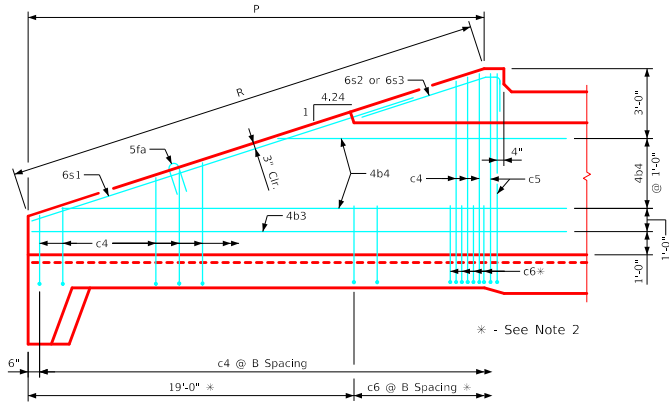
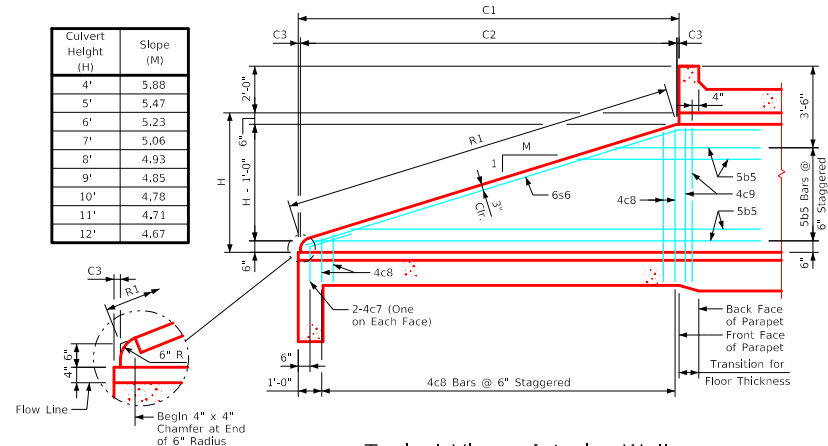


Typical View - Front Face Wingwall Reinforcing



Typical View - Back Face Wingwall Reinforcing

Culvert Height (ft)	Slope (M)
4'	5.88
5'	5.47
6'	5.23
7'	5.06
8'	4.93
9'	4.85
10'	4.78
11'	4.71
12'	4.67



Typical View - Interior Wall

Notes:

1. Bar spacings and positions shown are similar for all sizes of headwalls in this standard.
2. Not applicable for 4' thru 5' height headwalls.
3. Not applicable for 4' thru 8' height headwalls.
4. For headwall dimensions and bar spacing see Sheet TWPWH 45-2-20.
5. Apron m3 bars are to be centered on \bar{C} culvert.
6. B.F.V. (c5) and F.V. (c3) and interior wall both F.V. (c9) bars are approximately 4" from the back of parapet for all headwalls.

LATEST REVISION DATE	APPROVED BY BRIDGE ENGINEER		
		Standard Design - Twin Reinforced Concrete Box Culverts	
		Parallel Wing Headwalls	
		July, 2020	
		Wingwall Elevations 45° Skew	TWPWH 45-4-20