FLOODPLAIN ASSESSMENT REPORT

BRIDLE PARK

STAYNER
TOWNSHIP OF CLEARVIEW
COUNTY OF SIMCOE

PREPARED FOR:

1000983019 ONTARIO LIMITED

PREPARED BY:

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CROZIER

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1.0 Introduction

C.F. Crozier & Associates Inc. (Crozier) has been retained by 1000983019 Ontario Inc. to complete a Floodplain Assessment for the proposed residential development. The site is located within Part of Lot 26, Concession 3 in the Township of Clearview (Township), County of Simcoe (County), as shown on the Site Location Plan in **Figure 1**. The proposed residential development is herein referred to as the Subject Development/Subject Lands.

The Subject Lands are approximately 68.7 ha in size and are currently comprised of a mix of forested and agricultural lands. Existing features include a residential dwelling and associated agricultural buildings located at 7535 Highway 26, Stayner, along the eastern portion of the site.

The Draft Plan for the Subject Development was prepared by MHBC Planning Urban Design & Landscape Architecture (MHBC, June 2026) and is included as **Figure 2**. The Draft Plan proposes a mix of single detached units (523), semi-detached units (4) and townhouse units (164), for a total of 691 residential units. Additional elements include one (1) stormwater management block, 20 m right-of-way (ROW) allowances, one (1) school block, parkland, and environmental protection areas.

The purpose of this study is to establish the Regulatory Floodline, based on the 100-year SCS event, on the Subject Lands in support of identifying development constraints.

2.0 Site Description

The Subject Lands are characterized by a combination of agricultural fields and wooded areas. The eastern portion of the site is largely cleared and actively farmed and includes an existing residential dwelling and associated outbuildings. The western portion contains a wooded area designated as an Environmental Protection Area and is not proposed for development.

The Subject Lands are located within the Lamont Creek watershed. One (1) regulated tributary of Lamont Creek, under the jurisdiction of the Nottawasaga Valley Conservation Authority (NVCA), traverses the Subject Lands from south to north. This tributary connects to external tributaries from adjacent lands to the north and continues east beneath the Barrie-Collingwood Railway Active Transportation Trail (Rail Trail) through an approximately 900 mm diameter corrugated steel pipe (CSP) culvert located beneath the Rail Trail walking path. Downstream of this crossing, flows continue through a 1.8 m wide by 2.2 m high concrete arch culvert beneath the historic rail line, located east of the Rail Trail walking path. The tributaries ultimately discharge to Lamont Creek, then to McIntyre Creek, and finally to Georgian Bay.

Soils within the Subject Lands consist of Tioga Sandy Loam (Hydrologic Soil Group A), Alliston Sandy Loam (Group B), and Granby Sandy Loam (Group C), based on the Ontario Soil Survey Complex (2019).

The Subject Lands generally drains from southwest to northeast, with an approximate elevation change of 12.5 m based on topographic survey data completed in May 2026 by R-PE Surveying Ltd.

2.1 Surrounding Land Uses

Lands to the North – Clearview Garden Estates

Immediately north of the Subject Lands is a proposed development known as Clearview Garden Estates, located at 6237 Sideroad 27/28 in Stayner. These lands are currently advancing through the Draft Plan of Subdivision process. The lands are under common ownership with the Subject Development and are intended to proceed concurrently to facilitate coordinated servicing between the two (2) developments.

The Clearview Garden Estates lands also contain three (3) tributaries of Lamont Creek, which converges with the tributary on the Subject Lands immediately north of the Subject Lands, prior to crossing beneath the Rail Trail. The three (3) tributaries of the Lamont Creek in Clearview Garden Estates and the one (1) on the Subject Lands, upstream of the Rail Trail culvert will herein be referred to as the tributaries of interest.

Lands to the South – Existing Residential, Stayner Community Center, 211 North Street

The existing residential area includes an existing public ROW known as Red Oak Trail which is proposed to be extended within the Subject Development Draft Plan.

The existing community centre lands includes the Stayner Arena, skate park and Legion Park. The Township has requested a road connection from the Subject Lands through the existing Legion Park to form an intersection with North Street and East Street.

The 211 North Street Draft Plan is approximately 2.0 ha and consists of a total of thirty-seven (37) residential units and includes a public ROW that will provide a connection to the Subject Development which will require coordination with the owners of the 211 North Street.

A small portion of the existing community centre parking lot, Legion Park and residential lots drain to the north, into the tributary on the Subject Lands.

Lands to West

The lands to the west are comprised of NVCA-regulated wetlands, woodlands, and actively farmed agricultural fields, in addition to four (4) existing residential dwellings. The entirety of the lands to the West, up to Fairground Road North drain to the tributaries of interest.

Lands to the East

The lands to the east consist of the Rail Trail corridor, with a residential dwelling located immediately east of the corridor. Highway 26 is located further east. No drainage from the east lands drain into the tributaries of interest.

3.0 Existing Floodplain Modelling

3.1 Topographic Data

A topographic survey was completed by R-PE Surveying LTD. in May 2026 for a portion of the Subject Lands. Due to substantial tree cover and other site limitations, LiDAR data was used to supplement the survey.

The LiDAR surface was compared to the topographic survey at forty-five (45) locations across the Subject Lands, in accordance with the NVCA requirements, and adjusted using a calculated correction factor of 0.31 m.

Refer to **Appendix A** for details of the comparison and adjustment factor calculation, and to **Figure 3** for the location of the verification points.

3.2 Study Area

The study area encompasses the drainage area to the Lamont Creek tributaries located within the Subject Lands and Clearview Garden Estates. It specifically includes the portion of the tributary system upstream of the Rail Trail culvert crossings.

The catchment is comprised of lands bounded by Nottawasaga Sideroad 27 & 28 to the north, Rail Trail to the east, North Street and the rear lots of the existing residential lots to the south, and Fairgrounds Road North to the west. The total contributing area is approximately 276.3 ha, as shown in **Figure 4**.

3.3 Existing Conditions Modeling

3.3.1 Existing Drainage Conditions

The developable portion of the Subject Lands, the Environmental Protection (EP) area in the northeast corner, and external drainage areas to the south all drain toward the on-site tributary, which flows from south to north.

The remaining areas, including the EP lands in the western portion of the Subject Lands, lands to the west, portions of Clearview Garden Estates, and external drainage from the northeast that is conveyed through an existing 600 mm diameter CSP culvert to the north, drain toward three (3) tributaries within Clearview Garden Estates, which generally flow northward.

All tributaries converge immediately north of the Subject Lands before crossing beneath the Rail Trail via two (2) culverts. These flows ultimately discharge to Lamont Creek, then McIntyre Creek, and finally Georgian Bay.

Watershed delineation was completed using LiDAR and topographic survey data. Due to the intermittent nature of the three (3) tributaries in Clearview Garden Estates, hydrologic modeling was undertaken at the point where the tributaries converge.

For the purposes of this Floodplain Assessment, the modelled tributaries have been assigned a consistent naming convention to support the hydrologic and hydraulic modelling discussion. The naming convention is as follows:

- **Northern Tributary (Reach 4)**: The simplified tributary system located within the Clearview Garden Estates lands.

- **Southern Tributary (Reach 3)**: The tributary located on the Subject Lands.

- **Central Tributary (Reach 2)**: The downstream tributary reach extending from the confluence of the Northern Tributary and Southern Tributary to the downstream limit of the HEC-RAS model.

Based on the watershed delineation the following catchments were created:

- **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.

- **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

In addition to these catchments, there are external flows from the northeast that flow overland to the existing 600 mm diameter CSP culvert that is located under the Rail Trail to the north.

Please refer to **Figure 4** for the pre-development drainage plan.

3.3.2 Hydrologic Model

Hydrologic modeling was undertaken to establish 100-year and Regional (Timmins) storm peak flow rates of the tributaries using Visual OTTHYMO (VO) Version 6.2. The 100-year 24-hour SCS Type II, 100-year 4-hour Chicago and the Regional Timmins storm event were assessed to determine the most conservative peak flow rates. Please note that the IDF values were increased by 15%, per the Township Engineering Standards, to account for climate change.

Soil types were obtained from the Ontario Soil Survey Complex, and land uses were obtained using aerial-view measurements to determine the curve number for the watershed. Time of concentration was calculated using the Airport and Bransby method. Refer to **Appendix B** for the hydrologic parameter sheets. **Table 1** provides the key peak flow values for the tributary. Refer to **Appendix C** for the detailed VO outputs.

In addition to the VO model, CulvertMaster was used to assess the capacity of the existing 600 mm diameter CSP culvert located north of the Subject Lands that conveys overland runoff from upstream lands to the northeast into the tributary system within Clearview Garden Estates. A separate culvert capacity assessment was completed based on site observations, LiDAR data, and field measurements. The analysis determined that the culvert has a maximum conveyance capacity of approximately 0.65 m^3/s. To conservatively account for this external drainage contribution, the full culvert capacity was added to the modelled peak flow for the Northern Tributary and the Central Tributary for all storm events. Refer to **Appendix D** for the CulvertMaster analysis.

Table 1: Tributary Peak Flow Rates

Storm Event	Peak Flow Rate (m^3/s)		
	Northern Tributary (Reach 4)	Southern Tributary (Reach 3)	Central Tributary (Reach 2)
100-year 24-Hour SCS II	8.33	7.41	12.42
Regional (Timmins)	9.46	4.33	12.10

3.3.3 The peak flow rates from presented in **Table 1** are the flow rates used in the hydraulic model presented in **Section 3.3.3**, plus the addition of the external lands to the north east, with the governing event being the 100-year SCS storm event. Hydraulic Model

Floodplain analysis for the Subject Lands was completed using the U.S. Army Corps' HEC-RAS hydraulic computer model, Version 6.4.1. The purpose of the analysis is to establish the existing Regulatory floodline across the site based on topographic survey of the Subject Lands.

As previously stated, there is one (1) tributary traverses the Subject Lands from the south to the north and flows in the northernly direction where it exists the Subject Lands in the northeast corner. There are then three (3) tributaries in Clearview Garden Estate Lands that travers from northwest to southwest and flow in the southeast direction where it converges with the Subject Land tributary and flows under the Rail Trail culverts. A topographic survey (R-PE Surveying LTD., May 2026) was used to establish the culvert inverts and channel/riverbank elevations. Further site visits were conducted in order to assess the state Rail Trail crossings as well as the general flow characteristics of the creek.

The three (3) tributaries in Clearview Garden Estates were simplified into one model

Nineteen (19) cross-sections, within one (1) bridge crossing section to represent the Rail Trail were included within the area of interest. Due to the proximity of the Rail Trail and the historic rail line culverts, the culvert beneath the historic rail line was identified as the controlling hydraulic structure and was therefore used as the governing culvert in the model. Given the close spacing of the two (2) culverts, both structures could not be reliably represented within the HEC-RAS model. As such, the downstream culvert beneath the historic rail line was governing in the to control upstream water levels. This culvert restricts flow within the Lamont Creek tributary during major storm events and significantly influences the upstream floodplain extent near the Rail Trail.

The physical characteristics of the historical rail line culvert were measured in the field and compared with a previously completed hydraulic model to ensure accurate representation within the HEC-RAS model. The culvert properties are summarized in **Table 2**, and field photographs are provided in **Appendix E**.

Table 2: Existing Rail Trail Culvert Properties

Parameter	Description
Shape	Arch
Material	Concrete
Inlet Type	0° wingwalls (parallel to culvert)
Span (m)	1.8
Rise (m)	2.2
Length (m)	13.2
Upstream Invert (m)	212.27
Downstream Invert (m)	212.04
Slope (%)	1.74
Top of Rail Elevation (m)	216.47

Manning's roughness coefficients were assigned in accordance with the *HEC-RAS Hydraulic Reference Manual* (USACE, 2020) and NVCA *Natural Hazards Technical Guide* (NVCA, 2013), reflecting observed channel and overbank conditions.

Where the culvert was modeled, expansion and contraction coefficients were applied to the adjacent downstream and upstream cross-sections, respectively. A coefficient of 0.50 was used for expansion and 0.3 for contraction. For all other cross-sections, values of 0.30 and 0.10 were applied, respectively, to represent the gradual transitions in the tributary.

To accurately capture any impacts of the Lamont Creek tributaries on the Subject Lands, a "Normal Depth" boundary condition with the friction slope matching the energy grade line of 0.001 m/m was set. This value was estimated by measuring the slope of the stream bed of the entire watercourse.

A subcritical flow regime was modeled to conservatively estimate the hydraulic profile. Preliminary checks of the Froude Number confirm that flow remains below 1 for the 100-year and Regional storm events, supporting the use of a subcritical assumption. While localized areas (primarily offsite) exhibit Froude Numbers exceeding 1, these are limited in extent and do not influence the overall hydraulic control. As such, adopting a subcritical flow regime provides a conservative basis for floodplain delineation.

Results

Results from the existing condition hydraulic analysis of the tributaries of the Lamont Creek are presented in **Table 3** and the extent of the 100-year SCS and Regional floodplain has been illustrated on **Figure 5**. Refer to **Appendix F** for the detailed HEC-RAS outputs.

Table 3: Existing Conditions - 100-year SCS and Regional Water Surface Elevations (m)

Reach	Cross-Section ID	100-Year SCS Water Surface Elevation (m)	Regional Water Surface Elevation (m)
Northern Tributary (Reach 4)	336	215.72	215.71
	225	215.76	215.67
	162	215.75	215.66
	65	215.75	215.65
Southern Tributary (Reach 3)	174	215.77	215.67
	92	215.75	215.65
	60	215.75	215.65
Central Tributary (Reach 2)	342	215.75	215.65
	308	215.75	215.65
	305	215.75	215.65
	280	213.54	213.53
	278	213.58	213.57
	199	212.84	212.83
	143	212.44	212.43
	88	212.38	212.37
	78	212.36	212.35
	69	212.35	212.34
	60	212.35	212.34
	52	212.33	212.32

As shown in **Figure 5**, the floodplain limit at the majority of the floodplain is constrained to the Environmental Protection and SWM Block of the Subject Lands.

4.0 Sensitivity Analysis

In accordance with NVCA guidance for conservative hydraulic assessment, a sensitivity analysis was completed to evaluate the potential impact of debris accumulation at the Rail Trail culvert crossing. In addition to the baseline (unobstructed) condition, a scenario was modeled assuming a 50% blockage of culvert, representing partial obstruction of the inlet area due to debris during major storm events.

The 50% blockage condition was implemented within the HEC-RAS model by reducing the effective flow area of the culvert beneath the Rail Trail corridor. Under this scenario, model results indicate a localized increase in upstream water surface elevations resulting from the restricted flow capacity of the culvert. This causes additional ponding upstream of the crossing; however, flooding remains predominantly contained within the Environmental Protection Area and the SWM Block, with only minor encroachments into the rear lots backing onto the SWM Block. The results indicate that the hydraulic system continues to function adequately under the 50% blockage condition, with impacts generally limited to localized backwater effects immediately upstream of the Rail Trail culvert crossing.

The maximum water surface elevation within the portions of the rear lots affected by the 50% blockage scenario is approximately 216.37 m at XS-174 and XS-336. Accordingly, finished floor elevations for the affected residential lots will be required to be above 216.67 m. Final finished floor elevations will be confirmed during detailed design; however, based on the preliminary grading design, achieving the required elevations is not anticipated to present any issues to the proposed development.

Based on the results of the sensitivity analysis, the proposed residential development can be safely accommodated to have flood levels lower than the planned finished floor elevations. While the likelihood of a 50% blockage occurring simultaneously with major storm events is considered low, the analysis provides a conservative assessment of potential flood impacts under extreme debris accumulation conditions. The detailed results from the 50% blockage scenario HEC-RAS model are provided in **Appendix G**.

5.0 Floodplain Regularization

A wide and shallow floodplain condition exists south of the tributary corridor. Under Regulatory (100-year) flood conditions, this area experiences relatively shallow depths of flooding spread across a large area. As a result, the floodplain in this location functions primarily as flood storage with limited contribution to flood conveyance. Due to these characteristics, the area was identified as a suitable location for floodplain regularization. The objective of the proposed regularization is to relocate the floodplain limits while maintaining the overall hydraulic function, flood conveyance characteristics, and flood storage capacity of the tributary corridor. The proposed earthworks will facilitate the relocation of a portion of the existing floodplain from the SWM Block into the adjacent Environmental Protection Area, thereby consolidating the natural hazard lands within the long-term protected natural feature system while maintaining the overall floodplain function.

To quantify the existing floodplain storage within the proposed regularization area, a detailed cut-and-fill assessment was completed within the existing Regulatory (100-year) floodplain limits. Existing floodplain storage volumes were calculated at 0.3 m vertical increments between the ground surface and the Regulatory flood elevation to establish the volume of available storage under existing conditions. These calculations were used to define the minimum storage volumes required to be maintained under proposed conditions. The assessment was undertaken to demonstrate that the proposed grading would not result in a loss of floodplain storage, increase flood elevations, or adversely impact flooding conditions upstream, downstream, or within the tributary corridor.

The proposed regularization involves strategically placing fill within portions of the existing shallow floodplain to raise select areas above the Regulatory flood elevation. To offset the displacement of flood storage resulting from these fill activities, compensatory excavation is proposed within the same floodplain system and hydraulic reach. The compensatory excavation has been designed to maintain connectivity to the floodplain and ensure that storage remains available during Regulatory storm events. The cut-and-fill analysis confirms that all removed flood storage is fully compensated and that the proposed grading results in a net increase of approximately 2,893 m^3 of available floodplain storage. Consequently, the proposed regularization achieves a balanced floodplain storage condition while providing additional flood storage capacity within the corridor.

The proposed floodplain regularization grading is illustrated on **Figure 6**, while the resulting proposed Regulatory floodplain limits are presented on **Figure 7**. Supporting floodplain storage calculations are provided in **Appendix H** and summarized in **Table 4**.

Table 4: Proposed Floodplain Storage Balancing

Increment Elevation Range	Incremental Fill Volume (m^3)	Incremental Cut Volume (m^3)	Proposed Additional Floodplain Storage Volumes (m^3)
214.25-214.50	13	535	522
214.50-214.75	130	1,096	967
214.75-215.00	338	1,151	813
215.00-215.25	755	1,205	450
215.25-215.50	1,381	1,259	-122
215.50-215.64	1,115	1,379	264
Net Increase in Floodplain Storage (m^3):			**2,893**

The floodplain storage is increased at each vertical increment, except for the 215.25-215.50 elevation range which shows a minor reduction. These results indicate that the proposed floodplain regularization and storage compensation do not adversely impact the flood hazard.

6.0 Conclusions

Based on the foregoing we conclude the following:

- The 100-year SCS storm event was determined to be the governing design storm for floodplain delineation.
- The majority of the existing Regulatory floodplain is contained within the proposed Environmental Protection Area and SWM Block.
- A 50% culvert blockage sensitivity analysis, completed in accordance with NVCA guidance, demonstrated that flooding remains generally confined to the Environmental Protection Area and SWM Block, with only minor encroachments into adjacent rear lots.
- The maximum water surface elevation under the 50% blockage scenario is approximately 216.37 m at XS-174 and XS-336. Preliminary grading confirms that finished floor elevations can be established above 216.67 m during detailed design, with no anticipated issues to the proposed development.
- The proposed floodplain regularization results in a net increase of approximately 2,893 m³ of floodplain storage, while maintaining floodplain storage compensation within the same floodplain system.
- The proposed floodplain regularization balances floodplain storage at 0.25 m vertical increments and does not adversely impact flood conveyance or flooding conditions.

Given the above noted conclusions, the proposed development as shown on the proposed Concept Plan is supportable with respect to flood and erosion hazards.

Should you have any questions, or require further information, please do not hesitate to contact the undersigned.

Respectfully submitted,

C.F. CROZIER & ASSOCIATES INC.



Nicole O'Connor, P.Eng
Project Engineer

/EC

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APPENDIX A

Topographic Survey Data vs DEM Data Analysis

CROZIER

Project Name: Bridle Park Stayner
Project Number: 1508-7498
Completed By: EC/NOC
Date: 2026.05.27

DEM AND SURVEY COMPARISON

	Spot Elevation					Contour					Floodplain				
	Survey		DEM			Survey		DEM			Survey		DEM		
	UTM Coordinate	Elevation	UTM Coordinate	Elevation	Difference	UTM Coordinate	Elevation	UTM Coordinate	Elevation	Difference	UTM Coordinate	Elevation	UTM Coordinate	Elevation	Difference
1		216.39		216.00	0.39		216.96		216.85	0.11		218.68		218.50	0.18
2		217.84		217.50	0.34		218.73		218.50	0.23		217.26		217.00	0.26
3		216.34		216.00	0.34		216.99		216.57	0.42		215.81		215.50	0.31
4		219.80		219.50	0.30		219.99		219.63	0.36		215.87		215.47	0.40
5		219.19		218.70	0.49		218.03		217.62	0.41		216.03		216.00	0.03
6		215.86		215.50	0.36		220.51		220.08	0.43		214.87		214.50	0.37
7		218.84		218.50	0.34		217.24		217.44	-0.20		215.78		215.50	0.28
8		217.82		217.50	0.32		220.23		219.91	0.32		215.25		215.00	0.25
9		216.37		216.00	0.37		216.76		216.39	0.37		219.00		218.93	0.07
10		221.10		220.70	0.40		216.00		215.61	0.39		216.75		216.50	0.25
11		220.88		220.50	0.38		219.26		218.96	0.30		214.15		214.00	0.15
12		217.20		216.77	0.43		217.78		217.49	0.29		214.28		213.50	0.78
13		222.85		222.50	0.35		216.26		216.00	0.26		213.16		213.00	0.16
14		217.16		216.85	0.31		221.50		221.00	0.50		215.13		214.99	0.14
15		217.20		216.80	0.40		218.00		217.63	0.37		215.55		215.50	0.05
Average Difference				0.37					0.30					0.25	
Max difference (Absolute)				0.49					0.50					0.78	
Min difference (Absolute)				0.30					-0.20					0.03	

Suggested Adjustmnet Coefficient	0.31

APPENDIX B

Hydrologic Parameter Sheets

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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														
				Tioga Sandy		Alliston Sandy		Granby Sandy		Edenvale		Sargent Gravelly		Harriston Loam		Smithfield Silty Clay		
Landuse	IA (mm)	Area (ha)	A * IA	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

CROZIER

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														
				Tioga Sandy		Alliston Sandy		Granby Sandy		Edenvale		Sargent Gravelly		Harriston Loam		Smithfield Silty Clay		
Landuse	IA (mm)	Area (ha)	A * IA	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

CROZIER

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														
				Tioga Sandy		Alliston Sandy		Granby Sandy		Edenvale		Sargent Gravelly		Harriston Loam		Smithfield Silty Clay		
Landuse	IA (mm)	Area (ha)	A * IA	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

CROZIER

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														
				Tioga Sandy		Alliston Sandy		Granby Sandy		Edenvale		Sargent Gravelly		Harriston Loam		Smithfield Silty Clay		
Landuse	IA (mm)	Area (ha)	A * IA	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

CROZIER

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														
				Tioga Sandy		Alliston Sandy		Granby Sandy		Edenvale		Sargent Gravelly		Harriston Loam		Smithfield Silty Clay		
Landuse	IA (mm)	Area (ha)	A * IA	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

CROZIER

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														
				Tioga Sandy		Alliston Sandy		Granby Sandy		Edenvale		Sargent Gravelly		Harriston Loam		Smithfield Silty Clay		
Landuse	IA (mm)	Area (ha)	A * IA	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

CROZIER

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															
				Tioga Sandy		Alliston Sandy		Granby Sandy		Edenvale		Sargent Gravelly		Harriston Loam		Smithfield Silty Clay		
Landuse	IA (mm)	Area (ha)	A * IA	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

CROZIER

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														
				Tioga Sandy		Alliston Sandy		Granby Sandy		Edenvale		Sargent Gravelly		Harriston Loam		Smithfield Silty Clay		
Landuse	IA (mm)	Area (ha)	A * IA	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

CROZIER

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														
				Tioga Sandy		Alliston Sandy		Granby Sandy		Edenvale		Sargent Gravelly		Harriston Loam		Smithfield Silty Clay		
Landuse	IA (mm)	Area (ha)	A * IA	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

CROZIER

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															
				Tioga Sandy		Alliston Sandy		Granby Sandy		Edenvale		Sargent Gravelly		Harriston Loam		Smithfield Silty Clay		
Landuse	IA (mm)	Area (ha)	A * IA	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

CROZIER

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														
				Tioga Sandy		Alliston Sandy		Granby Sandy		Edenvale		Sargent Gravelly		Harriston Loam		Smithfield Silty Clay		
Landuse	IA (mm)	Area (ha)	A * IA	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

CROZIER

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														
				Tioga Sandy		Alliston Sandy		Granby Sandy		Edenvale		Sargent Gravelly		Harriston Loam		Smithfield Silty Clay		
Landuse	IA (mm)	Area (ha)	A * IA	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

CROZIER

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														
				Tioga Sandy		Alliston Sandy		Granby Sandy		Edenvale		Sargent Gravelly		Harriston Loam		Smithfield Silty Clay		
Landuse	IA (mm)	Area (ha)	A * IA	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

APPENDIX C

Visual OTTHYMO Outputs

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

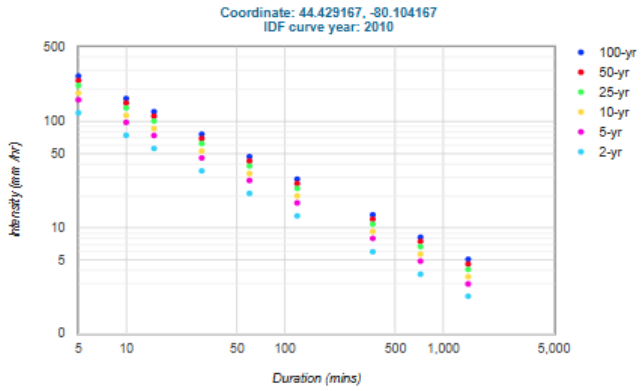
Location summary

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

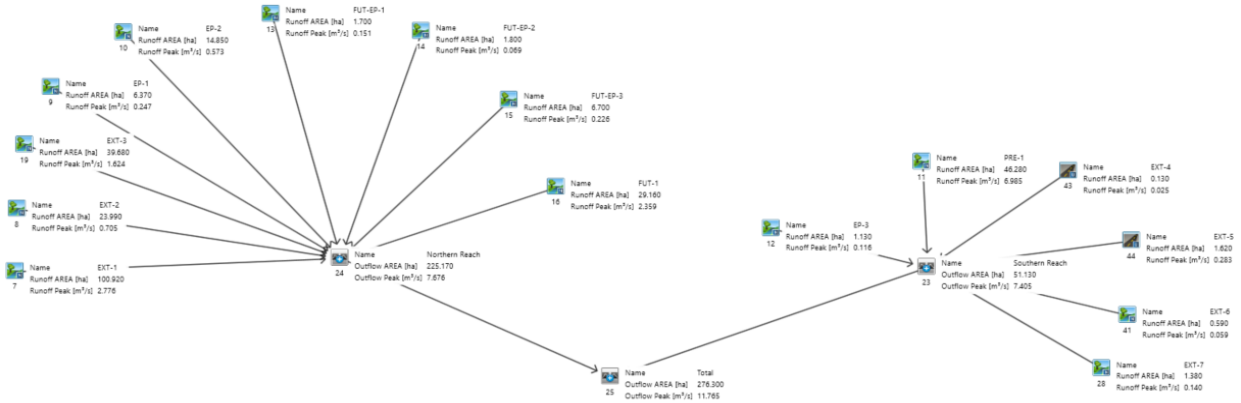
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Original IDF						
	2-year	**5-year**	**10-year**	**25-year**	**50-year**	**100-year**
A	21.1	27.9	32.4	38.1	42.4	46.6
B	-0.699	-0.699	-0.699	-0.699	-0.699	-0.699
100-year SCS rainfall depth		121.29	CGE External			
Increased IDF (Increase A by 15%)						
	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:	2026.07.08

Visual OTTHYMO 6.1 - Model Schematic

Pre-Development



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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:
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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                **
  ***********************************************

--------------------
| 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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 FINISH
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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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DATE: 07-15-2026                          TIME: 03:17:56

USER:
```

COMMENTS: _____

```
  ***********************************************
  ** 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:
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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.
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--------------------
| 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.
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--------------------
| 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.

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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    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!
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***** 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   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.

--------------------------------------------------------------------------------
--------------------
| 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.

--------------------------------------------------------------------------------

--------------------
| 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

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        ID = 1 (  0024):   194.81   2.650     2.83    18.06

     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   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.
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--------------------
| 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.

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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    6.22 | 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.

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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    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.

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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\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

```
               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.

--------------------------------------------------------------------------------

--------------------
| 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.
--------------------------------------------------------------------------------

--------------------
| 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.
--------------------------------------------------------------------------------
================================================================================
```

```
========================

       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: _____________________________________________________________


--------------------------------------------------------------------------------
------------------------
  ***********************************************
  ** 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.

```
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		

```
     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.
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--------------------
| ADD HYD  (  0024)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 1 (  0024):   194.81   3.529    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.
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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)= 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.

```
       (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   3.898    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    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

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                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.
--------------------------------------------------------------------------------
================================================================================
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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\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: _____

```
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  ***********************************************
  ** 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		

```
     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.
--------------------------------------------------------------------------------

--------------------
| 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.
--------------------------------------------------------------------------------

--------------------
| 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.
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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    2.03 |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.
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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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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              **
  ***********************************************


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|    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%
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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	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.
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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	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.
--------------------------------------------------------------------------------
--------------------
| 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

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     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.

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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
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                          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
```

```
               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.

--------------------------------------------------------------------------------
--------------------
| 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.

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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

     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.

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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.

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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
     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.
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--------------------
| 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.
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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\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: _____________________________________________________

--------------------------------------------------------------------------------
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  ********************************************
  ** 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

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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    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)

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|   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.

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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

        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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     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.

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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
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                              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 D

CulvertMaster Outputs

Culvert Calculator Report
External Flows Culvert Capacity

Solve For: Discharge

Culvert Summary					
Allowable HW Elevation	216.80	m	Headwater Depth/Height	2.28	
Computed Headwater Elev	216.80	m	Discharge	0.6543	m³/s
Inlet Control HW Elev.	216.75	m	Tailwater Elevation	0.00	m
Outlet Control HW Elev.	216.80	m	Control Type	Outlet Control	

Added to VO Peak Flows

Grades					
Upstream Invert	215.41	m	Downstream Invert	215.50	m
Length	6.80	m	Constructed Slope	-0.013235	m/m

Hydraulic Profile					
Profile	CompositeA2PressureProfile		Depth, Downstream	0.52	m
Slope Type	Adverse		Normal Depth	N/A	m
Flow Regime	Subcritical		Critical Depth	0.52	m
Velocity Downstream	2.46	m/s	Critical Slope	0.033217	m/m

Section					
Section Shape	Circular		Mannings Coefficient	0.024	
Section Material	CMP		Span	0.61	m
Section Size	600 mm		Rise	0.61	m
Number Sections	1				

Outlet Control Properties					
Outlet Control HW Elev.	216.80	m	Upstream Velocity Head	0.26	m
Ke	0.90		Entrance Loss	0.23	m

Inlet Control Properties					
Inlet Control HW Elev.	216.75	m	Flow Control	Submerged	
Inlet Type	Projecting		Area Full	0.3	m²
K	0.03400		HDS 5 Chart	2	
M	1.50000		HDS 5 Scale	3	
C	0.05530		Equation Form	1	
Y	0.54000				

APPENDIX E

Rail Trail Culvert Crossing Field Photos

Project Name: Bridle Park Stayner
Project Number: 1508-7498
Completed By EC/NOC
Date: 2026.06.24

Culvert Crossing Field Photos

Arch Culvert Under Historical Rail Line - Upstream End

From *Bridle Park II Development - TSI Internation Group Inc. - Functional Servicing Report* (TMIG, August 2013)



Arch Culvert Under Historical Rail Line - Upstream End

(Taken on May 25 2026 Site Visit



Arch Culvert Under Historical Rail Line - Downstream End

(Taken on May 25 2026 Site Visit



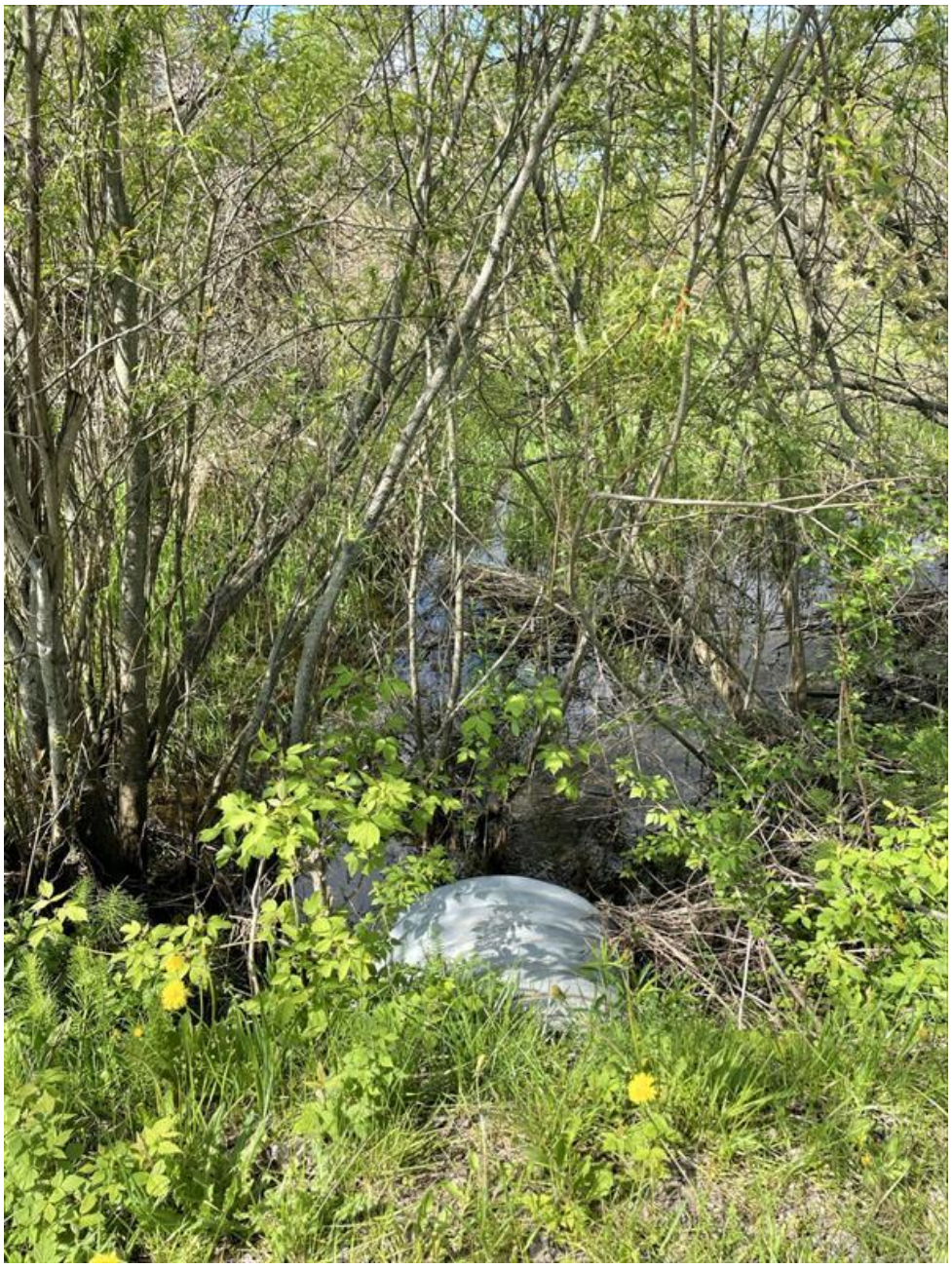
Arch Culvert Under Walkway - Downstream End

(Taken on May 25 2026 Site Visit



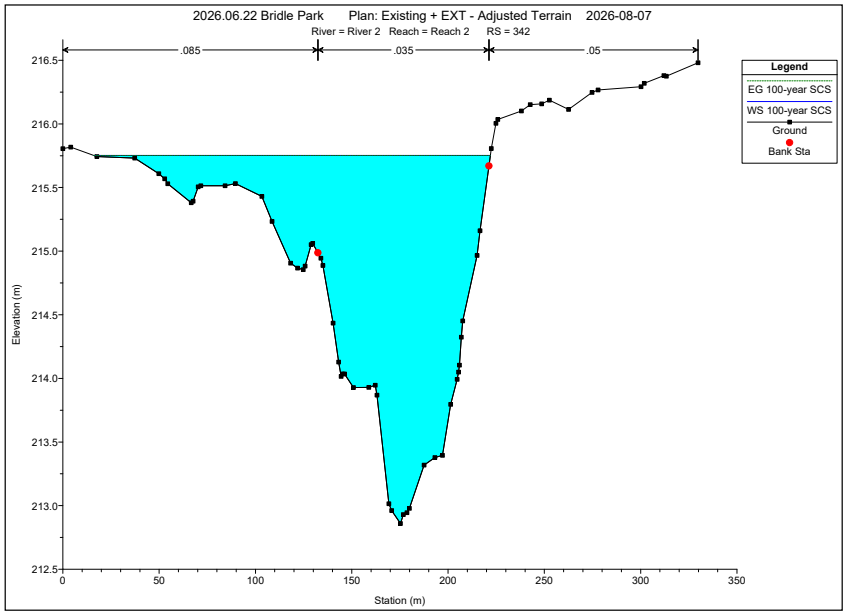
Arch Culvert Under Walkway - Upstream End

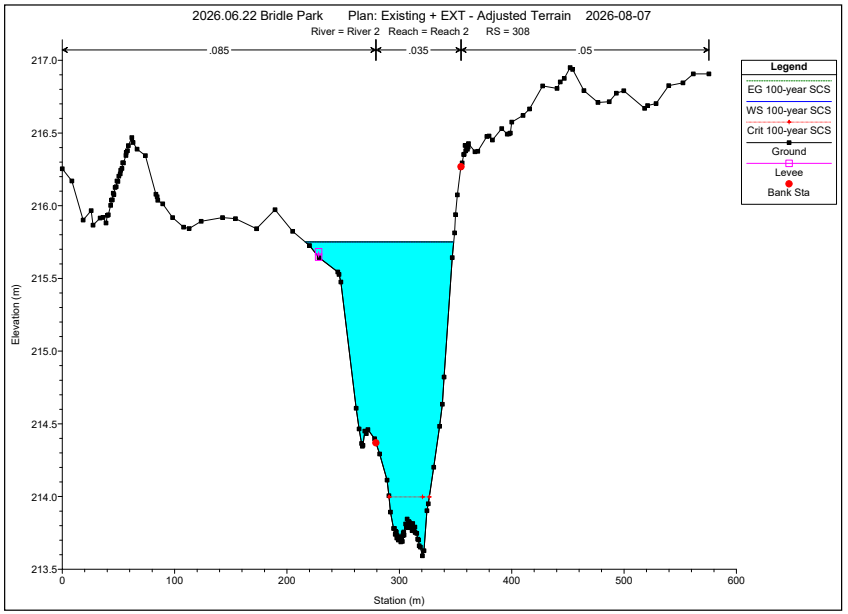
(Taken on May 25 2026 Site Visit

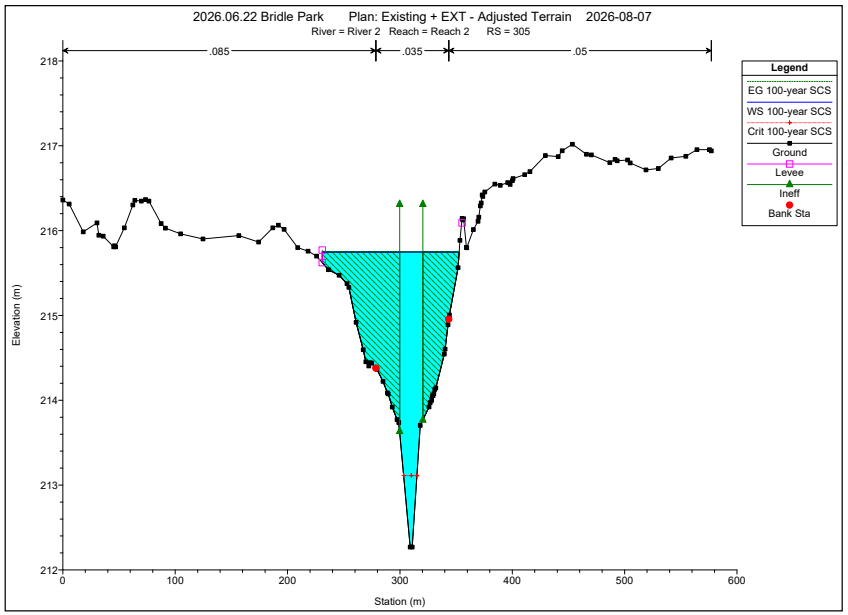


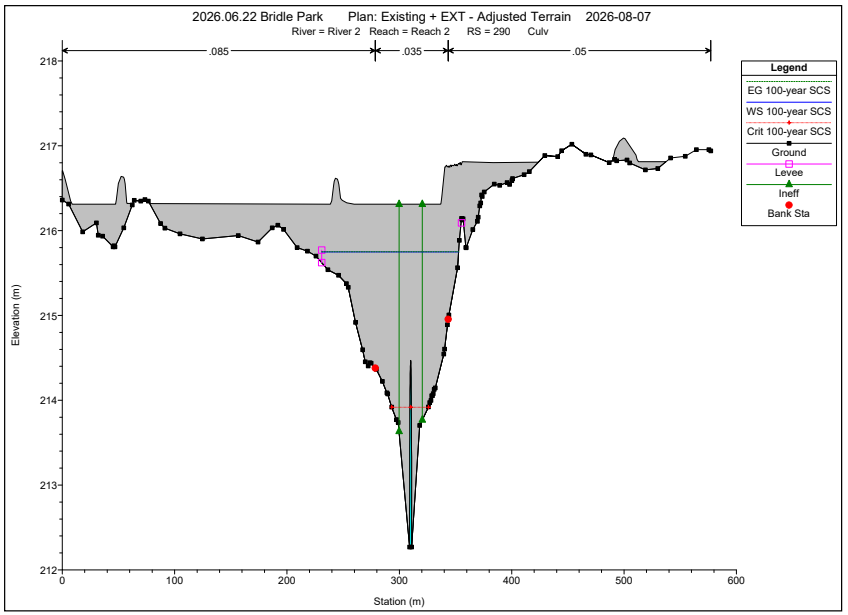
APPENDIX F

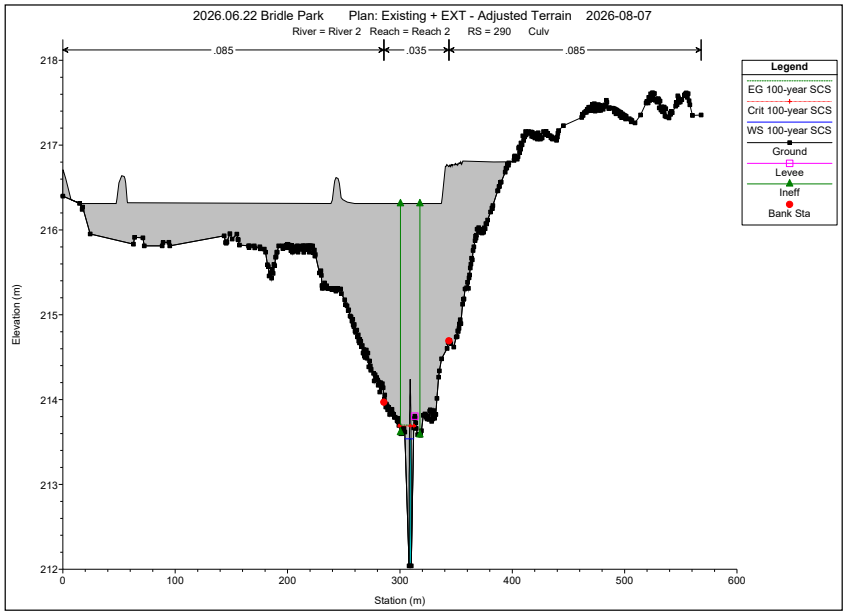
HEC-RAS Outputs

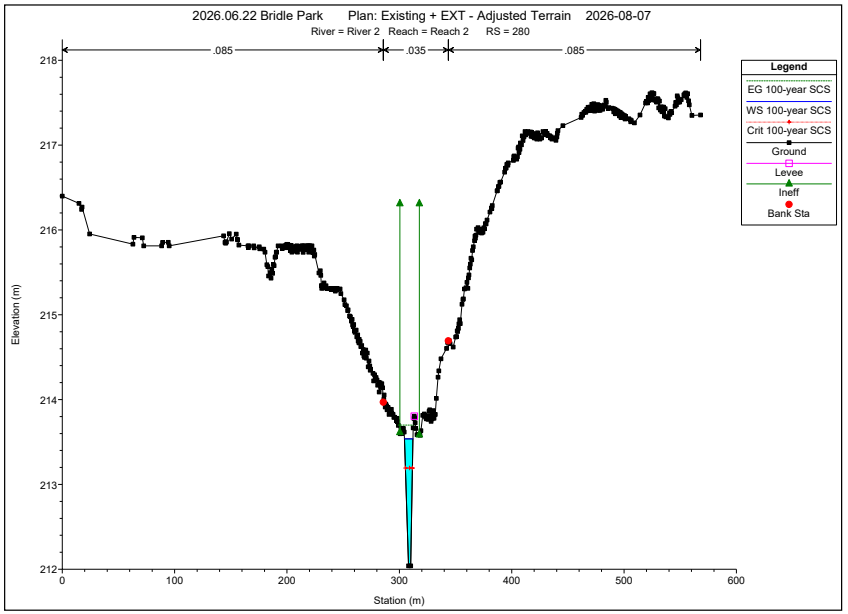

2026.06.22 Bridle Park Plan: Existing + EXT - Adjusted Terrain 2026-08-07
River = River 2 Reach = Reach 2 RS = 342
.085
.035
.05
Legend
EG 100-year SCS
WS 100-year SCS
Ground
Bank Sta
Elevation (m)
Station (m)

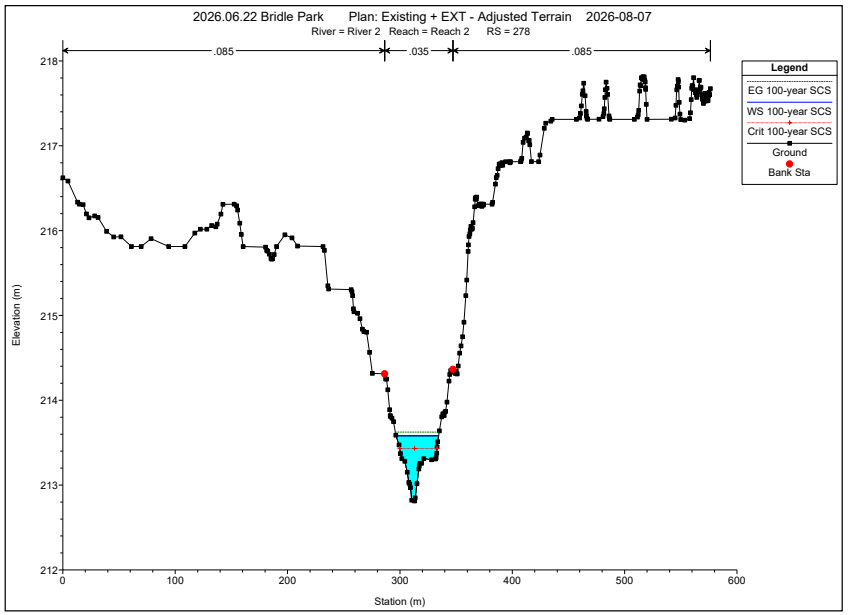

2026.06.22 Bridle Park Plan: Existing + EXT - Adjusted Terrain 2026-08-07
River = River 2 Reach = Reach 2 RS = 308
.085
.035
.05
Legend
EG 100-year SCS
WS 100-year SCS
Crit 100-year SCS
Ground
Levee
Bank Sta
Elevation (m)
Station (m)

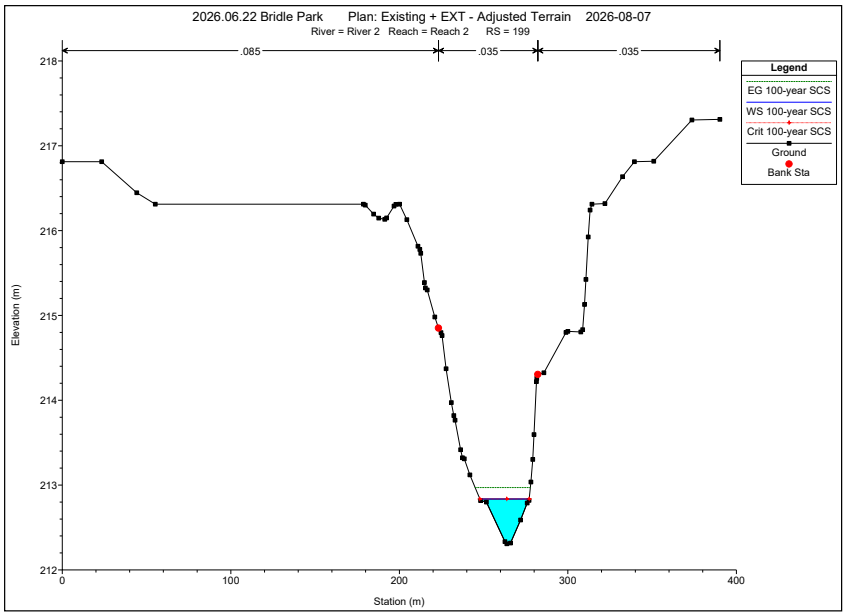

2026.06.22 Bridle Park Plan: Existing + EXT - Adjusted Terrain 2026-08-07
River = River 2 Reach = Reach 2 RS = 305
.085
.035
.05
Legend
EG 100-year SCS
WS 100-year SCS
Crit 100-year SCS
Ground
Levee
Ineff
Bank Sta
Elevation (m)
Station (m)

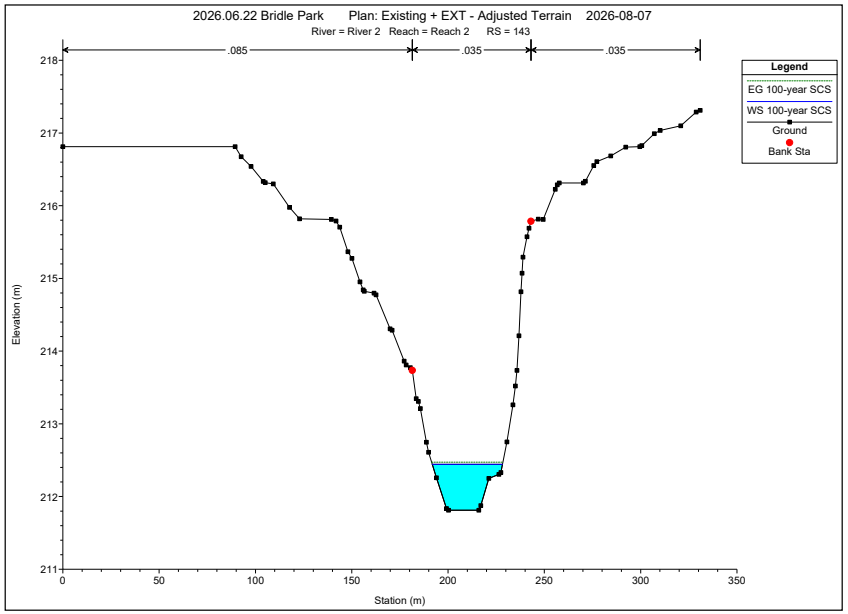

2026.06.22 Bridle Park Plan: Existing + EXT - Adjusted Terrain 2026-08-07
River = River 2 Reach = Reach 2 RS = 290 Culv
.085
.035
.05
Legend
EG 100-year SCS
WS 100-year SCS
Crit 100-year SCS
Ground
Levee
Ineff
Bank Sta
Elevation (m)
Station (m)

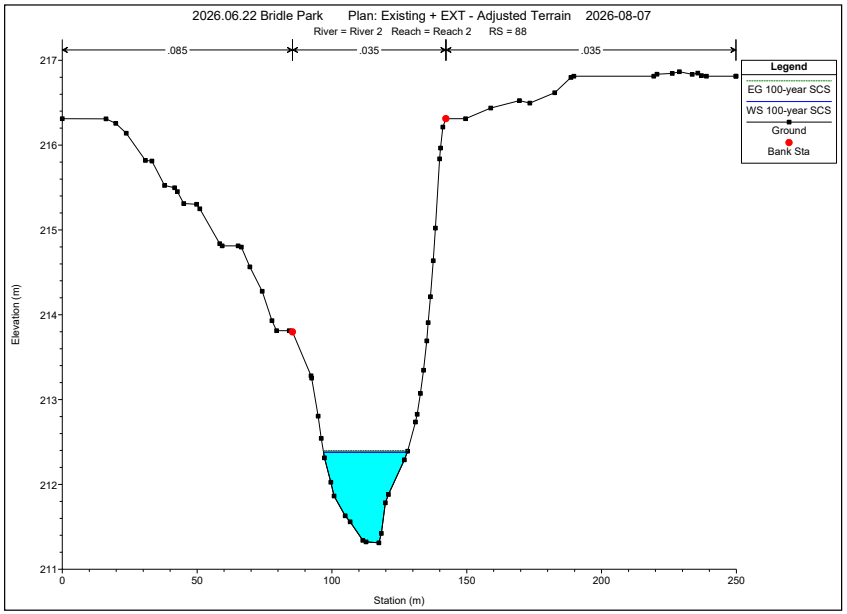

2026.06.22 Bridle Park Plan: Existing + EXT - Adjusted Terrain 2026-08-07
River = River 2 Reach = Reach 2 RS = 290 Culv
.085
.035
.085
Legend
EG 100-year SCS
Crit 100-year SCS
WS 100-year SCS
Ground
Levee
Ineff
Bank Sta
Elevation (m)
Station (m)

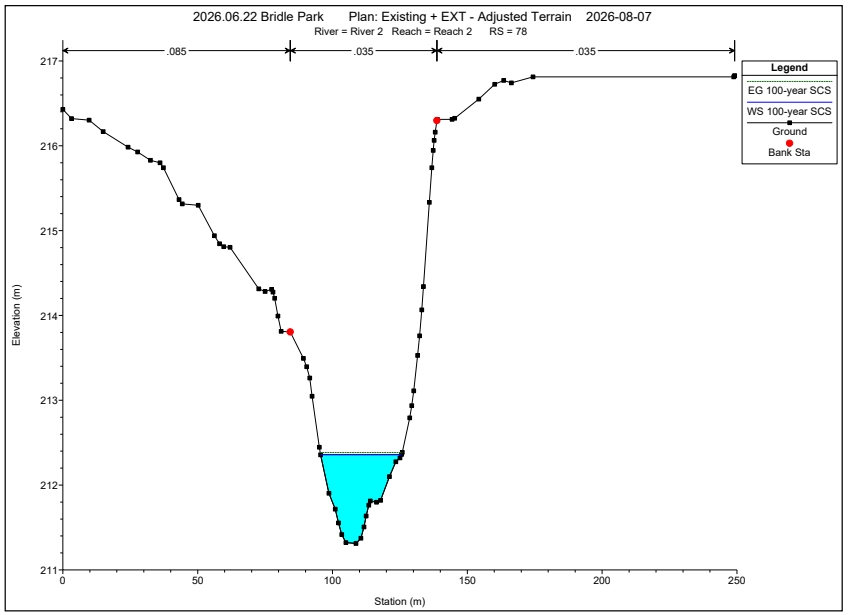

2026.06.22 Bridle Park Plan: Existing + EXT - Adjusted Terrain 2026-08-07
River = River 2 Reach = Reach 2 RS = 280
.085
.035
.085
Legend
EG 100-year SCS
WS 100-year SCS
Crit 100-year SCS
Ground
Levee
Ineff
Bank Sta
Elevation (m)
Station (m)

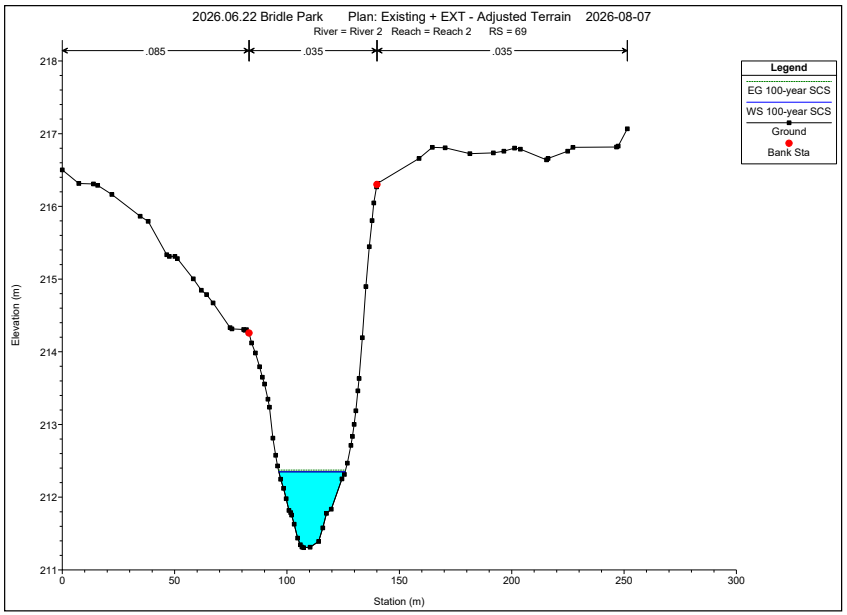

2026.06.22 Bridle Park Plan: Existing + EXT - Adjusted Terrain 2026-08-07
River = River 2 Reach = Reach 2 RS = 278
.085
.035
.085
Legend
EG 100-year SCS
WS 100-year SCS
Crit 100-year SCS
Ground
Bank Sta
Elevation (m)
Station (m)

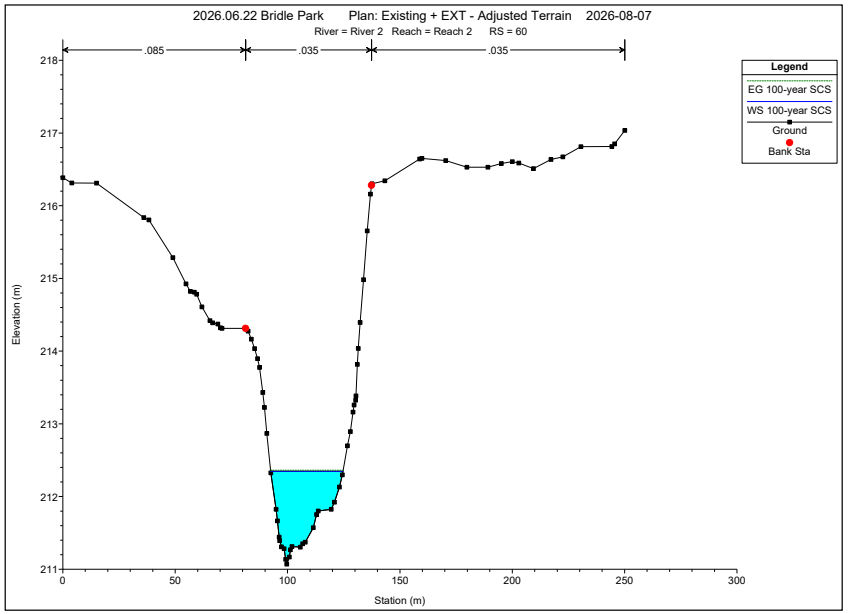

2026.06.22 Bridle Park Plan: Existing + EXT - Adjusted Terrain 2026-08-07
River = River 2 Reach = Reach 2 RS = 199
.085
.035
.035
Legend
EG 100-year SCS
WS 100-year SCS
Crit 100-year SCS
Ground
Bank Sta
Elevation (m)
Station (m)

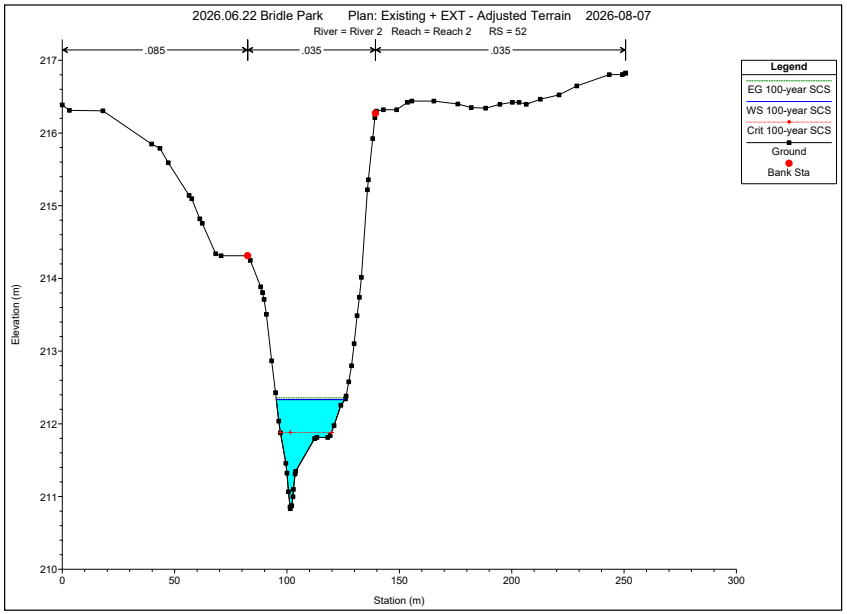

2026.06.22 Bridle Park Plan: Existing + EXT - Adjusted Terrain 2026-08-07
River = River 2 Reach = Reach 2 RS = 143
.085
.035
.035
Legend
EG 100-year SCS
WS 100-year SCS
Ground
Bank Sta
Elevation (m)
Station (m)

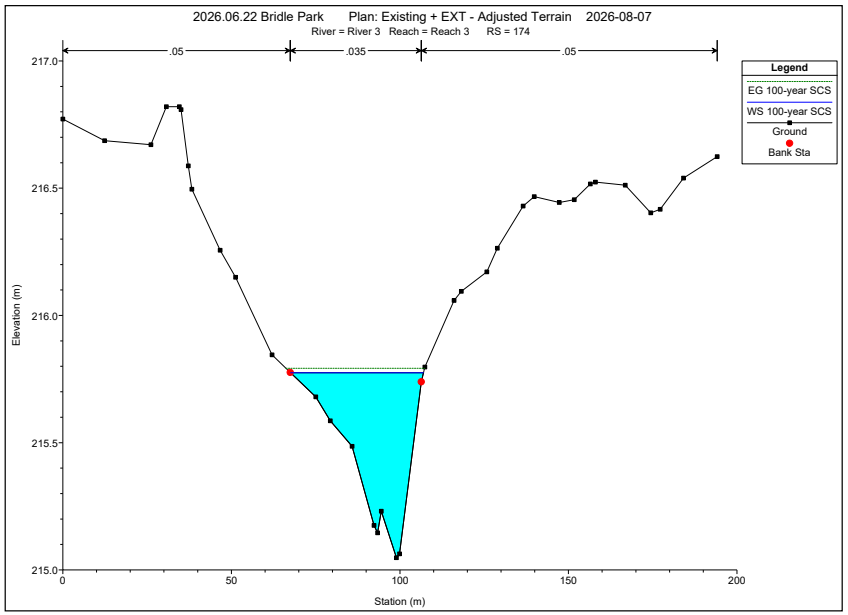

2026.06.22 Bridle Park Plan: Existing + EXT - Adjusted Terrain 2026-08-07
River = River 2 Reach = Reach 2 RS = 88
.085
.035
.035
Legend
EG 100-year SCS
WS 100-year SCS
Ground
Bank Sta
Elevation (m)
Station (m)

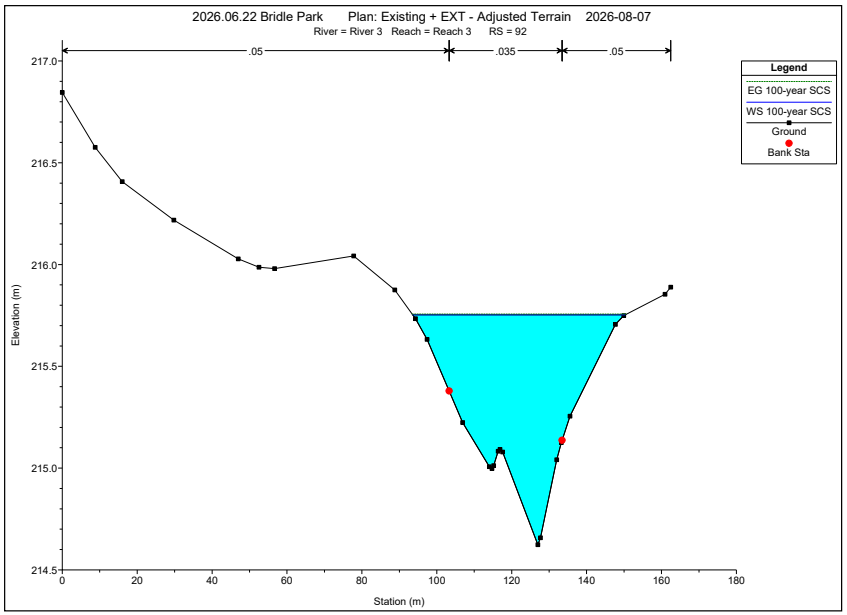

2026.06.22 Bridle Park Plan: Existing + EXT - Adjusted Terrain 2026-08-07
River = River 2 Reach = Reach 2 RS = 78
.085
.035
.035
Legend
EG 100-year SCS
WS 100-year SCS
Ground
Bank Sta
Elevation (m)
Station (m)

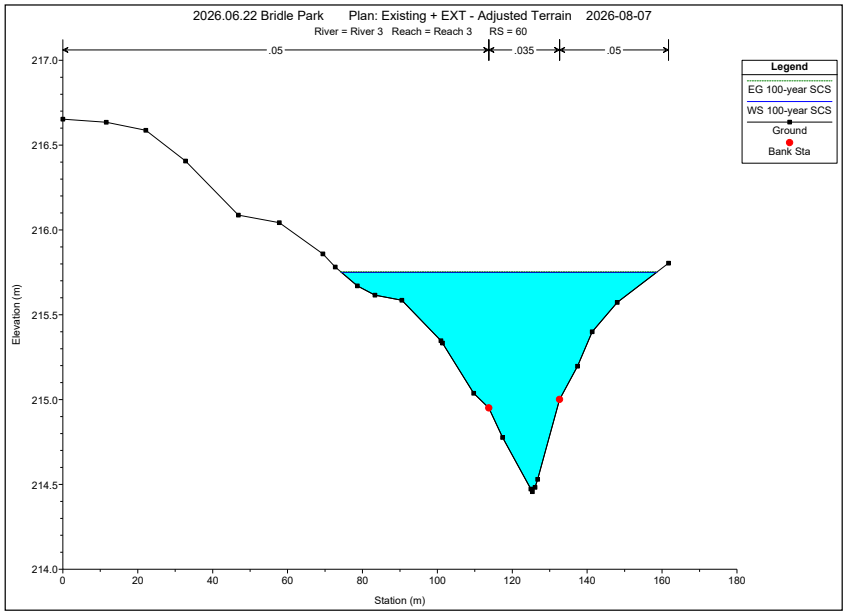

2026.06.22 Bridle Park Plan: Existing + EXT - Adjusted Terrain 2026-08-07
River = River 2 Reach = Reach 2 RS = 69
.085
.035
.035
Legend
EG 100-year SCS
WS 100-year SCS
Ground
Bank Sta
Elevation (m)
Station (m)

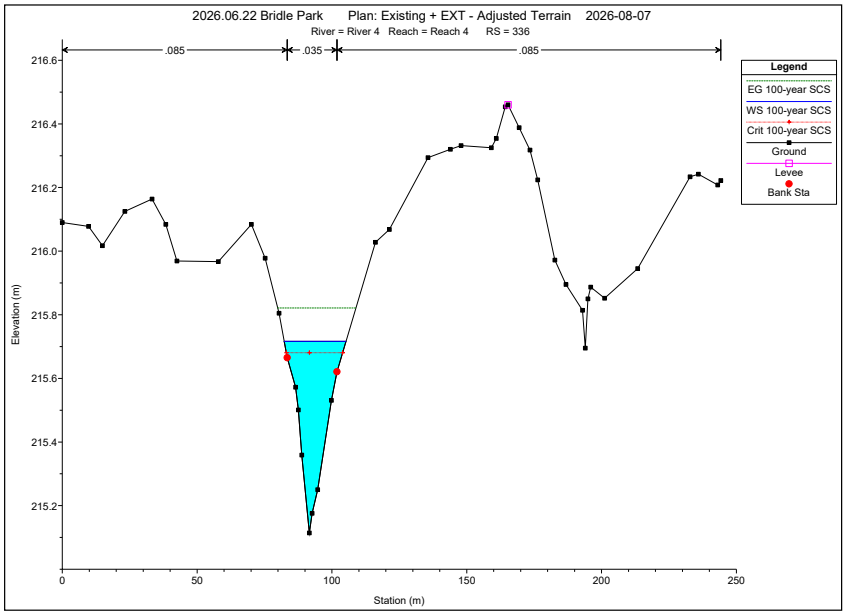

2026.06.22 Bridle Park Plan: Existing + EXT - Adjusted Terrain 2026-08-07
River = River 2 Reach = Reach 2 RS = 60
.085
.035
.035
Legend
EG 100-year SCS
WS 100-year SCS
Ground
Bank Sta
Elevation (m)
Station (m)

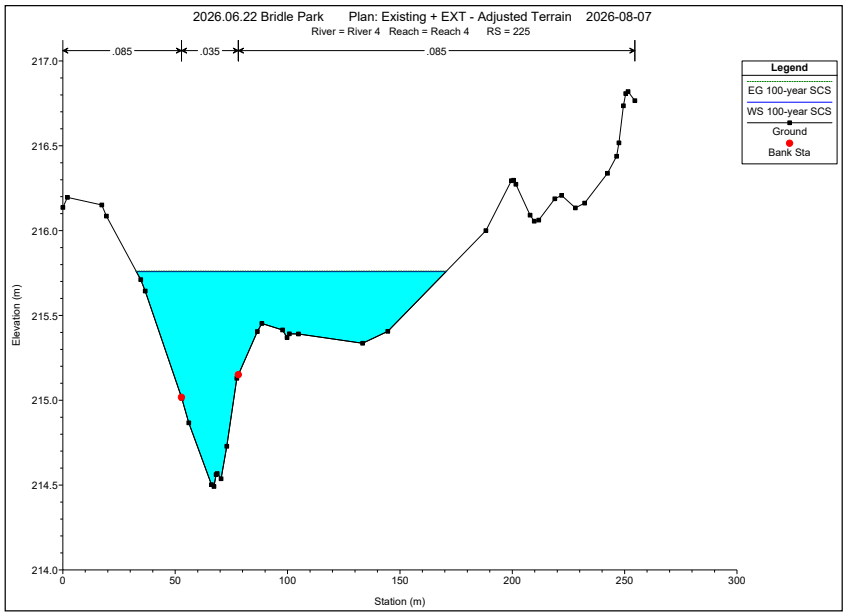

2026.06.22 Bridle Park Plan: Existing + EXT - Adjusted Terrain 2026-08-07
River = River 2 Reach = Reach 2 RS = 52
.085
.035
.035
Legend
EG 100-year SCS
WS 100-year SCS
Crit 100-year SCS
Ground
Bank Sta
Elevation (m)
Station (m)

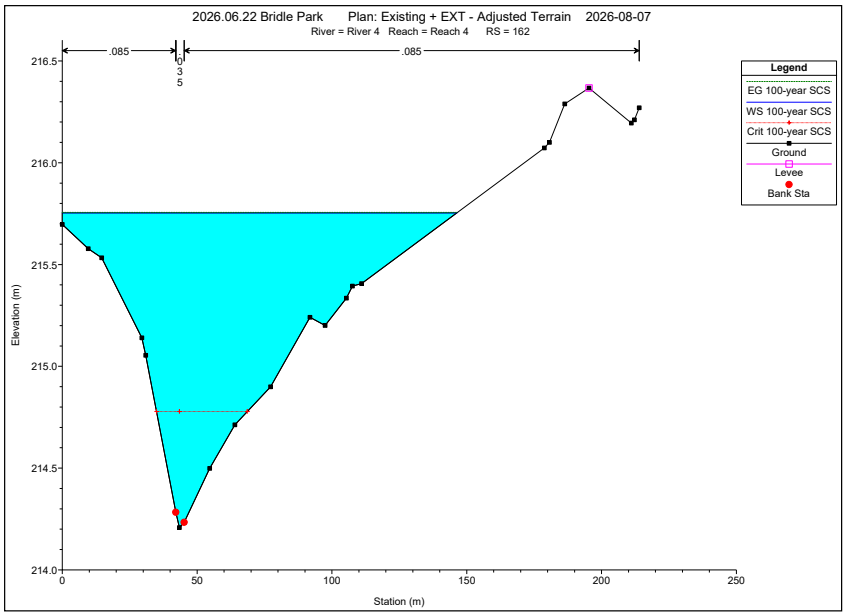

2026.06.22 Bridle Park Plan: Existing + EXT - Adjusted Terrain 2026-08-07
River = River 3 Reach = Reach 3 RS = 174
.05
.035
.05
Legend
EG 100-year SCS
WS 100-year SCS
Ground
Bank Sta
Elevation (m)
Station (m)

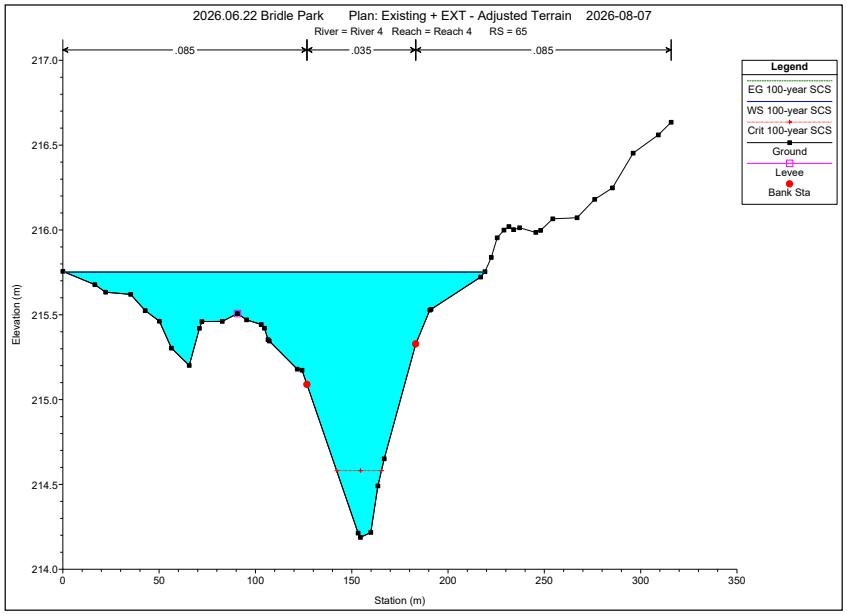

2026.06.22 Bridle Park Plan: Existing + EXT - Adjusted Terrain 2026-08-07
River = River 3 Reach = Reach 3 RS = 92
.05
.035
.05
Legend
EG 100-year SCS
WS 100-year SCS
Ground
Bank Sta
Elevation (m)
Station (m)

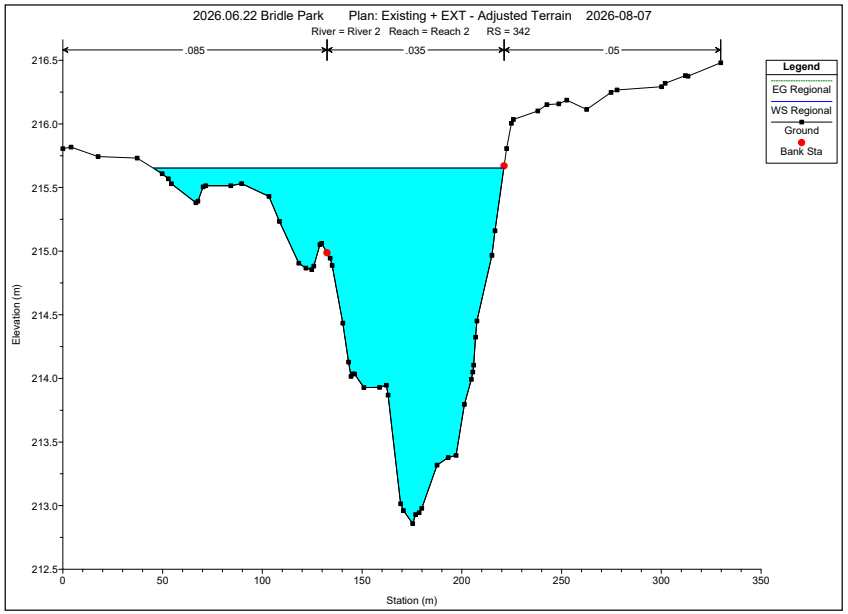

2026.06.22 Bridle Park Plan: Existing + EXT - Adjusted Terrain 2026-08-07
River = River 3 Reach = Reach 3 RS = 60
.05
.035
.05
Legend
EG 100-year SCS
WS 100-year SCS
Ground
Bank Sta
Elevation (m)
Station (m)

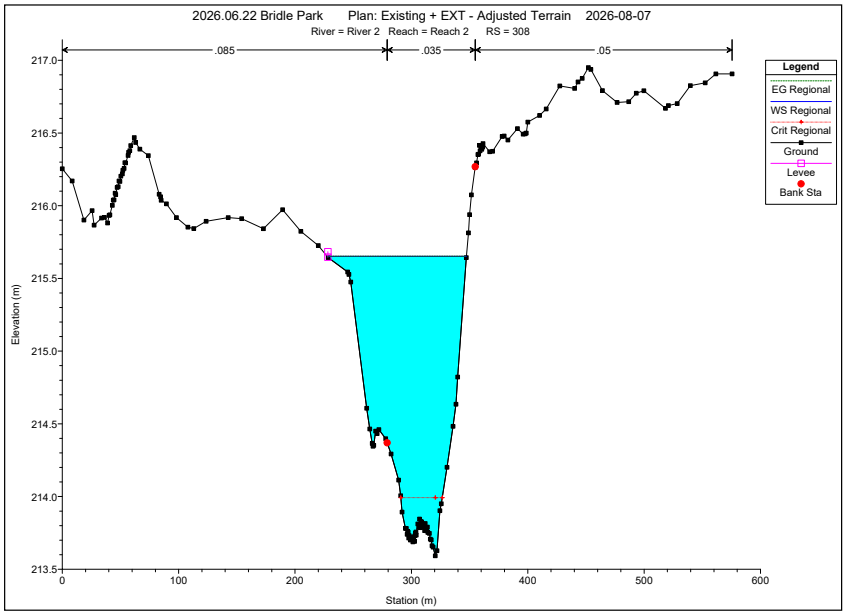

2026.06.22 Bridle Park Plan: Existing + EXT - Adjusted Terrain 2026-08-07
River = River 4 Reach = Reach 4 RS = 336
.085
.035
.085
Legend
EG 100-year SCS
WS 100-year SCS
Crit 100-year SCS
Ground
Levee
Bank Sta
Elevation (m)
Station (m)

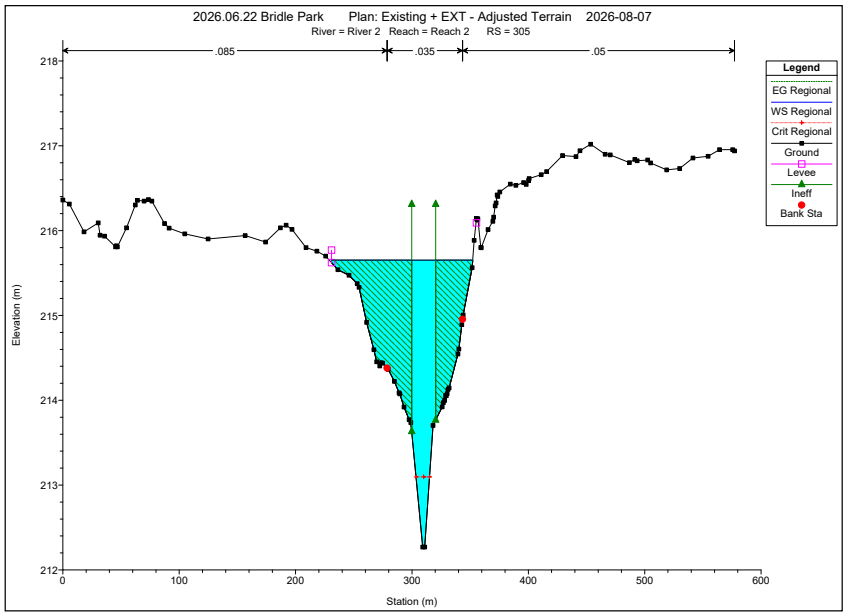

2026.06.22 Bridle Park Plan: Existing + EXT - Adjusted Terrain 2026-08-07
River = River 4 Reach = Reach 4 RS = 225
.085
.035
.085
Legend
EG 100-year SCS
WS 100-year SCS
Ground
Bank Sta
Elevation (m)
Station (m)

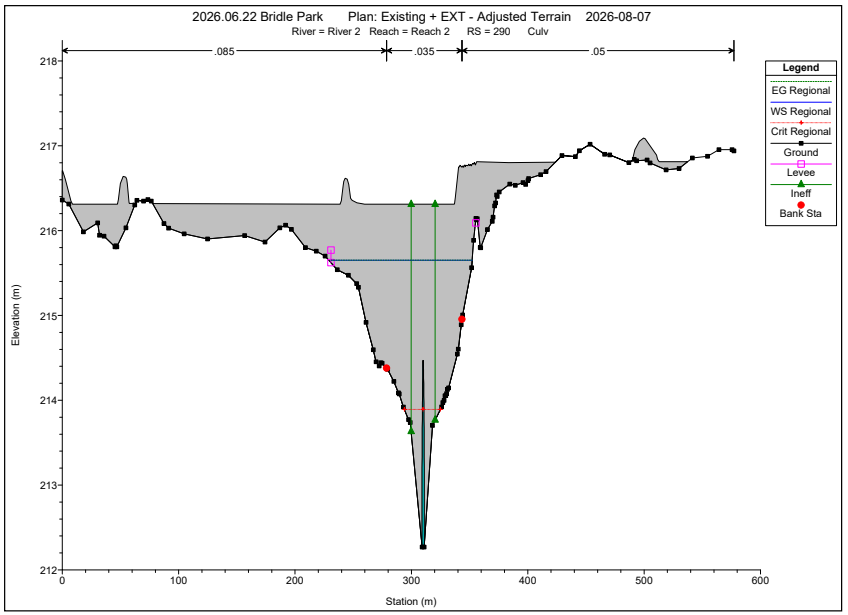

2026.06.22 Bridle Park Plan: Existing + EXT - Adjusted Terrain 2026-08-07
River = River 4 Reach = Reach 4 RS = 162
.085
.085
Legend
EG 100-year SCS
WS 100-year SCS
Crit 100-year SCS
Ground
Levee
Bank Sta
Elevation (m)
Station (m)

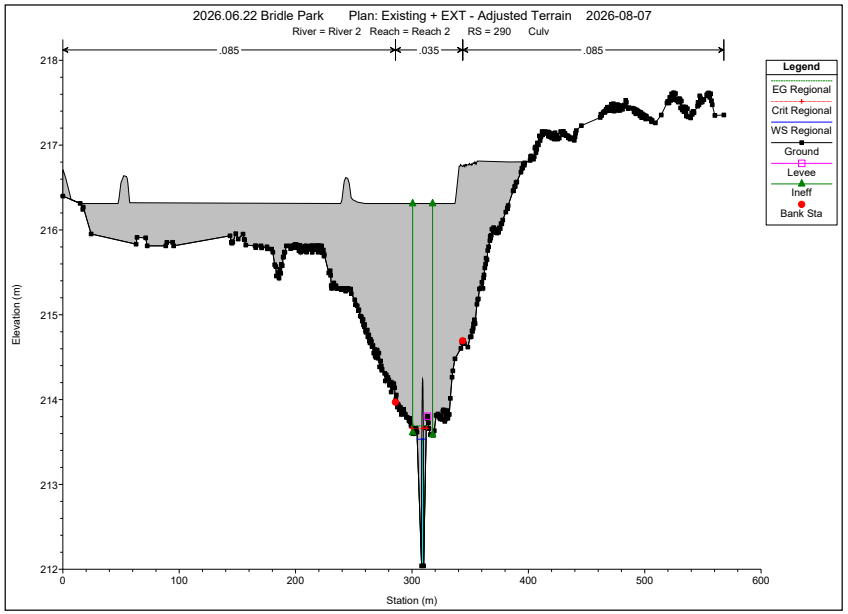

2026.06.22 Bridle Park Plan: Existing + EXT - Adjusted Terrain 2026-08-07
River = River 4 Reach = Reach 4 RS = 65
.085
.035
.085
Legend
EG 100-year SCS
WS 100-year SCS
Crit 100-year SCS
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
217.0
216.5
216.0
215.5
215.0
214.5
214.0
0
50
100
150
200
250
300
350

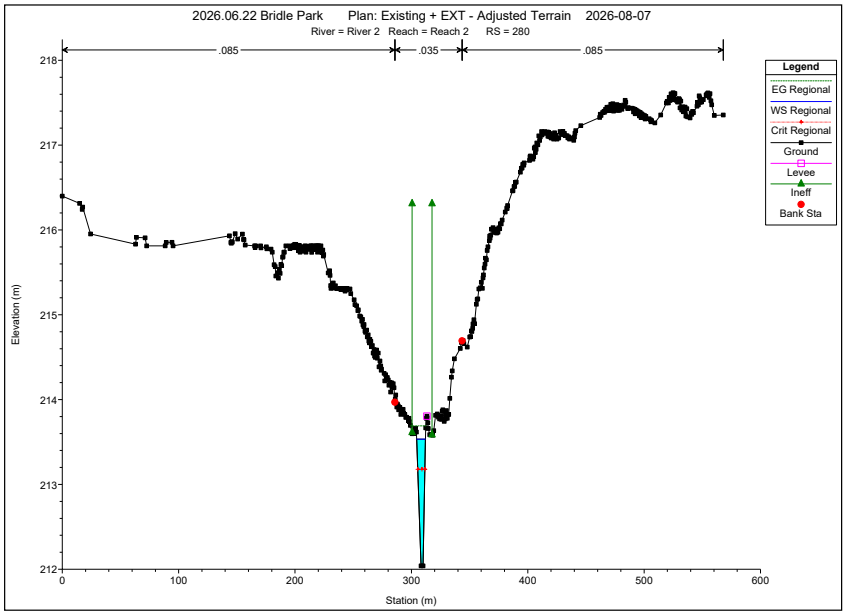

2026.06.22 Bridle Park Plan: Existing + EXT - Adjusted Terrain 2026-08-07
River = River 2 Reach = Reach 2 RS = 342
.085
.035
.05
Legend
EG Regional
WS Regional
Ground
Bank Sta
Elevation (m)
Station (m)

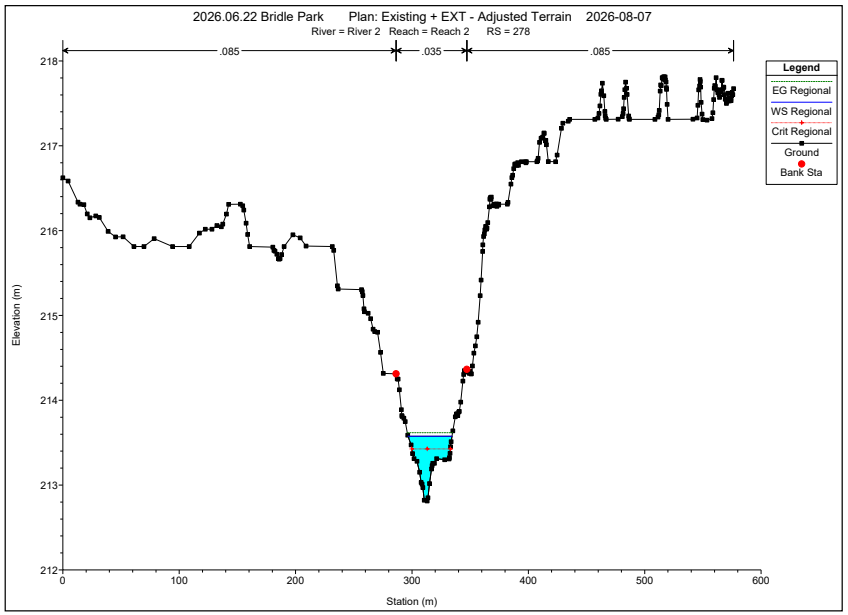

2026.06.22 Bridle Park Plan: Existing + EXT - Adjusted Terrain 2026-08-07
River = River 2 Reach = Reach 2 RS = 308
.085
.035
.05
Legend
EG Regional
WS Regional
Crit Regional
Ground
Levee
Bank Sta
Elevation (m)
Station (m)

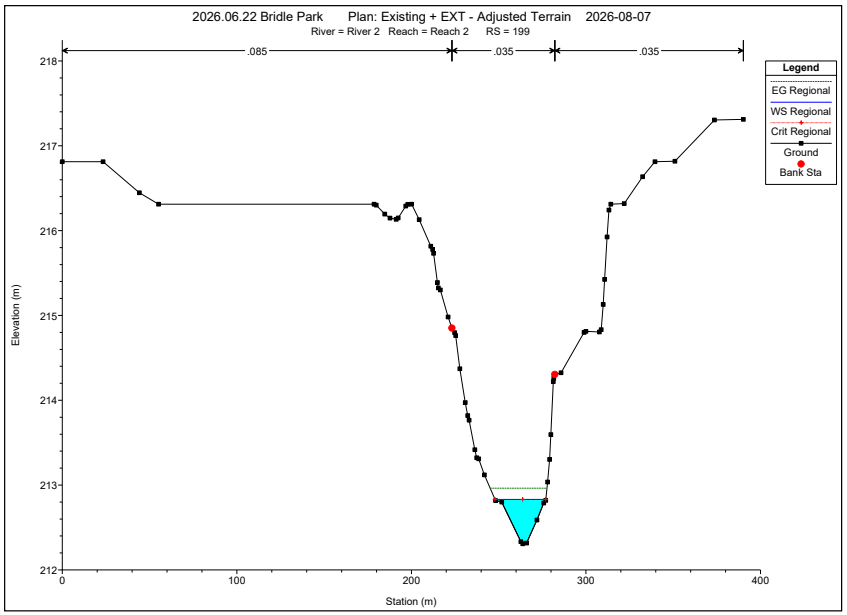

2026.06.22 Bridle Park Plan: Existing + EXT - Adjusted Terrain 2026-08-07
River = River 2 Reach = Reach 2 RS = 305
.085
.035
.05
Legend
EG Regional
WS Regional
Crit Regional
Ground
Levee
Ineff
Bank Sta
Elevation (m)
Station (m)

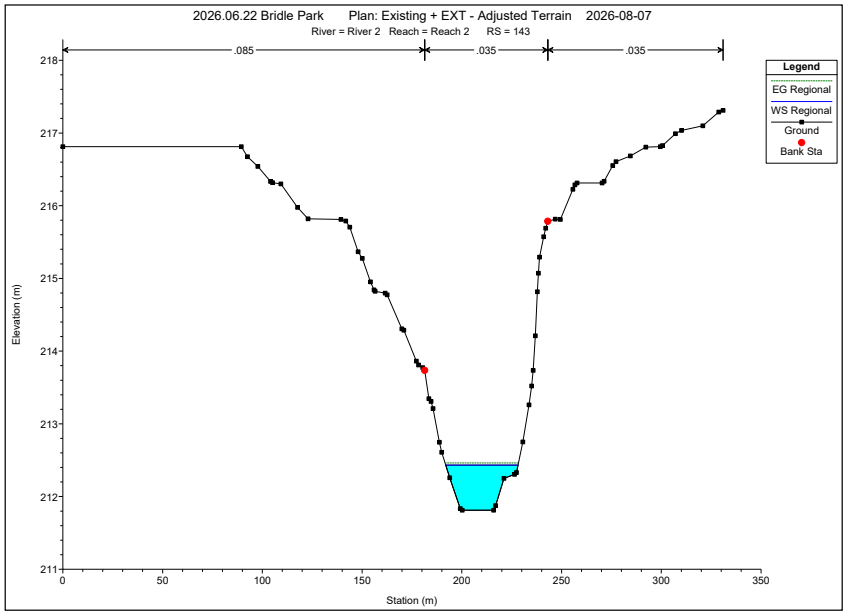

2026.06.22 Bridle Park Plan: Existing + EXT - Adjusted Terrain 2026-08-07
River = River 2 Reach = Reach 2 RS = 290 Culv
.085
.035
.05
Legend
EG Regional
WS Regional
Crit Regional
Ground
Levee
Ineff
Bank Sta
Elevation (m)
Station (m)

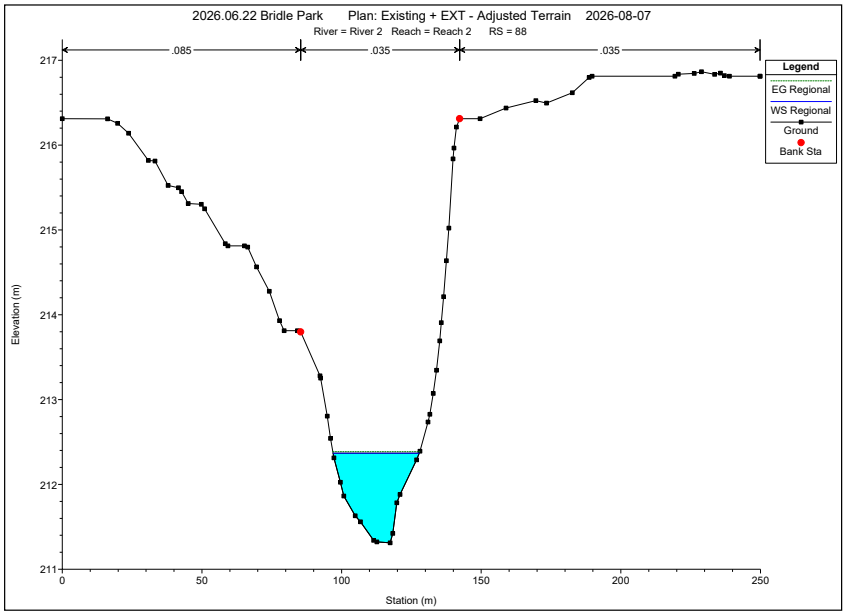

2026.06.22 Bridle Park Plan: Existing + EXT - Adjusted Terrain 2026-08-07
River = River 2 Reach = Reach 2 RS = 290 Culv
.085
.035
.085
Legend
EG Regional
Crit Regional
WS Regional
Ground
Levee
Ineff
Bank Sta
Elevation (m)
Station (m)

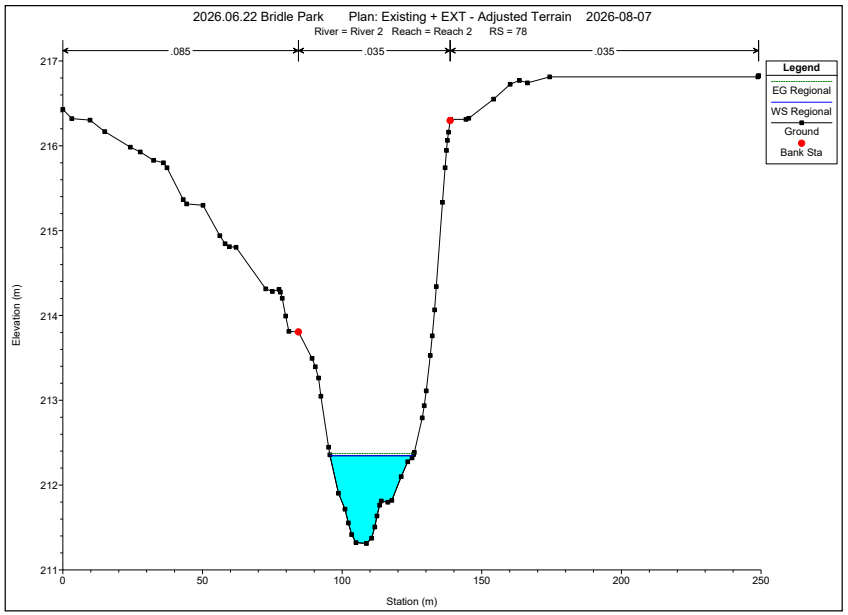

2026.06.22 Bridle Park Plan: Existing + EXT - Adjusted Terrain 2026-08-07
River = River 2 Reach = Reach 2 RS = 280
.085
.035
.085
Legend
EG Regional
WS Regional
Crit Regional
Ground
Levee
Ineff
Bank Sta
Elevation (m)
Station (m)

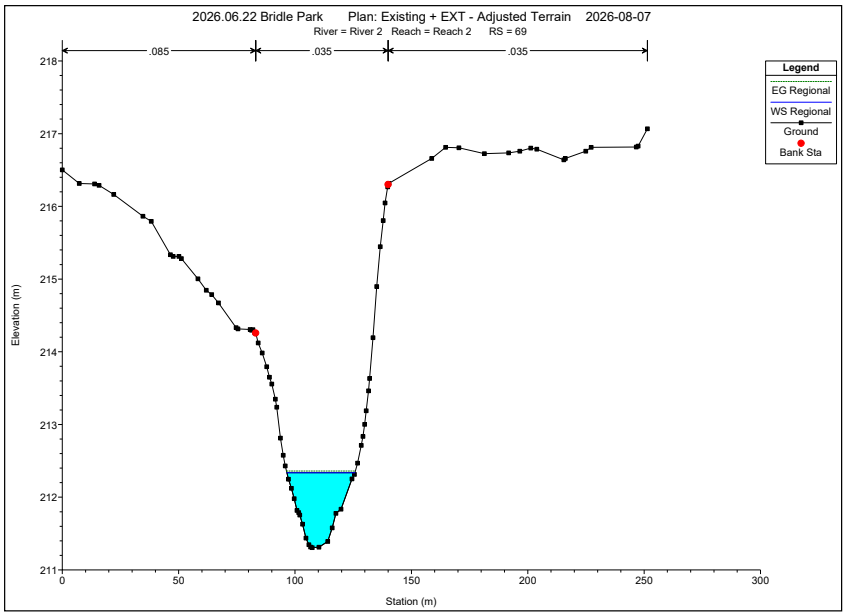

2026.06.22 Bridle Park Plan: Existing + EXT - Adjusted Terrain 2026-08-07
River = River 2 Reach = Reach 2 RS = 278
.085
.035
.085
Legend
EG Regional
WS Regional
Crit Regional
Ground
Bank Sta
Elevation (m)
Station (m)

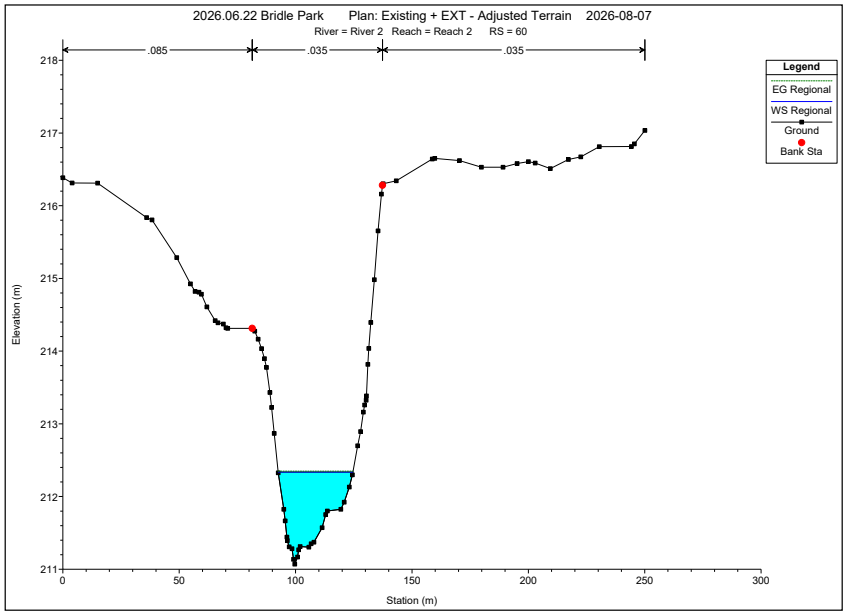

2026.06.22 Bridle Park Plan: Existing + EXT - Adjusted Terrain 2026-08-07
River = River 2 Reach = Reach 2 RS = 199
.085
.035
.035
Legend
EG Regional
WS Regional
Crit Regional
Ground
Bank Sta
Elevation (m)
Station (m)

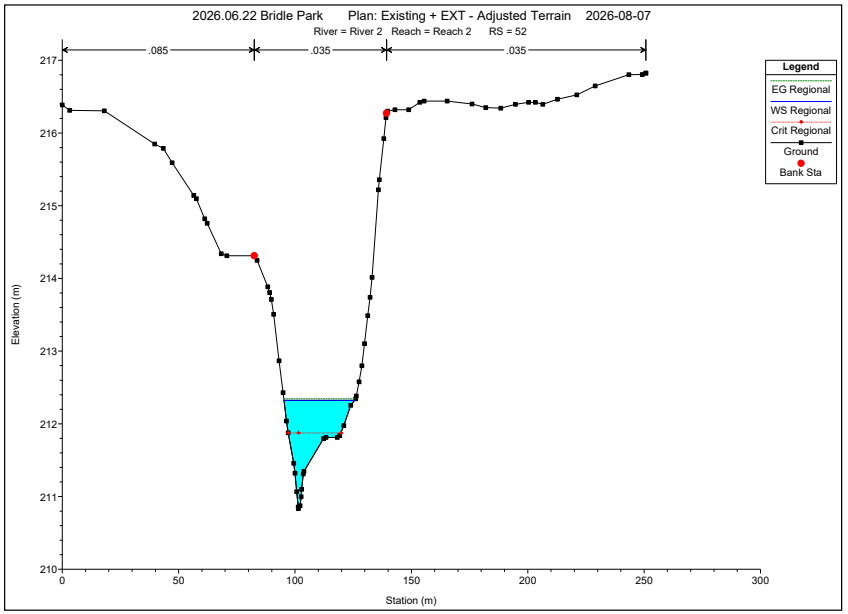

2026.06.22 Bridle Park Plan: Existing + EXT - Adjusted Terrain 2026-08-07
River = River 2 Reach = Reach 2 RS = 143
.085
.035
.035
Legend
EG Regional
WS Regional
Ground
Bank Sta
Elevation (m)
Station (m)

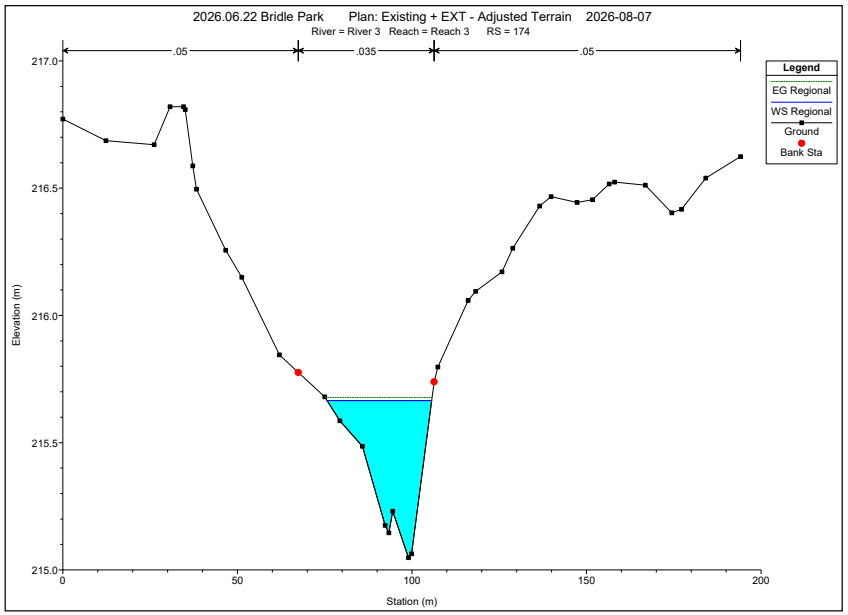

2026.06.22 Bridle Park Plan: Existing + EXT - Adjusted Terrain 2026-08-07
River = River 2 Reach = Reach 2 RS = 88
.085
.035
.035
Legend
EG Regional
WS Regional
Ground
Bank Sta
Elevation (m)
Station (m)

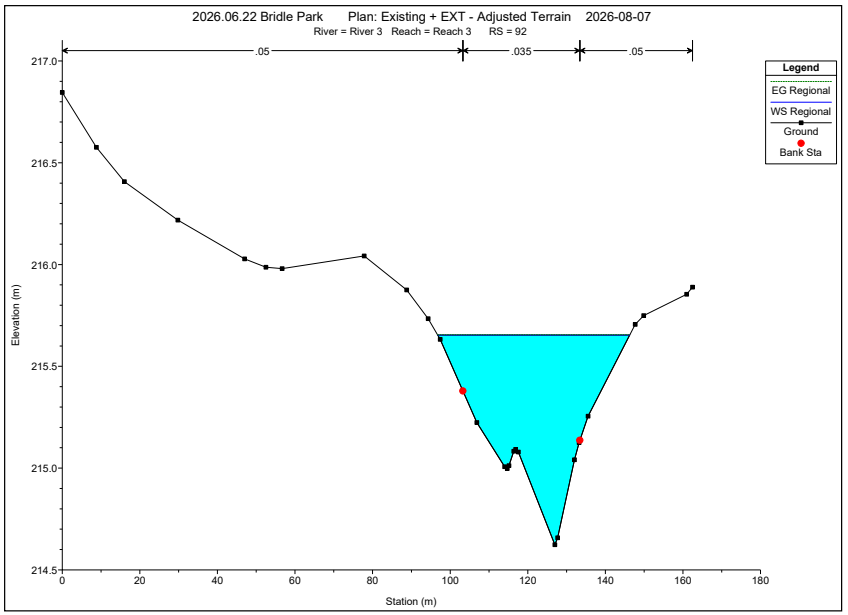

2026.06.22 Bridle Park Plan: Existing + EXT - Adjusted Terrain 2026-08-07
River = River 2 Reach = Reach 2 RS = 78
.085
.035
.035
Legend
EG Regional
WS Regional
Ground
Bank Sta
Elevation (m)
Station (m)

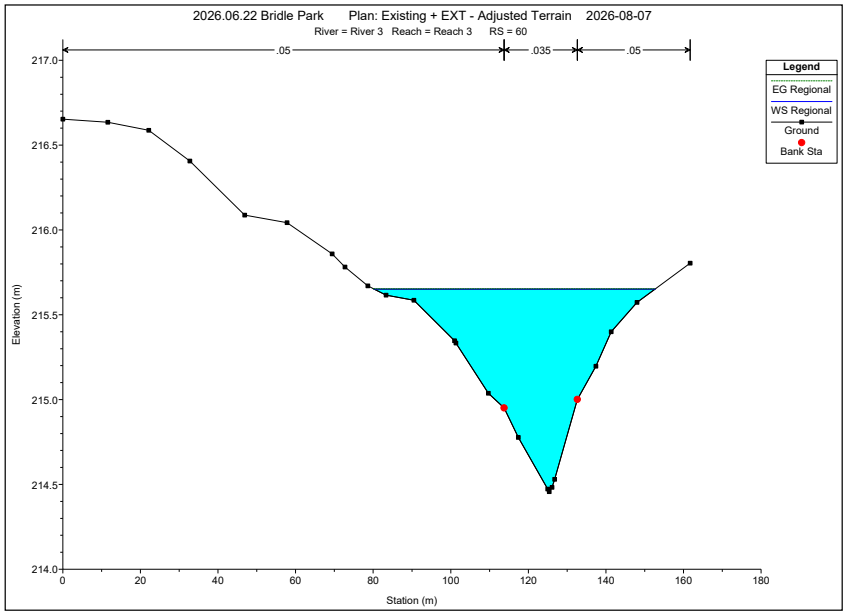

2026.06.22 Bridle Park Plan: Existing + EXT - Adjusted Terrain 2026-08-07
River = River 2 Reach = Reach 2 RS = 69
.085
.035
.035
Legend
EG Regional
WS Regional
Ground
Bank Sta
Elevation (m)
Station (m)

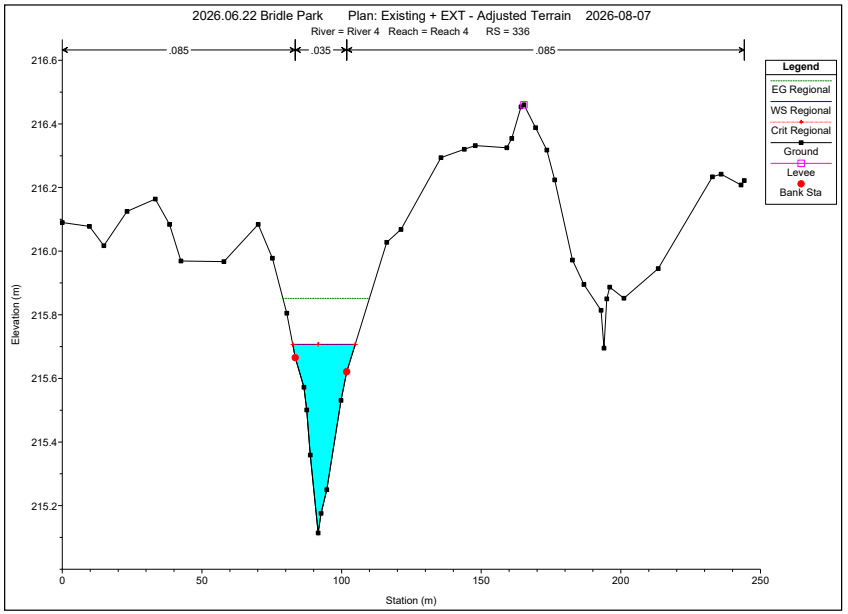

2026.06.22 Bridle Park Plan: Existing + EXT - Adjusted Terrain 2026-08-07
River = River 2 Reach = Reach 2 RS = 60
.085
.035
.035
Legend
EG Regional
WS Regional
Ground
Bank Sta
Elevation (m)
Station (m)

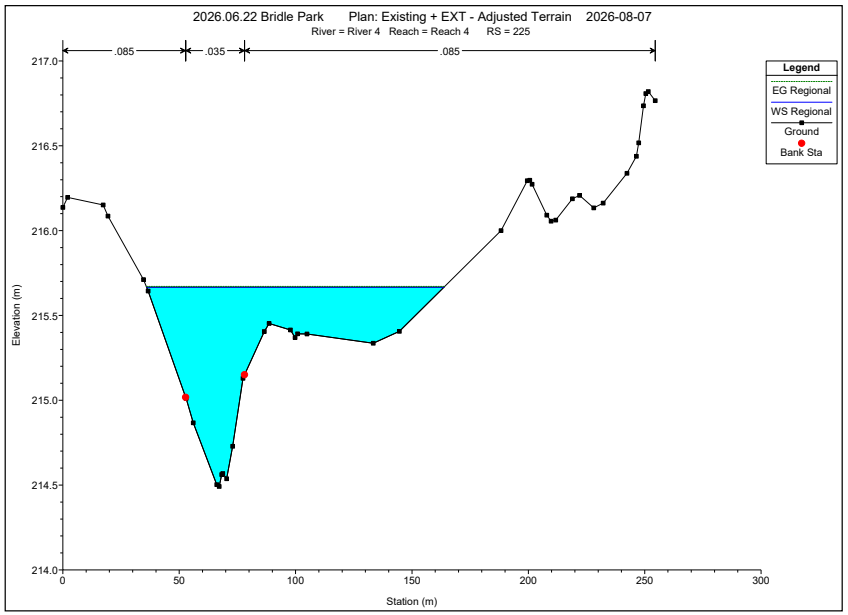

2026.06.22 Bridle Park Plan: Existing + EXT - Adjusted Terrain 2026-08-07
River = River 2 Reach = Reach 2 RS = 52
.085
.035
.035
Legend
EG Regional
WS Regional
Crit Regional
Ground
Bank Sta
Elevation (m)
Station (m)

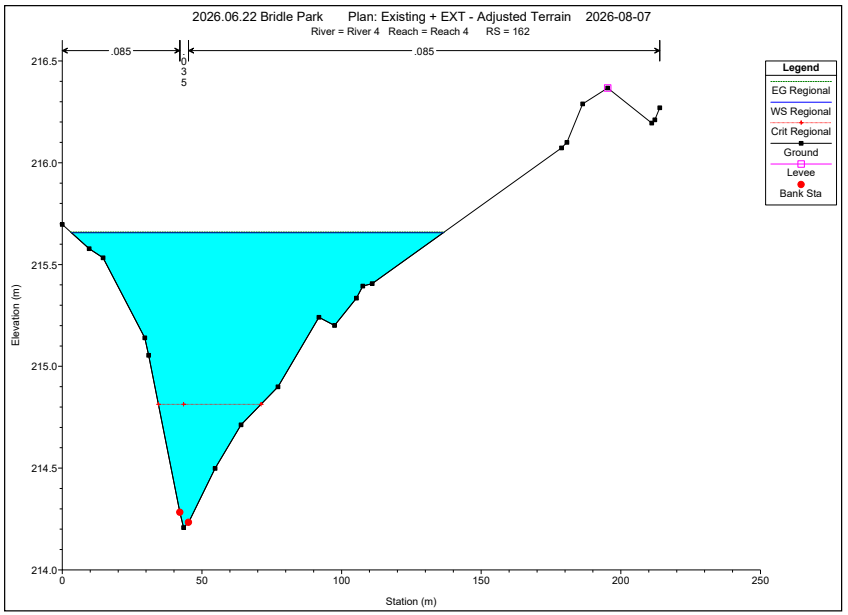

2026.06.22 Bridle Park Plan: Existing + EXT - Adjusted Terrain 2026-08-07
River = River 3 Reach = Reach 3 RS = 174
.05
.035
.05
Legend
EG Regional
WS Regional
Ground
Bank Sta
Elevation (m)
Station (m)

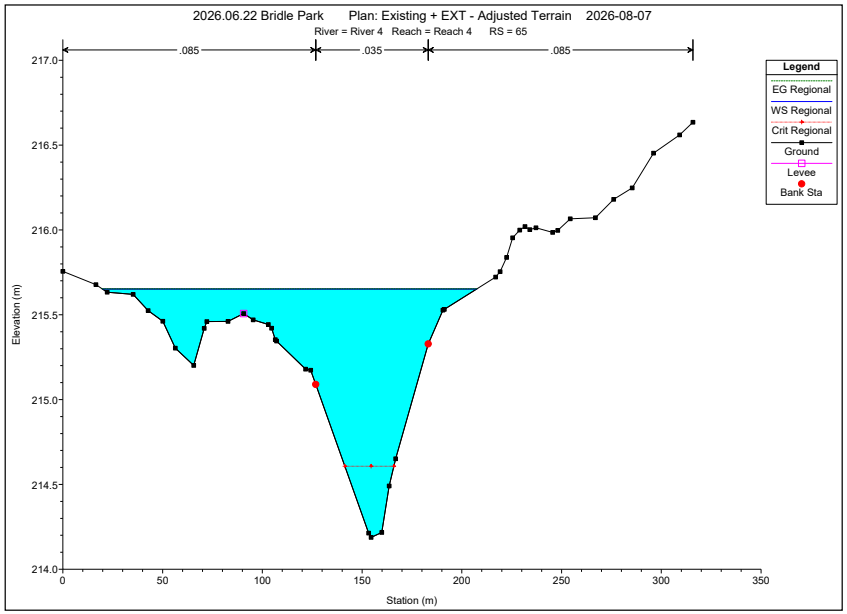

2026.06.22 Bridle Park Plan: Existing + EXT - Adjusted Terrain 2026-08-07
River = River 3 Reach = Reach 3 RS = 92
.05
.035
.05
Legend
EG Regional
WS Regional
Ground
Bank Sta
Elevation (m)
Station (m)


2026.06.22 Bridle Park Plan: Existing + EXT - Adjusted Terrain 2026-08-07
River = River 3 Reach = Reach 3 RS = 60
.05
.035
.05
Legend
EG Regional
WS Regional
Ground
Bank Sta
Elevation (m)
Station (m)


2026.06.22 Bridle Park Plan: Existing + EXT - Adjusted Terrain 2026-08-07
River = River 4 Reach = Reach 4 RS = 336
.085
.035
.085
Legend
EG Regional
WS Regional
Crit Regional
Ground
Levee
Bank Sta
Elevation (m)
Station (m)


2026.06.22 Bridle Park Plan: Existing + EXT - Adjusted Terrain 2026-08-07
River = River 4 Reach = Reach 4 RS = 225
.085
.035
.085
Legend
EG Regional
WS Regional
Ground
Bank Sta
Elevation (m)
Station (m)


2026.06.22 Bridle Park Plan: Existing + EXT - Adjusted Terrain 2026-08-07
River = River 4 Reach = Reach 4 RS = 162
.085
.085
Legend
EG Regional
WS Regional
Crit Regional
Ground
Levee
Bank Sta
Elevation (m)
Station (m)

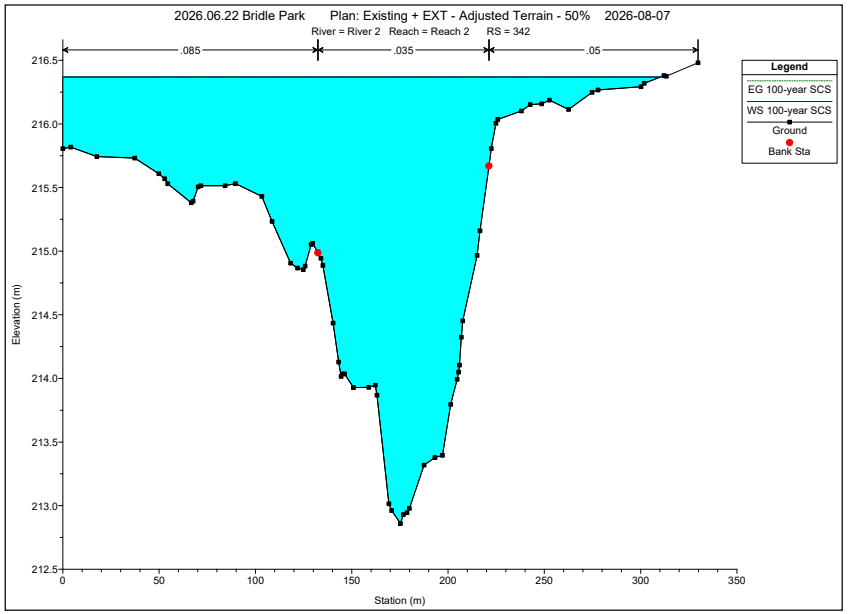

2026.06.22 Bridle Park Plan: Existing + EXT - Adjusted Terrain 2026-08-07
River = River 4 Reach = Reach 4 RS = 65
.085
.035
.085
Legend
EG Regional
WS Regional
Crit Regional
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
217.0
216.5
216.0
215.5
215.0
214.5
214.0
0
50
100
150
200
250
300
350

