

November 20, 2020

Michael Witmer, Senior Development Planner
 Planning and Building Services, City of Guelph
 1 Garden Street
 Guelph, ON N1H 3A1

**Re: Application to Amend the Zoning By-law
 Second Submission with revised Conceptual Layout
 To Permit the Development of 30 Cluster Townhouse Units, and
 40 Apartment units
 78 Eastview Road and 82 Eastview Road
 City File No. OZS19-004**

We are pleased to provide, herewith, revised plans and reports in support of the above noted application to amend the Zoning By-law.

Subsequent to the initial submission of the ZBA application, the City of Guelph identified a number of concerns regarding the previous development proposal for 57 cluster townhouses. The most significant of these related to the Hydrogeological Study, water balance and site layout.

Many responses, informal submissions and report updates were provided to the Town for review in the second half of 2019. The result of the ongoing dialogue with City staff is the provision of a revised Site Conceptual Layout, removing a number of units from the extreme north end of the development site, and the replacing some of the townhouse blocks along Eastview Road with a 5 storey apartment building containing 40 units.

The professional and expert consultants that were retained to review the existing conditions and proposed development and develop recommendations and designs as necessary to implement the City of Guelph's policies and standards have indicated that Hydrogeological and water balance requirements for this project are being implemented in a very rigid and significantly and substantially stricter manner than any project they have worked on previously in the City of Guelph with similar environmental constraints. As such, they believe that the measures proposed for this site will far exceed any other developments currently in the City of Guelph.

We have addressed the City comments as per the response matrix below.

Upper Grand District School Board	
Comment	Response
Education Development Charges shall be collected prior to the issuance of a building permit	Acknowledged
The Developer shall agree in the site plan agreement or future	Acknowledged



condominium declaration that adequate sidewalks, lighting and snow removal will be provided to allows children to walk safely to school or to a designated bus pickup point	
The developer shall agree in the site plan agreement or future condominium declaration to advise all purchasers of residential units and/or renters of same, by inserting the follow 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, 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."	Acknowledged

GRCA – May 25, 2019	
Comment	Response
The provided EIS and supporting documents are generally adequate to support the proposed zoning application.	Acknowledged
The proposed trail has not been adequately addressed. The EIS suggests field fitting at a subsequent process. Further details on the trail design and location should be provided. If the trail cannot be adequately accommodated within the currently recommended setbacks from the development, changes to the site plan may be required.	The trail alignment has been updated and is assessed in the EIS (See Section 7.2.7). Detailed grading will be developed during the EIR.

		Park Planning Comments – June 20, 2019	
		Comment	Response
1	Parkland Dedication: The purpose Zoning By-law Amendment is to permit the	Cash in Lieu of Parkland will be required for this development in accordance with Section 17c) of the City of Guelph By-law (2019)-20366 or any successor thereof. A narrative appraisal report of the subject property will be required to determine the CIL amount.	Acknowledged
2	Trail and EIS: The Official Plan Schedule 8 – Trail Network identifies a multi-use trail connection leading from Eastview community Park along the wetland to Carter Park. This is considered a secondary trail route.	City trails are required to meet the City's FADM – Section 4.5.2. For this development, this would require the trail to be graded to a maximum of 5% longitudinal slope and 2% cross slope. The 2.5 m trail also requires 0.3 m mow strips on either side with a 2% max cross slope as well. From the limited topographic information provided and the description in the EIS, it does not appear that the trail will be able to meet this requirement as currently shown. In future	Functional Approval Civil drawings show existing grades and existing contours for the proposed trail at a functional level. Additional detail for the trail design in accordance with FADM will be provided at the next design stage. Note that to maintain required slopes, some grading within wetland setbacks will be required. Mow strips are not referenced in the FADM and are not believed to be required. Refer to landscape planting plan for planting details near trail. The EIS



	<p>submissions and in the EIR, please submit trail grading information.</p>	<p>(Section 9) includes a recommendation for the detailed trail design to be reviewed as part of the EIR.</p>
	<p>The trail shown on Figure No. 3 and the Grading Plans, is not consistent with the approved trail route identified in the EIR for 66 Eastview. Please make the necessary changes in future submissions.</p>	<p>Plans and figures have been revised.</p>
	<p>Trail construction timing was not noted in the EIS. Does the owner intend on constructing the trail at the same time as the development? If the trail is developed in the future what impacts will this have on the adjacent features? Trail construction and timing should be further discussed with City staff</p>	<p>Trail construction is recommended to occur at the same time as the development. Further discussions can be held with the City on this during the Site Plan stage.</p>
	<p>Park Planning is requesting that the land associated with the trail be conveyed to the City. Trails on private property lead to a number of legal, maintenance and administration issues. In future submissions, please consider the conveyance of land and propose a future property line. Any retaining walls should be located on the applicant's property. Please also note that the land associated with trail development is not eligible for parkland dedication.</p>	<p>The proponent intends to dedicate lands within the woodland and wetland features and that portion of the buffers not required for SWM purposes to the City of Guelph. The proposed property line is shown on all plans. Any walkways not located within the lands to be dedicated are for the benefit of the future site residents only.</p>
	<p>In the EIR and future submissions, the applicant should review how a public trail interacts with the private development. Is the owner encouraging public interaction?</p>	<p>Public interaction will not be encouraged, however, resident's of the site will have the opportunity to access the trail network through a gate. Details to be further refined in the EIR.</p>
	<p>The EIS shows three (3) connections from the development to the City trail. Should the trail be located on City land, Park Planning will support one (1) connection, provided that the appropriate trail signage is installed. Multiple trail connections create more maintenance and opportunities for liability for both the applicant and the City.</p>	<p>See revised plans.</p>
	<p>The EIS does not show the proposed location of any chain link fencing. In the EIR please indicate the location of fencing. Typically where public and private land meet fencing or property demarcation is required.</p>	<p>Acknowledged and recommended for inclusion in the EIR (See Section 9 of the EIS).</p>
	<p>In the future EIR, rest stations and interpretive signage details will be</p>	<p>Acknowledged. Identified as a recommended topic for the EIR (See EIS,</p>



		required including any grading design of these features. The City's standard is that these pads do not exceed 2% slope or cross slope.	Section 9).
		On Figure No. 3, please remove the proposed trail leading north from Starwood Park – this is an ad-hoc trail route that is not indicated on any City mapping. Also the trail in this area is being constructed this summer. See attached drawing showing the proposed trail design in this area. This proposed trail should connect directly to this trail, unless there are any environmental reasons it should not.	Figures revised to remove the 'ad-hoc' trail.
		In the Tree Management Plan, little information about removals in 16b is discussed. With the buckthorn, white ash and the condition of this vegetation unit, there should be further discussion with City Forestry regarding this unit. In future submissions, provide more detail and whether any removals would be required.	Tree management plans now show hazard removals and buckthorn and debris removal areas.
		No hazard assessment for vegetation units for 16b to 23b was provided in the Tree Management Plan. In future submissions, provide further information about whether trees in this location require removal because they are hazardous to the future trail. A site meeting with City Forestry would likely be beneficial to both parties.	WSP completed hazard tree inspections for unit 16b - 23b. Hazard trees proposed for removal are included in the TIPP.
3	Property Demarcation: Under City's property Demarcation Policy, Developer is required to demarcate City Owned parcels. The site located north of the subject site is owned by the City of Guelph and would require a 1.5m high black vinyl chain link fence as demarcation. The final type and configuration of the fencing and/or property markers can be further refined during the detailed design stage and shown on the site plan.		Acknowledged
4	Open Space Works and Restoration: The developer is required to restore disturbed areas and enhance natural area buffers and to address clean-up		Acknowledged



	<p>of debris and waste; removal of hazard trees along residential properties, management of invasive species and provision of educational/ interpretive and stewardship materials/ signage as recommended through Environmental Impact Study and/ or Environmental Implementation Report (as noted in Section 7.3 of the EIS).</p>		
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Environmental Planner – June 27, 2019			
	Comment	Response	
1	<p>The policy analysis section should outline permitted uses and prohibitions within the Natural Heritage System. Please note that permitted uses vary per feature type. The EIS should demonstrate conformity with the City of Guelph's Official Plan. If conformity with the Official Plan cannot be demonstrated, a revised concept plan should be prepared that demonstrates this requirement.</p>	See updated report (EIS, Section 6.6)	
2	<p>The proposed development should conform to the following policies, and the EIS should provide an analysis of whether or not the proposed development conforms appropriately:</p> <p>a. Policy 4.1.2.1 Development and site alteration shall not be permitted within the Natural Heritage System, including minimum or established buffers, except for general permitted uses.</p> <p>b. Policy 4.1.3.4.6 Stormwater management facilities and structures and their normal maintenance, where low impact development measures have been implemented to the extent possible outside the buffer and provided they are located a minimum distance of 15m from a PSW, is an additional permitted use.</p> <p>c. Policy 4.1.2.7 Where stormwater management facilities and structures, and/or trails are permitted within minimum or established buffers works are to be located as far away from the feature boundary within the minimum or established buffer as possible; the area of construction disturbance shall be kept to a minimum; and disturbed areas of the minimum or established buffers shall be revegetated or restored with site-appropriate indigenous plants wherever opportunities exist.</p>	See updated report (EIS, Section 6.6)	
3	<p>The EIS should characterize pre-development wetland hydrology. For example, is the wetland fed by surface</p>	See updated Hydrogeology report and EIS (Section 4.3).	

	flows along, or is there a groundwater connection?	
4	The EIS should provide an evaluation of a feature-based wetland water balance, comparing pre- to post-development differences on a subcatchment basis.	See updated Hydrogeology report and updated EIS report (Section 7.1.6).
5	The EIS should also describe the hydroperiod of the wetland and evaluate the potential for impacts associated with the proposed development. The pre-development condition appears to convey surface flows toward the wetland. Post-development condition appears to convey runoff via a SWM pond outlet at a point source to the wetland. A detailed discussion of impacts associated with changes in flow rates, flow volumes and timing of flows is typically included in the evaluation of impacts to wetland hydrology.	See updated Hydrogeology report and updated EIS report (Section 7.1.5 and 7.1.6).
6	Under section 6.7.1 Wetland Policy, the EIS states that hydrogeological inputs to the wetland are generally maintained through the implementation of the proposed SWM facility and infiltration galleries. Supporting analysis should be provided to support this statement.	See updated Hydrogeology report and updated EIS report (Section 7.1.5 and 7.1.6).
7	The EIS should also provide a detailed assessment of impacts associated with changes proposed to surface water inputs to the wetland. An evaluation of impacts should be provided.	See updated Hydrogeology report and updated EIS report (Section 7.1.5 and 7.1.6).
8	Mapping of Significant Wildlife Habitat (SWH) has not been provided, and the extent of SWH on the property is not identified. Please provide a map that illustrates the extent of the following forms of SWH on the subject property or provide an explanation of why the form of SWH cannot be mapped: bat maternity colonies; snake hibernaculum; woodland amphibian breeding habitat; terrestrial crayfish; special concern and rare wildlife species.	A figure depicting SWH has been added (Figure 4). Note that woodland amphibian breeding habitat was evaluated as candidate habitat during field studies related to the EIS and does not meet the criteria of SWH - therefore it has not been included in Figure 4.
9	Table 4. Summary of Candidate and Confirmed SWH, under Special Concern and Rare Wildlife Species states that further surveys are not required and "No net impact with recommended mitigation". Please note that City of Guelph policies do not talk about 'net' impact. Our policies prescribe permitted uses, subject to the test of no negative impact. Please revise accordingly.	Acknowledged and revised.
10	Please provide correspondence with MNR/MECP regarding the Endangered Species Act and the protection of bat SAR on the subject property.	Agency correspondence has been added as Appendix I.
11	Based on Appendix D and E of the EIS, several locally significant species occur within the study area. Please provide an assessment of the presence/absence and extent of habitat for locally rare species within the study area. The EIS should also include a policy analysis (section 4.1.4.4 Habitat for Significant Species in the Official Plan).	See updated report (EIS, Section 6.6).

