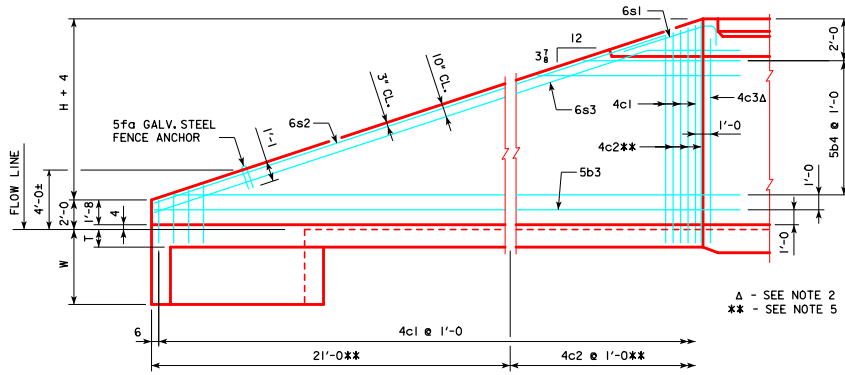
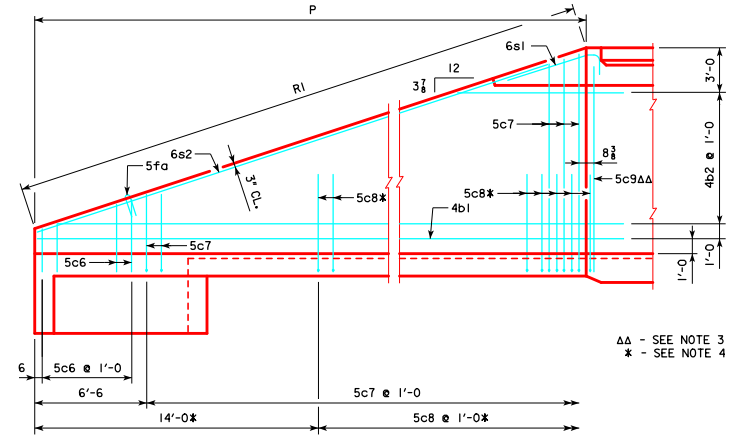


REVISED 05-13 - CHANGED 19'-0" DIMENSION TO 21'-0" IN TYPICAL VIEW - FRONT FACE REINFORCING DETAIL;
 REVISED 07-2016 - REMOVED 17'-8" VERTICAL DIMENSION FROM 6#3 BAR TO TOP OF PARAPET, THIS ALLOWS FOR THE VARIABLE VERTICAL LOCATION OF THE HORIZONTAL LEG IN THE SLAB.
 ENGLISH BEDSIGNED BY ERIE EQUIPMENT, TRH 0-4-12, THIS SHEET ISSUED 04-12.

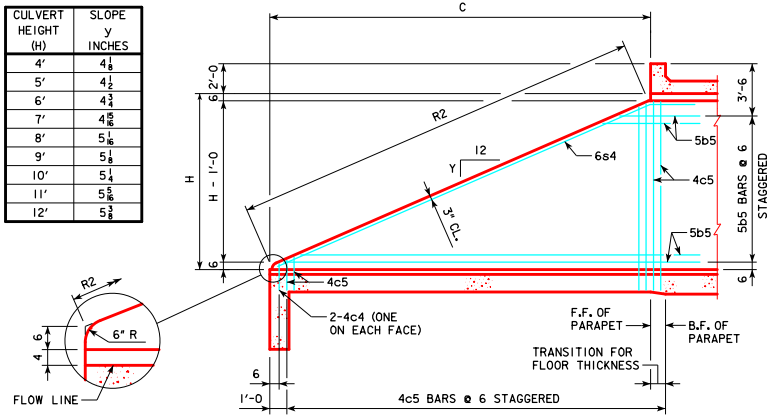


TYPICAL VIEW - FRONT FACE REINFORCING



TYPICAL VIEW - BACK FACE REINFORCING

CULVERT HEIGHT (H)	SLOPE Y INCHES
4'	4 1/8
5'	4 1/4
6'	4 1/2
7'	4 5/8
8'	5 1/8
9'	5 1/4
10'	5 3/8
11'	5 5/8
12'	5 3/4



TYPICAL VIEW - INTERIOR WALL

NOTES:

1. BAR SPACING AND POSITIONS SHOWN ARE SIMILAR FOR ALL SIZES OF HEADWALL IN THIS STANDARD.
2. TWO 4c3 BARS FOR 4', 5', 11' & 12' HEIGHT HEADWALLS. ONE 4c3 BAR FOR 6' THRU 10' HEIGHT HEADWALLS.
3. TWO 5c9 BARS FOR 4', 5', 11' & 12' HEIGHT HEADWALLS. ONE 5c9 BAR FOR 6' THRU 10' HEIGHT HEADWALLS.
4. NOT APPLICABLE FOR 4' & 5' HEIGHT HEADWALLS.
5. NOT APPLICABLE FOR 4' THRU 8' HEIGHT HEADWALLS.
6. FOR DIMENSION TABLE SEE SHEET TRH 0-1-12.

LATEST REVISION DATE 07-2016	 Iowa Department of Transportation Highway Division STANDARD DESIGN TRIPLE REINFORCED CONCRETE BOX CULVERTS APRIL, 2012	APPROVED BY BRIDGE ENGINEER Norman E. McQuinn	FLARED WING HEADWALLS 0° SKEW	TRH 0-4-12