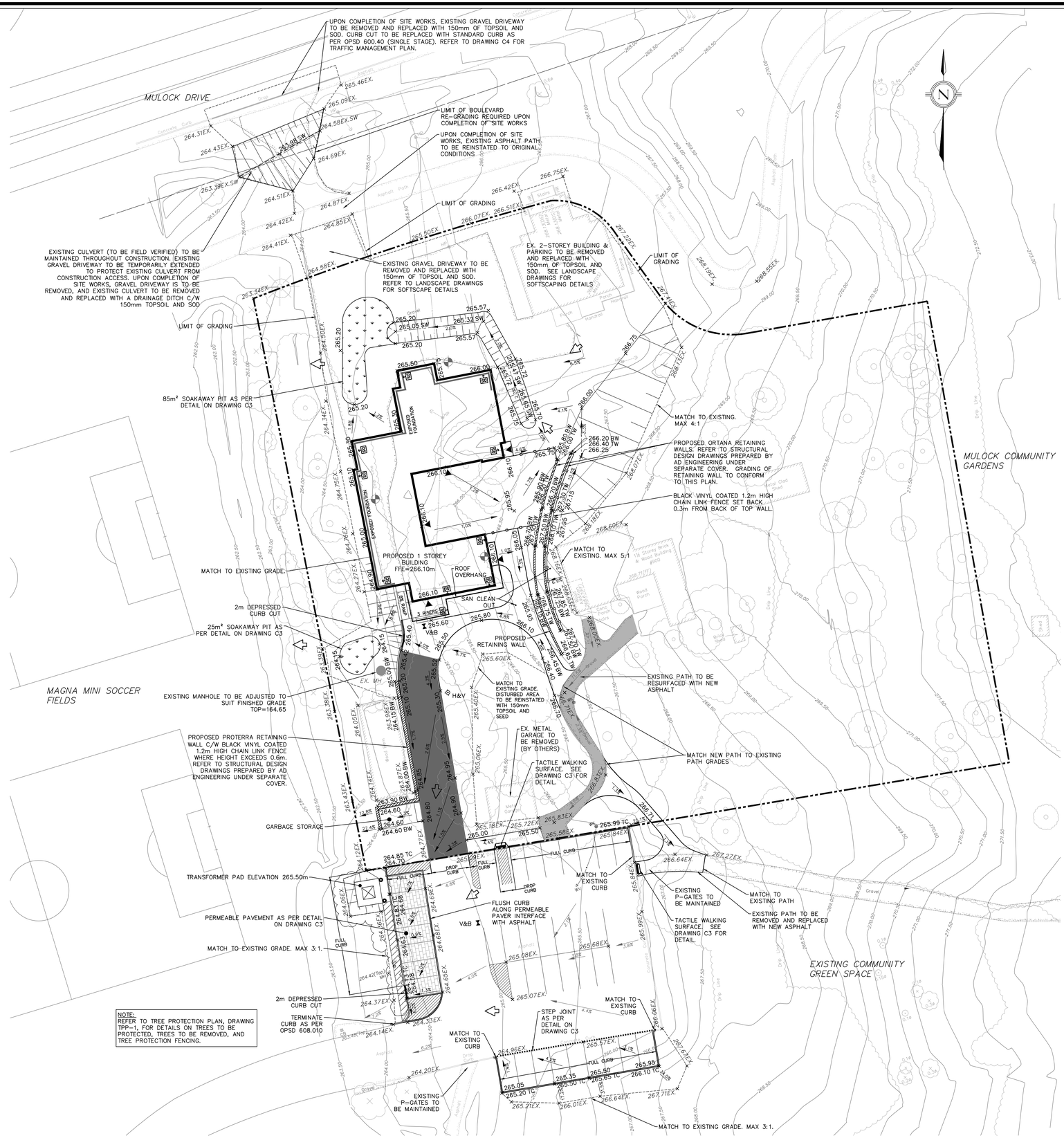
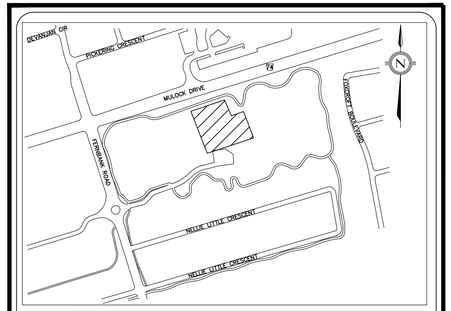




KEY PLAN

LEGEND

×264.60EX.	EXISTING ELEVATION	×264.00 SW	BOTTOM OF SWALE ELEVATION
260.00	EXISTING CONTOUR		LIMIT OF GRADING
×264.60	PROPOSED ELEVATION		PERMEABLE PAVERS
×264.60 TW	TOP OF WALL ELEVATION		100mm PERFORATED SUBDRAIN
×264.60 BW	BOTTOM OF WALL ELEVATION		DOWNSPOUT LOCATION
	EMERGENCY OVERLAND FLOW		RETAINING WALL
	EXISTING FIRE HYDRANT		STEP JOINT
	EXISTING STORM MANHOLE		PROPOSED FIRE ROUTE ASPHALT
	EXISTING SANITARY MANHOLE		ASPHALT RE-SURFACING
H&V	PROPOSED FIRE HYDRANT AND VALVE		
V&B	PROPOSED VALVE AND BOX		
	PROPOSED SANITARY MANHOLE		
	LIMIT OF LEASED AREA		
	SWALE		

1. MEASUREMENTS IN METRES AND/OR MILLIMETRES UNLESS OTHERWISE SHOWN.
2. CONTRACTOR TO BE RESPONSIBLE FOR LOCATION OF ALL EXISTING UNDERGROUND & OVERHEAD UTILITIES. VARIOUS UTILITIES CONCERNED TO BE GIVEN REQUIRED ADVANCE NOTICE PRIOR TO ANY DIGGING, FOR STAKE OUT. THE CONSULTANT ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF THE LOCATION OF EXISTING UTILITIES AS INDICATED ON THIS DRAWING.
3. THE INFORMATION CONTAINED ON THIS PLAN PERTAINS TO THE INSTALLATION OF NEW MUNICIPAL SERVICING ONLY AND SHALL NOT BE RELIED UPON BY A THIRD PARTY FOR ANY OTHER DESIGN AND/OR CONSTRUCTION RELATED PURPOSES (INCLUDING PUBLIC & PRIVATE SERVICING/UTILITY LOCATES, SHORING DESIGN AND FIELD LAYOUT, UTILITY DESIGN AND CONSTRUCTION, AND ALL OTHER DESIGN AND CONSTRUCTION RELATED ACTIVITIES). ALL THIRD PARTIES ARE RESPONSIBLE FOR OBTAINING THEIR OWN LOCATES FOR ANY PUBLICLY OR PRIVATELY HELD INFRASTRUCTURE WITHIN OR ADJACENT TO THE SUBJECT DEVELOPMENT.

LEGAL & TOPOGRAPHY
PROVIDED BY: LLOYD AND PURCELL ONTARIO LAND SURVEYORS

BENCHMARK
ELEVATIONS SHOWN HEREON ARE GEODETIC (CGVD-1928:1978) AND ARE REFERRED TO THE D.H.O. BENCHMARK №497-69 HAVING A PUBLISHED ELEVATION OF 264.573 METRES.

TOPOGRAPHIC OBSERVATIONS SHOWN HEREON COMPLETED ON AUGUST 19, 2019.

No.	REVISIONS/ISSUED	DATE	BY	TOWN
5.	ISSUED FOR SITE PLAN APPLICATION 4TH SUBMISSION	DEC 14/2020	CB	
4.	ISSUED FOR COORDINATION	NOV 20/2020	CB	
3.	ISSUED FOR SITE PLAN APPLICATION 3RD SUBMISSION	JUN 08/2020	CB	
2.	ISSUED FOR SITE PLAN APPLICATION 2ND SUBMISSION	MAR 05/2020	CB	
1.	ISSUED FOR SITE PLAN APPLICATION 1ST SUBMISSION	OCT 11/2019	CB	

counterpoint ENGINEERING
COUNTERPOINT ENGINEERING INC.
8395 Jane St., Suite 100, Vaughan, ON L4K 5Y2 Phone 905.326.1404 Fax 905.326.1405

LICENSED PROFESSIONAL ENGINEER
C. A. BUSH
100183380
DEC 14/2020
PROVINCE OF ONTARIO
ENGINEER'S STAMP

APPLICANT:
DENISON CHILD CARE CENTRE
900 MULOCK DRIVE/ 605 FERNBANK ROAD
NEWMARKET, ON

SITE LOCATION:
DENISON CHILD CARE CENTRE
900 MULOCK DRIVE/ 605 FERNBANK ROAD
NEWMARKET, ON

SP.19.N.0254

SITE GRADING PLAN

DESIGNED BY: ES	CHECKED BY: CB	DATE: OCTOBER 2019
DRAWING BY: ES	CHECKED BY: CB	PROJECT NO. 19055
SWM BY:	CHECKED BY:	
SCALE: 1:300m (0m 5m 10m 15m)		DRAWING NO. C1

REGION FILE No.:

NEWMARKET HYDRO

APPROVED: _____

DATE: _____

COUNTERPOINT ENGINEERING INC (CIVIL)

APPROVED: Patrick Turner

DATE: January 25, 2021

BELL CANADA

APPROVED: Colleen Murphy

DATE: December 17, 2020

ROGERS COMMUNICATION INC.

APPROVED: Colin Germaine

DATE: July 22nd/2020

ENBRIDGE GAS DISTRIBUTION

CUP / LICP SIGN OFF
BY: Nandini Rao
SUP PLANNING, GTA EAST
ENBRIDGE
THIS CUP APPROVAL CONSTITUTES A GENERAL REVIEW AND DOES NOT CONFIRM DIMENSIONAL ACCURACY

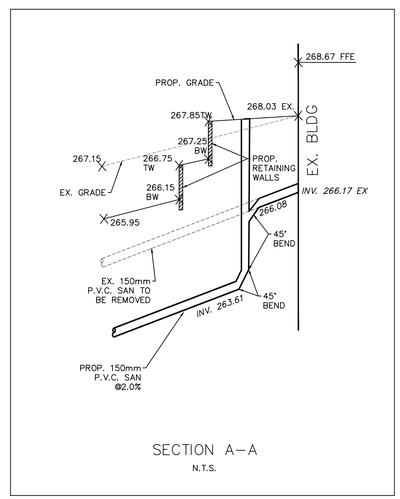
APPROVED: _____

DATE: 22-Jul-2020

ENVI

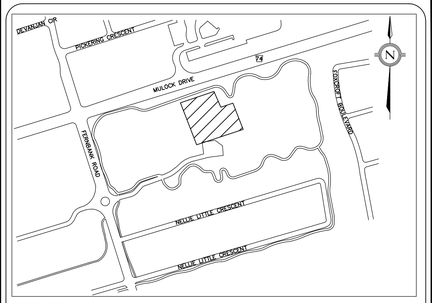
APPROVED: Tal Trainer

DATE: 7/27/2020



SECTION A-A

N.T.S.



KEY PLAN

LEGEND

- EXISTING HYDRANT
- EXISTING STORM SEWER
- EXISTING SANITARY SEWER
- EXISTING WATERMAIN
- PROPOSED STORM SEWER AND MH
- PROPOSED SANITARY SEWER AND MH
- H&V — PROPOSED HYDRANT AND VALVE
- V&B — PROPOSED VALVE AND BOX
- PROPOSED WATERMAIN
- PROPOSED WATERMAIN (BY OTHERS)
- LIMIT OF LEASED AREA
- PERMEABLE PAVERS

NOTES:

1. WATER METER AND APPURTENANCES TO BE PURCHASED FROM PUBLIC WORK SERVICES. CONTACT TOWN OF NEWMARKET MANAGER WATER/WASTEWATER SERVICES FOR INSTALLATION DETAILS AND REQUIREMENTS. WATER METER TO BE PURCHASED FROM TOWN OF NEWMARKET PUBLIC WORKS SERVICES AND LOCATED WITHIN THE BUILDING.
2. WATERMAIN COMMISSIONING PROCEDURE TO BE CONFIRMED WITH PUBLIC WORK SERVICES. CONTACT TOWN OF NEWMARKET MANAGER WATER/WASTEWATER SERVICES PRIOR TO TURNING WATER ON. A TEMPORARY BACKFLOW PREVENTOR TO BE INSTALLED AS PER TOWN STANDARDS, UNTIL A PERMANENT CONNECTION IS COMMISSIONED.
3. EXISTING WELLS TO BE DECOMMISSIONED TO THE APPLICABLE REGULATION AND A COPY OF THE WELL RECORD SHALL BE PROVIDED TO THE TOWN.
4. ENGINEERING SERVICES TO BE PRESENT DURING HYDRANT FLOW TESTING.

1. MEASUREMENTS IN METRES AND/OR MILLIMETRES UNLESS OTHERWISE SHOWN.
2. CONTRACTOR TO BE RESPONSIBLE FOR LOCATION OF ALL EXISTING UNDERGROUND & OVERHEAD UTILITIES. VARIOUS UTILITIES CONCERNED TO BE GIVEN REQUIRED ADVANCE NOTICE PRIOR TO ANY DIGGING, FOR STAKE OUT. THE CONSULTANT ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF THE LOCATION OF EXISTING UTILITIES AS INDICATED ON THIS DRAWING.
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LEGAL & TOPOGRAPHY
PROVIDED BY: LLOYD AND PURCELL ONTARIO LAND SURVEYORS

BENCHMARK
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No.	REVISIONS/ISSUED	DATE	BY	TOWN
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APPLICANT:
DENISON CHILD CARE CENTRE
900 MULOCK DRIVE/ 605 FERNBANK ROAD
NEWMARKET, ON

SITE LOCATION:
DENISON CHILD CARE CENTRE
900 MULOCK DRIVE/ 605 FERNBANK ROAD
NEWMARKET, ON

SP.19.N.0254

SITE SERVICING AND COMPOSITE UTILITY PLAN

DESIGNED BY: ES	CHECKED BY: CB	DATE: OCTOBER 2019
DRAWING BY: ES	CHECKED BY: CB	PROJECT NO. 19055
SWM BY:	CHECKED BY:	
SCALE: 1: 300m (0m 5m 10m 15m)		DRAWING NO. C2

REGION FILE No.:

GENERAL NOTES

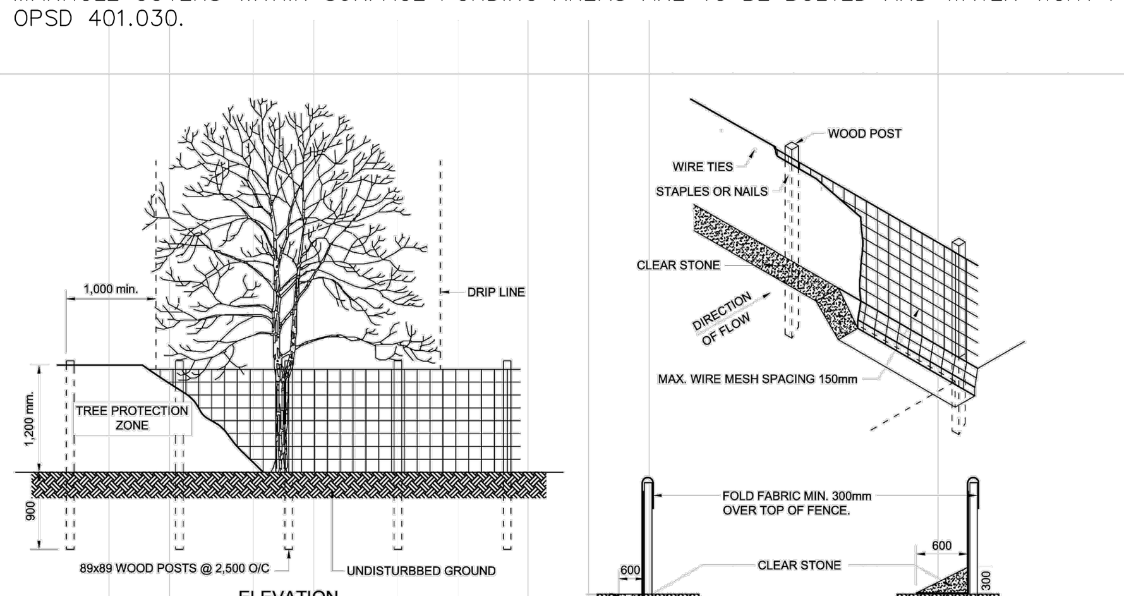
1. ALL DIMENSIONS ARE IN METRES (m) AND ALL PIPE SIZES ARE IN MILLIMETRES (mm), UNLESS OTHERWISE SPECIFIED.
2. THE NOTES ON SHEET APPLY TO ALL WORKS UNDER THIS CONTRACT UNLESS OTHERWISE NOTED ON THE PLAN AND PROFILE DRAWINGS SPECIFIC DETAIL DRAWINGS.
3. THE STANDARD DRAWINGS OF THE TOWN, ONTARIO PROVINCIAL STANDARDS AND SPECIFICATIONS (OPSS), THE ONTARIO PROVINCIAL STANDARD DRAWINGS (OPSD) AND YORK REGION STANDARDS CONSTITUTE PART OF THE PLANS OF THIS PROJECT.
4. ORDER OF PRECEDENCE OF STANDARD DRAWINGS IS FIRSTLY TOWN OF NEWMARKET STANDARD DRAWINGS, AND SECONDLY ONTARIO PROVINCIAL STANDARD DRAWINGS.
5. THE STANDARD DRAWINGS INCLUDED WITH THESE PLANS PLANS ARE PROVIDED FOR CONVENIENCE ONLY AND ARE NOT TO BE CONSTRUED TO BE A COMPLETE SET FOR THE PURPOSE OF THE CONTRACT OR PROJECT.
6. ALL DIMENSIONS AND ELEVATIONS SHALL BE CHECKED AND VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO ANY CONSTRUCTION AND ANY DISCREPANCIES SHALL BE REPORTED IMMEDIATELY TO THE ENGINEER.
7. ALL SITE 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 TOWN'S ENGINEER.
8. NATIVE MATERIAL, SUITABLE FOR BACKFILL, SHALL BE COMPACTED TO 95% STANDARD PROCTOR MAXIMUM DRY DENSITY. FOR BACKFILLING WITHIN THE ROADWAY, NATIVE MATERIAL SHALL BE BACKFILLED TO 95% STANDARD PROCTOR MAXIMUM DRY DENSITY OR AS PER GEOTECHNICAL ENGINEER RECOMMENDATIONS.
9. GRANULAR MATERIAL USED FOR BACKFILL, SHALL BE PLACED IN LAYERS 150 mm IN DEPTH MAXIMUM AND COMPACTED TO 100% STANDARD PROCTOR MAXIMUM DRY DENSITY OR AS PER GEOTECHNICAL ENGINEER RECOMMENDATIONS.
10. MATERIAL SPECIFICATION FOR ALL FRAMES, GRATES, COVERS AND GRATINGS SHALL BE AS PER OPSS 1850. FINISH ON ALL SURFACES SHALL BE PAINTED.
11. TOPSOIL IN FILL AREA TO BE STRIPPED. ALL FILL MATERIAL SHALL BE APPROVED FOR SUITABILITY BY THE GEOTECHNICAL ENGINEER PRIOR TO ANY FILLING OR REUSE OF EXCAVATED MATERIAL. APPROVED FILL MATERIAL SHALL BE COMPACTED TO THE SATISFACTION OF THE GEOTECHNICAL ENGINEER.
12. ALL UNSUITABLE OR SURPLUS MATERIAL OBTAINED FROM EXCAVATIONS TO BE DISPOSED OF OFF-SITE AT A LOCATION SELECTED BY THE CONTRACTOR THAT MEETS ALL APPLICABLE ENVIRONMENTAL REGULATIONS AND GUIDELINES.

STORM SEWERS

1. ALL STORM SEWER MAINS OVER 450 mm DIAMETER SHALL BE CONSTRUCTED WITH REINFORCED CONCRETE PIPE.
2. CATCHBASIN LEADS SHALL BE CONSTRUCTED WITH CONCRETE, PVC DR 35, OR HDPE BOSS POLY-TITE. RUBBER PVC PIPE WILL NOT BE PERMITTED.
3. CONCRETE PIPE SHALL CONFORM TO THE REQUIREMENTS OF CSA SPECIFICATION A257-M 1982 FOR THE CLASSES SHOWN BELOW:
   (A) NON-REINFORCED CONCRETE PIPE, CSA STANDARD A257.1 CLASS 1, 2 AND 3
   (B) REINFORCED CONCRETE PIPE, CSA STANDARD A257.2 STRENGTH CLASS 50-D, 65-D, 100-D AND 140-D.
4. PVC PIPE SHALL CONFORM TO CSA SPECIFICATION B182.1 OR B182.2 OR LATEST REVISION THEREOF. RIBBED PVC PIPE WILL NOT BE PERMITTED
5. HDPE PLASTIC PIPE SHALL CONFORM TO THE REQUIREMENTS OF CSA SPECIFICATION B182.6 AND SHALL HAVE A SMOOTH INSIDE WALL AND CORRUGATED OUTSIDE WALL SUCH AS HDPE BOSS POLY-TITE WITH MINIMUM STIFFNESS OF 300 kPa.
6. SEWERS SHALL BE CONSTRUCTED WITH BEDDING AS PER OPSD 802.010, UNLESS APPROVED OTHERWISE BY THE TOWN.
7. MANHOLE TOPS ARE TO BE SET TO BASE COURSE ASPHALT GRADE AND THEN ADJUSTED TO FINAL GRADE. FRAME AND COVER TO BE PER OPSD 401.010, TYPE 'B'. ADJUSTMENTS SHALL BE PER NMSD 210.00.
8. SINGLE CATCHBASIN LEADS TO BE 250 mm DIAMETER MINIMUM. DOUBLE CATCHBASIN LEADS TO BE 300 mm DIAMETER MINIMUM.
9. CATCHBASIN GRATES ARE TO BE SET TO BASE COURSE ASPHALT GRADE AND THEN ADJUSTED TO FINAL GRADE. ADJUSTMENTS SHALL BE AS PER NMSD-211.00. WHERE CATCHBASINS ARE CONNECTED DIRECTLY TO SEWERS, PRE-MANUFACTURED TEES SHALL BE USED.
10. SAFETY CHAINS ARE TO BE INSTALLED ON THE DOWNSTREAM SIDE OF ALL MANHOLES ON PIPES 1200 mm AND LARGER AS PER TOWN OF NEWMARKET STANDARD DRAWING NO. NMSD-403.00.
11. MANHOLE COVERS WITHIN SURFACE PONDING AREAS ARE TO BE BOLTED AND WATER TIGHT PER OPSD 401.030.

SANITARY SEWERS

1. FLEXIBLE PIPE SHALL BE PVC DR35 OR APPROVED EQUIVALENT, WITH RUBBER GASKET TYPE JOINTS AND SHALL CONFORM TO CSA B182.1 AND B182.2. RIGID PIPE SHALL BE REINFORCED CONCRETE CONFORMING TO CSA A257.2. PIPE JOINTS TO BE RUBBER GASKET AS PER CSA STANDARD A257.3.
2. MAXIMUM PIPE DEFLECTION FROM COMBINED LIVE AND DEAD LOADING SHALL NOT EXCEED ANY CSA, OPS OR MANUFACTURER'S RECOMMENDED SPECIFICATIONS
3. FLEXIBLE SEWERS SHALL BE CONSTRUCTED WITH BEDDING AND BACKFILL AS PER OPSD 802.010 (GRANULAR "A" FOR BEDDING AND COVER MATERIAL). RIGID SEWERS SHALL BE CONSTRUCTED WITH CLASS "B" BEDDING (GRANULAR "A" MATERIAL) AS PER OPSD 802.030, 802.031 AN802.032 AS APPLICABLE. MATERIAL MAY BE REPLACED ONLY BY APPROVAL OF THE ENGINEER.
4. PRECAST MAINTENANCE HOLES SHALL BE IN ACCORDANCE WITH OPSD 701.010 (1200 mm DIAMETER). PRECAST MAINTENANCE HOLES GREATER THAN 5 m DEEP SHALL BE CONSTRUCTED WITH A SAFETY PLATFORM IN ACCORDANCE WITH OPSD 404.020. FRAME AND COVER SHALL BE IN ACCORDANCE WITH OPSD 401.010, TYPE "A".
5. MAINTENANCE HOLE TOPS (FRAMES) ARE TO BE SET TO BASE COURSE ASPHALT GRADE, AND THEN ADJUSTED TO FINAL GRADE WHEN TOP LIFT OF ASPHALT IS PLACED. GRADE AND CROSSFALL ADJUSTMENT SHALL BE MADE USING PRODUCTS SPECIFICALLY MANUFACTURED FOR THAT PURPOSE. ADJUSTMENTS SHALL BE AS PER NMSD-210.00
6. ALL CONNECTIONS TO THE SANITARY MAIN SHALL BE MADE WITH PRE-MANUFACTURED APPROVED TEES.
7. MAINTENANCE HOLE BENCHING SHALL CONFORM WITH OPSD 701.021 WITH BENCHING TO THE OBVERT.
8. DROP STRUCTURES SHALL CONFORM WITH OPSD 1003.020.
9. ALL MAINTENANCE HOLES CONSTRUCTED IN VICINITY OF LOW POINTS IN ROADS SHALL HAVE WATERTIGHT LIDS.
10. PIPE TO BE MINIMUM 125 mm DIAMETER PVC SDR 28. RUBBER GASKET TYPE JOINTS, BEING GREEN IN COLOUR AND SHALL CONFORM TO CSA B182.1 or B182.2
11. MINIMUM PIPE SLOPE TO BE 2%, MAXIMUM 8% (SEE OPSD 1006.020).
12. MANHOLE COVERS WITHIN SURFACE PONDING AREAS ARE TO BE BOLTED AND WATER TIGHT PER OPSD 401.030.



NOTES:
1. ALL DIMENSIONS IN MILIMETERS
2. INSTALLATION: 2,100mm MIN. LENGTH WOOD POSTS, SPACED 2,500mm O.C. MAX. AND WIRED OR STAPLED TO STANDARD HIGHWAY FENCE AT MIN. 3 LOCATIONS PER POST WITH #10 WIRE OR GALVANIZED STAPLES.
3. ATTACH FILTER FABRIC (TERRAFIX 270R OR APPROVED EQUAL) SECURLY TO UPSTREAM SIDE OF POSTS BY HEAVY DUTY STAPLES.
4. ENSURE FENCE IS LOCATED 1.0m MIN. BEYOND THE DRIP LINE OF TREES TO BE PRESERVED.
5. FENCING TO BE INSTALLED PRIOR TO CONSTRUCTION.
6. TREE PROTECTION ZONE SIGNAGE (min dimensions 300mm x 450mm) TO BE ATTACHED TO FENCE IN HIGHLY VISIBLE LOCATIONS

TOWN OF NEWMARKET MUNICIPAL STANDARD DRAWING	05/08	REV	1
TREE PROTECTION / HEAVY DUTY SILTATION CONTROL FENCE		NMS - 503.00	Newmarket

WATERMAINS

1. EXISTING WATER SERVICES TO BE DISCONNECTED AND PLUGGED AT MAIN. LOCATIONS TO BE CONFIRMED ON SITE.
2. WATERMAIN MATERIAL TO BE POLYVINYL CHLORIDE (PVC) C-900 CLASS 150 (DR 18) OR HIGH DENSITY POLYETHYLENE PER CSA 137.1 WHERE INDICATED. WATERMAIN SHALL INCLUDE #12 TRACER WIRE.
3. CAST IRON MECHANICAL JOINT FITTINGS MEETING AWWA SPECIFICATIONS C-907 AND CSA B138.2 SHALL BE USED ON PVC WATERMAIN 150 mm TO 300 mm DIAMETER.
4. A MINIMUM OF 0.5 m VERTICAL CLEARANCE BETWEEN THE WATERMAIN AND ALL UTILITIES MUST BE KEPT, WHILE MAINTAINING A MINIMUM DEPTH OF COVER.
5. WATERMAIN SHALL BE INSTALLED WITH A MINIMUM COVER OF 1.8 m.
6. PVC WATERMAIN BEDDING SHALL CONSIST OF CLEAR SAND, 150 mm BELOW AND 300 mm ABOVE THE (REFER TO OPSD 802.010).
7. MECHANICAL JOINT RESTRAINTS ARE TO BE INSTALLED ON BELL AND SPIGOT JOINTS FOR ALL WATERMAINS CONSTRUCTED IN FILL MATERIAL AND AT ALL TEES, HORIZONTAL BENDS, VERTICAL BENDS, HYDRANTS, END OF MAINS AND VALVES. CONCRETE THRUST BLOCKS ARE NOT PERMITTED UNLESS EXPRESSLY APPROVED BY THE TOWN.
8. FIRE HYDRANTS TO BE MUELLER 'CENTURY', AVK, CLOW MCAVITY OR APPROVED EQUIVALENT COMPRESSION TYPE COMPLETE THREE PORT HYDRANTS WITH 100 mm, 1/4 TURN STORZ NOZZLE FACING THE STREET. THE SIDE PORTS SHALL BE 65 mm DIAMETER THREADED. HYDRANT TEES TO BE ANCHOR STYLE. ALL HYDRANTS TO BE EQUIPPED WITH ANTI-TAMPERING DEVICES.
9. HYDRANTS ARE TO BE PAINTED FIRE ENGINE RED. THE STORZ CAP IS TO BE BLACK. STEAMER OR PUMPER PORT THREADED CONNECTIONS ARE TO BE PAINTED RED (SAME AS BARREL).
10. REFLECTIVE RINGS COLOUR CODED TO THE HYDRANT FLOW CLASSIFICATION WILL BE INSTALLED ON THE 65 mm PORTS BY THE TOWN.
11. HYDRANT FLANGE ELEVATIONS SHALL BE SET AT A GRADE OF 50 mm TO 150 mm ABOVE THE FINISHED GROUND ELEVATION.
12. A MINIMUM HORIZONTAL SEPARATION OF 2.5 m SHALL BE MAINTAINED BETWEEN THE WATERMAIN AND ANY SEWER.
13. UNLESS SPECIFIED OR APPROVED BY THE TOWN, ALL VALVES SHALL BE MUELLER RESILIENT WEDGE GATE VALVES OR APPROVED EQUIVALENT. VALVES SHALL HAVE A NON-RISING STEM AND A 50 mm SQUARE OPERATING NUT, OPENING COUNTER-CLOCKWISE.
14. ALL VALVES 300 mm IN DIAMETER AND LARGER SHALL BE INSTALLED INSIDE VALVE CHAMBERS. THESE VALVES SHALL HAVE FLANGED ENDS. A FLANGED TO PLAIN END SPACER AND A VICTAULIC COUPLER SHALL BE INSTALLED INSIDE THE CHAMBER TO PERMIT REMOVAL OF THE VALVE IF NECESSARY.
15. VALVES IN EXCESS OF 2.4 m IN DEPTH SHALL REQUIRE A VALVE STEM EXTENSION.
16. THE CONTRACTOR SHALL INFORM THE TOWN 48 HOURS IN ADVANCE PRIOR TO COMMENCING WORK ON ANY PART OF THE WATER SYSTEM.
17. ALL MECHANICAL FITTINGS SHALL HAVE ZINC ANODES AS PER TOWN STANDARDS.

EROSION AND SEDIMENT CONTROL

1. SEDIMENT FENCE TO BE INSTALL AS REQUIRED AS PER NMS 502.00 TO BE INSTALLED PRIOR TO STRIPPING TOPSOIL AND TO BE MAINTAINED UNTIL ALL CONSTRUCTION IS COMPLETE.
2. TEMPORARY CONSTRUCTION ACCESS MUD MAT SHALL BE PLACED IN THE LOCATION SHOWN ON THIS DRAWING. THE MUD MAT SHALL BE A MINIMUM OF 6.0 m IN WIDTH, A MINIMUM 30 m IN LENGTH AND CONSTRUCTED OF A MINIMUM OF 0.50 m DEPTH OF 50mm DIAMETER CLEAR STONE.
3. INSTALL SEDIMENT TRAP PER NMS 500.00 IN ALL NEW AND EXISTING CATCH BASINS WHICH MAY RECEIVE SEDIMENT LADEN STORM RUN-OFF AND MAINTAIN UNTIL SURFACES HAVE BEEN STABILIZED. SEDIMENT TRAPS TO BE PLACED IN ALL PROPOSED CATCHBASINS IMMEDIATELY FOLLOWING INSTALLATION.
4. ADDITIONAL EROSION AND SEDIMENT CONTROL MATERIALS (I.E. CONSTRUCTION FENCE, SILT FENCE, STRAW BALES, CLEAR STONE, ETC.) ARE TO BE KEPT ON SITE FOR EMERGENCIES AND REPAIRS.
5. EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE CONTINUOUSLY EVALUATED AND REPLACED/MAINTAINED AS REQUIRED TO ENSURE THEIR EFFECTIVENESS. THE ESC MEASURES ARE TO BE INSPECTED AFTER ANY RAIN OR SNOW MELT EVENT, AND ANY MAINTENANCE/REPAIR/REPLACEMENT REQUIRED IS TO BE DONE WITHIN 48 HOURS.
6. THE CONTRACTOR WILL UNDERTAKE MEASURES TO CONTROL DUST AND TO PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO THE PUBLIC RIGHT OF WAY DURING CONSTRUCTION.
7. SEDIMENT BAGS SHALL BE USED AT THE END OF DISCHARGE HOSES WHERE DISCHARGE FROM DEWATERING AREA HAS A SEDIMENT LOAD.
8. STABILIZATION IS REQUIRED OF ALL AREAS WHICH WILL REMAIN DISTURBED FOR MORE THAN 30 DAYS.
9. THE STANDARD DRAWINGS OF THE TOWN, PROVINCIAL STANDARDS AND SPECIFICATIONS (OPSS) AND THE ONTARIO PROVINCIAL STANDARD DRAWINGS (OPSD) CONSTITUTE PART OF THE PLANS OF THIS PROJECT.
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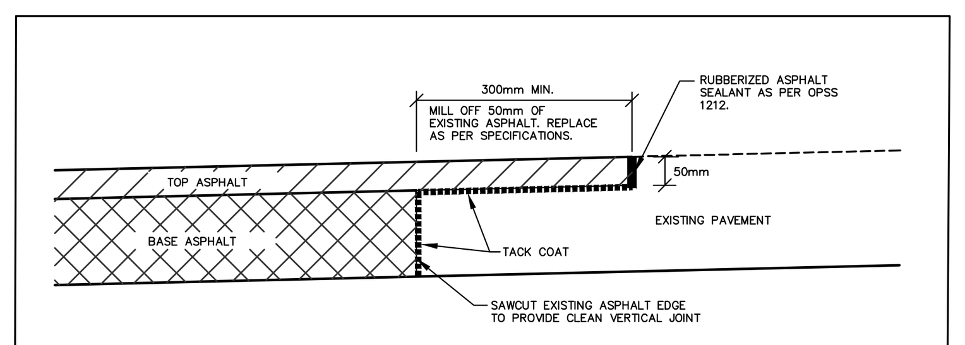
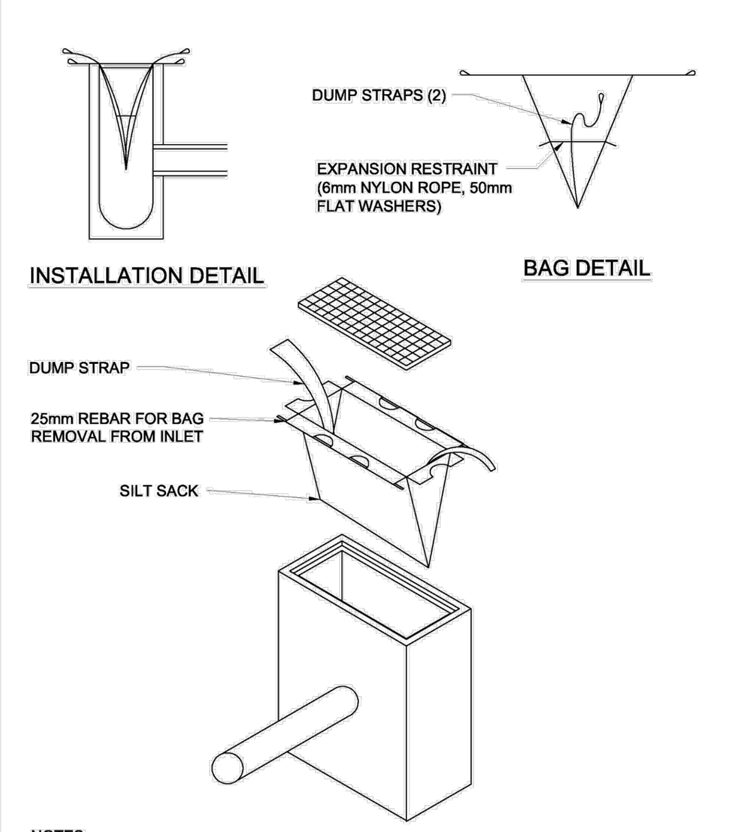
12. ALL CONTROL AND EROSION PROTECTION DEVICES ARE TO BE IN PLACE PRIOR TO THE COMMENCEMENT OF CONSTRUCTION AND SHALL REMAIN IN PLACE AND BE MAINTAINED BY THE CONTRACTOR UNTIL CONSTRUCTION IS COMPLETE AND PLANTINGS HAVE ESTABLISHED GROWTH, SUBJECT TO APPROVAL BY THE TOWN'S ENGINEER.



N.T.S. STEP JOINT DETAIL



NOTES:
- INSPECT AFTER EVERY MAJOR RAIN EVENT
- INSPECT EVERY THREE WEEKS MINIMUM
- SILTSACK SHOULD NEVER BE OVER HALF FULL

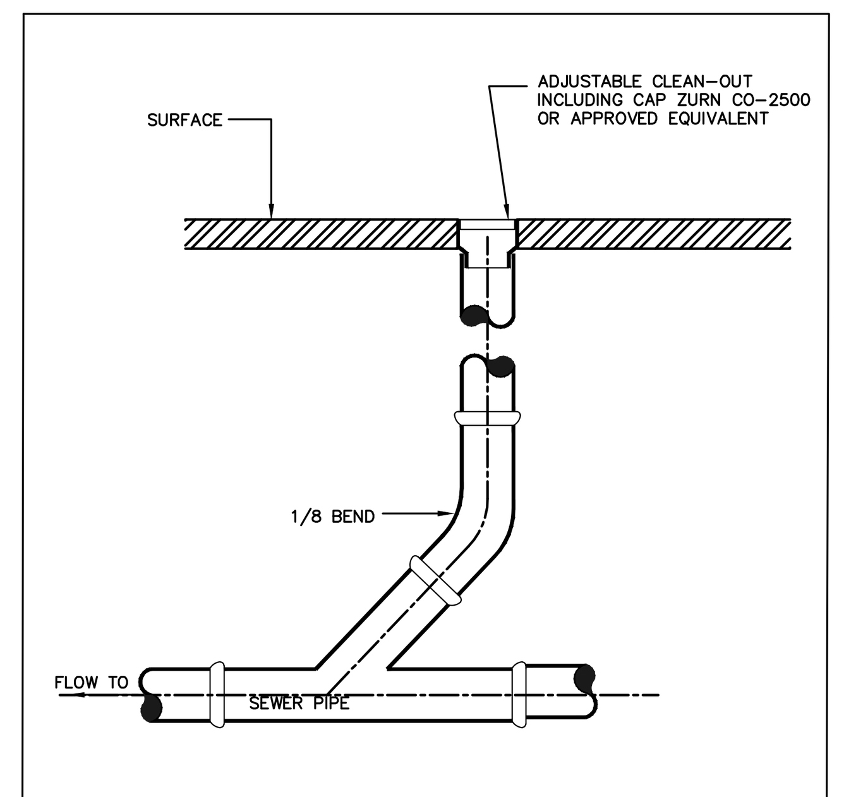
TOWN OF NEWMARKET MUNICIPAL STANDARD DRAWING	05/08	REV	1
SEDIMENT TRAP DETAIL FOR ROAD CATCHBASIN	NMS - 500.00	Newmarket	

ROADS

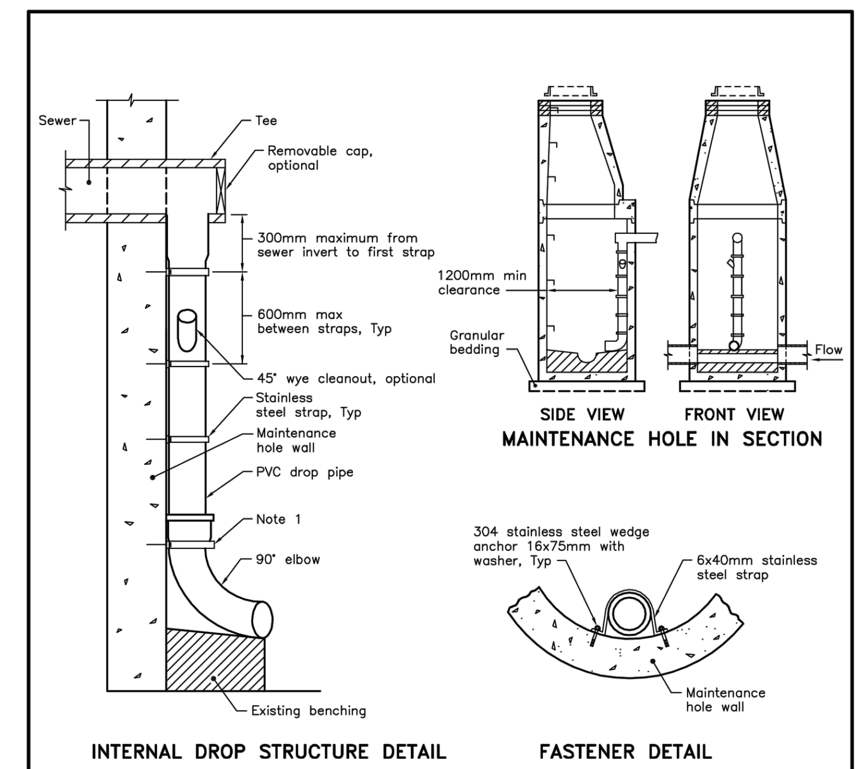
1. THE ROAD PAVEMENT FOR THE PARKING LOT SHALL CONSIST OF THE FOLLOWING IN CONFORMANCE WITH THE GEOTECHNICAL ENGINEER. COMPACTION REQUIREMENTS AS PER GEOTECHNICAL ENGINEER.

