REINFORCING BAR LIST

ONE SUPERSTRUCTURE AND TWO ABUTMENTS

BRIDGE LENGTH

BAR	LOCATION	SHAPE	46'-8 A NO.	46'-8 A LENGTH	46'-8 A WEIGHT	55'-0 A NO.	55'-0 A LENGTH	55'-0 A WEIGHT	67'-6 B NO.	67'-6 B LENGTH	67'-6 B WEIGHT	80'-0 C NO.	80'-0 C LENGTH	80'-0 C WEIGHT	90'-0 D NO.	90'-0 D LENGTH	90'-0 D WEIGHT	100'-0 D NO.	100'-0 D LENGTH	100'-0 D WEIGHT	110'-0 D NO.	110'-0 D LENGTH	110'-0 D WEIGHT
6a1	SLAB TRANSVERSE, TOP & BOTTOM		87	32'-10	4291	109	32'-10	5376	143	32'-10	7053	175	32'-10	8631	203	32'-10	10,012	229	32'-10	11,294	255	32'-10	12,576
6a2	SLAB TRANSVERSE END, TOP		44	*	1105	44	*	1105	44	*	1105	44	*	1105	44	*	1105	44	*	1105	44	*	1105
6a3	SLAB TRANSVERSE END, BOTTOM		46	**	1155	46	**	1155	46	**	1155	46	**	1155	46	**	1155	46	**	1155	46	**	1155
5b1	SLAB LONGITUDINAL TOP & BOTTOM		168	26'-0	4556	168	30'-2	5286	168	36'-5	6381	252	29'-2	7666	252	32'-6	8542	252	35'-10	9418	252	39'-2	10,294
5d2	ABUTMENT DIAPHRAGM, LONGITUDINAL - F.F.		24	7'-2	180	24	7'-2	180	24	7'-2	180	24	6'-11	174	24	7'-1	178	24	7'-1	178	24	7'-1	178
5d3	ABUTMENT DIAPHRAGM, LONGITUDINAL - F.F.		8	6'-3	53	8	6'-3	53	8	6'-3	53	8	6'-0	51	8	5'-10	49	8	5'-10	49	8	5'-10	49
5d5	ABUTMENT DIAPHRAGM, LONGITUDINAL - END		12	5'-0	63	12	5'-0	63	12	5'-0	63	12	5'-0	63	12	5'-0	63	12	5'-0	63	12	5'-0	63
5d6	ABUTMENT DIAPHRAGM LONGITUDINAL - B.F.		8	37'-5	313	8	37'-5	313	8	37'-5	313	8	37'-5	313	8	37'-5	313	8	37'-5	313	8	37'-5	313
5d7	PAVING NOTCH, LONGITUDINAL		4	37'-10	158	4	37'-10	158	4	37'-10	158	4	37'-10	158	4	37'-10	158	4	37'-10	158	4	37'-10	158
5d8	ABUTMENT DIAPH. WING EXT. LONGIT.		-	-	-	-	-	-	-	-	-	24	10'-9	269	24	10'-9	269	24	10'-9	269	24	10'-9	269
5d9	ABUT. DIAPH. WING EXT. LONGIT.											24	10'-8	267	24	10'-8	267	24	10'-8	267	24	10'-8	267
8f1	ABUTMENT FOOTING LONGITUDINAL		18	37'-5	1798	18	37'-5	1798	18	37'-5	1798	18	37'-5	1798	18	37'-5	1798	18	37'-5	1798	18	37'-5	1798
8f3	ABUTMENT EXTENSION LONGITUDINAL		-	-	-	-	-	-	-	-	-	16	10'-7	453	16	10'-7	453	16	10'-7	453	16	10'-7	453
8f4	ABUTMENT EXTENSION LONGITUDINAL		-	-	-	-	-	-	-	-	-	16	9'-6	406	16	9'-6	406	16	9'-6	406	16	9'-6	406
8g1	ABUTMENT VERTICAL		114	6'-7	2004	114	6'-7	2004	114	7'-2	2181	110	7'-8	2252	110	8'-5	2472	110	8'-5	2472	110	8'-5	2472
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
6g4	ABUT. DIAPH. WING EXT. VERT.		-	-	-	-	-	-	-	-	-	40	5'-8	341	40	6'-5	386	40	6'-5	386	40	6'-5	386
5h1	ABUTMENT TO WING ANCHOR		28	6'-8	196	28	6'-8	196	28	6'-8	196	36	6'-8	252	36	6'-8	252	36	6'-8	252	36	6'-8	252
5h2	ABUTMENT TO WING ANCHOR		56	4'-11	288	56	4'-11	288	56	4'-11	288	12	4'-11	62	12	4'-11	62	12	4'-11	62	12	4'-11	62
5h3	ABUTMENT TO WING ANCHOR		28	6'-9	198	28	6'-9	198	28	6'-9	198	36	6'-9	256	36	6'-9	256	36	6'-9	256	36	6'-9	256
5h4	ABUTMENT TO WING ANCHOR		-	-	-	-	-	-	-	-	-	12	4'-11	62	12	4'-11	62	12	4'-11	62	12	4'-11	62
5j1	SLAB TRANSV. TOP AT RAIL		126	6'-3	822	148	6'-3	965	182	6'-3	1187	214	6'-3	1396	242	6'-3	1578	268	6'-3	1748	294	6'-3	1917
5k1	PAVING NOTCH, TRANSVERSE		52	4'-11	267	52	4'-11	267	52	4'-11	267	52	4'-11	267	52	4'-11	267	52	4'-11	267	52	4'-11	267
5k2	PAVING NOTCH, TRANSVERSE		52	3'-5	186	52	3'-5	186	52	3'-5	186	52	3'-5	186	52	3'-5	186	52	3'-5	186	52	3'-5	186
5p1	ABUTMENT HOOPS		120	10'-6	1315	120	10'-6	1315	120	10'-6	1315	120	10'-6	1315	112	10'-6	1227	128	10'-6	1402	128	10'-6	1402
5p2	ABUTMENT EXT.HOOPS		-	-	-	-	-	-	-	-	-	24	10'-8	268	24	10'-8	268	24	10'-8	268	24	10'-8	268
6p3	ABUT. BOTT. AT PILES		-	-	-	-	-	-	-	-	-	28	6'-8	281	32	6'-8	321	36	6'-8	361	36	6'-8	361
5p4	ABUTMENT HOOPS AT ENDS		8	11'-6	96	8	11'-6	96	8	11'-6	96	8	11'-6	96	8	11'-6	96	8	11'-6	96	8	11'-6	96
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		64	5'-10	390	64	5'-10	390	64	6'-2	412	64	6'-11	462	64	7'-8	512	64	7'-8	512	64	7'-8	512
4t1	UNDER BEAMS AT ABUTMENTS		10	4'-11	33	10	4'-11	33	10	4'-11	33	10	4'-11	33	10	5'-1	34	10	5'-1	34	10	5'-1	34
#2	PILE SPIRAL - NO. 2 BAR		12	38'-6	77	12	38'-6	77	12	38'-6	77	18	38'-6	115	20	38'-6	128	22	38'-6	141	22	38'-6	141
	SPIRAL SPACER L 7/8 x 7/8 x 1/4 x 0.70		24	1'-10	32	24	1'-10	32	24	1'-10	32	36	1'-10	47	40	1'-10	53	44	1'-10	59	44	1'-10	59
	REINFORCING STEEL (LBS.)				21636			23594			26678			32327			35055			37617			39944
	SEE BARRIER RAIL DETAILS (LBS.)				4054			4410			4968			6002			6438			6875			7353
	SEE OPEN RAIL DETAILS (LBS.)				4179			4572			5277			6816			7478			7900			8322

* VARIES FROM 3'-1 TO 30'-4 ** VARIES FROM 2'-5 TO 31'-0

CONCRETE PLACEMENT QUANTITIES

(SUPERSTRUCTURE PLUS INTEGRAL ABUTMENTS)

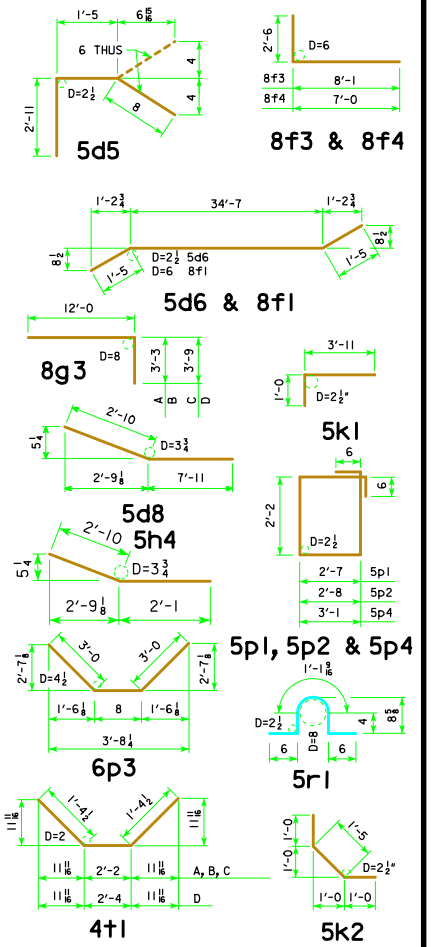
			46'-8	55'-0	67'-6	80'-0	90'-0	100'-0	110'-0
SLAB, AND ABUT. DIAPHRAGM	WITH BARRIER RAIL	CU.YD.	73.8	81.0	96.4	117.0	133.6	142.9	152.0
	WITH OPEN RAIL	CU.YD.	75.2	82.7	98.5	119.5	136.4	146.0	155.4
PAVING BLOCKS		CU.YD.	2.8	2.8	2.8	2.8	2.8	2.8	2.8
ABUTMENT WINGS		CU.YD.	7.2	7.2	7.6	8.4	9.2	9.2	9.2
ABUTMENT FOOTINGS		CU.YD.	30.7	30.7	30.7	38.5	38.5	38.5	38.5

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. (HP10X57)		NO.	12	12	12	18	20	20	20
STRUCTURAL CONCRETE, (BRIDGE)	WITH BARRIER RAIL	CU.YD.	113.4	120.6	136.4	165.6	183	192.3	201.4
	WITH OPEN RAIL	CU.YD.	114.8	122.3	138.5	168.1	185.8	195.4	204.8
CONCRETE RAIL (BARRIER OR OPEN)		L.F.	128.3	144.9	169.9	214.9	234.9	254.9	274.9
REINFORCING STEEL	WITH BARRIER RAIL	LBS.	25,490	27,804	31,446	38,120	41,284	44,283	47,088
	WITH OPEN RAIL	LBS.	25,815	28,166	32,064	39,143	42,533	45,517	48,266
STRUCTURAL STEEL	WITH BARRIER RAIL	LBS.	1532	1526	1570	1610	1695	1695	1695
	WITH OPEN RAIL	LBS.	1242	1235	1235	1235	1265	1265	1265

BENT BAR DETAILS



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

REVISED 09-14 - CORRECTED THE BARRIER RAIL REINFORCING STEEL QUANTITIES FOR ALL THE BRIDGE LENGTHS.
REVISED 05-15 - CORRECTED THE CONCRETE QUANTITIES OF THE PAVING BLOCKS FOR ALL THE BRIDGE LENGTHS. (WAS 1.7 CU.YD.)

05-15 LATEST REVISION DATE

APPROVED BY BRIDGE ENGINEER

IOWADOT Highway Division

STANDARD DESIGN - 30' ROADWAY, SINGLE SPAN BRIDGE

PRETENSIONED PRESTRESSED CONCRETE BEAM BRIDGES

APRIL, 2012

DECK & ABUTMENT REINF.
30 SKEW

H30S1-20-12