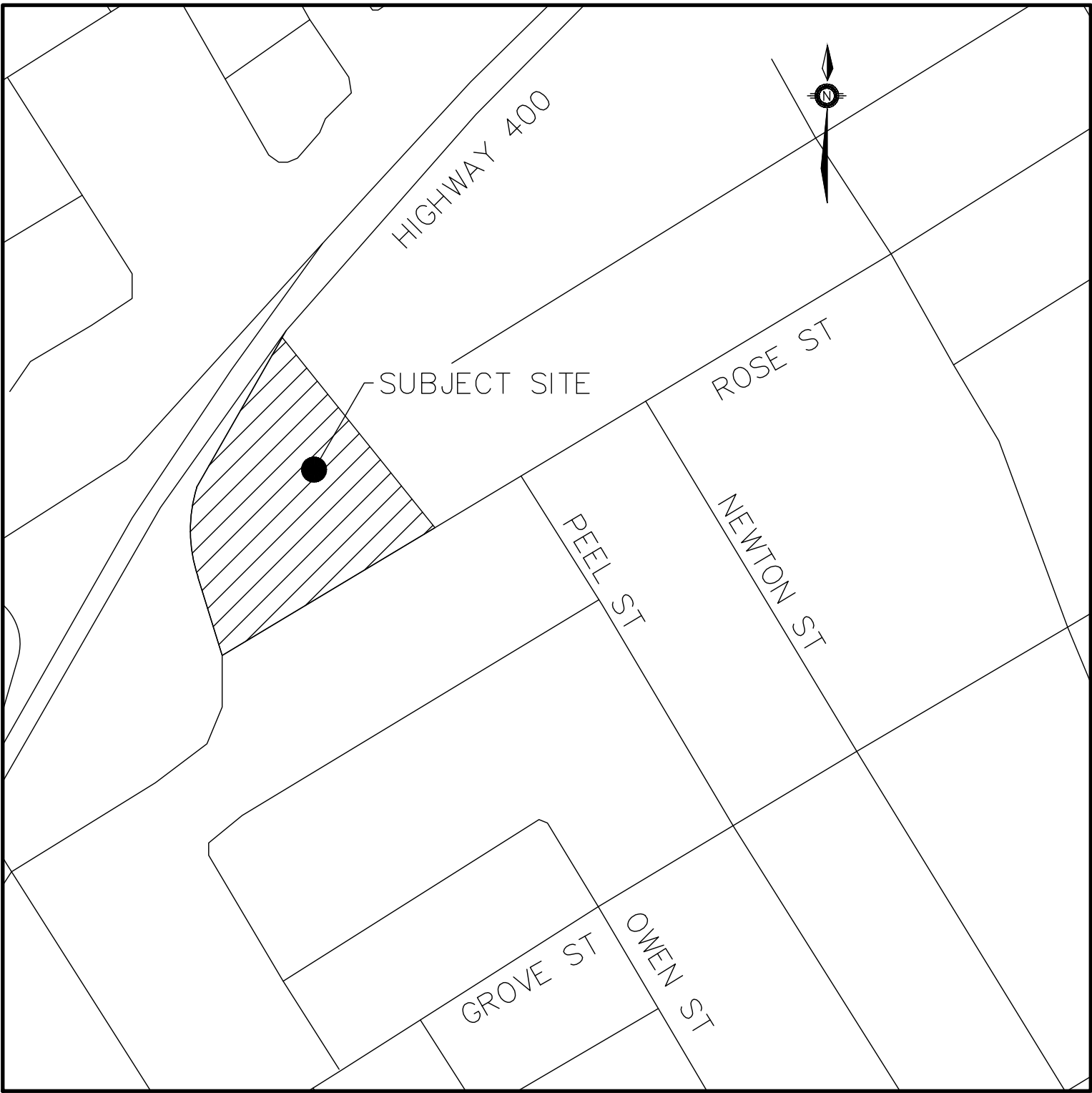


COUNTY OF SIMCOE
AFFORDABLE HOUSING - 20 ROSE STREET
CITY OF BARRIE

DRAWING LIST

ND-1	NOTES AND DETAILS
ND-2	NOTES AND DETAILS
SG-1	SITE GRADING PLAN
SS-1	SITE SERVICING PLAN
STM-1	PRE-DEVELOPMENT STORM CATCHMENT PLAN
STM-2	POST-DEVELOPMENT STORM CATCHMENT PLAN
STM-3	STORM DRAINAGE AREA PLAN
STM-4	EXTERNAL STORM CATCHMENT PLAN
PD-1	STORMWATER PIPE DESIGN SHEETS
PP-1	ROSE STREET STA 0+150 TO 0+310
PP-2	ROSE STREET STA 0+310 TO 0+390
EP-1	ENVIRONMENTAL PROTECTION AND REMOVALS PLAN
EP-2	ENVIRONMENTAL PROTECTION AND REMOVALS PLAN SITE ALTERATION



CITY OF BARRIE
70 COLLIER STREET
(BOX 400)
BARRIE, ONT
L4M 4T5

COUNTY OF SIMCOE
1110 HIGHWAY 26
MIDHURST, ON, L0L 1X0



PEARSON
ENGINEERING
PEARSONENG.COM PH. 705.719.4785

GENERAL NOTES

1. DRAWINGS

A. ALL DRAWINGS SHALL BE PRODUCED IN ACCORDANCE WITH CURRENT CITY OF BARRIE STANDARDS & SYMBOLS FOR PLAN & PROFILE DRAWINGS, GENERAL SERVICE PLANS AND LOT GRADING PLANS.

2. MEASUREMENTS

A. ALL DIMENSIONS ARE IN METRES, EXCEPT PIPE DIAMETERS, WHICH ARE IN MILLIMETRES, UNLESS SPECIFIED OTHERWISE.

3. GENERAL

A. ALL WORK SHALL BE IN ACCORDANCE WITH CURRENT CITY OF BARRIE STANDARD DRAWINGS (BSD) AND ONTARIO PROVINCIAL STANDARD DRAWINGS (OPSD).

B. ORDER OF PRECEDENCE OF STANDARD DRAWINGS IS FIRSTLY CITY OF BARRIE STANDARD DRAWINGS (BSD) AND SECONDLY ONTARIO PROVINCIAL STANDARD DRAWINGS (OPSD).

C. LOCATION OF EXISTING SERVICES ARE NOT GUARANTEED. THE CONTRACTOR IS REQUIRED TO NOTIFY THE VARIOUS UTILITY COMPANIES 48 HOURS PRIOR TO THE COMMENCEMENT OF ANY WORK.

D. A RIGHT-OF-WAY ACTIVITY PERMIT IS REQUIRED FROM THE ENGINEERING DEPARTMENT (OPERATIONS CENTRE, 165 FERNDALE DR. NORTH) PRIOR TO THE COMMENCEMENT OF WORK WITHIN ANY CITY RIGHT-OF-WAY.

E. A SITE ALTERATION PERMIT IS REQUIRED FROM THE ENGINEERING DEPARTMENT PRIOR TO THE COMMENCEMENT OF ANY EARTH WORKS ON THE SITE.

F. NATIVE MATERIAL, SUITABLE FOR BACKFILL, SHALL BE COMPACTED TO 95% STANDARD PROCTOR MAXIMUM DRY DENSITY.

G. GRANULAR MATERIAL, USED FOR BACKFILL, SHALL BE PLACED IN LAYERS 150mm IN DEPTH MAXIMUM AND COMPACTED TO 100% STANDARD PROCTOR MAXIMUM DRY DENSITY.

H. ALL DISTURBED AREAS ARE TO BE REINSTATED TO THEIR ORIGINAL CONDITION OR BETTER, AS DETERMINED BY THE CITY ENGINEERING DEPARTMENT.

I. ALL SILT CONTROL AND EROSION PROTECTION DEVICES ARE TO BE IN PLACE PRIOR TO THE COMMENCEMENT OF CONSTRUCTION AND SHALL REMAIN IN PLACE AND BE MAINTAINED BY THE CONTRACTOR UNTIL CONSTRUCTION IS COMPLETE AND THE GRASS HAS ESTABLISHED GROWTH, SUBJECT TO APPROVAL BY THE CITY ENGINEERING DEPARTMENT.

SANITARY SEWERS

A. SEWERS SHALL BE CONSTRUCTED WITH BEDDINGS AS PER OPSD-802.010, (GRAN. 'A' EMBEDMENT MATERIAL) FOR FLEXIBLE PIPES AND OPSD-802.030 OR 802.031 CLASS B (GRAN. 'A' BEDDING MATERIAL) FOR RIGID PIPE UNLESS OTHERWISE APPROVED BY THE DIRECTOR OF ENGINEERING.

B. MAXIMUM DEFLECTION FROM COMBINED LIVE AND DEAD LOADING SHALL NOT EXCEED ANY C.S.A., O.P.S. OR MANUFACTURERS RECOMMENDED SPECIFICATIONS.

C. PVC, CONCRETE AND PROFILE WALL PVC SEWERS SHALL HAVE RUBBER GASKET TYPE JOINTS AND SHALL BE CERTIFIED TO CONFORM TO ALL APPLICABLE CURRENT C.S.A. SPECIFICATIONS.

D. CONCRETE SANITARY SEWERS SHALL HAVE A MINIMUM STRENGTH OF 50 N/M/MM CONFORMING TO CSA STANDARD A257.2-1982, CLASS 50-D (PREVIOUSLY C.S.A. STANDARD A257.2-1974, CLASS II).

E. MAINTENANCE HOLE TOPS (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.

F. ALL CONNECTIONS TO NEW SANITARY MAINS SHALL BE PRE-MANUFACTURED, FABRICATED TEES. CONNECTIONS TO EXISTING SANITARY SEWER SHALL BE MADE WITH APPROVED FACTORY MADE TEES OR INSERTA-TEES IN STRICT ACCORDANCE TO MANUFACTURES GUIDELINES.

WATERMAIN

A. CONTRACTOR SHALL INFORM THE CITY OF BARRIE ENGINEERING DEPARTMENT A MINIMUM OF 48 HOURS IN ADVANCE OF THEIR INTENTIONS TO WORK.

B. OPERATION OF FIRE HYDRANTS AND VALVES ON POTABLE WATER BY OTHER THAN ENGINEERING DEPARTMENT IS PROHIBITED BY BY-LAW 1-88 AS AMENDED BY BY-LAW 99-290. THE CITY WILL SWAB, PRESSURE TEST, CHLORINATE AND FLUSH ALL NEW WATERMANS.

C. MINIMUM COVER OVER WATERMAIN TO BE 1.9m. THE MINIMUM HORIZONTAL SEPARATION BETWEEN WATERMAIN AND SEWERS TO BE 2.5M. WHERE WATERMAIN CONFLICTS WITH SEWER PIPES, DEFLECT WATERMAIN HORIZONTALLY OR VERTICALLY WHILE PROVIDING A MINIMUM OF 0.5M CLEARANCE BETWEEN WATERMAIN AND SEWERS. MAINTAIN MINIMUM DEPTH OF COVER AT ALL TIMES.

D. WATERMAIN SHALL BE CONSTRUCTED WITH BEDDINGS AS PER OPSD 802.010 (GRANULAR 'A' EMBEDMENT MATERIAL) FOR FLEXIBLE PIPES AND OPSD 802.030 OR 802.031 CLASS 'B' (GRANULAR 'A' BEDDING MATERIAL, GRANULAR 'A' OR SELECT NATIVE COVER MATERIAL) FOR RIGID PIPE UNLESS OTHERWISE APPROVED BY THE DIRECTOR OF ENGINEERING, OR * ALTERNATIVE * ALTERNATIVE EMBEDMENT MATERIAL - SAND MEETING GRADATION REQUIREMENTS OF OPS 1004.05.05 COMPACTED TO 95% PROCTOR DENSITY. GEOTECHNICAL CERTIFICATION OF MATERIAL AND COMPACTION TESTING MUST BE PROVIDED EVERY 150 METRES. THE COMPACTION TESTING MUST INCLUDE THE ENTIRE EMBEDMENT ENVELOPE (HAUNCHES, BEDDING AND TOP OF PIPE).

E. COPPER WATER MAINS AND SERVICES 25mm TO 50mm IN DIAMETER SHALL BE EMBEDDED IN SAND 100mm ABOVE AND BELOW TO CONFORM TO OPSS 1004.05.07.

F. CONCRETE THRUST BLOCKS ARE TO BE INSTALLED AT ALL TEES, BENDS, HYDRANTS, END OF MAINS AND CONNECTIONS 100mm AND LARGER AS PER OPSD 1103.010 AND 1103.020. RESTRAINING DEVICES MAY BE REQUIRED IN ADDITION TO STANDARD CONCRETE THRUST BLOCKING WHERE SOIL CONDITIONS WARRANT.

G. RESTRAINING WILL BE REQUIRED ON ALL FIRE HYDRANTS

H. NEW WATERMANS TO BE PVC DR18 CL150, OR DUCTILE IRON CL52

I. TRACING WIRE (#12 TWJ STRANDED COPPER) TO BE INSTALLED ON THE TOTAL LENGTH OF ALL NON-METALLIC WATERMAIN AND BROUGHT UP AT EACH HYDRANT AND CONNECTED TO FLANGE BOLT.

J. ALL WATER SERVICES SHALL BE MINIMUM 25MM TYPE 'K' COPPER UNLESS OTHERWISE APPROVED BY THE DIRECTOR OF ENGINEERING. WATER SERVICE SADDLES SHALL BE USED WHEN TAPPING INTO PVC WATERMAIN.

K. RISER PIPES ARE TO BE INSTALLED AS PER BSD-45 (REV. #1), AND REMOVED AS DIRECTED. SWABBING SCHEDULE TO BE SUPPLIED BY A CITY OF BARRIE FIELD REPRESENTATIVE.

L. SERVICE TAPPINGS SHALL BE PLACED AT A MINIMUM SEPARATION OF 1.0M AND A MINIMUM OF 0.6M FROM JOINTS. (ENDS OF PIPE)

M. ALL NEW CURB STOPS AND BOXES TO BE LOCATED OUT OF DRIVEWAYS AND SIDEWALKS.

N. INTERNAL HYDRANTS TO BE PAINTED RED AND INSTALLED A PER BSD W507.

STORM SEWER

A. STORM SEWER TO BE PROVIDED ON ALL ROADS WITH CURB AND GUTTER.

B. PLACE ALL CATCH BASIN LATERALS AT 2% GRADE UNLESS OTHERWISE NOTED. PIPE SIZE MINIMUM 250mm DIA. SINGLE, 300mm DIA. DOUBLE.

C. STORM SEWERS SHALL BE CONSTRUCTED WITH BEDDING AS PER OPSD-802.010 (GRAN. 'A' EMBEDMENT MATERIAL) FOR FLEXIBLE PIPES AND OPSD-802.030 OR 802.031 CLASS B (GRAN. 'A' BEDDING MATERIAL) FOR RIGID PIPE UNLESS OTHERWISE APPROVED BY THE DIRECTOR OF ENGINEERING.

D. 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.

E. 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.

F. 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.

G. STORM SEWER TO BE MINIMUM 300mm DIAMETER WITH JOINTS CONFORMING TO C.S.A. STANDARD A257.3.

H. 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 METRES UNLESS SPECIFICALLY APPROVED BY THE DIRECTOR OF ENGINEERING.

I. ALL PIPE HANDLING INSTALLATIONS MUST BE IN STRICT COMPLIANCE WITH MANUFACTURES INSTALLATION GUIDES AND THE O.C.P.A. OR UNIBELL GUIDELINES.

ROADS

A. BARRIER CURB TO COMPLY WITH OPSD 600.110

B. SIDEWALKS TO COMPLY WITH OPSD-310.010 AND ARE TO BE 1.5 METRES WIDE. MINIMUM THICKNESS AS FOLLOWS :

- RESIDENTIAL DRIVEWAY 150MM
- COMMERCIAL/INDUSTRIAL DRIVEWAY 200MM (REINFORCEMENT AS PER OPSS IF REQUIRED)
- WHEN NO DRIVEWAY IS PRESENT, 125MM.

D. NATIVE SUBGRADE SHALL HAVE A CROSSFALL OF 3% AND THE MATERIAL SHALL BE APPROVED BY A SOILS CONSULTANT AND IS SUBJECT TO APPROVAL BY THE DIRECTOR OF ENGINEERING.

E. NATIVE SUBGRADE SHALL BE COMPACTED TO MINIMUM 95% STANDARD PROCTOR MAXIMUM DRY DENSITY AND SHALL BE PROOF ROLLED.

F. GRADE AND CROSS FALL ADJUSTMENT OF MAINTENANCE HOLE AND CATCH BASIN FRAMES WILL BE MADE USING PRODUCTS SPECIFICALLY MANUFACTURED FOR THAT PURPOSE. THE TOP ADJUSTMENT UNIT OF ALL CATCH BASIN AND MAINTENANCE HOLES SHALL BE RUBBER.

G. ADJUSTMENT UNITS MUST BE CERTIFIED TO MEET ALL PERTINENT OPS, CSA, ASTM AND MTO-DSM LIST, OR OTHER INDUSTRY GUIDELINES FOR MATERIALS, PERFORMANCE AND USE AS APPLICABLE.

H. ADJUSTMENT UNITS AND JOINTS WILL BE SEALED AND OR PARGED IN COMPLIANCE WITH MANUFACTURERS SPECIFICATIONS AND GUIDELINES.

I. MORTAR IS USED FOR LEVELING OF 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.

J. NON-COMPRESSIBLE BACK FILL WILL BE USED DURING REBUILDING, ADJUSTING, OR ANY OTHER APPLICABLE CATCH BASIN OR MAINTENANCE HOLE WORKS.

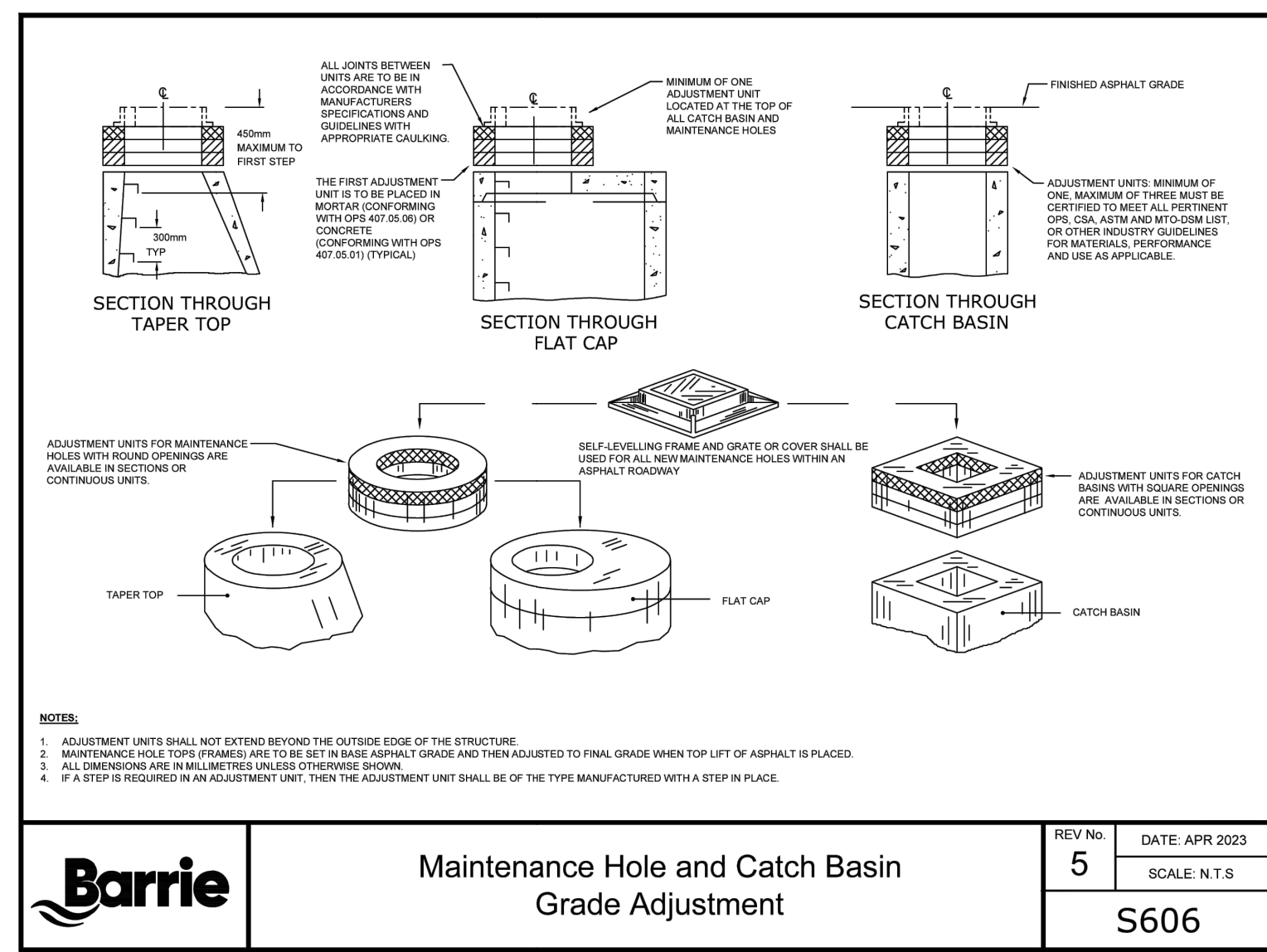
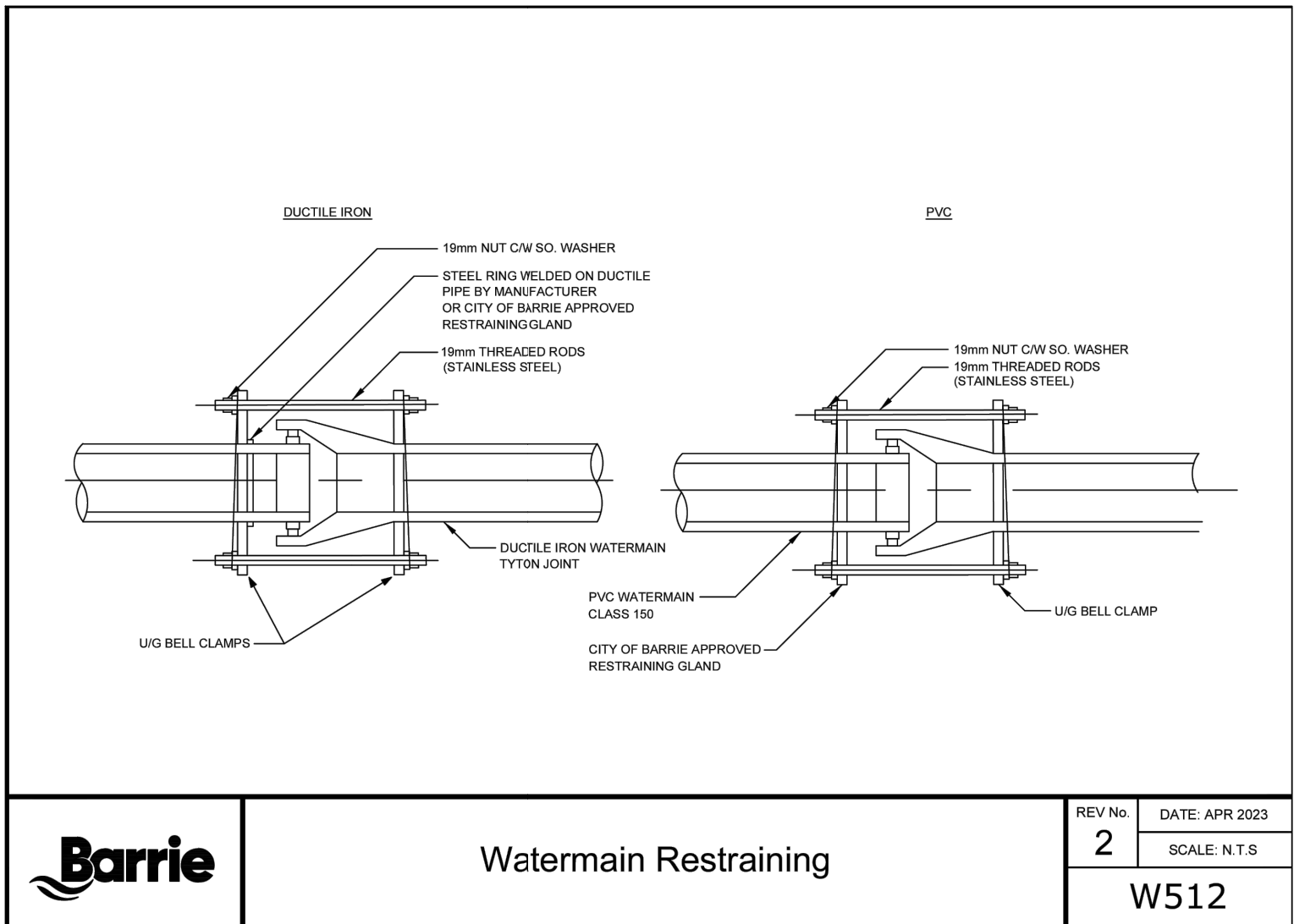
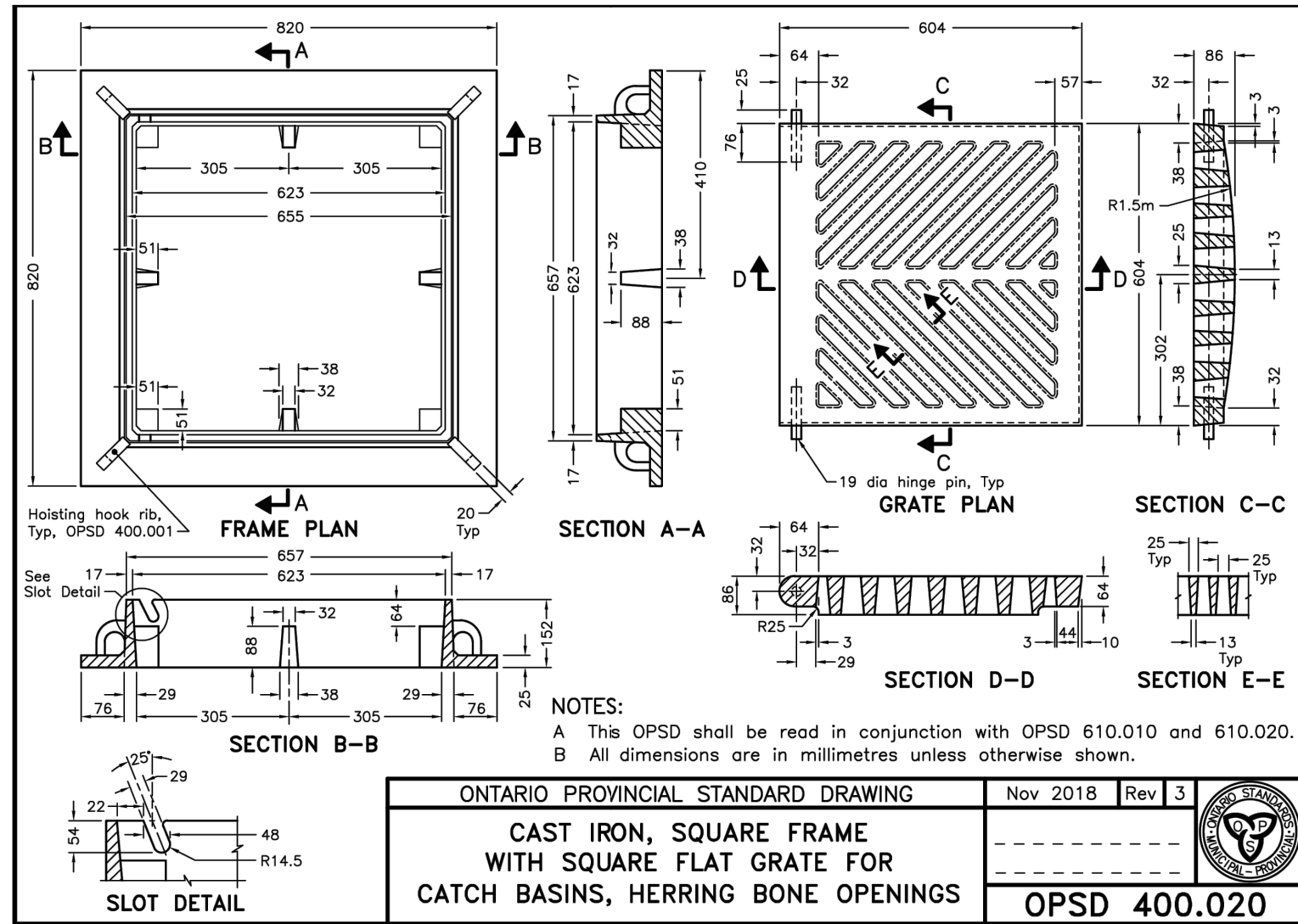
K. PAVEMENT STRUCTURE SHALL CONSIST OF THE FOLLOWING (AS PER GEOTECHNICAL REPORT BY PETO MACCALLUM LTD DATED MAY 2021)

HEAVY DUTY PAVEMENT (ACCESS ROUTE):

- 40mm HL 3
- 80mm HL 8
- 150mm GRANULAR 'A'
- 500mm GRANULAR 'B'

LIGHT DUTY (PARKING AREA):

- 40mm HL 3
- 50mm HL 8
- 150mm GRANULAR 'A'
- 350mm GRANULAR 'B'

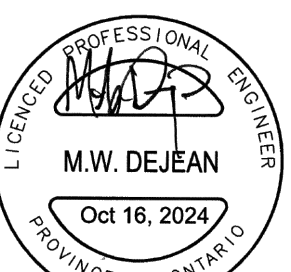


I HAVE REVIEWED THE PLANS FOR THE CONSTRUCTION OF SITE PLAN LOCATED AT 20 ROSE STREET IN THE CITY OF BARRIE AND HAVE PREPARED THIS PLAN TO INDICATE THE COMPATIBILITY OF THE PROPOSAL TO EXISTING ADJACENT PROPERTIES AND MUNICIPAL SERVICES. IT IS MY BELIEF THAT ADHERENCE TO THE PROPOSED GRADE AS SHOWN WILL PRODUCE ADEQUATE SURFACE DRAINAGE AND PROPER FACILITY OF MUNICIPAL SERVICES WITHOUT ANY DETRIMENTAL EFFECT TO THE EXISTING DRAINAGE PATTERNS OR ADJACENT PROPERTIES.

NO.	REVISION NOTE	DATE	BY
1.	REVISED AS PER CITY OF BARRIE COMMENTS	10/16/24	TWC

BENCHMARK

ELEVATIONS ARE GEODETIC REFERRED TO VERTICAL CONTROL MONUMENT No. 01019865474 AND RELATED TO THE CGVD28:78 DATUM, HAVING AN ELEVATION OF 272.0897 METRES.