12	Official Plan policy outlines minimum buffer requirements and the need to evaluate the appropriate established buffer width. Please provide an analysis to support the width of buffers proposed.	See updated report (EIS, Section 7.2.2.).
13	Based on the information provided, it appears that the concept plan appears to require revision to fit within the constraints of the site. Please note that development and site alteration are not permitted within the woodland buffer. Stormwater management facilities and structures are permitted within the outer 15m of the 30m wetland buffer. Grading cannot extend into the inner 15m buffer.	Acknowledged. See revised plans.
14	The EIS should demonstrate that the proposed buffer width can accommodate the proposed trail without resulting in a negative impact to the natural heritage system features and functions. Note that the trail must meet the standards set out in the City's FADM.	See updated EIS (Sections 6.6 and 7.1.8).
15	The EIS states that "minor grading" is proposed within the NHS buffer. Based on the information provided, it appears that substantial grading is proposed within the NHS buffer, including the Significant Woodland buffer and the PSW buffer. Please note that development and site alteration are not permitted within the feature or its buffer, except for specific permitted uses.	The Conceptual Site Plan has been revised so that grading in the buffer is limited to permitted uses (i.e., trail and SWM facility) in conformity with applicable Official Plan policies. No other grading in the buffer is proposed.
16	The EIS should evaluate impacts associated with the proposed SWM pond. For example, the FSR indicates that the invert of the SWM outlet pipe is proposed at the limit of the 15m PSW buffer, presumably meaning that riprap and a swale is proposed within the 15m buffer of the PSW. Please note that SWM and grading are not permitted within the 15m PSW buffer. Please clarify.	Civil drawings were revised to show a 15m long spreader berm outside the 15m buffer. All proposed pipes will be contained to outside the 15m buffer. Drainage flowing out of the spreader berm will flow overland across the trail into the wetland, but will be dispersed before doing so by the spreader berm. The proposed trail will generally match existing grades with only fine grading required.
17	The proposed development includes several retaining walls. The EIS should evaluate impacts to site drainage/wetland hydrology associated with the construction of retaining walls.	Retaining walls are required for the site to be serviceable, and functional from a traffic flow perspective due to existing grades on the site. All retaining walls are outside the 15m buffer. Retaining walls are not anticipated to impede on site drainage or wetland hydrology. This has been added to Table 6 of the EIS (i.e., under column 2 Hydrology, and column 4).
18	Grading associated with the parking area proposed in the eastern portion of the property, adjacent to the NHS appears to be very tight, with a 3:1 slope matching grades at the 10m woodland buffer. Mitigation measures, such as vegetation establishment, should be provided to stabilize soils in this area as quickly as possible, to avoid erosion/washout and impacts to trail/NHS. The EIR should address this.	Acknowledged and recommended for inclusion in the EIR (See Section 9 of the EIS).
19	Please note that the proposed trail alignment is mapped inconsistently on several of the Figures. Please clarify.	Revised on updated figures.
20	The EIS TOR (page 2) specifies that the proposed trail	Tree management plans now show hazard removals,

	design will be refined to include further construction detail, mitigation to implementation impacts, and integration into the existing landscape. Section 4.4.10 Trails of the EIS TOR specifies that the EIS is to include trail detail (surfacing and width), new points of connection, closure of existing undesired ad hoc connection, tree/vegetation management, including recommendations for hazard tree removal, invasive removal, debris clean-up; and design and locating of wayfinding signage (page 13). Please ensure that this information is included in the revised EIS.	buckthorn and debris removal areas, proposed trail detail, and proposed locations for interpretive and wayfinding signage and are also included in the EIS.
21	The EIS should demonstrate how the trail can be accommodated in the buffer provided, meeting FADM requirements with no negative impact to NHS. Specifically, the EIS should provide enough detail to demonstrate that policy 4.1.3.6.7 has been satisfied, including “the environmental impacts of the proposed trails have been assessed and mitigated through design that minimizes impacts to the natural heritage features and areas, and ecological functions”. This is often accomplished in an EIS through the evaluation of several options, and a relative comparison of those options.	Due to the narrow property width, options to align the City Trail are very limited. A trail alignment is proposed that avoids and/or reduces impacts to the NHS by keeping the trail outside of the Significant woodland, PSW and wildlife habitat and shifting the trail to the outer limit of the buffer wherever possible. See updated EIS (Sections 6.6 and 7.1.8).
22	Table 5: Environmental Management Recommendations and Rationale addresses buffer management and stewardship. Please expand upon the recommendation to vegetate buffers with nodal native species plantings and explain how buffer plantings correlate to tree compensation requirements under the City’s Private Tree Protection By-law.	See updated EIS (Section 7.1.3) and updated Tree Management Plan (Section 6.7). 67 trees in fair to good condition are being removed. At a 3:1 ratio this means there must be 201 compensation trees planted with a 50mm cal size minimum. Buffer enhancement plans now show 98 proposed trees. Remaining 103 trees to be coordinated to be planted else where within the proposed development. New column within tree data charts shows overall tree condition. Tree management plans and arborist report now note how many trees are being removed and how many are being planted to compensate.
23	Please clarify whether or not invasive species management recommended.	Invasive species management for Buckthorn is recommended in the EIS and identified in the Tree Management Plan drawings.
24	In section 7.2.6 Temporary and Permanent Fencing, the EIS states that permanent fencing at development limits abutting the NHS is recommended to prevent uncontrolled access and occupancy-related ‘spreading’ into these sensitive areas. Please clarify if the fencing is proposed at the limit of development/buffer or at the limit of the feature it self.	Fencing is recommended at the limit of development and is identified as a recommended topic for the EIR (See Section 9 of the EIS).
25	Section 7.2.8 Tree Inventory and Management Plan should note that Tree Protection Fencing must be installed and inspected to the City’s satisfaction prior to any tree removals. Note that tree protection fencing should be located at the dripline plus 1m for protected trees or the outer limit of the woodland buffer, whichever is greater. This will also need to be supported by a detailed grading analysis.	Noted and updated. Grading impacts noted in tree data charts.



26	Page 14-15 of the EIS TOR specifies that demonstration of water balance on a catchment/sub-catchment basis is required. The EIS should provide a detailed discussion on the water balance as it relates to the wetland. Pre-to post wetland water balance must be demonstrated to demonstrate no negative impact to the hydrologic function of the wetland. For example, does the stormwater management plan match the predevelopment hydroperiod of the wetland in terms of runoff volume, duration, rate and/or timing?	See updated Hydrogeology report and updated EIS report (Section 7.1.5 and 7.1.6).
27	Note that detailed design of the infiltration galleries (especially #2) will need to be provided at Site Plan, to ensure that it is designed properly to withstand the weight of vehicles on top of it. Infiltration Gallery #2 should be shifted further toward the park area to avoid overlap with the roadway, if possible.	Designs have been revised. See updated report.
28	The SWM outlet appears to outlet to the proposed trail. This poses an issue for trail maintenance and cannot be supported. Furthermore, the SWM outlet and presumably rip-rap and a swale are shown within the 15m buffer of the PSW. This is contrary to Official Plan policy. Please demonstrate that SWM for the site can be accommodated outside the 15m PSW buffer, noting that this includes site alteration/grading.	Portion of trail where SWM outlet is proposed is to be constructed as an asphalt trail with a 2% cross slope. Location and detail provided in tree management plans. SWM Outlet and rip-rap are outside of the 15m buffer.
29	The EIS should include a summary of recommended topics to include in the EIR. The EIS makes reference to future stages of study multiple times. It would be helpful to compile these topics in a section of the EIS to inform the forthcoming EIR. For example, a buffer planting plan, monitoring program, detailed trail alignment and education signage for the proposed trail are all mentioned in the EIS.	Report revised. See Section 9 of the EIS.
30	The EIS concludes that some minor encroachments will occur into the 30m buffer to accommodate grading and construction of the SWM facility. It is unclear how this statement can be made, when grading and the proposed SWM facility appears to be proposed well within the 30m and even 15m buffer. Please clarify.	Conceptual Site Plan has been revised. The proposed SWM facility is located outside the 15m buffer. Refer to civil drawings prepared by MTE.
31	Significant woodlands and their buffers require protection from development and site alteration. The EIS concludes that there is no intrusion into the significant woodland. The EIS should demonstrate how the grading requirements, retaining wall construction, etc. can be accommodated outside the significant woodland buffer.	Major grading and site alteration is limited to outside the 15m wetland buffer. Retaining walls are outside the 30m buffer. All structures and foundations are outside the 30m buffer. The proposed SWM facility is located outside the 15m buffer. Refer to civil drawings prepared by MTE.
32	The EIS concludes that the application conforms to the environmental management and mitigation principles identified in the relevant planning studies and policies outlined in the OP. This needs to be demonstrated and supported by analysis. Based on the information provided, this statement appears to be inaccurate. Please refer to comments above for specifics.	See updated EIS.

