



December 4, 2020

MTE File No.: 46037-100

Ms. Annette Simpson, B.A., C. Tech.
Senior Engineering Technologist Capital Works
Development and Infrastructure Division
City of Burlington
426 Brant Street, PO Box 5013
Burlington, ON L7R 3Z6

Dear Mr. Annette Simpson:

**RE: Local Official Plan Amendment, Zoning By-law Amendment & Draft Plan of Subdivision – 2294 & 2300 Queensway Drive, Burlington
Comments Response (505-5/19, 520-10/19 & 24T-19002/B)**

Thank you for your comments dated January 22, 2020 with regards to the development at 2294 & 2300 Queensway Drive in the City of Burlington. We have reviewed your comments and offer the following in response:

1. Provide a revised Stormwater Management Report for review and approval, to confirm project is feasible.

Response: Noted. Please see Section **2.0** in the Functional Servicing + Stormwater management report.

2. All roofs (and hard surfaces) must drain to the storm sewers, currently Blocks 1,2 and 3 roofs drain to the back yards, please revise so that they drain to the storm sewers in the laneways. Only the back and side (soft surface) yards can drain to the french drain system, no hard surfaces. Please update section 2.3 to reflect all hard surfaces being drained to and managed in the storm system that outlets to Queensway Drive.

Response: Noted. Blocks 1,2,3 and 4 roof drains to the proposed storm sewers in the laneways.

3. Please identify the existing overland flow route to the south that the back yards/landscape areas will drain to.

Response: Noted. Existing overland flow route has been included. Refer to drawing C1.1.

4. With only 2.5m of landscape area at the rear of Blocks 1 and 2 it is likely that residents will just hard surface their back yards rather than maintain such a small area of landscaping. Also, considering that the back yards are POTL, and the condo corporation will not be responsible for maintenance, we would ask that this area be considered 0.9 runoff coefficient in the stormwater calculations. This has been our experience in other developments.

Response: Noted. Stormwater calculations have been updated with 0.9 runoff coefficient in requested area. Refer to Section **2.0** in Stormwater Management Report.

5. We require a revised storm water management section of the Functional Servicing Report, including all calculations, figures and drawings addressing comments above and within this letter, signed and stamped by the Professional Engineer. Please note that additional comments/requirements may arise once a comprehensive review of the revised report/addendum is completed.

Response: Stormwater management section has been updated in the Functional Servicing Report. Refer to section **2.0**.

Servicing & Grading

6. The landscape drawings indicate a landscape buffer/cedar hedge along the rear property line in close proximity to the proposed french drain system. Our understanding is that the Landscape Technician has confirmed there is a conflict between the two. The landscape buffer is a required item to implement, there needs to be room for both. Could a root barrier be implemented? It is possible that the french drain system may not be feasible due to saturated ground conditions, it is also possible that the size of the french drain system will be reduced once all the roofs drain to the storm sewer system.

Response: French drains have been removed from the design as it is not required to meet SWM criteria.

7. There are structures and required infrastructure located in the 7.5m block that was to remain free and clear. It is our understanding that the requirement of this block to be created (but not dedicated) has not changed. Please remove all structures required infrastructure from this block. Only surface paving and curbing would be considered allowable.

Response: Noted. 7.5m block is free of structures and infrastructure. Refer to drawing C2.2

8. Since the site needs to be raised to provide an overland flow route for all hard surfaces to Queensway Drive, please ensure that the boulevard/front of the property also has positive drainage to Queensway Drive. i.e. a cut of swale & catch basin between the back of sidewalk and the property line should not be needed.

Response: Noted. Grading has been raised. Refer to drawing C2.1.

9. Please ensure that top of curb for the private laneways are higher than the high point in the driveway to ensure overland flow is directed to Queensway Drive via the development's driveway.

Response: Noted. The drawings have been revised to reflect this.

10. The stormwater management report indicated surface ponding – please show the surface ponding limits and elevation on the grading drawing. It needs to be clear that there is no risk of water entering the units.

Response: Noted. The grading design has been revised to eliminate surface ponding and include underground storage tank. Please refer to drawing C2.2.

11. What is the HGL for the municipal storm sewer – does it impact the site? Is a check valve needed?

Response: We could not obtain a HGL confirmation from the City. Hence, it is assumed that HGL is at 80% capacity of the existing 1200mm diameter pipe. The HGL does not impact the storm sewers or storm storage within the site and no backflow prevention valve is required.

12. Is the eccentric expander needed? Is it feasible just to have a 100mm pipe between MH2 and the OGS?

Response: Yes, eccentric expander is needed for stormwater management calculations.

13. Is it preferred to have a larger diameter pipe downstream from smaller diameter pipe, except for the orifice.

Response: Noted.

14. Is there physically enough horizontal separation between the storm sewer/manholes and the sanitary sewer/manholes? Please double check as they are larger size than typical due to storage requirements.

Response: Confirmed there is enough horizontal separation.

15. Erosion control will be looked at through the future site plan process(if this application is approved). As an advisory only, we look to the Conservation Ontario mud mat detail, i.e. two sizes of clear stone, 50mm diameter clear stone for 10m closest to the ROW and 150mm clear stone for the 10m into the site.

Response: Noted.

Servicing & Grading

16. Section 6.5 indicates it is strongly recommended to install continuous subdrains beneath the pavement structure and connect to the catchbasins to remove excess subsurface water, please ensure the civil engineer is aware of this strong recommendation and includes in their detailed design at the site plan stage.

Response: Noted. Subdrains have been added. Please see drawing **C2.2**.

17. Section 5.8 indicates that their preliminary opinion is that at source infiltration of stormwater runoff will be challenging for this development and that additional investigation is needed at the exact locations of proposed infiltration – there is a large French drain system proposed – this needs to be looked at now to confirm if the stormwater management of this site is feasible. Please have the Geotechnical Engineer discuss the proposed infiltration trenches with the Civil Engineer, we will need the Geotechnical Engineer to confirm it is feasible to have infiltration trenches, and if so specifically confirm that they will not be located in saturated conditions, seasonally high groundwater estimated elevation, and estimated drawdown time of less than 48 hours.

Response: Noted. French drains have been removed from design. Please see drawing **C2.2**.

Geotechnical Investigation

18. Section 6.1 indicated if there are basements that perched water may be handled using properly filtered sump and pumps located outside the building footprints – are there basements proposed? If so storm laterals will be needed, and the stormwater management will need their own sump pump/laterals.

Response: There are no basements proposed for the development. This statement has been removed from the Geotechnical Report.

19. Section 6.5 indicates it is strongly recommended to install continuous subdrains beneath the pavement structure and connect to the catchbasins to remove excess subsurface water, please ensure the civil engineer is aware of this strong recommendation and includes in their detailed design at the site plan stage.

Response: Civil Engineer is aware of this strong recommendation and subdrains have been incorporated. Please see Drawing **C2.2**.

20. Section 5.8 indicates that their preliminary opinion is that at source infiltration of stormwater runoff will be challenging for this development and that additional investigation is needed at the exact locations of proposed infiltration – there is a large French drain system proposed – this needs to be looked at now to confirm the stormwater management of the site is feasible. Please have Geotechnical Engineer discuss the proposed infiltration trenches with the Civil Engineer, we will need the Geotechnical Engineer to confirm it is desirable to have infiltration trenches, and if so specifically confirm that they will not be located in saturated conditions, seasonally high groundwater estimated elevation, and estimated drawdown time of less than 48 hours.

Response: Infiltration trenches have been removed from design. Please see Drawing **C2.2**.
Soils on site appear to get saturated about 0.3 to 0.8m below the ground surface with limited granular soils for infiltration potential and storage.

21. Section 7.0 excludes any party other than their Client from relying on information provided in the report – please provide a letter of reliance for the report and subsequent updated report.

Response: A reliance letter for the City and Region will be supplied.

22. An updated geotechnical report is required our review and approval.

Response: An updated Geotechnical Report will be provided.

We trust the above response to be satisfactory in addressing your comments and we thank you for your continued cooperation in processing this application. Please contact the undersigned should you have any questions.

Yours Truly,

MTE Consultants Inc.

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