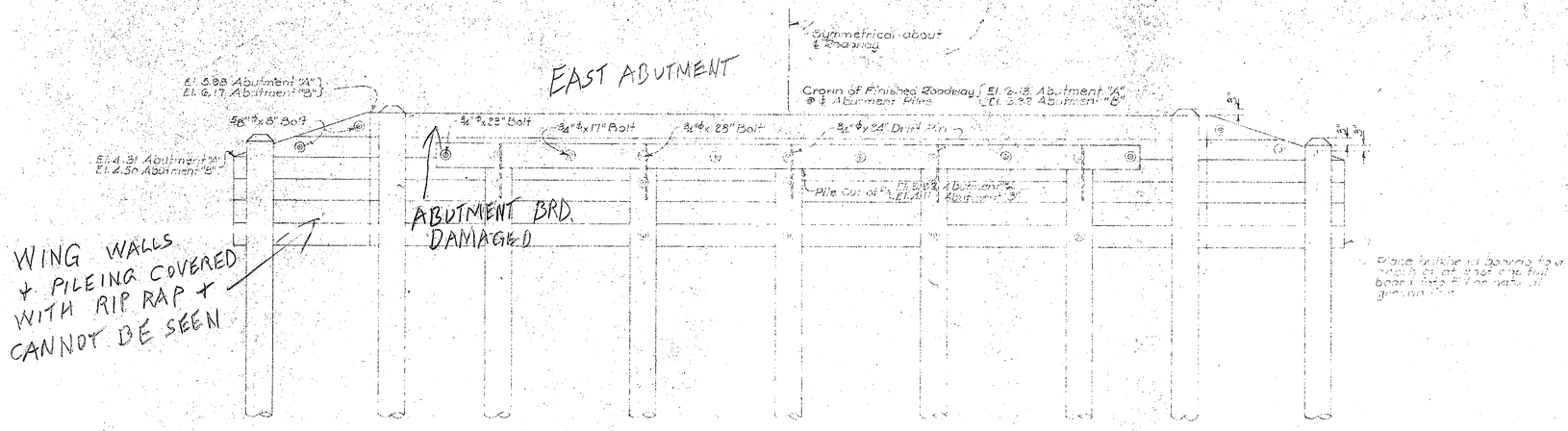
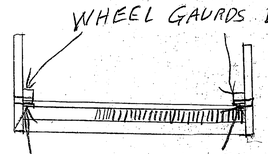
EAST ABUTMENT



ELEVATION OF ABUTMENT
WINGS SKEW PARALLEL
Scale 3/8"=1'-0"

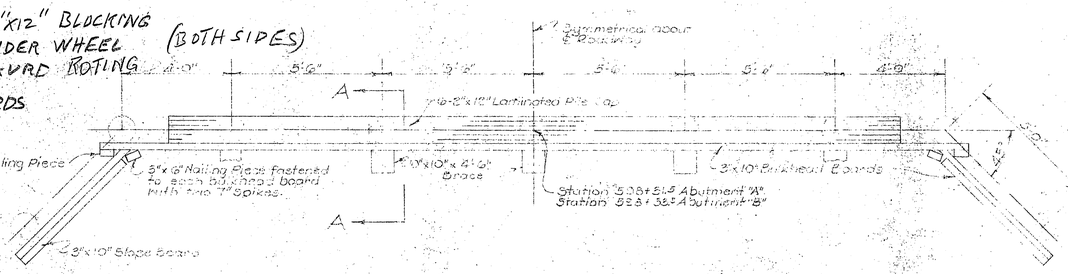
Note: Fasten each bulkhead plank to each pile with two 7" spikes.

WHEEL GAURDS DAMAGED

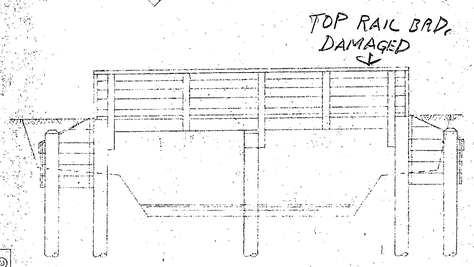


1 3"X12" BLOCKING UNDER WHEEL GAURD ROTTING (BOTH SIDES)

1" MATERIAL ON DECK BOARDS DAMAGED



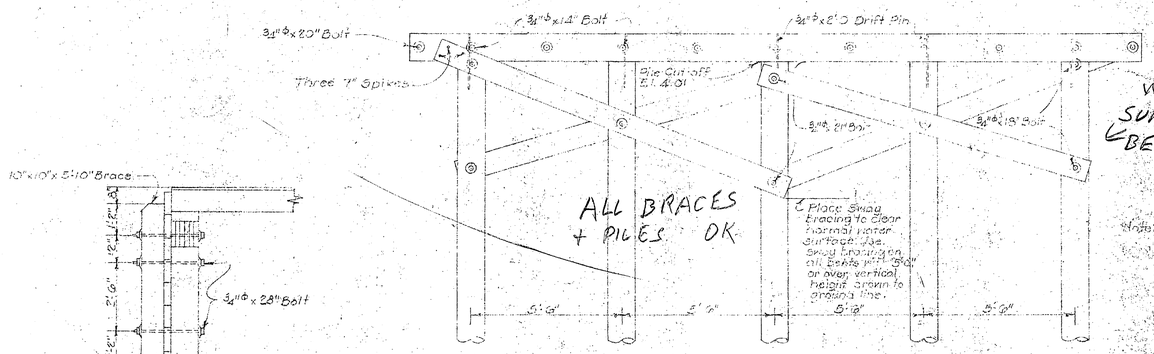
PLAN OF ABUTMENT
Scale 3/8"=1'-0"



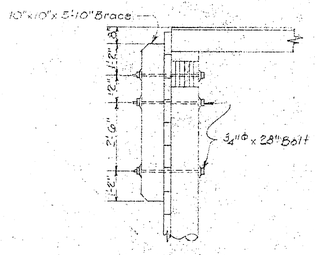
ELEVATION
Scale 3/16"=1'-0"
(STATION 513+38.5)

WATER MAIN SUPPORTS SHOULD BE REPLACED

Note: Piles shall be driven to a minimum center to center distance of 2'-6" long.

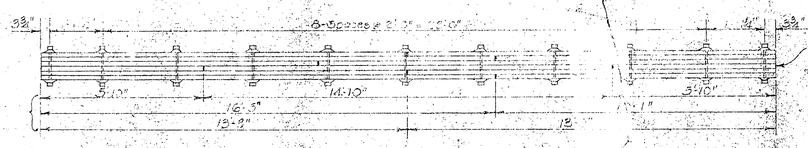


ELEVATION OF BENT
Scale 3/8"=1'-0"



SECTION A-A
Scale 3/8"=1'-0"

Note: For Superstructure Details see M.B. Orig.



Pile cap to be made up of 6-2"x 12" boards 3/4" to 9"x 11" each, board to be spiked to the adjacent piece with 60-8 nails & 8" to 8" apart in addition shall be bolted together as shown

PLAN OF PILE CAP
Scale 3/8"=1'-0"

BRIDGE AT
℄ STATION 508+82.5
℄ STATION 543+63.5
℄ STATION 529+00
℄ STATION 527+87

Note: Details and Bill of Material shown on this sheet for 508+82.5 Details and Superstructure Bill of Material for Stations shown above. The Contractor shall check all elevations, lengths of piles and substructure bills of material before ordering.

Station 508+82.5 is Creosoted Timber Pile Bridge

℄ BRIDGE STATION 538+42.5

BILL OF MATERIAL

SUPERSTRUCTURE

TWO SPANS @ 40'-0" c. to c. BENTS

UNTREATED TIMBER

Item	No	Size	Surface	Length
Railing	2	3"x8"	45° to 2"x7"	31'-0"
"	2	"	"	25'-9"
"	2	"	"	20'-6"
"	2	"	"	15'-3"
"	2	"	"	9'-11"
"	2	"	"	4'-8"
Rail Post	2	4"x8"	345 to 2"x7"	5'-9"
Rail Post	4	6"x8"	345 to 2"x7"	4'-7"

