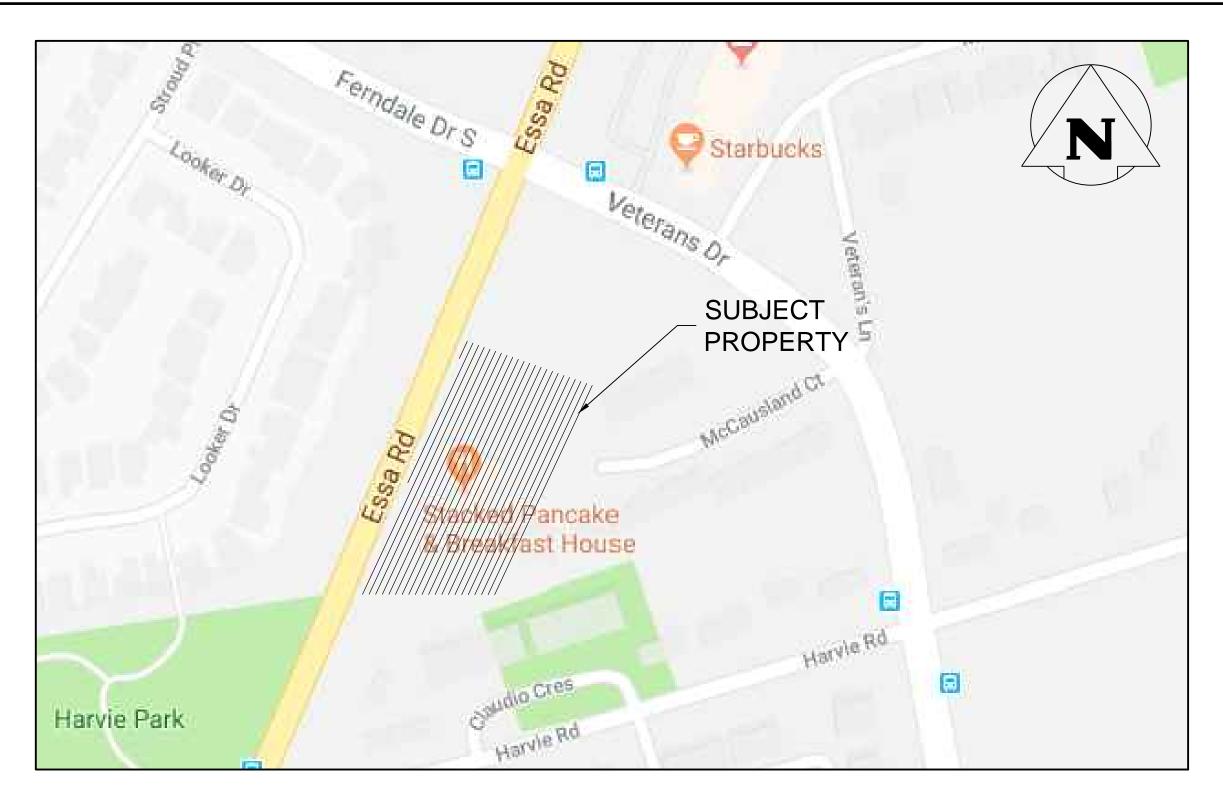
# 440 essa road

## city of barrie COUNTY of simcoe

<u>Drawing</u>	<u>TITLE</u>
101	GENERAL SITE SERVICING PLAN
102	GENERAL GRADING PLAN
103	REMOVALS & EROSION & SEDIMENT CONTROL PLAN
104	CONSTRUCTION NOTES & STANDARD DETAILS
105	PAVEMENT MARKING & SIGNAGE PLAN



## **MUNICIPALITY**

CITY OF BARRIE 70 COLLIER STREET P.O. BOX 400 BARRIE, ONTARIO, L4M 4T5

## <u>DEVELOPER</u>

ONE URBAN DEVELOPMENTS INC. 28 RIVALDA ROAD TORONTO, ON M9M 2M3

### DEVELOPER'S ENGINEER



57 John Street West P.O. Box 1011 Bradford, ON L3Z 2B4 905-952-3111 T www.cfcrozier.ca

#### LANDSCAPE ARCHITECT

STUDIO TLA 20 CHAMPLAIN BOULEVARD, SUITE 102 TORONTO, ON M3H 2Z1

# MASTER LEGEND **EXISTING FEATURES** (EX.) EX. CONTOUR EX. TREELINE

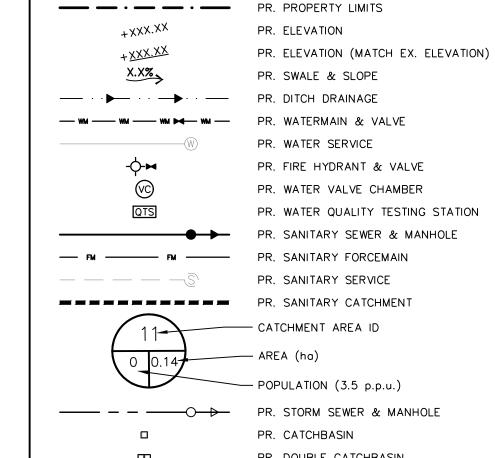
EX. WATER SERVICE EX. SANITARY FORCEMAIN

EX. STORM SEWER & MANHOLE EX. STORM CATCHBASIN EX. STORM DOUBLE CATCHBASIN EX. STORM CATCHBASIN MANHOLE EX. STORM DOUBLE CATCHBASIN MANHOLE

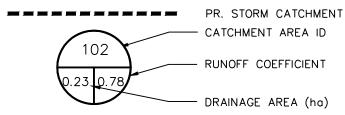
EX. BELL LINE EX. BELL PEDESTAL EX. CABLE TELEVISION PEDESTAL EX. HYDRO POLE EX. LIGHT STANDARD

EX. SIGN EX. BUILDING EX. BENCHMARK NUMBER & LOCATION

EX. BOREHOLE NUMBER & LOCATION



PR. DOUBLE CATCHBASIN PR. CATCHBASIN MANHOLE PR. DOUBLE CATCHBASIN MANHOLE



RUNOFF COEFFICIENT DRAINAGE AREA (ha)

PR. CURB CUT PR. CANADA POST COMMUNITY MAIL BOX 口 PR. TRANSFORMER PR. STOP SIGN PR. NAME SIGN

PR. NO PARKING SIGN \_\_\_\_x \_\_\_x \_\_\_x \_\_\_x \_\_\_ — sf — sf — sf — PR. LIGHT DUTY SILT FENCE

