



November 8, 2024
Our File: 2401754 - 420004

R.J. Burnside & Associates Limited
15 Townline
Orangeville, ON L9W 3R4

Attention: Carley Dixon, P.Eng.

Re: Marsville South Subdivision
Township of East Garafraxa
Draft Plan of Subdivision and
Zoning By-Law Amendment

Dear Ms. Dixon,

In response to the comments received September 30, 2022, we offer the following for your review and consideration:

Bell Canada

Comment 1: However, we hereby advise the Owner to contact Bell Canada at planninganddevelopment@bell.ca during detailed design to confirm the provisioning of communication/telecommunication infrastructure needed to service the development.

Response: *Acknowledged.*

Comment 2: The following paragraph be included as a condition of approval: "The Owner agrees that should any conflict arise with existing Bell Canada facilities where a current and valid easement exists within the subject area, the Owner shall be responsible for the relocation of any such facilities or easements at their own cost."

Response: *Acknowledged.*

Comment 3: It shall also be noted that it is the responsibility of the Owner to provide entrance/service duct(s) from Bell Canada's existing network infrastructure to service this development. In the event that no such network infrastructure exists, in accordance with the Bell Canada Act, the Owner may be required to pay for the extension of such network infrastructure.

Response: *Acknowledged.*

County Waste

Comment 4: Based up the Draft Plan, Dufferin Waste can provide waste collection if the parameters above are met.

Response: *Acknowledged.*

Hydro One

Comment 5: We have reviewed the documents concerning the noted Plan and have no comments or concerns at this time. Our preliminary review considers issues affecting Hydro One's 'High Voltage Facilities and Corridor Lands' only.

Response: Acknowledged.

County Building Department

Comment 6: Please be advised that the Plan of Subdivision and Zoning By-law Amendment for the above noted address has not revealed any issues. Please keep in mind that each lot must maintain septic clearances to property lines, structures, and wells.

Response: Acknowledged.

County Planning

Comment 7: The applicant to submit a trail network in regards to OS block and overall site connectivity for the proposed subdivision for review.

Response: *The trail network plan will be prepared by others under separate cover.*

Rogers

Comment 8: Rogers Communications Canada Inc. ("Rogers") has reviewed the application for the above Subdivision and has determined that it intends to offer its communications services to residents of the Subdivision. Accordingly, we request that municipal approval for the Subdivision be granted subject to the following conditions:

Response: *Acknowledged.*

Comment 9: The Owner shall agree in the Subdivision Agreement to (a) permit all CRTC-licensed telecommunications companies intending to serve the Subdivision (the "Communications Service Providers") to install their facilities within the Subdivision, and (b) provide joint trenches for such purpose.

Response: *Subdivision agreement to be prepared by Town.*

Comment 10: The Owner shall agree in the Subdivision Agreement to grant, at its own cost, all easements required by the Communications Service Providers to serve the Subdivision, and will cause the registration of all such easements on title to the property.

Response: *Subdivision agreement to be prepared by Town.*

Comment 11: The Owner shall agree in the Subdivision Agreement to coordinate construction activities with the Communications Service Providers and other utilities, and prepare an overall composite utility plan that shows the locations of all utility infrastructure for the Subdivision, as well as the timing and phasing of installation.

Response: *Subdivision agreement to be prepared by Town.*

Comment 12: The Owner shall agree in the Subdivision Agreement that, if the Owner requires any existing Rogers facilities to be relocated, the Owner shall be responsible for the relocation of such facilities and provide where applicable, an easement to Rogers to accommodate the relocated facilities.

Response: *Subdivision agreement to be prepared by Town.*

Comment 13: In addition, we kindly request to, where possible, receive copies of the following documents: the comments received from any of the Communications Service Providers during circulation; the proposed conditions of draft approval as prepared by municipal planners prior to their consideration by Council or any of its committees; and the municipal planners' report recommending draft approval before it goes to Council or any of its committees.

Response: *Town to circulate.*

GRCA

Comments to be Addressed Prior to Detailed Design:

Natural Heritage:

Comment 14: The EIS report suggests that a minor increase in surface water directed toward the offsite wetland is acceptable. A feature-based water balance assessment would be required to substantiate this conclusion. Depending on the sensitivity of the vegetation communities and the degree of hydrologic alterations, a monthly water balance assessment could be required to fully assess impacts on the offsite wetland. Additional information regarding the sensitivity of the wetland communities and pre- and post-development surface runoff volumes of water directed toward the wetland is required to assess impacts to the wetland. If all drainage from Catchment 4000 is directed to the Thunderbird Drainage Works, resulting in no increase in surface water directed toward the offsite wetland, the above additional information would not be required.

Response: *A monthly water balance assessment to the offsite wetland and additional information regarding the sensitivity of the wetland has been included in the EIS addendum (NRSI, dated September 2024).*

Comment 15: A detailed grading plan showing existing and post-development contours within catchment 4000 is needed to fully assess impacts to the offsite wetland.

Response: *Existing contours within Catchment 4000 can be found on the Existing Conditions Plan and the post-development grading details can be found on Grading Plan E in the revised drawing set.*

Comment 16: According to the EIS, the lands do not slope steeply toward the wetland. This is not sufficient rationale to support a 15 meter development setback from the wetland. A 30 meter setback from the offsite wetland is requested and would be consistent with subdivision applications in other portions of the watershed.

Response: *Additional rationale for the 15m setback has been included in the EIS addendum (NRSI, dated September 2024).*

Comment 17: Post-development flow volumes toward the Thunderbird Drain are expected to increase significantly during the 25 mm and 2-year events. The current agricultural drain outlets to a watercourse that supports cold water fish habitat. The potential for thermal impacts should be assessed.

Response: *Thermal impacts have been assessed in the revised EIS report.*

GRCA

Comments for Detailed Design:

Comment 18: It is requested that heavy-duty sediment fencing be placed along the approved setback limit.

Response: *Heavy-duty sediment fencing has been included in the revised drawings.*

Comment 19: Part of the proposed Thunderbird Drainage Works appear to cross a GRCA regulated wetland northwest of the proposed subdivision. GRCA requests that the presence of this wetland be confirmed and, if present, measures are taken to ensure its protection during and post development. Please delineate the wetland on the drawings to allow for the review of drainage, grading and site works proposed in the regulated area.

Response: *The alignment shown on the engineering drawings for the Marsville North and Marsville South Subdivision for the proposed extension of the Thunderbird Drainage Works is to be considered preliminary only. The detailed design of the proposed extension of the Thunderbird Drainage works, including the location, alignment and depth of these drainage works, will be determined by the Drainage Engineer, who has been appointed by the Township of East Garafraxa under the Drainage Act. It is our understanding that through the Drainage Act process, the Drainage Engineer will investigate, confirm and verify any feature(s) within the limits of the drainage works extension, including the design of all measures required to protect the feature(s) during the construction of the drainage works extension.*

GRCA

Advisory Comments to the Municipality:

Comment 20: We acknowledge that as part of the subdivision stormwater management strategy, upgrades to the Thunderbird Drainage Works are proposed. This includes extending a storm sewer from the outlet of the SWM Facility to the open drain portion of the Thunderbird Drainage Works. We presume that overland flow relief is will be provided along this route. A typical section for an overland flow path is recommended.

Response: *As part of the Thunderbird Drain improvements, it is our understanding that the Drainage Engineer appointed under the Drainage Act will determine if an overland flow path along the route of the drainage improvements is required.*

Comment 21: A table summarizing the hydraulic parameters used in the MIDUSS model is recommended.

Response: *A table of the hydraulic parameters used in the MIDUSS model has been included in the revised Functional Servicing Report.*

Comment 22: There appears to be inconsistency in the elevations shown in Figure 21 compared to the rest of the report. The emergency overland flow weir and top of berm elevations should be confirmed.

Response: *The Functional Servicing Report and drawings have been revised and checked for consistency.*

Comment 23: We recommend using a permanent pool depth of at least 1.0m to minimize resuspension of sediment.

Response: *The proposed stormwater management facility has been revised to a wetland type facility with the maximum 0.3m permanent pool depth recommended with that type of facility. A deeper pond will have greater groundwater hydrostatic pressures to withstand.*

Comment 24: Please be advised that Appendix C in the FSR is missing the Geotechnical Investigation report for the Marsville South Subdivision. However, the document was provided standalone with the submission package and has been reviewed.

Response: *The Geotechnical Investigation Report has been appended to the revised Functional Servicing Report.*

Comment 25: GRCA recommends running a 24-hr SCS storm event to confirm that the pond can sufficiently provide volume detention from that storm event.

Response: *The 100-year 24-hour Type II SCS storm event has been modelled in the revised Functional Servicing Report.*

Comment 26: GRCA charges a fee for its plan review services in accordance with the current approved GRCA Plan Review Fee Schedule. The fee required for the review of draft plans of subdivision is a \$2,295 base fee in addition to a fee of \$1,255 per net hectare (excluding natural areas) to a cap of \$31,520. Based on the proposed 28.1 hectares to be developed, a total fee capped at \$31,520 is required.

Response: *The fee has been paid.*

Comment 27: Please note that 70% is due at this time (\$22,064), with 30% due prior to the issuance of draft plan conditions. Note that should there be adjustments to the proposed draft plan configuration, the total required GRCA review fee may change.

Response: *The fee has been paid.*

Upper Grand District School Board

Please be advised that the Planning Department does not object to the application, subject to the following conditions:

Comment 28: That Education Development Charges shall be collected prior to the issuance of a building permit(s).

Response: *Noted.*

Comment 29: That the developer shall agree to provide the Upper Grand District School Board with a digital file of the plan of subdivision in either ARC/INFO export or DWG format containing parcel fabric and street network.

Response: *Noted.*

Comment 30: That the developer shall agree in the subdivision agreement that adequate sidewalks, lighting, and snow removal (on sidewalks and walkways) will be provided to allow children to walk safely to school or to a designated bus pickup point.

Response: *Noted.*

Comment 31: That the developer and the Upper Grand District School Board reach an agreement regarding the supply and erection of a sign (at the developer's expense and according to the Board's specifications) affixed to the permanent development sign advising prospective residents about schools in the area.

Response: *Noted.*

Comment 32: That the developer shall agree in the subdivision agreement to advise all purchasers of residential units and/or renters of same, by inserting the following clause in all offers of Purchase and Sale/Lease: "In order to limit liability, public school buses operated by the Service de transport de Wellington-Dufferin Student Transportation Services (STWDSTS), or its assigns or successors, will not travel on privately owned or maintained right-of-ways to pick up students, and potential busing students will be required to meet the bus at a congregated bus pick-up point."

Response: *Noted.*

Burnside

Draft Plan

Comment 33: For all the intersections, the following sight triangles per the Township's Official Plan should be provided.

Intersections between Township Roads (10 m x 10 m)

Intersections between Township and County Roads (15 m x 15 m) as well as meeting minimum County entrance policy visibility triangles.

Response: *Updated sight triangles has been included in this submission.*

Comment 34: A 0.3 m reserve should be added adjacent to the roads at Lots 1, 41, 42, and 90.

Response: *The 0.3m reserve has been added to the revised drawings.*

Comment 35: For lots that back on to one another, it can be advantageous when lot corners adjoin in terms of fencing and grading. The applicant should review opportunities to improve this aspect of the design.

Response: *Noted. The proposed draft plan minimizes lot corners that do not adjoin.*

Comment 36: The proposed roundabout is not supported.

Response: *The proposed draft plan has removed the roundabout.*

Comment 37: Lots 88 and 89 are narrow lots (25 m) as opposed to the minimum 30 m. While a reduced frontage could be considered on a lot specific basis, for example at a road bend where the width of the lot is narrower only for a small portion, a reduced frontage has not been justified at this location.

Response: *This has revised to a minimum lot frontage of 30m except for at road bend and entrance (Lots 13-16)*

and 35).

Comment 38: It is requested to provide an increased radius at the road bends so that they are gradual and less abrupt.

Response: *An increased radius has been provided at road bends in the revised draft plan.*

Comment 39: The road connections to County Road 3 will need to be approved by the County. Two connection points across from Maple Street and Grand Crescent are preferred locations. Grand Crescent would only be an option if the Developer could purchase 062390 Dufferin Road County 3. The 13th Line road connection should be removed. Preliminary drawings show islands provided at each entrance. The proposed islands are not supported due to increased maintenance and snow removal requirements and related costs.