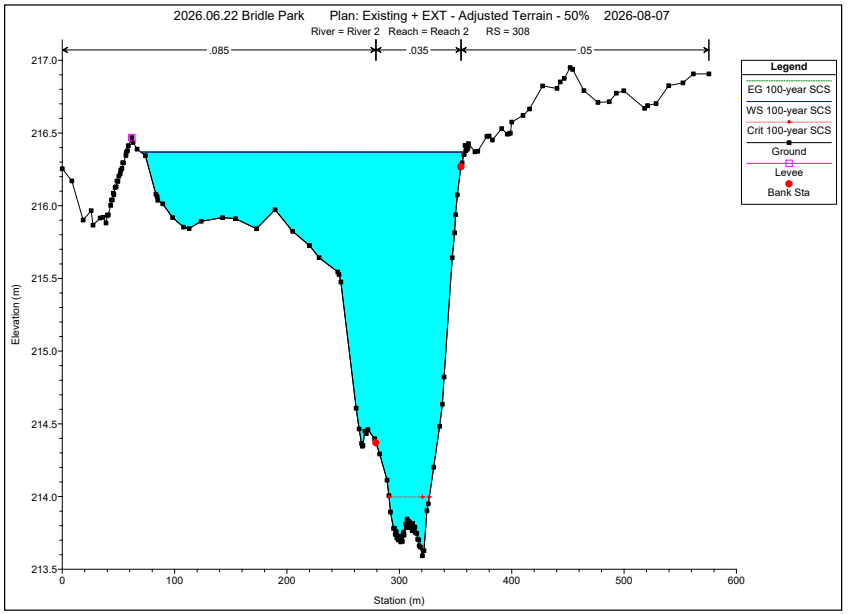
HEC-RAS Plan: Existing + EXT

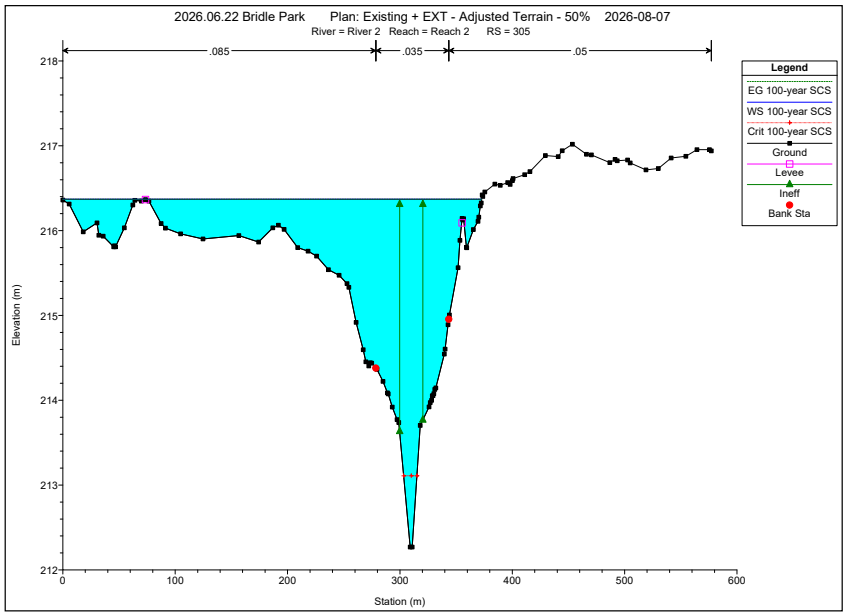
River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
River 4	Reach 4	336	100-year SCS	8.33	215.11	215.72	215.68	215.82	0.011950	1.44	5.96	22.90	0.82
River 4	Reach 4	336	Regional	9.46	215.11	215.71	215.71	215.85	0.017071	1.69	5.75	22.36	0.98
River 4	Reach 4	225	100-year SCS	8.33	214.49	215.76		215.76	0.000076	0.25	63.41	137.89	0.08
River 4	Reach 4	225	Regional	9.46	214.49	215.67		215.67	0.000151	0.33	51.12	127.77	0.11
River 4	Reach 4	162	100-year SCS	8.33	214.21	215.75	214.78	215.76	0.000094	0.37	87.60	146.36	0.10
River 4	Reach 4	162	Regional	9.46	214.21	215.66	214.81	215.66	0.000182	0.49	73.91	133.25	0.13
River 4	Reach 4	65	100-year SCS	8.33	214.19	215.75	214.58	215.75	0.000017	0.12	102.61	218.10	0.04
River 4	Reach 4	65	Regional	9.46	214.19	215.65	214.61	215.65	0.000032	0.16	82.43	187.68	0.05
River 3	Reach 3	174	100-year SCS	7.41	215.05	215.77		215.79	0.001890	0.59	12.63	39.43	0.33
River 3	Reach 3	174	Regional	4.33	215.05	215.67		215.68	0.001484	0.49	8.87	29.95	0.29
River 3	Reach 3	92	100-year SCS	7.41	214.62	215.75		215.76	0.000158	0.30	29.02	56.71	0.11
River 3	Reach 3	92	Regional	4.33	214.62	215.65		215.66	0.000090	0.21	23.78	49.50	0.08
River 3	Reach 3	60	100-year SCS	7.41	214.46	215.75		215.75	0.000093	0.28	39.99	84.09	0.09
River 3	Reach 3	60	Regional	4.33	214.46	215.65		215.65	0.000050	0.19	32.29	72.43	0.06
River 2	Reach 2	342	100-year SCS	12.42	212.86	215.75		215.75	0.000003	0.07	200.71	205.88	0.02
River 2	Reach 2	342	Regional	12.10	212.86	215.65		215.65	0.000003	0.08	182.44	175.70	0.02
River 2	Reach 2	308	100-year SCS	12.42	213.59	215.75	214.00	215.75	0.000007	0.10	148.03	132.27	0.03
River 2	Reach 2	308	Regional	12.10	213.59	215.65	213.99	215.65	0.000008	0.11	135.56	119.09	0.03
River 2	Reach 2	305	100-year SCS	12.42	212.27	215.75	213.11	215.75	0.000015	0.22	57.04	121.86	0.04
River 2	Reach 2	305	Regional	12.10	212.27	215.65	213.10	215.65	0.000016	0.22	54.98	121.36	0.04
River 2	Reach 2	290		Culvert									
River 2	Reach 2	280	100-year SCS	12.42	212.04	213.54	213.19	213.70	0.004926	1.79	6.96	7.49	0.59
River 2	Reach 2	280	Regional	12.10	212.04	213.53	213.18	213.69	0.004717	1.75	6.93	7.48	0.58
River 2	Reach 2	278	100-year SCS	12.42	212.81	213.58	213.43	213.62	0.004309	0.93	13.32	37.92	0.50
River 2	Reach 2	278	Regional	12.10	212.81	213.57	213.43	213.62	0.004291	0.92	13.10	37.72	0.50
River 2	Reach 2	199	100-year SCS	12.42	212.31	212.84	212.84	212.97	0.019048	1.62	7.69	29.27	1.01
River 2	Reach 2	199	Regional	12.10	212.31	212.83	212.83	212.96	0.019267	1.61	7.53	29.13	1.01
River 2	Reach 2	143	100-year SCS	12.42	211.81	212.44		212.47	0.002185	0.77	16.06	36.42	0.37
River 2	Reach 2	143	Regional	12.10	211.81	212.43		212.46	0.002247	0.77	15.65	36.21	0.38
River 2	Reach 2	88	100-year SCS	12.42	211.31	212.38		212.40	0.000818	0.61	20.26	31.04	0.24
River 2	Reach 2	88	Regional	12.10	211.31	212.37		212.39	0.000819	0.61	19.89	30.84	0.24
River 2	Reach 2	78	100-year SCS	12.42	211.31	212.36		212.38	0.001210	0.70	17.76	29.98	0.29
River 2	Reach 2	78	Regional	12.10	211.31	212.35		212.37	0.001218	0.70	17.40	29.74	0.29
River 2	Reach 2	69	100-year SCS	12.42	211.31	212.35		212.37	0.000996	0.66	18.69	29.43	0.27
River 2	Reach 2	69	Regional	12.10	211.31	212.34		212.36	0.001000	0.66	18.33	29.24	0.27
River 2	Reach 2	60	100-year SCS	12.42	211.07	212.35		212.36	0.000545	0.53	23.23	32.18	0.20
River 2	Reach 2	60	Regional	12.10	211.07	212.34		212.35	0.000546	0.53	22.84	32.07	0.20
River 2	Reach 2	52	100-year SCS	12.42	210.83	212.33	211.88	212.36	0.001000	0.65	18.99	30.55	0.26
River 2	Reach 2	52	Regional	12.10	210.83	212.32	211.87	212.34	0.001000	0.65	18.62	30.23	0.26

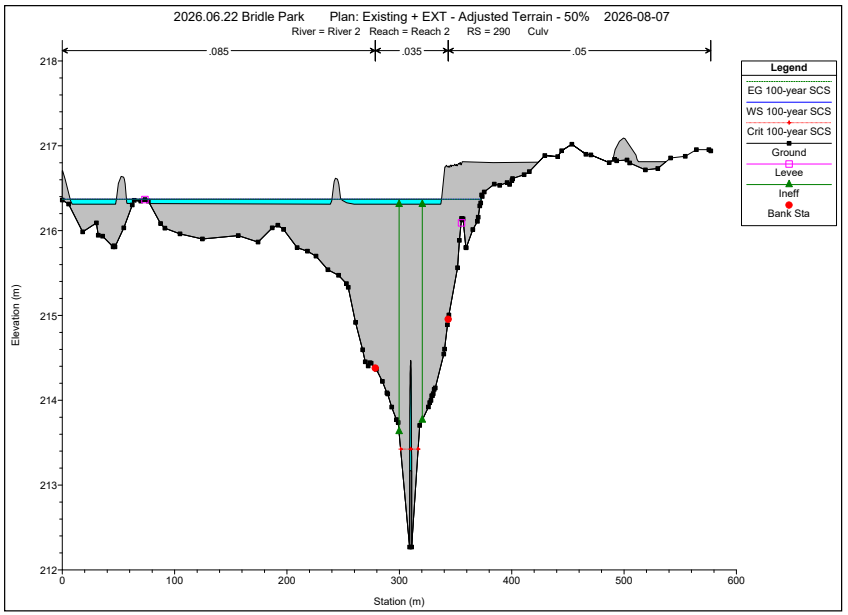
APPENDIX G

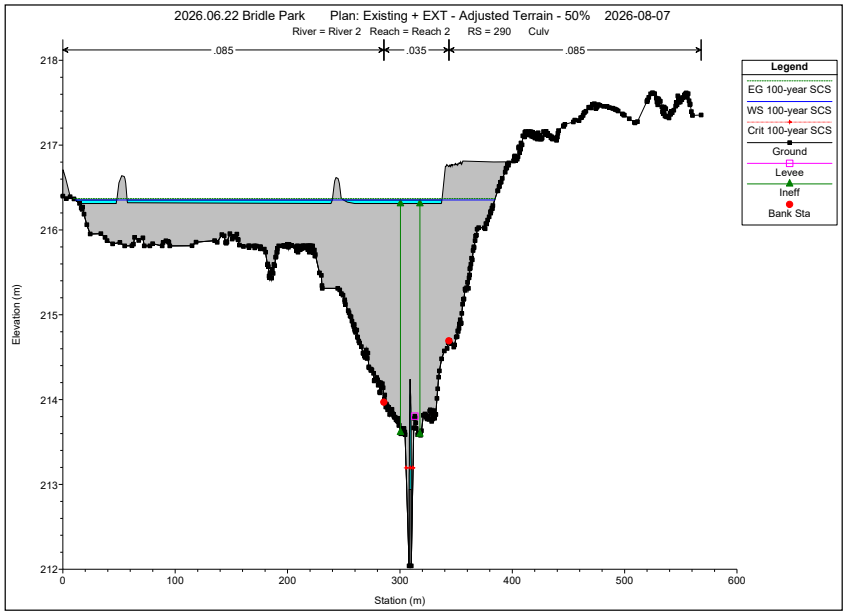
Sensitivity Analysis HEC-RAS Outputs

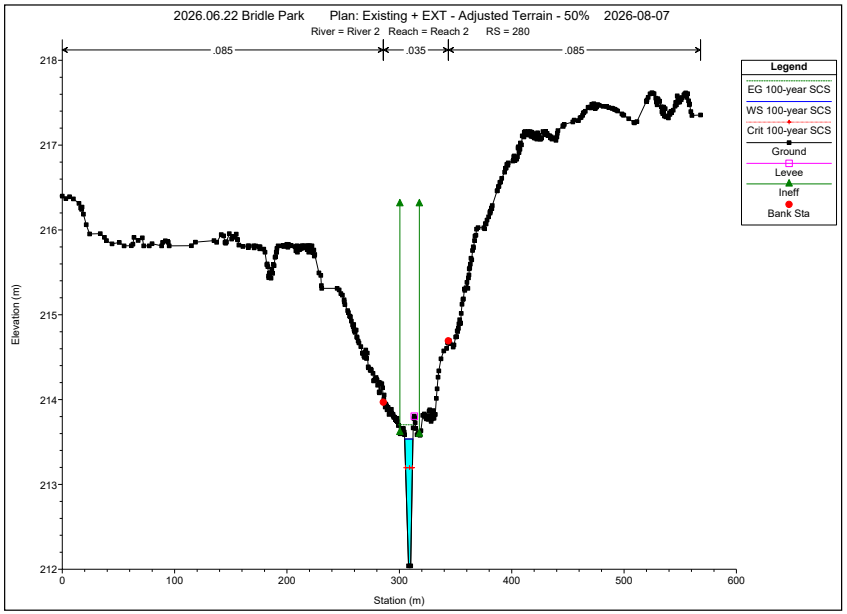

2026.06.22 Bridle Park Plan: Existing + EXT - Adjusted Terrain - 50% 2026-08-07
River = River 2 Reach = Reach 2 RS = 342
.085
.035
.05
Legend
EG 100-year SCS
WS 100-year SCS
Ground
Bank Sta
Elevation (m)
Station (m)

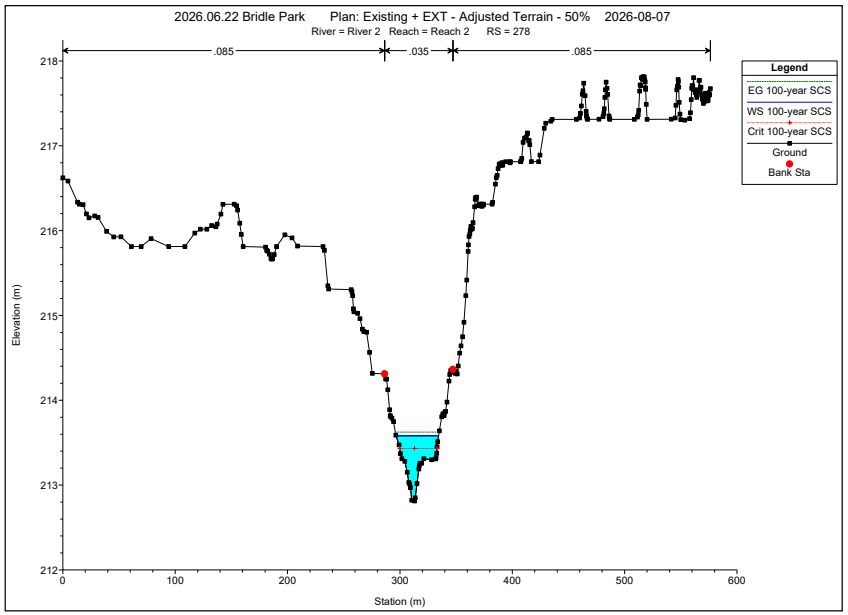

2026.06.22 Bridle Park Plan: Existing + EXT - Adjusted Terrain - 50% 2026-08-07
River = River 2 Reach = Reach 2 RS = 308
.085
.035
.05
Legend
EG 100-year SCS
WS 100-year SCS
Crit 100-year SCS
Ground
Levee
Bank Sta
Elevation (m)
Station (m)

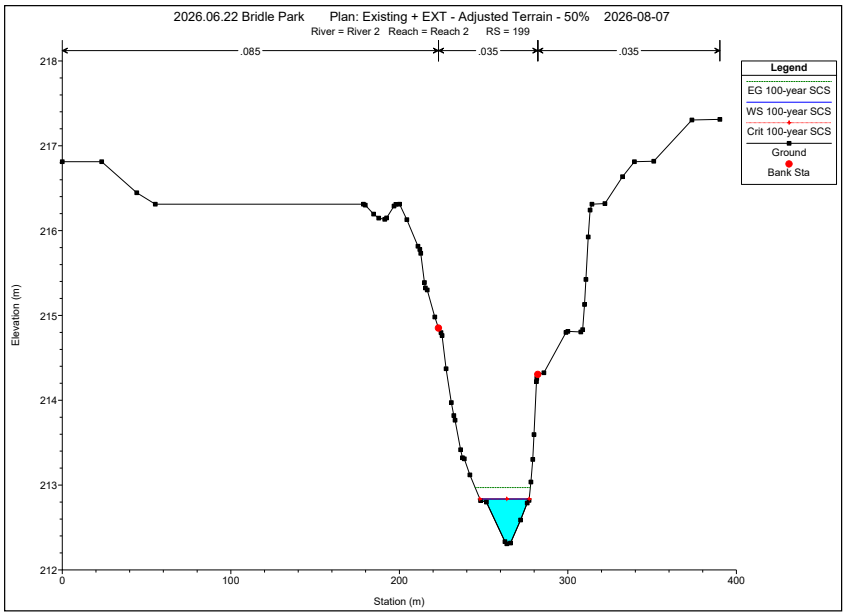

2026.06.22 Bridle Park Plan: Existing + EXT - Adjusted Terrain - 50% 2026-08-07
River = River 2 Reach = Reach 2 RS = 305
.085
.035
.05
Legend
EG 100-year SCS
WS 100-year SCS
Crit 100-year SCS
Ground
Levee
Ineff
Bank Sta
Elevation (m)
Station (m)

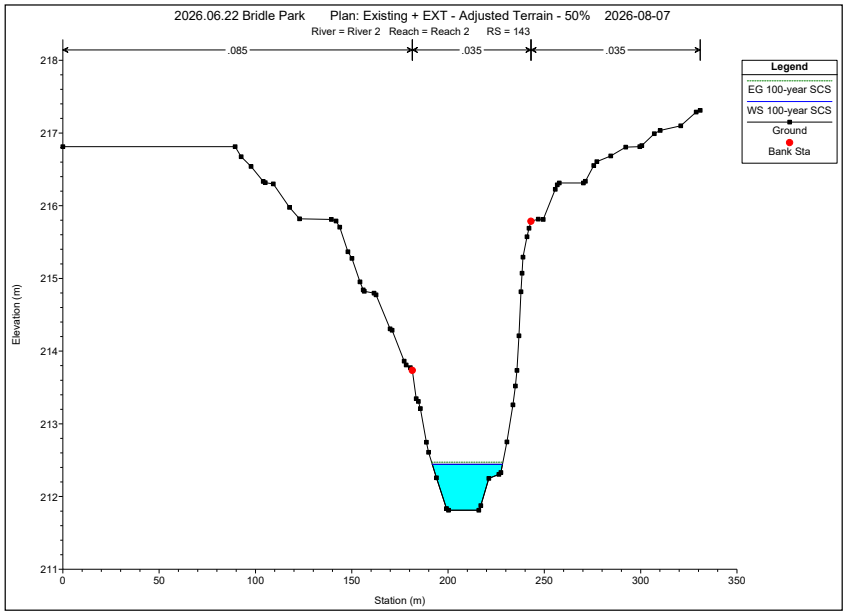

2026.06.22 Bridle Park Plan: Existing + EXT - Adjusted Terrain - 50% 2026-08-07
River = River 2 Reach = Reach 2 RS = 290 Culv
.085
.035
.05
Legend
EG 100-year SCS
WS 100-year SCS
Crit 100-year SCS
Ground
Levee
Ineff
Bank Sta
Elevation (m)
Station (m)

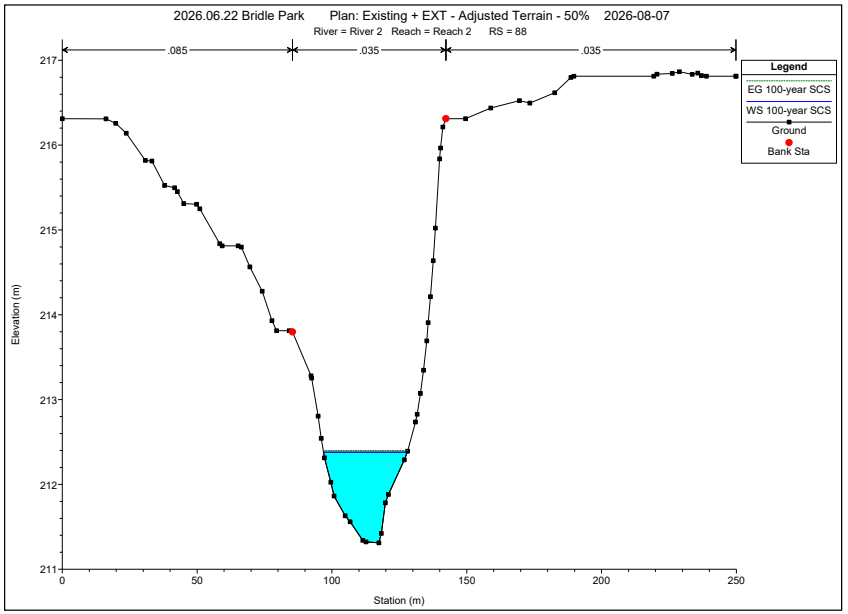

2026.06.22 Bridle Park Plan: Existing + EXT - Adjusted Terrain - 50% 2026-08-07
River = River 2 Reach = Reach 2 RS = 290 Culv
.085
.035
.085
Legend
EG 100-year SCS
WS 100-year SCS
Crit 100-year SCS
Ground
Levee
Ineff
Bank Sta
Elevation (m)
Station (m)

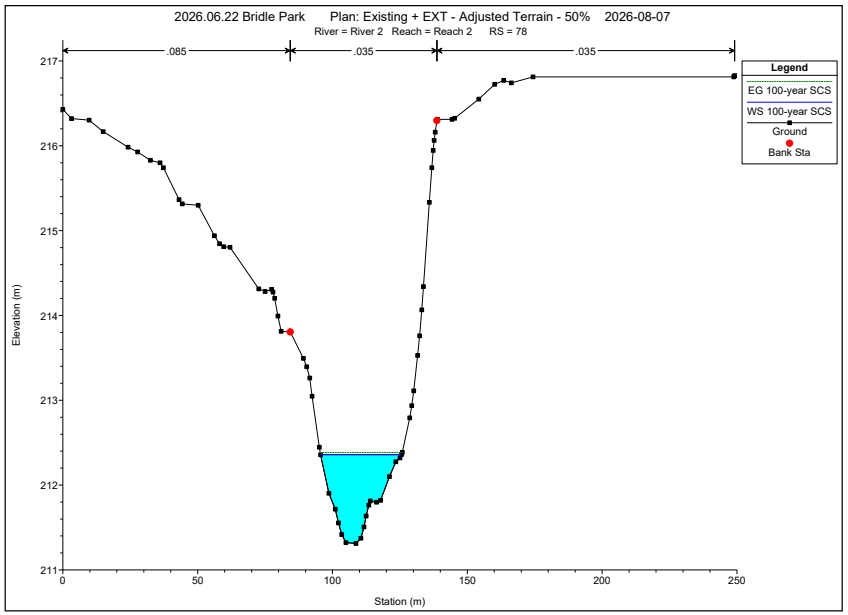

2026.06.22 Bridle Park Plan: Existing + EXT - Adjusted Terrain - 50% 2026-08-07
River = River 2 Reach = Reach 2 RS = 280
.085
.035
.085
Legend
EG 100-year SCS
WS 100-year SCS
Crit 100-year SCS
Ground
Levee
Ineff
Bank Sta
Elevation (m)
Station (m)

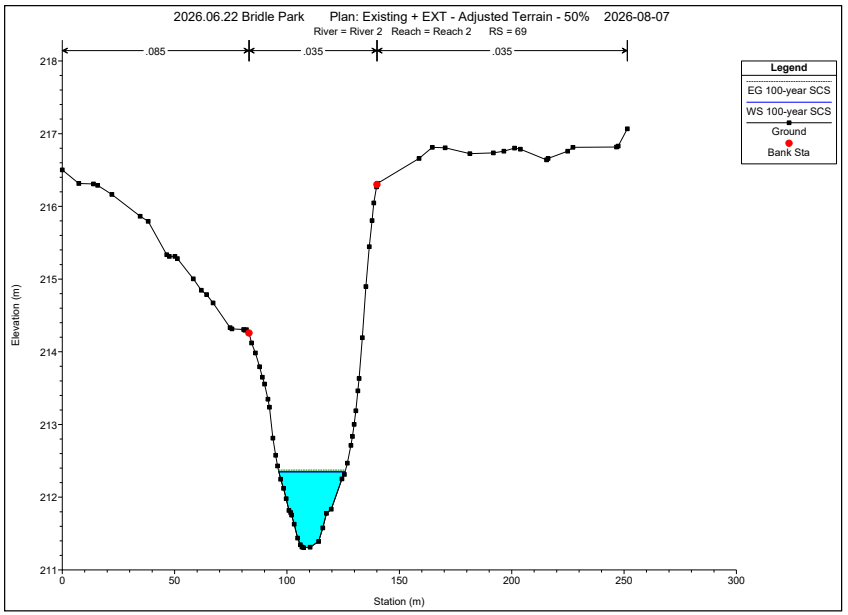

2026.06.22 Bridle Park Plan: Existing + EXT - Adjusted Terrain - 50% 2026-08-07
River = River 2 Reach = Reach 2 RS = 278
.085
.035
.085
Legend
EG 100-year SCS
WS 100-year SCS
Crit 100-year SCS
Ground
Bank Sta
Elevation (m)
Station (m)

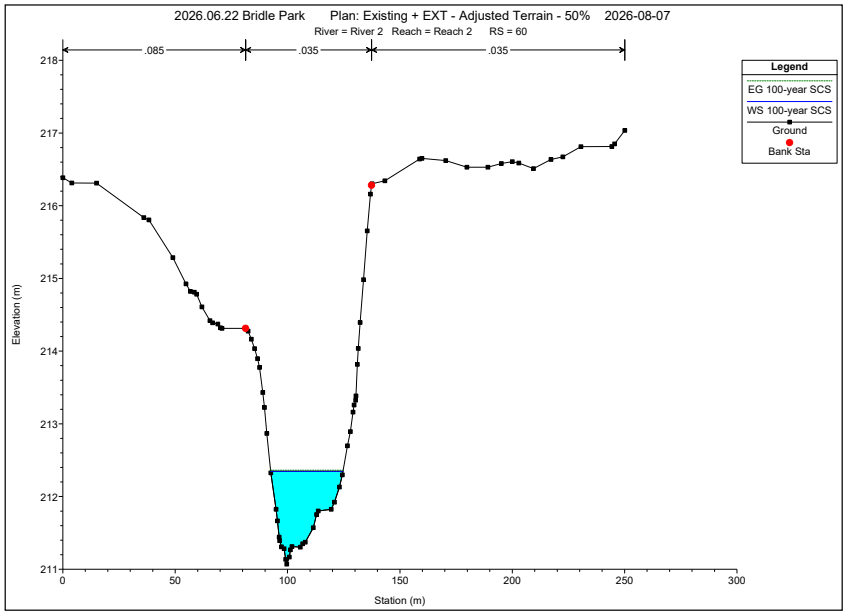

2026.06.22 Bridle Park Plan: Existing + EXT - Adjusted Terrain - 50% 2026-08-07
River = River 2 Reach = Reach 2 RS = 199
.085
.035
.035
Legend
EG 100-year SCS
WS 100-year SCS
Crit 100-year SCS
Ground
Bank Sta
Elevation (m)
Station (m)

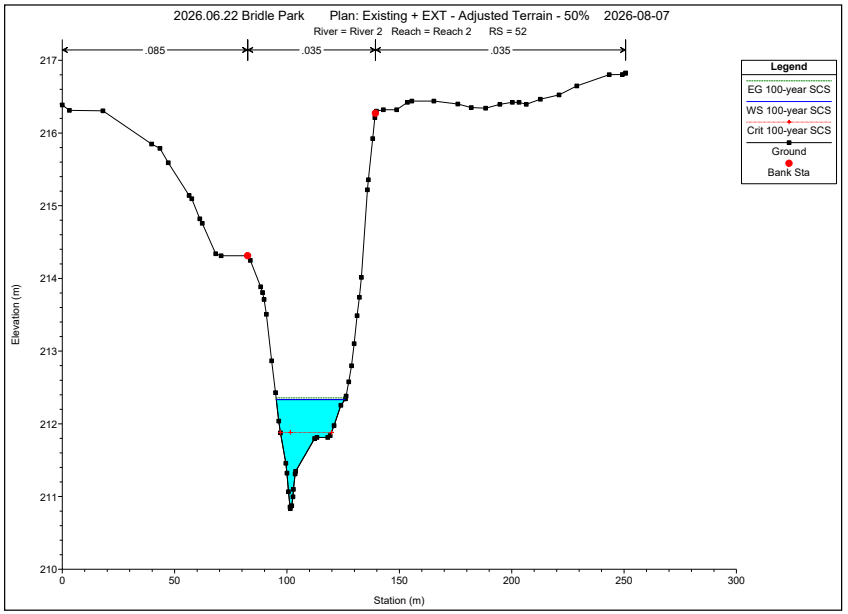

2026.06.22 Bridle Park Plan: Existing + EXT - Adjusted Terrain - 50% 2026-08-07
River = River 2 Reach = Reach 2 RS = 143
.085
.035
.035
Legend
EG 100-year SCS
WS 100-year SCS
Ground
Bank Sta
Elevation (m)
Station (m)

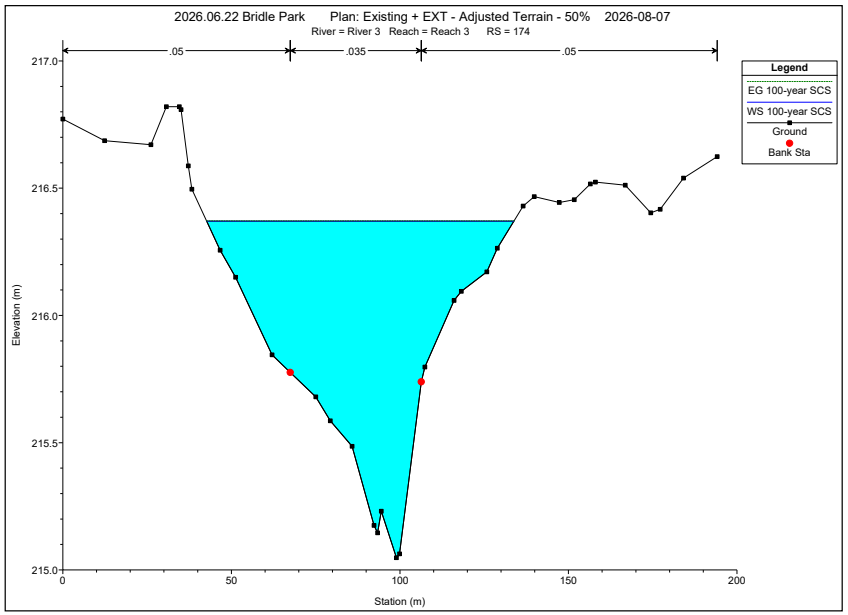

2026.06.22 Bridle Park Plan: Existing + EXT - Adjusted Terrain - 50% 2026-08-07
River = River 2 Reach = Reach 2 RS = 88
.085
.035
.035
Legend
EG 100-year SCS
WS 100-year SCS
Ground
Bank Sta
Elevation (m)
Station (m)

