

**Project Comment Form – Internal Review Comments**

<b>Project Name:</b>	1191 CR 42, Mamta Homes Development		
<b>Project File Number (Municipal):</b>	2019-003	<b>Project File Number (Burnside):</b>	300044301.0000
<b>Reviewer:</b>	R.J. Burnside & Associates Limited (A.Holvik, H.Centen, J.Georgas)	<b>Date of current comments:</b>	June 2024

Most Current Document Reviewed		
Title	Author	Report or Drawing Date (latest revision)
Functional Servicing & Stormwater Management Report	Capes Engineering	January 9, 2019
Survey	Martin Knisley	February 21, 2017
Draft Plan of Condominium	Rodney Reynolds OLS	February 1, 2019
Transportation Study	CGE Transportation Consulting	February 19, 2019
A2-A9	RPD Studio	January 16, 2019
Site Plan	RPD Studio	March 26, 2024

Comments:				
	1 <sup>st</sup> Submission (June 2024)	Developer Response	2 <sup>nd</sup> Submission	Developer Response
	<b>General</b>			
1.	It is unclear if the roads and infrastructure will be privately owned (ie a condominium site) or publicly owned (ie municipal right of way). If the roads and infrastructure are to be publicly owned it must meet all applicable municipal standards and standard cross sections. If the development is to be a private site, the Municipality will not be assuming any of the infrastructure. Please clarify.	The roads will be privately owned, however it is proposed that a blanket easement over the roads will be provided for utilities and the watermain.		
	<b>Draft Plan</b>			
2.	The Draft Plan is outdated and does not reflect the site plan submitted. Update accordingly.	Draft Plan has been updated.		
	<b>Site Plan</b>			
3.	Curb facing sidewalk is shown. Suggest moving sidewalk away from roadway to improve pedestrian safety and provide a boulevard area to provide snow storage in the in winter.	The suggestion is noted, however the sidewalk position has been maintained and snow storage areas shown.		
4.	Temporary hammerheads or cul-de-sacs to be provided at future connections to the east in the interim until those lands are build out.	Temporary turn-around will be provided at detailed design if it appears that Mamta East will not be developed ahead of Mamta West.		
5.	If Municipality will be assuming roads they shall be built to the Township standard cross section and standards.	The roads will be private, but have been designed to accommodate garbage trucks from Simcoe County.		
	<b>Transportation Study</b>	Please refer to the revised TIS for the comments in this section.		
6.	The report submitted is from 2019. Given the amount of time that has passed and changes to the proposed draft plan, the report shall be updated to reflect current traffic operations, vehicle counts, etc. We offer the comments below on the outdated report, noting further comments will be provided upon receipt of the new report.			
7.	Proposed Draft Plan – A single temporary access is proposed at Margaret Street to serve the development, with two connections to the proposed development to the east (former Village Green subdivision, now Ashton Meadows). Presumably the temporary nature of the access is to restrict through travel on the condominium roads that originate on the public roads in the adjacent subdivision, once that development proceeds. A second emergency access should be provided to service the subject lands, pending the subdivision connections becoming available. Consideration should also be made to retaining the temporary access as an emergency access over the long term. We note that only one of the access roads into Ashton			

