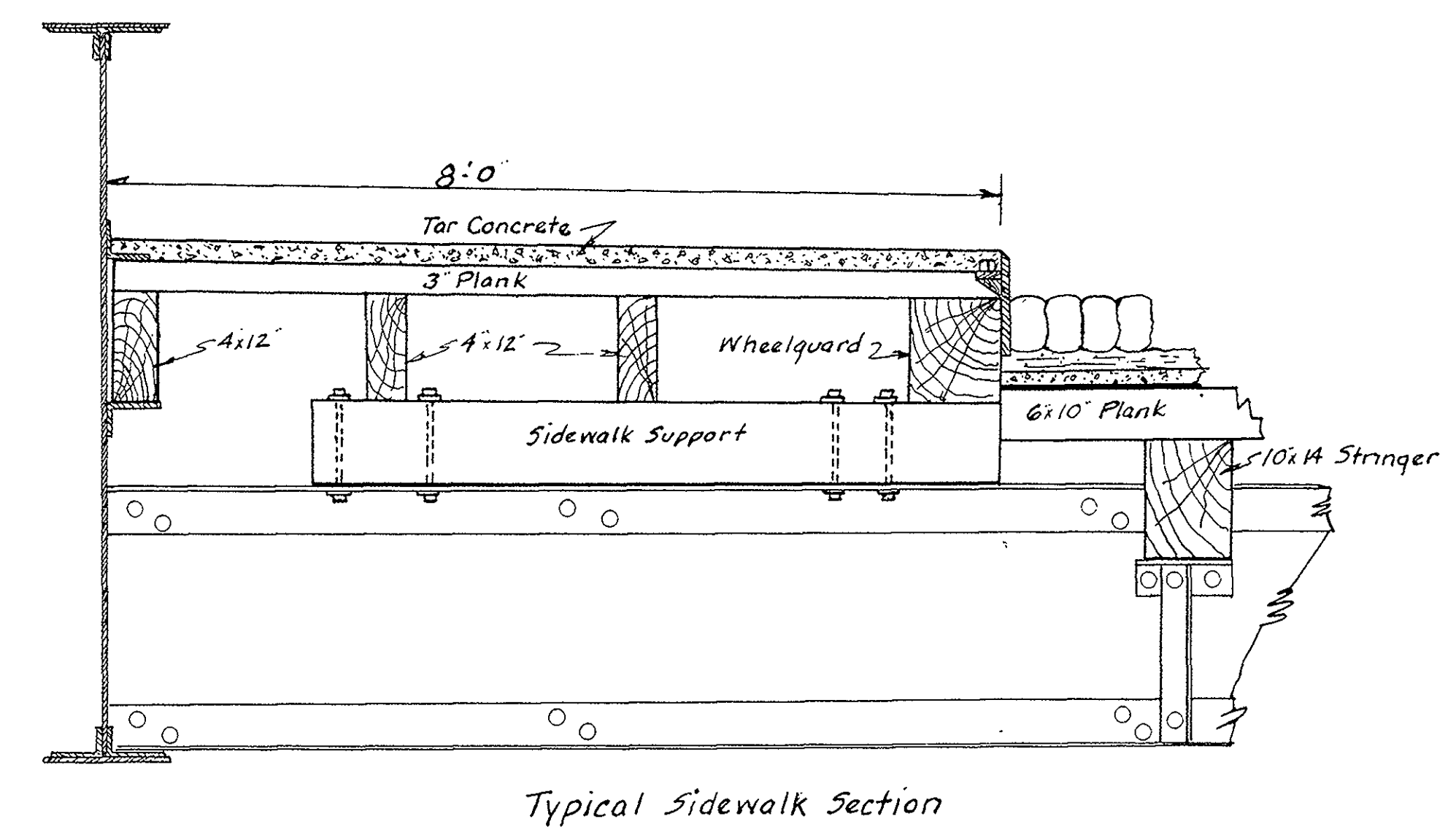
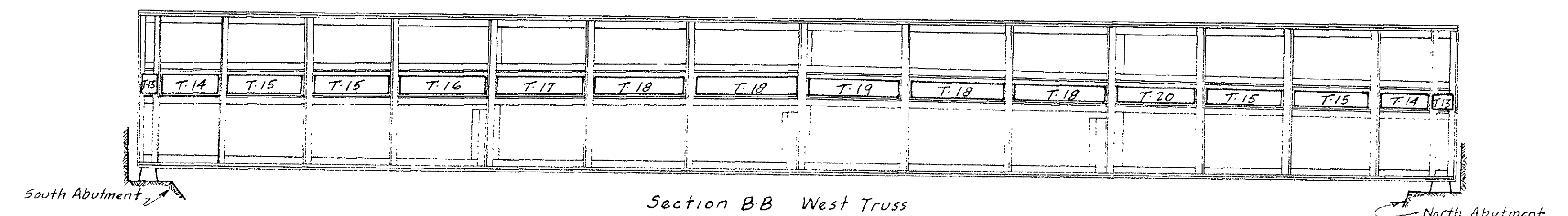
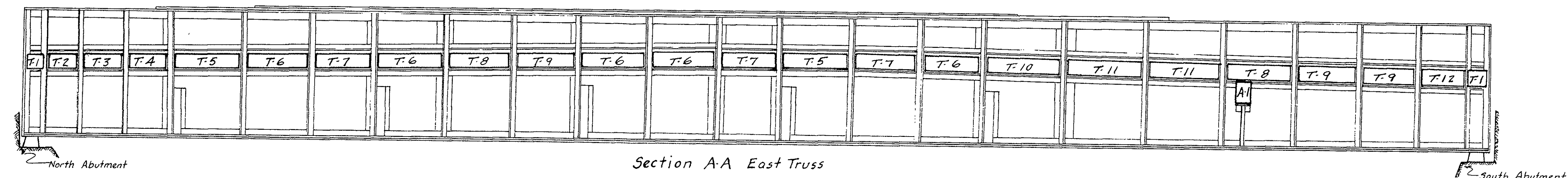
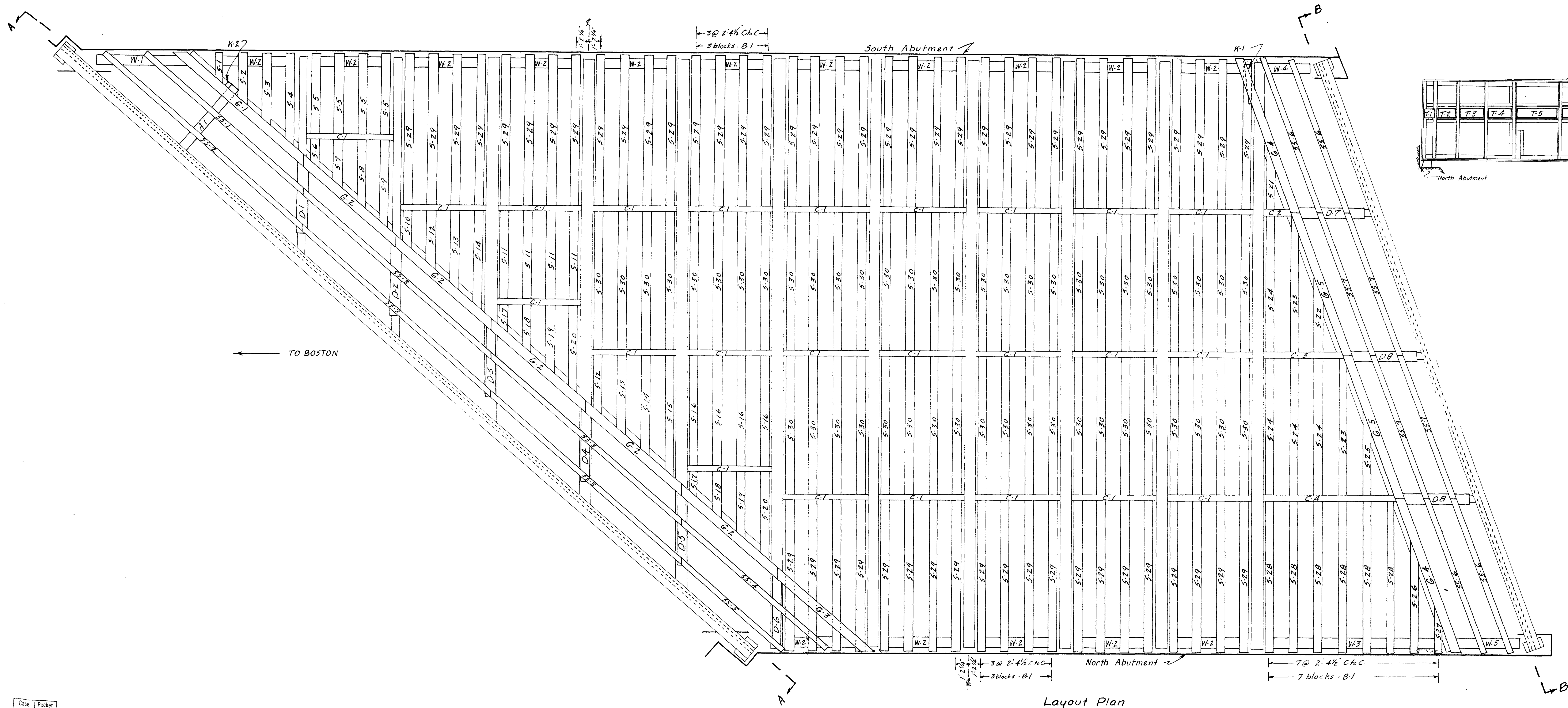


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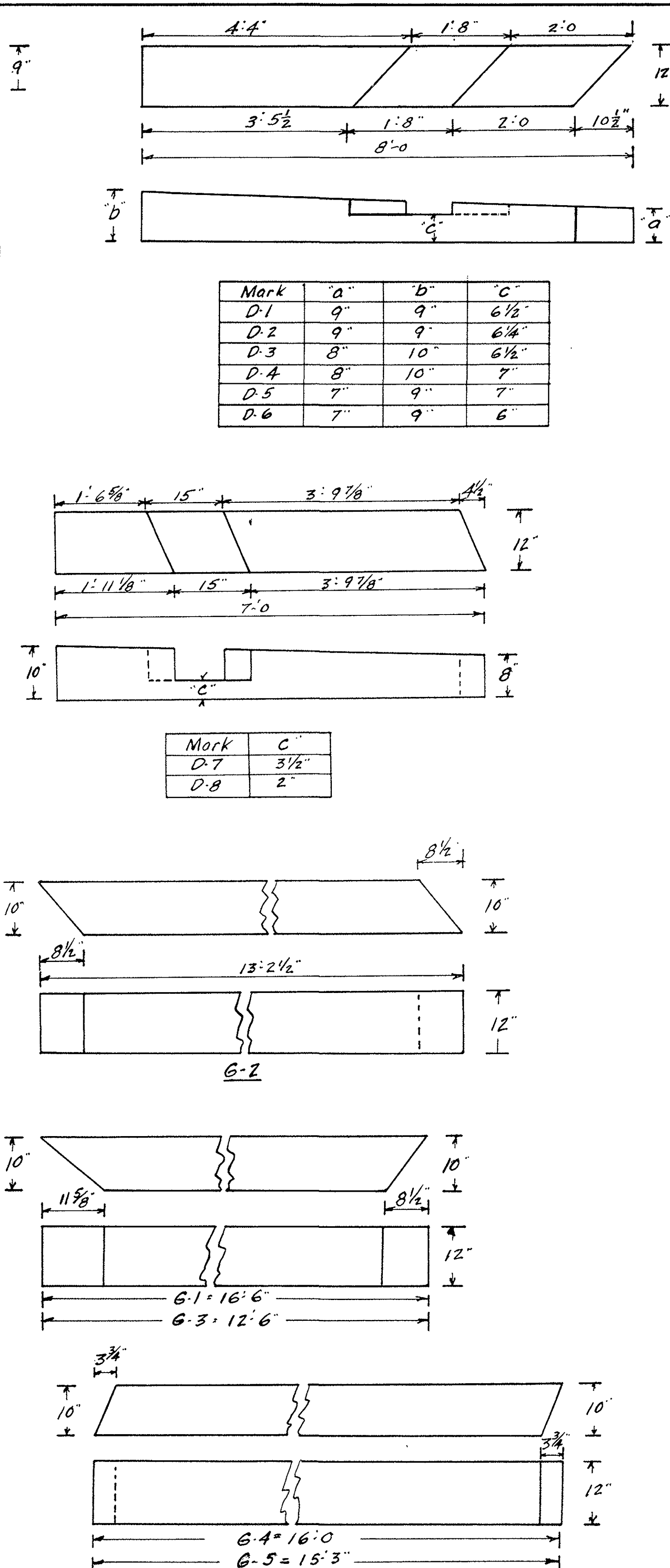
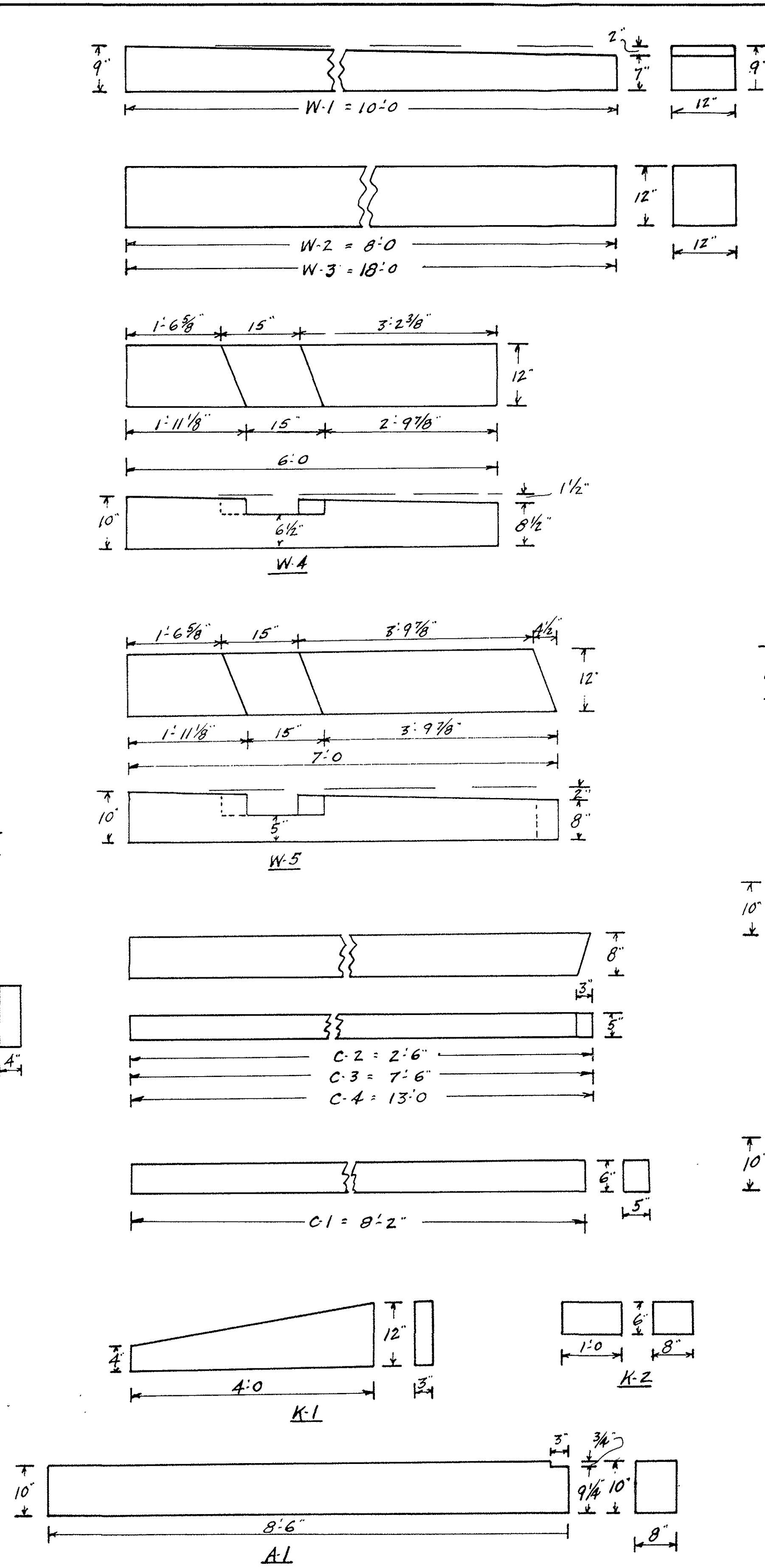
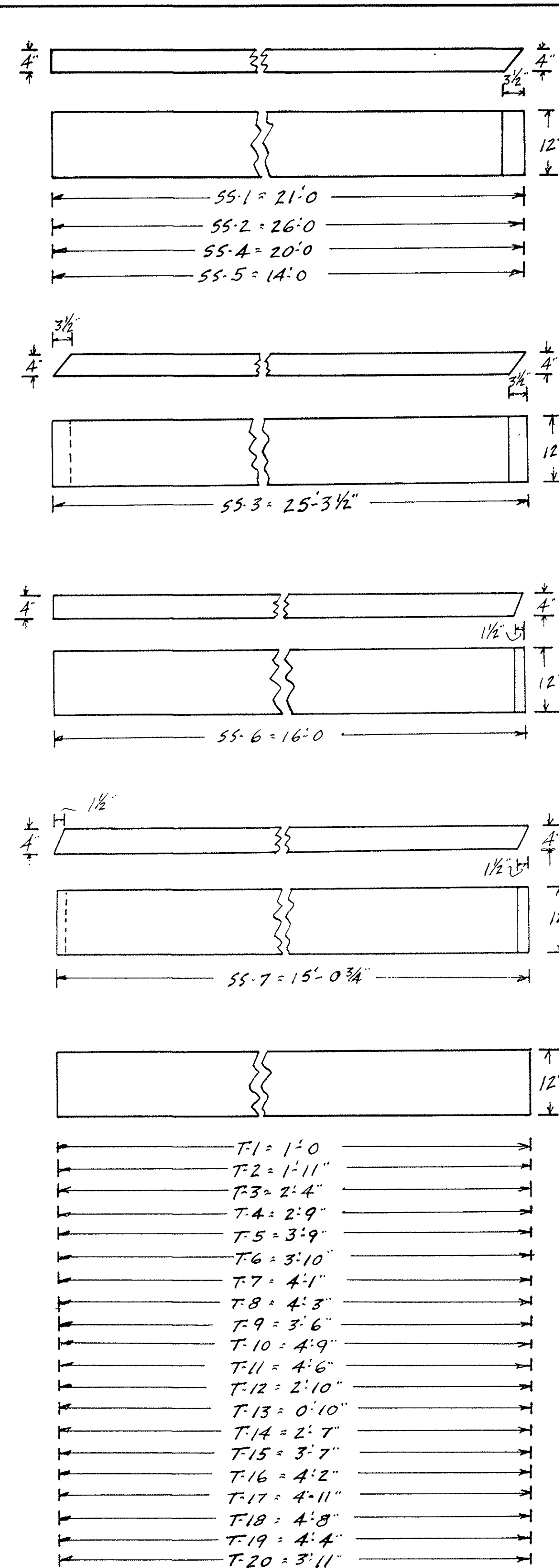
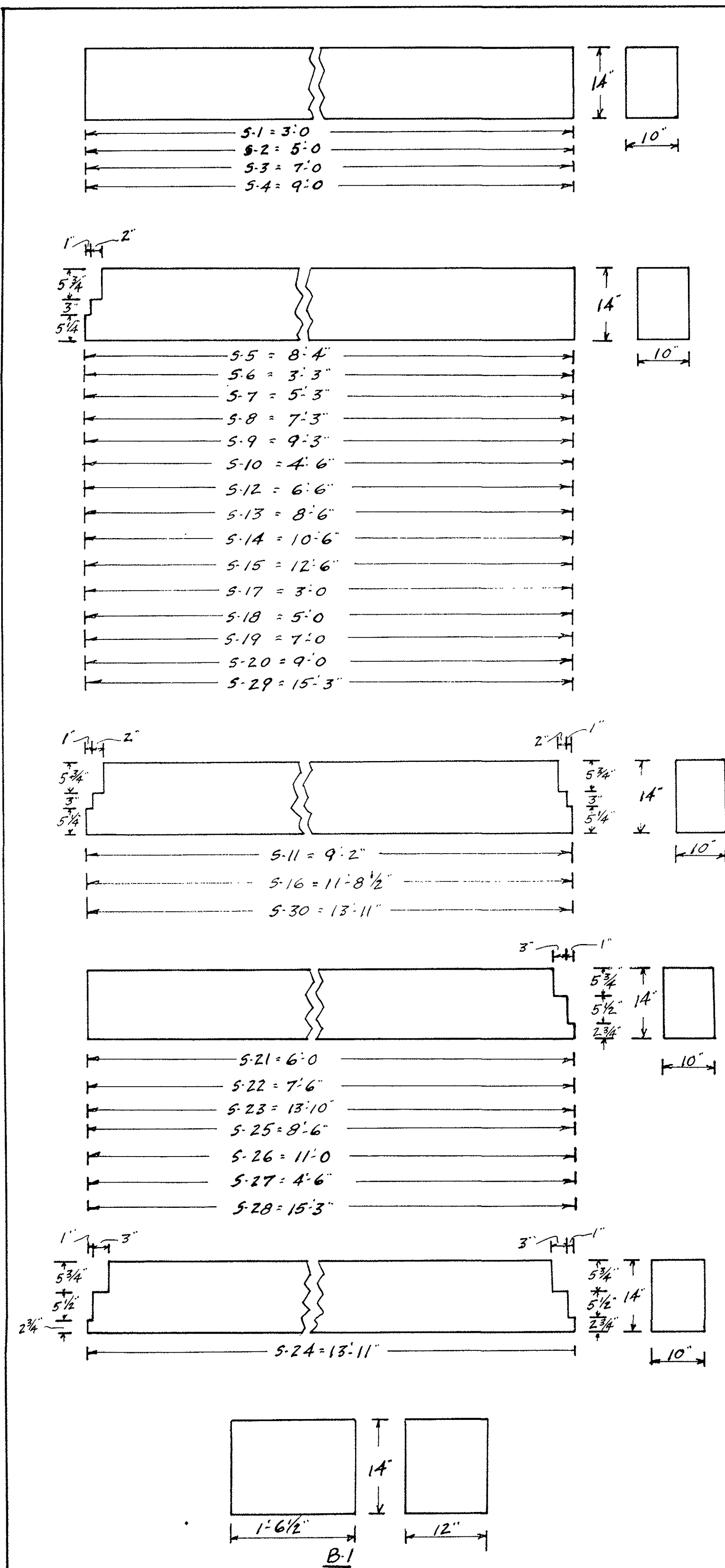


