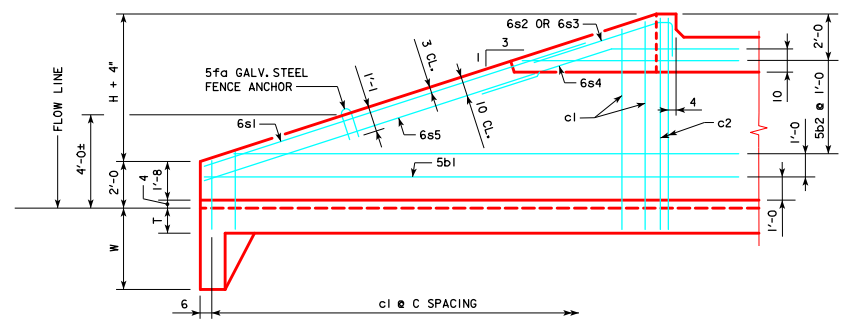
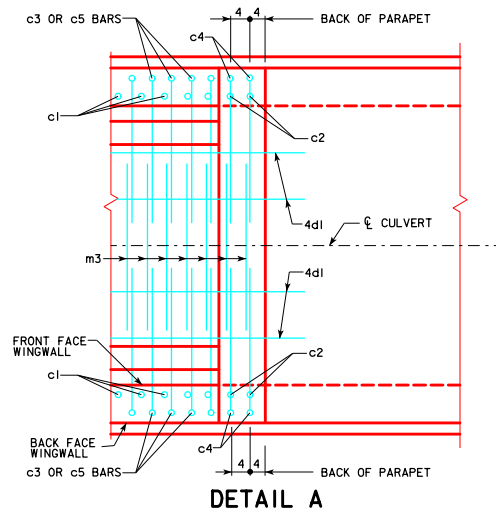
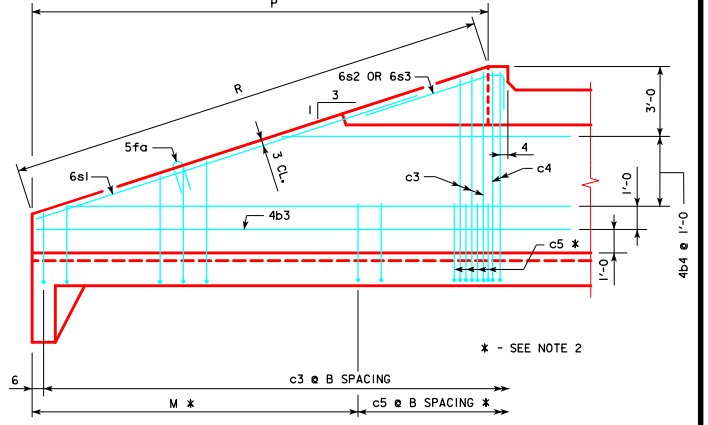


REVISED 07-2016 - CHANGED 10" VERTICAL DIMENSION FROM PERMISSIBLE WALL CONSTRUCTION JOINT TO 6s4 BAR. (DIMENSION WAS 1'-8" VERTICAL FROM TOP OF PARAPET TO 6s4 BAR.)
 ENGLISH DESIGNING/LEGAL/VERTIS.DGN - PWH 0-3-12 - THIS SHEET ISSUED 04-12

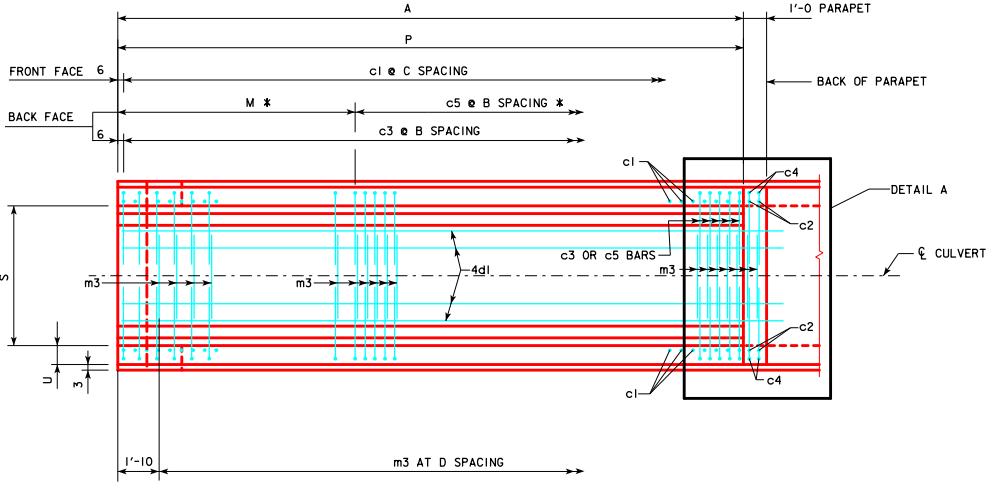


TYPICAL VIEW - FRONT FACE WINGWALL REINFORCING



TYPICAL VIEW - BACK FACE WINGWALL REINFORCING

- NOTES :**
1. BAR SPACINGS AND POSITIONS SHOWN ARE SIMILAR FOR ALL SIZES OF HEADWALLS IN THIS STANDARD.
 2. NOT APPLICABLE FOR THE FOLLOWING HEADWALL SIZES: 12x5, 12x4, 10x6, 10x5, 10x4, 8x6, 8x5, 8x4, 6x6, 6x5, 6x4, 6x3, 5x6, 5x5, 5x4, 5x3, 4x4 AND 3x3.
 3. FOR HEADWALL DIMENSIONS AND BAR SPACING SEE DRAWING PWH 0-1-12.
 4. WINGWALL BARS CONSISTENTLY REFERENCED FROM END OF WING FOR ALL WINGWALLS.
 5. APRON m3 BARS ARE TO BE CENTERED ON ϵ CULVERT.
 6. B.F.V. (c4) AND F.F.V. (c2) BARS ARE APPROXIMATELY 4" FROM THE BACK OF PARAPET FOR ALL HEADWALLS.



PLAN VIEW - BOTTOM APRON REINFORCING

LATEST REVISION DATE 07-2016 APPROVED BY BRIDGE ENGINEER <i>Thomas E. Mc Donnell</i>		
	STANDARD DESIGN - SINGLE REINFORCED CONCRETE BOX CULVERTS PARALLEL WING HEADWALLS	
	APRIL, 2012	
WINGWALL ELEVATIONS & BOTTOM APRON REINFORCING 0° SKEW		PWH 0-3-12