EPOXY COATED REINFORCING BAR LIST

ONE SUPERSTRUCTURE AND TWO ABUTMENTS

BRIDGE LENGTH

BAR	LOCATION	SHAPE	46'-8 LXA NO.	LENGTH	WEIGHT	55'-0 LXA NO.	LENGTH	WEIGHT	67'-6 LXB NO.	LENGTH	WEIGHT	80'-0 LXC NO.	LENGTH	WEIGHT	90'-0 LXD NO.	LENGTH	WEIGHT	100'-0 LXD NO.	LENGTH	WEIGHT	110'-0 LXD NO.	LENGTH	WEIGHT
6a1	SLAB TRANSVERSE, TOP & BOTTOM		111	32'-10	5475	133	32'-10	6559	165	32'-10	8138	199	32'-10	9814	225	32'-10	11,097	253	32'-10	12,477	279	32'-10	13,760
6a2	SLAB TRANSVERSE ENDS, TOP		20	*	511	20	*	511	20	*	511	20	*	511	20	*	511	20	*	511	20	*	511
6a3	SLAB TRANSVERSE ENDS, BOTTOM		22	**	562	22	**	562	22	**	562	22	**	562	22	**4	562	22	**	562	22	**	562
5b1	SLAB LONGITUDINAL TOP & BOTTOM		168	25'-10	4527	168	29'-11	5243	168	36'-2	6338	252	29'-0	7623	252	32'-4	8499	252	35'-8	9375	252	39'-0	10,251
5d6	ABUTMENT DIAPHRAGM LONGITUDINAL - B.F.		8	33'-10	283	8	33'-10	283	8	33'-10	283	8	33'-10	283	8	33'-10	283	8	33'-10	283	8	33'-10	283
5d7	PAVING NOTCH, LONGITUDINAL		4	29'-7	124	4	29'-7	124	4	29'-7	124	4	33'-11	142	4	33'-11	142	4	33'-11	142	4	33'-11	142
8f1	ABUTMENT FOOTING LONGITUDINAL - B.F.		8	33'-10	723	8	33'-10	723	8	33'-10	723	8	33'-10	723	8	33'-10	723	8	33'-10	723	8	33'-10	723
8g1	ABUTMENT VERTICAL - B.F.		62	6'-7	1090	62	6'-7	1090	62	7'-2	1187	58	7'-8	1188	58	8'-5	1304	58	8'-5	1304	58	8'-5	1304
8g3	ABUTMENT DIAPHRAGM VERTICAL - B.F.		50	15'-3	2036	50	15'-3	2036	50	15'-3	2036	50	15'-9	2103	50	15'-9	2103	50	15'-9	2103	50	15'-9	2103
5j1	SLAB TRANSV. TOP AT RAIL		128	6'-3	835	150	6'-3	978	182	6'-3	1187	216	6'-3	1409	242	6'-3	1578	270	6'-3	1761	296	6'-3	1930
5k1	PAVING NOTCH, TRANSVERSE		54	4'-11	277	54	4'-11	277	54	4'-11	277	54	4'-11	277	54	4'-11	277	54	4'-11	277	54	4'-11	277
5k2	PAVING NOTCH, TRANSVERSE		54	3'-5	193	54	3'-5	193	54	3'-5	193	54	3'-5	193	54	3'-5	193	54	3'-5	193	54	3'-5	193
5p1	ABUTMENT HOOPS		120	10'-6	1315	120	10'-6	1315	120	10'-6	1315	112	10'-6	1227	96	10'-6	1052	108	10'-6	1183	108	10'-6	1183
6p3	ABUT. BOTT. AT PILES		-	-	-	-	-	-	-	-	-	32	6'-8	321	36	6'-8	361	40	6'-8	401	40	6'-8	401
5p4	ABUTMENT HOOPS AT ENDS		8	10'-9	90	8	10'-9	90	8	10'-9	90	8	10'-9	90	8	10'-9	90	8	10'-9	90	8	10'-9	90
	REINFORCING STEEL - EPOXY COATED (LBS.)				18,041			19,984			22,964			26,466			28,775			31,385			33,713
	SEE BARRIER RAIL DETAILS (LBS.)				3870			4226			4784			5809			6245			6682			7160
	SEE OPEN RAIL DETAILS (LBS.)				4215			4734			5444			7095			7691			8240			8752

NON-EPOXY COATED REINFORCING BAR LIST

ONE SUPERSTRUCTURE AND TWO ABUTMENTS

BRIDGE LENGTH

BAR	LOCATION	SHAPE	46'-8 LXA NO.	LENGTH	WEIGHT	55'-0 LXA NO.	LENGTH	WEIGHT	67'-6 LXB NO.	LENGTH	WEIGHT	80'-0 LXC NO.	LENGTH	WEIGHT	90'-0 LXD NO.	LENGTH	WEIGHT	100'-0 LXD NO.	LENGTH	WEIGHT	110'-0 LXD NO.	LENGTH	WEIGHT
5d2	ABUTMENT DIAPHRAGM, LONGITUDINAL - F.F.		24	6'-4	159	24	6'-1	153	24	6'-1	153	24	6'-1	153	24	6'-3	157	24	6'-3	157	24	6'-3	157
5d3	ABUTMENT DIAPHRAGM, LONGITUDINAL - F.F.		8	5'-5	46	8	5'-2	44	8	5'-2	44	8	5'-2	44	8	5'-0	42	8	5'-0	42	8	5'-0	42
5d5	ABUTMENT DIAPHRAGM, LONGITUDINAL - END		12	4'-7	58	12	4'-7	58	12	4'-7	58	12	4'-7	58	12	4'-7	58	12	4'-7	58	12	4'-7	58
5d8	ABUTMENT DIAPH. WING EXT. LONGIT.		-	-	-	-	-	-	-	-	-	48	10'-6	526	48	10'-6	526	48	10'-6	526	48	10'-6	526
8f2	ABUTMENT FOOTING LONGITUDINAL - F.F.		10	33'-10	904	10	33'-10	904	10	33'-10	904	10	33'-10	904	10	33'-10	904	10	33'-10	904	10	33'-10	904
8f3	ABUTMENT EXTENSION LONGITUDINAL		-	-	-	-	-	-	-	-	-	16	10'-2	435	16	10'-2	435	16	10'-2	435	16	10'-2	435
8f4	ABUTMENT EXTENSION LONGITUDINAL		-	-	-	-	-	-	-	-	-	16	9'-0	385	16	9'-0	385	16	9'-0	385	16	9'-0	385
8g2	ABUTMENT VERTICAL - F.F.		52	5'-6	764	52	5'-6	764	52	6'-1	845	52	6'-7	915	52	7'-4	1019	52	7'-4	1019	52	7'-4	1019
6g4	ABUT. DIAPH. WING EXT. VERT.		-	-	-	-	-	-	-	-	-	40	5'-8	341	40	6'-5	386	40	6'-5	386	40	6'-5	386
5h1	ABUT. WING HORIZONTAL		56	6'-8	390	56	6'-8	390	56	6'-8	390	56	6'-8	390	56	6'-8	390	56	6'-8	390	56	6'-8	390
5h2	ABUTMENT TO WING ANCHOR		56	4'-0	234	56	4'-0	234	56	4'-0	234	8	4'-0	34	8	4'-0	34	8	4'-0	34	8	4'-0	34
5p2	ABUT. EXTENSION HOOPS		-	-	-	-	-	-	-	-	-	24	10'-8	268	24	10'-8	268	24	10'-8	268	24	10'-8	268
5r1	PAVING BLOCK LIFTING HOOPS		8	2'-10	24	8	2'-10	24	8	2'-10	24	8	2'-10	24	8	2'-10	24	8	2'-10	24	8	2'-10	24
5s1	WING, VERTICAL		56	VARIES	263	56	VARIES	263	56	VARIES	263	56	VARIES	263	56	VARIES	263	56	VARIES	263	56	VARIES	263
4t1	UNDER BEAMS AT ABUTMENTS		10	4'-8	32	10	4'-8	32	10	4'-8	32	10	4'-8	32	10	4'-10	33	10	4'-10	33	10	4'-10	33
#2	PILE SPIRAL - NO. 2 BAR		12	38'-6	77	14	38'-6	90	14	38'-6	90	20	38'-6	128	22	38'-6	141	24	38'-6	154	24	38'-6	154
	SPIRAL SPACER $L\frac{7}{8}\times\frac{7}{8}\times\frac{1}{8}\times 0.70$		24	1'-10	32	28	1'-10	37	28	1'-10	37	40	1'-10	52	44	1'-10	58	48	1'-10	63	48	1'-10	63
* VARIES FROM 4'-5 TO 29'-7 ** VARIES FROM 3'-0 TO 31'-0																							
	REINFORCING STEEL - NON-EPOXY COATED (LBS.)				2983			2993			3074			4952			5123			5141			5141

CONCRETE PLACEMENT QUANTITIES

(SUPERSTRUCTURE PLUS INTEGRAL ABUTMENTS)

			46'-8	55'-0	67'-6	80'-0	90'-0	100'-0	110'-0
SLAB, AND ABUT. DIAPHRAGM	WITH BARRIER RAIL	CU.YD.	67.6	74.4	88.7	108.3	123.6	132.4	141.0
	WITH OPEN RAIL	CU.YD.	69.1	76.1	90.8	110.7	126.4	135.4	144.4
PAVING BLOCKS		CU.YD.	1.5	1.5	1.5	1.6	1.6	1.6	1.6
ABUTMENT WINGS		CU.YD.	6.9	6.9	6.9	6.9	6.9	6.9	6.9
ABUTMENT FOOTINGS		CU.YD.	27.6	27.6	27.6	35.3	35.3	35.3	35.3

ESTIMATED QUANTITIES

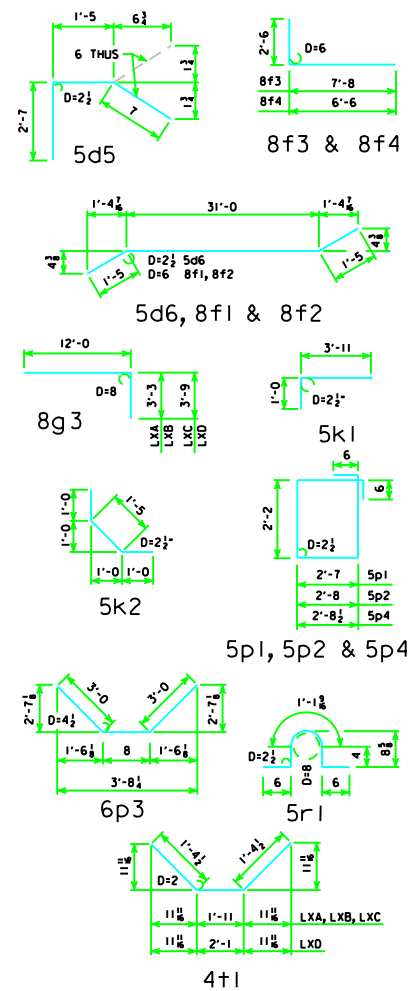
(SUPERSTRUCTURE PLUS INTEGRAL ABUTMENTS)

			46'-8	55'-0	67'-6	80'-0	90'-0	100'-0	110'-0
NO. OF STEEL H-PILES FOR TWO ABUTS. (HP10X42)		NO.	12	14	14	20	22	24	24
STRUCTURAL CONCRETE, (BRIDGE)	WITH BARRIER RAIL	CU.YD.	103.6	110.4	124.7	152.1	167.4	176.2	184.8
	WITH OPEN RAIL	CU.YD.	105.1	112.1	126.8	154.5	170.2	179.2	188.2
CONCRETE RAIL (BARRIER OR OPEN)		L.F.	127.5	144.2	169.2	214.2	234.2	254.2	274.2
REINFORCING STEEL EPOXY COATED	WITH BARRIER RAIL	LBS.	21,911	24,210	27,748	32,275	35,020	38,067	40,873
	WITH OPEN RAIL	LBS.	22,256	24,718	28,408	33,561	36,466	39,625	42,465
REINFORCING STEEL		LBS.	2983	2993	3074	4952	5123	5141	5141
STRUCTURAL STEEL	WITH BARRIER RAIL	LBS.	1532	1526	1570	1610	1695	1695	1695
	WITH OPEN RAIL	LBS.	1242	1235	1235	1235	1265	1265	1265

LATEST REVISION DATE :

APPROVED BY

BENT BAR DETAILS



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

STANDARD DESIGN - 30' ROADWAY, SINGLE SPAN BRIDGE

PRETENSIONED PRESTRESSED CONCRETE BEAM BRIDGES

JANUARY, 2005 HS20-44 LOADING

IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION

DECK & ABUTMENT REINF. H30S1-16-05 EPOXY