ITEM	NO. PIECES	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F	G	H	J	K	R	O
1	STAGE 1 - ABUTMENT 1																
2																	
3	32	5	38'-11	1A501	STR												
4	35	5	13'-5	1A502	2	0'-10	12'-7										
5	4	5	9'-10	1A503 △	STR												
6	22	5	15'-0	1A504	STR												
7	22	5	23'-11	1A505	STR												
8	3	5	15'-0	1A506	STR												
9	3	5	22'-0	1A507	STR												
10	71	5	4'-9	1A508	S10		2'-0	0'-9	2'-0								
11	36	5	6'-7	1A509	S10		2'-0	2'-7	2'-0								
12	11	5	12'-8	1A510	22		2'-0	8'-8	2'-0	1'-5	1'-5		1'-5		1'-5		11'-6
13	11	5	4'-0	1A511	17		2'-0	2'-2									
14	119	8	15'-0	1A801 △	STR												
15	79	9	15'-0	1A901	STR												
16	74	9	14'-2	1A902	17		1'-7	12'-7									
17																	
18																	
19																	
20	STAGE 1 - WINGWALL 2																
21	26	5	5'-9	2W501	STR												
22	15	5	11'-9	2W502	STR												
23	20	5	5'-2	2W503 △	STR												
24	18	5	12'-2	2W504	STR												
25	26	5	16'-11	2W505	STR												
26	18	5	10'-6	2W506 ▲	STR												
27	11	5	16'-11	2W507 ▲	STR												
28	11	5	16'-11	2W508 ▲ ◆	STR												
29	2	5	17'-5	2W509 ▲ ◆	22		13'-3	4'-2		3'-6	12'-9						
30	12	5	3'-4¾	2W510 ◆	28		2'-0	1'-5½	2'-0	2'-0			1'-11½		0'-4½		
31	18	5	5'-7	2W511	17		2'-0	1'-7	2'-0								
32	5	6	5'-2	2W601 △	STR												
33	18	6	10'-6	2W602 ▲	STR												
34	30	8	11'-9	2W801	STR												
35	15	8	11'-4	2W802	17		1'-4	10'-0									
36	15	8	16'-11	2W803	17		1'-4	15'-7									
37																	
38																	
39																	
40	STAGE 1 - ABUTMENT 2																
41	32	5	38'-0	2A501	STR												
42	35	5	13'-9¼	2A502	2	0'-10	12'-7¼										
43	22	5	20'-0	2A503	STR												
44	11	5	16'-6	2A504	STR												
45	11	5	18'-10	2A505	STR												
46	3	5	20'-0	2A506	STR												
47	3	5	15'-5	2A507 ▲	STR												
48	68	5	4'-9	2A508	S10		2'-0	0'-9	2'-0								
49	34	5	6'-7	2A509	S10		2'-0	2'-7	2'-0								
50	5	5	9'-10	2A510 △	STR												
51	11	5	15'-3	2A511 17' - 3"	22		2'-0	13'-3	2'-0	0'-10	1'-10		0'-10¼		1'-9⅝		16'-10⅝
52	11	5	4'-0	2A512	22		2'-0	2'-0		1'-6⅞	1'-3½						
53	110	8	15'-0	2A801	STR												
54	75	9	15'-0	2A901 △	STR												
55	70	9	14'-2	2A902	17		1'-7	12'-7									
56																	
57																	
58	STAGE 1 - WINGWALL 4																
59	26	5	12'-4½	4W501 ▲	STR												
60	11	5	11'-9	4W502	STR												
61	15	5	4'-10	4W503 △	STR												
62	13	5	12'-7	4W504	STR												
63	22	5	11'-9¼	4W505	STR												
64	13	5	13'-5½	4W506	STR												
65	11	5	10'-6	4W507 ▲	STR												
66	11	5	11'-9¼	4W508 ▲	STR												
67	2	5	14'-2¾	4W509 ▲ ◆	22		5'-1	9'-1¾		4'-6	8'-3						
68	12	5	5'-5	4W510 ◆	28		2'-0	1'-5	2'-0	1'-6⅞	1'-3⅞		1'-9⅛		1¼		
69	13	5	5'-7	4W511	17		2'-0	1'-7	2'-0								
70	6	6	5'-2	4W601 △	STR	0'-8	5'-2					0'-8		0'-6			
71	13	6	10'-6	4W602 ▲	STR												
72	21	8	11'-9	4W801	STR												
73	10	8	11'-4	4W802	17		1'-4	10'-0									
74	11	8	16'-11	4W803	17		1'-4	15'-7									
75																	
76																	
77																	
78	STAGE 1 HEADWALL (WEST)																
79	10	5	36'-4	1H501 △	STR												
80	40	6	3'-6	1H601 △	S10		1'-0	1'-6	1'-0								
81																	
82																	
83																	
84																	
85																	
86																	
87																	
88																	
89																	
90																	
91																	
92																	
93																	
94																	
95																	
96																	
97																	

ITEM	NO. PIECES	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F	G	H	J	K	R	O
98	STAGE 2 - ABUTMENT 1																
99	40	5	13'-5	1A502	2	0'-10	12'-7										
100	82	5	4'-9	1A508 △	S10		2'-0	0'-9	2'-0								
101	40	5	4'-7	1A509	S10		2'-0	2'-7	2'-0								
102	32	5	29'-1	1A512	STR												
103	32	5	15'-5	1A513	STR												
104	22	5	25'-0	1A514	STR												
105	11	5	17'-0	1A515	STR												
106	11	5	18'-0	1A516	STR												
107	3	5	25'-0	1A517	STR												
108	3	5	15'-4	1A518	STR												
109	3	5	9'-10	1A519	STR												
110	11	5	14'-8	1A520	22		2'-0	10'-8	2'-0	1'-1½	1'-8			1'-1½		1'-8		14'-0
111	11	5	4'-0	1A521	22		2'-0	2'-0		1'-10	0'-9¾						
112	131	8	15'-0	1A801 △	STR												
113	85	9	15'-0	1A901	STR												
114	80	9	14'-2	1A902	17		1'-7	12'-7									
115																	
116																	
117																	
118	STAGE 2 - WINGWALL 1																
119	32	5	31'-7	1W501	STR												
120	30	5	14'-6	1W502	STR												
121	63	5	5'-2	1W503	STR												
122	32	5	12'-0	1W504	STR												
123	11	5	30'-7	1W505	STR												
124	11	5	31'-5	1W506	STR												
125	32	5	11'-9½	1W507	STR												
126	12	5	30'-7	1W508	STR												
127	12	5	31'-5	1W509	STR												
128	32	5	5'-10	1W510	17		2'-0	1'-10	2'-0								
129	2	5	31'-2	1W511 ▲ ◆	22		3'-11	27'-3		0'-3	26'-11¼						30'-1⅞
130	13	5	5'-8½	1W512	28		2'-0	1'-8½	2'-0	1'-10½	0'-8½			1'-10½		0'-9	
131	7	6	4'-1	1W601 △	STR												
132	49	6	11'-9½	1W602 ▲	STR												
133	90	8	14'-6	1W801 △	STR												
134	44	8	11'-11	1W802	17		1'-4	10'-7									
135	44	8	16'-11	1W803	17		1'-4	15'-7									
136																	
137																	
138	STAGE 2 - ABUTMENT 2																
139	42	5	13'-5	2A502	2	0'-10	12'-7										
140	83	5	4'-9	2A508	S10		2'-0	0'-9	2'-0								
141	42	5	6'-7	2A509	S10		2'-0	2'-7	2'-0								
142	20	5	31'-10	2A513	STR												
143	12	5	45'-2½	2A514 ▲	STR												
144	22	5	20'-0	2A515	STR												
145	11	5	24'-5	2A516	STR												
146	11	5	23'-10	2A517	STR												
147	3	5	20'-0	2A518	STR												
148	3	5	24'-5	2A519	STR												
149	4	5	9'-10	2A520 △	STR												
150	11	5	12'-2	2A521	22		2'-0	8'-2	2'-0	1'-7	1'-2¾			1'-6⅞		1'-3		10'-7¾
151	11	5	4'-0	2A522	17		2'-0	2'-0								0'-5⅞	1'-11⅞	
152	139	8	15'-0	2A801 △	STR												
153	91	9	15'-0	2A901	STR												
154	85	9	14'-2	2A902	17		1'-7	12'-7									
155																	
156																	
157																	
158	STAGE 2 - WINGWALL 3																
159	32	5	23'-0	3W501 ▲	STR												
160	32	5	14'-6	3W502	STR												
161	71	5	5'-2	3W503 △	STR												
162	35	5	12'-7	3W504	STR												
163	11	5	33'-11	3W505	STR												
164	11	5	33'-5	3W506	STR												
165	35	5	11'-4	3W507 ▲	STR												
166	12	5	33'-11	3W508 ▲	STR												
167	12	5	33'-5	3W509 ▲ ◆	STR												
168	2	5	34'-3	3W510 ▲ ◆	22		5'-2	29'-1		0'-9	5'-1⅞						
169	35	5	5'-10	3W511	17		2'-0	1'-10	2'-0								
170	13	5	5'-8	3W512 ◆	28		2'-0	1'-7¾	2'-0	1'-10	0'-7			1'-10		0'-9	
171	7	6	4'-1	3W601 △	STR												
172	52	6	11'-4	3W602 ▲	STR												
173	94	8	14'-6	3W801	STR												
174	46	8	11'-11	3W802	17		1'-4	10'-7									
175	47	8	16'-11	3W803	17		1'-4	15'-7									
176																	
177																	
178	STAGE 2 HEADWALL (EAST)																
179	16	5	36'-4	2H501 △	STR												
180	40	6	3'-6	2H601 △	S10		1'-0	1'-6	1'-0								
181																	
182																	
183																	
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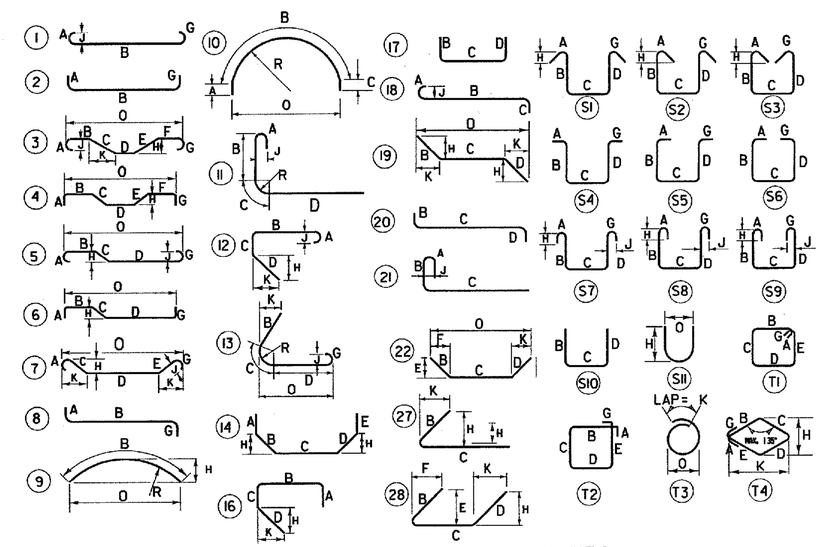

ASTM STANDARD REINFORCING BARS

BAR SIZE DESIGNATION	WEIGHT POUNDS PER FOOT	NOMINAL DIMENSIONS ROUND SECTION		
		DIAMETER INCHES	CROSS SECTIONAL AREA SQ. INCHES	PERIMETER INCHES
#3	.376	.375	.11	1.178
#4	.668	.500	.20	1.571
#5	1.043	.625	.31	1.963
#6	1.502	.750	.44	2.356
#7	2.044	.875	.60	2.749
#8	2.670	1.000	.79	3.142
#9	3.400	1.128	1.00	3.544
#10	4.303	1.270	1.27	3.990
#11	5.313	1.410	1.56	4.430
#14	7.65	1.693	2.25	5.32
#18	13.60	2.257	4.00	7.09

NOTES:

1. UNLESS OTHERWISE DESIGNATED, ALL BAR REINFORCEMENT FOR CONCRETE IN SIZES UP TO AND INCLUDING NO. 18 SHALL CONFORM TO THE REQUIREMENTS OF THE "SPECIFICATIONS FOR DEFORMED BILLET-STEEL BARS FOR CONCRETE REINFORCEMENT", AASHTO M 31 (ASTM A 615-S1). ALL BARS SHALL BE GRADE 60, UNLESS OTHERWISE DESIGNATED.
2. FOR TYPICAL BENDING DETAILS, RECOMMENDED PIN DIAMETER "D" OF BENDS AND HOOKS, AND OTHER STANDARD PRACTICE, SEE CURRENT CONCRETE REINFORCING STEEL INSTITUTE "MANUAL OF STANDARD PRACTICE".
3. BARS WHICH REQUIRE MORE ACCURATE BENDING THAN STANDARD PRACTICES SHOULD HAVE LIMITS INDICATED.
4. ALL DIMENSIONS ARE OUT TO OUT OF BAR EXCEPT "A" AND "G" ON STANDARD 180 DEGREE AND 135 DEGREE HOOKS.
5. "J" DIMENSION ON 180 DEGREE HOOKS TO BE SHOWN ONLY WHERE NECESSARY TO RESTRICT HOOK SIZE. OTHERWISE, STANDARD HOOKS ARE TO BE USED.
6. "H" DIMENSION ON STIRRUPS TO BE SHOWN ONLY WHEN NECESSARY TO MAINTAIN CLEARANCES.
7. WHERE SLOPE DIFFERS FROM 45 DEGREES, DIMENSIONS "H" AND "K" MUST BE SHOWN.
8. ▲ DENOTES BARS TO BE CUT IN FIELD.
9. ◆ DENOTES BARS TO BE BENT IN FIELD.
10. ✳ DENOTES ONE EXTRA BAR ADDED FOR TESTING PURPOSES.
11. △ DENOTES TWO EXTRA BARS ADDED FOR TESTING PURPOSES.
12. "E" IN PREFIX DENOTES EPOXY COATED REINFORCING STEEL.

CLOUGH, HARBOUR & ASSOCIATES LLP
ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS
11 WINNERS CIRCLE ALBANY, NEW YORK, 12205

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of	SEARSBURG	Bridge No. 24	Log Sta.
Highway No.	VT. RTE. 9		Surv. Sta.

VT. RTE.9 OVER BOND BROOK

RIENFORCING STEEL SCHEDULE - BR 24

Designed By M. GOGUEN		Drawn by J. LAGONE/Wm. WEATHERBY	
Checked By M. OLSTAD	Date 12/2001	Bridge Design Supervisor M. OLSTAD	Date 12/2001
PROJECT SEARSBURG - WILMINGTON		PROJECT NO. NHF 010-1(18)	
I.G.C. Info.			
Bridge Sheet No. BR114		Sheet 125 OF 435	

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