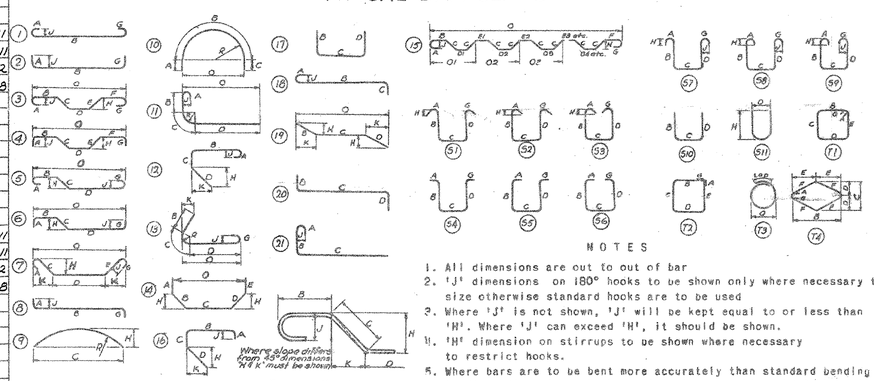
PIER NO. 3

Item	No. Pieces	Size	Length	Mark	Type	A	B	C	D	E	F	G	H	J	K	R	Q
						FOOTING											
2	63	9	14-4	3P901	2	1-5	11-6					1-5					
3	72	10	16-8	3P1001	2	1-7	13-6					1-7					
4	*79	14S	10-3	3P1451	2	2-1	8-2										
5																	
6						COLUMN											
7	26	9	29-10	3P902	Str												
8	26	9	31-7	3P903	Str												
9	26	9	33-5	3P904	Str												
10	39	14S	30-8	3P1452	Str												
11																	
12	*40	11	28-10	3P1101	3		5-8	2-0	21-2			0-2				28-10	
13																	
14				Spiral	Core	Pitch	Turns	Spacers									
15	3	5	24-9½	3P501	4-0	3½	88	4									
16	1	5	25-11½	3P502	4-0	3½	92	4									
17	1	5	27-8½	3P503	4-0	3½	98	4									
18	1	5	29-9	3P504	4-0	3½	105	4									
19																	
20						CAP											
21	20	5	8-6	3P505	Str												
22	10	5	5-6	3P506	Str												
23	16	6	25-9	3P603	Str												
24	10	8	22-4	3P801	Str												
25	6	9	15-0	3P905	Str												
26	8	9	28-5	3P906	Str												
27																	
28	48	4	8-6	3P401	17		2-0	4-6	2-0								
29	38	6	21-6	3P601	T1	0-7	4-6	5-8	4-6	5-8		0-7					
30	12	6	12-4	3P602	10	2-6	7-4	2-6								2-4	4-8
31	20	10	23-8	3P1002	17		5-0	18-8									
32																	
33																	
34																	
35																	
36																	
37						PIER NO. 4											
38																	
39	63	9	14-4	4P901	2	1-5	11-6					1-5					
40	72	10	16-8	4P1001	2	1-7	13-6					1-7					
41	78	14S	10-3	4P1451	2	2-1	8-2										
42																	
43						COLUMN											
44	26	9	29-7	4P902	Str												
45	26	9	31-6	4P903	Str												
46	26	9	33-5	4P904	Str												
47	39	14S	30-8	4P1452	Str												
48																	
49	39	11	28-10	4P1101	3		5-8	2-0	21-2			0-2				28-10	
50																	
51				Spiral	Core	Pitch	Turns	Spacers									
52	3	5	24-9½	4P501	4-0	3½	88	4									
53	1	5	25-8	4P502	4-0	3½	91	4									
54	1	5	27-8½	4P503	4-0	3½	98	4									
55	1	5	29-9	4P504	4-0	3½	105	4									
56																	
57						CAP											
58	20	5	8-6	4P505	Str												
59	10	5	5-6	4P506	Str												
60	16	6	27-9	4P603	Str												
61	10	8	23-10	4P801	Str												
62	6	9	16-6	4P905	Str												
63	8	9	30-5	4P906	Str												
64																	
65	48	4	8-6	4P401	17		2-0	4-6	2-0								
66	44	6	21-6	4P601	T1	0-7	4-6	5-8	4-6	5-8		0-7					
67	12	6	12-4	4P602	10	2-6	7-4	2-6								2-4	4-8
68	20	10	24-11	4P1002	17		5-0	19-11									
69																	
70																	
71																	
72																	
73																	
74																	
75																	
76																	
77																	
78																	
79																	
80																	
81																	