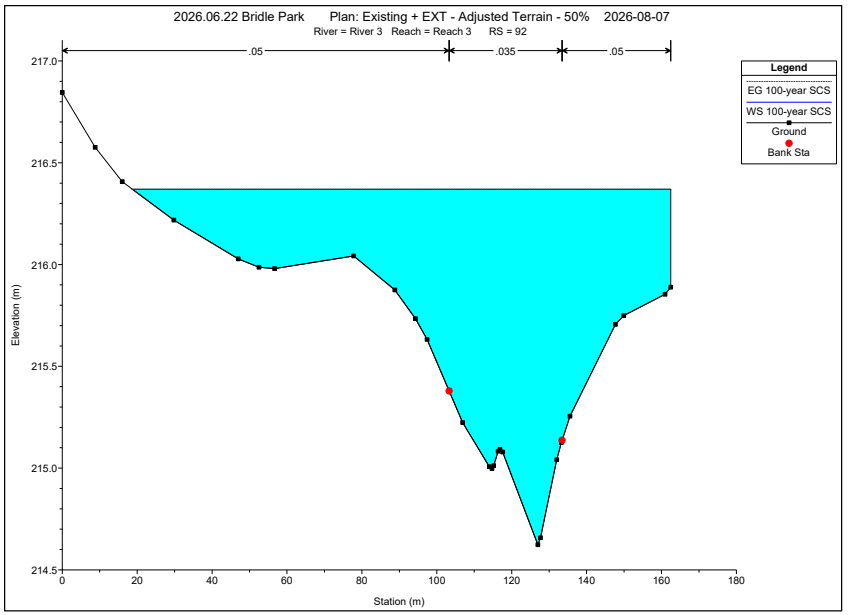

2026.06.22 Bridle Park Plan: Existing + EXT - Adjusted Terrain - 50% 2026-08-07
River = River 2 Reach = Reach 2 RS = 78
.085
.035
.035
Legend
EG 100-year SCS
WS 100-year SCS
Ground
Bank Sta
Elevation (m)
Station (m)

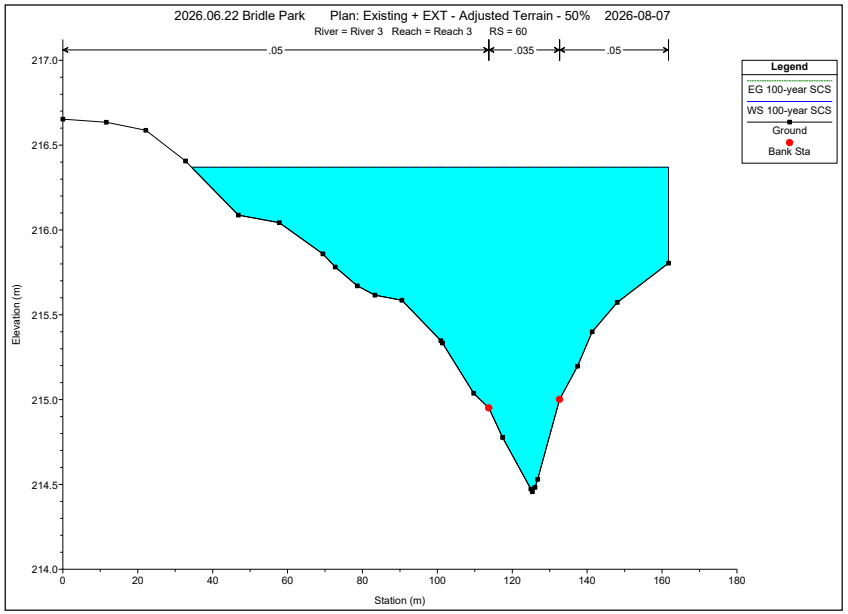

2026.06.22 Bridle Park Plan: Existing + EXT - Adjusted Terrain - 50% 2026-08-07
River = River 2 Reach = Reach 2 RS = 69
.085
.035
.035
Legend
EG 100-year SCS
WS 100-year SCS
Ground
Bank Sta
Elevation (m)
Station (m)

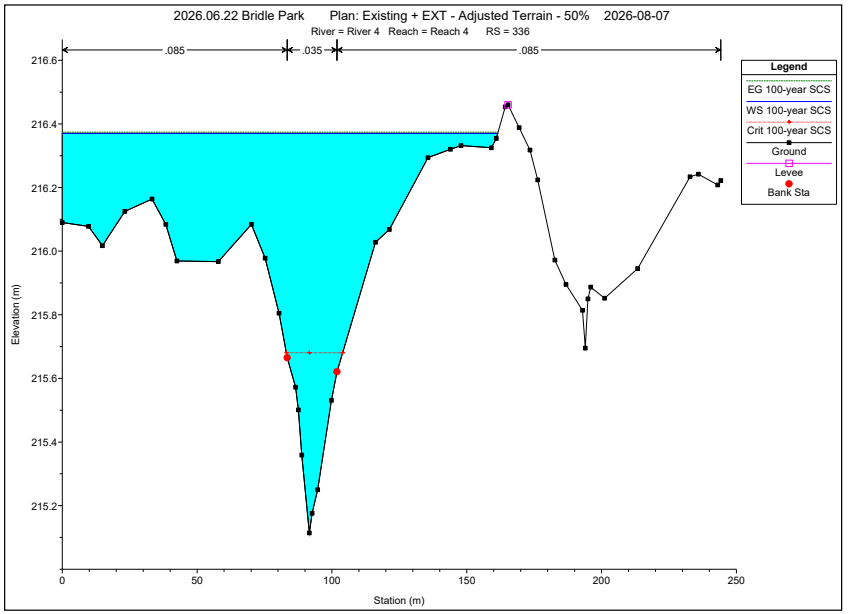

2026.06.22 Bridle Park Plan: Existing + EXT - Adjusted Terrain - 50% 2026-08-07
River = River 2 Reach = Reach 2 RS = 60
.085
.035
.035
Legend
EG 100-year SCS
WS 100-year SCS
Ground
Bank Sta
Elevation (m)
Station (m)

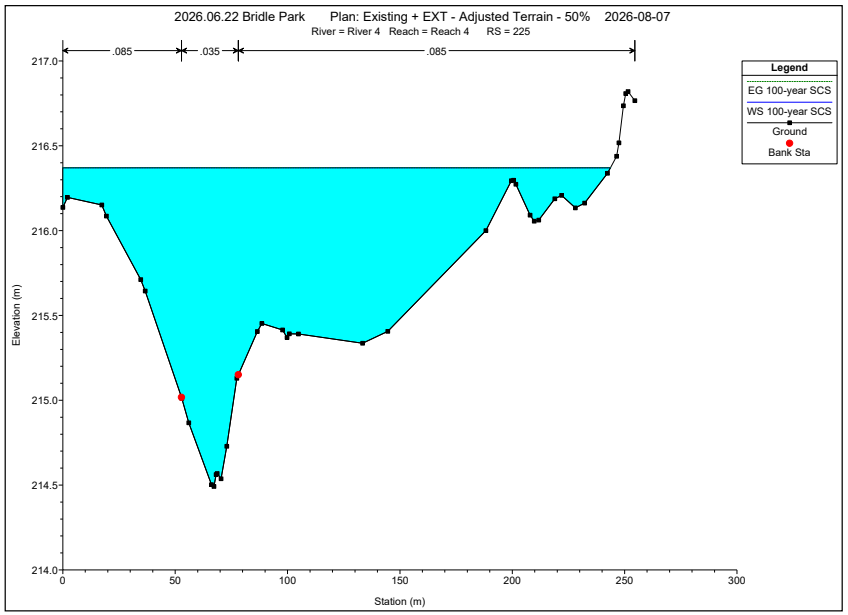

2026.06.22 Bridle Park Plan: Existing + EXT - Adjusted Terrain - 50% 2026-08-07
River = River 2 Reach = Reach 2 RS = 52
.085
.035
.035
Legend
EG 100-year SCS
WS 100-year SCS
Crit 100-year SCS
Ground
Bank Sta
Elevation (m)
Station (m)

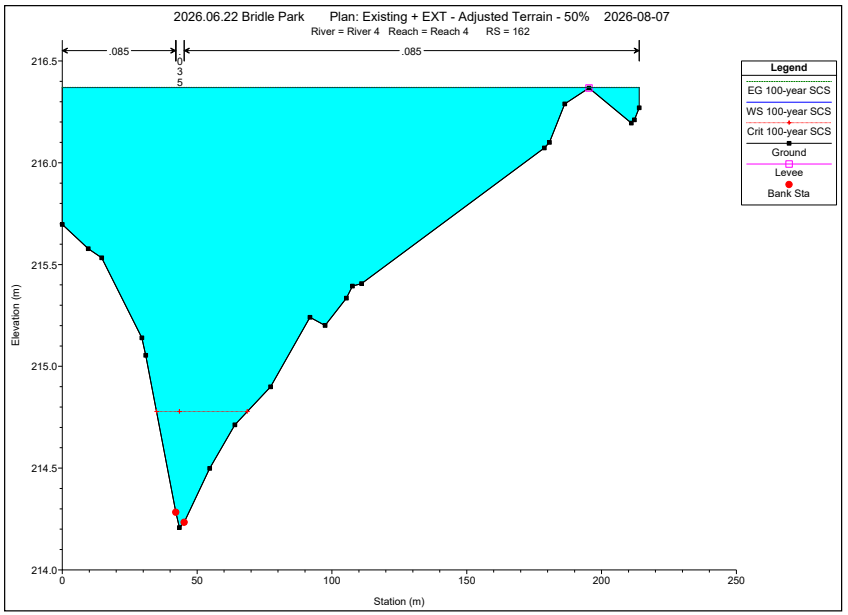

2026.06.22 Bridle Park Plan: Existing + EXT - Adjusted Terrain - 50% 2026-08-07
River = River 3 Reach = Reach 3 RS = 174
.05
.035
.05
Legend
EG 100-year SCS
WS 100-year SCS
Ground
Bank Sta
Elevation (m)
Station (m)

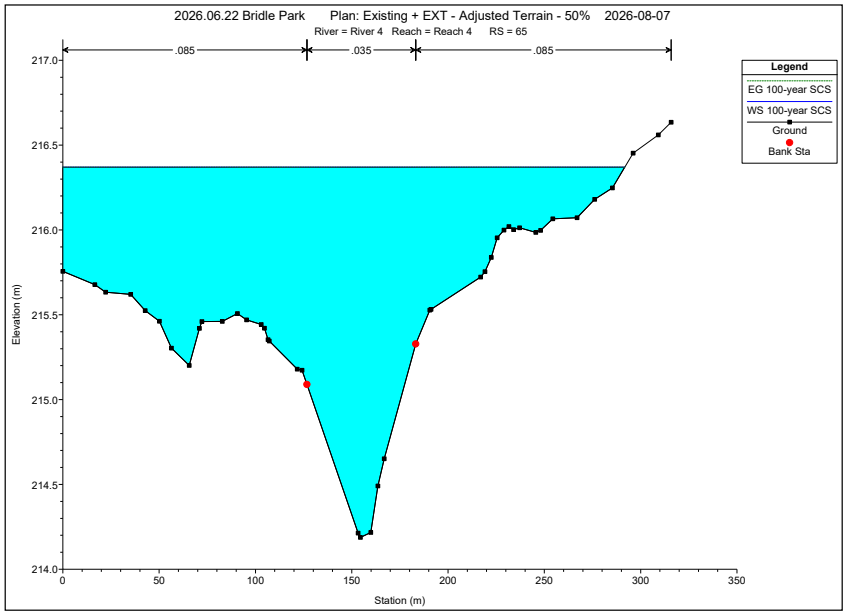

2026.06.22 Bridle Park Plan: Existing + EXT - Adjusted Terrain - 50% 2026-08-07
River = River 3 Reach = Reach 3 RS = 92
.05
.035
.05
Legend
EG 100-year SCS
WS 100-year SCS
Ground
Bank Sta
Elevation (m)
Station (m)

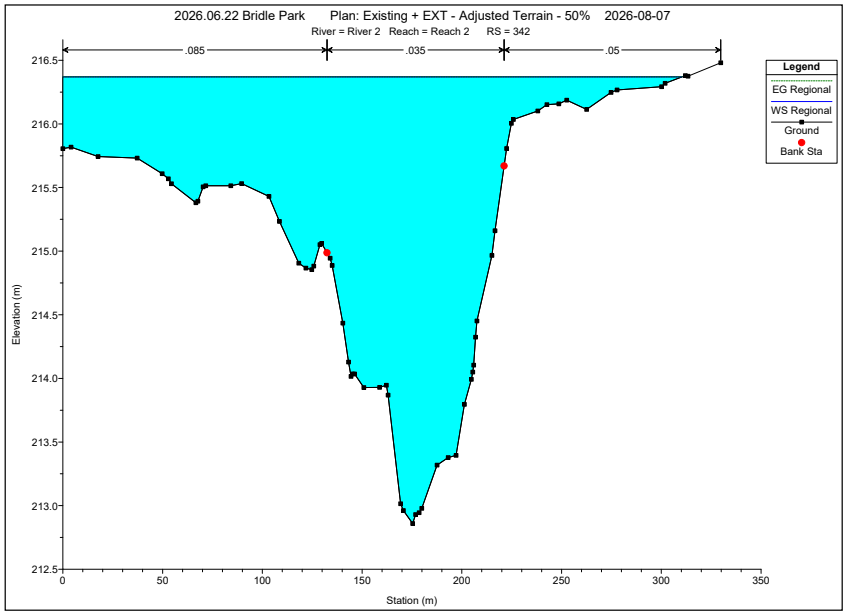

2026.06.22 Bridle Park Plan: Existing + EXT - Adjusted Terrain - 50% 2026-08-07
River = River 3 Reach = Reach 3 RS = 60
.05
.035
.05
Legend
EG 100-year SCS
WS 100-year SCS
Ground
Bank Sta
Elevation (m)
Station (m)

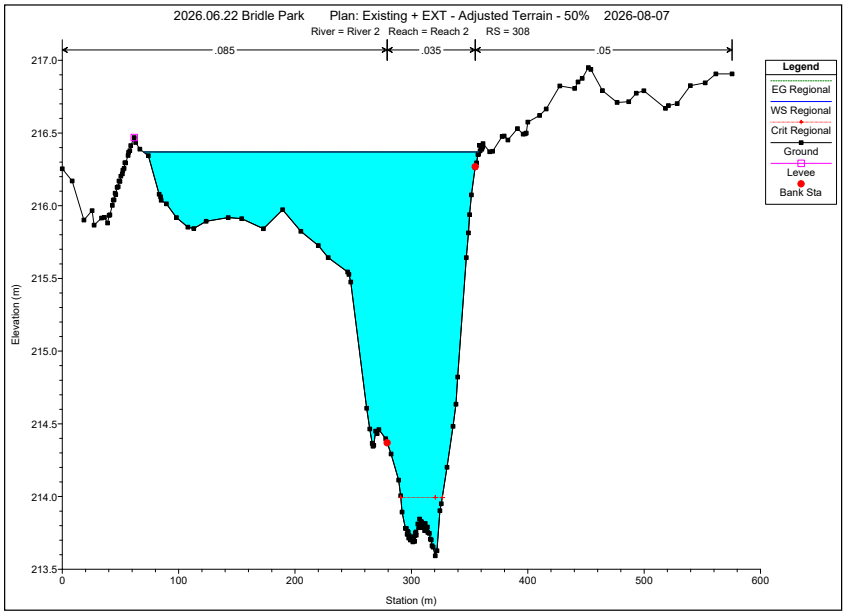

2026.06.22 Bridle Park Plan: Existing + EXT - Adjusted Terrain - 50% 2026-08-07
River = River 4 Reach = Reach 4 RS = 336
.085
.035
.085
Legend
EG 100-year SCS
WS 100-year SCS
Crit 100-year SCS
Ground
Levee
Bank Sta
Elevation (m)
Station (m)

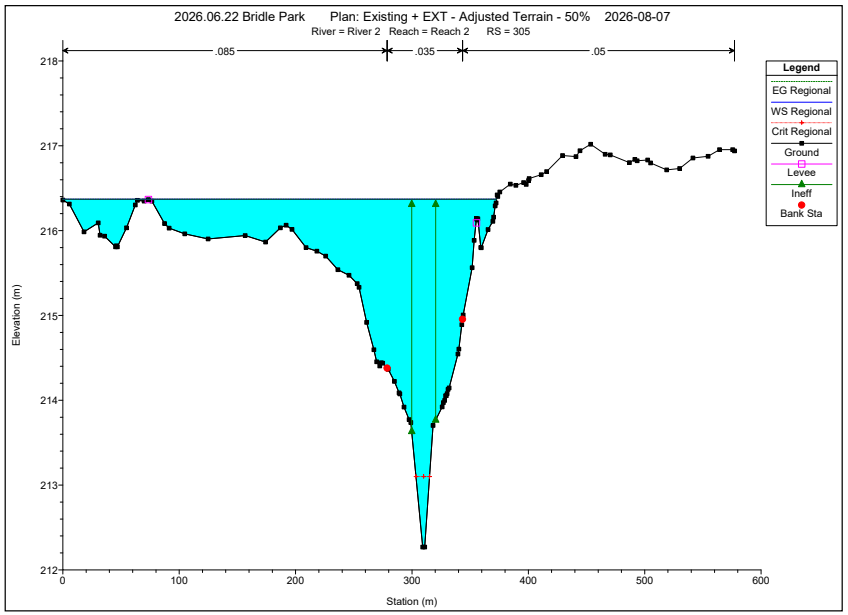

2026.06.22 Bridle Park Plan: Existing + EXT - Adjusted Terrain - 50% 2026-08-07
River = River 4 Reach = Reach 4 RS = 225
.085
.035
.085
Legend
EG 100-year SCS
WS 100-year SCS
Ground
Bank Sta
Elevation (m)
Station (m)

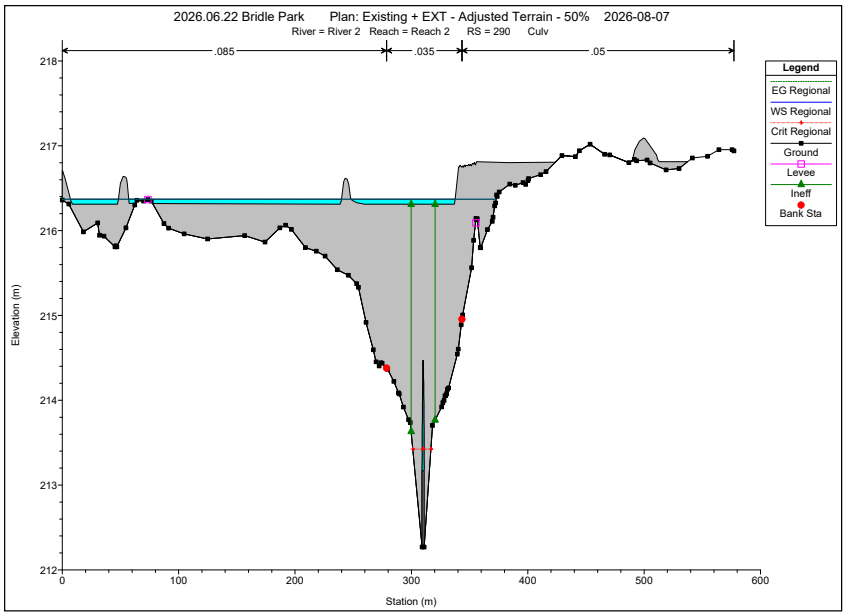

2026.06.22 Bridle Park Plan: Existing + EXT - Adjusted Terrain - 50% 2026-08-07
River = River 4 Reach = Reach 4 RS = 162
.085
.085
Legend
EG 100-year SCS
WS 100-year SCS
Crit 100-year SCS
Ground
Levee
Bank Sta
Elevation (m)
Station (m)

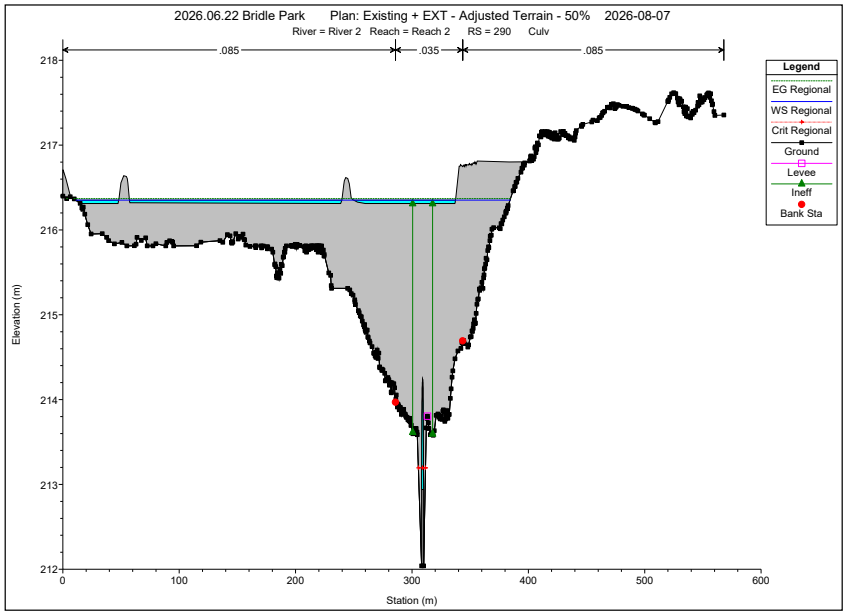

2026.06.22 Bridle Park Plan: Existing + EXT - Adjusted Terrain - 50% 2026-08-07
River = River 4 Reach = Reach 4 RS = 65
.085
.035
.085
Legend
EG 100-year SCS
WS 100-year SCS
Ground
Bank Sta
Elevation (m)
Station (m)
217.0
216.5
216.0
215.5
215.0
214.5
214.0
0
50
100
150
200
250
300
350

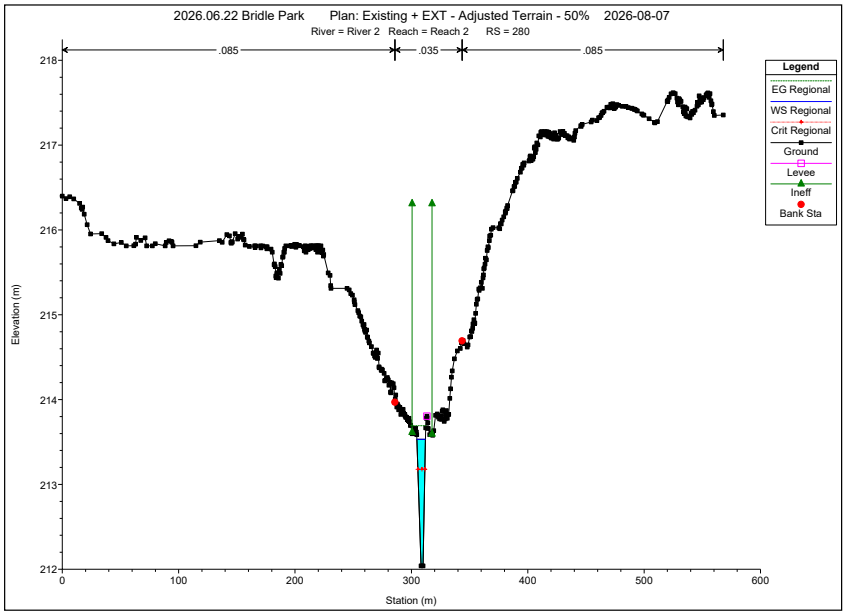

2026.06.22 Bridle Park Plan: Existing + EXT - Adjusted Terrain - 50% 2026-08-07
River = River 2 Reach = Reach 2 RS = 342
.085
.035
.05
Legend
EG Regional
WS Regional
Ground
Bank Sta
Elevation (m)
Station (m)

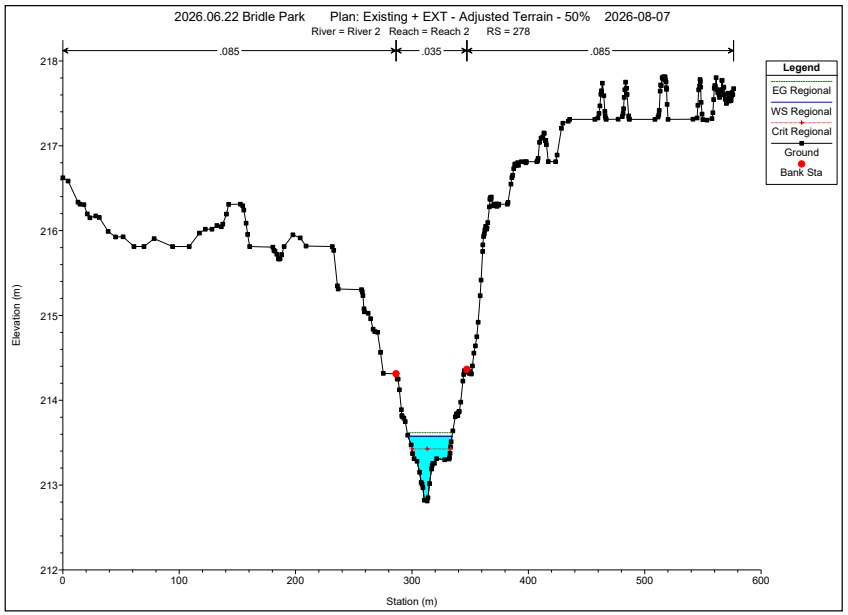

2026.06.22 Bridle Park Plan: Existing + EXT - Adjusted Terrain - 50% 2026-08-07
River = River 2 Reach = Reach 2 RS = 308
.085
.035
.05
Legend
EG Regional
WS Regional
Crit Regional
Ground
Levee
Bank Sta
Elevation (m)
Station (m)

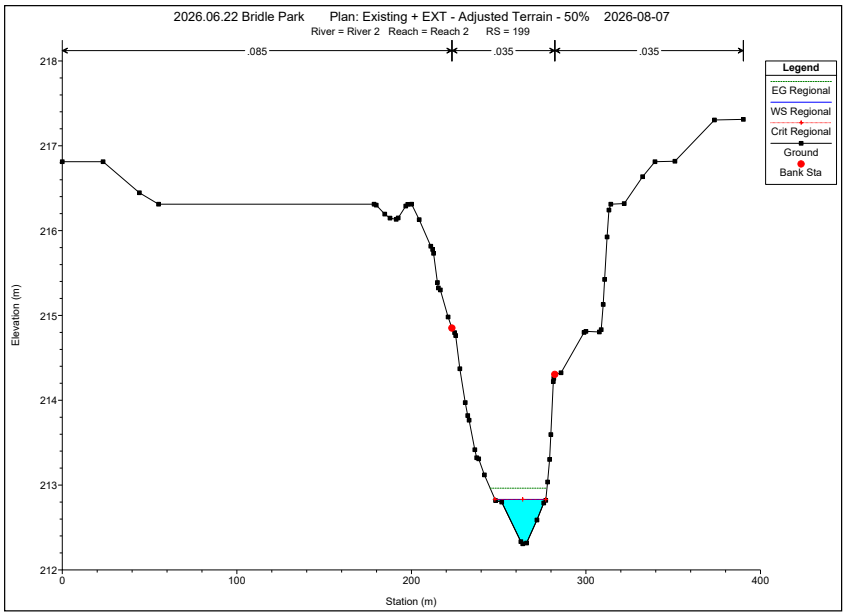

2026.06.22 Bridle Park Plan: Existing + EXT - Adjusted Terrain - 50% 2026-08-07
River = River 2 Reach = Reach 2 RS = 305
.085
.035
.05
Legend
EG Regional
WS Regional
Crit Regional
Ground
Levee
Ineff
Bank Sta
Elevation (m)
Station (m)

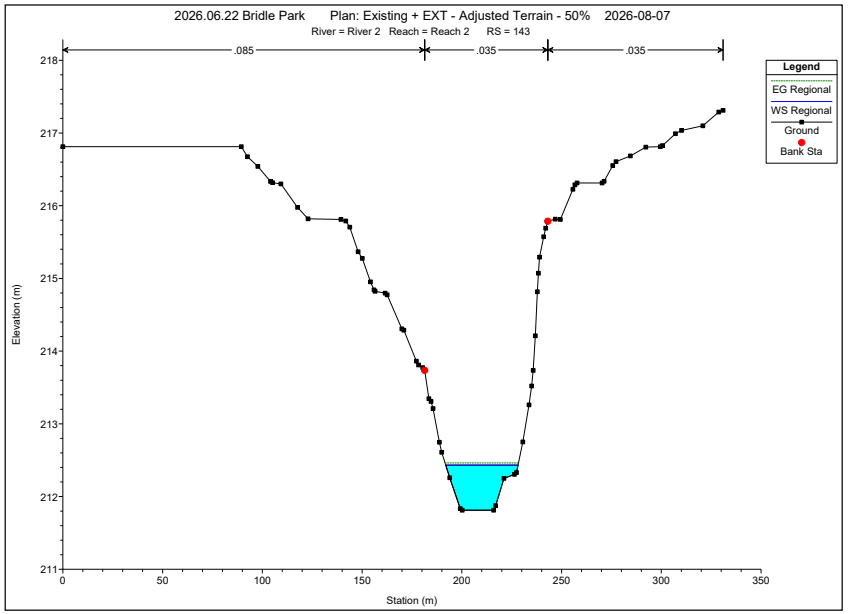

2026.06.22 Bridle Park Plan: Existing + EXT - Adjusted Terrain - 50% 2026-08-07
River = River 2 Reach = Reach 2 RS = 290 Culv
.085
.035
.05
Legend
EG Regional
WS Regional
Crit Regional
Ground
Levee
Ineff
Bank Sta
Elevation (m)
Station (m)

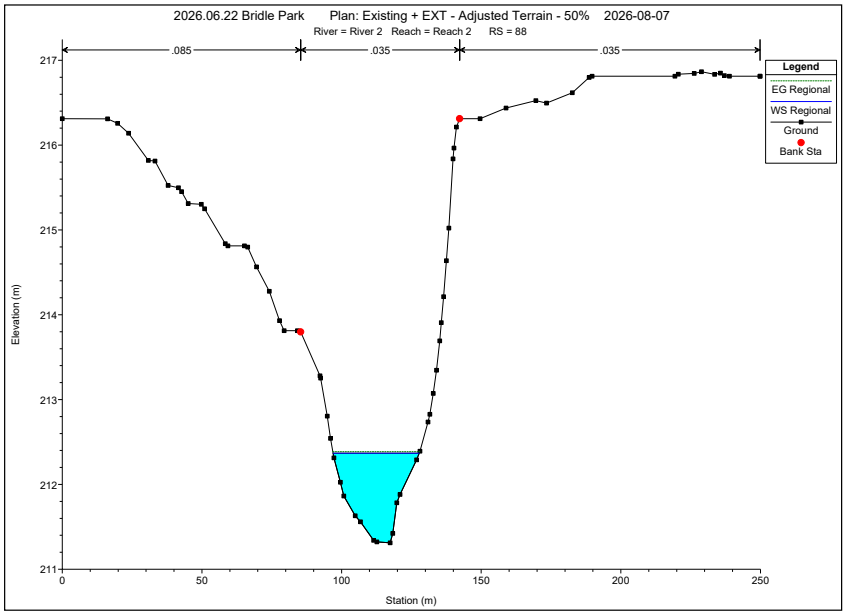

2026.06.22 Bridle Park Plan: Existing + EXT - Adjusted Terrain - 50% 2026-08-07
River = River 2 Reach = Reach 2 RS = 290 Culv
.085
.035
.085
Legend
EG Regional
WS Regional
Crit Regional
Ground
Levee
Ineff
Bank Sta
Elevation (m)
Station (m)

