

NOTE

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3	FINAL ISSUE TO SITE PLAN CONTROL	2022-08-24
2	RE-ISSUED TO SITE PLAN CONTROL	2022-04-29
1	ISSUED TO SITE PLAN CONTROL	2021-10-29

NO.	ISSUE/ REVISION	DATE
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NOT FOR CONSTRUCTION

PROJECT

CF RIDEAU CENTRE
REGISTRY SITE

PROJECT ADDRESS

70 NICOLAS ST.
OTTAWA, ON

TITLE

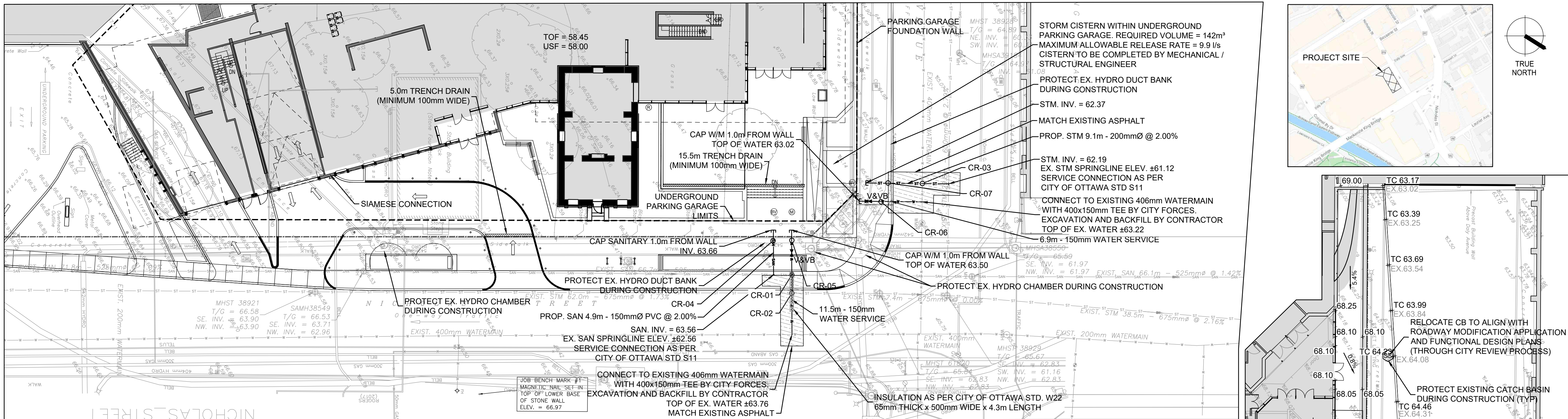
SITE SERVICING, GRADING
AND EROSION AND
SEDIMENT CONTROL PLAN

PROJECT NO.	DRAWN	CHECKED
477846	JN	SM

DRAWING NO.	REVISION NO.
D0718624	

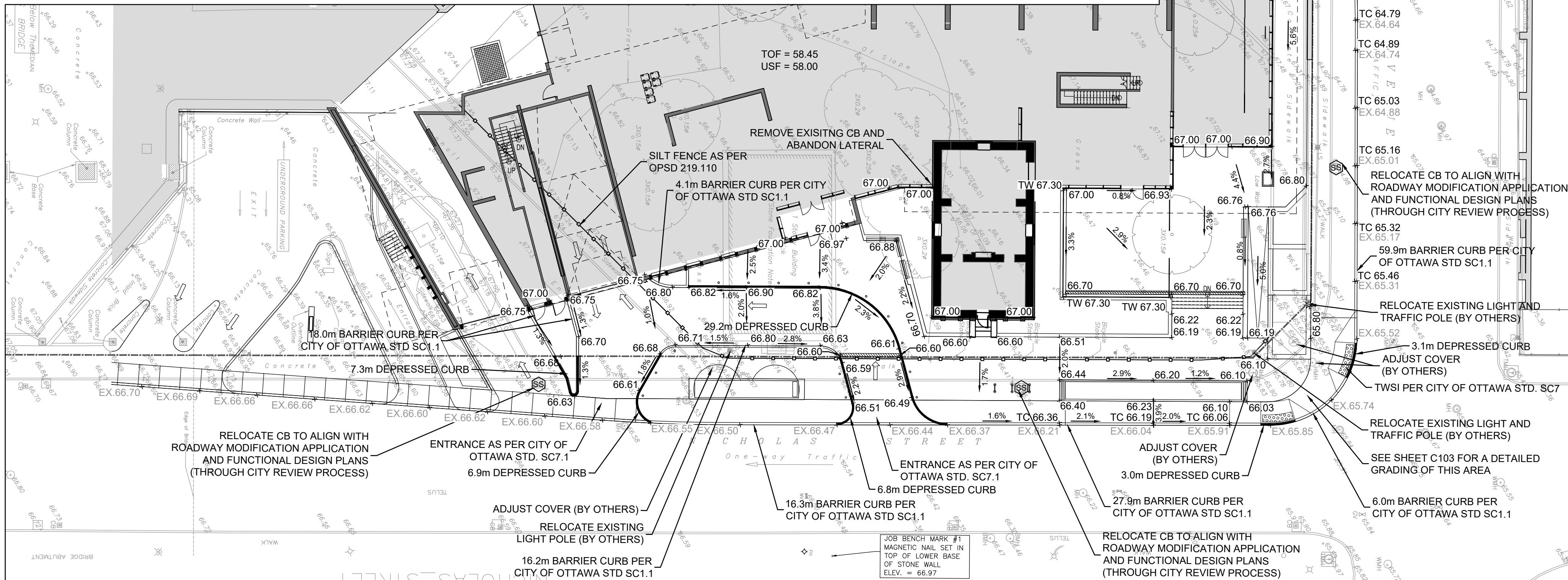
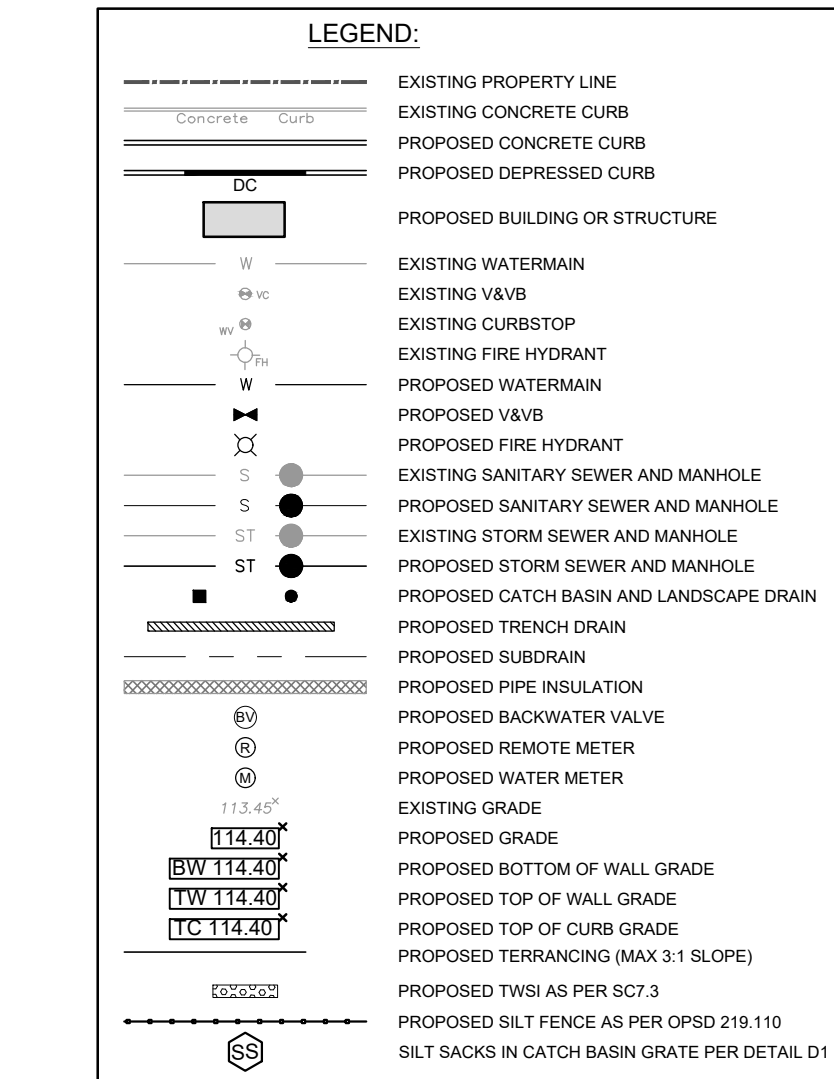
SPA-C101

2



SERVICING PLAN

WATERMAIN SERVICE TABLE			
WATER SERVICE	OFFSET FROM EX. WATERMAIN	FITTING	TOP OF WATERMAIN ELEVATION
NICHOLAS ST.	0.0m	TEE	EX. INV. 63.78 63.64
	2.3m	45° VERT. BEND	63.64
	3.0m	45° VERT. BEND	64.24
	6.0m	45° VERT. BEND	64.24
	6.8m	45° VERT. BEND	63.45m
	9.0m	V&VB	63.45m
	11.5m	CAP	63.45m
DALY AVE.	0.0m	TEE	EX. INV. 63.22 63.10
	5.9m	V&VB	63.10
	6.9m	CAP	63.10



GRADING & EROSION AND SEDIMENT CONTROL PLAN

NOTES: GENERAL

- CONTRACTOR IS RESPONSIBLE FOR ALL LAYOUT FOR CONSTRUCTION PURPOSES.
- ALL ELEVATIONS ARE GEODETIC AND UTILIZE METRIC UNITS. JOB BENCH MARK - REFER TO SURVEY BY ADV LTD. CONFORM WITH CONTRACT ADMINISTRATION UTILIZATION OF BENCH MARK.
- ALL GROUND SURFACES SHALL BE EVENLY GRADED WITHOUT PONDING AREAS AND WITHOUT LOW POINTS EXCEPT WHERE APPROVED SWALE OR CATCH BASIN OUTLETS ARE PROVIDED. STRIP AND REMOVE ALL TOPSOIL FROM IMPROVED AREAS. COORDINATE AND SCHEDULE ALL WORK WITH OTHER TRADES AND CONTRACTORS.
- ALL EDGES OF DISTURBED PAVEMENT SHALL BE SAW CUT TO FORM A NEAT AND STRAIGHT LINE PRIOR TO PLACING NEW PAVEMENT. PAVEMENT REINSTATEMENT SHALL BE PER CITY OF OTTAWA STD. R10.
- CURBS TO BE CONCRETE BARRIER, CONSTRUCTED AS PER CITY OF OTTAWA DETAIL SC1.1. ELEVATIONS AT CURB INDICATE THE GRADE AT THE FINISHED ROAD SURFACE UNLESS NOTED OTHERWISE.
- RESTORE PAVEMENT STRUCTURE AND SURFACES ON EXISTING ROADS TO A CONDITION AT LEAST EQUAL TO ORIGINAL AND TO THE SATISFACTION OF THE MUNICIPAL AUTHORITIES.
- ALL MATERIAL SUPPLIED AND PLACED FOR PARKING LOT AND ACCESS ROAD CONSTRUCTION SHALL BE TO OPSD STANDARDS AND SPECIFICATIONS UNLESS OTHERWISE NOTED. CONSTRUCTION TO OPSD 206, 310 & 314. MATERIALS TO OPSD 1001, 1003 & 1010.
- ABUTTING PROPERTY GRADE TO BE MATCHED.
- OBTAIN AND PAY FOR ALL NECESSARY PERMITS AND APPROVALS FROM THE MUNICIPAL AUTHORITIES PRIOR TO COMMENCING CONSTRUCTION.
- MINIMIZE DISTURBANCE TO EXISTING VEGETATION DURING THE EXECUTION OF ALL WORKS.
- FILTER FABRIC TO BE INSTALLED AND MAINTAINED BETWEEN THE FRAME AND COVER OF ALL CATCHBASINS AND CATCHBASIN MANHOLES DURING THE CONSTRUCTION PERIOD TO MINIMIZE SEDIMENTS ENTERING THE STORM SEWER SYSTEM. ALL GRASSED AREAS MUST BE COMPLETED PRIOR TO THE REMOVAL OF THE FILTER FABRIC IN THE CATCH BASINS.
- REMOVE FROM SITE ALL EXCESS EXCAVATED MATERIAL UNLESS OTHERWISE DIRECTED FROM THE ENGINEER. EXCAVATE AND REMOVE ALL ORGANIC MATERIAL AND DEBRIS LOCATED WITHIN THE

- PROPOSED BUILDING, PARKING AND ROADWAY LOCATIONS. ANY CONTAMINATED MATERIAL SHALL BE DISPOSED OF AT A LICENSED LANDFILL FACILITY.
- THE APPROVAL OF THIS PLAN DOES NOT EXEMPT THE CONTRACTOR FROM THE REQUIREMENTS TO OBTAIN THE VARIOUS PERMITS/APPROVALS REQUIRED TO COMPLETE A CONSTRUCTION PROJECT, SUCH AS BUT NOT LIMITED TO: ROAD CUT PERMITS, SEWER PERMITS, WATER PERMIT, ETC.
- AT PROPOSED UTILITY CONNECTION POINTS AND CROSSINGS (I.E. SEWER CONNECTIONS TO BE MADE ABOVE THE SPRINGLINE OF THE SEWER AS PER CITY OF OTTAWA STANDARD S11, S11.1, AND S11.2.
- SPRINGLINE ELEVATIONS ARE APPROXIMATE. THE CONTRACTOR SHALL DETERMINE THE PRECISE LOCATION OF THE EXISTING UTILITIES AND REPORT ANY DISCREPANCIES OR CONFLICTS TO THE ENGINEER BEFORE COMMENCING WORK. PROTECT AND ASSUME RESPONSIBILITY FOR ALL EXISTING UTILITIES. REFER TO ARCHITECT AND LANDSCAPE ARCHITECTS DRAWINGS FOR BUILDING, LANDSCAPE, AND HARD SURFACE AREAS AND DIMENSIONS.
- CONTRACTOR IS RESPONSIBLE TO KEEP THE ROADS FREE AND CLEAR FROM MUD OR DEBRIS.

NOTES: SEWER

- SUPPLY AND INSTALL ALL SEWERS AND APPURTENANCES IN ACCORDANCE WITH MOST CURRENT CITY OF OTTAWA STANDARDS AND SPECIFICATIONS.
- SEWER BEDDING AS PER CITY OF OTTAWA STANDARD S6 FOR SINGLE TRENCH AND CITY OF OTTAWA STANDARD S7 FOR COMBINED TRENCH.
- ALL WORK SHALL BE PERFORMED, AS APPLICABLE IN ACCORDANCE WITH OPSD 407 AND 410.
- CONTRACTOR TO CONFIRM ELEVATION OF EXISTING STORM AND SANITARY SEWERS AT PROPOSED CONNECTION POINTS AND REPORT ANY DISCREPANCIES TO THE ENGINEER BEFORE COMMENCING ANY WORK.
- ALL SEWERS WITH LESS THAN 1.5m OF COVER ARE SUBJECT TO INSULATION DETAIL, REFER TO DETAIL D2 ON DETAIL SHEET.
- STORM AND SANITARY LATERALS SHALL BE EQUIPPED WITH BACKWATER VALVES IN ACCORDANCE WITH CITY OF OTTAWA STANDARDS.
- CONTRACTOR TO CCTV ALL NEW SEWERS, 250mmØ OR GREATER, TO ENSURE THEY ARE CLEAN AND OPERATIONAL UPON COMPLETION OF CONTRACT. THE CONTRACTOR IS RESPONSIBLE TO FLUSH AND

NOTES: TRENCH DRAIN

- TRENCH DRAIN TO BE DIRECTED INTERNALLY THROUGH THE UNDERGROUND PARKING GARAGE TO THE UNDERGROUND CISTERN. REFER TO MECHANICAL DRAWINGS FOR DETAILS.

NOTES: WATERMAIN

- SUPPLY AND INSTALL ALL WATERMAIN AND APPURTENANCES IN ACCORDANCE WITH MOST CURRENT CITY OF OTTAWA STANDARDS AND SPECIFICATIONS.
- WATERMAIN MATERIAL SHALL BE PVC, CL 150, DR-18 IN ACCORDANCE WITH CITY OF OTTAWA STANDARDS AND SPECIFICATIONS.
- WATERMAIN TO BE INSTALLED AT MINIMUM COVER OF 2.4m BELOW FINISHED GRADE, WHERE REQUIRED, PROVIDE INSULATION IN ACCORDANCE WITH CITY OF OTTAWA STANDARDS W22 AND W23.
- WATERMAIN BEDDING AS PER CITY OF OTTAWA STANDARD W17.
- CONCRETE THRUST BLOCKS AND RESTRAINING AS PER DETAILS ON DRAWING C103.
- CATHODIC PROTECTION REQUIRED FOR ALL IRON FITTINGS.
- IF WATERMAIN MUST BE DEFLECTED TO MEET ALIGNMENT, ENSURE THAT THE AMOUNT OF DEFLECTION USED IS LESS THAN HALF THAT RECOMMENDED BY THE MANUFACTURER.
- EXCAVATION, INSTALLATION, AND BACKFILL BY CONTRACTOR. CONNECTIONS AND SHUT-OFFS AT THE MAIN BY CITY.

NOTES: UNDERGROUND STORMWATER STORAGE

- UNDERGROUND STORMWATER STORAGE REQUIRED: 142m³

EROSION AND SEDIMENT CONTROL MEASURES:

- CONTRACTOR IS RESPONSIBLE FOR ALL INSTALLATION, MONITORING, REPAIR AND REMOVAL OF ALL EROSION AND SEDIMENT CONTROL FEATURES. THE CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES TO PROVIDE PROTECTION OF THE AREA DRAINAGE SYSTEM AND THE RECEIVING WATERCOURSE. DURING CONSTRUCTION ACTIVITIES, THE CONTRACTOR ACKNOWLEDGES THAT FAILURE TO IMPLEMENT APPROPRIATE EROSION AND SEDIMENT CONTROL MEASURE MAY BE SUBJECT TO PENALTIES IMPOSED BY ANY APPLICABLE REGULATORY AGENCY.
- SEDIMENT AND EROSION CONTROL PLAN OBJECTIVES:
- PREVENT SOIL EROSION. THIS CAN RESULT FROM STREAMING RAIN WATER OR WIND EROSION DURING CONSTRUCTION.
- PREVENT SEDIMENT DEPOSITS IN THE SEWER PIPES AND NEARBY COLLECTING STREAMS (AS APPLICABLE).
- PREVENT AIR POLLUTION FROM PARTICULATE MATTER AND DUST.

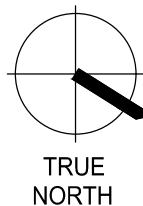
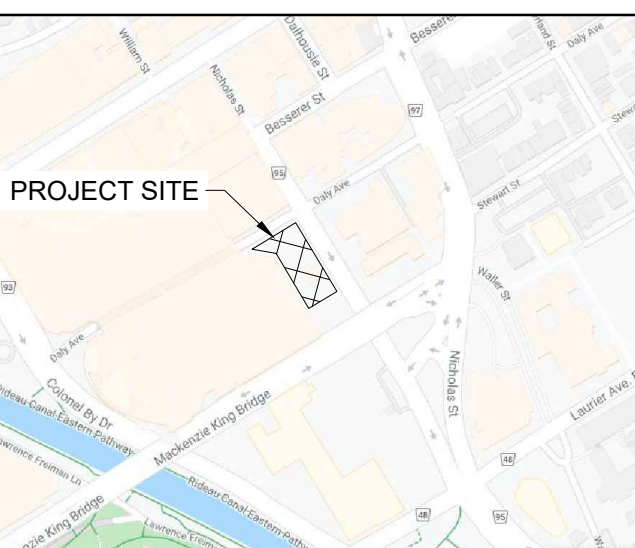
1. PRIOR TO START OF CONSTRUCTION:

- PRIOR TO THE REMOVAL OF ANY VEGETATIVE COVER, MOVING OF SOIL AND CONSTRUCTION:
- INSTALL FILTER CLOTH ON DOWNSTREAM MANHOLE COVERS.
- INSTALL SILTSACK FILTERS IN ALL CONCRETE CATCH BASINS STRUCTURES.
- INSPECT MEASURES IMMEDIATELY AFTER INSTALLATION.
- THE CONTRACTOR MUST SET UP THE MEASURES INDICATED ON THE PLAN, INSPECT THEM FREQUENTLY AND CLEAN AND REPAIR OR REPLACE THE DETERIORATED STRUCTURES. AT THE END OF THE CONSTRUCTION PERIOD, THE CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF THE TEMPORARY STRUCTURES AND RECONDITIONING THE AFFECTED AREAS.

2. DURING CONSTRUCTION:

- SEDIMENT AND EROSION CONTROL MEASURES TO BE CONSTRUCTED AS PER OPSD 305.
- WHEN SEDIMENT AND EROSION CONTROL MEASURES MUST BE REMOVED TO COMPLETE A PORTION OF THE WORK, THE SAME MEASURES MUST BE REINSTATED UPON THE WORK'S COMPLETION.

- WORK TO BE DONE IN THE VICINITY OF MAJOR WATERWAYS TO BE CARRIED OUT FROM JULY AND SEPTEMBER ONLY.
- MINIMIZE THE EXTENT OF DISTURBED AREAS AND THE DURATION OF EXPOSURE.
- PROTECT DISTURBED AREAS FROM RUNOFF.
- PROVIDE TEMPORARY COVER SUCH AS SEEDING OR MULCHING IF DISTURBED AREA WILL NOT BE REHABILITATED SHORTLY.
- INSPECT STRAW BALE FLOW CHECK DAMS, SILT FENCES, SILT SACKS, AND CATCH BASIN SUMPS REGULARLY AND AFTER EVERY MAJOR STORM EVENT. CLEAN AND REPAIR WHEN NECESSARY.
- PLAN TO BE REVIEWED AND REVISED AS REQUIRED DURING CONSTRUCTION.
- EROSION CONTROL FENCING TO BE ALSO INSTALLED AROUND THE BASE OF ALL STOCKPILES.
- DO NOT LOCATE TOPSOIL PILES AND EXCAVATION MATERIAL CLOSER THAN 2.5m FROM ANY PAVED SURFACE, OR ONE WHICH IS TO BE PAVED BEFORE THE PILE IS REMOVED. ALL TOPSOIL PILES ARE TO BE SEEDING IF THEY ARE TO REMAIN ON SITE LONG ENOUGH FOR SEEDS TO GROW (LONGER THAN 30 DAYS) WHEN STORING SOIL ON SITE IN PILES THE CONTRACTOR MUST COVER EACH PILE WITH TARPS, STRAW OR A GEOTEXTILE FABRIC TO AVOID FINE PARTICLE TRANSPORT BY WIND AND/OR STREAMING RAIN WATER.
- CONTROL WIND-BLOWN DUST OFF SITE TO ACCEPTABLE LEVELS BY SEEDING TOPSOIL PILES AND OTHER AREAS TEMPORARILY (PROVIDE WATERING AS REQUIRED) FOR DUST CONTROL, CONTRACTOR TO APPLY CALCIUM CHLORIDE (TYPE I - OPSD 2501 AND CAN/CGSB-15-1) AND WATER WITH EQUIPMENT APPROVED BY THE OWNER'S REPRESENTATIVE AT RATE IN ACCORDANCE TO OPSD 508 WHEN DIRECTED BY OWNER'S REPRESENTATIVE.
- ALL EROSION CONTROL STRUCTURE TO REMAIN IN PLACE UNTIL ALL DISTURBED GROUND SURFACES HAVE BEEN DESTABILIZED EITHER BY PAVING OR RESTORATION OF VEGETATIVE GROUND COVER. CONTRACTOR CAPTURE SILT SACKS MUST BE MAINTAINED AND CANNOT BE REMOVED UNTIL ALL LANDSCAPING AREAS ARE COMPLETED.
- NO ALTERNATE METHODS OF EROSION PROTECTION SHALL BE PERMITTED UNLESS APPROVES BY THIS CONSULTING ENGINEER AND THE TOWN DEPARTMENT OF PUBLIC WORKS.
- CONTRACTOR RESPONSIBLE FOR MUNICIPAL ROADWAY AND SIDEWALK TO BE CLEANED OF ALL SEDIMENT FROM VEHICULAR TRACKING ETC. AT THE END OF EACH WORK DAY.
- DURING WET CONDITIONS, TIRES OF ALL VEHICLES/EQUIPMENT



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2	RE-ISSUED TO SITE PLAN CONTROL	2022-04-29
1	ISSUED TO SITE PLAN CONTROL	2021-10-29

NO. ISSUE/REVISION DATE

NOT FOR CONSTRUCTION

PROJECT
CF RIDEAU CENTRE
REGISTRY SITE

PROJECT ADDRESS
70 NICOLAS ST.
OTTAWA, ON

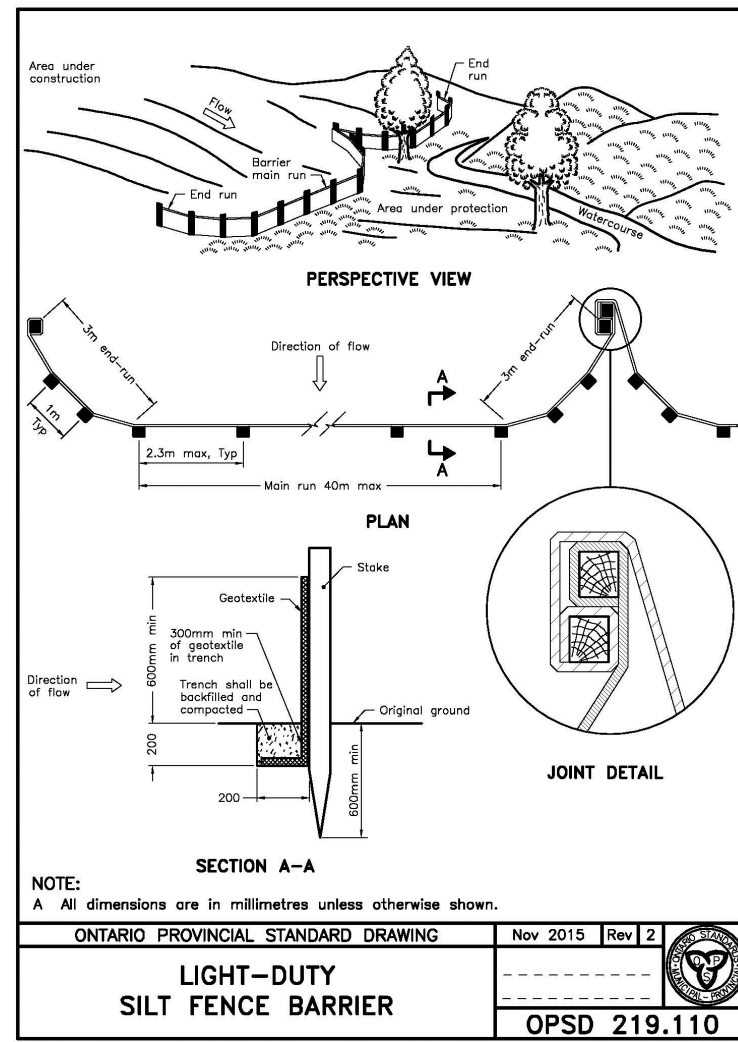
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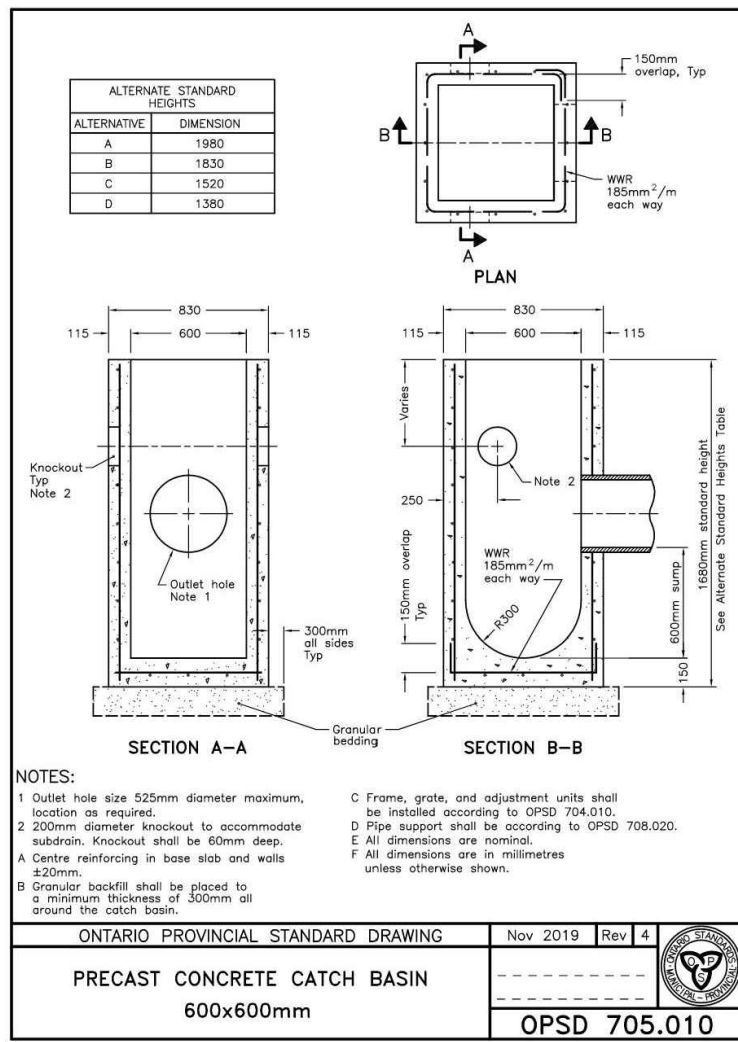
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DRAWN JN
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DRAWING NO. D0718624
REVISION NO.

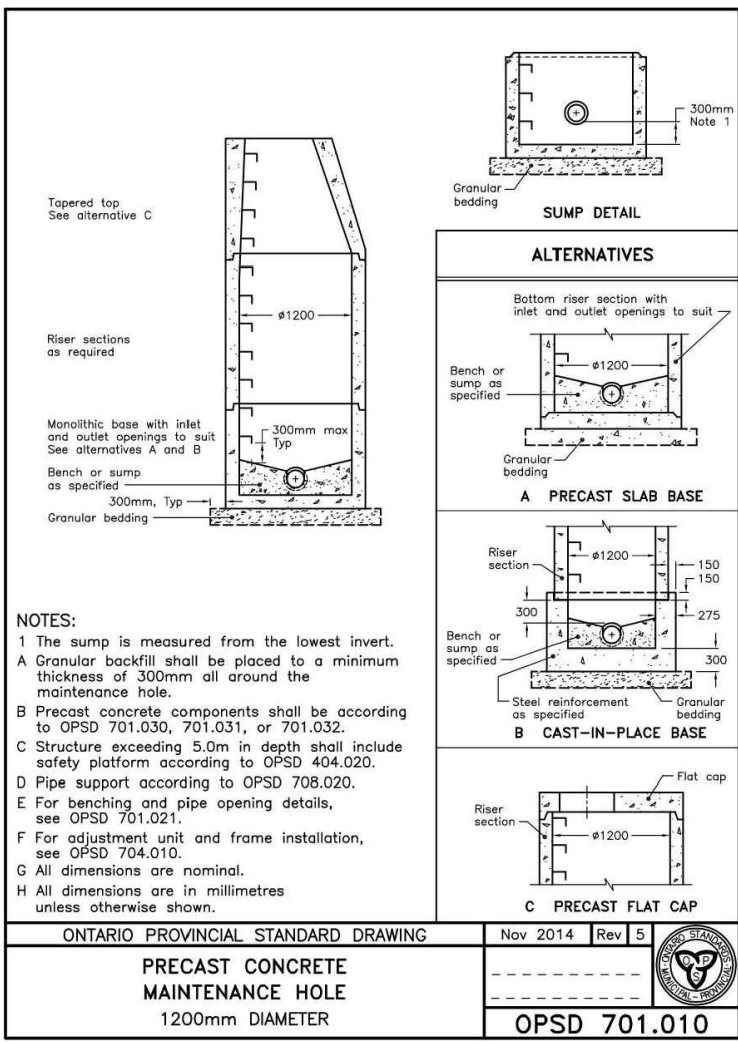
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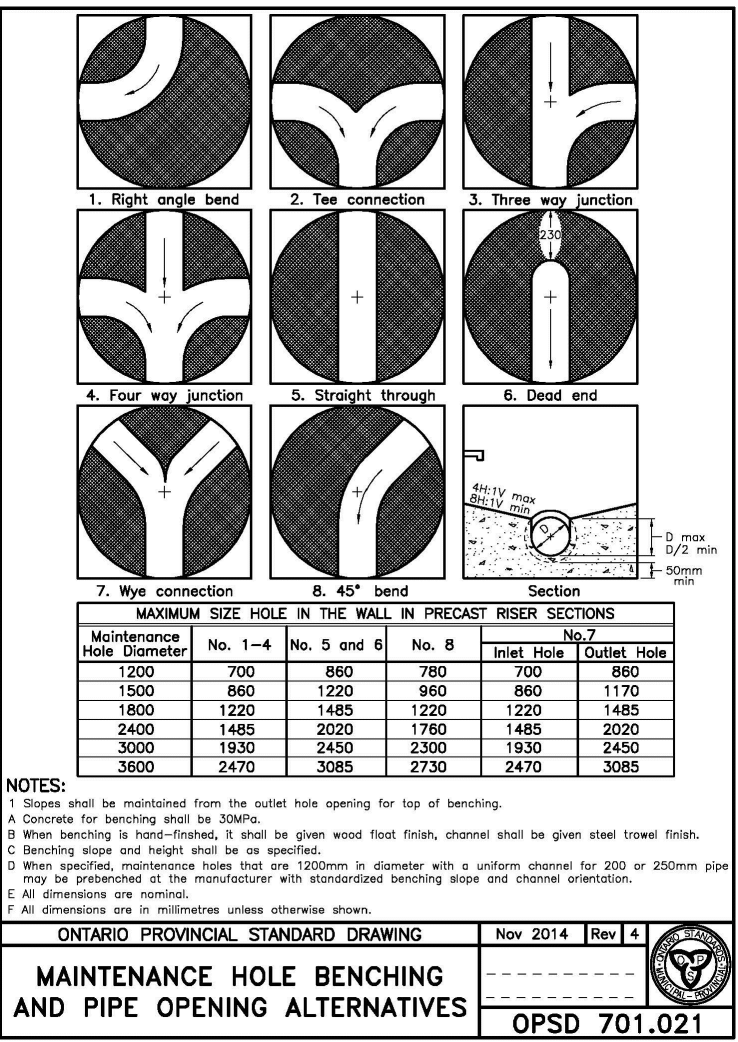
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LIGHT-DUTY
SILT FENCE BARRIER
OPSD 219.110



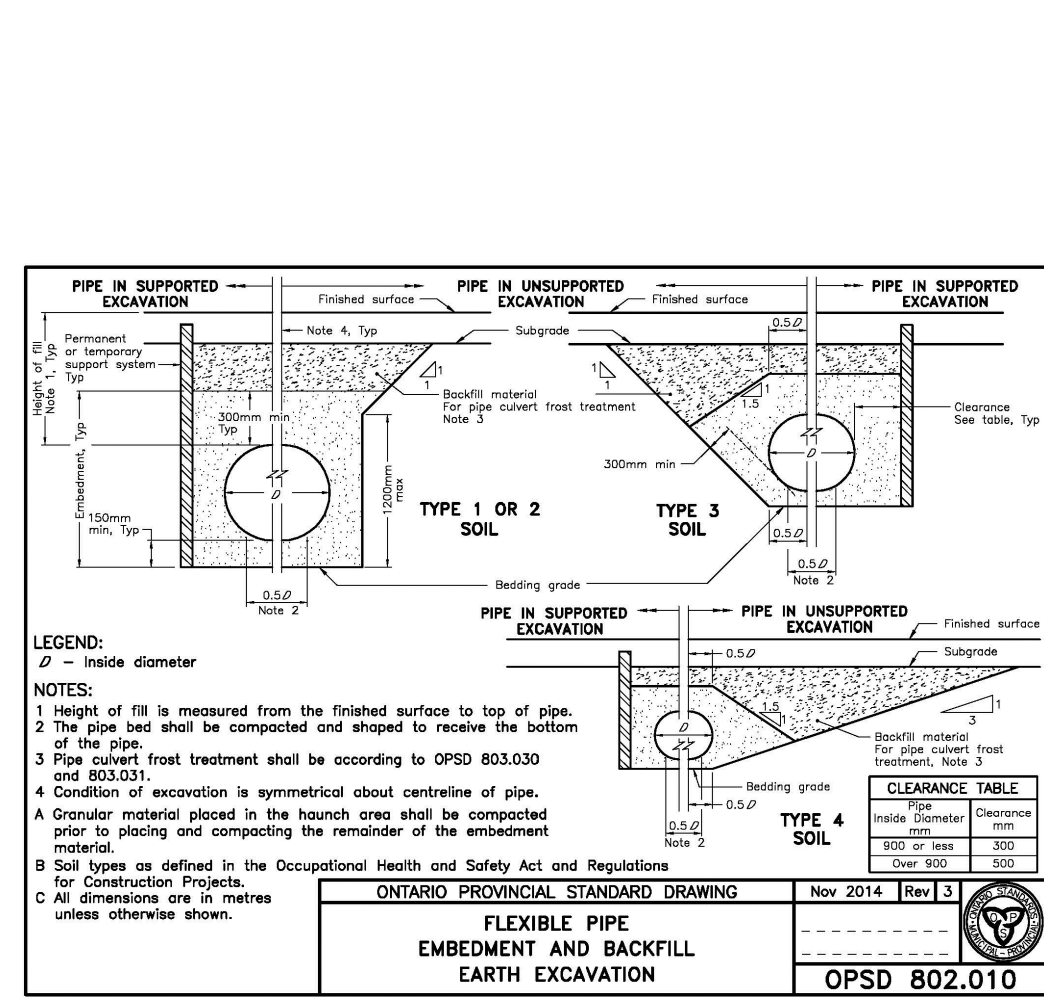
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PRECAST CONCRETE CATCH BASIN
600x600mm
OPSD 705.010



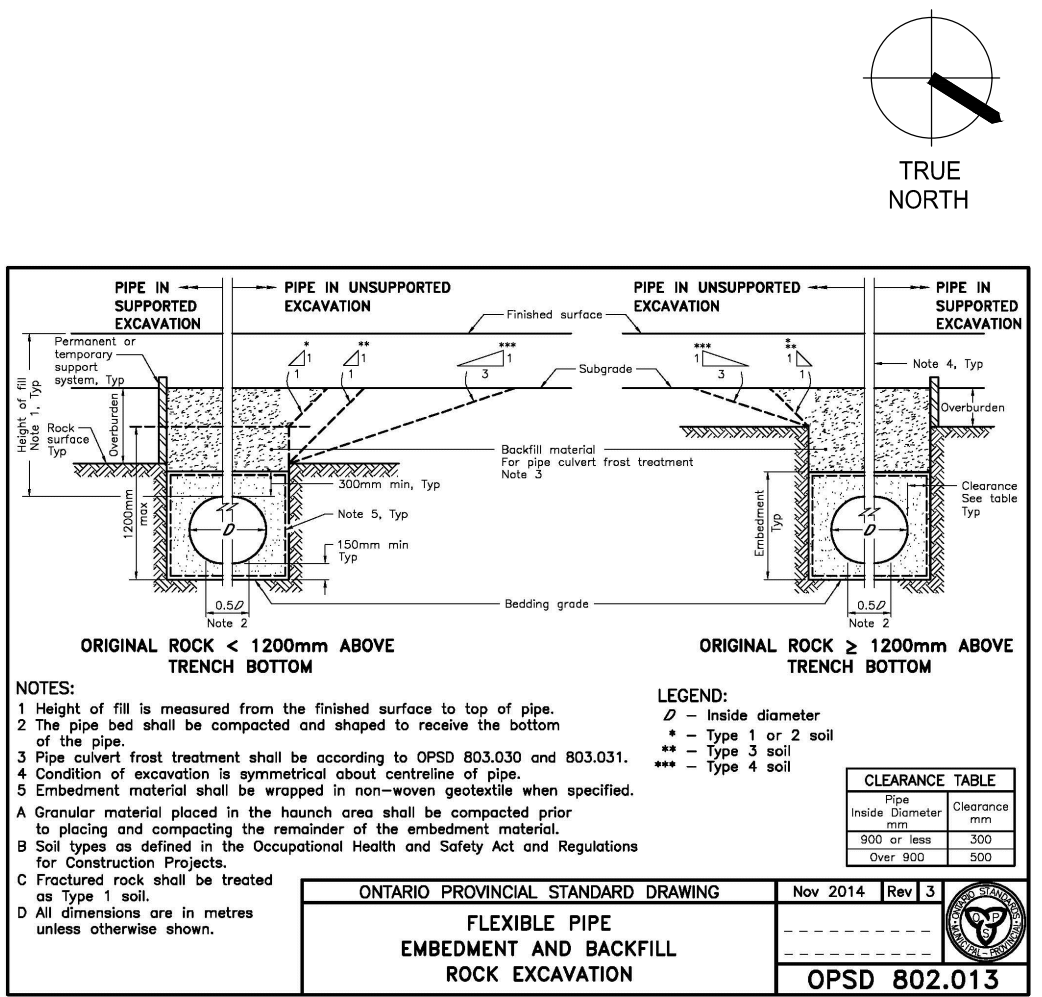
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PRECAST CONCRETE
MAINTENANCE HOLE
1200mm DIAMETER
OPSD 701.010



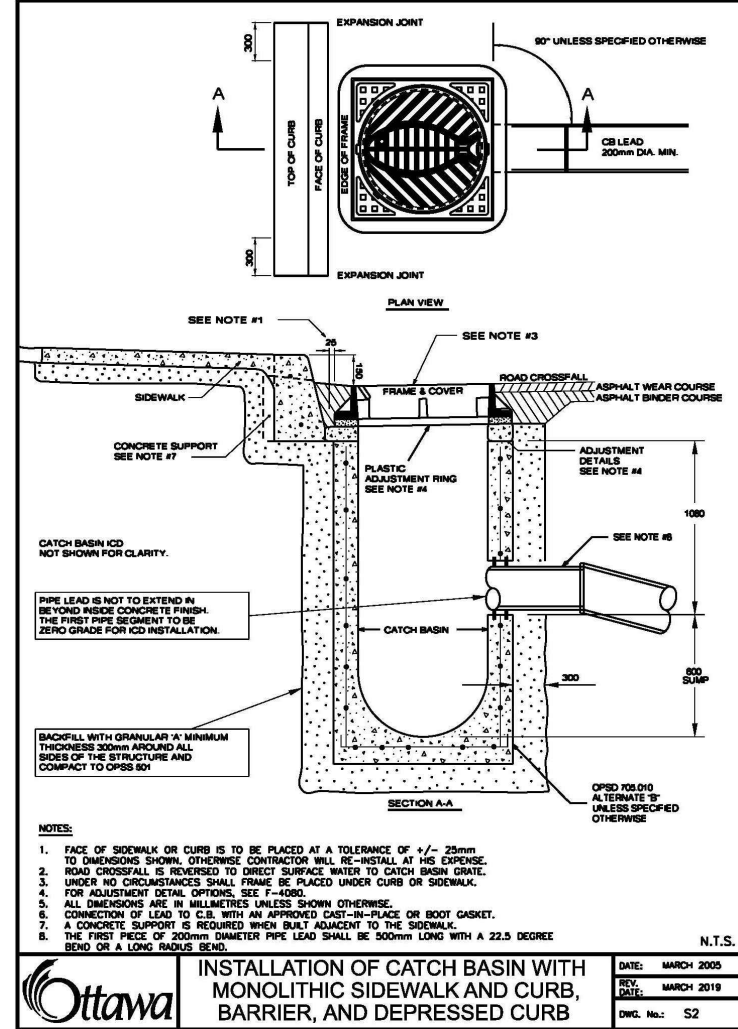
ONTARIO PROVINCIAL STANDARD DRAWING
MAINTENANCE HOLE BENCHING
AND PIPE OPENING ALTERNATIVES
OPSD 701.021



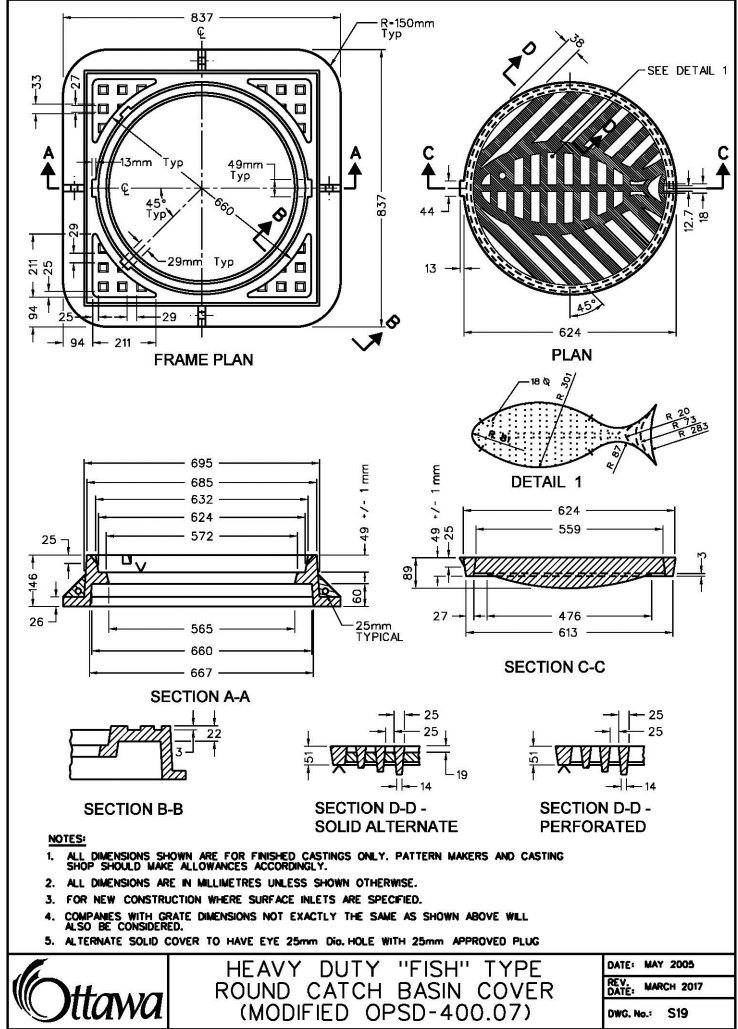
ONTARIO PROVINCIAL STANDARD DRAWING
FLEXIBLE PIPE
EMBEDMENT AND BACKFILL
EARTH EXCAVATION
OPSD 802.010



