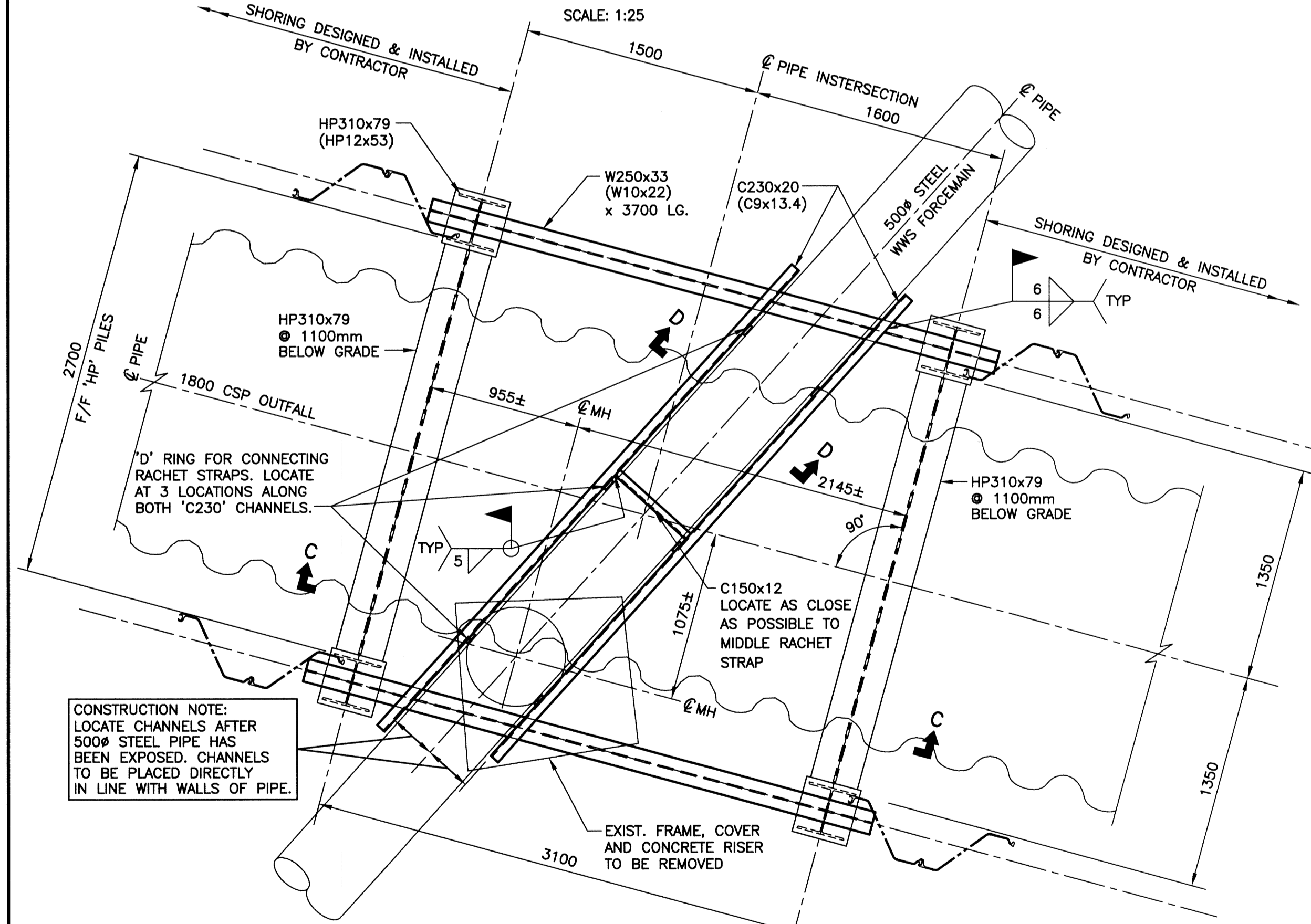
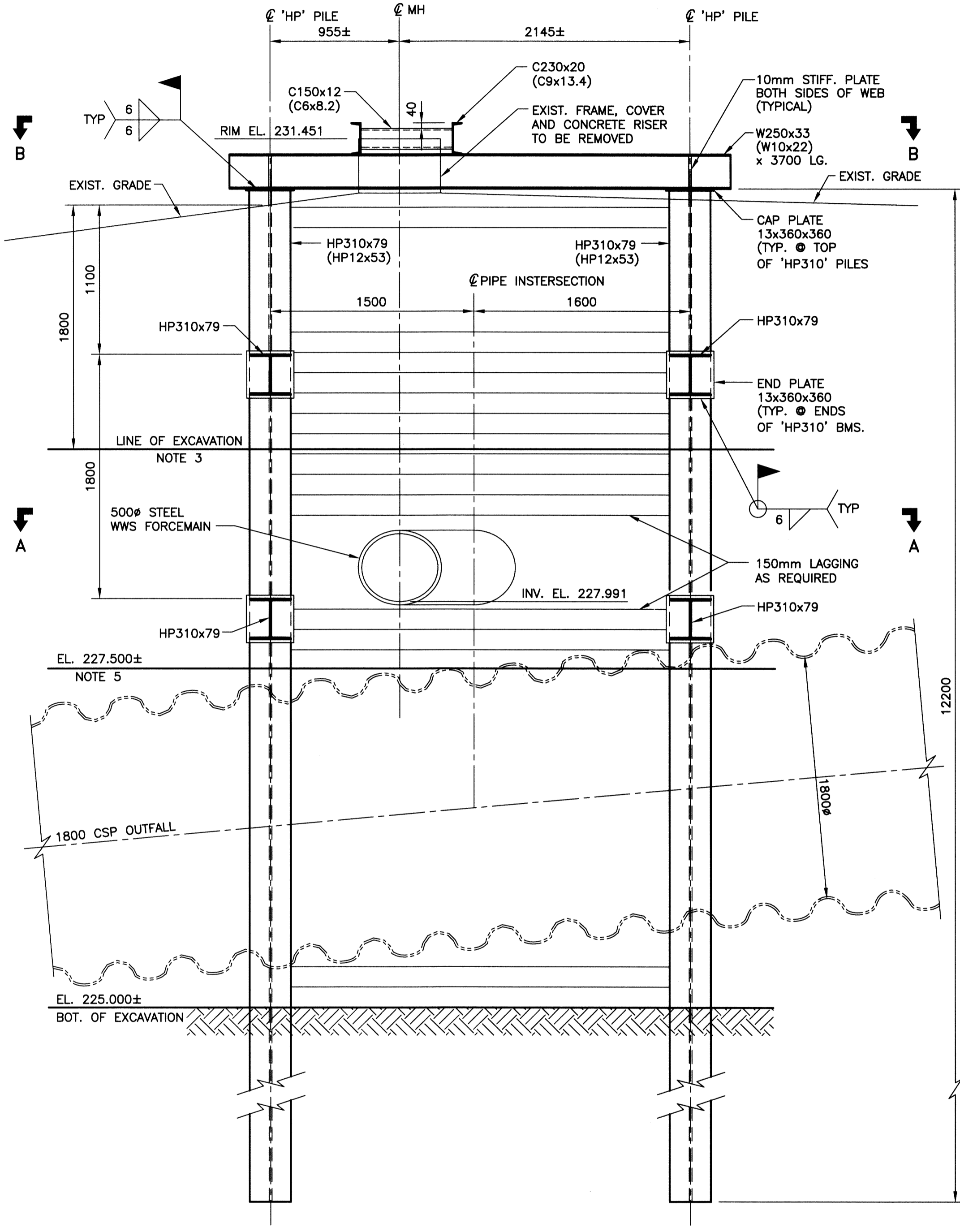


PLAN A-A
SCALE: 1:25

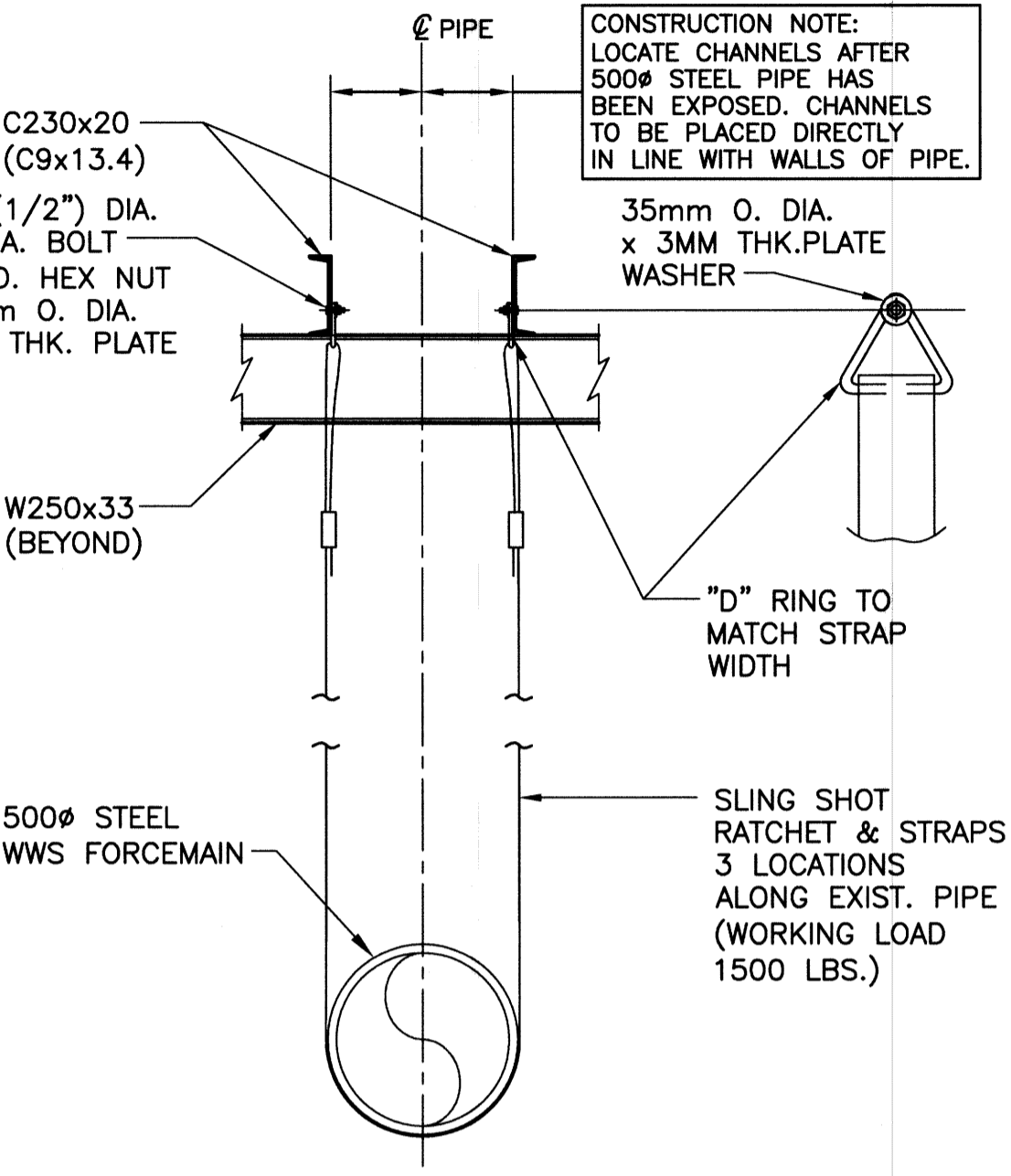


PLAN B-B
SCALE: 1:25

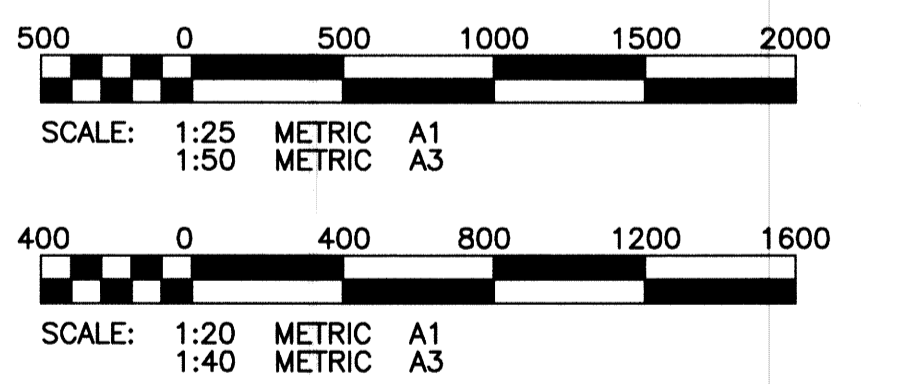


SECTION C-C
SCALE: 1:25

- CONSTRUCTION SEQUENCE:**
1. LOCATE FORCEMAIN AND OUTFALL AT INTERSECTION POINT.
 2. DRIVE 'HP' PILES (AND SHORING ON EITHER SIDE OF PILES).
 3. EXCAVATE TO 1800mm BELOW GRADE, INSTALLING LAGGING AS EXCAVATION PROGRESSES. INSTALL UPPER 'HP' STRUTS.
 4. EXCAVATE TO EXPOSE FORCEMAIN. INSTALL SUPPORT FRAMING AT GRADE AND PROVIDE SUPPORT FOR FORCEMAIN.
 5. EXCAVATE TO ELEV. 227.5± M. INSTALL LOWER 'HP' STRUTS.
 6. COMPLETE EXCAVATION TO ELEV. 225.0 M.
 7. FORCEMAIN TO BE PROTECTED FROM FREEZING DURING CONSTRUCTION.



SECTION D-D
SCALE: 1:20



METRIC
WHOLE NUMBERS INDICATE MILLIMETRES
DECIMALIZED NUMBERS INDICATE METRES

APEGM
Certificate of Authorization
KGS Group
No. 245

P:\Projects\2012\12-0107-013\Drawings\DWG\12-0107-013.LD-6953-Rev 0.dwg - Tab: LD-6953-Rev 0.dwg - 11/29/2012 (Thu 11:58am)
 COWI LEGEND

150 WM	WATERMAIN	150 WM	HYDRO	150 WM	WATERMAIN	150 WM
+	HYDRANT	+	M.T.S.	+	HYDRANT, VALVE	+
⊗	VALVE	⊗	CONCRETE	⊗	LAND DRAINAGE SEWER	⊗
300 LBS	LAND DRAINAGE SEWER	300 LBS	ASPHALT	250 WWS	WASTE WATER SEWER	250 WWS
250 WWS	WASTE WATER SEWER	250 WWS	SIDEWALK	⊗	PROFILE	⊗
○	MANHOLE	○	KGS TEST HOLE	⊗	NORTH/WEST GUTTER	⊗
□	CATCH BASIN	□	PROPERTY LINE	⊗	SOUTH/EAST GUTTER	⊗
▽	CURB INLET	▽	SURVEY BAR	⊗	N/W, S/E P'S	⊗
+	JUNCTIONS	+	DITCH	⊗	N/W, S/E TOP/CURB	⊗
⊞	CULVERT	⊞	ELEVATION	⊞	NORTH/WEST DITCH	⊞
⊞	GAS	⊞		⊞	SOUTH/EAST DITCH	⊞
EXISTING	LEGEND-PLAN	PROPOSED	EXISTING	LEGEND-PLAN	PROPOSED	EXISTING
EXISTING	LEGEND-PROFILE	PROPOSED	EXISTING	LEGEND-PROFILE	PROPOSED	EXISTING

LOCATION APPROVED UNDERGROUND STRUCTURES

DATE COMMITTEE

NOTE:
LOCATION OF UNDERGROUND STRUCTURES AS SHOWN ARE BASED ON THE BEST INFORMATION AVAILABLE BUT NO GUARANTEE IS GIVEN THAT ALL EXISTING UTILITIES ARE SHOWN OR THAT THE GIVEN LOCATIONS ARE EXACT. CONFIRMATION OF EXISTENCE AND EXACT LOCATION OF ALL SERVICES MUST BE OBTAINED FROM THE INDIVIDUAL UTILITIES BEFORE PROCEEDING WITH CONSTRUCTION.

B.M. KGS BASE ELEV.	DWGS BASED ON C.S.R.S. NAD 83 SYSTEM, UTM GRID
0	ISSUED FOR TENDER 12/11/30
NO. REVISIONS	DATE BY

KGS GROUP CONSULTING ENGINEERS	
DESIGNED BY: RJL	CHECKED BY: RBO
DRAWN BY: JF	APPROVED BY:
SCALE: AS NOTED	RELEASED FOR CONSTRUCTION:
DATE: 12/06/29	DATE:

ENGINEER'S SEAL
R.J. LONG
CONSULTANT DRAWING NO. 12-0107-013

THE CITY OF WINNIPEG WATER AND WASTE DEPARTMENT

PROJECT TITLE: 2012 OUTFALL RENEWAL/REHABILITATION PROGRAM
MARION STREET OUTFALL (RR-52)
FORCEMAIN TEMPORARY PIPE SUPPORT

SHEET 8 OF 9
COMPUTER FILE NAME: 12-0107-013
CITY DRAWING NUMBER: LD-6953