County File: 15T-21005 & Town File: OPA-04-21 - 3rd Submission Comment Response				
The Biglieri Group Ltd.		County File: 15T-21005 & Town File: OPA-04-21		TBG Project: 20699
		Address: S.E. CR 10 & Fallis Line, Millbrook		TBG Client: Vargas (C/o Peter Berardi)
Ref	Item	**Comment**	**Consultant**	**Formal Response**
Otonabee Conservation - May 4, 2023				
Comments Letter	1	I. Otonabee Conservation has reviewed this application through our mandated authority under Ontario Regulation 686/21, pursuant to the Conservation Authorities Act, to ensure consistency to natural hazards polices in any policy statement or provincial plan issued under the Planning Act. ORCA technical staff have identified inconsistencies in the characterization of the floodplain and erosion hazards on the southern portions of the property. Portions of the proposed development, including residential lots and the Stormwater Management block, appear to be shown within the delineated and suspected hazard areas and their associated allowances/setbacks. Section 3.1.1 of the Provincial Policy Statement (PPS) directs development to areas outside hazardous lands which are impacted by flooding and/or erosion; and PPS 3.1.2d) prohibits development within a floodway. Where Otonabee Conservation now agrees that much of the site has been appropriately delineated for hazards, technical staff note areas where further clarity and analysis is required regarding floodplain analysis, erosion hazards, and their implications to the overall draft plan and grading plans submitted to date. Of specific concern are the following: • Suitable justification of the water-crossing design of Street A over the Baxter Creek Tributary versus other design alternatives that may have lesser impact on upstream and downstream hazards including meander belt width and stream geomorphology. • If the current water-crossing design is to remain as is, then ORCA requires the following: o Analysis of design implications to downstream flooding and erosion hazards to ensure no negative impacts, o Analysis of design implications to upstream/downstream geomorphology including SWM outfall location and introduced point source velocities, • Additional floodplain delineation requirements and erosion hazard analysis in key areas as noted in the technical comments. • Where applicable, subsequent modifications from the above to the site servicing and grading plan and overall draft plan. Please see technical review comments in Appendix A.		Please see below for responses to detailed technical review comments.
	2	Otonabee Conservation staff attended a site inspection on June 14, 2022 with the proponents' environmental consultant (GHD). The purpose was to review the Ecological Land Classification (ELC) ecosites associated with the Baxter Creek tributary, wetlands, the northerly valley slope, and the proposed locations for the watercrossing. However, the latest submission still illustrates that development is proposed within some of those natural heritage features or their protective buffers - most notably, those lots at the south end of the proposed development. While the comment matrix states that the OPA will follow the intent of the MZO, there appears to be natural hazards and, by extension, natural heritage areas, not being captured accurately in the proposed redesignations. It is the opinion of Otonabee Conservation that it is inappropriate to redesignate these areas without the submission of additional information and field data to ensure appropriate boundaries and protective buffers are accurately being illustrated. In order to demonstrate that there will be no net overall negative impact on natural features and their ecological function there should be a wetland compensation plan submitted at detail design to compensate for the required watercrossing's alteration and interference to the identified natural heritage features in that location. This may include a compensation for other potential wetland intrusions around lots 109-121, if deemed applicable. Please see technical review comments in Appendix A.	GHD	GHD has revisited that part of the site and completed soil cores and wetland assessments to confirm presence of wetland. That information has been added to the updated EIS report. The low area in community 7 has been redesignated as SWD2-1 and the boundary of this ELC community and wetland adjusted according to our field delineated GPS wetland boundary line.The previous FOM community was confirmed as wetland, in response to ORCA comments. There will be no loss of wetland in that location at end of cul-de-sac.