33	Based on available high-level data, groundwater flow appears to generally be from the northeast to the southwest in the vicinity of the site. Please provide an explanation on the interpretation that groundwater flow is towards the north.	See updated Hydrogeology report.
34	Groundwater levels were collected on November 23, 2018. The seasonal highgroundwater table must be established, and generally requires a minimum of one year's worth of data.	See updated Hydrogeology report.
35	There appears to be an error in the calculation of percent increase/decrease. Based on my calculations, there is an anticipated 79% increase in runoff (pre- to postdevelopment, including LID), 2% decrease in infiltration and 29% decrease in evapotranspiration. Please clarify.	See updated Hydrogeology report.
36	The Tree Inventory and Preservation Plan (TIPP) should provide the methods used to evaluate grading impacts. For example, was an analysis of cut/fill of 10cm used? 20Cm?	Noted and updated in tree data charts
37	Please note that references to the City of Guelph's Official Plan should be updated to reflect the March 2018 Consolidation.	Acknowledged and updated in report.
38	It is unclear why groupings of trees, rather than individual trees were assessed. Assessment of individual trees is preferred to gain a better understanding of the impacts associated with the proposed development. It also enables a proper assessment of trees requiring compensation per the City of Guelph's Private Tree Protection By-law.	Additional inventory done July 2020 to analyze individual trees.
39	The TIPP should provide a detailed assessment of tree removals required to accommodate the proposed trail, and hazard trees required for removal in support of the proposed development.	Hazard trees have been inputted into CAD dwg and tree data sheet
40	Please provide the Tree Management Plan drawing in large format, noting the locations of all trees proposed for removal including the groupings of trees proposed for removal. Trees to be preserved, trees to be removed and trees potentially injured should be clearly identified on the drawing.	Acknowledged.
41	The Planting Plan should be compatible with other elements of development proposed for the site. For example, the Planting Plan L-410 proposes a Sugar Maple within the swale associated with the stormwater pond outlet.	Noted and updated.
42	The TIPP should cover all trees >10cm DBH within 6m of the proposed development. Please confirm that the TIPP reflects this requirement.	Noted and confirmed.
43	The TIPP should also assess, of the trees proposed for	67 trees in fair to good condition being removed. At a 3:1

	removal or injury, which trees require compensation. Please note that the City's by-law requires compensation for all regulated trees in fair or better condition. The City's standard practice is compensation at a 3:1 ratio, with three trees planted for each tree destroyed or injured. Please update the TIPP to reflect this information.	ratio this means there must be 201 compensation trees planted with a 50mm cal size minimum. Buffer enhancement plans now show 98 proposed trees. Remaining 103 trees to be coordinated to be planted elsewhere within the proposed development. New column within tree data charts shows overall tree condition. Tree management plans and arborist report now note how many trees are being removed and how many are being planted to compensate.
44	The FSR is based on a Geotechnical Investigation where measurements were taken in August and December. The information provided in the Geotechnical Investigation and therefore the FSR does not appear to capture the spring groundwater high. This information is needed to establish the 1m separation distance required between the seasonal high groundwater table and development.	Additional Hydrogeological data is being provided in the updated Hydrogeological study accompanying this submission. The updated data and spring high groundwater levels were incorporated into all other relevant documents.
45	The FSR appears to be based on hydrogeological information collected from adjacent properties. Please provide site specific hydrogeological data to inform the FSR.	Additional Hydrogeological data is being provided in the updated Hydrogeological study accompanying this submission. The updated data and spring high groundwater levels were incorporated into all other relevant documents.
46	The FSR indicates that all units will require sump pumps that will discharge to grade in the rear yards of each lot. Is pumping of groundwater proposed? How has this been factored into the stormwater design, evaluation of impacts, etc.? Please note that Environmental Planning staff are not supportive of pumping groundwater.	A note was included on the drawings that BFFE to be minimum of 1.0m above ground water level for all buildings. This was also added to Section 2.4 of the FSR. No pumping of groundwater is proposed. The sump pump referenced in Section 3.2.3 is a standard basement sump pump in case of water in basements.
47	Please clarify if the design and placement of infiltration galleries been informed by in situ testing?	Preliminary Guelph permeameter tests were completed in 2018. Refer to the February 2019 Hydrogeology report and the additional supplementary October 2020 report prepared by WSP. Infiltration galleries were placed to suit the latest Site Plan layout and are near the general vicinity of the preliminary tests locations. Once there is sufficient confidence that the Official Plan and Zoning By-law Amendment applications will proceed based on the current conceptual Site Plan, in situ testing will be performed to support the Site Plan application. Until such time, it is premature to perform additional tests that may need to be relocated to address zoning related site plan redesigns.
48	Please note that grading is not permitted within the 15m wetland buffer. Please revisit the SWM pond design accordingly. Refer to above comments on SWM.	Major grading is not proposed within the 15m wetland buffer. The SWM pond was moved outside the 15m buffer. It is anticipated that minor grading will be required within the buffers to facilitate the construction of the trail. The trail will more or less match existing grades. At a select few locations, adjustments of existing grades will be required due to the spacing of existing elevations and existing slopes. Refer to MTE Drawings C2.1 and C2.2 for limits of grading and buffer limits

