

A. MAXIMUM PIPE DEFLECTION FROM COMBINED LIVE AND DEAD LOADING SHALL NOT EXCEED ANY CSA, OPS OR MANUFACTURERS RECOMMENDED SPECIFICATIONS. FLEXIBLE PIPE SHALL BE PVC DR35 OR APPROVED EQUIVALENT, WITH RUBBER GASKET TYPE JOINTS AND SHALL CONFORM TO CSA (B-182.2, 3, 4). RIGID PIPE SHALL BE REINFORCED CONCRETE WITH STRENGTH OF 100N/mm² CONFORMING TO CSA STANDARD A257.2-M1982 CLASS 100D. PIPE JOINTS TO BE RUBBER GASKET AS PER CSA STANDARD A257.3.

B. FLEXIBLE SEWERS SHALL BE CONSTRUCTED WITH BEDDING AND BACKFILL AS PER OPSPD 802.010 (GRANULAR "A" FOR BEDDING, AND COVER MATERIAL TO BE SAND, GRANULAR "A" OR QUARRY SCREENINGS PENDING A REVIEW BY THE ENGINEER). RIGID SEWERS SHALL BE CONSTRUCTED WITH CLASS "B" BEDDING (GRANULAR "A" MATERIAL) AS PER OPSPD 802.030, 802.031 AND 802.032 AS APPLICABLE. MATERIAL MAY BE REPLACED ONLY BY APPROVAL OF THE DIRECTOR OF PUBLIC WORKS.

C. THE EXISTING SANITARY FLOWS ARE TO BE MAINTAINED AT ALL TIMES BY A METHOD APPROVED BY THE MUNICIPALITY.

A. WATERMAN MATERIAL TO BE POLYVINYL CHLORIDE (PVC) CLASS 150 (DR18) OR DUCTILE IRON CLASS 52, TRACER WIRE (#12 TWU) SHALL BE INSTALLED ALONG THE ENTIRE LENGTH OF PVC WATERMAIN BROUGHT UP AT EACH VALVE CHAMBER AND HORIZONTAL, AND CONNECTED TO A FLANGE. TAPE IS TO BE USED TO AFFIX THE WIRE TO THE PIPE.

B. PVC PUSH-ON FITTINGS MEETING AWWA SPECIFICATION C-907 AND CSA B137.2 MAY BE USED ON PVC WATERMAIN 150mm to 200mm IN DIAMETER. DUCTILE IRON FITTINGS SHALL BE IN ACCORDANCE WITH AWWA C153 OR AWWA C110. MECHANICAL JOINTS SHALL CONFORM TO AWWA C111.

C. ALL MECHANICAL JOINT FITTINGS SHALL HAVE SACRIFICIAL ANODES "PROTECTO CAPS" INSTALLED ON EVERY BOLT.

D. WATERMAIN TO BE LOCATED AS SHOWN ON THE CONTRACT DRAWINGS.

E. THE MINIMUM HORIZONTAL SEPARATION BETWEEN THE WATERMAIN AND THE SANITARY/STORM SEWER IS TO BE 2.5m.

F. A MINIMUM OF 0.5m VERTICAL CLEARANCE BETWEEN THE WATERMAIN AND ALL UTILITIES MUST BE KEPT WHILE STILL MAINTAINING A MINIMUM DEPTH OF COVER AT ALL TIMES.

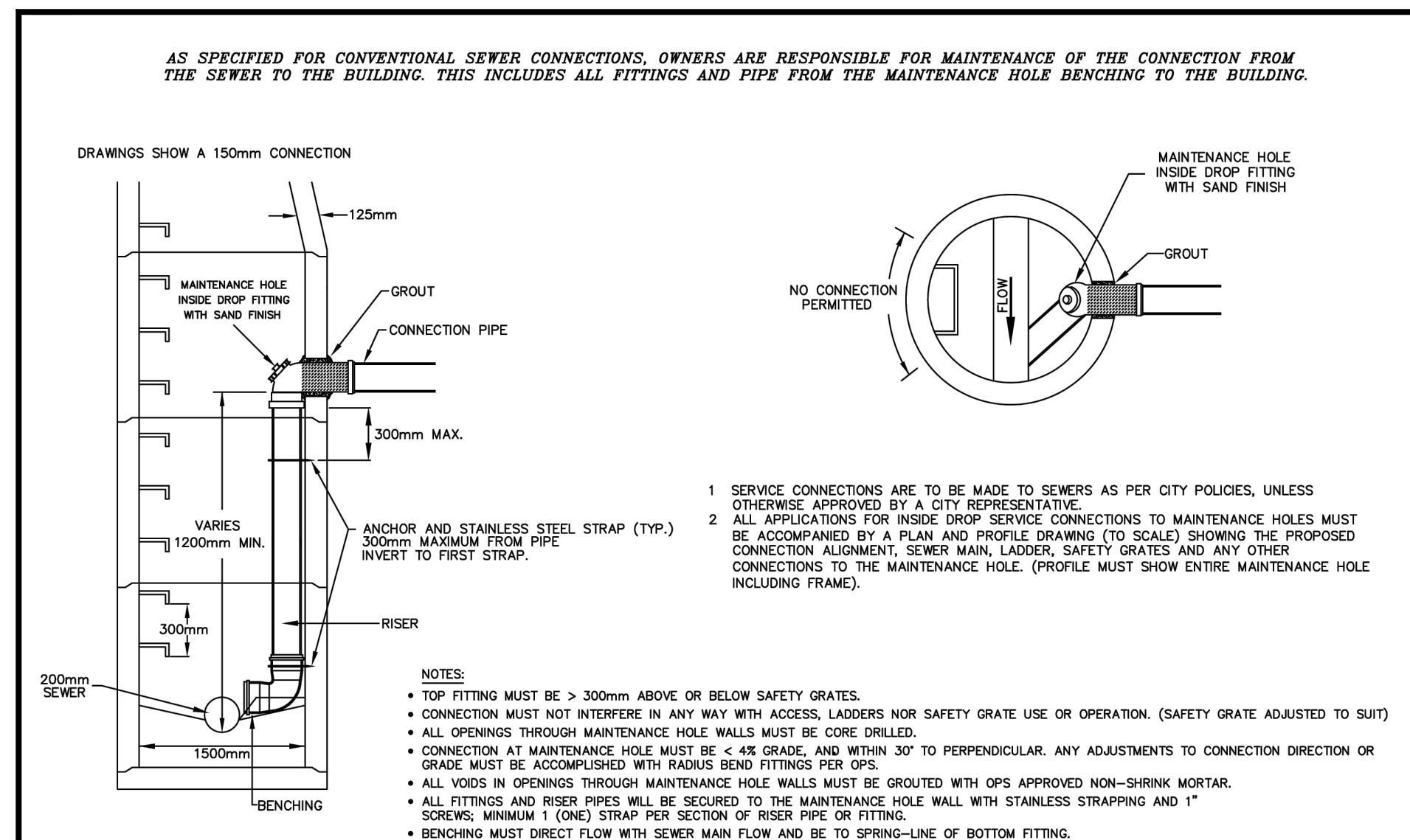
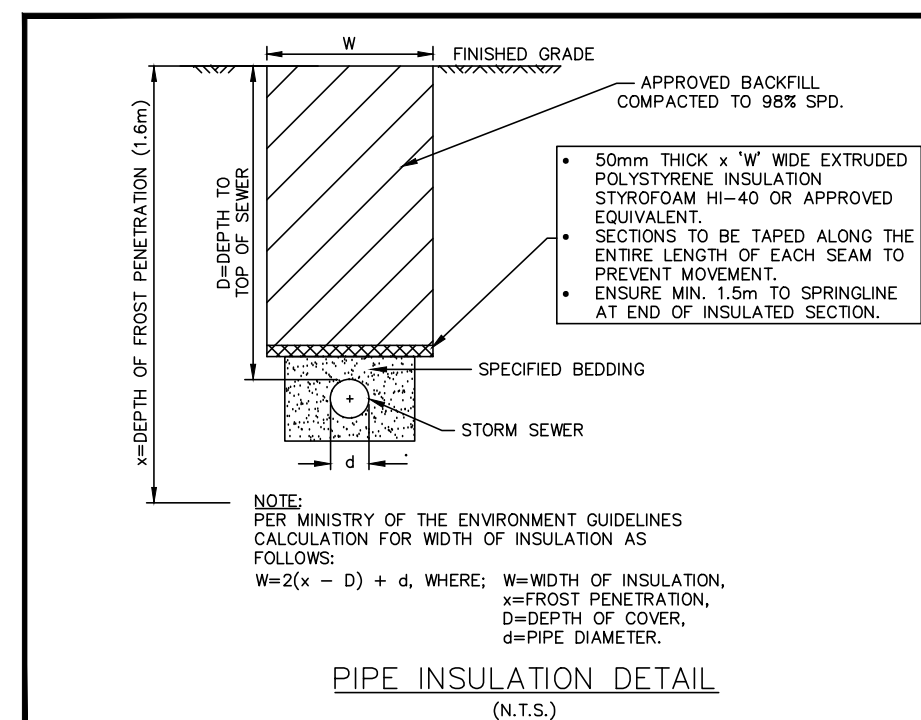
G. WATERMAINS SHALL BE INSTALLED WITH A MINIMUM COVER OF 1.9m OVER THE MAINS. 75mm OF STYROFOAM H160 OR APPROVED EQUAL INSULATION TO BE PROVIDED TO PROTECT WATERMAIN AT ALL STORM AND CB LEAD CROSSINGS WITHIN 300mm FREE TO FACE.