	3	The current design appears to place filling and grading for the stormwater management pond and infrastructure, water crossing (street A over Baxter Crk Trib.), and some lot limits within an erosion hazard and/or wetlands and their respective buffer. Wetland avoidance or rehabilitation of disturbed wetlands are the preferred solutions which keep natural features in situ. However, a compensation plan has been proposed elsewhere at the site to offset the wetland loss and enhance ecologic and hydrologic function of these regulated features. All areas of wetland disturbance and chosen areas for compensation will need to be identified in order to establish the principle of development. The compensation plan will need to include an effectiveness monitoring plan to review onsite conditions pre-to post development. These details and the overall compensation design should be submitted for review at the detail design phase and will be required in order to acquire a permit as per subsections 28.0.1 of the Conservation Authorities Act. As per Section 28.0.1 (3) of the Conservation Authorities Act, Otonabee Conservation, will continue to work with the developer to grant a permission prior to any site alteration and construction in those areas which are regulated at the site. Please find relevant technical review comments in Appendix A.	GHD	The crossing of Baxter Creek at Street A will impact on fish habitat, riparian wetland and the creek. This area has been delineated on our mapping and has been quantified. As part of the conditions of draft approval GHD will prepare a DFO request for review that will include a compensation plan for the loss of fish habitat and include wetland. There is also options to recreate wetland on other parts of the property. The wetland compensation plan will include a monitoring plan that includes the duration of the monitoring and the specific parameters to be studied. This usually involved monitoring of plant health of the nursery stock and seed mix, general success of the wetland to meet the objectives and ecological functions. This plan will be submitted to ORCA as part of the permit applications.
	4	Otonabee Conservation has reviewed the application in terms of the Revised Trent Source Water Protection Plan (SPP), prepared under the Clean Water Act. The SPP, intended to protect Ontario's drinking water at its source, came into effect on January 1, 2015 and contains policies to protect sources of municipal drinking water supplies from existing and future land use activities. The application was also reviewed in consideration of the SPP. It was determined that the subject property is not located within an area that is subject to the policies contained in the SPP.		No response required.
Otonabee Conservation: Appendix A: Technical Review Memo - March 30, 2023				
General Comments	1	Drainage Area 202 is modeled with Timp of 60 % and XIMP of 45%. Since more than half the drainage area is townhouse units these impervious values are too small. Please provide the breakdown of drainage area 202.	Valdor	A land use breakdown for Catchments 201 & 202 has been provided in Table 4. - Catchment 201 has a calculated TIMP of 69% and a XIMP of 58%. These were rounded up to 70%/60% in the model (as per the last submission). - Catchment 202 has a calculated TIMP of 52% and a XIMP of 40%. These were rounded up to 60%/45% in the model (as per the last submission). We note that this catchment includes a 1.24 ha lawn/agriculture area north of Fallis Line that is responsible for lowering the average TIMP/XIMP (and should explain the noted discrepancy identified in this comment). It is anticipated that if the land north of Fallis Line is developed in the future, this drainage area will be directed to a new SWM facility constructed to service that development.
	2	Water Quality Control a. The water quality calculations used an impervious of 65%. This value is too small. Using the Draft Plan, please provide the land use breakdown to calculate the appropriate impervious rate of the site.	Valdor	Based on the calculations per the response above, the weighted average imperviousness to the SWM pond is 64% (compared to 65% in the previous submission). This has been rounded up to 70% with this submission, to be conservative.
	3	Please provide Figure E.1, it is not included within Appendix E Flood Plain Analysis.	Valdor	We confirm that Figure E.1 was accidentally omitted from Appendix E, and has been included with this submission.

Floodplain Analysis - Baxter Creek Tributary	4	The revised report and Figure E.1 makes reference to the difference between floodplain elevations of the two studies. a. What is the vertical datum used in the hydraulic model and Figures 5 & 6 (e.g.CGVD28 or CGVD2013) including contour data?	Valdor	The contours (0.20 m intervals) shown on Figures 5, 6 and E.1, and used in the HEC-RAS model, are from the site's topographic survey (IBW Surveyors, 22 April 2020) which states "Elevations are geodetic and referred to the Canadian Geodetic Vertical Datum (CGVD28) by direct measurement to a Real Time Network." A more detailed explanation and comparison with the May 2022 Baxter Creek HEC-RAS model is provided in Section 4.5 of the FSR.