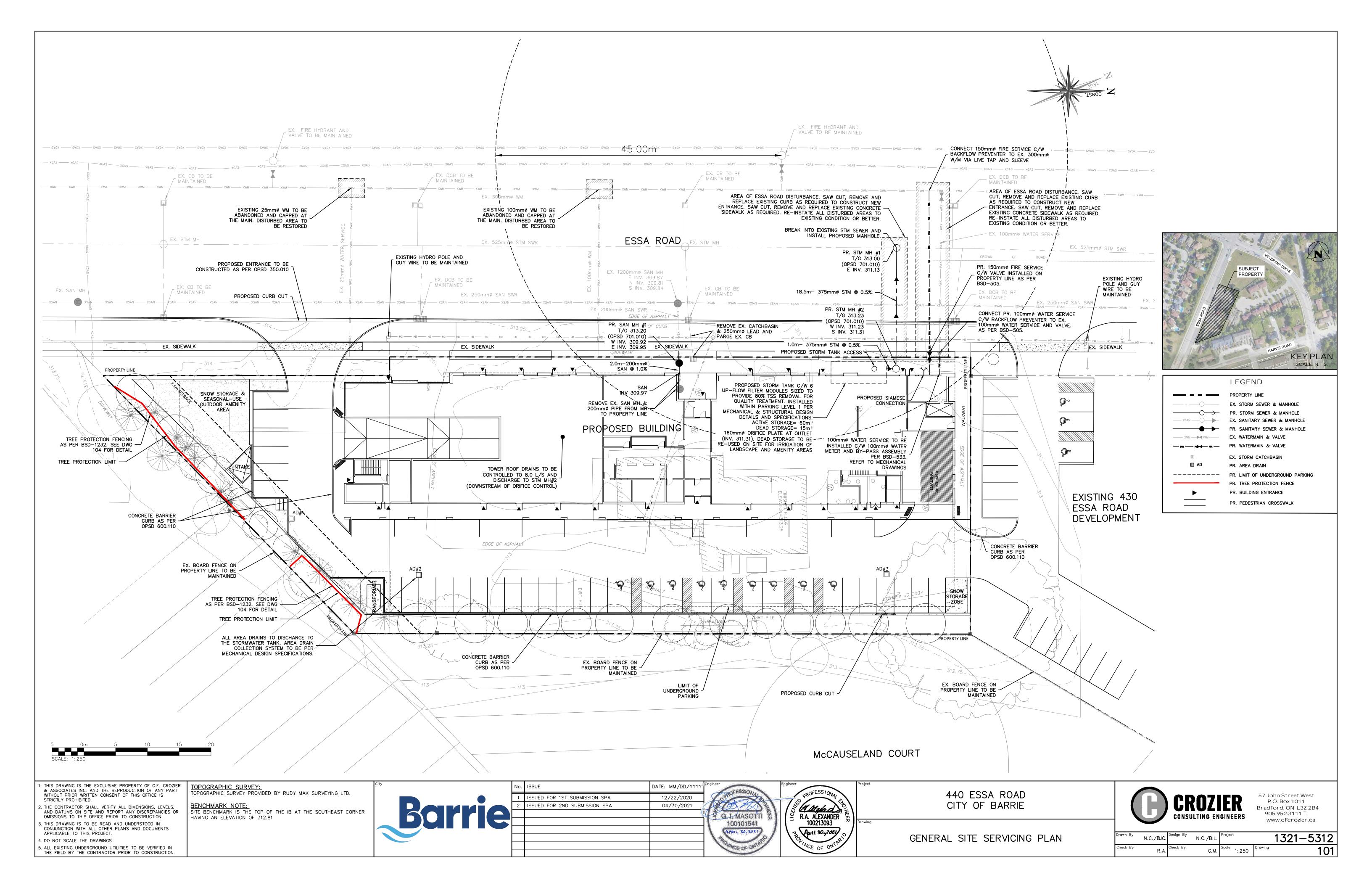
PR. BUILDING ENVELOPE PR. HEAVY DUTY SILT FENCE PR. STRAW BALE CHECK FLOW

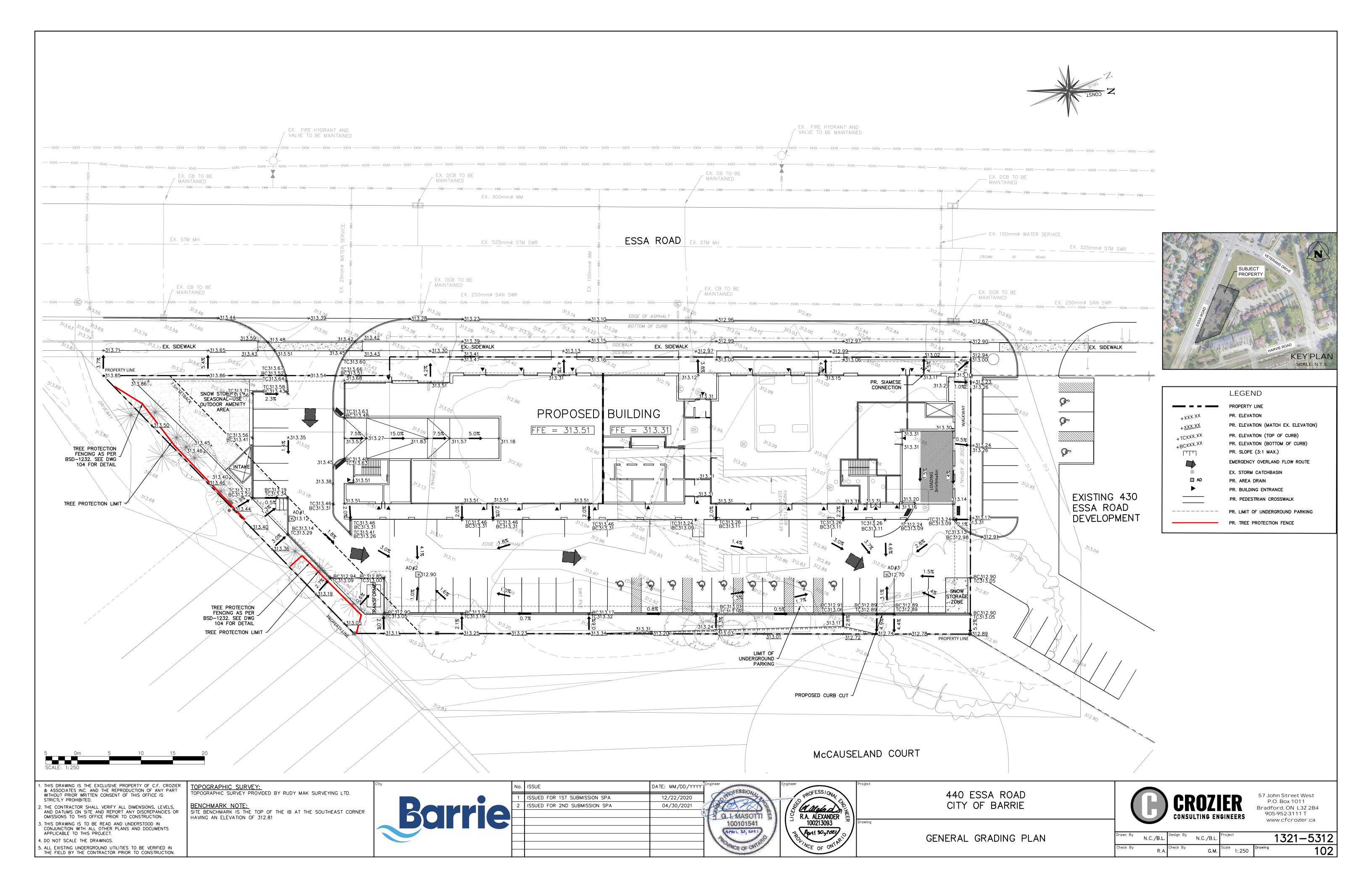
PR. ROCK CHECK DAM

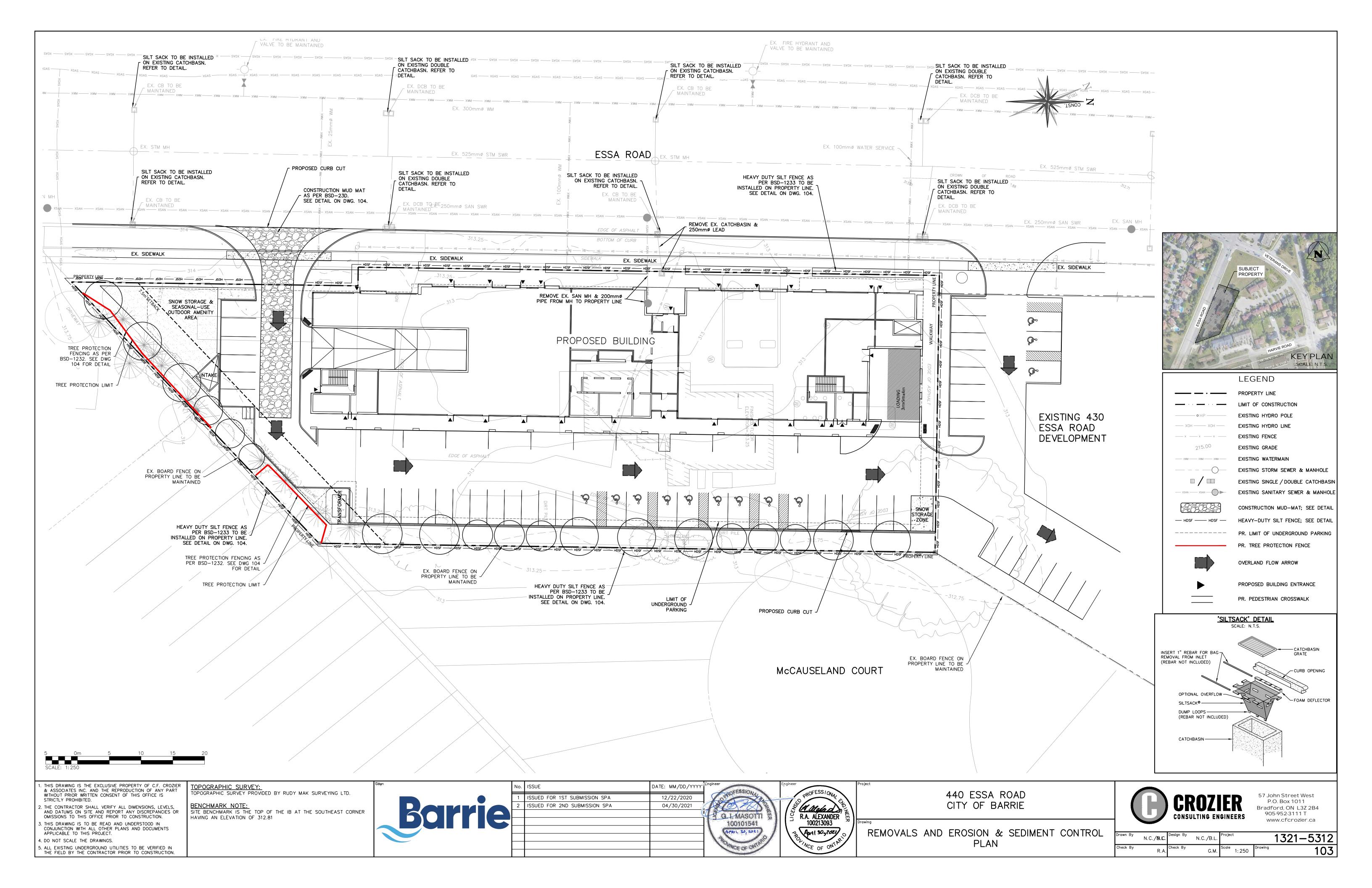
1111

PR. SLOPE (3:1 MAX.) PR. TREE PRESERVATION AREA PR. TOPSOIL STOCKPILE LOCATION

# 3 L , 3







#### **CONSTRUCTION NOTES**

#### <u>DRAWINGS</u>

1.1. ALL DRAWINGS SHALL BE PRODUCED IN ACCORDANCE WITH CURRENT CITY OF BARRIE STANDARDS AND SYMBOLS FOR PLAN & PROFILE DRAWINGS, 6.3 STORM SEWERS SHALL BE CONSTRUCTED WITH BEDDING AS PER OPSD 802.010 (GRAN 'A' EMBEDMENT MATERIAL) FOR FLEXIBLE PIPES AND OPSD GENERAL SERVICE PLANS AND LOT GRADING PLANS.

#### 2. MEASUREMENT

2.1. ALL DIMENSIONS ARE IN METRES (m), EXCEPT PIPE DIAMETERS, WHICH ARE IN MILLIMETRES (mm), UNLESS SPECIFIED OTHERWISE. 2.2. ALL DIMENSIONS 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.

