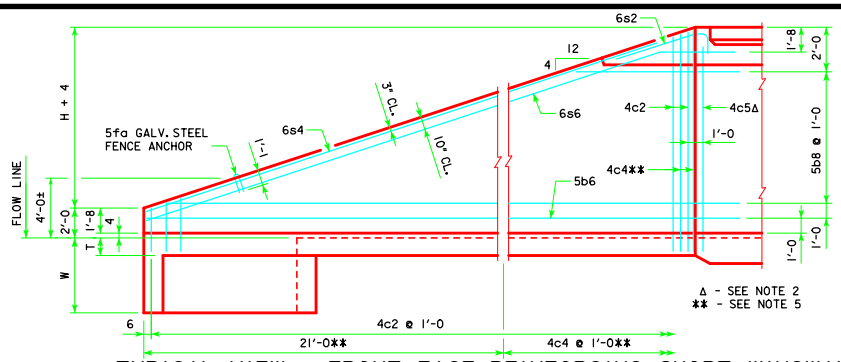
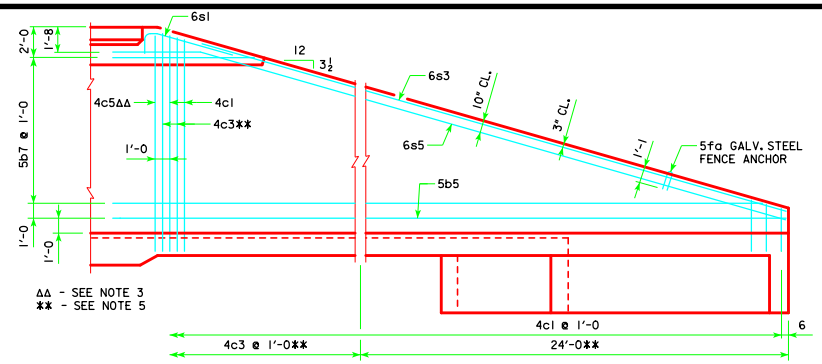
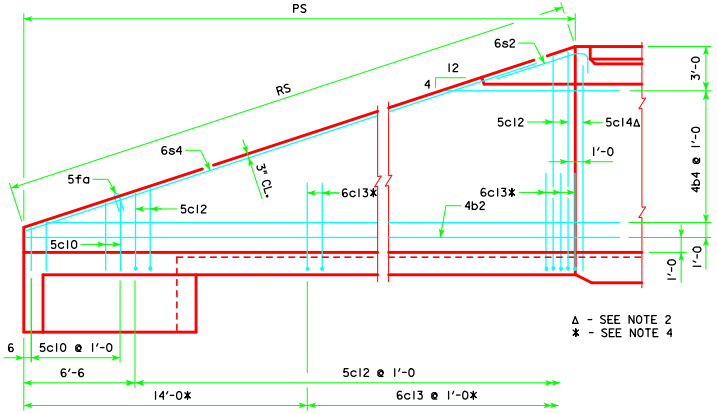


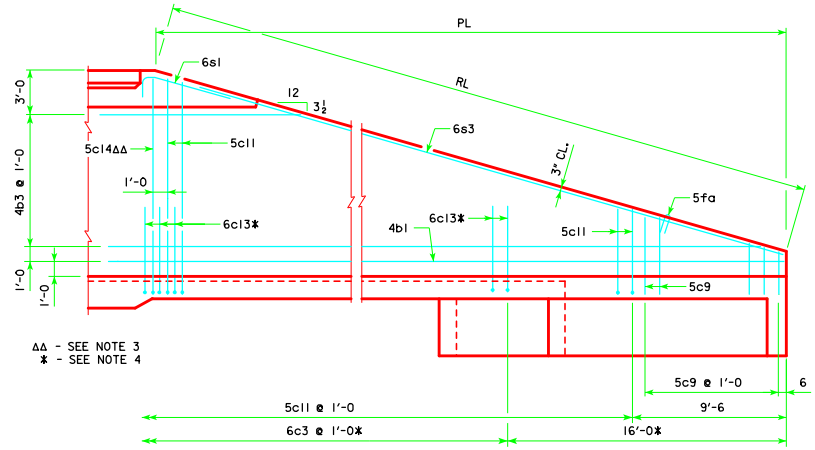
TYPICAL VIEW - FRONT FACE REINFORCING SHORT WINGWALL



TYPICAL VIEW - FRONT FACE REINFORCING LONG WINGWALL

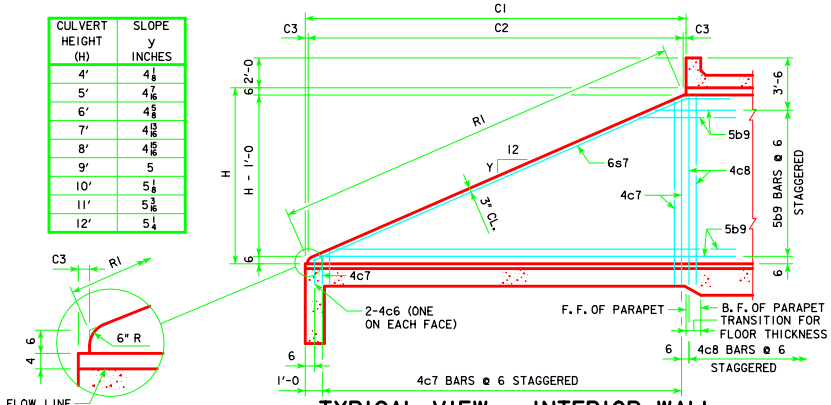


TYPICAL VIEW - BACK FACE REINFORCING SHORT WINGWALL



TYPICAL VIEW - BACK FACE REINFORCING LONG WINGWALL

CULVERT HEIGHT (H)	SLOPE y INCHES
4'	$4\frac{1}{8}$
5'	$4\frac{7}{16}$
6'	$4\frac{5}{8}$
7'	$4\frac{15}{16}$
8'	$4\frac{13}{16}$
9'	5
10'	$5\frac{1}{8}$
11'	$5\frac{3}{16}$
12'	$5\frac{1}{4}$



TYPICAL VIEW - INTERIOR WALL

NOTES:

1. BAR SPACINGS AND POSITIONS SHOWN ARE SIMILAR FOR ALL SIZES OF HEADWALLS IN THIS STANDARD.
2. TWO 4c5 & TWO 5c14 BARS FOR ALL HEADWALLS.
3. TWO 4c5 & TWO 5c14 BARS FOR 4', 5', 7', 9', 10' & 12' HEIGHT HEADWALLS. ONE 4c5 & ONE 5c14 BAR FOR 6', 8' & 11' HEIGHT HEADWALLS.
4. NOT APPLICABLE FOR 4' & 5' HEADWALLS.
5. NOT APPLICABLE FOR 4' THRU 8' HEIGHT HEADWALLS.
6. FOR DIMENSION TABLE SEE SHEET TWH 15-2-12.

LATEST REVISION DATE

APPROVED BY BRIDGE ENGINEER

Iowa Department of Transportation
Highway Division

STANDARD DESIGN

TWIN REINFORCED CONCRETE BOX CULVERTS

APRIL, 2012

FLARED WING HEADWALLS

15° SKEW

TWH 15-5-12

ENGLISH\RDSIGNED\TWINCULVERTS.DGN - TWH 15-5-12 - THIS SHEET ISSUED 04-12