BOSTON AND MAINE RAILROAD
Terminal Division Fitchburg M.L.
Bridge #2.01 (old B-5) Webster Ave.
SOMERVILLE, MASS.
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Not to Scale Issue A-12-31-43
Sheet 1 of 3

Case Pocket
Folder Plan

16 2
3 35

AP. 12. 10



Mark	a"	b"	c"
D-1	9"	9"	6 1/2"
D-2	9"	9"	6 1/4"
D-3	8"	10"	6 1/2"
D-4	8"	10"	7"
D-5	7"	9"	7"
D-6	7"	9"	6"

Mark	C
D-7	3 1/2"
D-8	2"

Bill of Material					
Mark	No	Req	Size	Length	Kind
T-1	2		4x12"	1'-0"	H.P.T.
T-2	1		"	1'-11"	"
T-3	1		"	2'-4"	"
T-4	1		"	2'-9"	"
T-5	2		"	3'-9"	"
T-6	5		"	3'-10"	"
T-7	3		"	4'-1"	"
T-8	2		"	4'-3"	"
T-9	3		"	3'-6"	"
T-10	1		"	4'-9"	"
T-11	2		"	4'-6"	"
T-12	1		"	2'-10"	"
T-13	2		"	0'-10"	"
T-14	2		"	2'-7"	"
T-15	4		"	3'-7"	"
T-16	1		"	4'-2"	"
T-17	1		"	4'-11"	"
T-18	4		"	4'-8"	"
T-19	1		"	4'-4"	"
T-20	1		"	3'-11"	"
W-1	1		9x12"	10'-0"	Wallplates
W-2	16		12x12"	8'-0"	"
W-3	1		12x12"	18'-0"	"
W-4	1		10x12"	6'-0"	"
W-5	1		10x12"	7'-0"	"
C-1	24		5x6"	8'-2"	Floorbeam Fillers
C-2	1		5x8"	2'-6"	"
C-3	1		5x8"	7'-6"	"
C-4	1		5x8"	13'-0"	"
D-1	1		9x12"	8'-0"	Sidewalk Supports
D-2	1		9x12"	"	"
D-3	1		10x12"	"	"
D-4	1		10x12"	"	"
D-5	1		9x12"	"	"
D-6	1		9x12"	"	"
D-7	1		10x12"	7'-0"	"
D-8	2		10x12"	"	"
G-1	1		10x12"	16'-6"	Wheelguards
G-2	5		"	13'-2 1/4"	"
G-3	1		"	12'-6"	"
G-4	2		"	16'-0"	"
G-5	2		"	15'-3"	"
A-1	1		8x10"	8'-6"	Auxiliary Support
K-1	1		3x12"	4'-0"	Shim
K-2	1		6x8"	1'-0"	Block
B-1	55		12x14"	1'-6 1/2"	Spacer Blocks
	200		3x10"	8'-0"	Sidewalk Plank
					Roadway Plank

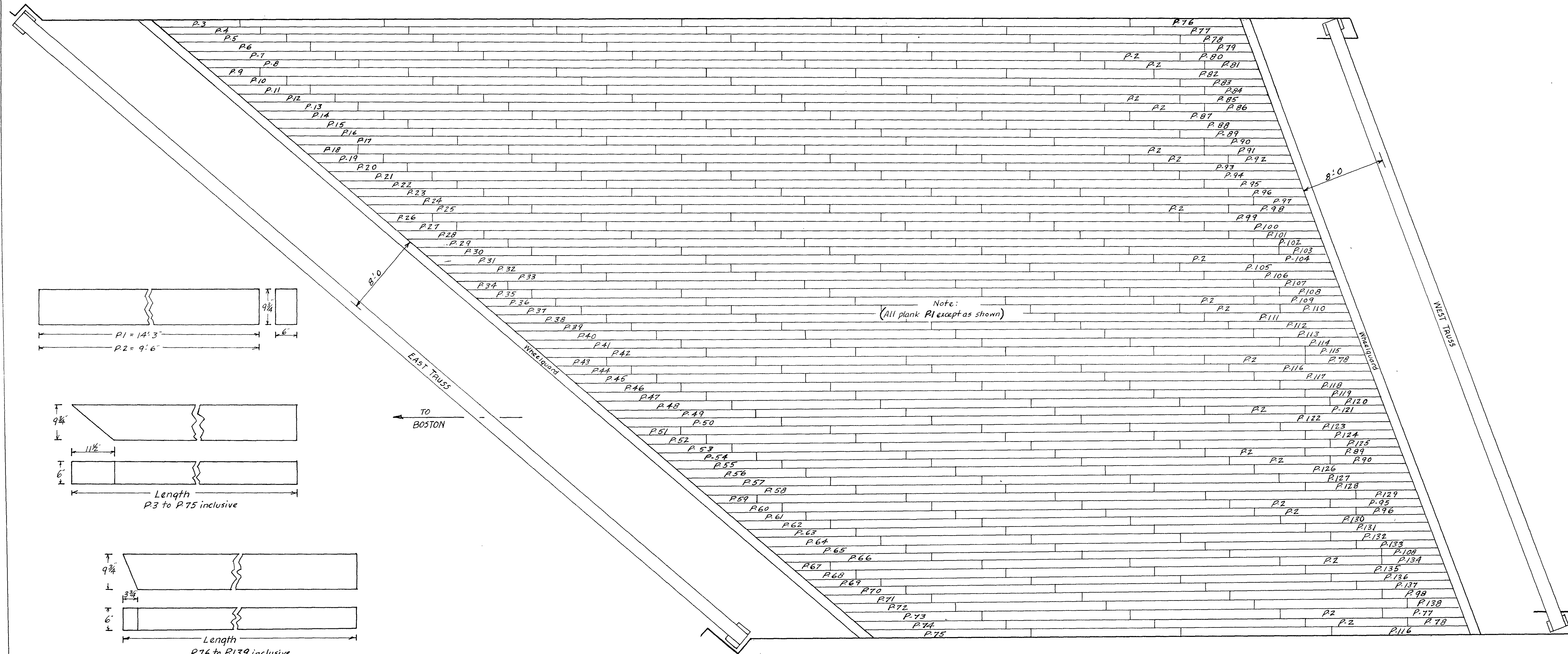
Bill of Hardware					
Mark	No	Req	Size	Length	Remarks
	20		3/4 dia.	11"	Mach Bolts with 3/4 dia. 2 1/2 sq. nuts, & 5/8 thread
	20		"	13"	"
	80		"	18"	Pick Point Drift Bolts
	260		"	22"	"
	6000		1/2 dia.	12"	Ship Spikes
	225		1 1/2 lbs.		60-D Spikes
	80				Std. C.I. Ogee Washers for 3/4 dia bolts
	40				" Round Plate

Bill of Material					
Mark	No	Req	Size	Length	Kind
S-1	1		10x14"	3'-0"	H.P.T.
S-2	1		"	5'-0"	"
S-3	1		"	7'-0"	"
S-4	1		"	9'-0"	"
S-5	4		"	8'-4"	"
S-6	1		"	3'-3"	"
S-7	1		"	5'-3"	"
S-8	1		"	7'-3"	"
S-9	1		"	9'-3"	"
S-10	1		"	4'-6"	"
S-11	4		"	9'-2"	"
S-12	2		"	6'-6"	"
S-13	2		"	8'-6"	"
S-14	2		"	10'-6"	"
S-15	1		"	12'-6"	"
S-16	4		"	11'-8 1/2"	"
S-17	2		"	3'-0"	"
S-18	2		"	5'-0"	"
S-19	2		"	7'-0"	"
S-20	2		"	9'-0"	"
S-21	1		"	6'-0"	"
S-22	1		"	7'-6"	"
S-23	2		"	13'-10"	"
S-24	4		"	13'-11"	"
S-25	1		"	8'-6"	"
S-26	1		"	11'-0"	"
S-27	1		"	4'-6"	"
S-28	6		"	15'-3"	"
S-29	56		"	15'-3"	"
S-30	48		"	13'-11"	"
S-31	1		4x12"	21'-0"	Sidewalk Stringers
S-32	1		"	26'-0"	"
S-33	4		"	25'-3 1/2"	"
S-34	1		"	20'-0"	"
S-35	1		"	14'-0"	"
S-36	4		"	16'-0"	"
S-37	4		"	15'-0 1/4"	"

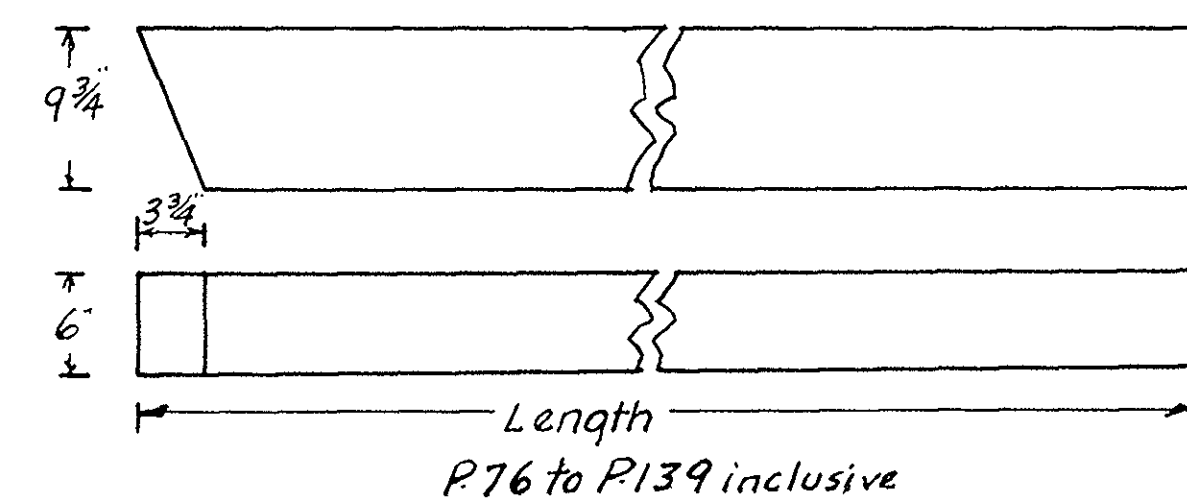
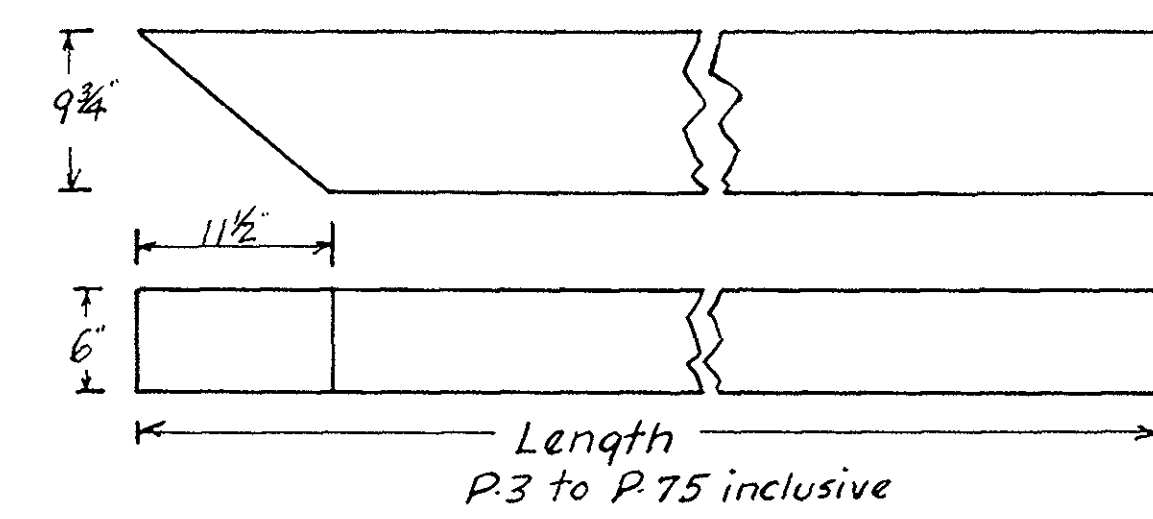
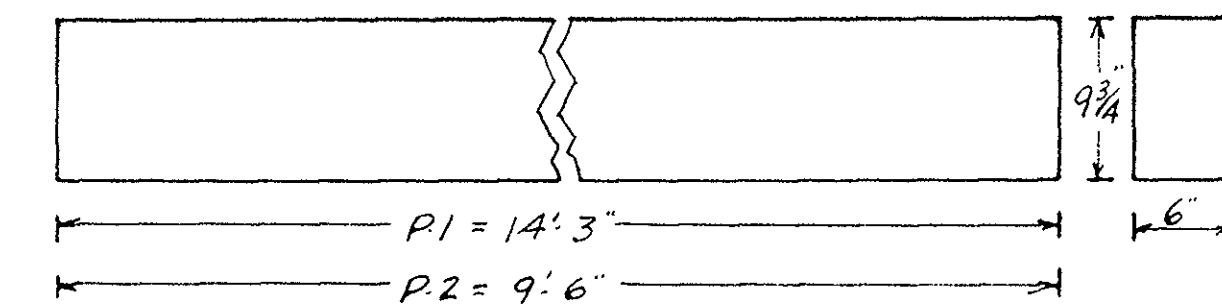
BOSTON AND MAINE RAILROAD
Terminal Division Fitchburg M.L.
Bridge #201 (old B-5) Webster Ave
SOMERVILLE, MASS.
Office of Division Engineer
Not to Scale Issue A-12-31-43
Sheet 2 of 3

BR. No. 5-17-16

16 2
367



Layout of Roadway Plank



Bill of Material				
Mark	No.	Size	Length	Kind
P1	310	6 x 10	14'-3"	HRT Roadway Plank
P2	19	"	9'-6"	"
P3	1	"	7'-10 1/4"	"
P4	1	"	9'-3 3/4"	"
P5	1	"	10'-8 3/4"	"
P6	1	"	12'-1 3/4"	"
P7	1	"	13'-6 3/4"	"
P8	1	"	14'-11 3/4"	"
P9	1	"	4'-6 3/4"	"
P10	1	"	5'-11 1/4"	"
P11	1	"	7'-4 1/4"	"
P12	1	"	8'-9 1/4"	"
P13	1	"	10'-2 1/4"	"
P14	1	"	11'-7 1/4"	"
P15	1	"	13'-0 1/4"	"
P16	1	"	14'-5 1/4"	"
P17	1	"	15'-10 1/4"	"
P18	1	"	5'-4 3/4"	"
P19	1	"	6'-9 3/4"	"
P20	1	"	8'-2 3/4"	"
P21	1	"	9'-7 3/4"	"
P22	1	"	11'-0 3/4"	"
P23	1	"	12'-5 3/4"	"
P24	1	"	13'-10 3/4"	"
P25	1	"	15'-3 3/4"	"
P26	1	"	4'-10 1/4"	"
P27	1	"	6'-3 1/4"	"
P28	1	"	7'-8 1/4"	"
P29	1	"	9'-1 1/4"	"
P30	1	"	10'-6 1/4"	"
P31	1	"	11'-11 1/4"	"
P32	1	"	13'-4 1/4"	"
P33	1	"	14'-9 1/4"	"
P34	1	"	4'-3 3/4"	"
P35	1	"	5'-8 3/4"	"
P36	1	"	7'-1 1/4"	"
P37	1	"	8'-6 1/4"	"
P38	1	"	9'-11 1/4"	"
P39	1	"	11'-4 3/4"	"
P40	1	"	12'-9 3/4"	"
P41	1	"	14'-2 3/4"	"
P42	1	"	15'-7 3/4"	"
P43	1	"	5'-2 1/4"	"
P44	1	"	6'-7 1/4"	"
P45	1	"	8'-0 1/4"	"
P46	1	"	9'-5 1/4"	"
P47	1	"	10'-10 1/4"	"
P48	1	"	12'-3 3/4"	"
P49	1	"	13'-8 3/4"	"
P50	1	"	15'-1 1/4"	"
P51	1	"	4'-7 3/4"	"
P52	1	"	6'-0 3/4"	"
P53	1	"	7'-5 3/4"	"
P54	1	"	8'-10 3/4"	"
P55	1	"	10'-3 3/4"	"
P56	1	"	11'-8 3/4"	"
P57	1	"	13'-1 3/4"	"
P58	1	"	14'-6 3/4"	"
P59	1	"	4'-1 1/4"	"
P60	1	"	5'-6 1/4"	"
P61	1	"	6'-11 1/4"	"
P62	1	"	8'-4 1/4"	"
P63	1	"	9'-9 1/4"	"
P64	1	"	11'-2 1/4"	"
P65	1	"	12'-7 1/4"	"
P66	1	"	14'-0 1/4"	"
P67	1	"	3'-6 3/4"	"
P68	1	"	4'-11 3/4"	"
P69	1	"	6'-4 3/4"	"
P70	1	"	7'-9 3/4"	"
P71	1	"	9'-2 3/4"	"

Bill of Material				
Mark	No.	Size	Length	Kind
P72	1	6 x 10	10'-7 3/4"	HRT Roadway Plank
P73	1	"	12'-0 3/4"	"
P74	1	"	13'-5 3/4"	"
P75	1	"	14'-10 3/4"	"
P76	1	"	10'-9 1/4"	"
P77	2	"	8'-8 1/2"	"
P78	3	"	6'-7 3/4"	"
P79	1	"	4'-7"	"
P80	1	"	7'-5 1/4"	"
P81	1	"	5'-2 1/2"	"
P82	1	"	10'-3 3/4"	"
P83	1	"	8'-2 1/2"	"
P84	1	"	6'-7 1/4"	"
P85	1	"	8'-10"	"
P86	1	"	6'-9 1/4"	"
P87	1	"	14'-2 1/2"	"
P88	1	"	12'-1 1/4"	"
P89	2	"	10'-1"	"
P90	2	"	8'-0 1/4"	"
P91	1	"	8'-4"	"
P92	1	"	6'-3 1/4"	"
P93	1	"	13'-8 1/2"	"
P94	1	"	11'-7 3/4"	"
P95	2	"	9'-7"	"
P96	2	"	7'-6 1/4"	"
P97	1	"	5'-5 1/4"	"
P98	2	"	8'-1 3/4"	"
P99	1	"	13'-2 1/4"	"
P100	1	"	11'-1 1/4"	"
P101	1	"	9'-1"	"
P102	1	"	7'-0 1/4"	"
P103	1	"	4'-11 1/2"	"
P104	1	"	7'-7 1/4"	"
P105	1	"	15'-1"	"
P106	1	"	13'-0 1/4"	"
P107	1	"	8'-7"	"
P108	2	"	6'-6 1/4"	"
P109	1	"	9'-2 1/2"	"
P110	1	"	7'-1 3/4"	"
P111	1	"	14'-7"	"
P112	1	"	12'-6 1/4"	"
P113	1	"	10'-5 1/2"	"
P114	1	"	8'-4 3/4"	"
P115	1	"	6'-4"	"
P116	2	"	14'-1"	"
P117	1	"	12'-0 1/4"	"
P118	1	"	9'-11 1/2"	"
P119	1	"	7'-10 3/4"	"
P120	1	"	5'-10"	"
P121	1	"	8'-6 1/4"	"
P122	1	"	15'-11 1/2"	"
P123	1	"	11'-6 1/4"	"
P124	1	"	9'-5 1/2"	"
P125	1	"	7'-5"	"
P126	1	"	15'-5 1/2"	"
P127	1	"	13'-4 3/4"	"
P128	1	"	11'-4"	"
P129	1	"	6'-10 3/4"	"
P130	1	"	14'-11 1/2"	"
P131	1	"	12'-10 3/4"	"
P132	1	"	10'-10"	"
P133	1	"	8'-9 1/4"	"
P134	1	"	6'-10 1/4"	"
P135	1	"	14'-3 1/2"	"
P136	1	"	12'-2 3/4"	"
P137	1	"	10'-2"	"
P138	1	"	6'-0 1/2"	"

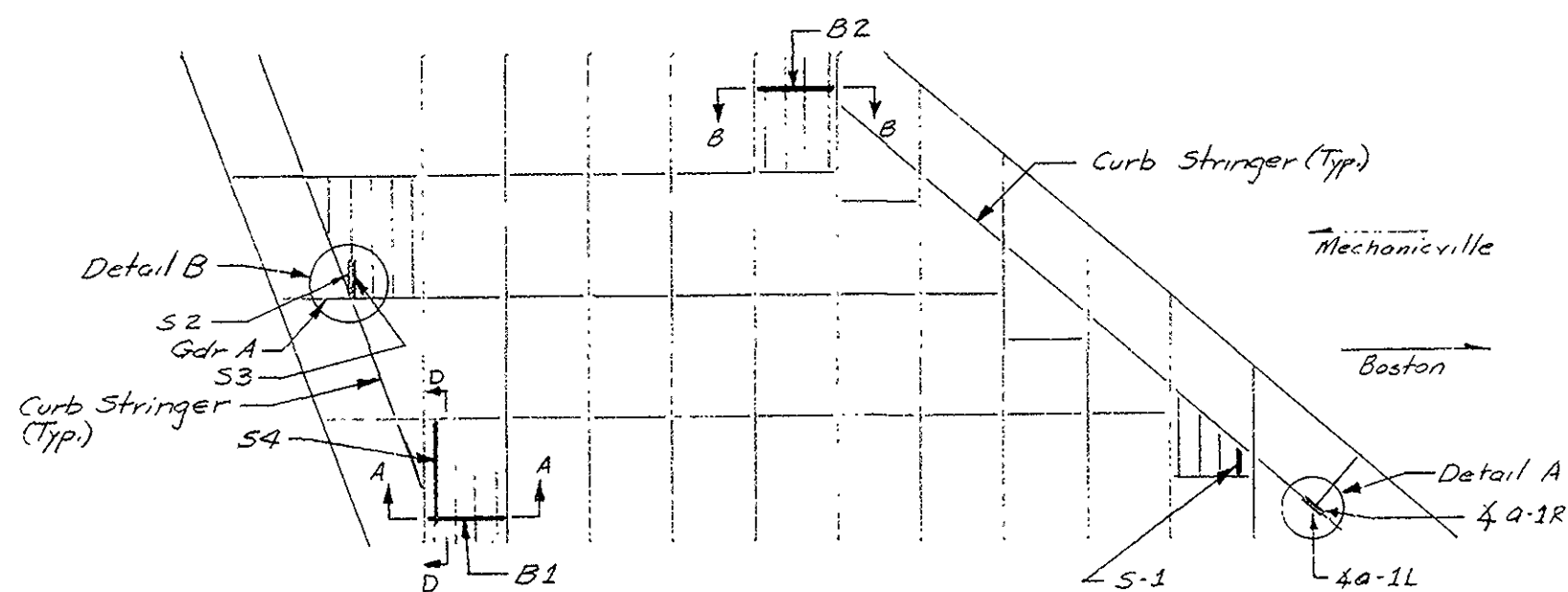
BOSTON AND MAINE RAILROAD
Terminal Division Fitchburg M.L.
Bridge #2.01 (old B-5) Webster Ave.

SOMERVILLE, MASS.

Office of Division Engineer
Not to Scale Issue A-12-31-43
Sheet 3 of 3

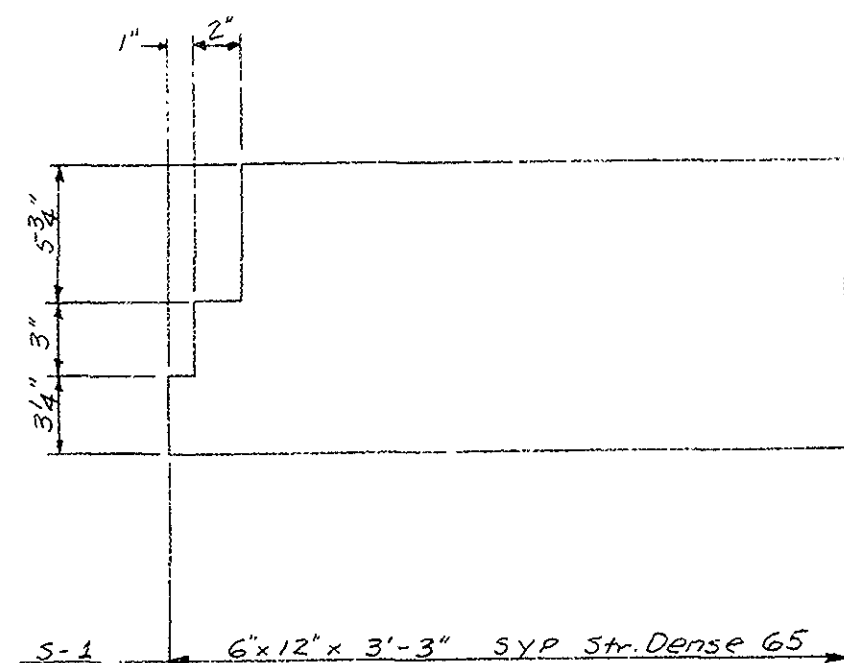
BR. No. 5-17-16

2 364



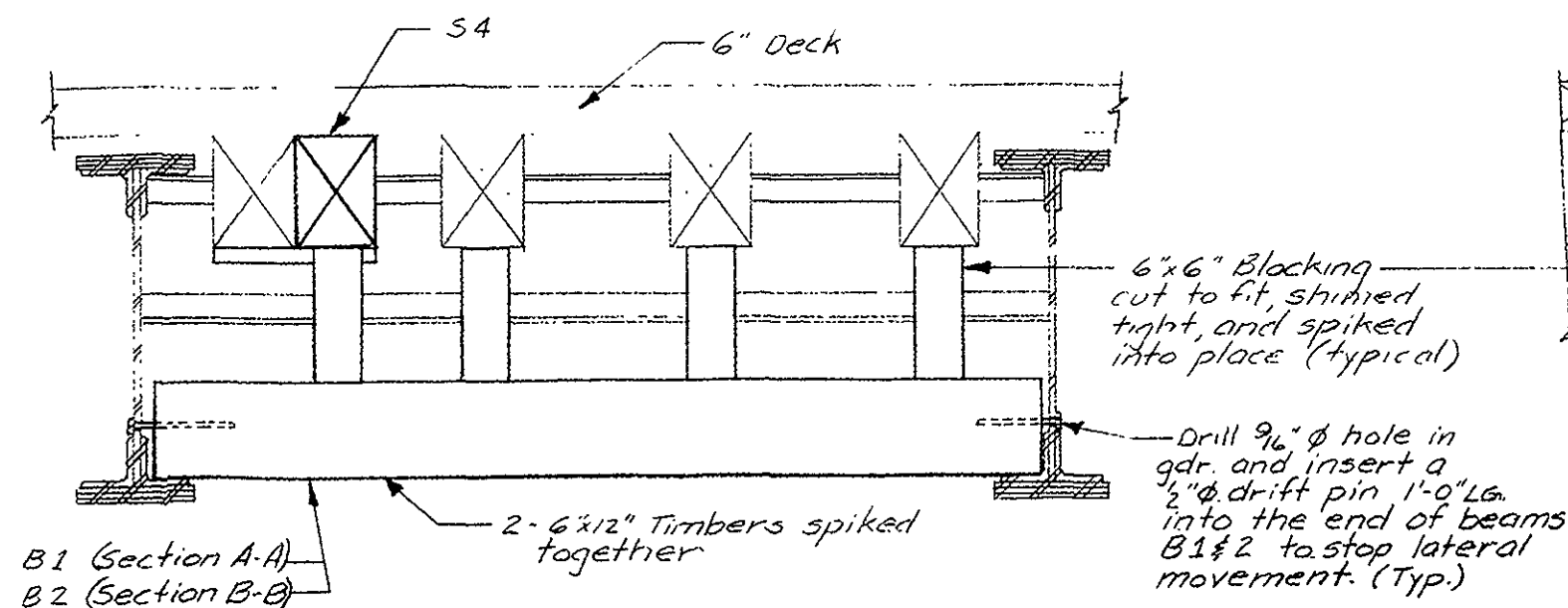
LOCATION PLAN

New work shown in dark lines. Old work shown in light lines. Prior to any repairs being made in a certain location, the roadway above that location shall be block off.



STRINGER S-1

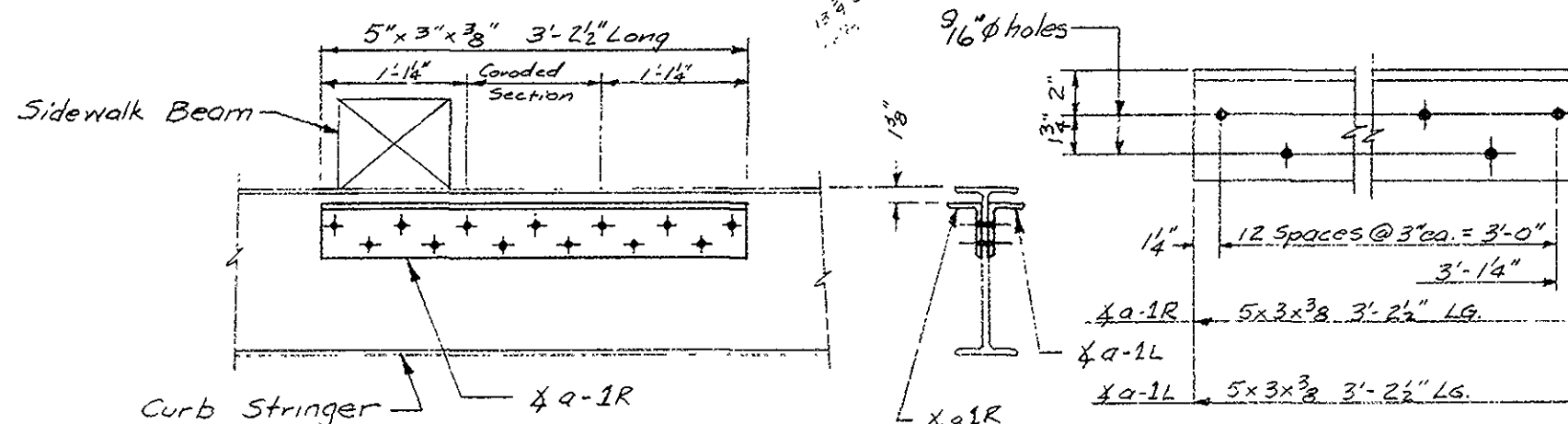
Remove rotten stringer, cut off ends of spikes in way, and install new stringer. Shim with 2" Oak blocks and spike new stringer tightly into place.



SECTION A-A

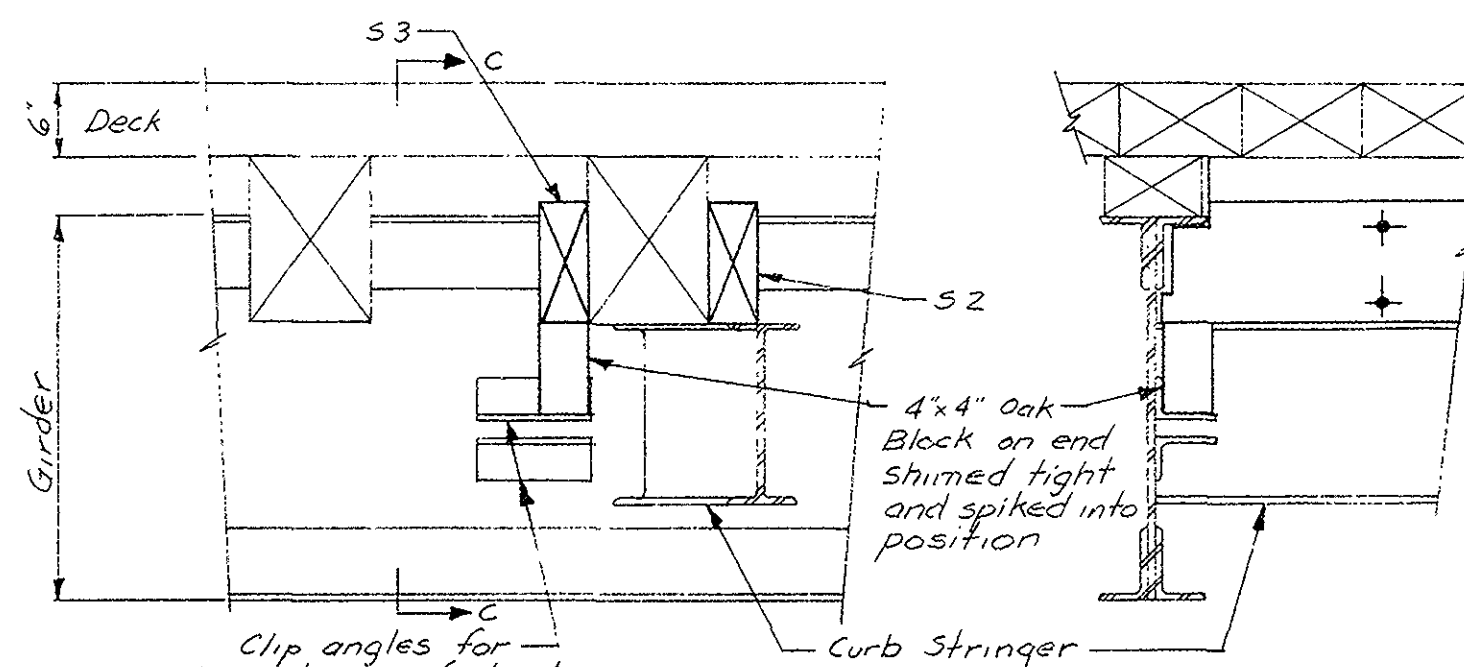
(Section B-B similar but does not include helper stringer S4. Instead original stringer is blocked.)

Note: Beam B1 in Section A-A is located 4' North of the South bearing of the stringers. Beam B2 in Section B-B is located 1'-0" South of the original helper beam which has rotted and is to be removed after installation of B-2 and blocking.

