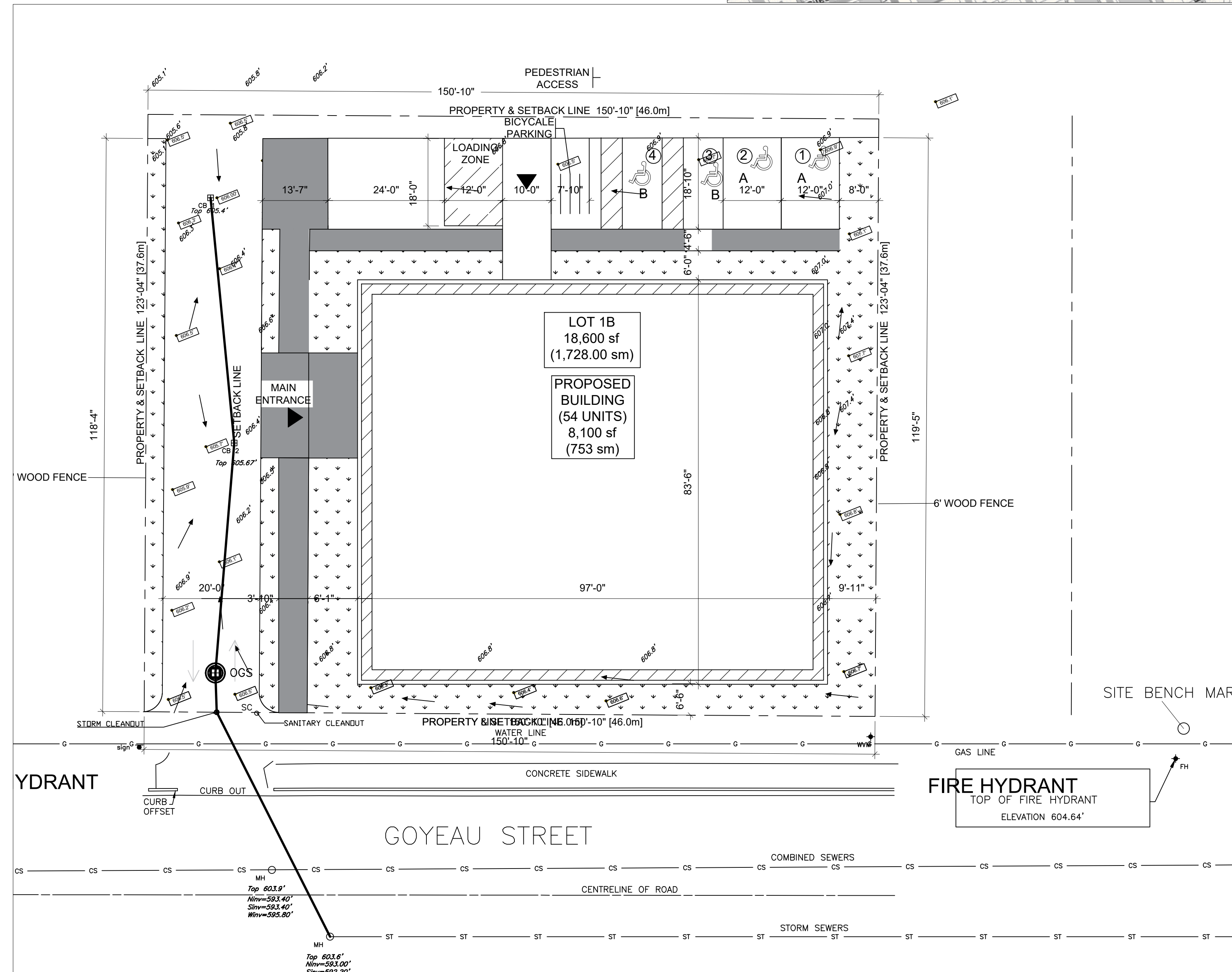
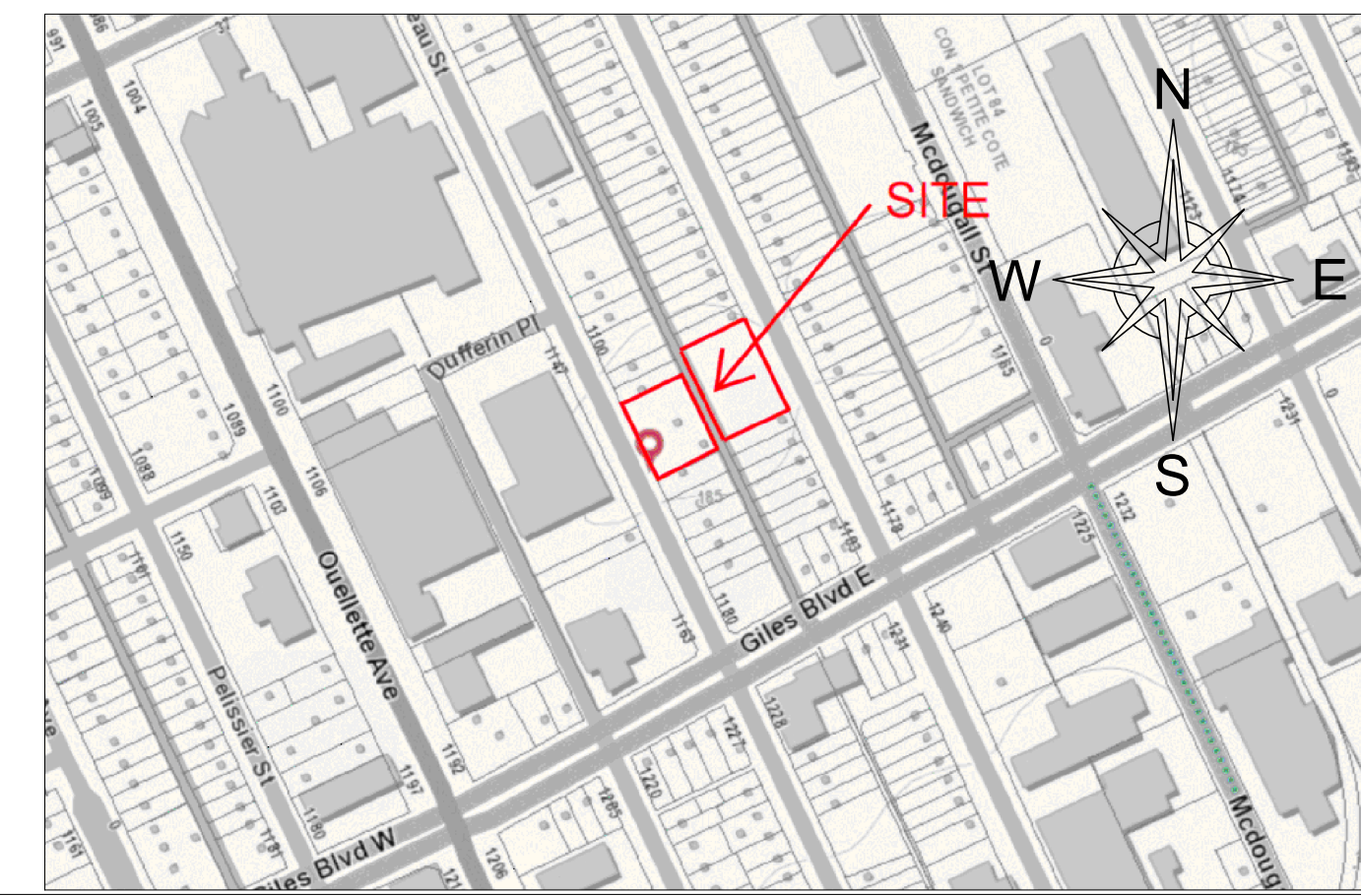


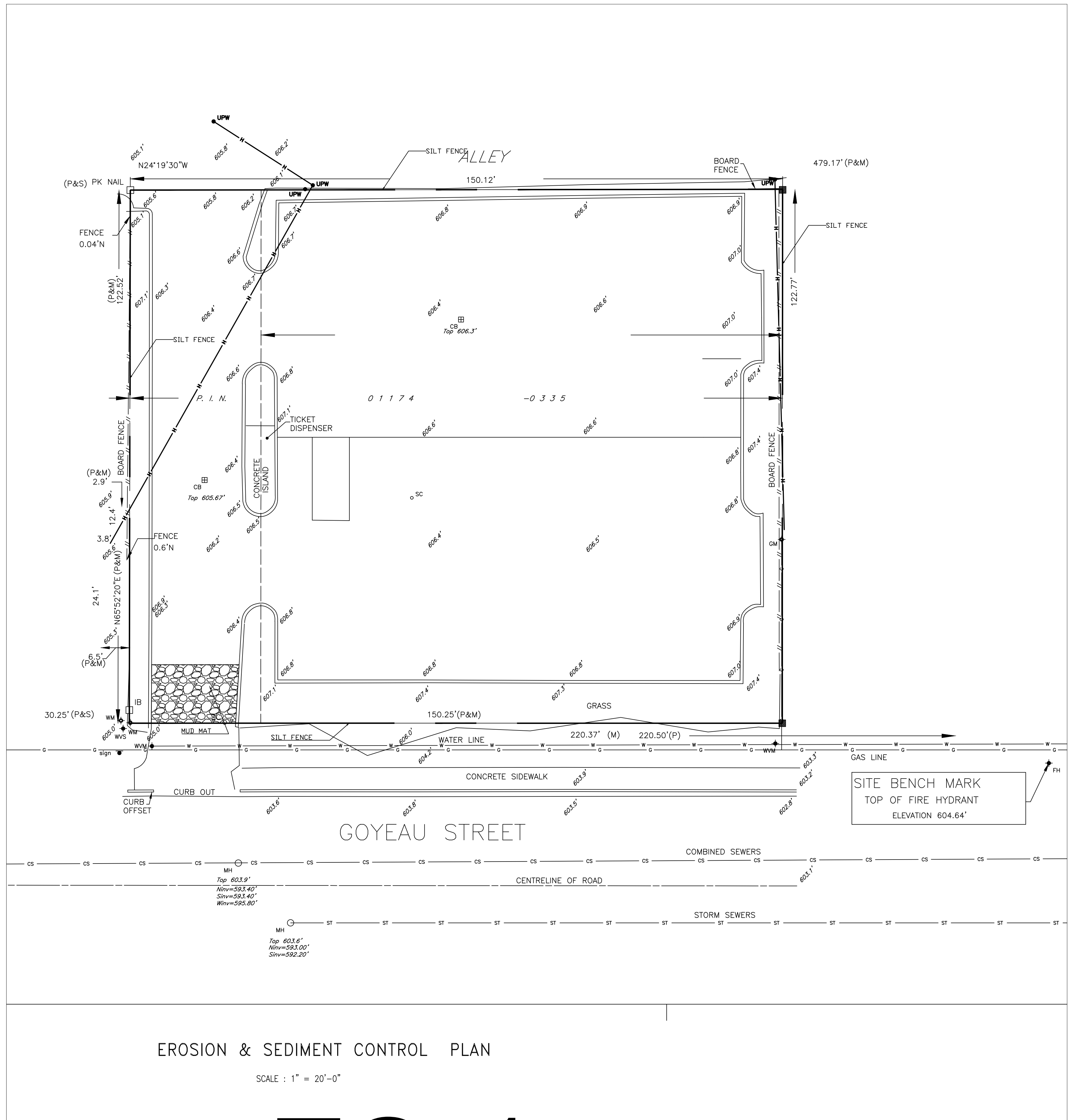
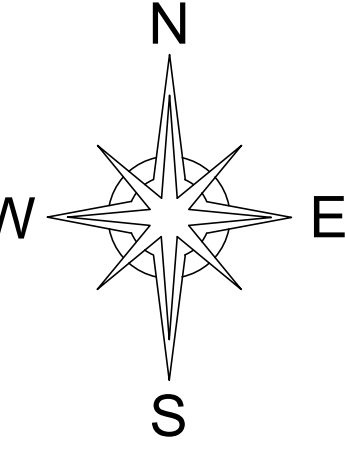
POST DEVELOPMENT DRAINAGE PLAN



PRE DEVELOPMENT DRAINAGE PLAN

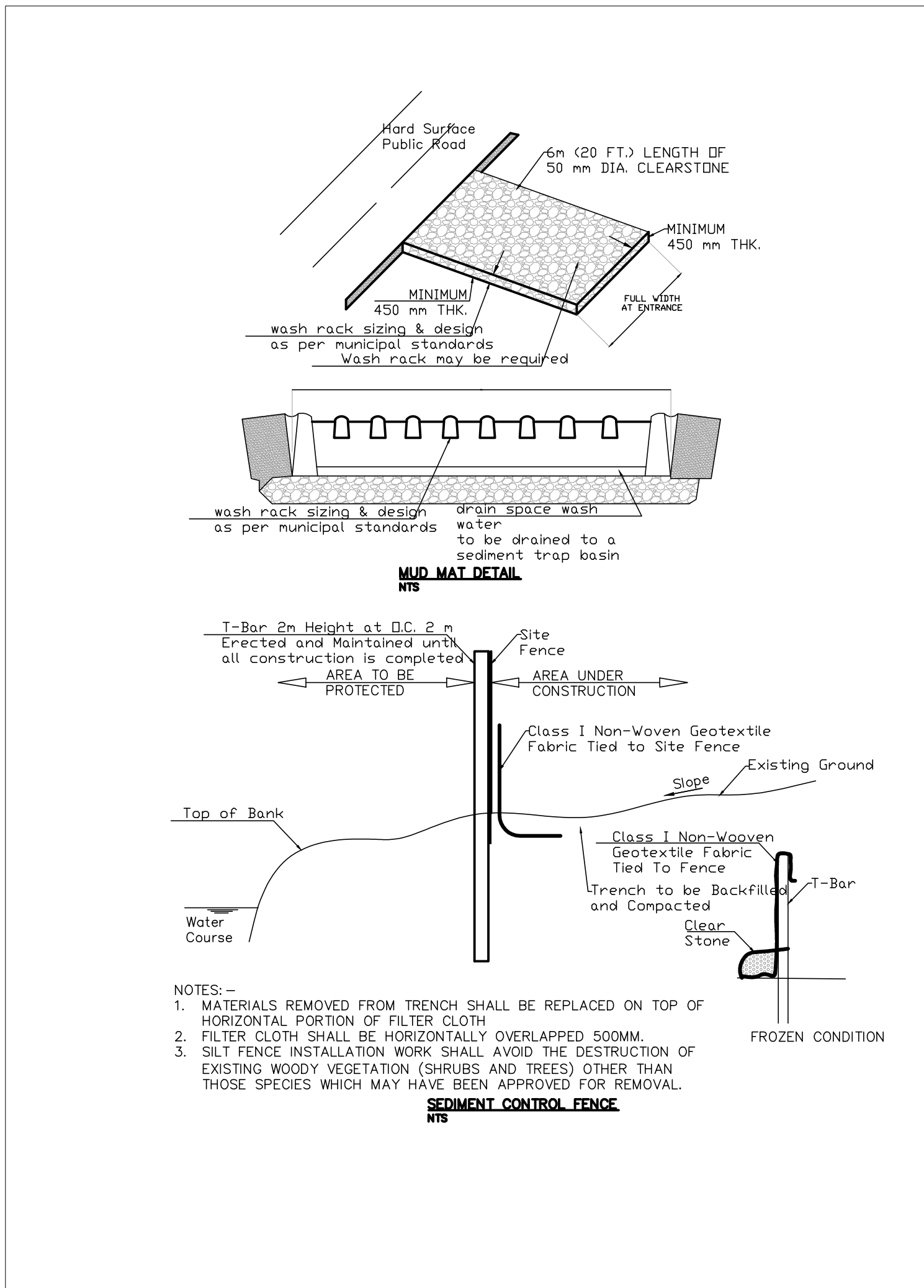
LEGEND	
	PROPOSED ELEVATION
	EXISTING ELEVATION
	OVERLAND FLOW ON LOTS

DETAIL NUMBERS 01 — 01 DETAIL SYMBOL	IN CHARGE INT. DESIGNED MAHENDRA,P DRAWN SARTHIL GOYAL CHECKED MAHENDRA,P DATE 12-12-2023 APPROVED 07-06-2023	CLIENT 1140_GOYEAU_ST_WINDSOR PROJECT TITLE 1140_GOYEAU_ST_WINDSOR DWG. TITLE STORM-WATER-PROPOSAL	PROJECT No. 1140 DWG. No. D.NO.1140
		AMBASHI ENGINEERING LTD. consulting engineers Toronto, Ontario	



EROSION & SEDIMENT CONTROL PLAN

SCALE : 1" = 20'-0"



NOTES:

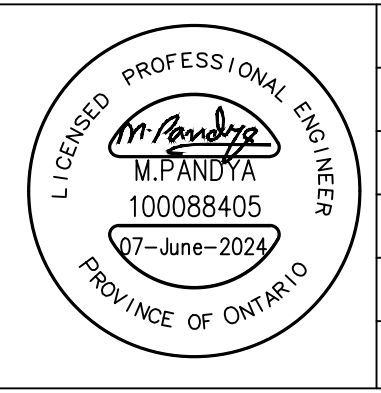
1. SEDIMENT BARRIERS, AND TEMPORARY CONSTRUCTION ACCESS TO BE INSTALLED PRIOR TO THE BEGINNING OF CONSTRUCTION.
2. ALL SEDIMENT CONTROL DEVICES TO BE ROUTINELY INSPECTED AND MAINTAINED IN PROPER WORKING ORDER UNTIL AREA IS STABILIZED.
3. IF NECESSARY, TRUCKS WILL BE WASHED DOWN BEFORE LEAVING THE SITE.
4. THE SITE WILL BE WET DOWN IF NECESSARY TO CONTROL DUST.
5. ALL CONSTRUCTION EQUIPMENT MUST BE PARKED ON-SITE.
6. ALL CONSTRUCTION ACTIVITY WILL COMPLY WITH CITY OF WINDSOR NOISE BYLAW.
7. SEDIMENT CONTROL FENCE TO BE AS PER CITY OF WINDSOR STANDARD.
8. ALL TOPSOIL STOCKPILES TO BE SURROUNDED WITH SEDIMENT CONTROL FENCING.
9. 'SILTSACKS' TO BE PLACED UNDER GRATES ON ALL CATCHBASINS TO TRAP SEDIMENT. 'SILTSACKS' INSTALLATION SHALL BE AS PER MANUFACTURER SPECIFICATION. 'SILTSACKS' ARE TO BE CLEANED REGULARLY AND ARE NOT TO BE REMOVED UNTIL SUCH TIME AS THE CURBS ARE CONSTRUCTED AND THE BOULEVARDS ARE SODDED OR BACKYARDS GRADED AND SODDED 'SILTSACKS' FOR SILT CONTROL TO BE TERRA REGULAR OR APPROVED EQUIVALENT.
10. 'SILTSACKS' WILL BE PLACED ON THE CATCHBASIN ON PUBLIC STREET ACCESS THE PROPERTY'S FRONTAGE.

EROSION AND SEDIMENT CONTROL MEASURES

1. CONSTRUCT 'MUD-MAT' AS INDICATED AND MAINTAIN UNTIL SITE IS STABILIZED.
2. MUD TRACKED ONTO EXISTING ROADWAYS FROM THE SITE IS TO BE REMOVED ON A DAILY BASIS.
3. CONSTRUCT AND MAINTAIN SILT FENCING AS SHOWN ON DRAWING UNTIL SITE IS STABILIZED.
4. PREVENT EROSION OF MATERIAL STOCKPILES.
5. DURING WORK STOPPAGES OR INCLEMENT WEATHER, PLUG ENDS OF OPEN SEWERS TO PREVENT DOWNSTREAM SEDIMENTATION.
6. INSTALL CATCH BASIN SEDIMENT PROTECTION AS PER DETAIL, AND MAINTAIN UNTIL ASPHALT PAVING IS COMPLETED.

DETAIL NUMBER	LOCATION SHEET	DETAIL SHEET	DETAIL SYMBOL
01 - 01			

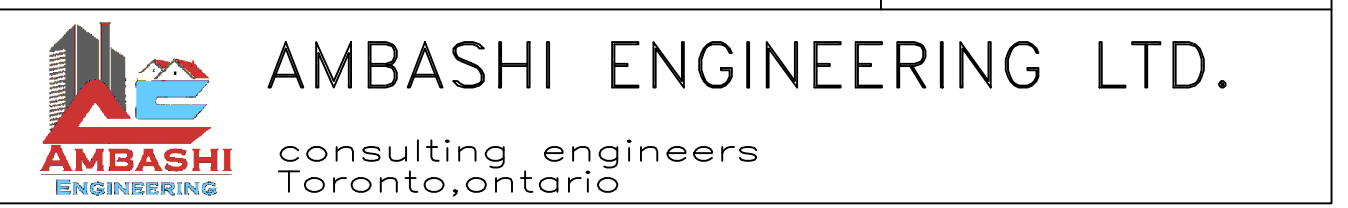
DATE	ISSUED FOR	SUBMISSION
07-JUNE-24	FOR-SUBMISSION	SUBMISSION-2
12-12-2023	FOR-SUBMISSION	SUBMISSION-1

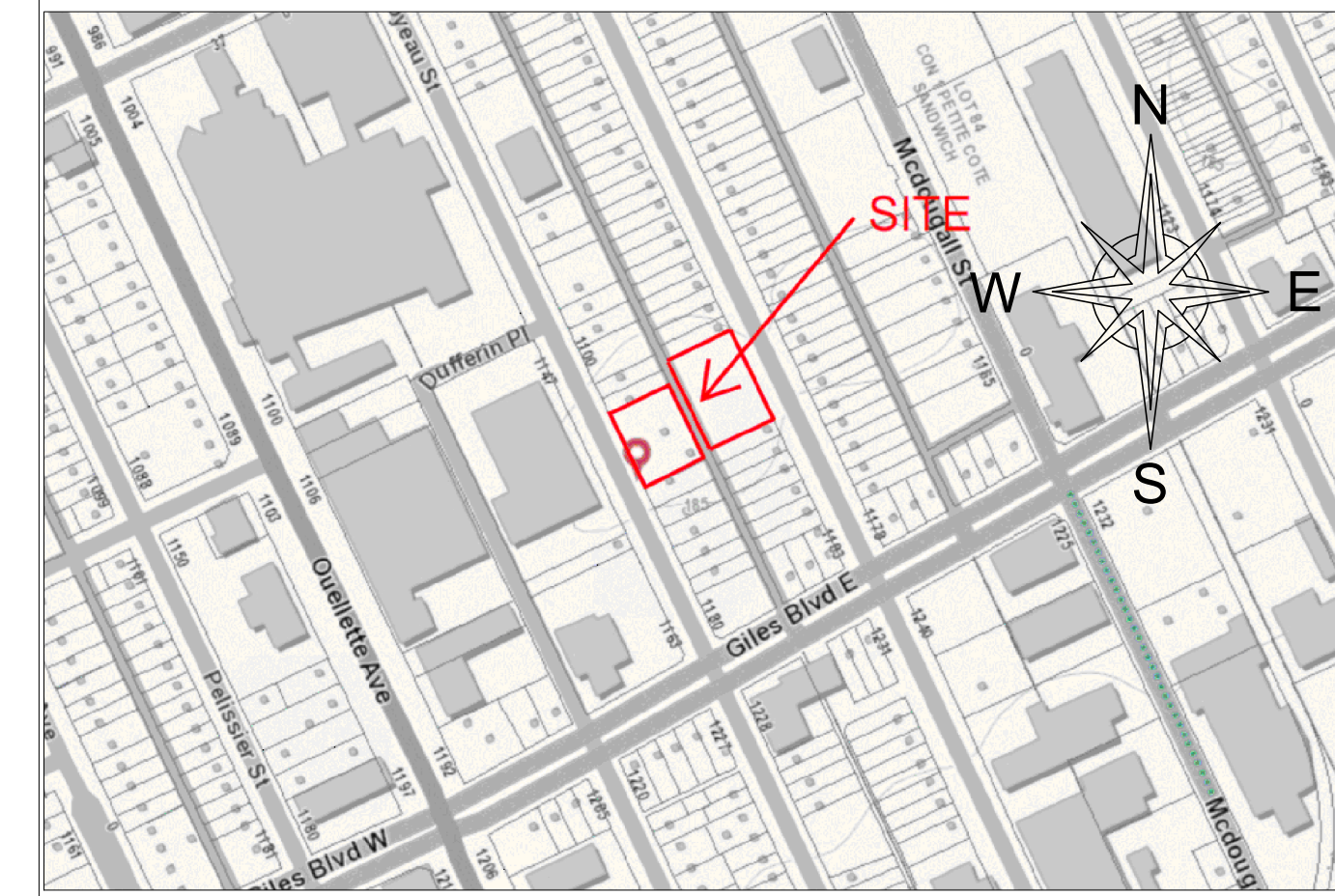


IN CHARGE	INT.
DESIGNED	MAHENDRA.P
DRAWN	SARTHIGOYAL
CHECKED	MAHENDRA.P
DATE	12-12-2023
APPROVED	07-06-2023

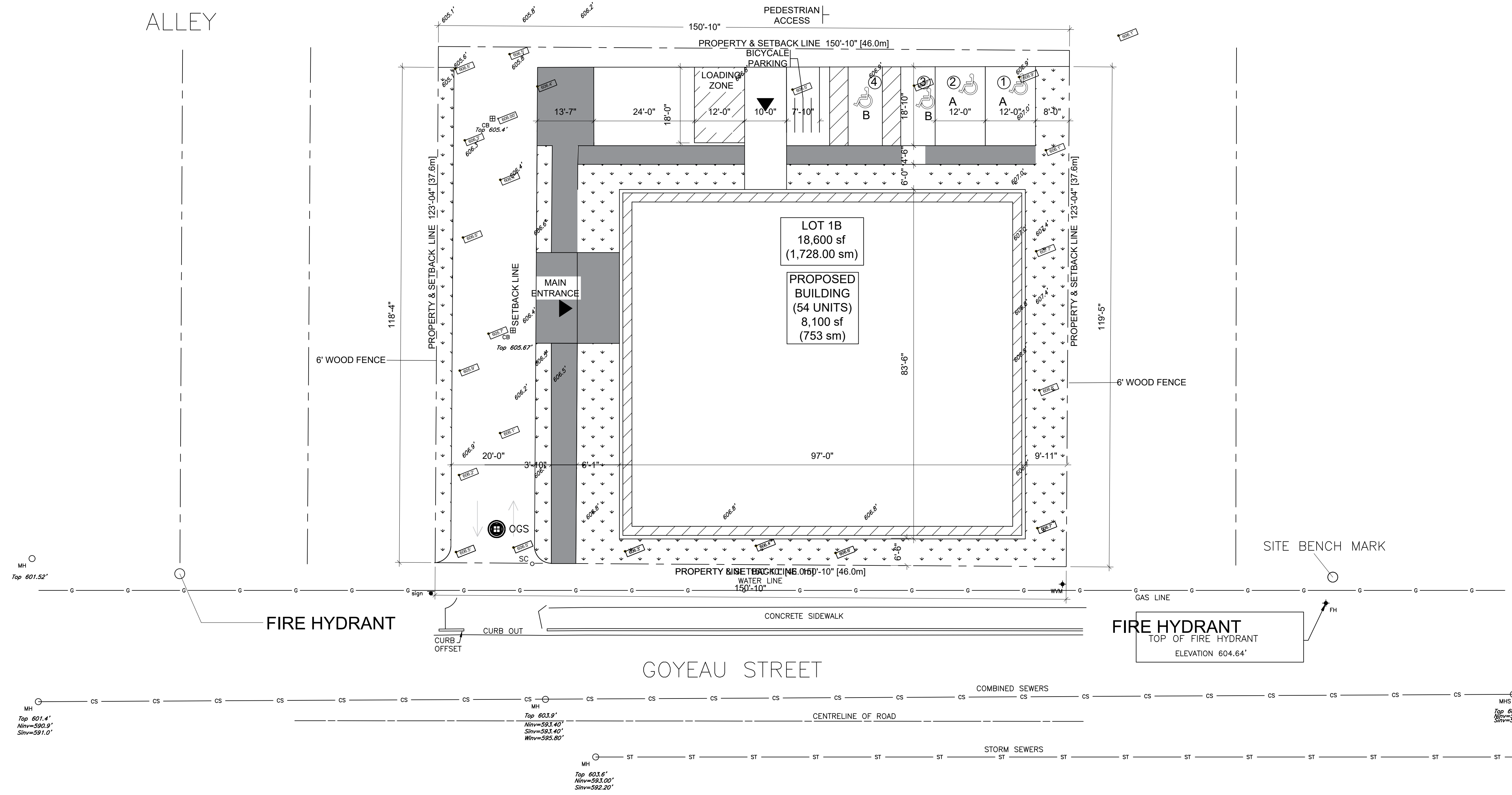
CLIENT	1140_GOYEAU_ST_WINDSOR
PROJECT TITLE	1140_GOYEAU_ST_WINDSOR
DWG. TITLE	STORM-WATER-PROPOSAL

PROJECT No.	1140
DWG. No.	D.NO.1140





ALLEY



LOT GRADING PLAN

- GENERAL NOTES:**
- THIS LOT GRADING PLAN IS BASED ON SURVEY DRAWING PREPARED BY VERHAEGEN SURVEYING INC., DATED 02 March 2023.
 - CONTRACTOR SHALL LOCATE, VERIFY AND PROTECT ALL EXISTING UTILITIES SUCH AS WATERMAIN, STORMWATER SEWER, SANITARY SEWER, GAS, FIBRE OPTIC CABLE, ETC.
 - ALL STORM SEWER CONNECTIONS SHALL BE WATER TIGHT.
 - STORM SEWER PIPE SHALL BE PVC OR HDPE MATERIAL.
- GRADING AND ROAD PAVEMENT NOTES:**
- ALL AREA GRADING AND RESULTING DRAINAGE PATTERNS SHALL NOT ADVERSELY AFFECT ADJACENT LANDS.
 - THE STORM DRAINAGE SHALL BE SELF CONTAINED WITHIN THE SUBJECT PROPERTY UNTIL IT CAN BE DISCHARGED, REUSED, INFILTRATED AND/OR EVAPORATES IN A MANNER ACCEPTABLE TO THE TOWN.
 - MINIMUM GENERALLY ACCEPTED GRADIENT 2%
 - MAXIMUM GENERALLY ACCEPTABLE GRADIENT 6%
 - MAXIMUM ACCEPTABLE SLOPE 3 PARTS HORIZONTAL TO 1 PART VERTICAL.
 - NO ALTERATIONS TO EXISTING BOUNDARY ELEVATIONS OR ADJACENT LANDS SHALL BE UNDERTAKEN UNLESS WRITTEN AGREEMENT WITH THE ADJACENT PROPERTY OWNER IS OBTAINED AND SUBMITTED IN A FORMAT ACCEPTABLE TO THE TOWN.
 - THE MINIMUM GRADIENT ON ANY DRIVEWAY SHALL BE 2%. THE MAXIMUM DRIVEWAY GRADIENT IS 6%.
 - MAXIMUM PONDING DEPTH 0.2 METERS.
 - PROPOSED SPOT ELEVATIONS WILL BE SHOWN FOR ASPHALT, LANDSCAPE OR CONCRETE AREAS. UNLESS OTHERWISE NOTED TOP OF CURB ELEVATIONS ARE 0.15 METERS ABOVE ASPHALT ELEVATIONS EXPECT AT CURB DEPRESSIONS AND WHEEL CHAIR RAMPS.
 - WHERE NEW ASPHALT MATCHES EXISTING ASPHALT, GRIND EXISTING ASPHALT A MINIMUM OF 300mm WIDE AND 40mm DEEP FOR KEYING. APPLY HOT RUBBER SEALING COMPOUND IN ACCORDANCE WITH OPSS 1212.
 - THE CONCRETE CURB, CONCRETE SIDEWALK IF APPLICABLE AND ALL RESTORATION ALONG FRONTING ROADWAYS TO THE SITE MUST BE CONSTRUCTED AND CARRIED OUT IN ACCORDANCE WITH ALL APPLICABLE AND CURRENT ONTARIO PROVINCIAL STANDARD SPECIFICATION.
 - MINIMUM PAVEMENT REQUIREMENT ARE AS FOLLOWS.
HEAVY DUTY 40mm HL3,
50mm HL8,
300mm GRANULAR A.
 - DRIVEWAY ENTRANCE SHALL BE AS PER CITY OF WINDSOR SHOWN IN SS-5.
- ADDITIONAL ROAD IMPROVE NOTES:**
- UNLESS INDICATED OTHERWISE, ALL WORK WITHIN THE TOWN RIGHT-OF-WAY SHALL BE CONSTRUCTED IN ACCORDANCE WITH ONTARIO PROVINCIAL DESIGN STANDARDS AND SPECIFICATIONS AND THE UNDERTAKING. ONTARIO PROVINCIAL STANDARDS MAY, SUBJECT TO THE APPROVAL OF CITY OF WINDSOR, BE WHERE NO STANDARD OR SPECIFICATION IS NOTED.
 - ANY DISCREPANCIES BETWEEN EXISTING CONDITIONS AND THE DRAWINGS MUST BE REPORTED TO THE CONSULTANT/ THE TOWN PRIOR TO COMMENCEMENT OF CONSTRUCTION AND APPROPRIATE ACTION TAKEN AS PER THE SPECIFICATION OF CITY OF WINDSOR.
 - ALL SURVEY POINTS SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO CONSTRUCTION. ANY DISCREPANCIES BETWEEN THE DRAWINGS AND THE LAYOUT SHALL BE REPORTED TO THE CONSULTANT/ THE TOWN AND THE CONSULTANT/ THE TOWN SHALL NOTIFY THE TOWN OF THE NECESSARY CHANGES.
- ONTARIO PROVINCIAL STANDARD SPECIFICATION INCLUDE BUT NOT ARE NOT LIMITED TO:**
- OPSS 353 - CONCRETE CURB & GUTTER SYSTEM
 - OPSS 350 - CONCRETE PAVEMENT AND CONCRETE BASE
 - OPSS 421 - PIPE CULVERT INSTALLATION
 - OPSD 350.010 - CONCRETE SIDEWALK
 - OPSD 601.010 - ASPHALT CURB AND ASPHALT CURB WITH GUTTER

- NOTES:**
- DISTANCES AND COORDINATES SHOWN ON THIS PLAN ARE IN FEET AND CAN BE CONVERTED TO METERS BY MULTIPLYING BY 0.3048.
 - ALL UTILITIES AS APPROXIMATE LOCATIONS ONLY AND MUST BE VERIFIED PRIOR TO CONSTRUCTION.
 - ALL BENCHMARKS MUST BE VERIFIED PRIOR TO CONSTRUCTION.

ELEVATIONS ELEVATIONS SHOWN ON THIS PLAN ARE IN FEET TO CANADIAN GEODETIC VERTICAL DATUM (1928)	
BENCH MARK BENCH MARK 869 CHILDREN'S ACHIEVEMENT CENTRE, M. B. 437 ERIE STREET; THE PLATE IS LOCATED ON THE NORTH WALL, 3.5' THE EAST WALL AND 1.8' ABOVE GRADE.	ELEVATION 597.86'
SITE BENCH MARK TOP OF FIRE HYDRANT AT 1162 GOYEAU STREET AREA 0.423 ACRES	ELEVATION 604.64'

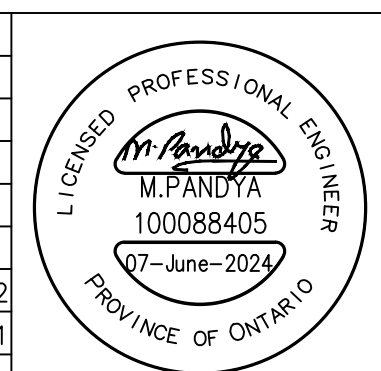
LEGEND

	PROPOSED ELEVATION
	EXISTING ELEVATION

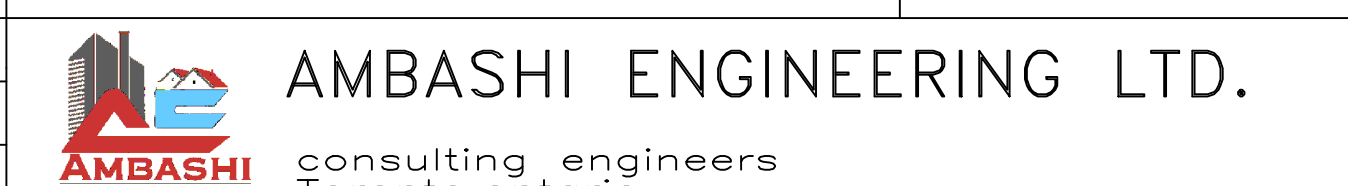
DETAIL NUMBERS

01	01
LOCATION SHEET	DETAIL SHEET
DETAIL SYMBOL	

07-JUNE-24	FOR-SUBMISSION	SUBMISSION-2
12-12-2023	FOR-SUBMISSION	SUBMISSION-1
DATE	ISSUED FOR	

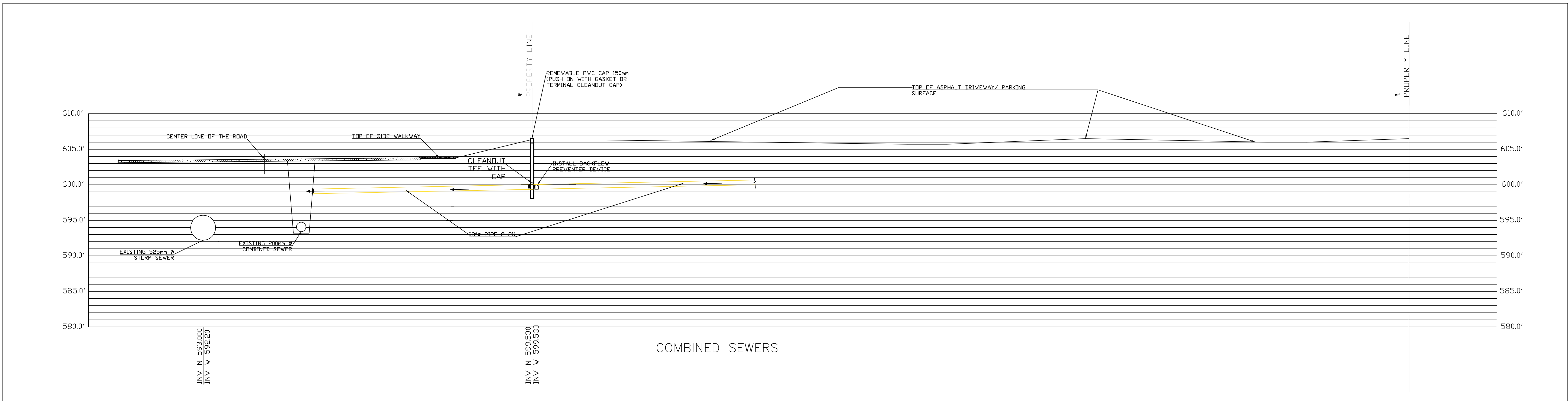
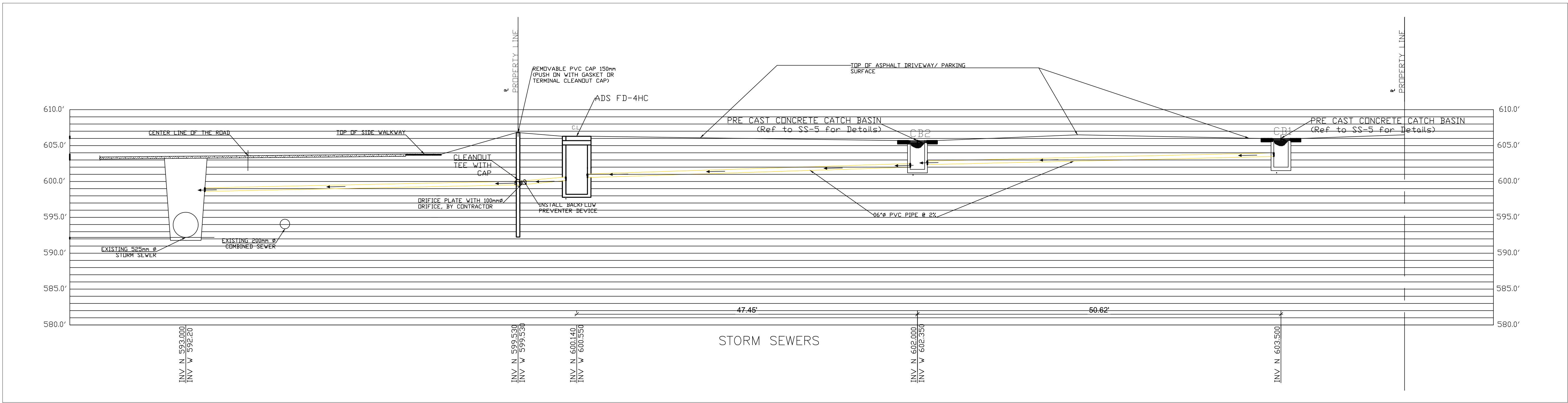


IN CHARGE AMBASHI_ENGG	CLIENT 1140_GOYEAU_ST_WINDSOR	PROJECT No. 1140
DESIGNED MAHENDRA,P	PROJECT TITLE 1140_GOYEAU_ST_WINDSOR	DWG. No. D.NO.1140
DRAWN SARTH_GOYAL	DWG. TITLE STORM-WATER-PROPOSAL	
CHECKED MAHENDRA,P		
DATE 12-12-2023		
APPROVED 07-06-2023		



SITE SERVICES PLAN

SCALE : 1" = 20'-0"



DETAIL NUMBERS 01 — 05 DETAIL SYMBOL						IN CHARGE: INT. DESIGNED: MAHENDRA.P DRAWN: SARTHIL GOYAL CHECKED: MAHENDRA.P DATE: 12-12-2023 APPROVED: 07-06-2023	CLIENT: 1140_GOYEAU_ST_WINDSOR PROJECT TITLE: 1140_GOYEAU_ST_WINDSOR DWG. TITLE: STORM-WATER-PROPOSAL	PROJECT No.: 1140 DWG. No.: D.NO.1140
	07-JUNE-24	FOR-SUBMISSION	SUBMISSION-2					
	12-12-2023	FOR-SUBMISSION	SUBMISSION-1					
	DATE	ISSUED FOR						

GENERAL NOTES:

- ALL WORK TO CONFORM TO THE CITY OF WINDSOR STANDARD DRAWINGS AND SPECIFICATIONS AS WELL AS THE LATEST ONTARIO PROVINCIAL STANDARD DRAWINGS AND SPECIFICATIONS.
- ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE CURRENT 'OCCUPATIONAL HEALTH AND SAFETY ACT'. THE GENERAL CONTRACTOR SHALL BE DEEMED TO BE THE CONSTRUCTOR AS DEFINED IN THE ACT.
- ALL TEMPORARY TRAFFIC CONTROL AND SIGNS DURING CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CURRENT ONTARIO TRAFFIC MANUAL BOOK 7: TEMPORARY CONDITIONS FIELD EDITION.
- ALL TRENCHES WITHIN THE EXISTING RIGHT-OF-WAY SHALL BE BACKFILLED WITH UN-SHRINKABLE FILL.
- THE CONTRACTOR SHALL RECTIFY ALL DISTURBED AREAS TO THE ORIGINAL CONDITION OR BETTER AND THE SATISFACTION OF THE EXECUTIVE DIRECTOR OF TECHNICAL SERVICES.
- BEFORE COMMENCING ANY WORK WITHIN THE MUNICIPAL RIGHT-OF-WAY, THE CONTRACTOR WILL OBTAIN ALL NECESSARY ROAD OCCUPANCY PERMITS FROM THE CITY OF WINDSOR RIGHT-OF-WAY MANAGEMENT SECTION.
- THE CONTRACTOR SHALL LOCATE, VERIFY AND PROTECT ALL EXISTING UTILITIES SUCH AS WATER MAIN, STORM SEWER, SANITARY SEWER, GAS, FIBER OPTIC CABLE, ETC.
- THIS DRAWING TO BE READ IN CONJUNCTION WITH THE FOLLOWING LATEST DRAWINGS:

LOT GRADING:	LG-1
SITE SERVICES (SH. 1 OF 5):	SS-1
SITE SERVICES-SECTIONS (SH. 2 OF 5):	SS-2
SITE SERVICES-NOTES (SH. 3 OF 5):	SS-3
STANDARD DRAWINGS (SH.4 OF 5)	SS-4
STANDARD DRAWINGS (SH.5 OF 5)	SS-5
EROSION & SEDIMENT CONTROL:	ESC-1

EXCAVATION & BACKFILL

- DRAWINGS SHOW EXISTING GRADES AND NEW FINISH LEVELS WHERE REQUIRED AROUND NEW CONSTRUCTION. INFORMATION HAS BEEN TAKEN FROM RECORDS TO ASSIST THE CONTRACTOR IN ESTABLISHING A PRICE, BUT NO GUARANTEE IS MADE TO COMPLETE ACCURACY. EMPLOY A COMPETENT CIVIL ENGINEER TO ACCURATELY ESTABLISH ALL BUILDING LINES, PERMANENT BENCHMARKS, CENTRAL LINES, GRADES AND ELEVATIONS NECESSARY TO COMPLETE ALL WORK SHOWN AND SPECIFIED UNDER THIS SECTION. ALL EXISTING LEVELS AND GRADES SHOWN SHALL BE VERIFIED BY THE CONTRACTOR BEFORE COMMENCING WORK.
- EXCAVATE AS REQUIRED FOR FOUNDATIONS. EXCAVATE TO THE ELEVATIONS INDICATED. IF SATISFACTORY CONDITIONS ARE NOT OBTAINED AT THE INDICATED LEVELS, THE EXCAVATION SHALL BE CARRIED DEEPER. FOUNDATION GRADE UNDER ALL COLUMN FOOTINGS SHALL BE INSPECTED BY GEOTECHNICAL CONSULTANT BEFORE PLACING OF CONCRETE.
- PROVIDE AND ERECT ALL SHORING, SHEETING AND BRACING REQUIRED TO SUPPORT THE EARTH BANKS OF EXCAVATIONS. ALL SUCH WORK SHALL BE FORMED WITH SOUND MATERIAL, ACCURATELY AND SECURELY SET, AND SHALL BE LEFT IN PLACE UNTIL BACKFILLING OPERATIONS COMMENCE IN EACH PARTICULAR AREA AND THEN REMOVED IN STAGES AS BACKFILLING PROGRESSES. ALL EXCAVATION WORK SHALL COMPLY WITH THE REQUIREMENTS OF THE OCCUPATIONAL HEALTH AND SAFETY ACT AND ONTARIO REGULATION 659/79.
- KEEP EXCAVATIONS FREE OF WATER AT ALL TIMES USING TRENCHING, WELL POINTS AND PUMPING OF A CAPACITY NECESSARY TO CONDUCT WATER A SUITABLE DISTANCE FROM THE EXCAVATIONS.
- PIPE TRENCHES SHALL BE EXCAVATED TO -3" BELOW INVERT ELEVATIONS AND PROPER SLOPE. REFILL TO INVERT ELEVATION WITH BEDDING MATERIAL. BEDDING MATERIAL SHALL BE 6" LIFTS TO 12" ABOVE THE PIPE TOP, HAND-PLACED, AND THOROUGHLY COMPACTED. BEDDING MATERIAL FOR STORM AND SANITARY DRAINAGE PIPING SHALL BE 3/4" CLEAR SEWER STONE. BEDDING MATERIAL FOR WATER PIPING SHALL BE BANK-RUN SAND AND GRAVEL.
- ALL SUB-GRADES WILL BE INSPECTED BY A GEOTECHNICAL ENGINEER BEFORE PLACING CONCRETE.

STORM SEWER

- STORM DRAINAGE PIPE AND FITTINGS SHALL BE PVC GRAVITY SEWER PIPE CONFORMING TO CSA B182-M1983 AND A.S.T.M. D3034-77 WITH LOCKED-IN GASKET BELL AND SPIGOT JOINTS AND DIMENSIONAL RATIO OF 35.
- PERFORM CONNECTIONS TO EXISTING SEWER AT CLEAN OUT IN A MANNER ACCEPTABLE TO LOCAL AUTHORITIES. PROVIDE EXPLORATORY PROBES TO DETERMINE THE EXACT LOCATION, INVERTS AND CONDITION OF EXISTING SEWERS UTILIZED FOR NEW SITE DRAINAGE AND WHERE NEW CONNECTIONS ARE PROPOSED. PROVIDE REDUCERS AND INCREASERS AND JOIN PIPE IN THE PROPER MANNER TO ENGINEER APPROVAL.
- ANY EXISTING DAMAGED SEWER SHALL BE REPAIRED IN MANNER ACCEPTABLE TO LOCAL AUTHORITIES.
- WORK SHALL COMPLY WITH ALL PROVINCIAL AND OR LOCAL CODE REGULATIONS AS MAY BE APPLICABLE UNDER SPECIFIC JURISDICTION OF EITHER THE ONTARIO WATER RESOURCES ACT, MINISTRY OF THE ENVIRONMENT, REGULATION 647 OR LOCAL MUNICIPAL AUTHORITIES.
- CATCH BASINS SHALL BE PRECAST CONCRETE PER OPSD STANDARDS WITH CAST IRON FRAME AND COVER. PROVIDE 4- 5' LENGTHS OF 4" PVC PERFORATED UNDERDRAINS AT EACH CATCH BASIN COMPLETE WITH FILTER FABRIC.
- ALL MANHOLE AND CATCH-BASIN EXCAVATIONS TO BE BACKFILLED WITH GRANULAR MATERIAL COMPACTED TO 95% STANDARD PROCTOR DENSITY.
- ULTRA-RIB PIPE IS NOT PERMITTED WITHIN THE MUNICIPAL RIGHT-OF-WAY.
- MAINTENANCE HOLES AS PER ONTARIO PROVINCIAL STANDARD AND SPECIFICATION, OPSD-701.030 (1200MM). FRAME AND COVER AS PER OPSD 401.010 TYPE A CLOSED (SANITARY) TYPE B OPEN (STORM).
- BENCHING SHALL BE AS PER ONTARIO PROVINCIAL STANDARD OPSD-701.021.
- REINFORCED CONCRETE PIPE SHALL BE AS PER CSA A257.2-03 (MINIMUM 650). HEIGHT OF FILL TO BE VERIFIED USING OPSD TABLES 807.010 AND 807.030.
- NON-REINFORCED CONCRETE PIPE 150MM TO 250MM SHALL BE AS PER CSA A257.1-03 CLASS 3. HEIGHT OF FILL TO BE VERIFIED USING OPSD TABLES 807.040.
- BEDDING FOR RIGID PIPE SHALL BE CLASS B AS PER OPSD 802.030, 802.031, 802.032 OR 802.033.
- SINGLE CATCH BASINS SHALL BE AS PER ONTARIO PROVINCIAL STANDARD OPSD-705.020 COMPLETE WITH GOSS TRAP. FRAME AND COVER AS PER OPSD 400.010
- SERVICE CONNECTIONS AND UTILITY CUTS TO BE BACKFILLED WITH UN-SHRINKABLE FILL.
- CATCH BASIN LEADS TO BE 200MM PVC SDR 35 FOR SINGLE CATCH BASINS AND 250MM PVC SDR 35 FOR DOUBLE CATCH BASINS UNLESS OTHERWISE NOTED.

CLEAN OUT

- CLEANOUT TO BE PLACED AT OR NEAR THE PROPERTY LINE.
- CLEANOUT TO BE BROUGHT TO GRADE WITH AN ACCESSIBLE CAP.
- METAL COVERS SHALL BE INSTALLED ON ALL CLEANOUTS INSTALLED WITHIN HARD SURFACES. (EX. DRIVEWAYS, SIDEWALKS AND LEADWALKS).
- CONTRACTOR SHALL CONNECT PDC TO TEE; NO CONNECTIONS SHALL BE MADE TO THE RISER PIPE.
- CLEAN OUT AS PER CITY OF WINDSOR STANDARDS AND SPECIFICATIONS, AS-325.

ASPHALT PAVING

- FURNISH ASPHALTIC CONCRETE PAVING TO O.P.S.S. 310 COMPOSED OF A BASE COURSE OF 2" HL8 AND 1 1/2" HL3 SURFACE COURSE. ASPHALT CEMENT SHALL CONFORM TO O.P.S.S. 1101 TO 85/100 PENETRATION DESIGNATION. ASPHALT PRIMER SHALL BE LIQUID ASPHALT EMULSION. PRIME VERTICAL SURFACES WITH PRIMER.
- INSTALL ASPHALTIC CONCRETE TO LINES AND COMPACTED THICKNESS TO CONFORM TO O.P.S.S. 310. FORM WELL BONDED JOINTS. THE FINISHED SURFACE SHALL BE SMOOTH, OF UNIFORM DENSITY AND TEXTURE AND TRUE TO ESTABLISHED FINISHED ELEVATIONS. PAVING SHALL BE OF MINIMUM 50MM THICKNESS OR ELSE SPECIFIED AND WHEN CHECKED WITH A 10'-0" STRAIGHT EDGE SHALL SHOW NO IRREGULARITY EXCEEDING 1/4" DEPTH. THE SURFACE SHALL BE SLOPED SO THAT ALL SURFACE WATER WILL BE DRAINED TO THE PERIMETER OF ASPHALT SURFACES, SYSTEMS OF DRAINS, CATCH BASINS OR STORM SEWERS.

- PROVIDE CONCRETE BARRIER CURBS AS SHOWN ON DRAWINGS. PROVIDE ALL PAVEMENT MARKING, LINE PAINTING, DIRECTIONAL LINES / ARROWS ETC. AS SHOWN ON DRAWINGS. PAINT SHALL BE 2 COATS OF ORGANIC SOLVENT PAINT IN ACCORDANCE WITH OPSS 1712.

CONSTRUCTION NOTES:

- THE CONTRACTOR IS RESPONSIBLE FOR LOCATING AND PROTECTING ALL EXISTING SERVICES DURING CONSTRUCTION.
- ALL DIMENSIONS AND EXISTING INVERTS MUST BE VERIFIED BEFORE CONSTRUCTION.
- ALL DISTURBED GRASSED AREAS ARE TO BE RESTORED WITH 100 MM DEPTH OF TOPSOIL AND SOD.
- BACKFILL SHALL BE APPROVED NATIVE MATERIAL, COMPACTED TO 98% S.P.D.
- ALL SEDIMENT CONTROLS WILL BE INSTALLED BEFORE ANY SITE DISTURBANCE AND MAINTAINED UNTIL THE SITE IS STABILIZED.
- ALL REMOVALS ARE TO BE DISPOSED OF SITE UNLESS OTHERWISE NOTED.
- ALL DISPOSALS WILL BE CARRIED OUT IN ACCORDANCE WITH CURRENT ENVIRONMENTAL STANDARDS AND PROCEDURES AT NO ADDITIONAL COST TO THE OWNER.
- WHERE EXISTING CATCH-BASINS AND MAN-HOLES ARE REMOVED, THE VOID IS FILLED WITH IMPORTED GRANULAR MATERIAL COMPACTED TO 100% SPD.
- ABANDONED SEWERS ARE TO BE PLUGGED AT OPEN ENDS.
- ALL MATERIALS ENCOUNTERED DURING EXCAVATION THAT ARE NOT SUITABLE FOR USE AS EARTH FILL ARE TO BE REMOVED AND DISPOSED OF SITE IN ACCORDANCE WITH CURRENT MOE REGULATIONS.
- ALL DISTRESSED GRASSED AREAS ARE TO BE RESTORED WITH 100 MM DEPTH TOPSOIL AND SOD.
- MECHANICAL RESTRAINTS SHALL BE INSTALLED AT ALL JOINTS BETWEEN FITTINGS, BENDS, TEES, CROSSES, AND VALVES; MECHANICAL RESTRAINTS SHALL CONFORM TO THE MATERIAL. SPECIFICATIONS CONTAINED IN MANUFACTURER SPECIFICATIONS.
- ALL TEES, PLUGS, HORIZONTAL AND VERTICAL BENDS, REDUCERS AND HYDRANTS ARE TO HAVE CONCRETE THRUST BLOCKS AS PER ONTARIO PROVINCIAL STANDARD OPSD-1103.01, OPSD-1103.020.
- THE SEPARATION OF SEWERS AND WATER MAINS F-6-1. A MINIMUM VERTICAL CLEARANCE OF 0.30M OVER. 0.5M UNDER SEWERS AND ALL OTHER UTILITIES WHEN CROSSING MUST ALSO MAINTAIN 2.5M HORIZONTAL SEPARATION.

CONCRETE NOTES:

- CONCRETE WORK
- CONCRETE SHALL BE TRANSIT-MIXED FROM A READY-MIX PLANT APPROVED BY THE CONSULTANT. CONCRETE MATERIALS AND MIXING PROCEDURES SHALL CONFORM TO THE REQUIREMENTS OF C.S.A. STANDARD CAN3.A23.1-M77, LATEST EDITION.
 - CONCRETE FOR INTERIOR SLABS SHALL BE 30 M.P.A. WITH A MAXIMUM WATER/CEMENT RATIO OF 0.50 (BY WEIGHT). CONCRETE FOR EXTERIOR PAVING SLABS AND WALLS EXPOSED TO WEATHER SHALL BE 30 MPA WITH 6% AIR ENTRAINMENT AND A MAXIMUM WATER/CEMENT RATIO OF 0.45 (BY WEIGHT). GENERAL FOUNDATION CONCRETE SHALL BE 25 MPA WITH A MAXIMUM WATER/CEMENT RATIO OF 0.50 (BY WEIGHT).
 - REINFORCING STEEL SHALL CONFORM TO CSA STANDARD G30.12 -M77, HIGH BOND DEFORMED BARS OF INTERMEDIATE OR HARD GRADE WITH A MINIMUM YIELD STRENGTH OF 400 MPA. PROVIDE ALL CHAIRS, STIRRUPS, BOLSTERS, SPACERS AND TIES ETC. REQUIRED FOR PROPER INSTALLATION OF REINFORCING MATERIALS. WIRE TIES SHALL BE 18 GA. OR GREATER.
 - REINFORCING STEEL SHALL BE FABRICATED IN ACCORDANCE WITH THE REQUIREMENTS OF ACI STANDARD 315. PLACING SHALL BE IN ACCORDANCE WITH CRSI RECOMMENDED PRACTICE FOR PLACING REINFORCING BARS
 - MINIMUM COVER FOR REINFORCING STEEL:
 - CONCRETE POURED ON OR AGAINST EARTH -3"
 - CONCRETE EXPOSED TO EARTH OR WEATHER -2"
 - CONCRETE NOT EXPOSED TO EARTH OR WEATHER -1 1/2"
 - MINIMUM LAP SPLICES FOR REINFORCING STEEL:
 - 42 BAR DIAMETERS IN TENSION
 - 30 BAR DIAMETERS IN COMPRESSION
 - IN NO CASE LESS THAN 12" UNLESS NOTED
 - PROVIDE CORNER BARS TO MATCH HORIZONTAL BARS AT ALL EXTERIOR CORNERS IN

WALLS. CHAMFER ALL EXPOSED EDGES 3/4". WELDED WIRE MESH IN FLOORS SHALL BE SET ON BRICK CHAIRS TURNED ON EDGE (3 1/2") AT 3'-0" O.C. IMMEDIATELY BEFORE PLACING OF CONCRETE.

- EXPANSION JOINT FILLER SHALL BE ASPHALT-IMPREGNATED FELT BOARD 1/2" THICK. SEALANT SHALL BE "STERNSON" DUOFLEX S.L.
- ALLOWABLE SOIL BEARING PRESSURE: 2000 P.S.F. (ASSUMED)
- PERIMETER INSULATION TO BE 2" THICK RIGID STYROFOAM SM OR EQUAL TO O.B.C. REQUIREMENTS.
- REINFORCEMENT FOR FLOOR SLABS SHALL BE "FIBER-MESH 150" SYNTHETIC FIBER REINFORCEMENT; 100 PERCENT VIRGIN HOMO-POLYMER POLYPROPYLENE MULTI FILAMENT FIBERS, CONTAINING NO REPROCESSED OLEFIN MATERIALS; APPLIED AT 1.5 POUNDS PER CUBIC YARD OF CONCRETE. MIX SYNTHETIC FIBER REINFORCEMENT IN CONCRETE MIXER IN ACCORDANCE WITH THE MIXING TIME AND SPEED OF ASTM C 94 TO ENSURE UNIFORM DISTRIBUTION AND RANDOM ORIENTATION OF FIBERS THROUGHOUT THE CONCRETE.

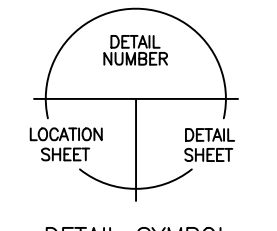
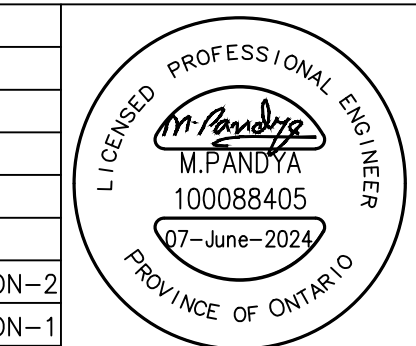

ADDITIONAL GENERAL NOTES:

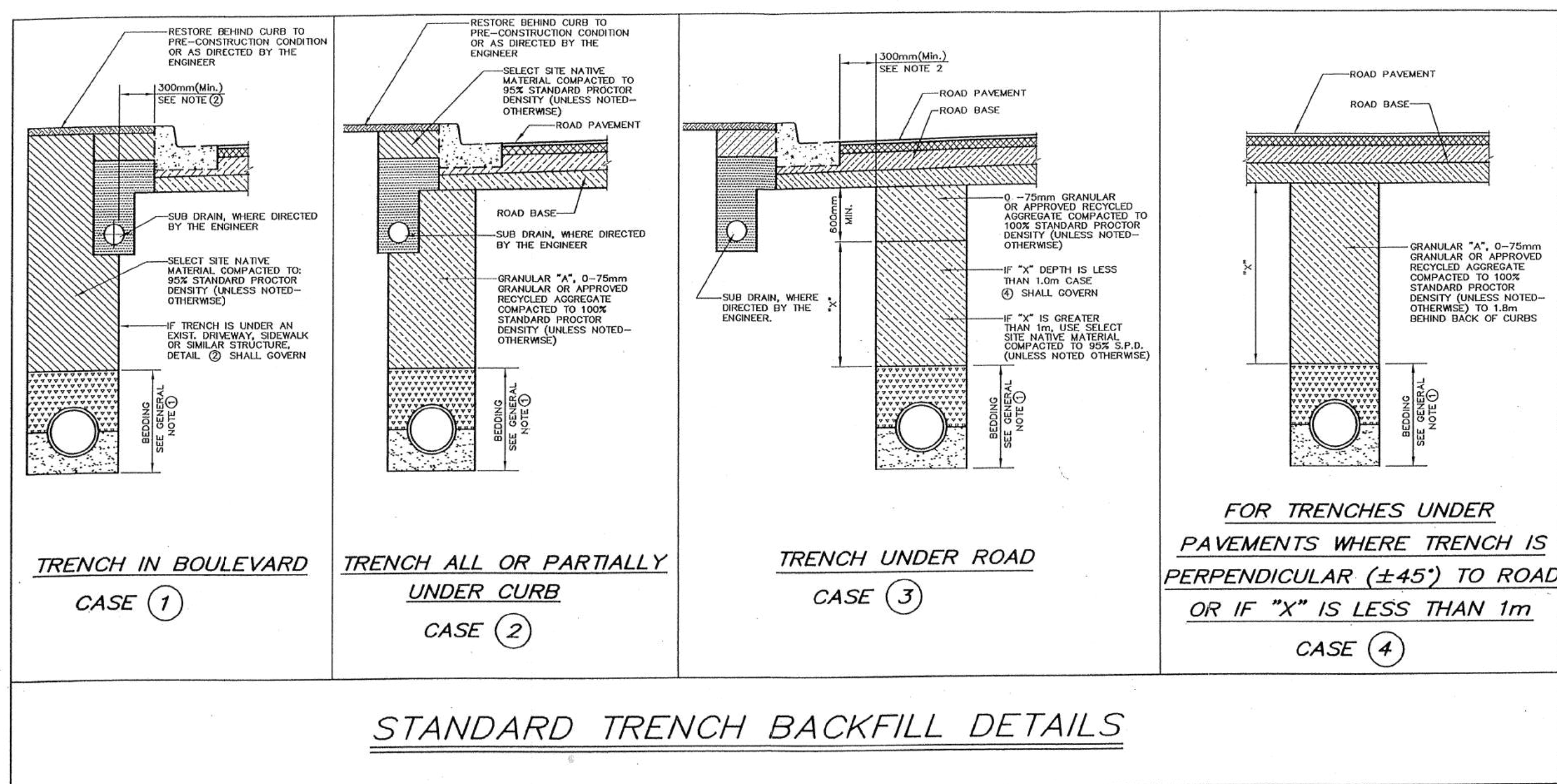
- ALL WORKS ON THE ROAD ALLOWANCE WITHIN THE RIGHT-OF-WAY ARE TO BE AS PER CURRENT CITY OF WINDSOR SPECIFICATIONS AND ARE SUBJECT TO THE CITY OF WINDSOR APPROVAL. NO CONCRETE SHALL BE POURED, OR ASPHALT LAID UNTIL FORM-WORK AND SUB-GRADE HAVE BEEN INSPECTED AND APPROVED BY THE CITY OF WINDSOR OFFICIALS. IF THE PROPERTY IS COVERED BY A SUBDIVISION AGREEMENT, ALL TERMS OF SAID AGREEMENT SHALL BE COMPLIED WITH.
- FORTY-EIGHT HOURS BEFORE COMMENCING WORK WITHIN THE PUBLIC ROAD ALLOWANCE, THE CONTRACTOR MUST CONTACT THE CITY OF WINDSOR UTILITIES.
- ALL ENTRANCES AND EXITS THROUGH BOULEVARDS WITHIN THE CALDERWOOD ROAD RIGHT-OF-WAY ARE TO BE CONSTRUCTED TO THE CITY OF WINDSOR STANDARDS AND SPECIFICATIONS.
- CURB CUTS AND FILLS ARE TO BE DONE BY THE OWNER ON MUNICIPAL ROADS AT THE OWNER'S (SUB-DIVIDE IF APPLICABLE) EXPENSE.
- CULVERTS WILL BE INSTALLED BY THE OWNER, WITH THE COMPLETED INSTALLATION INSPECTED AND APPROVED BY THE CITY OF WINDSOR STAFF, IF APPLICABLE.
- ALL UTILITIES AND TREES WHICH OBSTRUCT DRIVEWAY CONSTRUCTION ARE TO BE REMOVED AND RELOCATED AT THE OWNER'S (SUB-DIVIDE IF APPLICABLE) EXPENSE UPON APPROVAL BY THE CITY OF WINDSOR. ONLY TREES DEEMED SIGNIFICANT BY THE TOWN STAFF SHALL BE PROTECTED FROM ALL CONSTRUCTION ACTIVITY AS DIRECTED BY THE TOWN STAFF.
- EXISTING SIDEWALK IS TO BE BROKEN AND RE-CONSTRUCTED, OR A NEW SIDEWALK CONSTRUCTED, 180MM (7") THICK THROUGH DRIVEWAYS BY THE OWNER (OR SUB-DIVIDE IF APPLICABLE) TO CITY OF WINDSOR STANDARDS & SPECIFICATIONS.
- ALL BOULEVARDS ARE TO BE SODDED BY THE OWNER (SUB-DIVIDE IF APPLICABLE) EXCEPT WHERE THE WIDTH BETWEEN THE SIDEWALK AND CURB IS 1.20M (4.0 FEET) OR LESS. IN SUCH CASES, THE BOULEVARD SHOULD BE SURFACED WITH CONCRETE OR ASPHALT BY THE OWNER TO CITY OF WINDSOR STANDARDS AND SPECIFICATIONS.
- ALL SITE PLAN DRAWINGS SHALL BE RELATED TO THE ONTARIO COORDINATE SYSTEM AND PREPARED IN A DIGITIZED FORMAT TO THE SATISFACTION OF THE EXECUTIVE DIRECTOR OF TECHNICAL SERVICES.

MAINTENANCE NOTES:

The STORMWATER management and drainage system for the site is relatively low maintenance. Key components of the system and applicable maintenance issues are as follows:

- Oil and Girt Separator: The Oil and Girt Separator (FD-4HC) is proposed, which has a 95.0% TSS removal capacity and >90% Volume Treated capability and is designed to capture sediment, suspended solids, and oil from the parking area. (FD-4HC) The unit should be inspected annually and cleaned out when the sediment reaches the clean-out levels recommended by the manufacturer. Generally, it is advisable to establish a regular cleaning schedule similar to any regular catch basin sump cleaning program.
- Catch basins: Culvert, area drains, and catch basins should be inspected semiannually to ensure they are free of debris that may clog them.

DETAIL NUMBERS 03 — 05  DETAIL SYMBOL							
		IN CHARGE INT. _____ CLIENT 1140_GOYEAU_ST_WINDSOR DESIGNED MAHENDRA.P PROJECT TITLE 1140_GOYEAU_ST_WINDSOR DRAWN SARTHI_GOYAL DWG. TITLE STORM-WATER-PROPOSAL CHECKED MAHENDRA.P DATE 12-12-2023 APPROVED 07-06-2023	PROJECT No. 1140 DWG. No. D.NO.1140				
						 AMBASHI ENGINEERING LTD. consulting engineers Toronto, ontario	



STANDARD TRENCH BACKFILL DETAILS

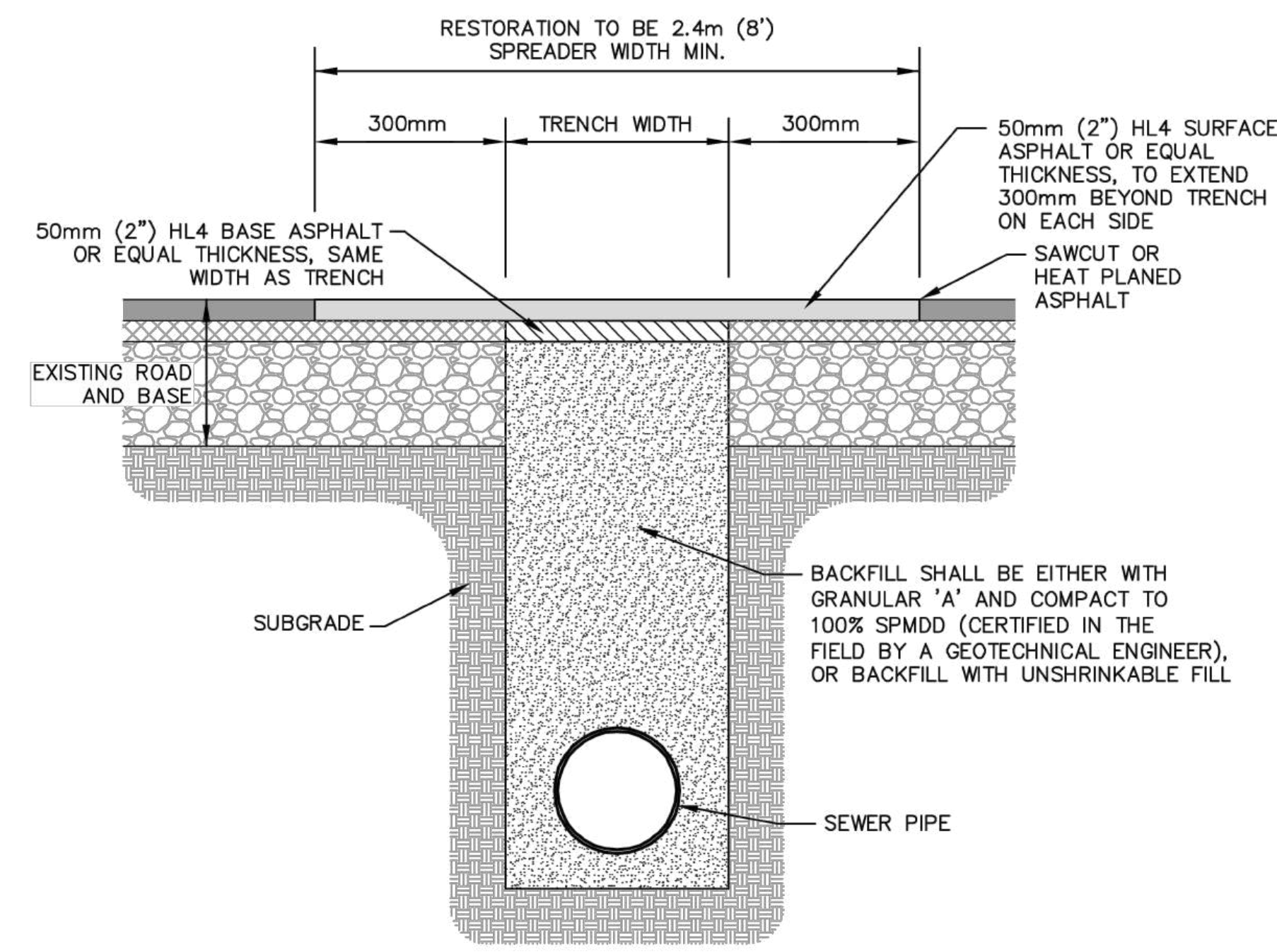
GENERAL NOTES:

- ① FOR SEWER AND PRIVATE SEWER CONNECTION CONSTRUCTION, ALL WORK TO BE IN ACCORDANCE WITH THE CITY OF WINDSOR STANDARD SPECIFICATIONS S-1 APPLIED TO ALL CASES ①, ②, ③ & ④ OF THIS STANDARD DRAWING.
- ② FOR ALL CASES, IF TRENCH WALL IS CLOSER THAN 300mm FROM THE BACK OF CURB (FUTURE OR EXISTING) OR EDGE OF PAVEMENT (FUTURE OR EXISTING), IN ANY DIRECTION, THEN CASE ② SHALL GOVERN.
- ③ FOR CASE ④, WHERE TRENCH CROSSES PERPENDICULAR TO ROADWAY ($\pm 45^\circ$) AND CROSSES UNDERNEATH AN EXISTING CURB, DRIVEWAY OR SIMILAR STRUCTURE, EXTEND GRANULAR BACKFILL TO 1.8m (MIN.) EITHER SIDE OF STRUCTURE.
- ④ THIS DETAIL ADDRESSES TRENCH BACKFILL ONLY. SURFACE RESTORATION SHALL BE AS OTHERWISE APPROVED BY THE COMMISSIONER OF WORKS.

CITY OF WINDSOR
DEPARTMENT OF PUBLIC WORKS

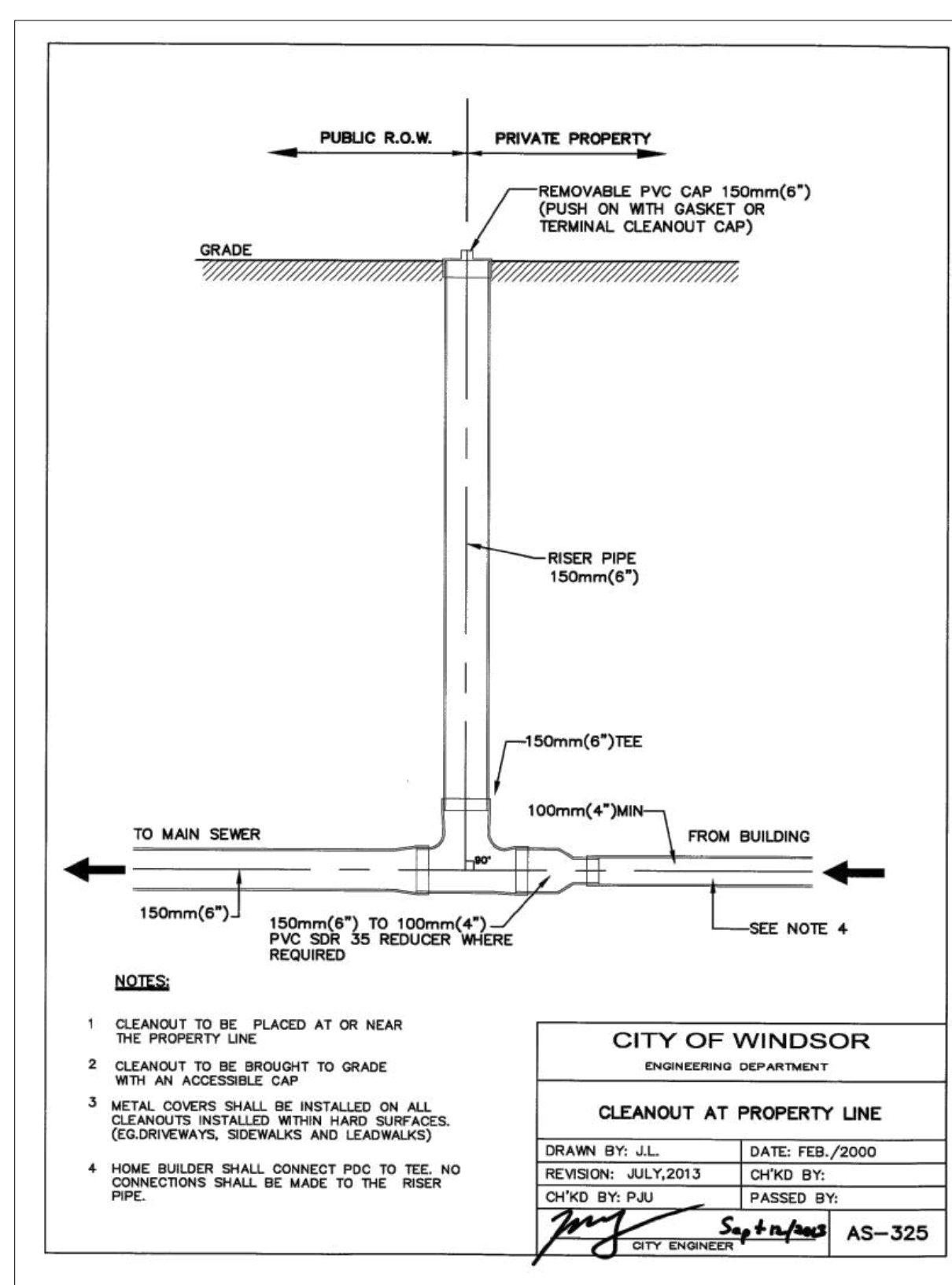
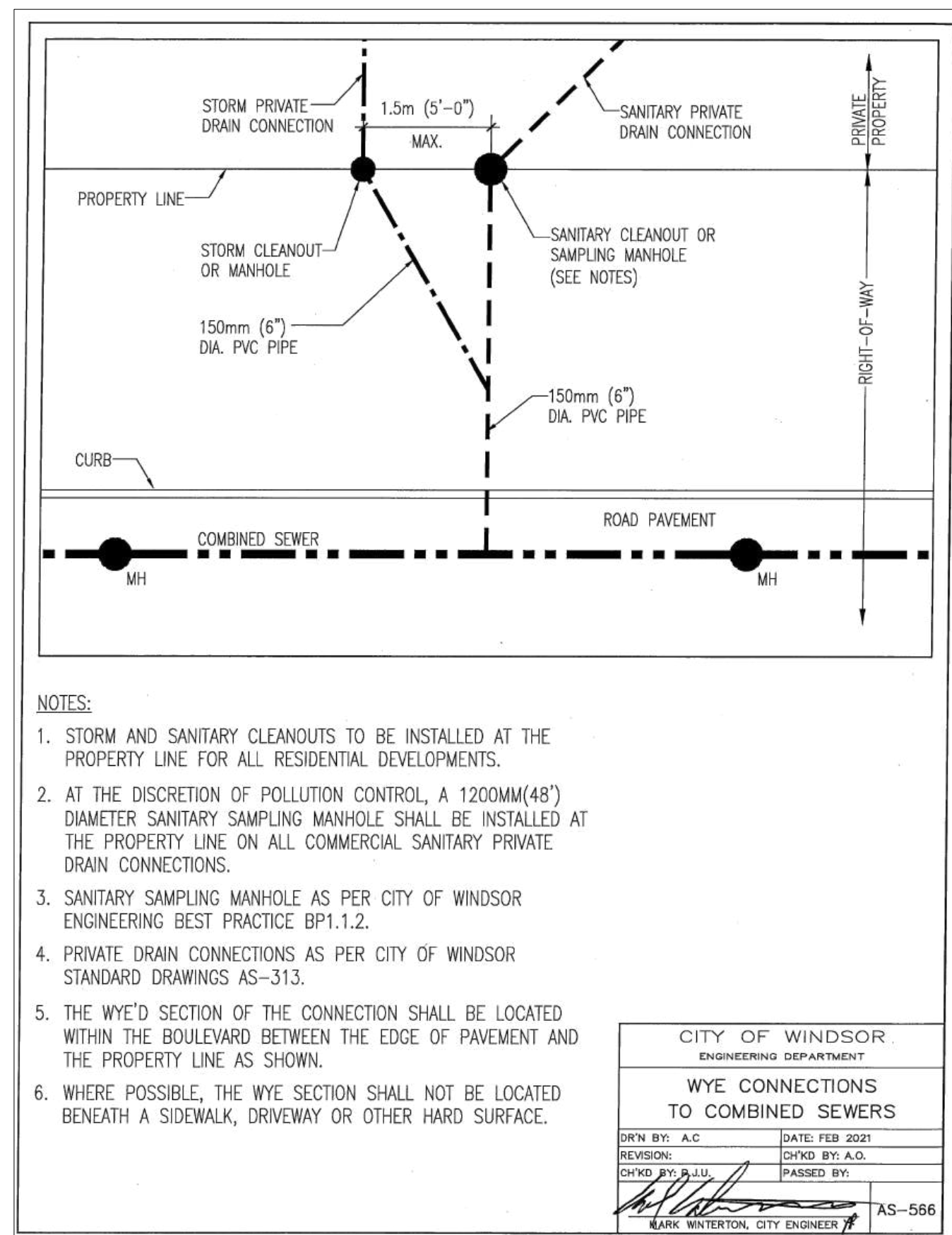
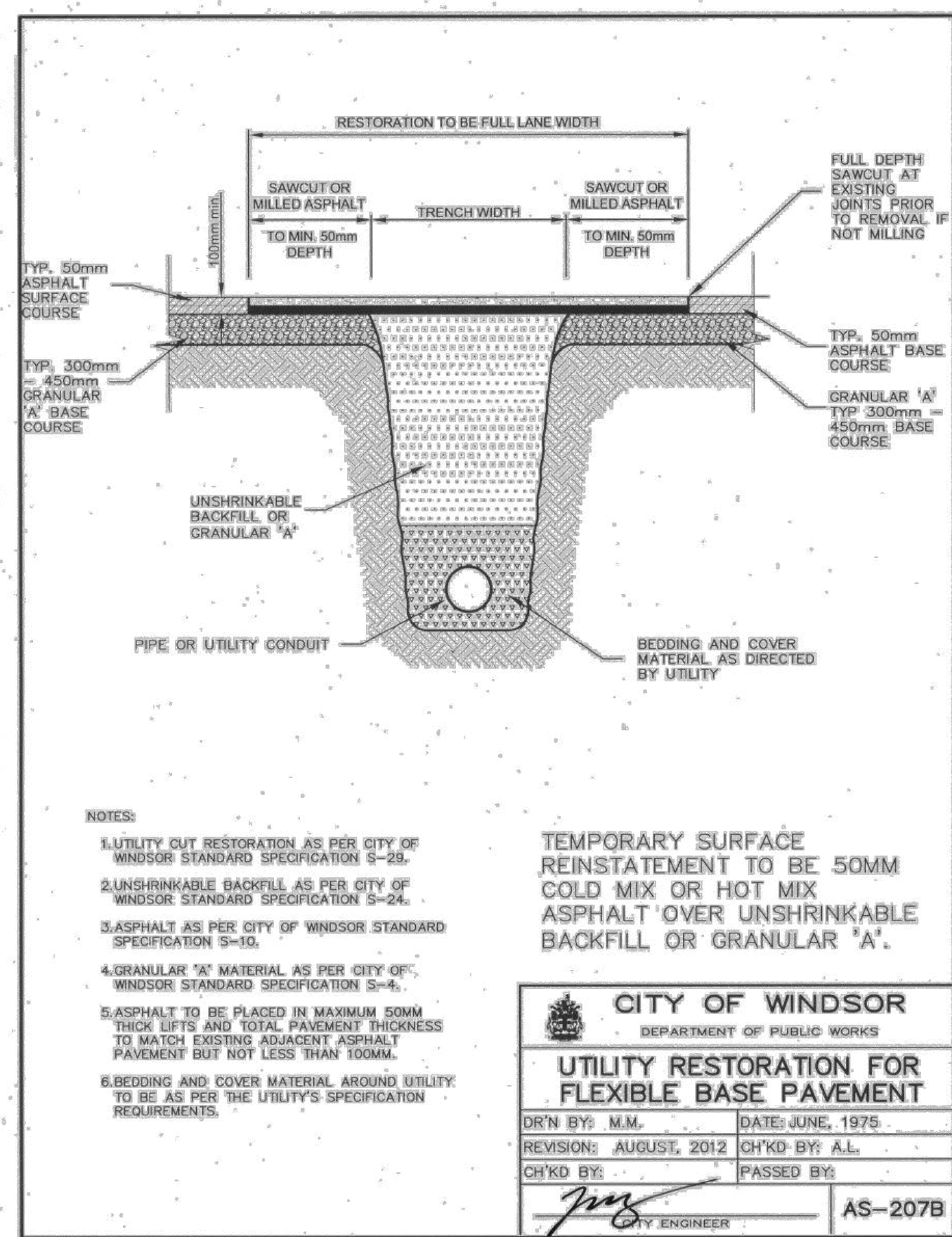
STANDARD TRENCH BACKFILL DETAILS

DRN BY: R.C. DATE: OCTOBER, 2002
REVISION: CH'KD BY:
CH'KD BY: PASSED BY:
COMMISSIONER OF WORKS AS-536



NOTES:

- 1. ASPHALT TO BE LAID IN TWO LAYERS OF TOTAL THICKNESS EQUAL TO THE EXISTING PAVEMENT THICKNESS BUT NOT LESS THAN 100mm (4").
- 2. TEMPORARY SURFACE REINSTATEMENT TO BE 50mm (2") COLD MIX ASPHALT, OVER GRANULAR 'A'.
- 3. ALL CUTS TO BE SQUARE AND STRAIGHT.



NOTES FOR STORM WATER CLEANOUT:

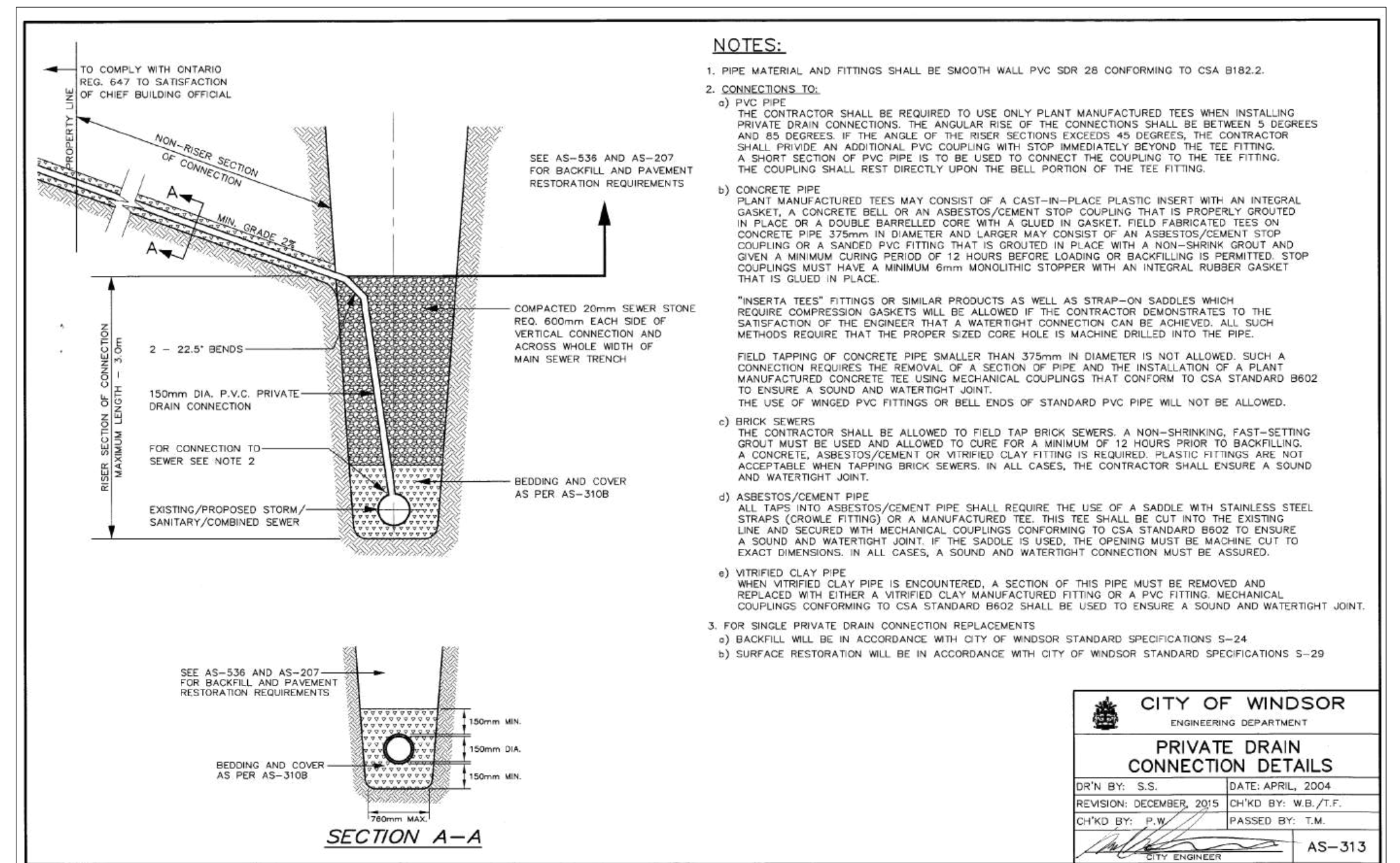
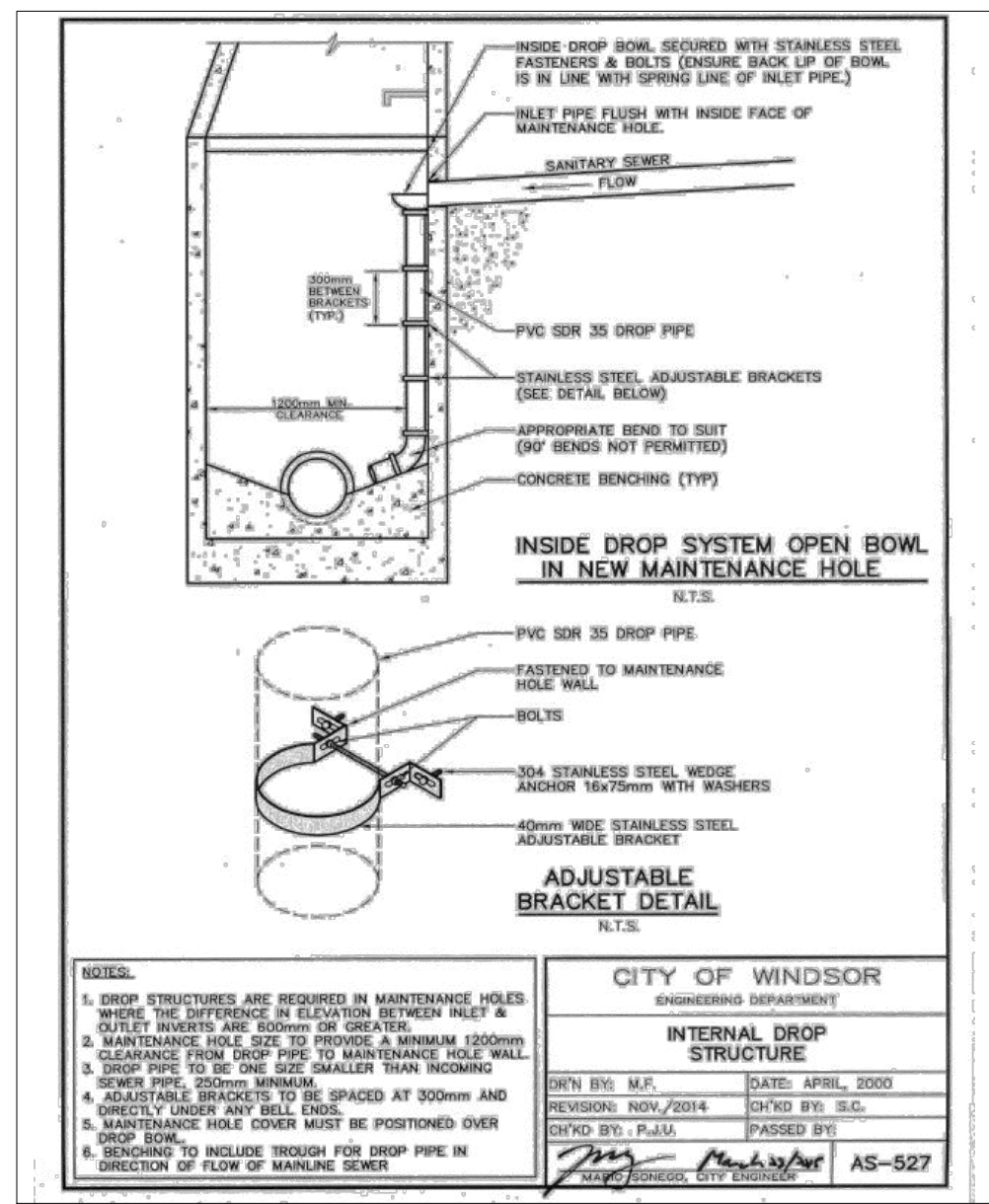
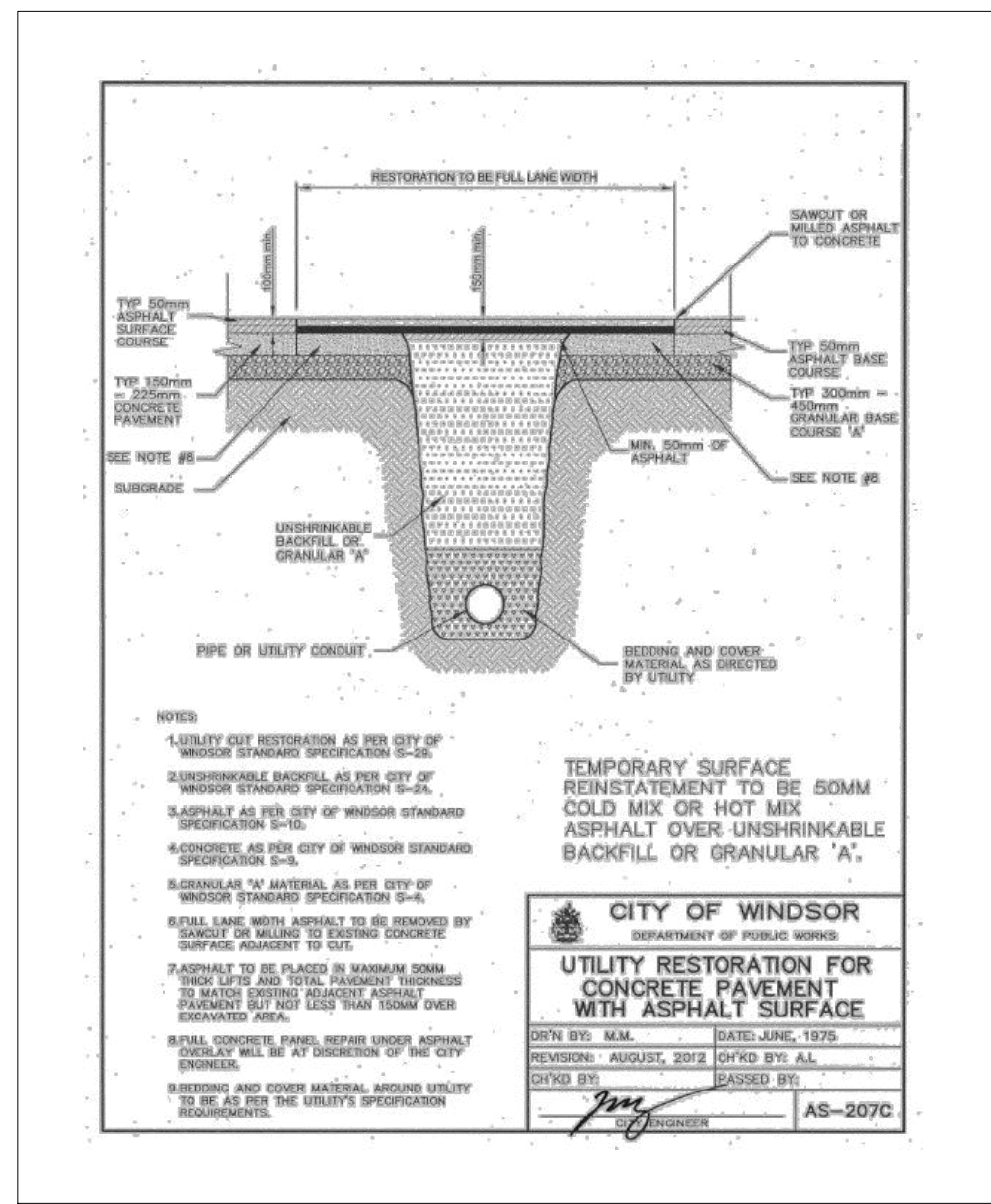
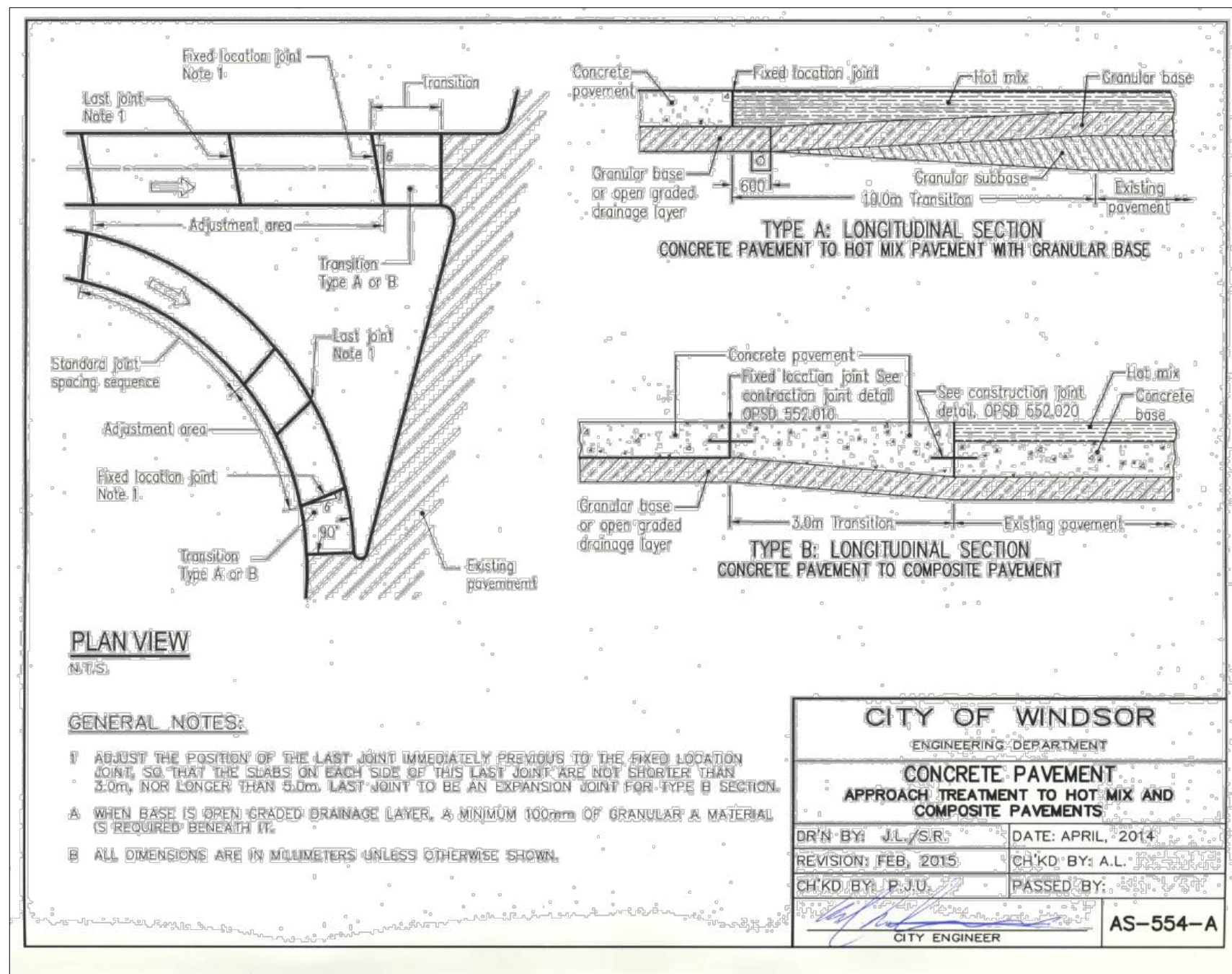
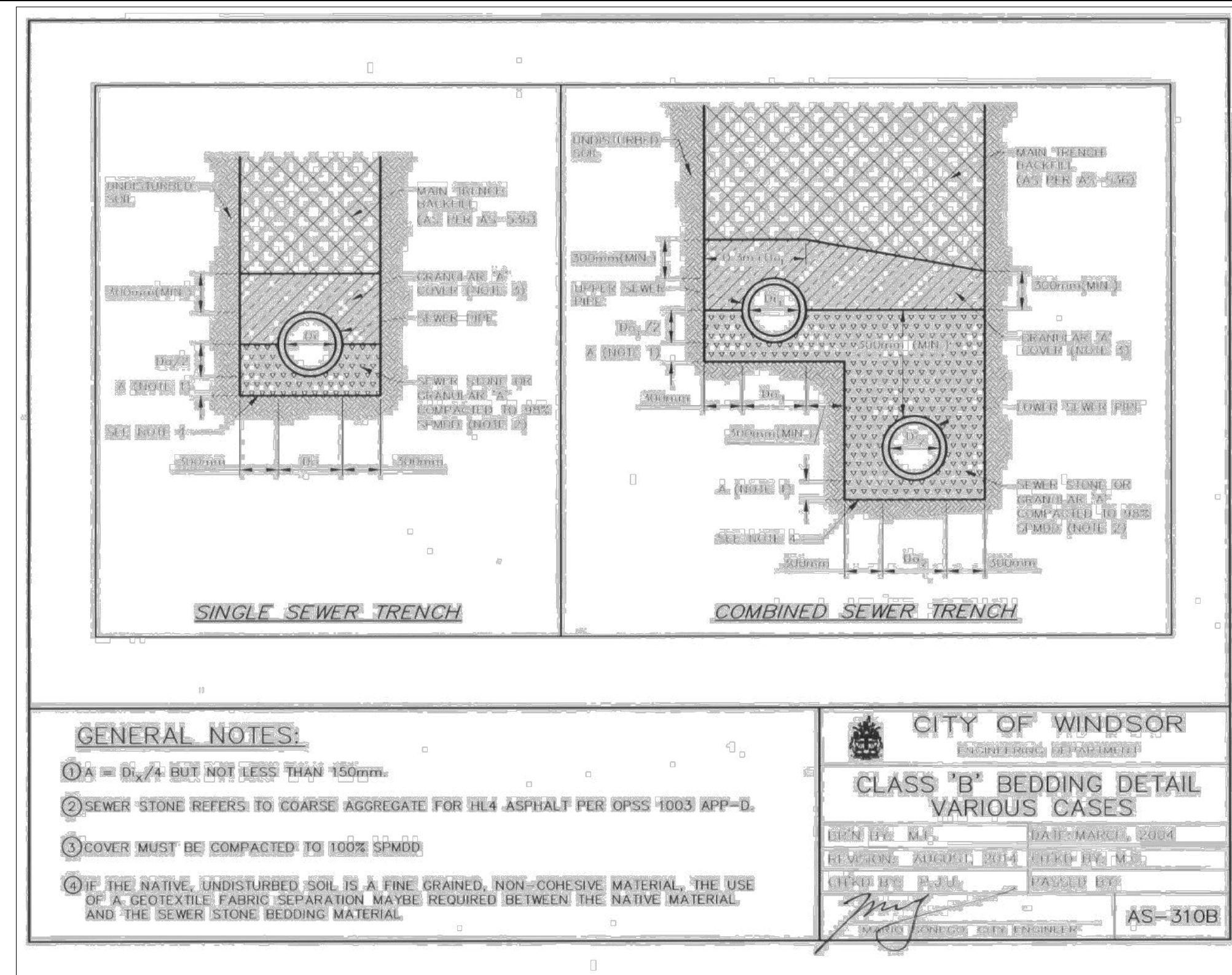
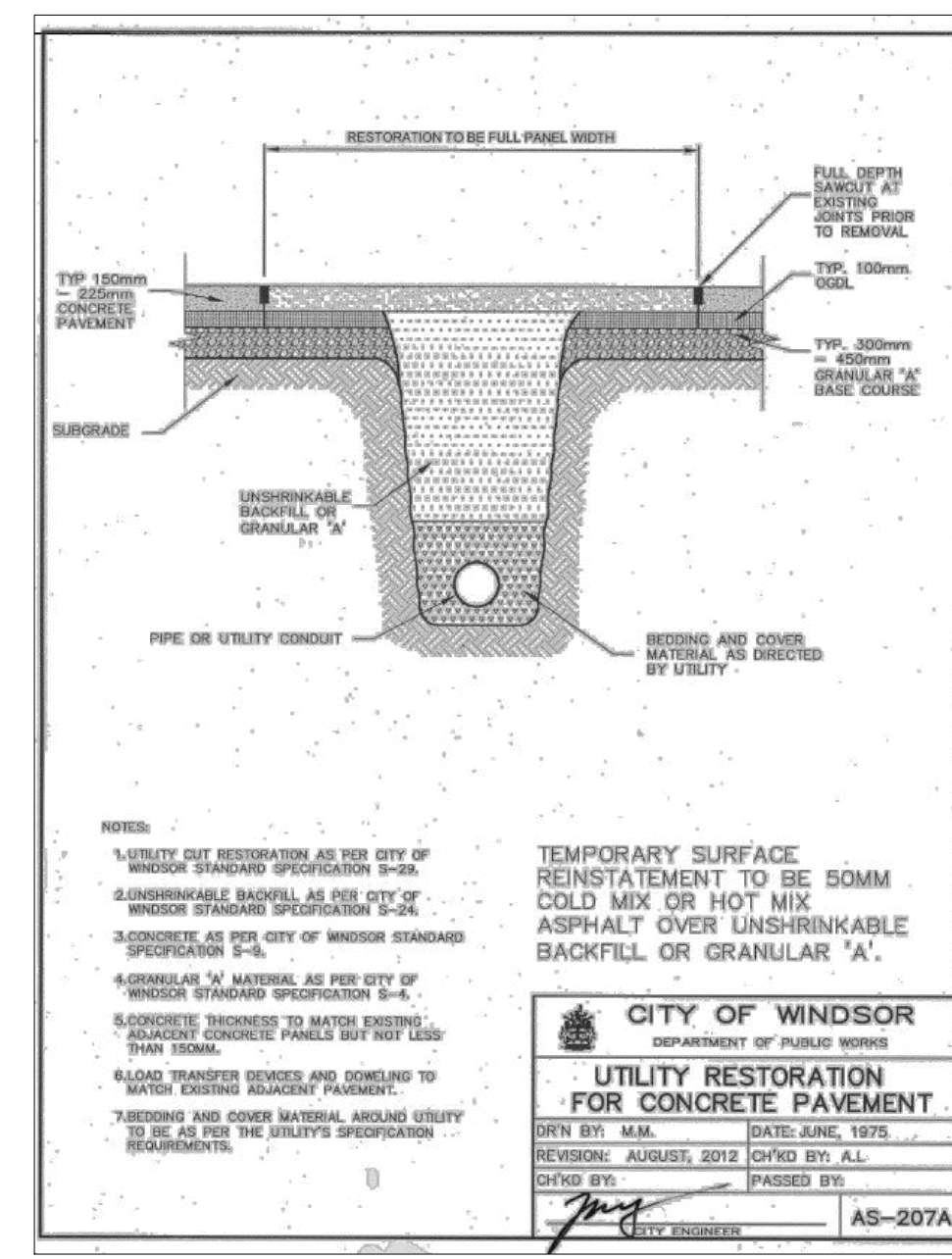
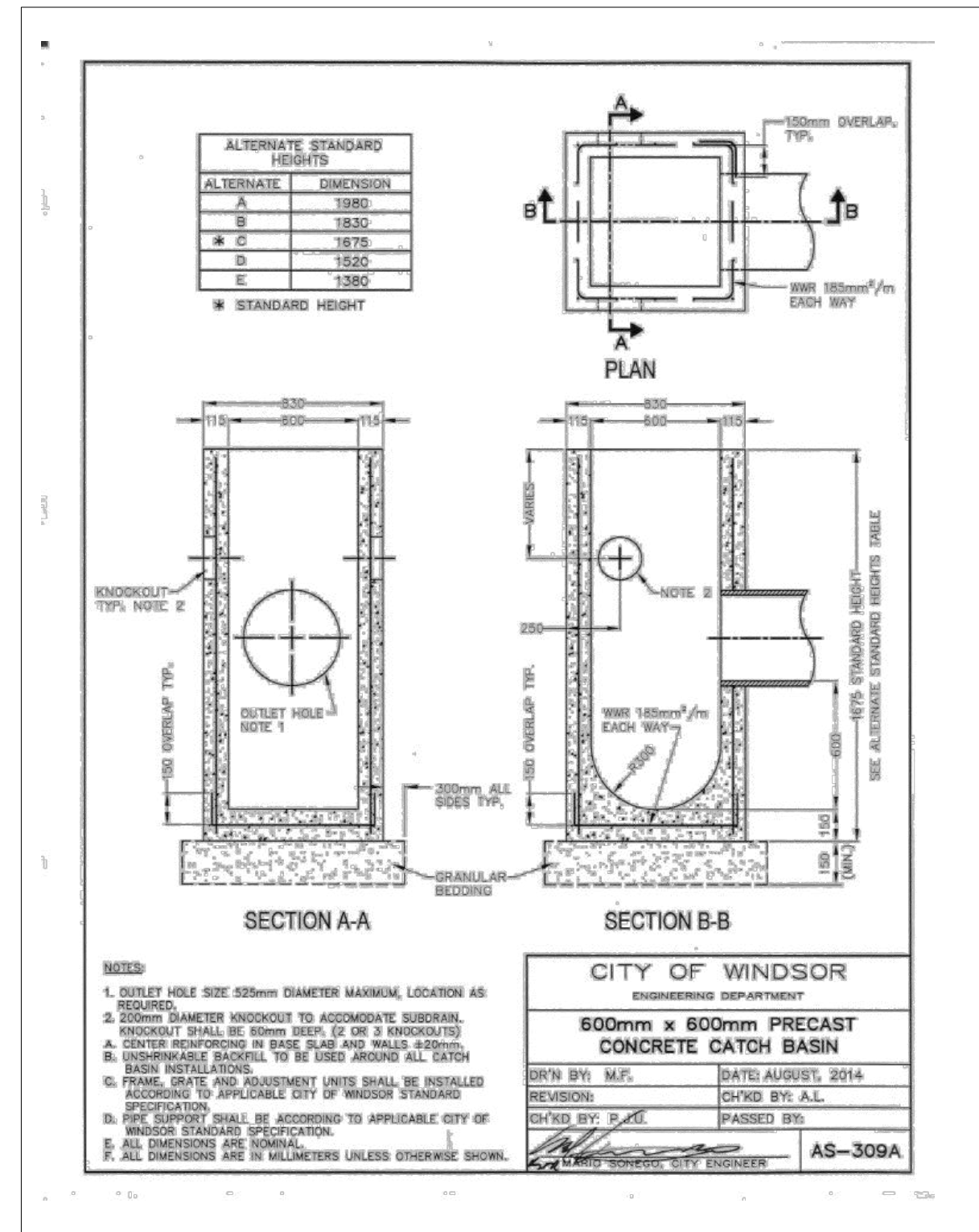
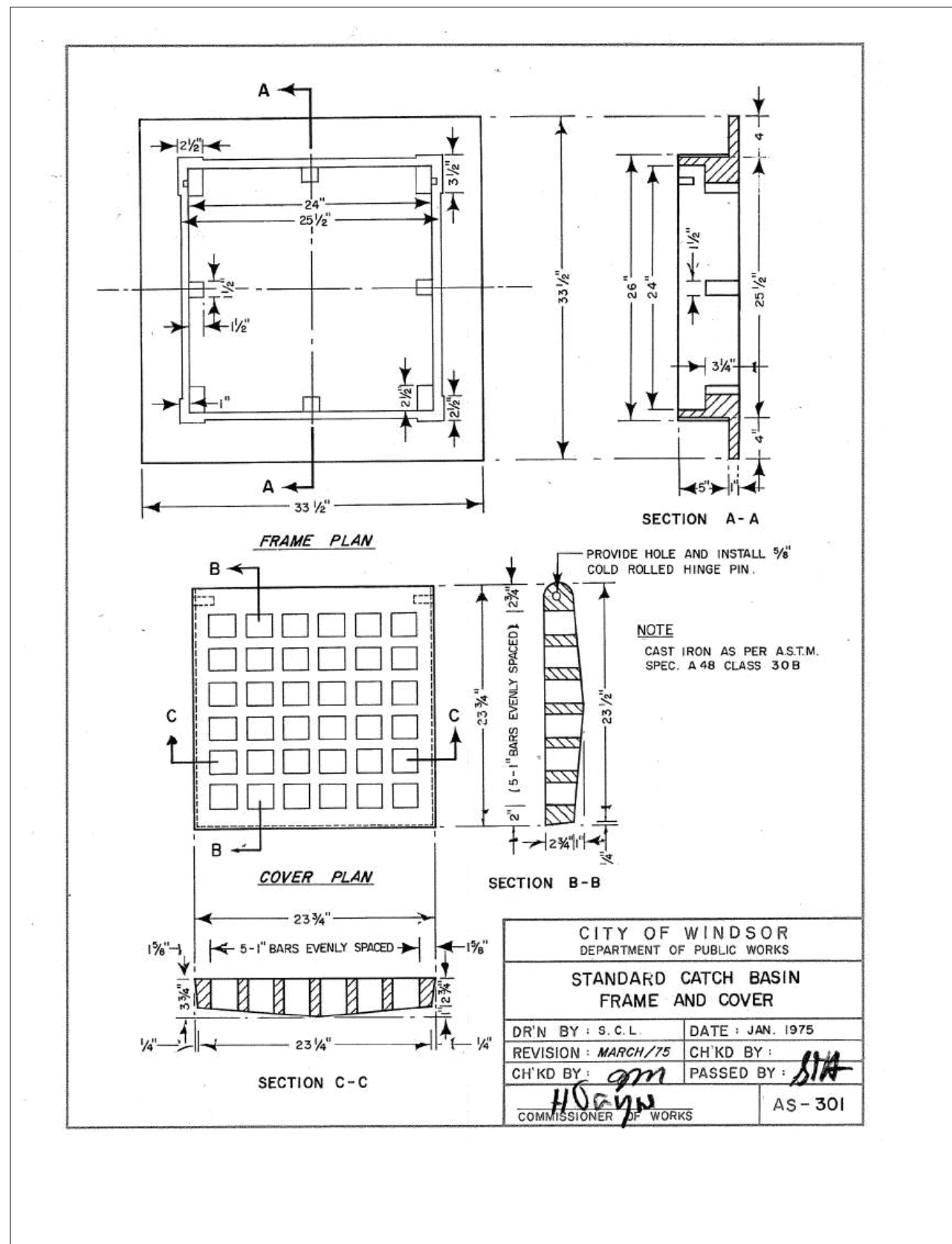
- 1. CLEANOUT TO BE PLACED AT OR NEAR THE PROPERTY LINE.
- 2. CLEANOUT TO BE BROUGHT TO GRADE WITH AN ACCESSIBLE CAP.
- 3. METAL COVERS SHALL BE INSTALLED ON ALL CLEANOUTS INSTALLED WITHIN HARD SURFACES. (EG. DRIVEWAYS, SIDEWALKS AND LEADWALKS).
- 4. CONTRACTOR SHALL CONNECT PDC TO TEE, NO CONNECTIONS SHALL BE MADE TO THE RISER PIPE.

DETAIL NUMBERS	DATE	FOR	ISSUED FOR
04 - 05	07-JUNE-24	FOR-SUBMISSION	SUBMISSION-2
	12-12-2023	FOR-SUBMISSION	SUBMISSION-1



IN CHARGE	CLIENT	PROJECT No.
INT.	1140_GOYEAU_ST_WINDSOR	1140
DESIGNED	MAHENDRA, P	DWG. No.
DRAWN	SARTHIL GOYAL	D.NO. 1140
CHECKED	MAHENDRA, P	
DATE	12-12-2023	
APPROVED	07-06-2023	

AMBASHI ENGINEERING LTD.
consulting engineers
Toronto, Ontario



DATE	ISSUED FOR	BY
07-JUNE-24	FOR-SUBMISSION	SUBMISSION-2
12-12-2023	FOR-SUBMISSION	SUBMISSION-1



IN CHARGE	CLIENT	PROJECT TITLE	PROJECT No.
MAHENDRA.P	1140_GOYEAU_ST_WINDSOR	1140_GOYEAU_ST_WINDSOR	1140
DRAWN	DWG. TITLE		DWG. No.
SARTHL_GOYAL	STORM-WATER-PROPOSAL		D.NO.1140
CHECKED	DATE		
MAHENDRA.P	12-12-2023	AMBASHI ENGINEERING LTD. consulting engineers Toronto, Ontario	
APPROVED	07-06-2023		