   LIGHT DUTY
   -40 mm HL3 OR SP 12.5 SURFACE COURSE ASPHALT
   -50 mm HL8 OR SP 19.0 BASE COURSE ASPHALT
   -150 mm OPSS GRANULAR 'A' OR 20mm CRUSHER RUN LIMESTONE (BASE COURSE)
   -225 mm OPSS GRANULAR 'B' OR 50mm CRUSHER RUN LIMESTONE (SUBBASE COURSE)

   HEAVY DUTY (FOR FIRE ROUTE)
   -40 mm HL3 OR SP 12.5 SURFACE COURSE ASPHALT
   -75 mm HL8 OR SP 19.0 BASE COURSE ASPHALT
   -150 mm OPSS GRANULAR 'A' OR 20mm CRUSHER RUN LIMESTONE (BASE COURSE)
   -300 mm OPSS GRANULAR 'B' OR 50mm CRUSHER RUN LIMESTONE (SUBBASE COURSE)
2. THE PAVEMENT FOR THE ASPHALT PEDESTRIAN PATHWAYS SHALL CONSIST OF THE FOLLOWING. COMPACTION REQUIREMENTS AS PER GEOTECHNICAL ENGINEER.
   -40 mm SP 9.5 SURFACE COURSE ASPHALT
   -60 mm SP 19.0 BASE COURSE ASPHALT
   -150 mm OPSS GRANULAR 'B' (BASE COURSE)
   -200 mm 50mm CRUSHER RUN LIMESTONE (SUBBASE COURSE)
3. WALKWAYS TO BE CONSTRUCTED WITH A COMPACTED BASE AS PER THE STANDARDS FOR SIDEWALKS AS SHOWN ON TOWN OF NEWMARKET STANDARD DRAWING NMSD-701.00
4. BOULEVARDS -150 mm TOPSOIL AND SOD
5. NATIVE SUBGRADE SHALL HAVE A CROSS-FALL OF 3% AND THE MATERIAL SHALL BE APPROVED BY A SOILS CONSULTANT.
6. NATIVE SUBGRADE TO BE COMPACTED TO MINIMUM 95% STANDARD PROCTOR MAXIMUM DRY DENSITY AND SHALL BE PROOF ROLLED OR AS PER GEOTECHNICAL ENGINEER RECOMMENDATIONS.
7. ROAD OCCUPANCY PERMIT IS REQUIRED FROM THE TOWN OR REGION PRIOR TO THE COMMENCEMENT OF ANY WORK IN THEIR RESPECTIVE RIGHT-OF-WAYS.
8. CONCRETE CURBS AND SIDEWALK SHALL BE 30 MPA AT 28 DAYS WITH 7% +/-1.5% AIR ENTRAINMENT OR AS PER GEOTECHNICAL ENGINEER RECOMMENDATIONS.
9. CONCRETE CURB AND GUTTER CONSTRUCTION SHALL COMPLY WITH OPSD 600.040 OR 600.070.
10. CONCRETE CURB SHALL COMPLY WITH OPSD 600.110.
11. CONCRETE CURB TERMINATION SHALL COMPLY WITH OPSD 608.101.
12. SIDEWALK CONSTRUCTION SHALL BE AS PER NEWMARKET STANDARD DRAWINGS NMSD-208.00 AND NMSD-209.00. ALL JOINTS TO BE SAW CUT.
13. NO MANHOLE LIDS WILL BE PERMITTED TO BE CONSTRUCTED WITHIN ANY PART OF A SIDEWALK/PATHWAYS.
14. SUB-DRAINS TO HAVE A FILTER FABRIC SOCK PULLED TO INSIDE FACE OF CATCHBASIN.

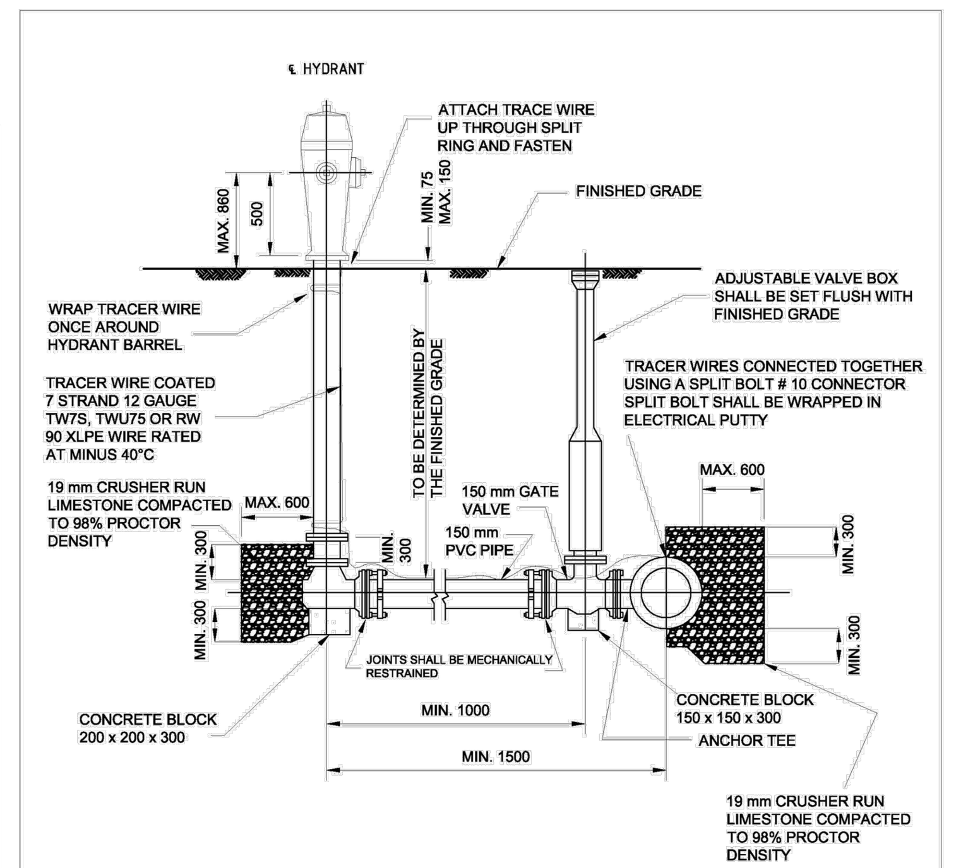


N.T.S. SEWER CLEAN OUT DETAIL



NOTES:
1 At the elbow, a stainless steel strap is required at bottom of bell.
A Internal drop structure shall be used on existing maintenance holes 1500mm diameter and larger with a minimum height of 600mm from the inlet pipe invert to the top of benching. The existing benching shall be modified as required.
B Drop pipe shall be one size smaller than the incoming sewer with a minimum 150mm diameter and maximum of 375mm diameter. A maximum of 300mm diameter for 1500mm maintenance holes.
C Straps shall not be placed within 150mm of any maintenance hole section joint.
D All dimensions are in millimetres unless otherwise shown.

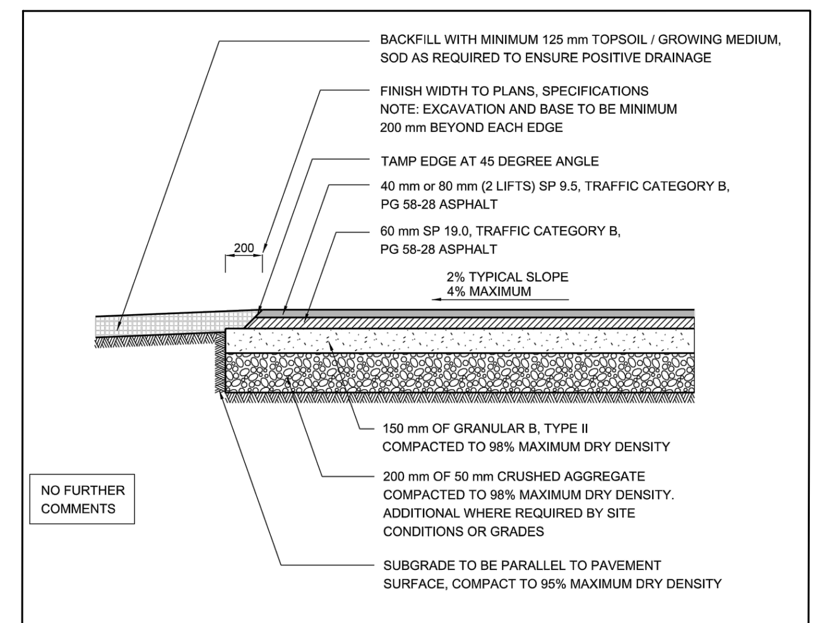
ONTARIO PROVINCIAL STANDARD DRAWING	Nov 2016	Rev 4
INTERNAL DROP STRUCTURE FOR EXISTING MAINTENANCE HOLES	OPSD 1003.030	



NOTES
1. JOINTS SHALL BE MECHANICALLY RESTRAINED.
2. HYDRANT EXTENSIONS SHALL BE INSTALLED AT BOTTOM OF BARREL.
3. ANCHOR TEE, VALVE & HYDRANT SHALL BE COMPLETELY BACKFILLED WITH 19mm CRUSHER RUN LIMESTONE.
4. TRACER WIRE COATED, 7 STRAND, 12 GAUGE TW75, TWU75 OR RW 90 XLPE WIRE RATED AT MINUS 40°C.
5. TRACER WIRE SHALL BE INSTALLED AT ALL HYDRANT LOCATIONS.
6. CATHODIC PROTECTION, BONDING CABLE AND TRACER WIRE SHALL BE AS PER NMSD - 309.00

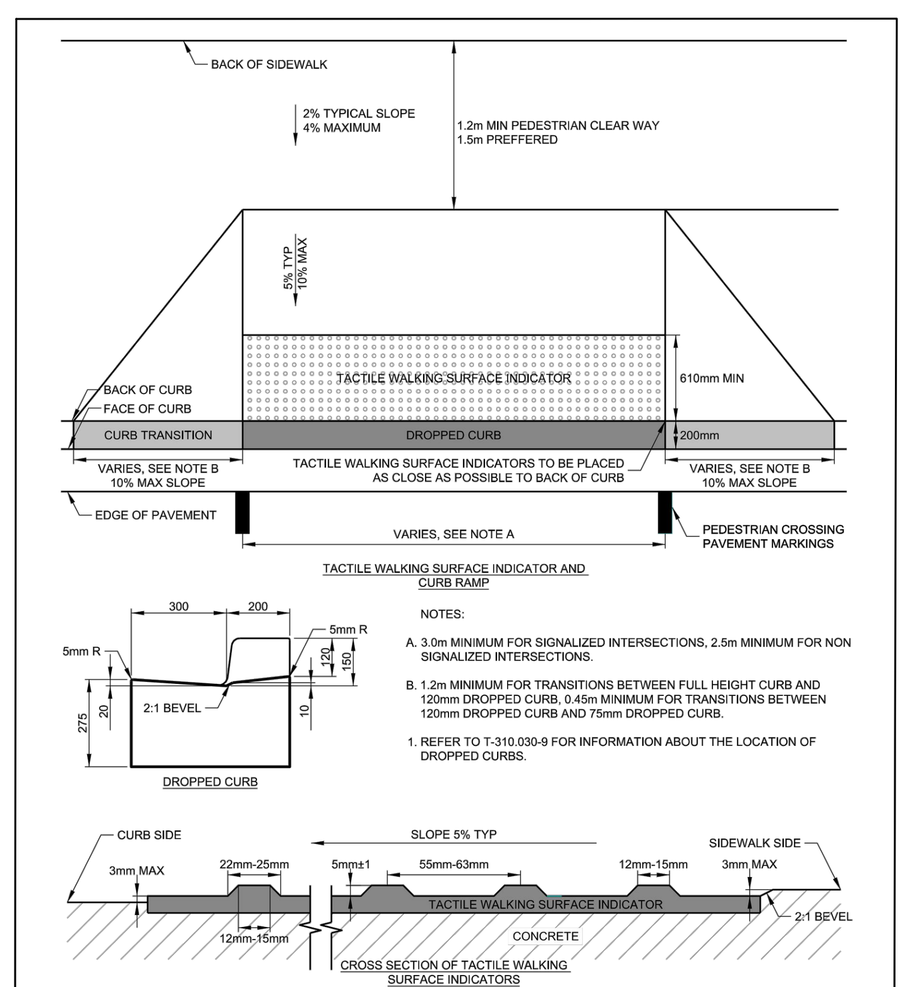
ALL DIMENSIONS IN MILLIMETERS EXCEPT WHERE NOTED.

TOWN OF NEWMARKET MUNICIPAL STANDARD DRAWING	08/08	REV	1
HYDRANT ASSEMBLY WITH MECHANICALLY RESTRAINED JOINTS		NMS - 306.00	Newmarket



TRAIL USE	ACTIVITIES	PAVEMENT THICKNESS
LOW / MEDIUM	BIKING, ROLLER BLADING, SCOOTER, WALKING AND JOGGING. INFREQUENT MAINTENANCE/SERVICE VEHICLES.	80 mm SP 9.5 B, PG 58-28(2 LIFTS) 150 mm GRANULAR B, TYPE II 200 mm 50 mm CRUSHED AGGREGATE
HIGH	FULL RANGE OF ACTIVITIES FROM WALKING TO BIKING. FULLSIZE VEHICLES, PICKUPS AND TRUCKS ARE EXPECTED IN REGULAR ACCESS.	40 mm SP 9.5 B, PG 58-28 60 mm SP 19.0 B, PG 58-28 150 mm GRANULAR B, TYPE II 200 mm 50 mm CRUSHED AGGREGATE

N.T.S. ASPHALT PAVING FOR MULTI-USE PATHWAYS

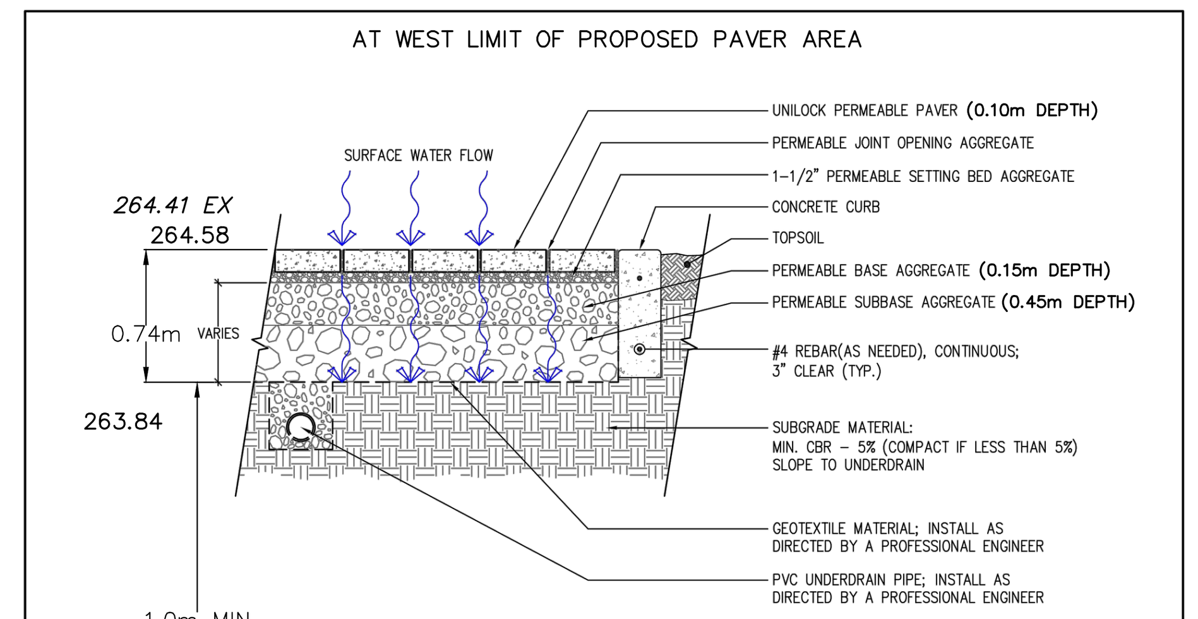


NOTES:
A. 3.0m MINIMUM FOR SIGNALIZED INTERSECTIONS, 2.5m MINIMUM FOR NON SIGNALIZED INTERSECTIONS.
B. 1.2m MINIMUM FOR TRANSITIONS BETWEEN FULL HEIGHT CURB AND 120mm DROPPED CURB, 0.45m MINIMUM FOR TRANSITIONS BETWEEN 120mm DROPPED CURB AND 75mm DROPPED CURB.
1. REFER TO T-310.030-9 FOR INFORMATION ABOUT THE LOCATION OF DROPPED CURBS.

All dimensions are in millimetres unless otherwise shown.

N.T.S. TACTILE WALKING SURFACE INDICATOR DETAIL

AT WEST LIMIT OF PROPOSED PAVER AREA



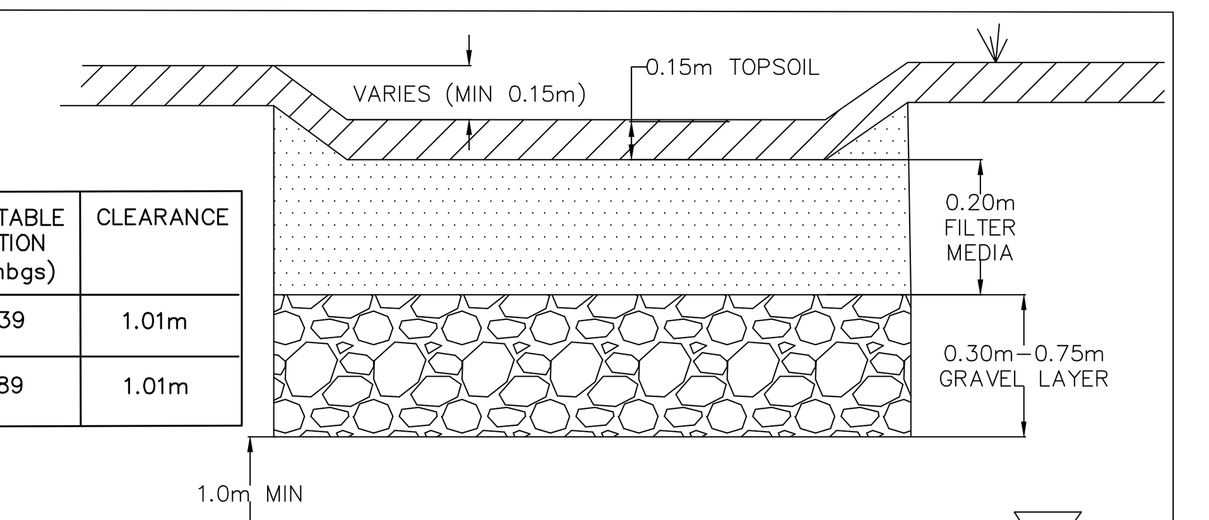
WATER TABLE: 262.80 (1.61 mbgs)

COMMERCIAL APPLICATION PERMEABLE PAVER DETAIL (MODIFIED)	NOTES:	CROSS SECTION
CREATED: OCTOBER 11, 2011 REVISED: JANUARY 30, 2014 FILE NAME: CS-COM-PERM-STRAIGHT-2014.DWG	This cross section is intended for preliminary design purposes only. Confirm site conditions and consult with a qualified design professional or installer prior to installation.	PERMEABLE PAVERS WITH STRAIGHT CURB UNILOCK DESIGNED TO CONNECT.

