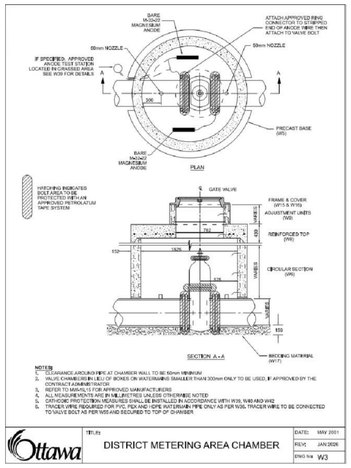
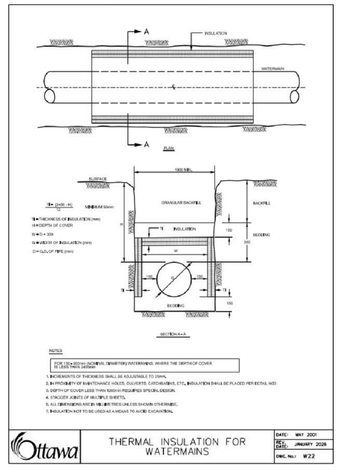


NOTES:
1. CLEARANCE AROUND PIPE AT CHAMBER WALL TO BE 50mm MINIMUM
2. VALVES CHAMBERS LESS OF BOXES ON WATERMAINS SMALLER THAN 300mm ONLY TO BE USED, IF APPROVED BY THE MUNICIPALITY HAVING JURISDICTION
3. REFER TO MANUFACTURER APPROVED MANUFACTURERS
4. ALL MEASUREMENTS ARE IN MILLIMETRES UNLESS OTHERWISE NOTED
5. CATHODIC PROTECTION MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH W39, W40 AND W42
6. TRACER WIRE REQUIRED FOR PVC, PEX AND HDPE WATERMAIN PIPE ONLY AS PER W39. TRACER WIRE TO BE CONNECTED TO VALVE BOLT AS PER W55 AND BROUGHT TO TOP OF CHAMBER.

Ottawa	DISTRICT METERING AREA CHAMBER	DATE: MAY 2001 REVS: JAN 2026 DWG No.: W3

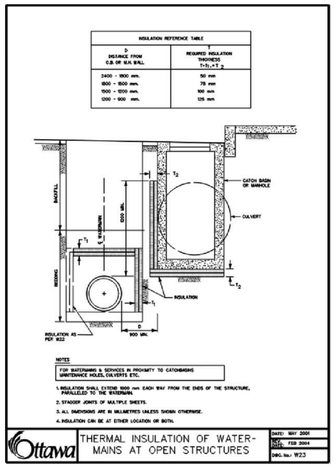


NOTES:
FOR 1.5 x 2.0m (NOMINAL DIAMETER) WATERMAINS, WHERE THE DEPTH OF COVER IS LESS THEN 1.6m/2.0m

1. INCREMENTS OF THICKNESS SHALL BE ADJUSTABLE TO 25mm.
2. IN PROXIMITY OF SUBSTANCE HOLES, CULVERTS, CATCHBASINS, ETC., INSULATION SHALL BE PLACED PER DETAIL W23
3. DEPTH OF COVER LESS THAN 1600mm REQUIRES SPECIAL DESIGN.
4. STAGGER JOINTS OF MULTIPLE SHEETS.
5. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE.
6. INSULATION NOT TO BE USED AS A MEANS TO ACHIEVE COVER.

Ottawa	THERMAL INSULATION FOR WATERMAINS	DATE: MAY 2001 REVS: JANUARY 2026 DWG No.: W22

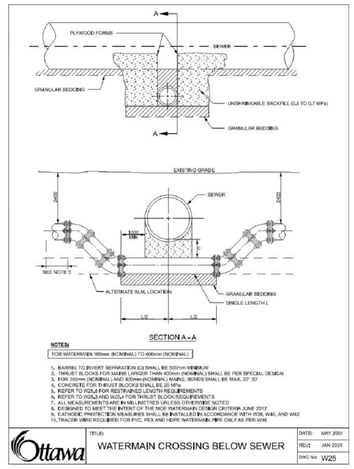
INSULATION REFERENCE TABLE	
DISTANCE FROM O.D. OF W.M. BELL	REQUIRED INSULATION THICKNESS T=T_1 + T_2
2400 - 1800 mm.	50 mm
1800 - 1500 mm.	75 mm
1500 - 1200 mm.	100 mm
1200 - 900 mm.	125 mm



NOTES:
FOR WATERMAINS & SERVICES IN PROXIMITY TO CATCHBASINS MAINTENANCE HOLES, CULVERTS ETC.

