1941 Eglinton Avenue East Transportation Considerations Report

City of Toronto

Employment Area Conversion Request

Prepared For: 1941 Eglinton East Holdings Inc.

July 2021

© BA Consulting Group Ltd.
45 St. Clair Avenue West, Suite 300
Toronto, ON M4V 1K9
www.bagroup.com

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

1.0 INTRODUCTION

BA Group has been retained by 1941 Eglinton Avenue East Inc. (herein referred to as the "client") to provide transportation advisory services in relation to an Employment Area Conversion Request being made to the City of Toronto, pertaining to the block bounded by Eglinton Avenue East, Warden Avenue, Civic Road and Prudham Gate (herein referred to as the "site"). The site is located on the southeast quadrant of the Warden Avenue / Eglinton Avenue East intersection.

The site is currently occupied by two existing car dealerships: Scarborough Nissan and Kingscross Hyundai.

The client is exploring the long-term potential for mixed-use development – notably including residential land uses – for the site. The purpose of this report is therefore to review the transportation considerations associated with a conversion of the lands from employment to mixed use.

Detailed conversion and removal policies for employment areas (i.e. criteria) are provided in policies 14-18 of Section 2.2.4 of the Toronto Official Plan which include the following transportation elements (see Policy 17 in Section 2.2.4):

> *"17. The City will assess requests to convert lands within Employment Areas, both cumulatively and individually, by considering whether or not:*
>
> *d) the conversion(s) will adversely affect the overall viability of an Employment Area and maintenance of a stable operating environment for business and economic activities with regard to the:*
>
> *viii. impact upon the capacity and functioning of the transportation network and the movement of goods for existing and future employment uses;*
>
> *e) the existing or planned sewage, water, energy and transportation infrastructure can accommodate the proposed conversion(s);*
>
> *g) employment lands are strategically preserved near important transportation infrastructure such as highways and highway interchanges, rail corridors, ports and airports to facilitate the movement of goods;"*

1.1 THIS REPORT

The client is advancing an Employment Area Conversion Request for the site. In assessment of the request, this report examines the transportation-related elements of the site, including preliminary analysis of the long-term potential of the site to accommodate mixed use development that includes residential land use. It forms a supplementary report intended to accompany the Employment Area Conversion Request application.

Included in this report are the following elements:

- An overview of the relevant and applicable transportation planning & policy context.
- An extensive description of the existing and planned transportation context of the site including the local area road network, public transit availability, and active transportation conditions;
- A trend analysis of observed transportation behaviour in the local area based on Transportation Tomorrow Survey (TTS) data;

- An assessment of the traffic generation of the potential Employment Area Conversion Request to include mixed use development as compared to what is called for the site per the Golden Mile Secondary Plan; and
- An analysis based upon the above factors regarding the suitability of the site to accommodate the Request and development intensification in general.

2.0 TRANSPORTATION PLANNING & POLICY CONTEXT

The site is located in Toronto's Clairlea-Birchmount neighbourhood[1] and is also part of the Golden Mile Secondary Plan area. The Golden Mile Secondary Plan (GMSP) was recently adopted by City of Toronto Council and has been appealed to the Ontario Land Tribunal (OLT).

The following summarizes the policies that either apply to the site, or are relevant guiding principles that should be considered as part of a redevelopment vision.

2.1 PROVINCIAL / REGIONAL POLICY FRAMEWORK & DIRECTIVES

There are a number of provincial and regional policy documents pertaining to the site.

Within the *2020 Provincial Policy Statement (PPS)*, which went into effect on May 1, 2020, transportation demand management (TDM) strategies to be implemented within new developments to increase the efficiency of existing and planned transportation infrastructure are encouraged. Furthermore, the *PPS* also encourages density being added to lands that adopt a mix of land uses to encourage the use of active transportation and transit, and to limit the length and number of vehicular trips generated by the site.

A Place to Grow, Growth Plan for the Greater Golden Horseshoe outlines the importance of reducing traffic and encourages the implementation of reduced parking standards along with the promotion of transit supportive uses within Major Transit Station Areas. *Places to Grow* also highlights the importance of planning for the integration of active transportation within the existing and planned street network (i.e. complete streets) and within development projects.

The *Metrolinx Draft 2041 Regional Transportation Plan* (2018 RTP) – an update to *The Big Move* (2008) – specifies a series of planned higher order public transit projects. The 2018 RTP includes several projects, such as the Eglinton Crosstown and Ontario Line, which will provide important new transit connections to the area which will expand the reach of destinations that will be available by transit form the site.

2.2 LOCAL AREA PLANNING

2.2.1 Golden Mile Secondary Plan

The site is located within the boundaries of the *Golden Mile Secondary Plan (GMSP)*. The GMSP study was adopted to inform a Secondary Plan for the area to establish a planning framework for future development with a long-term vision of creating a complete, liveable, connected, responsive, and prosperous mixed-use community that recognizes:

i) The construction of the Eglinton Crosstown Light Rail Transit (herein referred to as the Crosstown);
ii) The significant improvement it provides relative to the level of transit accessibility afforded to the entire Golden Mile area; and
iii) the support it provides for future intensification.

[1] City of Toronto Neighbourhoods listing - https://www.toronto.ca/ext/sdfa/Neighbourhood%20Profiles/pdf/2011/pdf4/cpa120.pdf

The GMSP was adopted by City of Toronto Council in 2020 but has been appealed to the Ontario Land Tribunal (OLT) so it is not yet in effect.

The GMSP includes proposed density thresholds for each site which were intended to be transit-supportive and optimize the public investment in the Crosstown. Based on the GMSP Density Strategy, the site, which is identified as an employment area, is permitted a maximum gross Floor Space Index (FSI) of 2.5.

2.2.2 Golden Mile Transportation Master Plan

The supporting *Golden Mile Transportation Master Plan (TMP)* was completed by HDR to evaluate and recommend transportation policies, programs and infrastructure required to meet the mobility needs of the existing and future Golden Mile Area, with consideration of the changing transportation context, particularly the transit context, along Eglinton Avenue and the greater east end of Toronto. The Golden Mile TMP was completed in November 2019.

2.2.3 Eglinton Connects Planning Study, Volume 2: Recommendations and Implementation Strategies

Key transportation-related recommendations of the strategy include the redesign of the Eglinton Avenue Corridor to remove traffic lanes, and reallocate the space towards wider pedestrian boulevards and bike lanes. Eglinton Connects also includes specific recommendations for the Golden Mile Focus Area, including urbanization and intensification of the City blocks, especially near transit.

2.3 SITE ZONING

The block that is the subject of the application is a “grey hole” within City of Toronto Zoning By-law 569-2013; it is subject to former City of Scarborough Employment District By-law 24982. According to Scarborough Employment District By-law 24982. Within By-law 24982 there are several addresses that make up the block that is under consideration (1923, 1941, 1957 Eglinton Avenue East and 793 Warden Avenue). All subject properties are zoned as Medium Density Commercial (MDC) with a variety of permitted uses on the individual addresses such as:

- Day nurseries
- Financial institutions
- Offices
- Places of worship
- Restaurants
- Vehicle services garages
- Vehicle service stations
- Barber shops
- Personal Service Shops
- Retail Stores

For all subject properties that make up the block the existing zoning notes there is a maximum FSI of 0.4 times the lot area.

3.0 TRANSPORTATION CONTEXT

3.1 STREET NETWORK CONTEXT

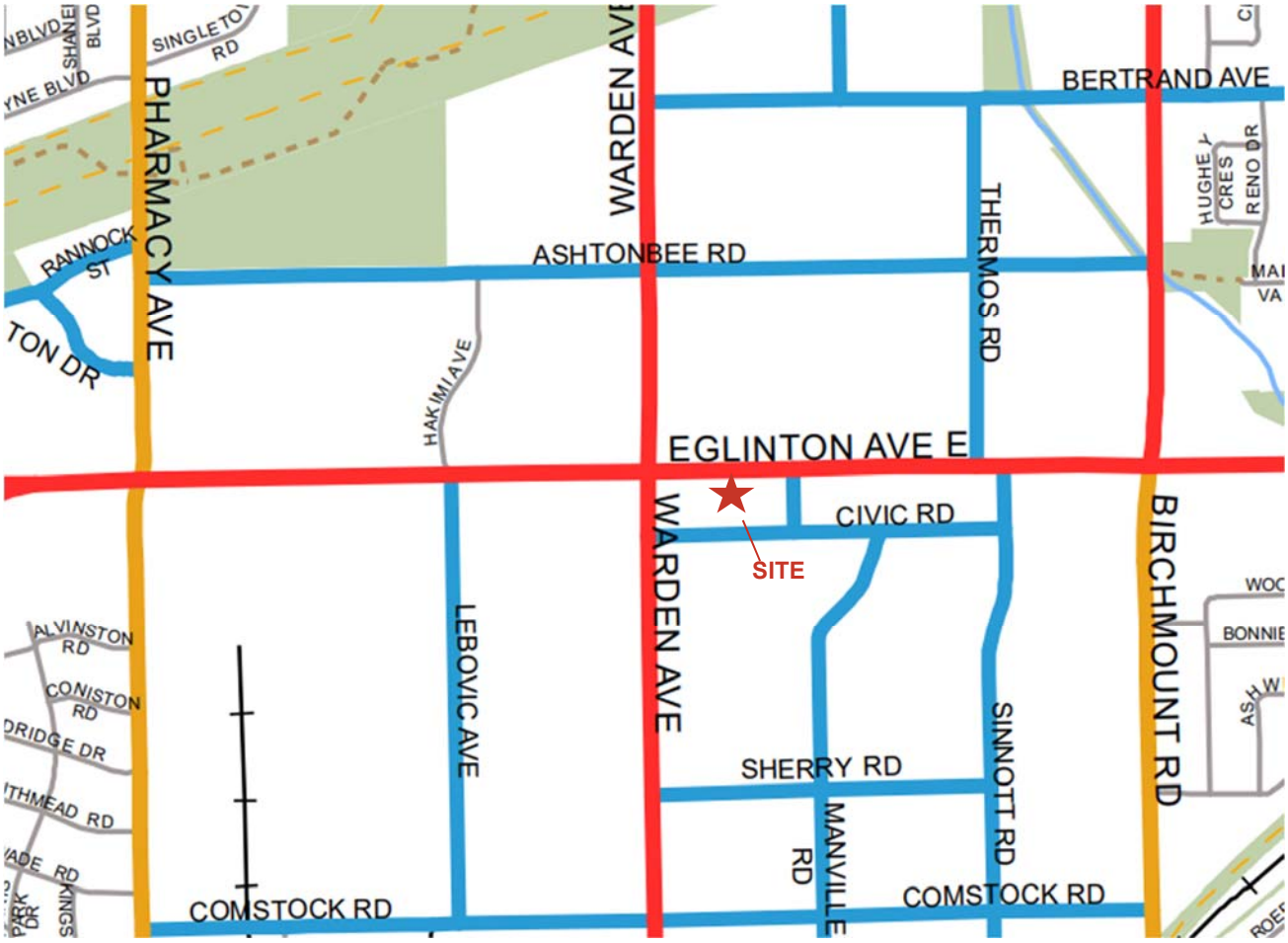
3.1.1 Existing Street Network

The surrounding public street network of arterial, collector, and local roads is outlined in **Table 1**. The area street network is illustrated in **Figure 1**.

TABLE 1 SUMMARY OF EXISTING AREA STREET NETWORK

Type		Street Name	Description & Parking Regulations	Roadway Limits	Speed Limit
Major Arterial	North-South	Warden Avenue	A five lane arterial road with a centre left turn lane. No parking permitted either side at any time. Sidewalks are provided on both sides of the road.	Through Golden Mile Area	50 km/h
	East-West	Eglinton Avenue East	Two lanes in either direction with a future LRT in centre median. Currently no stopping permitted during construction of LRT. Some on-street parking may be permitted after LRT construction. Sidewalks are provided on both sides of the road.	Through Golden Mile Area	50 km/h
Collector	East-West	Civic Road	A 2 lane road with no parking permitted either side. There are no sidewalks on either side.	Warden Avenue ←→ Sinnott Road	40 km/h
	North-South	Prudham Gate	A 2 lane road with parking permitted in select locations on east and west sides. There are no sidewalks on either side.	Eglinton Avenue East ←→ Civic Road	40 km/h
		Manville Road	A two lane road with no parking permitted either side. There are no sidewalks on either side.	Civic Road ←→ Hymus Road	40 km/h
		Lebovic Avenue	A five lane cross section with a centre left turn lane. Parking is not permitted on either side. Sidewalks are provided on both sides of the road.	Eglinton Avenue East ←→ Comstock Road	50 km/h
Other	North-South	Hakimi Avenue	A five lane cross section with a centre left turn lane. Parking is not permitted on either side. Sidewalks are provided on both sides of the road.	Eglinton Avenue East ←→ Ashtonbee Road	50 km/h

FIGURE 1: EXISTING AREA STREET NETWORK



3.1.2 Future Street Network

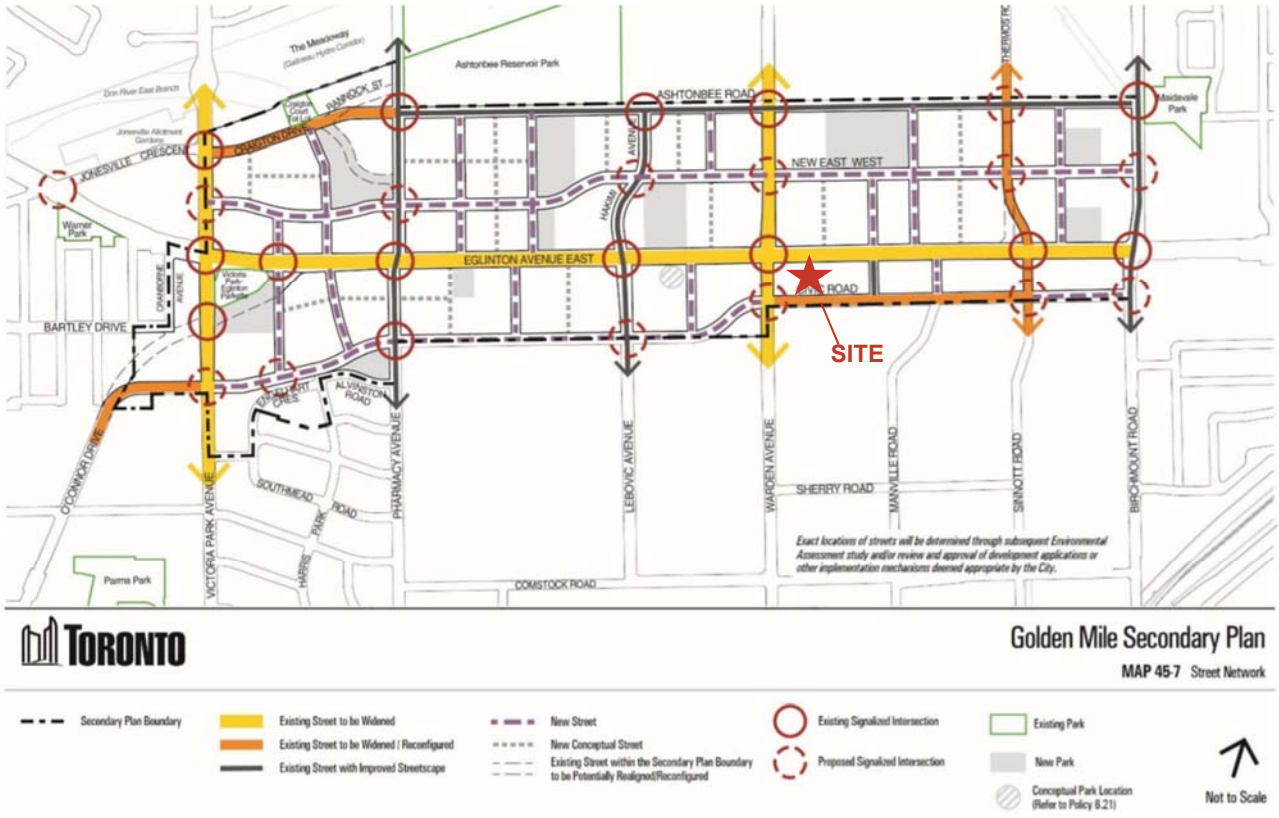
The GMSP envisions the creation of a new street network within the Golden Mile area that will facilitate the planned redevelopment. There are two significant new east-west roads planned:

1. O'Connor Drive Extension
2. Golden Mile Boulevard

The O'Connor Drive extension would re-align existing O'Connor Drive at its intersection with Victoria Park Avenue into a new east-west street that will run south of Eglinton Avenue East. At its eastern end it is envisioned that the O'Connor Drive extension would connect to Warden Avenue and align with Civic Road adjacent to the site.

The planned Golden Mile Boulevard would be a new east-west street running north of Eglinton Avenue East between Birchmount Avenue and Victoria Park Avenue.

FIGURE 2: FUTURE AREA STREET NETWORK



Taken together the planned new streets in the GMSP area will provide important new capacity and circulation routes to accommodate development within the GMSP. These new streets will also provide opportunities to accommodate intensification within the site because the site is proximate to the future O'Connor Drive extension.

3.2 TRANSIT CONTEXT

3.2.1 Existing Transit Service

A brief description of the transit services available in the area surrounding the site is provided in **Table 2**.

TABLE 2 AREA TRANSIT NETWORK

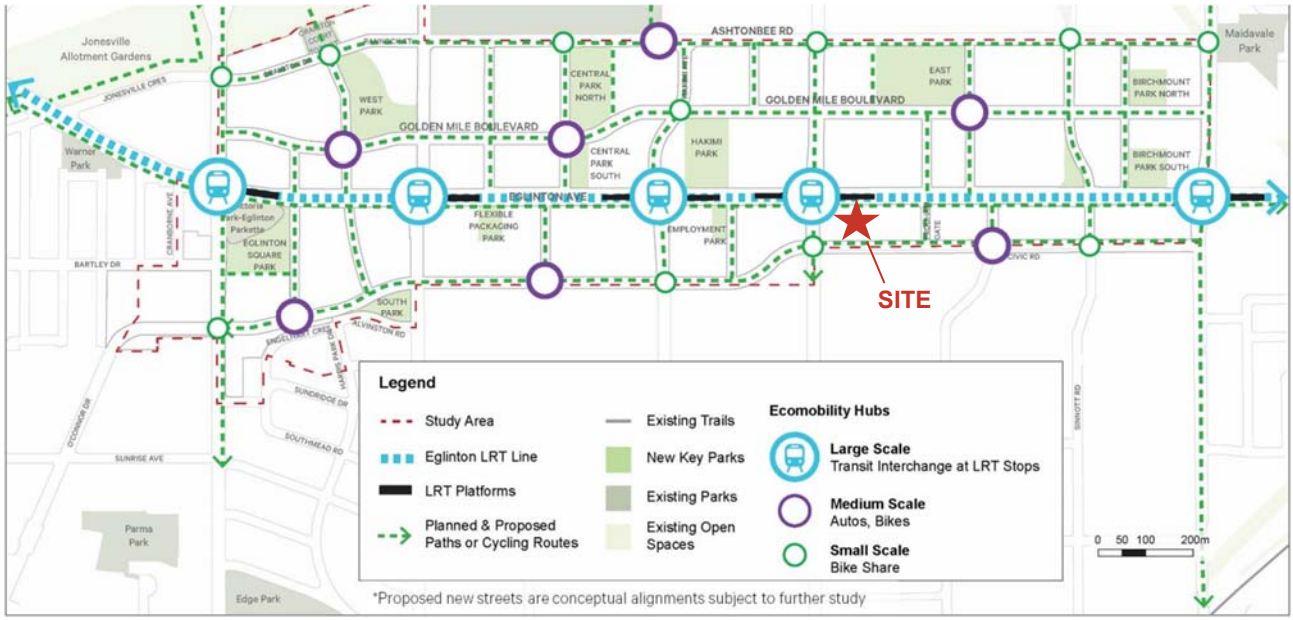
Route		Headways	Closest Stop	Additional Description (if applicable)
GO Transit	Stouffville	35 min. during weekday peak periods, 60 min. during off peak periods	Kennedy GO (3.7 km from the Site, 34 min. walk or 19 min. transit trip).	N/A
Subway	Line 2 - Bloor-Danforth Line	2 – 3 min. during weekday peak periods, 3 – 5 min. during off peak periods	Warden TTC Station (approx. 2 km from the Site, 10 minute bike ride or 10 minute transit trip)	N/A
	Line 3 - Scarborough Line	5 min. during weekday peak periods, 7 min. during off peak periods.	Kennedy TTC Station (2 km from the Site, 10 minute bike ride or 10 minute transit trip)	N/A
Bus	34AB - Eglinton East	3 min. during weekday peak periods, 4 – 7 min. during off peak periods	Warden Avenue (adjacent to site)	Part of the TTC "10-Minute Network" (service is 10 minutes or better throughout the day)
	67 - Pharmacy	9 – 10 min. during weekday peak periods, 15 – 24 min. during off peak periods	Eglinton Ave E (875 m from the Subject Site, 5-10 min. walk)	N/A
	68 - Warden	5 – 7 min. during weekday peak periods, 10 – 22 min. during off peak periods	Eglinton Ave E (0 m from the Subject Site, 0-1 min. walk)	N/A

3.3 PLANNED TRANSIT NETWORK

Eglinton Crosstown LRT

The Eglinton Crosstown LRT is a significant infrastructure investment being advanced by Metrolinx that will significantly enhance transit accessibility along the Eglinton Avenue corridor including the Golden Mile area. The ECLRT will extend from Kennedy Station in the east to Weston Road in the west, with both underground and at-grade sections along its length. Within the Golden Mile area, the LRT will be above grade. The site is well located with respect to the planned construction of the ECLRT (as illustrated below), located adjacent to the LRT station at Golden Mile Station (Warden Avenue).

FIGURE 3: FUTURE TRANSIT NETWORK



Scarborough Subway Expansion

In addition to the enhanced GO Transit services, the Ontario Government transit plans for Toronto includes a subway expansion at Kennedy Station. The subway extension is proposed to connect from Kennedy Station to Scarborough Town Centre via a 3-stop subway expansion. As it relates to the site, the site will have access to the future subway extension as the east terminus of the Crosstown is Kennedy Station where riders will then be able to transfer to the subway and travel further east to Scarborough Town Centre if required.

Warden Avenue Transit Priority Corridor

Warden Avenue is set out as a Transit Priority Segment in the GMSP (Map 45-17). Transit Priority Segments in the Secondary Plan Area are proposed to complement and support ridership on the Crosstown through vincreasing ridership and connections on north-south routes in the area. Transit Priority Segments are planned to have transit priority measures and are identified as a potential planned higher order transit corridors. A right of way protection of 36m has been recommended in the GMSP to support this vision.

3.4 CYCLING CONTEXT

3.4.1 Existing Area Cycling Network

A brief description of the local cycling network is provided in Table 3.

TABLE 3 EXISTING AREA CYCLING INFRASTRUCTURE NETWORK

→	Route	Cycling Infrastructure	Description
North-South	Gatineau Trail	Major Multi-Use Trail.	Kennedy Rd (at Jack Goodlad Park) ←→ Eglinton Ave E
East-West	Gatineau Trail	Major multi-use trail	Eglinton Ave E ←→ Kennedy Rd
	Marcos and Tara	Shared Lane Markings / Signed Routes	Medina Crescent (along Tara Ave) ←→ Lawrence Ave E (along Marcus Blvd)

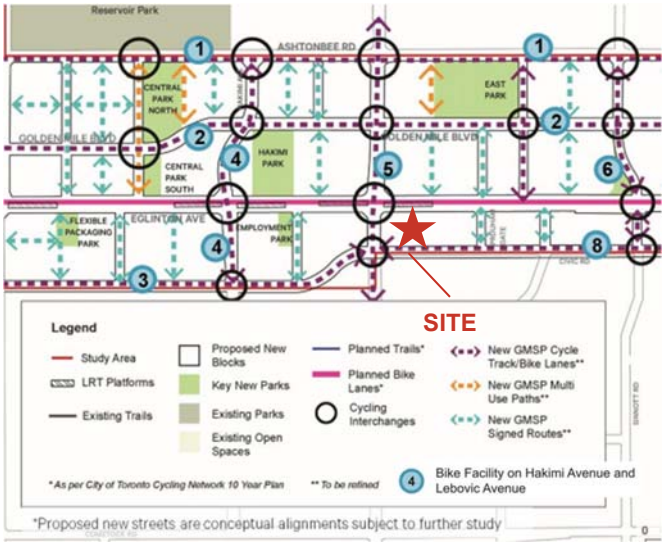
3.4.2 Future Area Cycling Network

A series of planned infrastructure investments (included as part of the City of Toronto's plans) will benefit the "reach" of the cycling network connected to the site. Planned connections and improvements have been identified by the City of Toronto and have been addressed through the Cycling Network Ten Year Plan (2016), a policy document that outlines proposed cycling infrastructure improvements in Toronto over a ten-year period (2016-2025). The Ten Year Plan aims to connect gaps in the City, and to renew existing cycling routes by improving their quality.

In July 2019, Toronto City Council approved an update to the Cycling Network Plan. The Cycling Network Plan now consists of a long-term overall proposed network as well as a detailed near-term rolling implementation program (currently 2019 to 2021). Cycling infrastructure improvements included as part of the near term implementation program generally coincide with planned road improvements. City of Toronto staff are currently developing the next near-term implementation plan (i.e. 2021 to 2023).

As part of the *Golden Mile Secondary Plan*, cycle tracks, bike lanes, multi-use paths, and signed routes are proposed throughout the study area including to the south of the site on the future O'Connor Drive extension (as illustrated in the image to the right). Bicycle lanes are also recommended on Eglinton Avenue East in the Ten Year Plan.

With the implementation the planned cycling facilities both north and south of the site, the site will effectively be bordered by cycle tracks / bike lanes. These proposed cycling facilities will provide sustainable modes of transportation to / from the site.

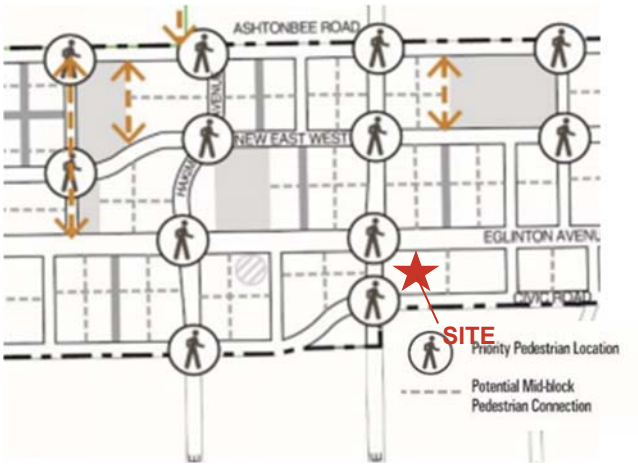


3.5 PEDESTRIAN INFRASTRUCTURE CONTEXT

The site is located in an area whereby pedestrian connections are facilitated by the provision of sidewalks on both sides of the roadway and at the adjacent intersection of Eglinton Avenue East / Warden Avenue. There are substantial pedestrian waiting areas at all corners of each intersection, with wide depressed curbs and tactile walking surface indicators at the corners. The local area contains a number of amenities including grocery stores, department stores, home improvement stores, banks, restaurants (aside from the site), and the Ashtonbee Reservoir Park restaurants, which provide walkable destinations for typical trips.

With any potential redevelopment of the site, sidewalks with typical contemporary width (i.e. 2.1 metres for arterial and collector roads, 1.7 metres for local roads) will be installed consistent with urban design guidelines and logical connection points with adjacent sites. The provision of sidewalks will positively contribute to area connectivity for future residents and visitors to the site.

The proposed midblock pedestrian connections and priority pedestrian locations associated with the *Golden Mile Secondary Plan* (illustrated to the right) are located in a manner that will substantially improve the connections between the site and surrounding area.



3.6 AREA TRAVEL CHARACTERISTICS

The 2016 Transportation Tomorrow Survey (TTS) data provides information relating to origin and designation patterns and travel mode choice for trips made within the GTHA. The 2016 TTS mode split for residential (home-based) and work-based trips for the general site area was reviewed.

3.6.1 Residential Travel Characteristics

The mode share characteristics for the weekday morning and afternoon peak periods is provided in **Table 4**.

TABLE 4 PEAK PERIOD AREA MODE SPLIT – RESIDENTIAL USES

Mode	AM	PM
Auto Driver	47%	49%
Auto Passenger[3]	10%	13%
Transit	37%	33%
Cycle	2%	3%
Walk	3%	2%

Notes:
1. Data obtained using 2016 TTS information for 2006 GTA zones 525-530.
2. Peak travel times assumed for residential trips: 6:00 AM – 8:59 AM, 3:00 PM – 5:59 PM
3. Includes auto passengers, school bus passengers, taxi passengers, and paid ride share

A review of TTS home-based travel characteristics confirms that a high proportion of peak period residential trips are undertaken by public transit and non auto modes of transportation. In the order 38-43% of trips are made using non-auto means, including transit, cycling, and walking. This suggests that the area is already transit supportive for residential uses.

3.6.2 Work-Based Travel Characteristics

The mode share characteristics for the weekday morning and afternoon peak periods is provided in **Table 5**.

TABLE 5 PEAK PERIOD AREA MODE SPLIT – WORK-BASED USES

Mode	AM	PM
Auto Driver	70%	66%
Auto Passenger[3]	7%	7%
Transit	21%	23%
Cycle	1%	1%
Walk	2%	3%

Notes:
1. Data obtained using 2016 TTS information for 2006 GTA zones 525-530.
2. Peak travel times assumed for work-based trips: 6:00 AM – 8:59 AM, 3:00 PM – 5:59 PM
3. Includes auto passengers, school bus passengers, taxi passengers, and paid ride share

A review of TTS home-based travel characteristics confirms that a high proportion of peak period work-based trips are undertaken by public transit and non auto modes of transportation. In the order of 23-27% of trips are made using non-auto means, including transit, cycling, and walking.

4.0 ASSESSMENT OF IMPACT

Within this section, a comparison is provided between what is currently permitted under the prevailing development permissions for the site (i.e. an "as-of-right" development) and the proposed preliminary development concept, which includes residential uses as part of the Employment Conversion Request.

4.1 GMSP TRIP GENERATION

In order to assess the impacts of the proposed conversion, an estimate of the traffic generation potential for the employment use permissions as outlined in the GMSP was undertaken. To develop a profile for the GMSP scenario, the permitted uses under the (under appeal) GMSP were considered. In the GMSP the site is identified as an employment area. Furthermore, based on the current zoning for the site, a variety of land uses are permitted under the employment designation including office uses. Therefore, for the purposes of this analysis, an as of right analysis was considered assuming the site would redevelop as an office use at the maximum allowable Floor Space Index (FSI) of 2.5, which is what is contemplated in the GMSP to apply to the site.

Table 6 provides a summary of estimated land use permissions based on the as of right scenario.

TABLE 6 MAXIMUM DEVELOPABLE GFA ASSOCIATED WITH PERMITTED LAND USES

Permitted Land Use	Site Area (if applicable)	Permitted FSI (if applicable)	Maximum Allowable GFA
Employment (Office Uses)	1.62 ha (16,200 sq. m.)	2.5	40,500 sq. m.

Traffic generation forecasts for the as-of-right scenario have been established utilizing the ITE Trip Generation Manual (10th Edition). The corresponding traffic generation forecasts are outlined in **Table 7**.

Based on the estimated trip generation for the GMSP scenario, the site would generate 436 two way trips during morning peak hour and 461 two-way trips during the afternoon peak hour as an employment use.

TABLE 7 AS-OF-RIGHT, ITE-BASED TRIP GENERATION BY PERMITTED LAND USE

Rate	AM Peak Hour			PM Peak Hour		
	Inbound	Outbound	Two-Way	Inbound	Outbound	Two-Way
Proposed As of Right Scenario (40,500sm, 435,940 sq. ft.)						
Office Trip Rate / 1,000 ft^2 (ITE Code: 710)[1]	0.86	0.14	1.00	0.17	0.89	1.06
Forecast Office Site Trips (172,653 ft^2)	**375**	**61**	**436**	**74**	**387**	**461**

Notes:
1. Trip generation rates based on ITE LUC 710 "fitted curve equation" calculations. AM: T = 0.94(x) + 26.49; PM: Ln(T) = 0.95Ln(X) + 0.36

4.2 PROPOSED CONVERSION REDEVELOPMENT POTENTIAL

Two redevelopment scenarios have been developed for the purposes of estimating the potential traffic generation of a future mix use redevelopment on the site. They are:

- Scenario 1: A Mixed Use FSI of 3.2 times the lot area with retained employment
- Scenario 2: A Mixed Use FSI of 5.0 times the lot area with retained employment

In both scenarios an equal or greater amount of employment uses have been assumed to be retained on the site as part of any redevelopment proposal. The land use assumptions for each scenario are outlined below.

TABLE 8 MAXIMUM DEVELOPABLE GFA ASSOCIATED WITH PERMITTED LAND USES

	Site Area	Proposed FSI (by scenario)	Maximum Allowable GFA	Estimated Non Res GFA	Estimated Unit Yield
Scenario 1	1.62 ha (16,200 sq. m.)	3.2	51,840 sq. m.	5,190 sq. m.	640
Scenario 2		5.0	81,000 sq. m.	8,190 sq. m.	994

TABLE 9 ESTIMATED TRIP GENERATION OF FUTURE SITE REDEVELOPMENT SCENARIOS

Rate	AM Peak Hour			PM Peak Hour		
	Inbound	Outbound	Two-Way	Inbound	Outbound	Two-Way
Scenario 1: Mixed Use FSI 3.2						
Office Trip Rate / 1,000 ft^2 (ITE Code: 710)[1]	1.22	0.20	1.41	0.18	0.98	1.16
Forecast Office Site Trips (55,865 ft^2)	**68**	**11**	**79**	**10**	**55**	**65**
High Rise Residential Apartment Trip Rate / Unit (ITE Code: 222)[2]	0.07	0.23	0.30	0.21	0.14	0.35
Forecast Residential Site Trips (640 units)	**46**	**146**	**192**	**138**	**88**	**226**
Total Site Trips, Scenario 1	**114**	**157**	**271**	**148**	**143**	**291**
Scenario 2: Mixed Use FSI 5.0						
Office Trip Rate / 1,000 ft^2 (ITE Code: 710)[1]	1.07	0.17	1.24	0.18	0.96	1.15
Forecast Office Site Trips (88,156 ft^2)	**94**	**15**	**109**	**16**	**85**	**101**
High Rise Residential Apartment Trip Rate / Unit (ITE Code: 222)[2]	0.07	0.22	0.29	0.21	0.14	0.35
Forecast Residential Site Trips (994 units)	**70**	**221**	**291**	**212**	**135**	**347**
Total Site Trips, Scenario 2	**164**	**236**	**400**	**228**	**220**	**448**

Notes:
1. Trip generation rates based on ITE LUC 710 "fitted curve equation" calculations. AM: T = 0.94(x) + 26.49; PM: Ln(T) = 0.95Ln(X) + 0.36
2. Trip generation rates based on ITE LUC 222 "fitted curve equation" calculations. AM: T = 0.28(x) + 12.86; PM: T = 0.34(x) + 8.56

Note that for the purposes of the trip generation analysis it has conservatively been assumed that all non-residential uses will be office uses. This assumption will result in a higher potential peak hour trip generation whereas if ultimately a portion of the non-residential uses are at grade retail uses, any such uses would be an ancillary retail use that is supportive of the overall area and not a vehicular destination based retail use. The resultant trip generation forecasts for both Scenario 1 and 2 are therefore conservative in terms of what may actually occur.

4.3 IMPACT ASSESSMENT

A comparison of the site-generated traffic under the two mixed use scenarios versus the GMSP scenario is presented below in Table 10.

TABLE 10 ASSESSMENT GMSP BASE SCENARIO VS. TRIP GENERATION POTENTIAL OF MIXED USE DEVELOPMENT SCENARIOS

Rate	AM Peak Hour			PM Peak Hour		
	Inbound	Outbound	Two-Way	Inbound	Outbound	Two-Way
Comparison						
GMSP Employment Base Scenario (# trips)	375	61	436	74	387	461
Mixed Use Scenario 1 Site Trips	114	157	271	148	143	291
Scenario 1 Difference Compared to GMSP Base	**-261**	**96**	**-165**	**74**	**-244**	**-170**
Mixed Use Scenario 2 Site Trips	164	236	400	228	220	448
Scenario 2 Difference Compared to GMSP Base	**-211**	**175**	**-36**	**154**	**-167**	**-13**

As can be seen above, it is estimated that Scenario 1 would generate significantly fewer trips during both the morning and afternoon peak hours as compared to the GMSP base trip generation scenario. In the morning peak hour Scenario 1 would generate 165 fewer two way trips, and during the afternoon peak hour Scenario 1 would generate 170 fewer two-way trips.

Scenario 2 is also expected to generate fewer peak hour trips compared to GMSP Base scenario. During the morning peak hour Scenario 2 would generate 36 fewer two-way trips and 13 fewer peak hour trips during the afternoon peak hour.

Based on the foregoing, if converted according to Scenario 1 the conversion would result in a net reduction in vehicle traffic compared to what is proposed to be permitted in the GMSP. Similarly if converted according to Scenario 2, the proposed conversion of the site to mixed use would result in a comparable amount of vehicle traffic relative to what is proposed to be permitted in the GMSP. Therefore the proposed conversion will have little or no impact on the area road network compared to what is proposed to be permitted in the GMSP.

5.0 SUITABILITY OF SITE TO ACCOMMODATE INTENSIFICATION

The following section provides an assessment of the appropriateness of the site to accommodate intensification from a transportation perspective.

5.1 ROAD NETWORK

The road network surrounding the site is planned to be improved through the creation of new road links that are planned through the GMSP. These include:

- O'Connor Drive extension (south of Eglinton Avenue East)
- Golden Mile Boulevard (north of Eglinton Avenue East)

The planned new streets will provide new capacity to the area and routing alternatives for vehicle traffic. The site is located on the north side of Civic Road, is very well positioned relative to the future O'Connor Drive extension as Civic Road is illustrated in the GMSP as being the easterly end of the O'Connor Drive extension (subject to the future EA that will be undertaken). Even if Civic Road does not become the extension of O'Connor Drive, it will still be in close proximity to Civic Road and provide significantly improved access.

There are also planned improvements to existing streets in the area through the implementation of the GMSP. Improvements include streetscape improvements (e.g. sidewalks and street trees) and road widenings to accommodate improved traffic flow and capacity. In this regard the GMSP calls for a widening on Civic Road and Warden Avenue. These future road widening projects will improve the existing condition and create capacity to accommodate future intensification.

The site is therefore an excellent candidate for intensification as it will benefit and be able to draw upon the future road capacity and connectivity that is already planned through the GMSP.

5.2 TRAFFIC IMPACT

Based on the analysis undertaken above the proposed conversion will generate less peak hour traffic than what the site could generate under a base scenario consistent with what has been proposed in the GMSP. As a result the conversion is not expected to generate a significant traffic as compared to what is proposed in the GMSP.

5.3 PUBLIC TRANSIT

The site is extremely well located relative to the soon to be completed Crosstown LRT. The Crosstown LRT will have a future stop at Warden Avenue which will provide any future users of the site with a direct connection across the entire City with connections to all other major rapid transit routes, such as:

- the UP Express;
- the GO Barrie Line;
- the Yonge-University Subway line (at Eglinton West and Yonge/Eglinton);
- the Stouffville GO Line; and
- the Bloor-Danforth Subway line.

5.4 ACTIVE TRANSPORTATION

From an active transportation perspective the site is also extremely well located and supportive of mixed use development. As part of the GMSP the site will be part of an evolving and improving area for both pedestrian and cyclist accommodation. New pedestrian connections will be provided through the new streets planned in the area and existing streets (such as Civic Road and Prudham Gate) will have new sidewalks installed as part of any future redevelopment. From a cycling perspective the site will benefit from the planned future cycling lanes on Eglinton Avenue East, Warden Avenue, and on the future O'Connor Drive extension.

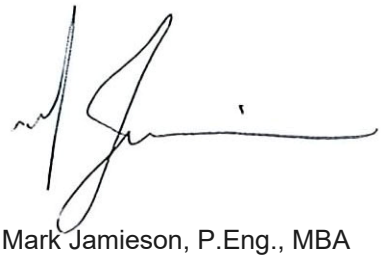
6.0 SUMMARY AND CONCLUSIONS

Based on the findings and analyses contained herein, the proposed conversion of the block bounded by Eglinton Avenue East, Warden Avenue, Civic Road and Prudham Gate from employment areas to mixed use is appropriate from a transportation perspective on the following basis:

- the conversion of the site to mixed use development with an FSI of 3.2 will generate less vehicular peak hour traffic as compared to the employment scenario considered in the GMSP and therefore will have a minimal traffic impact, or potentially even a beneficial impact on future traffic operations in the area compared to the base GMSP;
- the conversion of the site to mixed use development with an FSI of 5.0 will generate a comparable amount of peak hour traffic as compared to the employment scenario considered in the GMSP and therefore will have a minimal traffic impact compared to the base GMSP provisions;
- the site is extremely well positioned to benefit and take advantage of the planned Crosstown LRT;
- the site is extremely well positioned relative to planned pedestrian and cycling improvements through the GMSP which are important considerations for mixed use developments; and
- there is new road infrastructure (future O'Connor Drive extension) planned in the area which will provide additional circulation routes that will benefit the site.

I trust the foregoing is acceptable. Should anyone have any questions with respect to the above analysis please feel free to contact me directly.

Sincerely,



Mark Jamieson, P.Eng., MBA
Principal

File #:	**2275**
Date:	**July 14, 2021**

Mr. Nick Sgro
1941 Eglinton East Holdings Inc.
1941 Eglinton Ave East
Toronto, Ontario, M1L 2M4

Dear Mr. Sgro:

Re: **Servicing Brief**
Block bounded by Eglinton Ave East, Warden Ave, Civic Road and Prudham Gate
City of Toronto

The purpose of this servicing brief is to provide a high-level assessment of the servicing opportunities for the proposed re-development of the block bounded by Eglinton Ave East, Warden Ave, Civic Road and Prudham Gate, in the City of Toronto, Scarborough District. The following documents were referenced for the purpose of this study:

- Golden Mile Master Servicing Plan, City of Toronto, prepared by Cole Engineering dated December 2019.
- Plan and profiles of existing infrastructure, obtained from the City of Toronto

General Site Description

The subject property is approximately 1.67 ha in size.

According to the Golden Mile Master Servicing Plan **Figure B-1** (attached), the subject site (Block 11) is contemplated to have a future residential and non-residential equivalent population of 2,148.

Two development options have been considered for the subject site. Option 1 assumes a density of 3.2 FSI, which consists of a total of 640 residential units (329 one-bedroom, 248 two-bedroom, and 63 three-bedroom units) and 55,870 sf. of non-residential GFA. Option 2 assumes a density of 5.0 FSI, which consists of a total of 994 units (495 one-bedroom, 400 two-bedroom, and 99 three-bedroom units) and 88,160 sf. of non-residential GFA. In accordance to the City of Toronto Design Criteria for Sewers and Watermains January 2021 edition, the equivalent population for Option 1 and 2 are 1234 and 1930 people respectively, which are both under the planned population specified in the Golden Mile Master Servicing Plan.

Storm Servicing

Existing storm services within the vicinity of the subject site are summarized below:

- 375 mm diameter storm sewer flowing easterly on Eglinton Ave East.
- 975 mm diameter storm sewer flowing westerly on Civic Road.

The stormwater management (SWM) measures for the subject site are subject to the City's Wet Weather Flow Management Guidelines (WWFMG) and the City of Toronto Design Criteria for Sewers and Watermain, which consists of providing water balance, stormwater quantity and quality control. Specifically, enhanced water quality control to provide at least 80% Total Suspended Solids (TSS) removal is required for water quality control. Stormwater quantity control is required to ensure that the maximum release rate into the existing municipal storm sewer system will be equal to or less than the existing peak flow during the 2-year storm event, with a runoff coefficient of C=0.50 or less. Runoff from the site up to and including the 100-year storm event is to be contained on-site. Runoff exceeding the 100-year storm event may be conveyed via overland flow route towards downstream receiving systems.

According to the Golden Mile Master Servicing Plan **Figure 3.7** (attached), the storm sewers located on Eglinton Ave East and Civic Road are mostly operating under free flow conditions and have adequate capacity to support future developments in the area. Although one of the downstream sewers is operating under slightly surcharged conditions, the hydraulic grade line is more than 2.8 metres below the surface. The ultimate storm service connection location will be determined based on the existing drainage pattern of the subject site during detailed design.

Stormwater quality control will likely be provided via an onsite Oil Grit Separator (OGS) unit and various Low Impact Development techniques and stormwater quantity control will be provided via onsite underground storage measures and/or surface ponding. Water Balance will be provided through infiltration and/or water re-use measures such as irrigation and greywater re-use applications.

