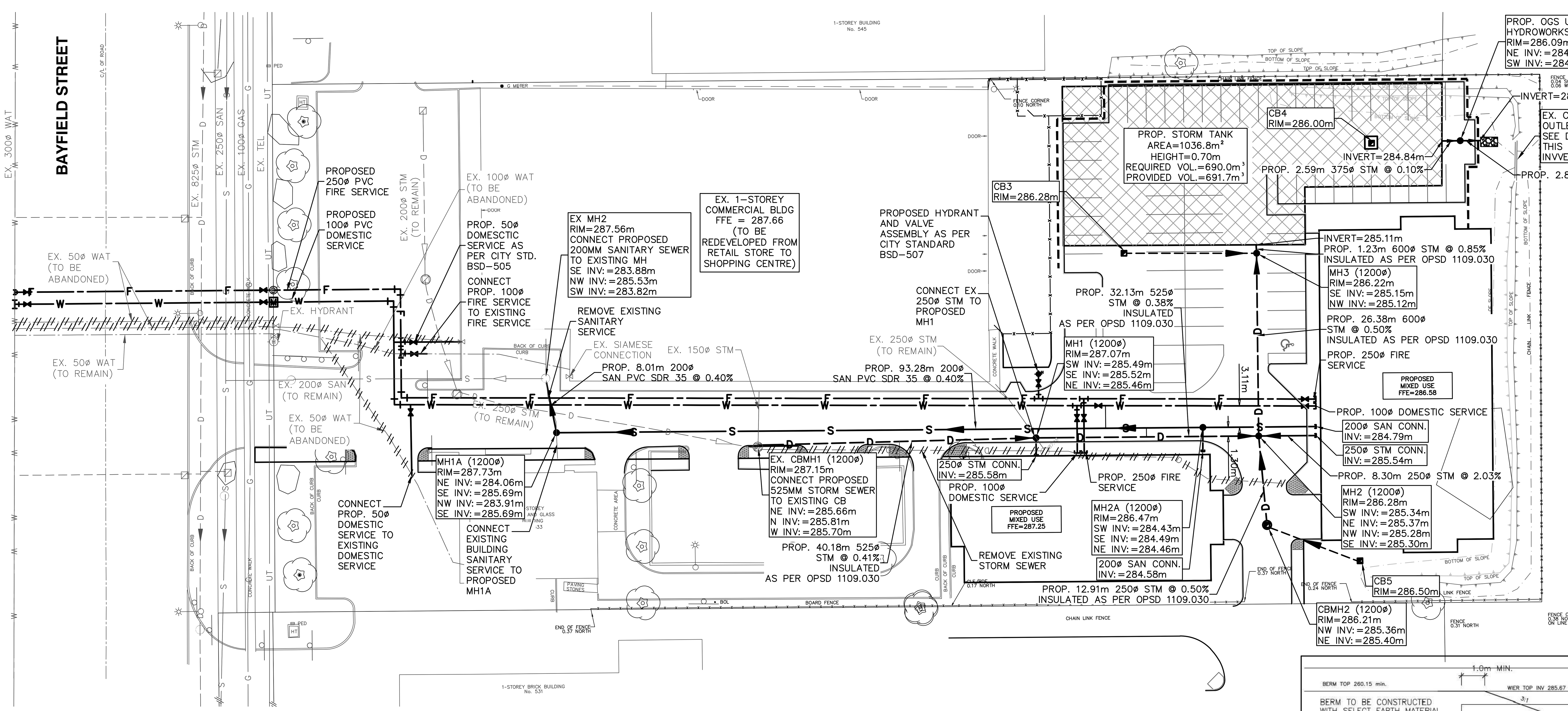
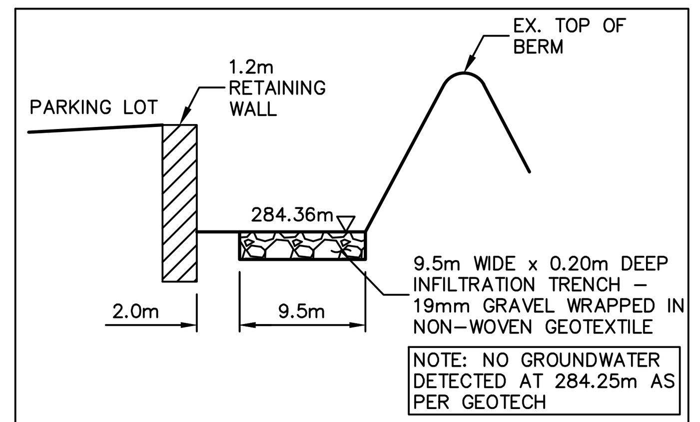


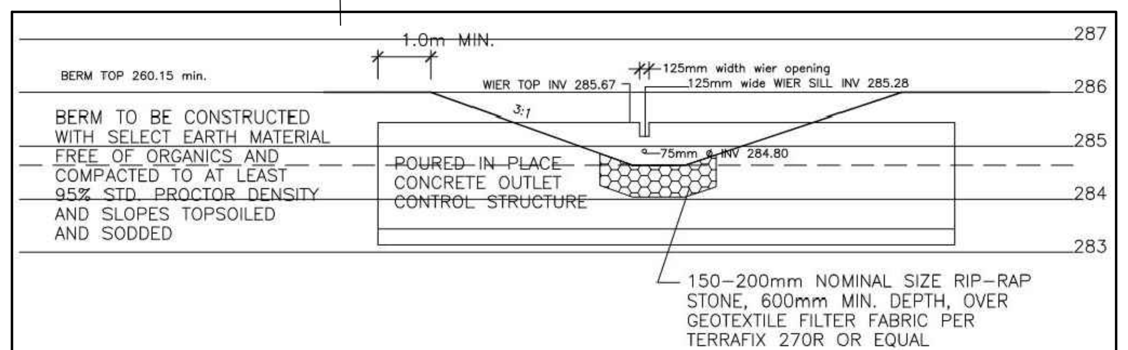
KEY PLAN - NTS

LEGEND

PROPERTY LINE	
EXISTING SANITARY SEWER	S
EXISTING STORM SEWER	D
EXISTING WATERMAIN	W
EXISTING GAS	G
EXISTING TELECOMMUNICATION	T
PROPOSED CATCH BASIN LEAD	
PROPOSED RETAINING WALL	
PROPOSED EDGE OF ASPHALT	
PROPOSED PIPE INSULATION	
PROPOSED INFILTRATION TRENCH	
LIMIT OF CONSTRUCTION	
EXISTING CONCRETE SIDEWALK	
REMOVALS	
EXISTING HYDRO POLE	
EXISTING FIRE HYDRANT	
EXISTING/PROPOSED CATCH BASIN	
EXISTING/PROPOSED CATCH BASIN MANHOLE	
EXISTING/PROPOSED MANHOLE	
PROPOSED BULK METER IN CHAMBER	M
PROPOSED BACKFLOW PREVENTION VALVE IN MANHOLE	B
PROPOSED GATE VALVE	
PROPOSED SIAMESE CONNECTION	S
OVERHEAD DOOR ENTRANCE	
BUILDING ENTRANCE	
PROPOSED RIP RAP	
PROPOSED SANITARY SEWER	S
PROPOSED STORM SEWER	D
PROPOSED WATERMAIN DOMESTIC	W
PROPOSED WATERMAIN FIRE	F



DETAIL FOR INFILTRATION TRENCH WITHIN STORM DETENTION FACILITY
N.T.S.



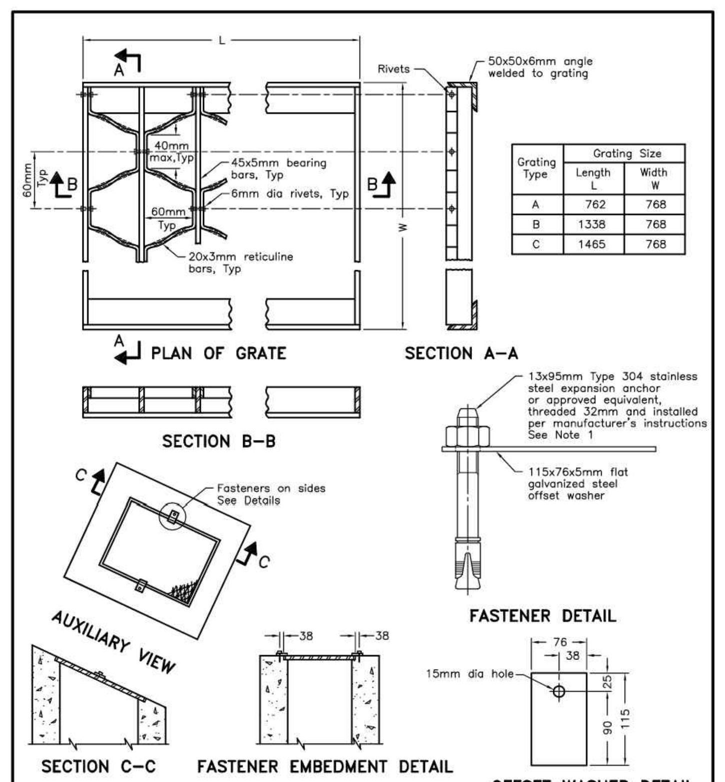
SECTION - OUTLET STRUCTURE

GENERAL NOTES - ROADWORKS:

1. GRADE AND CROSSFALL ADJUSTMENT OF MAINTENANCE HOLD AND CATCHBASIN FRAMES WILL BE MADE USING PRODUCTS SPECIFICALLY MANUFACTURED FOR THAT PURPOSE..
2. ADJUSTMENT UNITS MUST BE CERTIFIED TO MEET ALL PERTINENT OPS, CSA, ASTM AND MTO-DSM LISTS, OR OTHER INDUSTRY GUIDELINES FOR MATERIALS, PERFORMANCE AND USE AS APPLICABLE.
3. ADJUSTMENT UNITS AND JOINTS WILL BE SEALED AND OR PARGED IN COMPLIANCE WITH MANUFACTURERS SPECIFICATIONS AND GUIDELINES.
4. MORTAR IS USED FO RLEVELING OR PRECAST UNITS ONLY. THE THICKNESS OF MORTAR WILL BE 10MM TO FILL ALL VOIDS CREATED BY IRREGULARITIES IN THE PRECAST UNITS TO ENSURE AN EVEN SURFACE ONLY.

GENERAL NOTES - STORM SEWER:

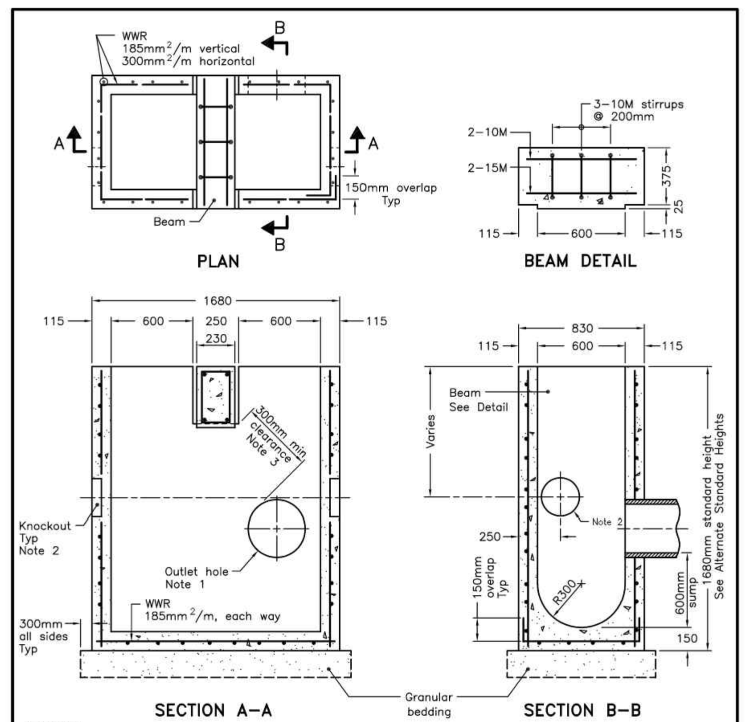
1. STORM SEWER TO BE PROVIDED ON ALL ROADS WITH CURB AND GUTTER.
2. PLACE ALL CATCH BASIN LATERALS AT 2% GRADE UNLESS OTHERWISE NOTED.
3. MAINTENANCE HOLE TOPS (FRAMES) AND CATCH BASIN (FRAMES) ARE TO BE SET TO BASE COURSE ASPHALT GRADE AND THEN ADJUSTED TO FINAL GRADE WHEN THE TOP LIFT OF ASPHALT IS PLACED. ALL ADJUSTMENT WILL BE ACCORDANCE WITH BSD-N2.
4. STORM SEWER TO BE LOCATED OFFSET 3.0M SOUTH OR EAST OF CENTRELINE UNLESS OTHERWISE SPECIFIED.
5. ALL CONNECTIONS TO THE STORM MAIN SHALL BE MADE WITH A STORM MANHOLE OR APPROVED FACTORY TEE CONNECTION AS PER OPSD-708.01 OR 708.03.
6. PIPE MATERIAL TO BE REINFORCED CONCRETE WITH A MINIMUM STRENGTH OF 50 N/m/mm CERTIFIED TO C.S.A. STANDARD A247.2-1982, CLASS 50-D (PREVIOUSLY C.S.A. STANDARD A257.2-1974, CLASS II) OR PVC CERTIFIED TO C.S.A. STANDARDS 182.2 AND 182.4.
7. STORM SEWER TO BE MINIMUM 300mm DIAMETER WITH JOINTS CONFORMING TO C.S.A. STANDARD 257.3.
8. ALL PIPE BEDDING MUST CONFORM TO OPSD, MAXIMUM COVER TABLE. NO FLEXIBLE PIPE SEWERS WILL BE INSTALLED WITH A DEPTH OF COVER GREATER THAN 6 METERS UNLESS SPECIFICALLY APPROVED BY THE DIRECTOR OF ENGINEERING.
9. ALL PIPE HANDLING INSTALLATIONS MUST BE IN STRICT COMPLIANCE WITH MANUFACTURES INSTALLATION GUIDES AND THE O.C.P.A. OR UNIBELL GUIDELINES.
10. SUMP PUMP DISCHARGE PIPING IN BOULEVARD: IN THE EVENT OF OVERACTIVE SUMP PUMP ACTIVITY, A 150mm DIAMETER PVC DR-28 SEWER MAY BE INSTALLED, WHEN SO DIRECTED BY THE DIRECTOR OF ENGINEERING, ALONG THE FRONTAGES OF DESIGNATED LOTS, WITH AN OFFSET OF 0.6m FROM BACK OF CURB. THIS SEWER IS TO BE CAPPED AT THE UPSTREAM END AND IS TO OUTLET INTO THE NEAREST CATCHBASIN DOWNSTREAM. DEPTH OF SEWER IS TO BE EQUAL TO SUBDRAIN DEPTH. NOT TO BE DIRECTLY CONNECTED TO FOUNDATION DRAINS.



Grating Type	Grating Size Length L	Width W
A	762	768
B	1338	768
C	1465	768

NOTES:
1 Equivalent (13x100mm Galvanized J-Bolt) cast-in-place anchor may be used.
A Fastener shall be inserted to maintain minimum concrete cover requirements.
B All steel components and rivets shall be galvanized.
C All dimensions are in millimetres unless otherwise shown.

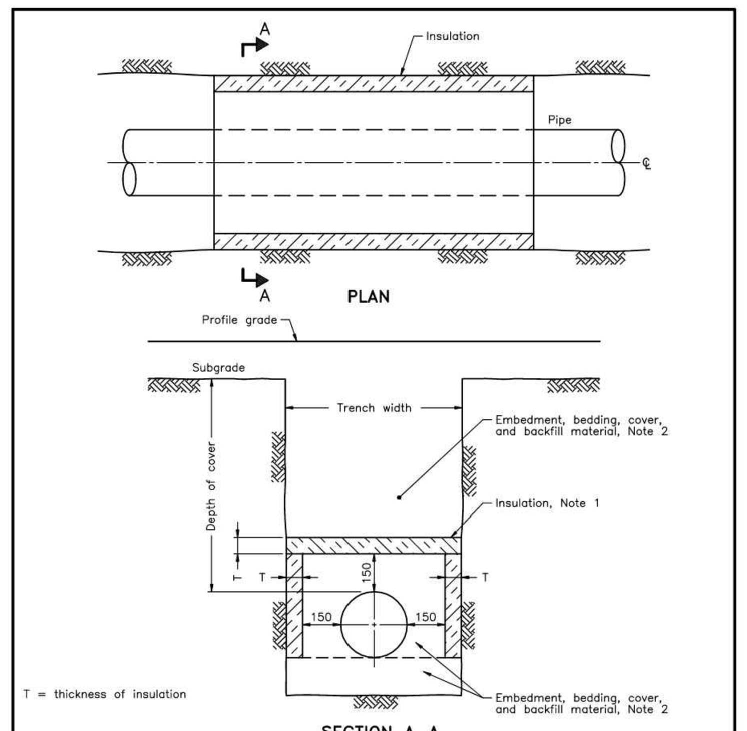
ONTARIO PROVINCIAL STANDARD DRAWING — Nov 2017 Rev 3
GALVANIZED STEEL HONEYCOMB GRATING FOR DITCH INLETS
OPSD 403.010



NOTES:
1 Outlet hole size 525mm diameter maximum, location as required.
2 200mm diameter knockout to accommodate subdrain. Knockout shall be 60mm deep.
3 Minimum clearance between beam recess and hole for pipe shall be 300mm or minimum clearance can be 150mm with addition of two 15M size rebar on 45 degree diagonal.
A Centre reinforcing in base slab and walls ±20mm.
B Granular backfill shall be placed to a minimum thickness of 300mm all around the catch basin.
C Frame, grate, and adjustment units shall be installed according to OPSD 704.010.
D Pipe support shall be according to OPSD 708.020.
E All dimensions are nominal.
F All dimensions are in millimetres unless otherwise shown.

ALTERNATIVE	DIMENSION
A	1980
B	1830
C	1680

ONTARIO PROVINCIAL STANDARD DRAWING — Nov 2019 Rev 4
PRECAST CONCRETE TWIN INLET CATCH BASIN 600 x 1450mm
OPSD 705.020



SECTION A-A
TYPICAL PIPE INSULATION DETAIL

NOTES:
1 The insulation material shall be extruded polystyrene according to OPSS 1605 with a minimum compressive strength of 275 kPa.
2 Pipe embedment or bedding, cover, and backfill shall be according to:
a) Flexible OPSD 802.010, 802.013, 802.020, and 802.023.
b) Rigid - OPSD 802.030, 802.031, 802.032, 802.033, 802.050, 802.051, 802.052, and 802.053.
A Minimum insulation thickness shall be 50mm.
B Joints shall be staggered for multiple insulation sheets.
C This OPSD is to be read in conjunction with OPSD 3090.100 and 3090.101.
D All dimensions are in millimetres unless otherwise shown.

ONTARIO PROVINCIAL STANDARD DRAWING — Nov 2020 Rev 1
INSULATION FOR SEWERS AND WATERMAINS IN SHALLOW TRENCHES
OPSD 1109.030

REV	DATE	DESCRIPTION	BY	APP
1	XX/11/2021	ISSUED FOR SITE PLAN APPLICATION	JML	CAB

ENGINEER STAMP

LEGAL DESCRIPTION: PART OF LOT 18 CONCESSION 4 GEOGRAPHIC TOWNSHIP OF VESPRA NOW IN THE CITY OF BARRIE COUNTY OF SIMCOE

BENCHMARK: ELEVATIONS SHOWN ON THIS PLAN ARE RELATED TO GEODETIC DATUM AND ARE DERIVED FROM BENCH MARK No 003120080033 HAVING A PUBLISHED ELEVATION OF 277.889 METRES.

APLIN MARTIN
ENGINEERING ARCHITECTURE PLANNING SURVEYING
Aplin & Martin Consultants Ltd.
405 - 55 St. Clair Ave. West, O.N. Canada M4V 2Y7
Tel: (416) 644-1900, Fax: (416) 644-1889, Email: general@aplinmartin.com

CLIENT
PETRO GOLD LTD.
261 ARNOLD AVE
VAUGHAN, ON L4J 1C3

PROJECT
COMMERCIAL DEVELOPMENT
535 BAYFIELD STREET
BARRIE, ONTARIO

DRAWING TITLE
SITE SERVICING PLAN

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NOTICE TO CONTRACTOR

IT IS THE RESPONSIBILITY OF THE CONTRACTOR'S SURVEYOR TO VERIFY THAT ALL LEGAL SURVEY DIMENSIONS SHOWN ON THE ENGINEERS DRAWINGS AGREE WITH THOSE ON THE REGISTERED LEGAL SURVEY PLAN. SHOULD THERE BE ANY DISCREPANCIES, THEN IMMEDIATELY NOTIFY THE ENGINEER OF RECORD

THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY & HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

DESIGN JML	DATE AUGUST, 2021	SCALE 1:400
DRAWN JML	PROJECT NO. 21-7026	
CHECKED CAB	DRAWING NO. C02	REV. -
APPROVED CAB		

0 4 1:400 20m

Feb 21 2023 - 3:01pm M:\TOR\2021\21-7026\DWG\ONSITE PRODUCTION\21-7026 - C02 - SITE SERVICING.dwg/C02 - SITE SERVICING PLAN SBalachandran