1. INSULATION SHALL EXTEND 1000 mm EACH WAY FROM THE SIDES OF THE STRUCTURE, PARALLEL TO THE WATERMAIN.
2. STAGGER JOINTS OF MULTIPLE SHEETS.
3. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS SHOWN OTHERWISE.
4. INSULATION CAN BE AT EITHER LOCATION OR BOTH.

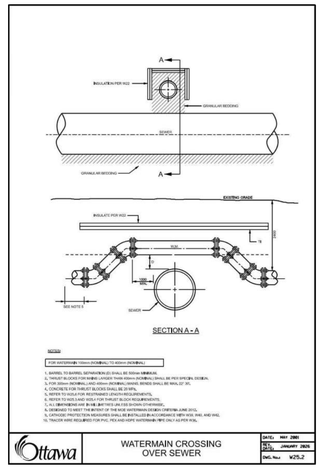
Ottawa	THERMAL INSULATION OF WATER-MAINS AT OPEN STRUCTURES	DATE: MAY 2001 REVS: FEB 2004 DWG No.: W23



NOTES:
FOR WATERMAIN 100mm (NOMINAL) TO 400mm (NOMINAL)

1. BARREL TO INVERT SEPARATION (D) SHALL BE 300mm MINIMUM
2. THRUST BLOCKS FOR MAINS LARGER THAN 400mm (NOMINAL) SHALL BE PER SPECIAL DESIGN
3. FOR 350mm (NOMINAL) AND 400mm (NOMINAL) MAINS, BENDS SHALL BE MAX. 22° 30'
4. CONCRETE FOR THRUST BLOCKS SHALL BE 20 MPa
5. REFER TO W39 AND W40 FOR TRACER WIRE REQUIREMENTS
6. REFER TO W39 AND W55.4 FOR THRUST BLOCK REQUIREMENTS.
7. ALL MEASUREMENTS ARE IN MILLIMETRES UNLESS OTHERWISE NOTED
8. DESIGNED TO MEET THE INTENT OF THE NOE WATERMAIN DESIGN CRITERIA JUNE 2012
9. CATHODIC PROTECTION MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH W39, W40, AND W42
10. TRACER WIRE REQUIRED FOR PVC, PEX AND HDPE WATERMAIN PIPE ONLY AS PER W39

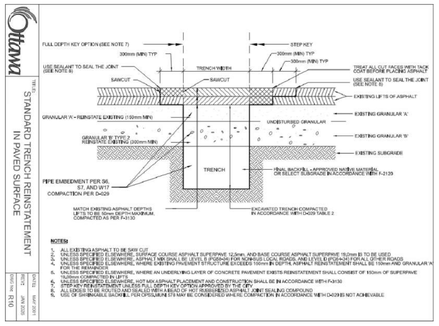
Ottawa	WATERMAIN CROSSING BELOW SEWER	DATE: MAY 2001 REVS: JAN 2026 DWG No.: W25



NOTES:
FOR WATERMAIN 100mm (NOMINAL) TO 400mm (NOMINAL)

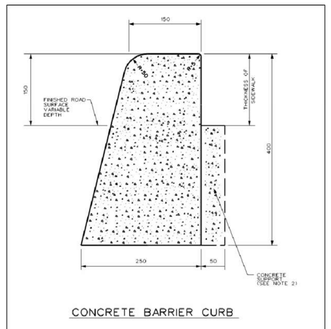
1. BARREL TO BARREL SEPARATION (D) SHALL BE 300mm MINIMUM.
2. THRUST BLOCKS FOR MAINS LARGER THAN 400mm (NOMINAL) SHALL BE PER SPECIAL DESIGN.
3. FOR 350mm (NOMINAL) AND 400mm (NOMINAL) MAINS, BENDS SHALL BE MAX. 22° 30'.
4. CONCRETE FOR THRUST BLOCKS SHALL BE 20 MPa.
5. REFER TO W39 AND W55.4 FOR THRUST BLOCK REQUIREMENTS.
6. REFER TO W25.1 AND W25.2 FOR THRUST BLOCK REQUIREMENTS.
7. ALL MEASUREMENTS ARE IN MILLIMETRES UNLESS OTHERWISE NOTED.
8. DESIGNED TO MEET THE INTENT OF THE NOE WATERMAIN DESIGN CRITERIA JUNE 2012.
9. CATHODIC PROTECTION MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH W39, W40, AND W42.
10. TRACER WIRE REQUIRED FOR PVC, PEX AND HDPE WATERMAIN PIPE ONLY AS PER W39.

Ottawa	WATERMAIN CROSSING OVER SEWER	DATE: MAY 2001 REVS: JANUARY 2026 DWG No.: W25.2



NOTES:
1. ALL EXISTING ASPHALT TO BE SAW CUT.
2. UNLESS SPECIFIED ELSEWHERE, SURFACE COURSE ASPHALT SUPERPAVE 12.5mm, AND BASE COURSE ASPHALT SUPERPAVE 19.0mm (B) TO BE USED.
3. UNLESS SPECIFIED ELSEWHERE, ASPHALT MIX SHALL BE LEVEL 3 (PG58-34) FOR NOMINAL LOCAL ROADS, AND LEVEL 2 (PG64-34) FOR ALL OTHER ROADS.
4. FOR ASPHALT RESTORATION IN BOULEVARDS, WHERE EXISTING PAVEMENT STRUCTURE EXCEEDS 150mm IN DEPTH ASPHALT REINSTATEMENT SHALL BE 150mm AND GRANULAR 'A' FOR THE REMAINDER.
5. UNLESS SPECIFIED ELSEWHERE, WHERE AN UNDERLYING LAYER OF CONCRETE PAVEMENT EXISTS REINSTATEMENT SHALL CONSIST OF 150mm OF SUPERPAVE 19.0mm (B) ASPHALT.
6. UNLESS SPECIFIED ELSEWHERE, HOT MIX ASPHALT PLACEMENT AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH A-8130
7. STEP KEY REINSTATEMENT UNLESS FULL DEPTH KEY OPTION APPROVED BY THE CITY.
8. ALL JOINTS AND CUT FACES TO BE PAINTED WITH TACK COAT PRIOR TO PLACING ASPHALT. JOINT SEALING COMPOUND
9. USE OF SAWABLE BACKER ROD FOR USE IN LIEU OF SEALANT WILL BE CONSIDERED WHERE COMPACTION IN ACCORDANCE WITH D-4229 IS NOT ACHIEVABLE

Ottawa	STANDARD TRENCH REINSTATEMENT IN PAVED SURFACE	DATE: JAN 2003 REVS: JANUARY 2026 DWG No.: SC1

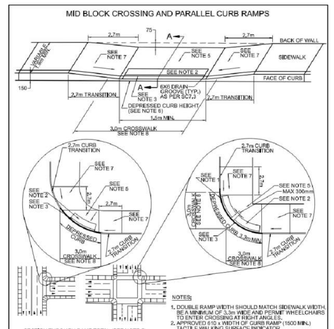


CONCRETE BARRIER CURB

NOTES:
1. THE FULL CURB DEPTH SHALL BE CARRIED THROUGH THE DEPRESSED ACCESS CROSSING.
2. A CONCRETE SUPPORT IS REQUIRED WHEN BUILT ADJACENT TO THE SIDEWALK.
3. FOR AN EXTRUSION CURBING MACHINE (SEE SC2), THE EXPANSION BITUMINOUS MATERIAL AND THE 15 mm DEEP SAW CUT SHALL BE OMITTED FOR THE EXTRUSION.
4. EXPANSION AND CONTRACTION JOINTS AS PER S.C.5
5. DEPRESSED CURB HEIGHT - FOR PEDESTRIAN CURB RAMPS 0 TO 6 mm AND FOR PRIVATE ENTRANCES 0 TO 12mm.

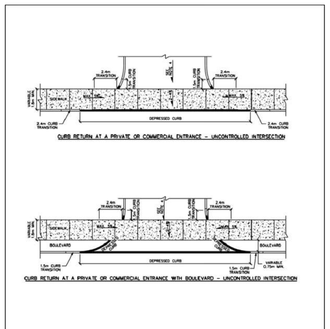
(DIMENSIONS mm)
NTS

Ottawa	CONCRETE BARRIER CURB FOR GRANULAR BASE PAVEMENT (MODIFIED OPSD 600.110)	DATE: JAN 2003 REVS: JANUARY 2026 DWG No.: SC5.1



NOTES:
1. DOUBLE RAMP WIDTH SHOULD MATCH SIDEWALK WIDTH
2. MIN. CLEARANCE OF 1.5m (WIDE AND PERMIT WHEELCHAIRS TO ENTER CROSSING AT RIGHT ANGLES)
3. APPROVED 610 x WIDTH OF CURB RAMP (1500 MIN.) TACTILE WALKING SURFACE INDICATOR.
4. RADIUS TO BACK OF CURB.
5. 150 TO 209 DIP.
6. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS SHOWN OTHERWISE.
7. FOR TRANSITIONARE, MAXIMUM SLOPE OF 2%.
8. DEPRESSED CURB HEIGHT SHALL BE 0 TO 6mm FOR PEDESTRIAN CURB RAMPS AND 0 TO 25mm FOR PRIVATE ENTRANCES, OR EQUAL HEIGHT OF CROSSWALK WHERE APPLICABLE.
9. FOR CURB RAMPS SLOPE OF 2% TO 5% MAXIMUM 8%.
10. FOR CURB RAMPS, THE TOP OF THE RAMP SHALL BE FLAT AND 610 x 610 AT 1:49 GRADE CONCRETE CROSSWALK, SUBJECT TO AVOIDANCE OF MEDIANS, CROSSWALK LINES TO CENTRED ON THE CURB RAMP.
11. FOR RETROFIT APPLICATIONS ONLY, THE MINIMUM WIDTH OF THE TWIN RAMPS SHALL BE 300 TO 200mm BACK FROM CURB FACE.

Ottawa	PEDESTRIAN CURB RAMP WITHOUT BOULEVARD	DATE: MAY 2001 REVS: MARCH 2022 DWG No.: SC6



NOTES:
1. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS SHOWN OTHERWISE.
2. CURB DETAILS SEE SC1.1, SC1.2 AND SC1.3.
3. SIDEWALK DETAILS SEE SC2 AND SC3.
4. MAXIMUM SLOPE VARIES, SEE PRIVATE APPROACH BYLAW.
5. UNCONTROLLED INTERSECTION MEANS AN ENTRANCE NOT LOCATED AT A TRAFFIC SIGNAL OR ALL-WAY STOP CONTROL.

Ottawa	CURB RETURN ENTRANCES - UNCONTROLLED INTERSECTIONS	DATE: MARCH 2007 REVS: MARCH 2021 DWG No.: SC7.1

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

NOT FOR CONSTRUCTION

No.	REVISION	DATE	BY
1.	ISSUED FOR SPA	APRIL 08/2026	ARM

SCALE: AS SHOWN

DESIGN
CHECKED: ARM
DRAWN: AM
CHECKED: ARM
APPROVED: GJM

FOR REVIEW ONLY

LICENSED PROFESSIONAL ENGINEER
A.R. MESTWARP
100201604
April 8/2026
PROVINCE OF ONTARIO

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LOCATION
1100 SPOOR STREET, CITY of OTTAWA
COPPERWOOD ESTATES (BLOCK 73)

DRAWING NAME
NOTES AND DETAILS

PROJECT No. 125113
REV REV #1
DRAWING No. 125113-ND2

M:\2025\125113\CAD\civil\125113-ND.dwg, ND2, Mar 27, 2026 - 9:58am, arnestwarp

PLANAT.DWG - 841mmx594mm