EPOXY COATED REINFORCING BAR LIST

ONE SUPERSTRUCTURE AND TWO ABUTMENTS

BRIDGE LENGTH

BAR	LOCATION	SHAPE	46'-8 LXA NO.	46'-8 LXA LENGTH	46'-8 LXA WEIGHT	55'-0 LXA NO.	55'-0 LXA LENGTH	55'-0 LXA WEIGHT	67'-6 LXB NO.	67'-6 LXB LENGTH	67'-6 LXB WEIGHT	80'-0 LXC NO.	80'-0 LXC LENGTH	80'-0 LXC WEIGHT	90'-0 LXD NO.	90'-0 LXD LENGTH	90'-0 LXD WEIGHT	100'-0 LXD NO.	100'-0 LXD LENGTH	100'-0 LXD WEIGHT	110'-0 LXD NO.	110'-0 LXD LENGTH	110'-0 LXD WEIGHT
6a1	SLAB TRANSVERSE, TOP & BOTTOM		131	32'-10	6461	153	32'-10	7546	187	32'-10	9223	221	32'-10	10899	247	32'-10	12181	273	32'-10	13,464	301	32'-10	14,845
5b1	SLAB LONGITUDINAL TOP & BOTTOM		168	25'-9	4513	168	29'-10	5228	168	36'-1	6323	252	28'-11	7601	252	32'-3	8477	252	35'-7	9353	252	38'-11	10229
5d6	ABUTMENT DIAPHRAGM LONGITUDINAL - B.F.		8	32'-9	274	8	32'-9	274	8	32'-9	274	8	32'-9	274	8	32'-9	274	8	32'-9	274	8	32'-9	274
5d7	PAVING NOTCH, LONGITUDINAL		4	28'-6	119	4	28'-6	119	4	28'-6	119	4	32'-8	137	4	32'-8	137	4	32'-8	137	4	32'-8	137
8f1	ABUTMENT FOOTING LONGITUDINAL - B.F.		8	32'-11	704	8	32'-11	704	8	32'-11	704	8	32'-11	704	8	32'-11	704	8	32'-11	704	8	32'-11	704
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		130	6'-3	848	152	6'-3	991	186	6'-3	1213	220	6'-3	1435	246	6'-3	1604	272	6'-3	1774	300	6'-3	1956
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		108	10'-6	1183	108	10'-6	1183	104	10'-6	1139	120	10'-6	1315	104	10'-6	1139	116	10'-6	1271	116	10'-6	1271
6p3	ABUT. BOTT. AT PILES		-	-	-	-	-	-	-	-	-	32	6'-8	321	36	6'-8	361	40	6'-8	401	40	6'-8	401
	REINFORCING STEEL - EPOXY COATED (LBS.)				17,698			19,641			22,688			26,447			28,754			31,255			33,694
	SEE BARRIER RAIL DETAILS (LBS.)				3870			4226			4784			5809			6245			6682			7160
	SEE OPEN RAIL DETAILS (LBS.)				4215			4734			5444			7095			7691			8240			8752

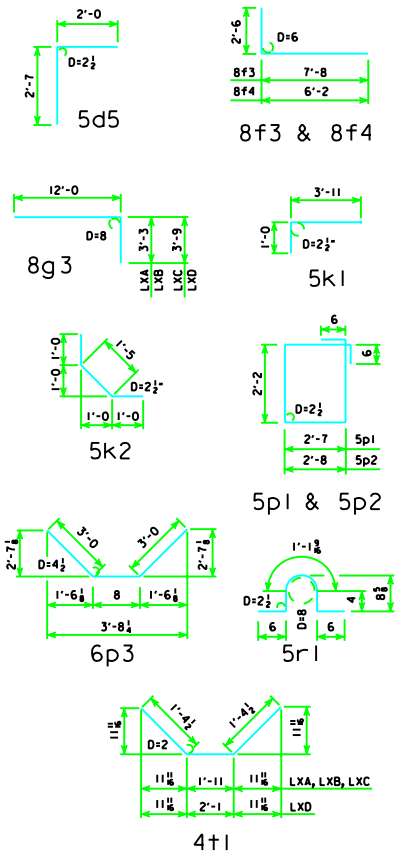
NON-EPOXY COATED REINFORCING BAR LIST

ONE SUPERSTRUCTURE AND TWO ABUTMENTS

BRIDGE LENGTH

BAR	LOCATION	SHAPE	46'-8 LXA NO.	46'-8 LXA LENGTH	46'-8 LXA WEIGHT	55'-0 LXA NO.	55'-0 LXA LENGTH	55'-0 LXA WEIGHT	67'-6 LXB NO.	67'-6 LXB LENGTH	67'-6 LXB WEIGHT	80'-0 LXC NO.	80'-0 LXC LENGTH	80'-0 LXC WEIGHT	90'-0 LXD NO.	90'-0 LXD LENGTH	90'-0 LXD WEIGHT	100'-0 LXD NO.	100'-0 LXD LENGTH	100'-0 LXD WEIGHT	110'-0 LXD NO.	110'-0 LXD LENGTH	110'-0 LXD WEIGHT
5d2	ABUTMENT DIAPHRAGM, LONGITUDINAL - F.F.		24	6'-2	155	24	5'-11	149	24	5'-11	149	24	5'-11	149	24	6'-1	153	24	6'-1	153	24	6'-1	153
5d3	ABUTMENT DIAPHRAGM, LONGITUDINAL - F.F.		8	5'-3	44	8	5'-0	42	8	5'-0	42	8	5'-0	42	8	4'-10	41	8	4'-10	41	8	4'-10	41
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	32'-11	879	10	32'-11	879	10	32'-11	879	10	32'-11	879	10	32'-11	879	10	32'-11	879	10	32'-11	879
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	8'-8	371	16	8'-8	371	16	8'-8	371	16	8'-8	371
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	12	38'-6	77	14	38'-6	90	20	38'-6	128	22	38'-6	141	24	38'-6	154	24	38'-6	154
	SPIRAL SPACER $L\frac{1}{8}\times\frac{1}{8}\times$ 0.70		24	1'-10	32	24	1'-10	32	28	1'-10	37	40	1'-10	52	44	1'-10	58	48	1'-10	63	48	1'-10	63
	REINFORCING STEEL - NON-EPOXY COATED (LBS.)				2952			2944			3043			4907			5079			5097			5097

BENT BAR DETAILS



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

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.	66.6	73.3	87.4	106.9	122.1	130.8	139.4
	WITH OPEN RAIL	CU.YD.	68.1	75.0	89.5	109.4	124.8	133.9	142.8
PAVING BLOCKS		CU.YD.	1.5	1.5	1.5	1.5	1.5	1.5	1.5
ABUTMENT WINGS		CU.YD.	6.9	6.9	6.9	6.9	6.9	6.9	6.9
ABUTMENT FOOTINGS		CU.YD.	26.6	26.6	26.6	34.4	34.4	34.4	34.4

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 ABUTMENTS (HP10X42)		NO.	12	12	14	20	22	24	24
STRUCTURAL CONCRETE, (BRIDGE)	WITH BARRIER RAIL	CU.YD.	101.6	108.3	122.4	149.7	164.9	173.6	182.2
	WITH OPEN RAIL	CU.YD.	103.1	110.0	124.5	152.2	167.6	176.7	185.6
CONCRETE RAIL (BARRIER OR OPEN)		L.F.	127.3	144.0	169.0	214.0	234.0	254.0	274.0
REINFORCING STEEL EPOXY COATED	WITH BARRIER RAIL	LBS.	21,568	23,867	27,472	32,256	34,999	37,937	40,854
	WITH OPEN RAIL	LBS.	21,913	24,375	28,132	33,542	36,445	39,495	42,446
REINFORCING STEEL		LBS.	2952	2944	3043	4907	5079	5097	5097
STRUCTURAL STEEL	WITH BARRIER RAIL	LBS.	1480	1471	1515	1555	1642	1642	1642
	WITH OPEN RAIL	LBS.	1190	1180	1180	1180	1212	1212	1212

LATEST REVISION DATE :

APPROVED BY

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. 15° SKEW

H30S1-09-05 EPOXY