

**JULY 09, 2021**

**PROJECT NO: 1060-5177**

MHBC Planning  
113 Collier Street  
Barrie, ON, L4M 1H2

**Attention: Kory Chisholm, BES, M.Sc., MCIP, RPP, Partner**

**RE: FLATO EDGEWOOD GREENS  
PROPOSED REZONING AND DRAFT PLAN REDLINE REVISION**

Dear Kory,

The following letter has been prepared to support the Zoning By-Law Amendment and redline revision to the Draft Plan revision being requested for Flato East in Dundalk. This letter outlines that as a result of the proposed Draft Plan revision, there will be no negative impact to the overall development from a servicing and stormwater management perspective or to traffic.

#### Stormwater Management (SWM)

The change to the walkway location (Block 374) from between the side yards of Lot 099 and 098 to the proposed location between the east side property line of Lot 090 and the rear property line of Lots 087 to 089 was necessitated for ensuring a more secure overland stormwater flow route. The overland flow route had initially been designed to flow through a depressed swale, only along the rear yard of Lots 087 to 089 and was proposed to be protected from encroachment by the future homeowners through a 3.0 m easement. Upon further review of the volume of flow and to better ensure no encroachment into the easement and future unauthorized alteration of the swale, it was deemed more appropriate to relocate the walkway and widen the swale to 3.60 m to align the overland flow route within a Block dedicated to the Town. The additional 0.60 m width of Block 374 is being achieved by reducing the depth of Lots 087 to 089 by a corresponding 0.60 m.

The total overland flow from Street B on the Draft Plan (now named Moody Street) through the swale to the Stormwater Pond on Block 361, immediately southeast of the proposed relocated Block 374 has not been altered.

#### Electrical Servicing

The change to Block 355 required for the Sanitary Pump Station (SPS) servicing lots in Flato East has been widened by 4.00 m to accommodate the inclusion of the transformer that provides hydro service to the SPS. The transformer and pad will be located entirely within the SPS block and not on the adjacent Open Space Block 367.

### Sanitary and Storm Servicing and Traffic

There has been no increase or decrease to the total number of units in the development because of these proposed changes. Therefore, there has been no change to the sanitary and stormwater servicing or traffic design for the development. No further analysis is required from a servicing and traffic perspective.

### Water Service

On behalf of the Township of Southgate, Triton Engineering Services prepared a water modeling analysis for the entire Flato lands to determine the available pressures and flows for the overall development as well as the various phases. As part of the proposed Phases 11 to 13 development (located east of the Foley Drain and now being combined into a single Phase), has identified the need for an additional/redundant water service connection (see attachment) to the boundary watermain. This additional 200 mm diameter watermain connection is proposed to be tied into a watermain currently being extended south on The Kings Highway 10 for a development at 772186 Highway 10.

By connecting the watermain out to Highway 10, an increased fire flow and water pressure will be available to the development and provide the improved design parameters that will be of benefit to the proposed townhouse units on Blocks 323 to 343 and to the Commercial Block 344.

This water service tie-in will also facilitate a looping of the watermain within the proposed Flato development east of the Foley Drain to ensure greater reliability of water service should the additional single water connection on the Phases 7 to 10 watermain along Street F ( Morgan Street) ever require being shut off for maintenance or any other unforeseen circumstance.

The option to provide the additional water service connection can be achieved through the proposed 6.00 m easement along the northeast and southeast sides of the proposed reconfigured Lot 232 to accommodate the 200 mm watermain. The reconfiguration of adjoining Lots 230 and 231 as well as Blocks 339 to 344 is also required to meet the necessary frontage requirement for the townhouse unit on Block 339. The watermain would continue north of Lot 232 through the Park Block 360 and then out to Highway 10 through the current Rest Area serving traffic on Highway 10.

Sincerely,

**C.F. CROZIER & ASSOCIATES INC.**



Dan Piggott, P.Eng.  
Senior Project Manager

**C.F. CROZIER & ASSOCIATES INC.**



Darrin Tone, P.Eng.  
Project Engineer

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# **Attachment A**

## **Triton Available Water Service Memo**



**TRITON  
ENGINEERING  
SERVICES  
LIMITED**  
Consulting Engineers

## Memorandum

DATE: May 14, 2021  
TO: Darrin Tone & Haley Birrell  
FROM: Dustin Lyttle & John Koolhaas  
RE: Flato East (Edgewood Greens)  
Phases 11-13  
Available Water Service  
Revision No.1  
Colgan Sizing Scenarios  
FILE: A4167F

### Introduction:

This memo is intended to provide insight on the expected water system configuration, operating conditions and available flow within Phases 11-13 of the Edgewood Greens Subdivision, including an assessment of the watermain size on Colgan Crescent.

The following estimates are based on the topographic and watermain design information presented in:

- Dundalk Commercial Block General Site Servicing Plan, dated June 11, 2020
- Revision 2 of the Edgewood Greens Phases 7-10 design drawings, dated August 19, 2020
- Revision 2 of the Edgewood Greens Phases 11-13 Preliminary Future Road Profiles, dated August 19, 2020
- Revision 2 of the Glenelg Subdivision Phase 1 design drawings, dated October 16, 2020
- Glenelg Subdivision Phase 2 Preliminary Grading and Drainage Plan, dated September 30, 2020

*Note: The watermain crossing the Foley Drain on Morgan Ave. is to be 250mm diameter east of Van Dusen until Millner Ave. is reached.*

*Lot 232 within Phases 11-13 is to contain a municipal servicing block (6 m wide) which will be used to connect the watermain on Colgan Crescent to a future 200mm watermain to be extended along the frontage of Highway 10. **The extension of watermain on Highway 10 to connect to Block 232 is required to provide sufficient/redundant water service to the future phases.***

The watermain is to be sized as 150mm throughout Phases 11-13 except for the following locations:

Diameter (mm)	Location	From	To
250	Morgan Avenue	Van Dusen Avenue	Milliner Avenue
200	Morgan Avenue	Milliner Avenue	Symington Street
200	Symington Street	Morgan Avenue	Milliner Avenue
250	Symington Street	Milliner Avenue	Block 369 Stub
200	Highway 10 and through Lot 232 (Servicing Block)	Existing Highway 10 stub	Colgan Crescent

Refer to attached sketch indicating the required servicing.

### Assessment:

The following assessment has been completed assuming a complete watermain network as per attached figure, buildout of Edgewood Greens Phases 1-13 and construction of the Dundalk Water Tower. This assessment has also been conducted under two scenarios. The first scenario assumes watermain sizing per the table above. The second scenario assumes the same, except Colgan Crescent is sized as 200mm between the Highway 10 connection and Symington Street. Refer to attached figure for additional information.

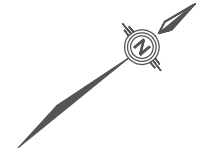
**Results:**

*Note: all pressures and flows modelled are at the proposed road centre line elevation. Watermain placement and sizing has been assumed for developments where detailed design is not available, this is reflected on the attached sketch.*

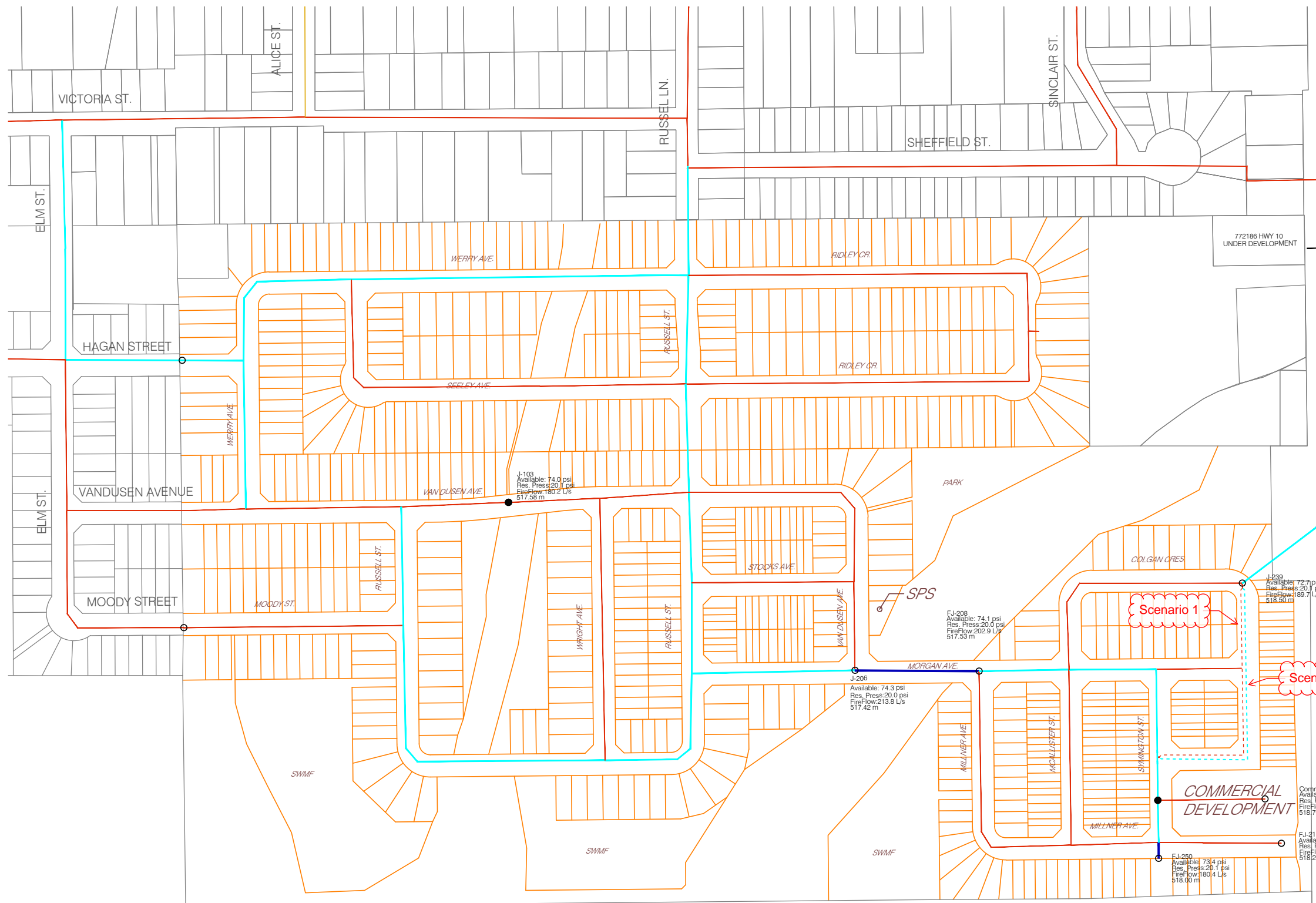
	Scenario 1		Scenario 2	
	Operating Pressure (PSI)	Fire Flow (L/s)	Operating Pressure (PSI)	Fire Flow (L/s)
Maximum	74.1 Milliner-Morgan Intersection	208 Milliner-Morgan Intersection	74.1 Milliner-Morgan Intersection	210 Milliner-Morgan Intersection
Minimum	72.4 Commercial Development	114 Milliner Stub at HWY-10 Intersection	72.4 Commercial Development	116 Milliner Stub at HWY-10 Intersection
Commercial Development	72.4	119	72.4	120

Any questions please contact us.

**TOWNSHIP OF SOUTHGATE**



**DUNDALK  
EDGEWOOD GREENS  
SUBDIVISION**



WATERMAIN CURRENTLY UNDER CONSTRUCTION

HWY 10 WATERMAIN EXTENSION

**LEGEND:**

- PROPERTY
  - EXISTING DEVELOPMENT PARCEL
  - FUTURE DEVELOPMENT PARCEL
- WATERMAIN
  - 100mm DIAMETER WATERMAIN OR LESS
  - 150mm DIAMETER WATERMAIN
  - 200mm DIAMETER WATERMAIN
  - 250mm DIAMETER WATERMAIN
- Junction Data:
  - Junction Label
  - Operating Pressure (psi)
  - Residual Pressure (psi) during Fire Flow
  - Available Fireflow (L/s)
  - Assumed Elevation (m)

**NOTE:** All modeling results indicated are based on "Scenario 1" watermain configuration.

**FIGURE 1  
ESTIMATED AVAILABLE  
WATER SERVICE**

MAY 2021  
SCALE 1:4,000  
A4167B

