Item	No. Pieces	Size	Length	Mark	Type	A	B	C	D	E	F	G	H	J	K	R	O
1																	
2					ABUTMENT #1												
3	51	6	8'-10"	1A1	1	8"	7'-6"										
4	8	5	35'-8"	1A2	STR							8"		6"			
5	124	6	5'-6"	1A3	2	1'-6"	4'-0"										
6	58	6	11'-9"	1A4	STR							0					
7	16	5	38'-10"	1A5	2	2'-0"	34'-10"										
8	58	6	8'-10"	1A6	STR							2'-0"					
9	4	6	4'-9"	1A7	STR												
10	2	5	4'-9"	1A7A	STR												
11	4	6	6'-8"	1A8	STR												
12	2	5	6'-8"	1A8A	STR												
13	4	6	7'-2"	1A9	STR												
14	2	5	7'-2"	1A9A	STR												
15	4	6	8'-4"	1A10	STR												
16	2	5	8'-4"	1A10A	STR												
17	4	6	9'-9"	1A11	STR												
18	2	5	9'-9"	1A11A	STR												
19	4	6	10'-8"	1A12	STR												
20	2	5	10'-8"	1A12A	STR												
21	33	5	4'-9"	1A13	STR												
22	4	5	6'-6"	1A14	STR												
23	6	5	7'-6"	1A15	STR												
24	4	5	9'-0"	1A16	STR												
25	6	5	10'-6"	1A17	STR												
26	4	5	12'-3"	1A18	STR												
27	6	5	13'-9"	1A19	STR												
28	22	5	15'-9	1A20	STR												
29	20	5	11'-6"	1A21	STR												
30	16	5	5'-0"	1A22	2	2'-6"	2'-6"										
31																	
32																	
33																	
34					PIER #1												
35	13	8	31'-6"	1P1	1	1'-1"	29'-4"										
36	30	6	12'-6"	1P2	STR							1'-1"		10"			
37	* 25	6	6'-6"	1P3	STR												
38	17	8	23'-4"	1P4	STR												
39	* 39	11	12'-8"	1P5	STR												
40	80	3	11'-0"	1P6	T1	4"	2'-7"	2'-7"	2'-7"	2'-7"		4"					
41	80	3	15'-4"	1P7	T1	4"	3'-8"	3'-8"	3'-8"	3'-8"		4"					
42	* 161	3	11'-10"	1P8	T1	4"	1'-11"	3'-8"	1'-11"	3'-8"		4"					
43	32	11	41'-3"	1P9	STR												
44	8	10	24'-0"	1P10	1	1'-3"	21'-6"					1'-3"					
45	10	3	9'-8"	1P11	T1	4"	1'-9"	2'-9"	1'-9"	2'-9"		4"					
46	* 88	9	25'-4"	1P12	STR												
47	4	4	11'-2"	1P13	T1	4½"	2'-5"	2'-9½"	2'-5"	2'-9½"		4½"					
48	4	4	11'-5	1P14	T1	4½"	2'-5"	2'-11"	2'-5"	2'-11"		4½"					
49	4	4	11'-10"	1P15	T1	4½"	2'-5"	3'-1½"	2'-5"	3'-1½"		4½"					
50	4	4	12'-3"	1P16	T1	4½"	2'-5"	3'-4"	2'-5"	3'-4"		4½"					
51	4	4	12'-7"	1P17	T1	4½"	2'-5"	3'-6"	2'-5"	3'-6"		4½"					
52	4	4	12'-11"	1P18	T1	4½"	2'-5"	3'-8"	2'-5"	3'-8"		4½"					
53	4	4	13'-4"	1P19	T1	4½"	2'-5"	3'-10½"	2'-5"	3'-10½"		4½"					
54	* 31	4	13'-5"	1P20	T1	4½"	2'-5"	3'-11"	2'-5"	3'-11"		4½"					
55	* 17	8	8'-0"	1P21	10		0	3'-6"	4'-6"				1'-0"	1'-0"			
56	8	11	22'-0"	1P22	STR												
57	* 9	10	13'-9"	1P23	1	1'-3"	12'-0"					0					
58	8	11	35'-4"	1P24	1	1'-5"	32'-6"					1'-5"					
59	4	8	32'-6"	1P25	STR											32'-6"	
60					BEND IN FIELD IF NECESSARY												
61																	
62																	
63																	
64																	
65																	
66																	
67																	
68																	
69																	
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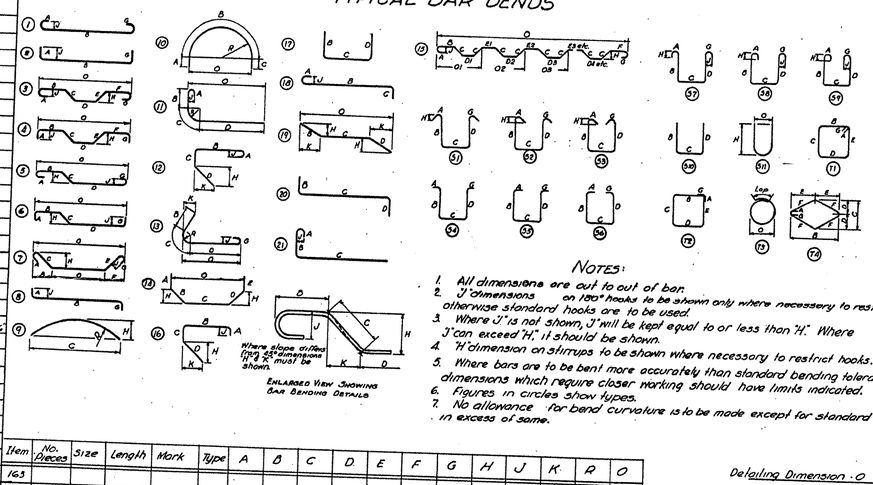
80																	
81																	

