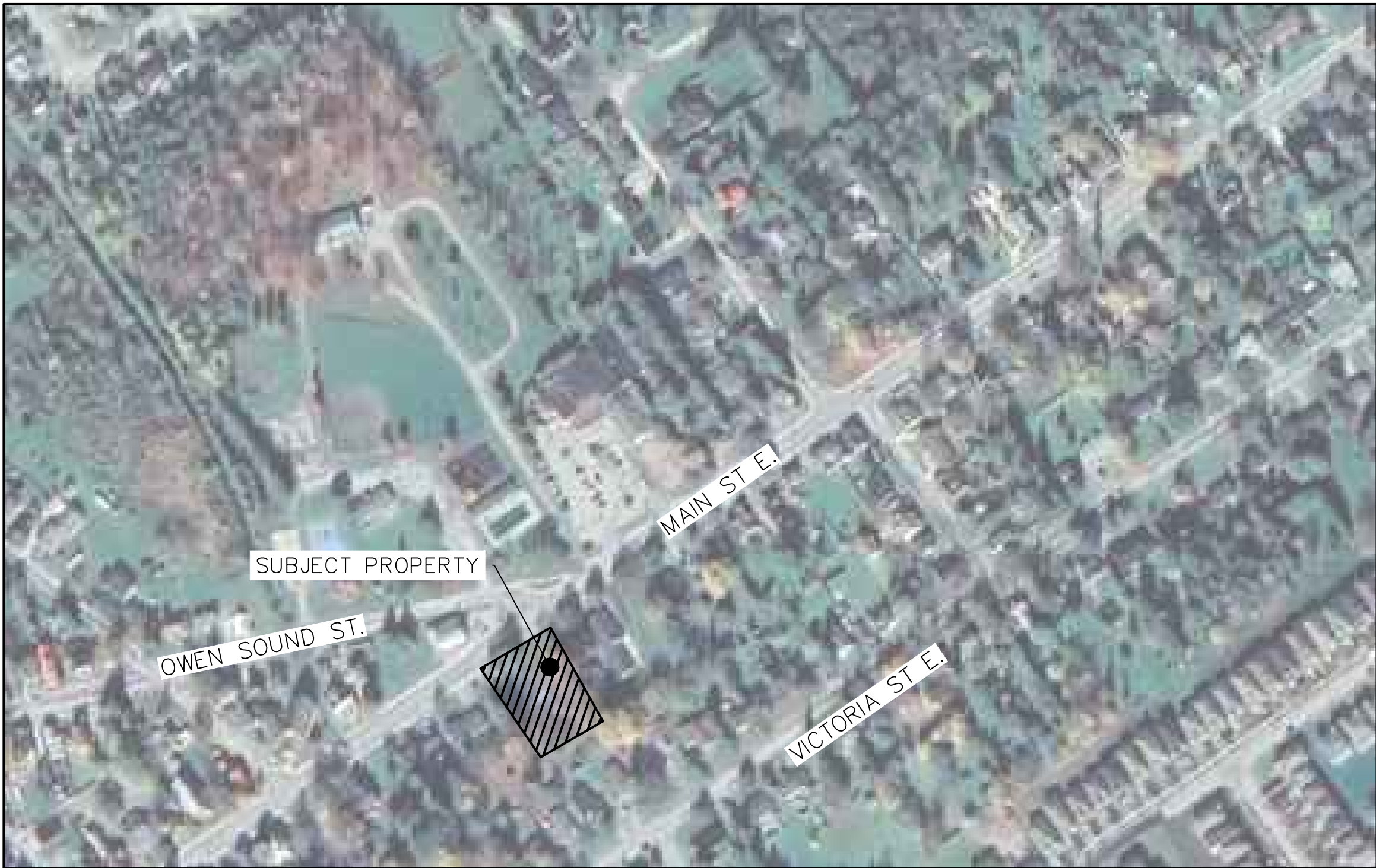


# 271 MAIN STREET EAST DUNDALK

## TOWNSHIP OF SOUTHGATE GREY COUNTY



MUNICIPALITY

TOWNSHIP OF SOUTHGATE  
185667 GREY RD 9  
DUNDALK, ONTARIO, N0C 1B0

DEVELOPER

COUNTRYSIDE COMMUNITIES INC.  
22746 RICHMOND ST N  
LONDON, ONTARIO, N5X 4B2

DEVELOPER'S ENGINEER



**CROZIER**  
CONSULTING ENGINEERS

70 HURON STREET, SUITE 100  
COLLINGWOOD, ON, L9Y 4L4  
705-446-3510  
WWW.CFCROZIER.CA

LANDSCAPE ARCHITECT

**MASTER LEGEND**

EXISTING FEATURES (EX.)

	EX. CONTOUR
	EX. GRADE
	EX. TREELINE
	EX. WATERCOURSE
	EX. DITCH
	EX. WATERMAIN
	EX. WATER SERVICE
	EX. FIRE HYDRANT & VALVE
	EX. SANITARY SEWER & MANHOLE
	EX. SANITARY FORCEMAIN
	EX. SANITARY SERVICE
	EX. STORM SEWER & MANHOLE
	EX. STORM CATCHBASIN
	EX. STORM DOUBLE CATCHBASIN
	EX. STORM CATCHBASIN MANHOLE
	EX. STORM DOUBLE CATCHBASIN MANHOLE
	EX. GAS MAIN
	EX. BELL LINE
	EX. BELL PEDESTAL
	EX. CABLE TELEVISION PEDESTAL
	EX. HYDRO POLE
	EX. LIGHT STANDARD
	EX. SIGN
	EX. BUILDING
	EX. BENCHMARK NUMBER & LOCATION
	EX. BOREHOLE NUMBER & LOCATION

PROPOSED FEATURES (PR.)

	PR. PROPERTY LIMITS
	PR. ELEVATION
	PR. ELEVATION (MATCH EX. ELEVATION)
	PR. SWALE & SLOPE
	PR. DITCH DRAINAGE
	PR. WATERMAIN & VALVE
	PR. WATER SERVICE
	PR. FIRE HYDRANT & VALVE
	PR. WATER VALVE CHAMBER
	PR. WATER QUALITY TESTING STATION
	PR. SANITARY SEWER & MANHOLE
	PR. SANITARY FORCEMAIN
	PR. SANITARY SERVICE
	PR. SANITARY CATCHMENT
	CATCHMENT AREA ID
	AREA (ha)
	POPULATION (3.5 p.p.u.)
	PR. STORM SEWER & MANHOLE
	PR. CATCHBASIN
	PR. DOUBLE CATCHBASIN
	PR. CATCHBASIN MANHOLE
	PR. DOUBLE CATCHBASIN MANHOLE
	PR. STORM CATCHMENT
	CATCHMENT AREA ID
	RUNOFF COEFFICIENT
	DRAINAGE AREA (ha)
	PR. CURB CUT
	PR. CANADA POST COMMUNITY MAIL BOX
	PR. TRANSFORMER
	PR. STOP SIGN
	PR. NAME SIGN
	PR. NO PARKING SIGN
	PR. FENCE
	PR. BUILDING ENVELOPE
	PR. LIGHT DUTY SILT FENCE
	PR. HEAVY DUTY SILT FENCE
	PR. STRAW BALE CHECK FLOW
	PR. ROCK CHECK DAM
	PR. SLOPE (3:1 MAX.)
	PR. TREE PRESERVATION AREA
	PR. TOPSOIL STOCKPILE LOCATION

DRAWING

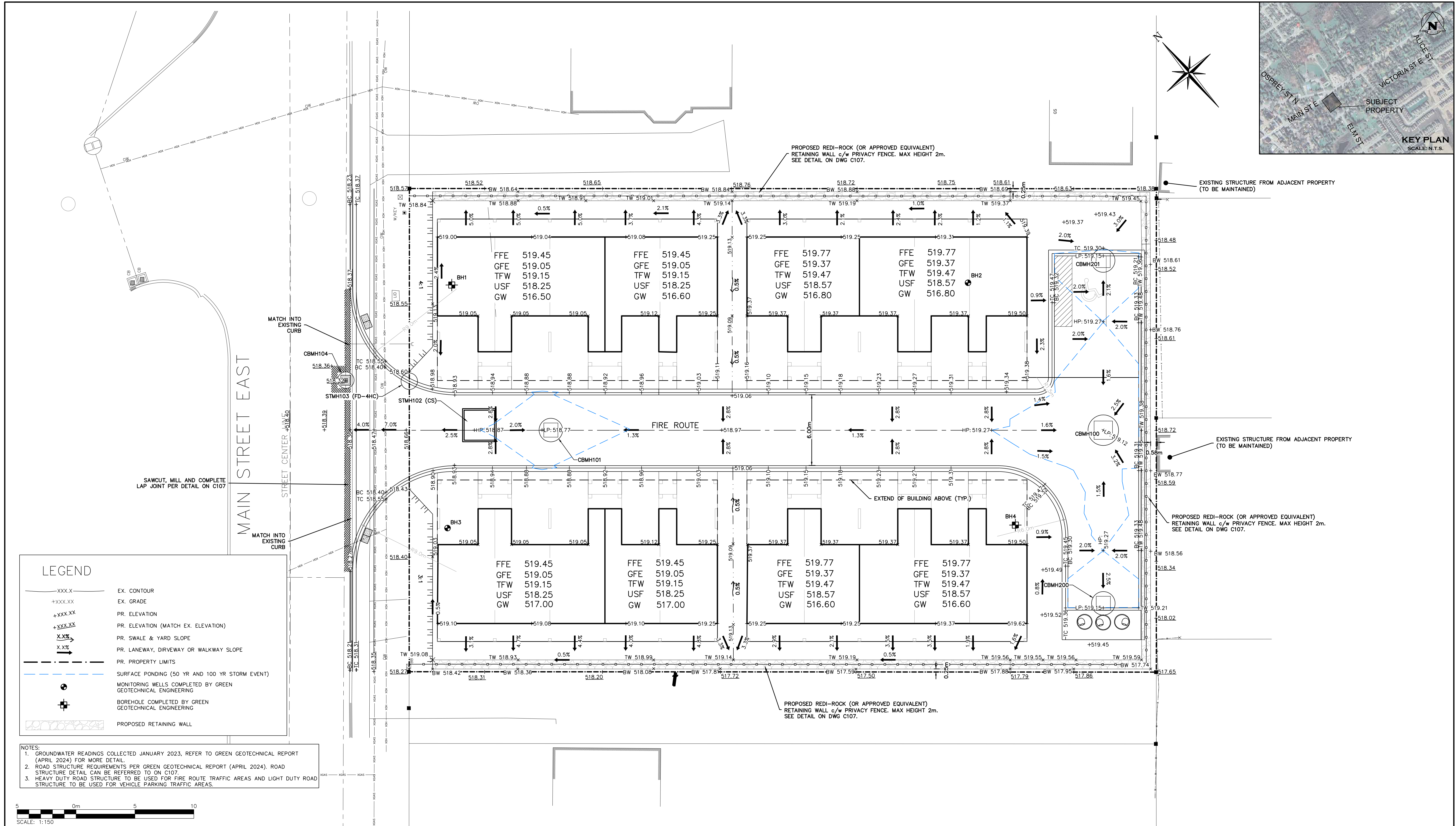
C100  
C101  
C102  
C102A  
C103  
C104  
C105  
C106  
C107  
C108  
C109

TITLE

TITLE PAGE  
GRADING PLAN  
GENERAL SERVICING PLAN  
CONNECTIONS TO EXISTING MAIN ST INFRASTRUCTURE  
PRE-DEVELOPMENT DRAINAGE PLAN  
POST-DEVELOPMENT DRAINAGE PLAN  
EROSION & SEDIMENT CONTROL PLAN  
EROSION & SEDIMENT CONTROL PLAN NOTES & DETAILS  
CONSTRUCTION NOTES & DETAILS 1 OF 3  
CONSTRUCTION NOTES & DETAILS 2 OF 3  
CONSTRUCTION NOTES & DETAILS 3 OF 3

PROJECT No.: 2514-6796  
2ND SUBMISSION SITE PLAN APPLICATION





1. THIS DRAWING IS THE EXCLUSIVE PROPERTY OF C.F. CROZIER & ASSOCIATES INC. AND THE MODIFICATION AND/OR REPRODUCTION OF ANY PART OF THIS DRAWING IS STRICTLY PROHIBITED WITHOUT WRITTEN AUTHORIZATION FROM THIS OFFICE.

2. THE DIGITAL FILES CONTAIN INTELLECTUAL AND DIGITAL DATA PROPERTY THAT IS THE EXCLUSIVE PROPERTY OF C.F. CROZIER & ASSOCIATES INC. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, LEVELS, AND DATUMS ON SITE AND REPORT ANY DISCREPANCIES OR OMISSIONS TO C.F. CROZIER & ASSOCIATES INC. PRIOR TO CONSTRUCTION.

3. THIS DRAWING IS TO BE READ AND UNDERSTOOD IN CONJUNCTION WITH ALL OTHER PLANS AND DOCUMENTS APPLICABLE TO THIS PROJECT.

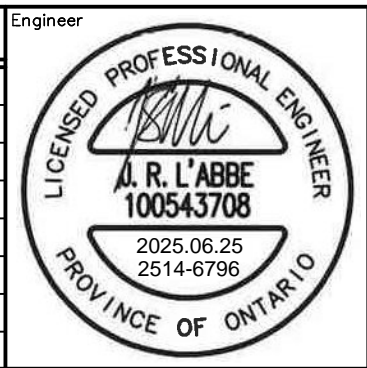
4. ALL EXISTING UNDERGROUND UTILITIES TO BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO CONSTRUCTION.

5. DO NOT SCALE DRAWINGS.

**BENCHMARKS**

SURVEY COMPLETED BY SCHAEFFER DZALDOV PURCELL LIMITED ON NOVEMBER 16TH, 2023. ELEVATIONS SHOWN HEREON ARE GEODETIC AND ARE REFERRED TO THE ONTARIO MINISTRY OF NATURAL RESOURCES AND FORESTRY CONTROL No. 00819688527 HAVING A PUBLISHED ELEVATION OF 515.566 METRES (CGVD2011).

No.	ISSUE	DATE: YYYY/MM/DD
0	ISSUED FOR 1ST SUBMISSION SPA	2024/04/26
1	ISSUED FOR 2ND SUBMISSION SPA	2025/06/25



271 MAIN STREET EAST DUNDALK  
TOWNSHIP OF SOUTHGATE

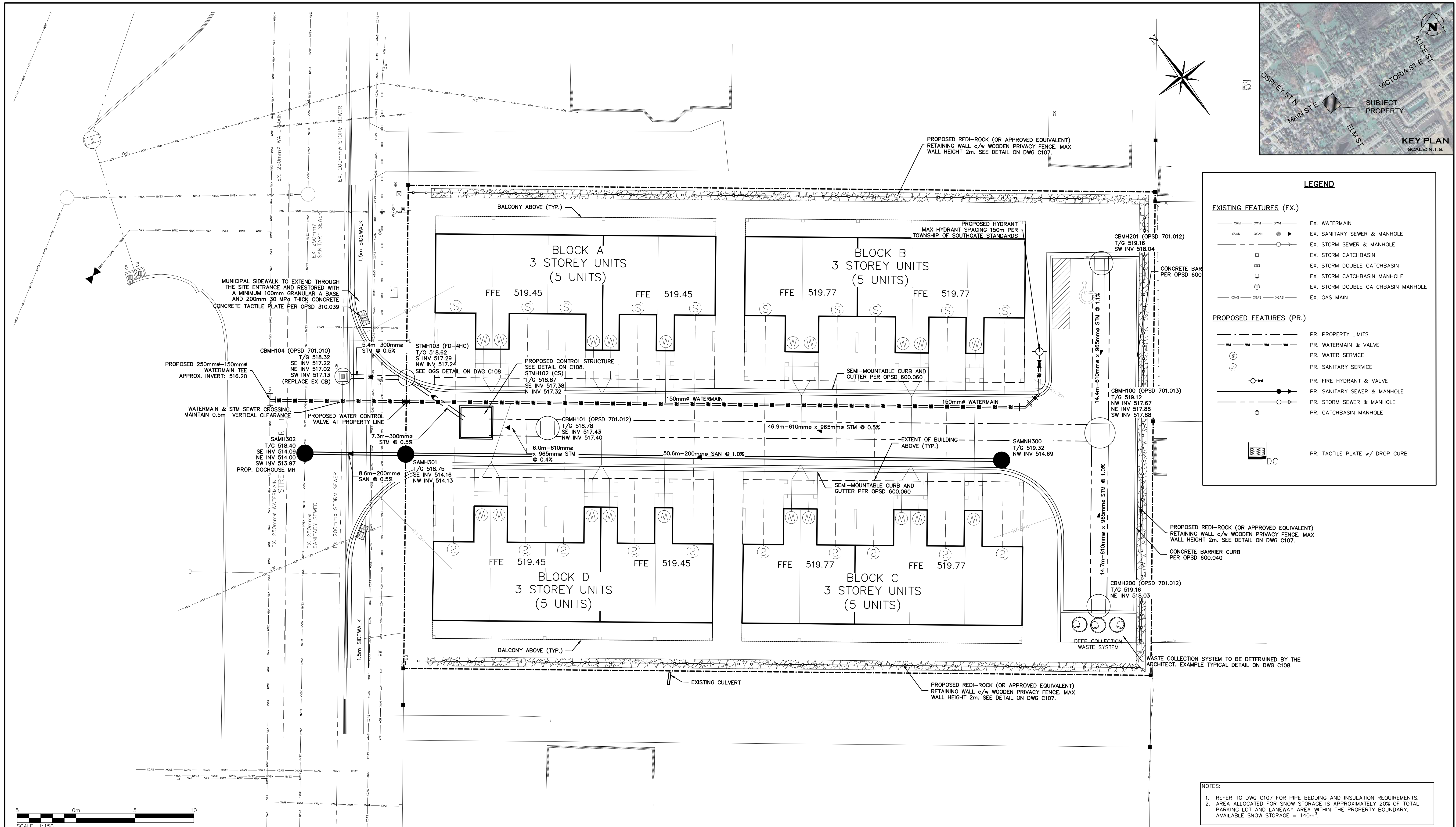
GRADING PLAN

**CROZIER CONSULTING ENGINEERS**

Drawn By: R.D.M./M.C. Design By: J.L.A./A.M. Project: 2514-6796

Check By: J.L.A. Check By: N.C.O. Drawing: C101





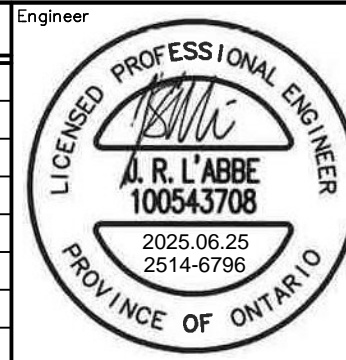
- THIS DRAWING IS THE EXCLUSIVE PROPERTY OF C.F. CROZIER & ASSOCIATES INC. AND THE MODIFICATION AND/OR REPRODUCTION OF ANY PART OF THIS DRAWING IS STRICTLY PROHIBITED WITHOUT WRITTEN AUTHORIZATION FROM THIS OFFICE.
- THE DIGITAL FILES CONTAIN INTELLECTUAL AND DIGITAL DATA PROPERTY THAT IS THE EXCLUSIVE PROPERTY OF C.F. CROZIER & ASSOCIATES INC. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, LEVELS, AND DATUMS ON SITE AND REPORT ANY DISCREPANCIES OR OMISSIONS TO C.F. CROZIER & ASSOCIATES INC. PRIOR TO CONSTRUCTION.
- THIS DRAWING IS TO BE READ AND UNDERSTOOD IN CONJUNCTION WITH ALL OTHER PLANS AND DOCUMENTS APPLICABLE TO THIS PROJECT. ALL EXISTING UNDERGROUND UTILITIES TO BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
- DO NOT SCALE DRAWINGS.

**BENCHMARKS**

SURVEY COMPLETED BY SCHAEFFER DZALDOV PURCELL LIMITED ON NOVEMBER 16TH, 2023. ELEVATIONS SHOWN HEREON ARE GEODETIC AND ARE REFERRED TO THE ONTARIO MINISTRY OF NATURAL RESOURCES AND FORESTRY CONTROL NO. 00819688527 HAVING A PUBLISHED ELEVATION OF 515.566 METRES (CGVD28:78)



No.	ISSUE	DATE: YYYY/MM/DD
0	ISSUED FOR 1ST SUBMISSION SPA	2024/04/26
1	ISSUED FOR 2ND SUBMISSION SPA	2025/06/25



271 MAIN STREET EAST DUNDALK  
TOWNSHIP OF SOUTHGATE

GENERAL SERVICING PLAN

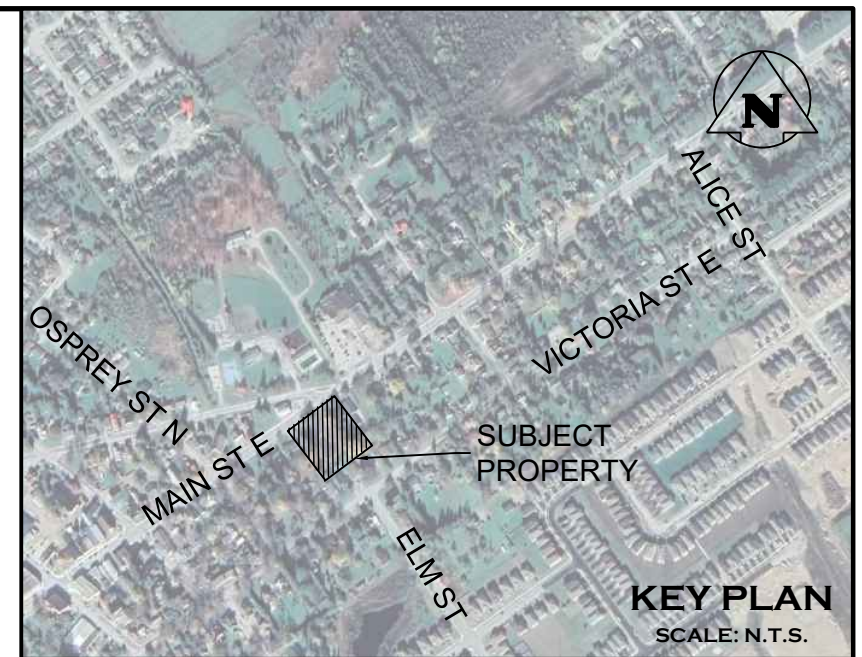
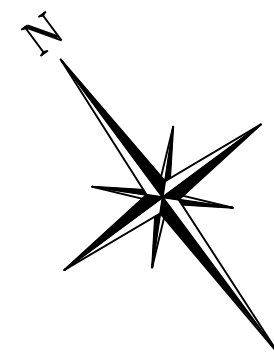
**CROZIER CONSULTING ENGINEERS**

Drawn By: R.D.M./M.C. Design By: J.L'A./A.M. Project: 2514-6796

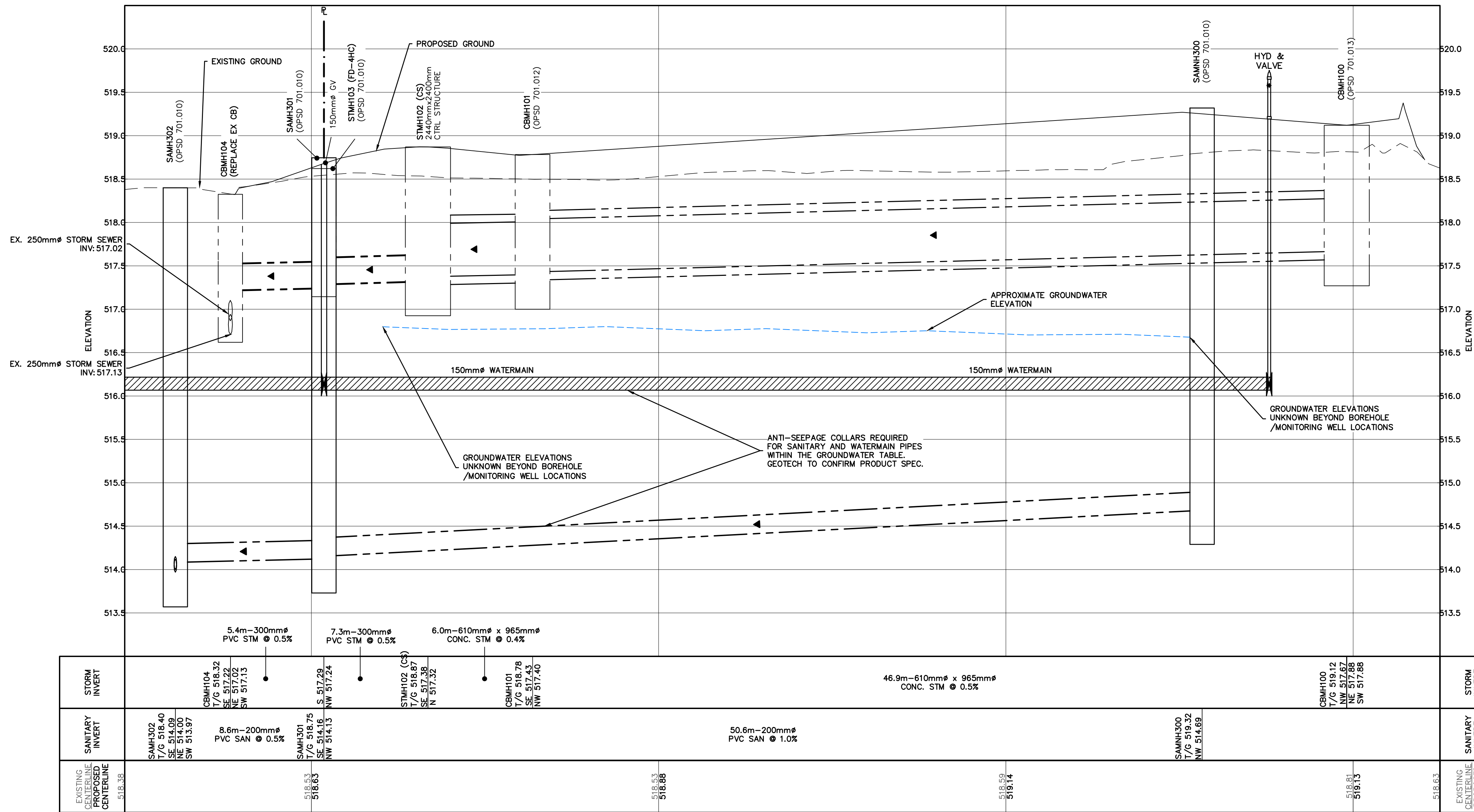
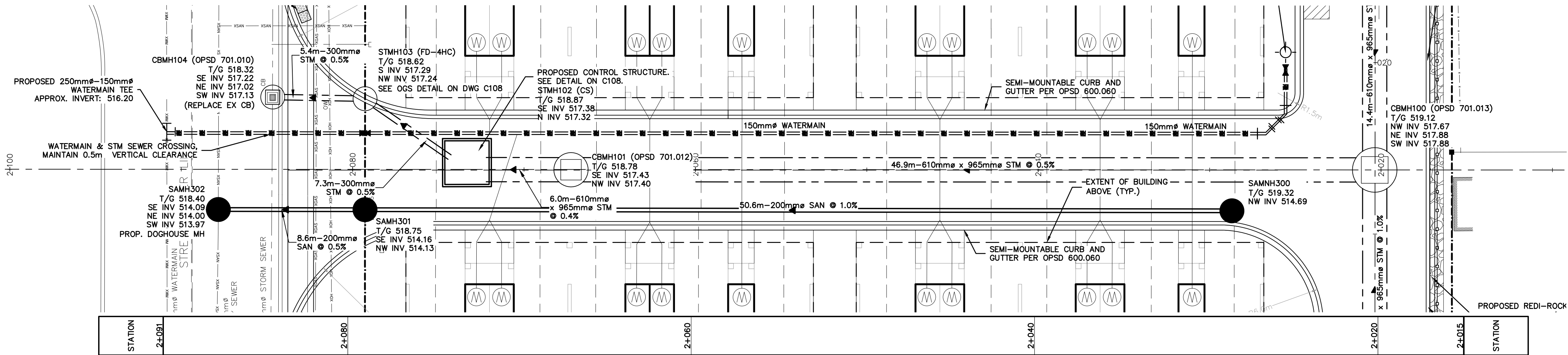
Check By: J.L'A. Check By: N.C.O. Drawing: C102



SERVICING CONNECTION ON MAIN STREET



5 0m 5 10  
SCALE: 1:150



H: 150  
V: 30

- THIS DRAWING IS THE EXCLUSIVE PROPERTY OF C.F. CROZIER & ASSOCIATES INC. AND THE MODIFICATION AND/OR REPRODUCTION OF ANY PART OF THIS DRAWING IS STRICTLY PROHIBITED WITHOUT WRITTEN AUTHORIZATION FROM THIS OFFICE.
- THE DIGITAL FILES CONTAIN INTELLECTUAL AND DIGITAL DATA PROPERTY THAT IS THE EXCLUSIVE PROPERTY OF C.F. CROZIER & ASSOCIATES INC. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, LEVELS, AND DATUMS ON SITE AND REPORT ANY DISCREPANCIES OR OMISSIONS TO C.F. CROZIER & ASSOCIATES INC. PRIOR TO CONSTRUCTION.
- THIS DRAWING IS TO BE READ AND UNDERSTOOD IN CONJUNCTION WITH ALL OTHER PLANS AND DOCUMENTS APPLICABLE TO THIS PROJECT.
- ALL EXISTING UNDERGROUND UTILITIES TO BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
- DO NOT SCALE DRAWINGS.

**BENCHMARKS**  
SURVEY COMPLETED BY SCHAEFFER DZALDOV PURCELL LIMITED ON NOVEMBER 16TH, 2023. ELEVATIONS SHOWN HEREON ARE GEODETIC AND ARE REFERRED TO THE ONTARIO MINISTRY OF NATURAL RESOURCES AND FORESTRY CONTROL NO. 00819688527 HAVING A PUBLISHED ELEVATION OF 515.566 METRES (CGVD28:78)



No.	ISSUE	DATE: YYYY/MM/DD
0	ISSUED FOR 1ST SUBMISSION SPA	2024/04/26
1	ISSUED FOR 2ND SUBMISSION SPA	2025/06/25



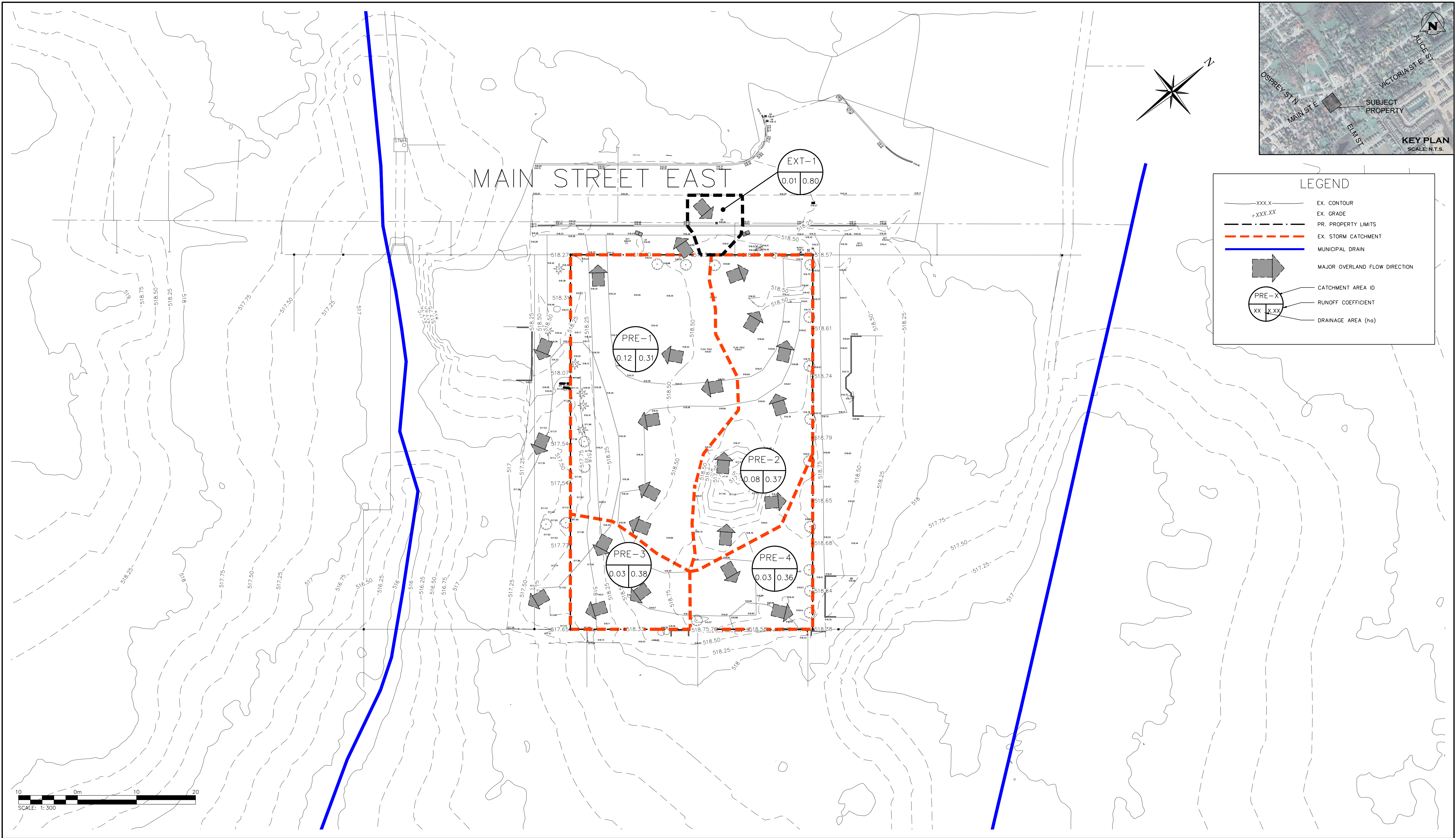
Project  
**271 MAIN STREET EAST DUNDALK  
TOWNSHIP OF SOUTHGATE**

Drawing  
**CONNECTIONS TO EXISTING  
MAIN STREET INFRASTRUCTURE**

Drawn By R.D.M./M.C. Design By J.L.A./A.M. Project **2514-6796**

Check By J.L.A. Check By N.C.O. Drawing **C102A**





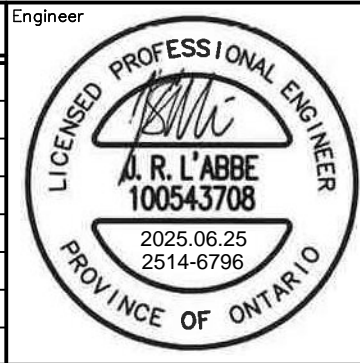
1. THIS DRAWING IS THE EXCLUSIVE PROPERTY OF C.F. CROZIER & ASSOCIATES INC. AND THE MODIFICATION AND/OR REPRODUCTION OF ANY PART OF THIS DRAWING IS STRICTLY PROHIBITED WITHOUT WRITTEN AUTHORIZATION FROM THIS OFFICE.  
2. THE DIGITAL FILES CONTAIN INTELLECTUAL AND DIGITAL DATA PROPERTY THAT IS THE EXCLUSIVE PROPERTY OF C.F. CROZIER & ASSOCIATES INC. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, LEVELS, AND DATUMS ON SITE AND REPORT ANY DISCREPANCIES OR OMISSIONS TO C.F. CROZIER & ASSOCIATES INC. PRIOR TO CONSTRUCTION.  
3. THIS DRAWING IS TO BE READ AND UNDERSTOOD IN CONJUNCTION WITH ALL OTHER PLANS AND DOCUMENTS APPLICABLE TO THIS PROJECT.  
4. ALL EXISTING UNDERGROUND UTILITIES TO BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO CONSTRUCTION.  
5. DO NOT SCALE DRAWINGS.