Response: *We acknowledge that the road connections to County Road 3 will need to be approved by the County. The connection point to County Road 3 proposed is across from Maple Street. As per follow up discussions, connections to 13th Line are provided for both North and South Marsville Subdivisions. The islands at each entrance have been removed from the revised draft plan.*

Comment 40: A trail block rather than a road connection is requested to the 13th Line.

Response: *To be addressed by others.*

Comment 41: The Township normally have environmental areas conveyed to a public entity such as the local conservation authority. There is a very small area on Lot 20 and 21 that requires protection due to setbacks from the wetland and woodland. These limits will be to the satisfaction of the GRCA. There was no zone proposed as Environmental Protection on Lots 20 and 21. It is required otherwise there is no mechanism in place that would prevent construction of an accessory building or on-site sewage system for example in the area to be preserved/protected. Both Lot 20 and 21 regardless of the environmental areas will provide at least 0.5 acres of land that would be zoned hamlet residential.

Response: *The wetland setback will not be dedicated to the Township.*

Hydrogeology Comments

Comment 42: The monitoring based approach was used to justify on-site sewage servicing for the proposed 90 lots. We are satisfied with the approach used.

Response: *Noted.*

Overall Drainage Comments

Comment 43: It is not clear how drainage from the external area at south corner of County Rd. 3 and 13 Line (i.e. Area no. 230 in pre-development and area no. 1200 in post development) will be re-directed to the south SWM pond. Some lot areas appear to outlet directly to the south roadside ditch and presumably the storm sewer system on County Rd. 3 outlets to ditches as well. These would have to be diverted internally to the plan of subdivision which does not appear on the preliminary

engineering drawings (i.e. Storm Sewer Drainage Plan drawing no. 21). The feasibility of this diversion is in question. More detailed contour information for area no. 1200 and the layout of the existing storm sewers should be provided to confirm existing conditions. A functional design for any proposed diversion is required. If area no. 1200 will not be diverted, the impact on the North Marsville SWM pond will have to be assessed. For example we note the public works yard runoff outlets near the south west corner of the site which has not been considered.

Response: *The stormwater management design has been revised to show the external area (Catchment 230 in pre-development and now labelled Catchment 2200 in post-development) as draining to the roadside ditch and ultimately to the Marsville North stormwater management facility.*

Comment 44: Runoff from the rear of lots 21 to 30 will flow uncontrolled across the southwesterly property line. This area should be identified separately from post development area no. 1300 and a post development to pre-development flow comparison with area no. 110 should be provided. The adjacent property owner is not to be impacted by increased flows. Also, a post vs. pre-development peak flow comparison should be provided where this flow combines with area no. 1400 and with the SWM pond outflow at the crossing of County Rd. 3.

Response: *The grading has been revised to capture flows from the rear of lots 21 to 30 and convey to the Marsville South stormwater management facility. Comparisons of post-development and pre-development flow rates has been included in the revised Functional Servicing Report.*

Comment 45: Describe the overland flow route direction and capacity from the proposed SWM pond south of County Road 3 (i.e. is the overland flow outlet west around the Marsville developments or east towards the cross culvert upstream of the Thunderbird subdivision). As noted in comments on the north plan of subdivision, additional design criteria description and summary of functional design results are required. The capacity to control and convey the full range of flows at equal to or less than predevelopment flow rates to the outlet of drainage area 2600 is to be demonstrated.

Response: *Further details of the routing and capacity to convey flows to Thunderbird Municipal Drain have been included in the revised Functional Servicing Report.*

Comment 46: The SWM facility south of County Road 3 should be constructed as part of the Marsville North subdivision works. A block together with any ancillary easements to be determined at detailed design should be provided to the Township.

Response: *Acknowledged.*

Comment 47: The FSR or separate correspondence from the developer should acknowledge the phasing of construction required as part of the Marsville North development.

Response: *To be addressed through separate correspondence.*

Comment 48: It is proposed that catchment 1100 be conveyed overland through the lots. However, this catchment area is 4.16 Ha, which is significant. A drainage block should be provided between the lots for this catchment area which could be used for overland flow and/or to contain a rear yard catch basin and storm sewer.

