

APPENDIX I: TRCA COMMENTS ON Draft Plan of Subdivision SP-2023-04, Draft Plan of Condominium CP-2023-05, and Zoning By-law Amendment Application A 13/23 (TRCA File # CFN 70364).

The following drawings and information were reviewed in support of the application:

- Cover Letter, prepared by Blackthorn Development Corp., dated December 4, 2023;
- Draft Plan of Condominium, prepared by J.D. Barnes Limited, dated September 12, 2023;
- Draft Plan of Subdivision, prepared by Blackthorn Development Corp., dated September 13, 2023;
- Planning Rationale Report, prepared by Blackthorn Development Corp., dated December 2023;
- Proposed Draft Plan of Subdivision, prepared by Blackthorn Development Corp, dated November 9, 2023;
- Plan of Subdivision, prepared by J.D. Barnes Limited, dated August 21, 2023;
- Proposed Zoning By-Law, prepared by applicant, undated;
- Site Survey, prepared by J.D. Barnes Limited, dated March 16, 2007;
- Arborist Report, prepared by Beacon Environmental, dated September 2023;
- Environmental Impact Study, prepared by Beacon Environmental, dated September 2023;
- Functional Servicing and Stormwater Management Report, prepared by Candevcon East Limited, dated July 2023;
- Geomorphic Assessment, prepared by Beacon Environmental, dated October 2023;
- Preliminary Nitrate Impact Assessment, prepared by GeoPro, dated October 18, 2023;
- Preliminary Hydrogeological Assessment, prepared by GeoPro, dated October 30, 2023;
- Preliminary Sewage System Assessment, prepared by Gunnell Engineering Ltd., dated June 30, 2022;
- Slope Stability Analysis and Geotechnical Setback Study, prepared by GeoPro, dated October 27, 2023;
- Supplementary Geotechnical Investigation, prepared by GeoPro Consulting Limited, dated December 5, 2022;
- Soil Characterization Report, prepared by GeoPro, dated December 28, 2022;
- Water Balance Assessment, prepared by R.J. Burnside, dated February 14, 2023;
- Updated Water Balance Assessment, prepared by R.J. Burnside, dated August 15, 2023;
- Wetland Water Balance Risk Assessment, prepared by Beacon Environmental, dated September 2023;
- Drawing No. FSGP, Functional Servicing and Grading Plan, prepared by Candevcon East Limited, dated June 23, 2023;
- Drawing Nos. ERS1 to ERS2, Erosion and Sediment Control Plans, prepared by Candevcon East Limited, dated November 21, 2023;
- Drawing No. SP-1, Sewage Layouts, prepared by Gunnell Engineering Ltd, dated July 13, 2023.

First Submission		Second Submission	
TRCA Comments	Proponent Response ¹	TRCA Comments ²	Proponent Response ²
Development Planning			
1. Based on our review of Figure 3 within the EIS prepared by Beacon Environmental, we understand that there is a proposed encroachment of 0.11ha into the 10-meter setback from the staked feature limit for the lots located east of the valley corridor. There is also an encroachment proposed in the south portion of the western lots adjacent to the cul-de-sac. Please provide the proposed setback in metres so we can understand exactly what setback is being proposed in these locations. We suggest regularizing the dimensions of the private road on	The EIS has been updated to show a revised plan with a 10 m setback to the feature limit. Figure 3 in the Beacon EIS (2025) illustrates this revision.		

¹ Response to TRCA Comments must include what revisions were made and reference where in the document or which drawings were adjusted.

Block 19 to avoid the zig-zag of the road while meeting all buffer requirements.			
Water Resources			
2. Please submit the Visual Otthymo continuous model for the Exceedance Analysis for review.	The digital file of the continuous VO model has been included in the resubmission.		
3. Please submit the Visual Otthymo for stormwater management review.	The digital file of the stormwater management design VO model has been included in the resubmission.		
4. Please add a table with a comparison upstream of Node 3101 at Node 3102 in an additional table within the SWM Report. This will represent the impact at 5 th Concession Road without the additional drainage area from Catchment 179 (94.63 ha) in the VO model and a portion of the development site.	A comparison at Node 3102 has been included in the revised FSSR (refer to Table 5 and Appendix E)		
5. Please indicate if the infiltration trench/bioretention area at the outfall location will be condominium owned and maintained over the long-term.	The infiltration/bioretention area is required to be at the storm outfall so that the drainage area captured by the storm sewer can be infiltrated, resulting in the infiltration/bioretention being located on public property. The infiltration feature is intended to be passive and has pre-treatment in the form of an OGS. Therefore, the infiltration feature has no expected ongoing maintenance requirements. Should the location not be acceptable, it will not be possible to achieve all of the water balance, erosion control, and quality control requirements, which will instead be pursued on a "best-efforts" basis (through detailed design).		
6. At this stage, please determine the rough footprint of the outfall infiltration trench/bioretention area to demonstrate that adequate space is available to infiltrate the required runoff volume.	Rough sizing of the infiltration features has been completed, refer to Section 4.3.3 and Appendix G in the revised FSSR.		
7. Please include the drainage area IDs and drainage areas in Table 4 of the SWM Report as some of the catchments in each node are not being conveyed through the proposed storm sewers.	This table has been replaced with new discussion in the revised FSSR, refer to Section 4.2.1 and Table 3, which compares the total site flows (both controlled and uncontrolled) to the predevelopment condition.		
8. Please include the footprints for the Soakaway pits for the rear yards with reference to the measured high groundwater levels from the borehole logs and ensuring they are away from the sewage filter beds, TRCA staff note that areas of high ground water are present so the feasibility of the soak away pits need to be determined at this stage and shallower measures like the infiltration swale may need to be utilized.	Rough sizing of the soakaway pits has been completed, refer to Section 4.3.2 and Appendix G in the revised FSSR. Based on the functional design, soakaway pits have been assumed for each lot; however, at the detailed design stage when there are house siting designs, the feasibility and design of the soakaway pits can be reevaluated. Should soakaway pits not be feasible at the detailed design stage, it is proposed to explore a rear yard infiltration trench/swale.		
9. At the detailed design, please include cross sections of the LIDs proposed along with the measured high groundwater levels with reference to the closest/interpolated borehole.	Deferred to detailed design.		

10. At the detailed design please include sediment control pond sizing and interceptor swale calculations. Please refer to TRCA's ESC guide for reference.	Deferred to detailed design.		
Geotechnical Engineering			
8. We understand that the slope was analyzed using 6 cross-sections (Cross-Sections A-A to F-F). For Cross-Sections B-B, C-C and E-E, the toe erosion allowance was not added into the delineation of the long-term stable top of slope as the slope toe is located more than 15m from the creek. However, for Cross-Sections A-A, D-D and F-F the toe erosion allowance was included as the creek is in very close proximity to the slope toe. For Cross-Sections A-A and F-F, a toe erosion allowance of 8m was applied whereas for Cross-Section D-D, a toe erosion allowance of 5m was added. Beacon Environmental has conducted a fluvial geomorphic assessment. The toe erosion allowance (i.e. meander belt width) determined through the geomorphic assessment should be used as there appears to be discrepancy between the toe erosion allowance in the geotechnical report and erosion allowance in the fluvial study. Please reanalyze the slope and add the erosion allowance determined in the fluvial study and revise the geotechnical report accordingly.	GeoPro Response: The slope stability analysis and setback study has been reanalyzed and updated to consider the meander belt indicated in the report titled Frisque Lands Geomorphic Assessment 3225 5th Concession Road (Part of Lots 3 and 4), City of Pickering Carruthers Creek Watershed prepared by Beacon Environmental Limited dated October 2023.		
9. Once the geotechnical report has been revised, the long-term stable top of slope (LTSTOS) line and required 10-meter setback line should be plotted on all applicable plans.	This line has been added to Figure 3 of the EIS (Beacon 2025)		
Ecology			
10. TRCA supports determining the zone of influence to identify the impacts of dewatering on the watercourse as well as monitoring surface water level and baseflow. Please provide further details as to when this information will be provided to TRCA.	Please refer to Wetland Risk Assessment.		

11. The mitigation and contingency table in the Hydrogeological Report indicates that straw bales might be used as a treatment for dewatering. Please note that TRCA doesn't accept the use of straw bales on their own as an ESC device. TRCA recommends that a filter bag be used in place. Please update the table accordingly.	Deferred to detailed design.		
12. TRCA recommends that the temporary ponds indicated on the ESC plans be dewatered to a filter bag on a pallet surrounded by silt soxx. It has been the experience of TRCA staff that when applied correctly this is a more effective means of settling out sediments and preventing erosion. Please see TRCA's Erosion and Sediment Control Guideline for Urban Construction to help with this process.	Deferred to detailed design.		
13. TRCA recommends that the rock check dams be replaced with soxx check dams.	Deferred to detailed design.		
14. The EIS states that details on the impacts associated with the outfalls will be provided as part of detailed design. TRCA requests that as part of this analysis further information on the connections between the outfall and the watercourse be included; vegetation, topography and potential for erosion should be part of this analysis.	Deferred to detailed design.		
15. Please note TRCA does not support permanent access roads in the valley to the outfalls.	Noted.		
16. Please ensure that the non-continuous model for the wetland risk assessment is included in subsequent submissions	The catchment area to the mixed swamp (SWM1-1) community is 2.39 ha under existing conditions. The post-development plan proposes to increase the catchment area to the mixed swamp (SWM1-1) community by approximately 10% to 2.63 ha, resulting in similar groundwater and surface water volumes within the catchment as under existing conditions. It is anticipated that the proposed development will not impact the mixed swamp (SWM1-1) community. A non-continuous model can be provided under at the Detailed Design stage, if required.		
17. Please include the ELC field data sheets as part of the appendices for subsequent submissions.	Detailed data sheets were not prepared, the Beacon EIS details ELC community data and methodology		
Hydrogeology			
18. Please provide an estimate of long-term dewatering from the foundation drains. TRCA staff recommend considering an LID facility in relation to the foundation drains.	The report will be updated with long-term drainage estimation once the final design with slab elevation is available.		

19. TRCA retains an interest in baseline water level and quality studies of the creek within the estimated zone of influence.	Agree. However, surface water baseline study is beyond GeoPro's scope of works, we recommend the client consult with specialized consultants to address this requirement		
---	--	--	--