

REVISED 07-09 - OPEN RAIL REIN. QTY'S CHANGED WHICH CHANGED TOTAL REIN. QTY'S.
REVISED 08-2022: UPDATED BRIDGE ENGINEER SIGNATURE. CHANGED PAVING BLOCK LIFTING HOOP BAR MARK, WAS SK1.

BILL OF REINFORCING STEEL FOR SUPERSTRUCTURE - 140' BRIDGE

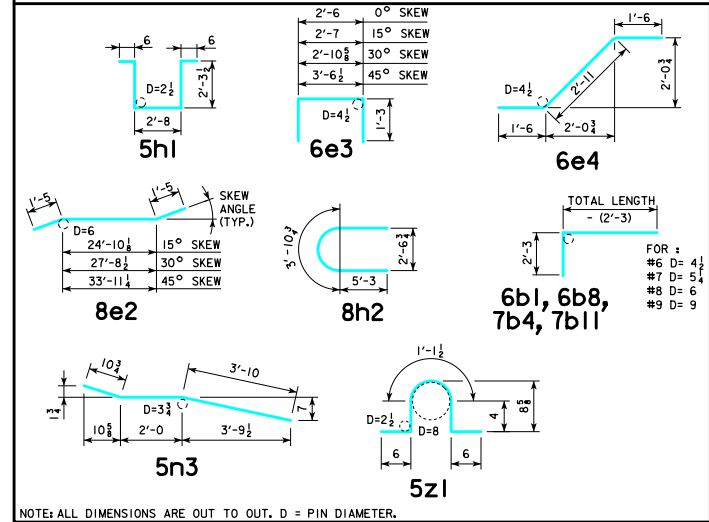
LOCATION	SHAPE	0°				15°				30°				45°			
		BAR	NO.	LENGTH	WEIGHT	BAR	NO.	LENGTH	WEIGHT	BAR	NO.	LENGTH	WEIGHT	BAR	NO.	LENGTH	WEIGHT
SLAB LONGITUDINAL BOTTOM	5h1	9a1	31	29'-3	3083	31	29'-3	3083	31	29'-3	3083	31	29'-3	3083	31	29'-3	3083
SLAB LONGITUDINAL BOTTOM	5h1	10a2	31	45'-4	6048	31	45'-4	6048	31	45'-4	6048	31	45'-4	6048	31	45'-4	6048
SLAB LONGITUDINAL BOTTOM	5h1	9a3	31	41'-3	4348	31	41'-3	4348	31	41'-3	4348	31	41'-3	4348	31	41'-3	4348
SLAB LONGITUDINAL BOTTOM	5h1	10a4	32	33'-9	4648	32	33'-9	4648	32	33'-9	4648	32	33'-9	4648	32	33'-9	4648
SLAB LONGITUDINAL BOTTOM	5h1	9a5	16	40'-6	2204	16	40'-6	2204	16	40'-6	2204	16	40'-6	2204	16	40'-6	2204
SLAB LONGITUDINAL BOTTOM, AT RAIL	5h1	9a6	8	39'-10	1084	8	39'-10	1084	8	39'-10	1084	8	39'-10	1084	8	39'-10	1084
SLAB LONGITUDINAL BOTTOM, AT RAIL	5h1	9a7	8	13'-0	354	8	13'-0	354	8	13'-0	354	8	13'-0	354	8	13'-0	354
SLAB LONGITUDINAL BOTTOM, AT RAIL	5h1	9a8	4	49'-2	669	4	49'-2	669	4	49'-2	669	4	49'-2	669	4	49'-2	669
SLAB LONGITUDINAL BOTTOM, AT RAIL	5h1	9a9	8	33'-0	898	8	33'-0	898	8	33'-0	898	8	33'-0	898	8	33'-0	898
SLAB LONGITUDINAL BOTTOM, AT RAIL	5h1	10a10	4	29'-8	511	4	29'-8	511	4	29'-8	511	4	29'-8	511	4	29'-8	511
SLAB LONGITUDINAL TOP	5h1	6b1	31	7'-6	350	31	7'-6	350	31	7'-6	350	31	7'-6	350	31	7'-6	350
SLAB LONGITUDINAL TOP	5h1	11b2	31	23'-6	3871	31	23'-6	3871	31	23'-6	3871	31	23'-6	3871	31	23'-6	3871
SLAB LONGITUDINAL TOP	5h1	11b3	31	29'-3	4818	31	29'-3	4818	31	29'-3	4818	31	29'-3	4818	31	29'-3	4818
SLAB LONGITUDINAL TOP	5h1	7b4	31	25'-11	1643	31	25'-11	1643	31	25'-11	1643	31	25'-11	1643	31	25'-11	1643
SLAB LONGITUDINAL TOP	5h1	11b5	32	26'-6	4506	32	26'-6	4506	32	26'-6	4506	32	26'-6	4506	32	26'-6	4506
SLAB LONGITUDINAL TOP	5h1	6b6	16	36'-0	866	16	36'-0	866	16	36'-0	866	16	36'-0	866	16	36'-0	866
SLAB LONGITUDINAL TOP, AT RAIL	5h1	6b8	8	33'-5	402	8	33'-5	402	8	33'-5	402	8	33'-5	402	8	33'-5	402
SLAB LONGITUDINAL TOP, AT RAIL	5h1	11b9	8	31'-6	1339	8	31'-6	1339	8	31'-6	1339	8	31'-6	1339	8	31'-6	1339
SLAB LONGITUDINAL TOP, AT RAIL	5h1	6b10	4	26'-10	162	4	26'-10	162	4	26'-10	162	4	26'-10	162	4	26'-10	162
SLAB LONGITUDINAL TOP, AT RAIL	5h1	7b11	8	38'-8	633	8	38'-8	633	8	38'-8	633	8	38'-8	633	8	38'-8	633
SLAB LONGITUDINAL TOP, AT RAIL	5h1	11b12	8	21'-9	925	8	21'-9	925	8	21'-9	925	8	21'-9	925	8	21'-9	925
SLAB TRANSVERSE, BOTTOM	5h1	6c1	137	26'-10	5522	137	27'-9	5711	126	26'-10	5079	116	26'-10	4676	24	VARIES	579
SLAB TRANSVERSE ENDS, BOTTOM	5h1	5d1	137	26'-10	3835	137	27'-9	3966	126	26'-10	3527	116	26'-10	3247	24	VARIES	402
SLAB TRANSVERSE ENDS, TOP	5h1	5d2	-	-	-	-	-	-	24	VARIES	402	44	VARIES	674	-	-	-
SLAB, TRANSVERSE AT ABUTMENT	5h1	8e1	18	26'-10	1290	-	-	-	-	-	-	-	-	-	-	-	-
SLAB, TRANSVERSE AT ABUTMENT	5h1	8e2	-	-	-	18	27'-8	1330	18	30'-7	1470	18	36'-9	1767	-	-	-
SLAB, HAIRPINS, AT ABUTMENT	5h1	6e3	60	5'-0	451	60	5'-1	459	60	5'-5	489	60	6'-1	549	-	-	-
SLAB, DIAGONALS, AT ABUTMENT	5h1	6e4	60	5'-11	534	60	5'-11	534	60	5'-11	534	60	5'-11	534	-	-	-
PIER CAP HOOPS	5h1	3e1	36	8'-3	310	36	8'-3	310	36	8'-3	310	54	8'-3	465	-	-	-
PIER CAP ENDS	5h1	8h2	4	14'-5	154	4	14'-5	154	4	14'-5	154	4	14'-5	154	-	-	-
PIER CAP, BOTTOM LONGITUDINAL	5h1	8h3	8	23'-10	510	8	24'-8	527	8	27'-6	588	8	33'-8	720	-	-	-
PIER CAP, TOP LONGITUDINAL	5h1	8h4	4	26'-10	287	4	27'-9	297	4	30'-11	331	4	37'-11	405	-	-	-
TOP OF SLAB, TRANSVERSE, AT RAIL	5h1	5j1	272	8'-6	2412	272	8'-6	2412	272	8'-6	2412	270	8'-6	2394	-	-	-
WING, VERTICAL	5h1	5m1	40	4'-5	185	40	4'-5	185	40	4'-5	185	40	4'-5	185	-	-	-
WING, HORIZONTAL BACK FACE	5h1	5n1	24	6'-8	167	24	6'-8	167	24	6'-8	167	24	6'-8	167	-	-	-
WING, HORIZONTAL TRAFFIC FACE	5h1	5n3	24	6'-9	169	24	6'-9	169	24	6'-9	169	24	6'-9	169	-	-	-
PAVING BLOCK LIFTING HOOPS	5h1	5z1	8	2'-10	24	8	2'-10	24	8	2'-10	24	8	2'-10	24	-	-	-
SUB TOTAL - LBS.					59,212			59,607			59,782			60,462			
OPEN RAIL - SEE LIST ON RAIL SHEET J24-41-06					9057			9057			9057			9057			
TOTAL - LBS. WITH MONOLITHIC PIER CAP AND OPEN RAIL					68,269			68,664			68,839			69,519			
TOTAL - LBS. WITH NON-MONOLITHIC PIER CAP AND OPEN RAIL					67,008			67,376			67,456			67,775			
SAME AS ABOVE EXCEPT ALL "h" BARS DELETED																	

ESTIMATED QUANTITIES FOR SUPERSTRUCTURE - 140' BRIDGE

ITEM	C.Y.	WITH MONOLITHIC PIER CAP				WITH NON-MONOLITHIC PIER CAP			
		0°	15°	30°	45°	0°	15°	30°	45°
OPEN RAIL	STRUCTURAL CONCRETE (BRIDGE)	284.7	285.3	287.5	291.9	280.5	281.0	282.7	286.1
OPEN RAIL	REINFORCING STEEL	68,269	68,664	68,839	69,519	67,008	67,376	67,456	67,775
OPEN RAIL	LIN. FT.	302.0	302.2	302.9	304.5	302.0	302.2	302.9	304.5

* INCLUDES 4 WINGS @ 0.68 C.Y. EACH AND 2 TEMPORARY PAVING BLOCKS; EXCLUDES RAIL CONCRETE.

BENT BAR DETAILS



08-2022 LATEST REVISION DATE APPROVED BY BRIDGE ENGINEER	 STANDARD DESIGN - 24'-0 ROADWAY, 3 SPAN BRIDGES CONTINUOUS CONCRETE SLAB BRIDGES NOVEMBER, 2006	
	SUPERSTRUCTURE DETAILS 140'-0 BRIDGE	J24-17-06
	FOR : #6 D= 4 #7 D= 5 #8 D= 6 #9 D= 9	