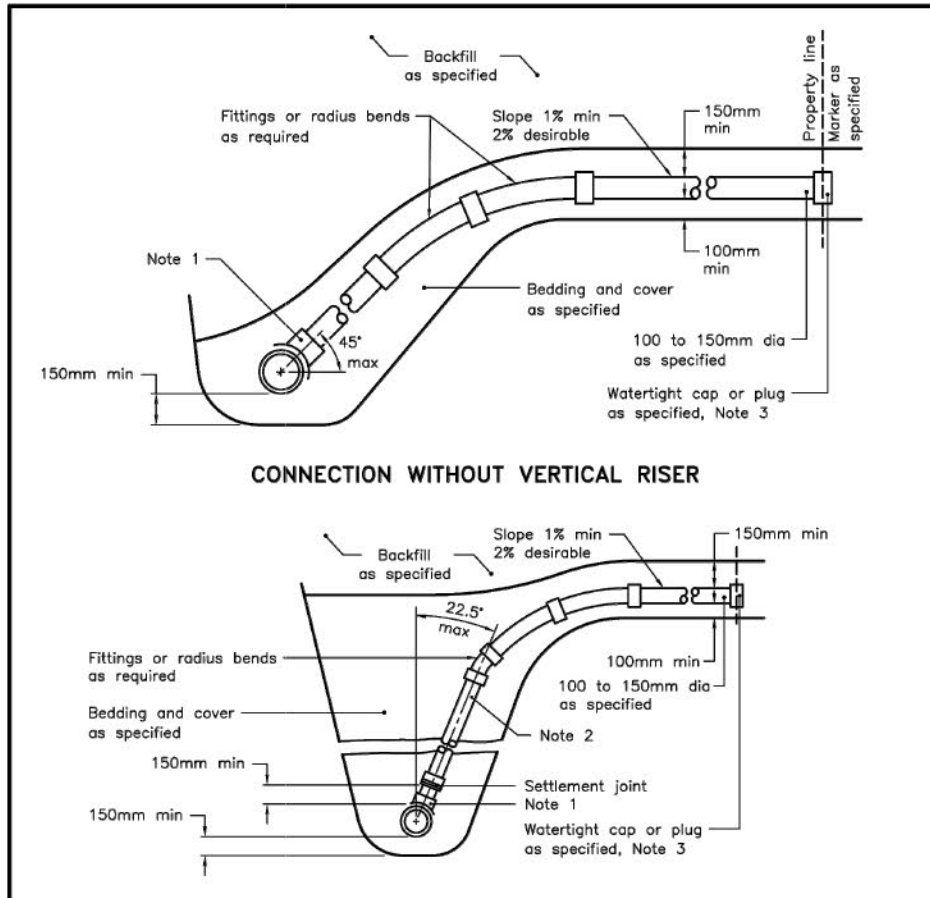


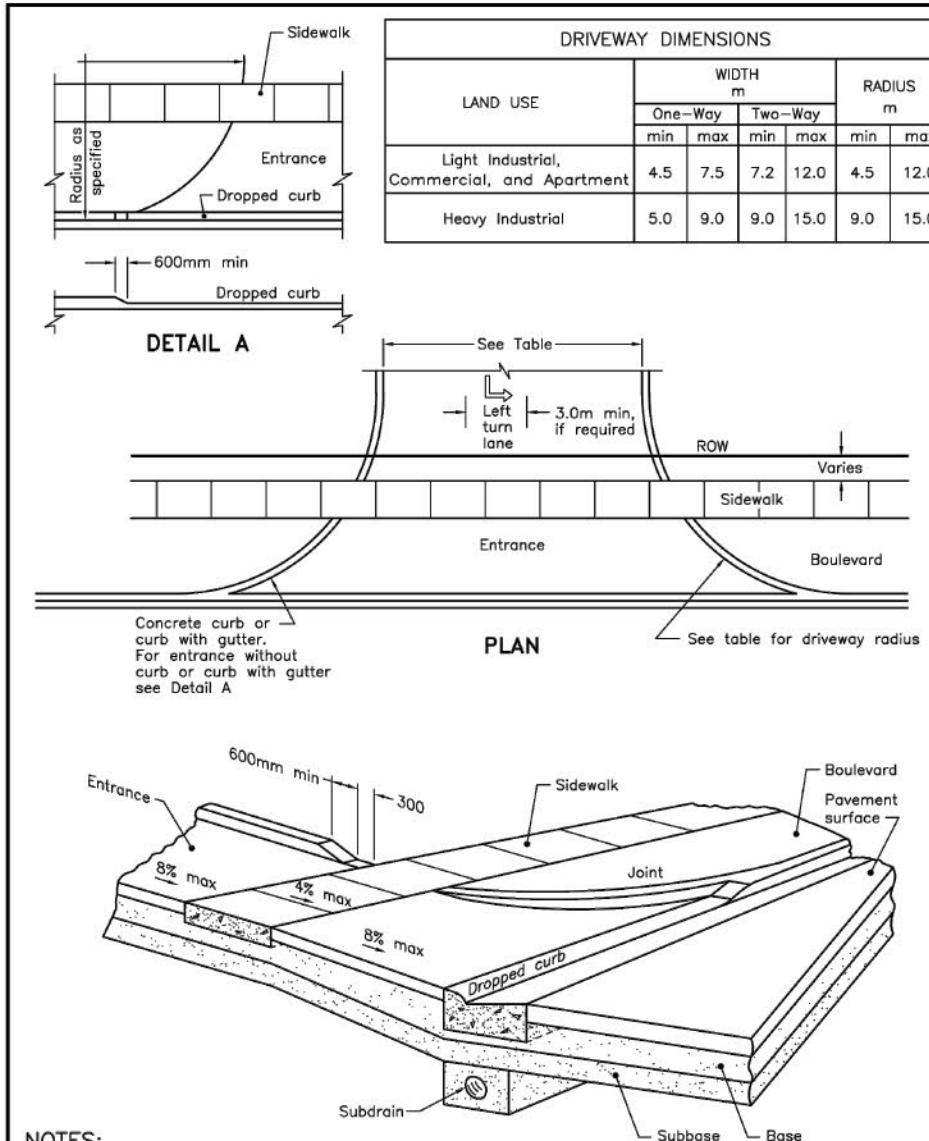
NOTES:
 1 For catch basin connections 300mm in diameter or less, factory made tees shall be used.
 2 For catch basin connections greater than 300mm in diameter, maintenance holes shall be used at the main sewer.
 3 A All dimensions are in millimetres unless otherwise shown.