**BENCHMARKS**  
SURVEY COMPLETED BY SCHAEFFER DZALDOV PURCELL LIMITED ON NOVEMBER 16TH, 2023. ELEVATIONS SHOWN HEREON ARE GEODETIC AND ARE REFERRED TO THE ONTARIO MINISTRY OF NATURAL RESOURCES AND FORESTRY CONTROL No. 00619688527 HAVING A PUBLISHED ELEVATION OF 515.566 METRES (CGVD28:78)

Town

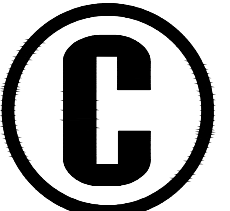


No.	ISSUE	DATE: YYYY/MM/DD
0	ISSUED FOR 1ST SUBMISSION SPA	2024/04/26
1	ISSUED FOR 2ND SUBMISSION SPA	2025/06/25



Project  
**271 MAIN STREET EAST DUNDALK TOWNSHIP OF SOUTHGATE**

Drawing  
**PRE-DEVELOPMENT DRAINAGE PLAN**

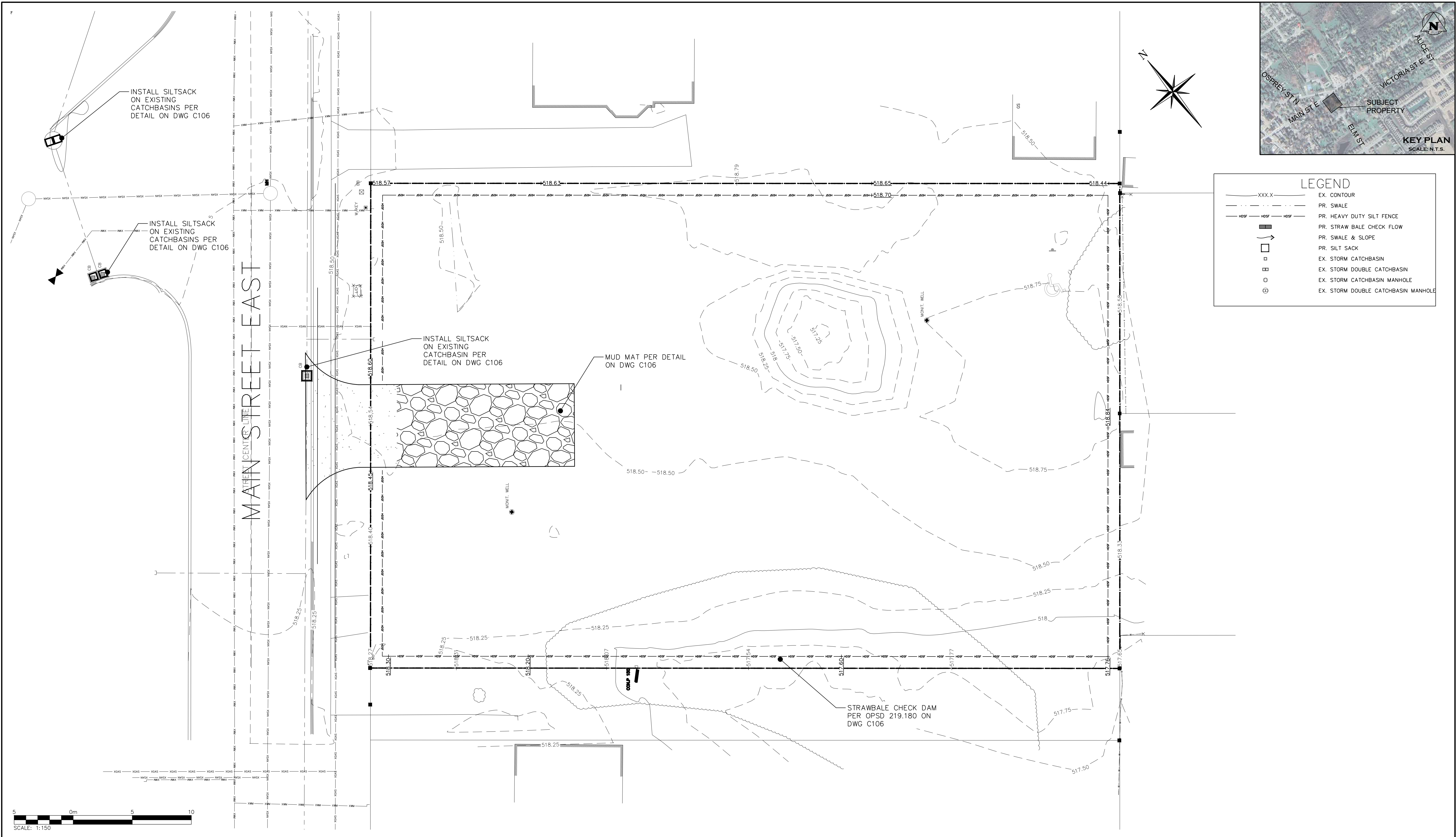
**CROZIER**  
CONSULTING ENGINEERS

Drawn By	R.D.M./M.C.	Design By	J.L'A./A.M.	Project	<b>2514-6796</b>
Check By	J.L'A.	Check By	N.C.O.	Drawing	<b>C103</b>









1. THIS DRAWING IS THE EXCLUSIVE PROPERTY OF C.F. CROZIER & ASSOCIATES INC. AND THE MODIFICATION AND/OR REPRODUCTION OF ANY PART OF THIS DRAWING IS STRICTLY PROHIBITED WITHOUT WRITTEN AUTHORIZATION FROM THIS OFFICE.

2. THE DIGITAL FILES CONTAIN INTELLECTUAL AND DIGITAL DATA PROPERTY THAT IS THE EXCLUSIVE PROPERTY OF C.F. CROZIER & ASSOCIATES INC. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, LEVELS, AND DATUMS ON SITE AND REPORT ANY DISCREPANCIES OR OMISSIONS TO C.F. CROZIER & ASSOCIATES INC. PRIOR TO CONSTRUCTION.

3. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, LEVELS, AND DATUMS ON SITE AND REPORT ANY DISCREPANCIES OR OMISSIONS TO C.F. CROZIER & ASSOCIATES INC. PRIOR TO CONSTRUCTION.

4. THIS DRAWING IS TO BE READ AND UNDERSTOOD IN CONJUNCTION WITH ALL OTHER PLANS AND DOCUMENTS APPLICABLE TO THIS PROJECT.

5. ALL EXISTING UNDERGROUND UTILITIES TO BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO CONSTRUCTION.

6. DO NOT SCALE DRAWINGS.

**BENCHMARKS**

SURVEY COMPLETED BY SCHAEFFER DZALDOV PURCELL LIMITED ON NOVEMBER 16TH, 2023. ELEVATIONS SHOWN HEREON ARE GEODETIC AND ARE REFERRED TO THE ONTARIO MINISTRY OF NATURAL RESOURCES AND FORESTRY CONTROL No. 09688527 HAVING A PUBLISHED ELEVATION OF 515.566 METRES (CGVD28:78)

Town

No.	ISSUE	DATE: YYYY/MM/DD
0	ISSUED FOR 1ST SUBMISSION SPA	2024/04/26
1	ISSUED FOR 2ND SUBMISSION SPA	2025/06/25

Engineer

Engineer

Project

271 MAIN STREET EAST DUNDALK  
TOWNSHIP OF SOUTHGATE

Drawing

EROSION & SEDIMENT CONTROL PLAN

Drawn By

R.D.M./M.C.

Design By

J.L'A./A.M.

Project

2514-6796

Check By

J.L'A.

Check By

N.C.O.

Drawing

C105



GENERAL NOTES:

1. CONSTRUCTION EQUIPMENT TO USE ACCESS POINT, LOCATED AT MAIN STREET, AS INDICATED ON DRAWING C105. MUD MAT TO BE MAINTAINED AT ACCESS POINT.
2. ALL WORKS SHALL BE COMPLETED IN ACCORDANCE WITH THE OCCUPATIONAL HEALTH AND SAFETY ACT. THE GENERAL CONTRACTOR SHALL BE DEEMED TO BE THE "CONSTRUCTOR" AS DEFINED IN THE ACT.
3. ALL SEDIMENT AND EROSION CONTROL FACILITIES AND WORKS ARE TO BE CONSTRUCTED AND IN PLACE TO THE APPROVAL OF THE SITE ENGINEER PRIOR TO ANY GRADING OPERATIONS COMMENCING. TYPICAL WORKS INCLUDE SILT FENCES, INTERCEPTOR SWALES, STRAW BALE CHECK DAMS AND SEDIMENT TRAPS.
4. ALL TEMPORARY TOPSOIL STOCKPILES ARE TO BE PROVIDED WITH THE NECESSARY SEDIMENT AND EROSION CONTROL FEATURES.
5. ALL INTERCEPTOR SWALES ARE TO BE SEEDED TO STABILIZE THEIR BANKS IMMEDIATELY FOLLOWING CONSTRUCTION.
6. REFER TO APPLICATION FORM FOR GRUBBING OF TREES WITHIN LIMITS OF FILL AREA.
7. NO GRADING OF LANDS WILL OCCUR WITHIN SPECIFIED BUFFERS ALONG PROPERTY LINES AND INTERNAL TO SITE.
8. THE LOCATION OF ALL UNDERGROUND AND ABOVEGROUND UTILITIES AND STRUCTURES ARE NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE LOCATION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK, THE CONTRACTOR SHALL INFORM HIMSELF OF THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES AND SHALL ASSUME ALL LIABILITY FOR DAMAGE TO THEM.
9. NON-WOVEN GEOTEXTILE TO BE TERRAFIX 270R OR APPROVED EQUIVALENT

MAINTENANCE & OPERATIONS OF SEDIMENT CONTROLS

SILT FENCE

1. SILT FENCE MUST BE INSPECTED WEEKLY FOR RIPS OR TEARS, BROKEN STAKES, BLOW-OUTS AND ACCUMULATION OF SEDIMENT.
2. SILT FENCE MUST BE INSPECTED FOLLOWING ALL 15MM OR GREATER RAIN STORM EVENT OR AS DIRECTED BY SITE ENGINEER.
3. SEDIMENT MUST BE REMOVED FROM SILT FENCE WHEN ACCUMULATION REACHES 50% OF THE HEIGHT OF THE FENCE.
4. ALL SILT FENCES MUST BE REMOVED ONLY WHEN THE ENTIRE SITE IS STABILIZED AND AS DIRECTED BY THE SITE ENGINEER.

STRAW BALE / ROCK CHECK DAM

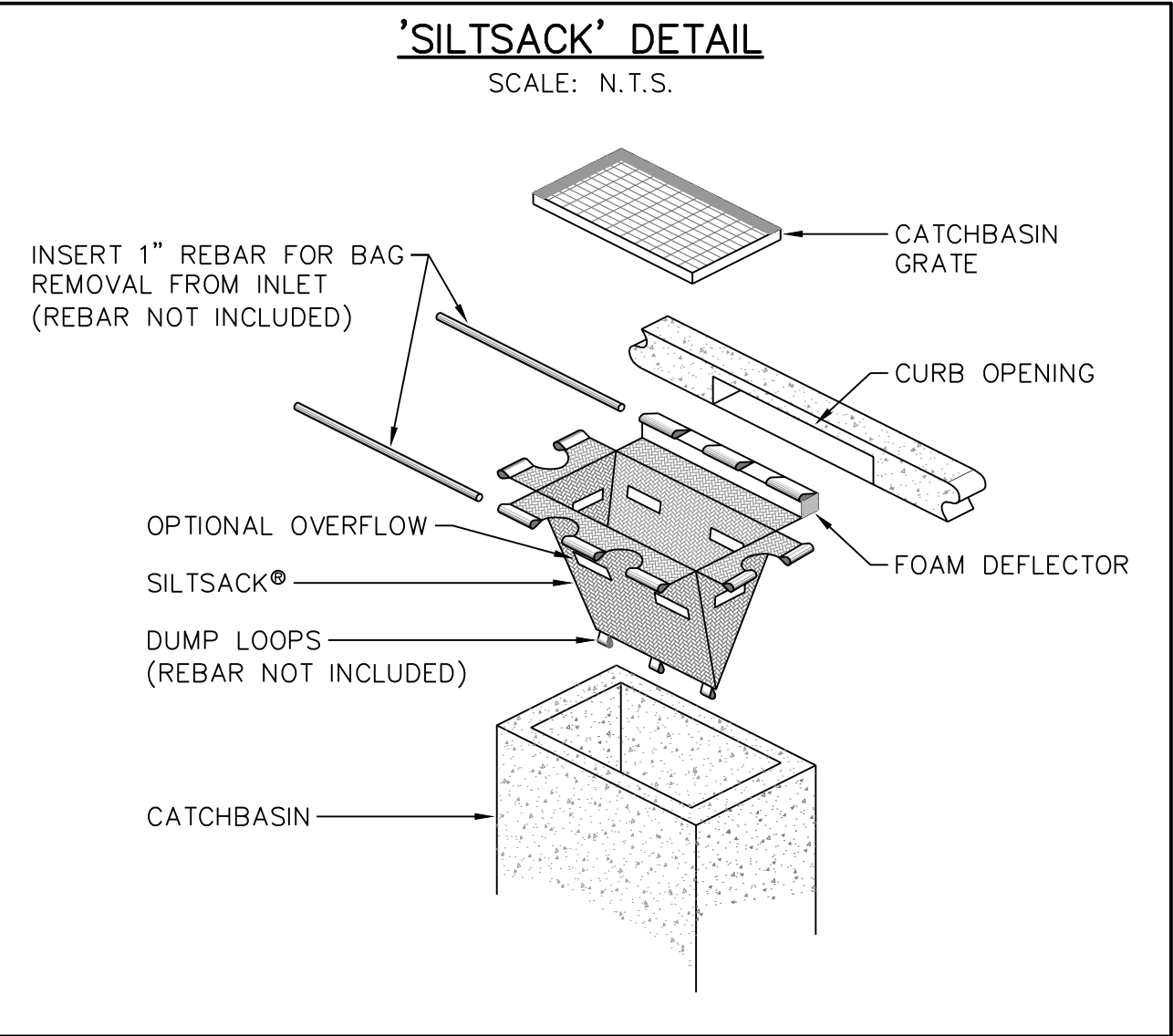
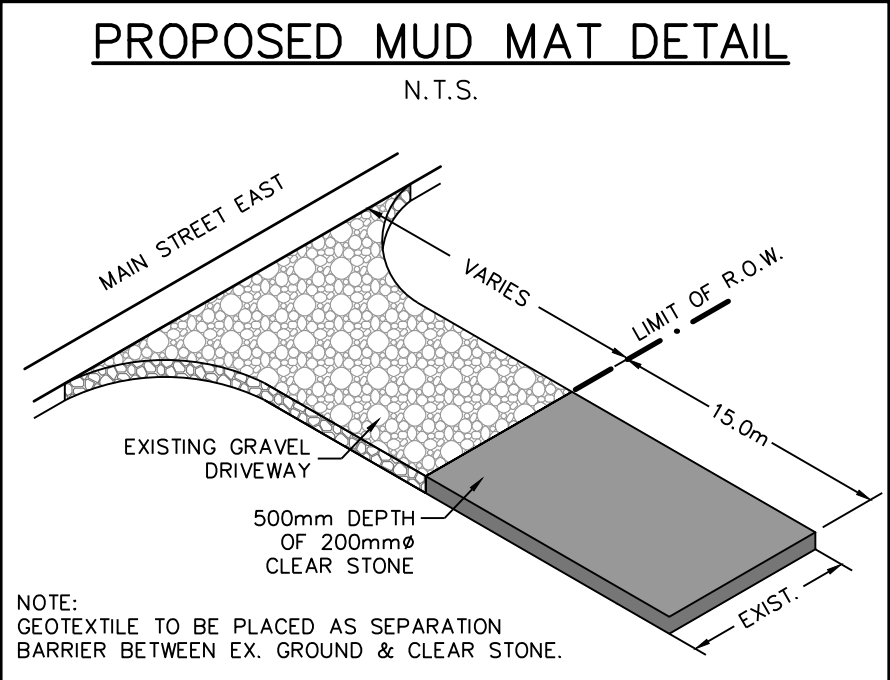
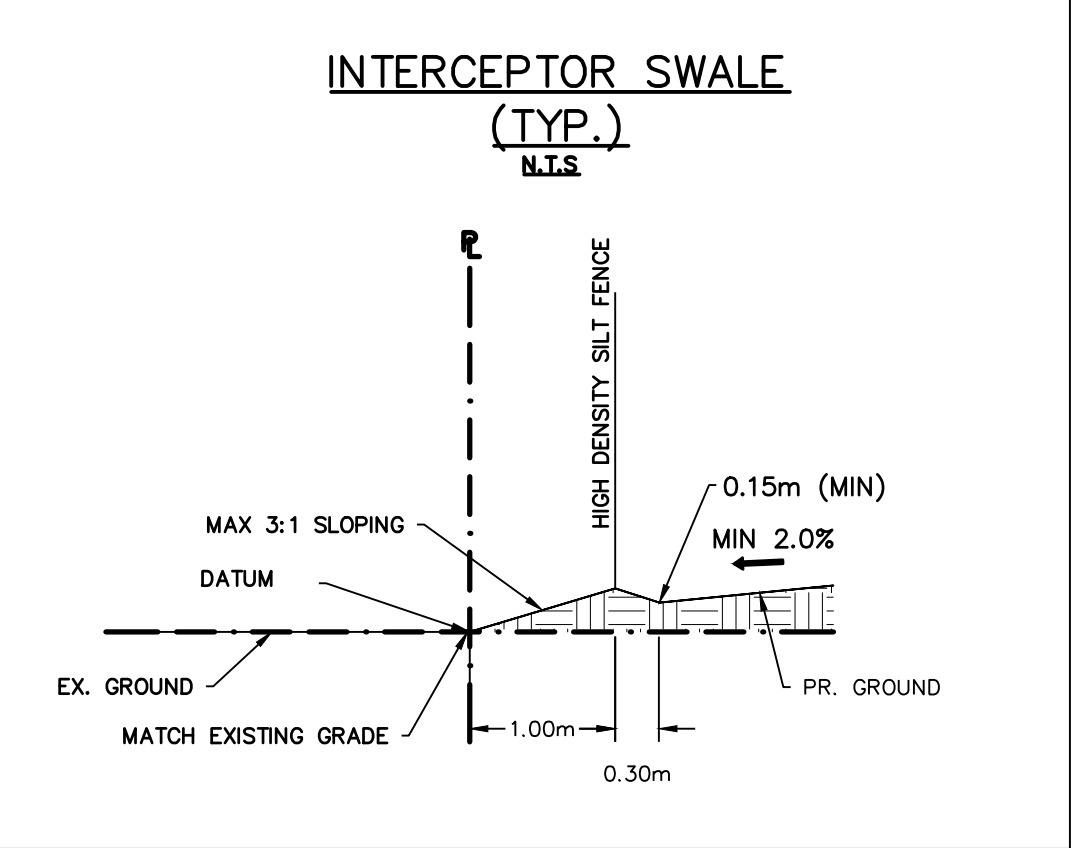
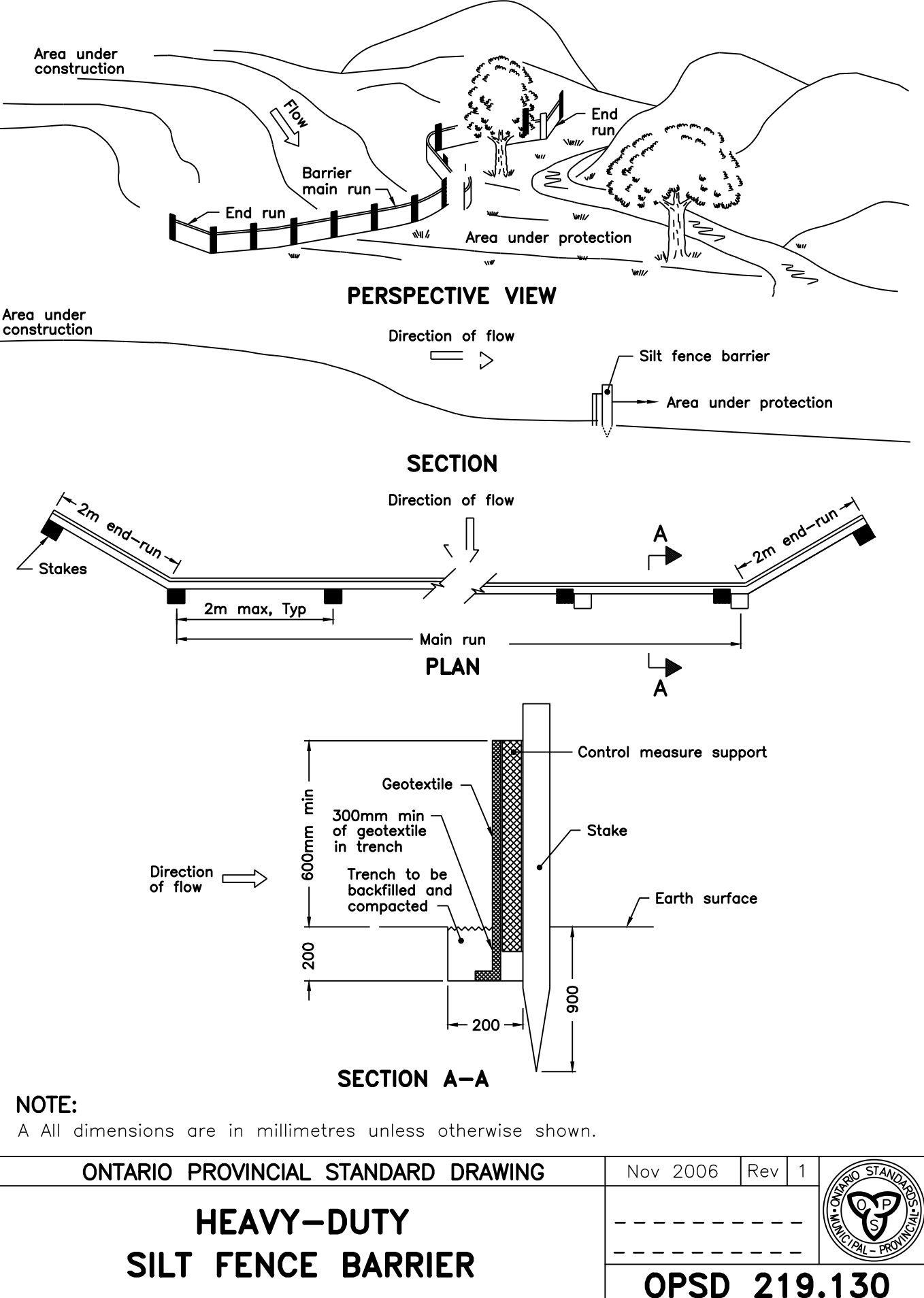
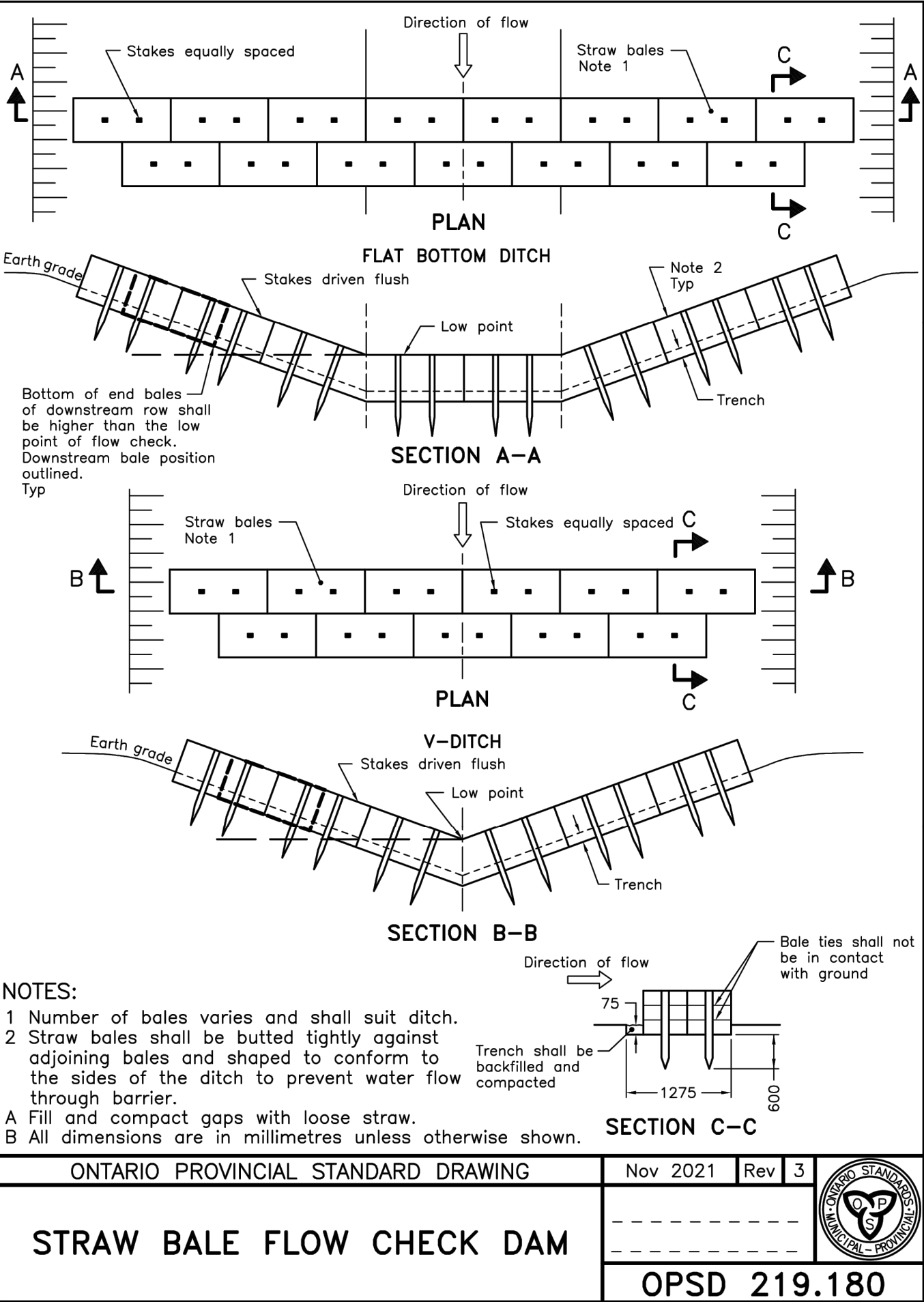
1. REMOVE ACCUMULATED SEDIMENT UP STREAM OF THE CHECK DAM IF GREATER THAN ONE HALF OF DAM HEIGHT.
2. SILT REMOVAL MUST BE UNDERTAKEN WITH CARE TO MINIMIZE DOWN STREAM SEDIMENTATION IN SWALE OR DITCH.
3. STRAW BALE CHECK DAM AND ALL ACCUMULATED SEDIMENT MUST BE REMOVED WITH CARE ONCE THE CONSTRUCTION SITE IS STABILIZED AND AS DIRECTED BY THE SITE ENGINEER.

MUD MAT MAINTENANCE

1. INSPECT MUD MAT WEEKLY TO ASSESS CONDITION AND ENSURE OPERATION EFFICIENCY.
2. SUPPLY AND PLACE ADDITIONAL CLEAR STONE AS DIRECTED BY SITE ENGINEER.
3. MAT TO REMAIN IN PLACE UNTIL SITE IS STABILIZED OR AS DIRECTED BY SITE ENGINEER.
4. CONTRACTOR TO COMPLETE REGULAR STREET SWEEPING ON MAIN STREET EAST.

DECOMMISSIONING / RESTORATION

1. FOLLOWING COMPLETION OF CONSTRUCTION AND AS DIRECTED BY SITE ENGINEER, ALL EROSION AND SEDIMENT CONTROL WORKS ARE TO BE REMOVED INCLUDING ANY ACCUMULATED SEDIMENT.
2. ALL WORKS LOCATED ON LANDS OUTSIDE THE PROPOSED DEVELOPMENT AREA ARE TO BE GRADED TO MATCH EXISTING SURROUNDING GROUND AND HYDROSEEDED.
3. ALL SEDIMENT BUILD-UP TO BE REMOVED FROM SEDIMENT BASINS, CUT AREAS AND SEDIMENT BASINS TO BE TREATED WITH 25mm OF TOPSOIL AND HYDROSEEDED AS DIRECTED BY SITE ENGINEER.



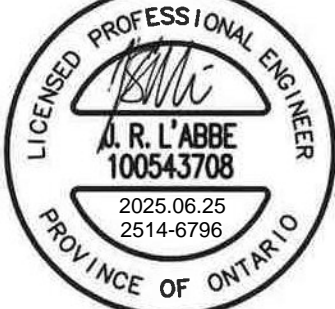
1. THIS DRAWING IS THE EXCLUSIVE PROPERTY OF C.F. CROZIER & ASSOCIATES INC. AND THE MODIFICATION AND/OR REPRODUCTION OF ANY PART OF THIS DRAWING IS STRICTLY PROHIBITED WITHOUT WRITTEN AUTHORIZATION FROM THIS OFFICE.
2. THE DIGITAL FILES CONTAIN INTELLECTUAL AND DIGITAL DATA PROPERTY THAT IS THE EXCLUSIVE PROPERTY OF C.F. CROZIER & ASSOCIATES INC.
3. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, LEVELS, AND DATUMS ON SITE AND REPORT ANY DISCREPANCIES OR OMISSIONS TO C.F. CROZIER & ASSOCIATES INC. PRIOR TO CONSTRUCTION.
4. THIS DRAWING IS TO BE READ AND UNDERSTOOD IN CONJUNCTION WITH ALL OTHER PLANS AND DOCUMENTS APPLICABLE TO THIS PROJECT.
5. ALL EXISTING UNDERGROUND UTILITIES TO BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
6. DO NOT SCALE DRAWINGS.

Town



No.	ISSUE	DATE: YYYY/MM/DD
0	ISSUED FOR 1ST SUBMISSION SPA	2024/04/26
1	ISSUED FOR 2ND SUBMISSION SPA	2025/06/25

Engineer



Engineer



Project

271 MAIN STREET EAST DUNDALK  
TOWNSHIP OF SOUTHGATE

Drawing

EROSION & SEDIMENT CONTROL PLAN  
NOTES & DETAILS



Drawn By	R.D.M.	Design By	J.L'A./A.M.	Project	2514-6796
Check By	J.L'A.	Check By	N.C.O.	Drawing	C106



A) GENERAL – CONSTRUCTION

1. ALL WORK TO BE CARRIED OUT IN ACCORDANCE WITH TOWNSHIP OF SOUTHAKE STANDARDS, OPSD AND OPSS. WHERE CONFLICT OCCURS, TOWNSHIP OF SOUTHAKE TO GOVERN.
2. TRENCH BACKFILL (OPSD 802.010 & 802.013) TO BE SELECT NATIVE MATERIAL OR IMPORTED SELECT SUBGRADE TO OPSS 1010. BACKFILL TO BE PLACED IN MAXIMUM 200mm THICK LIFTS AND COMPACTED TO 95% OF THE MATERIAL'S STANDARD PROCTOR MAXIMUM DRY DENSITY (SPD) OF 100%.
3. PIPE COVER AND BEDDING TO BE CLASS 'B' COMPOSED OF COMPACTED GRANULAR IF EXTENSIVE DEWATERING IS REQUIRED CLASS 'A'.
4. ALL TOPSOIL AND EARTH EXCAVATION TO BE STOCK PILED OR REMOVED TO AN APPROVED SITE AS DIRECTED BY ENGINEER.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DETAILED LAYOUT OF THE WORK. THE DEVELOPER'S ENGINEER WILL CONFIRM ALL BENCH MARK ELEVATIONS AND HORIZONTAL ALIGNMENT FOR THE CONTRACTOR.
6. ALL PROPERTY BARS TO BE PRESERVED AND REPLACED BY O.L.S. AT CONTRACTOR'S EXPENSE IF REMOVED DURING CONSTRUCTION.
7. THE CONTRACTOR SHALL MAKE HIS OWN ARRANGEMENTS FOR THE SUPPLY OF TEMPORARY WATER AND POWER.
8. DEWATERING TO BE CARRIED OUT IN ACCORDANCE WITH OPSS-517 AND 518 TO MAINTAIN ALL TRENCHES IN A DRY CONDITION.
9. CONTRACTOR RESPONSIBLE FOR OBTAINING MECP PERMIT IF REQUIRED.
10. ALL ENGINE DRIVEN PUMPS TO BE ADEQUATELY SILENCED, SUITABLE FOR OPERATION IN A RESIDENTIAL DISTRICT.
11. DISTURBED AREAS OUTSIDE THE DEVELOPABLE LANDS TO BE REINSTATE TO PREVIOUS CONDITION OR BETTER.
12. THE CONTRACTOR IS RESPONSIBLE TO NOTIFY ALL UTILITY COMPANIES PRIOR TO COMMENCING WORK AND OBTAINING CONSTRUCTION PERMISSIONS.
13. ALL EXCAVATION MUST BE CARRIED OUT IN FULL COMPLIANCE WITH MOST RECENT GUIDELINES OF OHSA. NATIVE SOILS ARE CLASSIFIED AS TYPE 3 & 4 & SOIL AS PER GEOTECHNICAL REPORT (GREEN GEOTECHNICAL LIMITED, FEBRUARY 2024)

B) ROADS

2. ALL EXCAVATION SHALL CONFORM TO THE CURRENT ONTARIO PROVINCIAL SPECIFICATION FOR GRADING OPS6 2006. THE DEVELOPER SHALL RETAIN A QUALIFIED SOILS CONSULTANT TO CARRY OUT COMPACTION TESTS ON THE COMPLETED SUBGRADE AND SUBSEQUENT LIFTS.
3. ALL GRANULAR BASE MATERIAL SHALL BE COMPACTED TO NEXT GRANULAR OR ASPHALT LIFT.
3. ALL VEGETATION, Boulders Over 150mm<sup>3</sup>, TOPSOIL AND ORGANIC OR FROST-SUSCEPTABLE MATERIALS SHALL BE REMOVED FROM THE ROAD BASE TO A DEPTH OF AT LEAST 1.2m BELOW FINISHED GRADE AND REPLACED WITH SUITABLE MATERIAL.
4. ALL SUBGRADE MATERIAL TO BE COMPACTED TO A MINIMUM DRY DENSITY OF AT LEAST 95% SPMDM. IN THE ZONE WITHIN 1.0m BELOW THE PAVEMENT SUBGRADE, THE BACKFILL SHOULD BE COMPACTED TO AT LEAST 98% SPMDM WITH THE WATER CONTENT 2% TO 3% DRIER THAN THE OPTIMUM. IN THE LOWER ZONE, A 95% OR GREATER COMPACTION IS ADEQUATE.
5. GRANULAR 'A' AND 'B' ROAD BASE TO BE COMPACTED TO 100% OF THE MATERIAL'S RESPECTIVE SPMDM AND PLACED IN MAX. 150mm LIFTS. REFER TO GEOTECHNICAL REPORT FOR FURTHER DETAILS.
6. PROPOSED LANEWAY TO BE CONSTRUCTED WITH MINIMUM 450mm GRANULAR 'B' TYPE 1, 150mm GRANULAR 'A', 80mm HLB BASE COURSE ASPHALT, & 50mm HLB SURFACE COURSE ASPHALT (HEAVY DUTY PAVEMENT STRUCTURE). ASPHALT ON TACK COAT APPLIED FROM PROPERTY LINE TO THE BACK OF CURB TO BE TREATED WITH A TOPSOIL DEPTH OF 200mm AND SOD. PER RECOMMENDATIONS INCLUDED IN GEOTECH REPORT (GREEN, 2024)/PER TOWNSHIP STANDARDS DATED JUNE, 2022.
7. SELECT SUBGRADE MATERIAL, OR IMPORTED GRANULAR MATERIAL APPROVED BY THE ENGINEER, COMPACTED TO 98% SPMDM. BE USED FOR ALL AREAS WHERE PROPOSED PIPE INVERTS ARE HIGHER THAN EXISTING GRADE OR AS INSTRUCTED BY THE ENGINEER.
8. ALL GRANULARS AND ASPHALT MATERIALS AND PLACEMENT TO BE IN ACCORDANCE WITH OPS6 314 AND OPS6 310. JOINTS WITH EXISTING ASPHALT TO BE SAW CUT STRAIGHT WITH MIN. 0.3m LAP JOINT PRIOR TO PLACING NEW ASPHALT.
9. ALL TACK COAT APPLICATIONS TO BE IN ACCORDANCE WITH TOWNSHIP STANDARDS AND TOWNSHIP SIGN STOPS AND STREET SIGNS TO TOWNSHIP STANDARDS.
10. REINSTATEMENT OF ALL DISTURBED BOULEVARDS TO INCLUDE REGRADING, 200mm TOPSOIL AND SOD TO OPS6 570 AND 571.
12. ALL PIPE SUBDRAINS SHALL BE PROVIDED UNDER EDGE OF PAVEMENT ON LOWER (GUTTER) SIDE OF THE ROAD.
13. ALL SUBDRAINS TO BE CONSTRUCTED IN ACCORDANCE WITH OPS6 405. SUBDRAIN TO BE INSTALLED IN GRANULAR 'A' TRENCH AND CONNECTED TO EACH CB OR CBMH.
14. SUBDRAINS TO BE PERFORATED OTHER THAN THE 2m SECTION IMMEDIATELY UPSTREAM OF ALL STRUCTURES WHICH SHALL BE NON-DEPRESSURIZED.
15. ALL CONCRETE SIDEWALKS TO BE CONSTRUCTED AS PER OPS6 310.010. ALL SIDEWALK RAMPS SHALL CONFORM WITH OPS6 310.030, 031, 039 AND COMPLETE WITH TACTILE PLATES.

