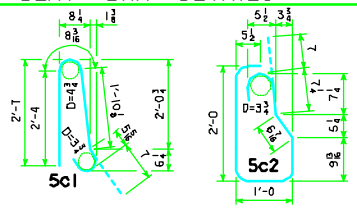
EPOXY REINF. STEEL-TWO BARRIER RAILS

BRIDGE LENGTH				160'-0			180'-0			200'-0			220'-0			240'-0			260'-0			280'-0			300'-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		326	5'-11	2012	366	5'-11	2259	406	5'-11	2506	446	5'-11	2752	486	5'-11	2999	526	5'-11	3246	566	5'-11	3493	606	5'-11	3740
	5c2	VERTICAL		326	6'-0	2040	366	6'-0	2290	406	6'-0	2541	446	6'-0	2791	486	6'-0	3041	526	6'-0	3292	566	6'-0	3542	606	6'-0	3792
	5d1	LONGITUDINAL		90	34'-5	3231	108	32'-4	3642	108	35'-8	4018	126	33'-9	4435	126	36'-8	4819	144	34'-10	5232	144	37'-4	5607	162	35'-8	6026
		4 END SECTIONS @ 413 LB				1652			1652			1652			1652			1652			1652			1652			1652
(INCLUDE WITH SUPERSTRUCTURE REINFORCING)				TOTAL (LB)		8935	TOTAL (LB)		9843	TOTAL (LB)		10,717	TOTAL (LB)		11,630	TOTAL (LB)		12,511	TOTAL (LB)		13,422	TOTAL (LB)		14,294	TOTAL (LB)		15,210

BENT BAR DETAILS



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

CONCRETE PLACEMENT SUMMARY

BRIDGE LENGTH		160'-0	180'-0	200'-0	220'-0	240'-0	260'-0	280'-0	300'-0
STANDARD SECTION *	2 X 8 @ 0.1052 CU.YD. PER FT.	34.4	38.6	42.8	47.0	51.2	55.4	59.6	63.8
END SECTION	4 @ 0.62 CU.YD.	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
	TOTAL (CU. YD.)	36.9	41.1	45.3	49.5	53.7	57.9	62.1	66.3

* SEE RS40-BRI-04 FOR DIMENSION "B".
CONCRETE QUANTITIES SHOWN ARE
BASED ON 30° SKEW BID LENGTHS.

CONCRETE BARRIER RAIL QUANTITIES

BRIDGE LENGTH		UNIT	160'-0	180'-0	200'-0	220'-0	240'-0	260'-0	280'-0	300'-0
CONCRETE BARRIER RAILING	0° SKEW	L.F.	354.0	394.0	434.0	474.0	514.0	554.0	594.0	634.0
CONCRETE BARRIER RAILING	10° SKEW	L.F.	354.1	394.1	434.1	474.1	514.1	554.1	594.1	634.1
CONCRETE BARRIER RAILING	20° SKEW	L.F.	354.4	394.4	434.4	474.4	514.4	554.4	594.4	634.4
CONCRETE BARRIER RAILING	30° SKEW	L.F.	354.9	394.9	434.9	474.9	514.9	554.9	594.9	634.9

LATEST REVISION DATE

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 3 OF 3

RS40-BR3-04