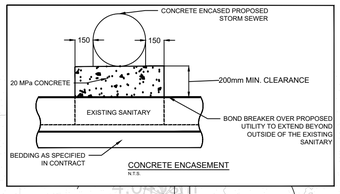
ORIFICE PLATE TO BE INSPECTED ANNUALLY TO ENSURE THAT THE OUTLET IS FUNCTIONING AS INTENDED AND FREE FROM DEBRIS/OBSTRUCTION



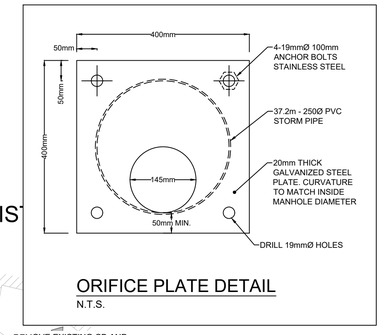
Crossings Table

City of Mississauga

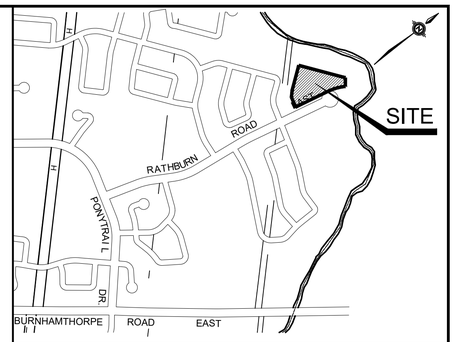
EnVision Consultants Ltd.
2121 Rathburn Rd E
Project No.: 25-1026

2026-07-09
Designed: I.Z.
Checked: D.A.

CROSSING #	GROUND ELEV (m)	STM Diam. (mm)	STM OBV. (m)	STM INV. (m)	SAN Diam. (mm)	SAN OBV. (m)	SAN INV. (m)	PVC WM Diam. (mm)	PVC WM OBV. (m)	PVC WM INV. (m)	DI WM Diam. (mm)	DI WM OBV. (m)	DI WM INV. (m)	CLEARANCE (m)	NOTES
1	141.84				200	138.07	137.87	100	140.14	140.04				1.97	Sanitary below WM
2	142.87				200	138.86	138.66	100	141.17	141.07				2.22	Sanitary below WM
3	142.84	450	139.69	139.24				100	141.14	141.04				1.36	Storm below WM
4	141.38	300	138.35	138.05				*300*	*139.27*	*138.97*				0.62	Storm below ex. *WM*
5	141.43	300	138.32	138.02	*250*	*137.62*	*137.37*							0.40	*Ex. sanitary* below storm
6	141.40				200	137.80	137.60	*300*	*139.84*	*139.54*				1.74	Sanitary below ex. *WM*
7	141.96	450	139.22	138.72	*250*	*138.48*	*138.23*							0.29	*Ex. sanitary* below storm (Concrete Encased Crossing)
8	141.99	450	139.25	138.80				*300*	*139.87*	*139.57*				0.32	Storm below ex. *WM*
9	142.01	450	139.26	138.81							200	*140.15*	*139.95*	0.69	Storm below ex. *WM (ABND)*
10	142.01							150	139.08	138.93	200	*139.78*	*139.58*	0.50	WM below ex. *WM (ABND)*
11	141.51	300	138.36	138.06							200	*139.75*	*139.55*	1.10	Storm below ex. *WM (ABND)*
12	141.56				*200*	*137.82*	137.62				200	*139.81*	*139.61*	1.79	Sanitary below ex. *WM (ABND)*
13	141.59							150	139.11	138.96	200	*139.81*	*139.61*	0.50	WM below ex. *WM (ABND)*
14	142.87	300	140.70	140.40										0.69	375mm storm below 300mm storm
		375	139.72	139.34											
15	142.65	300	140.66	140.36				100	139.86	139.76				0.50	Bend WM below storm
16	142.60	135	140.46	140.32				100	141.09	140.99				0.53	storm below WM



ORIFICE PLATE DETAIL
N.T.S.