H. THE CONTRACTOR SHALL INFORM THE TOWN OF COLLINGWOOD A MINIMUM OF 48 HOURS IN ADVANCE OF COMMENCING WORK.

I. WATERMAIN SHALL BE CONSTRUCTED WITH BEDDINGS AS PER OPD 802.010 (GRANULAR 'A' EMBEDMENT MATERIAL) FOR FLEXIBLE PIPES AND OPD 802.030 OR 802.031 CLASS 'B' (GRANULAR "A" BEDDING) FOR RIGID PIPE UNLESS OTHERWISE APPROVED BY THE DIRECTOR OF PUBLIC WORKS. COVER MATERIAL TO BE SAND, GRANULAR 'A' OR QUARRY SCREENINGS PENDING A REVIEW BY THE ENGINEER.

J. COPPER SERVICES 19mm TO 50mm IN DIAMETER SHALL BE EMBEDDED IN SAND 100mm ABOVE AND BELOW TO CONFORM TO OPSS 1004.05.05.

K. ALL FILL AREAS SHALL BE FILLED TO SUB-GRADE PRIOR TO INSTALLATION. FILL AREAS SHALL BE COMPACTED TO A MINIMUM OF 95% STANDARD PROCTOR DENSITY PRIOR TO THE INSTALLATION OF THE WATERMAIN.



