

re: Geotechnical Review
Proposed Parking Garage Access Ramp
56 Steacie Drive - Ottawa
to: Merkburn Holdings Ltd - Mr. Peter Dooher - pdooher@merkburn.com
date: June 12, 2019
file: PG4484-MEMO.02

Further to your request and authorization, Paterson Group (Paterson) has completed a review of the proposed ramp detail for the aforementioned site.

Paterson reviewed the following drawing prepared by WSP:

- ☐ Project No. 18M-01672-00 - Drawing No. C-02 - Servicing Plan - Revision 2 dated April 3, 2019

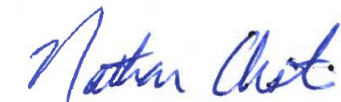
Section A on the above noted drawing shows a cross-section detail at a catch basin with an outlet to the proposed 375 mm diameter storm sewer. Based on the Section A detail, the total available frost cover above the outlet pipe is 521 mm, including the proposed 200 mm thick concrete pavement. In order to ensure adequate frost protection, it is understood that heat tracing will be provided within the concrete slab. It is further understood that the proposed outlet pipe will be wrapped with insulation resulting in a reduction of the granular material thickness for the pavement structure to approximately 270 mm below the concrete slab.

Based on our review of the above noted detail, the localized reduction in pavement structure granular thickness is considered acceptable from a geotechnical perspective.

We trust that this information satisfies your immediate requirements.

Best Regards,

Paterson Group Inc.



Nathan F. S. Christie, P.Eng.



David J. Gilbert, P.Eng.

Paterson Group Inc.

Head Office and Laboratory
154 Colonnade Road South
Ottawa - Ontario - K2E 7J5
Tel: (613) 226-7381 Fax: (613) 226-6344

Northern Office and Laboratory
63 Gibson Street
North Bay - Ontario - P1B 8Z4
Tel: (705) 472-5331 Fax: (705) 472-2334

St. Lawrence Office
993 Princess Street
Kingston - Ontario - K7L 1H3
Tel: (613) 542-7381

*REFER TO DRAWING C-01 FOR SERVICING NOTES.

STM STRUCTURE TABLE						
STRUCTURE ID	RIM ELEVATION	INVERT IN		INVERT OUT	DESCRIPTION	
					SIZE	COVER
CB101	87.70			85.615	600x600mm	OPSD-705.010
CBMH102	87.70		85.466	85.416	1200mm DIA.	OPSD-701.010
STMH103	87.33		85.300	84.842	1200mm DIA.	OPSD-701.010
DICB104	86.80		85.900	83.733	600x600mm	OPSD-705.010
STMH105	84.55		83.671	83.496	1200mm DIA.	OPSD-701.010
CB106	84.38			83.659	600x600mm	OPSD-705.010
CBMH107	87.70		85.000	83.293	1200mm DIA.	OPSD-701.010
STMH108	87.91		83.347	83.287	1200mm DIA.	OPSD-701.010
STMH110	85.70	84.640	83.271	83.211	1200mm DIA.	OPSD-701.010
CB109	84.58			84.060	600x600mm	OPSD-705.010

SAN STRUCTURE TABLE						
STRUCTURE ID	RIM ELEVATION	INVERT IN		INVERT OUT	DESCRIPTION	
					SIZE	COVER
SAMH101	87.77		84.807	84.787	1200mm DIA.	OPSD-701.010

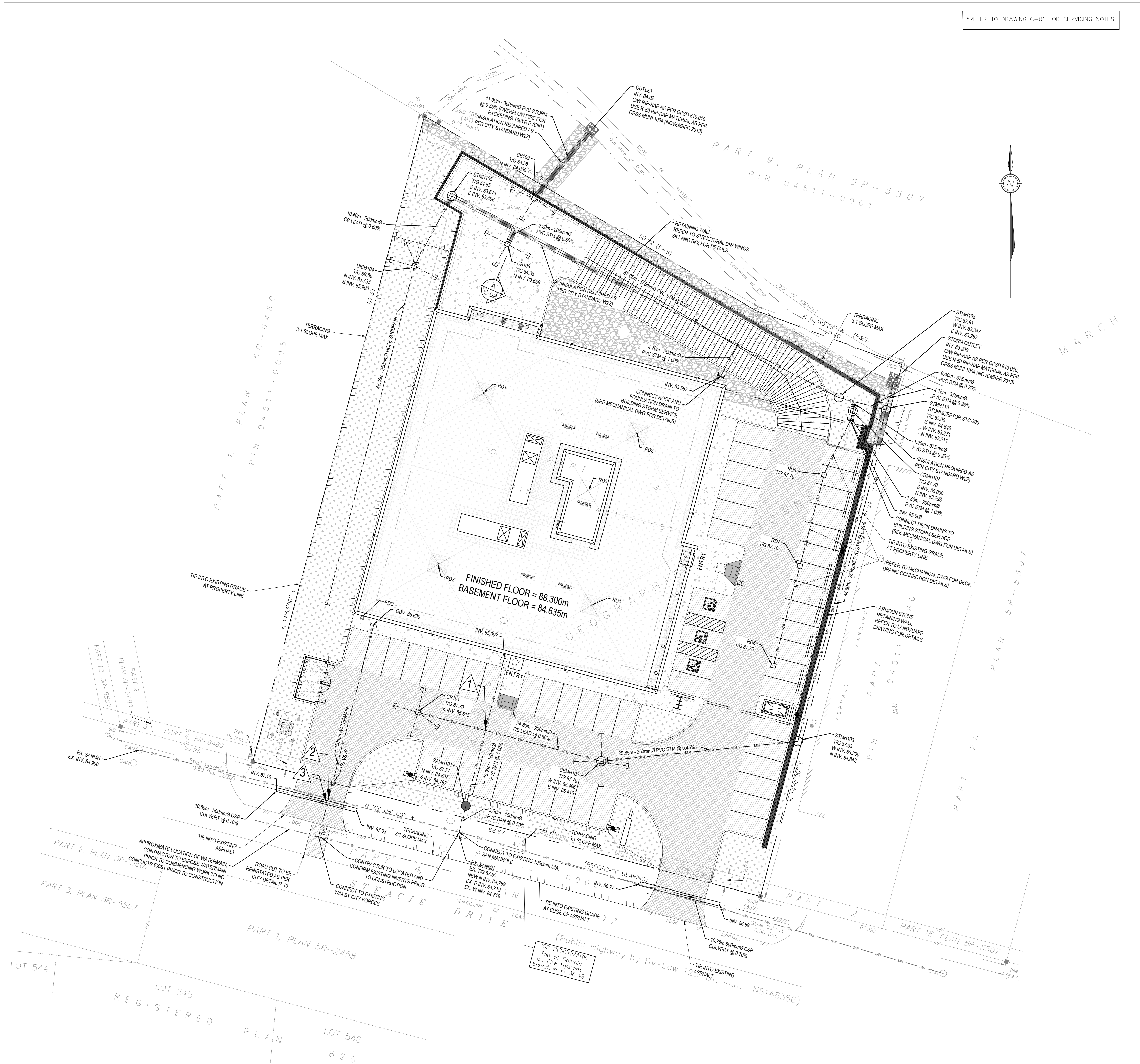
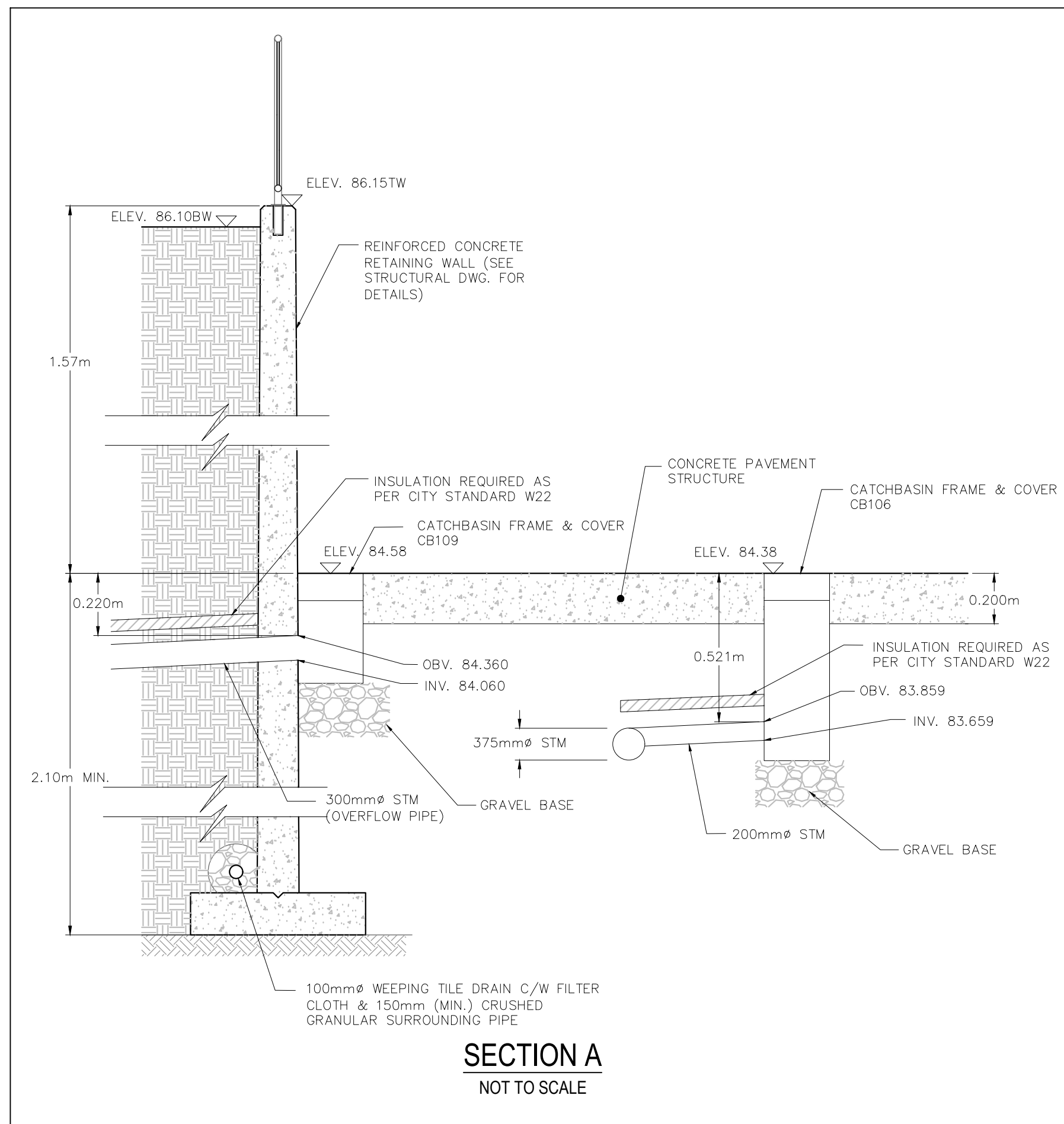
PIPE CROSSING TABLE						
Obvert			Invert			
1.	150mm. Dia. SAN	85.056	0.504	Clearance Under	85.560	250mm. Dia. STM
2.	Ex. 250mm. Dia. SAN	85.043	0.258	Clearance Under	85.301	150mm. Dia. WM
3.	150mm. Dia. WM	85.438	1.614	Clearance Under	87.052	500mm. Dia. CUL

*Provide Thermal Insulation as per Ottawa Drawing W23

WATERMAIN SCHEDULE				
STATION	DESCRIPTION	FINISHED GRADE	TOP OF WATERMAIN	AS-BUILT WATERMAIN
0+000	200mm x 150mm TVS	87.800		85.374
0+004.6	Crossing under Culvert	87.840	85.440	
0+005.2	Crossing over Ex. San	87.850	85.450	
0+007.3	150mm V&VB	87.890	85.490	
0+028.7	CAP	88.200	85.630	

SERVICING LEGEND

- STM PROPOSED STORM SEWER
- PROPOSED STORM MANHOLE
- ⊙ PROPOSED CATCHBASIN MANHOLE
- PROPOSED CATCHBASIN
- RPROPOSED SANITARY SEWER
- PROPOSED SANITARY MANHOLE
- ⊗ PROPOSED WATER V&VB
- W PROPOSED WATERMAIN
- PROPOSED CULVERT



1 SERVICING PLAN
C-02 SCALE= 1:250

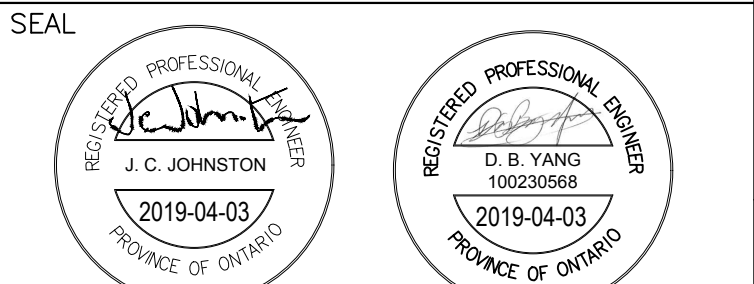
CATCH BASIN AND ICD DATA TABLE									
STRUCTURE ID	AREA ID	STRUCTURE	COVER	TOP OF GRATE ELEVATION	INVERT		DIAMETER (mm)	TYPE	ICE TYPE
CB101	A101	OPSD 705.010	S19.1	87.70		85.615	200	PVC DR-35	
CBMH102	A102	OPSD 701.010	S28.1	87.70	85.466	85.416	250	PVC DR-35	HYDROVEX 50VHV-1
DICB104	A104	OPSD 705.010	OPSD 403.010	86.80	85.900	83.733	200	PVC DR-35	HYDROVEX 25SVHV-1
CB106	A106	OPSD 705.010	S19.1	84.38		83.659	200	PVC DR-28	HYDROVEX 100VHV-1
CBMH107	A107	OPSD 701.010	S28.1	87.70	85.000	83.293	375	PVC DR-35	HYDROVEX 50VHV-1
CB109		OPSD 705.010	S19.1	84.58		84.06	300	PVC DR-35	



300-2611 QUEENSWAY DRIVE
OTTAWA ONTARIO CANADA K2B 8K2
TEL: 1-613-829-2881 | FAX: 1-613-829-9299 | WWW.WSPGROUP.COM



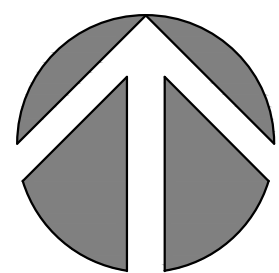
LOCATION MAP



Not for construction unless
SEALED AND SIGNED.

2	SUBMISSION NO. 2	APR 03, 2019
1	ISSUED FOR SITE PLAN APPLICATION	JAN 23, 2019
NO.	ISSUE & REVISIONS	DATE

PROJECT NORTH



P & R
PYE & RICHARDS ARCHITECTS INC
200-824 MEATH STREET OTTAWA ONTARIO K1Z 6E8
TEL: 613-724-7700 FAX: 613-724-1289
EMAIL: staff@pnarch.com
WEBSITE: www.pyeandrichardsarchitects.com

PROJECT
**NEW 2-STORY
OFFICE BUILDING
WITH BASEMENT PARKING GARAGE**
56 STEACIE DRIVE OTTAWA, ONTARIO

DRAWING
SERVICING PLAN

Do not scale. Refer any dimensional errors and/or possible
trade interference/conflict to the architects for clarification
prior to commencement of the work.
The conditions of the contract apply.

PROJECT NO. 18M-01672-00	DRAWING NO.
SCALE: AS NOTED	C-02
DRAWN: WJ	
CHECKED: JJ	
PLOT DATE -2019-04-03	REVISION NO. 1