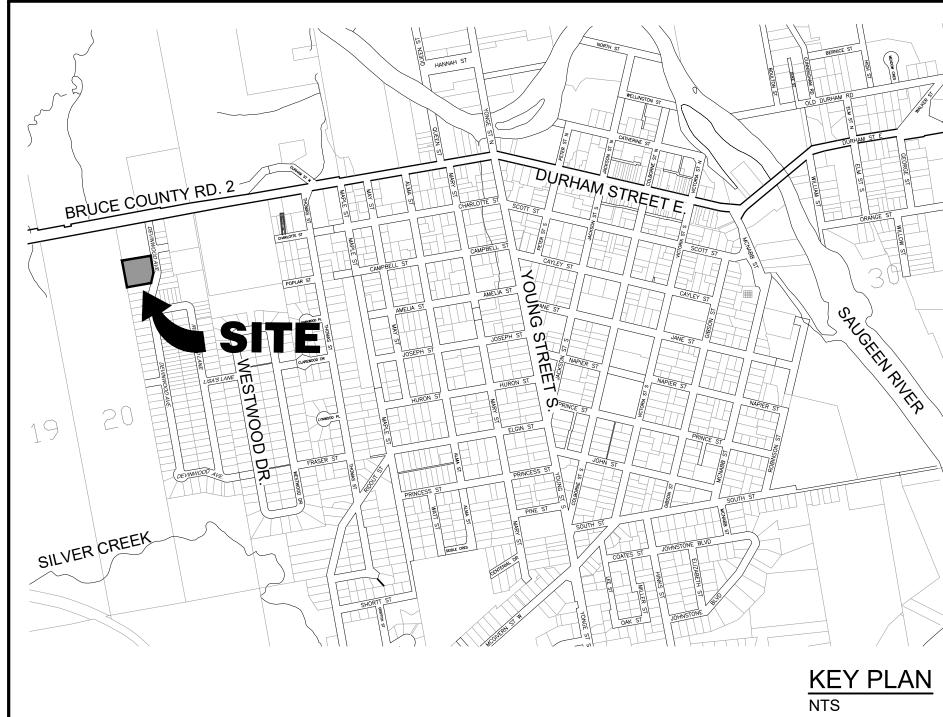
PROPOSED TOWNHOUSE DEVELOPMENT **WALKER WEST ESTATES - MUNICIPALITY OF BROCKTON COUNTY OF BRUCE**