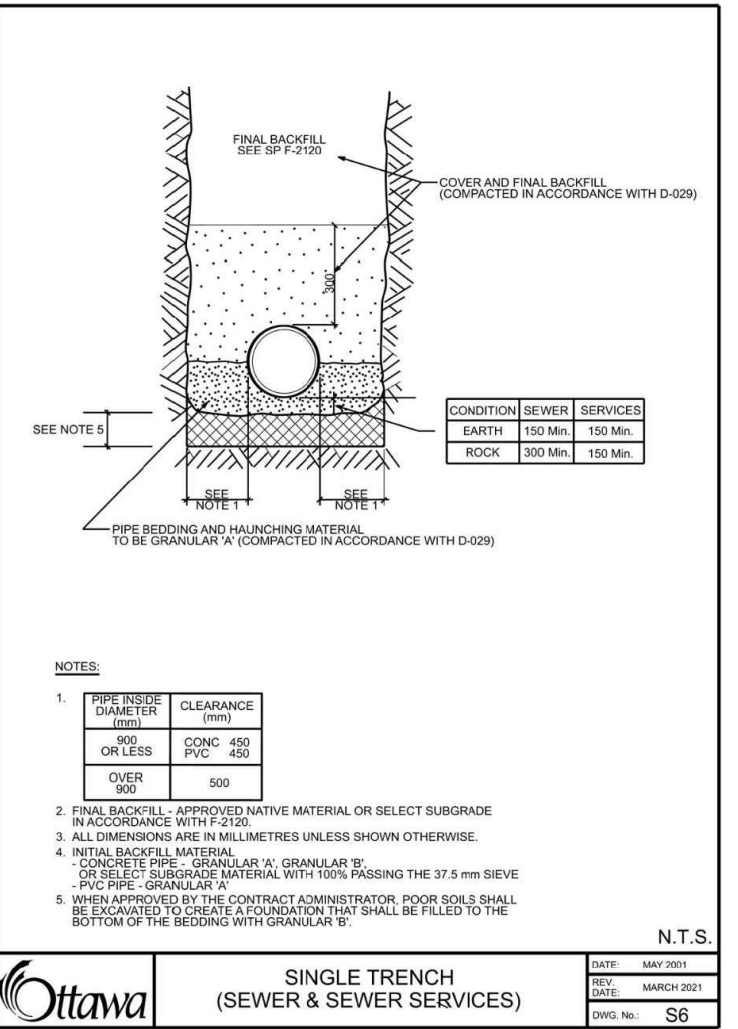
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FLEXIBLE PIPE
EMBEDMENT AND BACKFILL
ROCK EXCAVATION
OPSD 802.013



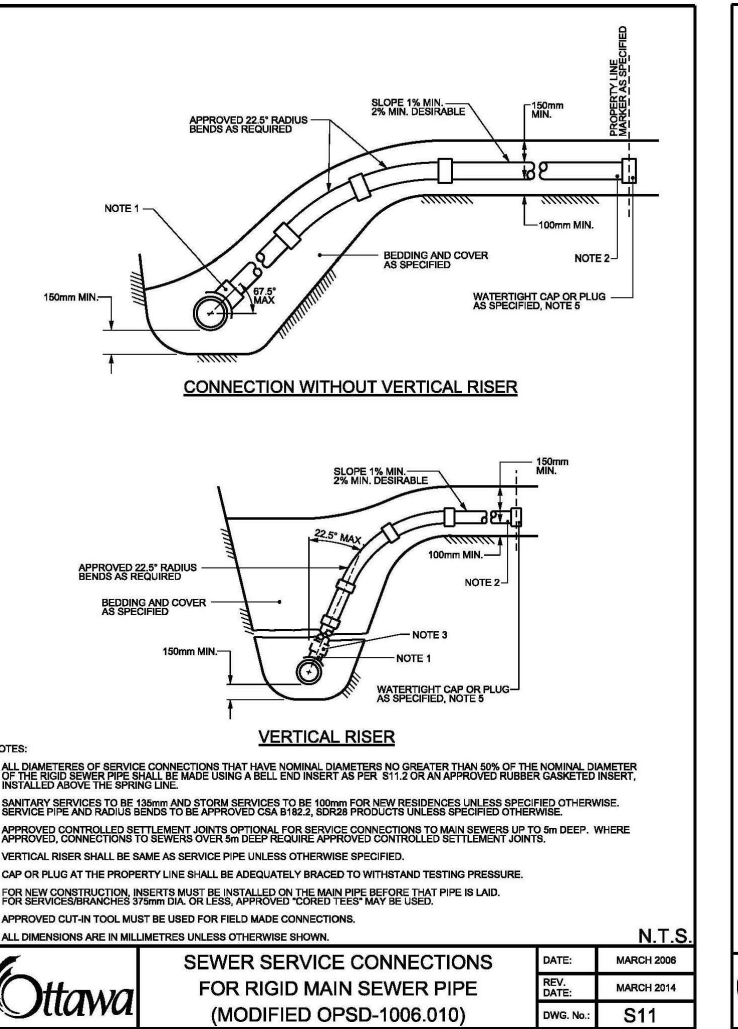
ONTARIO PROVINCIAL STANDARD DRAWING
HEAVY-DUTY "FISH" TYPE
ROUND CATCH BASIN COVER
(MODIFIED OPSD-400.07)
DATE: MAY 2006
REV: MARCH 2017
DWG NO. S6



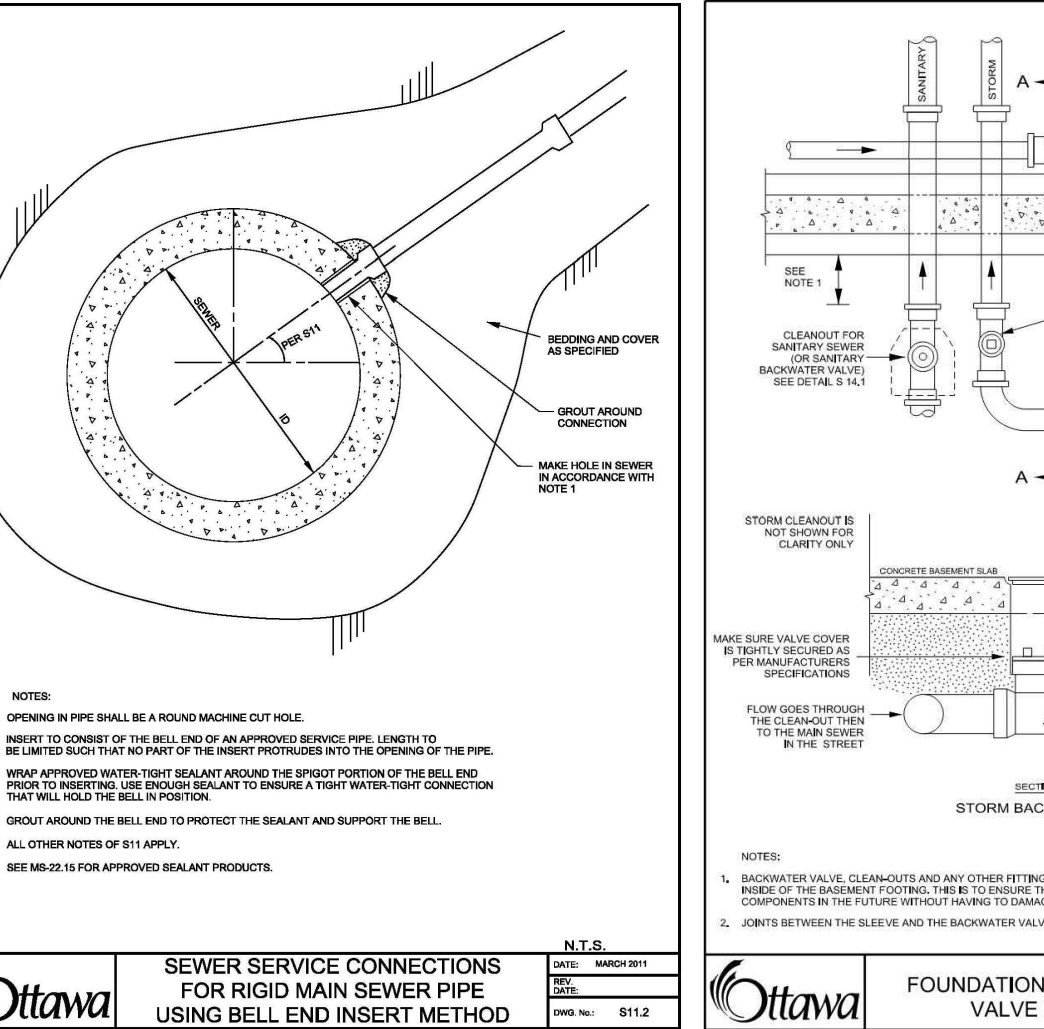
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SINGLE TRENCH
(SEWER & SEWER SERVICES)
DATE: MARCH 2001
REV: MARCH 2017
DWG NO. S6



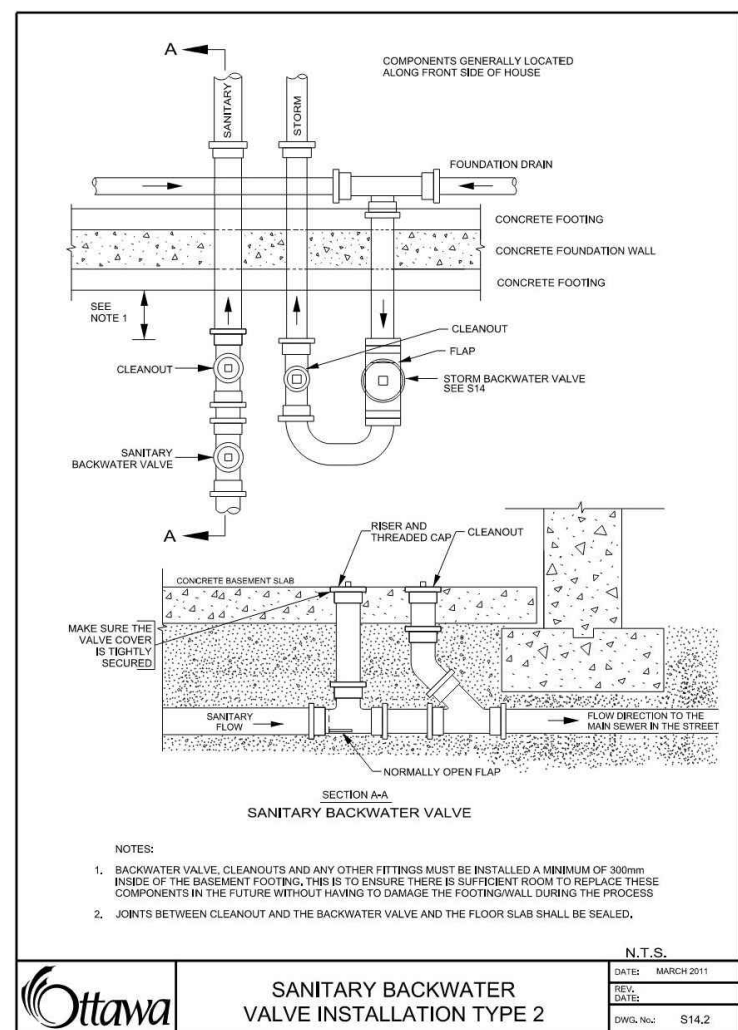
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SEWER SERVICE CONNECTIONS
FOR RIGID MAIN SEWER PIPE
USING BELL END INSERT METHOD
DATE: MARCH 2001
REV: MARCH 2017
DWG NO. S11



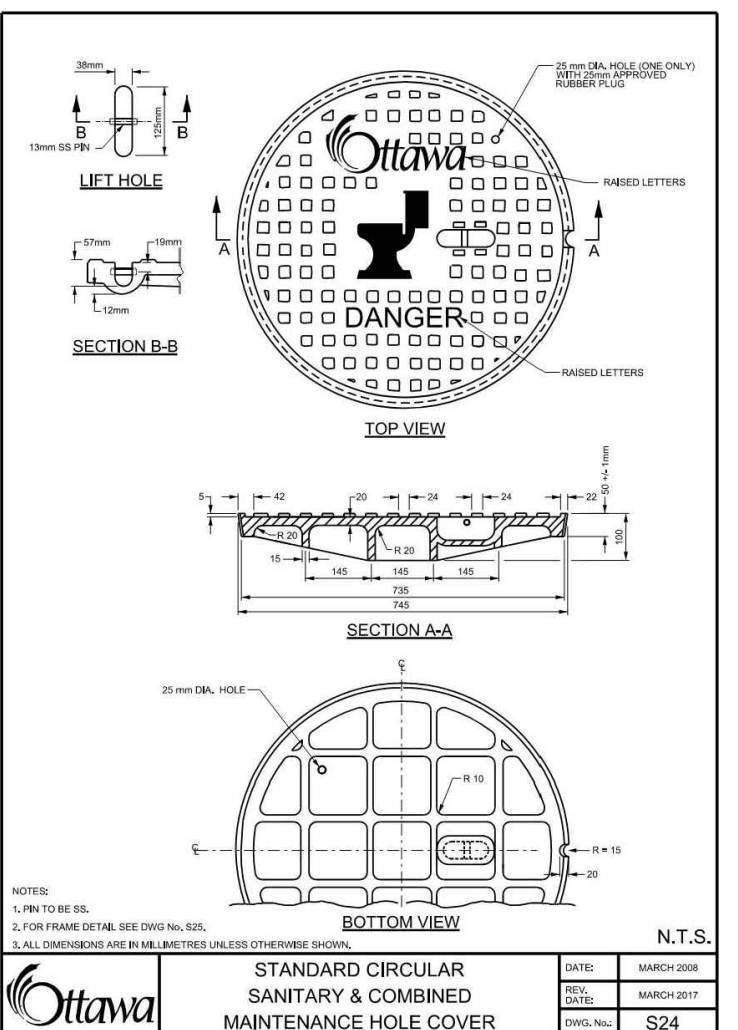
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FOUNDATION DRAIN BACKWATER
VALVE INSTALLATION
DATE: MARCH 2001
REV: MARCH 2017
DWG NO. S14



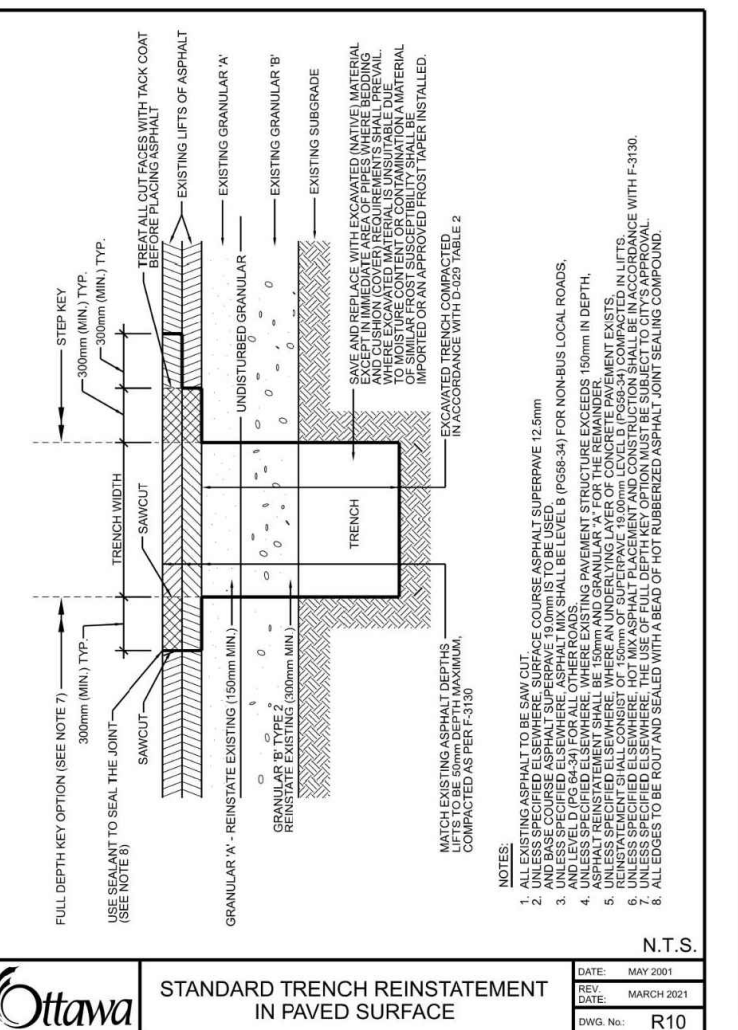
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VALVE INSTALLATION TYPE 1
DATE: MARCH 2001
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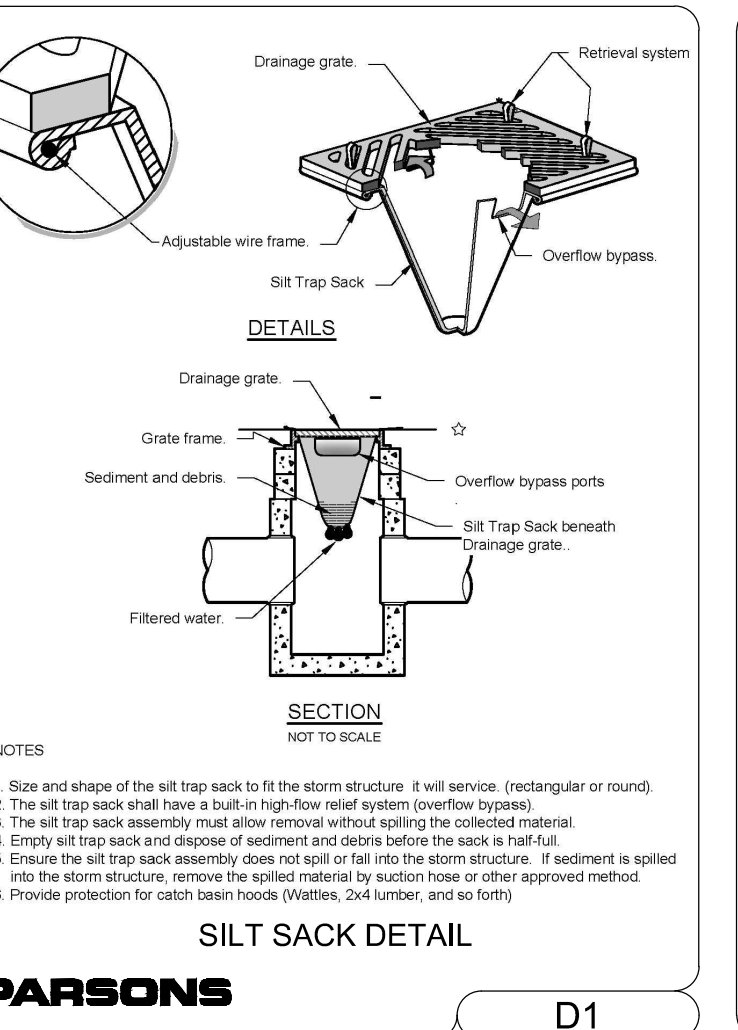
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TYPICAL SIDEWALK SECTION
DATE: MAY 2001
REV: MARCH 2017
DWG NO. SC2



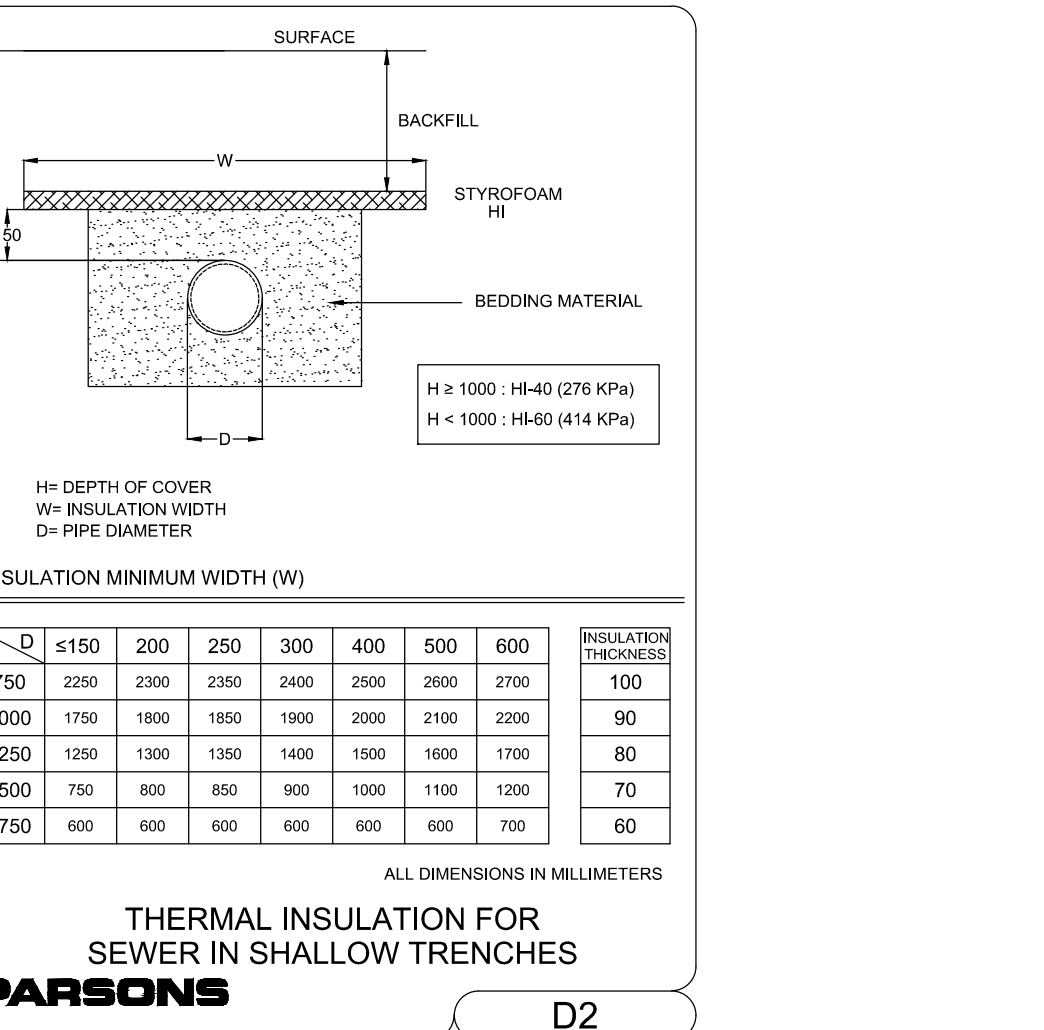
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STANDARD CIRCULAR
SANITARY & COMBINED
MAINTENANCE HOLE COVER
DATE: MAY 2001
REV: MARCH 2017
DWG NO. S24



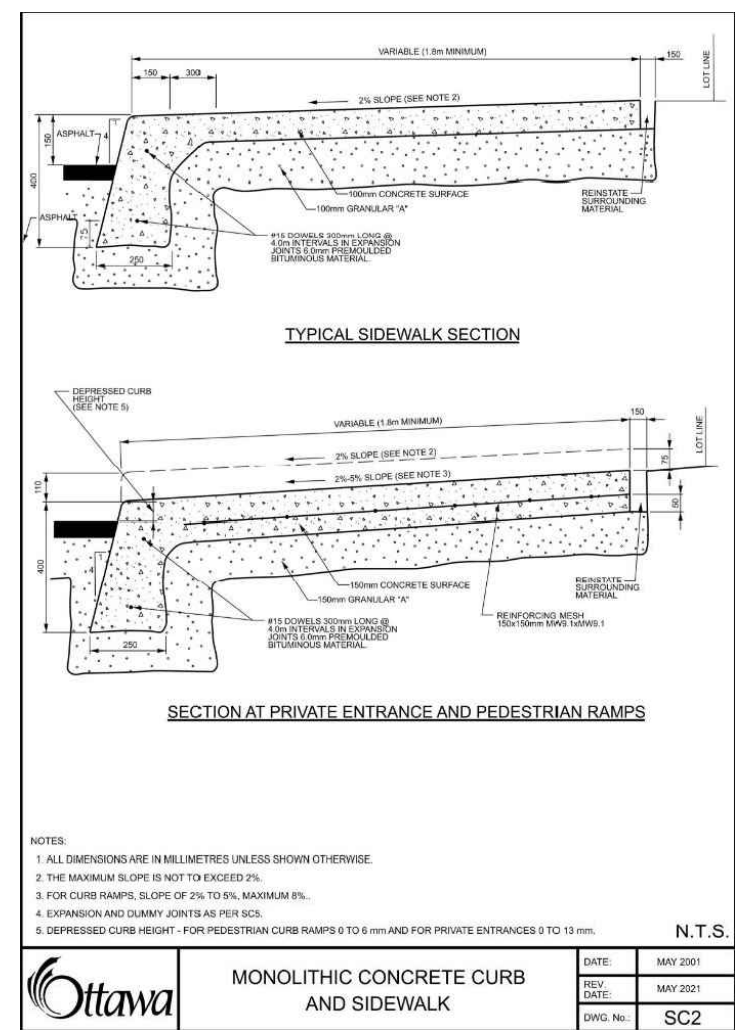
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STANDARD TRENCH REINSTATEMENT
IN PAVED SURFACE
DATE: MAY 2001
REV: MARCH 2017
DWG NO. R10



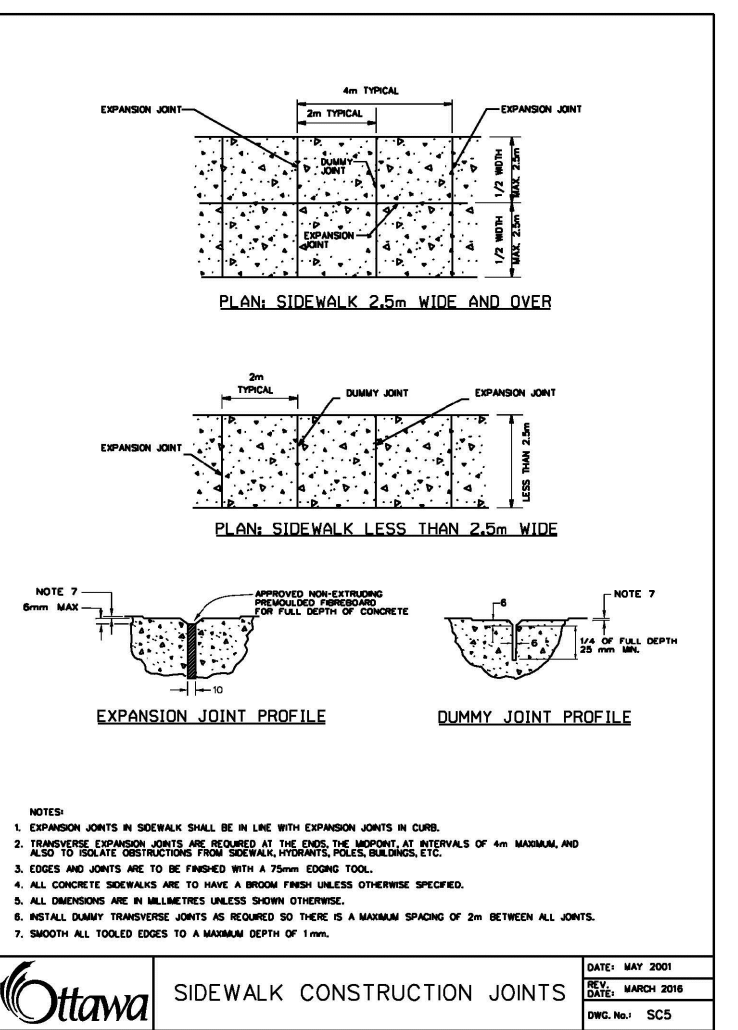
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SILT SACK DETAIL
DATE: MAY 2001
REV: MARCH 2017
DWG NO. D1



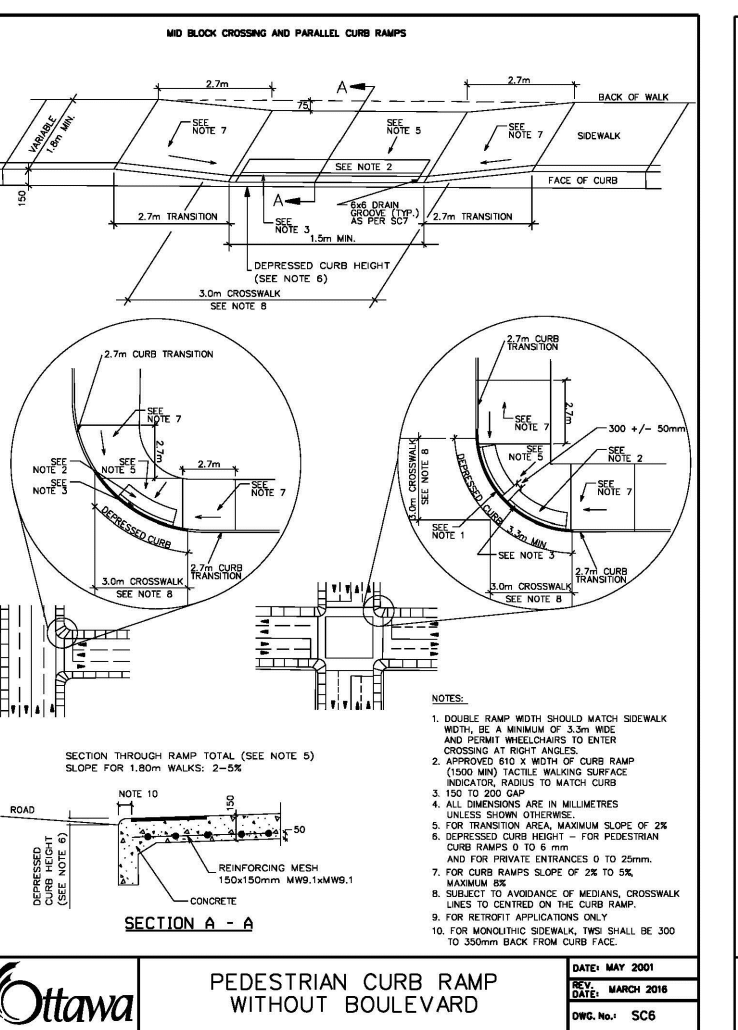
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THERMAL INSULATION FOR
SEWER IN SHALLOW TRENCHES
DATE: MAY 2001
REV: MARCH 2017
DWG NO. D2



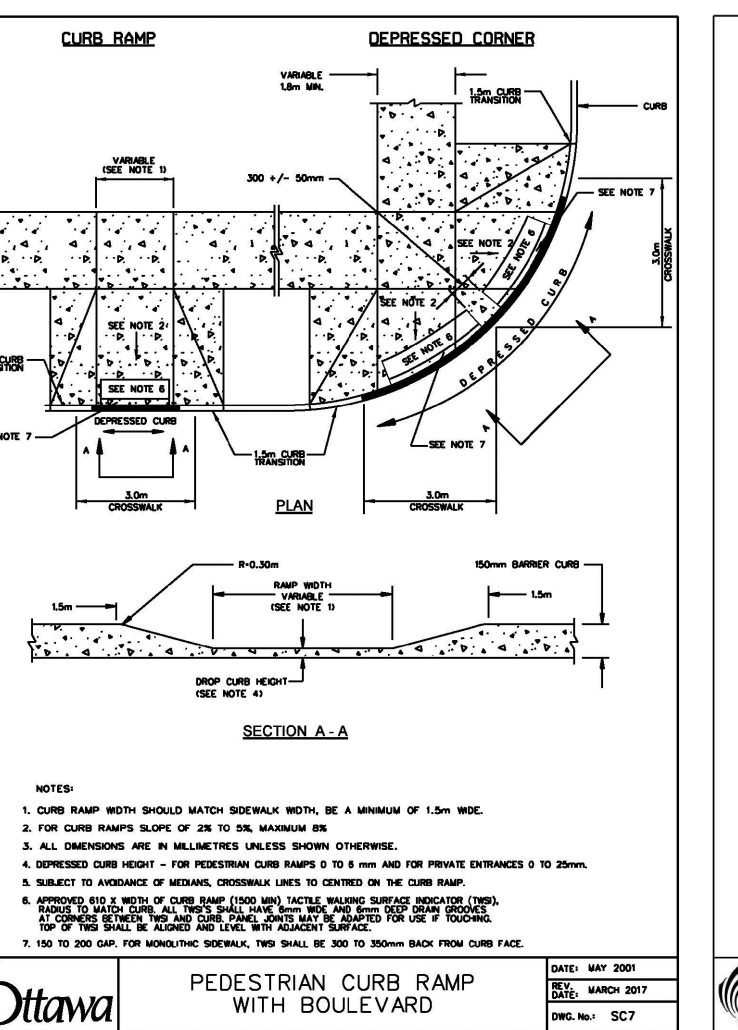
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MONOLITHIC CONCRETE CURB
AND SIDEWALK
DATE: MAY 2001
REV: MARCH 2017
DWG NO. SC2



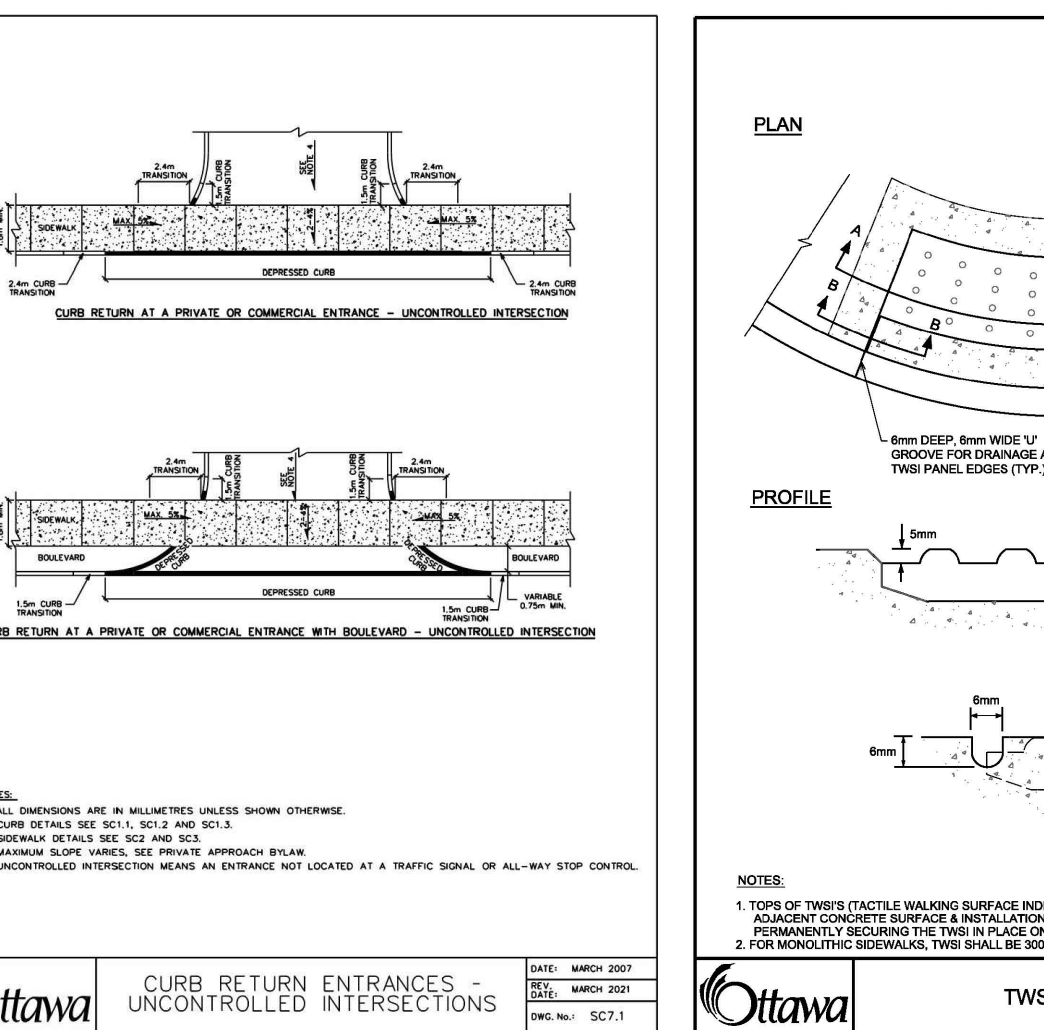
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SIDEWALK CONSTRUCTION JOINTS
DATE: MAY 2001
REV: MARCH 2017
DWG NO. SC5



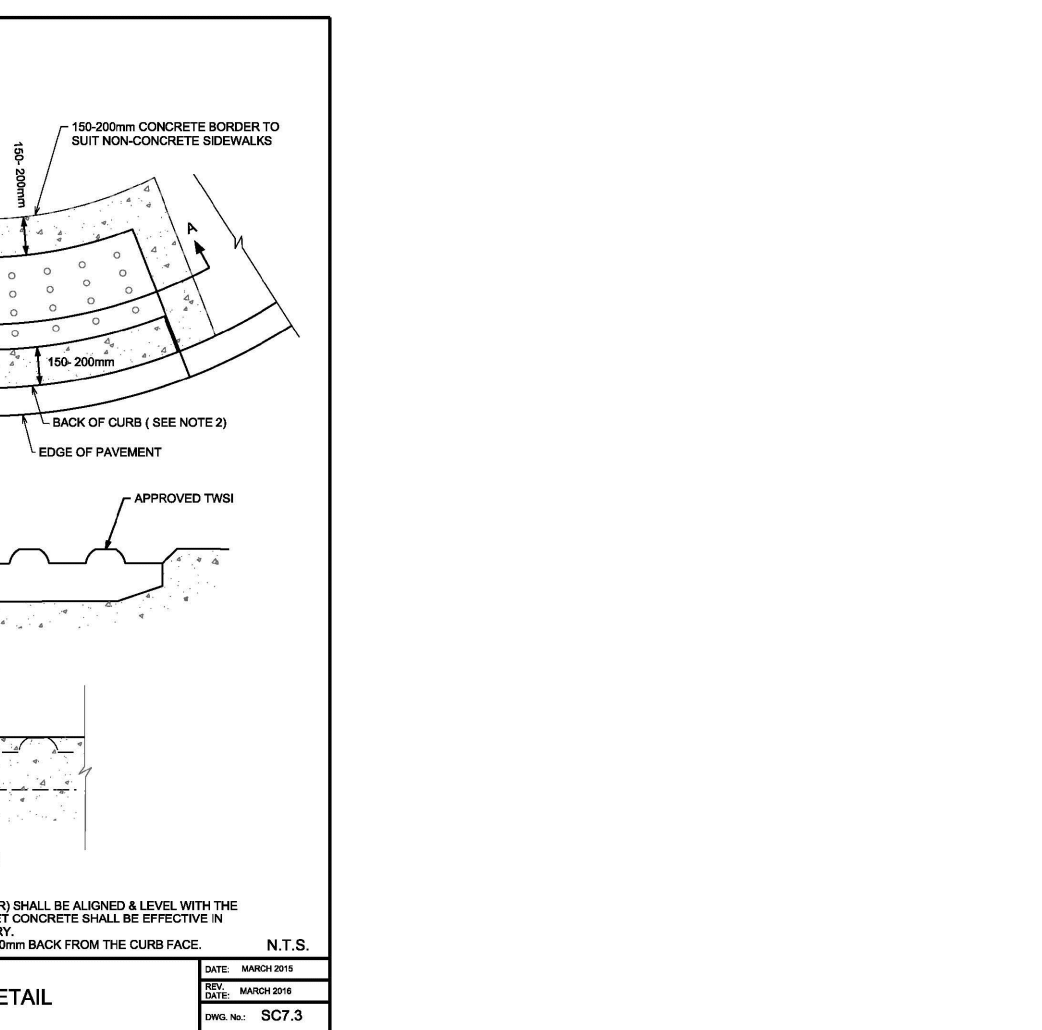
ONTARIO PROVINCIAL STANDARD DRAWING
PEDESTRIAN CURB RAMP
WITHOUT BOULEVARD
DATE: MAY 2001
REV: MARCH 2017
DWG NO. SC6



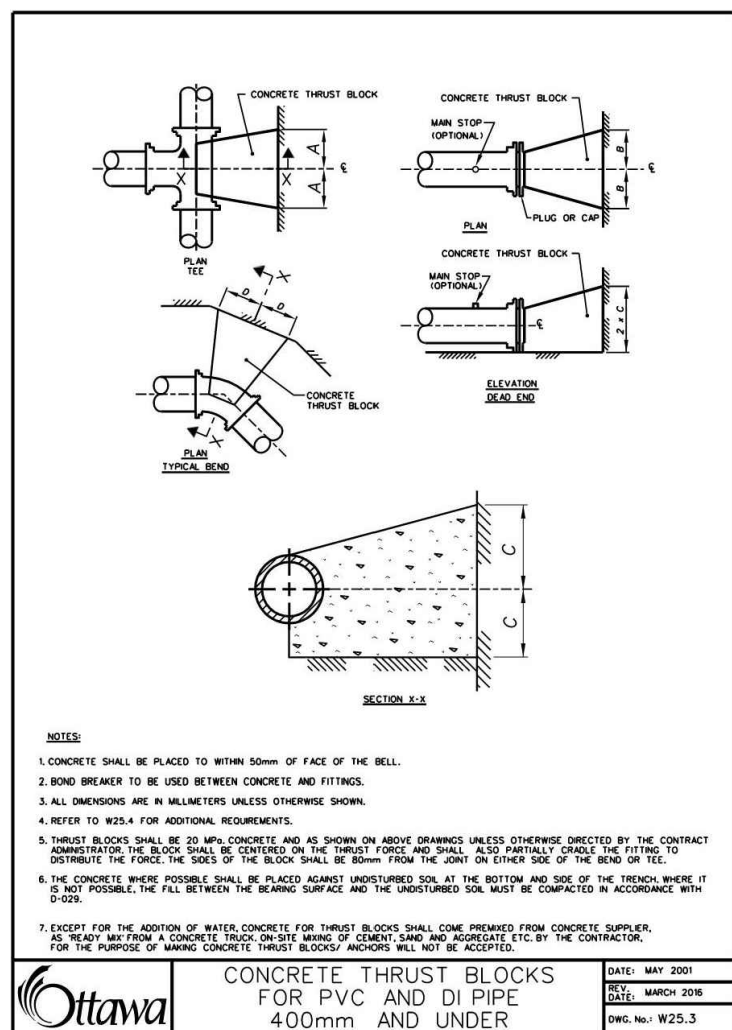
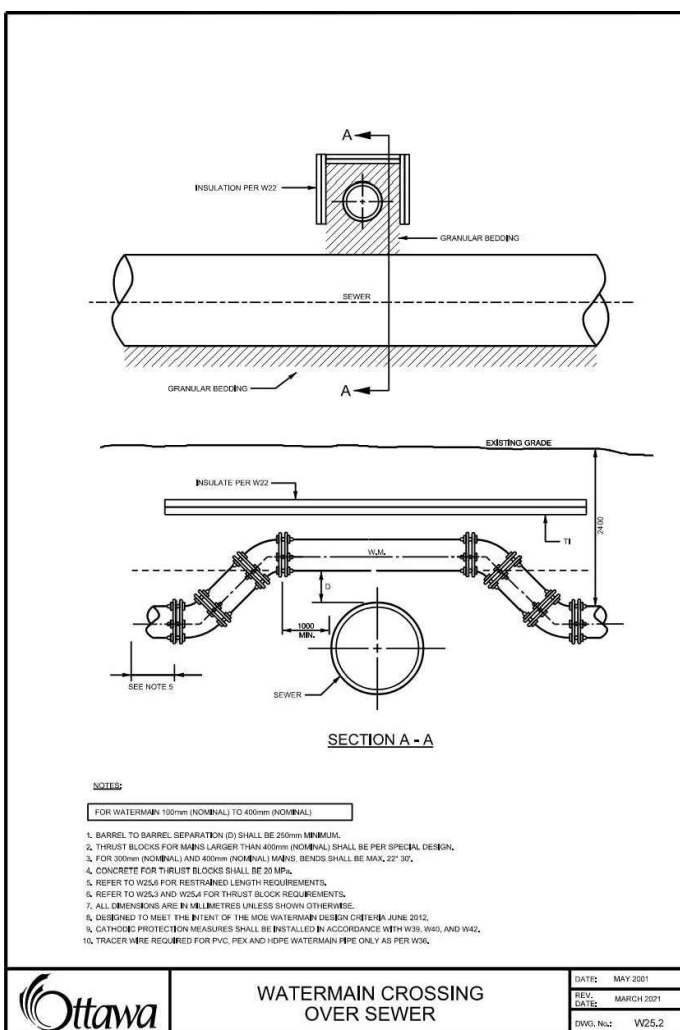
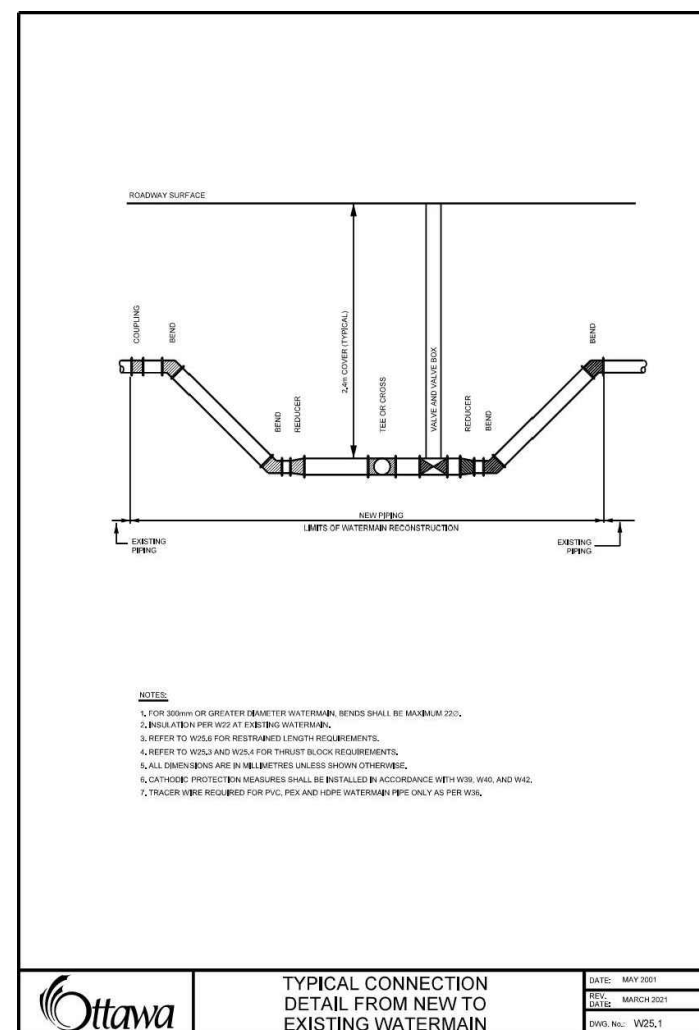
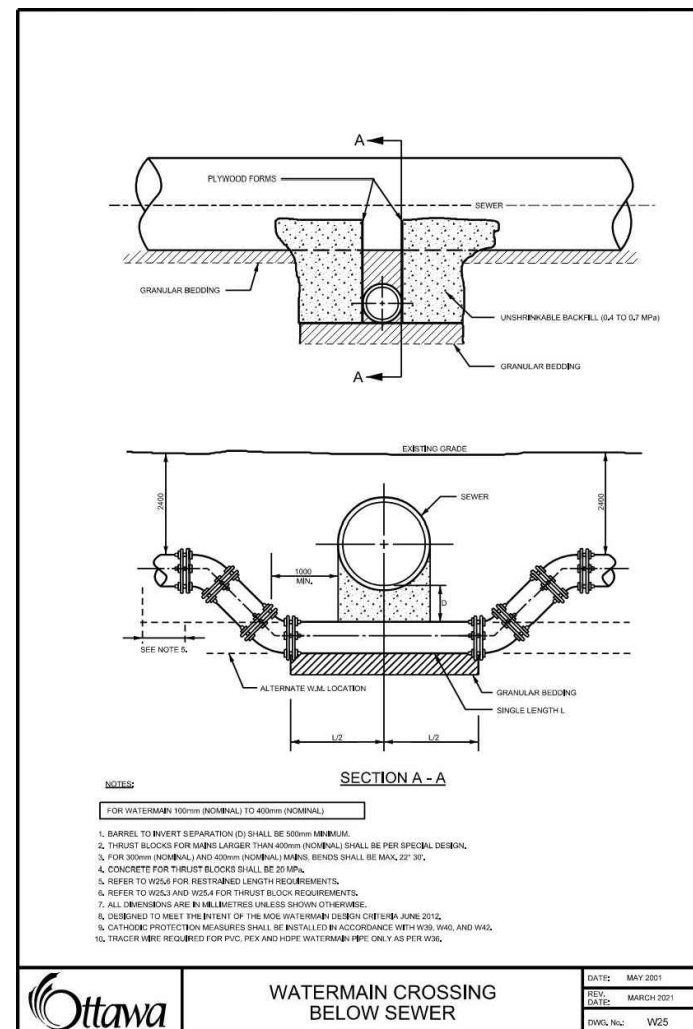
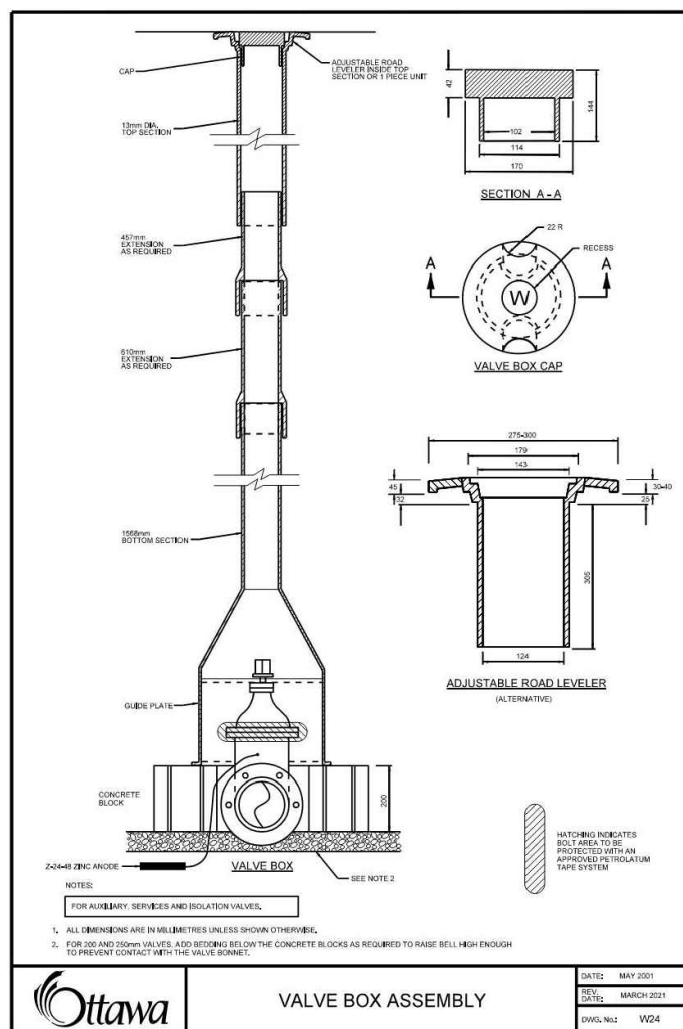
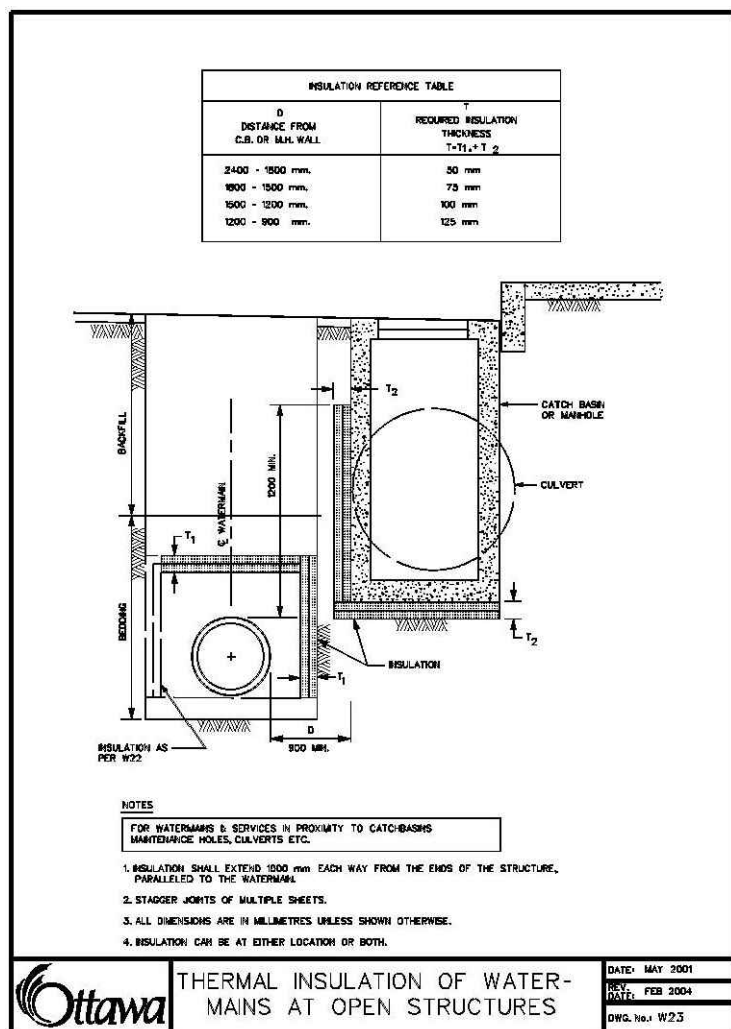
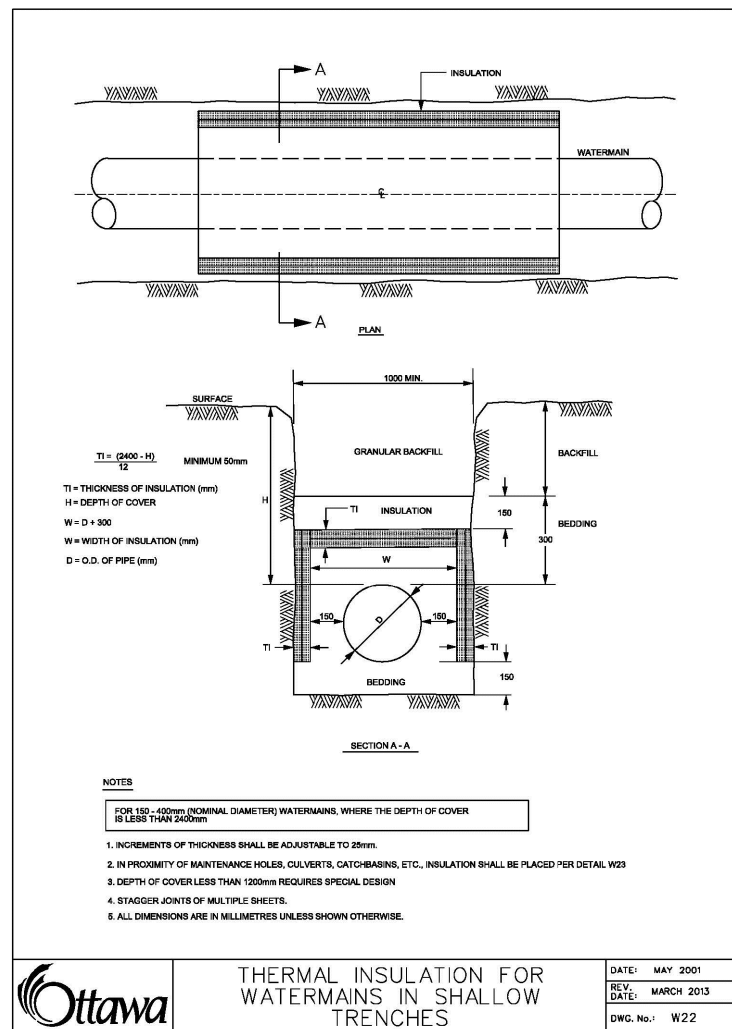
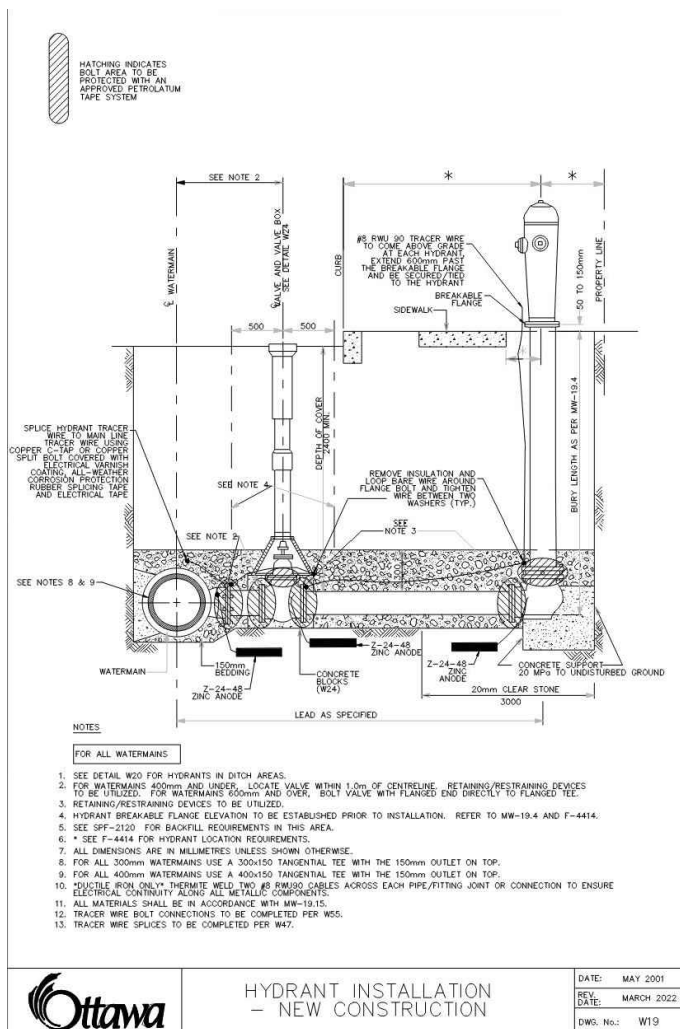
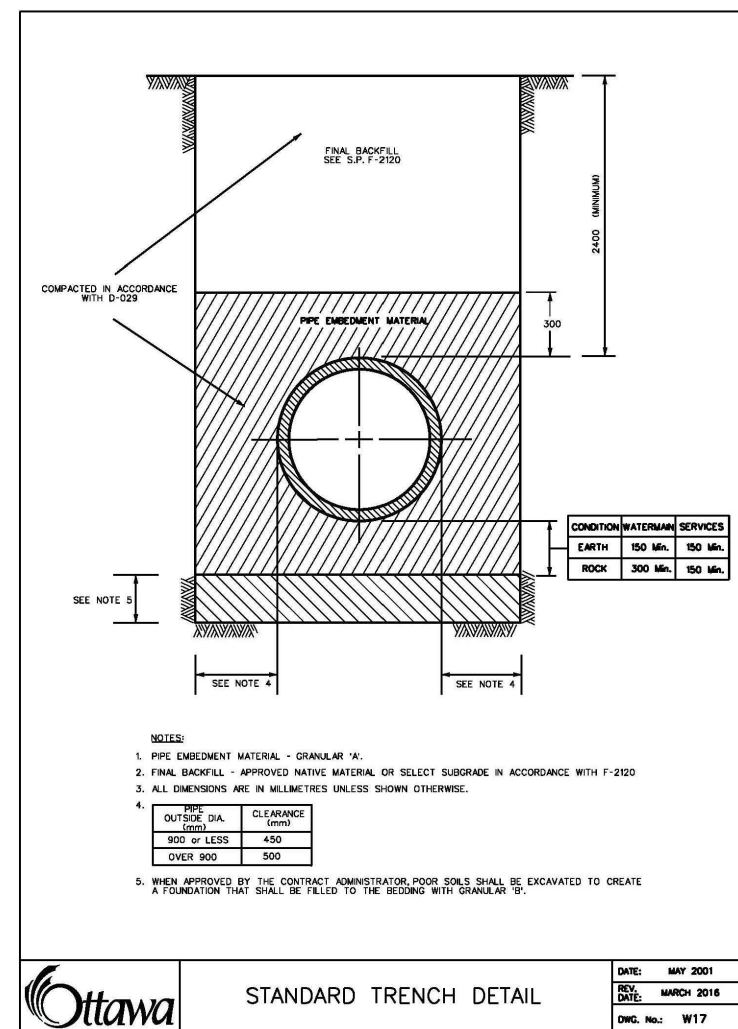
ONTARIO PROVINCIAL STANDARD DRAWING
PEDESTRIAN CURB RAMP
WITH BOULEVARD
DATE: MAY 2001
REV: MARCH 2017
DWG NO. SC7



ONTARIO PROVINCIAL STANDARD DRAWING
CURB RETURN ENTRANCES -
UNCONTROLLED INTERSECTIONS
DATE: MAY 2001
REV: MARCH 2017
DWG NO. SC7.1



ONTARIO PROVINCIAL STANDARD DRAWING
TWSI DETAIL
DATE: MAY 2001
REV: MARCH 2017
DWG NO. SC7.3



5. SOIL DESCRIPTION: VERY FINE SANDS, SANDY CLAY, CLAYS.
SOILS WITH TYPICAL BEARING STRENGTHS OF 100 TO 150 KPA
 DIMENSION NOTED ON WELLS

PIPE DIAMETER	A	B	C	D
102	200	200	200	200
152	400	400	400	300
203	500	500	500	300
254	600	600	600	400
305	800	800	400	600
406	1000	1000	800	800

6. SOIL DESCRIPTION: FINE SANDS, GRAVELS AND CLAYEY SAND GRAVELS.
SOILS WITH TYPICAL BEARING STRENGTHS OF 200 TO 350 KPA
 DIMENSION NOTED ON WELLS

PIPE DIAMETER	A	B	C	D
102	200	200	150	150
152	200	200	200	200
203	300	300	200	270
254	400	400	300	300
305	500	500	500	300
406	750	750	400	400

7. SOIL DESCRIPTION: FINE SANDS, GRAVELS AND GRAVELLED SAND MOTILES.
SOILS WITH TYPICAL BEARING STRENGTHS OF 300 KPA AND OVER
 DIMENSION NOTED ON WELLS

PIPE DIAMETER	A	B	C	D
102	100	100	100	100
152	200	200	200	200
203	300	300	300	300
254	400	400	350	270
305	450	450	200	300
406	600	600	300	300

NOTES

- THE ABOVE TABLES ARE DIMENSIONS ONLY TO GUIDE THE INTERPRETATION OF BEARING CAPACITY. BEARING CAPACITY AND DEPTH OF PENETRATION DEPENDS UPON SOIL TYPE, SOIL CONDITION, AND THE TYPE OF FOUNDATION.
- FOR ALL FOUNDATIONS, THE MINIMUM PENETRATION DEPTH SHALL BE 1.5 TIMES THE DIAMETER OF THE FOUNDATION.
- FOR ALL FOUNDATIONS, THE MINIMUM PENETRATION DEPTH SHALL BE 1.5 TIMES THE DIAMETER OF THE FOUNDATION.
- THE TABLES ONLY PROVIDE A GENERAL GUIDE. A DESIGNER SHOULD CONSULT WITH THE GEOTECHNICAL ENGINEER FOR THE SPECIFIC SOIL TYPE AND CONDITION.
- FOR ALL FOUNDATIONS, THE MINIMUM PENETRATION DEPTH SHALL BE 1.5 TIMES THE DIAMETER OF THE FOUNDATION.

FOR FIVE (5) AND SIX (6) PIPE 400mm AND UNDER

THURST COLD DIMENSION TABLES

PIPE DIAMETER	MINIMUM PENETRATION DEPTH
102	150
152	225
203	300
254	375
305	450
406	600

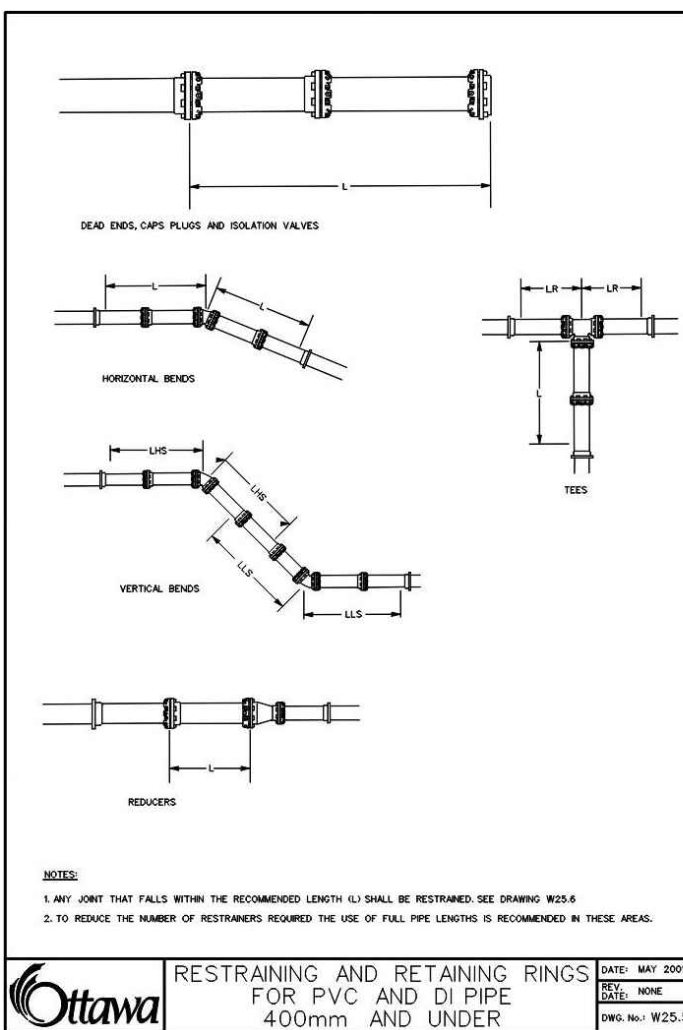
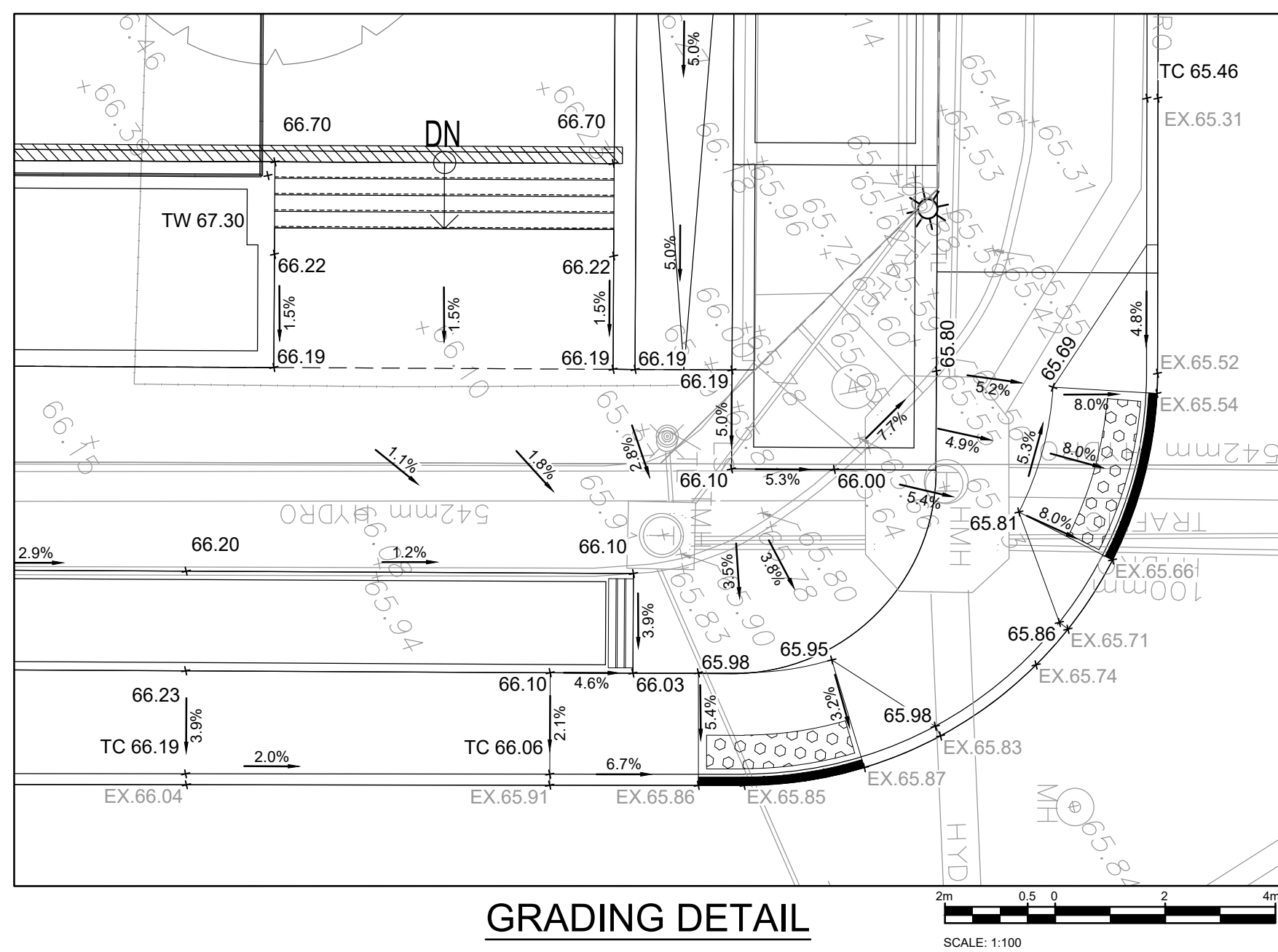
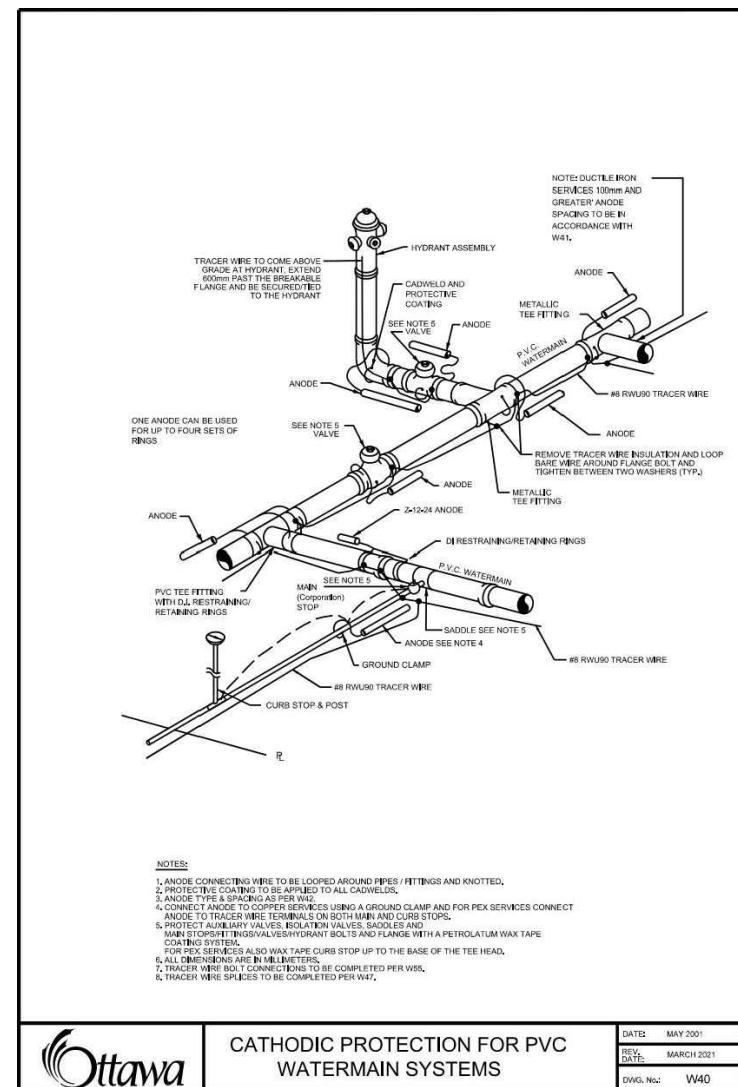
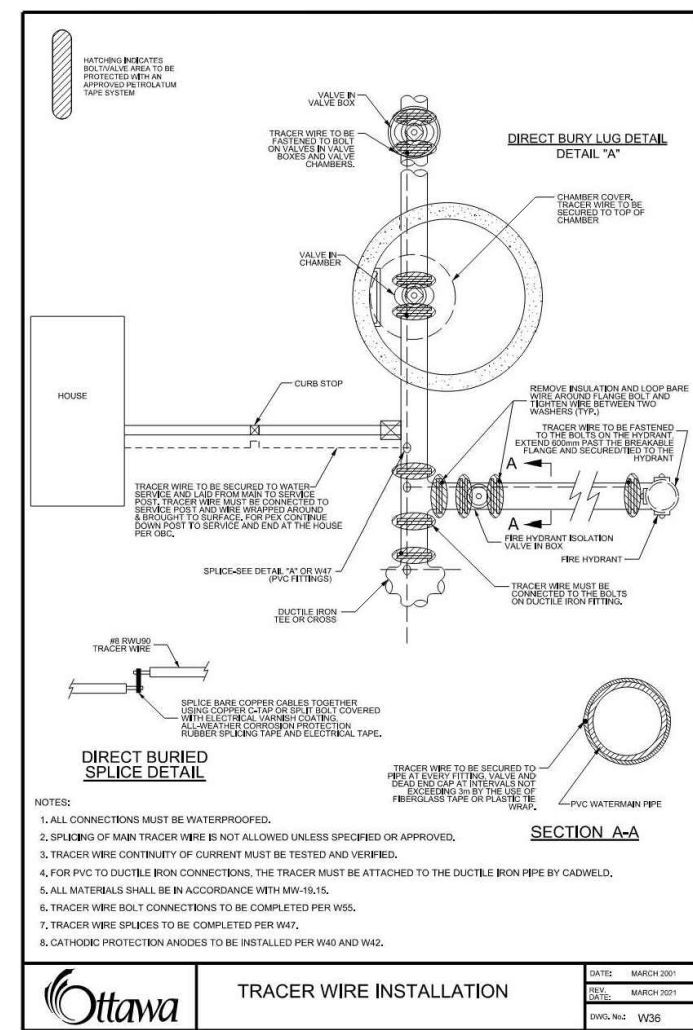


TABLE OF RESTRAINED LENGTHS FOR PLAIN AND PLAIN WATERMASTER TYPE B STANDARD DRAINAGE V. SENSIBILITY OF THE BEARING CAPACITY OF THE SOILS AND OVER

REDUCERS					LARGER DRAINER DUE TO RESTRAINED				
SMALLER DRAINER (UNRESTRAINED)	100mm	150mm	200mm	250mm	400mm	100mm	150mm	200mm	400mm
100mm	N/A	3	6	8	12	14			
150mm	N/A	N/A	4	6	8	10			
200mm	N/A	N/A	N/A	3	6	8			
250mm	N/A	N/A	N/A	N/A	4	6			
300mm	N/A	N/A	N/A	N/A	N/A	5			
400mm	N/A	N/A	N/A	N/A	N/A	N/A			
SPS DRAINAGE									
	100mm	150mm	200mm	250mm	300mm	400mm			
SEAL ENDS, CAPS, VALVES									
BEFORE CAPS AND EITHER SIDE OF VALVES-1	5	6	8	9	12	16			
VERTICAL BENDS									
LENGTH ALONG SIDE-1/2"	3	4	5	6	7	8			
LENGTH ALONG SIDE-1/4"	1.5	2	2.5	3	3.5	4.5			
TEES									
LENGTH ALONG THE BRANCH-1"	1	1	1	1	1	1			
LENGTH ALONG THE RUN-1/4"	3	3	3	3	3	3			
HORIZONTAL BENDS									
1/2, 3/4, AND 1" DRAINER BENDS	1	1.5	1.8	2	2	2.5			

NOTES:

- THE ABOVE INFORMATION IS GIVEN AS A GUIDE TO THE INFORMATION REQUIRED FOR THE PURPOSE OF CALCULATING THE REQUIRED UNRESTRAINED LENGTHS OF THE DRAINAGE PIPES TO BE INSTALLED IN THE FIELD.
- THE LENGTHS OF THE BENDS ARE THE MINIMUM REQUIRED AND ARE AS FOLLOWS:
 - TO MAKE A 90° TURN THROUGH A 90° ELBOW OR CURVE OF 90°
 - TO MAKE A 45° TURN THROUGH A 45° ELBOW OR CURVE OF 45°
 - TO MAKE A 180° TURN THROUGH A 180° ELBOW OR CURVE OF 180°
 - TO MAKE A 180° TURN THROUGH A 180° ELBOW OR CURVE OF 180°
 - TO MAKE A 180° TURN THROUGH A 180° ELBOW OR CURVE OF 180°
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SANITARY SEWER DATA							
LOCATION		DIAMETER	MATERIAL	CLASS	LENGTH	INVERT ELEVATIONS	
FROM	TO					UPSTREAM	DOWNSTREAM
CAP AT BLDG	NICHOLAS ST. CONNECTION*	150mm	PVC	SDR-35	4.9m	63.66	63.56*

*INVERT AT TOP BEND. CONNECT TO EXISTING PIPE AS PER CITY OF OTTAWA STD. S11.

STORM SEWER DATA							
LOCATION		DIAMETER	MATERIAL	CLASS	LENGTH	INVERT ELEVATIONS	
FROM	TO					UPSTREAM	DOWNSTREAM
CAP 1.0m FROM BLDG	DAILY AVE. CONNECTION*	200mm	PVC	SDR-35	9.1m	62.37	62.19*

* INVERT AT TOP BEND. CONNECT TO EXISTING PIPE AS PER CITY OF OTTAWA STD. S11

CROSSING TABLE				
CROSSING NO.	CONDUIT ELEV. AT CROSSING	CONDUIT ELEV. AT CROSSING	CLEARANCE	CITY OTTAWA STANDARD DETAIL
CR-01	WM, BOT. 63.30	EX, SAN, TOP. ±62.88	0.42m	-
CR-02	WM, BOT. 64.09	EX, STM, TOP. ±63.79	0.30m	W25.2
CR-03	EX, WM, BOT. ±62.75**	STM, TOP. 62.45	0.30m	-
CR-04	EX, HYDRO, BOT. ±64.96*	SAN, TOP. 63.81	1.15m	-
CR-05	EX, HYDRO, BOT. ±64.96*	WM, TOP. 63.50	1.46m	-
CR-06	EX, HYDRO, BOT. ±64.38*	WM, TOP. 63.02	1.36m	-
CR-07	EX, HYDRO, BOT. ±64.27*	STM, TOP. 62.52	1.75m	-

NOTE

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3	FINAL ISSUE TO SITE PLAN CONTROL	2022-08-24
2	RE-ISSUED TO SITE PLAN CONTROL	2022-04-29
1	ISSUED TO SITE PLAN CONTROL	2021-10-29
NO.	ISSUE/ REVISION	DATE

NOT FOR CONSTRUCTION

PROJECT

CF RIDEAU CENTRE REGISTRY SITE

PROJECT ADDRESS

70 NICOLAS ST.
OTTAWA, ON

TITLE

WATERMAIN DETAILS AND SEWER TABLES

PROJECT NO.	DRAWN	CHECKED
477846	JN	SM

DRAWING NO. D0718624

SPA-C103

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