	5	The Street 'A' cul-de-sac, all associated fill for side slope and lots 118 to 122 are potentially within the regulatory floodplain from Baxter Creek and the Tributary. a. The regulatory floodplain for the Baxter Creek Tributary needs to be extended and joined with the Baxter Creek Floodplain (ORCA 2022) to properly delineate the regulatory floodplain in this area. b. The boundary condition for the Tributary section will be derived from the appropriate section of the Baxter Creek model. c. The regulatory floodplain will be delineated/extended around lots 118 to 122 on Street 'A' cul-de-sac on PSG-1 Preliminary Site Servicing and Grading Plan.	Valdor	See Figure E.1, which shows that these lots are outside the Regulatory floodplain associated with both Baxter Creek and the tributary. The floodplain analysis for the tributary extends beyond the limit of development and confirms that the proposed development is not within the floodplain. Also, the tributary floodplain elevation at the downstream end of the study area (209.17 m) is higher than the floodplain elevation in Baxter Creek (208.33 m), so there are no tailwater impacts on the subject site. Further floodplain mapping downstream of the current study area is not warranted.
	6	Please provide a digital copy of the hydraulic models (existing and proposed conditions) with the additional cross-sections and revised boundary conditions.	Valdor	The HEC-RAS model has been provided.
Erosion Hazard Limit	7	The Erosion Hazard Limit still has not been properly delineated around the north-west corner of the stormwater management pond. As indicated in the snapshots below, Figure G.1 Updated Geotechnical Investigation Report and Figure 2 DEM layer from PTBO County GIS, the watercourse and associated slopes make a bend in this location. a. The proposed Erosion Hazard Limit does not represent the shift in the creek or the floodplain/slope location in the top west corner of the SWM Block. Please add additional cross-section(s) to properly calculate/delineate the Erosion Hazard Limit. b. Please plot the Erosion Hazard Limit on the PSG-1 Preliminary Site Servicing and Grading Plan and adjust the SMW Block to be outside the hazard if needed.	Valdor / GHD	GHD: a. *See Letter regarding "Response to Comment - Updated Geotechnical Investigation Report", dated July 12, 2023, prepared by GHD, for Figures Referenced below.* An additional cross-section (Section 10-10') was plotted at the north-west corner of the SWM Block. The location of Section 10-10' is illustrated in the attached updated Figure G.1. The EHL setback along Section 10-10' is illustrated in the attached Figure G.8, using the previously established 8 m toe erosion allowance, 3H:1V stable slope inclination and 6 m erosion access allowance. The updated EHL setback is illustrated in the attached Erosion Hazard Limit Assessment Plan, Figure G.1. The SWM pond design has been adjusted to be entirely outside the defined EHL setback as illustrated in the updated PSG1 Preliminary Site Servicing and Grading Plan. Valdor: b. The erosion hazard limit in the specified location has been assessed and delineated on the plans. The SWM pond has been adjusted such that the pond and all associated grading is outside of the erosion hazard limit.
	8	Please remove the small section of air photo that sits between County Road 10 and the west property limit it is interfering with background information on PSG-1. Please insert the labeled contour data, the wetland boundary and 30 metre buffer, and the Erosion Hazard Limit to properly define the development constraints for the stormwater management block (Block 145).	Valdor	PSG-1 has been updated accordingly.
	9	Lot limits for proposed lots 112, 113, 114, 115, 116, and 117 appear to be within the 30metre wetland buffer. Please illustrate that no development, including lot lines will not be within appropriate protective buffers and update on all drawings/plans.	GHD	See updated figure showing wetlands and the southern lotting fabric (updated July 2023). Buffer from lot lines to wetland is approximately 15 m with some grading within the lots. This will not impact on the wetland as tree cover is present in the buffer outside of the lots and grading will allow runoff to continue towards the wetland. Wetland receives groundwater, floodwaters and surface runoff/snowmelt to maintain the hydrology.

Wetland, Floodplain and Erosion Hazard Limits	10	The following lot boundaries also appear to have proposed grading and/or retaining walls within environmental protective buffers which should be further investigated/delineated on all drawings/plans: a.Lots 6, 7, & 8 Street C, b. Street D cul-de-sac construction and associated fill, c. Lots 91, 92, 93, 94, 95, 96, 97 & 98 Street A.	GHD	**a.** Lot numbering has been adjusted in this area along proposed Street C. Lots 11-14 will have extensive grading completed that will be within the 30 m woodland buffer. This is a minor intrusion with grading completed will still convey rear yard runoff to the woodland critical rooting zone and wetland much further down the slope. The graded area outside the lot and in the outer part of the 30m woodland buffer will be revegetated to restabilize the slope. **b.**Lot depth and post-construction grading has been adjusted as much as possible. Still minor intrusion into the woodland a buffer but outside 30m wetland buffer. This area will be regraded and be revegetated after construction. **c.** Lot depth and post-construction grading has been adjusted as much as possible. Still minor intrusion into the woodland a buffer but outside 30m wetland buffer. This area will be regraded and be revegetated after construction. Part of 30 m wetland buffer on new lots 88-95 within lots. Grading will continue to direct rear yard runoff towards wetland and maintain hydrologic function of that riparian wetland.
	11	Otonabee Conservation technical staff confirmed an organic swamp integrated with the creek within the valley while on site with GHD. Please provide field data to demonstrate wetland boundary limit of all wetland areas. a. The wetland communities within the valley support organic soils, not only in community 14 as reported in the EIS.	GHD	Additional text added to report, as well as updating of our ELC communities. **a.** Organic soils are defined as soil columns greater than 60 cm. there is organic soil in several wetlands on site in the 10-30 cm range but deeper in community 14 and 7.
	12	Soil sampling with a handheld auger and confirmation of soil moisture regime as per the ELC protocol is required from GHD to address the wetland tests of ORCA regulation 167/06 in support of the proposed wetland boundaries, wetland compensation areas, and the SWM pond location/community 3. Please provide field data sheets.	GHD	Additional text added to report, as well as updating of our ELC communities.
	13	Please add an ELC code to community 3 based on GHD field data.	GHD	Community 3 would be classified as a cultural thicket (CUT) ELC code.

	14	Provide the field evidence to demonstrate the SWM pond is not in a wetland and outside the 30 metre buffer and to confirm extent of wetland disturbance. a) The SWM emergency outfall and associated grading are within the buffer. Please provide rationale as to why all development cannot fit within the constraint limits. b) Please confirm extent of wetland disturbance an provide an area of compensation.	Valdor / GHD	Valdor: As shown on Drawing PSG-1, all grading associated with the SWM pond is located outside of the 30 m wetland buffer. The only exception is the emergency spillway which must encroach slightly into the 30 m wetland buffer in order to achieve positive flow (the pond is constructed mostly in cut). This emergency spillway will be vegetated. GHD: a) SWM report and site plan show that the stormwater pond is located on the tableland with an outfall to Baxter Creek. There is no loss of wetland associated with the construction of the pond or outfall. At detailed design the grading, pond size and detail construction drawings will be prepared. The pond is no longer located within the 30 m buffer from the creek. The buffer along the creek at the proposed crossing has a well defined valley and banks. The buffer extends onto the tablelands above the top of bank. As the emergency overflow must convey flows to the creek in high precipitation events and prevent erosion, the outfall has been designed as required to protect the slope and creek. This is a minor impact on the buffer area. b) Figure 3 has been updated to show extent of wetland loss and the proposed compensation area for that wetland. Figure 3 has been updated based on the latest site plan (July 2023). The development limits are consistent with the MZO and there will be further cooridination of compensation location selection and design through the detailed design submissions.
	15	15. Where applicable, please update all drawings/plans with the correct constraint boundaries and include areas allocated for proposed environmental compensation that are NOT within an already existing feature or its protective buffer.	GHD	Figure 3 has been updated to show extent of wetland loss and the proposed compensation area for that wetland. Wetland compensation is shown on Figure 3 in Community 17, north of the old railway line. Figure 3 has been updated based on the latest site plan (July 2023). The development limits are consistent with the MZO and there will be further cooridination of compensation location selection and design through the detailed design submissions.
Watercourse and Valley Crossing	16 a)	The proposed crossing involves the filling of the valley to install a pre-cast concrete culvert approximately 24 metres in length. Impacts of infrastructure and fill placement (construction footprint) on the natural heritage features and natural hazards require to be characterized further to inform appropriate design. a) Wetland: The current watercrossing configuration of 'Street A' will require wetland compensation to address ecologic and hydrologic impacts to wetland regulated features. i. Figure 3 of the EIS identifies areas for woodland/tree removal and NOT wetland compensation. Please include proposed areas where wetland compensation shall occur that consider those wetland areas which are required to be removed for the proposed valley crossing.	GHD	Figure 3 has been updated to show extent of wetland loss and the proposed compensation area for that wetland. Wetland compensation has been shown on Figure 3 in Community 17, north of the old railway line.

	16 b)	b) Watercourse Geomorphology - The concerns below should be addressed by a qualified professional: i. What are the impacts to watercourse/channel morphology given the proposed change in natural valley/watercourse configuration (filling the valley and channeling flow through the proposed concrete culvert) on stream velocity, meander belt width and changes to the location or extent of the erosion hazard limit/flooding hazards downstream? ii. In addition, The SWM outlet is proposed in the wing wall and will add waters to the downstream system at a point discharge of 1.0m3/s (during the 100-year flow) from the SWM Pond via the 825mm diameter outlet pipe. • What are the potential impacts from this added point source to the system and its associated impact to downstream erosion and flooding hazards? iii. Does the watercrossing require a wider structure to accommodate flows and not negatively impact up and downstream flood and erosion hazards (as per the above analysis)? iv. Once the above analysis is completed, the final watercrossing engineering details can be provided at detail design.	Valdor	An opinion letter from Water's Edge (18 July 2023) has been included in Appendix L of the FSR. This letter recommends that the culvert be widened to 4 m (previously 2.4 m wide) to address the concerns listed in this comment. Additional details and updated floodplain modelling will be provided at detailed design.
Comments for Detailed Design	17	Conveyance The preliminary calculations for major storm overland flows as presented in Section 4.2 Major Storm Design and Appendix D demonstrate that the major flow can be conveyed within the easement and road allowance without affecting surrounding lots. However, the design for the valley crossing may change at detail design and the cross-section used to demonstrate conveyance will need updating. The current cross-section identifies the boulevard, yet the crossing will have concrete walls.	Valdor	Noted. To be addressed at Detailed Design.
	18	Water Balance The drainage area used in the water balance calculations should represent the area actually being disturbed for construction as outlined on DP-01 Draft Plan of Subdivision (The Biglieri Group Ltd., rev. November 29, 2022) and Functional Servicing Report – Millbrook South East Subdivision (Valdor Engineering Inc., rev. December 2022). a) Please revise the pre and post development water balance calculations based on the developed portion of the site.	GHD	Noted. To be addressed at Detailed Design.
	19	The calculations should be prepared to follow the Water Balance Analysis within the Hydrogeological Assessment Submissions – Conservation Authority Guidelines for Development Applications (June 2013). The post development water balance calculations in Appendix H of the GHD and Section 5.4 Site Water Balance (FSR) applies the roof downspout disconnection BMP. a) Direct infiltration method, such as soak-away pits & infiltration trenches, are required to provide the volume of infiltration needed across this site. i. Please provide calculations and size of infiltration method. ii. Please provide cross-section and detail of infiltration measure on drawings.	GHD	Noted. To be addressed at Detailed Design.
	20	Wetland Compensation Wetland Compensation plan to be completed for those areas determined to be impacted.	GHD	Figure 3 has been updated to show extent of wetland loss and the proposed compensation area for that wetland. Compensation is proposed near the central woodland and abandoned rail line.

Geotechnical Peer Review - March 24, 2023				
	0	The County of Peterborough (The County) requested that Stantec Consulting Ltd. (Stantec) complete a peer review of the geotechnical investigation report for the proposed development captioned above (herein referred to as the Site). The initial version of the geotechnical report was dated March 8, 2021. The results of the peer review were forwarded to the County in Stantec's letter dated October 29, 2021. The County subsequently requested that Stantec complete a peer review of the "updated" geotechnical investigation report for the proposed development. The "updated" version of the report was dated 11 March 2022. The results of the peer review of the "updated" report were forwarded to the County in Stantec's letter dated July 12, 2022. The County subsequently requested that Stantec complete a peer review of the "updated" geotechnical investigation report dated 25 January 2023. This version of the report was intended to address the remaining comments from the previous peer review. This peer review is specific to the geotechnical information and recommendations referenced herein and is intended to confirm that the recommendations provided in the initial peer review have been addressed in the updated report.		No response required.
	1	Section 6.2.1 Site Preparation and Excavation Recommendation 6 in Stantec's Peer Review Item 13 in the Response To Comments Matrix Paragraph 2 refers to the excavation requirements above and below the water table. With consideration for the conditions encountered in the investigation, can the authors provide an indication of the depth or elevation of the groundwater table that should be assumed for purposes of design and construction. The updated report includes classification of the soils encountered in the investigation in accordance with the OH&S Act for purposes of excavation. Based on the clarification provided, this item is considered closed.	GHD	This item is considered closed.
	2	Section 6.2.2 Service Installation Recommendation 8 in Stantec's Peer Review Item 15 in the Response to Comments Matrix Paragraph 2 references the potential to reuse "some" of the excavated soils as service trench backfill. A recommendation for suitable imported fill should be added for the case where portions of the excavated material are not satisfactory for reuse and imported material is required for this purpose. The comment provided was intended to identify to the reader and designers, the general soil types/materials that would be considered suitable for this purpose (e.g. granular materials, Select Subgrade Material, or other) if and when import was required. GHD's response to the comment states that any material intended for import to the site for this purpose should be assessed and confirmed at the time of construction. This is consistent with a similar comment provided in Section 6.2.1 Site Preparation and Excavation (that includes a discussion on grading). The Reviewer accepts the response as stated. This item is considered closed.	GHD	This item is considered closed.
	3	Section 6.2.6 Basement Retaining Walls For Consideration in Stantec's Peer Review Item 22 in the Comments and Response Matrix This section refers to addressing hydrostatic pressure where the basement walls extend below the groundwater table. Can clarification be provided regarding this statement given that an earlier section referenced seepage between 1.8 m and 4.0 m below grade but no static groundwater table to the depth(s) investigated. Based on the response provided and the corresponding edit made to the report, this item is considered closed.	GHD	This item is considered closed.

	4	Test Pit Logs For Consideration in Stantec's Peer Review Item 24 in the Comments and Response Matrix The test pit logs indicate the presence of silty sand with no mention of clay. All of the borehole records indicate the presence of clay in the majority of strata encountered and the grain size test results on the till samples indicate the presence of trace clay. It is suggested that the authors review the results of the investigation to confirm if the predominant soil strata encountered in the test pits contain a clay component. Based on a review of the updated test pit logs, this item is considered closed.	GHD	This item is considered closed.

Santec FSR - April 28, 2023				
	1	In regard to the above referenced recently initiated Water and Wastewater Master Servicing Study, the concerns that Stantec brought up in our reviews of the 1 st and 2 nd submissions of the FSR as to verifying the adequacy of the external infrastructure components for Water and Wastewater Servicing to service the development, is still needed. If the adequacy of the existing external infrastructure components is not satisfactory, then a determination needs to be made as to what upgrades are required to either system. The responses in the Comments Matrix are that these issues are currently being addressed as part of the overall Master Serving Study and that the Township is to provide updates. The Matrix comments further state that the Study includes the subject site which was part of a Minister's Zoning Order (MZO). The ability for the external Water and Wastewater infrastructure components to service the development is even more critical now since the Equivalent Population (in persons) has increased from 621 to 931, due mainly to the additional 80 Units of Medium Density Development.	Valdor	See Township Comment 3.4. Capacity has been confirmed by the Township.
	2	In terms of Stormwater Management, the Matrix comments indicates that the storm flows from the large 1.07 ha Medium Density / Commercial Block will be conveyed to and serviced by the proposed SWM Pond. However, the storm sewer site servicing drawing doesn't show a storm sewer connection to it from Street "A" or Street "B".	Valdor	Noted. Design details to be confirmed through detailed engineering submissions.
	3	Notwithstanding Stantec's current concerns related to the FSR mentioned above in this letter, all of Stantec's other concerns presented in our Peer Review letter based on the 2nd FSR submission, have now been addressed in the Comments Matrix and / or in the 3rd submission of the FSR.	Valdor	No response required.

Cavan Monaghan Township Staff Comments - May 25, 2023				
Parks, Open & Trails:	1.1	Township Staff are supportive that further discussion and detail will be provided at the detailed design stage for the Parkland Block (Block 148). The Concept drawing will include grading, landscaping, fencing, sidewalks and proposed park equipment.		Noted.
	1.2	Block 73 is to be dedicated to the Township for access to the adjacent private property.		Noted. This comment does not require any revision to lotting as shown on the DPS. Ownership to be further discussed with Town staff and confirmed through final draft approval conditions.
Roads/ Layout:	2.1	The Developer will be required to provide an intersection plan configuration with details for the intersection of Fallis Line and County Road 10. This will include left and right turning lanes, ductwork for the future street lighting, traffic signals and sidewalk/cross walk will be required. As this intersection is the jurisdiction of the County of Peterborough, this will need to be confirmed with the County of Peterborough.		Please see updated TIS which provides clarity on required intersection design. Design to be confirmed through detailed engineering submissions.
	2.2	Developer will construct sidewalks and street lighting along the County Rd. 10 frontage of the plan. [REVISED AS PER CORRESPONDENCE WITH COUNTY]		Noted. Design details to be confirmed through detailed engineering submissions.
	2.3	The Developer is required to provide a profile and cross section design drawings for the service road ("Street B") along the east side of County Road 10. Fallis Line East is to be constructed as a "collectors & arterial" road while Streets A, B, C and D will be constructed as local residential roads.		Noted. Design details to be confirmed through detailed engineering submissions.
	2.4	Sidewalks will be required on both sides of Fallis Line East as well as both sides of Street A.		Noted. Design details to be confirmed through detailed engineering submissions.
	2.5	Sidewalks will also be required on one side of the street for Street B, Street C, and Street D.		Noted. Design details to be confirmed through detailed engineering submissions.
	2.6	The Developer will be required to provide a legal survey of the section of Fallis Line East road allowance, presently unopened. This survey will include a cul-de-sac at he most easterly limit. o The Developer will provide detailed engineering on the extension of Fallis Line East. o The Township will require the road to be extended to an urbanized standard for a minimum 30.0 m beyond the most eastern property lot line, Block 143. o The Developer will be required to construct a cul-du-sac as the eastern limit of Fallis Line.		Noted. Design details to be confirmed through detailed engineering submissions.
	2.7	The extension of Fallis Line East will be required to be 10.0 m in width with sidewalks on both sides of the street (as noted above). This will be reviewed as part of the detailed engineering. o The Developer will be responsible to build the roadway and also be responsible to construct to 8.5 m width. o The oversizing of the roadway to 10.0 m (the difference of 1.5 m) will be a development charge credit and paid for by the Township.		Noted. Design details to be confirmed through detailed engineering submissions.
	2.8	An emergency connection access will need to be provided in Block 150. This will include a 6.0 m wide sidewalk with knock down bollards. The developer's consultant will need to verify the grade within this block and make accommodations for the emergency access.		Noted. Design details to be confirmed through detailed engineering submissions.
	2.9	The Developer is to provide information & details on how the walkway system (Block 149) will connect to Buckland Drive.		Noted. Design details to be confirmed through detailed engineering submissions.
	2.1	As per the geotechnical report, pavement structures shall be constructed as specified. The pavement structures outlined in the Geotechnical Report will meet Township standards.		Noted.
Stormwater Management/Servicing:	3.1	The Developer will be required to provide a detailed stormwater management report to be reviewed during the detailed design engineering submission.		Noted. Design details to be confirmed through detailed engineering submissions.
	3.2	The Developer will be required to provide information on how the stormwater on the future commercial site will be dealt with (i.e., where will the outlet be?).		Noted. Design details to be confirmed through detailed engineering submissions.
	3.3	The Developer will also be required to provide details for fencing surrounding the stormwater management block.		Noted. Design details to be confirmed through detailed engineering submissions.
	3.4	The Developer shall note that the Township's current water & wastewater facilities have enough capacity for this development. This allocation has been confirmed through the Township Master Servicing Study (water & wastewater) that the Township is undertaking with support from its consultant (RV Anderson).		Noted. County has been advised. Township confirmation is appreciated.

	3.5	The Developer will be required to confirm all data for the required fire flows, which will be required to accommodate this development.		Noted. Design details to be confirmed through detailed engineering submissions.
Planning:	4.1	Township Staff do not support the townhouse blocks fronting on Fallis Line (i.e., Block 138, Block 139, Block 140, Block 141, Block 142 and Block 143). Township Staff propose that these lots be incorporated into single family units with lots being a minimum of 12.8 m in width.		Noted. These have been replaced with Single-detached lots fronting Fallis Line. Townhouse Blocks now located south of mixed-use block 139.
Detailed Comments (to be included as conditions of draft plan approval):	5.1	Architectural control will be applied and included as a draft plan condition. o The Developer will be required to provide an urban design guideline package for the Development to include such items as entrance features, streetlight standards, street name signage (etc...). This information can be provided during the detailed design submission. o Future comments on Block 144 (Mixed Use Block) will be provided during the detailed design engineering review phase. o Fencing will be required along any existing adjacent properties. The details of this fencing and other fencing requirements will form part of the Subdivision Agreement and be shown on the general plan. o The Developer will be required to provide a detailed landscape plan for the subdivision, to be included with detailed engineering drawings for the Development. o Details of sidewalks, fencing, & landscaping will be detailed through the subdivision agreement. o Well monitoring will be required on any surrounding ground wells during the construction of the Development and for a period of time after the completion on the construction as per the subdivision agreement. o The Developer will be required to provide plan and profile drawings for the proposed streets in the development. o Details will be required for street elevation, sidewalks, fencing, and landscaping. o This will be reviewed during the detailed design engineering submission. o Noise barrier fencing will be required for lots 53 & 54 as well as any other areas outlined in the final noise report.		To be included as conditions of draft plan approval.