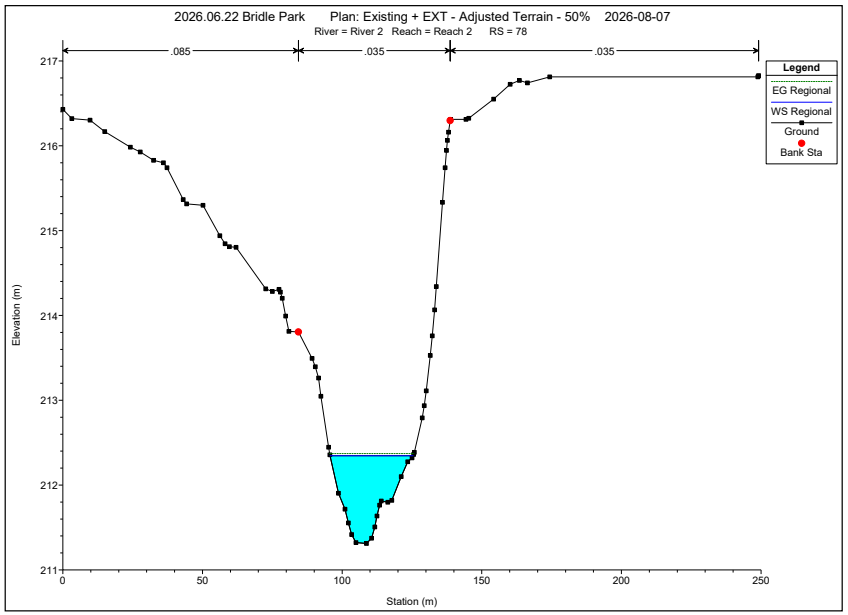

2026.06.22 Bridle Park Plan: Existing + EXT - Adjusted Terrain - 50% 2026-08-07
River = River 2 Reach = Reach 2 RS = 280
.085
.035
.085
Legend
EG Regional
WS Regional
Crit Regional
Ground
Levee
Ineff
Bank Sta
Elevation (m)
Station (m)

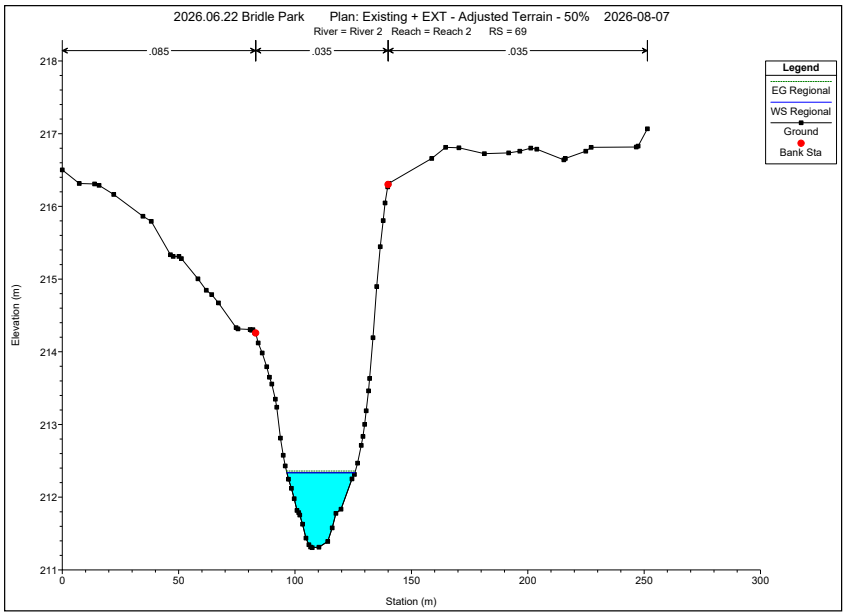

2026.06.22 Bridle Park Plan: Existing + EXT - Adjusted Terrain - 50% 2026-08-07
River = River 2 Reach = Reach 2 RS = 278
.085
.035
.085
Legend
EG Regional
WS Regional
Crit Regional
Ground
Bank Sta
Elevation (m)
Station (m)

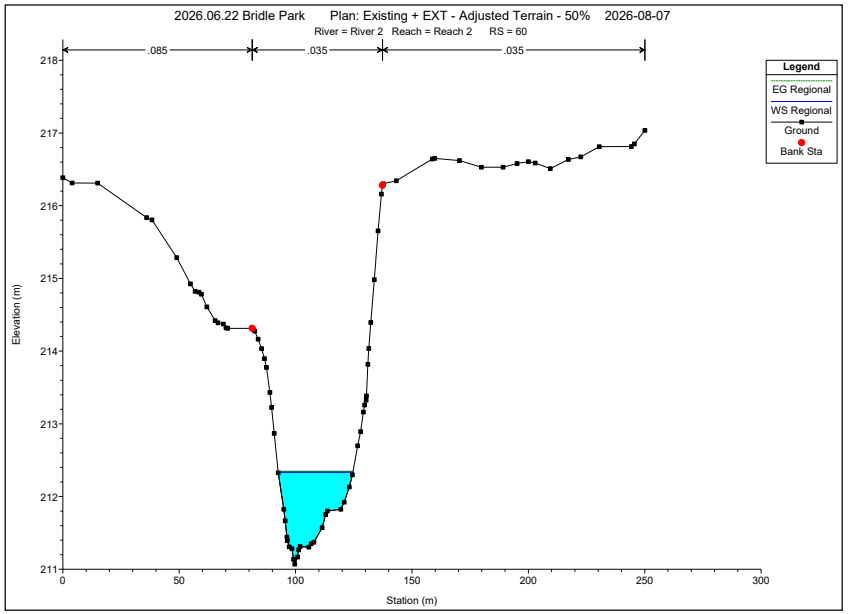

2026.06.22 Bridle Park Plan: Existing + EXT - Adjusted Terrain - 50% 2026-08-07
River = River 2 Reach = Reach 2 RS = 199
.085
.035
.035
Legend
EG Regional
WS Regional
Crit Regional
Ground
Bank Sta
Elevation (m)
Station (m)

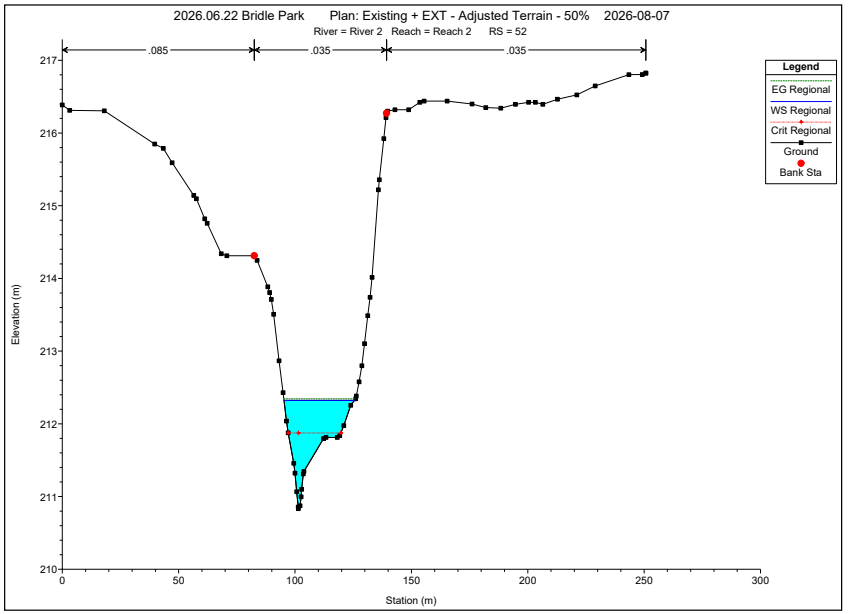

2026.06.22 Bridle Park Plan: Existing + EXT - Adjusted Terrain - 50% 2026-08-07
River = River 2 Reach = Reach 2 RS = 143
.085
.035
.035
Legend
EG Regional
WS Regional
Ground
Bank Sta
Elevation (m)
Station (m)

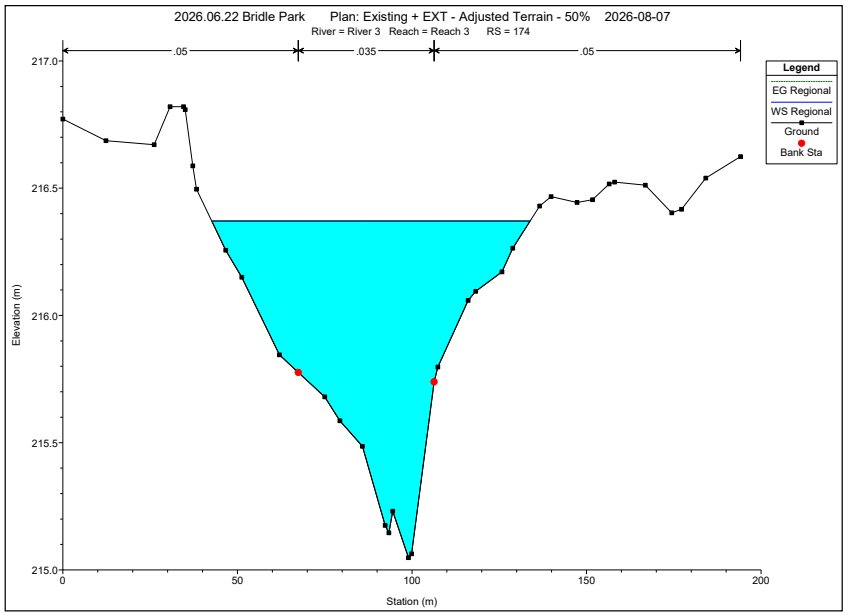

2026.06.22 Bridle Park Plan: Existing + EXT - Adjusted Terrain - 50% 2026-08-07
River = River 2 Reach = Reach 2 RS = 88
.085
.035
.035
Legend
EG Regional
WS Regional
Ground
Bank Sta
Elevation (m)
Station (m)

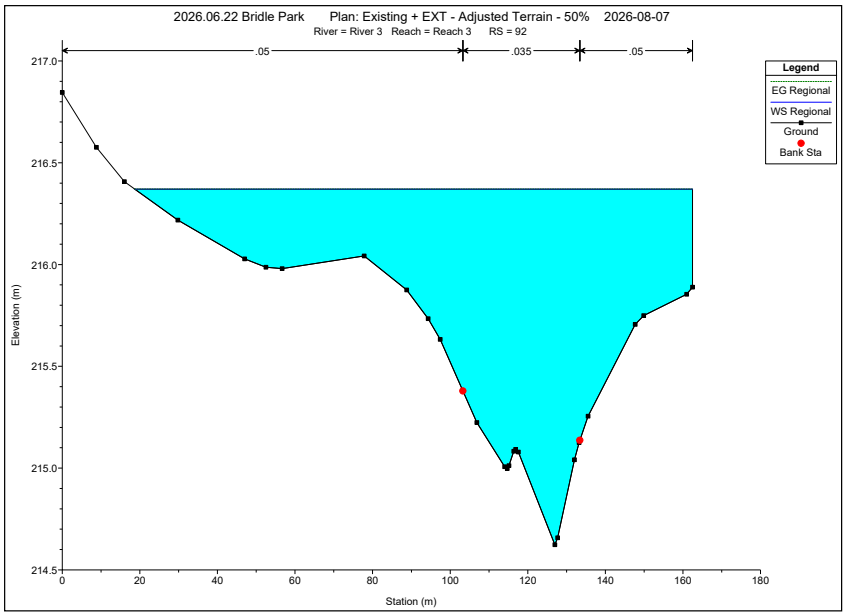

2026.06.22 Bridle Park Plan: Existing + EXT - Adjusted Terrain - 50% 2026-08-07
River = River 2 Reach = Reach 2 RS = 78
.085
.035
.035
Legend
EG Regional
WS Regional
Ground
Bank Sta
Elevation (m)
Station (m)

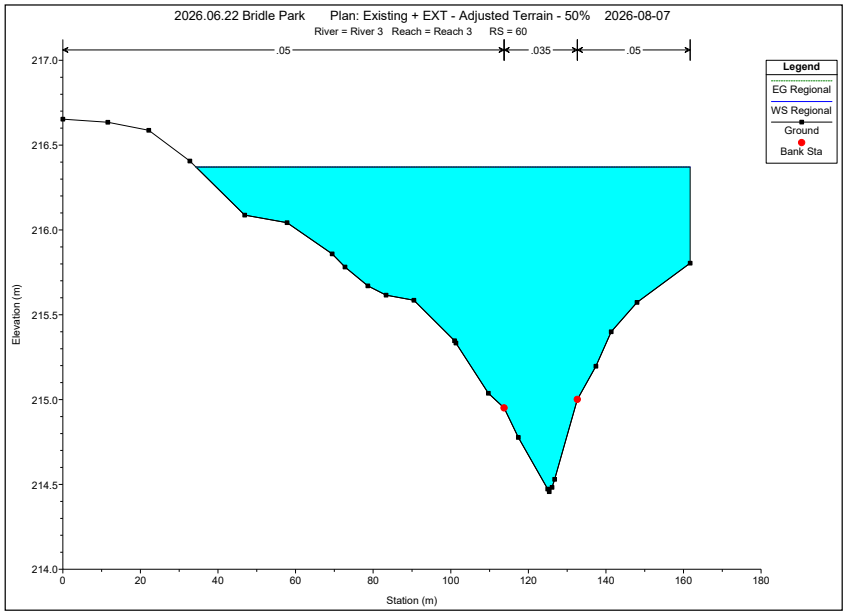

2026.06.22 Bridle Park Plan: Existing + EXT - Adjusted Terrain - 50% 2026-08-07
River = River 2 Reach = Reach 2 RS = 69
.085
.035
.035
Legend
EG Regional
WS Regional
Ground
Bank Sta
Elevation (m)
Station (m)

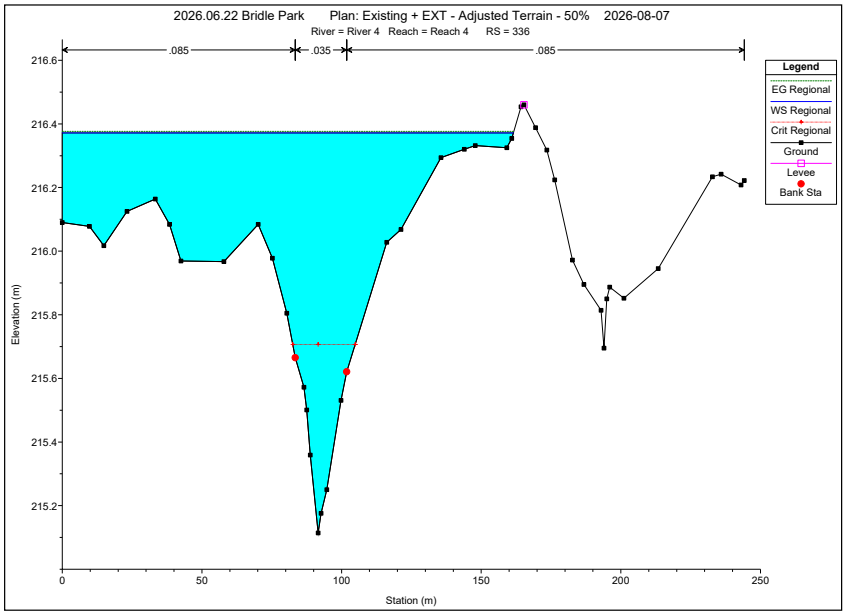

2026.06.22 Bridle Park Plan: Existing + EXT - Adjusted Terrain - 50% 2026-08-07
River = River 2 Reach = Reach 2 RS = 60
.085
.035
.035
Legend
EG Regional
WS Regional
Ground
Bank Sta
Elevation (m)
Station (m)

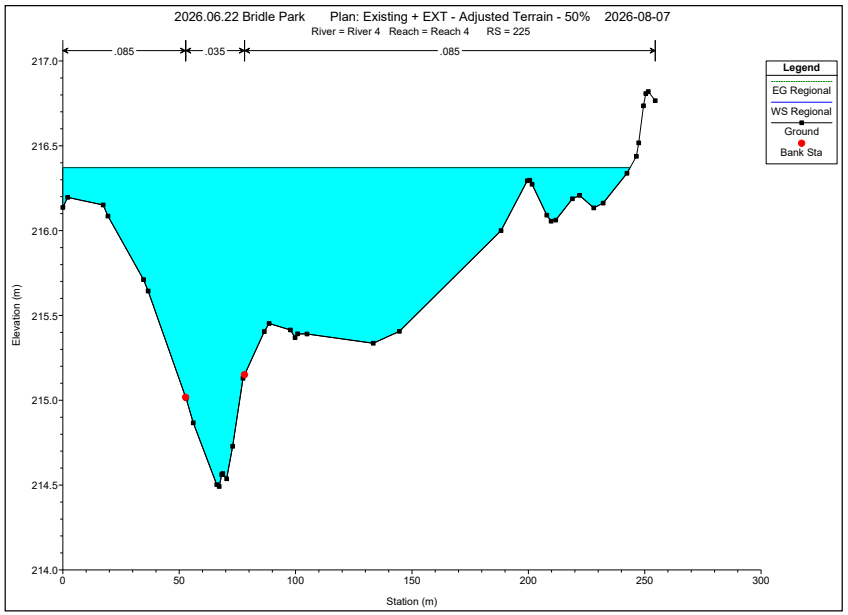

2026.06.22 Bridle Park Plan: Existing + EXT - Adjusted Terrain - 50% 2026-08-07
River = River 2 Reach = Reach 2 RS = 52
.085
.035
.035
Legend
EG Regional
WS Regional
Crit Regional
Ground
Bank Sta
Elevation (m)
Station (m)

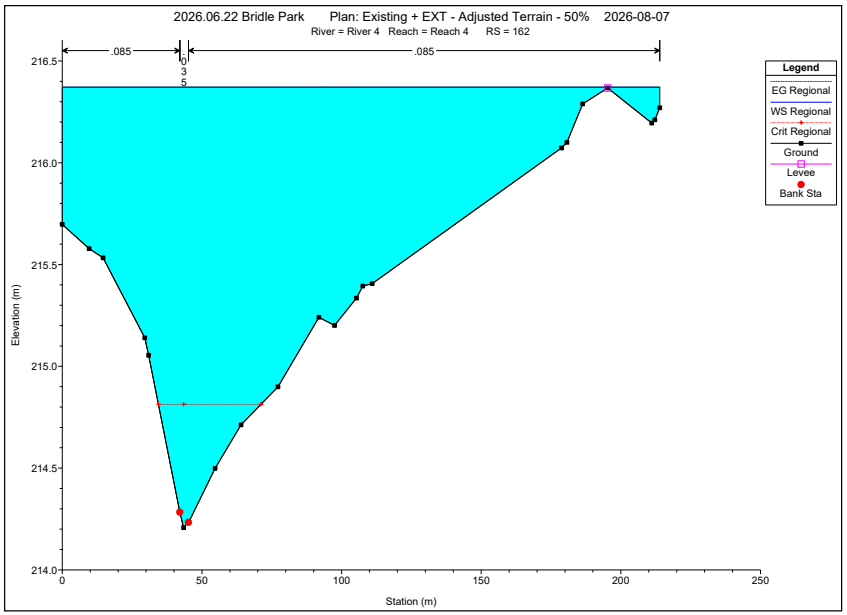

2026.06.22 Bridle Park Plan: Existing + EXT - Adjusted Terrain - 50% 2026-08-07
River = River 3 Reach = Reach 3 RS = 174
.05
.035
.05
Legend
EG Regional
WS Regional
Ground
Bank Sta
Elevation (m)
Station (m)

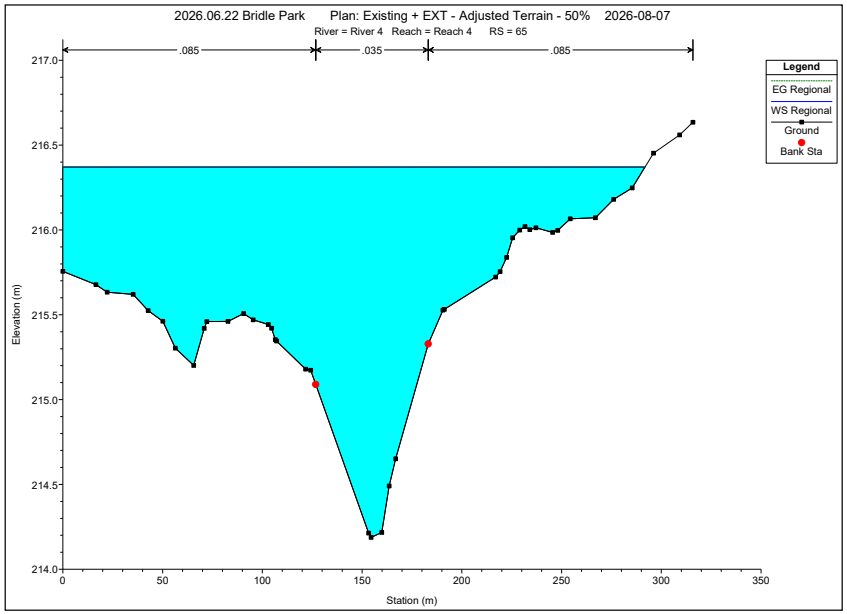

2026.06.22 Bridle Park Plan: Existing + EXT - Adjusted Terrain - 50% 2026-08-07
River = River 3 Reach = Reach 3 RS = 92
.05
.035
.05
Legend
EG Regional
WS Regional
Ground
Bank Sta
Elevation (m)
Station (m)


2026.06.22 Bridle Park Plan: Existing + EXT - Adjusted Terrain - 50% 2026-08-07
River = River 3 Reach = Reach 3 RS = 60
.05
.035
.05
Legend
EG Regional
WS Regional
Ground
Bank Sta
Elevation (m)
Station (m)


2026.06.22 Bridle Park Plan: Existing + EXT - Adjusted Terrain - 50% 2026-08-07
River = River 4 Reach = Reach 4 RS = 336
.085
.035
.085
Legend
EG Regional
WS Regional
Crit Regional
Ground
Levee
Bank Sta
Elevation (m)
Station (m)


2026.06.22 Bridle Park Plan: Existing + EXT - Adjusted Terrain - 50% 2026-08-07
River = River 4 Reach = Reach 4 RS = 225
.085
.035
.085
Legend
EG Regional
WS Regional
Ground
Bank Sta
Elevation (m)
Station (m)


2026.06.22 Bridle Park Plan: Existing + EXT - Adjusted Terrain - 50% 2026-08-07
River = River 4 Reach = Reach 4 RS = 162
.085
.085
Legend
EG Regional
WS Regional
Crit Regional
Ground
Levee
Bank Sta
Elevation (m)
Station (m)


2026.06.22 Bridle Park Plan: Existing + EXT - Adjusted Terrain - 50% 2026-08-07
River = River 4 Reach = Reach 4 RS = 65
.085
.035
.085
Legend
EG Regional
WS Regional
Ground
Bank Sta
Elevation (m)
Station (m)
217.0
216.5
216.0
215.5
215.0
214.5
214.0
0
50
100
150
200
250
300
350

HEC-RAS Plan: Existing + EXT - 50%

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
River 4	Reach 4	336	100-year SCS	8.33	215.11	216.37	215.68	216.37	0.000134	0.32	59.67	161.48	0.11
River 4	Reach 4	336	Regional	9.46	215.11	216.37	215.71	216.38	0.000172	0.37	59.88	161.52	0.12
River 4	Reach 4	225	100-year SCS	8.33	214.49	216.37		216.37	0.000009	0.12	177.00	243.67	0.03
River 4	Reach 4	225	Regional	9.46	214.49	216.37		216.37	0.000011	0.13	177.30	243.72	0.03
River 4	Reach 4	162	100-year SCS	8.33	214.21	216.37	214.78	216.37	0.000012	0.16	196.19	213.95	0.04
River 4	Reach 4	162	Regional	9.46	214.21	216.37	214.81	216.37	0.000015	0.19	196.43	213.95	0.04
River 4	Reach 4	65	100-year SCS	8.33	214.19	216.37		216.37	0.000002	0.08	259.65	291.70	0.02
River 4	Reach 4	65	Regional	9.46	214.19	216.37		216.37	0.000003	0.07	259.94	291.75	0.02
River 3	Reach 3	174	100-year SCS	7.41	215.05	216.37		216.37	0.000045	0.18	51.47	91.14	0.06
River 3	Reach 3	174	Regional	4.33	215.05	216.37		216.37	0.000015	0.11	51.51	91.18	0.04
River 3	Reach 3	92	100-year SCS	7.41	214.62	216.37		216.37	0.000012	0.12	94.20	143.71	0.03
River 3	Reach 3	92	Regional	4.33	214.62	216.37		216.37	0.000004	0.07	94.35	143.79	0.02
River 3	Reach 3	60	100-year SCS	7.41	214.46	216.37		216.37	0.000009	0.12	106.76	127.33	0.03
River 3	Reach 3	60	Regional	4.33	214.46	216.37		216.37	0.000003	0.07	106.92	127.39	0.02
River 2	Reach 2	342	100-year SCS	12.42	212.86	216.37		216.37	0.000001	0.05	352.93	310.27	0.01
River 2	Reach 2	342	Regional	12.10	212.86	216.37		216.37	0.000001	0.05	353.25	310.44	0.01
River 2	Reach 2	308	100-year SCS	12.42	213.59	216.37	214.00	216.37	0.000002	0.07	296.54	288.01	0.02
River 2	Reach 2	308	Regional	12.10	213.59	216.37	213.99	216.37	0.000002	0.07	296.84	288.19	0.01
River 2	Reach 2	305	100-year SCS	12.42	212.27	216.37	213.11	216.37	0.000001	0.06	333.26	372.73	0.01
River 2	Reach 2	305	Regional	12.10	212.27	216.37	213.10	216.37	0.000001	0.06	333.65	372.74	0.01
River 2	Reach 2	290		Culvert									
River 2	Reach 2	280	100-year SCS	12.42	212.04	213.54	213.20	213.70	0.005064	1.81	6.86	7.38	0.90
River 2	Reach 2	280	Regional	12.10	212.04	213.53	213.18	213.69	0.004850	1.77	6.84	7.37	0.89
River 2	Reach 2	278	100-year SCS	12.42	212.81	213.58	213.43	213.63	0.004300	0.93	13.33	37.93	0.50
River 2	Reach 2	278	Regional	12.10	212.81	213.57	213.43	213.62	0.004288	0.92	13.11	37.72	0.50
River 2	Reach 2	199	100-year SCS	12.42	212.31	212.84	212.84	212.97	0.019121	1.62	7.68	29.26	1.01
River 2	Reach 2	199	Regional	12.10	212.31	212.83	212.83	212.96	0.019284	1.61	7.53	29.13	1.01
River 2	Reach 2	143	100-year SCS	12.42	211.81	212.44		212.47	0.002185	0.77	16.08	36.42	0.37
River 2	Reach 2	143	Regional	12.10	211.81	212.43		212.46	0.002247	0.77	15.65	36.21	0.38
River 2	Reach 2	88	100-year SCS	12.42	211.31	212.38		212.40	0.000818	0.61	20.26	31.04	0.24
River 2	Reach 2	88	Regional	12.10	211.31	212.37		212.39	0.000819	0.61	19.89	30.84	0.24
River 2	Reach 2	78	100-year SCS	12.42	211.31	212.36		212.38	0.001210	0.70	17.76	29.98	0.29
River 2	Reach 2	78	Regional	12.10	211.31	212.35		212.37	0.001218	0.70	17.40	29.74	0.29
River 2	Reach 2	69	100-year SCS	12.42	211.31	212.35		212.37	0.000996	0.66	18.69	29.43	0.27
River 2	Reach 2	69	Regional	12.10	211.31	212.34		212.36	0.001000	0.66	18.33	29.24	0.27
River 2	Reach 2	60	100-year SCS	12.42	211.07	212.35		212.36	0.000545	0.53	23.23	32.18	0.20
River 2	Reach 2	60	Regional	12.10	211.07	212.34		212.35	0.000546	0.53	22.84	32.07	0.20
River 2	Reach 2	52	100-year SCS	12.42	210.83	212.33	211.88	212.36	0.001000	0.65	18.99	30.55	0.26
River 2	Reach 2	52	Regional	12.10	210.83	212.32	211.87	212.34	0.001000	0.65	18.62	30.23	0.26

