CAUTION:
THE POSITION OF POLE LINES, CONDUITS, WATERMAINS, SEWERS AND
OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES
NOT NECESSARILY SHOWN ON THE DRAWINGS, AND, WHERE SHOWN, TH
ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS N
GUARANTEED. BEFORE STARTING WORK, THE CONTRACTOR SHALL
INFORM HIMSELF OF THE EXACT LOCATION OF ALL SUCH UTILITIES AND
STRUCTURES, AND SHALL ASSUME ALL LABBILITY FOR DAMAGE TO THEM

# RIVER BREEZE TOWNHOUSE DEVELOPMENT MUNICIPALITY OF BROCKTON (FORMERLY TOWN OF WALKERTON)

CONTRACT NO. 21-01892-01

MAYOR: MR. CHRIS PEABODY

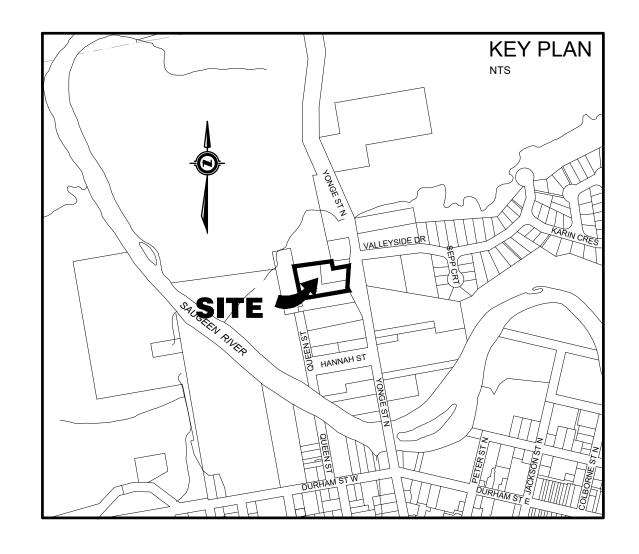
CHIEF ADMINISTRATIVE OFFICER / CLERK : MS. SONYA WATSON
DIRECTOR OF OPERATIONS : MR. GREGORY FURTNEY

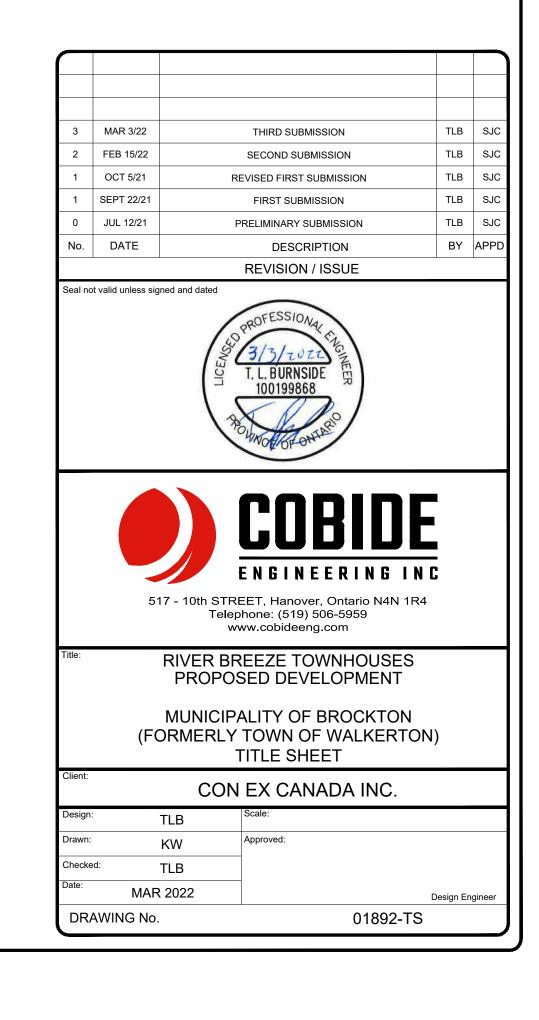
# OWNER:

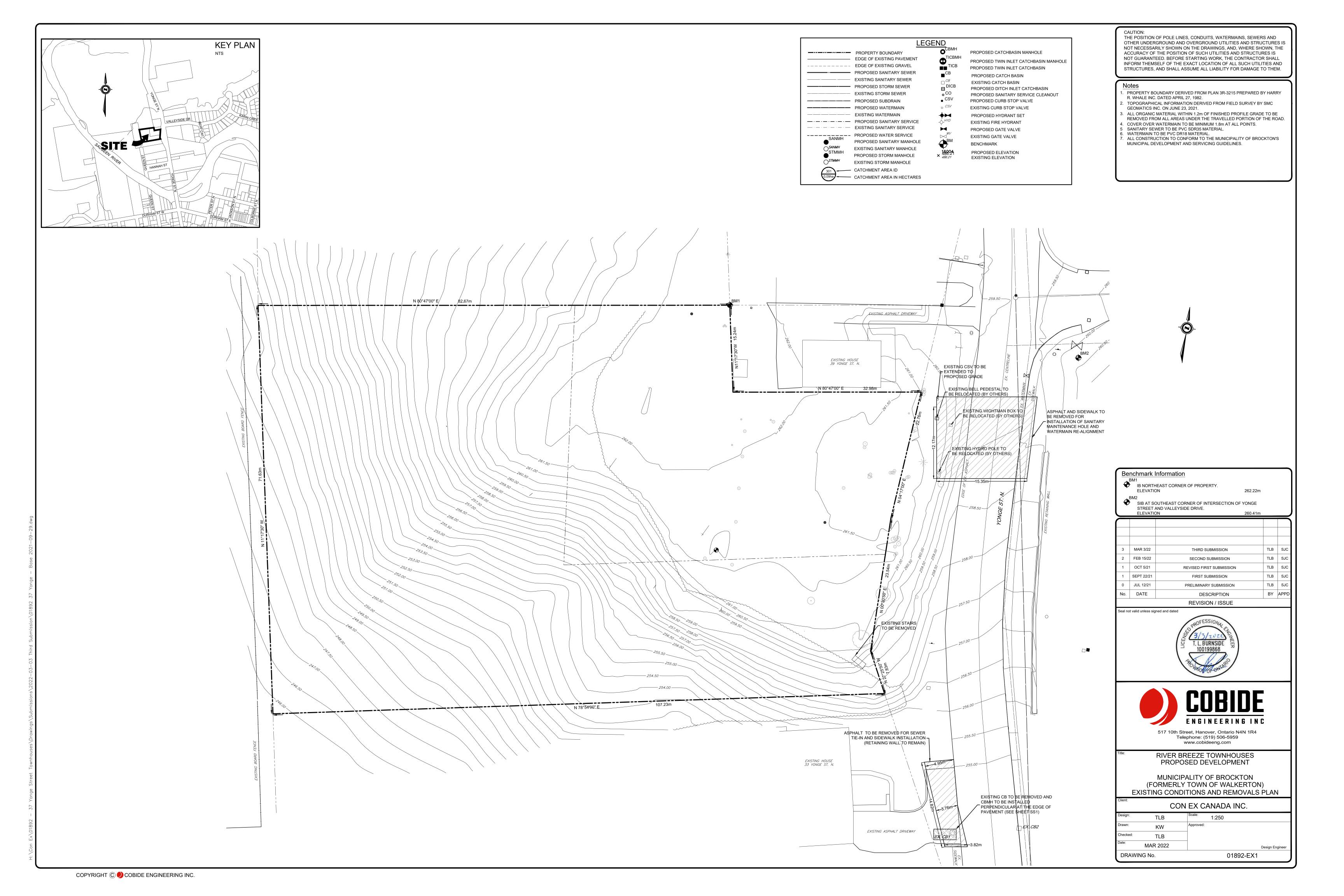
CON EX CANADA INC.

## Index

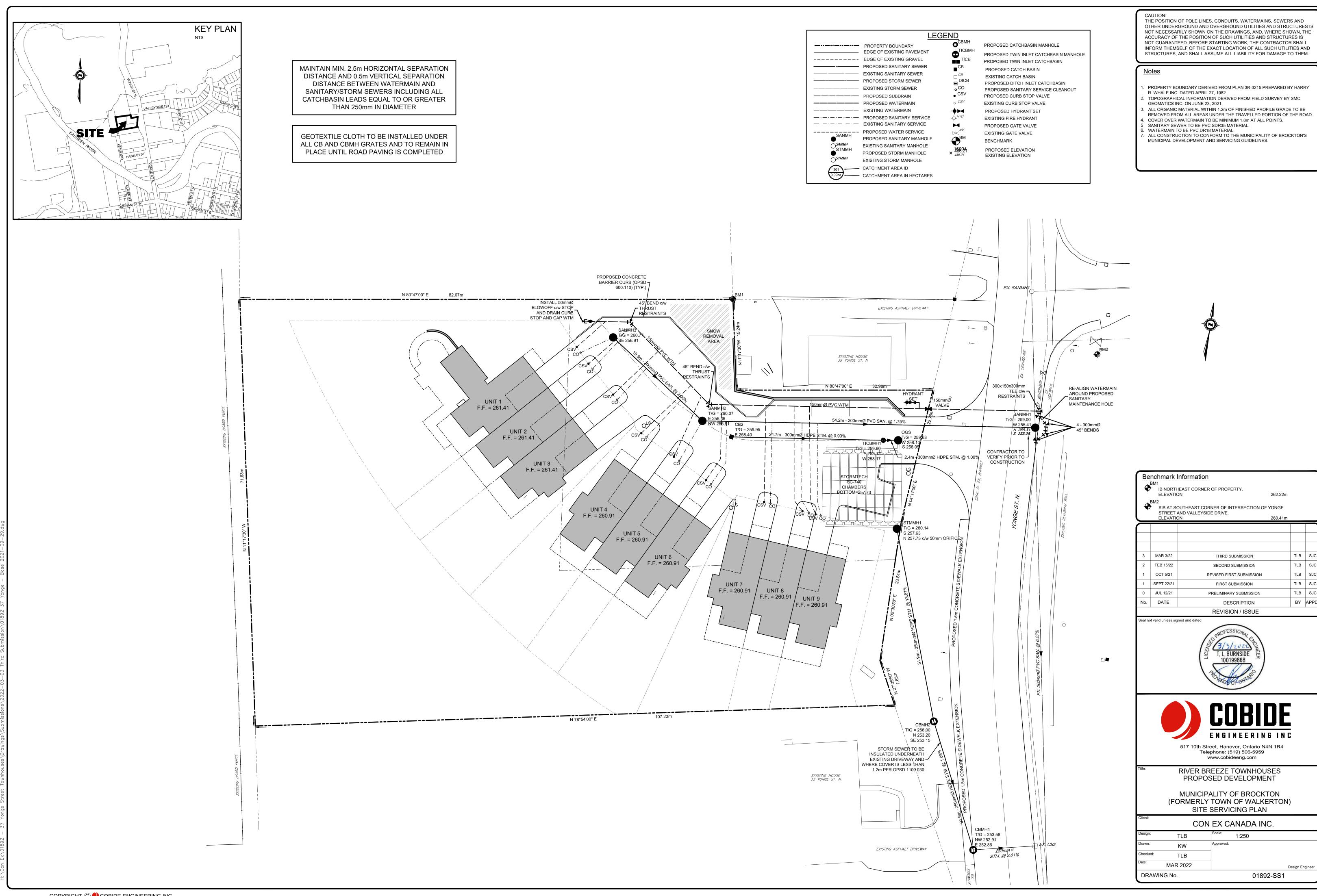
SHEET No.	DESCRIPTION
01892-EX1	EXISTING CONDITIONS AND REMOVALS PLAN
01892-SP1	DEVELOPMENT SITE PLAN
01892-SS1	SITE SERVICING PLAN
01892-SGR1	SITE GRADING PLAN
01892-STM1	STORM SEWER CATCHMENT AREAS
01892-DET1	CHAMBER/MISCELLANEOUS DETAILS I
01892-DET2	MISCELLANEOUS DETAILS II
01892-DET3	MISCELLANEOUS DETAILS III



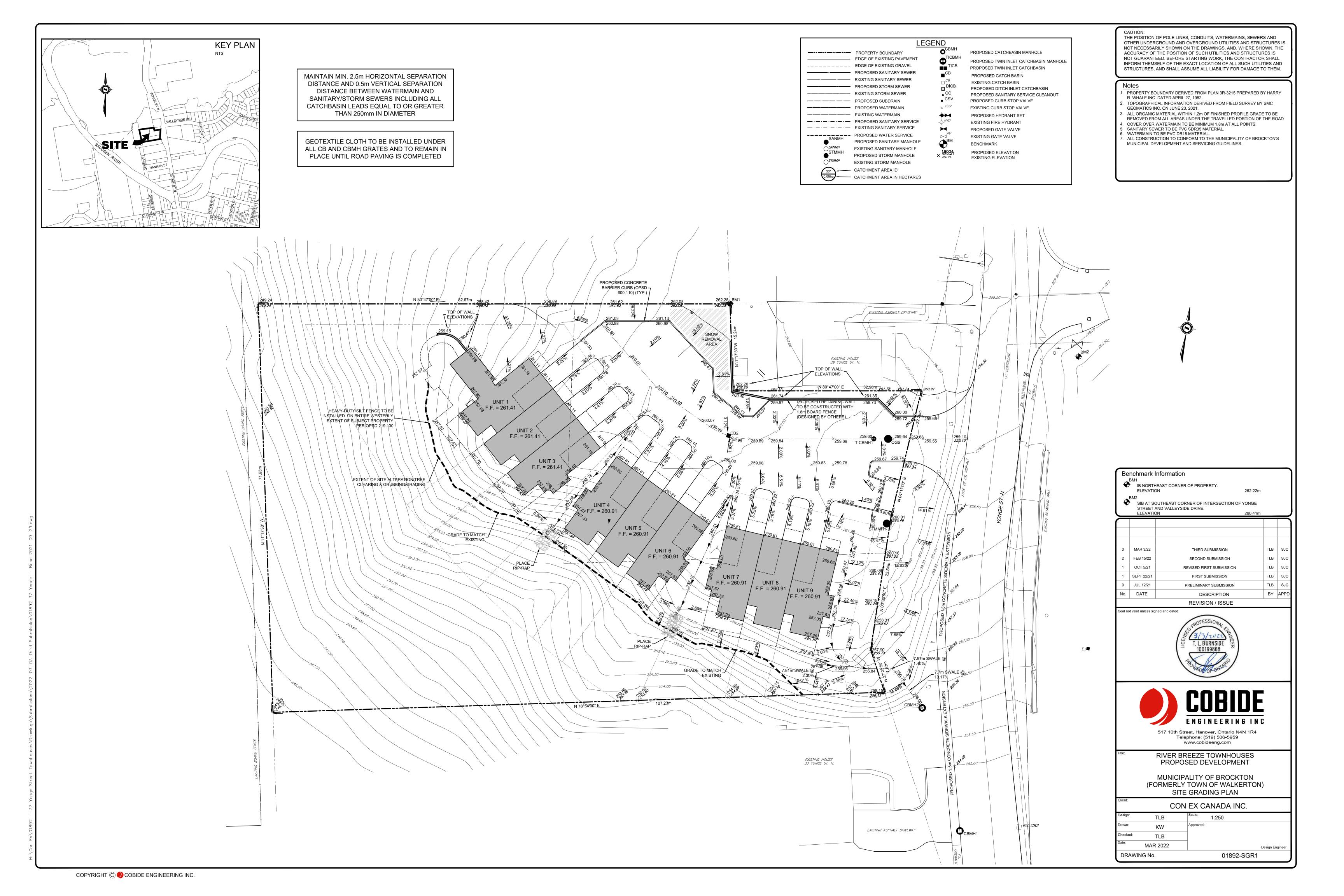


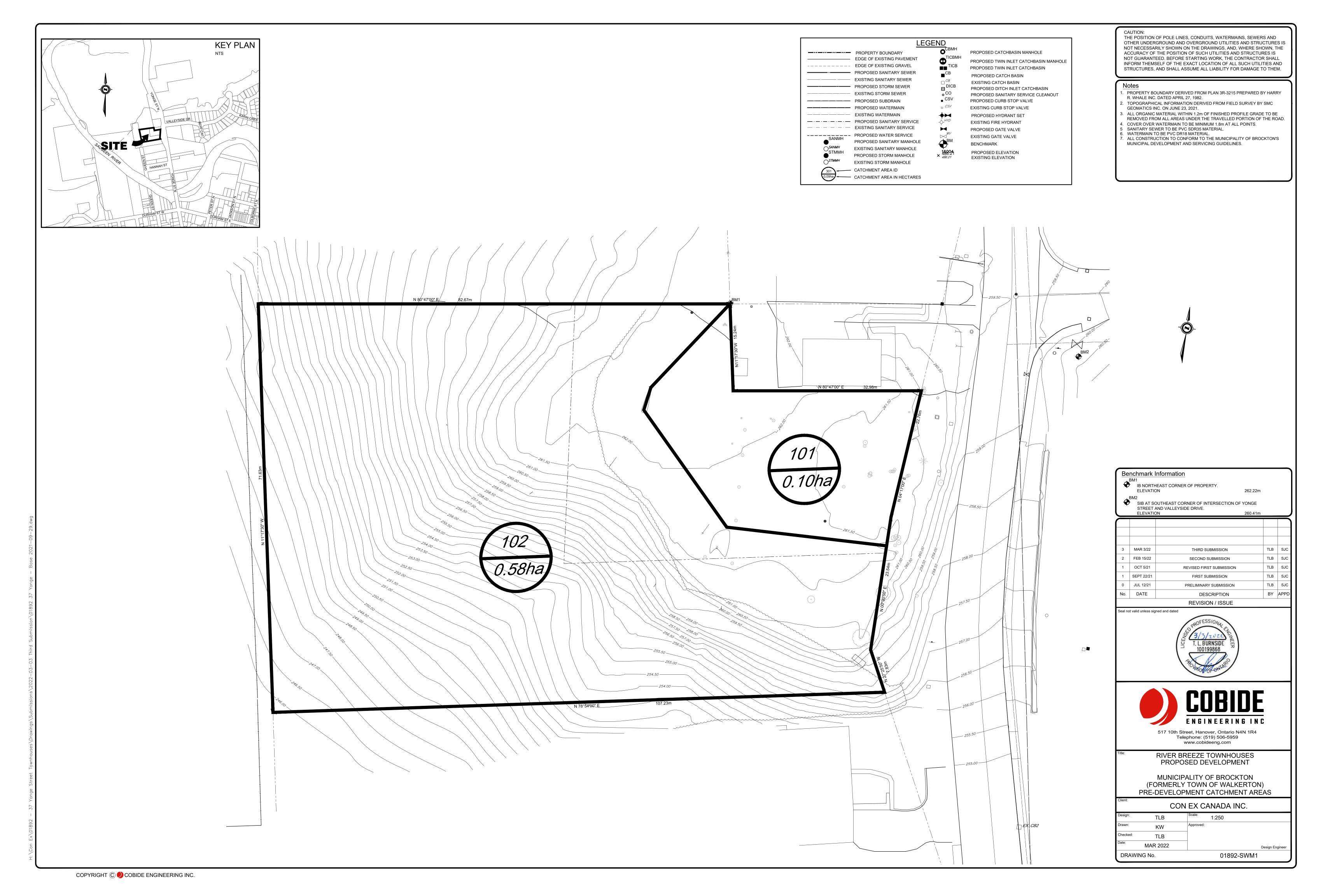


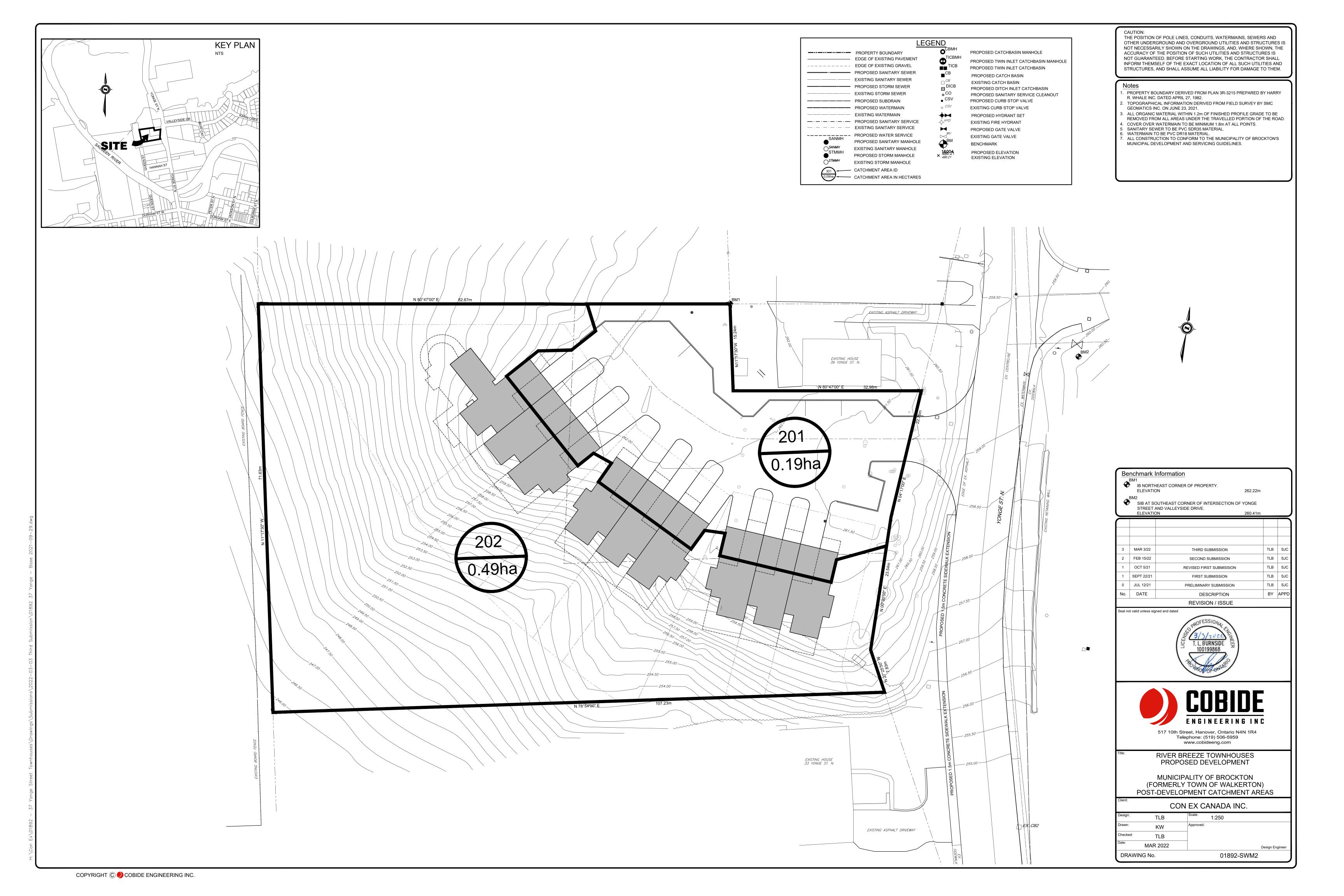


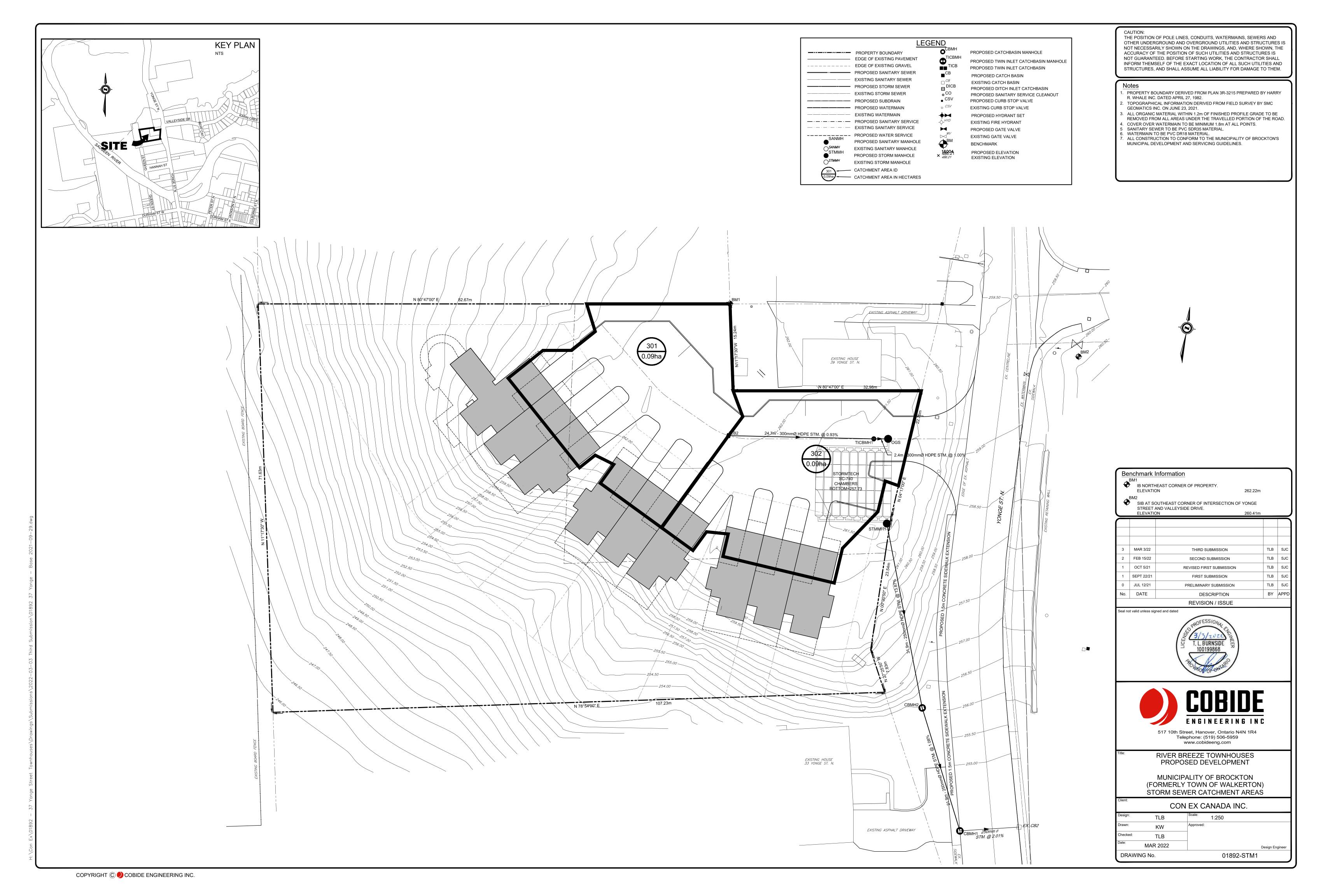


3	MAR 3/22	THIRD SUBMISSION	TLB	SJC
2	FEB 15/22	SECOND SUBMISSION		SJC
1	OCT 5/21	REVISED FIRST SUBMISSION		SJC
1	SEPT 22/21	FIRST SUBMISSION	TLB	SJC
0	JUL 12/21	PRELIMINARY SUBMISSION		SJC
No.	DATE	DESCRIPTION		APPD
				-





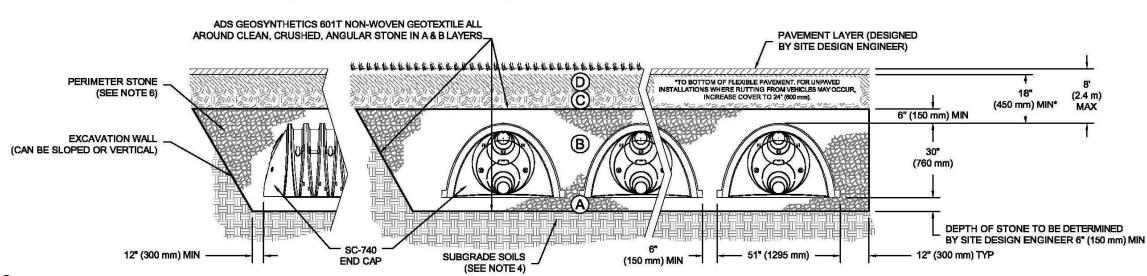




	*				
	MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT	
D	FINAL FILL: FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.	
С	INITIAL FILL: FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 18" (450 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE.  MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	OR	BEGIN COMPACTIONS AFTER 12" (300 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" (150 mm) MA LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 lbs (53 kN). DYNAMIC FORCE NOT TO EXCEED 20,000 lbs (89 kN).	
В	EMBEDMENT STONE: FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE (A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43¹ 3, 357, 4, 467, 5, 56, 57	NO COMPACTION REQUIRED.	
Α	FOUNDATION STONE: FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43¹ 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE. 23	

PLEASE NOTE: 1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE."

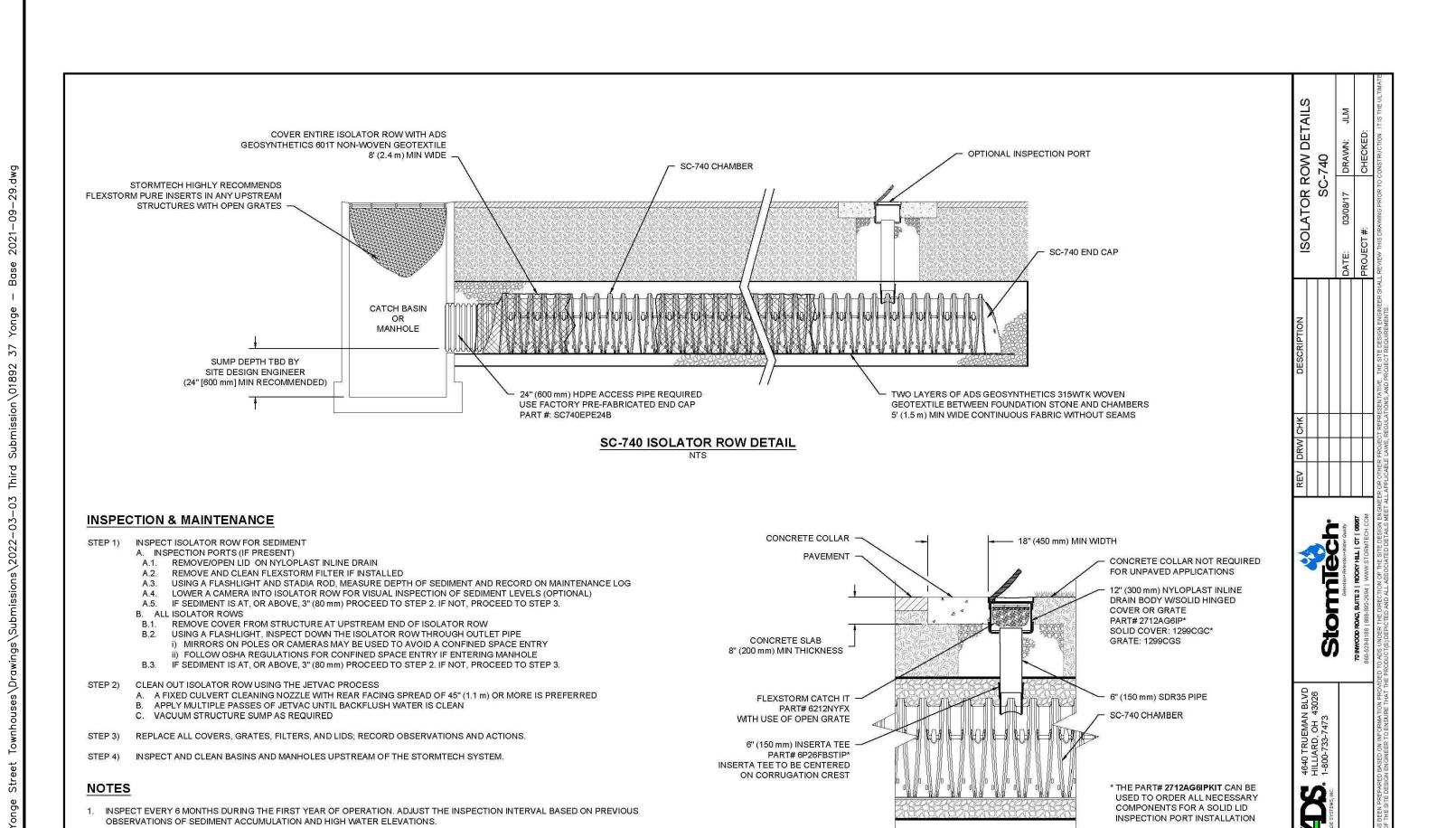
ANGULAR NO. 4 (AASHTO M43) STONE". STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (150 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.



### NOTES:

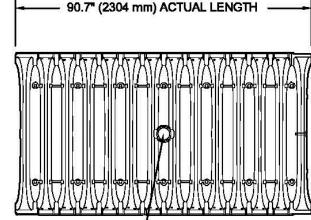
- 1. SC-740 CHAMBERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM F2418 "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS", OR ASTM F2922 "STANDARD SPECIFICATION FOR POLYETHYLENE (PE) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- 2. SC-740 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION
- 3. "ACCEPTABLE FILL MATERIALS" TABLE ABOVE PROVIDES MATERIAL LOCATIONS, DESCRIPTIONS, GRADATIONS, AND COMPACTION REQUIREMENTS FOR FOUNDATION, EMBEDMENT, AND FILL
- 4. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE
- WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS. 5. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
- 6. ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL

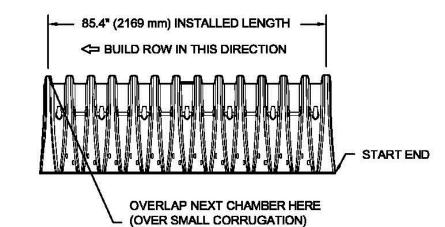
REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.



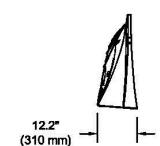
SC-740 6" INSPECTION PORT DETAIL

## SC-740 TECHNICAL SPECIFICATION



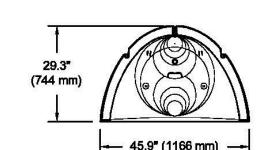


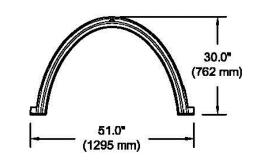
ACCEPTS 4" (100 mm) SCH 40 PVC PIPE FOR INSPECTION L PORT. FOR PÎPE SIZÉS LARGER THAN 4" (100 mm) UP TO 10" (250 mm) USE INSERTA TEE CONNECTION CENTERED ON A CHAMBER CREST CORRUGATION



OF 1

SHEET OF 1



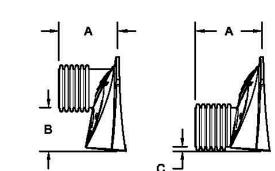


NOMINAL CHAMBER SPECIFICATIONS SIZE (W X H X INSTALLED LENGTH) CHAMBER STORAGE MINIMUM INSTALLED STORAGE\*

51.0" X 30.0" X 85.4" 45.9 CUBIC FEET 74.9 CUBIC FEET 75.0 lbs.