Response: *A rear yard catchbasin and 375mm dia. storm sewer has been provided to capture and convey flows from Catchment 1100 in the revised design.*

Comment 49: Drawing No. 4 shows that runoff from at least half the houses and rear yards of Lots 44, 45, 46, potentially a portion of the park and nearby adjacent existing lot would be directed between Lot 42 and 43. The grading design and additional details need to be added. There is too much drainage being directed to this location and re-design is required. Contours should extend beyond the site boundaries to assist with the preliminary grading design to understand how neighbouring properties drainage is being conveyed around and/or through the subdivision.

Response: *The draft plan has been revised and the runoff concerns do not apply to this new layout. Contours extend beyond site boundaries on the storm sewer catchment plan, but could not be added to all drawings given the size of the contour files.*

Comment 50: The existing drainage swale going through Lots 22-25 is being proposed to be removed with runoff fully directed to the farm field. There may be a need for an internal swale along this area which needs to be determined.

Response: *A rear yard catchbasin has been proposed to capture and convey external flows from the existing swale south of Lots 22-25 to the proposed roadside ditches.*

Comment 51: Contours should be extended outside the subject lands to verify drainage areas. At the detail design stage, we will require topographic information beyond the subject lands to reconfirm the contour information presented especially near Lot 13-16 where the grade is being raised at the rear. Lot 22 will require a rear swale to provide an outlet for the runoff as the property line is at a higher elevation in some areas.

Response: *Contours extend beyond site boundaries on the storm sewer catchment plan, but could not be added to all drawings given the size of the contour files.*

SWM Facility

Comment 52: The geotechnical assessment identifies the need for an impermeable liner to withstand over 3 m of hydraulic pressure. Please confirm the feasibility of this approach, especially the ease to perform pond cleanouts when water would need to be drained. A preliminary design should be provided and endorsed by the Geotechnical Engineer that show the feasibility of meeting this requirement.

Response: *Acknowledged.*

Comment 53: "a) Include the overflow weir discharge equation used in the discharge table included in Appendix G."

Response: *The overflow weir discharge equation has been included in the discharge table in the revised Functional Servicing Report.*

Comment 54: b) The "CB Control with Orifice Plate" calculation in Appendix G is based on a head of 2.5 m on an orifice. However, this flow value is not used in the Stage-Storage-Discharge Table and there is no sharp edge orifice plate proposed in the manhole to justify use of $C_d = 0.60$.

Response: *The major control outlet analysis has been revised to include pipe flow based on the hydraulic gradline only rather than including an orifice style equation.*

Comment 55: c) The basis for the discharge values in the "1800x1800 Major Control" column in the Stage-Storage-Discharge table is not clear compared to the previous "CB Control with Orifice Plate"

calculation which uses the orifice equation. Show the equation used for this calculation. The DICB grate inlet capacity should be checked based on the inlet acting as a weir with a 50% blockage factor at the same ponding elevations as those considered for the storm sewer inlet. This is to ensure the grate inlet area is not more restrictive than the outlet pipe.

Response: *The equation for the outlet controls has been included in the revised tables. The inlet grate capacity has been included with a 50% blockage in the analysis to determine the more restrictive flow rate at each elevation.*

Comment 56: d) The purpose of the “Storm Control – Hydraulic Gradeline Flowrate” data in Appendix G is not clear as it is not a hydraulic gradeline calculation. If the outlet pipe from the control MH does not have a control device (i.e. orifice plate or orifice tube) with a free flowing condition into the outlet pipe, a standard hydraulic gradeline analysis will be needed from the outlet of the new drain system at catchment 2600 throughout both the west and central drainage area to confirm the system hydraulics and required pipe sizes. The headwater at the south SWM pond may affect the sizing of the drains.

Response: *The outlet pipes from each pond do not have a control device. As such, the hydraulic gradeline approach included is needed to determine the discharge rate from the pond at each ponding elevation of the Stage-Storage-Discharge Table.*

Comment 57: e) Clarify why there is no discharge calculated for the 185 mm dia. knockout orifice at elevations greater than 485.10 m in the Stage-Storage-Discharge table. This orifice would continue to operate at higher stages.

