.083	8.65	17.167	2.51	23.25	1.67
5.083	2.23	11.167	8.65	17.250	2.51	23.33	1.67
5.167	2.23	11.250	8.65	17.333	2.51	23.42	1.67
5.250	2.23	11.333	13.39	17.417	2.51	23.50	1.67
5.333	2.23	11.417	13.39	17.500	2.51	23.58	1.67
5.417	2.23	11.500	13.39	17.583	2.51	23.67	1.67
5.500	2.23	11.583	13.39	17.667	2.51	23.75	1.67
5.583	2.23	11.667	13.39	17.750	2.51	23.83	1.67
5.667	2.23	11.750	13.39	17.833	2.51	23.92	1.67
5.750	2.23	11.833	41.28	17.917	2.51	24.00	1.67
5.833	2.23	11.917	41.29	18.000	2.51	24.08	1.67
5.917	2.23	12.000	41.29	18.083	2.51	24.17	1.67
6.000	2.23	12.083	170.71	18.167	2.51	24.25	1.67
6.083	2.23	12.167	170.72	18.250	2.51		

Unit Hyd Qpeak (cms)= 0.090

PEAK FLOW (cms)= 0.069 (i)
TIME TO PEAK (hrs)= 13.000
RUNOFF VOLUME (mm)= 40.391
TOTAL RAINFALL (mm)= 139.480
RUNOFF COEFFICIENT = 0.290

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0032)	ID= 1 DT= 5.0 min	Area (ha)= 6.70	Ia (mm)= 10.00	U.H. Tp(hrs)= 1.45	Curve Number (CN)= 60.0 # of Linear Res.(N)= 3.00

Post-Development VO Output (INT)

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.23	12.250	170.72	18.33	2.51
0.167	0.00	6.250	2.23	12.333	20.10	18.42	2.51
0.250	0.00	6.333	2.51	12.417	20.09	18.50	2.51
0.333	1.53	6.417	2.51	12.500	20.09	18.58	2.51
0.417	1.53	6.500	2.51	12.583	20.09	18.67	2.51
0.500	1.53	6.583	2.51	12.667	20.09	18.75	2.51
0.583	1.53	6.667	2.51	12.750	20.09	18.83	2.51
0.667	1.53	6.750	2.51	12.833	10.32	18.92	2.51
0.750	1.53	6.833	2.51	12.917	10.32	19.00	2.51
0.833	1.53	6.917	2.51	13.000	10.32	19.08	2.51
0.917	1.53	7.000	2.51	13.083	10.32	19.17	2.51
1.000	1.53	7.083	2.51	13.167	10.32	19.25	2.51
1.083	1.53	7.167	2.51	13.250	10.32	19.33	2.51
1.167	1.53	7.250	2.51	13.333	7.53	19.42	2.51
1.250	1.53	7.333	3.07	13.417	7.53	19.50	2.51
1.333	1.53	7.417	3.07	13.500	7.53	19.58	2.51
1.417	1.53	7.500	3.07	13.583	7.53	19.67	2.51
1.500	1.53	7.583	3.07	13.667	7.53	19.75	2.51
1.583	1.53	7.667	3.07	13.750	7.53	19.83	2.51
1.667	1.53	7.750	3.07	13.833	5.86	19.92	2.51
1.750	1.53	7.833	3.07	13.917	5.86	20.00	2.51
1.833	1.53	7.917	3.07	14.000	5.86	20.08	2.51
1.917	1.53	8.000	3.07	14.083	5.86	20.17	2.51
2.000	1.53	8.083	3.07	14.167	5.86	20.25	2.51
2.083	1.53	8.167	3.07	14.250	5.86	20.33	1.67
2.167	1.53	8.250	3.07	14.333	4.18	20.42	1.67
2.250	1.53	8.333	3.63	14.417	4.18	20.50	1.67
2.333	1.81	8.417	3.63	14.500	4.18	20.58	1.67
2.417	1.81	8.500	3.63	14.583	4.18	20.67	1.67
2.500	1.81	8.583	3.63	14.667	4.18	20.75	1.67
2.583	1.81	8.667	3.63	14.750	4.18	20.83	1.67
2.667	1.81	8.750	3.63	14.833	4.18	20.92	1.67
2.750	1.81	8.833	3.91	14.917	4.18	21.00	1.67
2.833	1.81	8.917	3.91	15.000	4.18	21.08	1.67
2.917	1.81	9.000	3.91	15.083	4.18	21.17	1.67
3.000	1.81	9.083	3.91	15.167	4.18	21.25	1.67
3.083	1.81	9.167	3.91	15.250	4.18	21.33	1.67
3.167	1.81	9.250	3.91	15.333	4.18	21.42	1.67
3.250	1.81	9.333	4.46	15.417	4.18	21.50	1.67
3.333	1.81	9.417	4.46	15.500	4.18	21.58	1.67
3.417	1.81	9.500	4.46	15.583	4.18	21.67	1.67
3.500	1.81	9.583	4.46	15.667	4.18	21.75	1.67
3.583	1.81	9.667	4.46	15.750	4.18	21.83	1.67
3.667	1.81	9.750	4.46	15.833	4.18	21.92	1.67
3.750	1.81	9.833	5.02	15.917	4.18	22.00	1.67
3.833	1.81	9.917	5.02	16.000	4.18	22.08	1.67
3.917	1.81	10.000	5.02	16.083	4.18	22.17	1.67
4.000	1.81	10.083	5.02	16.167	4.18	22.25	1.67
4.083	1.81	10.167	5.02	16.250	4.18	22.33	1.67
4.167	1.81	10.250	5.02	16.333	2.51	22.42	1.67
4.250	1.81	10.333	6.42	16.417	2.51	22.50	1.67
4.333	2.23	10.417	6.42	16.500	2.51	22.58	1.67
4.417	2.23	10.500	6.42	16.583	2.51	22.67	1.67
4.500	2.23	10.583	6.42	16.667	2.51	22.75	1.67
4.583	2.23	10.667	6.42	16.750	2.51	22.83	1.67
4.667	2.23	10.750	6.42	16.833	2.51	22.92	1.67
4.750	2.23	10.833	8.65	16.917	2.51	23.00	1.67
4.833	2.23	10.917	8.65	17.000	2.51	23.08	1.67
4.917	2.23	11.000	8.65	17.083	2.51	23.17	1.67
5.000	2.23	11.083	8.65	17.167	2.51	23.25	1.67
5.083	2.23	11.167	8.65	17.250	2.51	23.33	1.67
5.167	2.23	11.250	8.65	17.333	2.51	23.42	1.67
5.250	2.23	11.333	13.39	17.417	2.51	23.50	1.67
5.333	2.23	11.417	13.39	17.500	2.51	23.58	1.67
5.417	2.23	11.500	13.39	17.583	2.51	23.67	1.67
5.500	2.23	11.583	13.39	17.667	2.51	23.75	1.67
5.583	2.23	11.667	13.39	17.750	2.51	23.83	1.67
5.667	2.23	11.750	13.39	17.833	2.51	23.92	1.67
5.750	2.23	11.833	41.28	17.917	2.51	24.00	1.67
5.833	2.23	11.917	41.29	18.000	2.51	24.08	1.67
5.917	2.23	12.000	41.29	18.083	2.51	24.17	1.67
6.000	2.23	12.083	170.71	18.167	2.51	24.25	1.67
6.083	2.23	12.167	170.72	18.250	2.51		

Unit Hyd Qpeak (cms)= 0.176

PEAK FLOW (cms)= 0.226 (i)
TIME TO PEAK (hrs)= 13.750
RUNOFF VOLUME (mm)= 56.105
TOTAL RAINFALL (mm)= 139.480
RUNOFF COEFFICIENT = 0.402

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0033)	ID= 1 DT= 5.0 min	Area (ha)= 1.13	Ia (mm)= 7.88	U.H. Tp(hrs)= 0.43	Curve Number (CN)= 67.4 # of Linear Res.(N)= 3.00

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.23	12.250	170.72	18.33	2.51
0.167	0.00	6.250	2.23	12.333	20.10	18.42	2.51
0.250	0.00	6.333	2.51	12.417	20.09	18.50	2.51
0.333	1.53	6.417	2.51	12.500	20.09	18.58	2.51
0.417	1.53	6.500	2.51	12.583	20.09	18.67	2.51
0.500	1.53	6.583	2.51	12.667	20.09	18.75	2.51
0.583	1.53	6.667	2.51	12.750	20.09	18.83	2.51
0.667	1.53	6.750	2.51	12.833	10.32	18.92	2.51
0.750	1.53	6.833	2.51	12.917	10.32	19.00	2.51
0.833	1.53	6.917	2.51	13.000	10.32	19.08	2.51
0.917	1.53	7.000	2.51	13.083	10.32	19.17	2.51
1.000	1.53	7.083	2.51	13.167	10.32	19.25	2.51
1.083	1.53	7.167	2.51	13.250	10.32	19.33	2.51
1.167	1.53	7.250	2.51	13.333	7.53	19.42	2.51
1.250	1.53	7.333	3.07	13.417	7.53	19.50	2.51
1.333	1.53	7.417	3.07	13.500	7.53	19.58	2.51
1.417	1.53	7.500	3.07	13.583	7.53	19.67	2.51
1.500	1.53	7.583	3.07	13.667	7.53	19.75	2.51
1.583	1.53	7.667	3.07	13.750	7.53	19.83	2.51
1.667	1.53	7.750	3.07	13.833	5.86	19.92	2.51
1.750	1.53	7.833	3.07	13.917	5.86	20.00	2.51
1.833	1.53	7.917	3.07	14.000	5.86	20.08	2.51
1.917	1.53	8.000	3.07	14.083	5.86	20.17	2.51
2.000	1.53	8.083	3.07	14.167	5.86	20.25	2.51
2.083	1.53	8.167	3.07	14.250	5.86	20.33	1.67
2.167	1.53	8.250	3.07	14.333	4.18	20.42	1.67
2.250	1.53	8.333	3.63	14.417	4.18	20.50	1.67
2.333	1.81	8.417	3.63	14.500	4.18	20.58	1.67
2.417	1.81	8.500	3.63	14.583	4.18	20.67	1.67
2.500	1.81	8.583	3.63	14.667	4.18	20.75	1.67
2.583	1.81	8.667	3.63	14.750	4.18	20.83	1.67
2.667	1.81	8.750	3.63	14.833	4.18	20.92	1.67
2.750	1.81	8.833	3.91	14.917	4.18	21.00	1.67
2.833	1.81	8.917	3.91	15.000	4.18	21.08	1.67
2.917	1.81	9.000	3.91	15.083	4.18	21.17	1.67
3.000	1.81	9.083	3.91	15.167	4.18	21.25	1.67
3.083	1.81	9.167	3.91	15.250	4.18	21.33	1.67
3.167	1.81	9.250	3.91	15.333	4.18	21.42	1.67
3.250	1.81	9.333	4.46	15.417	4.18	21.50	1.67
3.333	1.81	9.417	4.46	15.500	4.18	21.58	1.67
3.417	1.81	9.500	4.46	15.583	4.18	21.67	1.67
3.500	1.81	9.583	4.46	15.667	4.18	21.75	1.67
3.583	1.81	9.667	4.46	15.750	4.18	21.83	1.67
3.667	1.81	9.750	4.46	15.833	4.18	21.92	1.67
3.750	1.81	9.833	5.02	15.917	4.18	22.00	1.67
3.833	1.81	9.917	5.02	16.000	4.18	22.08	1.67
3.917	1.81	10.000	5.02	16.083	4.18	22.17	1.67
4.000	1.81	10.083	5.02	16.167	4.18	22.25	1.67
4.083	1.81	10.167	5.02	16.250	4.18	22.33	1.67
4.167	1.81	10.250	5.02	16.333	2.51	22.42	1.67
4.250	1.81	10.333	6.42	16.417	2.51	22.50	1.67
4.333	2.23	10.417	6.42	16.500	2.51	22.58	1.67
4.417	2.23	10.500	6.42	16.583	2.51	22.67	1.67
4.500	2.23	10.583	6.42	16.667	2.51	22.75	1.67
4.583	2.23	10.667	6.42	16.750	2.51	22.83	1.67
4.667	2.23	10.750	6.42	16.833	2.51	22.92	1.67
4.750	2.23	10.833	8.65	16.917	2.51	23.00	1.67
4.833	2.23	10.917	8.65	17.000	2.51	23.08	1.67
4.917	2.23	11.000	8.65	17.083	2.51	23.17	1.67
5.000	2.23	11.083	8.65	17.167	2.51	23.25	1.67
5.083	2.23	11.167	8.65	17.250	2.51	23.33	1.67
5.167	2.23	11.250	8.65	17.333	2.51	23.42	1.67
5.250	2.23	11.333	13.39	17.417	2.51	23.50	1.67
5.333	2.23	11.417	13.39	17.500	2.51	23.58	1.67
5.417	2.23	11.500	13.39	17.583	2.51	23.67	1.67
5.500	2.23	11.583	13.39	17.667	2.51	23.75	1.67
5.583	2.23	11.667	13.39	17.750	2.51	23.83	1.67
5.667	2.23	11.750	13.39	17.833	2.51	23.92	1.67
5.750	2.23	11.833	41.28	17.917	2.51	24.00	1.67
5.833	2.23	11.917	41.29	18.000	2.51	24.08	1.67
5.917	2.23	12.000	41.29	18.083	2.51	24.17	1.67
6.000	2.23	12.083	170.71	18.167	2.51	24.25	1.67
6.083	2.23	12.167	170.72	18.250	2.51		

Unit Hyd Qpeak (cms)= 0.100

PEAK FLOW (cms)= 0.116 (i)
TIME TO PEAK (hrs)= 12.583
RUNOFF VOLUME (mm)= 67.994
TOTAL RAINFALL (mm)= 139.480
RUNOFF COEFFICIENT = 0.487

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0027)	Area (ha)=	1.38	Curve Number (CN)=	64.1	
ID= 1 DT= 5.0 min	Ia (mm)=	8.51	# of Linear Res.(N)=	3.00	

Post-Development VO Output (INT)

U.H. Tp(hrs)= 0.39

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.23	12.250	170.72	18.33	2.51
0.167	0.00	6.250	2.23	12.333	20.10	18.42	2.51
0.250	0.00	6.333	2.51	12.417	20.09	18.50	2.51
0.333	1.53	6.417	2.51	12.500	20.09	18.58	2.51
0.417	1.53	6.500	2.51	12.583	20.09	18.67	2.51
0.500	1.53	6.583	2.51	12.667	20.09	18.75	2.51
0.583	1.53	6.667	2.51	12.750	20.09	18.83	2.51
0.667	1.53	6.750	2.51	12.833	10.32	18.92	2.51
0.750	1.53	6.833	2.51	12.917	10.32	19.00	2.51
0.833	1.53	6.917	2.51	13.000	10.32	19.08	2.51
0.917	1.53	7.000	2.51	13.083	10.32	19.17	2.51
1.000	1.53	7.083	2.51	13.167	10.32	19.25	2.51
1.083	1.53	7.167	2.51	13.250	10.32	19.33	2.51
1.167	1.53	7.250	2.51	13.333	7.53	19.42	2.51
1.250	1.53	7.333	3.07	13.417	7.53	19.50	2.51
1.333	1.53	7.417	3.07	13.500	7.53	19.58	2.51
1.417	1.53	7.500	3.07	13.583	7.53	19.67	2.51
1.500	1.53	7.583	3.07	13.667	7.53	19.75	2.51
1.583	1.53	7.667	3.07	13.750	7.53	19.83	2.51
1.667	1.53	7.750	3.07	13.833	5.86	19.92	2.51
1.750	1.53	7.833	3.07	13.917	5.86	20.00	2.51
1.833	1.53	7.917	3.07	14.000	5.86	20.08	2.51
1.917	1.53	8.000	3.07	14.083	5.86	20.17	2.51
2.000	1.53	8.083	3.07	14.167	5.86	20.25	2.51
2.083	1.53	8.167	3.07	14.250	5.86	20.33	1.67
2.167	1.53	8.250	3.07	14.333	4.18	20.42	1.67
2.250	1.53	8.333	3.63	14.417	4.18	20.50	1.67
2.333	1.81	8.417	3.63	14.500	4.18	20.58	1.67
2.417	1.81	8.500	3.63	14.583	4.18	20.67	1.67
2.500	1.81	8.583	3.63	14.667	4.18	20.75	1.67
2.583	1.81	8.667	3.63	14.750	4.18	20.83	1.67
2.667	1.81	8.750	3.63	14.833	4.18	20.92	1.67
2.750	1.81	8.833	3.91	14.917	4.18	21.00	1.67
2.833	1.81	8.917	3.91	15.000	4.18	21.08	1.67
2.917	1.81	9.000	3.91	15.083	4.18	21.17	1.67
3.000	1.81	9.083	3.91	15.167	4.18	21.25	1.67
3.083	1.81	9.167	3.91	15.250	4.18	21.33	1.67
3.167	1.81	9.250	3.91	15.333	4.18	21.42	1.67
3.250	1.81	9.333	4.46	15.417	4.18	21.50	1.67
3.333	1.81	9.417	4.46	15.500	4.18	21.58	1.67
3.417	1.81	9.500	4.46	15.583	4.18	21.67	1.67
3.500	1.81	9.583	4.46	15.667	4.18	21.75	1.67
3.583	1.81	9.667	4.46	15.750	4.18	21.83	1.67
3.667	1.81	9.750	4.46	15.833	4.18	21.92	1.67
3.750	1.81	9.833	5.02	15.917	4.18	22.00	1.67
3.833	1.81	9.917	5.02	16.000	4.18	22.08	1.67
3.917	1.81	10.000	5.02	16.083	4.18	22.17	1.67
4.000	1.81	10.083	5.02	16.167	4.18	22.25	1.67
4.083	1.81	10.167	5.02	16.250	4.18	22.33	1.67
4.167	1.81	10.250	5.02	16.333	2.51	22.42	1.67
4.250	1.81	10.333	6.42	16.417	2.51	22.50	1.67
4.333	2.23	10.417	6.42	16.500	2.51	22.58	1.67
4.417	2.23	10.500	6.42	16.583	2.51	22.67	1.67
4.500	2.23	10.583	6.42	16.667	2.51	22.75	1.67
4.583	2.23	10.667	6.42	16.750	2.51	22.83	1.67
4.667	2.23	10.750	6.42	16.833	2.51	22.92	1.67
4.750	2.23	10.833	8.65	16.917	2.51	23.00	1.67
4.833	2.23	10.917	8.65	17.000	2.51	23.08	1.67
4.917	2.23	11.000	8.65	17.083	2.51	23.17	1.67
5.000	2.23	11.083	8.65	17.167	2.51	23.25	1.67
5.083	2.23	11.167	8.65	17.250	2.51	23.33	1.67
5.167	2.23	11.250	8.65	17.333	2.51	23.42	1.67
5.250	2.23	11.333	13.39	17.417	2.51	23.50	1.67
5.333	2.23	11.417	13.39	17.500	2.51	23.58	1.67
5.417	2.23	11.500	13.39	17.583	2.51	23.67	1.67
5.500	2.23	11.583	13.39	17.667	2.51	23.75	1.67
5.583	2.23	11.667	13.39	17.750	2.51	23.83	1.67
5.667	2.23	11.750	13.39	17.833	2.51	23.92	1.67
5.750	2.23	11.833	41.28	17.917	2.51	24.00	1.67
5.833	2.23	11.917	41.29	18.000	2.51	24.08	1.67
5.917	2.23	12.000	41.29	18.083	2.51	24.17	1.67
6.000	2.23	12.083	170.71	18.167	2.51	24.25	1.67
6.083	2.23	12.167	170.72	18.250	2.51		

Unit Hyd Qpeak (cms)= 0.135

PEAK FLOW (cms)= 0.140 (i)
TIME TO PEAK (hrs)= 12.500
RUNOFF VOLUME (mm)= 62.828
TOTAL RAINFALL (mm)= 139.480
RUNOFF COEFFICIENT = 0.450

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0041)	Area (ha)=	0.59	Curve Number (CN)=	71.5	

|ID= 1 DT= 5.0 min | Ia (mm)= 4.75 # of Linear Res.(N)= 3.00

U.H. Tp(hrs)= 0.53

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.23	12.250	170.72	18.33	2.51
0.167	0.00	6.250	2.23	12.333	20.10	18.42	2.51
0.250	0.00	6.333	2.51	12.417	20.09	18.50	2.51
0.333	1.53	6.417	2.51	12.500	20.09	18.58	2.51
0.417	1.53	6.500	2.51	12.583	20.09	18.67	2.51
0.500	1.53	6.583	2.51	12.667	20.09	18.75	2.51
0.583	1.53	6.667	2.51	12.750	20.09	18.83	2.51
0.667	1.53	6.750	2.51	12.833	10.32	18.92	2.51
0.750	1.53	6.833	2.51	12.917	10.32	19.00	2.51
0.833	1.53	6.917	2.51	13.000	10.32	19.08	2.51
0.917	1.53	7.000	2.51	13.083	10.32	19.17	2.51
1.000	1.53	7.083	2.51	13.167	10.32	19.25	2.51
1.083	1.53	7.167	2.51	13.250	10.32	19.33	2.51
1.167	1.53	7.250	2.51	13.333	7.53	19.42	2.51
1.250	1.53	7.333	3.07	13.417	7.53	19.50	2.51
1.333	1.53	7.417	3.07	13.500	7.53	19.58	2.51
1.417	1.53	7.500	3.07	13.583	7.53	19.67	2.51
1.500	1.53	7.583	3.07	13.667	7.53	19.75	2.51
1.583	1.53	7.667	3.07	13.750	7.53	19.83	2.51
1.667	1.53	7.750	3.07	13.833	5.86	19.92	2.51
1.750	1.53	7.833	3.07	13.917	5.86	20.00	2.51
1.833	1.53	7.917	3.07	14.000	5.86	20.08	2.51
1.917	1.53	8.000	3.07	14.083	5.86	20.17	2.51
2.000	1.53	8.083	3.07	14.167	5.86	20.25	2.51
2.083	1.53	8.167	3.07	14.250	5.86	20.33	1.67
2.167	1.53	8.250	3.07	14.333	4.18	20.42	1.67
2.250	1.53	8.333	3.63	14.417	4.18	20.50	1.67
2.333	1.81	8.417	3.63	14.500	4.18	20.58	1.67
2.417	1.81	8.500	3.63	14.583	4.18	20.67	1.67
2.500	1.81	8.583	3.63	14.667	4.18	20.75	1.67
2.583	1.81	8.667	3.63	14.750	4.18	20.83	1.67
2.667	1.81	8.750	3.63	14.833	4.18	20.92	1.67
2.750	1.81	8.833	3.91	14.917	4.18	21.00	1.67
2.833	1.81	8.917	3.91	15.000	4.18	21.08	1.67
2.917	1.81	9.000	3.91	15.083	4.18	21.17	1.67
3.000	1.81	9.083	3.91	15.167	4.18	21.25	1.67
3.083	1.81	9.167	3.91	15.250	4.18	21.33	1.67
3.167	1.81	9.250	3.91	15.333	4.18	21.42	1.67
3.250	1.81	9.333	4.46	15.417	4.18	21.50	1.67

3.333	1.81	9.417	4.46	15.500	4.18	21.58	1.67
3.417	1.81	9.500	4.46	15.583	4.18	21.67	1.67
3.500	1.81	9.583	4.46	15.667	4.18	21.75	1.67
3.583	1.81	9.667	4.46	15.750	4.18	21.83	1.67
3.667	1.81	9.750	4.46	15.833	4.18	21.92	1.67
3.750	1.81	9.833	5.02	15.917	4.18	22.00	1.67
3.833	1.81	9.917	5.02	16.000	4.18	22.08	1.67
3.917	1.81	10.000	5.02	16.083	4.18	22.17	1.67
4.000	1.81	10.083	5.02	16.167	4.18	22.25	1.67
4.083	1.81	10.167	5.02	16.250	4.18	22.33	1.67
4.167	1.81	10.250	5.02	16.333	2.51	22.42	1.67
4.250	1.81	10.333	6.42	16.417	2.51	22.50	1.67
4.333	2.23	10.417	6.42	16.500	2.51	22.58	1.67
4.417	2.23	10.500	6.42	16.583	2.51	22.67	1.67
4.500	2.23	10.583	6.42	16.667	2.51	22.75	1.67
4.583	2.23	10.667	6.42	16.750	2.51	22.83	1.67
4.667	2.23	10.750	6.42	16.833	2.51	22.92	1.67
4.750	2.23	10.833	8.65	16.917	2.51	23.00	1.67
4.833	2.23	10.917	8.65	17.000	2.51	23.08	1.67
4.917	2.23	11.000	8.65	17.083	2.51	23.17	1.67
5.000	2.23	11.083	8.65	17.167	2.51	23.25	1.67
5.083	2.23	11.167	8.65	17.250	2.51	23.33	1.67
5.167	2.23	11.250	8.65	17.333	2.51	23.42	1.67
5.250	2.23	11.333	13.39	17.417	2.51	23.50	1.67
5.333	2.23	11.417	13.39	17.500	2.51	23.58	1.67
5.417	2.23	11.500	13.39	17.583	2.51	23.67	1.67
5.500	2.23	11.583	13.39	17.667	2.51	23.75	1.67
5.583	2.23	11.667	13.39	17.750	2.51	23.83	1.67
5.667	2.23	11.750	13.39	17.833	2.51	23.92	1.67
5.750	2.23	11.833	41.28	17.917	2.51	24.00	1.67
5.833	2.23	11.917	41.29	18.000	2.51	24.08	1.67
5.917	2.23	12.000	41.29	18.083	2.51	24.17	1.67
6.000	2.23	12.083	170.71	18.167	2.51	24.25	1.67
6.083	2.23	12.167	170.72	18.250	2.51		

Unit Hyd Qpeak (cms)= 0.043

PEAK FLOW (cms)= 0.059 (i)
TIME TO PEAK (hrs)= 12.667
RUNOFF VOLUME (mm)= 76.854
TOTAL RAINFALL (mm)= 139.480
RUNOFF COEFFICIENT = 0.551

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB

| STANDHYD (0015)| Area (ha)= 1.93
|ID= 1 DT= 5.0 min | Total Imp(%)= 54.66 Dir. Conn.(%)= 10.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	1.05	0.88
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	113.43	45.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.23	12.250	170.72	18.33	2.51
0.167	0.00	6.250	2.23	12.333	20.10	18.42	2.51
0.250	0.00	6.333	2.51	12.417	20.09	18.50	2.51
0.333	1.53	6.417	2.51	12.500	20.09	18.58	2.51
0.417	1.53	6.500	2.51	12.583	20.09	18.67	2.51
0.500	1.53	6.583	2.51	12.667	20.09	18.75	2.51
0.583	1.53	6.667	2.51	12.750	20.09	18.83	2.51
0.667	1.53	6.750	2.51	12.833	10.32	18.92	2.51
0.750	1.53	6.833	2.51	12.917	10.32	19.00	2.51
0.833	1.53	6.917	2.51	13.000	10.32	19.08	2.51
0.917	1.53	7.000	2.51	13.083	10.32	19.17	2.51
1.000	1.53	7.083	2.51	13.167	10.32	19.25	2.51
1.083	1.53	7.167	2.51	13.250	10.32	19.33	2.51
1.167	1.53	7.250	2.51	13.333	7.53	19.42	2.51
1.250	1.53	7.333	3.07	13.417	7.53	19.50	2.51
1.333	1.53	7.417	3.07	13.500	7.53	19.58	2.51
1.417	1.53	7.500	3.07	13.583	7.53	19.67	2.51
1.500	1.53	7.583	3.07	13.667	7.53	19.75	2.51
1.583	1.53	7.667	3.07	13.750	7.53	19.83	2.51
1.667	1.53	7.750	3.07	13.833	5.86	19.92	2.51
1.750	1.53	7.833	3.07	13.917	5.86	20.00	2.51
1.833	1.53	7.917	3.07	14.000	5.86	20.08	2.51
1.917	1.53	8.000	3.07	14.083	5.86	20.17	2.51
2.000	1.53	8.083	3.07	14.167	5.86	20.25	2.51
2.083	1.53	8.167	3.07	14.250	5.86	20.33	1.67
2.167	1.53	8.250	3.07	14.333	4.18	20.42	1.67
2.250	1.53	8.333	3.63	14.417	4.18	20.50	1.67
2.333	1.81	8.417	3.63	14.500	4.18	20.58	1.67
2.417	1.81	8.500	3.63	14.583	4.18	20.67	1.67
2.500	1.81	8.583	3.63	14.667	4.18	20.75	1.67
2.583	1.81	8.667	3.63	14.750	4.18	20.83	1.67
2.667	1.81	8.750	3.63	14.833	4.18	20.92	1.67

2.750	1.81	8.833	3.91	14.917	4.18	21.00	1.67
2.833	1.81	8.917	3.91	15.000	4.18	21.08	1.67
2.917	1.81	9.000	3.91	15.083	4.18	21.17	1.67
3.000	1.81	9.083	3.91	15.167	4.18	21.25	1.67
3.083	1.81	9.167	3.91	15.250	4.18	21.33	1.67
3.167	1.81	9.250	3.91	15.333	4.18	21.42	1.67
3.250	1.81	9.333	4.46	15.417	4.18	21.50	1.67
3.333	1.81	9.417	4.46	15.500	4.18	21.58	1.67
3.417	1.81	9.500	4.46	15.583	4.18	21.67	1.67
3.500	1.81	9.583	4.46	15.667	4.18	21.75	1.67
3.583	1.81	9.667	4.46	15.750	4.18	21.83	1.67
3.667	1.81	9.750	4.46	15.833	4.18	21.92	1.67
3.750	1.81	9.833	5.02	15.917	4.18	22.00	1.67
3.833	1.81	9.917	5.02	16.000	4.18	22.08	1.67
3.917	1.81	10.000	5.02	16.083	4.18	22.17	1.67
4.000	1.81	10.083	5.02	16.167	4.18	22.25	1.67
4.083	1.81	10.167	5.02	16.250	4.18	22.33	1.67
4.167	1.81	10.250	5.02	16.333	2.51	22.42	1.67
4.250	1.81	10.333	6.42	16.417	2.51	22.50	1.67
4.333	2.23	10.417	6.42	16.500	2.51	22.58	1.67
4.417	2.23	10.500	6.42	16.583	2.51	22.67	1.67
4.500	2.23	10.583	6.42	16.667	2.51	22.75	1.67
4.583	2.23	10.667	6.42	16.750	2.51	22.83	1.67
4.667	2.23	10.750	6.42	16.833	2.51	22.92	1.67
4.750	2.23	10.833	8.65	16.917	2.51	23.00	1.67
4.833	2.23	10.917	8.65	17.000	2.51	23.08	1.67
4.917	2.23	11.000	8.65	17.083	2.51	23.17	1.67
5.000	2.23	11.083	8.65	17.167	2.51	23.25	1.67
5.083	2.23	11.167	8.65	17.250	2.51	23.33	1.67
5.167	2.23	11.250	8.65	17.333	2.51	23.42	1.67
5.250	2.23	11.333	13.39	17.417	2.51	23.50	1.67
5.333	2.23	11.417	13.39	17.500	2.51	23.58	1.67
5.417	2.23	11.500	13.39	17.583	2.51	23.67	1.67
5.500	2.23	11.583	13.39	17.667	2.51	23.75	1.67
5.583	2.23	11.667	13.39	17.750	2.51	23.83	1.67
5.667	2.23	11.750	13.39	17.833	2.51	23.92	1.67
5.750	2.23	11.833	41.28	17.917	2.51	24.00	1.67
5.833	2.23	11.917	41.29	18.000	2.51	24.08	1.67
5.917	2.23	12.000	41.29	18.083	2.51	24.17	1.67
6.000	2.23	12.083	170.71	18.167	2.51	24.25	1.67
6.083	2.23	12.167	170.72	18.250	2.51		

Max.Eff.Inten.(mm/hr)=	170.72	200.71	
over (min)	5.00	10.00	
Storage Coeff. (min)=	2.74 (ii)	8.47 (ii)	
Unit Hyd. Tpeak (min)=	5.00	10.00	
Unit Hyd. peak (cms)=	0.29	0.12	
			TOTALS

PEAK FLOW (cms)=	0.09	0.36	0.455 (iii)
TIME TO PEAK (hrs)=	12.25	12.25	12.25
RUNOFF VOLUME (mm)=	138.48	69.51	76.40
TOTAL RAINFALL (mm)=	139.48	139.48	139.48
RUNOFF COEFFICIENT =	0.99	0.50	0.55

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 49.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	
STANDHYD (0019)	Area (ha)= 2.16
ID= 1 DT= 5.0 min	Total Imp(%)= 54.64 Dir. Conn.(%)= 10.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	1.18	0.98
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	0.50	2.00
Length (m)=	120.00	30.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.23	12.250	170.72	18.33	2.51
0.167	0.00	6.250	2.23	12.333	20.10	18.42	2.51
0.250	0.00	6.333	2.51	12.417	20.09	18.50	2.51
0.333	1.53	6.417	2.51	12.500	20.09	18.58	2.51
0.417	1.53	6.500	2.51	12.583	20.09	18.67	2.51
0.500	1.53	6.583	2.51	12.667	20.09	18.75	2.51
0.583	1.53	6.667	2.51	12.750	20.09	18.83	2.51
0.667	1.53	6.750	2.51	12.833	10.32	18.92	2.51
0.750	1.53	6.833	2.51	12.917	10.32	19.00	2.51
0.833	1.53	6.917	2.51	13.000	10.32	19.08	2.51
0.917	1.53	7.000	2.51	13.083	10.32	19.17	2.51
1.000	1.53	7.083	2.51	13.167	10.32	19.25	2.51
1.083	1.53	7.167	2.51	13.250	10.32	19.33	2.51

1.167	1.53	7.250	2.51	13.333	7.53	19.42	2.51
1.250	1.53	7.333	3.07	13.417	7.53	19.50	2.51
1.333	1.53	7.417	3.07	13.500	7.53	19.58	2.51
1.417	1.53	7.500	3.07	13.583	7.53	19.67	2.51
1.500	1.53	7.583	3.07	13.667	7.53	19.75	2.51
1.583	1.53	7.667	3.07	13.750	7.53	19.83	2.51
1.667	1.53	7.750	3.07	13.833	5.86	19.92	2.51
1.750	1.53	7.833	3.07	13.917	5.86	20.00	2.51
1.833	1.53	7.917	3.07	14.000	5.86	20.08	2.51
1.917	1.53	8.000	3.07	14.083	5.86	20.17	2.51
2.000	1.53	8.083	3.07	14.167	5.86	20.25	2.51
2.083	1.53	8.167	3.07	14.250	5.86	20.33	1.67
2.167	1.53	8.250	3.07	14.333	4.18	20.42	1.67
2.250	1.53	8.333	3.63	14.417	4.18	20.50	1.67
2.333	1.81	8.417	3.63	14.500	4.18	20.58	1.67
2.417	1.81	8.500	3.63	14.583	4.18	20.67	1.67
2.500	1.81	8.583	3.63	14.667	4.18	20.75	1.67
2.583	1.81	8.667	3.63	14.750	4.18	20.83	1.67
2.667	1.81	8.750	3.63	14.833	4.18	20.92	1.67
2.750	1.81	8.833	3.91	14.917	4.18	21.00	1.67
2.833	1.81	8.917	3.91	15.000	4.18	21.08	1.67
2.917	1.81	9.000	3.91	15.083	4.18	21.17	1.67
3.000	1.81	9.083	3.91	15.167	4.18	21.25	1.67
3.083	1.81	9.167	3.91	15.250	4.18	21.33	1.67
3.167	1.81	9.250	3.91	15.333	4.18	21.42	1.67
3.250	1.81	9.333	4.46	15.417	4.18	21.50	1.67
3.333	1.81	9.417	4.46	15.500	4.18	21.58	1.67
3.417	1.81	9.500	4.46	15.583	4.18	21.67	1.67
3.500	1.81	9.583	4.46	15.667	4.18	21.75	1.67
3.583	1.81	9.667	4.46	15.750	4.18	21.83	1.67
3.667	1.81	9.750	4.46	15.833	4.18	21.92	1.67
3.750	1.81	9.833	5.02	15.917	4.18	22.00	1.67
3.833	1.81	9.917	5.02	16.000	4.18	22.08	1.67
3.917	1.81	10.000	5.02	16.083	4.18	22.17	1.67
4.000	1.81	10.083	5.02	16.167	4.18	22.25	1.67
4.083	1.81	10.167	5.02	16.250	4.18	22.33	1.67
4.167	1.81	10.250	5.02	16.333	2.51	22.42	1.67
4.250	1.81	10.333	6.42	16.417	2.51	22.50	1.67
4.333	2.23	10.417	6.42	16.500	2.51	22.58	1.67
4.417	2.23	10.500	6.42	16.583	2.51	22.67	1.67
4.500	2.23	10.583	6.42	16.667	2.51	22.75	1.67
4.583	2.23	10.667	6.42	16.750	2.51	22.83	1.67
4.667	2.23	10.750	6.42	16.833	2.51	22.92	1.67
4.750	2.23	10.833	8.65	16.917	2.51	23.00	1.67
4.833	2.23	10.917	8.65	17.000	2.51	23.08	1.67
4.917	2.23	11.000	8.65	17.083	2.51	23.17	1.67
5.000	2.23	11.083	8.65	17.167	2.51	23.25	1.67
5.083	2.23	11.167	8.65	17.250	2.51	23.33	1.67

5.167	2.23	11.250	8.65	17.333	2.51	23.42	1.67
5.250	2.23	11.333	13.39	17.417	2.51	23.50	1.67
5.333	2.23	11.417	13.39	17.500	2.51	23.58	1.67
5.417	2.23	11.500	13.39	17.583	2.51	23.67	1.67
5.500	2.23	11.583	13.39	17.667	2.51	23.75	1.67
5.583	2.23	11.667	13.39	17.750	2.51	23.83	1.67
5.667	2.23	11.750	13.39	17.833	2.51	23.92	1.67
5.750	2.23	11.833	41.28	17.917	2.51	24.00	1.67
5.833	2.23	11.917	41.29	18.000	2.51	24.08	1.67
5.917	2.23	12.000	41.29	18.083	2.51	24.17	1.67
6.000	2.23	12.083	170.71	18.167	2.51	24.25	1.67
6.083	2.23	12.167	170.72	18.250	2.51		

Max.Eff.Inten.(mm/hr)=	170.72	274.89	
over (min)	5.00	10.00	
Storage Coeff. (min)=	2.83 (ii)	6.80 (ii)	
Unit Hyd. Tpeak (min)=	5.00	10.00	
Unit Hyd. peak (cms)=	0.28	0.14	
			TOTALS
PEAK FLOW (cms)=	0.10	0.62	0.721 (iii)
TIME TO PEAK (hrs)=	12.25	12.25	12.25
RUNOFF VOLUME (mm)=	138.48	96.45	100.66
TOTAL RAINFALL (mm)=	139.48	139.48	139.48
RUNOFF COEFFICIENT =	0.99	0.69	0.72

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0040)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0015):	1.93	0.455	12.25	76.40
+ ID2= 2 (0019):	2.16	0.721	12.25	100.66
ID = 3 (0040):	4.09	1.177	12.25	89.21

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0040)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0040):	4.09	1.177	12.25	89.21
+ ID2= 2 (0027):	1.38	0.140	12.50	62.83
ID = 1 (0040):	5.47	1.263	12.25	82.55

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0040)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0040):	5.47	1.263	12.25	82.55
+ ID2= 2 (0041):	0.59	0.059	12.67	76.85
ID = 3 (0040):	6.06	1.292	12.25	82.00

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB	
NASHYD (0048)	Area (ha)= 29.16 Curve Number (CN)= 71.4
ID= 1 DT= 5.0 min	Ia (mm)= 7.88 # of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.68

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.23	12.250	170.72	18.33	2.51
0.167	0.00	6.250	2.23	12.333	20.10	18.42	2.51
0.250	0.00	6.333	2.51	12.417	20.09	18.50	2.51
0.333	1.53	6.417	2.51	12.500	20.09	18.58	2.51
0.417	1.53	6.500	2.51	12.583	20.09	18.67	2.51
0.500	1.53	6.583	2.51	12.667	20.09	18.75	2.51
0.583	1.53	6.667	2.51	12.750	20.09	18.83	2.51
0.667	1.53	6.750	2.51	12.833	10.32	18.92	2.51
0.750	1.53	6.833	2.51	12.917	10.32	19.00	2.51
0.833	1.53	6.917	2.51	13.000	10.32	19.08	2.51
0.917	1.53	7.000	2.51	13.083	10.32	19.17	2.51
1.000	1.53	7.083	2.51	13.167	10.32	19.25	2.51

1.083	1.53	7.167	2.51	13.250	10.32	19.33	2.51
1.167	1.53	7.250	2.51	13.333	7.53	19.42	2.51
1.250	1.53	7.333	3.07	13.417	7.53	19.50	2.51
1.333	1.53	7.417	3.07	13.500	7.53	19.58	2.51
1.417	1.53	7.500	3.07	13.583	7.53	19.67	2.51
1.500	1.53	7.583	3.07	13.667	7.53	19.75	2.51
1.583	1.53	7.667	3.07	13.750	7.53	19.83	2.51
1.667	1.53	7.750	3.07	13.833	5.86	19.92	2.51
1.750	1.53	7.833	3.07	13.917	5.86	20.00	2.51
1.833	1.53	7.917	3.07	14.000	5.86	20.08	2.51
1.917	1.53	8.000	3.07	14.083	5.86	20.17	2.51
2.000	1.53	8.083	3.07	14.167	5.86	20.25	2.51
2.083	1.53	8.167	3.07	14.250	5.86	20.33	1.67
2.167	1.53	8.250	3.07	14.333	4.18	20.42	1.67
2.250	1.53	8.333	3.63	14.417	4.18	20.50	1.67
2.333	1.81	8.417	3.63	14.500	4.18	20.58	1.67
2.417	1.81	8.500	3.63	14.583	4.18	20.67	1.67
2.500	1.81	8.583	3.63	14.667	4.18	20.75	1.67
2.583	1.81	8.667	3.63	14.750	4.18	20.83	1.67
2.667	1.81	8.750	3.63	14.833	4.18	20.92	1.67
2.750	1.81	8.833	3.91	14.917	4.18	21.00	1.67
2.833	1.81	8.917	3.91	15.000	4.18	21.08	1.67
2.917	1.81	9.000	3.91	15.083	4.18	21.17	1.67
3.000	1.81	9.083	3.91	15.167	4.18	21.25	1.67
3.083	1.81	9.167	3.91	15.250	4.18	21.33	1.67
3.167	1.81	9.250	3.91	15.333	4.18	21.42	1.67
3.250	1.81	9.333	4.46	15.417	4.18	21.50	1.67
3.333	1.81	9.417	4.46	15.500	4.18	21.58	1.67
3.417	1.81	9.500	4.46	15.583	4.18	21.67	1.67
3.500	1.81	9.583	4.46	15.667	4.18	21.75	1.67
3.583	1.81	9.667	4.46	15.750	4.18	21.83	1.67
3.667	1.81	9.750	4.46	15.833	4.18	21.92	1.67
3.750	1.81	9.833	5.02	15.917	4.18	22.00	1.67
3.833	1.81	9.917	5.02	16.000	4.18	22.08	1.67
3.917	1.81	10.000	5.02	16.083	4.18	22.17	1.67
4.000	1.81	10.083	5.02	16.167	4.18	22.25	1.67
4.083	1.81	10.167	5.02	16.250	4.18	22.33	1.67
4.167	1.81	10.250	5.02	16.333	2.51	22.42	1.67
4.250	1.81	10.333	6.42	16.417	2.51	22.50	1.67
4.333	2.23	10.417	6.42	16.500	2.51	22.58	1.67
4.417	2.23	10.500	6.42	16.583	2.51	22.67	1.67
4.500	2.23	10.583	6.42	16.667	2.51	22.75	1.67
4.583	2.23	10.667	6.42	16.750	2.51	22.83	1.67
4.667	2.23	10.750	6.42	16.833	2.51	22.92	1.67
4.750	2.23	10.833	8.65	16.917	2.51	23.00	1.67
4.833	2.23	10.917	8.65	17.000	2.51	23.08	1.67
4.917	2.23	11.000	8.65	17.083	2.51	23.17	1.67
5.000	2.23	11.083	8.65	17.167	2.51	23.25	1.67

5.083	2.23	11.167	8.65	17.250	2.51	23.33	1.67
5.167	2.23	11.250	8.65	17.333	2.51	23.42	1.67
5.250	2.23	11.333	13.39	17.417	2.51	23.50	1.67
5.333	2.23	11.417	13.39	17.500	2.51	23.58	1.67
5.417	2.23	11.500	13.39	17.583	2.51	23.67	1.67
5.500	2.23	11.583	13.39	17.667	2.51	23.75	1.67
5.583	2.23	11.667	13.39	17.750	2.51	23.83	1.67
5.667	2.23	11.750	13.39	17.833	2.51	23.92	1.67
5.750	2.23	11.833	41.28	17.917	2.51	24.00	1.67
5.833	2.23	11.917	41.29	18.000	2.51	24.08	1.67
5.917	2.23	12.000	41.29	18.083	2.51	24.17	1.67
6.000	2.23	12.083	170.71	18.167	2.51	24.25	1.67
6.083	2.23	12.167	170.72	18.250	2.51		

Unit Hyd Qpeak (cms)= 1.638

PEAK FLOW (cms)= 2.359 (i)
TIME TO PEAK (hrs)= 12.833
RUNOFF VOLUME (mm)= 74.218
TOTAL RAINFALL (mm)= 139.480
RUNOFF COEFFICIENT = 0.532

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (0014) | Area (ha)= 1.87
ID= 1 DT= 5.0 min | Total Imp(%)= 43.28 Dir. Conn.(%)= 10.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	0.81	1.06
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	0.50	2.00
Length (m)=	111.65	25.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.23	12.250	170.72	18.33	2.51
0.167	0.00	6.250	2.23	12.333	20.10	18.42	2.51
0.250	0.00	6.333	2.51	12.417	20.09	18.50	2.51
0.333	1.53	6.417	2.51	12.500	20.09	18.58	2.51
0.417	1.53	6.500	2.51	12.583	20.09	18.67	2.51

0.500	1.53	6.583	2.51	12.667	20.09	18.75	2.51
0.583	1.53	6.667	2.51	12.750	20.09	18.83	2.51
0.667	1.53	6.750	2.51	12.833	10.32	18.92	2.51
0.750	1.53	6.833	2.51	12.917	10.32	19.00	2.51
0.833	1.53	6.917	2.51	13.000	10.32	19.08	2.51
0.917	1.53	7.000	2.51	13.083	10.32	19.17	2.51
1.000	1.53	7.083	2.51	13.167	10.32	19.25	2.51
1.083	1.53	7.167	2.51	13.250	10.32	19.33	2.51
1.167	1.53	7.250	2.51	13.333	7.53	19.42	2.51
1.250	1.53	7.333	3.07	13.417	7.53	19.50	2.51
1.333	1.53	7.417	3.07	13.500	7.53	19.58	2.51
1.417	1.53	7.500	3.07	13.583	7.53	19.67	2.51
1.500	1.53	7.583	3.07	13.667	7.53	19.75	2.51
1.583	1.53	7.667	3.07	13.750	7.53	19.83	2.51
1.667	1.53	7.750	3.07	13.833	5.86	19.92	2.51
1.750	1.53	7.833	3.07	13.917	5.86	20.00	2.51
1.833	1.53	7.917	3.07	14.000	5.86	20.08	2.51
1.917	1.53	8.000	3.07	14.083	5.86	20.17	2.51
2.000	1.53	8.083	3.07	14.167	5.86	20.25	2.51
2.083	1.53	8.167	3.07	14.250	5.86	20.33	1.67
2.167	1.53	8.250	3.07	14.333	4.18	20.42	1.67
2.250	1.53	8.333	3.63	14.417	4.18	20.50	1.67
2.333	1.81	8.417	3.63	14.500	4.18	20.58	1.67
2.417	1.81	8.500	3.63	14.583	4.18	20.67	1.67
2.500	1.81	8.583	3.63	14.667	4.18	20.75	1.67
2.583	1.81	8.667	3.63	14.750	4.18	20.83	1.67
2.667	1.81	8.750	3.63	14.833	4.18	20.92	1.67
2.750	1.81	8.833	3.91	14.917	4.18	21.00	1.67
2.833	1.81	8.917	3.91	15.000	4.18	21.08	1.67
2.917	1.81	9.000	3.91	15.083	4.18	21.17	1.67
3.000	1.81	9.083	3.91	15.167	4.18	21.25	1.67
3.083	1.81	9.167	3.91	15.250	4.18	21.33	1.67
3.167	1.81	9.250	3.91	15.333	4.18	21.42	1.67
3.250	1.81	9.333	4.46	15.417	4.18	21.50	1.67
3.333	1.81	9.417	4.46	15.500	4.18	21.58	1.67
3.417	1.81	9.500	4.46	15.583	4.18	21.67	1.67
3.500	1.81	9.583	4.46	15.667	4.18	21.75	1.67
3.583	1.81	9.667	4.46	15.750	4.18	21.83	1.67
3.667	1.81	9.750	4.46	15.833	4.18	21.92	1.67
3.750	1.81	9.833	5.02	15.917	4.18	22.00	1.67
3.833	1.81	9.917	5.02	16.000	4.18	22.08	1.67
3.917	1.81	10.000	5.02	16.083	4.18	22.17	1.67
4.000	1.81	10.083	5.02	16.167	4.18	22.25	1.67
4.083	1.81	10.167	5.02	16.250	4.18	22.33	1.67
4.167	1.81	10.250	5.02	16.333	2.51	22.42	1.67
4.250	1.81	10.333	6.42	16.417	2.51	22.50	1.67
4.333	2.23	10.417	6.42	16.500	2.51	22.58	1.67
4.417	2.23	10.500	6.42	16.583	2.51	22.67	1.67

4.500	2.23	10.583	6.42	16.667	2.51	22.75	1.67
4.583	2.23	10.667	6.42	16.750	2.51	22.83	1.67
4.667	2.23	10.750	6.42	16.833	2.51	22.92	1.67
4.750	2.23	10.833	8.65	16.917	2.51	23.00	1.67
4.833	2.23	10.917	8.65	17.000	2.51	23.08	1.67
4.917	2.23	11.000	8.65	17.083	2.51	23.17	1.67
5.000	2.23	11.083	8.65	17.167	2.51	23.25	1.67
5.083	2.23	11.167	8.65	17.250	2.51	23.33	1.67
5.167	2.23	11.250	8.65	17.333	2.51	23.42	1.67
5.250	2.23	11.333	13.39	17.417	2.51	23.50	1.67
5.333	2.23	11.417	13.39	17.500	2.51	23.58	1.67
5.417	2.23	11.500	13.39	17.583	2.51	23.67	1.67
5.500	2.23	11.583	13.39	17.667	2.51	23.75	1.67
5.583	2.23	11.667	13.39	17.750	2.51	23.83	1.67
5.667	2.23	11.750	13.39	17.833	2.51	23.92	1.67
5.750	2.23	11.833	41.28	17.917	2.51	24.00	1.67
5.833	2.23	11.917	41.29	18.000	2.51	24.08	1.67
5.917	2.23	12.000	41.29	18.083	2.51	24.17	1.67
6.000	2.23	12.083	170.71	18.167	2.51	24.25	1.67
6.083	2.23	12.167	170.72	18.250	2.51		

Max.Eff.Inten.(mm/hr)=	170.72	232.10	
over (min)	5.00	10.00	
Storage Coeff. (min)=	2.71 (ii)	6.51 (ii)	
Unit Hyd. Tpeak (min)=	5.00	10.00	
Unit Hyd. peak (cms)=	0.29	0.14	
			TOTALS
PEAK FLOW (cms)=	0.09	0.58	0.665 (iii)
TIME TO PEAK (hrs)=	12.25	12.25	12.25
RUNOFF VOLUME (mm)=	138.48	102.38	105.99
TOTAL RAINFALL (mm)=	139.48	139.48	139.48
RUNOFF COEFFICIENT =	0.99	0.73	0.76

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 78.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (0021) | Area (ha)= 0.07
ID= 1 DT= 5.0 min | Total Imp(%)= 48.26 Dir. Conn.(%)= 39.54

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.03	0.04
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	21.60	5.60
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.23	12.250	170.72	18.33	2.51
0.167	0.00	6.250	2.23	12.333	20.10	18.42	2.51
0.250	0.00	6.333	2.51	12.417	20.09	18.50	2.51
0.333	1.53	6.417	2.51	12.500	20.09	18.58	2.51
0.417	1.53	6.500	2.51	12.583	20.09	18.67	2.51
0.500	1.53	6.583	2.51	12.667	20.09	18.75	2.51
0.583	1.53	6.667	2.51	12.750	20.09	18.83	2.51
0.667	1.53	6.750	2.51	12.833	10.32	18.92	2.51
0.750	1.53	6.833	2.51	12.917	10.32	19.00	2.51
0.833	1.53	6.917	2.51	13.000	10.32	19.08	2.51
0.917	1.53	7.000	2.51	13.083	10.32	19.17	2.51
1.000	1.53	7.083	2.51	13.167	10.32	19.25	2.51
1.083	1.53	7.167	2.51	13.250	10.32	19.33	2.51
1.167	1.53	7.250	2.51	13.333	7.53	19.42	2.51
1.250	1.53	7.333	3.07	13.417	7.53	19.50	2.51
1.333	1.53	7.417	3.07	13.500	7.53	19.58	2.51
1.417	1.53	7.500	3.07	13.583	7.53	19.67	2.51
1.500	1.53	7.583	3.07	13.667	7.53	19.75	2.51
1.583	1.53	7.667	3.07	13.750	7.53	19.83	2.51
1.667	1.53	7.750	3.07	13.833	5.86	19.92	2.51
1.750	1.53	7.833	3.07	13.917	5.86	20.00	2.51
1.833	1.53	7.917	3.07	14.000	5.86	20.08	2.51
1.917	1.53	8.000	3.07	14.083	5.86	20.17	2.51
2.000	1.53	8.083	3.07	14.167	5.86	20.25	2.51
2.083	1.53	8.167	3.07	14.250	5.86	20.33	1.67
2.167	1.53	8.250	3.07	14.333	4.18	20.42	1.67
2.250	1.53	8.333	3.63	14.417	4.18	20.50	1.67
2.333	1.81	8.417	3.63	14.500	4.18	20.58	1.67
2.417	1.81	8.500	3.63	14.583	4.18	20.67	1.67
2.500	1.81	8.583	3.63	14.667	4.18	20.75	1.67
2.583	1.81	8.667	3.63	14.750	4.18	20.83	1.67
2.667	1.81	8.750	3.63	14.833	4.18	20.92	1.67
2.750	1.81	8.833	3.91	14.917	4.18	21.00	1.67
2.833	1.81	8.917	3.91	15.000	4.18	21.08	1.67

2.917	1.81	9.000	3.91	15.083	4.18	21.17	1.67
3.000	1.81	9.083	3.91	15.167	4.18	21.25	1.67
3.083	1.81	9.167	3.91	15.250	4.18	21.33	1.67
3.167	1.81	9.250	3.91	15.333	4.18	21.42	1.67
3.250	1.81	9.333	4.46	15.417	4.18	21.50	1.67
3.333	1.81	9.417	4.46	15.500	4.18	21.58	1.67
3.417	1.81	9.500	4.46	15.583	4.18	21.67	1.67
3.500	1.81	9.583	4.46	15.667	4.18	21.75	1.67
3.583	1.81	9.667	4.46	15.750	4.18	21.83	1.67
3.667	1.81	9.750	4.46	15.833	4.18	21.92	1.67
3.750	1.81	9.833	5.02	15.917	4.18	22.00	1.67
3.833	1.81	9.917	5.02	16.000	4.18	22.08	1.67
3.917	1.81	10.000	5.02	16.083	4.18	22.17	1.67
4.000	1.81	10.083	5.02	16.167	4.18	22.25	1.67
4.083	1.81	10.167	5.02	16.250	4.18	22.33	1.67
4.167	1.81	10.250	5.02	16.333	2.51	22.42	1.67
4.250	1.81	10.333	6.42	16.417	2.51	22.50	1.67
4.333	2.23	10.417	6.42	16.500	2.51	22.58	1.67
4.417	2.23	10.500	6.42	16.583	2.51	22.67	1.67
4.500	2.23	10.583	6.42	16.667	2.51	22.75	1.67
4.583	2.23	10.667	6.42	16.750	2.51	22.83	1.67
4.667	2.23	10.750	6.42	16.833	2.51	22.92	1.67
4.750	2.23	10.833	8.65	16.917	2.51	23.00	1.67
4.833	2.23	10.917	8.65	17.000	2.51	23.08	1.67
4.917	2.23	11.000	8.65	17.083	2.51	23.17	1.67
5.000	2.23	11.083	8.65	17.167	2.51	23.25	1.67
5.083	2.23	11.167	8.65	17.250	2.51	23.33	1.67
5.167	2.23	11.250	8.65	17.333	2.51	23.42	1.67
5.250	2.23	11.333	13.39	17.417	2.51	23.50	1.67
5.333	2.23	11.417	13.39	17.500	2.51	23.58	1.67
5.417	2.23	11.500	13.39	17.583	2.51	23.67	1.67
5.500	2.23	11.583	13.39	17.667	2.51	23.75	1.67
5.583	2.23	11.667	13.39	17.750	2.51	23.83	1.67
5.667	2.23	11.750	13.39	17.833	2.51	23.92	1.67
5.750	2.23	11.833	41.28	17.917	2.51	24.00	1.67
5.833	2.23	11.917	41.29	18.000	2.51	24.08	1.67
5.917	2.23	12.000	41.29	18.083	2.51	24.17	1.67
6.000	2.23	12.083	170.71	18.167	2.51	24.25	1.67
6.083	2.23	12.167	170.72	18.250	2.51		

Max.Eff.Inten.	(mm/hr)=	170.72	93.14	
	over (min)		5.00	5.00
Storage Coeff.	(min)=	1.01 (ii)	2.96 (ii)	
Unit Hyd. Tpeak	(min)=	5.00	5.00	
Unit Hyd. peak	(cms)=	0.34	0.28	
				TOTALS
PEAK FLOW	(cms)=	0.01	0.01	0.023 (iii)
TIME TO PEAK	(hrs)=	12.25	12.25	12.25

RUNOFF VOLUME	(mm)=	138.48	54.68	87.80
TOTAL RAINFALL	(mm)=	139.48	139.48	139.48
RUNOFF COEFFICIENT	=	0.99	0.39	0.63

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 52.2 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0016)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0001):		39.68	1.624	13.42	58.21
+ ID2= 2 (0014):		1.87	0.665	12.25	105.99
ID = 3 (0016):		41.55	1.664	13.42	60.36

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0016):		41.55	1.664	13.42	60.36
+ ID2= 2 (0002):		23.99	0.705	13.25	37.33
ID = 1 (0016):		65.54	2.362	13.33	51.93

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0016):		65.54	2.362	13.33	51.93
+ ID2= 2 (0021):		0.07	0.023	12.25	87.80
ID = 3 (0016):		65.61	2.363	13.33	51.97

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0016):		65.61	2.363	13.33	51.97
+ ID2= 2 (0025):		100.92	2.776	14.08	52.21
ID = 1 (0016):		166.53	4.929	13.67	52.12

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0016):		166.53	4.929	13.67	52.12
+ ID2= 2 (0028):		6.37	0.247	13.00	41.09
ID = 3 (0016):		172.90	5.110	13.67	51.71

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0016):		172.90	5.110	13.67	51.71
+ ID2= 2 (0029):		14.85	0.573	13.08	45.25
ID = 1 (0016):		187.75	5.612	13.58	51.20

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0016):		187.75	5.612	13.58	51.20
+ ID2= 2 (0030):		1.70	0.151	12.50	56.95
ID = 3 (0016):		189.45	5.650	13.50	51.25

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
	ID1= 3 (0016):	189.45	5.650	13.50	51.25
	+ ID2= 2 (0031):	1.80	0.069	13.00	40.39
	ID = 1 (0016):	191.25	5.706	13.50	51.15

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
	ID1= 1 (0016):	191.25	5.706	13.50	51.15
	+ ID2= 2 (0032):	6.70	0.226	13.75	56.10
	ID = 3 (0016):	197.95	5.926	13.50	51.32

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
	ID1= 3 (0016):	197.95	5.926	13.50	51.32
	+ ID2= 2 (0033):	1.13	0.116	12.58	67.99
	ID = 1 (0016):	199.08	5.963	13.50	51.41

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
	ID1= 1 (0016):	199.08	5.963	13.50	51.41
	+ ID2= 2 (0040):	6.06	1.292	12.25	82.00
	ID = 3 (0016):	205.14	6.101	13.50	52.31

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
	ID1= 3 (0016):	205.14	6.101	13.50	52.31
	+ ID2= 2 (0048):	29.16	2.359	12.83	74.22
	ID = 1 (0016):	234.30	7.970	13.17	55.04

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB			
STANDHYD (0009)	Area (ha)=	31.06	
ID= 1 DT= 5.0 min	Total Imp(%)=	53.89	Dir. Conn.(%)= 20.76

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	16.74	14.32
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	455.05	30.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.23	12.250	170.72	18.33	2.51
0.167	0.00	6.250	2.23	12.333	20.10	18.42	2.51
0.250	0.00	6.333	2.51	12.417	20.09	18.50	2.51
0.333	1.53	6.417	2.51	12.500	20.09	18.58	2.51
0.417	1.53	6.500	2.51	12.583	20.09	18.67	2.51
0.500	1.53	6.583	2.51	12.667	20.09	18.75	2.51
0.583	1.53	6.667	2.51	12.750	20.09	18.83	2.51
0.667	1.53	6.750	2.51	12.833	10.32	18.92	2.51
0.750	1.53	6.833	2.51	12.917	10.32	19.00	2.51
0.833	1.53	6.917	2.51	13.000	10.32	19.08	2.51
0.917	1.53	7.000	2.51	13.083	10.32	19.17	2.51
1.000	1.53	7.083	2.51	13.167	10.32	19.25	2.51
1.083	1.53	7.167	2.51	13.250	10.32	19.33	2.51
1.167	1.53	7.250	2.51	13.333	7.53	19.42	2.51
1.250	1.53	7.333	3.07	13.417	7.53	19.50	2.51
1.333	1.53	7.417	3.07	13.500	7.53	19.58	2.51
1.417	1.53	7.500	3.07	13.583	7.53	19.67	2.51

1.500	1.53	7.583	3.07	13.667	7.53	19.75	2.51
1.583	1.53	7.667	3.07	13.750	7.53	19.83	2.51
1.667	1.53	7.750	3.07	13.833	5.86	19.92	2.51
1.750	1.53	7.833	3.07	13.917	5.86	20.00	2.51
1.833	1.53	7.917	3.07	14.000	5.86	20.08	2.51
1.917	1.53	8.000	3.07	14.083	5.86	20.17	2.51
2.000	1.53	8.083	3.07	14.167	5.86	20.25	2.51
2.083	1.53	8.167	3.07	14.250	5.86	20.33	1.67
2.167	1.53	8.250	3.07	14.333	4.18	20.42	1.67
2.250	1.53	8.333	3.63	14.417	4.18	20.50	1.67
2.333	1.81	8.417	3.63	14.500	4.18	20.58	1.67
2.417	1.81	8.500	3.63	14.583	4.18	20.67	1.67
2.500	1.81	8.583	3.63	14.667	4.18	20.75	1.67
2.583	1.81	8.667	3.63	14.750	4.18	20.83	1.67
2.667	1.81	8.750	3.63	14.833	4.18	20.92	1.67
2.750	1.81	8.833	3.91	14.917	4.18	21.00	1.67
2.833	1.81	8.917	3.91	15.000	4.18	21.08	1.67
2.917	1.81	9.000	3.91	15.083	4.18	21.17	1.67
3.000	1.81	9.083	3.91	15.167	4.18	21.25	1.67
3.083	1.81	9.167	3.91	15.250	4.18	21.33	1.67
3.167	1.81	9.250	3.91	15.333	4.18	21.42	1.67
3.250	1.81	9.333	4.46	15.417	4.18	21.50	1.67
3.333	1.81	9.417	4.46	15.500	4.18	21.58	1.67
3.417	1.81	9.500	4.46	15.583	4.18	21.67	1.67
3.500	1.81	9.583	4.46	15.667	4.18	21.75	1.67
3.583	1.81	9.667	4.46	15.750	4.18	21.83	1.67
3.667	1.81	9.750	4.46	15.833	4.18	21.92	1.67
3.750	1.81	9.833	5.02	15.917	4.18	22.00	1.67
3.833	1.81	9.917	5.02	16.000	4.18	22.08	1.67
3.917	1.81	10.000	5.02	16.083	4.18	22.17	1.67
4.000	1.81	10.083	5.02	16.167	4.18	22.25	1.67
4.083	1.81	10.167	5.02	16.250	4.18	22.33	1.67
4.167	1.81	10.250	5.02	16.333	2.51	22.42	1.67
4.250	1.81	10.333	6.42	16.417	2.51	22.50	1.67
4.333	2.23	10.417	6.42	16.500	2.51	22.58	1.67
4.417	2.23	10.500	6.42	16.583	2.51	22.67	1.67
4.500	2.23	10.583	6.42	16.667	2.51	22.75	1.67
4.583	2.23	10.667	6.42	16.750	2.51	22.83	1.67
4.667	2.23	10.750	6.42	16.833	2.51	22.92	1.67
4.750	2.23	10.833	8.65	16.917	2.51	23.00	1.67
4.833	2.23	10.917	8.65	17.000	2.51	23.08	1.67
4.917	2.23	11.000	8.65	17.083	2.51	23.17	1.67
5.000	2.23	11.083	8.65	17.167	2.51	23.25	1.67
5.083	2.23	11.167	8.65	17.250	2.51	23.33	1.67
5.167	2.23	11.250	8.65	17.333	2.51	23.42	1.67
5.250	2.23	11.333	13.39	17.417	2.51	23.50	1.67
5.333	2.23	11.417	13.39	17.500	2.51	23.58	1.67
5.417	2.23	11.500	13.39	17.583	2.51	23.67	1.67

5.500	2.23	11.583	13.39	17.667	2.51	23.75	1.67
5.583	2.23	11.667	13.39	17.750	2.51	23.83	1.67
5.667	2.23	11.750	13.39	17.833	2.51	23.92	1.67
5.750	2.23	11.833	41.28	17.917	2.51	24.00	1.67
5.833	2.23	11.917	41.29	18.000	2.51	24.08	1.67
5.917	2.23	12.000	41.29	18.083	2.51	24.17	1.67
6.000	2.23	12.083	170.71	18.167	2.51	24.25	1.67
6.083	2.23	12.167	170.72	18.250	2.51		

Max.Eff.Inten.(mm/hr)=		170.72	226.80	
over (min)		5.00	15.00	
Storage Coeff. (min)=		6.30 (ii)	10.58 (ii)	
Unit Hyd. Tpeak (min)=		5.00	15.00	
Unit Hyd. peak (cms)=		0.19	0.09	
				TOTALS
PEAK FLOW	(cms)=	2.84	5.97	8.139 (iii)
TIME TO PEAK	(hrs)=	12.25	12.33	12.25
RUNOFF VOLUME	(mm)=	138.48	91.22	101.03
TOTAL RAINFALL	(mm)=	139.48	139.48	139.48
RUNOFF COEFFICIENT	=	0.99	0.65	0.72

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 68.5 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
STANDHYD (0010)	Area (ha)=	1.32	
ID= 1 DT= 5.0 min	Total Imp(%)=	55.27	Dir. Conn.(%)= 1.52

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.73	0.59
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	93.81	23.50
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.23	12.250	170.72	18.33	2.51

0.167	0.00	6.250	2.23	12.333	20.10	18.42	2.51
0.250	0.00	6.333	2.51	12.417	20.09	18.50	2.51
0.333	1.53	6.417	2.51	12.500	20.09	18.58	2.51
0.417	1.53	6.500	2.51	12.583	20.09	18.67	2.51
0.500	1.53	6.583	2.51	12.667	20.09	18.75	2.51
0.583	1.53	6.667	2.51	12.750	20.09	18.83	2.51
0.667	1.53	6.750	2.51	12.833	10.32	18.92	2.51
0.750	1.53	6.833	2.51	12.917	10.32	19.00	2.51
0.833	1.53	6.917	2.51	13.000	10.32	19.08	2.51
0.917	1.53	7.000	2.51	13.083	10.32	19.17	2.51
1.000	1.53	7.083	2.51	13.167	10.32	19.25	2.51
1.083	1.53	7.167	2.51	13.250	10.32	19.33	2.51
1.167	1.53	7.250	2.51	13.333	7.53	19.42	2.51
1.250	1.53	7.333	3.07	13.417	7.53	19.50	2.51
1.333	1.53	7.417	3.07	13.500	7.53	19.58	2.51
1.417	1.53	7.500	3.07	13.583	7.53	19.67	2.51
1.500	1.53	7.583	3.07	13.667	7.53	19.75	2.51
1.583	1.53	7.667	3.07	13.750	7.53	19.83	2.51
1.667	1.53	7.750	3.07	13.833	5.86	19.92	2.51
1.750	1.53	7.833	3.07	13.917	5.86	20.00	2.51
1.833	1.53	7.917	3.07	14.000	5.86	20.08	2.51
1.917	1.53	8.000	3.07	14.083	5.86	20.17	2.51
2.000	1.53	8.083	3.07	14.167	5.86	20.25	2.51
2.083	1.53	8.167	3.07	14.250	5.86	20.33	1.67
2.167	1.53	8.250	3.07	14.333	4.18	20.42	1.67
2.250	1.53	8.333	3.63	14.417	4.18	20.50	1.67
2.333	1.81	8.417	3.63	14.500	4.18	20.58	1.67
2.417	1.81	8.500	3.63	14.583	4.18	20.67	1.67
2.500	1.81	8.583	3.63	14.667	4.18	20.75	1.67
2.583	1.81	8.667	3.63	14.750	4.18	20.83	1.67
2.667	1.81	8.750	3.63	14.833	4.18	20.92	1.67
2.750	1.81	8.833	3.91	14.917	4.18	21.00	1.67
2.833	1.81	8.917	3.91	15.000	4.18	21.08	1.67
2.917	1.81	9.000	3.91	15.083	4.18	21.17	1.67
3.000	1.81	9.083	3.91	15.167	4.18	21.25	1.67
3.083	1.81	9.167	3.91	15.250	4.18	21.33	1.67
3.167	1.81	9.250	3.91	15.333	4.18	21.42	1.67
3.250	1.81	9.333	4.46	15.417	4.18	21.50	1.67
3.333	1.81	9.417	4.46	15.500	4.18	21.58	1.67
3.417	1.81	9.500	4.46	15.583	4.18	21.67	1.67
3.500	1.81	9.583	4.46	15.667	4.18	21.75	1.67
3.583	1.81	9.667	4.46	15.750	4.18	21.83	1.67
3.667	1.81	9.750	4.46	15.833	4.18	21.92	1.67
3.750	1.81	9.833	5.02	15.917	4.18	22.00	1.67
3.833	1.81	9.917	5.02	16.000	4.18	22.08	1.67
3.917	1.81	10.000	5.02	16.083	4.18	22.17	1.67
4.000	1.81	10.083	5.02	16.167	4.18	22.25	1.67
4.083	1.81	10.167	5.02	16.250	4.18	22.33	1.67

4.167	1.81	10.250	5.02	16.333	2.51	22.42	1.67
4.250	1.81	10.333	6.42	16.417	2.51	22.50	1.67
4.333	2.23	10.417	6.42	16.500	2.51	22.58	1.67
4.417	2.23	10.500	6.42	16.583	2.51	22.67	1.67
4.500	2.23	10.583	6.42	16.667	2.51	22.75	1.67
4.583	2.23	10.667	6.42	16.750	2.51	22.83	1.67
4.667	2.23	10.750	6.42	16.833	2.51	22.92	1.67
4.750	2.23	10.833	8.65	16.917	2.51	23.00	1.67
4.833	2.23	10.917	8.65	17.000	2.51	23.08	1.67
4.917	2.23	11.000	8.65	17.083	2.51	23.17	1.67
5.000	2.23	11.083	8.65	17.167	2.51	23.25	1.67
5.083	2.23	11.167	8.65	17.250	2.51	23.33	1.67
5.167	2.23	11.250	8.65	17.333	2.51	23.42	1.67
5.250	2.23	11.333	13.39	17.417	2.51	23.50	1.67
5.333	2.23	11.417	13.39	17.500	2.51	23.58	1.67
5.417	2.23	11.500	13.39	17.583	2.51	23.67	1.67
5.500	2.23	11.583	13.39	17.667	2.51	23.75	1.67
5.583	2.23	11.667	13.39	17.750	2.51	23.83	1.67
5.667	2.23	11.750	13.39	17.833	2.51	23.92	1.67
5.750	2.23	11.833	41.28	17.917	2.51	24.00	1.67
5.833	2.23	11.917	41.29	18.000	2.51	24.08	1.67
5.917	2.23	12.000	41.29	18.083	2.51	24.17	1.67
6.000	2.23	12.083	170.71	18.167	2.51	24.25	1.67
6.083	2.23	12.167	170.72	18.250	2.51		

Max.Eff.Inten.(mm/hr)=	170.72	312.76	
over (min)	5.00	10.00	
Storage Coeff. (min)=	2.44 (ii)	5.69 (ii)	
Unit Hyd. Tpeak (min)=	5.00	10.00	
Unit Hyd. peak (cms)=	0.30	0.15	
			TOTALS
PEAK FLOW (cms)=	0.01	0.45	0.456 (iii)
TIME TO PEAK (hrs)=	12.25	12.25	12.25
RUNOFF VOLUME (mm)=	138.48	99.40	99.99
TOTAL RAINFALL (mm)=	139.48	139.48	139.48
RUNOFF COEFFICIENT =	0.99	0.71	0.72

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 68.8 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	
STANDHYD (0013)	Area (ha)= 4.16
ID= 1 DT= 5.0 min	Total Imp(%)= 50.00 Dir. Conn.(%)= 50.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	2.08	2.08
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	166.53	250.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.23	12.250	170.72	18.33	2.51
0.167	0.00	6.250	2.23	12.333	20.10	18.42	2.51
0.250	0.00	6.333	2.51	12.417	20.09	18.50	2.51
0.333	1.53	6.417	2.51	12.500	20.09	18.58	2.51
0.417	1.53	6.500	2.51	12.583	20.09	18.67	2.51
0.500	1.53	6.583	2.51	12.667	20.09	18.75	2.51
0.583	1.53	6.667	2.51	12.750	20.09	18.83	2.51
0.667	1.53	6.750	2.51	12.833	10.32	18.92	2.51
0.750	1.53	6.833	2.51	12.917	10.32	19.00	2.51
0.833	1.53	6.917	2.51	13.000	10.32	19.08	2.51
0.917	1.53	7.000	2.51	13.083	10.32	19.17	2.51
1.000	1.53	7.083	2.51	13.167	10.32	19.25	2.51
1.083	1.53	7.167	2.51	13.250	10.32	19.33	2.51
1.167	1.53	7.250	2.51	13.333	7.53	19.42	2.51
1.250	1.53	7.333	3.07	13.417	7.53	19.50	2.51
1.333	1.53	7.417	3.07	13.500	7.53	19.58	2.51
1.417	1.53	7.500	3.07	13.583	7.53	19.67	2.51
1.500	1.53	7.583	3.07	13.667	7.53	19.75	2.51
1.583	1.53	7.667	3.07	13.750	7.53	19.83	2.51
1.667	1.53	7.750	3.07	13.833	5.86	19.92	2.51
1.750	1.53	7.833	3.07	13.917	5.86	20.00	2.51
1.833	1.53	7.917	3.07	14.000	5.86	20.08	2.51
1.917	1.53	8.000	3.07	14.083	5.86	20.17	2.51
2.000	1.53	8.083	3.07	14.167	5.86	20.25	2.51
2.083	1.53	8.167	3.07	14.250	5.86	20.33	1.67
2.167	1.53	8.250	3.07	14.333	4.18	20.42	1.67
2.250	1.53	8.333	3.63	14.417	4.18	20.50	1.67
2.333	1.81	8.417	3.63	14.500	4.18	20.58	1.67
2.417	1.81	8.500	3.63	14.583	4.18	20.67	1.67
2.500	1.81	8.583	3.63	14.667	4.18	20.75	1.67

2.583	1.81	8.667	3.63	14.750	4.18	20.83	1.67
2.667	1.81	8.750	3.63	14.833	4.18	20.92	1.67
2.750	1.81	8.833	3.91	14.917	4.18	21.00	1.67
2.833	1.81	8.917	3.91	15.000	4.18	21.08	1.67
2.917	1.81	9.000	3.91	15.083	4.18	21.17	1.67
3.000	1.81	9.083	3.91	15.167	4.18	21.25	1.67
3.083	1.81	9.167	3.91	15.250	4.18	21.33	1.67
3.167	1.81	9.250	3.91	15.333	4.18	21.42	1.67
3.250	1.81	9.333	4.46	15.417	4.18	21.50	1.67
3.333	1.81	9.417	4.46	15.500	4.18	21.58	1.67
3.417	1.81	9.500	4.46	15.583	4.18	21.67	1.67
3.500	1.81	9.583	4.46	15.667	4.18	21.75	1.67
3.583	1.81	9.667	4.46	15.750	4.18	21.83	1.67
3.667	1.81	9.750	4.46	15.833	4.18	21.92	1.67
3.750	1.81	9.833	5.02	15.917	4.18	22.00	1.67
3.833	1.81	9.917	5.02	16.000	4.18	22.08	1.67
3.917	1.81	10.000	5.02	16.083	4.18	22.17	1.67
4.000	1.81	10.083	5.02	16.167	4.18	22.25	1.67
4.083	1.81	10.167	5.02	16.250	4.18	22.33	1.67
4.167	1.81	10.250	5.02	16.333	2.51	22.42	1.67
4.250	1.81	10.333	6.42	16.417	2.51	22.50	1.67
4.333	2.23	10.417	6.42	16.500	2.51	22.58	1.67
4.417	2.23	10.500	6.42	16.583	2.51	22.67	1.67
4.500	2.23	10.583	6.42	16.667	2.51	22.75	1.67
4.583	2.23	10.667	6.42	16.750	2.51	22.83	1.67
4.667	2.23	10.750	6.42	16.833	2.51	22.92	1.67
4.750	2.23	10.833	8.65	16.917	2.51	23.00	1.67
4.833	2.23	10.917	8.65	17.000	2.51	23.08	1.67
4.917	2.23	11.000	8.65	17.083	2.51	23.17	1.67
5.000	2.23	11.083	8.65	17.167	2.51	23.25	1.67
5.083	2.23	11.167	8.65	17.250	2.51	23.33	1.67
5.167	2.23	11.250	8.65	17.333	2.51	23.42	1.67
5.250	2.23	11.333	13.39	17.417	2.51	23.50	1.67
5.333	2.23	11.417	13.39	17.500	2.51	23.58	1.67
5.417	2.23	11.500	13.39	17.583	2.51	23.67	1.67
5.500	2.23	11.583	13.39	17.667	2.51	23.75	1.67
5.583	2.23	11.667	13.39	17.750	2.51	23.83	1.67
5.667	2.23	11.750	13.39	17.833	2.51	23.92	1.67
5.750	2.23	11.833	41.28	17.917	2.51	24.00	1.67
5.833	2.23	11.917	41.29	18.000	2.51	24.08	1.67
5.917	2.23	12.000	41.29	18.083	2.51	24.17	1.67
6.000	2.23	12.083	170.71	18.167	2.51	24.25	1.67
6.083	2.23	12.167	170.72	18.250	2.51		

Max.Eff.Inten.(mm/hr)=	170.72	68.34
over (min)	5.00	30.00
Storage Coeff. (min)=	3.45 (ii)	28.13 (ii)
Unit Hyd. Tpeak (min)=	5.00	30.00

Unit Hyd. peak (cms)=	0.26	0.04	
			TOTALS
PEAK FLOW (cms)=	0.98	0.23	1.087 (iii)
TIME TO PEAK (hrs)=	12.25	12.58	12.25
RUNOFF VOLUME (mm)=	138.48	72.68	105.58
TOTAL RAINFALL (mm)=	139.48	139.48	139.48
RUNOFF COEFFICIENT =	0.99	0.52	0.76

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
STANDHYD (0036)	Area (ha)=	2.12	
ID= 1 DT= 5.0 min	Total Imp(%)=	85.04	Dir. Conn.(%)= 0.10

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	1.80	0.32
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	0.50	2.00
Length (m)=	118.88	175.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.23	12.250	170.72	18.33	2.51
0.167	0.00	6.250	2.23	12.333	20.10	18.42	2.51
0.250	0.00	6.333	2.51	12.417	20.09	18.50	2.51
0.333	1.53	6.417	2.51	12.500	20.09	18.58	2.51
0.417	1.53	6.500	2.51	12.583	20.09	18.67	2.51
0.500	1.53	6.583	2.51	12.667	20.09	18.75	2.51
0.583	1.53	6.667	2.51	12.750	20.09	18.83	2.51
0.667	1.53	6.750	2.51	12.833	10.32	18.92	2.51
0.750	1.53	6.833	2.51	12.917	10.32	19.00	2.51
0.833	1.53	6.917	2.51	13.000	10.32	19.08	2.51
0.917	1.53	7.000	2.51	13.083	10.32	19.17	2.51
1.000	1.53	7.083	2.51	13.167	10.32	19.25	2.51
1.083	1.53	7.167	2.51	13.250	10.32	19.33	2.51

1.167	1.53	7.250	2.51	13.333	7.53	19.42	2.51
1.250	1.53	7.333	3.07	13.417	7.53	19.50	2.51
1.333	1.53	7.417	3.07	13.500	7.53	19.58	2.51
1.417	1.53	7.500	3.07	13.583	7.53	19.67	2.51
1.500	1.53	7.583	3.07	13.667	7.53	19.75	2.51
1.583	1.53	7.667	3.07	13.750	7.53	19.83	2.51
1.667	1.53	7.750	3.07	13.833	5.86	19.92	2.51
1.750	1.53	7.833	3.07	13.917	5.86	20.00	2.51
1.833	1.53	7.917	3.07	14.000	5.86	20.08	2.51
1.917	1.53	8.000	3.07	14.083	5.86	20.17	2.51
2.000	1.53	8.083	3.07	14.167	5.86	20.25	2.51
2.083	1.53	8.167	3.07	14.250	5.86	20.33	1.67
2.167	1.53	8.250	3.07	14.333	4.18	20.42	1.67
2.250	1.53	8.333	3.63	14.417	4.18	20.50	1.67
2.333	1.81	8.417	3.63	14.500	4.18	20.58	1.67
2.417	1.81	8.500	3.63	14.583	4.18	20.67	1.67
2.500	1.81	8.583	3.63	14.667	4.18	20.75	1.67
2.583	1.81	8.667	3.63	14.750	4.18	20.83	1.67
2.667	1.81	8.750	3.63	14.833	4.18	20.92	1.67
2.750	1.81	8.833	3.91	14.917	4.18	21.00	1.67
2.833	1.81	8.917	3.91	15.000	4.18	21.08	1.67
2.917	1.81	9.000	3.91	15.083	4.18	21.17	1.67
3.000	1.81	9.083	3.91	15.167	4.18	21.25	1.67
3.083	1.81	9.167	3.91	15.250	4.18	21.33	1.67
3.167	1.81	9.250	3.91	15.333	4.18	21.42	1.67
3.250	1.81	9.333	4.46	15.417	4.18	21.50	1.67
3.333	1.81	9.417	4.46	15.500	4.18	21.58	1.67
3.417	1.81	9.500	4.46	15.583	4.18	21.67	1.67
3.500	1.81	9.583	4.46	15.667	4.18	21.75	1.67
3.583	1.81	9.667	4.46	15.750	4.18	21.83	1.67
3.667	1.81	9.750	4.46	15.833	4.18	21.92	1.67
3.750	1.81	9.833	5.02	15.917	4.18	22.00	1.67
3.833	1.81	9.917	5.02	16.000	4.18	22.08	1.67
3.917	1.81	10.000	5.02	16.083	4.18	22.17	1.67
4.000	1.81	10.083	5.02	16.167	4.18	22.25	1.67
4.083	1.81	10.167	5.02	16.250	4.18	22.33	1.67
4.167	1.81	10.250	5.02	16.333	2.51	22.42	1.67
4.250	1.81	10.333	6.42	16.417	2.51	22.50	1.67
4.333	2.23	10.417	6.42	16.500	2.51	22.58	1.67
4.417	2.23	10.500	6.42	16.583	2.51	22.67	1.67
4.500	2.23	10.583	6.42	16.667	2.51	22.75	1.67
4.583	2.23	10.667	6.42	16.750	2.51	22.83	1.67
4.667	2.23	10.750	6.42	16.833	2.51	22.92	1.67
4.750	2.23	10.833	8.65	16.917	2.51	23.00	1.67
4.833	2.23	10.917	8.65	17.000	2.51	23.08	1.67
4.917	2.23	11.000	8.65	17.083	2.51	23.17	1.67
5.000	2.23	11.083	8.65	17.167	2.51	23.25	1.67
5.083	2.23	11.167	8.65	17.250	2.51	23.33	1.67

5.167	2.23	11.250	8.65	17.333	2.51	23.42	1.67
5.250	2.23	11.333	13.39	17.417	2.51	23.50	1.67
5.333	2.23	11.417	13.39	17.500	2.51	23.58	1.67
5.417	2.23	11.500	13.39	17.583	2.51	23.67	1.67
5.500	2.23	11.583	13.39	17.667	2.51	23.75	1.67
5.583	2.23	11.667	13.39	17.750	2.51	23.83	1.67
5.667	2.23	11.750	13.39	17.833	2.51	23.92	1.67
5.750	2.23	11.833	41.28	17.917	2.51	24.00	1.67
5.833	2.23	11.917	41.29	18.000	2.51	24.08	1.67
5.917	2.23	12.000	41.29	18.083	2.51	24.17	1.67
6.000	2.23	12.083	170.71	18.167	2.51	24.25	1.67
6.083	2.23	12.167	170.72	18.250	2.51		

Max.Eff.Inten.(mm/hr)=	170.72	1101.98	
over (min)	5.00	10.00	
Storage Coeff. (min)=	2.82 (ii)	9.37 (ii)	
Unit Hyd. Tpeak (min)=	5.00	10.00	
Unit Hyd. peak (cms)=	0.28	0.12	
			TOTALS
PEAK FLOW (cms)=	0.00	0.74	0.745 (iii)
TIME TO PEAK (hrs)=	12.25	12.25	12.25
RUNOFF VOLUME (mm)=	138.48	123.52	123.53
TOTAL RAINFALL (mm)=	139.48	139.48	139.48
RUNOFF COEFFICIENT =	0.99	0.89	0.89

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
STANDHYD (0043)	Area (ha)=	0.13	
ID= 1 DT= 5.0 min	Total Imp(%)=	30.77	Dir. Conn.(%)= 7.69

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	0.04	0.09
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	0.50	0.50
Length (m)=	29.44	70.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.23	12.250	170.72	18.33	2.51
0.167	0.00	6.250	2.23	12.333	20.10	18.42	2.51
0.250	0.00	6.333	2.51	12.417	20.09	18.50	2.51
0.333	1.53	6.417	2.51	12.500	20.09	18.58	2.51
0.417	1.53	6.500	2.51	12.583	20.09	18.67	2.51
0.500	1.53	6.583	2.51	12.667	20.09	18.75	2.51
0.583	1.53	6.667	2.51	12.750	20.09	18.83	2.51
0.667	1.53	6.750	2.51	12.833	10.32	18.92	2.51
0.750	1.53	6.833	2.51	12.917	10.32	19.00	2.51
0.833	1.53	6.917	2.51	13.000	10.32	19.08	2.51
0.917	1.53	7.000	2.51	13.083	10.32	19.17	2.51
1.000	1.53	7.083	2.51	13.167	10.32	19.25	2.51
1.083	1.53	7.167	2.51	13.250	10.32	19.33	2.51
1.167	1.53	7.250	2.51	13.333	7.53	19.42	2.51
1.250	1.53	7.333	3.07	13.417	7.53	19.50	2.51
1.333	1.53	7.417	3.07	13.500	7.53	19.58	2.51
1.417	1.53	7.500	3.07	13.583	7.53	19.67	2.51
1.500	1.53	7.583	3.07	13.667	7.53	19.75	2.51
1.583	1.53	7.667	3.07	13.750	7.53	19.83	2.51
1.667	1.53	7.750	3.07	13.833	5.86	19.92	2.51
1.750	1.53	7.833	3.07	13.917	5.86	20.00	2.51
1.833	1.53	7.917	3.07	14.000	5.86	20.08	2.51
1.917	1.53	8.000	3.07	14.083	5.86	20.17	2.51
2.000	1.53	8.083	3.07	14.167	5.86	20.25	2.51
2.083	1.53	8.167	3.07	14.250	5.86	20.33	1.67
2.167	1.53	8.250	3.07	14.333	4.18	20.42	1.67
2.250	1.53	8.333	3.63	14.417	4.18	20.50	1.67
2.333	1.81	8.417	3.63	14.500	4.18	20.58	1.67
2.417	1.81	8.500	3.63	14.583	4.18	20.67	1.67
2.500	1.81	8.583	3.63	14.667	4.18	20.75	1.67
2.583	1.81	8.667	3.63	14.750	4.18	20.83	1.67
2.667	1.81	8.750	3.63	14.833	4.18	20.92	1.67
2.750	1.81	8.833	3.91	14.917	4.18	21.00	1.67
2.833	1.81	8.917	3.91	15.000	4.18	21.08	1.67
2.917	1.81	9.000	3.91	15.083	4.18	21.17	1.67
3.000	1.81	9.083	3.91	15.167	4.18	21.25	1.67
3.083	1.81	9.167	3.91	15.250	4.18	21.33	1.67
3.167	1.81	9.250	3.91	15.333	4.18	21.42	1.67
3.250	1.81	9.333	4.46	15.417	4.18	21.50	1.67
3.333	1.81	9.417	4.46	15.500	4.18	21.58	1.67
3.417	1.81	9.500	4.46	15.583	4.18	21.67	1.67
3.500	1.81	9.583	4.46	15.667	4.18	21.75	1.67

3.583	1.81	9.667	4.46	15.750	4.18	21.83	1.67
3.667	1.81	9.750	4.46	15.833	4.18	21.92	1.67
3.750	1.81	9.833	5.02	15.917	4.18	22.00	1.67
3.833	1.81	9.917	5.02	16.000	4.18	22.08	1.67
3.917	1.81	10.000	5.02	16.083	4.18	22.17	1.67
4.000	1.81	10.083	5.02	16.167	4.18	22.25	1.67
4.083	1.81	10.167	5.02	16.250	4.18	22.33	1.67
4.167	1.81	10.250	5.02	16.333	2.51	22.42	1.67
4.250	1.81	10.333	6.42	16.417	2.51	22.50	1.67
4.333	2.23	10.417	6.42	16.500	2.51	22.58	1.67
4.417	2.23	10.500	6.42	16.583	2.51	22.67	1.67
4.500	2.23	10.583	6.42	16.667	2.51	22.75	1.67
4.583	2.23	10.667	6.42	16.750	2.51	22.83	1.67
4.667	2.23	10.750	6.42	16.833	2.51	22.92	1.67
4.750	2.23	10.833	8.65	16.917	2.51	23.00	1.67
4.833	2.23	10.917	8.65	17.000	2.51	23.08	1.67
4.917	2.23	11.000	8.65	17.083	2.51	23.17	1.67
5.000	2.23	11.083	8.65	17.167	2.51	23.25	1.67
5.083	2.23	11.167	8.65	17.250	2.51	23.33	1.67
5.167	2.23	11.250	8.65	17.333	2.51	23.42	1.67
5.250	2.23	11.333	13.39	17.417	2.51	23.50	1.67
5.333	2.23	11.417	13.39	17.500	2.51	23.58	1.67
5.417	2.23	11.500	13.39	17.583	2.51	23.67	1.67
5.500	2.23	11.583	13.39	17.667	2.51	23.75	1.67
5.583	2.23	11.667	13.39	17.750	2.51	23.83	1.67
5.667	2.23	11.750	13.39	17.833	2.51	23.92	1.67
5.750	2.23	11.833	41.28	17.917	2.51	24.00	1.67
5.833	2.23	11.917	41.29	18.000	2.51	24.08	1.67
5.917	2.23	12.000	41.29	18.083	2.51	24.17	1.67
6.000	2.23	12.083	170.71	18.167	2.51	24.25	1.67
6.083	2.23	12.167	170.72	18.250	2.51		

Max.Eff.Inten.(mm/hr)=	170.72	154.96	
over (min)	5.00	15.00	
Storage Coeff. (min)=	1.22 (ii)	13.78 (ii)	
Unit Hyd. Tpeak (min)=	5.00	15.00	
Unit Hyd. peak (cms)=	0.33	0.08	
			TOTALS
PEAK FLOW (cms)=	0.00	0.02	0.025 (iii)
TIME TO PEAK (hrs)=	12.25	12.33	12.25
RUNOFF VOLUME (mm)=	138.48	83.24	87.43
TOTAL RAINFALL (mm)=	139.48	139.48	139.48
RUNOFF COEFFICIENT =	0.99	0.60	0.63

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (0044) | Area (ha)= 1.62
ID= 1 DT= 5.0 min | Total Imp(%)= 48.77 Dir. Conn.(%)= 30.86

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.79	0.83
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	1.40
Length	(m)=	103.92	400.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.23	12.250	170.72	18.33	2.51
0.167	0.00	6.250	2.23	12.333	20.10	18.42	2.51
0.250	0.00	6.333	2.51	12.417	20.09	18.50	2.51
0.333	1.53	6.417	2.51	12.500	20.09	18.58	2.51
0.417	1.53	6.500	2.51	12.583	20.09	18.67	2.51
0.500	1.53	6.583	2.51	12.667	20.09	18.75	2.51
0.583	1.53	6.667	2.51	12.750	20.09	18.83	2.51
0.667	1.53	6.750	2.51	12.833	10.32	18.92	2.51
0.750	1.53	6.833	2.51	12.917	10.32	19.00	2.51
0.833	1.53	6.917	2.51	13.000	10.32	19.08	2.51
0.917	1.53	7.000	2.51	13.083	10.32	19.17	2.51
1.000	1.53	7.083	2.51	13.167	10.32	19.25	2.51
1.083	1.53	7.167	2.51	13.250	10.32	19.33	2.51
1.167	1.53	7.250	2.51	13.333	7.53	19.42	2.51
1.250	1.53	7.333	3.07	13.417	7.53	19.50	2.51
1.333	1.53	7.417	3.07	13.500	7.53	19.58	2.51
1.417	1.53	7.500	3.07	13.583	7.53	19.67	2.51
1.500	1.53	7.583	3.07	13.667	7.53	19.75	2.51
1.583	1.53	7.667	3.07	13.750	7.53	19.83	2.51
1.667	1.53	7.750	3.07	13.833	5.86	19.92	2.51
1.750	1.53	7.833	3.07	13.917	5.86	20.00	2.51
1.833	1.53	7.917	3.07	14.000	5.86	20.08	2.51
1.917	1.53	8.000	3.07	14.083	5.86	20.17	2.51

2.000	1.53	8.083	3.07	14.167	5.86	20.25	2.51
2.083	1.53	8.167	3.07	14.250	5.86	20.33	1.67
2.167	1.53	8.250	3.07	14.333	4.18	20.42	1.67
2.250	1.53	8.333	3.63	14.417	4.18	20.50	1.67
2.333	1.81	8.417	3.63	14.500	4.18	20.58	1.67
2.417	1.81	8.500	3.63	14.583	4.18	20.67	1.67
2.500	1.81	8.583	3.63	14.667	4.18	20.75	1.67
2.583	1.81	8.667	3.63	14.750	4.18	20.83	1.67
2.667	1.81	8.750	3.63	14.833	4.18	20.92	1.67
2.750	1.81	8.833	3.91	14.917	4.18	21.00	1.67
2.833	1.81	8.917	3.91	15.000	4.18	21.08	1.67
2.917	1.81	9.000	3.91	15.083	4.18	21.17	1.67
3.000	1.81	9.083	3.91	15.167	4.18	21.25	1.67
3.083	1.81	9.167	3.91	15.250	4.18	21.33	1.67
3.167	1.81	9.250	3.91	15.333	4.18	21.42	1.67
3.250	1.81	9.333	4.46	15.417	4.18	21.50	1.67
3.333	1.81	9.417	4.46	15.500	4.18	21.58	1.67
3.417	1.81	9.500	4.46	15.583	4.18	21.67	1.67
3.500	1.81	9.583	4.46	15.667	4.18	21.75	1.67
3.583	1.81	9.667	4.46	15.750	4.18	21.83	1.67
3.667	1.81	9.750	4.46	15.833	4.18	21.92	1.67
3.750	1.81	9.833	5.02	15.917	4.18	22.00	1.67
3.833	1.81	9.917	5.02	16.000	4.18	22.08	1.67
3.917	1.81	10.000	5.02	16.083	4.18	22.17	1.67
4.000	1.81	10.083	5.02	16.167	4.18	22.25	1.67
4.083	1.81	10.167	5.02	16.250	4.18	22.33	1.67
4.167	1.81	10.250	5.02	16.333	2.51	22.42	1.67
4.250	1.81	10.333	6.42	16.417	2.51	22.50	1.67
4.333	2.23	10.417	6.42	16.500	2.51	22.58	1.67
4.417	2.23	10.500	6.42	16.583	2.51	22.67	1.67
4.500	2.23	10.583	6.42	16.667	2.51	22.75	1.67
4.583	2.23	10.667	6.42	16.750	2.51	22.83	1.67
4.667	2.23	10.750	6.42	16.833	2.51	22.92	1.67
4.750	2.23	10.833	8.65	16.917	2.51	23.00	1.67
4.833	2.23	10.917	8.65	17.000	2.51	23.08	1.67
4.917	2.23	11.000	8.65	17.083	2.51	23.17	1.67
5.000	2.23	11.083	8.65	17.167	2.51	23.25	1.67
5.083	2.23	11.167	8.65	17.250	2.51	23.33	1.67
5.167	2.23	11.250	8.65	17.333	2.51	23.42	1.67
5.250	2.23	11.333	13.39	17.417	2.51	23.50	1.67
5.333	2.23	11.417	13.39	17.500	2.51	23.58	1.67
5.417	2.23	11.500	13.39	17.583	2.51	23.67	1.67
5.500	2.23	11.583	13.39	17.667	2.51	23.75	1.67
5.583	2.23	11.667	13.39	17.750	2.51	23.83	1.67
5.667	2.23	11.750	13.39	17.833	2.51	23.92	1.67
5.750	2.23	11.833	41.28	17.917	2.51	24.00	1.67
5.833	2.23	11.917	41.29	18.000	2.51	24.08	1.67
5.917	2.23	12.000	41.29	18.083	2.51	24.17	1.67

6.000	2.23	12.083	170.71	18.167	2.51	24.25	1.67
6.083	2.23	12.167	170.72	18.250	2.51		

Max.Eff.Inten.(mm/hr)=	170.72	83.55	
over (min)	5.00	40.00	
Storage Coeff. (min)=	2.60 (ii)	36.20 (ii)	
Unit Hyd. Tpeak (min)=	5.00	40.00	
Unit Hyd. peak (cms)=	0.29	0.03	
			TOTALS
PEAK FLOW (cms)=	0.24	0.12	0.283 (iii)
TIME TO PEAK (hrs)=	12.25	12.75	12.25
RUNOFF VOLUME (mm)=	138.48	83.67	100.57
TOTAL RAINFALL (mm)=	139.48	139.48	139.48
RUNOFF COEFFICIENT =	0.99	0.60	0.72

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0037) | 1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0010):	1.32	0.456	12.25	99.99
+ ID2= 2 (0013):	4.16	1.087	12.25	105.58
ID = 3 (0037):	5.48	1.544	12.25	104.23

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0037) | 3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0037):	5.48	1.544	12.25	104.23
+ ID2= 2 (0036):	2.12	0.745	12.25	123.53
ID = 1 (0037):	7.60	2.289	12.25	109.62

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0037) | 1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0037):	7.60	2.289	12.25	109.62
+ ID2= 2 (0043):	0.13	0.025	12.25	87.43
ID = 3 (0037):	7.73	2.314	12.25	109.24

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0037) | 3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0037):	7.73	2.314	12.25	109.24
+ ID2= 2 (0044):	1.62	0.283	12.25	100.57
ID = 1 (0037):	9.35	2.597	12.25	107.74

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0037) | 1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0037):	9.35	2.597	12.25	107.74
+ ID2= 2 (0009):	31.06	8.139	12.25	101.03
ID = 3 (0037):	40.41	10.737	12.25	102.58

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

RESERVOIR(0038) \| IN= 2---> OUT= 1 \| DT= 5.0 min — OVERFLOW IS OFF

OUTFLOW (cms)	STORAGE (ha.m.)	OUTFLOW (cms)	STORAGE (ha.m.)
0.0000	0.0000	0.5076	2.8989
0.0000	0.2023	0.6060	3.2065
0.0353	0.4202	0.7105	3.5196
0.0525	0.6536	0.8207	3.8381
0.0654	0.9026	0.9365	4.1621
0.0843	1.1671	1.0574	4.4915
0.1858	1.7227	1.1833	4.8263

0.2540	2.0086	1.3139	5.1665
0.3309	2.2999	1.4492	5.5122
0.4157	2.5967	1.5890	5.8633

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
INFLOW : ID= 2 (0037)	40.410	10.737	12.25	102.58
OUTFLOW: ID= 1 (0038)	40.410	0.489	14.50	97.54

PEAK FLOW REDUCTION [Qout/Qin](%)= 4.55
TIME SHIFT OF PEAK FLOW (min)=135.00
MAXIMUM STORAGE USED (ha.m.)= 2.8374

CALIB \| STANDHYD (0017) \|ID= 1 DT= 5.0 min — Area (ha)= 1.59 — Total Imp(%)= 58.58 — Dir. Conn.(%)= 27.10

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.93	0.66
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	102.96	30.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.23	12.250	170.72	18.33	2.51
0.167	0.00	6.250	2.23	12.333	20.10	18.42	2.51
0.250	0.00	6.333	2.51	12.417	20.09	18.50	2.51
0.333	1.53	6.417	2.51	12.500	20.09	18.58	2.51
0.417	1.53	6.500	2.51	12.583	20.09	18.67	2.51
0.500	1.53	6.583	2.51	12.667	20.09	18.75	2.51
0.583	1.53	6.667	2.51	12.750	20.09	18.83	2.51
0.667	1.53	6.750	2.51	12.833	10.32	18.92	2.51
0.750	1.53	6.833	2.51	12.917	10.32	19.00	2.51
0.833	1.53	6.917	2.51	13.000	10.32	19.08	2.51
0.917	1.53	7.000	2.51	13.083	10.32	19.17	2.51
1.000	1.53	7.083	2.51	13.167	10.32	19.25	2.51
1.083	1.53	7.167	2.51	13.250	10.32	19.33	2.51
1.167	1.53	7.250	2.51	13.333	7.53	19.42	2.51
1.250	1.53	7.333	3.07	13.417	7.53	19.50	2.51
1.333	1.53	7.417	3.07	13.500	7.53	19.58	2.51

1.417	1.53	7.500	3.07	13.583	7.53	19.67	2.51
1.500	1.53	7.583	3.07	13.667	7.53	19.75	2.51
1.583	1.53	7.667	3.07	13.750	7.53	19.83	2.51
1.667	1.53	7.750	3.07	13.833	5.86	19.92	2.51
1.750	1.53	7.833	3.07	13.917	5.86	20.00	2.51
1.833	1.53	7.917	3.07	14.000	5.86	20.08	2.51
1.917	1.53	8.000	3.07	14.083	5.86	20.17	2.51
2.000	1.53	8.083	3.07	14.167	5.86	20.25	2.51
2.083	1.53	8.167	3.07	14.250	5.86	20.33	1.67
2.167	1.53	8.250	3.07	14.333	4.18	20.42	1.67
2.250	1.53	8.333	3.63	14.417	4.18	20.50	1.67
2.333	1.81	8.417	3.63	14.500	4.18	20.58	1.67
2.417	1.81	8.500	3.63	14.583	4.18	20.67	1.67
2.500	1.81	8.583	3.63	14.667	4.18	20.75	1.67
2.583	1.81	8.667	3.63	14.750	4.18	20.83	1.67
2.667	1.81	8.750	3.63	14.833	4.18	20.92	1.67
2.750	1.81	8.833	3.91	14.917	4.18	21.00	1.67
2.833	1.81	8.917	3.91	15.000	4.18	21.08	1.67
2.917	1.81	9.000	3.91	15.083	4.18	21.17	1.67
3.000	1.81	9.083	3.91	15.167	4.18	21.25	1.67
3.083	1.81	9.167	3.91	15.250	4.18	21.33	1.67
3.167	1.81	9.250	3.91	15.333	4.18	21.42	1.67
3.250	1.81	9.333	4.46	15.417	4.18	21.50	1.67
3.333	1.81	9.417	4.46	15.500	4.18	21.58	1.67
3.417	1.81	9.500	4.46	15.583	4.18	21.67	1.67
3.500	1.81	9.583	4.46	15.667	4.18	21.75	1.67
3.583	1.81	9.667	4.46	15.750	4.18	21.83	1.67
3.667	1.81	9.750	4.46	15.833	4.18	21.92	1.67
3.750	1.81	9.833	5.02	15.917	4.18	22.00	1.67
3.833	1.81	9.917	5.02	16.000	4.18	22.08	1.67
3.917	1.81	10.000	5.02	16.083	4.18	22.17	1.67
4.000	1.81	10.083	5.02	16.167	4.18	22.25	1.67
4.083	1.81	10.167	5.02	16.250	4.18	22.33	1.67
4.167	1.81	10.250	5.02	16.333	2.51	22.42	1.67
4.250	1.81	10.333	6.42	16.417	2.51	22.50	1.67
4.333	2.23	10.417	6.42	16.500	2.51	22.58	1.67
4.417	2.23	10.500	6.42	16.583	2.51	22.67	1.67
4.500	2.23	10.583	6.42	16.667	2.51	22.75	1.67
4.583	2.23	10.667	6.42	16.750	2.51	22.83	1.67
4.667	2.23	10.750	6.42	16.833	2.51	22.92	1.67
4.750	2.23	10.833	8.65	16.917	2.51	23.00	1.67
4.833	2.23	10.917	8.65	17.000	2.51	23.08	1.67
4.917	2.23	11.000	8.65	17.083	2.51	23.17	1.67
5.000	2.23	11.083	8.65	17.167	2.51	23.25	1.67
5.083	2.23	11.167	8.65	17.250	2.51	23.33	1.67
5.167	2.23	11.250	8.65	17.333	2.51	23.42	1.67
5.250	2.23	11.333	13.39	17.417	2.51	23.50	1.67
5.333	2.23	11.417	13.39	17.500	2.51	23.58	1.67

5.417	2.23	11.500	13.39	17.583	2.51	23.67	1.67
5.500	2.23	11.583	13.39	17.667	2.51	23.75	1.67
5.583	2.23	11.667	13.39	17.750	2.51	23.83	1.67
5.667	2.23	11.750	13.39	17.833	2.51	23.92	1.67
5.750	2.23	11.833	41.28	17.917	2.51	24.00	1.67
5.833	2.23	11.917	41.29	18.000	2.51	24.08	1.67
5.917	2.23	12.000	41.29	18.083	2.51	24.17	1.67
6.000	2.23	12.083	170.71	18.167	2.51	24.25	1.67
6.083	2.23	12.167	170.72	18.250	2.51		

Max.Eff.Inten.(mm/hr)=		170.72	227.53	
over (min)		5.00	10.00	
Storage Coeff. (min)=		2.58 (ii)	6.86 (ii)	
Unit Hyd. Tpeak (min)=		5.00	10.00	
Unit Hyd. peak (cms)=		0.29	0.14	
				TOTALS
PEAK FLOW	(cms)=	0.20	0.34	0.545 (iii)
TIME TO PEAK	(hrs)=	12.25	12.25	12.25
RUNOFF VOLUME	(mm)=	138.48	89.24	102.58
TOTAL RAINFALL	(mm)=	139.48	139.48	139.48
RUNOFF COEFFICIENT	=	0.99	0.64	0.74

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 66.5 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

Junction Command(0018)

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
INFLOW : ID= 2(0017)	1.59	0.54	12.25	102.58
OUTFLOW: ID= 2(0018)	1.59	0.54	12.25	102.58

ADD HYD (0023) | 1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0016):	234.30	7.970	13.17	55.04

```
      + ID2= 2 (  0018):     1.59   0.545    12.25   102.58
        ================================================
        ID = 3 (  0023):   235.89   8.011    13.17    55.36

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
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--------------------
| ADD HYD  (  0023)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 3 (  0023):   235.89   8.011    13.17    55.36
      + ID2= 2 (  0038):    40.41   0.489    14.50    97.54
        ================================================
        ID = 1 (  0023):   276.30   8.456    13.25    61.53

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
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*********************************
** SIMULATION:M - 25mm        **
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--------------------
|    READ STORM    |    Filename: C:\Users\ecomish\AppD
|                  |              ata\Local\Temp\
|                  |              bd70dd54-263f-4ef7-b852-c48fc040cbd3\6deeea8b
| Ptotal= 26.26 mm |    Comments: 25mm
--------------------
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                 hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
                0.00    2.10 |  0.83   30.00 |  1.67    4.67 |  2.50    2.37
                0.08    2.29 |  0.92   80.70 |  1.75    4.23 |  2.58    2.26
                0.17    2.52 |  1.00   37.00 |  1.83    3.88 |  2.67    2.17
                0.25    2.81 |  1.08   20.30 |  1.92    3.58 |  2.75    2.08
                0.33    3.18 |  1.17   13.27 |  2.00    3.33 |  2.83    2.00
                0.42    3.68 |  1.25   10.09 |  2.08    3.11 |  2.92    1.93
                0.50    4.39 |  1.33    8.15 |  2.17    2.92 |  3.00    1.93
                0.58    5.49 |  1.42    6.85 |  2.25    2.76 |  3.08    1.93
                0.67    7.40 |  1.50    5.92 |  2.33    2.61 |  3.17    1.93
                0.75   11.54 |  1.58    5.22 |  2.42    2.48 |

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| CALIB            |
| NASHYD   (  0025)|   Area    (ha)= 100.92   Curve Number   (CN)= 55.9
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.89   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   1.70
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     Unit Hyd Qpeak  (cms)=   2.267

     PEAK FLOW       (cms)=   0.117 (i)
     TIME TO PEAK    (hrs)=   3.583
     RUNOFF VOLUME    (mm)=   1.544
     TOTAL RAINFALL   (mm)=  26.256
     RUNOFF COEFFICIENT   =   0.059

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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--------------------
| CALIB            |
| NASHYD   (  0002)|   Area    (ha)=  23.99   Curve Number   (CN)= 44.7
|ID= 1 DT= 5.0 min |   Ia      (mm)=  10.91   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.97

     Unit Hyd Qpeak  (cms)=   0.945

     PEAK FLOW       (cms)=   0.018 (i)
     TIME TO PEAK    (hrs)=   2.750
     RUNOFF VOLUME    (mm)=   0.714
     TOTAL RAINFALL   (mm)=  26.256
     RUNOFF COEFFICIENT   =   0.027

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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--------------------
| CALIB            |
| NASHYD   (  0001)|   Area    (ha)=  39.68   Curve Number   (CN)= 60.7
|ID= 1 DT= 5.0 min |   Ia      (mm)=   8.26   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   1.18

     Unit Hyd Qpeak  (cms)=   1.284

     PEAK FLOW       (cms)=   0.066 (i)
     TIME TO PEAK    (hrs)=   2.917
     RUNOFF VOLUME    (mm)=   1.774
     TOTAL RAINFALL   (mm)=  26.256
     RUNOFF COEFFICIENT   =   0.068

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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| CALIB            |
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| NASHYD   (  0028)|   Area    (ha)=   6.37   Curve Number   (CN)= 50.5
|ID= 1 DT= 5.0 min |   Ia      (mm)=  15.69   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.77

     Unit Hyd Qpeak  (cms)=   0.316

     PEAK FLOW       (cms)=   0.003 (i)
     TIME TO PEAK    (hrs)=   2.917
     RUNOFF VOLUME    (mm)=   0.430
     TOTAL RAINFALL   (mm)=  26.256
     RUNOFF COEFFICIENT   =   0.016

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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--------------------
| CALIB            |
| NASHYD   (  0029)|   Area    (ha)=  14.85   Curve Number   (CN)= 52.9
|ID= 1 DT= 5.0 min |   Ia      (mm)=  13.28   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.89

     Unit Hyd Qpeak  (cms)=   0.637

     PEAK FLOW       (cms)=   0.011 (i)
     TIME TO PEAK    (hrs)=   2.833
     RUNOFF VOLUME    (mm)=   0.705
     TOTAL RAINFALL   (mm)=  26.256
     RUNOFF COEFFICIENT   =   0.027

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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| CALIB            |
| NASHYD   (  0030)|   Area    (ha)=   1.70   Curve Number   (CN)= 60.5
|ID= 1 DT= 5.0 min |   Ia      (mm)=   9.65   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.40

     Unit Hyd Qpeak  (cms)=   0.162

     PEAK FLOW       (cms)=   0.004 (i)
     TIME TO PEAK    (hrs)=   1.667
     RUNOFF VOLUME    (mm)=   1.509
     TOTAL RAINFALL   (mm)=  26.256
     RUNOFF COEFFICIENT   =   0.057

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
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--------------------
| CALIB            |
| NASHYD   (  0031)|   Area    (ha)=   1.80   Curve Number   (CN)= 50.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=  16.00   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.76

     Unit Hyd Qpeak  (cms)=   0.090

     PEAK FLOW       (cms)=   0.001 (i)
     TIME TO PEAK    (hrs)=   2.917
     RUNOFF VOLUME    (mm)=   0.397
     TOTAL RAINFALL   (mm)=  26.256
     RUNOFF COEFFICIENT   =   0.015

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| NASHYD   (  0032)|   Area    (ha)=   6.70   Curve Number   (CN)= 60.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=  10.00   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   1.45

     Unit Hyd Qpeak  (cms)=   0.176

     PEAK FLOW       (cms)=   0.008 (i)
     TIME TO PEAK    (hrs)=   3.417
     RUNOFF VOLUME    (mm)=   1.423
     TOTAL RAINFALL   (mm)=  26.256
     RUNOFF COEFFICIENT   =   0.054

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| NASHYD   (  0033)|   Area    (ha)=   1.13   Curve Number   (CN)= 67.4
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.88   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.43

     Unit Hyd Qpeak  (cms)=   0.100

     PEAK FLOW       (cms)=   0.005 (i)
     TIME TO PEAK    (hrs)=   1.667
     RUNOFF VOLUME    (mm)=   2.386
     TOTAL RAINFALL   (mm)=  26.256
     RUNOFF COEFFICIENT   =   0.091
```

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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--------------------------------------------------------------------------------
--------------------
| CALIB            |
| NASHYD   (  0027)|   Area    (ha)=   1.38   Curve Number   (CN)= 64.1
|ID= 1 DT= 5.0 min |   Ia      (mm)=   8.51   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.39

     Unit Hyd Qpeak  (cms)=   0.135

     PEAK FLOW       (cms)=   0.005 (i)
     TIME TO PEAK    (hrs)=   1.667
     RUNOFF VOLUME    (mm)=   1.970
     TOTAL RAINFALL   (mm)=  26.256
     RUNOFF COEFFICIENT   =   0.075

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| NASHYD   (  0041)|   Area    (ha)=   0.59   Curve Number   (CN)= 71.5
|ID= 1 DT= 5.0 min |   Ia      (mm)=   4.75   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.53

     Unit Hyd Qpeak  (cms)=   0.043

     PEAK FLOW       (cms)=   0.004 (i)
     TIME TO PEAK    (hrs)=   1.750
     RUNOFF VOLUME    (mm)=   3.760
     TOTAL RAINFALL   (mm)=  26.256
     RUNOFF COEFFICIENT   =   0.143

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| STANDHYD (  0015)|   Area    (ha)=   1.93
|ID= 1 DT= 5.0 min |   Total Imp(%)=  54.66   Dir. Conn.(%)=  10.00
--------------------
                           IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       1.05         0.88
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       0.50         2.00
     Length            (m)=     113.43        45.00
```



```
     Mannings n          =      0.013        0.250

     Max.Eff.Inten.(mm/hr)=      80.70        10.07
               over (min)        5.00        25.00
     Storage Coeff.  (min)=       3.70 (ii)   22.67 (ii)
     Unit Hyd. Tpeak (min)=       5.00        25.00
     Unit Hyd. peak  (cms)=       0.25         0.05
                                                        *TOTALS*
     PEAK FLOW       (cms)=       0.04         0.01         0.037 (iii)
     TIME TO PEAK    (hrs)=       1.00         1.42          1.00
     RUNOFF VOLUME    (mm)=      25.26         3.60          5.76
     TOTAL RAINFALL   (mm)=      26.26        26.26         26.26
     RUNOFF COEFFICIENT   =       0.96         0.14          0.22

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
              YOU SHOULD CONSIDER SPLITTING THE AREA.

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  49.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| STANDHYD (  0019)|   Area    (ha)=   2.16
|ID= 1 DT= 5.0 min |   Total Imp(%)=  54.64   Dir. Conn.(%)=  10.00
--------------------
                           IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       1.18         0.98
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       0.50         2.00
     Length            (m)=     120.00        30.00
     Mannings n          =      0.013        0.250

     Max.Eff.Inten.(mm/hr)=      80.70        28.09
               over (min)        5.00        15.00
     Storage Coeff.  (min)=       3.82 (ii)   13.69 (ii)
     Unit Hyd. Tpeak (min)=       5.00        15.00
     Unit Hyd. peak  (cms)=       0.25         0.08
                                                        *TOTALS*
     PEAK FLOW       (cms)=       0.04         0.04         0.052 (iii)
     TIME TO PEAK    (hrs)=       1.00         1.25          1.17
     RUNOFF VOLUME    (mm)=      25.26         6.93          8.76
     TOTAL RAINFALL   (mm)=      26.26        26.26         26.26
     RUNOFF COEFFICIENT   =       0.96         0.26          0.33
```



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***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
              YOU SHOULD CONSIDER SPLITTING THE AREA.

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  69.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0040)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 1 (  0015):     1.93   0.037     1.00     5.76
      + ID2= 2 (  0019):     2.16   0.052     1.17     8.76
        ================================================
        ID = 3 (  0040):     4.09   0.086     1.00     7.34

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0040)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 3 (  0040):     4.09   0.086     1.00     7.34
      + ID2= 2 (  0027):     1.38   0.005     1.67     1.97
        ================================================
        ID = 1 (  0040):     5.47   0.086     1.00     5.99

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0040)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 1 (  0040):     5.47   0.086     1.00     5.99
      + ID2= 2 (  0041):     0.59   0.004     1.75     3.76
        ================================================
        ID = 3 (  0040):     6.06   0.086     1.00     5.77

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
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--------------------
| CALIB            |
| NASHYD   (  0048)|   Area    (ha)=  29.16   Curve Number   (CN)= 71.4
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.88   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.68

     Unit Hyd Qpeak  (cms)=   1.638

     PEAK FLOW       (cms)=   0.107 (i)
     TIME TO PEAK    (hrs)=   2.083
     RUNOFF VOLUME    (mm)=   2.811
     TOTAL RAINFALL   (mm)=  26.256
     RUNOFF COEFFICIENT   =   0.107

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| STANDHYD (  0014)|   Area    (ha)=   1.87
|ID= 1 DT= 5.0 min |   Total Imp(%)=  43.28   Dir. Conn.(%)=  10.00
--------------------
                           IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       0.81         1.06
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       0.50         2.00
     Length            (m)=     111.65        25.00
     Mannings n          =      0.013        0.250

     Max.Eff.Inten.(mm/hr)=      80.70        25.49
               over (min)        5.00        15.00
     Storage Coeff.  (min)=       3.66 (ii)   12.86 (ii)
     Unit Hyd. Tpeak (min)=       5.00        15.00
     Unit Hyd. peak  (cms)=       0.25         0.08
                                                        *TOTALS*
     PEAK FLOW       (cms)=       0.03         0.04         0.050 (iii)
     TIME TO PEAK    (hrs)=       1.00         1.25          1.17
     RUNOFF VOLUME    (mm)=      25.26         7.82          9.56
     TOTAL RAINFALL   (mm)=      26.26        26.26         26.26
     RUNOFF COEFFICIENT   =       0.96         0.30          0.36

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
              YOU SHOULD CONSIDER SPLITTING THE AREA.

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  78.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
```

THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
STANDHYD (0021)	Area (ha)=	0.07	
ID= 1 DT= 5.0 min	Total Imp(%)=	48.26	Dir. Conn.(%)= 39.54

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.03	0.04
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	21.60	5.60
Mannings n	=	0.013	0.250
Max.Eff.Inten.(mm/hr)=		80.70	4.50
over (min)		5.00	5.00
Storage Coeff. (min)=		1.37 (ii)	4.00 (ii)
Unit Hyd. Tpeak (min)=		5.00	5.00
Unit Hyd. peak (cms)=		0.33	0.24

		TOTALS	
PEAK FLOW	(cms)=	0.01	0.00	0.006 (iii)
TIME TO PEAK	(hrs)=	1.00	1.08	1.00
RUNOFF VOLUME	(mm)=	25.26	2.18	11.30
TOTAL RAINFALL	(mm)=	26.26	26.26	26.26
RUNOFF COEFFICIENT	=	0.96	0.08	0.43

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 52.2 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0016)					
1 + 2 = 3		AREA	QPEAK	TPEAK	R.V.
		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0001):		39.68	0.066	2.92	1.77
+ ID2= 2 (0014):		1.87	0.050	1.17	9.56
ID = 3 (0016):		41.55	0.073	2.75	2.12

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)					
3 + 2 = 1		AREA	QPEAK	TPEAK	R.V.
		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0016):		41.55	0.073	2.75	2.12
+ ID2= 2 (0002):		23.99	0.018	2.75	0.71
ID = 1 (0016):		65.54	0.091	2.75	1.61

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)					
1 + 2 = 3		AREA	QPEAK	TPEAK	R.V.
		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0016):		65.54	0.091	2.75	1.61
+ ID2= 2 (0021):		0.07	0.006	1.00	11.30
ID = 3 (0016):		65.61	0.091	2.75	1.62

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)					
3 + 2 = 1		AREA	QPEAK	TPEAK	R.V.
		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0016):		65.61	0.091	2.75	1.62
+ ID2= 2 (0025):		100.92	0.117	3.58	1.54
ID = 1 (0016):		166.53	0.202	3.25	1.57

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)					
1 + 2 = 3		AREA	QPEAK	TPEAK	R.V.
		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0016):		166.53	0.202	3.25	1.57
+ ID2= 2 (0028):		6.37	0.003	2.92	0.43
ID = 3 (0016):		172.90	0.205	3.25	1.53

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)					
3 + 2 = 1		AREA	QPEAK	TPEAK	R.V.
		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0016):		172.90	0.205	3.25	1.53
+ ID2= 2 (0029):		14.85	0.011	2.83	0.71
ID = 1 (0016):		187.75	0.216	3.25	1.47

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)					
1 + 2 = 3		AREA	QPEAK	TPEAK	R.V.
		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0016):		187.75	0.216	3.25	1.47
+ ID2= 2 (0030):		1.70	0.004	1.67	1.51
ID = 3 (0016):		189.45	0.217	3.25	1.47

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)					
3 + 2 = 1		AREA	QPEAK	TPEAK	R.V.
		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0016):		189.45	0.217	3.25	1.47
+ ID2= 2 (0031):		1.80	0.001	2.92	0.40
ID = 1 (0016):		191.25	0.218	3.25	1.46

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)					
1 + 2 = 3		AREA	QPEAK	TPEAK	R.V.
		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0016):		191.25	0.218	3.25	1.46
+ ID2= 2 (0032):		6.70	0.008	3.42	1.42
ID = 3 (0016):		197.95	0.226	3.25	1.46

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)					
3 + 2 = 1		AREA	QPEAK	TPEAK	R.V.
		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0016):		197.95	0.226	3.25	1.46
+ ID2= 2 (0033):		1.13	0.005	1.67	2.39
ID = 1 (0016):		199.08	0.228	3.25	1.46

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)					
1 + 2 = 3		AREA	QPEAK	TPEAK	R.V.
		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0016):		199.08	0.228	3.25	1.46
+ ID2= 2 (0040):		6.06	0.086	1.00	5.77
ID = 3 (0016):		205.14	0.242	3.17	1.59

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)					
3 + 2 = 1		AREA	QPEAK	TPEAK	R.V.
		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0016):		205.14	0.242	3.17	1.59
+ ID2= 2 (0048):		29.16	0.107	2.08	2.81
ID = 1 (0016):		234.30	0.322	2.67	1.74

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB			
STANDHYD (0009)	Area (ha)=	31.06	
ID= 1 DT= 5.0 min	Total Imp(%)=	53.89	Dir. Conn.(%)= 20.76

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	16.74	14.32
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	455.05	30.00
Mannings n	=	0.013	0.250

Max.Eff.Inten.(mm/hr)=	58.85	17.27		
over (min)	10.00	25.00		
Storage Coeff. (min)=	9.65 (ii)	21.64 (ii)		
Unit Hyd. Tpeak (min)=	10.00	25.00		
Unit Hyd. peak (cms)=	0.11	0.05		
			TOTALS	
PEAK FLOW (cms)=	0.75	0.32	0.833 (iii)	
TIME TO PEAK (hrs)=	1.08	1.42	1.08	
RUNOFF VOLUME (mm)=	25.26	5.97	9.98	
TOTAL RAINFALL (mm)=	26.26	26.26	26.26	
RUNOFF COEFFICIENT =	0.96	0.23	0.38	

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 68.5 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB				
STANDHYD (0010)	Area (ha)=	1.32		
ID= 1 DT= 5.0 min	Total Imp(%)=	55.27	Dir. Conn.(%)=	1.52

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	0.73	0.59
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	0.50	2.00
Length (m)=	93.81	23.50
Mannings n =	0.013	0.250

Max.Eff.Inten.(mm/hr)=	80.70	34.44		
over (min)	5.00	15.00		
Storage Coeff. (min)=	3.30 (ii)	11.15 (ii)		
Unit Hyd. Tpeak (min)=	5.00	15.00		
Unit Hyd. peak (cms)=	0.27	0.09		
			TOTALS	
PEAK FLOW (cms)=	0.00	0.03	0.033 (iii)	
TIME TO PEAK (hrs)=	1.00	1.25	1.25	
RUNOFF VOLUME (mm)=	25.26	7.55	7.82	
TOTAL RAINFALL (mm)=	26.26	26.26	26.26	
RUNOFF COEFFICIENT =	0.96	0.29	0.30	

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 68.8 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB				
STANDHYD (0013)	Area (ha)=	4.16		
ID= 1 DT= 5.0 min	Total Imp(%)=	50.00	Dir. Conn.(%)=	50.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	2.08	2.08
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	0.50	2.00
Length (m)=	166.53	250.00
Mannings n =	0.013	0.250

Max.Eff.Inten.(mm/hr)=	80.70	2.43		
over (min)	5.00	100.00		
Storage Coeff. (min)=	4.65 (ii)	98.44 (ii)		
Unit Hyd. Tpeak (min)=	5.00	100.00		
Unit Hyd. peak (cms)=	0.22	0.01		
			TOTALS	
PEAK FLOW (cms)=	0.35	0.01	0.353 (iii)	
TIME TO PEAK (hrs)=	1.00	3.00	1.00	
RUNOFF VOLUME (mm)=	25.26	3.33	14.28	
TOTAL RAINFALL (mm)=	26.26	26.26	26.26	
RUNOFF COEFFICIENT =	0.96	0.13	0.54	

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB				
STANDHYD (0036)	Area (ha)=	2.12		
ID= 1 DT= 5.0 min	Total Imp(%)=	85.04	Dir. Conn.(%)=	0.10

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	1.80	0.32

Dep. Storage (mm)=	1.00	5.00		
Average Slope (%)=	0.50	2.00		
Length (m)=	118.88	175.00		
Mannings n =	0.013	0.250		
Max.Eff.Inten.(mm/hr)=	80.70	190.98		
over (min)	5.00	20.00		
Storage Coeff. (min)=	3.80 (ii)	17.01 (ii)		
Unit Hyd. Tpeak (min)=	5.00	20.00		
Unit Hyd. peak (cms)=	0.25	0.06		
			TOTALS	
PEAK FLOW (cms)=	0.00	0.09	0.093 (iii)	
TIME TO PEAK (hrs)=	1.00	1.33	1.33	
RUNOFF VOLUME (mm)=	25.26	15.27	15.28	
TOTAL RAINFALL (mm)=	26.26	26.26	26.26	
RUNOFF COEFFICIENT =	0.96	0.58	0.58	

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB				
STANDHYD (0043)	Area (ha)=	0.13		
ID= 1 DT= 5.0 min	Total Imp(%)=	30.77	Dir. Conn.(%)=	7.69

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	0.04	0.09
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	0.50	0.50
Length (m)=	29.44	70.00
Mannings n =	0.013	0.250

Max.Eff.Inten.(mm/hr)=	80.70	5.17		
over (min)	5.00	55.00		
Storage Coeff. (min)=	1.65 (ii)	50.59 (ii)		
Unit Hyd. Tpeak (min)=	5.00	55.00		
Unit Hyd. peak (cms)=	0.32	0.02		
			TOTALS	
PEAK FLOW (cms)=	0.00	0.00	0.002 (iii)	
TIME TO PEAK (hrs)=	1.00	2.00	1.00	

RUNOFF VOLUME (mm)=	26.26	5.26	6.04	
TOTAL RAINFALL (mm)=	26.26	26.26	26.26	
RUNOFF COEFFICIENT =	0.96	0.18	0.23	

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB				
STANDHYD (0044)	Area (ha)=	1.62		
ID= 1 DT= 5.0 min	Total Imp(%)=	48.77	Dir. Conn.(%)=	30.86

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	0.79	0.83
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	0.50	1.40
Length (m)=	103.92	400.00
Mannings n =	0.013	0.250

Max.Eff.Inten.(mm/hr)=	80.70	4.72		
over (min)	5.00	110.00		
Storage Coeff. (min)=	3.51 (ii)	109.54 (ii)		
Unit Hyd. Tpeak (min)=	5.00	110.00		
Unit Hyd. peak (cms)=	0.26	0.01		
			TOTALS	
PEAK FLOW (cms)=	0.09	0.00	0.094 (iii)	
TIME TO PEAK (hrs)=	1.00	3.08	1.00	
RUNOFF VOLUME (mm)=	25.26	4.75	11.04	
TOTAL RAINFALL (mm)=	26.26	26.26	26.26	
RUNOFF COEFFICIENT =	0.96	0.18	0.42	

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0037)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0010):	1.32	0.033	1.25	7.82
+ ID2= 2 (0013):	4.16	0.353	1.00	14.28
ID = 3 (0037):	5.48	0.365	1.00	12.72

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0037)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0037):	5.48	0.365	1.00	12.72
+ ID2= 2 (0036):	2.12	0.093	1.33	15.28
ID = 1 (0037):	7.60	0.388	1.00	13.44

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0037)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0037):	7.60	0.388	1.00	13.44
+ ID2= 2 (0043):	0.13	0.002	1.00	6.04
ID = 3 (0037):	7.73	0.390	1.00	13.31

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0037)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0037):	7.73	0.390	1.00	13.31
+ ID2= 2 (0044):	1.62	0.094	1.00	11.04
ID = 1 (0037):	9.35	0.484	1.00	12.92

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0037)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0037):	9.35	0.484	1.00	12.92
+ ID2= 2 (0009):	31.06	0.833	1.08	9.98
ID = 3 (0037):	40.41	1.224	1.08	10.66

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

RESERVOIR(0038) | IN= 2---> OUT= 1 | DT= 5.0 min	OVERFLOW IS OFF			
	OUTFLOW (cms)	STORAGE (ha.m.)	OUTFLOW (cms)	STORAGE (ha.m.)
	0.0000	0.0000	0.5076	2.8989
	0.0000	0.2023	0.6060	3.2065
	0.0353	0.4202	0.7105	3.5196
	0.0525	0.6536	0.8207	3.8381
	0.0654	0.9026	0.9365	4.1621
	0.0843	1.1671	1.0574	4.4915
	0.1858	1.7227	1.1833	4.8263
	0.2540	2.0086	1.3139	5.1665
	0.3309	2.2999	1.4492	5.5122
	0.4157	2.5967	1.5890	5.8633

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
INFLOW : ID= 2 (0037)	40.410	1.224	1.08	10.66
OUTFLOW: ID= 1 (0038)	40.410	0.032	3.92	5.61

PEAK FLOW REDUCTION [Qout/Qin](%)= 2.64
TIME SHIFT OF PEAK FLOW (min)=170.00
MAXIMUM STORAGE USED (ha.m.)= 0.4015

CALIB STANDHYD (0017) | ID= 1 DT= 5.0 min	Area (ha)= 1.59	Total Imp(%)= 58.58	Dir. Conn.(%)= 27.10

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.93	0.66
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	102.96	30.00

Mannings n	=	0.013	0.250
Max.Eff.Inten.(mm/hr)	=	80.70	16.86
over (min)		5.00	20.00
Storage Coeff. (min)	=	3.49 (ii)	15.59 (ii)
Unit Hyd. Tpeak (min)	=	5.00	20.00
Unit Hyd. peak (cms)	=	0.26	0.07

				TOTALS
PEAK FLOW	(cms)=	0.08	0.02	0.083 (iii)
TIME TO PEAK	(hrs)=	1.00	1.33	1.00
RUNOFF VOLUME	(mm)=	25.26	5.71	11.00
TOTAL RAINFALL	(mm)=	26.26	26.26	26.26
RUNOFF COEFFICIENT	=	0.96	0.22	0.42

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 66.5 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

Junction Command(0018)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
INFLOW : ID= 2(0017)	1.59	0.08	1.00	11.00
OUTFLOW: ID= 2(0018)	1.59	0.08	1.00	11.00

ADD HYD (0023)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0016):	234.30	0.322	2.67	1.74
+ ID2= 2 (0018):	1.59	0.083	1.00	11.00
ID = 3 (0023):	235.89	0.329	2.58	1.80

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0023):	235.89	0.329	2.58	1.80
+ ID2= 2 (0038):	40.41	0.032	3.92	5.61
ID = 1 (0023):	276.30	0.355	2.67	2.36

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

****
** SIMULATION:N- Timmins **
****

READ STORM | Ptotal=193.00 mm	Filename: C:\Users\ecomish\AppData\Local\Temp\bd70dd54-263f-4ef7-b852-c48fc040cbd3\e3c6c2ae Comments: tim

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.00	15.00	3.00	3.00	6.00	43.00	9.00	13.00
1.00	20.00	4.00	5.00	7.00	20.00	10.00	13.00
2.00	10.00	5.00	20.00	8.00	23.00	11.00	8.00

CALIB NASHYD (0025) | ID= 1 DT= 5.0 min	Area (ha)= 100.92	Curve Number (CN)= 55.9	Ia (mm)= 7.89	# of Linear Res.(N)= 3.00	U.H. Tp(hrs)= 1.70

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	15.00	3.083	3.00	6.083	43.00	9.08	13.00
0.167	15.00	3.167	3.00	6.167	43.00	9.17	13.00
0.250	15.00	3.250	3.00	6.250	43.00	9.25	13.00
0.333	15.00	3.333	3.00	6.333	43.00	9.33	13.00
0.417	15.00	3.417	3.00	6.417	43.00	9.42	13.00
0.500	15.00	3.500	3.00	6.500	43.00	9.50	13.00
0.583	15.00	3.583	3.00	6.583	43.00	9.58	13.00
0.667	15.00	3.667	3.00	6.667	43.00	9.67	13.00

0.750	15.00	3.750	3.00	6.750	43.00	9.75	13.00
0.833	15.00	3.833	3.00	6.833	43.00	9.83	13.00
0.917	15.00	3.917	3.00	6.917	43.00	9.92	13.00
1.000	15.00	4.000	3.00	7.000	43.00	10.00	13.00
1.083	20.00	4.083	5.00	7.083	20.00	10.08	13.00
1.167	20.00	4.167	5.00	7.167	20.00	10.17	13.00
1.250	20.00	4.250	5.00	7.250	20.00	10.25	13.00
1.333	20.00	4.333	5.00	7.333	20.00	10.33	13.00
1.417	20.00	4.417	5.00	7.417	20.00	10.42	13.00
1.500	20.00	4.500	5.00	7.500	20.00	10.50	13.00
1.583	20.00	4.583	5.00	7.583	20.00	10.58	13.00
1.667	20.00	4.667	5.00	7.667	20.00	10.67	13.00
1.750	20.00	4.750	5.00	7.750	20.00	10.75	13.00
1.833	20.00	4.833	5.00	7.833	20.00	10.83	13.00
1.917	20.00	4.917	5.00	7.917	20.00	10.92	13.00
2.000	20.00	5.000	5.00	8.000	20.00	11.00	13.00
2.083	10.00	5.083	20.00	8.083	23.00	11.08	8.00
2.167	10.00	5.167	20.00	8.167	23.00	11.17	8.00
2.250	10.00	5.250	20.00	8.250	23.00	11.25	8.00
2.333	10.00	5.333	20.00	8.333	23.00	11.33	8.00
2.417	10.00	5.417	20.00	8.417	23.00	11.42	8.00
2.500	10.00	5.500	20.00	8.500	23.00	11.50	8.00
2.583	10.00	5.583	20.00	8.583	23.00	11.58	8.00
2.667	10.00	5.667	20.00	8.667	23.00	11.67	8.00
2.750	10.00	5.750	20.00	8.750	23.00	11.75	8.00
2.833	10.00	5.833	20.00	8.833	23.00	11.83	8.00
2.917	10.00	5.917	20.00	8.917	23.00	11.92	8.00
3.000	10.00	6.000	20.00	9.000	23.00	12.00	8.00

Unit Hyd Qpeak (cms)= 2.267

PEAK FLOW (cms)= 3.734 (i)
TIME TO PEAK (hrs)= 9.583
RUNOFF VOLUME (mm)= 88.963
TOTAL RAINFALL (mm)= 193.000
RUNOFF COEFFICIENT = 0.461

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0002)	Area (ha)=	23.99	Curve Number (CN)=	44.7	
ID= 5.0 min	Ia (mm)=	10.91	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	0.97			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	15.00	3.083	3.00	6.083	43.00	9.08	13.00
0.167	15.00	3.167	3.00	6.167	43.00	9.17	13.00
0.250	15.00	3.250	3.00	6.250	43.00	9.25	13.00
0.333	15.00	3.333	3.00	6.333	43.00	9.33	13.00
0.417	15.00	3.417	3.00	6.417	43.00	9.42	13.00
0.500	15.00	3.500	3.00	6.500	43.00	9.50	13.00
0.583	15.00	3.583	3.00	6.583	43.00	9.58	13.00
0.667	15.00	3.667	3.00	6.667	43.00	9.67	13.00
0.750	15.00	3.750	3.00	6.750	43.00	9.75	13.00
0.833	15.00	3.833	3.00	6.833	43.00	9.83	13.00
0.917	15.00	3.917	3.00	6.917	43.00	9.92	13.00
1.000	15.00	4.000	3.00	7.000	43.00	10.00	13.00
1.083	20.00	4.083	5.00	7.083	20.00	10.08	13.00
1.167	20.00	4.167	5.00	7.167	20.00	10.17	13.00
1.250	20.00	4.250	5.00	7.250	20.00	10.25	13.00
1.333	20.00	4.333	5.00	7.333	20.00	10.33	13.00
1.417	20.00	4.417	5.00	7.417	20.00	10.42	13.00
1.500	20.00	4.500	5.00	7.500	20.00	10.50	13.00
1.583	20.00	4.583	5.00	7.583	20.00	10.58	13.00
1.667	20.00	4.667	5.00	7.667	20.00	10.67	13.00
1.750	20.00	4.750	5.00	7.750	20.00	10.75	13.00
1.833	20.00	4.833	5.00	7.833	20.00	10.83	13.00
1.917	20.00	4.917	5.00	7.917	20.00	10.92	13.00
2.000	20.00	5.000	5.00	8.000	20.00	11.00	13.00
2.083	10.00	5.083	20.00	8.083	23.00	11.08	8.00
2.167	10.00	5.167	20.00	8.167	23.00	11.17	8.00
2.250	10.00	5.250	20.00	8.250	23.00	11.25	8.00
2.333	10.00	5.333	20.00	8.333	23.00	11.33	8.00
2.417	10.00	5.417	20.00	8.417	23.00	11.42	8.00
2.500	10.00	5.500	20.00	8.500	23.00	11.50	8.00
2.583	10.00	5.583	20.00	8.583	23.00	11.58	8.00
2.667	10.00	5.667	20.00	8.667	23.00	11.67	8.00
2.750	10.00	5.750	20.00	8.750	23.00	11.75	8.00
2.833	10.00	5.833	20.00	8.833	23.00	11.83	8.00
2.917	10.00	5.917	20.00	8.917	23.00	11.92	8.00
3.000	10.00	6.000	20.00	9.000	23.00	12.00	8.00

Unit Hyd Qpeak (cms)= 0.945

PEAK FLOW (cms)= 0.752 (i)
TIME TO PEAK (hrs)= 7.917
RUNOFF VOLUME (mm)= 66.804
TOTAL RAINFALL (mm)= 193.000
RUNOFF COEFFICIENT = 0.346

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0001)	Area (ha)=	39.68	Curve Number (CN)=	60.7	
ID= 1 DT= 5.0 min	Ia (mm)=	8.26	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	1.18			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	15.00	3.083	3.00	6.083	43.00	9.08	13.00
0.167	15.00	3.167	3.00	6.167	43.00	9.17	13.00
0.250	15.00	3.250	3.00	6.250	43.00	9.25	13.00
0.333	15.00	3.333	3.00	6.333	43.00	9.33	13.00
0.417	15.00	3.417	3.00	6.417	43.00	9.42	13.00
0.500	15.00	3.500	3.00	6.500	43.00	9.50	13.00
0.583	15.00	3.583	3.00	6.583	43.00	9.58	13.00
0.667	15.00	3.667	3.00	6.667	43.00	9.67	13.00
0.750	15.00	3.750	3.00	6.750	43.00	9.75	13.00
0.833	15.00	3.833	3.00	6.833	43.00	9.83	13.00
0.917	15.00	3.917	3.00	6.917	43.00	9.92	13.00
1.000	15.00	4.000	3.00	7.000	43.00	10.00	13.00
1.083	20.00	4.083	5.00	7.083	20.00	10.08	13.00
1.167	20.00	4.167	5.00	7.167	20.00	10.17	13.00
1.250	20.00	4.250	5.00	7.250	20.00	10.25	13.00
1.333	20.00	4.333	5.00	7.333	20.00	10.33	13.00
1.417	20.00	4.417	5.00	7.417	20.00	10.42	13.00
1.500	20.00	4.500	5.00	7.500	20.00	10.50	13.00
1.583	20.00	4.583	5.00	7.583	20.00	10.58	13.00
1.667	20.00	4.667	5.00	7.667	20.00	10.67	13.00
1.750	20.00	4.750	5.00	7.750	20.00	10.75	13.00
1.833	20.00	4.833	5.00	7.833	20.00	10.83	13.00
1.917	20.00	4.917	5.00	7.917	20.00	10.92	13.00
2.000	20.00	5.000	5.00	8.000	20.00	11.00	13.00
2.083	10.00	5.083	20.00	8.083	23.00	11.08	8.00
2.167	10.00	5.167	20.00	8.167	23.00	11.17	8.00
2.250	10.00	5.250	20.00	8.250	23.00	11.25	8.00
2.333	10.00	5.333	20.00	8.333	23.00	11.33	8.00
2.417	10.00	5.417	20.00	8.417	23.00	11.42	8.00
2.500	10.00	5.500	20.00	8.500	23.00	11.50	8.00
2.583	10.00	5.583	20.00	8.583	23.00	11.58	8.00
2.667	10.00	5.667	20.00	8.667	23.00	11.67	8.00

2.750	10.00	5.750	20.00	8.750	23.00	11.75	8.00
2.833	10.00	5.833	20.00	8.833	23.00	11.83	8.00
2.917	10.00	5.917	20.00	8.917	23.00	11.92	8.00
3.000	10.00	6.000	20.00	9.000	23.00	12.00	8.00

Unit Hyd Qpeak (cms)= 1.284

PEAK FLOW (cms)= 1.736 (i)
TIME TO PEAK (hrs)= 9.083
RUNOFF VOLUME (mm)= 97.698
TOTAL RAINFALL (mm)= 193.000
RUNOFF COEFFICIENT = 0.506

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0028)	Area (ha)=	6.37	Curve Number (CN)=	50.5	
ID= 1 DT= 5.0 min	Ia (mm)=	15.69	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	0.77			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	15.00	3.083	3.00	6.083	43.00	9.08	13.00
0.167	15.00	3.167	3.00	6.167	43.00	9.17	13.00
0.250	15.00	3.250	3.00	6.250	43.00	9.25	13.00
0.333	15.00	3.333	3.00	6.333	43.00	9.33	13.00
0.417	15.00	3.417	3.00	6.417	43.00	9.42	13.00
0.500	15.00	3.500	3.00	6.500	43.00	9.50	13.00
0.583	15.00	3.583	3.00	6.583	43.00	9.58	13.00
0.667	15.00	3.667	3.00	6.667	43.00	9.67	13.00
0.750	15.00	3.750	3.00	6.750	43.00	9.75	13.00
0.833	15.00	3.833	3.00	6.833	43.00	9.83	13.00
0.917	15.00	3.917	3.00	6.917	43.00	9.92	13.00
1.000	15.00	4.000	3.00	7.000	43.00	10.00	13.00
1.083	20.00	4.083	5.00	7.083	20.00	10.08	13.00
1.167	20.00	4.167	5.00	7.167	20.00	10.17	13.00
1.250	20.00	4.250	5.00	7.250	20.00	10.25	13.00
1.333	20.00	4.333	5.00	7.333	20.00	10.33	13.00
1.417	20.00	4.417	5.00	7.417	20.00	10.42	13.00
1.500	20.00	4.500	5.00	7.500	20.00	10.50	13.00
1.583	20.00	4.583	5.00	7.583	20.00	10.58	13.00
1.667	20.00	4.667	5.00	7.667	20.00	10.67	13.00

1.750	20.00	4.750	5.00	7.750	20.00	10.75	13.00
1.833	20.00	4.833	5.00	7.833	20.00	10.83	13.00
1.917	20.00	4.917	5.00	7.917	20.00	10.92	13.00
2.000	20.00	5.000	5.00	8.000	20.00	11.00	13.00
2.083	10.00	5.083	20.00	8.083	23.00	11.08	8.00
2.167	10.00	5.167	20.00	8.167	23.00	11.17	8.00
2.250	10.00	5.250	20.00	8.250	23.00	11.25	8.00
2.333	10.00	5.333	20.00	8.333	23.00	11.33	8.00
2.417	10.00	5.417	20.00	8.417	23.00	11.42	8.00
2.500	10.00	5.500	20.00	8.500	23.00	11.50	8.00
2.583	10.00	5.583	20.00	8.583	23.00	11.58	8.00
2.667	10.00	5.667	20.00	8.667	23.00	11.67	8.00
2.750	10.00	5.750	20.00	8.750	23.00	11.75	8.00
2.833	10.00	5.833	20.00	8.833	23.00	11.83	8.00
2.917	10.00	5.917	20.00	8.917	23.00	11.92	8.00
3.000	10.00	6.000	20.00	9.000	23.00	12.00	8.00

Unit Hyd Qpeak (cms)= 0.316

PEAK FLOW (cms)= 0.245 (i)
TIME TO PEAK (hrs)= 7.500
RUNOFF VOLUME (mm)= 73.716
TOTAL RAINFALL (mm)= 193.000
RUNOFF COEFFICIENT = 0.382

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0029)	Area (ha)=	14.85	Curve Number (CN)= 52.9
ID= 1 DT= 5.0 min	Ia (mm)=	13.28	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	0.89	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	15.00	3.083	3.00	6.083	43.00	9.08	13.00
0.167	15.00	3.167	3.00	6.167	43.00	9.17	13.00
0.250	15.00	3.250	3.00	6.250	43.00	9.25	13.00
0.333	15.00	3.333	3.00	6.333	43.00	9.33	13.00
0.417	15.00	3.417	3.00	6.417	43.00	9.42	13.00
0.500	15.00	3.500	3.00	6.500	43.00	9.50	13.00
0.583	15.00	3.583	3.00	6.583	43.00	9.58	13.00
0.667	15.00	3.667	3.00	6.667	43.00	9.67	13.00

0.750	15.00	3.750	3.00	6.750	43.00	9.75	13.00
0.833	15.00	3.833	3.00	6.833	43.00	9.83	13.00
0.917	15.00	3.917	3.00	6.917	43.00	9.92	13.00
1.000	15.00	4.000	3.00	7.000	43.00	10.00	13.00
1.083	20.00	4.083	5.00	7.083	20.00	10.08	13.00
1.167	20.00	4.167	5.00	7.167	20.00	10.17	13.00
1.250	20.00	4.250	5.00	7.250	20.00	10.25	13.00
1.333	20.00	4.333	5.00	7.333	20.00	10.33	13.00
1.417	20.00	4.417	5.00	7.417	20.00	10.42	13.00
1.500	20.00	4.500	5.00	7.500	20.00	10.50	13.00
1.583	20.00	4.583	5.00	7.583	20.00	10.58	13.00
1.667	20.00	4.667	5.00	7.667	20.00	10.67	13.00
1.750	20.00	4.750	5.00	7.750	20.00	10.75	13.00
1.833	20.00	4.833	5.00	7.833	20.00	10.83	13.00
1.917	20.00	4.917	5.00	7.917	20.00	10.92	13.00
2.000	20.00	5.000	5.00	8.000	20.00	11.00	13.00
2.083	10.00	5.083	20.00	8.083	23.00	11.08	8.00
2.167	10.00	5.167	20.00	8.167	23.00	11.17	8.00
2.250	10.00	5.250	20.00	8.250	23.00	11.25	8.00
2.333	10.00	5.333	20.00	8.333	23.00	11.33	8.00
2.417	10.00	5.417	20.00	8.417	23.00	11.42	8.00
2.500	10.00	5.500	20.00	8.500	23.00	11.50	8.00
2.583	10.00	5.583	20.00	8.583	23.00	11.58	8.00
2.667	10.00	5.667	20.00	8.667	23.00	11.67	8.00
2.750	10.00	5.750	20.00	8.750	23.00	11.75	8.00
2.833	10.00	5.833	20.00	8.833	23.00	11.83	8.00
2.917	10.00	5.917	20.00	8.917	23.00	11.92	8.00
3.000	10.00	6.000	20.00	9.000	23.00	12.00	8.00

Unit Hyd Qpeak (cms)= 0.637

PEAK FLOW (cms)= 0.585 (i)
TIME TO PEAK (hrs)= 7.750
RUNOFF VOLUME (mm)= 79.651
TOTAL RAINFALL (mm)= 193.000
RUNOFF COEFFICIENT = 0.413

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0030)	Area (ha)=	1.70	Curve Number (CN)= 60.5
ID= 1 DT= 5.0 min	Ia (mm)=	9.65	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	0.40	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	15.00	3.083	3.00	6.083	43.00	9.08	13.00
0.167	15.00	3.167	3.00	6.167	43.00	9.17	13.00
0.250	15.00	3.250	3.00	6.250	43.00	9.25	13.00
0.333	15.00	3.333	3.00	6.333	43.00	9.33	13.00
0.417	15.00	3.417	3.00	6.417	43.00	9.42	13.00
0.500	15.00	3.500	3.00	6.500	43.00	9.50	13.00
0.583	15.00	3.583	3.00	6.583	43.00	9.58	13.00
0.667	15.00	3.667	3.00	6.667	43.00	9.67	13.00
0.750	15.00	3.750	3.00	6.750	43.00	9.75	13.00
0.833	15.00	3.833	3.00	6.833	43.00	9.83	13.00
0.917	15.00	3.917	3.00	6.917	43.00	9.92	13.00
1.000	15.00	4.000	3.00	7.000	43.00	10.00	13.00
1.083	20.00	4.083	5.00	7.083	20.00	10.08	13.00
1.167	20.00	4.167	5.00	7.167	20.00	10.17	13.00
1.250	20.00	4.250	5.00	7.250	20.00	10.25	13.00
1.333	20.00	4.333	5.00	7.333	20.00	10.33	13.00
1.417	20.00	4.417	5.00	7.417	20.00	10.42	13.00
1.500	20.00	4.500	5.00	7.500	20.00	10.50	13.00
1.583	20.00	4.583	5.00	7.583	20.00	10.58	13.00
1.667	20.00	4.667	5.00	7.667	20.00	10.67	13.00
1.750	20.00	4.750	5.00	7.750	20.00	10.75	13.00
1.833	20.00	4.833	5.00	7.833	20.00	10.83	13.00
1.917	20.00	4.917	5.00	7.917	20.00	10.92	13.00
2.000	20.00	5.000	5.00	8.000	20.00	11.00	13.00
2.083	10.00	5.083	20.00	8.083	23.00	11.08	8.00
2.167	10.00	5.167	20.00	8.167	23.00	11.17	8.00
2.250	10.00	5.250	20.00	8.250	23.00	11.25	8.00
2.333	10.00	5.333	20.00	8.333	23.00	11.33	8.00
2.417	10.00	5.417	20.00	8.417	23.00	11.42	8.00
2.500	10.00	5.500	20.00	8.500	23.00	11.50	8.00
2.583	10.00	5.583	20.00	8.583	23.00	11.58	8.00
2.667	10.00	5.667	20.00	8.667	23.00	11.67	8.00
2.750	10.00	5.750	20.00	8.750	23.00	11.75	8.00
2.833	10.00	5.833	20.00	8.833	23.00	11.83	8.00
2.917	10.00	5.917	20.00	8.917	23.00	11.92	8.00
3.000	10.00	6.000	20.00	9.000	23.00	12.00	8.00

Unit Hyd Qpeak (cms)= 0.162

PEAK FLOW (cms)= 0.109 (i)
TIME TO PEAK (hrs)= 7.083
RUNOFF VOLUME (mm)= 96.184
TOTAL RAINFALL (mm)= 193.000
RUNOFF COEFFICIENT = 0.498

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0031)	Area (ha)=	1.80	Curve Number (CN)= 50.0
ID= 1 DT= 5.0 min	Ia (mm)=	16.00	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	0.76	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	15.00	3.083	3.00	6.083	43.00	9.08	13.00
0.167	15.00	3.167	3.00	6.167	43.00	9.17	13.00
0.250	15.00	3.250	3.00	6.250	43.00	9.25	13.00
0.333	15.00	3.333	3.00	6.333	43.00	9.33	13.00
0.417	15.00	3.417	3.00	6.417	43.00	9.42	13.00
0.500	15.00	3.500	3.00	6.500	43.00	9.50	13.00
0.583	15.00	3.583	3.00	6.583	43.00	9.58	13.00
0.667	15.00	3.667	3.00	6.667	43.00	9.67	13.00
0.750	15.00	3.750	3.00	6.750	43.00	9.75	13.00
0.833	15.00	3.833	3.00	6.833	43.00	9.83	13.00
0.917	15.00	3.917	3.00	6.917	43.00	9.92	13.00
1.000	15.00	4.000	3.00	7.000	43.00	10.00	13.00
1.083	20.00	4.083	5.00	7.083	20.00	10.08	13.00
1.167	20.00	4.167	5.00	7.167	20.00	10.17	13.00
1.250	20.00	4.250	5.00	7.250	20.00	10.25	13.00
1.333	20.00	4.333	5.00	7.333	20.00	10.33	13.00
1.417	20.00	4.417	5.00	7.417	20.00	10.42	13.00
1.500	20.00	4.500	5.00	7.500	20.00	10.50	13.00
1.583	20.00	4.583	5.00	7.583	20.00	10.58	13.00
1.667	20.00	4.667	5.00	7.667	20.00	10.67	13.00
1.750	20.00	4.750	5.00	7.750	20.00	10.75	13.00
1.833	20.00	4.833	5.00	7.833	20.00	10.83	13.00
1.917	20.00	4.917	5.00	7.917	20.00	10.92	13.00
2.000	20.00	5.000	5.00	8.000	20.00	11.00	13.00
2.083	10.00	5.083	20.00	8.083	23.00	11.08	8.00
2.167	10.00	5.167	20.00	8.167	23.00	11.17	8.00
2.250	10.00	5.250	20.00	8.250	23.00	11.25	8.00
2.333	10.00	5.333	20.00	8.333	23.00	11.33	8.00
2.417	10.00	5.417	20.00	8.417	23.00	11.42	8.00
2.500	10.00	5.500	20.00	8.500	23.00	11.50	8.00
2.583	10.00	5.583	20.00	8.583	23.00	11.58	8.00
2.667	10.00	5.667	20.00	8.667	23.00	11.67	8.00

2.750	10.00	5.750	20.00	8.750	23.00	11.75	8.00
2.833	10.00	5.833	20.00	8.833	23.00	11.83	8.00
2.917	10.00	5.917	20.00	8.917	23.00	11.92	8.00
3.000	10.00	6.000	20.00	9.000	23.00	12.00	8.00

Unit Hyd Qpeak (cms)= 0.090

PEAK FLOW (cms)= 0.069 (i)
TIME TO PEAK (hrs)= 7.500
RUNOFF VOLUME (mm)= 72.687
TOTAL RAINFALL (mm)= 193.000
RUNOFF COEFFICIENT = 0.377

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0032)	Area (ha)=	6.70	Curve Number (CN)=	60.0	
ID= 1 DT= 5.0 min	Ia (mm)=	10.00	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	1.45			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	15.00	3.083	3.00	6.083	43.00	9.08	13.00
0.167	15.00	3.167	3.00	6.167	43.00	9.17	13.00
0.250	15.00	3.250	3.00	6.250	43.00	9.25	13.00
0.333	15.00	3.333	3.00	6.333	43.00	9.33	13.00
0.417	15.00	3.417	3.00	6.417	43.00	9.42	13.00
0.500	15.00	3.500	3.00	6.500	43.00	9.50	13.00
0.583	15.00	3.583	3.00	6.583	43.00	9.58	13.00
0.667	15.00	3.667	3.00	6.667	43.00	9.67	13.00
0.750	15.00	3.750	3.00	6.750	43.00	9.75	13.00
0.833	15.00	3.833	3.00	6.833	43.00	9.83	13.00
0.917	15.00	3.917	3.00	6.917	43.00	9.92	13.00
1.000	15.00	4.000	3.00	7.000	43.00	10.00	13.00
1.083	20.00	4.083	5.00	7.083	20.00	10.08	13.00
1.167	20.00	4.167	5.00	7.167	20.00	10.17	13.00
1.250	20.00	4.250	5.00	7.250	20.00	10.25	13.00
1.333	20.00	4.333	5.00	7.333	20.00	10.33	13.00
1.417	20.00	4.417	5.00	7.417	20.00	10.42	13.00
1.500	20.00	4.500	5.00	7.500	20.00	10.50	13.00
1.583	20.00	4.583	5.00	7.583	20.00	10.58	13.00
1.667	20.00	4.667	5.00	7.667	20.00	10.67	13.00

1.750	20.00	4.750	5.00	7.750	20.00	10.75	13.00
1.833	20.00	4.833	5.00	7.833	20.00	10.83	13.00
1.917	20.00	4.917	5.00	7.917	20.00	10.92	13.00
2.000	20.00	5.000	5.00	8.000	20.00	11.00	13.00
2.083	10.00	5.083	20.00	8.083	23.00	11.08	8.00
2.167	10.00	5.167	20.00	8.167	23.00	11.17	8.00
2.250	10.00	5.250	20.00	8.250	23.00	11.25	8.00
2.333	10.00	5.333	20.00	8.333	23.00	11.33	8.00
2.417	10.00	5.417	20.00	8.417	23.00	11.42	8.00
2.500	10.00	5.500	20.00	8.500	23.00	11.50	8.00
2.583	10.00	5.583	20.00	8.583	23.00	11.58	8.00
2.667	10.00	5.667	20.00	8.667	23.00	11.67	8.00
2.750	10.00	5.750	20.00	8.750	23.00	11.75	8.00
2.833	10.00	5.833	20.00	8.833	23.00	11.83	8.00
2.917	10.00	5.917	20.00	8.917	23.00	11.92	8.00
3.000	10.00	6.000	20.00	9.000	23.00	12.00	8.00

Unit Hyd Qpeak (cms)= 0.176

PEAK FLOW (cms)= 0.278 (i)
TIME TO PEAK (hrs)= 9.333
RUNOFF VOLUME (mm)= 95.049
TOTAL RAINFALL (mm)= 193.000
RUNOFF COEFFICIENT = 0.492

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0033)	Area (ha)=	1.13	Curve Number (CN)=	67.4	
ID= 1 DT= 5.0 min	Ia (mm)=	7.88	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	0.43			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	15.00	3.083	3.00	6.083	43.00	9.08	13.00
0.167	15.00	3.167	3.00	6.167	43.00	9.17	13.00
0.250	15.00	3.250	3.00	6.250	43.00	9.25	13.00
0.333	15.00	3.333	3.00	6.333	43.00	9.33	13.00
0.417	15.00	3.417	3.00	6.417	43.00	9.42	13.00
0.500	15.00	3.500	3.00	6.500	43.00	9.50	13.00
0.583	15.00	3.583	3.00	6.583	43.00	9.58	13.00
0.667	15.00	3.667	3.00	6.667	43.00	9.67	13.00

0.750	15.00	3.750	3.00	6.750	43.00	9.75	13.00
0.833	15.00	3.833	3.00	6.833	43.00	9.83	13.00
0.917	15.00	3.917	3.00	6.917	43.00	9.92	13.00
1.000	15.00	4.000	3.00	7.000	43.00	10.00	13.00
1.083	20.00	4.083	5.00	7.083	20.00	10.08	13.00
1.167	20.00	4.167	5.00	7.167	20.00	10.17	13.00
1.250	20.00	4.250	5.00	7.250	20.00	10.25	13.00
1.333	20.00	4.333	5.00	7.333	20.00	10.33	13.00
1.417	20.00	4.417	5.00	7.417	20.00	10.42	13.00
1.500	20.00	4.500	5.00	7.500	20.00	10.50	13.00
1.583	20.00	4.583	5.00	7.583	20.00	10.58	13.00
1.667	20.00	4.667	5.00	7.667	20.00	10.67	13.00
1.750	20.00	4.750	5.00	7.750	20.00	10.75	13.00
1.833	20.00	4.833	5.00	7.833	20.00	10.83	13.00
1.917	20.00	4.917	5.00	7.917	20.00	10.92	13.00
2.000	20.00	5.000	5.00	8.000	20.00	11.00	13.00
2.083	10.00	5.083	20.00	8.083	23.00	11.08	8.00
2.167	10.00	5.167	20.00	8.167	23.00	11.17	8.00
2.250	10.00	5.250	20.00	8.250	23.00	11.25	8.00
2.333	10.00	5.333	20.00	8.333	23.00	11.33	8.00
2.417	10.00	5.417	20.00	8.417	23.00	11.42	8.00
2.500	10.00	5.500	20.00	8.500	23.00	11.50	8.00
2.583	10.00	5.583	20.00	8.583	23.00	11.58	8.00
2.667	10.00	5.667	20.00	8.667	23.00	11.67	8.00
2.750	10.00	5.750	20.00	8.750	23.00	11.75	8.00
2.833	10.00	5.833	20.00	8.833	23.00	11.83	8.00
2.917	10.00	5.917	20.00	8.917	23.00	11.92	8.00
3.000	10.00	6.000	20.00	9.000	23.00	12.00	8.00

Unit Hyd Qpeak (cms)= 0.100

PEAK FLOW (cms)= 0.082 (i)
TIME TO PEAK (hrs)= 7.083
RUNOFF VOLUME (mm)= 111.181
TOTAL RAINFALL (mm)= 193.000
RUNOFF COEFFICIENT = 0.576

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0027)	Area (ha)=	1.38	Curve Number (CN)=	64.1	
ID= 1 DT= 5.0 min	Ia (mm)=	8.51	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	0.39			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	15.00	3.083	3.00	6.083	43.00	9.08	13.00
0.167	15.00	3.167	3.00	6.167	43.00	9.17	13.00
0.250	15.00	3.250	3.00	6.250	43.00	9.25	13.00
0.333	15.00	3.333	3.00	6.333	43.00	9.33	13.00
0.417	15.00	3.417	3.00	6.417	43.00	9.42	13.00
0.500	15.00	3.500	3.00	6.500	43.00	9.50	13.00
0.583	15.00	3.583	3.00	6.583	43.00	9.58	13.00
0.667	15.00	3.667	3.00	6.667	43.00	9.67	13.00
0.750	15.00	3.750	3.00	6.750	43.00	9.75	13.00
0.833	15.00	3.833	3.00	6.833	43.00	9.83	13.00
0.917	15.00	3.917	3.00	6.917	43.00	9.92	13.00
1.000	15.00	4.000	3.00	7.000	43.00	10.00	13.00
1.083	20.00	4.083	5.00	7.083	20.00	10.08	13.00
1.167	20.00	4.167	5.00	7.167	20.00	10.17	13.00
1.250	20.00	4.250	5.00	7.250	20.00	10.25	13.00
1.333	20.00	4.333	5.00	7.333	20.00	10.33	13.00
1.417	20.00	4.417	5.00	7.417	20.00	10.42	13.00
1.500	20.00	4.500	5.00	7.500	20.00	10.50	13.00
1.583	20.00	4.583	5.00	7.583	20.00	10.58	13.00
1.667	20.00	4.667	5.00	7.667	20.00	10.67	13.00
1.750	20.00	4.750	5.00	7.750	20.00	10.75	13.00
1.833	20.00	4.833	5.00	7.833	20.00	10.83	13.00
1.917	20.00	4.917	5.00	7.917	20.00	10.92	13.00
2.000	20.00	5.000	5.00	8.000	20.00	11.00	13.00
2.083	10.00	5.083	20.00	8.083	23.00	11.08	8.00
2.167	10.00	5.167	20.00	8.167	23.00	11.17	8.00
2.250	10.00	5.250	20.00	8.250	23.00	11.25	8.00
2.333	10.00	5.333	20.00	8.333	23.00	11.33	8.00
2.417	10.00	5.417	20.00	8.417	23.00	11.42	8.00
2.500	10.00	5.500	20.00	8.500	23.00	11.50	8.00
2.583	10.00	5.583	20.00	8.583	23.00	11.58	8.00
2.667	10.00	5.667	20.00	8.667	23.00	11.67	8.00
2.750	10.00	5.750	20.00	8.750	23.00	11.75	8.00
2.833	10.00	5.833	20.00	8.833	23.00	11.83	8.00
2.917	10.00	5.917	20.00	8.917	23.00	11.92	8.00
3.000	10.00	6.000	20.00	9.000	23.00	12.00	8.00

Unit Hyd Qpeak (cms)= 0.135

PEAK FLOW (cms)= 0.097 (i)
TIME TO PEAK (hrs)= 7.083
RUNOFF VOLUME (mm)= 104.232
TOTAL RAINFALL (mm)= 193.000
RUNOFF COEFFICIENT = 0.540

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0041)	Area (ha)=	0.59	Curve Number (CN)=	71.5	
ID= 1 DT= 5.0 min	Ia (mm)=	4.75	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	0.53			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	15.00	3.083	3.00	6.083	43.00	9.08	13.00
0.167	15.00	3.167	3.00	6.167	43.00	9.17	13.00
0.250	15.00	3.250	3.00	6.250	43.00	9.25	13.00
0.333	15.00	3.333	3.00	6.333	43.00	9.33	13.00
0.417	15.00	3.417	3.00	6.417	43.00	9.42	13.00
0.500	15.00	3.500	3.00	6.500	43.00	9.50	13.00
0.583	15.00	3.583	3.00	6.583	43.00	9.58	13.00
0.667	15.00	3.667	3.00	6.667	43.00	9.67	13.00
0.750	15.00	3.750	3.00	6.750	43.00	9.75	13.00
0.833	15.00	3.833	3.00	6.833	43.00	9.83	13.00
0.917	15.00	3.917	3.00	6.917	43.00	9.92	13.00
1.000	15.00	4.000	3.00	7.000	43.00	10.00	13.00
1.083	20.00	4.083	5.00	7.083	20.00	10.08	13.00
1.167	20.00	4.167	5.00	7.167	20.00	10.17	13.00
1.250	20.00	4.250	5.00	7.250	20.00	10.25	13.00
1.333	20.00	4.333	5.00	7.333	20.00	10.33	13.00
1.417	20.00	4.417	5.00	7.417	20.00	10.42	13.00
1.500	20.00	4.500	5.00	7.500	20.00	10.50	13.00
1.583	20.00	4.583	5.00	7.583	20.00	10.58	13.00
1.667	20.00	4.667	5.00	7.667	20.00	10.67	13.00
1.750	20.00	4.750	5.00	7.750	20.00	10.75	13.00
1.833	20.00	4.833	5.00	7.833	20.00	10.83	13.00
1.917	20.00	4.917	5.00	7.917	20.00	10.92	13.00
2.000	20.00	5.000	5.00	8.000	20.00	11.00	13.00
2.083	10.00	5.083	20.00	8.083	23.00	11.08	8.00
2.167	10.00	5.167	20.00	8.167	23.00	11.17	8.00
2.250	10.00	5.250	20.00	8.250	23.00	11.25	8.00
2.333	10.00	5.333	20.00	8.333	23.00	11.33	8.00
2.417	10.00	5.417	20.00	8.417	23.00	11.42	8.00
2.500	10.00	5.500	20.00	8.500	23.00	11.50	8.00
2.583	10.00	5.583	20.00	8.583	23.00	11.58	8.00
2.667	10.00	5.667	20.00	8.667	23.00	11.67	8.00

2.750	10.00	5.750	20.00	8.750	23.00	11.75	8.00
2.833	10.00	5.833	20.00	8.833	23.00	11.83	8.00
2.917	10.00	5.917	20.00	8.917	23.00	11.92	8.00
3.000	10.00	6.000	20.00	9.000	23.00	12.00	8.00

Unit Hyd Qpeak (cms)= 0.043

PEAK FLOW (cms)= 0.044 (i)
TIME TO PEAK (hrs)= 7.167
RUNOFF VOLUME (mm)= 122.322
TOTAL RAINFALL (mm)= 193.000
RUNOFF COEFFICIENT = 0.634

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
STANDHYD (0015)	Area (ha)=	1.93	
ID= 1 DT= 5.0 min	Total Imp(%)=	54.66	Dir. Conn.(%)= 10.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	1.05	0.88
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	113.43	45.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	15.00	3.083	3.00	6.083	43.00	9.08	13.00
0.167	15.00	3.167	3.00	6.167	43.00	9.17	13.00
0.250	15.00	3.250	3.00	6.250	43.00	9.25	13.00
0.333	15.00	3.333	3.00	6.333	43.00	9.33	13.00
0.417	15.00	3.417	3.00	6.417	43.00	9.42	13.00
0.500	15.00	3.500	3.00	6.500	43.00	9.50	13.00
0.583	15.00	3.583	3.00	6.583	43.00	9.58	13.00
0.667	15.00	3.667	3.00	6.667	43.00	9.67	13.00
0.750	15.00	3.750	3.00	6.750	43.00	9.75	13.00
0.833	15.00	3.833	3.00	6.833	43.00	9.83	13.00
0.917	15.00	3.917	3.00	6.917	43.00	9.92	13.00
1.000	15.00	4.000	3.00	7.000	43.00	10.00	13.00
1.083	20.00	4.083	5.00	7.083	20.00	10.08	13.00
1.167	20.00	4.167	5.00	7.167	20.00	10.17	13.00

1.250	20.00	4.250	5.00	7.250	20.00	10.25	13.00
1.333	20.00	4.333	5.00	7.333	20.00	10.33	13.00
1.417	20.00	4.417	5.00	7.417	20.00	10.42	13.00
1.500	20.00	4.500	5.00	7.500	20.00	10.50	13.00
1.583	20.00	4.583	5.00	7.583	20.00	10.58	13.00
1.667	20.00	4.667	5.00	7.667	20.00	10.67	13.00
1.750	20.00	4.750	5.00	7.750	20.00	10.75	13.00
1.833	20.00	4.833	5.00	7.833	20.00	10.83	13.00
1.917	20.00	4.917	5.00	7.917	20.00	10.92	13.00
2.000	20.00	5.000	5.00	8.000	20.00	11.00	13.00
2.083	10.00	5.083	20.00	8.083	23.00	11.08	8.00
2.167	10.00	5.167	20.00	8.167	23.00	11.17	8.00
2.250	10.00	5.250	20.00	8.250	23.00	11.25	8.00
2.333	10.00	5.333	20.00	8.333	23.00	11.33	8.00
2.417	10.00	5.417	20.00	8.417	23.00	11.42	8.00
2.500	10.00	5.500	20.00	8.500	23.00	11.50	8.00
2.583	10.00	5.583	20.00	8.583	23.00	11.58	8.00
2.667	10.00	5.667	20.00	8.667	23.00	11.67	8.00
2.750	10.00	5.750	20.00	8.750	23.00	11.75	8.00
2.833	10.00	5.833	20.00	8.833	23.00	11.83	8.00
2.917	10.00	5.917	20.00	8.917	23.00	11.92	8.00
3.000	10.00	6.000	20.00	9.000	23.00	12.00	8.00

Max.Eff.Inten.(mm/hr)=	43.00	59.77		
over (min)	5.00	15.00		
Storage Coeff. (min)=	4.75 (ii)	14.06 (ii)		
Unit Hyd. Tpeak (min)=	5.00	15.00		
Unit Hyd. peak (cms)=	0.22	0.08		
			TOTALS	
PEAK FLOW (cms)=	0.02	0.14	0.161 (iii)	
TIME TO PEAK (hrs)=	6.92	7.00	7.00	
RUNOFF VOLUME (mm)=	192.00	112.19	120.17	
TOTAL RAINFALL (mm)=	193.00	193.00	193.00	
RUNOFF COEFFICIENT =	0.99	0.58	0.62	

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 49.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	

STANDHYD (0019)	Area (ha)=	2.16	
ID= 1 DT= 5.0 min	Total Imp(%)=	54.64	Dir. Conn.(%)= 10.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	1.18	0.98
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	120.00	30.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	15.00	3.083	3.00	6.083	43.00	9.08	13.00
0.167	15.00	3.167	3.00	6.167	43.00	9.17	13.00
0.250	15.00	3.250	3.00	6.250	43.00	9.25	13.00
0.333	15.00	3.333	3.00	6.333	43.00	9.33	13.00
0.417	15.00	3.417	3.00	6.417	43.00	9.42	13.00
0.500	15.00	3.500	3.00	6.500	43.00	9.50	13.00
0.583	15.00	3.583	3.00	6.583	43.00	9.58	13.00
0.667	15.00	3.667	3.00	6.667	43.00	9.67	13.00
0.750	15.00	3.750	3.00	6.750	43.00	9.75	13.00
0.833	15.00	3.833	3.00	6.833	43.00	9.83	13.00
0.917	15.00	3.917	3.00	6.917	43.00	9.92	13.00
1.000	15.00	4.000	3.00	7.000	43.00	10.00	13.00
1.083	20.00	4.083	5.00	7.083	20.00	10.08	13.00
1.167	20.00	4.167	5.00	7.167	20.00	10.17	13.00
1.250	20.00	4.250	5.00	7.250	20.00	10.25	13.00
1.333	20.00	4.333	5.00	7.333	20.00	10.33	13.00
1.417	20.00	4.417	5.00	7.417	20.00	10.42	13.00
1.500	20.00	4.500	5.00	7.500	20.00	10.50	13.00
1.583	20.00	4.583	5.00	7.583	20.00	10.58	13.00
1.667	20.00	4.667	5.00	7.667	20.00	10.67	13.00
1.750	20.00	4.750	5.00	7.750	20.00	10.75	13.00
1.833	20.00	4.833	5.00	7.833	20.00	10.83	13.00
1.917	20.00	4.917	5.00	7.917	20.00	10.92	13.00
2.000	20.00	5.000	5.00	8.000	20.00	11.00	13.00
2.083	10.00	5.083	20.00	8.083	23.00	11.08	8.00
2.167	10.00	5.167	20.00	8.167	23.00	11.17	8.00
2.250	10.00	5.250	20.00	8.250	23.00	11.25	8.00
2.333	10.00	5.333	20.00	8.333	23.00	11.33	8.00
2.417	10.00	5.417	20.00	8.417	23.00	11.42	8.00
2.500	10.00	5.500	20.00	8.500	23.00	11.50	8.00
2.583	10.00	5.583	20.00	8.583	23.00	11.58	8.00
2.667	10.00	5.667	20.00	8.667	23.00	11.67	8.00

2.750	10.00	5.750	20.00	8.750	23.00	11.75	8.00
2.833	10.00	5.833	20.00	8.833	23.00	11.83	8.00
2.917	10.00	5.917	20.00	8.917	23.00	11.92	8.00
3.000	10.00	6.000	20.00	9.000	23.00	12.00	8.00

Max.Eff.Inten.(mm/hr)=	43.00	75.24	
over (min)	5.00	15.00	
Storage Coeff. (min)=	4.92 (ii)	11.57 (ii)	
Unit Hyd. Tpeak (min)=	5.00	15.00	
Unit Hyd. peak (cms)=	0.22	0.09	
			TOTALS
PEAK FLOW (cms)=	0.03	0.20	0.226 (iii)
TIME TO PEAK (hrs)=	6.92	7.00	7.00
RUNOFF VOLUME (mm)=	192.00	146.30	150.87
TOTAL RAINFALL (mm)=	193.00	193.00	193.00
RUNOFF COEFFICIENT =	0.99	0.76	0.78

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0040)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0015):		1.93	0.161	7.00	120.17
+ ID2= 2 (0019):		2.16	0.226	7.00	150.87
ID = 3 (0040):		4.09	0.387	7.00	136.38

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0040)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0040):		4.09	0.387	7.00	136.38
+ ID2= 2 (0027):		1.38	0.097	7.08	104.23

ID = 1 (0040): 5.47 0.482 7.00 128.27

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0040)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0040):		5.47	0.482	7.00	128.27
+ ID2= 2 (0041):		0.59	0.044	7.17	122.32
ID = 3 (0040):		6.06	0.524	7.00	127.69

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB					
NASHYD (0048)	Area	(ha)=	29.16	Curve Number	(CN)= 71.4
ID= 1 DT= 5.0 min	Ia	(mm)=	7.88	# of Linear Res.(N)=	3.00
	U.H. Tp(hrs)=		0.68		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	15.00	3.083	3.00	6.083	43.00	9.08	13.00
0.167	15.00	3.167	3.00	6.167	43.00	9.17	13.00
0.250	15.00	3.250	3.00	6.250	43.00	9.25	13.00
0.333	15.00	3.333	3.00	6.333	43.00	9.33	13.00
0.417	15.00	3.417	3.00	6.417	43.00	9.42	13.00
0.500	15.00	3.500	3.00	6.500	43.00	9.50	13.00
0.583	15.00	3.583	3.00	6.583	43.00	9.58	13.00
0.667	15.00	3.667	3.00	6.667	43.00	9.67	13.00
0.750	15.00	3.750	3.00	6.750	43.00	9.75	13.00
0.833	15.00	3.833	3.00	6.833	43.00	9.83	13.00
0.917	15.00	3.917	3.00	6.917	43.00	9.92	13.00
1.000	15.00	4.000	3.00	7.000	43.00	10.00	13.00
1.083	20.00	4.083	5.00	7.083	20.00	10.08	13.00
1.167	20.00	4.167	5.00	7.167	20.00	10.17	13.00
1.250	20.00	4.250	5.00	7.250	20.00	10.25	13.00
1.333	20.00	4.333	5.00	7.333	20.00	10.33	13.00
1.417	20.00	4.417	5.00	7.417	20.00	10.42	13.00
1.500	20.00	4.500	5.00	7.500	20.00	10.50	13.00
1.583	20.00	4.583	5.00	7.583	20.00	10.58	13.00
1.667	20.00	4.667	5.00	7.667	20.00	10.67	13.00

1.750	20.00	4.750	5.00	7.750	20.00	10.75	13.00
1.833	20.00	4.833	5.00	7.833	20.00	10.83	13.00
1.917	20.00	4.917	5.00	7.917	20.00	10.92	13.00
2.000	20.00	5.000	5.00	8.000	20.00	11.00	13.00
2.083	10.00	5.083	20.00	8.083	23.00	11.08	8.00
2.167	10.00	5.167	20.00	8.167	23.00	11.17	8.00
2.250	10.00	5.250	20.00	8.250	23.00	11.25	8.00
2.333	10.00	5.333	20.00	8.333	23.00	11.33	8.00
2.417	10.00	5.417	20.00	8.417	23.00	11.42	8.00
2.500	10.00	5.500	20.00	8.500	23.00	11.50	8.00
2.583	10.00	5.583	20.00	8.583	23.00	11.58	8.00
2.667	10.00	5.667	20.00	8.667	23.00	11.67	8.00
2.750	10.00	5.750	20.00	8.750	23.00	11.75	8.00
2.833	10.00	5.833	20.00	8.833	23.00	11.83	8.00
2.917	10.00	5.917	20.00	8.917	23.00	11.92	8.00
3.000	10.00	6.000	20.00	9.000	23.00	12.00	8.00

Unit Hyd Qpeak (cms)= 1.638

PEAK FLOW (cms)= 1.977 (i)
TIME TO PEAK (hrs)= 7.333
RUNOFF VOLUME (mm)= 119.461
TOTAL RAINFALL (mm)= 193.000
RUNOFF COEFFICIENT = 0.619

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
STANDHYD (0014)	Area	(ha)=	1.87		
ID= 1 DT= 5.0 min	Total Imp(%)=		43.28	Dir. Conn.(%)=	10.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	0.81	1.06
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	0.50	2.00
Length (m)=	111.65	25.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	15.00	3.083	3.00	6.083	43.00	9.08	13.00
0.167	15.00	3.167	3.00	6.167	43.00	9.17	13.00

0.250	15.00	3.250	3.00	6.250	43.00	9.25	13.00
0.333	15.00	3.333	3.00	6.333	43.00	9.33	13.00
0.417	15.00	3.417	3.00	6.417	43.00	9.42	13.00
0.500	15.00	3.500	3.00	6.500	43.00	9.50	13.00
0.583	15.00	3.583	3.00	6.583	43.00	9.58	13.00
0.667	15.00	3.667	3.00	6.667	43.00	9.67	13.00
0.750	15.00	3.750	3.00	6.750	43.00	9.75	13.00
0.833	15.00	3.833	3.00	6.833	43.00	9.83	13.00
0.917	15.00	3.917	3.00	6.917	43.00	9.92	13.00
1.000	15.00	4.000	3.00	7.000	43.00	10.00	13.00
1.083	20.00	4.083	5.00	7.083	20.00	10.08	13.00
1.167	20.00	4.167	5.00	7.167	20.00	10.17	13.00
1.250	20.00	4.250	5.00	7.250	20.00	10.25	13.00
1.333	20.00	4.333	5.00	7.333	20.00	10.33	13.00
1.417	20.00	4.417	5.00	7.417	20.00	10.42	13.00
1.500	20.00	4.500	5.00	7.500	20.00	10.50	13.00
1.583	20.00	4.583	5.00	7.583	20.00	10.58	13.00
1.667	20.00	4.667	5.00	7.667	20.00	10.67	13.00
1.750	20.00	4.750	5.00	7.750	20.00	10.75	13.00
1.833	20.00	4.833	5.00	7.833	20.00	10.83	13.00
1.917	20.00	4.917	5.00	7.917	20.00	10.92	13.00
2.000	20.00	5.000	5.00	8.000	20.00	11.00	13.00
2.083	10.00	5.083	20.00	8.083	23.00	11.08	8.00
2.167	10.00	5.167	20.00	8.167	23.00	11.17	8.00
2.250	10.00	5.250	20.00	8.250	23.00	11.25	8.00
2.333	10.00	5.333	20.00	8.333	23.00	11.33	8.00
2.417	10.00	5.417	20.00	8.417	23.00	11.42	8.00
2.500	10.00	5.500	20.00	8.500	23.00	11.50	8.00
2.583	10.00	5.583	20.00	8.583	23.00	11.58	8.00
2.667	10.00	5.667	20.00	8.667	23.00	11.67	8.00
2.750	10.00	5.750	20.00	8.750	23.00	11.75	8.00
2.833	10.00	5.833	20.00	8.833	23.00	11.83	8.00
2.917	10.00	5.917	20.00	8.917	23.00	11.92	8.00
3.000	10.00	6.000	20.00	9.000	23.00	12.00	8.00

Max.Eff.Inten.(mm/hr)=	43.00	62.38	
over (min)	5.00	15.00	
Storage Coeff. (min)=	4.71 (ii)	11.14 (ii)	
Unit Hyd. Tpeak (min)=	5.00	15.00	
Unit Hyd. peak (cms)=	0.22	0.09	
			TOTALS
PEAK FLOW (cms)=	0.02	0.18	0.203 (iii)
TIME TO PEAK (hrs)=	6.92	7.00	7.00
RUNOFF VOLUME (mm)=	192.00	153.34	157.20
TOTAL RAINFALL (mm)=	193.00	193.00	193.00
RUNOFF COEFFICIENT =	0.99	0.79	0.81

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 78.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
STANDHYD (0021)	Area (ha)= 0.07		
ID= 1 DT= 5.0 min	Total Imp(%)= 48.26	Dir. Conn.(%)= 39.54	
	IMPERVIOUS	PERVIOUS (i)	
Surface Area	(ha)= 0.03	0.04	
Dep. Storage	(mm)= 1.00	5.00	
Average Slope	(%)= 0.50	2.00	
Length	(m)= 21.60	5.60	
Mannings n	= 0.013	0.250	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	15.00	3.083	3.00	6.083	43.00	9.08	13.00
0.167	15.00	3.167	3.00	6.167	43.00	9.17	13.00
0.250	15.00	3.250	3.00	6.250	43.00	9.25	13.00
0.333	15.00	3.333	3.00	6.333	43.00	9.33	13.00
0.417	15.00	3.417	3.00	6.417	43.00	9.42	13.00
0.500	15.00	3.500	3.00	6.500	43.00	9.50	13.00
0.583	15.00	3.583	3.00	6.583	43.00	9.58	13.00
0.667	15.00	3.667	3.00	6.667	43.00	9.67	13.00
0.750	15.00	3.750	3.00	6.750	43.00	9.75	13.00
0.833	15.00	3.833	3.00	6.833	43.00	9.83	13.00
0.917	15.00	3.917	3.00	6.917	43.00	9.92	13.00
1.000	15.00	4.000	3.00	7.000	43.00	10.00	13.00
1.083	20.00	4.083	5.00	7.083	20.00	10.08	13.00
1.167	20.00	4.167	5.00	7.167	20.00	10.17	13.00
1.250	20.00	4.250	5.00	7.250	20.00	10.25	13.00
1.333	20.00	4.333	5.00	7.333	20.00	10.33	13.00
1.417	20.00	4.417	5.00	7.417	20.00	10.42	13.00
1.500	20.00	4.500	5.00	7.500	20.00	10.50	13.00
1.583	20.00	4.583	5.00	7.583	20.00	10.58	13.00
1.667	20.00	4.667	5.00	7.667	20.00	10.67	13.00
1.750	20.00	4.750	5.00	7.750	20.00	10.75	13.00
1.833	20.00	4.833	5.00	7.833	20.00	10.83	13.00
1.917	20.00	4.917	5.00	7.917	20.00	10.92	13.00
2.000	20.00	5.000	5.00	8.000	20.00	11.00	13.00
2.083	10.00	5.083	20.00	8.083	23.00	11.08	8.00
2.167	10.00	5.167	20.00	8.167	23.00	11.17	8.00
2.250	10.00	5.250	20.00	8.250	23.00	11.25	8.00
2.333	10.00	5.333	20.00	8.333	23.00	11.33	8.00
2.417	10.00	5.417	20.00	8.417	23.00	11.42	8.00
2.500	10.00	5.500	20.00	8.500	23.00	11.50	8.00
2.583	10.00	5.583	20.00	8.583	23.00	11.58	8.00
2.667	10.00	5.667	20.00	8.667	23.00	11.67	8.00
2.750	10.00	5.750	20.00	8.750	23.00	11.75	8.00
2.833	10.00	5.833	20.00	8.833	23.00	11.83	8.00
2.917	10.00	5.917	20.00	8.917	23.00	11.92	8.00
3.000	10.00	6.000	20.00	9.000	23.00	12.00	8.00

Max.Eff.Inten.(mm/hr)=	43.00	29.14	
over (min)	5.00	10.00	
Storage Coeff. (min)=	1.76 (ii)	5.14 (ii)	
Unit Hyd. Tpeak (min)=	5.00	10.00	
Unit Hyd. peak (cms)=	0.32	0.16	
			TOTALS
PEAK FLOW (cms)=	0.00	0.00	0.006 (iii)
TIME TO PEAK (hrs)=	6.42	7.00	7.00
RUNOFF VOLUME (mm)=	192.00	91.83	131.38
TOTAL RAINFALL (mm)=	193.00	193.00	193.00
RUNOFF COEFFICIENT =	0.99	0.48	0.68

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 52.2 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0016)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0001):	39.68	1.736	9.08	97.70
+ ID2= 2 (0014):	1.87	0.203	7.00	157.20
ID = 3 (0016):	41.55	1.849	9.00	100.38

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0016):	41.55	1.849	9.00	100.38
+ ID2= 2 (0002):	23.99	0.752	7.92	66.80
ID = 1 (0016):	65.54	2.589	9.00	88.09

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0016):	65.54	2.589	9.00	88.09
+ ID2= 2 (0021):	0.07	0.006	7.00	131.38
ID = 3 (0016):	65.61	2.592	9.00	88.13

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0016):	65.61	2.592	9.00	88.13
+ ID2= 2 (0025):	100.92	3.734	9.58	88.96
ID = 1 (0016):	166.53	6.246	9.33	88.64

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0016):	166.53	6.246	9.33	88.64
+ ID2= 2 (0028):	6.37	0.245	7.50	73.72
ID = 3 (0016):	172.90	6.464	9.25	88.09

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0016):	172.90	6.464	9.25	88.09
+ ID2= 2 (0029):	14.85	0.585	7.75	79.65
ID = 1 (0016):	187.75	7.011	9.25	87.42

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0016):	187.75	7.011	9.25	87.42
+ ID2= 2 (0030):	1.70	0.109	7.08	96.18
ID = 3 (0016):	189.45	7.081	9.25	87.50

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0016):	189.45	7.081	9.25	87.50
+ ID2= 2 (0031):	1.80	0.069	7.50	72.69
ID = 1 (0016):	191.25	7.142	9.25	87.36

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0016):	191.25	7.142	9.25	87.36
+ ID2= 2 (0032):	6.70	0.278	9.33	95.05
ID = 3 (0016):	197.95	7.420	9.25	87.62

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0016):		197.95	7.420	9.25	87.62
+ ID2= 2 (0033):		1.13	0.082	7.08	111.18
ID = 1 (0016):		199.08	7.473	9.25	87.75

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0016):		199.08	7.473	9.25	87.75
+ ID2= 2 (0040):		6.06	0.524	7.00	127.69
ID = 3 (0016):		205.14	7.763	9.08	88.93

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0016)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0016):		205.14	7.763	9.08	88.93
+ ID2= 2 (0048):		29.16	1.977	7.33	119.46
ID = 1 (0016):		234.30	9.254	9.08	92.73

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB				
STANDHYD (0009)	Area (ha)=	31.06		
ID= 1 DT= 5.0 min	Total Imp(%)=	53.89	Dir. Conn.(%)=	20.76

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	16.74	14.32
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	455.05	30.00

Mannings n = 0.013 0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	15.00	3.083	3.00	6.083	43.00	9.08	13.00
0.167	15.00	3.167	3.00	6.167	43.00	9.17	13.00
0.250	15.00	3.250	3.00	6.250	43.00	9.25	13.00
0.333	15.00	3.333	3.00	6.333	43.00	9.33	13.00
0.417	15.00	3.417	3.00	6.417	43.00	9.42	13.00
0.500	15.00	3.500	3.00	6.500	43.00	9.50	13.00
0.583	15.00	3.583	3.00	6.583	43.00	9.58	13.00
0.667	15.00	3.667	3.00	6.667	43.00	9.67	13.00
0.750	15.00	3.750	3.00	6.750	43.00	9.75	13.00
0.833	15.00	3.833	3.00	6.833	43.00	9.83	13.00
0.917	15.00	3.917	3.00	6.917	43.00	9.92	13.00
1.000	15.00	4.000	3.00	7.000	43.00	10.00	13.00
1.083	20.00	4.083	5.00	7.083	20.00	10.08	13.00
1.167	20.00	4.167	5.00	7.167	20.00	10.17	13.00
1.250	20.00	4.250	5.00	7.250	20.00	10.25	13.00
1.333	20.00	4.333	5.00	7.333	20.00	10.33	13.00
1.417	20.00	4.417	5.00	7.417	20.00	10.42	13.00
1.500	20.00	4.500	5.00	7.500	20.00	10.50	13.00
1.583	20.00	4.583	5.00	7.583	20.00	10.58	13.00
1.667	20.00	4.667	5.00	7.667	20.00	10.67	13.00
1.750	20.00	4.750	5.00	7.750	20.00	10.75	13.00
1.833	20.00	4.833	5.00	7.833	20.00	10.83	13.00
1.917	20.00	4.917	5.00	7.917	20.00	10.92	13.00
2.000	20.00	5.000	5.00	8.000	20.00	11.00	13.00
2.083	10.00	5.083	20.00	8.083	23.00	11.08	8.00
2.167	10.00	5.167	20.00	8.167	23.00	11.17	8.00
2.250	10.00	5.250	20.00	8.250	23.00	11.25	8.00
2.333	10.00	5.333	20.00	8.333	23.00	11.33	8.00
2.417	10.00	5.417	20.00	8.417	23.00	11.42	8.00
2.500	10.00	5.500	20.00	8.500	23.00	11.50	8.00
2.583	10.00	5.583	20.00	8.583	23.00	11.58	8.00
2.667	10.00	5.667	20.00	8.667	23.00	11.67	8.00
2.750	10.00	5.750	20.00	8.750	23.00	11.75	8.00
2.833	10.00	5.833	20.00	8.833	23.00	11.83	8.00
2.917	10.00	5.917	20.00	8.917	23.00	11.92	8.00
3.000	10.00	6.000	20.00	9.000	23.00	12.00	8.00

Max.Eff.Inten.(mm/hr)=	43.00	63.06	
over (min)	10.00	20.00	
Storage Coeff. (min)=	10.94 (ii)	18.08 (ii)	

				TOTALS
Unit Hyd. Tpeak (min)=	10.00	20.00		
Unit Hyd. peak (cms)=	0.11	0.06		
PEAK FLOW (cms)=	0.77	2.34		3.111 (iii)
TIME TO PEAK (hrs)=	7.00	7.00		7.00
RUNOFF VOLUME (mm)=	192.00	140.06		150.84
TOTAL RAINFALL (mm)=	193.00	193.00		193.00
RUNOFF COEFFICIENT =	0.99	0.73		0.78

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 68.5 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB				
STANDHYD (0010)	Area (ha)=	1.32		
ID= 1 DT= 5.0 min	Total Imp(%)=	55.27	Dir. Conn.(%)=	1.52

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.73	0.59
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	93.81	23.50
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	15.00	3.083	3.00	6.083	43.00	9.08	13.00
0.167	15.00	3.167	3.00	6.167	43.00	9.17	13.00
0.250	15.00	3.250	3.00	6.250	43.00	9.25	13.00
0.333	15.00	3.333	3.00	6.333	43.00	9.33	13.00
0.417	15.00	3.417	3.00	6.417	43.00	9.42	13.00
0.500	15.00	3.500	3.00	6.500	43.00	9.50	13.00
0.583	15.00	3.583	3.00	6.583	43.00	9.58	13.00
0.667	15.00	3.667	3.00	6.667	43.00	9.67	13.00
0.750	15.00	3.750	3.00	6.750	43.00	9.75	13.00
0.833	15.00	3.833	3.00	6.833	43.00	9.83	13.00
0.917	15.00	3.917	3.00	6.917	43.00	9.92	13.00
1.000	15.00	4.000	3.00	7.000	43.00	10.00	13.00
1.083	20.00	4.083	5.00	7.083	20.00	10.08	13.00

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
1.167	20.00	4.167	5.00	7.167	20.00	10.17	13.00
1.250	20.00	4.250	5.00	7.250	20.00	10.25	13.00
1.333	20.00	4.333	5.00	7.333	20.00	10.33	13.00
1.417	20.00	4.417	5.00	7.417	20.00	10.42	13.00
1.500	20.00	4.500	5.00	7.500	20.00	10.50	13.00
1.583	20.00	4.583	5.00	7.583	20.00	10.58	13.00
1.667	20.00	4.667	5.00	7.667	20.00	10.67	13.00
1.750	20.00	4.750	5.00	7.750	20.00	10.75	13.00
1.833	20.00	4.833	5.00	7.833	20.00	10.83	13.00
1.917	20.00	4.917	5.00	7.917	20.00	10.92	13.00
2.000	20.00	5.000	5.00	8.000	20.00	11.00	13.00
2.083	10.00	5.083	20.00	8.083	23.00	11.08	8.00
2.167	10.00	5.167	20.00	8.167	23.00	11.17	8.00
2.250	10.00	5.250	20.00	8.250	23.00	11.25	8.00
2.333	10.00	5.333	20.00	8.333	23.00	11.33	8.00
2.417	10.00	5.417	20.00	8.417	23.00	11.42	8.00
2.500	10.00	5.500	20.00	8.500	23.00	11.50	8.00
2.583	10.00	5.583	20.00	8.583	23.00	11.58	8.00
2.667	10.00	5.667	20.00	8.667	23.00	11.67	8.00
2.750	10.00	5.750	20.00	8.750	23.00	11.75	8.00
2.833	10.00	5.833	20.00	8.833	23.00	11.83	8.00
2.917	10.00	5.917	20.00	8.917	23.00	11.92	8.00
3.000	10.00	6.000	20.00	9.000	23.00	12.00	8.00

				TOTALS
Max.Eff.Inten.(mm/hr)=	43.00	84.88		
over (min)	5.00	10.00		
Storage Coeff. (min)=	4.24 (ii)	9.72 (ii)		
Unit Hyd. Tpeak (min)=	5.00	10.00		
Unit Hyd. peak (cms)=	0.24	0.11		
PEAK FLOW (cms)=	0.00	0.14		0.140 (iii)
TIME TO PEAK (hrs)=	6.75	7.00		7.00
RUNOFF VOLUME (mm)=	192.00	149.75		150.39
TOTAL RAINFALL (mm)=	193.00	193.00		193.00
RUNOFF COEFFICIENT =	0.99	0.78		0.78

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 68.8 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	
STANDHYD (0013)	Area (ha)= 4.16
ID= 1 DT= 5.0 min	Total Imp(%)= 50.00 Dir. Conn.(%)= 50.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	2.08	2.08
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	166.53	250.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	15.00	3.083	3.00	6.083	43.00	9.08	13.00
0.167	15.00	3.167	3.00	6.167	43.00	9.17	13.00
0.250	15.00	3.250	3.00	6.250	43.00	9.25	13.00
0.333	15.00	3.333	3.00	6.333	43.00	9.33	13.00
0.417	15.00	3.417	3.00	6.417	43.00	9.42	13.00
0.500	15.00	3.500	3.00	6.500	43.00	9.50	13.00
0.583	15.00	3.583	3.00	6.583	43.00	9.58	13.00
0.667	15.00	3.667	3.00	6.667	43.00	9.67	13.00
0.750	15.00	3.750	3.00	6.750	43.00	9.75	13.00
0.833	15.00	3.833	3.00	6.833	43.00	9.83	13.00
0.917	15.00	3.917	3.00	6.917	43.00	9.92	13.00
1.000	15.00	4.000	3.00	7.000	43.00	10.00	13.00
1.083	20.00	4.083	5.00	7.083	20.00	10.08	13.00
1.167	20.00	4.167	5.00	7.167	20.00	10.17	13.00
1.250	20.00	4.250	5.00	7.250	20.00	10.25	13.00
1.333	20.00	4.333	5.00	7.333	20.00	10.33	13.00
1.417	20.00	4.417	5.00	7.417	20.00	10.42	13.00
1.500	20.00	4.500	5.00	7.500	20.00	10.50	13.00
1.583	20.00	4.583	5.00	7.583	20.00	10.58	13.00
1.667	20.00	4.667	5.00	7.667	20.00	10.67	13.00
1.750	20.00	4.750	5.00	7.750	20.00	10.75	13.00
1.833	20.00	4.833	5.00	7.833	20.00	10.83	13.00
1.917	20.00	4.917	5.00	7.917	20.00	10.92	13.00
2.000	20.00	5.000	5.00	8.000	20.00	11.00	13.00
2.083	10.00	5.083	20.00	8.083	23.00	11.08	8.00
2.167	10.00	5.167	20.00	8.167	23.00	11.17	8.00
2.250	10.00	5.250	20.00	8.250	23.00	11.25	8.00
2.333	10.00	5.333	20.00	8.333	23.00	11.33	8.00
2.417	10.00	5.417	20.00	8.417	23.00	11.42	8.00
2.500	10.00	5.500	20.00	8.500	23.00	11.50	8.00
2.583	10.00	5.583	20.00	8.583	23.00	11.58	8.00
2.667	10.00	5.667	20.00	8.667	23.00	11.67	8.00
2.750	10.00	5.750	20.00	8.750	23.00	11.75	8.00
2.833	10.00	5.833	20.00	8.833	23.00	11.83	8.00
2.917	10.00	5.917	20.00	8.917	23.00	11.92	8.00
3.000	10.00	6.000	20.00	9.000	23.00	12.00	8.00

				TOTALS
Max.Eff.Inten.(mm/hr)=		43.00	30.54	
over (min)		5.00	45.00	
Storage Coeff. (min)=		5.99 (ii)	40.04 (ii)	
Unit Hyd. Tpeak (min)=		5.00	45.00	
Unit Hyd. peak (cms)=		0.19	0.03	
PEAK FLOW	(cms)=	0.25	0.13	0.368 (iii)
TIME TO PEAK	(hrs)=	7.00	7.42	7.00
RUNOFF VOLUME	(mm)=	192.00	116.90	154.45
TOTAL RAINFALL	(mm)=	193.00	193.00	193.00
RUNOFF COEFFICIENT	=	0.99	0.61	0.80

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	
STANDHYD (0036)	Area (ha)= 2.12
ID= 1 DT= 5.0 min	Total Imp(%)= 85.04 Dir. Conn.(%)= 0.10

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	1.80	0.32
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	118.88	175.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	15.00	3.083	3.00	6.083	43.00	9.08	13.00
0.167	15.00	3.167	3.00	6.167	43.00	9.17	13.00
0.250	15.00	3.250	3.00	6.250	43.00	9.25	13.00
0.333	15.00	3.333	3.00	6.333	43.00	9.33	13.00

Post-Development VO Output (INT)

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	
STANDHYD (0043)	Area (ha)= 0.13
ID= 1 DT= 5.0 min	Total Imp(%)= 30.77 Dir. Conn.(%)= 7.69

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.04	0.09
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	0.50
Length	(m)=	29.44	70.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	15.00	3.083	3.00	6.083	43.00	9.08	13.00
0.167	15.00	3.167	3.00	6.167	43.00	9.17	13.00
0.250	15.00	3.250	3.00	6.250	43.00	9.25	13.00
0.333	15.00	3.333	3.00	6.333	43.00	9.33	13.00
0.417	15.00	3.417	3.00	6.417	43.00	9.42	13.00
0.500	15.00	3.500	3.00	6.500	43.00	9.50	13.00
0.583	15.00	3.583	3.00	6.583	43.00	9.58	13.00
0.667	15.00	3.667	3.00	6.667	43.00	9.67	13.00
0.750	15.00	3.750	3.00	6.750	43.00	9.75	13.00
0.833	15.00	3.833	3.00	6.833	43.00	9.83	13.00
0.917	15.00	3.917	3.00	6.917	43.00	9.92	13.00
1.000	15.00	4.000	3.00	7.000	43.00	10.00	13.00
1.083	20.00	4.083	5.00	7.083	20.00	10.08	13.00
1.167	20.00	4.167	5.00	7.167	20.00	10.17	13.00
1.250	20.00	4.250	5.00	7.250	20.00	10.25	13.00
1.333	20.00	4.333	5.00	7.333	20.00	10.33	13.00
1.417	20.00	4.417	5.00	7.417	20.00	10.42	13.00
1.500	20.00	4.500	5.00	7.500	20.00	10.50	13.00
1.583	20.00	4.583	5.00	7.583	20.00	10.58	13.00
1.667	20.00	4.667	5.00	7.667	20.00	10.67	13.00
1.750	20.00	4.750	5.00	7.750	20.00	10.75	13.00
1.833	20.00	4.833	5.00	7.833	20.00	10.83	13.00

1508-7498

Post-Development VO Output (INT)

				TOTALS
Max.Eff.Inten.(mm/hr)=		43.00	281.93	
over (min)		5.00	20.00	
Storage Coeff. (min)=		4.89 (ii)	16.19 (ii)	
Unit Hyd. Tpeak (min)=		5.00	20.00	
Unit Hyd. peak (cms)=		0.22	0.06	
PEAK FLOW	(cms)=	0.00	0.24	0.242 (iii)
TIME TO PEAK	(hrs)=	6.67	7.00	7.00
RUNOFF VOLUME	(mm)=	192.00	176.56	176.57
TOTAL RAINFALL	(mm)=	193.00	193.00	193.00
RUNOFF COEFFICIENT	=	0.99	0.91	0.91

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

1508-7498

Post-Development VO Output (INT)

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 69.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	
STANDHYD (0043)	Area (ha)= 0.13
ID= 1 DT= 5.0 min	Total Imp(%)= 30.77 Dir. Conn.(%)= 7.69

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.04	0.09
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	0.50
Length	(m)=	29.44	70.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	15.00	3.083	3.00	6.083	43.00	9.08	13.00
0.167	15.00	3.167	3.00	6.167	43.00	9.17	13.00
0.250	15.00	3.250	3.00	6.250	43.00	9.25	13.00
0.333	15.00	3.333	3.00	6.333	43.00	9.33	13.00
0.417	15.00	3.417	3.00	6.417	43.00	9.42	13.00
0.500	15.00	3.500	3.00	6.500	43.00	9.50	13.00
0.583	15.00	3.583	3.00	6.583	43.00	9.58	13.00
0.667	15.00	3.667	3.00	6.667	43.00	9.67	13.00
0.750	15.00	3.750	3.00	6.750	43.00	9.75	13.00
0.833	15.00	3.833	3.00	6.833	43.00	9.83	13.00
0.917	15.00	3.917	3.00	6.917	43.00	9.92	13.00
1.000	15.00	4.000	3.00	7.000	43.00	10.00	13.00
1.083	20.00	4.083	5.00	7.083	20.00	10.08	13.00
1.167	20.00	4.167	5.00	7.167	20.00	10.17	13.00
1.250	20.00	4.250	5.00	7.250	20.00	10.25	13.00
1.333	20.00	4.333	5.00	7.333	20.00	10.33	13.00
1.417	20.00	4.417	5.00	7.417	20.00	10.42	13.00
1.500	20.00	4.500	5.00	7.500	20.00	10.50	13.00
1.583	20.00	4.583	5.00	7.583	20.00	10.58	13.00
1.667	20.00	4.667	5.00	7.667	20.00	10.67	13.00
1.750	20.00	4.750	5.00	7.750	20.00	10.75	13.00
1.833	20.00	4.833	5.00	7.833	20.00	10.83	13.00

1508-7498

1.917	20.00	4.917	5.00	7.917	20.00	10.92	13.00
2.000	20.00	5.000	5.00	8.000	20.00	11.00	13.00
2.083	10.00	5.083	20.00	8.083	23.00	11.08	8.00
2.167	10.00	5.167	20.00	8.167	23.00	11.17	8.00
2.250	10.00	5.250	20.00	8.250	23.00	11.25	8.00
2.333	10.00	5.333	20.00	8.333	23.00	11.33	8.00
2.417	10.00	5.417	20.00	8.417	23.00	11.42	8.00
2.500	10.00	5.500	20.00	8.500	23.00	11.50	8.00
2.583	10.00	5.583	20.00	8.583	23.00	11.58	8.00
2.667	10.00	5.667	20.00	8.667	23.00	11.67	8.00
2.750	10.00	5.750	20.00	8.750	23.00	11.75	8.00
2.833	10.00	5.833	20.00	8.833	23.00	11.83	8.00
2.917	10.00	5.917	20.00	8.917	23.00	11.92	8.00
3.000	10.00	6.000	20.00	9.000	23.00	12.00	8.00

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     Max.Eff.Inten.(mm/hr)=      43.00        45.54
                  over (min)        5.00        25.00
     Storage Coeff.  (min)=       2.12 (ii)   22.62 (ii)
     Unit Hyd. Tpeak (min)=       5.00        25.00
     Unit Hyd. peak  (cms)=       0.31         0.05
                                                      *TOTALS*
     PEAK FLOW       (cms)=       0.00         0.01         0.011 (iii)
     TIME TO PEAK    (hrs)=       6.42         7.08         7.00
     RUNOFF VOLUME    (mm)=     192.00       130.32       134.97
     TOTAL RAINFALL   (mm)=     193.00       193.00       193.00
     RUNOFF COEFFICIENT   =       0.99         0.68         0.70

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
              YOU SHOULD CONSIDER SPLITTING THE AREA.

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  69.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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| CALIB            |
| STANDHYD (  0044)|   Area    (ha)=   1.62
|ID= 1 DT= 5.0 min |   Total Imp(%)=  48.77   Dir. Conn.(%)=  30.86
--------------------
                           IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       0.79         0.83
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       0.50         1.40
     Length            (m)=     103.92       400.00
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     Mannings n          =      0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.
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---- TRANSFORMED HYETOGRAPH ----							
TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	15.00	3.083	3.00	6.083	43.00	9.08	13.00
0.167	15.00	3.167	3.00	6.167	43.00	9.17	13.00
0.250	15.00	3.250	3.00	6.250	43.00	9.25	13.00
0.333	15.00	3.333	3.00	6.333	43.00	9.33	13.00
0.417	15.00	3.417	3.00	6.417	43.00	9.42	13.00
0.500	15.00	3.500	3.00	6.500	43.00	9.50	13.00
0.583	15.00	3.583	3.00	6.583	43.00	9.58	13.00
0.667	15.00	3.667	3.00	6.667	43.00	9.67	13.00
0.750	15.00	3.750	3.00	6.750	43.00	9.75	13.00
0.833	15.00	3.833	3.00	6.833	43.00	9.83	13.00
0.917	15.00	3.917	3.00	6.917	43.00	9.92	13.00
1.000	15.00	4.000	3.00	7.000	43.00	10.00	13.00
1.083	20.00	4.083	5.00	7.083	20.00	10.08	13.00
1.167	20.00	4.167	5.00	7.167	20.00	10.17	13.00
1.250	20.00	4.250	5.00	7.250	20.00	10.25	13.00
1.333	20.00	4.333	5.00	7.333	20.00	10.33	13.00
1.417	20.00	4.417	5.00	7.417	20.00	10.42	13.00
1.500	20.00	4.500	5.00	7.500	20.00	10.50	13.00
1.583	20.00	4.583	5.00	7.583	20.00	10.58	13.00
1.667	20.00	4.667	5.00	7.667	20.00	10.67	13.00
1.750	20.00	4.750	5.00	7.750	20.00	10.75	13.00
1.833	20.00	4.833	5.00	7.833	20.00	10.83	13.00
1.917	20.00	4.917	5.00	7.917	20.00	10.92	13.00
2.000	20.00	5.000	5.00	8.000	20.00	11.00	13.00
2.083	10.00	5.083	20.00	8.083	23.00	11.08	8.00
2.167	10.00	5.167	20.00	8.167	23.00	11.17	8.00
2.250	10.00	5.250	20.00	8.250	23.00	11.25	8.00
2.333	10.00	5.333	20.00	8.333	23.00	11.33	8.00
2.417	10.00	5.417	20.00	8.417	23.00	11.42	8.00
2.500	10.00	5.500	20.00	8.500	23.00	11.50	8.00
2.583	10.00	5.583	20.00	8.583	23.00	11.58	8.00
2.667	10.00	5.667	20.00	8.667	23.00	11.67	8.00
2.750	10.00	5.750	20.00	8.750	23.00	11.75	8.00
2.833	10.00	5.833	20.00	8.833	23.00	11.83	8.00
2.917	10.00	5.917	20.00	8.917	23.00	11.92	8.00
3.000	10.00	6.000	20.00	9.000	23.00	12.00	8.00

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     Max.Eff.Inten.(mm/hr)=      43.00        45.23
                  over (min)        5.00        50.00
     Storage Coeff.  (min)=       4.51 (ii)   47.46 (ii)
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     Unit Hyd. Tpeak (min)=       5.00        50.00
     Unit Hyd. peak  (cms)=       0.23         0.02
                                                      *TOTALS*
     PEAK FLOW       (cms)=       0.06         0.08         0.126 (iii)
     TIME TO PEAK    (hrs)=       6.92         7.50         7.00
     RUNOFF VOLUME    (mm)=     192.00       130.85       149.70
     TOTAL RAINFALL   (mm)=     193.00       193.00       193.00
     RUNOFF COEFFICIENT   =       0.99         0.68         0.78

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  69.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0037)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0010):     1.32   0.140     7.00   150.39
     + ID2= 2 (  0013):     4.16   0.368     7.00   154.45
       ==========================================================
       ID = 3 (  0037):     5.48   0.508     7.00   153.47

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0037)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 3 (  0037):     5.48   0.508     7.00   153.47
     + ID2= 2 (  0036):     2.12   0.242     7.00   176.57
       ==========================================================
       ID = 1 (  0037):     7.60   0.750     7.00   159.91

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0037)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0037):     7.60   0.750     7.00   159.91
```



```
     + ID2= 2 (  0043):     0.13   0.011     7.00   134.97
       ==========================================================
       ID = 3 (  0037):     7.73   0.761     7.00   159.49

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0037)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 3 (  0037):     7.73   0.761     7.00   159.49
     + ID2= 2 (  0044):     1.62   0.126     7.00   149.70
       ==========================================================
       ID = 1 (  0037):     9.35   0.887     7.00   157.80

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0037)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0037):     9.35   0.887     7.00   157.80
     + ID2= 2 (  0009):    31.06   3.111     7.00   150.84
       ==========================================================
       ID = 3 (  0037):    40.41   3.998     7.00   152.45

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
--------------------
| RESERVOIR(  0038)|     OVERFLOW IS OFF
| IN= 2---> OUT= 1 |
| DT=  5.0 min     |     OUTFLOW    STORAGE   |  OUTFLOW    STORAGE
--------------------      (cms)     (ha.m.)   |   (cms)     (ha.m.)
                          0.0000      0.0000   |    0.5076      2.8989
                          0.0000      0.2023   |    0.6060      3.2065
                          0.0353      0.4202   |    0.7105      3.5196
                          0.0525      0.6536   |    0.8207      3.8381
                          0.0654      0.9026   |    0.9365      4.1621
                          0.0843      1.1671   |    1.0574      4.4915
                          0.1858      1.7227   |    1.1833      4.8263
                          0.2540      2.0086   |    1.3139      5.1665
                          0.3309      2.2999   |    1.4492      5.5122
                          0.4157      2.5967   |    1.5890      5.8633

                               AREA     QPEAK     TPEAK       R.V.
                               (ha)     (cms)     (hrs)       (mm)
```

INFLOW : ID= 2 (	0037)	40.410	3.998	7.00	152.45
OUTFLOW: ID= 1 (	0038)	40.410	1.008	11.50	147.41

PEAK FLOW REDUCTION [Qout/Qin](%)= 25.21
TIME SHIFT OF PEAK FLOW (min)=270.00
MAXIMUM STORAGE USED (ha.m.)= 4.3572

CALIB			
STANDHYD (0017)	Area (ha)=	1.59	
ID= 1 DT= 5.0 min	Total Imp(%)=	58.58	Dir. Conn.(%)= 27.10

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.93	0.66
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	102.96	30.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	15.00	3.083	3.00	6.083	43.00	9.08	13.00
0.167	15.00	3.167	3.00	6.167	43.00	9.17	13.00
0.250	15.00	3.250	3.00	6.250	43.00	9.25	13.00
0.333	15.00	3.333	3.00	6.333	43.00	9.33	13.00
0.417	15.00	3.417	3.00	6.417	43.00	9.42	13.00
0.500	15.00	3.500	3.00	6.500	43.00	9.50	13.00
0.583	15.00	3.583	3.00	6.583	43.00	9.58	13.00
0.667	15.00	3.667	3.00	6.667	43.00	9.67	13.00
0.750	15.00	3.750	3.00	6.750	43.00	9.75	13.00
0.833	15.00	3.833	3.00	6.833	43.00	9.83	13.00
0.917	15.00	3.917	3.00	6.917	43.00	9.92	13.00
1.000	15.00	4.000	3.00	7.000	43.00	10.00	13.00
1.083	20.00	4.083	5.00	7.083	20.00	10.08	13.00
1.167	20.00	4.167	5.00	7.167	20.00	10.17	13.00
1.250	20.00	4.250	5.00	7.250	20.00	10.25	13.00
1.333	20.00	4.333	5.00	7.333	20.00	10.33	13.00
1.417	20.00	4.417	5.00	7.417	20.00	10.42	13.00
1.500	20.00	4.500	5.00	7.500	20.00	10.50	13.00
1.583	20.00	4.583	5.00	7.583	20.00	10.58	13.00
1.667	20.00	4.667	5.00	7.667	20.00	10.67	13.00
1.750	20.00	4.750	5.00	7.750	20.00	10.75	13.00
1.833	20.00	4.833	5.00	7.833	20.00	10.83	13.00

1.917	20.00	4.917	5.00	7.917	20.00	10.92	13.00
2.000	20.00	5.000	5.00	8.000	20.00	11.00	13.00
2.083	10.00	5.083	20.00	8.083	23.00	11.08	8.00
2.167	10.00	5.167	20.00	8.167	23.00	11.17	8.00
2.250	10.00	5.250	20.00	8.250	23.00	11.25	8.00
2.333	10.00	5.333	20.00	8.333	23.00	11.33	8.00
2.417	10.00	5.417	20.00	8.417	23.00	11.42	8.00
2.500	10.00	5.500	20.00	8.500	23.00	11.50	8.00
2.583	10.00	5.583	20.00	8.583	23.00	11.58	8.00
2.667	10.00	5.667	20.00	8.667	23.00	11.67	8.00
2.750	10.00	5.750	20.00	8.750	23.00	11.75	8.00
2.833	10.00	5.833	20.00	8.833	23.00	11.83	8.00
2.917	10.00	5.917	20.00	8.917	23.00	11.92	8.00
3.000	10.00	6.000	20.00	9.000	23.00	12.00	8.00

Max.Eff.Inten.(mm/hr)=		43.00	63.66	
	over (min)	5.00	15.00	
Storage Coeff. (min)=		4.49 (ii)	11.60 (ii)	
Unit Hyd. Tpeak (min)=		5.00	15.00	
Unit Hyd. peak (cms)=		0.23	0.09	
				TOTALS
PEAK FLOW	(cms)=	0.05	0.11	0.165 (iii)
TIME TO PEAK	(hrs)=	6.92	7.00	7.00
RUNOFF VOLUME	(mm)=	192.00	137.63	152.36
TOTAL RAINFALL	(mm)=	193.00	193.00	193.00
RUNOFF COEFFICIENT	=	0.99	0.71	0.79

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 66.5 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

Junction Command(0018)					
		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
INFLOW : ID= 2(	0017)	1.59	0.16	7.00	152.36
OUTFLOW: ID= 2(	0018)	1.59	0.16	7.00	152.36

ADD HYD (0023)		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3	ID1= 1 (0016):	234.30	9.254	9.08	92.73
	+ ID2= 2 (0018):	1.59	0.165	7.00	152.36
	ID = 3 (0023):	235.89	9.337	9.08	93.13

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023)		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
3 + 2 = 1	ID1= 3 (0023):	235.89	9.337	9.08	93.13
	+ ID2= 2 (0038):	40.41	1.008	11.50	147.41
	ID = 1 (0023):	276.30	10.183	9.08	101.07

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

APPENDIX F-1

SWM Facility Calculations (Ultimate Conditions)

CROZIER

Project #: Bridle Park
Project: 1508-7498
Date: 2026.07.30
By: EC
Check By: NOC

Water Quality Requirements for SWMF

Areas Contributing	Area (ha)	% Imp	25mm RV (mm)	25mm RV (m^3)
POST-1	31.06	53.9	9.97	3097
POST-2	1.32	55.3	7.82	103
POND	4.16	50.0	14.28	594
POST-FUT-1	29.16	75.0	16.23	4733
SCHOOL	2.12	85.0	15.28	324
EXT-4	0.13	30.8	6.04	8
EXT-5	1.62	48.8	11.04	179
Total	**69.57**	**63.3**		**9037**

MOE Total WQ Volume (m^3/ha)	209
MOE ED Volume (m^3/ha)	40
MOE ED Volume (m^3)	2783
MOE PP Volume (m^3/ha)	169
MOE PP Volume (m^3)	11785
Pond Required ED Volume (m^3)	9037
Pond Required PP Volume (m^3)	11785
Available ED Volume (m^3)	11671
Provided PP Volume (m^3)	17919

CROZIER

Project #: Bridle Park
Project: 1508-7498
Date: 2026.07.30
By: EC
Check By: NOC

EXTENDED DETENTION SPECIFICATIONS - SWMF

(Per MECP)

Extended Detention Volume (Area x runoff from 25mm event)		9037
t (drawdown time - seconds, *hours in italics*)	*48.0*	172800
Ao (cross section area of orifice - sqm)		0.0594
h (maximum water elevation above orifice for extended detention- m)		0.40
C (discharge coefficient)		0.64
Ap (average surface area for extended detention - sqm)		22992

t = 2*Ap*(h^0.5)/(C*Ao*(g*2)^0.5)

Ao = 0.059546714 sqm d = 275 mm

Extended Detention Orifice Diameter (as designed) d = **275** mm

CROZIER

Project #: Bridle Park
Project: 1508-7498
Date: 2026.07.30
By: EC
Check By: NOC

Stage Storage Discharge - SWMF

Outlet Structure		Main Cell Spillway	
E.D. Orifice Diameter:	0.275 m	Emergency Spill Elev.	218 m
E.D. Orifice Invert Elevation:	216.00 m	Emerg Spill Bot. Width	65 m
		Trap. Side Slopes	10 :1
Rectangular Weir Width:	0.4		
Rectangular Weir Invert Elevation:	216.45		

	Pond Dimensions				Outlet Structure		Cell Spillway		Total Discharge	Storage
	Elev. (m)	Depth Above PP (m)	Area (sqm)	Storage Volume (cu.m)	ED Orifice Discharge (cu.m/s)	Rectangular Weir Discharge (cu.m/s)	Emerg. Weir Ave. Width (m)	Emerg. Weir Discharge (cu.m/s)	(cu.m/s)	(ha-m)
PP	216.00	0.00	19452	0	0.0000	0.000	0.00	0.000	**0.0000**	**0.0000**
	216.10	0.10	21009	2023	0.0000	0.000	0.00	0.000	**0.000**	**0.2023**
	216.20	0.20	22565	4202	0.0421	0.000	0.00	0.000	**0.042**	**0.4202**
	216.30	0.30	24121	6536	0.0679	0.000	0.00	0.000	**0.068**	**0.6536**
	216.40	0.40	25677	9026	0.0863	0.000	0.00	0.000	**0.086**	**0.9026**
ED	216.50	0.50	27233	11671	0.1014	0.008	0.00	0.000	**0.110**	**1.1671**
	216.60	0.60	27776	14422	0.1145	0.043	0.00	0.000	0.157	1.4422
	216.70	0.70	28320	17227	0.1263	0.092	0.00	0.000	**0.218**	**1.7227**
	216.80	0.80	28863	20086	0.1370	0.152	0.00	0.000	**0.289**	**2.0086**
	216.90	0.90	29406	22999	0.1470	0.222	0.00	0.000	**0.369**	**2.2999**
	217.00	1.00	29950	25967	0.1564	0.300	0.00	0.000	**0.457**	**2.5967**
	217.10	1.10	30493	28989	0.1652	0.386	0.00	0.000	**0.551**	**2.8989**
	217.20	1.20	31036	32066	0.1736	0.478	0.00	0.000	**0.652**	**3.2066**
	217.30	1.30	31580	35196	0.1815	0.577	0.00	0.000	**0.758**	**3.5196**
	217.40	1.40	32123	38381	0.1892	0.681	0.00	0.000	**0.871**	**3.8381**
	217.50	1.50	32666	41621	0.1965	0.792	0.00	0.000	**0.988**	**4.1621**
	217.60	1.60	33210	44915	0.2036	0.908	0.00	0.000	**1.111**	**4.4915**
100-year SCS	217.70	1.70	33753	48263	0.2105	1.029	0.00	0.000	**1.239**	**4.8263**
	217.80	1.80	34296	51665	0.2171	1.154	0.00	0.000	**1.372**	**5.1665**
	217.90	1.90	34840	55122	0.2235	1.285	0.00	0.000	**1.509**	**5.5122**
HWL	218.00	2.00	35383	58633	0.2298	1.420	0.00	0.000	**1.650**	**5.8633**
	218.10	2.10	35926	62199	0.2359	1.560	67.00	3.898	5.694	6.2199
	218.20	2.20	36470	65818	0.2418	1.704	69.00	11.356	13.301	6.5818
TOB	218.30	2.30	37013	69493	0.2476	1.852	71.00	21.466	23.566	6.9493

APPENDIX F-2

SWM Facility Calculations (Interim Conditions)

CROZIER

Project #: Bridle Park
Project: 1508-7498
Date: 2026.07.08
By: EC
Check By: NOC

Water Quality Requirements for SWMF

Areas Contributing	Area (ha)	% Imp	25mm RV (mm)	25mm RV (m^3)
POST-1	31.06	53.9	9.97	3097
POST-2	1.32	55.3	7.82	103
POND	4.16	50.0	14.28	594
				0
SCHOOL	2.12	85.0	15.28	324
EXT-4	0.13	30.8	6.04	8
EXT-5	1.62	48.8	11.04	179
Total	**40.41**	**54.9**		**4305**

MOE Total WQ Volume (m^3/ha)	190
MOE ED Volume (m^3/ha)	40
MOE ED Volume (m^3)	1616
MOE PP Volume (m^3/ha)	150
MOE PP Volume (m^3)	6050
Pond Required ED Volume (m^3)	4305
Pond Required PP Volume (m^3)	6050
Available ED Volume (m^3)	11671
Provided PP Volume (m^3)	17919

CROZIER

Project #: Bridle Park
Project: 1508-7498
Date: 2026.07.08
By: EC
Check By: NOC

EXTENDED DETENTION SPECIFICATIONS - SWMF

(Per MECP)

Extended Detention Volume (Area x runoff from 25mm event)		4305
t (drawdown time - seconds, *hours in italics*)	*48.0*	172800
Ao (cross section area of orifice - sqm)		0.0434
h (maximum water elevation above orifice for extended detention- m)		0.25
C (discharge coefficient)		0.64
Ap (average surface area for extended detention - sqm)		21780

t = 2*Ap*(h^0.5)/(C*Ao*(g*2)^0.5)

Ao = 0.044274103 sqm d = 237 mm

Extended Detention Orifice Diameter (as designed) d = **235** mm

CROZIER

Project #: Bridle Park
Project: 1508-7498
Date: 2026.07.08
By: EC
Check By: NOC

Stage Storage Discharge - SWMF

Outlet Structure		Main Cell Spillway	
E.D. Orifice Diameter:	0.235 m	Emergency Spill Elev.	218 m
E.D. Orifice Invert Elevation:	216.00 m	Emerg Spill Bot. Width	65 m
		Trap. Side Slopes	10 :1
Rectangular Weir Width:	0.4		
Rectangular Weir Invert Elevation:	216.45		

	Pond Dimensions				Outlet Structure		Cell Spillway		Total Discharge	Storage
	Elev. (m)	Depth Above PP (m)	Area (sqm)	Storage Volume (cu.m)	ED Orifice Discharge (cu.m/s)	Rectangular Weir Discharge (cu.m/s)	Emerg. Weir Ave. Width (m)	Emerg. Weir Discharge (cu.m/s)	(cu.m/s)	(ha-m)
PP	216.00	0.00	19452	0	0.0000	0.000	0.00	0.000	**0.0000**	**0.0000**
	216.10	0.10	21009	2023	0.0000	0.000	0.00	0.000	**0.000**	**0.2023**
	216.20	0.20	22565	4202	0.0353	0.000	0.00	0.000	**0.035**	**0.4202**
	216.30	0.30	24121	6536	0.0525	0.000	0.00	0.000	**0.053**	**0.6536**
	216.40	0.40	25677	9026	0.0654	0.000	0.00	0.000	**0.065**	**0.9026**
ED	216.50	0.50	27233	11671	0.0760	0.008	0.00	0.000	**0.084**	**1.1671**
	216.60	0.60	27776	14422	0.0854	0.043	0.00	0.000	0.128	1.4422
	216.70	0.70	28320	17227	0.0938	0.092	0.00	0.000	**0.186**	**1.7227**
	216.80	0.80	28863	20086	0.1016	0.152	0.00	0.000	**0.254**	**2.0086**
	216.90	0.90	29406	22999	0.1088	0.222	0.00	0.000	**0.331**	**2.2999**
	217.00	1.00	29950	25967	0.1155	0.300	0.00	0.000	**0.416**	**2.5967**
	217.10	1.10	30493	28989	0.1219	0.386	0.00	0.000	**0.508**	**2.8989**
	217.20	1.20	31036	32066	0.1279	0.478	0.00	0.000	**0.606**	**3.2066**
	217.30	1.30	31580	35196	0.1337	0.577	0.00	0.000	**0.710**	**3.5196**
	217.40	1.40	32123	38381	0.1392	0.681	0.00	0.000	**0.821**	**3.8381**
	217.50	1.50	32666	41621	0.1446	0.792	0.00	0.000	**0.936**	**4.1621**
	217.60	1.60	33210	44915	0.1497	0.908	0.00	0.000	**1.057**	**4.4915**
100-year SCS	217.70	1.70	33753	48263	0.1547	1.029	0.00	0.000	**1.183**	**4.8263**
	217.80	1.80	34296	51665	0.1595	1.154	0.00	0.000	**1.314**	**5.1665**
	217.90	1.90	34840	55122	0.1642	1.285	0.00	0.000	**1.449**	**5.5122**
HWL	218.00	2.00	35383	58633	0.1687	1.420	0.00	0.000	**1.589**	**5.8633**
	218.10	2.10	35926	62199	0.1731	1.560	67.00	3.898	5.632	6.2199
	218.20	2.20	36470	65818	0.1774	1.704	69.00	11.356	13.237	6.5818
TOB	218.30	2.30	37013	69493	0.1816	1.852	71.00	21.466	23.500	6.9493

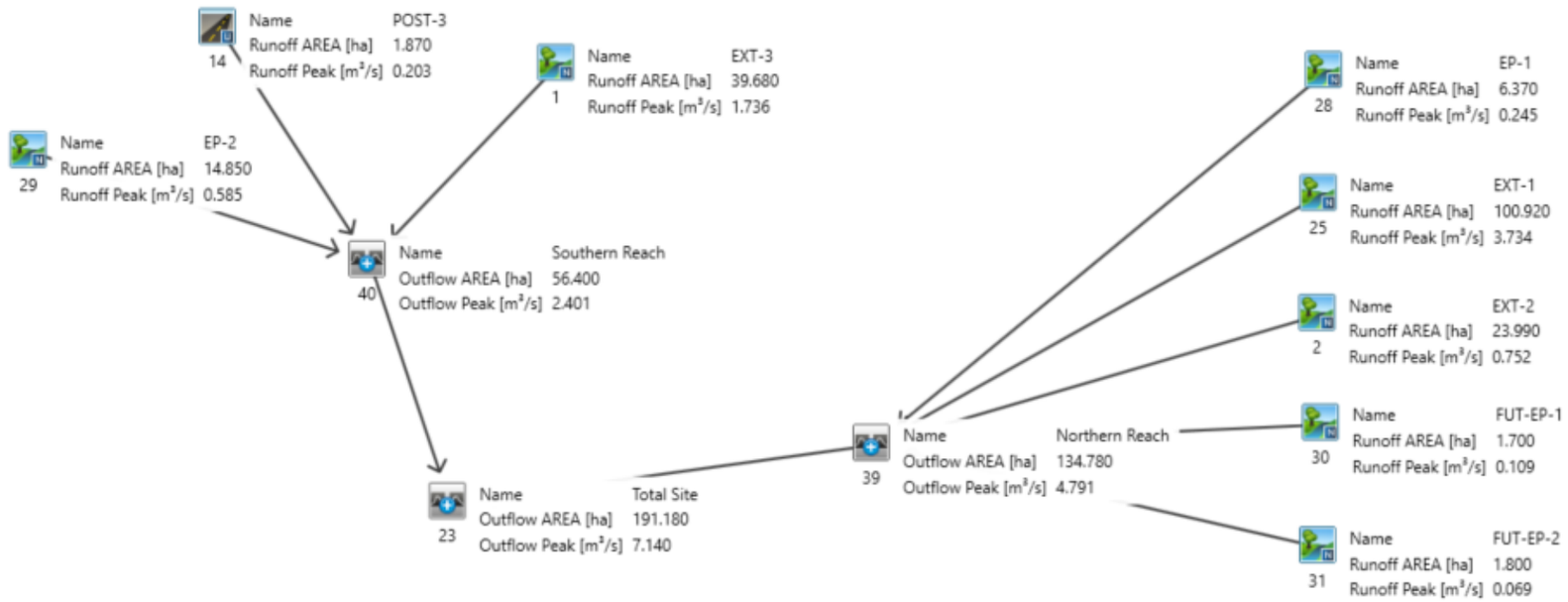
APPENDIX G

External Flow Management

Project:	Bridle Park Stayner
Project No.:	1508-7498
File:	Model Schematic
Design by:	EC/NOC
Date:	2026.06.26

Visual OTTHYMO 6.2 - Model Schematic

Pre-Development



```
*********************************
** SIMULATION:A - 2-year CHI  **
*********************************
--------------------
| CHICAGO STORM    |    IDF curve parameters: A= 424.530
| Ptotal= 36.82 mm |                          B=   0.000
--------------------                          C=   0.699
                       used in:   INTENSITY =  A / (t + B)^C

                       Duration of storm  =  4.00 hrs
                       Storm time step    = 10.00 min
                       Time to peak ratio =  0.33
```

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.00	3.10	1.00	14.65	2.00	6.12	3.00	3.57
0.17	3.46	1.17	84.90	2.17	5.41	3.17	3.36
0.33	3.95	1.33	17.98	2.33	4.86	3.33	3.18
0.50	4.65	1.50	11.34	2.50	4.44	3.50	3.02
0.67	5.76	1.67	8.64	2.67	4.09	3.67	2.88
0.83	7.88	1.83	7.12	2.83	3.81	3.83	2.75

```
--------------------
| CALIB            |
| NASHYD   (  0025)|   Area    (ha)= 100.92   Curve Number   (CN)= 55.9
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.89   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   1.70

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.
```

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	3.10	1.083	14.65	2.083	6.12	3.08	3.57
0.167	3.10	1.167	14.65	2.167	6.12	3.17	3.57
0.250	3.46	1.250	84.90	2.250	5.41	3.25	3.36
0.333	3.46	1.333	84.90	2.333	5.41	3.33	3.36
0.417	3.95	1.417	17.98	2.417	4.86	3.42	3.18
0.500	3.95	1.500	17.98	2.500	4.86	3.50	3.18
0.583	4.65	1.583	11.34	2.583	4.44	3.58	3.02
0.667	4.65	1.667	11.34	2.667	4.44	3.67	3.02
0.750	5.76	1.750	8.64	2.750	4.09	3.75	2.88
0.833	5.76	1.833	8.64	2.833	4.09	3.83	2.88
0.917	7.88	1.917	7.12	2.917	3.81	3.92	2.75
1.000	7.88	2.000	7.12	3.000	3.81	4.00	2.75


```
    Unit Hyd Qpeak  (cms)=   2.267

    PEAK FLOW       (cms)=   0.253 (i)
    TIME TO PEAK    (hrs)=   4.083
    RUNOFF VOLUME    (mm)=   3.654
    TOTAL RAINFALL   (mm)=  36.816
    RUNOFF COEFFICIENT   =   0.099

    (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| NASHYD   (  0002)|   Area    (ha)=  23.99   Curve Number   (CN)= 44.7
|ID= 1 DT= 5.0 min |   Ia      (mm)=  10.91   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.97

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.
```

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	3.10	1.083	14.65	2.083	6.12	3.08	3.57
0.167	3.10	1.167	14.65	2.167	6.12	3.17	3.57
0.250	3.46	1.250	84.90	2.250	5.41	3.25	3.36
0.333	3.46	1.333	84.90	2.333	5.41	3.33	3.36
0.417	3.95	1.417	17.98	2.417	4.86	3.42	3.18
0.500	3.95	1.500	17.98	2.500	4.86	3.50	3.18
0.583	4.65	1.583	11.34	2.583	4.44	3.58	3.02
0.667	4.65	1.667	11.34	2.667	4.44	3.67	3.02
0.750	5.76	1.750	8.64	2.750	4.09	3.75	2.88
0.833	5.76	1.833	8.64	2.833	4.09	3.83	2.88
0.917	7.88	1.917	7.12	2.917	3.81	3.92	2.75
1.000	7.88	2.000	7.12	3.000	3.81	4.00	2.75

```
    Unit Hyd Qpeak  (cms)=   0.945

    PEAK FLOW       (cms)=   0.042 (i)
    TIME TO PEAK    (hrs)=   3.000
    RUNOFF VOLUME    (mm)=   1.973
    TOTAL RAINFALL   (mm)=  36.816
    RUNOFF COEFFICIENT   =   0.054

    (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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--------------------
| CALIB            |
| NASHYD   (  0028)|   Area    (ha)=   6.37   Curve Number   (CN)= 50.5
|ID= 1 DT= 5.0 min |   Ia      (mm)=  15.69   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.77

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.
```

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	3.10	1.083	14.65	2.083	6.12	3.08	3.57
0.167	3.10	1.167	14.65	2.167	6.12	3.17	3.57
0.250	3.46	1.250	84.90	2.250	5.41	3.25	3.36
0.333	3.46	1.333	84.90	2.333	5.41	3.33	3.36
0.417	3.95	1.417	17.98	2.417	4.86	3.42	3.18
0.500	3.95	1.500	17.98	2.500	4.86	3.50	3.18
0.583	4.65	1.583	11.34	2.583	4.44	3.58	3.02
0.667	4.65	1.667	11.34	2.667	4.44	3.67	3.02
0.750	5.76	1.750	8.64	2.750	4.09	3.75	2.88
0.833	5.76	1.833	8.64	2.833	4.09	3.83	2.88
0.917	7.88	1.917	7.12	2.917	3.81	3.92	2.75
1.000	7.88	2.000	7.12	3.000	3.81	4.00	2.75

```
    Unit Hyd Qpeak  (cms)=   0.316

    PEAK FLOW       (cms)=   0.010 (i)
    TIME TO PEAK    (hrs)=   3.000
    RUNOFF VOLUME    (mm)=   1.651
    TOTAL RAINFALL   (mm)=  36.816
    RUNOFF COEFFICIENT   =   0.045

    (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| NASHYD   (  0030)|   Area    (ha)=   1.70   Curve Number   (CN)= 60.5
|ID= 1 DT= 5.0 min |   Ia      (mm)=   9.65   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.40

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.
```

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr

0.083	3.10	1.083	14.65	2.083	6.12	3.08	3.57
0.167	3.10	1.167	14.65	2.167	6.12	3.17	3.57
0.250	3.46	1.250	84.90	2.250	5.41	3.25	3.36
0.333	3.46	1.333	84.90	2.333	5.41	3.33	3.36
0.417	3.95	1.417	17.98	2.417	4.86	3.42	3.18
0.500	3.95	1.500	17.98	2.500	4.86	3.50	3.18
0.583	4.65	1.583	11.34	2.583	4.44	3.58	3.02
0.667	4.65	1.667	11.34	2.667	4.44	3.67	3.02
0.750	5.76	1.750	8.64	2.750	4.09	3.75	2.88
0.833	5.76	1.833	8.64	2.833	4.09	3.83	2.88
0.917	7.88	1.917	7.12	2.917	3.81	3.92	2.75
1.000	7.88	2.000	7.12	3.000	3.81	4.00	2.75

```
    Unit Hyd Qpeak  (cms)=   0.162

    PEAK FLOW       (cms)=   0.009 (i)
    TIME TO PEAK    (hrs)=   1.917
    RUNOFF VOLUME    (mm)=   3.817
    TOTAL RAINFALL   (mm)=  36.816
    RUNOFF COEFFICIENT   =   0.104

    (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| NASHYD   (  0031)|   Area    (ha)=   1.80   Curve Number   (CN)= 50.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=  16.00   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.76

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.
```

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	3.10	1.083	14.65	2.083	6.12	3.08	3.57
0.167	3.10	1.167	14.65	2.167	6.12	3.17	3.57
0.250	3.46	1.250	84.90	2.250	5.41	3.25	3.36
0.333	3.46	1.333	84.90	2.333	5.41	3.33	3.36
0.417	3.95	1.417	17.98	2.417	4.86	3.42	3.18
0.500	3.95	1.500	17.98	2.500	4.86	3.50	3.18
0.583	4.65	1.583	11.34	2.583	4.44	3.58	3.02
0.667	4.65	1.667	11.34	2.667	4.44	3.67	3.02
0.750	5.76	1.750	8.64	2.750	4.09	3.75	2.88
0.833	5.76	1.833	8.64	2.833	4.09	3.83	2.88
0.917	7.88	1.917	7.12	2.917	3.81	3.92	2.75
1.000	7.88	2.000	7.12	3.000	3.81	4.00	2.75

Unit Hyd Qpeak (cms)= 0.090

PEAK FLOW (cms)= 0.003 (i)
TIME TO PEAK (hrs)= 3.000
RUNOFF VOLUME (mm)= 1.576
TOTAL RAINFALL (mm)= 36.816
RUNOFF COEFFICIENT = 0.043

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0039)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0002):		23.99	0.042	3.00	1.97
+ ID2= 2 (0025):		100.92	0.253	4.08	3.65
ID = 3 (0039):		124.91	0.290	4.00	3.33

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0039)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0039):		124.91	0.290	4.00	3.33
+ ID2= 2 (0028):		6.37	0.010	3.00	1.65
ID = 1 (0039):		131.28	0.299	3.92	3.25

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0039)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0039):		131.28	0.299	3.92	3.25
+ ID2= 2 (0030):		1.70	0.009	1.92	3.82
ID = 3 (0039):		132.98	0.303	3.92	3.26

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0039)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0039):		132.98	0.303	3.92	3.26
+ ID2= 2 (0031):		1.80	0.003	3.00	1.58
ID = 1 (0039):		134.78	0.305	3.92	3.23

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB					
NASHYD (0001)	Area	(ha)=	39.68	Curve Number	(CN)= 60.7
ID= 1 DT= 5.0 min	Ia	(mm)=	8.26	# of Linear Res.(N)=	3.00
	U.H. Tp(hrs)=		1.18		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	3.10	1.083	14.65	2.083	6.12	3.08	3.57
0.167	3.10	1.167	14.65	2.167	6.12	3.17	3.57
0.250	3.46	1.250	84.90	2.250	5.41	3.25	3.36
0.333	3.46	1.333	84.90	2.333	5.41	3.33	3.36
0.417	3.95	1.417	17.98	2.417	4.86	3.42	3.18
0.500	3.95	1.500	17.98	2.500	4.86	3.50	3.18
0.583	4.65	1.583	11.34	2.583	4.44	3.58	3.02
0.667	4.65	1.667	11.34	2.667	4.44	3.67	3.02
0.750	5.76	1.750	8.64	2.750	4.09	3.75	2.88
0.833	5.76	1.833	8.64	2.833	4.09	3.83	2.88
0.917	7.88	1.917	7.12	2.917	3.81	3.92	2.75
1.000	7.88	2.000	7.12	3.000	3.81	4.00	2.75

Unit Hyd Qpeak (cms)= 1.284

PEAK FLOW (cms)= 0.139 (i)
TIME TO PEAK (hrs)= 3.167
RUNOFF VOLUME (mm)= 4.222
TOTAL RAINFALL (mm)= 36.816
RUNOFF COEFFICIENT = 0.115

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0029)	Area	(ha)=	14.85	Curve Number	(CN)= 52.9
ID= 1 DT= 5.0 min	Ia	(mm)=	13.28	# of Linear Res.(N)=	3.00
	U.H. Tp(hrs)=		0.89		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	3.10	1.083	14.65	2.083	6.12	3.08	3.57
0.167	3.10	1.167	14.65	2.167	6.12	3.17	3.57
0.250	3.46	1.250	84.90	2.250	5.41	3.25	3.36
0.333	3.46	1.333	84.90	2.333	5.41	3.33	3.36
0.417	3.95	1.417	17.98	2.417	4.86	3.42	3.18
0.500	3.95	1.500	17.98	2.500	4.86	3.50	3.18
0.583	4.65	1.583	11.34	2.583	4.44	3.58	3.02
0.667	4.65	1.667	11.34	2.667	4.44	3.67	3.02
0.750	5.76	1.750	8.64	2.750	4.09	3.75	2.88
0.833	5.76	1.833	8.64	2.833	4.09	3.83	2.88
0.917	7.88	1.917	7.12	2.917	3.81	3.92	2.75
1.000	7.88	2.000	7.12	3.000	3.81	4.00	2.75

Unit Hyd Qpeak (cms)= 0.637

PEAK FLOW (cms)= 0.030 (i)
TIME TO PEAK (hrs)= 3.000
RUNOFF VOLUME (mm)= 2.222
TOTAL RAINFALL (mm)= 36.816
RUNOFF COEFFICIENT = 0.060

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
STANDHYD (0014)	Area	(ha)=	1.87		
ID= 1 DT= 5.0 min	Total Imp(%)=	43.28	Dir. Conn.(%)=	10.00	

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.81	1.06
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	111.65	25.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	3.10	1.083	14.65	2.083	6.12	3.08	3.57
0.167	3.10	1.167	14.65	2.167	6.12	3.17	3.57
0.250	3.46	1.250	84.90	2.250	5.41	3.25	3.36
0.333	3.46	1.333	84.90	2.333	5.41	3.33	3.36
0.417	3.95	1.417	17.98	2.417	4.86	3.42	3.18
0.500	3.95	1.500	17.98	2.500	4.86	3.50	3.18
0.583	4.65	1.583	11.34	2.583	4.44	3.58	3.02
0.667	4.65	1.667	11.34	2.667	4.44	3.67	3.02
0.750	5.76	1.750	8.64	2.750	4.09	3.75	2.88
0.833	5.76	1.833	8.64	2.833	4.09	3.83	2.88
0.917	7.88	1.917	7.12	2.917	3.81	3.92	2.75
1.000	7.88	2.000	7.12	3.000	3.81	4.00	2.75

				TOTALS
Max.Eff.Inten.(mm/hr)=		84.90	46.69	
over (min)		5.00	15.00	
Storage Coeff. (min)=		3.59 (ii)	10.81 (ii)	
Unit Hyd. Tpeak (min)=		5.00	15.00	
Unit Hyd. peak (cms)=		0.26	0.09	
PEAK FLOW	(cms)=	0.04	0.08	0.088 (iii)
TIME TO PEAK	(hrs)=	1.33	1.50	1.50
RUNOFF VOLUME	(mm)=	35.82	14.37	16.51
TOTAL RAINFALL	(mm)=	36.82	36.82	36.82
RUNOFF COEFFICIENT	=	0.97	0.39	0.45

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 78.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0040)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0001):		39.68	0.139	3.17	4.22

```
      + ID2= 2 (  0014):     1.87   0.088     1.50    16.51
        ================================================
        ID = 3 (  0040):    41.55   0.153     3.17     4.78

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0040)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 3 (  0040):    41.55   0.153     3.17     4.78
      + ID2= 2 (  0029):    14.85   0.030     3.00     2.22
        ================================================
        ID = 1 (  0040):    56.40   0.183     3.08     4.10

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0023)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0039):   134.78   0.305     3.92     3.23
      + ID2= 2 (  0040):    56.40   0.183     3.08     4.10
        ================================================
        ID = 3 (  0023):   191.18   0.477     3.58     3.49

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
------------------------------------------------------------------------------
*********************************
** SIMULATION:B - 5-year CHI  **
*********************************
--------------------
| CHICAGO STORM    |    IDF curve parameters: A= 561.345
| Ptotal= 48.68 mm |                          B=   0.000
--------------------                          C=   0.699
                       used in:   INTENSITY =  A / (t + B)^C

                       Duration of storm  =  4.00 hrs
                       Storm time step    = 10.00 min
                       Time to peak ratio =  0.33

                  TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                   hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
                  0.00    4.09 |  1.00   19.37 |'  2.00    8.09 |  3.00    4.72
                  0.17    4.57 |  1.17  112.26 |'  2.17    7.15 |  3.17    4.44
                  0.33    5.22 |  1.33   23.77 |'  2.33    6.43 |  3.33    4.20
```



```
                  0.50    6.15 |  1.50   14.99 |'  2.50    5.87 |  3.50    3.99
                  0.67    7.61 |  1.67   11.43 |'  2.67    5.41 |  3.67    3.81
                  0.83   10.41 |  1.83    9.42 |'  2.83    5.04 |  3.83    3.64


------------------------------------------------------------------------------
--------------------
| CALIB            |
| NASHYD   (  0025)|   Area    (ha)= 100.92   Curve Number   (CN)= 55.9
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.89   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   1.70

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                           ---- TRANSFORMED HYETOGRAPH ----
                  TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                   hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
                 0.083    4.09 | 1.083   19.37 | 2.083    8.09 |  3.08    4.72
                 0.167    4.09 | 1.167   19.37 | 2.167    8.09 |  3.17    4.72
                 0.250    4.57 | 1.250  112.26 | 2.250    7.15 |  3.25    4.44
                 0.333    4.57 | 1.333  112.26 | 2.333    7.15 |  3.33    4.44
                 0.417    5.22 | 1.417   23.77 | 2.417    6.43 |  3.42    4.20
                 0.500    5.22 | 1.500   23.77 | 2.500    6.43 |  3.50    4.20
                 0.583    6.15 | 1.583   14.99 | 2.583    5.87 |  3.58    3.99
                 0.667    6.15 | 1.667   14.99 | 2.667    5.87 |  3.67    3.99
                 0.750    7.61 | 1.750   11.43 | 2.750    5.41 |  3.75    3.81
                 0.833    7.61 | 1.833   11.43 | 2.833    5.41 |  3.83    3.81
                 0.917   10.41 | 1.917    9.42 | 2.917    5.04 |  3.92    3.64
                 1.000   10.41 | 2.000    9.42 | 3.000    5.04 |  4.00    3.64

    Unit Hyd Qpeak  (cms)=   2.267

    PEAK FLOW       (cms)=   0.479 (i)
    TIME TO PEAK    (hrs)=   3.917
    RUNOFF VOLUME    (mm)=   6.909
    TOTAL RAINFALL   (mm)=  48.681
    RUNOFF COEFFICIENT   =   0.142

    (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

------------------------------------------------------------------------------
--------------------
| CALIB            |
| NASHYD   (  0002)|   Area    (ha)=  23.99   Curve Number   (CN)= 44.7
|ID= 1 DT= 5.0 min |   Ia      (mm)=  10.91   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.97
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        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                           ---- TRANSFORMED HYETOGRAPH ----
                  TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                   hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
                 0.083    4.09 | 1.083   19.37 | 2.083    8.09 |  3.08    4.72
                 0.167    4.09 | 1.167   19.37 | 2.167    8.09 |  3.17    4.72
                 0.250    4.57 | 1.250  112.26 | 2.250    7.15 |  3.25    4.44
                 0.333    4.57 | 1.333  112.26 | 2.333    7.15 |  3.33    4.44
                 0.417    5.22 | 1.417   23.77 | 2.417    6.43 |  3.42    4.20
                 0.500    5.22 | 1.500   23.77 | 2.500    6.43 |  3.50    4.20
                 0.583    6.15 | 1.583   14.99 | 2.583    5.87 |  3.58    3.99
                 0.667    6.15 | 1.667   14.99 | 2.667    5.87 |  3.67    3.99
                 0.750    7.61 | 1.750   11.43 | 2.750    5.41 |  3.75    3.81
                 0.833    7.61 | 1.833   11.43 | 2.833    5.41 |  3.83    3.81
                 0.917   10.41 | 1.917    9.42 | 2.917    5.04 |  3.92    3.64
                 1.000   10.41 | 2.000    9.42 | 3.000    5.04 |  4.00    3.64

    Unit Hyd Qpeak  (cms)=   0.945

    PEAK FLOW       (cms)=   0.089 (i)
    TIME TO PEAK    (hrs)=   2.833
    RUNOFF VOLUME    (mm)=   4.053
    TOTAL RAINFALL   (mm)=  48.681
    RUNOFF COEFFICIENT   =   0.083

    (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

------------------------------------------------------------------------------
--------------------
| CALIB            |
| NASHYD   (  0028)|   Area    (ha)=   6.37   Curve Number   (CN)= 50.5
|ID= 1 DT= 5.0 min |   Ia      (mm)=  15.69   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.77

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                           ---- TRANSFORMED HYETOGRAPH ----
                  TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                   hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
                 0.083    4.09 | 1.083   19.37 | 2.083    8.09 |  3.08    4.72
                 0.167    4.09 | 1.167   19.37 | 2.167    8.09 |  3.17    4.72
                 0.250    4.57 | 1.250  112.26 | 2.250    7.15 |  3.25    4.44
                 0.333    4.57 | 1.333  112.26 | 2.333    7.15 |  3.33    4.44
                 0.417    5.22 | 1.417   23.77 | 2.417    6.43 |  3.42    4.20
                 0.500    5.22 | 1.500   23.77 | 2.500    6.43 |  3.50    4.20
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                 0.583    6.15 | 1.583   14.99 | 2.583    5.87 |  3.58    3.99
                 0.667    6.15 | 1.667   14.99 | 2.667    5.87 |  3.67    3.99
                 0.750    7.61 | 1.750   11.43 | 2.750    5.41 |  3.75    3.81
                 0.833    7.61 | 1.833   11.43 | 2.833    5.41 |  3.83    3.81
                 0.917   10.41 | 1.917    9.42 | 2.917    5.04 |  3.92    3.64
                 1.000   10.41 | 2.000    9.42 | 3.000    5.04 |  4.00    3.64

    Unit Hyd Qpeak  (cms)=   0.316

    PEAK FLOW       (cms)=   0.024 (i)
    TIME TO PEAK    (hrs)=   2.667
    RUNOFF VOLUME    (mm)=   3.857
    TOTAL RAINFALL   (mm)=  48.681
    RUNOFF COEFFICIENT   =   0.079

    (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

------------------------------------------------------------------------------
--------------------
| CALIB            |
| NASHYD   (  0030)|   Area    (ha)=   1.70   Curve Number   (CN)= 60.5
|ID= 1 DT= 5.0 min |   Ia      (mm)=   9.65   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.40

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                           ---- TRANSFORMED HYETOGRAPH ----
                  TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                   hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
                 0.083    4.09 | 1.083   19.37 | 2.083    8.09 |  3.08    4.72
                 0.167    4.09 | 1.167   19.37 | 2.167    8.09 |  3.17    4.72
                 0.250    4.57 | 1.250  112.26 | 2.250    7.15 |  3.25    4.44
                 0.333    4.57 | 1.333  112.26 | 2.333    7.15 |  3.33    4.44
                 0.417    5.22 | 1.417   23.77 | 2.417    6.43 |  3.42    4.20
                 0.500    5.22 | 1.500   23.77 | 2.500    6.43 |  3.50    4.20
                 0.583    6.15 | 1.583   14.99 | 2.583    5.87 |  3.58    3.99
                 0.667    6.15 | 1.667   14.99 | 2.667    5.87 |  3.67    3.99
                 0.750    7.61 | 1.750   11.43 | 2.750    5.41 |  3.75    3.81
                 0.833    7.61 | 1.833   11.43 | 2.833    5.41 |  3.83    3.81
                 0.917   10.41 | 1.917    9.42 | 2.917    5.04 |  3.92    3.64
                 1.000   10.41 | 2.000    9.42 | 3.000    5.04 |  4.00    3.64

    Unit Hyd Qpeak  (cms)=   0.162

    PEAK FLOW       (cms)=   0.020 (i)
    TIME TO PEAK    (hrs)=   1.833
    RUNOFF VOLUME    (mm)=   7.425
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TOTAL RAINFALL (mm)= 48.681
RUNOFF COEFFICIENT = 0.153

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0031)	Area (ha)= 1.80	Curve Number (CN)= 50.0			
ID= 1 DT= 5.0 min	Ia (mm)= 16.00	# of Linear Res.(N)= 3.00			
	U.H. Tp(hrs)= 0.76				

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.09	1.083	19.37	2.083	8.09	3.08	4.72
0.167	4.09	1.167	19.37	2.167	8.09	3.17	4.72
0.250	4.57	1.250	112.26	2.250	7.15	3.25	4.44
0.333	4.57	1.333	112.26	2.333	7.15	3.33	4.44
0.417	5.22	1.417	23.77	2.417	6.43	3.42	4.20
0.500	5.22	1.500	23.77	2.500	6.43	3.50	4.20
0.583	6.15	1.583	14.99	2.583	5.87	3.58	3.99
0.667	6.15	1.667	14.99	2.667	5.87	3.67	3.99
0.750	7.61	1.750	11.43	2.750	5.41	3.75	3.81
0.833	7.61	1.833	11.43	2.833	5.41	3.83	3.81
0.917	10.41	1.917	9.42	2.917	5.04	3.92	3.64
1.000	10.41	2.000	9.42	3.000	5.04	4.00	3.64

Unit Hyd Qpeak (cms)= 0.090

PEAK FLOW (cms)= 0.007 (i)
TIME TO PEAK (hrs)= 2.667
RUNOFF VOLUME (mm)= 3.725
TOTAL RAINFALL (mm)= 48.681
RUNOFF COEFFICIENT = 0.077

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0039)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0002):	23.99	0.089	2.83	4.05

+ ID2= 2 (0025):	100.92	0.479	3.92	6.91
ID = 3 (0039):	124.91	0.553	3.75	6.36

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0039)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0039):	124.91	0.553	3.75	6.36
+ ID2= 2 (0028):	6.37	0.024	2.67	3.86
ID = 1 (0039):	131.28	0.573	3.75	6.24

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0039)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0039):	131.28	0.573	3.75	6.24
+ ID2= 2 (0030):	1.70	0.020	1.83	7.42
ID = 3 (0039):	132.98	0.580	3.75	6.25

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0039)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0039):	132.98	0.580	3.75	6.25
+ ID2= 2 (0031):	1.80	0.007	2.67	3.72
ID = 1 (0039):	134.78	0.585	3.75	6.22

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB			
NASHYD (0001)	Area (ha)= 39.68	Curve Number (CN)= 60.7	
ID= 1 DT= 5.0 min	Ia (mm)= 8.26	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 1.18		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.09	1.083	19.37	2.083	8.09	3.08	4.72
0.167	4.09	1.167	19.37	2.167	8.09	3.17	4.72
0.250	4.57	1.250	112.26	2.250	7.15	3.25	4.44
0.333	4.57	1.333	112.26	2.333	7.15	3.33	4.44
0.417	5.22	1.417	23.77	2.417	6.43	3.42	4.20
0.500	5.22	1.500	23.77	2.500	6.43	3.50	4.20
0.583	6.15	1.583	14.99	2.583	5.87	3.58	3.99
0.667	6.15	1.667	14.99	2.667	5.87	3.67	3.99
0.750	7.61	1.750	11.43	2.750	5.41	3.75	3.81
0.833	7.61	1.833	11.43	2.833	5.41	3.83	3.81
0.917	10.41	1.917	9.42	2.917	5.04	3.92	3.64
1.000	10.41	2.000	9.42	3.000	5.04	4.00	3.64

Unit Hyd Qpeak (cms)= 1.284

PEAK FLOW (cms)= 0.267 (i)
TIME TO PEAK (hrs)= 3.083
RUNOFF VOLUME (mm)= 7.970
TOTAL RAINFALL (mm)= 48.681
RUNOFF COEFFICIENT = 0.164

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0029)	Area (ha)= 14.85	Curve Number (CN)= 52.9	
ID= 1 DT= 5.0 min	Ia (mm)= 13.28	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.89		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.09	1.083	19.37	2.083	8.09	3.08	4.72
0.167	4.09	1.167	19.37	2.167	8.09	3.17	4.72
0.250	4.57	1.250	112.26	2.250	7.15	3.25	4.44
0.333	4.57	1.333	112.26	2.333	7.15	3.33	4.44
0.417	5.22	1.417	23.77	2.417	6.43	3.42	4.20
0.500	5.22	1.500	23.77	2.500	6.43	3.50	4.20

0.583	6.15	1.583	14.99	2.583	5.87	3.58	3.99
0.667	6.15	1.667	14.99	2.667	5.87	3.67	3.99
0.750	7.61	1.750	11.43	2.750	5.41	3.75	3.81
0.833	7.61	1.833	11.43	2.833	5.41	3.83	3.81
0.917	10.41	1.917	9.42	2.917	5.04	3.92	3.64
1.000	10.41	2.000	9.42	3.000	5.04	4.00	3.64

Unit Hyd Qpeak (cms)= 0.637

PEAK FLOW (cms)= 0.067 (i)
TIME TO PEAK (hrs)= 2.750
RUNOFF VOLUME (mm)= 4.798
TOTAL RAINFALL (mm)= 48.681
RUNOFF COEFFICIENT = 0.099

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
STANDHYD (0014)	Area (ha)= 1.87		
ID= 1 DT= 5.0 min	Total Imp(%)= 43.28	Dir. Conn.(%)= 10.00	

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.81	1.06
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	111.65	25.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.09	1.083	19.37	2.083	8.09	3.08	4.72
0.167	4.09	1.167	19.37	2.167	8.09	3.17	4.72
0.250	4.57	1.250	112.26	2.250	7.15	3.25	4.44
0.333	4.57	1.333	112.26	2.333	7.15	3.33	4.44
0.417	5.22	1.417	23.77	2.417	6.43	3.42	4.20
0.500	5.22	1.500	23.77	2.500	6.43	3.50	4.20
0.583	6.15	1.583	14.99	2.583	5.87	3.58	3.99
0.667	6.15	1.667	14.99	2.667	5.87	3.67	3.99
0.750	7.61	1.750	11.43	2.750	5.41	3.75	3.81
0.833	7.61	1.833	11.43	2.833	5.41	3.83	3.81
0.917	10.41	1.917	9.42	2.917	5.04	3.92	3.64
1.000	10.41	2.000	9.42	3.000	5.04	4.00	3.64

Max.Eff.Inten.(mm/hr)=	112.26	77.89	
over (min)	5.00	10.00	
Storage Coeff. (min)=	3.21 (ii)	9.09 (ii)	
Unit Hyd. Tpeak (min)=	5.00	10.00	
Unit Hyd. peak (cms)=	0.27	0.12	
			TOTALS
PEAK FLOW (cms)=	0.06	0.15	0.174 (iii)
TIME TO PEAK (hrs)=	1.33	1.42	1.33
RUNOFF VOLUME (mm)=	47.68	22.85	25.33
TOTAL RAINFALL (mm)=	48.68	48.68	48.68
RUNOFF COEFFICIENT =	0.98	0.47	0.52

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 78.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0040)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0001):	39.68	0.267	3.08	7.97
+ ID2= 2 (0014):	1.87	0.174	1.33	25.33
ID = 3 (0040):	41.55	0.287	3.00	8.75

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0040)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0040):	41.55	0.287	3.00	8.75
+ ID2= 2 (0029):	14.85	0.067	2.75	4.80
ID = 1 (0040):	56.40	0.354	3.00	7.71

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0039):	134.78	0.585	3.75	6.22
+ ID2= 2 (0040):	56.40	0.354	3.00	7.71
ID = 3 (0023):	191.18	0.918	3.42	6.66

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

****
** SIMULATION:C - 10-year CHI **
****

CHICAGO STORM	IDF curve parameters: A= 651.884
Ptotal= 56.53 mm	B= 0.000
	C= 0.699

used in: INTENSITY = A / (t + B)^C

Duration of storm = 4.00 hrs
Storm time step = 10.00 min
Time to peak ratio = 0.33

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.00	4.75	1.00	22.49	2.00	9.40	3.00	5.48
0.17	5.31	1.17	130.37	2.17	8.30	3.17	5.16
0.33	6.06	1.33	27.61	2.33	7.47	3.33	4.88
0.50	7.14	1.50	17.41	2.50	6.82	3.50	4.64
0.67	8.84	1.67	13.27	2.67	6.29	3.67	4.42
0.83	12.09	1.83	10.93	2.83	5.85	3.83	4.23

CALIB			
NASHYD (0025)	Area (ha)= 100.92	Curve Number (CN)= 55.9	
ID= 1 DT= 5.0 min	Ia (mm)= 7.89	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 1.70		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.75	1.083	22.49	2.083	9.40	3.08	5.48
0.167	4.75	1.167	22.49	2.167	9.40	3.17	5.48
0.250	5.31	1.250	130.37	2.250	8.30	3.25	5.16
0.333	5.31	1.333	130.37	2.333	8.30	3.33	5.16
0.417	6.06	1.417	27.61	2.417	7.47	3.42	4.88
0.500	6.06	1.500	27.61	2.500	7.47	3.50	4.88
0.583	7.14	1.583	17.41	2.583	6.82	3.58	4.64
0.667	7.14	1.667	17.41	2.667	6.82	3.67	4.64
0.750	8.84	1.750	13.27	2.750	6.29	3.75	4.42
0.833	8.84	1.833	13.27	2.833	6.29	3.83	4.42
0.917	12.09	1.917	10.93	2.917	5.85	3.92	4.23
1.000	12.09	2.000	10.93	3.000	5.85	4.00	4.23

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.75	1.083	22.49	2.083	9.40	3.08	5.48
0.167	4.75	1.167	22.49	2.167	9.40	3.17	5.48
0.250	5.31	1.250	130.37	2.250	8.30	3.25	5.16
0.333	5.31	1.333	130.37	2.333	8.30	3.33	5.16
0.417	6.06	1.417	27.61	2.417	7.47	3.42	4.88
0.500	6.06	1.500	27.61	2.500	7.47	3.50	4.88
0.583	7.14	1.583	17.41	2.583	6.82	3.58	4.64
0.667	7.14	1.667	17.41	2.667	6.82	3.67	4.64
0.750	8.84	1.750	13.27	2.750	6.29	3.75	4.42
0.833	8.84	1.833	13.27	2.833	6.29	3.83	4.42
0.917	12.09	1.917	10.93	2.917	5.85	3.92	4.23
1.000	12.09	2.000	10.93	3.000	5.85	4.00	4.23

Unit Hyd Qpeak (cms)= 2.267

PEAK FLOW	(cms)=	0.660 (i)
TIME TO PEAK	(hrs)=	3.917
RUNOFF VOLUME	(mm)=	9.514
TOTAL RAINFALL	(mm)=	56.533
RUNOFF COEFFICIENT	=	0.168

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0002)	Area (ha)= 23.99	Curve Number (CN)= 44.7	
ID= 1 DT= 5.0 min	Ia (mm)= 10.91	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.97		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.75	1.083	22.49	2.083	9.40	3.08	5.48
0.167	4.75	1.167	22.49	2.167	9.40	3.17	5.48
0.250	5.31	1.250	130.37	2.250	8.30	3.25	5.16
0.333	5.31	1.333	130.37	2.333	8.30	3.33	5.16
0.417	6.06	1.417	27.61	2.417	7.47	3.42	4.88
0.500	6.06	1.500	27.61	2.500	7.47	3.50	4.88
0.583	7.14	1.583	17.41	2.583	6.82	3.58	4.64
0.667	7.14	1.667	17.41	2.667	6.82	3.67	4.64
0.750	8.84	1.750	13.27	2.750	6.29	3.75	4.42
0.833	8.84	1.833	13.27	2.833	6.29	3.83	4.42
0.917	12.09	1.917	10.93	2.917	5.85	3.92	4.23
1.000	12.09	2.000	10.93	3.000	5.85	4.00	4.23

Unit Hyd Qpeak (cms)= 0.945

PEAK FLOW	(cms)=	0.129 (i)
TIME TO PEAK	(hrs)=	2.833
RUNOFF VOLUME	(mm)=	5.784
TOTAL RAINFALL	(mm)=	56.533
RUNOFF COEFFICIENT	=	0.102

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0028)	Area (ha)= 6.37	Curve Number (CN)= 50.5	
ID= 1 DT= 5.0 min	Ia (mm)= 15.69	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.77		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.75	1.083	22.49	2.083	9.40	3.08	5.48
0.167	4.75	1.167	22.49	2.167	9.40	3.17	5.48
0.250	5.31	1.250	130.37	2.250	8.30	3.25	5.16
0.333	5.31	1.333	130.37	2.333	8.30	3.33	5.16
0.417	6.06	1.417	27.61	2.417	7.47	3.42	4.88
0.500	6.06	1.500	27.61	2.500	7.47	3.50	4.88
0.583	7.14	1.583	17.41	2.583	6.82	3.58	4.64
0.667	7.14	1.667	17.41	2.667	6.82	3.67	4.64
0.750	8.84	1.750	13.27	2.750	6.29	3.75	4.42
0.833	8.84	1.833	13.27	2.833	6.29	3.83	4.42
0.917	12.09	1.917	10.93	2.917	5.85	3.92	4.23
1.000	12.09	2.000	10.93	3.000	5.85	4.00	4.23

Unit Hyd Qpeak (cms)= 0.316

PEAK FLOW	(cms)=	0.037 (i)
TIME TO PEAK	(hrs)=	2.583
RUNOFF VOLUME	(mm)=	5.752
TOTAL RAINFALL	(mm)=	56.533
RUNOFF COEFFICIENT	=	0.102

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0030)	Area (ha)= 1.70	Curve Number (CN)= 60.5			
ID= 1 DT= 5.0 min	Ia (mm)= 9.65	# of Linear Res.(N)= 3.00			
	U.H. Tp(hrs)= 0.40				

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.75	1.083	22.49	2.083	9.40	3.08	5.48
0.167	4.75	1.167	22.49	2.167	9.40	3.17	5.48
0.250	5.31	1.250	130.37	2.250	8.30	3.25	5.16
0.333	5.31	1.333	130.37	2.333	8.30	3.33	5.16
0.417	6.06	1.417	27.61	2.417	7.47	3.42	4.88
0.500	6.06	1.500	27.61	2.500	7.47	3.50	4.88
0.583	7.14	1.583	17.41	2.583	6.82	3.58	4.64
0.667	7.14	1.667	17.41	2.667	6.82	3.67	4.64
0.750	8.84	1.750	13.27	2.750	6.29	3.75	4.42
0.833	8.84	1.833	13.27	2.833	6.29	3.83	4.42
0.917	12.09	1.917	10.93	2.917	5.85	3.92	4.23
1.000	12.09	2.000	10.93	3.000	5.85	4.00	4.23

Unit Hyd Qpeak (cms)= 0.162

PEAK FLOW (cms)= 0.028 (i)
TIME TO PEAK (hrs)= 1.833
RUNOFF VOLUME (mm)= 10.318
TOTAL RAINFALL (mm)= 56.533
RUNOFF COEFFICIENT = 0.183

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0031)	Area (ha)= 1.80	Curve Number (CN)= 50.0			
ID= 1 DT= 5.0 min	Ia (mm)= 16.00	# of Linear Res.(N)= 3.00			
	U.H. Tp(hrs)= 0.76				

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr

0.083	4.75	1.083	22.49	2.083	9.40	3.08	5.48
0.167	4.75	1.167	22.49	2.167	9.40	3.17	5.48
0.250	5.31	1.250	130.37	2.250	8.30	3.25	5.16
0.333	5.31	1.333	130.37	2.333	8.30	3.33	5.16
0.417	6.06	1.417	27.61	2.417	7.47	3.42	4.88
0.500	6.06	1.500	27.61	2.500	7.47	3.50	4.88
0.583	7.14	1.583	17.41	2.583	6.82	3.58	4.64
0.667	7.14	1.667	17.41	2.667	6.82	3.67	4.64
0.750	8.84	1.750	13.27	2.750	6.29	3.75	4.42
0.833	8.84	1.833	13.27	2.833	6.29	3.83	4.42
0.917	12.09	1.917	10.93	2.917	5.85	3.92	4.23
1.000	12.09	2.000	10.93	3.000	5.85	4.00	4.23

Unit Hyd Qpeak (cms)= 0.090

PEAK FLOW (cms)= 0.010 (i)
TIME TO PEAK (hrs)= 2.583
RUNOFF VOLUME (mm)= 5.577
TOTAL RAINFALL (mm)= 56.533
RUNOFF COEFFICIENT = 0.099

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0039)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0002):	23.99	0.129	2.83	5.78
+ ID2= 2 (0025):	100.92	0.660	3.92	9.51
ID = 3 (0039):	124.91	0.766	3.75	8.80

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0039)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0039):	124.91	0.766	3.75	8.80
+ ID2= 2 (0028):	6.37	0.037	2.58	5.75
ID = 1 (0039):	131.28	0.795	3.67	8.65

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0039)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0039):	131.28	0.795	3.67	8.65
+ ID2= 2 (0030):	1.70	0.028	1.83	10.32
ID = 3 (0039):	132.98	0.805	3.67	8.67

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0039)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0039):	132.98	0.805	3.67	8.67
+ ID2= 2 (0031):	1.80	0.010	2.58	5.58
ID = 1 (0039):	134.78	0.812	3.67	8.63

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB					
NASHYD (0001)	Area (ha)= 39.68	Curve Number (CN)= 60.7			
ID= 1 DT= 5.0 min	Ia (mm)= 8.26	# of Linear Res.(N)= 3.00			
	U.H. Tp(hrs)= 1.18				

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.75	1.083	22.49	2.083	9.40	3.08	5.48
0.167	4.75	1.167	22.49	2.167	9.40	3.17	5.48
0.250	5.31	1.250	130.37	2.250	8.30	3.25	5.16
0.333	5.31	1.333	130.37	2.333	8.30	3.33	5.16
0.417	6.06	1.417	27.61	2.417	7.47	3.42	4.88
0.500	6.06	1.500	27.61	2.500	7.47	3.50	4.88
0.583	7.14	1.583	17.41	2.583	6.82	3.58	4.64
0.667	7.14	1.667	17.41	2.667	6.82	3.67	4.64
0.750	8.84	1.750	13.27	2.750	6.29	3.75	4.42
0.833	8.84	1.833	13.27	2.833	6.29	3.83	4.42
0.917	12.09	1.917	10.93	2.917	5.85	3.92	4.23
1.000	12.09	2.000	10.93	3.000	5.85	4.00	4.23

Unit Hyd Qpeak (cms)= 1.284

PEAK FLOW (cms)= 0.370 (i)
TIME TO PEAK (hrs)= 3.000
RUNOFF VOLUME (mm)= 10.947
TOTAL RAINFALL (mm)= 56.533
RUNOFF COEFFICIENT = 0.194

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0029)	Area (ha)= 14.85	Curve Number (CN)= 52.9			
ID= 1 DT= 5.0 min	Ia (mm)= 13.28	# of Linear Res.(N)= 3.00			
	U.H. Tp(hrs)= 0.89				

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.75	1.083	22.49	2.083	9.40	3.08	5.48
0.167	4.75	1.167	22.49	2.167	9.40	3.17	5.48
0.250	5.31	1.250	130.37	2.250	8.30	3.25	5.16
0.333	5.31	1.333	130.37	2.333	8.30	3.33	5.16
0.417	6.06	1.417	27.61	2.417	7.47	3.42	4.88
0.500	6.06	1.500	27.61	2.500	7.47	3.50	4.88
0.583	7.14	1.583	17.41	2.583	6.82	3.58	4.64
0.667	7.14	1.667	17.41	2.667	6.82	3.67	4.64
0.750	8.84	1.750	13.27	2.750	6.29	3.75	4.42
0.833	8.84	1.833	13.27	2.833	6.29	3.83	4.42
0.917	12.09	1.917	10.93	2.917	5.85	3.92	4.23
1.000	12.09	2.000	10.93	3.000	5.85	4.00	4.23

Unit Hyd Qpeak (cms)= 0.637

PEAK FLOW (cms)= 0.099 (i)
TIME TO PEAK (hrs)= 2.750
RUNOFF VOLUME (mm)= 6.954
TOTAL RAINFALL (mm)= 56.533
RUNOFF COEFFICIENT = 0.123

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	
STANDHYD (0014)	Area (ha)= 1.87
ID= 1 DT= 5.0 min	Total Imp(%)= 43.28 Dir. Conn.(%)= 10.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	0.81	1.06
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	0.50	2.00
Length (m)=	111.65	25.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.75	1.083	22.49	2.083	9.40	3.08	5.48
0.167	4.75	1.167	22.49	2.167	9.40	3.17	5.48
0.250	5.31	1.250	130.37	2.250	8.30	3.25	5.16
0.333	5.31	1.333	130.37	2.333	8.30	3.33	5.16
0.417	6.06	1.417	27.61	2.417	7.47	3.42	4.88
0.500	6.06	1.500	27.61	2.500	7.47	3.50	4.88
0.583	7.14	1.583	17.41	2.583	6.82	3.58	4.64
0.667	7.14	1.667	17.41	2.667	6.82	3.67	4.64
0.750	8.84	1.750	13.27	2.750	6.29	3.75	4.42
0.833	8.84	1.833	13.27	2.833	6.29	3.83	4.42
0.917	12.09	1.917	10.93	2.917	5.85	3.92	4.23
1.000	12.09	2.000	10.93	3.000	5.85	4.00	4.23

			TOTALS
Max.Eff.Inten.(mm/hr)=	130.37	100.71	
over (min)	5.00	10.00	
Storage Coeff. (min)=	3.02 (ii)	8.33 (ii)	
Unit Hyd. Tpeak (min)=	5.00	10.00	
Unit Hyd. peak (cms)=	0.27	0.13	
PEAK FLOW (cms)=	0.07	0.20	0.228 (iii)
TIME TO PEAK (hrs)=	1.33	1.42	1.33
RUNOFF VOLUME (mm)=	55.53	28.91	31.57
TOTAL RAINFALL (mm)=	56.53	56.53	56.53
RUNOFF COEFFICIENT =	0.98	0.51	0.56

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:

CN* = 78.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0040)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
	ID1= 1 (0001):	39.68	0.370	3.00	10.95
	+ ID2= 2 (0014):	1.87	0.228	1.33	31.57
	ID = 3 (0040):	41.55	0.395	3.00	11.88

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0040)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
	ID1= 3 (0040):	41.55	0.395	3.00	11.88
	+ ID2= 2 (0029):	14.85	0.099	2.75	6.95
	ID = 1 (0040):	56.40	0.493	2.92	10.58

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
	ID1= 1 (0039):	134.78	0.812	3.67	8.63
	+ ID2= 2 (0040):	56.40	0.493	2.92	10.58
	ID = 3 (0023):	191.18	1.277	3.33	9.21

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

****
** SIMULATION:D - 25-year CHI **
****

CHICAGO STORM	IDF curve parameters: A= 766.568
Ptotal= 66.48 mm	B= 0.000

C= 0.699
used in: INTENSITY = A / (t + B)^C

Duration of storm = 4.00 hrs
Storm time step = 10.00 min
Time to peak ratio = 0.33

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.00	5.59	1.00	26.45	2.00	11.05	3.00	6.44
0.17	6.25	1.17	153.30	2.17	9.76	3.17	6.06
0.33	7.13	1.33	32.46	2.33	8.78	3.33	5.74
0.50	8.39	1.50	20.47	2.50	8.02	3.50	5.45
0.67	10.40	1.67	15.61	2.67	7.39	3.67	5.20
0.83	14.22	1.83	12.86	2.83	6.88	3.83	4.97

CALIB	
NASHYD (0025)	Area (ha)= 100.92 Curve Number (CN)= 55.9
ID= 1 DT= 5.0 min	Ia (mm)= 7.89 # of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 1.70

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	5.59	1.083	26.45	2.083	11.05	3.08	6.44
0.167	5.59	1.167	26.45	2.167	11.05	3.17	6.44
0.250	6.25	1.250	153.30	2.250	9.76	3.25	6.06
0.333	6.25	1.333	153.30	2.333	9.76	3.33	6.06
0.417	7.13	1.417	32.46	2.417	8.78	3.42	5.74
0.500	7.13	1.500	32.46	2.500	8.78	3.50	5.74
0.583	8.39	1.583	20.47	2.583	8.02	3.58	5.45
0.667	8.39	1.667	20.47	2.667	8.02	3.67	5.45
0.750	10.40	1.750	15.61	2.750	7.39	3.75	5.20
0.833	10.40	1.833	15.61	2.833	7.39	3.83	5.20
0.917	14.22	1.917	12.86	2.917	6.88	3.92	4.97
1.000	14.22	2.000	12.86	3.000	6.88	4.00	4.97

Unit Hyd Qpeak (cms)= 2.267

PEAK FLOW (cms)= 0.923 (i)
TIME TO PEAK (hrs)= 3.833
RUNOFF VOLUME (mm)= 13.272

TOTAL RAINFALL (mm)= 66.479
RUNOFF COEFFICIENT = 0.200

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	
NASHYD (0002)	Area (ha)= 23.99 Curve Number (CN)= 44.7
ID= 1 DT= 5.0 min	Ia (mm)= 10.91 # of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.97

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	5.59	1.083	26.45	2.083	11.05	3.08	6.44
0.167	5.59	1.167	26.45	2.167	11.05	3.17	6.44
0.250	6.25	1.250	153.30	2.250	9.76	3.25	6.06
0.333	6.25	1.333	153.30	2.333	9.76	3.33	6.06
0.417	7.13	1.417	32.46	2.417	8.78	3.42	5.74
0.500	7.13	1.500	32.46	2.500	8.78	3.50	5.74
0.583	8.39	1.583	20.47	2.583	8.02	3.58	5.45
0.667	8.39	1.667	20.47	2.667	8.02	3.67	5.45
0.750	10.40	1.750	15.61	2.750	7.39	3.75	5.20
0.833	10.40	1.833	15.61	2.833	7.39	3.83	5.20
0.917	14.22	1.917	12.86	2.917	6.88	3.92	4.97
1.000	14.22	2.000	12.86	3.000	6.88	4.00	4.97

Unit Hyd Qpeak (cms)= 0.945

PEAK FLOW (cms)= 0.188 (i)
TIME TO PEAK (hrs)= 2.750
RUNOFF VOLUME (mm)= 8.350
TOTAL RAINFALL (mm)= 66.479
RUNOFF COEFFICIENT = 0.126

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	
NASHYD (0028)	Area (ha)= 6.37 Curve Number (CN)= 50.5
ID= 1 DT= 5.0 min	Ia (mm)= 15.69 # of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.77

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	5.59	1.083	26.45	2.083	11.05	3.08	6.44
0.167	5.59	1.167	26.45	2.167	11.05	3.17	6.44
0.250	6.25	1.250	153.30	2.250	9.76	3.25	6.06
0.333	6.25	1.333	153.30	2.333	9.76	3.33	6.06
0.417	7.13	1.417	32.46	2.417	8.78	3.42	5.74
0.500	7.13	1.500	32.46	2.500	8.78	3.50	5.74
0.583	8.39	1.583	20.47	2.583	8.02	3.58	5.45
0.667	8.39	1.667	20.47	2.667	8.02	3.67	5.45
0.750	10.40	1.750	15.61	2.750	7.39	3.75	5.20
0.833	10.40	1.833	15.61	2.833	7.39	3.83	5.20
0.917	14.22	1.917	12.86	2.917	6.88	3.92	4.97
1.000	14.22	2.000	12.86	3.000	6.88	4.00	4.97

Unit Hyd Qpeak (cms)= 0.316

PEAK FLOW (cms)= 0.057 (i)
TIME TO PEAK (hrs)= 2.500
RUNOFF VOLUME (mm)= 8.599
TOTAL RAINFALL (mm)= 66.479
RUNOFF COEFFICIENT = 0.129

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0030)	Area (ha)= 1.70	Curve Number (CN)= 60.5	
ID= 1 DT= 5.0 min	Ia (mm)= 9.65	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.40		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	5.59	1.083	26.45	2.083	11.05	3.08	6.44
0.167	5.59	1.167	26.45	2.167	11.05	3.17	6.44
0.250	6.25	1.250	153.30	2.250	9.76	3.25	6.06
0.333	6.25	1.333	153.30	2.333	9.76	3.33	6.06
0.417	7.13	1.417	32.46	2.417	8.78	3.42	5.74
0.500	7.13	1.500	32.46	2.500	8.78	3.50	5.74

0.583	8.39	1.583	20.47	2.583	8.02	3.58	5.45
0.667	8.39	1.667	20.47	2.667	8.02	3.67	5.45
0.750	10.40	1.750	15.61	2.750	7.39	3.75	5.20
0.833	10.40	1.833	15.61	2.833	7.39	3.83	5.20
0.917	14.22	1.917	12.86	2.917	6.88	3.92	4.97
1.000	14.22	2.000	12.86	3.000	6.88	4.00	4.97

Unit Hyd Qpeak (cms)= 0.162

PEAK FLOW (cms)= 0.041 (i)
TIME TO PEAK (hrs)= 1.833
RUNOFF VOLUME (mm)= 14.484
TOTAL RAINFALL (mm)= 66.479
RUNOFF COEFFICIENT = 0.218

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0031)	Area (ha)= 1.80	Curve Number (CN)= 50.0	
ID= 1 DT= 5.0 min	Ia (mm)= 16.00	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.76		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	5.59	1.083	26.45	2.083	11.05	3.08	6.44
0.167	5.59	1.167	26.45	2.167	11.05	3.17	6.44
0.250	6.25	1.250	153.30	2.250	9.76	3.25	6.06
0.333	6.25	1.333	153.30	2.333	9.76	3.33	6.06
0.417	7.13	1.417	32.46	2.417	8.78	3.42	5.74
0.500	7.13	1.500	32.46	2.500	8.78	3.50	5.74
0.583	8.39	1.583	20.47	2.583	8.02	3.58	5.45
0.667	8.39	1.667	20.47	2.667	8.02	3.67	5.45
0.750	10.40	1.750	15.61	2.750	7.39	3.75	5.20
0.833	10.40	1.833	15.61	2.833	7.39	3.83	5.20
0.917	14.22	1.917	12.86	2.917	6.88	3.92	4.97
1.000	14.22	2.000	12.86	3.000	6.88	4.00	4.97

Unit Hyd Qpeak (cms)= 0.090

PEAK FLOW (cms)= 0.016 (i)
TIME TO PEAK (hrs)= 2.500
RUNOFF VOLUME (mm)= 8.368

TOTAL RAINFALL (mm)= 66.479
RUNOFF COEFFICIENT = 0.126

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0039)					
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)	
ID1= 1 (0002):	23.99	0.188	2.75	8.35	
+ ID2= 2 (0025):	100.92	0.923	3.83	13.27	
ID = 3 (0039):	124.91	1.076	3.67	12.33	

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0039)					
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)	
ID1= 3 (0039):	124.91	1.076	3.67	12.33	
+ ID2= 2 (0028):	6.37	0.057	2.50	8.60	
ID = 1 (0039):	131.28	1.118	3.58	12.15	

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0039)					
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)	
ID1= 1 (0039):	131.28	1.118	3.58	12.15	
+ ID2= 2 (0030):	1.70	0.041	1.83	14.48	
ID = 3 (0039):	132.98	1.132	3.58	12.18	

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0039)					
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)	
ID1= 3 (0039):	132.98	1.132	3.58	12.18	

+ ID2= 2 (0031):	1.80	0.016	2.50	8.37
ID = 1 (0039):	134.78	1.143	3.58	12.12

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB			
NASHYD (0001)	Area (ha)= 39.68	Curve Number (CN)= 60.7	
ID= 1 DT= 5.0 min	Ia (mm)= 8.26	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 1.18		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	5.59	1.083	26.45	2.083	11.05	3.08	6.44
0.167	5.59	1.167	26.45	2.167	11.05	3.17	6.44
0.250	6.25	1.250	153.30	2.250	9.76	3.25	6.06
0.333	6.25	1.333	153.30	2.333	9.76	3.33	6.06
0.417	7.13	1.417	32.46	2.417	8.78	3.42	5.74
0.500	7.13	1.500	32.46	2.500	8.78	3.50	5.74
0.583	8.39	1.583	20.47	2.583	8.02	3.58	5.45
0.667	8.39	1.667	20.47	2.667	8.02	3.67	5.45
0.750	10.40	1.750	15.61	2.750	7.39	3.75	5.20
0.833	10.40	1.833	15.61	2.833	7.39	3.83	5.20
0.917	14.22	1.917	12.86	2.917	6.88	3.92	4.97
1.000	14.22	2.000	12.86	3.000	6.88	4.00	4.97

Unit Hyd Qpeak (cms)= 1.284

PEAK FLOW (cms)= 0.519 (i)
TIME TO PEAK (hrs)= 3.000
RUNOFF VOLUME (mm)= 15.212
TOTAL RAINFALL (mm)= 66.479
RUNOFF COEFFICIENT = 0.229