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	Meadows is currently constructed, and that it has not been assumed by the Township. This can be reassessed closer to build out as the status of Ashton Meadows may have changed by then.			
8.	Section 2.1 indicates that the section of County Road 42 to the south of Margaret Street is under the jurisdiction of the County of Simcoe and has an 80 km/h posted speed. The Township's Road Needs Study indicates that this section is under the Township's jurisdiction and has a posted speed of 50 km/h. Please confirm.			
9.	Section 3.1 – Background traffic has been based on October traffic counts. It should be confirmed if a seasonal adjustment factor should be applied to reflect summer traffic conditions in this area (i.e., based on the County's seasonal counts on CR 42).			
10.	Section 3.2.1 – The background developments have been based on old information, incorrect unit counts, and old studies (i.e., dating back to 2008). Traffic generation from these background developments should be updated.  Once the subdivision to the east is developed, the subject lands will access Margaret Street through the public roads in the subdivision. The analysis should be expanded to include the future subdivision access onto Margaret Street, which will accommodate the condominium development that is currently being considered.			
11.	Section 3.2.2 – The assumed background growth rate (2.5% per annum) is adopted from the Village Green Traffic Study, which was prepared in 2008. Considering the age of this data, and the significant changes that have occurred or are forecasted to occur in Stayner, further justification of growth rates in the study area should be provided.  The Township's Official Plan has identified the potential for Margaret Street to be extended easterly to Warrington Road. The TIS assumes that the only growth of traffic on Margaret Street will be from the subject development and from the Village Green Development, thereby assuming that any changes to the road network will not have an impact. Considering that the TIS forecasts traffic conditions to 2038, the Warrington Road connection should be considered in the analysis.			
12.	Section 3.3.2 – The TIS notes that the assumed site distribution has been based on the Village Green Traffic Study; however, it is not clear how this previous study has been applied. In addition, the previous study assumed that some traffic was distributed to the Warrington Road connection. The proposed trip distribution should be reviewed, since it may over-estimate the percentage to/from the south.			
13.	Section 5.0 – The TIS concludes that the intersection of County Road 42 / Margaret Street does not warrant signals; however, it recommends that the intersection continue to be monitored for these warrants in the future, considering the poor left turn egress forecasted. We agree that future monitoring should be completed; however, suggest that the warrants be based on free flow criteria, as opposed to the restricted flow criteria that was used in the TIS.			
14.	Section 6.1 and Section 6.2 – The analysis proposes a southbound left turn lane and northbound right turn lane at the intersection of County Road 42 / Margaret Street under 2038 Future Total Traffic conditions. The analysis should be expanded to assess the timing for these improvements, relative to the phasing of the proposed development and the traffic from the adjacent subdivision. In addition, considering the poor Level of Service for the westbound left turn movement at this intersection, consideration should be made to separating the westbound left turn and westbound right turn movements, assuming the intersection continues to operate under unsignalized conditions.			
15.	Other Traffic Items – The TIS does not address the following: Improvements to Margaret Street (i.e., other than LOS improvements at the intersection), internal traffic circulation, parking requirements, emergency access, garbage truck access, snow clearing considerations, condominium road cross sections, coordination of road access with adjacent development, transit connections, pedestrian and cyclist connections. Please include these discussions in the updated TIS.			
	<b>Functional Servicing and SWM Report</b>			
16.	The FSR submitted is outdated and does not reflect the current servicing environment. Please update the report and resubmit. The comments below are on the outdated report. Further comments are anticipated once an updated report is provided.	The FSR has been updated.		
17.	Stayner does not currently have water allocation for this development. Timing on future available allocation is currently unknown.	Noted.		
18.	The proposed alternative option for sanitary servicing utilizing the existing Margaret Street sanitary sewer will not be considered by the Township.	It is proposed that only 5 single family units will connect to Margaret Street and updated sanitary sewer calculations have been provided demonstrating capacity.		