Response: *The knockout orifice does not provide an additional release rate at elevations where the pipe outlet is the controlling factor. A note regarding this has been included in the revised Stage-Storage-Discharge tables.*

Comment 58: a) The FSR should show that the overland flow capacity of Street A at the access route/driveway to the pond block (i.e. broad crested weir flow over the curb) and the cross section of the access road in the pond block (i.e. Section D-D, drawing No. 10) are adequate to convey the greater of the 100 year or Regional storm runoff peak flow rate to the pond. If the sewer capacity or the width of the overland flow block need to be adjusted, this should be identified in the FSR.

Response: *The Functional Servicing Report has been revised to include overland flow capacity analysis of the access route from Street A to the stormwater management facility.*

Comment 59: b) Provide calculations to support the forebay dimensions based on the MECP design guidelines.

Response: *Forebay calculations have been included in the revised Functional Servicing Report.*

Comment 60: c) Access ramps at a maximum slope of 8% are to be provided to the bottom of the forebay and the outlet structure for inspection and maintenance. The pond volume is to be reduced accordingly to account for grading of the ramps.

Response: *The access ramps have been provided with a maximum slope of 8% in the revised drawings.*

Comment 61: d) The pond’s permanent pool depth should be between 1 m and 2 m to avoid resuspension of sediment as opposed to the consistent 0.5 m depth proposed.

Response: *The proposed stormwater management facility has been revised to a wetland type facility with the maximum 0.3m permanent pool depth recommended with that type of facility. A deeper pond will have greater groundwater hydrostatic pressures to withstand.*

Comment 62: e) The SWM pond design should include a maintenance by-pass pipe from the inlet manhole to the outlet headwall to divert incoming flows around the pond during maintenance periods when sediment drying and clean-out is being done. Alternatively, the pond block should be increased to provide sediment drying areas.

Response: *Sediment drying areas have been noted on the revised drawings.*

Comment 63: The routing of the proposed storm sewer outlet for the Marsville South SWM pond within the County Road allowance is subject to approval by the County. We have not received correspondence with respect to comments on the proposed new infrastructure in their right of way.

Response: *Noted.*

Servicing Options Report

Comment 64: The Township has received funds from the developers to complete the EA which is underway. We expect well drilling will occur shortly. Any additional well supply will require the necessary source protection studies to delineate new wellhead protection areas which we will prepare as part of the EA study.

Response: *Noted*

Functional Servicing Report

Comment 65: We were unable to locate the January 2020 V.A. Wood Geotech report referenced in Appendix C in the submission documents.

Response: *The 2020 Geotechnical Investigation Report has been appended to the Functional Servicing Report.*

Comment 66: Page 3 under topography, adjust the 'under existing conditions' topography from south to north (rather than from north to south).

Response: *The topography reference has been changed to 'south to north' in the revised Functional Servicing Report.*

Comment 67: The proposal to develop the subdivision with an urban cross section, with storm sewer, curb and gutter and sidewalks, instead of having a rural cross section with ditches and no sidewalks as is currently found in Marsville requires further direction from Township Council.

Response: *Further discussion with the Township resulted in the rural cross-section included in the revised drawings provided with this submission.*

Comment 68: The Public Works Yard can operate through the night especially during snow removal operations with equipment that also has backup alarms. A noise report should be provided to confirm whether a noise fence or landscaped berm subject to drainage considerations is required and to confirm that higher berms are not required along the County Road.

Response: *Please refer to the Noise Study prepared by HGC Engineering.*

Comment 69: While fire flow requirements will be determined as part of the municipal class EA, please provide the reference used to determine the noted 38 L/s for 1.5 hours.

Response: *References have been updated to the Municipal Class EA recommendations in the revised Functional Servicing Report.*

Comment 70: The FSR at the detail design stage will have to provide calculations that demonstrate that the major system flow will be contained within right of way.

Response: *Major flow conveyance calculations have been included in the revised Functional Servicing Report.*

Comment 71: Figure 21, emergency weir elevation is outdated and not consistent with the overall engineering drawing set. It should be corrected in an updated FSR. A Hickenbottom design is preferable to the proposed DICB as proposed.