SOUTHBOUND SUPERSTRUCTURE

Item	No. Pieces	Size	Length	Mark	Type	A	B	C	D	E	F	G	H	J	K	R	Q
82						SPAN NO. 1											
83	415	5	31-6	1SS505	Str												
84	8	5	26-1	1SS506	Str												
85	60	6	31-10	1SS601	Str												
86																	
87	199	4	4-6	1SS401	S3	0-5	1-4	1-0	1-4			0-5					
88	300	5	18-11	1SS501	19		1-10	17-1						0-2		1-10	18-11
89	300	5	24-11	1SS502	19		1-10	23-1						0-2		1-10	24-11
90	*301	5	15-2	1SS503	19		1-10	13-4						0-2		1-10	15-2
91	300	5	28-8	1SS504	19		1-10	26-10						0-2		1-10	28-8
92																	
93																	
94						SPAN NO. 2											
95	415	5	31-6	2SS505	Str												
96	8	5	28-3	2SS506	Str												
97	60	6	31-10	2SS601	Str												
98																	
99	199	4	4-6	2SS401	S3	0-5	1-4	1-0	1-4			0-5					
100	300	5	18-11	2SS501	19		1-10	17-1						0-2		1-10	18-11
101	300	5	24-11	2SS502	19		1-10	23-1						0-2		1-10	24-11
102	300	5	15-2	2SS503	19		1-10	13-4						0-2		1-10	15-2
103	300	5	28-8	2SS504	19		1-10	26-10						0-2		1-10	28-8
104																	
105																	
106						SPAN NO. 3											
107	415	5	31-6	3SS505	Str												
108	8	5	31-2	3SS506	Str												
109	60	6	31-10	3SS601	Str												
110																	
111	199	4	4-6	3SS401	S3	0-5	1-4	1-0	1-4			0-5					
112	300	5	18-11	3SS501	19		1-10	17-1						0-2		1-10	18-11
113	300	5	24-11	3SS502	19		1-10	23-1						0-2		1-10	24-11
114	300	5	15-2	3SS503	19		1-10	13-4						0-2		1-10	15-2
115	300	5	28-8	3SS504	19		1-10	26-10						0-2		1-10	28-8
116																	
117																	
118																	
119																	
120						NORTHBOUND SUPERSTRUCTURE												
121						SPAN NO. 1											
122	415	5	31-6	1NS505	Str												
123	8	5	26-1	1NS506	Str												
124	60	6	31-10	1NS601	Str												
125																	
126	199	4	4-6	1NS401	S3	0-5	1-4	1-0	1-4			0-5					
127	300	5	18-11	1NS501	19		1-10	17-1						0-2		1-10	18-11
128	300	5	24-11	1NS502	19		1-10	23-1						0-2		1-10	24-11
129	*301	5	15-2	1NS503	19		1-10	13-4						0-2		1-10	15-2
130	300	5	28-8	1NS504	19		1-10	26-10						0-2		1-10	28-8
131																	
132																	
133						SPAN NO. 2											
134	415	5	31-6	2NS505	Str												
135	8	5	28-3	2NS506	Str												
136	60	6	31-10	2NS601	Str												
137																	
138	199	4	4-6	2NS401	S3	0-5	1-4	1-0	1-4			0-5					
139	300	5	18-11	2NS501	19		1-10	17-1						0-2		1-10	18-11
140	300	5	24-11	2NS502	19		1-10	23-1						0-2		1-10	24-11
141	300	5	15-2	2NS503	19		1-10	13-4						0-2		1-10	15-2
142	300	5	28-8	2NS504	19		1-10	26-10						0-2		1-10	28-8
143																	
144																	
145						SPAN NO. 3											
146	415	5	31-6	3NS505	Str												
147	8	5	31-2	3NS506	Str												
148	60	6	31-10	3NS601	Str												
149																	
150	199	4	4-6	3NS401	S3	0-5	1-4	1-0	1-4			0-5					
151	300	5	18-11	3NS501	19		1-10	17-1						0-2		1-10	18-11
152	300	5	24-11	3NS502	19		1-10	23-1						0-2		1-10	24-11
153	300	5	15-2	3NS503	19		1-10	13-4						0-2		1-10	15-2
154	300	5	28-8	3NS504	19		1-10	26-10						0-2		1-10	28-8
155																	
156																	
157																	
158																	
159																	
160																	
161																	
162																	

TYPICAL BAR BENDS

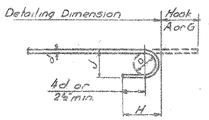


ENLARGED VIEW SHOWING BAR BENDING DETAILS

NOTES

1. All dimensions are out to out of bar
2. 'J' dimensions on 180° hooks to be shown only where necessary to restrict hook size otherwise standard hooks are to be used
3. Where 'J' is not shown, 'J' will be kept equal to or less than 'H'. Where 'J' can exceed 'H', it should be shown.
4. 'H' dimension on stirrups to be shown where necessary to restrict hooks.
5. Where bars are to be bent more accurately than standard bending tolerances bending dimensions which require closer working should have limits indicated
6. Figures in circles show types
7. No allowance for bend curvature is to be made except for standard hook & radii in excess of same.

Item	No. Pieces	Size	Length	Mark	Type	A	B	C	D	E	F	G	H	J	K	R	Q
163						APPROACH SLAB NO. 1											
164	34	5	24-4	1AS501	Str												
165	*39	10	20-7	1AS101	1	1-1	19-6							0-9			
166																	
167																	
168																	
169						APPROACH SLAB NO. 2											
170	26	5	31-6	2AS501	Str												
171	38	10	20-7	2AS101	1	1-1	19-6							0-9			
172																	
173																	
174																	
175						APPROACH SLAB NO. 3											
176	34	5	24-4	3AS501	Str												
177	38	10	20-7	3AS101	1	1-1	19-6							0-9			
178																	
179																	
180																	
181						APPROACH SLAB NO. 4											
182	26	5	31-2	4AS501	Str												
183	38	10	20-7	4AS101	1	1-1	19-6							0-9			
184																	
185																	
186																	
187																	
188																	
189																	
190																	



STANDARD HOOK DETAIL

BAR SIZES

Equivalent Size	Present Number	Weight per Ft.
⅜"	2	.167
⅜"	3	.376
½"	4	.668
⅝"	5	1.043
¾"	6	1.502
⅞"	7	2.044
1"	8	2.670
1"	9	3.400
1⅛"	10	4.303
1¼"	11	5.313
1⅜"	14S	7.650
2"	18S	13.600

THIS SHEET FOR REFERANCE ONLY
BERLIN IM 089-1(20)
BRIDGES 40 N&S

SHEET 104 OF 104

GENERAL NOTES

(1) Unless otherwise designated all standard reinforcement shall be deformed bars conforming with the requirements of the "Standard Specification for Billet-Steel Bars for Concrete Reinforcement"(Intermediate Grade) AASHO Designation M31-60 or its latest revision.

(2) Unless otherwise designated all special large size reinforcement shall be deformed bars conforming with the requirements of the "Standard Specification for Special Large size Deformed Billet-Steel Bars for Concrete Reinforcement"(Intermediate Grade) AASHO Designation M-171-60 or its latest revision.

(3) * Denotes one extra bar added for testing purposes.

(4) Stirrups and tie bars shall be bent around a pin having a diameter not less than two times the minimum thickness of the bar. Bends for other bars shall be made around a pin having a diameter not less than six times the minimum thickness except for bars larger than 1 inch, in which case the bends shall be made around a pin of eight bar diameters.

(5) All Spiral Reinforcement shall conform to AASHO designation M32-60, Cold Drawn Steel Wire for Concrete Reinforcement.

ESTIMATED QUANTITIES

LOCATION	PLAN (LBS)	FINAL (LBS)
PIER 3		
PIER 4		
S.B. SUPERSTRUCTURE		
N.B. SUPERSTRUCTURE		
APPROACH SLAB 1		
APPROACH SLAB 2		
APPROACH SLAB 3		
APPROACH SLAB 4		

STATE OF VERMONT
DEPARTMENT OF HIGHWAYS

PROJECT BERLIN - MONTPELIER
TOWNS OF BERLIN & MONTPELIER
ROUTE NO I89 STA 193+50±
I89 OVER VT. 12
REINFORCING - PIERS 3 & 4, SUPERS, & APP. SLABS
IN CHARGE W. SMITH
DRAWN BY W. TRIPP CHECKED BY F. GILMAN R. LADD 1147
PROJECT I NO. 89-1(12)
SHEET 178 OF 497 BR. 427