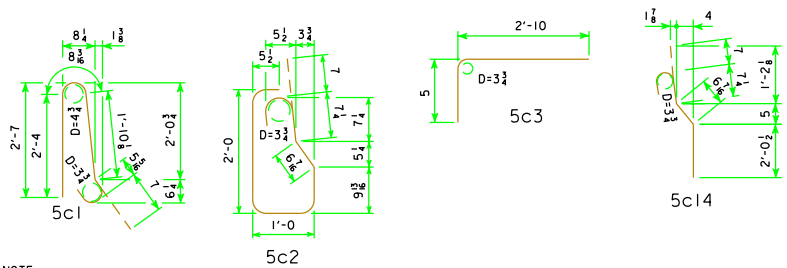


## EPOXY COATED REINFORCING STEEL-TWO BARRIER RAILS

(NOTE: THESE REINFORCING BARS TO BE USED ON ALL SKEWS)

BRIDGE LENGTH				138'-10		151'-4		163'-10		176'-4		188'-10		201'-4		213'-10		226'-4		243'-0													
SECTION	BAR	LOCATION	SHAPE	NO.	LENGTH	WEIGHT	NO.	LENGTH	WEIGHT	NO.	LENGTH	WEIGHT	NO.	LENGTH	WEIGHT	NO.	LENGTH	WEIGHT	NO.	LENGTH	WEIGHT	NO.	LENGTH	WEIGHT	NO.	LENGTH	WEIGHT						
STANDARD SECTION	5c1	VERTICAL		288	5'-11	1,777	312	5'-11	1,925	338	5'-11	2,086	362	5'-11	2,234	388	5'-11	2,394	432	5'-11	2,666	458	5'-11	2,826	482	5'-11	2,974	516	5'-11	3,184			
	5c2	VERTICAL		288	6'-0	1,802	312	6'-0	1,952	338	6'-0	2,115	362	6'-0	2,265	388	6'-0	2,428	412	6'-0	2,578	438	6'-0	2,741	462	6'-0	2,891	496	6'-0	3,104			
	5c3	VERTICAL		-----	-----	0	-----	-----	0	-----	-----	0	-----	-----	0	-----	-----	0	20	3'-3	68	20	3'-3	68	20	3'-3	68	20	3'-3	68	20	3'-3	68
	5c14	VERTICAL		-----	-----	0	-----	-----	0	-----	-----	0	-----	-----	0	-----	-----	0	20	3'-10	80	20	3'-10	80	20	3'-10	80	20	3'-10	80	20	3'-10	80
	5d1	LONGITUDINAL-STANDARD SECTION			36	40'-0	1,502	54	40'-0	2,253	54	40'-0	2,253	54	40'-0	2,253	72	40'-0	3,004	72	40'-0	3,004	72	40'-0	3,004	90	40'-0	3,755	90	40'-0	3,755		
	5d2	LONGITUDINAL-STANDARD SECTION, ENDS			36	34'-8	1,302	36	22'-0	826	36	28'-3	1,061	36	34'-6	1,295	36	21'-10	820	36	32'-5	1,217	36	38'-8	1,452	36	26'-0	976	36	34'-4	1,289		
	4 END SECTIONS @ 458 LBS.						1,832			1,832			1,832			1,832			1,832			1,832			1,832			1,832			1,832		
	TOTAL LBS. (INCLUDE WITH SUPERSTRUCTURE REINFORCING)						8,215			8,788			9,347			9,879			10,478			11,445			12,003			12,576			13,312		

### BENT BAR DETAILS



NOTE:  
ALL DIMENSIONS ARE OUT TO OUT. D = PIN DIAMETER.

### CONCRETE PLACEMENT SUMMARY - C.Y.

BRIDGE LENGTH		138'-10	151'-4	163'-10	176'-4	188'-10	201'-4	213'-10	226'-4	243'-0
STANDARD SECTION *	2 x "B" @ 0.1052 C.Y. PER FT.	30.1	32.7	35.4	38.0	40.6	45.1	47.7	50.4	53.9
BARRIER RAIL END SECTION	4 @ 0.65 C.Y.	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
TOTAL C.Y.		32.7	35.3	38.0	40.6	43.2	47.7	50.3	53.0	56.5

\* SEE SHEET H40-39-06 FOR DIMENSION "B". CONCRETE QUANTITIES SHOWN ARE BASED ON 45° SKEW BID LENGTHS.

### CONCRETE BARRIER RAIL QUANTITIES - L.F.

BRIDGE LENGTH		138'-10	151'-4	163'-10	176'-4	188'-10	201'-4	213'-10	226'-4	243'-0
CONCRETE BARRIER RAILING	0° SKEW	311.7	336.7	361.7	386.7	411.7	456.7	481.7	506.7	540.0
CONCRETE BARRIER RAILING	15° SKEW	311.9	336.9	361.9	386.9	411.9	456.7	481.7	506.7	540.0
CONCRETE BARRIER RAILING	30° SKEW	312.6	337.6	362.6	387.6	412.6	456.7	481.7	506.7	540.0
CONCRETE BARRIER RAILING	45° SKEW	314.2	339.2	364.2	389.2	414.2	456.7	481.7	506.7	540.0

10-09 LATEST REVISION DATE	 APPROVED BY BRIDGE ENGINEER		<b>Iowa Department of Transportation</b> <b>Highway Division</b> STANDARD DESIGN - 40' ROADWAY, THREE SPAN BRIDGE <b>PRETENSIONED PRESTRESSED</b> <b>CONCRETE BEAM BRIDGES</b> AUGUST, 2009
		<b>BARRIER RAIL DETAILS</b> SHEET 3 OF 3	<b>H40-41-06</b>

REVISED 10-09 - THE REINFORCING STEEL WAS CHANGED TO AGREE WITH H40-40-06.