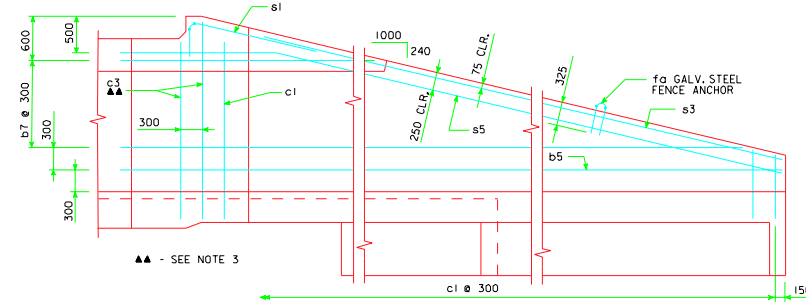
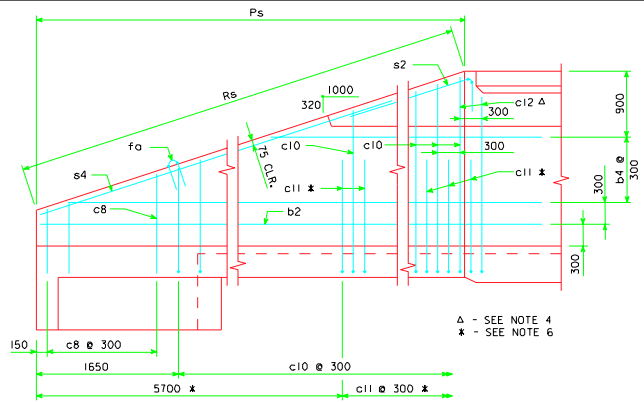


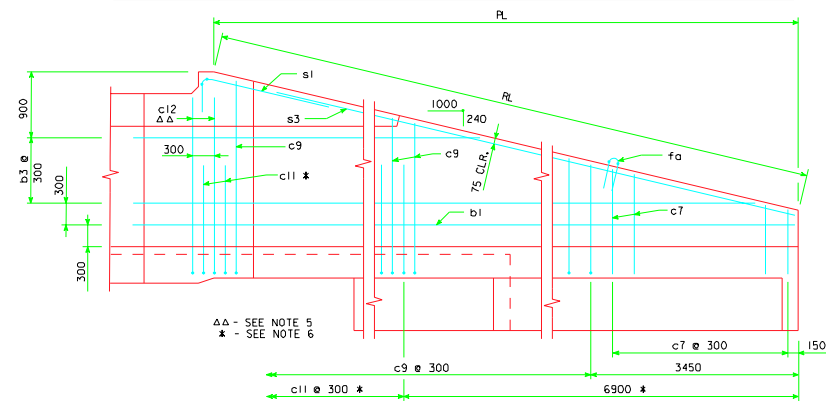
TYPICAL VIEW - FRONT FACE REINFORCING SHORT WINGWALL



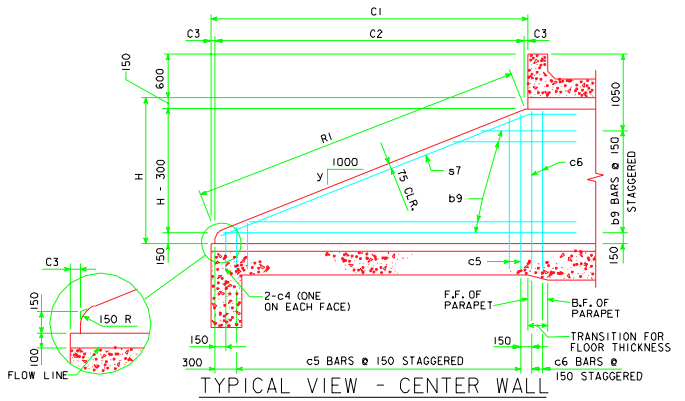
TYPICAL VIEW - FRONT FACE REINFORCING LONG WINGWALL



TYPICAL VIEW - BACK FACE REINFORCING SHORT WINGWALL



TYPICAL VIEW - BACK FACE REINFORCING LONG WINGWALL



TYPICAL VIEW - CENTER WALL

CULVERT SLOPE HEIGHT (H)	y mm
1800	352
2400	373
3000	385
3600	394

NOTE:

- BAR SPACINGS AND POSITIONS SHOWN ARE SIMILAR FOR ALL SIZES OF HEADWALLS IN THIS STANDARD.
- ONE C3 BAR, HEADWALL HEIGHT OF H = 2400 mm AND TWO C3 BARS, HEADWALL HEIGHTS OF H = 1800 mm, H = 3000 mm, AND H = 3600 mm.
- ONE C3 BAR, HEADWALL HEIGHT OF H = 1800 mm, H = 2400 mm AND TWO C3 BARS, HEADWALL HEIGHTS OF H = 1800 mm, AND H = 3600 mm.
- ONE C12 BAR, HEADWALL HEIGHT OF H = 2400 mm AND TWO C12 BARS, HEADWALL HEIGHTS OF H = 1800 mm, H = 3000 mm, AND H = 3600 mm.
- ONE C12 BAR, HEADWALL HEIGHT OF H = 1800 mm, H = 2400 mm AND TWO C12 BARS, HEADWALL HEIGHTS OF H = 3000 mm, AND H = 3600 mm.
- NOT APPLICABLE TO HEADWALL HEIGHT OF H = 1800 mm.
- FOR DIMENSION TABLE SEE SHEET MTHW 30-1-95.

LATEST REVISION DATE :

APPROVED BY : *William A. Redempt*

STANDARD DESIGN
FLARED WING HEADWALLS

FOR
TWIN REINFORCED CONCRETE BOX CULVERTS

PROJECT DEVELOPMENT DIVISION
IOWA DEPARTMENT OF TRANSPORTATION

JULY, 1995

MTHW 30-4-95

TWISDANLS01