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0029)	Area (ha)= 14.85	Curve Number (CN)= 52.9	
ID= 1 DT= 5.0 min	Ia (mm)= 13.28	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.89		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	5.59	1.083	26.45	2.083	11.05	3.08	6.44
0.167	5.59	1.167	26.45	2.167	11.05	3.17	6.44
0.250	6.25	1.250	153.30	2.250	9.76	3.25	6.06
0.333	6.25	1.333	153.30	2.333	9.76	3.33	6.06
0.417	7.13	1.417	32.46	2.417	8.78	3.42	5.74
0.500	7.13	1.500	32.46	2.500	8.78	3.50	5.74
0.583	8.39	1.583	20.47	2.583	8.02	3.58	5.45
0.667	8.39	1.667	20.47	2.667	8.02	3.67	5.45
0.750	10.40	1.750	15.61	2.750	7.39	3.75	5.20
0.833	10.40	1.833	15.61	2.833	7.39	3.83	5.20
0.917	14.22	1.917	12.86	2.917	6.88	3.92	4.97
1.000	14.22	2.000	12.86	3.000	6.88	4.00	4.97

Unit Hyd Qpeak (cms)= 0.637

PEAK FLOW (cms)= 0.148 (i)
TIME TO PEAK (hrs)= 2.667
RUNOFF VOLUME (mm)= 10.144
TOTAL RAINFALL (mm)= 66.479
RUNOFF COEFFICIENT = 0.153

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
STANDHYD (0014)	Area (ha)= 1.87		
ID= 1 DT= 5.0 min	Total Imp(%)= 43.28	Dir. Conn.(%)= 10.00	

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	0.81	1.06
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	0.50	2.00
Length (m)=	111.65	25.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr

0.083	5.59	1.083	26.45	2.083	11.05	3.08	6.44
0.167	5.59	1.167	26.45	2.167	11.05	3.17	6.44
0.250	6.25	1.250	153.30	2.250	9.76	3.25	6.06
0.333	6.25	1.333	153.30	2.333	9.76	3.33	6.06
0.417	7.13	1.417	32.46	2.417	8.78	3.42	5.74
0.500	7.13	1.500	32.46	2.500	8.78	3.50	5.74
0.583	8.39	1.583	20.47	2.583	8.02	3.58	5.45
0.667	8.39	1.667	20.47	2.667	8.02	3.67	5.45
0.750	10.40	1.750	15.61	2.750	7.39	3.75	5.20
0.833	10.40	1.833	15.61	2.833	7.39	3.83	5.20
0.917	14.22	1.917	12.86	2.917	6.88	3.92	4.97
1.000	14.22	2.000	12.86	3.000	6.88	4.00	4.97

			TOTALS
Max.Eff.Inten.(mm/hr)=	153.30	131.48	
over (min)	5.00	10.00	
Storage Coeff. (min)=	2.83 (ii)	7.60 (ii)	
Unit Hyd. Tpeak (min)=	5.00	10.00	
Unit Hyd. peak (cms)=	0.28	0.13	
PEAK FLOW (cms)=	0.08	0.27	0.303 (iii)
TIME TO PEAK (hrs)=	1.33	1.42	1.33
RUNOFF VOLUME (mm)=	65.48	36.95	39.80
TOTAL RAINFALL (mm)=	66.48	66.48	66.48
RUNOFF COEFFICIENT =	0.98	0.56	0.60

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 78.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0040)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0001):	39.68	0.519	3.00	15.21
+ ID2= 2 (0014):	1.87	0.303	1.33	39.80
ID = 3 (0040):	41.55	0.550	2.92	16.32

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0040)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0040):	41.55	0.550	2.92	16.32
+ ID2= 2 (0029):	14.85	0.148	2.67	10.14
ID = 1 (0040):	56.40	0.694	2.92	14.69

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0039):	134.78	1.143	3.58	12.12
+ ID2= 2 (0040):	56.40	0.694	2.92	14.69
ID = 3 (0023):	191.18	1.799	3.25	12.88

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

****
** SIMULATION:E - 50-year CHI **
****

CHICAGO STORM	IDF curve parameters:	A= 853.083
Ptotal= 73.98 mm		B= 0.000
		C= 0.699
	used in: INTENSITY =	A / (t + B)^C

Duration of storm = 4.00 hrs
Storm time step = 10.00 min
Time to peak ratio = 0.33

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.00	6.22	1.00	29.44	2.00	12.30	3.00	7.17
0.17	6.95	1.17	170.60	2.17	10.86	3.17	6.75
0.33	7.93	1.33	36.13	2.33	9.78	3.33	6.39
0.50	9.34	1.50	22.78	2.50	8.92	3.50	6.07
0.67	11.57	1.67	17.37	2.67	8.23	3.67	5.78
0.83	15.83	1.83	14.31	2.83	7.65	3.83	5.53

CALIB			
NASHYD (0025)	Area (ha)= 100.92	Curve Number (CN)= 55.9	
ID= 1 DT= 5.0 min	Ia (mm)= 7.89	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 1.70		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.22	1.083	29.44	2.083	12.30	3.08	7.17
0.167	6.22	1.167	29.44	2.167	12.30	3.17	7.17
0.250	6.95	1.250	170.60	2.250	10.86	3.25	6.75
0.333	6.95	1.333	170.60	2.333	10.86	3.33	6.75
0.417	7.93	1.417	36.13	2.417	9.78	3.42	6.39
0.500	7.93	1.500	36.13	2.500	9.78	3.50	6.39
0.583	9.34	1.583	22.78	2.583	8.92	3.58	6.07
0.667	9.34	1.667	22.78	2.667	8.92	3.67	6.07
0.750	11.57	1.750	17.37	2.750	8.23	3.75	5.78
0.833	11.57	1.833	17.37	2.833	8.23	3.83	5.78
0.917	15.83	1.917	14.31	2.917	7.65	3.92	5.53
1.000	15.83	2.000	14.31	3.000	7.65	4.00	5.53

Unit Hyd Qpeak (cms)= 2.267

PEAK FLOW (cms)= 1.143 (i)
TIME TO PEAK (hrs)= 3.833
RUNOFF VOLUME (mm)= 16.412
TOTAL RAINFALL (mm)= 73.982
RUNOFF COEFFICIENT = 0.222

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0002)	Area (ha)= 23.99	Curve Number (CN)= 44.7	
ID= 1 DT= 5.0 min	Ia (mm)= 10.91	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.97		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr

0.083	6.22	1.083	29.44	2.083	12.30	3.08	7.17
0.167	6.22	1.167	29.44	2.167	12.30	3.17	7.17
0.250	6.95	1.250	170.60	2.250	10.86	3.25	6.75
0.333	6.95	1.333	170.60	2.333	10.86	3.33	6.75
0.417	7.93	1.417	36.13	2.417	9.78	3.42	6.39
0.500	7.93	1.500	36.13	2.500	9.78	3.50	6.39
0.583	9.34	1.583	22.78	2.583	8.92	3.58	6.07
0.667	9.34	1.667	22.78	2.667	8.92	3.67	6.07
0.750	11.57	1.750	17.37	2.750	8.23	3.75	5.78
0.833	11.57	1.833	17.37	2.833	8.23	3.83	5.78
0.917	15.83	1.917	14.31	2.917	7.65	3.92	5.53
1.000	15.83	2.000	14.31	3.000	7.65	4.00	5.53

Unit Hyd Qpeak (cms)= 0.945

PEAK FLOW (cms)= 0.240 (i)
TIME TO PEAK (hrs)= 2.750
RUNOFF VOLUME (mm)= 10.543
TOTAL RAINFALL (mm)= 73.982
RUNOFF COEFFICIENT = 0.143

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0028)	Area (ha)=	6.37	Curve Number (CN)=	50.5	
ID= 1 DT= 5.0 min	Ia (mm)=	15.69	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	0.77			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.22	1.083	29.44	2.083	12.30	3.08	7.17
0.167	6.22	1.167	29.44	2.167	12.30	3.17	7.17
0.250	6.95	1.250	170.60	2.250	10.86	3.25	6.75
0.333	6.95	1.333	170.60	2.333	10.86	3.33	6.75
0.417	7.93	1.417	36.13	2.417	9.78	3.42	6.39
0.500	7.93	1.500	36.13	2.500	9.78	3.50	6.39
0.583	9.34	1.583	22.78	2.583	8.92	3.58	6.07
0.667	9.34	1.667	22.78	2.667	8.92	3.67	6.07
0.750	11.57	1.750	17.37	2.750	8.23	3.75	5.78
0.833	11.57	1.833	17.37	2.833	8.23	3.83	5.78
0.917	15.83	1.917	14.31	2.917	7.65	3.92	5.53
1.000	15.83	2.000	14.31	3.000	7.65	4.00	5.53

Unit Hyd Qpeak (cms)= 0.316

PEAK FLOW (cms)= 0.074 (i)
TIME TO PEAK (hrs)= 2.500
RUNOFF VOLUME (mm)= 11.051
TOTAL RAINFALL (mm)= 73.982
RUNOFF COEFFICIENT = 0.149

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0030)	Area (ha)=	1.70	Curve Number (CN)=	60.5	
ID= 1 DT= 5.0 min	Ia (mm)=	9.65	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	0.40			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.22	1.083	29.44	2.083	12.30	3.08	7.17
0.167	6.22	1.167	29.44	2.167	12.30	3.17	7.17
0.250	6.95	1.250	170.60	2.250	10.86	3.25	6.75
0.333	6.95	1.333	170.60	2.333	10.86	3.33	6.75
0.417	7.93	1.417	36.13	2.417	9.78	3.42	6.39
0.500	7.93	1.500	36.13	2.500	9.78	3.50	6.39
0.583	9.34	1.583	22.78	2.583	8.92	3.58	6.07
0.667	9.34	1.667	22.78	2.667	8.92	3.67	6.07
0.750	11.57	1.750	17.37	2.750	8.23	3.75	5.78
0.833	11.57	1.833	17.37	2.833	8.23	3.83	5.78
0.917	15.83	1.917	14.31	2.917	7.65	3.92	5.53
1.000	15.83	2.000	14.31	3.000	7.65	4.00	5.53

Unit Hyd Qpeak (cms)= 0.162

PEAK FLOW (cms)= 0.051 (i)
TIME TO PEAK (hrs)= 1.750
RUNOFF VOLUME (mm)= 17.956
TOTAL RAINFALL (mm)= 73.982
RUNOFF COEFFICIENT = 0.243

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0031)	Area (ha)=	1.80	Curve Number (CN)=	50.0	
ID= 1 DT= 5.0 min	Ia (mm)=	16.00	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	0.76			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.22	1.083	29.44	2.083	12.30	3.08	7.17
0.167	6.22	1.167	29.44	2.167	12.30	3.17	7.17
0.250	6.95	1.250	170.60	2.250	10.86	3.25	6.75
0.333	6.95	1.333	170.60	2.333	10.86	3.33	6.75
0.417	7.93	1.417	36.13	2.417	9.78	3.42	6.39
0.500	7.93	1.500	36.13	2.500	9.78	3.50	6.39
0.583	9.34	1.583	22.78	2.583	8.92	3.58	6.07
0.667	9.34	1.667	22.78	2.667	8.92	3.67	6.07
0.750	11.57	1.750	17.37	2.750	8.23	3.75	5.78
0.833	11.57	1.833	17.37	2.833	8.23	3.83	5.78
0.917	15.83	1.917	14.31	2.917	7.65	3.92	5.53
1.000	15.83	2.000	14.31	3.000	7.65	4.00	5.53

Unit Hyd Qpeak (cms)= 0.090

PEAK FLOW (cms)= 0.021 (i)
TIME TO PEAK (hrs)= 2.417
RUNOFF VOLUME (mm)= 10.775
TOTAL RAINFALL (mm)= 73.982
RUNOFF COEFFICIENT = 0.146

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0039)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0002)	23.99	0.240	2.75	10.54
+ ID2= 2 (0025)	100.92	1.143	3.83	16.41
ID = 3 (0039)	124.91	1.337	3.58	15.29

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0039)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0039)	124.91	1.337	3.58	15.29
+ ID2= 2 (0028)	6.37	0.074	2.50	11.05
ID = 1 (0039)	131.28	1.391	3.58	15.08

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0039)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0039)	131.28	1.391	3.58	15.08
+ ID2= 2 (0030)	1.70	0.051	1.75	17.96
ID = 3 (0039)	132.98	1.407	3.50	15.12

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0039)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0039)	132.98	1.407	3.50	15.12
+ ID2= 2 (0031)	1.80	0.021	2.42	10.77
ID = 1 (0039)	134.78	1.422	3.50	15.06

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB					
NASHYD (0001)	Area (ha)=	39.68	Curve Number (CN)=	60.7	
ID= 1 DT= 5.0 min	Ia (mm)=	8.26	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	1.18			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr

0.083	6.22	1.083	29.44	2.083	12.30	3.08	7.17
0.167	6.22	1.167	29.44	2.167	12.30	3.17	7.17
0.250	6.95	1.250	170.60	2.250	10.86	3.25	6.75
0.333	6.95	1.333	170.60	2.333	10.86	3.33	6.75
0.417	7.93	1.417	36.13	2.417	9.78	3.42	6.39
0.500	7.93	1.500	36.13	2.500	9.78	3.50	6.39
0.583	9.34	1.583	22.78	2.583	8.92	3.58	6.07
0.667	9.34	1.667	22.78	2.667	8.92	3.67	6.07
0.750	11.57	1.750	17.37	2.750	8.23	3.75	5.78
0.833	11.57	1.833	17.37	2.833	8.23	3.83	5.78
0.917	15.83	1.917	14.31	2.917	7.65	3.92	5.53
1.000	15.83	2.000	14.31	3.000	7.65	4.00	5.53

Unit Hyd Qpeak (cms)= 1.284

PEAK FLOW (cms)= 0.644 (i)
TIME TO PEAK (hrs)= 3.000
RUNOFF VOLUME (mm)= 18.754
TOTAL RAINFALL (mm)= 73.982
RUNOFF COEFFICIENT = 0.253

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0029)	Area (ha)=	14.85	Curve Number (CN)=	52.9	
ID= 1 DT= 5.0 min	Ia (mm)=	13.28	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	0.89			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.22	1.083	29.44	2.083	12.30	3.08	7.17
0.167	6.22	1.167	29.44	2.167	12.30	3.17	7.17
0.250	6.95	1.250	170.60	2.250	10.86	3.25	6.75
0.333	6.95	1.333	170.60	2.333	10.86	3.33	6.75
0.417	7.93	1.417	36.13	2.417	9.78	3.42	6.39
0.500	7.93	1.500	36.13	2.500	9.78	3.50	6.39
0.583	9.34	1.583	22.78	2.583	8.92	3.58	6.07
0.667	9.34	1.667	22.78	2.667	8.92	3.67	6.07
0.750	11.57	1.750	17.37	2.750	8.23	3.75	5.78
0.833	11.57	1.833	17.37	2.833	8.23	3.83	5.78
0.917	15.83	1.917	14.31	2.917	7.65	3.92	5.53
1.000	15.83	2.000	14.31	3.000	7.65	4.00	5.53

Unit Hyd Qpeak (cms)= 0.637

PEAK FLOW (cms)= 0.189 (i)
TIME TO PEAK (hrs)= 2.583
RUNOFF VOLUME (mm)= 12.861
TOTAL RAINFALL (mm)= 73.982
RUNOFF COEFFICIENT = 0.174

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
STANDHYD (0014)	Area (ha)=	1.87			
ID= 1 DT= 5.0 min	Total Imp(%)=	43.28	Dir. Conn.(%)=	10.00	

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.81	1.06
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	111.65	25.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.22	1.083	29.44	2.083	12.30	3.08	7.17
0.167	6.22	1.167	29.44	2.167	12.30	3.17	7.17
0.250	6.95	1.250	170.60	2.250	10.86	3.25	6.75
0.333	6.95	1.333	170.60	2.333	10.86	3.33	6.75
0.417	7.93	1.417	36.13	2.417	9.78	3.42	6.39
0.500	7.93	1.500	36.13	2.500	9.78	3.50	6.39
0.583	9.34	1.583	22.78	2.583	8.92	3.58	6.07
0.667	9.34	1.667	22.78	2.667	8.92	3.67	6.07
0.750	11.57	1.750	17.37	2.750	8.23	3.75	5.78
0.833	11.57	1.833	17.37	2.833	8.23	3.83	5.78
0.917	15.83	1.917	14.31	2.917	7.65	3.92	5.53
1.000	15.83	2.000	14.31	3.000	7.65	4.00	5.53

Max.Eff.Inten.(mm/hr)=	170.60	155.77	
over (min)	5.00	10.00	
Storage Coeff. (min)=	2.71 (ii)	7.17 (ii)	
Unit Hyd. Tpeak (min)=	5.00	10.00	
Unit Hyd. peak (cms)=	0.29	0.14	

				TOTALS
PEAK FLOW	(cms)=	0.09	0.32	0.363 (iii)
TIME TO PEAK	(hrs)=	1.33	1.42	1.33
RUNOFF VOLUME	(mm)=	72.98	43.24	46.21
TOTAL RAINFALL	(mm)=	73.98	73.98	73.98
RUNOFF COEFFICIENT	=	0.99	0.58	0.62

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 78.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0040)					
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)	
ID1= 1 (0001):	39.68	0.644	3.00	18.75	
+ ID2= 2 (0014):	1.87	0.363	1.33	46.21	
ID = 3 (0040):	41.55	0.679	2.92	19.99	

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0040)					
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)	
ID1= 3 (0040):	41.55	0.679	2.92	19.99	
+ ID2= 2 (0029):	14.85	0.189	2.58	12.86	
ID = 1 (0040):	56.40	0.864	2.83	18.11	

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023)					
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)	
ID1= 1 (0039):	134.78	1.422	3.50	15.06	

+ ID2= 2 (0040):	56.40	0.864	2.83	18.11
ID = 3 (0023):	191.18	2.238	3.25	15.96

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

****
** SIMULATION:F - 100-year CHI **
****

CHICAGO STORM			
Ptotal= 81.31 mm	IDF curve parameters:	A=	937.587
		B=	0.000
		C=	0.699

used in: INTENSITY = A / (t + B)^C

Duration of storm = 4.00 hrs
Storm time step = 10.00 min
Time to peak ratio = 0.33

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.00	6.84	1.00	32.35	2.00	13.52	3.00	7.88
0.17	7.64	1.17	187.50	2.17	11.94	3.17	7.42
0.33	8.72	1.33	39.70	2.33	10.74	3.33	7.02
0.50	10.26	1.50	25.04	2.50	9.80	3.50	6.67
0.67	12.72	1.67	19.09	2.67	9.04	3.67	6.36
0.83	17.39	1.83	15.73	2.83	8.41	3.83	6.08

CALIB					
NASHYD (0025)	Area (ha)=	100.92	Curve Number (CN)=	55.9	
ID= 1 DT= 5.0 min	Ia (mm)=	7.89	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	1.70			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.84	1.083	32.35	2.083	13.52	3.08	7.88
0.167	6.84	1.167	32.35	2.167	13.52	3.17	7.88
0.250	7.64	1.250	187.50	2.250	11.94	3.25	7.42
0.333	7.64	1.333	187.50	2.333	11.94	3.33	7.42
0.417	8.72	1.417	39.70	2.417	10.74	3.42	7.02
0.500	8.72	1.500	39.70	2.500	10.74	3.50	7.02

0.583	10.26	1.583	25.04	2.583	9.80	3.58	6.67
0.667	10.26	1.667	25.04	2.667	9.80	3.67	6.67
0.750	12.72	1.750	19.09	2.750	9.04	3.75	6.36
0.833	12.72	1.833	19.09	2.833	9.04	3.83	6.36
0.917	17.39	1.917	15.73	2.917	8.41	3.92	6.08
1.000	17.39	2.000	15.73	3.000	8.41	4.00	6.08

Unit Hyd Qpeak (cms)= 2.267

PEAK FLOW (cms)= 1.374 (i)
TIME TO PEAK (hrs)= 3.750
RUNOFF VOLUME (mm)= 19.711
TOTAL RAINFALL (mm)= 81.310
RUNOFF COEFFICIENT = 0.242

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0002)	Area (ha)= 23.99	Curve Number (CN)= 44.7	
ID= 1 DT= 5.0 min	Ia (mm)= 10.91	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.97		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.84	1.083	32.35	2.083	13.52	3.08	7.88
0.167	6.84	1.167	32.35	2.167	13.52	3.17	7.88
0.250	7.64	1.250	187.50	2.250	11.94	3.25	7.42
0.333	7.64	1.333	187.50	2.333	11.94	3.33	7.42
0.417	8.72	1.417	39.70	2.417	10.74	3.42	7.02
0.500	8.72	1.500	39.70	2.500	10.74	3.50	7.02
0.583	10.26	1.583	25.04	2.583	9.80	3.58	6.67
0.667	10.26	1.667	25.04	2.667	9.80	3.67	6.67
0.750	12.72	1.750	19.09	2.750	9.04	3.75	6.36
0.833	12.72	1.833	19.09	2.833	9.04	3.83	6.36
0.917	17.39	1.917	15.73	2.917	8.41	3.92	6.08
1.000	17.39	2.000	15.73	3.000	8.41	4.00	6.08

Unit Hyd Qpeak (cms)= 0.945

PEAK FLOW (cms)= 0.295 (i)
TIME TO PEAK (hrs)= 2.667
RUNOFF VOLUME (mm)= 12.885

TOTAL RAINFALL (mm)= 81.310
RUNOFF COEFFICIENT = 0.158

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0028)	Area (ha)= 6.37	Curve Number (CN)= 50.5	
ID= 1 DT= 5.0 min	Ia (mm)= 15.69	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.77		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.84	1.083	32.35	2.083	13.52	3.08	7.88
0.167	6.84	1.167	32.35	2.167	13.52	3.17	7.88
0.250	7.64	1.250	187.50	2.250	11.94	3.25	7.42
0.333	7.64	1.333	187.50	2.333	11.94	3.33	7.42
0.417	8.72	1.417	39.70	2.417	10.74	3.42	7.02
0.500	8.72	1.500	39.70	2.500	10.74	3.50	7.02
0.583	10.26	1.583	25.04	2.583	9.80	3.58	6.67
0.667	10.26	1.667	25.04	2.667	9.80	3.67	6.67
0.750	12.72	1.750	19.09	2.750	9.04	3.75	6.36
0.833	12.72	1.833	19.09	2.833	9.04	3.83	6.36
0.917	17.39	1.917	15.73	2.917	8.41	3.92	6.08
1.000	17.39	2.000	15.73	3.000	8.41	4.00	6.08

Unit Hyd Qpeak (cms)= 0.316

PEAK FLOW (cms)= 0.093 (i)
TIME TO PEAK (hrs)= 2.417
RUNOFF VOLUME (mm)= 13.679
TOTAL RAINFALL (mm)= 81.310
RUNOFF COEFFICIENT = 0.168

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0030)	Area (ha)= 1.70	Curve Number (CN)= 60.5	
ID= 1 DT= 5.0 min	Ia (mm)= 9.65	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.40		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.84	1.083	32.35	2.083	13.52	3.08	7.88
0.167	6.84	1.167	32.35	2.167	13.52	3.17	7.88
0.250	7.64	1.250	187.50	2.250	11.94	3.25	7.42
0.333	7.64	1.333	187.50	2.333	11.94	3.33	7.42
0.417	8.72	1.417	39.70	2.417	10.74	3.42	7.02
0.500	8.72	1.500	39.70	2.500	10.74	3.50	7.02
0.583	10.26	1.583	25.04	2.583	9.80	3.58	6.67
0.667	10.26	1.667	25.04	2.667	9.80	3.67	6.67
0.750	12.72	1.750	19.09	2.750	9.04	3.75	6.36
0.833	12.72	1.833	19.09	2.833	9.04	3.83	6.36
0.917	17.39	1.917	15.73	2.917	8.41	3.92	6.08
1.000	17.39	2.000	15.73	3.000	8.41	4.00	6.08

Unit Hyd Qpeak (cms)= 0.162

PEAK FLOW (cms)= 0.063 (i)
TIME TO PEAK (hrs)= 1.750
RUNOFF VOLUME (mm)= 21.594
TOTAL RAINFALL (mm)= 81.310
RUNOFF COEFFICIENT = 0.266

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0031)	Area (ha)= 1.80	Curve Number (CN)= 50.0	
ID= 1 DT= 5.0 min	Ia (mm)= 16.00	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.76		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.84	1.083	32.35	2.083	13.52	3.08	7.88
0.167	6.84	1.167	32.35	2.167	13.52	3.17	7.88
0.250	7.64	1.250	187.50	2.250	11.94	3.25	7.42
0.333	7.64	1.333	187.50	2.333	11.94	3.33	7.42
0.417	8.72	1.417	39.70	2.417	10.74	3.42	7.02
0.500	8.72	1.500	39.70	2.500	10.74	3.50	7.02

0.583	10.26	1.583	25.04	2.583	9.80	3.58	6.67
0.667	10.26	1.667	25.04	2.667	9.80	3.67	6.67
0.750	12.72	1.750	19.09	2.750	9.04	3.75	6.36
0.833	12.72	1.833	19.09	2.833	9.04	3.83	6.36
0.917	17.39	1.917	15.73	2.917	8.41	3.92	6.08
1.000	17.39	2.000	15.73	3.000	8.41	4.00	6.08

Unit Hyd Qpeak (cms)= 0.090

PEAK FLOW (cms)= 0.026 (i)
TIME TO PEAK (hrs)= 2.417
RUNOFF VOLUME (mm)= 13.357
TOTAL RAINFALL (mm)= 81.310
RUNOFF COEFFICIENT = 0.164

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0039)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0002):	23.99	0.295	2.67	12.89
+ ID2= 2 (0025):	100.92	1.374	3.75	19.71
ID = 3 (0039):	124.91	1.613	3.58	18.40

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0039)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0039):	124.91	1.613	3.58	18.40
+ ID2= 2 (0028):	6.37	0.093	2.42	13.68
ID = 1 (0039):	131.28	1.679	3.50	18.17

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0039)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0039):	131.28	1.679	3.50	18.17

```
      + ID2= 2 (  0030):     1.70   0.063     1.75    21.59
        ================================================
        ID = 3 (  0039):   132.98   1.699     3.50    18.21

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
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--------------------
| ADD HYD  (  0039)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 3 (  0039):   132.98   1.699     3.50    18.21
      + ID2= 2 (  0031):     1.80   0.026     2.42    13.36
        ================================================
        ID = 1 (  0039):   134.78   1.717     3.50    18.15

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
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| CALIB            |
| NASHYD   (  0001)|   Area    (ha)=  39.68   Curve Number   (CN)= 60.7
|ID= 1 DT= 5.0 min |   Ia      (mm)=   8.26   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   1.18

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.
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---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.84	1.083	32.35	2.083	13.52	3.08	7.88
0.167	6.84	1.167	32.35	2.167	13.52	3.17	7.88
0.250	7.64	1.250	187.50	2.250	11.94	3.25	7.42
0.333	7.64	1.333	187.50	2.333	11.94	3.33	7.42
0.417	8.72	1.417	39.70	2.417	10.74	3.42	7.02
0.500	8.72	1.500	39.70	2.500	10.74	3.50	7.02
0.583	10.26	1.583	25.04	2.583	9.80	3.58	6.67
0.667	10.26	1.667	25.04	2.667	9.80	3.67	6.67
0.750	12.72	1.750	19.09	2.750	9.04	3.75	6.36
0.833	12.72	1.833	19.09	2.833	9.04	3.83	6.36
0.917	17.39	1.917	15.73	2.917	8.41	3.92	6.08
1.000	17.39	2.000	15.73	3.000	8.41	4.00	6.08

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     Unit Hyd Qpeak  (cms)=   1.284

     PEAK FLOW       (cms)=   0.775 (i)
     TIME TO PEAK    (hrs)=   2.917
     RUNOFF VOLUME    (mm)=  22.455
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     TOTAL RAINFALL   (mm)=  81.310
     RUNOFF COEFFICIENT   =   0.276

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
```

```
--------------------
| CALIB            |
| NASHYD   (  0029)|   Area    (ha)=  14.85   Curve Number   (CN)= 52.9
|ID= 1 DT= 5.0 min |   Ia      (mm)=  13.28   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.89

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.
```

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.84	1.083	32.35	2.083	13.52	3.08	7.88
0.167	6.84	1.167	32.35	2.167	13.52	3.17	7.88
0.250	7.64	1.250	187.50	2.250	11.94	3.25	7.42
0.333	7.64	1.333	187.50	2.333	11.94	3.33	7.42
0.417	8.72	1.417	39.70	2.417	10.74	3.42	7.02
0.500	8.72	1.500	39.70	2.500	10.74	3.50	7.02
0.583	10.26	1.583	25.04	2.583	9.80	3.58	6.67
0.667	10.26	1.667	25.04	2.667	9.80	3.67	6.67
0.750	12.72	1.750	19.09	2.750	9.04	3.75	6.36
0.833	12.72	1.833	19.09	2.833	9.04	3.83	6.36
0.917	17.39	1.917	15.73	2.917	8.41	3.92	6.08
1.000	17.39	2.000	15.73	3.000	8.41	4.00	6.08

```
     Unit Hyd Qpeak  (cms)=   0.637

     PEAK FLOW       (cms)=   0.234 (i)
     TIME TO PEAK    (hrs)=   2.583
     RUNOFF VOLUME    (mm)=  15.751
     TOTAL RAINFALL   (mm)=  81.310
     RUNOFF COEFFICIENT   =   0.194

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
```

```
--------------------
| CALIB            |
| STANDHYD (  0014)|   Area    (ha)=   1.87
|ID= 1 DT= 5.0 min |   Total Imp(%)=  43.28   Dir. Conn.(%)=  10.00
--------------------
                           IMPERVIOUS    PERVIOUS (i)
```



```
     Surface Area     (ha)=       0.81         1.06
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       0.50         2.00
     Length            (m)=     111.65        25.00
     Mannings n            =      0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.
```

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.84	1.083	32.35	2.083	13.52	3.08	7.88
0.167	6.84	1.167	32.35	2.167	13.52	3.17	7.88
0.250	7.64	1.250	187.50	2.250	11.94	3.25	7.42
0.333	7.64	1.333	187.50	2.333	11.94	3.33	7.42
0.417	8.72	1.417	39.70	2.417	10.74	3.42	7.02
0.500	8.72	1.500	39.70	2.500	10.74	3.50	7.02
0.583	10.26	1.583	25.04	2.583	9.80	3.58	6.67
0.667	10.26	1.667	25.04	2.667	9.80	3.67	6.67
0.750	12.72	1.750	19.09	2.750	9.04	3.75	6.36
0.833	12.72	1.833	19.09	2.833	9.04	3.83	6.36
0.917	17.39	1.917	15.73	2.917	8.41	3.92	6.08
1.000	17.39	2.000	15.73	3.000	8.41	4.00	6.08

```
     Max.Eff.Inten.(mm/hr)=     187.50       180.21
               over (min)        5.00        10.00
     Storage Coeff.  (min)=       2.61 (ii)    6.82 (ii)
     Unit Hyd. Tpeak (min)=       5.00        10.00
     Unit Hyd. peak  (cms)=       0.29         0.14
                                                      *TOTALS*
     PEAK FLOW       (cms)=       0.10         0.38         0.426 (iii)
     TIME TO PEAK    (hrs)=       1.33         1.42          1.33
     RUNOFF VOLUME    (mm)=      80.31        49.52         52.60
     TOTAL RAINFALL   (mm)=      81.31        81.31         81.31
     RUNOFF COEFFICIENT   =       0.99         0.61          0.65

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
              YOU SHOULD CONSIDER SPLITTING THE AREA.

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  78.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
```

```
--------------------
| ADD HYD  (  0040)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 1 (  0001):    39.68   0.775     2.92    22.46
      + ID2= 2 (  0014):     1.87   0.426     1.33    52.60
        ================================================
        ID = 3 (  0040):    41.55   0.815     2.92    23.81

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
```

```
--------------------
| ADD HYD  (  0040)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 3 (  0040):    41.55   0.815     2.92    23.81
      + ID2= 2 (  0029):    14.85   0.234     2.58    15.75
        ================================================
        ID = 1 (  0040):    56.40   1.043     2.83    21.69

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
```

```
--------------------
| ADD HYD  (  0023)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 1 (  0039):   134.78   1.717     3.50    18.15
      + ID2= 2 (  0040):    56.40   1.043     2.83    21.69
        ================================================
        ID = 3 (  0023):   191.18   2.703     3.17    19.19

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
```

```
*********************************
** SIMULATION:G - 2-year SCS  **
*********************************

--------------------
|    READ STORM    |    Filename: C:\Users\ecomish\AppD
|                  |              ata\Local\Temp\
|                  |              49208e0f-499d-4cb6-b2a9-d1492d706baa\d5860a37
| Ptotal= 63.16 mm |    Comments: 2yr 24hr 15min SCS Type II (MTO) - 15% I
--------------------
```

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr

0.00	0.00	6.25	1.14	12.50	9.10	18.75	1.14
0.25	0.69	6.50	1.14	12.75	4.67	19.00	1.14
0.50	0.69	6.75	1.14	13.00	4.67	19.25	1.14
0.75	0.69	7.00	1.14	13.25	3.41	19.50	1.14
1.00	0.69	7.25	1.39	13.50	3.41	19.75	1.14
1.25	0.69	7.50	1.39	13.75	2.65	20.00	1.14
1.50	0.69	7.75	1.39	14.00	2.65	20.25	0.76
1.75	0.69	8.00	1.39	14.25	1.89	20.50	0.76
2.00	0.69	8.25	1.64	14.50	1.89	20.75	0.76
2.25	0.82	8.50	1.64	14.75	1.89	21.00	0.76
2.50	0.82	8.75	1.77	15.00	1.89	21.25	0.76
2.75	0.82	9.00	1.77	15.25	1.89	21.50	0.76
3.00	0.82	9.25	2.02	15.50	1.89	21.75	0.76
3.25	0.82	9.50	2.02	15.75	1.89	22.00	0.76
3.50	0.82	9.75	2.27	16.00	1.89	22.25	0.76
3.75	0.82	10.00	2.27	16.25	1.14	22.50	0.76
4.00	0.82	10.25	2.91	16.50	1.14	22.75	0.76
4.25	1.01	10.50	2.91	16.75	1.14	23.00	0.76
4.50	1.01	10.75	3.92	17.00	1.14	23.25	0.76
4.75	1.01	11.00	3.92	17.25	1.14	23.50	0.76
5.00	1.01	11.25	6.06	17.50	1.14	23.75	0.76
5.25	1.01	11.50	6.06	17.75	1.14	24.00	0.76
5.50	1.01	11.75	18.70	18.00	1.14		
5.75	1.01	12.00	77.31	18.25	1.14		
6.00	1.01	12.25	9.10	18.50	1.14		

CALIB			
NASHYD (0025)	Area	(ha)= 100.92	Curve Number (CN)= 55.9
ID= 1 DT= 5.0 min	Ia	(mm)= 7.89	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 1.70		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.01	12.250	77.31	18.33	1.14
0.167	0.00	6.250	1.01	12.333	9.10	18.42	1.14
0.250	0.00	6.333	1.14	12.417	9.10	18.50	1.14
0.333	0.69	6.417	1.14	12.500	9.10	18.58	1.14
0.417	0.69	6.500	1.14	12.583	9.10	18.67	1.14
0.500	0.69	6.583	1.14	12.667	9.10	18.75	1.14
0.583	0.69	6.667	1.14	12.750	9.10	18.83	1.14
0.667	0.69	6.750	1.14	12.833	4.67	18.92	1.14

0.750	0.69	6.833	1.14	12.917	4.67	19.00	1.14
0.833	0.69	6.917	1.14	13.000	4.67	19.08	1.14
0.917	0.69	7.000	1.14	13.083	4.67	19.17	1.14
1.000	0.69	7.083	1.14	13.167	4.67	19.25	1.14
1.083	0.69	7.167	1.14	13.250	4.67	19.33	1.14
1.167	0.69	7.250	1.14	13.333	3.41	19.42	1.14
1.250	0.69	7.333	1.39	13.417	3.41	19.50	1.14
1.333	0.69	7.417	1.39	13.500	3.41	19.58	1.14
1.417	0.69	7.500	1.39	13.583	3.41	19.67	1.14
1.500	0.69	7.583	1.39	13.667	3.41	19.75	1.14
1.583	0.69	7.667	1.39	13.750	3.41	19.83	1.14
1.667	0.69	7.750	1.39	13.833	2.65	19.92	1.14
1.750	0.69	7.833	1.39	13.917	2.65	20.00	1.14
1.833	0.69	7.917	1.39	14.000	2.65	20.08	1.14
1.917	0.69	8.000	1.39	14.083	2.65	20.17	1.14
2.000	0.69	8.083	1.39	14.167	2.65	20.25	1.14
2.083	0.69	8.167	1.39	14.250	2.65	20.33	0.76
2.167	0.69	8.250	1.39	14.333	1.89	20.42	0.76
2.250	0.69	8.333	1.64	14.417	1.89	20.50	0.76
2.333	0.82	8.417	1.64	14.500	1.89	20.58	0.76
2.417	0.82	8.500	1.64	14.583	1.89	20.67	0.76
2.500	0.82	8.583	1.64	14.667	1.89	20.75	0.76
2.583	0.82	8.667	1.64	14.750	1.89	20.83	0.76
2.667	0.82	8.750	1.64	14.833	1.89	20.92	0.76
2.750	0.82	8.833	1.77	14.917	1.89	21.00	0.76
2.833	0.82	8.917	1.77	15.000	1.89	21.08	0.76
2.917	0.82	9.000	1.77	15.083	1.89	21.17	0.76
3.000	0.82	9.083	1.77	15.167	1.89	21.25	0.76
3.083	0.82	9.167	1.77	15.250	1.89	21.33	0.76
3.167	0.82	9.250	1.77	15.333	1.89	21.42	0.76
3.250	0.82	9.333	2.02	15.417	1.89	21.50	0.76
3.333	0.82	9.417	2.02	15.500	1.89	21.58	0.76
3.417	0.82	9.500	2.02	15.583	1.89	21.67	0.76
3.500	0.82	9.583	2.02	15.667	1.89	21.75	0.76
3.583	0.82	9.667	2.02	15.750	1.89	21.83	0.76
3.667	0.82	9.750	2.02	15.833	1.89	21.92	0.76
3.750	0.82	9.833	2.27	15.917	1.89	22.00	0.76
3.833	0.82	9.917	2.27	16.000	1.89	22.08	0.76
3.917	0.82	10.000	2.27	16.083	1.89	22.17	0.76
4.000	0.82	10.083	2.27	16.167	1.89	22.25	0.76
4.083	0.82	10.167	2.27	16.250	1.89	22.33	0.76
4.167	0.82	10.250	2.27	16.333	1.14	22.42	0.76
4.250	0.82	10.333	2.91	16.417	1.14	22.50	0.76
4.333	1.01	10.417	2.91	16.500	1.14	22.58	0.76
4.417	1.01	10.500	2.91	16.583	1.14	22.67	0.76
4.500	1.01	10.583	2.91	16.667	1.14	22.75	0.76
4.583	1.01	10.667	2.91	16.750	1.14	22.83	0.76
4.667	1.01	10.750	2.91	16.833	1.14	22.92	0.76

4.750	1.01	10.833	3.92	16.917	1.14	23.00	0.76
4.833	1.01	10.917	3.92	17.000	1.14	23.08	0.76
4.917	1.01	11.000	3.92	17.083	1.14	23.17	0.76
5.000	1.01	11.083	3.92	17.167	1.14	23.25	0.76
5.083	1.01	11.167	3.92	17.250	1.14	23.33	0.76
5.167	1.01	11.250	3.92	17.333	1.14	23.42	0.76
5.250	1.01	11.333	6.06	17.417	1.14	23.50	0.76
5.333	1.01	11.417	6.06	17.500	1.14	23.58	0.76
5.417	1.01	11.500	6.06	17.583	1.14	23.67	0.76
5.500	1.01	11.583	6.06	17.667	1.14	23.75	0.76
5.583	1.01	11.667	6.06	17.750	1.14	23.83	0.76
5.667	1.01	11.750	6.06	17.833	1.14	23.92	0.76
5.750	1.01	11.833	18.69	17.917	1.14	24.00	0.76
5.833	1.01	11.917	18.70	18.000	1.14	24.08	0.76
5.917	1.01	12.000	18.70	18.083	1.14	24.17	0.76
6.000	1.01	12.083	77.30	18.167	1.14	24.25	0.76
6.083	1.01	12.167	77.31	18.250	1.14		

Unit Hyd Qpeak (cms)= 2.267

PEAK FLOW (cms)= 0.607 (i)
TIME TO PEAK (hrs)= 14.167
RUNOFF VOLUME (mm)= 11.964
TOTAL RAINFALL (mm)= 63.160
RUNOFF COEFFICIENT = 0.189

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0002)	Area	(ha)= 23.99	Curve Number (CN)= 44.7
ID= 1 DT= 5.0 min	Ia	(mm)= 10.91	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.97		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.01	12.250	77.31	18.33	1.14
0.167	0.00	6.250	1.01	12.333	9.10	18.42	1.14
0.250	0.00	6.333	1.14	12.417	9.10	18.50	1.14
0.333	0.69	6.417	1.14	12.500	9.10	18.58	1.14
0.417	0.69	6.500	1.14	12.583	9.10	18.67	1.14
0.500	0.69	6.583	1.14	12.667	9.10	18.75	1.14
0.583	0.69	6.667	1.14	12.750	9.10	18.83	1.14

0.667	0.69	6.750	1.14	12.833	4.67	18.92	1.14
0.750	0.69	6.833	1.14	12.917	4.67	19.00	1.14
0.833	0.69	6.917	1.14	13.000	4.67	19.08	1.14
0.917	0.69	7.000	1.14	13.083	4.67	19.17	1.14
1.000	0.69	7.083	1.14	13.167	4.67	19.25	1.14
1.083	0.69	7.167	1.14	13.250	4.67	19.33	1.14
1.167	0.69	7.250	1.14	13.333	3.41	19.42	1.14
1.250	0.69	7.333	1.39	13.417	3.41	19.50	1.14
1.333	0.69	7.417	1.39	13.500	3.41	19.58	1.14
1.417	0.69	7.500	1.39	13.583	3.41	19.67	1.14
1.500	0.69	7.583	1.39	13.667	3.41	19.75	1.14
1.583	0.69	7.667	1.39	13.750	3.41	19.83	1.14
1.667	0.69	7.750	1.39	13.833	2.65	19.92	1.14
1.750	0.69	7.833	1.39	13.917	2.65	20.00	1.14
1.833	0.69	7.917	1.39	14.000	2.65	20.08	1.14
1.917	0.69	8.000	1.39	14.083	2.65	20.17	1.14
2.000	0.69	8.083	1.39	14.167	2.65	20.25	1.14
2.083	0.69	8.167	1.39	14.250	2.65	20.33	0.76
2.167	0.69	8.250	1.39	14.333	1.89	20.42	0.76
2.250	0.69	8.333	1.64	14.417	1.89	20.50	0.76
2.333	0.82	8.417	1.64	14.500	1.89	20.58	0.76
2.417	0.82	8.500	1.64	14.583	1.89	20.67	0.76
2.500	0.82	8.583	1.64	14.667	1.89	20.75	0.76
2.583	0.82	8.667	1.64	14.750	1.89	20.83	0.76
2.667	0.82	8.750	1.64	14.833	1.89	20.92	0.76
2.750	0.82	8.833	1.77	14.917	1.89	21.00	0.76
2.833	0.82	8.917	1.77	15.000	1.89	21.08	0.76
2.917	0.82	9.000	1.77	15.083	1.89	21.17	0.76
3.000	0.82	9.083	1.77	15.167	1.89	21.25	0.76
3.083	0.82	9.167	1.77	15.250	1.89	21.33	0.76
3.167	0.82	9.250	1.77	15.333	1.89	21.42	0.76
3.250	0.82	9.333	2.02	15.417	1.89	21.50	0.76
3.333	0.82	9.417	2.02	15.500	1.89	21.58	0.76
3.417	0.82	9.500	2.02	15.583	1.89	21.67	0.76
3.500	0.82	9.583	2.02	15.667	1.89	21.75	0.76
3.583	0.82	9.667	2.02	15.750	1.89	21.83	0.76
3.667	0.82	9.750	2.02	15.833	1.89	21.92	0.76
3.750	0.82	9.833	2.27	15.917	1.89	22.00	0.76
3.833	0.82	9.917	2.27	16.000	1.89	22.08	0.76
3.917	0.82	10.000	2.27	16.083	1.89	22.17	0.76
4.000	0.82	10.083	2.27	16.167	1.89	22.25	0.76
4.083	0.82	10.167	2.27	16.250	1.89	22.33	0.76
4.167	0.82	10.250	2.27	16.333	1.14	22.42	0.76
4.250	0.82	10.333	2.91	16.417	1.14	22.50	0.76
4.333	1.01	10.417	2.91	16.500	1.14	22.58	0.76
4.417	1.01	10.500	2.91	16.583	1.14	22.67	0.76
4.500	1.01	10.583	2.91	16.667	1.14	22.75	0.76
4.583	1.01	10.667	2.91	16.750	1.14	22.83	0.76

4.667	1.01	10.750	2.91	16.833	1.14	22.92	0.76
4.750	1.01	10.833	3.92	16.917	1.14	23.00	0.76
4.833	1.01	10.917	3.92	17.000	1.14	23.08	0.76
4.917	1.01	11.000	3.92	17.083	1.14	23.17	0.76
5.000	1.01	11.083	3.92	17.167	1.14	23.25	0.76
5.083	1.01	11.167	3.92	17.250	1.14	23.33	0.76
5.167	1.01	11.250	3.92	17.333	1.14	23.42	0.76
5.250	1.01	11.333	6.06	17.417	1.14	23.50	0.76
5.333	1.01	11.417	6.06	17.500	1.14	23.58	0.76
5.417	1.01	11.500	6.06	17.583	1.14	23.67	0.76
5.500	1.01	11.583	6.06	17.667	1.14	23.75	0.76
5.583	1.01	11.667	6.06	17.750	1.14	23.83	0.76
5.667	1.01	11.750	6.06	17.833	1.14	23.92	0.76
5.750	1.01	11.833	18.69	17.917	1.14	24.00	0.76
5.833	1.01	11.917	18.70	18.000	1.14	24.08	0.76
5.917	1.01	12.000	18.70	18.083	1.14	24.17	0.76
6.000	1.01	12.083	77.30	18.167	1.14	24.25	0.76
6.083	1.01	12.167	77.31	18.250	1.14		

Unit Hyd Qpeak (cms)= 0.945

PEAK FLOW (cms)= 0.131 (i)
TIME TO PEAK (hrs)= 13.250
RUNOFF VOLUME (mm)= 7.449
TOTAL RAINFALL (mm)= 63.160
RUNOFF COEFFICIENT = 0.118

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0028)	Area (ha)=	6.37	Curve Number (CN)=	50.5	
ID= 1 DT= 5.0 min	Ia (mm)=	15.69	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	0.77			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.01	12.250	77.31	18.33	1.14
0.167	0.00	6.250	1.01	12.333	9.10	18.42	1.14
0.250	0.00	6.333	1.14	12.417	9.10	18.50	1.14
0.333	0.69	6.417	1.14	12.500	9.10	18.58	1.14
0.417	0.69	6.500	1.14	12.583	9.10	18.67	1.14
0.500	0.69	6.583	1.14	12.667	9.10	18.75	1.14

0.583	0.69	6.667	1.14	12.750	9.10	18.83	1.14
0.667	0.69	6.750	1.14	12.833	4.67	18.92	1.14
0.750	0.69	6.833	1.14	12.917	4.67	19.00	1.14
0.833	0.69	6.917	1.14	13.000	4.67	19.08	1.14
0.917	0.69	7.000	1.14	13.083	4.67	19.17	1.14
1.000	0.69	7.083	1.14	13.167	4.67	19.25	1.14
1.083	0.69	7.167	1.14	13.250	4.67	19.33	1.14
1.167	0.69	7.250	1.14	13.333	3.41	19.42	1.14
1.250	0.69	7.333	1.39	13.417	3.41	19.50	1.14
1.333	0.69	7.417	1.39	13.500	3.41	19.58	1.14
1.417	0.69	7.500	1.39	13.583	3.41	19.67	1.14
1.500	0.69	7.583	1.39	13.667	3.41	19.75	1.14
1.583	0.69	7.667	1.39	13.750	3.41	19.83	1.14
1.667	0.69	7.750	1.39	13.833	2.65	19.92	1.14
1.750	0.69	7.833	1.39	13.917	2.65	20.00	1.14
1.833	0.69	7.917	1.39	14.000	2.65	20.08	1.14
1.917	0.69	8.000	1.39	14.083	2.65	20.17	1.14
2.000	0.69	8.083	1.39	14.167	2.65	20.25	1.14
2.083	0.69	8.167	1.39	14.250	2.65	20.33	0.76
2.167	0.69	8.250	1.39	14.333	1.89	20.42	0.76
2.250	0.69	8.333	1.64	14.417	1.89	20.50	0.76
2.333	0.82	8.417	1.64	14.500	1.89	20.58	0.76
2.417	0.82	8.500	1.64	14.583	1.89	20.67	0.76
2.500	0.82	8.583	1.64	14.667	1.89	20.75	0.76
2.583	0.82	8.667	1.64	14.750	1.89	20.83	0.76
2.667	0.82	8.750	1.64	14.833	1.89	20.92	0.76
2.750	0.82	8.833	1.77	14.917	1.89	21.00	0.76
2.833	0.82	8.917	1.77	15.000	1.89	21.08	0.76
2.917	0.82	9.000	1.77	15.083	1.89	21.17	0.76
3.000	0.82	9.083	1.77	15.167	1.89	21.25	0.76
3.083	0.82	9.167	1.77	15.250	1.89	21.33	0.76
3.167	0.82	9.250	1.77	15.333	1.89	21.42	0.76
3.250	0.82	9.333	2.02	15.417	1.89	21.50	0.76
3.333	0.82	9.417	2.02	15.500	1.89	21.58	0.76
3.417	0.82	9.500	2.02	15.583	1.89	21.67	0.76
3.500	0.82	9.583	2.02	15.667	1.89	21.75	0.76
3.583	0.82	9.667	2.02	15.750	1.89	21.83	0.76
3.667	0.82	9.750	2.02	15.833	1.89	21.92	0.76
3.750	0.82	9.833	2.27	15.917	1.89	22.00	0.76
3.833	0.82	9.917	2.27	16.000	1.89	22.08	0.76
3.917	0.82	10.000	2.27	16.083	1.89	22.17	0.76
4.000	0.82	10.083	2.27	16.167	1.89	22.25	0.76
4.083	0.82	10.167	2.27	16.250	1.89	22.33	0.76
4.167	0.82	10.250	2.27	16.333	1.14	22.42	0.76
4.250	0.82	10.333	2.91	16.417	1.14	22.50	0.76
4.333	1.01	10.417	2.91	16.500	1.14	22.58	0.76
4.417	1.01	10.500	2.91	16.583	1.14	22.67	0.76
4.500	1.01	10.583	2.91	16.667	1.14	22.75	0.76

4.583	1.01	10.667	2.91	16.750	1.14	22.83	0.76
4.667	1.01	10.750	2.91	16.833	1.14	22.92	0.76
4.750	1.01	10.833	3.92	16.917	1.14	23.00	0.76
4.833	1.01	10.917	3.92	17.000	1.14	23.08	0.76
4.917	1.01	11.000	3.92	17.083	1.14	23.17	0.76
5.000	1.01	11.083	3.92	17.167	1.14	23.25	0.76
5.083	1.01	11.167	3.92	17.250	1.14	23.33	0.76
5.167	1.01	11.250	3.92	17.333	1.14	23.42	0.76
5.250	1.01	11.333	6.06	17.417	1.14	23.50	0.76
5.333	1.01	11.417	6.06	17.500	1.14	23.58	0.76
5.417	1.01	11.500	6.06	17.583	1.14	23.67	0.76
5.500	1.01	11.583	6.06	17.667	1.14	23.75	0.76
5.583	1.01	11.667	6.06	17.750	1.14	23.83	0.76
5.667	1.01	11.750	6.06	17.833	1.14	23.92	0.76
5.750	1.01	11.833	18.69	17.917	1.14	24.00	0.76
5.833	1.01	11.917	18.70	18.000	1.14	24.08	0.76
5.917	1.01	12.000	18.70	18.083	1.14	24.17	0.76
6.000	1.01	12.083	77.30	18.167	1.14	24.25	0.76
6.083	1.01	12.167	77.31	18.250	1.14		

Unit Hyd Qpeak (cms)= 0.316

PEAK FLOW (cms)= 0.040 (i)
TIME TO PEAK (hrs)= 13.083
RUNOFF VOLUME (mm)= 7.596
TOTAL RAINFALL (mm)= 63.160
RUNOFF COEFFICIENT = 0.120

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0030)	Area (ha)=	1.70	Curve Number (CN)=	60.5	
ID= 1 DT= 5.0 min	Ia (mm)=	9.65	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	0.40			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.01	12.250	77.31	18.33	1.14
0.167	0.00	6.250	1.01	12.333	9.10	18.42	1.14
0.250	0.00	6.333	1.14	12.417	9.10	18.50	1.14
0.333	0.69	6.417	1.14	12.500	9.10	18.58	1.14
0.417	0.69	6.500	1.14	12.583	9.10	18.67	1.14

0.500	0.69	6.583	1.14	12.667	9.10	18.75	1.14
0.583	0.69	6.667	1.14	12.750	9.10	18.83	1.14
0.667	0.69	6.750	1.14	12.833	4.67	18.92	1.14
0.750	0.69	6.833	1.14	12.917	4.67	19.00	1.14
0.833	0.69	6.917	1.14	13.000	4.67	19.08	1.14
0.917	0.69	7.000	1.14	13.083	4.67	19.17	1.14
1.000	0.69	7.083	1.14	13.167	4.67	19.25	1.14
1.083	0.69	7.167	1.14	13.250	4.67	19.33	1.14
1.167	0.69	7.250	1.14	13.333	3.41	19.42	1.14
1.250	0.69	7.333	1.39	13.417	3.41	19.50	1.14
1.333	0.69	7.417	1.39	13.500	3.41	19.58	1.14
1.417	0.69	7.500	1.39	13.583	3.41	19.67	1.14
1.500	0.69	7.583	1.39	13.667	3.41	19.75	1.14
1.583	0.69	7.667	1.39	13.750	3.41	19.83	1.14
1.667	0.69	7.750	1.39	13.833	2.65	19.92	1.14
1.750	0.69	7.833	1.39	13.917	2.65	20.00	1.14
1.833	0.69	7.917	1.39	14.000	2.65	20.08	1.14
1.917	0.69	8.000	1.39	14.083	2.65	20.17	1.14
2.000	0.69	8.083	1.39	14.167	2.65	20.25	1.14
2.083	0.69	8.167	1.39	14.250	2.65	20.33	0.76
2.167	0.69	8.250	1.39	14.333	1.89	20.42	0.76
2.250	0.69	8.333	1.64	14.417	1.89	20.50	0.76
2.333	0.82	8.417	1.64	14.500	1.89	20.58	0.76
2.417	0.82	8.500	1.64	14.583	1.89	20.67	0.76
2.500	0.82	8.583	1.64	14.667	1.89	20.75	0.76
2.583	0.82	8.667	1.64	14.750	1.89	20.83	0.76
2.667	0.82	8.750	1.64	14.833	1.89	20.92	0.76
2.750	0.82	8.833	1.77	14.917	1.89	21.00	0.76
2.833	0.82	8.917	1.77	15.000	1.89	21.08	0.76
2.917	0.82	9.000	1.77	15.083	1.89	21.17	0.76
3.000	0.82	9.083	1.77	15.167	1.89	21.25	0.76
3.083	0.82	9.167	1.77	15.250	1.89	21.33	0.76
3.167	0.82	9.250	1.77	15.333	1.89	21.42	0.76
3.250	0.82	9.333	2.02	15.417	1.89	21.50	0.76
3.333	0.82	9.417	2.02	15.500	1.89	21.58	0.76
3.417	0.82	9.500	2.02	15.583	1.89	21.67	0.76
3.500	0.82	9.583	2.02	15.667	1.89	21.75	0.76
3.583	0.82	9.667	2.02	15.750	1.89	21.83	0.76
3.667	0.82	9.750	2.02	15.833	1.89	21.92	0.76
3.750	0.82	9.833	2.27	15.917	1.89	22.00	0.76
3.833	0.82	9.917	2.27	16.000	1.89	22.08	0.76
3.917	0.82	10.000	2.27	16.083	1.89	22.17	0.76
4.000	0.82	10.083	2.27	16.167	1.89	22.25	0.76
4.083	0.82	10.167	2.27	16.250	1.89	22.33	0.76
4.167	0.82	10.250	2.27	16.333	1.14	22.42	0.76
4.250	0.82	10.333	2.91	16.417	1.14	22.50	0.76
4.333	1.01	10.417	2.91	16.500	1.14	22.58	0.76
4.417	1.01	10.500	2.91	16.583	1.14	22.67	0.76

4.500	1.01	10.583	2.91	16.667	1.14	22.75	0.76
4.583	1.01	10.667	2.91	16.750	1.14	22.83	0.76
4.667	1.01	10.750	2.91	16.833	1.14	22.92	0.76
4.750	1.01	10.833	3.92	16.917	1.14	23.00	0.76
4.833	1.01	10.917	3.92	17.000	1.14	23.08	0.76
4.917	1.01	11.000	3.92	17.083	1.14	23.17	0.76
5.000	1.01	11.083	3.92	17.167	1.14	23.25	0.76
5.083	1.01	11.167	3.92	17.250	1.14	23.33	0.76
5.167	1.01	11.250	3.92	17.333	1.14	23.42	0.76
5.250	1.01	11.333	6.06	17.417	1.14	23.50	0.76
5.333	1.01	11.417	6.06	17.500	1.14	23.58	0.76
5.417	1.01	11.500	6.06	17.583	1.14	23.67	0.76
5.500	1.01	11.583	6.06	17.667	1.14	23.75	0.76
5.583	1.01	11.667	6.06	17.750	1.14	23.83	0.76
5.667	1.01	11.750	6.06	17.833	1.14	23.92	0.76
5.750	1.01	11.833	18.69	17.917	1.14	24.00	0.76
5.833	1.01	11.917	18.70	18.000	1.14	24.08	0.76
5.917	1.01	12.000	18.70	18.083	1.14	24.17	0.76
6.000	1.01	12.083	77.30	18.167	1.14	24.25	0.76
6.083	1.01	12.167	77.31	18.250	1.14		

Unit Hyd Qpeak (cms)= 0.162

PEAK FLOW (cms)= 0.032 (i)
TIME TO PEAK (hrs)= 12.583
RUNOFF VOLUME (mm)= 13.035
TOTAL RAINFALL (mm)= 63.160
RUNOFF COEFFICIENT = 0.206

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0031)	Area	(ha)= 1.80	Curve Number	(CN)= 50.0	
ID= 1 DT= 5.0 min	Ia	(mm)= 16.00	# of Linear Res.(N)= 3.00		
	U.H. Tp(hrs)= 0.76				

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.01	12.250	77.31	18.33	1.14
0.167	0.00	6.250	1.01	12.333	9.10	18.42	1.14
0.250	0.00	6.333	1.14	12.417	9.10	18.50	1.14
0.333	0.69	6.417	1.14	12.500	9.10	18.58	1.14

0.417	0.69	6.500	1.14	12.583	9.10	18.67	1.14
0.500	0.69	6.583	1.14	12.667	9.10	18.75	1.14
0.583	0.69	6.667	1.14	12.750	9.10	18.83	1.14
0.667	0.69	6.750	1.14	12.833	4.67	18.92	1.14
0.750	0.69	6.833	1.14	12.917	4.67	19.00	1.14
0.833	0.69	6.917	1.14	13.000	4.67	19.08	1.14
0.917	0.69	7.000	1.14	13.083	4.67	19.17	1.14
1.000	0.69	7.083	1.14	13.167	4.67	19.25	1.14
1.083	0.69	7.167	1.14	13.250	4.67	19.33	1.14
1.167	0.69	7.250	1.14	13.333	3.41	19.42	1.14
1.250	0.69	7.333	1.39	13.417	3.41	19.50	1.14
1.333	0.69	7.417	1.39	13.500	3.41	19.58	1.14
1.417	0.69	7.500	1.39	13.583	3.41	19.67	1.14
1.500	0.69	7.583	1.39	13.667	3.41	19.75	1.14
1.583	0.69	7.667	1.39	13.750	3.41	19.83	1.14
1.667	0.69	7.750	1.39	13.833	2.65	19.92	1.14
1.750	0.69	7.833	1.39	13.917	2.65	20.00	1.14
1.833	0.69	7.917	1.39	14.000	2.65	20.08	1.14
1.917	0.69	8.000	1.39	14.083	2.65	20.17	1.14
2.000	0.69	8.083	1.39	14.167	2.65	20.25	1.14
2.083	0.69	8.167	1.39	14.250	2.65	20.33	0.76
2.167	0.69	8.250	1.39	14.333	1.89	20.42	0.76
2.250	0.69	8.333	1.64	14.417	1.89	20.50	0.76
2.333	0.82	8.417	1.64	14.500	1.89	20.58	0.76
2.417	0.82	8.500	1.64	14.583	1.89	20.67	0.76
2.500	0.82	8.583	1.64	14.667	1.89	20.75	0.76
2.583	0.82	8.667	1.64	14.750	1.89	20.83	0.76
2.667	0.82	8.750	1.64	14.833	1.89	20.92	0.76
2.750	0.82	8.833	1.77	14.917	1.89	21.00	0.76
2.833	0.82	8.917	1.77	15.000	1.89	21.08	0.76
2.917	0.82	9.000	1.77	15.083	1.89	21.17	0.76
3.000	0.82	9.083	1.77	15.167	1.89	21.25	0.76
3.083	0.82	9.167	1.77	15.250	1.89	21.33	0.76
3.167	0.82	9.250	1.77	15.333	1.89	21.42	0.76
3.250	0.82	9.333	2.02	15.417	1.89	21.50	0.76
3.333	0.82	9.417	2.02	15.500	1.89	21.58	0.76
3.417	0.82	9.500	2.02	15.583	1.89	21.67	0.76
3.500	0.82	9.583	2.02	15.667	1.89	21.75	0.76
3.583	0.82	9.667	2.02	15.750	1.89	21.83	0.76
3.667	0.82	9.750	2.02	15.833	1.89	21.92	0.76
3.750	0.82	9.833	2.27	15.917	1.89	22.00	0.76
3.833	0.82	9.917	2.27	16.000	1.89	22.08	0.76
3.917	0.82	10.000	2.27	16.083	1.89	22.17	0.76
4.000	0.82	10.083	2.27	16.167	1.89	22.25	0.76
4.083	0.82	10.167	2.27	16.250	1.89	22.33	0.76
4.167	0.82	10.250	2.27	16.333	1.14	22.42	0.76
4.250	0.82	10.333	2.91	16.417	1.14	22.50	0.76
4.333	1.01	10.417	2.91	16.500	1.14	22.58	0.76

4.417	1.01	10.500	2.91	16.583	1.14	22.67	0.76
4.500	1.01	10.583	2.91	16.667	1.14	22.75	0.76
4.583	1.01	10.667	2.91	16.750	1.14	22.83	0.76
4.667	1.01	10.750	2.91	16.833	1.14	22.92	0.76
4.750	1.01	10.833	3.92	16.917	1.14	23.00	0.76
4.833	1.01	10.917	3.92	17.000	1.14	23.08	0.76
4.917	1.01	11.000	3.92	17.083	1.14	23.17	0.76
5.000	1.01	11.083	3.92	17.167	1.14	23.25	0.76
5.083	1.01	11.167	3.92	17.250	1.14	23.33	0.76
5.167	1.01	11.250	3.92	17.333	1.14	23.42	0.76
5.250	1.01	11.333	6.06	17.417	1.14	23.50	0.76
5.333	1.01	11.417	6.06	17.500	1.14	23.58	0.76
5.417	1.01	11.500	6.06	17.583	1.14	23.67	0.76
5.500	1.01	11.583	6.06	17.667	1.14	23.75	0.76
5.583	1.01	11.667	6.06	17.750	1.14	23.83	0.76
5.667	1.01	11.750	6.06	17.833	1.14	23.92	0.76
5.750	1.01	11.833	18.69	17.917	1.14	24.00	0.76
5.833	1.01	11.917	18.70	18.000	1.14	24.08	0.76
5.917	1.01	12.000	18.70	18.083	1.14	24.17	0.76
6.000	1.01	12.083	77.30	18.167	1.14	24.25	0.76
6.083	1.01	12.167	77.31	18.250	1.14		

Unit Hyd Qpeak (cms)= 0.090

PEAK FLOW (cms)= 0.011 (i)
TIME TO PEAK (hrs)= 13.083
RUNOFF VOLUME (mm)= 7.384
TOTAL RAINFALL (mm)= 63.160
RUNOFF COEFFICIENT = 0.117

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0039)					
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)	
ID1= 1 (0002):	23.99	0.131	13.25	7.45	
+ ID2= 2 (0025):	100.92	0.607	14.17	11.96	
ID = 3 (0039):	124.91	0.709	14.00	11.10	

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0039)					
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)	
ID1= 1 (0039):	131.28	0.736	13.92	10.93	
+ ID2= 2 (0030):	1.70	0.032	12.58	13.04	
ID = 3 (0039):	132.98	0.743	13.92	10.95	

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0039)					
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)	
ID1= 3 (0039):	132.98	0.743	13.92	10.95	
+ ID2= 2 (0031):	1.80	0.011	13.08	7.38	
ID = 1 (0039):	134.78	0.751	13.92	10.91	

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0039)					
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)	
ID1= 3 (0039):	124.91	0.709	14.00	11.10	
+ ID2= 2 (0028):	6.37	0.040	13.08	7.60	
ID = 1 (0039):	131.28	0.736	13.92	10.93	

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB					
NASHYD (0001)	Area	(ha)= 39.68	Curve Number	(CN)= 60.7	
ID= 1 DT= 5.0 min	Ia	(mm)= 8.26	# of Linear Res.(N)= 3.00		
	U.H. Tp(hrs)= 1.18				

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.01	12.250	77.31	18.33	1.14
0.167	0.00	6.250	1.01	12.333	9.10	18.42	1.14
0.250	0.00	6.333	1.14	12.417	9.10	18.50	1.14

0.333	0.69	6.417	1.14	12.500	9.10	18.58	1.14
0.417	0.69	6.500	1.14	12.583	9.10	18.67	1.14
0.500	0.69	6.583	1.14	12.667	9.10	18.75	1.14
0.583	0.69	6.667	1.14	12.750	9.10	18.83	1.14
0.667	0.69	6.750	1.14	12.833	4.67	18.92	1.14
0.750	0.69	6.833	1.14	12.917	4.67	19.00	1.14
0.833	0.69	6.917	1.14	13.000	4.67	19.08	1.14
0.917	0.69	7.000	1.14	13.083	4.67	19.17	1.14
1.000	0.69	7.083	1.14	13.167	4.67	19.25	1.14
1.083	0.69	7.167	1.14	13.250	4.67	19.33	1.14
1.167	0.69	7.250	1.14	13.333	3.41	19.42	1.14
1.250	0.69	7.333	1.39	13.417	3.41	19.50	1.14
1.333	0.69	7.417	1.39	13.500	3.41	19.58	1.14
1.417	0.69	7.500	1.39	13.583	3.41	19.67	1.14
1.500	0.69	7.583	1.39	13.667	3.41	19.75	1.14
1.583	0.69	7.667	1.39	13.750	3.41	19.83	1.14
1.667	0.69	7.750	1.39	13.833	2.65	19.92	1.14
1.750	0.69	7.833	1.39	13.917	2.65	20.00	1.14
1.833	0.69	7.917	1.39	14.000	2.65	20.08	1.14
1.917	0.69	8.000	1.39	14.083	2.65	20.17	1.14
2.000	0.69	8.083	1.39	14.167	2.65	20.25	1.14
2.083	0.69	8.167	1.39	14.250	2.65	20.33	0.76
2.167	0.69	8.250	1.39	14.333	1.89	20.42	0.76
2.250	0.69	8.333	1.64	14.417	1.89	20.50	0.76
2.333	0.82	8.417	1.64	14.500	1.89	20.58	0.76
2.417	0.82	8.500	1.64	14.583	1.89	20.67	0.76
2.500	0.82	8.583	1.64	14.667	1.89	20.75	0.76
2.583	0.82	8.667	1.64	14.750	1.89	20.83	0.76
2.667	0.82	8.750	1.64	14.833	1.89	20.92	0.76
2.750	0.82	8.833	1.77	14.917	1.89	21.00	0.76
2.833	0.82	8.917	1.77	15.000	1.89	21.08	0.76
2.917	0.82	9.000	1.77	15.083	1.89	21.17	0.76
3.000	0.82	9.083	1.77	15.167	1.89	21.25	0.76
3.083	0.82	9.167	1.77	15.250	1.89	21.33	0.76
3.167	0.82	9.250	1.77	15.333	1.89	21.42	0.76
3.250	0.82	9.333	2.02	15.417	1.89	21.50	0.76
3.333	0.82	9.417	2.02	15.500	1.89	21.58	0.76
3.417	0.82	9.500	2.02	15.583	1.89	21.67	0.76
3.500	0.82	9.583	2.02	15.667	1.89	21.75	0.76
3.583	0.82	9.667	2.02	15.750	1.89	21.83	0.76
3.667	0.82	9.750	2.02	15.833	1.89	21.92	0.76
3.750	0.82	9.833	2.27	15.917	1.89	22.00	0.76
3.833	0.82	9.917	2.27	16.000	1.89	22.08	0.76
3.917	0.82	10.000	2.27	16.083	1.89	22.17	0.76
4.000	0.82	10.083	2.27	16.167	1.89	22.25	0.76
4.083	0.82	10.167	2.27	16.250	1.89	22.33	0.76
4.167	0.82	10.250	2.27	16.333	1.14	22.42	0.76
4.250	0.82	10.333	2.91	16.417	1.14	22.50	0.76

4.333	1.01	10.417	2.91	16.500	1.14	22.58	0.76
4.417	1.01	10.500	2.91	16.583	1.14	22.67	0.76
4.500	1.01	10.583	2.91	16.667	1.14	22.75	0.76
4.583	1.01	10.667	2.91	16.750	1.14	22.83	0.76
4.667	1.01	10.750	2.91	16.833	1.14	22.92	0.76
4.750	1.01	10.833	3.92	16.917	1.14	23.00	0.76
4.833	1.01	10.917	3.92	17.000	1.14	23.08	0.76
4.917	1.01	11.000	3.92	17.083	1.14	23.17	0.76
5.000	1.01	11.083	3.92	17.167	1.14	23.25	0.76
5.083	1.01	11.167	3.92	17.250	1.14	23.33	0.76
5.167	1.01	11.250	3.92	17.333	1.14	23.42	0.76
5.250	1.01	11.333	6.06	17.417	1.14	23.50	0.76
5.333	1.01	11.417	6.06	17.500	1.14	23.58	0.76
5.417	1.01	11.500	6.06	17.583	1.14	23.67	0.76
5.500	1.01	11.583	6.06	17.667	1.14	23.75	0.76
5.583	1.01	11.667	6.06	17.750	1.14	23.83	0.76
5.667	1.01	11.750	6.06	17.833	1.14	23.92	0.76
5.750	1.01	11.833	18.69	17.917	1.14	24.00	0.76
5.833	1.01	11.917	18.70	18.000	1.14	24.08	0.76
5.917	1.01	12.000	18.70	18.083	1.14	24.17	0.76
6.000	1.01	12.083	77.30	18.167	1.14	24.25	0.76
6.083	1.01	12.167	77.31	18.250	1.14		

Unit Hyd Qpeak (cms)= 1.284

PEAK FLOW (cms)= 0.363 (i)
TIME TO PEAK (hrs)= 13.500
RUNOFF VOLUME (mm)= 13.732
TOTAL RAINFALL (mm)= 63.160
RUNOFF COEFFICIENT = 0.217

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0029)	Area (ha)=	14.85	Curve Number (CN)=	52.9	
ID= 1 DT= 5.0 min	Ia (mm)=	13.28	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	0.89			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.01	12.250	77.31	18.33	1.14
0.167	0.00	6.250	1.01	12.333	9.10	18.42	1.14

0.250	0.00	6.333	1.14	12.417	9.10	18.50	1.14
0.333	0.69	6.417	1.14	12.500	9.10	18.58	1.14
0.417	0.69	6.500	1.14	12.583	9.10	18.67	1.14
0.500	0.69	6.583	1.14	12.667	9.10	18.75	1.14
0.583	0.69	6.667	1.14	12.750	9.10	18.83	1.14
0.667	0.69	6.750	1.14	12.833	4.67	18.92	1.14
0.750	0.69	6.833	1.14	12.917	4.67	19.00	1.14
0.833	0.69	6.917	1.14	13.000	4.67	19.08	1.14
0.917	0.69	7.000	1.14	13.083	4.67	19.17	1.14
1.000	0.69	7.083	1.14	13.167	4.67	19.25	1.14
1.083	0.69	7.167	1.14	13.250	4.67	19.33	1.14
1.167	0.69	7.250	1.14	13.333	3.41	19.42	1.14
1.250	0.69	7.333	1.39	13.417	3.41	19.50	1.14
1.333	0.69	7.417	1.39	13.500	3.41	19.58	1.14
1.417	0.69	7.500	1.39	13.583	3.41	19.67	1.14
1.500	0.69	7.583	1.39	13.667	3.41	19.75	1.14
1.583	0.69	7.667	1.39	13.750	3.41	19.83	1.14
1.667	0.69	7.750	1.39	13.833	2.65	19.92	1.14
1.750	0.69	7.833	1.39	13.917	2.65	20.00	1.14
1.833	0.69	7.917	1.39	14.000	2.65	20.08	1.14
1.917	0.69	8.000	1.39	14.083	2.65	20.17	1.14
2.000	0.69	8.083	1.39	14.167	2.65	20.25	1.14
2.083	0.69	8.167	1.39	14.250	2.65	20.33	0.76
2.167	0.69	8.250	1.39	14.333	1.89	20.42	0.76
2.250	0.69	8.333	1.64	14.417	1.89	20.50	0.76
2.333	0.82	8.417	1.64	14.500	1.89	20.58	0.76
2.417	0.82	8.500	1.64	14.583	1.89	20.67	0.76
2.500	0.82	8.583	1.64	14.667	1.89	20.75	0.76
2.583	0.82	8.667	1.64	14.750	1.89	20.83	0.76
2.667	0.82	8.750	1.64	14.833	1.89	20.92	0.76
2.750	0.82	8.833	1.77	14.917	1.89	21.00	0.76
2.833	0.82	8.917	1.77	15.000	1.89	21.08	0.76
2.917	0.82	9.000	1.77	15.083	1.89	21.17	0.76
3.000	0.82	9.083	1.77	15.167	1.89	21.25	0.76
3.083	0.82	9.167	1.77	15.250	1.89	21.33	0.76
3.167	0.82	9.250	1.77	15.333	1.89	21.42	0.76
3.250	0.82	9.333	2.02	15.417	1.89	21.50	0.76
3.333	0.82	9.417	2.02	15.500	1.89	21.58	0.76
3.417	0.82	9.500	2.02	15.583	1.89	21.67	0.76
3.500	0.82	9.583	2.02	15.667	1.89	21.75	0.76
3.583	0.82	9.667	2.02	15.750	1.89	21.83	0.76
3.667	0.82	9.750	2.02	15.833	1.89	21.92	0.76
3.750	0.82	9.833	2.27	15.917	1.89	22.00	0.76
3.833	0.82	9.917	2.27	16.000	1.89	22.08	0.76
3.917	0.82	10.000	2.27	16.083	1.89	22.17	0.76
4.000	0.82	10.083	2.27	16.167	1.89	22.25	0.76
4.083	0.82	10.167	2.27	16.250	1.89	22.33	0.76
4.167	0.82	10.250	2.27	16.333	1.14	22.42	0.76

4.250	0.82	10.333	2.91	16.417	1.14	22.50	0.76
4.333	1.01	10.417	2.91	16.500	1.14	22.58	0.76
4.417	1.01	10.500	2.91	16.583	1.14	22.67	0.76
4.500	1.01	10.583	2.91	16.667	1.14	22.75	0.76
4.583	1.01	10.667	2.91	16.750	1.14	22.83	0.76
4.667	1.01	10.750	2.91	16.833	1.14	22.92	0.76
4.750	1.01	10.833	3.92	16.917	1.14	23.00	0.76
4.833	1.01	10.917	3.92	17.000	1.14	23.08	0.76
4.917	1.01	11.000	3.92	17.083	1.14	23.17	0.76
5.000	1.01	11.083	3.92	17.167	1.14	23.25	0.76
5.083	1.01	11.167	3.92	17.250	1.14	23.33	0.76
5.167	1.01	11.250	3.92	17.333	1.14	23.42	0.76
5.250	1.01	11.333	6.06	17.417	1.14	23.50	0.76
5.333	1.01	11.417	6.06	17.500	1.14	23.58	0.76
5.417	1.01	11.500	6.06	17.583	1.14	23.67	0.76
5.500	1.01	11.583	6.06	17.667	1.14	23.75	0.76
5.583	1.01	11.667	6.06	17.750	1.14	23.83	0.76
5.667	1.01	11.750	6.06	17.833	1.14	23.92	0.76
5.750	1.01	11.833	18.69	17.917	1.14	24.00	0.76
5.833	1.01	11.917	18.70	18.000	1.14	24.08	0.76
5.917	1.01	12.000	18.70	18.083	1.14	24.17	0.76
6.000	1.01	12.083	77.30	18.167	1.14	24.25	0.76
6.083	1.01	12.167	77.31	18.250	1.14		

Unit Hyd Qpeak (cms)= 0.637

PEAK FLOW (cms)= 0.104 (i)
TIME TO PEAK (hrs)= 13.167
RUNOFF VOLUME (mm)= 9.025
TOTAL RAINFALL (mm)= 63.160
RUNOFF COEFFICIENT = 0.143

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
STANDHYD (0014)	Area (ha)=	1.87			
ID= 1 DT= 5.0 min	Total Imp(%)=	43.28	Dir. Conn.(%)=	10.00	

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.81	1.06
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	111.65	25.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.01	12.250	77.31	18.33	1.14
0.167	0.00	6.250	1.01	12.333	9.10	18.42	1.14
0.250	0.00	6.333	1.14	12.417	9.10	18.50	1.14
0.333	0.69	6.417	1.14	12.500	9.10	18.58	1.14
0.417	0.69	6.500	1.14	12.583	9.10	18.67	1.14
0.500	0.69	6.583	1.14	12.667	9.10	18.75	1.14
0.583	0.69	6.667	1.14	12.750	9.10	18.83	1.14
0.667	0.69	6.750	1.14	12.833	4.67	18.92	1.14
0.750	0.69	6.833	1.14	12.917	4.67	19.00	1.14
0.833	0.69	6.917	1.14	13.000	4.67	19.08	1.14
0.917	0.69	7.000	1.14	13.083	4.67	19.17	1.14
1.000	0.69	7.083	1.14	13.167	4.67	19.25	1.14
1.083	0.69	7.167	1.14	13.250	4.67	19.33	1.14
1.167	0.69	7.250	1.14	13.333	3.41	19.42	1.14
1.250	0.69	7.333	1.39	13.417	3.41	19.50	1.14
1.333	0.69	7.417	1.39	13.500	3.41	19.58	1.14
1.417	0.69	7.500	1.39	13.583	3.41	19.67	1.14
1.500	0.69	7.583	1.39	13.667	3.41	19.75	1.14
1.583	0.69	7.667	1.39	13.750	3.41	19.83	1.14
1.667	0.69	7.750	1.39	13.833	2.65	19.92	1.14
1.750	0.69	7.833	1.39	13.917	2.65	20.00	1.14
1.833	0.69	7.917	1.39	14.000	2.65	20.08	1.14
1.917	0.69	8.000	1.39	14.083	2.65	20.17	1.14
2.000	0.69	8.083	1.39	14.167	2.65	20.25	1.14
2.083	0.69	8.167	1.39	14.250	2.65	20.33	0.76
2.167	0.69	8.250	1.39	14.333	1.89	20.42	0.76
2.250	0.69	8.333	1.64	14.417	1.89	20.50	0.76
2.333	0.82	8.417	1.64	14.500	1.89	20.58	0.76
2.417	0.82	8.500	1.64	14.583	1.89	20.67	0.76
2.500	0.82	8.583	1.64	14.667	1.89	20.75	0.76
2.583	0.82	8.667	1.64	14.750	1.89	20.83	0.76
2.667	0.82	8.750	1.64	14.833	1.89	20.92	0.76
2.750	0.82	8.833	1.77	14.917	1.89	21.00	0.76
2.833	0.82	8.917	1.77	15.000	1.89	21.08	0.76
2.917	0.82	9.000	1.77	15.083	1.89	21.17	0.76
3.000	0.82	9.083	1.77	15.167	1.89	21.25	0.76
3.083	0.82	9.167	1.77	15.250	1.89	21.33	0.76
3.167	0.82	9.250	1.77	15.333	1.89	21.42	0.76
3.250	0.82	9.333	2.02	15.417	1.89	21.50	0.76
3.333	0.82	9.417	2.02	15.500	1.89	21.58	0.76
3.417	0.82	9.500	2.02	15.583	1.89	21.67	0.76
3.500	0.82	9.583	2.02	15.667	1.89	21.75	0.76
3.583	0.82	9.667	2.02	15.750	1.89	21.83	0.76

3.667	0.82	9.750	2.02	15.833	1.89	21.92	0.76
3.750	0.82	9.833	2.27	15.917	1.89	22.00	0.76
3.833	0.82	9.917	2.27	16.000	1.89	22.08	0.76
3.917	0.82	10.000	2.27	16.083	1.89	22.17	0.76
4.000	0.82	10.083	2.27	16.167	1.89	22.25	0.76
4.083	0.82	10.167	2.27	16.250	1.89	22.33	0.76
4.167	0.82	10.250	2.27	16.333	1.14	22.42	0.76
4.250	0.82	10.333	2.91	16.417	1.14	22.50	0.76
4.333	1.01	10.417	2.91	16.500	1.14	22.58	0.76
4.417	1.01	10.500	2.91	16.583	1.14	22.67	0.76
4.500	1.01	10.583	2.91	16.667	1.14	22.75	0.76
4.583	1.01	10.667	2.91	16.750	1.14	22.83	0.76
4.667	1.01	10.750	2.91	16.833	1.14	22.92	0.76
4.750	1.01	10.833	3.92	16.917	1.14	23.00	0.76
4.833	1.01	10.917	3.92	17.000	1.14	23.08	0.76
4.917	1.01	11.000	3.92	17.083	1.14	23.17	0.76
5.000	1.01	11.083	3.92	17.167	1.14	23.25	0.76
5.083	1.01	11.167	3.92	17.250	1.14	23.33	0.76
5.167	1.01	11.250	3.92	17.333	1.14	23.42	0.76
5.250	1.01	11.333	6.06	17.417	1.14	23.50	0.76
5.333	1.01	11.417	6.06	17.500	1.14	23.58	0.76
5.417	1.01	11.500	6.06	17.583	1.14	23.67	0.76
5.500	1.01	11.583	6.06	17.667	1.14	23.75	0.76
5.583	1.01	11.667	6.06	17.750	1.14	23.83	0.76
5.667	1.01	11.750	6.06	17.833	1.14	23.92	0.76
5.750	1.01	11.833	18.69	17.917	1.14	24.00	0.76
5.833	1.01	11.917	18.70	18.000	1.14	24.08	0.76
5.917	1.01	12.000	18.70	18.083	1.14	24.17	0.76
6.000	1.01	12.083	77.30	18.167	1.14	24.25	0.76
6.083	1.01	12.167	77.31	18.250	1.14		

Max.Eff.Inten.(mm/hr)=	77.31	80.63	
over (min)	5.00	10.00	
Storage Coeff. (min)=	3.72 (ii)	9.53 (ii)	
Unit Hyd. Tpeak (min)=	5.00	10.00	
Unit Hyd. peak (cms)=	0.25	0.12	
			TOTALS
PEAK FLOW (cms)=	0.04	0.17	0.209 (iii)
TIME TO PEAK (hrs)=	12.25	12.25	12.25
RUNOFF VOLUME (mm)=	62.16	34.23	37.02
TOTAL RAINFALL (mm)=	63.16	63.16	63.16
RUNOFF COEFFICIENT =	0.98	0.54	0.59

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:

CN* = 78.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0040)		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3	ID1= 1 (0001):	39.68	0.363	13.50	13.73
	+ ID2= 2 (0014):	1.87	0.209	12.25	37.02
	ID = 3 (0040):	41.55	0.379	13.50	14.78

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0040)		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
3 + 2 = 1	ID1= 3 (0040):	41.55	0.379	13.50	14.78
	+ ID2= 2 (0029):	14.85	0.104	13.17	9.03
	ID = 1 (0040):	56.40	0.479	13.42	13.26

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023)		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3	ID1= 1 (0039):	134.78	0.751	13.92	10.91
	+ ID2= 2 (0040):	56.40	0.479	13.42	13.26
	ID = 3 (0023):	191.18	1.208	13.67	11.60

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

****
** SIMULATION:H - 5-year SCS **
****

READ STORM	Filename: C:\Users\ecomish\AppD

	ata\Local\Temp\
	49208e0f-499d-4cb6-b2a9-d1492d706baa\39aaeae0
Ptotal= 83.51 mm	Comments: 5yr 24hr 15min SCS Type II (MTO) - 15% I

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.00	0.00	6.25	1.50	12.50	12.03	18.75	1.50
0.25	0.92	6.50	1.50	12.75	6.18	19.00	1.50
0.50	0.92	6.75	1.50	13.00	6.18	19.25	1.50
0.75	0.92	7.00	1.50	13.25	4.51	19.50	1.50
1.00	0.92	7.25	1.84	13.50	4.51	19.75	1.50
1.25	0.92	7.50	1.84	13.75	3.51	20.00	1.50
1.50	0.92	7.75	1.84	14.00	3.51	20.25	1.00
1.75	0.92	8.00	1.84	14.25	2.51	20.50	1.00
2.00	0.92	8.25	2.17	14.50	2.51	20.75	1.00
2.25	1.09	8.50	2.17	14.75	2.51	21.00	1.00
2.50	1.09	8.75	2.34	15.00	2.51	21.25	1.00
2.75	1.09	9.00	2.34	15.25	2.51	21.50	1.00
3.00	1.09	9.25	2.67	15.50	2.51	21.75	1.00
3.25	1.09	9.50	2.67	15.75	2.51	22.00	1.00
3.50	1.09	9.75	3.01	16.00	2.51	22.25	1.00
3.75	1.09	10.00	3.01	16.25	1.50	22.50	1.00
4.00	1.09	10.25	3.84	16.50	1.50	22.75	1.00
4.25	1.34	10.50	3.84	16.75	1.50	23.00	1.00
4.50	1.34	10.75	5.18	17.00	1.50	23.25	1.00
4.75	1.34	11.00	5.18	17.25	1.50	23.50	1.00
5.00	1.34	11.25	8.02	17.50	1.50	23.75	1.00
5.25	1.34	11.50	8.02	17.75	1.50	24.00	1.00
5.50	1.34	11.75	24.72	18.00	1.50		
5.75	1.34	12.00	102.22	18.25	1.50		
6.00	1.34	12.25	12.03	18.50	1.50		

CALIB			
NASHYD (0025)	Area (ha)= 100.92	Curve Number (CN)= 55.9	
ID= 1 DT= 5.0 min	Ia (mm)= 7.89	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 1.70		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.34	12.250	102.22	18.33	1.50
0.167	0.00	6.250	1.34	12.333	12.04	18.42	1.50

0.250	0.00	6.333	1.50	12.417	12.03	18.50	1.50
0.333	0.92	6.417	1.50	12.500	12.03	18.58	1.50
0.417	0.92	6.500	1.50	12.583	12.03	18.67	1.50
0.500	0.92	6.583	1.50	12.667	12.03	18.75	1.50
0.583	0.92	6.667	1.50	12.750	12.03	18.83	1.50
0.667	0.92	6.750	1.50	12.833	6.18	18.92	1.50
0.750	0.92	6.833	1.50	12.917	6.18	19.00	1.50
0.833	0.92	6.917	1.50	13.000	6.18	19.08	1.50
0.917	0.92	7.000	1.50	13.083	6.18	19.17	1.50
1.000	0.92	7.083	1.50	13.167	6.18	19.25	1.50
1.083	0.92	7.167	1.50	13.250	6.18	19.33	1.50
1.167	0.92	7.250	1.50	13.333	4.51	19.42	1.50
1.250	0.92	7.333	1.84	13.417	4.51	19.50	1.50
1.333	0.92	7.417	1.84	13.500	4.51	19.58	1.50
1.417	0.92	7.500	1.84	13.583	4.51	19.67	1.50
1.500	0.92	7.583	1.84	13.667	4.51	19.75	1.50
1.583	0.92	7.667	1.84	13.750	4.51	19.83	1.50
1.667	0.92	7.750	1.84	13.833	3.51	19.92	1.50
1.750	0.92	7.833	1.84	13.917	3.51	20.00	1.50
1.833	0.92	7.917	1.84	14.000	3.51	20.08	1.50
1.917	0.92	8.000	1.84	14.083	3.51	20.17	1.50
2.000	0.92	8.083	1.84	14.167	3.51	20.25	1.50
2.083	0.92	8.167	1.84	14.250	3.51	20.33	1.00
2.167	0.92	8.250	1.84	14.333	2.51	20.42	1.00
2.250	0.92	8.333	2.17	14.417	2.51	20.50	1.00
2.333	1.09	8.417	2.17	14.500	2.51	20.58	1.00
2.417	1.09	8.500	2.17	14.583	2.51	20.67	1.00
2.500	1.09	8.583	2.17	14.667	2.51	20.75	1.00
2.583	1.09	8.667	2.17	14.750	2.51	20.83	1.00
2.667	1.09	8.750	2.17	14.833	2.51	20.92	1.00
2.750	1.09	8.833	2.34	14.917	2.51	21.00	1.00
2.833	1.09	8.917	2.34	15.000	2.51	21.08	1.00
2.917	1.09	9.000	2.34	15.083	2.51	21.17	1.00
3.000	1.09	9.083	2.34	15.167	2.51	21.25	1.00
3.083	1.09	9.167	2.34	15.250	2.51	21.33	1.00
3.167	1.09	9.250	2.34	15.333	2.51	21.42	1.00
3.250	1.09	9.333	2.67	15.417	2.51	21.50	1.00
3.333	1.09	9.417	2.67	15.500	2.51	21.58	1.00
3.417	1.09	9.500	2.67	15.583	2.51	21.67	1.00
3.500	1.09	9.583	2.67	15.667	2.51	21.75	1.00
3.583	1.09	9.667	2.67	15.750	2.51	21.83	1.00
3.667	1.09	9.750	2.67	15.833	2.51	21.92	1.00
3.750	1.09	9.833	3.01	15.917	2.51	22.00	1.00
3.833	1.09	9.917	3.01	16.000	2.51	22.08	1.00
3.917	1.09	10.000	3.01	16.083	2.51	22.17	1.00
4.000	1.09	10.083	3.01	16.167	2.51	22.25	1.00
4.083	1.09	10.167	3.01	16.250	2.51	22.33	1.00
4.167	1.09	10.250	3.01	16.333	1.50	22.42	1.00

4.250	1.09	10.333	3.84	16.417	1.50	22.50	1.00
4.333	1.34	10.417	3.84	16.500	1.50	22.58	1.00
4.417	1.34	10.500	3.84	16.583	1.50	22.67	1.00
4.500	1.34	10.583	3.84	16.667	1.50	22.75	1.00
4.583	1.34	10.667	3.84	16.750	1.50	22.83	1.00
4.667	1.34	10.750	3.84	16.833	1.50	22.92	1.00
4.750	1.34	10.833	5.18	16.917	1.50	23.00	1.00
4.833	1.34	10.917	5.18	17.000	1.50	23.08	1.00
4.917	1.34	11.000	5.18	17.083	1.50	23.17	1.00
5.000	1.34	11.083	5.18	17.167	1.50	23.25	1.00
5.083	1.34	11.167	5.18	17.250	1.50	23.33	1.00
5.167	1.34	11.250	5.18	17.333	1.50	23.42	1.00
5.250	1.34	11.333	8.02	17.417	1.50	23.50	1.00
5.333	1.34	11.417	8.02	17.500	1.50	23.58	1.00
5.417	1.34	11.500	8.02	17.583	1.50	23.67	1.00
5.500	1.34	11.583	8.02	17.667	1.50	23.75	1.00
5.583	1.34	11.667	8.02	17.750	1.50	23.83	1.00
5.667	1.34	11.750	8.02	17.833	1.50	23.92	1.00
5.750	1.34	11.833	24.72	17.917	1.50	24.00	1.00
5.833	1.34	11.917	24.72	18.000	1.50	24.08	1.00
5.917	1.34	12.000	24.72	18.083	1.50	24.17	1.00
6.000	1.34	12.083	102.21	18.167	1.50	24.25	1.00
6.083	1.34	12.167	102.22	18.250	1.50		

Unit Hyd Qpeak (cms)= 2.267

PEAK FLOW (cms)= 1.073 (i)
TIME TO PEAK (hrs)= 14.083
RUNOFF VOLUME (mm)= 20.743
TOTAL RAINFALL (mm)= 83.510
RUNOFF COEFFICIENT = 0.248

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0002)	Area (ha)=	23.99	Curve Number (CN)= 44.7
ID= 1 DT= 5.0 min	Ia (mm)=	10.91	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	0.97	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.34	12.250	102.22	18.33	1.50

0.167	0.00	6.250	1.34	12.333	12.04	18.42	1.50
0.250	0.00	6.333	1.50	12.417	12.03	18.50	1.50
0.333	0.92	6.417	1.50	12.500	12.03	18.58	1.50
0.417	0.92	6.500	1.50	12.583	12.03	18.67	1.50
0.500	0.92	6.583	1.50	12.667	12.03	18.75	1.50
0.583	0.92	6.667	1.50	12.750	12.03	18.83	1.50
0.667	0.92	6.750	1.50	12.833	6.18	18.92	1.50
0.750	0.92	6.833	1.50	12.917	6.18	19.00	1.50
0.833	0.92	6.917	1.50	13.000	6.18	19.08	1.50
0.917	0.92	7.000	1.50	13.083	6.18	19.17	1.50
1.000	0.92	7.083	1.50	13.167	6.18	19.25	1.50
1.083	0.92	7.167	1.50	13.250	6.18	19.33	1.50
1.167	0.92	7.250	1.50	13.333	4.51	19.42	1.50
1.250	0.92	7.333	1.84	13.417	4.51	19.50	1.50
1.333	0.92	7.417	1.84	13.500	4.51	19.58	1.50
1.417	0.92	7.500	1.84	13.583	4.51	19.67	1.50
1.500	0.92	7.583	1.84	13.667	4.51	19.75	1.50
1.583	0.92	7.667	1.84	13.750	4.51	19.83	1.50
1.667	0.92	7.750	1.84	13.833	3.51	19.92	1.50
1.750	0.92	7.833	1.84	13.917	3.51	20.00	1.50
1.833	0.92	7.917	1.84	14.000	3.51	20.08	1.50
1.917	0.92	8.000	1.84	14.083	3.51	20.17	1.50
2.000	0.92	8.083	1.84	14.167	3.51	20.25	1.50
2.083	0.92	8.167	1.84	14.250	3.51	20.33	1.00
2.167	0.92	8.250	1.84	14.333	2.51	20.42	1.00
2.250	0.92	8.333	2.17	14.417	2.51	20.50	1.00
2.333	1.09	8.417	2.17	14.500	2.51	20.58	1.00
2.417	1.09	8.500	2.17	14.583	2.51	20.67	1.00
2.500	1.09	8.583	2.17	14.667	2.51	20.75	1.00
2.583	1.09	8.667	2.17	14.750	2.51	20.83	1.00
2.667	1.09	8.750	2.17	14.833	2.51	20.92	1.00
2.750	1.09	8.833	2.34	14.917	2.51	21.00	1.00
2.833	1.09	8.917	2.34	15.000	2.51	21.08	1.00
2.917	1.09	9.000	2.34	15.083	2.51	21.17	1.00
3.000	1.09	9.083	2.34	15.167	2.51	21.25	1.00
3.083	1.09	9.167	2.34	15.250	2.51	21.33	1.00
3.167	1.09	9.250	2.34	15.333	2.51	21.42	1.00
3.250	1.09	9.333	2.67	15.417	2.51	21.50	1.00
3.333	1.09	9.417	2.67	15.500	2.51	21.58	1.00
3.417	1.09	9.500	2.67	15.583	2.51	21.67	1.00
3.500	1.09	9.583	2.67	15.667	2.51	21.75	1.00
3.583	1.09	9.667	2.67	15.750	2.51	21.83	1.00
3.667	1.09	9.750	2.67	15.833	2.51	21.92	1.00
3.750	1.09	9.833	3.01	15.917	2.51	22.00	1.00
3.833	1.09	9.917	3.01	16.000	2.51	22.08	1.00
3.917	1.09	10.000	3.01	16.083	2.51	22.17	1.00
4.000	1.09	10.083	3.01	16.167	2.51	22.25	1.00
4.083	1.09	10.167	3.01	16.250	2.51	22.33	1.00

4.167	1.09	10.250	3.01	16.333	1.50	22.42	1.00
4.250	1.09	10.333	3.84	16.417	1.50	22.50	1.00
4.333	1.34	10.417	3.84	16.500	1.50	22.58	1.00
4.417	1.34	10.500	3.84	16.583	1.50	22.67	1.00
4.500	1.34	10.583	3.84	16.667	1.50	22.75	1.00
4.583	1.34	10.667	3.84	16.750	1.50	22.83	1.00
4.667	1.34	10.750	3.84	16.833	1.50	22.92	1.00
4.750	1.34	10.833	5.18	16.917	1.50	23.00	1.00
4.833	1.34	10.917	5.18	17.000	1.50	23.08	1.00
4.917	1.34	11.000	5.18	17.083	1.50	23.17	1.00
5.000	1.34	11.083	5.18	17.167	1.50	23.25	1.00
5.083	1.34	11.167	5.18	17.250	1.50	23.33	1.00
5.167	1.34	11.250	5.18	17.333	1.50	23.42	1.00
5.250	1.34	11.333	8.02	17.417	1.50	23.50	1.00
5.333	1.34	11.417	8.02	17.500	1.50	23.58	1.00
5.417	1.34	11.500	8.02	17.583	1.50	23.67	1.00
5.500	1.34	11.583	8.02	17.667	1.50	23.75	1.00
5.583	1.34	11.667	8.02	17.750	1.50	23.83	1.00
5.667	1.34	11.750	8.02	17.833	1.50	23.92	1.00
5.750	1.34	11.833	24.72	17.917	1.50	24.00	1.00
5.833	1.34	11.917	24.72	18.000	1.50	24.08	1.00
5.917	1.34	12.000	24.72	18.083	1.50	24.17	1.00
6.000	1.34	12.083	102.21	18.167	1.50	24.25	1.00
6.083	1.34	12.167	102.22	18.250	1.50		

Unit Hyd Qpeak (cms)= 0.945

PEAK FLOW (cms)= 0.248 (i)
TIME TO PEAK (hrs)= 13.250
RUNOFF VOLUME (mm)= 13.625
TOTAL RAINFALL (mm)= 83.510
RUNOFF COEFFICIENT = 0.163

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0028)	Area (ha)=	6.37	Curve Number (CN)= 50.5
ID= 1 DT= 5.0 min	Ia (mm)=	15.69	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	0.77	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr

0.083	0.00	6.167	1.34	12.250	102.22	18.33	1.50
0.167	0.00	6.250	1.34	12.333	12.04	18.42	1.50
0.250	0.00	6.333	1.50	12.417	12.03	18.50	1.50
0.333	0.92	6.417	1.50	12.500	12.03	18.58	1.50
0.417	0.92	6.500	1.50	12.583	12.03	18.67	1.50
0.500	0.92	6.583	1.50	12.667	12.03	18.75	1.50
0.583	0.92	6.667	1.50	12.750	12.03	18.83	1.50
0.667	0.92	6.750	1.50	12.833	6.18	18.92	1.50
0.750	0.92	6.833	1.50	12.917	6.18	19.00	1.50
0.833	0.92	6.917	1.50	13.000	6.18	19.08	1.50
0.917	0.92	7.000	1.50	13.083	6.18	19.17	1.50
1.000	0.92	7.083	1.50	13.167	6.18	19.25	1.50
1.083	0.92	7.167	1.50	13.250	6.18	19.33	1.50
1.167	0.92	7.250	1.50	13.333	4.51	19.42	1.50
1.250	0.92	7.333	1.84	13.417	4.51	19.50	1.50
1.333	0.92	7.417	1.84	13.500	4.51	19.58	1.50
1.417	0.92	7.500	1.84	13.583	4.51	19.67	1.50
1.500	0.92	7.583	1.84	13.667	4.51	19.75	1.50
1.583	0.92	7.667	1.84	13.750	4.51	19.83	1.50
1.667	0.92	7.750	1.84	13.833	3.51	19.92	1.50
1.750	0.92	7.833	1.84	13.917	3.51	20.00	1.50
1.833	0.92	7.917	1.84	14.000	3.51	20.08	1.50
1.917	0.92	8.000	1.84	14.083	3.51	20.17	1.50
2.000	0.92	8.083	1.84	14.167	3.51	20.25	1.50
2.083	0.92	8.167	1.84	14.250	3.51	20.33	1.00
2.167	0.92	8.250	1.84	14.333	2.51	20.42	1.00
2.250	0.92	8.333	2.17	14.417	2.51	20.50	1.00
2.333	1.09	8.417	2.17	14.500	2.51	20.58	1.00
2.417	1.09	8.500	2.17	14.583	2.51	20.67	1.00
2.500	1.09	8.583	2.17	14.667	2.51	20.75	1.00
2.583	1.09	8.667	2.17	14.750	2.51	20.83	1.00
2.667	1.09	8.750	2.17	14.833	2.51	20.92	1.00
2.750	1.09	8.833	2.34	14.917	2.51	21.00	1.00
2.833	1.09	8.917	2.34	15.000	2.51	21.08	1.00
2.917	1.09	9.000	2.34	15.083	2.51	21.17	1.00
3.000	1.09	9.083	2.34	15.167	2.51	21.25	1.00
3.083	1.09	9.167	2.34	15.250	2.51	21.33	1.00
3.167	1.09	9.250	2.34	15.333	2.51	21.42	1.00
3.250	1.09	9.333	2.67	15.417	2.51	21.50	1.00
3.333	1.09	9.417	2.67	15.500	2.51	21.58	1.00
3.417	1.09	9.500	2.67	15.583	2.51	21.67	1.00
3.500	1.09	9.583	2.67	15.667	2.51	21.75	1.00
3.583	1.09	9.667	2.67	15.750	2.51	21.83	1.00
3.667	1.09	9.750	2.67	15.833	2.51	21.92	1.00
3.750	1.09	9.833	3.01	15.917	2.51	22.00	1.00
3.833	1.09	9.917	3.01	16.000	2.51	22.08	1.00
3.917	1.09	10.000	3.01	16.083	2.51	22.17	1.00
4.000	1.09	10.083	3.01	16.167	2.51	22.25	1.00

4.083	1.09	10.167	3.01	16.250	2.51	22.33	1.00
4.167	1.09	10.250	3.01	16.333	1.50	22.42	1.00
4.250	1.09	10.333	3.84	16.417	1.50	22.50	1.00
4.333	1.34	10.417	3.84	16.500	1.50	22.58	1.00
4.417	1.34	10.500	3.84	16.583	1.50	22.67	1.00
4.500	1.34	10.583	3.84	16.667	1.50	22.75	1.00
4.583	1.34	10.667	3.84	16.750	1.50	22.83	1.00
4.667	1.34	10.750	3.84	16.833	1.50	22.92	1.00
4.750	1.34	10.833	5.18	16.917	1.50	23.00	1.00
4.833	1.34	10.917	5.18	17.000	1.50	23.08	1.00
4.917	1.34	11.000	5.18	17.083	1.50	23.17	1.00
5.000	1.34	11.083	5.18	17.167	1.50	23.25	1.00
5.083	1.34	11.167	5.18	17.250	1.50	23.33	1.00
5.167	1.34	11.250	5.18	17.333	1.50	23.42	1.00
5.250	1.34	11.333	8.02	17.417	1.50	23.50	1.00
5.333	1.34	11.417	8.02	17.500	1.50	23.58	1.00
5.417	1.34	11.500	8.02	17.583	1.50	23.67	1.00
5.500	1.34	11.583	8.02	17.667	1.50	23.75	1.00
5.583	1.34	11.667	8.02	17.750	1.50	23.83	1.00
5.667	1.34	11.750	8.02	17.833	1.50	23.92	1.00
5.750	1.34	11.833	24.72	17.917	1.50	24.00	1.00
5.833	1.34	11.917	24.72	18.000	1.50	24.08	1.00
5.917	1.34	12.000	24.72	18.083	1.50	24.17	1.00
6.000	1.34	12.083	102.21	18.167	1.50	24.25	1.00
6.083	1.34	12.167	102.22	18.250	1.50		

Unit Hyd Qpeak (cms)= 0.316

PEAK FLOW (cms)= 0.082 (i)
TIME TO PEAK (hrs)= 13.000
RUNOFF VOLUME (mm)= 14.510
TOTAL RAINFALL (mm)= 83.510
RUNOFF COEFFICIENT = 0.174

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0030)	Area (ha)=	1.70	Curve Number (CN)= 60.5
ID= 1 DT= 5.0 min	Ia (mm)=	9.65	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	0.40	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN

hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	6.167	1.34	12.250	102.22	18.33	1.50
0.167	0.00	6.250	1.34	12.333	12.04	18.42	1.50
0.250	0.00	6.333	1.50	12.417	12.03	18.50	1.50
0.333	0.92	6.417	1.50	12.500	12.03	18.58	1.50
0.417	0.92	6.500	1.50	12.583	12.03	18.67	1.50
0.500	0.92	6.583	1.50	12.667	12.03	18.75	1.50
0.583	0.92	6.667	1.50	12.750	12.03	18.83	1.50
0.667	0.92	6.750	1.50	12.833	6.18	18.92	1.50
0.750	0.92	6.833	1.50	12.917	6.18	19.00	1.50
0.833	0.92	6.917	1.50	13.000	6.18	19.08	1.50
0.917	0.92	7.000	1.50	13.083	6.18	19.17	1.50
1.000	0.92	7.083	1.50	13.167	6.18	19.25	1.50
1.083	0.92	7.167	1.50	13.250	6.18	19.33	1.50
1.167	0.92	7.250	1.50	13.333	4.51	19.42	1.50
1.250	0.92	7.333	1.84	13.417	4.51	19.50	1.50
1.333	0.92	7.417	1.84	13.500	4.51	19.58	1.50
1.417	0.92	7.500	1.84	13.583	4.51	19.67	1.50
1.500	0.92	7.583	1.84	13.667	4.51	19.75	1.50
1.583	0.92	7.667	1.84	13.750	4.51	19.83	1.50
1.667	0.92	7.750	1.84	13.833	3.51	19.92	1.50
1.750	0.92	7.833	1.84	13.917	3.51	20.00	1.50
1.833	0.92	7.917	1.84	14.000	3.51	20.08	1.50
1.917	0.92	8.000	1.84	14.083	3.51	20.17	1.50
2.000	0.92	8.083	1.84	14.167	3.51	20.25	1.50
2.083	0.92	8.167	1.84	14.250	3.51	20.33	1.00
2.167	0.92	8.250	1.84	14.333	2.51	20.42	1.00
2.250	0.92	8.333	2.17	14.417	2.51	20.50	1.00
2.333	1.09	8.417	2.17	14.500	2.51	20.58	1.00
2.417	1.09	8.500	2.17	14.583	2.51	20.67	1.00
2.500	1.09	8.583	2.17	14.667	2.51	20.75	1.00
2.583	1.09	8.667	2.17	14.750	2.51	20.83	1.00
2.667	1.09	8.750	2.17	14.833	2.51	20.92	1.00
2.750	1.09	8.833	2.34	14.917	2.51	21.00	1.00
2.833	1.09	8.917	2.34	15.000	2.51	21.08	1.00
2.917	1.09	9.000	2.34	15.083	2.51	21.17	1.00
3.000	1.09	9.083	2.34	15.167	2.51	21.25	1.00
3.083	1.09	9.167	2.34	15.250	2.51	21.33	1.00
3.167	1.09	9.250	2.34	15.333	2.51	21.42	1.00
3.250	1.09	9.333	2.67	15.417	2.51	21.50	1.00
3.333	1.09	9.417	2.67	15.500	2.51	21.58	1.00
3.417	1.09	9.500	2.67	15.583	2.51	21.67	1.00
3.500	1.09	9.583	2.67	15.667	2.51	21.75	1.00
3.583	1.09	9.667	2.67	15.750	2.51	21.83	1.00
3.667	1.09	9.750	2.67	15.833	2.51	21.92	1.00
3.750	1.09	9.833	3.01	15.917	2.51	22.00	1.00
3.833	1.09	9.917	3.01	16.000	2.51	22.08	1.00
3.917	1.09	10.000	3.01	16.083	2.51	22.17	1.00

4.000	1.09	10.083	3.01	16.167	2.51	22.25	1.00
4.083	1.09	10.167	3.01	16.250	2.51	22.33	1.00
4.167	1.09	10.250	3.01	16.333	1.50	22.42	1.00
4.250	1.09	10.333	3.84	16.417	1.50	22.50	1.00
4.333	1.34	10.417	3.84	16.500	1.50	22.58	1.00
4.417	1.34	10.500	3.84	16.583	1.50	22.67	1.00
4.500	1.34	10.583	3.84	16.667	1.50	22.75	1.00
4.583	1.34	10.667	3.84	16.750	1.50	22.83	1.00
4.667	1.34	10.750	3.84	16.833	1.50	22.92	1.00
4.750	1.34	10.833	5.18	16.917	1.50	23.00	1.00
4.833	1.34	10.917	5.18	17.000	1.50	23.08	1.00
4.917	1.34	11.000	5.18	17.083	1.50	23.17	1.00
5.000	1.34	11.083	5.18	17.167	1.50	23.25	1.00
5.083	1.34	11.167	5.18	17.250	1.50	23.33	1.00
5.167	1.34	11.250	5.18	17.333	1.50	23.42	1.00
5.250	1.34	11.333	8.02	17.417	1.50	23.50	1.00
5.333	1.34	11.417	8.02	17.500	1.50	23.58	1.00
5.417	1.34	11.500	8.02	17.583	1.50	23.67	1.00
5.500	1.34	11.583	8.02	17.667	1.50	23.75	1.00
5.583	1.34	11.667	8.02	17.750	1.50	23.83	1.00
5.667	1.34	11.750	8.02	17.833	1.50	23.92	1.00
5.750	1.34	11.833	24.72	17.917	1.50	24.00	1.00
5.833	1.34	11.917	24.72	18.000	1.50	24.08	1.00
5.917	1.34	12.000	24.72	18.083	1.50	24.17	1.00
6.000	1.34	12.083	102.21	18.167	1.50	24.25	1.00
6.083	1.34	12.167	102.22	18.250	1.50		

Unit Hyd Qpeak (cms)= 0.162

PEAK FLOW (cms)= 0.058 (i)
TIME TO PEAK (hrs)= 12.500
RUNOFF VOLUME (mm)= 22.730
TOTAL RAINFALL (mm)= 83.510
RUNOFF COEFFICIENT = 0.272

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0031)	Area (ha)=	1.80	Curve Number (CN)= 50.0
ID= 1 DT= 5.0 min	Ia (mm)=	16.00	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	0.76	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.34	12.250	102.22	18.33	1.50
0.167	0.00	6.250	1.34	12.333	12.04	18.42	1.50
0.250	0.00	6.333	1.50	12.417	12.03	18.50	1.50
0.333	0.92	6.417	1.50	12.500	12.03	18.58	1.50
0.417	0.92	6.500	1.50	12.583	12.03	18.67	1.50
0.500	0.92	6.583	1.50	12.667	12.03	18.75	1.50
0.583	0.92	6.667	1.50	12.750	12.03	18.83	1.50
0.667	0.92	6.750	1.50	12.833	6.18	18.92	1.50
0.750	0.92	6.833	1.50	12.917	6.18	19.00	1.50
0.833	0.92	6.917	1.50	13.000	6.18	19.08	1.50
0.917	0.92	7.000	1.50	13.083	6.18	19.17	1.50
1.000	0.92	7.083	1.50	13.167	6.18	19.25	1.50
1.083	0.92	7.167	1.50	13.250	6.18	19.33	1.50
1.167	0.92	7.250	1.50	13.333	4.51	19.42	1.50
1.250	0.92	7.333	1.84	13.417	4.51	19.50	1.50
1.333	0.92	7.417	1.84	13.500	4.51	19.58	1.50
1.417	0.92	7.500	1.84	13.583	4.51	19.67	1.50
1.500	0.92	7.583	1.84	13.667	4.51	19.75	1.50
1.583	0.92	7.667	1.84	13.750	4.51	19.83	1.50
1.667	0.92	7.750	1.84	13.833	3.51	19.92	1.50
1.750	0.92	7.833	1.84	13.917	3.51	20.00	1.50
1.833	0.92	7.917	1.84	14.000	3.51	20.08	1.50
1.917	0.92	8.000	1.84	14.083	3.51	20.17	1.50
2.000	0.92	8.083	1.84	14.167	3.51	20.25	1.50
2.083	0.92	8.167	1.84	14.250	3.51	20.33	1.00
2.167	0.92	8.250	1.84	14.333	2.51	20.42	1.00
2.250	0.92	8.333	2.17	14.417	2.51	20.50	1.00
2.333	1.09	8.417	2.17	14.500	2.51	20.58	1.00
2.417	1.09	8.500	2.17	14.583	2.51	20.67	1.00
2.500	1.09	8.583	2.17	14.667	2.51	20.75	1.00
2.583	1.09	8.667	2.17	14.750	2.51	20.83	1.00
2.667	1.09	8.750	2.17	14.833	2.51	20.92	1.00
2.750	1.09	8.833	2.34	14.917	2.51	21.00	1.00
2.833	1.09	8.917	2.34	15.000	2.51	21.08	1.00
2.917	1.09	9.000	2.34	15.083	2.51	21.17	1.00
3.000	1.09	9.083	2.34	15.167	2.51	21.25	1.00
3.083	1.09	9.167	2.34	15.250	2.51	21.33	1.00
3.167	1.09	9.250	2.34	15.333	2.51	21.42	1.00
3.250	1.09	9.333	2.67	15.417	2.51	21.50	1.00
3.333	1.09	9.417	2.67	15.500	2.51	21.58	1.00
3.417	1.09	9.500	2.67	15.583	2.51	21.67	1.00
3.500	1.09	9.583	2.67	15.667	2.51	21.75	1.00
3.583	1.09	9.667	2.67	15.750	2.51	21.83	1.00
3.667	1.09	9.750	2.67	15.833	2.51	21.92	1.00
3.750	1.09	9.833	3.01	15.917	2.51	22.00	1.00
3.833	1.09	9.917	3.01	16.000	2.51	22.08	1.00

3.917	1.09	10.000	3.01	16.083	2.51	22.17	1.00
4.000	1.09	10.083	3.01	16.167	2.51	22.25	1.00
4.083	1.09	10.167	3.01	16.250	2.51	22.33	1.00
4.167	1.09	10.250	3.01	16.333	1.50	22.42	1.00
4.250	1.09	10.333	3.84	16.417	1.50	22.50	1.00
4.333	1.34	10.417	3.84	16.500	1.50	22.58	1.00
4.417	1.34	10.500	3.84	16.583	1.50	22.67	1.00
4.500	1.34	10.583	3.84	16.667	1.50	22.75	1.00
4.583	1.34	10.667	3.84	16.750	1.50	22.83	1.00
4.667	1.34	10.750	3.84	16.833	1.50	22.92	1.00
4.750	1.34	10.833	5.18	16.917	1.50	23.00	1.00
4.833	1.34	10.917	5.18	17.000	1.50	23.08	1.00
4.917	1.34	11.000	5.18	17.083	1.50	23.17	1.00
5.000	1.34	11.083	5.18	17.167	1.50	23.25	1.00
5.083	1.34	11.167	5.18	17.250	1.50	23.33	1.00
5.167	1.34	11.250	5.18	17.333	1.50	23.42	1.00
5.250	1.34	11.333	8.02	17.417	1.50	23.50	1.00
5.333	1.34	11.417	8.02	17.500	1.50	23.58	1.00
5.417	1.34	11.500	8.02	17.583	1.50	23.67	1.00
5.500	1.34	11.583	8.02	17.667	1.50	23.75	1.00
5.583	1.34	11.667	8.02	17.750	1.50	23.83	1.00
5.667	1.34	11.750	8.02	17.833	1.50	23.92	1.00
5.750	1.34	11.833	24.72	17.917	1.50	24.00	1.00
5.833	1.34	11.917	24.72	18.000	1.50	24.08	1.00
5.917	1.34	12.000	24.72	18.083	1.50	24.17	1.00
6.000	1.34	12.083	102.21	18.167	1.50	24.25	1.00
6.083	1.34	12.167	102.22	18.250	1.50		

Unit Hyd Qpeak (cms)= 0.090

PEAK FLOW (cms)= 0.023 (i)
TIME TO PEAK (hrs)= 13.000
RUNOFF VOLUME (mm)= 14.175
TOTAL RAINFALL (mm)= 83.510
RUNOFF COEFFICIENT = 0.170

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0039) | 1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0002):	23.99	0.248	13.25	13.63
+ ID2= 2 (0025):	100.92	1.073	14.08	20.74
ID = 3 (0039):	124.91	1.267	13.92	19.38

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0039) | 3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0039):	124.91	1.267	13.92	19.38
+ ID2= 2 (0028):	6.37	0.082	13.00	14.51
ID = 1 (0039):	131.28	1.321	13.83	19.14

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0039) | 1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0039):	131.28	1.321	13.83	19.14
+ ID2= 2 (0030):	1.70	0.058	12.50	22.73
ID = 3 (0039):	132.98	1.333	13.83	19.19

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0039) | 3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0039):	132.98	1.333	13.83	19.19
+ ID2= 2 (0031):	1.80	0.023	13.00	14.17
ID = 1 (0039):	134.78	1.349	13.83	19.12

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB | NASHYD (0001) | ID= 1 DT= 5.0 min				
Area	(ha)=	39.68	Curve Number (CN)=	60.7
Ia	(mm)=	8.26	# of Linear Res.(N)=	3.00
U.H. Tp(hrs)=		1.18		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.34	12.250	102.22	18.33	1.50
0.167	0.00	6.250	1.34	12.333	12.04	18.42	1.50
0.250	0.00	6.333	1.50	12.417	12.03	18.50	1.50
0.333	0.92	6.417	1.50	12.500	12.03	18.58	1.50
0.417	0.92	6.500	1.50	12.583	12.03	18.67	1.50
0.500	0.92	6.583	1.50	12.667	12.03	18.75	1.50
0.583	0.92	6.667	1.50	12.750	12.03	18.83	1.50
0.667	0.92	6.750	1.50	12.833	6.18	18.92	1.50
0.750	0.92	6.833	1.50	12.917	6.18	19.00	1.50
0.833	0.92	6.917	1.50	13.000	6.18	19.08	1.50
0.917	0.92	7.000	1.50	13.083	6.18	19.17	1.50
1.000	0.92	7.083	1.50	13.167	6.18	19.25	1.50
1.083	0.92	7.167	1.50	13.250	6.18	19.33	1.50
1.167	0.92	7.250	1.50	13.333	4.51	19.42	1.50
1.250	0.92	7.333	1.84	13.417	4.51	19.50	1.50
1.333	0.92	7.417	1.84	13.500	4.51	19.58	1.50
1.417	0.92	7.500	1.84	13.583	4.51	19.67	1.50
1.500	0.92	7.583	1.84	13.667	4.51	19.75	1.50
1.583	0.92	7.667	1.84	13.750	4.51	19.83	1.50
1.667	0.92	7.750	1.84	13.833	3.51	19.92	1.50
1.750	0.92	7.833	1.84	13.917	3.51	20.00	1.50
1.833	0.92	7.917	1.84	14.000	3.51	20.08	1.50
1.917	0.92	8.000	1.84	14.083	3.51	20.17	1.50
2.000	0.92	8.083	1.84	14.167	3.51	20.25	1.50
2.083	0.92	8.167	1.84	14.250	3.51	20.33	1.00
2.167	0.92	8.250	1.84	14.333	2.51	20.42	1.00
2.250	0.92	8.333	2.17	14.417	2.51	20.50	1.00
2.333	1.09	8.417	2.17	14.500	2.51	20.58	1.00
2.417	1.09	8.500	2.17	14.583	2.51	20.67	1.00
2.500	1.09	8.583	2.17	14.667	2.51	20.75	1.00
2.583	1.09	8.667	2.17	14.750	2.51	20.83	1.00
2.667	1.09	8.750	2.17	14.833	2.51	20.92	1.00
2.750	1.09	8.833	2.34	14.917	2.51	21.00	1.00
2.833	1.09	8.917	2.34	15.000	2.51	21.08	1.00
2.917	1.09	9.000	2.34	15.083	2.51	21.17	1.00
3.000	1.09	9.083	2.34	15.167	2.51	21.25	1.00
3.083	1.09	9.167	2.34	15.250	2.51	21.33	1.00
3.167	1.09	9.250	2.34	15.333	2.51	21.42	1.00
3.250	1.09	9.333	2.67	15.417	2.51	21.50	1.00
3.333	1.09	9.417	2.67	15.500	2.51	21.58	1.00
3.417	1.09	9.500	2.67	15.583	2.51	21.67	1.00
3.500	1.09	9.583	2.67	15.667	2.51	21.75	1.00
3.583	1.09	9.667	2.67	15.750	2.51	21.83	1.00
3.667	1.09	9.750	2.67	15.833	2.51	21.92	1.00
3.750	1.09	9.833	3.01	15.917	2.51	22.00	1.00

3.833	1.09	9.917	3.01	16.000	2.51	22.08	1.00
3.917	1.09	10.000	3.01	16.083	2.51	22.17	1.00
4.000	1.09	10.083	3.01	16.167	2.51	22.25	1.00
4.083	1.09	10.167	3.01	16.250	2.51	22.33	1.00
4.167	1.09	10.250	3.01	16.333	1.50	22.42	1.00
4.250	1.09	10.333	3.84	16.417	1.50	22.50	1.00
4.333	1.34	10.417	3.84	16.500	1.50	22.58	1.00
4.417	1.34	10.500	3.84	16.583	1.50	22.67	1.00
4.500	1.34	10.583	3.84	16.667	1.50	22.75	1.00
4.583	1.34	10.667	3.84	16.750	1.50	22.83	1.00
4.667	1.34	10.750	3.84	16.833	1.50	22.92	1.00
4.750	1.34	10.833	5.18	16.917	1.50	23.00	1.00
4.833	1.34	10.917	5.18	17.000	1.50	23.08	1.00
4.917	1.34	11.000	5.18	17.083	1.50	23.17	1.00
5.000	1.34	11.083	5.18	17.167	1.50	23.25	1.00
5.083	1.34	11.167	5.18	17.250	1.50	23.33	1.00
5.167	1.34	11.250	5.18	17.333	1.50	23.42	1.00
5.250	1.34	11.333	8.02	17.417	1.50	23.50	1.00
5.333	1.34	11.417	8.02	17.500	1.50	23.58	1.00
5.417	1.34	11.500	8.02	17.583	1.50	23.67	1.00
5.500	1.34	11.583	8.02	17.667	1.50	23.75	1.00
5.583	1.34	11.667	8.02	17.750	1.50	23.83	1.00
5.667	1.34	11.750	8.02	17.833	1.50	23.92	1.00
5.750	1.34	11.833	24.72	17.917	1.50	24.00	1.00
5.833	1.34	11.917	24.72	18.000	1.50	24.08	1.00
5.917	1.34	12.000	24.72	18.083	1.50	24.17	1.00
6.000	1.34	12.083	102.21	18.167	1.50	24.25	1.00
6.083	1.34	12.167	102.22	18.250	1.50		

Unit Hyd Qpeak (cms)= 1.284

PEAK FLOW (cms)= 0.639 (i)
TIME TO PEAK (hrs)= 13.500
RUNOFF VOLUME (mm)= 23.610
TOTAL RAINFALL (mm)= 83.510
RUNOFF COEFFICIENT = 0.283

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0029)	Area (ha)=	14.85	Curve Number (CN)= 52.9
ID= 1 DT= 5.0 min	Ia (mm)=	13.28	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	0.89	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.34	12.250	102.22	18.33	1.50
0.167	0.00	6.250	1.34	12.333	12.04	18.42	1.50
0.250	0.00	6.333	1.50	12.417	12.03	18.50	1.50
0.333	0.92	6.417	1.50	12.500	12.03	18.58	1.50
0.417	0.92	6.500	1.50	12.583	12.03	18.67	1.50
0.500	0.92	6.583	1.50	12.667	12.03	18.75	1.50
0.583	0.92	6.667	1.50	12.750	12.03	18.83	1.50
0.667	0.92	6.750	1.50	12.833	6.18	18.92	1.50
0.750	0.92	6.833	1.50	12.917	6.18	19.00	1.50
0.833	0.92	6.917	1.50	13.000	6.18	19.08	1.50
0.917	0.92	7.000	1.50	13.083	6.18	19.17	1.50
1.000	0.92	7.083	1.50	13.167	6.18	19.25	1.50
1.083	0.92	7.167	1.50	13.250	6.18	19.33	1.50
1.167	0.92	7.250	1.50	13.333	4.51	19.42	1.50
1.250	0.92	7.333	1.84	13.417	4.51	19.50	1.50
1.333	0.92	7.417	1.84	13.500	4.51	19.58	1.50
1.417	0.92	7.500	1.84	13.583	4.51	19.67	1.50
1.500	0.92	7.583	1.84	13.667	4.51	19.75	1.50
1.583	0.92	7.667	1.84	13.750	4.51	19.83	1.50
1.667	0.92	7.750	1.84	13.833	3.51	19.92	1.50
1.750	0.92	7.833	1.84	13.917	3.51	20.00	1.50
1.833	0.92	7.917	1.84	14.000	3.51	20.08	1.50
1.917	0.92	8.000	1.84	14.083	3.51	20.17	1.50
2.000	0.92	8.083	1.84	14.167	3.51	20.25	1.50
2.083	0.92	8.167	1.84	14.250	3.51	20.33	1.00
2.167	0.92	8.250	1.84	14.333	2.51	20.42	1.00
2.250	0.92	8.333	2.17	14.417	2.51	20.50	1.00
2.333	1.09	8.417	2.17	14.500	2.51	20.58	1.00
2.417	1.09	8.500	2.17	14.583	2.51	20.67	1.00
2.500	1.09	8.583	2.17	14.667	2.51	20.75	1.00
2.583	1.09	8.667	2.17	14.750	2.51	20.83	1.00
2.667	1.09	8.750	2.17	14.833	2.51	20.92	1.00
2.750	1.09	8.833	2.34	14.917	2.51	21.00	1.00
2.833	1.09	8.917	2.34	15.000	2.51	21.08	1.00
2.917	1.09	9.000	2.34	15.083	2.51	21.17	1.00
3.000	1.09	9.083	2.34	15.167	2.51	21.25	1.00
3.083	1.09	9.167	2.34	15.250	2.51	21.33	1.00
3.167	1.09	9.250	2.34	15.333	2.51	21.42	1.00
3.250	1.09	9.333	2.67	15.417	2.51	21.50	1.00
3.333	1.09	9.417	2.67	15.500	2.51	21.58	1.00
3.417	1.09	9.500	2.67	15.583	2.51	21.67	1.00
3.500	1.09	9.583	2.67	15.667	2.51	21.75	1.00
3.583	1.09	9.667	2.67	15.750	2.51	21.83	1.00
3.667	1.09	9.750	2.67	15.833	2.51	21.92	1.00

3.750	1.09	9.833	3.01	15.917	2.51	22.00	1.00
3.833	1.09	9.917	3.01	16.000	2.51	22.08	1.00
3.917	1.09	10.000	3.01	16.083	2.51	22.17	1.00
4.000	1.09	10.083	3.01	16.167	2.51	22.25	1.00
4.083	1.09	10.167	3.01	16.250	2.51	22.33	1.00
4.167	1.09	10.250	3.01	16.333	1.50	22.42	1.00
4.250	1.09	10.333	3.84	16.417	1.50	22.50	1.00
4.333	1.34	10.417	3.84	16.500	1.50	22.58	1.00
4.417	1.34	10.500	3.84	16.583	1.50	22.67	1.00
4.500	1.34	10.583	3.84	16.667	1.50	22.75	1.00
4.583	1.34	10.667	3.84	16.750	1.50	22.83	1.00
4.667	1.34	10.750	3.84	16.833	1.50	22.92	1.00
4.750	1.34	10.833	5.18	16.917	1.50	23.00	1.00
4.833	1.34	10.917	5.18	17.000	1.50	23.08	1.00
4.917	1.34	11.000	5.18	17.083	1.50	23.17	1.00
5.000	1.34	11.083	5.18	17.167	1.50	23.25	1.00
5.083	1.34	11.167	5.18	17.250	1.50	23.33	1.00
5.167	1.34	11.250	5.18	17.333	1.50	23.42	1.00
5.250	1.34	11.333	8.02	17.417	1.50	23.50	1.00
5.333	1.34	11.417	8.02	17.500	1.50	23.58	1.00
5.417	1.34	11.500	8.02	17.583	1.50	23.67	1.00
5.500	1.34	11.583	8.02	17.667	1.50	23.75	1.00
5.583	1.34	11.667	8.02	17.750	1.50	23.83	1.00
5.667	1.34	11.750	8.02	17.833	1.50	23.92	1.00
5.750	1.34	11.833	24.72	17.917	1.50	24.00	1.00
5.833	1.34	11.917	24.72	18.000	1.50	24.08	1.00
5.917	1.34	12.000	24.72	18.083	1.50	24.17	1.00
6.000	1.34	12.083	102.21	18.167	1.50	24.25	1.00
6.083	1.34	12.167	102.22	18.250	1.50		

Unit Hyd Qpeak (cms)= 0.637

PEAK FLOW (cms)= 0.201 (i)
TIME TO PEAK (hrs)= 13.167
RUNOFF VOLUME (mm)= 16.662
TOTAL RAINFALL (mm)= 83.510
RUNOFF COEFFICIENT = 0.200

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
STANDHYD (0014)	Area (ha)=	1.87	
ID= 1 DT= 5.0 min	Total Imp(%)=	43.28	Dir. Conn.(%)= 10.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	0.81	1.06

Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	111.65	25.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.34	12.250	102.22	18.33	1.50
0.167	0.00	6.250	1.34	12.333	12.04	18.42	1.50
0.250	0.00	6.333	1.50	12.417	12.03	18.50	1.50
0.333	0.92	6.417	1.50	12.500	12.03	18.58	1.50
0.417	0.92	6.500	1.50	12.583	12.03	18.67	1.50
0.500	0.92	6.583	1.50	12.667	12.03	18.75	1.50
0.583	0.92	6.667	1.50	12.750	12.03	18.83	1.50
0.667	0.92	6.750	1.50	12.833	6.18	18.92	1.50
0.750	0.92	6.833	1.50	12.917	6.18	19.00	1.50
0.833	0.92	6.917	1.50	13.000	6.18	19.08	1.50
0.917	0.92	7.000	1.50	13.083	6.18	19.17	1.50
1.000	0.92	7.083	1.50	13.167	6.18	19.25	1.50
1.083	0.92	7.167	1.50	13.250	6.18	19.33	1.50
1.167	0.92	7.250	1.50	13.333	4.51	19.42	1.50
1.250	0.92	7.333	1.84	13.417	4.51	19.50	1.50
1.333	0.92	7.417	1.84	13.500	4.51	19.58	1.50
1.417	0.92	7.500	1.84	13.583	4.51	19.67	1.50
1.500	0.92	7.583	1.84	13.667	4.51	19.75	1.50
1.583	0.92	7.667	1.84	13.750	4.51	19.83	1.50
1.667	0.92	7.750	1.84	13.833	3.51	19.92	1.50
1.750	0.92	7.833	1.84	13.917	3.51	20.00	1.50
1.833	0.92	7.917	1.84	14.000	3.51	20.08	1.50
1.917	0.92	8.000	1.84	14.083	3.51	20.17	1.50
2.000	0.92	8.083	1.84	14.167	3.51	20.25	1.50
2.083	0.92	8.167	1.84	14.250	3.51	20.33	1.00
2.167	0.92	8.250	1.84	14.333	2.51	20.42	1.00
2.250	0.92	8.333	2.17	14.417	2.51	20.50	1.00
2.333	1.09	8.417	2.17	14.500	2.51	20.58	1.00
2.417	1.09	8.500	2.17	14.583	2.51	20.67	1.00
2.500	1.09	8.583	2.17	14.667	2.51	20.75	1.00
2.583	1.09	8.667	2.17	14.750	2.51	20.83	1.00
2.667	1.09	8.750	2.17	14.833	2.51	20.92	1.00
2.750	1.09	8.833	2.34	14.917	2.51	21.00	1.00
2.833	1.09	8.917	2.34	15.000	2.51	21.08	1.00
2.917	1.09	9.000	2.34	15.083	2.51	21.17	1.00
3.000	1.09	9.083	2.34	15.167	2.51	21.25	1.00
3.083	1.09	9.167	2.34	15.250	2.51	21.33	1.00

3.167	1.09	9.250	2.34	15.333	2.51	21.42	1.00
3.250	1.09	9.333	2.67	15.417	2.51	21.50	1.00
3.333	1.09	9.417	2.67	15.500	2.51	21.58	1.00
3.417	1.09	9.500	2.67	15.583	2.51	21.67	1.00
3.500	1.09	9.583	2.67	15.667	2.51	21.75	1.00
3.583	1.09	9.667	2.67	15.750	2.51	21.83	1.00
3.667	1.09	9.750	2.67	15.833	2.51	21.92	1.00
3.750	1.09	9.833	3.01	15.917	2.51	22.00	1.00
3.833	1.09	9.917	3.01	16.000	2.51	22.08	1.00
3.917	1.09	10.000	3.01	16.083	2.51	22.17	1.00
4.000	1.09	10.083	3.01	16.167	2.51	22.25	1.00
4.083	1.09	10.167	3.01	16.250	2.51	22.33	1.00
4.167	1.09	10.250	3.01	16.333	1.50	22.42	1.00
4.250	1.09	10.333	3.84	16.417	1.50	22.50	1.00
4.333	1.34	10.417	3.84	16.500	1.50	22.58	1.00
4.417	1.34	10.500	3.84	16.583	1.50	22.67	1.00
4.500	1.34	10.583	3.84	16.667	1.50	22.75	1.00
4.583	1.34	10.667	3.84	16.750	1.50	22.83	1.00
4.667	1.34	10.750	3.84	16.833	1.50	22.92	1.00
4.750	1.34	10.833	5.18	16.917	1.50	23.00	1.00
4.833	1.34	10.917	5.18	17.000	1.50	23.08	1.00
4.917	1.34	11.000	5.18	17.083	1.50	23.17	1.00
5.000	1.34	11.083	5.18	17.167	1.50	23.25	1.00
5.083	1.34	11.167	5.18	17.250	1.50	23.33	1.00
5.167	1.34	11.250	5.18	17.333	1.50	23.42	1.00
5.250	1.34	11.333	8.02	17.417	1.50	23.50	1.00
5.333	1.34	11.417	8.02	17.500	1.50	23.58	1.00
5.417	1.34	11.500	8.02	17.583	1.50	23.67	1.00
5.500	1.34	11.583	8.02	17.667	1.50	23.75	1.00
5.583	1.34	11.667	8.02	17.750	1.50	23.83	1.00
5.667	1.34	11.750	8.02	17.833	1.50	23.92	1.00
5.750	1.34	11.833	24.72	17.917	1.50	24.00	1.00
5.833	1.34	11.917	24.72	18.000	1.50	24.08	1.00
5.917	1.34	12.000	24.72	18.083	1.50	24.17	1.00
6.000	1.34	12.083	102.21	18.167	1.50	24.25	1.00
6.083	1.34	12.167	102.22	18.250	1.50		

Max.Eff.Inten.(mm/hr)=	102.22	119.87	
over (min)	5.00	10.00	
Storage Coeff. (min)=	3.33 (ii)	8.28 (ii)	
Unit Hyd. Tpeak (min)=	5.00	10.00	
Unit Hyd. peak (cms)=	0.26	0.13	
			TOTALS
PEAK FLOW (cms)=	0.05	0.27	0.323 (iii)
TIME TO PEAK (hrs)=	12.25	12.25	12.25
RUNOFF VOLUME (mm)=	82.51	51.43	54.53
TOTAL RAINFALL (mm)=	83.51	83.51	83.51
RUNOFF COEFFICIENT =	0.99	0.62	0.65

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 78.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0040)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0001):	39.68	0.639	13.50	23.61
+ ID2= 2 (0014):	1.87	0.323	12.25	54.53
ID = 3 (0040):	41.55	0.661	13.42	25.00

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0040)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0040):	41.55	0.661	13.42	25.00
+ ID2= 2 (0029):	14.85	0.201	13.17	16.66
ID = 1 (0040):	56.40	0.856	13.33	22.81

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0039):	134.78	1.349	13.83	19.12
+ ID2= 2 (0040):	56.40	0.856	13.33	22.81
ID = 3 (0023):	191.18	2.168	13.58	20.21

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

****
** SIMULATION:I - 10-year SCS **
****

READ STORM	Filename: C:\Users\ecomish\AppData\Local\Temp\49208e0f-499d-4cb6-b2a9-d1492d706baa\fb02d2ed
Ptotal= 96.98 mm	Comments: 10yr 24hr 15min SCS Type II (MTO) - 15%

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.00	0.00	6.25	1.75	12.50	13.97	18.75	1.75
0.25	1.07	6.50	1.75	12.75	7.18	19.00	1.75
0.50	1.07	6.75	1.75	13.00	7.18	19.25	1.75
0.75	1.07	7.00	1.75	13.25	5.24	19.50	1.75
1.00	1.07	7.25	2.13	13.50	5.24	19.75	1.75
1.25	1.07	7.50	2.13	13.75	4.07	20.00	1.75
1.50	1.07	7.75	2.13	14.00	4.07	20.25	1.16
1.75	1.07	8.00	2.13	14.25	2.91	20.50	1.16
2.00	1.07	8.25	2.52	14.50	2.91	20.75	1.16
2.25	1.26	8.50	2.52	14.75	2.91	21.00	1.16
2.50	1.26	8.75	2.72	15.00	2.91	21.25	1.16
2.75	1.26	9.00	2.72	15.25	2.91	21.50	1.16
3.00	1.26	9.25	3.10	15.50	2.91	21.75	1.16
3.25	1.26	9.50	3.10	15.75	2.91	22.00	1.16
3.50	1.26	9.75	3.49	16.00	2.91	22.25	1.16
3.75	1.26	10.00	3.49	16.25	1.75	22.50	1.16
4.00	1.26	10.25	4.46	16.50	1.75	22.75	1.16
4.25	1.55	10.50	4.46	16.75	1.75	23.00	1.16
4.50	1.55	10.75	6.01	17.00	1.75	23.25	1.16
4.75	1.55	11.00	6.01	17.25	1.75	23.50	1.16
5.00	1.55	11.25	9.31	17.50	1.75	23.75	1.16
5.25	1.55	11.50	9.31	17.75	1.75	24.00	1.16
5.50	1.55	11.75	28.71	18.00	1.75		
5.75	1.55	12.00	118.70	18.25	1.75		
6.00	1.55	12.25	13.97	18.50	1.75		

CALIB			
NASHYD (0025)|	Area (ha)= 100.92	Curve Number (CN)= 55.9	
ID= 1 DT= 5.0 min |	Ia (mm)= 7.89	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 1.70		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.55	12.250	118.70	18.33	1.75
0.167	0.00	6.250	1.55	12.333	13.98	18.42	1.75
0.250	0.00	6.333	1.75	12.417	13.97	18.50	1.75
0.333	1.07	6.417	1.75	12.500	13.97	18.58	1.75
0.417	1.07	6.500	1.75	12.583	13.97	18.67	1.75
0.500	1.07	6.583	1.75	12.667	13.97	18.75	1.75
0.583	1.07	6.667	1.75	12.750	13.97	18.83	1.75
0.667	1.07	6.750	1.75	12.833	7.18	18.92	1.75
0.750	1.07	6.833	1.75	12.917	7.18	19.00	1.75
0.833	1.07	6.917	1.75	13.000	7.18	19.08	1.75
0.917	1.07	7.000	1.75	13.083	7.18	19.17	1.75
1.000	1.07	7.083	1.75	13.167	7.18	19.25	1.75
1.083	1.07	7.167	1.75	13.250	7.18	19.33	1.75
1.167	1.07	7.250	1.75	13.333	5.24	19.42	1.75
1.250	1.07	7.333	2.13	13.417	5.24	19.50	1.75
1.333	1.07	7.417	2.13	13.500	5.24	19.58	1.75
1.417	1.07	7.500	2.13	13.583	5.24	19.67	1.75
1.500	1.07	7.583	2.13	13.667	5.24	19.75	1.75
1.583	1.07	7.667	2.13	13.750	5.24	19.83	1.75
1.667	1.07	7.750	2.13	13.833	4.07	19.92	1.75
1.750	1.07	7.833	2.13	13.917	4.07	20.00	1.75
1.833	1.07	7.917	2.13	14.000	4.07	20.08	1.75
1.917	1.07	8.000	2.13	14.083	4.07	20.17	1.75
2.000	1.07	8.083	2.13	14.167	4.07	20.25	1.75
2.083	1.07	8.167	2.13	14.250	4.07	20.33	1.16
2.167	1.07	8.250	2.13	14.333	2.91	20.42	1.16
2.250	1.07	8.333	2.52	14.417	2.91	20.50	1.16
2.333	1.26	8.417	2.52	14.500	2.91	20.58	1.16
2.417	1.26	8.500	2.52	14.583	2.91	20.67	1.16
2.500	1.26	8.583	2.52	14.667	2.91	20.75	1.16
2.583	1.26	8.667	2.52	14.750	2.91	20.83	1.16
2.667	1.26	8.750	2.52	14.833	2.91	20.92	1.16
2.750	1.26	8.833	2.72	14.917	2.91	21.00	1.16
2.833	1.26	8.917	2.72	15.000	2.91	21.08	1.16
2.917	1.26	9.000	2.72	15.083	2.91	21.17	1.16
3.000	1.26	9.083	2.72	15.167	2.91	21.25	1.16
3.083	1.26	9.167	2.72	15.250	2.91	21.33	1.16
3.167	1.26	9.250	2.72	15.333	2.91	21.42	1.16
3.250	1.26	9.333	3.10	15.417	2.91	21.50	1.16
3.333	1.26	9.417	3.10	15.500	2.91	21.58	1.16
3.417	1.26	9.500	3.10	15.583	2.91	21.67	1.16
3.500	1.26	9.583	3.10	15.667	2.91	21.75	1.16
3.583	1.26	9.667	3.10	15.750	2.91	21.83	1.16
3.667	1.26	9.750	3.10	15.833	2.91	21.92	1.16

3.750	1.26	9.833	3.49	15.917	2.91	22.00	1.16
3.833	1.26	9.917	3.49	16.000	2.91	22.08	1.16
3.917	1.26	10.000	3.49	16.083	2.91	22.17	1.16
4.000	1.26	10.083	3.49	16.167	2.91	22.25	1.16
4.083	1.26	10.167	3.49	16.250	2.91	22.33	1.16
4.167	1.26	10.250	3.49	16.333	1.75	22.42	1.16
4.250	1.26	10.333	4.46	16.417	1.75	22.50	1.16
4.333	1.55	10.417	4.46	16.500	1.75	22.58	1.16
4.417	1.55	10.500	4.46	16.583	1.75	22.67	1.16
4.500	1.55	10.583	4.46	16.667	1.75	22.75	1.16
4.583	1.55	10.667	4.46	16.750	1.75	22.83	1.16
4.667	1.55	10.750	4.46	16.833	1.75	22.92	1.16
4.750	1.55	10.833	6.01	16.917	1.75	23.00	1.16
4.833	1.55	10.917	6.01	17.000	1.75	23.08	1.16
4.917	1.55	11.000	6.01	17.083	1.75	23.17	1.16
5.000	1.55	11.083	6.01	17.167	1.75	23.25	1.16
5.083	1.55	11.167	6.01	17.250	1.75	23.33	1.16
5.167	1.55	11.250	6.01	17.333	1.75	23.42	1.16
5.250	1.55	11.333	9.31	17.417	1.75	23.50	1.16
5.333	1.55	11.417	9.31	17.500	1.75	23.58	1.16
5.417	1.55	11.500	9.31	17.583	1.75	23.67	1.16
5.500	1.55	11.583	9.31	17.667	1.75	23.75	1.16
5.583	1.55	11.667	9.31	17.750	1.75	23.83	1.16
5.667	1.55	11.750	9.31	17.833	1.75	23.92	1.16
5.750	1.55	11.833	28.70	17.917	1.75	24.00	1.16
5.833	1.55	11.917	28.71	18.000	1.75	24.08	1.16
5.917	1.55	12.000	28.71	18.083	1.75	24.17	1.16
6.000	1.55	12.083	118.69	18.167	1.75	24.25	1.16
6.083	1.55	12.167	118.70	18.250	1.75		

Unit Hyd Qpeak (cms)= 2.267

PEAK FLOW (cms)= 1.433 (i)
TIME TO PEAK (hrs)= 14.083
RUNOFF VOLUME (mm)= 27.450
TOTAL RAINFALL (mm)= 96.980
RUNOFF COEFFICIENT = 0.283

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0002)	Area (ha)=	23.99	Curve Number (CN)=	44.7	
ID= 1 DT= 5.0 min	Ia (mm)=	10.91	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	0.97			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.55	12.250	118.70	18.33	1.75
0.167	0.00	6.250	1.55	12.333	13.98	18.42	1.75
0.250	0.00	6.333	1.75	12.417	13.97	18.50	1.75
0.333	1.07	6.417	1.75	12.500	13.97	18.58	1.75
0.417	1.07	6.500	1.75	12.583	13.97	18.67	1.75
0.500	1.07	6.583	1.75	12.667	13.97	18.75	1.75
0.583	1.07	6.667	1.75	12.750	13.97	18.83	1.75
0.667	1.07	6.750	1.75	12.833	7.18	18.92	1.75
0.750	1.07	6.833	1.75	12.917	7.18	19.00	1.75
0.833	1.07	6.917	1.75	13.000	7.18	19.08	1.75
0.917	1.07	7.000	1.75	13.083	7.18	19.17	1.75
1.000	1.07	7.083	1.75	13.167	7.18	19.25	1.75
1.083	1.07	7.167	1.75	13.250	7.18	19.33	1.75
1.167	1.07	7.250	1.75	13.333	5.24	19.42	1.75
1.250	1.07	7.333	2.13	13.417	5.24	19.50	1.75
1.333	1.07	7.417	2.13	13.500	5.24	19.58	1.75
1.417	1.07	7.500	2.13	13.583	5.24	19.67	1.75
1.500	1.07	7.583	2.13	13.667	5.24	19.75	1.75
1.583	1.07	7.667	2.13	13.750	5.24	19.83	1.75
1.667	1.07	7.750	2.13	13.833	4.07	19.92	1.75
1.750	1.07	7.833	2.13	13.917	4.07	20.00	1.75
1.833	1.07	7.917	2.13	14.000	4.07	20.08	1.75
1.917	1.07	8.000	2.13	14.083	4.07	20.17	1.75
2.000	1.07	8.083	2.13	14.167	4.07	20.25	1.75
2.083	1.07	8.167	2.13	14.250	4.07	20.33	1.16
2.167	1.07	8.250	2.13	14.333	2.91	20.42	1.16
2.250	1.07	8.333	2.52	14.417	2.91	20.50	1.16
2.333	1.26	8.417	2.52	14.500	2.91	20.58	1.16
2.417	1.26	8.500	2.52	14.583	2.91	20.67	1.16
2.500	1.26	8.583	2.52	14.667	2.91	20.75	1.16
2.583	1.26	8.667	2.52	14.750	2.91	20.83	1.16
2.667	1.26	8.750	2.52	14.833	2.91	20.92	1.16
2.750	1.26	8.833	2.72	14.917	2.91	21.00	1.16
2.833	1.26	8.917	2.72	15.000	2.91	21.08	1.16
2.917	1.26	9.000	2.72	15.083	2.91	21.17	1.16
3.000	1.26	9.083	2.72	15.167	2.91	21.25	1.16
3.083	1.26	9.167	2.72	15.250	2.91	21.33	1.16
3.167	1.26	9.250	2.72	15.333	2.91	21.42	1.16
3.250	1.26	9.333	3.10	15.417	2.91	21.50	1.16
3.333	1.26	9.417	3.10	15.500	2.91	21.58	1.16
3.417	1.26	9.500	3.10	15.583	2.91	21.67	1.16
3.500	1.26	9.583	3.10	15.667	2.91	21.75	1.16
3.583	1.26	9.667	3.10	15.750	2.91	21.83	1.16

3.667	1.26	9.750	3.10	15.833	2.91	21.92	1.16
3.750	1.26	9.833	3.49	15.917	2.91	22.00	1.16
3.833	1.26	9.917	3.49	16.000	2.91	22.08	1.16
3.917	1.26	10.000	3.49	16.083	2.91	22.17	1.16
4.000	1.26	10.083	3.49	16.167	2.91	22.25	1.16
4.083	1.26	10.167	3.49	16.250	2.91	22.33	1.16
4.167	1.26	10.250	3.49	16.333	1.75	22.42	1.16
4.250	1.26	10.333	4.46	16.417	1.75	22.50	1.16
4.333	1.55	10.417	4.46	16.500	1.75	22.58	1.16
4.417	1.55	10.500	4.46	16.583	1.75	22.67	1.16
4.500	1.55	10.583	4.46	16.667	1.75	22.75	1.16
4.583	1.55	10.667	4.46	16.750	1.75	22.83	1.16
4.667	1.55	10.750	4.46	16.833	1.75	22.92	1.16
4.750	1.55	10.833	6.01	16.917	1.75	23.00	1.16
4.833	1.55	10.917	6.01	17.000	1.75	23.08	1.16
4.917	1.55	11.000	6.01	17.083	1.75	23.17	1.16
5.000	1.55	11.083	6.01	17.167	1.75	23.25	1.16
5.083	1.55	11.167	6.01	17.250	1.75	23.33	1.16
5.167	1.55	11.250	6.01	17.333	1.75	23.42	1.16
5.250	1.55	11.333	9.31	17.417	1.75	23.50	1.16
5.333	1.55	11.417	9.31	17.500	1.75	23.58	1.16
5.417	1.55	11.500	9.31	17.583	1.75	23.67	1.16
5.500	1.55	11.583	9.31	17.667	1.75	23.75	1.16
5.583	1.55	11.667	9.31	17.750	1.75	23.83	1.16
5.667	1.55	11.750	9.31	17.833	1.75	23.92	1.16
5.750	1.55	11.833	28.70	17.917	1.75	24.00	1.16
5.833	1.55	11.917	28.71	18.000	1.75	24.08	1.16
5.917	1.55	12.000	28.71	18.083	1.75	24.17	1.16
6.000	1.55	12.083	118.69	18.167	1.75	24.25	1.16
6.083	1.55	12.167	118.70	18.250	1.75		

Unit Hyd Qpeak (cms)= 0.945

PEAK FLOW (cms)= 0.341 (i)
TIME TO PEAK (hrs)= 13.250
RUNOFF VOLUME (mm)= 18.506
TOTAL RAINFALL (mm)= 96.980
RUNOFF COEFFICIENT = 0.191

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0028)	Area (ha)=	6.37	Curve Number (CN)=	50.5	
ID= 1 DT= 5.0 min	Ia (mm)=	15.69	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	0.77			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.55	12.250	118.70	18.33	1.75
0.167	0.00	6.250	1.55	12.333	13.98	18.42	1.75
0.250	0.00	6.333	1.75	12.417	13.97	18.50	1.75
0.333	1.07	6.417	1.75	12.500	13.97	18.58	1.75
0.417	1.07	6.500	1.75	12.583	13.97	18.67	1.75
0.500	1.07	6.583	1.75	12.667	13.97	18.75	1.75
0.583	1.07	6.667	1.75	12.750	13.97	18.83	1.75
0.667	1.07	6.750	1.75	12.833	7.18	18.92	1.75
0.750	1.07	6.833	1.75	12.917	7.18	19.00	1.75
0.833	1.07	6.917	1.75	13.000	7.18	19.08	1.75
0.917	1.07	7.000	1.75	13.083	7.18	19.17	1.75
1.000	1.07	7.083	1.75	13.167	7.18	19.25	1.75
1.083	1.07	7.167	1.75	13.250	7.18	19.33	1.75
1.167	1.07	7.250	1.75	13.333	5.24	19.42	1.75
1.250	1.07	7.333	2.13	13.417	5.24	19.50	1.75
1.333	1.07	7.417	2.13	13.500	5.24	19.58	1.75
1.417	1.07	7.500	2.13	13.583	5.24	19.67	1.75
1.500	1.07	7.583	2.13	13.667	5.24	19.75	1.75
1.583	1.07	7.667	2.13	13.750	5.24	19.83	1.75
1.667	1.07	7.750	2.13	13.833	4.07	19.92	1.75
1.750	1.07	7.833	2.13	13.917	4.07	20.00	1.75
1.833	1.07	7.917	2.13	14.000	4.07	20.08	1.75
1.917	1.07	8.000	2.13	14.083	4.07	20.17	1.75
2.000	1.07	8.083	2.13	14.167	4.07	20.25	1.75
2.083	1.07	8.167	2.13	14.250	4.07	20.33	1.16
2.167	1.07	8.250	2.13	14.333	2.91	20.42	1.16
2.250	1.07	8.333	2.52	14.417	2.91	20.50	1.16
2.333	1.26	8.417	2.52	14.500	2.91	20.58	1.16
2.417	1.26	8.500	2.52	14.583	2.91	20.67	1.16
2.500	1.26	8.583	2.52	14.667	2.91	20.75	1.16
2.583	1.26	8.667	2.52	14.750	2.91	20.83	1.16
2.667	1.26	8.750	2.52	14.833	2.91	20.92	1.16
2.750	1.26	8.833	2.72	14.917	2.91	21.00	1.16
2.833	1.26	8.917	2.72	15.000	2.91	21.08	1.16
2.917	1.26	9.000	2.72	15.083	2.91	21.17	1.16
3.000	1.26	9.083	2.72	15.167	2.91	21.25	1.16
3.083	1.26	9.167	2.72	15.250	2.91	21.33	1.16
3.167	1.26	9.250	2.72	15.333	2.91	21.42	1.16
3.250	1.26	9.333	3.10	15.417	2.91	21.50	1.16
3.333	1.26	9.417	3.10	15.500	2.91	21.58	1.16
3.417	1.26	9.500	3.10	15.583	2.91	21.67	1.16
3.500	1.26	9.583	3.10	15.667	2.91	21.75	1.16

3.583	1.26	9.667	3.10	15.750	2.91	21.83	1.16
3.667	1.26	9.750	3.10	15.833	2.91	21.92	1.16
3.750	1.26	9.833	3.49	15.917	2.91	22.00	1.16
3.833	1.26	9.917	3.49	16.000	2.91	22.08	1.16
3.917	1.26	10.000	3.49	16.083	2.91	22.17	1.16
4.000	1.26	10.083	3.49	16.167	2.91	22.25	1.16
4.083	1.26	10.167	3.49	16.250	2.91	22.33	1.16
4.167	1.26	10.250	3.49	16.333	1.75	22.42	1.16
4.250	1.26	10.333	4.46	16.417	1.75	22.50	1.16
4.333	1.55	10.417	4.46	16.500	1.75	22.58	1.16
4.417	1.55	10.500	4.46	16.583	1.75	22.67	1.16
4.500	1.55	10.583	4.46	16.667	1.75	22.75	1.16
4.583	1.55	10.667	4.46	16.750	1.75	22.83	1.16
4.667	1.55	10.750	4.46	16.833	1.75	22.92	1.16
4.750	1.55	10.833	6.01	16.917	1.75	23.00	1.16
4.833	1.55	10.917	6.01	17.000	1.75	23.08	1.16
4.917	1.55	11.000	6.01	17.083	1.75	23.17	1.16
5.000	1.55	11.083	6.01	17.167	1.75	23.25	1.16
5.083	1.55	11.167	6.01	17.250	1.75	23.33	1.16
5.167	1.55	11.250	6.01	17.333	1.75	23.42	1.16
5.250	1.55	11.333	9.31	17.417	1.75	23.50	1.16
5.333	1.55	11.417	9.31	17.500	1.75	23.58	1.16
5.417	1.55	11.500	9.31	17.583	1.75	23.67	1.16
5.500	1.55	11.583	9.31	17.667	1.75	23.75	1.16
5.583	1.55	11.667	9.31	17.750	1.75	23.83	1.16
5.667	1.55	11.750	9.31	17.833	1.75	23.92	1.16
5.750	1.55	11.833	28.70	17.917	1.75	24.00	1.16
5.833	1.55	11.917	28.71	18.000	1.75	24.08	1.16
5.917	1.55	12.000	28.71	18.083	1.75	24.17	1.16
6.000	1.55	12.083	118.69	18.167	1.75	24.25	1.16
6.083	1.55	12.167	118.70	18.250	1.75		

Unit Hyd Qpeak (cms)= 0.316

PEAK FLOW (cms)= 0.115 (i)
TIME TO PEAK (hrs)= 13.000
RUNOFF VOLUME (mm)= 19.996
TOTAL RAINFALL (mm)= 96.980
RUNOFF COEFFICIENT = 0.206

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	
NASHYD (0030)	Area (ha)= 1.70 Curve Number (CN)= 60.5
ID= 1 DT= 5.0 min	Ia (mm)= 9.65 # of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.40

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.55	12.250	118.70	18.33	1.75
0.167	0.00	6.250	1.55	12.333	13.98	18.42	1.75
0.250	0.00	6.333	1.75	12.417	13.97	18.50	1.75
0.333	1.07	6.417	1.75	12.500	13.97	18.58	1.75
0.417	1.07	6.500	1.75	12.583	13.97	18.67	1.75
0.500	1.07	6.583	1.75	12.667	13.97	18.75	1.75
0.583	1.07	6.667	1.75	12.750	13.97	18.83	1.75
0.667	1.07	6.750	1.75	12.833	7.18	18.92	1.75
0.750	1.07	6.833	1.75	12.917	7.18	19.00	1.75
0.833	1.07	6.917	1.75	13.000	7.18	19.08	1.75
0.917	1.07	7.000	1.75	13.083	7.18	19.17	1.75
1.000	1.07	7.083	1.75	13.167	7.18	19.25	1.75
1.083	1.07	7.167	1.75	13.250	7.18	19.33	1.75
1.167	1.07	7.250	1.75	13.333	5.24	19.42	1.75
1.250	1.07	7.333	2.13	13.417	5.24	19.50	1.75
1.333	1.07	7.417	2.13	13.500	5.24	19.58	1.75
1.417	1.07	7.500	2.13	13.583	5.24	19.67	1.75
1.500	1.07	7.583	2.13	13.667	5.24	19.75	1.75
1.583	1.07	7.667	2.13	13.750	5.24	19.83	1.75
1.667	1.07	7.750	2.13	13.833	4.07	19.92	1.75
1.750	1.07	7.833	2.13	13.917	4.07	20.00	1.75
1.833	1.07	7.917	2.13	14.000	4.07	20.08	1.75
1.917	1.07	8.000	2.13	14.083	4.07	20.17	1.75
2.000	1.07	8.083	2.13	14.167	4.07	20.25	1.75
2.083	1.07	8.167	2.13	14.250	4.07	20.33	1.16
2.167	1.07	8.250	2.13	14.333	2.91	20.42	1.16
2.250	1.07	8.333	2.52	14.417	2.91	20.50	1.16
2.333	1.26	8.417	2.52	14.500	2.91	20.58	1.16
2.417	1.26	8.500	2.52	14.583	2.91	20.67	1.16
2.500	1.26	8.583	2.52	14.667	2.91	20.75	1.16
2.583	1.26	8.667	2.52	14.750	2.91	20.83	1.16
2.667	1.26	8.750	2.52	14.833	2.91	20.92	1.16
2.750	1.26	8.833	2.72	14.917	2.91	21.00	1.16
2.833	1.26	8.917	2.72	15.000	2.91	21.08	1.16
2.917	1.26	9.000	2.72	15.083	2.91	21.17	1.16
3.000	1.26	9.083	2.72	15.167	2.91	21.25	1.16
3.083	1.26	9.167	2.72	15.250	2.91	21.33	1.16
3.167	1.26	9.250	2.72	15.333	2.91	21.42	1.16
3.250	1.26	9.333	3.10	15.417	2.91	21.50	1.16
3.333	1.26	9.417	3.10	15.500	2.91	21.58	1.16
3.417	1.26	9.500	3.10	15.583	2.91	21.67	1.16

3.500	1.26	9.583	3.10	15.667	2.91	21.75	1.16
3.583	1.26	9.667	3.10	15.750	2.91	21.83	1.16
3.667	1.26	9.750	3.10	15.833	2.91	21.92	1.16
3.750	1.26	9.833	3.49	15.917	2.91	22.00	1.16
3.833	1.26	9.917	3.49	16.000	2.91	22.08	1.16
3.917	1.26	10.000	3.49	16.083	2.91	22.17	1.16
4.000	1.26	10.083	3.49	16.167	2.91	22.25	1.16
4.083	1.26	10.167	3.49	16.250	2.91	22.33	1.16
4.167	1.26	10.250	3.49	16.333	1.75	22.42	1.16
4.250	1.26	10.333	4.46	16.417	1.75	22.50	1.16
4.333	1.55	10.417	4.46	16.500	1.75	22.58	1.16
4.417	1.55	10.500	4.46	16.583	1.75	22.67	1.16
4.500	1.55	10.583	4.46	16.667	1.75	22.75	1.16
4.583	1.55	10.667	4.46	16.750	1.75	22.83	1.16
4.667	1.55	10.750	4.46	16.833	1.75	22.92	1.16
4.750	1.55	10.833	6.01	16.917	1.75	23.00	1.16
4.833	1.55	10.917	6.01	17.000	1.75	23.08	1.16
4.917	1.55	11.000	6.01	17.083	1.75	23.17	1.16
5.000	1.55	11.083	6.01	17.167	1.75	23.25	1.16
5.083	1.55	11.167	6.01	17.250	1.75	23.33	1.16
5.167	1.55	11.250	6.01	17.333	1.75	23.42	1.16
5.250	1.55	11.333	9.31	17.417	1.75	23.50	1.16
5.333	1.55	11.417	9.31	17.500	1.75	23.58	1.16
5.417	1.55	11.500	9.31	17.583	1.75	23.67	1.16
5.500	1.55	11.583	9.31	17.667	1.75	23.75	1.16
5.583	1.55	11.667	9.31	17.750	1.75	23.83	1.16
5.667	1.55	11.750	9.31	17.833	1.75	23.92	1.16
5.750	1.55	11.833	28.70	17.917	1.75	24.00	1.16
5.833	1.55	11.917	28.71	18.000	1.75	24.08	1.16
5.917	1.55	12.000	28.71	18.083	1.75	24.17	1.16
6.000	1.55	12.083	118.69	18.167	1.75	24.25	1.16
6.083	1.55	12.167	118.70	18.250	1.75		

Unit Hyd Qpeak (cms)= 0.162

PEAK FLOW (cms)= 0.078 (i)
TIME TO PEAK (hrs)= 12.500
RUNOFF VOLUME (mm)= 30.088
TOTAL RAINFALL (mm)= 96.980
RUNOFF COEFFICIENT = 0.310

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	
NASHYD (0031)	Area (ha)= 1.80 Curve Number (CN)= 50.0
ID= 1 DT= 5.0 min	Ia (mm)= 16.00 # of Linear Res.(N)= 3.00

---------- U.H. Tp(hrs)= 0.76

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.55	12.250	118.70	18.33	1.75
0.167	0.00	6.250	1.55	12.333	13.98	18.42	1.75
0.250	0.00	6.333	1.75	12.417	13.97	18.50	1.75
0.333	1.07	6.417	1.75	12.500	13.97	18.58	1.75
0.417	1.07	6.500	1.75	12.583	13.97	18.67	1.75
0.500	1.07	6.583	1.75	12.667	13.97	18.75	1.75
0.583	1.07	6.667	1.75	12.750	13.97	18.83	1.75
0.667	1.07	6.750	1.75	12.833	7.18	18.92	1.75
0.750	1.07	6.833	1.75	12.917	7.18	19.00	1.75
0.833	1.07	6.917	1.75	13.000	7.18	19.08	1.75
0.917	1.07	7.000	1.75	13.083	7.18	19.17	1.75
1.000	1.07	7.083	1.75	13.167	7.18	19.25	1.75
1.083	1.07	7.167	1.75	13.250	7.18	19.33	1.75
1.167	1.07	7.250	1.75	13.333	5.24	19.42	1.75
1.250	1.07	7.333	2.13	13.417	5.24	19.50	1.75
1.333	1.07	7.417	2.13	13.500	5.24	19.58	1.75
1.417	1.07	7.500	2.13	13.583	5.24	19.67	1.75
1.500	1.07	7.583	2.13	13.667	5.24	19.75	1.75
1.583	1.07	7.667	2.13	13.750	5.24	19.83	1.75
1.667	1.07	7.750	2.13	13.833	4.07	19.92	1.75
1.750	1.07	7.833	2.13	13.917	4.07	20.00	1.75
1.833	1.07	7.917	2.13	14.000	4.07	20.08	1.75
1.917	1.07	8.000	2.13	14.083	4.07	20.17	1.75
2.000	1.07	8.083	2.13	14.167	4.07	20.25	1.75
2.083	1.07	8.167	2.13	14.250	4.07	20.33	1.16
2.167	1.07	8.250	2.13	14.333	2.91	20.42	1.16
2.250	1.07	8.333	2.52	14.417	2.91	20.50	1.16
2.333	1.26	8.417	2.52	14.500	2.91	20.58	1.16
2.417	1.26	8.500	2.52	14.583	2.91	20.67	1.16
2.500	1.26	8.583	2.52	14.667	2.91	20.75	1.16
2.583	1.26	8.667	2.52	14.750	2.91	20.83	1.16
2.667	1.26	8.750	2.52	14.833	2.91	20.92	1.16
2.750	1.26	8.833	2.72	14.917	2.91	21.00	1.16
2.833	1.26	8.917	2.72	15.000	2.91	21.08	1.16
2.917	1.26	9.000	2.72	15.083	2.91	21.17	1.16
3.000	1.26	9.083	2.72	15.167	2.91	21.25	1.16
3.083	1.26	9.167	2.72	15.250	2.91	21.33	1.16
3.167	1.26	9.250	2.72	15.333	2.91	21.42	1.16
3.250	1.26	9.333	3.10	15.417	2.91	21.50	1.16
3.333	1.26	9.417	3.10	15.500	2.91	21.58	1.16

3.417	1.26	9.500	3.10	15.583	2.91	21.67	1.16
3.500	1.26	9.583	3.10	15.667	2.91	21.75	1.16
3.583	1.26	9.667	3.10	15.750	2.91	21.83	1.16
3.667	1.26	9.750	3.10	15.833	2.91	21.92	1.16
3.750	1.26	9.833	3.49	15.917	2.91	22.00	1.16
3.833	1.26	9.917	3.49	16.000	2.91	22.08	1.16
3.917	1.26	10.000	3.49	16.083	2.91	22.17	1.16
4.000	1.26	10.083	3.49	16.167	2.91	22.25	1.16
4.083	1.26	10.167	3.49	16.250	2.91	22.33	1.16
4.167	1.26	10.250	3.49	16.333	1.75	22.42	1.16
4.250	1.26	10.333	4.46	16.417	1.75	22.50	1.16
4.333	1.55	10.417	4.46	16.500	1.75	22.58	1.16
4.417	1.55	10.500	4.46	16.583	1.75	22.67	1.16
4.500	1.55	10.583	4.46	16.667	1.75	22.75	1.16
4.583	1.55	10.667	4.46	16.750	1.75	22.83	1.16
4.667	1.55	10.750	4.46	16.833	1.75	22.92	1.16
4.750	1.55	10.833	6.01	16.917	1.75	23.00	1.16
4.833	1.55	10.917	6.01	17.000	1.75	23.08	1.16
4.917	1.55	11.000	6.01	17.083	1.75	23.17	1.16
5.000	1.55	11.083	6.01	17.167	1.75	23.25	1.16
5.083	1.55	11.167	6.01	17.250	1.75	23.33	1.16
5.167	1.55	11.250	6.01	17.333	1.75	23.42	1.16
5.250	1.55	11.333	9.31	17.417	1.75	23.50	1.16
5.333	1.55	11.417	9.31	17.500	1.75	23.58	1.16
5.417	1.55	11.500	9.31	17.583	1.75	23.67	1.16
5.500	1.55	11.583	9.31	17.667	1.75	23.75	1.16
5.583	1.55	11.667	9.31	17.750	1.75	23.83	1.16
5.667	1.55	11.750	9.31	17.833	1.75	23.92	1.16
5.750	1.55	11.833	28.70	17.917	1.75	24.00	1.16
5.833	1.55	11.917	28.71	18.000	1.75	24.08	1.16
5.917	1.55	12.000	28.71	18.083	1.75	24.17	1.16
6.000	1.55	12.083	118.69	18.167	1.75	24.25	1.16
6.083	1.55	12.167	118.70	18.250	1.75		

Unit Hyd Qpeak (cms)= 0.090

PEAK FLOW (cms)= 0.032 (i)
TIME TO PEAK (hrs)= 13.000
RUNOFF VOLUME (mm)= 19.575
TOTAL RAINFALL (mm)= 96.980
RUNOFF COEFFICIENT = 0.202

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

| ADD HYD (0039)|

1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0002):	23.99	0.341	13.25	18.51
+ ID2= 2 (0025):	100.92	1.433	14.08	27.45
ID = 3 (0039):	124.91	1.700	13.92	25.73

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0039)|
3 + 2 = 1

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0039):	124.91	1.700	13.92	25.73
+ ID2= 2 (0028):	6.37	0.115	13.00	20.00
ID = 1 (0039):	131.28	1.776	13.83	25.45

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0039)|
1 + 2 = 3

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0039):	131.28	1.776	13.83	25.45
+ ID2= 2 (0030):	1.70	0.078	12.50	30.09
ID = 3 (0039):	132.98	1.792	13.83	25.51

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0039)|
3 + 2 = 1

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0039):	132.98	1.792	13.83	25.51
+ ID2= 2 (0031):	1.80	0.032	13.00	19.58
ID = 1 (0039):	134.78	1.814	13.83	25.43

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB	
NASHYD (0001)	Area (ha)= 39.68 Curve Number (CN)= 60.7

|ID= 1 DT= 5.0 min | Ia (mm)= 8.26 # of Linear Res.(N)= 3.00
---|---|---|---|---|---|---|---|
U.H. Tp(hrs)= 1.18

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.55	12.250	118.70	18.33	1.75
0.167	0.00	6.250	1.55	12.333	13.98	18.42	1.75
0.250	0.00	6.333	1.75	12.417	13.97	18.50	1.75
0.333	1.07	6.417	1.75	12.500	13.97	18.58	1.75
0.417	1.07	6.500	1.75	12.583	13.97	18.67	1.75
0.500	1.07	6.583	1.75	12.667	13.97	18.75	1.75
0.583	1.07	6.667	1.75	12.750	13.97	18.83	1.75
0.667	1.07	6.750	1.75	12.833	7.18	18.92	1.75
0.750	1.07	6.833	1.75	12.917	7.18	19.00	1.75
0.833	1.07	6.917	1.75	13.000	7.18	19.08	1.75
0.917	1.07	7.000	1.75	13.083	7.18	19.17	1.75
1.000	1.07	7.083	1.75	13.167	7.18	19.25	1.75
1.083	1.07	7.167	1.75	13.250	7.18	19.33	1.75
1.167	1.07	7.250	1.75	13.333	5.24	19.42	1.75
1.250	1.07	7.333	2.13	13.417	5.24	19.50	1.75
1.333	1.07	7.417	2.13	13.500	5.24	19.58	1.75
1.417	1.07	7.500	2.13	13.583	5.24	19.67	1.75
1.500	1.07	7.583	2.13	13.667	5.24	19.75	1.75
1.583	1.07	7.667	2.13	13.750	5.24	19.83	1.75
1.667	1.07	7.750	2.13	13.833	4.07	19.92	1.75
1.750	1.07	7.833	2.13	13.917	4.07	20.00	1.75
1.833	1.07	7.917	2.13	14.000	4.07	20.08	1.75
1.917	1.07	8.000	2.13	14.083	4.07	20.17	1.75
2.000	1.07	8.083	2.13	14.167	4.07	20.25	1.75
2.083	1.07	8.167	2.13	14.250	4.07	20.33	1.16
2.167	1.07	8.250	2.13	14.333	2.91	20.42	1.16
2.250	1.07	8.333	2.52	14.417	2.91	20.50	1.16
2.333	1.26	8.417	2.52	14.500	2.91	20.58	1.16
2.417	1.26	8.500	2.52	14.583	2.91	20.67	1.16
2.500	1.26	8.583	2.52	14.667	2.91	20.75	1.16
2.583	1.26	8.667	2.52	14.750	2.91	20.83	1.16
2.667	1.26	8.750	2.52	14.833	2.91	20.92	1.16
2.750	1.26	8.833	2.72	14.917	2.91	21.00	1.16
2.833	1.26	8.917	2.72	15.000	2.91	21.08	1.16
2.917	1.26	9.000	2.72	15.083	2.91	21.17	1.16
3.000	1.26	9.083	2.72	15.167	2.91	21.25	1.16
3.083	1.26	9.167	2.72	15.250	2.91	21.33	1.16
3.167	1.26	9.250	2.72	15.333	2.91	21.42	1.16
3.250	1.26	9.333	3.10	15.417	2.91	21.50	1.16

3.333	1.26	9.417	3.10	15.500	2.91	21.58	1.16
3.417	1.26	9.500	3.10	15.583	2.91	21.67	1.16
3.500	1.26	9.583	3.10	15.667	2.91	21.75	1.16
3.583	1.26	9.667	3.10	15.750	2.91	21.83	1.16
3.667	1.26	9.750	3.10	15.833	2.91	21.92	1.16
3.750	1.26	9.833	3.49	15.917	2.91	22.00	1.16
3.833	1.26	9.917	3.49	16.000	2.91	22.08	1.16
3.917	1.26	10.000	3.49	16.083	2.91	22.17	1.16
4.000	1.26	10.083	3.49	16.167	2.91	22.25	1.16
4.083	1.26	10.167	3.49	16.250	2.91	22.33	1.16
4.167	1.26	10.250	3.49	16.333	1.75	22.42	1.16
4.250	1.26	10.333	4.46	16.417	1.75	22.50	1.16
4.333	1.55	10.417	4.46	16.500	1.75	22.58	1.16
4.417	1.55	10.500	4.46	16.583	1.75	22.67	1.16
4.500	1.55	10.583	4.46	16.667	1.75	22.75	1.16
4.583	1.55	10.667	4.46	16.750	1.75	22.83	1.16
4.667	1.55	10.750	4.46	16.833	1.75	22.92	1.16
4.750	1.55	10.833	6.01	16.917	1.75	23.00	1.16
4.833	1.55	10.917	6.01	17.000	1.75	23.08	1.16
4.917	1.55	11.000	6.01	17.083	1.75	23.17	1.16
5.000	1.55	11.083	6.01	17.167	1.75	23.25	1.16
5.083	1.55	11.167	6.01	17.250	1.75	23.33	1.16
5.167	1.55	11.250	6.01	17.333	1.75	23.42	1.16
5.250	1.55	11.333	9.31	17.417	1.75	23.50	1.16
5.333	1.55	11.417	9.31	17.500	1.75	23.58	1.16
5.417	1.55	11.500	9.31	17.583	1.75	23.67	1.16
5.500	1.55	11.583	9.31	17.667	1.75	23.75	1.16
5.583	1.55	11.667	9.31	17.750	1.75	23.83	1.16
5.667	1.55	11.750	9.31	17.833	1.75	23.92	1.16
5.750	1.55	11.833	28.70	17.917	1.75	24.00	1.16
5.833	1.55	11.917	28.71	18.000	1.75	24.08	1.16
5.917	1.55	12.000	28.71	18.083	1.75	24.17	1.16
6.000	1.55	12.083	118.69	18.167	1.75	24.25	1.16
6.083	1.55	12.167	118.70	18.250	1.75		

Unit Hyd Qpeak (cms)= 1.284

PEAK FLOW (cms)= 0.849 (i)
TIME TO PEAK (hrs)= 13.500
RUNOFF VOLUME (mm)= 31.074
TOTAL RAINFALL (mm)= 96.980
RUNOFF COEFFICIENT = 0.320

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB

| NASHYD (0029)| Area (ha)= 14.85 Curve Number (CN)= 52.9
|ID= 1 DT= 5.0 min | Ia (mm)= 13.28 # of Linear Res.(N)= 3.00
---------- U.H. Tp(hrs)= 0.89

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.55	12.250	118.70	18.33	1.75
0.167	0.00	6.250	1.55	12.333	13.98	18.42	1.75
0.250	0.00	6.333	1.75	12.417	13.97	18.50	1.75
0.333	1.07	6.417	1.75	12.500	13.97	18.58	1.75
0.417	1.07	6.500	1.75	12.583	13.97	18.67	1.75
0.500	1.07	6.583	1.75	12.667	13.97	18.75	1.75
0.583	1.07	6.667	1.75	12.750	13.97	18.83	1.75
0.667	1.07	6.750	1.75	12.833	7.18	18.92	1.75
0.750	1.07	6.833	1.75	12.917	7.18	19.00	1.75
0.833	1.07	6.917	1.75	13.000	7.18	19.08	1.75
0.917	1.07	7.000	1.75	13.083	7.18	19.17	1.75
1.000	1.07	7.083	1.75	13.167	7.18	19.25	1.75
1.083	1.07	7.167	1.75	13.250	7.18	19.33	1.75
1.167	1.07	7.250	1.75	13.333	5.24	19.42	1.75
1.250	1.07	7.333	2.13	13.417	5.24	19.50	1.75
1.333	1.07	7.417	2.13	13.500	5.24	19.58	1.75
1.417	1.07	7.500	2.13	13.583	5.24	19.67	1.75
1.500	1.07	7.583	2.13	13.667	5.24	19.75	1.75
1.583	1.07	7.667	2.13	13.750	5.24	19.83	1.75
1.667	1.07	7.750	2.13	13.833	4.07	19.92	1.75
1.750	1.07	7.833	2.13	13.917	4.07	20.00	1.75
1.833	1.07	7.917	2.13	14.000	4.07	20.08	1.75
1.917	1.07	8.000	2.13	14.083	4.07	20.17	1.75
2.000	1.07	8.083	2.13	14.167	4.07	20.25	1.75
2.083	1.07	8.167	2.13	14.250	4.07	20.33	1.16
2.167	1.07	8.250	2.13	14.333	2.91	20.42	1.16
2.250	1.07	8.333	2.52	14.417	2.91	20.50	1.16
2.333	1.26	8.417	2.52	14.500	2.91	20.58	1.16
2.417	1.26	8.500	2.52	14.583	2.91	20.67	1.16
2.500	1.26	8.583	2.52	14.667	2.91	20.75	1.16
2.583	1.26	8.667	2.52	14.750	2.91	20.83	1.16
2.667	1.26	8.750	2.52	14.833	2.91	20.92	1.16
2.750	1.26	8.833	2.72	14.917	2.91	21.00	1.16
2.833	1.26	8.917	2.72	15.000	2.91	21.08	1.16
2.917	1.26	9.000	2.72	15.083	2.91	21.17	1.16
3.000	1.26	9.083	2.72	15.167	2.91	21.25	1.16
3.083	1.26	9.167	2.72	15.250	2.91	21.33	1.16
3.167	1.26	9.250	2.72	15.333	2.91	21.42	1.16

3.250	1.26	9.333	3.10	15.417	2.91	21.50	1.16
3.333	1.26	9.417	3.10	15.500	2.91	21.58	1.16
3.417	1.26	9.500	3.10	15.583	2.91	21.67	1.16
3.500	1.26	9.583	3.10	15.667	2.91	21.75	1.16
3.583	1.26	9.667	3.10	15.750	2.91	21.83	1.16
3.667	1.26	9.750	3.10	15.833	2.91	21.92	1.16
3.750	1.26	9.833	3.49	15.917	2.91	22.00	1.16
3.833	1.26	9.917	3.49	16.000	2.91	22.08	1.16
3.917	1.26	10.000	3.49	16.083	2.91	22.17	1.16
4.000	1.26	10.083	3.49	16.167	2.91	22.25	1.16
4.083	1.26	10.167	3.49	16.250	2.91	22.33	1.16
4.167	1.26	10.250	3.49	16.333	1.75	22.42	1.16
4.250	1.26	10.333	4.46	16.417	1.75	22.50	1.16
4.333	1.55	10.417	4.46	16.500	1.75	22.58	1.16
4.417	1.55	10.500	4.46	16.583	1.75	22.67	1.16
4.500	1.55	10.583	4.46	16.667	1.75	22.75	1.16
4.583	1.55	10.667	4.46	16.750	1.75	22.83	1.16
4.667	1.55	10.750	4.46	16.833	1.75	22.92	1.16
4.750	1.55	10.833	6.01	16.917	1.75	23.00	1.16
4.833	1.55	10.917	6.01	17.000	1.75	23.08	1.16
4.917	1.55	11.000	6.01	17.083	1.75	23.17	1.16
5.000	1.55	11.083	6.01	17.167	1.75	23.25	1.16
5.083	1.55	11.167	6.01	17.250	1.75	23.33	1.16
5.167	1.55	11.250	6.01	17.333	1.75	23.42	1.16
5.250	1.55	11.333	9.31	17.417	1.75	23.50	1.16
5.333	1.55	11.417	9.31	17.500	1.75	23.58	1.16
5.417	1.55	11.500	9.31	17.583	1.75	23.67	1.16
5.500	1.55	11.583	9.31	17.667	1.75	23.75	1.16
5.583	1.55	11.667	9.31	17.750	1.75	23.83	1.16
5.667	1.55	11.750	9.31	17.833	1.75	23.92	1.16
5.750	1.55	11.833	28.70	17.917	1.75	24.00	1.16
5.833	1.55	11.917	28.71	18.000	1.75	24.08	1.16
5.917	1.55	12.000	28.71	18.083	1.75	24.17	1.16
6.000	1.55	12.083	118.69	18.167	1.75	24.25	1.16
6.083	1.55	12.167	118.70	18.250	1.75		

Unit Hyd Qpeak (cms)= 0.637

PEAK FLOW (cms)= 0.278 (i)
TIME TO PEAK (hrs)= 13.167
RUNOFF VOLUME (mm)= 22.636
TOTAL RAINFALL (mm)= 96.980
RUNOFF COEFFICIENT = 0.233

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

| CALIB |
| STANDHYD (0014)| Area (ha)= 1.87
|ID= 1 DT= 5.0 min | Total Imp(%)= 43.28 Dir. Conn.(%)= 10.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.81	1.06
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	111.65	25.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.55	12.250	118.70	18.33	1.75
0.167	0.00	6.250	1.55	12.333	13.98	18.42	1.75
0.250	0.00	6.333	1.75	12.417	13.97	18.50	1.75
0.333	1.07	6.417	1.75	12.500	13.97	18.58	1.75
0.417	1.07	6.500	1.75	12.583	13.97	18.67	1.75
0.500	1.07	6.583	1.75	12.667	13.97	18.75	1.75
0.583	1.07	6.667	1.75	12.750	13.97	18.83	1.75
0.667	1.07	6.750	1.75	12.833	7.18	18.92	1.75
0.750	1.07	6.833	1.75	12.917	7.18	19.00	1.75
0.833	1.07	6.917	1.75	13.000	7.18	19.08	1.75
0.917	1.07	7.000	1.75	13.083	7.18	19.17	1.75
1.000	1.07	7.083	1.75	13.167	7.18	19.25	1.75
1.083	1.07	7.167	1.75	13.250	7.18	19.33	1.75
1.167	1.07	7.250	1.75	13.333	5.24	19.42	1.75
1.250	1.07	7.333	2.13	13.417	5.24	19.50	1.75
1.333	1.07	7.417	2.13	13.500	5.24	19.58	1.75
1.417	1.07	7.500	2.13	13.583	5.24	19.67	1.75
1.500	1.07	7.583	2.13	13.667	5.24	19.75	1.75
1.583	1.07	7.667	2.13	13.750	5.24	19.83	1.75
1.667	1.07	7.750	2.13	13.833	4.07	19.92	1.75
1.750	1.07	7.833	2.13	13.917	4.07	20.00	1.75
1.833	1.07	7.917	2.13	14.000	4.07	20.08	1.75
1.917	1.07	8.000	2.13	14.083	4.07	20.17	1.75
2.000	1.07	8.083	2.13	14.167	4.07	20.25	1.75
2.083	1.07	8.167	2.13	14.250	4.07	20.33	1.16
2.167	1.07	8.250	2.13	14.333	2.91	20.42	1.16
2.250	1.07	8.333	2.52	14.417	2.91	20.50	1.16
2.333	1.26	8.417	2.52	14.500	2.91	20.58	1.16
2.417	1.26	8.500	2.52	14.583	2.91	20.67	1.16
2.500	1.26	8.583	2.52	14.667	2.91	20.75	1.16
2.583	1.26	8.667	2.52	14.750	2.91	20.83	1.16

2.667	1.26	8.750	2.52	14.833	2.91	20.92	1.16
2.750	1.26	8.833	2.72	14.917	2.91	21.00	1.16
2.833	1.26	8.917	2.72	15.000	2.91	21.08	1.16
2.917	1.26	9.000	2.72	15.083	2.91	21.17	1.16
3.000	1.26	9.083	2.72	15.167	2.91	21.25	1.16
3.083	1.26	9.167	2.72	15.250	2.91	21.33	1.16
3.167	1.26	9.250	2.72	15.333	2.91	21.42	1.16
3.250	1.26	9.333	3.10	15.417	2.91	21.50	1.16
3.333	1.26	9.417	3.10	15.500	2.91	21.58	1.16
3.417	1.26	9.500	3.10	15.583	2.91	21.67	1.16
3.500	1.26	9.583	3.10	15.667	2.91	21.75	1.16
3.583	1.26	9.667	3.10	15.750	2.91	21.83	1.16
3.667	1.26	9.750	3.10	15.833	2.91	21.92	1.16
3.750	1.26	9.833	3.49	15.917	2.91	22.00	1.16
3.833	1.26	9.917	3.49	16.000	2.91	22.08	1.16
3.917	1.26	10.000	3.49	16.083	2.91	22.17	1.16
4.000	1.26	10.083	3.49	16.167	2.91	22.25	1.16
4.083	1.26	10.167	3.49	16.250	2.91	22.33	1.16
4.167	1.26	10.250	3.49	16.333	1.75	22.42	1.16
4.250	1.26	10.333	4.46	16.417	1.75	22.50	1.16
4.333	1.55	10.417	4.46	16.500	1.75	22.58	1.16
4.417	1.55	10.500	4.46	16.583	1.75	22.67	1.16
4.500	1.55	10.583	4.46	16.667	1.75	22.75	1.16
4.583	1.55	10.667	4.46	16.750	1.75	22.83	1.16
4.667	1.55	10.750	4.46	16.833	1.75	22.92	1.16
4.750	1.55	10.833	6.01	16.917	1.75	23.00	1.16
4.833	1.55	10.917	6.01	17.000	1.75	23.08	1.16
4.917	1.55	11.000	6.01	17.083	1.75	23.17	1.16
5.000	1.55	11.083	6.01	17.167	1.75	23.25	1.16
5.083	1.55	11.167	6.01	17.250	1.75	23.33	1.16
5.167	1.55	11.250	6.01	17.333	1.75	23.42	1.16
5.250	1.55	11.333	9.31	17.417	1.75	23.50	1.16
5.333	1.55	11.417	9.31	17.500	1.75	23.58	1.16
5.417	1.55	11.500	9.31	17.583	1.75	23.67	1.16
5.500	1.55	11.583	9.31	17.667	1.75	23.75	1.16
5.583	1.55	11.667	9.31	17.750	1.75	23.83	1.16
5.667	1.55	11.750	9.31	17.833	1.75	23.92	1.16
5.750	1.55	11.833	28.70	17.917	1.75	24.00	1.16
5.833	1.55	11.917	28.71	18.000	1.75	24.08	1.16
5.917	1.55	12.000	28.71	18.083	1.75	24.17	1.16
6.000	1.55	12.083	118.69	18.167	1.75	24.25	1.16
6.083	1.55	12.167	118.70	18.250	1.75		

Max.Eff.Inten.(mm/hr)= 118.70 146.55
over (min) 5.00 10.00
Storage Coeff. (min)= 3.14 (ii) 7.71 (ii)
Unit Hyd. Tpeak (min)= 5.00 10.00
Unit Hyd. peak (cms)= 0.27 0.13

				TOTALS
PEAK FLOW	(cms)=	0.06	0.34	0.402 (iii)
TIME TO PEAK	(hrs)=	12.25	12.25	12.25
RUNOFF VOLUME	(mm)=	95.98	63.32	66.59
TOTAL RAINFALL	(mm)=	96.98	96.98	96.98
RUNOFF COEFFICIENT	=	0.99	0.65	0.69

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 78.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0040)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0001):		39.68	0.849	13.50	31.07
+ ID2= 2 (0014):		1.87	0.402	12.25	66.59
ID = 3 (0040):		41.55	0.876	13.42	32.67

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0040)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0040):		41.55	0.876	13.42	32.67
+ ID2= 2 (0029):		14.85	0.278	13.17	22.64
ID = 1 (0040):		56.40	1.145	13.33	30.03

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0039):		134.78	1.814	13.83	25.43

+ ID2= 2 (0040):	56.40	1.145	13.33	30.03
ID = 3 (0023):	191.18	2.912	13.58	26.79

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

****
** SIMULATION:J - 25-year SCS **
****

READ STORM	Filename: C:\Users\ecomish\AppData\Local\Temp\49208e0f-499d-4cb6-b2a9-d1492d706baa\67437f9c
Ptotal=114.04 mm	Comments: 25yr 24hr 15min SCS Type II (MTO) - 15%

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.00	0.00	6.25	2.05	12.50	16.42	18.75	2.05
0.25	1.25	6.50	2.05	12.75	8.44	19.00	2.05
0.50	1.25	6.75	2.05	13.00	8.44	19.25	2.05
0.75	1.25	7.00	2.05	13.25	6.16	19.50	2.05
1.00	1.25	7.25	2.51	13.50	6.16	19.75	2.05
1.25	1.25	7.50	2.51	13.75	4.79	20.00	2.05
1.50	1.25	7.75	2.51	14.00	4.79	20.25	1.37
1.75	1.25	8.00	2.51	14.25	3.42	20.50	1.37
2.00	1.25	8.25	2.97	14.50	3.42	20.75	1.37
2.25	1.48	8.50	2.97	14.75	3.42	21.00	1.37
2.50	1.48	8.75	3.19	15.00	3.42	21.25	1.37
2.75	1.48	9.00	3.19	15.25	3.42	21.50	1.37
3.00	1.48	9.25	3.65	15.50	3.42	21.75	1.37
3.25	1.48	9.50	3.65	15.75	3.42	22.00	1.37
3.50	1.48	9.75	4.11	16.00	3.42	22.25	1.37
3.75	1.48	10.00	4.11	16.25	2.05	22.50	1.37
4.00	1.48	10.25	5.25	16.50	2.05	22.75	1.37
4.25	1.82	10.50	5.25	16.75	2.05	23.00	1.37
4.50	1.82	10.75	7.07	17.00	2.05	23.25	1.37
4.75	1.82	11.00	7.07	17.25	2.05	23.50	1.37
5.00	1.82	11.25	10.95	17.50	2.05	23.75	1.37
5.25	1.82	11.50	10.95	17.75	2.05	24.00	1.37
5.50	1.82	11.75	33.76	18.00	2.05		
5.75	1.82	12.00	139.58	18.25	2.05		
6.00	1.82	12.25	16.42	18.50	2.05		

CALIB

NASHYD (0025)	Area (ha)= 100.92	Curve Number (CN)= 55.9
ID= 1 DT= 5.0 min	Ia (mm)= 7.89	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 1.70	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.82	12.250	139.58	18.33	2.05
0.167	0.00	6.250	1.82	12.333	16.44	18.42	2.05
0.250	0.00	6.333	2.05	12.417	16.42	18.50	2.05
0.333	1.25	6.417	2.05	12.500	16.42	18.58	2.05
0.417	1.25	6.500	2.05	12.583	16.42	18.67	2.05
0.500	1.25	6.583	2.05	12.667	16.42	18.75	2.05
0.583	1.25	6.667	2.05	12.750	16.42	18.83	2.05
0.667	1.25	6.750	2.05	12.833	8.44	18.92	2.05
0.750	1.25	6.833	2.05	12.917	8.44	19.00	2.05
0.833	1.25	6.917	2.05	13.000	8.44	19.08	2.05
0.917	1.25	7.000	2.05	13.083	8.44	19.17	2.05
1.000	1.25	7.083	2.05	13.167	8.44	19.25	2.05
1.083	1.25	7.167	2.05	13.250	8.44	19.33	2.05
1.167	1.25	7.250	2.05	13.333	6.16	19.42	2.05
1.250	1.25	7.333	2.51	13.417	6.16	19.50	2.05
1.333	1.25	7.417	2.51	13.500	6.16	19.58	2.05
1.417	1.25	7.500	2.51	13.583	6.16	19.67	2.05
1.500	1.25	7.583	2.51	13.667	6.16	19.75	2.05
1.583	1.25	7.667	2.51	13.750	6.16	19.83	2.05
1.667	1.25	7.750	2.51	13.833	4.79	19.92	2.05
1.750	1.25	7.833	2.51	13.917	4.79	20.00	2.05
1.833	1.25	7.917	2.51	14.000	4.79	20.08	2.05
1.917	1.25	8.000	2.51	14.083	4.79	20.17	2.05
2.000	1.25	8.083	2.51	14.167	4.79	20.25	2.05
2.083	1.25	8.167	2.51	14.250	4.79	20.33	1.37
2.167	1.25	8.250	2.51	14.333	3.42	20.42	1.37
2.250	1.25	8.333	2.97	14.417	3.42	20.50	1.37
2.333	1.48	8.417	2.97	14.500	3.42	20.58	1.37
2.417	1.48	8.500	2.97	14.583	3.42	20.67	1.37
2.500	1.48	8.583	2.97	14.667	3.42	20.75	1.37
2.583	1.48	8.667	2.97	14.750	3.42	20.83	1.37
2.667	1.48	8.750	2.97	14.833	3.42	20.92	1.37
2.750	1.48	8.833	3.19	14.917	3.42	21.00	1.37
2.833	1.48	8.917	3.19	15.000	3.42	21.08	1.37
2.917	1.48	9.000	3.19	15.083	3.42	21.17	1.37
3.000	1.48	9.083	3.19	15.167	3.42	21.25	1.37
3.083	1.48	9.167	3.19	15.250	3.42	21.33	1.37
3.167	1.48	9.250	3.19	15.333	3.42	21.42	1.37

3.250	1.48	9.333	3.65	15.417	3.42	21.50	1.37
3.333	1.48	9.417	3.65	15.500	3.42	21.58	1.37
3.417	1.48	9.500	3.65	15.583	3.42	21.67	1.37
3.500	1.48	9.583	3.65	15.667	3.42	21.75	1.37
3.583	1.48	9.667	3.65	15.750	3.42	21.83	1.37
3.667	1.48	9.750	3.65	15.833	3.42	21.92	1.37
3.750	1.48	9.833	4.11	15.917	3.42	22.00	1.37
3.833	1.48	9.917	4.11	16.000	3.42	22.08	1.37
3.917	1.48	10.000	4.11	16.083	3.42	22.17	1.37
4.000	1.48	10.083	4.11	16.167	3.42	22.25	1.37
4.083	1.48	10.167	4.11	16.250	3.42	22.33	1.37
4.167	1.48	10.250	4.11	16.333	2.05	22.42	1.37
4.250	1.48	10.333	5.25	16.417	2.05	22.50	1.37
4.333	1.82	10.417	5.25	16.500	2.05	22.58	1.37
4.417	1.82	10.500	5.25	16.583	2.05	22.67	1.37
4.500	1.82	10.583	5.25	16.667	2.05	22.75	1.37
4.583	1.82	10.667	5.25	16.750	2.05	22.83	1.37
4.667	1.82	10.750	5.25	16.833	2.05	22.92	1.37
4.750	1.82	10.833	7.07	16.917	2.05	23.00	1.37
4.833	1.82	10.917	7.07	17.000	2.05	23.08	1.37
4.917	1.82	11.000	7.07	17.083	2.05	23.17	1.37
5.000	1.82	11.083	7.07	17.167	2.05	23.25	1.37
5.083	1.82	11.167	7.07	17.250	2.05	23.33	1.37
5.167	1.82	11.250	7.07	17.333	2.05	23.42	1.37
5.250	1.82	11.333	10.95	17.417	2.05	23.50	1.37
5.333	1.82	11.417	10.95	17.500	2.05	23.58	1.37
5.417	1.82	11.500	10.95	17.583	2.05	23.67	1.37
5.500	1.82	11.583	10.95	17.667	2.05	23.75	1.37
5.583	1.82	11.667	10.95	17.750	2.05	23.83	1.37
5.667	1.82	11.750	10.95	17.833	2.05	23.92	1.37
5.750	1.82	11.833	33.75	17.917	2.05	24.00	1.37
5.833	1.82	11.917	33.76	18.000	2.05	24.08	1.37
5.917	1.82	12.000	33.76	18.083	2.05	24.17	1.37
6.000	1.82	12.083	139.57	18.167	2.05	24.25	1.37
6.083	1.82	12.167	139.58	18.250	2.05		

Unit Hyd Qpeak (cms)= 2.267

PEAK FLOW	(cms)=	1.938 (i)
TIME TO PEAK	(hrs)=	14.083
RUNOFF VOLUME	(mm)=	36.798
TOTAL RAINFALL	(mm)=	114.040
RUNOFF COEFFICIENT	=	0.323

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB								
NASHYD (0002)	Area (ha)= 23.99	Curve Number (CN)= 44.7						
ID= 1 DT= 5.0 min	Ia (mm)= 10.91	# of Linear Res.(N)= 3.00						
	U.H. Tp(hrs)= 0.97							

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.82	12.250	139.58	18.33	2.05
0.167	0.00	6.250	1.82	12.333	16.44	18.42	2.05
0.250	0.00	6.333	2.05	12.417	16.42	18.50	2.05
0.333	1.25	6.417	2.05	12.500	16.42	18.58	2.05
0.417	1.25	6.500	2.05	12.583	16.42	18.67	2.05
0.500	1.25	6.583	2.05	12.667	16.42	18.75	2.05
0.583	1.25	6.667	2.05	12.750	16.42	18.83	2.05
0.667	1.25	6.750	2.05	12.833	8.44	18.92	2.05
0.750	1.25	6.833	2.05	12.917	8.44	19.00	2.05
0.833	1.25	6.917	2.05	13.000	8.44	19.08	2.05
0.917	1.25	7.000	2.05	13.083	8.44	19.17	2.05
1.000	1.25	7.083	2.05	13.167	8.44	19.25	2.05
1.083	1.25	7.167	2.05	13.250	8.44	19.33	2.05
1.167	1.25	7.250	2.05	13.333	6.16	19.42	2.05
1.250	1.25	7.333	2.51	13.417	6.16	19.50	2.05
1.333	1.25	7.417	2.51	13.500	6.16	19.58	2.05
1.417	1.25	7.500	2.51	13.583	6.16	19.67	2.05
1.500	1.25	7.583	2.51	13.667	6.16	19.75	2.05
1.583	1.25	7.667	2.51	13.750	6.16	19.83	2.05
1.667	1.25	7.750	2.51	13.833	4.79	19.92	2.05
1.750	1.25	7.833	2.51	13.917	4.79	20.00	2.05
1.833	1.25	7.917	2.51	14.000	4.79	20.08	2.05
1.917	1.25	8.000	2.51	14.083	4.79	20.17	2.05
2.000	1.25	8.083	2.51	14.167	4.79	20.25	2.05
2.083	1.25	8.167	2.51	14.250	4.79	20.33	1.37
2.167	1.25	8.250	2.51	14.333	3.42	20.42	1.37
2.250	1.25	8.333	2.97	14.417	3.42	20.50	1.37
2.333	1.48	8.417	2.97	14.500	3.42	20.58	1.37
2.417	1.48	8.500	2.97	14.583	3.42	20.67	1.37
2.500	1.48	8.583	2.97	14.667	3.42	20.75	1.37
2.583	1.48	8.667	2.97	14.750	3.42	20.83	1.37
2.667	1.48	8.750	2.97	14.833	3.42	20.92	1.37
2.750	1.48	8.833	3.19	14.917	3.42	21.00	1.37
2.833	1.48	8.917	3.19	15.000	3.42	21.08	1.37
2.917	1.48	9.000	3.19	15.083	3.42	21.17	1.37
3.000	1.48	9.083	3.19	15.167	3.42	21.25	1.37
3.083	1.48	9.167	3.19	15.250	3.42	21.33	1.37
3.167	1.48	9.250	3.19	15.333	3.42	21.42	1.37
3.250	1.48	9.333	3.65	15.417	3.42	21.50	1.37
3.333	1.48	9.417	3.65	15.500	3.42	21.58	1.37
3.417	1.48	9.500	3.65	15.583	3.42	21.67	1.37
3.500	1.48	9.583	3.65	15.667	3.42	21.75	1.37
3.583	1.48	9.667	3.65	15.750	3.42	21.83	1.37
3.667	1.48	9.750	3.65	15.833	3.42	21.92	1.37
3.750	1.48	9.833	4.11	15.917	3.42	22.00	1.37
3.833	1.48	9.917	4.11	16.000	3.42	22.08	1.37
3.917	1.48	10.000	4.11	16.083	3.42	22.17	1.37
4.000	1.48	10.083	4.11	16.167	3.42	22.25	1.37
4.083	1.48	10.167	4.11	16.250	3.42	22.33	1.37
4.167	1.48	10.250	4.11	16.333	2.05	22.42	1.37
4.250	1.48	10.333	5.25	16.417	2.05	22.50	1.37
4.333	1.82	10.417	5.25	16.500	2.05	22.58	1.37
4.417	1.82	10.500	5.25	16.583	2.05	22.67	1.37
4.500	1.82	10.583	5.25	16.667	2.05	22.75	1.37
4.583	1.82	10.667	5.25	16.750	2.05	22.83	1.37
4.667	1.82	10.750	5.25	16.833	2.05	22.92	1.37
4.750	1.82	10.833	7.07	16.917	2.05	23.00	1.37
4.833	1.82	10.917	7.07	17.000	2.05	23.08	1.37
4.917	1.82	11.000	7.07	17.083	2.05	23.17	1.37
5.000	1.82	11.083	7.07	17.167	2.05	23.25	1.37
5.083	1.82	11.167	7.07	17.250	2.05	23.33	1.37
5.167	1.82	11.250	7.07	17.333	2.05	23.42	1.37
5.250	1.82	11.333	10.95	17.417	2.05	23.50	1.37
5.333	1.82	11.417	10.95	17.500	2.05	23.58	1.37
5.417	1.82	11.500	10.95	17.583	2.05	23.67	1.37
5.500	1.82	11.583	10.95	17.667	2.05	23.75	1.37
5.583	1.82	11.667	10.95	17.750	2.05	23.83	1.37
5.667	1.82	11.750	10.95	17.833	2.05	23.92	1.37
5.750	1.82	11.833	33.75	17.917	2.05	24.00	1.37
5.833	1.82	11.917	33.76	18.000	2.05	24.08	1.37
5.917	1.82	12.000	33.76	18.083	2.05	24.17	1.37
6.000	1.82	12.083	139.57	18.167	2.05	24.25	1.37
6.083	1.82	12.167	139.58	18.250	2.05		

Unit Hyd Qpeak (cms)= 0.945

PEAK FLOW (cms)= 0.476 (i)
TIME TO PEAK (hrs)= 13.250
RUNOFF VOLUME (mm)= 25.483
TOTAL RAINFALL (mm)= 114.040
RUNOFF COEFFICIENT = 0.223

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

Pre-Development VO Output

CALIB								
NASHYD (0028)	Area (ha)= 6.37	Curve Number (CN)= 50.5						
ID= 1 DT= 5.0 min	Ia (mm)= 15.69	# of Linear Res.(N)= 3.00						
	U.H. Tp(hrs)= 0.77							

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.82	12.250	139.58	18.33	2.05
0.167	0.00	6.250	1.82	12.333	16.44	18.42	2.05
0.250	0.00	6.333	2.05	12.417	16.42	18.50	2.05
0.333	1.25	6.417	2.05	12.500	16.42	18.58	2.05
0.417	1.25	6.500	2.05	12.583	16.42	18.67	2.05
0.500	1.25	6.583	2.05	12.667	16.42	18.75	2.05
0.583	1.25	6.667	2.05	12.750	16.42	18.83	2.05
0.667	1.25	6.750	2.05	12.833	8.44	18.92	2.05
0.750	1.25	6.833	2.05	12.917	8.44	19.00	2.05
0.833	1.25	6.917	2.05	13.000	8.44	19.08	2.05
0.917	1.25	7.000	2.05	13.083	8.44	19.17	2.05
1.000	1.25	7.083	2.05	13.167	8.44	19.25	2.05
1.083	1.25	7.167	2.05	13.250	8.44	19.33	2.05
1.167	1.25	7.250	2.05	13.333	6.16	19.42	2.05
1.250	1.25	7.333	2.51	13.417	6.16	19.50	2.05
1.333	1.25	7.417	2.51	13.500	6.16	19.58	2.05
1.417	1.25	7.500	2.51	13.583	6.16	19.67	2.05
1.500	1.25	7.583	2.51	13.667	6.16	19.75	2.05
1.583	1.25	7.667	2.51	13.750	6.16	19.83	2.05
1.667	1.25	7.750	2.51	13.833	4.79	19.92	2.05
1.750	1.25	7.833	2.51	13.917	4.79	20.00	2.05
1.833	1.25	7.917	2.51	14.000	4.79	20.08	2.05
1.917	1.25	8.000	2.51	14.083	4.79	20.17	2.05
2.000	1.25	8.083	2.51	14.167	4.79	20.25	2.05
2.083	1.25	8.167	2.51	14.250	4.79	20.33	1.37
2.167	1.25	8.250	2.51	14.333	3.42	20.42	1.37
2.250	1.25	8.333	2.97	14.417	3.42	20.50	1.37
2.333	1.48	8.417	2.97	14.500	3.42	20.58	1.37
2.417	1.48	8.500	2.97	14.583	3.42	20.67	1.37
2.500	1.48	8.583	2.97	14.667	3.42	20.75	1.37
2.583	1.48	8.667	2.97	14.750	3.42	20.83	1.37
2.667	1.48	8.750	2.97	14.833	3.42	20.92	1.37
2.750	1.48	8.833	3.19	14.917	3.42	21.00	1.37
2.833	1.48	8.917	3.19	15.000	3.42	21.08	1.37
2.917	1.48	9.000	3.19	15.083	3.42	21.17	1.37
3.000	1.48	9.083	3.19	15.167	3.42	21.25	1.37
3.083	1.48	9.167	3.19	15.250	3.42	21.33	1.37
3.167	1.48	9.250	3.19	15.333	3.42	21.42	1.37
3.250	1.48	9.333	3.65	15.417	3.42	21.50	1.37
3.333	1.48	9.417	3.65	15.500	3.42	21.58	1.37
3.417	1.48	9.500	3.65	15.583	3.42	21.67	1.37
3.500	1.48	9.583	3.65	15.667	3.42	21.75	1.37
3.583	1.48	9.667	3.65	15.750	3.42	21.83	1.37
3.667	1.48	9.750	3.65	15.833	3.42	21.92	1.37
3.750	1.48	9.833	4.11	15.917	3.42	22.00	1.37
3.833	1.48	9.917	4.11	16.000	3.42	22.08	1.37
3.917	1.48	10.000	4.11	16.083	3.42	22.17	1.37
4.000	1.48	10.083	4.11	16.167	3.42	22.25	1.37
4.083	1.48	10.167	4.11	16.250	3.42	22.33	1.37
4.167	1.48	10.250	4.11	16.333	2.05	22.42	1.37
4.250	1.48	10.333	5.25	16.417	2.05	22.50	1.37
4.333	1.82	10.417	5.25	16.500	2.05	22.58	1.37
4.417	1.82	10.500	5.25	16.583	2.05	22.67	1.37
4.500	1.82	10.583	5.25	16.667	2.05	22.75	1.37
4.583	1.82	10.667	5.25	16.750	2.05	22.83	1.37
4.667	1.82	10.750	5.25	16.833	2.05	22.92	1.37
4.750	1.82	10.833	7.07	16.917	2.05	23.00	1.37
4.833	1.82	10.917	7.07	17.000	2.05	23.08	1.37
4.917	1.82	11.000	7.07	17.083	2.05	23.17	1.37
5.000	1.82	11.083	7.07	17.167	2.05	23.25	1.37
5.083	1.82	11.167	7.07	17.250	2.05	23.33	1.37
5.167	1.82	11.250	7.07	17.333	2.05	23.42	1.37
5.250	1.82	11.333	10.95	17.417	2.05	23.50	1.37
5.333	1.82	11.417	10.95	17.500	2.05	23.58	1.37
5.417	1.82	11.500	10.95	17.583	2.05	23.67	1.37
5.500	1.82	11.583	10.95	17.667	2.05	23.75	1.37
5.583	1.82	11.667	10.95	17.750	2.05	23.83	1.37
5.667	1.82	11.750	10.95	17.833	2.05	23.92	1.37
5.750	1.82	11.833	33.75	17.917	2.05	24.00	1.37
5.833	1.82	11.917	33.76	18.000	2.05	24.08	1.37
5.917	1.82	12.000	33.76	18.083	2.05	24.17	1.37
6.000	1.82	12.083	139.57	18.167	2.05	24.25	1.37
6.083	1.82	12.167	139.58	18.250	2.05		

Unit Hyd Qpeak (cms)= 0.316

PEAK FLOW (cms)= 0.164 (i)
TIME TO PEAK (hrs)= 13.000
RUNOFF VOLUME (mm)= 27.833
TOTAL RAINFALL (mm)= 114.040
RUNOFF COEFFICIENT = 0.244

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB									
NASHYD (0030)	Area (ha)= 1.70	Curve Number (CN)= 60.5							
ID= 1 DT= 5.0 min	Ia (mm)= 9.65	# of Linear Res.(N)= 3.00							
	U.H. Tp(hrs)= 0.40								

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.82	12.250	139.58	18.33	2.05
0.167	0.00	6.250	1.82	12.333	16.44	18.42	2.05
0.250	0.00	6.333	2.05	12.417	16.42	18.50	2.05
0.333	1.25	6.417	2.05	12.500	16.42	18.58	2.05
0.417	1.25	6.500	2.05	12.583	16.42	18.67	2.05
0.500	1.25	6.583	2.05	12.667	16.42	18.75	2.05
0.583	1.25	6.667	2.05	12.750	16.42	18.83	2.05
0.667	1.25	6.750	2.05	12.833	8.44	18.92	2.05
0.750	1.25	6.833	2.05	12.917	8.44	19.00	2.05
0.833	1.25	6.917	2.05	13.000	8.44	19.08	2.05
0.917	1.25	7.000	2.05	13.083	8.44	19.17	2.05
1.000	1.25	7.083	2.05	13.167	8.44	19.25	2.05
1.083	1.25	7.167	2.05	13.250	8.44	19.33	2.05
1.167	1.25	7.250	2.05	13.333	6.16	19.42	2.05
1.250	1.25	7.333	2.51	13.417	6.16	19.50	2.05
1.333	1.25	7.417	2.51	13.500	6.16	19.58	2.05
1.417	1.25	7.500	2.51	13.583	6.16	19.67	2.05
1.500	1.25	7.583	2.51	13.667	6.16	19.75	2.05
1.583	1.25	7.667	2.51	13.750	6.16	19.83	2.05
1.667	1.25	7.750	2.51	13.833	4.79	19.92	2.05
1.750	1.25	7.833	2.51	13.917	4.79	20.00	2.05
1.833	1.25	7.917	2.51	14.000	4.79	20.08	2.05
1.917	1.25	8.000	2.51	14.083	4.79	20.17	2.05
2.000	1.25	8.083	2.51	14.167	4.79	20.25	2.05
2.083	1.25	8.167	2.51	14.250	4.79	20.33	1.37
2.167	1.25	8.250	2.51	14.333	3.42	20.42	1.37
2.250	1.25	8.333	2.97	14.417	3.42	20.50	1.37
2.333	1.48	8.417	2.97	14.500	3.42	20.58	1.37
2.417	1.48	8.500	2.97	14.583	3.42	20.67	1.37
2.500	1.48	8.583	2.97	14.667	3.42	20.75	1.37
2.583	1.48	8.667	2.97	14.750	3.42	20.83	1.37
2.667	1.48	8.750	2.97	14.833	3.42	20.92	1.37
2.750	1.48	8.833	3.19	14.917	3.42	21.00	1.37
2.833	1.48	8.917	3.19	15.000	3.42	21.08	1.37
2.917	1.48	9.000	3.19	15.083	3.42	21.17	1.37
3.000	1.48	9.083	3.19	15.167	3.42	21.25	1.37
3.083	1.48	9.167	3.19	15.250	3.42	21.33	1.37
3.167	1.48	9.250	3.19	15.333	3.42	21.42	1.37
3.250	1.48	9.333	3.65	15.417	3.42	21.50	1.37
3.333	1.48	9.417	3.65	15.500	3.42	21.58	1.37
3.417	1.48	9.500	3.65	15.583	3.42	21.67	1.37
3.500	1.48	9.583	3.65	15.667	3.42	21.75	1.37
3.583	1.48	9.667	3.65	15.750	3.42	21.83	1.37
3.667	1.48	9.750	3.65	15.833	3.42	21.92	1.37
3.750	1.48	9.833	4.11	15.917	3.42	22.00	1.37
3.833	1.48	9.917	4.11	16.000	3.42	22.08	1.37
3.917	1.48	10.000	4.11	16.083	3.42	22.17	1.37
4.000	1.48	10.083	4.11	16.167	3.42	22.25	1.37
4.083	1.48	10.167	4.11	16.250	3.42	22.33	1.37
4.167	1.48	10.250	4.11	16.333	2.05	22.42	1.37
4.250	1.48	10.333	5.25	16.417	2.05	22.50	1.37
4.333	1.82	10.417	5.25	16.500	2.05	22.58	1.37
4.417	1.82	10.500	5.25	16.583	2.05	22.67	1.37
4.500	1.82	10.583	5.25	16.667	2.05	22.75	1.37
4.583	1.82	10.667	5.25	16.750	2.05	22.83	1.37
4.667	1.82	10.750	5.25	16.833	2.05	22.92	1.37
4.750	1.82	10.833	7.07	16.917	2.05	23.00	1.37
4.833	1.82	10.917	7.07	17.000	2.05	23.08	1.37
4.917	1.82	11.000	7.07	17.083	2.05	23.17	1.37
5.000	1.82	11.083	7.07	17.167	2.05	23.25	1.37
5.083	1.82	11.167	7.07	17.250	2.05	23.33	1.37
5.167	1.82	11.250	7.07	17.333	2.05	23.42	1.37
5.250	1.82	11.333	10.95	17.417	2.05	23.50	1.37
5.333	1.82	11.417	10.95	17.500	2.05	23.58	1.37
5.417	1.82	11.500	10.95	17.583	2.05	23.67	1.37
5.500	1.82	11.583	10.95	17.667	2.05	23.75	1.37
5.583	1.82	11.667	10.95	17.750	2.05	23.83	1.37
5.667	1.82	11.750	10.95	17.833	2.05	23.92	1.37
5.750	1.82	11.833	33.75	17.917	2.05	24.00	1.37
5.833	1.82	11.917	33.76	18.000	2.05	24.08	1.37
5.917	1.82	12.000	33.76	18.083	2.05	24.17	1.37
6.000	1.82	12.083	139.57	18.167	2.05	24.25	1.37
6.083	1.82	12.167	139.58	18.250	2.05		

Unit Hyd Qpeak (cms)= 0.162

PEAK FLOW (cms)= 0.106 (i)
TIME TO PEAK (hrs)= 12.500
RUNOFF VOLUME (mm)= 40.280
TOTAL RAINFALL (mm)= 114.040
RUNOFF COEFFICIENT = 0.353

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

Pre-Development VO Output

CALIB									
NASHYD (0031)	Area (ha)= 1.80	Curve Number (CN)= 50.0							
ID= 1 DT= 5.0 min	Ia (mm)= 16.00	# of Linear Res.(N)= 3.00							
	U.H. Tp(hrs)= 0.76								

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.82	12.250	139.58	18.33	2.05
0.167	0.00	6.250	1.82	12.333	16.44	18.42	2.05
0.250	0.00	6.333	2.05	12.417	16.42	18.50	2.05
0.333	1.25	6.417	2.05	12.500	16.42	18.58	2.05
0.417	1.25	6.500	2.05	12.583	16.42	18.67	2.05
0.500	1.25	6.583	2.05	12.667	16.42	18.75	2.05
0.583	1.25	6.667	2.05	12.750	16.42	18.83	2.05
0.667	1.25	6.750	2.05	12.833	8.44	18.92	2.05
0.750	1.25	6.833	2.05	12.917	8.44	19.00	2.05
0.833	1.25	6.917	2.05	13.000	8.44	19.08	2.05
0.917	1.25	7.000	2.05	13.083	8.44	19.17	2.05
1.000	1.25	7.083	2.05	13.167	8.44	19.25	2.05
1.083	1.25	7.167	2.05	13.250	8.44	19.33	2.05
1.167	1.25	7.250	2.05	13.333	6.16	19.42	2.05
1.250	1.25	7.333	2.51	13.417	6.16	19.50	2.05
1.333	1.25	7.417	2.51	13.500	6.16	19.58	2.05
1.417	1.25	7.500	2.51	13.583	6.16	19.67	2.05
1.500	1.25	7.583	2.51	13.667	6.16	19.75	2.05
1.583	1.25	7.667	2.51	13.750	6.16	19.83	2.05
1.667	1.25	7.750	2.51	13.833	4.79	19.92	2.05
1.750	1.25	7.833	2.51	13.917	4.79	20.00	2.05
1.833	1.25	7.917	2.51	14.000	4.79	20.08	2.05
1.917	1.25	8.000	2.51	14.083	4.79	20.17	2.05
2.000	1.25	8.083	2.51	14.167	4.79	20.25	2.05
2.083	1.25	8.167	2.51	14.250	4.79	20.33	1.37
2.167	1.25	8.250	2.51	14.333	3.42	20.42	1.37
2.250	1.25	8.333	2.97	14.417	3.42	20.50	1.37
2.333	1.48	8.417	2.97	14.500	3.42	20.58	1.37
2.417	1.48	8.500	2.97	14.583	3.42	20.67	1.37
2.500	1.48	8.583	2.97	14.667	3.42	20.75	1.37
2.583	1.48	8.667	2.97	14.750	3.42	20.83	1.37
2.667	1.48	8.750	2.97	14.833	3.42	20.92	1.37
2.750	1.48	8.833	3.19	14.917	3.42	21.00	1.37
2.833	1.48	8.917	3.19	15.000	3.42	21.08	1.37
2.917	1.48	9.000	3.19	15.083	3.42	21.17	1.37
3.000	1.48	9.083	3.19	15.167	3.42	21.25	1.37
3.083	1.48	9.167	3.19	15.250	3.42	21.33	1.37
3.167	1.48	9.250	3.19	15.333	3.42	21.42	1.37
3.250	1.48	9.333	3.65	15.417	3.42	21.50	1.37
3.333	1.48	9.417	3.65	15.500	3.42	21.58	1.37
3.417	1.48	9.500	3.65	15.583	3.42	21.67	1.37
3.500	1.48	9.583	3.65	15.667	3.42	21.75	1.37
3.583	1.48	9.667	3.65	15.750	3.42	21.83	1.37
3.667	1.48	9.750	3.65	15.833	3.42	21.92	1.37
3.750	1.48	9.833	4.11	15.917	3.42	22.00	1.37
3.833	1.48	9.917	4.11	16.000	3.42	22.08	1.37
3.917	1.48	10.000	4.11	16.083	3.42	22.17	1.37
4.000	1.48	10.083	4.11	16.167	3.42	22.25	1.37
4.083	1.48	10.167	4.11	16.250	3.42	22.33	1.37
4.167	1.48	10.250	4.11	16.333	2.05	22.42	1.37
4.250	1.48	10.333	5.25	16.417	2.05	22.50	1.37
4.333	1.82	10.417	5.25	16.500	2.05	22.58	1.37
4.417	1.82	10.500	5.25	16.583	2.05	22.67	1.37
4.500	1.82	10.583	5.25	16.667	2.05	22.75	1.37
4.583	1.82	10.667	5.25	16.750	2.05	22.83	1.37
4.667	1.82	10.750	5.25	16.833	2.05	22.92	1.37
4.750	1.82	10.833	7.07	16.917	2.05	23.00	1.37
4.833	1.82	10.917	7.07	17.000	2.05	23.08	1.37
4.917	1.82	11.000	7.07	17.083	2.05	23.17	1.37
5.000	1.82	11.083	7.07	17.167	2.05	23.25	1.37
5.083	1.82	11.167	7.07	17.250	2.05	23.33	1.37
5.167	1.82	11.250	7.07	17.333	2.05	23.42	1.37
5.250	1.82	11.333	10.95	17.417	2.05	23.50	1.37
5.333	1.82	11.417	10.95	17.500	2.05	23.58	1.37
5.417	1.82	11.500	10.95	17.583	2.05	23.67	1.37
5.500	1.82	11.583	10.95	17.667	2.05	23.75	1.37
5.583	1.82	11.667	10.95	17.750	2.05	23.83	1.37
5.667	1.82	11.750	10.95	17.833	2.05	23.92	1.37
5.750	1.82	11.833	33.75	17.917	2.05	24.00	1.37
5.833	1.82	11.917	33.76	18.000	2.05	24.08	1.37
5.917	1.82	12.000	33.76	18.083	2.05	24.17	1.37
6.000	1.82	12.083	139.57	18.167	2.05	24.25	1.37
6.083	1.82	12.167	139.58	18.250	2.05		

Unit Hyd Qpeak (cms)= 0.090

PEAK FLOW (cms)= 0.046 (i)
TIME TO PEAK (hrs)= 13.000
RUNOFF VOLUME (mm)= 27.302
TOTAL RAINFALL (mm)= 114.040
RUNOFF COEFFICIENT = 0.239

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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--------------------
| ADD HYD  (  0039)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0002):    23.99   0.476    13.25    25.48
     + ID2= 2 (  0025):   100.92   1.938    14.08    36.80
       ================================================
       ID = 3 (  0039):   124.91   2.310    13.83    34.63

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------
| ADD HYD  (  0039)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 3 (  0039):   124.91   2.310    13.83    34.63
     + ID2= 2 (  0028):     6.37   0.164    13.00    27.83
       ================================================
       ID = 1 (  0039):   131.28   2.418    13.83    34.30

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------
| ADD HYD  (  0039)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0039):   131.28   2.418    13.83    34.30
     + ID2= 2 (  0030):     1.70   0.106    12.50    40.28
       ================================================
       ID = 3 (  0039):   132.98   2.440    13.75    34.37

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------
| ADD HYD  (  0039)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 3 (  0039):   132.98   2.440    13.75    34.37
     + ID2= 2 (  0031):     1.80   0.046    13.00    27.30
       ================================================
       ID = 1 (  0039):   134.78   2.471    13.75    34.28
```


NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

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| CALIB            |
| NASHYD   (  0001)|   Area    (ha)=  39.68   Curve Number   (CN)= 60.7
|ID= 1 DT= 5.0 min |   Ia      (mm)=   8.26   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   1.18
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NOTE: RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.82	12.250	139.58	18.33	2.05
0.167	0.00	6.250	1.82	12.333	16.44	18.42	2.05
0.250	0.00	6.333	2.05	12.417	16.42	18.50	2.05
0.333	1.25	6.417	2.05	12.500	16.42	18.58	2.05
0.417	1.25	6.500	2.05	12.583	16.42	18.67	2.05
0.500	1.25	6.583	2.05	12.667	16.42	18.75	2.05
0.583	1.25	6.667	2.05	12.750	16.42	18.83	2.05
0.667	1.25	6.750	2.05	12.833	8.44	18.92	2.05
0.750	1.25	6.833	2.05	12.917	8.44	19.00	2.05
0.833	1.25	6.917	2.05	13.000	8.44	19.08	2.05
0.917	1.25	7.000	2.05	13.083	8.44	19.17	2.05
1.000	1.25	7.083	2.05	13.167	8.44	19.25	2.05
1.083	1.25	7.167	2.05	13.250	8.44	19.33	2.05
1.167	1.25	7.250	2.05	13.333	6.16	19.42	2.05
1.250	1.25	7.333	2.51	13.417	6.16	19.50	2.05
1.333	1.25	7.417	2.51	13.500	6.16	19.58	2.05
1.417	1.25	7.500	2.51	13.583	6.16	19.67	2.05
1.500	1.25	7.583	2.51	13.667	6.16	19.75	2.05
1.583	1.25	7.667	2.51	13.750	6.16	19.83	2.05
1.667	1.25	7.750	2.51	13.833	4.79	19.92	2.05
1.750	1.25	7.833	2.51	13.917	4.79	20.00	2.05
1.833	1.25	7.917	2.51	14.000	4.79	20.08	2.05
1.917	1.25	8.000	2.51	14.083	4.79	20.17	2.05
2.000	1.25	8.083	2.51	14.167	4.79	20.25	2.05
2.083	1.25	8.167	2.51	14.250	4.79	20.33	1.37
2.167	1.25	8.250	2.51	14.333	3.42	20.42	1.37
2.250	1.25	8.333	2.97	14.417	3.42	20.50	1.37
2.333	1.48	8.417	2.97	14.500	3.42	20.58	1.37
2.417	1.48	8.500	2.97	14.583	3.42	20.67	1.37
2.500	1.48	8.583	2.97	14.667	3.42	20.75	1.37
2.583	1.48	8.667	2.97	14.750	3.42	20.83	1.37
2.667	1.48	8.750	2.97	14.833	3.42	20.92	1.37
2.750	1.48	8.833	3.19	14.917	3.42	21.00	1.37

2.833	1.48	8.917	3.19	15.000	3.42	21.08	1.37
2.917	1.48	9.000	3.19	15.083	3.42	21.17	1.37
3.000	1.48	9.083	3.19	15.167	3.42	21.25	1.37
3.083	1.48	9.167	3.19	15.250	3.42	21.33	1.37
3.167	1.48	9.250	3.19	15.333	3.42	21.42	1.37
3.250	1.48	9.333	3.65	15.417	3.42	21.50	1.37
3.333	1.48	9.417	3.65	15.500	3.42	21.58	1.37
3.417	1.48	9.500	3.65	15.583	3.42	21.67	1.37
3.500	1.48	9.583	3.65	15.667	3.42	21.75	1.37
3.583	1.48	9.667	3.65	15.750	3.42	21.83	1.37
3.667	1.48	9.750	3.65	15.833	3.42	21.92	1.37
3.750	1.48	9.833	4.11	15.917	3.42	22.00	1.37
3.833	1.48	9.917	4.11	16.000	3.42	22.08	1.37
3.917	1.48	10.000	4.11	16.083	3.42	22.17	1.37
4.000	1.48	10.083	4.11	16.167	3.42	22.25	1.37
4.083	1.48	10.167	4.11	16.250	3.42	22.33	1.37
4.167	1.48	10.250	4.11	16.333	2.05	22.42	1.37
4.250	1.48	10.333	5.25	16.417	2.05	22.50	1.37
4.333	1.82	10.417	5.25	16.500	2.05	22.58	1.37
4.417	1.82	10.500	5.25	16.583	2.05	22.67	1.37
4.500	1.82	10.583	5.25	16.667	2.05	22.75	1.37
4.583	1.82	10.667	5.25	16.750	2.05	22.83	1.37
4.667	1.82	10.750	5.25	16.833	2.05	22.92	1.37
4.750	1.82	10.833	7.07	16.917	2.05	23.00	1.37
4.833	1.82	10.917	7.07	17.000	2.05	23.08	1.37
4.917	1.82	11.000	7.07	17.083	2.05	23.17	1.37
5.000	1.82	11.083	7.07	17.167	2.05	23.25	1.37
5.083	1.82	11.167	7.07	17.250	2.05	23.33	1.37
5.167	1.82	11.250	7.07	17.333	2.05	23.42	1.37
5.250	1.82	11.333	10.95	17.417	2.05	23.50	1.37
5.333	1.82	11.417	10.95	17.500	2.05	23.58	1.37
5.417	1.82	11.500	10.95	17.583	2.05	23.67	1.37
5.500	1.82	11.583	10.95	17.667	2.05	23.75	1.37
5.583	1.82	11.667	10.95	17.750	2.05	23.83	1.37
5.667	1.82	11.750	10.95	17.833	2.05	23.92	1.37
5.750	1.82	11.833	33.75	17.917	2.05	24.00	1.37
5.833	1.82	11.917	33.76	18.000	2.05	24.08	1.37
5.917	1.82	12.000	33.76	18.083	2.05	24.17	1.37
6.000	1.82	12.083	139.57	18.167	2.05	24.25	1.37
6.083	1.82	12.167	139.58	18.250	2.05		

Unit Hyd Qpeak (cms)=   1.284

PEAK FLOW   (cms)=   1.142 (i)
TIME TO PEAK   (hrs)= 13.417
RUNOFF VOLUME   (mm)= 41.386
TOTAL RAINFALL   (mm)= 114.040
RUNOFF COEFFICIENT   =   0.363

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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| CALIB            |
| NASHYD   (  0029)|   Area    (ha)=  14.85   Curve Number   (CN)= 52.9
|ID= 1 DT= 5.0 min |   Ia      (mm)=  13.28   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.89
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NOTE: RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.82	12.250	139.58	18.33	2.05
0.167	0.00	6.250	1.82	12.333	16.44	18.42	2.05
0.250	0.00	6.333	2.05	12.417	16.42	18.50	2.05
0.333	1.25	6.417	2.05	12.500	16.42	18.58	2.05
0.417	1.25	6.500	2.05	12.583	16.42	18.67	2.05
0.500	1.25	6.583	2.05	12.667	16.42	18.75	2.05
0.583	1.25	6.667	2.05	12.750	16.42	18.83	2.05
0.667	1.25	6.750	2.05	12.833	8.44	18.92	2.05
0.750	1.25	6.833	2.05	12.917	8.44	19.00	2.05
0.833	1.25	6.917	2.05	13.000	8.44	19.08	2.05
0.917	1.25	7.000	2.05	13.083	8.44	19.17	2.05
1.000	1.25	7.083	2.05	13.167	8.44	19.25	2.05
1.083	1.25	7.167	2.05	13.250	8.44	19.33	2.05
1.167	1.25	7.250	2.05	13.333	6.16	19.42	2.05
1.250	1.25	7.333	2.51	13.417	6.16	19.50	2.05
1.333	1.25	7.417	2.51	13.500	6.16	19.58	2.05
1.417	1.25	7.500	2.51	13.583	6.16	19.67	2.05
1.500	1.25	7.583	2.51	13.667	6.16	19.75	2.05
1.583	1.25	7.667	2.51	13.750	6.16	19.83	2.05
1.667	1.25	7.750	2.51	13.833	4.79	19.92	2.05
1.750	1.25	7.833	2.51	13.917	4.79	20.00	2.05
1.833	1.25	7.917	2.51	14.000	4.79	20.08	2.05
1.917	1.25	8.000	2.51	14.083	4.79	20.17	2.05
2.000	1.25	8.083	2.51	14.167	4.79	20.25	2.05
2.083	1.25	8.167	2.51	14.250	4.79	20.33	1.37
2.167	1.25	8.250	2.51	14.333	3.42	20.42	1.37
2.250	1.25	8.333	2.97	14.417	3.42	20.50	1.37
2.333	1.48	8.417	2.97	14.500	3.42	20.58	1.37
2.417	1.48	8.500	2.97	14.583	3.42	20.67	1.37
2.500	1.48	8.583	2.97	14.667	3.42	20.75	1.37
2.583	1.48	8.667	2.97	14.750	3.42	20.83	1.37
2.667	1.48	8.750	2.97	14.833	3.42	20.92	1.37

2.750	1.48	8.833	3.19	14.917	3.42	21.00	1.37
2.833	1.48	8.917	3.19	15.000	3.42	21.08	1.37
2.917	1.48	9.000	3.19	15.083	3.42	21.17	1.37
3.000	1.48	9.083	3.19	15.167	3.42	21.25	1.37
3.083	1.48	9.167	3.19	15.250	3.42	21.33	1.37
3.167	1.48	9.250	3.19	15.333	3.42	21.42	1.37
3.250	1.48	9.333	3.65	15.417	3.42	21.50	1.37
3.333	1.48	9.417	3.65	15.500	3.42	21.58	1.37
3.417	1.48	9.500	3.65	15.583	3.42	21.67	1.37
3.500	1.48	9.583	3.65	15.667	3.42	21.75	1.37
3.583	1.48	9.667	3.65	15.750	3.42	21.83	1.37
3.667	1.48	9.750	3.65	15.833	3.42	21.92	1.37
3.750	1.48	9.833	4.11	15.917	3.42	22.00	1.37
3.833	1.48	9.917	4.11	16.000	3.42	22.08	1.37
3.917	1.48	10.000	4.11	16.083	3.42	22.17	1.37
4.000	1.48	10.083	4.11	16.167	3.42	22.25	1.37
4.083	1.48	10.167	4.11	16.250	3.42	22.33	1.37
4.167	1.48	10.250	4.11	16.333	2.05	22.42	1.37
4.250	1.48	10.333	5.25	16.417	2.05	22.50	1.37
4.333	1.82	10.417	5.25	16.500	2.05	22.58	1.37
4.417	1.82	10.500	5.25	16.583	2.05	22.67	1.37
4.500	1.82	10.583	5.25	16.667	2.05	22.75	1.37
4.583	1.82	10.667	5.25	16.750	2.05	22.83	1.37
4.667	1.82	10.750	5.25	16.833	2.05	22.92	1.37
4.750	1.82	10.833	7.07	16.917	2.05	23.00	1.37
4.833	1.82	10.917	7.07	17.000	2.05	23.08	1.37
4.917	1.82	11.000	7.07	17.083	2.05	23.17	1.37
5.000	1.82	11.083	7.07	17.167	2.05	23.25	1.37
5.083	1.82	11.167	7.07	17.250	2.05	23.33	1.37
5.167	1.82	11.250	7.07	17.333	2.05	23.42	1.37
5.250	1.82	11.333	10.95	17.417	2.05	23.50	1.37
5.333	1.82	11.417	10.95	17.500	2.05	23.58	1.37
5.417	1.82	11.500	10.95	17.583	2.05	23.67	1.37
5.500	1.82	11.583	10.95	17.667	2.05	23.75	1.37
5.583	1.82	11.667	10.95	17.750	2.05	23.83	1.37
5.667	1.82	11.750	10.95	17.833	2.05	23.92	1.37
5.750	1.82	11.833	33.75	17.917	2.05	24.00	1.37
5.833	1.82	11.917	33.76	18.000	2.05	24.08	1.37
5.917	1.82	12.000	33.76	18.083	2.05	24.17	1.37
6.000	1.82	12.083	139.57	18.167	2.05	24.25	1.37
6.083	1.82	12.167	139.58	18.250	2.05		

Unit Hyd Qpeak (cms)= 0.637

PEAK FLOW (cms)= 0.388 (i)
TIME TO PEAK (hrs)= 13.167
RUNOFF VOLUME (mm)= 31.091
TOTAL RAINFALL (mm)= 114.040

RUNOFF COEFFICIENT = 0.273

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	
STANDHYD (0014)	Area (ha)= 1.87
ID= 1 DT= 5.0 min	Total Imp(%)= 43.28 Dir. Conn.(%)= 10.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.81	1.06
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	111.65	25.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.82	12.250	139.58	18.33	2.05
0.167	0.00	6.250	1.82	12.333	16.44	18.42	2.05
0.250	0.00	6.333	2.05	12.417	16.42	18.50	2.05
0.333	1.25	6.417	2.05	12.500	16.42	18.58	2.05
0.417	1.25	6.500	2.05	12.583	16.42	18.67	2.05
0.500	1.25	6.583	2.05	12.667	16.42	18.75	2.05
0.583	1.25	6.667	2.05	12.750	16.42	18.83	2.05
0.667	1.25	6.750	2.05	12.833	8.44	18.92	2.05
0.750	1.25	6.833	2.05	12.917	8.44	19.00	2.05
0.833	1.25	6.917	2.05	13.000	8.44	19.08	2.05
0.917	1.25	7.000	2.05	13.083	8.44	19.17	2.05
1.000	1.25	7.083	2.05	13.167	8.44	19.25	2.05
1.083	1.25	7.167	2.05	13.250	8.44	19.33	2.05
1.167	1.25	7.250	2.05	13.333	6.16	19.42	2.05
1.250	1.25	7.333	2.51	13.417	6.16	19.50	2.05
1.333	1.25	7.417	2.51	13.500	6.16	19.58	2.05
1.417	1.25	7.500	2.51	13.583	6.16	19.67	2.05
1.500	1.25	7.583	2.51	13.667	6.16	19.75	2.05
1.583	1.25	7.667	2.51	13.750	6.16	19.83	2.05
1.667	1.25	7.750	2.51	13.833	4.79	19.92	2.05
1.750	1.25	7.833	2.51	13.917	4.79	20.00	2.05
1.833	1.25	7.917	2.51	14.000	4.79	20.08	2.05
1.917	1.25	8.000	2.51	14.083	4.79	20.17	2.05
2.000	1.25	8.083	2.51	14.167	4.79	20.25	2.05
2.083	1.25	8.167	2.51	14.250	4.79	20.33	1.37

2.167	1.25	8.250	2.51	14.333	3.42	20.42	1.37
2.250	1.25	8.333	2.97	14.417	3.42	20.50	1.37
2.333	1.48	8.417	2.97	14.500	3.42	20.58	1.37
2.417	1.48	8.500	2.97	14.583	3.42	20.67	1.37
2.500	1.48	8.583	2.97	14.667	3.42	20.75	1.37
2.583	1.48	8.667	2.97	14.750	3.42	20.83	1.37
2.667	1.48	8.750	2.97	14.833	3.42	20.92	1.37
2.750	1.48	8.833	3.19	14.917	3.42	21.00	1.37
2.833	1.48	8.917	3.19	15.000	3.42	21.08	1.37
2.917	1.48	9.000	3.19	15.083	3.42	21.17	1.37
3.000	1.48	9.083	3.19	15.167	3.42	21.25	1.37
3.083	1.48	9.167	3.19	15.250	3.42	21.33	1.37
3.167	1.48	9.250	3.19	15.333	3.42	21.42	1.37
3.250	1.48	9.333	3.65	15.417	3.42	21.50	1.37
3.333	1.48	9.417	3.65	15.500	3.42	21.58	1.37
3.417	1.48	9.500	3.65	15.583	3.42	21.67	1.37
3.500	1.48	9.583	3.65	15.667	3.42	21.75	1.37
3.583	1.48	9.667	3.65	15.750	3.42	21.83	1.37
3.667	1.48	9.750	3.65	15.833	3.42	21.92	1.37
3.750	1.48	9.833	4.11	15.917	3.42	22.00	1.37
3.833	1.48	9.917	4.11	16.000	3.42	22.08	1.37
3.917	1.48	10.000	4.11	16.083	3.42	22.17	1.37
4.000	1.48	10.083	4.11	16.167	3.42	22.25	1.37
4.083	1.48	10.167	4.11	16.250	3.42	22.33	1.37
4.167	1.48	10.250	4.11	16.333	2.05	22.42	1.37
4.250	1.48	10.333	5.25	16.417	2.05	22.50	1.37
4.333	1.82	10.417	5.25	16.500	2.05	22.58	1.37
4.417	1.82	10.500	5.25	16.583	2.05	22.67	1.37
4.500	1.82	10.583	5.25	16.667	2.05	22.75	1.37
4.583	1.82	10.667	5.25	16.750	2.05	22.83	1.37
4.667	1.82	10.750	5.25	16.833	2.05	22.92	1.37
4.750	1.82	10.833	7.07	16.917	2.05	23.00	1.37
4.833	1.82	10.917	7.07	17.000	2.05	23.08	1.37
4.917	1.82	11.000	7.07	17.083	2.05	23.17	1.37
5.000	1.82	11.083	7.07	17.167	2.05	23.25	1.37
5.083	1.82	11.167	7.07	17.250	2.05	23.33	1.37
5.167	1.82	11.250	7.07	17.333	2.05	23.42	1.37
5.250	1.82	11.333	10.95	17.417	2.05	23.50	1.37
5.333	1.82	11.417	10.95	17.500	2.05	23.58	1.37
5.417	1.82	11.500	10.95	17.583	2.05	23.67	1.37
5.500	1.82	11.583	10.95	17.667	2.05	23.75	1.37
5.583	1.82	11.667	10.95	17.750	2.05	23.83	1.37
5.667	1.82	11.750	10.95	17.833	2.05	23.92	1.37
5.750	1.82	11.833	33.75	17.917	2.05	24.00	1.37
5.833	1.82	11.917	33.76	18.000	2.05	24.08	1.37
5.917	1.82	12.000	33.76	18.083	2.05	24.17	1.37
6.000	1.82	12.083	139.57	18.167	2.05	24.25	1.37
6.083	1.82	12.167	139.58	18.250	2.05		

Max.Eff.Inten.(mm/hr)=	139.58	180.74		
over (min)	5.00	10.00		
Storage Coeff. (min)=	2.94 (ii)	7.14 (ii)		
Unit Hyd. Tpeak (min)=	5.00	10.00		
Unit Hyd. peak (cms)=	0.28	0.14		
			TOTALS	
PEAK FLOW (cms)=	0.07	0.43	0.506 (iii)	
TIME TO PEAK (hrs)=	12.25	12.25	12.25	
RUNOFF VOLUME (mm)=	113.04	78.78	82.20	
TOTAL RAINFALL (mm)=	114.04	114.04	114.04	
RUNOFF COEFFICIENT =	0.99	0.69	0.72	

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 78.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0040)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0001):	39.68	1.142	13.42	41.39
+ ID2= 2 (0014):	1.87	0.506	12.25	82.20
ID = 3 (0040):	41.55	1.175	13.42	43.22

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0040)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0040):	41.55	1.175	13.42	43.22
+ ID2= 2 (0029):	14.85	0.388	13.17	31.09
ID = 1 (0040):	56.40	1.549	13.33	40.03

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023)		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3	ID1= 1 (0039):	134.78	2.471	13.75	34.28
	+ ID2= 2 (0040):	56.40	1.549	13.33	40.03
	ID = 3 (0023):	191.18	3.959	13.58	35.97

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

****
** SIMULATION:K - 50-year SCS **
****

READ STORM	Filename: C:\Users\ecomish\AppData\Local\Temp\49208e0f-499d-4cb6-b2a9-d1492d706baa\0c38785b
Ptotal=126.91 mm	Comments: 50yr 24hr 15min SCS Type II (MTO) - 15%

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.00	0.00	6.25	2.28	12.50	18.28	18.75	2.28
0.25	1.40	6.50	2.28	12.75	9.39	19.00	2.28
0.50	1.40	6.75	2.28	13.00	9.39	19.25	2.28
0.75	1.40	7.00	2.28	13.25	6.85	19.50	2.28
1.00	1.40	7.25	2.79	13.50	6.85	19.75	2.28
1.25	1.40	7.50	2.79	13.75	5.33	20.00	2.28
1.50	1.40	7.75	2.79	14.00	5.33	20.25	1.52
1.75	1.40	8.00	2.79	14.25	3.81	20.50	1.52
2.00	1.40	8.25	3.30	14.50	3.81	20.75	1.52
2.25	1.65	8.50	3.30	14.75	3.81	21.00	1.52
2.50	1.65	8.75	3.55	15.00	3.81	21.25	1.52
2.75	1.65	9.00	3.55	15.25	3.81	21.50	1.52
3.00	1.65	9.25	4.06	15.50	3.81	21.75	1.52
3.25	1.65	9.50	4.06	15.75	3.81	22.00	1.52
3.50	1.65	9.75	4.57	16.00	3.81	22.25	1.52
3.75	1.65	10.00	4.57	16.25	2.28	22.50	1.52
4.00	1.65	10.25	5.84	16.50	2.28	22.75	1.52
4.25	2.03	10.50	5.84	16.75	2.28	23.00	1.52
4.50	2.03	10.75	7.87	17.00	2.28	23.25	1.52
4.75	2.03	11.00	7.87	17.25	2.28	23.50	1.52
5.00	2.03	11.25	12.18	17.50	2.28	23.75	1.52
5.25	2.03	11.50	12.18	17.75	2.28	24.00	1.52
5.50	2.03	11.75	37.57	18.00	2.28		
5.75	2.03	12.00	155.34	18.25	2.28		

6.00	2.03	12.25	18.28	18.50	2.28		

CALIB			
NASHYD (0025)	Area (ha)= 100.92	Curve Number (CN)= 55.9	
ID= 1 DT= 5.0 min	Ia (mm)= 7.89	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 1.70		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.03	12.250	155.34	18.33	2.28
0.167	0.00	6.250	2.03	12.333	18.29	18.42	2.28
0.250	0.00	6.333	2.28	12.417	18.28	18.50	2.28
0.333	1.40	6.417	2.28	12.500	18.28	18.58	2.28
0.417	1.40	6.500	2.28	12.583	18.27	18.67	2.28
0.500	1.40	6.583	2.28	12.667	18.28	18.75	2.28
0.583	1.40	6.667	2.28	12.750	18.28	18.83	2.28
0.667	1.40	6.750	2.28	12.833	9.39	18.92	2.28
0.750	1.40	6.833	2.28	12.917	9.39	19.00	2.28
0.833	1.40	6.917	2.28	13.000	9.39	19.08	2.28
0.917	1.40	7.000	2.28	13.083	9.39	19.17	2.28
1.000	1.40	7.083	2.28	13.167	9.39	19.25	2.28
1.083	1.40	7.167	2.28	13.250	9.39	19.33	2.28
1.167	1.40	7.250	2.28	13.333	6.85	19.42	2.28
1.250	1.40	7.333	2.79	13.417	6.85	19.50	2.28
1.333	1.40	7.417	2.79	13.500	6.85	19.58	2.28
1.417	1.40	7.500	2.79	13.583	6.85	19.67	2.28
1.500	1.40	7.583	2.79	13.667	6.85	19.75	2.28
1.583	1.40	7.667	2.79	13.750	6.85	19.83	2.28
1.667	1.40	7.750	2.79	13.833	5.33	19.92	2.28
1.750	1.40	7.833	2.79	13.917	5.33	20.00	2.28
1.833	1.40	7.917	2.79	14.000	5.33	20.08	2.28
1.917	1.40	8.000	2.79	14.083	5.33	20.17	2.28
2.000	1.40	8.083	2.79	14.167	5.33	20.25	2.28
2.083	1.40	8.167	2.79	14.250	5.33	20.33	1.52
2.167	1.40	8.250	2.79	14.333	3.81	20.42	1.52
2.250	1.40	8.333	3.30	14.417	3.81	20.50	1.52
2.333	1.65	8.417	3.30	14.500	3.81	20.58	1.52
2.417	1.65	8.500	3.30	14.583	3.81	20.67	1.52
2.500	1.65	8.583	3.30	14.667	3.81	20.75	1.52
2.583	1.65	8.667	3.30	14.750	3.81	20.83	1.52
2.667	1.65	8.750	3.30	14.833	3.81	20.92	1.52

2.750	1.65	8.833	3.55	14.917	3.81	21.00	1.52
2.833	1.65	8.917	3.55	15.000	3.81	21.08	1.52
2.917	1.65	9.000	3.55	15.083	3.81	21.17	1.52
3.000	1.65	9.083	3.55	15.167	3.81	21.25	1.52
3.083	1.65	9.167	3.55	15.250	3.81	21.33	1.52
3.167	1.65	9.250	3.55	15.333	3.81	21.42	1.52
3.250	1.65	9.333	4.06	15.417	3.81	21.50	1.52
3.333	1.65	9.417	4.06	15.500	3.81	21.58	1.52
3.417	1.65	9.500	4.06	15.583	3.81	21.67	1.52
3.500	1.65	9.583	4.06	15.667	3.81	21.75	1.52
3.583	1.65	9.667	4.06	15.750	3.81	21.83	1.52
3.667	1.65	9.750	4.06	15.833	3.81	21.92	1.52
3.750	1.65	9.833	4.57	15.917	3.81	22.00	1.52
3.833	1.65	9.917	4.57	16.000	3.81	22.08	1.52
3.917	1.65	10.000	4.57	16.083	3.81	22.17	1.52
4.000	1.65	10.083	4.57	16.167	3.81	22.25	1.52
4.083	1.65	10.167	4.57	16.250	3.81	22.33	1.52
4.167	1.65	10.250	4.57	16.333	2.28	22.42	1.52
4.250	1.65	10.333	5.84	16.417	2.28	22.50	1.52
4.333	2.03	10.417	5.84	16.500	2.28	22.58	1.52
4.417	2.03	10.500	5.84	16.583	2.28	22.67	1.52
4.500	2.03	10.583	5.84	16.667	2.28	22.75	1.52
4.583	2.03	10.667	5.84	16.750	2.28	22.83	1.52
4.667	2.03	10.750	5.84	16.833	2.28	22.92	1.52
4.750	2.03	10.833	7.87	16.917	2.28	23.00	1.52
4.833	2.03	10.917	7.87	17.000	2.28	23.08	1.52
4.917	2.03	11.000	7.87	17.083	2.28	23.17	1.52
5.000	2.03	11.083	7.87	17.167	2.28	23.25	1.52
5.083	2.03	11.167	7.87	17.250	2.28	23.33	1.52
5.167	2.03	11.250	7.87	17.333	2.28	23.42	1.52
5.250	2.03	11.333	12.18	17.417	2.28	23.50	1.52
5.333	2.03	11.417	12.18	17.500	2.28	23.58	1.52
5.417	2.03	11.500	12.18	17.583	2.28	23.67	1.52
5.500	2.03	11.583	12.18	17.667	2.28	23.75	1.52
5.583	2.03	11.667	12.18	17.750	2.28	23.83	1.52
5.667	2.03	11.750	12.18	17.833	2.28	23.92	1.52
5.750	2.03	11.833	37.56	17.917	2.28	24.00	1.52
5.833	2.03	11.917	37.57	18.000	2.28	24.08	1.52
5.917	2.03	12.000	37.57	18.083	2.28	24.17	1.52
6.000	2.03	12.083	155.32	18.167	2.28	24.25	1.52
6.083	2.03	12.167	155.34	18.250	2.28		

Unit Hyd Qpeak (cms)= 2.267

PEAK FLOW (cms)= 2.350 (i)
TIME TO PEAK (hrs)= 14.083
RUNOFF VOLUME (mm)= 44.396
TOTAL RAINFALL (mm)= 126.910

RUNOFF COEFFICIENT = 0.350

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0002)	Area (ha)= 23.99	Curve Number (CN)= 44.7	
ID= 1 DT= 5.0 min	Ia (mm)= 10.91	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.97		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.03	12.250	155.34	18.33	2.28
0.167	0.00	6.250	2.03	12.333	18.29	18.42	2.28
0.250	0.00	6.333	2.28	12.417	18.28	18.50	2.28
0.333	1.40	6.417	2.28	12.500	18.28	18.58	2.28
0.417	1.40	6.500	2.28	12.583	18.27	18.67	2.28
0.500	1.40	6.583	2.28	12.667	18.28	18.75	2.28
0.583	1.40	6.667	2.28	12.750	18.28	18.83	2.28
0.667	1.40	6.750	2.28	12.833	9.39	18.92	2.28
0.750	1.40	6.833	2.28	12.917	9.39	19.00	2.28
0.833	1.40	6.917	2.28	13.000	9.39	19.08	2.28
0.917	1.40	7.000	2.28	13.083	9.39	19.17	2.28
1.000	1.40	7.083	2.28	13.167	9.39	19.25	2.28
1.083	1.40	7.167	2.28	13.250	9.39	19.33	2.28
1.167	1.40	7.250	2.28	13.333	6.85	19.42	2.28
1.250	1.40	7.333	2.79	13.417	6.85	19.50	2.28
1.333	1.40	7.417	2.79	13.500	6.85	19.58	2.28
1.417	1.40	7.500	2.79	13.583	6.85	19.67	2.28
1.500	1.40	7.583	2.79	13.667	6.85	19.75	2.28
1.583	1.40	7.667	2.79	13.750	6.85	19.83	2.28
1.667	1.40	7.750	2.79	13.833	5.33	19.92	2.28
1.750	1.40	7.833	2.79	13.917	5.33	20.00	2.28
1.833	1.40	7.917	2.79	14.000	5.33	20.08	2.28
1.917	1.40	8.000	2.79	14.083	5.33	20.17	2.28
2.000	1.40	8.083	2.79	14.167	5.33	20.25	2.28
2.083	1.40	8.167	2.79	14.250	5.33	20.33	1.52
2.167	1.40	8.250	2.79	14.333	3.81	20.42	1.52
2.250	1.40	8.333	3.30	14.417	3.81	20.50	1.52
2.333	1.65	8.417	3.30	14.500	3.81	20.58	1.52
2.417	1.65	8.500	3.30	14.583	3.81	20.67	1.52
2.500	1.65	8.583	3.30	14.667	3.81	20.75	1.52
2.583	1.65	8.667	3.30	14.750	3.81	20.83	1.52

2.667	1.65	8.750	3.30	14.833	3.81	20.92	1.52
2.750	1.65	8.833	3.55	14.917	3.81	21.00	1.52
2.833	1.65	8.917	3.55	15.000	3.81	21.08	1.52
2.917	1.65	9.000	3.55	15.083	3.81	21.17	1.52
3.000	1.65	9.083	3.55	15.167	3.81	21.25	1.52
3.083	1.65	9.167	3.55	15.250	3.81	21.33	1.52
3.167	1.65	9.250	3.55	15.333	3.81	21.42	1.52
3.250	1.65	9.333	4.06	15.417	3.81	21.50	1.52
3.333	1.65	9.417	4.06	15.500	3.81	21.58	1.52
3.417	1.65	9.500	4.06	15.583	3.81	21.67	1.52
3.500	1.65	9.583	4.06	15.667	3.81	21.75	1.52
3.583	1.65	9.667	4.06	15.750	3.81	21.83	1.52
3.667	1.65	9.750	4.06	15.833	3.81	21.92	1.52
3.750	1.65	9.833	4.57	15.917	3.81	22.00	1.52
3.833	1.65	9.917	4.57	16.000	3.81	22.08	1.52
3.917	1.65	10.000	4.57	16.083	3.81	22.17	1.52
4.000	1.65	10.083	4.57	16.167	3.81	22.25	1.52
4.083	1.65	10.167	4.57	16.250	3.81	22.33	1.52
4.167	1.65	10.250	4.57	16.333	2.28	22.42	1.52
4.250	1.65	10.333	5.84	16.417	2.28	22.50	1.52
4.333	2.03	10.417	5.84	16.500	2.28	22.58	1.52
4.417	2.03	10.500	5.84	16.583	2.28	22.67	1.52
4.500	2.03	10.583	5.84	16.667	2.28	22.75	1.52
4.583	2.03	10.667	5.84	16.750	2.28	22.83	1.52
4.667	2.03	10.750	5.84	16.833	2.28	22.92	1.52
4.750	2.03	10.833	7.87	16.917	2.28	23.00	1.52
4.833	2.03	10.917	7.87	17.000	2.28	23.08	1.52
4.917	2.03	11.000	7.87	17.083	2.28	23.17	1.52
5.000	2.03	11.083	7.87	17.167	2.28	23.25	1.52
5.083	2.03	11.167	7.87	17.250	2.28	23.33	1.52
5.167	2.03	11.250	7.87	17.333	2.28	23.42	1.52
5.250	2.03	11.333	12.18	17.417	2.28	23.50	1.52
5.333	2.03	11.417	12.18	17.500	2.28	23.58	1.52
5.417	2.03	11.500	12.18	17.583	2.28	23.67	1.52
5.500	2.03	11.583	12.18	17.667	2.28	23.75	1.52
5.583	2.03	11.667	12.18	17.750	2.28	23.83	1.52
5.667	2.03	11.750	12.18	17.833	2.28	23.92	1.52
5.750	2.03	11.833	37.56	17.917	2.28	24.00	1.52
5.833	2.03	11.917	37.57	18.000	2.28	24.08	1.52
5.917	2.03	12.000	37.57	18.083	2.28	24.17	1.52
6.000	2.03	12.083	155.32	18.167	2.28	24.25	1.52
6.083	2.03	12.167	155.34	18.250	2.28		

Unit Hyd Qpeak (cms)= 0.945

PEAK FLOW (cms)= 0.588 (i)
TIME TO PEAK (hrs)= 13.250
RUNOFF VOLUME (mm)= 31.276

TOTAL RAINFALL (mm)= 126.910
RUNOFF COEFFICIENT = 0.246

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB							
NASHYD (0028)	Area (ha)= 6.37	Curve Number (CN)= 50.5					
ID= 1 DT= 5.0 min	Ia (mm)= 15.69	# of Linear Res.(N)= 3.00					
	U.H. Tp(hrs)= 0.77						

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.03	12.250	155.34	18.33	2.28
0.167	0.00	6.250	2.03	12.333	18.29	18.42	2.28
0.250	0.00	6.333	2.28	12.417	18.28	18.50	2.28
0.333	1.40	6.417	2.28	12.500	18.28	18.58	2.28
0.417	1.40	6.500	2.28	12.583	18.27	18.67	2.28
0.500	1.40	6.583	2.28	12.667	18.28	18.75	2.28
0.583	1.40	6.667	2.28	12.750	18.28	18.83	2.28
0.667	1.40	6.750	2.28	12.833	9.39	18.92	2.28
0.750	1.40	6.833	2.28	12.917	9.39	19.00	2.28
0.833	1.40	6.917	2.28	13.000	9.39	19.08	2.28
0.917	1.40	7.000	2.28	13.083	9.39	19.17	2.28
1.000	1.40	7.083	2.28	13.167	9.39	19.25	2.28
1.083	1.40	7.167	2.28	13.250	9.39	19.33	2.28
1.167	1.40	7.250	2.28	13.333	6.85	19.42	2.28
1.250	1.40	7.333	2.79	13.417	6.85	19.50	2.28
1.333	1.40	7.417	2.79	13.500	6.85	19.58	2.28
1.417	1.40	7.500	2.79	13.583	6.85	19.67	2.28
1.500	1.40	7.583	2.79	13.667	6.85	19.75	2.28
1.583	1.40	7.667	2.79	13.750	6.85	19.83	2.28
1.667	1.40	7.750	2.79	13.833	5.33	19.92	2.28
1.750	1.40	7.833	2.79	13.917	5.33	20.00	2.28
1.833	1.40	7.917	2.79	14.000	5.33	20.08	2.28
1.917	1.40	8.000	2.79	14.083	5.33	20.17	2.28
2.000	1.40	8.083	2.79	14.167	5.33	20.25	2.28
2.083	1.40	8.167	2.79	14.250	5.33	20.33	1.52
2.167	1.40	8.250	2.79	14.333	3.81	20.42	1.52
2.250	1.40	8.333	3.30	14.417	3.81	20.50	1.52
2.333	1.65	8.417	3.30	14.500	3.81	20.58	1.52
2.417	1.65	8.500	3.30	14.583	3.81	20.67	1.52
2.500	1.65	8.583	3.30	14.667	3.81	20.75	1.52

2.583	1.65	8.667	3.30	14.750	3.81	20.83	1.52
2.667	1.65	8.750	3.30	14.833	3.81	20.92	1.52
2.750	1.65	8.833	3.55	14.917	3.81	21.00	1.52
2.833	1.65	8.917	3.55	15.000	3.81	21.08	1.52
2.917	1.65	9.000	3.55	15.083	3.81	21.17	1.52
3.000	1.65	9.083	3.55	15.167	3.81	21.25	1.52
3.083	1.65	9.167	3.55	15.250	3.81	21.33	1.52
3.167	1.65	9.250	3.55	15.333	3.81	21.42	1.52
3.250	1.65	9.333	4.06	15.417	3.81	21.50	1.52
3.333	1.65	9.417	4.06	15.500	3.81	21.58	1.52
3.417	1.65	9.500	4.06	15.583	3.81	21.67	1.52
3.500	1.65	9.583	4.06	15.667	3.81	21.75	1.52
3.583	1.65	9.667	4.06	15.750	3.81	21.83	1.52
3.667	1.65	9.750	4.06	15.833	3.81	21.92	1.52
3.750	1.65	9.833	4.57	15.917	3.81	22.00	1.52
3.833	1.65	9.917	4.57	16.000	3.81	22.08	1.52
3.917	1.65	10.000	4.57	16.083	3.81	22.17	1.52
4.000	1.65	10.083	4.57	16.167	3.81	22.25	1.52
4.083	1.65	10.167	4.57	16.250	3.81	22.33	1.52
4.167	1.65	10.250	4.57	16.333	2.28	22.42	1.52
4.250	1.65	10.333	5.84	16.417	2.28	22.50	1.52
4.333	2.03	10.417	5.84	16.500	2.28	22.58	1.52
4.417	2.03	10.500	5.84	16.583	2.28	22.67	1.52
4.500	2.03	10.583	5.84	16.667	2.28	22.75	1.52
4.583	2.03	10.667	5.84	16.750	2.28	22.83	1.52
4.667	2.03	10.750	5.84	16.833	2.28	22.92	1.52
4.750	2.03	10.833	7.87	16.917	2.28	23.00	1.52
4.833	2.03	10.917	7.87	17.000	2.28	23.08	1.52
4.917	2.03	11.000	7.87	17.083	2.28	23.17	1.52
5.000	2.03	11.083	7.87	17.167	2.28	23.25	1.52
5.083	2.03	11.167	7.87	17.250	2.28	23.33	1.52
5.167	2.03	11.250	7.87	17.333	2.28	23.42	1.52
5.250	2.03	11.333	12.18	17.417	2.28	23.50	1.52
5.333	2.03	11.417	12.18	17.500	2.28	23.58	1.52
5.417	2.03	11.500	12.18	17.583	2.28	23.67	1.52
5.500	2.03	11.583	12.18	17.667	2.28	23.75	1.52
5.583	2.03	11.667	12.18	17.750	2.28	23.83	1.52
5.667	2.03	11.750	12.18	17.833	2.28	23.92	1.52
5.750	2.03	11.833	37.56	17.917	2.28	24.00	1.52
5.833	2.03	11.917	37.57	18.000	2.28	24.08	1.52
5.917	2.03	12.000	37.57	18.083	2.28	24.17	1.52
6.000	2.03	12.083	155.32	18.167	2.28	24.25	1.52
6.083	2.03	12.167	155.34	18.250	2.28		

Unit Hyd Qpeak (cms)= 0.316

PEAK FLOW (cms)= 0.205 (i)
TIME TO PEAK (hrs)= 13.000

RUNOFF VOLUME (mm)= 34.323
TOTAL RAINFALL (mm)= 126.910
RUNOFF COEFFICIENT = 0.270

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB							
NASHYD (0030)	Area (ha)= 1.70	Curve Number (CN)= 60.5					
ID= 1 DT= 5.0 min	Ia (mm)= 9.65	# of Linear Res.(N)= 3.00					
	U.H. Tp(hrs)= 0.40						

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.03	12.250	155.34	18.33	2.28
0.167	0.00	6.250	2.03	12.333	18.29	18.42	2.28
0.250	0.00	6.333	2.28	12.417	18.28	18.50	2.28
0.333	1.40	6.417	2.28	12.500	18.28	18.58	2.28
0.417	1.40	6.500	2.28	12.583	18.27	18.67	2.28
0.500	1.40	6.583	2.28	12.667	18.28	18.75	2.28
0.583	1.40	6.667	2.28	12.750	18.28	18.83	2.28
0.667	1.40	6.750	2.28	12.833	9.39	18.92	2.28
0.750	1.40	6.833	2.28	12.917	9.39	19.00	2.28
0.833	1.40	6.917	2.28	13.000	9.39	19.08	2.28
0.917	1.40	7.000	2.28	13.083	9.39	19.17	2.28
1.000	1.40	7.083	2.28	13.167	9.39	19.25	2.28
1.083	1.40	7.167	2.28	13.250	9.39	19.33	2.28
1.167	1.40	7.250	2.28	13.333	6.85	19.42	2.28
1.250	1.40	7.333	2.79	13.417	6.85	19.50	2.28
1.333	1.40	7.417	2.79	13.500	6.85	19.58	2.28
1.417	1.40	7.500	2.79	13.583	6.85	19.67	2.28
1.500	1.40	7.583	2.79	13.667	6.85	19.75	2.28
1.583	1.40	7.667	2.79	13.750	6.85	19.83	2.28
1.667	1.40	7.750	2.79	13.833	5.33	19.92	2.28
1.750	1.40	7.833	2.79	13.917	5.33	20.00	2.28
1.833	1.40	7.917	2.79	14.000	5.33	20.08	2.28
1.917	1.40	8.000	2.79	14.083	5.33	20.17	2.28
2.000	1.40	8.083	2.79	14.167	5.33	20.25	2.28
2.083	1.40	8.167	2.79	14.250	5.33	20.33	1.52
2.167	1.40	8.250	2.79	14.333	3.81	20.42	1.52
2.250	1.40	8.333	3.30	14.417	3.81	20.50	1.52
2.333	1.65	8.417	3.30	14.500	3.81	20.58	1.52
2.417	1.65	8.500	3.30	14.583	3.81	20.67	1.52

2.500	1.65	8.583	3.30	14.667	3.81	20.75	1.52
2.583	1.65	8.667	3.30	14.750	3.81	20.83	1.52
2.667	1.65	8.750	3.30	14.833	3.81	20.92	1.52
2.750	1.65	8.833	3.55	14.917	3.81	21.00	1.52
2.833	1.65	8.917	3.55	15.000	3.81	21.08	1.52
2.917	1.65	9.000	3.55	15.083	3.81	21.17	1.52
3.000	1.65	9.083	3.55	15.167	3.81	21.25	1.52
3.083	1.65	9.167	3.55	15.250	3.81	21.33	1.52
3.167	1.65	9.250	3.55	15.333	3.81	21.42	1.52
3.250	1.65	9.333	4.06	15.417	3.81	21.50	1.52
3.333	1.65	9.417	4.06	15.500	3.81	21.58	1.52
3.417	1.65	9.500	4.06	15.583	3.81	21.67	1.52
3.500	1.65	9.583	4.06	15.667	3.81	21.75	1.52
3.583	1.65	9.667	4.06	15.750	3.81	21.83	1.52
3.667	1.65	9.750	4.06	15.833	3.81	21.92	1.52
3.750	1.65	9.833	4.57	15.917	3.81	22.00	1.52
3.833	1.65	9.917	4.57	16.000	3.81	22.08	1.52
3.917	1.65	10.000	4.57	16.083	3.81	22.17	1.52
4.000	1.65	10.083	4.57	16.167	3.81	22.25	1.52
4.083	1.65	10.167	4.57	16.250	3.81	22.33	1.52
4.167	1.65	10.250	4.57	16.333	2.28	22.42	1.52
4.250	1.65	10.333	5.84	16.417	2.28	22.50	1.52
4.333	2.03	10.417	5.84	16.500	2.28	22.58	1.52
4.417	2.03	10.500	5.84	16.583	2.28	22.67	1.52
4.500	2.03	10.583	5.84	16.667	2.28	22.75	1.52
4.583	2.03	10.667	5.84	16.750	2.28	22.83	1.52
4.667	2.03	10.750	5.84	16.833	2.28	22.92	1.52
4.750	2.03	10.833	7.87	16.917	2.28	23.00	1.52
4.833	2.03	10.917	7.87	17.000	2.28	23.08	1.52
4.917	2.03	11.000	7.87	17.083	2.28	23.17	1.52
5.000	2.03	11.083	7.87	17.167	2.28	23.25	1.52
5.083	2.03	11.167	7.87	17.250	2.28	23.33	1.52
5.167	2.03	11.250	7.87	17.333	2.28	23.42	1.52
5.250	2.03	11.333	12.18	17.417	2.28	23.50	1.52
5.333	2.03	11.417	12.18	17.500	2.28	23.58	1.52
5.417	2.03	11.500	12.18	17.583	2.28	23.67	1.52
5.500	2.03	11.583	12.18	17.667	2.28	23.75	1.52
5.583	2.03	11.667	12.18	17.750	2.28	23.83	1.52
5.667	2.03	11.750	12.18	17.833	2.28	23.92	1.52
5.750	2.03	11.833	37.56	17.917	2.28	24.00	1.52
5.833	2.03	11.917	37.57	18.000	2.28	24.08	1.52
5.917	2.03	12.000	37.57	18.083	2.28	24.17	1.52
6.000	2.03	12.083	155.32	18.167	2.28	24.25	1.52
6.083	2.03	12.167	155.34	18.250	2.28		

Unit Hyd Qpeak (cms)= 0.162

PEAK FLOW (cms)= 0.128 (i)

TIME TO PEAK (hrs)= 12.500
RUNOFF VOLUME (mm)= 48.516
TOTAL RAINFALL (mm)= 126.910
RUNOFF COEFFICIENT = 0.382

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB							
NASHYD (0031)	Area (ha)= 1.80	Curve Number (CN)= 50.0					
ID= 1 DT= 5.0 min	Ia (mm)= 16.00	# of Linear Res.(N)= 3.00					
	U.H. Tp(hrs)= 0.76						

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.03	12.250	155.34	18.33	2.28
0.167	0.00	6.250	2.03	12.333	18.29	18.42	2.28
0.250	0.00	6.333	2.28	12.417	18.28	18.50	2.28
0.333	1.40	6.417	2.28	12.500	18.28	18.58	2.28
0.417	1.40	6.500	2.28	12.583	18.27	18.67	2.28
0.500	1.40	6.583	2.28	12.667	18.28	18.75	2.28
0.583	1.40	6.667	2.28	12.750	18.28	18.83	2.28
0.667	1.40	6.750	2.28	12.833	9.39	18.92	2.28
0.750	1.40	6.833	2.28	12.917	9.39	19.00	2.28
0.833	1.40	6.917	2.28	13.000	9.39	19.08	2.28
0.917	1.40	7.000	2.28	13.083	9.39	19.17	2.28
1.000	1.40	7.083	2.28	13.167	9.39	19.25	2.28
1.083	1.40	7.167	2.28	13.250	9.39	19.33	2.28
1.167	1.40	7.250	2.28	13.333	6.85	19.42	2.28
1.250	1.40	7.333	2.79	13.417	6.85	19.50	2.28
1.333	1.40	7.417	2.79	13.500	6.85	19.58	2.28
1.417	1.40	7.500	2.79	13.583	6.85	19.67	2.28
1.500	1.40	7.583	2.79	13.667	6.85	19.75	2.28
1.583	1.40	7.667	2.79	13.750	6.85	19.83	2.28
1.667	1.40	7.750	2.79	13.833	5.33	19.92	2.28
1.750	1.40	7.833	2.79	13.917	5.33	20.00	2.28
1.833	1.40	7.917	2.79	14.000	5.33	20.08	2.28
1.917	1.40	8.000	2.79	14.083	5.33	20.17	2.28
2.000	1.40	8.083	2.79	14.167	5.33	20.25	2.28
2.083	1.40	8.167	2.79	14.250	5.33	20.33	1.52
2.167	1.40	8.250	2.79	14.333	3.81	20.42	1.52
2.250	1.40	8.333	3.30	14.417	3.81	20.50	1.52
2.333	1.65	8.417	3.30	14.500	3.81	20.58	1.52

2.417	1.65	8.500	3.30	14.583	3.81	20.67	1.52
2.500	1.65	8.583	3.30	14.667	3.81	20.75	1.52
2.583	1.65	8.667	3.30	14.750	3.81	20.83	1.52
2.667	1.65	8.750	3.30	14.833	3.81	20.92	1.52
2.750	1.65	8.833	3.55	14.917	3.81	21.00	1.52
2.833	1.65	8.917	3.55	15.000	3.81	21.08	1.52
2.917	1.65	9.000	3.55	15.083	3.81	21.17	1.52
3.000	1.65	9.083	3.55	15.167	3.81	21.25	1.52
3.083	1.65	9.167	3.55	15.250	3.81	21.33	1.52
3.167	1.65	9.250	3.55	15.333	3.81	21.42	1.52
3.250	1.65	9.333	4.06	15.417	3.81	21.50	1.52
3.333	1.65	9.417	4.06	15.500	3.81	21.58	1.52
3.417	1.65	9.500	4.06	15.583	3.81	21.67	1.52
3.500	1.65	9.583	4.06	15.667	3.81	21.75	1.52
3.583	1.65	9.667	4.06	15.750	3.81	21.83	1.52
3.667	1.65	9.750	4.06	15.833	3.81	21.92	1.52
3.750	1.65	9.833	4.57	15.917	3.81	22.00	1.52
3.833	1.65	9.917	4.57	16.000	3.81	22.08	1.52
3.917	1.65	10.000	4.57	16.083	3.81	22.17	1.52
4.000	1.65	10.083	4.57	16.167	3.81	22.25	1.52
4.083	1.65	10.167	4.57	16.250	3.81	22.33	1.52
4.167	1.65	10.250	4.57	16.333	2.28	22.42	1.52
4.250	1.65	10.333	5.84	16.417	2.28	22.50	1.52
4.333	2.03	10.417	5.84	16.500	2.28	22.58	1.52
4.417	2.03	10.500	5.84	16.583	2.28	22.67	1.52
4.500	2.03	10.583	5.84	16.667	2.28	22.75	1.52
4.583	2.03	10.667	5.84	16.750	2.28	22.83	1.52
4.667	2.03	10.750	5.84	16.833	2.28	22.92	1.52
4.750	2.03	10.833	7.87	16.917	2.28	23.00	1.52
4.833	2.03	10.917	7.87	17.000	2.28	23.08	1.52
4.917	2.03	11.000	7.87	17.083	2.28	23.17	1.52
5.000	2.03	11.083	7.87	17.167	2.28	23.25	1.52
5.083	2.03	11.167	7.87	17.250	2.28	23.33	1.52
5.167	2.03	11.250	7.87	17.333	2.28	23.42	1.52
5.250	2.03	11.333	12.18	17.417	2.28	23.50	1.52
5.333	2.03	11.417	12.18	17.500	2.28	23.58	1.52
5.417	2.03	11.500	12.18	17.583	2.28	23.67	1.52
5.500	2.03	11.583	12.18	17.667	2.28	23.75	1.52
5.583	2.03	11.667	12.18	17.750	2.28	23.83	1.52
5.667	2.03	11.750	12.18	17.833	2.28	23.92	1.52
5.750	2.03	11.833	37.56	17.917	2.28	24.00	1.52
5.833	2.03	11.917	37.57	18.000	2.28	24.08	1.52
5.917	2.03	12.000	37.57	18.083	2.28	24.17	1.52
6.000	2.03	12.083	155.32	18.167	2.28	24.25	1.52
6.083	2.03	12.167	155.34	18.250	2.28		

Unit Hyd Qpeak (cms)= 0.090

PEAK FLOW (cms)= 0.057 (i)
TIME TO PEAK (hrs)= 13.000
RUNOFF VOLUME (mm)= 33.708
TOTAL RAINFALL (mm)= 126.910
RUNOFF COEFFICIENT = 0.266

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0039)
1 + 2 = 3

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0002):	23.99	0.588	13.25	31.28
+ ID2= 2 (0025):	100.92	2.350	14.08	44.40
ID = 3 (0039):	124.91	2.812	13.83	41.88

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0039)
3 + 2 = 1

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0039):	124.91	2.812	13.83	41.88
+ ID2= 2 (0028):	6.37	0.205	13.00	34.32
ID = 1 (0039):	131.28	2.946	13.75	41.51

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0039)
1 + 2 = 3

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0039):	131.28	2.946	13.75	41.51
+ ID2= 2 (0030):	1.70	0.128	12.50	48.52
ID = 3 (0039):	132.98	2.973	13.75	41.60

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0039)

3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0039):	132.98	2.973	13.75	41.60
+ ID2= 2 (0031):	1.80	0.057	13.00	33.71
ID = 1 (0039):	134.78	3.012	13.75	41.49

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB					
NASHYD (0001)	Area (ha)=	39.68	Curve Number (CN)=	60.7	
ID= 1 DT= 5.0 min	Ia (mm)=	8.26	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	1.18			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.03	12.250	155.34	18.33	2.28
0.167	0.00	6.250	2.03	12.333	18.29	18.42	2.28
0.250	0.00	6.333	2.28	12.417	18.28	18.50	2.28
0.333	1.40	6.417	2.28	12.500	18.28	18.58	2.28
0.417	1.40	6.500	2.28	12.583	18.27	18.67	2.28
0.500	1.40	6.583	2.28	12.667	18.28	18.75	2.28
0.583	1.40	6.667	2.28	12.750	18.28	18.83	2.28
0.667	1.40	6.750	2.28	12.833	9.39	18.92	2.28
0.750	1.40	6.833	2.28	12.917	9.39	19.00	2.28
0.833	1.40	6.917	2.28	13.000	9.39	19.08	2.28
0.917	1.40	7.000	2.28	13.083	9.39	19.17	2.28
1.000	1.40	7.083	2.28	13.167	9.39	19.25	2.28
1.083	1.40	7.167	2.28	13.250	9.39	19.33	2.28
1.167	1.40	7.250	2.28	13.333	6.85	19.42	2.28
1.250	1.40	7.333	2.79	13.417	6.85	19.50	2.28
1.333	1.40	7.417	2.79	13.500	6.85	19.58	2.28
1.417	1.40	7.500	2.79	13.583	6.85	19.67	2.28
1.500	1.40	7.583	2.79	13.667	6.85	19.75	2.28
1.583	1.40	7.667	2.79	13.750	6.85	19.83	2.28
1.667	1.40	7.750	2.79	13.833	5.33	19.92	2.28
1.750	1.40	7.833	2.79	13.917	5.33	20.00	2.28
1.833	1.40	7.917	2.79	14.000	5.33	20.08	2.28
1.917	1.40	8.000	2.79	14.083	5.33	20.17	2.28
2.000	1.40	8.083	2.79	14.167	5.33	20.25	2.28
2.083	1.40	8.167	2.79	14.250	5.33	20.33	1.52
2.167	1.40	8.250	2.79	14.333	3.81	20.42	1.52
2.250	1.40	8.333	3.30	14.417	3.81	20.50	1.52
2.333	1.65	8.417	3.30	14.500	3.81	20.58	1.52
2.417	1.65	8.500	3.30	14.583	3.81	20.67	1.52
2.500	1.65	8.583	3.30	14.667	3.81	20.75	1.52
2.583	1.65	8.667	3.30	14.750	3.81	20.83	1.52
2.667	1.65	8.750	3.30	14.833	3.81	20.92	1.52
2.750	1.65	8.833	3.55	14.917	3.81	21.00	1.52
2.833	1.65	8.917	3.55	15.000	3.81	21.08	1.52
2.917	1.65	9.000	3.55	15.083	3.81	21.17	1.52
3.000	1.65	9.083	3.55	15.167	3.81	21.25	1.52
3.083	1.65	9.167	3.55	15.250	3.81	21.33	1.52
3.167	1.65	9.250	3.55	15.333	3.81	21.42	1.52
3.250	1.65	9.333	4.06	15.417	3.81	21.50	1.52
3.333	1.65	9.417	4.06	15.500	3.81	21.58	1.52
3.417	1.65	9.500	4.06	15.583	3.81	21.67	1.52
3.500	1.65	9.583	4.06	15.667	3.81	21.75	1.52
3.583	1.65	9.667	4.06	15.750	3.81	21.83	1.52
3.667	1.65	9.750	4.06	15.833	3.81	21.92	1.52
3.750	1.65	9.833	4.57	15.917	3.81	22.00	1.52
3.833	1.65	9.917	4.57	16.000	3.81	22.08	1.52
3.917	1.65	10.000	4.57	16.083	3.81	22.17	1.52
4.000	1.65	10.083	4.57	16.167	3.81	22.25	1.52
4.083	1.65	10.167	4.57	16.250	3.81	22.33	1.52
4.167	1.65	10.250	4.57	16.333	2.28	22.42	1.52
4.250	1.65	10.333	5.84	16.417	2.28	22.50	1.52
4.333	2.03	10.417	5.84	16.500	2.28	22.58	1.52
4.417	2.03	10.500	5.84	16.583	2.28	22.67	1.52
4.500	2.03	10.583	5.84	16.667	2.28	22.75	1.52
4.583	2.03	10.667	5.84	16.750	2.28	22.83	1.52
4.667	2.03	10.750	5.84	16.833	2.28	22.92	1.52
4.750	2.03	10.833	7.87	16.917	2.28	23.00	1.52
4.833	2.03	10.917	7.87	17.000	2.28	23.08	1.52
4.917	2.03	11.000	7.87	17.083	2.28	23.17	1.52
5.000	2.03	11.083	7.87	17.167	2.28	23.25	1.52
5.083	2.03	11.167	7.87	17.250	2.28	23.33	1.52
5.167	2.03	11.250	7.87	17.333	2.28	23.42	1.52
5.250	2.03	11.333	12.18	17.417	2.28	23.50	1.52
5.333	2.03	11.417	12.18	17.500	2.28	23.58	1.52
5.417	2.03	11.500	12.18	17.583	2.28	23.67	1.52
5.500	2.03	11.583	12.18	17.667	2.28	23.75	1.52
5.583	2.03	11.667	12.18	17.750	2.28	23.83	1.52
5.667	2.03	11.750	12.18	17.833	2.28	23.92	1.52
5.750	2.03	11.833	37.56	17.917	2.28	24.00	1.52
5.833	2.03	11.917	37.57	18.000	2.28	24.08	1.52
5.917	2.03	12.000	37.57	18.083	2.28	24.17	1.52
6.000	2.03	12.083	155.32	18.167	2.28	24.25	1.52
6.083	2.03	12.167	155.34	18.250	2.28		

Unit Hyd Qpeak (cms)= 1.284

Pre-Development VO Output

PEAK FLOW (cms)= 1.380 (i)
TIME TO PEAK (hrs)= 13.417
RUNOFF VOLUME (mm)= 49.703
TOTAL RAINFALL (mm)= 126.910
RUNOFF COEFFICIENT = 0.392

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0029)	Area (ha)=	14.85	Curve Number (CN)=	52.9	
ID= 1 DT= 5.0 min	Ia (mm)=	13.28	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	0.89			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.03	12.250	155.34	18.33	2.28
0.167	0.00	6.250	2.03	12.333	18.29	18.42	2.28
0.250	0.00	6.333	2.28	12.417	18.28	18.50	2.28
0.333	1.40	6.417	2.28	12.500	18.28	18.58	2.28
0.417	1.40	6.500	2.28	12.583	18.27	18.67	2.28
0.500	1.40	6.583	2.28	12.667	18.28	18.75	2.28
0.583	1.40	6.667	2.28	12.750	18.28	18.83	2.28
0.667	1.40	6.750	2.28	12.833	9.39	18.92	2.28
0.750	1.40	6.833	2.28	12.917	9.39	19.00	2.28
0.833	1.40	6.917	2.28	13.000	9.39	19.08	2.28
0.917	1.40	7.000	2.28	13.083	9.39	19.17	2.28
1.000	1.40	7.083	2.28	13.167	9.39	19.25	2.28
1.083	1.40	7.167	2.28	13.250	9.39	19.33	2.28
1.167	1.40	7.250	2.28	13.333	6.85	19.42	2.28
1.250	1.40	7.333	2.79	13.417	6.85	19.50	2.28
1.333	1.40	7.417	2.79	13.500	6.85	19.58	2.28
1.417	1.40	7.500	2.79	13.583	6.85	19.67	2.28
1.500	1.40	7.583	2.79	13.667	6.85	19.75	2.28
1.583	1.40	7.667	2.79	13.750	6.85	19.83	2.28
1.667	1.40	7.750	2.79	13.833	5.33	19.92	2.28
1.750	1.40	7.833	2.79	13.917	5.33	20.00	2.28
1.833	1.40	7.917	2.79	14.000	5.33	20.08	2.28
1.917	1.40	8.000	2.79	14.083	5.33	20.17	2.28
2.000	1.40	8.083	2.79	14.167	5.33	20.25	2.28
2.083	1.40	8.167	2.79	14.250	5.33	20.33	1.52
2.167	1.40	8.250	2.79	14.333	3.81	20.42	1.52
2.250	1.40	8.333	3.30	14.417	3.81	20.50	1.52
2.333	1.65	8.417	3.30	14.500	3.81	20.58	1.52
2.417	1.65	8.500	3.30	14.583	3.81	20.67	1.52
2.500	1.65	8.583	3.30	14.667	3.81	20.75	1.52
2.583	1.65	8.667	3.30	14.750	3.81	20.83	1.52
2.667	1.65	8.750	3.30	14.833	3.81	20.92	1.52
2.750	1.65	8.833	3.55	14.917	3.81	21.00	1.52
2.833	1.65	8.917	3.55	15.000	3.81	21.08	1.52
2.917	1.65	9.000	3.55	15.083	3.81	21.17	1.52
3.000	1.65	9.083	3.55	15.167	3.81	21.25	1.52
3.083	1.65	9.167	3.55	15.250	3.81	21.33	1.52
3.167	1.65	9.250	3.55	15.333	3.81	21.42	1.52
3.250	1.65	9.333	4.06	15.417	3.81	21.50	1.52
3.333	1.65	9.417	4.06	15.500	3.81	21.58	1.52
3.417	1.65	9.500	4.06	15.583	3.81	21.67	1.52
3.500	1.65	9.583	4.06	15.667	3.81	21.75	1.52
3.583	1.65	9.667	4.06	15.750	3.81	21.83	1.52
3.667	1.65	9.750	4.06	15.833	3.81	21.92	1.52
3.750	1.65	9.833	4.57	15.917	3.81	22.00	1.52
3.833	1.65	9.917	4.57	16.000	3.81	22.08	1.52
3.917	1.65	10.000	4.57	16.083	3.81	22.17	1.52
4.000	1.65	10.083	4.57	16.167	3.81	22.25	1.52
4.083	1.65	10.167	4.57	16.250	3.81	22.33	1.52
4.167	1.65	10.250	4.57	16.333	2.28	22.42	1.52
4.250	1.65	10.333	5.84	16.417	2.28	22.50	1.52
4.333	2.03	10.417	5.84	16.500	2.28	22.58	1.52
4.417	2.03	10.500	5.84	16.583	2.28	22.67	1.52
4.500	2.03	10.583	5.84	16.667	2.28	22.75	1.52
4.583	2.03	10.667	5.84	16.750	2.28	22.83	1.52
4.667	2.03	10.750	5.84	16.833	2.28	22.92	1.52
4.750	2.03	10.833	7.87	16.917	2.28	23.00	1.52
4.833	2.03	10.917	7.87	17.000	2.28	23.08	1.52
4.917	2.03	11.000	7.87	17.083	2.28	23.17	1.52
5.000	2.03	11.083	7.87	17.167	2.28	23.25	1.52
5.083	2.03	11.167	7.87	17.250	2.28	23.33	1.52
5.167	2.03	11.250	7.87	17.333	2.28	23.42	1.52
5.250	2.03	11.333	12.18	17.417	2.28	23.50	1.52
5.333	2.03	11.417	12.18	17.500	2.28	23.58	1.52
5.417	2.03	11.500	12.18	17.583	2.28	23.67	1.52
5.500	2.03	11.583	12.18	17.667	2.28	23.75	1.52
5.583	2.03	11.667	12.18	17.750	2.28	23.83	1.52
5.667	2.03	11.750	12.18	17.833	2.28	23.92	1.52
5.750	2.03	11.833	37.56	17.917	2.28	24.00	1.52
5.833	2.03	11.917	37.57	18.000	2.28	24.08	1.52
5.917	2.03	12.000	37.57	18.083	2.28	24.17	1.52
6.000	2.03	12.083	155.32	18.167	2.28	24.25	1.52
6.083	2.03	12.167	155.34	18.250	2.28		

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     Unit Hyd Qpeak  (cms)=   0.637

     PEAK FLOW      (cms)=   0.478 (i)
     TIME TO PEAK   (hrs)=  13.083
     RUNOFF VOLUME   (mm)=  38.041
     TOTAL RAINFALL  (mm)= 126.910
     RUNOFF COEFFICIENT   =   0.300

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
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CALIB							
STANDHYD (0014)	Area (ha)= 1.87						
ID= 1 DT= 5.0 min	Total Imp(%)= 43.28	Dir. Conn.(%)= 10.00					

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	0.81	1.06
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	0.50	2.00
Length (m)=	111.65	25.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.03	12.250	155.34	18.33	2.28
0.167	0.00	6.250	2.03	12.333	18.29	18.42	2.28
0.250	0.00	6.333	2.28	12.417	18.28	18.50	2.28
0.333	1.40	6.417	2.28	12.500	18.28	18.58	2.28
0.417	1.40	6.500	2.28	12.583	18.27	18.67	2.28
0.500	1.40	6.583	2.28	12.667	18.28	18.75	2.28
0.583	1.40	6.667	2.28	12.750	18.28	18.83	2.28
0.667	1.40	6.750	2.28	12.833	9.39	18.92	2.28
0.750	1.40	6.833	2.28	12.917	9.39	19.00	2.28
0.833	1.40	6.917	2.28	13.000	9.39	19.08	2.28
0.917	1.40	7.000	2.28	13.083	9.39	19.17	2.28
1.000	1.40	7.083	2.28	13.167	9.39	19.25	2.28
1.083	1.40	7.167	2.28	13.250	9.39	19.33	2.28
1.167	1.40	7.250	2.28	13.333	6.85	19.42	2.28
1.250	1.40	7.333	2.79	13.417	6.85	19.50	2.28
1.333	1.40	7.417	2.79	13.500	6.85	19.58	2.28
1.417	1.40	7.500	2.79	13.583	6.85	19.67	2.28
1.500	1.40	7.583	2.79	13.667	6.85	19.75	2.28
1.583	1.40	7.667	2.79	13.750	6.85	19.83	2.28

1.667	1.40	7.750	2.79	13.833	5.33	19.92	2.28
1.750	1.40	7.833	2.79	13.917	5.33	20.00	2.28
1.833	1.40	7.917	2.79	14.000	5.33	20.08	2.28
1.917	1.40	8.000	2.79	14.083	5.33	20.17	2.28
2.000	1.40	8.083	2.79	14.167	5.33	20.25	2.28
2.083	1.40	8.167	2.79	14.250	5.33	20.33	1.52
2.167	1.40	8.250	2.79	14.333	3.81	20.42	1.52
2.250	1.40	8.333	3.30	14.417	3.81	20.50	1.52
2.333	1.65	8.417	3.30	14.500	3.81	20.58	1.52
2.417	1.65	8.500	3.30	14.583	3.81	20.67	1.52
2.500	1.65	8.583	3.30	14.667	3.81	20.75	1.52
2.583	1.65	8.667	3.30	14.750	3.81	20.83	1.52
2.667	1.65	8.750	3.30	14.833	3.81	20.92	1.52
2.750	1.65	8.833	3.55	14.917	3.81	21.00	1.52
2.833	1.65	8.917	3.55	15.000	3.81	21.08	1.52
2.917	1.65	9.000	3.55	15.083	3.81	21.17	1.52
3.000	1.65	9.083	3.55	15.167	3.81	21.25	1.52
3.083	1.65	9.167	3.55	15.250	3.81	21.33	1.52
3.167	1.65	9.250	3.55	15.333	3.81	21.42	1.52
3.250	1.65	9.333	4.06	15.417	3.81	21.50	1.52
3.333	1.65	9.417	4.06	15.500	3.81	21.58	1.52
3.417	1.65	9.500	4.06	15.583	3.81	21.67	1.52
3.500	1.65	9.583	4.06	15.667	3.81	21.75	1.52
3.583	1.65	9.667	4.06	15.750	3.81	21.83	1.52
3.667	1.65	9.750	4.06	15.833	3.81	21.92	1.52
3.750	1.65	9.833	4.57	15.917	3.81	22.00	1.52
3.833	1.65	9.917	4.57	16.000	3.81	22.08	1.52
3.917	1.65	10.000	4.57	16.083	3.81	22.17	1.52
4.000	1.65	10.083	4.57	16.167	3.81	22.25	1.52
4.083	1.65	10.167	4.57	16.250	3.81	22.33	1.52
4.167	1.65	10.250	4.57	16.333	2.28	22.42	1.52
4.250	1.65	10.333	5.84	16.417	2.28	22.50	1.52
4.333	2.03	10.417	5.84	16.500	2.28	22.58	1.52
4.417	2.03	10.500	5.84	16.583	2.28	22.67	1.52
4.500	2.03	10.583	5.84	16.667	2.28	22.75	1.52
4.583	2.03	10.667	5.84	16.750	2.28	22.83	1.52
4.667	2.03	10.750	5.84	16.833	2.28	22.92	1.52
4.750	2.03	10.833	7.87	16.917	2.28	23.00	1.52
4.833	2.03	10.917	7.87	17.000	2.28	23.08	1.52
4.917	2.03	11.000	7.87	17.083	2.28	23.17	1.52
5.000	2.03	11.083	7.87	17.167	2.28	23.25	1.52
5.083	2.03	11.167	7.87	17.250	2.28	23.33	1.52
5.167	2.03	11.250	7.87	17.333	2.28	23.42	1.52
5.250	2.03	11.333	12.18	17.417	2.28	23.50	1.52
5.333	2.03	11.417	12.18	17.500	2.28	23.58	1.52
5.417	2.03	11.500	12.18	17.583	2.28	23.67	1.52
5.500	2.03	11.583	12.18	17.667	2.28	23.75	1.52
5.583	2.03	11.667	12.18	17.750	2.28	23.83	1.52

5.667	2.03	11.750	12.18	17.833	2.28	23.92	1.52
5.750	2.03	11.833	37.56	17.917	2.28	24.00	1.52
5.833	2.03	11.917	37.57	18.000	2.28	24.08	1.52
5.917	2.03	12.000	37.57	18.083	2.28	24.17	1.52
6.000	2.03	12.083	155.32	18.167	2.28	24.25	1.52
6.083	2.03	12.167	155.34	18.250	2.28		

			TOTALS
Max.Eff.Inten.(mm/hr)=	155.34	206.69	
over (min)	5.00	10.00	
Storage Coeff. (min)=	2.82 (ii)	6.80 (ii)	
Unit Hyd. Tpeak (min)=	5.00	10.00	
Unit Hyd. peak (cms)=	0.28	0.14	
PEAK FLOW (cms)=	0.08	0.51	0.586 (iii)
TIME TO PEAK (hrs)=	12.25	12.25	12.25
RUNOFF VOLUME (mm)=	125.91	90.65	94.17
TOTAL RAINFALL (mm)=	126.91	126.91	126.91
RUNOFF COEFFICIENT =	0.99	0.71	0.74

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 78.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0040)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0001):	39.68	1.380	13.42	49.70
+ ID2= 2 (0014):	1.87	0.586	12.25	94.17
ID = 3 (0040):	41.55	1.416	13.42	51.70

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0040)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0040):	41.55	1.416	13.42	51.70

+ ID2= 2 (0029):	14.85	0.478	13.08	38.04
ID = 1 (0040):	56.40	1.879	13.33	48.11

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0039):	134.78	3.012	13.75	41.49
+ ID2= 2 (0040):	56.40	1.879	13.33	48.11
ID = 3 (0023):	191.18	4.816	13.58	43.44

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

****
** SIMULATION:L - 100-year SCS **
****

READ STORM	Filename: C:\Users\ecomish\AppData\Local\Temp\49208e0f-499d-4cb6-b2a9-d1492d706baa\6e9bf3ab
Ptotal=139.48 mm	Comments: 100yr 24hr 15min SCS Type II (MTO) - 15%

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.00	0.00	6.25	2.51	12.50	20.09	18.75	2.51
0.25	1.53	6.50	2.51	12.75	10.32	19.00	2.51
0.50	1.53	6.75	2.51	13.00	10.32	19.25	2.51
0.75	1.53	7.00	2.51	13.25	7.53	19.50	2.51
1.00	1.53	7.25	3.07	13.50	7.53	19.75	2.51
1.25	1.53	7.50	3.07	13.75	5.86	20.00	2.51
1.50	1.53	7.75	3.07	14.00	5.86	20.25	1.67
1.75	1.53	8.00	3.07	14.25	4.18	20.50	1.67
2.00	1.53	8.25	3.63	14.50	4.18	20.75	1.67
2.25	1.81	8.50	3.63	14.75	4.18	21.00	1.67
2.50	1.81	8.75	3.91	15.00	4.18	21.25	1.67
2.75	1.81	9.00	3.91	15.25	4.18	21.50	1.67
3.00	1.81	9.25	4.46	15.50	4.18	21.75	1.67
3.25	1.81	9.50	4.46	15.75	4.18	22.00	1.67
3.50	1.81	9.75	5.02	16.00	4.18	22.25	1.67
3.75	1.81	10.00	5.02	16.25	2.51	22.50	1.67
4.00	1.81	10.25	6.42	16.50	2.51	22.75	1.67
4.25	2.23	10.50	6.42	16.75	2.51	23.00	1.67

4.50	2.23	10.75	8.65	17.00	2.51	23.25	1.67
4.75	2.23	11.00	8.65	17.25	2.51	23.50	1.67
5.00	2.23	11.25	13.39	17.50	2.51	23.75	1.67
5.25	2.23	11.50	13.39	17.75	2.51	24.00	1.67
5.50	2.23	11.75	41.29	18.00	2.51		
5.75	2.23	12.00	170.72	18.25	2.51		
6.00	2.23	12.25	20.09	18.50	2.51		

CALIB		
NASHYD (0025)	Area (ha)= 100.92	Curve Number (CN)= 55.9
ID= 1 DT= 5.0 min	Ia (mm)= 7.89	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 1.70	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.23	12.250	170.72	18.33	2.51
0.167	0.00	6.250	2.23	12.333	20.10	18.42	2.51
0.250	0.00	6.333	2.51	12.417	20.09	18.50	2.51
0.333	1.53	6.417	2.51	12.500	20.09	18.58	2.51
0.417	1.53	6.500	2.51	12.583	20.09	18.67	2.51
0.500	1.53	6.583	2.51	12.667	20.09	18.75	2.51
0.583	1.53	6.667	2.51	12.750	20.09	18.83	2.51
0.667	1.53	6.750	2.51	12.833	10.32	18.92	2.51
0.750	1.53	6.833	2.51	12.917	10.32	19.00	2.51
0.833	1.53	6.917	2.51	13.000	10.32	19.08	2.51
0.917	1.53	7.000	2.51	13.083	10.32	19.17	2.51
1.000	1.53	7.083	2.51	13.167	10.32	19.25	2.51
1.083	1.53	7.167	2.51	13.250	10.32	19.33	2.51
1.167	1.53	7.250	2.51	13.333	7.53	19.42	2.51
1.250	1.53	7.333	3.07	13.417	7.53	19.50	2.51
1.333	1.53	7.417	3.07	13.500	7.53	19.58	2.51
1.417	1.53	7.500	3.07	13.583	7.53	19.67	2.51
1.500	1.53	7.583	3.07	13.667	7.53	19.75	2.51
1.583	1.53	7.667	3.07	13.750	7.53	19.83	2.51
1.667	1.53	7.750	3.07	13.833	5.86	19.92	2.51
1.750	1.53	7.833	3.07	13.917	5.86	20.00	2.51
1.833	1.53	7.917	3.07	14.000	5.86	20.08	2.51
1.917	1.53	8.000	3.07	14.083	5.86	20.17	2.51
2.000	1.53	8.083	3.07	14.167	5.86	20.25	2.51
2.083	1.53	8.167	3.07	14.250	5.86	20.33	1.67
2.167	1.53	8.250	3.07	14.333	4.18	20.42	1.67

2.250	1.53	8.333	3.63	14.417	4.18	20.50	1.67
2.333	1.81	8.417	3.63	14.500	4.18	20.58	1.67
2.417	1.81	8.500	3.63	14.583	4.18	20.67	1.67
2.500	1.81	8.583	3.63	14.667	4.18	20.75	1.67
2.583	1.81	8.667	3.63	14.750	4.18	20.83	1.67
2.667	1.81	8.750	3.63	14.833	4.18	20.92	1.67
2.750	1.81	8.833	3.91	14.917	4.18	21.00	1.67
2.833	1.81	8.917	3.91	15.000	4.18	21.08	1.67
2.917	1.81	9.000	3.91	15.083	4.18	21.17	1.67
3.000	1.81	9.083	3.91	15.167	4.18	21.25	1.67
3.083	1.81	9.167	3.91	15.250	4.18	21.33	1.67
3.167	1.81	9.250	3.91	15.333	4.18	21.42	1.67
3.250	1.81	9.333	4.46	15.417	4.18	21.50	1.67
3.333	1.81	9.417	4.46	15.500	4.18	21.58	1.67
3.417	1.81	9.500	4.46	15.583	4.18	21.67	1.67
3.500	1.81	9.583	4.46	15.667	4.18	21.75	1.67
3.583	1.81	9.667	4.46	15.750	4.18	21.83	1.67
3.667	1.81	9.750	4.46	15.833	4.18	21.92	1.67
3.750	1.81	9.833	5.02	15.917	4.18	22.00	1.67
3.833	1.81	9.917	5.02	16.000	4.18	22.08	1.67
3.917	1.81	10.000	5.02	16.083	4.18	22.17	1.67
4.000	1.81	10.083	5.02	16.167	4.18	22.25	1.67
4.083	1.81	10.167	5.02	16.250	4.18	22.33	1.67
4.167	1.81	10.250	5.02	16.333	2.51	22.42	1.67
4.250	1.81	10.333	6.42	16.417	2.51	22.50	1.67
4.333	2.23	10.417	6.42	16.500	2.51	22.58	1.67
4.417	2.23	10.500	6.42	16.583	2.51	22.67	1.67
4.500	2.23	10.583	6.42	16.667	2.51	22.75	1.67
4.583	2.23	10.667	6.42	16.750	2.51	22.83	1.67
4.667	2.23	10.750	6.42	16.833	2.51	22.92	1.67
4.750	2.23	10.833	8.65	16.917	2.51	23.00	1.67
4.833	2.23	10.917	8.65	17.000	2.51	23.08	1.67
4.917	2.23	11.000	8.65	17.083	2.51	23.17	1.67
5.000	2.23	11.083	8.65	17.167	2.51	23.25	1.67
5.083	2.23	11.167	8.65	17.250	2.51	23.33	1.67
5.167	2.23	11.250	8.65	17.333	2.51	23.42	1.67
5.250	2.23	11.333	13.39	17.417	2.51	23.50	1.67
5.333	2.23	11.417	13.39	17.500	2.51	23.58	1.67
5.417	2.23	11.500	13.39	17.583	2.51	23.67	1.67
5.500	2.23	11.583	13.39	17.667	2.51	23.75	1.67
5.583	2.23	11.667	13.39	17.750	2.51	23.83	1.67
5.667	2.23	11.750	13.39	17.833	2.51	23.92	1.67
5.750	2.23	11.833	41.28	17.917	2.51	24.00	1.67
5.833	2.23	11.917	41.29	18.000	2.51	24.08	1.67
5.917	2.23	12.000	41.29	18.083	2.51	24.17	1.67
6.000	2.23	12.083	170.71	18.167	2.51	24.25	1.67
6.083	2.23	12.167	170.72	18.250	2.51		

Unit Hyd Qpeak (cms)= 2.267

PEAK FLOW (cms)= 2.776 (i)
TIME TO PEAK (hrs)= 14.083
RUNOFF VOLUME (mm)= 52.212
TOTAL RAINFALL (mm)= 139.480
RUNOFF COEFFICIENT = 0.374

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB		
NASHYD (0002)	Area (ha)= 23.99	Curve Number (CN)= 44.7
ID= 1 DT= 5.0 min	Ia (mm)= 10.91	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.97	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.23	12.250	170.72	18.33	2.51
0.167	0.00	6.250	2.23	12.333	20.10	18.42	2.51
0.250	0.00	6.333	2.51	12.417	20.09	18.50	2.51
0.333	1.53	6.417	2.51	12.500	20.09	18.58	2.51
0.417	1.53	6.500	2.51	12.583	20.09	18.67	2.51
0.500	1.53	6.583	2.51	12.667	20.09	18.75	2.51
0.583	1.53	6.667	2.51	12.750	20.09	18.83	2.51
0.667	1.53	6.750	2.51	12.833	10.32	18.92	2.51
0.750	1.53	6.833	2.51	12.917	10.32	19.00	2.51
0.833	1.53	6.917	2.51	13.000	10.32	19.08	2.51
0.917	1.53	7.000	2.51	13.083	10.32	19.17	2.51
1.000	1.53	7.083	2.51	13.167	10.32	19.25	2.51
1.083	1.53	7.167	2.51	13.250	10.32	19.33	2.51
1.167	1.53	7.250	2.51	13.333	7.53	19.42	2.51
1.250	1.53	7.333	3.07	13.417	7.53	19.50	2.51
1.333	1.53	7.417	3.07	13.500	7.53	19.58	2.51
1.417	1.53	7.500	3.07	13.583	7.53	19.67	2.51
1.500	1.53	7.583	3.07	13.667	7.53	19.75	2.51
1.583	1.53	7.667	3.07	13.750	7.53	19.83	2.51
1.667	1.53	7.750	3.07	13.833	5.86	19.92	2.51
1.750	1.53	7.833	3.07	13.917	5.86	20.00	2.51
1.833	1.53	7.917	3.07	14.000	5.86	20.08	2.51
1.917	1.53	8.000	3.07	14.083	5.86	20.17	2.51
2.000	1.53	8.083	3.07	14.167	5.86	20.25	2.51
2.083	1.53	8.167	3.07	14.250	5.86	20.33	1.67

2.167	1.53	8.250	3.07	14.333	4.18	20.42	1.67
2.250	1.53	8.333	3.63	14.417	4.18	20.50	1.67
2.333	1.81	8.417	3.63	14.500	4.18	20.58	1.67
2.417	1.81	8.500	3.63	14.583	4.18	20.67	1.67
2.500	1.81	8.583	3.63	14.667	4.18	20.75	1.67
2.583	1.81	8.667	3.63	14.750	4.18	20.83	1.67
2.667	1.81	8.750	3.63	14.833	4.18	20.92	1.67
2.750	1.81	8.833	3.91	14.917	4.18	21.00	1.67
2.833	1.81	8.917	3.91	15.000	4.18	21.08	1.67
2.917	1.81	9.000	3.91	15.083	4.18	21.17	1.67
3.000	1.81	9.083	3.91	15.167	4.18	21.25	1.67
3.083	1.81	9.167	3.91	15.250	4.18	21.33	1.67
3.167	1.81	9.250	3.91	15.333	4.18	21.42	1.67
3.250	1.81	9.333	4.46	15.417	4.18	21.50	1.67
3.333	1.81	9.417	4.46	15.500	4.18	21.58	1.67
3.417	1.81	9.500	4.46	15.583	4.18	21.67	1.67
3.500	1.81	9.583	4.46	15.667	4.18	21.75	1.67
3.583	1.81	9.667	4.46	15.750	4.18	21.83	1.67
3.667	1.81	9.750	4.46	15.833	4.18	21.92	1.67
3.750	1.81	9.833	5.02	15.917	4.18	22.00	1.67
3.833	1.81	9.917	5.02	16.000	4.18	22.08	1.67
3.917	1.81	10.000	5.02	16.083	4.18	22.17	1.67
4.000	1.81	10.083	5.02	16.167	4.18	22.25	1.67
4.083	1.81	10.167	5.02	16.250	4.18	22.33	1.67
4.167	1.81	10.250	5.02	16.333	2.51	22.42	1.67
4.250	1.81	10.333	6.42	16.417	2.51	22.50	1.67
4.333	2.23	10.417	6.42	16.500	2.51	22.58	1.67
4.417	2.23	10.500	6.42	16.583	2.51	22.67	1.67
4.500	2.23	10.583	6.42	16.667	2.51	22.75	1.67
4.583	2.23	10.667	6.42	16.750	2.51	22.83	1.67
4.667	2.23	10.750	6.42	16.833	2.51	22.92	1.67
4.750	2.23	10.833	8.65	16.917	2.51	23.00	1.67
4.833	2.23	10.917	8.65	17.000	2.51	23.08	1.67
4.917	2.23	11.000	8.65	17.083	2.51	23.17	1.67
5.000	2.23	11.083	8.65	17.167	2.51	23.25	1.67
5.083	2.23	11.167	8.65	17.250	2.51	23.33	1.67
5.167	2.23	11.250	8.65	17.333	2.51	23.42	1.67
5.250	2.23	11.333	13.39	17.417	2.51	23.50	1.67
5.333	2.23	11.417	13.39	17.500	2.51	23.58	1.67
5.417	2.23	11.500	13.39	17.583	2.51	23.67	1.67
5.500	2.23	11.583	13.39	17.667	2.51	23.75	1.67
5.583	2.23	11.667	13.39	17.750	2.51	23.83	1.67
5.667	2.23	11.750	13.39	17.833	2.51	23.92	1.67
5.750	2.23	11.833	41.28	17.917	2.51	24.00	1.67
5.833	2.23	11.917	41.29	18.000	2.51	24.08	1.67
5.917	2.23	12.000	41.29	18.083	2.51	24.17	1.67
6.000	2.23	12.083	170.71	18.167	2.51	24.25	1.67
6.083	2.23	12.167	170.72	18.250	2.51		

Unit Hyd Qpeak (cms)= 0.945

PEAK FLOW (cms)= 0.705 (i)
TIME TO PEAK (hrs)= 13.250
RUNOFF VOLUME (mm)= 37.331
TOTAL RAINFALL (mm)= 139.480
RUNOFF COEFFICIENT = 0.268

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0028)	Area (ha)=	6.37	Curve Number (CN)=	50.5	
ID= 1 DT= 5.0 min	Ia (mm)=	15.69	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	0.77			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.23	12.250	170.72	18.33	2.51
0.167	0.00	6.250	2.23	12.333	20.10	18.42	2.51
0.250	0.00	6.333	2.51	12.417	20.09	18.50	2.51
0.333	1.53	6.417	2.51	12.500	20.09	18.58	2.51
0.417	1.53	6.500	2.51	12.583	20.09	18.67	2.51
0.500	1.53	6.583	2.51	12.667	20.09	18.75	2.51
0.583	1.53	6.667	2.51	12.750	20.09	18.83	2.51
0.667	1.53	6.750	2.51	12.833	10.32	18.92	2.51
0.750	1.53	6.833	2.51	12.917	10.32	19.00	2.51
0.833	1.53	6.917	2.51	13.000	10.32	19.08	2.51
0.917	1.53	7.000	2.51	13.083	10.32	19.17	2.51
1.000	1.53	7.083	2.51	13.167	10.32	19.25	2.51
1.083	1.53	7.167	2.51	13.250	10.32	19.33	2.51
1.167	1.53	7.250	2.51	13.333	7.53	19.42	2.51
1.250	1.53	7.333	3.07	13.417	7.53	19.50	2.51
1.333	1.53	7.417	3.07	13.500	7.53	19.58	2.51
1.417	1.53	7.500	3.07	13.583	7.53	19.67	2.51
1.500	1.53	7.583	3.07	13.667	7.53	19.75	2.51
1.583	1.53	7.667	3.07	13.750	7.53	19.83	2.51
1.667	1.53	7.750	3.07	13.833	5.86	19.92	2.51
1.750	1.53	7.833	3.07	13.917	5.86	20.00	2.51
1.833	1.53	7.917	3.07	14.000	5.86	20.08	2.51
1.917	1.53	8.000	3.07	14.083	5.86	20.17	2.51
2.000	1.53	8.083	3.07	14.167	5.86	20.25	2.51

2.083	1.53	8.167	3.07	14.250	5.86	20.33	1.67
2.167	1.53	8.250	3.07	14.333	4.18	20.42	1.67
2.250	1.53	8.333	3.63	14.417	4.18	20.50	1.67
2.333	1.81	8.417	3.63	14.500	4.18	20.58	1.67
2.417	1.81	8.500	3.63	14.583	4.18	20.67	1.67
2.500	1.81	8.583	3.63	14.667	4.18	20.75	1.67
2.583	1.81	8.667	3.63	14.750	4.18	20.83	1.67
2.667	1.81	8.750	3.63	14.833	4.18	20.92	1.67
2.750	1.81	8.833	3.91	14.917	4.18	21.00	1.67
2.833	1.81	8.917	3.91	15.000	4.18	21.08	1.67
2.917	1.81	9.000	3.91	15.083	4.18	21.17	1.67
3.000	1.81	9.083	3.91	15.167	4.18	21.25	1.67
3.083	1.81	9.167	3.91	15.250	4.18	21.33	1.67
3.167	1.81	9.250	3.91	15.333	4.18	21.42	1.67
3.250	1.81	9.333	4.46	15.417	4.18	21.50	1.67
3.333	1.81	9.417	4.46	15.500	4.18	21.58	1.67
3.417	1.81	9.500	4.46	15.583	4.18	21.67	1.67
3.500	1.81	9.583	4.46	15.667	4.18	21.75	1.67
3.583	1.81	9.667	4.46	15.750	4.18	21.83	1.67
3.667	1.81	9.750	4.46	15.833	4.18	21.92	1.67
3.750	1.81	9.833	5.02	15.917	4.18	22.00	1.67
3.833	1.81	9.917	5.02	16.000	4.18	22.08	1.67
3.917	1.81	10.000	5.02	16.083	4.18	22.17	1.67
4.000	1.81	10.083	5.02	16.167	4.18	22.25	1.67
4.083	1.81	10.167	5.02	16.250	4.18	22.33	1.67
4.167	1.81	10.250	5.02	16.333	2.51	22.42	1.67
4.250	1.81	10.333	6.42	16.417	2.51	22.50	1.67
4.333	2.23	10.417	6.42	16.500	2.51	22.58	1.67
4.417	2.23	10.500	6.42	16.583	2.51	22.67	1.67
4.500	2.23	10.583	6.42	16.667	2.51	22.75	1.67
4.583	2.23	10.667	6.42	16.750	2.51	22.83	1.67
4.667	2.23	10.750	6.42	16.833	2.51	22.92	1.67
4.750	2.23	10.833	8.65	16.917	2.51	23.00	1.67
4.833	2.23	10.917	8.65	17.000	2.51	23.08	1.67
4.917	2.23	11.000	8.65	17.083	2.51	23.17	1.67
5.000	2.23	11.083	8.65	17.167	2.51	23.25	1.67
5.083	2.23	11.167	8.65	17.250	2.51	23.33	1.67
5.167	2.23	11.250	8.65	17.333	2.51	23.42	1.67
5.250	2.23	11.333	13.39	17.417	2.51	23.50	1.67
5.333	2.23	11.417	13.39	17.500	2.51	23.58	1.67
5.417	2.23	11.500	13.39	17.583	2.51	23.67	1.67
5.500	2.23	11.583	13.39	17.667	2.51	23.75	1.67
5.583	2.23	11.667	13.39	17.750	2.51	23.83	1.67
5.667	2.23	11.750	13.39	17.833	2.51	23.92	1.67
5.750	2.23	11.833	41.28	17.917	2.51	24.00	1.67
5.833	2.23	11.917	41.29	18.000	2.51	24.08	1.67
5.917	2.23	12.000	41.29	18.083	2.51	24.17	1.67
6.000	2.23	12.083	170.71	18.167	2.51	24.25	1.67

6.083	2.23	12.167	170.72	18.250	2.51		

Unit Hyd Qpeak (cms)= 0.316

PEAK FLOW (cms)= 0.247 (i)
TIME TO PEAK (hrs)= 13.000
RUNOFF VOLUME (mm)= 41.087
TOTAL RAINFALL (mm)= 139.480
RUNOFF COEFFICIENT = 0.295

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0030)	Area (ha)=	1.70	Curve Number (CN)=	60.5	
ID= 1 DT= 5.0 min	Ia (mm)=	9.65	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	0.40			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.23	12.250	170.72	18.33	2.51
0.167	0.00	6.250	2.23	12.333	20.10	18.42	2.51
0.250	0.00	6.333	2.51	12.417	20.09	18.50	2.51
0.333	1.53	6.417	2.51	12.500	20.09	18.58	2.51
0.417	1.53	6.500	2.51	12.583	20.09	18.67	2.51
0.500	1.53	6.583	2.51	12.667	20.09	18.75	2.51
0.583	1.53	6.667	2.51	12.750	20.09	18.83	2.51
0.667	1.53	6.750	2.51	12.833	10.32	18.92	2.51
0.750	1.53	6.833	2.51	12.917	10.32	19.00	2.51
0.833	1.53	6.917	2.51	13.000	10.32	19.08	2.51
0.917	1.53	7.000	2.51	13.083	10.32	19.17	2.51
1.000	1.53	7.083	2.51	13.167	10.32	19.25	2.51
1.083	1.53	7.167	2.51	13.250	10.32	19.33	2.51
1.167	1.53	7.250	2.51	13.333	7.53	19.42	2.51
1.250	1.53	7.333	3.07	13.417	7.53	19.50	2.51
1.333	1.53	7.417	3.07	13.500	7.53	19.58	2.51
1.417	1.53	7.500	3.07	13.583	7.53	19.67	2.51
1.500	1.53	7.583	3.07	13.667	7.53	19.75	2.51
1.583	1.53	7.667	3.07	13.750	7.53	19.83	2.51
1.667	1.53	7.750	3.07	13.833	5.86	19.92	2.51
1.750	1.53	7.833	3.07	13.917	5.86	20.00	2.51
1.833	1.53	7.917	3.07	14.000	5.86	20.08	2.51
1.917	1.53	8.000	3.07	14.083	5.86	20.17	2.51

2.000	1.53	8.083	3.07	14.167	5.86	20.25	2.51
2.083	1.53	8.167	3.07	14.250	5.86	20.33	1.67
2.167	1.53	8.250	3.07	14.333	4.18	20.42	1.67
2.250	1.53	8.333	3.63	14.417	4.18	20.50	1.67
2.333	1.81	8.417	3.63	14.500	4.18	20.58	1.67
2.417	1.81	8.500	3.63	14.583	4.18	20.67	1.67
2.500	1.81	8.583	3.63	14.667	4.18	20.75	1.67
2.583	1.81	8.667	3.63	14.750	4.18	20.83	1.67
2.667	1.81	8.750	3.63	14.833	4.18	20.92	1.67
2.750	1.81	8.833	3.91	14.917	4.18	21.00	1.67
2.833	1.81	8.917	3.91	15.000	4.18	21.08	1.67
2.917	1.81	9.000	3.91	15.083	4.18	21.17	1.67
3.000	1.81	9.083	3.91	15.167	4.18	21.25	1.67
3.083	1.81	9.167	3.91	15.250	4.18	21.33	1.67
3.167	1.81	9.250	3.91	15.333	4.18	21.42	1.67
3.250	1.81	9.333	4.46	15.417	4.18	21.50	1.67
3.333	1.81	9.417	4.46	15.500	4.18	21.58	1.67
3.417	1.81	9.500	4.46	15.583	4.18	21.67	1.67
3.500	1.81	9.583	4.46	15.667	4.18	21.75	1.67
3.583	1.81	9.667	4.46	15.750	4.18	21.83	1.67
3.667	1.81	9.750	4.46	15.833	4.18	21.92	1.67
3.750	1.81	9.833	5.02	15.917	4.18	22.00	1.67
3.833	1.81	9.917	5.02	16.000	4.18	22.08	1.67
3.917	1.81	10.000	5.02	16.083	4.18	22.17	1.67
4.000	1.81	10.083	5.02	16.167	4.18	22.25	1.67
4.083	1.81	10.167	5.02	16.250	4.18	22.33	1.67
4.167	1.81	10.250	5.02	16.333	2.51	22.42	1.67
4.250	1.81	10.333	6.42	16.417	2.51	22.50	1.67
4.333	2.23	10.417	6.42	16.500	2.51	22.58	1.67
4.417	2.23	10.500	6.42	16.583	2.51	22.67	1.67
4.500	2.23	10.583	6.42	16.667	2.51	22.75	1.67
4.583	2.23	10.667	6.42	16.750	2.51	22.83	1.67
4.667	2.23	10.750	6.42	16.833	2.51	22.92	1.67
4.750	2.23	10.833	8.65	16.917	2.51	23.00	1.67
4.833	2.23	10.917	8.65	17.000	2.51	23.08	1.67
4.917	2.23	11.000	8.65	17.083	2.51	23.17	1.67
5.000	2.23	11.083	8.65	17.167	2.51	23.25	1.67
5.083	2.23	11.167	8.65	17.250	2.51	23.33	1.67
5.167	2.23	11.250	8.65	17.333	2.51	23.42	1.67
5.250	2.23	11.333	13.39	17.417	2.51	23.50	1.67
5.333	2.23	11.417	13.39	17.500	2.51	23.58	1.67
5.417	2.23	11.500	13.39	17.583	2.51	23.67	1.67
5.500	2.23	11.583	13.39	17.667	2.51	23.75	1.67
5.583	2.23	11.667	13.39	17.750	2.51	23.83	1.67
5.667	2.23	11.750	13.39	17.833	2.51	23.92	1.67
5.750	2.23	11.833	41.28	17.917	2.51	24.00	1.67
5.833	2.23	11.917	41.29	18.000	2.51	24.08	1.67
5.917	2.23	12.000	41.29	18.083	2.51	24.17	1.67

6.000	2.23	12.083	170.71	18.167	2.51	24.25	1.67
6.083	2.23	12.167	170.72	18.250	2.51		

Unit Hyd Qpeak (cms)= 0.162

PEAK FLOW (cms)= 0.151 (i)
TIME TO PEAK (hrs)= 12.500
RUNOFF VOLUME (mm)= 56.949
TOTAL RAINFALL (mm)= 139.480
RUNOFF COEFFICIENT = 0.408

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	
NASHYD (0031)	Area (ha)= 1.80 Curve Number (CN)= 50.0
ID= 1 DT= 5.0 min	Ia (mm)= 16.00 # of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.76

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.23	12.250	170.72	18.33	2.51
0.167	0.00	6.250	2.23	12.333	20.10	18.42	2.51
0.250	0.00	6.333	2.51	12.417	20.09	18.50	2.51
0.333	1.53	6.417	2.51	12.500	20.09	18.58	2.51
0.417	1.53	6.500	2.51	12.583	20.09	18.67	2.51
0.500	1.53	6.583	2.51	12.667	20.09	18.75	2.51
0.583	1.53	6.667	2.51	12.750	20.09	18.83	2.51
0.667	1.53	6.750	2.51	12.833	10.32	18.92	2.51
0.750	1.53	6.833	2.51	12.917	10.32	19.00	2.51
0.833	1.53	6.917	2.51	13.000	10.32	19.08	2.51
0.917	1.53	7.000	2.51	13.083	10.32	19.17	2.51
1.000	1.53	7.083	2.51	13.167	10.32	19.25	2.51
1.083	1.53	7.167	2.51	13.250	10.32	19.33	2.51
1.167	1.53	7.250	2.51	13.333	7.53	19.42	2.51
1.250	1.53	7.333	3.07	13.417	7.53	19.50	2.51
1.333	1.53	7.417	3.07	13.500	7.53	19.58	2.51
1.417	1.53	7.500	3.07	13.583	7.53	19.67	2.51
1.500	1.53	7.583	3.07	13.667	7.53	19.75	2.51
1.583	1.53	7.667	3.07	13.750	7.53	19.83	2.51
1.667	1.53	7.750	3.07	13.833	5.86	19.92	2.51
1.750	1.53	7.833	3.07	13.917	5.86	20.00	2.51
1.833	1.53	7.917	3.07	14.000	5.86	20.08	2.51

1.917	1.53	8.000	3.07	14.083	5.86	20.17	2.51
2.000	1.53	8.083	3.07	14.167	5.86	20.25	2.51
2.083	1.53	8.167	3.07	14.250	5.86	20.33	1.67
2.167	1.53	8.250	3.07	14.333	4.18	20.42	1.67
2.250	1.53	8.333	3.63	14.417	4.18	20.50	1.67
2.333	1.81	8.417	3.63	14.500	4.18	20.58	1.67
2.417	1.81	8.500	3.63	14.583	4.18	20.67	1.67
2.500	1.81	8.583	3.63	14.667	4.18	20.75	1.67
2.583	1.81	8.667	3.63	14.750	4.18	20.83	1.67
2.667	1.81	8.750	3.63	14.833	4.18	20.92	1.67
2.750	1.81	8.833	3.91	14.917	4.18	21.00	1.67
2.833	1.81	8.917	3.91	15.000	4.18	21.08	1.67
2.917	1.81	9.000	3.91	15.083	4.18	21.17	1.67
3.000	1.81	9.083	3.91	15.167	4.18	21.25	1.67
3.083	1.81	9.167	3.91	15.250	4.18	21.33	1.67
3.167	1.81	9.250	3.91	15.333	4.18	21.42	1.67
3.250	1.81	9.333	4.46	15.417	4.18	21.50	1.67
3.333	1.81	9.417	4.46	15.500	4.18	21.58	1.67
3.417	1.81	9.500	4.46	15.583	4.18	21.67	1.67
3.500	1.81	9.583	4.46	15.667	4.18	21.75	1.67
3.583	1.81	9.667	4.46	15.750	4.18	21.83	1.67
3.667	1.81	9.750	4.46	15.833	4.18	21.92	1.67
3.750	1.81	9.833	5.02	15.917	4.18	22.00	1.67
3.833	1.81	9.917	5.02	16.000	4.18	22.08	1.67
3.917	1.81	10.000	5.02	16.083	4.18	22.17	1.67
4.000	1.81	10.083	5.02	16.167	4.18	22.25	1.67
4.083	1.81	10.167	5.02	16.250	4.18	22.33	1.67
4.167	1.81	10.250	5.02	16.333	2.51	22.42	1.67
4.250	1.81	10.333	6.42	16.417	2.51	22.50	1.67
4.333	2.23	10.417	6.42	16.500	2.51	22.58	1.67
4.417	2.23	10.500	6.42	16.583	2.51	22.67	1.67
4.500	2.23	10.583	6.42	16.667	2.51	22.75	1.67
4.583	2.23	10.667	6.42	16.750	2.51	22.83	1.67
4.667	2.23	10.750	6.42	16.833	2.51	22.92	1.67
4.750	2.23	10.833	8.65	16.917	2.51	23.00	1.67
4.833	2.23	10.917	8.65	17.000	2.51	23.08	1.67
4.917	2.23	11.000	8.65	17.083	2.51	23.17	1.67
5.000	2.23	11.083	8.65	17.167	2.51	23.25	1.67
5.083	2.23	11.167	8.65	17.250	2.51	23.33	1.67
5.167	2.23	11.250	8.65	17.333	2.51	23.42	1.67
5.250	2.23	11.333	13.39	17.417	2.51	23.50	1.67
5.333	2.23	11.417	13.39	17.500	2.51	23.58	1.67
5.417	2.23	11.500	13.39	17.583	2.51	23.67	1.67
5.500	2.23	11.583	13.39	17.667	2.51	23.75	1.67
5.583	2.23	11.667	13.39	17.750	2.51	23.83	1.67
5.667	2.23	11.750	13.39	17.833	2.51	23.92	1.67
5.750	2.23	11.833	41.28	17.917	2.51	24.00	1.67
5.833	2.23	11.917	41.29	18.000	2.51	24.08	1.67

5.917	2.23	12.000	41.29	18.083	2.51	24.17	1.67
6.000	2.23	12.083	170.71	18.167	2.51	24.25	1.67
6.083	2.23	12.167	170.72	18.250	2.51		

Unit Hyd Qpeak (cms)= 0.090

PEAK FLOW (cms)= 0.069 (i)
TIME TO PEAK (hrs)= 13.000
RUNOFF VOLUME (mm)= 40.391
TOTAL RAINFALL (mm)= 139.480
RUNOFF COEFFICIENT = 0.290

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0039)					
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0002):	23.99	0.705	13.25	37.33
+ ID2= 2 (0025):	100.92	2.776	14.08	52.21
ID = 3 (0039):	124.91	3.331	13.83	49.35

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0039)					
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0039):	124.91	3.331	13.83	49.35
+ ID2= 2 (0028):	6.37	0.247	13.00	41.09
ID = 1 (0039):	131.28	3.494	13.75	48.95

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0039)					
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0039):	131.28	3.494	13.75	48.95
+ ID2= 2 (0030):	1.70	0.151	12.50	56.95
ID = 3 (0039):	132.98	3.525	13.75	49.05

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0039)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0039):	132.98	3.525	13.75	49.05
+ ID2= 2 (0031):	1.80	0.069	13.00	40.39
ID = 1 (0039):	134.78	3.572	13.75	48.94

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB	
NASHYD (0001)	Area (ha)= 39.68 Curve Number (CN)= 60.7
ID= 1 DT= 5.0 min	Ia (mm)= 8.26 # of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 1.18

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.23	12.250	170.72	18.33	2.51
0.167	0.00	6.250	2.23	12.333	20.10	18.42	2.51
0.250	0.00	6.333	2.51	12.417	20.09	18.50	2.51
0.333	1.53	6.417	2.51	12.500	20.09	18.58	2.51
0.417	1.53	6.500	2.51	12.583	20.09	18.67	2.51
0.500	1.53	6.583	2.51	12.667	20.09	18.75	2.51
0.583	1.53	6.667	2.51	12.750	20.09	18.83	2.51
0.667	1.53	6.750	2.51	12.833	10.32	18.92	2.51
0.750	1.53	6.833	2.51	12.917	10.32	19.00	2.51
0.833	1.53	6.917	2.51	13.000	10.32	19.08	2.51
0.917	1.53	7.000	2.51	13.083	10.32	19.17	2.51
1.000	1.53	7.083	2.51	13.167	10.32	19.25	2.51
1.083	1.53	7.167	2.51	13.250	10.32	19.33	2.51
1.167	1.53	7.250	2.51	13.333	7.53	19.42	2.51
1.250	1.53	7.333	3.07	13.417	7.53	19.50	2.51
1.333	1.53	7.417	3.07	13.500	7.53	19.58	2.51
1.417	1.53	7.500	3.07	13.583	7.53	19.67	2.51
1.500	1.53	7.583	3.07	13.667	7.53	19.75	2.51
1.583	1.53	7.667	3.07	13.750	7.53	19.83	2.51
1.667	1.53	7.750	3.07	13.833	5.86	19.92	2.51
1.750	1.53	7.833	3.07	13.917	5.86	20.00	2.51

1.833	1.53	7.917	3.07	14.000	5.86	20.08	2.51
1.917	1.53	8.000	3.07	14.083	5.86	20.17	2.51
2.000	1.53	8.083	3.07	14.167	5.86	20.25	2.51
2.083	1.53	8.167	3.07	14.250	5.86	20.33	1.67
2.167	1.53	8.250	3.07	14.333	4.18	20.42	1.67
2.250	1.53	8.333	3.63	14.417	4.18	20.50	1.67
2.333	1.81	8.417	3.63	14.500	4.18	20.58	1.67
2.417	1.81	8.500	3.63	14.583	4.18	20.67	1.67
2.500	1.81	8.583	3.63	14.667	4.18	20.75	1.67
2.583	1.81	8.667	3.63	14.750	4.18	20.83	1.67
2.667	1.81	8.750	3.63	14.833	4.18	20.92	1.67
2.750	1.81	8.833	3.91	14.917	4.18	21.00	1.67
2.833	1.81	8.917	3.91	15.000	4.18	21.08	1.67
2.917	1.81	9.000	3.91	15.083	4.18	21.17	1.67
3.000	1.81	9.083	3.91	15.167	4.18	21.25	1.67
3.083	1.81	9.167	3.91	15.250	4.18	21.33	1.67
3.167	1.81	9.250	3.91	15.333	4.18	21.42	1.67
3.250	1.81	9.333	4.46	15.417	4.18	21.50	1.67
3.333	1.81	9.417	4.46	15.500	4.18	21.58	1.67
3.417	1.81	9.500	4.46	15.583	4.18	21.67	1.67
3.500	1.81	9.583	4.46	15.667	4.18	21.75	1.67
3.583	1.81	9.667	4.46	15.750	4.18	21.83	1.67
3.667	1.81	9.750	4.46	15.833	4.18	21.92	1.67
3.750	1.81	9.833	5.02	15.917	4.18	22.00	1.67
3.833	1.81	9.917	5.02	16.000	4.18	22.08	1.67
3.917	1.81	10.000	5.02	16.083	4.18	22.17	1.67
4.000	1.81	10.083	5.02	16.167	4.18	22.25	1.67
4.083	1.81	10.167	5.02	16.250	4.18	22.33	1.67
4.167	1.81	10.250	5.02	16.333	2.51	22.42	1.67
4.250	1.81	10.333	6.42	16.417	2.51	22.50	1.67
4.333	2.23	10.417	6.42	16.500	2.51	22.58	1.67
4.417	2.23	10.500	6.42	16.583	2.51	22.67	1.67
4.500	2.23	10.583	6.42	16.667	2.51	22.75	1.67
4.583	2.23	10.667	6.42	16.750	2.51	22.83	1.67
4.667	2.23	10.750	6.42	16.833	2.51	22.92	1.67
4.750	2.23	10.833	8.65	16.917	2.51	23.00	1.67
4.833	2.23	10.917	8.65	17.000	2.51	23.08	1.67
4.917	2.23	11.000	8.65	17.083	2.51	23.17	1.67
5.000	2.23	11.083	8.65	17.167	2.51	23.25	1.67
5.083	2.23	11.167	8.65	17.250	2.51	23.33	1.67
5.167	2.23	11.250	8.65	17.333	2.51	23.42	1.67
5.250	2.23	11.333	13.39	17.417	2.51	23.50	1.67
5.333	2.23	11.417	13.39	17.500	2.51	23.58	1.67
5.417	2.23	11.500	13.39	17.583	2.51	23.67	1.67
5.500	2.23	11.583	13.39	17.667	2.51	23.75	1.67
5.583	2.23	11.667	13.39	17.750	2.51	23.83	1.67
5.667	2.23	11.750	13.39	17.833	2.51	23.92	1.67
5.750	2.23	11.833	41.28	17.917	2.51	24.00	1.67

5.833	2.23	11.917	41.29	18.000	2.51	24.08	1.67
5.917	2.23	12.000	41.29	18.083	2.51	24.17	1.67
6.000	2.23	12.083	170.71	18.167	2.51	24.25	1.67
6.083	2.23	12.167	170.72	18.250	2.51		

Unit Hyd Qpeak (cms)= 1.284

PEAK FLOW (cms)= 1.624 (i)
TIME TO PEAK (hrs)= 13.417
RUNOFF VOLUME (mm)= 58.208
TOTAL RAINFALL (mm)= 139.480
RUNOFF COEFFICIENT = 0.417

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0029)	Area (ha)= 14.85	Curve Number (CN)= 52.9	
ID= 1 DT= 5.0 min	Ia (mm)= 13.28	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.89		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.23	12.250	170.72	18.33	2.51
0.167	0.00	6.250	2.23	12.333	20.10	18.42	2.51
0.250	0.00	6.333	2.51	12.417	20.09	18.50	2.51
0.333	1.53	6.417	2.51	12.500	20.09	18.58	2.51
0.417	1.53	6.500	2.51	12.583	20.09	18.67	2.51
0.500	1.53	6.583	2.51	12.667	20.09	18.75	2.51
0.583	1.53	6.667	2.51	12.750	20.09	18.83	2.51
0.667	1.53	6.750	2.51	12.833	10.32	18.92	2.51
0.750	1.53	6.833	2.51	12.917	10.32	19.00	2.51
0.833	1.53	6.917	2.51	13.000	10.32	19.08	2.51
0.917	1.53	7.000	2.51	13.083	10.32	19.17	2.51
1.000	1.53	7.083	2.51	13.167	10.32	19.25	2.51
1.083	1.53	7.167	2.51	13.250	10.32	19.33	2.51
1.167	1.53	7.250	2.51	13.333	7.53	19.42	2.51
1.250	1.53	7.333	3.07	13.417	7.53	19.50	2.51
1.333	1.53	7.417	3.07	13.500	7.53	19.58	2.51
1.417	1.53	7.500	3.07	13.583	7.53	19.67	2.51
1.500	1.53	7.583	3.07	13.667	7.53	19.75	2.51
1.583	1.53	7.667	3.07	13.750	7.53	19.83	2.51
1.667	1.53	7.750	3.07	13.833	5.86	19.92	2.51

1.750	1.53	7.833	3.07	13.917	5.86	20.00	2.51
1.833	1.53	7.917	3.07	14.000	5.86	20.08	2.51
1.917	1.53	8.000	3.07	14.083	5.86	20.17	2.51
2.000	1.53	8.083	3.07	14.167	5.86	20.25	2.51
2.083	1.53	8.167	3.07	14.250	5.86	20.33	1.67
2.167	1.53	8.250	3.07	14.333	4.18	20.42	1.67
2.250	1.53	8.333	3.63	14.417	4.18	20.50	1.67
2.333	1.81	8.417	3.63	14.500	4.18	20.58	1.67
2.417	1.81	8.500	3.63	14.583	4.18	20.67	1.67
2.500	1.81	8.583	3.63	14.667	4.18	20.75	1.67
2.583	1.81	8.667	3.63	14.750	4.18	20.83	1.67
2.667	1.81	8.750	3.63	14.833	4.18	20.92	1.67
2.750	1.81	8.833	3.91	14.917	4.18	21.00	1.67
2.833	1.81	8.917	3.91	15.000	4.18	21.08	1.67
2.917	1.81	9.000	3.91	15.083	4.18	21.17	1.67
3.000	1.81	9.083	3.91	15.167	4.18	21.25	1.67
3.083	1.81	9.167	3.91	15.250	4.18	21.33	1.67
3.167	1.81	9.250	3.91	15.333	4.18	21.42	1.67
3.250	1.81	9.333	4.46	15.417	4.18	21.50	1.67
3.333	1.81	9.417	4.46	15.500	4.18	21.58	1.67
3.417	1.81	9.500	4.46	15.583	4.18	21.67	1.67
3.500	1.81	9.583	4.46	15.667	4.18	21.75	1.67
3.583	1.81	9.667	4.46	15.750	4.18	21.83	1.67
3.667	1.81	9.750	4.46	15.833	4.18	21.92	1.67
3.750	1.81	9.833	5.02	15.917	4.18	22.00	1.67
3.833	1.81	9.917	5.02	16.000	4.18	22.08	1.67
3.917	1.81	10.000	5.02	16.083	4.18	22.17	1.67
4.000	1.81	10.083	5.02	16.167	4.18	22.25	1.67
4.083	1.81	10.167	5.02	16.250	4.18	22.33	1.67
4.167	1.81	10.250	5.02	16.333	2.51	22.42	1.67
4.250	1.81	10.333	6.42	16.417	2.51	22.50	1.67
4.333	2.23	10.417	6.42	16.500	2.51	22.58	1.67
4.417	2.23	10.500	6.42	16.583	2.51	22.67	1.67
4.500	2.23	10.583	6.42	16.667	2.51	22.75	1.67
4.583	2.23	10.667	6.42	16.750	2.51	22.83	1.67
4.667	2.23	10.750	6.42	16.833	2.51	22.92	1.67
4.750	2.23	10.833	8.65	16.917	2.51	23.00	1.67
4.833	2.23	10.917	8.65	17.000	2.51	23.08	1.67
4.917	2.23	11.000	8.65	17.083	2.51	23.17	1.67
5.000	2.23	11.083	8.65	17.167	2.51	23.25	1.67
5.083	2.23	11.167	8.65	17.250	2.51	23.33	1.67
5.167	2.23	11.250	8.65	17.333	2.51	23.42	1.67
5.250	2.23	11.333	13.39	17.417	2.51	23.50	1.67
5.333	2.23	11.417	13.39	17.500	2.51	23.58	1.67
5.417	2.23	11.500	13.39	17.583	2.51	23.67	1.67
5.500	2.23	11.583	13.39	17.667	2.51	23.75	1.67
5.583	2.23	11.667	13.39	17.750	2.51	23.83	1.67
5.667	2.23	11.750	13.39	17.833	2.51	23.92	1.67

5.750	2.23	11.833	41.28	17.917	2.51	24.00	1.67
5.833	2.23	11.917	41.29	18.000	2.51	24.08	1.67
5.917	2.23	12.000	41.29	18.083	2.51	24.17	1.67
6.000	2.23	12.083	170.71	18.167	2.51	24.25	1.67
6.083	2.23	12.167	170.72	18.250	2.51		

Unit Hyd Qpeak (cms)= 0.637

PEAK FLOW (cms)= 0.573 (i)
TIME TO PEAK (hrs)= 13.083
RUNOFF VOLUME (mm)= 45.247
TOTAL RAINFALL (mm)= 139.480
RUNOFF COEFFICIENT = 0.324

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
STANDHYD (0014)	Area (ha)= 1.87		
ID= 1 DT= 5.0 min	Total Imp(%)= 43.28	Dir. Conn.(%)= 10.00	

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.81	1.06
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	111.65	25.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.23	12.250	170.72	18.33	2.51
0.167	0.00	6.250	2.23	12.333	20.10	18.42	2.51
0.250	0.00	6.333	2.51	12.417	20.09	18.50	2.51
0.333	1.53	6.417	2.51	12.500	20.09	18.58	2.51
0.417	1.53	6.500	2.51	12.583	20.09	18.67	2.51
0.500	1.53	6.583	2.51	12.667	20.09	18.75	2.51
0.583	1.53	6.667	2.51	12.750	20.09	18.83	2.51
0.667	1.53	6.750	2.51	12.833	10.32	18.92	2.51
0.750	1.53	6.833	2.51	12.917	10.32	19.00	2.51
0.833	1.53	6.917	2.51	13.000	10.32	19.08	2.51
0.917	1.53	7.000	2.51	13.083	10.32	19.17	2.51
1.000	1.53	7.083	2.51	13.167	10.32	19.25	2.51
1.083	1.53	7.167	2.51	13.250	10.32	19.33	2.51

1.167	1.53	7.250	2.51	13.333	7.53	19.42	2.51
1.250	1.53	7.333	3.07	13.417	7.53	19.50	2.51
1.333	1.53	7.417	3.07	13.500	7.53	19.58	2.51
1.417	1.53	7.500	3.07	13.583	7.53	19.67	2.51
1.500	1.53	7.583	3.07	13.667	7.53	19.75	2.51
1.583	1.53	7.667	3.07	13.750	7.53	19.83	2.51
1.667	1.53	7.750	3.07	13.833	5.86	19.92	2.51
1.750	1.53	7.833	3.07	13.917	5.86	20.00	2.51
1.833	1.53	7.917	3.07	14.000	5.86	20.08	2.51
1.917	1.53	8.000	3.07	14.083	5.86	20.17	2.51
2.000	1.53	8.083	3.07	14.167	5.86	20.25	2.51
2.083	1.53	8.167	3.07	14.250	5.86	20.33	1.67
2.167	1.53	8.250	3.07	14.333	4.18	20.42	1.67
2.250	1.53	8.333	3.63	14.417	4.18	20.50	1.67
2.333	1.81	8.417	3.63	14.500	4.18	20.58	1.67
2.417	1.81	8.500	3.63	14.583	4.18	20.67	1.67
2.500	1.81	8.583	3.63	14.667	4.18	20.75	1.67
2.583	1.81	8.667	3.63	14.750	4.18	20.83	1.67
2.667	1.81	8.750	3.63	14.833	4.18	20.92	1.67
2.750	1.81	8.833	3.91	14.917	4.18	21.00	1.67
2.833	1.81	8.917	3.91	15.000	4.18	21.08	1.67
2.917	1.81	9.000	3.91	15.083	4.18	21.17	1.67
3.000	1.81	9.083	3.91	15.167	4.18	21.25	1.67
3.083	1.81	9.167	3.91	15.250	4.18	21.33	1.67
3.167	1.81	9.250	3.91	15.333	4.18	21.42	1.67
3.250	1.81	9.333	4.46	15.417	4.18	21.50	1.67
3.333	1.81	9.417	4.46	15.500	4.18	21.58	1.67
3.417	1.81	9.500	4.46	15.583	4.18	21.67	1.67
3.500	1.81	9.583	4.46	15.667	4.18	21.75	1.67
3.583	1.81	9.667	4.46	15.750	4.18	21.83	1.67
3.667	1.81	9.750	4.46	15.833	4.18	21.92	1.67
3.750	1.81	9.833	5.02	15.917	4.18	22.00	1.67
3.833	1.81	9.917	5.02	16.000	4.18	22.08	1.67
3.917	1.81	10.000	5.02	16.083	4.18	22.17	1.67
4.000	1.81	10.083	5.02	16.167	4.18	22.25	1.67
4.083	1.81	10.167	5.02	16.250	4.18	22.33	1.67
4.167	1.81	10.250	5.02	16.333	2.51	22.42	1.67
4.250	1.81	10.333	6.42	16.417	2.51	22.50	1.67
4.333	2.23	10.417	6.42	16.500	2.51	22.58	1.67
4.417	2.23	10.500	6.42	16.583	2.51	22.67	1.67
4.500	2.23	10.583	6.42	16.667	2.51	22.75	1.67
4.583	2.23	10.667	6.42	16.750	2.51	22.83	1.67
4.667	2.23	10.750	6.42	16.833	2.51	22.92	1.67
4.750	2.23	10.833	8.65	16.917	2.51	23.00	1.67
4.833	2.23	10.917	8.65	17.000	2.51	23.08	1.67
4.917	2.23	11.000	8.65	17.083	2.51	23.17	1.67
5.000	2.23	11.083	8.65	17.167	2.51	23.25	1.67
5.083	2.23	11.167	8.65	17.250	2.51	23.33	1.67

5.167	2.23	11.250	8.65	17.333	2.51	23.42	1.67
5.250	2.23	11.333	13.39	17.417	2.51	23.50	1.67
5.333	2.23	11.417	13.39	17.500	2.51	23.58	1.67
5.417	2.23	11.500	13.39	17.583	2.51	23.67	1.67
5.500	2.23	11.583	13.39	17.667	2.51	23.75	1.67
5.583	2.23	11.667	13.39	17.750	2.51	23.83	1.67
5.667	2.23	11.750	13.39	17.833	2.51	23.92	1.67
5.750	2.23	11.833	41.28	17.917	2.51	24.00	1.67
5.833	2.23	11.917	41.29	18.000	2.51	24.08	1.67
5.917	2.23	12.000	41.29	18.083	2.51	24.17	1.67
6.000	2.23	12.083	170.71	18.167	2.51	24.25	1.67
6.083	2.23	12.167	170.72	18.250	2.51		