Response: *The Functional Servicing Report and drawings have been checked for consistency. A Hickenbottom outlet design would not work with the current controls established.*

Municipal Drain Re-Alignment

Comment 72: Comments with respect to the municipal drain are provided under the Marsville North Subdivision.

Response: *Acknowledged.*

Groundwater

Comment 73: Monitoring of the groundwater levels should continue to verify seasonally high groundwater levels to finalize the grading as part of detailed design.

Response: *Acknowledged. Groundwater monitoring has continued to verify seasonal high groundwater levels.*

Comment 74: Some basements are proposed to be constructed within the groundwater table. The geotechnical consultant recommended raising the grade to avoid the groundwater which has not been completed. Street D for example would propose houses within the groundwater. The grading plan should be reviewed in greater detail to avoid complications with the groundwater.

Response: *Groundwater contours have been added to the revised drawings and grading has been revised per groundwater contours and geotechnical recommendations.*

Traffic Impact Study:

Comment 75: County Jurisdiction – County Road 3 is under the jurisdiction of the County of Dufferin. Their comments are vital to ensure any proposed connection points are acceptable. As noted, the TIS should be modified to determine the location of two connection points off County Road 3 with elimination of the 13th Line Road connection.

Response: *To be addressed by others under separate cover.*

Comment 76: Traffic Count Data – Please provide the raw traffic count data that is referenced in the report.

Response: *To be addressed by others under separate cover.*

Comment 77: Visibility Triangles – Visibility triangles should be confirmed at all intersections and bends, to confirm to the County’s Entrance Policy and the Township’s Zoning Bylaw requirements.

Response: *To be addressed by others under separate cover.*

Comment 78: Internal Road Geometrics – Confirm that all internal road geometrics conform with TAC standards.

Response: *To be addressed by others under separate cover.*

Proposed Zoning By-law Amendment

Comment 79: There was no zone proposed as Environmental Protection on Lots 20 and 21. It is required otherwise there is no mechanism in place that would prevent construction of an accessory building or on-site sewage system for example in the area to be preserved/protected.

Response: *To be addressed by others under separate cover.*

Comment 80: The zoning by-law includes requirements for hamlet residential by either private services or municipal services. As the site will be partially municipally serviced, we expect the setbacks would fall under the municipal section however confirmation should be provided by the Township planning consultant.

Response: *To be addressed by others under separate cover.*

Comment 81: The applicant has requested modifications to the Hamlet Residential zone including the minimum lot area down to 0.20 ha (0.5 acres). We note that to ensure reasonable amenity space is provided, the developer is proposing tertiary sewage systems due to the 0.5 acre lot sizes. As noted previously, Council has a general preference for the use of ditches and lot sizes that are at least 0.6 acres to maintain the rural feel. Acceptance of this smaller lot size is subject to further Council input.

Response: *To be addressed by others under separate cover.*

Comment 82: The applicant is proposing a reduction of minimum lot frontage to 25 m. We have not been provided with a functional layout for a lot with 25 m frontage. A reduced frontage at a road bend for example may be considered on a lot specific basis but is not intended to be a mechanism to reduce the overall lot width. If such a frontage could be justified on a lot specific basis, it should be an exception, with the standard being the 30 m frontage.

Response: *This has revised to a minimum lot frontage of 30m except for at road bend and entrance (Lots 13-16 and 35).*

Other

Comment 83: Only one driveway will be permitted to each lot.

Response: *Acknowledged.*

Comment 84: "Notice to Purchasers will need to address the following:

- That the lands are in the vicinity of the Public Works Yard which could cause noises typical of municipal maintenance facilities which can operate 24/7. Winter snow removal operations will result in increased use of the facility. Vehicles/Equipment are equipped with back up alarms, and trucks are loaded at the site.
- That lots 20 and 21 contain lands zoned as Environmental Protection which cannot be disturbed or developed.
- That pending the outcome of the Municipal Class EA lots may be located within source water protection areas and subject to on-site sewage system inspections.
- That lots will each be equipped with sewage treatment systems that require the Owners to maintain maintenance agreements with representatives approved by the manufacturer."