Maintenance Hole Inside Drop Service Connection

REV No. 6	DATE: APRIL 2024
	SCALE: N.T.S
S604	

2	AS PER CITY COMMENTS	12/02/24	AMC
1	REVISED SITE PLAN – SECOND MODULES	11/29/24	AMC
NO.	REVISION NOTE	DATE	BY

BENCHMARK

TOP NUT OF FIRE HYDRANT LOCATED IN FRONT OF 444 BLAKE STREET.
ELEV = 260.16

TOP NUT OF FIRE HYDRANT LOCATED IN FRONT OF 109 PENETANGUISHENE ROAD.
ELEV = 261.02



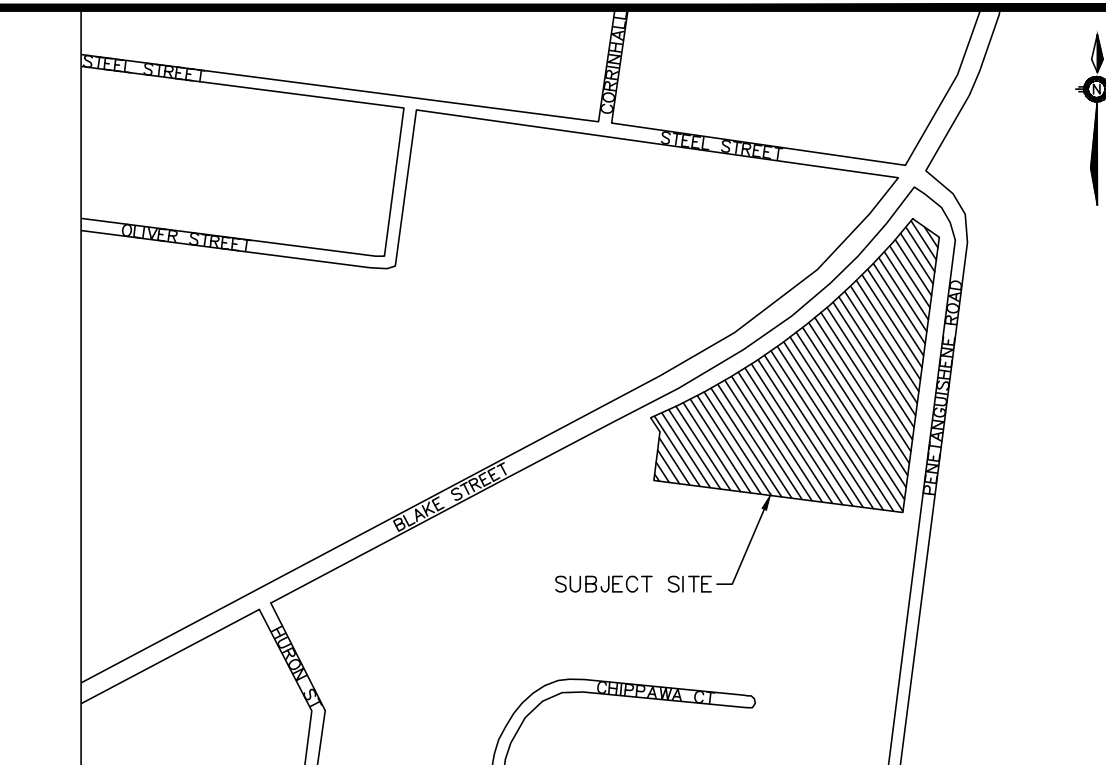
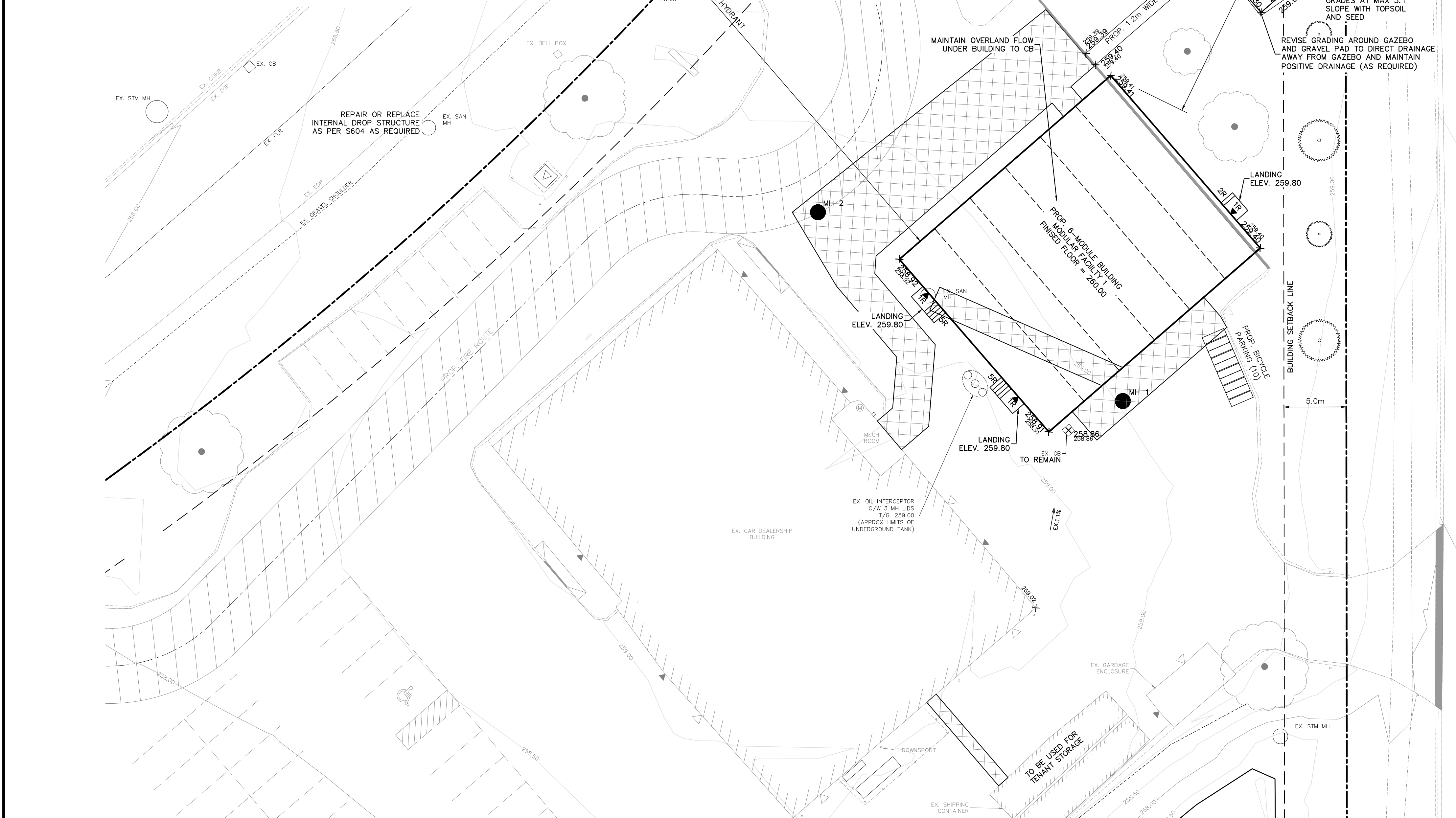
SIMCOE COUNTY HOUSING CORP RAPID RESPONSE HOUSING 445 BLAKE STREET, CITY OF BARRIE

SITE SERVICING PLAN



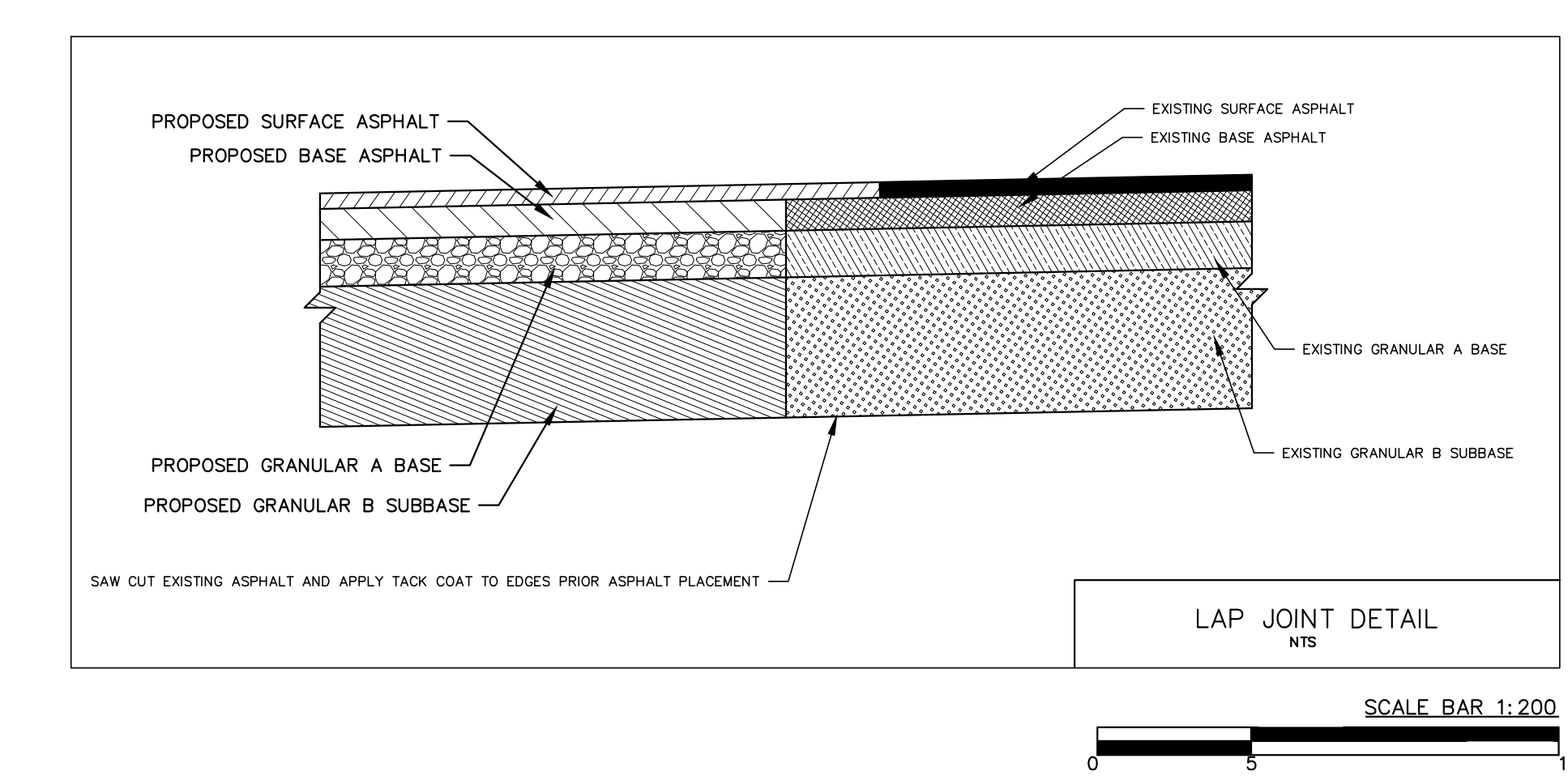
DESIGNED BY	AMC	HORIZ SCALE	1:200	PROJECT #	24203
DRAWN BY	JC	VERT SCALE	N/A	DRAWING #	SS-1
CHECKED BY	MWD	DATE	OCTOBER 2024	REVISION #	2

