REPORT

SITE SERVICING REPORT
1546 SCOTT STREET

Project: 132902-7.03.04

Prepared for Reid's Heritage Properties
by IBI Group
April 17, 2023

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1 INTRODUCTION

1.1 Scope

The purpose of this report is to outline the required municipal services, including water supply, stormwater management and wastewater disposal, needed to support the redevelopment of the subject property. The property is approximately 0.253 hectares in area and is currently identified as 1546 Scott Street.

The site is bound by existing commercial and residential lands to the west and south (1560 Scott St, known as Holland Cross, with a current development application at the City of Ottawa for lands south of the subject site), Scott Street to the north, and undeveloped lands to the east. Please refer to Figure 1 – Existing Conditions in **Appendix A** for location information. City asbuilts are also included in **Appendix A**.

This Site Servicing Study, which also includes the Stormwater Management Plan, Watermain Analysis and Erosion and Sedimentation Control Plans, is being completed in support of the Site Plan Application.

1.2 Subject Site

Reid's Heritage Properties proposes to construct a 25-storey residential apartment building with 230 units. The proposed development also includes 4 levels of underground parking. 204 m^2 of commercial space is also proposed. Vehicular access to the site will be from both Scott Street to the north as well as through an existing shared access of Bullman St/Hamilton Ave. N intersection towards the south. Please refer to Figure 2 – Site Plan in **Appendix A** for more information.

The site currently consists of a commercial retail store (Beer Store). All existing structures within the subject property will be demolished to facilitate the proposed development.

1.3 Pre-consultation

A pre-consultation meeting with the City of Ottawa was held in May 2021 regarding the proposed development. Notes from this meeting may be found in **Appendix A**. No significant constraints relating to the site servicing or stormwater management for the subject lands were identified during the consultation.

2 WATER DISTRIBUTION

2.1 Existing Conditions

Adjacent to the site there is an existing 1067 mm diameter concrete watermain, located within the Scott Street right of way. At the eastern limit of the site there is also a 152mm diameter iron watermain This is a dead-end watermain which terminates at the east property limit of the subject lands and is located within the subject property. The existing building is thought to be serviced from this dead-end watermain. These watermains fall within the City of Ottawa's pressure zone 1W which will provide the water supply to the site. The existing building is serviced from Scott Street, although the exact location is unknown.

2.2 Design Criteria

2.2.1 Water Demands

The population for apartment buildings is assumed at 1.4 persons per 1-bedroom unit, 2.1 persons per 2-bedroom unit, and 3.1 persons per 3-bedroom unit as found in Table 4.1 of the Design Guidelines. A watermain demand calculation sheet is included in **Appendix B** and the total water demands are summarized as follows:

	Subject Site
Average Day	1.27 l/s
Maximum Day	3.18 l/s
Peak Hour	7.01 l/s

2.2.2 System Pressure

The Ottawa Design Guidelines – Water Distribution (WDG001), July 2010, City of Ottawa, Clause 4.2.2.1 states that the preferred practice for design of a new distribution system is to have normal operating pressures range between 345 kPa (50 psi) and 480 kPa (80 psi) under maximum daily flow conditions. Other pressure criteria identified in Clause 4.2.2 of the guidelines are as follows:

Minimum Pressure	Minimum system pressure under peak hour demand conditions shall not be less than 276 kPa (40 psi)
Fire Flow	During the period of maximum day demand, the system pressure shall not be less than 140 kPa (20 psi) during a fire flow event.
Maximum Pressure	In accordance with the Ontario Building/Plumbing Code, the maximum pressure should not exceed 552 kPa (80 psi). Pressure reduction controls will be required for buildings where it is not possible/feasible to maintain the system pressure below 552 kPa.

2.2.3 Fire Flow Rates

A calculation using the Fire Underwriting Survey (FUS) method was conducted to determine the fire flow requirement for the site. The building is considered fire-resistive construction. Results of the analysis provides a maximum fire flow rate of 5,000 l/min or 83 l/s is required which is used in the hydraulic analysis. A copy of the FUS calculation is included in **Appendix B**. Confirmation from the mechanical engineer that the building is equipped with an automatic sprinkler system, and confirmation from the architect that the building will meet a fire-resistive rating can also be found in **Appendix B**.

2.3 Proposed Water Plan

The city has requested that the new building not be serviced from the 1067mm concrete watermain. It is therefore proposed that the existing dead-end 152mm watermain be extended to the intersection of Scott Street and Holland Avenue. Limited space within the ROW will result in removal of sidewalk to install the watermain with 3m of separation, however since Scott St is being redeveloped, a temporary asphalt sidewalk will be reinstated in its place to maintain pedestrian access until the completion of the redevelopment.

Twin 152mm dia water services are proposed to connect to this new watermain. A new valve chamber separating the twin services is also proposed, see site servicing plan 132902-C-001 in **Appendix E.** The proposed 152mm dia services will provide adequate supply to the building to meet demands while twining the service will provide service redundancy for this building.

Minimum Pressure (Peak Hour) – The minimum peak hour pressure on the site can be estimated as HGL 108.1m – meter elevation (assumed to be 1m above level P1) 59.55m = 48.55m or 476.28 kPa which exceeds the minimum requirement of 276 kPa. The pressure on the top floor can be estimated as 108.1m – 145.9m, which is negative and well below the minimum of 276 kPa, therefore this building will require a water pump.

Fire Flow – The max day plus fire flow can be estimated as HGL 108.0 – ground floor 62.40 = 45.6m or 447.34 KPa which exceeds the minimum of 140kPa.

Max HGL (High Pressure Check) – The high-pressure check can be estimated as HGL 115.1 – lowest level) 49.5 = 65.6m or 643.54 KPa which exceeds the maximum of 552 kPa, therefore a pressure reducing valve is required.

The above results indicate the municipal infrastructure can support the proposed development.

All existing waster services will be located and abandoned per City of Ottawa specifications.

With 2 AA hydrants within 75m of the building the minimum number of hydrants needed to deliver the required fire flow to the structure is being provided in accordance with Technical Bulletin ISTB-2018-02 dated March 21, 2018. Furthermore, the fire dept. connection is located within 45m of a hydrant which is located on Scott Street at the eastern property line, as such a new hydrant is not needed.

BUILDING ID	FIRE FLOW DEMAND (L/MIN)	FIRE HYDRANT(S) WITHIN 75M (5,700 L/MIN)	FIRE HYDRANT(S) WITHIN 150M (3,800 L/MIN)	COMBINED FIRE FLOW (L/MIN)
1546 Scott	5,000	1	1	9,500

3 WASTEWATER

3.1 Existing Conditions

Adjacent to the site is a 300mm concrete sanitary sewer located in the Scott Street ROW draining eastward. This sewer will be the outlet for the subject development.

3.2 Design Criteria

The sanitary sewers for the subject site will be based on the City of Ottawa design criteria. It should be noted that the sanitary sewer design for this study incorporates the latest City of Ottawa design parameters identified in Technical Bulletin ISTB-2018-01. Some of the key criteria will include the following:

- Commercial/Institutional flow — 28,000 l/ha/d
- Residential flow — 280 l/c/d
- Peaking factor — 1.5 if ICI in contributing area >20%
1.0 if ICI in contributing area <20%
- Infiltration allowance — 0.33 l/s/ha
- Velocities — 0.60 m/s min. to 3.0 m/s max.

Given the above criteria, total wastewater flow from the proposed development will 4.44 l/s, the detailed sanitary sewer calculations are included in **Appendix C**. As noted during the City pre-consult, City staff advised there are no capacity issues with the proposed sanitary outlet servicing the proposed development.

3.3 Recommended Wastewater Plan

A 250mm dia sanitary service lateral is proposed to connect to the existing sanitary sewer in Scott Street to service this site. Please refer to the site servicing plan 132902-C-001 in **Appendix E** for connection location details.

Existing sanitary service will be abandoned per City of Ottawa specifications.

4 STORMWATER SYSTEM

4.1 Existing Conditions

The site is currently serviced by a 1050mm concrete storm sewer located in the Scott Street ROW. This sewer serves as the current outlet for the major and minor flows generated from the current site.

4.2 Design Criteria

Criteria for the stormwater management of existing infill sites discharging to separated sewers within the City of Ottawa are as follows;

- Existing adjacent storm sewers were designed to a 2 year level of service
- Site to be designed to limit the 100 year post development flow to a maximum of the 2 year pre development flow
- Pre development flow to use a maximum C of 0.5 and a minimum TC of 10 min.

The stormwater system was designed following the principles of dual drainage, making accommodations for both major and minor flow.

Some of the key criteria include the following:

• Design Storm	1:2 year return (Ottawa) 1:100 year return (External Areas)
• Rational Method Sewer Sizing	
• Initial Time of Concentration	10 minutes
• Runoff Coefficients	
- Landscaped Areas	C = 0.30
- Asphalt/Concrete	C = 0.90
- Roof	C = 0.90
• Pipe Velocities	0.80 m/s to 6.0 m/s
• Minimum Pipe Size	250 mm diameter (200 mm CB Leads)

4.3 Proposed Minor System

Drawing C-001 in **Appendix E** illustrates the proposed storm sewer service for the site. The majority of the site runoff will be captured and discharges into the municipal system through the service along with some uncontrolled surface drainage entering the Scott St ROW.

Using the above-noted criteria, the proposed storm sewer connection was sized accordingly. A detailed storm sewer design sheet and the associated storm sewer drainage area plan are included in **Appendix D**.

4.4 Stormwater Management

The subject site will be limited to a release rate established using the criteria described in section 4.2. This will be achieved through roof flow control devices and an inlet control device (ICD) at the outlet of the cistern.

Flows generated that are in excess of the site`s allowable release rate will be stored within a cistern located at the parking garage structure.

At certain locations within the site, the opportunity to store runoff is limited due to grading constraints and building geometry. These locations are generally located at the perimeter of the site where it is necessary to tie into public boulevards and adjacent properties, and it is not always feasible to capture or store stormwater runoff.

In this case, a portion of the building frontage along Scott Street will discharge uncontrolled to the street CBs. This uncontrolled area, 0.006 hectares in total, have a C value of 0.9 (increased by 25% to a maximum of 1.00 for 100 year events). Based on 1:100 year storm uncontrolled flows, the uncontrolled areas generate 2.98 l/s runoff (refer to Section 4.5 for calculation). The cistern has been sized to control water generated during the 1:100-year event, with no overflow leaving the site. Please refer to the SWM calculations in **Appendix D**.

4.5 Inlet Controls

The allowable release rate for the 0.253 Ha site can be calculated as follows:

$\mathbf{Q_{allowable}}$ = **2.78** x **C** x $\mathbf{i_{2yr}}$ x **A** where:

C = 0.5 (pre-development C*)

$\mathbf{I_{2yr}}$ = Intensity of 2-year storm event (mm/hr)

= $732.951 \times (T_c + 6.199)^{0.81}$ = 76.81 mm/hr; where T_c = 10 minutes*

A = Area = 0.253 Ha

= **27.01 L/s**

*based on pre development calculations, see Appendix C

As noted in Section 4.4, a portion of the site will be left to discharge to the surrounding boulevard at an uncontrolled rate.

Based on a 1:100 year event, the flow from the 0.006 Ha uncontrolled areas can be determined as:

$\mathbf{Q_{uncontrolled}}$ = **2.78** x **C** x $\mathbf{i_{100yr}}$ x **A** where:

C = Average runoff coefficient of uncontrolled area = 1.00

$\mathbf{i_{100yr}}$ = Intensity of 100-year storm event (mm/hr)

= $1735.688 \times (T_c + 6.014)^{0.820}$ = 178.56 mm/hr; where T_c = 10 minutes

A = Uncontrolled Area = 0.006 Ha

Therefore, the uncontrolled release rate can be determined as:

$\mathbf{Q_{uncontrolled}}$ = **2.78** x **C** x $\mathbf{i_{100yr}}$ x **A**

= 2.78 x 1.0 x 178.56 x 0.006

= **2.98 L/s**

The maximum allowable release rate from the remainder of the site can then be determined as:

$Q_{max\ allowable}$ = $Q_{restricted} - Q_{uncontrolled}$

= 27.01 L/s – 2.98 L/s

= **24.03 L/s**

4.6 On-Site Detention

As noted in section 4.4 any excess storm water up to the 100-year event is to be stored on-site within the building cistern in order to not surcharge the downstream municipal storm sewer system. As the cistern is located inside the building, coordination with the architect, structural and mechanical engineers will be needed to design the structure and associated inlet control device.

4.6.1 Site Inlet Control

The following Table summarizes the on-site storage requirements during both the 1:5-year and 1:100-year events.

ICD AREA	TRIBUTARY AREA	AVAILABLE STORAGE (M^3)	100-YEAR STORM		5-YEAR STORM	
			RESTRICTED FLOW (L/S)	REQUIRED STORAGE (M^3)	RESTRICTED FLOW (L/S)	REQUIRED STORAGE (M^3)
Cistern	0.25	100	24	97.34	24	39.21
Unrestricted	0.006					
TOTAL	**0.25**	**100**	**24**	**97.34**	**24**	**39.21**

In all instances the required storage is met. The cistern will be fitted with a plug style ICD set at 24 litres/second, as such flow rates have been reduced by 50% when calculating the required storage volumes.

4.6.2 Overall Release Rate

As demonstrated above, the site uses an inlet control device to restrict the 100 year storm event to the criteria approved by the City of Ottawa. Restricted stormwater will be contained onsite by the building cistern. In the 100 year event, there will be no overflow off-site from restricted areas.

The sum of restrictions on the site is 24 l/s, which is less than the allowable release of 24.03 l/s noted in section 4.5.

5 SEDIMENT AND EROSION CONTROL PLAN

During construction, existing storm water conveyance systems can be exposed to significant sediment loadings. A number of construction techniques designed to reduce unnecessary construction sediment loadings may be used such as;

- Filter socks will remain on open surface structures such as manholes and catchbasins until these structures are commissioned and put into use;
- Installation of silt fence, where applicable, around the perimeter of the proposed work area.

During construction of the services, any trench dewatering using pumps will be fitted with a "filter sock." Thus, any pumped groundwater will be filtered prior to release to the existing surface runoff. The contractor will inspect and maintain the filter sock as needed including sediment removal and disposal.

All catchbasins, and to a lesser degree manholes, convey surface water to sewers. Consequently, until the surrounding surface has been completed these structures will be protected with a sediment capture filter sock to prevent sediment from entering the minor storm sewer system. These will stay in place and be maintained during construction and build-out until it is appropriate to remove them.

The Sediment and Erosion Control Plan 132902-C-010 is included in **Appendix E**.

6 CONCLUSIONS

Municipal water, wastewater and stormwater systems required to accommodate the proposed development are available to service the proposed development. Prior to construction, existing sewers are to be CCTV inspected to assess sewer condition.

This report has demonstrated sanitary and storm flows from and water supply to the subject site can be accommodated by the existing infrastructure. Also, the proposed servicing has been designed in accordance with MECP and City of Ottawa current level of service requirements.

The use of lot level controls, conveyance controls and end of pipe controls outlined in the report will result in effective treatment of surface stormwater runoff from the site. Adherence to the sediment and erosion control plan during construction will minimize harmful impacts on surface water.

Based on the information provided herein, the development can be serviced to meet City of Ottawa requirements.

Report prepared by:

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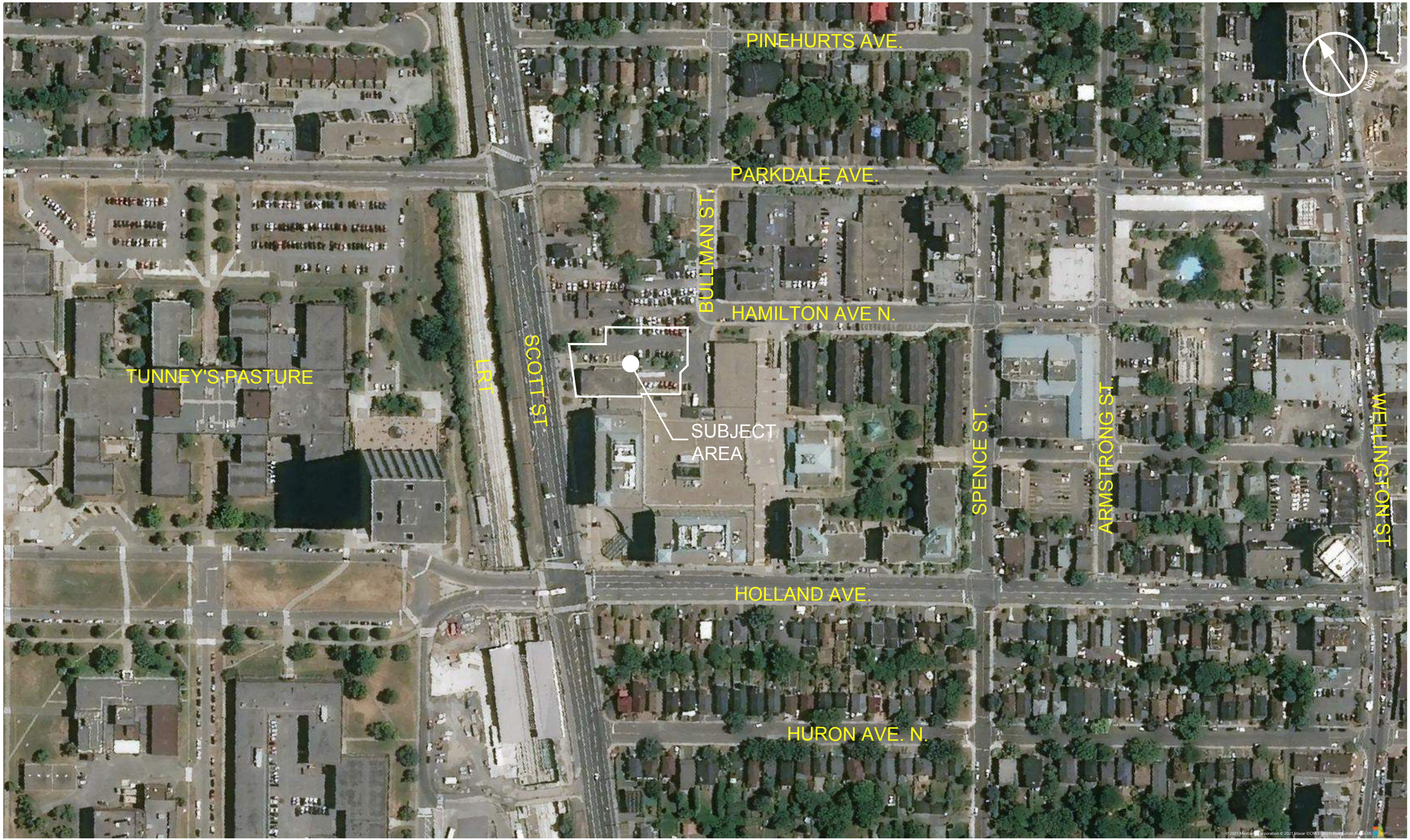
Director, Office Lead

S. E. Labadie, P.Eng
Civil Engineer

APPENDIX A

- Figure 1 – Existing Conditions
- Figure 2 – Site Plan
- City Pre-Consultation Meeting Notes (June 15, 2021)
- City Existing Services Asbuilt Drawings



W:\132902_1546_Scot\7.0_Production\7.03_Design\04_Civil_LAND\Figures\Figure1.dwg Layout Name: FIGURE1 Plot Scale: 1:5.13 Plotted At: 7/7/2022 Last Saved By: ddore Last Saved At: Jul. 7, 22

Scale	Project Title	Drawing Title	Sheet No.
NTS	1546 SCOTT STREET	EXISTING CONDITIONS	FIGURE 1

w: \132902_1546_Scot\7.0_Production\7.03_Design\04_Civil_LAND\Figures\Figure2.dwg Layout Name: FIGURE2 Plot Scale: 1:5.13 Plotted At: 2/9/2023 Last Saved By: ddore Last Saved At: Jul. 7, 22

IEL\2022-06-27 UPDATED\C

4 OVERVIEW
Scale: N.T.S

3 CONTEXT PLAN
Scale: N.T.S

1546 SCOTT STREET
OTTAWA, ON

LEGAL DESCRIPTION
PLAN OF SURVEY
PART OF LOTS 3&4 (NORTH OF BULLMAN STREET) AND PART OF LOTS 3&4 (SOUTH OF SCOTT STREET) REGISTER PLAN 58 AND PART OF LOTS 1290,1292 &1303 REGISTER PLAN 157 CITY OF OTTAWA

SITE DATA	
EXISTING LOT AREA	2,524.5 m²
RESIDENTIAL GFA	14,060 m²
COMMERCIAL GFA	205 m²
TOTAL GFA	14,265 m²
FSI/GFA/LOT AREA	5.7
LOT COVERAGE	1,570 m²
LOT COVERAGE %	62.2%

SETBACKS	GROUND	2ND/3RD	TOWER
FRONT YARD	2.4 m	8.2 m	10.9 m
INTERIOR SIDE YARD	10.2m EAST 0.0 m WEST	1.8 m EAST 4.2 m WEST	4.1 m EAST 8.9 m WEST
REAR	1.2 m	11.6m	11.6 m

BUILDING HEIGHT		REQUIRED (EASL)	PROPOSED (EASL)
MINIMUM	FOR ALL USES WITHIN 400 M OF A RAPID TRANSIT STATION, OTHER THAT A GAS BAR IT IS PERMITTED BY SUBDIVISION	6.7m	148.2
MAXIMUM		99.83m	148.2

LANDSCAPE	PROVIDED	PROVIDED %
AREA	696.0 m²	28%

LANDSCAPE PROVISION FOR PARKING LOT	REQUIRED	PROVIDED
MINIMUM 15% AS PERIMETER OR INTERIOR LANDS AREA	15.0%	18.5%

FLOOR AREA DETAILS

FLOOR LEVEL	FLOOR AREA	COMMERCIAL GFA	RESIDENTIAL GFA	AMENITY INDOOR	AMENITY PRIVATE	AMENITY OUTDOOR	SUITE COUNT 1 BR	2 BR	3 BR
P1	1,126 m²	205 m²							
P2	1,025 m²	0	875 m²		27 m²		3	3	3
P3	1,025 m²	0	875 m²		27 m²		3	3	3
P4	605 m²	0		590 m²		242 m²	0	0	
F5	717 m²	0	586 m²		23 m²		6	4	
F6	717 m²	0	586 m²		23 m²		6	4	
F7	717 m²	0	586 m²		23 m²		6	4	
F8	717 m²	0	586 m²		23 m²		6	4	
F9	717 m²	0	586 m²		23 m²		6	4	
F10	717 m²	0	586 m²		23 m²		6	4	
F11	717 m²	0	586 m²		23 m²		6	4	
F12	717 m²	0	586 m²		23 m²		6	4	
F13	717 m²	0	586 m²		23 m²		6	4	
F14	717 m²	0	586 m²		23 m²		6	4	
F15	717 m²	0	586 m²		23 m²		6	4	
F16	717 m²	0	586 m²		23 m²		6	4	
F17	717 m²	0	586 m²		23 m²		6	4	
F18	717 m²	0	586 m²		23 m²		6	4	
F19	717 m²	0	586 m²		23 m²		6	4	
F20	717 m²	0	586 m²		23 m²		6	4	
F21	717 m²	0	586 m²		23 m²		6	4	
F22	717 m²	0	586 m²		23 m²		6	4	
F23	717 m²	0	586 m²		23 m²		6	4	
F24	717 m²	0	586 m²		23 m²		6	4	
F25	717 m²	0	590 m²		23 m²		6	4	
TOTALS	18,837 m²	205 m²	14,060 m²	590 m²	537 m²	242 m²	132	90	6

AMENITY SPACE

	REQUIRED			PROVIDED			
	RATE/UNIT	# OF UNITS	AREA REQUIRED	COMMUNAL INDOOR	COMMUNAL OUTDOOR	PRIVATE OUTDOOR	TOTAL AR
	6.0 m²	228	1,368 m²	590 m²	242 m²	537 m²	1,369 m
AMENITY SPACE REQUIRED			1,368 m²	TOTAL			1,369 m

LOADING DOCK

REQUIRED	PROVIDED
LOADING DOCK REQUIRED FOR RESIDENTIAL AND COMMERCIAL	1 LOADING DOCK SHARED BY RESIDENTIAL AND COMM

CAR PARKING

RESIDENTIAL PARKING

UNIT TYPES	RATE	# OF UNITS	PARKING REQUIRED
1 BEDROOM	0.0	132	0
2 BEDROOM	0.0	90	
3 BEDROOM	0.0	6	0
SUB-TOTAL		228	0
TOTAL RESIDENTIAL PARKING REQUIRED			0

PROVIDED		
PARKING LEVEL	RESIDENTIAL	PARKING S
SURFACE	0	
P1 LEVEL	5	
P2 LEVEL	48	
P3 LEVEL	48	
P4 LEVEL	25	
TOTAL	126	

VISITOR PARKING

REQUIRED			
	RATE	# OF UNITS MINUS 12	TOTAL SPACES
VISITOR PARKING (0.1 x NUMBER OF UNITS MINUS THE FIRST 12 UNITS	0.1 PER UNIT	216	22
TOTAL VISITOR PARKING REQUIRED			22

PROVIDED	
PARKING LEVEL	PARKING SPACES
SURFACE	5
P1	17
TOTAL	22

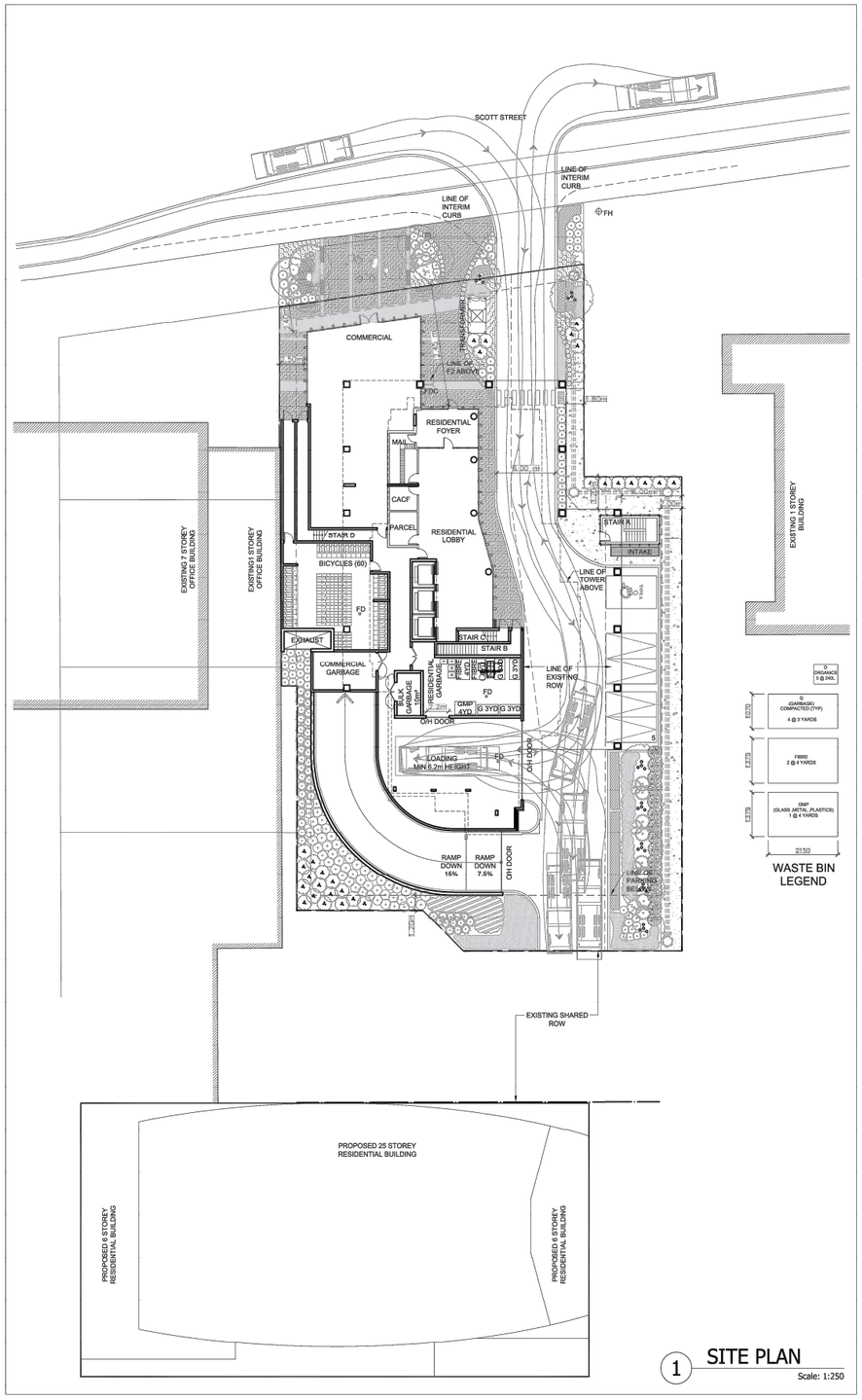
TOTAL PARKING PROVIDED SUMMARY	RESIDENTIAL	VISITOR	TOTAL NUMBER OF PARKING ON SITE
TOTAL	126	22	148

BICYCLE PARKING

RESIDENTIAL	REQUIRED			PROVIDED			
	RATE	# OF UNITS	PARKING REQUIRED	PARKING LOCATION	VERTICAL	HORIZONTAL	NO. OF PARKING
	0.5 PER UNIT	228	114.00	OUTDOOR		6	2
				P1-INDOOR	39	21	60
				P1- INDOOR	102	66	168
TOTAL RESIDENTIAL BICYCLE PARKING REQUIRED			114	TOTAL			230

COMMERCIAL PARKING	REQUIRED			PROVIDED	
	RATE	AREA	PARKING REQUIRED	PARKING LOCATION	NO. OF PARKING
COMMERCIAL 1 PER 250 m2	1 PER 250 m2	205 m²	1	OUTDOOR	5

2 SITE STATISTICS



1 SITE PLAN
Scale: 1:250

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Site Grading and Servicing information is for reference only. Refer to Site Grading Plan Drawing C-200, Storm Drainage Area Plan C-500 and Site Servicing Plan Drawing C-001 prepared by IBI GROUP, dated Aug 18, 2022, for the purpose of obtaining site grading and servicing information.

Landscaping information is for reference only. Refer to the Landscape Plan Drawings L-1, L-2, LD1, LD2 and LD3 prepared by IBI GROUP dated Aug 18, 2022, for full landscape details.

Building classification:
OBC 3.2.2.42, Group C, Any Height, Any Area, Sprinklered

DATE	No.	ISSUE
2022-08-18	02	SPA/ZBA
2021-11-24	01	SPA/ZBA

ARCHITECT:
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Toronto, ON M4T 1M9
PHONE: 647.352.3350

OWNER:
REID'S Heritage Properties

PROJECT NAME:
EVOKE

1546 SCOTT STREET OTTAWA,ON
Based on :
TOPOGRAPHY SURVEY OF PART OF LOTS 3&4 (NORTH OF BULLMAN STREET) AND PART OF LOTS 3 & 4 (SOUTH OF SCOTT STREET) REGISTERED PLAN 58 & PART OF LOTS 1290, 1292 & 1303 REGISTERED PLAN 157 CITY OF OTTAWA.
PREPARED BY FAIRHILL, MOFFATT & WOODLAND LIMITED, ONTARIO LAND SURVEYORS
JAN 21, 2020

DRAWING TITLE:
SITE PLAN
CONTEXT PLAN
SITE STATISTICS

PRINT DATE: 2022-08-18

NORTH

ONTARIO ASSOCIATION OF ARCHITECTS MICHEL COGAN LICENCE 7284

PROJ. No.: 1085
CITY FILE #: D07-12-21-0216
CITY PLAN #: 18688
SCALE: 1:250, AS NOTED
DRAWN BY: MC
DWG NO. A1.01
SPA AND ZBA

Scale	Project Title	Drawing Title	Sheet No.
NTS	1546 SCOTT STREET	SITE PLAN	FIGURE 2

Samantha Labadie

From: Tess Gilchrist
Sent: Wednesday, May 11, 2022 4:26 PM
To: Samantha Labadie
Subject: FW: Pre-consultation follow-up - 1546 Scott Street

Tess Gilchrist MCIP RPP

Associate - Manager, Planning

IBI GROUP
650 Dalton Avenue
Kingston ON K7M 8N7 Canada
tel +1 613 531 4440 ext 63309

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NOTE: Ce courriel peut contenir de l'information privilégiée et confidentielle. Si vous avez recu ce message par erreur, veuillez le mentionner immédiatement à l'expéditeur et effacer ce courriel.

From: Demetrius Yannoulopoulos <dyannoulopoulos@IBIGroup.com>
Sent: Tuesday, June 15, 2021 8:59 AM
To: Andrew Arklie <aarklie@reidsproperties.com>; Tess Gilchrist <tess.gilchrist@ibigroup.com>; Melissa MacGregor <mmacgregor@reidsproperties.com>
Cc: Scott Reid <scott@reidsproperties.com>; Victor Labreche <Victor.Labreche@ibigroup.com>; David Hook <DHook@IBIGroup.com>
Subject: RE: Pre-consultation follow-up - 1546 Scott Street

All
Had a call yesterday with Shawn Wessel who will be the engineering reviewer on this site, also joining us was Eric Tousignant who is a senior infrastructure manager.
Eric joined us as he is the model keeper for the sanitary system for the City.
Eric advised he did not anticipate any issues with the existing sanitary system accommodating the increase in density, he had reviewed this area in detail a while back and he would look in his files and provide some notes. Eric did note the City does not currently have a mechanism to allocate capacity in the sanitary system, should the development be delayed for a long period of time (years) and other redevelopments in the area receive approval there is always the chance of capacity being used up.
Shawn noted the site would be subject to the typical City infil requirement for Storm water, the site will have to restrict flow from the site such that the 1:100yr flow will be restricted to the equivalent of 1:2 yr event with C=0.5. the usual freeboards (0.3m from openings to max water levels) will be required as will sensitivity review of the extent of the 1:100+20% event.
Due to the proximity of a major watermain (1067Dia) in Scott street and anticipated excavation for underground parking an additional $25M insurance policy will be required (in addition to the standard $5M).
Also due to the proximity to the LRT, vibration analysis and monitoring will be required, strongly advise pre and post CCTV of all adjacent infrastructure to note condition of infrastructure in case there is future problems.
In addition to the servicing study, noise (road and stationary), and Wind will be required.
All transportation comments will be provided by Wally
Shaw will prepare formal notes and circulate through the City planner.

Thx
D

Demetrius Yannoulopoulos P.ENG.

Director - Office Lead
mob +1 613 447 0504

A Message from IBI Group's CEO on COVID-19: https://www.ibigroup.com/covid19-response

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400-333 Preston Street
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NOTE: Ce courriel peut contenir de l'information privilégiée et confidentielle. Si vous avez recu ce message par erreur, veuillez le mentionner immédiatement à l'expéditeur et effacer ce courriel.

From: Andrew Arklie <aarklie@reidsproperties.com>
Sent: Tuesday, June 15, 2021 7:37 AM
To: Demetrius Yannoulopoulos <dyannoulopoulos@IBIGroup.com>; Tess Gilchrist <tess.gilchrist@ibigroup.com>; Melissa MacGregor <mmacgregor@reidsproperties.com>
Cc: Scott Reid <scott@reidsproperties.com>; Victor Labreche <Victor.Labreche@ibigroup.com>; David Hook <DHook@IBIGroup.com>
Subject: RE: Pre-consultation follow-up - 1546 Scott Street

Hi Demetrius,

How was the call yesterday? Do you have an update for us?

Thanks,

Andrew

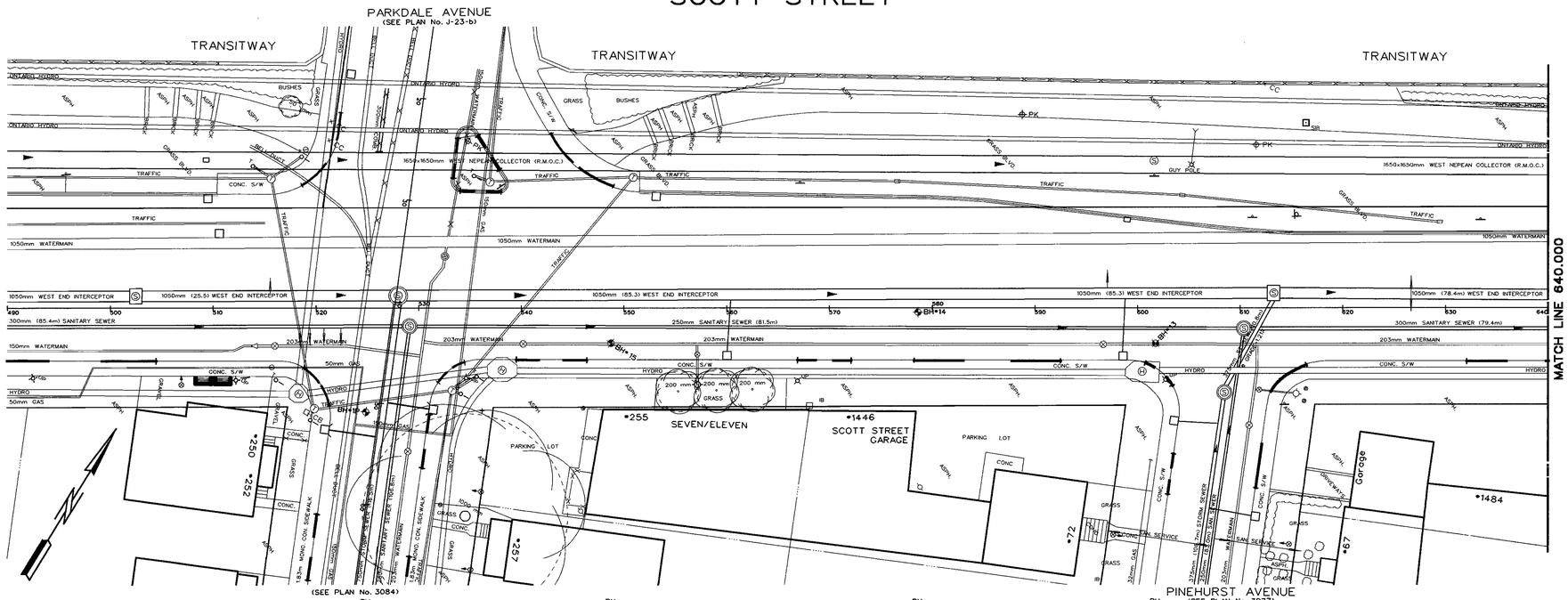
From: Demetrius Yannoulopoulos <dyannoulopoulos@IBIGroup.com>
Sent: June 11, 2021 8:18 AM
To: Andrew Arklie <aarklie@reidsproperties.com>; Tess Gilchrist <tess.gilchrist@ibigroup.com>; Melissa MacGregor <mmacgregor@reidsproperties.com>
Cc: Scott Reid <scott@reidsproperties.com>; Victor Labreche <Victor.Labreche@ibigroup.com>; David Hook <DHook@IBIGroup.com>
Subject: RE: Pre-consultation follow-up - 1546 Scott Street

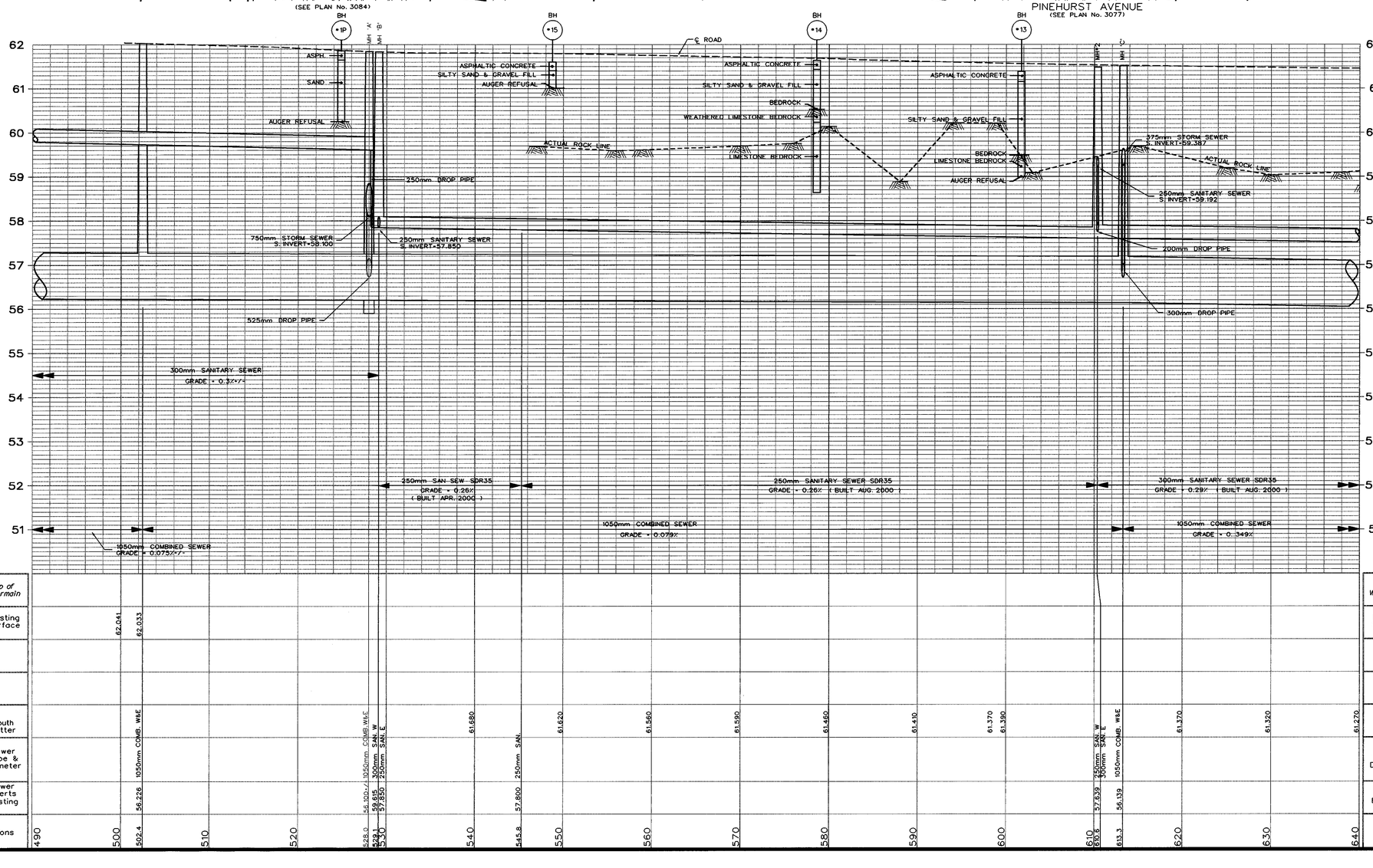
All
City staff had to reschedule our Friday call to Monday.
Thx
D

Demetrius Yannoulopoulos P.ENG.

3200 (2) SCOTT STREET

SCOTT STREET





Elevations	490	500	510	520	528.0	529.1	530	540	545.8	550	560	570	580	590	600	610	613.3	620	630	640
Top of Watermain																				
Existing Surface		62.041	62.033																	
South Gutter					56.300+/-			61.680		61.620	61.560	61.580	61.460	61.410	61.370	61.390		61.370	61.320	61.270
Sewer Type & Diameter		1050mm COMB. W&E			1050mm COMB. W&E	300mm SAN. W	250mm SAN. E		250mm SAN.							250mm SAN. W	300mm SAN. E	1050mm COMB. W&E		
Sewer Inverts Existing		56.226				59.615	57.850		57.800							57.849	56.139			
Stations	490	500	502.4	510	520	528.0	529.1	530	540	545.8	550	560	570	580	590	600	610	613.3	620	630	640

Revisions:				
No.	Date	Description	Drawn By	Approved By

Design:

Designed By	Date	Checked By	Date
REG REHBEIN	MAR 99 & JAN 00	REG REHBEIN (ALL)	JAN 00
Survey Detail By	Date	Field Checked By	Date
JOHN FRANCE	JULY 98	DON BROWN	MAY 99
Drafting By	Date	Checked By	Date
DON BROWN	MAY 99 & JAN 00	REG REHBEIN (ALL)	JAN 00

Chief Design & Construction Engineer
H. V. Pascoe, P.Eng.

Final Measurements:

Construction Type		Inspector	
SEWERS/WATERBROAD		G.QUIROUETTE/R.CORMIER/D.BROWN	
Work Commenced		Project Manager	
MAY 00		R.REHBEIN	
Work Completed		Field Book *	
AUG 00			
Contractor		Date	
GREENBELT		FEB. 01	
Drafting Revisions	Date	Checked By	
D.BROWN	FEB. 01	R. REHBEIN/R. ZORGEL	

As Built Notes:

1. Soil information shown is not guaranteed and contractors are advised to collect additional soils information as deemed necessary.
2. Soil information taken from : TROW MAR 98
3. This plan supercedes (in whole or in part) plan */////////
4. While illustrations and utilities shown are taken from the best available information, they cannot be guaranteed.
5. The actual rock line was recorded during construction of the existing SEWERS & WATERMAIN
6. Boreholes taken prior to construction.
7. See typical cross sections for road structure material depths.
8. All Water information and locations cannot be guaranteed. Please contact the Region of Ottawa Carleton, Environmental Section.

Legal Survey Notes:

Boundary information shown hereon has been compiled and calculated from Teranet data and not based on an actual survey.

Distances shown to survey monuments are for reference purposes only, survey monuments may not define property boundaries.

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THIS IS NOT A PLAN OF SURVEY

This plan was compiled from plans and documents recorded in the Land Registry System and has been prepared for property indexing purposes only.

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City of Ville d' **Ottawa**

Department of Urban Planning & Public Works
Engineering Branch
Design And Construction Division
111 SUSSEX DRIVE, SUSSEX PAVILION, 7TH FLOOR, OTTAWA, ONTARIO. K1N 5A1

E.M. Robinson	W.R. Cole, P.Eng.
Commissioner	Branch Director

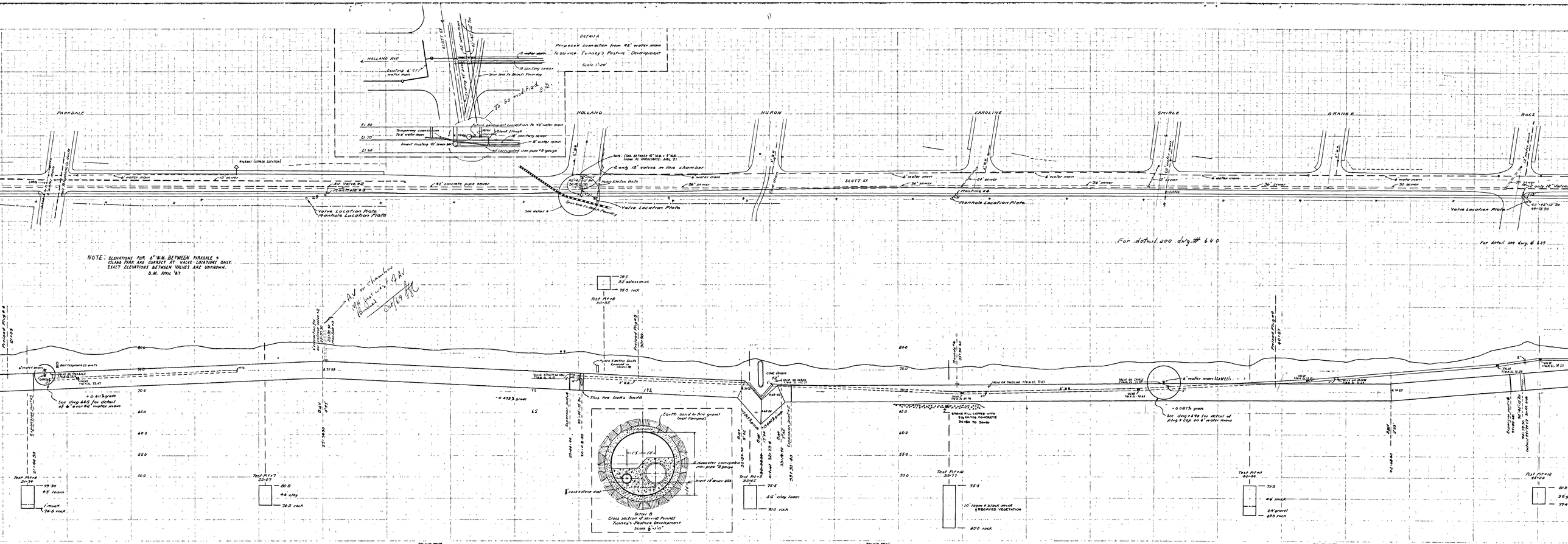
SCOTT STREET

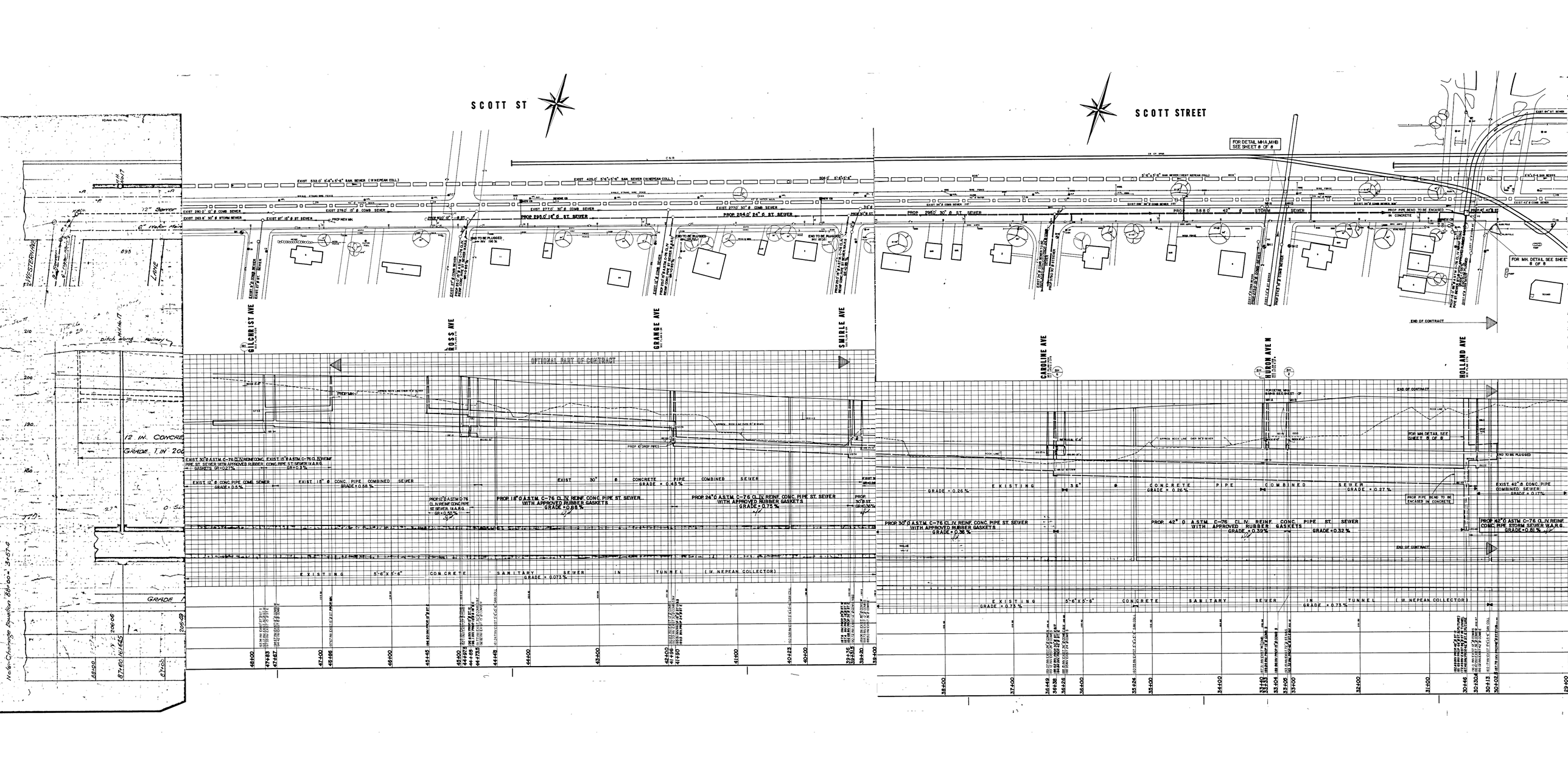
FROM PARKDALE AVENUE TO STATION 640.00

Contract No:	Survey Books:	Scales: (See note)	Plan No:
00C3200		HOR. 1:250 VERT. 1:50	3200 Sheet 2 of 8

*This drawing was created using MicroStation 95 V.5.05.01.65 (Contract Sheet Revision Date 971001)

File name: 3200SN2.DGN
Reference: OTTEBDR.DGN
3200BASE.dgn 3200PROF.dgn


Detail A
Proposed connection from 48" water main
To service Tunney's Pasture Development
Scale 1"=20'
HOLLAND AVE
Existing 6" C.I. water main
48" water main
48" sanitary sewer
Sour line To Beach Flow-way
To be modified
Future permanent connection to 48" water main
Temporary connection to 8" water main
Invert existing 42" sewer
8" sanitary sewer
8" water main
60" corrugated iron pipe 8 gauge
El. 80
El. 70
El. 60
PARKDALE
HOLLAND
HURON
CAROLINE
SMIRLE
GRANGE
ROSS
Hubert (APPROX LOCATION)
6" water main
42" sewer
40" concrete pipe sewers
Air Valve #2
Manhole #3
Valve Location Plate
Manhole Location Plate
See detail A
Note: CONC. BETWEEN 42" W.M. & 8" W.M.
SHOWN AS AMBULANCE - APRIL '67
2 only 12" valves in this chamber
Hydro Electric Duct
36" sewer
SCOTT ST.
Manhole #4
Manhole Location Plate
24" sewer
Valve Location Plate
For detail see dwg. # 640
For detail see dwg. # 639
NOTE: ELEVATIONS FOR 6" W.M. BETWEEN PARKDALE & ELMS PARK ARE CORRECT AT VALVE LOCATIONS ONLY. EXACT ELEVATIONS BETWEEN VALVES ARE UNKNOWN.
D.M. APRIL '67
AV in chamber
MH last two
Backfilled
Oct 6 '67
Test Pit #8
20+38
79-20
83' loam
1' muck
74.6 rock
Test Pit #7
23+67
80.8
44 clay
76.2 rock
Test Pit #6
30+93
78.5
32 ashes+muck
76.9 rock
Test Pit #5
32+65
78.5
55' clay loam
70.0 rock
Test Pit #10
35+73
75.5
10' loam & block stone
& BRUSH VEGETATION
65.0 rock
Test Pit #11
40+98
76.9
46' muck
24' gravel
69.5 rock
Test Pit #12
43+00
80.5
38.9
77.4
Earth sand or fine gravel (well Tamped)
Concrete
Reinforcing
Rubble stone wall
6" concrete
S. Asbestos corrugated iron pipe 12 gauge
Invert 18" sewer 65%
Detail B
Cross section of service Tunnel
Tunney's Pasture Development
Scale 1"=10'
Project Mile 2165
Project Mile 2+30
Project Mile 4+01
Project Mile 4+87
Expansion joints
Elev. 78.5
Elev. 76.9
Elev. 75.47
Elev. 73.89
Elev. 72.31
Elev. 70.73
Elev. 69.15
Elev. 67.57
Elev. 65.99
Elev. 64.41
Elev. 62.83
Elev. 61.25
Elev. 59.67
Elev. 58.09
Elev. 56.51
Elev. 54.93
Elev. 53.35
Elev. 51.77
Elev. 50.19
Elev. 48.61
Elev. 47.03
Elev. 45.45
Elev. 43.87
Elev. 42.29
Elev. 40.71
Elev. 39.13
Elev. 37.55
Elev. 35.97
Elev. 34.39
Elev. 32.81
Elev. 31.23
Elev. 29.65
Elev. 28.07
Elev. 26.49
Elev. 24.91
Elev. 23.33
Elev. 21.75
Elev. 20.17
Elev. 18.59
Elev. 17.01
Elev. 15.43
Elev. 13.85
Elev. 12.27
Elev. 10.69
Elev. 9.11
Elev. 7.53
Elev. 5.95
Elev. 4.37
Elev. 2.79
Elev. 1.21
Elev. 0.37
Valve Elev. 71.47
Valve Elev. 71.81
Valve Elev. 71.33
Valve Elev. 70.73
Valve Elev. 70.25
Valve Elev. 69.65
Valve Elev. 68.57
Valve Elev. 67.49
Valve Elev. 66.41
Valve Elev. 65.33
Valve Elev. 64.25
Valve Elev. 63.17
Valve Elev. 62.09
Valve Elev. 61.01
Valve Elev. 59.93
Valve Elev. 58.85
Valve Elev. 57.77
Valve Elev. 56.69
Valve Elev. 55.61
Valve Elev. 54.53
Valve Elev. 53.45
Valve Elev. 52.37
Valve Elev. 51.29
Valve Elev. 50.21
Valve Elev. 49.13
Valve Elev. 48.05
Valve Elev. 46.97
Valve Elev. 45.89
Valve Elev. 44.81
Valve Elev. 43.73
Valve Elev. 42.65
Valve Elev. 41.57
Valve Elev. 40.49
Valve Elev. 39.41
Valve Elev. 38.33
Valve Elev. 37.25
Valve Elev. 36.17
Valve Elev. 35.09
Valve Elev. 34.01
Valve Elev. 32.93
Valve Elev. 31.85
Valve Elev. 30.77
Valve Elev. 29.69
Valve Elev. 28.61
Valve Elev. 27.53
Valve Elev. 26.45
Valve Elev. 25.37
Valve Elev. 24.29
Valve Elev. 23.21
Valve Elev. 22.13
Valve Elev. 21.05
Valve Elev. 19.97
Valve Elev. 18.89
Valve Elev. 17.81
Valve Elev. 16.73
Valve Elev. 15.65
Valve Elev. 14.57
Valve Elev. 13.49
Valve Elev. 12.41
Valve Elev. 11.33
Valve Elev. 10.25
Valve Elev. 9.17
Valve Elev. 8.09
Valve Elev. 7.01
Valve Elev. 5.93
Valve Elev. 4.85
Valve Elev. 3.77
Valve Elev. 2.69
Valve Elev. 1.61
Valve Elev. 0.53
Valve Elev. -0.55
Valve Elev. -1.63
Valve Elev. -2.71
Valve Elev. -3.79
Valve Elev. -4.87
Valve Elev. -5.95
Valve Elev. -7.03
Valve Elev. -8.11
Valve Elev. -9.19
Valve Elev. -10.27
Valve Elev. -11.35
Valve Elev. -12.43
Valve Elev. -13.51
Valve Elev.


SCOTT ST
SCOTT STREET
GILCHRIST AVE
BOSS AVE
GRANGE AVE
SMIRLE AVE
CAROLINE AVE
HURON AVE N
HOLLAND AVE
EXIST 633.0' 5'-6"x5'-6" SAN. SEWER (W.NEPEAN COLL.)
EXIST 435.0' 5'-6"x5'-6" SAN. SEWER (W.NEPEAN COLL.)
EXIST 280.0' 15" Ø COMB SEWER
EXIST 243.8' 30" Ø STORM SEWER
EXIST 276.0' 15" Ø COMB SEWER
EXIST 277.0' 30" Ø COMB SEWER
PROP 295.0' 16" Ø ST. SEWER
PROP 264.0' 24" Ø ST. SEWER
PROP 588.0' 42" Ø STORM SEWER
PROP 298.0' 30" Ø ST. SEWER
FOR DETAIL MHA,MHB SEE SHEET 8 OF 8
FOR MH. DETAIL SEE SHEET 8 OF 8
END OF CONTRACT
OPTIONAL END OF CONTRACT
EXIST 30" Ø CONCRETE PIPE COMBINED SEWER GRADE = 0.45 %
EXIST 15" Ø CONC. PIPE COMBINED SEWER GRADE = 0.68 %
EXIST 12" Ø CONC PIPE COMB. SEWER GRADE = 0.5 %
EXIST 30" Ø A.S.T.M. C-76 CL.IV REINF.CONC. PIPE ST. SEWER WITH APPROVED RUBBER GASKETS GR=0.27%
PROP 12" Ø A.S.T.M. C-76 CL.IV REINF. CONC. PIPE SEWER, W.A.R.G. GR = 0.50 %
PROP 18" Ø A.S.T.M. C-76 CL.IV REINF. CONC. PIPE ST. SEWER WITH APPROVED RUBBER GASKETS GRADE = 0.68 %
PROP 24" Ø A.S.T.M. C-76 CL.IV REINF. CONC. PIPE ST. SEWER WITH APPROVED RUBBER GASKETS GRADE = 0.75 %
PROP 30" Ø ST. GR=0.36%
EXISTING 5'-6"X5'-6" CONCRETE SANITARY SEWER IN TUNNEL (W. NEPEAN COLLECTOR) GRADE = 0.073 %
EXISTING GRADE = 0.26 %
EXISTING 3.5" Ø CONCRETE PIPE COMBINED SEWER GRADE = 0.26 %
PROP. 42" Ø A.S.T.M. C-76 CL. IV. REINF. CONC. PIPE ST. SEWER WITH APPROVED RUBBER GASKETS GRADE = 0.39 %
PROP 30" Ø A.S.T.M. C-76 CL.IV. REINF. CONC. PIPE ST. SEWER WITH APPROVED RUBBER GASKETS GRADE = 0.36 %
EXIST. 42" Ø CONC. PIPE COMBINED SEWER GRADE = 0.17%
PROP 42" Ø A.S.T.M. C-76 CL.IV REINF. CONC. PIPE STORM SEWER W.A.R.G. GRADE = 0.81 %
EXISTING GRADE = 0.75 % 5'-6"X5'-6" CONCRETE SANITARY SEWER IN TUNNEL (W. NEPEAN COLLECTOR) GRADE = 0.75 %
PROP PIPE BEND TO BE ENCASED IN CONCRETE
END TO BE PLUGGED
12" Sanitary
6" Water Main
12 IN. CONCRE
GRADE 1 IN 20
ditch along Railway
WESTERN AVE
LANE
GRADE 1
Hole Chainage Equation 28+00.0 = 3+67.8

RECORD DRAWING

Robinson Consultants

NO.	REVISIONS	BY	DATE
1	ISSUED FOR CIRCULATION	D.E.P.	12.13.02
2	ISSUED FOR MOE APPROVAL	D.E.P.	02.24.03
3	ISSUED FOR TENDER	D.E.P.	03.10.03
4	RECORD DRAWING PER CITY INSPECTOR FIELD PRINT	W.C.	17.DEC.04

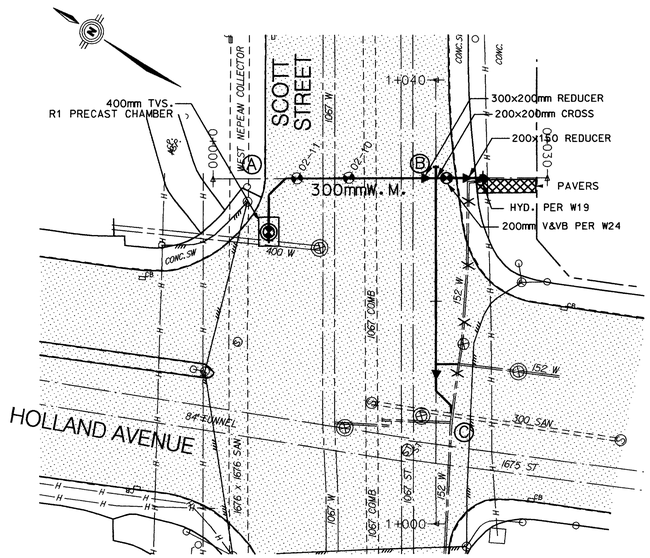
NOTE:
The location of the utilities is approximate only, the exact location should be determined by consulting the municipal authorities and utility companies concerned.
The contractor shall prove the location of utilities and shall be responsible for adequate protection from damage.

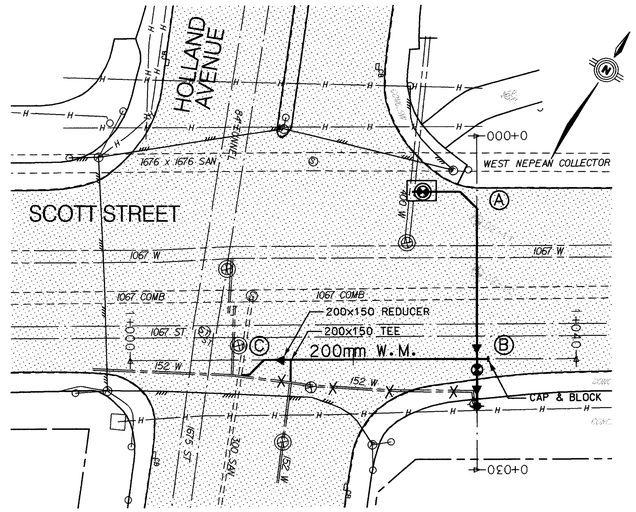
SCOTT STREET VALVE CONTRACT
ABC REPLACEMENT PROGRAM

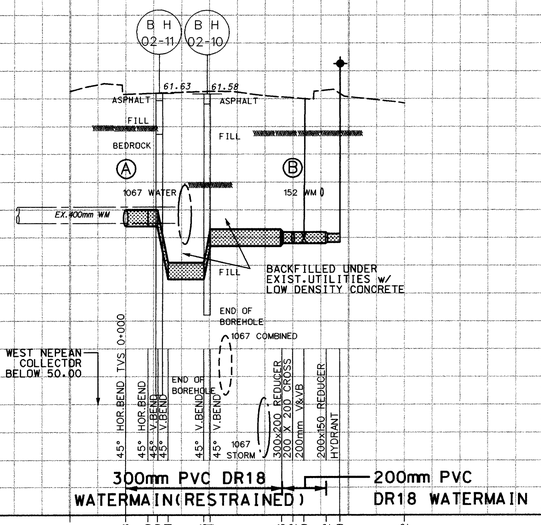
HOLLAND @ SCOTT STREET

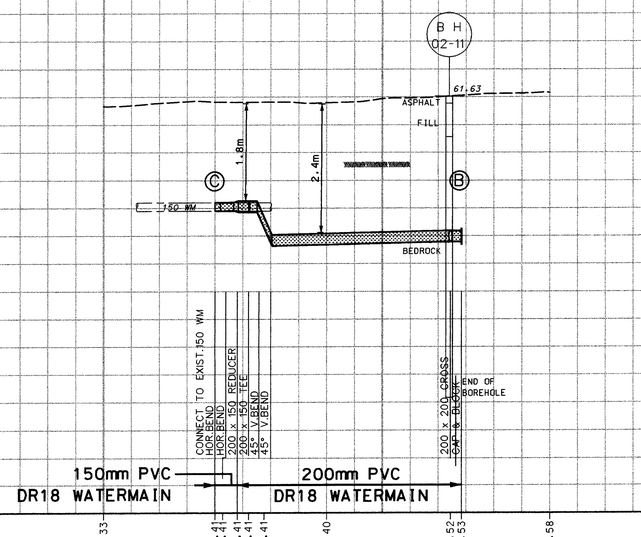
R. G. HEWITT, P.ENG. Director Infrastructure Services		W.R. NEWELL, P.ENG. Manager Construction Services	
Dwn: IDM	Chkd:	Des: WGC	Chkd: DEP

Ottawa
CONTRACT NO. ISB02-5180
DWG. NO. 11970-02
SHEET OF
Date: March, 2003
Scale: HORIZONTAL 1:250 VERTICAL 1:50









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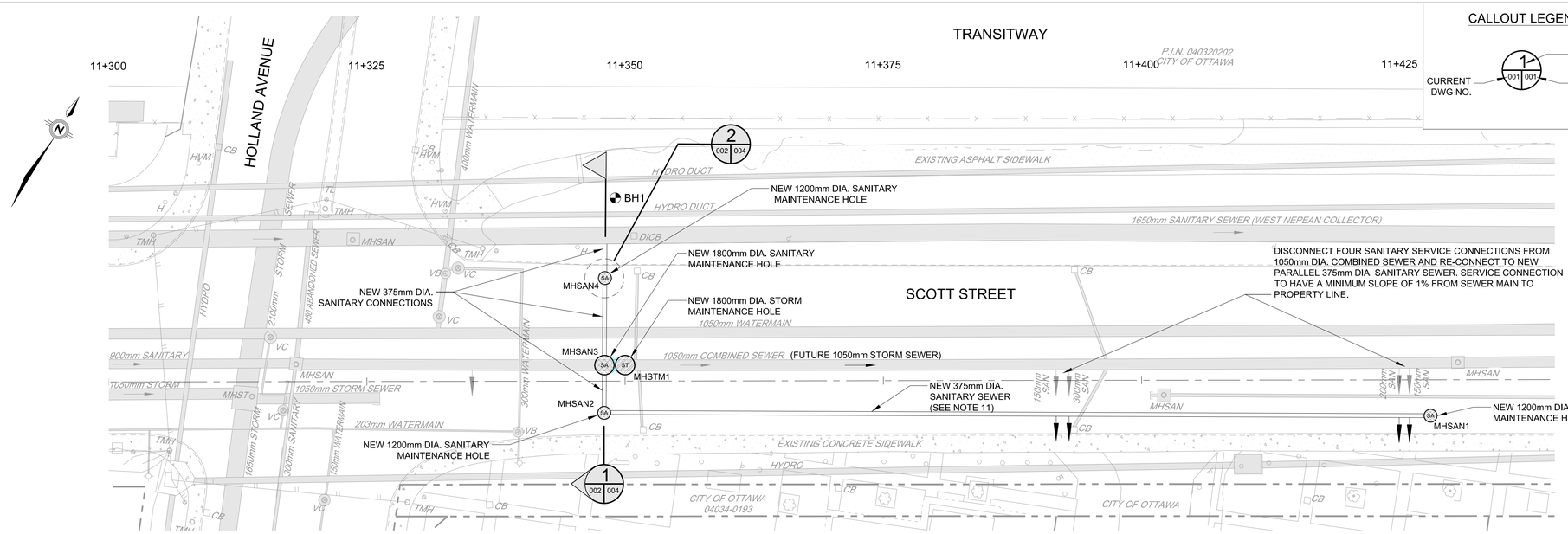
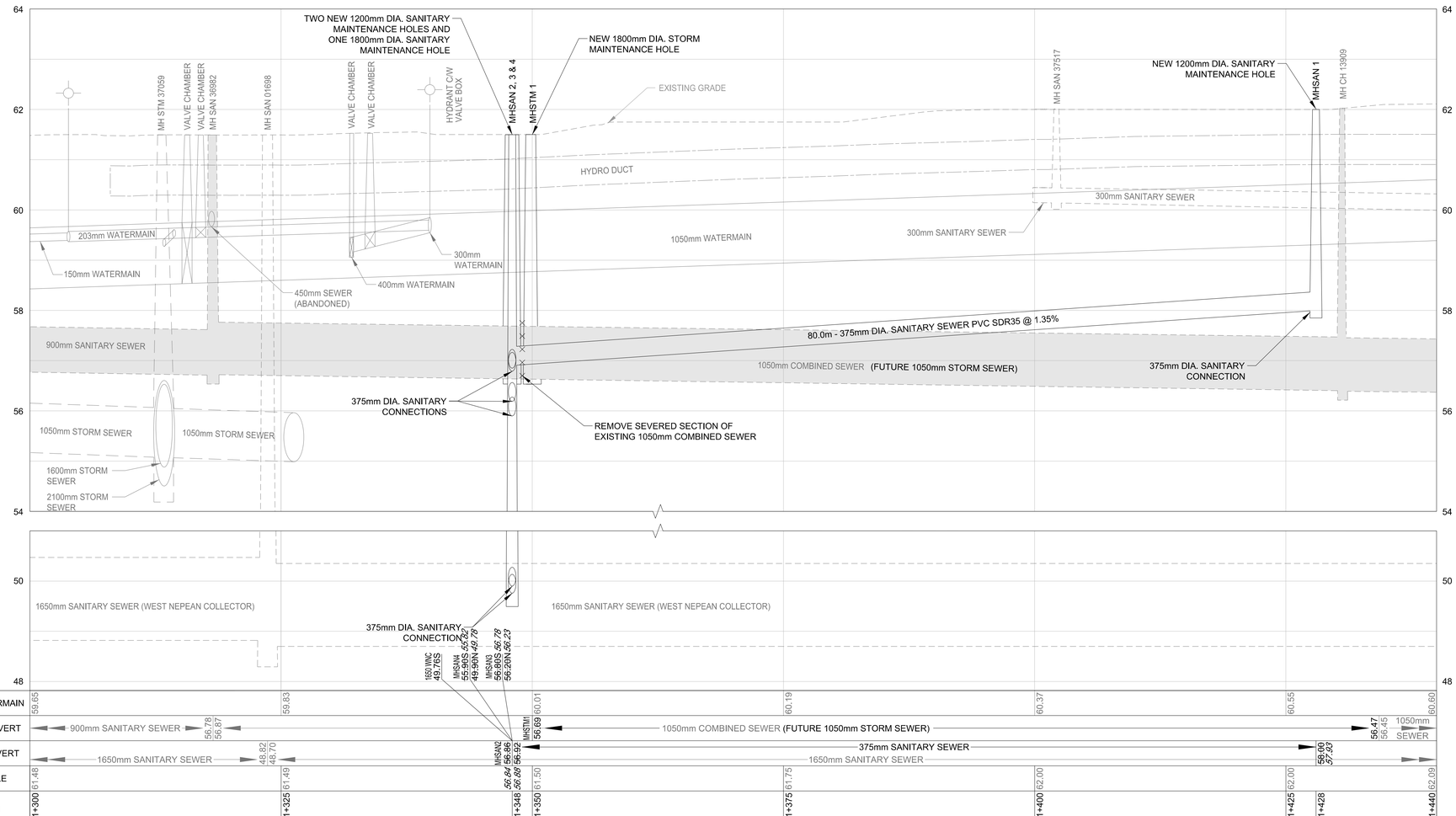
08-8954 C002 PLAN PROFILE





| | | |

NOTES

SCOTT STREET

PARKDALE AVENUE

MATCH LINE 21+00

MATCH LINE 31+00

GOVT BLDG

CONC RET WALL

PROP 20' EASEMENT

PROP 533 84" STORM TUNNEL PROP 109.76 84" STORM

SHAFT No 2

125,000 VOLTS HYDRO

125,000 VOLTS (HYDRO)

EXIST 5'6" X 5'6" SEWER

EXIST 42 COMB SEWER

EXIST 12 COMB SEWER

EXIST 6 WATER

EXIST 2 GAS

EXIST 12" STORM

EXIST 8" STORM

REMOVE

BEGINNING CURB 21+40

CONTROL MON

PARKING AREA

PARKING AREA

RENE SOULIET CONST

CAMBELL MOTORS

BREWER'S RETAIL

FENCE

HYDRO MH

SIGN

LIGHT

CB

MH

FH

WATER VALVE

GAS VALVE

BELL

HYDRO

SEWER

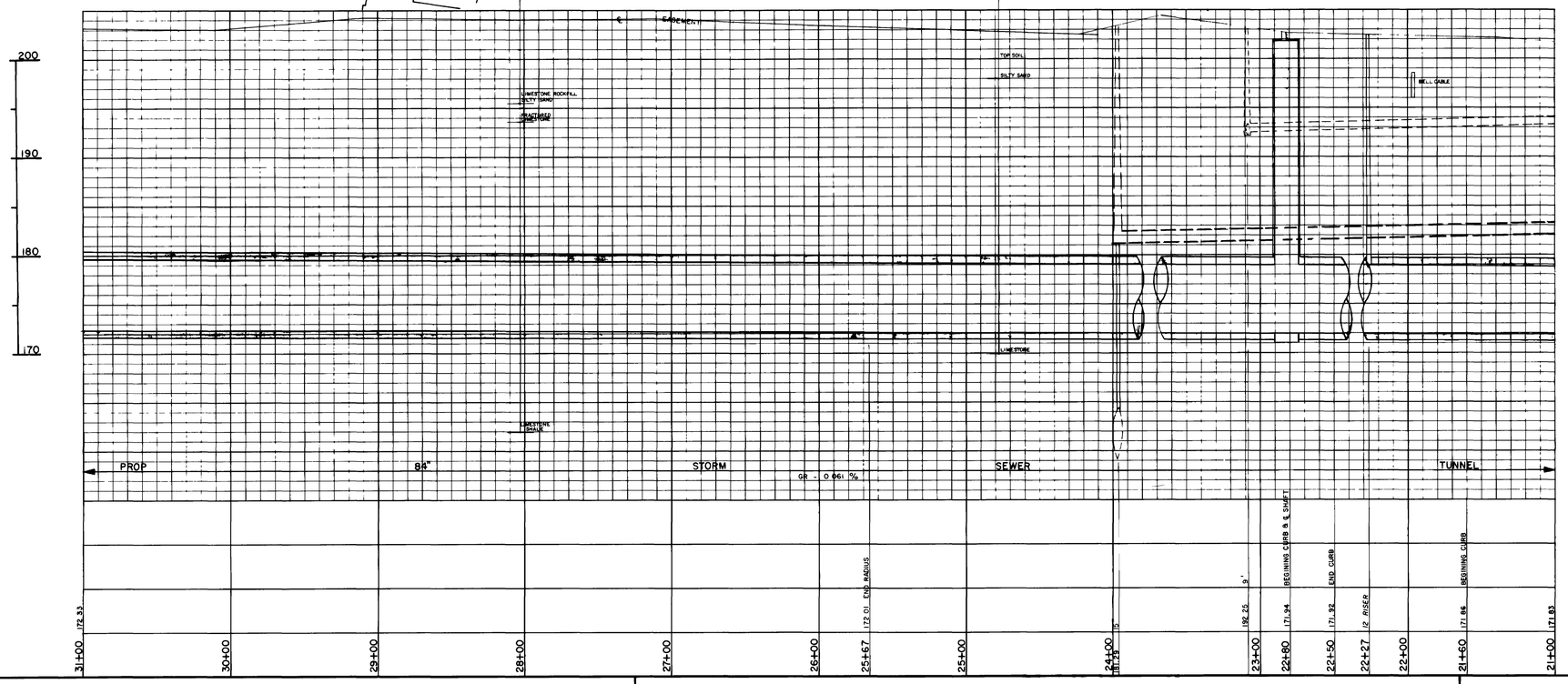
COMB

WATER

GAS

STORM

TUNNEL



DATE	DESCRIPTION	DRAWN BY	APPROVED BY
MAY 14/74	12" RISER ADDED	RPL	
MAR 20/74	PROP. STORM TUNNEL RELOCATED	RPL	

REVISIONS

NOTE
UTILITIES SHOWN ARE TAKEN FROM BEST AVAILABLE RECORDS CONTRACTOR IS REQUESTED TO CHECK WITH ALL UTILITY COMPANIES BEFORE DIGGING

ELEVATIONS: ROAD GRADE | SURFACE | INVERT | STATIONS

DESIGNED BY	DATE
ROAD GRADE	
SANITARY SEWER	
STORM SEWER	

CITY OF OTTAWA
ENGINEERING DEPARTMENT
SEWER BRANCH

HINTONBURGH CENTRAL
STAGE II

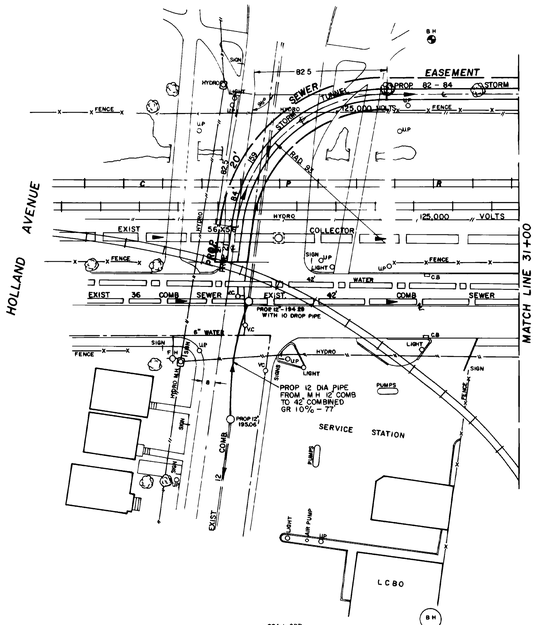
SENIOR DESIGN ENGINEER
ENGINEER 7 OF SEWER BRANCH
ENGINEER 7 OF ROADWAYS
T.H. DOBBIN, P.Eng.
CITY ENGINEER

DRAWN BY R.P.L.
CHECKED BY
DATE MAY 22/73
SURVEY BOOKS

SCALES HOR 40 = 1 VERT 6 = 1
PLAN No H-38-a
SHEET 3 of 10

NOTES

SCOTT STREET



DATE	DESCRIPTION	DRAWN BY	APPROVED BY
JAN 30/74	EXTENSION TO CROSS C.P.R. R of W	R.P.L.	
AUG 21/73	PROP 12 PI PE ADDED FROM EXIST 42 COMB SEWER TO EXIST 12 COMB SEWER	D.J.D.	

REVISIONS

NOTE
UTILITIES SHOWN ARE TAKEN FROM BEST AVAILABLE RECORDS CONTRACTOR IS REQUESTED TO CHECK WITH ALL UTILITY COMPANIES BEFORE DIGGING

ELEVATIONS: ROAD GRADE / SURFACE / INVERT / STATIONS

DESIGNED BY	DATE
ROAD GRADE	
SANITARY SEWER	
STORM SEWER	

CITY OF OTTAWA
ENGINEERING DEPARTMENT
SEWER BRANCH

MINTONBURGH CENTRAL
STAGE II

SENIOR DESIGN ENGINEER
ENGINEER IN CHARGE OF ROADWAYS
T.H. DOBBIN, P. Eng.
CITY ENGINEER

DRAWN BY R.P.L.
CHECKED BY
DATE MAY 22/73
SURVEY BOOKS

SCALES HOR 40=1 VERT 6=1
PLAN No. H-38-a
SHEET 4 of 10

APPENDIX B

- Watermain Demand Calculation Sheets
- FUS Calculation
- Boundary Conditions from the City of Ottawa
- Correspondence regarding Building Fire Resistivity
- Correspondence regarding Building Sprinkler System
- Correspondence regarding Cistern Backwater Valve

WATERMAIN DEMAND CALCULATION SHEET

IBI GROUP
333 PRESTON STREET
OTTAWA, ON
K1S 5N4

PROJECT : 1546 Scott Street
LOCATION : City of Ottawa

FILE: 132902-6.4.4
DATE PRINTED: 2023-02-09
DESIGN: 2023-02-09
PAGE : 1 OF 1

NODE	RESIDENTIAL				NON-RESIDENTIAL			AVERAGE DAILY DEMAND (l/s)			MAXIMUM DAILY DEMAND (l/s)			MAXIMUM HOURLY DEMAND (l/s)			FIRE DEMAND
	1-BD	2-BD	3-BD	POP'N	INDTRL (ha.)	COMM. (m^2)	RETAIL (m^2)	Res.	Non-res.	Total	Res.	Non-res.	Total	Res.	Non-res.	Total	(l/min)
BUILDING	132	90	6	392		205		1.27	0.01	**1.28**	3.18	0.01	**3.19**	6.99	0.02	**7.01**	**5,000**

ASSUMPTIONS

RESIDENTIAL DENSITIES

Apartment (1 Bedroom)	1.4	p / p / u
Apartment (2 Bedroom)	2.1	p / p / u
Apartment (3 Bedroom)	3.1	p / p / u

** Residential Daily Demand reduced to coincide with current waste water guidelines

AVG. DAILY DEMAND

Residential:**	280	l / cap / day
Industrial:		l / ha / day
Commercial:	2,800	l / 1000m^2 / day
Retail:	2,500	l / 1000m^2 / day

MAX. DAILY DEMAND

Residential:	700	l / cap / day
Industrial:		l / ha / day
Commercial:	4,200	l / ha / day
Retail:	3,750	l / 1000m^2 / day

MAX. HOURLY DEMAND

Residential:	1,540	l / cap / day
Industrial:		l / ha / day
Commercial:	7,560	l / ha / day
Retail:	6,750	l / 1000m^2 / day

FIRE FLOW

From FUS Calculation	5,000	l / min

Fire Flow Requirement from Fire Underwriters Survey

1546 Scott Street

Floor	Area (m^2)	Two Largest Floors	Floors Above at 50%
1	1125	1125	
2	1025	1025	
3	1025		513
4	605		303
5	717		359
6	717		359
7	717		359
8	717		359
9	717		359
10	717		359
Total	8082		**5116**

(**Note**: For fire-resistive buildings, consider two largest adjoining floors plus 50% of each of any floors immediately above them up to eight.)

Total Floor Area 5,116 m^2

$F = 220C\sqrt{A}$

C	0.6	C =	1.5 wood frame
A	5,116 m^2		1.0 ordinary
			0.8 non-combustible
F	9,441 l/min		0.6 fire-resistive
use	9,000 l/min		

Occupancy Adjustment

	-25%	non-combustible
	-15%	limited combustible
Use -15%	0%	combustible
	+15%	free burning
Adjustment -1350 l/min	+25%	rapid burning
Fire flow 7,650 l/min		

Sprinkler Adjustment

	-30%	system conforming to NFPA 13
	-50%	complete automatic system
Use -30%		
Adjustment -2295 l/min		

Exposure Adjustment

Building Face	Separation (m)	Adjacent Exposed Wall			Exposure Charge *
		Length	Stories	L*H Factor	
north		Lower elevation			0%
east		Lower elevation			0%
south		Lower elevation			0%
west		Lower elevation			0%
Total					0%

(**Note**: According to Page G-104 in **Tech bulletin ISTB-2018-02** Revisions to Ottawa Design Guidelines - Water Distribution, "If the exposing wall of the building being considered is taller than the exposed wall of the adjacent structure, no exposure charge applies".)

Adjustment	-	l/min
Total adjustments	(2,295)	l/min
Fire flow	5,355	l/min
Use	**5,000**	**l/min**
	83	**l/s**

Samantha Labadie

From: Wessel, Shawn <shawn.wessel@ottawa.ca>
Sent: Tuesday, May 17, 2022 2:05 PM
To: Samantha Labadie
Cc: Jhamb, Nishant
Subject: 1546 Scott St - Boundary Condition Request
Attachments: 1546 Scott Street May 2022.pdf

Good afternoon, Sam

Please find boundary conditions for 1546 Scott St.:

I believe Nishant is the PM on this project.

The following are boundary conditions, HGL, for hydraulic analysis at 1546 Scott Street (zone 1W) assumed to be a dual connection to the proposed extension of the 203 mm watermain on Scott Street (see attached PDF for location).

Minimum HGL: 108.1 m

Maximum HGL: 115.1 m

Max Day + Fire Flow (83 L/s): 108.0 m

These are for current conditions and are based on computer model simulation.

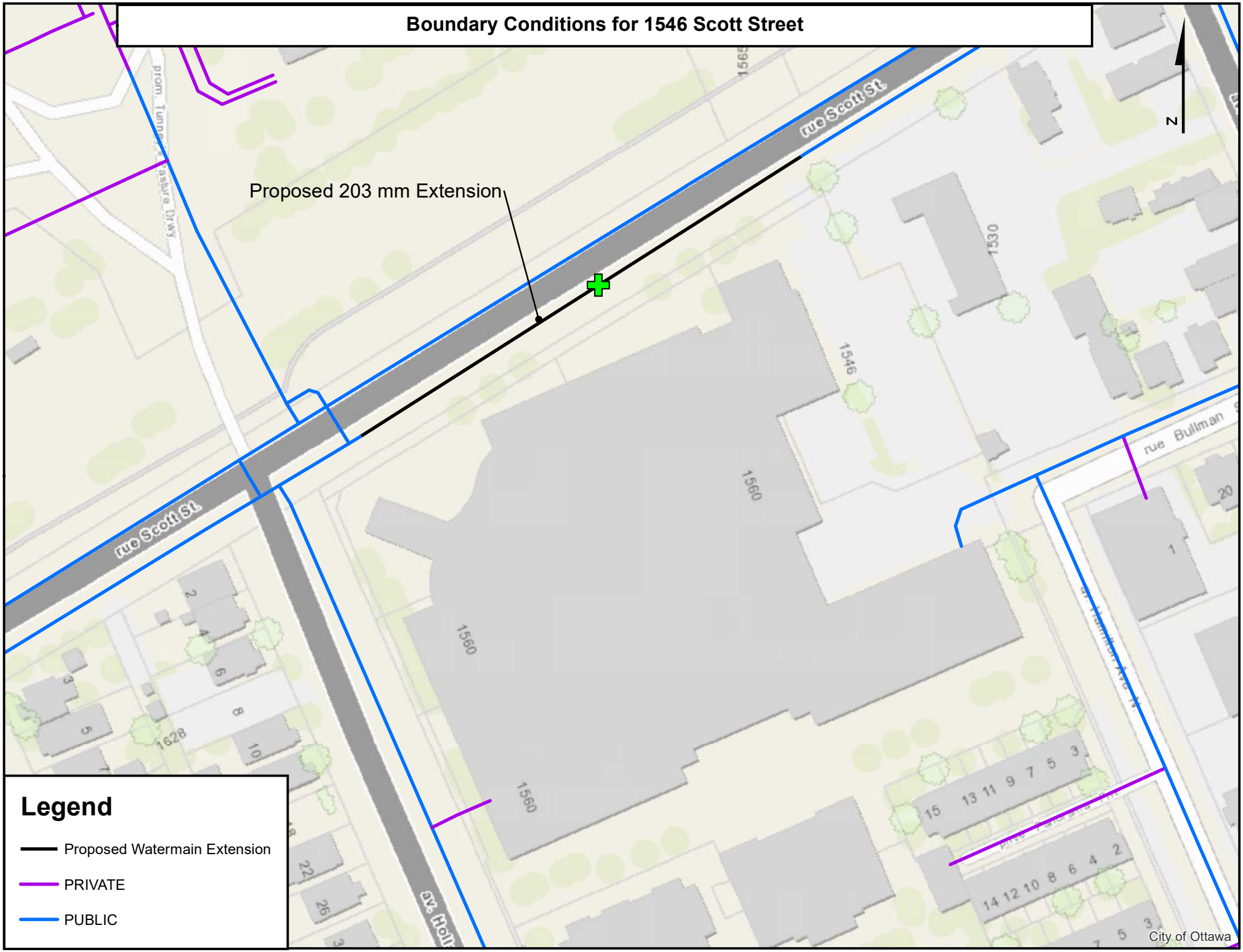
Disclaimer: The boundary condition information is based on current operation of the city water distribution system. The computer model simulation is based on the best information available at the time. The operation of the water distribution system can change on a regular basis, resulting in a variation in boundary conditions. The physical properties of watermains deteriorate over time, as such must be assumed in the absence of actual field test data. The variation in physical watermain properties can therefore alter the results of the computer model simulation.

Regards,

Shawn Wessel, A.Sc.T.,rcji
Project Manager - Infrastructure Approvals
Gestionnaire de projet – Approbation des demandes d'infrastructures

Development Review Central Branch | Direction de l'examen des projets d'aménagement, Centrale
Planning, Real Estate and Economic Development Department | Direction générale de la planification des biens immobiliers et du développement économique
City of Ottawa | Ville d'Ottawa
110 Laurier Ave. W. | 110, avenue Laurier Ouest, Ottawa ON K1P 1J1
(613) 580 2424 Ext. | Poste 33017

Boundary Conditions for 1546 Scott Street



Samantha Labadie

From: Samantha Labadie
Sent: Friday, November 25, 2022 9:50 AM
To: Michael Cogan
Cc: Anthony Vecchiarelli; Tess Gilchrist; Michael Palmer
Subject: Re: 1546 Scott Street - ZBL 2nd Review Comments and SPC 1st Review Comments

Hi Mike,

Yes, that's great news.

Thanks,

Sam

From: Michael Cogan <michael@tcarchitecture.ca>
Sent: Friday, November 25, 2022 8:52:46 AM
To: Samantha Labadie <samantha.labadie@ibigroup.com>
Cc: Anthony Vecchiarelli <avecchiarelli@reidsproperties.com>; Tess Gilchrist <tess.gilchrist@ibigroup.com>; Michael Palmer <michael.palmer@ibigroup.com>
Subject: RE: 1546 Scott Street - ZBL 2nd Review Comments and SPC 1st Review Comments

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Sam,
The three hour rating for structural members can be achieved (per OBC). I presume that the rest of the calculation(s) can be done on your end?

Mike

From: Michael Cogan [mailto:michael@tcarchitecture.ca]
Sent: Wednesday, November 23, 2022 10:17 AM
To: 'Samantha Labadie'
Cc: 'Anthony Vecchiarelli'; 'Tess Gilchrist'; 'Michael Palmer'
Subject: RE: [External] RE: 1546 Scott Street - ZBL 2nd Review Comments and SPC 1st Review Comments

Sam,
I looked through this and can say the following:

Ground Floor is 1127msq.
The two largest floors above this are F2 and F3, 966msq each.
The tower floors are 725msq each.

The 'fire resistive' construction I believe can be achieved (just checking with structural to ensure we can accommodate 32mm bar coverage on the slabs and will confirm with you).

It appears that the calculation then involves several steps (A -H on page 20). We are happy to assist in completing this calculation.

Mike

From: Samantha Labadie [mailto:samantha.labadie@ibigroup.com]
Sent: Tuesday, November 22, 2022 2:49 PM
To: Michael Cogan
Cc: Anthony Vecchiarelli; Tess Gilchrist; Michael Palmer
Subject: [External] RE: 1546 Scott Street - ZBL 2nd Review Comments and SPC 1st Review Comments

Hi Michael,

See attached for "fire-resistive construction" requirements on page 21 of the Fire Underwriters Survey, which the city uses to determine fire flows.

From: Tess Gilchrist <tess.gilchrist@ibigroup.com>
Sent: Tuesday, November 15, 2022 5:01 PM
To: Melissa MacGregor <mmacgregor@reidsproperties.com>; Anthony Vecchiarelli <avecchiarelli@reidsproperties.com>; Michael Cogan <michael@tcarchitecture.ca>; Michael Palmer <michael.palmer@ibigroup.com>; Samantha Labadie <samantha.labadie@ibigroup.com>; Ben Pascolo-Neveu <Ben.Pascolo-Neveu@ibigroup.com>
Cc: Andrew Arklie <aarklie@reidsproperties.com>; Holly Crawford <holly.crawford@ibigroup.com>
Subject: FW: 1546 Scott Street - ZBL 2nd Review Comments and SPC 1st Review Comments

Hello all – please see the latest round of City comments attached for your review.

I'll send out an invite for a coordination meeting next week to review required revisions together.

Thanks,

Tess Gilchrist MCIP RPP

Associate - Manager, Planning

Please note that as of September 1st, IBI Group's Kingston office will be located at 61 Hyperion Court (Suite 6) in Kingston. We will be working remotely until we formally open at this new location on October 28th.

61 Hyperion Court, Suite 6
Kingston ON K7K7K7 Canada
tel +1 613 531 4440 ext 63309

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From: Renaud, Jean-Charles <Jean-Charles.Renaud@ottawa.ca>
Sent: Tuesday, November 15, 2022 3:29 PM
To: Tess Gilchrist <tess.gilchrist@ibigroup.com>
Cc: Moise, Christopher <christopher.moise@ottawa.ca>; Fawzi, Mohammed <mohammed.fawzi@ottawa.ca>; Kiar, David <david.kiar@ottawa.ca>; Mitchell, Amanda <Amanda.Mitchell@ottawa.ca>; Laplante, André <Andre.Laplante@ottawa.ca>; Murray, Hayley <hayley.murray@ottawa.ca>; Elliott, Mark <mark.elliott@ottawa.ca>; Good, Joshua <Josh.Good@ottawa.ca>; Paudel, Neeti <neeti.paudel@ottawa.ca>
Subject: 1546 Scott Street - ZBL 2nd Review Comments and SPC 1st Review Comments

*** Exercise caution. This is an EXTERNAL email. DO NOT open attachments or click links from unknown senders or unexpected email. ***

Good afternoon Tess,

Please find attached the second review comments for the Zoning Bylaw Amendment application and the first review comments for the Site Plan Control application for the proposed development at 1546 Scott Street. Going forward, please provide future submissions in a similar, concurrent manner.

Please do not hesitate to contact me if you have any questions.

JC

Jean-Charles Renaud, MCIP/*MICU*, RPP/*UPC*

Planner III (A) | *Urbaniste III (p.i.)*

Development Review, Central | *Examen des projets d'aménagement, Central*

Planning, Real Estate and Economic Development Department | *Services de la planification, des biens immobiliers et du développement économique*

City of Ottawa | *Ville d'Ottawa*

110 Laurier Avenue West. Ottawa, ON | *110, avenue. Laurier Ouest. Ottawa (Ontario) K1P 1J1*

613.580.2424 ext./poste 27629

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'

Samantha Labadie

From: Elaine Guenette <elaine.guenette@smithandandersen.com>
Sent: Wednesday, January 18, 2023 4:32 PM
To: Andre Drouin; Samantha Labadie
Subject: RE: 1546 Scott Street - Sprinkler System Confirmation

*** Exercise caution. This is an EXTERNAL email. DO NOT open attachments or click links from unknown senders or unexpected email. ***
Hi Samantha,

The building will be equipped with an automatic, supervised sprinkler/standpipe system.

Regards,

Smith + Andersen

Elaine Guenette B.A.Sc., P.Eng., LEED AP
Principal
d 613 691 1853 **m** 343 961 2244

From: Andre Drouin <Andre.Drouin@smithandandersen.com>
Sent: January 18, 2023 4:23 PM
To: Samantha Labadie <samantha.labadie@ibigroup.com>
Cc: Elaine Guenette <elaine.guenette@smithandandersen.com>
Subject: RE: 1546 Scott Street - Sprinkler System Confirmation

Hello Samantha,

Looping in Elaine Guenette as she is the mechanical principal for the project.

Hello Elaine,

See request below.

Regards,

Smith + Andersen

Andre Drouin P.Eng., ing., LEED AP
Principal
d 613 691 0263 **m** 613 898 5742

From: Samantha Labadie <samantha.labadie@ibigroup.com>
Sent: January 18, 2023 3:07 PM
To: Andre Drouin <Andre.Drouin@smithandandersen.com>
Cc: Tess Gilchrist <tess.gilchrist@ibigroup.com>
Subject: 1546 Scott Street - Sprinkler System Confirmation

CAUTION: This message originated from outside Smith + Andersen

---

Hi Andre,

We are preparing our response to the latest set of city comments for 1546 Scott Street. They have asked us to “provide a memo or email correspondence from the Mechanical Engineer confirming that the building is equipped with a sprinkler system”.

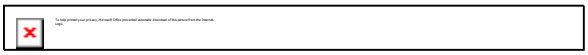
Would you be able to provide this confirmation?

Thank you,

Sam Labadie P.ENG

Civil Engineer

Suite 500, 333 Preston Street
Ottawa ON K1S 5N4 Canada
cell +1 613 899 5717



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Samantha Labadie

From: Elaine Guenette <elaine.guenette@smithandandersen.com>
Sent: Monday, January 23, 2023 10:03 PM
To: Samantha Labadie
Subject: Re: 1546 Scott Street - Sprinkler System Confirmation

*** Exercise caution. This is an EXTERNAL email. DO NOT open attachments or click links from unknown senders or unexpected email. ***
Hi Samantha,

Yes the Cistern would be provided with a backwater valve.

Regards,

Get Outlook for Android

From: Samantha Labadie <samantha.labadie@ibigroup.com>
Sent: Friday, January 20, 2023 1:20:34 PM
To: Elaine Guenette <elaine.guenette@smithandandersen.com>
Subject: RE: 1546 Scott Street - Sprinkler System Confirmation

CAUTION: This message originated from outside Smith + Andersen

---

Hi Elaine,

One more thing, can you confirm the cistern has backflow prevention?

Thank you,

Sam

From: Samantha Labadie
Sent: Wednesday, January 18, 2023 4:35 PM
To: Elaine Guenette <elaine.guenette@smithandandersen.com>; Andre Drouin <Andre.Drouin@smithandandersen.com>
Subject: RE: 1546 Scott Street - Sprinkler System Confirmation

Hi Elaine,

Perfect, thank you both.

Sam

From: Elaine Guenette <elaine.guenette@smithandandersen.com>
Sent: Wednesday, January 18, 2023 4:32 PM
To: Andre Drouin <Andre.Drouin@smithandandersen.com>; Samantha Labadie <samantha.labadie@ibigroup.com>
Subject: RE: 1546 Scott Street - Sprinkler System Confirmation

APPENDIX C

- Sanitary Sewer Design Sheet

IBI GROUP
400-333 Preston Street
Ottawa, Ontario K1S 5N4 Canada
tel 613 225 1311 fax 613 225 9868
ibigroup.com

SANITARY SEWER DESIGN SHEET

1546 Scott Street
CITY OF OTTAWA
Reid's Heritage Properties

LOCATION				RESIDENTIAL										ICI AREAS								INFILTRATION ALLOWANCE			FIXED FLOW (L/s)		TOTAL FLOW	PROPOSED SEWER DESIGN						
				AREA w/ Units (Ha)	UNIT TYPES				AREA w/o Units (Ha)	POPULATION		RES PEAK FACTOR	PEAK FLOW (L/s)	AREA (Ha)						ICI PEAK FACTOR	PEAK FLOW (L/s)	AREA (Ha)		FLOW				CAPACITY	LENGTH	DIA	SLOPE	VELOCITY (full)	AVAILABLE CAPACITY	
STREET	AREA ID	FROM MH	TO MH		1-BED	2-BED	3-BED	APT		IND	CUM			INSTITUTIONAL		COMMERCIAL		INDUSTRIAL				IND	CUM	(L/s)	IND	CUM	(L/s)	(L/s)	(m)	(mm)	(%)	(m/s)	L/s	(%)
														IND	CUM	IND	CUM	IND	CUM															
1546 Scott Street		Bldg	Main	0.25	132	90	6			392.4	392.4	3.42	4.35			0.0205	0.0205			1.00	0.01	0.25	0.25	0.08			4.44	62.04	12.33	250	1.00	1.224	57.60	92.84%

Design Parameters:

Residential			ICI Areas			
1-BED	1.4	p/p/u	INST	28,000	L/Ha/day	
2-BED	2.1	p/p/u	COM	28,000	L/Ha/day	
3-BED	3.1	p/p/u	IND	35,000	L/Ha/day	MOE Chart
Other	60	p/p/Ha				

Notes:
1. Mannings coefficient (n) = 0.013
2. Demand (per capita): 280 L/day 200 L/day
3. Infiltration allowance: 0.33 L/s/Ha
4. Residential Peaking Factor:
   Harmon Formula = 1+(14/(4+(P/1000)^0.5))0.8
   where K = 0.8 Correction Factor
5. Commercial and Institutional Peak Factors based on total area, 1.5 if greater than 20%, otherwise 1.0

Designed: JEB
Checked: DY
Dwg. Reference: 132902-C-001

No.	Revision	Date
1.	Issued for Site Plan Application	2021-11-24
2	Revisions per City Comments	2023-01-24
3	Revisions per New Site Plan Statistics	2023-02-09
4	Revisions per City Comments	2023-04-17

File Reference: 132902.6.04
Date: 2023-04-17
Sheet No: 1 of 1

APPENDIX D

- Storm Sewer Design Sheet
- Stormwater Management Calculations
- Drawing 132902 C-500 – Storm Drainage Area Plan
- Correspondence regarding Foundation Drainage

IBI GROUP
400-333 Preston Street
Ottawa, Ontario K1S 5N4 Canada
tel 613 225 1311 fax 613 225 9868
ibigroup.com

STORM SEWER DESIGN SHEET

1546 Scott Street
City of Ottawa
Reid's Heritage Properties

LOCATION				AREA (Ha)										RATIONAL DESIGN FLOW														SEWER DATA							
STREET	AREA ID	FROM	TO	C= 0.20	C= 0.25	C= 0.30	C= 0.50	C= 0.57	C= 0.60	C= 0.69	C= 0.70	C= 0.77	C= 0.90	IND 2.78AC	CUM 2.78AC	INLET (min)	TIME IN PIPE	TOTAL (min)	i (2) (mm/hr)	i (5) (mm/hr)	i (10) (mm/hr)	i (100) (mm/hr)	2yr PEAK FLOW (L/s)	5yr PEAK FLOW (L/s)	10yr PEAK FLOW (L/s)	100yr PEAK FLOW (L/s)	FIXED FLOW IND	FIXED FLOW CUM	DESIGN FLOW (L/s)	CAPACITY (L/s)	LENGTH (m)	PIPE SIZE (mm) DIA	PIPE SIZE (mm) W	PIPE SIZE (mm) H	SLOPE (%)	VELOCITY (m/s)	AVAIL CAP (2yr) (L/s)	AVAIL CAP (2yr) (%)
1546 Scott Street	Cistern	Bldg	Main										0.25	0.63	0.63	10.00	0.21	10.21	76.81	104.19	122.14	178.56	48.04	65.17	76.40	111.69	0.00	0.00	48.04	62.04	15.10	250			1.00	1.224	14.00	22.56%

Definitions:
Q = 2.78CiA, where:
Q = Peak Flow in Litres per Second (L/s)
A = Area in Hectares (Ha)
i = Rainfall intensity in millimeters per hour (mm/hr)
[i = 732.951 / (TC+6.199)^0.810] 2 YEAR
[i = 998.071 / (TC+6.053)^0.814] 5 YEAR
[i = 1174.184 / (TC+6.014)^0.816] 10 YEAR
[i = 1735.688 / (TC+6.014)^0.820] 100 YEAR

Notes:
1. Mannings coefficient (n) = 0.013

Designed: JEB
Checked: DY
Dwg. Reference: 132902.C-500

No.	Revision	Date
1.	Issued for Site Plan Application	2021-11-24
2.	Revised per City Comments	2023-04-17

File Reference: 132902.6.04
Date: 2023-04-17
Sheet No: 1 of 1

IBI GROUP
333 PRESTON STREET
OTTAWA, ON
K1S 5N4

PROJECT: 1546 Scott Street
DATE: 2022-05-13
FILE: 132902.6.04
REV #: 1
DESIGNED BY: SL
CHECKED BY: DY

STORMWATER MANAGEMENT

Formulas and Descriptions

i_{2yr} = 1:2 year Intensity = 732.951 / $(T_c+6.199)^{0.810}$
i_{5yr} = 1:5 year Intensity = 998.071 / $(T_c+6.053)^{0.814}$
i_{100yr} = 1:100 year Intensity = 1735.688 / $(T_c+6.014)^{0.820}$
T_c = Time of Concentration (min)
C = Average Runoff Coefficient
A = Area (Ha)
Q = Flow = 2.78CiA (L/s)

Maximum Allowable Release Rate

Flow Allocation

C =	0.5	(Pre-Development)
T_c =	10	min
i_{2yr} =	76.81	mm/hr
A_{TOTAL} =	0.25	Ha
Q_{TOTAL} =	27.01	L/s

Uncontrolled Release ($Q_{uncontrolled} = 2.78*C*i_{100yr}*A_{uncontrolled}$)

C =	1.00	
T_c =	10	min
i_{100yr} =	178.56	mm/hr
$A_{uncontrolled}$ =	0.006	Ha
$Q_{uncontrolled}$ =	2.98	L/s

Maximum Allowable Release Rate ($Q_{max\ allowable} = Q_{restricted} - Q_{uncontrolled}$)

$Q_{max\ allowable}$ =	24.03	L/s

MODIFIED RATIONAL METHOD (100-Year & 5-YearPonding)

Drainage Area	*Cistern*		
Area (Ha)	0.250		
C =	1.00	Restricted Flow Q_r (L/s)=	24.00

100-Year Ponding

T_c Variable (min)	*i_{100yr} (mm/hour)*	*Peak Flow Q_p=2.78xCi_{100yr}A (L/s)*	*Q_r (L/s)*	*Q_p-Q_r (L/s)*	*Volume 100yr (m^3)*
46	67.96	47.23	12.00	35.23	97.24
48	65.89	45.79	12.00	33.79	97.32
49	64.91	45.11	12.00	33.11	**97.34**
50	63.95	44.45	12.00	32.45	97.34
52	62.14	43.19	12.00	31.19	97.31

Storage (m^3)

Overflow	Required	Roof	Cistern	Balance
0.00	97.34	0.00	100.00	0.00

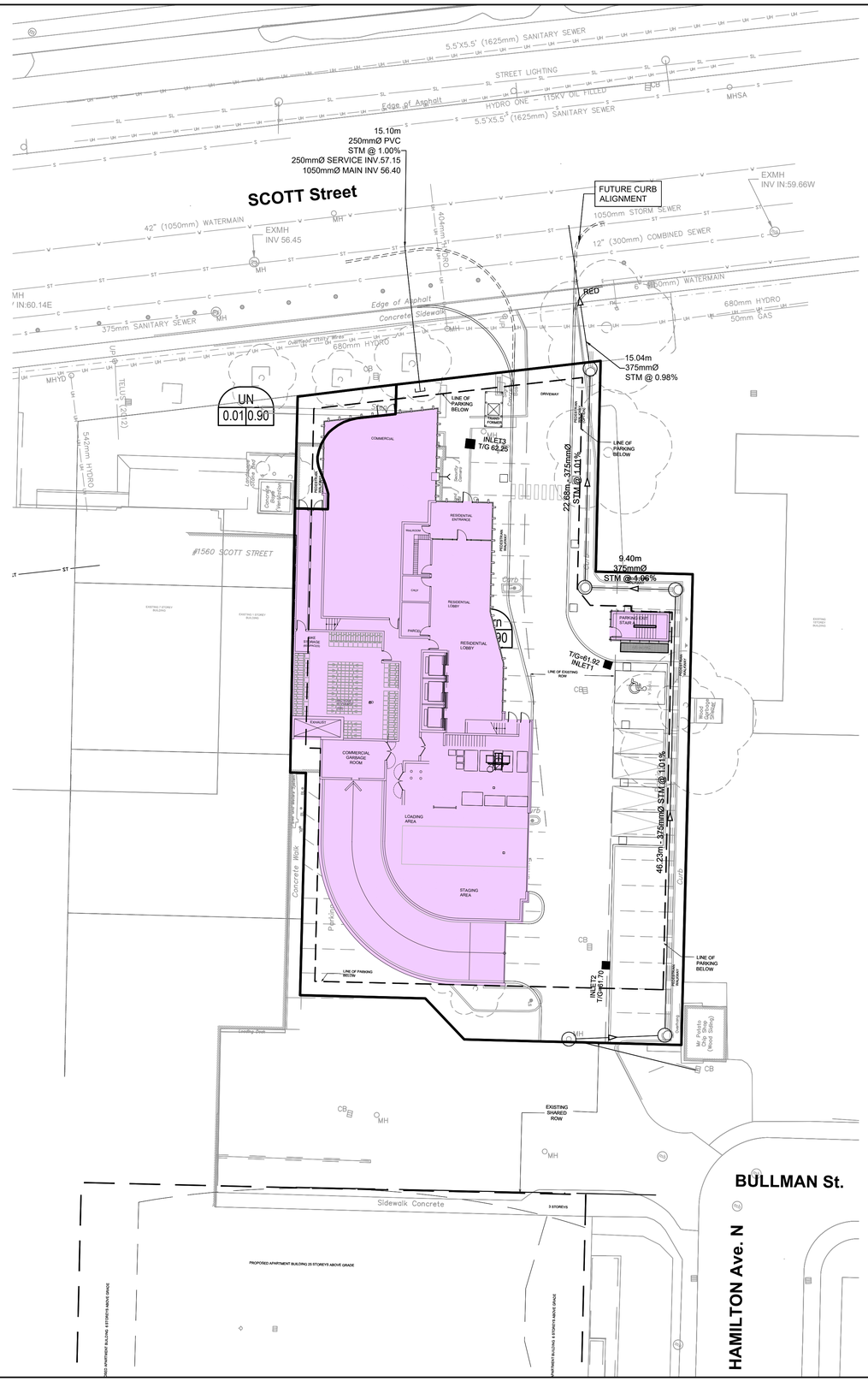
Drainage Area	*Cistern*		
Area (Ha)	0.250		
C =	0.90	Restricted Flow Q_r (L/s)=	24.00

5-Year Ponding

T_c Variable (min)	*i_{5yr} (mm/hour)*	*Peak Flow Q_p=2.78xCi_{5yr}A (L/s)*	*Q_r (L/s)*	*Q_p-Q_r (L/s)*	*Volume 5yr (m^3)*
24	62.54	39.12	12.00	27.12	39.05
26	59.35	37.12	12.00	25.12	39.19
27	57.88	36.20	12.00	24.20	**39.21**
28	56.49	35.34	12.00	23.34	39.20
30	53.93	33.73	12.00	21.73	39.12

Storage (m^3)

Overflow	Required	Roof	Cistern	Balance
0.00	39.21	0.00	100.00	0.00



LEGEND:

X1
0.08 | 0.90

- AREA IDENTIFICATION
- COEFFICIENT
- AREA IN HECTARES

CLIENT

REID'S
Heritage Properties

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ISSUES

No.	DESCRIPTION	DATE
1	ISSUED FOR SPA	2021-11-24
2	REVISED PER CITY COMMENTS	2022-07-06
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6	REVISED PER MECHANICAL DESIGN	2023-03-24
7	REVISED PER CITY COMMENTS	2023-04-17

SEE 010 FOR NOTES, LEGEND, CB TABLE, STREET SECTIONS AND DETAILS

KEY PLAN

CONSULTANTS

1:250 0 2.5 7.5 12.5m

SEAL

LICENSED PROFESSIONAL ENGINEER
D. G. Yannoulopoulos
2023/04/17
PROVINCE OF ONTARIO

LICENSED PROFESSIONAL ENGINEER
S. É. LABADIE
100214983
2023/04/17
PROVINCE OF ONTARIO

IBI GROUP
Suite 400 – 333 Preston Street
Ottawa ON K1S 5N4 Canada
tel 613 225 1311 / 613 241 3300 fax 613 225 9868
ibigroup.com

PROJECT

EVOKE

1546 Scott Street, Ottawa

PROJECT NO: 132902	
DRAWN BY: **D.D.**	CHECKED BY: **J.B.**
PROJECT MGR: **D.G.Y.**	APPROVED BY: **J.B.**

SHEET TITLE

STORM DRAINAGE AREA PLAN

SHEET NUMBER	ISSUE
C-500	7

SCALE CHECK

CITY FILE No. D07-12-21-0216

CITY PLAN No. 18873

File Location: W:\132902 - 1546_Scott\7.0_Production\7.03_Design\04_Civil\Sheets\C-500 STORM DRAINAGE AREA PLAN.dwg Last Saved: April 17, 2023, by ddore Plotted: Monday, April 17, 2023 3:33:29 PM by Denis Dore

Samantha Labadie

From: Menggu He <Menggu.He@smithandandersen.com>
Sent: Thursday, April 13, 2023 10:49 AM
To: Michael Cogan; Samantha Labadie
Subject: RE: 1546 Scott - Revisions due to city comments

*** Exercise caution. This is an EXTERNAL email. DO NOT open attachments or click links from unknown senders or unexpected email. ***
Hi Michael/Samantha,

I confirm the foundation drainage will be pumped and connected to the storm pipe downstream of the flow restriction device from the cistern tank.

Smith + Andersen

Menggu He B.Eng., M.A.Sc., P.Eng., LEED Green Associate
Project Manager - Mechanical
t 613 230 1186 x3121 **m** 343 999 9490

From: Michael Cogan <michael@tcarchitecture.ca>
Sent: April 13, 2023 10:47 AM
To: 'Samantha Labadie' <samantha.labadie@ibigroup.com>
Cc: Menggu He <Menggu.He@smithandandersen.com>
Subject: 1546 Scott - Revisions due to city comments

CAUTION: This message originated from outside Smith + Andersen

---

Hi Sam,
I would say that the plan is static enough from the last submission.

The foundation is a water raft tight, but there is an interstitial drainage layer in case anything gets by that.

I have cc'd Menggu from S+A to elaborate.

Regards,
Mike

From: Samantha Labadie [mailto:samantha.labadie@ibigroup.com]
Sent: Thursday, April 13, 2023 10:22 AM
To: Michael Cogan
Subject: [External] 1546 Scott - Revisions due to city comments

Hi Mike,

We're working on the city comment revisions. Will the site plan be changing at all? Different unit count/different unit type/floor areas?

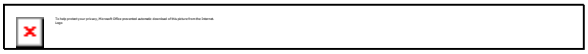
Also, can you confirm that the foundation drainage is pumped? I assume so, however the city did pose the question in the latest round of comments.

Thanks,

Sam Labadie P.ENG

Civil Engineer

Suite 500, 333 Preston Street
Ottawa ON K1S 5N4 Canada
cell +1 613 899 5717



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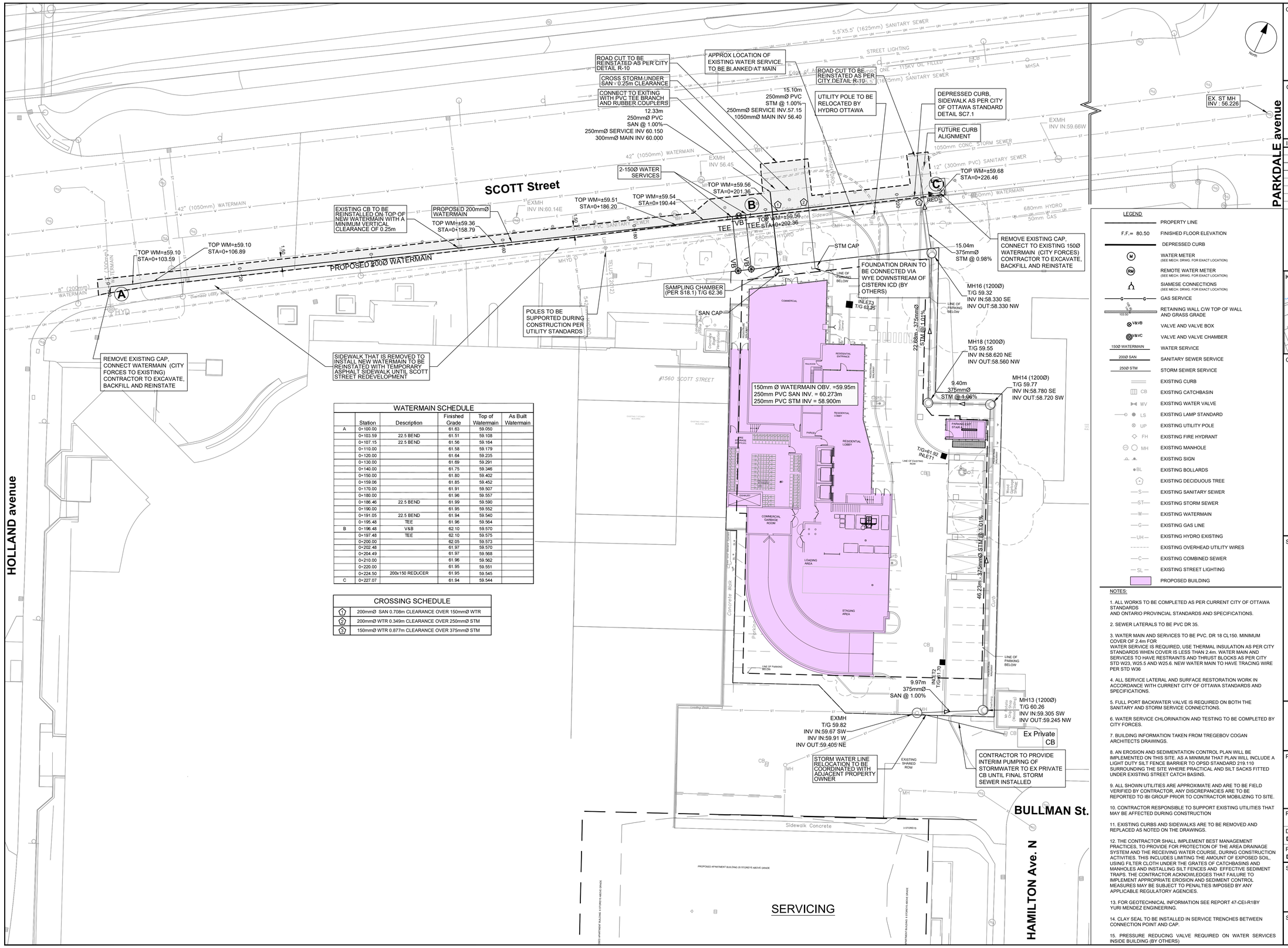
APPENDIX E

- Drawing 132902 C-001 – General Plan of Services
- Drawing 132902 C-200 – Site Grading Plan
- Drawing 132902 C-900 – Erosion and Sedimentation Control Plan



WATERMAIN SCHEDULE					
	Station	Description	Finished Grade	Top of Watermain	As Built Watermain
A	0+100.00		61.63	59.050	
	0+103.59	22.5 BEND	61.51	59.108	
	0+107.15	22.5 BEND	61.56	59.164	
	0+110.00		61.58	59.179	
	0+120.00		61.64	59.235	
	0+130.00		61.69	59.291	
	0+140.00		61.75	59.346	
	0+150.00		61.80	59.402	
	0+159.06		61.85	59.452	
	0+170.00		61.91	59.507	
	0+180.00		61.96	59.557	
	0+186.46	22.5 BEND	61.99	59.590	
	0+190.00		61.95	59.552	
	0+191.05	22.5 BEND	61.94	59.540	
	0+195.48	TEE	61.96	59.564	
B	0+196.48	V&B	62.10	59.570	
	0+197.48	TEE	62.10	59.575	
	0+200.00		62.05	59.573	
	0+202.48		61.97	59.570	
	0+204.49		61.97	59.568	
	0+210.00		61.96	59.562	
	0+220.00		61.95	59.551	
	0+224.50	200x150 REDUCER	61.95	59.545	
C	0+227.07		61.94	59.544	

CROSSING SCHEDULE	
1	200mmØ SAN 0.708m CLEARANCE OVER 150mmØ WTR
2	200mmØ WTR 0.349m CLEARANCE OVER 250mmØ STM
3	150mmØ WTR 0.877m CLEARANCE OVER 375mmØ STM

LEGEND

- PROPERTY LINE
- F.F.= 80.50 FINISHED FLOOR ELEVATION
- DEPRESSED CURB
- WATER METER (SEE MECH. DRWG. FOR EXACT LOCATION)
- REMOTE WATER METER (SEE MECH. DRWG. FOR EXACT LOCATION)
- SIAMESE CONNECTIONS (SEE MECH. DRWG. FOR EXACT LOCATION)
- GAS SERVICE
- RETAINING WALL C/W TOP OF WALL AND GRASS GRADE
- V&VB VALVE AND VALVE BOX
- V&VC VALVE AND VALVE CHAMBER
- 150Ø WATERMAIN WATER SERVICE
- 200Ø SAN SANITARY SEWER SERVICE
- 250Ø STM STORM SEWER SERVICE
- EXISTING CURB
- CB EXISTING CATCHBASIN
- WV EXISTING WATER VALVE
- LS EXISTING LAMP STANDARD
- UP EXISTING UTILITY POLE
- FH EXISTING FIRE HYDRANT
- MH EXISTING MANHOLE
- EXISTING SIGN
- BL EXISTING BOLLARDS
- EXISTING DECIDUOUS TREE
- S EXISTING SANITARY SEWER
- ST EXISTING STORM SEWER
- W EXISTING WATERMAIN
- G EXISTING GAS LINE
- UH EXISTING HYDRO EXISTING
- EXISTING OVERHEAD UTILITY WIRES
- C EXISTING COMBINED SEWER
- SL EXISTING STREET LIGHTING
- PROPOSED BUILDING

NOTES:

1. ALL WORKS TO BE COMPLETED AS PER CURRENT CITY OF OTTAWA STANDARDS AND ONTARIO PROVINCIAL STANDARDS AND SPECIFICATIONS.

2. SEWER LATERALS TO BE PVC DR 35.

3. WATER MAIN AND SERVICES TO BE PVC. DR 18 CL150. MINIMUM COVER OF 2.4m FOR WATER SERVICE IS REQUIRED, USE THERMAL INSULATION AS PER CITY STANDARDS WHEN COVER IS LESS THAN 2.4m. WATER MAIN AND SERVICES TO HAVE RESTRAINTS AND THRUST BLOCKS AS PER CITY STD WG3, W25.5 AND W25.6. NEW WATER MAIN TO HAVE TRACING WIRE PER STD W36

4. ALL SERVICE LATERAL AND SURFACE RESTORATION WORK IN ACCORDANCE WITH CURRENT CITY OF OTTAWA STANDARDS AND SPECIFICATIONS.

5. FULL PORT BACKWATER VALVE IS REQUIRED ON BOTH THE SANITARY AND STORM SERVICE CONNECTIONS.

6. WATER SERVICE CHLORINATION AND TESTING TO BE COMPLETED BY CITY FORCES.

7. BUILDING INFORMATION TAKEN FROM TREGEBOV COGAN ARCHITECTS DRAWINGS.

8. AN EROSION AND SEDIMENTATION CONTROL PLAN WILL BE IMPLEMENTED ON THIS SITE. AS A MINIMUM THAT PLAN WILL INCLUDE A LIGHT DUTY SILT FENCE BARRIER TO OPSD STANDARD 219.110 SURROUNDING THE SITE WHERE PRACTICAL AND SILT SACKS FITTED UNDER EXISTING STREET CATCH BASINS.

9. ALL SHOWN UTILITIES ARE APPROXIMATE AND ARE TO BE FIELD VERIFIED BY CONTRACTOR, ANY DISCREPANCIES ARE TO BE REPORTED TO IBI GROUP PRIOR TO CONTRACTOR MOBILIZING TO SITE.

10. CONTRACTOR RESPONSIBLE TO SUPPORT EXISTING UTILITIES THAT MAY BE AFFECTED DURING CONSTRUCTION

11. EXISTING CURBS AND SIDEWALKS ARE TO BE REMOVED AND REPLACED AS NOTED ON THE DRAWINGS.

12. THE CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES, TO PROVIDE FOR PROTECTION OF THE AREA DRAINAGE SYSTEM AND THE RECEIVING WATER COURSE, DURING CONSTRUCTION ACTIVITIES. THIS INCLUDES LIMITING THE AMOUNT OF EXPOSED SOIL, USING FILTER CLOTH UNDER THE GRATES OF CATCHBASINS AND MANHOLES AND INSTALLING SILT FENCES AND EFFECTIVE SEDIMENT TRAPS. THE CONTRACTOR ACKNOWLEDGES THAT FAILURE TO IMPLEMENT APPROPRIATE EROSION AND SEDIMENT CONTROL MEASURES MAY BE SUBJECT TO PENALTIES IMPOSED BY ANY APPLICABLE REGULATORY AGENCIES.

13. FOR GEOTECHNICAL INFORMATION SEE REPORT 47-CEI-R1BY YURI MENDEZ ENGINEERING.

14. CLAY SEAL TO BE INSTALLED IN SERVICE TRENCHES BETWEEN CONNECTION POINT AND CAP.

15. PRESSURE REDUCING VALVE REQUIRED ON WATER SERVICES INSIDE BUILDING (BY OTHERS)

CLIENT
Reid's Heritage Properties
1515 Gordon Street, Suite 203 , Guelph, ON. N1L 1C9

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6	REVISED PER MECHANICAL DESIGN	2023-03-24
7	REVISED PER CITY COMMENTS	2023-04-17

SEE 010 FOR NOTES, LEGEND, CB TABLE, STREET SECTIONS AND DETAILS

KEY PLAN

CONSULTANTS

1:250 0 2.5 7.5 12.5m

SEAL

LICENSED PROFESSIONAL ENGINEER
L.D. 45. Yannoulopoulos
2023/04/17
PROVINCE OF ONTARIO

LICENSED PROFESSIONAL ENGINEER
S. É. LABADIE
100214983
2023/04/17
PROVINCE OF ONTARIO

IBI GROUP
Suite 400 – 333 Preston Street
Ottawa ON K1S 5N4 Canada
tel 613 225 1311 / 613 241 3300 fax 613 225 9868
ibigroup.com

PROJECT
EVOKE
1546 Scott Street, Ottawa

PROJECT NO: 132902

DRAWN BY:	CHECKED BY:
D.D.	J.B.
PROJECT MGR:	APPROVED BY:
D.G.Y.	J.B.

SHEET TITLE
GENERAL PLAN OF SERVICES

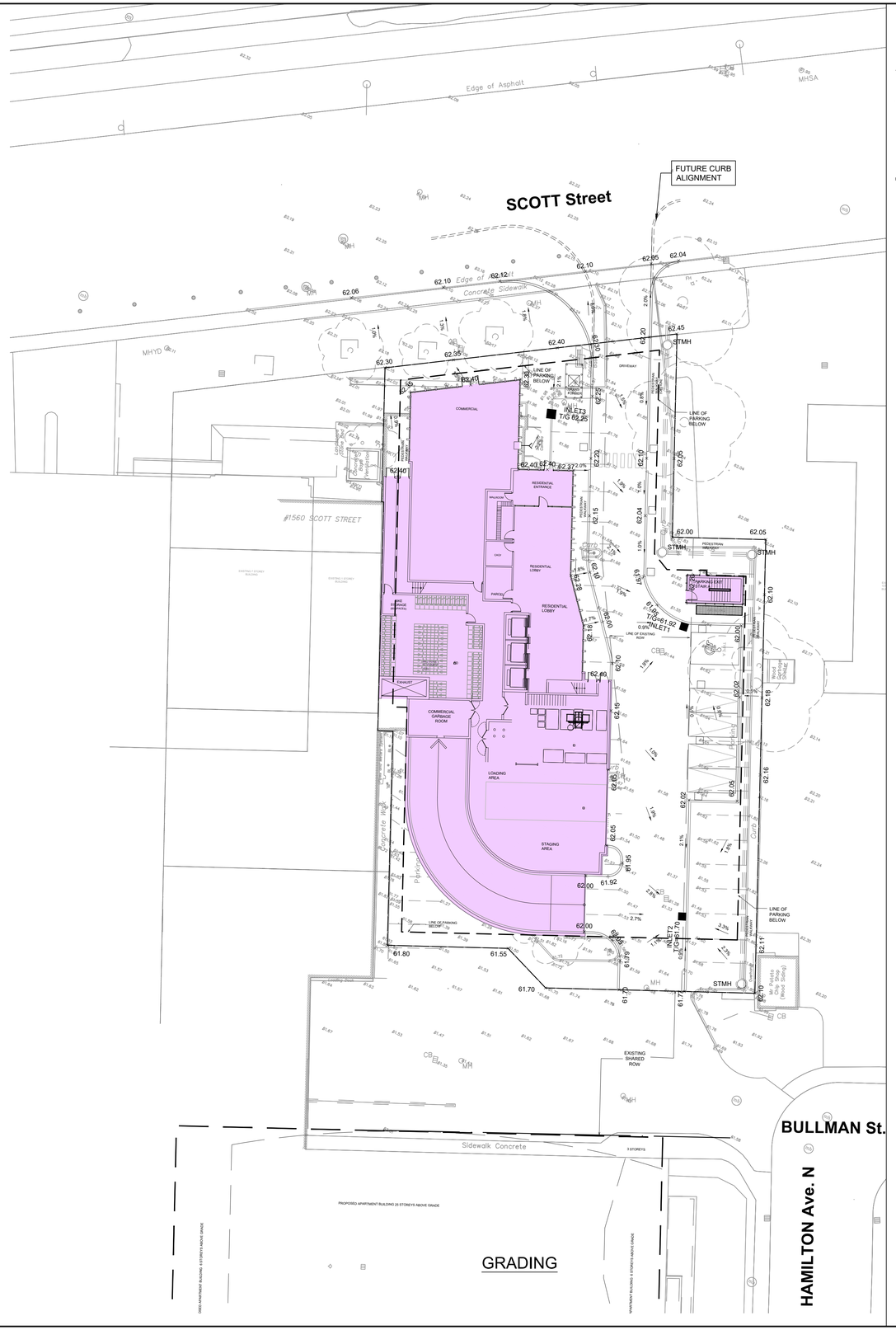
SHEET NUMBER	ISSUE
C-001	7

SCALE CHECK

File Location: W:\132902_1546_Scott\7.0_Production\7.03_Design\04_Civil\Sheets\C-001 GENERAL PLAN OF SERVICES.dwg Last Saved: April 13, 2023, by ddore Plotted: Thursday, April 13, 2023 2:24:11 PM by Denis Dore

CITY FILE No. D07-12-21-0216

CITY PLAN No. 18873



GRADING

LEGEND

- PROPERTY LINE
- F.F.= 80.50 FINISHED FLOOR ELEVATION
- DEPRESSED CURB
- M WATER METER (SEE MECH. DRWG. FOR EXACT LOCATION)
- RM REMOTE WATER METER (SEE MECH. DRWG. FOR EXACT LOCATION)
- SIAMESE CONNECTIONS (SEE MECH. DRWG. FOR EXACT LOCATION)
- RETAINING WALL C/W TOP OF WALL AND GRASS GRADE
- EXISTING CURB
- CB EXISTING CATCHBASIN
- WV EXISTING WATER VALVE
- LS EXISTING LAMP STANDARD
- UP EXISTING UTILITY POLE
- FH EXISTING FIRE HYDRANT
- MH EXISTING MANHOLE
- EXISTING SIGN
- BL EXISTING BOLLARDS
- EXISTING DECIDUOUS TREE
- x62.04 EXISTING TOPO POINTS
- PROPOSED BUILDING

North

CLIENT

Reid's Heritage Properties

REID'S Heritage Properties

1515 Gordon Street, Suite 203 , Guelph, ON. N1L 1C9

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KEY PLAN

CONSULTANTS

1:250 0 2.5 7.5 12.5m

SEAL

LICENSED PROFESSIONAL ENGINEER
J.D. 45. Yannoulopoulos
2023/04/17
PROVINCE OF ONTARIO

LICENSED PROFESSIONAL ENGINEER
S. É. LABADIE
100214983
2023/04/17
PROVINCE OF ONTARIO

IBI GROUP
Suite 400 – 333 Preston Street
Ottawa ON K1S 5N4 Canada
tel 613 225 1311 / 613 241 3300 fax 613 225 9868
ibigroup.com

PROJECT

EVOKE

1546 Scott Street, Ottawa

PROJECT NO: 132902	
DRAWN BY: **D.D.**	CHECKED BY: **J.B.**
PROJECT MGR: **D.G.Y.**	APPROVED BY: **J.B.**

SHEET TITLE

GRADING PLAN

SHEET NUMBER	ISSUE
C-200	7

SCALE CHECK

File Location: W:\132902_1546_Scott\7.0_Production\7.03_Design\04_Civil\Sheets\C-200 GRADING PLAN.dwg Last Saved: April 17, 2023, by ddore Plotted: Monday, April 17, 2023 3:32:51 PM by Denis Dore

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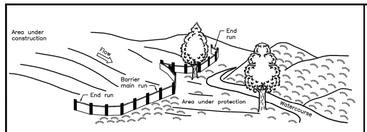
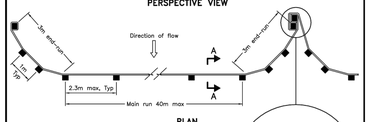
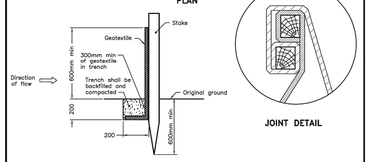
CITY PLAN No. 18873



PERSPECTIVE VIEW



PLAN

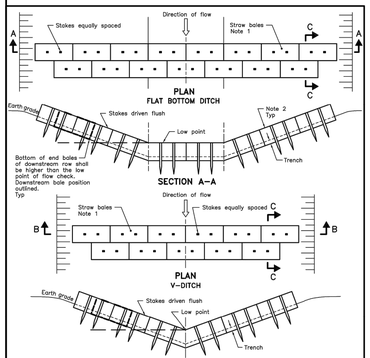


JOIT DETAIL

SECTION A–A

NOTE:
A All dimensions are in millimetres unless otherwise shown.

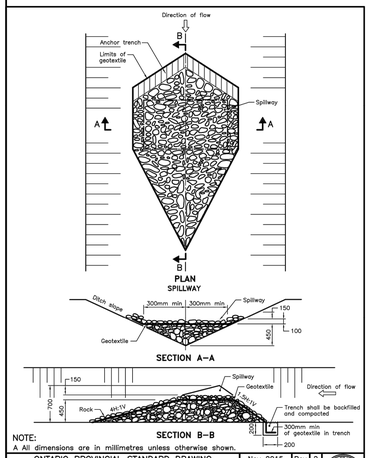
ONTARIO PROVINCIAL STANDARD DRAWING	Nov 2015	Rev 2
LIGHT–DUTY SILT FENCE BARRIER		OPSD 219.110



NOTES:
1 Number of bales varies and shall suit ditch.
2 Straw bales shall be butted tightly against adjoining bales and shaped to conform to the sides of the ditch to prevent water flow through barrier.

A All dimensions are in millimetres unless otherwise shown.

ONTARIO PROVINCIAL STANDARD DRAWING	Nov 2015	Rev 2
STRAW BALE FLOW CHECK DAM		OPSD 219.180



NOTE:
A All dimensions are in millimetres unless otherwise shown.

ONTARIO PROVINCIAL STANDARD DRAWING	Nov 2015	Rev 2
TEMPORARY ROCK FLOW CHECK DAM V–DITCH		OPSD 219.210

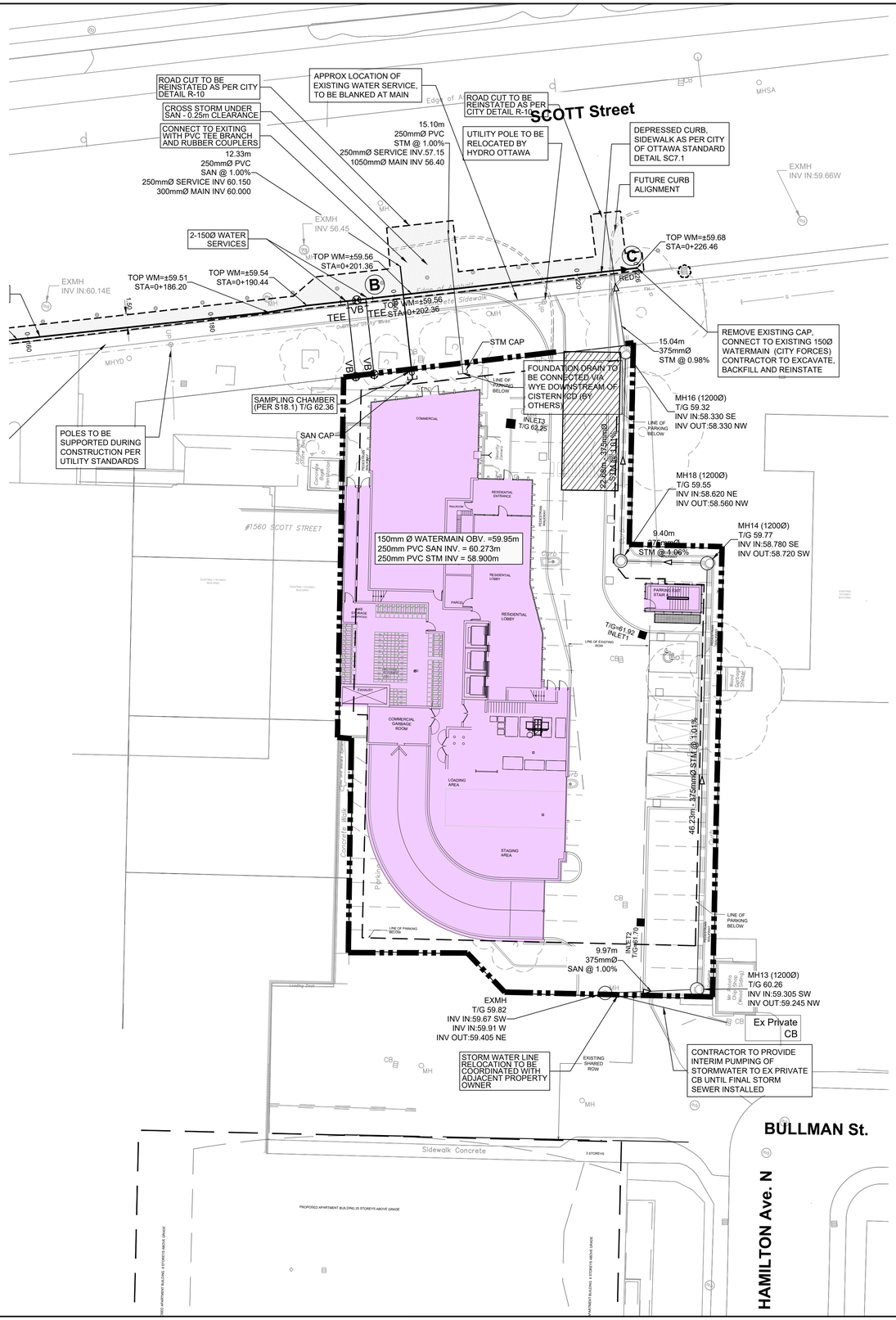
NOTES:

THE CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES, TO PROVIDE FOR PROTECTION OF THE AREA DRAINAGE SYSTEM AND THE RECEIVING WATERCOURSE, DURING CONSTRUCTION ACTIVITIES. THE CONTRACTOR ACKNOWLEDGES THAT FAILURE TO IMPLEMENT APPROPRIATE EROSION AND SEDIMENT CONTROL MEASURES MAY BE SUBJECT TO PENALTIES IMPOSED BY ANY APPLICABLE REGULATORY AGENCY,

1. SILT FENCE TO BE ERECTED PRIOR TO EARTH WORKS BEING COMMENCED. SILT FENCE TO BE MAINTAINED UNTIL VEGETATION IS ESTABLISHED OR UNTIL START OF SUBSEQUENT PHASE.
2. SILT SACK TO BE PLACED AND MAINTAINED UNDER COVER OF ALL CATCHBASINS. GEOTEXTILE SILT SACK IN STREET CBs TO REMAIN UNTIL ALL CURBS ARE CONSTRUCTED. GEOTEXTILE FABRIC IN RYCBs TO REMAIN UNTIL VEGETATION IS ESTABLISHED. ALL CATCHBASINS TO BE REGULARLY INSPECTED AND CLEANED, AS NECESSARY, UNTIL SOD AND CURBS ARE CONSTRUCTED.
3. WORKS NOTED ABOVE ARE TO BE INSTALLED, INSPECTED, MAINTAINED AND ULTIMATELY REMOVED BY SERVICING CONTRACTOR.
4. THIS IS A "LIVING DOCUMENT" AND MAY BE MODIFIED IN THE EVENT THE PROPOSED CONTROL MEASURES ARE INSUFFICIENT
5. SEE DRAWING C-010 FOR ADDITIONAL DETAILS AND NOTES.

LEGEND :

- LIGHT DUTY SILT FENCE AS PER OPSD-219.110
- SNOW FENCE
- STRAW BALE CHECK DAM AS PER OPSD-219.180
- ROCK CHECK DAM AS PER OPSD-219.210
- CB — SILT SACK PLACED UNDER EXISTING CB COVER
- 15.0 × 6.0 — TEMPORARY MUD MAT 0.15m THICK 50mm CLEAR STONE ON NON WOVEN FILTER CLOTH


Project North
SCOTT Street
ROAD CUT TO BE REINSTATED AS PER CITY DETAIL R-10
CROSS STORM UNDER SAN - 0.25m CLEARANCE
CONNECT TO EXITING WITH PVC TEE BRANCH AND RUBBER COUPLERS
12.33m
250mmØ PVC
SAN @ 1.00%
250mmØ SERVICE INV 60.150
300mmØ MAIN INV 60.000
APPROX LOCATION OF EXISTING WATER SERVICE, TO BE BLANKED AT MAIN
15.10m
250mmØ PVC
STM @ 1.00%
250mmØ SERVICE INV.57.15
1050mmØ MAIN INV 56.40
ROAD CUT TO BE REINSTATED AS PER CITY DETAIL R-10
UTILITY POLE TO BE RELOCATED BY HYDRO OTTAWA
DEPRESSED CURB, SIDEWALK AS PER CITY OF OTTAWA STANDARD DETAIL SC7.1
FUTURE CURB ALIGNMENT
EXMH
INV IN:59.66W
2-150Ø WATER SERVICES
EXMH
INV 56.45
TOP WM=±59.56
STA=0+201.36
TOP WM=±59.68
STA=0+226.46
EXMH
INV IN:60.14E
TOP WM=±59.51
STA=0+186.20
TOP WM=±59.54
STA=0+190.44
TOP WM=±59.56
TEE STA=0+202.36
TEE
VB
REMOVE EXISTING CAP, CONNECT TO EXISTING 150Ø WATERMAIN (CITY FORCES) CONTRACTOR TO EXCAVATE, BACKFILL AND REINSTATE
STM CAP
15.04m
375mmØ
STM @ 0.98%
FOUNDATION DRAIN TO BE CONNECTED VIA WYE DOWNSTREAM OF CISTERN (BY OTHERS)
SAMPLING CHAMBER (PER S18.1) T/G 62.36
POLES TO BE SUPPORTED DURING CONSTRUCTION PER UTILITY STANDARDS
SAN CAP
INLET3
T/G 62.25
MH16 (1200Ø)
T/G 59.32
INV IN:58.330 SE
INV OUT:58.330 NW
#1560 SCOTT STREET
150mm Ø WATERMAIN OBV. =59.95m
250mm PVC SAN INV. = 60.273m
250mm PVC STM INV = 58.900m
46.23m 375mmØ STM @ 1.01%
9.40m
375mmØ
STM @ 1.06%
MH18 (1200Ø)
T/G 59.55
INV IN:58.620 NE
INV OUT:58.560 NW
MH14 (1200Ø)
T/G 59.77
INV IN:58.780 SE
INV OUT:58.720 SW
T/G=61.92
INLET1
9.97m
375mmØ
SAN @ 1.00%
MH13 (1200Ø)
T/G 60.26
INV IN:59.305 SW
INV OUT:59.245 NW
EXMH
T/G 59.82
INV IN:59.67 SW
INV IN:59.91 W
INV OUT:59.405 NE
Ex Private CB
STORM WATER LINE RELOCATION TO BE COORDINATED WITH ADJACENT PROPERTY OWNER
CONTRACTOR TO PROVIDE INTERIM PUMPING OF STORMWATER TO EX PRIVATE CB UNTIL FINAL STORM SEWER INSTALLED
BULLMAN St.
HAMILTON Ave. N
Sidewalk Concrete
PROPOSED APARTMENT BUILDING 25 STOREYS ABOVE GRADE
3 STOREYS
COMMERCIAL
RESIDENTIAL ENTRANCE
RESIDENTIAL LOBBY
LOADING AREA
STAGING AREA
COMMERCIAL GARBAGE ROOM
PARKING LIGHT STAIR
LINE OF PARKING BELOW
LINE OF EXISTING ROW
EXISTING SHARED ROW
Flood Shield
Sump Pump
Ex Sump Pump
Ex Flood Shield
Ex Storage Room
Ex Mech Room
Ex Elec Room
Ex Garbage Room
Ex Loading Area
Ex Parking Below
Ex Residential Entrance
Ex Residential Lobby
Ex Parking Stair
Ex Staging Area
Ex Commercial
Ex Canopy
Ex Sidewalk
Ex Curb
Ex Building
Ex Property Line
Ex Edge of Asphalt
Ex Overhead Wires
Ex Gas Line
Ex Hydro Line
Ex Bell Line
Ex Rogers Line
Ex Telecom Line
Ex Fibre Optic Line
Ex Water Line
Ex Storm Line
Ex Sanitary Line
Ex Combined Line
Ex Catch Basin
Ex Manhole
Ex Hydro Vault
Ex Bell Vault
Ex Gas Valve
Ex Water Valve
Ex Hydrant
Ex Light Standard
Ex Hydro Pole
Ex Guy Wire
Ex Tree
Ex Bollard
Ex Sign
Ex Fence
Ex Retaining Wall
Ex Curb Stop
Ex Water Meter
Ex Backflow Preventer
Ex Cleanout
Ex Grade
Ex Top of Bank
Ex Toe of Bank
Ex Ditch
Ex Culvert
Ex Swale
Ex Berm
Ex Rip Rap
Ex Gravel
Ex Asphalt
Ex Concrete
Ex Interlock
Ex Landscaping
Ex Trees
Ex Shrubs
Ex Grass
Ex Soil
Ex Rock
Ex Water
Ex Wetland
Ex Forest
Ex Meadow
Ex Field
Ex Pasture
Ex Crop
Ex Orchard
Ex Vineyard
Ex Nursery
Ex Greenhouse
Ex Barn
Ex House
Ex Garage
Ex Shed
Ex Pool
Ex Deck
Ex Patio
Ex Porch
Ex Steps
Ex Ramp
Ex Railing
Ex Gate
Ex Post
Ex Pillar
Ex Wall
Ex Foundation
Ex Footing
Ex Slab
Ex Roof
Ex Chimney
Ex Vent
Ex Antenna
Ex Satellite Dish
Ex Solar Panel
Ex Wind Turbine
Ex Generator
Ex Transformer
Ex Meter
Ex Switch
Ex Breaker
Ex Fuse
Ex Relay
Ex Contactor
Ex Motor
Ex Pump
Ex Valve
Ex Actuator
Ex Sensor
Ex Controller
Ex Wiring
Ex Conduit
Ex Cable
Ex Duct
Ex Pipe
Ex Tube
Ex Hose
Ex Fitting
Ex Coupling
Ex Adapter
Ex Reducer
Ex Elbow
Ex Tee
Ex Cross
Ex Flange
Ex Gasket
Ex Bolt
Ex Nut
Ex Washer
Ex Screw
Ex Rivet
Ex Weld
Ex Solder
Ex Braze
Ex Glue
Ex Tape
Ex Paint
Ex Coating
Ex Insulation
Ex Fireproofing
Ex Soundproofing
Ex Vibration Isolation
Ex Seismic Restraint
Ex Anchor
Ex Support
Ex Hanger
Ex Bracket
Ex Clamp
Ex Strap
Ex Band
Ex Ring
Ex Collar
Ex Sleeve
Ex Penetration
Ex Opening
Ex Core
Ex Drill
Ex Saw
Ex Grinder
Ex Sander
Ex Polisher
Ex Cutter
Ex Blade
Ex Bit
Ex Chuck
Ex Arbor
Ex Mandrel
Ex Collet
Ex Vise
Ex Clamp
Ex Jig
Ex Fixture
Ex Gauge
Ex Meter
Ex Scale
Ex Level
Ex Square
Ex Protractor
Ex Compass
Ex Caliper
Ex Micrometer
Ex Dial Indicator
Ex Height Gauge
Ex Surface Plate
Ex Granite Block
Ex Parallel
Ex V-Block
Ex Angle Plate
Ex Sine Bar
Ex Gage Block
Ex Feeler Gage
Ex Thickness Gage
Ex Radius Gage
Ex Thread Gage
Ex Plug Gage
Ex Ring Gage
Ex Snap Gage
Ex Depth Gage
Ex Bore Gage
Ex Telescoping Gage
Ex Small Hole Gage
Ex Inside Micrometer
Ex Outside Micrometer
Ex Vernier Caliper
Ex Digital Caliper
Ex Dial Caliper
Ex Beam Caliper
Ex Trammel
Ex Divider
Ex Scribe
Ex Punch
Ex Chisel
Ex File
Ex Rasp
Ex Hammer
Ex Mallet
Ex Screwdriver
Ex Wrench
Ex Pliers
Ex Cutters
Ex Snips
Ex Shears
Ex Knife
Ex Saw
Ex Drill
Ex Tap
Ex Die
Ex Reamer
Ex Countersink
Ex Counterbore
Ex Spotface
Ex Chamfer
Ex Deburr
Ex Polish
Ex Buff
Ex Wax
Ex Oil
Ex Grease
Ex Lubricant
Ex Coolant
Ex Cutting Fluid
Ex Solvent
Ex Cleaner
Ex Degreaser
Ex Rust Remover
Ex Primer
Ex Paint
Ex Clear Coat
Ex Finish
Ex Texture
Ex Pattern
Ex Mold
Ex Cast
Ex Forge
Ex Machine
Ex Weld
Ex Braze
Ex Solder
Ex Glue
Ex Tape
Ex Adhesive
Ex Sealant
Ex Gasket
Ex Bolt
Ex Nut
Ex Washer
Ex Screw
Ex Rivet
Ex Pin
Ex Key
Ex Spline
Ex Gear
Ex Sprocket
Ex Chain
Ex Belt
Ex Pulley
Ex Shaft
Ex Bearing
Ex Housing
Ex Frame
Ex Base
Ex Plate
Ex Bracket
Ex Support
Ex Leg
Ex Foot
Ex Wheel
Ex Caster
Ex Handle
Ex Knob
Ex Lever
Ex Switch
Ex Button
Ex Dial
Ex Display
Ex Indicator
Ex Light
Ex Lens
Ex Reflector
Ex Filter
Ex Screen
Ex Mesh
Ex Grille
Ex Louver
Ex Vent
Ex Duct
Ex Fan
Ex Blower
Ex Motor
Ex Drive