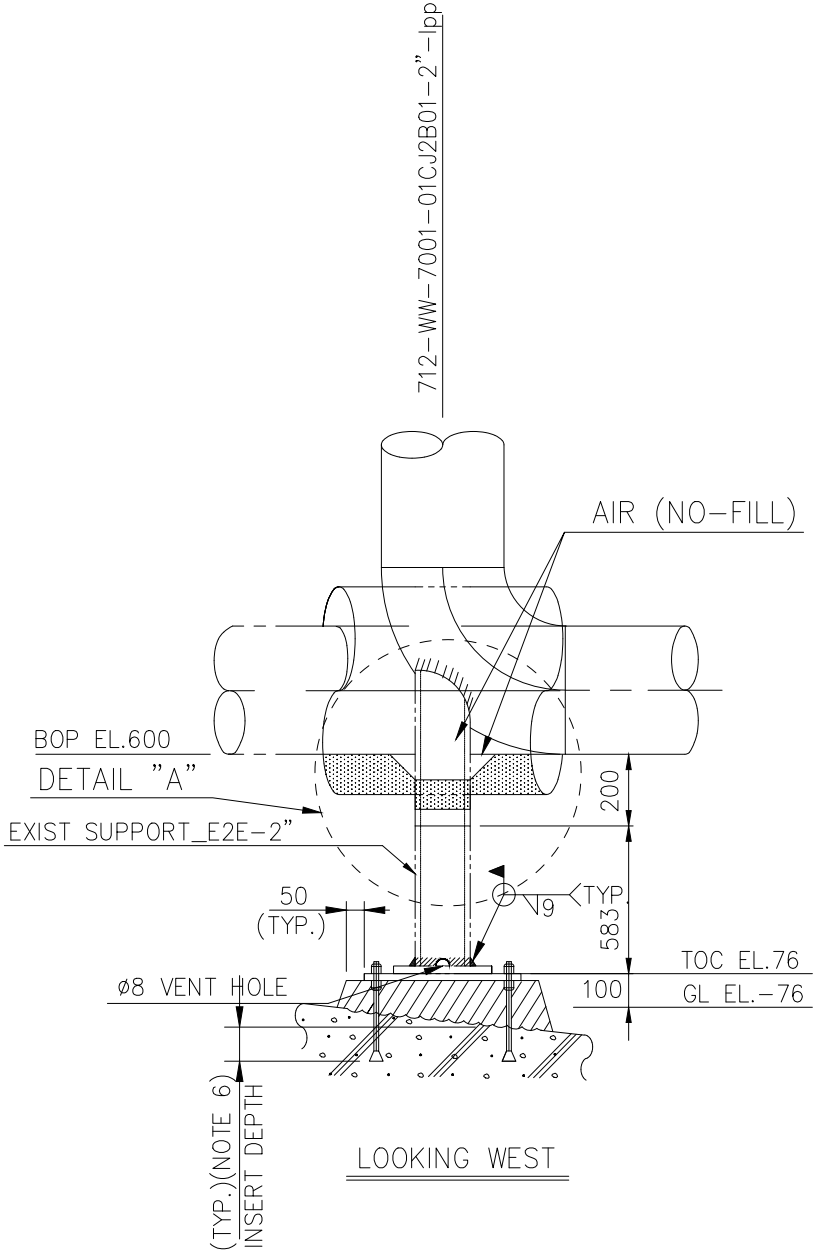
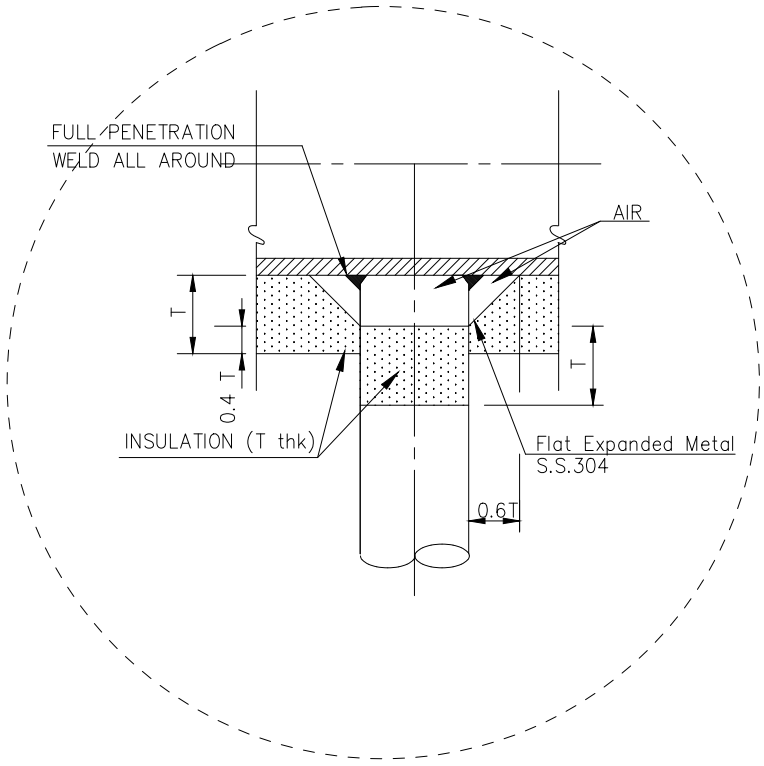


