ITEM	NO. PIECES	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F	G	H	J	K	R	O
		BOX															
1																	
2																	
3	24	8	4'-0"	B801	STR												
4																	
5																	
6	222	9	18'-9"	B901	STR												
7																	
8																	
9	110	5	10'-0"	B501	STR												
10	118	5	3'-0"	B502	STR												
11	84	5	20'-6"	B503	STR												
12	84	5	22'-6"	B504	STR												
13	84	5	25'-0"	B505	STR												
14	84	5	17'-6"	B506	STR												
15	8	5	18'-6"	B507	STR												
16	62	5	3'-6"	B514	STR												
17																	
18	218	9	9'-0"	B902	17		7'-6"	4'-6"									
19	218	9	14'-6"	B903	17		10'-0"	4'-6"									
20																	
21																	
22	42	5	3'-6"	B508	19		1'-6"	2'-0"					0'-9"				
23	42	5	3'-3"	B509	19		1'-3"	2'-0"					0'-7½"				
24	14	5	3'-3"	B510	19		1'-3"	2'-0"									
25	14	5	3'-6"	B511	19		1'-6"	2'-0"									
26	28	5	7'-3"	B512	55	2'-6"	1'-6"	0'-9"	1'-0"			1'-6"					
27	8	5	6'-0"	B513	17		3'-0"	3'-0"									
28	1	5	4'-0"	B515	STR*												
29																	
30																	
31		INLET APRON															
32																	
33																	
34	1	9	4'-0"	IA901	STR*												
35																	
36																	
37	21	8	VARIES	—	STR	IA801 TO IA821 VARIES 20'-0" TO 26'-8" (INC. 4")											
38	1	8	4'-0"	IA822	STR*												
39																	
40																	
41	12	5	VARIES	—	STR	IA501 TO IA506 (2EA) VARIES 2'-0" TO 8'-3" (INC. 1")											
42	30	5	VARIES	—	STR	IA507 TO IA521 (2EA) VARIES 8'-0" TO 13'-0" (INC. 5')											
43	12	5	VARIES	—	STR	IA522 TO IA527 (2EA) VARIES 13'-9" TO 2'-6" (INC. 27")											
44	13	5	3'-0"	IA528	STR												
45	11	5	VARIES		STR	IA529 TO IA539 VARIES 20'-0" TO 26'-8" (INC. 8")											
46	15	5	3'-0"	IA540	STR												
47	6	5	17'-6"	IA541	STR												
48	6	5	16'-6"	IA542	STR												
49																	
50																	
51	54	8	8'-0"	IA823	17		4'-3"	3'-9"									
52																	
53																	
54	33	5	11'-3"	IA543	55	2'-6"	3'-6"	0'-9"	3'-0"			1'-6"					
55																	
56																	
57																	
58		OUTLET APRON															
59																	
60																	
61	19	8	24'-0"	OA801	STR												
62	11	8	VARIES	—	STR	OA802 TO OA807 VARIES 18'-3" TO 7'-0" (INC. 27")											
63																	
64																	
65	18	5	VARIES	—	STR	OA501 TO OA509 (2EA) VARIES 2'-6" TO 10'-6" (INC. 12")											
66	28	5	VARIES	—	STR	OA510 TO OA523 (2EA) VARIES 10'-4¾" TO 11'-9" (INC. 1¼")											
67	14	5	VARIES	—	STR	OA524 TO OA530 (2EA) VARIES 11'-9" TO 3'-0" (INC. 1⅞")											
68	32	5	3'-0"	OA531	STR												
69	10	5	24'-0"	OA532	STR												
70	6	5	VARIES	—	STR	OA533 TO OA539 VARIES 18'-3" TO 7'-0" (INC. 27")											
71	12	5	21'-6"	OA540	STR												
72																	
73																	
74	62	8	8'-0"	OA808	17		4'-3"	3'-9"									
75																	
76																	
77	41	5	11'-3"	OA541	55	2'-6"	3'-6"	0'-9"	3'-0"			1'-6"					
78																	
79																	
80																	

ITEM	NO. PIECES	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F	G	H	J	K	R	O
81		WINGWALL #1															
82																	
83	41	7	VARIES	—	STR	1W701 TO 1W741 VARIES 5'-0" TO 11'-6" (INC. ¾")											
84	1	7	4'-0"	1W742	STR*												
85																	
86	21	5	VARIES	—	STR	1W501 TO 1W521 VARIES 9'-0" TO 11'-6" (INC. 1½")											
87	20	5	20'-0"	1W522	STR												
88	2	5	20'-6"	1W523	STR												
89	2	5	11'-9"	1W524	STR												
90																	
91																	
92																	
93		WINGWALL #2															
94																	
95																	
96	21	7	VARIES	—	STR	2W701 TO 2W721 VARIES 5'-6" TO 11'-9" (INC. 3¾")											
97																	
98																	
99	11	5	VARIES	—	STR	2W501 TO 2W511 VARIES 5'-6" TO 11'-9" (INC. 7½")											
100	12	5	10'-0"	2W512	STR												
101	10	5	VARIES	—	STR	2W513 TO 2W517 VARIES 9'-3" TO 2'-9" (INC. 19½")											
102	2	5	12'-0"	2W518	STR												
103																	
104																	
105																	
106		WINGWALL #3															
107																	
108																	
109	29	7	VARIES	—	STR	3W701 TO 3W729 VARIES 5'-6" TO 11'-4" (INC. 2½")											
110																	
111																	
112	15	5	VARIES	—	STR	3W501 TO 3W515 VARIES 5'-6" TO 11'-7½" (INC. 5¼")											
113	12	5	14'-0"	3W516	STR												
114	10	5	VARIES	—	STR	3W517 TO 3W521 (2EA) VARIES 12'-0" TO 3'-0" (INC. 27")											
115	2	5	15'-3"	3W522	STR												
116																	
117																	
118																	
119		WINGWALL #4															
120																	
121																	
122	25	7	VARIES	—	STR	4W701 TO 4W725 VARIES 7'-6" TO 11'-6" (INC. 2")											
123																	
124																	
125	13	5	VARIES	—	STR	4W501 TO 4W513 VARIES 7'-6" TO 11'-6" (INC. 4")											
126	16	5	12'-0"	4W514	STR												
127	6	5	VARIES	—	STR	4W515 TO 4W518 (2EA) VARIES 10'-6" TO 4'-6" (INC. 36")											
128	2	5	12'-9"	4W519	STR												
129																	
130																	
131																	
132																	
133																	
134																	
135																	
136																	
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ITEM	NO. PIECES	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F	G	H	J	K	R	O
161																	
162																	
163																	
164																	
165																	
166																	
167																	
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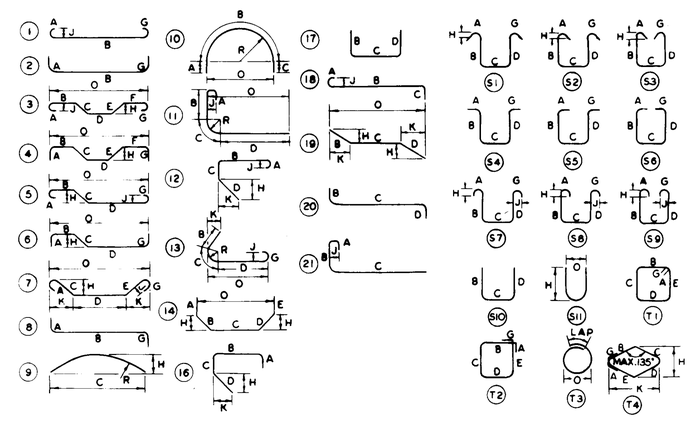
ASTM STANDARD REINFORCING BARS

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

TYPICAL BAR BENDS



PARE ENGINEERING CORPORATION
Engineers — Planners — Landscape Architects
8 Blackstone Valley Place, Lincoln, RI 02865
401/334/4100

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° AND 135° HOOKS.
5. "J" DIMENSION ON 180° 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° DIMENSIONS "H" AND "K" MUST BE SHOWN.

▲ DENOTES BARS TO BE CUT IN FIELD.
✱ DENOTES ONE EXTRA BAR ADDED FOR TESTING PURPOSES.
△ DENOTES TWO EXTRA BARS ADDED FOR TESTING PURPOSES.

REV. NO.	MADE BY	DATE	DESCRIPTION

STATE OF VERMONT
AGENCY OF TRANSPORTATION

TOWN OF	POWNAL	BRIDGE NO. 5	LOG STA.
HIGHWAY NO.	ROUTE 346	SURV. STA. 121+88	

REINFORCING STEEL SCHEDULE

DESIGNED BY G.F.	DRAWN BY R.J.H.
CHECKED BY P.D.M. DATE 2/10/87	BRIDGE DESIGN SUPERVISOR DATE
PROJECT	PROJECT NO.

BRIDGE SHEET NO. BR504 SHEET 127 OF 319