ONTARIO PROVINCIAL STANDARD DRAWING Nov 2016 Rev 3
CATCH BASIN CONNECTION FOR FLEXIBLE MAIN PIPE SEWER
 OPSD 708.030



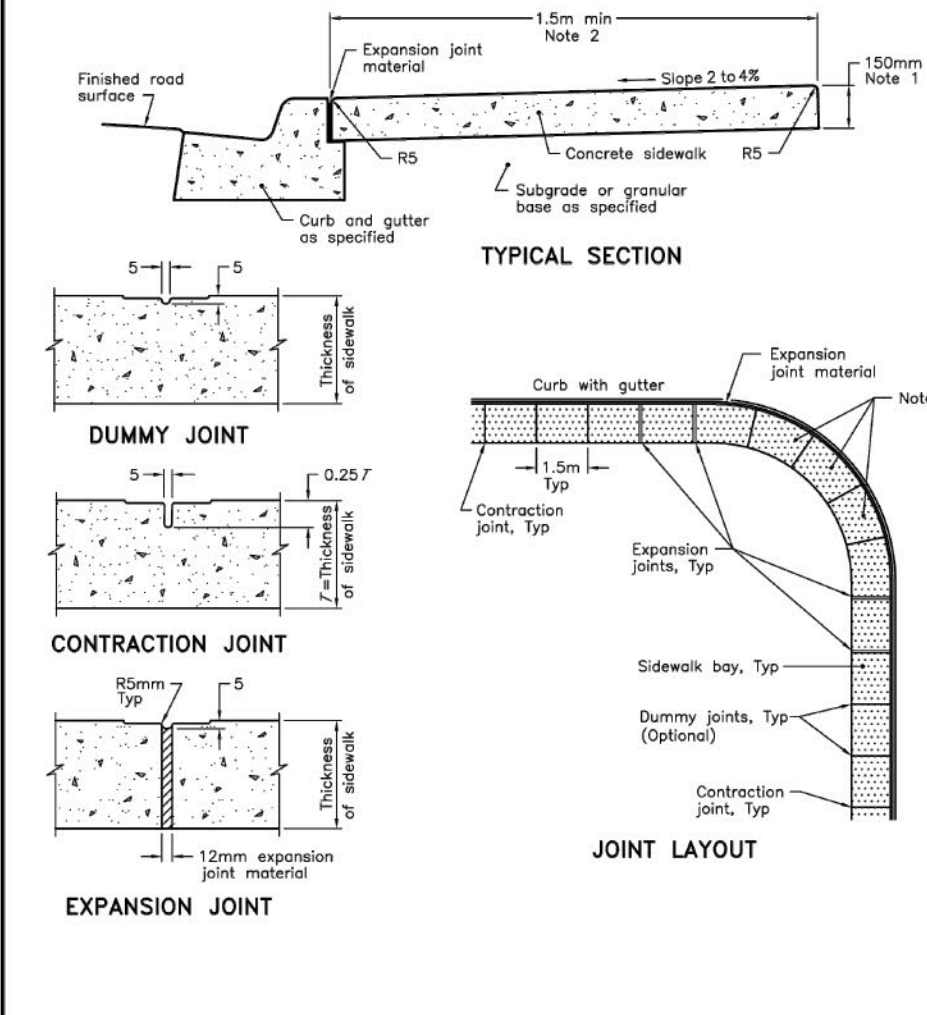
NOTES:
 1 Sewer service connections to the main pipe sewer shall be made using factory made tees, strap-on-addies, or other approved addies.
 2 Vertical risers shall be as specified.
 3 Cap or plug at property line shall be adequately braced.
 A Maintenance holes shall be used at the main sewer to connect service connections greater than 200mm.
 B For new construction, addies shall be installed on the main pipe before that pipe is laid.
 C Approved cut-in tool shall be used for field made connections.
 D All dimensions are in millimetres unless otherwise shown.

ONTARIO PROVINCIAL STANDARD DRAWING Nov 2021 Rev 4
SEWER SERVICE CONNECTIONS FOR MAIN PIPE SEWER
 OPSD 1006.010



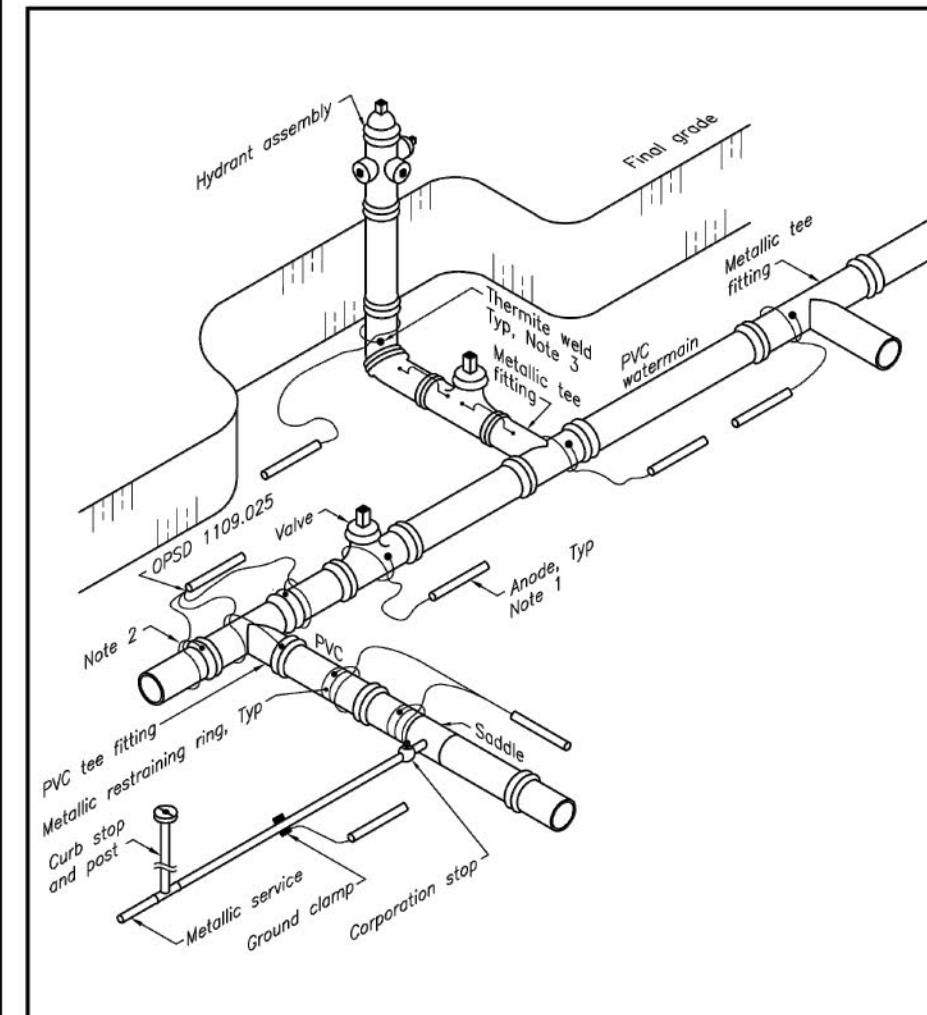
NOTES:
 A All dimensions are in millimetres unless otherwise shown.

ONTARIO PROVINCIAL STANDARD DRAWING Nov 2018 Rev 2
URBAN INDUSTRIAL, COMMERCIAL, AND APARTMENT ENTRANCES
 OPSD 350.010



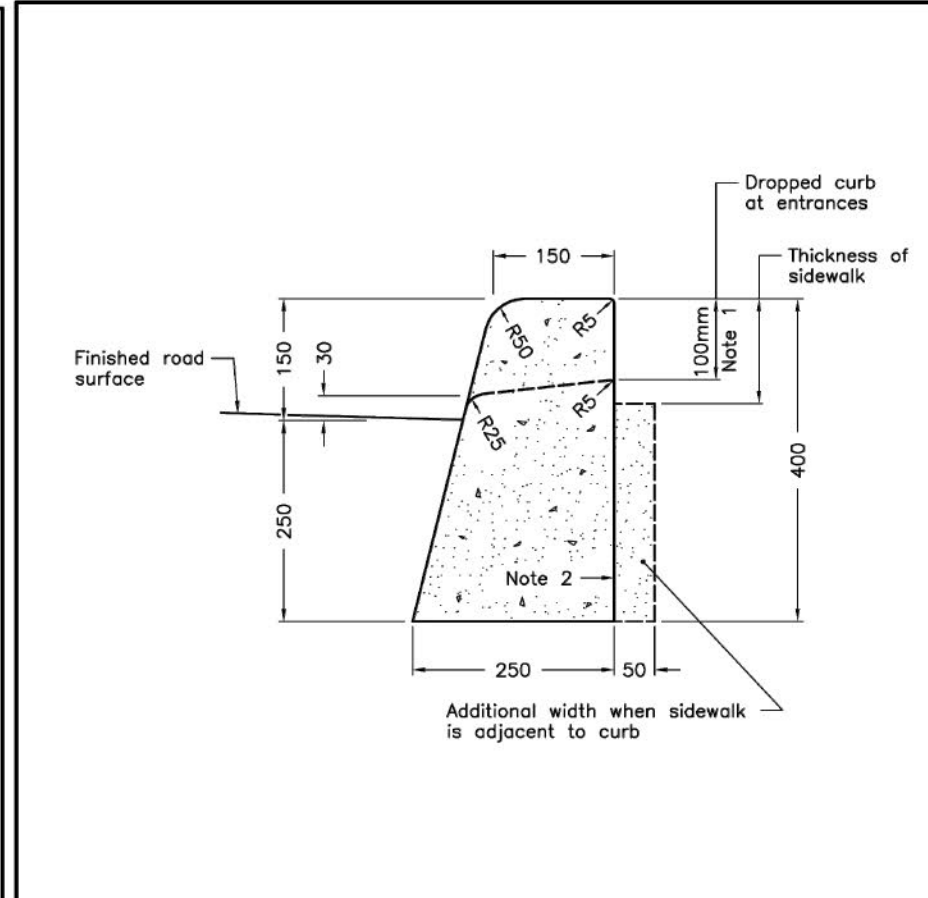
NOTES:
 1 At commercial and industrial driveways, the thickness shall be 200mm.
 2 Sidewalk width shall be wider when specified.
 3 This OPSD shall be read in conjunction with OPSD 310.030, 310.031, 310.033, and 310.039.
 4 A All dimensions are in millimetres unless otherwise shown.

ONTARIO PROVINCIAL STANDARD DRAWING Nov 2019 Rev 3
CONCRETE SIDEWALK ADJACENT TO CURB WITH GUTTER
 OPSD 310.020



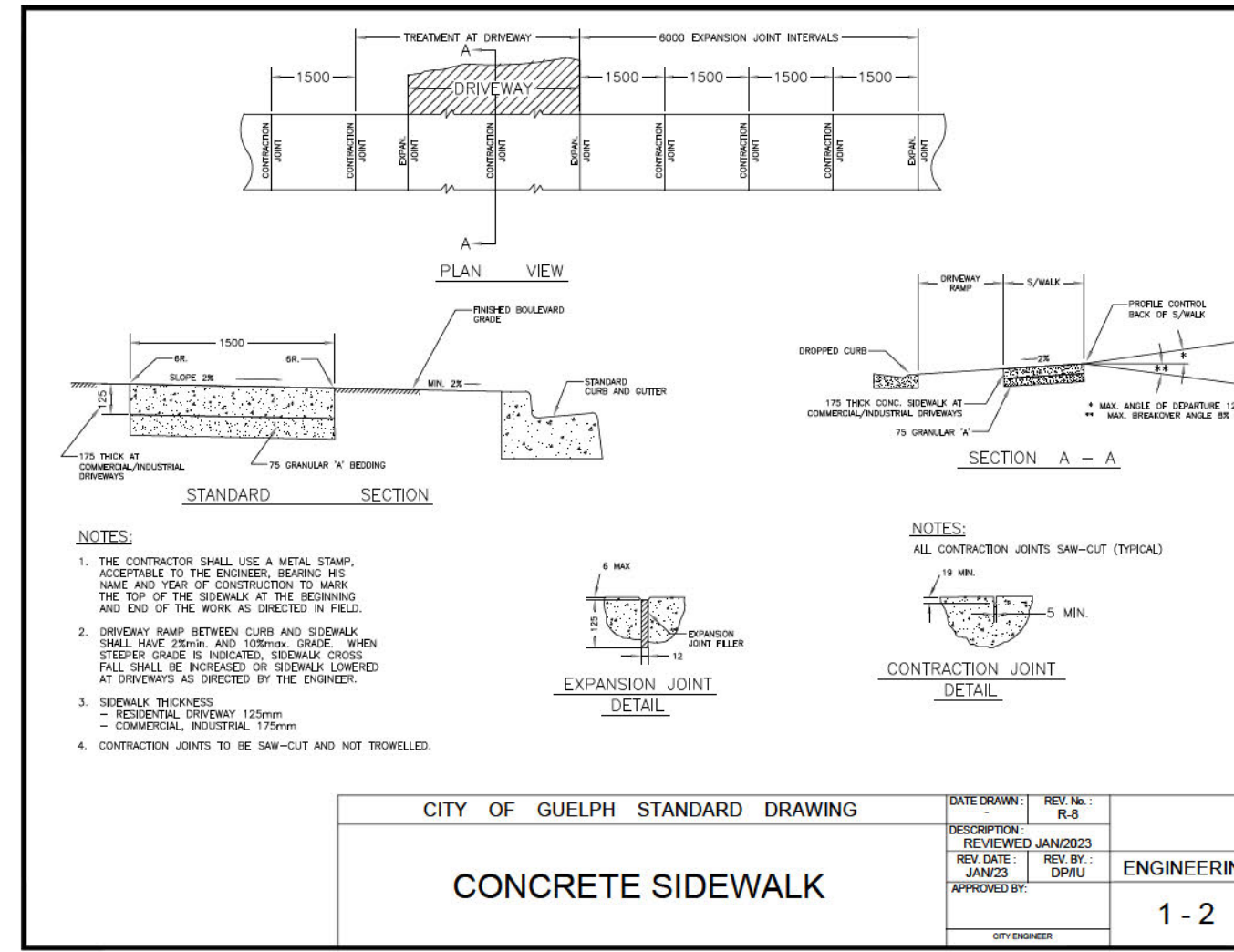
NOTES:
 1 Anode shall be placed at least 1.0m away from the water system pipe and appurtenances and as deep as the bottom of the pipe and appurtenances or as specified in Contract Documents.
 2 Anode connecting wire shall be loosely wrapped around pipes and fittings and knotted.
 3 Protective coating shall be applied to all thermite welds.

ONTARIO PROVINCIAL STANDARD DRAWING Nov 2020 Rev 3
CATHODIC PROTECTION FOR PVC WATERMAIN SYSTEMS
 OPSD 1109.011



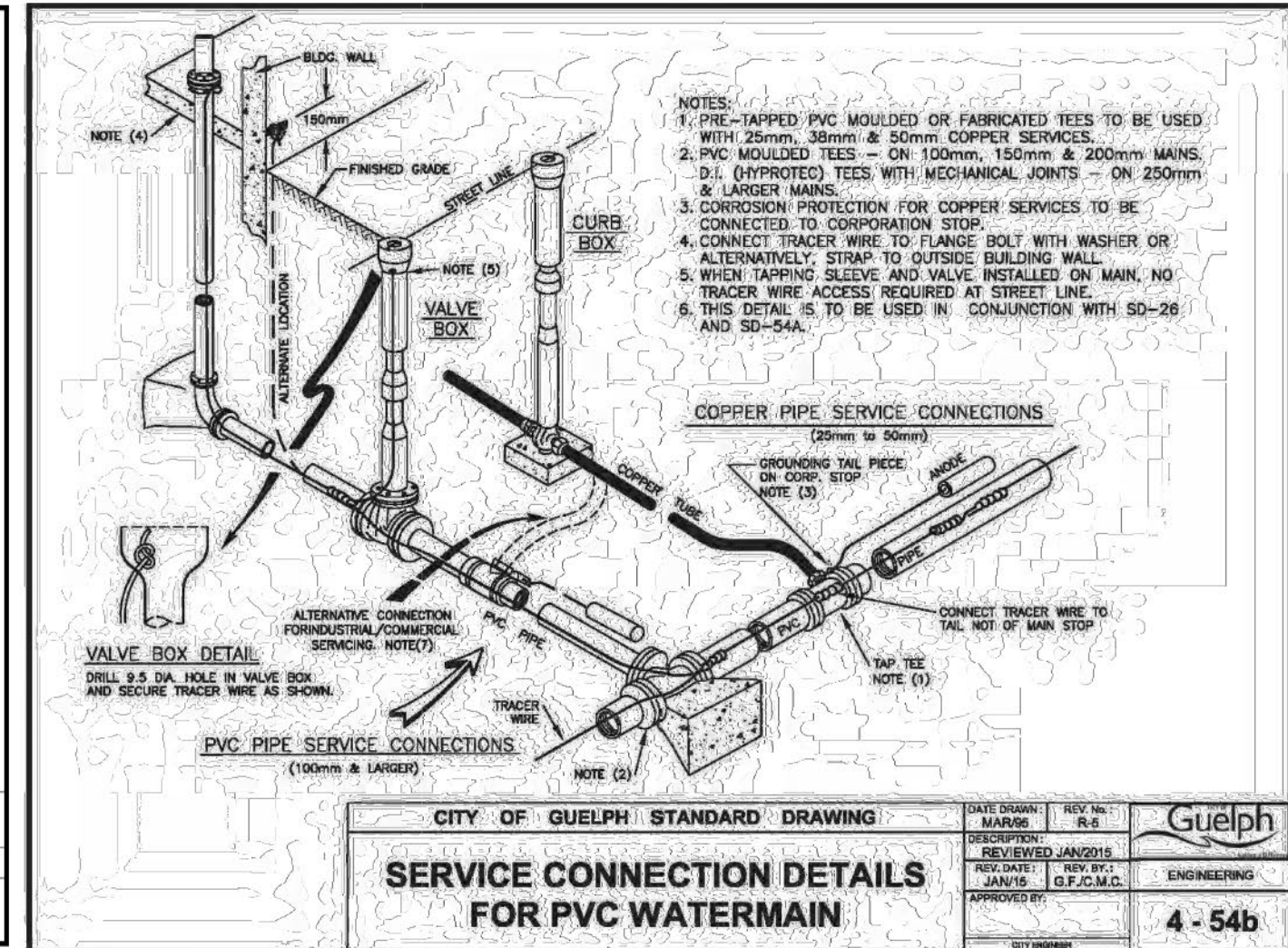
NOTES:
 1 When sidewalk is continuously adjacent, the dropped curb at entrances shall be reduced to 75mm.
 2 For slipforming procedure a 5% batter is acceptable.
 A Treatment at entrances shall be according to OPSD 351.010.
 B Outlet treatment shall be according to the OPSD 610 Series.
 C The transition from one curb type to another shall be a minimum length of 3.0m, except in conjunction with guide roll 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 THE CONTRACTOR SHALL USE A METAL STRAP, ACCORDING TO THE DESIGN, BEARING HIS NAME AND SIGN OF CONTRACTOR TO MARK THE TOP OF THE SIDEWALK OR THE FINISHED DRIVEWAY STRIP BETWEEN CURB AND SIDEWALK. STEELER GRADE IS INDICATED. STEELER CHAINS SHALL BE PROVIDED AT STRENGTH LINE AND AT DRIVEWAY AS SPECIFIED BY THE DESIGNER.
 2 SIDEWALK THICKNESS - FEDERAL HIGHWAY 175mm - CONCRETE, REGIONAL 175mm
 3 DRIVEWAY THICKNESS - FEDERAL HIGHWAY 175mm - CONCRETE, REGIONAL 175mm
 4 CONTRACTION JOINTS TO BE SAW-CUT AND NOT TROTTLED.