CHIEF



CONTRACT NO. 22-02776-01

MAYOR	:	MR. CHRIS PEABODY
F ADMINISTRATIVE OFFICER/CLERK	:	MS. SONYA WATSON

OWNER: WALKER WEST ESTATES

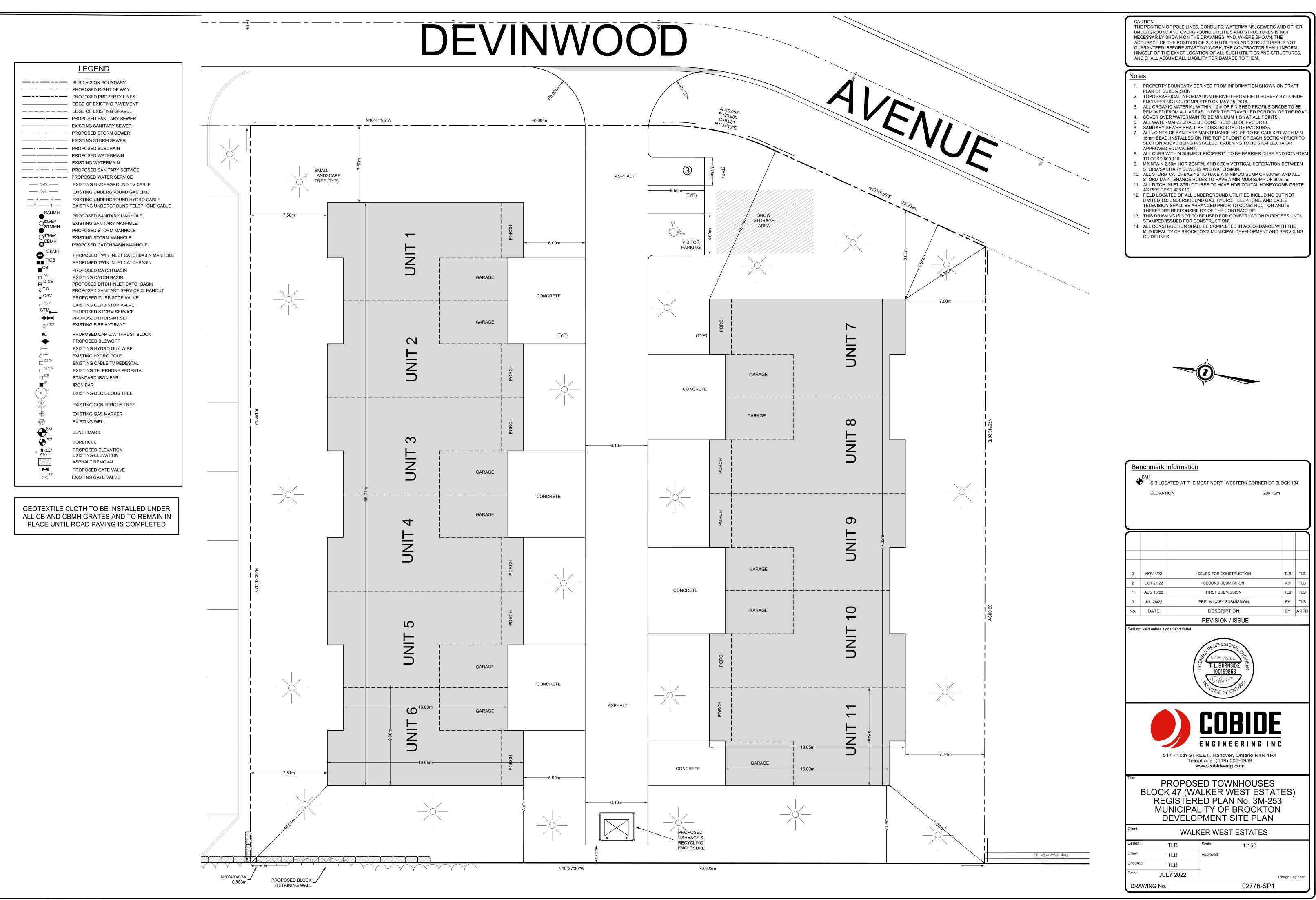
Index

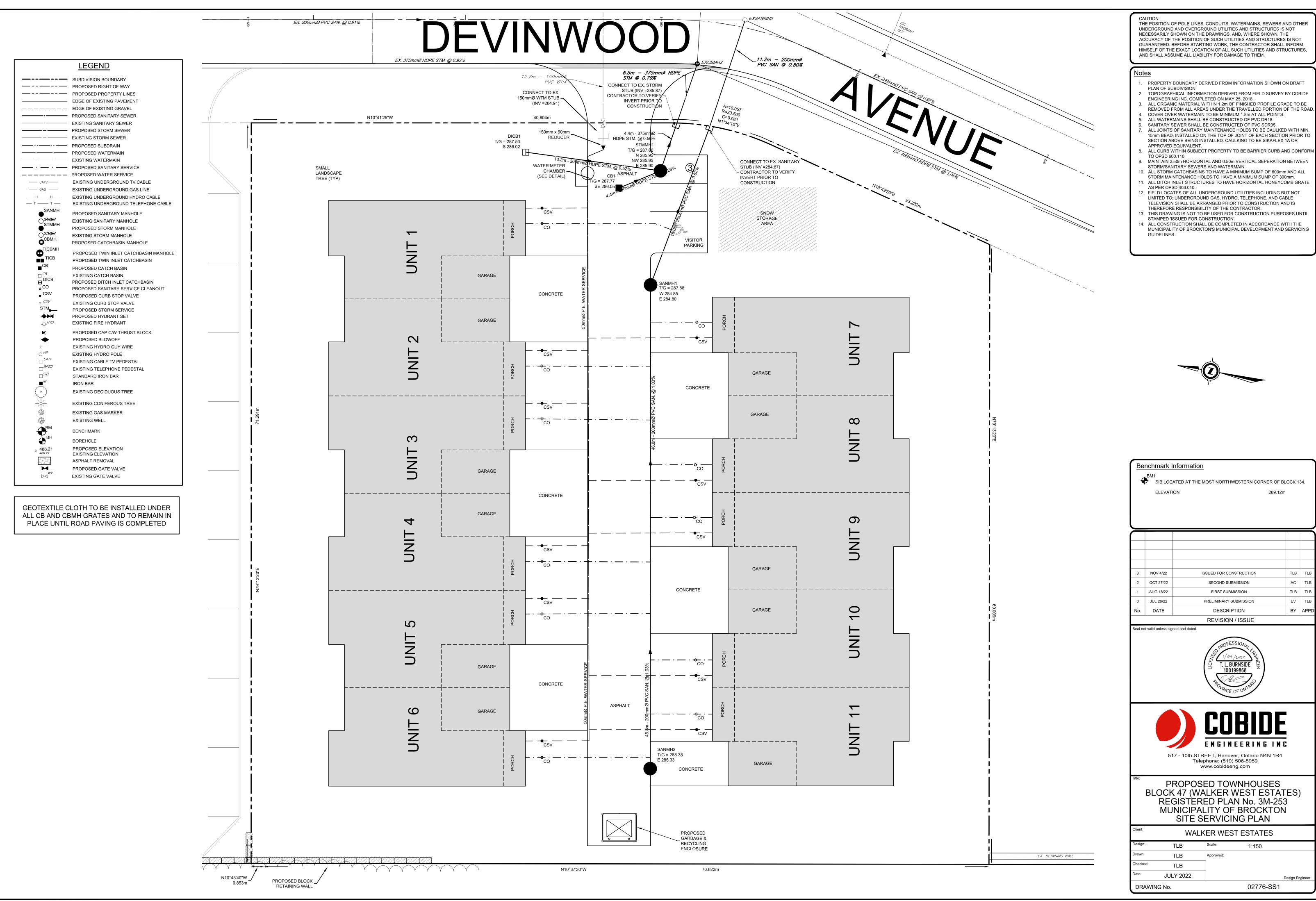
SHEET No.	DESCRIPTION
02776-SP1	DEVELOPMENT SITE PLAN
02776-SS1	SITE SERVICING PLAN
02776-SGR1	SITE GRADING PLAN
02776-STM1	STORM SEWER CATCHMENT AREAS
02776-DET1	MISCELLANEOUS DETAILS I
02776-DET2	ENGINEERING STANDARDS & MISCELLANEOUS DETAILS

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 HIMSELF OF THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES, AND SHALL ASSUME ALL LIABILITY FOR DAMAGE TO THEM.

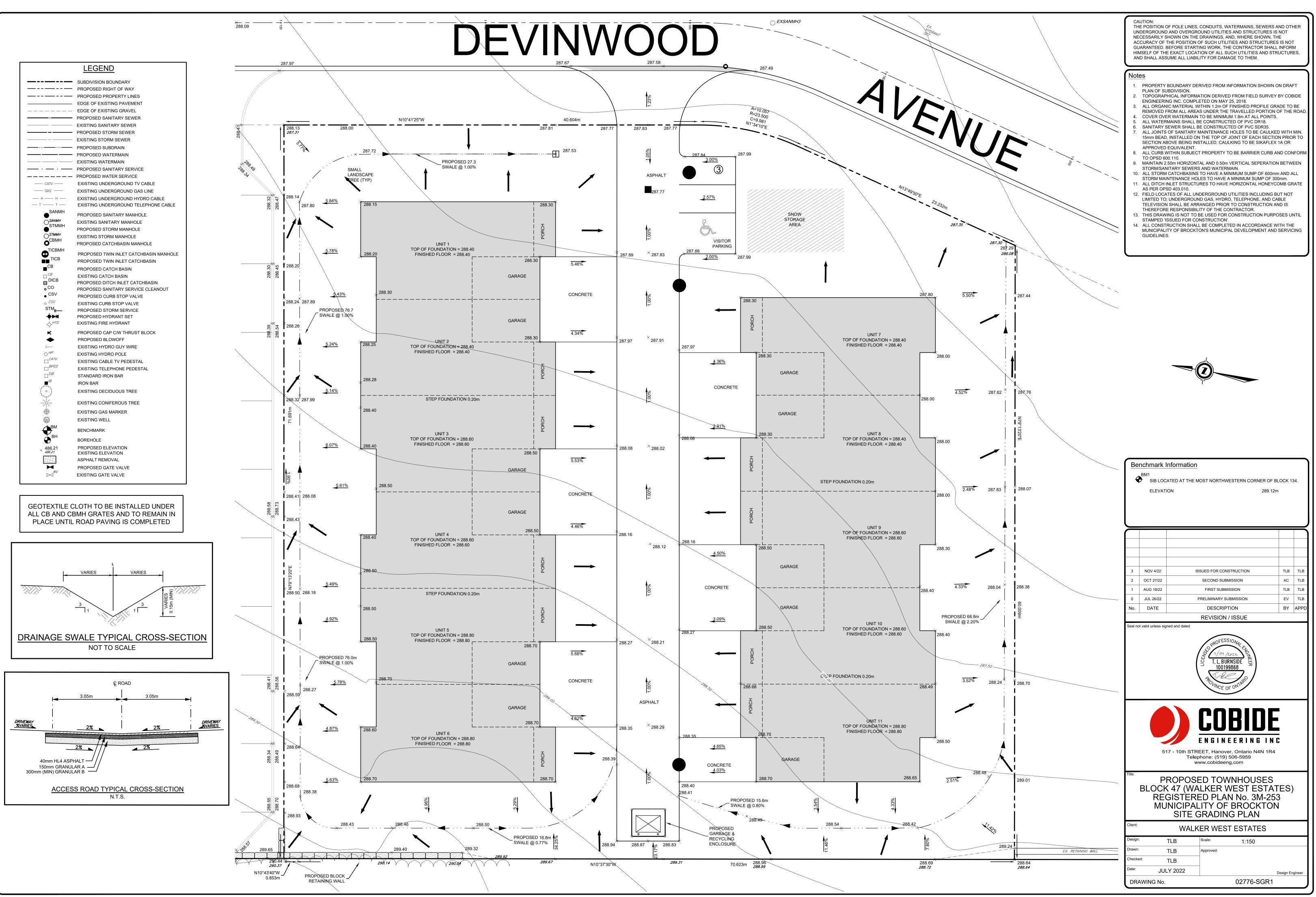
3	NOV 4/22	IS	SUED FOR CONSTRUCTION	TLB	TLB
2	OCT 27/22		SECOND SUBMISSION	AC	TLB
1	AUG 18/22		FIRST SUBMISSION	TLB	TLB
0	JUL 26/22	F	PRELIMINARY SUBMISSION	EV	TLB
No.	DATE		DESCRIPTION	BY	APP
			REVISION / ISSUE		
	5	17 - 10th STR Telep	COBID ENGINEERING IN EET, Hanover, Ontario N4N 1R ohone: (519) 506-5959 ww.cobideeng.com		
Title:	BLOCk RE	K 47 (WA GISTERI JNICIPAL	ED TOWNHOUSES LKER WEST ESTA ED PLAN No. 3M-2 LTY OF BROCKTO TLE SHEET	ATES) 53)
Title: Client:	BLOCk RE	(47 (WA GISTERI JNICIPAL TI	LKER WEST ESTA ED PLAN No. 3M-2 LITY OF BROCKTC	ATES) 53)
	BLOCH RE MU	(47 (WA GISTERI JNICIPAL TI	LKER WEST ESTA ED PLAN No. 3M-2 LITY OF BROCKTC TLE SHEET	ATES) 53)
Client:	BLOCH RE MU	K 47 (WA GISTERI JNICIPAL TI WALK	LKER WEST ESTA ED PLAN No. 3M-29 ITY OF BROCKTO TLE SHEET ER WEST ESTATES	ATES) 53)
Client: Design	BLOCH	K 47 (WA GISTERE JNICIPAL TI WALK	LKER WEST ESTA ED PLAN No. 3M-2 ITY OF BROCKTO TLE SHEET ER WEST ESTATES	ATES) 53)
Client: Design Drawn:	BLOCK	K 47 (WA GISTERE JNICIPAL TI WALK TLB TLB TLB	LKER WEST ESTA ED PLAN No. 3M-2 ITY OF BROCKTO TLE SHEET ER WEST ESTATES	ATES) 53 N	
Client: Design Drawn: Checke Date:	BLOCK	K 47 (WA GISTERE JNICIPAL TI WALK TLB TLB TLB LY 2022	LKER WEST ESTA ED PLAN No. 3M-2 ITY OF BROCKTO TLE SHEET ER WEST ESTATES	ATES) 53 DN	

LS II





02776 - Walker West - 11 Plex\Drawings\Submissions\2022-11-04 IFC Submission\02776 11 Plex 2022-11-04.dwg Nov 04, 2022 - 10:



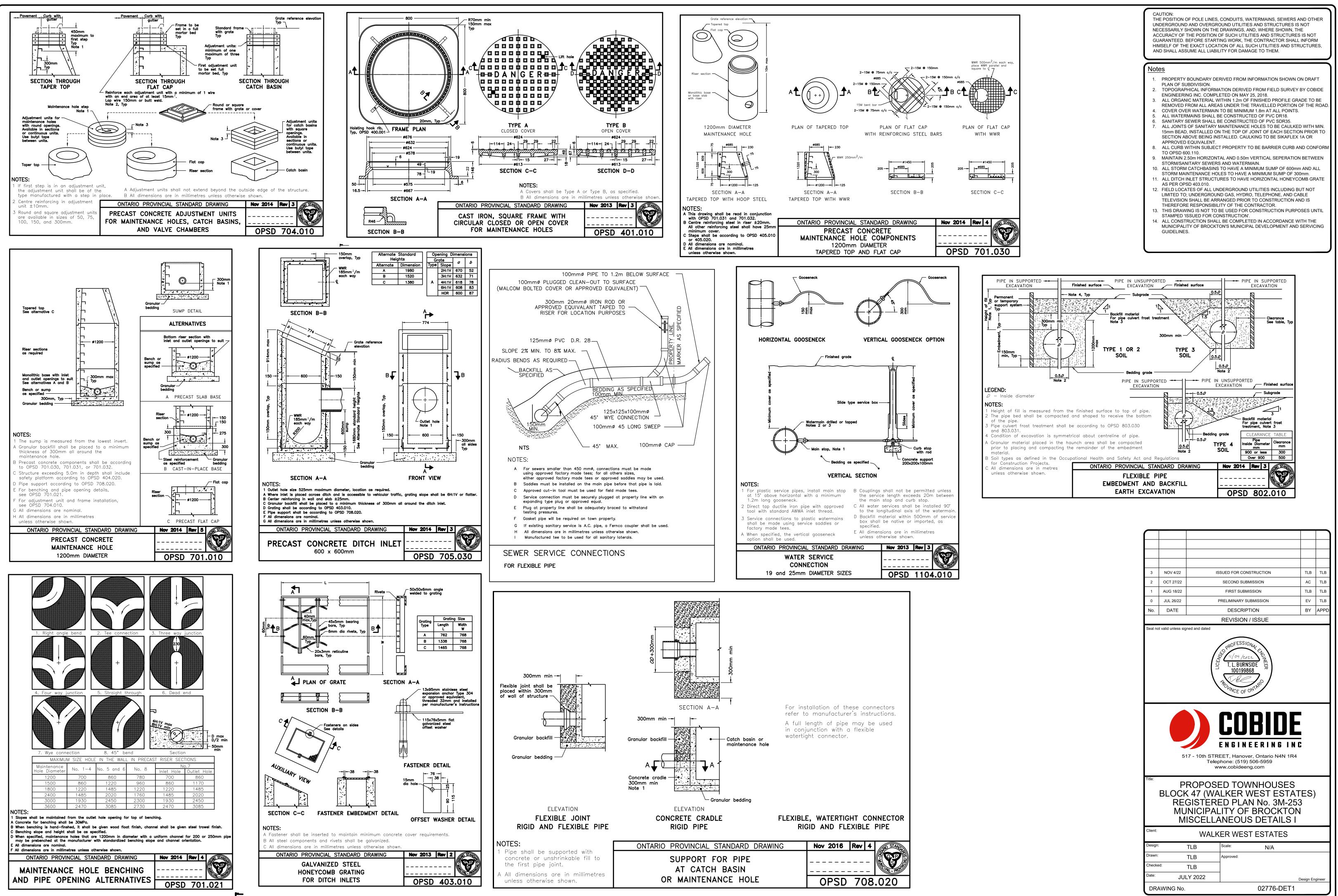


TLB TLB AC TLB

TLB TLB

EV TLB

BY APPD



MUNICIPALITY OF BROCKTON ENGINEERING STANDARDS

G	ENERAL - CONSTRUCTION
1.	ALL WORK TO BE CARRIED OUT IN ACCORDANCE WITH MUNICIPALITY OF BROCKTON STANDARDS AND OPSS. WHERE CONFLICT OCCURS, MUNICIPAL STANDARDS GOVERN.
2.	DEWATERING TO BE CARRIED OUT IN ACCORDANCE WITH OPSS 517 AND 518 TO MAINTAIN ALL TRENCHES IN A DRY CONDITION.
3.	ALL ENGINE DRIVEN PUMPS TO BE ADEQUATELY SILENCED, SUITABLE FOR OPERATION IN A RESIDENTIAL DISTRICT.
4.	DISTURBED AREAS TO BE REINSTATED TO PREVIOUS CONDITION OR BETTER.
5.	ALL MAINTENANCE HOLE FRAMES AND COVERS TO BE INITIALLY SET TO BASE COURSE HL4 ASPHALT ELEVATION
	AND ULTIMATELY RAISED BY ADDING SOLID ONE PIECE CAST IRON ADJUSTMENT RINGS PRIOR TO PLACING
	SURFACE COURSE HL3 ASPHALT.
6.	ALL EXISTING MAINTENANCE HOLES TO BE RAISED OR LOWERED TO PROPOSED GRADE. MAXIMUM ALLOWABLE
	HEIGHT OF ADJUSTMENT TO BE 300mm.
7.	ALL EXISTING HYDRANTS AND VALVES TO BE RAISED OR LOWERED TO PROPOSED GRADE.
8.	TRENCHES FOR UTILITIES TO BE MINIMUM 600mm WIDE BACKFILLED WITH APPROVED NATIVE MATERIAL AND

- COMPACTED ALL TO THE SATISFACTION OF THE LOCAL UTILITY. CONDUITS FOR ROAD CROSSINGS TO EXTEND 1.0m BEYOND CURB c/w PULL ROPES. INSTALL CONDUITS TO LOCAL STANDARDS.
- . MAINTAIN A 300mm VERTICAL SEPARATION (MINIMUM) BETWEEN SEWERS AT CROSSINGS. . CONTRACTOR IS RESPONSIBLE TO NOTIFY ALL UTILITY COMPANIES PRIOR TO COMMENCING WORK AND
- COORDINATE CONSTRUCTION ACCORDINGLY.
- 2. TOPSOIL TO BE STRIPPED FROM SITE SHALL BE STOCKPILED AS DIRECTED BY ENGINEER. ROADWAYS
- CONCRETE CURB AND GUTTER TO OPSD 600.100.
- 2. CURB AND GUTTER TERMINATION TO OPSD 608.010.
- B. CURB AND GUTTER CONSTRUCTION SHALL CONFORM TO OPSS 353, NOV. 2006.
- CONTRACTOR TO SUPPLY AND INSTALL STREET AND TRAFFIC SIGNS TO TOWN STANDARD. POSTS TO BE 'U-FLANGE" GALVANIZED METAL POSTS OR APPROVED EQUIVALENT. POSTS TO BE 3.75m LONG EMBEDDED 1.2m. SUBGRADE TO BE COMPACTED TO A MAXIMUM DRY DENSITY OF 95% OF THE MATERIAL'S MAXIMUM DRY DENSITY
- (MDD). COMPACTION PER OPSS 501, NOV. 2005.
- GRANULAR 'A' AND 'B' MATERIALS TO BE COMPACTED TO 100% MDD, PER OPSS 501, NOV. 2005.
- BOULEVARD COMPACTION TO 95% OF MATERIAL'S MDD.
- ROADWAY SUBGRADE TO BE PROOF ROLLED IN PRESENCE OF GEOTECHNICAL ENGINEER.
- STANDARD ROAD BASE SHALL CONSIST OF 300mm GRANULAR 'B' AND 150mm GRANULAR 'A'.
- 10. PAVEMENT ON NEW ROADS TO BE HOT MIX HL4 (40mm) BASE COURSE AND HL3 (40mm) PER OPSS 310, NOV. 2003.
- SANITARY SEWERS AND SERVICES MAINTENANCE HOLES TO OPSS 1001.01 (1200mmØ)
- BENCHING TO OPSD 1004.01
- FRAMES AND COVERS TO BE OPSD 401.01 TYPE 'A', CLOSED COVER.
- SERVICE CONNECTIONS TO BE 125mm, TERMINATED AT THE PROPERTY LINE WITH A 125x125x100mm WYE C/W CAP,
- A 100mm Ø RISER C/W 100mmØ LONG SWEEP CAPPED AT SURFACE. SERVICE CONNECTIONS TO OPSD 1006.020 WITH SUITABLE NATIVE BEDDING OR GRANULAR 'A'.
- BEDDING FOR SEWER SHALL BE PER OPSD 1005.02. BEDDING MATERIAL FOR SANITARY SEWER AND SERVICES
- SHALL BE GRANULAR 'A'. BACKFILL PER OPSD 803.04 USING APPROVED NATIVE BACKFILL.
- BACKFILL AND BEDDING MATERIAL TO BE COMPACTED PER OPSS 410 AND 514.
- 9. TESTING TO OPSS 410.

	ENGINEERING STANDARDS
Watermain Pipe	
100 mm Ø and larger	PVC DR18 (Class 150)
50 mm Ø	PVC Series 160
Gate Valves	Mueller, mechanical joint, resilient seat, right hand closing
Valve Boxes	130 mm Ø (5 ¹ / ₄ ") cast iron or ductile iron slider type with a standard lower section and guide plate at manufactured by Bibby - St. Croix or approved equivalent
Hydrants	Canada Valve "Century", yellow with one standard 100 mm Storz quick connect fitting on the pumper port and two 63.5 m (2 ½") nozzles with CSA Standard thread. Left hand closing
Fittings	Tees, bends, reducers, sleeves, etc. Mechanical joint, cast iron or ductile iror
Saddles	Broad band, stainless steel, double bolt
Corporation Stops	Mueller H15008 or Ford F1000
Curb Stops	Muller H15207 or Ford 244-333 (3/4") or Ford 244-444 (1")
Service Material	Rehau Municipex service line
Curb Boxes	Mueller A-726-7 for 1500 mm to 1800 mm cover
Curb Box Extension Rods	Stainless Steel to within 600 mm of surface
Tracer Wire	Copperhead Superflex 1030 Blue Wire
Grip Rings	To be used at all mechanical joint fittings
Fasteners	Protecto caps and zinc sacrificial anodes on all mechanical joints
Test Station	50mm underground test station by Handley Industries

WATERMAIN AND WATER SERVICES 1. THRUST BLOCKS PER OPSD 1103.010 AND 1103.020.

- 2. SERVICE CONNECTIONS PER OPSD 1104.01.
- 3. HYDRANT, INSTALLATION PER OPSD 1105.01 AND TO TOWN STANDARDS.
- 4. USE APPROVED NATIVE MATERIAL OR GRANULAR 'A' BEDDING PER OPSD 1102.02. BACKFILL TO BE APPROVED
- NATIVE MATERIAL PER OPSD 803.04.
- 5. WATERMAIN, SERVICES, AND HYDRANTS TO BE INSTALLED PER OPSS 701, NOV. 2006. 6. ALL PVC WATERMAIN TO HAVE TRACER WIRE BETWEEN HYDRANTS AND OTHER CONDUCTING APPURTENANCES.
- 7. MINIMUM COVER TO BE 1.8m. 8. ALL FITTINGS (BENDS, TEES, VALVES, HYDRANTS, MAIN STOPS, CURB STOPS ETC) SHALL BE PROVIDED WITH
- ALL CADWELDS TO BE COVERED WITH MASTIC MATERIAL. 9. MAIN STOPS AND CURB STOPS TO HAVE GROUNDING SCREW FOR ATTACHING ANODE.
- 10. ALL FITTINGS TO BE FITTED WITH 19MM SACRIFICIAL ZINC CAPS. CAPS TO BE "PROTECTO-CAPS" OR APPROVED EQUIVALENT.
- 11. ANODES SHALL BE AS FOLLOWS:
- MAIN STOPS AND CURB STOPS 2.3 KG
- ALL OTHER FITTINGS 5.5 KG
- STORM SEWERS AND SERVICES 1. MAINTENANCE HOLES TO OPSS 1001.01 (1200mmØ)
- 2. BENCHING TO OPSD 1004.01
- 3. FRAMES AND COVERS TO BE OPSD 401.011YPE 'A', CLOSED COVER. 4. SERVICE CONNECTIONS TO BE 150mm, TERMINATED AT THE PROPERTY LINE WITH A 150mmØ RISER C/W 150mmØ LONG SWEEP CAPPED AT SURFACE.
- 5. SERVICE CONNECTIONS TO OPSD 1006.020 WITH SUITABLE NATIVE BEDDING OR GRANULAR 'A'.
- 6. BEDDING FOR SEWER SHALL BE PER OPSD 1005.02. BEDDING MATERIAL FOR STM SHALL BE GRANULAR 'A'.
- 7. BACKFILL PER OPSD 803.04 USING APPROVED NATIVE BACKFILL.
- 8. BACKFILL AND BEDDING MATERIAL TO BE COMPACTED PER OPSS 410 AND 514.

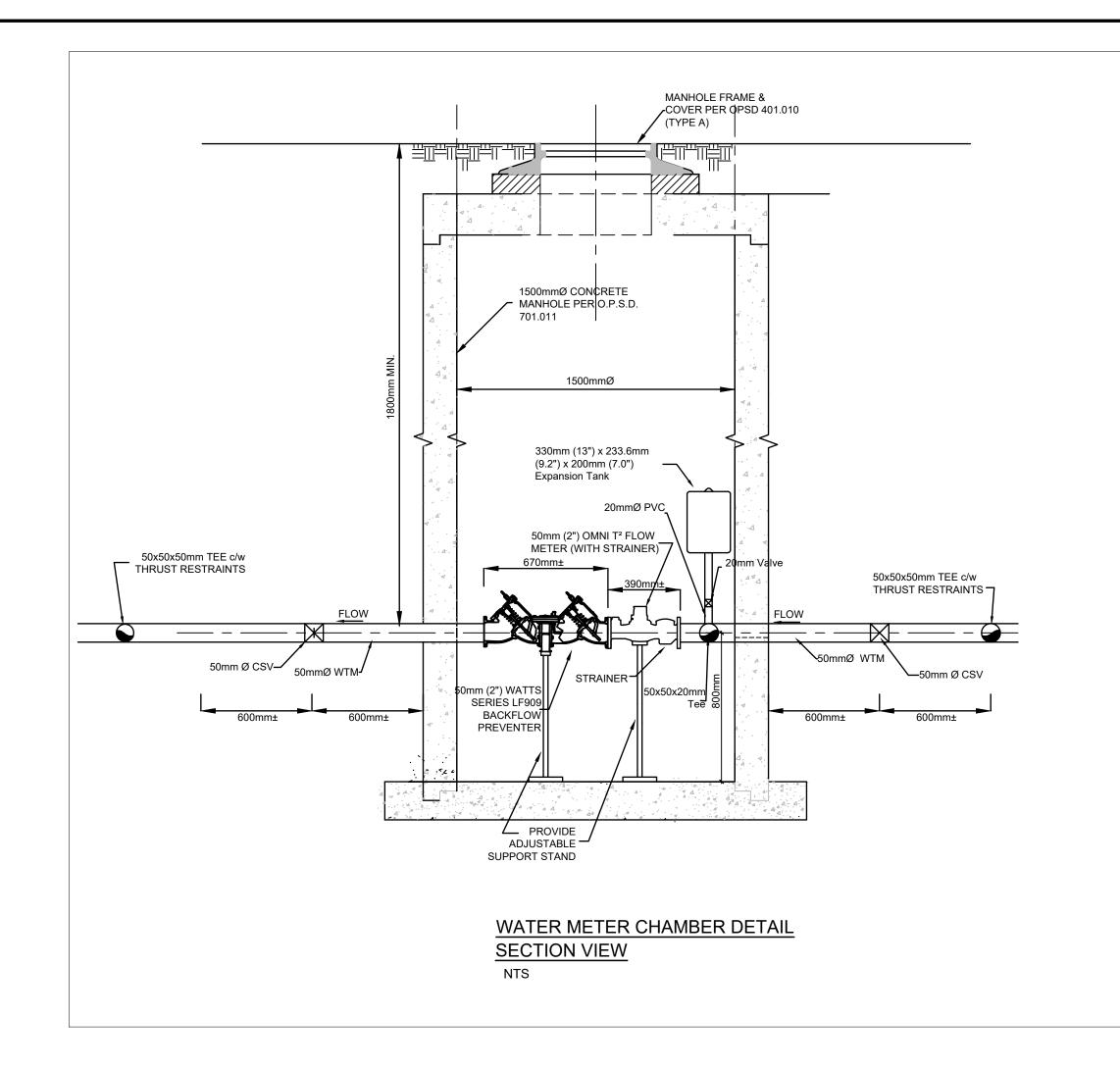
MATERIALS

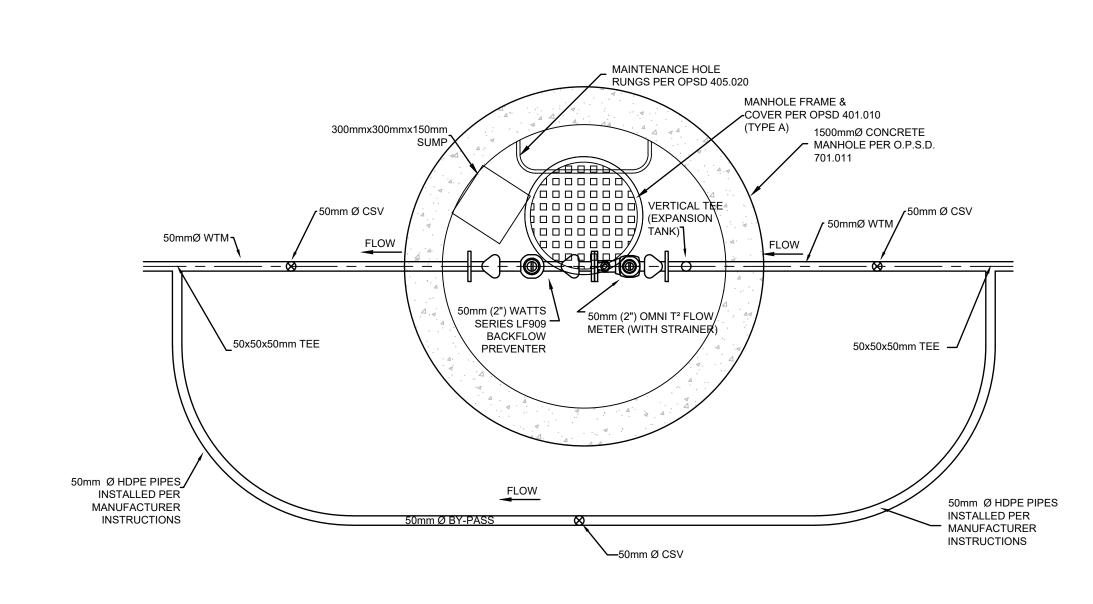
- 1. SANITARY SEWER SDR35 PVC.
- 2. SANITARY SERVICES SDR28 PVC, 125Ø USING TEE CONNECTIONS TO MAIN.
- 3. STORM SEWER PE (PS 320). 4. ALL DRAINAGE PIT MATERIAL TO BE PERFORATED P.E. (PS 320) STORM SEWER.
- GRIP RINGS. 6. WATERMAIN SERVICES - 19mmØ, REHAU MUNICIPEX, MAIN STOP (FORD F1000 OR MUELLER 15008), CURB STOP (MUELLER H 15207 OR FORD 244-333) C/W CURB BOX (MUELLER A-726-7). SERVICE SADDLES SHALL BE DOUBLE
- 7. HYDRANTS CANADA VALVE CENTURY WITH 2-63.5mm PORTS AND 100Ø STORTZ PUMPER PORT, OR AS APPROVED BY THE FIRE CHIEF OF WALKERTON STATION. MUELLER #55 OR CONCORD 2000 WEDGE STYLE GATE VALVE SHALL BE PLACED 1.0m FROM HYDRANT. EACH HYDRANT TO BE C/W 50mm DIA. UNDERGROUND TEST STATION PER TOWN STANDARDS.
- 8. ALL HYDRANT INSTALLATIONS WILL ALSO INCLUDE A 50mm DIA. UNDERGROUND TEST STATION. THE TEST STATION WILL BE APPROX. 300m BEHIND EACH HYDRANT AND COME COMPLETE WITH 2 TERMINALS ON THE TERMINAL BLOCK THAT IS FASTENED TO THE LID. THE LID SHALL HAVE A PERMANENT MAGNET AND/OR A METAL LID FOR EASY DETECTION WITH AN ELECTRONIC LOCATOR. THE TOP OF THE TEST STATION SHALL BE INSTALLED FLUSH TO THE PROPOSED FINISH GRADE ELEVATION. TEST STATIONS SHALL BE SUPPLIED BY HANDLEY INDUSTRIES OR APPROVED EQUIVALENT.
- 9. VALVES AWWA C509 RESILIENT SEATED GATE VALVES (RIGHT HAND CLOSING) WITH MECHANICAL JOINT ENDS. VALVE BOX SHALL BE 130 MAX. DIA. CAST OR DUCTILE IRON SLIDER TYPE WITH STANDARD LOWER SECTION AND GUIDE PLATE BY BIBBY-ST. CROIX. PREFABRICATED HOLES SHALL BE PLACED NEAR TOP OF VALVE BOX FOR
- TRACER WIRE. 10. "STOP AND DRAIN" VALVES ARE TO BE USED AT BLOW-OFFS. MUELLER H-15219 OR APPROVED EQUIVALENT TO
- BE USED. 11. HYDRANTS TO BE PAINTED RED BARREL WITH RED TOP. 100mm(4") DIAMETER CONNECTION CAP IN BLACK,
- OTHER CONNECTION CAPS TO BE RED. SUPPLY AND PLACE FIBERGLASS POST AND SIGN ON 63.5mm(2-1/2") PORT TO INDICATE LOCATION IN WINTER WEATHER.
- 12. UTILITY ROAD CROSSING CONDUITS 100mmØ TYPE II PVC.

CATHODIC PROTECTION. ANODES SHALL BE CONNECTED TO WATERMAIN FITTINGS USING CADWELD METHOD.

5. WATERMAIN - DR18 PVC INCLUDING 12 AWG TWU TRACER WIRE. ALL MECHANICAL JOINTS TO BE EQUIPPED WITH

BOLT STAINLESS STEEL ROCKWELL SERIES 371 OR CAMBRIDGE BRASS SERIES 403.





WATER METER CHAMBER DETAIL PLAN VIEW NTS

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 HIMSELF OF THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES, AND SHALL ASSUME ALL LIABILITY FOR DAMAGE TO THEM.

Notes

- PROPERTY BOUNDARY DERIVED FROM INFORMATION SHOWN ON DRAFT PLAN OF SUBDIVISION.
- 2. TOPOGRAPHICAL INFORMATION DERIVED FROM FIELD SURVEY BY COBIDE ENGINEERING INC. COMPLETED ON MAY 25, 2018. 3. 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. 5. ALL WATERMAINS SHALL BE CONSTRUCTED OF PVC DR18. SANITARY SEWER SHALL BE CONSTRUCTED OF PVC SDR35 7. ALL JOINTS OF SANITARY MAINTENANCE HOLES TO BE CAULKED WITH MIN.
- 15mm BEAD, INSTALLED ON THE TOP OF JOINT OF EACH SECTION PRIOR TO SECTION ABOVE BEING INSTALLED. CAULKING TO BE SIKAFLEX 1A OR APPROVED EQUIVALENT
- 8. ALL CURB WITHIN SUBJECT PROPERTY TO BE BARRIER CURB AND CONFORM TO OPSD 600.110. 9. MAINTAIN 2.50m HORIZONTAL AND 0.50m VERTICAL SEPERATION BETWEEN STORM/SANITARY SEWERS AND WATERMAIN
- 10. ALL STORM CATCHBASINS TO HAVE A MINIMUM SUMP OF 600mm AND ALL STORM MAINTENANCE HOLES TO HAVE A MINIMUM SUMP OF 300mm. 11. ALL DITCH INLET STRUCTURES TO HAVE HORIZONTAL HONEYCOMB GRATE
- AS PER OPSD 403.010. 12. FIELD LOCATES OF ALL UNDERGROUND UTILITIES INCLUDING BUT NOT LIMITED TO; UNDERGROUND GAS, HYDRO, TELEPHONE, AND CABLE TELEVISION SHALL BE ARRANGED PRIOR TO CONSTRUCTION AND IS THEREFORE RESPONSIBILITY OF THE CONTRACTOR.
- 13. THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION PURPOSES UNTIL STAMPED 'ISSUED FOR CONSTRUCTION'. 14. ALL CONSTRUCTION SHALL BE COMPLETED IN ACCORDANCE WITH THE MUNICIPALITY OF BROCKTON'S MUNICIPAL DEVELOPMENT AND SERVICING

GUIDELINES.

3	NOV 4/22	IS	SUED FOR CON	STRUCTION		TLB	TLE
2	OCT 27/22		SECOND SUB	MISSION		AC	TLE
1	AUG 18/22		FIRST SUBM	SSION		TLB	TLI
0	JUL 26/22	F	PRELIMINARY SU	IBMISSION		EV	TLI
No.	DATE		DESCRIP	ΓΙΟΝ		BY	APF
			REVISION	/ ISSUE			
		Ĺ	PROFESSIO, 11/04/202 T. L. BURNS 10019986 BOLINCE OF O				
			nn		пг		
	5	17 - 10th STRI Telep	ENGIN EET, Hanove ohone: (519) ww.cobideen	E E R I N er, Ontario 506-5959	IGINO		
Title:	P BLOCk RE(MU	17 - 10th STRI Telep	E N G I N EET, Hanove ohone: (519) ww.cobideen ED TOW LKER V ED PLA ITY OF	EERIN er, Ontario 506-5959 g.com /NHOU VEST NNO. 3 BROO	JSES ESTAT 3M-253	ES))
Title:	P BLOCk RE(MU	ROPOSE 47 (WA GISTERE NICIPAL SCELLA	E N G I N EET, Hanove ohone: (519) ww.cobideen ED TOW LKER V ED PLA ITY OF	E E R I N er, Ontario 506-5959 g.com /NHOU VEST N NO. 5 BROC DETA	JSES ESTAT 3M-253 CKTON AILS II	ES))
	P BLOCk RE(MU MI	ROPOSE 47 (WA GISTERE NICIPAL SCELLA	E N G I N EET, Hanove bhone: (519) ww.cobideen ED TOW LKER V ED PLA ITY OF NEOUS	E E R I N er, Ontario 506-5959 g.com /NHOU VEST N NO. 5 BROC DETA	JSES ESTAT 3M-253 CKTON AILS II TES	ES)	
Client:	P BLOCK RE(MU MI	ROPOSE 47 (WA GISTERE NICIPAL SCELLA WALK	E N G I N EET, Hanove ohone: (519) ww.cobideen ED TOW LKER V ED PLA ITY OF NEOUS	EERIN ar, Ontario 506-5959 g.com /NHOU VEST NNO. 3 BROC DETA TESTA	JSES ESTAT 3M-253 CKTON AILS II TES	ES)	
Client: Design	P BLOCk RE(MU MI	TLB	E N G I N EET, Hanove ohone: (519) ww.cobideen ED TOW LKER V ED PLA ITY OF NEOUS	EERIN ar, Ontario 506-5959 g.com /NHOU VEST NNO. 3 BROC DETA TESTA	JSES ESTAT 3M-253 CKTON AILS II TES	ES))
Client: Design Drawn:		TLB	E N G I N EET, Hanove ohone: (519) ww.cobideen ED TOW LKER V ED PLA ITY OF NEOUS	EERIN ar, Ontario 506-5959 g.com /NHOU VEST NNO. 3 BROC DETA TESTA	JSES ESTAT 3M-253 CKTON AILS II TES	ES)	