

OPEN RAIL REINFORCING BAR LIST - TWO RAILS

NOTE: THESE REINFORCING BARS TO BE USED ON ALL SKEWS.

STANDARD SECTION	ABUT. LOCATION	SHAPE	46'-8"		55'-0"		67'-6"		80'-0"		90'-0"		100'-0"		110'-0"		
			NO.	LENGTH	WEIGHT	NO.	LENGTH	WEIGHT	NO.	LENGTH	WEIGHT	NO.	LENGTH	WEIGHT	NO.	LENGTH	WEIGHT
7J1	RAIL POST VERTICAL	L	84	4'-1	701	108	4'-1	901	144	4'-1	1202	144	4'-1	1402	192	4'-1	1602
5J2	RAIL POST TIES	U	42	4'-0	175	54	4'-0	225	72	4'-0	300	72	4'-0	300	84	4'-0	401
5J3	RAIL TIES	U	164	5'-8	969	184	5'-8	1088	216	5'-8	1277	276	5'-8	1631	304	5'-8	1797
6h1	RAIL LONGITUDINAL	U	24	26'-8	961	24	30'-10	1111	24	34'-10	1256	24	41'-1	1481	24	46'-1	1661
5J7	VERTICAL	L	-	-	-	-	-	-	-	-	-	72	3'-10	288	72	3'-10	288
5J8	VERTICAL	L	-	-	-	-	-	-	-	-	-	36	5'-0	188	36	5'-0	188
6h4	LONGITUDINAL	U	-	-	-	-	-	-	-	-	-	40	7'-9	466	40	7'-9	466
4t1	WING FOOTING TIE BAR	U	-	-	-	-	-	-	-	-	-	32	2'-2	46	32	2'-2	46
5d1	WING HORIZONTAL	U	16	6'-8	111	16	6'-8	111	16	6'-8	111	16	11'-8	195	16	11'-8	195
5J4	ANCHOR TO SLAB	U	104	3'-10	416	104	3'-10	416	104	3'-10	416	104	3'-10	416	104	3'-10	416
5J5	VERTICAL	L	48	5'-0	250	48	5'-0	250	48	5'-0	250	48	5'-0	250	48	5'-0	250
5J6	VERTICAL	L	4	4'-11	21	4	4'-11	21	4	4'-11	21	4	4'-11	21	4	4'-11	21
6h2	LONGITUDINAL	U	28	6'-8	280	28	6'-8	280	28	6'-8	280	28	6'-8	280	28	6'-8	280
6h3	LONGITUDINAL	U	28	6'-8	280	28	6'-8	280	28	6'-8	280	28	6'-8	280	28	6'-8	280
4t1	WING FOOTING TIE BAR	U	40	VARIES	51	40	VARIES	51	40	VARIES	51	40	VARIES	51	40	VARIES	51
TOTAL LBS.					4215			4734			5444			7095			7691
															8240		8752

CONCRETE OPEN RAIL QUANTITIES

BRIDGE LENGTH		UNIT	46'-8"	55'-0"	67'-6"	80'-0"	90'-0"	100'-0"	110'-0"
CONCRETE BARRIER RAILING	0° SKEW	L.F.	127.3	144.0	169.0	214.0	234.0	254.0	274.0
CONCRETE BARRIER RAILING	15° SKEW	L.F.	127.5	144.2	169.2	214.2	234.2	254.2	274.2
CONCRETE BARRIER RAILING	30° SKEW	L.F.	128.3	144.9	169.9	214.9	234.9	254.9	274.9

CONCRETE PLACEMENT QUANTITIES

NOTE: THESE VALUES TO BE USED FOR ALL SKEWS.

§-§ ABUTMENT BEARING	46'-8"	55'-0"	67'-6"	80'-0"	90'-0"	100'-0"	110'-0"
STANDARD SECTION	7.8	9.1	11.1	13.1	14.5	16.1	17.6
ABUTMENT DIAPHRAGM EXTENSION 4 @ 0.47 CU. YDS.	-	-	-	1.9	1.9	1.9	1.9
END SECTION 4 @ 0.70 CU. YDS.	2.8	2.8	2.8	2.8	2.8	2.8	2.8
TOTAL CU. YDS.	10.6	11.9	13.9	17.8	19.2	20.8	22.3

BENT BAR DETAILS

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

LATEST REVISION DATE :

APPROVED BY

STANDARD DESIGN - 24' ROADWAY, SINGLE SPAN BRIDGE
PRETENSIONED PRESTRESSED
CONCRETE BEAM BRIDGES
JANUARY, 2005 HS20-44 LOADING
IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
OPEN RAIL DETAILS
SHEET 2 OF 2
H24SI-35-05