- 3.1 ALL WORK SHALL BE IN ACCORDANCE WITH CURRENT CITY OF BARRIE STANDARD DRAWINGS (BSD) AND ONTARIO PROVINCIAL STANDARD DRAWINGS
- 3.2 ORDER OF PRECEDENCE OF STANDARD DRAWINGS IS FIRSTLY CITY OF BARRIE STANDARD DRAWINGS (BSD) AND SECONDLY ONTARIO PROVINCIAL STANDARD DRAWINGS (OPSD) 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. 3.4 A ROAD OCCUPANCY PERMIT IS REQUIRED FROM THE ROADS AND PARKS OPERATIONS BRANCH PRIOR TO THE COMMENCEMENT OF WORK WITHIN
- ANY CITY RIGHT-OF-WAY 3.5 A SITE ALTERATION PERMIT IS REQUIRED FROM THE ENGINEERING DEPARTMENT PRIOR TO THE COMMENCEMENT OF ANY EARTH WORKS ON THE
- 3.6 NATIVE MATERIAL, SUITABLE FOR BACKFILL, SHALL BE COMPACTED TO 95% STANDARD PROCTOR MAXIMUM DRY DENSITY (SPMDD). GRANULAR MATERIAL, USED FOR BACKFILL, SHALL BE PLACED IN LAYERS OF 150mm IN DEPTH MAXIMUM AND COMPACTED TO 100% SPMDD.
- ALL DISTURBED AREAS ARE TO BE REINSTATED TO THEIR ORIGINAL CONDITION OR BETTER, AS DETERMINED BY THE CITY ENGINEERING DEPARTMENT
- 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 ENGINEERING DEPARTMENT.

- GENERAL

  SINGLE-STAGE CURB AND GUTTER TO COMPLY WITH OPSD 600.040. TWO-STAGE CURB AND GUTTERTO COMPLY WITH OPSD 600.070.
- 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
- 4.4 NATIVE SUBGRADE SHALL HAVE CROSSFALL OF 3% AND MATERIAL SHALL BE APPROVED BY A SOILS CONSULTANT AND IS SUBJECT TO APPROVAL BY THE DIRECTOR OF ENGINEERING.
- THE ROAD BASE SHALL INCORPORATE 100mm DIAMETER SUBDRAIN WITH FACTORY INSTALLED FILTER FABRIC AS PER CITY OF BARRIE STANDARD
- 4.6 ALL CURB RADII TO BE MINIMUM 10.0 METRES AT THE EDGE OF ASPHALT 4.7 NATIVE SUBGRADE TO BE COMPACTED TO MINIMUM 95% SPMDD AND SHALL BE PROOF ROLLED.
- 4.8 GRADE AND CROSSFALL ADJUSTMENTS OF MAINTENANCE HOLE AND CATCHBASIN FRAMES WILL BE MADE USING PRODUCTS SPECIFICALLY
- MANUFACTURED FOR THAT PURPOSE. THE TOP ADJUSTMENT OF ALL CATCHBASIN AND MAINTENANCE HOLES SHALL BE RUBBER. 4.9 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. ADJUSTMENT UNITS AND JOINTS WILL BE SEALED AND OR PARGED IN COMPLIANCE WITH MANUFACTURERS SPECIFICATIONS AND GUIDELINES. 4.11 MORTAR 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. 4.12 NON COMPRESSIVE BACKFILL WILL BE USED DURING REBUILDING, ADJUSTING, OR ANY OTHER APPLICABLE CATCHBASIN OR MAINTENANCE HOLE WORKS.

#### 5. <u>SANITARY SEWERS</u>

- SANITARY SEWER TO BE LOCATED AT THE CENTRELINE OF THE ROAD.
- 5.2 SEWERS SHALL BE CONSTRUCTED WITH BEDDINGS AS PER OSD 802.010 (GRAN 'A' EMBEDMENT MATERIAL) FOR FLEXIBLE PIPES AND OPSD 802.030 OR 802.031 CLASS B (GRAN 'A' BEDDING MATERIAL) FOR RIGID PIPES UNLESS OTHERWISE APPROVED BY THE DIRECTOR OF ENGINEERING.
- 5.3 MAXIMUM DEFLECTION FROM COMBINED LIVE AND DEAD LOADING SHALL NOT EXCEED AND CSA, OPS, OR MANUFACTURES RECOMMENDED **SPECIFICATIONS**
- PVC, CONCRETE AND PROFILE WALL PVC SEWERS SHALL HAVE RUBBER GASKET TYPE JOINTS AND SHALL BE CERTIFIED TO CONFORM TO ALL APPLICABLE CURRENT CSA SPECIFICATIONS.
- CONCRETE SANITARY SEWERS SHALL HAVE A MINIMUM STRENGTH OF 50N/m/mm CONFORMING TO CSA STANDARD A257.2-1982, CLASS 50-D (PREVIOUSLY CSA STANDARD A257.2-1974, CLASS II).
- 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 ADJUSTMENTS WILL BE IN ACCORDANCE WITH BSD-N2.
- 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 MANUFACTURERS GUIDELINES.
- SANITARY LATERAL CONNECTION TO BE LOCATED AT THE CENTRELINE OF THE LOT AND CAPPED. 5.9 LOCATION OF LATERAL TO BE MARKED 2.0m PAST PROPERTY LINE WITH A 50mm x 100mm WOOD MARKER PAINTED GREEN, EXTENDING FROM
- SERVICE INVERT TO 300mm ABOVE GROUND LEVEL.
- 5.10 PIPE TO BE MINIMUM 100mm DIA. PVC SDR28, RUBBER GASKET TYPE JOINTS AND SHALL CONFORM TO CSA (B-182.2.3.4) (COLOURED) FOR A RESIDENTIAL HOUSE AND 150mm MINIMUM DIA. PVC SDR28 FOR INDUSTRIAL/COMMERCIAL DEVELOPMENT.
- MINIMUM DEPTH OF LATERAL AT PROPERTY LINE SHALL BE 2.4m MEASURED FROM THE SEWER OBVERT TO FINISHED GROUND SURFACE ELEVATION
- 5.12 ALL CONNECTIONS TO NEW SANITARY MAINS SHELL BE PRE-MANUFACTURED, FABRICATED TEES. CONNECTIONS TO EXISTING SANITARY SEWER SHALL BE MADE WITH APPROVED FACTORY MADE TEES OR INSERTA-TEES IN STRICT ACCORDANCE WITH MANUFACTURERS GUIDELINES.
- 5.13 MINIMUM PIPE SLOPE TO BE 2.0%, MAXIMUM 8.0% (SEE OPSD 1006.010, 1006.020).