APPENDIX H

Floodplain Regularization Analysis

CROZIER

Project: Bridle Park
Project Number: 1508-7498
By: NOC
Date: 2026.07.15

Floodplain Cut/Fill

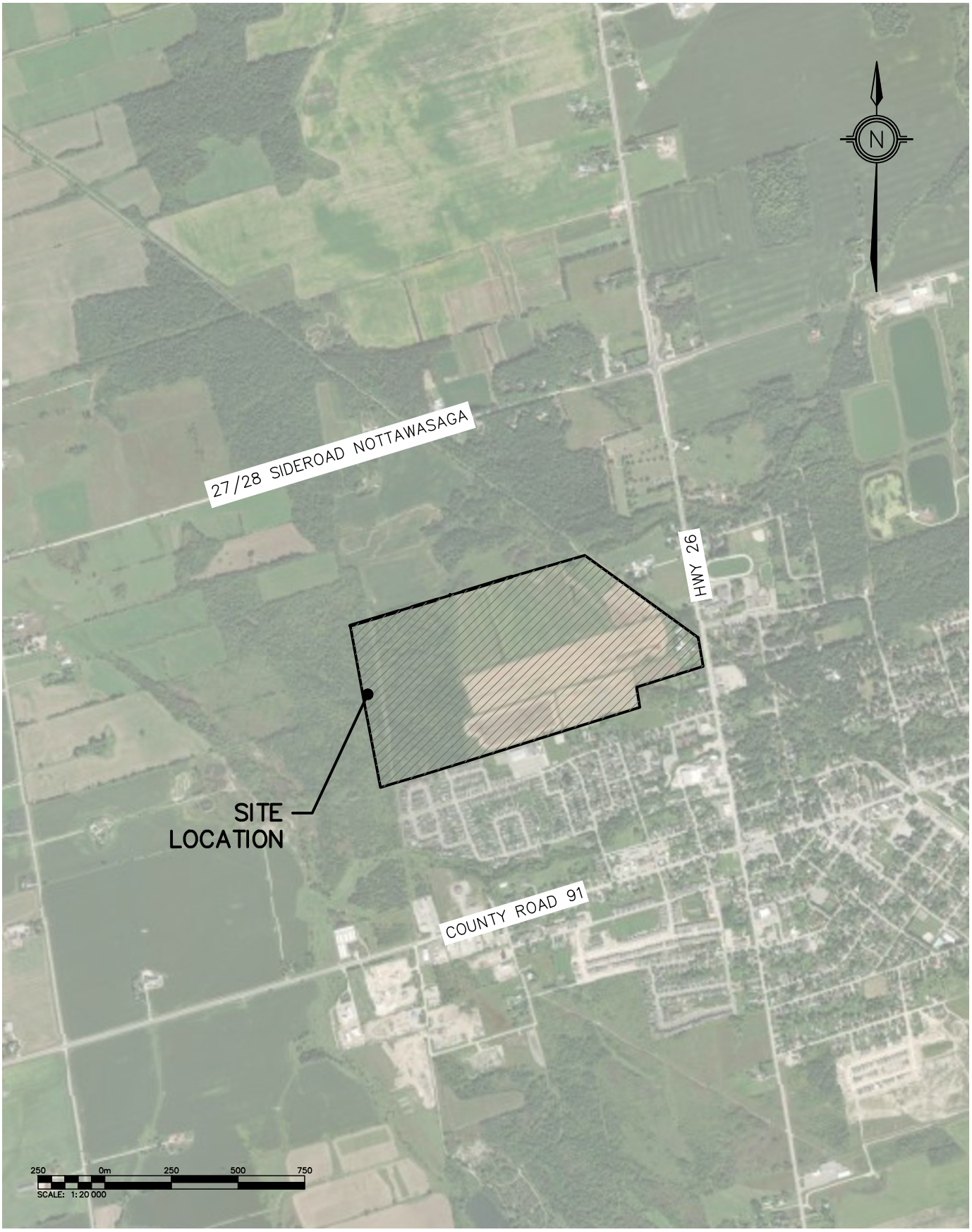
Fill Area				
Elevation (m)	**Area (m^2)**	**Average Area (m^2)**	**Increment (m)**	**Incremental Fill (m^3)**
214.25	0			
214.50	103	52	0.25	13
214.75	935	519	0.25	130
215.00	1767	1351	0.25	338
215.25	4273	3020	0.25	755
215.50	6778	5526	0.25	1381
215.64	9151	7965	0.14	1115
			Total	**3732**

Cut Area				
Elevation (m)	**Area (m^2)**	**Average Area (m^2)**	**Increment (m)**	**Incremental Cut (m^3)**
214.25	0			
214.5	4278	2139	0.25	535
214.75	4494	4386	0.25	1096
215	4711	4602	0.25	1151
215.25	4927	4819	0.25	1205
215.5	5144	5036	0.25	1259
215.64	5889.53	5517	0.25	1379
			Total	**6625**

Net Floodplain Storage	
Elevation (m)	**Net Storage Increase (m3)**
214.25	522
214.50	967
214.75	813
215.00	450
215.25	-122
215.50	264
215.64	**2893**

FIGURES

Figure 1: Site Location Plan
Figure 2: Draft Plan
Figure 3: Topographic Survey Data vs DEM Data Comparison
Figure 4: Pre-Development Drainage Plan
Figure 5: Existing Floodplain
Figure 6: Floodplain Regularization
Figure 7: Proposed Floodplain



Legend

= SUBJECT LANDS

Project

BRIDLE PARK
(STAYNER, ONTARIO)

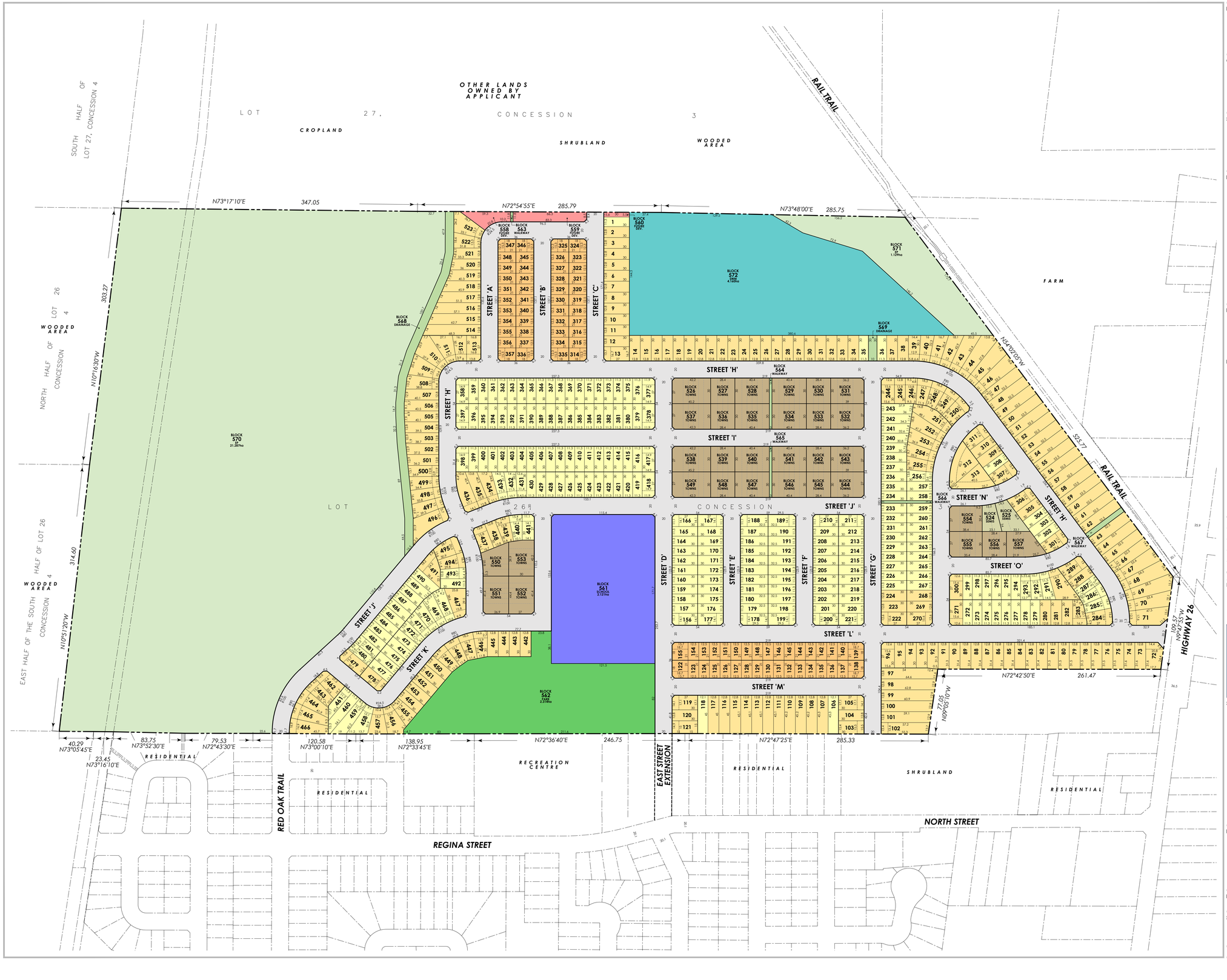
Drawing

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

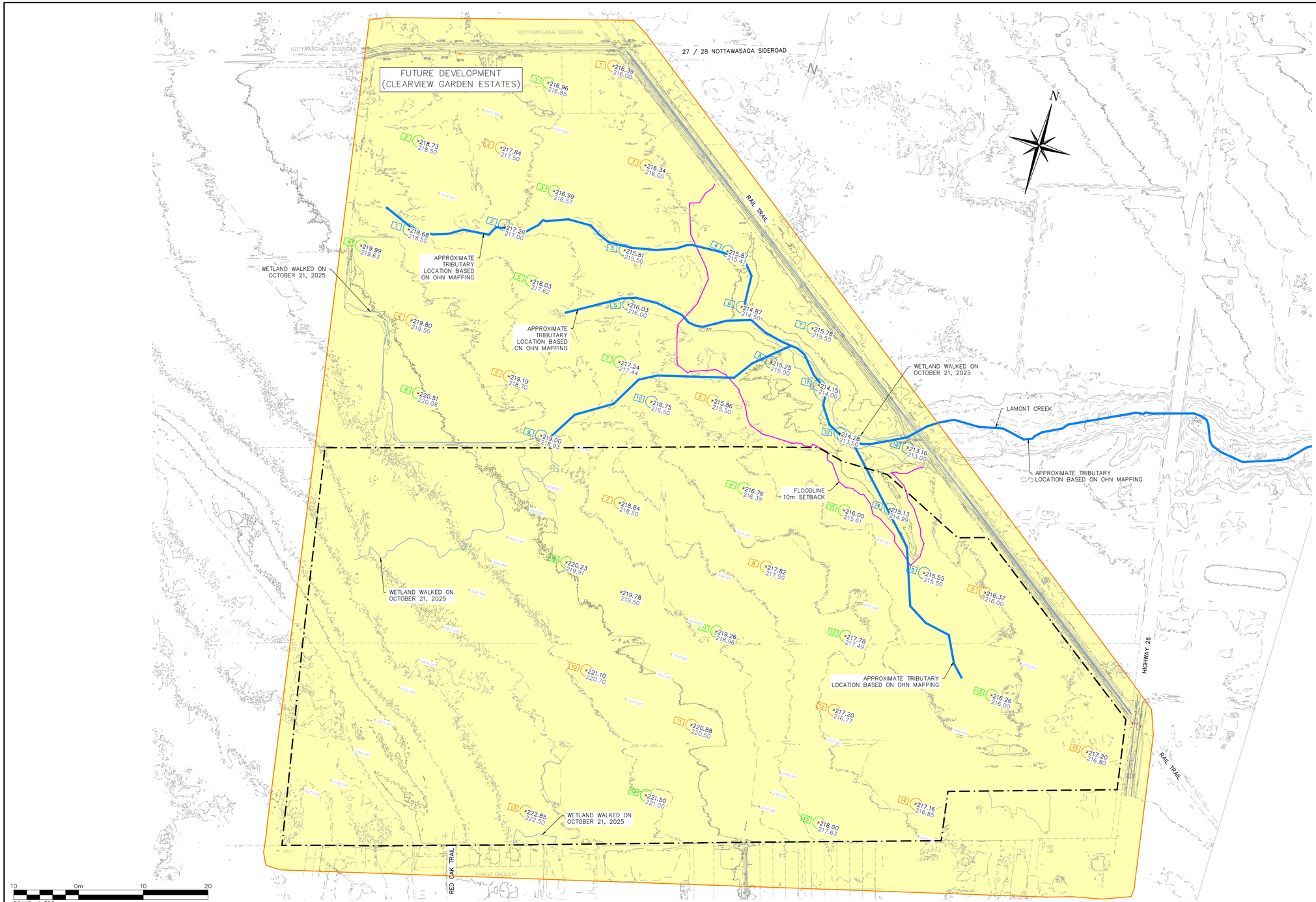
DWG No. 1 of 1

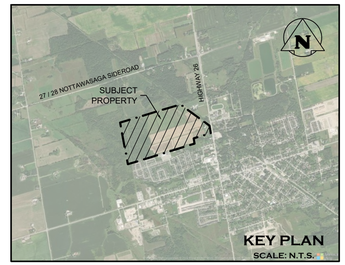
Scale Bar

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





LEGEND

- EX. CONTOUR
- PROPERTY LIMITS
- EX. WATERCOURSE
- FLOODPLAIN 10m SETBACK
- WETLAND WALKED ON OCTOBER 21, 2025
- TOPOGRAPHIC SURVEY AREA
- TOPOGRAPHIC SURVEY ELEVATION
- LIDAR DATA ELEVATION
- FLOODPLAIN (CONTOUR AND SPOT ELEVATION)
- CONTOUR ELEVATION
- SPOT ELEVATION

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4. THIS DRAWING IS TO BE READ AND UNDERSTOOD IN CONJUNCTION WITH ALL OTHER PLANS AND DOCUMENTS APPLICABLE TO THIS PROJECT.
5. ALL EXISTING UNDERGROUND UTILITIES TO BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
6. DO NOT SCALE DRAWINGS.

BENCHMARK NOTE

ELEVATIONS ARE GEODETIC AND ARE REFERRED TO MINISTRY OF NATURAL RESOURCES AND FORESTRY VERTICAL BENCHMARK NUMBER 00820038059 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

PRELIMINARY
NOT TO BE USED FOR CONSTRUCTION

Engineer

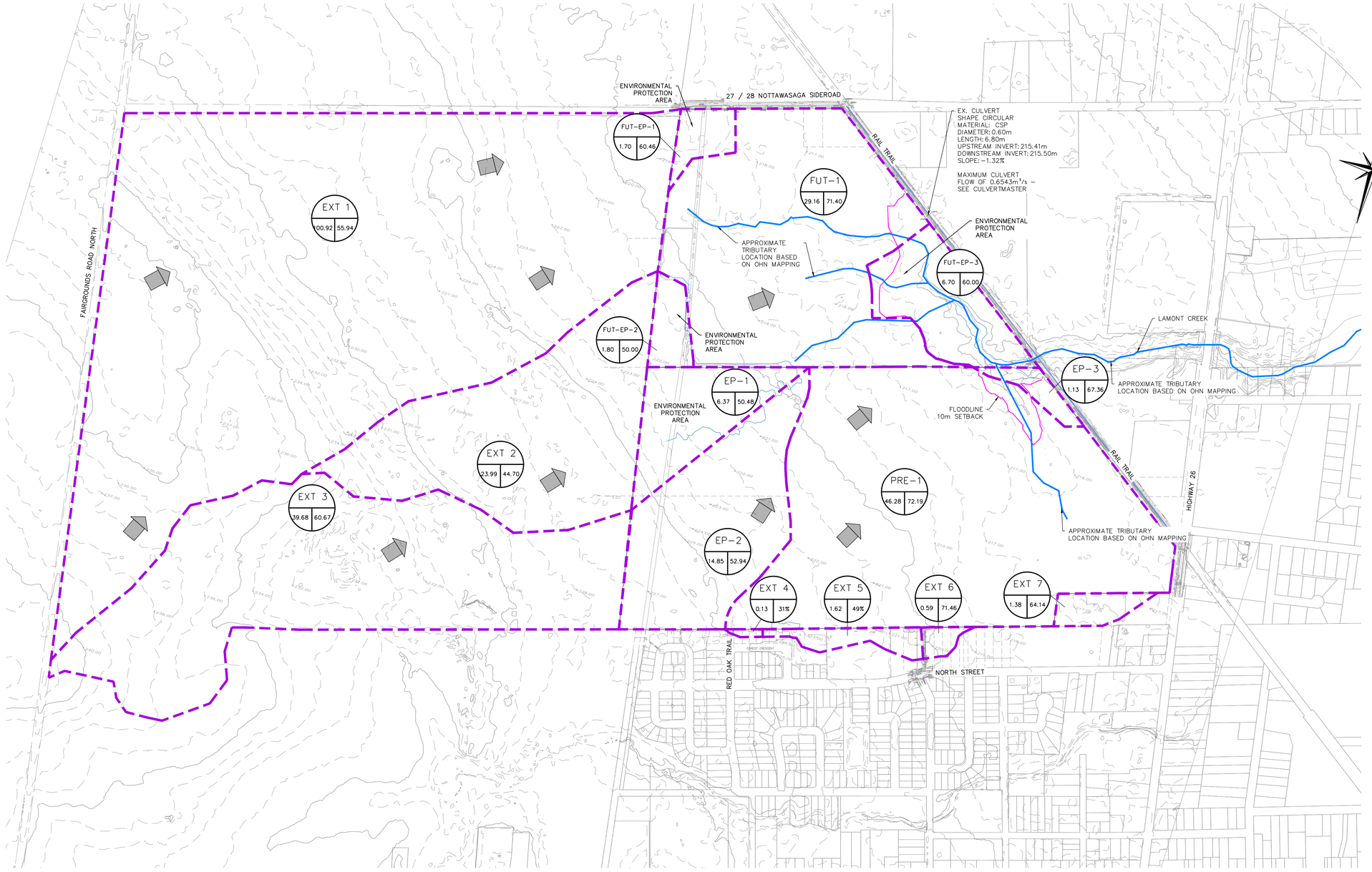
Project: BRIDLE PARK (STAYNER, ONTARIO) TOWNSHIP OF CLEARVIEW

Drawing: TOPOGRAPHIC SURVEY DATA vs DEM DATA COMPARISON

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 3

C:\Users\oparovyk\DC\ACCDocs\Crozier Consulting Engineers\1508-7498 Bridle Park Stayner\Project Files\Civil_Sheets\FLOODPLAIN FIGs\7498_FIG3 TOPO-LiDAR COMPARISON.dwg, FIG 3, 2026-07-21 11:08:10 PM, oparovyk



100 0m 100 200 300 400

SCALE: 1:5000

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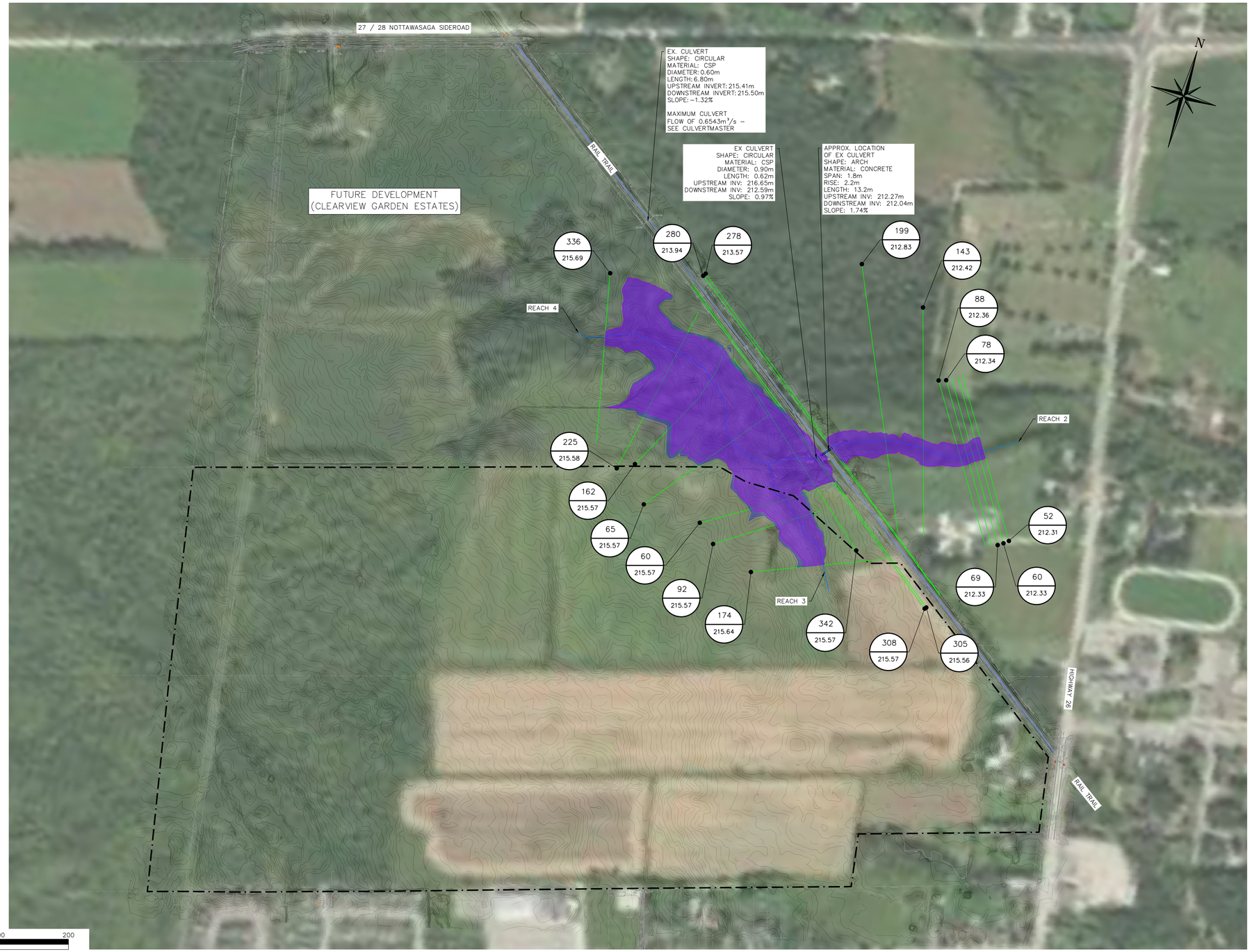
Project: BRIDLE PARK (STAYNER, ONTARIO) TOWNSHIP OF CLEARVIEW

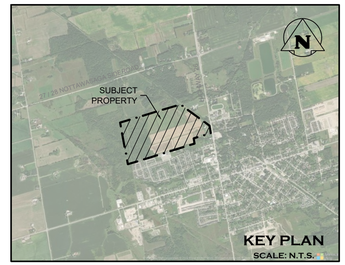
Drawing: PRE-DEVELOPMENT DRAINAGE PLAN

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: FIG4

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LEGEND

- XXX.X — EX. CONTOUR
- PROPERTY LIMITS
- RIVER
- HEC–RAS CROSS–SECTION
- REGIONAL FLOODPLAIN
- 100–YEAR FLOODPLAIN
- XSEC / ELEV — CROSS SECTION NAME; 100–YEAR WATER SURFACE ELEVATION (m)

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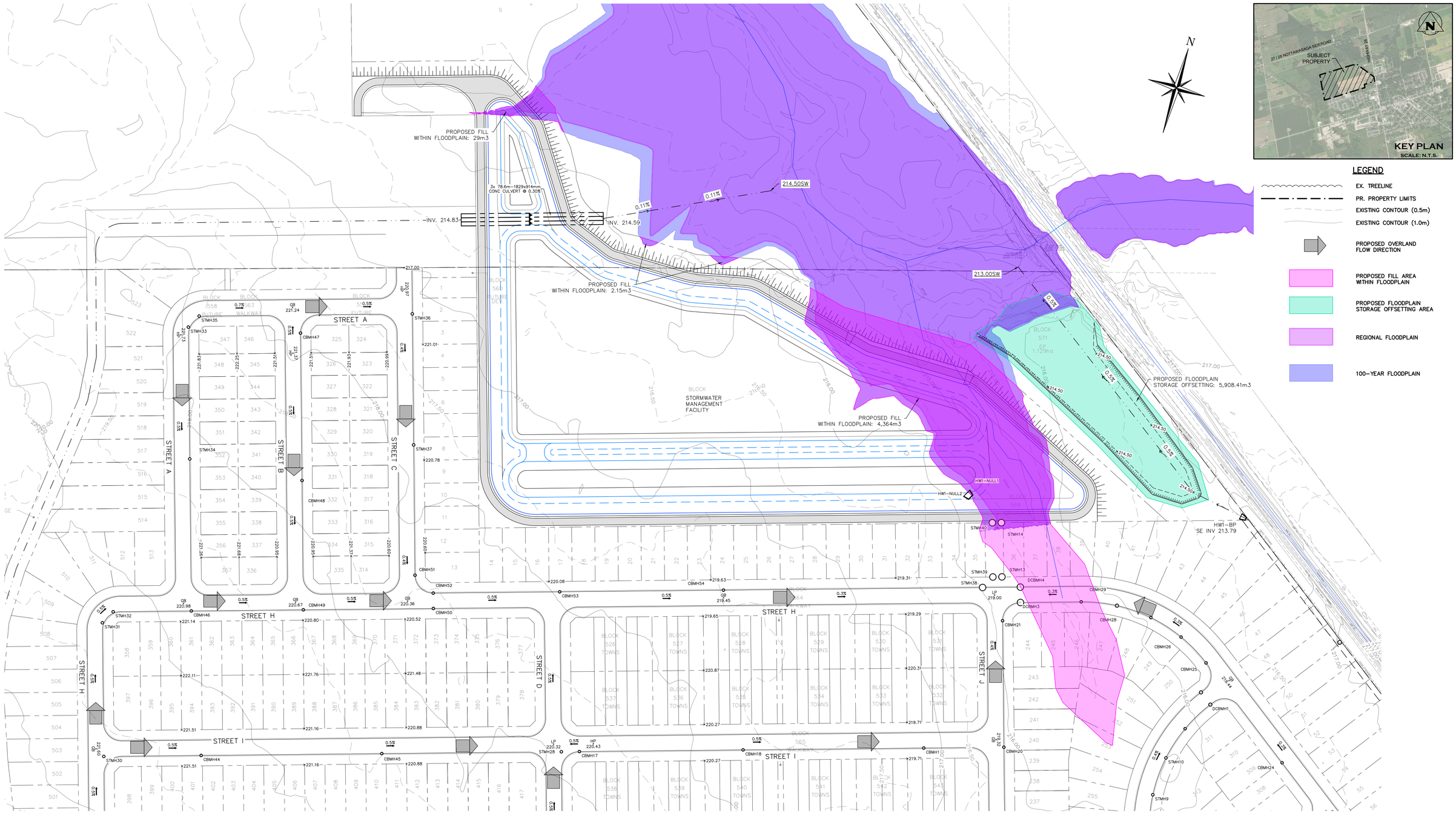
Project: BRIDLE PARK (STAYNER, ONTARIO) TOWNSHIP OF CLEARVIEW

Drawing: EXISTING FLOODPLAIN

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Check By	Check By	Drawing
N.O.C.	J.L.A./T.M.G.	FIG 5

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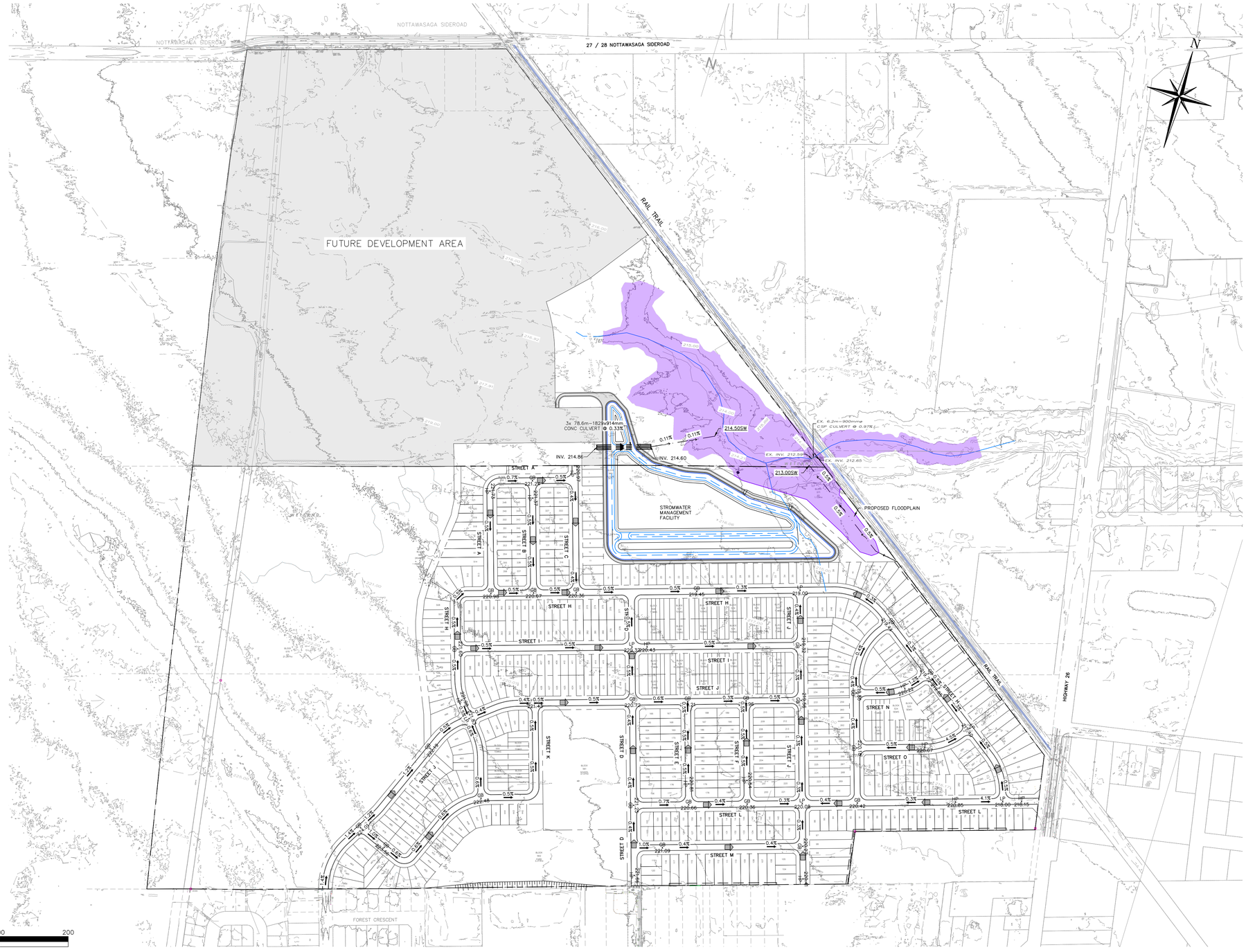
Project: BRIDLE PARK (STAYNER, ONTARIO) TOWNSHIP OF CLEARVIEW

Drawing: FLOODPLAIN REGULARIZATION PLAN

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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_FIG6 FLOODPLAIN REGULARIZATION.dwg, FIG6, 2026-08-10 11:34:25 AM, oparovyk





LEGEND

- EX. TREELINE
- PR. PROPERTY LIMITS
- EXISTING CONTOUR (0.5m)
- EXISTING CONTOUR (1.0m)
- PROPOSED OVERLAND FLOW DIRECTION
- CGE FUTURE DEVELOPMENT
- PROPOSED FLOODPLAIN

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Drawing: PROPOSED FLOODPLAIN

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