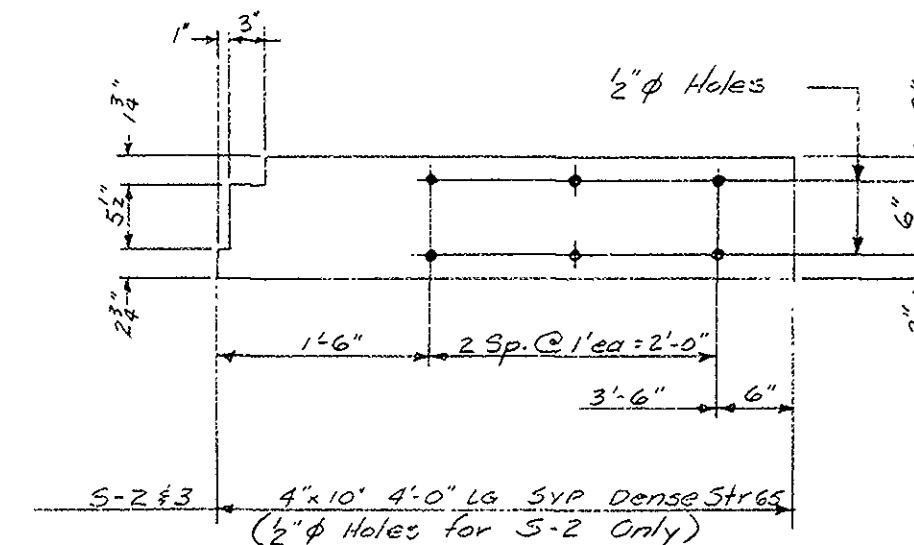


DETAIL A - EAST ELEVATION

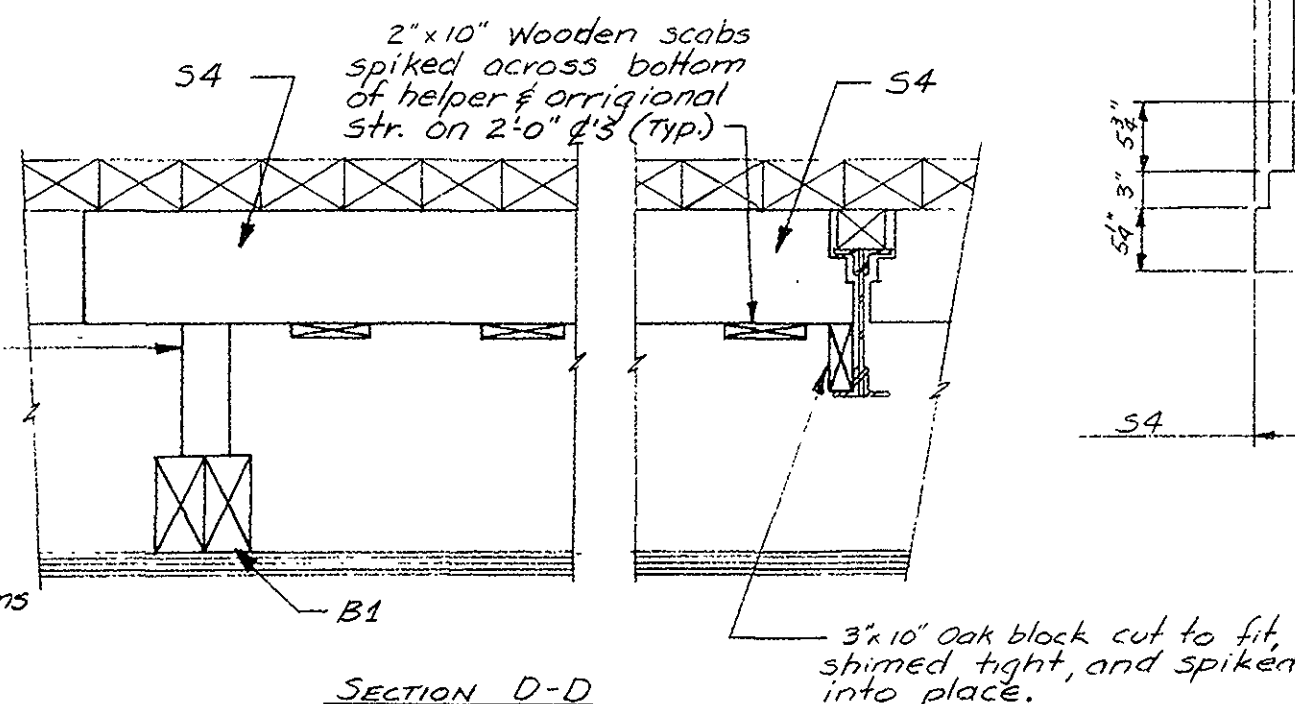
Contact surfaces of angles and beam are to be cleaned, free of rust, oil, paint, lacquer, or rust inhibitors. Locate angle a-1R on curb stringer as shown above and tack weld into position for use as a template. Drill the two top end holes through the curb stringer with a 9/16" drill and bolt angle a-1L into position with 1/2" bolts. Complete drilling the other eleven holes with the 9/16" drill. Then ream the holes to 13/16" and bolt tight with 3/4" A325 High Strength bolts. Remove the two top end bolts and ream end holes to 13/16" and install 3/4" A325 High Strength bolts tight. Then tighten H.S. bolts using turn of nut method (AASHTO 2.10.20(D)(4)). Upon completion of bolting, give all unprotected surfaces one protective coat of red lead paint.



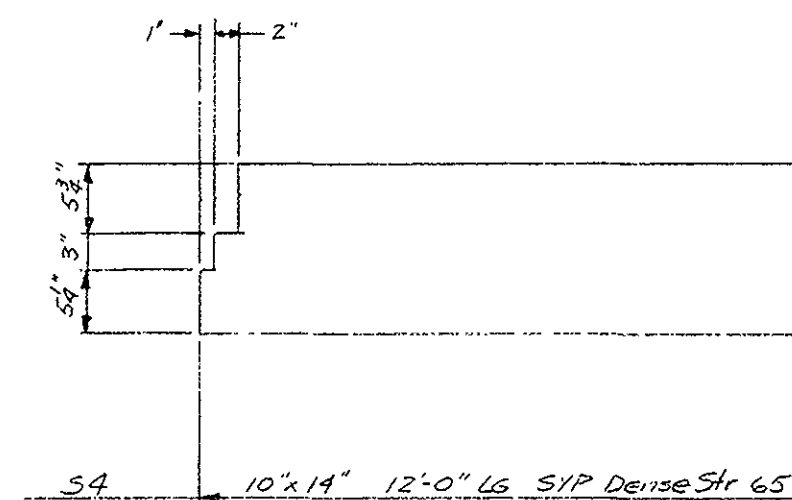
DETAIL B
(North Elevation Gdr A)



Note: Make up S2 & S3 as shown above. Pre-drill S2 as shown and use as template to drill through the stringer and S3. Then bolt into position using washers and 1/2" bolts & nuts.



SECTION D-D
(Pertains only to Section A-A)



Material List		
Mark	No.	Description
4a-1R	one	5" x 3" x 3/8" L
4a-1L	one	5" x 3" x 3/8" L
	13	3/4" H.S. Bolts A325
S1	one	6" x 12" SYP Dense Str 65
	2	2" x 4" Oak blocks
S2	one	4" x 10" SYP Dense Str 65
S3	one	Do
	6	1/2" bolts
	one	4" x 4" Oak block
S4	one	10" x 14" SYP Dense Str 65
B1 & 2	4	6" x 12" " " "
	one	6" x 6" blocking
	one	3" x 10" oak block
	4	1/2" Drift bolts
	4	2" x 10" Scabs

Boston and Maine Corporation
Iron Horse Park
North Billerica, Mass.

Repair Plan for Bridge #2.01 F.M.L.
Webster Ave - Somerville, Mass.

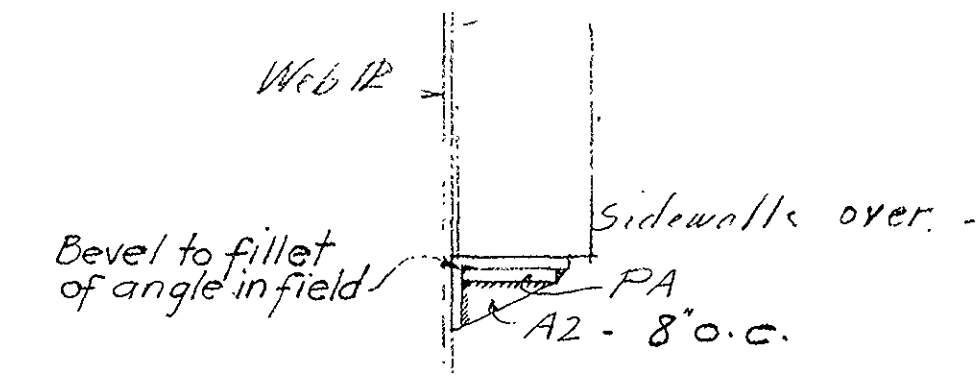
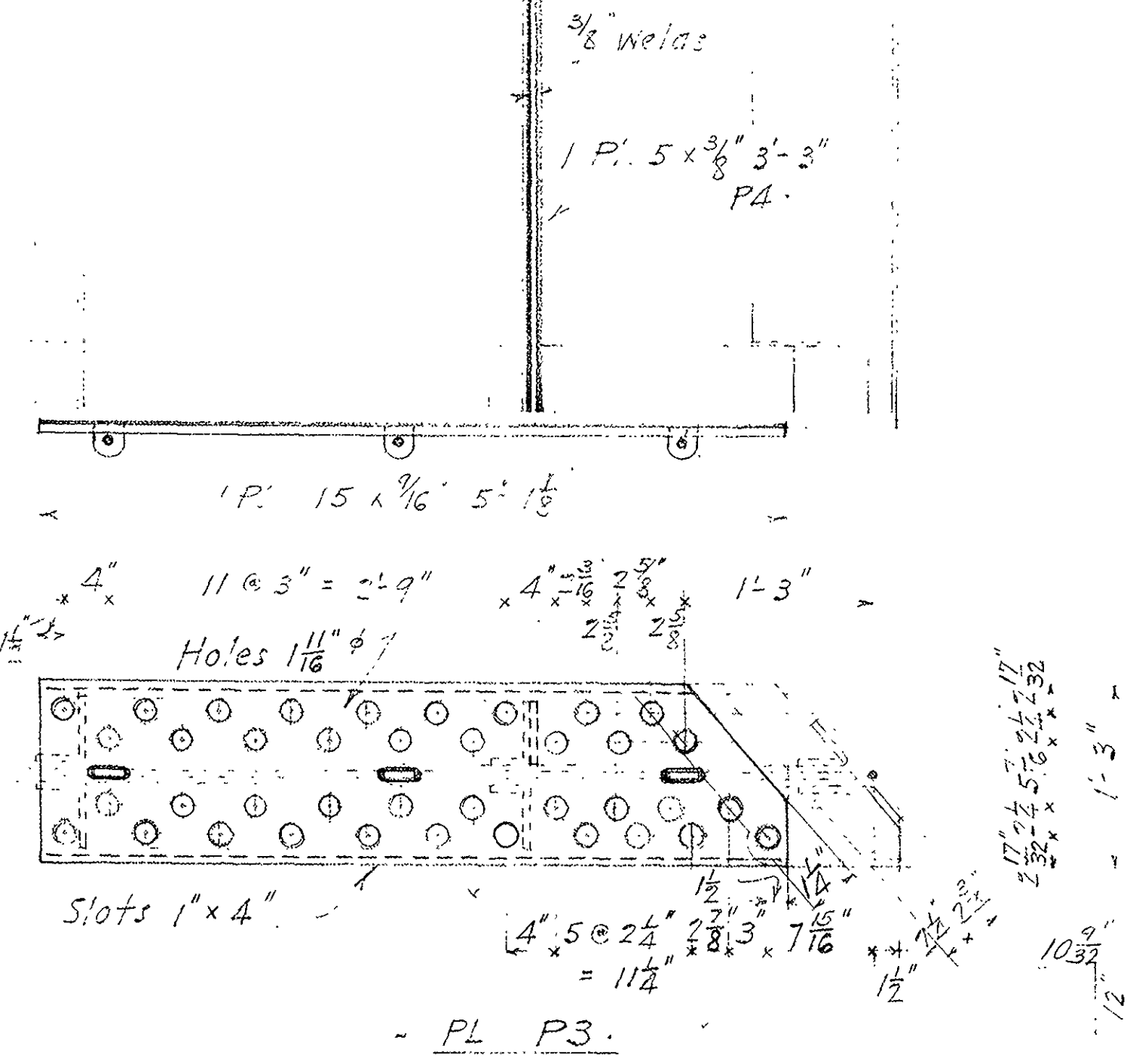
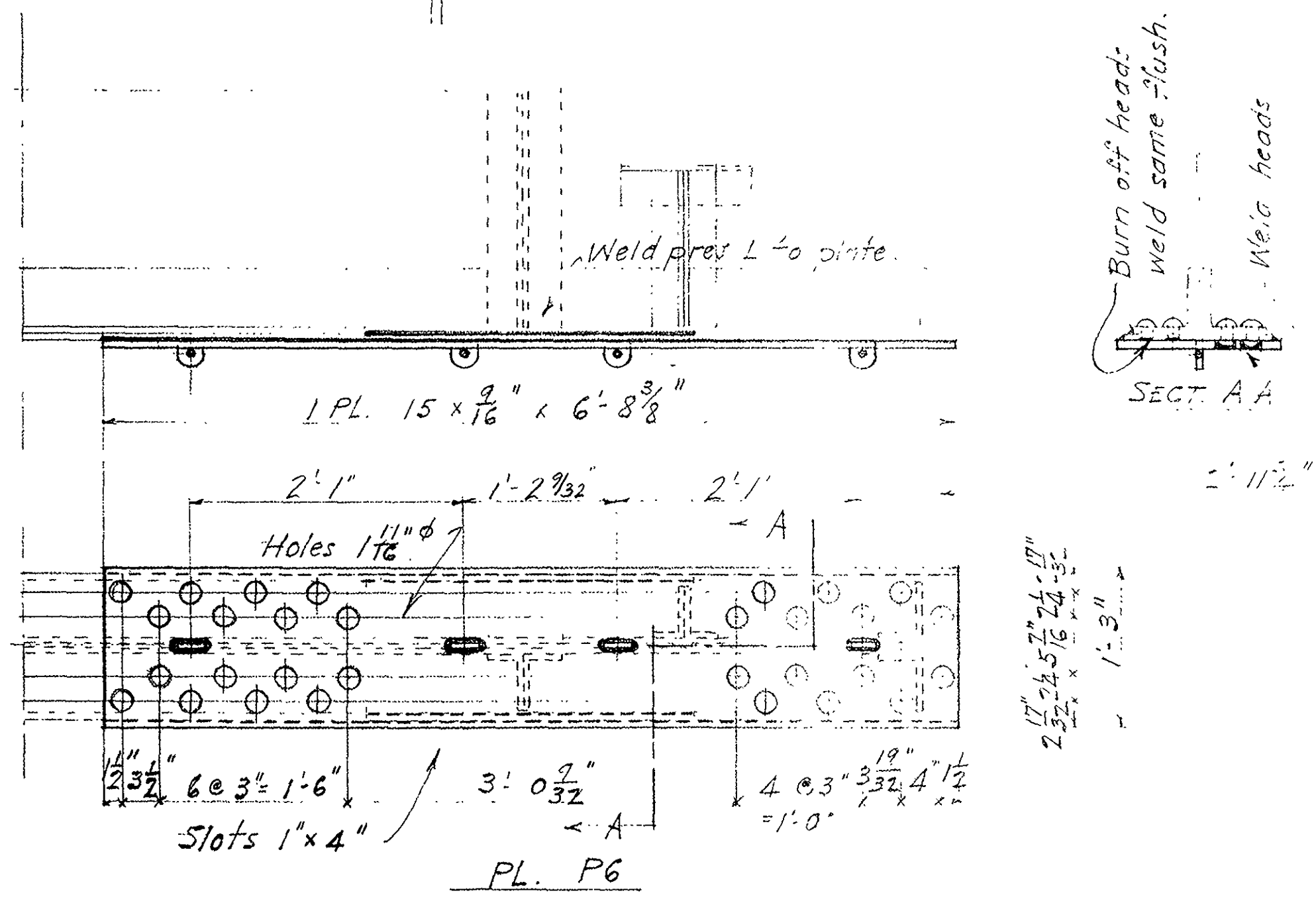
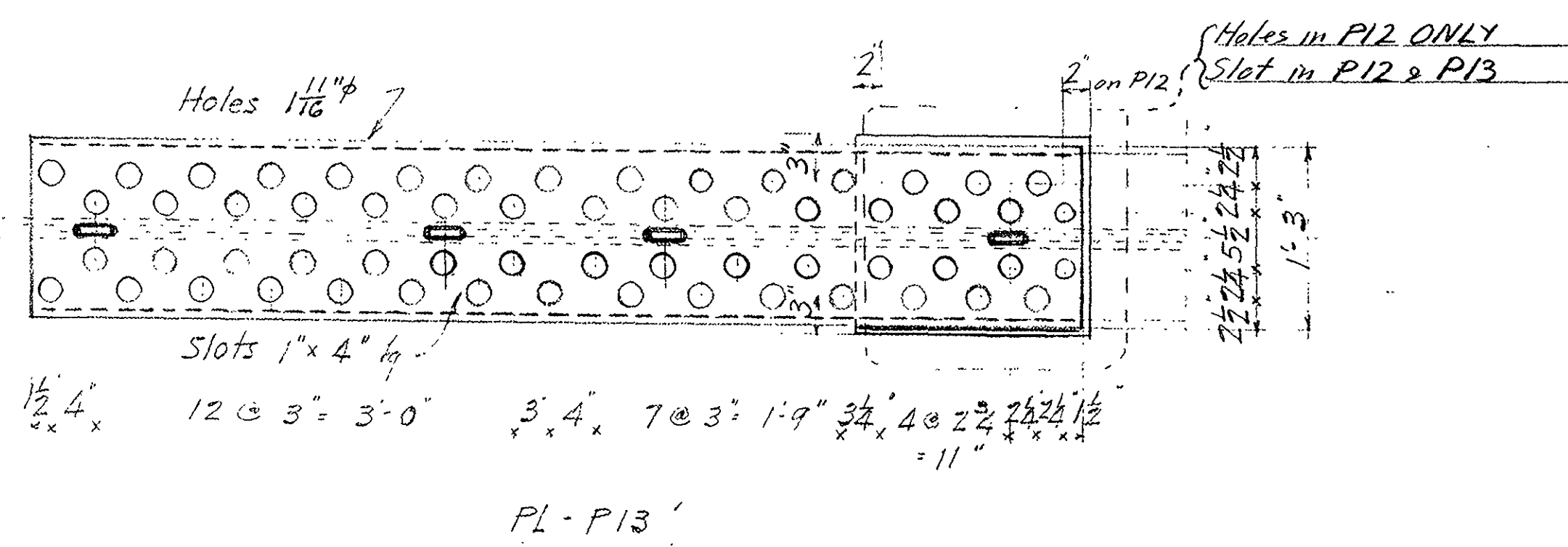
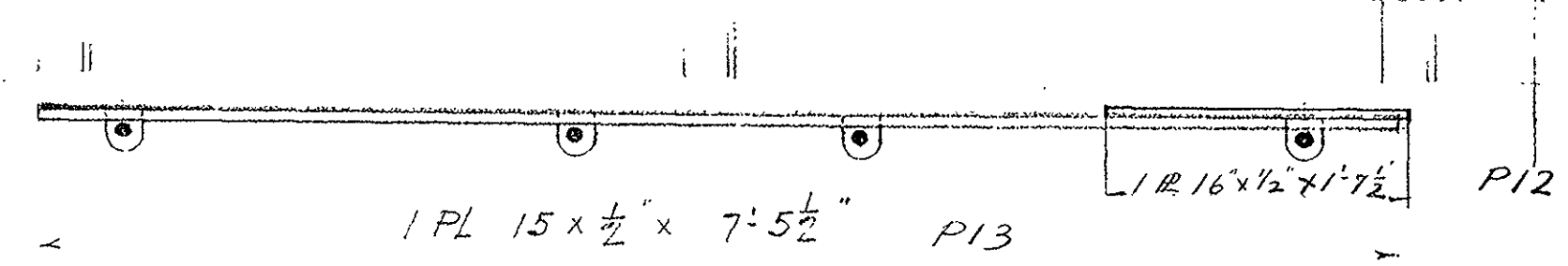
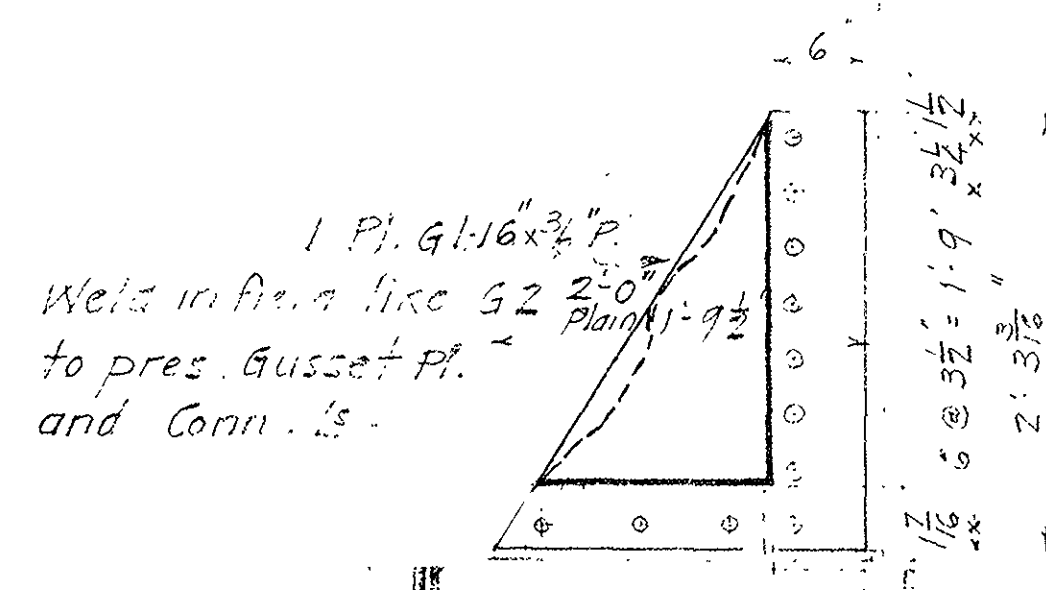
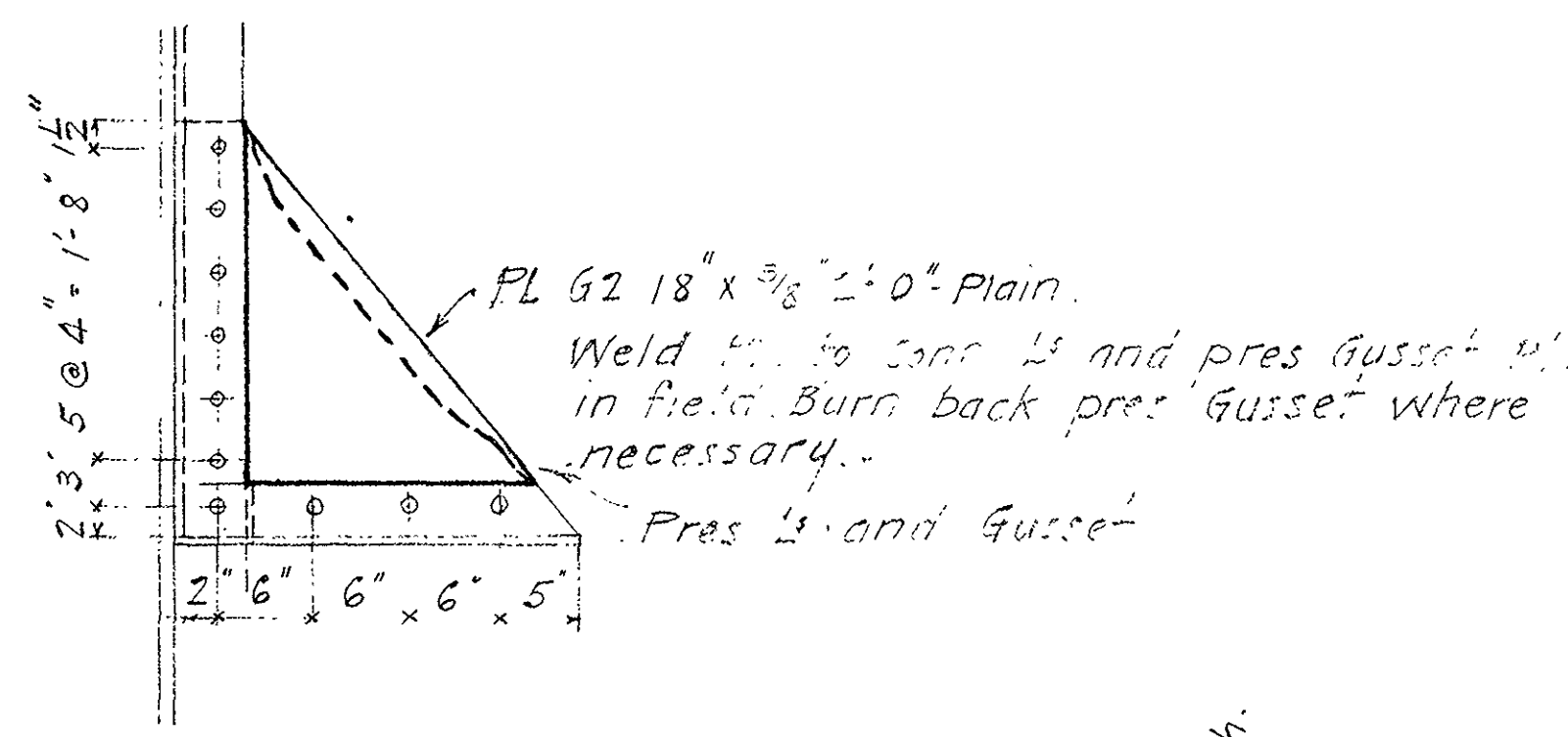
Date: 2/3/76
Drawn by: JHR
Scale: None

Approved: *L.B. Boyd*
Chief Design Eng.

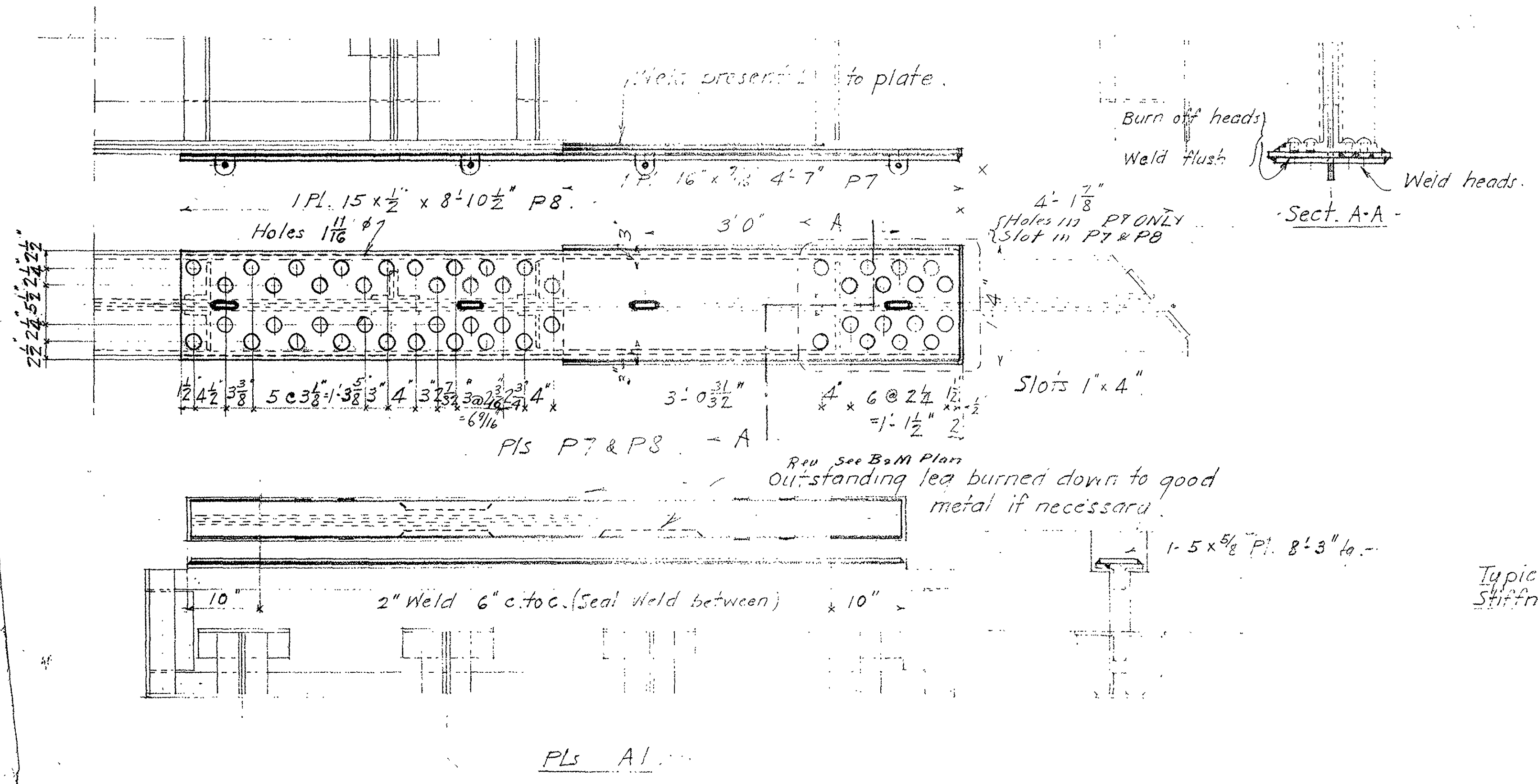
Sheet #1 of 1

BR.No. S-17-16

Issue A: 2/3/76



Typical Detail of K2 to K10



Typical Detail of repairs to stiffeners

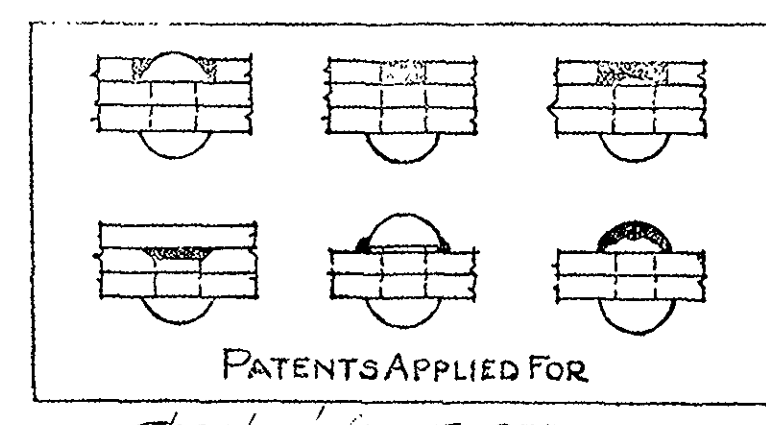
PREPARE ALL MATERIALS FOR THIS JOB WITH THE LETTER Z

Date	8/12
File	2/23

50 1245 FIELD
50 1245A SHOP

STEEL REPAIRS (old B5)
BRIDGE No 2.01 B & M. R.R. Co.
UNION SQUARE, MASS.:
(Fitchburg Div.) sheet 1 of 3

BR. 5-17-16

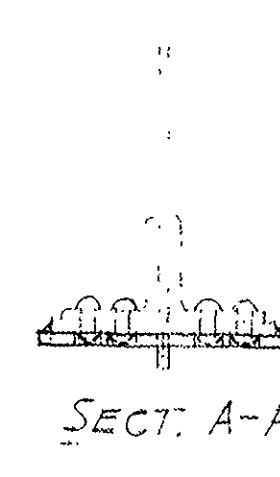
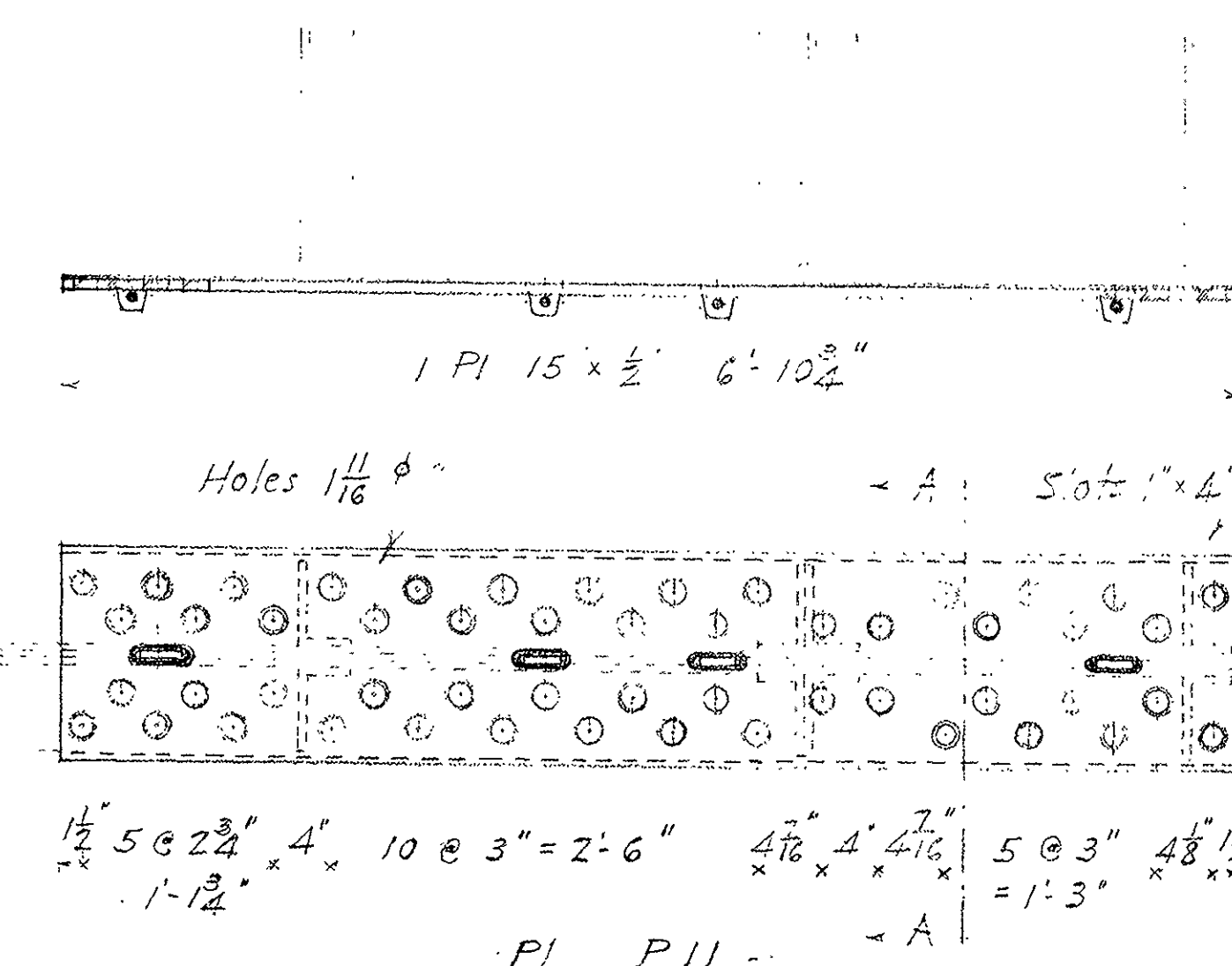
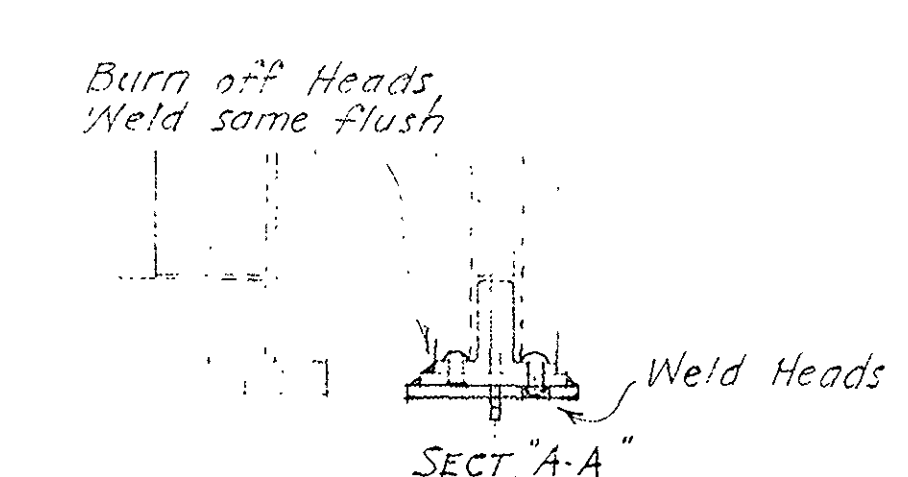
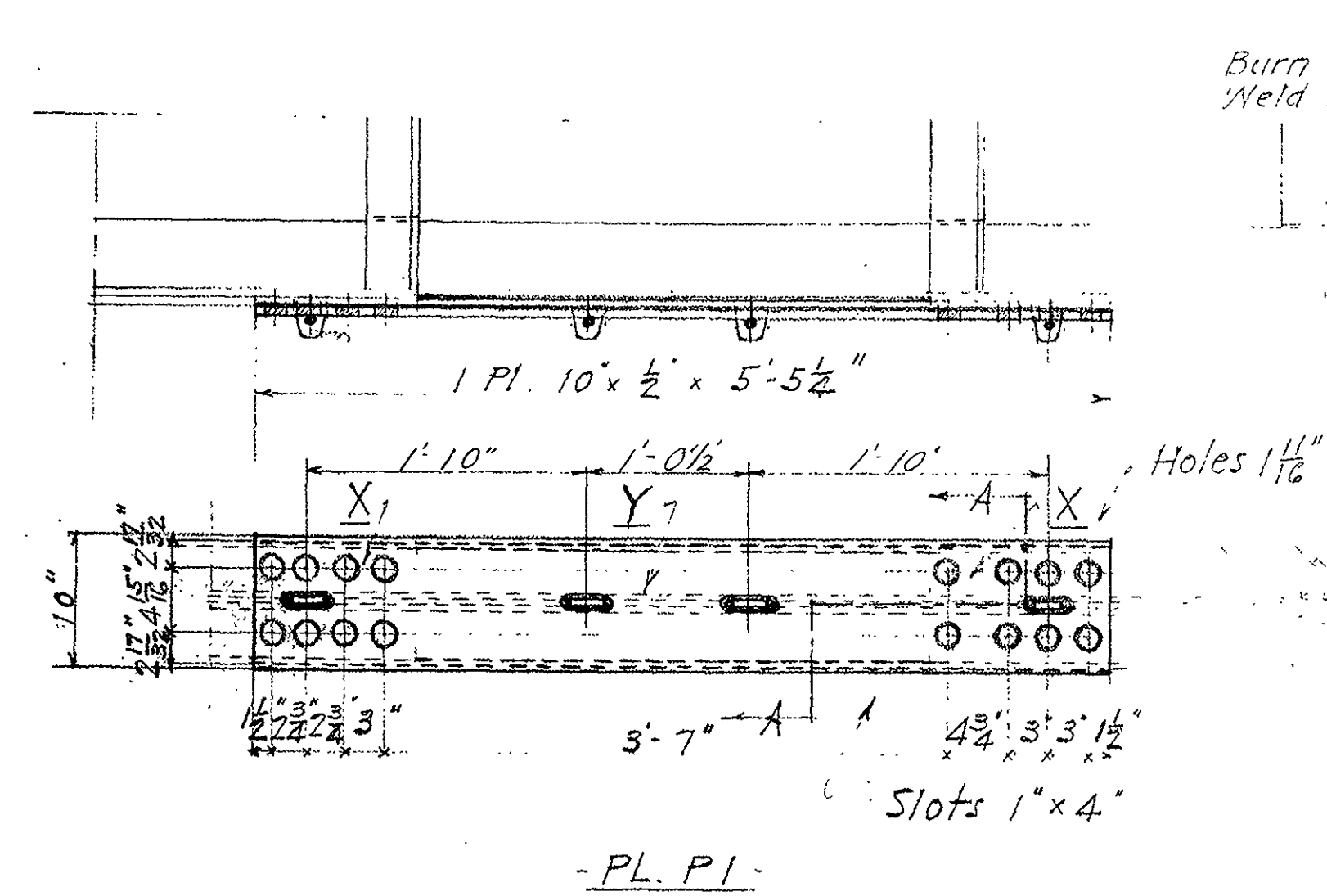
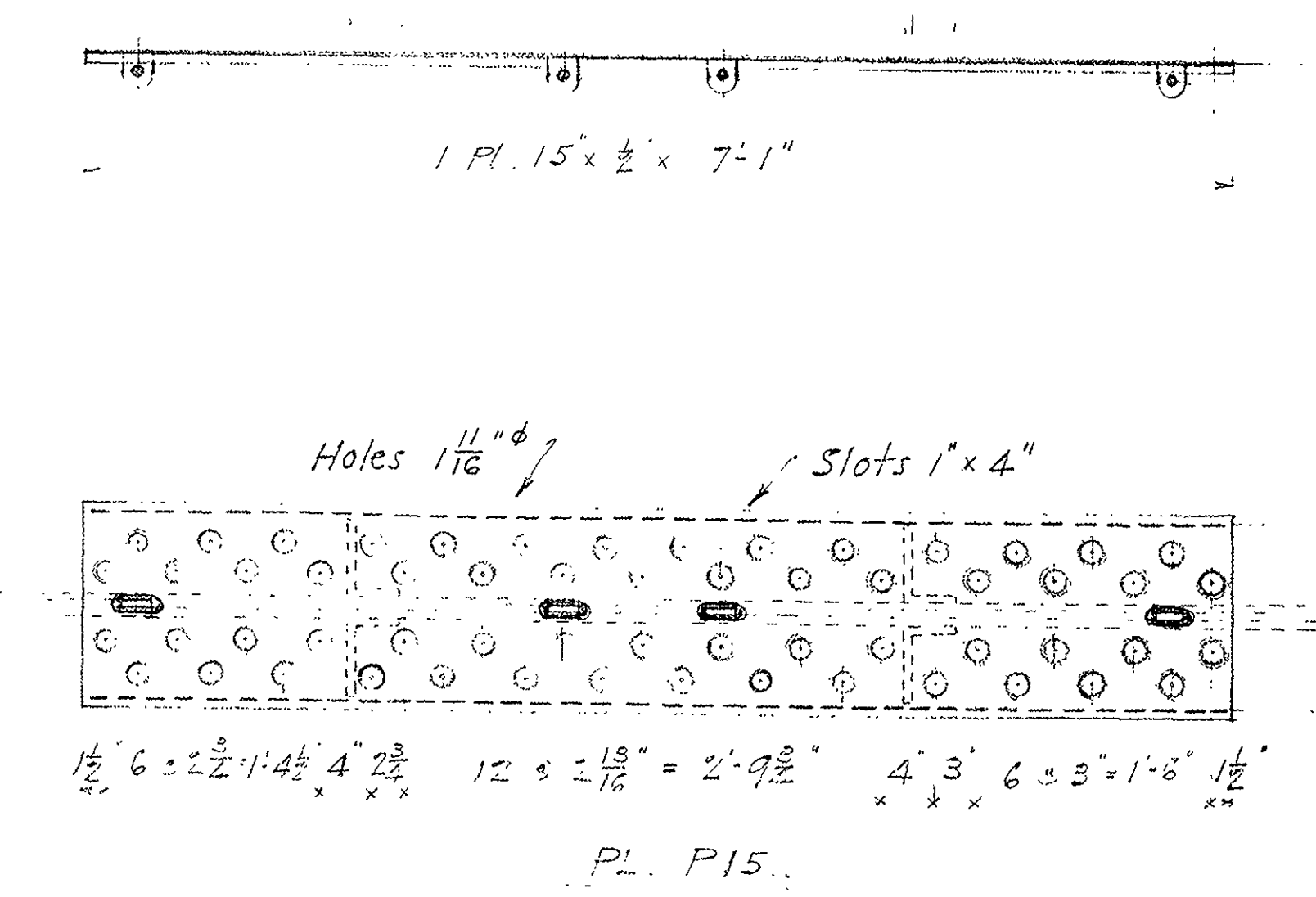
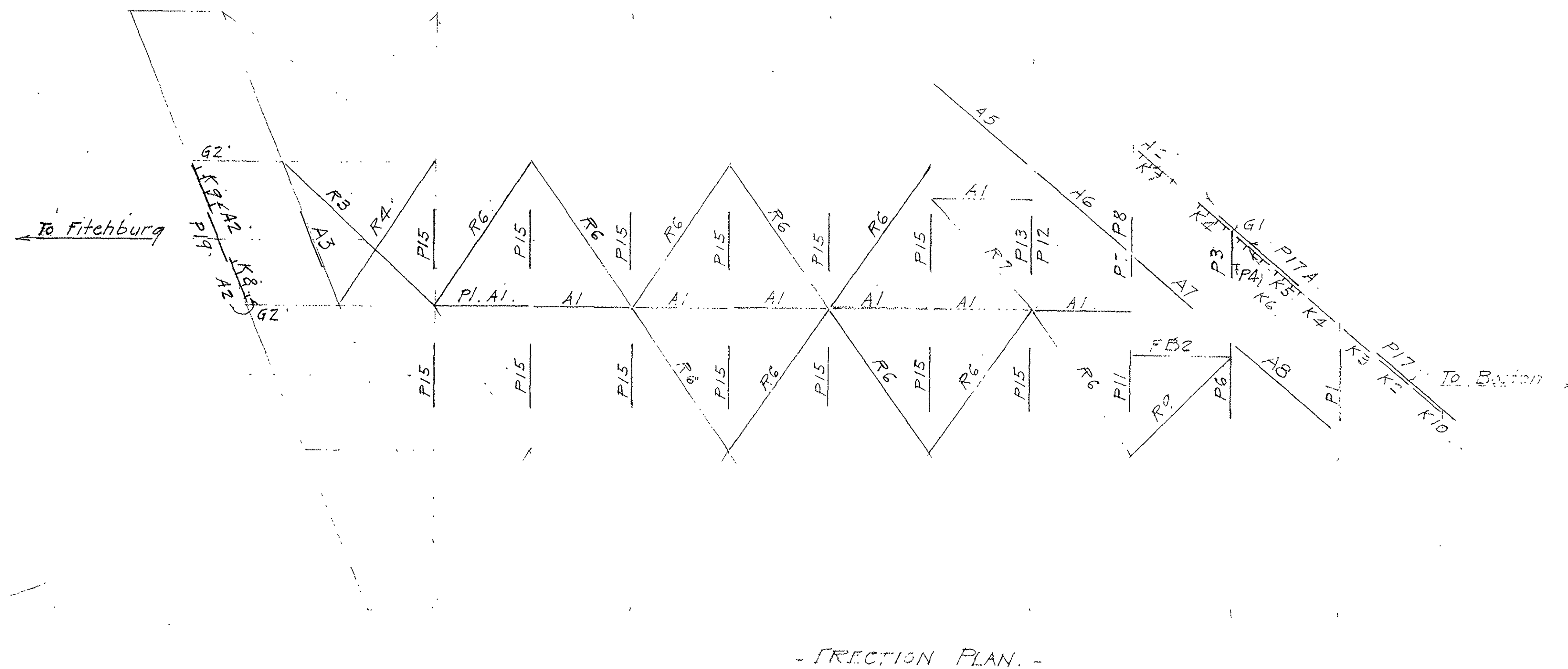


THE LEAKE & NELSON CO. Inc.
WELDING ENGINEERS
NEW YORK OFFICE
1845 GRAND CENTRAL TERMINAL
NEW YORK CITY
LICENSED UNDER PATENTED WELDING
METHODS AND OTHER PATENTS PENDING

Rev. Apr. 22nd 32.
May 11, 32.

Checked Apr 15 1932

Jan. 22 48 1932



GENERAL NOTES -

All welds $\frac{3}{8}$ " unless otherwise noted. Seal weld ends of all plates. Holes $\frac{11}{16}$ " ϕ . Bolt all new material. Spot weld bolts and nuts to prevent turning. Weld flange to supporting member, $1 \times \frac{3}{8}$ " bead for each bolt. All steel shall be cleaned of rust and scale before welding by Contractor. All new steel to be welded to have one coat of linseed oil in shop and one coat of Red Lead after welding. All other new steel to have one shop coat of Red Lead. The B. & M. R.R. Co. will do all work of removing and replacing bridge deck, and all field painting except as noted above.

MATERIAL As Detailed on Sheet No. 3

No.	Mark	Shape	Length	Remarks
2	Q3	3" x 2" x $\frac{3}{8}$ " L _s	5'-0"	Plain
1	P20	7" x $\frac{1}{2}$ "	5'-0"	do
6	Q4	3" x 2" x $\frac{3}{8}$ " L _s	10'-0"	do
2	P21	10" x $\frac{3}{8}$ "	3'-0"	do
2	P22	7" x $\frac{1}{2}$ "	11'-0"	do
1	R3	Rod # T.B.	17'-4"	Comp. as Det.
1	R4	do	14'-3"	do
10	R6	do	14'-9"	do
1	R7	do	13'-1"	do
1	R9	do	11'-5"	do
2	P23	7" x $\frac{1}{2}$ "	7'-0"	Plain
2	Q5	3" x 2" x $\frac{3}{8}$ " L _s	7'-0"	do
1	P24	5" x $\frac{3}{8}$ "	8'-3"	do
8	P25	5" x $\frac{3}{8}$ "	1'-1"	do
1	P26	4" x $\frac{3}{8}$ "	5'-9"	Cut in field
16	P27	2" x $\frac{3}{8}$ "	0'-5"	do
1	P28	8" x $\frac{1}{2}$ "	8'-9"	5 Plain

BILL OF MATERIAL Sheets No. 1 & No. 2

No.	Mark	Shape	Length	Remarks
1	P1	10" x $\frac{1}{2}$ " Pl.	5'-5"	As detailed Sheet 2
1	P3	15" x $\frac{9}{16}$ "	5'-1"	" Sheet 1
1	P6	"	6'-8"	" " 1
1	P7	16" x $\frac{7}{16}$ "	4'-7"	" " 1
1	P8	15" x $\frac{1}{2}$ "	8'-10"	" " 1
1	P11	"	6'-10"	" " Sheet 2
1	P12	16" x $\frac{1}{2}$ "	1'-7"	" " Sheet 1
13	P15	"	7'-1"	" " Sheet 2
1	P17	17" x $\frac{7}{16}$ Pls	10'-9"	" " Sheet 3
1	P17A	do	11'-6"	" " " 3
1	G1	16" x $\frac{3}{8}$ "	2'-0"	Plain
2	G2	18" x $\frac{3}{8}$ "	2'-0"	" " Rev.
8	A1	5" x $\frac{5}{8}$ "	9'-3"	" " Rev.
2	PA	4" x $\frac{1}{2}$ "	20'-0"	Plain cut in field for Ks
1	PA	5" x $\frac{3}{8}$ Pl.	3'-3"	Plain
60	A2	2" x $\frac{3}{8}$ "	0'-4"	do
1	P19	15" x $\frac{1}{16}$ "	9'-10"	Det. 4" x 3"

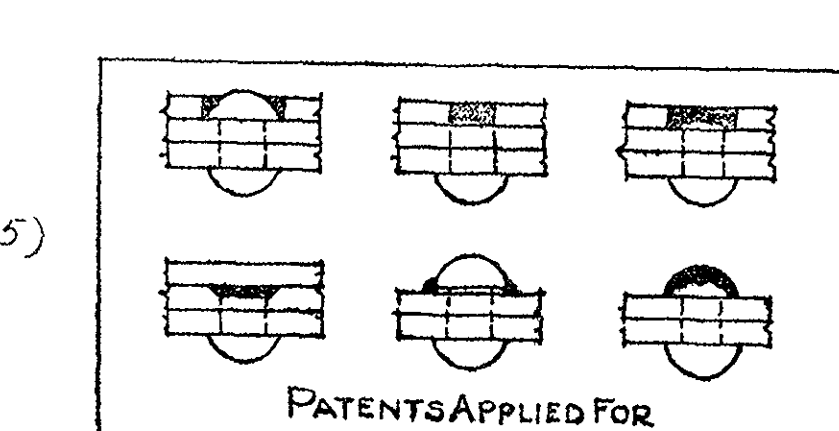
PREFIX ALL MATERIALS ON THIS JOB WITH THE LETTER "Z"

STEEL REPAIRS

BRIDGE NO. 201 - B. & M. R.R. Co. (old B5)

UNION SQUARE, MASS. (Fitchburg Div.)

