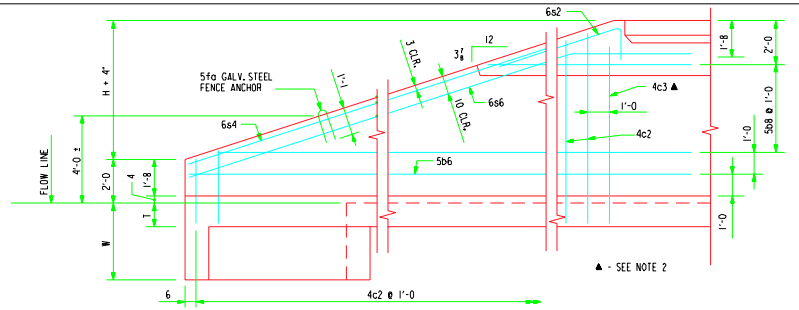
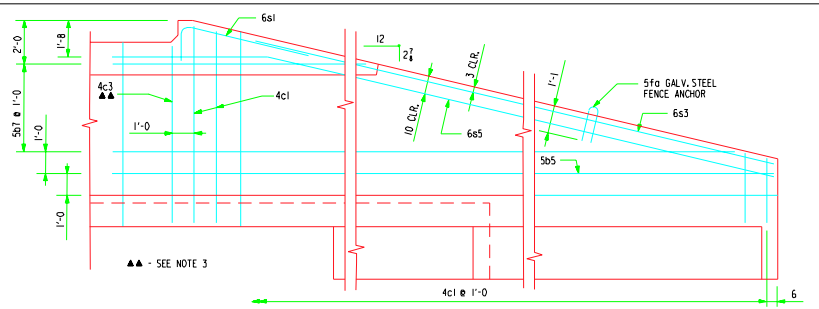
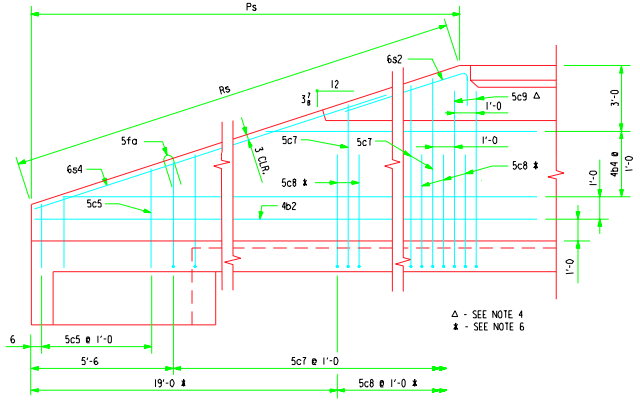


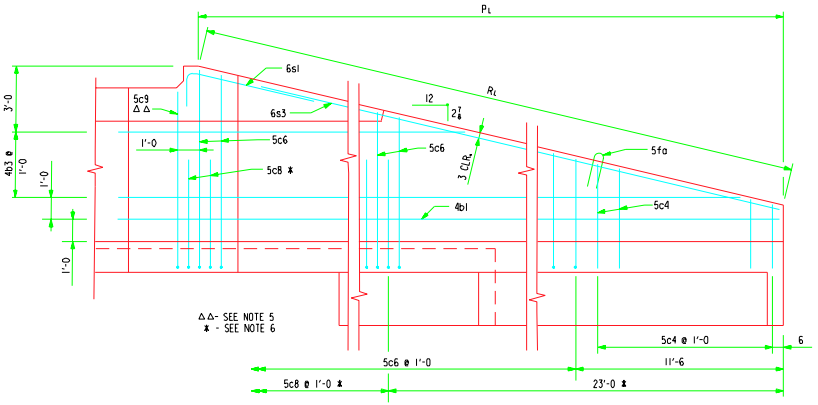

TYPICAL VIEW - FRONT FACE REINFORCING SHORT WINGWALL



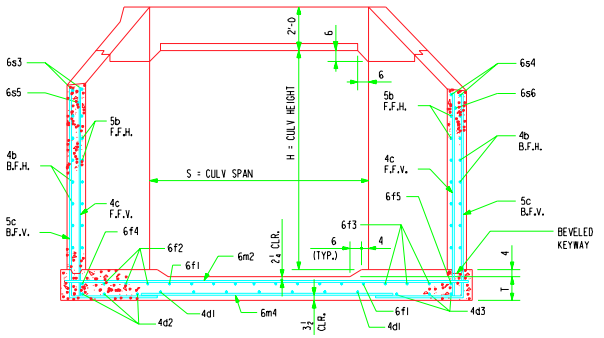

TYPICAL VIEW - FRONT FACE REINFORCING LONG WINGWALL



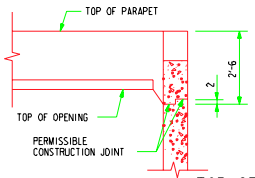

TYPICAL VIEW - BACK FACE REINFORCING SHORT WINGWALL



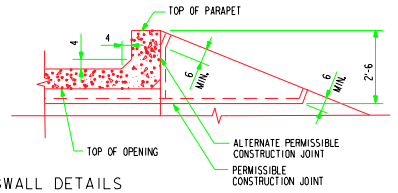

TYPICAL VIEW - BACK FACE REINFORCING LONG WINGWALL

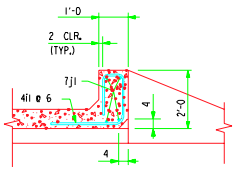



TYPICAL SECTION - NEAR CENTER OF APRON




TOP OF WINGWALL DETAILS




SECTION THRU PARAPET

NOTES :

1. BAR SPACINGS AND POSITIONS SHOWN ARE SIMILAR FOR ALL SIZES OF HEADWALLS IN THIS STANDARD.
2. ONE 4c3 BAR, HEADWALL HEIGHTS OF H:4', H:5', H:6', H:8' AND TWO 4c3 BARS, HEADWALL HEIGHTS OF H:3', H:10', H:12'.
3. ONE 4c3 BAR, HEADWALL HEIGHTS OF H:3', H:8' AND TWO 4c3 BARS, HEADWALL HEIGHTS OF H:4', H:5', H:6', H:10', H:12'.
4. ONE 5c9 BAR, HEADWALL HEIGHTS OF H:4', H:5', H:6', H:8' AND TWO 5c9 BARS, HEADWALL HEIGHTS OF H:3', H:10' AND H:12'.
5. ONE 5c9 BAR, HEADWALL HEIGHTS OF H:3', H:8' AND TWO 5c9 BARS, HEADWALL HEIGHTS OF H:4', H:5', H:6', H:10', H:12'.
6. NOT APPLICABLE TO HEADWALL HEIGHTS OF H:3', H:4', H:5' AND H:6'.
7. FOR DIMENSION TABLE SEE DWG. FWH 30-4-87.

LATEST REVISION DATE : 1-1-98

APPROVED BY : William A. Knudsen

STANDARD DESIGN

# FLARED WING HEADWALLS

FOR
REINFORCED CONCRETE BOX CULVERTS

HIGHWAY DIVISION
IOWA DEPARTMENT OF TRANSPORTATION

MAY , 1987

FWH 30-6-87

REVISED 1/98; CLEAR DISTANCE TO 4i1 BAR CHANGED.
REVISED : 12/96 ; KEYWAY NOTATION CHANGED.
FWH306.SOI

XXXXXXXXXXSYSTEMTIME XXXXXXXUSERNAME XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXDGNSPEC