

**40-60 Emma Street Comment Matrix
OPA01-2023 and Z05-2023**

Burnside Comments	
Comment	Response
Stormwater Management and Drainage	
1 Due to the topography, we do not recommend the Town take any liability, or responsibility, for inspecting or monitoring of the rear yard catch basin system, such as failure could result in potential for claims of flooding from the future owners of the townhomes. There will need to be a common element for drainage, or a mutual drainage agreement among the owners. We expect this also to be required for the retaining wall that expands across the property.	Site is to be a condo corporation and the storm system will be owned by the corporation.
2 The rainfall intensity data should be from Fergus Shand Dam, AES station per Town standards.	Updated, Fergus Shand Dam coordinates utilized along with the IDF curve lookup in order to provide for design storm in PCSWMM. Rational method calculations also updated to utilize the Fergus Shand Dam
3 Drainage Areas:	
a The runoff coefficients should be included in the drainage area symbols and included in the legend for the drainage plans.	Updated
b The Pre-Development Drainage Conditions drawing should be revised to show the full extent of the upstream external drainage area identified as 1.01 ha. in size and to show how it drains through the site. The majority of the external area shown in post development plan by-passes most of the site and drains north of the townhouse blocks (i.e. 0.70 ha in area Post-6) but the grading plan doesn't show any major conveyance swale to ensure it by-passes the rear yard of the townhouses. A catch basin west of the sidewalk in a block dedicated to the Town may be needed. Calculations to confirm that the 100 year storm can be conveyed through that area should be provided.	Updated, all roof water is being directed to the onsite stormwater management system. Limited flows from neighbouring properties are being directed around the building and will enter into rear yard CBs all to be owned by the condo corporation.
c The northern portion of the site is cut-off on these drawings. Both the pre-development and post development drainage area drawings are to show all the lands included in this application.	Updated
d The pre-development drainage drawing does not include the west half of the Emma Street road allowance area. However, the post development drainage area drawing shows it as being included, yet the total drainage areas are equal in both analysis.	Updated

e	The drainage areas to the two new single street catchbasins on the east side of the Emma Street centerline are not shown on the drainage area drawings or accounted for in the storm sewer design. These areas are to be added in order to properly size the storm sewer.	Updated
f	The townhouse backyard drainage areas are to include half the townhouse roof area due to peaked roof construction. The runoff coefficients should be revised accordingly.	No longer applicable
4	The portion of drainage area Post-7 assigned a runoff coefficient of 0.90 appears low when accounting for all imperviousness surfaces. A breakdown of impervious area components (roofs, driveway, sidewalk, road pavement) should be included in the report.	Updated to 0.95
5	The inlet capacity of the new sewer system should be identified.	Provided through the PCSWMM model output
6	The structural integrity of retaining walls typically require control of surface water which would require collector swales and catchbasin inlets behind the wall. Please confirm whether this has been considered in the design of the retaining wall as no conveyance of surface water is shown to direct water away from the top of the wall.	A swale is provided with drainage away from the building
7	The storm sewer design is to be revised based on the above comments. Refer to red-marked drawing comments.	Updated
8	Notwithstanding the elevation difference between foundation drain and the storm sewer, a 100 year hydraulic gradeline analysis is to be provided. The minimum HGL separation to the finished level 1 slabs of the townhouse blocks is 0.5 m.	Provided through the PCSWMM model output
9	The CBMHs will be benched so there is limited quality control being provided. Further discussion is required on how quality control can be met in order to satisfy CLI-ECA requirements.	It is proposed to include an OGS on site to be owned by the condo coporation
10	Provide the calculation and evaluate its impact if the runoff coefficient is greater than 0.5 which had been applied to the area in the Design Brief dated August 2011 for the William Street Outlet Works.	PCSWMM was used to evaluate the site requirements for storm water storage as the new site has a runoff coefficient greater than 0.5
Grading Plan		
11	Refer to comments directly on the plan. We note that filling will be needed by the hydro poles to maintain positive drainage towards the new barrier curbing installed which will need to be approved by hydro. A topographic survey to the limits of the sidewalk installation should be completed to confirm the location of the sidewalk and any requirement for utility modifications.	Owner will coordinate directly with Hydro One, a strut for the guy wire will also be required to accommodate the new sidewalk

Concept		
12	Plans show hydro guy wires, as well as overhead hydro along its east side of the property. We trust easements are in place for that infrastructure for the respective utilities otherwise they should be provided accordingly.	Noted
13	There is no street lighting along this section of Emma Street and should be in place fronting at minimum fronting the development.	Electrical Plans to be provided at final design review
14	There are existing water services on Emma Street (shown in background drawings provided to Moorefield Excavating) that are not shown on the submitted drawing. We request they be shown so that the contractor will be aware of their location. The Town was also able to locate an older drawing which does show a sanitary service to 71 Emma Street coming from the existing San. MH shown below.	Noted on the drawings
Landscape Plan		
15	The plan should consider underground services. It is unlikely any of the trees shown in the front yard will be able to be planted.	Revised plan provided for new development
16	Potential equipment may be needed to do future repairs to the rear yard storm sewer. Planting trees along the west side or east side of Block 2 is likely problematic in the long term.	Storm sewer is now a private element to be owned by the condo corporation
17	A note should be added on the plans, that trees should not be planted within 3 m of the retaining wall or within a 1H:1V envelope measured from the back of the bottom of the retaining wall structure whichever is greater.	Notes Added
Site Screening		
18	Little Brown Myotis, an endangered bat species was recorded 53 times on the property over 10 nights. We recommend that the proponent submit an Information Gathering Form to the Ministry of Environment, Conservation and Parks (MECP) to confirm any permitting requirements. Prior to ZBA approval, the proponent should obtain either 1) written confirmation that a permit is not required, or 2) written confirmation that a permit is required and commitment from the proponent to carry out all permit requirements prior to construction.	No permit is required. (Refer to emails between Envision and MECP)
Vegetation Management Plan		
19	No comment, but the timing of the clearing should be conducted between Oct 1st and April 1st per the Screening report, however, should also consider impacts of erosion and sediment control given the slope of the property and upstream drainage area.	Timin window noted on drawings

Erosion & Sediment Control Plan		
20	The majority of the site is being cleared. More measures including a staging plan should be provided. If the site was cleared, a mud mat and silt fence alone would not be sufficient for this site. The Grand River is close, and therefore it is more critical to provide enhanced ES&C.	Staging plan provided, ESC plans updated and risk assessment provided per GRCA comments
Renderings and Elevations		
21	It's unclear where the rainwater leaders are located. They are not to discharge onto a hard surface. The applicant should show where the downspouts will discharge on the property.	Discharge to storm drain for connection into stormwater management pipe
Noise Report		
22	The assessment considered the proposed development as Class 1 area. However Class 2 area classification is more appropriate for this location. According to Table 2 in the Environmental Noise Report, sound levels predicted due to traffic are 46 dBA and 40 dBA for day and nighttime, respectively. Considering these values represent future worst case scenario, the existing ambient sound levels are expected to be even lower and below Class 2 exclusion limit values. Therefore, in our opinion, the development should be considered and assessed as a Class 2 area.	JAI June 17, 2024 - addressed
23	Sound levels predicted due to stationary noise exceed Class 2 evening limit for the outdoor receptor (R1). Mitigation measures should be investigated and recommended to ensure the sound level is below the applicable limit at this location.	JAI June 17, 2024 - addressed
24	There are recommended warning clauses so it is unclear how the Town would ensure these warning clauses are provided to future property owners without a development agreement.	JAI June 17, 2024 - addressed as the proposed development will require a Site Plan Application in the future
25	The report relies on the analysis of no windows on the side faces. Typically, that is the advantage of purchasing a corner unit and having the opportunity to have additional windows. It is unclear how this could be enforced without a development agreement.	JAI June 17, 2024 - addressed as the proposed development will require a Site Plan Application in the future
Water Supply		
26	The Town is waiting for the commissioning of a new pumphouse to expand its water capacity which is expected to be completed by end of Spring 2024.	N/A
Slope Stability		
27	This report shall be to the satisfaction of the GRCA.	Refer to responses to GRCA comments below.

Dufferin County - Building Services

	Comment	Response
1	No Comment	N/A

Upper Grand District School Board

	Comment	Response
1	The collection of Education Development Charges is required prior to the issuance of a building permit(s).	N/A

Grand River Conservation Authority

	Comment	Response
1	It appears that the datum used for the survey (CGVD 28; 1978 adjustment) does not match the datum used and specified by the GRCA (CGVD28). The difference varies with location; however, the 1978 adjustment results in ~0.15m vertical differential to the original 1928 datum. The survey data set needs to be translated to match GRCA datum (CGVD28) and the Regional Flood Elevation of 455.39 metres re-mapped on the drawings.	Mapped floodplain was adjusted by 0.15m on the design drawings and marked as adjusted (adj)
2	The Geotechnical Investigation and Slope Assessment is generally acceptable, however, considered incomplete in the absence of a photographic record. Please submit a photographic record to support the site inspection.	A photographic record has been provided in the revised geotechnical report
3	The report mentions groundwater seepage at the location of BH3, which is at the middle of the slope. A review of this location suggests that it may have suffered a previous landslide. Please review and confirm that the ground disturbance and lack of vegetation at this location is not due to previous landslide activity.	This has been addressed in the revised geotechnical report. Upon review, there are no signs of slope failure or landslides in this area.
4	Please provide recommendations on how to manage the groundwater seepage at location BH3 for the service life of the structure, assuming that any attempt to block it could adversely affect the stability of the slope and/or the stability of the structure.	This has been addressed in the revised geotechnical report. It is anticipated that intermittant seepage from the slope can be redirected by the proposed building wall and foundation drainage system.

Comments to be addressed at detailed design:		
5	The ESC assessment should follow the Erosion and Sediment Control Guide for Urban Construction (TRCA, 2019) including an erosion risk assessment to guide/justify ESC Plan development. Additional measures should consider:	See Updated ESC Plans and risk assessment in the servicing brief
a	Vegetation of areas inactive for 30 days or longer.	This has been included.
b	Conveyance of major event flows during construction (i.e., location, method, necessary protection)	Included.
c	Evaluation of requirement of and specification of any erosion control measures on the embankment.	A filter sock at the base of the embankment is being proposed
Advisory comments for the Municipality		
6	The site will discharge to the municipal storm sewer and as such stormwater management review is deferred to the Municipality. The Municipality should be advised that the proposed runoff coefficient for the site is greater than the 0.50 value that was assumed for the downstream storm sewer system.	Noted. Stormwater retention provided on site. Runoff will be limited to max 0.5 runoff coefficient
7	The submitted drawings are lacking information. Property boundary and major/minor flow routes should be clearly identified, and extent of external catchment areas fully shown. A legend should be provided on all drawings to identify all line types and symbol/icons.	Updated
8	The slope is heavily vegetated. Removal of the vegetation will reduce the concentration time for surface runoff coming off the slope, which could impact Emma Street and/or downstream structures. The Municipality might consider surface water management for the property.	Included
9	It may be prudent to extend the silt fencing around the entire site perimeter to act as a construction boundary.	Included