49	Is uncontrolled area in catchment 204, to the rear of the northern most block of townhomes a concern? Drainage will be directed to the rear of each lot and then appears to run down slope toward the wetland. Is a swale needed to accommodate this drainage? Are there potential impacts to neighbouring properties?	Site plan was updated and the northern most block of townhomes were removed. Refer to updated drawings. There are no impacts to neighbouring properties.
Hydrogeological Technical Quality Review		
1	Names and designations below signatures are missing; please include these in future revisions.	See updated Hydrogeology report.
2	Section 2.4.2 "...bedrock at site is composed of dolostone from Lockport Formation". This should state that bedrock underlying the site is composed of dolostone formations of the Lockport Group based on the mapping the author chose to base their interpretation on. No boreholes were advanced to bedrock on site as far as the reviewer can tell, which is why it is important to refer to the mapping the author chose, or copies of local well Records/borehole logs used.	See updated Hydrogeology report.
3	Section 2.4.2. The author states that AECOM drilled 3 boreholes on the nearby closed landfill. Please provide these borehole logs in the report appendix as well as referring to them in the text by name so the reviewer is aware of the 3 particular wells the author refers to.	See updated Hydrogeology report.
4	Section 2.5.2. Were there any wells installed on the site? From what appears in the report, there were no wells installed onsite, which makes the author's interpretation of groundwater flow direction invalid without proper reference as to where this data was collected.	See updated Hydrogeology report.
5	Section 2.5.2. As per the City of Guelph EIS Guidelines, the author must include groundwater flow directions and gradients, which do not appear in the report.	See updated Hydrogeology report (Figure 1, with a copy appended to the EIS - Appendix J).
6	Section 2.5.3. What is "the vicinity of the site"? The author states that there are no PTTWs/EASRs in the vicinity, but does not provide an actual distance as to what was considered. If the "vicinity" is the 120m or 250m buffer around the site, then the reviewer suggests this exercise is completed once again for a buffer of at least 500m around the site. At the very least, please state the search area used to identify water well records.	See updated Hydrogeology report.
7	Section 2.5.4. The three domestic wells identified are in close proximity to the site. Although the assumption is made that these are likely not in use, this issue should be further explored in any dewatering and discharge plan that is prepared for the site.	See updated Hydrogeology report.
8	Section 2.7. Please include either the Certificates of Analysis or a table of the water quality results. The author	See updated Hydrogeology report.

	speaks to Metals and VOCs, however general chemistry is not at all discussed.	
9	No hydrographs are present in the report. This item should include a minimum of 1 year worth of data showing groundwater levels that characterize seasonal highs, spring freshet and other storm and melt events with comparison to local precipitation data (as per requirements outlined in the City of Guelph Guidelines for the Preparation of Environmental Impact Studies (2017)).	See updated Hydrogeology report.
10	Data with respect to seasonal highs of groundwater elevations have not been collected or presented in the report; water levels have not been collected aside from during drilling. Similar to previous comments, groundwater level data should be collected which include a minimum of 1 year worth of data which encompasses the spring freshet seasonal highs and lows and other storm and melt events.	See updated Hydrogeology report.
11	As per the City of Guelph EIS Guidelines, the author must include a description of recharge and discharge zones, including springs and seeps, which does not appear in the report.	No springs or seeps were observed during field investigations. See updated Hydrogeology report for discussion of recharge zones. A note about the lack of recharge areas has been added to EIS Section 4.3.1 and the lack of ground water discharge observations has been added to the EIS Section 4.6.1.
12	Further to the previous comment, EIS Guidelines also require the author to describe flows (quantity and quality) into and out of the natural features and areas, including rivers, creeks, lakes, ponds, springs, seeps and headwater features (including wetlands).	See updated Hydrogeology report, with relevant discussion included in the EIS (Section 4.3.1).

Engineering Services – July 8, 2019

Scoped EIS

	Comment	Response
1	To meet the requirement of zoning, the municipal services must be “adequate and available” which includes a stormwater outlet. The engineering consultant has designed the site to outlet to a private dry pond and infiltrate some of the clean rooftop discharge. As such, the in-situ testing to confirm the infiltration ability of the soil is to be completed at the location of the proposed gallery(s) in keeping with the methodology outlined in the City’s Development Engineering Manual (DEM). Please be certain to review these requirements prior to testing to ensure the sufficient number of test holes and depths are used. The Guelph Permeameter testing that has been done on the site as described in the Hydrogeological Assessment was done incorrectly (depth & location) and the results cannot be used as the infiltration of the soils	See updated Hydrogeology report.



	<p>underlying the proposed galleries need to be determined.</p> <p>This will need to be completed as part of a future resubmission and prior to a staff report to Council to confirm the availability of a storm outlet.</p>	
2	<p>Engineering staff also support and echo the Environmental Planner's comments regarding the lack of data on site specifically surrounding the groundwater monitoring for one year to capture the seasonal high level. This is a requirement of any site as specifically outlined in the City's Development Engineering Manual (DEM) that can be found on the City's website. The spring freshet needs to be captured in order to determine elevations relating to basements, SWM and infiltration.</p>	See updated Hydrogeology report.
3	<p>A future submission will require more detailed (monthly) water balance calculations as specified in the City's DEM.</p>	See updated Hydrogeology report.
4	<p>The feasibility of the infiltration galleries to function as proposed is in question due to the preliminary information gathered only from the Geotechnical Reports provided in the FSR. The requested in-situ testing and groundwater monitoring should establish whether or not infiltration would be suitable at the locations proposed while maintaining the separation required by the MOECC.</p> <p>The strong reservations around infiltration design was reached by utilizing the elevations provided for infiltration gallery#1 and the information for Borehole 1 (Geo-tech Report 08/21/2017). The proposed bottom of the gallery will not have the necessary minimum 1 metre separation from the groundwater that was reported in the borehole log. Furthermore the feasibility is questioned since the underlying soils below the proposed gallery as identified in BH1 log is "moist and very dense" and that the groundwater measured was taken in August.</p>	See updated Hydrogeology report.
Functional Servicing Report – SWM		
	Comment	Response
1	<p>Infiltration gallery depth cannot exceed 0.6m as per DEM and the factor of safety that is used should be from the TRCA/CVC LID Design Guide (Appendix C) utilizing the results of the Permeameter testing (underside of gallery). Update Section 3.2.4 in report accordingly.</p>	<p>Stone infiltration galleries were replaced with ADS stormtech galleries to provide adequate storage volume, a minimum of 1.0m of vertical separation from groundwater. Refer to typical sections on MTE drawing C2.2. A conservative infiltration rate of 33.7mm/hr (as noted in WSP's February 2019 report) was used in the SWM model . Converting the hydraulic conductivities calculated by WSP from m/s to infiltration rates in mm/hr results infiltration rates with a max low of 57.5m/hr and a max high of 91.9 mm/hr. Additionally, the ADS galleries were oversized by 15% or more. ADS galleries will be optimized during detailed design. Section 3.2.4 and 2.4 were</p>



		updated. Further reducing the 33.7mm/hr is not required given the soils encountered on site (sand silt and till).
2	Ensure that the elevation for the bottom of the proposed infiltration galleries are clearly shown on the plans. A cross section or detail of the gallery would be helpful.	Elevations of the bottom of proposed infiltration galleries are clearly shown on preliminary cross sections on MTE drawing C2.2
3	The void ratio used for the infiltration gallery should be 40% rather than 35% assuming that it's a stone gallery (50mm clear stone typical). Update FSR accordingly.	A void ratio of 40% was used in the the storage volumes calculated for the ADS Stormtech galleries.
4	The dry pond is to include a forebay for quality control as per the DEM. OGS units will only be considered as a pretreatment device.	The developable portion of the site is only 1.96 ha (<2 ha) and therefore we are not proposing a forebay in the dry pond as per DEM.
5	Please note that the private SWM pond will require an Environmental Compliance Approval (ECA) from the MOECC as it discharges to the adjacent wetland.	Acknowledged.
6	Drainage catchment area 205 as identified in the FSR should be captured and controlled within the site and not discharged uncontrolled to Eastview Road.	Site plan has changed and an apartment is proposed. At this time it is not anticipated that drainage area 205 can be fully captured due to grading constraints. This will be reviewed further during detailed design.

Functional Servicing Report – Grading

	Comment	Response
1	As discussed at the meeting held on July 4, 2019, please review the proposed grading including the retaining walls adjacent to the 10m dripline buffer to ensure that construction activities will remain outside of the protected areas. Furthermore grading that is adjacent to the 10m dripline buffer should provide further setback where severe grading (3:1) is proposed to avoid potential erosion.	Site Plan was updated and grading was reviewed. Construction activities (including retaining wall will remain outside the 10m dripline buffer.
2	Please show underside of footings or basement floor elevations for the proposed buildings on the grading plan.	BFFE to be set a minimum of 1.0m above groundwater elevations. Townhome units have been set as look out units. BFFE and FFE will be set during detailed design stage.

Functional Servicing Report – Servicing

	Comment	Response
1	The proposed units at the north end of the site, as mentioned in the FSR, will likely need to have pumps for the basement plumbing fixtures. Please note that Engineering will not support pumping of effluent from basements as per our DEM for any new buildings and therefore alternative solutions need to be investigated.	Site Plan was updated. Northern townhouses have been removed.
2	Please note that the minimum water service size in the City of Guelph is 25mm. Update the FSR accordingly.	Section 3.2.1 of the FSR was updated to specify 25mm domestic service



3	The location of the former septic tanks and tile beds should be taken into consideration and noted on the plans as there may be potential conflict with the proposed infiltration galleries.	The location of former septic tanks and tile bed is unknown. A note will be added to the drawings during detailed design, specifying that the existing septic system be properly removed and disposed of.
Environmental		
	Comment	Response
	A Phase 1 report is to be submitted in accordance with the City of Guelph's document entitled "Development Guidelines for Potentially Contaminated or Contaminated Sites" as found on the City's website. The Phase 1 will need to be provided with the next submission especially considering the geotechnical borehole logs did show fill present.	Phase 1 ESA is provided with this submission.
Environmental Noise Assessment		
	Comment	Response
	The noise assessment report should be reviewed against the document "Guelph Noise Control Guidelines" as found on the City's website. The type of study required to support a rezoning application is a Feasibility Study where the evaluation of the site design and methods of noise mitigation is explored. The current study does not mention any site design alternatives nor investigates alternative mitigation measures. The orientation of the proposed buildings and outdoor amenity areas should be evaluated and discussed. Refer to this document to update the study to ensure that the content reflects the information that is required for the City of Guelph as well as NPC-300. Please note that the material selection and design requirements for any recommended noise barrier is to meet the City of Guelph guidelines and not the "M.O.E. policy" as indicated in Section 5.1.	Noise feasibility study has been updated to reflect the new site layout.
Traffic		
	Comment	Response
	Driveway #A The proposed location of Driveway #A does not provide sufficient distance from the signalized intersection of Eastview Road and Starwood Drive as per City's Development Engineering Manual. This shall be design as an emergency access only, with the use of post and chain design for emergency vehicles.	Driveway #A is now shown as an emergency access driveway.

	<p>Driveway #B The proposed location of Driveway #2 will need an eastbound left turn lane to facilitate the left turn vehicles entering the proposed development site. This can be achieved through the use of pavement markings due to the existing width of Eastview Road.</p>	Left turn lane is recommended in update TIS.
	<p>Trip Distribution The development trips assigned to Driveway #A will need to be reassigned to Driveway #B.</p>	Acknowledged. Please see revised TIS.
	<p>Sight Distance Analysis The sight distance analysis in Section 5.0 has been reviewed and found to be satisfactory.</p>	Acknowledged.
	<p>Additional Analysis An All-way Stop Warrant analysis for the intersection of Eastview Road at Auden Road/Development Entrance will need to be provided for our review.</p>	Acknowledged. Please see revised TIS.

