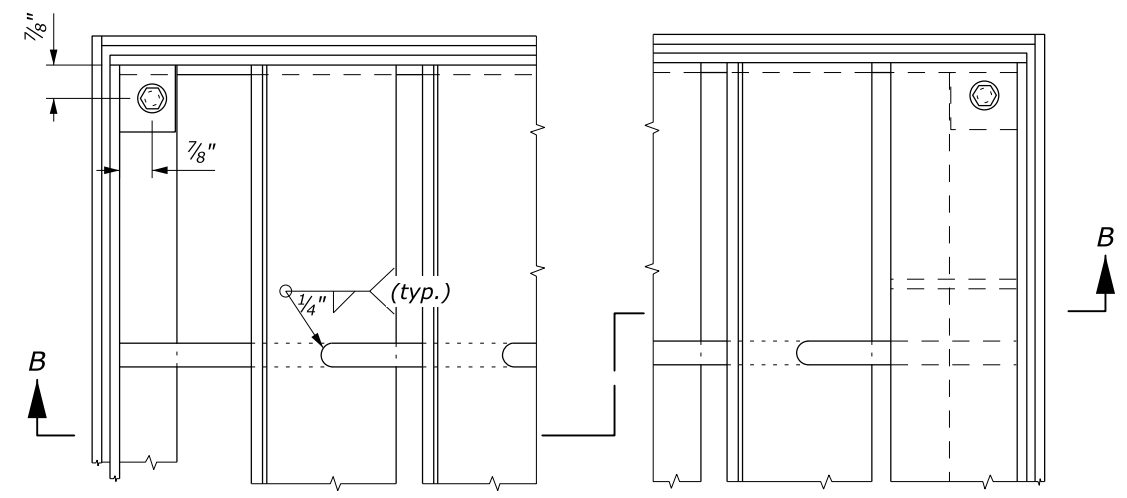
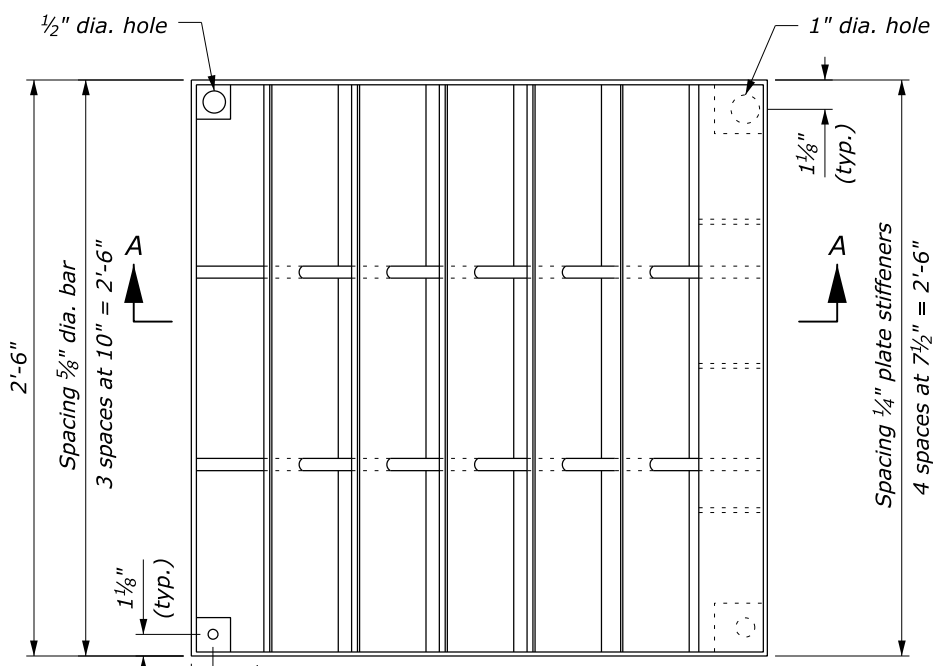


L4" x 2 1/2" x 1/4" (trim L to size)

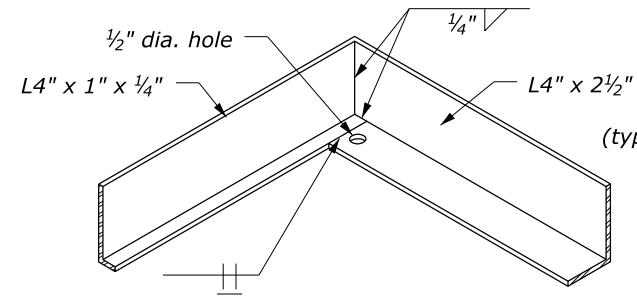
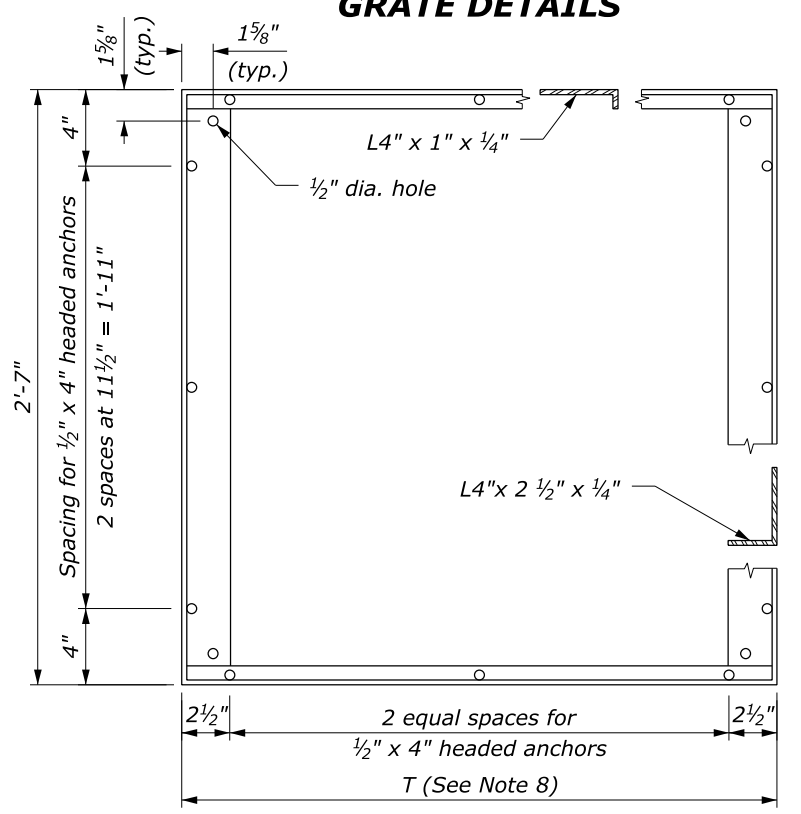
**NOTE:**

1. STRUCTURAL STEEL: AASHTO M 183 (ASTM A 36M).
2. BOLTS & WASHERS: ASTM A 307, Galvanized.
3. THREADED CONCRETE ANCHORS: Ferrule loop inserts for 3/8" bolt or approved equal.
4. HEADED CONCRETE ANCHORS: Weld to frame with a full penetration butt weld.
5. WELDING: Weld in conformance with the Standard Specifications. Unless otherwise indicated seal weld all joints with a minimum size fillet weld, based on material thickness. Grind smooth all contact surfaces. FINISH: Galvanized after fabrication.
6. Estimated weight, frame and grate (2'-6" x 2'-6") 215 lbs. Increase or decrease weight by 28 lbs for each 4 1/2" increment.
7. Number of plates varies according to pipe diameter. See Standard 604-1.
8. See Standard 604-1 for dimensions of T.

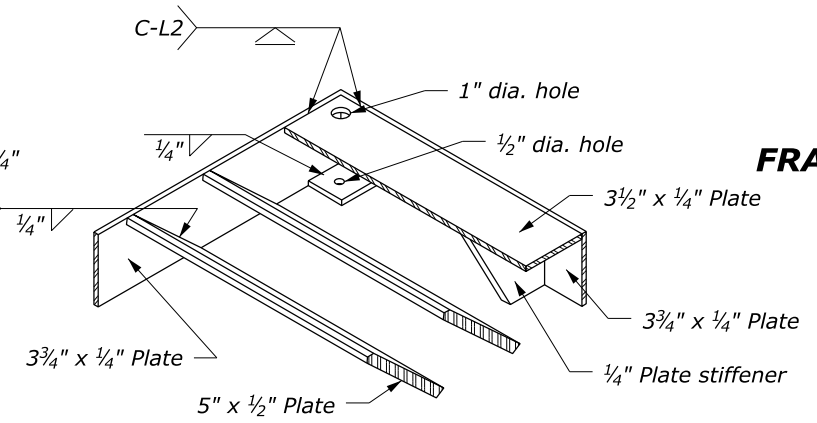


**GRATE DETAILS**

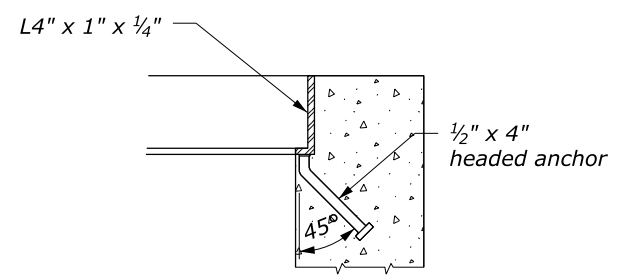
**FRAME AND GRATE DETAILS**



**FRAME CORNER DETAIL**



**GRATE CORNER DETAIL**



**FRAME ANCHOR DETAIL**

NO SCALE

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION FEDERAL LANDS HIGHWAY	
U.S. CUSTOMARY STANDARD	
<b>METAL FRAME AND GRATE TYPE A</b>	
STANDARD APPROVED FOR USE 6/2005	STANDARD
REVISED:	604-2