B-17-16



THE LEAKE & NELSON CO. Inc.
WELDING ENGINEERS
NEW YORK OFFICE
1845 GRAND CENTRAL TERMINAL
NEW YORK CITY

LICENSED UNDER PATENTED WELDING METHODS AND OTHER PATENTS PENDING

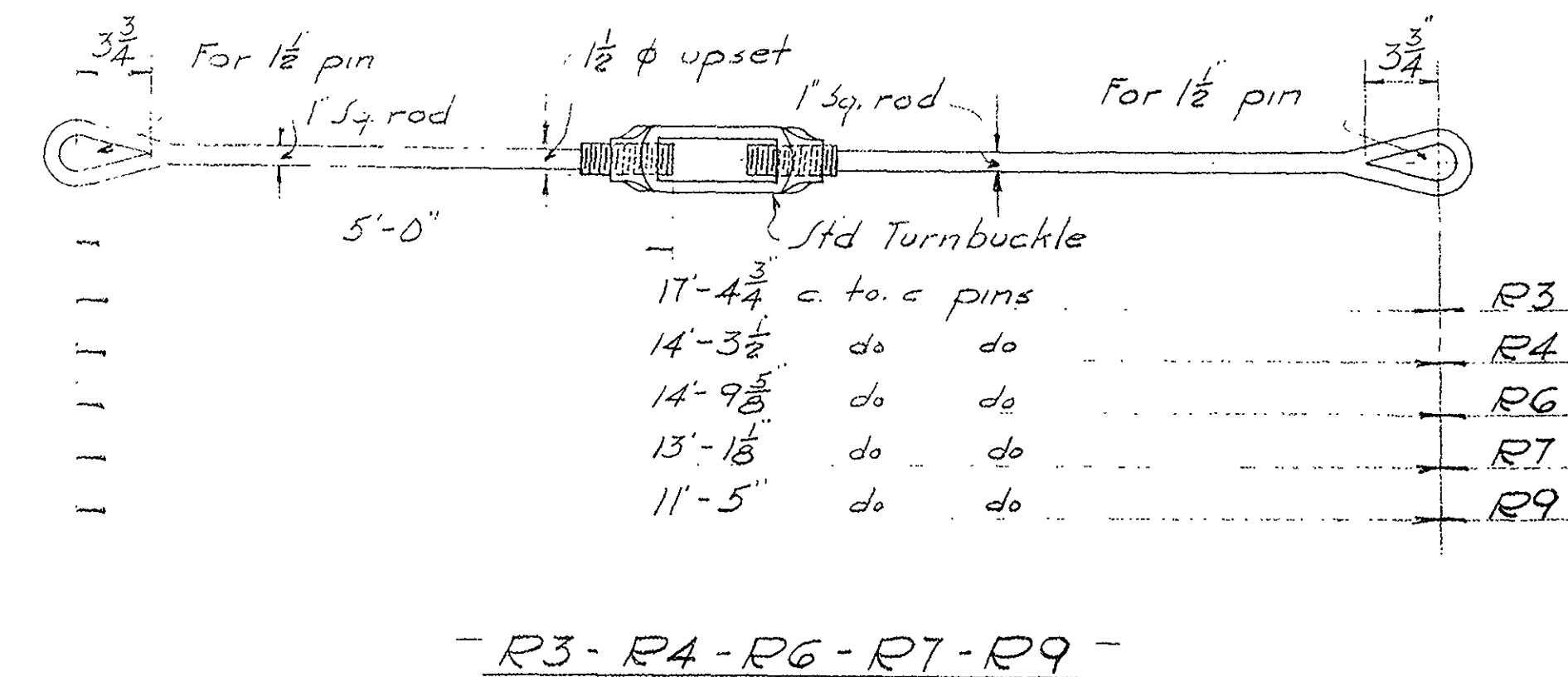
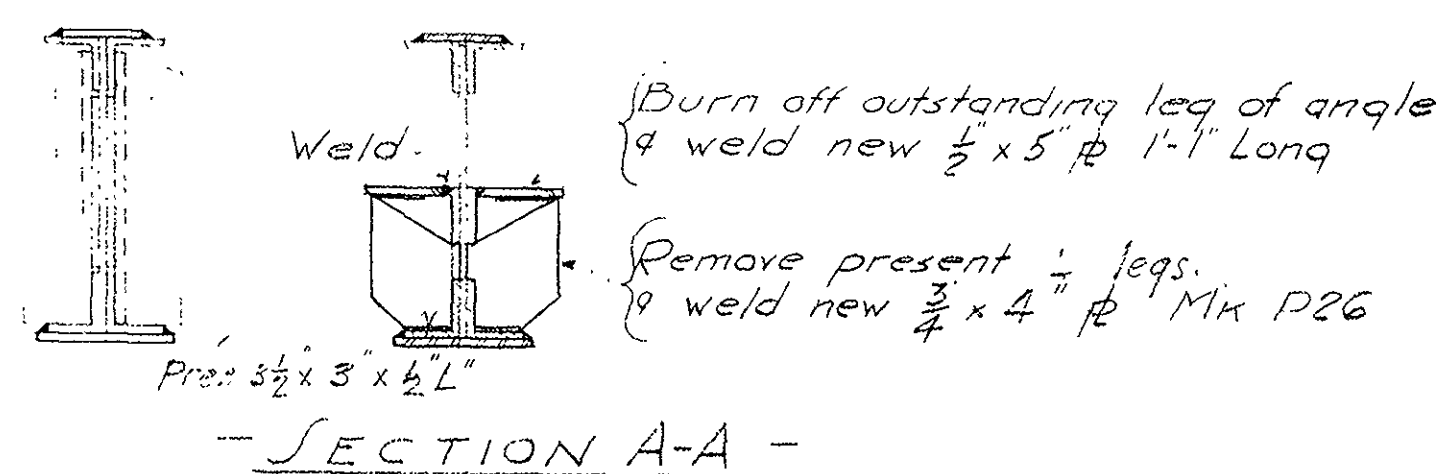
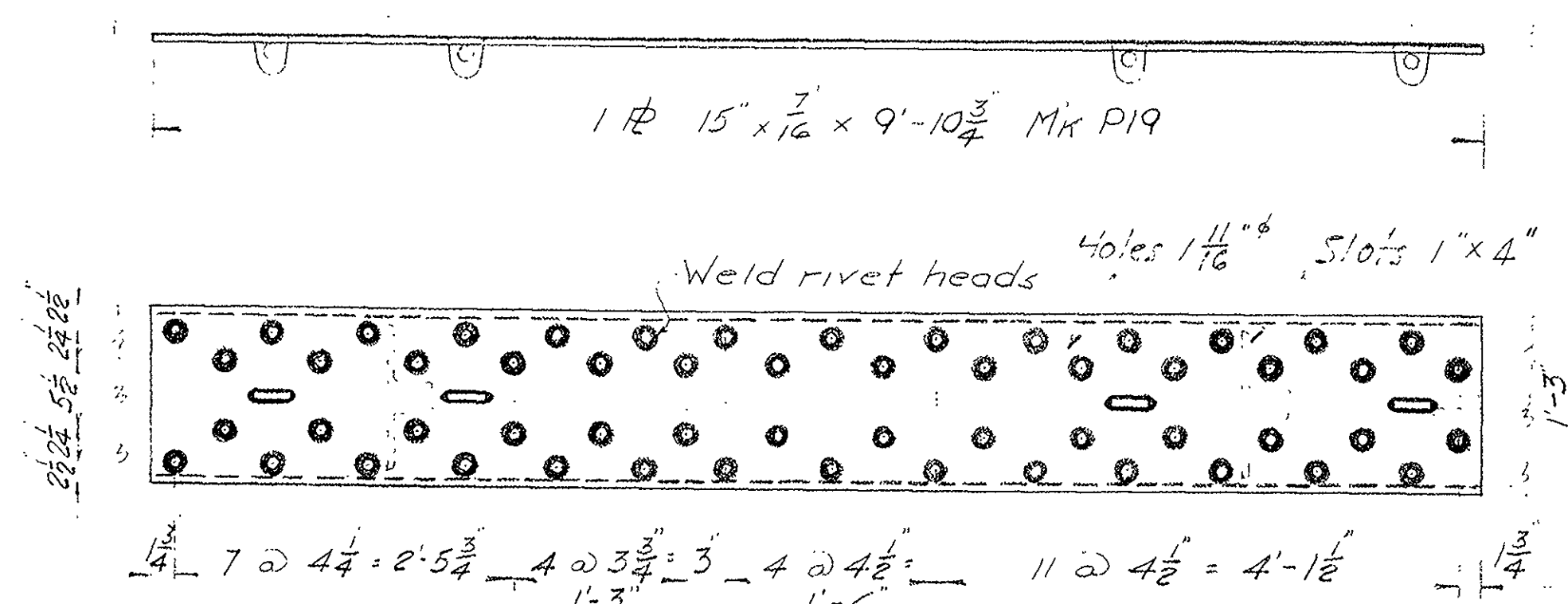
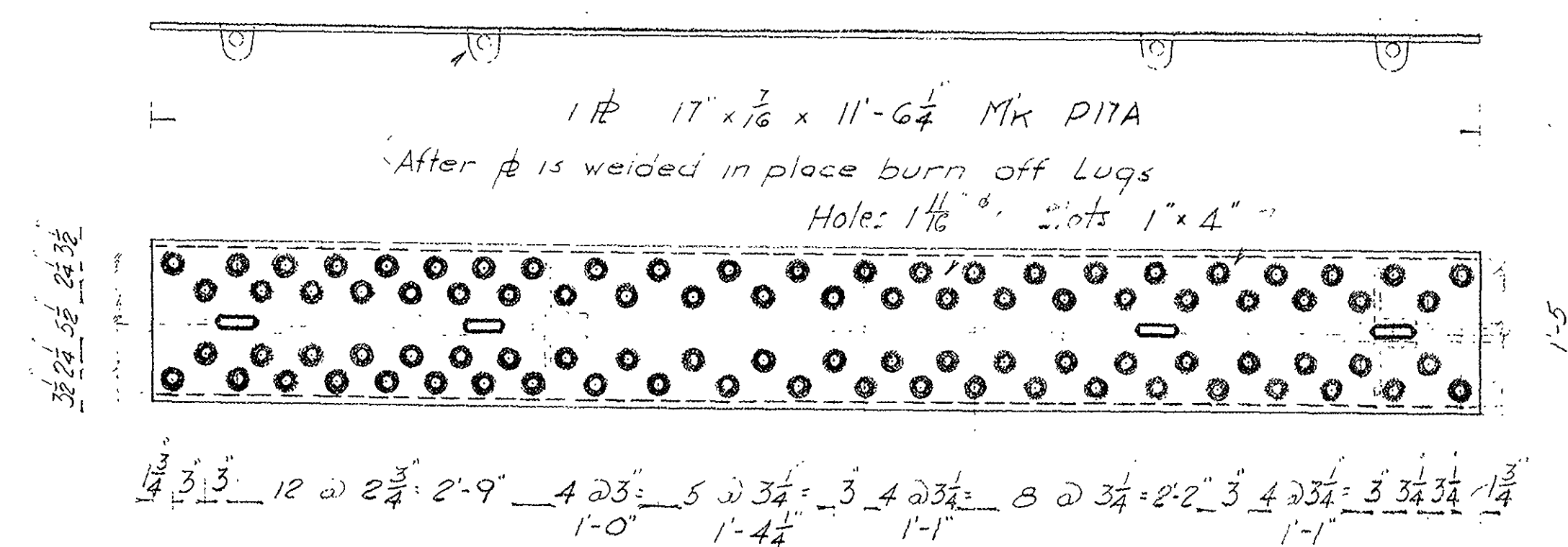
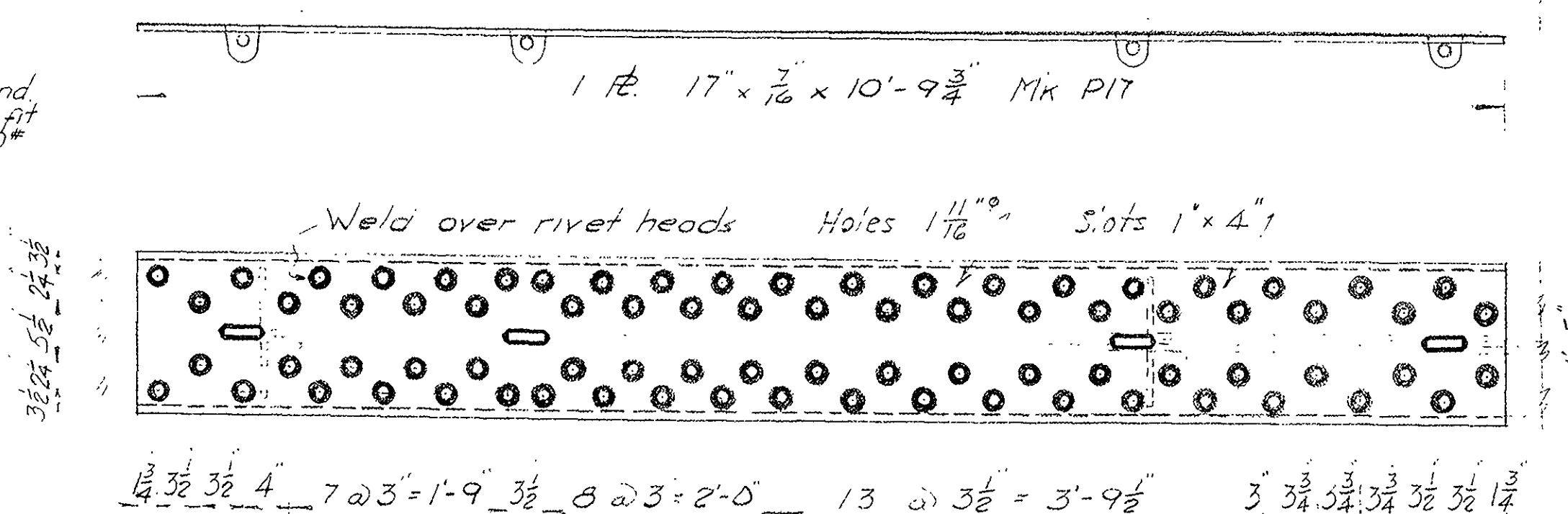
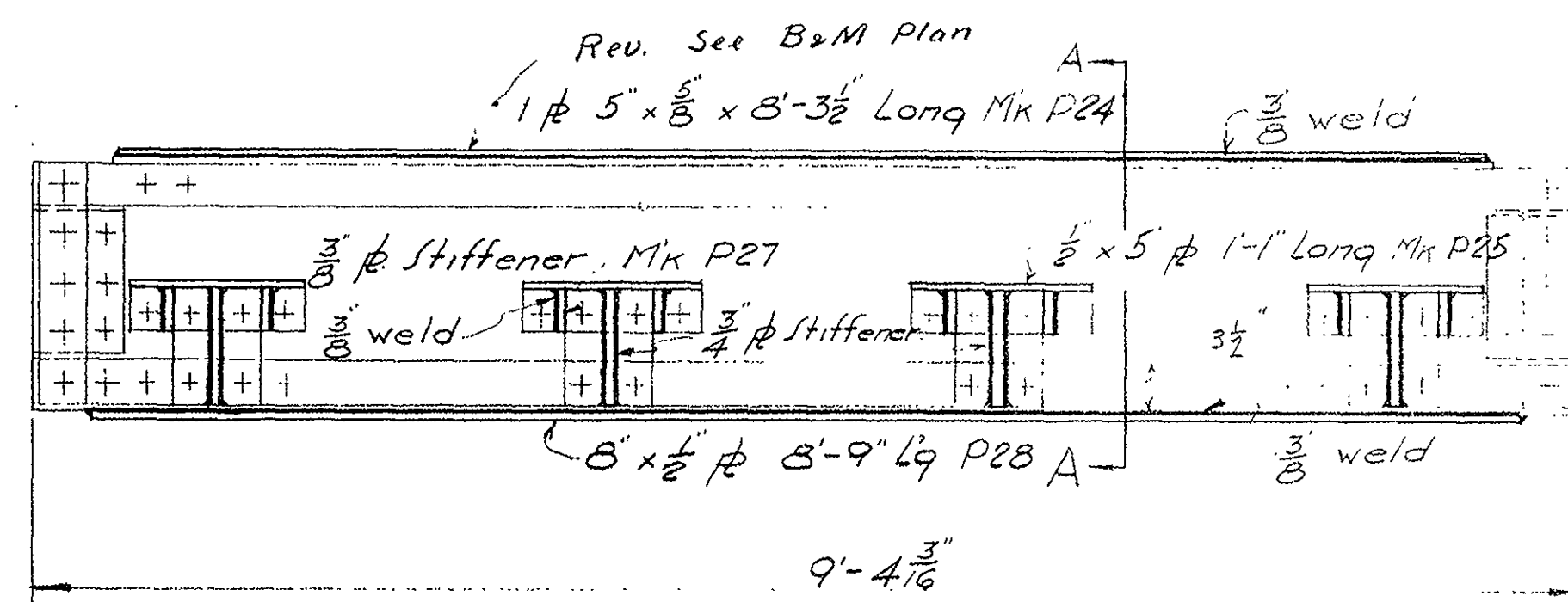
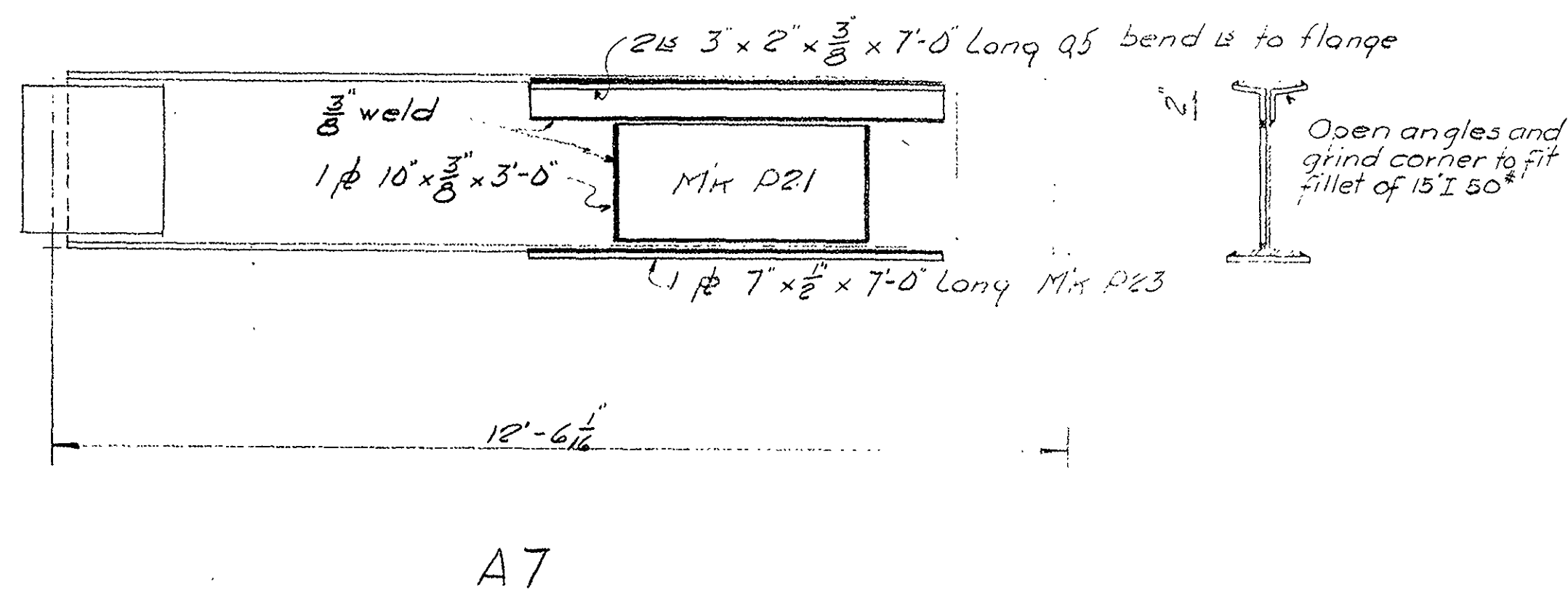
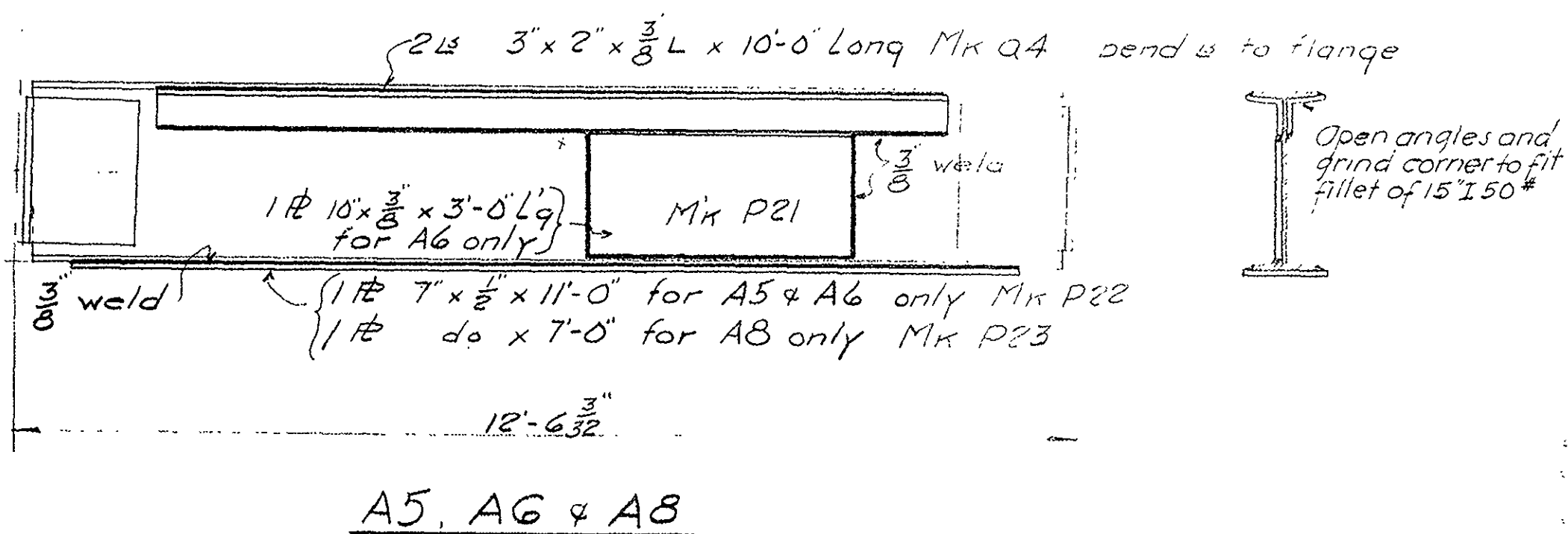
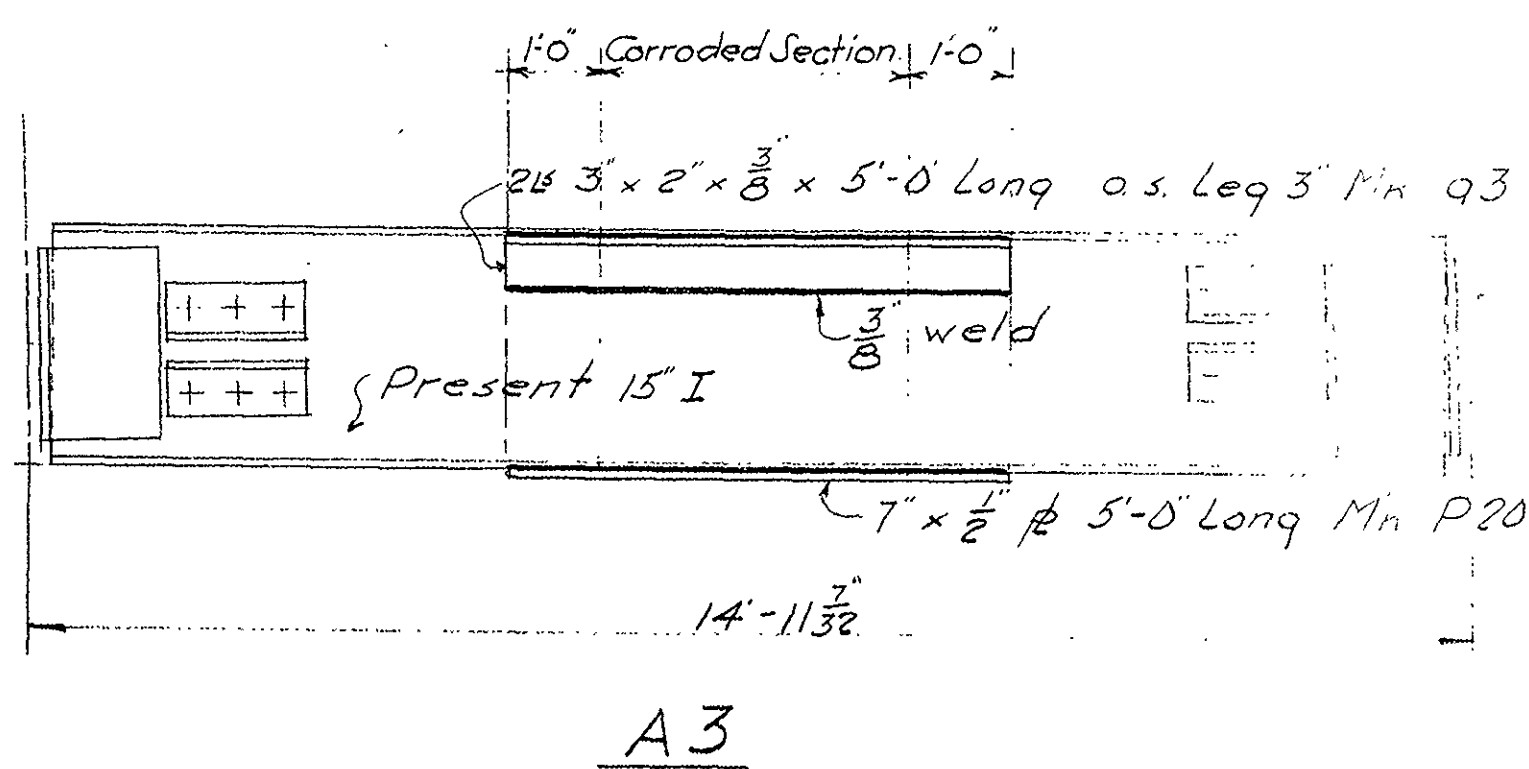
Date 8/12/24
File 2/24

S.O. 1245 FIELD
S.O. 1245A SHOP

Sheet 2 of 3

Chg. Apr 15/32
Rev. May 10, 1932

JAN 22 1932

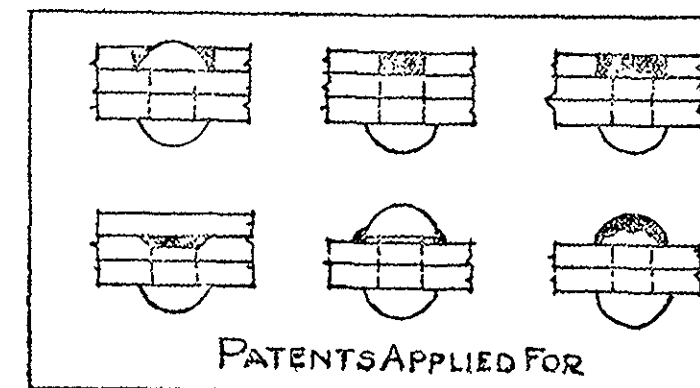


STEEL REPAIRS
BRIDGE No 201 B. & M. R. (OLD B5)
UNION SQUARE, MASS
(Fitchburg Div.)

