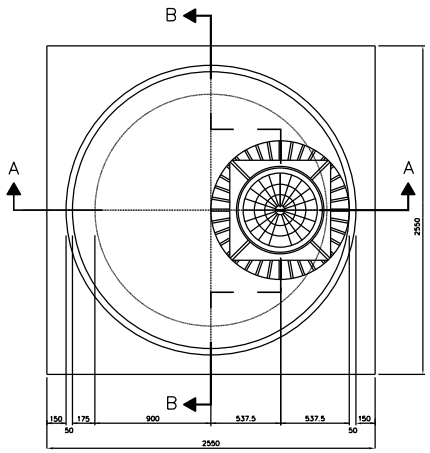
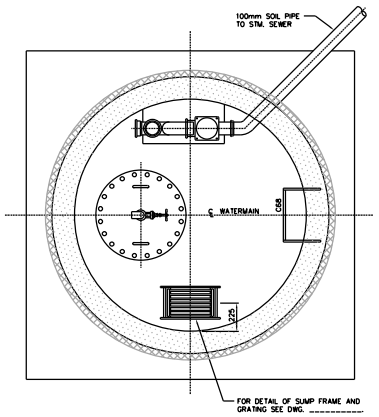
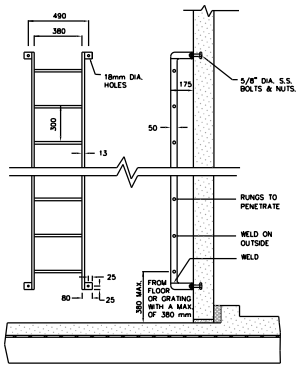


PLAN



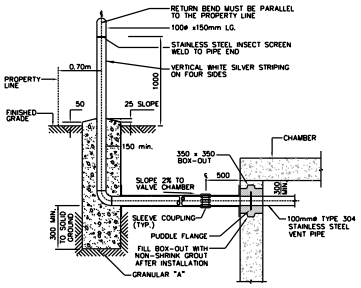
SECTION C–C



REMOVABLE ALUMINUM LADDER

NOT TO SCALE

SECTION
THROUGH LADDER RUNG
FULL SIZE

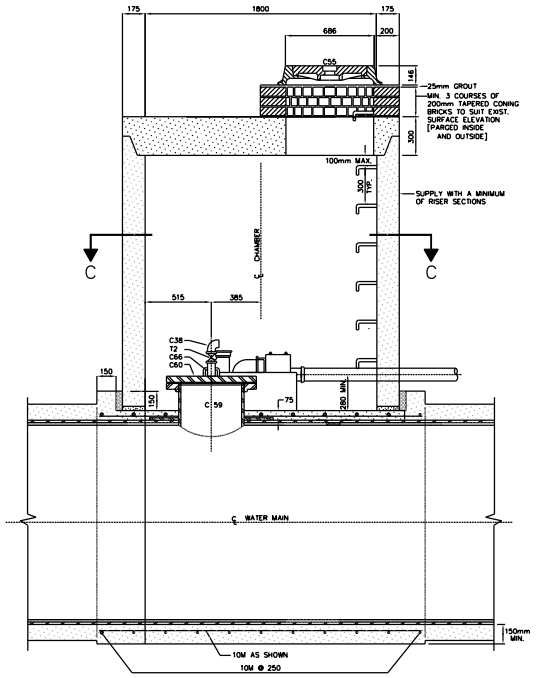


AIR VALVE
VENTILATION PIPING DETAIL

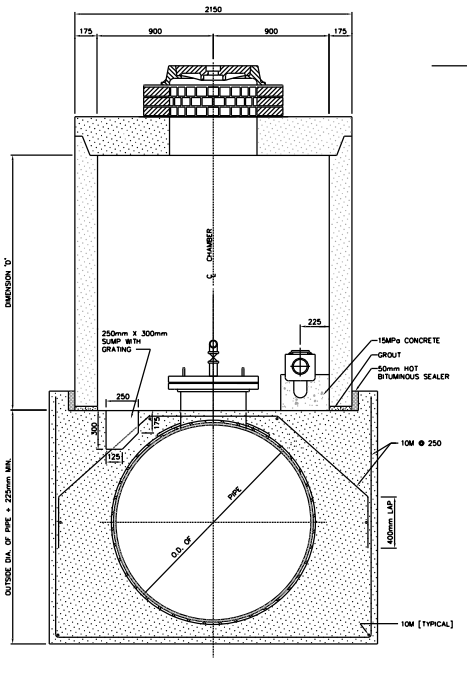
NOT TO SCALE

NOTES

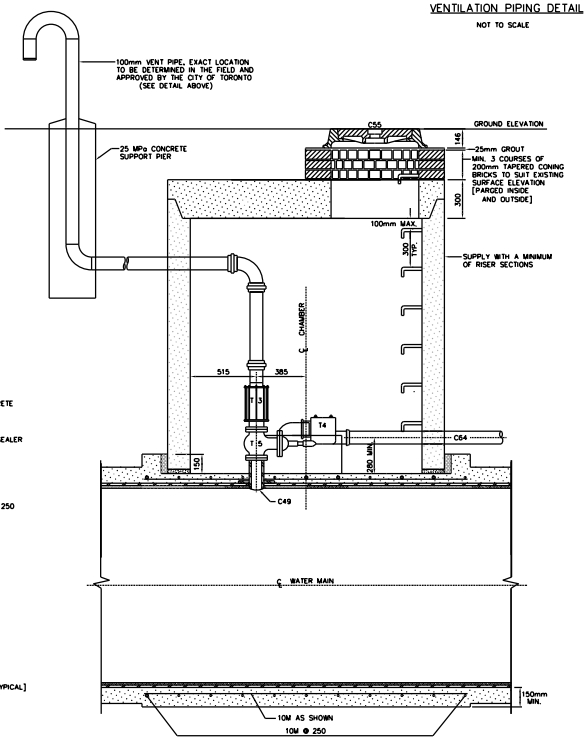
1. PRECAST MAINTENANCE HOLE A.S.T.M. C-478-72 (REINFORCED) RUBBER GASKET JOINTS.
2. PROVIDE SUMP PIT WITH GRATING IN ALL CHAMBERS AND SLOPE CHAMBER FLOOR TO SUMP 10mm PER METRE.
3. DRAIN CONNECTION TO SEWERS TO BE MADE BY THE CONTRACTOR, UNLESS OTHERWISE STATED IN THE GENERAL SPECIFICATIONS.
4. FOR CHAMBERS UNDER 2 METRES IN DEPTH, STANDARD STEPS MAY REPLACE THE LADDER.
5. STANDARD STEPS IN THE CHIMNEY TO BE OF THE REMOVABLE TYPE, AND NOT TO PROJECT MORE THAN 125mm BEYOND WALL.
6. CHAMBERS DEEPER THAN 4 METRES FROM SURFACE TO FLOOR, ONE OR MORE SAFETY GRATING SHALL BE INSTALLED. FOR GRATING DETAIL SEE DWG. No. _____.
7. ALL ALUMINUM SURFACES CONTACTING CONCRETE TO RECEIVE ONE COAT OF BITUMINOUS PAINT.
8. BACKFILLING TO BE BROUGHT UP EVENLY IN 300mm LAYERS AROUND CHAMBER.
9. SET BOTTOM SECTION OF CHAMBER ON 13mm STEEL SHIMS LEVEL AS REQUIRED AND COMPLETELY FILL VOID WITH APPROVED NON-SHRINK GROUT.
10. ALL JOINTS TO BE MORTARED ON OUTSIDE AND INSIDE.
11. PRIOR TO PLACING PRE-CAST ROOF SLAB ON CHAMBER THE FABRICATED MAINTENANCE HOLE COVER [C60] SHALL BE LOWERED INTO THE CHAMBER AND BE STORED AND PROTECTED UNTILL ITS INSTALLATION AFTER COMPLETION OF CEMENT MORTAR LINING.



SECTION A–A
FOR 100mm MAINTENANCE HOLE CHAMBER



SECTION B–B



SECTION A–A
FOR 100mm AIR VALVE CHAMBER

MATERIAL LIST / PER CHAMBER

MAINTENANCE HOLE CHAMBER

MARK No.	SUPPLIED BY CONTRACTOR
C38	1-50mm GALVANIZED STREET ELBOW
C59	1-FABRICATED MANHOLE FRAME
C60	1-FABRICATED MANHOLE COVER
C61	20-M30 x 125mm S.S. BOLTS & NUTS
C61	16-M16 x 75mm S.S. BOLTS & NUTS
C61	CINCH ANCHORS WITH M16 DIA. S.S. BOLT & NUT
C62	1-MANHOLE GASKET [FULL FACE, ONE PIECE]
C63	1-100mm TRAP WITH CLEANOUT & COVER
C64	1-100mm SOIL PIPING
C65	1-SUMP FRAME & GRATING [ALUMINUM]
C68	STANDARD ALUMINUM STEPS OR LADDERS
C66	1-50mm x 100mm LG. HEAVY DUTY BRASS NIPPLE, THREADED, TAPERED ENDS
C55	1-CAST IRON, SQUARE FRAME WITH CIRCULAR COVER AND PLUG FOR VALVE CHAMBERS AS PER OPSD-402.010

100mm AIR VALVE CHAMBER

MARK No.	SUPPLIED BY CONTRACTOR
C49	1-100mm FABRICATED NOZZLE
C61	16-M16 x 75mm BOLTS & NUTS
● C61	CINCH ANCHORS WITH M16 DIA. S.S. BOLT & NUT
C62	2-100mm GASKETS [FULL FACE, ONE PIECE]
● C63	1-100mm RUNNING TRAP WITH CLEANOUT & COVER
C64	1-100mm SOIL PIPING
C65	1-SUMP FRAME & GRATING [ALUMINUM]
C68	STANDARD ALUMINUM STEPS OR LADDERS
C39	1-13mm MALE INLET SINK FAUCET, ROUGH BRASS WITH HOSE END, EMCO #3710 OR EQUIVALENT
C55	1-CAST IRON, SQUARE FRAME WITH CIRCULAR COVER AND PLUG FOR VALVE CHAMBERS AS PER OPSD-402.010

MARK No.	SUPPLIED BY CITY OF TORONTO
T2	1-50mm GATE VALVE [SCREWED]
● T4	1-100mm BACKWATER CHECK VALVE

MARK No.	SUPPLIED BY CITY OF TORONTO
T3	1-100mm VENT-O-MAT SERIES RBX AIR RELEASE VALVE (FLANGED) OR EQUIVALENT
● T4	1-100mm BACKWATER CHECK VALVE
T5	1-100mm GATE VALVE [FLANGED]

● SUPPLY ONLY IF REQUIRED

MAINTENANCE HOLE CHAMBER (M.H.) CHAMBER

CHAMBER No.	CHAINAGE	SURFACE ELEV.	WATERMAIN ℄ ELEV.	DIFFERENCE IN ELEV.	'D' DIM.	DRAIN TO BE INSTALLED	DIRECTION OF DRAIN OUTLET	COVER LOCATION	FOR LOCATION REFER TO PLAN No.
		IN METRES							

100 mm AIR VALVE CHAMBER

CHAMBER No.	CHAINAGE	SURFACE ELEV.	WATERMAIN ℄ ELEV.	DIFFERENCE IN ELEV.	'D' DIM.	DRAIN TO BE INSTALLED	DIRECTION OF DRAIN OUTLET	COVER LOCATION	FOR LOCATION REFER TO PLAN No.
		IN METRES							

TORONTO Water

No.	DATE	REVISIONS	INITIAL	SIGNED

TORONTO Engineering & Construction Services

GENERAL MANAGER, TORONTO WATER	DIRECTOR, Design and Construction Linear Underground Infrastructure
EXECUTIVE DIRECTOR, Engineering & Construction Services	MANAGER, Design and Construction Linear Underground Infrastructure

Title
Subtitle1
Subtitle2

PRECAST 100 mm AIR VALVE OR M.H. CHAMBER

DESIGN	Design	DRAWN	Drawn	CHECKED	Checked	CONTRACT No. X-X	
SCALE	SCALE			DRAWING NUMBER	T-1110.07-4	SHEET	X OF X
DATE	DATE						