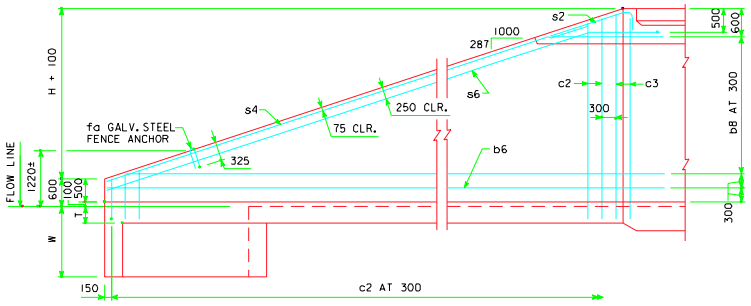
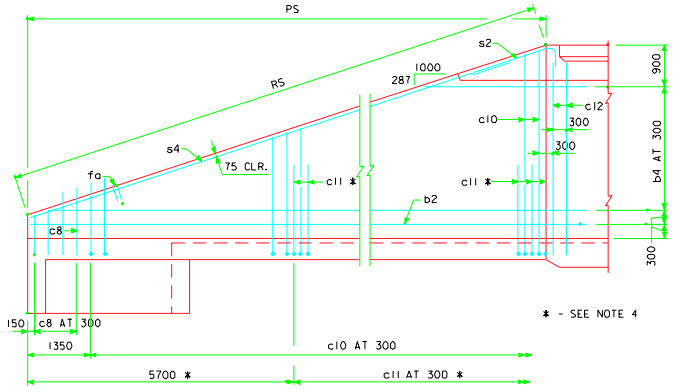
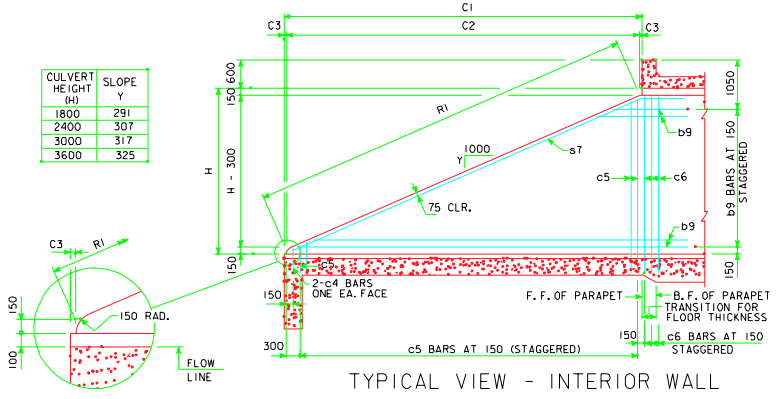


TYPICAL VIEW - FRONT FACE REINFORCING SHORT WINGWALL

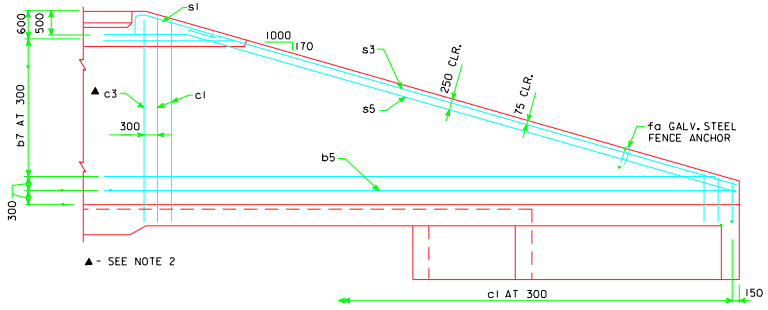


TYPICAL VIEW - BACK FACE REINFORCING SHORT WINGWALL

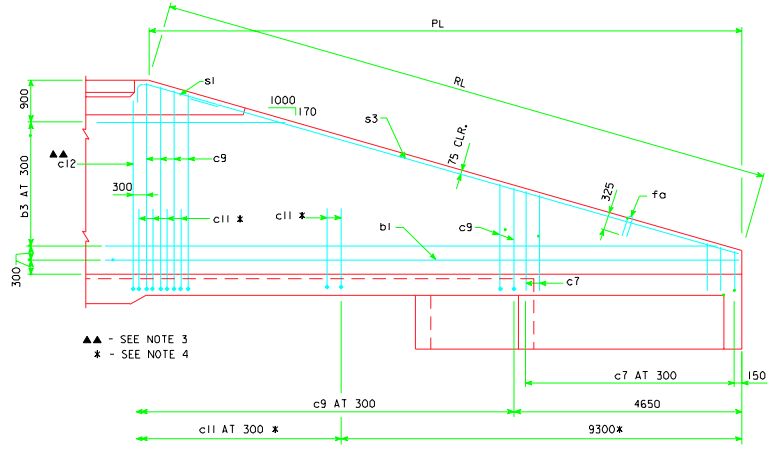


CULVERT HEIGHT (H)	SLOPE Y
1800	291
2400	307
3000	317
3600	325

TYPICAL VIEW - INTERIOR WALL



TYPICAL VIEW - FRONT FACE REINFORCING LONG WINGWALL



TYPICAL VIEW - BACK FACE REINFORCING LONG WINGWALL

NOTES:

1. BAR SPACINGS AND POSITIONS SHOWN ARE SIMILAR FOR ALL SIZES OF HEADWALLS IN THIS STANDARD.
2. ONE c3 BAR, HEADWALL HEIGHTS OF 1800 mm, 2400 mm, 3600 mm AND TWO c3 BARS, HEADWALL HEIGHHT OF 3000 mm.
3. ONE c12 BAR, HEADWALL HEIGHTS OF 1800 mm, 2400 mm, 3600 mm AND TWO c12 BARS, HEADWALL HEIGHHT OF 3000 mm.
4. NOT APPLICABLE TO HEADWALL HEIGHT OF H=1800 mm.
5. FOR DIMENSION TABLE SEE SHEET MTRH 45-1-94.

LATEST REVISION DATE : 04-02

APPROVED BY : William A. Stoddard

STANDARD DESIGN

FLARED WING HEADWALLS

FOR

TRIPLE REINFORCED CONCRETE BOX CULVERTS

PROJECT DEVELOPMENT DIVISION

IOWA DEPARTMENT OF TRANSPORTATION

DECEMBER, 1994

MTRH 45-5-94

REVISED 04-02 - CHANGED BAR CLEARANCES.
TRH45SM.501

XXXXXXXXXSYSTEMTIME XXXXXXXUSERNAME XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXDGNSPEC