MATTAMY & COSCORP - 5520 & 5552 Eighth Line Draft Plan of Subdivision and Zoning - 2nd Submission Comment Response Matrix (Z22-06, Z22-07, 23T-22003, 23T-22004)					
Town of Erin Comments (Received March 15, 2024)					
Department / Category	Document / Sub Category	Item No.	Comment No.	Comments	Response
Town Planning - Michelle Baya, Senior Planner Michelle.Baya @erin.ca and planning@erin.ca	General Comments	1	1	The properties are designated Residential and Core Greenlands in Erin's Official Plan, within the Erin Urban Area.	
		2	2	The properties are zoned Future Development (FD) and Village Environmental Protection (EP1) in Erin's Zoning By-law 07-67, as amended.	
		3	3	It is noted that the applicants propose to zone the property to appropriate zone categories, to permit the proposed residential subdivision.	Agreed.
	Density and Affordable Housing	4	1	5552 Eighth Line has been allocated 365 Single Detached Equivalent (SDEs) and 5520 Eighth Line has been allocated 210 SDEs. It is noted that the SDEs are intended to be balanced among the owners. - Please include a reference to this on both of the separate Draft Plan documents, accordingly.	SDE Calculations are shown on revised draft plans.
		5	2	Provincial and County policy seeks to establish a full range of housing, including affordable housing. The County has set a target of 25% of new housing will be affordable.	Noted.
	Zoning	6	1	In the previous comments, staff noted that the following should be removed from the list of permitted uses noted in the Draft By-law document: day nursery and group home. It appears that the entire Permitted Uses section has been removed from the Draft By-law document. Please revise this section of the Draft By-law to list the permitted uses, for clarity	Uses that are permitted in the parent by-law have not been added to the proposed site specific by-law.
		7	2	Thank you for providing a reduction in the building height to 12.5 m for townhouse uses. Please provide justification for the requested height of 14.5 metres for single detached dwellings or align these provisions with the Town's Zoning By-law.	The proposed building height has been revised to 12.5 metres for townhouse dwellings and single detached dwellings. We have included a site specific definition of *Finished Grade* to address grading challenges.
		8	3	It is noted in the response matrix that "the current plan is designed for 6.5 m towns. 6.0 m minimum will suffice for 2 storey towns". The Lot Frontage provisions (and other lot regulations) for Townhouses have been removed from the Draft Zoning By-law. Please revise this section of your Draft Zoning By-law to identify the lot regulations for each type of residential use so it is clear and ensure the following: If it does not align with the current Zoning By-law, as amended by By law 22-43, provide justification for the difference	The proposed townhouse dwellings conform to the minimum lot frontage requirements under the parent UR provisions. We are not seeking a site specific provision for minimum lot frontage.
		9	4	Please revise the draft by-law to include a holding symbol for the entire site.	A holding symbol has been applied to all residential zone categories.
		10	5	Please provide a draft schedule for the By-law that aligns with what is proposed (e.g. the proposed zone classes noted on the first page should align with the zone classes on the Schedule so it is clear what applies).	A revised zoning schedules have been included with the resubmission package.
		11	6	Please note that the Town Initiated Zoning By-law Amendment Z21-05 to implement 6 metre daylight triangles was not supported and approved by Council. The 9 metre daylight triangle requirement still applies. o Please revise accordingly, with consideration for various areas on the draft plan where 9 metres can be provided.	Further to discussions with Town staff, 6 metre daylight roundings have been provided.
	Commercial/Mixed-Use Zoning	12	1	This comment is being carried forward: The Town would like the applicants to evaluate the introduction of a mixed-use block, to introduce small scale commercial uses to the local area (see small scale uses permitted within the Mixed Use (MU) Zone and Commercial Zones in the Town's Zoning By-law 07-67, as amended). This will add to the notion of a complete community, in which local services are provided within a community itself and are within walking distance	The UR1 site specific BBB zone provisions have been updated to include local commercial and service uses.
	Open Space, Parkland and Trails	13	1	Please note that the Town has a new Parkland Dedication By-law# 22-41. Staff acknowledge that a combination of parkland and cash-in-lieu will be required to satisfy parkland dedication.	Noted
		14	2	This comment is being carried forward for the detailed design of the landscape plans: Design SWM as amenities with ecological function. Provide walking trails, seating nodes and low-maintenance naturalized plantings within the SWM Blocks.	To be included in future landscape drawings at detailed design.
		15	3	This comment is being carried forward: Provide a 1.8 metre high privacy fence along the subdivision perimeters, as well as at the end of street blocks.	Noted. Will revise UDB figure as indicated for privacy fencing in areas of importance. Chain link fencing will separate public from private property throughout subdivision.
		16	1	Staff may consider garage doors exceeding 50% of the overall width of the house, if the applicant is able to illustrate that the garage doors are situated behind the front door and the residence's primary front elevation, and are not prominent features.	Elevations will be designed to ensure that garages will not be the prominent feature of the dwelling.
		17	2	Staff would like to see more information pertaining to the medium density blocks, to demonstrate the feasibility of these blocks, from a built form perspective, to accommodate the units proposed within each.	Concepts for medium density blocks will be provided under a separate cover when product type has been refined.
		18	3	The preliminary elevation drawings have not illustrated a sufficient variety of designs, models and elevations along a street. They also do not represent a built form true to a defined architectural style, and appear to present an eclectic mix of unrelated design elements. Ensure façade details throughout all building's elevations are consistent with their intended architectural expression.	Facade details will be subject to review by the Control Architect.
		19	4	Corner lots are to provide two highly articulated elevations that include changes of plane, substantial window openings and upgraded architectural detailing and materials, such as wrap around corner windows, porches and other architectural treatments at corner conditions.	Upgraded elevations will be provided on corner lots.
		20	5	All material expression is to be high quality, durable and easily maintained	Noted. Will be dealt with during elevation design approval.

	Site Layout and Design	21	6	The Town of Erin would like to see medium density residential housing fronting onto Eighth Line. Having housing units back onto Eighth Line is not a desirable urban design condition. The backlot conditions on the east side of Eighth Line are not to be repeated within the design of this subdivision. Therefore a 2.2 metre noise wall/fence is also not an acceptable condition along Eighth Line.	Acoustic to comment on Noise Mitigation The following response was submitted and generally accepted by Town staff in the June 8, 2023 "Scoped FSR Comment Response Letter" prepared by DSEL. The response is recopied below for ease of reference and letter has been provided as Attachment 1. As presented in FSR drawing 6, vertical transitions from streets H and G are made up either through lotting, 3:1 transition sloping or use of retaining walls. Therefore, a window street cannot be provided without significant vertical transitions. Implementation of higher density product eliminates flexibility in making up vertical grades along road, through lots and will result in increased use of retaining walls. Furthermore, 6-8 storey buildings were never contemplated for this plan. Proposed increase in density would require additional capacity within downstream infrastructure which is limited (SWM Ponds, sanitary trunks designed by WSP/Town). Buildings around 6-8 storeys in height will clash significantly with the existing single detached product located on the east side of 8th Line, and doing so would be counter intuitive to community aesthetic objectives. The comment is understood. We can only prepare a noise study based on the site plan. Design of the site plan is beyond our scope.
		22	7	The Town of Erin will seek a Control Architect within the draft subdivision conditions, to assist staff in the review and execution of the subdivision built form.	Acknowledged.
	Road Network	23	1	This comment is being carried forward for consideration with the External Works: Staff would like to see a sidewalk proposed along the length of Eighth Line	The composition of Eighth Line ROW is subject to Town review and comment. Comment will be addressed through external 8th line detailed design package.
		24	2	This comment is being carried forward for the detailed design of the landscape plans: Staff request that entrance features be provided along Eighth Line, to signal the arrival into this new community	To be addressed during detailed design.
		25	3	This comment is being carried forward for consideration with the External Works: There are several factors that warrant the consideration of significant right-of way improvements along both Eighth Line and Dundas Street West. Please see comments from the Town's Engineering Department	Noted. Please see response to comment 23.1 above.
		26	4	This comment is being carried forward for consideration with the External Works: This application must also plan for safe pedestrian movement across Eighth Line including anticipated pedestrian desires to access trails, parkland, natural heritage lands, and for the potential school which is being requested on this site.	Noted, see UDB and TIS. Pedestrian connectivity illustrated and shown on External Engineering Design Package and is currently being reviewed by Town staff.
	Compatibility Study	27	1	This comment is being carried forward to align with updated grading and traffic data:The applicants Noise Compatibility Study has a recommendation that a detailed noise study be prepared when grading information and refined traffic data is available, including commercial vehicle percentages proposed for the roadways along with lot numbering to refine the acoustic requirements. It is staff's expectation that the applicant will update their Noise Compatibility Study to address this item.	Agreed. This will be addressed through detailed engineering design.
		28	2	This comment is being carried forward: The recommendations under the Implementation section of the Noise Compatibility Study will need to be further considered. These may need to be conditions of draft approval, or require sign off by a control architect.	Agreed.
	Other	29	1	This comment is being carried forward for consideration of implementation in P&S agreements: The applicants Salt Management Plan places the emphasis on Town salt management practices as well as the Wellington Source Water Protection. Given the potential for salt impacts to the local Town well, a more robust plan for public/private salt use should be proposed by the applicant to limit salt impacts to the local well and the Town's ground water supply.	As residences will be individually owned, it is difficult for a plan to be implemented by a body that has no municipal function. In the post sale scenario the developers have very little leverage on salt use practices by individual owners. This request can be communicated to purchasers.
		30	1	1.I am satisfied that locally significant plants will be effectively retained on the subject lands. More details are, however, needed on the location of clammy ground-cherry in relation to the proposed 15m wide sanitary servicing easement and the possible need to transplant this herbaceous plant. This information must be included in the required wetland rehabilitation plan.	The EIS report has been updated in Table 25 with additional information on future mitigation plans for Clammy Ground-cherry. This species is located adjacent to the 15 m sanitary easement crossing. While it is expected that it will not be impacted by the sanitary work, it will be physically flagged on site so that ESC fencing will protect it from grading and site work. If it is determined at detailed design that there is less than 1 m clearance from the ESC fencing, it will be relocated to nearby, within the same ELC unit. However, relocation is not the preferred method, as this will disturb the plant. Focus will be placed on ensuring a minimal buffer of 1m around the plant. The method of protection (transplanting or protective fencing) will be noted in the Ecological Benefit Actions and Monitoring Plan, to be submitted at detailed design. This report will be the master plan, containing sub reports, such as the ecological offsetting plan, buffer enhancement plan and monitoring.
		31	2	2.Compensation for the removal of 1 retainable butternut tree must be provided but the EIS has still not clarified whether compensation will consist of replanting or a payment into the SAR Conservation Fund. This detail needs to be clarified and if the decision is to undertake compensation planting, the planting location must be identified on an ecological enhancement plan.	The EIS report in Section 6.6.2 has been updated for clarification. The retainable Butternut has been removed. A Butternut compensation planting plan, following the requirements of sections 34 and 35 of O. Reg 830/21, will be installed no later than three years from the date of registration (i.e., before March 11, 2025). The compensation planting contains two Butternut saplings and two companion plants and will be monitored for 5 years. The Planting Plan has been included in Appendix I of the EIS.
		32	3	3.The responses provided by Burnside with respect to habitat protection and maintenance for Barn Swallow, monarch butterfly and SAR bats are acceptable.	No comment required.

	Burnside EIS	33	4	The amphibian calling surveys and turtle surveys were properly carried out and they indicated the presence of Significant Wildlife Habitat (SWH) for amphibian breeding at pond 2 (SAS 1-1) while turtle wintering habitat is provided at pond 1 (AQ) and pond 2. These wetland areas that provide SWH will be protected with adequate buffer zones.	Comment Addressed.
		34	5	3.The responses provided by Burnside with respect to habitat protection and maintenance for Barn Swallow, monarch butterfly and SAR bats are acceptable.	No comment required.
		35	6	3.The responses provided by Burnside with respect to habitat protection and maintenance for Barn Swallow, monarch butterfly and SAR bats are acceptable.	No comment required.
		36	7	4.The proposed 15m wide Open Space Block between Wetland 3 and Street E and the construction of a wildlife tunnel under this road and use of exclusion fencing to guide wildlife to this crossing should effectively maintain an ecological linkage to the larger woodland/wetland area to the south. More details are, however, required on the design of these facilities and native species plantings in the Open Space Blocks on either side of the road.	The EIS report has been updated in Section 8.0 and Table 25. The Open Space Block and wildlife tunnel specifications will be determined at detailed design. At this stage, shifts in the grading and block plan would make tunnel designs premature. Detailed drawings of the tunnel, as well as plans for linkage naturalization will be included in the Ecological Benefit Actions and Monitoring Plan, to be submitted at detailed design.
		37	8	5.More details have been provided on the proposed linkage enhancement in the park and SWM area between the north and central woodland/wetland areas and the concept presented seems reasonable. A naturalization plan will nonetheless be required at the detailed design stage that clearly shows the species, size, quantity and arrangement of native trees, shrubs and groundcover seed mixes to be used.	Acknowledged. See Section 8.0 and Table 25 of the EIS report. Linkage enhancement plans for the park will be determined at detailed design. At this stage, shifts in the grading and block plan would make determining the exact location and design of the linkage premature. Further details will be provided under the cover of the Ecological Benefit Actions and Monitoring Plan, to be submitted at detailed design.
		38	9	6.The proposed grading intrusions into the 10m woodland buffers are considered acceptable provided temporary tree protection fencing is installed at least 1m from the dripline of trees to be retained and the disturbed areas are restored using an appropriate upland meadow seed mix. Furthermore , ecological enhancement plantings of native trees and shrubs should also be carried out in these woodland buffers. With respect to proposed grading intrusions into the 30m wetland buffers, I feel this is also acceptable in this landscape setting provided the same kind of tree protection measures and follow-up ecological enhancement plantings are implemented as recommended for woodland buffers. These decisions are, however, within the mandate of CVC.	The EIS report has been updated in Section 9.2 and Table 25. Tree protection fencing meeting this requirement has been specified in the Tree Inventory and Preservation Plan (Jackson Arboriculture Inc. (October 2023). All areas of intrusion into the buffers will be restored using native seed mixes, and where appropriate, plantings of shrubs and trees. A Buffer Enhancement Plan has been created to show areas of past agricultural usage within the buffers that will be enhanced with native seed mixes, shrubs and trees. An Ecological Offsetting Plan has been requested by CVC. The Ecological Offsetting Plan will be completed at detailed design, when grading has been finalized, under the cover of the Ecological Benefit Actions and Monitoring Plan. At that time, all areas of intrusion will be mapped, calculated, assessed, and tailored restoration plans created which will result in an ecological gain.
		39	10	7.With respect to the proposed sanitary sewer easement, Burnside has agreed to provide a rehabilitation plan for the disturbed section of meadow marsh at the detailed design stage and this approach is acceptable.	Acknowledged. As noted in the EIS report, Section 9.3, the rehabilitation plan will be included under the cover of the Ecological Benefit Actions and Monitoring Plan.

Environmental Impact Study & Arborist Report Peer Review Comments (GWS Ecological & Forestry Services Inc.)		40	11	8.More details have been provided on the design and operation of the 2 SWM ponds so that I can now better understand the need for extensive tree removals in these areas. Various thermal mitigation measures are suggested but the most appropriate method of stormwater treatment will not be determined until the detailed design stage when a naturalized plan for the constructed wetland facilities will be prepared. I look forward to reviewing these plans which must demonstrate that the discharge leaving the outlet pipes is cooled to 20° or lower so there are no thermal impacts to the river.	This comment was discussed during a virtual meeting with GWS on June 17, 2024. As requested by GWS, GEO Morphix has prepared a SWMP thermal model to evaluate performance of Best Management Practices (BMP's) measures proposed for the SWMPs. As discussed in the memo, the SWMP's outlet to a the West Credit, a cold-water stream, in which is comprised of Brook Trout habitat. DSEL described the substantial length of buried pipe the water from the SWMF's will flow through before discharging to the watercourse, as well as additional BMP's that are proposed for the site. A thermal model was completed by GEO Morphix which confirms SWMP's discharge temperatures are lower than the target temperature that would impact Brook Trout. Please refer to Thermal Modelling of SWMP's prepared by GEO Morphix provided as attachment to the comment response matrix.
		41	12	9.The EIS and Section 6.2 of the Arborist Report have now been revised to state that tree protection fence is to be installed at least 1m beyond the dripline of trees to be preserved and silt fence is to be affixed to the paige wire fence as per my recommendation. However, Section 6.3 of the Arborist Report still says tree protection fencing is to be installed at the dripline of trees to be preserved. This inconsistency in reporting needs to be corrected.	Section 6.3 of the Arborist Report has been revised to indicate that tree protection fence is to be installed 1 m beyond the dripline.
		42	13	10.Burnside states that a long-term monitoring plan for wetland vegetation communities will be provided once detailed designs are finalized. In my opinion, some discussion of proposed vegetation monitoring data collection methods should be provided in the EIS, at least as a general overview subject to further refinement. Furthermore, vegetation monitoring from pre to post construction should be combined with the monitoring of aquatic habitat conditions immediately downstream of stormwater discharge points to the West Credit River. I suggest this could involve measuring water temperature, conductivity and/or sampling aquatic invertebrate populations. I look forward to receiving more details on the proposed monitoring program.	A section has been added to the EIS Report (new Section 11.0) to address the long term monitoring plan for natural heritage features on the site (wetlands, woodlands, aquatic habitat etc) as a general overview that will be subject to further refinement during detailed design. As per section 8.12.6 of the Town of Erin Engineering Design Standards, the water quality monitoring plan to be submitted during detailed design will ensure that it is in accordance with the Environmental Compliance Approval (ECA) from MECP. Monitoring will follow the Town standard (i.e., to the targets identified in the ECA). See also Item No. 40, Comment No. 11, above.
		43	14	On page 83 and 118 the EIS states that the proposed SWM pond and park which are to be located between the northern PSW Complex and the central woodland/PSW will represent a significant enhancement to current conditions and ensure that a vegetated linkage is maintained between these features. Conceptually this sounds very desirable but once again no details are provided on how and where this area will be naturalized. Detailed landscaping plans are therefore needed to support this proposal and I suggest that several buffer zones would also benefit from ecological enhancement plantings. Details should be provided on the species, size, quantity and arrangement of plant materials to be utilized in these areas and this requirement should be a condition of Draft Plan approval.	Acknowledged. Please see the EIS report Table 25 - Significant Wildlife Habitat. Detailed landscape plans will be provided during the detailed design stage for the SWM pond and park block under the cover of the Ecological Benefit Actions and Monitoring Plan . Buffer intrusions will be restored using native seed mixes including those which support pollinator foraging. In addition, a Buffer Enhancement Plan has been included in Appendix K of the EIS report that depicts the buffer zones that could benefit from ecological enhancement plantings (native seed mixes, shrubs and trees) where past agricultural usage has caused degraded conditions.
		44	15	11.The EIS and the Arborist Report now include a brief discussion about the removal of common buckthorn. However, no details are given on exactly where this work will be carried out, how it will be carried out and when it will be done. In my experience this work is most efficiently and effectively carried out during tree removal operations which may shortly be underway. The Arborist Report and Tree Preservation Plan should therefore be revised to provide more clarity on proposed invasive species control measures. Other non-native invasive species such as tartarian honeysuckle and Manitoba maple established along woodland/wetland edges should also be removed along with common buckthorn.	The scope and challenges of invasive species management on the site was discussed during a virtual meeting with GWS on June 17, 2024. In particular, Common Buckthorn. GWS noted it is most efficiently and effectively carried out during tree removal operations; however, this work has already been completed. It was acknowledged that while it is not possible to manage the entire site, the focus should be on removal of mature Buckthorn within the woodland/wetland edges adjacent to the planting areas (i.e., 5 m inside the dripline) to demonstrate a reasonable amount of work has been completed to combat invasive species. The larger plants that produce fruit are the biggest concern.
	Jackson Arborist Report	45	1	12.The Arborist Report now indicates that 185 trees will have to be removed instead of 201 trees as previously recommended. I am pleased to see that upon further review 16 additional trees can be retained. Although I would prefer to see more tree saving on these lands I appreciate the topographic constraints and development requirements that limit tree preservation opportunities. I am therefore satisfied with the proposed level of tree retention.	Comment Addressed
		46	2	13.The Arborist Report still indicates that 24 tree polygons are recommended for removal, the same number as previously reported. The County and I previously indicated that tree polygons P29, P52 and P74 are protected under the County's Forest Conservation By-law since they are connected to larger adjacent woodlands. The EIS and Draft Plan of Subdivision assume these polygons will be removed . Upon further review, the connection between P74 and FODM 7-2 appears insufficient to consider it part of FODM 7-2 so County approval should not be needed to facilitate tree removal in this area. However, this is not the case with P29 and P52 which are protected from destruction. I recommend that if the proponent wants to destroy these treed areas appropriate compensation must be provided. P29 has 33 protected trees (excludes 1 green ash that is now dead or dying due to EAB) and P52 contains 40 protected trees. Compensation may be determined as a dollar value using appraisal methods recommended by the International Society of Arboriculture (ISA) or alternatively be based on a replacement ratio such as two or three replacement trees of a specified size for every tree removed. The preferred approach for determining appropriate compensation for tree losses will have to be determined in consultation with the County.	The trees residing within P52 and P40 have already been removed in accordance with the Site Alteration Agreement with the Town of Erin, and the Site Alteration permit that was issued by the County.
		47	3	On Sheet #3 tree #215 and 216 are identified as green ash trees that are infested with Emerald Ash Borer (EAB). They will die shortly but are not recommended for removal. Although they occur off-site they are located very close to the property line and will therefore become a future hazard to new homeowners. I recommend these trees should be removed subject to the approval of the adjacent landowner. I can see no reason why he would object to the free removal of his dead trees.	Both trees have been identified for removal. Tree 215 resides on a portion of land that was purchased by the application. Permission from the neighbouring property owner (Doug Hamilton) has been provided to remove Tree 216.

		48	4	With respect to the tree management recommendations in the report, no explanation or justification is provided for the removal of trees in fair to good condition. I suspect the reason is grading requirements or conflicts with roads or other essential infrastructure but if so I suggest it would be helpful to clearly state the reason for proposed removals.	A sentence has been added to Section 6.1 Tree Removal of the Arborist Report to confirm that the topography of the property and resultant grading requirements is the reason for the majority of the tree removal.
Fire Services – Jim Sawkins, Fire Chief Jim.Sawkins@erin.ca or 519.855.4407 ext. 243	**General Comments**	49	1	Maximize access into the subdivision from both major arteries; 8th Line and 17th Sideroad.	Noted
		50	2	Confirm that the turning radius on the crescents is sufficient to accommodate our fire apparatus.	Noted. RVA has confirmed.

MATTAMY & COSCORP - 5520 & 5552 Eighth Line Draft Plan of Subdivision and Zoning - 2nd Submission Comment Response Matrix (Z22-06, Z22-07, 23T-22003, 23T-22004)				
CVC Comments (Received March 15, 2024)				
Document / Sub Category	**Item No.**	**Comment No.**	**Comments**	**Response**
General	1	1	CVC staff have reviewed the revised submission including the technical reports, plans and response matrix and provide the following comments for your consideration. Please provide an updated response matrix with your next submission outlining how each of the following comments have been addressed.	Noted. Please note, responses to past comment response were not provided, therefore some comment responses remain consistent.
	2	2	Prior to draft plan approval, the constraint limit of the natural and hazardous features and limit of development must be established, and a drawing should be provided which shows the limit of all natural and hazardous features, their associated buffers, and the proposed limit of development as well as the proposed development.	As stated in 1st submission comment-matrix, all relevant ecological features, constraints and associated buffers are depicted on Figure 8 of the EIS. Hazards, buffers and associated development limit is also illustrated on the Grading Plan prepared by DSEL.
Hydrogeology	3	3a	CVC staff are generally satisfied that the analyses accounts for pre- to post surface flows in a reasonable manner. However, the following clarification will be helpful in supporting the conclusions: a. The hydrogeological assessment concluded that there may be seasonal groundwater component to flow to these features. Please advise on whether /how this has been considered in the Feature based water balance (FBWB);	Groundwater contributions were considered in the water balance analysis and additional details regarding the relative contributions of groundwater to the wetlands have been provided in the amended report.
	4	3b	The FBWB concludes that post-development runoff at the features will likely range between 97%-111% of existing flows. Please provide this breakdown in calculations.	A monthly breakdown is provided in the water balance summary tables attached to the FBWB report; the water balance calculations for each of the wetlands will be added to the appendices of the amended report
Engineering -Erosion Threshold	5	4	The Erosion Mitigation Assessment (June 8, 2022) prepared by Geomorphix confirmed the need for 5mm onsite retention. Please provide the required minimum 5mm onsite retention to protect the channel downstream from erosion. Please refer to the following link for guidelines: https://cvc.ca/document/fluvial-geomorphic guidelines/	Please see response to comment #5 below
	6	5	Please provide a document from the geomorphologist (signed and sealed) to confirm that the 3mm retention will not cause downstream erosion at the receiving channel.	Please see our May 17, 2024 letter which provides the rational to support our conclusion that the provided 3 mm of onsite retention is expected to be sufficient to reduce the risk of excess erosion at the receiving channel. Further to meeting with CVC Staff June 19, 2024, it is understood this comment is addressed.
Engineering - Meanderbelt Study	7	6	Please provide the letter justifying the applicability of the previously defined MB width and please retain a Qualified Fluvial Geomorphologist to provide Erosion Hazard/ Meanderbelt Assessment for the proposed development.	Please see letter dated October 16th, 2023 which provides the requested justification. Further to meeting with CVC Staff June 19, 2024, it is understood this comment is addressed.
Long Term Stable Slope Line (LTSSL) and Top of Bank delineation (Slope Hazard)	8	7	Subsurface conditions are to be confirmed by carrying out a detailed slope stability modeling and analysis. A geotechnical assessment completed by a licensed professional geotechnical engineer is required as per CVC's Slope Stability Definition & Determination Guideline to determine the long-term stable slope line (LTSSL) and the top of bank within the subject property.	Acknowledged. Please refer to Shad Slope Stability Analysis Report T22907 dated May 2024 which identifies the LTSS. No grading is proposed within the LTSS. A minor amount of grading is proposed within the buffer due to site constraints, however it is noted that this grading accommodates removal of material for transition to the adjacent lots and therefore reduces the load applied on the existing slope.
SWM Facility - Constructed Wetland Design	9	8	Please confirm the outfall elevation from pond 1 is higher than 25yr flood elevation at the channel to ensure the pond will function as proposed. Alternatively, please complete the HGL analysis to confirm that the pond will function as intended without surcharging.	The Pond 1 and Pond 2 outfalls to the West Credit River are located at HEC-RAS cross-sections 12075.12 and 11808.34, respectively, per the April 2020 WestCreditRiver.* model by R.J. Burnside and Associates Ltd. accepted by CVC as part of the recent Bridge 10 approved works. Based on this model, the Pond 1 outlet 25-year flood level is 396.30 m, and the Regional flood level is 396.99 m. Pond 1 has been designed to consider the restrictive downstream Regional flood level. At the Pond 2 outfall, the 25-year flood level is 395.76 m, and the Regional flood level is 396.55 m. As the permanent pool of the pond is above the Regional flood level, it does not impact the performance of the pond. A detailed sewer hydraulic analysis will be completed at detailed design. This comment was discussed at the meeting with CVC Staff June 19, 2024 and is understood this comment is addressed. Additionally, it is important to note the CVCs hydrology model is currently under revision to reduce and calibrate modelled flows with flow gauge data within the West Credit. As such, respective SWMP outlet conditions will be refined during detailed design.

New engineering comments	10	9	Please show the contour elevations on the draft plans for both subdivisions and add the contours up to the dripline buffer south of the subdivision.	The Draft Plan is intended to show general lotting and road network for the proposed subdivisions. The Draft Plan has been completed based on hazards and buffers defined by the environmental studies. As such, the Draft Plan linework, topography, proposed grading, and hazards/buffers have been summarized on grading Drawing 6, prepared by DSEL.
	11	10	Under section 9.1 of the FSR, site waterbalance is briefly discussed. However, Appendix L (Waterbalance) as per the table of contents, is missing. The summary of the following three scenarios for both subdivisions along with appropriate calculations are to be submitted in the FSR. - Pre-development, - Post development without mitigation, and - Post development with mitigation.	Hydrogeological Report was included in previous submission. Water balance tables can be found in Appendix G.
	12	11	Figure 9 in the FSR shows the LID locations. With the detailed design, please include the following:	Responses to specific comments provided below.
	13	11a	Clearance between the bottom of the LID and groundwater elevation.	Noted. Details pertaining to proposed infiltration trench will be provided at detailed design.
	14	11b	Sizing calculations to match the deficiency calculated in post development with mitigation scenario	See response to Comment 11. a) above.
	15	11c	Drawdown time to each LIDs	See response to Comment 11. a) above.
	16	11d	Include factor of safety for the LIDs at the private landowner's property. Please note that approval from the municipality is required for the LID locations.	See response to Comment 11. a) above.
	17	12	With the detailed design, please provide pond design details such as orifice, weir, and emergency spillway, calculations etc. Also provide the detailed drawings of the pond and cross sections.	Noted. SWM Pond details will be provided within SWM Pond Design Brief at detailed design.
	18	13	Appendix G, Preliminary Pond design details has a footnote under Table 6-B referring to tables B-3 and B-4. Please verify if these tables have been included in the appendix	Tables are included. Reference in foot note to Tables B3 and B4 was incorrect and has been revised.
	19	14	Please show the supporting calculation for required extended detention volumes for Ponds 1 and 2	Extended detention calculations have been added to the FSR. To clarify, the extended detention volumes for Ponds 1 and 2 presented in Tables B6 and 10B are based on the 25mm event runoff volume to each of the SWM ponds as determined by the post-development SWMHYMO model (e.g. 25mm event runoff volume to pond (in mm) from SWMHYMO summary file x Drainage Area). Please refer to "Pre Post SWMHYMO" folder for model output details.
	20	15	Only SWMHYMO schematic for a post development scenario is provided. Please provide existing scenario schematic and the relevant summary output sheets for both scenarios.	Existing conditions schematic has been added to the FSR. Please refer to "Schematic" folder.
	21	16	Concerns remain regarding the resulting high risk hydrologic scenarios for the wetlands and the overuse of mitigation measures when avoidance first principles and alternatives including restoration and expanding the NHS appear feasible. As per the FBWB retaining and enhancing natural areas on the subject property is recommended. Further assessment is required including buffer analysis and designing for adjacent transitional land uses to establish low risk scenarios for the wetlands that do not rely on designated infrastructure for mitigation (i.e. clean sewer collection systems).	The FBWB confirms wetlands are sufficiently fed under post development conditions and do not solely rely on designated proposed infrastructure (i.e. also rely on maintaining natural drainage patterns within NHS, transitional land uses adjacent to features, and interception of clean drainage which is redirected from 8th Line ditch to downstream wetlands). Significant effort has been made to iterate the FBWB and associated grading and infrastructure requirements including minimizing retaining walls surrounding natural features, while meeting other planning objectives for delivery of housing units. The EIS confirms the buffers applied to hazards are sufficient to mitigate impacts to ecological features. The required transition grading has been reviewed by RJB and mitigation measures to address locations where temporary grading impacts is necessary are described in the EIS report.

Ecology - Feature Based Water Balance (FBWB)	22	16a	Please clarify the tables in the report (see page 3 and 6 from the FBWB memo by Geomorphix, located in the appendix of the FSR) that indicate the smallest wetlands on site (wetland D and E) have the largest drainage areas and runoff values. Please clarify and merge these tables and include a column for estimated changes in water depth to facilitate further review.	We confirm the smallest on-site wetlands (D,E) do have the largest estimated runoff volumes and the smallest surface areas. Wetlands C-F are all hydrological connected via surface flow paths and their catchment areas are nested. The table report the direct catchment areas for each wetland rather then the nested, or cumulative, catchment areas which would include the direct catchment areas to each wetland plus the catchment areas for the upstream wetlands. To avoid one overly large table we have kept the tables separate but we have added the existing catchment areas from the table on page 3 to the table on page 6.
	23	16b	The FBWB indicates that runoff to the wetlands can be maintained through various mitigations. Please update the reports to discuss the existing versus proposed hydroperiods for the wetlands and discuss how the design has achieved pre to post development conditions.	Additional text was added to the end of the results section to specifically discuss how the hydrological regime (hydroperiods) of the wetlands is generally consistent under pre- and post-development conditions with comments provided on the slight seasonal changes in runoff volumes that are projected under post-development conditions.
	24	16c	Further information is required to quantify the mitigations required to achieve FBWB (e.g. how many and which rooftops will be re-directed, which rear lots, loss factors, etc.). Please provide.	Please refer to storm drainage area plan Figure 6, prepared by DSEL. As noted in comment response above, the FBWB confirms wetlands are sufficiently fed under post development conditions do not solely rely on designated proposed infrastructure (i.e. also relies on maintaining natural drainage patterns within NHS, transitional land uses adjacent to features, and interception of clean drainage which is redirected from 8th Line ditch to downstream wetlands).
	25	16d	Consideration of expanded buffers adjacent to wetlands is recommended to allow for natural fluctuation.	Buffer widths were applied based on CVC's Watershed Planning and Regulation Policies (2010) to natural heritage features: •10 m from the drip line of Significant Woodlands. •10 m from the limit of other (unevaluated) wetlands. •30 m from the limit of PSWs. The EIS, supported by the FBWB and engineering design, confirms that expanded buffer widths to the wetlands is not necessary. The wetlands are sufficiently fed under post development conditions and do not solely rely on designated proposed infrastructure (i.e. also rely on maintaining natural drainage patterns within NHS, transitional land uses adjacent to features, and interception of clean drainage which is redirected from 8th Line ditch to downstream wetlands).
	26	16e	Please confirm that the placement of the retaining wall adjacent to the wetland will not interfere with the wetland form and function.	Retaining walls will be located outside of the wetlands and their respective wetland buffers. The FBWB confirms sufficient measures will be provided to support the wetland form and function. The location of retaining walls outside of the wetland and buffers do not interfere with this assessment. Please see updated Section 8.0 of the EIS report. Detailed retaining wall design will be provided at detailed design. For clarity, the retaining wall on the south side of SAS1-1 is is outside the wetland and buffer to ensure protection of the wetland form and function. A 450 mm clean water pipe is proposed at this location that is 40 m in length; the culvert will convey clean flows from undeveloped adjacent lands in support of the FBWB. This dug pond is comprised of two wetland units that are not hydrologically connected to the PSW units and are considered 'other wetlands', SAS1-1 and SWDM4-5 (Wetland A). These features do not receive regional groundwater support and appear to be surface water fed; ponding may occur from local groundwater due to high clay content in the soil. Interpreted groundwater flow and recharge / discharge conditions are described in detail in Burnside's Hydrogeological Assessment (2023). It is Burnside's opinion that due to the feature being surface water fed, the location of the retaining wall in this location will not interfere with the wetland form and function. Per the FBWB, the overall risk assignment (magnitude of hydrological change and sensitivity of the wetlands) for Wetland A was "Low". Additionally, Dwg 6 of the FSR (2024) depicts a slotted, at-grade wildlife tunnel, equipped with headwalls to direct migrating animals through the tunnel (in particular, amphibians), to ensure the function of the wetland and adjacent woodland is not lost (and prevent road mortalities crossing Street E). The retaining wall would assist in funneling wildlife to the tunnel. The location for the wildlife tunnel is intended to provide the required connectivity for passage of amphibians and reptiles while keeping the tunnel length as short as possible.

	27	17	The proposal includes significant wetland buffer encroachment in some areas, please revise the plan to match grades at the buffer limits. Any minor encroachments should be satisfactorily justified and mitigated to achieve an ecological gain.	Where temporary encroachments are necessary, they will be mitigated to achieve an ecological gain, as described in detail in Table 25 of the EIS report. See also responses below under Comment 17b, c and Comment 18. Grading is limited to the extent possible within the NHS buffers, but given the challenging topographical constraints some grade transition is required within the outer portions of the buffer to minimize retaining walls adjacent to the features and meet Town standards and criteria. No grading is proposed within the natural features, and encroachments within the outer limits of their buffers will be temporary to facilitate the required fill slope. The slope and associated disturbed areas will be restored with native vegetation seed mix. An offsetting plan under the Ecological Benefit Actions and Monitoring Plan will be developed during detailed design to address areas of temporary intrusion.

Ecology - Buffers	28	17a	The plan calls for encroachment to accommodate lots in some areas including areas where the wetland buffer is in a natural state; these lots should be reconfigured to respect the wetlands and buffer.	The EIS confirms the buffers applied to wetlands are sufficient to minimize impacts to ecological features. The EIS assesses the required transition grading within the buffers and outlines mitigation measures to address locations where temporary grading impacts within the outer limits of the buffer is necessary. The FBWB confirms wetlands are sufficiently fed under post development conditions do not solely rely on designated proposed infrastructure (i.e. also rely on maintaining natural drainage patterns within NHS, transitional land uses adjacent to features, and interception of clean drainage which is redirected from 8th Line ditch to downstream wetlands). As noted in the June 19, 2024 meeting with CVC, numerous grading iterations have been completed to address the challenging topographical constraints of the site, including to minimize grading within the buffer. Extension discussions have occured with the Town to determine the overall grading concept that minimizes retaining walls, meets road and lot grading criteria, and minimizes encroachments to the NHS buffers. As discussed, the proposed grading within buffers cannot be completely eliminated without impacting planning objectives or adding significant retaining walls along the NHS. As noted in the comment response above, following the temporary encroachment to facilitate the transition sloping, the slope and disturbed areas will be restored with native vegetation with details to be provided at detailed design. Although grade transition sloping cannot be fully eliminated, the grading has been refined where feasible to reduce sloping within the buffer. Grading within the buffer for Wetland SWDM4-1 has been reduced by shifting transition sloping to the adjacent lots. A summary of area and percent of buffers graded within has been provided in Appdenix P of the FSR. A Buffer Enhancement Plan has been included in Appendix K of the EIS report that depicts the buffer zones that could benefit from ecological enhancement plantings (native seed mixes, shrubs and trees) where past agricultural usage has caused degraded conditions.
	29	17b	There is encroachment associated with a swale near pond 2 that has not been discussed; please redesign the swale to be outside the wetland buffer.	Swales have been proposed on the south side of Pond 2 to intercept and convey clean drainage from wetlands downstream to meet existing feature drainage patterns and water balance. Hard infrastructure (catch basins and sewer pipes) to convey drainage are proposed outside of the NHS and do not encroach the wetland or buffer. Furthermore, swales have been located within the outermost limit of the buffers and do not encroach beyond the 15m limit of no disturbance as recommended by RJB. To address the areas of temporary intrusion into the buffers, RJB will develop an offsetting plan during detailed design, under the Ecological Benefit Actions and Monitoring Plan. In addition, a Buffer Enhancement Plan has been included in Appendix K of the EIS report that depicts the buffer zones that could benefit from ecological enhancement plantings (native seed mixes, shrubs and trees) where past agricultural usage has caused degraded conditions. This guiding plan includes species, densities, spacing, stock size and seed mixes.
	30	17c	Note that any permitted encroachments into the buffers should be offset elsewhere to establish a buffer that on average meets the agreed to distance. Any temporary impacts are to be phased appropriately and restored to result in an ecological gain. Permanent removal of vegetation from a regulated buffer should be offset according to the CVC Ecosystem Offsetting Guidelines.	Currently the existing buffers to NHS features are either agricultural fields or degraded communities, featuring many invasive non-native species and even discarded farm equipment and debris. The EIS addresses phased timing of buffer encroachments through Table 25 - Vegetation Communities, which states that necessary grading in the NHS during the dormant season is encouraged, where feasible. At detailed design, final buffer impacts will be assessed and an offsetting plan (Ecological Benefit Actions and Monitoring Plan) will be developed in accordance with the CVC Ecosystem Offsetting Guidelines. Table 25 has been updated to reflect the need for a comprehensive offsetting plan to address impacts to buffers.

	31	18	A robust buffer enhancement plan should be developed at this stage to inform the detailed design process. This should include targets such as species assemblages, sizes, and densities; please see the CVC Buffer Enhancement Guideline, the CVC Plant Selection Guideline and the CVC Healthy Soils Guideline for recommendations while developing these plans.	Acknowledged. A Buffer Enhancement Plan has been included in Appendix K of the EIS report that depicts the buffer zones that could benefit from ecological enhancement plantings (native seed mixes, shrubs and trees) where past agricultural usage has caused degraded conditions. The CVC Buffer Enhancement Guideline, the CVC Plant Selection Guideline and the CVC Healthy Soils Guideline were consulted in the creation of the Plan. The Plan will guide the restoration of the NHS buffer areas that were previously agricultural lands. This guiding plan includes species, densities, spacing, stock size and seed mixes.
Ecology - Sanitary Easement	32	19	The proposal includes an easement through an area that contains regulated wetland. If the alignment is permitted the use of an existing driveway is encouraged. Please provide details of the depth of the infrastructure, ongoing maintenance requirements, open cut methodology, and how the site will be restored to achieve a net gain including the removal of the access path to return grades.	Open cut methodology was discussed and accepted by Town ecologist. Additionally, the alignment of the proposed sewer passes through lands to be retained by the original landowner and generally follows the path of the existing access road. As such, disturbance in this area will not have a negative impact on the natural features. A 15m sanitary easement permits installation of sewers and allows for future maintenance to be completed as required. The maximum sewer depth is ~4.5m as illustrated on FSR Drawing 2, prepared by DSEL. The easement will be restored, and a planting plan will include self-sustaining native vegetation that does not inhibit the function of the sanitary sewer. Rehabilitation plans will be provided during the detailed design stage under the cover of the Ecological Benefit Actions and Monitoring Plan.
Ecology - Stormwater Management Outfalls	33	20	Please confirm the locations of the outfalls to ensure feasibility and inform detailed design. An alternatives and impact assessment should be completed to help inform the locations.	Please see updated text in Section 9.4 of the EIS report for a detailed description of how each each outlet location was chosen for Pond 1 and Pond 2. As shown on Drawing 3 of the FSR (2024), the SWM pond outlet sewer alignments are proposed within the municipal ROWs of 17th Sideroad and Eighth Line. The discharge location of both pond outfalls are proposed in proximity to bridge crossings that are currently under construction (17th Sideroad) or will be reconstructed (8th Line). This will minimize disturbance to existing vegetation for construction and future maintenance.
Ecology- Trails	34	21	Details regarding trails alignment should be provided to ensure that the alignment avoids CVC areas of interest (including features and their setbacks). Respectfully, if trails are proposed within a regulated feature buffer the buffers should be widened as feasible, to accommodate the infrastructure. When only minimum buffer widths are recommended it is important to ensure that they are fully enhanced to afford the feature the greatest protection from the land use change; placement of infrastructure within a minimum buffer is discouraged.	No trails are proposed within the NHS or buffers.
Ecology - Offsetting Recommendations to the Town	35	1	It is noted that tree removal is required to accommodate the development. It is recommended that the Town defer to the CVC Ecosystem Offsetting Guidelines for direction on offsetting for any permitted removals	Noted.
Ecology - CVC Review Fee	36	1	CVC subdivision review fees are typically staged as follows: - 25% at submittal of the draft plan - 50% at the submittal of supporting studies - 25% at the draft plan approval Please note that the remaining 25% of the subdivision review fee will be due at draft plan approval. Additionally, CVC collects a fee to clear draft plan conditions	Noted.
Ecology - Conclusion	37	1	CVC staff anticipate that the above comments will be addressed through a revised submission including an updated response to comments matrix. Please provide the resubmission at your convenience and feel free to contact the undersigned should you have any questions. Upon receipt of the revised submission, we will provide further comments.	Noted.
	38	2	Please be advised that further information and details are anticipated during the detailed design stage, at which time CVC staff may also offer further comments on items such as (including but not limited to) a staged ESC plan.	Noted.
	39	3	A site visit is required to assess the suitability of the two pond outfalls proposed and to investigate the area where the sanitary easement works are proposed.	Noted.
	40	4	CVC staff are available for a meeting to discuss the above comments.	Noted.

Item	Ainley 1st Submission Review Comments	Proponents Response Comments	Ainley 2nd Submission Review	Proponents Response Comments
	Draft Plans of Subdivision, 5520 Eighth Line – Korsiak Draft Plan of Subdivision, 5552 Eighth Line – Korsiak Legal Survey – R-PE Surveying Ltd.			
1.	The minimum width of a right-of-way is 20 m for local streets and 23 m for minor collector streets as per the Engineering Standards. Eighteen metre (18 m) right-of-way widths and Standard Drawing, ERIN SD. 101, are not in the adopted Town of Erin Engineering Standards.	DSEL - Sidewalks are proposed per Town of Erin standard 18m, 20m and 23m ROW drawings. The following response was submitted and generally accepted by Town staff in the June 8, 2023 "Scoped FSR Comment Response Letter" prepared by DSEL. The response is recopied below for ease of reference and letter has been provided as Attachment 1. As discussed with Town staff on April 27, 2023, it was generally accepted 18m ROWs could be implemented for the local roads throughout the proposed Draft Plan. Additionally, DSEL noted a 23m ROW could be provided for the spine road, with exception to the stretch adjacent to SWM Pond 1. Please refer to J. Krubnik & T. Bal Comment 1 response for discussion the Spine Road adjacent to SWM Pond 1.	This approach is acceptable, based on the April 27, 2023 meeting.	
2.	Given the size of the proposed subdivisions we recommend that the following streets should be classified as Minor Collector roads and have a right-of-way width of 23 m (as per Erin Engineering Standard Drawing 103):		This approach is acceptable, based on the April 27, 2023 meeting.	
	2.1.□Street "E" from the Eight Line to Street "A"		This approach is acceptable, based on the April 27, 2023 meeting.	
	2.2.□Street "A" from Street "E" to Street "C"		This approach is acceptable, based on the April 27, 2023 meeting.	
	2.3.□Street "C" from Street "A" to Sideroad 17"		This approach is acceptable, based on the April 27, 2023 meeting.	
3.	The draft plan should include dimensions for radii internal intersection rights-of-way (e.g., right-of-way radii at the internal intersection of Street 'A' and Street 'B') to ensure the radii conform to the Engineering Standards.	Proposed radii have been revised accordingly.	Per the Engineering Standards, the minimum daylighting radii for - Local road intersecting a local road is 3 m - Local road intersecting a Collector road is 5 m - an 90^{O} elbow in a Local road (e.g. Streets 'C' (3 bends) & 'G') needs a 4.5 m x 4.5 m sight triangle Dimensions on the Draft Plan should be added to confirm these standards are applied.	The draft plans have been revised per further discussions with Town staff.
4.	The centreline radii on collector streets (i.e., Street 'A' and Street 'E' from Eighth Line to Street 'A') should be a minimum of 190 m.	DSEL - WE WOULD ARGUE THIS IS NOT A COLLECTOR ROAD BUT RATHER LOCAL. PER TOWN STD TABLE 23 (PG 125 OF PDF). THEREFORE MINIMUM CURVATURE IS 60m.	This approach is acceptable.	
5.	Street 'E' at Block 1 on the Draft Plan for 5520 Eighth Line should intersect Street 'A' at a right angle.	DSEL - INTERSECITON ADJUSTED WITHIN 80-100 DEGREES AND IS CONSIDERED A RIGHT ANGLE ACCORDING TO RVA	This comment is addressed.	
6.	Street 'F' should intersect Street 'A' at a right angle.	DSEL - INTERSECITON ADJUSTED WITHIN 80-100 DEGREES AND IS CONSIDERED A RIGHT ANGLE ACCORDING TO RVA	This comment is addressed.	
7.	Street 'A' at Blocks 4 and 6 on the Draft Plan for 5520 Eighth Line should intersect Street 'E' at a right angle.	DSEL - INTERSECITON ADJUSTED WITHIN 80-100 DEGREES AND IS CONSIDERED A RIGHT ANGLE ACCORDING TO RVA	This comment is addressed.	
8.	The alignment of Street 'E' fronting Block 9 on the Draft Plan for 5552 Eighth Line should have a smoother alignment around Block 9 and eliminate the reversing curved alignment.	The alignment has been revised accordingly.	The approach is acceptable.	
9.	The radii for the cul-de-sac bulbs on Streets 'D', 'G', and 'H' should be 20.75 m minimum as per Erin Engineering Standard Drawing 109 in the Engineering Standards. The right-of-way radii leading into the bulbs should also be dimensioned and conform to the Engineering Standards.	DSEL - cul-de-sacs updated	The approach is acceptable.	
10.	The right-angle elbow on Street 'C' fronting Blocks 1 and 23 on the Draft Plan for 5552 Eighth Line should have dimensions that conform to Erin Engineering Standard Drawing 111B, Minor Collector Road 'Elbow' Design, including a 4.5 m x 4.5 m sight triangle with a 0.3 m reserve on the inside of the elbow bend.	DSEL - Elbow does not appear to have been added see town std 111B (PDF page 212 of Town standards). This will be treated as an intersection with stop controls rather than a continuous street and therefore the elbow is not required.	This approach is acceptable, and provides an opportunity for a pedestrian crossing across the roadway. With that section of Street 'C' being a collector road, the daylighting radius should be a minimum of 10 m.	The draft plan has been updated to include a 10m radius.
11.	Sanitary Servicing Block 23 and the 15 m Sanitary Servicing Easement should be realigned to avoid placing infrastructure in the Natural Heritage System.	Further to comment 10 above, staff have confirmed they have no concerns with the current alignment and location of the 15m servicing easement through the NHS. Therefore servicing easement remains consistent with previous plan.	This comment is addressed.	
12.	All internal lot lines should be dimensioned (i.e., lengths and radii).	All Blocks on the updated draft plans have been dimensioned.	This comment is addressed.	
13.	A significant retaining wall (2 to 3m high) and an areas with a 2 to 3m 3:1 slope is proposed along Block 35 and Street C, that will be a liability for the Town and should be avoided.	Retaining walls in the north portion of the plan within Block 35 and SWM Pond 1 are required in order to tie in to existing road elevations on 17 Sideroad and provide adequate storage within the Pond block. Following discussions with Town of Erin staff it has been understood this approach is generally accepted. A plan highlighting public or private ownership of retaining walls has been provided as Attachment 2.	Due to the considerable height and length of the retaining walls (Private or Public) and the concerns regarding their long-term maintenance, we request the submission of engineering design details for the proposed retaining walls. This should includes specifications, materials, manufacturer warranties and examples of where similar retaining walls are constructed. Additionally, the designs should detail the size and length of the tie backs related to the walls.	Please refer to Retaining Wall memo prepared by Jewell Engineering.
	Test Pit Investigation on the North Parcel, Erin Property, 5520 Eight Line, Erin, Ontario – Shad (November 9, 2020) Test Pit Investigation on the North Parcel, Erin Property, 5520 Eight Line, Erin, Ontario – Shad (January 18, 2021) Geotechnical Borehole Information, Erin Property, 5520 Eight Line, Erin, Ontario – Shad Hydrogeological Assessment – Langen Property – Burnside			
14.	The Geotechnical Investigation should be extended to include the proposed development on 5552 Eighth Line and expanded to include recommendations for detail design purposes such as pavement structure, building footings, dewatering concerns, and environmental analyses of the soil and groundwater. This can be addressed during the detail design stage of the project.	Noted.	This is carried forward for tracking purposes.	

Item	Ainley 1st Submission Review	Proponents	Ainley 2nd	Proponents Response Comments
	Phase One Environmental Site Assessment, 5520 & 5552 Eight Line – Pinchin			
15.	The Phase One Environmental Site Assessment (ESA) identified two Potentially Contaminating Activities (PCA's) on the property. As per Pinchin recommendation, a Phase Two ESA should be conducted prior to filing a Record of Site Condition for the property.	Noted.	This is carried forward for tracking purposes.	Pinchin
	Functional Servicing and Stormwater Management Report For 5520 Eighth Line & 5552 Eighth Line –DSEL			
	Water Supply Servicing			
16.	Pending the finalization of the Town's Water Model, which is anticipated in the next couple of months, further details will be provided regarding the need for:			
	16.1.□External watermain upgrades on the Eighth Line, Sideroad 17 and/or Dundas Street West to accommodate the proposed development.	Noted, Town to advise on external watermains required. All external watermains are Development Charge eligible. Proposed watermain servicing is provided on FSR Figure 3.	This is carried forward for tracking purposes.	Noted.

		16.2.□The development of a new Municipal well and/or an additional Fire Storage Reservoir in Erin to accommodate the proposed development.	Requirement for additional municipal well and fire storage reservoir are dependant on the conclusions of the Town's comprehensive water model network. It is our understanding any external watermains are Development Charge eligible. Proposed watermain servicing is provided on FSR Figure 3.	This is carried forward for tracking purposes.	Noted.	
		16.3.□Any trunk watermains within the internal road network of the proposed subdivisions.	Proposed watermain servicing is provided on FSR Figure 3.	The proposed servicing provides reasonable looping. Watermain sizing details can be confirmed during the Detail Design Stage.	Noted. A hydraulic analysis will be completed at detailed design.	
		16.4.□To provide a looped watermain distribution system we recommend that a service corridor and watermain be provided from:				
		16.4.1 the cul-de-sac bulb of Street D to either the bend of Street C or to the intersection of Streets E and F.	A servicing easement has been added from Street D to Street C to achieve water service looping objectives. Please refer to watermain servicing plan on FSR Figure 3.	The easement dimensions can be determined during the Detail Design Stage.	Noted.	
		16.4.2 The cul-de-sac bulb of Street H to the Eight Line.	The following response was submitted and generally accepted by Town staff in the June 8, 2023 "Scoped FSR Comment Response Letter" prepared by DSEL. The response is recopied below for ease of reference and letter has been provided as Attachment 1. An easement to provide water looping cannot be provided between lots due to the proposed retaining wall along Eighth Line. Additionally, Street H cul-de-sac has less than 20 units, and is ~100m in length, which is less than 300m per Town standards 9.3.4 for single detached product. A 50mm copper loop will be provided within the cul- de-sac to mitigate the potential for stagnant water.	This approach is acceptable.	Noted.	
		16.4.3 the cul-de-sac bulb of Street G to the Eight Line.	DSEL - The following response was submitted and generally accepted by Town staff in the June 8, 2023 "Scoped FSR Comment Response Letter" prepared by DSEL. The response is recopied below for ease of reference and letter has been provided as Attachment 1. An easement to provide water looping cannot be provided between lots as there is no existing watermain along the units Eighth Line frontage. Additionally, Street G cul-de- sac has less than 40 units, and is ~250m in length, which is less than 300m per Town standards 9.3.4 for single detached product. A 50mm copper loop will be provided within the cul-de-sac to mitigate the potential for stagnant water.	This approach is acceptable.	Noted.	
		16.5.It□t would be beneficial if Figure 3 or a new figure showed the general position of the watermain projects listed in Table 3-4.	Details regarding Development Charge water projects identified in FSR Table 3-4 have been provided in FSR Appendix M.	This comment is addressed.	Noted.	
		16.6.		Based in the WSP's Water Model, the Mattamy/Coscorp & Empire Developments will require a Water Booster Station to provide adequate Flows and pressures under all conditions, so please coordinate with Empire and ensure that an adequately sized Block is provided within either development, for the Water Booster Station. With regard to the Design and Construction of the Booster Station, this will require further discussion with the Town.	Details regarding the proposed water booster station will be further refined during a pre-consultation meeting and presented at detailed design. A block has been added to the Draft Plan. Please note sizing of the block is contingent on requirements of the station. As such, block size will be refined at the detailed design stage.	
		Wastewater Servicing				
	17.	The Town has considered the sanitary servicing options presented in the reports submitted, for both Mattamy Homes and Empire Communities, and are not in favour of the gravity sewer and siphon option. Therefore, the Town requires the design and construction of a Sewage Pumping Station (that will service both developments) with the forcemain discharging to the new trunk sewer on the Elora Cataract Trailway at the intersection with Sideroad 17. Please provide further details to confirm that Block 22 is adequately sized to accommodate the proposed Sewage Pumping Station.	Further design coordination between the development community and Town of Erin staff has occurred in support of a gravity sanitary option. It is in the best interest of both the development community and Town staff to eliminate the need for a sanitary pump station. Therefore, details regarding the proposed sanitary servicing approach is presented in FSR Section 4.	Understanding that a gravity sewer is the preferred option being designed for the sewers on Eight Line and Sideroad 17, the minimum profile slope for the sewers should be 0.30% per the Engineering Standards.	Noted. Please note that a sewer grade of 0.25% is required to connect to the elevation of the trunk sewer on 17th Sideroad. Increasing slope to 0.30% would require further lowering of the Elora Cataract Trail trunk (0.3-0.4m). The proposed 0.25% sewer is operating less than 70% full and velocities comply with MECP guidelines. The sewer design will continue to be refined once the Bridge 9 hydraulics are confirmed with the CVC. DSEL will investigate if there are oppertunities to provided a a sewer at 0.30% through the external detailed design package. Furthermore, it should be noted the Elora Cataract Trail sewer is sloped at 0.20% and is understood to be accepted by the Town. The depth and slope of the external sanitary sewer does not impact the Draft Plan.	
	18.	In Table 4-1 Wastewater Design Criteria the value for inflow and infiltration should be provided as 0.29 l/s/ha rather than units of l/capita/day.	Noted, FSR Table 4-1 has been revised to match Town of Erin standards.	This comment is addressed.	Noted.	
	19.	The data in the Sanitary Sewer Design sheets has a few discrepancies compared to the data on the Conceptual Sanitary Servicing Plan. The discrepancies can be resolved in preparing the detail design documents.	Noted, sanitary design sheets and supporting tributary plans have been updated to ensure consistency.	This will be reviewed in detail during the Detail Design Stage.	Noted.	
	20.	The populations and infiltration catchment areas for Medium Density Blocks on Street A and Street C should be included in the design sheets.	Medium density block estimated population density has been added to design sheets.	This comment is addressed.	Noted.	
	21.	The design sheet should account for the infiltration flow collected by the sanitary main in the Sanitary Easement and the Park Block. The discrepancy can be resolved during the detail design phase.	Noted. Sanitary easement area has been added to the design sheet.	The easement area is identified on the Conceptual Sanitary Servicing Plan, but not accounted for in the Design Sheets. This can be addressed during the Detail Design Stage.	Noted. Easement area has been reflected on the design sheets.	

Item	Ainley 1st Submission Review	Proponents	Ainley 2nd	Proponents Response Comments	
	Storm Drainage				
22.	Storm Sewer Design Sheets				
	22.1. A column should be added that provides "Actual Flow Velocity"	Noted, actual velocity column has been added to the design sheet	This comment is addressed.		
	22.2. It appears that maximum flow velocity of 4.5 m/sec is exceeded between MH 116 and 118, between MH 205 and 206 and, between MH 206 and 207.	Sewers has been revised such that velocity criteria is met.	This comment is addressed and will be reviewed in detail during the Detail Design Stage.	Noted.	
	22.3. It appears that the maximum spacing between catch basins for the road grade provided is exceeded between MH 230 and 231, between MH 102 and 105, between MH 116 and 118.	Noted. Catch basin and manhole spacing will be provided at detailed design in conformance with Town standards.	This can be addressed during the Detail Design Stage.	Noted.	
	22.4. On sheet 2 the catchment area for MH 114 to 115 should be 0.53 ha not 0.78 ha.	Design sheet has been updated.	This comment is addressed and will be reviewed in detail during the Detail Design Stage.	Noted.	
	22.5. On Sheet 9 the proponent should provide calculations to support the assumption of C=0.52 for the clean water storm sewer pipe MH 1000 to 1007 and to support the assumption of C=0.6 for MH 2001 to 2006	Supporting RC calculations will be provided at detailed design.	This can be addressed during the Detail Design Stage.	Noted.	
	22.6. On Sheet 9 the accumulated area for MH 2006 to HW2102 is 0.58 ha not 0.46 ha.	Design sheet has been updated.	This can be addressed during the Detail Design Stage.	Noted.	
	22.7. On Sheet 10 of 10 under Easement Sizing it appears they intend to show the 1 in 100-year flows from the various double catch basins and have adjusted the run-off coefficient upwards by 1.25 but they apply the rainfall intensity of the 1 in 5-year storm. They should apply the intensity of the 1 in 100-year storm.	Proposed local storm sewers have been sized to convey the 5-year event per Town of Erin standards. Cleanwater sewers have been designed to convey the 100-year storm event to ensure drainage is contained within the intended system. The design sheet has	This can be addressed during the Detail Design Stage.	Noted.	

		22.8. On Sheet 10, assuming 50% blockage the inlet capacity of the DICB may be exceeded for DICB 2103 and DICB 10.	Noted. Grate inlet capacity will be verified at detailed design to ensure flow can enter the minor system as intended.	This can be addressed during the Detail Design Stage.	Noted.	
		Stormwater Management				
	23.	An infiltration gallery is proposed within the park block which, based on Table 19 of the Town Standards must be reviewed on a case-by-case basis by the Town. While Section 8.10.1 of the Standards indicates that the Town supports the integration of SWM facilities with passive recreational opportunities, it is on the condition that the intended function of either is not impaired. Further details are to be provided to confirm that the infiltration gallery will not impact the use of the Park Block.	The function of the park would not be impacted by the infiltration facility. The infiltration facility is a subsurface feature with only maintenance holes visible from the surface. The infiltration facility is required to in an effort to meet 5mm on site retention target.	The infiltration facility should also not interfere with any anchoring systems for playground equipment or foundation requirements of park facilities.	Noted. Park facility fit will be coordinated with proposed infiltration trench design at detailed design.	
	24.	The Town is not in favour of third-pipe clean water collectors and encourages the use of other ways of infiltrating the clean water closer to the source, such as infiltration galleries on private lots to achieve water balance objectives. If other alternatives cannot be found, the Town will be looking to the Developer to contribute funds to the future life cycle costs of the clean water collector, including the operation, maintenance, and repair costs.	Cleanwater pipes are proposed to meet water balance requirements for the nine (9) wetlands located with the development. To mitigate against reduce runoff volumes to wetlands as compared to pre-development conditions, DSEL's first approach was to allow areas adjacent to the wetlands to drain directly overland. It was determined that drainage in addition to the rear yards would be required to meet wetland water balance targets and as such a cleanwater pipe is required. Additionally, a clean water pipe is required to convey storm runoff from the central medium density block to the infiltration facility located with the park to infiltrate the 5mm event. As cleanwater pipes are required to meet feature and site wide water balance, maintenance of infrastructure is the responsibility of the municipality. Please note this is common practice across the Province.	This can be addressed by documenting a list of design exceptions and deviations from the Erin Engineering Design Standards, providing rationale for the exception/deviation.	Noted.	
	25.	In accordance with Section 8.10.9 of the Engineering Design Standards sediment drying areas must be incorporated into the design of the facilities and the Pond Blocks modified as necessary.	Town has aggreged sediment drying area is not required for SWM Pond 1. Opportunities will be investigated to incorporate sediment drying areas for SWM Pond 2 at detailed design.	This issue is resolved and can be documented with a list of design exceptions and deviations from the Erin Engineering Design Standards, providing rationale for the exception/deviation.	Noted.	
	26.	Retaining walls are located along the Stormwater Pond Blocks and will be the responsibility of the Town to maintain. However, within the Engineering Standards retaining walls greater than 1.0m in height are not permitted within SWM facilities. The Standards further state that retaining walls greater that 1.0m may be accepted at the discretion the Town, but they will not be accepted if their sole purpose is to minimize the area required for the SWM facility. It appears the sole purpose of these retaining walls is to make use of areas with steep topography for the SWM facility.	The following response was submitted and generally accepted by Town staff in the June 8, 2023 "Scoped FSR Comment Response Letter" prepared by DSEL. The response is recopied below for ease of reference and letter has been provided as Attachment 1. Retaining walls are located outside the functional area of the pond and are within the grading transition zone. They are required in the vicinity of the SWM block to match existing boundary conditions. Without the use of retaining walls, the pond block would significantly increase in size as illustrated on Figure 1. It is not possible to provide vertical sloping within the pond block in accordance with Town standards. Therefore, retaining walls have been implemented to achieve required pond storage volumes given the heavily constrained road layout and boundary conditions.	This issue is resolved and can be documented with a list of design exceptions and deviations from the Erin Engineering Design Standards, providing rationale for the exception/deviation.	Noted.	
	27.	Section 5.6 of the FSR indicates that cut-off swales at the base of the southern slope are shown on Drawing 6. However, the centreline appears to be covered by the drainage boundary and the line type is not included in the Legend for this element. Confirmation should be provided by the geotechnical consultant to ensure suitable setbacks and protection measures are maintained or provide recommendations to improve the stability of the southern slope. In addition, an easement and a maintenance access point should be provided for this swale with the limits clearly shown on the drawing.	The following response was submitted and generally accepted by Town staff in the June 8, 2023 "Scoped FSR Comment Response Letter" prepared by DSEL. The response is recopied below for ease of reference and letter has been provided as Attachment 1. The Draft Plan will be amended to provide standard 28m lot depths. The swale and proposed sloping are to be within an open space block and ultimately to the Town's ownership. Easements are provided for RLCBs and access to the open space block will be provided from Street E. Additionally, a slope stability assessment has been completed by Shad and Associates to assess proposed grading conditions, please refer to FSR Appendix J. The restoration planting of the slope will be selected to ensure vegetation can withstand erosive forces at detailed design.	The Slope Stability Assessment in Appendix J is only a Preliminary Geotechnical Slope Stability Analysis, and recommends further boreholes be advanced to carry out supplementary detailed slope stability modelling and analysis be completed. Given that excessive cuts within Block 19 and proposed slopes that are 2:1, 2.5:1 & 3:1, we require the additional boreholes and detailed slope stability analysis be completed in conjunction with the next submission, and prior to finalization of the Draft Plan, to confirm that the proposed slopes can be accommodated/constructed within the proposed Block.	Following the preliminary Geotechnical Slope Stability Assessment report, additional boreholes and geotechnical information were obtained during the January 15, 2023 investigation at the site (i.e., BH 105, 106 and 107) and were incorporated in the overall geotechnical study. Shad confirms that this additional borehole information supports the conservative parameters used in the preliminary Slope Stability assessment and therefore the June 1, 2022 slope stability results and recommendations remain valid and the Block provided on the Draft is sufficient.	