```
     Max.Eff.Inten.(mm/hr)=     170.72       232.10
               over (min)        5.00        10.00
     Storage Coeff.  (min)=       2.71 (ii)    6.51 (ii)
     Unit Hyd. Tpeak (min)=       5.00        10.00
     Unit Hyd. peak  (cms)=       0.29         0.14
                                                        *TOTALS*
     PEAK FLOW       (cms)=       0.09         0.58          0.665 (iii)
     TIME TO PEAK    (hrs)=      12.25        12.25         12.25
     RUNOFF VOLUME    (mm)=     138.48       102.38        105.99
     TOTAL RAINFALL   (mm)=     139.48       139.48        139.48
     RUNOFF COEFFICIENT   =       0.99         0.73          0.76

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
             YOU SHOULD CONSIDER SPLITTING THE AREA.

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  78.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0040)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------          (ha)    (cms)    (hrs)     (mm)
        ID1= 1 (  0001):    39.68   1.624    13.42    58.21
      + ID2= 2 (  0014):     1.87   0.665    12.25   105.99
        ================================================
        ID = 3 (  0040):    41.55   1.664    13.42    60.36

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
```



```
--------------------
| ADD HYD  (  0040)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------          (ha)    (cms)    (hrs)     (mm)
        ID1= 3 (  0040):    41.55   1.664    13.42    60.36
      + ID2= 2 (  0029):    14.85   0.573    13.08    45.25
        ================================================
        ID = 1 (  0040):    56.40   2.218    13.33    56.38

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0023)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------          (ha)    (cms)    (hrs)     (mm)
        ID1= 1 (  0039):   134.78   3.572    13.75    48.94
      + ID2= 2 (  0040):    56.40   2.218    13.33    56.38
        ================================================
        ID = 3 (  0023):   191.18   5.705    13.50    51.13

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
*********************************
** SIMULATION:M - 25mm        **
*********************************

--------------------
|    READ STORM    |    Filename: C:\Users\ecomish\AppD
|                  |              ata\Local\Temp\
|                  |              49208e0f-499d-4cb6-b2a9-d1492d706baa\6deeea8b
| Ptotal= 26.26 mm |    Comments: 25mm
--------------------
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                 hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
                0.00    2.10 |  0.83   30.00 |  1.67    4.67 |  2.50    2.37
                0.08    2.29 |  0.92   80.70 |  1.75    4.23 |  2.58    2.26
                0.17    2.52 |  1.00   37.00 |  1.83    3.88 |  2.67    2.17
                0.25    2.81 |  1.08   20.30 |  1.92    3.58 |  2.75    2.08
                0.33    3.18 |  1.17   13.27 |  2.00    3.33 |  2.83    2.00
                0.42    3.68 |  1.25   10.09 |  2.08    3.11 |  2.92    1.93
                0.50    4.39 |  1.33    8.15 |  2.17    2.92 |  3.00    1.93
                0.58    5.49 |  1.42    6.85 |  2.25    2.76 |  3.08    1.93
                0.67    7.40 |  1.50    5.92 |  2.33    2.61 |  3.17    1.93
                0.75   11.54 |  1.58    5.22 |  2.42    2.48 |

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| CALIB            |
| NASHYD   (  0025)|   Area    (ha)= 100.92   Curve Number   (CN)= 55.9
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.89   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   1.70

     Unit Hyd Qpeak  (cms)=   2.267

     PEAK FLOW       (cms)=   0.117 (i)
     TIME TO PEAK    (hrs)=   3.583
     RUNOFF VOLUME    (mm)=   1.544
     TOTAL RAINFALL   (mm)=  26.256
     RUNOFF COEFFICIENT   =   0.059

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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--------------------
| CALIB            |
| NASHYD   (  0002)|   Area    (ha)=  23.99   Curve Number   (CN)= 44.7
|ID= 1 DT= 5.0 min |   Ia      (mm)=  10.91   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.97

     Unit Hyd Qpeak  (cms)=   0.945

     PEAK FLOW       (cms)=   0.018 (i)
     TIME TO PEAK    (hrs)=   2.750
     RUNOFF VOLUME    (mm)=   0.714
     TOTAL RAINFALL   (mm)=  26.256
     RUNOFF COEFFICIENT   =   0.027

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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--------------------
| CALIB            |
| NASHYD   (  0028)|   Area    (ha)=   6.37   Curve Number   (CN)= 50.5
|ID= 1 DT= 5.0 min |   Ia      (mm)=  15.69   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.77

     Unit Hyd Qpeak  (cms)=   0.316

     PEAK FLOW       (cms)=   0.003 (i)
     TIME TO PEAK    (hrs)=   2.917
     RUNOFF VOLUME    (mm)=   0.430
     TOTAL RAINFALL   (mm)=  26.256
     RUNOFF COEFFICIENT   =   0.016
```

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB				
NASHYD (0030)	Area (ha)= 1.70	Curve Number (CN)= 60.5		
ID= 1 DT= 5.0 min	Ia (mm)= 9.65	# of Linear Res.(N)= 3.00		
	U.H. Tp(hrs)= 0.40			

Unit Hyd Qpeak (cms)= 0.162

PEAK FLOW (cms)= 0.004 (i)
TIME TO PEAK (hrs)= 1.667
RUNOFF VOLUME (mm)= 1.509
TOTAL RAINFALL (mm)= 26.256
RUNOFF COEFFICIENT = 0.057

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB				
NASHYD (0031)	Area (ha)= 1.80	Curve Number (CN)= 50.0		
ID= 1 DT= 5.0 min	Ia (mm)= 16.00	# of Linear Res.(N)= 3.00		
	U.H. Tp(hrs)= 0.76			

Unit Hyd Qpeak (cms)= 0.090

PEAK FLOW (cms)= 0.001 (i)
TIME TO PEAK (hrs)= 2.917
RUNOFF VOLUME (mm)= 0.397
TOTAL RAINFALL (mm)= 26.256
RUNOFF COEFFICIENT = 0.015

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0039)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0002):	23.99	0.018	2.75	0.71
+ ID2= 2 (0025):	100.92	0.117	3.58	1.54
ID = 3 (0039):	124.91	0.133	3.42	1.38

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0039)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0039):	124.91	0.133	3.42	1.38
+ ID2= 2 (0028):	6.37	0.003	2.92	0.43
ID = 1 (0039):	131.28	0.136	3.42	1.34

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0039)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0039):	131.28	0.136	3.42	1.34
+ ID2= 2 (0030):	1.70	0.004	1.67	1.51
ID = 3 (0039):	132.98	0.137	3.42	1.34

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0039)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0039):	132.98	0.137	3.42	1.34
+ ID2= 2 (0031):	1.80	0.001	2.92	0.40
ID = 1 (0039):	134.78	0.138	3.42	1.33

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB				
NASHYD (0001)	Area (ha)= 39.68	Curve Number (CN)= 60.7		
ID= 1 DT= 5.0 min	Ia (mm)= 8.26	# of Linear Res.(N)= 3.00		
	U.H. Tp(hrs)= 1.18			

Unit Hyd Qpeak (cms)= 1.284

PEAK FLOW (cms)= 0.066 (i)
TIME TO PEAK (hrs)= 2.917

RUNOFF VOLUME (mm)= 1.774
TOTAL RAINFALL (mm)= 26.256
RUNOFF COEFFICIENT = 0.068

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB				
NASHYD (0029)	Area (ha)= 14.85	Curve Number (CN)= 52.9		
ID= 1 DT= 5.0 min	Ia (mm)= 13.28	# of Linear Res.(N)= 3.00		
	U.H. Tp(hrs)= 0.89			

Unit Hyd Qpeak (cms)= 0.637

PEAK FLOW (cms)= 0.011 (i)
TIME TO PEAK (hrs)= 2.833
RUNOFF VOLUME (mm)= 0.705
TOTAL RAINFALL (mm)= 26.256
RUNOFF COEFFICIENT = 0.027

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB				
STANDHYD (0014)	Area (ha)= 1.87			
ID= 1 DT= 5.0 min	Total Imp(%)= 43.28	Dir. Conn.(%)= 10.00		

	IMPERVIOUS	PERVIOUS (i)	
Surface Area (ha)=	0.81	1.06	
Dep. Storage (mm)=	1.00	5.00	
Average Slope (%)=	0.50	2.00	
Length (m)=	111.65	25.00	
Mannings n =	0.013	0.250	
Max.Eff.Inten.(mm/hr)=	80.70	25.49	
over (min)	5.00	15.00	
Storage Coeff. (min)=	3.66 (ii)	12.86 (ii)	
Unit Hyd. Tpeak (min)=	5.00	15.00	
Unit Hyd. peak (cms)=	0.25	0.08	
			TOTALS
PEAK FLOW (cms)=	0.03	0.04	0.050 (iii)
TIME TO PEAK (hrs)=	1.00	1.25	1.17
RUNOFF VOLUME (mm)=	25.26	7.82	9.56
TOTAL RAINFALL (mm)=	26.26	26.26	26.26
RUNOFF COEFFICIENT =	0.96	0.30	0.36

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 78.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0040)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0001):	39.68	0.066	2.92	1.77
+ ID2= 2 (0014):	1.87	0.050	1.17	9.56
ID = 3 (0040):	41.55	0.073	2.75	2.12

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0040)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0040):	41.55	0.073	2.75	2.12
+ ID2= 2 (0029):	14.85	0.011	2.83	0.71
ID = 1 (0040):	56.40	0.085	2.75	1.75

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0039):	134.78	0.138	3.42	1.33
+ ID2= 2 (0040):	56.40	0.085	2.75	1.75
ID = 3 (0023):	191.18	0.218	3.25	1.45

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

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** SIMULATION:N- Timmins      **
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|    READ STORM    |    Filename: C:\Users\ecomish\AppD
|                  |              ata\Local\Temp\
|                  |              49208e0f-499d-4cb6-b2a9-d1492d706baa\e3c6c2ae
| Ptotal=193.00 mm |    Comments: tim
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```

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.00	15.00	3.00	3.00	6.00	43.00	9.00	13.00
1.00	20.00	4.00	5.00	7.00	20.00	10.00	13.00
2.00	10.00	5.00	20.00	8.00	23.00	11.00	8.00

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--------------------
| CALIB            |
| NASHYD   (  0025)|   Area    (ha)= 100.92   Curve Number   (CN)= 55.9
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.89   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   1.70

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.
```

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	15.00	3.083	3.00	6.083	43.00	9.08	13.00
0.167	15.00	3.167	3.00	6.167	43.00	9.17	13.00
0.250	15.00	3.250	3.00	6.250	43.00	9.25	13.00
0.333	15.00	3.333	3.00	6.333	43.00	9.33	13.00
0.417	15.00	3.417	3.00	6.417	43.00	9.42	13.00
0.500	15.00	3.500	3.00	6.500	43.00	9.50	13.00
0.583	15.00	3.583	3.00	6.583	43.00	9.58	13.00
0.667	15.00	3.667	3.00	6.667	43.00	9.67	13.00
0.750	15.00	3.750	3.00	6.750	43.00	9.75	13.00
0.833	15.00	3.833	3.00	6.833	43.00	9.83	13.00
0.917	15.00	3.917	3.00	6.917	43.00	9.92	13.00
1.000	15.00	4.000	3.00	7.000	43.00	10.00	13.00
1.083	20.00	4.083	5.00	7.083	20.00	10.08	13.00
1.167	20.00	4.167	5.00	7.167	20.00	10.17	13.00
1.250	20.00	4.250	5.00	7.250	20.00	10.25	13.00
1.333	20.00	4.333	5.00	7.333	20.00	10.33	13.00
1.417	20.00	4.417	5.00	7.417	20.00	10.42	13.00
1.500	20.00	4.500	5.00	7.500	20.00	10.50	13.00
1.583	20.00	4.583	5.00	7.583	20.00	10.58	13.00

1.667	20.00	4.667	5.00	7.667	20.00	10.67	13.00
1.750	20.00	4.750	5.00	7.750	20.00	10.75	13.00
1.833	20.00	4.833	5.00	7.833	20.00	10.83	13.00
1.917	20.00	4.917	5.00	7.917	20.00	10.92	13.00
2.000	20.00	5.000	5.00	8.000	20.00	11.00	13.00
2.083	10.00	5.083	20.00	8.083	23.00	11.08	8.00
2.167	10.00	5.167	20.00	8.167	23.00	11.17	8.00
2.250	10.00	5.250	20.00	8.250	23.00	11.25	8.00
2.333	10.00	5.333	20.00	8.333	23.00	11.33	8.00
2.417	10.00	5.417	20.00	8.417	23.00	11.42	8.00
2.500	10.00	5.500	20.00	8.500	23.00	11.50	8.00
2.583	10.00	5.583	20.00	8.583	23.00	11.58	8.00
2.667	10.00	5.667	20.00	8.667	23.00	11.67	8.00
2.750	10.00	5.750	20.00	8.750	23.00	11.75	8.00
2.833	10.00	5.833	20.00	8.833	23.00	11.83	8.00
2.917	10.00	5.917	20.00	8.917	23.00	11.92	8.00
3.000	10.00	6.000	20.00	9.000	23.00	12.00	8.00

```
    Unit Hyd Qpeak  (cms)=   2.267

    PEAK FLOW       (cms)=   3.734 (i)
    TIME TO PEAK    (hrs)=   9.583
    RUNOFF VOLUME    (mm)=  88.963
    TOTAL RAINFALL   (mm)= 193.000
    RUNOFF COEFFICIENT   =   0.461

    (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
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--------------------
| CALIB            |
| NASHYD   (  0002)|   Area    (ha)=  23.99   Curve Number   (CN)= 44.7
|ID= 1 DT= 5.0 min |   Ia      (mm)=  10.91   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.97

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.
```

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	15.00	3.083	3.00	6.083	43.00	9.08	13.00
0.167	15.00	3.167	3.00	6.167	43.00	9.17	13.00
0.250	15.00	3.250	3.00	6.250	43.00	9.25	13.00
0.333	15.00	3.333	3.00	6.333	43.00	9.33	13.00
0.417	15.00	3.417	3.00	6.417	43.00	9.42	13.00
0.500	15.00	3.500	3.00	6.500	43.00	9.50	13.00
0.583	15.00	3.583	3.00	6.583	43.00	9.58	13.00

0.667	15.00	3.667	3.00	6.667	43.00	9.67	13.00
0.750	15.00	3.750	3.00	6.750	43.00	9.75	13.00
0.833	15.00	3.833	3.00	6.833	43.00	9.83	13.00
0.917	15.00	3.917	3.00	6.917	43.00	9.92	13.00
1.000	15.00	4.000	3.00	7.000	43.00	10.00	13.00
1.083	20.00	4.083	5.00	7.083	20.00	10.08	13.00
1.167	20.00	4.167	5.00	7.167	20.00	10.17	13.00
1.250	20.00	4.250	5.00	7.250	20.00	10.25	13.00
1.333	20.00	4.333	5.00	7.333	20.00	10.33	13.00
1.417	20.00	4.417	5.00	7.417	20.00	10.42	13.00
1.500	20.00	4.500	5.00	7.500	20.00	10.50	13.00
1.583	20.00	4.583	5.00	7.583	20.00	10.58	13.00
1.667	20.00	4.667	5.00	7.667	20.00	10.67	13.00
1.750	20.00	4.750	5.00	7.750	20.00	10.75	13.00
1.833	20.00	4.833	5.00	7.833	20.00	10.83	13.00
1.917	20.00	4.917	5.00	7.917	20.00	10.92	13.00
2.000	20.00	5.000	5.00	8.000	20.00	11.00	13.00
2.083	10.00	5.083	20.00	8.083	23.00	11.08	8.00
2.167	10.00	5.167	20.00	8.167	23.00	11.17	8.00
2.250	10.00	5.250	20.00	8.250	23.00	11.25	8.00
2.333	10.00	5.333	20.00	8.333	23.00	11.33	8.00
2.417	10.00	5.417	20.00	8.417	23.00	11.42	8.00
2.500	10.00	5.500	20.00	8.500	23.00	11.50	8.00
2.583	10.00	5.583	20.00	8.583	23.00	11.58	8.00
2.667	10.00	5.667	20.00	8.667	23.00	11.67	8.00
2.750	10.00	5.750	20.00	8.750	23.00	11.75	8.00
2.833	10.00	5.833	20.00	8.833	23.00	11.83	8.00
2.917	10.00	5.917	20.00	8.917	23.00	11.92	8.00
3.000	10.00	6.000	20.00	9.000	23.00	12.00	8.00

```
    Unit Hyd Qpeak  (cms)=   0.945

    PEAK FLOW       (cms)=   0.752 (i)
    TIME TO PEAK    (hrs)=   7.917
    RUNOFF VOLUME    (mm)=  66.804
    TOTAL RAINFALL   (mm)= 193.000
    RUNOFF COEFFICIENT   =   0.346

    (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
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--------------------
| CALIB            |
| NASHYD   (  0028)|   Area    (ha)=   6.37   Curve Number   (CN)= 50.5
|ID= 1 DT= 5.0 min |   Ia      (mm)=  15.69   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.77

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.
```


---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	15.00	3.083	3.00	6.083	43.00	9.08	13.00
0.167	15.00	3.167	3.00	6.167	43.00	9.17	13.00
0.250	15.00	3.250	3.00	6.250	43.00	9.25	13.00
0.333	15.00	3.333	3.00	6.333	43.00	9.33	13.00
0.417	15.00	3.417	3.00	6.417	43.00	9.42	13.00
0.500	15.00	3.500	3.00	6.500	43.00	9.50	13.00
0.583	15.00	3.583	3.00	6.583	43.00	9.58	13.00
0.667	15.00	3.667	3.00	6.667	43.00	9.67	13.00
0.750	15.00	3.750	3.00	6.750	43.00	9.75	13.00
0.833	15.00	3.833	3.00	6.833	43.00	9.83	13.00
0.917	15.00	3.917	3.00	6.917	43.00	9.92	13.00
1.000	15.00	4.000	3.00	7.000	43.00	10.00	13.00
1.083	20.00	4.083	5.00	7.083	20.00	10.08	13.00
1.167	20.00	4.167	5.00	7.167	20.00	10.17	13.00
1.250	20.00	4.250	5.00	7.250	20.00	10.25	13.00
1.333	20.00	4.333	5.00	7.333	20.00	10.33	13.00
1.417	20.00	4.417	5.00	7.417	20.00	10.42	13.00
1.500	20.00	4.500	5.00	7.500	20.00	10.50	13.00
1.583	20.00	4.583	5.00	7.583	20.00	10.58	13.00
1.667	20.00	4.667	5.00	7.667	20.00	10.67	13.00
1.750	20.00	4.750	5.00	7.750	20.00	10.75	13.00
1.833	20.00	4.833	5.00	7.833	20.00	10.83	13.00
1.917	20.00	4.917	5.00	7.917	20.00	10.92	13.00
2.000	20.00	5.000	5.00	8.000	20.00	11.00	13.00
2.083	10.00	5.083	20.00	8.083	23.00	11.08	8.00
2.167	10.00	5.167	20.00	8.167	23.00	11.17	8.00
2.250	10.00	5.250	20.00	8.250	23.00	11.25	8.00
2.333	10.00	5.333	20.00	8.333	23.00	11.33	8.00
2.417	10.00	5.417	20.00	8.417	23.00	11.42	8.00
2.500	10.00	5.500	20.00	8.500	23.00	11.50	8.00
2.583	10.00	5.583	20.00	8.583	23.00	11.58	8.00
2.667	10.00	5.667	20.00	8.667	23.00	11.67	8.00
2.750	10.00	5.750	20.00	8.750	23.00	11.75	8.00
2.833	10.00	5.833	20.00	8.833	23.00	11.83	8.00
2.917	10.00	5.917	20.00	8.917	23.00	11.92	8.00
3.000	10.00	6.000	20.00	9.000	23.00	12.00	8.00

```
    Unit Hyd Qpeak  (cms)=   0.316

    PEAK FLOW       (cms)=   0.245 (i)
    TIME TO PEAK    (hrs)=   7.500
    RUNOFF VOLUME    (mm)=  73.716
    TOTAL RAINFALL   (mm)= 193.000
```

RUNOFF COEFFICIENT = 0.382

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0030)	Area (ha)=	1.70	Curve Number (CN)=	60.5	
ID= 1 DT= 5.0 min	Ia (mm)=	9.65	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	0.40			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	15.00	3.083	3.00	6.083	43.00	9.08	13.00
0.167	15.00	3.167	3.00	6.167	43.00	9.17	13.00
0.250	15.00	3.250	3.00	6.250	43.00	9.25	13.00
0.333	15.00	3.333	3.00	6.333	43.00	9.33	13.00
0.417	15.00	3.417	3.00	6.417	43.00	9.42	13.00
0.500	15.00	3.500	3.00	6.500	43.00	9.50	13.00
0.583	15.00	3.583	3.00	6.583	43.00	9.58	13.00
0.667	15.00	3.667	3.00	6.667	43.00	9.67	13.00
0.750	15.00	3.750	3.00	6.750	43.00	9.75	13.00
0.833	15.00	3.833	3.00	6.833	43.00	9.83	13.00
0.917	15.00	3.917	3.00	6.917	43.00	9.92	13.00
1.000	15.00	4.000	3.00	7.000	43.00	10.00	13.00
1.083	20.00	4.083	5.00	7.083	20.00	10.08	13.00
1.167	20.00	4.167	5.00	7.167	20.00	10.17	13.00
1.250	20.00	4.250	5.00	7.250	20.00	10.25	13.00
1.333	20.00	4.333	5.00	7.333	20.00	10.33	13.00
1.417	20.00	4.417	5.00	7.417	20.00	10.42	13.00
1.500	20.00	4.500	5.00	7.500	20.00	10.50	13.00
1.583	20.00	4.583	5.00	7.583	20.00	10.58	13.00
1.667	20.00	4.667	5.00	7.667	20.00	10.67	13.00
1.750	20.00	4.750	5.00	7.750	20.00	10.75	13.00
1.833	20.00	4.833	5.00	7.833	20.00	10.83	13.00
1.917	20.00	4.917	5.00	7.917	20.00	10.92	13.00
2.000	20.00	5.000	5.00	8.000	20.00	11.00	13.00
2.083	10.00	5.083	20.00	8.083	23.00	11.08	8.00
2.167	10.00	5.167	20.00	8.167	23.00	11.17	8.00
2.250	10.00	5.250	20.00	8.250	23.00	11.25	8.00
2.333	10.00	5.333	20.00	8.333	23.00	11.33	8.00
2.417	10.00	5.417	20.00	8.417	23.00	11.42	8.00
2.500	10.00	5.500	20.00	8.500	23.00	11.50	8.00
2.583	10.00	5.583	20.00	8.583	23.00	11.58	8.00

2.667	10.00	5.667	20.00	8.667	23.00	11.67	8.00
2.750	10.00	5.750	20.00	8.750	23.00	11.75	8.00
2.833	10.00	5.833	20.00	8.833	23.00	11.83	8.00
2.917	10.00	5.917	20.00	8.917	23.00	11.92	8.00
3.000	10.00	6.000	20.00	9.000	23.00	12.00	8.00

Unit Hyd Qpeak (cms)= 0.162

PEAK FLOW (cms)= 0.109 (i)
TIME TO PEAK (hrs)= 7.083
RUNOFF VOLUME (mm)= 96.184
TOTAL RAINFALL (mm)= 193.000
RUNOFF COEFFICIENT = 0.498

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0031)	Area (ha)=	1.80	Curve Number (CN)=	50.0	
ID= 1 DT= 5.0 min	Ia (mm)=	16.00	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	0.76			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	15.00	3.083	3.00	6.083	43.00	9.08	13.00
0.167	15.00	3.167	3.00	6.167	43.00	9.17	13.00
0.250	15.00	3.250	3.00	6.250	43.00	9.25	13.00
0.333	15.00	3.333	3.00	6.333	43.00	9.33	13.00
0.417	15.00	3.417	3.00	6.417	43.00	9.42	13.00
0.500	15.00	3.500	3.00	6.500	43.00	9.50	13.00
0.583	15.00	3.583	3.00	6.583	43.00	9.58	13.00
0.667	15.00	3.667	3.00	6.667	43.00	9.67	13.00
0.750	15.00	3.750	3.00	6.750	43.00	9.75	13.00
0.833	15.00	3.833	3.00	6.833	43.00	9.83	13.00
0.917	15.00	3.917	3.00	6.917	43.00	9.92	13.00
1.000	15.00	4.000	3.00	7.000	43.00	10.00	13.00
1.083	20.00	4.083	5.00	7.083	20.00	10.08	13.00
1.167	20.00	4.167	5.00	7.167	20.00	10.17	13.00
1.250	20.00	4.250	5.00	7.250	20.00	10.25	13.00
1.333	20.00	4.333	5.00	7.333	20.00	10.33	13.00
1.417	20.00	4.417	5.00	7.417	20.00	10.42	13.00
1.500	20.00	4.500	5.00	7.500	20.00	10.50	13.00
1.583	20.00	4.583	5.00	7.583	20.00	10.58	13.00

1.667	20.00	4.667	5.00	7.667	20.00	10.67	13.00
1.750	20.00	4.750	5.00	7.750	20.00	10.75	13.00
1.833	20.00	4.833	5.00	7.833	20.00	10.83	13.00
1.917	20.00	4.917	5.00	7.917	20.00	10.92	13.00
2.000	20.00	5.000	5.00	8.000	20.00	11.00	13.00
2.083	10.00	5.083	20.00	8.083	23.00	11.08	8.00
2.167	10.00	5.167	20.00	8.167	23.00	11.17	8.00
2.250	10.00	5.250	20.00	8.250	23.00	11.25	8.00
2.333	10.00	5.333	20.00	8.333	23.00	11.33	8.00
2.417	10.00	5.417	20.00	8.417	23.00	11.42	8.00
2.500	10.00	5.500	20.00	8.500	23.00	11.50	8.00
2.583	10.00	5.583	20.00	8.583	23.00	11.58	8.00
2.667	10.00	5.667	20.00	8.667	23.00	11.67	8.00
2.750	10.00	5.750	20.00	8.750	23.00	11.75	8.00
2.833	10.00	5.833	20.00	8.833	23.00	11.83	8.00
2.917	10.00	5.917	20.00	8.917	23.00	11.92	8.00
3.000	10.00	6.000	20.00	9.000	23.00	12.00	8.00

Unit Hyd Qpeak (cms)= 0.090

PEAK FLOW (cms)= 0.069 (i)
TIME TO PEAK (hrs)= 7.500
RUNOFF VOLUME (mm)= 72.687
TOTAL RAINFALL (mm)= 193.000
RUNOFF COEFFICIENT = 0.377

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0039)					
1 + 2 = 3		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
	ID1= 1 (0002):	23.99	0.752	7.92	66.80
	+ ID2= 2 (0025):	100.92	3.734	9.58	88.96
	ID = 3 (0039):	124.91	4.455	9.50	84.71

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0039)					
3 + 2 = 1		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
	ID1= 3 (0039):	124.91	4.455	9.50	84.71
	+ ID2= 2 (0028):	6.37	0.245	7.50	73.72

ID = 1 (0039):	131.28	4.667	9.42	84.17

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0039)					
1 + 2 = 3		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
	ID1= 1 (0039):	131.28	4.667	9.42	84.17
	+ ID2= 2 (0030):	1.70	0.109	7.08	96.18
	ID = 3 (0039):	132.98	4.731	9.42	84.33

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0039)					
3 + 2 = 1		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
	ID1= 3 (0039):	132.98	4.731	9.42	84.33
	+ ID2= 2 (0031):	1.80	0.069	7.50	72.69
	ID = 1 (0039):	134.78	4.791	9.42	84.17

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB					
NASHYD (0001)	Area (ha)=	39.68	Curve Number (CN)=	60.7	
ID= 1 DT= 5.0 min	Ia (mm)=	8.26	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	1.18			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	15.00	3.083	3.00	6.083	43.00	9.08	13.00
0.167	15.00	3.167	3.00	6.167	43.00	9.17	13.00
0.250	15.00	3.250	3.00	6.250	43.00	9.25	13.00
0.333	15.00	3.333	3.00	6.333	43.00	9.33	13.00
0.417	15.00	3.417	3.00	6.417	43.00	9.42	13.00
0.500	15.00	3.500	3.00	6.500	43.00	9.50	13.00
0.583	15.00	3.583	3.00	6.583	43.00	9.58	13.00

0.667	15.00	3.667	3.00	6.667	43.00	9.67	13.00
0.750	15.00	3.750	3.00	6.750	43.00	9.75	13.00
0.833	15.00	3.833	3.00	6.833	43.00	9.83	13.00
0.917	15.00	3.917	3.00	6.917	43.00	9.92	13.00
1.000	15.00	4.000	3.00	7.000	43.00	10.00	13.00
1.083	20.00	4.083	5.00	7.083	20.00	10.08	13.00
1.167	20.00	4.167	5.00	7.167	20.00	10.17	13.00
1.250	20.00	4.250	5.00	7.250	20.00	10.25	13.00
1.333	20.00	4.333	5.00	7.333	20.00	10.33	13.00
1.417	20.00	4.417	5.00	7.417	20.00	10.42	13.00
1.500	20.00	4.500	5.00	7.500	20.00	10.50	13.00
1.583	20.00	4.583	5.00	7.583	20.00	10.58	13.00
1.667	20.00	4.667	5.00	7.667	20.00	10.67	13.00
1.750	20.00	4.750	5.00	7.750	20.00	10.75	13.00
1.833	20.00	4.833	5.00	7.833	20.00	10.83	13.00
1.917	20.00	4.917	5.00	7.917	20.00	10.92	13.00
2.000	20.00	5.000	5.00	8.000	20.00	11.00	13.00
2.083	10.00	5.083	20.00	8.083	23.00	11.08	8.00
2.167	10.00	5.167	20.00	8.167	23.00	11.17	8.00
2.250	10.00	5.250	20.00	8.250	23.00	11.25	8.00
2.333	10.00	5.333	20.00	8.333	23.00	11.33	8.00
2.417	10.00	5.417	20.00	8.417	23.00	11.42	8.00
2.500	10.00	5.500	20.00	8.500	23.00	11.50	8.00
2.583	10.00	5.583	20.00	8.583	23.00	11.58	8.00
2.667	10.00	5.667	20.00	8.667	23.00	11.67	8.00
2.750	10.00	5.750	20.00	8.750	23.00	11.75	8.00
2.833	10.00	5.833	20.00	8.833	23.00	11.83	8.00
2.917	10.00	5.917	20.00	8.917	23.00	11.92	8.00
3.000	10.00	6.000	20.00	9.000	23.00	12.00	8.00

Unit Hyd Qpeak (cms)= 1.284

PEAK FLOW (cms)= 1.736 (i)
TIME TO PEAK (hrs)= 9.083
RUNOFF VOLUME (mm)= 97.698
TOTAL RAINFALL (mm)= 193.000
RUNOFF COEFFICIENT = 0.506

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0029)	Area	(ha)=	14.85	Curve Number	(CN)= 52.9
ID= 1 DT= 5.0 min	Ia	(mm)=	13.28	# of Linear Res.(N)=	3.00
	U.H. Tp(hrs)=		0.89		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	15.00	3.083	3.00	6.083	43.00	9.08	13.00
0.167	15.00	3.167	3.00	6.167	43.00	9.17	13.00
0.250	15.00	3.250	3.00	6.250	43.00	9.25	13.00
0.333	15.00	3.333	3.00	6.333	43.00	9.33	13.00
0.417	15.00	3.417	3.00	6.417	43.00	9.42	13.00
0.500	15.00	3.500	3.00	6.500	43.00	9.50	13.00
0.583	15.00	3.583	3.00	6.583	43.00	9.58	13.00
0.667	15.00	3.667	3.00	6.667	43.00	9.67	13.00
0.750	15.00	3.750	3.00	6.750	43.00	9.75	13.00
0.833	15.00	3.833	3.00	6.833	43.00	9.83	13.00
0.917	15.00	3.917	3.00	6.917	43.00	9.92	13.00
1.000	15.00	4.000	3.00	7.000	43.00	10.00	13.00
1.083	20.00	4.083	5.00	7.083	20.00	10.08	13.00
1.167	20.00	4.167	5.00	7.167	20.00	10.17	13.00
1.250	20.00	4.250	5.00	7.250	20.00	10.25	13.00
1.333	20.00	4.333	5.00	7.333	20.00	10.33	13.00
1.417	20.00	4.417	5.00	7.417	20.00	10.42	13.00
1.500	20.00	4.500	5.00	7.500	20.00	10.50	13.00
1.583	20.00	4.583	5.00	7.583	20.00	10.58	13.00
1.667	20.00	4.667	5.00	7.667	20.00	10.67	13.00
1.750	20.00	4.750	5.00	7.750	20.00	10.75	13.00
1.833	20.00	4.833	5.00	7.833	20.00	10.83	13.00
1.917	20.00	4.917	5.00	7.917	20.00	10.92	13.00
2.000	20.00	5.000	5.00	8.000	20.00	11.00	13.00
2.083	10.00	5.083	20.00	8.083	23.00	11.08	8.00
2.167	10.00	5.167	20.00	8.167	23.00	11.17	8.00
2.250	10.00	5.250	20.00	8.250	23.00	11.25	8.00
2.333	10.00	5.333	20.00	8.333	23.00	11.33	8.00
2.417	10.00	5.417	20.00	8.417	23.00	11.42	8.00
2.500	10.00	5.500	20.00	8.500	23.00	11.50	8.00
2.583	10.00	5.583	20.00	8.583	23.00	11.58	8.00
2.667	10.00	5.667	20.00	8.667	23.00	11.67	8.00
2.750	10.00	5.750	20.00	8.750	23.00	11.75	8.00
2.833	10.00	5.833	20.00	8.833	23.00	11.83	8.00
2.917	10.00	5.917	20.00	8.917	23.00	11.92	8.00
3.000	10.00	6.000	20.00	9.000	23.00	12.00	8.00

Unit Hyd Qpeak (cms)= 0.637

PEAK FLOW (cms)= 0.585 (i)
TIME TO PEAK (hrs)= 7.750
RUNOFF VOLUME (mm)= 79.651
TOTAL RAINFALL (mm)= 193.000

RUNOFF COEFFICIENT = 0.413

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
STANDHYD (0014)	Area	(ha)=	1.87		
ID= 1 DT= 5.0 min	Total Imp(%)=	43.28	Dir. Conn.(%)=	10.00	

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.81	1.06
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	0.50	2.00
Length	(m)=	111.65	25.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	15.00	3.083	3.00	6.083	43.00	9.08	13.00
0.167	15.00	3.167	3.00	6.167	43.00	9.17	13.00
0.250	15.00	3.250	3.00	6.250	43.00	9.25	13.00
0.333	15.00	3.333	3.00	6.333	43.00	9.33	13.00
0.417	15.00	3.417	3.00	6.417	43.00	9.42	13.00
0.500	15.00	3.500	3.00	6.500	43.00	9.50	13.00
0.583	15.00	3.583	3.00	6.583	43.00	9.58	13.00
0.667	15.00	3.667	3.00	6.667	43.00	9.67	13.00
0.750	15.00	3.750	3.00	6.750	43.00	9.75	13.00
0.833	15.00	3.833	3.00	6.833	43.00	9.83	13.00
0.917	15.00	3.917	3.00	6.917	43.00	9.92	13.00
1.000	15.00	4.000	3.00	7.000	43.00	10.00	13.00
1.083	20.00	4.083	5.00	7.083	20.00	10.08	13.00
1.167	20.00	4.167	5.00	7.167	20.00	10.17	13.00
1.250	20.00	4.250	5.00	7.250	20.00	10.25	13.00
1.333	20.00	4.333	5.00	7.333	20.00	10.33	13.00
1.417	20.00	4.417	5.00	7.417	20.00	10.42	13.00
1.500	20.00	4.500	5.00	7.500	20.00	10.50	13.00
1.583	20.00	4.583	5.00	7.583	20.00	10.58	13.00
1.667	20.00	4.667	5.00	7.667	20.00	10.67	13.00
1.750	20.00	4.750	5.00	7.750	20.00	10.75	13.00
1.833	20.00	4.833	5.00	7.833	20.00	10.83	13.00
1.917	20.00	4.917	5.00	7.917	20.00	10.92	13.00
2.000	20.00	5.000	5.00	8.000	20.00	11.00	13.00
2.083	10.00	5.083	20.00	8.083	23.00	11.08	8.00

2.167	10.00	5.167	20.00	8.167	23.00	11.17	8.00
2.250	10.00	5.250	20.00	8.250	23.00	11.25	8.00
2.333	10.00	5.333	20.00	8.333	23.00	11.33	8.00
2.417	10.00	5.417	20.00	8.417	23.00	11.42	8.00
2.500	10.00	5.500	20.00	8.500	23.00	11.50	8.00
2.583	10.00	5.583	20.00	8.583	23.00	11.58	8.00
2.667	10.00	5.667	20.00	8.667	23.00	11.67	8.00
2.750	10.00	5.750	20.00	8.750	23.00	11.75	8.00
2.833	10.00	5.833	20.00	8.833	23.00	11.83	8.00
2.917	10.00	5.917	20.00	8.917	23.00	11.92	8.00
3.000	10.00	6.000	20.00	9.000	23.00	12.00	8.00

Max.Eff.Inten.(mm/hr)=	43.00	62.38		
over (min)	5.00	15.00		
Storage Coeff. (min)=	4.71 (ii)	11.14 (ii)		
Unit Hyd. Tpeak (min)=	5.00	15.00		
Unit Hyd. peak (cms)=	0.22	0.09		
			TOTALS	
PEAK FLOW (cms)=	0.02	0.18	0.203 (iii)	
TIME TO PEAK (hrs)=	6.92	7.00	7.00	
RUNOFF VOLUME (mm)=	192.00	153.34	157.20	
TOTAL RAINFALL (mm)=	193.00	193.00	193.00	
RUNOFF COEFFICIENT =	0.99	0.79	0.81	

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 78.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0040)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0001):		39.68	1.736	9.08	97.70
+ ID2= 2 (0014):		1.87	0.203	7.00	157.20
ID = 3 (0040):		41.55	1.849	9.00	100.38

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

Pre-Development VO Output

ADD HYD (0040) | 3 + 2 = 1		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0040):		41.55	1.849	9.00	100.38
+ ID2= 2 (0029):		14.85	0.585	7.75	79.65
ID = 1 (0040):		56.40	2.401	8.25	94.92

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0023) | 1 + 2 = 3		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0039):		134.78	4.791	9.42	84.17
+ ID2= 2 (0040):		56.40	2.401	8.25	94.92
ID = 3 (0023):		191.18	7.140	9.25	87.34

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CROZIER

Project Name: Bridle Park Stayner
Project Number: 1508-7498
Completed By EC/NOC
Date: 2026.06.24

Central Swale

Bottom Width	4		
Side Slopes	1:3		
Channel Slope	0.26%		
Height of Channel	1.38		
Freeboard	0.3		
Normal Depth	1.08	m	= Height of the Channel - Freeboard
Required Discharge	7.14	m^3/s	
Designed Discharge	10.696	m^3/s	
Channel Width	4.9108	m	

North Swale

Bottom Width	6.5		
Side Slopes	1:3		
Channel Slope	0.30%		
Height of Channel	0.85		
Freeboard	0.3		
Normal Depth	0.55	m	= Height of the Channel - Freeboard
Required Discharge	4.79	m^3/s	
Designed Discharge	4.8	m^3/s	
Channel Width	7.061	m	

South Swale

Bottom Width	5		
Side Slopes	1:3		
Channel Slope	0.30%		
Height of Channel	0.75		
Freeboard	0.3		
Normal Depth	0.45	m	= Height of the Channel - Freeboard
Required Discharge	2.4	m^3/s	
Designed Discharge	2.66	m^3/s	
Channel Width	5.495	m	

North Reach

Project Description

Friction Method	Manning Formula
Solve For	Discharge

Input Data

Roughness Coefficient	0.030	
Channel Slope	0.30000	%
Normal Depth	0.55	m
Left Side Slope	3.00	m/m (H:V)
Right Side Slope	3.00	m/m (H:V)
Bottom Width	6.50	m

Results

Discharge	4.800	m^3/s
Flow Area	4.48	m^2
Wetted Perimeter	9.98	m
Hydraulic Radius	0.45	m
Top Width	9.80	m
Critical Depth	0.36	m
Critical Slope	0.01320	m/m
Velocity	1.07	m/s
Velocity Head	0.06	m
Specific Energy	0.61	m
Froude Number	0.51	
Flow Type	Subcritical	

GVF Input Data

Downstream Depth	0.00	m
Length	0.00	m
Number Of Steps	0	

GVF Output Data

Upstream Depth	0.00	m
Profile Description		
Profile Headloss	0.00	m
Downstream Velocity	Infinity	m/s
Upstream Velocity	Infinity	m/s
Normal Depth	0.55	m
Critical Depth	0.36	m
Channel Slope	0.30000	%

North Reach

GVF Output Data

Critical Slope	0.01320	m/m

South Reach

Project Description

Friction Method	Manning Formula
Solve For	Discharge

Input Data

Roughness Coefficient	0.030	
Channel Slope	0.30000	%
Normal Depth	0.45	m
Left Side Slope	3.00	m/m (H:V)
Right Side Slope	3.00	m/m (H:V)
Bottom Width	5.00	m

Results

Discharge	2.661	m^3/s
Flow Area	2.86	m^2
Wetted Perimeter	7.85	m
Hydraulic Radius	0.36	m
Top Width	7.70	m
Critical Depth	0.29	m
Critical Slope	0.01424	m/m
Velocity	0.93	m/s
Velocity Head	0.04	m
Specific Energy	0.49	m
Froude Number	0.49	
Flow Type	Subcritical	

GVF Input Data

Downstream Depth	0.00	m
Length	0.00	m
Number Of Steps	0	

GVF Output Data

Upstream Depth	0.00	m
Profile Description		
Profile Headloss	0.00	m
Downstream Velocity	Infinity	m/s
Upstream Velocity	Infinity	m/s
Normal Depth	0.45	m
Critical Depth	0.29	m
Channel Slope	0.30000	%

South Reach

GVF Output Data

Critical Slope	0.01424	m/m

Central Reach

Project Description

Friction Method	Manning Formula
Solve For	Discharge

Input Data

Roughness Coefficient	0.030	
Channel Slope	0.26000	%
Normal Depth	1.08	m
Left Side Slope	3.00	m/m (H:V)
Right Side Slope	3.00	m/m (H:V)
Bottom Width	4.00	m

Results

Discharge	10.696	m^3/s
Flow Area	7.82	m^2
Wetted Perimeter	10.83	m
Hydraulic Radius	0.72	m
Top Width	10.48	m
Critical Depth	0.74	m
Critical Slope	0.01121	m/m
Velocity	1.37	m/s
Velocity Head	0.10	m
Specific Energy	1.18	m
Froude Number	0.51	
Flow Type	Subcritical	

GVF Input Data

Downstream Depth	0.00	m
Length	0.00	m
Number Of Steps	0	

GVF Output Data

Upstream Depth	0.00	m
Profile Description		
Profile Headloss	0.00	m
Downstream Velocity	Infinity	m/s
Upstream Velocity	Infinity	m/s
Normal Depth	1.08	m
Critical Depth	0.74	m
Channel Slope	0.26000	%

Central Reach

GVF Output Data

Critical Slope	0.01121	m/m

Culvert Calculator Report
2026.07.06_Channel Culvert Sizing <sensitivity> parallel box culvert

Solve For: Discharge

Culvert Summary					
Allowable HW Elevation	218.00	m	Headwater Depth/Height	3.43	
Computed Headwater Elev	218.00	m	Discharge	19.3799	m³/s
Inlet Control HW Elev.	217.68	m	Tailwater Elevation	215.60	m
Outlet Control HW Elev.	218.00	m	Control Type	Outlet Control	

Grades					
Upstream Invert	214.86	m	Downstream Invert	214.60	m
Length	90.00	m	Constructed Slope	0.002889	m/m

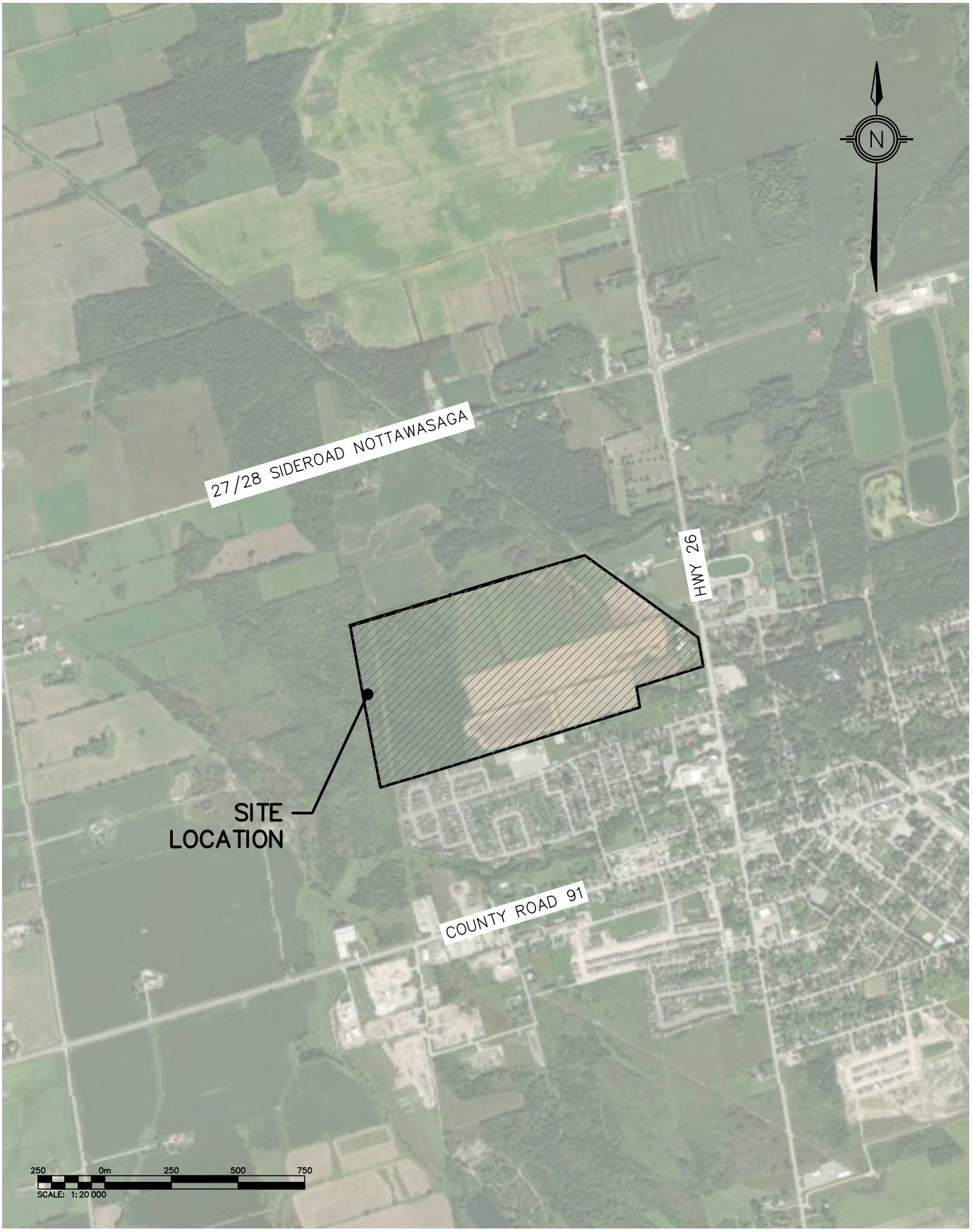
Hydraulic Profile					
Profile	PressureProfile		Depth, Downstream	1.00	m
Slope Type	N/A		Normal Depth	N/A	m
Flow Regime	N/A		Critical Depth	0.91	m
Velocity Downstream	3.86	m/s	Critical Slope	0.012295	m/m

Section					
Section Shape	Box		Mannings Coefficient	0.013	
Section Material	Concrete		Span	1.83	m
Section Size	1830 x 910 mm		Rise	0.91	m
Number Sections	3				

Outlet Control Properties					
Outlet Control HW Elev.	218.00	m	Upstream Velocity Head	0.76	m
Ke	0.70		Entrance Loss	0.53	m

Inlet Control Properties					
Inlet Control HW Elev.	217.68	m	Flow Control	N/A	
Inlet Type	0° wingwall flares		Area Full	5.0	m²
K	0.06100		HDS 5 Chart	8	
M	0.75000		HDS 5 Scale	3	
C	0.04230		Equation Form	1	
Y	0.82000				

FIGURES



Legend

= SUBJECT LANDS

Project

BRIDLE PARK
(STAYNER, ONTARIO)

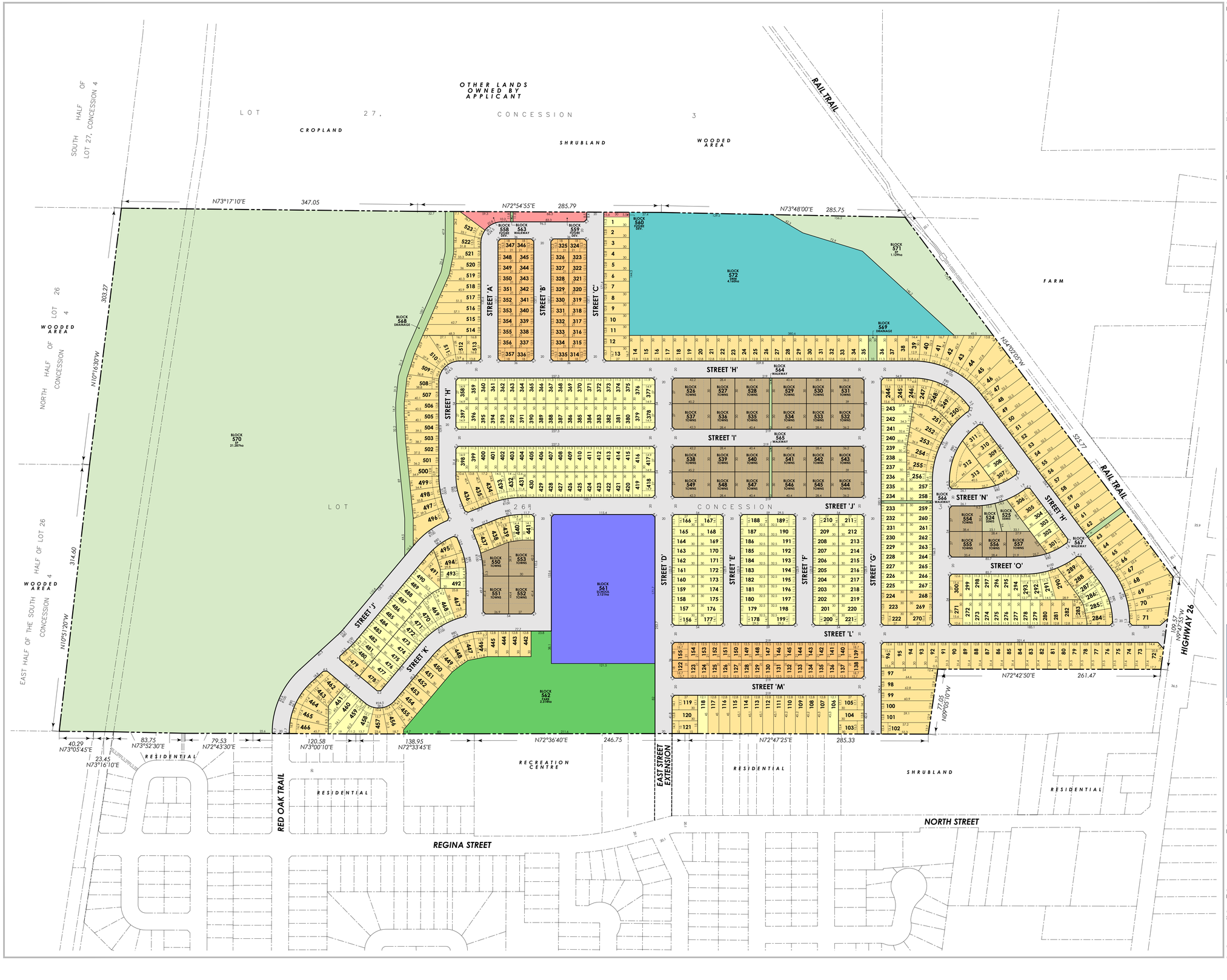
Drawing

SITE LOCATION

CROZIER

Drawn By	Design By	Project
O.P.	N.O.C./A.M.	1508-7498
Scale	Date	Check By	Drawing
1:20,000	JULY/23/2026	J.L.A./T.M.G.	FIG 1

C:\Users\oparovyk\DC\ACCDocs\Crozier Consulting Engineers\1508-7498 Bridle Park Stayner\Project Files\Civil_Sheets\FSR FIGs\7498_FIG1 SITE LOCATION.dwg, FIG1,



Legal Description

Part of Lot 26, Concession 3
Geographic Township of Nottawasaga
Town of Clearview
County of Simcoe

Owner's Certificate

I hereby authorize MacNaughton Hermsen Britton Clarkson Planning Limited to submit this plan for approval.