### C) SANITARY SEWERS

1. M.H.'S TO OPSD - 701.010, 701.030, & 704.010.
2. BENCHING TO OPSD - 701.021.
3. STEPS TO OPSD - 405.010.
4. BACKFILL AND EMBEDMENT TO OPSD - 802.010 CLASS 'B', GRANULAR 'A' BEDDING. IF EXTENSIVE DEWATERING IS REQUIRED, A CLASS 'A' BEDDING MAY BE REQUIRED (SUBJECT TO GEOTECHNICAL RECOMMENDATIONS.)
5. TRENCH BACKFILL TO BE SELECT NATURAL MATERIAL AS APPROVED BY ENGINEER OR IMPORTED GRANULAR MATERIAL.
6. FRAMES AND COVERS TO CONFORM TO OPSD - 401.010 'A' (CLOSED COVER).
7. SERVICE CONNECTIONS TO OPSD - 1006.020 (125mm), GRANULAR 'A' BEDDING, TERMINATE AT SERVING CORRIDOR LIMITS WITH A TEST FITTING, PLUG AND 2x4 MARKER POST PAINTED GREEN REFER TO TOWNSHIP STANDARD S3. MINIMUM GRADE TO BE 2.0% SERVICE CONNECTIONS TO TOWNSHIP STD S4.
8. RADII BENDS TO BE USED ON SANITARY SEWER CONNECTIONS WHERE THE ANGLE OF CONNECTION BETWEEN THE SERVICE AND SEWER EXCEEDS 90'.
9. BACKFILL AND EMBEDMENT MATERIAL TO BE COMPACTED TO A DRY DENSITY OF AT LEAST 95% OF THE MATERIAL'S STANDARD PROCTOR DENSITY (90% DENSITY (STD)).
10. MANHOLES FRAMES TO BE SET TO BASE COURSE ASPHALT ELEVATION AND RAISED BY ADDING RISER RINGS PRIOR TO PLACING SURFACE COURSE ASPHALT.
11. PIPE SUPPORT AT MAINTENANCE HOLES AS PER OPSD 708.020.
12. ALL MAINTENANCE HOLES, UNLESS EXPRESSLY IDENTIFIED, ARE 1200mm Ø. SANITARY MANHOLE JOINTS TO BE SEALED WITH "MEL-ROL" AS PER MUNICIPAL STANDARD.
13. GENERAL INSTALLATION AND TESTING OF SEWERS AND APPURTENANCES TO BE IN ACCORDANCE WITH OPSD 407, 408, 409 (CCTV), 410, 421 AND ALL SPECIFICATIONS REFERENCED WITHIN THESE SECTIONS.
14. SANITARY SEWER - SDR 35 PVC
15. SANITARY SERVICE - SDR 28 PVC - 125mm.
16. FROST STRAPS PER OPSD 701.100.
17. ALL JOINTS MUST BE LEAK-PROOF AND /OR ALL JOINTS SHOULD BE WRAPPED IN A WATERPROOF MEMBRANE (SUBJECT TO GEOTECHNICAL RECOMMENDATIONS). ALL MANHOLE JOINTS ARE TO BE SEALED USING MEL-ROL OR RISE-WRAP.

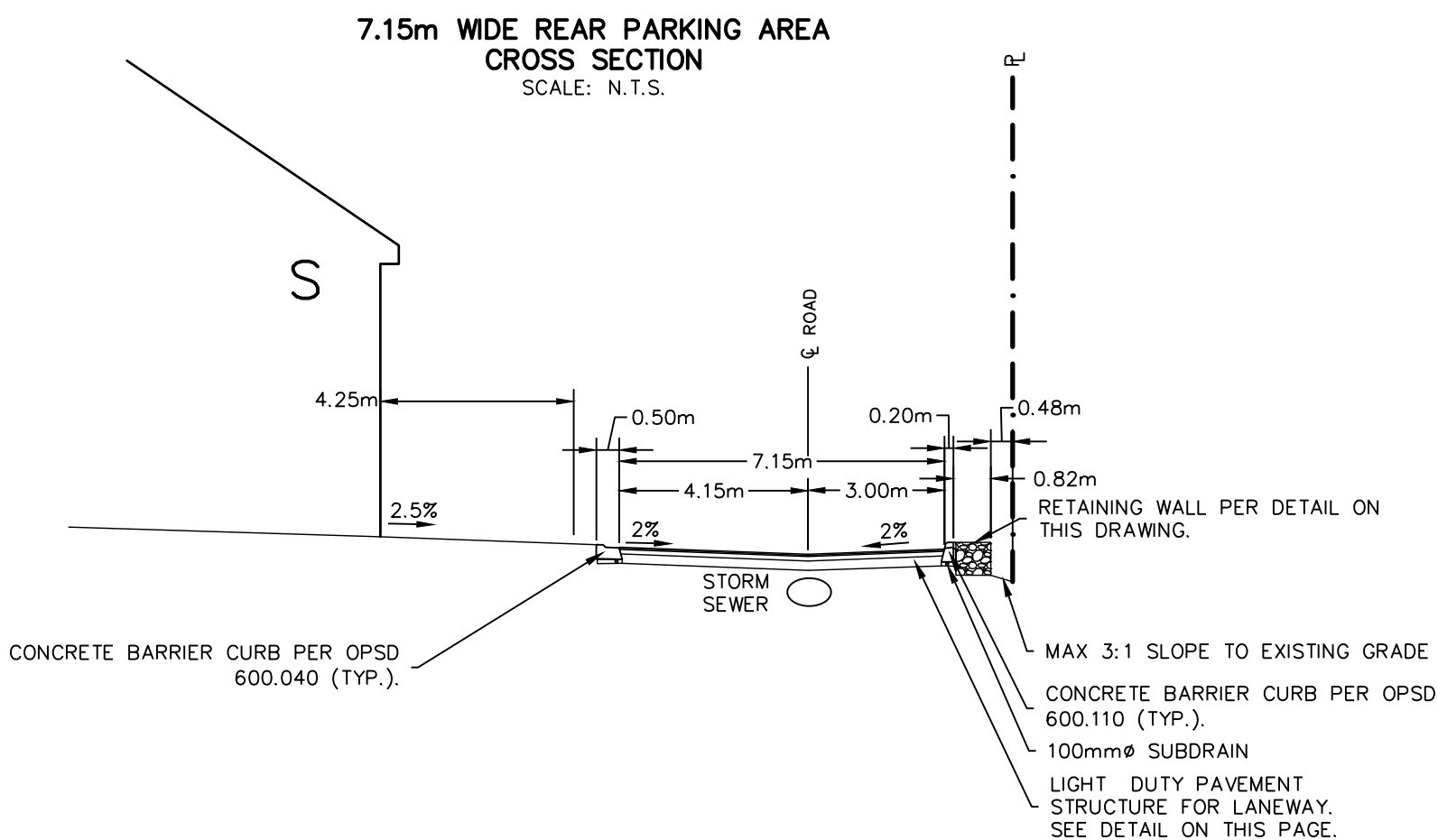
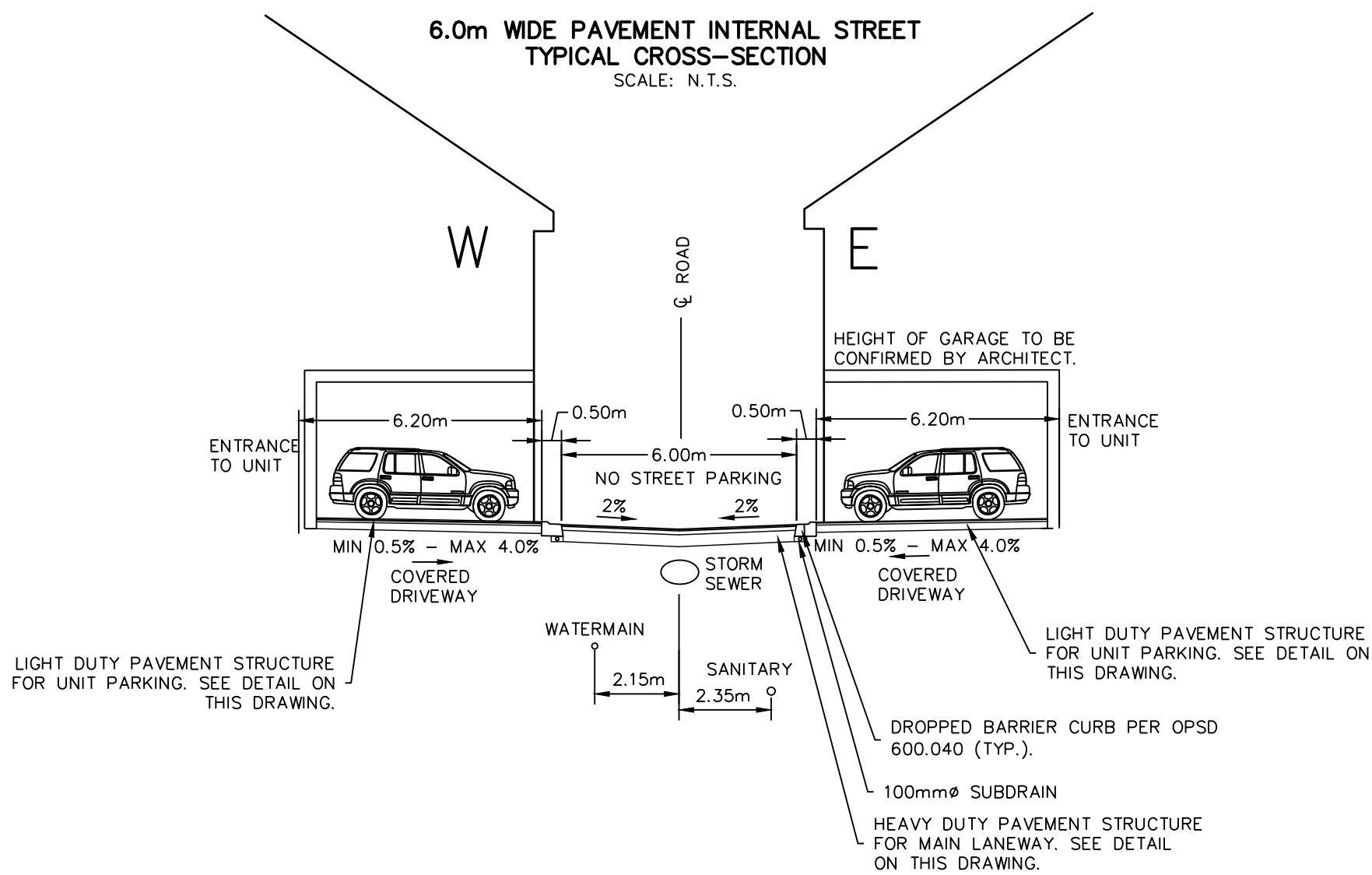
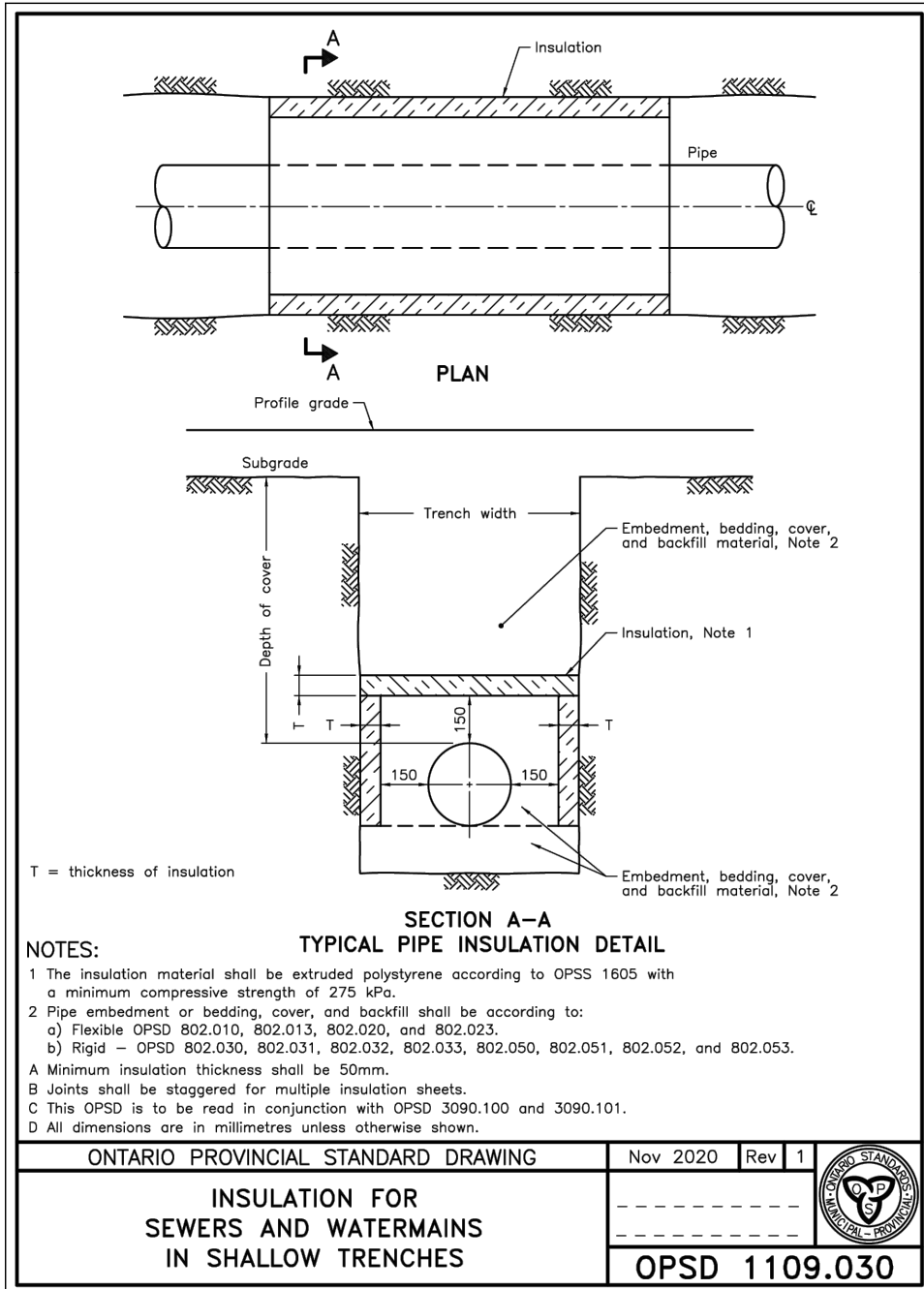
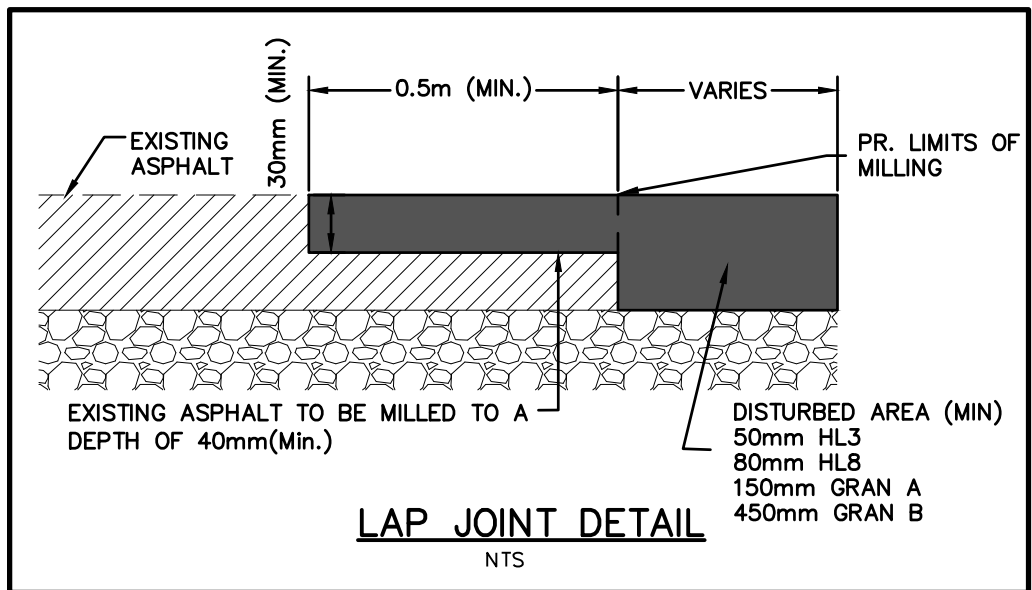
#### D) WATERMAINS