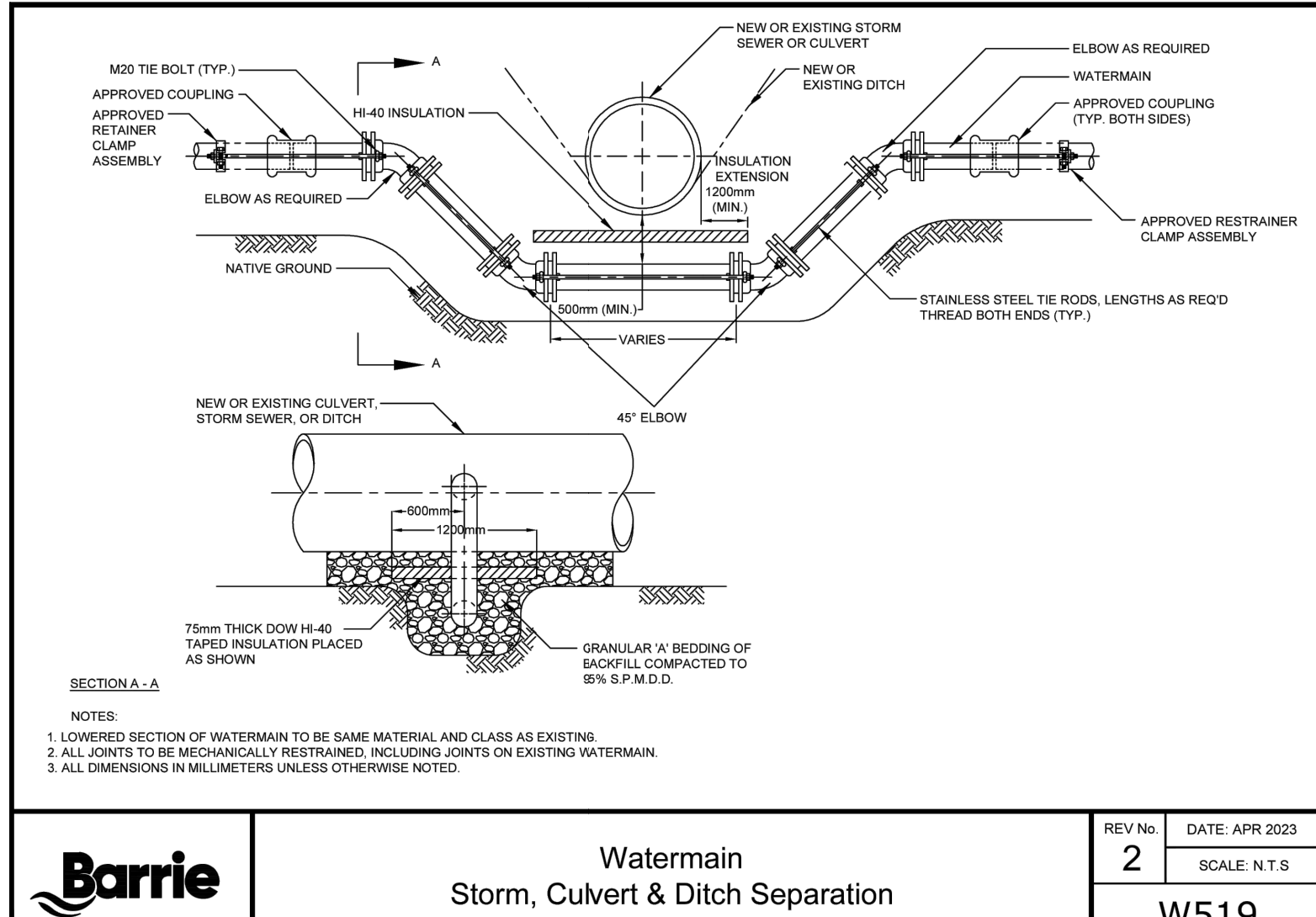
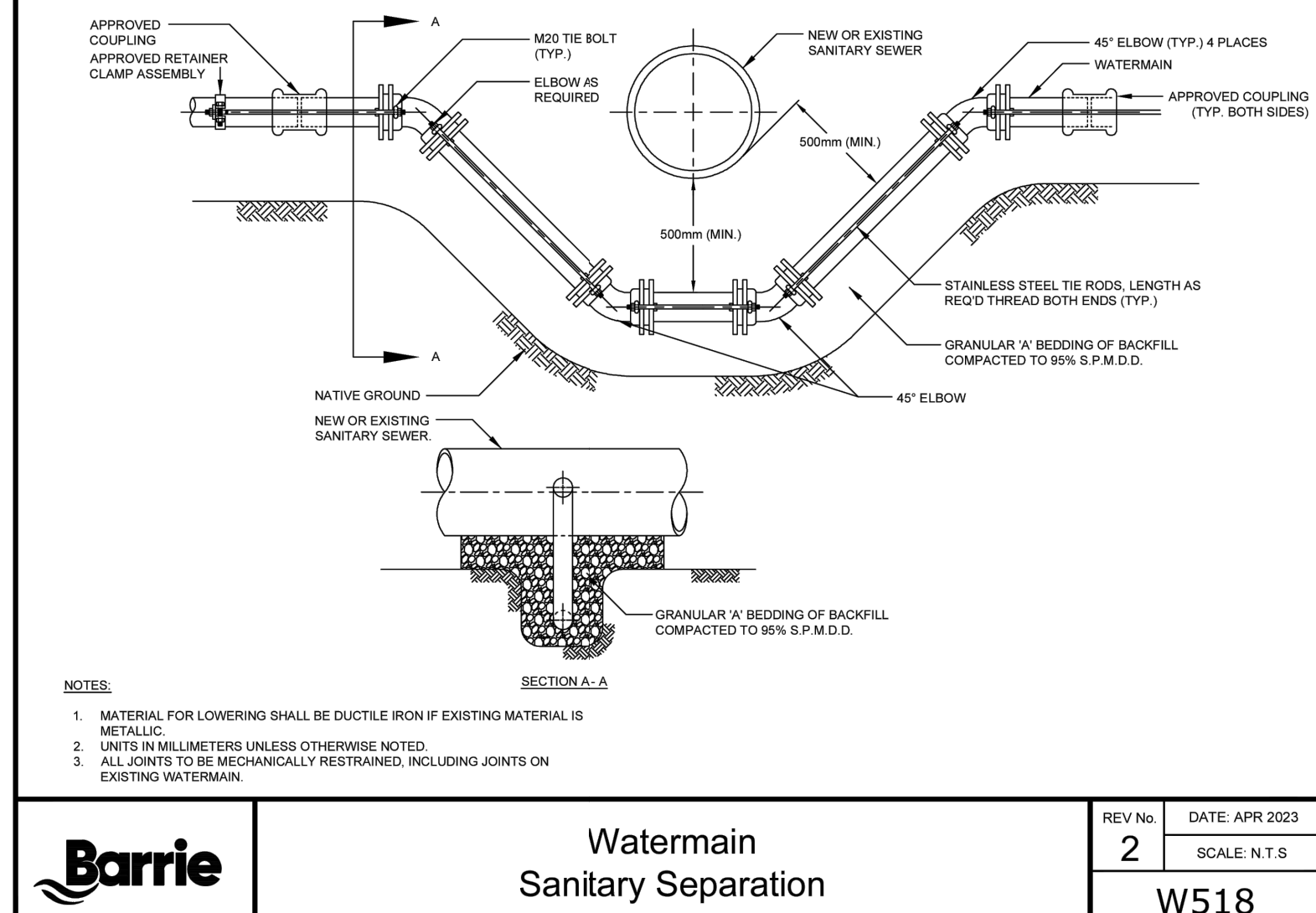
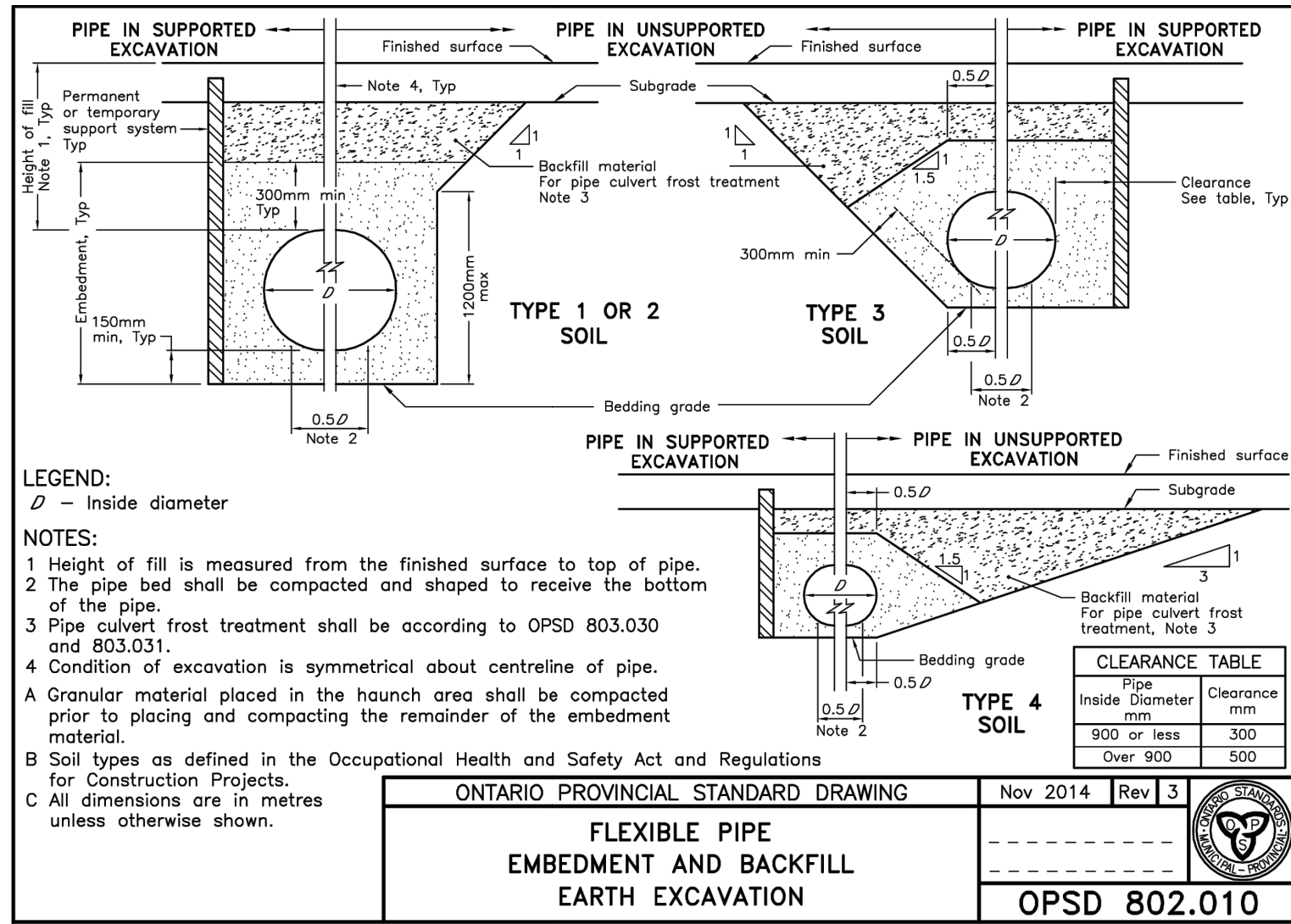
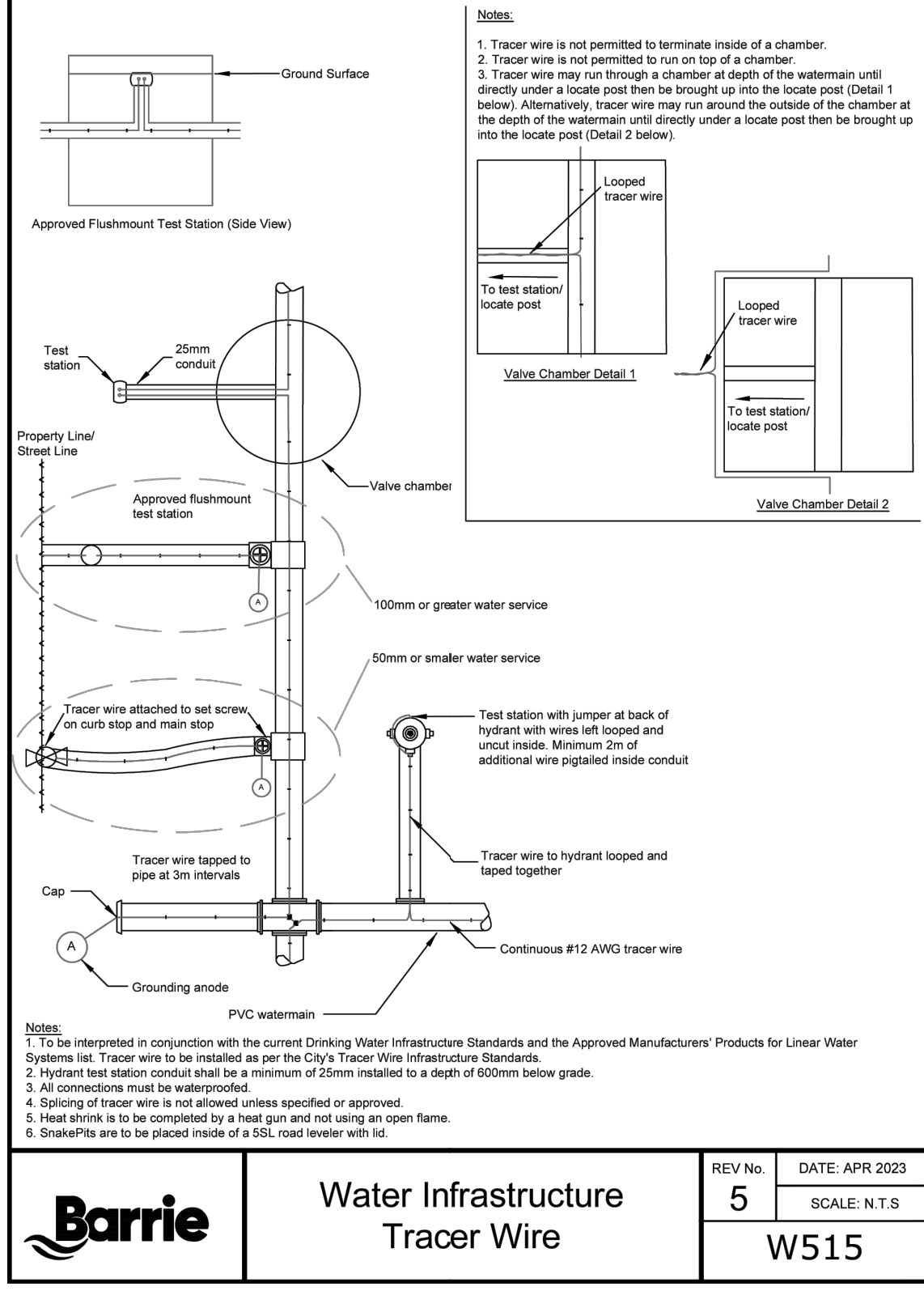
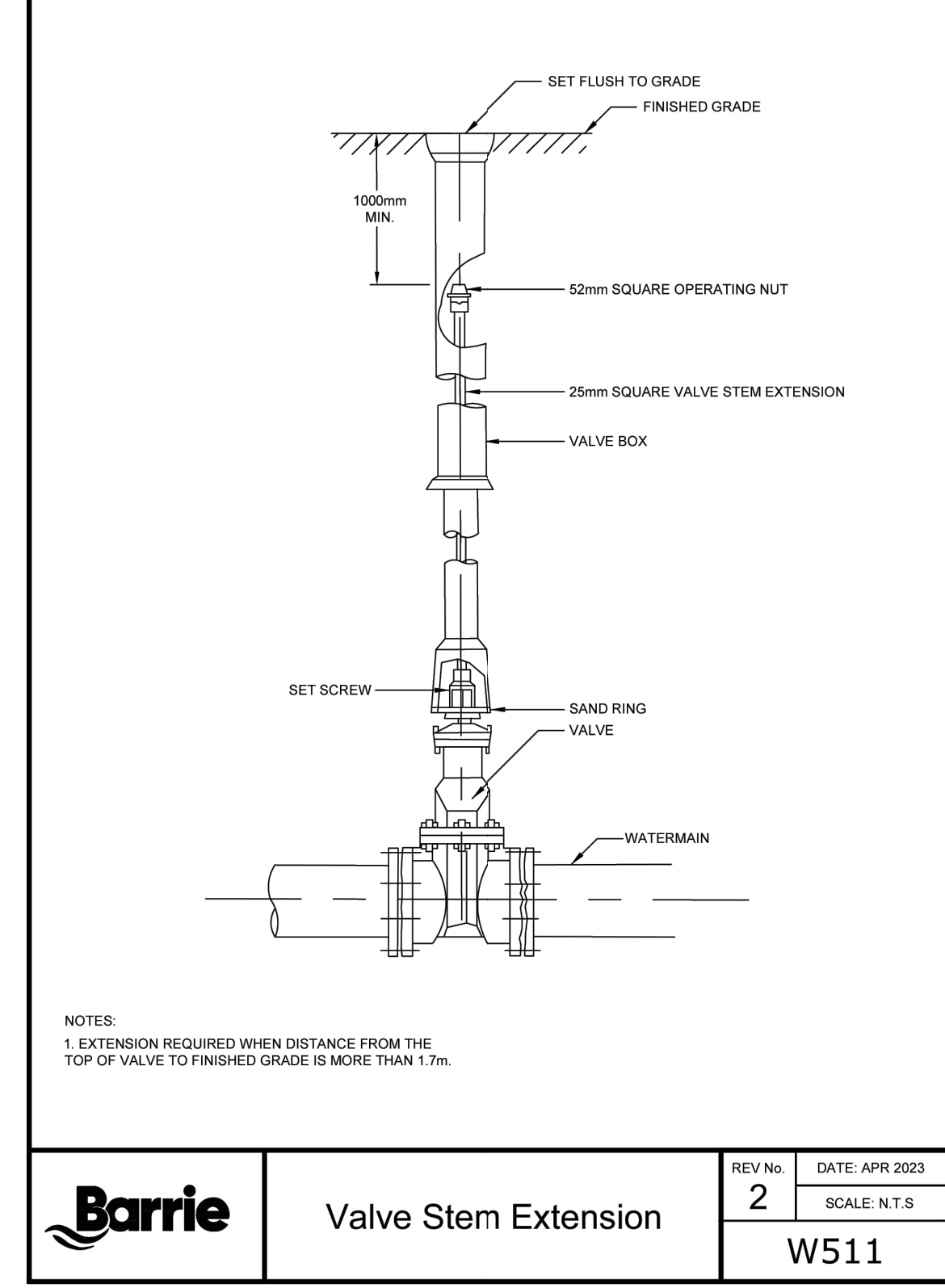
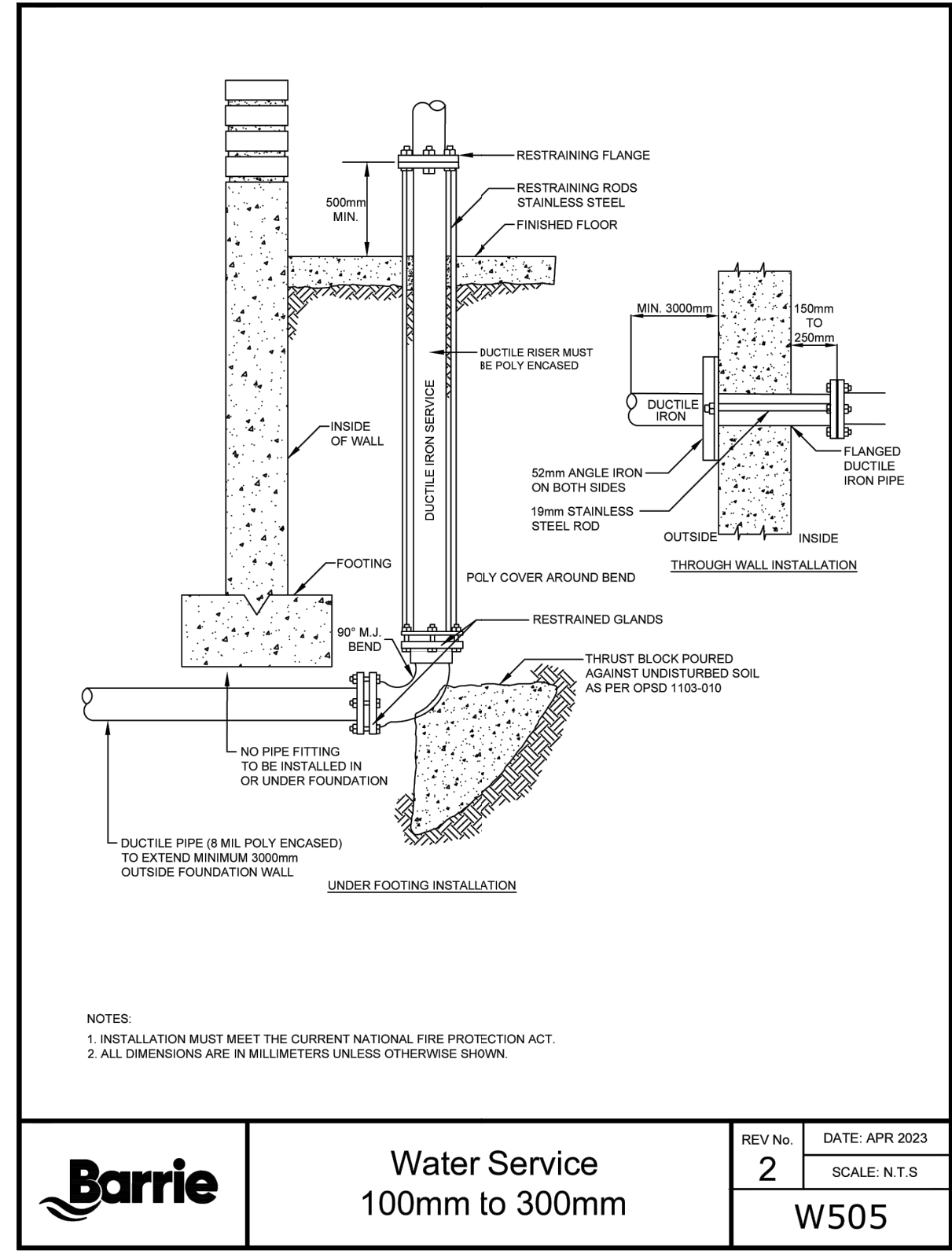
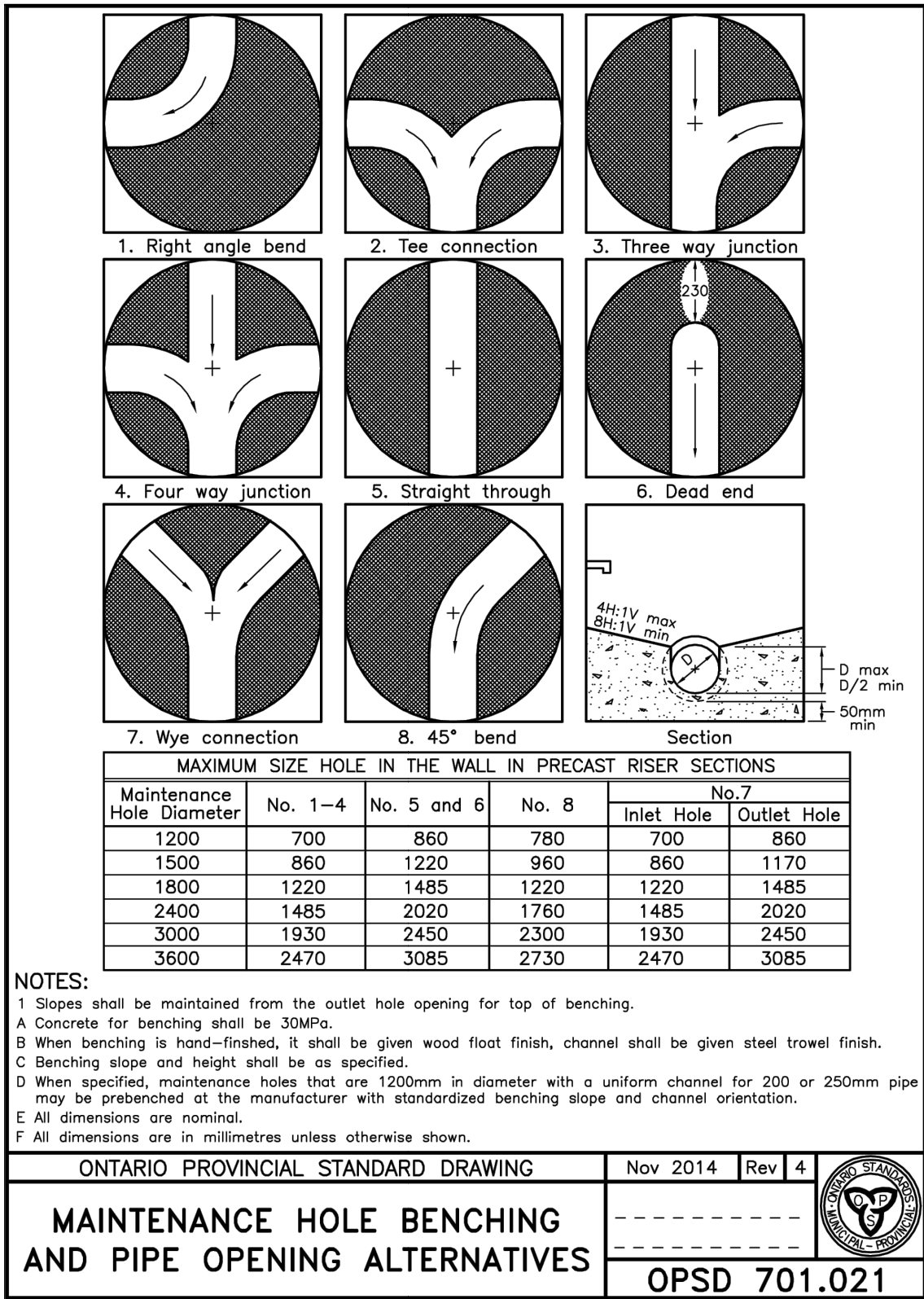
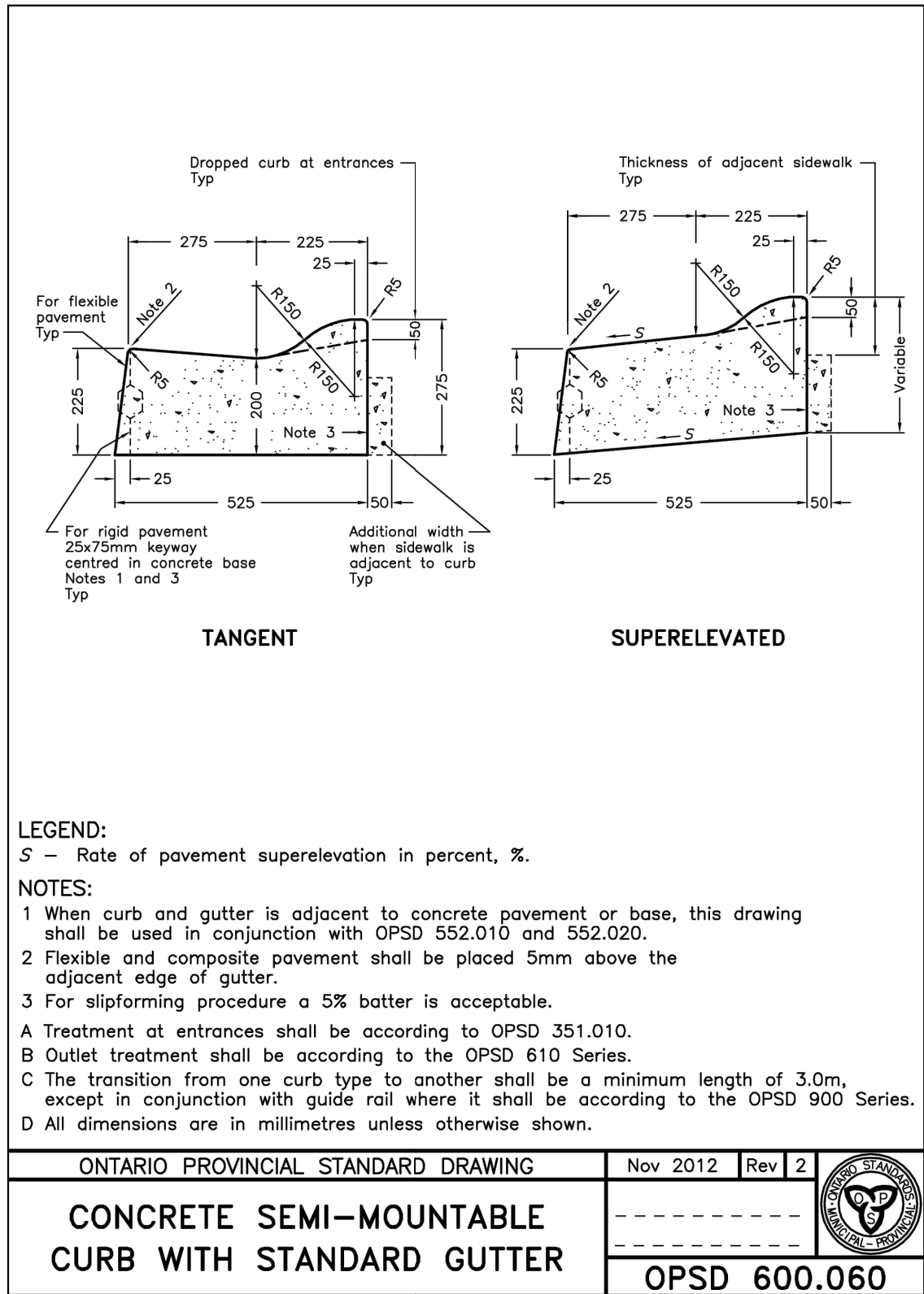
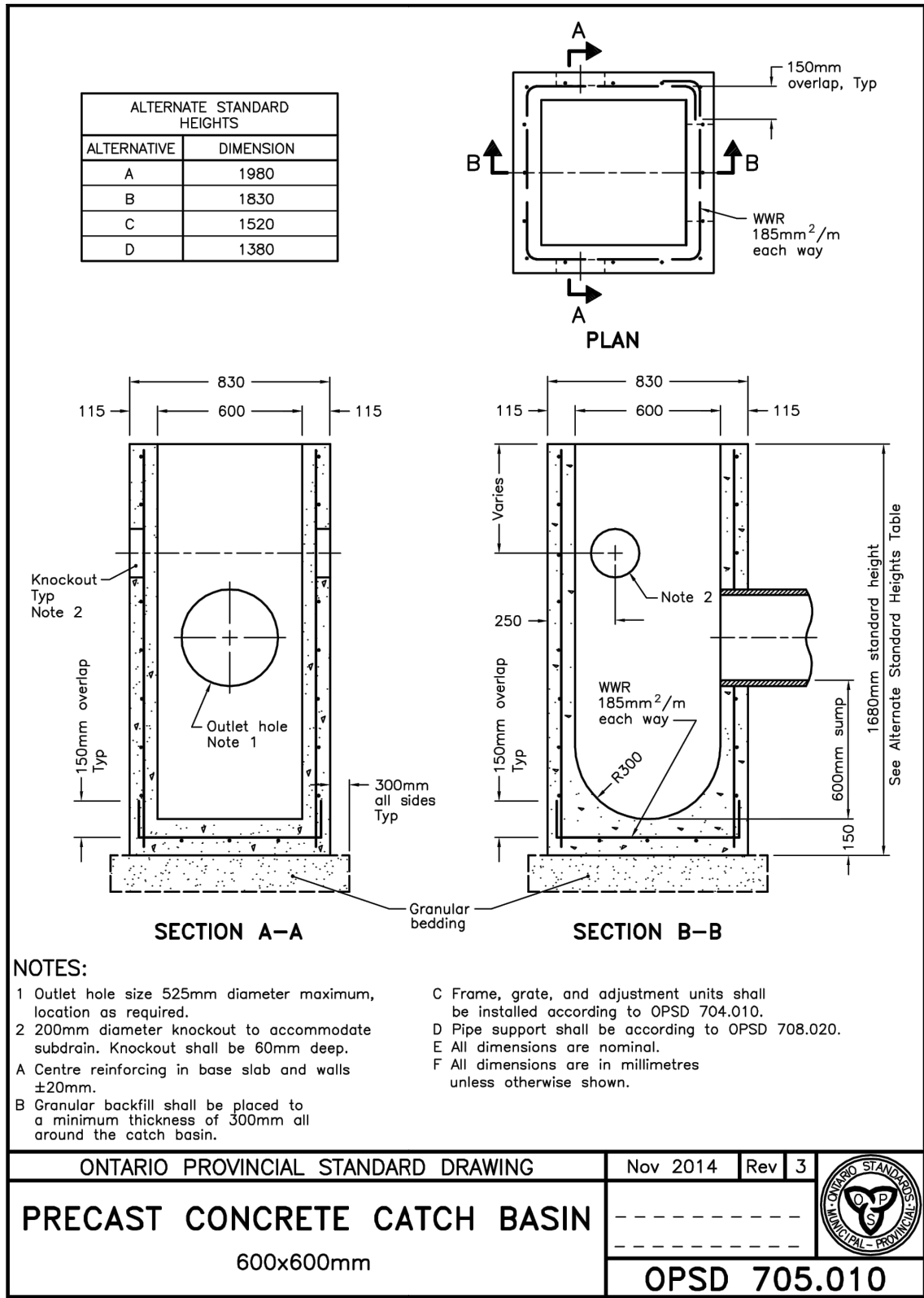


COUNTY OF SIMCOE AFFORDABLE HOUSING - 20 ROSE ST. CITY OF BARRIE

NOTES AND DETAILS



DESIGNED BY	AMC/TWC	HORIZ SCALE	N/A	PROJECT #	20118
DRAWN BY	TWC	VERT SCALE	N/A	DRAWING #	ND-1
CHECKED BY	MWD	DATE	OCTOBER 2023	REVISION #	1



CITY OF BARRIE D30-006-2024

I HAVE REVIEWED THE PLANS FOR THE CONSTRUCTION OF SITE PLAN LOCATED AT 20 ROSE STREET IN THE CITY OF BARRIE AND HAVE PREPARED THIS PLAN TO INDICATE THE COMPATIBILITY OF THE PROPOSAL TO EXISTING ADJACENT PROPERTIES AND MUNICIPAL SERVICES. IT IS MY BELIEF THAT ADHERENCE TO THE PROPOSED GRADE AS SHOWN WILL PRODUCE ADEQUATE SURFACE DRAINAGE AND PROPER FACILITY OF MUNICIPAL SERVICES WITHOUT ANY DETRIMENTAL EFFECT TO THE EXISTING DRAINAGE PATTERNS OR ADJACENT PROPERTIES.

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COUNTY OF SIMCOE AFFORDABLE HOUSING - 20 ROSE ST. CITY OF BARRIE

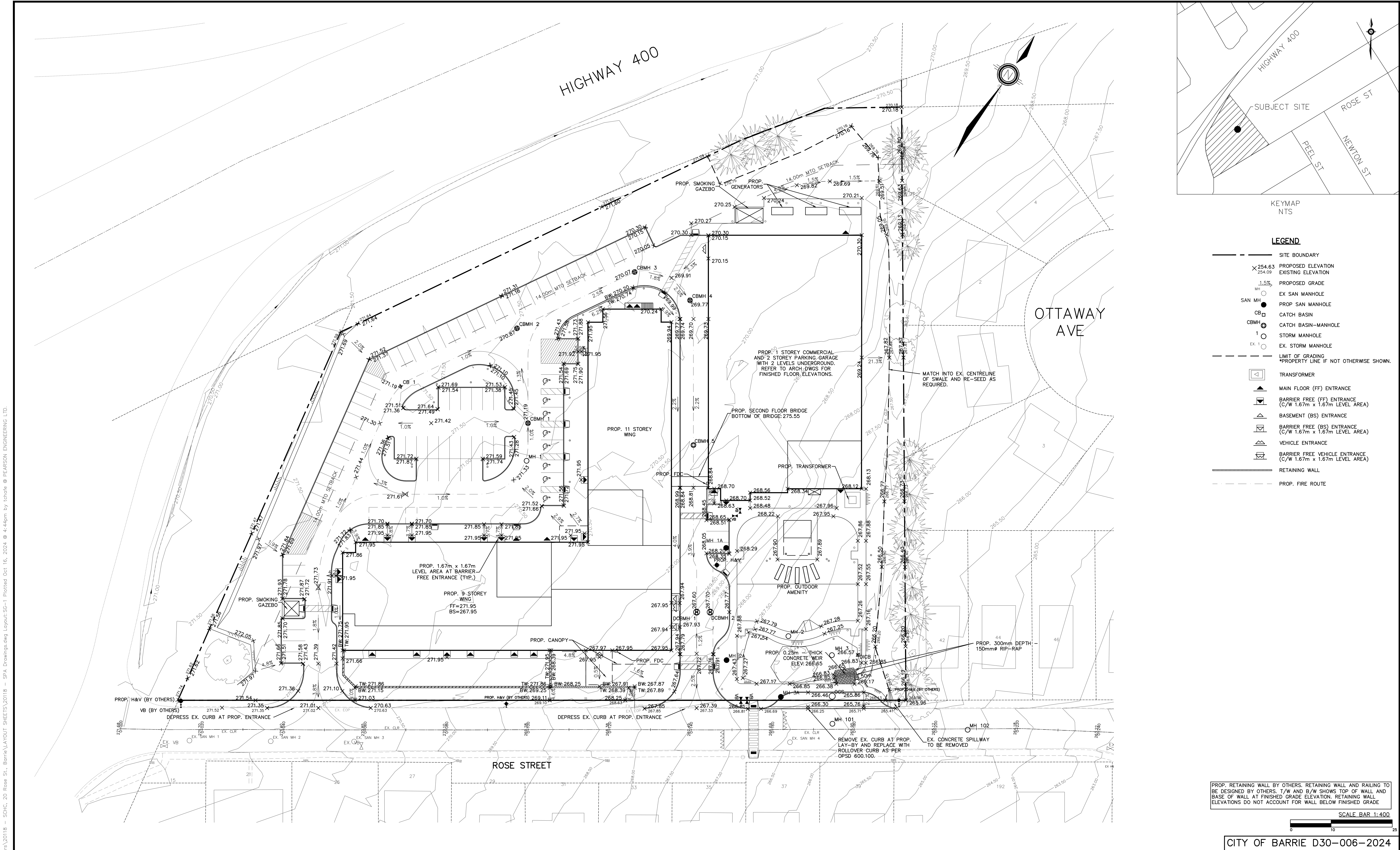
NOTES AND DETAILS



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PROP. RETAINING WALL BY OTHERS. RETAINING WALL AND RAILING TO BE DESIGNED BY OTHERS. T/W AND B/W SHOWS TOP OF WALL AND BASE OF WALL AT FINISHED GRADE ELEVATION. RETAINING WALL ELEVATIONS DO NOT ACCOUNT FOR WALL BELOW FINISHED GRADE

SCALE BAR 1:400

CITY OF BARRIE D30-006-2024

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COUNTY OF SIMCOE AFFORDABLE HOUSING – 20 ROSE ST. CITY OF BARRIE

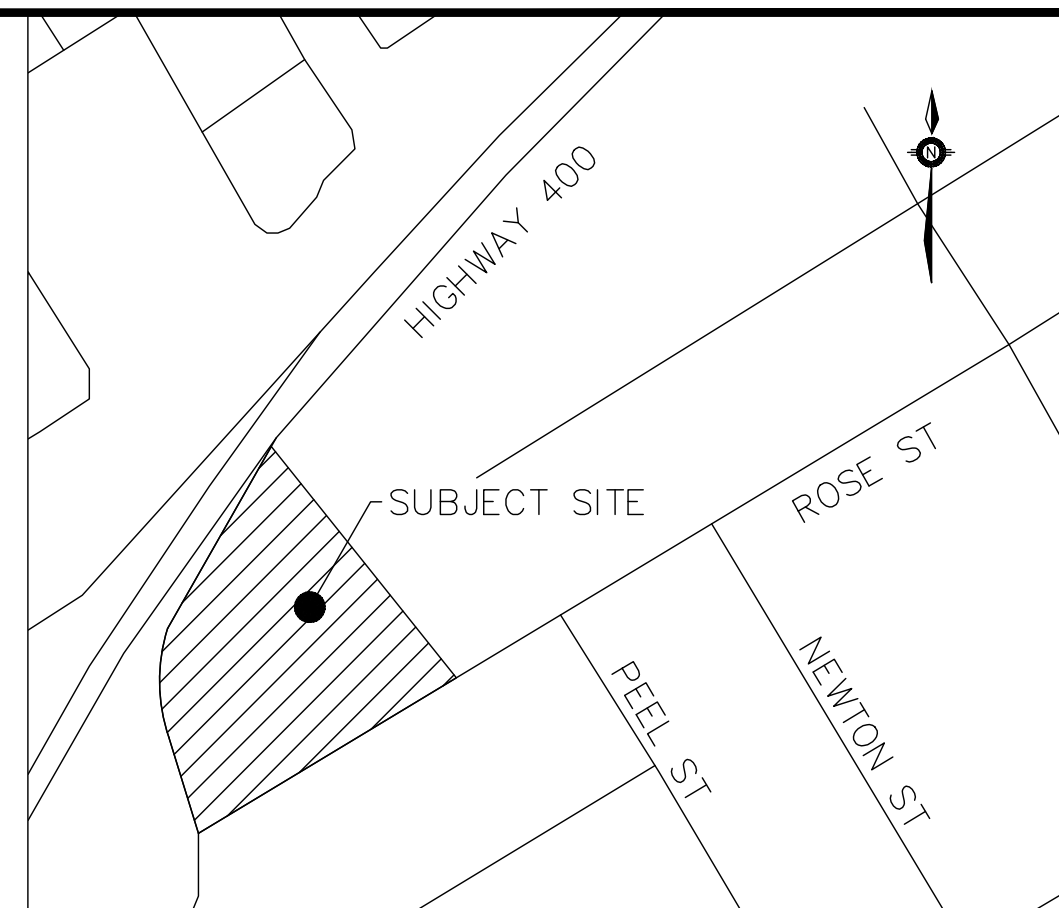
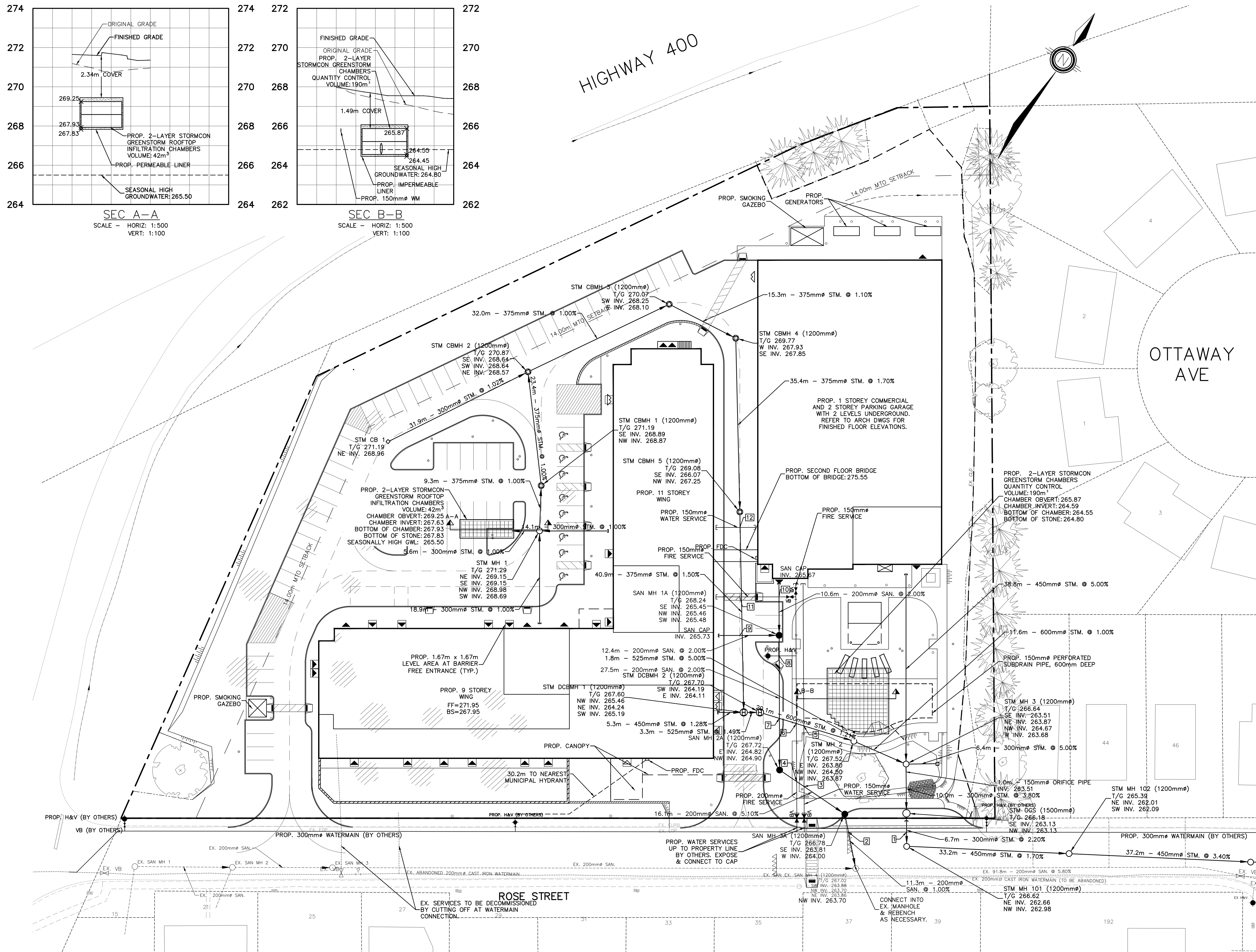
SITE GRADING PLAN



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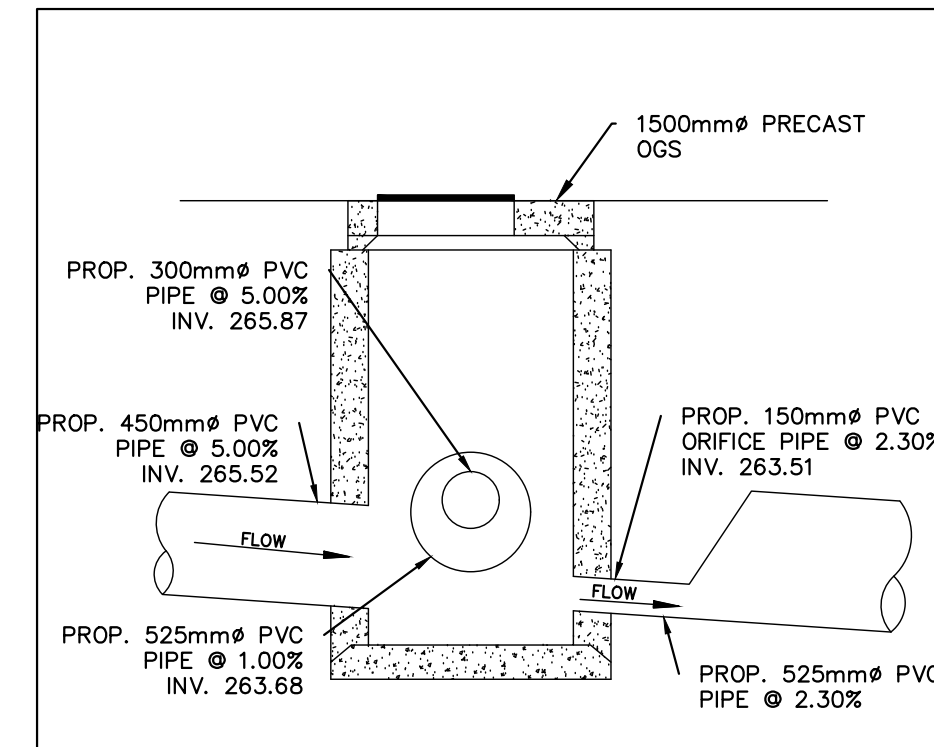
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LEGEND

- SITE BOUNDARY
- WATER VALVE
- EX STM MANHOLE
- PROP. STM MANHOLE
- EX STM PIPE
- PROP. STM PIPE
- EX SAN MANHOLE
- PROP. SAN MANHOLE
- EX SAN PIPE
- PROP. SAN PIPE
- SERVICING CAP
- TRANSFORMER
- MAIN FLOOR (FF) ENTRANCE
- BARRIER FREE (FF) ENTRANCE
- BASEMENT (BS) ENTRANCE
- BARRIER FREE (BS) ENTRANCE
- VEHICLE ENTRANCE
- BARRIER FREE VEHICLE ENTRANCE
- TREE PRESERVATION FENCE



ORIFICE DETAIL

NTS

CROSSING LOCATION	ELEVATION	SEPARATION (m)	PIPE CROSSINGS					
			SAN INV	SAN OBV	STM INV	STM OBV	WM INV	WM OBV
1	266.04	0.50			263.43	263.93		
2	266.50	0.50	263.98			264.48		
3	267.29	0.54	264.71			265.25		
4	267.52	0.54	264.81			265.35		
5	267.87	1.04			264.53	265.57		
6	267.91	1.10			264.55	265.65		
7	267.86	0.52	265.10		264.58			
8	268.16			265.57		266.07		
9	268.08	1.05	264.65	265.70				
10	268.65	0.72	265.72			266.44		
11	268.51	0.50			266.19	266.69		
12	269.04	0.77			267.27		266.50	

SCALE BAR 1:400

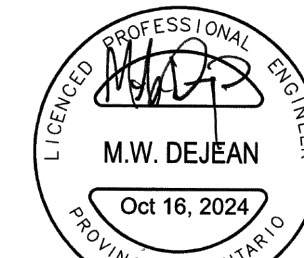
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CITY OF BARRIE D30-006-2024

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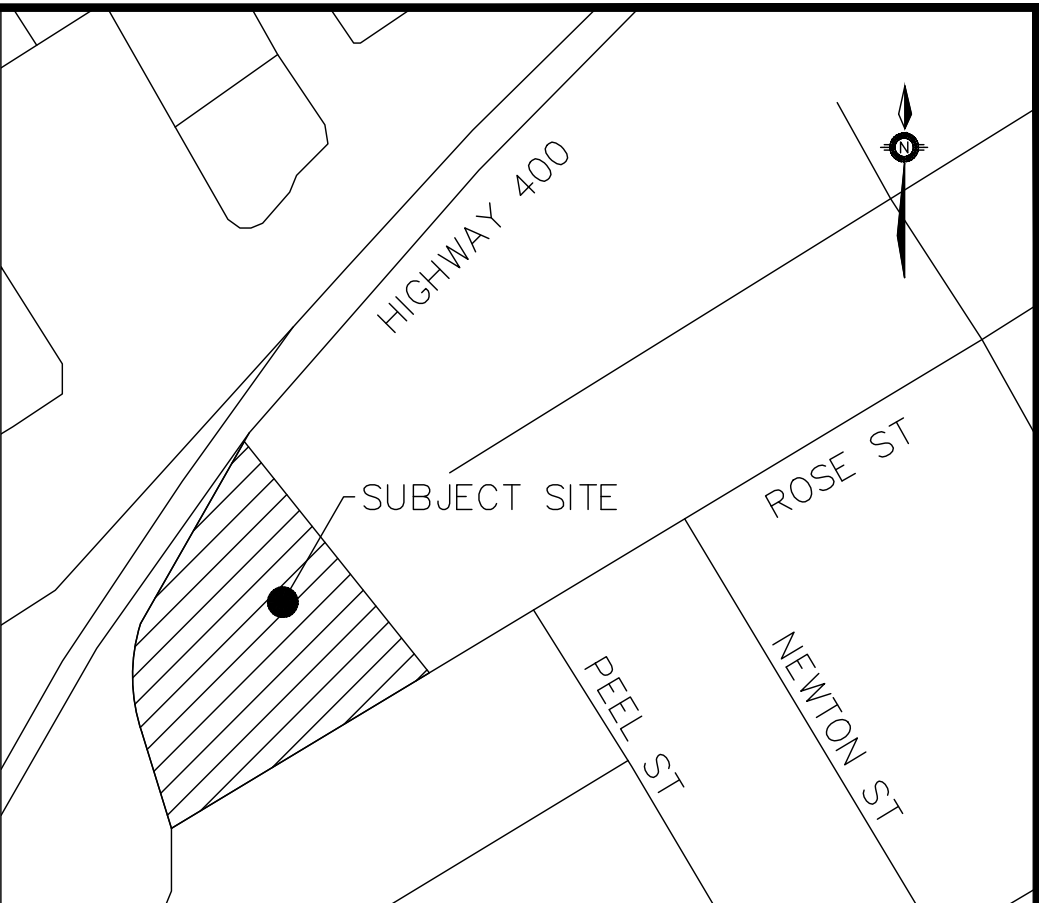
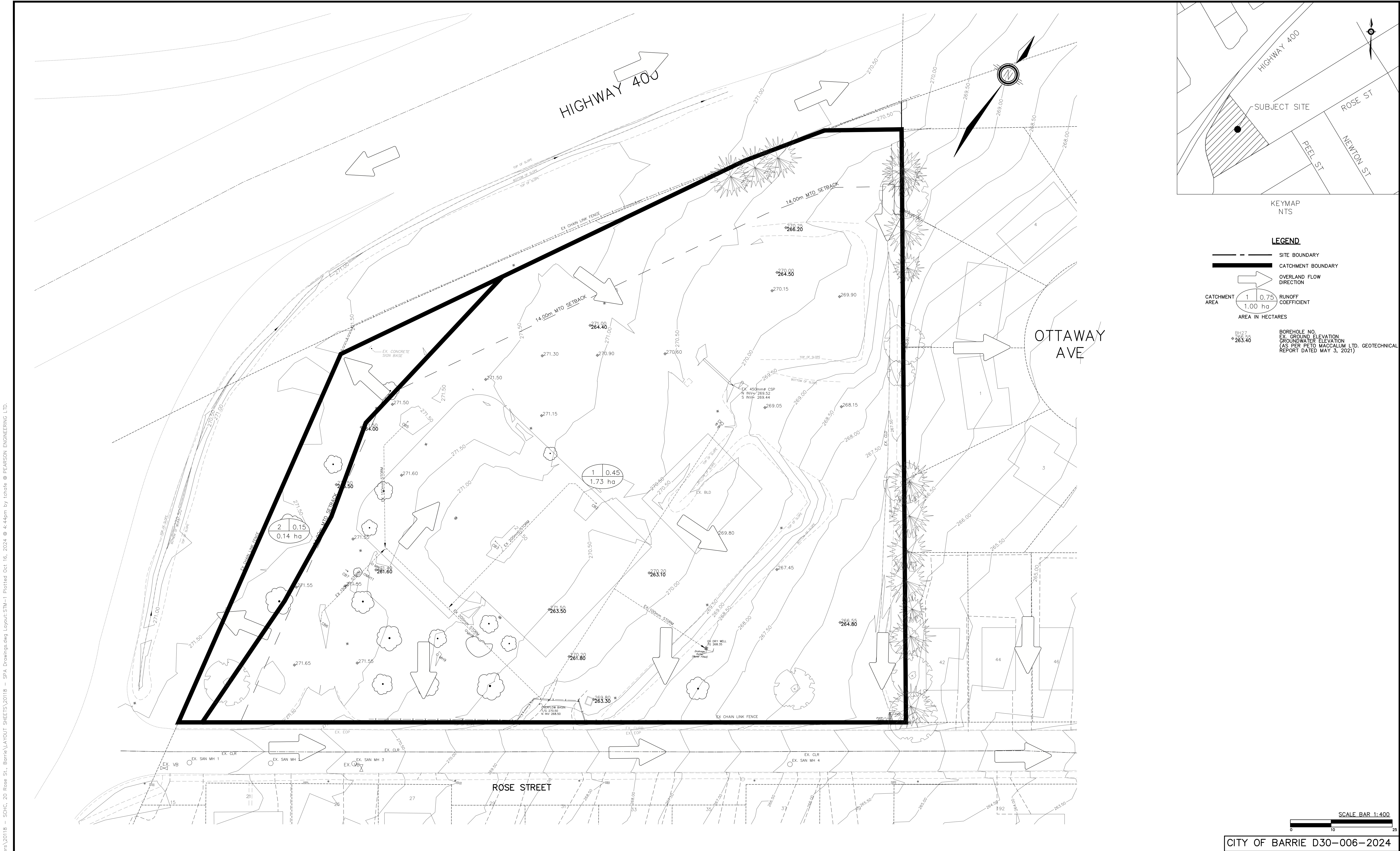
SITE SERVICING PLAN



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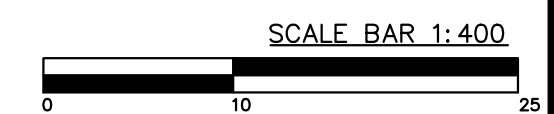
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CHECKED BY	MWD	DATE	OCTOBER 2023	REVISION #	1

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LEGEND

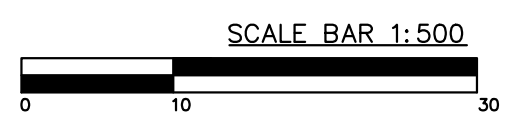
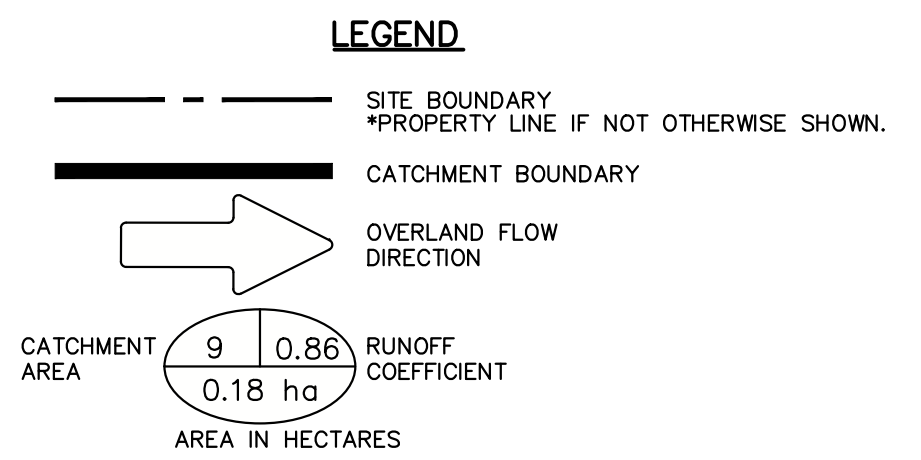
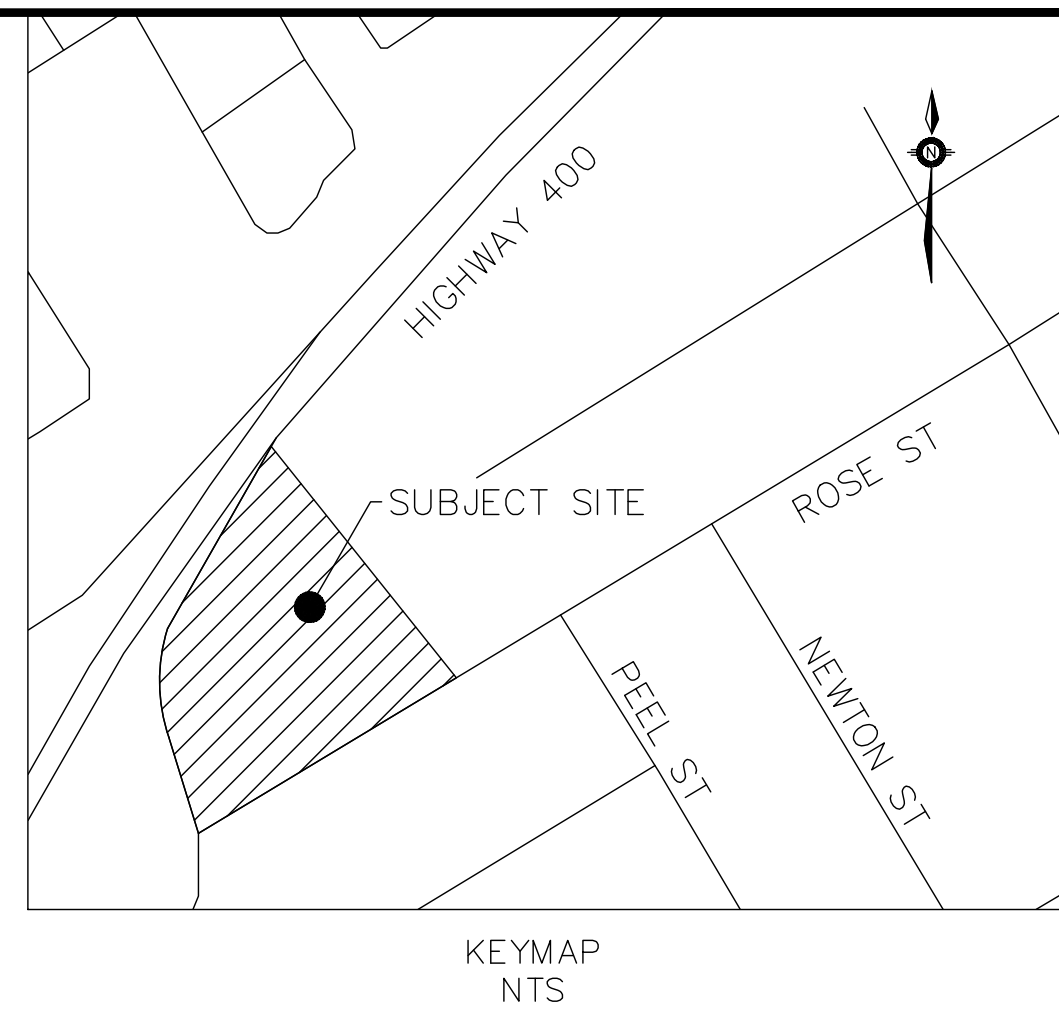
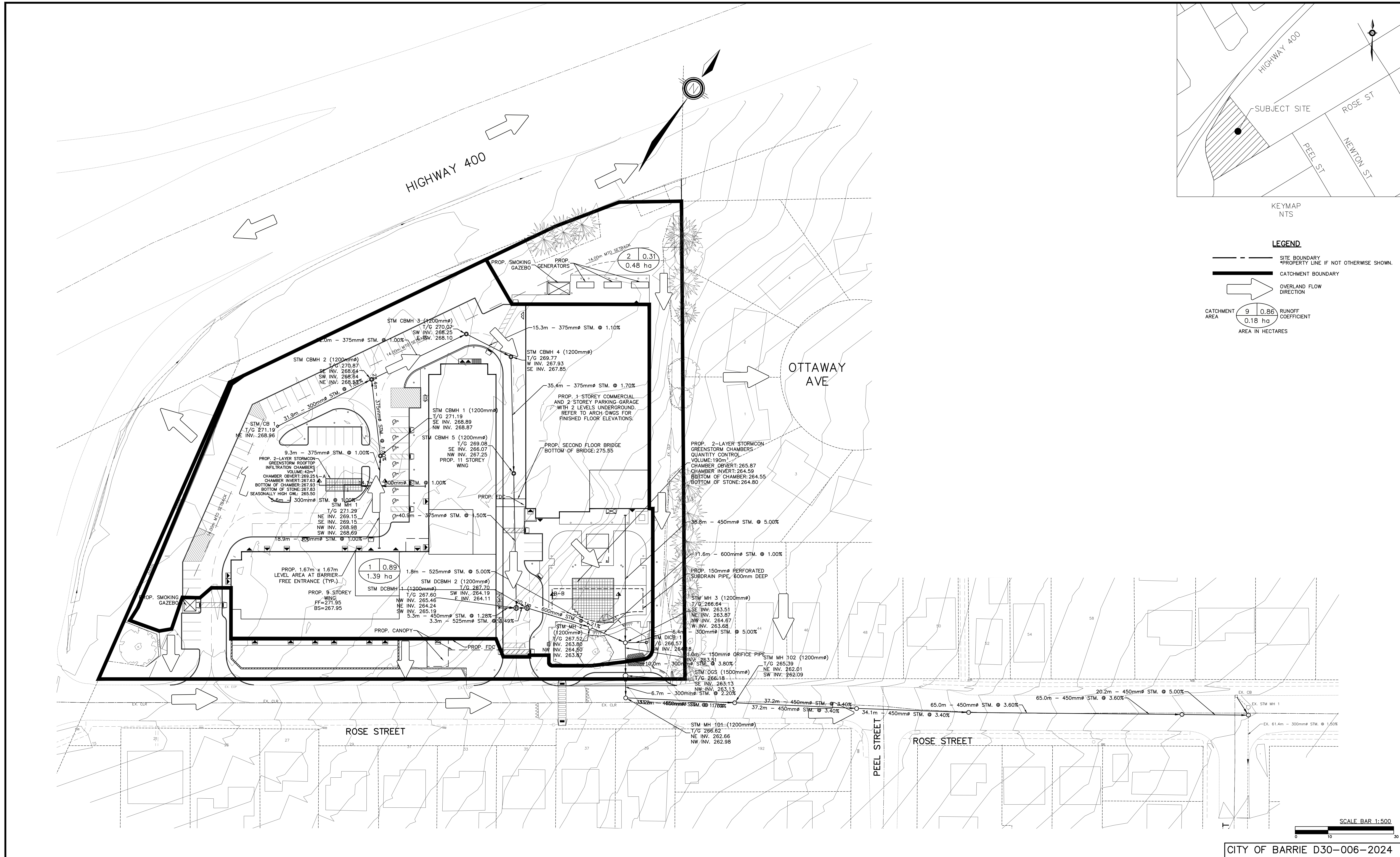
- SITE BOUNDARY
- CATCHMENT BOUNDARY
- OVERLAND FLOW DIRECTION
- CATCHMENT AREA: 1 (1.00 ha), 2 (0.75 ha)
- AREA IN HECTARES
- BOREHOLE NO. EX. GROUND ELEVATION (AS PER PEO MACALUM LTD. GEOTECHNICAL REPORT DATED MAY 3, 2021)
- 263.40



CITY OF BARRIE D30-006-2024

I HAVE REVIEWED THE PLANS FOR THE CONSTRUCTION OF SITE PLAN LOCATED AT 20 ROSE STREET IN THE CITY OF BARRIE AND HAVE PREPARED THIS PLAN TO INDICATE THE COMPATIBILITY OF THE PROPOSAL TO EXISTING ADJACENT PROPERTIES AND MUNICIPAL SERVICES. IT IS MY BELIEF THAT ADHERENCE TO THE PROPOSED GRADE AS SHOWN WILL PRODUCE ADEQUATE SURFACE DRAINAGE AND PROPER FACILITY OF MUNICIPAL SERVICES WITHOUT ANY DETRIMENTAL EFFECT TO THE EXISTING DRAINAGE PATTERNS OR ADJACENT PROPERTIES.				BENCHMARK ELEVATIONS ARE GEODETIC REFERRED TO VERTICAL CONTROL MONUMENT No. 01019865474 AND RELATED TO THE CGVD28:78 DATUM, HAVING AN ELEVATION OF 272.0897 METRES.						COUNTY OF SIMCOE AFFORDABLE HOUSING – 20 ROSE ST. CITY OF BARRIE			
1. REVISED AS PER CITY OF BARRIE COMMENTS				10/16/24				PROJECT # 20118		DRAWING # STM-1		DESIGNED BY AMC/TWC	
NO.				REVISION NOTE				DATE		BY		HORIZ SCALE 1:400	
												VERT SCALE N/A	
												CHECKED BY MWD	
												DATE OCTOBER 2023	
												REVISION # 1	

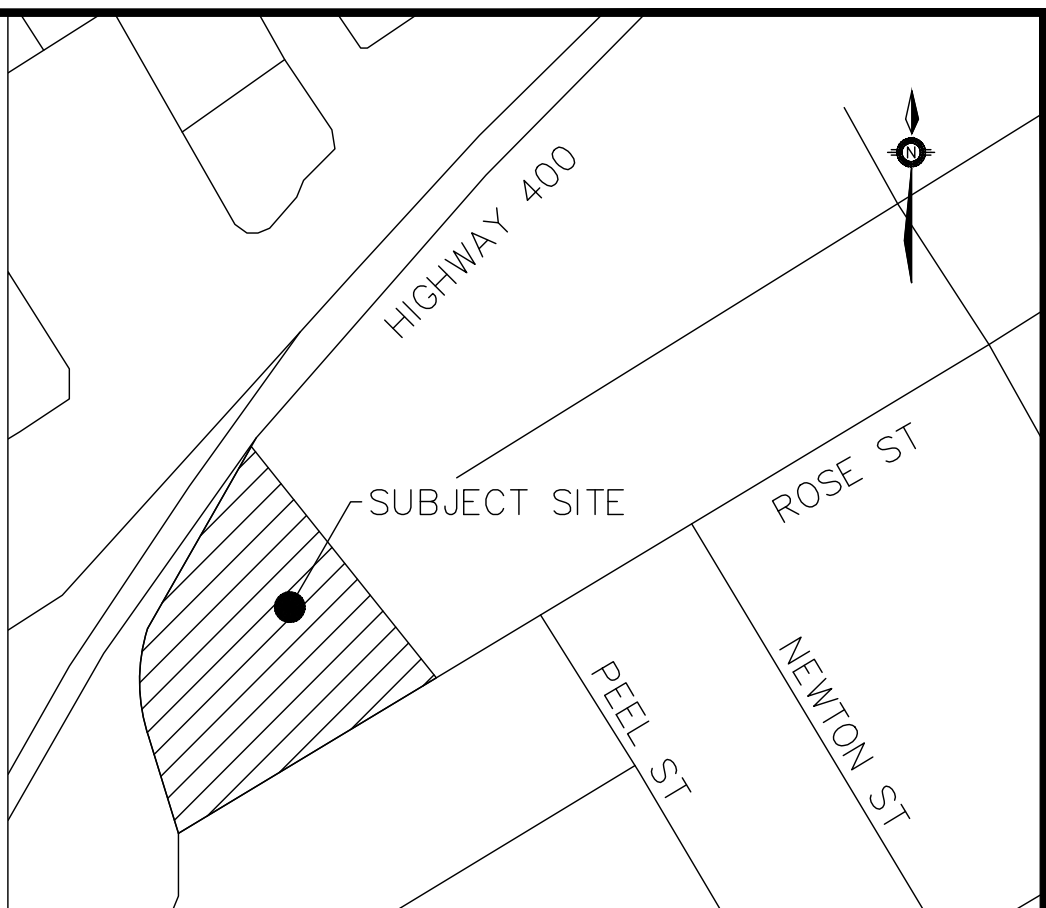
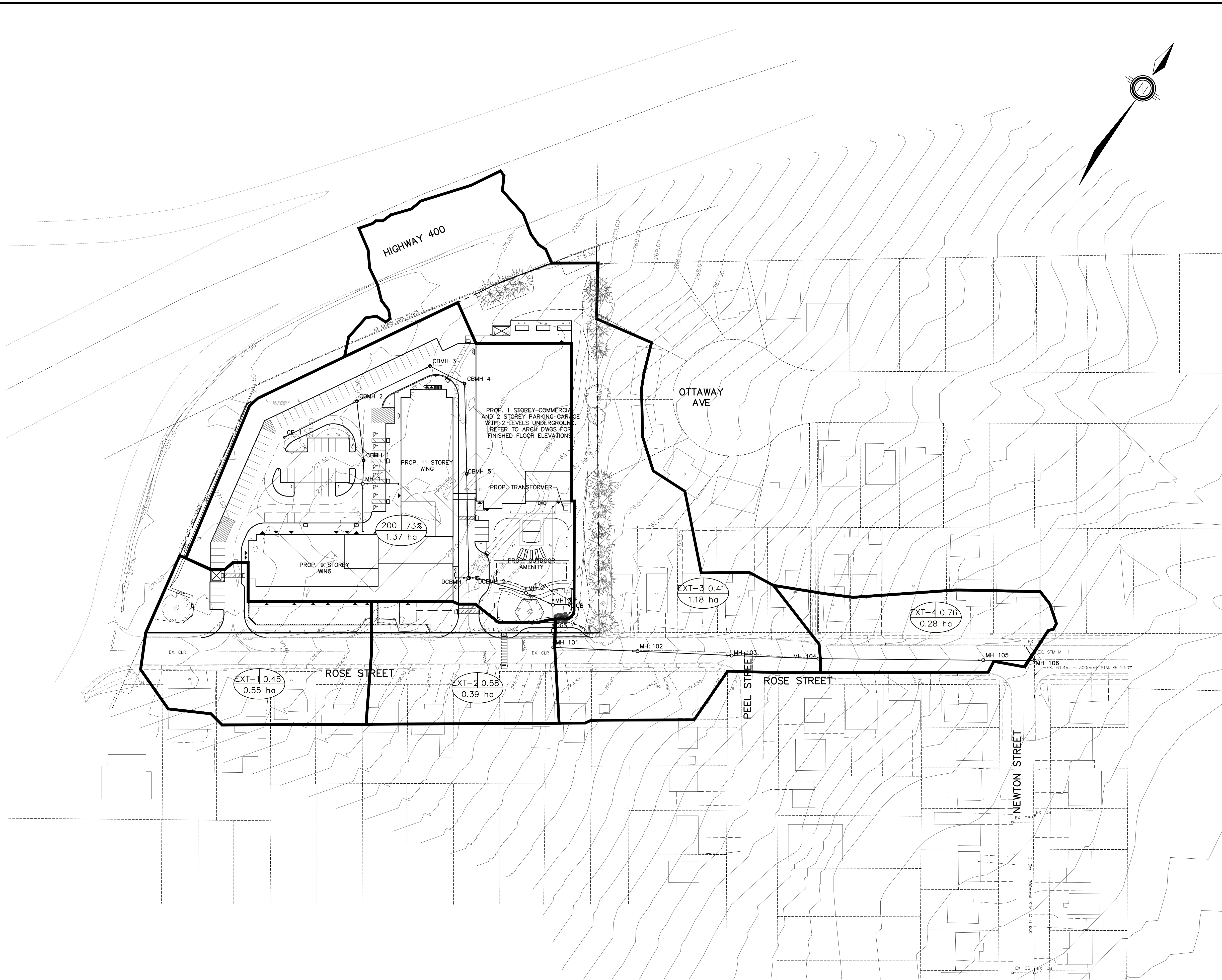
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CITY OF BARRIE D30-006-2024

I HAVE REVIEWED THE PLANS FOR THE CONSTRUCTION OF SITE PLAN LOCATED AT 20 ROSE STREET IN THE CITY OF BARRIE AND HAVE PREPARED THIS PLAN TO INDICATE THE COMPATIBILITY OF THE PROPOSAL TO EXISTING ADJACENT PROPERTIES AND MUNICIPAL SERVICES. IT IS MY BELIEF THAT ADHERENCE TO THE PROPOSED GRADE AS SHOWN WILL PRODUCE ADEQUATE SURFACE DRAINAGE AND PROPER FACILITY OF MUNICIPAL SERVICES WITHOUT ANY DETRIMENTAL EFFECT TO THE EXISTING DRAINAGE PATTERNS OR ADJACENT PROPERTIES.				BENCHMARK ELEVATIONS ARE GEODETIC REFERRED TO VERTICAL CONTROL MONUMENT No. 01019865474 AND RELATED TO THE CGVD28:78 DATUM, HAVING AN ELEVATION OF 272.0897 METRES.				COUNTY OF SIMCOE AFFORDABLE HOUSING – 20 ROSE ST. CITY OF BARRIE				PEARSON ENGINEERING PEARSONENG.COM PH. 705.719.4785			
DESIGNED BY AMC/TWC				DRAWN BY TWC				CHECKED BY MWD				HORIZ SCALE 1:500			
VERT SCALE N/A				DATE OCTOBER 2023				PROJECT # 20118				DRAWING # STM-2			
NO.				REVISION NOTE				DATE				BY			
1.				REVISED AS PER CITY OF BARRIE COMMENTS				10/16/24				TWC			

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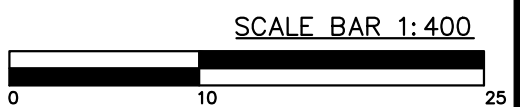


KEYMAP
NTS

LEGEND

- SITE BOUNDARY
- - - PROPERTY LINE IF NOT OTHERWISE SHOWN.
- CATCHMENT BOUNDARY
- OVERLAND FLOW DIRECTION

CATCHMENT AREA	Runoff Coefficient	Area in Hectares
9	0.86	0.18 ha



CITY OF BARRIE D30-006-2024

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1.	REVISED AS PER CITY OF BARRIE COMMENTS	10/16/24	TWC
NO.	REVISION NOTE	DATE	BY

BENCHMARK

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COUNTY OF SIMCOE AFFORDABLE
HOUSING – 20 ROSE ST.
CITY OF BARRIE

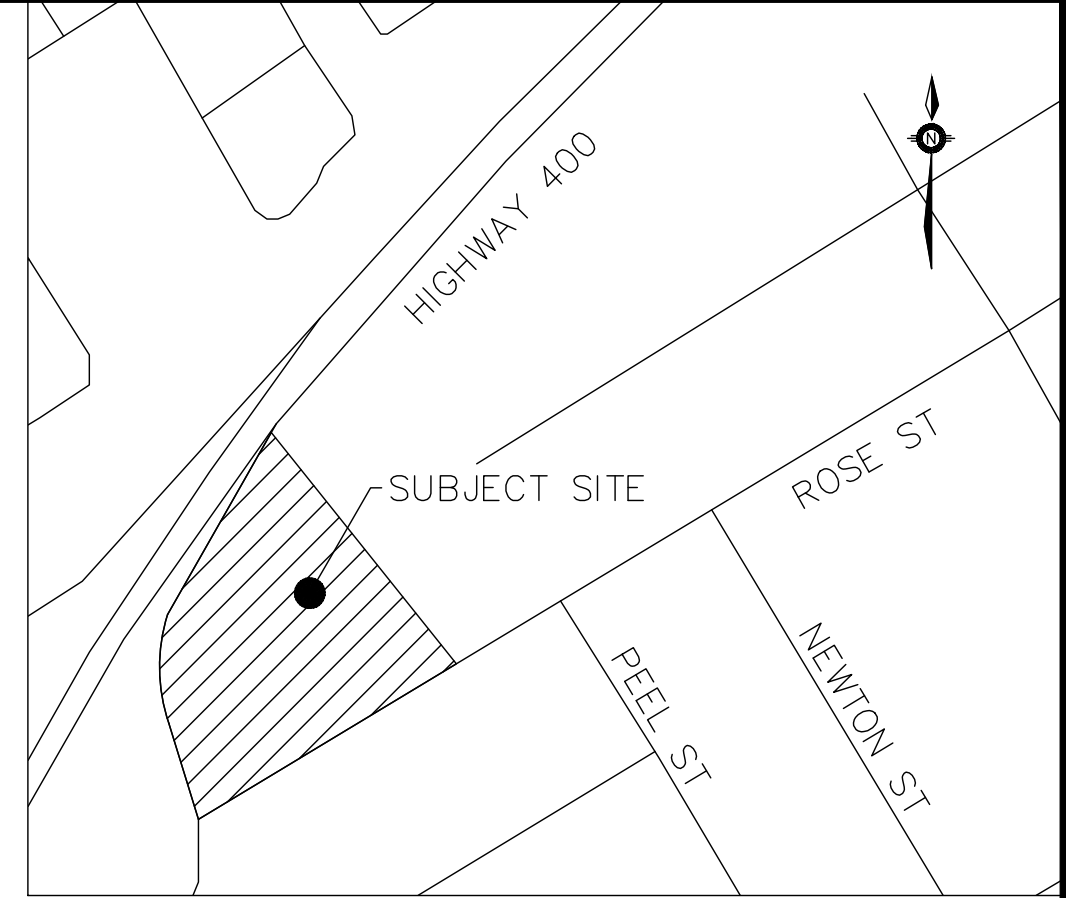
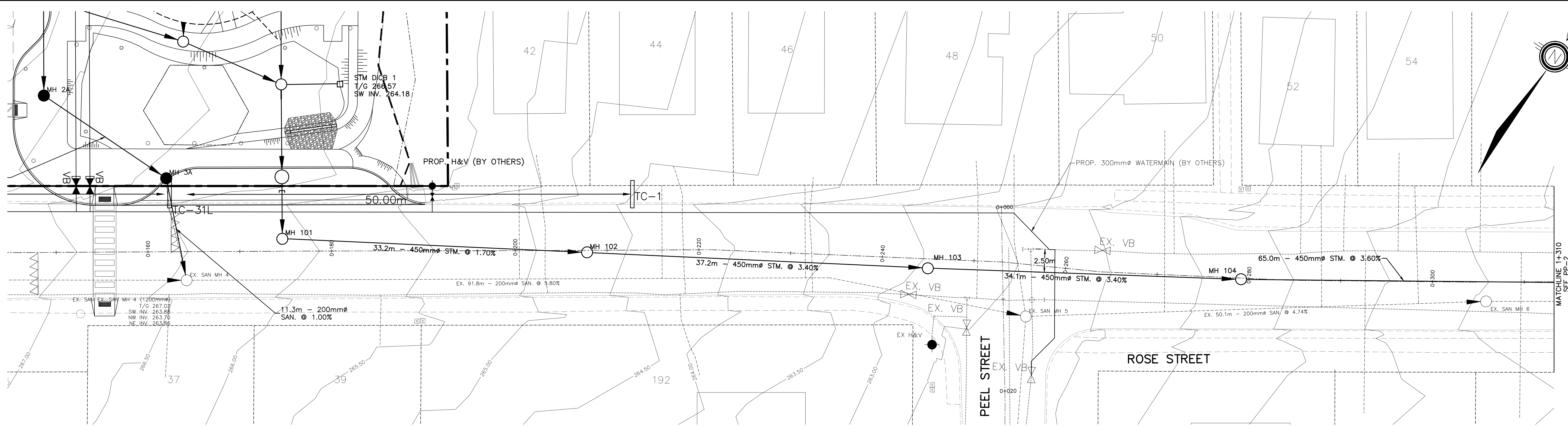
EXTERNAL
STORM CATCHMENT PLAN



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DESIGNED BY	AMC/TWC	HORIZ SCALE	1:400	PROJECT #	20118
DRAWN BY	TWC	VERT SCALE	N/A	DRAWING #	STM-4
CHECKED BY	MWD	DATE	OCTOBER 2023	REVISION #	1

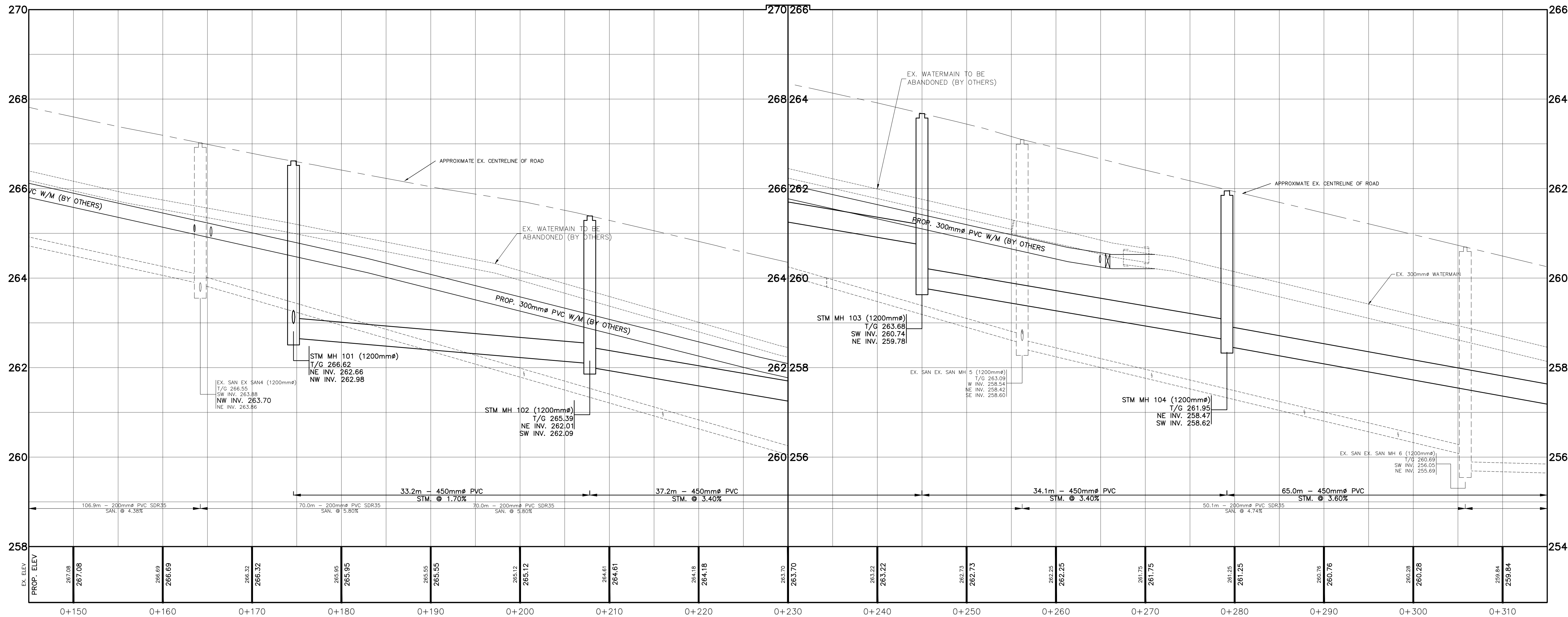
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KEYMAP
NTS

LEGEND

- EX. SAN MH. ○
- SAN MH. ●
- CB □
- CBMH ○
- 1 ○
- EX. 1 ○
- EX. CB □
- EX. HYD. ●
- H&V ●
- VB ►
- CS ●
- SITE BOUNDARY
- EX. SAN MANHOLE
- PROP. SAN MANHOLE
- CATCH BASIN
- CATCH BASIN-MANHOLE
- STORM MANHOLE
- EX. STORM MANHOLE
- EX. CATCH BASIN
- EX. FIRE HYDRANT
- SERVICE CAP
- FIRE HYDRANT
- WATER VALVE
- CURB STOP



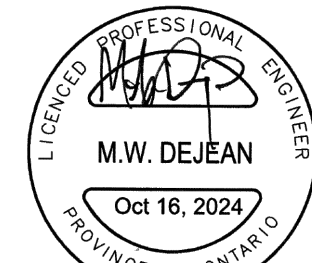
SCALE BAR 1:250
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CITY OF BARRIE D30-006-2024

I HAVE REVIEWED THE PLANS FOR THE CONSTRUCTION OF SITE PLAN LOCATED AT 20 ROSE STREET IN THE CITY OF BARRIE AND HAVE PREPARED THIS PLAN TO INDICATE THE COMPATIBILITY OF THE PROPOSAL TO EXISTING ADJACENT PROPERTIES AND MUNICIPAL SERVICES. IT IS MY BELIEF THAT ADHERENCE TO THE PROPOSED GRADE AS SHOWN WILL PRODUCE ADEQUATE SURFACE DRAINAGE AND PROPER FACILITY OF MUNICIPAL SERVICES WITHOUT ANY DETRIMENTAL EFFECT TO THE EXISTING DRAINAGE PATTERNS OR ADJACENT PROPERTIES.

NO.	REVISION NOTE	DATE	BY
1.	REVISED AS PER CITY OF BARRIE COMMENTS	10/16/24	TWC

BENCHMARK
ELEVATIONS ARE GEODETIC REFERRED TO VERTICAL CONTROL MONUMENT No. 01019865474 AND RELATED TO THE CGVD28:78 DATUM, HAVING AN ELEVATION OF 272.0897 METRES.

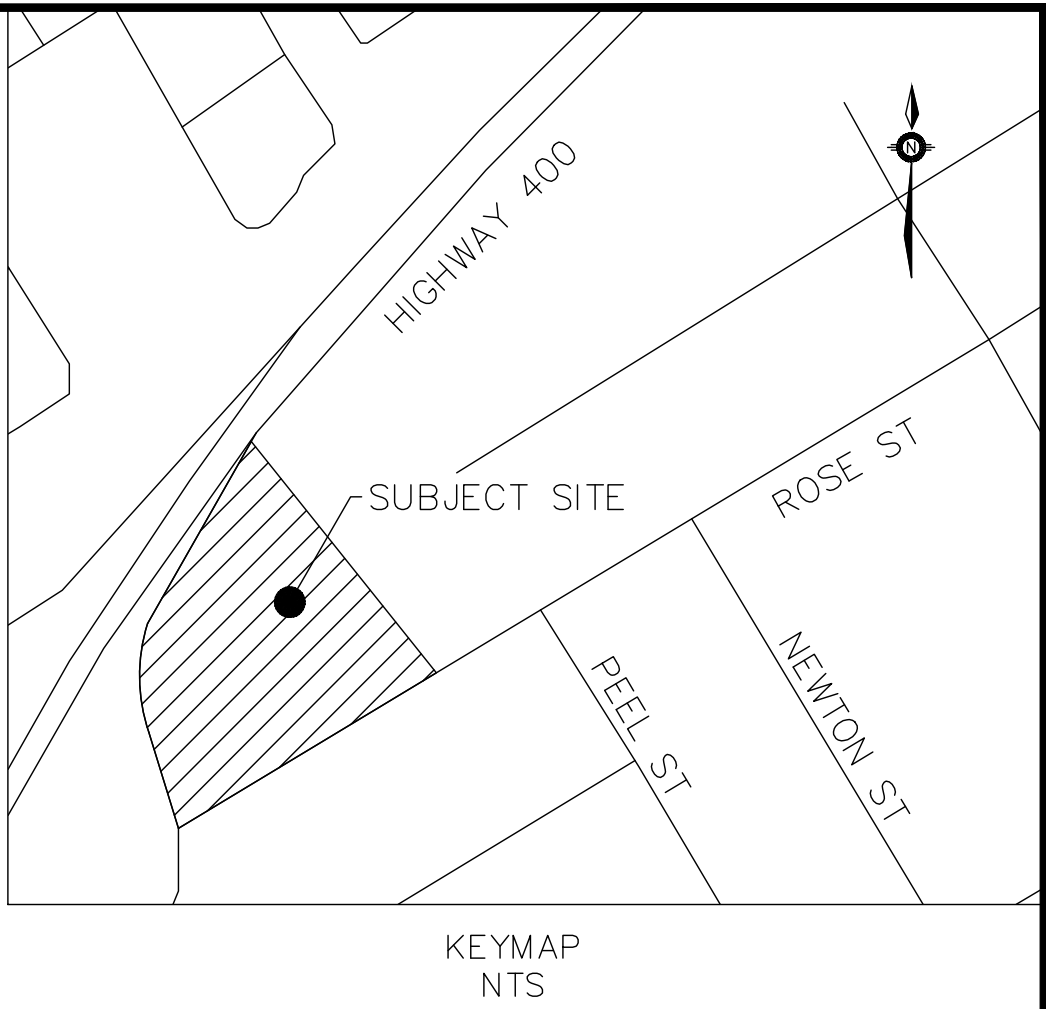
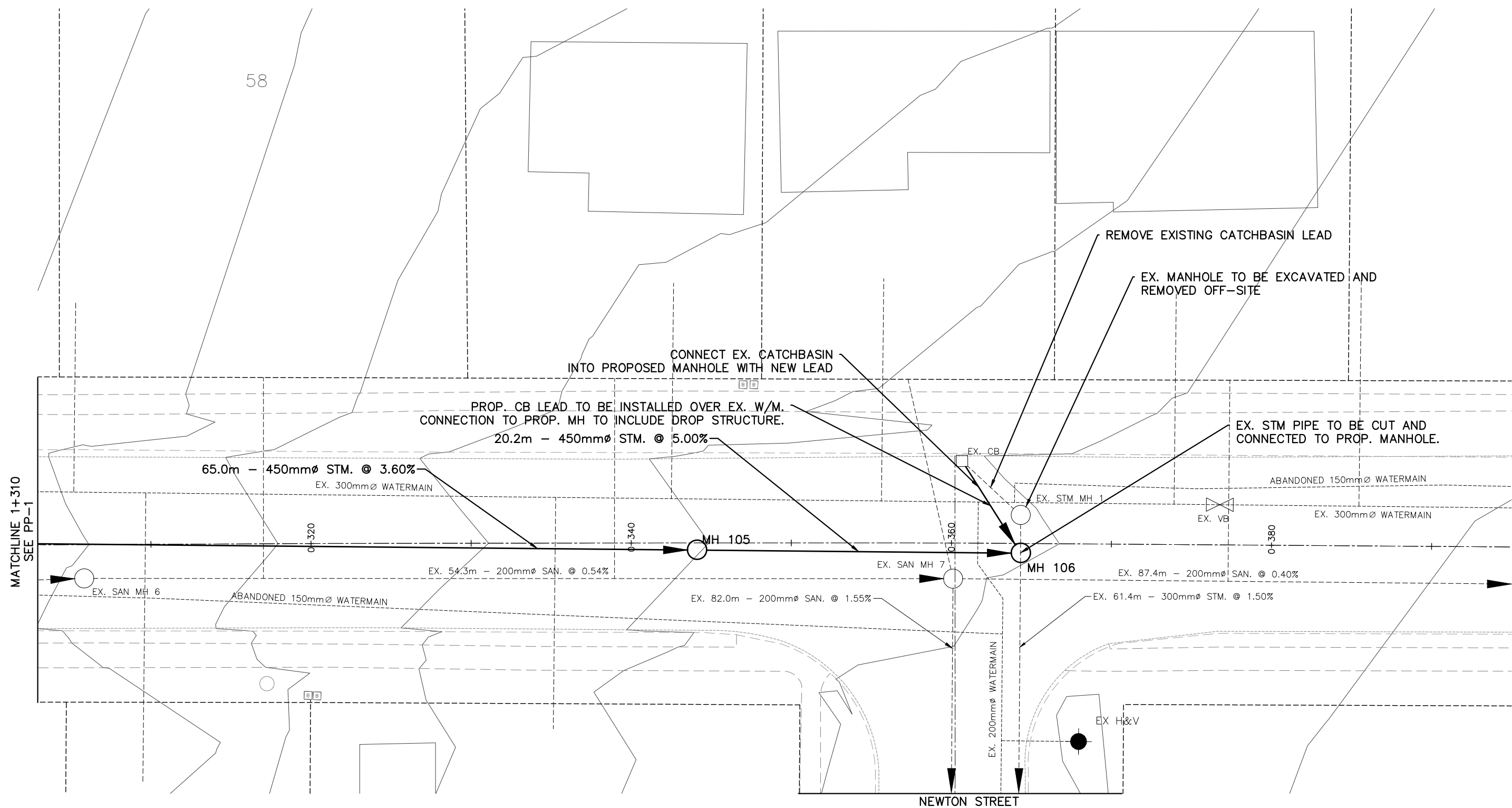


COUNTY OF SIMCOE AFFORDABLE
HOUSING – 20 ROSE ST.
CITY OF BARRIE
**PLAN AND PROFILE
ROSE STREET
STA. 0+150 TO 0+310**

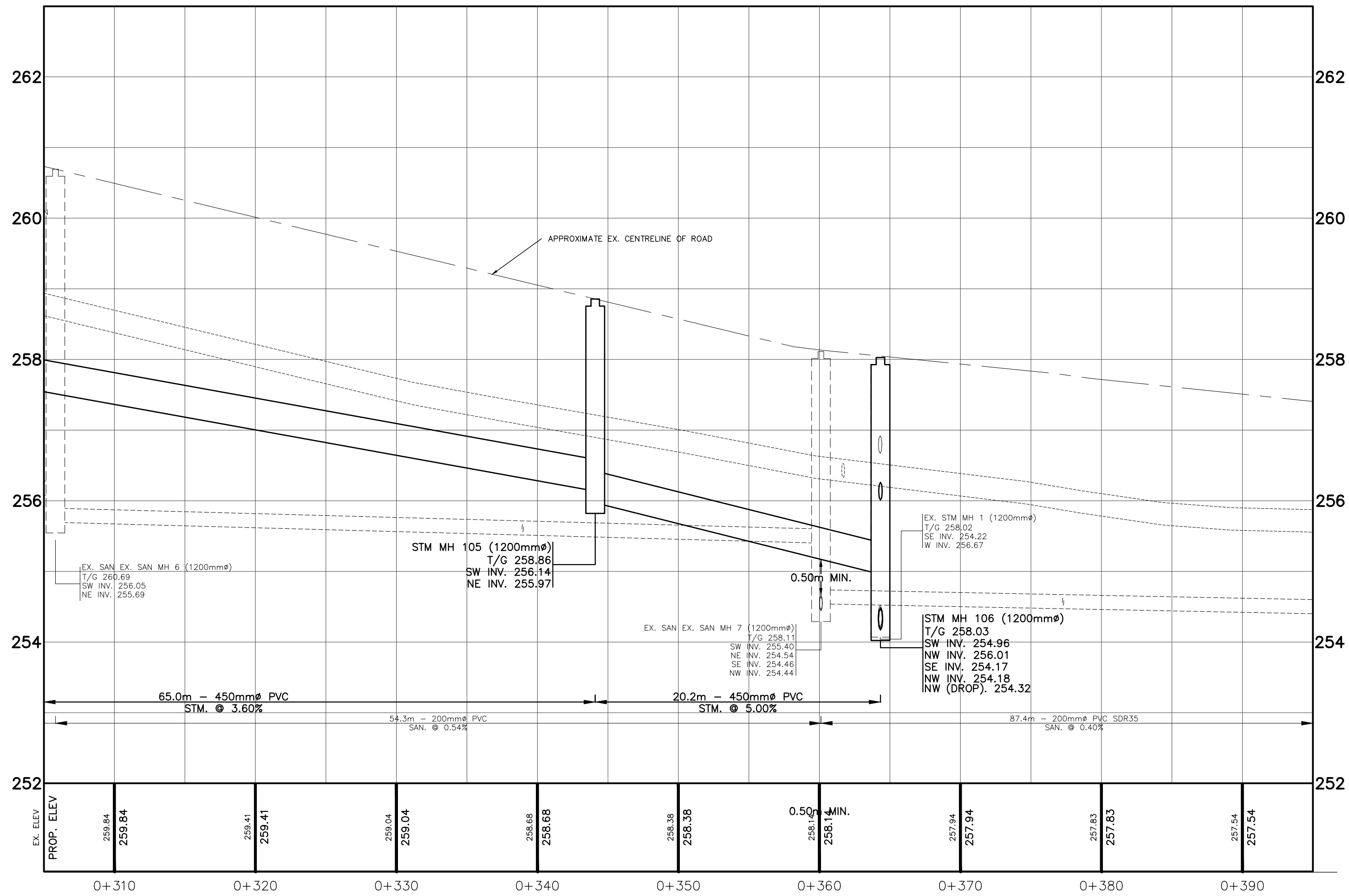


DESIGNED BY	AMC/TWC	HORIZ SCALE	1:250	PROJECT #	20118
DRAWN BY	TWC	VERT SCALE	1:50	DRAWING #	PP-1
CHECKED BY	MWD	DATE	OCTOBER 2023	REVISION #	1

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- LEGEND**
- EX. SAN MH. SITE BOUNDARY
 - SAN MH. EX SAN MANHOLE
 - CB. PROP SAN MANHOLE
 - CBMH. CATCH BASIN
 - 1. CATCH BASIN-MANHOLE
 - EX. 1. STORM MANHOLE
 - EX. CB. EX. CATCH BASIN
 - EX. HYD. EX. FIRE HYDRANT
 - H&V. SERVICE CAP
 - VB. FIRE HYDRANT
 - CS. WATER VALVE
 - CURB STOP



CITY OF BARRIE D30-006-2024

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BENCHMARK

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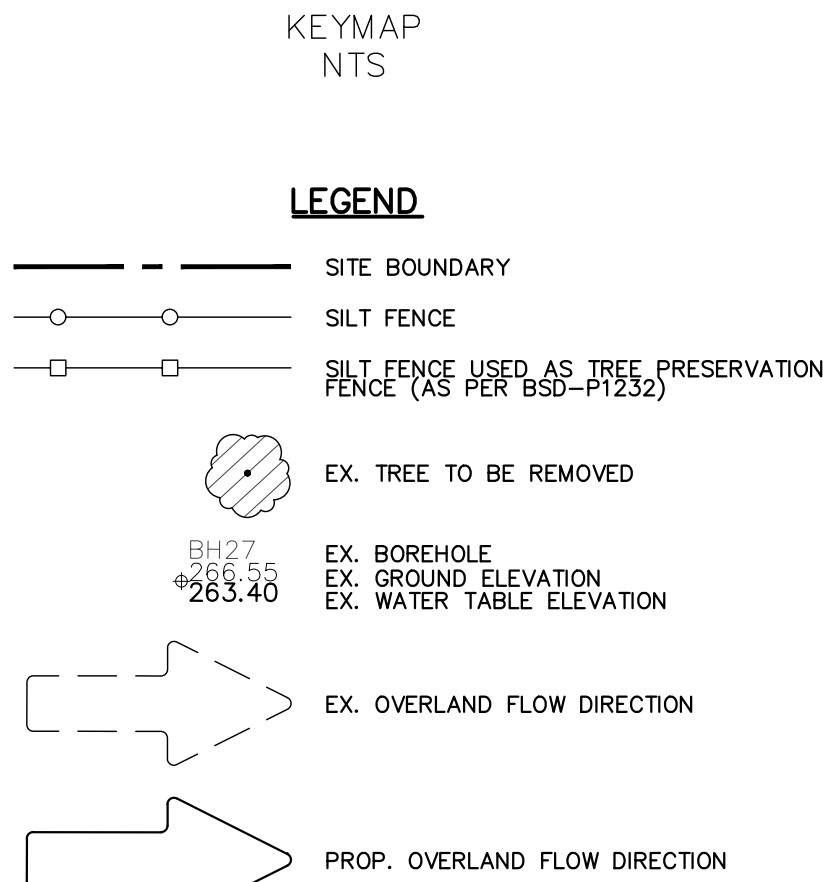
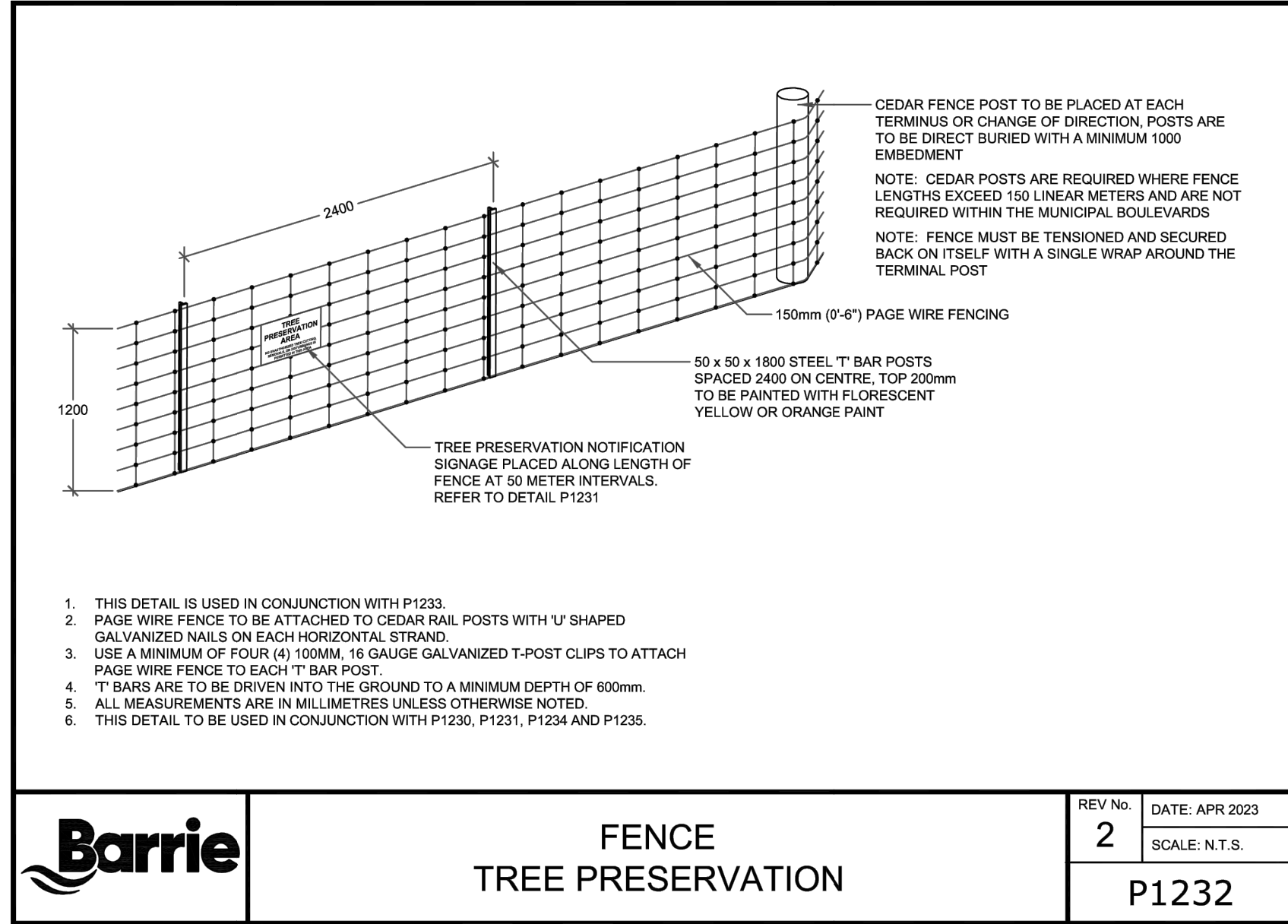
COUNTY OF SIMCOE AFFORDABLE
HOUSING - 20 ROSE ST.
CITY OF BARRIE

PLAN AND PROFILE
ROSE STREET
STA. 0+310 TO 0+390



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CHECKED BY	MWD	DATE	OCTOBER 2023	REVISION #	1



1. ENGINEER TO BE NOTIFIED PRIOR TO INITIATION OF ANY ON SITE WORKS.
2. SILT FENCE AS PER DETAIL BSD-23A. CONSTRUCTION ACCESS MATS AS PER CITY STANDARDS ARE TO BE INSTALLED PRIOR TO THE COMMENCEMENT OF ANY WORKS ONSITE.
3. VEGETATION REMOVAL MAY COMMENCE AFTER ALL SILT FENCE IS INSTALLED AND APPROVED BY THE ENGINEER.
4. COMMENCE WITH EARTH WORKS AND SITE SERVICING.
5. EROSION CONTROL MEASURES TO BE MAINTAINED AS DIRECTED BY THE ENGINEER DURING THE CONSTRUCTION PERIOD. ADDITIONAL CONTROL MEASURES MAY BE REQUIRED AT THE DISCRETION OF THE ENGINEER.
6. ALL DISTURBED GROUND LEFT INACTIVE FOR MORE THAN 30 DAYS SHALL BE STABILIZED WITH SEED, SOIL, MULCH OR OTHER ADEQUATE COVERING, AS INSTRUCTED BY THE ENGINEER.

1. DISTURBED AREAS THAT HAVE FAILED TO HAVE STABLE GROUND COVER ESTABLISHED BY OCTOBER 30TH SHALL BE PROTECTED WITH A SILTATION CONTROL FENCE OR STRAW MULCH ETC. AND MAINTAINED BY THE CONTRACTOR UNTIL VEGETATION BECOMES ESTABLISHED IN THE SUBSEQUENT GROWING SEASON.
2. ANY DETAHERING WATER SHALL BE DISCHARGED TO A VEGETATED AREA AT LEAST 30m FROM ANY WATERCOURSE AND FILTERED. FILTERING METHODS MUST BE APPROVED BY THE SITE ADMINISTRATOR.
3. SILT FENCE SHALL BE PUT IN PLACE PRIOR TO AND MAINTAINED DURING ALL ACTIVITIES TO BE CONDUCTED PRIOR TO COMMENCEMENT OF EARTH GRADING ACTIVITIES. SILT FENCE TO BE INSPECTED AND REPAIRED OR REPLACED IF DAMAGED AS DIRECTED BY THE SITE ADMINISTRATOR. SILT CONTROLS TO BE INSPECTED ON A 30 DAY BASIS AND AFTER EVERY RAIN EVENT. INSTALLATION SHALL BE TO THE MANUFACTURER'S RECOMMENDED SPECIFICATIONS.
4. THE CONTRACTOR SHALL BE PREPARED FOR UNEXPECTED CONDITIONS AND ACCORDINGLY HAVE STOCKPILED MATERIALS ON SITE FOR NECESSARY REPAIRS AS A RESULT OF FAILED OR INADEQUATE CONTROL MEASURES. ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL BE INSPECTED AT LEAST ONCE A WEEK, AND AFTER EVERY RAINFALL EVENT.
5. MUD MATS AT ALL LOCATIONS WHERE CONSTRUCTION TRAFFIC ENTERS OR LEAVES THE SITE SHALL BE USED. MUD MATS TO CONSIST OF 300mm MIN. 100mm TO 200mm CLEAR STONE HAVING DIMENSIONS 8.0m Wide X 30.0m LONG.
6. CONTRACTOR SHALL OBTAIN A CURRENT COPY AND BECOME FAMILIAR WITH OPSS REGULATIONS AND ALL APPLICABLE MUNICIPAL STANDARDS.
7. THE CONTRACTOR MAY CONSIDER ALTERNATIVE SEDIMENT AND EROSION CONTROL MEASURES. SUCH MEASURES SHOULD BE PRESENTED IN WRITING FOR APPROVAL OF THE SITE ADMINISTRATOR AND MUST BE APPROVED IN WRITING BY THE MUNICIPALITY AND CONSERVATION AUTHORITY.
8. THE TOPS OF ALL FILTER FABRIC MUST BE A MINIMUM OF 1.0 METRES ABOVE THE GROUND LEVEL AND ATTACHED TO THE FENCE WITH A CONTINUOUS STEEL WIRE. AFTER 30 DAYS, THE TOP OF THE FABRIC MUST BE SOLDERED ABOVE THE TOP OF THE FENCE AND ATTACHED TO THE FENCE, WITH FUR LOOPED THROUGH THE FABRIC ON BOTH SIDES OF THE FENCE. FILTER FABRIC IS TO BE TERRAFIX 270R OR EQUIVALENT.
9. ALL DISTURBED GROUND LEFT FOR MORE THAN 30 DAYS SHALL BE STABILIZED BY SEEDING, SODDING, MULCHING, OR COVERING OR OTHER EQUIVALENT CONTROL MEASURES. THIS PERIOD OF INACTIVITY SHALL BE AT THE DISCRETION OF THE CITY OF CAMBRIDGE. MANY OTHER EROSION CONTROL MEASURES ARE ALLOWED FOR 30 DAYS OR SUCH LONGER PERIOD DEEMED ADVISABLE BY THE CITY OF CAMBRIDGE'S MANAGER OF ENGINEERING.
10. CONTRACTOR RESPONSIBLE FOR MUD TRACKING, PREVENTION, AND MAINTENANCE ON HAMILTON RD.

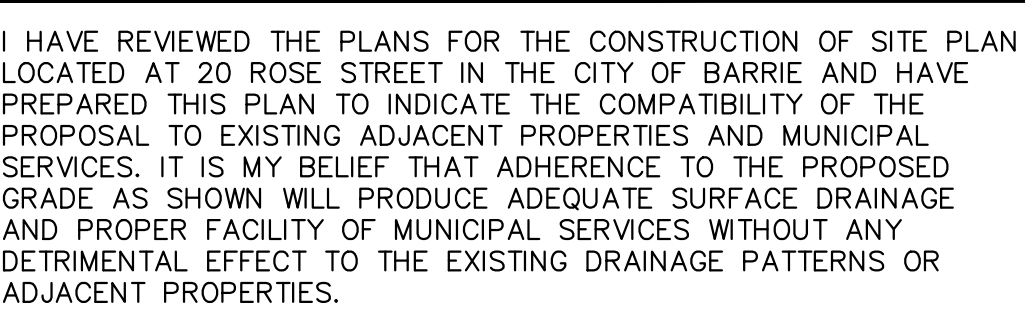


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CHECKED BY	MWD	DATE	OCTOBER 2023	REVISION #	1

1.	REVISED AS PER CITY OF BARRIE COMMENTS	10/16/24	TWC
NO.	REVISION NOTE	DATE	BY

ENVIRONMENTAL PROTECTION AND REMOVALS PLAN



1.	REVISED AS PER CITY OF BARRIE COMMENTS	10/16/24	TWC
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CHECKED BY	MWD	DATE	OCTOBER 2023	REVISION #	

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