APPROACHES

Item	No	Size	Surface	Length
Flooring	100	2"x 6"	SIE to 3"x 3'-6"	11'-0"
"	100	"	"	8'-0"
"	100	"	"	5'-0"
"	100	"	"	2'-0"
Rail Posts	10	6"x 6"	345 to 9"x 4'	4'-6"
Panel Guard	2	10"x 8"	345 to 9"x 7'-6"	6'-0"
Wheel Guard	2	6"x 8"	345 to 9"x 7'-6"	16'-3"
Wheel Guard Block	10	3"x12"	345 to 2'-6"x 11'-6"	11'-3"
Retaining Brace	2	11"x12"	SIE to 3"x 4'-6"	12'-6"
Retaining Brace	2	5"x 12"	SIE to 3"x 4'-6"	10'-0"
Crown Beam	5	5"x 12"	Sand Dash	8'-9"-0"

SUBSTRUCTURE

Item	No	Size	Surface	Length
Bolts	12		3/4" ϕ	20"
"	2		"	21"
"	10		3/4" ϕ	28"
Bolt	10		3/4" ϕ	27"
Carriage Bolts	45		3/8" ϕ	11/2"
Drift Pins	34		For 3/4" Bolts	
Drift Pins	2		For 3/4" ϕ Bolts	
Cut Nails	40		For Bracing	
Nails	2420		20d	4"
Nails	75		8d	2 1/2"
Nails	250		20d	4"
Spikes	8		7"	7"
Lag Screws	3		1/2" ϕ	6"

SUBSTRUCTURE

TWO ABUTMENTS & ONE BENT

CREOSOTED TIMBER

Item	No	Size	Surface	Length
Pile Cap	14	8"x12"	SIE to 12"x 11 1/2"	18'-0"
"	2			16'-2"
"	2			9'-7"
"	2			6'-10"
Pile Cap	2	8"x 12"	SIE to 12"x 11 1/2"	18'-4"
Bulkhead Boards	4	3"x10"	Rough	3'-6"
"	20			4'-3"
"	12			13'-2"
"	2			11'-0"
Bulkhead Cleats	12	3"x 10"	Rough	13'-10"
Bracing	10	10"x 10"	Rough	5'-10"
Nailing Piece	3	3"x 8"	Rough	3'-0"
Slope Boards	4	2"x10"		3'-6"
Snag Bracing	2		Rough	14'-0"
Snag Bracing	2	3"x 10"	Rough	12'-6"

HARDWARE

Item	No	Size	Length
Bolts	3	3/4" ϕ	8"
"	9	3/4" ϕ	14"
"	3	"	17"
"	3	"	18"
"	2	"	20"
"	1	"	21"
Bolts	4	3/4" ϕ	22"
Bolts	20	3/4" ϕ	12"
O.G Washers	60	For 3/4" ϕ Bolts	
Drift Pins	15	3/4" ϕ	2'-0"
Nails	300	30-d	4"
Spikes	250	7"	7"
O.G Washers	16	For 3/4" ϕ Bolts	

CREOSOTED TIMBER PILES

Item	No	Size	Length
Creosoted Timber Piles - Nº 2			

STATION 513+38.5

DRAWN BY	E.W.H.
TRACED BY	E.W.H.
CHECKED BY	H.B.M.
CHIEF D'FMN.	
IN CHARGE	H.B.M.
DATE	5-4-42
SCALE	As Shown
Y. & D. DRAWING NO.	229352

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DURHAM, N. C. BALTIMORE, MD.

MARINE BARRACKS—NEW RIVER, N. C.

BUREAU OF YARDS AND DOCKS — U. S. NAVY

STANDARD SUBSTRUCTURE DETAILS FOR CREOSOTED TIMBER BENTS TWO SPANS AT 40'-0" c. to c.

5-858 JUNE 1941

ARCHITECT-ENGINEERS SPECIFICATION NO.

APPROVED May 11 1942
BY Chief of Bureau
RESIDENT OFFICER IN CHARGE

SHEET 2 OF 3

M.B. PROJ. NO. 229352

M.B. DWG. NO. 269

REVISION	DATE	BRIEF	R.O. IN CHARGE	BY

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