#### NOTES: THIS STANDARD IS TO BE IN ACCORDANCE WITH SCHEDULE "B" OF THE SITE ALTERATION BY-LAW, 'CODE FOR THE DESIGN AND Install culvert as needed in existing ditches MAINTENANCE OF EROSION AND SEDIMENTATION <u>CONTROL MEASURES' AND IS TO BE ADMINISTEREI</u> 2. Purpose of Construction Mat is to minimize ortation of sediment onto roadways. 3. Construction mat is to be installed as the first step in the site alteration process. Areas Without Vegetation roads are within 300m of the site. vegetative buffer beyond Dual Silt Fence along edge of 30m minimum access road and property lin Silt Fence along edge of Install Silt Fence to property line— 0.1m to 0.2m quarry stone with appropriate geotextile CITY OF BARRIE STANDARD 1. | Standardized Dimension Text| J.S. |05.10.2 DATE: 04.03.16 RAWN: A.S.C SCALE: N.T.S CONSTRUCTION **ENTRANCE MAT** BSD-23D REVISION APR'DI DATE

#### 6. STORM SEWERS

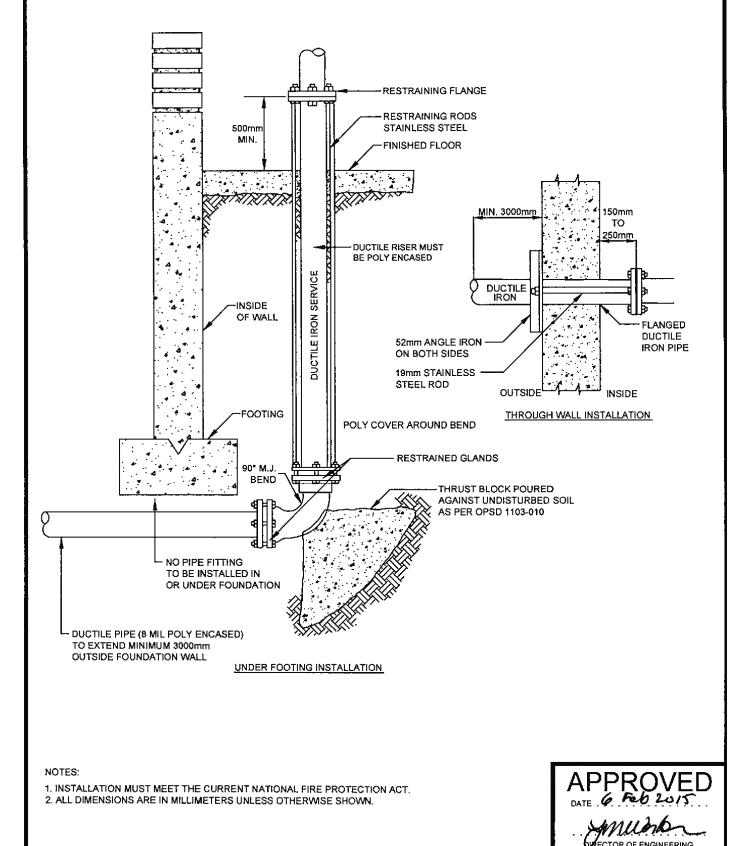
- STORM SEWER TO BE PROVIDED ON ALL ROADS WITH CURB AND GUTTER. 6.2 PLACE ALL CATCHBASIN LATERALS AT 2.0% GRADE UNLESS OTHERWISE NOTES. PIPE SIZE MINIMUM 250mm DIA. SINGLE, 300mm DIA. DOUBLE.
- 802.030 OR 802.031 (GRAN 'A' BEDDING MATERIAL) FOR RIGID PIPE UNLESS OTHERWISE APPROVED BY THE DIRECTOR OF ENGINEERING. MAINTENANCE HOLE TOPS (FRAMES) AND CATCHBASIN TOPS (FRAMES) ARE TO BE SET TO BASE COURSE ASPHALT GRADE AND THEN ADJUSTED
- TO THE FINAL GRADE WHENTHE TOP COURSE ASPHALT IS PLACED. ALL ADJUSTMENT WILL BE IN ACCORDANCE WITH BD-N2. STORM SEWER SHALL BE LOCATED OFFSET 3.0m SOUTH OR EAST OF CENTRELINE UNLESS OTHERWISE SPECIFIED.
- ALL CONNECTIONS TO THE STORM MAIN SHALL BE MADE WITH A STORM MANHOLE OR APPROVED FACTORY TEE CONNECTION AS PER OPSD 708-010 OR 708.030. PIPE MATERIAL TO BE REINFORCED CONCRETE WITH A MINIMUM STRENGTH OF 50N/m/mm CERTIFIED TO CSA STANDARD A247.2-1982, CLASS
- 50-D (PREVIOUSLY CSA STANDARD A257.2-1974, CLASS II) OR PVC CERTIFIED TO CSA STANDARDS 182.2 AND 182.4. STORM SEWER TO BE MINIMUM 300mm DIAMETER WITH JOINTS CONFORMING TO CSA STANDARD A257.3.
- ALL PIPE BEDDING MUST CONFORM TO OPSD, MAXIMUM COVER TABLE. NO FLEXIBLE PIPES WILL BE INSTALLED WITH A DEPTH OF COVER GREATER THAN 6 METRES UNLESS SPECIFICALLY APPROVED BY THE DIRECTOR OF ENGINEERING.
- 6.10 ALL PIPE HANDLING INSTALLATIONS MUST BE IN STRICT COMPLIANCE WITH MANUFACTURERS INSTALLATIONS GUIDELINES AND THE O.C.P.A. OR
- UNIBELL GUIDELINES SUMP PUMP DISCHARGE PIPING IN BOULEVARD:
- IN THE EVENT OF OVERACTIVE SUMP PUMP ACTIVITY, A 150mm DIAMETER PVC DR-28 SEWER MAY BE INSTALLED, WHEN SO DIRECTED BY THE DIRECTOR OF ENGINEERING, ALONG THE FRONTAGES OF DESIGNATED LOTS, WITH AN OFFSET OF 0.6m FROM BACK OF CURB. THIS SEWER IS THE BE CAPPED AT THE UPSTREAM END AND IS TO OUTLET INTO THE NEAREST CATCHBASIN DOWNSTREAM. DEPTH OF THE SEWER IS TO BE EQUAL TO SUBDRAIN DEPTH, NOT TO BE DIRECTLY CONNECTED TO FOUNDATION DRAINS.

#### <u>WATERMAINS</u>

- CONTRACTOR SHALL INFORM THE CITY OF BARRIE ENGINEERING DEPARTMENT A MINIMUM OF 48 HOURS IN ADVANCE OF THEIR INTENTIONS TO
- OPERATIONS 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 WATERMAINS
- MINIMUM COVER OVER WATERMAIN IS 1.7m. THE MINIMUM HORIZONTAL SEPARATION BETWEEN WATERMAIN AND SEWERS IS THE BE 2.5m. WHERE WATERMAIN CONFLICTS WITH SEWER PIPES, DEFLECT WATERMAIN HORIZONTALLY OR VERTICALLY WHILE PROVIDING A MINIMUM OF 0.5m CLEARANCE BETWEEN WATERMAINS AND SEWERS. MAINTAIN MINIMUM DEPTH OF COVER AT ALL TIMES.
- 7.4.1 WATERMAIN 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, GRAN 'A' OR SELECT NATIVE COVER MATERIAL) FOR RIGID PIPE UNLESS OTHERWISE APPOVED BY THEDIRECTOR OF ENGINEERING OR \*ALTERNATIVE \* ALTERNATIVE EMBEDMENT MATERIAL - SAND MEETING GRADATION REQUIREMENTS OF OPS 1004.05.05 COMPACTED TO 95% SPMDD. GEOTECHNCAL CLARIFICATION 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). 7.4.2 COPPER WATERMAINS AND SERVICES 19mm TO 50mm IN DIAMETER SHALL BE EMBEDDED IN SAND 100mm ABOVE AND BELOW TO CONFORM TO OPSS 1004.05.05.
- 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 MER BE REQUIRED IN ADDITION TO STANDARD CONCRETE THRUST BLOCKING WHERE SOIL
- RESTRAINING WILL BE REQUIRED ON ALL FIRE HYDRANTS. 7.7 NEW WATERMAINS TO BE PVC DR18 CL150, OR DUCTILE IRON CL52.
- 7.8 TRACING WIRE (#12 TWO 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.
- 7.9 ALL WATER SERVICES SHALL BE MINIMUM 19mm TYPE 'K' COPPER UNLESS OTHERWISE APPROVED BY THE DIRECTOR OF ENGINEERING. WATER SERVICE SADDLES SHALL BE USED WHEN TAPPING INTO PVC WATERMAIN.
- 7.10 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. 7.11 DOMESTIC AND FIRE SERVICE RISER PIPES TO BE BUILT AS PER BSD-505
- 7.11 SERVICE TAPPINGS SHALL BE PLACED AT A MINIMUM SEPARATION OF 1.0m AND A MINIMUM OF 0.6m FROM JOINTS (ENDS OF PIPE).
- 7.12 ALL NEW CURB STOPS AND BOXES TO BE LOCATED AT PROPERTY LINE AND OUT OF DRIVEWAYS AND SIDEWALKS.

#### 8. <u>EROSION AND SEDIMENT CONTROL</u>

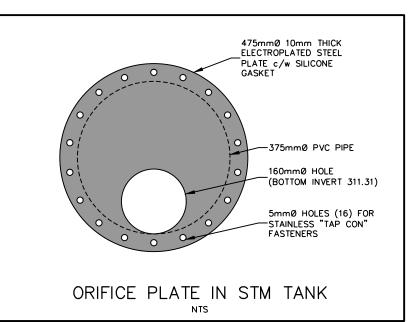
- ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO THE COMMENCEMENT OF CONSTRUCTION AND SHALL REMAIN IN PLACE UNTIL ALL DISTURBED AREAS HAVE BEEN STABILIZED. SEDIMENT AND EROSION CONTROL MEASURES THAT ARE DESIGNED TO CONTROL RUNOFF FROM SPECIFIC AREAS MUST BE INSTALLED PRIOR TO ANY DISTURBANCE TO SITE.
- THE CONTRACTOR MAY CONSIDER ALTERNATIVE SEDIMENT AND EROSION CONTROL MEASURES. SUCH MEASURES MUST BE PRESENTED IN WRITING FOR APPROVAL OF THE CONTRACT ADMINISTRATOR AND THE TOWN.
- THE CONTRACTOR SHALL HAVE MATERIALS AVAILABLE ON-SITE TO REPAIR SEDIMENT AND EROSION CONTROL MEASURES IN THE EVENT OF
- UNFORESEEN CONDITIONS: HIGHWATER, EXTREME RAINFALL EVENTS, ETC. MUD MAT TO BE CONSTRUCTED AT ACCESS POINT.
- NO MAINTENANCE OR REPAIR WORK ON CONSTRUCTION EQUIPMENT IS ALLOWED WITHIN 30M OF AN EXISTING WATERCOURSE OR DITCH EXCEPT AS ALL TEMPORARY SOIL OR DIRT STOCKPILES ARE TO BE PROVIDED WITH THE NECESSARY SEDIMENT AND EROSION CONTROL FEATURES. IF
- STOCKPILES ARE TO REMAIN FOR A PERIOD LONGER THAN 30 DAYS, STOCKPILES SHALL BE HYDROSEEDED AND SURROUNDED WITH SILT FENCE. CONTRACTOR TO ENSURE POSITIVE DRAINAGE THROUGH SITE SUCH THAT NO UPSTREAM OR DOWNSTREAM IMPACT OCCURS DURING CONSTRUCTION
- ACTIVITIES. THE CONTRACTOR WILL BE RESPONSIBLE TO CLEAN ALL ADJACENT ROADWAYS AS REQUIRED OR AS DIRECTED BY THE SITE ENGINEER OR TOWN.
- 8.10 SILT FENCE MUST BE INSPECTED WEEKLY FOR RIPS OR TEARS, BROKEN STAKES, BLOW-OUTS AND ACCUMULATION OF SEDIMENT.
- 8.11 SILT FENCE MUST BE INSPECTED IMMEDIATELY AFTER EVERY RAIN STORM EVENT OR AS DIRECTED BY SITE ENGINEER. 8.12 SEDIMENT DEPOSITS MUST BE REMOVED FROM SILT FENCE WHEN ACCUMULATION REACHES 50% OF THE HEIGHT OF THE FENCE.
- 8.13 ALL SILT FENCES MUST BE REMOVED ONLY WHEN THE ENTIRE SITE IS STABILIZED AND AS DIRECTED BY THE SITE ENGINEER. 8.14 ALL SILT FENCES INSTALLED AT THE LIMIT OF THE DEVELOPMENT ARE TO BE PLACED ON THE PROPERTY LINE.
- 8.15 GEOTEXTILE (TERRAFIX 270R OR APPROVED EQUAL) TO BE PLACED AS SEPARATION BARRIER BETWEEN EXISTING GROUND AND CLEAR STONE.
- 8.16 INSPECT MUD MAT WEEKLY TO ASSESS CONDITION AND TO ENSURE OPERATION EFFICIENCY. 8.17 SUPPLY AND PLACE ADDITIONAL STONE TO PREVENT MUD TRACKING AS DIRECTED BY SITE ENGINEER.
- 8.18 MUD MAT TO REMAIN IN PLACE UNTIL SITE IS STABILIZED OR AS DIRECTED BY SITE ENGINEER.

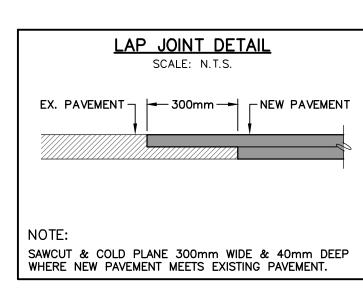


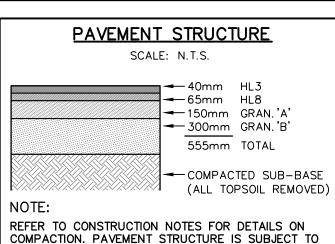
DIAMETER PIPE

TYPICAL SERVICE ENTRY 100mm TO 300mm

REV No. DATE: FEB 2015 SCALE: N.T.S. BSD-505 (PREVIOUSLY BSD-61

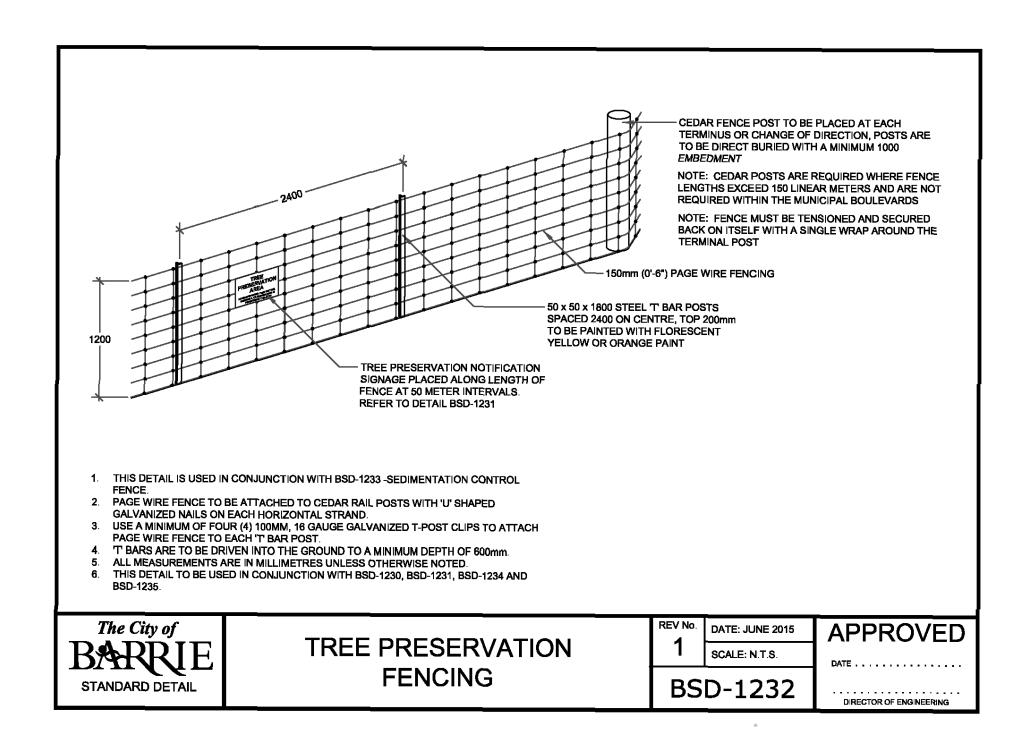




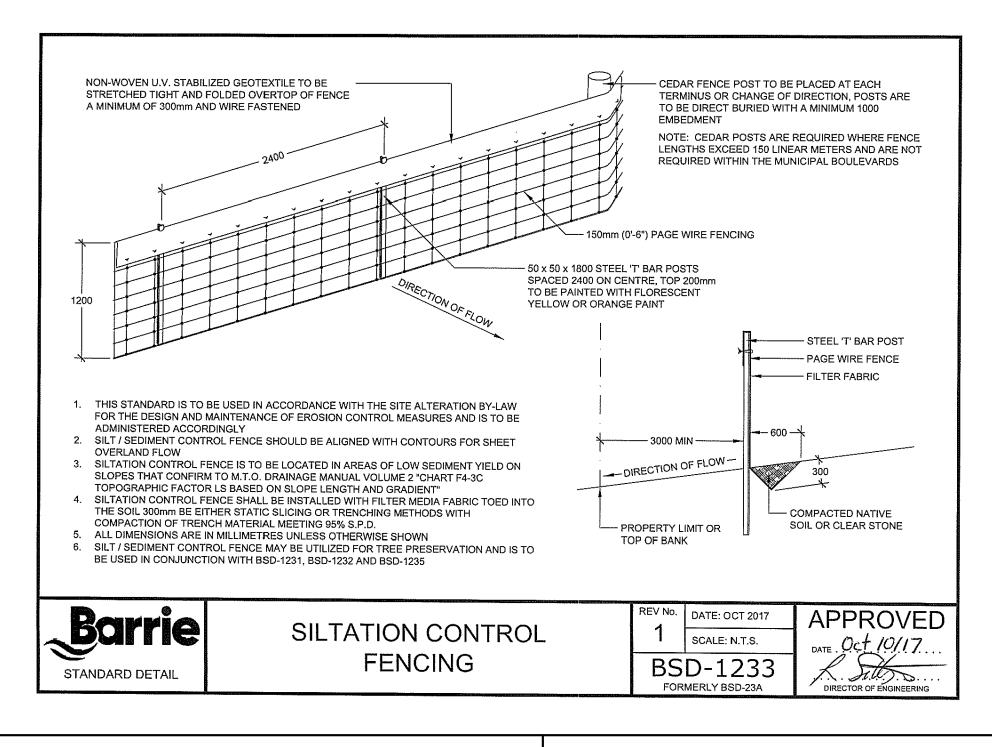


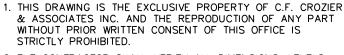
CHANGE BASED ON GEOTECHNICAL CONSULTANT'S

RECOMMENDATIONS.