Environmental Planner – May 4, 2020		
	Comment	Response
1	Results from permeameter testing, as per section 5.7.7 and 5.7.6 of Guelph's Development Engineering Manual, have not been integrated into water balance calculations.	n/a
2	Results from groundwater monitoring, as per section 5.8 and 5.7.6 of Guelph's Development Engineering Manual, have not been integrated into water balance calculations.	n/a
3	Wetland Water Balance Risk Evaluation, as per TRCA's November 2017 document, does not appear to have been completed for the proposed development scenarios. This risk evaluation should factor into the assessment of impacts to the receiving wetland.	The TRCA Wetland Water Balance Risk Assessment was not a requirement noted in the approved Terms of Reference for the EIS. We have completed a cursory analysis of the site in accordance with the TRCA document and determined that if we followed those guidelines, there would be a substantial increase to the scope of the EIS beyond what was contemplated during the approval of the Terms of Reference. As such, we believe it is too late in the process to introduce this requirement.
4	Why are precipitation values for evapotranspiration (76.82 mm) and runoff (691.36 mm) the same for both development options and the pre-development condition, when the pre-development condition has only 0.1 ha of impervious cover and the townhouse and condo options have 1.32 ha and 1.29 ha of impervious cover respectively? Refer to Table 2: Updated Annual Water Balance Summary.	See updated Hydrogeology report.
5	Figure 3: Water Balance Comparison shows the change or difference between proportions of the total, comparing the pre-construction condition to the postconstruction townhouse and condo options, and not the percent increase, as described. Figure 3 suggests a 13%	See updated Hydrogeology report.

	increase in runoff for the townhouse option and a 10% increase for the condo option, yet there is actually a 53% increase for the townhouse option and a 42% increase for the condo option. Similarly, the percent difference in infiltration is actually a 34% increase for the townhouse option and a 47% increase for the condo option (refer to Attachment 1 for calculations).	
6	Note that standards and policies have changed since 66 Eastview was approved. Refer to the Development Engineering Manual and Environmental Impact Study Guidelines for current requirements. While using the stormwater and environmental work completed for 66 Eastview as a direct comparison is not appropriate, making use of existing data and background information is acceptable.	Acknowledged.
7	The stormwater management design criteria for the site, as established by the City of Guelph, includes control of post-development peak discharge from the site to pre-development levels for each of the 2, 5, 10, 25, 50 and 100 year return period storm events. With a 53% (townhouse option) and 42% (condo option) increase in runoff predicted, it is unclear how stormwater management design criteria can be met based on the current development scenarios.	See updated Hydrogeology report.
8	A site-specific, feature-based, monthly wetland water balance is required, per the approved Environmental Impact Study Terms of Reference (dated May 1, 2018) and Development Review Committee meeting minutes (dated August 15, 2017), to assist in determining whether or not a negative impact to the wetland would result from the proposed development. In addition to Guelph's Development Engineering Manual and Environmental Impact Study Guidelines, refer to TRCA's August 2012 Water Balance for Protection of Natural Features document for additional guidance. Also consider looking to the City of Guelph's 'Current development applications' for examples of wetland water balances submitted for other development applications.	See updated Hydrogeology report.
9	Calculations provided on the predicted water level rise volumes assume that runoff will be distributed evenly across the wetland, with two scenarios provided (i.e. Wetland A + B and Wetland B). Under the proposed development scenarios, runoff will be directed to a stormwater management pond that outlets, as a point source, to the wetland. Water levels will most likely increase locally, to a greater depth, in proximity to the outlet and will almost certainly not be evenly distributed across the wetland. The resubmission should include an evaluation of impacts associated with localized water level increases in the wetland in proximity to the stormwater management pond outlet.	See updated Hydrogeology report.



Enclosed with this digital submission please find the following:

- Revised Conceptual Site Plan prepared by BJC Architects dated November 17, 2020
- Revised Planning Justification Report prepared by Robert Russell Planning Consultants Inc. dated November 20, 2020
- The Draft Zoning By-law Amendment
- Functional Servicing and Stormwater Management Report prepared by MTE Consultants revised November 6, 2020
- Servicing and Grading Plans C2.1 and C2.2 MTE Consultants revised November 6, 2020
- Existing Conditions Plans C1.1 and C1.2 MTE Consultants revised November 6, 2020
- Environmental Impact Study prepared by WSP revised November 6, 2020
- Tree Management Plan prepared by WSP revised November 3, 2020
- Traffic Impact Study prepared by Paradigm Transportation Solutions revised November 2020
- Hydrogeological Study prepared by WSP revised November 5, 2020
- Revised Noise Feasibility Study prepared by YCA revised November 2020
- Phase 1 ESA for 78 Eastview Road prepared by Premier Environmental Services dated August 16, 2017
- Phase 1 ESA for 82 Eastview Road prepared by Premier Environmental Services dated July 24, 2017

If you should have any comments or questions, please feel free to contact me at your convenience.

Yours Truly,

ROBERT RUSSELL PLANNING CONSULTANTS INC.

A handwritten signature in blue ink, appearing to read 'Rob Russell', is written over a white background.

Rob Russell, MCIP, RPP
President