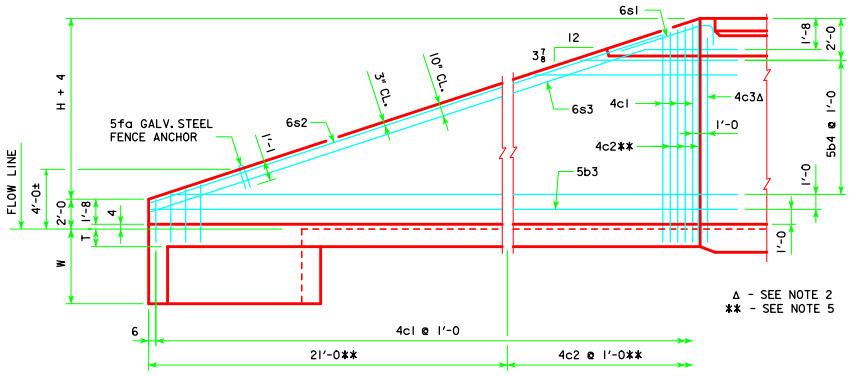
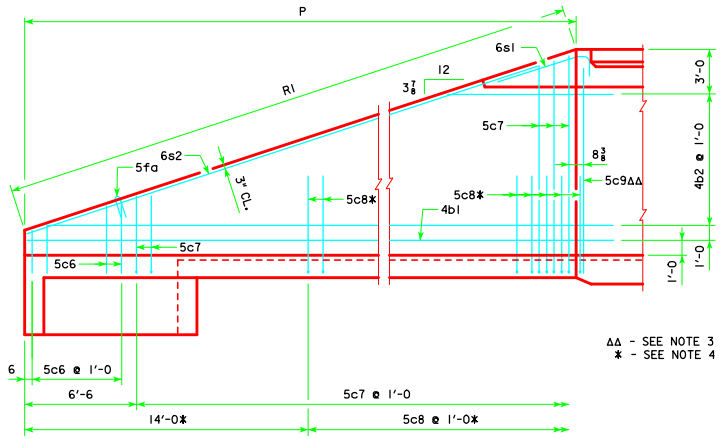
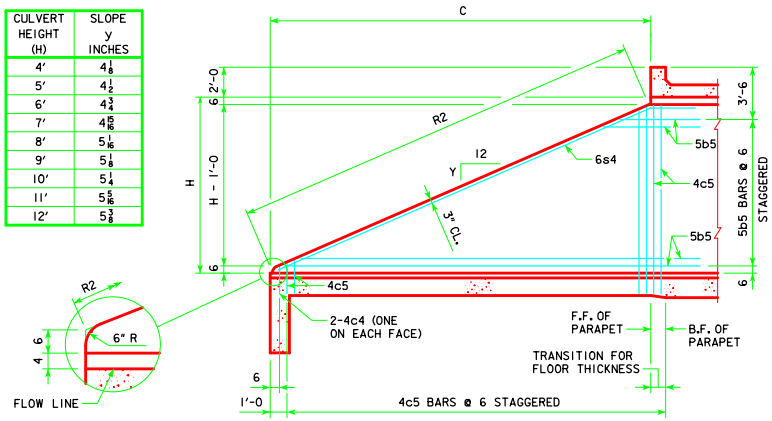


TYPICAL VIEW - FRONT FACE REINFORCING

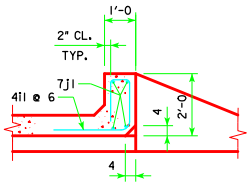


TYPICAL VIEW - BACK FACE REINFORCING

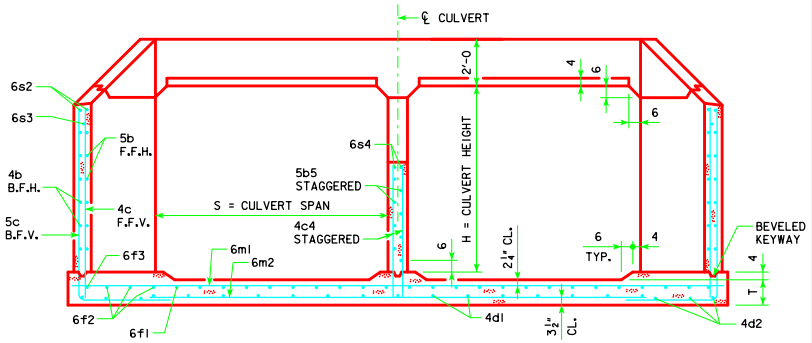
CULVERT HEIGHT (H)	SLOPE y INCHES
4'	4 1/8
5'	4 1/2
6'	4 3/4
7'	4 15/16
8'	5 1/16
9'	5 1/8
10'	5 1/4
11'	5 5/16
12'	5 3/8



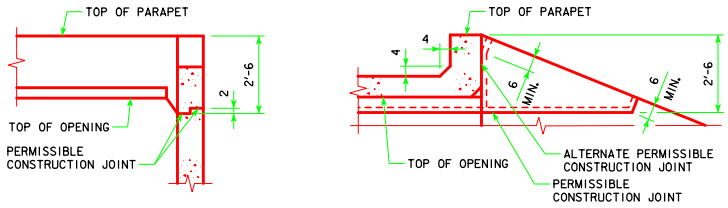
TYPICAL VIEW - INTERIOR WALL



SECTION THRU PARAPET



TYPICAL SECTION - NEAR CENTER OF APRON



TOP OF WINGWALL DETAILS

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 TWH 0-1-12.

05-13
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

0° SKEW

TWH 0-3-12

REVISED 05-13 - CHANGED 19'-0** DIMENSION TO 21'-0** IN TYPICAL VIEW - FRONT FACE REINFORCING DETAIL.
ENGLISH\RFDSIGNED\TWINCULVERTS.DGN - TWH 0-3-12 - THIS SHEET ISSUED 04-12.