DATE: MM/DD/YYY





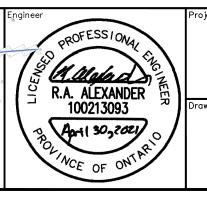
- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, LEVELS, AND DATUMS ON SITE AND REPORT ANY DISCREPANCIES OR OMISSIONS TO THIS OFFICE PRIOR TO CONSTRUCTION.
- THIS DRAWING IS TO BE READ AND UNDERSTOOD IN CONJUNCTION WITH ALL OTHER PLANS AND DOCUMENTS APPLICABLE TO THIS PROJECT. 4. DO NOT SCALE THE DRAWINGS.
- 5. ALL EXISTING UNDERGROUND UTILITIES TO BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO CONSTRUCTION.

TOPOGRAPHIC SURVEY: OPOGRAPHIC SURVEY PROVIDED BY RUDY MAK SURVEYING LTD.

BENCHMARK NOTE: SITE BENCHMARK IS THE TOP OF THE IB AT THE SOUTHEAST CORNER HAVING AN ELEVATION OF 312.81

ISSUED FOR 1ST SUBMISSION SPA 12/22/2020 SSUED FOR 2ND SUBMISSION SPA 04/30/2021





BARRIF

STANDARD DETAIL

440 ESSA ROAD CITY OF BARRIE

CONSTRUCTION NOTES

AND STANDARD DETAILS

57 John Street West P.O. Box 1011 radford, ON L3Z 2B4 905-952-3111 T www.cfcrozier.ca

1321-5312



PR. PEDESTRIAN CROSSWALK

<u>SIGNAGE</u>

ACCESSIBLE PARKING

NO PARKING/FIRE ROUTE SIGN, SEE DETAIL

CONVEX MIRROR

WARNING SIGN TO CAUTION MOTORISTS AND PEDESTRIANS OF HEAVY VEHICLES WHEN LOADING OPERATIONS ARE OCCURING.

#### NOTES:

- ALL WORK SHALL BE DONE IN ACCORDANCE WITH BOOK 5 (REGULATORY SIGNS) AND BOOK 11 (PAVEMENT,
- HAZARD & DELINEATION MARKINGS). 2. PAVEMENT MARKINGS FOR PARKING STALLS TO
- CONFORM TO OPSS 1712. 3. ADDITIONAL TRAFFIC SIGNAGE AND MIRRORS TO BE
- PROVIDED FOR THE UNDERGROUND PARKING

  4. SIGNS TO BE WALL MOUNTED WHERE APPLICABLE

#### PAVEMENT MARKINGS LEGEND

SOLID YELLOW, 10cm

13 SOLID WHITE, 30cm

20 SYMBOLS

] [ LIMITS OF MARKINGS

1. USE 1) TO DENOTE PAVEMENT MARKING, PAINT

2. USE 1 TO DENOTE PAVEMENT MARKING, DURABLE

THIS DRAWING IS THE EXCLUSIVE PROPERTY OF C.F. CROZIER & ASSOCIATES INC. AND THE REPRODUCTION OF ANY PART WITHOUT PRIOR WRITTEN CONSENT OF THIS OFFICE IS

€----30.00 cm

VEHICLES WILL BE TAGGED AND/OR TOWED AWAY

2.54\_cm

FIRE ROUTE SIGNAGE AND INSTALLATION SPECIFICATIONS

SIGN REQUIREMENTS

5. ALL LETTERING TO MEET M.T.O. STANDARDS. 6. ALL COLOURS TO MEET M.T.O. STANDARDS.

STRICTLY PROHIBITED. 2. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, LEVELS, AND DATUMS ON SITE AND REPORT ANY DISCREPANCIES OR

OMISSIONS TO THIS OFFICE PRIOR TO CONSTRUCTION. 3. THIS DRAWING IS TO BE READ AND UNDERSTOOD IN APPLICABLE TO THIS PROJECT.

CONJUNCTION WITH ALL OTHER PLANS AND DOCUMENTS 4. DO NOT SCALE THE DRAWINGS. 5. ALL EXISTING UNDERGROUND UTILITIES TO BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO CONSTRUCTION.

TOPOGRAPHIC SURVEY: TOPOGRAPHIC SURVEY PROVIDED BY RUDY MAK SURVEYING LTD. BENCHMARK NOTE:

FIRE ROUTE SIGN DETAIL

SITE BENCHMARK IS THE TOP OF THE IB AT THE SOUTHEAST CORNER

SIGNS SHALL COMPLY WITH THE ATTACHED FIGURE 5.

1. ALL SIGN SHALL HAVE APPROPRIATE RADIUS. CORNER AS PER DIAGRAM OR 4 cm RADIUS.

2. ALL SHARP EDGES REMOVED FROM SIGN BLANKS. COMPLETED SIGNS SHALL HAVE 11mm X
18mm SLOTTED HOLES TO ACCEPT METRIC OR IMPERIAL MOUNTING WITH HOLES 3cm-12cm
FROM OUTER EDGE OR AS PER DIAGRAM.

3. CENTRE OF MOUNTING SLOTS SHALL BE EQUAL TO MULTIPLE OF 5.08cm (2 INCHES)
CENTRALLY LOCATED ON BLANK. ON STEEL BLANKS, FABRICATIONS SHALL BE FABRICATED
BEFORE GALVANIZING AS TO PREVENT CORROSION. ON ALUMINUM BLANKS, FABRICATING
SHALL BE PERFORMED PRIOR TO PAINTING AND RAKING

SHALL BE PERFORMED PRIOR TO PAINTING AND BAKING.

FINISHED SIGNS AND SYMBOLS SHALL BE APPLIED TO 1.63mm UTILITY GRADE ALUMINUM WITH BRIGHT WHITE MILL BAKED FINISH ON BOTH SIDES. ALL INKS SHALL BE FACES TO CONFORM TO REG. 486 OF THE HIGHWAY TRAFFIC ACT.

DETAIL 1

HAVING AN ELEVATION OF 312.81

Ο.	ISSUE	DATE: MM/DD/TTTT
1	ISSUED FOR 1ST SUBMISSION SPA	12/22/2020
2	ISSUED FOR 2ND SUBMISSION SPA	04/30/2021



440 ESSA ROAD CITY OF BARRIE

PAVEMENT MARKING AND SIGNAGE PLAN



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