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19.	Please include all assumptions/design criteria used on sanitary design sheet.	Noted.		
20.	Please review infiltration value calculations. Using 0.23 L/s/ha, our calculations are resulting in slightly higher values.	The sanitary design sheet has been updated		
21.	The sanitary flows stated in the report for Mamta East and West do not correspond with the design sheet.	The sanitary flows have been updated		
22.	The sanitary flows shall be confirmed to be adequately accommodated in the Ashton Meadows sewer. Coordination between Developers is required to confirm flow/sizing requirements.	Calculations have been provided to demonstrate capacity.		
23.	Water demand calculations and fire flow demand calculations (based on FUS, for worst case rowhouse block, amenity building, and apartment building) are required. The minimum flow for multi-residential type dwellings is 100 L/s. The actual required fire flow will be per FUS calculations. Based on preliminary modelling, to achieve the minimum 100 L/s everywhere in the site, a 200 mm watermain is required for the north/south watermain, as well as a direct connection to the Margaret Street watermain. The modelling was completed under the assumption that the proposed 300 mm on Margaret Street is completed, as well as the connections to the Ashton Meadows development. Modelling to be further updated once updated water demand calculations are provided.	FUS calculations have been added to the FSR and 200 mm dia. watermain has been provided on the Mamta West site. Three connections points for the watermain have been proposed.		
24.	Visual OTTHYMO was used to model the pre and post development stormwater conditions and to the model the proposed stormwater management pond for Ashton Meadows. Visual OTTHYMO and PCSWMM will produce different pre and post development stormwater results for the same site and the two models are difficult to compare results. We therefore will not accept the PCSWMM model for Mamta, as Mamta relies on the stormwater management design for Ashton Meadows. Please revise the modelling using Visual OTTHYMO.	We do not see any advantage to remodelling the Mamta West site. We have reviewed the applicable drainage areas and C Values/CN and the Mamta West site is less than Greenland assumed when designing the Ashton meadows SWMF. Provided the site stays below a CN of 68.9 or C value of 0.6 there should be no need for additional controls or calculations. The Mamta West site is below the CN/C value.		
25.	Please provide a storm sewer calculation sheet using the Rational Method for the sizing of the internal storm sewer network.	A Rational Method design has been included		
26.	The storm sewer in Ashton Meadows will have capacity to accept up to the 5-year storm runoff from the native soils on the Mamta site and up to the 10-year storm when the proposed extra pervious imported fill is placed on the Mamta site. The Ashton Meadows SWM pond has been designed with capacity for the post development uncontrolled runoff from the Mamta site. The report for Mamta West states that an overland flow route will connect into the Ashton Meadows site to convey runoff to the SWM pond. Please show an overland flow route (including proposed elevations) on Drawings C3 and C4 from the Mamta site to the Ashton Meadows site to ensure safe conveyance of storms greater than the 10-year event. Provide calculations to show that the overland flow route has the required capacity. This will require coordination with the Mamta East lands, as the overland flow route will connect to Ashton Meadows through these lands.	We believe the design of a formal overland flow route is better suited to detailed design, or at least a later stage of design when it may be more clear on the timing of which site will be developed first (Mamta East or West).		
27.	Jellyfish (or equivalent) Sorptive filters are specified on Drawing C6 as a stormwater quality control measure. Please provide specifications for the proposed sorptive filters. Are the sorptive filters to be assumed by the Township?	No additional quality controls are required and have been removed from the design. Quality controls are provided by Ashton Meadows.		
28.	According to the Geotechnical Report the existing site has a topsoil thickness generally ranging from 200 mm to 400 mm. It is proposed to have a 300 mm topsoil layer on site to help maintain the overall site water balance. Since the existing topsoil conditions match the proposed topsoil conditions, no additional water balance credit should be employed in the modelling for the proposed topsoil layer. Please adjust the modelling.	The proposed 300 mm of topsoil would be a sandy mix topsoil underlain by a more permeable fill layer and we believe that the additional topsoil could provide a modest improvement overall.		
29.	The report states that MECP approval is not required. Please cite the supporting regulatory exemption in the report. Due to the fact that the proposed development drains to the Ashton Meadows pond and because this pond has not been assumed by the Township, it will be the (Mamta) Proponent's responsibility to ensure that the MECP ECA and/or CLI-ECA for the pond is valid and current prior to constructing or using the proposed stormwater works on the Mamta site.	We have expanded the explanation in the report.		
30.	We defer to NVCA for review/comment of the wetland assessment by Terrastory.	Noted		
	<b>Engineering Drawings</b>			
31.	Updated engineering drawings have not been submitted. We provide the comments below based on the previous submission in 2019. Given the redesign they may no longer be valid however some that are still valid may assist in providing a new submission with fewer comments if the below are addressed. More fulsome comments will be provided upon receipt of the updated submission.	Updated drawings are included in the resubmission.		

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32.	Dwg. C4 – The existing contours on the drawings denote a significant draw along the south property line of the proposed development. The site plan should be modified to ensure the field to the south continues to be intercepted and directed east. Adjacent landowner coordination may be required.	We have indicated that drainage along the south side will be directed east.		
33.	Please provide arrows showing the overland flow route on drawing C6.	Arrows have been added.		
34.	Please show the contributing areas from Mamta East on the sanitary catchment drawing C5.	The sanitary drainage area sheet has been updated.		
35.	Please add dimensions to the proposed parking spaces on drawing C2 and C4.	The parking spaces are drawn as standard 3 m x 6 m.		
36.	Please label the structure between CBMH12 and CBMH13 on drawing C2.	Storm structure labels have all been updated.		
37.	Please label the curb radii and provide a specification for the curb and gutter on drawings C2 and C3.	The curb is identified on C8		
38.	Please show the proposed grading limits on drawings C3 and C4.	Grading limits have been shown.		
39.	Please show the proposed grading limits to transition from the edge of the proposed trail to the existing grade in the Hydro Easement on drawing C4.	At this stage grading is conceptual only. More detailed grading will be provided at a later stage of design.		
40.	On drawing C2, please provide the inverts and top of grate elevations for the proposed manhole that will replace the storm sewer stub labelled "EXPLUG39" on Ashton Meadows Street A. In addition, the invert for the storm sewer stub on Street A to be confirmed to be as per the Ashton Meadows storm design.	Storm structure information has been updated. This is preliminary design only.		
41.	The proposed storm sewer from the plug to MH39 on Ashton Meadows Street A is 600 mm diameter. Drawing C2 currently shows it as 450 mm diameter. Please revise this pipe diameter on drawing C2.	The pipe label has been revised.		
42.	On drawing C2, please provide the inverts and top of grate elevation for the proposed sanitary manhole that will replace the sanitary stub on Ashton Meadows Street A.	This is preliminary design only. Full design details such as is being requested will be provided at detailed design.		
43.	Where more than four homes rely on rear lot drainage, a storm pipe system is required. Storm sewers and catchbasins should be provided for all rear lot drainage systems. Any pipes to be located in easements a minimum of 3.0m wide.	There is no stipulation in the Town standards regarding the number of rear yards which trigger the use of rear yard catchbasins. We are currently proposing that all rear yards are able to drain via swale to the road storm sewer. If it appears that additional CB are required this will be addressed at detailed design.		
44.	Please add the following note to drawings C3 and C4: <i>"The underside of flood slab and associated drains are to be at least 0.4 m above the seasonal high groundwater elevation. The high groundwater elevation shall be raised with corresponding increase in all other construction elevations, if higher groundwater conditions are evident at the time of construction. The high groundwater elevation shall be the highest documented groundwater observation."</i>	This will be added at detailed design. The provided design is for preliminary approval only.		
45.	Please show the borehole locations on drawings C3 and C4 and label the seasonal high groundwater elevation at each borehole.	This will be added at detailed design. The provided design is for preliminary approval only. The geotechnical		
46.	Please confirm if buildings are to have basements and indicate the underside of basement floor slab and seasonal high groundwater elevation for each building to confirm appropriate separation from groundwater can be achieved.	The buildings are currently assumed to have a basement.		
47.	Please label the proposed elevations on all lot corners on drawings C3 and C4.	This will be added at detailed design. The provided design is for preliminary approval only.		
48.	Please provide edge of curb elevations on drawings C3 and C4.	This will be added at detailed design. The provided design is for preliminary approval only.		
49.	Please label the hatching shown on all drawings at the intersection between Street E and Street A.	This will be added at detailed design. The		

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50.	Please label the proposed slope on all driveways on drawings C3 and C4.	This will be added at detailed design. The provided design is for preliminary approval only.		
51.	Please label the areas between Streets D & Street E and Street E & Street F. Are these areas intended to be landscape buffers?	The Draft Plan has been updated so this comment is no longer relevant. At detailed design a full landscape plan and details will be provided.		
52.	If the temporary road connection to Margaret Street is required, a temporary culvert will be required. Please show a temporary culvert on drawing C1. Label the inverts, size and material of the culvert and provide a supporting calculation for the culvert size.	The proposed connection is not permanent.		
53.	Please show the location of the sanitary and water services on drawings C1 and C2. The minimum offset between the services and the driveway is to be 1.5 m.	This will be added at detailed design. The provided design is for preliminary approval only.		
54.	Please include the percent impervious area within the catchment area information bubble on drawing C6.	The C value now replaces % impervious.		
55.	An erosion and sediment control drawing will be required for the detailed design.	Noted.		
56.	If the temporary access road should be shown to connect into the edge of pavement.	This will be added at detailed design. The provided design is for preliminary approval only.		
57.	Please provide plan and profile drawings for all proposed roads within Mamta West at the detailed design stage.	Noted		
58.	Coordination with the design of Mamta East is required to ensure that the proposed sanitary, storm and water services, as well as the site grading match into the Mamta East property.	Noted		
59.	Please add an additional structure, as required, to maintain the alignment of the sanitary (and watermain) per the Township standards. The manhole structures should be in the middle of the roadway, and out of the wheelpath of vehicles.	Noted		
60.	Please place watermain valves near the end of the curb radius and not within intersections.	The specific valve locations can be adjusted at detailed design stage once the watermain sizing/location is determined with updated modelling.		
61.	Please confirm the planned ownership of the roads and infrastructure. Based on the documents provided, the development appears to be planned as privately-owned roads and infrastructure. In this case, please include a water meter and backflow preventer in an above ground, heated enclosure at the property line. The system will be classified as a private small system and will require a qualified operator. Please see Township by-law 19-54 for more details.	The roads are to be private but a blanket easement is proposed for the Town to own/access the watermain.		
62.	Please provide written confirmation from the owner of hydro easement to confirm that the proposed infrastructure within the easement is acceptable.	This will be provided at detailed design when all utilities are contacted for the internal design. We understand from other projects completed in Clearview under the same easement that restrictions apply to any development that extends vertically within the easement and roads/curbs/walkways that are generally flush with are acceptable provided they do not extend within 10 m of the hydro pole bases.		
63.	The development includes an extensive retaining wall. Please review grading, including coordination with adjacent properties, to minimize retaining wall height and extents. Are access ramps or stairs contemplated to provide pedestrian access more easily for the central portion of the site? This is a feasibility issue because it affects the neighbouring properties. As such, it should be addressed at the FSR stage of the design.	The retaining wall has been reduced as much as possible, but will require structural design at a later stage.		
64.	Please show top and bottom of wall grades, as well as proposed preliminary grading of trail block adjacent to CR42. This needs to be confirmed at this stage to confirm proper grading and drainage can be achieved within the property available.	There is no longer a wall proposed in this area.		
65.	A drainage solution is required for the rear yards of the easterly lots. This can include options with and without Mamta east being constructed. A piped system is required for more than four units.	A drainage solution will be determined at a later stage when it becomes clear which development will be constructed first.		

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66.	If Mamta East and Mamta West will be under different ownership in the future, maintenance holes at the property boundary should be provided to ensure maintenance can occur on one property or the other without the requirement for permission from the neighbouring owner.	The Mamta East site is to have Municipal ROW not private roads so no permission will be required.		
67.	Dwg. C3 & C4 – Where is the drainage from the east side of CR42 draining in the proposed development condition? The existing contours show that sheet flow from CR 42 currently crosses the Mamta site to reach the Margaret Street ditch. The proposed retaining wall along the west side of the Mamta site will concentrate this flow and divert it north on to the existing private lot at the northwest corner of the Mamta site. This is not acceptable. Additional grading information must be provided to demonstrate that the CR 42 runoff can safely drain via the right-of-way into the Margaret Street ditch in the proposed condition.	The drainage on the east side of CR42 appears to drain north to Margaret Street this will be maintained in the post development condition. We requested the proposed intersection improvement drawings for Margaret Street but did not receive anything from the Town for this.		
68.	Dwg. C3 – The proposed grading of the Mamta site must ensure that the lot adjacent to the northeast corner of the site can drain. In the existing conditions this lot would drain across the Mamta site to eventually outlet to the Margaret Street ditch; however, once Mamta is developed the proposed retaining wall will block the drainage path. Please revise.	The overall grading has been changed and this comment may not be relevant anymore.		
	<b>Geotechnical Report</b>			
69.	Please provide the Township a copy of the PTTW or EASR, as applicable, when available.	This would occur at a later stage of design/approval		
70.	The report and groundwater monitoring was completed in 2017. Have any groundwater measurements been recorded since that time? Provide an updated report with updated modelling results.	Updated measurements have been obtained and the report updated.		
71.	The report from 2017 is marked DRAFT. Please provide an updated report stamped by a P. Eng with the draft removed.	Noted		