Date: _____

_____
Matthew Castelli
1000983019 Ontario Limited

Surveyor's Certificate

I hereby certify that the boundaries of the land to be subdivided on this plan and their relationship to the adjacent lands are accurately and correctly shown.

Date: _____

_____
Paul Edwards, OLS
R-PE Surveying Limited

Key Plan



Legend

- Project Boundary Line
- Right of Way Line
- Block Line
- Lot Line
- Parcel Fabric

Land Use Summary

Land Use	Lot / Block	Units	Area
Single Detached - 11.3m	1, 35, 36, 106, 118, 156-221, 225-243, 256-267, 272-279, 285-287, 291-299, 302-304, 308, 358-433, 440, 441, 458-461, 468-477, 480-490, 492, 493	231	8.325
Single Detached - 12.8m	2-34, 37-105, 107-117, 119-121, 222-224, 244-255, 268-271, 280-284, 288-290, 300, 301, 305-307, 309-313, 434-439, 442-457, 462-467, 478, 479, 491, 494-523	214	11.044
Single Detached - 12.5m Shallow	122-155, 314-357	78	2.141
Semi Detached - 7.5m	524, 525	4	0.146
Townhouse - 6m	526-557	164	3.583
Future Development	558-560		0.190
School	561		2.121
Park	562		2.314
Walkway	563-567		0.089
Drainage	568-569		0.439
Environmental Protection	570, 571		22.346
Stormwater Management Area	572		4.160
Right of Way	A, B, C, D, E, F, G, H, I, J, K, L, M, N, O		11.727
Totals		691	68.625

Rev. No.	Date	Issued / Revision	By

Additional Information
Required Under Section 51 (17) of the Planning Act R.S.O. 1990 C.P.13 as Amended

A. As shown
B. As shown
C. As shown
D. As shown
E. As shown
F. As shown
G. As shown
H. Municipal water & sanitary supply
I. Silty sand/sand & glacial till
J. As shown
K. All services as required (water, sanitary, storm, hydro, cable)
L. As shown

MHBC PLANNING URBAN DESIGN & LANDSCAPE ARCHITECTURE
113 COLLIER STREET, BARRIE, ON, L4M 1H2 | P: 705.728.0045 | WWW.MHBCPLAN.COM

Stamp

Date	June 18, 2026
File No.	15226AH
Scale	1:2,000 (ARCH D)
Drawn By	M.A.M.
Checked By	K.C.
Other	

Project

Bridle Park
1000983019 Ontario Limited
111 Mildenhall Road
Toronto, Ontario
M4N 3H4

NORTH

File Name
Draft Plan of Subdivision

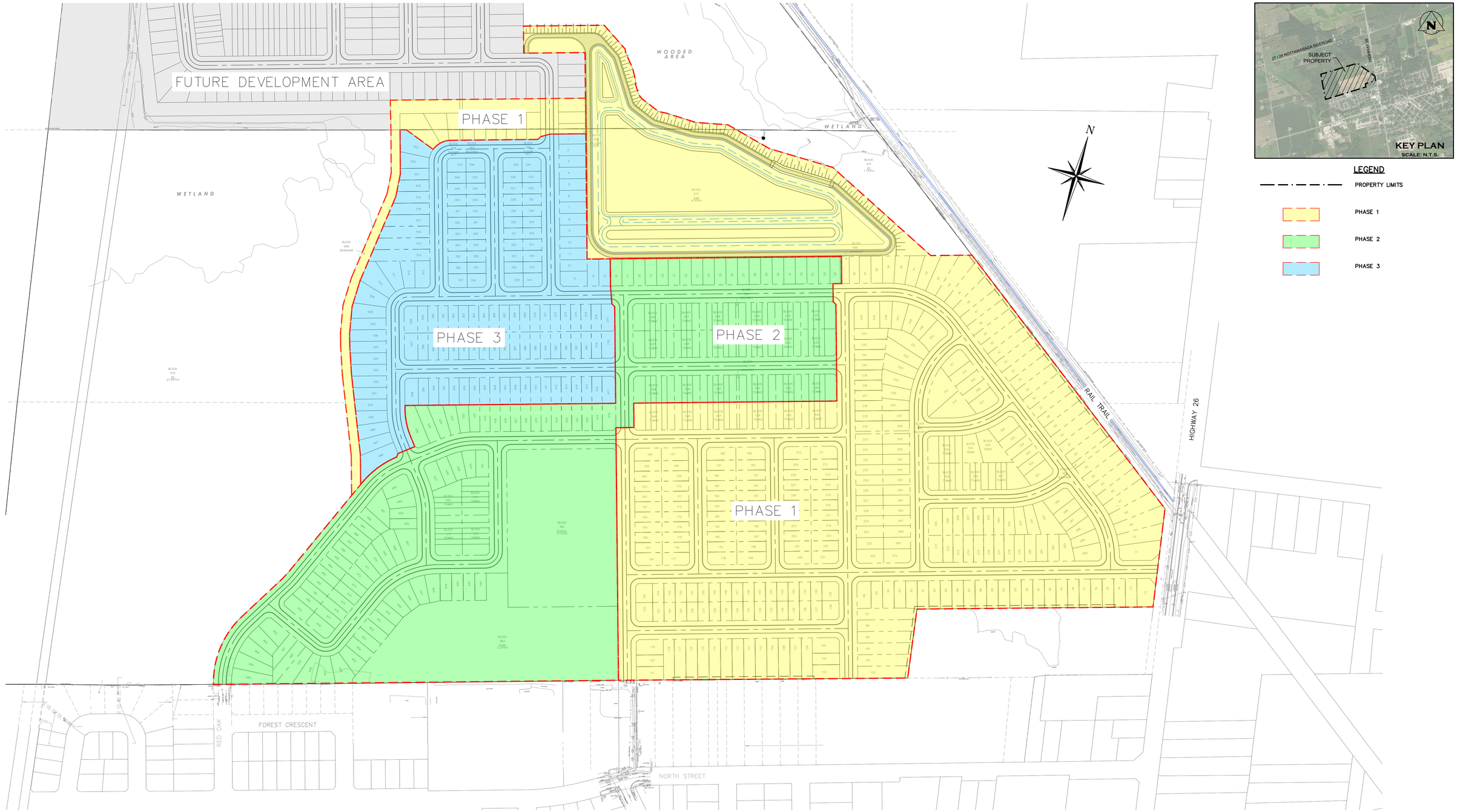
DWG No. 1 of 1

Scale Bar

0 5 10 15 20 25 50 75 100m

Measurements shown on this plan are in metres and can be converted to feet by dividing by 0.3048

B:\Clearview\15226AH\Drawings\Draft Plan\CAD



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BENCHMARK NOTE

ELEVATIONS ARE GEODETIC AND ARE REFERRED TO MINISTRY OF NATURAL RESOURCES AND FORESTRY VERTICAL BENCHMARK NUMBER 008200138059 HAVING AN ORTHOMETRIC ELEVATION OF 216.832 METRES. ELEVATIONS ARE REFERENCED TO THE CANADIAN GEODETIC VERTICAL DATUM OF 1928, 1978 ADJUSTMENT (CGVD-1928:1978).

BENCHMARK LOCATED ON THE WEST SIDE OF HWY 26 IN TOWN OF STAYER, APPROXIMATELY 300 M NORTH OF HWY 26 EAST. POINT SET ON THE WEST FACE OF THE NORTH END OF A WING WALL ALONG THE ASPHALT SIDEWALK.

Town

CLEARVIEW TOWNSHIP

No.	ISSUE	DATE: YYYY/MM/DD
0	ISSUED FOR RED-LINED DRAFT PLAN APPROVAL	2026/07/23

Engineer

Engineer

PRELIMINARY
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Project

BRIDLE PARK
(STAYNER, ONTARIO)
TOWNSHIP OF CLEARVIEW

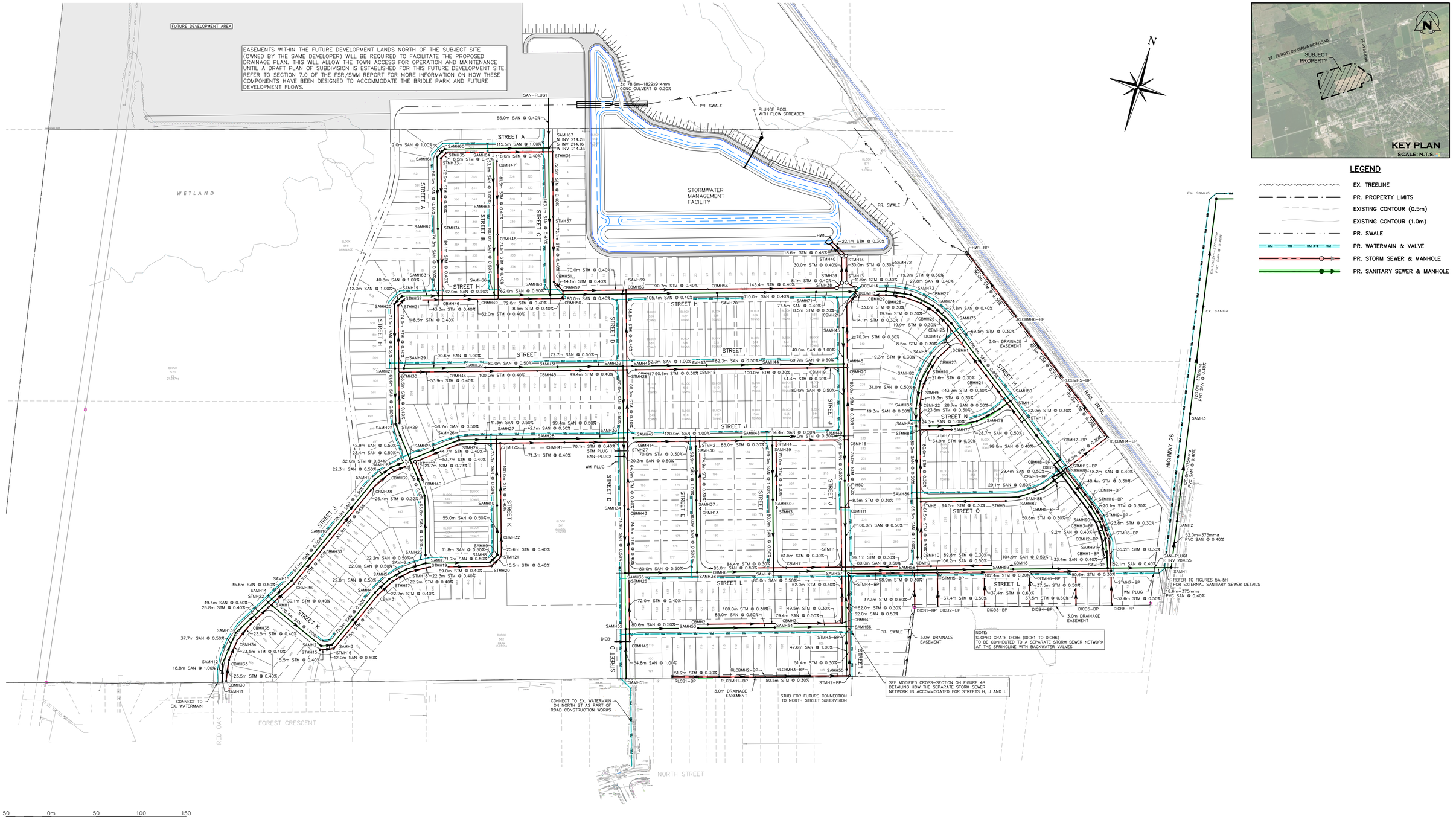
Drawing

PHASING PLAN

CROZIER

Drawn By O.P.	Design By N.O.C./A.M.	Project	1508-7498
Check By N.O.C.	Check By J.L.A./T.M.G.	Drawing	FIG 3

C:\Users\oparovyk\DC\ACCDocs\Crozier Consulting Engineers\1508-7498 Bridle Park Stayner\Project Files\Civil_Sheets\FSR FIGS\7498_FIG3 PHASING PLAN.dwg, FIG 3, 2026-07-21 10:40:02 PM, oparovyk



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BENCHMARK NOTE

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BENCHMARK LOCATED ON THE WEST SIDE OF HWY 26 IN TOWN OF STAYNER, APPROXIMATELY 300 M NORTH OF HWY 26 EAST. POINT SET ON THE WEST FACE OF THE NORTH END OF A WING WALL ALONG THE ASPHALT SIDEWALK.

Town: CLEARVIEW TOWNSHIP

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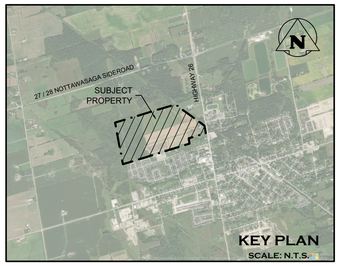
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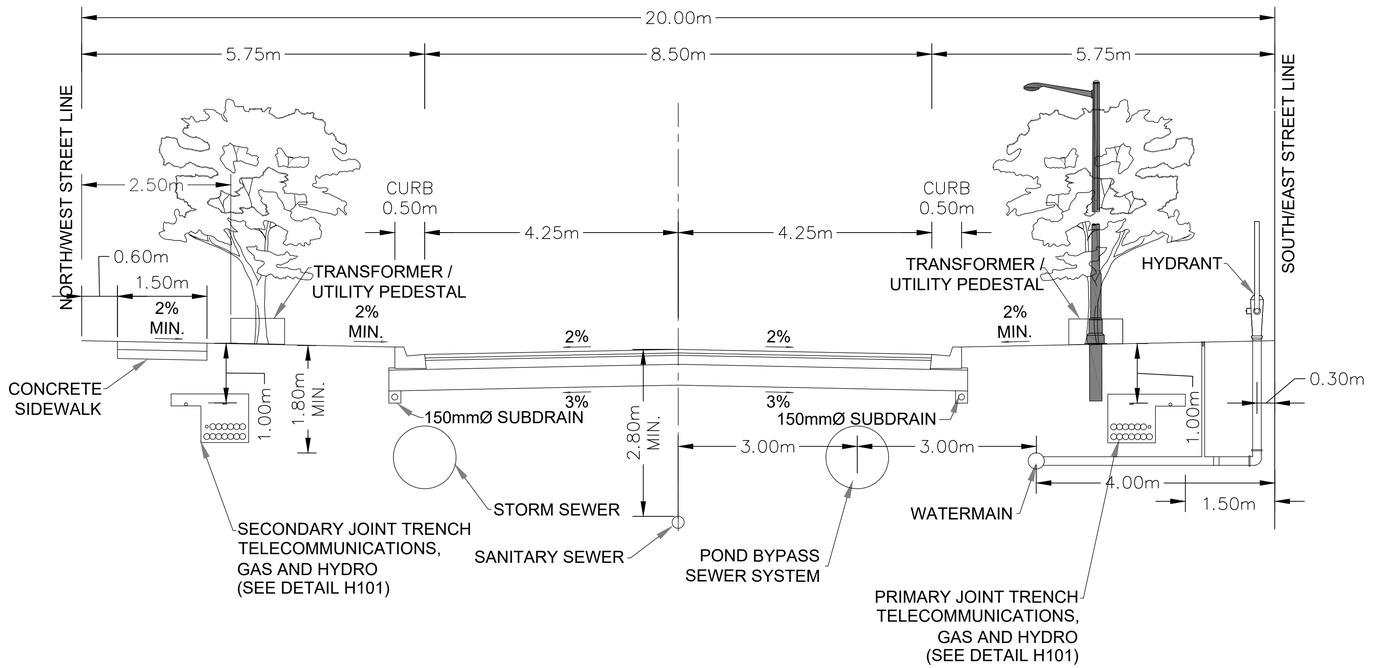
Drowing: GENERAL SERVICING PLAN

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Drawn By	Design By	Project
O.P.	N.O.C./A.M.	1508–7498
Check By	Check By	Drowing
N.O.C.	J.L.A./T.M.G.	FIG 4A

C:\Users\oparovyk\DC\ACCDocs\Crozier Consulting Engineers\1508-7498 Bridle Park Stayner\Project Files\Civil_Sheets\FSR FIGs\7498_FIG4A-B GEN.dwg, FIG 4A, 2026-07-30 9:46:34 AM, oparovyk





1 0m 1 2 3 4
SCALE: 1:50

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BENCHMARK NOTE

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BENCHMARK LOCATED ON THE WEST SIDE OF HWY 26 IN TOWN OF STAYER, APPROXIMATELY 300 M NORTH OF HWY 26 EAST. POINT SET ON THE WEST FACE OF THE NORTH END OF A WING WALL ALONG THE ASPHALT SIDEWALK.

Town: CLEARVIEW TOWNSHIP

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Engineer

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Engineer

Project: BRIDLE PARK
(STAYNER, ONTARIO)
TOWNSHIP OF CLEARVIEW

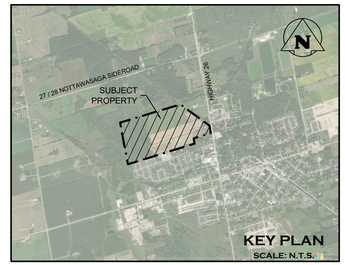
Drawing: MODIFIED ROAD CROSS-SECTION

CROZIER

Drawn By: O.P.	Design By: N.O.C./A.M.	Project: 1508-7498
Check By: N.O.C.	Check By: J.L.A./T.M.G.	Drawing: FIG 4B

C:\Users\oparovyk\DC\ACCDocs\Crozier Consulting Engineers\1508-7498 Bridle Park Stayner\Project Files\Civil_Sheets\FSR FIGs\7498_FIG4A-B GEN.dwg, FIG 4B, 2026-07-29 8:44:07 PM, oparovyk





LEGEND

- EX. TREELINE
- PR. PROPERTY LIMITS
- EXISTING CONTOUR (0.5m)
- EXISTING CONTOUR (1.0m)

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Town: CLEARVIEW TOWNSHIP

No.	ISSUE	DATE: YYYY/MM/DD
0	ISSUED FOR RED-LINED DRAFT PLAN APPROVAL	2026/07/23

Engineer

PRELIMINARY
NOT TO BE USED FOR CONSTRUCTION

Engineer

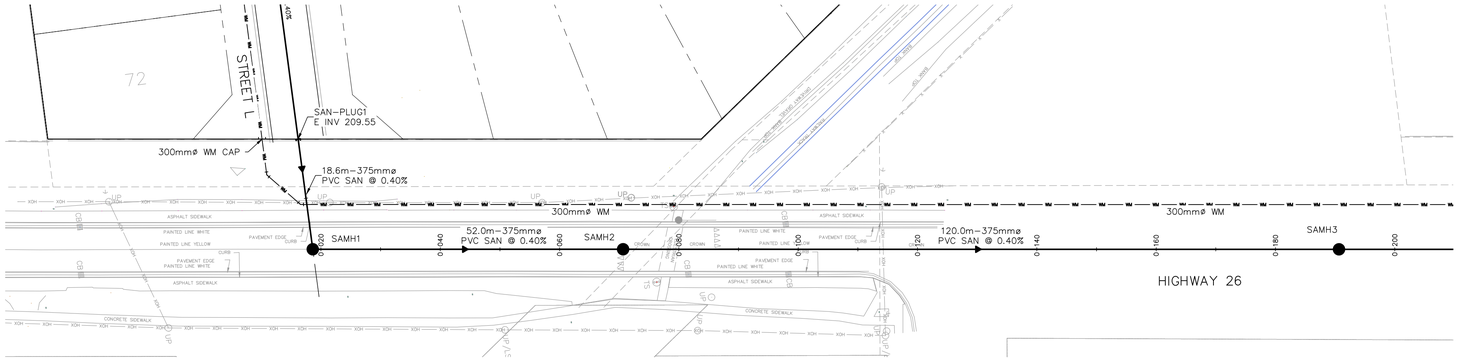
Project: BRIDLE PARK (STAYNER, ONTARIO) TOWNSHIP OF CLEARVIEW

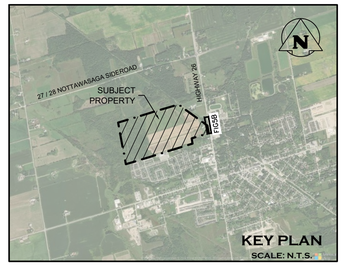
Drawing: EXTERNAL SANITARY SERVICING PLAN

CROZIER

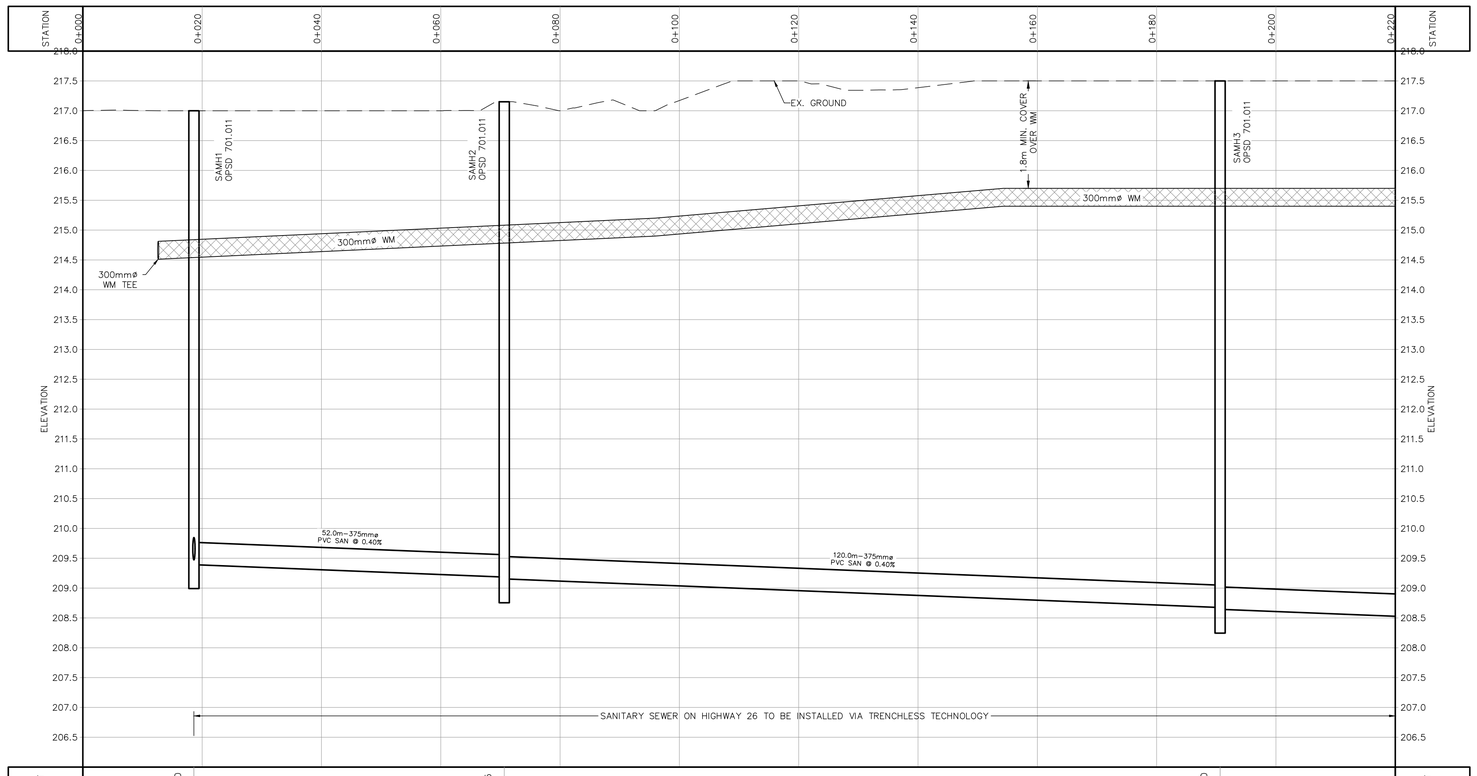
Drawn By: O.P.	Design By: N.O.C./A.M.	Project: 1508-7498
Check By: N.O.C.	Check By: J.L.A./T.M.G.	Drawing: FIG5A

C:\Users\oparovyk\DC\ACCDocs\Crozier Consulting Engineers\1508-7498 Bridle Park Stayner\Project Files\Civil_Sheets\FSR FIGS\7498_FIG5A EXT SAN PLAN.dwg, FIG5A, 2026-07-21 4:26:25 PM, oparovyk





NOTE:
- PLAN/PROFILES PROVIDED FOR CONCEPTUAL DESIGN PURPOSES ONLY. DETAILS, CONSTRUCTION METHODOLOGY, ETC. TO BE REFINED THROUGH DETAILED DESIGN PROCESS IN COORDINATION WITH TOWNSHIP OF CLEARVIEW.
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Town: CLEARVIEW TOWNSHIP

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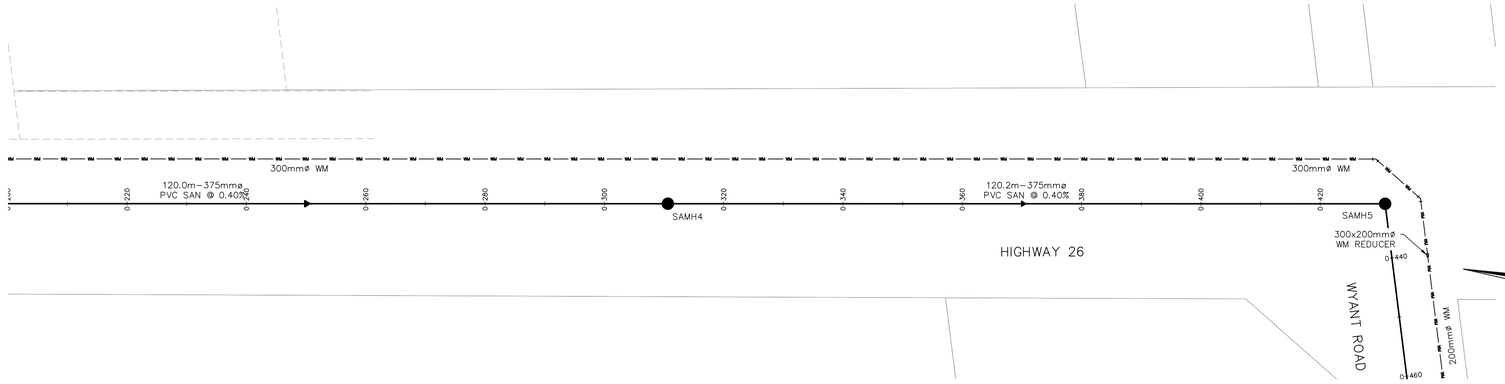
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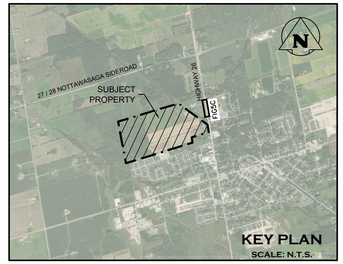
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CROZIER

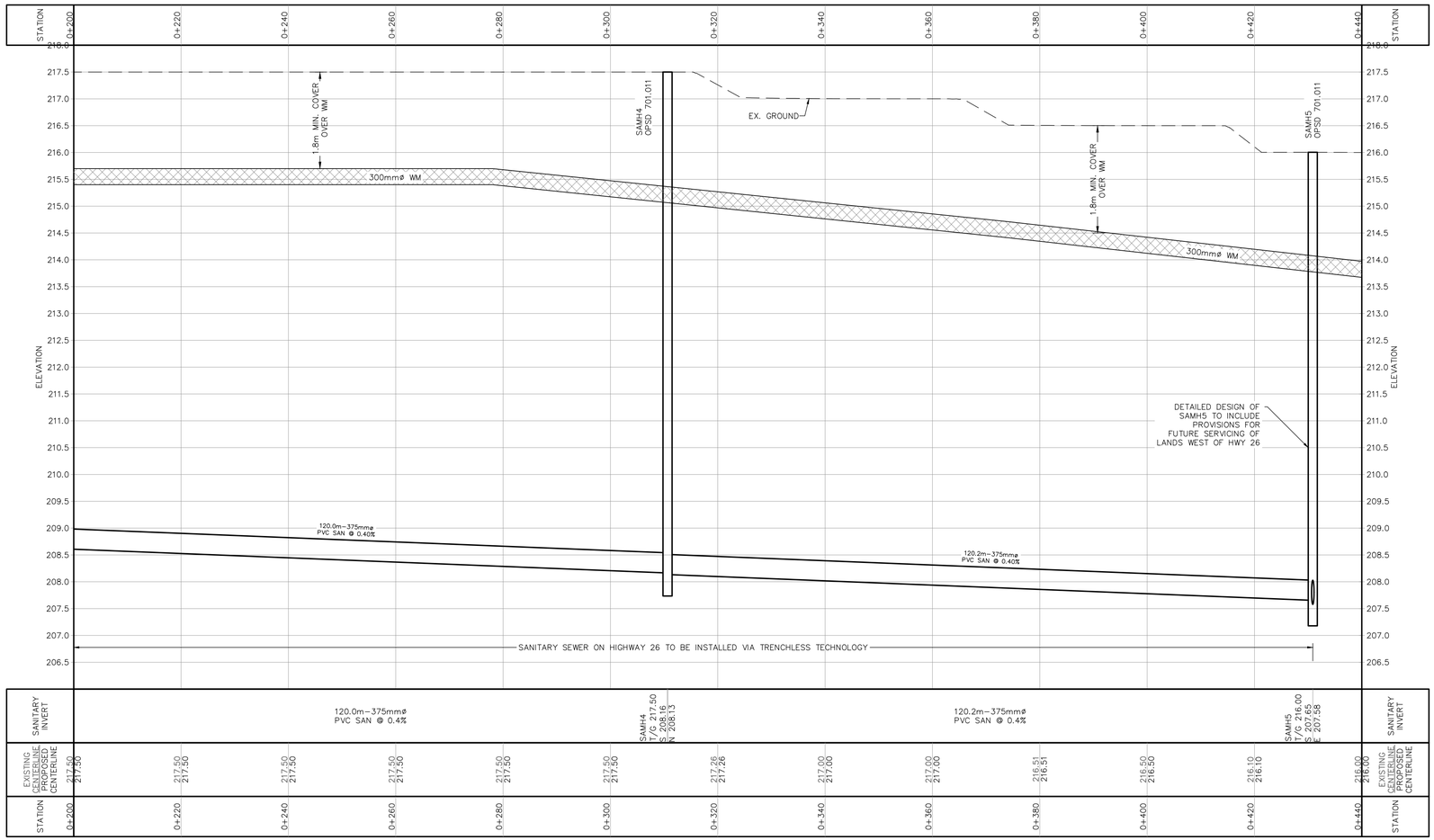
Drown By	Design By	Project
O.P.	N.O.C./A.M.	1508-7498
Check By	Check By	Drawing
N.O.C.	J.L.A./T.M.G.	FIG5B

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1 0m 1 2 3 4
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10 0m 10 20 30 40
SCALE: 1:500 HORIZONTAL

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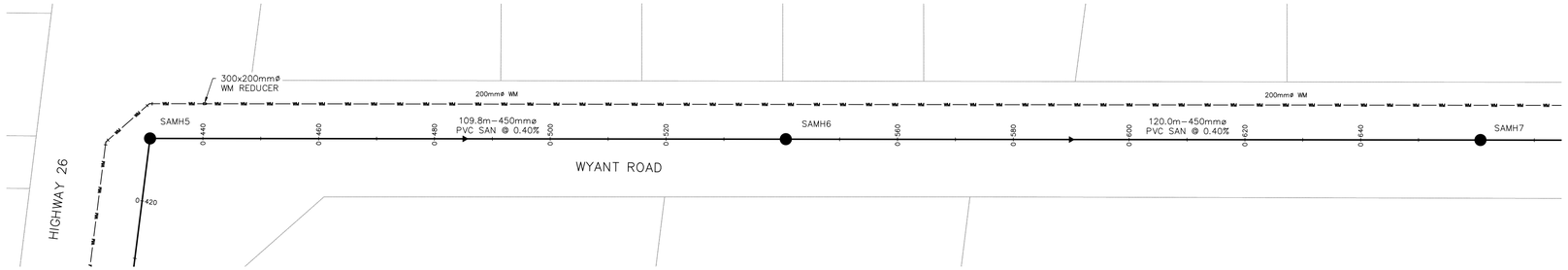
Project: BRIDLE PARK (STAYNER, ONTARIO) TOWNSHIP OF CLEARVIEW

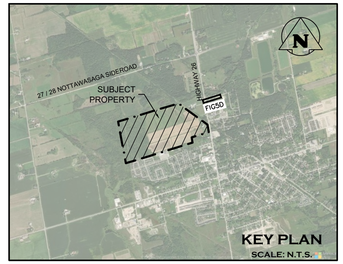
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CROZIER

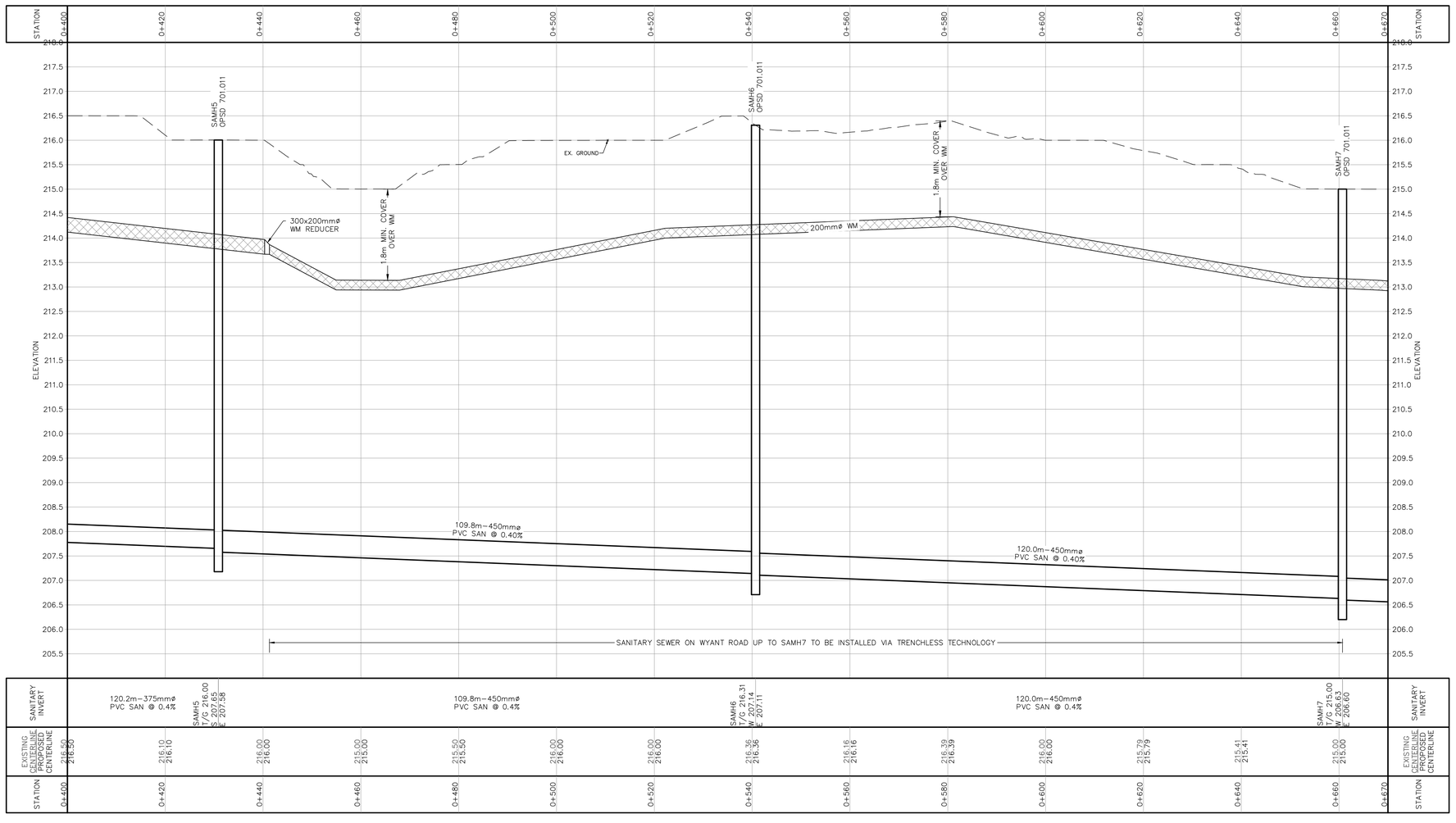
Drawn By	Design By	Project
O.P.	N.O.C./A.M.	1508–7498
Check By	Check By	Drawing
N.O.C.	J.L.A./T.M.G.	FIG5C

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- SHOULD THE TOWNSHIP WISH TO PROVIDE MUNICIPAL SERVICING TO EXISTING RESIDENTS ALONG WYANT ROAD, A LOCAL SANITARY SEWER AT NOMINAL DEPTH MAY BE REQUIRED.



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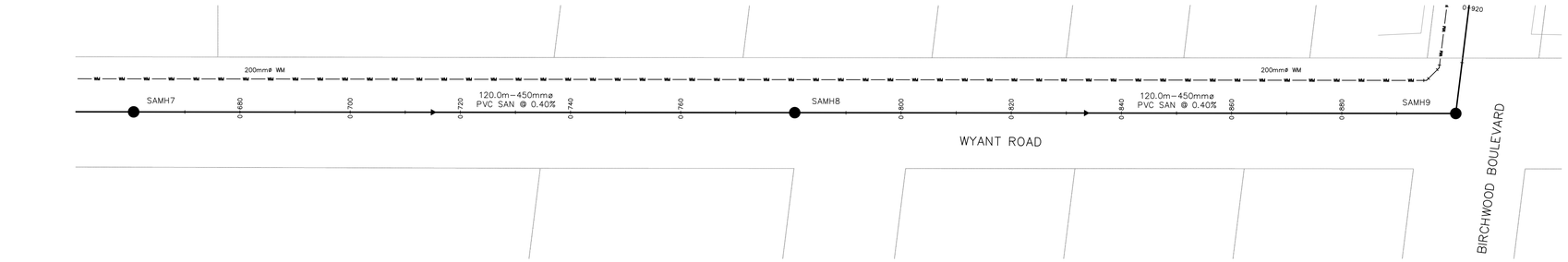
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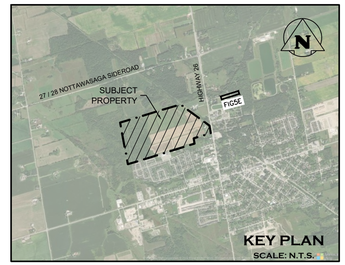
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CROZIER

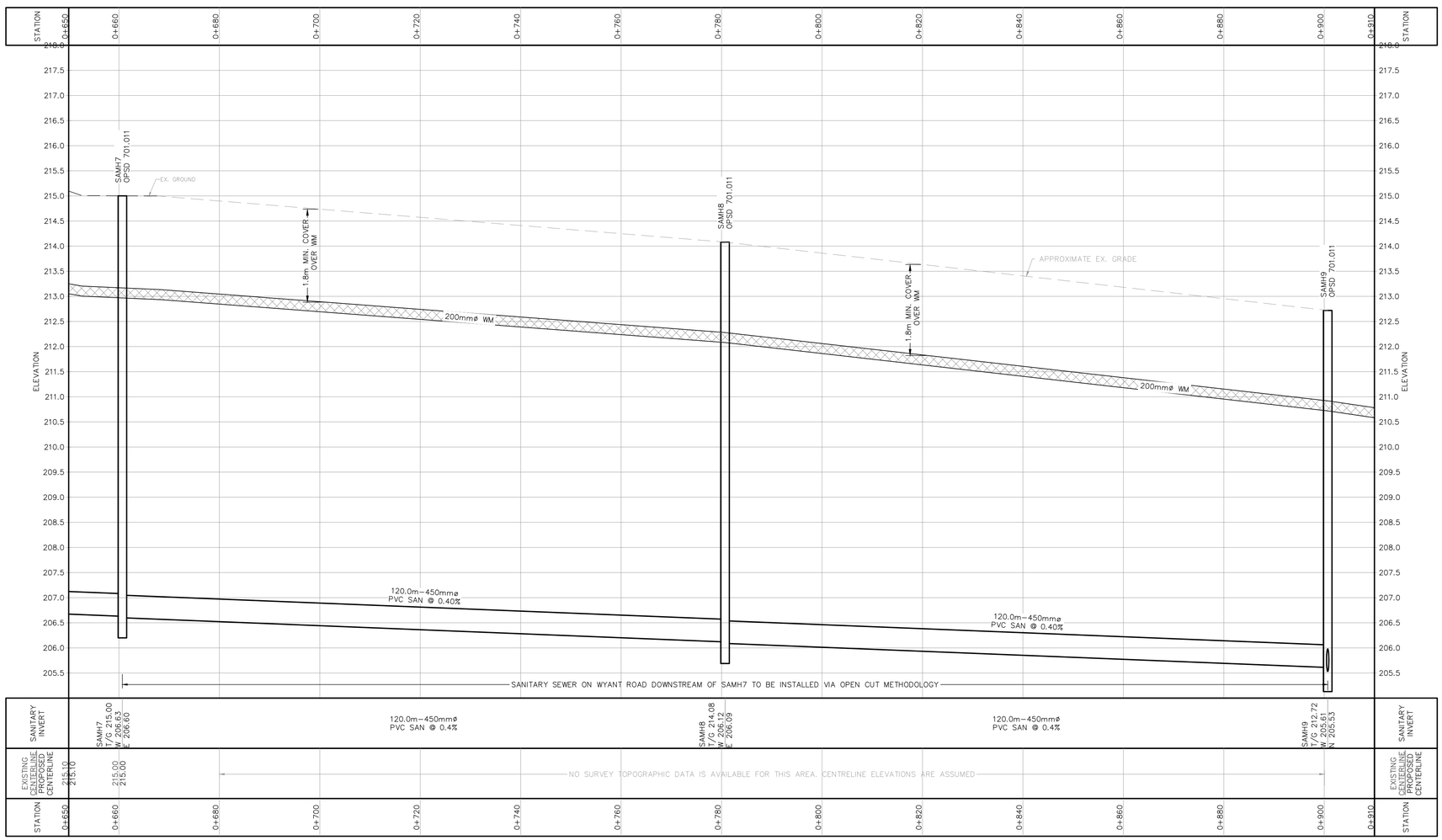
Drown By	Design By	Project
O.P.	N.O.C./A.M.	1508–7498
Check By	Check By	Drawing
N.O.C.	J.L.A./T.M.G.	FIG5D

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10 0m 10 20 30 40
SCALE: 1:500 HORIZONTAL

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Engineer

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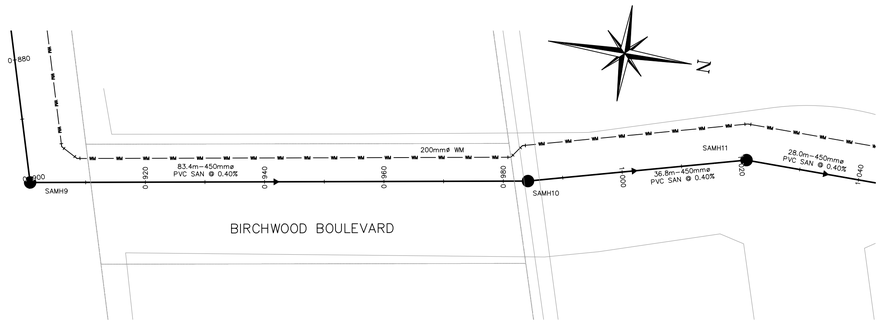
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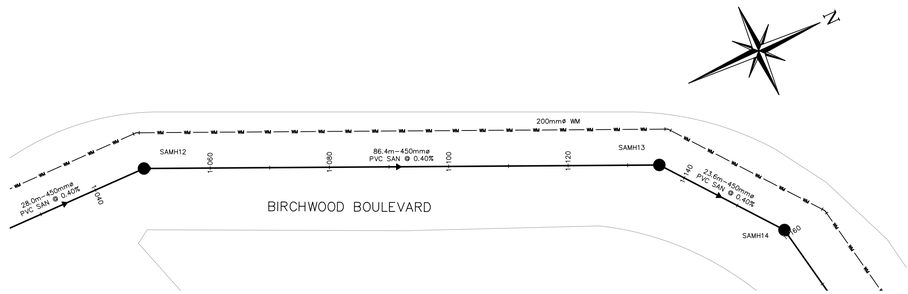
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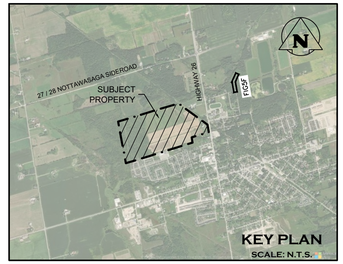
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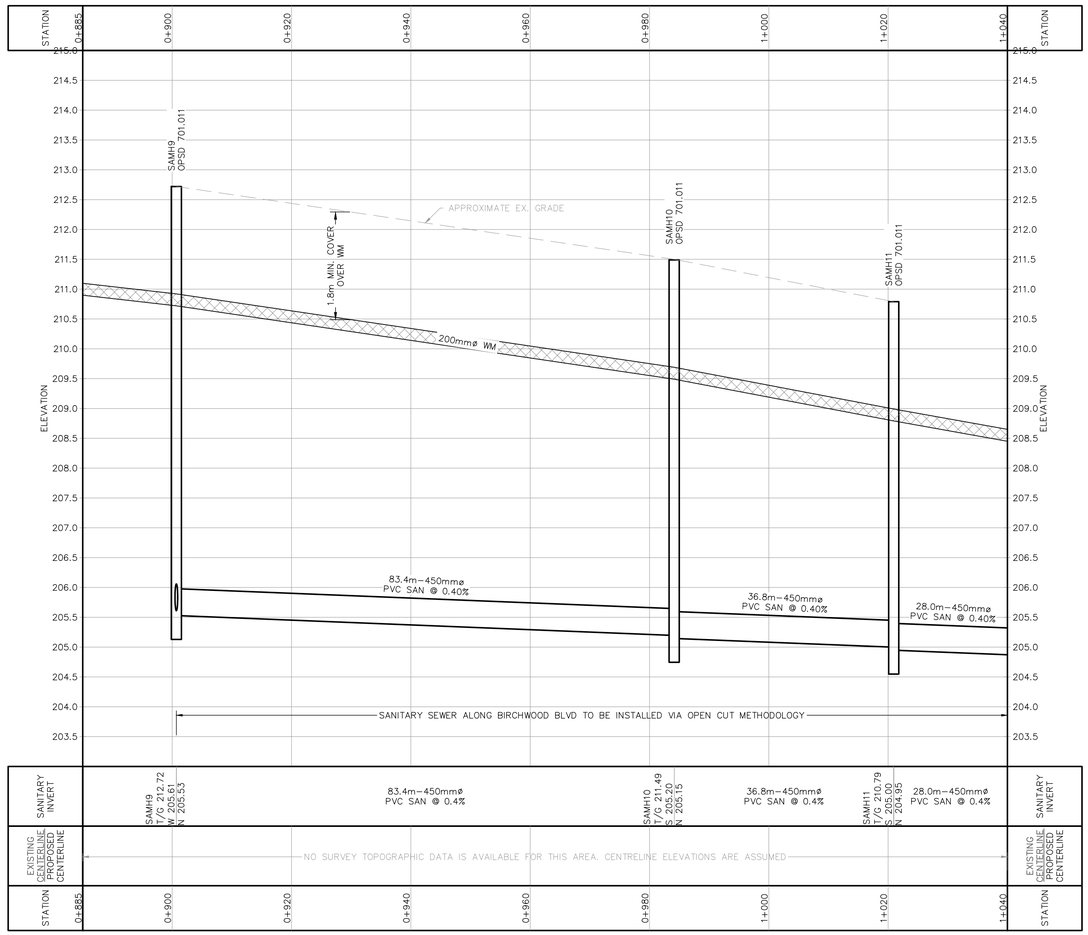
Drawn By	Design By	Project
O.P.	N.O.C./A.M.	1508–7498
Check By	Check By	Drawing
N.O.C.	J.L.A./T.M.G.	FIG5E

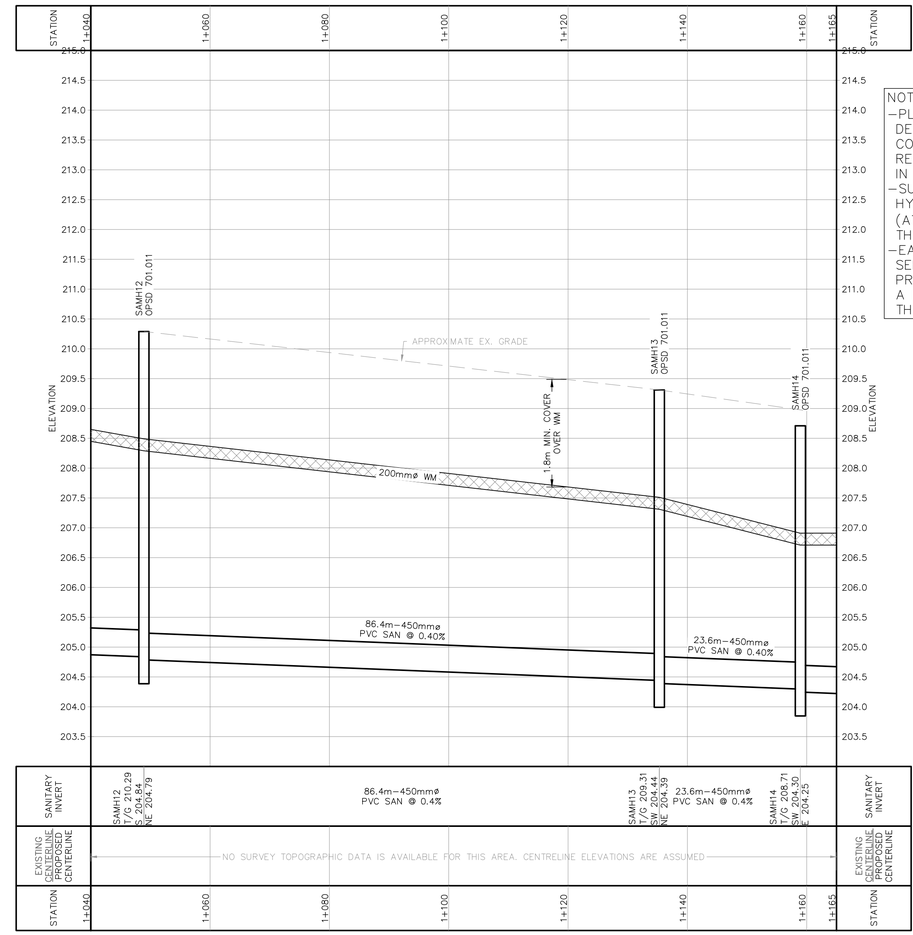
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Engineer

Engineer

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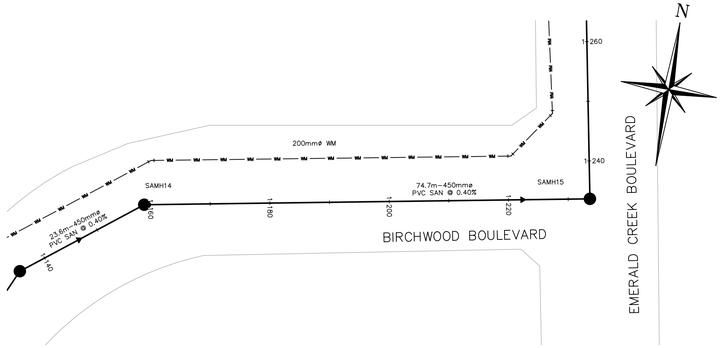
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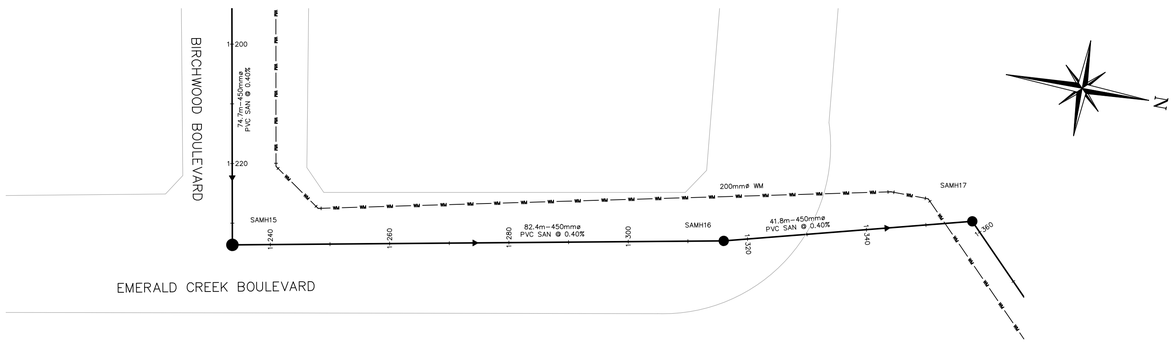
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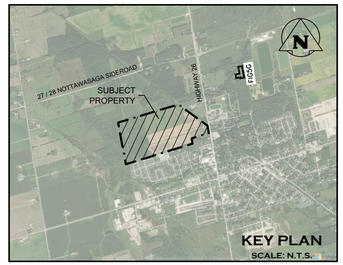
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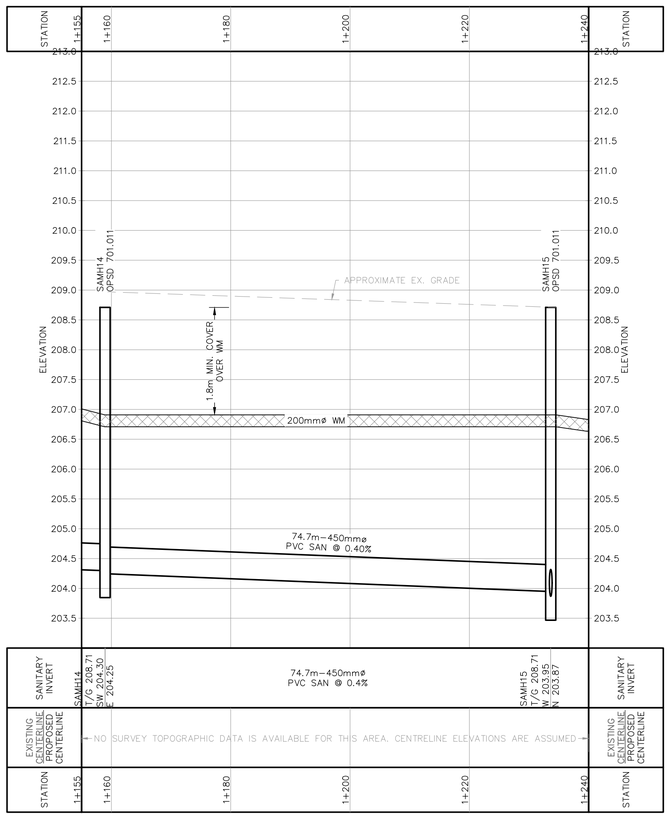
Drawn By	Design By	Project
O.P.	N.O.C./A.M.	1508-7498
Check By	Check By	Drawing
N.O.C.	J.L.A./T.M.G.	FIG5F

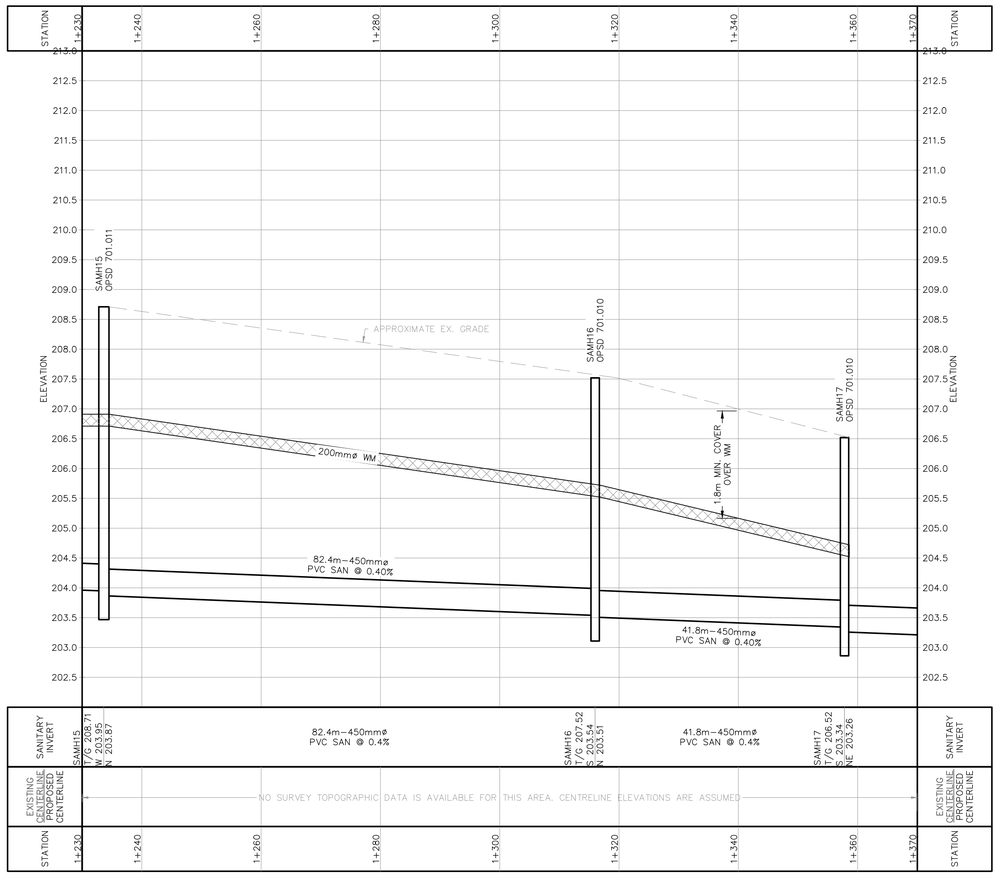
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BENCHMARK LOCATED ON THE WEST SIDE OF HWY 26 IN TOWN OF STAYER, APPROXIMATELY 300 M NORTH OF HWY 26 EAST. POINT SET ON THE WEST FACE OF THE NORTH END OF A WING WALL ALONG THE ASPHALT SIDEWALK.

Town: CLEARVIEW TOWNSHIP

No.	ISSUE	DATE: YYYY/MM/DD
0	ISSUED FOR RED-LINED DRAFT PLAN APPROVAL	2026/07/23

Engineer

PRELIMINARY
NOT TO BE USED FOR CONSTRUCTION

Engineer

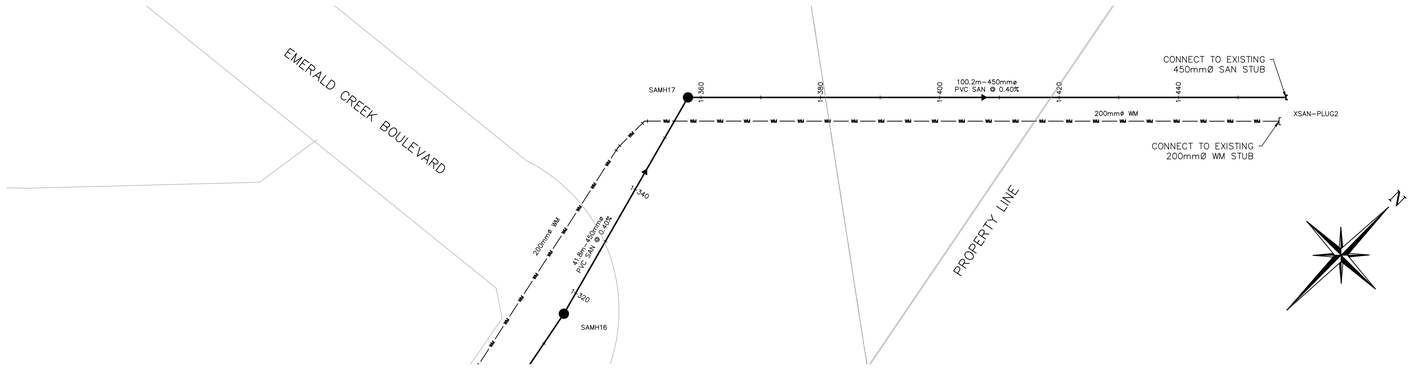
Project: BRIDLE PARK (STAYNER, ONTARIO) TOWNSHIP OF CLEARVIEW

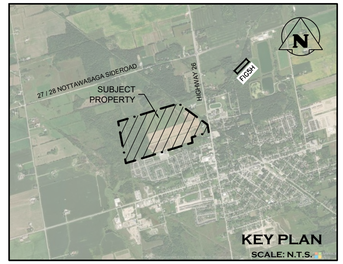
Drowing: PLAN AND PROFILE EXTERNAL SANITARY SERVICING PLAN STA. 1+155 TO STA. 1+240, STA, 1+230 TO STA. 1+370

CROZIER

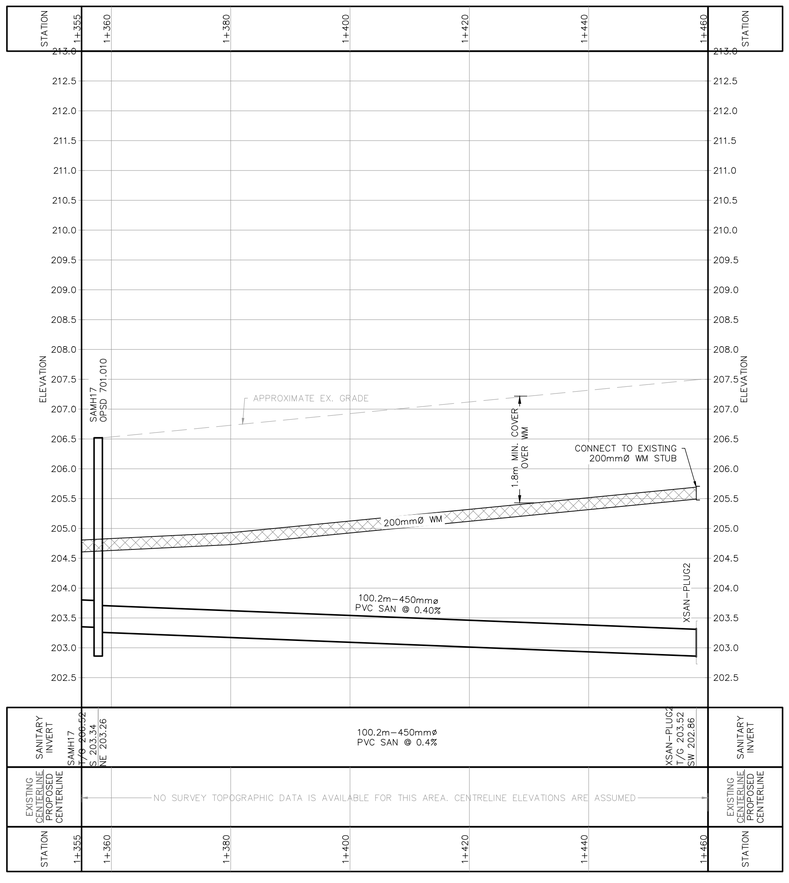
Drawn By	Design By	Project
O.P.	N.O.C./A.M.	1508–7498
Check By	Check By	Drowing
N.O.C.	J.L.A./T.M.G.	FIG5G

C:\Users\oparovyk\DC\ACCDocs\Crozier Consulting Engineers\1508-7498 Bridle Park Stayner\Project Files\Civil_Sheets\FSR FIGs\7498_FIG5F-G EXT SAN PP.dwg, FIG5G, 2026-07-21 6:11:55 PM, oparovyk





NOTE:
- PLAN/PROFILES PROVIDED FOR CONCEPTUAL DESIGN PURPOSES ONLY. DETAILS, CONSTRUCTION METHODOLOGY, ETC. TO BE REFINED THROUGH DETAILED DESIGN PROCESS IN COORDINATION WITH TOWNSHIP OF CLEARVIEW.
- SUBSURFACE UTILITY, GEOTECHNICAL, AND HYDROGEOLOGICAL INVESTIGATIONS (AT A MINIMUM) WILL BE REQUIRED TO REFINE THE ALIGNMENT AND APPROACH.
- EARTHWORKS TO BE COMPLETED ALONG SERVICING ROUTE WITHIN EMERALD CREEK PROPERTY, WITH RESTORATION INCLUDING A MAINTENANCE ACCESS ROAD TO THE SATISFACTION OF THE TOWNSHIP.



1 0m 1 2 3 4
SCALE: 1:50 VERTICAL

10 0m 10 20 30 40
SCALE: 1:500 HORIZONTAL

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BENCHMARK NOTE

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Town: CLEARVIEW TOWNSHIP

No.	ISSUE	DATE: YYYY/MM/DD
0	ISSUED FOR RED-LINED DRAFT PLAN APPROVAL	2026/07/23

Engineer | Engineer

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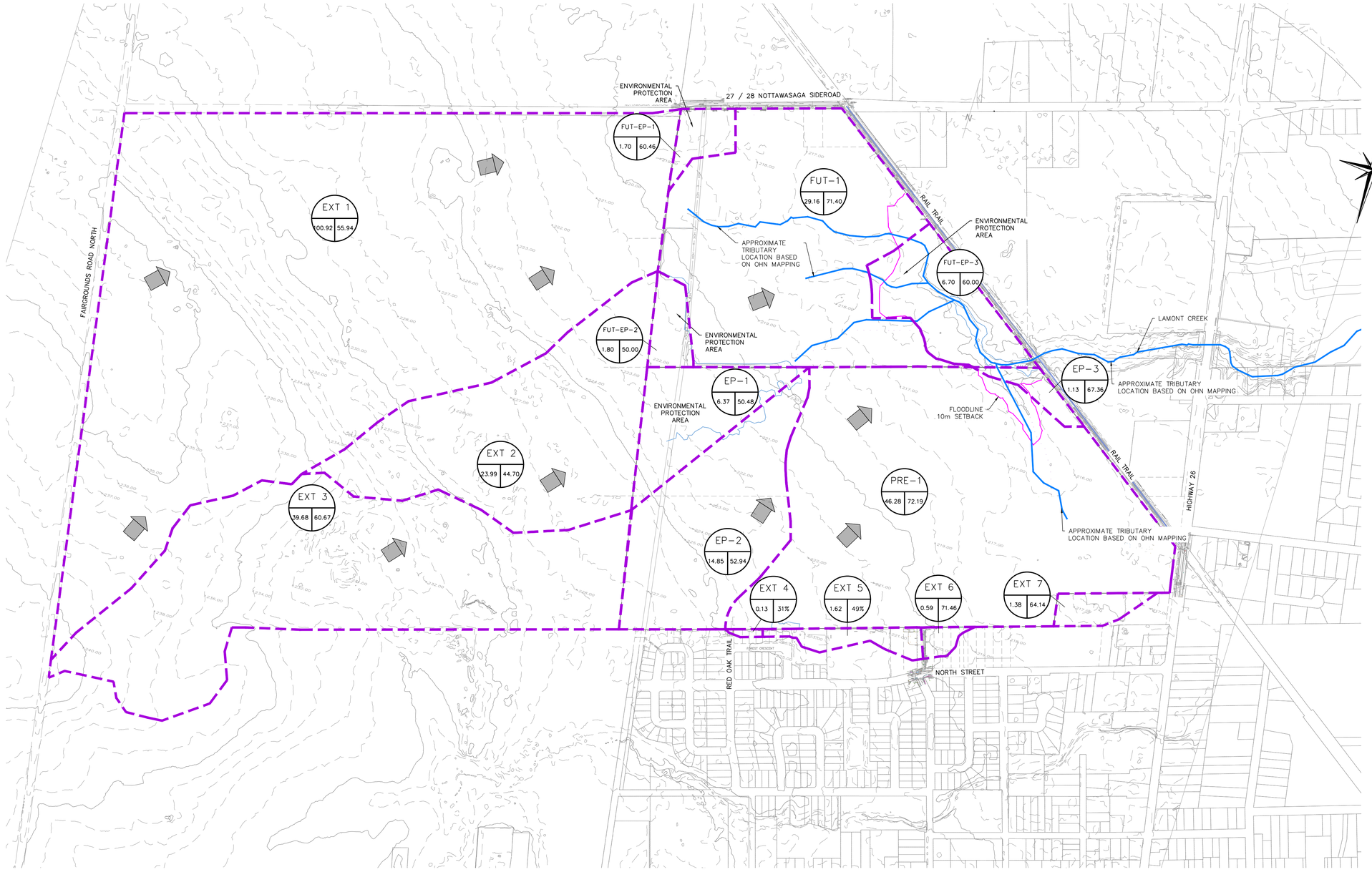
Project: BRIDLE PARK (STAYNER, ONTARIO) TOWNSHIP OF CLEARVIEW

Drawing: PLAN AND PROFILE EXTERNAL SANITARY SERVICING PLAN STA. 1+355 TO STA. 1+460

CROZIER

Drawn By	Design By	Project
O.P.	N.O.C./A.M.	1508-7498
Check By	Check By	Drawing
N.O.C.	J.L.A./T.M.G.	FIG5H

C:\Users\oparovyk\DC\ACCDocs\Crozier Consulting Engineers\1508-7498 Bridle Park Stayner\Project Files\Civil_Sheets\FSR FIGs\7498_FIG5H EXT SAN PP.dwg, FIG5H, 2026-07-21 6:24:33 PM, oparovyk





LEGEND

- XXX.X — EX. CONTOUR
- EX. WATERCOURSE
- FLOODPLAIN 10m SETBACK
- WETLAND WALKED ON OCTOBER 21, 2025
- PRE DEVELOPMENT CATCHMENT AREA
- 1 / 1.37 | 64.10 — CATCHMENT AREA I.D. / AREA (ha) | PERCENT IMPERVIOUS (%) (STANDHYD) CURVE NUMBER (NASHYD)
- PRE-DEVELOPMENT OVERLAND FLOW DIRECTION

100 0m 100 200 300 400
SCALE: 1:5000

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Town: CLEARVIEW TOWNSHIP

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0	ISSUED FOR RED-LINED DRAFT PLAN APPROVAL	2026/07/23

Engineer

PRELIMINARY
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Engineer

Project: BRIDLE PARK (STAYNER, ONTARIO) TOWNSHIP OF CLEARVIEW

Drawing: PRE-DEVELOPMENT DRAINAGE PLAN

CROZIER

Drawn By	Design By	Project
O.P.	N.O.C./A.M.	1508-7498
Check By	Check By	Drawing
N.O.C.	J.L.A./T.M.G.	FIG6

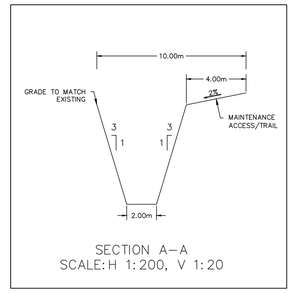
C:\Users\oparovyk\DC\ACCDocs\Crozier Consulting Engineers\1508-7498 Bridle Park Stayner\Project Files\Civil_Sheets\FLOODPLAIN FIGs\7498_FIG4 PRE-DEV DR.dwg, FIG6, 2026-07-23 12:06:44 PM, oparovyk

EASEMENTS WITHIN THE FUTURE DEVELOPMENT LANDS NORTH OF THE SUBJECT SITE (OWNED BY THE SAME DEVELOPER) WILL BE REQUIRED TO FACILITATE THE PROPOSED DRAINAGE PLAN. THIS WILL ALLOW THE TOWN ACCESS FOR OPERATION AND MAINTENANCE UNTIL A DRAFT PLAN OF SUBDIVISION IS ESTABLISHED FOR THIS FUTURE DEVELOPMENT SITE. REFER TO SECTION 7.0 OF THE FSR/SWM REPORT FOR MORE INFORMATION ON HOW THESE COMPONENTS HAVE BEEN DESIGNED TO ACCOMMODATE THE BRIDLE PARK AND FUTURE DEVELOPMENT FLOWS.

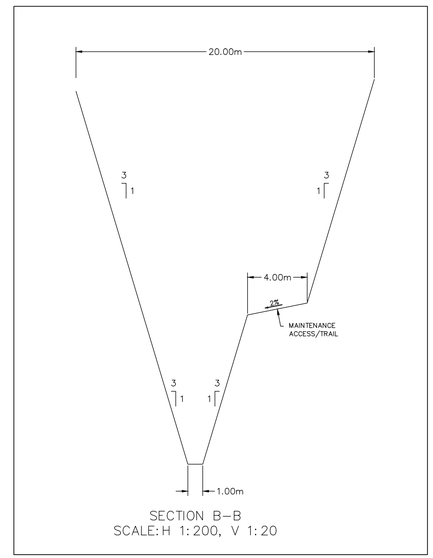


LEGEND

- EX. TREELINE
- PR. PROPERTY LIMITS
- EXISTING CONTOUR (0.5m)
- EXISTING CONTOUR (1.0m)
- PR. SWALE
- PROPOSED OVERLAND FLOW DIRECTION



SECTION A–A
SCALE: H 1:200, V 1:20



SECTION B–B
SCALE: H 1:200, V 1:20

50 0m 50 100 150
SCALE: 1:2000

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Engineer

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Engineer

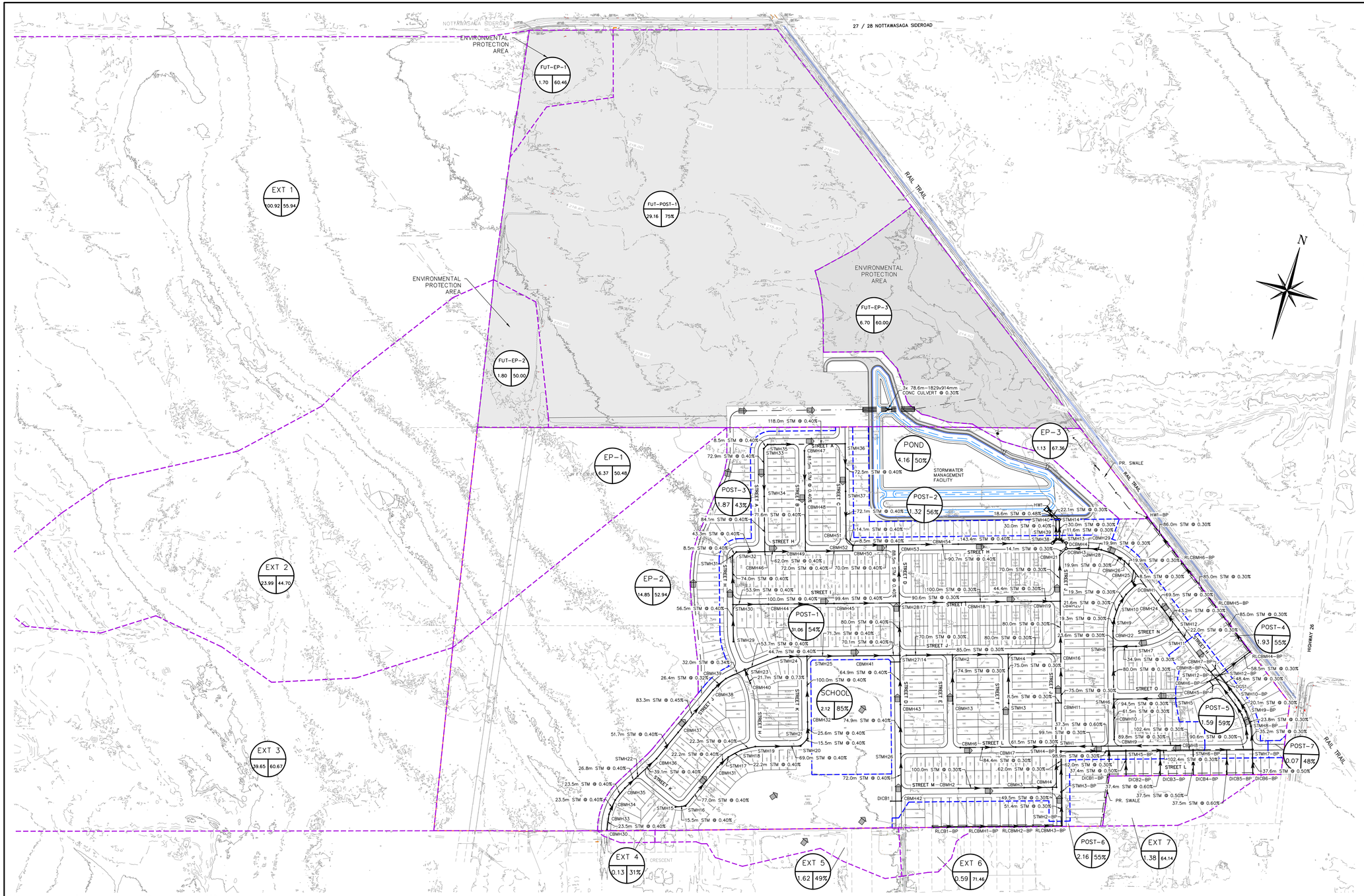
Project: BRIDLE PARK (STAYNER, ONTARIO) TOWNSHIP OF CLEARVIEW

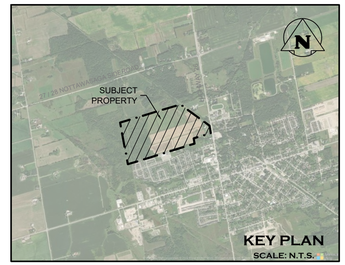
Drawing: GRADING PLAN

CROZIER

Drawn By	Design By	Project
O.P.	N.O.C./A.M.	1508–7498
Check By	Check By	Drawing
N.O.C.	J.L.A./T.M.G.	FIG 7

C:\Users\oparovyk\DC\ACCDocs\Crozier Consulting Engineers\1508-7498 Bridle Park Stayner\Project Files\Civil_Sheets\FSR FIGs\7498_FIG7 GR.dwg, FIG 7, 2026-07-30 10:04:18 AM, oparovyk





LEGEND

- EX. TREELINE
- PR. PROPERTY LIMITS
- EXISTING CONTOUR (0.5m)
- EXISTING CONTOUR (1.0m)
- PRE DEVELOPMENT CATCHMENT AREA
- POST DEVELOPMENT CATCHMENT AREA
- PROPOSED OVERLAND FLOW DIRECTION
- ID — CATCHMENT IDENTIFICATION
- X.X — PERCENT IMPERVIOUS, % (STANDHYD) CURVE NUMBER (NASHYD)
- X.XX — CATCHMENT AREA (ha)

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Engineer

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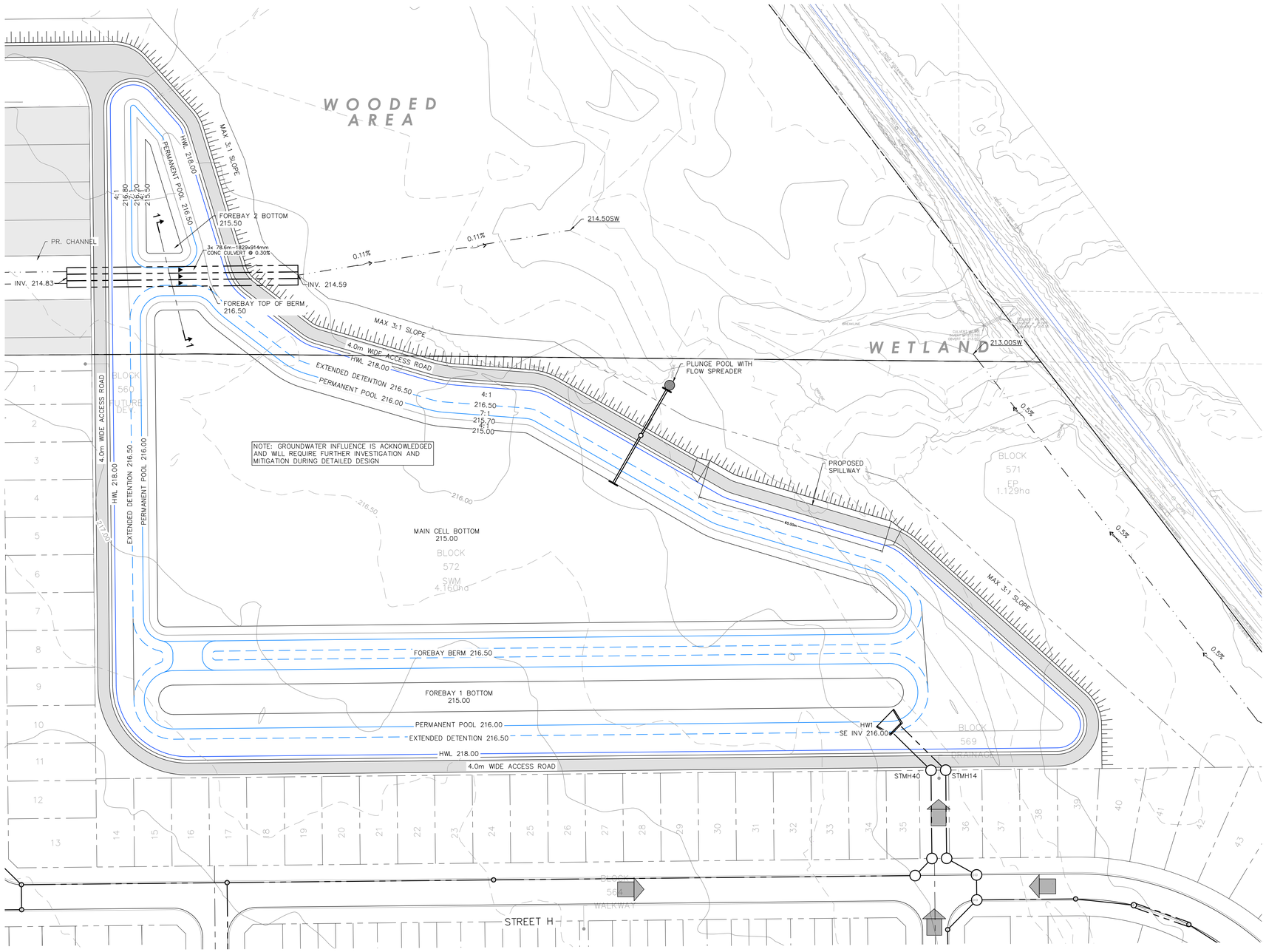
Project: BRIDLE PARK (STAYNER, ONTARIO) TOWNSHIP OF CLEARVIEW

Drawing: POST-DEVELOPMENT DRAINAGE PLAN

CROZIER

Drawn By	Design By	Project
O.P.	N.O.C./A.M.	1508-7498
Check By	Check By	Drawing
N.O.C.	J.L.A./T.M.G.	FIG8

C:\Users\oparovyk\DC\ACCDocs\Crozier Consulting Engineers\1508-7498 Bridle Park Stayner\Project Files\Civil_Sheets\FSR FIGs\7498_FIG8 POST-DEV DR PLAN.dwg, FIG8, 2026-07-30 2:34:06 PM, oparovyk



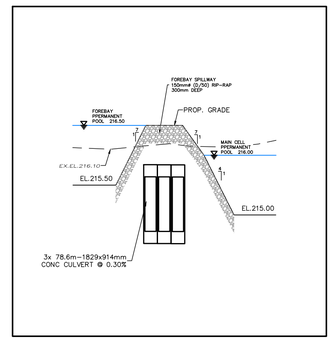


N

LEGEND

- EX. TREELINE
- PR. PROPERTY LIMITS
- EXISTING CONTOUR (0.5m)
- EXISTING CONTOUR (1.0m)
- PROPOSED OVERLAND FLOW DIRECTION
- CGE FUTURE DEVELOPMENT

XSEC 1–1



15 0m 15 30 45 60

SCALE: 1:750

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Engineer

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Engineer

Project: BRIDLE PARK (STAYNER, ONTARIO) TOWNSHIP OF CLEARVIEW

Drowing: SWM FACILITY PLAN

CROZIER

Drawn By: O.P.	Design By: N.O.C./A.M.	Project: 1508-7498	
Check By: N.O.C.	Check By: J.L.A./T.M.G.	Drowing: FIG 9	

C:\Users\oparovyk\DC\ACCDocs\Crozier Consulting Engineers\1508-7498 Bridle Park Stayner\Project Files\Civil_Sheets\FSR FIGs\7498_FIG9 SWMF.dwg, FIG 9, 2026-07-29 8:33:00 PM, oparovyk