

February 20th, 2025

Mr. Koren Lam, County Planner Lanark of County – Planning Department 99 Christie Lake Road Perth, ON K7H 3C6 klam@lanarkcounty.ca

Dear Mr. Lam:

Re: Draft 2 Comments – Lake Avenue Proponent – Escape Homes County of Lanark File No. 09-T-23008 Egis Project #: CCO-22-1448

This letter is written in response to the comments from County Staff received on October 24th, 2024, for the above-noted Draft Plan of Subdivision application. The following sections of this letter provide responses for each comment received from County Staff and Agencies.

Corporation of the Town of Carleton Place

Servicing and Stormwater Management Report Comments:

- 1. More information is needed on the Lyndhurst St. connection that was installed by the Town. The submission should include plan and profile drawings indicating all required reinstatements, pipe locations, pipe sizes, pipe materials, depth of pipe, etc. *Response: Plan and profile, reinstatement, pipe location, pipe size, material, and depth for the Lyndhurst Street connection has been included on drawing C104.*
- 2. Further information is required on the proposed pump station components (wet well size, pump size, float locations, etc.). The connection to Lyndhurst will not be done by others and should be completed as part of the development site works. *Response: Detailed design drawings for the proposed pump station have been included in Appendix 'D' of the Servicing & Stormwater Management Report. The proposed E-One W-Series Quad pump station will have a structure diameter of 1800mm and be equipped with 1hp pumps. The working volume between the on and off levels will be 267 Litres, with a total volume of 1668 Litres provided up to the alarm level. The total height of the structure will be 5791m. 200mm PVC DR-35 if proposed for the gravity inlet pipe, while 32mm PVC Schedule-40 is proposed for the forcemain outlet pipe.*
- 3. Although this is not a municipally owned sanitary sewer main, we recommend increasing the slope of the first sewer run from 0.32% to 0.5% Sanitary services should be connected via a tee wye to prevent clogging. *Response: The sanitary sewer slope has been revised to 0.5%. The connection notes have been revised to specify wye tees.*





- 4. The services for Block 6 should be relocated to be outside of the driveways. *Response: Services for Block 6 have been relocated outside of the driveways.*
- 5. There are concerns regarding the drainage to the roadside ditch along Lake Ave downstream from the development, as water in this ditch occasionally flows onto the roadway. *Response: The ditch has been revised to include landscaping catchbasins located within localized low points, as well as a 300 mm diameter subdrain system. While capacity concerns are not expected along the property frontage based on the ditch calculations included in Appendix 'G', should downstream constraints result in upstream flooding of the ditch, the modified ditch design will provide temporary storage within the proposed depressions during periods of peak runoff.*
- 6. Can the proponent comment on how the buildings are protected from flooding if the ditch were to be surcharged in the spring, since this is the main outlet for the rear yard drainage? *Response: Building opening elevations are located at a minimum 0.30m above the proposed back of sidewalk elevations.* Should the ditch surcharge, runoff will spill onto the road and drain west along Lake Avenue before reaching any building opening.
- 7. Additional clarification on the sump pump outlet pipe is required. Will the discharge pipes go directly to the ditch? How are the basements protected from flooding if the ditch is surcharged in the spring? This area is known for flooding, so this should be evaluated by the engineer. A potential option is to discharge the pipe to the rear yard ditch, which would help alleviate water backing up into the basement. The proposed pipe locations should be shown on the plans and equipped with backflow preventers. *Response: As the building designs are still preliminary, it is unknown if basements will be included. It is expected that foundation drainage, if required, will be provided by pumping a sump to surface within the rear yard. This will allow runoff to sheet drain towards the perimeter swale system and ultimately the Lake Avenue municipal ditch, Should the ditch surcharge, runoff will spill onto the roadway and surface drain west along Lake Avenue.*
- 8. How is the quality of the stormwater being addressed? Given the proximity to the Mississippi River, this should be considered in the servicing report. *Response: A treatment train approach is proposed to address stormwater quality. The Servicing & Stormwater Management Report has been revised to include quality control discussion.*
- 9. Please confirm where the hydrant flow data is derived from. Hydrant testing should be completed to confirm the flows utilized in the servicing report. *Response: Hydrant flow data was estimated based on City of Ottawa ISTB 2018-02-03 and NFPA 291, which provides guidelines for estimating hydrant capacity based on the Hydrant Class Rating and distance from the building. Hydrants classes were determined based on visual inspection of the colored discs located on each respective hydrant.*





