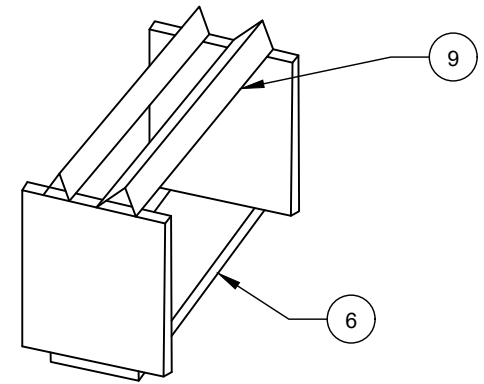
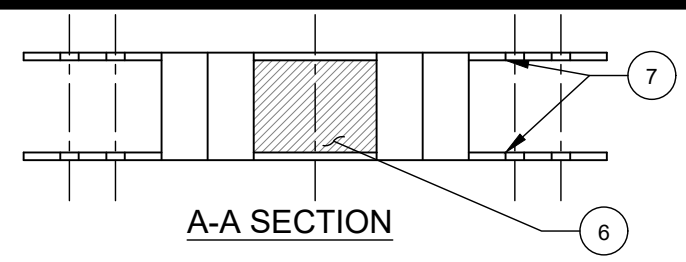


NOTES:

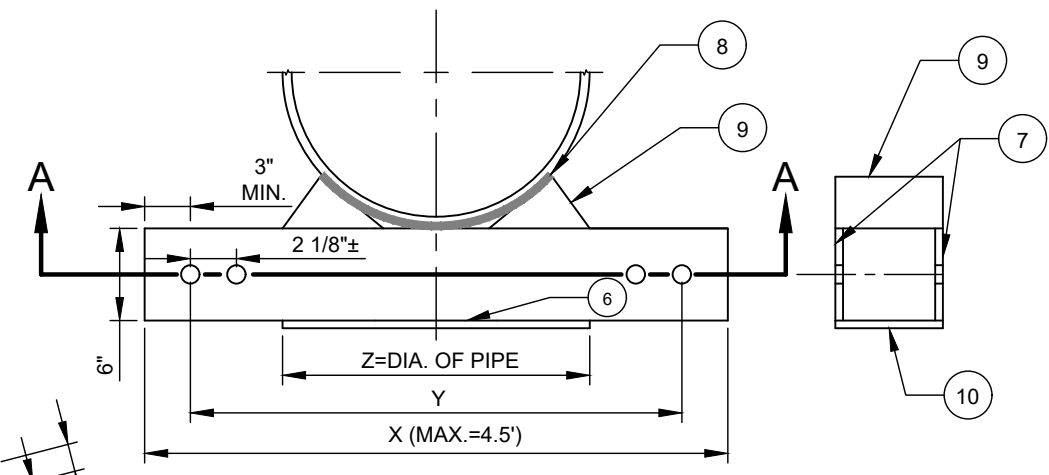
- A. ALL FIELD CUTS BY TORCH SHALL BE GROUND TO FLAT TRUE 90° ANGLES.
- B. DIMENSIONS X AND Y VARY ACCORDING TO PIPE SIZE AND ELEVATION OF PIPE. THE MAXIMUM LENGTH OF X IS 4.5'.
- C. DIMENSION Z IS EQUAL TO THE DIAMETER OF THE PIPE.
- D. ALL STEEL PLATES SHALL MEET ASTM A36.
- E. FOR 8" TO 18" PIPE, ALL BOLTS SHALL BE 7/8" IN DIAMETER AND MEET ASTM A325. FOR 24" PIPE, BOLTS ON THE CRADLE SHALL BE 1 INCH IN DIAMETER AND MEET ASTM A490. BOLTS SHALL BE AT LEAST 2 1/2" LONG. PLAIN ROUND WASHERS WILL BE REQUIRED.
- F. BOLT HOLES SHALL BE 1/16" LARGER THAN THE DIAMETER OF THE BOLT AND SHALL BE DRILLED.
- G. THIS CRADLE SHALL NOT BE USED FOR PIPE LARGER THAN 24" IN DIAMETER.
- H. ATTACH THE CRADLE TO THE PILES WITH 4 BOLTS ON EACH SIDE [TOTAL OF 8 BOLTS].
- I. ATTACH BOTTOM PLATE TO CRADLE SIDES WITH A CONTINUOUS 3/8" FILLET WELD.
- J. THE 1/2" STEEL ANGLES SHALL BE SPOT WELDED TO THE SIDES OF THE CRADLE AND SHALL BE 1/4TH OF THE PIPE DIAMETER.
- K. ADD 1/4" NEOPRENE PAD OR SIMILAR TO PROTECT PIPE FROM CRADLE.
- L. MAXIMUM HEIGHT FROM PIPE TO UNDISTURBED SOIL IS 20'.
- M. PIPE SHALL FIT SNUGLY.
- N. V SHALL EQUAL W OR AS APPROVED.
- O. SEE STEEL H-PILE SPECIFICATIONS.
- P. PILES SHALL BE DRIVEN TO A MINIMUM DEPTH OF 10' BELOW GROUND OR AS DIRECTED BY THE ENGINEER.
- Q. PILES SHALL BE DRIVEN TO A DEPTH AT WHICH PILE BEARING CAPACITY IS 20 TONS OR AS APPROVED BY THE ENGINEER.
- R. THESE PIERS SHALL BE USED FOR DUCTILE IRON PIPE OR HIGH STRENGTH STEEL PIPE ONLY.
- S. ALL STEEL TO BE HOT DIP GALVANIZED. SEE GALVANIZED SPECIFICATIONS.
- T. PAINTING IN BLACK OVER THE HOT DIP GALVANIZED COMPONENTS IS ACCEPTABLE TO CLTW.



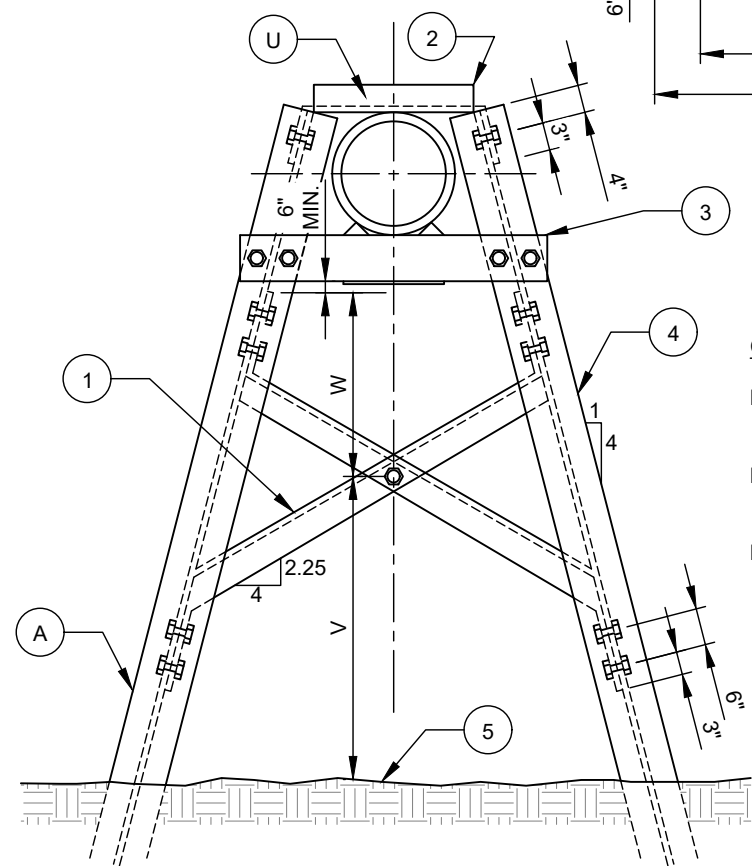
CRADLE
ISOMETRIC
VIEW



A-A SECTION



CRADLE DETAIL



CROSS BRACING SIZES

- FOR 12" PIPE AND SMALLER:
USE 3" X 3" X 7/16" ANGLES
- FOR 15"-18" PIPE:
USE 4" X 4" X 5/16" ANGLES
- FOR 20"-24" PIPE:
USE 5" X 5" X 3/8" ANGLES

NO.	DESCRIPTION:
1.	CROSS BRACING (CUT WEB AND BEND).
2.	C 6x10.5 TOP BRACE (CUT FLANGE AND BEND WEB).
3.	CRADLE (SEE CRADLE DETAIL).
4.	HP 8 X 36, HP 10 X 42, HP 12 X 53, HP 12 X 69 OR HP 12 X 74 OR W 8 X 8 X 48, W 8 X 8 X 58, W 10 X 10 X 60, W 10 X 10 X 68, W 12 X 12 X 72 OR W 12 X 12 X 79 PILES.
5.	FINISHED GRADE.
6.	1/2" STEEL BOTTOM PLATE.
7.	3/4" STEEL PLATE.
8.	1/4" NEOPRENE PAD.
9.	1/2" STEEL ANGLE WITH EQUAL SIDES.