Item	Ainley 1st Submission Review	Proponents	Ainley 2nd	Proponents Response Comments	
28.	Section 5.7, Easements, indicates a number of easements are required. The easements should be shown to assist in reviewing the proposed concept. In addition, the width of the easement should conform to the Engineering Design Standards.	Servicing easements have been identified on the Draft Plan and have been identified on the Grading Plan. Easements required for local RLCB leads have not been shown as lotting and subsequently RLCB locations is subject to change at detailed design.	Servicing Easements are identified. The Easement details can be addressed during the Detail Design Stage.	Servicing blocks/easements have been reflected on the Draft Plan.	
29.	Drawing 3 (Conceptual Storm Servicing Plan) should include the Street Names (letters), and the MH numbers should be in a larger and darker font. They are difficult to read where they overlap the blue boundary lines and green arrow symbols.	Noted, Drawings have been revised to increase legibility.	The Conceptual Storm Servicing Plan is more legible. This will further detailed during the Detail Design Stage.	Noted.	
30.	The Town has updated their rainfall-intensity-duration-frequency (IDF) curves as part of the May 2022 Engineering Design Standards and incorporated considerations for climate change. The SWMHYMO models and storm sewer design sheets should be updated accordingly based on the revised IDF information and the design of the sewers and ponds modified accordingly, as necessary.	Noted. Town of Erin IDF curves have been used to size stormwater management infrastructure.	This comment is addressed.	Noted.	
31.	In accordance with Erin SD 502 the following grading elements are required for Pond 1				
	31.1.□A 6m buffer from the Medium Density Block to the top of bank slope,	The following response was submitted and generally accepted by Town staff in the June 8, 2023 "Scoped FSR Comment Response Letter" prepared by DSEL. The response is recopied below for ease of reference and letter has been provided as Attachment 1. The required 6m buffer block from the top of slope is provided along the south limit of the pond. As discussed with Town staff on April 27, 2023 the 10m sanitary easement located along the southern pond limit is sufficient to achieve the requirement of the 6m buffer.	This issue is resolved and can be carried forward to the Detail Design Stage.	Noted.	
	31.2.□The maintenance access road must be extended around the perimeter of the facility,	The following response was submitted and generally accepted by Town staff in the June 8, 2023 "Scoped FSR Comment Response Letter" prepared by DSEL. The response is recopied below for ease of reference and letter has been provided as Attachment 1. It is not possible to implement a maintenance access road around the perimeter of the pond, as storage volumes would not be able to be met within the pond block. It is important to note, while maintenance access is 'preferred' around the perimeter of the pond, it is not required from a practical perspective to complete pond maintenance. Sufficient to access the pond forebay, and main cell is achieved by the proposed access road configuration.	This issue is resolved and can be carried forward to the Detail Design Stage.	Noted.	
	31.3.□Maximum 7:1 side slopes are required in the vicinity of the permanent poo and maximum 4:1 side slopes elsewhere.	SWM Ponds 1 and 2 have been designed in accordance Town of Erin standards unless otherwise noted. Please refer to FSR Figures 7 and 8 and FSR Section 8.	This issue is resolved and can be carried forward to the Detail Design Stage.	Noted.	
	31.4. It would be helpful if Figure 9 of the FSR included the clean water pipe locations.	Noted, CWP locations have been added to FSR Figure 9.	This comment is addressed.	Noted.	

	32.	Considering the steep side-slopes provided, lack of 7:1 shelf above permanent pool level, required fill within the floodplain, lack of drying area and use of retaining walls it is likely that the size and position of Pond 1 Block and Pond 2 Block will require significant adjustment.	The orientation and block sizes of both SWM Ponds 1 and 2 have generally been accepted by Town of Erin staff.	This issue is resolved and can be carried forward to the Detail Design Stage.	Noted.	
	33.	Grading in the vicinity of the sediment forebays for both facilities must include a minimum 5m 7:1 safety shelf extending downward from the permanent pool elevation in accordance with Erin SD 503.	SWM Ponds 1 and 2 have been designed in accordance Town of Erin standards unless otherwise noted. Please refer to FSR Figures 7 and 8 and FSR Section 8.	This comment is addressed.	Noted.	
	34.	Some minor discrepancies occur between the catchment areas depicted on Figure 6 in the body of the FSR, and Figure 5 included in Appendix G as the basis of the SWMHYMO models. A summary table should be provided to show that the areas used for both depictions are correlated and consistent.	Drainage area characteristics have been revised to match across FSR, SWM model and drainage plans. Note these will be further refined at detailed design.	This issue is resolved and can be carried forward to the Detail Design Stage.	Noted.	
		Pond Components				
	35.	Figure 7 and 8 of the FSR shows a cross-section of the SWM Ponds. It shows pond wall slopes of 3:1 that according to the Erin Standards should be 4:1 to 6:1 and the sections should also provide a 7:1 slope between the permanent pond level and the active storage level (see Erin Standard Drawing 501).	SWM Ponds 1 and 2 have been designed in accordance Town of Erin standards unless otherwise noted. Please refer to FSR Figures 7 and 8 and FSR Section 8.	This issue is resolved and can be carried forward to the Detail Design Stage.	Noted.	
		Water Balance				
	36.	The strategy applied requires the addition of a clean water collection pipe and as noted earlier the Town is not in favour of a third-pipe clean water pipe and encourages the use of other ways of infiltrating the clean water closer to the source, such as infiltration galleries on private lots to achieve water balance objectives.		This comment is discussed in Comment 24, and can be addressed by documenting a list of design exceptions and deviations from the Erin Engineering Design Standards, providing rationale for the exception/deviation.	Noted.	
	37.	In Section 9.1, Site Wide Water Balance, the proposed increase in topsoil depth and the total depth of topsoil should be provided.		This is carried forward for tracking purposes.	Noted.	
		Roads				
	38.	The Eighth Line (Sideroad 17 to Dundas St West) and Dundas St West (Eighth Line to Main St) will require full reconstruction to an urban standard with watermains, storm sewers, sanitary sewers, curbs, sidewalks, streetlights, etc. in conjunction with the proposed development. This will include the replacement of single lane bridge on the Eighth Line.	The scope of external road improvements requires further discussion with the Town. These works do not impact the draft plan. Any external works are understood to be DC eligible.	This is carried forward to be addressed during the Detail Design Stage.	Noted.	
	39.	The sight lines at Eighth Line & Sideroad 17 intersection are limited and should be reviewed and if necessary, adjustments to the vertical curve on Sideroad 17 made in conjunction with the development.	This is beyond the scope of the draft plan application and improvements to this existing intersection is the responsibility of the Town.	This is carried forward to be addressed during the Detail Design Stage.	Noted.	
	40.	The close proximity of the Sideroad 17 & Street "C" to Sideroad 17 & Eight Line should be investigated.	Street C is located as far west as possible and cannot be relocated due to constraints of the adjacent SWM pond.	The details required to accommodate the offset intersections can be explored and determined during the Detail Design Stage.	Noted.	

Item	Ainley 1st Submission Review	Proponents	Ainley 2nd	Proponents Response Comments	
41.	Given the 15-tonne weight restriction on the existing Eighth Line bridge, it is recommended that the Eighth Line bridge be replaced before the subdivision construction begins, otherwise the construction traffic will have to access the site through the existing community of Main Street and Dundas Street West.	The subject lands have frontage on Sideroad 17 that can be utilized for site construction access and avoid crossing of the bridge. As such, timing of the bridge works can be concurrent with subdivision works.	This can be addressed during the Detail Design Stage.	Noted.	
42.	Street C from SR 17 to Street A and Street A to Street E and Street E to Eight Line should be designed as a Minor Collector road with ROW width, grades and horizontal curves conforming to the municipality's standards. Maximum grades on collector roads should not exceed 6%. See Erin Standards Section 9.3.	The following response was submitted and generally accepted by Town staff in the June 8, 2023 "Scoped FSR Comment Response Letter" prepared by DSEL. The response is recopied below for ease of reference and letter has been provided as Attachment 1. Grades greater than 6% are only proposed at the flank of SWM Pond 1 in order to meet existing road grades at 17th Sideroad. As there are no lots or additional access through this section of road, we are requesting the Town consider 7% for this localized section. Lowering grades to 6% would further exacerbate vertical constraints throughout the plan. Additionally, Table 23 of the Town standards (Section 9.3) states a maximum road grade of 8% for local roads. While we understand the Town is considering the spine road as a collector road, 70km/hr speed limit will not be provided. Therefore, vertical grading criteria tailored towards a local road with a corresponding 50km/hr is seemingly more appropriate, and therefore maximum 8% should apply. Please refer to Figure 3 for markup of grading conditions.	This issue is resolved and can be documented with a list of design exceptions and deviations from the Erin Engineering Design Standards, providing rationale for the exception/deviation.	Noted.	
43.	Street D serves 49 residential units with a cul-de-sac and it should be investigated connecting with either Street C or Street E/F to eliminate the dead end.	The following response was submitted and generally accepted by Town staff in the June 8, 2023 "Scoped FSR Comment Response Letter" prepared by DSEL. The response is recopied below for ease of reference and letter has been provided as Attachment 1. As illustrated on the grading plan there is ~5.5m between both Street D/E and Street D/C as presented in Figure 4. Adding a connection street is not possible as much of the grade transition is made up through the depth of the unit. Adding a road connection would requiring significant areas of 100yr capture and increasing requirement for retaining walls in rear yards of lots. Furthermore, Street D is ~260m which is less than 300m per Town standards 9.3.4 for single detached product.	This issue is resolved and can be documented with a list of design exceptions and deviations from the Erin Engineering Design Standards, providing rationale for the exception/deviation.	Noted.	
44.	The road class designation for Sideroad 17 and Eight Line needs to be defined as Collector Road and the appropriate ROW width provided for.	It is understood the Town is considering the spine road as a collector road, however a 70km/hr speed limit will not be provided. Therefore, road design criteria tailored to local road with a corresponding 50km/hr is seemingly more appropriate. Report has been updated to include existing road classification.	The need for any widening on 17th Sideroad and Eighth Line should be determined during the Draft Plan. A Collector Road should have a minimum of 26 m wide right-of- way.	The TIS confirms the proposed Draft Plan is not driving a need for additional widening on 17th Sideroad. Widenings are provided along 8th Line that we understand are satisfactory to the Town.	
	Preliminary Grading Plan				
45.	Section 11.1 of the FSR describes grading transition areas that extend into the outer portion of the 30-metre wetland buffer or the 10-metre drip line buffer in order to reduce the required height and extent of retaining walls. This strategy needs to be reviewed with the CVC before being carried further into the design process. The localized filling in the floodplain for the construction of Pond 1 needs to be quantified and accepted by CVC.	Noted.	This is carried forward for tracking purposes.	Noted. Permits for works within the regulated area will be obtained from the CVC prior to commencement of works as necessary.	
	45.1.□Park grading is described as varying between 2 and 5%. This should be in conformance with the Erin Design Standards Section 12.15 which describes the range as 2 to 4%.	Noted. Park grading has been revised, however trail/pond access road has been sloped at a maximum of 5% consistent with Town standards 8.14.7.	This comment is being addressed and can be resolved in detail during the Detail Design Stage.	Noted.	
	45.2.□As noted in Appendix J, the Slope Stability Investigation prepared by SHAD and Associates Ltd., Section 3.0, Discussions and Recommendations, says, "before final design, the assumed subsurface conditions to be confirmed by drilling representative number of the boreholes as well as carrying out supplementary detailed slope stability modelling and analysis". This should be tracked and addressed during the detail design stage.	Noted.	This is carried forward for tracking purposes.	Noted.	
	Pond Maintenance				

	46.	An access road to SWM Pond 2 should be provided from Eight Line, not by a route through the Park Block.	Noted, Pond maintenance access has been provided from both the park and 8th Line.	This comment is addressed and can be further detailed during the Detail Design Stage.	Noted.	
		Erosion and Sediment Control				
	47.	Confirm that the ditches of SR 17 and Eight Line to receive the emergency overflow from the SWM ponds can accommodate the flows and resist erosion from the concentrated flows or provide the necessary cross-section and channel armoring.	Please note the spillway is only intended to function during an emergency scenario, or for storms greater that the 100 year as required by the Town. Under an emergency scenario safe conveyance away from residents and public infrastructure is to be provided. Given the location of SWM Pond 2, it will spill to the rural roadside ditch before discharging to the NHS. Further details of emergency conveyance will be provided at detailed design and be considered in the reconstruction of 8th Line as required.	This is carried forward into the Detail Design Stage for tracking purposes.	Noted.	
		Environmental Impact Study, Langen Property, 5520 & 5552 Eighth Line, Town of Erin, Wellington County – Burnside				
	48.	The study revealed three (3) butternut trees on site. Two (2) of the butternut trees are Category 1 and their habitat are not protected from removal. The one (1) Category 2 butternut tree was registered for removal on March 11, 2022 and can be removed.	Noted.	This comment is resolved.	Noted.	
	49.	The study revealed the site has Species at Risk (SAR) bat habitat. A mitigation and monitoring plan is being developed to the satisfaction of the Ministry of Environment, Conservation and Parks (MECP). A copy of MECP's acceptance of the plan should be provided.	Noted. A copy of the Overall Benefit Permit will be provided once it has been received from MECP.	This is carried forward for tracking purposes.	RJB	

Proposed Mattamy & Coscorp Developments, 2nd Draft Plan Submission - Engineering Peer Review

	Item	Ainley 1st Submission Review	Proponents	Ainley 2nd	Proponents Response Comments	
	50.	The study revealed the site has Barn Swallows and Barn Swallow nesting habitat. Prior to removing the wooden barn and lean-to across the Eighth Line from Erin Heights Drive, the conditions under the Endangered Species Act (ESA) Regulations must be met in the form of either compensation or "cash-in-lieu" for Barn Swallow as briefly outlined in the report.	The EIS report Section 4.2.2 has been updated to reflect the re-classification of Barn Swallow under the Endangered Species Act to Special Concern. Conditions outlined under OReg 830/21 no longer apply. However, Barn Swallow impacts/mitigation are now discussed in Table 25 - Significant Wildlife Habitat.	This is carried forward for tracking purposes.		
	51.	When the legal survey establishes the limits of the buffers recommended in the report, an environmental consultant should be on site to confirm the limits.	As stated in the EIS report Section 4.1.1 and 6.1, the setbacks were staked and surveyed in the field with CVC on July 5 and 19, 2021.	The concern is partially addressed. Given that the stakes were placed 2 1/2 years ago, the stakes may need to be replaced to confirm the limits.	Noted.	
	52.	During the detail design phase of this development, an environmental consultant should review the design to confirm the recommended mitigation efforts are implemented in the design.	Noted.	This is carried forward for tracking purposes.		
	53.	More literature on the proposed amphibian road crossing should be provided including required maintenance for removing winter sand and if the CVC has experience with that type of system.	According to email correspondence with CVC (Sarah Labrie) on February 7, 2023, CVC does not yet have this open slotted tunnel design type in their jurisdiction. According to CVC, a water truck with a powerful enough hose on it could be used to flush the system out and can checked by roads staff mostly likely. The tunnels should be flushed in the spring annually to eliminate the salt which amphibians are highly sensitive to. According to the ACO Maintenance manual, the ACO Climate Tunnel is made from polymer concrete, a homogenous material resistant to various chemicals and salts. Regular checks should be made to ensure that the system continues to function efficiently. At minimum this should include a visual inspection prior to spring migration periods. A maintenance plan should be developed to keep the system free of accumulations of vegetation and leaves. The EIS report, Table 25 Wildlife Linkages and Corridors has been updated with additional information on required maintenance recommendations.	This comment is addressed.		
		Erosion Mitigation Assessment – GEO Morphix				
	54.	In Section 7, Summary, the report should clarify how the proposed 5 mm on-site retention target is established for erosion mitigation. used to establish the erosion control targets for the facilities? Does CVC concur with results? Why would GeoM specify a target, indicate that is conservative, not achieve it, then say it is acceptable if 48-hour extended detention and 5mm retention is sufficient?	The June 8, 2022 Erosion Mitigation report suggested working toward a 5 mm on-site retention target . The 5 mm target is the best-efforts target for erosion mitigation referenced from the CVC stormwater guidelines. For the following reasons the provided 3 mm of on-site retention is sufficient to mitigate against the potential of excess erosion within reach WC-1: i) Reach WC-1 is a stable reach not particularly sensitive to erosion. As detailed in the Erosion Mitigation report, Reach WC-1 is a low gradient, relatively wide stream channel that is very well connected to the extensive wetland system bordering the channel. No significant active erosion was observed within or downstream of the subject lands, and a survey of historical images of the reach indicated no significant changes in channel planform. These site characteristics suggest that reach WC-1 is stable and not particularly sensitive to erosion. ii) The relatively small development footprint relative to the reach WC-1 drainage area. The drainage area of WC-1 is approximately 3,570 ha (as defined using the OWIT assessment tool). The drainage area to WC-1 via the site is approximately 55 ha of which 46 ha is on the subject lands. The drainage area of the subject lands accounts for approximately 1.3% of the total drainage area to reach WC-1. Developments with such relatively small development footprints are not likely to have any meaningful impact on the rates of erosion within the receiving watercourses. iii) All the site's existing wetland and forested areas will be retained which includes approximately 12.3 ha of forests, wetlands, and wetland buffer areas which account for approximately 27% of the drainage area from the subject lands. A Feature-based Water Balance for the wetlands conveying runoff from the site to the wetland complex adjacent to reach WC-1 indicates that annual runoff volumes to the wetland complex will increase by 8% but that peak monthly runoff volumes which occur during the month of April will be reduced by approximately 12%. All individual wetlands on site are within +/- 5% of pre-development targets. We therefore expect there to be a slight reduction in erosion potential related to reduced spring runoff volumes from the site. Within this context, the provided 3mm in on-site retention is expected to be sufficient to reduce the risk of excess erosion at reach WC-1 as the assimilative capacity of the receiving channel is adequate given the expected hydrological changes associated with the development. Given the size of the receiving watercourse, it is understood the planned LIDs and wetland water balance requirements mitigates potential erosion risk at this location.	CVC shares the same concerns with proposed on-site water balance and erosion mitigation. The explanation provided is included in the FSR-SWM Report, Section 9.2, LID Measures. Subject to CVC's acceptance of this approach and response, and issuing a permit, this is an acceptable approach.	Noted. Please refer to revised Feature Based Water Balance Assessment and Letter prepared by Geo Morphix (May 2024) provided within Appendix H of the FSR	

	55.	The concrete bridge on the Eight Line is undersized relative to the West Credit River - Erin Branch channel dimensions and should be replaced as part of the external works for this development. The concrete bridge is also a traffic constraint and should be replaced prior to development of this site, and in coordination with the development of the Empire Homes site on the east side of Eight Line.	Existing Bridge 9 is located on a municipal road and outside of the subject lands road frontage. Due to its current poor condition and narrow width, Bridge 9 is proposed to be upgraded to better service existing and future residents. It is noted these works do not impact the Draft Plan . It is understood bridge replacement works are Development Charge eligible.	This can be addressed during the Detail Design Stage.	No action required.	

Proposed Mattamy & Coscorp Developments,
2nd Draft Plan Submission - Engineering Peer Review

Item	Ainley 1st Submission Review	Proponents	Ainley 2nd	Proponents Response Comments	
56.	Based on a similar concrete bridge structure crossing West Credit River - Erin Branch on the Eight Line upstream of the subject site with a span of approximately 9.14 m, the new concrete bridge structure for the Eight Line at this site should be at greater than 9.14 m to assist in maintaining the existing channel form and function.	Noted. Please refer to response to Erosion Mitigation Assessment Comment 55 above.	This can be addressed during the Detail Design Stage.	No action required.	
	Stage 1-2 Archaeological Assessment – Lincoln				
57.	The Ministry of Heritage, Sport, Tourism, and Culture Industries (MHSTCI) received the Archaeological Assessment Phase 1 and Phase 2 report. A copy of the letter from MHSTCI should be provided stating they accept the report and have registered the report.	Noted	This is carried forward for tracking purposes.		
	Drinking Water Threats Disclosure Report and Salt Management Plan – Burnside				
58.	The recommendations provided in the report for mitigating the stormwater management and sewer threats on drinking water should be implemented in the detail design.	Recommendations from the Threats Disclosure Report will be incorporated into the SWM design where appropriate.	This can be addressed during the Detail Design Stage.	No action required.	
59.	The subdivision design should incorporate elements to reduce the need for applying salt during winter seasons, including, for example, directing roof downspouts to grass (pervious) areas and grading to prevent ponding and ice.	Similar recommendations are included in the Threats Disclosure Report. The recommendations will be incorporated into the final design as appropriate	This can be addressed during the Detail Design Stage.	No action required.	
60.	The residents who live in this development should receive education and outreach materials targeted to educate on proper salt application practices and alert them on the proximity of the drinking water source to their subdivision.	This information is most effective when coming from the municipality. The RMO will have access to resources that can provide this information in user friendly format.	This information should also be available with the Purchase and Sale packages provided to the residents. This can be addressed during the Detail Design Stage.	Agree. No action required.	
61.	Snow removed from the site should be hauled to a site certified for snow disposal.	Snow removal will be a function of the municipality	This comment is resolved.		
	5520 & 5552 Eighth Line Plans of Subdivision, Traffic Impact Study – RVA				
62	62.□For Section 2.1 Existing Road Network:				
	62.1. The assumed speed limit of 50 km/h for the Eight Line in all sections in the report should be reviewed. The posted speed varies within the limits of the study. The Eight Line has a posted speed limit of 50 km/h between Sideroad 17 and the north of the bend at Dundas Street W; a posted speed limit of 40 km/h between the two gravel sections just south of Dundas Street W and just north of Delarmbro Drive; and, a 60 km/h posted speed just north of Wellington Road 124.	Report has been amended to reflect the posted speed limit on all roads within the study area.	This comment is addressed.		
	62.2.□The single lane bridge located on Eight Line south of Sideroad 17 should be reconstructed and widened to two lanes including active transportation.	Noted	This is carried forward for tracking purposes.		
	62.3.□A "5 tonnes per axle from March 1 to May 15" sign posted on Eight Line just south of Sideroad 17 for southbound traffic should be noted in the study.	Report has been updated to include discussion about weight restrictions on Eighth Line.	This comment is addressed.		
	62.4.□The posted speed for Main Street within the study area should be reviewed. The posted speed varies within the study limits. Main Street has a posted speed limit of 40 km/h from Wellington Road 52-Wellington Road 124 Intersection northerly to just north of Erinville Drive, and 50 km/h from the north side of Erinville Drive northerly to beyond the study area limits in the report.	Report has been updated to note the different speed limits along Main Street.	This comment is addressed.		
	62.5.□The posted speed for Wellington Road 124 within the study area should be reviewed. The posted speed limit is 80 km/h from the west limits of the study area to just east of Eight Line, 60 km/h between just east of Eight Line and just east of Delarmbro Drive, and 40 km/h from just east of Delarmbro Drive to easterly of the Wellington Road 52-Wellington Road 124 Intersection.	The report has been updated to reflect the posted speed limits along Wellington Road 124.	This comment is addressed.		
63.	For Section 2.4 Existing Traffic Data:				
	63.1.□Traffic data was collected on September 1, 2021 during the Province COVID Step 3 reopening with capacity restrictions. Therefore, the traffic volumes are lower and should be factored to the normal conditions.	Following discussion with the Town a 10% growth rate has been utilized to adjust the 2021 traffic data in the revised report.	This comment is addressed.		
	63.2.□A growth rate should be included with the factored 2021 traffic data to reflect the 2022 condition.	Please see response to comment 63.1 above.	This comment is addressed.		
	63.3.□Figure 2.1, 2022 Existing Traffic Volumes, should be expanded to show the golf course access and its generated traffic.	Given the low traffic volumes generated by the golf course, for the revised TIS provided we have left these trips with the network as their impacts to intersection operations would be negligible.	This approach is acceptable.		
64.	In Section 3.1, Study Horizon Year, as per our comments provided for the TIS Terms of Reference during the pre-consultation, a 10 year after build out year (2034) should be included.	A 10 year analysis horizon has been added to the revised TIS provided.	This comment is addressed.		
65.	For Section 3.2, Future Background Developments:				
	65.1 In Table 3-2, "Wellington Road 124 (N/W)" should read "Wellington Road 124 (N/E)" and "Wellington Road 124 (S/E)" should read "Wellington Road 124 (S/W)". As a result, the distribution percentages may need to be revised.	Table 3-2 has been revised to read "Wellington Road 124 (N/E)" and "Wellington Road 124 (S/W)". Distribution percentages have also been reviewed and revised if necessary.	This comment is addressed, but the revised Table 3-2 no longer includes Wellington Road 52.		
	65.2		i)□In Table 3-2, it is not reasonable that there are no trips distributed to/from the south via Wellington Road 52 and should be revised.		
	65.3		ii)□Figure 3-1, trips to/from the south via Wellington Road 52 should be included.		
	65.2 Figure 2-1, 2022 Existing Traffic Volumes, should include the traffic generated by the Golf Course. Figure 2-1 should include the Golf Course access and turning traffic from Figure 3-2, Existing Golf Course Traffic Volumes.	Please see response to comment 63.3 above.	This approach is acceptable.		
	65.3 Figure 3-2, Existing Golf Course Traffic Volumes, indicates that virtually all of the traffic it generates goes to/comes from Sideroad 17 (i.e., in the PM Peak Hour,13 of 14 vehicles enter from the north and 12 of 12 exit to the north). The distribution of golf course traffic should be reviewed and explained.	Please see response to comment 63.3 above.	This approach is acceptable.		

Proposed Mattamy & Coscorp Developments, 5520 and 5552 Eighth Line
2nd Draft Plan Submission - Engineering Peer Review Comments

Item	Ainley 1st Submission Review Comments	Proponents	Ainley 2nd	Proponents Response Comments	
	65.4 In Figure 2-1 the full existing traffic turning southbound on the Eight Line from Sideroad 17 totals 33 vehicles and includes the golf course traffic. In Figure 3-2, the total golf course traffic turning southbound on the Eight Line from Sideroad 17 totals 13 vehicles, meaning that 20 vehicles from Figure 2-1 pass by the golf course. Figure 2-1 indicates that 32 southbound vehicles pass by the golf course (i.e., 17 3turn left onto Erin Heights and 15 continue south to Dundas Street West). The unbalanced traffic volumes on Line 8 in both directions and during the AM and PM peak hours between the two figures should be reviewed and become balanced.	Please see response to comment 63.3 above.	This approach is acceptable.		
	65.5 The proposed Solmar Subdivision located at the east side of Main Street between Dundas Street and Wellington Road 124 should also be considered. The Solmar Subdivision traffic impact study area overlaps the study area for this and the Empire Subdivision traffic impact studies.	Site generated traffic from the proposed Solmar development has been included as part of background traffic in the revised report.	This comment is addressed.		

	66.	For Section, 3.3 Future Background Growth, rationale to support the 1% growth rate should be provided. The 1% growth rate was not included in the Terms of Reference for review during pre-consultation.	The 1% growth rate was utilized given that the surrounding area is mainly rural and all foreseeable development in the area (Solmar, Empire and 5520 & 5552) has been included in the analysis of future conditions.	This approach is acceptable.		
	67.	For Section, 4.1 Draft Plan Layout:				
		67.1 □The distance between Street "C" and Eight Line westerly intersection on Sideroad 17 should be specified, and shown to comply with TAC Standards.	Discussions on intersection spacing and their compliance with TAC standards has been added to the updated report.	This comment is addressed.		
		67.2 □For cross-section design consistency purposes, the section of Eight Line between Sideroad 17 and the bridge over the West Credit River should also be urbanized to the same cross-section as the section between the bridge and Dundas Street.	Further discussion with the Town is required to confirm the scope of improvements within this segment. There may be restrictions due to the current overtopping of the roadway in frequent flooding events. External road improvements are understood to be DC eligible and do not impact the draft plan.	This is carried forward for tracking purposes.	Noted. Discussions for proposed external road urbanization will remain on going.	
		67.3 □The adequacy of the width for the servicing easements through the NHS should be reviewed considering the size and depth of the service.	Comment addressed under site serving comments.	This approach is acceptable.		
	68.	For Section 4.3, Trip Distribution:				
		68.1 □In Table 4-2 and Appendix B, "Wellington Road 124 (N/W)" should read "Wellington Road 124 (N/E)' and "Wellington Road 124 (S/E)" should read "Wellington Road 124 (S/W)". As a result, the distribution percentages should be reviewed.	Table 4-2 has been revised to read "Wellington Road 124 (N/E)" and "Wellington Road 124 (S/W)". Distribution percentages have also been reviewed and revised if necessary.	Table 4-2 from the previous study version is now Table 4-3. This table should be reviewed. It excludes Wellington Road 52 (South) and Wellington Road 124 (S/W).	Based on comment 65.2, Table 4-3 has been updated.	
		68.2□In Table 4-2, "Highway 52" and "Highway 23" should read "Wellington Road 52" and "Wellington Road 23".	Table 4-2 has been revised to read "Wellington Road 52" and "Wellington Road 23".	Table 4-3 (previously, Table 4-2) no longer includes Wellington Road 52.	Based on comment 65.2, Table 4-3 has been updated.	
		68.3		i) In Table 4-2 – Trip Generation, for the "Single-Family Detached Housing" land use during the PM peak hour, total site trips should read "384" vs "373" as per the rate in Table 4-1.	Noted. The trip generation has been updated to include the average rate (384), rather than the fitted curve (379).	
		68.4		ii) Table 4-2 shows 409 single family detached units and 121 single family attached units; however, the site plan in Appendix C shows 409 single family units, 121 townhouse units plus two medium density blocks. Trips generated by the two medium density blocks should be included.	Noted. The trip generation has been updated to include the medium-density blocks.	
		68.5		iii) In Table 4-3, it is not reasonable that there are no trips distributed to/from the south via Wellington Road 52 and should be revised.	Based on comment 65.2, Table 4-3 has been updated.	
		68.6		iv) Figure 4-1, trips to/from the south via Wellington Road 52 should be included.	Based on comment 65.2, Figure 4.1 has been updated.	
	69.	For Section 4.4, Trip Assignment, the distribution shown in Figure 4-3 is not consistent with the distribution in Table 4-2. For example, Figure 4-3 shows site traffic was evenly distributed to (i) Wellington Road 52, (ii) Wellington Road 124 NE, (iii) Wellington Road 124 SW, and (iv) Trafalgar Road (i.e., each direction had 25% of the total traffic development generated traffic). This discrepancy should be resolved.	Site-generated trip distribution has been revised in the updated report.	Accounting for the comments on Tables 4-2 and 4-3, the trip distribution should be reviewed and revised as necessary.	Based on comment 65.2, the trip distribution has been updated.	
	70.	For Section 6.2, Capacity Analysis Results:				
		70.1 □A statement should be included that the timing of the single lane bridge replacement on the Eight Line will be advance of the development of these proposed subdivisions on the Eight Line such that the link capacity of the Eight Line will not be a critical factor for analysing the road network capacity within the study area.	It is acknowledged that replacement of the bridge will be undertaken concurrent with the development of the subject lands. As such, the existing bridge has not been considered a constraint to the network capacity. It is understood the bridge replacement works will be DC eligible.	This is carried forward for tracking purposes.	Traffic assignment has been updated with new distribution.	
		70.2 □The 2029 future background scenario should also be included in the analysis.	The 2029 future background scenario has been added to the revised report.	This comment is addressed. The revisions to Figure 4-1 may revise the 2029 and 2034 figures, too. This should be checked.	Noted.	
		70.3 □Table 6-9 indicates that the eastbound left turn queue lengths on Shamrock Road (Wellington Road 23) at Wellington Road 124 (Main Street) are longer due to the site traffic.	The eastbound queue length exceeds the storage available under existing traffic conditions and continues to grow with the addition of future background traffic growth. Based on the analysis in the revised report, the site generated traffic has only increased the queue length for this movement by 7 to 8 metres or 1 vehicle.	Table 6-8 indicates that the eastbound left turn queue lengths on Shamrock Road at Wellington Road 124 are 7m longer due to the site traffic, although, background traffic triggers a longer eastbound left turn lane. The eastbound left turn lane should be increased to at least 60 m from the existing 15 m, and the design should be based on the principles described in the TAC Manual. This can be addressed in Draft Plan Conditions and during Detail Design.	Noted.	
		For Section 7.0, Left Turn Lane Warrants:				
		70.4 □The Left Turn Warrants for Trafalgar Road should be based on a design speed of 100 km/hr.	Design speed used for Left-Turn Lane Warrants have been revised in the update report.	This comment is addressed.		
		70.5 □The 15 m southbound Left turn lane on Trafalgar Road at Sideroad 17 is warranted based on both the 2024 and 2029 total traffic volumes and a design speed of 100 km/h on Trafalgar Road. This left turn lane is marginally warranted based on the 2024 background traffic volume. Therefore, this left turn lane is mostly triggered by both the developments of Mattamy Homes and Empire Residential.	Based on the revised warrant analysis as part of the updated report, this left lane is warranted under future background 2024 traffic conditions based on the p.m. peak hour volumes.	A left turn lane is warranted and should be constructed. This can be addressed in the Draft Plan Conditions and Detail Design.	Noted.	
		70.6 □A 25 m eastbound left turn Lane is warranted on Wellington Road 124 at Eight Line based on the 2024 and 2029 total traffic volumes. Whereas, a 15 m eastbound left turn lane is warranted at the intersection based on the 2024 and 2029 background traffic volumes.	Based on the redistribution of site-generated traffic volumes through this intersection as part of the revised study, a dedicated left-turn lane is not warranted.	Accounting for the comments on Tables 4-2 and 4-3, the trip distribution should be reviewed and revised as necessary, and the left-turn lane warrants should be reviewed.	Based on comment 65.2, the trip distribution and warrants have been updated.	
	71.	For Appendix E, Synchro Software Output Reports:				

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	71.1 □At the intersection of Main Street with Dundas Street, the vehicle extension should be 5.0 seconds for phases 2 and 6 as per the signal timing plan vs 3.0 seconds in the report. In addition, the 8 seconds minimum green for phases 4 and 8, 24 seconds minimum green for phases 2 and 6, 10 seconds pedestrian "Walk" time and 8 seconds pedestrian clearance time should be included in the input.	Signal timing settings in synchro have been amended as part of the revised study.	This comment is addressed.	
	71.2 □At the intersection of Main Street with Shamrock Road, the 10 seconds minimum green, 10 seconds pedestrian "Walk" time and 10 seconds pedestrian clearance time for phases 4 and 8, and 35 seconds minimum green, 16 seconds pedestrian "Walk" time and 19 seconds pedestrian clearance time for phases 2 and 6, should also be included in the input.	Signal timing settings in synchro have been amended as part of the revised study.	This comment is addressed.	
	71.3 □A later version the Highway Capacity Manual such as 2010, 6th or 7th Edition should be used vs 2000 version.	Based on our knowledge in differences between the HCM versions is that later iterations have mainly consisted of incorporating multi-modal analysis methods and new methods for ramp terminal and roundabout analysis. In our experience, HCM 2000 is still widely used within the industry and that analysis results from newer versions don't always properly reflect conditions within the field.	For this development, the approach is acceptable.	
72.	For Appendix F, Auxiliary Left-Turn Lane Warrants:			

		72.1 □A design speed of 100 km/h should be used on Wellington Road 124 at Eight Line and on Trafalgar Road at Sideroad 17 vs 90 km/h in the report.	Design speed used for Left-Turn Lane Warrants have been revised in the updated report.	This comment is partially addressed. The Left-Turn Lane Warrants for WR 124-Eighth Line Intersection should be included.	Left turn lane warrant has been completed for WR 124 and Eighth Line.	
		72.2 □The 2029 future background scenario should also be included.	Please see response to comment 70.2 above.	This comment is addressed. The left turn lane warrants may need to be reviewed based on the revisions to Tables 4-2 and 4-3 .	Based on comment 65.2, the left turn lane has been updated.	
		72.3		Section 9.0 Summary pf Findings: It should be pointed out that a poor level of service "F" occurs at the intersection of Trafalgar Road with Sideroad 17 due to the area developments	Noted. THis section was added to the summary of conclusions.	
		72.4		Section 10.0 Recommendations: i)□A westbound left turn lane on Sideroad 17 at Eighth Line is also triggered by the site traffic in the 2024 horizon.	LTL warrant was updated with the generated trips and distribution. As such, the future background scenario warrants a 15m left turn lane. The future total scenario warrants an extension of the left turn lane to a total of 25 m.	
		72.5		ii)□All required turn lanes storage lengths should be specified.	A breakdown of warrants and storage requirements for auxiliary lanes are shown in the summary of conclusions.	
		72.6		Appendix F Auxiliary Left-Turn Lane Warrants: For the intersection of Sideroad 17 at the site access, a design speed of 70 km/h should be on Sideroad 17 vs. 60 km/h.	Left turn lane warrant has been updated using 70km/h design speed at this location.	
		72.7		In summary, we suggest that an addendum to the report is required to address the aforementioned comments.	The original report has been revised.	
		Tree Preservation Plan – Jackson **Tree Inventory and Preservation Plan Report – Jackson**				
	73.	The recommendations for tree preservation in Section 6.3, Tree Protection Recommendations, should be carried forward into the Draft Plan Conditions and Site Alteration Agreement.	Noted.	A Tree Clearing Agreement is being executed. This comment is addressed.		
	74.	The Tree Inventory and Preservation Plan should include a Legend identifying the line type used for tree preservation fencing.	Jackson - There has been a legend in the top right hand corner of Sheets 1-4 identifying the tree protection fence line and all other pertinent tree protection plan linework since the 1st submission.	This comment is addressed.		
	75.	In the northeast corner of SWM Pond Block 20 is a 10 m setback consistent with the line work on the Draft Plan. This should, at a minimum, have tree preservation fencing along the 10 m setback line.	Jackson - Tree protection fence has been added to the 10 m setback on the east site of SWM Pond Block 1 on Sheet 2 of the TPP.	This comment is addressed.		
		Urban Design Brief – NAK				
	76.	The proposed setbacks illustrated in Figure 6 and Figure 7 should be reviewed with respect to the required setbacks in the Zoning By-law. Figure 7 shows an 18.0 m right- of-way width, which is not compliant with the Engineering Standards. The minimum width of right-of-way should be 20 m.	DSEL - Sidewalks are proposed per Town of Erin standard 18m, 20m and 23m ROW drawings. The following response was submitted and generally accepted by Town staff in the June 8, 2023 "Scoped FSR Comment Response Letter" prepared by DSEL. The response is recopied below for ease of reference and letter has been provided as Attachment 1. As discussed with Town staff on April 27, 2023, it was generally accepted 18m ROWs could be implemented for the local roads throughout the proposed Draft Plan. Additionally, DSEL noted a 23m ROW could be provided for the spine road, with exception to the stretch adjacent to SWM Pond 1. Please refer to J. Krubnik & T. Bal Comment 1 response for discussion the Spine Road adjacent to SWM Pond 1.	The approach, based on the April 27, 2023 Meeting, is generally acceptable. The preference is to remain consistent with the other Erin Standard Urban Cross-sections and maintain the centre of the roadway in the centre of the right-of-way. This 18.0 m wide Right-of-way can be addressed by documenting a list of design exceptions and deviations from the Erin Engineering Design Standards, providing rationale for the exception/deviation. The comment can be addressed during the Detail Design Stage.	No action required.	
	77.	In Section 3.1.3, Street Lighting, the Design Guidelines:				
		77.1 i□n the second bulleted item, the light poles and luminaires should conform to the Engineering Standards.	Noted.	This is carried forward for tracking purposes and can be addressed in the Detail Design Stage.		
		77.2 I□n the third bulleted item, the Engineering Standards apply to more than just the placement and selection of lighting fixtures.	Noted.	This is carried forward for tracking purposes and can be addressed in the Detail Design Stage.		
	78.	In Section 4.2, Residential Architectural Guidelines, the design guidelines discuss garage projections and bay window encroachments. The actual building for a particular lot will should be checked that it conforms to the required setbacks from the lot lines defined in the Zoning By-law during the Building Permit Application stage.	Noted.	This is carried forward for tracking purposes and can be addressed in the Building Permit Application Stage.		
	79.	In Section 4.2.5, Variable Grading Conditions,				

Item	Ainley 1st Submission Review	Proponents	Ainley 2nd	Proponents Response Comments	
	79.1 f□or "garage under product" scenarios, the setbacks may be governed by the living space or balcony over the garage, especially if it cantilevers over and beyond the garage front door.	The setback to garage is greater than the setback to the living space or balcony above which may extend over the driveway. NAK - updated UDB to state: For garage under product, the overall width of the garage door(s) may exceed 50% of the overall width of the house, however, care shall be taken to ensure the impact of the garage is minimized through articulation of the main entrance and two upper storeys, and by providing two garage doors or designing a single door to create the appearance of two separate doors. Designs shall conform to the approved Zoning By-law.	This is carried forward for tracking purposes and can be addressed in the Building Permit Application Stage.	No action required.	
	79.2 □For garages that exceed 50% of the overall width of the house, they should be reviewed that they conform to the zoning bylaw.	Designs will be reviewed with Approved Zoning NAK - updated UDB to state: For garage under product, the overall width of the garage door(s) may exceed 50% of the overall width of the house, however, care shall be taken to ensure the impact of the garage is minimized through articulation of the main entrance and two upper storeys, and by providing two garage doors or designing a single door to create the appearance of two separate doors. Designs shall conform to the approved Zoning By-law.	This is carried forward for tracking purposes and can be addressed in the Building Permit Application Stage.	No action required.	
	Noise Feasibility Study – HGC Engineering (HGC)				
80.	Peer Review comments from R. Bouwmeester & Associates dated Oct 26, 2022, are attached.	Defer to detailed design.	The Noise Feasibility Study peer review comments are carried forward for tracking purposes and can be addressed during the Detail Design Stage.	No action required.	

MATTAMY & COSCORP - 5520 & 5552 Eighth Line Draft Plan of Subdivision and Zoning - Comment Response Matrix (Z22-06, Z22-07, 23T-22003, 23T-22004)

Town of Erin Comments

Department / Category	Document / Sub Category	Item No.	Comment No.	1st Submission Comments	1st Submission Comments Response	2nd Submission Comments	2nd Submission Comments Response
	Preliminary Comments	1	1	Avoid rear lotting along Eighth Line. This condition creates an adverse pedestrian condition and is contrary to the Town's vision for attractive and pedestrian oriented/scaled streetscapes. Instead, it is recommended that these lots be replaced by 1) rear-lane accessed units, 2) thru- lot units or 3) window street units, listed in order of preference. Alternatively, medium density uses / massing forms along this frontage may also be appropriate (the separation distance to the existing residential lots on the east side of Eighth Line appears to be approximately 25m which would generally allow new buildings in the range of 6 - 8 storeys in height to 'fit' within this context.	DSEL - The following response was submitted and generally accepted by Town staff in the June 8, 2023 "Scoped FSR Comment Response Letter" prepared by DSEL. The response is recopied below for ease of reference and letter has been provided as **Attachment 1**. As presented in FSR drawing 6, vertical transitions from streets H and G are made up either through lotting, 3:1 transition sloping or use of retaining walls. Therefore, a window street cannot be provided without significant vertical transitions. Implementation of higher density product eliminates flexibility in making up vertical grades along road, through lots and will result in increased use of retaining walls. Furthermore, 6-8 storey buildings were never contemplated for this plan. Proposed increase in density would require additional capacity within downstream infrastructure which is limited (SWM Ponds, sanitary trunks designed by WSP/Town). Buildings around 6-8 storeys in height will clash significantly with the existing single detached product located on the east side of 8th Line, and doing so would be counter intuitive to community aesthetic objectives. NAK - section prepared in UDB to show rear lotting Eighth Line condition	The distribution of the different housing / building forms do not appear to be enhancing community structure (i.e. transition, framing open space, etc.). We would recommend that TH units be added along Street 'A', beside the northern MD block (similar to the southern MD block), with rear access (potentially in combination with that of the medium density block).	Townhouses are proposed on the Blocks adjacent to the northern medium density block. Please see lotted plan that is included with the resubmission package.
		2	2	Provide more public frontage along the NHS / windows to the open space by shifting the primary access road in key locations.	DSEL - The following response was submitted and generally accepted by Town staff in the June 8, 2023 "Scoped FSR Comment Response Letter" prepared by DSEL. The response is recopied below for ease of reference and letter has been provided as Attachment 1. As presented in FSR drawing 6, vertical transitions from internal roads to the NHS streets are made up either through lotting, 3:1 transition sloping or use of retaining walls. Providing roads adjacent to the NHS would require larger grading blocks which would impact lotting and increase the requirement for public retaining walls and therefore, additional public frontage along the NHS will not be provided.	Noted	
		3	3	Typically, the campusing of parks, NHS and SWMs would be a desirable scenario in new neighbourhoods (with obvious benefits) however, in this context, swapping the park and medium density block (Blks 15 & 16) would place the park on the west side of the primary road where the majority of residents are located. This location would achieve other objectives for the public space such as 1) a more central/accessible location 2) road frontage on all sides 3) views and vistas from the surrounding residential fabric and 4) an overall broader dispersion of	Swapping the park block with the medium density block as requested in the comment has been discussed with Town staff. It is understood the current park block located on the west side of the Spine Road is acceptable to the Town and as such comment no longer applies. NAK - through discussions with the Town, the proposed park location has been agreed upon with staff	NO CHANGE	
		4	4	Provide shorter / more connected blocks that are also more easily connected to the park. Ensure that blocks to the west of Street A do not exceed the maximum 180m recommended block length. This would improve permeability / enhance walkability.	As discussed with Town staff, due to topographical constraints these pedestrian connections would require sloping significantly greater than 10% and would therefore not be accessible. Adjacent lot grading and the grade differential from street to street do not allow additional pedestrian connections to be feasible.	Noted	
		5	5	Provide a direct pedestrian connection to the 'central' park from the walkway block at the southwest.	Site grading constraints are restrictive in providing opportunities for walkway connections. Conceptual trails/walkways have been incorporated into the preliminary design where feasible and appropriate. Additional refinements can be explored at detailed design. Swapping the park block with the medium density block as requested in the comment above has been discussed with Town staff. It is understood the current park block located on the west side of the Spine Road is acceptable to the Town and as such comment no longer applies.	Noted	
				1.5 Opportunities & Constraints			
		6	6	In the legend, identify both proposed types of roads within the community (re: dashed purple (20m ROW) and blue (18m ROW)).	NAK - Updated	Noted	
		7	7	On the plan, identify opportunities for pedestrian connections through blocks, where appropriate (ie. Blocks in excess of 180m in length).	DSEL - These pedestrian connections would not be accessible at 10% slope, additional streets (from shorter blocks) create worse grading conditions and transition slope requirements. Additionally, for the proposed sidewalk and pedestrian connectivity plan, please refer to FSR Figure 13. NAK - through discussions with the Town, it has been agreed upon that mid-block connections would not be accessible	Noted	
		8	8	On the plan, identify pedestrian trails/linkages within vista blocks.	DSEL - As the subject lands are heavily constrained by the existing topography, pedestrian connections from vista blocks are limited. The proposed sidewalk and pedestrian connectivity plan, please refer to FSR Figure 13. NAK - through discussions with the Town, it has been agreed upon that grading conditions do not allow for accessible vista block linkages	Noted	

				2.2 Street Network & Heirarchy			
		9	9	Identify on plan the views/vistas created throughout the community.	NAK - shown in Figure 12: Proposed Views & Vistas Plan	Noted	
		10	10	As mentioned, blocks to the west of Street 'A' are overly long. This is contrary to the statement "They are designed to achieve short block lengths thereby creating terminating views, vistas, and other focal points."	NAK - reference removed in UDB	Noted	
		11	11	As stated in the 'Public Realm" section of the Town's Urban Design Guidelines (UDG), sidewalks are encouraged on both sides of the street.	DSEL - Sidewalks are proposed per Town of Erin standard 18m, 20m and 23m ROW drawings. The following response was submitted and generally accepted by Town staff in the June 8, 2023 "Scoped FSR Comment Response Letter" prepared by DSEL. The response is recopied below for ease of reference and letter has been provided as Attachment 1. As discussed with Town staff on April 27, 2023, it was generally accepted 18m ROWs could be implemented for the local roads throughout the proposed Draft Plan. Additionally, DSEL noted a 23m ROW could be provided for the spine road, with exception to the stretch adjacent to SWM Pond 1. Please refer to J. Krubnik & T. Bal Comment 1 response for discussion the Spine Road adjacent to SWM Pond 1. NAK - sections updated through discussions with the Town	Noted	
		12	12	It is not clear how the front integrated garages (and potential rooms above) shown on all preliminary elevations, would work in relation to the minimum setbacks shown for the garages on pages 12 and 13; clarification is required.	The sections have been updated through discussions with the Town. The product is currently under development. Elevations and architectural cross sections will be provided under a seperate cover. NAK - sections updated through discussions with the Town Q4 to provide elevations and cross sections at a later date	Noted	
Town of Erin Comments							
Department / Category	**Document / Sub Category**	**Item No.**	**Comment No.**	**1st Submission Comments**	**1st Submission Comments Response**	**2nd Submission Comments**	**2nd Submission Comments Response**
		13	13	As per the sections on pages 12 and 13, the proposed minimum setbacks to porches/unit's front wall are between 1m and 2m. The 'Built Form' section for new Neighbourhoods (UDG – page 47) requests that, in these conditions, the unit entry should be raise between 0.9 to 1.2m above the sidewalk grade to allow for proper privacy. Ensure either models reflect this, or adjust sections to allow for a minimum setback of 3m from the property line to the front wall of the house.	Q4: To force 5R to 7R to Front Porches means the ground floor elevation will be forced up and the overall building height will be taller. This would also force rear decks to walk-out basements where they otherwise would not be required. Grading will ultimately determine the number of risers to Porch Front Walk-out Lots designs with raised split entry Foyers will likely have 7R minimum to front walk-up porch porch. (See Building Height Section) Front Walk-out Lots designed with Front Foyer leading direcly into slab on grade Walk-out Basement level will likely have 1R minimum to porch. For standard grade lots and Rear Walk-out Basement lots, the foyer Leading directly into the Ground floor Level will likely have 2R to porch. This is to avoid Decks to access a walk-out basement and to keep building height down. (See Building Height Section)	Note: Town's UDG indicate a maximum of 6 external risers, whereas 7 risers minimum is proposed.	Grading of the site is still being refined, but there are many constraints to meet engineering and safety guidelines. Detailed design of the subdivision and house sitings will be designed to reduce risers, but actual number of risers will not be known until then.
				2.3 Pedestrian Circulation			
		14	14	UDG – Public Realm section (page 44) recommend that "At a minimum, include sidewalks and large canopy deciduous trees on both sides of all streets". The statement on section 2.3 of the briefs contradicts this guideline.	NAK - sections updated through discussions with the Town	Noted	
		15	15	UDG (page 29) recommends that "Design all sidewalks to have a minimum width of 1.8m on local streets and 2.1 on major streets (in compliance with AODA standards)."	DSEL - Further to response to Comment 11 above, proposed sidewalk widths are consistent with Town of Erin standard ROW sections. Therefore, the proposed 1.5m sidewalk width has not been increased and remains at 1.5m.	Noted	
		16	16	As mentioned previously, identify on plan opportunities for pedestrian connections through blocks, where appropriate (re: long blocks), as well as trails/linkages within vista blocks.	NAK - through discussions with the Town, it has been agreed upon that mid-block connections would not be accessible DSEL - Please refer to response to Comment 4 above. Korsiak - As discussed with Town staff, due to grading constraints mid-block connections would be undesireable and would not be accessible.	Noted	
				3.1.2 Fencing			
		17	17	Since this is a design brief, it's recommended that conceptual designs for the various contemplated fencing elements be provided.	NAK - subsection added to UDB including plan showing fencing locations	Noted. Please revise some colours on the plan to avoid confusion, especially those related to green areas, medium-density residential zones, and 30' single detached categories. Make sure these areas are colored according to the legend and are clearly distinguishable from one another.	Revised UDB figures accordingly
				3.1.4 Street Furniture			
		18	18	Since vista blocks are open space amenities, recommend that site furniture be provided in these locations.	NAK - Through discussions with the Town, it has been agreed upon that grading conditions do not allow for accessible vista blocks. Further, proposed street furniture design will be prepared and submitted during detailed design.	Noted	

				3.4.1 Neighborhood Park			
		19	19	The UDG "Encourage street frontages on 3 sides (preferable configuration), and provide a minimum of 2 sides fronting onto streets". As proposed, the neighbourhood park only has one side fronting a street (see comment #3)	NAK - by combining the park with the open space blocks, a longer street frontage is achieved with ample views from the public ROW into the park. This location also allows for pedestrian connectivity from 8th Line through the SWM, which would not be possible if the park was internalized for the sole purpose of allowing for more street frontages.	Noted	
		20	20	As it is proposed that pedestrians and cyclists share this space, consider a wider walkway (suggest 4.5m).	NAK - park plan adjusted to show 4.5m pathway	Noted. On the plan on page 27, it seems the width of the pathway was revised but not the labels. Please review/revise accordingly.	Revised UDB figures accordingly
				3.5 Views and Viewsheds			
		21	21	Provide more opportunities for public access / views to the NHS (see comment #2).	Refer to response to Comment 2 and 4 above. NAK - ample view opportunities are provided from within the community through the park and vista blocks, as well as outside of the community from the SWM pond interface along 8th Line DSEL - Views to the NHS are not possible given the orientation of the Draft Plan. Lotting is required on the NHS side of the spine road to accommodate transition grading through the unit rather.	Noted	
		22	22	Views and vistas are stablished from public spaces; adjust plan accordingly.	As presented in FSR drawing 6, vertical transitions from internal roads to the NHS streets are made up either through lotting, 3:1 transition sloping or use of retaining walls. Providing roads adjacent to the NHS would require larger grading blocks which would impact lotting and increase the requirement for public retaining walls and therefore, additional public frontage along the NHS will not be provided.	Noted	
Urban Design Peer Review, Wai Ying Di Giorgio				**4.2 Residential Architectural Guidelines**			
	Urban Design Brief	23	23	It's unknown what form of buildings are planned for the medium density blocks. A section should be included that specifically addresses these blocks and, in particular how the interface to NHS / OS and transition to low-rise forms will be dealt with.	Based on the revisions to the draft plan limits of the mixed use blocks have been adjusted. Concept plans for these blocks have not been designed.	Consider the following for the new Section 4.3 : Medium Density residential: - Provide built form of minimum 3 storeys in heights. - Encourage ground floor to be minimum 4.0m for residential uses or 4.5m for non-residential uses. - All elevations exposed to public view should incorporate consistent architectural quality and materials, as well as articulated walls (projections/recessions) and rooflines - Ample and enhanced fenestration is to be provided on all elevations exposed to public view. - Entrances should be clearly visible, dominant elements on the elevation and be connected to the adjacent public realm - Surface parking should not be located between the building and the street. - Surface parking and servcining areas should be located to the rear, side or interior of the lot, and screnned by a combination of built form and landscape elements - Common amenities at grade should be designed to complement the adjacent public realm (streetscape, parks, open space, etc). and to incorporate seating and shade areas, hard and sof landscape elements and complementary street furniture Expand bullet #2 to provide guidelines on how appropriate transitions in height would be incorporated and shadows on open spaces/low-rise blocks mitigated (re: minimum setbacks, height/ massing articultaion, etc.) Refer to the of Erin's Community and Architectural Design Guidelines for more details on the design of mid-rise built form.	Noted. Medium Density concept plans will be submitted under separate cover. These will be refined when the density blocks move forward with development.
		24	24	Add a bullet before #5, stating that units with projecting garages should be discouraged or minimized to prioritize streetscapes that are framed by active spaces.	NAK - UDB updated accordingly	Noted	
				4.2.1 Elevation Variety			
		25	25	Single-detached dwellings, bullet #3, add "….are integrated, as long as appropriate height transition is provided."	NAK - UDB updated accordingly	Noted	
		26	26	The UDG recommend '3 distinct elevations' per model.	Noted	Noted	
		27	27	Last bullet for single detached dwellings; recommend same colour packages for	NAK - UDB updated accordingly Q4 - Open to discussing with design of exterior colours	Noted	
		28	28	Design guidelines, bullet #2, add "….unless at gateway conditions or other priority locations	NAK - UDB updated accordingly	Noted	
		29	29	Design guidelines, bullet #4, "..porches or entry feature as the dominant element of…."	NAK - UDB updated accordingly	Noted	
		30	30	Design guidelines, add bullets:	NAK - UDB updated accordingly		
		30a	30a	Locate and prioritize active spaces along the public realm (streets or open spaces).	NAK - UDB updated accordingly	Noted	

30b	30b	The length of townhouse blocks should be limited to 8 units.	NAK - UDB updated accordingly	Noted	
30c	30c	The design of townhouse block elevations should delineate the individual units through wall and roof articulation.	NAK - UDB updated accordingly Q4A - Has designed conceptual 6.5m wide Townhouse block elevation, sample unit floor plans and section from street to street for freehold towns with WOB backing onto back to front freehold towns with up to 7R to front porch	Noted Also refer to row 18 (item 13), above.	
		4.2.3 Exterior Colour Selection			
31	31	Design guidelines bullet #3, add "....unless at gateway conditions or other priority locations that frame entrances to the community or community spaces".	NAK - UDB updated accordingly	Noted	
		4.2.4 Driveways			
32	32	Design guidelines, bullet #1, add "for a minimum 5.5m setback...."	NAK - UDB updated accordingly	Consider 'The visual impact/dominance of driveways on the streetscape shall be minimized and parked car overhangs avoided, by establishing a minimum 5.5m setback to the garage.'	Revised UDB figures accordingly
33	33	Complement #2 by adding that driveways should be maximum 6m at the property line/curb; and that driveway width should not exceed the width of the garage door.	NAK - UDB updated to state driveways will not exceed exterior width of garage. Q4 - Driveway not to exceed width of front wall of garage. Driveway will in fact be wider than 8' garage door and wider than 16' garage door. But will not exceed the smaller of overall garage width or 6m.	Noted	
34	34	Bullet #3, add "where paired driveways are not possible...."	NAK - updated UDB to state: "To create opportunities for on-street parking on one side of the street, a 5.5m separation between driveways shall be encouraged where paired driveways are not possible."	Noted	
		4.2.5 Variable Grading Condition			
35	35	Design guidelines, bullet #2, UDG request no more than 250mm of concrete foundations on exposed elevations and 300mm for interior ones.	NAK - updated to state: "Grading shall be coordinated with dwelling foundation design and constructed so that generally no more than 250 mm of the foundation wall above finished grade is exposed on street facing elevations."	Noted	
36	36	Design guidelines, bullet #5, revise to state that architectural detailing to mitigate dropped-garage conditions should be provided when the wall above the garage door is greater than 400- 600mm.	NAK - UDB updated to state: "Architectural detailing shall be employed to mitigate dropped-garage conditions to reduce the visual impact of a taller attached garage wall, including:..."	No dimension was specified. We suggest the following ' is generally greater than 400-600mm.'	This will be reviewed by the Control Architect during detailed design and permit review.
37	37	It is not clear what the term 'garage under product' refers to; does this only apply to walk-up models?. Please clarify and, if possible, include examples of it (images or drawings).	NAK - UDB updated accordingly	Noted	
		4.3 Priority Lotting			
38	38	Missing 'T' lots at the end of Street 'G'.	NAK - UDB updated accordingly	Missing 'T' intersection at the end of street 'D' Missing 'rear/side' upgrades' on various lots adjacent to small green spaces along Street 'E' Missing green marking on plan for lots facing park/pond	Revised UDB figures accordingly
39	39	Ensure elbow lots ('E') include all units that part of the 'bending' of the road. If possible, mark them individually to avoid confusions.	NAK - UDB updated accordingly	While some are individualy marked on the revised plan, others are missing. Consider a dot instead of a 'E' and ensure all lots on the bending portion of the road are identified.	Revised UDB figures accordingly
40	40	All lots adjacent/abutting to the open spaces (vista blocks) along Street 'E' and 'G' will required upgrades. Identify them as 'Lots adjacent to park/open space' with the pink line symbol.	NAK - UDB updated accordingly	See comment 38.	Revised UDB figures accordingly
41	41	All lots along the south that backing onto the NHS should have upgraded rear elevations (pink line).	NAK - UDB updated accordingly	Please ensure that all are identified (there appears to be some that are missing in the revised plan)	Revised UDB figures accordingly. Only lots that are visible from the rear will have upgraded rear elevations. The lots that back onto the southern portion of the NHS will not be visible from the rear as there is no access proposed through the NHS.

				4.3.1 Gateway Lots			
		42	42	Design guidelines, bullet #2, add "….prominent gables, articulated walls and roofs and projecting bays shall be featured."	NAK - UDB updated accordingly	Noted	
		43	43	Add a guideline requesting that garages be located as far away from the intersections/corner.	NAK - UDB updated accordingly	Noted	
				4.3.2 Corner Lots			
		44	44	Add 'wall's articulation' to the list of elements listed on the design guidelines, bullet #3.	NAK - UDB updated accordingly	Noted	
		45	45	Design guideline, bullet #4. Ensure any upgrade on the flankage elevation, including	NAK - UDB updated accordingly	Noted	
Town of							
Department / Category	**Document / Sub Category**	**Item No.**	**Comment No.**	**1st Submission Comments**	**1st Submission Comments Response**	**2nd Submission Comments**	**2nd Submission Comments Response**
		46	46	Encourage main entrances be located on the flankage elevation.	NAK - UDB updated accordingly	Noted	
		47	47	Request active uses to be located along the flankage elevation, and garages away from it.	NAK - UDB updated accordingly	Noted	
				4.3.5 Lots Requiring Rear/Side Upgrades			
		48	48	Clarify which lots are these ones on the Priority Lot Plan.	NAK - UDB updated accordingly	Noted. Some are missing (see comment 38)	Revised UDB figures accordingly
		49	49	First bullet, add 'wall and roof articulation' after "….in terms	NAK - UDB updated accordingly	Noted	
		50	50	Last bullet, revise to say 'wall and roof articulation'.	NAK - UDB updated accordingly	Noted	
		51	51	Encourage full porches on side elevations and second level balconies on side/rear elevations.	NAK - UDB updated accordingly	Noted. TPP note. Second-level balconies on elevations facing open spaces provide greater opportunities to animate these public spaces and enhance views of the surrounding greenery for residents. This is why they are encouraged on priority lots adjacent to NHS, parks, ponds and other public spaces.	Second-level balconies may not be possible due to constraints. This will be refined at detailed design and building permit review.
				4.3.6 Dwellings Adjacent to Parks and Ponds			
		52	52	Clarify which lots are these ones on the Priority Lot Plan. Do these include dwellings facing parks, ponds and open space?	NAK - UDB updated accordingly	Not shown on the plan on page. Please review and revise as necessary.	Revised UDB figures accordingly
		53	53	Design guidelines, bullet #1, revise "……articulated wall/roof treatment and….."	NAK - UDB updated accordingly	Noted	
		54	54	For dwellings facing parks, ponds and open space, encourage:			
		54a	54a	Full porches on the elevation facing such space	Q4A - Some designs may have full porches in front of the habitable portion of the ground floor. There will not be a porch in front of the garage. NAK - added "For dwellings facing parks, ponds, and open space, full porches in front of the habitable portion of the ground floor on the elevation facing such space shall be encouraged."	Noted	
		54b	54b	Second level balconies	Q4A - Few elevations are typically designed with second floor balcony. The question should be asked to Marketing whether each model should be designed with one elevation having a second floor balcony or whether only elevations with second floor balconies can be sold on certain priority lots. Korsiak - Second level balconies are currently being considered. Elevations are currently in the design stage.	TPP note. Second-level balconies on elevations facing open spaces provide greater opportunities to animate these public spaces and enhance views of the surrounding greenery for residents. This is way they are encouraged on priority lots adjacent to NHS, parks, ponds and other public spaces.	Second-level balconies may not be possible due to constraints. This will be refined at detailed design and building permit review.
				5.2 Sustainability and Low-Impact Approaches			
		55	55	Lighting. Consider LED and solar powered light poles.	NAK - UDB updated accordingly	Noted	
		56	56	Materials. Encourage the use of recycled materials.	NAK - UDB updated accordingly	Noted	
				6.2 Architectural Design Review Process			
		57	57	Exterior colour/material packages to be submitted prior to final site plans (sitings).	NAK - UDB updated accordingly	Noted	

		58	58	Materials. Encourage the use of recycled materials.	NAK - incorporated into Section 5.2	Noted	
	General Comments	59	59	Provide transitions in materials at logical points (e.g., changes in planes, aligned to architectural elements and openings, etc.).	NAK - incorporated into Section 4.2	Noted	
		60	60	Reconsider roof forms / lines with respect to 'Modern' models, specially for narrow lots. See comments master sheet (SEPARATE DOCUMENT)	Noted	Model drawings were not included in this submission.	Model drawings are being refined and will be part of the Architectural Control Review process for building permit.
		61	61	Simplify material palettes to better relate to the model designs (i.e. 'Modern' models use smooth brick or clean square cut stone vs. 'Manor' models use more random, rougher cut stone...).	Noted	Noted	
ADDITIONAL URBAN DESIGN COMMENTS - TPP - DECEMBER 12, 2023							
	Urban Design Brief - Section 2.1 Land Uses			As per the plan on page 8 and the previous version of the brief, the number of low-rise units was increased due to the introduction of townhouse units. If this is the case, please revise first sentence to on page 9 to replace '409 single detached homes' with '409 low-rise residential units'.	NAK - Updated to reflect new plan	Noted	
	Urban Design Brief - 3.1.3 Eighth Line Rear Lotting Condition			Revise the last sentence on page 20 to read "To supplement the proposed acoustic wall and potential retained trees, rear elevations of units backing onto Eighth Line shall be enhanced, further improving the quality of the public realm."	NAK - UDB updated accordingly	Noted	
Town of Erin Comments							
Department / Category	**Document / Sub Category**	**Item No.**	**Comment No.**	**Comments**	**Response**	**2nd Submission Comments**	**2nd Submission Comments Response**
	Urban Design Brief - 4.4.2 Corner Lots			For fencing on corner lots (bullet 8) consider revising to read 'A privacy fence shall be provided to enclose the rear yard of the corner lot dwelling. Ensure fencing does not terminate at the rear wall/corner of the unit, instead, extend the fence beyond parallel to the flankage elevation and include a gate at the fence return.' For rear detached garages consider revising to read 'Rear lane garages on corner lots will require upgrades to the side/rear elevations when exposed to public view, including consistent architectural style and materials.'	NAK - UDB updated accordingly	Noted	