- A. ALL WORK TO BE DONE TO CITY OF BARRIE STANDARDS AND OPSS. WHERE CONFLICT OCCURS CITY OF BARRIE STANDARDS GOVERN.
- B. THE CONTRACTOR IS RESPONSIBLE FOR LAYOUT. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF, AND FOR THE COST OF REPLACING, LAYOUT STAKES, BENCHMARKS AND SURVEY BARS
- C. THE CONTRACTOR IS REQUIRED TO CONFIRM EXISTING GRADES AND REPORT ANY DISCREPANCIES TO THE ENGINEER BEFORE COMMENCING WORK.
- D. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING INFORMATION IN REGARD TO EXACT LOCATION OF BURIED UTILITIES. THIS SHALL INCLUDE EXCAVATION OF INSPECTED HOLES IF NECESSARY. THE CONTRACTOR MUST EXERCISE NECESSARY CONSTRUCTION PRECAUTIONS INCLUDING IF NECESSARY HAND DIGGING TO SAFEGUARD UTILITIES FROM DAMAGE. THE CONTRACTOR SHALL ARRANGE FOR TEMPORARY SUPPORT OF UTILITY POLES AS MAY BE REQUIRED TO COMPLETE THE. THE CONTRACTOR IS LIABLE FOR ALL DAMAGE TO UTILITIES OCCURRING WITHIN OR OUTSIDE THE CONTRACT LIMITS CAUSE HIS OPERATIONS.
- E. THE CONTRACTOR IS TO SUBMIT SAMPLES AND A GRADATION ANALYSIS OF THE PROPOSED GRANULAR MATERIALS FOR APPROVAL BY THE ENGINEER PRIOR TO PLACING.
- F. TRAFFIC CONTROL AND SIGNAGE DURING CONSTRUCTION SHALL CONFORM TO MUNICIPAL REQUIREMENTS AND THE MOST CURRENT CANADIAN CONSTRUCTION REGULATIONS INCLUDING REGULATION NO. 213 UNDER OHSA AND REFERRED TO MTO TEMPORARY CONDITIONS MANUAL BOOK NO. 7.
- G. ALL AREAS DISTURBED DURING CONSTRUCTION SHALL BE REINSTATE TO EXISTING CONDITION OR BETTER
- H. THE CONTRACTOR SHALL SUPPLY ALL NECESSARY WATER AND/OR CALCIUM CHLORIDE AS REQUIRED FOR COMPACTION AND/OR DUST CONTROL.
- I. FOR THE DURATION OF THE CONTRACT, MATERIAL THAT BECOMES CONTAMINATED DUE TO CONTRACTORS ACTIVITY SHALL BE REMOVED AND REPLACED AT NO EXTRA COST TO THE CONTRACT.
- J. DEWATERING TO BE CARRIED OUT IN ACCORDANCE WITH OPSS 517 AND 518 TO MAINTAIN ALL TRENCHES IN A DRY CONDITION.
- K. ALL ENGINE DRIVEN PUMPS TO BE ADEQUATELY SILENCED, SUITABLE FOR OPERATION IN A RESIDENTIAL OR INDUSTRIAL AREA.
- L. ALL CONNECTIONS TO SANITARY SEWERS AND WATER MAIN REQUIRE APPROVED FACTORY MADE TEES OR SADDLES.
- M. PIPE DEFLECTIONS SHALL NOT EXCEED MANUFACTURERS SPECIFICATIONS.
- N. FLEXIBLE PIPE EMBEDMENT AND BACKFILL TO OPSD 802.010 WITH GRANULAR 'A' FOR EMBEDMENT MATERIAL.
- O. FLEXIBLE PIPE EMBEDMENT AND BACKFILL MATERIAL TO BE COMPACTED TO A DRY DENSITY OF AT LEAST 95% OF THE MATERIAL'S STANDARD PROCTOR MAXIMUM DRY DENSITY (SPMDD).
- P. MODIFIED PIPE BEDDING UNDER WET TRENCH CONDITIONS:
FLEXIBLE PIPE BEDDING TO BE 10mm CLEAR STONE. RIGID PIPE TO BEDDING TO BE 20mm CLEAR STONE. ALL STONE BEDDING WRAPPED IN GEOTEXTILE FACTOR (TERRAFIX 270R OR APPROVED EQUAL)
- Q. TRENCH BACKFILL TO BE SELECT NATURAL MATERIAL.
- R. JOINTS WITH EXISTING ASPHALT TO BE SAW CUT STRAIGHT AS DIRECTED BY ENGINEER PRIOR TO PLACING NEW ASPHALT.



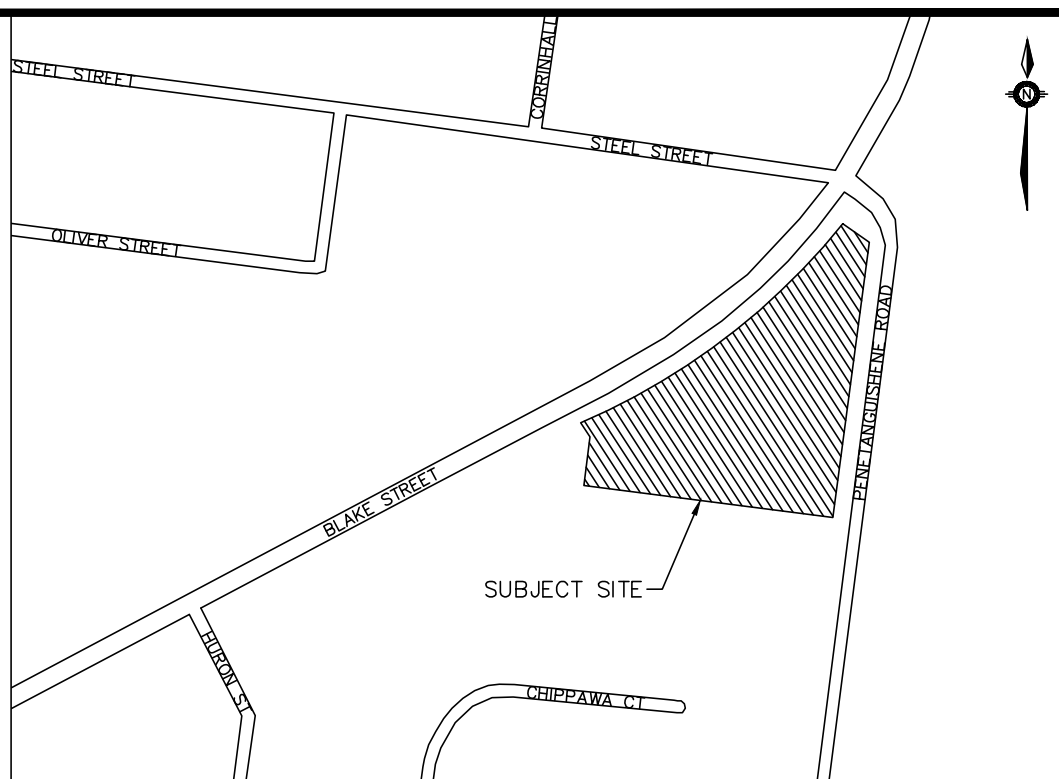
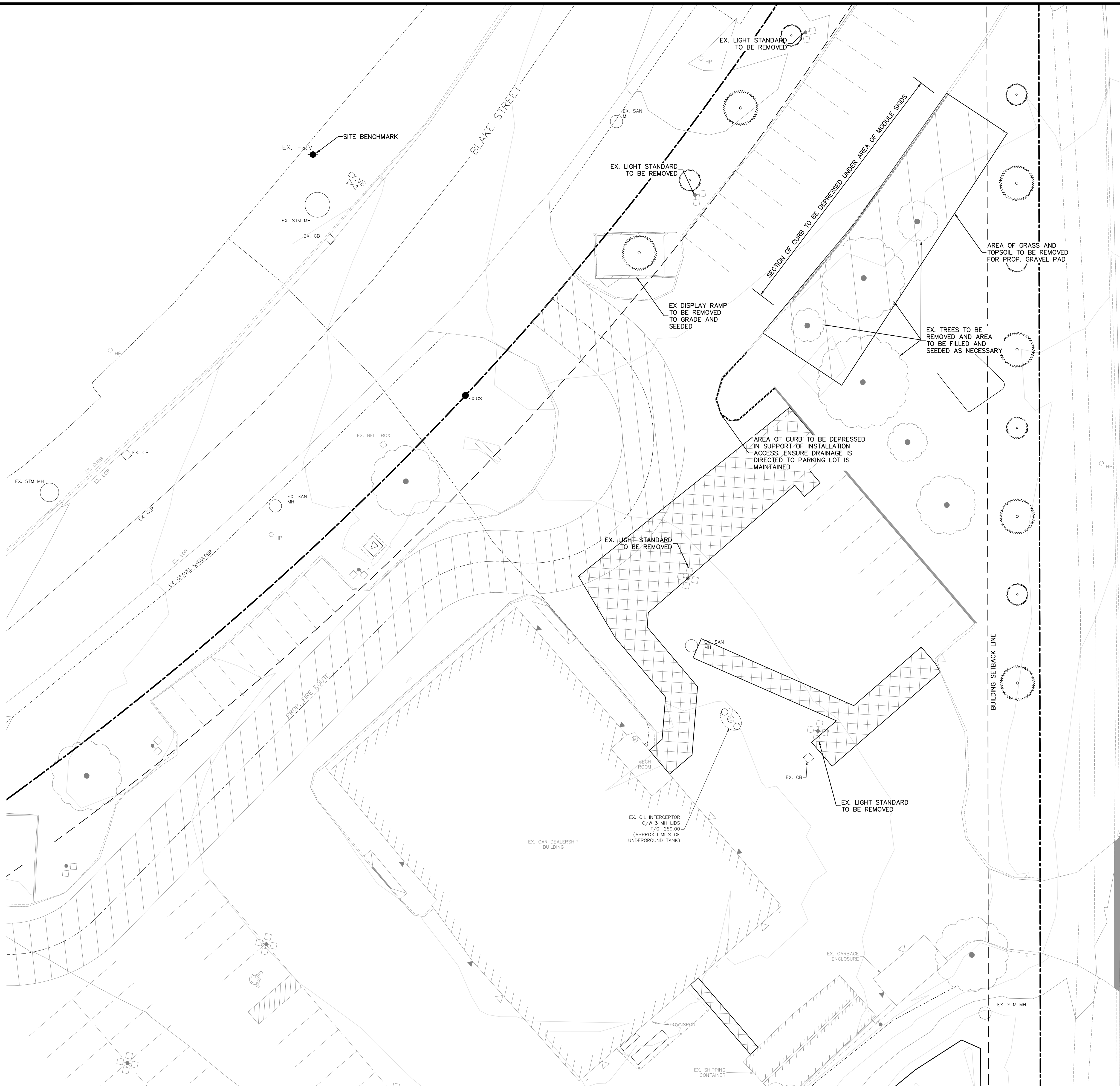
KEYMAP
N.T.S.

	STM CB		PROPOSED CATCH BASIN
	EX. CB		EXISTING CATCH BASIN
	STM DCB		PROPOSED DOUBLE CATCH BASIN
	STM MH		PROPOSED STORM MANHOLE
	EX. STM MH		EXISTING STORM MANHOLE
	SAN MH		PROPOSED SANITARY MANHOLE
	EX. SAN MH		EXISTING SANITARY MANHOLE
	HYD.		PROPOSED FIRE HYDRANT
	EX. HYD.		EXISTING FIRE HYDRANT
	VB		WATER VALVE
	254.63		PROPOSED ELEVATION
	254.09		EXISTING ELEVATION
	1.5%		PROPOSED DIRECTION AND GRADE
	BACK OF CURB		EDGE OF PAVEMENT
	PROP. CURB CUT LOCATION		EX. CURB CUT LOCATION
	HIGH POINT		PROPERTY LINE
	LIMIT OF WORK		PERSON DOOR
	OVERHEAD DOOR		EX. WATER METER AND AND CATCH BASIN PREVENTER
	PROP. FIRE ROUTE		PROP. ASPHALT RESTORATION AREA MATCH EX. GRADES



				BENCHMARK	SIMCOE COUNTY HOUSING CORP RAPID RESPONSE HOUSING 445 BLAKE STREET, CITY OF BARRIE																		
				TOP NUT OF FIRE HYDRANT LOCATED IN FRONT OF 444 BLAKE STREET. ELEV = 260.16																			
				TOP NUT OF FIRE HYDRANT LOCATED IN FRONT OF 109 PENETANGUSHENE ROAD. ELEV = 261.02																			
2	AS PER CITY COMMENTS	12/02/24	AMC																				
1	REVISED SITE PLAN – SECOND MODULES	11/29/24	AMC																				
NO.	REVISION NOTE	DATE	BY																				
					PEARSON ENGINEERING PEARSONENG.COM PH. 705.719.4785																		
					SITE GRADING PLAN <table border="1" style="width: 100%;"> <tr> <td>DESIGNED BY</td><td>AMC</td> <td>HORIZ SCALE</td><td>1:200</td> <td>PROJECT #</td><td>24203</td> </tr> <tr> <td>DRAWN BY</td><td>JC</td> <td>VERT SCALE</td><td>N/A</td> <td>DRAWING #</td><td>SG-1</td> </tr> <tr> <td>CHECKED BY</td><td>MWD</td> <td>DATE</td><td>OCTOBER 2024</td> <td>REVISION #</td><td>2</td> </tr> </table>	DESIGNED BY	AMC	HORIZ SCALE	1:200	PROJECT #	24203	DRAWN BY	JC	VERT SCALE	N/A	DRAWING #	SG-1	CHECKED BY	MWD	DATE	OCTOBER 2024	REVISION #	2
DESIGNED BY	AMC	HORIZ SCALE	1:200	PROJECT #	24203																		
DRAWN BY	JC	VERT SCALE	N/A	DRAWING #	SG-1																		
CHECKED BY	MWD	DATE	OCTOBER 2024	REVISION #	2																		

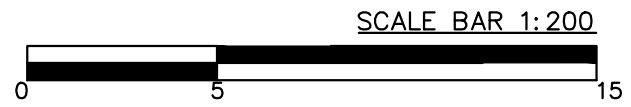
C:\Users\adecoves\AppData\Local\Temp\AcadPlot\Layout_4896\24203 - BASE.dwg Layout:REV-1 Plotted Dec 02, 2024 @ 4:37pm by adecoves @ PEARSON ENGINEERING LTD.



KEYMAP
N.T.S.

LEGEND

- STM CB PROPOSED CATCH BASIN
- EX. CB EXISTING CATCH BASIN
- STM DCB PROPOSED DOUBLE CATCH BASIN
- STM MH PROPOSED STORM MANHOLE
- EX. STM MH EXISTING STORM MANHOLE
- SAN MH PROPOSED SANITARY MANHOLE
- EX. SAN MH EXISTING SANITARY MANHOLE
- HYD. PROPOSED FIRE HYDRANT
- EX. HYD. EXISTING FIRE HYDRANT
- VB WATER VALVE
- 254.63 PROPOSED ELEVATION
- 254.09 EXISTING ELEVATION
- 1.5% PROPOSED DIRECTION AND GRADE
- BACK OF CURB
- EDGE OF PAVEMENT
- PROP. CURB CUT LOCATION
- EX. CURB CUT LOCATION
-) (HIGH POINT
- PROPERTY LINE
- LIMIT OF WORK
- PERSON DOOR
- OVERHEAD DOOR
- EX. WATER METER AND BACKFLOW PREVENTER
- PROP. FIRE ROUTE
- PROP. ASPHALT RESTORATION AREA MATCH EX. GRADES



2	AS PER CITY COMMENTS	12/02/24	AMC
1	REVISED SITE PLAN - SECOND MODULES	11/29/24	AMC
NO.	REVISION NOTE	DATE	BY

BENCHMARK
TOP NUT OF FIRE HYDRANT LOCATED IN FRONT OF 444 BLAKE STREET.
ELEV = 260.16
TOP NUT OF FIRE HYDRANT LOCATED IN FRONT OF 109 PENETANGUISHENE ROAD.
ELEV = 261.02



SIMCOE COUNTY HOUSING CORP
RAPID RESPONSE HOUSING
445 BLAKE STREET, CITY OF BARRIE

SITE REMOVALS PLAN

		PROJECT # 24203	
DESIGNED BY AMC	HORIZ SCALE 1:200	DRAWING # SG-1	
DRAWN BY JC	VERT SCALE N/A	REVISION # 2	
CHECKED BY MWD	DATE OCTOBER 2024		