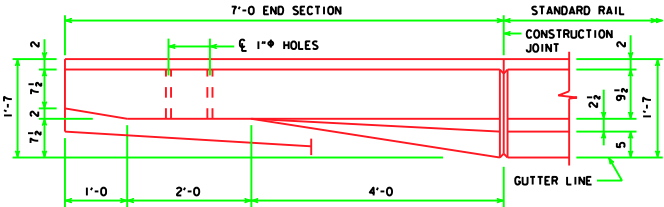
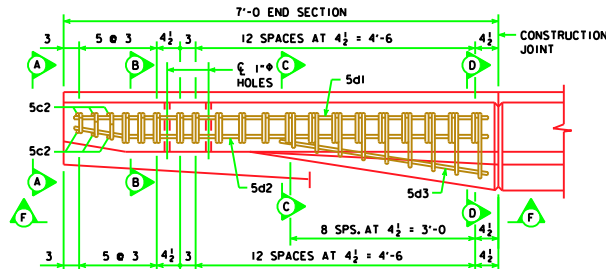


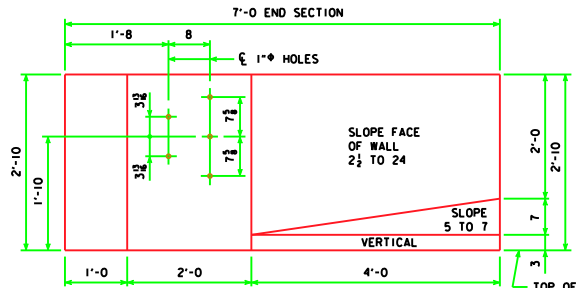
REVISION 03-07 - CHANGED "X" DIMENSION FOR 5c BARS AND ADJUSTED WEIGHT.



PART PLAN VIEW

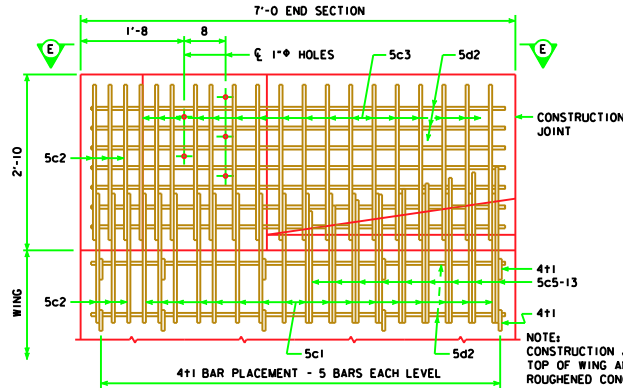


PART VIEW E-E

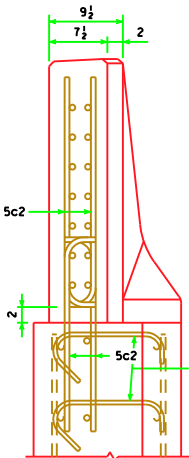


PART ELEVATION VIEW

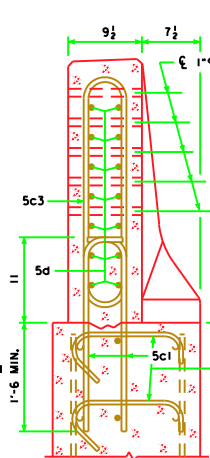
PROVIDE 5 HOLES FORMED WITH 1"Ø PLASTIC CONDUIT, COST TO BE INCLUDED IN PRICE BID FOR CONCRETE BARRIER RAILING.



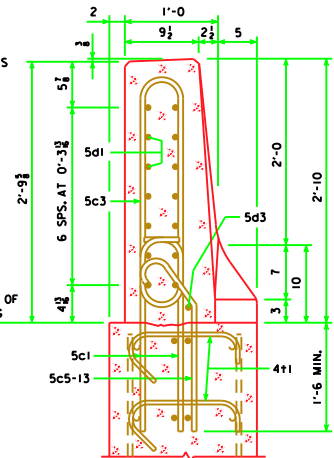
PART VIEW F-F



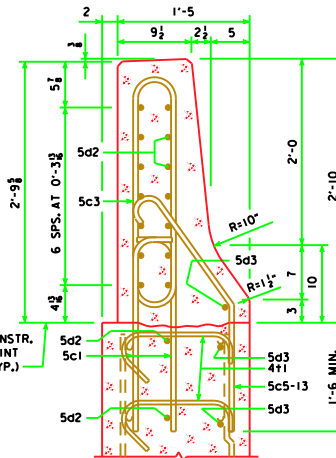
VIEW A-A



SECTION B-B



SECTION C-C



SECTION D-D

NOTE: CONSTRUCTION JOINT BETWEEN TOP OF WING AND BARRIER ROUGHENED CONCRETE.

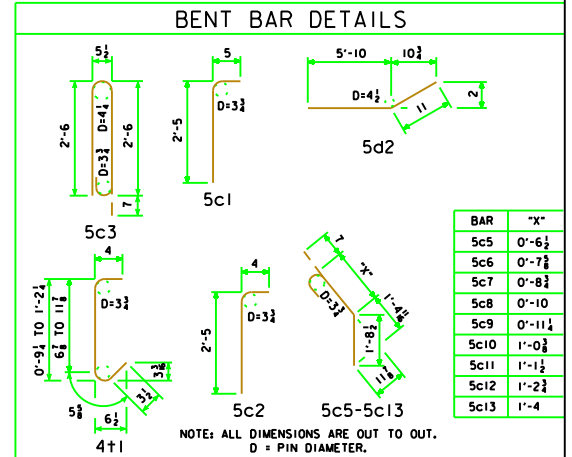
NOTE: THE 10" RADIUS AND 1 1/2" RADIUS ARE TYPICAL AND SHALL BE USED WHEN CONSTRUCTING THE CORNERS FOR VIEW A-A, SECTION B-B, SECTION C-C AND SECTION D-D.

NOTE: THE 5c1, 6 - 5c2, 5c5-13, 2 - 5d2 AND 2 - 5d3 BARS ARE TO BE PLACED WITH THE ABUTMENT WING FOOTING. THE DETAILS FOR PLACEMENT ARE SHOWN ON THE LONGITUDINAL SECTION SHEET.

NOTE: DASHED LINES BELOW THE TOP OF WING ARE THE ABUTMENT WING REINFORCING STEEL. SEE ABUTMENT DETAILS SHEETS FOR PLACEMENT.

EPOXY REINFORCING STEEL - ONE END SECTION					
BAR	LOCATION	SHAPE	NO.	LENGTH	WEIGHT
5c1	VERTICAL, RAIL TO WING FOOTING		34	2'-10"	100
5c2	VERTICAL AT NOSE, RAIL TO WING FOOTING		12	2'-9"	34
5c3	VERTICAL		17	6'-1"	108
5c5-13	VERTICAL		9	VARIES	30
5d1	HORIZONTAL		7	6'-8"	49
5d2	HORIZONTAL		9	6'-9"	63
5d3	HORIZONTAL		3	3'-5"	11
4t1	WING FOOTING TIE BARS		10	VARIES	13
(INCLUDE WITH BARRIER RAIL REINFORCING)					TOTAL WEIGHT (LBS.) 408

CONCRETE PLACEMENT SUMMARY		
SECTION		TOTAL
BARRIER RAIL ONE END SECTION		0.62 CU. YD.



BAR	"X"
5c5	0'-6 1/2"
5c6	0'-7 1/2"
5c7	0'-8 1/2"
5c8	0'-10"
5c9	0'-11 1/4"
5c10	1'-0 3/8"
5c11	1'-1 1/2"
5c12	1'-2 1/4"
5c13	1'-4"

LATEST REVISION DATE

03-07

Thomas R. McQuinn

APPROVED BY BRIDGE ENGINEER

Iowa Department of Transportation

Highway Division

STANDARD DESIGN - 40' ROADWAY, 3 SPAN BRIDGES

ROLLED STEEL BEAM BRIDGES

FEBRUARY, 2004

BARRIER RAIL DETAILS

SHEET 2 OF 3

RS40-70-04