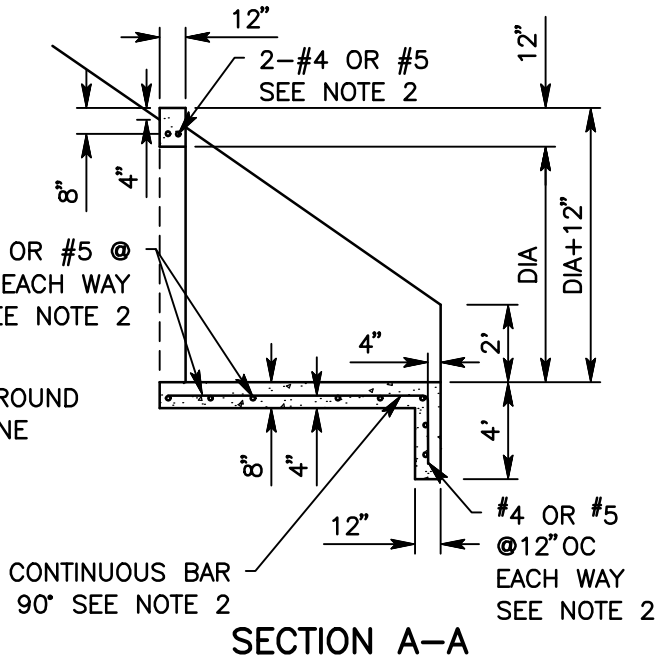
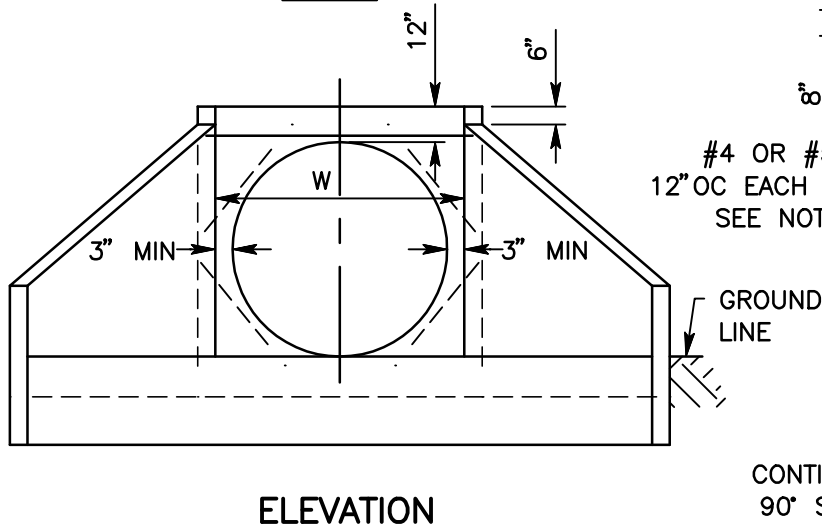
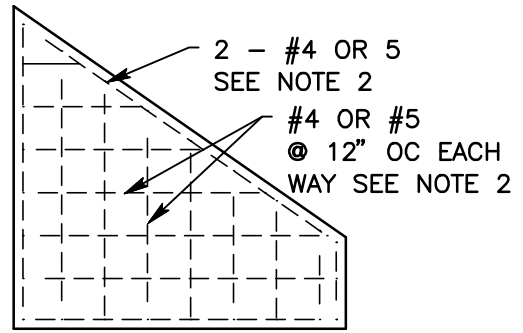
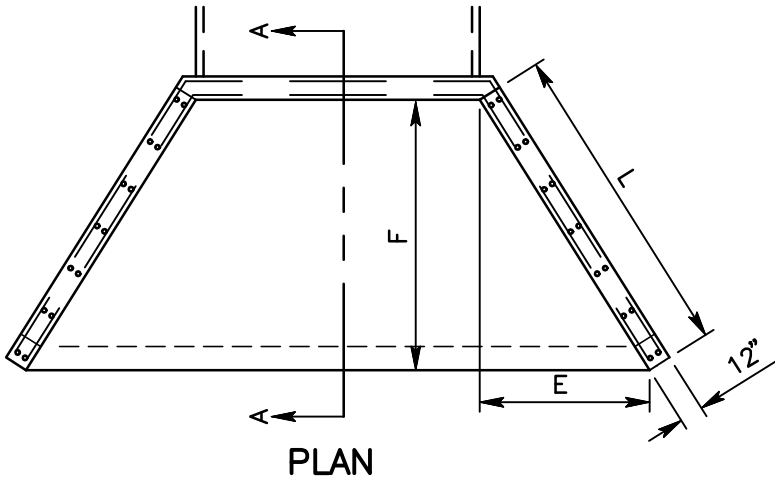


HEADWALL SHALL BE MONOLITHIC.
LAP ALL BARS AT CORNERS 30 DIAMETERS
IF NOT CONTINUOUS

DIA = DIAMETER
MIN = MINIMUM
OC = ON CENTER



NOTES:

1. HEADWALL SHALL BE CONSTRUCTED OF MINOR CONCRETE (MINOR STRUCTURE).
2. REINFORCING STEEL SHALL BE #4 BARS FOR "W" UP TO 60". ABOVE "W" = 60" #5 BARS SHALL BE USED. 2" MINIMUM CLEARANCE 30 DIAMETER LAP, ALL STEEL.
3. ADJACENT SLOPES SHALL BE 1.5:1 OR FLATTER.
4. MULTIPLE PIPES TO BE SET WITH LONGITUDINAL CENTERS 1 1/2" DIAMETERS APART.
5. ALL EXPOSED CORNERS TO BE ROUNDED 3/4" RADIUS.
6. "W" SHALL BE INCREASED WHEN MULTIPLE PIPES OR PIPES ON SKEW ARE USED.
7. FOR FENCING SEE STANDARD 404.

DIMENSIONS

PIPE DIA	L	E	F	W	HEADWALL (CY)
24"	4'-9"	2'-8"	4'-0"	2'-6"	3.59
30"	5'-5"	3'-0"	4'-6"	3'-0"	4.45
36"	6'-0"	3'-4"	5'-0"	3'-8"	5.33
42"	6'-7"	3'-8"	5'-6"	4'-2"	6.24
48"	7'-3"	4'-0"	6'-0"	4'-10"	7.35
54"	8'-2"	4'-6"	6'-9"	5'-4"	8.72



SAN BERNARDINO COUNTY DEPARTMENT OF PUBLIC WORKS

HEADWALL WING TYPE

BRENDON P. BIGGS, PE
DIRECTOR OF PUBLIC
WORKS/ROAD
COMMISSIONER