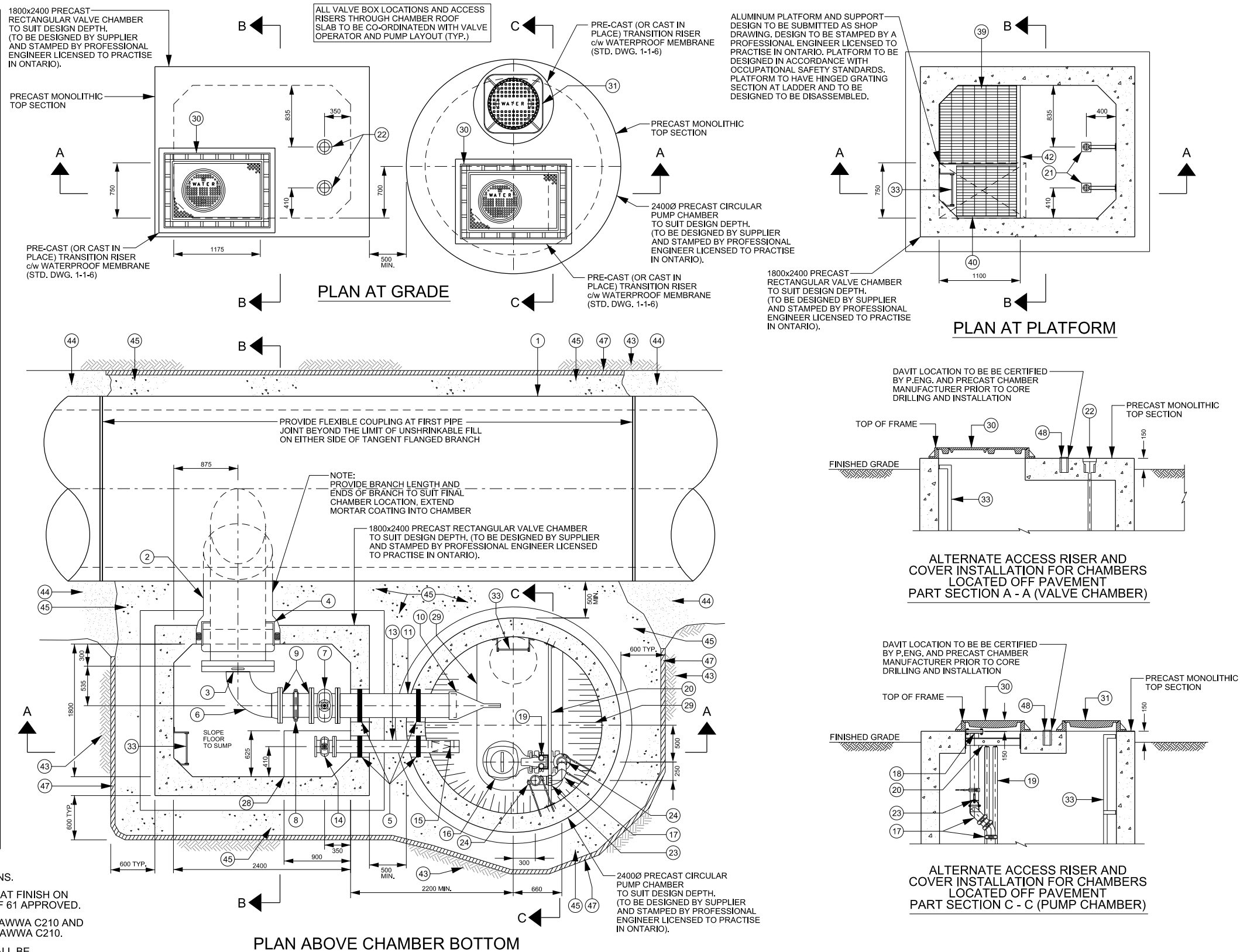


ITEM	ITEM DESCRIPTION	Category	
1	C.P.P. FEEDERMAIN AWWA C-301(E) AS PER DESIGN	Large Dia. CPP	
2	750Ø TANGENT FLANGED BRANCH (PIPE ACCESS)		
3	750x300Ø TANGENTIAL REDUCING FLANGE (CARBON STEEL), LIQUID EPOXY COATED TO AWWA C210, CEMENT MORTAR LINED c/w 13Ø LIFTING ROD HANDLE ON TOP EDGE OF FLANGE		
4	CPP WALL PIECE (STD. DWG. 1-3-4)		
5	LINK SEAL PENETRATION SEAL (OR APPROVED EQUAL)		
6	300Ø 90° L.R. LONG TANGENT ONE END DUCTILE IRON (LIQUID EPOXY COATED TO AWWA C210)		
7	300Ø FLANGED, RESILIENT SEAT GATE VALVE AWWA C-509 FUSION BONDED EPOXY SHOP COAT FINISH ON EXTERIOR OF VALVE, FBE INTERIOR COATING TO BE ANS/NSF 61 APPROVED c/w 50mm SQ. OPERATING NUT AND EXTENSION STEM		
8	300Ø VICTAULIC STYLE 31 COUPLING, FUSION BOND EPOXY SHOP COAT FINISH ON EXTERIOR, FBE INTERIOR COATING TO BE ANS/NSF 61 APPROVED. PIPE GAP AS PER MAUNFACTURER'S RECOMMENDATIONS.		
9	300Ø FLANGE x PLAIN END DUCTILE IRON CLASS 53 SPOOL PIECE (SUITABLE FOR VICTAULIC COUPLING)		
10	300Ø TIDEFLEX SERIES TF-1 CHECK VALVE, LOW HEAD OPENING, CONNECT TO DUCTILE IRON PIPE		
11	300Ø FLANGE x PLAIN END DUCTILE IRON CLASS 53 PIPE (SUITABLE FOR TIDEFLEX VALVE)		
12	Line Left Intentionally Blank	Small Diameter Pipe and Fittings	
13	150Ø FLANGE x PLAIN END DUCTILE IRON PIPE (SUITABLE FOR INLINE TIDEFLEX VALVE)		
14	150Ø FLANGED, RESILIENT SEAT GATE VALVE AWWA C-509 FUSION BONDED EPOXY SHOP COAT FINISH ON EXTERIOR OF VALVE, FBE INTERIOR COATING TO BE ANS/NSF 61 APPROVED c/w 50mm SQ. OPERATING NUT AND EXTENSION STEM		
15	150Ø TIDEFLEX CHECKMATE INLINE CHECK VALVE		
16	SUBMERSIBLE FLYGT PUMP AT SPECIFIED CAPACITY AND T.D.H. c/w DISCHARGE ELBOW ANCHORED TO CHAMBER BASE SECTION (QUANTITY AS SPECIFIED IN CONTRACT DOCUMENTS)		
17	100Ø STAINLESS STEEL DISCHARGE PIPE c/w S.S. VICTAULIC STYLE 489 COUPLINGS AS REQUIRED		
18	100Ø S.S. PUMP DISCHARGE CONNECTION (SEE DISCHARGE ADAPTER DETAIL)		
19	50Ø PUMP GUIDE RAILS LENGTH AS REQUIRED FOR INSTALLATION		
20	PUMP GUIDE RAIL SUPPORTS (SPACING AS RECOMMENDED BY PUMP MANUFACTURER) L-75x75x10 WITH CONCRETE ANCHORS AND ANCHOR PADS EACH END		
21	VALVE STEM EXTENSION SUPPORT (STD. DWG. 1-2-4) AT 2.0m c/c MAX. (TYP. ALL VALVES)		
22	VALVE BOX c/w SLEEVE AND EXTENSION STEM OPSD 1101.020 (TYP. ALL VALVES)		Pump & Accessories
23	PIPE SUPPORT CLEVIS HANGER MYATT FIG. 124L c/w HANGER ROD AND LOCK NUTS		
24	LATERAL PIPE SUPPORT MAX. 3.0m SPACING, STAINLESS STEEL WITH CHEMICAL EPOXY EMBEDDED BOLTS AND NEOPRENE WRAP AROUND PIPE		
25	Line Left Intentionally Blank		
26	STEEL VALVE SUPPORT c/w CONCRETE BASE (STD. DWG. 1-2-6) (CONCRETE BASE HEIGHT TO SUIT INSTALLATION)		
27	PIPE STANCHION / SADDLE SUPPORT BY MYATT FIG. 304		
28	SUMP c/w FRAME AND GRATE (STD. DWG. 1-1-8, MODIFIED TO SUIT DIMENSIONS SHOWN)		
29	20MPa CONC. BENCHING @ 45° AS PER DESIGN (DISTANCE FROM PUMP AS RECOMMENDED BY PUMP MANUFACTURER)		
30	TWO PIECE VALVE CHAMBER COVER AS PER OPSD 402.030; WORD "WATER" TO BE EMBOSSED IN COVER		
31	LOCKING FRAME AND COVER AS PER OPSD 401.060; WORD "WATER" TO BE EMBOSSED IN COVER		
32	Line Left Intentionally Blank	Equipment Supports	
33	ALUMINUM ACCESS LADDER AS PER OPSD 406.010 c/w BRACKETS TO SUIT CHAMFER AT CORNER OF PRECAST CHAMBER AS NECESSARY		
34	ALUMINUM CHANNEL		
35	76.2x76.2x9.52 ALUMINUM ANGLE FULLY WELDED TO SUPPORT AT EACH END		
36	ADJUSTMENT BRACKETS 6mm PLATE 304 STAINLESS STEEL		
37	19Øx150 HILTI EXPANSION ANCHOR c/w NUT, LOCK AND FLAT WASHER 316 STAINLESS STEEL		
38	13Ø BOLT c/w NUT, LOCK AND FLAT WASHER 316 STAINLESS STEEL		
39	ALUMINUM GRATING CSA H5A 6351-T6 BORDEN B#6 32x5 BANDED c/w ALUMINUM HOLD DOWN CLIPS		
40	HINGED REST PLATFORM @ 5.0m MAX. SPACING, WITH METHOD OF ATTACHING RAISED PLATFORM TO WALL		
41	150x6 ALUMINUM KICK PLATE		
42	40Ø SCHED. 80 ANODIZED ALUMINUM HANDRAIL ANCHORED TO PLATFORM		Chamber Accessories
43	UNDISTURBED GROUND OR COMPACTED SELECT BACKFILL TO 100% SPMDD		
44	BACKFILL MATERIAL AS SPECIFIED		
45	UNSHRINKABLE FILL		
46	CONCRETE MUD MAT 150mm THK. MIN.		
47	100mm RIGID STYROFOAM INSULATION IF WATERMAIN IS IN ROCK OR SHALE TRENCH		
48	EME FLUSH MOUNTED STAINLESS STEEL DAVIT SOCKET, CORE DRILL CONCRETE SLAB FOR SOCKET SUITABLE FOR EME 1100CH LIFTING DAVIT AND SEAL OPENING WITH NON-SHRINK EPOXY GROUT. DAVIT SOCKETS ONLY TO BE USED WITH ALTERNATE ACCESS RISER FOR OFF PAVEMENT LOCATION (FINAL SOCKET LOCATION TO BE DETERMINED ON SITE BY THE ENGINEER)		
		Platforms, Ladders & Accessories	
			Chamber Bedding
		Misc.	

NOTE

- REFER TO TYPICAL DOUBLE DRAIN CHAMBER DETAIL 2 OF 2 (STD. DWG. 1-3-45) FOR SECTIONS.
- ALL VALVES TO BE RESILIENT SEAT TO AWWA C509, FUSION BONDED EPOXY (FBE) SHOP COAT FINISH ON INTERIOR AND EXTERIOR OF VALVE TO AWWA C550. INTERIOR COATING TO BE FBE ANS/NSF 61 APPROVED.
- INTERIOR OF ALL STEEL (NOT STAINLESS STEEL) PIPE SHALL BE LIQUID EPOXY COATED TO AWWA C210 AND BE ANS/NSF 61 APPROVED. ALL EXTERIOR SURFACES SHALL BE LIQUID EPOXY COATED TO AWWA C210.
- INTERIOR OF ALL DUCTILE IRON PIPE AND FITTINGS IN CONTACT WITH POTABLE WATER SHALL BE CEMENT MORTAR LINED TO AWWA C104.
- VALVE STEM EXTENSION SUPPORT BRACKETS SHALL SUPPORT TOTAL WEIGHT OF THE EXTENSION STEM, NO FORCES SHALL BE TRANSMITTED TO THE VALVE OR GEARBOX.
- ALL STAINLESS STEEL PIPE WILL BE 304L SCHEDULE 40 TO ASTM A776.
- ALL FLANGE BOLTS TO BE STAINLESS STEEL.
- ALL ALUMINUM IN CONTACT WITH CONCRETE SHALL RECEIVE TWO COATS OF BITUMINOUS PAINT.
- ALL PIPE AND VALVE SUPPORTS AS PER STD. DWG. 1-2-6 c/w 6mm NEOPRENE BOND BREAKER AT ALL CONTACT POINTS. PROVIDE PIPE SUPPORTS WITHIN A MAXIMUM DISTANCE OF ONE PIPE DIAMETER FROM ALL VICTAULIC COUPLINGS.
- CHAMBERS TO BE WATERPROOFED AS PER STD. DWG. 1-1-6.
- ALL COVERS LOCATED OFF PAVEMENT, SHALL BE RAISED A MIN. OF 150mm ABOVE SURROUNDING GRADE LEVEL TYP.
- ALL PIPING, FITTINGS, VALVES, APPURTENANCES AND MECHANICAL RESTRAINTS TO BE c/w DENSO PASTE, DENSO MASTIC AND DENSO TAPE OR APPROVED EQUAL, APPLIED TO MANUFACTURER'S RECOMMENDATIONS.



**PUBLIC WORKS
STANDARD DRAWING**

**TYPICAL DOUBLE DRAIN CHAMBER FOR CONCRETE
PRESSURE PIPE 750 DIAMETER OR GREATER
DETAIL 1 OF 2**

REV. DATE: APRIL 2014

APPROVED BY	DRAWN BY
A.P.	AINLEY GROUP
STD. DWG. NUMBER	SCALE
1-3-44	N.T.S.