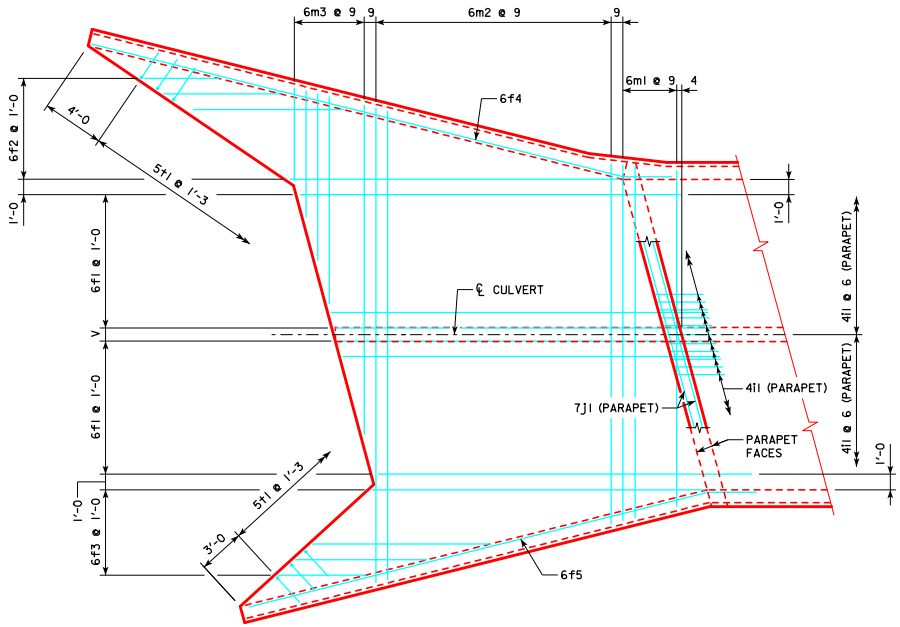
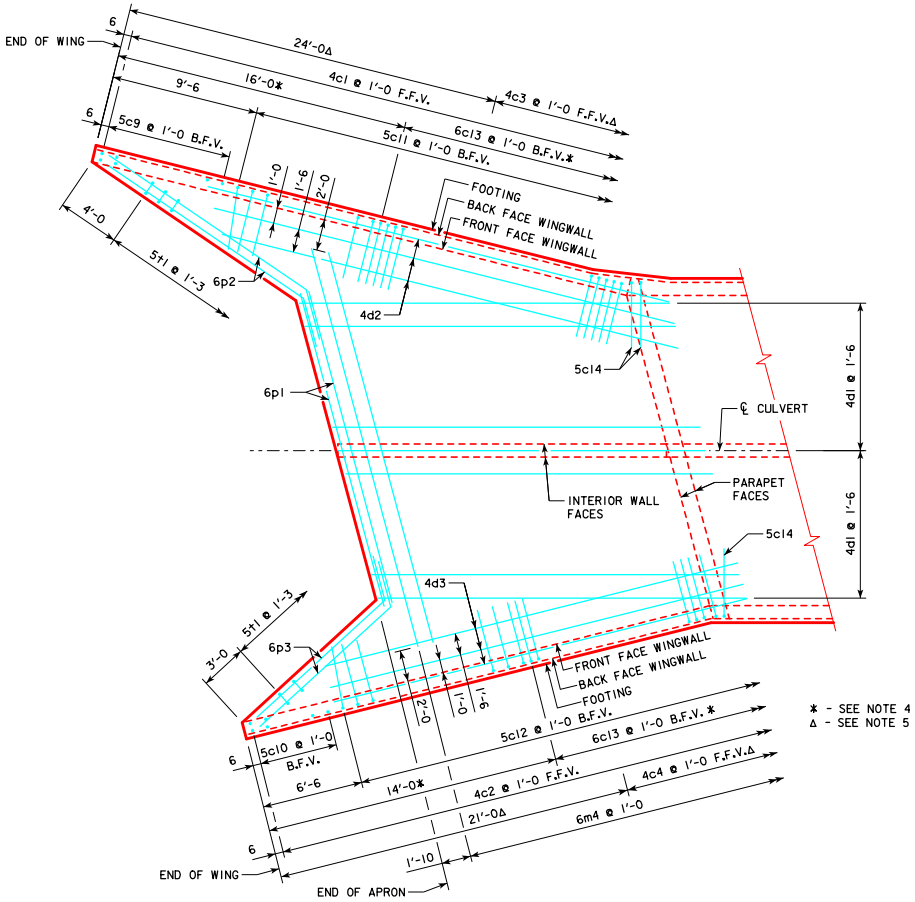


PLAN VIEW - TOP OF APRON REINFORCING BARS



PLAN VIEW - BOTTOM OF APRON REINFORCING BARS

NOTES:

1. BAR SPACINGS AND POSITIONS SHOWN ARE SIMILAR FOR ALL SIZES OF HEADWALLS IN THIS STANDARD.
2. WINGWALL BARS CONSISTENTLY REFERENCED FROM END OF WING FOR ALL HEADWALLS.
3. TOP TRANSVERSE FLOOR BARS ARE REFERENCED APPROXIMATELY 4" FROM THE BACK OF THE PARAPET FOR ALL HEADWALLS.
4. THERE ARE NO 6c13 BARS IN THE 4' & 5' HEIGHT HEADWALLS.
5. 4c3 & 4c4 BARS USE ONLY IN THE 9', 10', 11' & 12' HEIGHT HEADWALLS.
6. FOR DIMENSION TABLE SEE SHEET TWH 15-2-12.
7. FOR REINFORCING IN CURTAIN WALL SEE CURTAIN WALL DETAILS ON SHEET TWH 15-4-12.

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 15-3-12

ENGLISH\RDSIGNED\TWINCULVERTS.DGN - TWH 15-3-12 - THIS SHEET ISSUED 04-12.