Item	No. Pieces	Size	Length	Mark	Type	A	B	C	D	E	F	G	H	J	K	R	O
82																	
83					PIER #2												
84	13	8	31'-6"	2P1	1	1'-1"	29'-4"										
85	30	6	12'-6"	2P2	Str.							1'-1"		0'-10"			
86	24	6	6'-6"	2P3	Str.												
87	17	8	23'-4"	2P4	Str.												
88	32	11	12'-3"	2P5	Str.												
89	84	3	11'-0"	2P6	T1	4"	2'-7"	2'-7"	2'-7"	2'-7"		4"					
90	84	3	15'-4"	2P7	T1	4"	3'-8"	3'-8"	3'-8"	3'-8"		4"					
91	168	3	11'-10"	2P8	T1	4"	1'-11"	3'-8"	1'-11"	3'-8"		4"					
92	32	11	43'-4"	2P9	Str.												
93	8	10	24'-0"	2P10	1	1'-3"	21'-6"										
94	10	3	9'-8"	2P11	T1	4"	1'-9"	2'-9"	1'-9"	2'-9"		1'-3"					
95	32	9	25'-4"	2P12	Str.							4"					
96	4	4	11'-2"	2P13	T1	4½"	2'-5"	2'-9½"	2'-5"	2'-9½"		4½"					
97	4	4	11'-5	2P14	T1	4½"	2'-5"	2'-11"	2'-5"	2'-11"		4½"					
98	4	4	11'-10"	2P15	T1	4½"	2'-5"	3'-1½"	2'-5"	3'-1½"		4½"					
99	4	4	12'-3"	2P16	T1	4½"	2'-5"	3'-4"	2'-5"	3'-4"		4½"					
100	4	4	12'-7"	2P17	T1	4½"	2'-5"	3'-6"	2'-5"	3'-6"		4½"					
101	4	4	12'-11"	2P18	T1	4½"	2'-5"	3'-8"	2'-5"	3'-8"		4½"					
102	4	4	13'-4"	2P19	T1	4½"	2'-5"	3'-10½"	2'-5"	3'-10½"		4½"					
103	30	4	13'-5"	2P20	T1	4½"	2'-5"	3'-11"	2'-5"	3'-11"		4½"					
104	16	8	8'-0"	2P21	19		0	3'-6"	4'-6"								
105	8	11	22'-0"	2P22	Str.								1'-8"		4'-6"		
106	8	10	13'-3"	2P23	1	1'-3"	12'-0"										
107	8	11	35'-4"	2P24	1	1'-5"	32'-6"					0					
108	4	8	32'-6"	2P25	Str		BEND IN FIELD IF NECESSARY					1'-5"					
109																32'-6"	
110																	
111	51	6	8'-10"	2A1	ABUT #2	8"	7'-6"										
112	8	5	35'-8"	2A2	1							8"		6"			
113	124	6	5'-6"	2A3	STR												
114	57	6	8'-8"	2A4	2	1'-6"	4'-0"										
115	57	6	11'-8"	2A5	STR							0					
116	4	6	4'-6"	2A6	STR												
117	2	5	4'-6"	2A6A	STR												
118	4	6	6'-0"	2A7	STR												
119	2	5	6'-0"	2A7A	STR												
120	4	6	7'-2"	2A8	STR												
121	2	5	7'-2"	2A8A	STR												
122	4	6	8'-4"	2A9	STR												
123	2	5	8'-4"	2A9A	STR												
124	4	6	9'-6"	2A10	STR												
125	2	5	9'-6"	2A10A	STR												
126	4	6	10'-8"	2A11	STR												
127	2	5	10'-8"	2A12	STR												
128	16	5	38'-10"	2A13	2	2'-0"	34'-10"										
129	* 34	5	4'-9"	2A14	STR						2'-0"						
130	4	5	6'-6"	2A15	STR												
131	6	5	7'-0"	2A16	STR												
132	6	5	9'-9"	2A17	STR												
133	2	5	10'-9"	2A18	STR												
134	6	5	12'-6"	2A19	STR												
135	4	5	14'-0"	2A20	STR												
136	22	5	15'-9"	2A21	STR												
137	20	5	11'-6"	2A22	STR												
138	16	5	5'-0"	2A23	2	2'-6"	2'-6"										
139																	
140																	
141																	
142					SUPERSTRUCTURE												
143	862	5	34'-10"	51	STR												
144	16	5	32'-7"	51A	STR		(BAT EACH ABUTMENT)										
145	426	4	33'-7"	52	STR		(END SPANS)										
146	142	4	30'-8"	52A	STR		(SUSPENDED SPAN)										
147	388	5	5'-1"	53	53	0'-5"	1'-4"	1'-7"	1'-4"								
148	36	5	33'-7"	54	STR		(END SPANS)				0'-5"	0'-2½"					
149	12	5	30'-8	54A	STR		(SUSPENDED SPAN)										
150																	
151																	
152																	
153																	
154																	
155																	
156																	
157																	
158																	
159																	
160																	
161																	
162																	

TYPICAL BAR BENDS



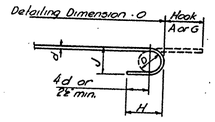
NOTES:

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	O
163																	
164																	
165					APPROACH SLABS												
166	66	10	19'-6"	A51	STR												
167	* 5	10	15'-9"	A52	STR		(BEND IN FIELD)										
168	24	5	32'-5"	A53	STR												
169	* 3	5	29'-6"	A54	STR												
170	2	5	29'-9"	A55	STR												
171	2	5	30'-0"	A56	STR												
172	2	5	30'-3"	A57	STR												
173	2	5	30'-6"	A58	STR												
174	2	5	30'-9"	A59	STR												
175	2	5	31'-0"	A510	STR												
176	2	5	31'-5"	A511	STR												
177	2	5	31'-9"	A512	STR												
178	2	5	32'-0"	A513	STR												
179	32	4	4'-6"	A514	53	0'-4½"	1'-7"	0'-7"	1'-7"			0'-4½"	0'-2½"				
180	* 9	4	7'-2"	A515	STR												
181																	
182																	
183																	
184																	
185																	
186																	
187																	
188																	
189																	
190																	

* SIGNIFIES ONE BAR ADDED FOR TESTING PURPOSES.

Detailing Dimension - O



STANDARD HOOK DETAIL

BAR SIZES

Equivalent Size	Present (Numbers)
¼"ϕ	#2
3/8"ϕ	#3
½"ϕ	#4
5/8"ϕ	#5
¾"ϕ	#6
7/8"ϕ	#7
1"ϕ	#8
1"□	#9
1⅛"□	#10
1¼"□	#11

8. Bar reinforcement metal shall conform to the requirements of the Standard Specifications for new Billet-Steel Concrete Reinforcement Bars (Intermediate Grade) Serial Designation A.A.S.H.O. M31-48 or its latest revision. All bars shall be deformed to conform with A.S.T.M. Specifications A305-49.

ESTIMATED QUANTITIES

Location	Pounds	
ABUTMENT #1	6,000	6,074
PIER #1	21,300 V	
PIER #2	21,700 V	
ABUTMENT #2	5,910	5,984
SUPERSTRUCTURE	47,260 V	
APPROACH SLABS	7,490 V	

CAUTION: REPRODUCTION IS NOT TO SCALE

IM 091-1(33)
This sheet for information only.
BR 3 N&S
Sheet 109 of 114

GUILFORD

Surveyed by
Designed by RLB & RTB
Drawn by RLB
Traced by RLB
Checked by H.E.S.
Section IM No. 001-1(6) Filed
I-001-1(6)

SHEET 109 OF 114