WATER SERVICE PROFILE TABLE

MATERIAL: 150mm PVC PRESSURE CLASS 150 DR18

STATION	DESCRIPTION	GRADE ELEVATION	TOP OF PIPE	DEPTH OF COVER	NOTES
A+00.0	200mm x 150mm TEE CONNECTION IN 300mm MUNICIPAL WATERMAIN TO CITY OF OTTAWA STANDARDS	±94.75	±92.31	±2.44	–
A+01.3	22.5° VERTICAL BEND UP TO CITY OF OTTAWA STANDARDS	±94.75	92.31	±2.44	START OF 50mm THICK INSULATION AS PER CITY OF OTTAWA DRAWING No. W22
A+03.0	–	±94.79	93.01	±1.78	CROSSING 250 SAN TOP 90.63 WM U/S 92.86 – 2230mm CLEARANCE (MIN. 250mm REQ'D)
A+03.1	22.5° VERTICAL BEND DOWN TO CITY OF OTTAWA STANDARDS	±94.79	93.05	±1.74	
A+04.1	–	±94.81	93.05	±1.76	CROSSING 300 ST TOP ±92.65 WM U/S 92.90 – 250mm CLEARANCE (MIN. 250mm REQ'D)
A+05.1	22.5° VERTICAL BEND DOWN TO CITY OF OTTAWA STANDARDS	±94.77	93.05	±1.72	–
A+07.3	22.5° VERTICAL BEND UP TO CITY OF OTTAWA STANDARDS	±94.67	92.14	±2.53	END OF 50mm THICK INSULATION AS PER CITY OF OTTAWA DRAWING No. W22
A+12.1	150mm VALVE & VALVE BOX TO CITY OF OTTAWA STANDARDS	94.78	92.12	2.66	ON PROPERTY LINE
A+16.8 (B+00.0)	150mm x 150mm TEE TO CITY OF OTTAWA STANDARDS	94.58	92.10	2.48	–
A+17.4 (C+00.0)	TVS CONNECTION AS PER CITY OF OTTAWA DRAWING No. W33	94.55	92.10	2.45	–
A+17.9	150mm END CAP TO CITY OF OTTAWA STANDARDS	94.54	92.10	2.44	–

WATERMAIN CROSSING OVER SEWER AS PER CITY STANDARD W23.2

MATERIAL: 150mm PVC PRESSURE CLASS 150 DR18

B+00.0 (A+16.8)	150mm x 150mm TEE TO CITY OF OTTAWA STANDARDS	94.58	92.10	2.48	–
B+01.0	150mm VALVE & VALVE BOX TO CITY OF OTTAWA STANDARDS	94.55	92.08	2.47	–
B+03.0	–	94.50	92.03	2.47	CROSSING 200 SAN TOP 91.63 WM U/S 91.88 – 250mm CLEARANCE (MIN. 250mm REQ'D)
B+04.4	–	94.46	91.99	2.47	CROSSING 250 ST INV 92.49 WM TOP 91.99 – 500mm CLEARANCE (MIN. 500mm REQ'D)
B+05.7	–	94.43	91.98	2.45	BOTTOM OF CURB
B+11.7	22.5° BEND VERTICAL BEND DOWN TO CITY OF OTTAWA STANDARDS	94.35	91.95	2.40	–
B+12.7	22.5° BEND VERTICAL BEND UP TO CITY OF OTTAWA STANDARDS	94.35	91.55	2.80	–
B+13.2	–	94.35	91.55	2.80	CROSSING 450 ST U/S 92.05 WM TOP 91.55 – 500mm CLEARANCE (MIN. 500mm REQ'D)
B+15.2	45° BEND TO CITY OF OTTAWA STANDARDS	94.38	91.55	2.83	–
B+16.7	–	94.40	91.55	2.85	ENTRY INTO BUILDING

WATERMAIN CROSSING BELOW SEWER AS PER CITY STANDARD W25

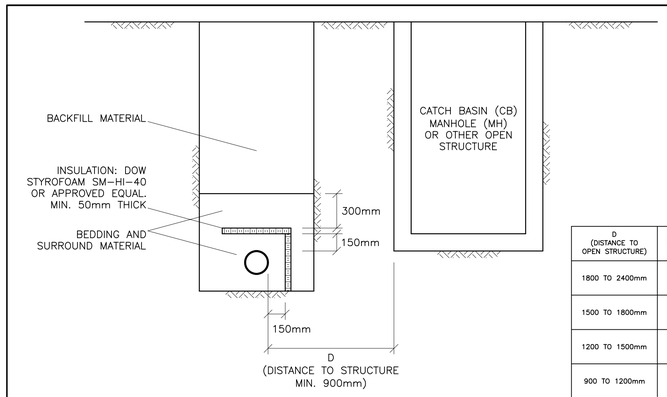
INSULATION AS PER CITY OF OTTAWA DRAWING No. W23 FROM B+02.8 TO B+06.0 AND FROM B+12.4 TO B+15.7

MATERIAL: 50mm PEX TUBING TO AWWA C–904 SDR 9 (CTS)

C+00.0 (A+17.4)	TVS CONNECTION AS PER CITY OF OTTAWA DRAWING No. W33	94.55	92.10	2.45	–
C+00.5	50mm CURB STOP & SERVICE POST TO CITY OF OTTAWA STANDARDS	94.57	91.94	2.63	–
C+04.9	–	94.38	91.23	3.15	CROSSING 100 ST INV 92.68 WM TOP 91.29 – 1390mm CLEARANCE (MIN. 500mm REQ'D)
C+05.2	–	94.37	91.19	3.18	19 COPPER WS CONNECTION
C+05.5	–	94.36	91.14	3.22	CROSSING 135 SAN INV 91.65 WM TOP 91.14 – 510mm CLEARANCE (MIN. 500mm REQ'D)
C+14.7	–	94.14	91.21	2.93	CROSSING 100 ST INV 92.72 WM TOP 91.23 – 1490mm CLEARANCE (MIN. 500mm REQ'D)
C+15.0	–	94.14	91.21	2.93	19 COPPER WS CONNECTION
C+15.3	–	94.14	91.21	2.93	CROSSING 135 SAN INV 91.74 WM TOP 91.23 – 510mm CLEARANCE (MIN. 500mm REQ'D)
C+20.0	–	94.14	91.25	2.89	CROSSING 250 ST INV 92.19 WM TOP 91.24 – 950mm CLEARANCE (MIN. 500mm REQ'D)
C+24.8	–	94.14	91.29	2.85	CROSSING 100 ST INV 92.76 WM TOP 91.26 – 1500mm CLEARANCE (MIN. 500mm REQ'D)
C+25.1	–	94.14	91.29	2.85	19 COPPER WS CONNECTION
C+25.4	–	94.14	91.29	2.85	CROSSING 135 SAN INV 91.80 WM TOP 91.29 – 510mm CLEARANCE (MIN. 500mm REQ'D)
C+32.3	50mm TO 19mm REDUCER TO CITY OF OTTAWA STANDARDS	94.14	91.29	2.85	19 COPPER WS CONNECTION

3130 WOODROFFE AVENUE CATCH–BASIN & MANHOLE SCHEDULE

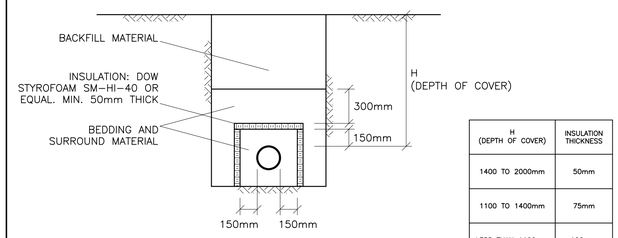
REF	TOP	SIZE	TYPE	INVERT AT INLET	INVERT AT OUTLET	NOTES
STORM SEWER						
CB/MH–0	93.67	1200mm	PRE–CAST CONCRETE CATCH–BASIN/MANHOLE	–	92.24	TO OPSD 701.010 & CITY OF OTTAWA STANDARDS – FRAME & COVER TO CITY OF OTTAWA DRAWING No. S25 & S28.1 OR OPSD 401.010
MH–1A	94.19	1500mm	PRE–CAST CONCRETE MANHOLE	92.23(W)	92.23(E)	TO OPSD 701.010 & CITY OF OTTAWA STANDARDS – FRAME & COVER TO CITY OF OTTAWA DRAWING No. S25 & S24.1 OR OPSD 401.010
MH–1B	94.23	1500mm	PRE–CAST CONCRETE MANHOLE	92.21(W)	92.21(E)	TO OPSD 701.010 & CITY OF OTTAWA STANDARDS – FRAME & COVER TO CITY OF OTTAWA DRAWING No. S25 & S24.1 OR OPSD 401.010
CB/MH–2	93.96	1200mm	PRE–CAST CONCRETE CATCH–BASIN/MANHOLE	92.17(W)	92.17(SE)	TO OPSD 701.010 & CITY OF OTTAWA STANDARDS – FRAME & COVER TO CITY OF OTTAWA DRAWING No. S25 & S28.1 OR OPSD 401.010 INSTALL ICD IN OUTLET PIPE
MH–3	94.36	1200mm	PRE–CAST CONCRETE MANHOLE	92.125(NW) 92.125(SW)	92.125(E)	TO OPSD 701.010 & CITY OF OTTAWA STANDARDS – FRAME & COVER TO CITY OF OTTAWA DRAWING No. S25 & S24.1 OR OPSD 401.010
MH–4	94.09	1200mm	PRE–CAST CONCRETE MANHOLE	–	92.66	TO OPSD 701.010 & CITY OF OTTAWA STANDARDS – FRAME & COVER TO CITY OF OTTAWA DRAWING No. S25 & S24.1 OR OPSD 401.010
MH–5	94.57	1200mm	PRE–CAST CONCRETE MANHOLE	92.48(NW)	92.15(NE)	TO OPSD 701.010 & CITY OF OTTAWA STANDARDS – FRAME & COVER TO CITY OF OTTAWA DRAWING No. S25 & S24.1 OR OPSD 401.010
CB/MH–6	93.94	1500mm	PRE–CAST CONCRETE CATCH–BASIN/MANHOLE	–	92.245	TO OPSD 701.010 & CITY OF OTTAWA STANDARDS – FRAME & COVER TO CITY OF OTTAWA DRAWING No. S25 & S28.1 OR OPSD 401.010
CB/MH–7	93.92	1500mm	PRE–CAST CONCRETE CATCH–BASIN/MANHOLE	92.225(W)	92.225(E)	TO OPSD 701.010 & CITY OF OTTAWA STANDARDS – FRAME & COVER TO CITY OF OTTAWA DRAWING No. S25 & S28.1 OR OPSD 401.010
CB/MH–8	93.43	1200mm	PRE–CAST CONCRETE CATCH–BASIN/MANHOLE	92.20(W)	92.20(E)	TO OPSD 701.010 & CITY OF OTTAWA STANDARDS – FRAME & COVER TO CITY OF OTTAWA DRAWING No. S25 & S28.1 OR OPSD 401.010
CB/MH–9	93.27	1200mm	PRE–CAST CONCRETE CATCH–BASIN/MANHOLE	92.19(W)	92.19(S)	TO OPSD 701.010 & CITY OF OTTAWA STANDARDS – FRAME & COVER TO CITY OF OTTAWA DRAWING No. S25 & S28.1 OR OPSD 401.010
CB/MH–10	93.29	1200mm	PRE–CAST CONCRETE CATCH–BASIN/MANHOLE	92.155(N)	92.155(S)	TO OPSD 701.010 & CITY OF OTTAWA STANDARDS – FRAME & COVER TO CITY OF OTTAWA DRAWING No. S25 & S28.1 OR OPSD 401.010
CB/MH–11	93.18	1200mm	PRE–CAST CONCRETE CATCH–BASIN/MANHOLE	92.115(N)	92.115(SW)	TO OPSD 701.010 & CITY OF OTTAWA STANDARDS – FRAME & COVER TO CITY OF OTTAWA DRAWING No. S25 & S28.1 OR OPSD 401.010 INSTALL ICD IN OUTLET PIPE
MH–12	94.14	1200mm	PRE–CAST CONCRETE MANHOLE	92.09(NE) 92.09(W)	92.09(S)	TO OPSD 701.010 & CITY OF OTTAWA STANDARDS – FRAME & COVER TO CITY OF OTTAWA DRAWING No. S25 & S24.1 OR OPSD 401.010
CB/MH–13	93.31	1200mm	PRE–CAST CONCRETE CATCH–BASIN/MANHOLE	91.90(N)	±91.84(E)	TO OPSD 701.010 & CITY OF OTTAWA STANDARDS – FRAME & COVER TO CITY OF OTTAWA DRAWING No. S25 & S28.1 OR OPSD 401.010
SANITARY SEWER						
MH–SA.1	94.04	1200mm	PRE–CAST CONCRETE MANHOLE	–	91.66	TO OPSD 701.010 & CITY OF OTTAWA STANDARDS – FRAME & COVER TO CITY OF OTTAWA DRAWING No. S25 & S24 OR OPSD 401.010
MH–SA.2	94.70	1200mm	PRE–CAST CONCRETE MANHOLE	91.40(NW)	91.39(SE)	TO OPSD 701.010 & CITY OF OTTAWA STANDARDS – FRAME & COVER TO CITY OF OTTAWA DRAWING No. S25 & S24 OR OPSD 401.010



D (DISTANCE TO OPEN STRUCTURE)	INSULATION THICKNESS
1800 TO 2400mm	50mm
1500 TO 1800mm	75mm
1200 TO 1500mm	100mm
900 TO 1200mm	125mm

INSULATE SEWER AS INDICATED.
CENTER INSULATION OVER PIPE.
JOINTS BETWEEN SHEETS OF INSULATION SHALL BE STAGGERED.

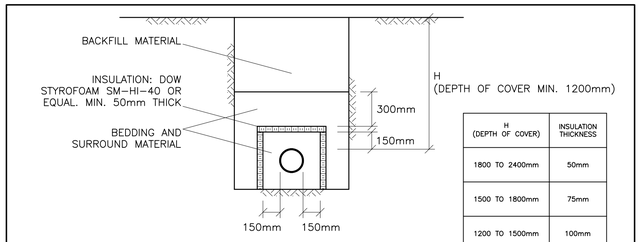
INSULATION OF WATERMAINS & WATER SERVICE CONNECTIONS AT OPEN STRUCTURES
AS PER CITY OF OTTAWA DRAWING No. W23
N.T.S



H (DEPTH OF COVER)	INSULATION THICKNESS
1400 TO 2000mm	50mm
1100 TO 1400mm	75mm
LESS THAN 1100mm	100mm

INSULATE SEWER AS INDICATED AND WHERE DEPTH OF COVER IS LESS THAN 2000mm.
CENTER INSULATION OVER PIPE.
JOINTS BETWEEN SHEETS OF INSULATION SHALL BE STAGGERED.

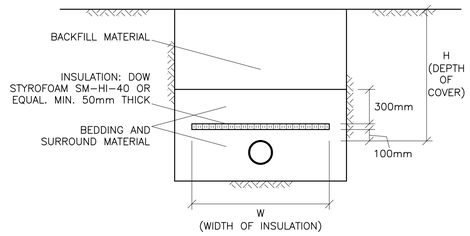
INSULATION OF SEWERS & SERVICE CONNECTIONS IN SHALLOW TRENCHES
N.T.S



H (DEPTH OF COVER)	INSULATION THICKNESS
1800 TO 2400mm	50mm
1500 TO 1800mm	75mm
1200 TO 1500mm	100mm

INSULATE WATERMAIN AS INDICATED AND WHERE DEPTH OF COVER IS LESS THAN 2400mm. PROVIDE A MINIMUM 1200mm COVER
CENTER INSULATION OVER PIPE.
JOINTS BETWEEN SHEETS OF INSULATION SHALL BE STAGGERED.

INSULATION OF WATERMAINS & WATER SERVICE CONNECTIONS IN SHALLOW TRENCHES
AS PER CITY OF OTTAWA DRAWING No. W22
N.T.S



INSULATE SEWER AS INDICATED AND WHERE DEPTH OF COVER IS LESS THAN 2000mm.
CENTER INSULATION OVER PIPE.
JOINTS BETWEEN SHEETS OF INSULATION SHALL BE STAGGERED.

INSULATION OF SEWERS IN SHALLOW TRENCHES
N.T.S

H (DEPTH OF COVER)	INSULATION THICKNESS	W (WIDTH OF INSULATION)
1400 TO 2000mm	50mm	1200mm + DIAMETER OF PIPE
1100 TO 1400mm	75mm	1800mm + DIAMETER OF PIPE
LESS THAN 1100mm	100mm	2400mm + DIAMETER OF PIPE

LEGEND

FFL	FINISHED FLOOR ELEVATION
TOF	TOP OF FOUNDATION
BFL	BASEMENT FLOOR ELEVATION
USF	UNDERSIDE OF FOOTING
	PROPERTY LINE
CB	CATCH–BASIN
MH	STORM MANHOLE
CB/MH	CATCH–BASIN/MANHOLE
MH	SANITARY MANHOLE
VC	VALVE CHAMBER
FH	FIRE HYDRANT
FDC	FIRE DEPARTMENT CONNECTION
CS	CURB STOP & STANDPOST
VB	VALVE & VALVE BOX
M	WATER METER
R	REMOTE WATER METER
PRV	PRESSURE REDUCING VALVE
SAN	SANITARY SEWER
ST	STORM SEWER
WS/WM	WATER SERVICE/WATERMAIN
OBV	OBVERT OF PIPE
SPL	SPRINGLINE OF PIPE
INV	INVERT OF PIPE
	150mm BARRIER CURB
D.C	DEPRESSED CURB

KEY PLAN

No.	DATE	REVISION
5	JAN 27–23	RE–ISSUED TO CITY FOR APPROVAL
4	OCT 31–22	RE–ISSUED TO CITY FOR APPROVAL
3	SEP 8–22	RE–ISSUED TO CITY FOR APPROVAL
2	MAR 17–22	ISSUED FOR APPROVAL
1	FEB 17–22	ISSUED FOR COORDINATION

D. B. GRAY ENGINEERING INC.
Stormwater Management - Grading & Drainage - Storm & Sanitary Sewers - Watermains
700 Long Point Circle 613-425-8044
Ottawa, Ontario d.gray@dbgrayengineering.com

Project
PROPOSED
1 STOREY DENTAL CLINIC &
4 2–STOREY SEMI–DETACHED,
3130 WOODROFFE AVENUE
OTTAWA, ONTARIO

Drawing Title
DETAILS & SCHEDULES

Drawn	D.B.G
Hor. Scale	1:200
Vert. Scale	
Date	FEB 17–21
Job No.	20055

Drawing No.
C–6
of 7

Engineer's Seal
LICENSED PROFESSIONAL ENGINEER
D.B. GRAY
17016502
JAN 27–23
PROVINCE OF ONTARIO
NOT VALID UNLESS SIGNED & DATED

D07–12–22–0055

#17351

OWNER:
Vo and Van Holdings Corporation
65 Loch Isle Road
Nepean, Ontario
K2H 8G7
613–720–4090

APPROVED
By Lily Xu at 12:55 pm, Apr 27, 2023

LILY XU, MCIP, RPP
MANAGER, DEVELOPMENT REVIEW SOUTH
PLANNING, INFRASTRUCTURE & ECONOMIC DEVELOPMENT DEPARTMENT, CITY OF OTTAWA