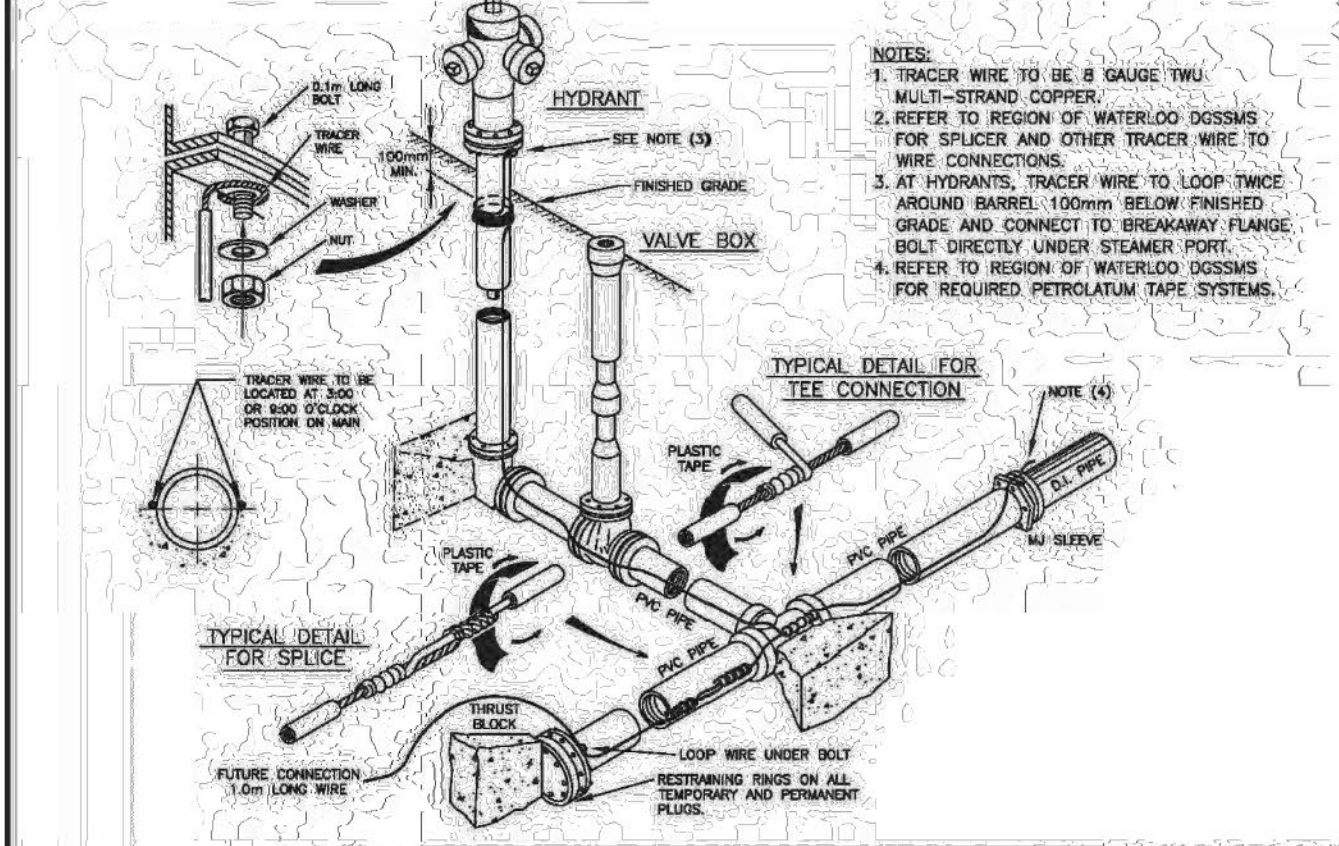
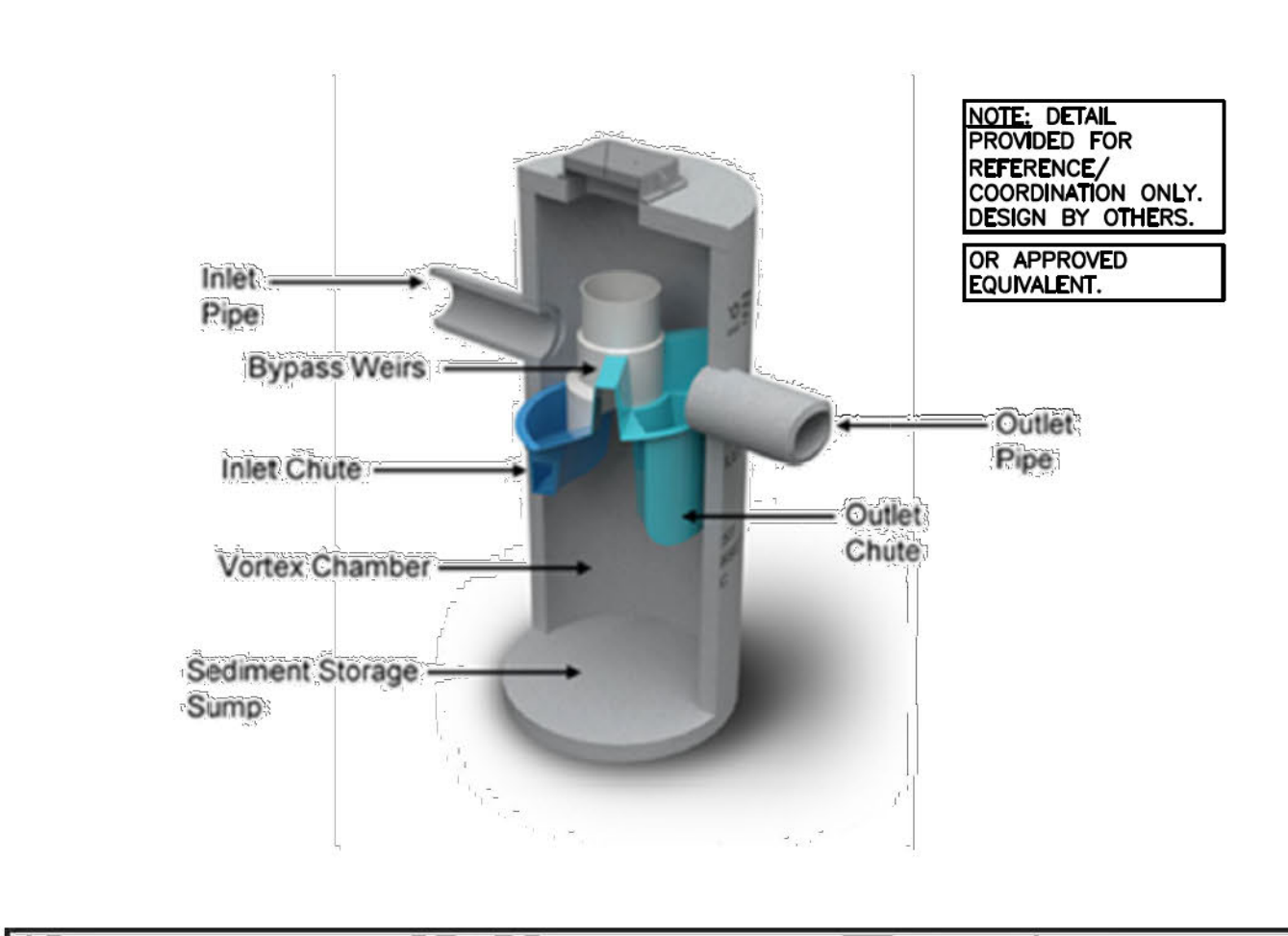
CITY OF GUELPH STANDARD DRAWING DATE DRAWN: REV. No. REV. No. DESCRIPTION: REV. No. REV. No. APPROVED BY: DATE: CITY ENGINEER: **CONCRETE SIDEWALK** ENGINEERING 1-2



NOTES:
 1. PRE-APPLIED PVC MOULDED OR FABRICATED TEES TO BE USED WITH 25mm, 50mm & 50mm COPPER SERVICES.
 2. PVC MOULDED TEES - ON 100mm, 150mm & 200mm MAINS, D.I. (IMPREGNATED) TEES WITH MECHANICAL JOINTS - ON 225mm & LARGER MAINS.
 3. CORROSION PROTECTION FOR COPPER SERVICES TO BE CONNECTED TO COPPERATION SYSTEM.
 4. CONNECT TRACER WIRE TO FLANGE BOLT WITH WASHER OR ALTERNATIVELY STRAP TO OUTSIDE BUILDING WALL.
 5. WIRE TAPPING SLAVE AND VALVE INSTALLED ON MAIN, NO TRACER WIRE ACCESS REQUIRED AT STREET LINE.
 6. THIS DETAIL IS TO BE USED IN CONJUNCTION WITH S0-26 AND S0-26A.
 7. TRACER WIRE TO BE 1.0m LONG WIRE.

ONTARIO PROVINCIAL STANDARD DRAWING Nov 2012 Rev 2
CONCRETE BARRIER CURB WITH STANDARD GUTTER
 OPSD 600.040

Figure 1: Hydro International First Defense® HC Oil Grit Separator



CITY OF GUELPH STANDARD DRAWING DATE DRAWN: REV. No. REV. No. DESCRIPTION: REV. No. REV. No. APPROVED BY: DATE: CITY ENGINEER: **TRACER WIRE DETAILS FOR PVC WATERMAIN** ENGINEERING 4-54a

ADS OGS Sizing Summary

Project Name: 317 Speedvale Ave
 Consulting Engineer: SEM
 Location: Guelph, ON
 Sizing Completed by: C. Nevin
 Email: cnevin@ads-gps.com

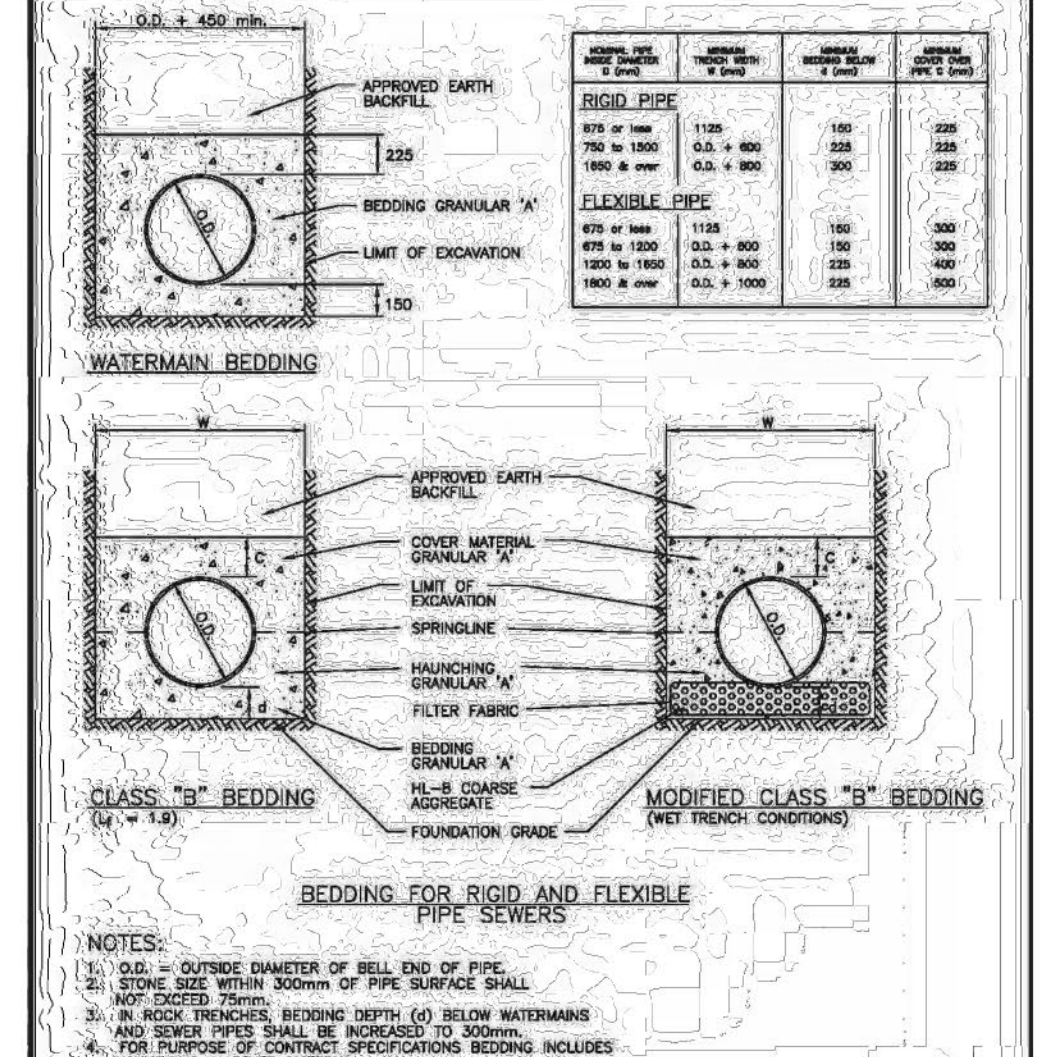
Treatment Goal: Enhanced (MCE)
 Selected Parameters: 80% TSS 80% Volume
 Selected Unit: FD-4HC

Model	TSS Removal %	Volume Treated (m³)
FD-4HC	86.0%	100%
FD-4HC	87.0%	100%
FD-4HC	88.0%	100%
FD-4HC	89.0%	100%
FD-4HC	90.0%	100%

FD-4HC Sizing Summary
 Unit Diameter (A): 1,200 mm
 Inlet Pipe Diameter (B): 250 mm
 Outlet Pipe Diameter (C): 250 mm
 Height, T33 to Outlet Invert (D): 840 mm
 Height, Outlet Invert to Sump (E): 1810 mm
 Sediment Storage Capacity (F): 0.78 m³
 Oil Storage Capacity (G): 723 L
 Recommended Settlement Depth for Maintenance: 440 mm
 Max. Pipe Diameter: 600 mm
 Peak Flow Capacity: 610 L/s

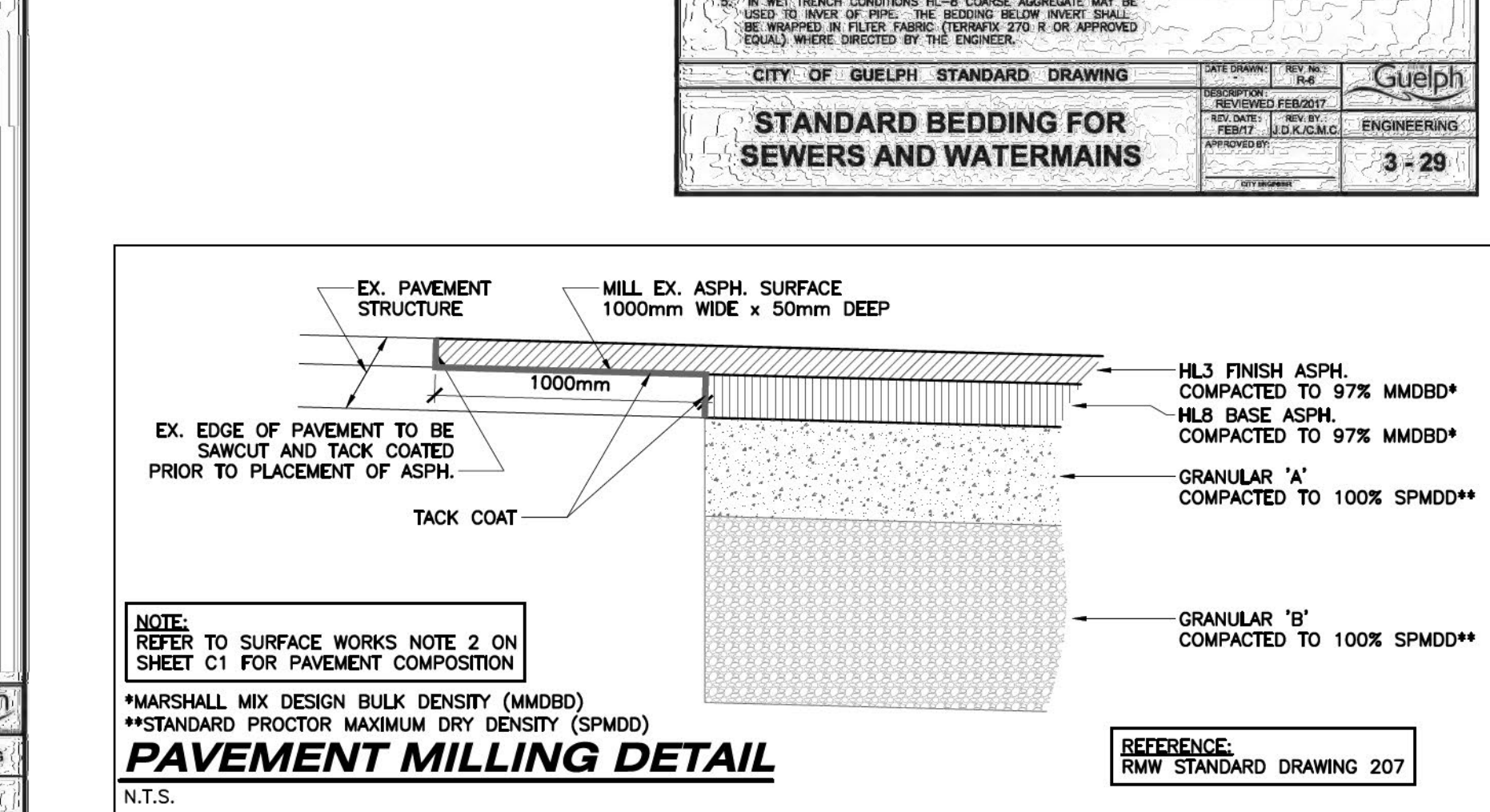
Site Elevation: 330.67
 Inlet Pipe Elevation: 330.15
 Outlet Pipe Elevation: 330.15

NOTE: DETAIL PROVIDED FOR REFERENCE/COORDINATION ONLY. DESIGN BY OTHERS.



NOTES:
 1. 1/2" IN. OUTSIDE DIAMETER OF BELL END OF PIPE SHALL BE WITHIN 300mm OF PIPE SURFACE SHALL AND BE CUT OFF.
 2. IN ROCK TRENCHES BEDDING DEPTH (A) BELOW WATERMANS AND SEWER PIPES SHALL BE INCREASED TO 300mm.
 3. FOR PURPOSE OF CONTRACT SPECIFICATIONS BEDDING INCLUDES HANDLING & COVER MATERIAL.
 4. IN WET TRENCH CONDITIONS HE-B COARSE AGGREGATE MAY BE USED TO MAKE UP PIPE. THE BEDDING BELOW INVERT SHALL BE WRAPPED IN FILTER FABRIC (PERMANENT 270 R OR APPROVED EQUAL) AND DIRECTED BY THE ENGINEER.
 5. IN WET TRENCH CONDITIONS HE-B COARSE AGGREGATE MAY BE USED TO MAKE UP PIPE. THE BEDDING BELOW INVERT SHALL BE WRAPPED IN FILTER FABRIC (PERMANENT 270 R OR APPROVED EQUAL) AND DIRECTED BY THE ENGINEER.

CITY OF GUELPH STANDARD DRAWING DATE DRAWN: REV. No. REV. No. DESCRIPTION: REV. No. REV. No. APPROVED BY: DATE: CITY ENGINEER: **STANDARD BEDDING FOR SEWERS AND WATERMANS** ENGINEERING 3-29



NOTE:
 REFER TO SURFACE WORKS NOTE 2 ON SHEET C1 FOR PAVEMENT COMPOSITION

*MARSHALL MIX DESIGN BULK DENSITY (MMBDD)
 **STANDARD PROCTOR MAXIMUM DRY DENSITY (SPMDD)

PAVEMENT MILLING DETAIL

REFERENCE: RMW STANDARD DRAWING 207

AS CONSTRUCTED SERVICES	COMPLETION	No.	REVISIONS	D/M/Y	BY	CONSULTANT
DESIGN	HA	1	FOR SUBMISSION - OPA/ZBA	1/02/24	BLG	
DRAWN	BG/BG					
CHECKED	TMB/KEK					
APPROVED	KM					
DATE	30/01/2024					
CAD	23-1518					

STRICK BALDINELLI MONIZ
 PLANNING - CIVIL - STRUCTURAL - MECHANICAL - ELECTRICAL
 1599 Adelaide St. N, Unit 301, London, Ontario, N5X 4E8
 Tel: (519) 471-6667 Fax: (519) 471-0034
 Email: sbm@sbmtd.ca

ENGINEER'S STAMP
HABITAT FOR HUMANITY
 SUITE 100B - 104 DAWSON RD.
 GUELPH, ON
 N1H 1A6
 P: 226-770-4341
 E: BRETT@HABITATGW.CA

SCALE: N/A
 TITLE: **STANDARD DETAILS**
HABITAT FOR HUMANITY
 303 - 317 SPEEDVALE AVE EAST
 GUELPH, ON.
 PROJECT No.: **SBM-23-1518**
 SHEET No.: **C5**
 PLAN FILE No.: