1. LAP-WELD FIELD JOINT - STEEL PIPE JOINT
   FLEXIBLE COATING AND LINING

2. LAP-WELD FIELD JOINT - STEEL PIPE JOINT
   CEMENT MORTAR LINED & CEMENT MORTAR COATED

3. BUTT WELD FIELD JOINT - STEEL PIPE JOINT
   FLEXIBLE COATING AND LINING

4. FIELD WELDED O-RING - STEEL PIPE JOINT
   FLEXIBLE COATING AND CEMENT MORTAR LINING
   (FOR JOINTS ONLY AS APPROVED BY ENGINEER AND PIPE MANUFACTURER)

5. CARNEGIE JOINT - STEEL PIPE JOINT
   CEMENT MORTAR LINED & CEMENT MORTAR COATED

6. O-RING - STEEL PIPE JOINT
   CEMENT MORTAR LINED & FLEXIBLE COATING

NOTES:
1. T = STEEL CYLINDER THICKNESS AND SIZE OF FILLET ATTACHMENT WELD.
2. ALL REFERENCES TO PIPE DIAMETER FOR THIS PROJECT SHALL MEAN DIA. MEASURED TO INSIDE DIAMETER OF THE LIQUID PIPE.
3. DETAILS 1 AND 2 SHOW EPOXY LINING CEMENT MORTAR LINING TO BE SIMILAR TO DETAILS ON THIS SHEET SHOWING CEMENT MORTAR LINED PIPE, AS APPROVED BY PROGRAM MANAGER.
4. SEE SPECIFICATIONS FOR REPAIR OF EPOXY LINING.
5. WHEN CEMENT MORTAR COATING IS USED FOR STEEL PIPE, FLEXIBLE METAL BANDS SHALL BE APPLIED TO THE EXTERIOR OF THE JOINT IN 30" INTERVALS OR ENGRAVEMENT, WHERE PIPE IS INSTALLED IN A TUNNEL OR ENGRAVEMENT PIPE.
6. OUTSIDE WELD MAY BE SUBSTITUTED FOR INSIDE WELD. INSIDE WELDING IS NOT RECOMMENDED FOR 30" DIAMETER PIPE AND SMALLER.

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

STANDARD LDWL
STEEL PIPE DETAILS
(SHEET 1 OF 2)

APPROVED BY
ACTING CITY ENGINEER
DIRECTOR OF
HOUSTON PUBLIC WORKS

DATE: MAR-20-2018
Dwg NO: 02518-01

NOT TO SCALE