Administration Centre: 400 Clyde Road, P.O. Box 729 Cambridge, ON N1R 5W6
Phone: 519-621-2761 Toll free: 1-866-900-4722 Fax: 519-621-4844 www.grandriver.ca

August 21, 2025 via email

GRCA File: C14-25 & OPA3-25 - Ida Street

Shavi Fernando
Planning Assistant
Township of Southgate
185667 Grey County Rd. 9
Dundalk, ON N0C 1B0

Dear Shavi Fernando,

Re: Applications for Official Plan Amendment (OPA3-25) and Zoning By-law Amendment (C14-25)
Part Lot 234, Concession 2 (Southwest of Sydenham Road), Village of Dundalk
Owner: Briarwood (Dundalk) Ltd.
Agent: Innovative Planning Solutions c/o Dafne Gokcen

Grand River Conservation Authority (GRCA) staff has reviewed the above-noted applications for official plan amendment and zoning by-law amendment.

Recommendation
At this time, the GRCA is not in a position to recommend approval of the above-noted applications. Please see detailed comments below.

Documents Reviewed by Staff
GRCA staff have reviewed the following documents submitted with this application:

- Comment Response Matrix (dated May 2025).
- Environmental Impact Study (Prepared by Birks Natural Heritage Consultants, dated May 2025).
- Landscape Plan (Prepared by Adesso design inc., dated December 6, 2024).
- Floodplain Analysis (Prepared by Valdor Engineering Inc., dated December 20, 2024) and associated modelling files.
- Functional Servicing / Stormwater Management Report (Valdor Engineering Inc., dated January 2025).
- Architectural drawings (S&C Architects Inc., dated June 27, 2024, revised December 2024).
- Survey (Prepared by J.D. Barnes, dated June 7, 2018).
- Hydrogeological Assessment (Prepared by Soil Engineers Ltd., dated January 29, 2025).
- Preliminary Geotechnical Investigation for Proposed Residential Development (Prepared by Soil Engineers Ltd., dated December 2024, revised January 2025).
- Application form (signed April 24, 2025).

GRCA provided preliminary review comments to the Township, which were incorporated into a Township letter dated July 3, 2025. The Township letter outlined high-level comments provided by various Township departments and agencies including the GRCA. GRCA indicated that there were various concerns with the proposed works such as the proposal to remove part of a wetland, realign a watercourse, and place fill within the floodplain.

GRCA Comments

GRCA has reviewed this application under the Mandatory Programs and Services Regulation (Ontario Regulation 686/21), including acting on behalf of the Province regarding natural hazards identified in Section 5.2 of the Provincial Planning Statement (PPS, 2024), as a regulatory authority under Ontario Regulation 41/24 and as a public body under the *Planning Act* as per our CA Board approved policies.

Information currently available at our office indicates the subject lands contain watercourses, wetlands, floodplain, and the regulated allowances associated with these features. A copy of our resource mapping is attached for reference.

Due to the presence of these features, a portion of the subject lands are regulated by the GRCA under Ontario Regulation 41/24 (Prohibited Activities, Exemptions, and Permits Regulation). Any development or site alteration within the regulated areas requires a GRCA permit pursuant to Ontario Regulation 41/24.

Comments on the Environmental Impact Study:

1. GRCA generally does not support development within wetlands or wetland removal. The proposed development must meet GRCA policies regarding Wetlands and Areas of Interference (see section 8.4 in *Grand River Conservation Authority Policies for the Administration of the Prohibited Activities, Exemptions and Permits Regulation,* in particular policy 8.4.4).
2. The Environmental Impact Study is required to determine the wetland boundaries and appropriate development setbacks. All site plan drawings must include the GRCA-verified wetland boundaries and appropriate setbacks and demonstrate that development and site alteration will be outside of the wetland and applicable setback.
3. Field confirmation of wetland boundaries with GRCA will be required. Wetland boundaries should be pre-staked prior to GRCA arrival on site and the shapefiles of surveyed wetland boundaries provided to GRCA.
4. The EIS should indicate how potential impacts to local site perviousness and water balance of adjacent wetland features will be assessed and addressed. If a water balance assessment is being completed under separate cover (e.g. in a separate water balance study or stormwater management report), the relevant results of that report should be incorporated appropriately into the EIS, such that hydrologic impacts to the wetland can be assessed and mitigated. Water balance study protocols, hydroperiod resolution (e.g. monthly), and proposed mitigations should be scoped to the sensitivity of the wetland feature present, and the scale of the developments impact on its hydrology. Additionally, potential temporary impacts that site grading, construction and dewatering activities may have on groundwater and surface flow towards the adjacent wetland should be assessed, with mitigation proposed as needed, in the EIS.

Comments Regarding the Watercourse:

6. GRCA generally does not support the realignment of a watercourse for new development and would only consider this in such cases as where an Environmental Assessment has been done evaluating all alternatives, or for conservation projects. Please see GRCA policy 8.9.16 of GRCA's Policies for the Administration of Ontario Regulation 41/24 for reference. The proposed site design will need to be adjusted as necessary to meet applicable GRCA policies.

Comments Regarding the Floodplain:

7. GRCA does not support any development, including fill placement within the One-Zone floodplain, or the use of a cut/fill to support new development in the floodplain. Please see GRCA policy 8.1.27 for reference. A floodplain analysis must identify the floodplain boundaries and demonstrate that all new development will be outside of the existing floodplain. The digital modelling files associated with the floodplain analysis should also be submitted to GRCA for review with each submission.

HYDROLOGY (VO Model)

General Comments

8. Please confirm which vertical geodetic datum has been used for the survey (for example, either CGVD28 or CGVD2013). Please ensure that the survey, grading plan, HEC-RAS model, and terrain model are all based on the same vertical datum.

Hydrologic Modelling

9. Please provide detailed information on how the initial abstraction was calculated.
10. The total Hurricane Hazel storm duration is 48 hours (73mm rain in the first 36 hours and 212mm during the last 12 hours of storm duration). Please revise the CN curve infiltration parameters to account for saturated conditions (use CN_{III} values for the Hurricane Hazel modeling). Alternatively, the full duration of the regional storm (285mm) can be used without revisions of the CN values.
11. Please provide a summary table referencing the VO6 model (flows and catchments/nodes) and indicating how these correspond to the HEC-RAS input flow locations (cross-sections).

HYDRAULICS (HEC-RAS Model)

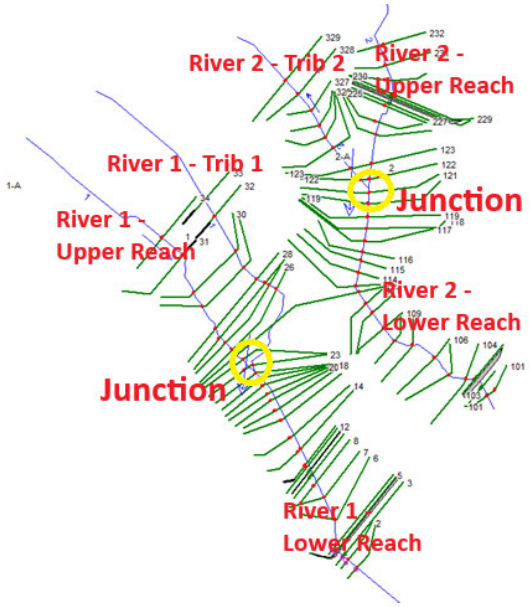
Model Plans

12. There are multiple plans in the HEC-RAS model: Plan 39, Plan 10, and Plan 01 but it is not clear which plans represent existing and proposed conditions. Please confirm if Plan 39 represents the existing conditions as it is linked with the existing conditions geometry. Plan 10 does not have a geometry file associated with it and Plan 01 does not exist. Please clarify which scenario (existing, proposed) each plan is associated with.

Model Rivers and Junctions

13. The modeled area two distinct rivers, each with three distinct reaches (tributary reach, upstream main reach, downstream main reach). However, these are modeled as four independent reaches and they do not interact. Junctions should be applied at the confluence of the river with the tributary for the two rivers. See figure below for where junctions should be applied and for locations of the different reaches.

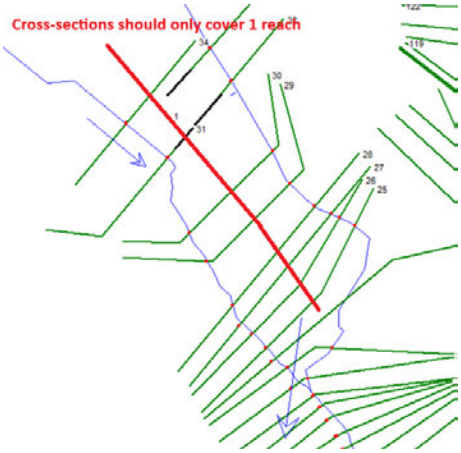
Figure 1: Model Schematic



River 1 - Reach 1 and Reach 1-A

14. Cross-sections should only contain the channel for one reach and not extend into another reach. In the current model cross-section for each reach extend to into the adjacent reach. In figure 2 below, a red line has been drawn showing the approximate locations where cross-sections should end. Please correct the model accordingly.
15. In the current model, the entire river has been duplicated in in Reach 1 and Reach 1-A. For example, in the current model the culverts at River Stations 9.5 and 3.5 are included in both Reach 1 and Reach 1-A. Please correct the model accordingly.
16. Each reach should be acting independent of the other reach until they meet at the confluence, unless spill is occurring from one reach into the other. If a spill is occurring then lateral structures should be included to capture the spill and transmit that flow to the other reach. Please correct the model accordingly.

Figure 2- River 1 - Reach 1 and Reach



Flows and Downstream Boundary Conditions

17. The flows will need to be updated and clarified when the model geometry fixed. In the current model each reach has its own downstream boundary conditions. This means that each reach is acting completely independent of each other. There should only be two downstream boundary conditions, those for River 1 - Lower Reach and River 2 - Lower Reach (naming from Figure 1 above).

Comments Regarding the Stormwater Management Report:

18. While we acknowledge that detailed LID designs can be provided during the detailed design phase of the project, water balance calculations and preliminary LID sizing should be submitted at this stage to confirm feasibility.
19. The runoff coefficient of 0.25 used for the pre-development condition may be overestimated, as a value of 0.2 is typically applied for grass or open space areas. Please provide a supporting reference for the selected value.
20. A time of concentration of 10 minutes should not be applied to pre-development conditions. Instead, it should be calculated using an appropriate method—such as the Airport Method (or any other applicable method), which is typically used when the runoff coefficient (C) is less than 0.4.
21. Please confirm whether the bottom elevation of the proposed SWM tank is situated above the seasonal high groundwater table.
22. The submitted SWM calculations indicate that the required storage volume can be accommodated within the proposed underground system. To confirm the actual storage capacity, please provide detailed drawings and technical documentation from the storage tank manufacturer. Please note that this can be done during the detailed design stage.

GRCA Review Fees:

Consistent with GRCA's 2023-2025 approved fee schedule, this application is considered a 'major' zoning by-law amendment and official plan amendment application, and the applicant will be invoiced in the amount of $2,500.00 for the GRCA's review of these applications. Additional fees would be required for a GRCA permit application for any works proposed within the regulated areas.

Should you have any questions, please contact me at jconroy@grandriver.ca or 5[redacted] extension 2230.

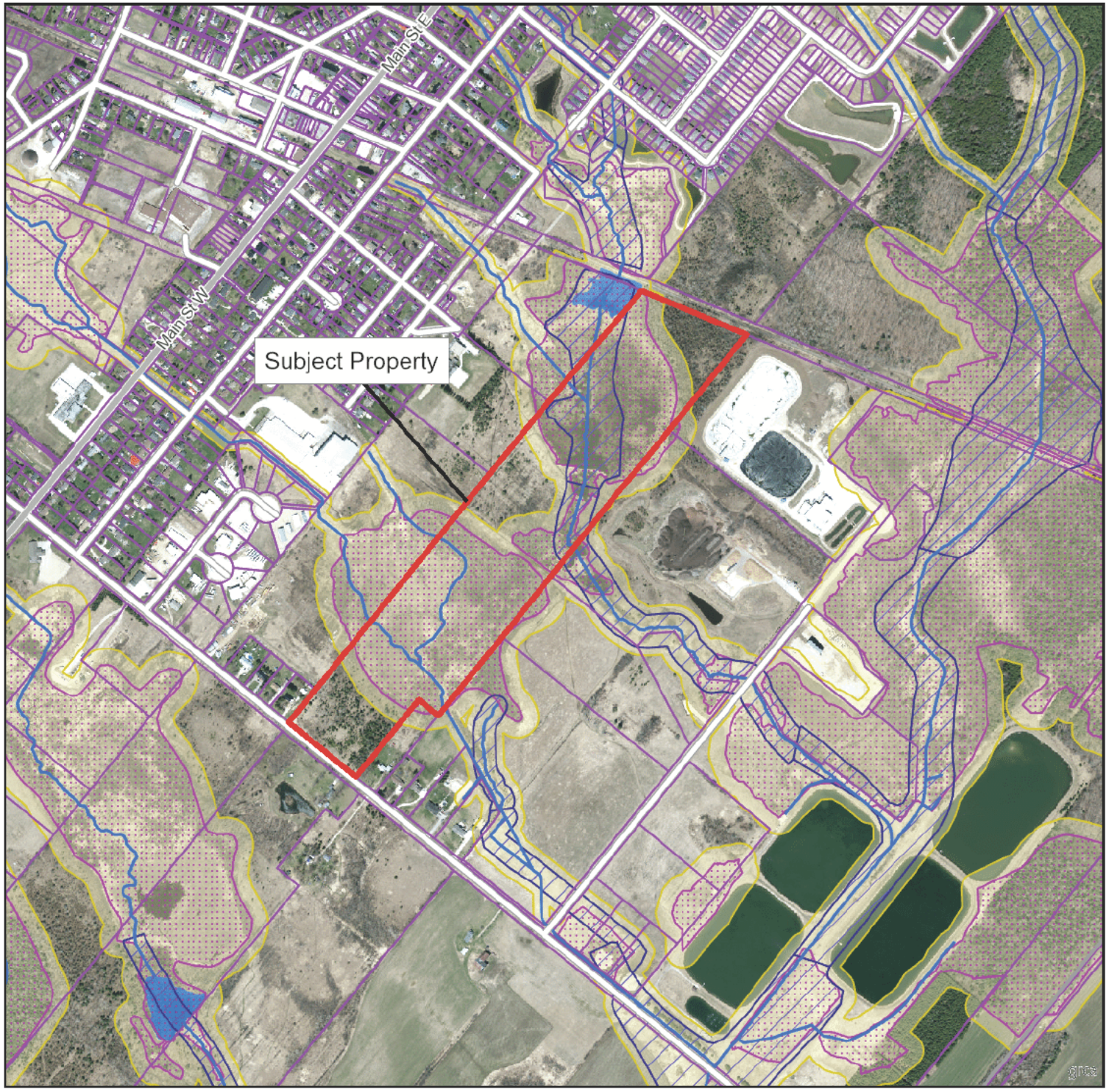
Sincerely,

[redacted]

Jessica Conroy, MES Pl.
Resource Planner
Grand River Conservation Authority

Enclosed: GRCA Map of Subject Property

Copy (via email): *Briarwood (Dundalk) Ltd. (Owner/Applicant)
Innovative Planning Solutions c/o Dafne Gokcen (Agent)
Grey County



Map Centre (X,Y): 548946.99, 4889991.97 | Map Link

This map is not to be used for navigation | 2020 Ortho (ON)

Grand River Conservation Authority

Date: Jun 12, 2025
Author: JC

Ida Street, Dundalk, Township of Southgate

Legend

- Regulation Limit (GRCA)
- Floodplain (GRCA)
  - Engineered
  - Estimated
  - Approximate
- Floodplain - Special Policy Area (GRCA)
- Slope Erosion (GRCA)
  - Steep
  - Oversteep
  - Toe
- Slope Valley (GRCA)
  - Steep
  - Oversteep
- Regulated Watercourse (GRCA)
- Regulated Waterbody (GRCA)
- Wetland (GRCA)
- Lake Erie Flood (GRCA)
- Lake Erie Shoreline Reach (GRCA)
- Lake Erie Dynamic Beach (GRCA)
- Lake Erie Erosion (GRCA)
- Parcel - Assessment (MPAC/MNRF)
- Conservation Area Boundary (GRCA)

Scale 1:10,224

NAD83 UTM zone 17 (EPSG:26917)