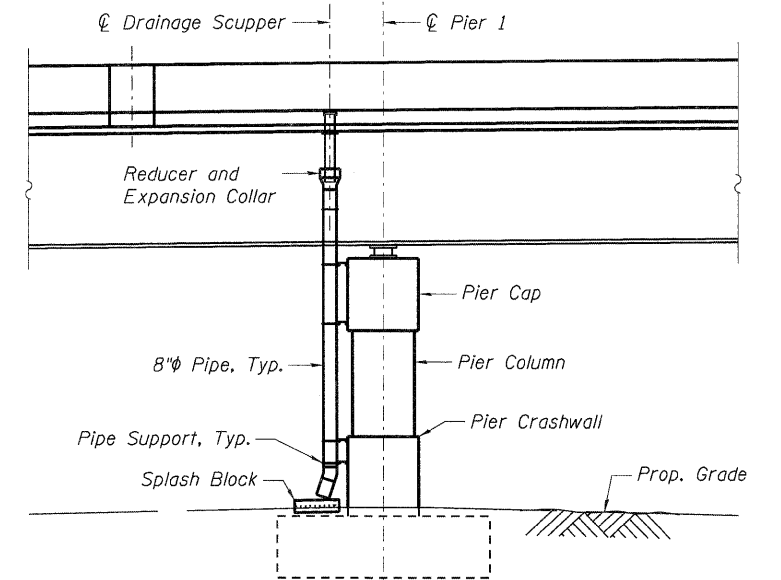


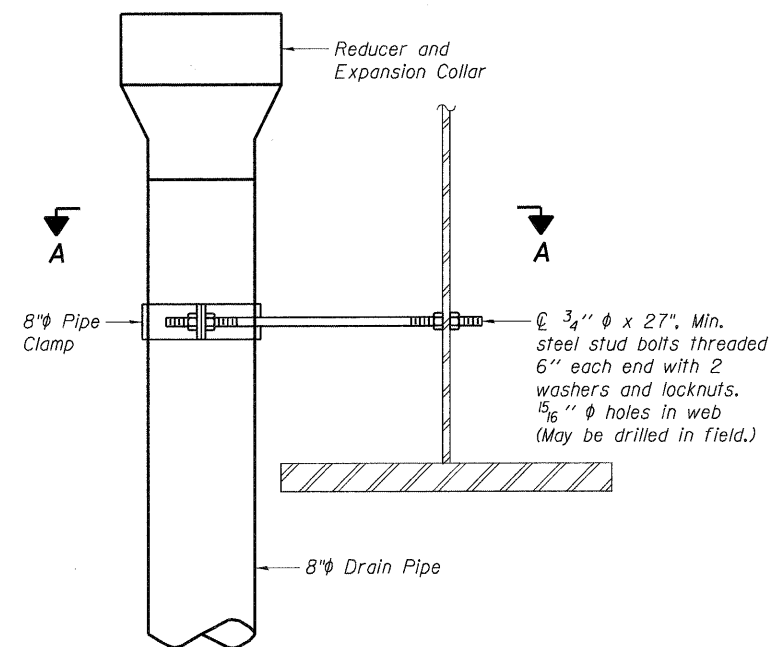
PIER 1 ELEVATION - SHOWING BRIDGE DRAINAGE SYSTEM

(Looking East - Pier 2 opposite hand)

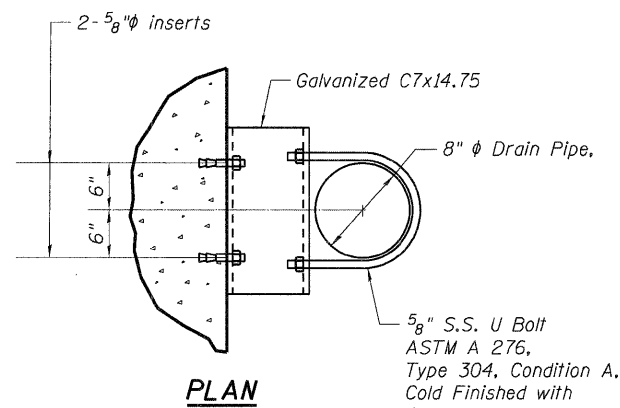


PIER 1 END VIEW

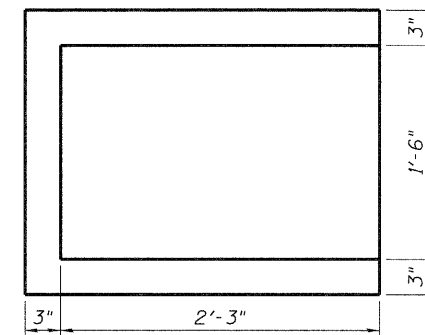
(Looking North - Pier 2 opposite hand)



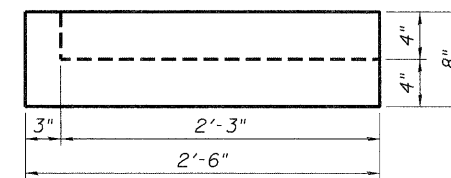
DETAIL B - PIPE CLAMP DETAIL



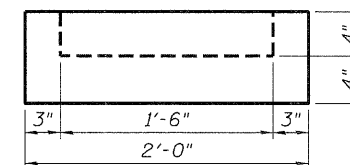
PLAN



PLAN

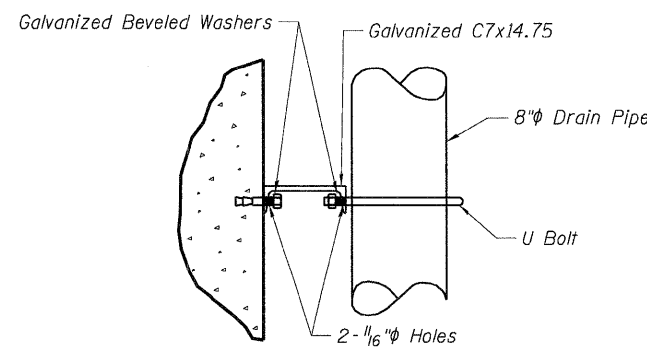


ELEVATION



END VIEW

SPLASH BLOCK DETAIL



DETAIL A - PIPE CLAMP DETAIL

(Use to support vertical pipe runs along pier cap and crashwall)

BILL OF MATERIAL

Item	Unit	Total
Drainage System	L Sum	1

NOTES:

- All pipe hangers, supports and hardware shall be hot-dipped galvanized in accordance with AASHTO M232 (ASTM A153) unless otherwise noted. All bolts, nuts and washers shall be stainless steel. Stainless steel bolts shall conform to the requirements of ASTM A 193M (A193), Class 1, ASTM F593, TYPE 304 Grade B8. Stainless steel nuts shall conform to the requirements of AASHTO M 292, ASTM F594, TYPE 304 Grade 8 or 8F, and the washers shall conform to ASTM A 240, Type 302 or 304.
- At Pier 2, the pipe fittings will need to accommodate a total horizontal movement of 4".
- Pipe brackets shall be provided at each tee, elbow or change in direction. Each vertical pipe shall have a minimum of two brackets attached to the crashwall and one bracket attached to the pier cap.

FILE NAME = \\S:\045\077\DRAINAGE\SHIT.DGN, USER NAME = #USER#, DESIGNED - MDB, REVISED - , DRAWN - MDB, REVISED - , CHECKED - PK, REVISED - , DATE - 12/16/11, REVISED - , PLOT SCALE = #SCALE#, PLOT DATE = #DATE#