LOOKING WEST



DETAIL "A"

11. VENT HOLE IS REQUIRED ONLY FOR TRUNNION WITH ENDPLATE. THE VENT HOLE MUST BE LOCATED AT MIN. DISTANCE FROM THE BOTTOM OF THE PLATE.
IN ADDITION, WHERE PLATE IS REQUIRED FOR DUMMY, VENT HOLE MUST BE AT THE BOTTOM OF THE DUMMY TO ALLOW DRAINAGE.
12. WELDING OF ATTACHMENT SHOULD BE DONE WITHOUT DAMAGING HEADER PIPE.
13. ON LINE DESIGN TEMPERATURE OVER 450°c A "HOT BOX" SHALL BE PROVIDED TO TRUNNION SUPPORT.

NOTES

1. ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED.
2. MATERIAL (ASTM)
   (1) PLATE & ANGLE : A36
   (2) MACH. BOLT : A307-B
   (3) ANCHOR BOLT : SEE REFERENCE DWG.
   M16 HILTI HSA OR EQUIVALENT
   - TENSILE CAPACITY : 28 kN
   - SHEAR CAPACITY : 40.8 kN
   (4) CONRETE :
   COMPRESSIVE STRENGTH f'c = 21 MPa
   (5) CEMENT BASED GROUT :
   COMPRESSIVE STRENGTH = 35 MPa
   (6) PAVING THICKNESS CONSIDERED : 150MM
   (7) MISC.FOUNDATION : AS PER CIVIL TEAM
   (8) SOIL BEARING CAPACITY : 120 kN/m
   (9) TRUNNION PIPE/REINFORCING PAD :
   COMPATIBLE WITH MAIN PIPE.
3. GUIDE PLATES SHOULD BE FABRICATED ONLY IN THE DIRECTION SPECIFIED ON ISOMETRIC DRAWING AND MAX. 3mm CLEARANCE TO PREVENT UNEXPECTED STICKING.
4. REFERENCE DWG
   BOLT : L - L24A
5. DO NOT USE ANCHOR TYPE (A)
   IF NEED TO USE THIS TYPE,
   CONSULT WITH STRESS ENGINEER.
6. DESIGN CALCULATION AND INSTALLATION OF THE EXPANSION ANCHORS SHALL COMPLY BY THE GUIDELINES AND PROCEDURES SET BY THE MANUFACTURER.
7. SURFACE OF PAVE, BENETH THE PEDESTAL SHALL BE ROUGHENED AND CLEANED BEFORE GROUTING.
8. BASE PLATES SHALL BE ANCHORED TO THE CONCRETE PAVING BY HILTI HSA ANCHOR OR EQUIVALENT.
9. REQUIRED HILTI HSA BOLT LENGTH SHALL BE RECONFIRMED BY MANUFACTURER.
10. TRUNNION PIPE/REINFORCING PAD THICKNESS SHALL BE AS FOLLOWS.

MAIN PIPE	TRUNNION/R.PAD
BELOW STD	THE SAME SCH. AS MAIN PIPE
STD & OVER	STD

MFC PROJECT

GS Caltex Corporation
YEOSU, KOREA

GS Engineering & Construction

TITLE: SPECIAL PIPE SUPPORT (712-SPS-4611)

DRAWING No.	712-SPS-4611	PAGE 1 OF 1	REV. 0