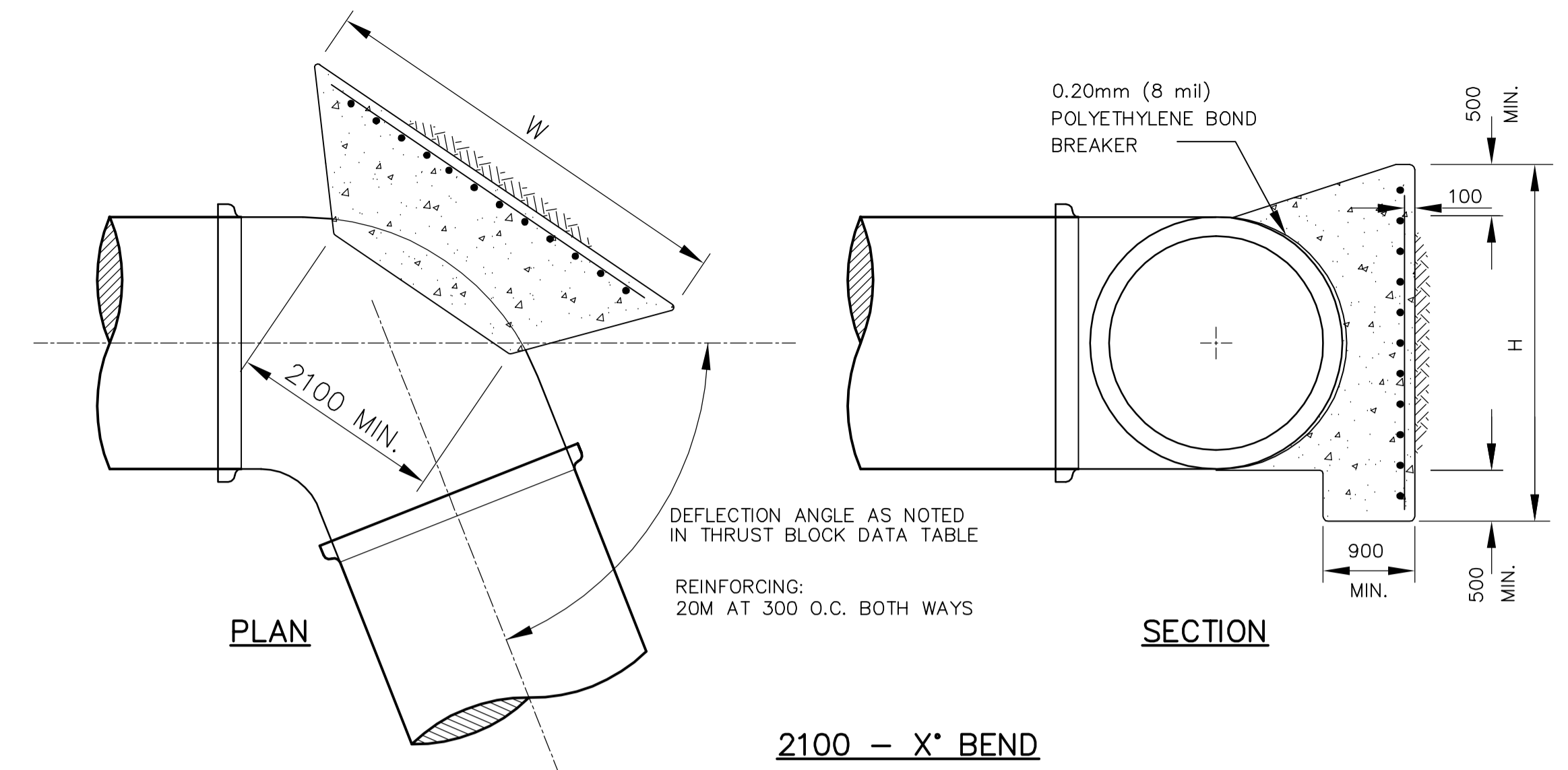
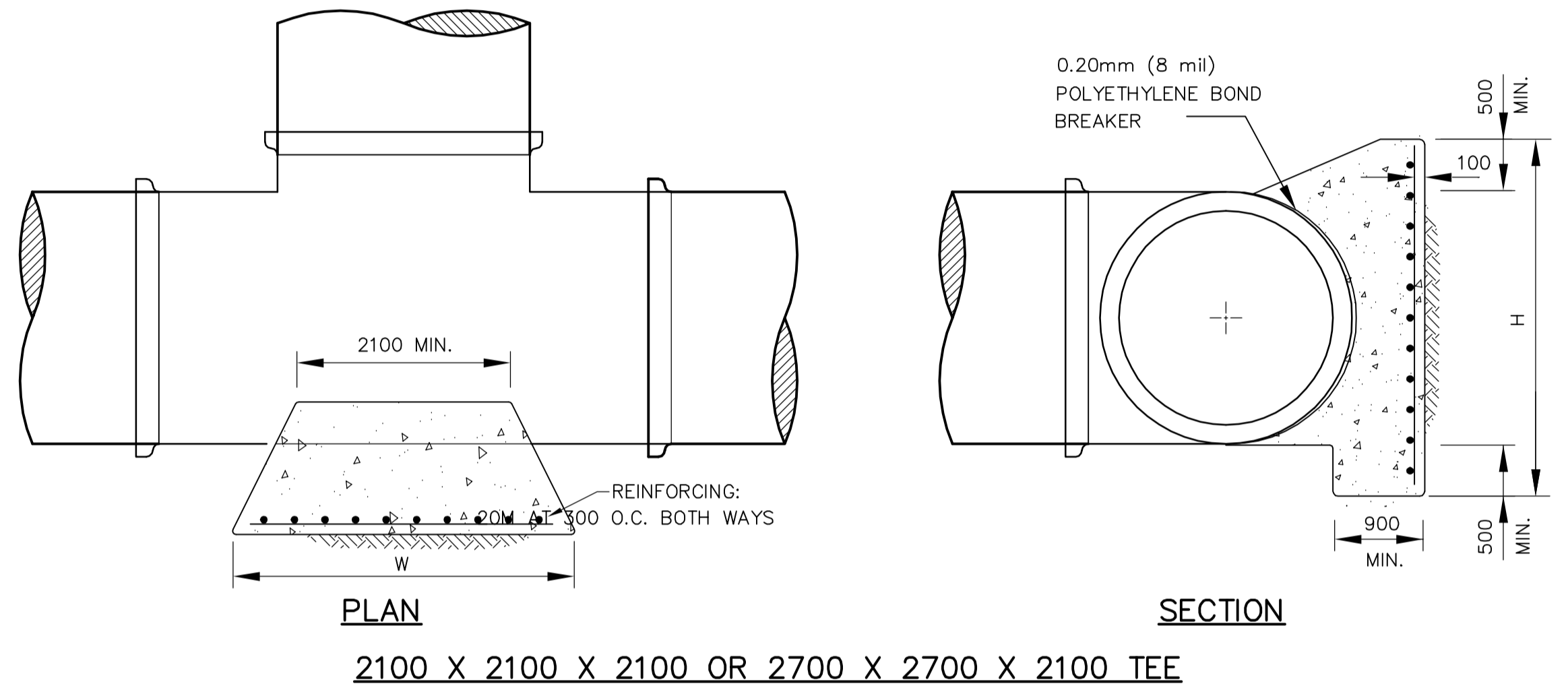


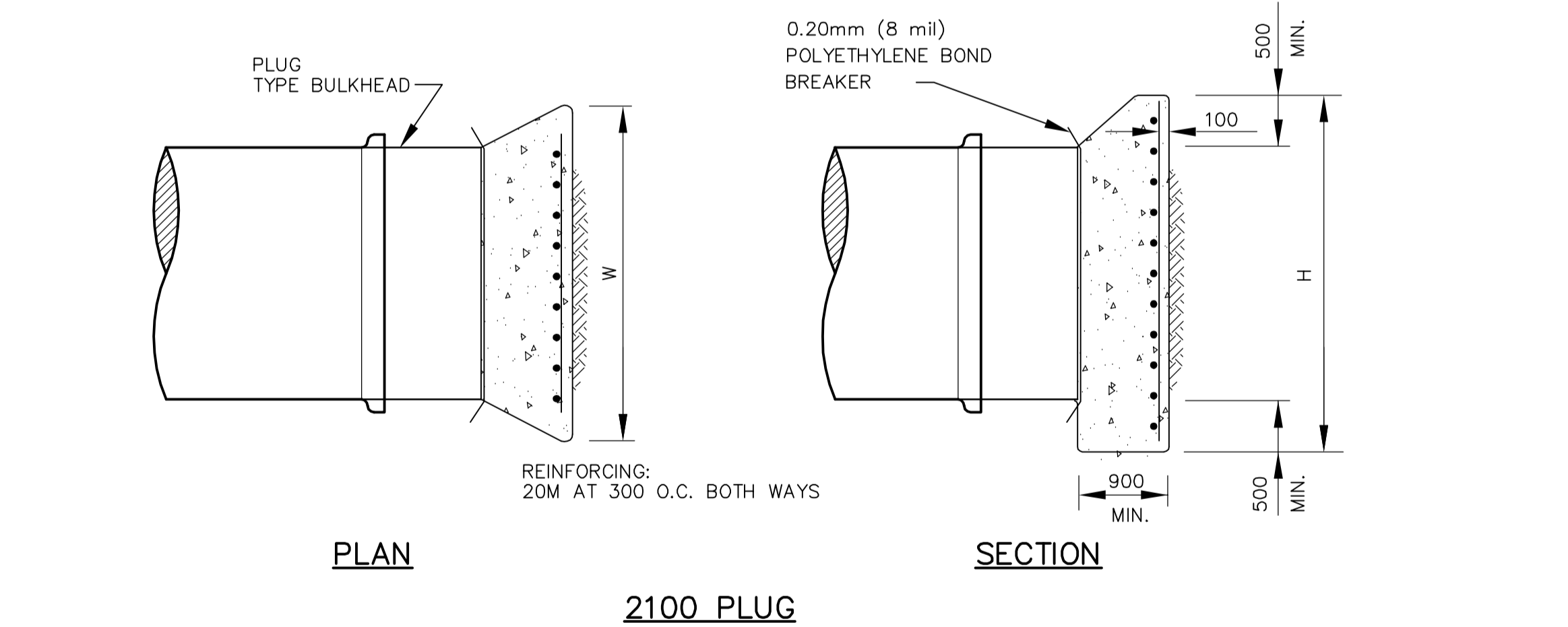
EXISTING WELDED-IN-PLACE TORISPHERICAL BULKHEAD REMOVAL DETAIL



2100 - X° BEND



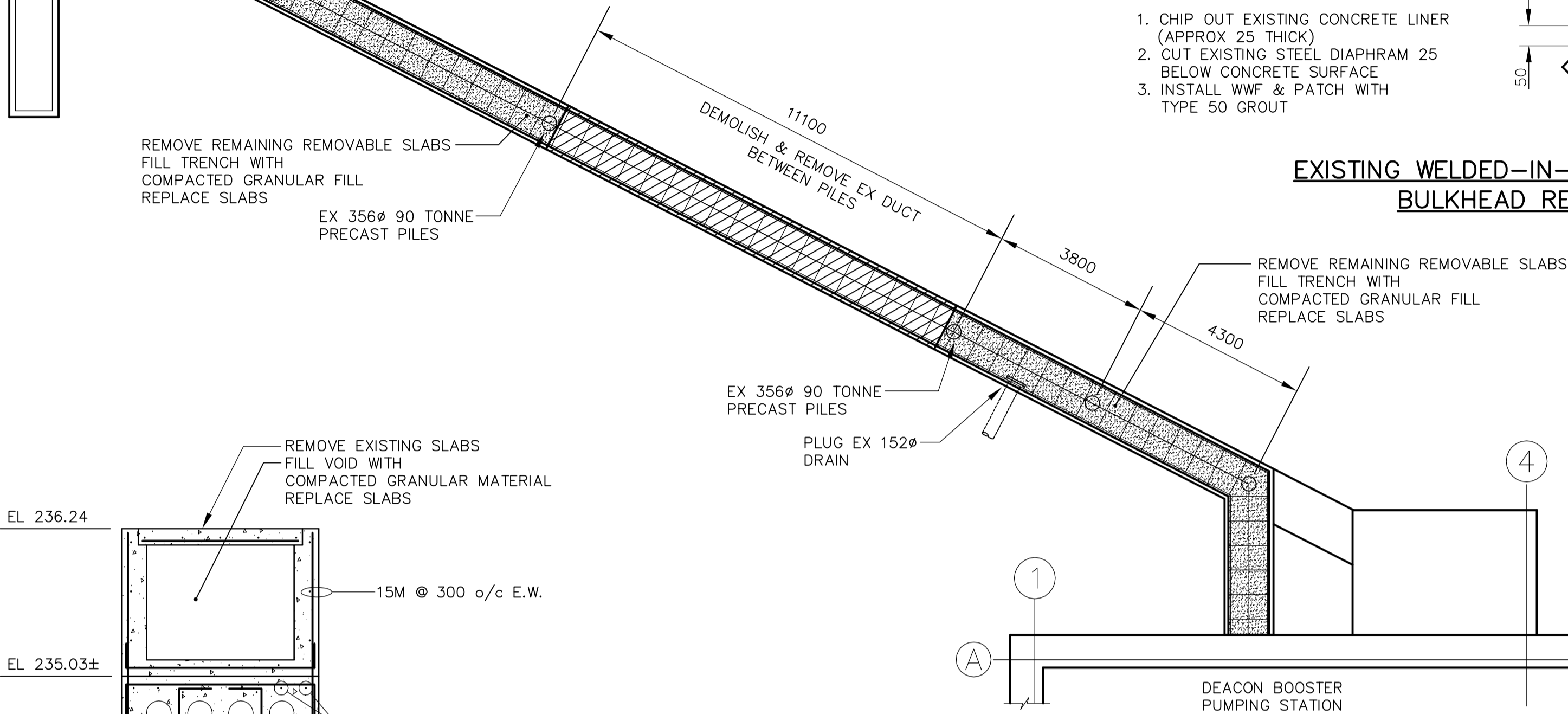
2100 X 2100 X 2100 OR 2700 X 2700 X 2100 TEE



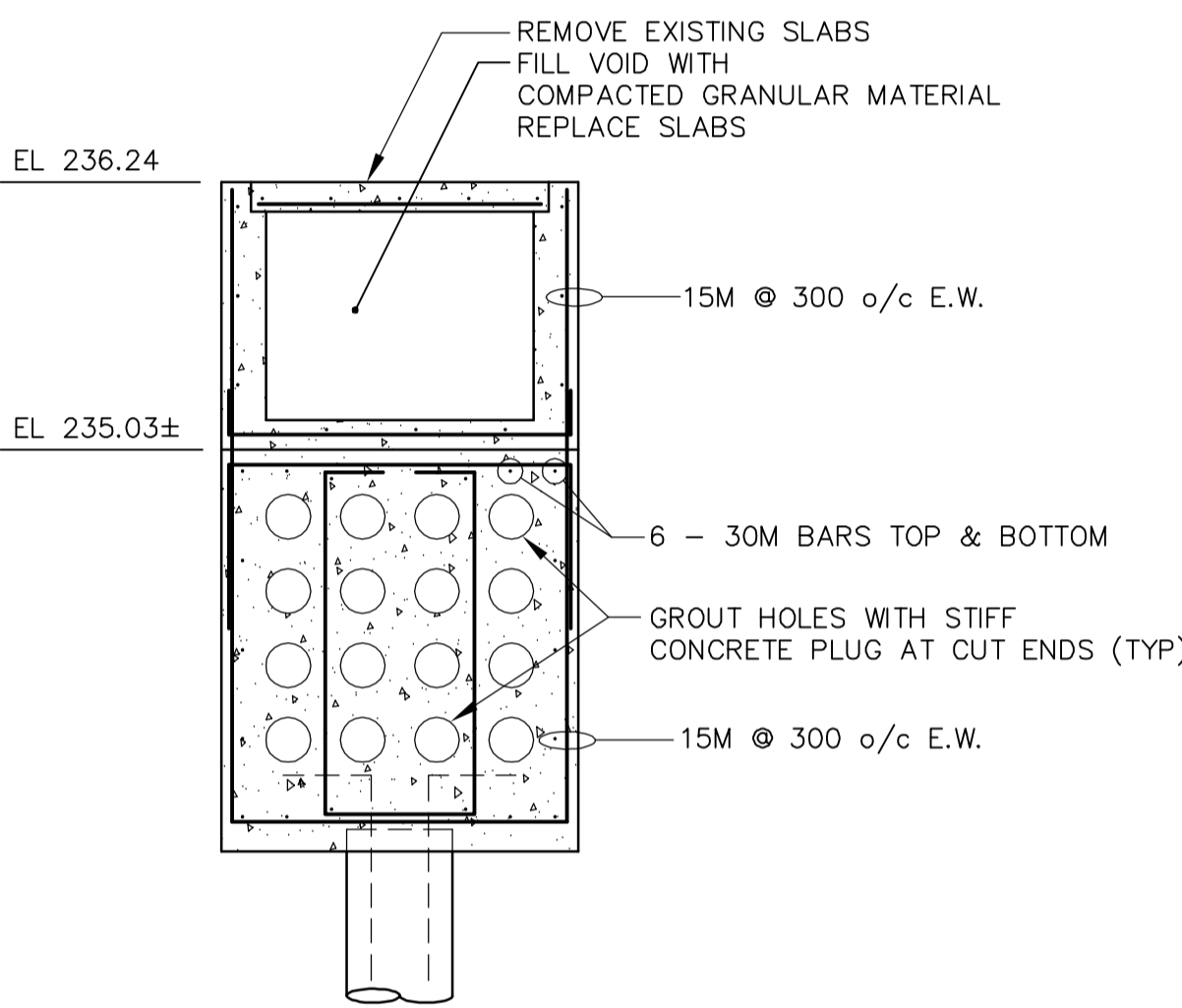
2100 PLUG

THRUST BLOCK DATA TABLE

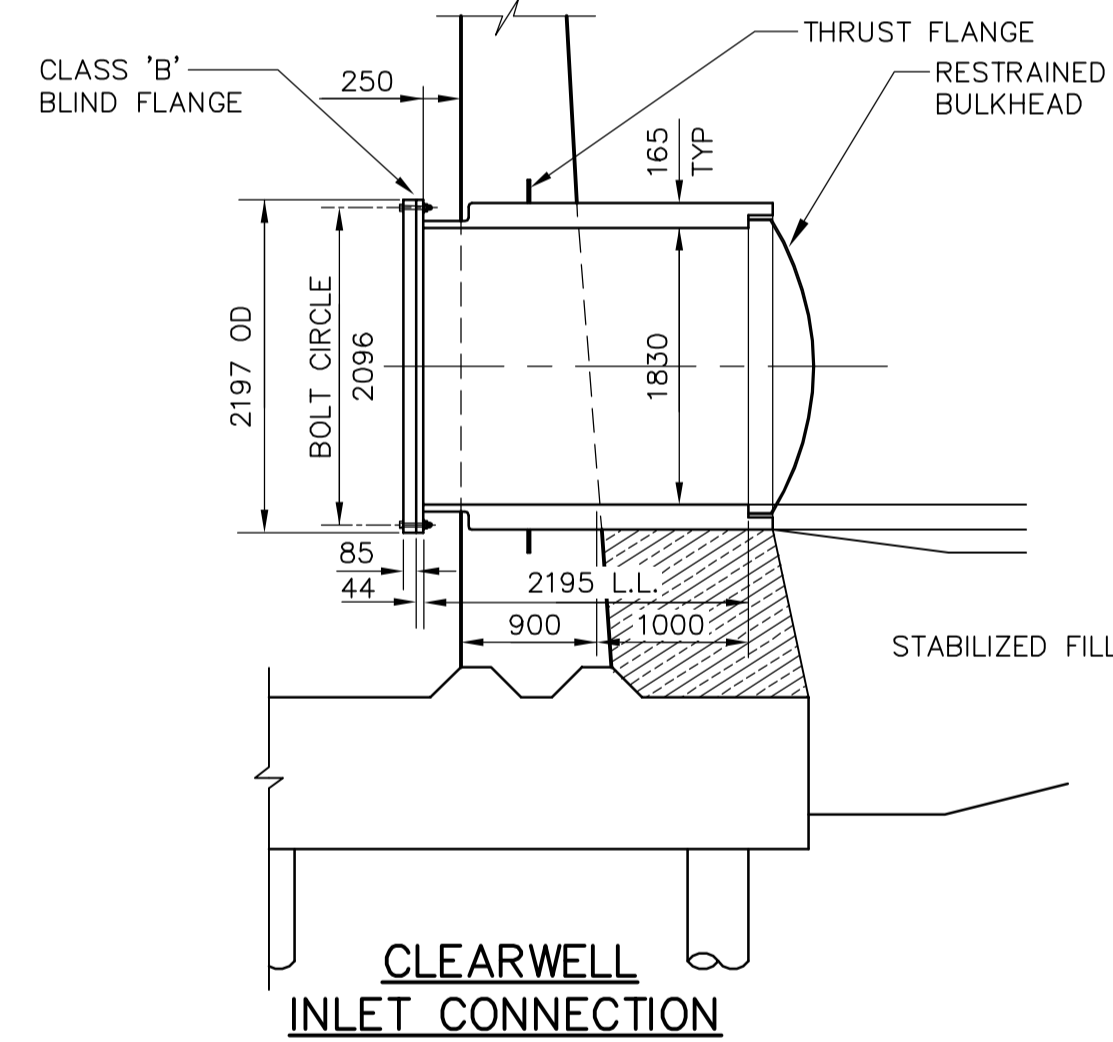
ITEM	HEAD (m)	PRESSURE (Kpa)	THRUST (KN)	SOIL BEARING CAPACITY (Kpa)	BEARING AREA (m ²)	H (m)	W (m)	D (m)
2100ø CELL 1 RW 45° BEND	11.0	108	296	43.1	6.9	3.1	2.3	0.9
2100ø CELL 1 TW 45° BEND	14.0	137	376	43.1	8.8	3.1	2.9	0.9
2100ø CELL 1 TW TEE	14.0	137	491	43.1	11.4	3.1	3.7	0.9
2100ø CELL 3 RW 45° BEND	11.5	113	308	43.1	7.2	3.1	2.4	0.9
2100ø CELL 3 RW 11.25° BEND	10.5	103	72	43.1	1.7	2.1	0.9	0.9
2100ø CELL 3 RW TEE	9.5	93	333	43.1	7.8	3.1	2.6	0.9
2100ø CELL 3 TW 15° BEND	14.0	137	128	43.1	3.0	2.1	1.5	0.9
2100ø CELL 3 TW 45° BEND	14.0	137	376	43.1	8.8	3.1	2.9	0.9



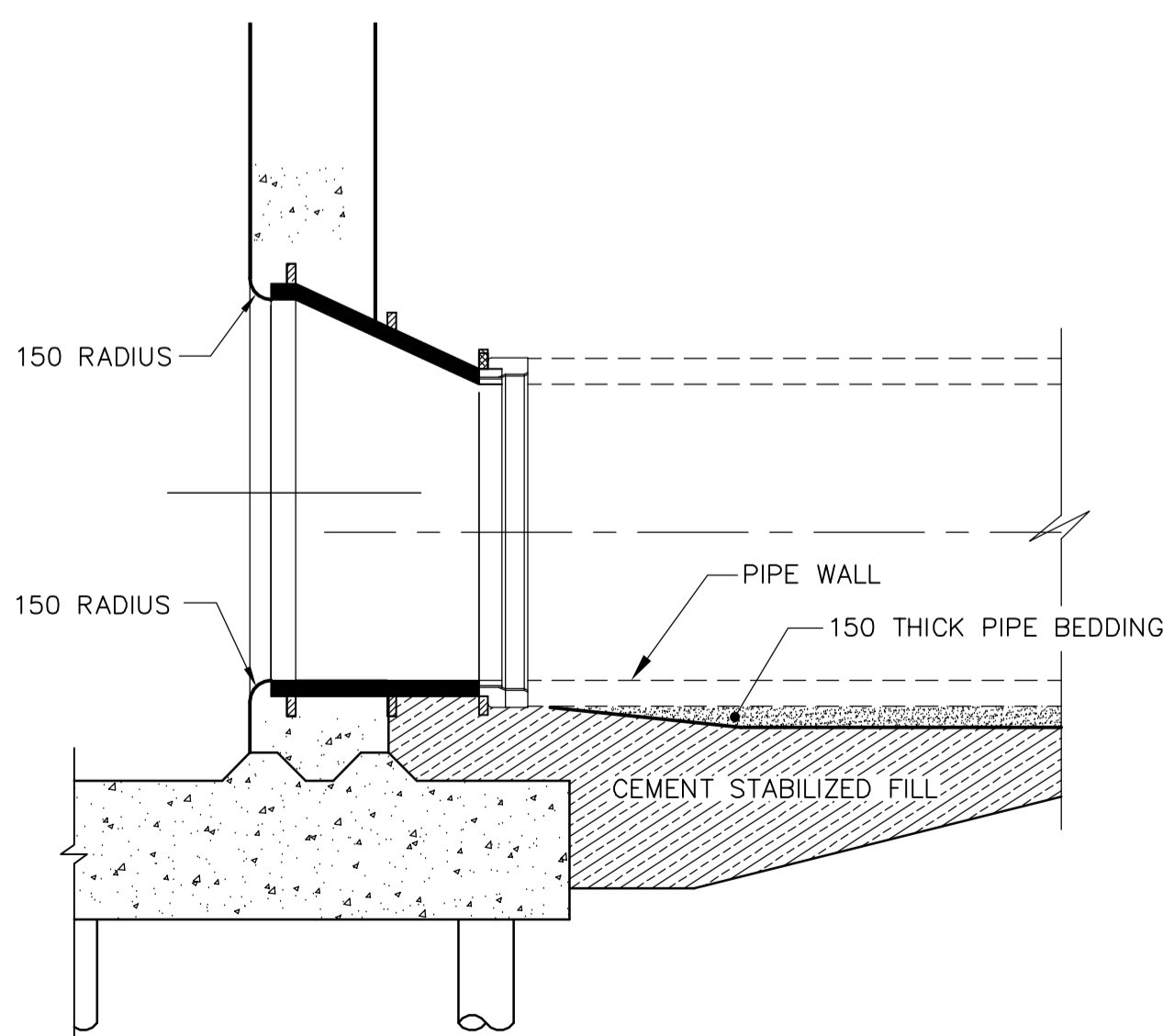
PLAN OF EXISTING CHLORINE TRENCH & ELECTRICAL DUCT BANK



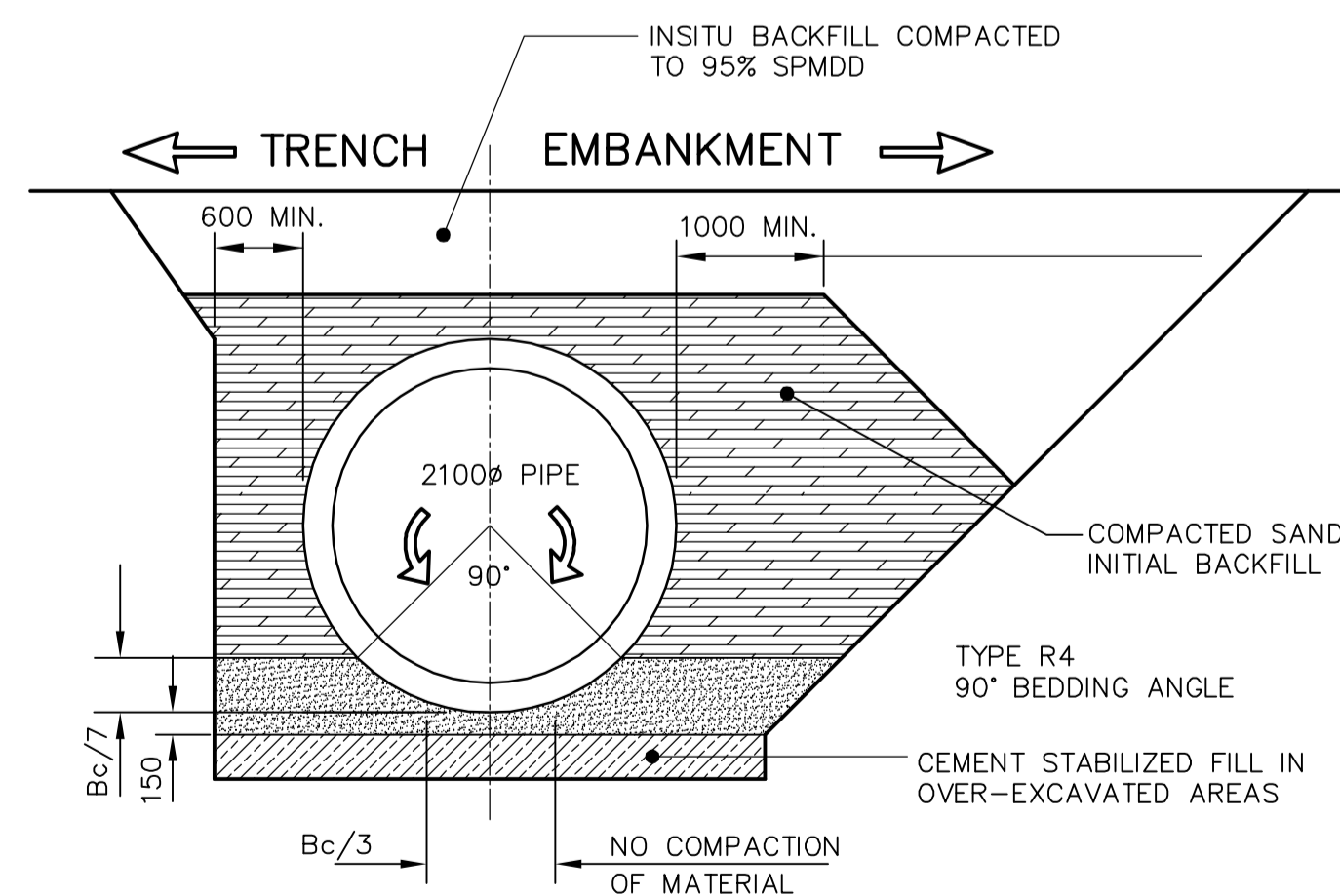
SECTION THRU EXISTING CHLORINE TRENCH & ELECTRICAL DUCT BANK



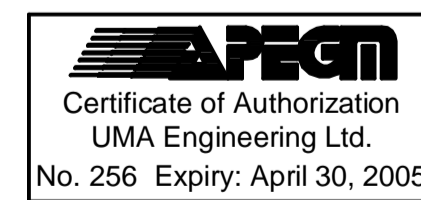
CLEARWELL INLET CONNECTION



CLEARWELL DISCHARGE CHAMBER CONNECTION



TYPICAL PIPE BEDDING BACKFILL



B.M. ELEV.	UMA AECOM	ENGINEER'S SEAL	THE CITY OF WINNIPEG WATER AND WASTE DEPARTMENT ENGINEERING DIVISION
	©2005 UMA ENGINEERING LTD. ALL RIGHTS RESERVED.	ORIGINAL SIGNED BY C. C. MACEY 2005/04/17	WINNIPEG WATER TREATMENT PROGRAM CONSTRUCTION OF YARD PIPING AND VALVE CHAMBERS
	DESIGNED BY: MGM CHECKED BY: CCM DRAWN BY: Wjd APPROVED BY: Bryan Weber	CONSULTANT DRAWING NO. WY C008	CITY FILE NUMBER SHEET 1 OF 1 CITY DRAWING NUMBER 1-0601Y-C-C0008-001-00D
0 ISSUED FOR TENDER 05/04/14 Wjd	HOR. SCALE: AS NOTED VERTICAL SCALE: AS NOTED	RELEASED FOR CONSTRUCTION BY: R. A. Sorokowski	CIVIL MISCELLANEOUS YARD PIPING DETAILS
A ISSUED FOR REVIEW 05/04/06 Wjd	DATE 2005/03/22	DATE April 17, 2005	
NO. REVISIONS	DATE	DATE	