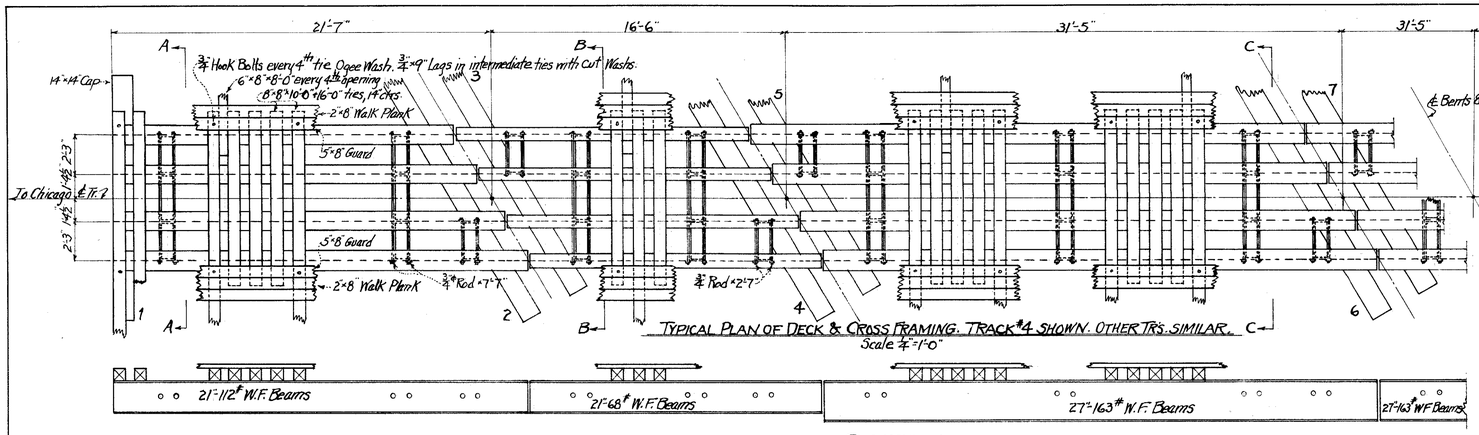
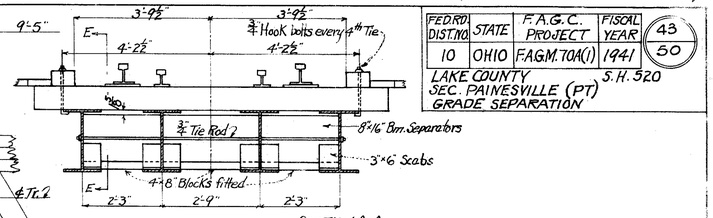
FED.RD. DIST.NO.	STATE	F.A.G.C. PROJECT	FISCAL YEAR	43 / 50
10	OHIO	F.A.G.M.TOA(1)	1941	

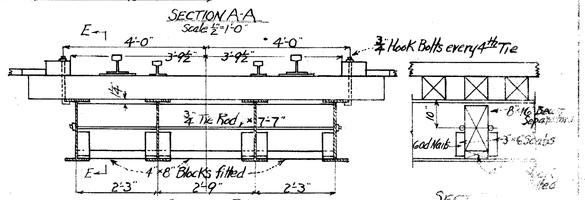
LAKE COUNTY S.H. 520
SEC. PAINESVILLE (PT)
GRADE SEPARATION

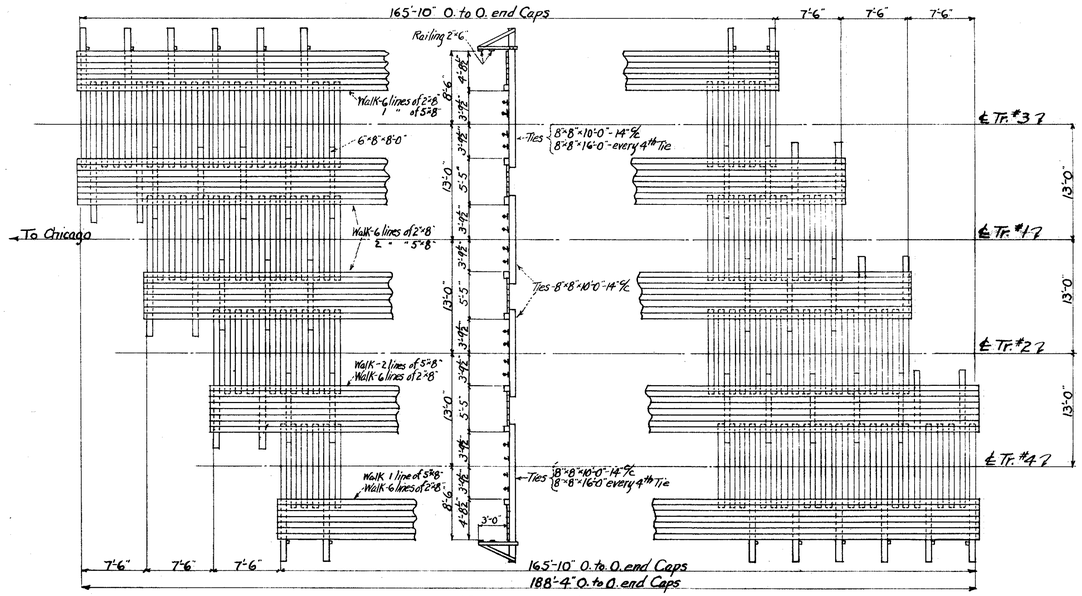


TYPICAL PLAN OF DECK & CROSS FRAMING. TRACK #4 SHOWN. OTHER TR'S. SIMILAR.
Scale ¼"=1'-0"

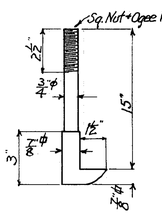
ELEVATION
Scale ¼"=1'-0"

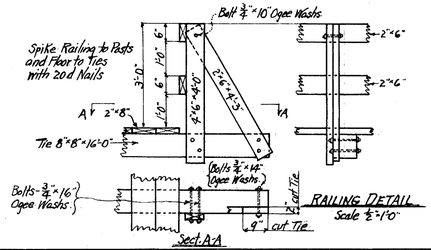


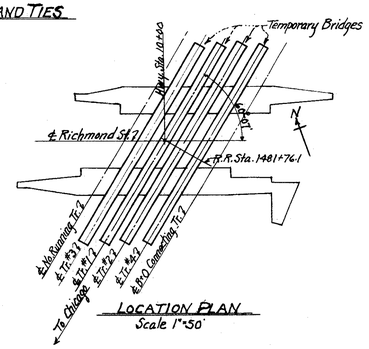




PLAN OF WALKS AND TIES
Scale 8'=1'-0"







Bill of Timber (No Excess)

No.	Size	Length	Kind	Remarks	FBM
20	8"x16"	24'-0"	Pine or YP	Stringers	5120
4	"	21'-0"	"	"	896
12	"	12'-0"	"	"	1536
4	"	11'-0"	"	"	469
4	"	9'-0"	"	"	384
4	"	8'-0"	"	"	341
8	"	19'-0"	"	Backwall Good S.H.	1621
4	"	17'-0"	"	" " " "	725
12	"	14'-0"	"	" " " "	1792
52	"	2'-9"	"	Beam Separators Good S.H.	1525
100	"	2'-3"	"	" " " "	3360
56	14"x14"	14'-0"	Oak, Fir or YP	Caps	12805
180	12"x14"	4'-8"	"	Blocking	11768
80	12"x12"	12'-0"	"	"	11520
4	6"x12"	12'-0"	"	"	288
86	8"x8"	16'-0"	"	Ties	7339
494	"	10'-0"	"	"	26346
105	6"x8"	8'-0"	"	Walk Supports	3360
36	8"x9"	2'-9"	"	Blocking for Bm. Separators Good S.H.	594
96	"	2'-3"	"	" " " "	1296
16	4"x8"	2'-9"	"	Blocking for Bm. Separators Good S.H.	117
44	"	2'-3"	"	" " " "	264
74	4"x6"	4'-0"	"	Railing Posts	592
192	3"x10"	4'-2"	"	Bracing for Bents 4,5,6,7,8,9,10,11	2002
64	"	6'-3"	"	" " " 6,7,8,9	1000
64	"	5'-0"	"	" " " 10,11,4,5	800
16	"	19'-0"	"	" " " 6,7,8,9	760
16	"	17'-0"	"	" " " 10,11,4,5	680
528	3"x8"	1'-2"	"	Scabs for Bm. Separators Good S.H.	1236
240	3"x6"	0'-8"	"	" " " "	241
319	2"x8"	16'-0"	"	Walk Plank	6805
42	2"x6"	16'-0"	"	Railing	672
74	"	4'-3"	"	Railing Braces	315
85	5"x8"	16'-0"	"	Walk Guard	4533
8	3"x10"	15'-0"	"	Bracing for Bent 12.	300
510	3"x12"	10'-0"	Oak	Sheeting	15300

Total 128702 F.B.M.

Hardware shall be of good quality and standard make.

Bill of Hardware (No Excess)

No.	Size	Length	Kind	Remarks
380	¾"	26"	Drifts Button Head	Caps to Piles. Stringers to Caps
720	"	22"	"	Blocking
100	"	16"	"	Ties to Stringers. Blocking
96	¾"	27"	Bolts	Thru Stringers Sq. Hd + Nut
224	"	25"	"	Bracing " "
512	"	22"	"	" " "
240	¾"	See Detail	Hook Bolts	Ties to Stringers
1360	¾"	9"	Lag Screws	Bear. Pls. + Bms. to Caps
66	¾"	15"	Boat Spikes	Backwalls
148	¾"	14"	Bolts	Rail Braces to Ties. Sq. Hd. + Nut
104	¾"	7'-7"	Tie Rods	Bm. Separators
72	"	2'-7"	"	" "
400 lbs. 60d Nails				
160 lbs. 20d Nails				
2644	Ogee Washs. for ¾" Bolts			
74	¾"	10"	Bolts	Rail Posts to Braces Sq. Hd. + Nut
148	¾"	16"	"	Posts to Ties " " "
1372	Cut washers for ¾" Lag screws			

Bill of Piles

No.	Length	Remarks	LF
68	25'-0"	For Bents 1, 13, 14	1700
60	30'-0"	" " 2, 3, 12	1800
160	35'-0"	" " 4, 5, 6, 7, 8, 9, 10, 11	5600
		Total	9100

Bill of Structural Steel

No.	Size	Length	Remarks		Wt. lbs
4	21WF@112#	23'-6½"	Stringers	B1	10545
4	"	22'-3"	"	B2	9968
4	"	20'-8"	"	B3	9260
4	"	19'-4½"	"	B4	8682
8	21WF@68#	16'-5"	"	B5	8932
8	"	16'-5"	"	B6	8932
24	27WF@163#	31'-4"	"	B7	122562
24	"	31'-4"	"	B8	122562
4	12"x¾"	9'-4"	Bearing Plates	BP1	1142
28	"	11'-0"	"	BP2	9424
8	"	11'-0"	"	BP3	2692
			Total		314701 Lbs.

ESTIMATED QUANTITIES

S-30 Structural Steel, Sec. M-7.4	338469 Lbs.
S-30 Untreated Timber Piling, Sec. M-8.4	9100 L.F.
S-30 Untreated Trestle Timber and Sheeting, Sec. M-8.2 (incl. Hardware)	149.9 M.B.M.
E-2 Excavation for Temporary Structures (Pile Bents on Hwy. slopes)	400 Cu. Yds.

1. Contractor shall furnish all sheeting lumber for use in excavating for decks of temporary bridges.
2. R.R. Co. will place sheeting.
3. All material excavated by Railroad forces to be disposed of by Contractor, included in roadway excavation for payment.

All salvaged trestle material will become the property of the Contractor, and shall be removed from the site by him when no longer needed.

Correct _____ Engineer of Structures
Approved _____ Chief Engineer

Drawn L.J.C.	Traced L.J.C.	Checked G.P.B.

REVISIONS

Date	By	Description
3-12-41	state	Item E-2 ; S-30 Trestle Timber

BR. No. - LA-283-170

N. Y. C. System	Office of Chief Engineer	Chicago, Ill.

BR. No. 100¾ ERIE DIVISION STA. 1481+76.1
GRADE SEPARATION
RICHMOND ST. PAINESVILLE, OHIO.
DETAILS OF TEMPORARY BRIDGES Sheet 15 of 19

N.Y.C.R.R. West, Erie Division		Plan No. 1091
Scales as shown	July 5, 1940 Val. Sec. 203	File No. 100-92