- 10. Please confirm the purpose of the 5" retaining curb along the western property line. This could be eliminated entirely with minor grading on the adjacent property, pending permission from the respective owner. *Response: Noted. The developer is currently in discussion with the neighbouring property owner on minor grading into their property. Drawing C101 has been revised to show minor grading into the adjacent property, pending permission from the neighbouring property owner.*
- 11. Please confirm the purpose of the 1.5m paved shoulder. *Response: Paved shoulder was proposed in lieu of monolithic curb and sidewalk. Please note the paved shoulder has been replaced with monolithic curb and sidewalk along the property frontage.*
- 12. Proposed roadway structures should be provided for the road reinstatement, as well as for the on-site drive aisle and parking areas. *Response: Pavement structures have been included on the revised Grading & Drainage Plan.*
- 13. Confirm garbage collection location, specifically for the two proposed quadplex buildings. *Response: The architect has recommended that a shed/enclosure be included within the rear yard or as an extension to a carport area.*
- 14. Is the existing structure going to be demolished? Where is the existing septic and well? This will need to be shown on the plans we will require a removal drawing. Are the existing wells going to be decommissioned? *Response: The existing structure is proposed to be demolished as part of the application. Drawing C103 has been revised to note removal of the existing well and septic system.*

Additional Comments:

- Subdrains for rear lot drainage may be used but will not reduce the required 1% minimum grade requirement for rear lot swales. Please ensure the swales have a minimum 1% grade. Response: Please note that a 0.50% slope swale was incorporated into the design to reduce runoff velocity and promote both infiltration and settle of suspended solids. The purpose of the reduced slope is to achieve a target runoff velocity of ≤ 0.50 m/s, as recommended by the MECP Stormwater Management Planning and Design Manual. Swale calculations included within Appendix 'G', demonstrate the swale and subdrain system has sufficient capacity to convey the calculated flows. Reduced runoff velocity will also delay the time of concentration at the municipal ditch outlet, which will provide a benefit to the town as the municipal ditch has a history of surcharging.
- 2. U.S.F. and foundation elevation information missing. *Response: First floor elevation and underside of footing elevations have been indicated for the proposed buildings based on localized site grading and availability to connect by gravity to the proposed sanitary wastewater system.*
- 3. Please change the culvert material type from CSP to dual-wall HDPE. *Response: Culverts have been revised from CSP to dual-wall HDPE.*





- 4. 1.8m of cover is required on all water services, including at ditch crossings. *Response: Servicing notes have been revised to indicate the requirement for 1.8m cover over water services at the ditch crossing.*
- 5. Please indicate the proposed pipe material for the water services. *Response: The servicing report has been revised to specify PEX piping for the proposed water services.*
- 6. Revise the drawings and crossing table for crossings 1-4 to increase the separation to a minimum of 0.5m. *Response: Service crossings have been revised to provide a minimum 0.5m separation.*
- 7. The note on the servicing plan indicates that the TVS connection for the water service connections to the existing 300 mm main is to be made by Town Forces. Please remove this note, as Watermain Note 8 indicates the proper procedure for connections. *Response: Notation for the water service connections has been revised to reference Watermain Note 8.*
- 8. Please indicate the proposed cover on the water services where they cross the ditch. If insulation is to be utilized, a detail should be added to the drawings. *Response: Servicing notes have been revised to note that minimum 1.8m cover over the water service must be provided at the ditch crossing.*
- 9. The water and sewer services being installed on private property shall conform the building code for spatial separation as indicated in the Ontario Building Code 7.3.5.7. *Response: Service locations have been revised to provide the required spatial separation as per OBC 7.3.5.7.*
- 10. A monolithic curb and sidewalk will be required to be extended across the frontage of this property to the sidewalk at the intersection of Lake Ave. W. and Mississippi Road. *Response: A monolithic curb and sidewalk has been included along the property frontage.*

Should you have any questions, please contact the undersigned at your convenience.

Yours Truly,

Andrew MacLeod, P. Eng. Senior Engineer, Land Development Egis 647.212.7758 andrew.macleod@egis-group.com





Attachments:

Drawing CCO-22-1448 – C101 - 254 Lake Avenue West Grading & Drainage Plan Rev. 3 dated February 20th, 2025. Drawing CCO-22-1448 – C102 - 254 Lake Avenue West Site Servicing Plan Rev. 3 dated February 20th, 2025. Drawing CCO-22-1448 – C103 - 254 Lake Avenue West Removals, Erosion and Sediment Control Plan Rev. 3 dated February 20th, 2025.

Drawing CCO-22-1448 – C104 - 254 Lake Avenue Offsite Sanitary Plan & Profile Rev. 1 dated February 20th, 2025. Servicing and Stormwater Management Report – 254 Lake Avenue West, dated February 20th, 2025