Sanitary Servicing

Existing sanitary services within the vicinity of the subject site are summarized below:

- 250 mm diameter sanitary sewer flowing easterly on Civic Road, ultimately connects to a 900 mm combined sewer trunk on Sinnott Road.
- 450 mm diameter combined sewer flowing easterly on Eglinton Ave East

According to the Golden Mile Master Servicing Plan **Figure B-4.1 and B 4.2** (attached), the dedicated sanitary sewer on Civic Road is at 48% capacity at its most constrained leg during the extreme wet weather condition, while taking into consideration the future population contemplated in the Master Servicing Plan. Therefore, the downstream sanitary sewer has adequate capacity to service the population proposed in both conceptual design options.

The sanitary design for the future development of the subject site is subject to the City of Toronto Design Criteria for Sewers and Watermain and the MECP Procedure F-5-5 regarding combined sewers, which requires that flows to a combined sewer where system deficiencies exist cannot be increased. However, if during site investigation we find that the existing building's storm connection is connected to the combined sewer, further sanitary capacity can be made available if the existing storm connections are to be disconnected from the combined system and outlet to the dedicated storm sewer system.

An updated InfoWorks model will be required in support of a re-zoning application to confirm system capacity if additional population is proposed.

Water Servicing

Existing water services within the vicinity of the subject site are summarized below:

- 300 mm diameter watermain located on the south side of Eglinton Ave East
- 200 mm diameter watermain located on the south side of Civic Road.

According to the Golden Mile Master Servicing Plan **Figure A-1** (attached), the available fire flow in the existing watermain system (20 psi) ranges between 216 L/s – 220 L/s, at the west and east limit of the Golden Mile study area. Since the subject site is located near the water tower, it should have higher flow available than the boundary flows. The available flow in the municipal watermain meets the typical fire flow requirement for fire resistive high-rise buildings defined by the Fire-Underwriters Survey (FUS). The ultimate water servicing connection location will be determined based on further flow investigation and building layouts during detailed design. There is a robust water system in the Golden Mile study area along with an existing water reservoir immediately south of the subject site. A detailed water analysis at the re-zoning stage will determine if any external water infrastructure upgrades are required.

Summary

In conclusion, the subject lands have:

- An existing storm sewer system adjacent to the site with sufficient capacity, along with on-site stormwater management controls, to accommodate any redevelopment opportunity;
- An existing sanitary and combined sewer system adjacent to the site with considerable residual capacity to accommodate re-development, subject to further detailed analysis; and
- An existing watermain network adjacent to the site and a robust water system in the Golder Mile Study area to accommodate re-development, subject to further detailed analysis.

Sincerely,

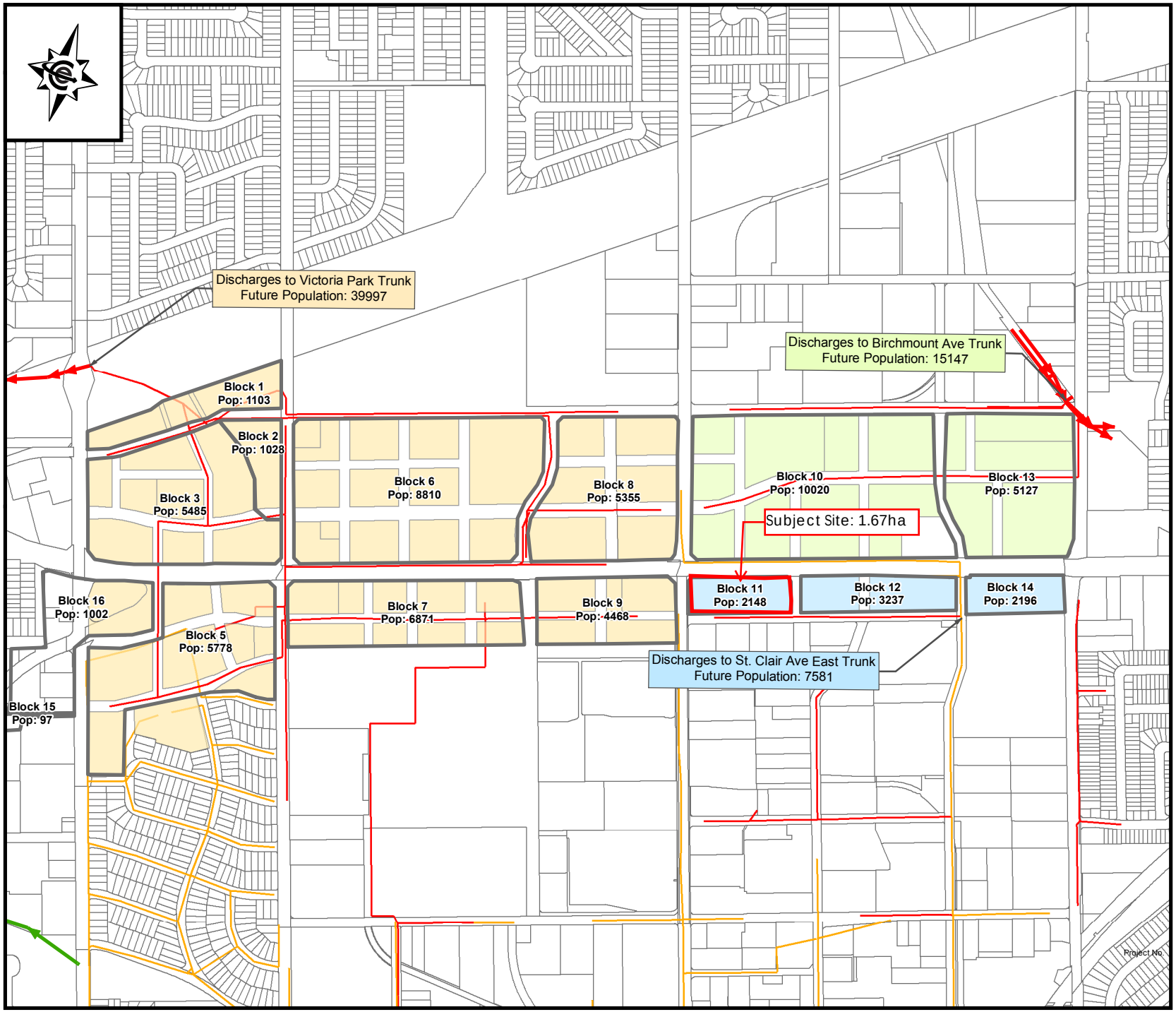
SCS Consulting Group Ltd.

Peter Chen, P. Eng
pchen@scsconsultinggroup.com

Attachments: Figure B-1: Future Population Overview
Figure 3.7: Storm Sewer Analysis – 2-year Rainfall Event
Figure B4.1: Future Servicing Design Condition

Figure B4.2: Future Servicing Extreme Condition
Figure A.1: Watermain Schematic Model Layout

Figure B-1: Future Population Overview



Legend

- Combined Sewer
- Sanitary Sewer
- Sanitary Trunk
- Storm Trunk
- Proposed Blocks
- Birchmount Trunk
- St Clair Ave East Trunk
- Victoria Park Trunk

Note: Only storm and combined pipes within and downstream of the study area are shown here for clarity.

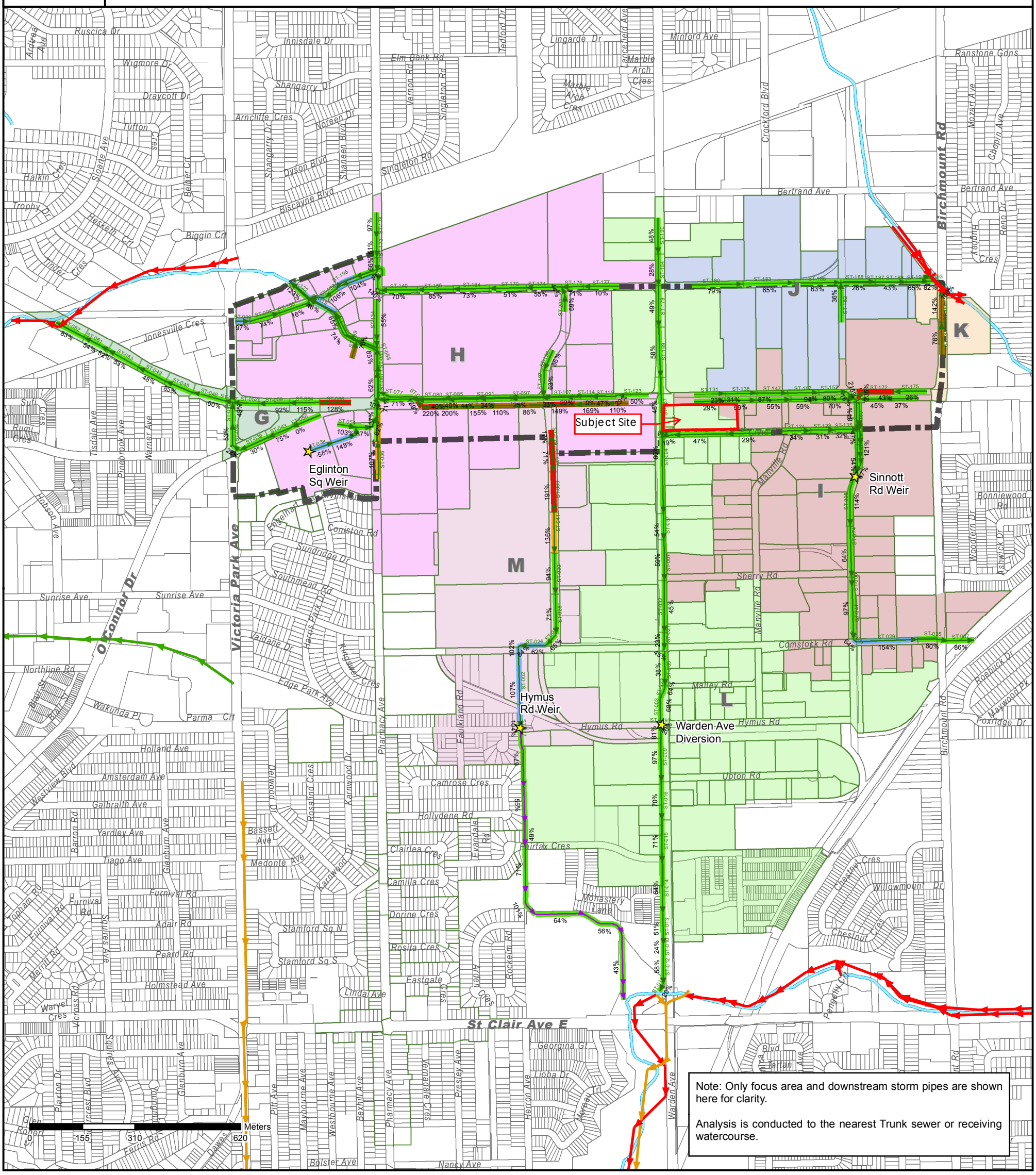
Golden Mile Secondary Plan

Master Servicing Plan

TORONTO COLE

Project No.:	Date:
2017-0296	November 2019

Storm Sewer Analysis
2-year Rainfall Event

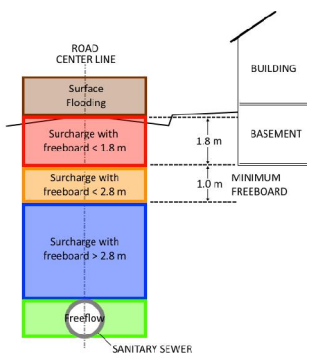


Legend

- Special Structures
- Combined Sewer
- Overflow Sewer
- Sanitary Sewer
- Storm Sewer
- Combined Trunk
- Sanitary Trunk
- Storm Trunk

Pipe Flow Conditions

- Freeflow
- Freeboard > 2.8 m
- Freeboard > 1.8 m
- Freeboard < 1.8 m
- Surface Flooding
- Golden Mile Study Area

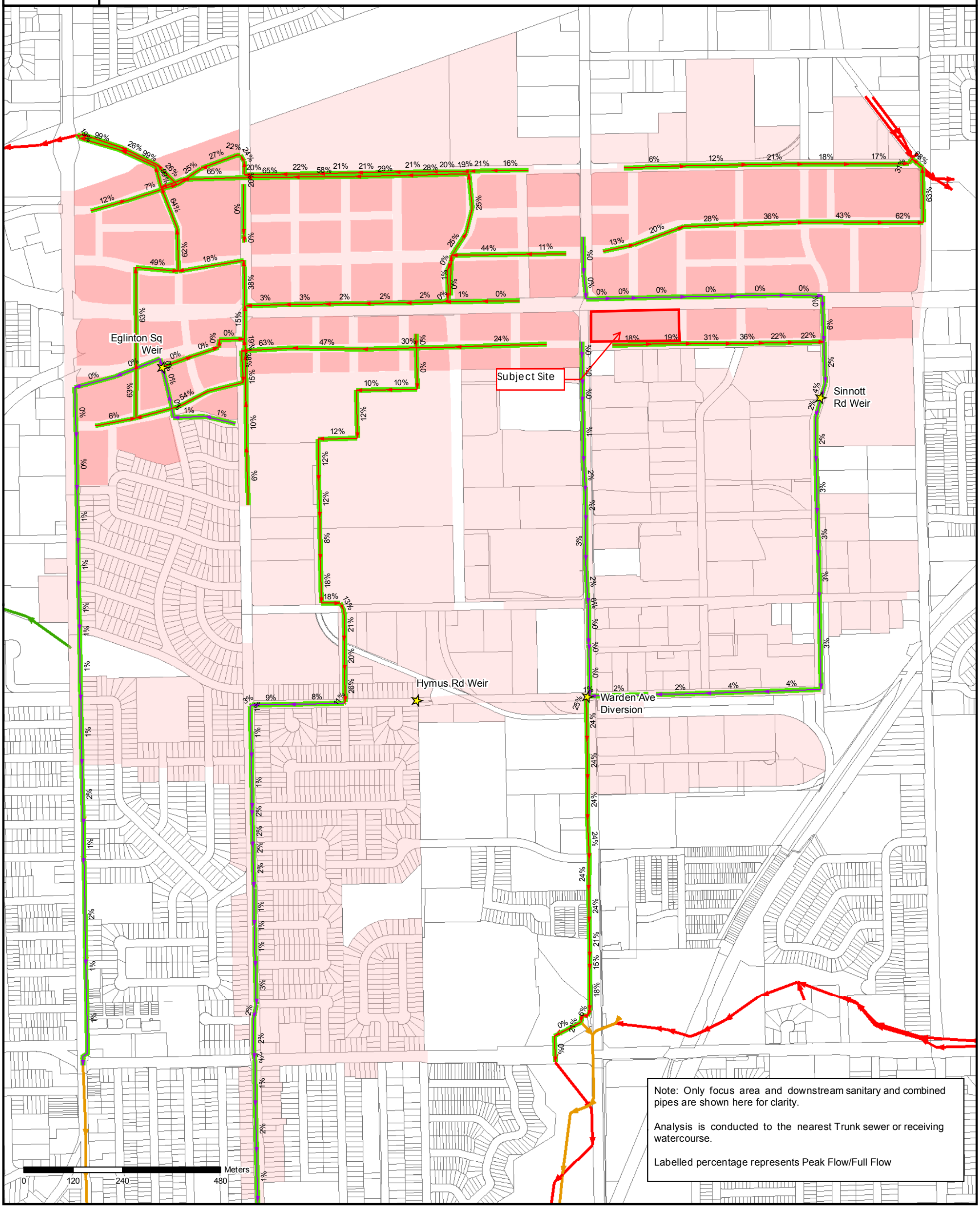


Scenario Parameters	InfoWorks Model Results
Base I-I Rate: 0 L/s/ha	Golden Mile Secondary Plan September 2017
Storm Event: 2-yr 6-hr Chicago	TORONTO / COLE ENGINEERING
Development Timeline: Existing	Project No. 2017-0296 / Figure No. Figure 3.7

Analysis for the storm network within the study area was based on a 2-year 6-hour storm. The model was run without any inflow and infiltration input. Results of the analysis showed some small amounts of surcharging throughout the study area. This surcharging is likely contributed by larger properties
within the study area.

Disclaimer: results have not been updated with revised population data or revised sanitary servicing.

Figure B4.1 - Future Servicing Design Conditions

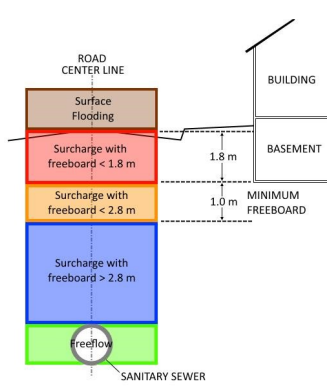


Legend

- Special Structures
- Combined Sewer
- Overflow Sewer
- Sanitary Sewer
- Storm Sewer
- Combined Trunk
- Sanitary Trunk
- Storm Trunk

Pipe Flow Conditions

- Freeflow
- Freeboard > 2.8 m
- Freeboard > 1.8 m
- Freeboard < 1.8 m
- Surface Flooding
- GMSP Sanitary Catchment
- Existing Sanitary Catchment



Scenario Parameters
Base I-I Rate: 0.26 L/s/ha
Storm Event: None
Development Timeline: LongTerm

InfoWorks Model Results
Golden Mile Secondary Plan
August 2019

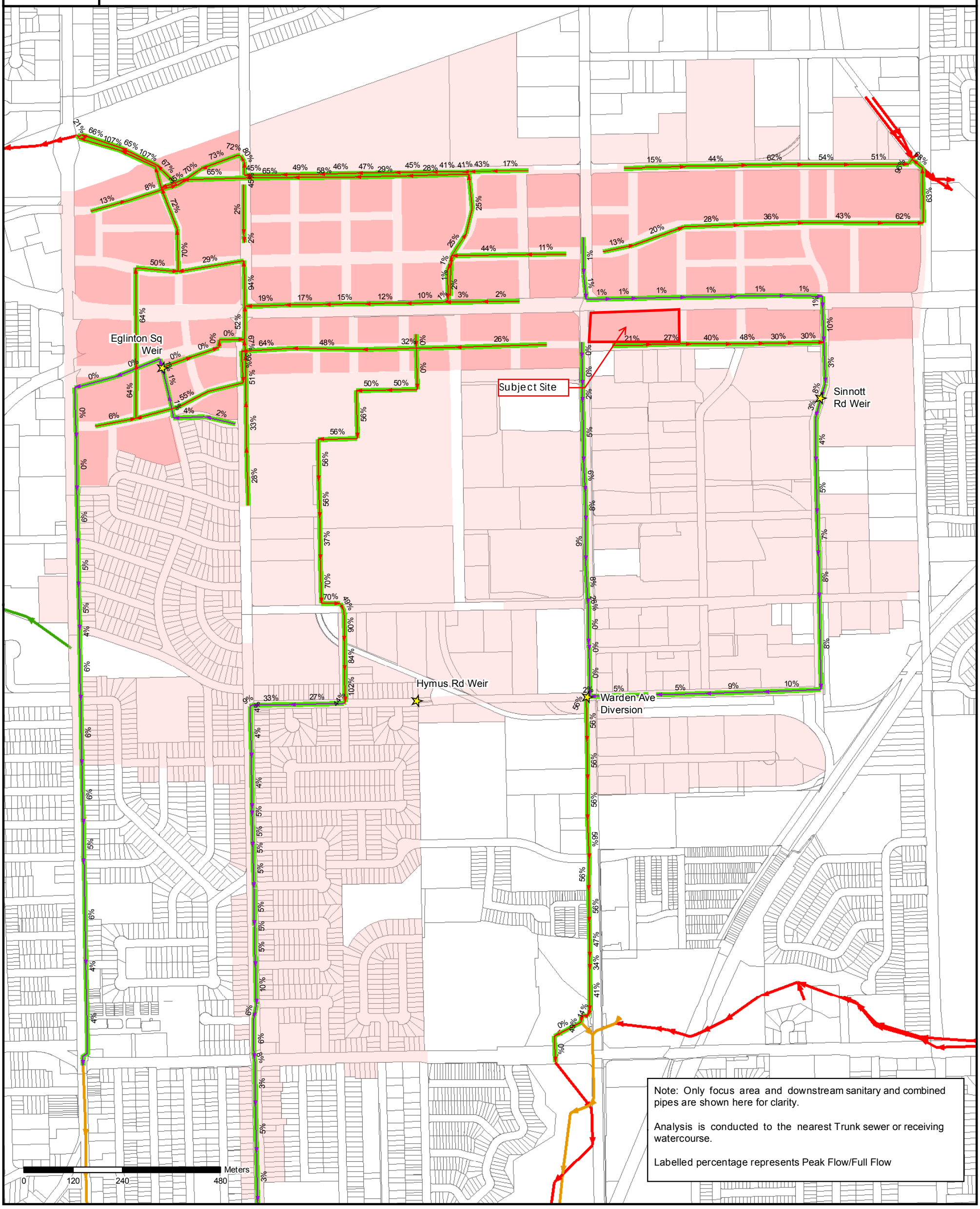
TORONTO COLE ENGINEERING

Project No. 2017-0296

KAM 15/08/2019 \\server.ceg.local\shared\2017 Projects\WM\2017-0296 SvN_GoldenMileSecondary_TO\400-CADD\402-GIS\1-Service Sector or BU\Maps\Preferred Alternatives\Results\07 Sani Ultimate_Design_20190815.mxd

Disclaimer: results have not been updated with revised population data or revised sanitary servicing.

Figure B4.2 - Future Servicing
Extreme Conditions

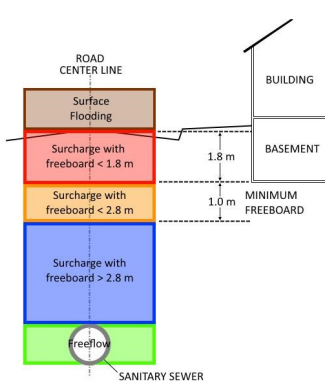


Legend

- Special Structures
- Combined Sewer
- Overflow Sewer
- Sanitary Sewer
- Storm Sewer
- Combined Trunk
- Sanitary Trunk
- Storm Trunk

Pipe Flow Conditions

- Freeflow
- Freeboard > 2.8 m
- Freeboard > 1.8 m
- Freeboard < 1.8 m
- Surface Flooding
- GMSP Sanitary Catchment
- Existing Sanitary Catchment



Scenario Parameters

Base I-I Rate:
0.26 L/s/ha for new developments
2.0 L/s/ha for existing

Storm Event: None

Development Timeline: LongTerm

InfoWorks Model Results

Golden Mile Secondary Plan

August 2019

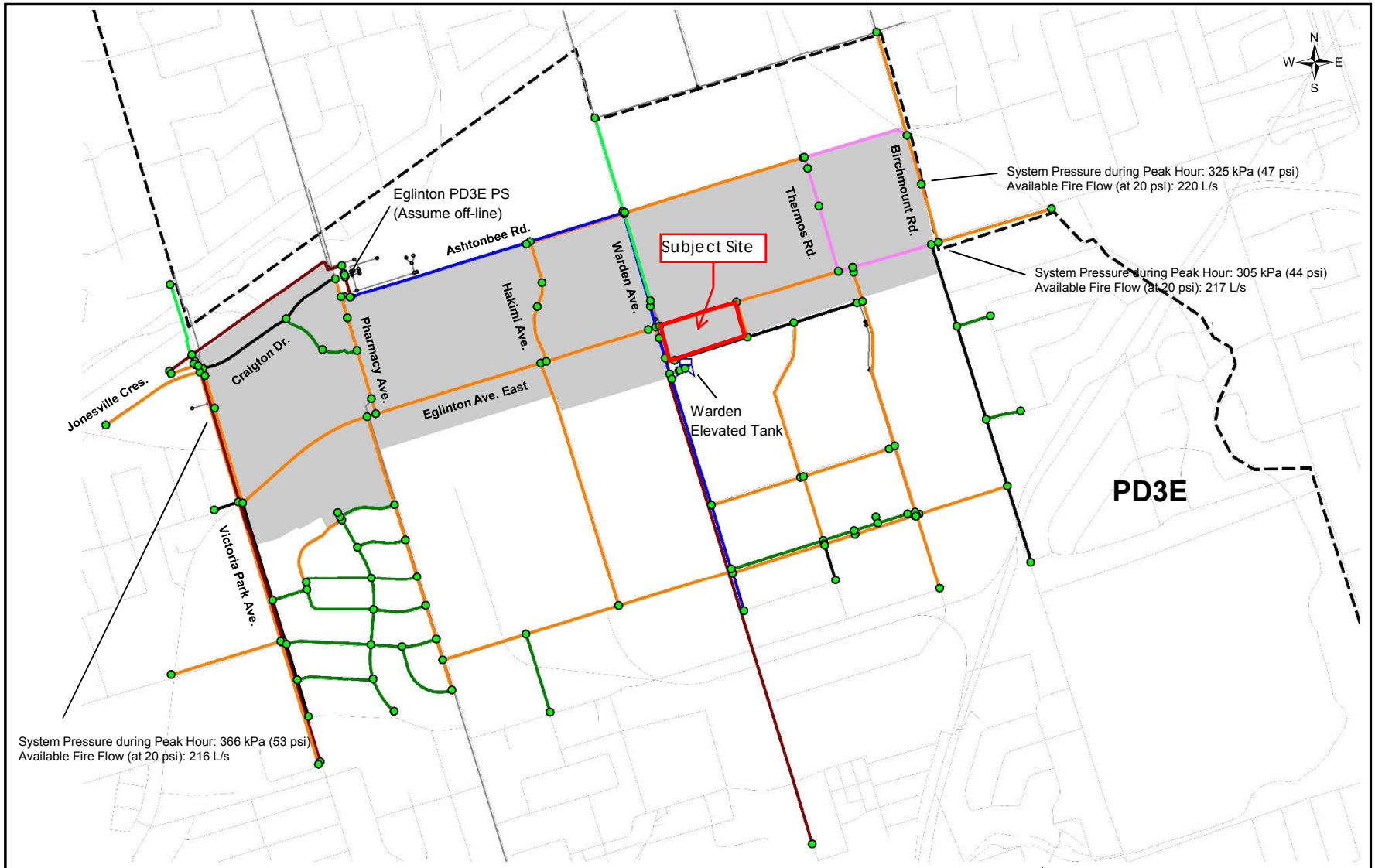
TORONTO

COLE ENGINEERING

Project No.

2017-0296

KAM 15/08/2019 \\server.ceg.local\shared\2017 Projects\WM\2017-0296 SvN_GoldenMileSecondary_TO\400-CADD\402-GIS\1-Service Sector or BU\Maps\Preferred Alternatives\Results\08 Sani Ultimate_Extreme_20190815.mxd



Legend

- Golden Mile Study Area
- Pressure District Boundary
- Model Junction
- 150 mm Watermain
- 200 mm Watermain
- 250 mm Watermain
- 300 mm Watermain
- 400 mm Watermain
- 600 mm Watermain
- 750 mm Watermain
- Junction (Inactive)
- Pipe (Inactive)

COLE ENGINEERING

Golden Mile Secondary Plan

Schematic Model Layout

DATE:	PROJ. No.:	FIGURE No:
September 2017	2017-0296	Appendix A-1