NOTE:
- SOAK-AWAY PIT NOT CONNECTED TO DOWNSTREAM STORM SEWER
- ONCE SATURATED, FLOWS WILL SPILL OVER AT MAXIMUM PONDING ELEVATION (VARIES)

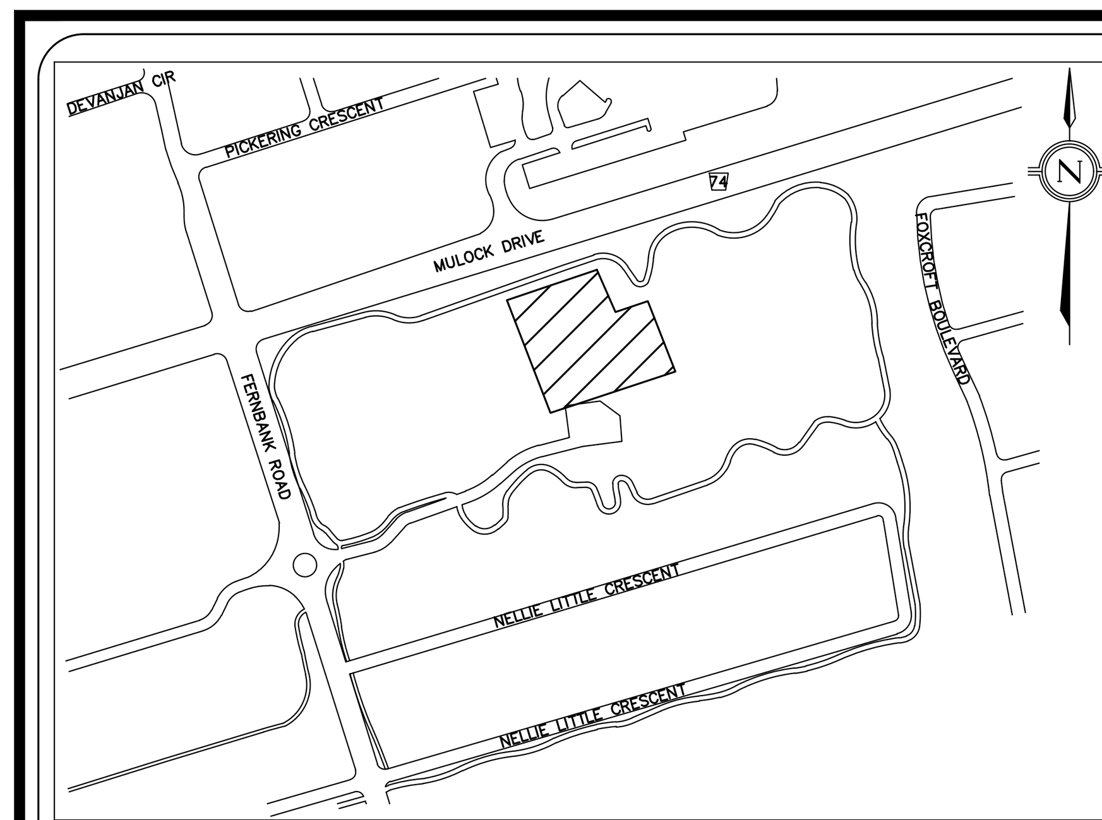
LOCATION	EX. ELEVATION	GRAVEL DEPTH	BOTTOM OF PIT	WATER TABLE ELEVATION (1.61 mbgs)	CLEARANCE
NORTH PIT	265.00	0.30m	264.40	263.39	1.01m
SOUTH PIT	263.50	0.75m	263.15	261.89	1.01m

MATERIAL	SPECIFICATION
FILTER MEDIA COMPOSITION & TESTING	FILTER SOIL MIXTURES TO CONTAIN – 85–88% SAND – 8–12% SOIL FINES – 3–5% ORGANIC MATTER IN FORM OF LEAF COMPOST. – THE MEDIA SHOULD HAVE AN INFILTRATION RATE OF 25–50mm/hr.
PLANTING/ GRASS LAYER	TOPSOIL
GRAVEL LAYER	GRANULAR TO BE COMPRISED OF THE FOLLOWING: – GRANULAR 'A', 50mmø CLEARSTONE – DOUBLE WASHED, FREE OF ALL SOIL FINES



WATER TABLE: VARIES (REFER TO CHART)

SOAK-AWAY PIT DETAIL
N.T.S.



KEY PLAN

LEGEND

1. MEASUREMENTS IN METRES AND/OR MILLIMETRES UNLESS OTHERWISE SHOWN.
2. CONTRACTOR TO BE RESPONSIBLE FOR LOCATION OF ALL EXISTING UNDERGROUND & OVERHEAD UTILITIES. VARIOUS UTILITIES CONCERNED TO BE GIVEN REQUIRED ADVANCE NOTICE PRIOR TO ANY DIGGING, FOR STAKE OUT. THE CONSULTANT ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF THE LOCATION OF EXISTING UTILITIES AS INDICATED ON THIS DRAWING.
3. THE INFORMATION CONTAINED ON THIS PLAN PERTAINS TO THE INSTALLATION OF NEW MUNICIPAL SERVICING ONLY AND SHALL NOT BE RELIED UPON BY A THIRD PARTY FOR ANY OTHER DESIGN AND/OR CONSTRUCTION RELATED PURPOSES (INCLUDING PUBLIC & PRIVATE SERVICING/UTILITY LOCATES, SHORING DESIGN AND FIELD LAYOUT, UTILITY DESIGN AND CONSTRUCTION, AND ALL OTHER DESIGN AND CONSTRUCTION RELATED ACTIVITIES). ALL THIRD PARTIES ARE RESPONSIBLE FOR OBTAINING THEIR OWN LOCATES FOR ANY PUBLICLY OR PRIVATELY HELD INFRASTRUCTURE WITHIN OR ADJACENT TO THE SUBJECT DEVELOPMENT.

LEGAL & TOPOGRAPHY
PROVIDED BY: LLOYD AND PURCELL
ONTARIO LAND SURVEYORS

BENCHMARK
ELEVATIONS SHOWN HEREON ARE GEODETIC (CGVD-1928:1978) AND ARE REFERRED TO THE D.H.O. BENCHMARK N°497-69 HAVING A PUBLISHED ELEVATION OF 264.573 METRES.

TOPOGRAPHIC OBSERVATIONS SHOWN HEREON COMPLETED ON AUGUST 19, 2019.

No.	REVISIONS/ISSUED	DATE	BY	TOWN
5.	ISSUED FOR SITE PLAN APPLICATION 4TH SUBMISSION	DEC 14/2020	CB	
4.	ISSUED FOR COORDINATION	NOV 20/2020	CB	
3.	ISSUED FOR SITE PLAN APPLICATION 3RD SUBMISSION	JUN 08/2020	CB	
2.	ISSUED FOR SITE PLAN APPLICATION 2ND SUBMISSION	MAR 05/2020	CB	
1.	ISSUED FOR SITE PLAN APPLICATION 1ST SUBMISSION	OCT 11/2019	CB	

counterpoint ENGINEERING
COUNTERPOINT ENGINEERING INC.
8395 Jane St., Suite 100, Vaughan, ON L4K 5Y2 Phone 905.326.1404 Fax 905.326.1405

LICENSED PROFESSIONAL ENGINEER C.A. BUSH 100183880 DEC 14/2020 PROVINCE OF ONTARIO
ENGINEER'S STAMP

APPLICANT:
DENISON CHILD CARE CENTRE
900 MULOCK DRIVE/ 605 FERNBANK ROAD
NEWMARKET, ON

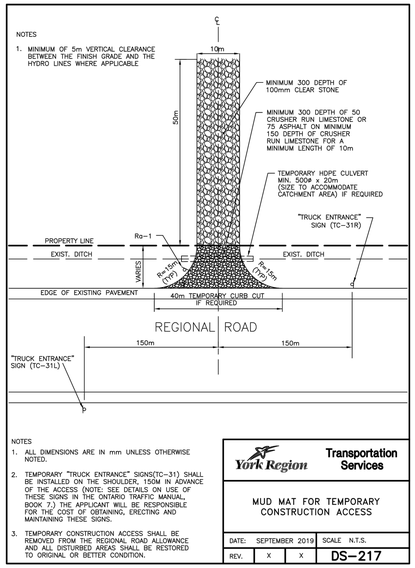
SITE LOCATION:
DENISON CHILD CARE CENTRE
900 MULOCK DRIVE/ 605 FERNBANK ROAD
NEWMARKET, ON

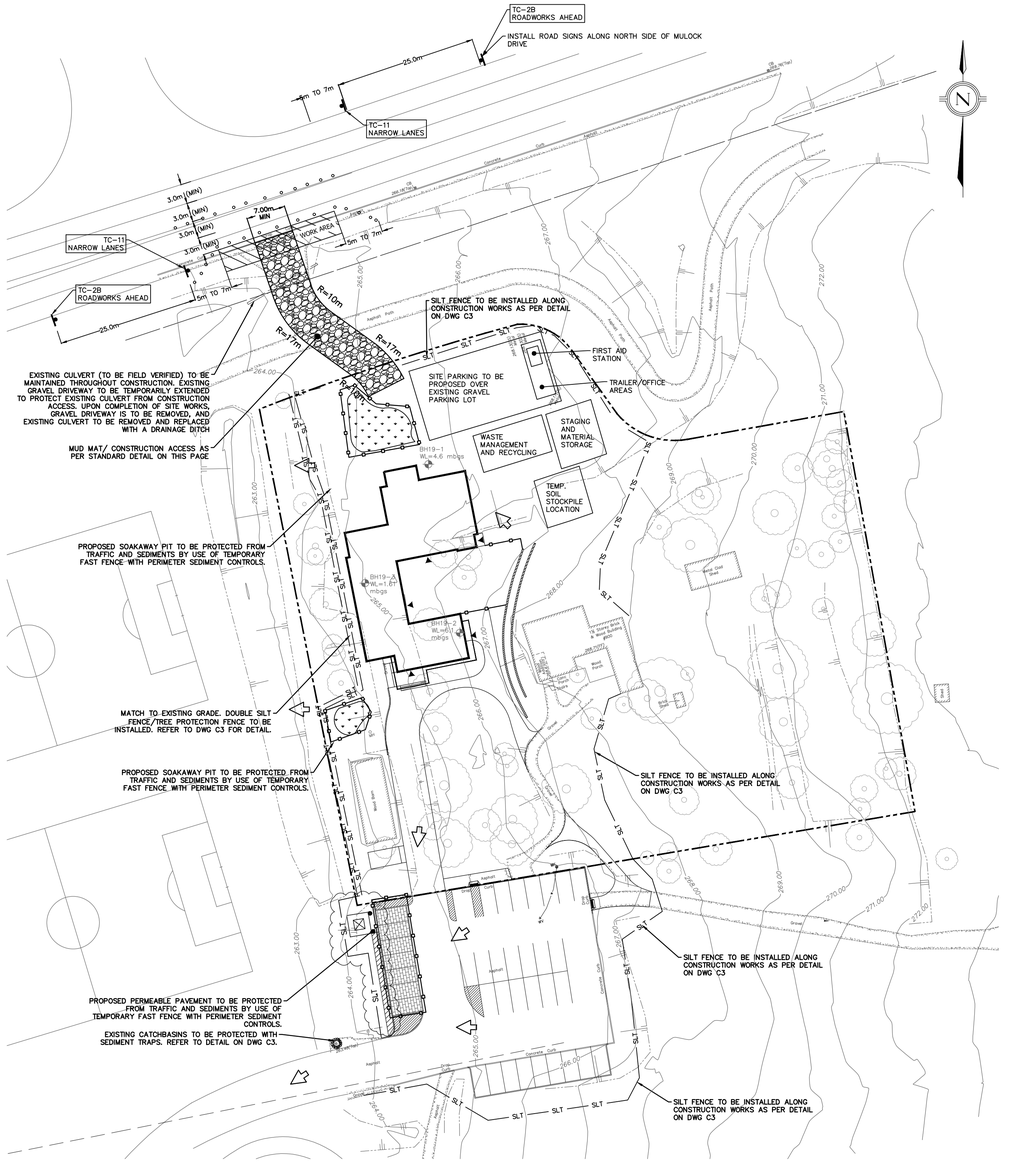
SP.19.N.0254

NOTES & DETAILS

DESIGNED BY: ES	CHECKED BY: CB	DATE: OCTOBER 2019
DRAWING BY: ES	CHECKED BY: CB	PROJECT NO. 19055
SWM BY:	CHECKED BY:	
SCALE: N.T.S		DRAWING NO. C3

REGION FILE No.:





CONSTRUCTION MANAGEMENT

PRE-CONSTRUCTION MEETING IS REQUIRED PRIOR TO COMMENCEMENT OF WORKS. OWNER TO ARRANGE WITH BRANDON EWART AT THE TOWN OF NEWMARKET. NO WORK SHALL COMMENT UNTIL PRE-CONSTRUCTION MEETING IS HELD.

ANTICIPATED CONSTRUCTION START DATE: FALL 2020 . CONSTRUCTION SCHEDULE TO BE CONFIRMED FOLLOWING AWARD OF GENERAL CONTRACTOR.

WORKING HOURS DURING CONSTRUCTION SHALL BE WITHIN THE HOURS OF 7:00 A.M. TO 7:00 P.M. MONDAY TO FRIDAY AND 9:00 A.M. TO 7:00 P.M. ON SATURDAY, SUNDAY AND HOLIDAYS.

THE OPERATION OF ANY CONSTRUCTION EQUIPMENT OR THE CONDUCT OF ANY ALTERATION OR REPAIR OF ANY BUILDING SHALL NOT BE OPERATED BETWEEN THE HOURS OF 8:00 P.M. TO 7:00 A.M. (9:00 A.M. ON SATURDAYS, SUNDAYS AND HOLIDAYS), IN ACCORDANCE WITH THE TOWN OF NEWMARKET BY-LAW NUMBER 2004-94 ("NOISE CONTROL BY-LAW").

LOADING, UNLOADING, PACKING, DELIVERING OR OTHERWISE HANDLING ANY CONTAINER, PRODUCT OR MATERIAL UNLESS NECESSARY FOR THE MAINTENANCE OF ESSENTIAL SERVICES SHALL NOT TAKE PLACE BETWEEN THE HOURS OF9:00 P.M. TO 7:00 A.M. (TO 9:00 A.M. ON SATURDAYS, SUNDAYS AND HOLIDAYS), IN ACCORDANCE WITH THE TOWN OF NEWMARKET BY-LAW NUMBER 2004-94 ("NOISE CONTROL BY-LAW").

PROVIDE AND MAINTAIN ACCESS TO FIRE HYDRANTS, FREE OF OBSTRUCTIONS.

CONSTRUCT AND MAINTAIN TEMPORARY ALL WEATHER ROADS ACCESSING PUBLIC THROROUGHFARES TO SERVE BUILDING PAD AND CONSTRUCTION STAGING AREAS.

PROVIDE TEMPORARY PARKING AREAS TO ACCOMMODATE CONSTRUCTION PERSONNEL.

ALL SIGNING FOR CONSTRUCTION VEHICLE MOVEMENTS MUST CONFORM TO THE STANDARDS OF THE MUNICIPALITY IN WHICH THE PLACE OF WORK IS LOCATED, AND REQUIREMENTS AND PROVINCIAL TRANSPORTATION AUTHORITY REQUIREMENTS.

THROUGHOUT THE PROJECT DURATION, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROTECT THE SAFETY AND CONVENIENCE OF THE TRAVELLING PUBLIC.

MAINTAIN TRAFFIC FLOW IN ACCORDANCE WITH ALL LOCAL AND PROVINCIAL REGULATIONS AND ANY APPLICABLE MUNICIPAL BY-LAWS AT ALL TIMES UNLESS OTHERWISE STIPULATED. OBTAIN ALL REQUIRED PERMITS, INCLUDING BUT NOT LIMITED TO LANE CLOSURES OR RESTRICTIONS, LOADING AND UNLOADING OF MATERIALS, DETOURS, SIGNAGE REQUIREMENTS AND NOISE RESTRICTIONS.

SUPPLY, ERECT, MAINTAIN AND REMOVE ALL TRAFFIC WARNING AND GUIDANCE DEVICES NECESSARY FOR THE SAFE MOVEMENT OF BOTH VEHICULAR AND PEDESTRIAN TRAFFIC. THESE DEVICES SHALL INCLUDE, BUT NOT BE LIMITED TO, DETOUR ARROWS, DELINEATORS, FLASHERS, FENCING, CONES, NEW JERSEY BARRIERS, BARRICADES, FLAG PERSONS, PEDESTRIAN WALKWAYS, LINE PAINTING, SCREENING AND TEMPORARY SPEED BUMPS.

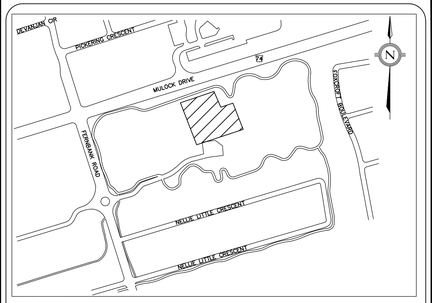
UNDER NO CIRCUMSTANCES WILL ACCESS TO ANY LOCAL BUSINESS, RESIDENCE OR EMERGENCY SERVICE BE INTERRUPTED.

ALL NECESSARY ROAD OCCUPANCY PERMITS TO BE OBTAINED BY THE CONTRACTOR PRIOR TO ANY WORK OUTSIDE OF THE PRIVATE SITE BOUNDARIES. PERMITS TO BE OBTAINED FROM YORK REGION AND THE TOWN OF NEWMARKET IF NECESSARY.

CONSTRUCTION TRAFFIC SHALL USE THE REGIONAL ROAD NETWORK WHEN EVER POSSIBLE AS PER TOWN BY-LAW 2011-24.

NO LOADING, UNLOADING, OR VEHICLE QUEUING, PARKING ETC. IS PERMITTED ON TOWN PROPERTY.

TOWN ROADS SHALL BE LEFT IN A BROOM SWEPT CONDITION AT THE END OF EACH DAY.



KEY PLAN

LEGEND

- 260.00 — EXISTING CONTOUR
- EMERGENCY OVERLAND FLOW
- SLT — TREE PROTECTION FENCE/SILT FENCE
- FENCE C/W PERIMETER SEDIMENT CONTROLS
- SEDIMENT TRAP
- CONSTRUCTION ACCESS
- TRAFFIC CONE
- TRAFFIC SIGN
- LIMIT OF LEASED AREA

1. MEASUREMENTS IN METRES AND/OR MILLIMETRES UNLESS OTHERWISE SHOWN.
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LEGAL & TOPOGRAPHY
PROVIDED BY: LLOYD AND PURCELL
ONTARIO LAND SURVEYORS

BENCHMARK
ELEVATIONS SHOWN HEREON ARE GEODETIC (CGVD-1928:1978) AND ARE REFERRED TO THE D.H.O. BENCHMARK N°497-69 HAVING A PUBLISHED ELEVATION OF 264.573 METRES.

TOPOGRAPHIC OBSERVATIONS SHOWN HEREON COMPLETED ON AUGUST 19, 2019.

No.	REVISIONS/ISSUED	DATE	BY	TOWN
5.	ISSUED FOR SITE PLAN APPLICATION 4TH SUBMISSION	DEC 14/2020	CB	
4.	ISSUED FOR COORDINATION	NOV 20/2020	CB	
3.	ISSUED FOR SITE PLAN APPLICATION 3RD SUBMISSION	JUN 08/2020	CB	
2.	ISSUED FOR SITE PLAN APPLICATION 2ND SUBMISSION	MAR 05/2020	CB	
1.	ISSUED FOR SITE PLAN APPLICATION 1ST SUBMISSION	OCT 11/2019	CB	

counterpoint ENGINEERING
COUNTERPOINT ENGINEERING INC.
8395 Jane St., Suite 100, Vaughan, ON L4K 5Y2 Phone 905.326.1404 Fax 905.326.1405

LICENSED PROFESSIONAL ENGINEER
C. A. BUSH
100183880
DEC 14/2020
PROVINCE OF ONTARIO
ENGINEER'S STAMP

APPLICANT:
DENISON CHILD CARE CENTRE
900 MULOCK DRIVE/ 605 FERNBANK ROAD
NEWMARKET, ON

SITE LOCATION:
DENISON CHILD CARE CENTRE
900 MULOCK DRIVE/ 605 FERNBANK ROAD
NEWMARKET, ON

SP.19.N.0254

TRAFFIC MANAGEMENT, CONSTRUCTION MANAGEMENT, EROSION AND SEDIMENT CONTROL PLAN

DESIGNED BY: ES	CHECKED BY: CB	DATE: OCTOBER 2019
DRAWING BY: ES	CHECKED BY: CB	PROJECT NO. 19055
SWM BY:	CHECKED BY:	
SCALE:		DRAWING NO. C4

REGION FILE No.:

GENERAL LEGEND

1. PROPOSED PAD MOUNTED TRANSFORMER LOCATION.
2. PROPOSED INCOMING LOCATION OF PRIMARY DUCTBANK. COORDINATE WITH ALECTRA PRIOR TO ROUGH-IN FOR EXACT ROUTING.
3. PROPOSED SECONDARY DUCTBANK.
4. TRANSFORMER GROUNDING GRID. REFER TO DETAIL #3 ON DRAWING E1.1.
5. BOLLARDS (TYPICAL OF 4)
6. COMMUNICATION DUCTBANK. COORDINATE ON SITE FOR FINAL TERMINATION OF COMMUNICATION DUCBANK.
7. LOCATION OF ELECTRICAL ROOM.
8. DIRECT BURIED FEEDER FOR POWER TO ELECTRICAL SERVICE IN EXISTING HERITAGE HOME. COORDINATE ON SITE FOR EXACT LOCATION OF ELECTRICAL EQUIPMENT IN HERITAGE HOME. REFER TO FLOOR PLAN FOR DETAILS.
9. DIRECT BURIED COMMUNICATION CONDUIT TO COMMUNICATION PLYWOOD BACKBOARD IN EXISTING HERITAGE HOME. COORDINATE ON SITE FOR EXACT LOCATION OF PLYWOOD BACKBOARD IN HERITAGE HOME. REFER TO FLOOR PLAN FOR DETAILS.
10. DIRECT BURIED CONDUIT FOR FIRE ALARM TROUBLE SIGNAL FROM DAYCARE FIRE ALARM PANEL TO HERITAGE HOME FIRE ALARM PANEL. COORDINATE ON SITE FOR EXACT LOCATION OF FIRE ALARM PANELS. REFER TO FLOOR PLANS FOR DETAILS.
11. APPROXIMATE LOCATION OF EXISTING NEWMARKET HYDRO SWITCHGEAR. COORDINATE ON SITE FOR EXACT LOCATION PRIOR TO ROUGH-IN OF PRIMARY DUCTBANK.

APPLICATION NUMBER:

APPLICATION NUMBER:

LICENSED PROFESSIONAL ENGINEER
25/01/2021
F. SANTIA
PROVINCE OF ONTARIO

CERTIFIED ENGINEERING TECHNOLOGIST
CAGETT
ONTARIO
GABRIEL G. MOBILIO
Nº 57663

REVISIONS

11			
10			
9			
8			
7			
6			
5			
4			
3			
2			
1	ADDENDUM #E1	2020.11.18	FC

SUBMITTALS

10.	RE-ISSUED FOR SPA	2021.01.25	FC
9.	RE-ISSUED FOR SPA	2020.12.01	FC
8.	RE-ISSUED FOR TENDER	2020.11.11	FC
7.	ISSUED FOR PERMIT REVISIONS	2020.11.05	FC
6.	RE-ISSUED FOR PERMIT	2020.08.12	FC
5.	RE-ISSUED FOR PERMIT	2020.06.26	FC
4.	ISSUED TO ESA	2020.06.01	FC
3.	ISSUED FOR TENDER	2020.05.29	FC
2.	ISSUED FOR PERMIT	2020.04.17	FC
1.	ISSUED FOR COORDINATION	2020.04.09	FC
No.	Description	YYYY.MM.DD	By

NORTH: TRUE NORTH, PROJECT NORTH

STAMP:

e-Lumen International Inc.
CONSULTING ENGINEERS
LIGHTING - ELECTRICAL
595 CITYVIEW BLVD, SUITE 204/205
VAUGHAN, ONTARIO, CANADA L4H 3W7
Tel:(905)417-6881 Fax:(905)417-6882
www.e-lumen.ca

219031 - DENISON DAYCARE CENTRE

900 MULOCK DRIVE / 605 FERNBANK ROAD, NEWMARKET, ONTARIO

ELECTRICAL SITE PLAN

2020.02.19

Scale	Drawn By	Checked By
1:500	FC	FC

File Number: 19-247

E1.0

AINLEY PROJECT No. 220059
FINAL SUBMISSION

TOWN OF NEWMARKET

STICKWOOD WALKER WATERMAIN REPLACEMENT

CONTRACT OR TENDER NO.
FINAL SUBMISSION

SITE LOCATION PLAN
N.T.S.

DRAWING LIST

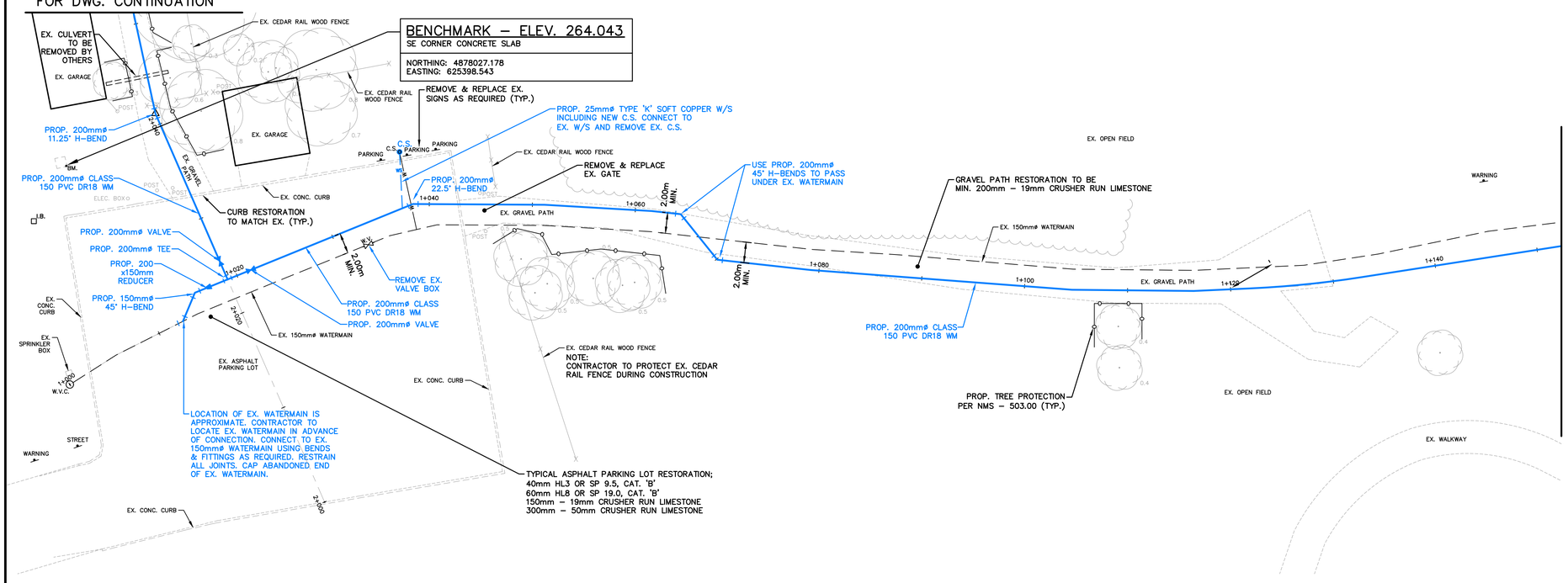
DWG. No.	TITLE	
COVER & INDEX		
PP1	PLAN & PROFILE	STA. 1+000 TO STA. 1+150
PP2	PLAN & PROFILE	STA. 1+150 TO STA. 1+250
PP3	PLAN & PROFILE	STA. 2+000 TO STA. 2+070
DET1	GENERAL NOTES & LEGEND	
DET2	TOWN OF NEWMARKET STANDARD DRAWING DETAILS & OPSD DETAILS	

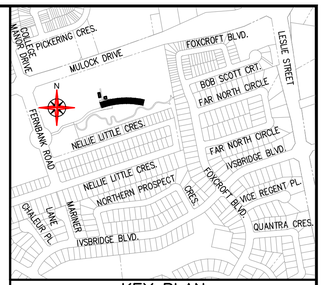
Ainley GROUP CONSULTING ENGINEERS PLANNERS

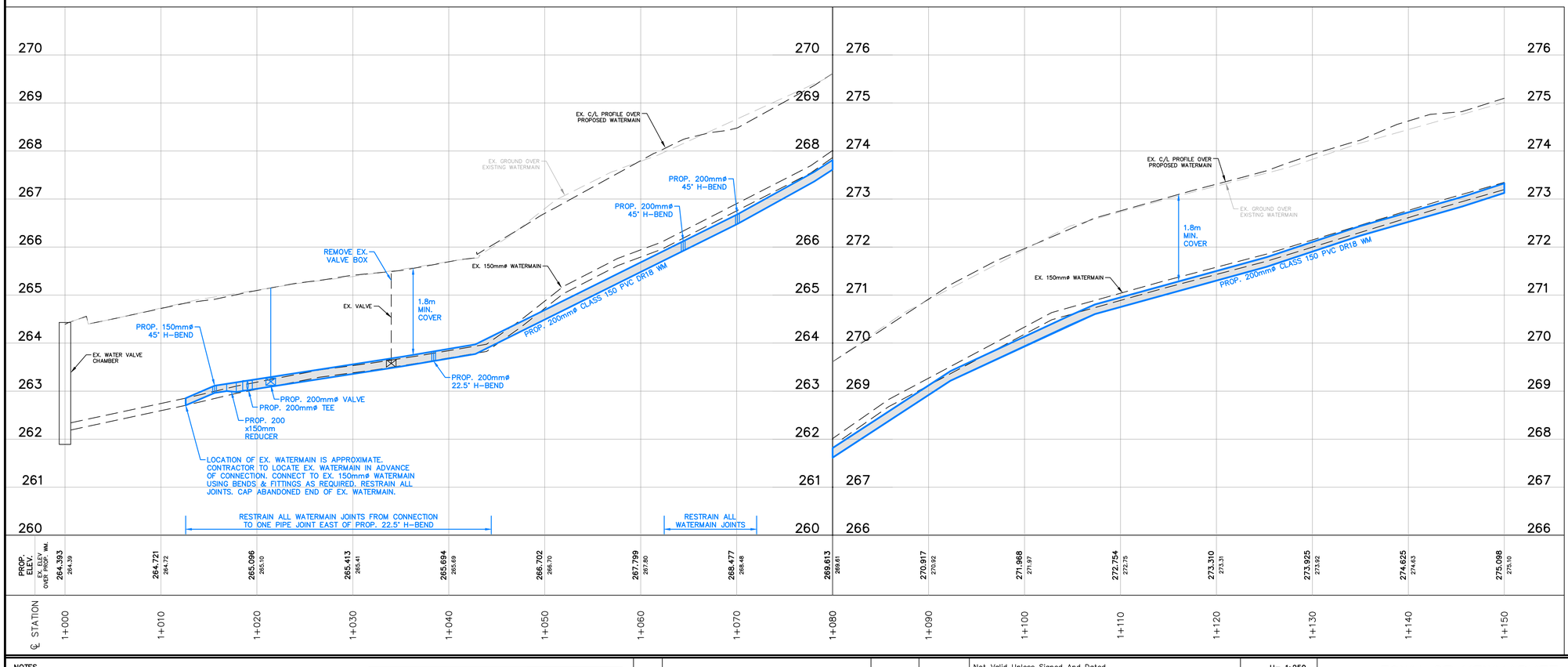
AINLEY PROJECT No. 220059

Newmarket

REFER TO DWG 220059-PP3
FOR DWG. CONTINUATION







NOTES

Plotted by: RWECKERLE on October 16, 2020 at 3:38pm
File: C:\Users\rweckerle\AppData\Local\Temp\AcPublish_62604\220059-Oplan.dwg Layout: PP1

CONTRACT DRAWINGS
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NO.	REVISIONS	DATE	INITIAL
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P2	2ND SUBMISSION	SEP/20	T.F.H.
P1	1ST SUBMISSION	SEP/20	T.F.H.

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LICENSED PROFESSIONAL ENGINEER
C.F. HOUGH
100107685
Oct. 16, 2020
PROVINCE OF ONTARIO

SCALE:	H= 1:250 V= 1:50
DESIGN:	T.F.H.
DRAWN:	R.A.W.
CHECKED:	C.F.H.
DATE:	SEPT. 2020

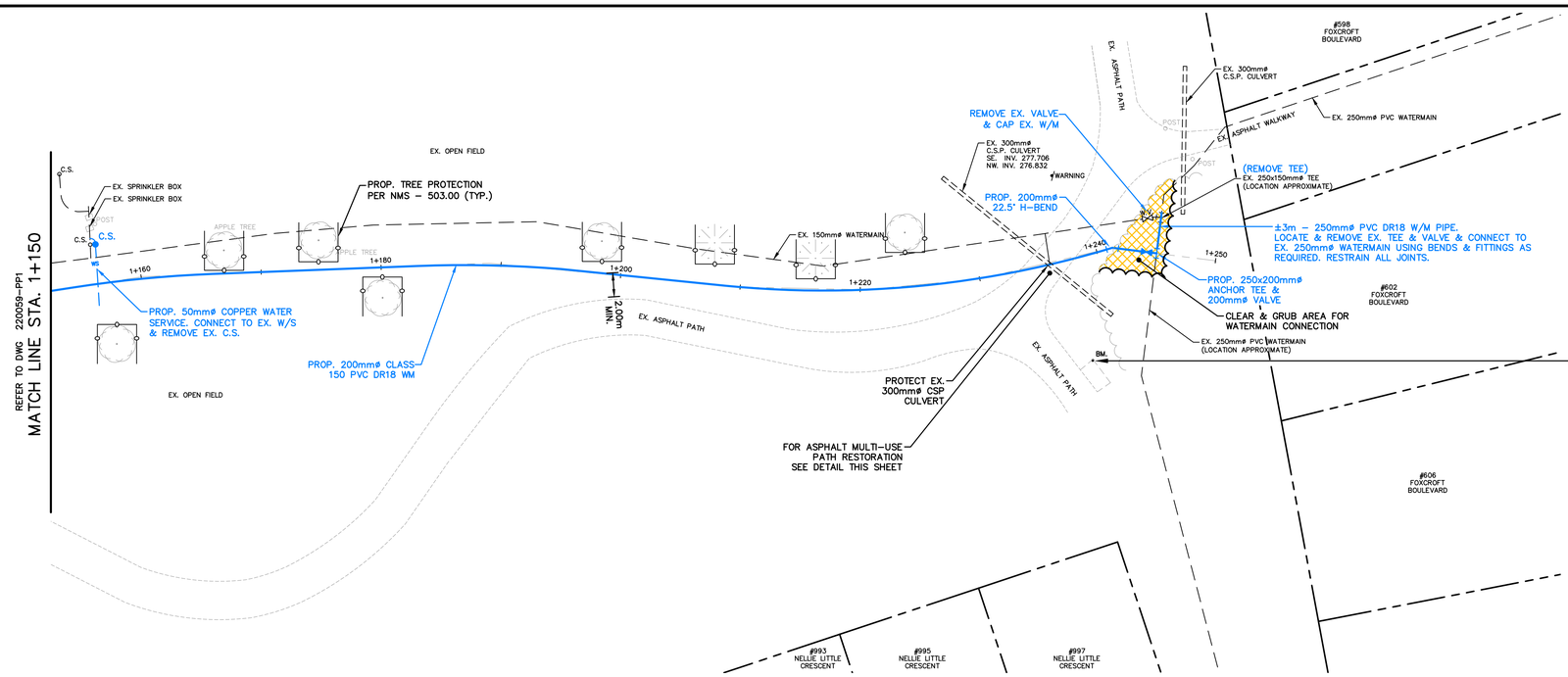
TOWN OF NEWMARKET
STICKWOOD WALKER WATERMAIN REPLACEMENT
NEWMARKET, ON

PLAN AND PROFILE PROPOSED WATERMAIN
STA. 1+000 TO STA. 1+150

Ainley GROUP
CONSULTING ENGINEERS PLANNERS

CONTRACT No.

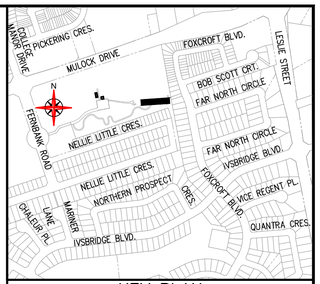
DWG. No. 220059-PP1



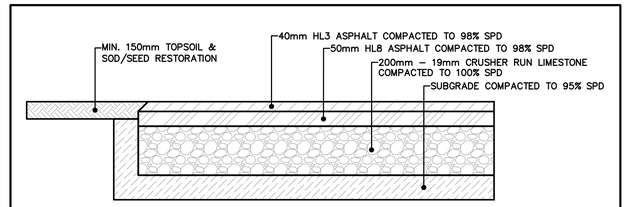
BENCHMARK - ELEV. 278.681

NE CORNER CONCRETE SLAB

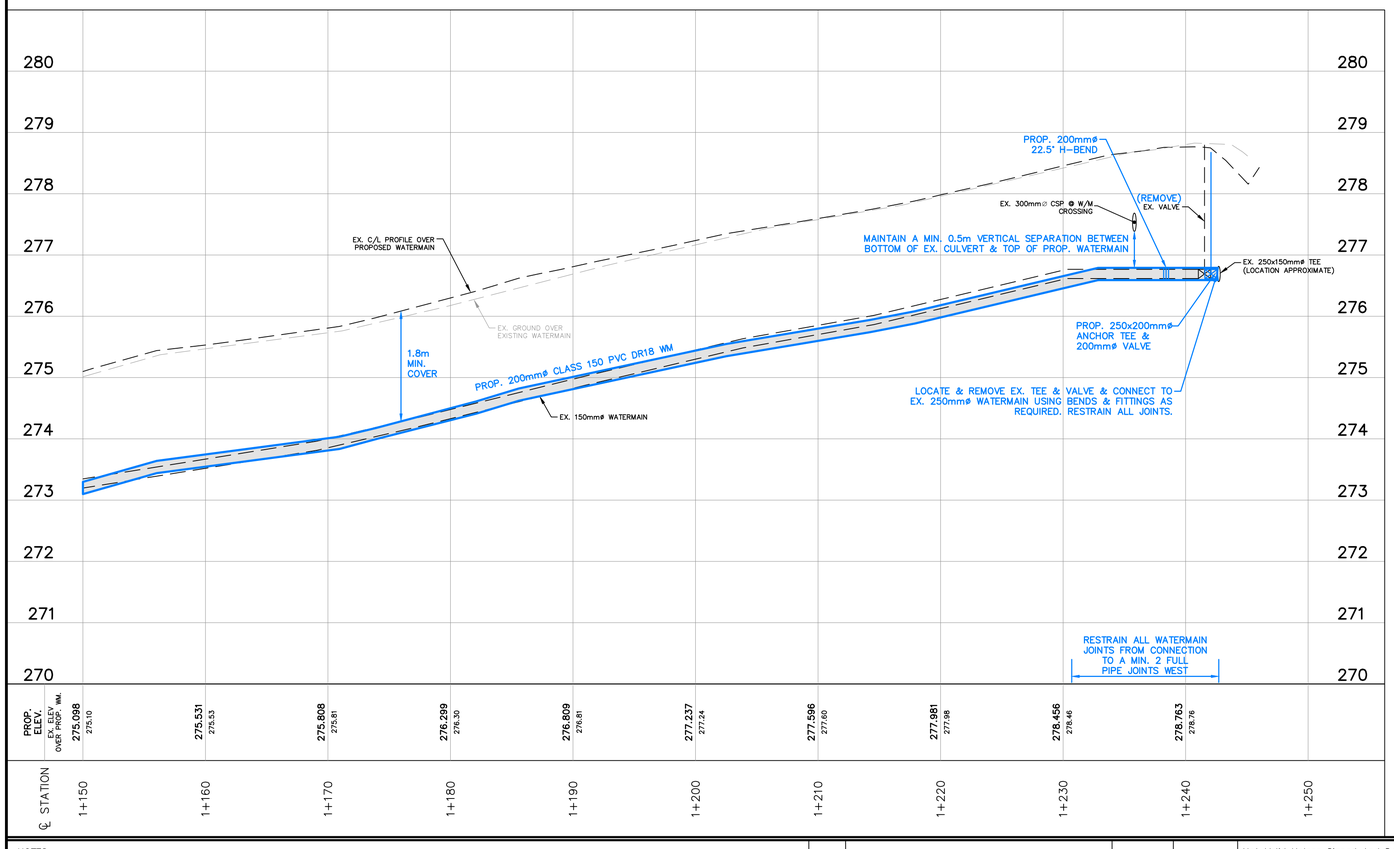
NORTHING: 4878013.617
EASTING: 625630.311



KEY PLAN
NOT TO SCALE



TYPICAL ASPHALT MULTI-USE PATH RESTORATION
SCALE - NOT TO SCALE



NOTES

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LICENSED PROFESSIONAL ENGINEER
C.F. HOUGH
100107685
Oct 16, 20
PROVINCE OF ONTARIO

SCALE:	H= 1:250 V= 1:50
DESIGN:	T.F.H.
DRAWN:	R.A.W.
CHECKED:	C.F.H.
DATE:	SEPT. 2020

TOWN OF NEWMARKET
STICKWOOD WALKER WATERMAIN REPLACEMENT
NEWMARKET, ON

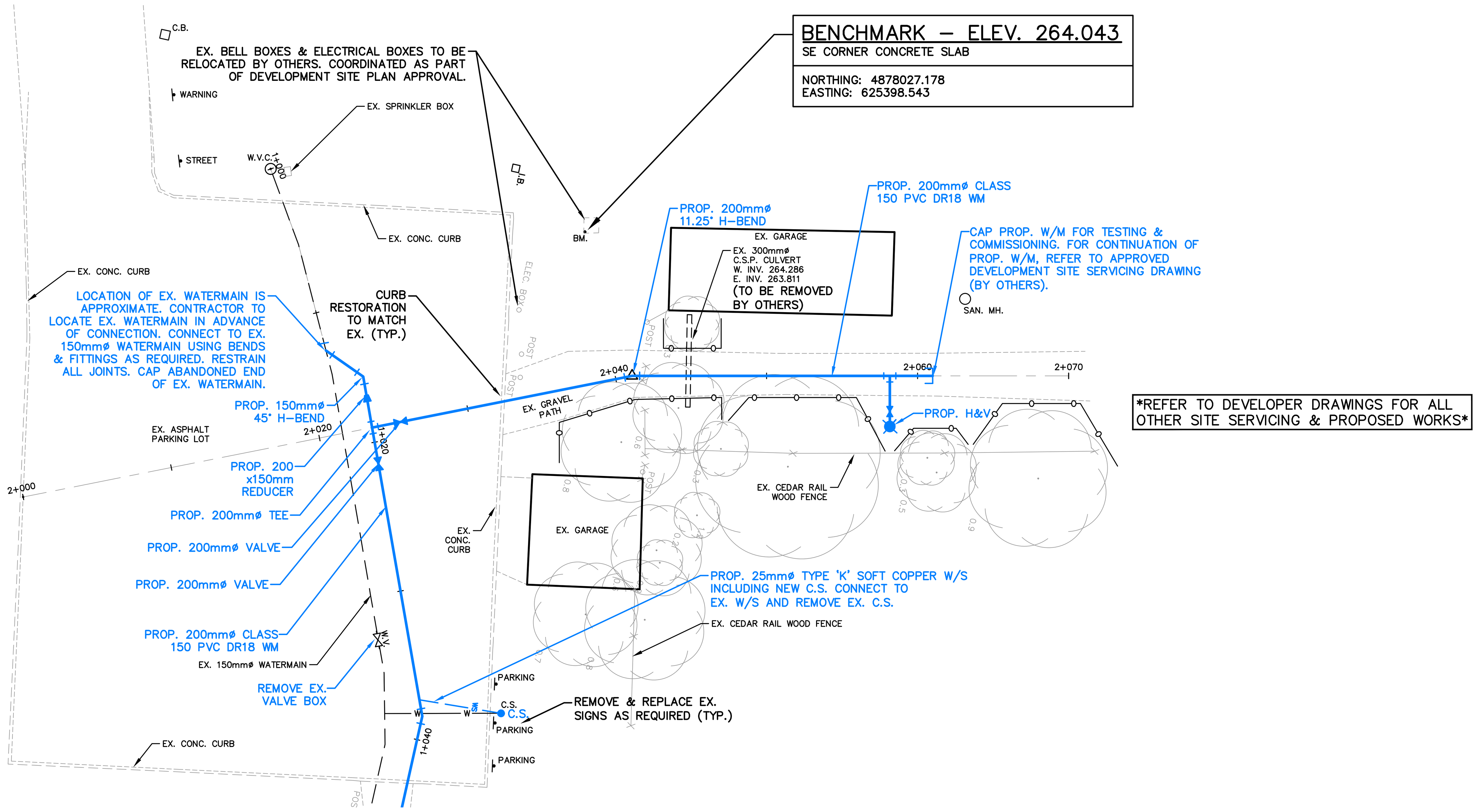
PLAN AND PROFILE PROPOSED WATERMAIN
STA. 1+150 TO STA. 1+250

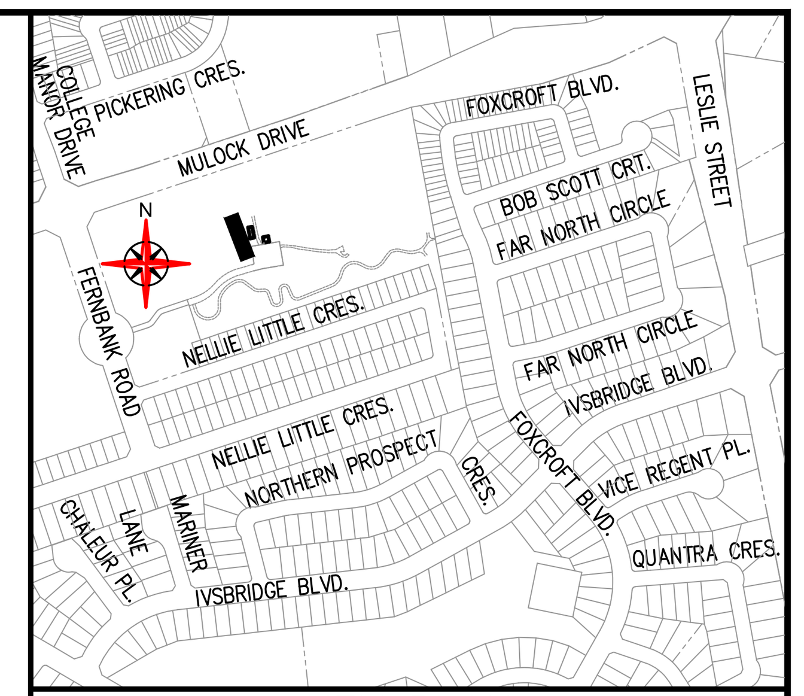
Ainley GROUP
CONSULTING ENGINEERS PLANNERS

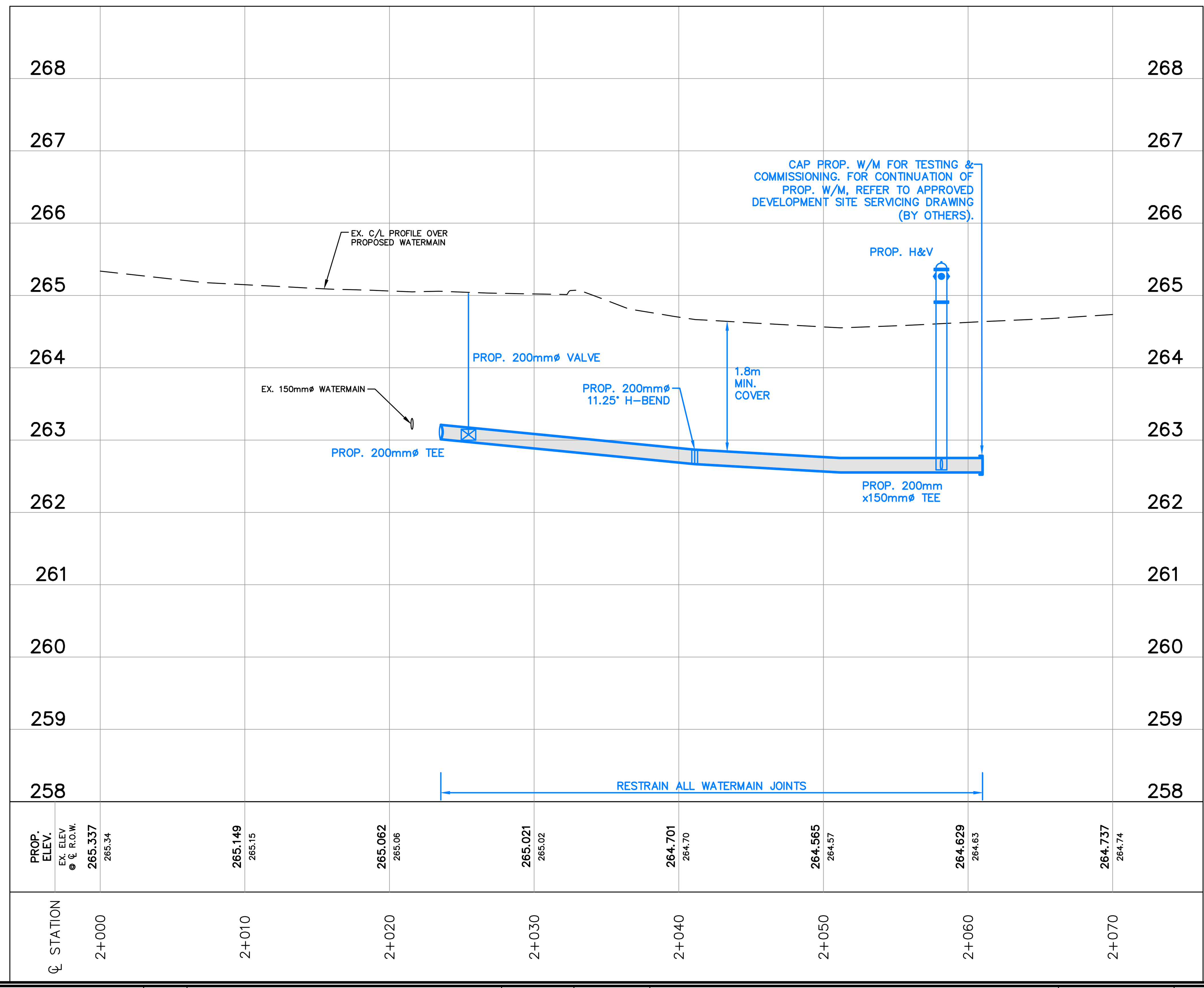
CONTRACT No.

DWG. No. 220059-PP2

Plotted by: RWECKERLE on October 16, 2020 at 3:40pm
File: C:\Users\rweckerle\AppData\Local\Temp\AcPublish_62604\220059-Oplan.dwg Layout: PP2







NOTES

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P3	FINAL SUBMISSION	OCT/20	TFH
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LICENSED PROFESSIONAL ENGINEER
C.F. HOUGH
100107685
Oct. 16, 2020
PROVINCE OF ONTARIO

SCALE: H= 1:250 V= 1:50
DESIGN: T.F.H.
DRAWN: R.A.W.
CHECKED: C.F.H.
DATE: SEPT. 2020

TOWN OF NEWMARKET
STICKWOOD WALKER WATERMAIN REPLACEMENT
NEWMARKET, ON

PLAN AND PROFILE
PROPOSED WATERMAIN
STA. 2+000 TO STA. 2+070

Ainley GROUP
CONSULTING ENGINEERS PLANNERS

CONTRACT No.
DWG. No. 220059–PP3

GENERAL NOTES - MISCELLANEOUS

1. ALL DIMENSIONS ARE IN METRES (m) AND ALL PIPE SIZES ARE IN MILLIMETRES (mm), UNLESS OTHERWISE SPECIFIED.
2. THE NOTES ON THIS SHEET APPLY TO ALL WORKS UNDER THIS CONTRACT UNLESS OTHERWISE NOTED ON THE PLAN AND PROFILE DRAWINGS AND/OR SPECIFIC DETAIL DRAWINGS.
3. THE STANDARD DRAWINGS OF THE TOWN, ONTARIO PROVINCIAL STANDARDS AND SPECIFICATIONS (OPSS) AND THE ONTARIO PROVINCIAL STANDARD DRAWINGS (OPSD) CONSTITUTE PART OF THE PLANS OF THIS PROJECT.
4. ORDER OF PRECEDENCE OF STANDARD DRAWINGS IS FIRSTLY TOWN OF NEWMARKET STANDARD DRAWINGS AND SECONDLY ONTARIO PROVINCIAL STANDARD DRAWINGS.
5. THE STANDARD DRAWINGS INCLUDED WITH THESE PLANS ARE PROVIDED FOR CONVENIENCE ONLY AND ARE NOT TO BE CONSTRUED TO BE A COMPLETE SET FOR THE PURPOSE OF THE CONTRACT OR PROJECT.
6. ALL DIMENSIONS AND ELEVATIONS SHALL BE CHECKED AND VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO ANY CONSTRUCTION AND ANY DISCREPANCIES SHALL BE REPORTED IMMEDIATELY TO THE ENGINEER.
7. ALL SITE 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 TOWN'S ENGINEER.
8. NATIVE MATERIAL, SUITABLE FOR BACKFILL, SHALL BE COMPACTED TO 95% STANDARD PROCTOR MAXIMUM DRY DENSITY WITHIN THE BOULEVARD.
9. GRANULAR MATERIAL USED FOR BACKFILL SHALL BE PLACED IN LAYERS 150mm IN DEPTH MAXIMUM AND COMPACTED TO 100% STANDARD PROCTOR MAXIMUM DRY DENSITY.
10. MATERIAL SPECIFICATION FOR ALL FRAMES, GRATES, COVERS AND GRATINGS SHALL BE AS PER OPSS 1850. FINISH ON ALL SURFACES SHALL BE PAINTED.
11. CONTRACTORS SHALL NOTE THAT THERE MAY BE NUMEROUS UTILITY CABLES CROSSING OVER THE ROAD(S) AT VARIOUS LOCATIONS, WHICH MAY NOT BE SHOWN ON THE DRAWINGS. SOME OR ALL OF THESE OVERHEAD UTILITY CABLES MAY REQUIRE SHIELDING OR OTHER APPROPRIATE FORM OF PROTECTION AS REQUIRED BY THE RESPECTIVE UTILITY COMPANY, THE OCCUPATIONAL HEALTH AND SAFETY ACT AND REGULATIONS FOR CONSTRUCTION PROJECTS (R.S.O. 1990, CH. O1, AS AMENDED) AND ALL OTHER APPLICABLE LEGISLATION IN FORCE. PRIOR TO BIDDING THE CONTRACTOR SHALL THOROUGHLY FAMILIARIZE HIM/HERSELF WITH THE NUMBER AND LOCATIONS OF THESE OVERHEAD UTILITY CABLES AND SHALL PREPARE THEIR BID ACCORDINGLY. NO EXTRA PAYMENT WILL BE ALLOWED FOR WORKING AROUND OVERHEAD UTILITY CABLES. ANY CABLE(S) DAMAGED BY THE CONTRACTOR'S ACTIVITIES SHALL BE RESTORED BY THE UTILITY COMPANY WHO OWNS THE CABLE(S) AT THE CONTRACTOR'S EXPENSE.
12. ALL DISTURBED AREAS TO BE REINSTATED TO EXISTING CONDITIONS OR BETTER. LIMITS OF ALL RESTORATION TO BE CONFIRMED BY THE TOWN.

GENERAL NOTES - WATERMAINS

1. WATERMAIN MATERIAL TO BE PVC C-900, CLASS 150 (DR 18) AND HDPE DR11. PVC WATERMAIN SHALL INCLUDE #12 TRACER WIRE FIXED TO TOP OF PIPE.
2. DUCTILE IRON MECHANICAL JOINT FITTINGS MEETING AWWA/ANSI SPECIFICATIONS C110/A21.10 AND C153/A21.53 SHALL BE USED ON PVC WATERMAIN 150mm TO 300mm IN DIAMETER.
3. ALL DOMESTIC WATER SERVICES SHALL BE 25mm DIAMETER TYPE 'K' COPPER PIPE AND INCLUDE CATHODIC PROTECTION PER TOWN OF NEWMARKET STANDARD DETAIL 309.
4. 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 AS SPECIFIED.
5. WATERMAIN SHALL BE INSTALLED WITH A MINIMUM COVER OF 1.8m UNLESS OTHERWISE SPECIFIED.
6. PVC WATERMAIN EMBEDMENT SHALL BE CLEAR SAND, 150mm BELOW AND 300mm ABOVE THE WATERMAIN (REFER TO OPSD 802.010).
7. MECHANICAL JOINT RESTRAINTS ARE TO BE INSTALLED ON BELL AND SPIGOT JOINTS FOR ALL WATERMAINS CONSTRUCTED IN FILL MATERIAL AND AT ALL TEES, HORIZONTAL BENDS, VERTICAL BENDS, HYDRANTS, END OF MAINS AND VALVES. CONCRETE THRUST BLOCKS ARE NOT PERMITTED UNLESS EXPRESSLY APPROVED BY THE TOWN.
8. HYDRANTS TO BE MUELLER 'CENTURY', CLOW MCAVITY OR APPROVED EQUIVALENT COMPRESSION TYPE COMPLETE THREE PORT HYDRANTS WITH 100mm, ¼ TURN STORZ NOZZLE FACING THE STREET. THE SIDE PORTS SHALL BE 65mm DIAMETER THREADED. HYDRANT TEES TO BE ANCHOR STYLE. ALL HYDRANTS TO BE EQUIPPED WITH ANTI-TAMPERING DEVICES.
9. HYDRANTS ARE TO BE PAINTED FIRE ENGINE RED. THE STORZ CAP IS TO BE BLACK. STEAMER OR PUMPER PORT THREADED CONNECTIONS ARE TO BE PAINTED RED (SAME AS BARREL).
10. REFLECTIVE RINGS COLOUR CODED TO THE HYDRANT TO THE HYDRANT FLOW CLASSIFICATION WILL BE INSTALLED ON THE 65mm PORTS BY THE TOWN.
11. HYDRANT FLANGE ELEVATIONS SHALL BE SET AT A GRADE OF 50mm TO 150mm ABOVE THE FINISHED GROUND ELEVATION.
12. A MINIMUM HORIZONTAL SEPARATION OF 2.5m SHALL BE MAINTAINED BETWEEN THE WATERMAIN AND ANY SEWER.
13. UNLESS SPECIFIED OR APPROVED BY THE TOWN, ALL VALVES SHALL BE MUELLER RESILIENT WEDGE GATE VALVES OR APPROVED EQUIVALENT. VALVES SHALL HAVE A NON-RISING STEM AND A 50mm SQUARE OPERATING NUT, OPENING COUNTER-CLOCKWISE.
14. ALL VALVES 300mm IN DIAMETER AND LARGER SHALL BE INSTALLED INSIDE VALVE CHAMBERS. THESE VALVES SHALL HAVE FLANGED ENDS. A FLANGED TO PLAIN END SPACER AND A VICTAULIC COUPLER SHALL BE INSTALLED INSIDE THE CHAMBER TO PERMIT REMOVAL OF THE VALVE IF NECESSARY.
15. VALVES IN EXCESS OF 2.4m IN DEPTH SHALL REQUIRE A VALVE STEM EXTENSION.
16. THE CONTRACTOR SHALL INFORM THE TOWN 72 HOURS IN ADVANCE PRIOR TO COMMENCING WORK ON ANY PART OF THE WATER SYSTEM.
17. CATHODIC PROTECTION OF WATERMAIN SYSTEMS SHALL BE IN ACCORDANCE WITH TOWN OF NEWMARKET STANDARD DETAIL 309 INCLUDING INSTALLATION OF 14.5kg MAGNESIUM ANODE WHEN CONNECTING TO AN EXISTING METALLIC WATERMAIN.
18. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WATERMAIN TESTING AND COMMISSIONING IN ACCORDANCE WITH `APPENDIX 7' - WATERMAIN TESTING REQUIREMENTS (COPY WILL BE PROVIDED)

LEGEND

- EX. 300mmø CSP — EXIST. CULVERT
- EX. 300mmø STM — EXIST. STORM SEWER
- EX. 200mmø SAN — EXIST. SANITARY SEWER
- EXIST. CURB
- EXIST. EDGE OF PAVEMENT
- H — EXIST. HYDRO LINE
- G — EXIST. GAS LINE
- B — EXIST. BELL LINE
- CTV — EXIST. CABLE LINE
- SAN — EXIST. SANITARY SERVICE
- W — EXIST. WATER SERVICE
- EXIST. C/L DITCH
- EX.CB — EXIST. CATCH BASIN
- EX.STM.MH — EXIST. STORM MANHOLE
- EX.SAN.MH — EXIST. SANITARY MANHOLE
- F.H. — EXIST. FIRE HYDRANT
- W.V. — EXIST. WATER VALVE
- C.S. — EXIST. CURB STOP
- L.S. — EXIST. LIGHT STANDARD
- H.L.S. — EXIST. HYDRO POLE/LT. STD.
- S.S. — EXIST. STREET SIGN
- B. PED — EXIST. BELL PEDESTAL
- B. PED — EXIST. CABLE PEDESTAL
- TRAN. — EXIST. HYDRO TRANSFORMER
- 0.3 / 0.4 — EXIST. TREE

- PROP. WATERMAIN
- PROP. SANITARY SEWER MAIN
- PROP. STORM SEWER MAIN
- PROP. WATER SERVICE
- PROP. SANITARY SERVICE
- PROP. CURB & GUTTER
- C.S. — PROP. CURB STOP
- PROP. FIRE HYDRANT
- PROP. WATER VALVE
- × 244.48 — PROP. ELEVATION
- PROP. CATCHBASIN
- PROP. DOUBLE CATCHBASIN
- PROP. STORM MAINTENANCE HOLE
- PROP. SANITARY MAINTENANCE HOLE

NOTES

Plotted by: RWECKERLE on October 16, 2020 at 3:42pm
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P3	FINAL SUBMISSION	OCT/20	TFH
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LICENSED PROFESSIONAL ENGINEER — C.F. HOUGH — 100107685 — Oct. 16, 2020 — PROVINCE OF ONTARIO

SCALE: H= N/A V= N/A
DESIGN: T.F.H.
DRAWN: R.A.W.
CHECKED: C.F.H.
DATE: SEPT. 2020

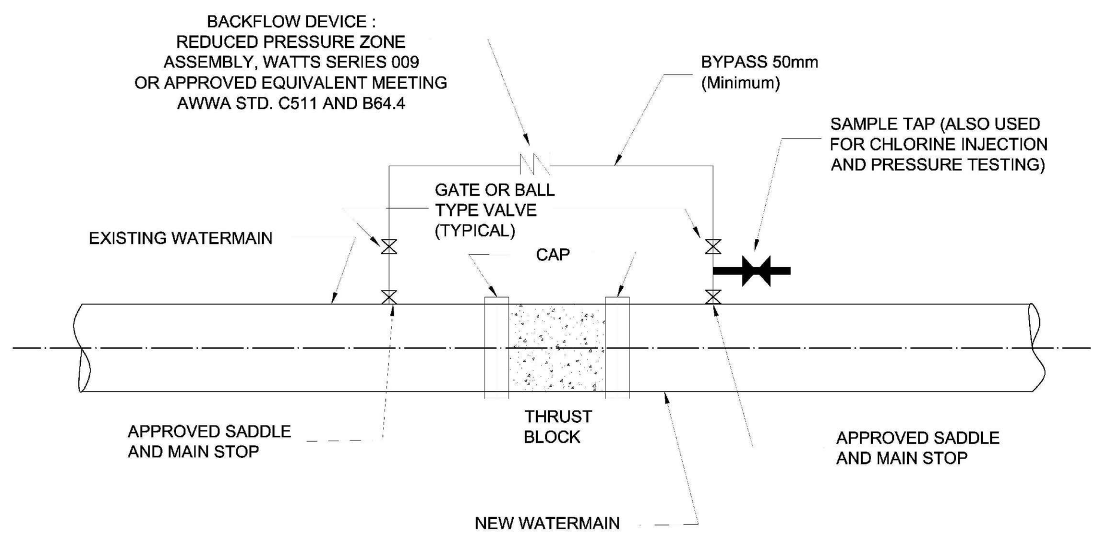
TOWN OF NEWMARKET
STICKWOOD WALKER WATERMAIN REPLACEMENT
NEWMARKET, ON

GENERAL NOTES & LEGEND

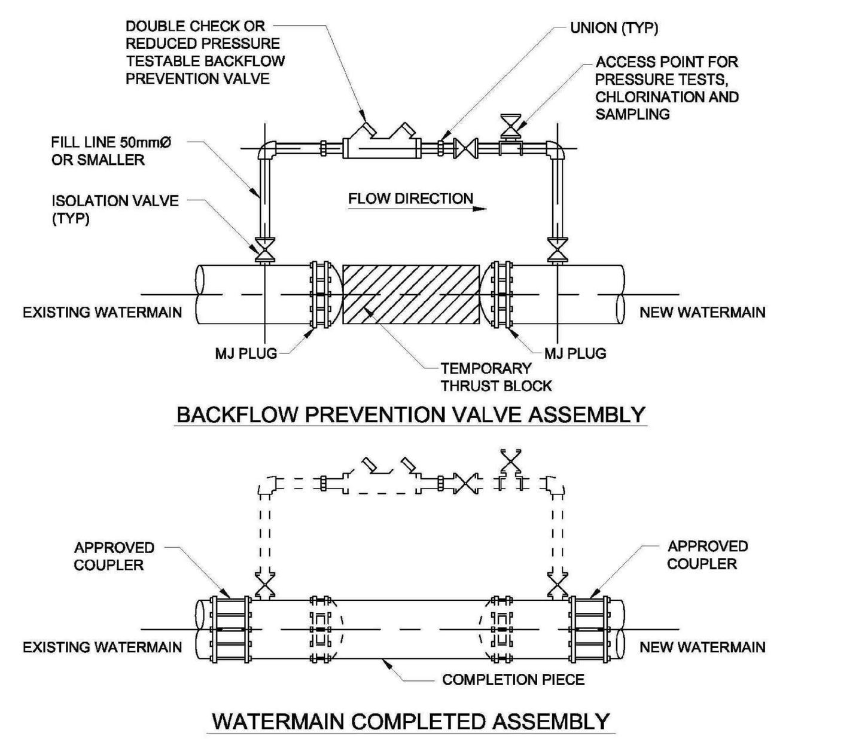
Ainley GROUP — CONSULTING ENGINEERS PLANNERS

CONTRACT No.

DWG. No. 220059-DET1

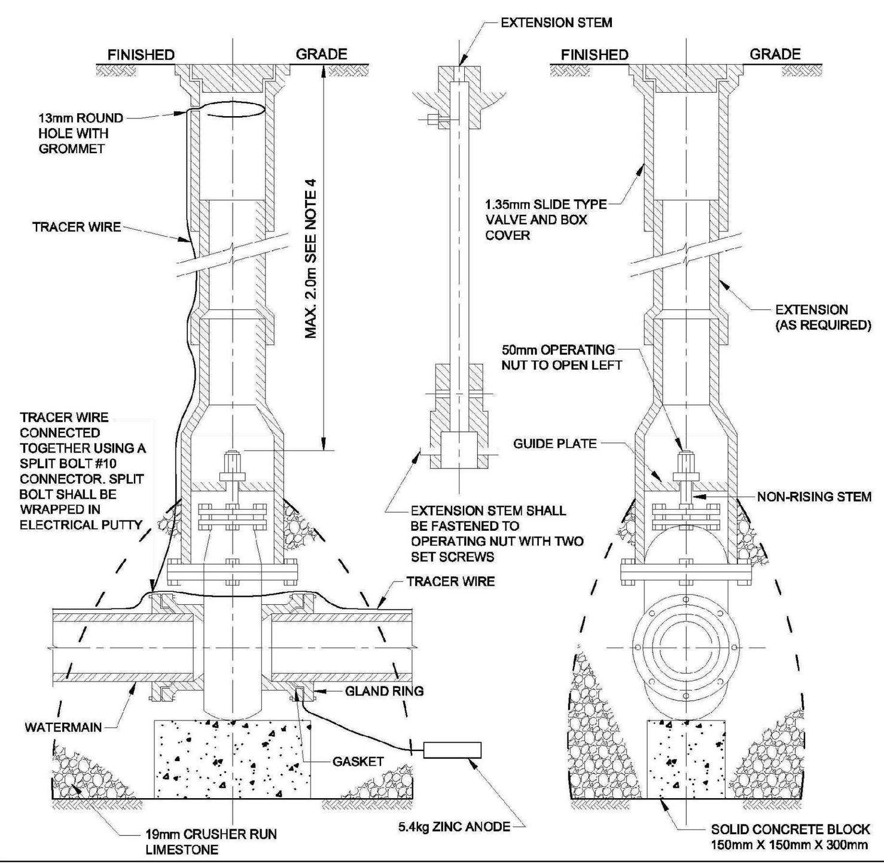


TOWN OF NEWMARKET MUNICIPAL STANDARD DRAWING	06/08	REV	1
TOTAL ISOLATION OF EXISTING AND NEW SYSTEMS	NMS - 300.00	Newmarket	



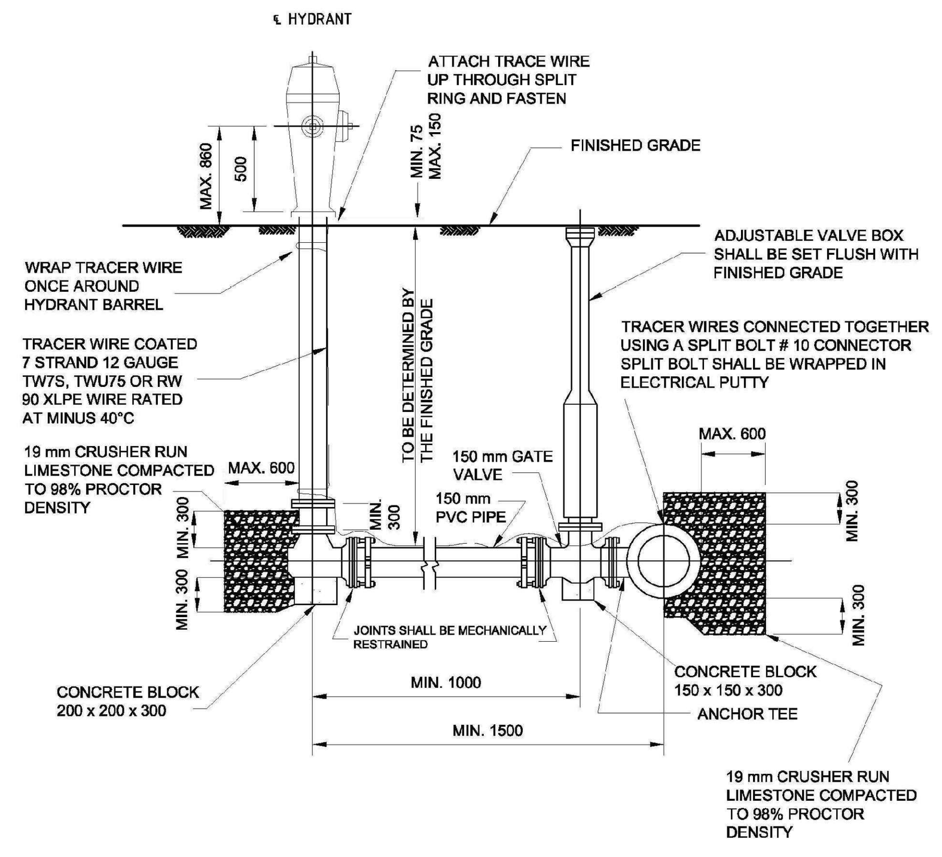
NOTES:
1. THE BACKFLOW PREVENTION VALVE ASSEMBLY SHALL BE REMOVED DURING WATERMAIN PRESSURE TESTS.
2. THE FINAL CONNECTION OF THE WATERMAIN SHALL BE COMPLETED ONLY AFTER AUTHORIZATION BY THE MUNICIPALITY.
3. THE WATERMAIN SHALL BE DRAINED BY CONTROLLED MEANS. SUFFICIENT TRENCH DEWATERING CAPACITY SHALL BE USED WHEN THE EXISTING AND NEW WATERMAINS ARE DRAINED PRIOR TO THE FINAL CONNECTION TO ENSURE NO BACKFLOW INTO EITHER WATERMAIN.
4. THE WATERMAIN SHALL BE CUT BACK TO REMOVE THE TAPPING POINTS OF THE BACKFLOW PREVENTION VALVE ASSEMBLY.
5. ALL NEW PIPING AND APPURTENANCES PLACED IN THE CONNECTION SHALL BE THOROUGHLY DISINFECTED WITH 1% SOLUTION OF SODIUM HYPOCHLORITE OR EQUIVALENT.
6. ON NON-METALLIC WATERMAINS, THE TRACING WIRE SHALL BE CONNECTED TO THE COUPLER ONLY IF THE COUPLER IS NOT IN CONTACT WITH A METALLIC WATERMAIN OTHERWISE TERMINATE TRACER WIRE WITH AN ANODE.
7. A PHYSICAL SEPARATION MUST BE MAINTAINED AT ALL CONNECTION POINTS OF NEW WATERMAINS TO THE EXISTING SYSTEMS UNTIL BACTERIOLOGICAL TESTS HAVE PASSED. A SAMPLING TAP MUST BE PROVIDED AT THE END OF EACH BRANCH OR STUB.
8. ONLY THE MUNICIPAL STAFF SHALL OPERATE MUNICIPALITY OWNED VALVES.
9. THIS DETAIL IS FOR SCHEMATIC INFORMATION ONLY. THE ACTUAL CONFIGURATION USED MUST SATISFY THE INTENT OF THIS DRAWING.

TOWN OF NEWMARKET MUNICIPAL STANDARD DRAWING	05/08	REV	1
TYPICAL WATER CONNECTION SCHEMATIC	NMS - 301.00	Newmarket	



NOTES:
1. VALVE BOX SHALL BE ADEQUATELY BRACED WHILE BACKFILLING AND MUST REMAIN PLUMB
2. VALVE BOX EXTENSION SHALL BE USED ONLY IF REQUIRED
3. VALVE SHALL BE COMPLETELY BACKFILLED WITH 19mm CRUSHER RUN LIMESTONE
4. AN EXTENSION STEM SHALL BE USED WHEN THE DEPTH OF THE OPERATING NUT EXCEEDS 2.0m BELOW FINISHED GRADE
5. ALL INLINE VALVES INSTALLED ON PVC WATERMAINS SHALL BE RESTRAINED UNLESS OTHERWISE NOTED
6. A 1.0m X 1.0m X 50mm ASPHALT COLLAR SHALL BE INSTALLED IF VALVE BOX IS LOCATED IN GRAVEL
7. TRACER WIRE SHALL BE COATED, 7 STRAND, 12 GUAGE TW75 TWU75 OR RW90XLPE WIRE RATED AT MINUS 40° C
8. TRACER WIRE SHALL BE INSTALLED ON THE OUTSIDE OF THE VALVE BOX AND SHALL BE BROUGHT INTO THE UPPER SECTION THROUGH A 13mm Ø ROUND HOLE AND LOOPED AT THE TOP. THE LOOP SHALL BE A MINIMUM 450mm IN LENGTH
9. TRACER WIRE SHALL BE INSTALLED IN ALL PVC AND CPP MAIN LINE VALVE BOXES
10. CATHODIC PROTECTION, BONDING CABLE AND TRACER WIRE SHALL BE INSTALLED AS PER NMSD 309.00

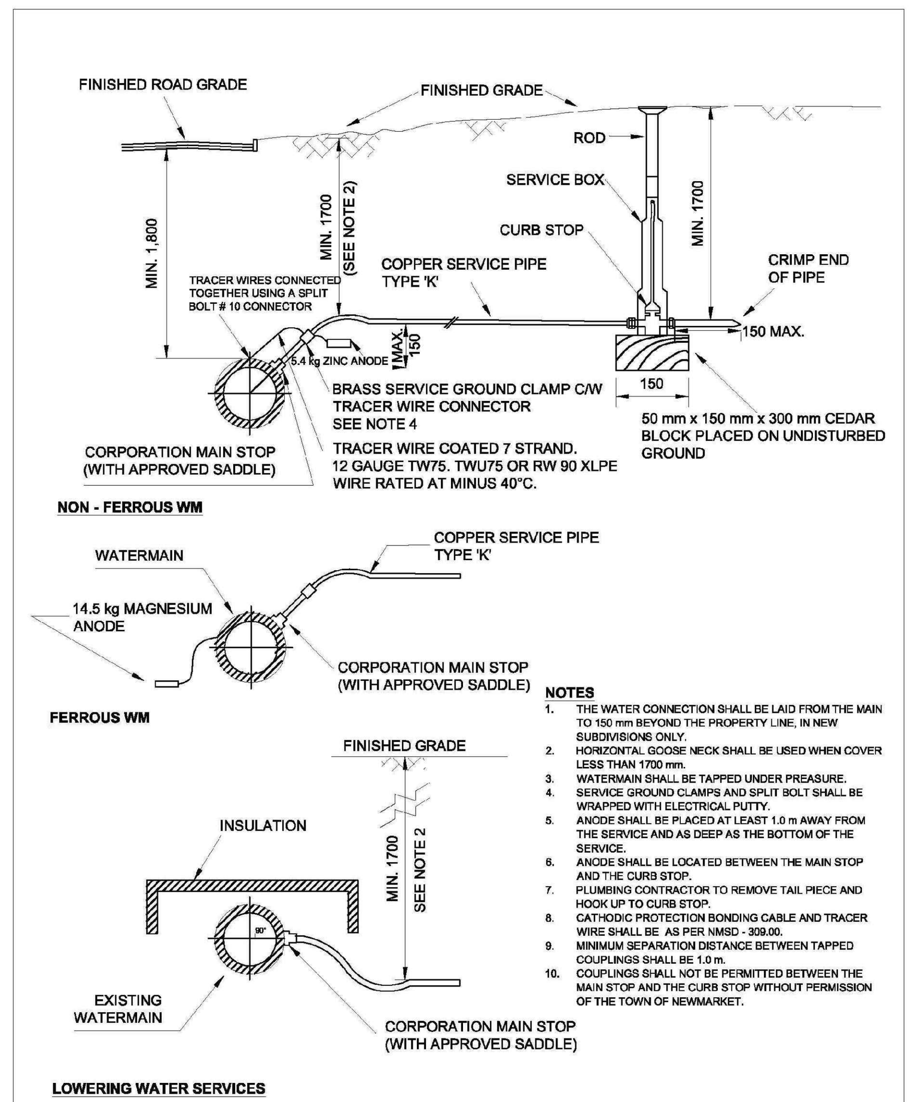
TOWN OF NEWMARKET MUNICIPAL STANDARD DRAWING	MARCH 2008	REV	1
100mm TO 400mm GATE VALVE, VALVE BOX AND TRACER WIRE ARRANGEMENT FOR PVC OR CPP WATERMAINS	NMSD 305.00	Newmarket	



NOTES
1. JOINTS SHALL BE MECHANICALLY RESTRAINED.
2. HYDRANT EXTENSIONS SHALL BE INSTALLED AT BOTTOM OF BARREL.
3. ANCHOR TEE, VALVE & HYDRANT SHALL BE COMPLETELY BACKFILLED WITH 19mm CRUSHER RUN LIMESTONE.
4. TRACER WIRE COATED, 7 STRAND, 12 GAUGE TW75, TWU75 OR RW 90 XLPE WIRE RATED AT MINUS 40°C.
5. TRACER WIRE SHALL BE INSTALLED AT ALL HYDRANT LOCATIONS.
6. CATHODIC PROTECTION, BONDING CABLE AND TRACER WIRE SHALL BE AS PER NMSD - 309.00

ALL DIMENSIONS IN MILLIMETERS EXCEPT WHERE NOTED.

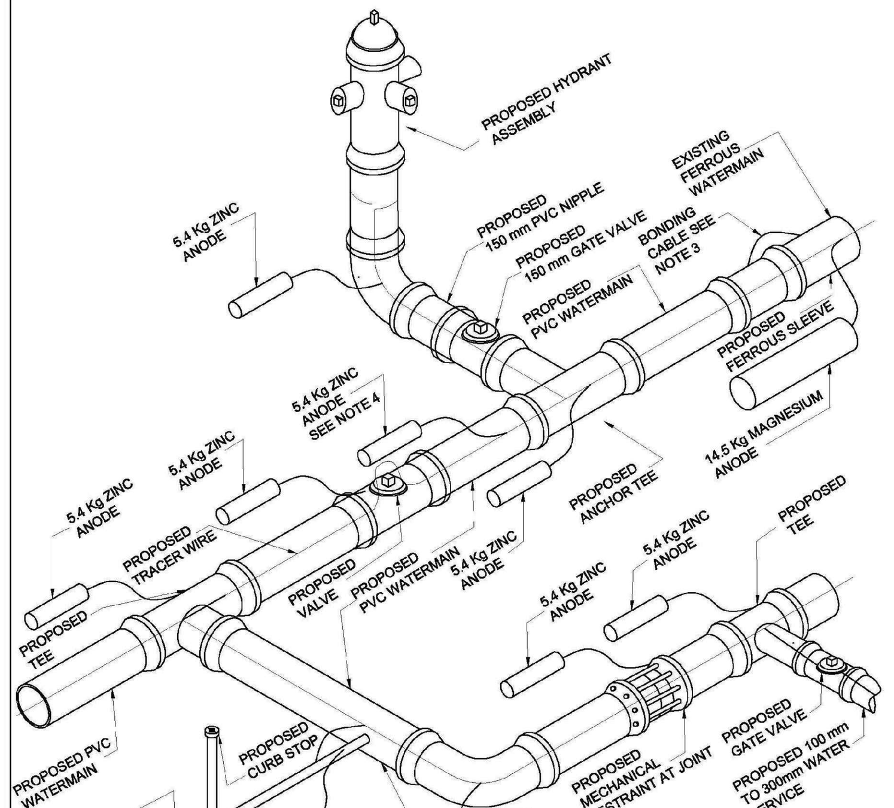
TOWN OF NEWMARKET MUNICIPAL STANDARD DRAWING	08/08	REV	1
HYDRANT ASSEMBLY WITH MECHANICALLY RESTRAINED JOINTS	NMS - 306.00	Newmarket	



NOTES
1. THE WATER CONNECTION SHALL BE LAID FROM THE MAIN TO 150 mm BEYOND THE PROPERTY LINE, IN NEW SUBDIVISIONS ONLY.
2. HORIZONTAL GOOSE NECK SHALL BE USED WHEN COVER LESS THAN 1700 mm.
3. WATERMAIN SHALL BE TAPPED UNDER PREASURE.
4. SERVICE GROUND CLAMPS AND SPLIT BOLT SHALL BE WRAPPED WITH ELECTRICAL PUTTY.
5. ANODE SHALL BE PLACED AT LEAST 1.0 m AWAY FROM THE SERVICE AND AS DEEP AS THE BOTTOM OF THE SERVICE.
6. ANODE SHALL BE LOCATED BETWEEN THE MAIN STOP AND THE CURB STOP.
7. PLUMBING CONTRACTOR TO REMOVE TAIL PIECE AND HOOK UP TO CURB STOP.
8. CATHODIC PROTECTION BONDING CABLE AND TRACER WIRE SHALL BE AS PER NMSD - 309.00.
9. MINIMUM SEPARATION DISTANCE BETWEEN TAPPED COUPLINGS SHALL BE 1.0 m.
10. COUPLINGS SHALL NOT BE PERMITTED BETWEEN THE MAIN STOP AND THE CURB STOP WITHOUT PERMISSION OF THE TOWN OF NEWMARKET.

ALL DIMENSIONS IN MILLIMETERS EXCEPT WHERE NOTED.

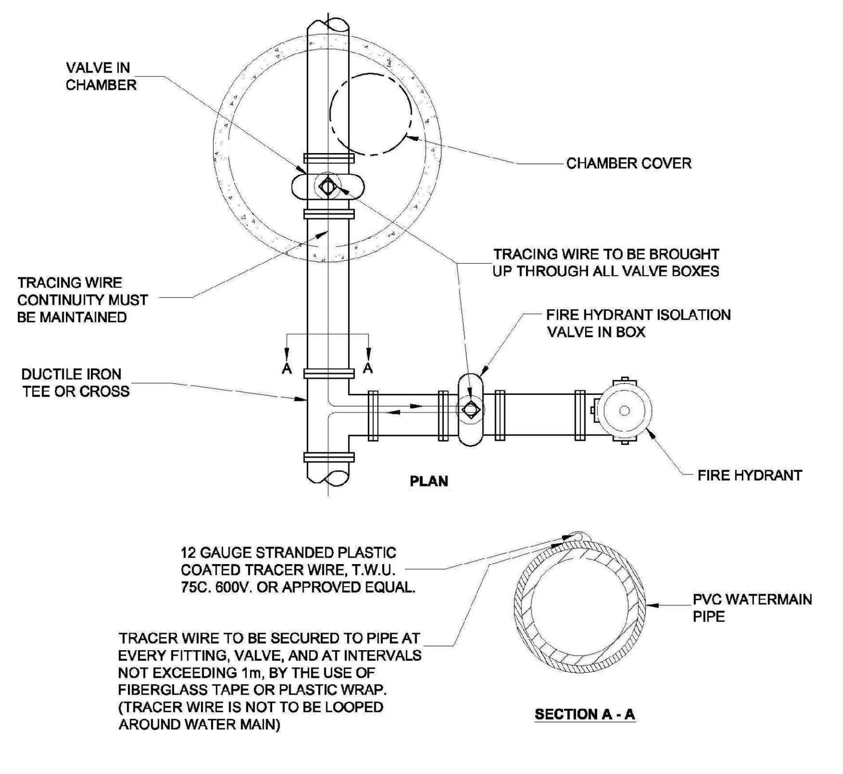
TOWN OF NEWMARKET MUNICIPAL STANDARD DRAWING	07/08	REV	1
19 mm AND 25 mm COPPER WATER SERVICE	NMS - 307.00	Newmarket	



NOTES
1. ANODE SHALL BE PLACED AT LEAST 1.0 m AWAY FROM THE WATER SYSTEM APPURTENANCES AND AS DEEP AS THE BOTTOM OF THE APPURTENANCES. MINIMUM DISTANCE BETWEEN ANODES SHALL BE 1.0 m.
2. ALL BONDING AND ANODE CABLE CONNECTIONS SHALL BE THERMITE WELDED. ALL THERMITE WELD CONNECTIONS SHALL BE COATED WITH AN APPROVED COATING MATERIAL.
3. BONDING CABLE SHALL BE NO. 6, SEVEN STRAND COATED COPPER WIRE, CADWELDED TO FITTINGS.
4. 5.4 Kg ZINC ANODE SHALL BE SUPPLIED AND INSTALLED IN A MANNER APPROVED BY THE TOWN FOR EVERY 1000 m OF TRACER WIRE INSTALLED.
5. MAGNESIUM ANODE CABLES SHALL BE BLUE AND ZINC ANODE CABLES SHALL BE WHITE.
6. ONE 5.4Kg ZINC ANODE SHALL BE INSTALLED ON EACH RESTRAINER.

ALL DIMENSIONS IN MILLIMETERS EXCEPT WHERE NOTED.

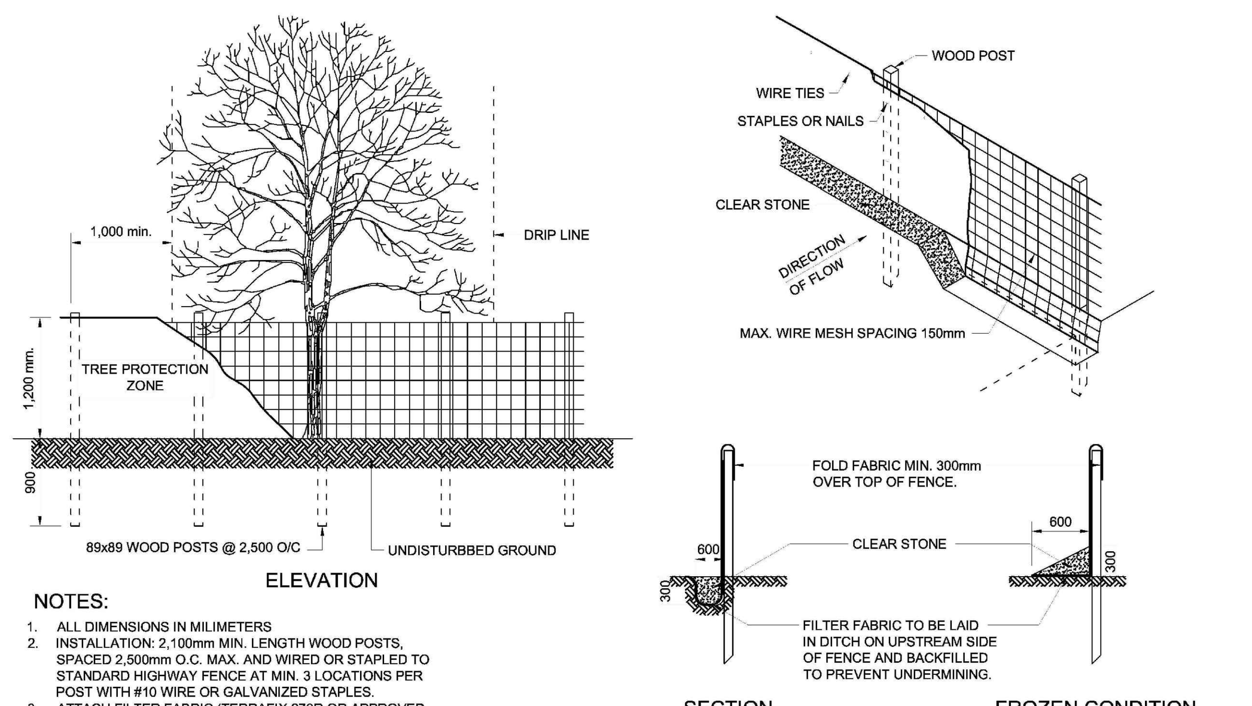
TOWN OF NEWMARKET MUNICIPAL STANDARD DRAWING	08/08	REV	1
CATHODIC PROTECTION REQUIREMENTS	NMSD - 309.00	Newmarket	



NOTES
1. SPLICING OF TRACING WIRE IS NOT PERMITTED UNLESS SPECIFIED OR APPROVED BY THE ENGINEER WHEN PERMITTED, THE WIRE SHALL BE SOLDERED.
2. IF SPLICING IS REQUIRED, ELECTRICAL CONNECTORS APPROVED FOR UNDERGROUND INSTALLATION SHALL BE USED.
3. TRACER WIRE CONTINUITY OF CURRENT MUST BE TESTED AND VERIFIED BY THE TOWN OF NEWMARKET WATERWORKS REPRESENTATIVE.

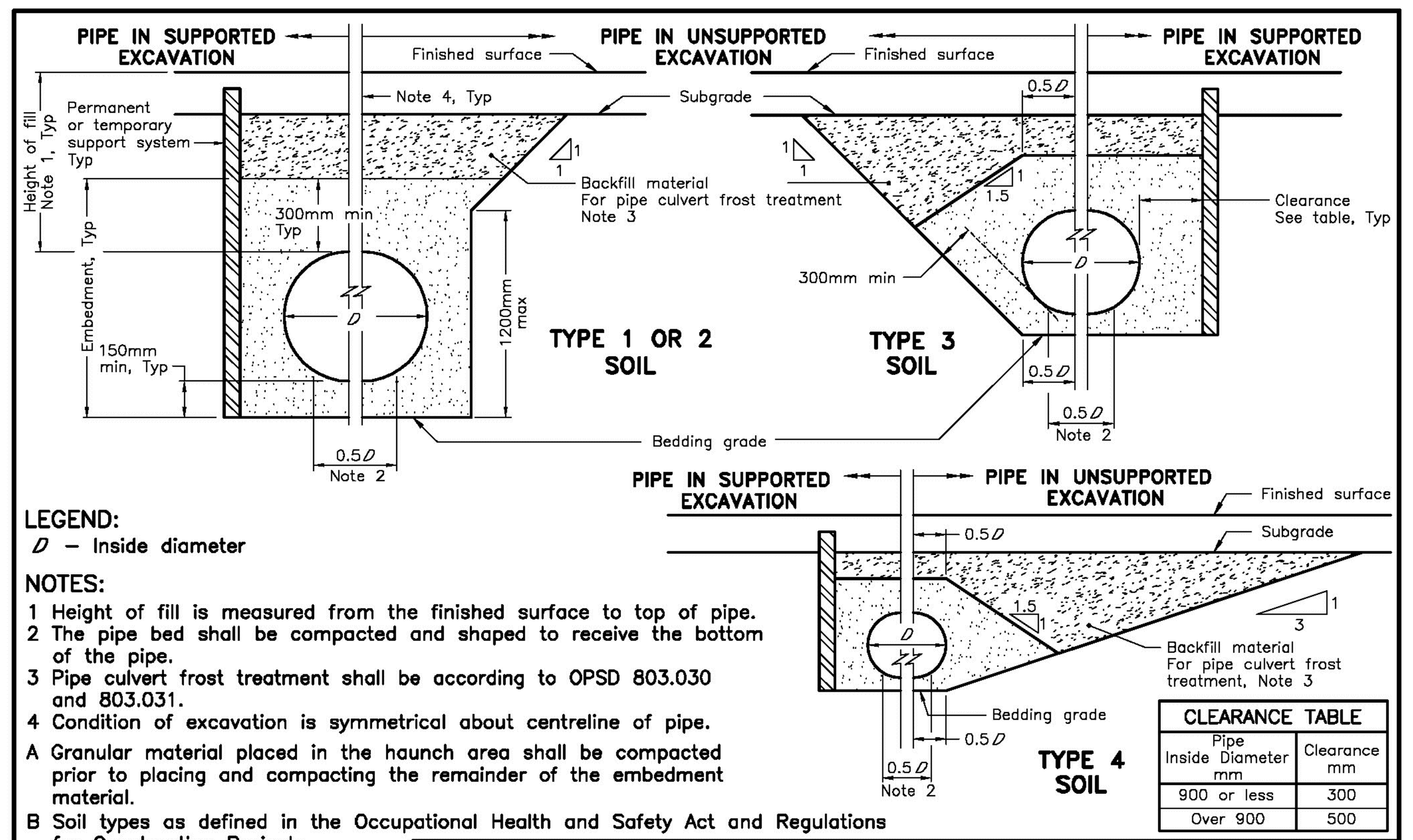
ALL DIMENSIONS ARE EXPRESSED IN mm UNLESS OTHERWISE NOTED.

TOWN OF NEWMARKET MUNICIPAL STANDARD DRAWING	08/08	REV	1
TRACER WIRE INSTALLATION	NMSD - 311.00	Newmarket	



NOTES:
1. ALL DIMENSIONS IN MILIMETERS
2. INSTALLATION: 2,100mm MIN. LENGTH WOOD POSTS, SPACED 2,500mm O.C. MAX. AND WIRED OR STAPLED TO STANDARD HIGHWAY FENCE AT MIN. 3 LOCATIONS PER POST WITH #10 WIRE OR GALVANIZED STAPLES.
3. ATTACH FILTER FABRIC (TERRAFIX 270R OR APPROVED EQUAL) SECURLY TO UPSTREAM SIDE OF POSTS BY HEAVY DUTY STAPLES.
4. ENSURE FENCE IS LOCATED 1.0m MIN. BEYOND THE DRIP LINE OF TREES TO BE PRESERVED.
5. FENCING TO BE INSTALLED PRIOR TO CONSTRUCTION.
6. TREE PROTECTION ZONE SIGNAGE (min dimensions 300mm x 450mm) TO BE ATTACHED TO FENCE IN HIGHLY VISIBLE LOCATIONS

TOWN OF NEWMARKET MUNICIPAL STANDARD DRAWING	05/08	REV	1
TREE PROTECTION / HEAVY DUTY SILTATION CONTROL FENCE	NMS - 503.00	Newmarket	

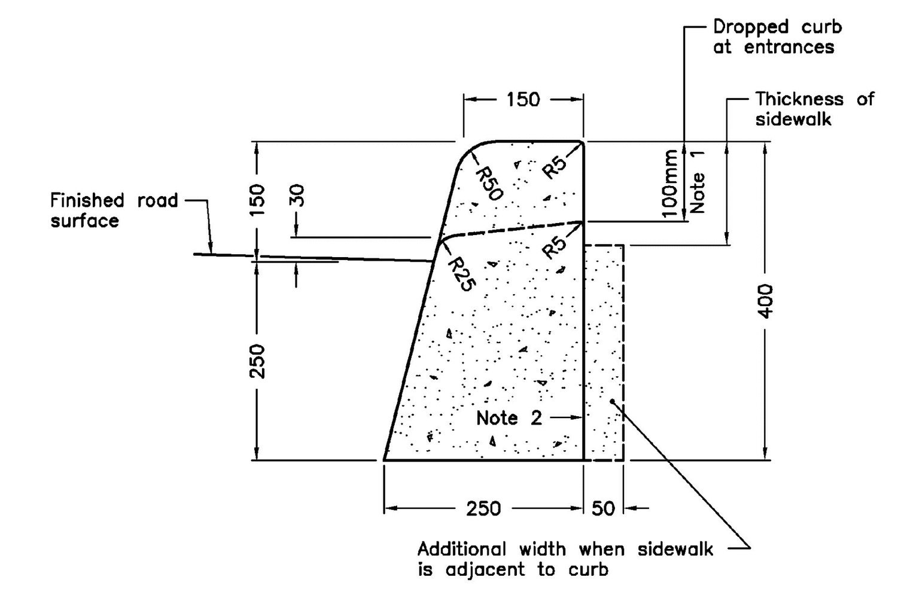


LEGEND:
D – Inside diameter

CLEARANCE TABLE	
Pipe Inside Diameter mm	Clearance mm
900 or less	300
Over 900	500

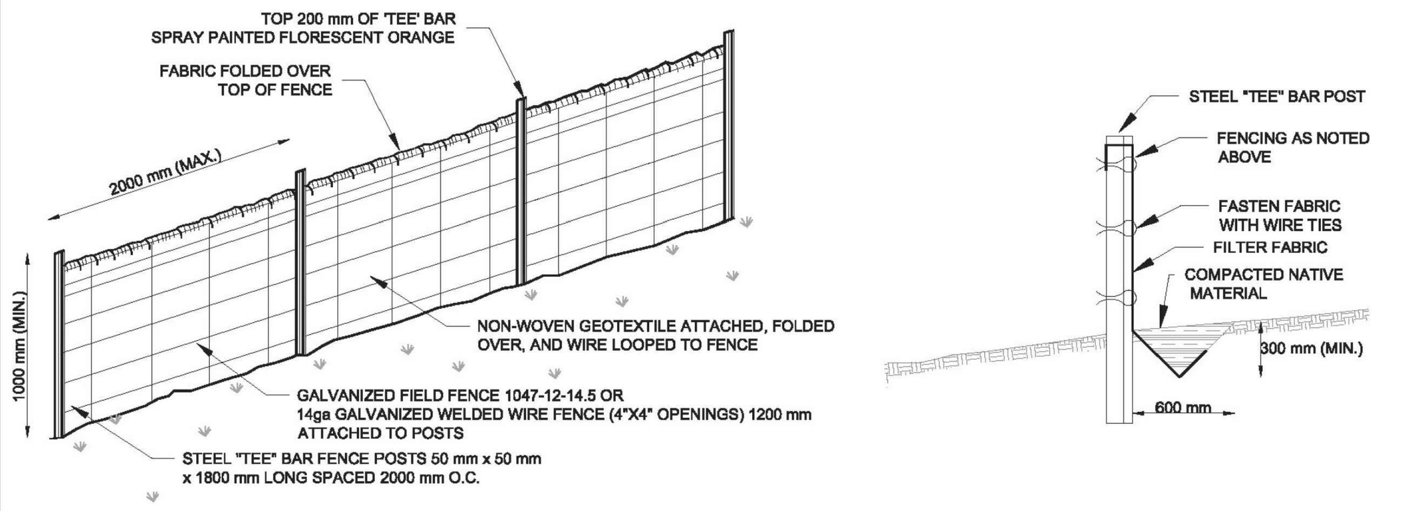
NOTES:
1 Height of fill is measured from the finished surface to top of pipe.
2 The pipe bed shall be compacted and shaped to receive the bottom of the pipe.
3 Pipe culvert frost treatment shall be according to OPSD 803.030 and 803.031.
4 Condition of excavation is symmetrical about centreline of pipe.
A Granular material placed in the haunch area shall be compacted prior to placing and compacting the remainder of the embedment material.
B Soil types as defined in the Occupational Health and Safety Act and Regulations for Construction Projects.
C All dimensions are in metres unless otherwise shown.

ONTARIO PROVINCIAL STANDARD DRAWING	Nov 2014	Rev	3
FLEXIBLE PIPE EMBEDMENT AND BACKFILL EARTH EXCAVATION	OPSD 802.010		



NOTES:
1 When sidewalk is continuously adjacent, the dropped curb at entrances shall be reduced to 75mm.
2 For slipforming procedure a 5% batter is acceptable.
A Treatment at entrances shall be according to OPSD 351.010.
B Outlet treatment shall be according to the OPSD 610 Series.
C The transition from one curb type to another shall be a minimum length of 3.0m, except in conjunction with guide rail where it shall be according to the OPSD 900 Series.
D All dimensions are in millimetres unless otherwise shown.

ONTARIO PROVINCIAL STANDARD DRAWING	Nov 2012	Rev	2
CONCRETE BARRIER CURB	OPSD 600.110		



NOTES:
1. SEDIMENT CONTROL FENCE SHOULD BE ALIGNED WITH CONTOURS FOR SHEET OVERLAND FLOW.
2. SEDIMENT CONTROL FENCE IS TO BE LOCATED IN AREAS OF LOW SEDIMENT YIELD ON SLOPES THAT CONFORM TO MTO DRAINAGE MANUAL VOLUME 2 CHART F4-3C TOPOGRAPHIC FACTOR LS BASED ON SLOPE LENGTH AND GRADIENT.
3. SEDIMENT CONTROL FENCE SHALL BE INSTALLED WITH FILTER MEDIA FABRIC TIED INTO THE SOIL A MINIMUM OF 300 mm BY EITHER STATIC SLICING OR TRENCH METHODS WITH COMPACTION OF TRENCH MATERIAL MEETING 95% STANDARD PROCTOR DENSITY.
4. STEEL 'T' BAR POSTS ARE TO BE SPACED A MAXIMUM DISTANCE OF 2000 mm ON CENTER.
5. FROZEN GROUND CONDITIONS REQUIRE FILTER FABRIC TO BE BACKFILLED IN TRENCH WITH CLEAR STONE.
6. GEOTEXTILE FABRIC TO BE COMPRISED OF NON-WOVEN U.V. STABILIZED MATERIAL FABRIC TO BE FOLDED OVER TOP OF FENCE A MINIMUM OF 300 mm AND WIRE FASTENED.
7. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND WATER POLLUTION IS MINIMIZED.
8. ALL DIMENSIONS IN MILLIMETRES UNLESS OTHERWISE SHOWN.

NO.	REVISION	DATE		
1	SWM GUIDELINES UPDATE	06.2016	SEDIMENT CONTROL FENCE	DATE: 06.2016 SCALE: NTS LSRCA ESC-4

NOTES

Plotted by: RWECKERLE on October 16, 2020 at 3:42pm
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NO.	REVISIONS	DATE	INITIAL
P3	FINAL SUBMISSION	OCT/20	TFH
P2	2ND SUBMISSION	SEP/20	T.F.H.
P1	1ST SUBMISSION	SEP/20	T.F.H.

Not Valid Unless Signed And Dated

LICENSED PROFESSIONAL ENGINEER
C.F. HOUGH
100107685
Oct. 16, 2020
PROVINCE OF ONTARIO

SCALE: H= N/A V= N/A
DESIGN: T.F.H.
DRAWN: R.A.W.
CHECKED: C.F.H.
DATE: SEPT. 2020

TOWN OF NEWMARKET
STICKWOOD WALKER WATERMAIN REPLACEMENT
NEWMARKET, ON

TOWN OF NEWMARKET STANDARD DRAWING DETAILS & OPSD DETAILS

Ainley GROUP CONSULTING ENGINEERS PLANNERS

CONTRACT No.
DWG. No. 220059-DET2