(1295 mm X 762 mm X 2169 mm) (2.12 m<sup>2</sup>)

\*ASSUMES 6" (152 mm) STONE ABOVE, BELOW, AND BETWEEN CHAMBERS



STUBS AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "B"

PART#	STUB	Α	В	C
SC740EPE06T / SC740EPE06TPC	6" (150 mm)	40.01/277>	18.5" (470 mm)	( <del>-</del>
SC740EPE06B / SC740EPE06BPC		10.9" (277 mm)	<del>,</del> .	0.5" (13 mm)
SC740EPE08T /SC740EPE08TPC	8" (200 mm)	13 38 /310 mm)	16.5" (419 mm)	200 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -
SC740EPE08B / SC740EPE08BPC		12.2" (310 mm)	_	0.6" (15 mm)
SC740EPE10T / SC740EPE10TPC	10" (250 mm)	13.4" (340 mm)	14.5" (368 mm)	
SC740EPE10B / SC740EPE10BPC		13.4 (340 11111)	<del>,</del> .	0.7" (18 mm)
SC740EPE12T / SC740EPE12TPC	12" (300 mm)	12" (300 mm) 14.7" (373 mm)	12.5" (318 mm)	72 722
SC740EPE12B / SC740EPE12BPC		14.7 (3/3/11/11)	<u> 2</u>	1.2" (30 mm)
SC740EPE15T / SC740EPE15TPC	15" (375 mm)	18.4" (467 mm)	9.0" (229 mm)	
SC740EPE15B / SC740EPE15BPC		10.4 (407 11111)	<del>7-</del> -	1.3" (33 mm)
SC740EPE18T / SC740EPE18TPC	- 18" (450 mm)	19.7" (500 mm)	5.0" (127 mm)	
SC740EPE18B / SC740EPE18BPC		19.1 (300 11111)	_	1.6" (41 mm)
SC740EPE24B*	24" (600 mm)	18.5" (470 mm)		0.1" (3 mm)

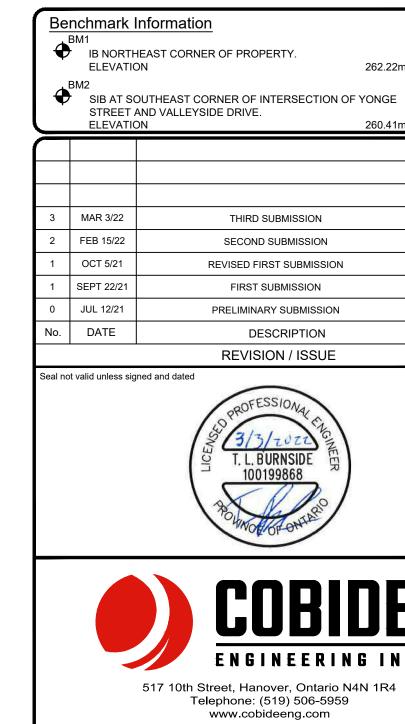
ALL STUBS, EXCEPT FOR THE SC740EPE24B ARE PLACED AT BOTTOM OF END CAP SUCH THAT THE OUTSIDE DIAMETER OF THE STUB IS FLUSH WITH THE BOTTOM OF THE END CAP. FOR ADDITIONAL INFORMATION CONTACT STORMTECH AT

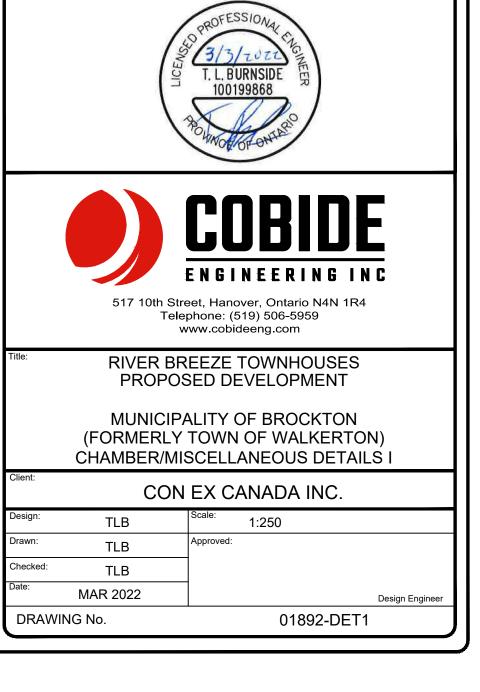
\* FOR THE SC740EPE24B THE 24" (600 mm) STUB LIES BELOW THE BOTTOM OF THE END CAP APPROXIMATELY 1.75" (44 mm). BACKFILL MATERIAL SHOULD BE REMOVED FROM BELOW THE N-12 STUB SO THAT THE FITTING SITS LEVEL.

NOTE: ALL DIMENSIONS ARE NOMINAL

CAUTION: THE POSITION OF POLE LINES, CONDUITS, WATERMAINS, SEWERS AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON THE DRAWINGS, AND, WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK, THE CONTRACTOR SHALL INFORM THEMSELF OF THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES, AND SHALL ASSUME ALL LIABILITY FOR DAMAGE TO THEM.

- PROPERTY BOUNDARY DERIVED FROM PLAN 3R-3215 PREPARED BY HARRY R. WHALE INC. DATED APRIL 27, 1982. TOPOGRAPHICAL INFORMATION DERIVED FROM FIELD SURVEY BY SMC
- GEOMATICS INC. ON JUNE 23, 2021. . ALL ORGANIC MATERIAL WITHIN 1.2m OF FINISHED PROFILE GRADE TO BE
- REMOVED FROM ALL AREAS UNDER THE TRAVELLED PORTION OF THE ROAD.
- COVER OVER WATERMAIN TO BE MINIMUM 1.8m AT ALL POINTS. SANITARY SEWER TO BE PVC SDR35 MATERIAL. WATERMAIN TO BE PVC DR18 MATERIAL.
- ALL CONSTRUCTION TO CONFORM TO THE MUNICIPALITY OF BROCKTON'S MUNICIPAL DEVELOPMENT AND SERVICING GUIDELINES.





THIRD SUBMISSION

SECOND SUBMISSION

REVISED FIRST SUBMISSION

FIRST SUBMISSION

PRELIMINARY SUBMISSION

REVISION / ISSUE

DESCRIPTION

262.22m

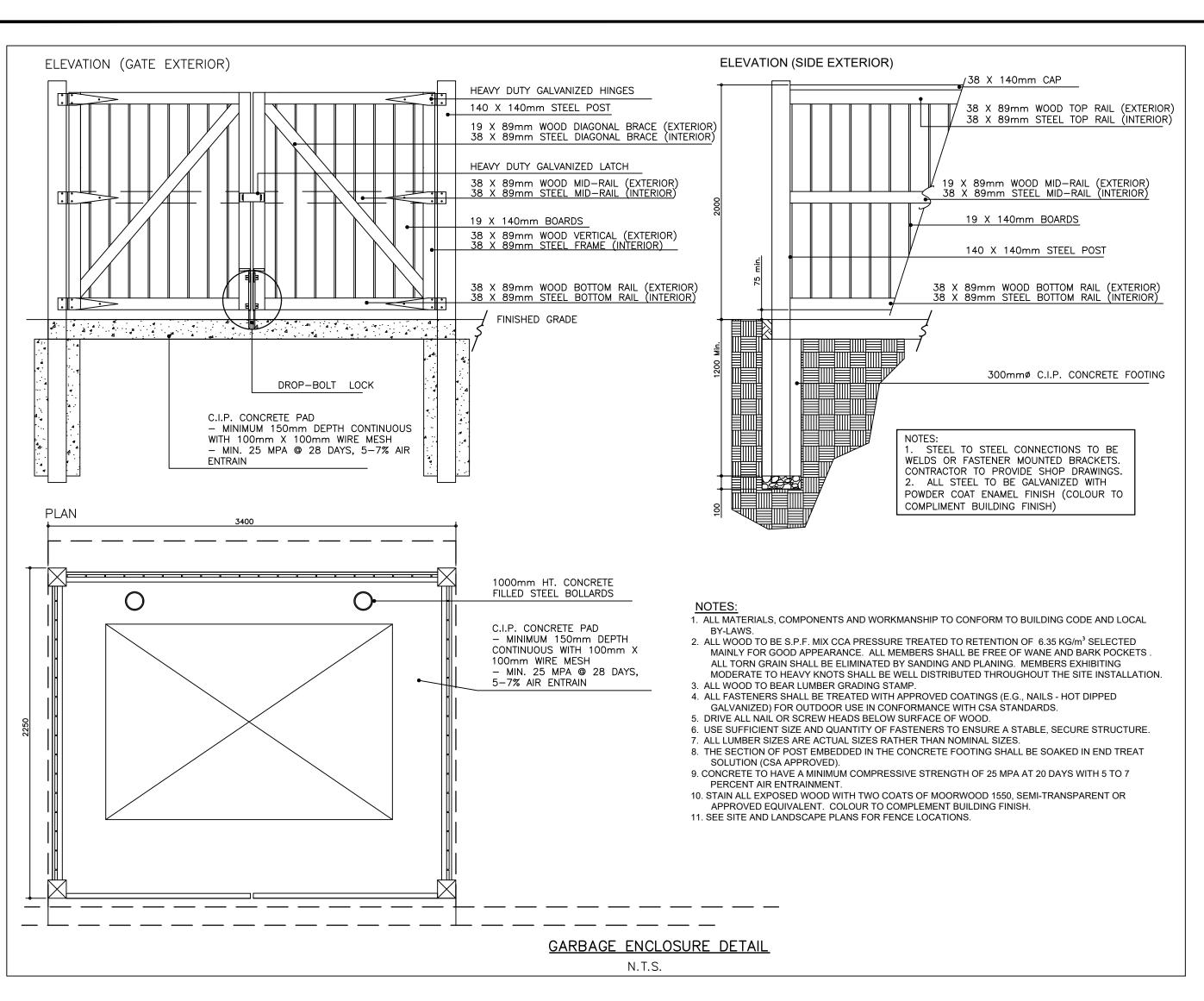
TLB SJC

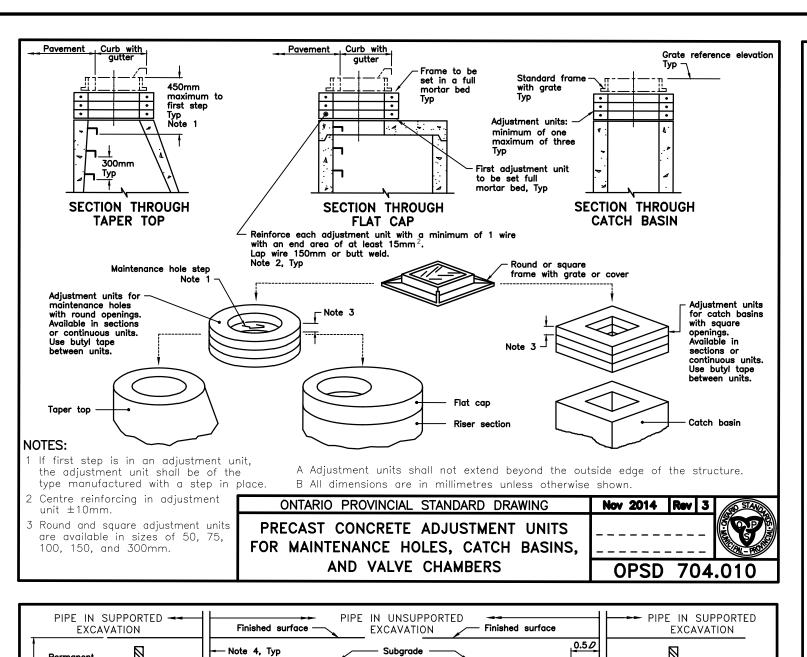
TLB SJC

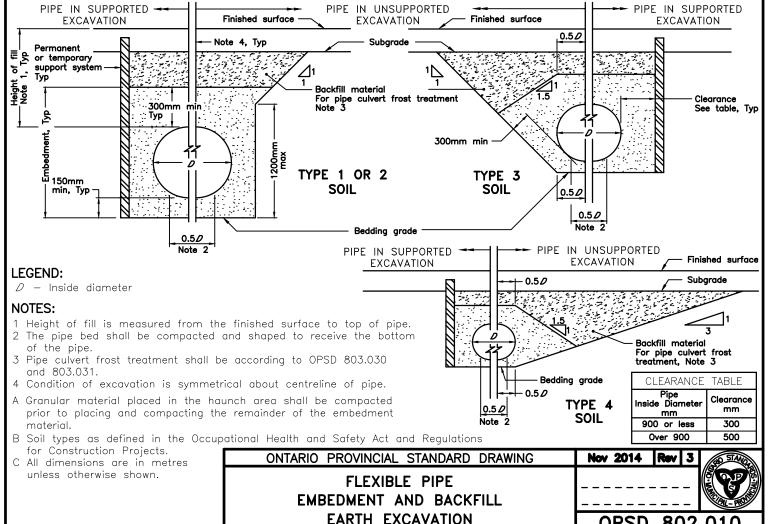
TLB SJC

BY APPD

2. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.







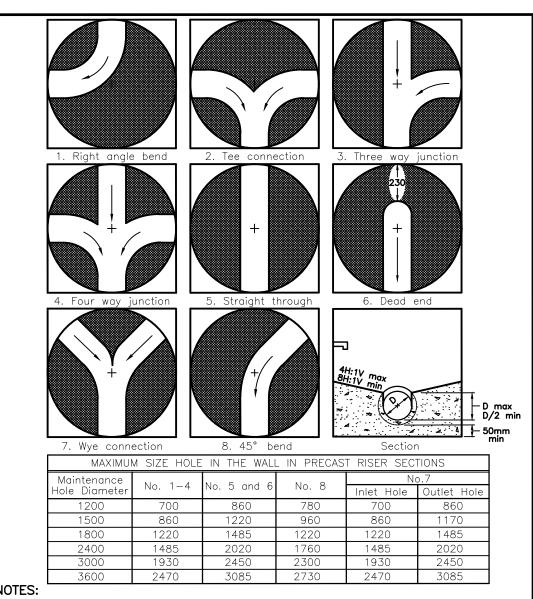
TYPE B

OPEN COVER

29 29 22 -114- 24 | -19 - 29 - 22 -114- 15 27- | -

SECTION D-D

A Covers shall be Type A or Type B, as specified. B All dimensions are in millimetres unless otherwise shown

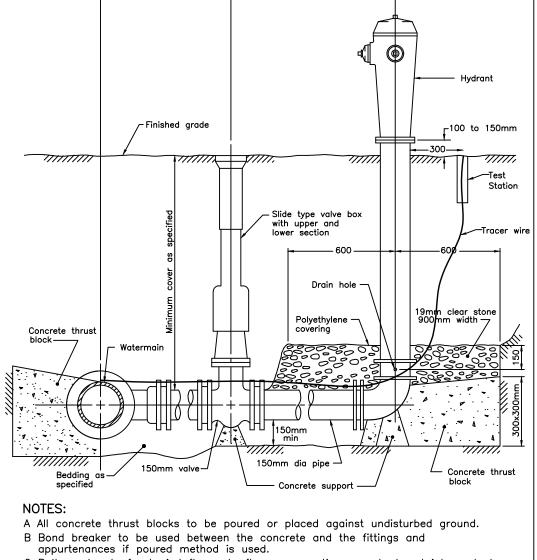


Slopes shall be maintained from the outlet hole opening for top of benching. Concrete for benching shall be 30MPa.

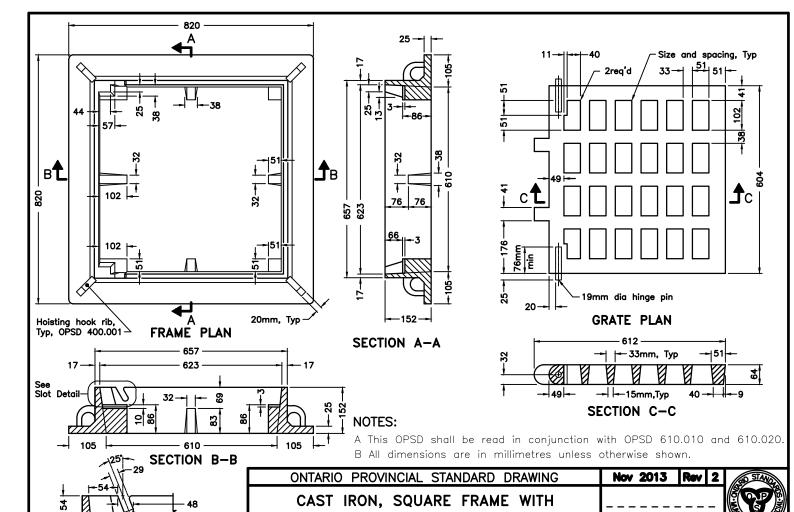
When benching is hand-finshed, it shall be given wood float finish, channel shall be given steel trowel finish. Benching slope and height shall be as specified. D When specified, maintenance holes that are 1200mm in diameter with a uniform channel for 200 or 250mm pipe may be prebenched at the manufacturer with standardized benching slope and channel orientation. All dimensions are nominal. All dimensions are in millimetres unless otherwise shown.

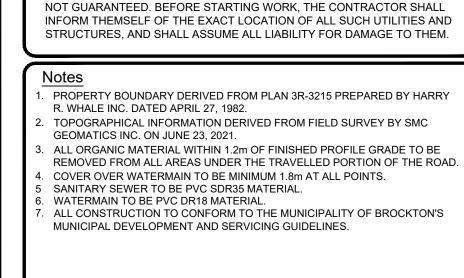
ONTARIO PROVINCIAL STANDARD DRAWING Nov 2014 Rev 4 MAINTENANCE HOLE BENCHING AND PIPE OPENING ALTERNATIVES

OPSD 701.021



\_\_\_\_\_ SS - 1105.010





**Benchmark Information** 

ELEVATION

FI EVATION

FEB 15/22

OCT 5/21

SEPT 22/21

JUL 12/21

DATE

Seal not valid unless signed and dated

IB NORTHEAST CORNER OF PROPERTY

STREET AND VALLEYSIDE DRIVE.

SIB AT SOUTHEAST CORNER OF INTERSECTION OF YONGE

THIRD SUBMISSION

SECOND SUBMISSION

REVISED FIRST SUBMISSION

FIRST SUBMISSION

PRELIMINARY SUBMISSION

REVISION / ISSUE

DESCRIPTION

262.22m

I TLB | SJC

TLB SJC

TLB SJC

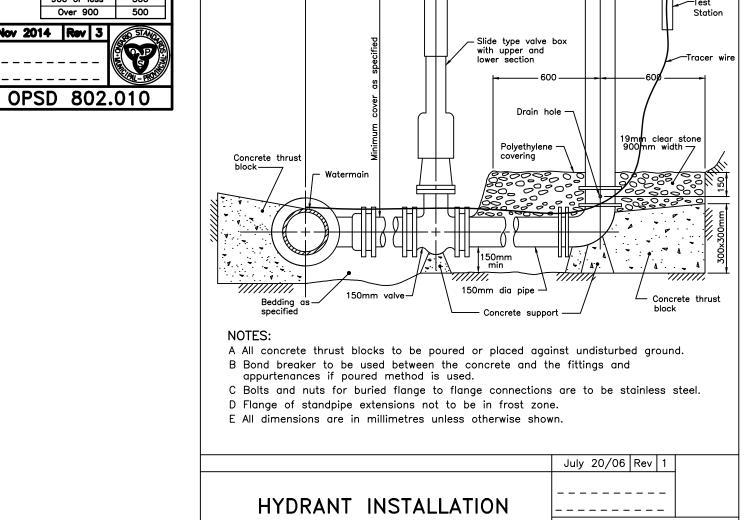
BY APPD

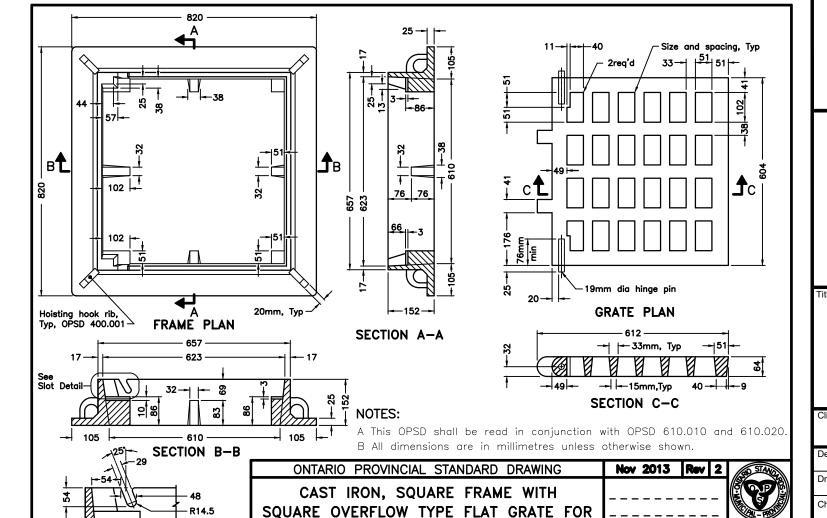
THE POSITION OF POLE LINES, CONDUITS, WATERMAINS, SEWERS AND

ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS

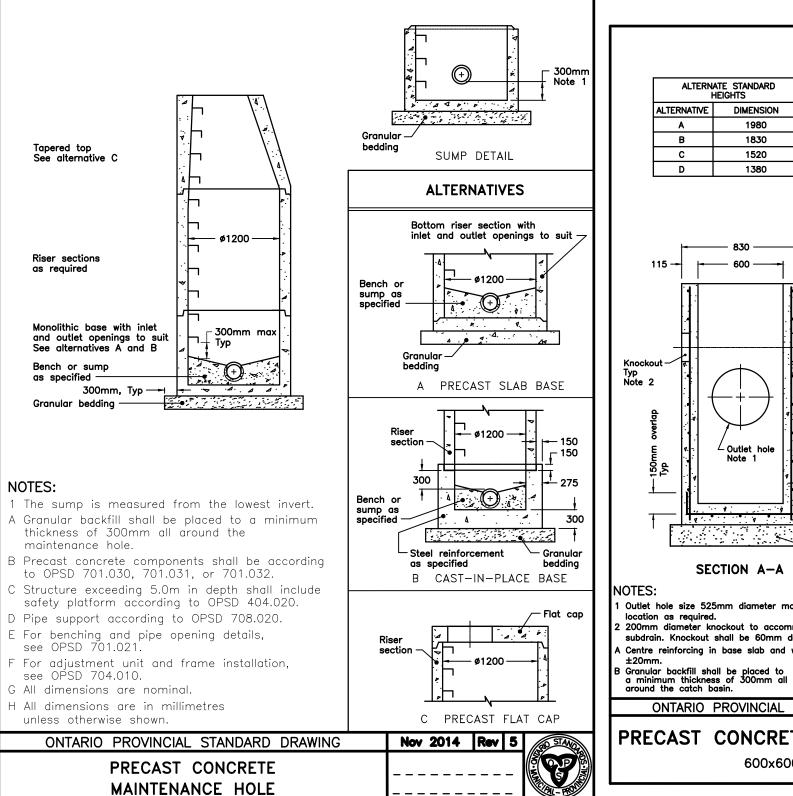
OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES IS

NOT NECESSARILY SHOWN ON THE DRAWINGS, AND, WHERE SHOWN, THE

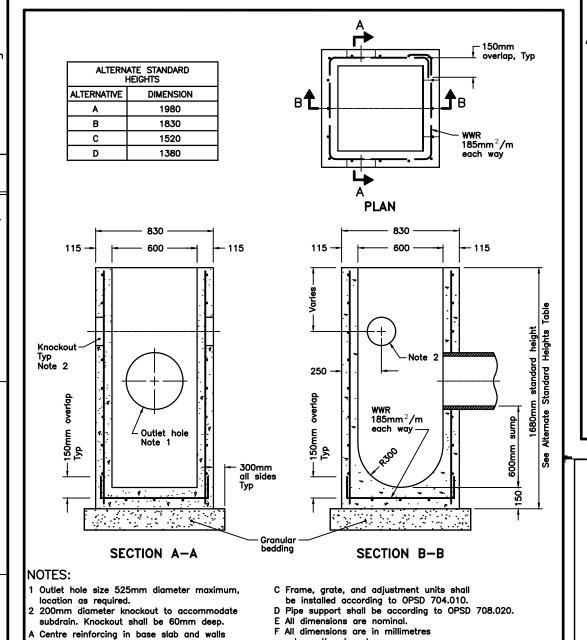




CATCH BASINS, PERFORATED OPENINGS



OPSD 701.010



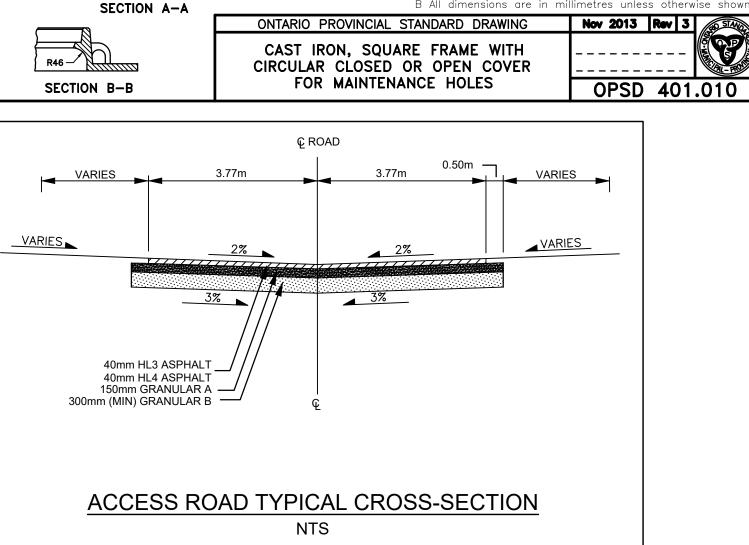
ONTARIO PROVINCIAL STANDARD DRAWING

PRECAST CONCRETE CATCH BASIN

600x600mm

Nov 2014 Rev 3

OPSD 705.010



Hoisting hook rib, Typ, OPSD 400.001 FRAME PLAN

— ø578 —

/0000**0** 

.c**1**./□□□□□□□□□□1c1

DDANGER<del>DD</del> \oooooda /a\_aaaaaaaa

TYPE A

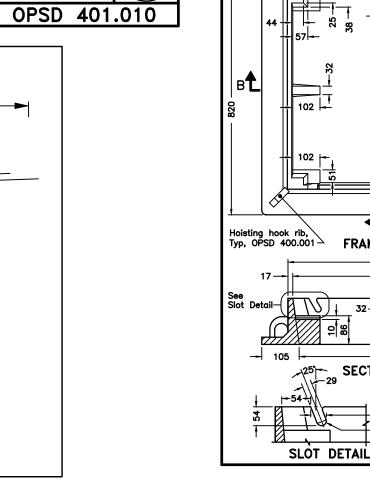
CLOSED COVER

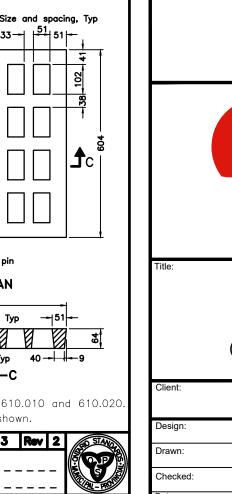
29 29

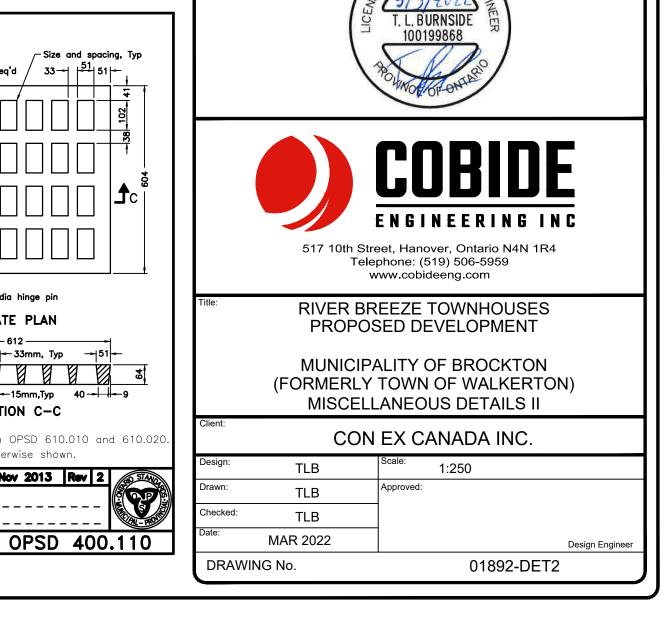
SECTION C-C

NOTES:

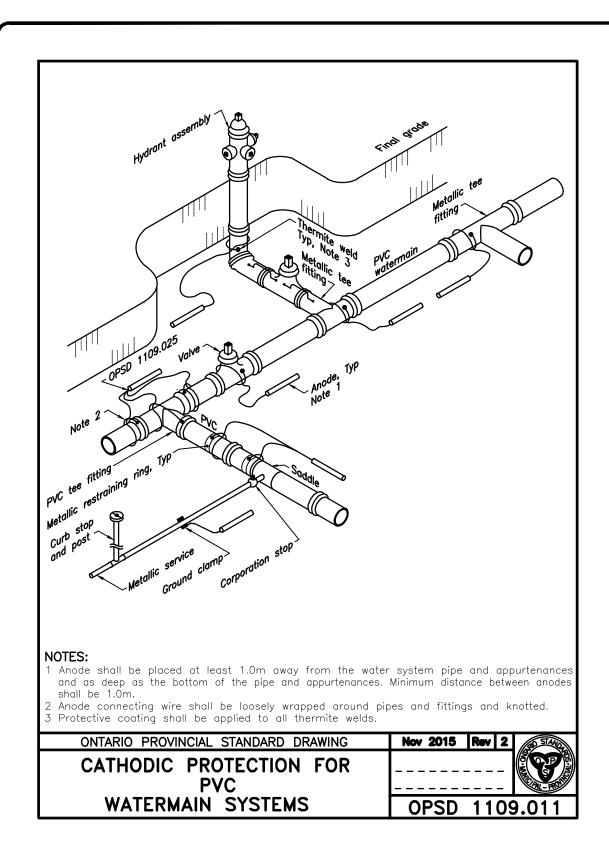
—— ø624 —

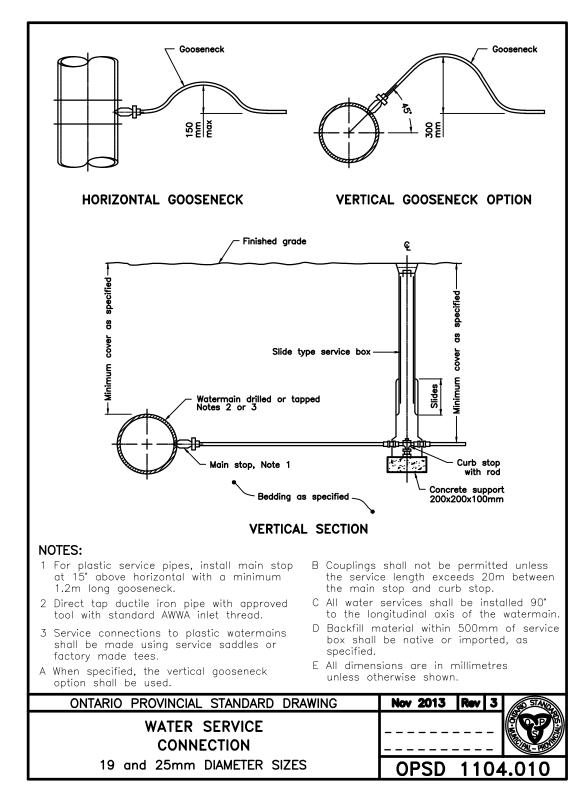


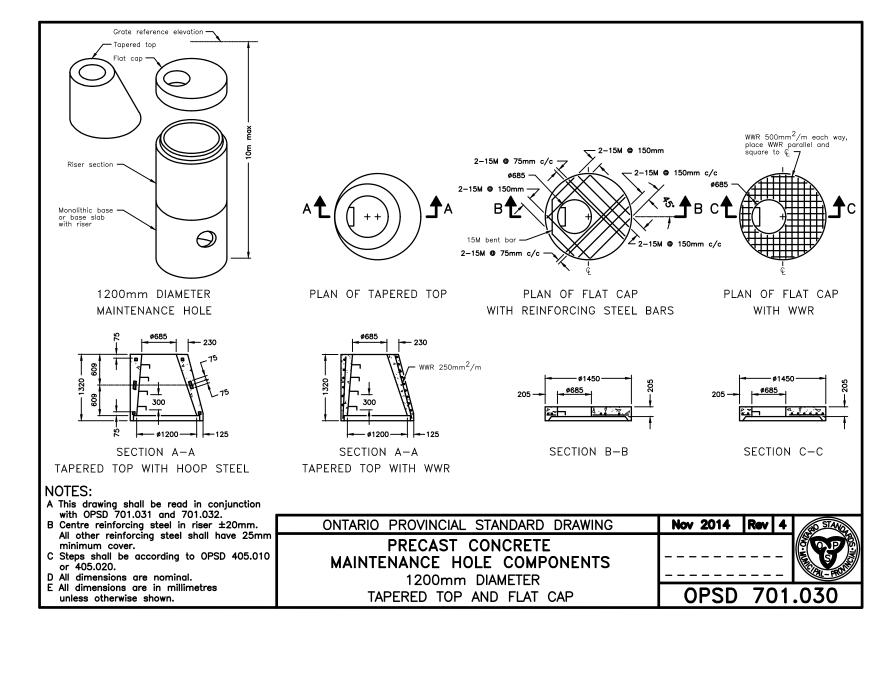


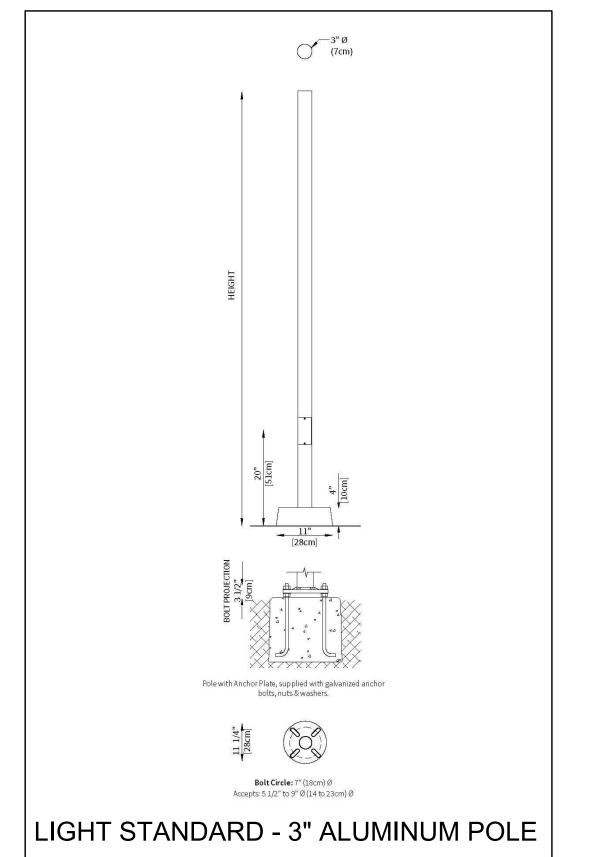


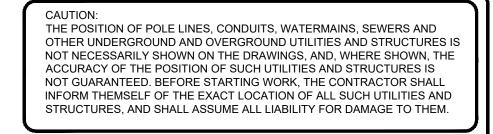
1200mm DIAMETER











PROPERTY BOUNDARY DERIVED FROM PLAN 3R-3215 PREPARED BY HARRY R. WHALE INC. DATED APRIL 27, 1982. TOPOGRAPHICAL INFORMATION DERIVED FROM FIELD SURVEY BY SMC

ALL ORGANIC MATERIAL WITHIN 1.2m OF FINISHED PROFILE GRADE TO BE

REMOVED FROM ALL AREAS UNDER THE TRAVELLED PORTION OF THE ROAD. COVER OVER WATERMAIN TO BE MINIMUM 1.8m AT ALL POINTS.

SANITARY SEWER TO BE PVC SDR35 MATERIAL. WATERMAIN TO BE PVC DR18 MATERIAL.

GEOMATICS INC. ON JUNE 23, 2021.

ALL CONSTRUCTION TO CONFORM TO THE MUNICIPALITY OF BROCKTON'S MUNICIPAL DEVELOPMENT AND SERVICING GUIDELINES.