KEY PLAN NTS

LEGEND

- EX. VALVE & CHAMBER
- EX. HYDRANT
- EX. SANITARY MANHOLE
- EX. STORM MANHOLE
- EX. CATCHBASIN
- SANITARY MANHOLE
- STORM MANHOLE
- CATCHBASIN
- DOUBLE CATCHBASIN
- VALVE AND BOX
- HYDRANT AND VALVE
- LIMIT OF PROPERTY
- DEVELOPMENT LIMIT
- EXISTING SEWER / WATERMAIN TO BE REMOVED AND DISPOSED OFFSITE
- EXISTING SEWER / WATERMAIN TO BE ABANDONED

BENCHMARK NOTES:

ELEVATIONS SHOWN HEREON ARE GEODETIC AND ARE REFERRED TO THE CITY OF MISSISSAUGA BENCHMARK NO. 766, LOCATED ON THE NORTH FACE, WEST CORNER OF A RED BRICK TWO-STOREY HOUSE #4215 AT THE SOUTHEAST CORNER OF GARNETWOOD CHASE AND RATHBURN ROAD EAST, HAVING A PUBLISHED ELEVATION OF 141.957 METRES.

ALL DIMENSIONS AND ELEVATIONS ARE IN METRES UNLESS OTHERWISE NOTED.

PIPE SIZES ARE IN MILLIMETRES

No.	REVISIONS	DATE	APPR. BY
3	ISSUED FOR 3RD S.P.A SUBMISSION	JUL 15/26	D.A.
2	ISSUED FOR S.P.A SUBMISSION	MAR 04/26	D.A.
1	ISSUED FOR S.P.A SUBMISSION	SEPT 08/25	D.A.

CLIENT

CAPREIT APARTMENTS INC.
11 Church Street, Toronto, ON Canada M5E 1W1
Office (416) 861-9404
E-mail hello@capreit.net

PROJECT TITLE

2121 RATHBURN ROAD EAST
MISSISSAUGA, ONTARIO
STACKED RESIDENTIAL RENTAL TOWNHOUSE DEVELOPMENT

STAMP

LICENCED PROFESSIONAL ENGINEER — T. M. ABIKOYE — 100546720 — 2026-07-15 — PROVINCE OF ONTARIO

APPROVED AS TO FORM IN RELIANCE UPON THE PROFESSIONAL SKILL AND ABILITY OF ENVISION CONSULTANTS LTD. AS TO DESIGN AND SPECIFICATION

DIRECTOR OF DEVELOPMENT / TRANSPORTATION ENGINEERING

CONSULTANT

ENVISION CONSULTANTS LTD
6415 Northwest Dr. Mississauga, ON Canada L4V 1X1
Office (905) 677-0202
E-mail admin@envisionconsultants.ca

MUNICIPALITY

MISSISSAUGA — Region of Peel working with you

CITY FILE NO.: SP 25-54 W3, REGION FILE NO.: C604649

SHEET TITLE

SITE SERVICING PLAN

DESIGNED BY:	DATE:	CHECKED BY:
D.A.	SEPT 2025	A.W.
DRAWN BY: M.R.	PROJECT No. 25-1026	
SCALES: 1: 200		DRAWING No. C-102b

XXXX RATHBURN ROAD (BLOCK A)
PROPOSED STACKED TOWNHOUSES
3 STOREYS, 40 UNITS

RATHBURN RD E

EXISTING 6 STOREY APARTMENT BUILDING

EXISTING 6 STOREY APARTMENT BUILDING

PROPOSED CLOSED BOTTOM S.W.M. TANK 1
GREENSTORM-ST OR APPROVED EQUIVALENT
C/W IMPERMEABLE LINER ON ALL SIDES TO MAKE WATERTIGHT
FOOTPRINT = 204.2 m²
HEIGHT = 0.66m
TOTAL VOLUME = 129.4 m³
SUMP VOLUME = 0 m³
TOP OF STONE = 139.35m
TOP OF TANK = 139.05m
BOTTOM OF TANK = 138.39m
BOTTOM OF STONE = 138.24m
OUTLET = 145mm ORIFICE PLATE D/S OF MH2
PEAK RELEASE RATE = 28.2 L/s

JELLYFISH TREATMENT UNIT
1200Ø P.C.
JF4-1-1
TOP 142.74
E (S) INV. 138.67
E (N) INV. 138.55

9.0m - 375Ø PVC STM @ 2.00%

STM MH3
(DIVERSION MH)
1800Ø P.C.
OPSD 701.012
TOP 142.66
SE INV. 139.35
E INV. 138.84
W (S) INV. 138.72
W (N) INV. 138.57
N INV. 138.48
WEIR ELEV 141.02

STM MH2
1200Ø P.C.
OPSD 701.010
TOP 143.26
N INV. 138.26
E INV. 138.15

145mmØ ORIFICE PLATE ON D/S SIDE OF MH2 INV 138.15

2.6m - 300Ø PVC STM @ 1.20%

STM DCB1
TOP 142.51
INV. 140.83

2.1m - 375Ø PVC STM @ 1.00%

SAN MH3A
1200Ø P.C.
REGION OF PEEL STD 2-5-3
TOP 142.48
N INV. 138.18
E INV. 138.11

6.3m - 250Ø PVC STM @ 1.00%

3.0m WIDE LANDSCAPE BUFFER (TYP.)

