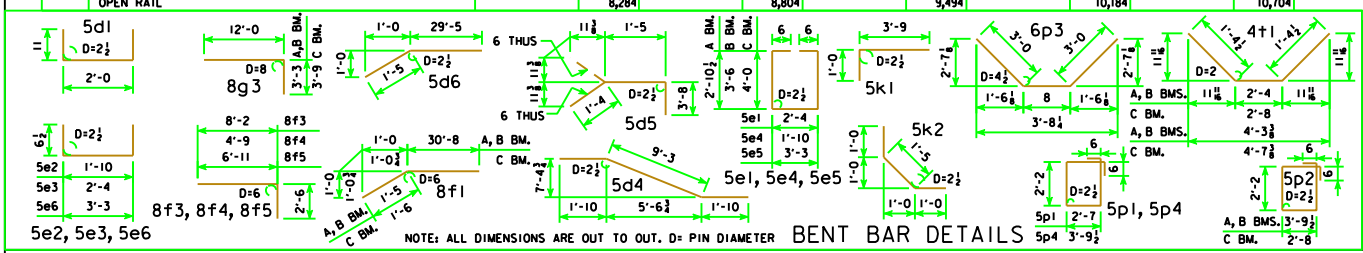
EPOXY COATED REINFORCING

REINFORCING BAR LIST

ONE SUPERSTRUCTURE AND TWO ABUTMENTS

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	NO.	LENGTH	WEIGHT
	℄-℄ ABUT. BRG.		138'-10			151'-4			163'-10			176'-4			188'-10			201'-4			213'-10			226'-4			243'-0		
	℄-℄ BEAM BRG.		42'-6	50'-10	42'-6	46'-8	55'-0	46'-8	50'-10	59'-2	50'-10	55'-0	63'-4	55'-0	59'-2	67'-6	59'-2	63'-4	71'-8	63'-4	67'-6	75'-10	67'-6	71'-8	80'-0	71'-8	80'-0	80'-0	80'-0	80'-0
	BEAM SERIES		A BEAM			A BEAM			B BEAM			B BEAM			B BEAM			C BEAM			C BEAM			C BEAM			C BEAM		
6a1	SLAB TRANSV. TOP & BOTT.		247	42'-10	15,891	277	42'-10	17,821	307	42'-10	19,751	337	42'-10	21,681	367	42'-10	23,611	397	42'-10	25,541	427	42'-10	27,471	457	42'-10	29,401	497	42'-10	31,975
6a2	SLAB TRANSV. TOP ENDS		96	VARIES	3,028	96	VARIES	3,028	96	VARIES	3,028	96	VARIES	3,028	96	VARIES	3,028	96	VARIES	3,028	96	VARIES	3,028	96	VARIES	3,028	96	VARIES	3,028
6a3	SLAB TRANSV. BOTT. ENDS		96	VARIES	3,088	96	VARIES	3,088	96	VARIES	3,088	96	VARIES	3,088	96	VARIES	3,088	96	VARIES	3,088	96	VARIES	3,088	96	VARIES	3,088	96	VARIES	3,088
5b1	SLAB LONGITUDINAL, TOP & BOTT.		202	40'-0	8,427	303	40'-0	12,641	303	40'-0	12,641	303	40'-0	12,641	404	40'-0	16,855	404	40'-0	16,855	404	40'-0	16,855	505	40'-0	21,069	505	40'-0	21,069
5b2	SLAB LONGITUDINAL, TOP & BOTT., ENDS		202	34'-5	7,251	202	21'-8	4,565	202	27'-11	5,882	202	34'-2	7,198	202	21'-5	4,512	202	27'-8	5,829	202	33'-11	7,146	202	21'-2	4,460	202	29'-6	6,215
6b3	SLAB LONGITUDINAL, TOP @ PIERS		92	12'-10	1,773	92	13'-10	1,912	92	14'-10	2,050	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
7b3	SLAB LONGITUDINAL, TOP @ PIERS		—	—	—	—	—	—	—	—	—	92	15'-10	2,977	92	17'-0	3,197	92	18'-0	3,385	—	—	—	—	—	—	—	—	—
8b3	SLAB LONGITUDINAL, TOP @ PIERS		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	92	19'-0	4,667	92	20'-0	4,913	92	20'-0	4,913
5d1	PIER DIAPH. ENDS		12	3'-10	48	12	3'-10	48	12	3'-10	48	12	3'-10	48	12	3'-10	48	12	3'-10	48	12	3'-10	48	12	3'-10	48	12	3'-10	48
5d2	PIER & ABUT. DIAPH. LONGIT.		90	9'-1	853	90	9'-1	853	90	9'-1	853	90	9'-1	853	90	9'-1	853	90	8'-10	829	90	8'-10	829	90	8'-10	829	90	8'-10	829
5d3	PIER & ABUT. DIAPH. LONGIT.		30	8'-2	256	30	8'-2	256	30	8'-2	256	30	8'-2	256	30	8'-2	256	30	7'-10	245	30	7'-10	245	30	7'-10	245	30	7'-10	245
5d4	PIER DIAPH. LONGIT.		10	12'-11	135	10	12'-11	135	10	12'-11	135	10	12'-11	135	10	12'-11	135	10	12'-11	135	10	12'-11	135	10	12'-11	135	10	12'-11	135
5d5	ABUT. DIAPH. ENDS		12	6'-5	80	12	6'-5	80	12	6'-5	80	12	6'-5	80	12	6'-5	80	12	6'-5	80	12	6'-5	80	12	6'-5	80	12	6'-5	80
5d6	ABUT. DIAPH. LONGIT. B.F.		16	30'-10	515	16	30'-10	515	16	30'-10	515	16	30'-10	515	16	30'-10	515	16	30'-10	515	16	30'-10	515	16	30'-10	515	16	30'-10	515
5d7	PAVING NOTCH LONGIT.		8	31'-0	259	8	31'-0	259	8	31'-0	259	8	31'-0	259	8	31'-0	259	8	31'-0	259	8	31'-0	259	8	31'-0	259	8	31'-0	259
5d8	ABUT. DIAPH. WING EXT. LONGIT.		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	48	11'-0	551	48	11'-0	551	48	11'-0	551	48	11'-0	551
5e1	PIER DIAPH. HOOPS		50	9'-1	474	50	9'-1	474	50	10'-4	539	50	10'-4	539	50	10'-4	539	50	11'-4	591	50	11'-4	591	50	11'-4	591	50	11'-4	591
5e2	PIER DIAPH. TIES ENDS		4	2'-11	12	4	2'-11	12	4	2'-11	12	4	2'-11	12	4	2'-11	12	4	2'-11	12	4	2'-11	12	4	2'-11	12	4	2'-11	12
5e3	PIER DIAPH. TIES		50	3'-5	178	50	3'-5	178	50	3'-5	178	50	3'-5	178	50	3'-5	178	50	3'-5	178	50	3'-5	178	50	3'-5	178	50	3'-5	178
5e4	PIER DIAPH. HOOPS ENDS		4	8'-7	36	4	8'-7	36	4	9'-10	41	4	9'-10	41	4	9'-10	41	4	10'-10	45	4	10'-10	45	4	10'-10	45	4	10'-10	45
5e5	PIER DIAPH. HOOPS		20	10'-0	209	20	10'-0	209	20	11'-3	235	20	11'-3	235	20	11'-3	235	20	12'-3	256	20	12'-3	256	20	12'-3	256	20	12'-3	256
5e6	PIER DIAPH. TIES		20	4'-4	90	20	4'-4	90	20	4'-4	90	20	4'-4	90	20	4'-4	90	20	4'-4	90	20	4'-4	90	20	4'-4	90	20	4'-4	90
8f1	ABUT. FOOTING LONGIT.		36	32'-1	3,084	36	32'-1	3,084	36	32'-1	3,084	36	32'-1	3,084	36	32'-1	3,084	36	32'-2	3,092	36	32'-2	3,092	36	32'-2	3,092	36	32'-2	3,092
8f3	ABUT. EXTENSION LONGIT.		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	16	10'-8	456	16	10'-8	456	16	10'-8	456	16	10'-8	456
8f4	ABUT. EXTENSION LONGIT.		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8	7'-3	155	8	7'-3	155	8	7'-3	155	8	7'-3	155
8f5	ABUT. EXTENSION LONGIT.		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8	9'-5	201	8	9'-5	201	8	9'-5	201	8	9'-5	201
8g1	ABUT. VERT.		166	6'-8	2,955	166	6'-8	2,955	166	7'-3	3,213	166	7'-3	3,213	166	7'-3	3,213	162	7'-9	3,352	162	7'-9	3,352	162	7'-9	3,352	162	7'-10	3,388
8g3	ABUT. DIAPH. VERT. B.F.		82	15'-3	3,339	82	15'-3	3,339	82	15'-3	3,339	82	15'-3	3,339	82	15'-3	3,339	82	15'-9	3,448	82	15'-9	3,448	82	15'-9	3,448	82	15'-9	3,448
6g4	ABUT. DIAPH. WING EXT. VERT.		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	32	6'-6	312	32	6'-6	312	32	6'-7	316	32	6'-7	316
5h1	ABUT. WING HORIZ.		56	6'-8	389	56	6'-8	389	56	6'-8	389	56	6'-8	389	56	6'-8	389	56	6'-8	389	56	6'-8	389	56	6'-8	389	56	6'-8	389
5h2	ABUT. TO WING ANCHOR		56	4'-8	273	56	4'-8	273	56	4'-8	273	56	4'-8	273	56	4'-8	273	8	4'-8	39	8	4'-8	39	8	4'-8	39	8	4'-8	39
5j1	TOP OF SLAB TRANSV. (AT RAIL)		330	6'-3	2,151	360	6'-3	2,347	390	6'-3	2,542	420	6'-3	2,738	450	6'-3	2,933	480	6'-3	3,129	510	6'-3	3,325	540	6'-3	3,520	580	6'-3	3,781
5k1	PAVING NOTCH		84	4'-9	416	84	4'-9	416	84	4'-9	416	84	4'-9	416	84	4'-9	416	84	4'-9	416	84	4'-9	416	84	4'-9	416	84	4'-9	416
5k2	PAVING NOTCH		84	3'-5	299	84	3'-5	299	84	3'-5	299	84	3'-5	299	84	3'-5	299	84	3'-5	299	84	3'-5	299	84	3'-5	299	84	3'-5	299
5p1	ABUTMENT HOOPS (WOOD/STEEL)		168/160	10'-6	1840/1752	168/160	10'-6	1840/1752	192/160	10'-6	2103/1752	192/160	10'-6	2103/1752	136/160	10'-6	1489/1752	168	10'-6	1,840	168	10'-6	1,840	168	10'-6	1,840	168	10'-6	1,840
5p2	ABUTMENT HOOPS		8	12'-11	108	8	12'-11	108	8	12'-11	108	8	12'-11	108	8	12'-11	108	24	10'-8	267	24	10'-8	267	24	10'-8	267	24	10'-8	267
6p3	ABUT. BOTT. AT PILES		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	36	6'-8	360	36	6'-8	360	36	6'-8	360	36	6'-8	360
5p4	ABUT. HOOPS AT ENDS		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8	12'-11	108	8	12'-11	108	8	12'-11	108	8	12'-11	108
5s1	WING VERT.		56	VARIES	263	56	VARIES	263	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		12	5'-1	41	12	5'-1	41	12	5'-1	41	12	5'-1	41	12	5'-1	41	12	5'-5	43	12	5'-5	43	12	5'-5	43	12	5'-5	43
#2	PILE SPIRAL (WOOD/STEEL)*		30/18	38'-6	193/116	30/18	38'-6	193/116	34/18	38'-6	219/116	34/18	38'-6	219/116	36/18	38'-6	231/116	22	38'-6	141	22	38'-6	141	22	38'-6	141	22	38'-6	141
	SPIRAL SPACERS, L $\frac{1}{8}$×$\frac{1}{8}$×$\frac{1}{8}$× 0.70 (WOOD/STL.)*		60/36	1'-10	77/46	60/36	1'-10	77/46	68/36	1'-10	87/46	68/36	1'-10	87/46	72/36	1'-10	92/46	44	1'-10	56	44	1'-10	56	44	1'-10	56	44	1'-10	56
	*EPOXY COATING NOT REQUIRED																												
	SUB TOTAL W/ WOOD PILES**				58,031			61,824			66,057			70,426			73,702			—			—			—			—
	SUB TOTAL W/ STEEL H-PILES**				57,835			61,628			65,562			69,931			73,804			79,926			84,651			88,554			93,180
	**RAIL REINFORCING NOT INCLUDED																												
	BARRIER RAIL				8,035			8,608			9,167			9,699			10,298			11,256			11,814			12,387			13,123
	OPEN RAIL				8,284			8,804			9,494			10,184			10,704			12,210			12,668			13,420			14,185



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

BENT BAR DETAILS

LATEST REVISION DATE

APPROVED BY BRIDGE ENGINEER

Iowa Department of Transportation
Highway Division

STANDARD DESIGN - 40' ROADWAY, THREE SPAN BRIDGE

PRETENSIONED PRESTRESSED CONCRETE BEAM BRIDGES

HL93 SUPERSTRUCTURE DECEMBER, 2006 HS25 SUBSTRUCTURE

DECK & ABUTMENT REINF.
45° SKEW

H40-30-06