1. BACKFILL AND EMBEDMENT TO OPSD - 802.010 CLASS "B", GRANULAR "A" EMBEDMENT. REFER TO GENERAL NOTES.
2. TRENCH BACKFILL TO BE SELECT NATIVE MATERIAL AS APPROVED BY ENGINEER OR IMPORTED GRANULAR MATERIAL. THRUST BLOCKS TO OPSD - 1103.010 AND 1103.020 WHERE SUITABLE SOILS ARE ENCOUNTERED.
3. SEEDING SHALL BE TO OPSD 1105.010, 1105.020, 1105.030, 1105.040, 1105.050, 1105.060, 1105.070, 1105.080, 1105.090, 1105.100, 1105.110, 1105.120, 1105.130, 1105.140, 1105.150, 1105.160, 1105.170, 1105.180, 1105.190, 1105.200, 1105.210, 1105.220, 1105.230, 1105.240, 1105.250, 1105.260, 1105.270, 1105.280, 1105.290, 1105.300, 1105.310, 1105.320, 1105.330, 1105.340, 1105.350, 1105.360, 1105.370, 1105.380, 1105.390, 1105.400, 1105.410, 1105.420, 1105.430, 1105.440, 1105.450, 1105.460, 1105.470, 1105.480, 1105.490, 1105.500, 1105.510, 1105.520, 1105.530, 1105.540, 1105.550, 1105.560, 1105.570, 1105.580, 1105.590, 1105.600, 1105.610, 1105.620, 1105.630, 1105.640, 1105.650, 1105.660, 1105.670, 1105.680, 1105.690, 1105.700, 1105.710, 1105.720, 1105.730, 1105.740, 1105.750, 1105.760, 1105.770, 1105.780, 1105.790, 1105.800, 1105.810, 1105.820, 1105.830, 1105.840, 1105.850, 1105.860, 1105.870, 1105.880, 1105.890, 1105.900, 1105.910, 1105.920, 1105.930, 1105.940, 1105.950, 1105.960, 1105.970, 1105.980, 1105.990, 1106.000, 1106.010, 1106.020, 1106.030, 1106.040, 1106.050, 1106.060, 1106.070, 1106.080, 1106.090, 1106.100, 1106.110, 1106.120, 1106.130, 1106.140, 1106.150, 1106.160, 1106.170, 1106.180, 1106.190, 1106.200, 1106.210, 1106.220, 1106.230, 1106.240, 1106.250, 1106.260, 1106.270, 1106.280, 1106.290, 1106.300, 1106.310, 1106.320, 1106.330, 1106.340, 1106.350, 1106.360, 1106.370, 1106.380, 1106.390, 1106.400, 1106.410, 1106.420, 1106.430, 1106.440, 1106.450, 1106.460, 1106.470, 1106.480, 1106.490, 1106.500, 1106.510, 1106.520, 1106.530, 1106.540, 1106.550, 1106.560, 1106.570, 1106.580, 1106.590, 1106.600, 1106.610, 1106.620, 1106.630, 1106.640, 1106.650, 1106.660, 1106.670, 1106.680, 1106.690, 1106.700, 1106.710, 1106.720, 1106.730, 1106.740, 1106.750, 1106.760, 1106.770, 1106.780, 1106.790, 1106.800, 1106.810, 1106.820, 1106.830, 1106.840, 1106.850, 1106.860, 1106.870, 1106.880, 1106.890, 1106.900, 1106.910, 1106.920, 1106.930, 1106.940, 1106.950, 1106.960, 1106.970, 1106.980, 1106.990, 1107.000, 1107.010, 1107.020, 1107.030, 1107.040, 1107.050, 1107.060, 1107.070, 1107.080, 1107.090, 1107.100, 1107.110, 1107.120, 1107.130, 1107.140, 1107.150, 1107.160, 1107.170, 1107.180, 1107.190, 1107.200, 1107.210, 1107.220, 1107.230, 1107.240, 1107.250, 1107.260, 1107.270, 1107.280, 1107.290, 1107.300, 1107.310, 1107.320, 1107.330, 1107.340, 1107.350, 1107.360, 1107.370, 1107.380, 1107.390, 1107.400, 1107.410, 1107.420, 1107.430, 1107.440, 1107.450, 1107.460, 1107.470, 1107.480, 1107.490, 1107.500, 1107.510, 1107.520, 1107.530, 1107.540, 1107.550, 1107.560, 1107.570, 1107.580, 1107.590, 1107.600, 1107.610, 1107.620, 1107.630, 1107.640, 1107.650, 1107.660, 1107.670, 1107.680, 1107.690, 1107.700, 1107.710, 1107.720, 1107.730, 1107.740, 1107.750, 1107.760, 1107.770, 1107.780, 1107.790, 1107.800, 1107.810, 1107.820, 1107.830, 1107.840, 1107.850, 1107.860, 1107.870, 1107.880, 1107.890, 1107.900, 1107.910, 1107.920, 1107.930, 1107.940, 1107.950, 1107.960, 1107.970, 1107.980, 1107.990, 1108.000, 1108.010, 1108.020, 1108.030, 1108.040, 1108.050, 1108.060, 1108.070, 1108.080, 1108.090, 1108.100, 1108.110, 1108.120, 1108.130, 1108.140, 1108.150, 1108.160, 1108.170, 1108.180, 1108.190, 1108.200, 1108.210, 1108.220, 1108.230, 1108.240, 1108.250, 1108.260, 1108.270, 1108.280, 1108.290, 1108.300, 1108.310, 1108.320, 1108.330, 1108.340, 1108.350, 1108.360, 1108.370, 1108.380, 1108.390, 1108.400, 1108.410, 1108.420, 1108.430, 1108.440, 1108.450, 1108.460, 1108.470, 1108.480, 1108.490, 1108.500, 1108.510, 1108.520, 1108.530, 1108.540, 1108.550, 1108.560, 1108.570, 1108.580, 1108.590, 1108.600, 1108.610, 1108.620, 1108.630, 1108.640, 1108.650, 1108.660, 1108.670, 1108.680, 1108.690, 1108.700, 1108.710, 1108.720, 1108.730, 1108.740, 1108.750, 1108.760, 1108.770, 1108.780, 1108.790, 1108.800, 1108.810, 1108.820, 1108.830, 1108.840, 1108.850, 1108.860, 1108.870, 1108.880, 1108.890, 1108.900, 1108.910, 1108.920, 1108.930, 1108.940, 1108.950, 1108.960

- to be #12 AWG CLAD STEEL, HIGH STRENGTH WITH MINIMUM 450LB BREAK BURIAL AND COLOR CODED BLUE. DIRECT BURY WIRE SHOULD HAVE 3-WAY LOCABLE CONNECTORS. ABOVE GROUND TRACER WIRE ACCESS BOXES SHALL BE ATTACHED TO UNDERSIDE OF BOTTOM FLANGE OF FIRE HYDRANTS.
14. SINGLE WATER MAIN SERVICES TO BE INSTALLED TO CURB STOP SHALL BE 1" OR 1.5" FOR SERVICES LESS THAN OR EQUAL TO 20.0m IN LENGTH. CROSS-LINKED POLYETHYLENE ("MUNICIPLEX" BY REHAU AND "BLUE 904" BY IPEx) FOR SERVICES GREATER THAN 20.0m IN LENGTH.
15. MAIN STOPS ARE TO BE ONE OF THE FOLLOWING:
- a. CAMBRIDGE BRASS, BALL STYLE, SERIES 301NL (NO LEAD), AWWA X CB COMPRESSION ASSEMBLY
- b. CAMBRIDGE CANADA, MUELLER 305, BALL TYPE, NO LEAD, B-25008, AWWA X MUELLER "CC" COMPRESSION ASSEMBLY
- c. FORD METER BOX COMPANY, BALL STYLE, FB-1000-NL, NO LEAD, AWWA X "CC" COMPRESSION ASSEMBLY
17. CURB STOPS TO 203-H3H3, BALL STYLE WITH DRAIN, BLOW OFFS AS PER TOWNSHIP SD WI.
- c. CURB STOPS ARE TO BE ONE OF THE FOLLOWING:
- a. CAMBRIDGE BRASS, BALL STYLE, SERIES 202NL (NO LEAD), CB COMPRESSION X CB COMPRESSION ASSEMBLY
- b. CAMBRIDGE CANADA, MUELLER 300, BALL TYPE, NO LEAD, MUELLER "CC" X MUELLER "CC" COMPRESSION ASSEMBLY
- c. FORD METER BOX COMPANY, BALL STYLE, BALL, B44 SERIES, NO LEAD, "CC" COMPRESSION ASSEMBLY
18. A CURB STOP & EXTENSION SERVICE BOX & MAIN STOP MUST BE INSTALLED ON EACH SERVICE USING COMPRESSION JOINT FITTINGS.
19. ALL CURB STOPS FOR SERVICES WITHIN ASPHALT TO BE LOCATED IN VALVE BOXES INSTALLED FLUSH TO FINISHED GRADE OF ASPHALT. CAP FOR VALVE BOX TO BE MARKED WITH "W" & PAINTED BLUE.
20. SERVICE BOXES TO NUMBER 7, D-I CLOW OR MUELLER, 24" BLACK ROADS STRAIGHT C/W CAP PAINTED BLUE.
21. ALL SERVICES SHALL BE METERED AS PER TOWNSHIP SD W7. METERS TO BE COMPLETE WITH REMOTE READOUT OR RADIO READ AS DETERMINED BY THE TOWNSHIP.
22. HYDRANTS – CENTURY NUMBER 1, OPEN LEFT (O/L), 2 HOSE, 338 PLUMBER PORT, 6" WJ BASE, SELF-DRAINING RED, STOP CAP, CAP PAINTED BLUE. CENTURY COMPRESSION TYPE VALVE SEAL OR GASKET CANADA BRIGADIER HERITAGE STYLE HYDRANT WITH MCAVITY M59M SHAPE, 2 BOTH WITH STORZ PUMPER CONNECTION.
23. VALVES – RESILIENT SEATED, RSGV MECHANICAL JOINT, OPEN LEFT CLOW OR MUELLER WITH 5-SL-48 SLIDING VALVE BOX C/W CAP PAINTED BLUE. VALVE AND VALVE BOX PER TOWNSHIP SD W2.
24. MECHANICAL JOINT DUCTILE FITTINGS – AWWA/ANSI C153/A21.53.
25. HYDRANT TO BE INSTALLED ON RIGHT HAND MARKER STAKES PER TOWN & CPU STANDARD "FLEX STAKE HYDRANT MARKER MODEL FHW804, 48" LONG, COLOR YELLOW WITH REFLECTIVE SHINY GRAPHIC ON BOTH SIDES". MARKER TO BE POSITIONED ON THE RIGHT PORT AS VIEWED FROM STREET.
26. ALL VALVES TO BE OPERATED BY THE TOWNSHIP (IF REQUIRED), CONTRACTOR TO PROVIDE MIN. 48hr NOTIFICATION FOR REQUEST.
27. HYDRANTS ARE TO BE 1.67m (5'6") LONG. MAKE-UP PIECES, IF REQUIRED, ARE TO BE INSTALLED BELOW THE HYDRANT.
28. ALL WATERMAIN FITTINGS TO BE LEAD FREE.
29. MECHANICAL JOINT RESTRAINTS TO BE USED DURING TRANSITION OF WATERMAIN INSTALLATION IN NATIVE SOILS TO ENGINEERED FILL. MECHANICAL JOINT RESTRAINTS TO BE UN-FLANGED SERIES 1300, MANUFACTURED BY FORD METER BOX COMPANY INC. OR APPROVED EQUIVALENT. FIELD DECISION.
30. MECHANICAL JOINTS ARE REQUIRED ON ALL FITTINGS AND BENDS.
31. WATER SAMPLING STATION – THE KUPFERLE FOUNDRY COMPANY ECLIPSE #88 FOR FREEZING CLIMATES ON A PEDESTAL.
32. PROTECTION REQUIRED ON ALL METALLIC FITTING AND PIPE AS PER OPS 702 & TOWNSHIP STANDARDS
33. THE PVC PIPE INSTALLATION SHALL INCLUDE TRACER WIRE. TRACER WIRE TO BE 12 GAUGE, MULTI-STRAND SHALL BE PLACED ON TOP & ATTACHED IN WO PLACES ON EACH LENGTH OF PVC WATERMAIN, ALL CONNECTIONS SHALL BE MADE WITH "DRYCONOM WATERPROOF CONNECTORS" OR APPROVED EQUIVALENT. MUNICIPALITY MUST BE ON SITE DURING TRACER WIRE INSTALLATION. ABOVE GROUND TRACER WIRE ACCESS BOXES SHALL BE ATTACHED TO UNDERSIDE OF BOTTOM FLANGE OF FIRE HYDRANTS.
34. SEPARATION BETWEEN WATERMAINS AND SEWER TO BE AS PER MOE GUIDELINES. THE MINIMUM HORIZONTAL SEPARATION BETWEEN THE WATER MAIN AND ANY SEWER SHALL BE 2.5m. A MINIMUM VERTICAL SEPARATION OF 0.5m MUST BE MAINTAINED BETWEEN WATER MAIN AND SEWERS. CLEARANCES ARE MEASURED FROM OUTSIDE EDGES OF PIPES.
35. 75mm PVC SLEEVES SHALL BE PROVIDED WHERE CURB-STOPS ARE LOCATED IN DRIVEWAYS.

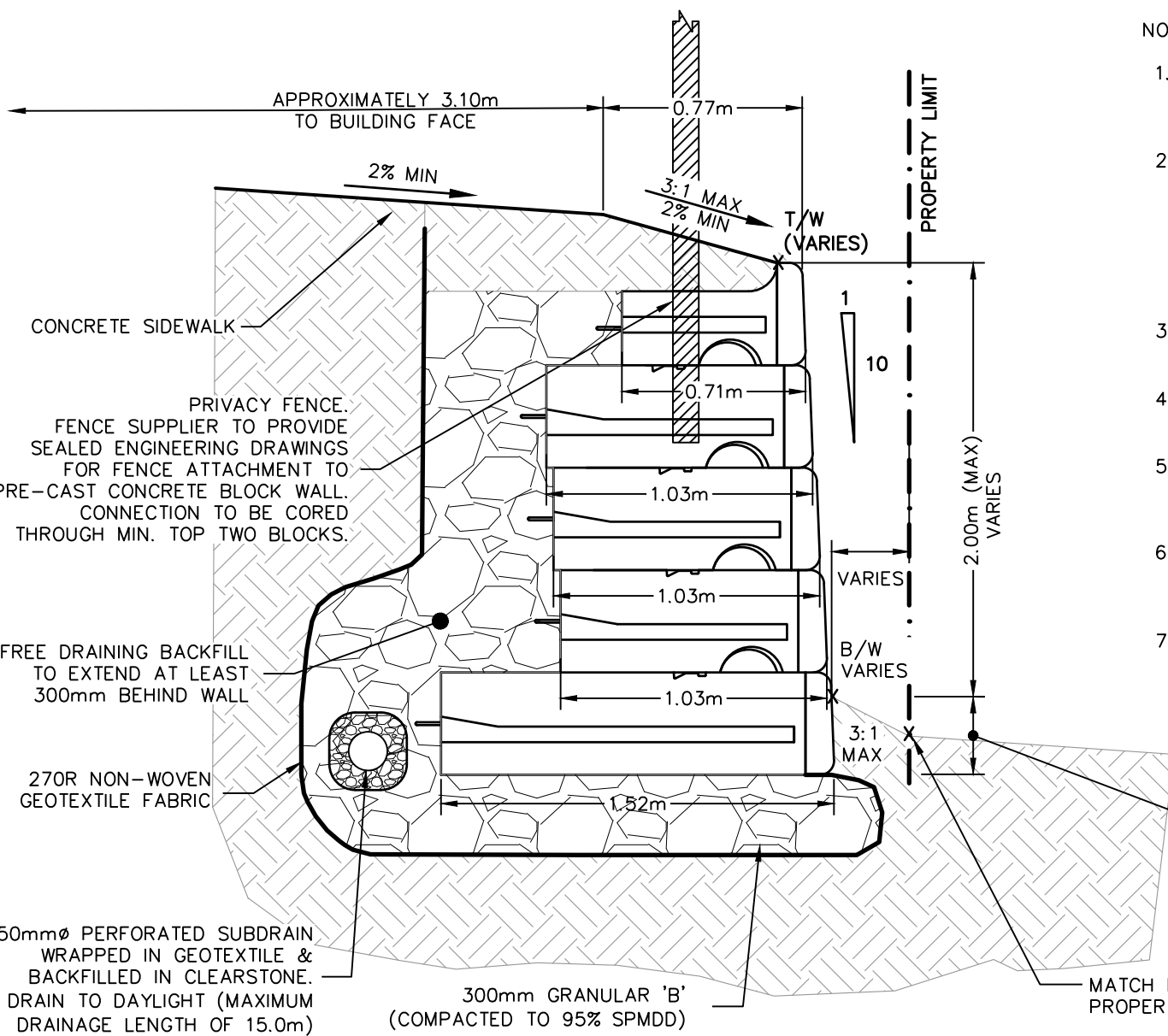
### E) STORM SEWERS

1. MH TO OPSD 701.010 AND DCBMH TO OPSD - 701.011, 701.012, 701.013.
2. SUMPS - 450mm PIPES AND UNDER 600mm SUMP IN CATCHBASINS AND MAINTENANCE HOLES
3. BENCHING - REQUIRED FOR PIPES OVER 450mm DIAMETER.
4. STEPS TO OPSD 405.010.
5. M.H. FRAMES AND GRATES TO OPSD - 401.01 OPEN COVER.
6. DICB'S TO OPSD - 705.030, 705.040 (TYPE A).
7. DCBMH FRAMES AND GRATES TO BE OPSD - 400.100, & OPSD-400.110 (SQUARE)
8. PIPE SUPPORT AT DCBMH'S TO OPSD - 708.020.
9. DGB - 120mm MINIMUM 300mm Ø CONNECTIONS TO RIGID & FLEXIBLE MAIN PIPE SEWER AS PER OPSD - 708.010, 708.030.
10. PROTECTION DURING CONSTRUCTION TO OPSD - 808.010.
11. BACKFILL AND EMBEDMENT TO OPSD - 802.010 (FLEXIBLE PIPE CLASS 'B', GRANULAR 'A' EMBEDMENT OR OPSD - 802.030 802.031 AND 802.032 (RIGID PIPE) GRANULAR 'A' EMBEDMENT. REFER TO GENERAL NOTES.
12. BACKFILL AND EMBEDMENT MATERIAL TO BE COMPACTED TO A DRY DENSITY OF AT LEAST 95% OF THE MATERIAL'S SPMD0.
13. STORM STRENGTH PER OPSD 701.010.
14. STORM SEWERS 375mm OR LESS TO BE PVC DR35. STORM SEWERS 450mm OR MORE TO BE CONCRETE CL-65D UNLESS OTHERWISE NOTED.
15. STORM SERVICES TO BE 100mmØ PVC DR28 COLORED WHITE, WHERE SHARED STORM SERVICES ARE USED, SERVICE BETWEEN STORM SERVICES CONNECTION AND PIPE TO BE 125mmØ MINIMUM COVER TO BE 1% AND MINIMUM COVER 1.2m.
16. CATCHBASIN LEADS TO REAR YARD CATCHBASINS TO BE CONCRETE CL-100D.
17. INLINE AREA DRAINS (AD) TO BE NYLOPLAST 11" (DWG NO. 7003-110-1026).



### TYPICAL PRE-ENGINEERED RETAINING WALL

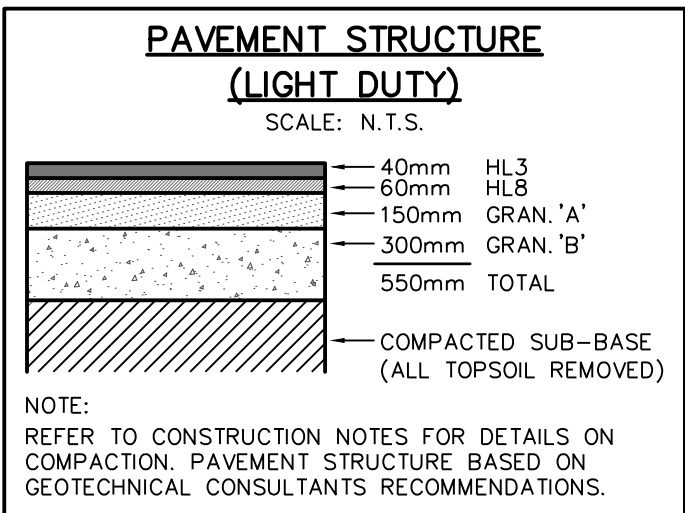
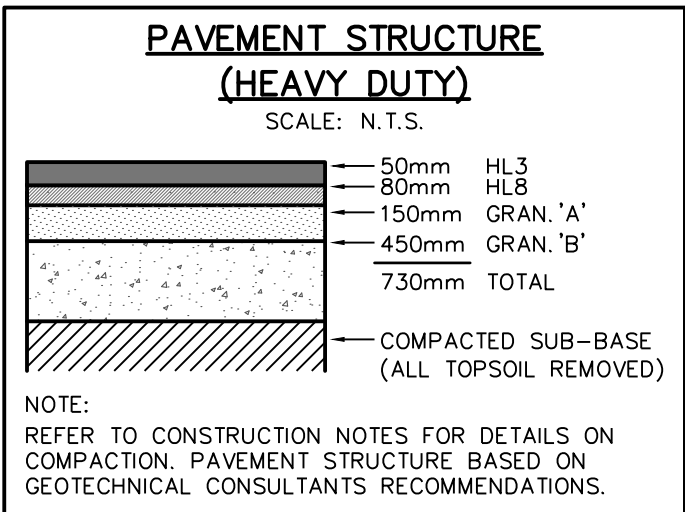
SCALE 1:25



NOTES:

1. RETAINING WALL TO BE CONSTRUCTED IN ACCORDANCE WITH PROPOSED GRADES ON DWG C102A & C101. DIVERGENCE FROM PROPOSED GRADES SHALL BE REVIEWED BY ENGINEER OF RECORD.
2. DESIGN PARAMETERS (GREEN GEOTECHNICAL, 2024):
  - BACKFILL SOIL = 32'
    - Ko = 0.36
    - c = 2.76
    - γ soil = 18kN/m<sup>3</sup>
    - γ block = 24kN/m<sup>3</sup>
  - SURCHARGE = 3.6 kPa
3. A NON-WOVEN GEOTEXTILE (TERRAFIX 270R OR APPROVED EQUIVALENT) SHALL BE PLACED BEHIND THE RETAINING WALL AS INDICATED.
4. ALL BACKFILL USED BEHIND RETAINING WALL SHALL BE FREE DRAINING GRANULAR "B" MATERIAL AND SHALL BE PLACED AT A MINIMUM OF 300mm BEHIND THE WALL.
5. CONTRACTOR TO PROVIDE SHOP DRAWINGS FOR PRE-ENGINEERED DRAINING WALL. SHOP DRAWINGS SHALL BE SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE PROVINCE OF ONTARIO.
6. BLOCK SHOWN IS RED-ROCK. CONTRACTOR TO ENSURE INSTALLATION OF BLOCK WALL IS IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTALLATION SPECIFICATIONS.
7. PROVIDE MINIMUM 850mm SETBACK FROM PROPERTY LINE. APPROACHMENT IS ALLOWED onto ADJACENT PROPERTIES DURING CONSTRUCTION.

PRELIMINARY



1. THIS DRAWING IS THE EXCLUSIVE PROPERTY OF C.F. CROZIER & ASSOCIATES INC. AND THE MODIFICATION AND/OR REPRODUCTION OF ANY PART OF THIS DRAWING IS STRICTLY PROHIBITED WITHOUT WRITTEN PERMISSION OF C.F. CROZIER & ASSOCIATES INC.
2. THE DIGITAL FILES CONTAIN INTELLECTUAL AND DIGITAL DATA PROPERTY THAT IS THE EXCLUSIVE PROPERTY OF C.F. CROZIER & ASSOCIATES INC.
3. THE USER OF THIS DRAWING SHALL BE RESPONSIBLE FOR REPORTING MATRIMONIALS ON SITE AND REPORT ANY DISCREPANCIES OR OMISSIONS TO C.F. CROZIER & ASSOCIATES INC. PRIOR TO CONSTRUCTION.
4. THE USER OF THIS DRAWING SHALL BE RESPONSIBLE FOR CONJUNCTION WITH ALL OTHER PLANS AND DOCUMENTS APPLICABLE TO THIS PROJECT.
5. ALL EXISTING UNDERGROUND UTILITIES TO BE VERIFIED IN THE FIELD BY THE FIELD ENGINEER PRIOR TO CONSTRUCTION.
6. DO NOT SCALE DRAWINGS.




No.	ISSUE
0	ISSUED FOR 1ST SUBMISSION SPA
1	ISSUED FOR 2ND SUBMISSION SPA

DATE: YYYY/MM/DD

2024/04/26
2025/06/25

Engineer



A circular professional engineer seal for the Province of Ontario. The outer ring contains the text "LICENSED PROFESSIONAL ENGINEER" at the top and "PROVINCE OF ONTARIO" at the bottom. The center of the seal features a stylized signature "A. R. L'ABBE" above the license number "100543708". Below the license number, the expiration date "2025.06.25" and the phone number "2514-6796" are printed.

Engineer

LICENSED PROFESSIONAL ENGINEER

*N. C. O'Connor*

N. C. O'CONNOR  
100505766

2025.06.25  
2514-6796

PROVINCE OF ONTARIO


Project

271 MAIN STREET EAST DUNDALK  
TOWNSHIP OF SOUTHGATE

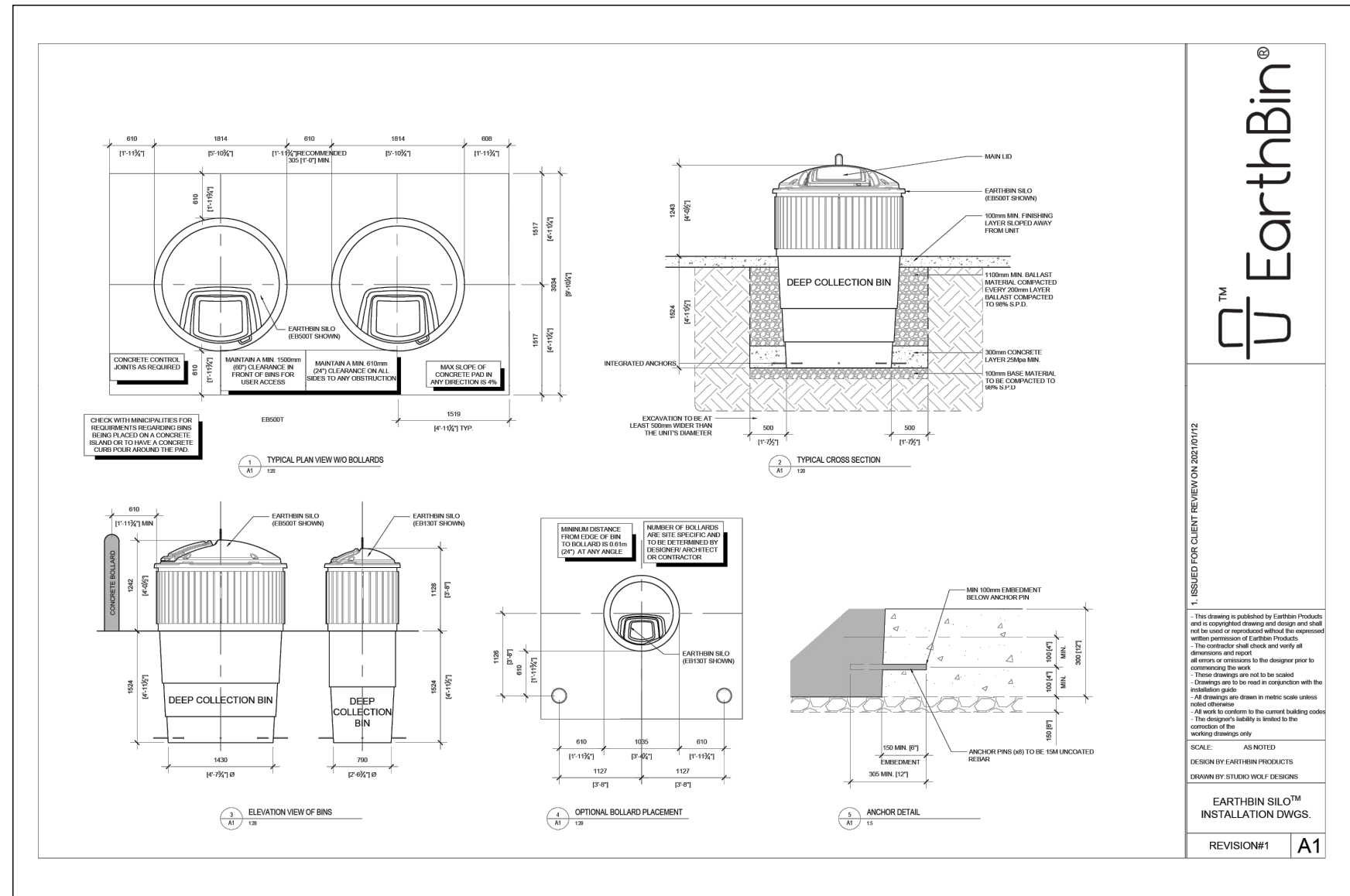
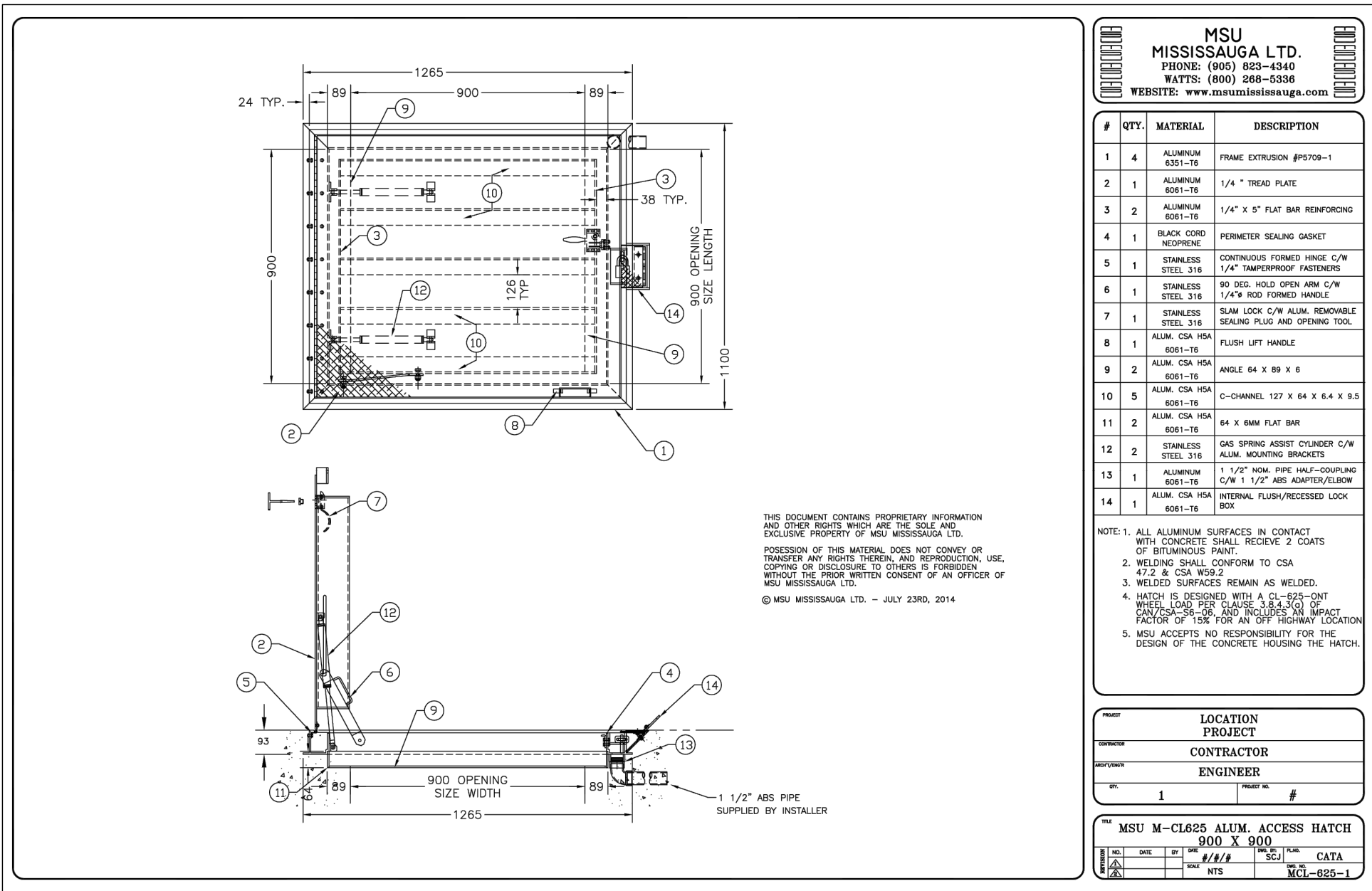
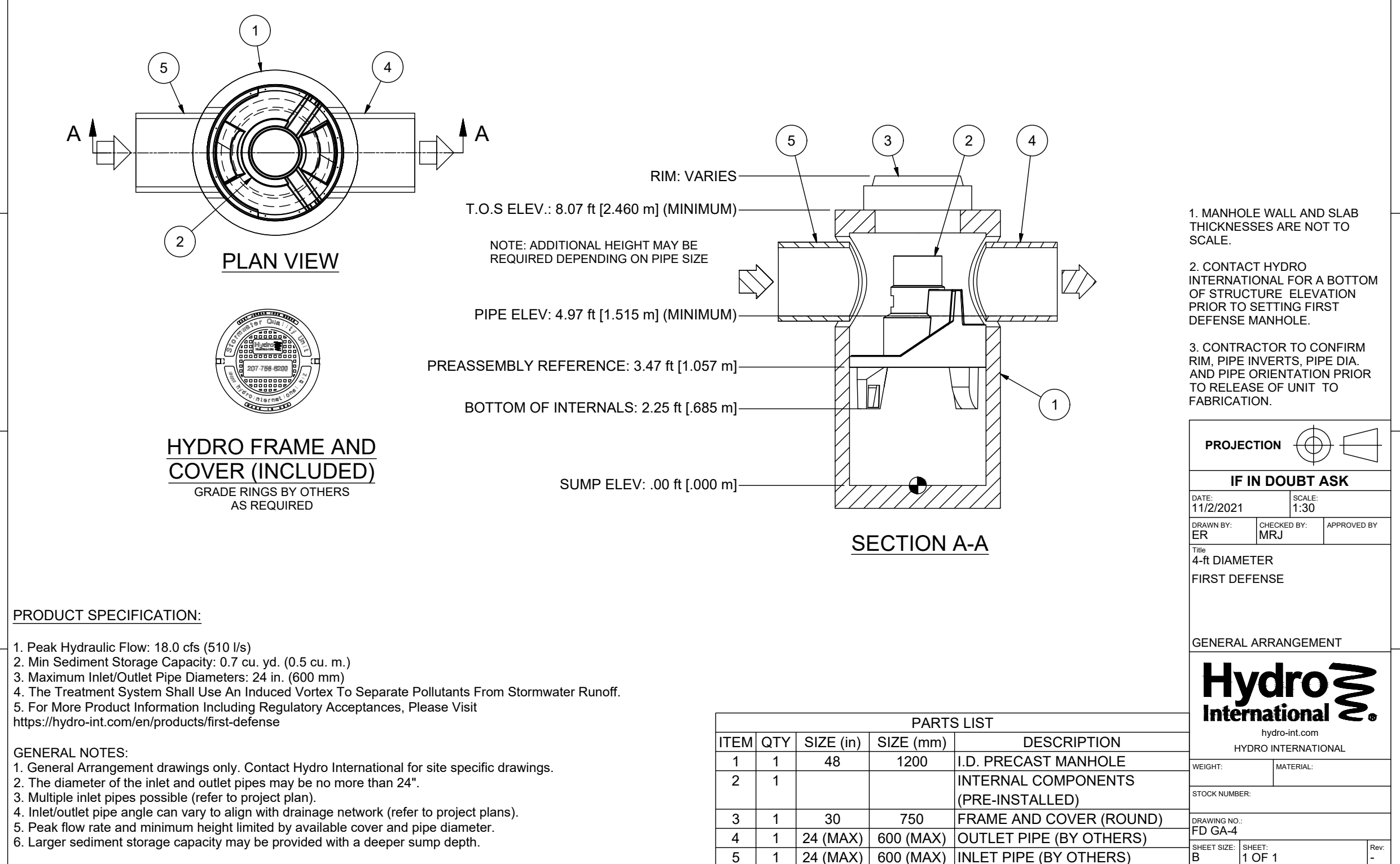
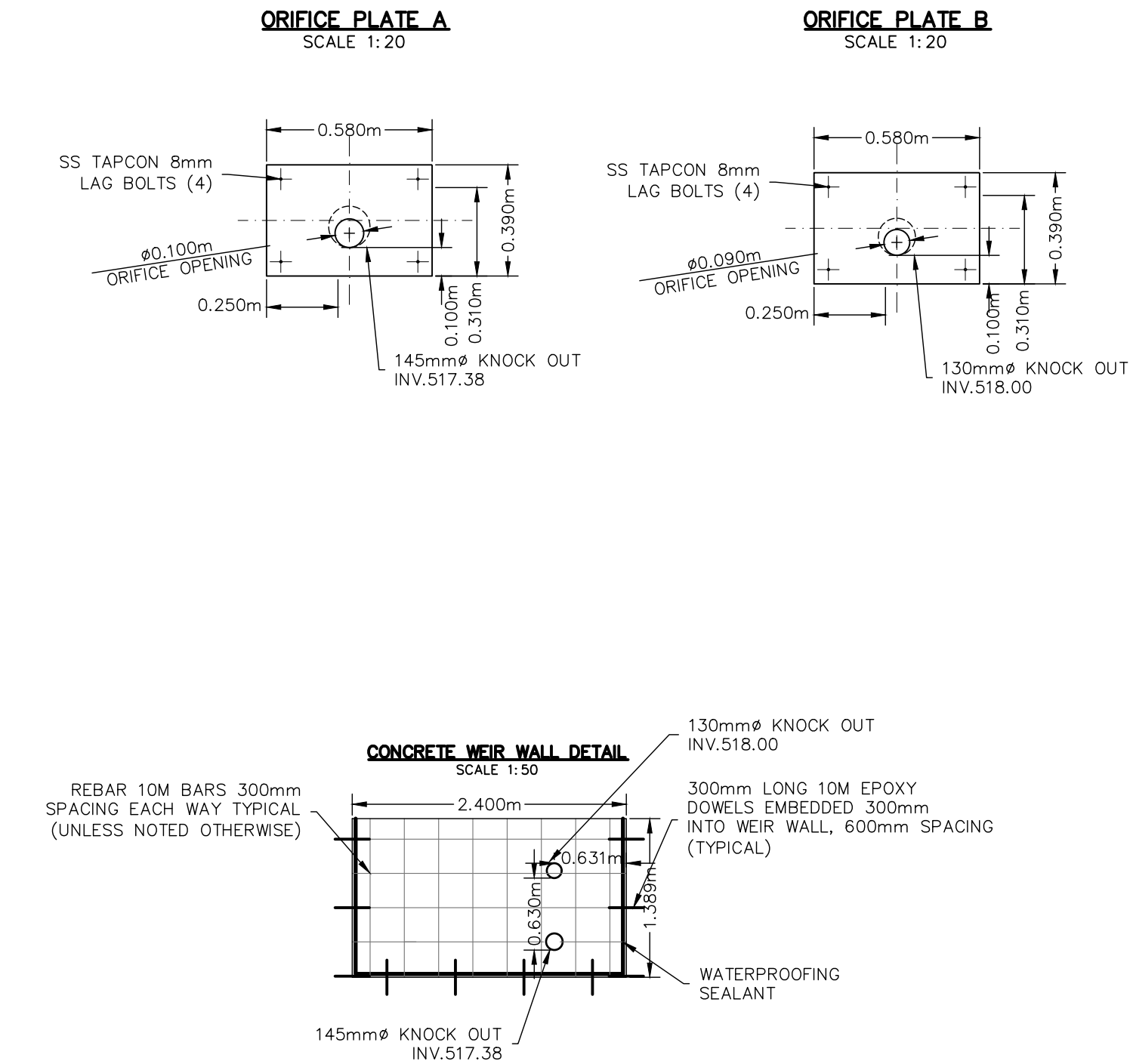
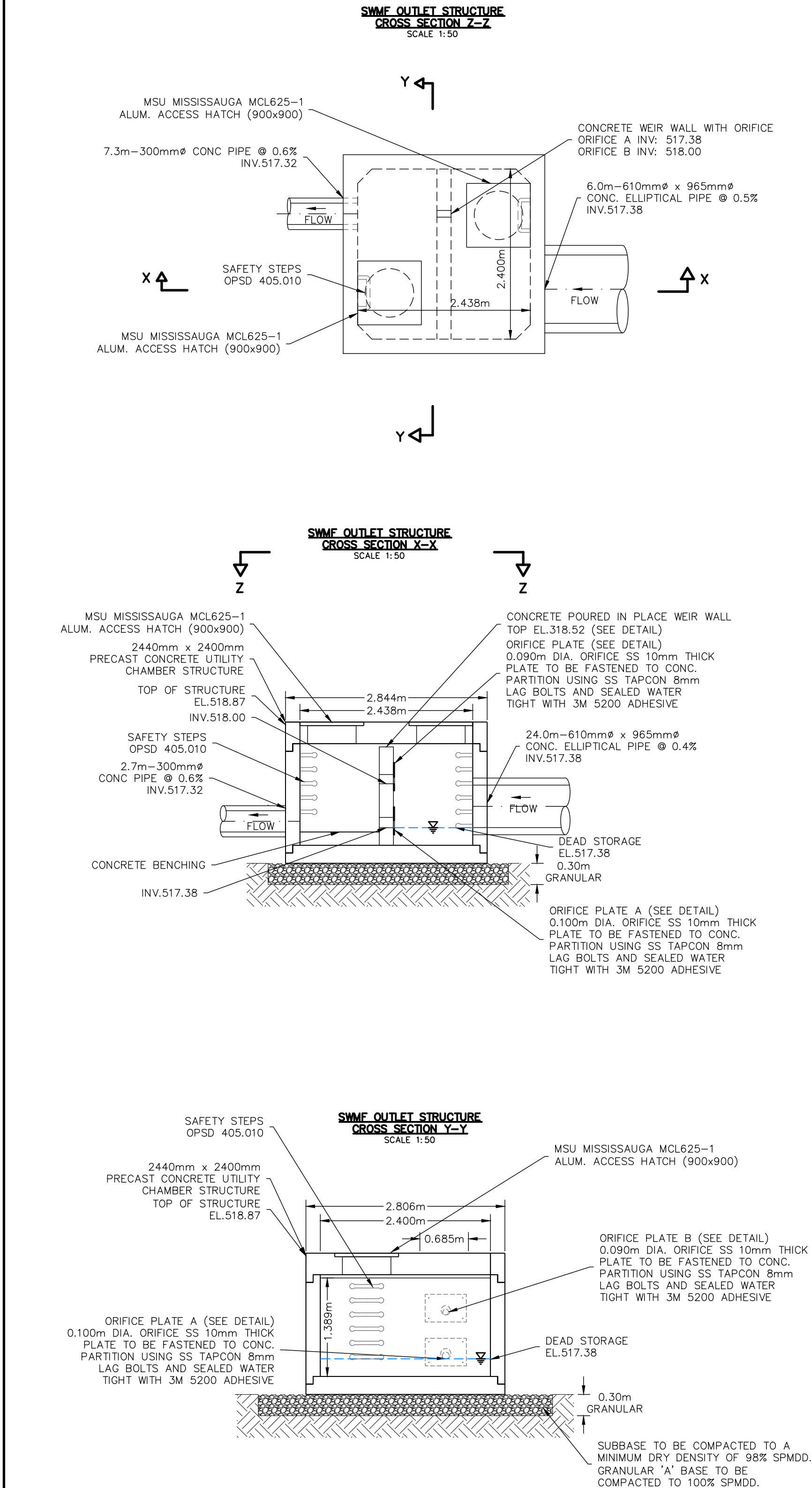
---

Drawing

CONSTRUCTION NOTES & DETAILS  
(1 OF 3)

 <b>CROZIER</b> CONSULTING ENGINEERS			
Drawn By	R.D.M.	Design By	J.L'A./A.M.
Check By	J.L'A.	Check By	N.C.O.
		Project	2514-6796
		Drawing	C107





1. THIS DRAWING IS THE EXCLUSIVE PROPERTY OF C.F. CROZIER & ASSOCIATES INC. AND THE MODIFICATION AND/OR REPRODUCTION OF ANY PART OF THIS DRAWING IS STRICTLY PROHIBITED WITHOUT WRITTEN AUTHORIZATION FROM THIS OFFICE.

2. THE DIGITAL FILES CONTAIN INTELLECTUAL AND DIGITAL DATA PROPERTY THAT IS THE EXCLUSIVE PROPERTY OF C.F. CROZIER & ASSOCIATES INC. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, LEVELS, AND DATUMS ON SITE AND REPORT ANY DISCREPANCIES OR OMISSIONS TO C.F. CROZIER & ASSOCIATES INC. PRIOR TO CONSTRUCTION.

3. THIS DRAWING IS TO BE READ AND UNDERSTOOD IN CONJUNCTION WITH ALL OTHER PLANS AND DOCUMENTS APPLICABLE TO THIS PROJECT.

4. ALL EXISTING UNDERGROUND UTILITIES TO BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO CONSTRUCTION.

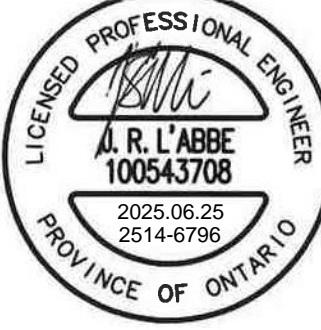
5. DO NOT SCALE DRAWINGS.

Town



No.	ISSUE	DATE: YYYY/MM/DD
0	ISSUED FOR 1ST SUBMISSION SPA	2024/04/26
1	ISSUED FOR 2ND SUBMISSION SPA	2025/06/25

Engineer



Engineer



Project

271 MAIN STREET EAST DUNDALK  
TOWNSHIP OF SOUTHGATE

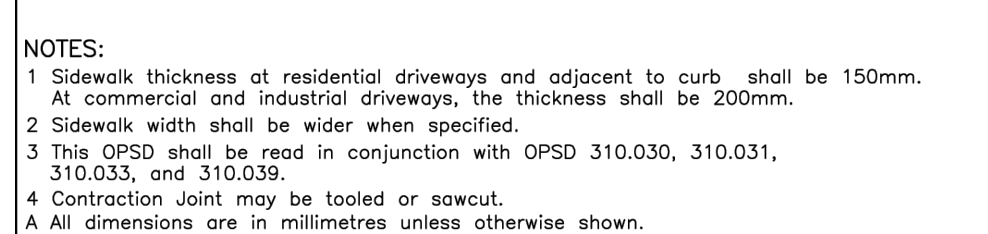
Drawing


CONSTRUCTION NOTES & DETAILS  
(2 OF 3)

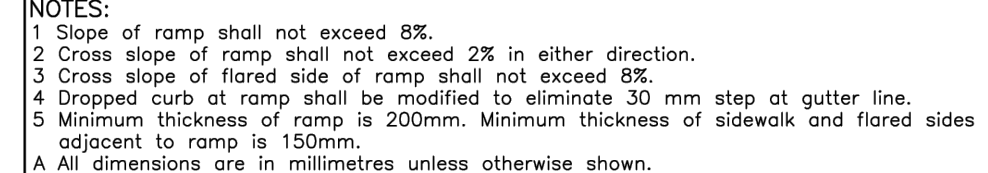



Drawn By: R.D.M. Design By: J.L.A./A.M. Project: 2514-6796  
Check By: J.L.A. Check By: N.C.O. Drawing: C108

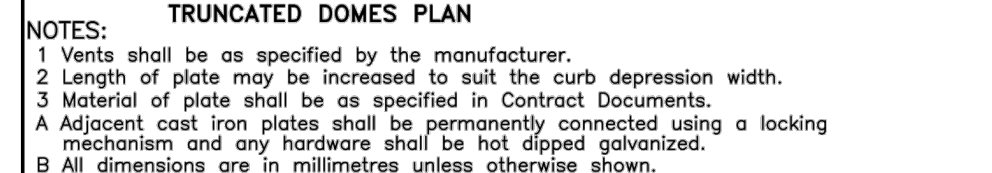





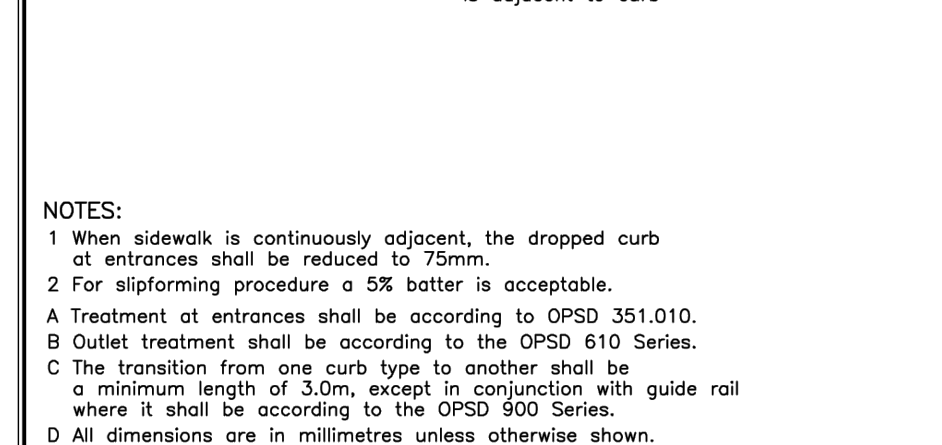
ONTARIO PROVINCIAL STANDARD DRAWING	Nov 2019	Rev	3	
CONCRETE SIDEWALK				
			OPSD 310.010	




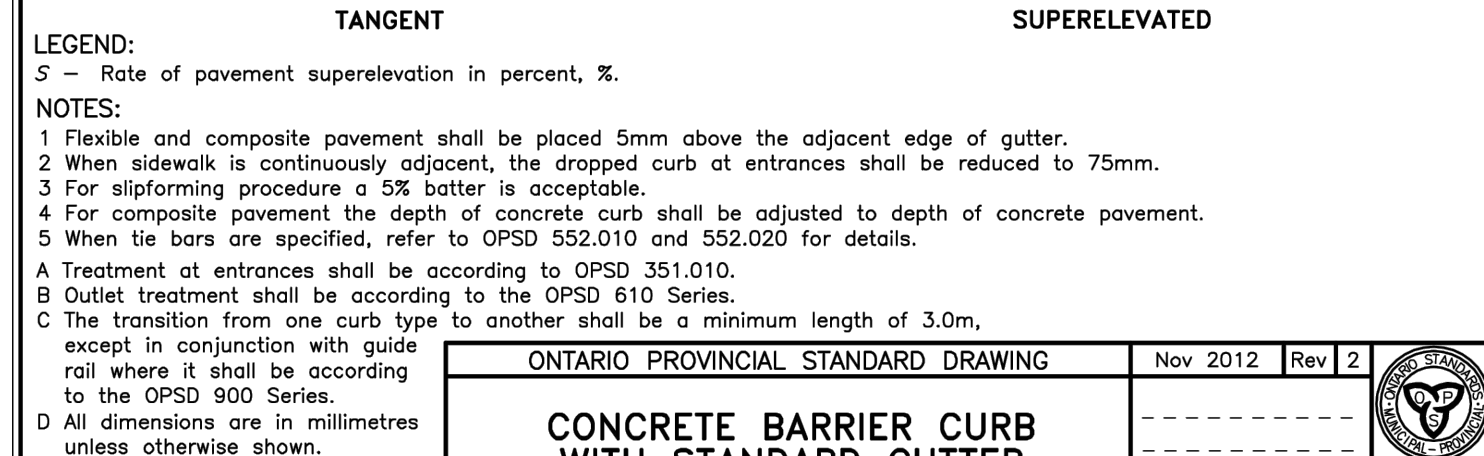
ONTARIO PROVINCIAL STANDARD DRAWING		Nov 2019	Rev 1	
CONCRETE SIDEWALK RAMPS AT UNSIGNALIZED INTERSECTIONS		-----		
		OPSD 310.033		



ONTARIO PROVINCIAL STANDARD DRAWING		Nov 2019	Rev 1	
CONCRETE SIDEWALK RAMPS TACTILE WALKING SURFACE INDICATORS COMPONENT				
		OPSD 310.039		

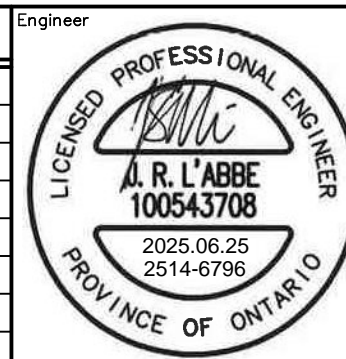


ONTARIO PROVINCIAL STANDARD DRAWING	Nov 2012	Rev	2	
CONCRETE BARRIER CURB	<div style="border-bottom: 1px solid black; height: 1.2em; width: 100%;"></div> <div style="border-bottom: 1px solid black; height: 1.2em; width: 100%;"></div> <div style="border-bottom: 1px solid black; height: 1.2em; width: 100%;"></div>			
OPSD 600.11				



	WITH STANDARD GUTTER	OPSD 600.040
--	----------------------	--------------

1. THIS DRAWING IS THE EXCLUSIVE PROPERTY OF C.F. CZOZIER & ASSOCIATES INC. AND THE MODIFICATION AND/OR REPRODUCTION OF ANY PART OF THIS DRAWING IS STRICTLY PROHIBITED WITHOUT WRITTEN PERMISSION FROM THE DESIGNER.
2. THE DIGITAL FILES CONTAIN INTELLECTUAL AND DIGITAL DATA PROPERTY THAT IS THE EXCLUSIVE PROPERTY OF C.F. CZOZIER & ASSOCIATES INC. THE CONTRACTOR SHALL BE RESPONSIBLE FOR BACKUP, LOSS, AND DAMAGE ON SITE AND REPORT ANY DISCREPANCIES OR OMISSIONS TO C.F. CZOZIER & ASSOCIATES INC. PRIOR TO CONSTRUCTION.
3. THIS DRAWING IS TO BE USED IN CONJUNCTION WITH ALL OTHER PLANS AND DOCUMENTS APPLICABLE TO THIS PROJECT.
4. ALL EXISTING UNDERGROUND UTILITIES TO BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
5. DO NOT SCALE DRAWINGS.

[illegible]

Project	271 MAIN STREET EAST DUNDALK TOWNSHIP OF SOUTHGATE
Drawing	CONSTRUCTION NOTES & DETAILS (3 OF 3)



Drawn By	R.D.M.	Design By	J.L'A./A.M.	Project	2514-6796
Check By	J.L'A.	Check By	N.C.O.	Drawing	C109