29.4m - 200Ø PVC SDR-35 SAN @ 1.00%

150 x 100 REDUCER

STM CB1
TOP 141.87
INV. 138.18

1.3m - 250Ø PVC STM @ 1.00%

STM MH1
1200Ø P.C.
OPSD 701.010
TOP 141.83
W INV. 138.14
E INV. 138.09

150Ø PVC WATERMAIN

2-45° VERTICAL BENDS

CONNECT PROPOSED 150Ø WATER SERVICE TO EXISTING 300Ø WATERMAIN C/W TAPPING SLEEVE AND VALVE & BOX PER REGION OF PEEL STANDARDS

STM MH10
1200Ø P.C.
OPSD 701.010
TOP 141.40
W INV. 138.01
N INV. 137.63±
S INV. 137.63±

BREAK INTO EXISTING 525Ø STORM SEWER AND INSTALL PROPOSED MANHOLE

INV. 138.43
2.0m - 375Ø PVC STM @ 2.00%
2.0m - 375Ø PVC STM @ 2.00%
2.5m - 375Ø PVC STM @ 2.00%
INV. 138.43

TRANSHELP VEHICLE TURNAROUND SPACE

32.4m - 375Ø PVC STM @ 1.00%
36.4m - 200Ø PVC SDR-35 SAN @ 1.00%

LANDSCAPE BUFFER

100Ø PVC DR-18 WATERMAIN

PLUG
INV. 139.05

STM MH4
1200Ø P.C.
OPSD 701.010
TOP 142.85
N INV. 139.46
W INV. 138.86
E INV. 138.99

BUILDING STORM COLLECTION SYSTEM. REFER TO MECHANICAL DRAWINGS FOR DETAILS (TYP.)

SINGLE CHECK VALVE BACKFLOW PREVENTER IN 1800Ø CHAMBER. CHAMBER TO BE CONSTRUCTED PER REGION OF PEEL STD. 1-1-5

150mm TRU-FLO COMPOUND METER IN CHAMBER PER REGION OF PEEL STD. 1-4-4. CHAMBER TO BE CONSTRUCTED PER REGION OF PEEL STD. 1-1-5

Storm Sewer 109
Top: 141.96m
NW INV 2.95m 150mm Ø (139.01m)
N INV 3.16m 300mm Ø (138.80m)
E INV 3.10m 450mm Ø (138.86m)

Sanitary Sewer 108
Top: 141.96m
E INV 3.31m 250mm Ø (138.65m)
W INV 3.20m 250mm Ø (138.76m)

68.9m - 200Ø PVC SDR-35 SAN @ 1.00%

4.0m - 300Ø PVC STM @ 1.20%

STM MH5
1200Ø P.C.
OPSD 701.010
TOP 143.40
W INV. 140.39
S INV. 139.79

STM CB2
TOP 143.09
INV. 140.44

SAN MH2A
1200Ø P.C.
REGION OF PEEL STD 2-5-3
TOP 143.50
NW INV. 139.52±
NE INV. 138.71
SW INV. 138.68

STM MH9
1200Ø P.C.
OPSD 701.010
TOP 143.14
N INV. 140.27
NW INV. 139.41±
E INV. 139.36

BREAK INTO EXISTING STORM SEWER AND INSTALL PROPOSED MANHOLE

SAN MH8A
1200Ø P.C.
REGION OF PEEL
STD 2-5-3
TOP 143.44
NE INV. 138.60
S INV. 138.55

7.6m - 200Ø PVC SDR-35 SAN @ 1.00%

BREAK INTO EXISTING SANITARY SEWER AND INSTALL PROPOSED MANHOLE

SAN MH1A
1200Ø P.C.
REGION OF PEEL STD 2-5-3
TOP 143.57
SW INV. 138.82

SAN MH6A
1200Ø P.C.
REGION OF PEEL STD 2-5-3
TOP 143.17
E INV. 138.78

10.9m - 200Ø PVC SDR-35 SAN @ 1.00%

16.5m - 200Ø PVC SDR-35 SAN @ 1.00%
7.0m - 375Ø PVC STM @ 0.50%
3.4m - 300Ø PVC STM @ 1.00%

BUILDING WEEPING TILE SYSTEM. REFER TO MECHANICAL DRAWINGS FOR DETAILS (TYP.)

STM CBMH1
1500Ø P.C.
OPSD 701.010
TOP 142.55
W INV. 139.32
N INV. 139.34±
E INV. 139.24

PLUG INV. 140.42

Storm Sewer 110
NW INV 3.43m 300mm Ø (139.35m)
N INV 3.45m 300mm Ø (139.33m)
S INV 3.49m 300mm Ø (139.29m)
Originally buried, exposed as THMH during investigation.

REMOVE EXISTING CB AND LEAD AND DISPOSE OFFSITE

100Ø PVC DR-18 WATERMAIN

4.2m - 135Ø PVC STM ORIFICE TUBE @ 2.00%
INV. 140.35

3.0m - 300Ø PVC STM @ 1.00%

PROPOSED HYDRO SERVICE (BY OTHERS)

6 CLASS B BICYCLE PARKING SPACES

BREAK IN AND CONNECT TO EX STM SEWER
INV. 139.47

1.5m - 250Ø PVC STM @ 1.00%

STM CB3
TOP 142.06
INV. 139.49

EX. ±91.2m - 300Ø CONC STM @ ±0.47%

PROPOSED COMMUNITY MAILBOXES ON CONCRETE PAD

PROPOSED PAD MOUNT TRANSFORMER

PROPERTY LINE

3.0m WIDE LANDSCAPE BUFFER (TYP.)

INSTALL 300Ø ISOLATION VALVE AND BOX ON EXISTING 300Ø WATERMAIN

EX. 200Ø DI WATERMAIN (ABND)

EX. 300Ø PVC WATERMAIN

15.2m - 200Ø PVC SDR-35 SAN @ 1.00%

SAN MH4A
1200Ø P.C.
REGION OF PEEL
STD 2-5-3
TOP 141.84
N INV. 137.82
W INV. 137.82
E INV. 137.67

16.8m - 300Ø PVC STM @ 0.50%

SAN MH5A
1200Ø P.C.
REGION OF PEEL STD 2-5-3
TOP 141.45
W INV. 137.52
N INV. 137.47±
S INV. 137.47±

BREAK INTO EXISTING 250Ø SANITARY SEWER AND INSTALL PROPOSED MANHOLE

Sanitary Sewer 107
Top: 141.73m
NW INV 3.62m 250mm Ø (138.11m)
N INV 3.72m 250mm Ø (138.01m)
S INV 3.74m 250mm Ø (137.99m)

EX. ±89.7m - 250Ø PVC SAN @ ±1.46%

EX. ±90.2m - 525Ø CONC STM @ ±1.06%

Storm Sewer 106
Top: 141.74m
N INV 3.64m 525mm Ø (138.10m)
E INV 3.34m 375mm Ø (138.40m)
S INV 3.65m 525mm Ø (138.09m)
W INV 3.25m 450mm Ø (138.49m)

CAP EXISTING SANITARY MUNICIPAL SERVICING CONNECTION AT PROPERTY LINE AND ABANDON CONNECTION IN ACCORDANCE WITH REGION OF PEEL STANDARDS & SPECIFICATIONS

CAP EXISTING STORM MUNICIPAL SERVICING CONNECTION AT PROPERTY LINE AND ABANDON CONNECTION IN ACCORDANCE WITH CITY OF MISSISSAUGA STANDARDS & SPECIFICATIONS

EX. ±92.2m - 250Ø PVC SAN @ ±0.88%

EX. ±91.3m - 525Ø CONC STM @ ±0.84%

SAN MH7A
1200Ø P.C.
REGION OF PEEL
STD 2-5-3
TOP 142.30
W INV. 138.62
S INV. 138.51

17.0m - 450Ø PVC STM @ 0.50%

4.4m - 450Ø PVC STM @ 0.50%

STM MH7
1200Ø P.C.
OPSD 701.010
TOP 142.32
W INV. 139.22
E INV. 138.88

EXISTING GAS METER TO REMAIN AND BE PROTECTED IN PLACE

150 x 100 REDUCER

SINGLE CHECK VALVE BACKFLOW PREVENTER IN 1800Ø CHAMBER. CHAMBER TO BE CONSTRUCTED PER REGION OF PEEL STD. 1-1-5

150mm TRU-FLO COMPOUND METER IN CHAMBER PER REGION OF PEEL STD. 1-4-4. CHAMBER TO BE CONSTRUCTED PER REGION OF PEEL STD. 1-1-5

150Ø PVC WATERMAIN

2-45° VERTICAL BENDS

CONNECT PROPOSED 150Ø WATER SERVICE TO EXISTING 300Ø WATERMAIN C/W TAPPING SLEEVE AND VALVE & BOX PER REGION OF PEEL STANDARDS

STM MH6
1200Ø P.C.
OPSD 701.010
TOP 141.88
W INV. 138.76
N INV. 138.39±
S INV. 138.39±

CONCRETE ENCASED EXISTING SANITARY SEWER

BREAK INTO EXISTING 525Ø STORM SEWER AND INSTALL PROPOSED MANHOLE

REMOVE EXISTING CB AND LEAD AND DISPOSE OFFSITE

PROPOSED OPEN BOTTOM S.W.M. TANK 2
GREENSTORM-ST OR APPROVED EQUIVALENT
FOOTPRINT = 71.7 m²
HEIGHT = 0.66m
TOTAL VOLUME = 45.4 m³
SUMP VOLUME = 15.8 m³
TOP OF STONE = 141.08m
TOP OF TANK = 140.78m
BOTTOM OF TANK = 140.12m
BOTTOM OF STONE = 139.97m
OUTLET = 135mm ORIFICE TUBE
PEAK RELEASE RATE = 24.6 L/s
GROUNDWATER ELEVATION = ±138.80

APPROX. LOCATION OF HYDRO SERVICE (BY OTHERS)

REFER TO DRAWING C-103 FOR CROSS-SECTIONS

BUILDING STORM COLLECTION AND WEEPING TILE SYSTEMS ARE SHOWN SCHEMATICALLY FOR REFERENCE ONLY. REFER TO MECHANICAL DRAWING PREPARED BY CBM GROUP + ASSOCIATES INC. FOR EXACT LOCATION OF STORM AND WEEPING TILE SYSTEMS.

ALL EXISTING UTILITIES ARE TO REMAIN AND BE MAINTAINED IN PLACE UNLESS NOTED OTHERWISE

ALL ROOF DOWNSPOUTS SHALL DISCHARGE BELOW GRADE TO THE BUILDING STORM COLLECTION SYSTEM. REFER TO MECHANICAL DRAWINGS PREPARED BY CBM GROUP + ASSOCIATES INC. FOR DETAILS.

CONTRACTOR TO FIELD VERIFY THE LOCATION OF ALL EXISTING SERVICES AND REPORT ANY DISCREPANCIES TO THE CONSULTANT PRIOR TO THE COMMENCEMENT OF CONSTRUCTION OPERATIONS

CONTRACTOR TO PROVIDE STAMPED SHOP DRAWINGS FOR THE PROPOSED STORMWATER MANAGEMENT TANK SYSTEMS AND WATERPROOFING (WHERE APPLICABLE) FOR CONSULTANT APPROVAL PRIOR TO CONSTRUCTION

REGION OF PEEL SERVICING NOTES

1. PUBLIC AND PRIVATE SERVICES, APPURTENANCES, MATERIALS AND CONSTRUCTION METHODS MUST COMPLY WITH THE MOST CURRENT REGION OF PEEL STANDARDS AND SPECIFICATIONS, THE LOCAL MUNICIPALITY'S REQUIREMENTS FOR THE ONTARIO BUILDING CODE AND ONTARIO PROVINCIAL STANDARDS. ALL WORKS SHALL ADHERE TO ALL APPLICABLE LEGISLATION, INCLUDING REGIONAL BY-LAWS.
2. WATERMAIN AND / OR WATER SERVICE MATERIALS 100 MM (4") AND LARGER MUST BE PVC DR18 CONSTRUCTED AS PER AWWA C900-16. SIZE 50 MM (2") AND SMALLER MUST BE TYPE K SOFT COPPER CONSTRUCTED AS PER ASTM B88-49 OR POLYETHYLENE CONSTRUCTED AS PER AWWA C901 AND CSA B.137.10 (CHOOSE ONLY ONE MATERIAL).
3. WATERMAINS AND / OR WATER SERVICES ARE TO HAVE A MINIMUM COVER OF 1.7 M (5'6") WITH A MINIMUM HORIZONTAL SPACING OF 1.2 M (4') FROM THEMSELVES AND ALL OTHER UTILITIES.
4. PROVISIONS FOR FLUSHING WATER LINE PRIOR TO TESTING, ETC. MUST BE PROVIDED WITH AT LEAST A 50 MM (2") OUTLET ON 100 MM (4") AND LARGER LINES. COPPER LINES ARE TO HAVE FLUSHING POINTS AT THE END, THE SAME SIZE AS THE LINE. THEY MUST ALSO BE HOSED OR PIPED TO ALLOW THE WATER TO DRAIN ONTO A PARKING LOT OR DOWN A DRAIN. ON FIRE LINES, FLUSHING OUTLET TO BE 100 MM (4") DIAMETER MINIMUM ON A HYDRANT.
5. ALL CURB STOPS TO BE 3.0 M (10') OFF THE FACE OF THE BUILDING UNLESS OTHERWISE NOTED.
6. HYDRANT AND VALVE SET TO REGION STANDARD 1 - 6 - 1 DIMENSION A AND B, 0.7 M (2') AND 0.9 M (3') AND TO HAVE PUMPER NOZZLE.
7. WATERMAINS TO BE INSTALLED TO GRADES AS SHOWN ON APPROVED SITE PLAN. COPY OF GRADE SHEET MUST BE SUPPLIED TO INSPECTOR PRIOR TO COMMENCEMENT OF WORK, WHERE REQUESTED BY INSPECTOR.
8. WATERMAINS MUST HAVE A MINIMUM VERTICAL CLEARANCE OF 0.3 M (12") OVER / 0.5 M (20") UNDER SEWERS AND ALL OTHER UTILITIES WHEN CROSSING.
9. ALL PROPOSED WATER PIPING MUST BE ISOLATED FROM EXISTING LINES IN ORDER TO ALLOW INDEPENDENT PRESSURE TESTING AND CHLORINATING FROM EXISTING SYSTEMS.
10. ALL LIVE TAPPING AND OPERATION OF REGION WATER VALVES SHALL BE ARRANGED THROUGH THE REGIONAL INSPECTOR ASSIGNED OR BY CONTACTING THE OPERATIONS AND MAINTENANCE DIVISION.
11. LOCATION OF ALL EXISTING UTILITIES IN THE FIELD TO BE ESTABLISHED BY THE CONTRACTOR.
12. THE CONTRACTOR(S) SHALL BE SOLELY RESPONSIBLE FOR LOCATES, EXPOSING, SUPPORTING AND PROTECTING OF ALL UNDERGROUND AND OVERHEAD UTILITIES AND STRUCTURES EXISTING AT THE TIME OF CONSTRUCTION IN THE AREA OF THEIR WORK. WHETHER SHOWN ON THE PLANS OR NOT AND FOR ALL REPAIRS AND CONSEQUENCES RESULTING FROM DAMAGE TO SAME.
13. THE CONTRACTOR(S) SHALL BE SOLELY RESPONSIBLE TO GIVE 72 HOURS WRITTEN NOTICE TO THE UTILITIES PRIOR TO CROSSING SUCH UTILITIES, FOR THE PURPOSE OF INSPECTION BY THE CONCERNED UTILITY. THIS INSPECTION WILL BE FOR THE DURATION OF THE CONSTRUCTION, WITH THE CONTRACTOR RESPONSIBLE FOR ALL COSTS ARISING FROM SUCH INSPECTION.
14. ALL PROPOSED WATER PIPING MUST BE ISOLATED THROUGH A TEMPORARY CONNECTION THAT SHALL INCLUDE AN APPROPRIATE CROSS-CONNECTION CONTROL DEVICE, CONSISTENT WITH THE DEGREE OF HAZARD, FOR BACKFLOW PREVENTION OF THE ACTIVE DISTRIBUTION SYSTEM, CONFORMING TO REGION OF PEEL STANDARDS 1-7-7 OR 1-7-8.
15. ALL WATER METERS MUST BE INSTALLED IN HEATED AND ACCESSIBLE SPACE.
16. PROPOSALS TO CONNECT TO AN EXISTING SERVICE LATERAL REQUIRES APPROVAL FROM THE REGION OF PEEL.

FILENAME: C:\Users\ANDREW~1\AppData\Local\Temp\AcPublish_32280\25-1026_SS1-SG1-ESC1-NT1.dwg
PLOTDATE: Jul 15, 2026 - 4:46pm, AndrewRocha