Response: *Acknowledged.*

Comment 85: A draft plan condition shall include the requirement for a fencing plan to the satisfaction of the Township. Typically, a fence is required around the perimeter of the development, the park, and may be considered around the SWM Pond dependent on the design.

Response: *A fencing plan has been included with this submission.*

Dufferin County Public Works

General Comments

Comment 86: A Dufferin County issued Entrance Permit is required for any modification to an existing entrance, or for the construction of a new entrance accessing a County Road.

Response: *Acknowledged.*

Comment 87: A Dufferin County issued Road Occupancy Permit is required prior to completing any work within the Dufferin County Road 3 right of way.

Response: *Acknowledged.*

Comment 88: The County of Dufferin Public Works Waste Services comments will be circulated as a separate letter.

Response: *Acknowledged.*

Draft Plan of Subdivision:

Comment 89: Street 'A' should be relocated directly across from either Grand Crescent or Maple Street to avoid the introduction of a staggered intersection. Alignment with Grand Crescent would further afford opportunity of a connection to any future development to the west. This should be a consideration of the proposed development.

Response: *Street 'A' has been relocated to directly across from Maple Street in the revised plans.*

Comment 90: Include 15.0 metre x 15.0 metre sight triangles at the proposed Street 'A' and Dufferin County Road 3 intersection. Sight triangle dimensions must be confirmed to meet the greater of either the Township's Official Plan, or the County of Dufferin's Entrance Policy 5-3-17.

Response: *Sight triangle dimensions have been revised to 15m x 15m at the proposed Street 'A' and Dufferin County Road 3 intersection.*

Comment 91: Provide a 0.3 metre reserve along the entire development frontage on Dufferin County Road 3.

Response: *A 0.3m reserve has been added to the development frontage on County Road 3 in the revised plans.*

Servicing Options Report for Marsville North and South:

Comment 92: We understand that the Township may proceed with an EA for the Marsville water system expansion. The County requires that municipal/development servicing/infrastructure within a County right of way be kept to a minimum. In line with this any proposed infrastructure should be reduced and consolidated to road crossings only.

Response: *The proposed infrastructure includes the extension of a storm sewer under the ditch within the County right-of-way.*

Functional Servicing Report for Marsville North and South:

Comment 93: The County supports a municipal drain connection from the existing Thunderbird Drain to the proposed SWM Facility. The County will continue to review this option and supporting detailed engineering drawings as the project progresses.

Response: *Acknowledged.*

Comment 94: Additional investigation will be required to confirm that there is a suitable overland flow route for major flows exceeding the proposed SWM system.

Response: *Acknowledged.*

Transportation Impact Study

Comment 95: Update the TIS to reflect relocation of Street A. This should also include an updated sightline analysis.

Response: *To be addressed by others under separate cover.*

Comment 96: Current traffic data should be collected and compared to data provided in the study. The greater of the two volumes should be utilized in the analysis. Further review of the TIS will be completed following receipt of an updated study.

Response: *To be addressed by others under separate cover.*

Comment 97: Include consideration for interconnected pedestrian traffic within the area that also facilitates pedestrian connection to the East Garafraxa Public School.

Response: *To be addressed by others under separate cover.*

Engineering Drawings for Marsville South

Comment 98: Update all applicable plans to show the realignment of Street 'A' and the 0.3 metre reserve.

Response: *Street 'A' has been relocated to directly across from Maple Street and 0.3m reserve has been added to the development frontage on County Road 3 in the revised plans.*

Comment 99: It appears that the proposed SWM facility relies on grading work within the County Road allowance. The design should be revised so that it operates independently within the limits of the private development. This comment specifically refers to the proposed SWM berm.

Response: *The SWM berm has been removed from the proposed design, as such the stormwater management facility will not rely on grading work within the County Road allowance.*

Comment 100: The County supports walkable communities where continuity and connection of pedestrian infrastructure is provided. Pedestrian infrastructure that terminates at a County Road resulting in pedestrian traffic along an arterial road shoulder is not sufficient.

Response: *To be addressed by others.*

We trust this is the information you require at this time. If you have any questions or require additional information, please do not hesitate to call or write.

Yours truly,

GM BLUEPLAN ENGINEERING LIMITED

Per:



Angela Kroetsch, P.Eng.