

**220 Arkell Road Draft Plan of Subdivision and Zoning By-law Amendment Application – 2nd Submission
D.P. 23T-19002, ZBA OZS19-017**

Monday, February 12, 2024

Leah Lefler, Environmental Planner, Infrastructure, Development and Enterprise Planning and Building Services
519.822.1260, ext. 2362 / leah.lefler@guelph.ca

Responses to 2nd Submission Engineering Comments received from:

#	C/R	Comment / Response
		A revised Draft Plan of Subdivision has been submitted for 220 Arkell Road. In total, 98 new dwelling units are proposed (30 single detached dwellings and 68 stacked cluster townhouses). The draft plan also includes a 0.33 ha park block, a stormwater management block, an open space block and two ecological linkage blocks. A revised Zoning Bylaw Amendment application has also been submitted to rezone the subject lands.
		Revisions made to the original application include: <ul style="list-style-type: none"> • Inclusion of the existing driveway from Arkell Road to the South side of Dawes Avenue to be conveyed to the City for a future public walkway. • Redesign of the Stormwater Management Facility. • Reformatting of the North property boundary to be consistent with the final changes to Registered Plan of Subdivision for the land to the North (i.e., Phase 2 of the Victoria Park Village subdivision). • Increasing the width of the public walkway/emergency access along the West side of Block 31 from 6.0 metres to 8.0 metres. • Removal of future road allowance to Poole Street in the Northeast corner. • Increasing the amount of cluster townhouse units from 60 to 68, resulting in 98 total units within the development.
		Environmental planning staff reviewed the following Second Submission materials: <ul style="list-style-type: none"> • Revised Draft Plan of Subdivision, prepared by Black, Shoemaker, Robinson & Donaldson Limited, revised February 21, 2023; • Planning Policy Update, prepared by Black, Shoemaker, Robinson & Donaldson, dated April 2023; • Environmental Impact Study (EIS) Addendum, prepared by Stantec Consulting Ltd., dated April 17, 2023; • Revised Water Balance Calculations in Response to First Submission Comments, prepared by Stantec Consulting Ltd., dated March 29, 2023; • Revised Preliminary Servicing, Grading and Stormwater Management Report, prepared by Stantec Consulting Ltd., dated April 4, 2023; and • Tree Preservation Plan, prepared by Stantec Consulting Ltd., dated April 20, 2023.
<u>COMMENTS</u>		
The following comments are offered from environmental planning staff at this time:		
1	C	Stormwater management infrastructure (i.e., a spreader swale) is proposed within the inner 15m Provincially Significant Wetland (PSW) buffer. This is not supportable. Official Plan policy 4.1.3.4.6 establishes that stormwater management facilities and structures and their normal maintenance may be permitted, where low impact development measures have been implemented to the extent possible outside the buffer and provided they are located a minimum distance of 15 metres from a PSW.
	R	The location of the spreader swale that was previously encroaching into inner 15m of the PSW buffer has been adjusted and now is located beyond the inner 15m of the PSW buffer as shown on Drawing C-410 of the resubmission.
2	C	A proposed location for a wildlife culvert is shown on several of the engineering drawings submitted. The wildlife culvert location should be moved to the north to facilitate movement between the PSW and woodland through the Ecological Linkage (not the SWM facility).
	R	The positioning of the wildlife culvert is located within the limits of the Ecological Linkage for the purpose of the Draft Plan review/approval. As discussed with City staff on November 9, 2023, the final position of the culvert will be based on additional information provided during preparation of the EIR and detailed design.

#	C/R	Comment / Response
3	C	The water balance prepared for the proposed development shows a 9,930 m ³ /yr increase in infiltration across the Site. This outcome is consistent with the recommendations of the Torrance Creek Subwatershed Study and is supported by environmental planning staff.
		<p>a. The end-of-pipe infiltration facility proposed beneath the stormwater management facility is not consistent with Guelph's Development Engineering Manual (DEM). The applicant is encouraged to consider opportunities for maximizing infiltration that are consistent with the DEM.</p> <p>b. With respect to the requirement for revisions to be made to the proposed stormwater management system, environmental planning staff request the opportunity to review future submissions for consistency with natural heritage system and water resource system policy.</p>
	R	As discussed with City Staff during our meeting on November 9, 2023, the end-of-pipe infiltration has now been adjusted to occur through a surface infiltration cell/basin. There is now no proposed infiltration facility beneath the stormwater management pond to be consistent with Guelph's DEM.
4	C	<p>The water balance prepared for the proposed development shows a 6,075 m³/yr increase in runoff directed to the Torrance Creek PSW. Hydrographs submitted in support of the water balance and EIS Addendum indicate a near tripling of runoff volume directed toward the wetland during summer months when swamps typically dry up. Trees that are located in a swamp are adapted to a specific wetland hydroperiod. Changes to the hydroperiod of a wetland, such as a consistent increase in the monthly volume of runoff directed to a wetland, may result in negative impacts (e.g., the death / dieback of trees located near SWM outlets).</p> <p>a. Opportunities to reduce runoff directed to the wetland should be explored, including exploring the feasibility of maintaining the pre-construction volume of runoff directed via sheet flow toward the woodland located on the adjacent property to the east. The water balance currently shows a 2,481 m³/yr decrease in runoff directed to the woodland</p>
	R	<p>The infiltration strategy has been re-designed to promote infiltration of the 25 mm event where possible. This planned approach is expected to result in a reduction in the runoff surplus to the wetland from the unmitigated post-development value of 16,404 m³/yr to a mitigated value of 2,640 m³/yr. Grading constraints across the Site do not allow for more runoff to be directed to the woodlot to the east and away from the wetland; therefore, the runoff deficit of 2,445 m³/yr to the east remains.</p> <p>The increase in post-development runoff discharged to the Torrance Creek Swamp is expected to be temporary (i.e., not cumulative from month to month) as the Torrance Creek Swamp is identified to be a groundwater recharge feature (i.e., the runoff entering the wetland is expected to be infiltrated during those months when runoff under the pre-development condition is low to absent (e.g., May to October)). Preliminary monitoring results from the wetland drive-point piezometers located downstream of the future SWMF outlet support this assertion as surface water ponding has been absent with groundwater levels remaining below the wetland substrate (refer to Figure 5 in the <i>Revised Water Balance Calculations in Response to First and Second Submission Comments, Draft Plan Application - 220 Arkell Road, City of Guelph, Ontario (Third Submission)</i>). As such, the assumption is reasonable that any ponding of this runoff during these months (i.e., when the vegetation is not dormant) will be limited as infiltration will not be impeded by a high groundwater table beneath the wetland.</p>
5	C	<p>The Tree Inventory and Preservation Plan submitted is based on data collected in 2017. Please note that an updated TIPP that is based on new data will be required as a component of the Environmental Implementation Report (EIR), Site Plan approval and/or detailed design requirements.</p> <p>a. Although the tree by-law does not include ash trees in the list of exemptions, since the arrival of Emerald Ash Borer and the widespread death /dieback of ash trees, the City of Guelph does not require compensation for the removal of ash trees. This detail can be considered when the TIPP is updated for the EIR, Site Plan approval and/or detailed design.</p>
	R	The Tree Inventory and Preservation Plan will be updated using new data, and will provide recommendations for compensation with notes on ash trees not requiring compensation with the EIR.
6	C	Please note that a Vegetation Compensation Plan will also be required as a component of the EIR, Site Plan approval and/or detailed design requirements. Since the subject development application pre-dates the City's Tree Technical Manual and the requirement for tree compensation to be provided based on an aggregate caliper formula, the proposed 3:1 replacement ratio is acceptable.
	R	Acknowledged.

#	C/R	Comment / Response
CONCLUSIONS		
The proposed development's consistency with Official Plan natural heritage system and water resource system policy has not been adequately demonstrated. A re- submission that addresses the comments above is required.		
END OF COMMENTS		