Drawn	8	12
File	2	25

Sheet No 3 of 3

S.O. 1245 FIELD
 S.O. 1245A SHOP



PATENTS APPLIED FOR

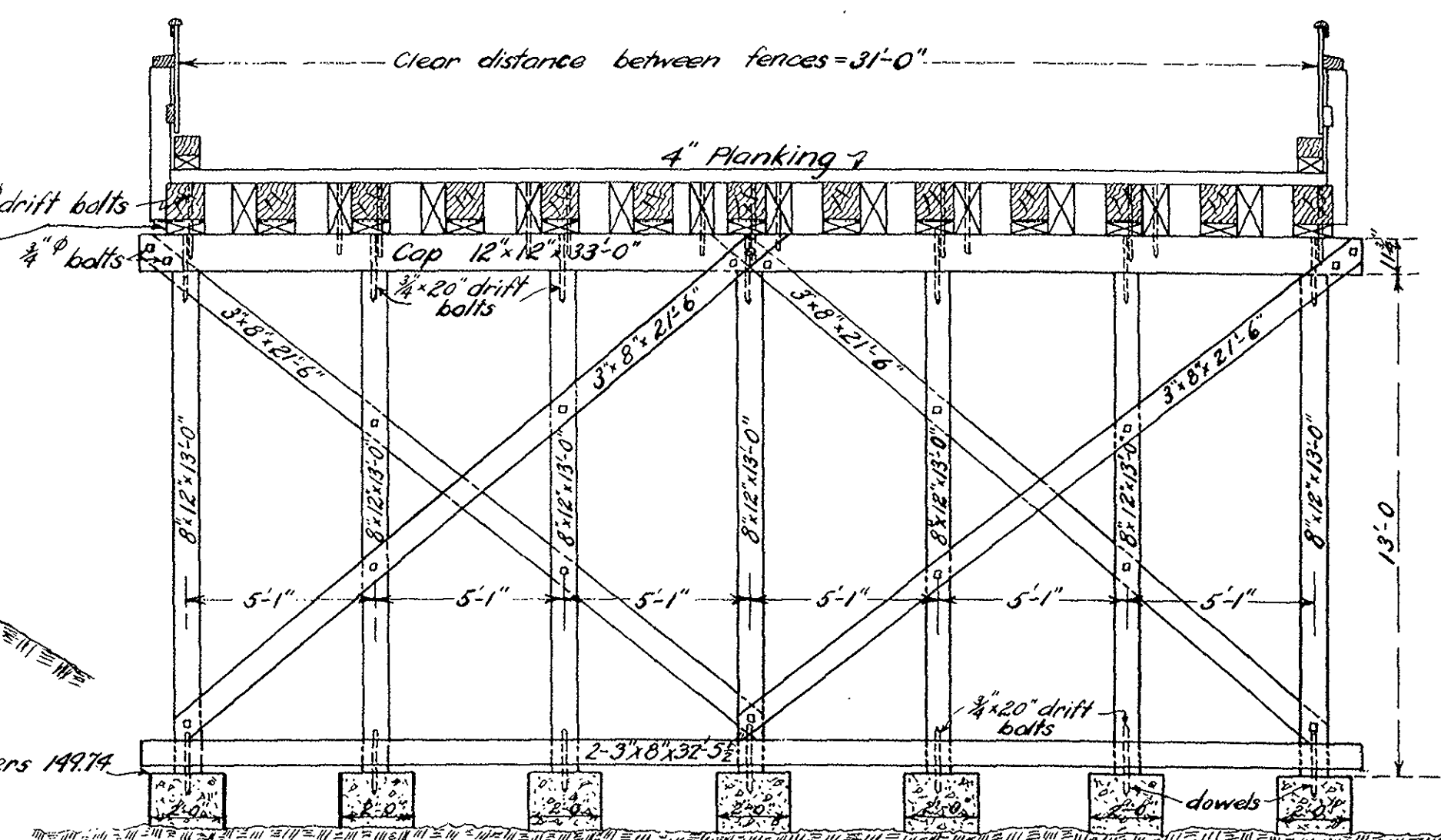
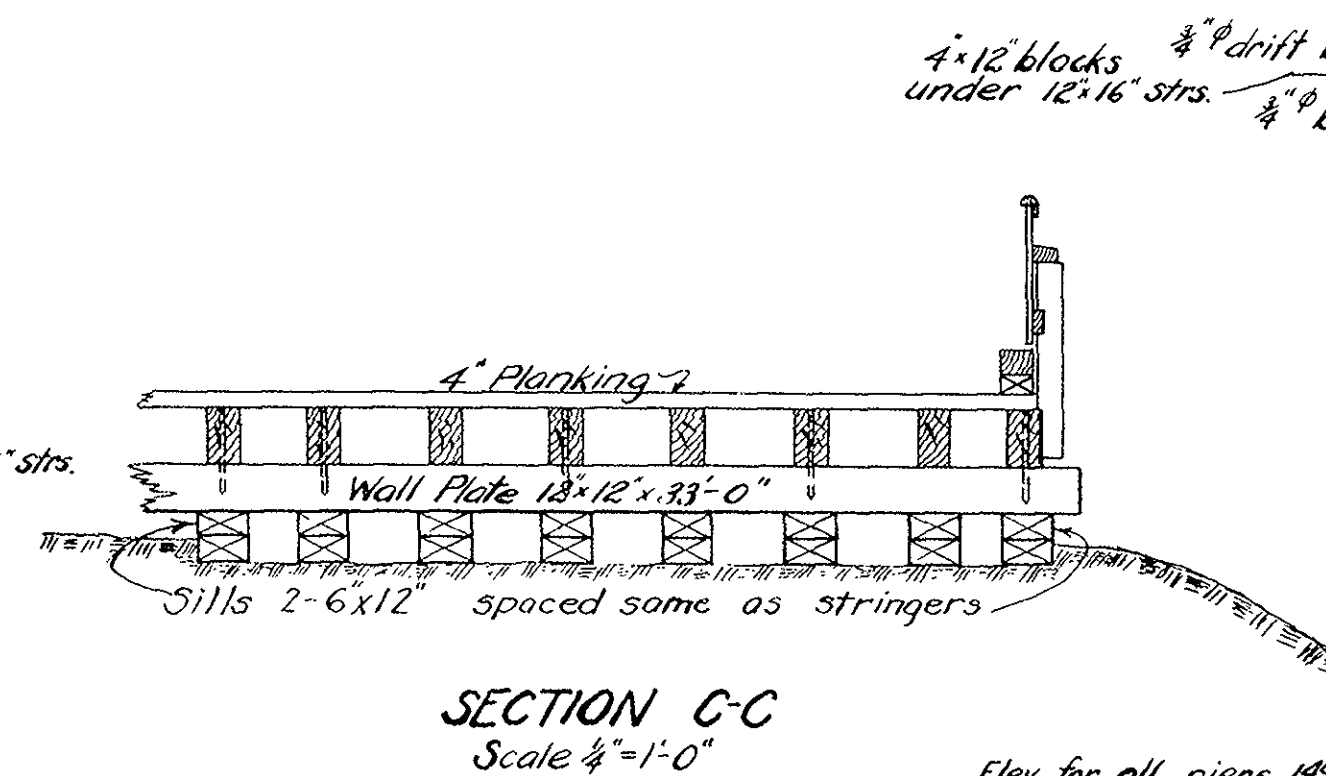
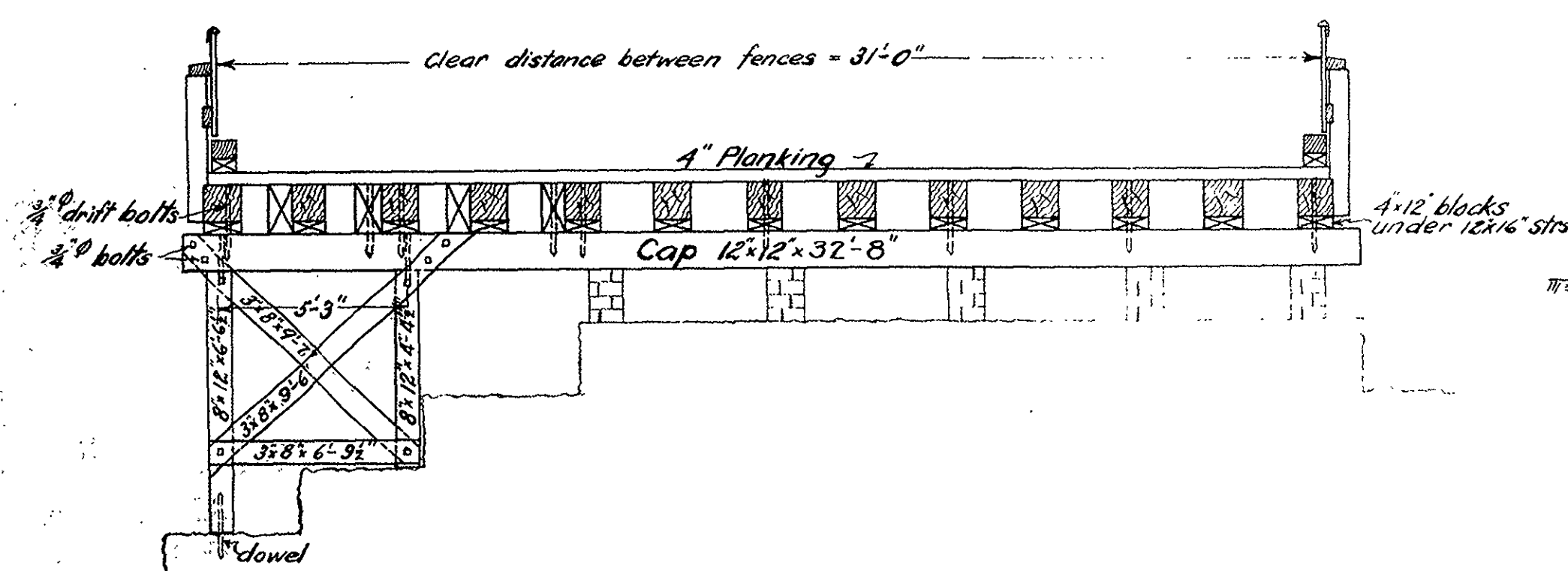
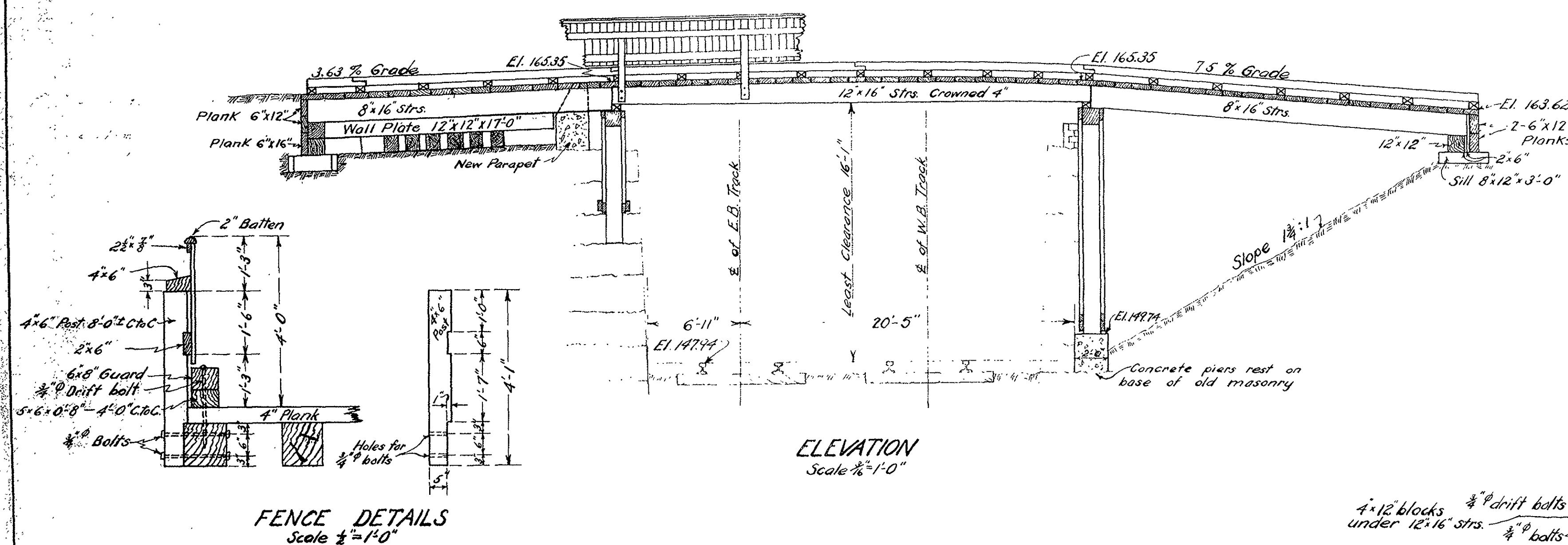
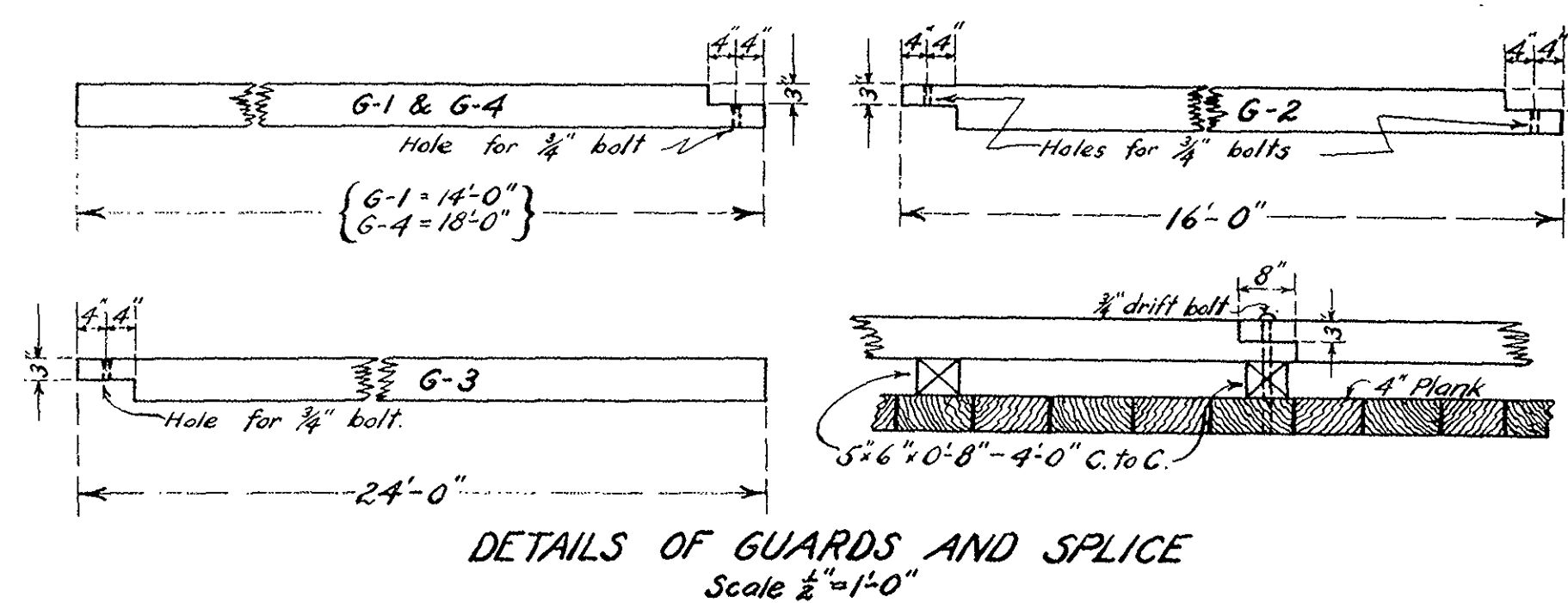
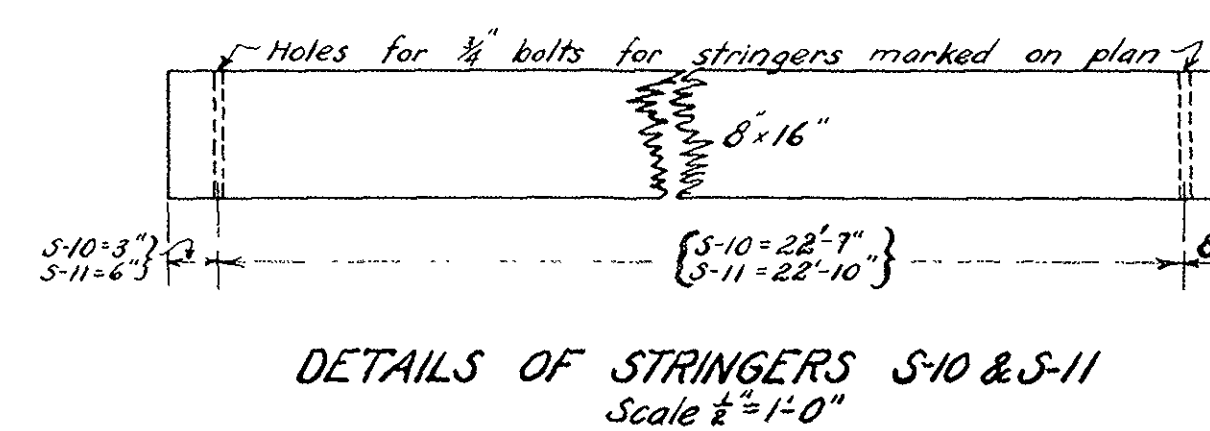
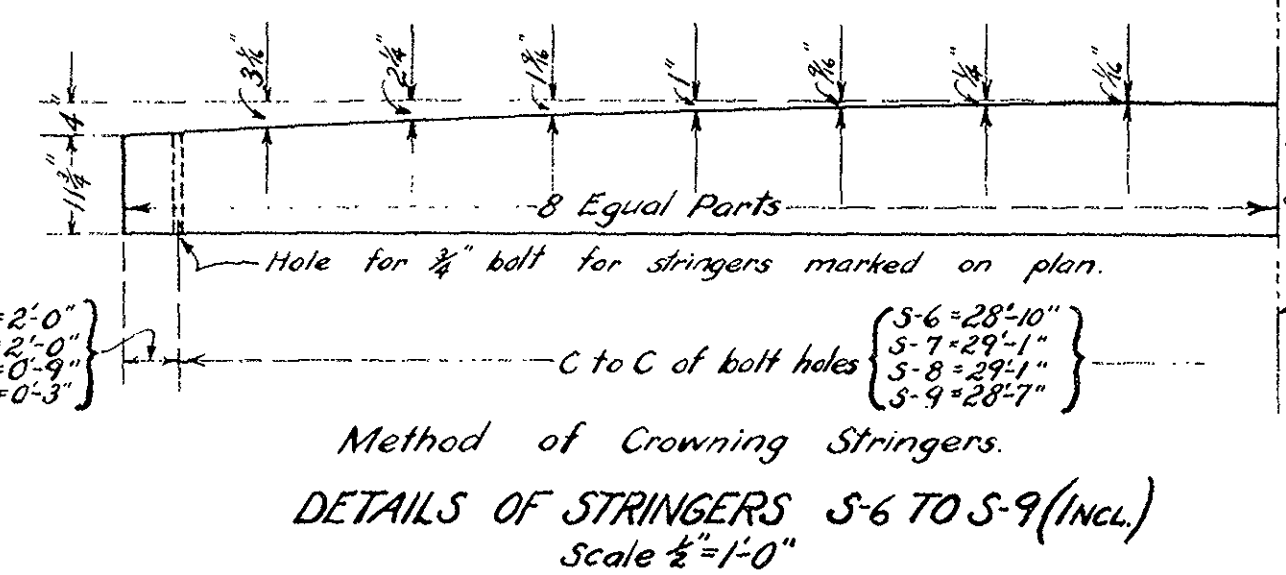
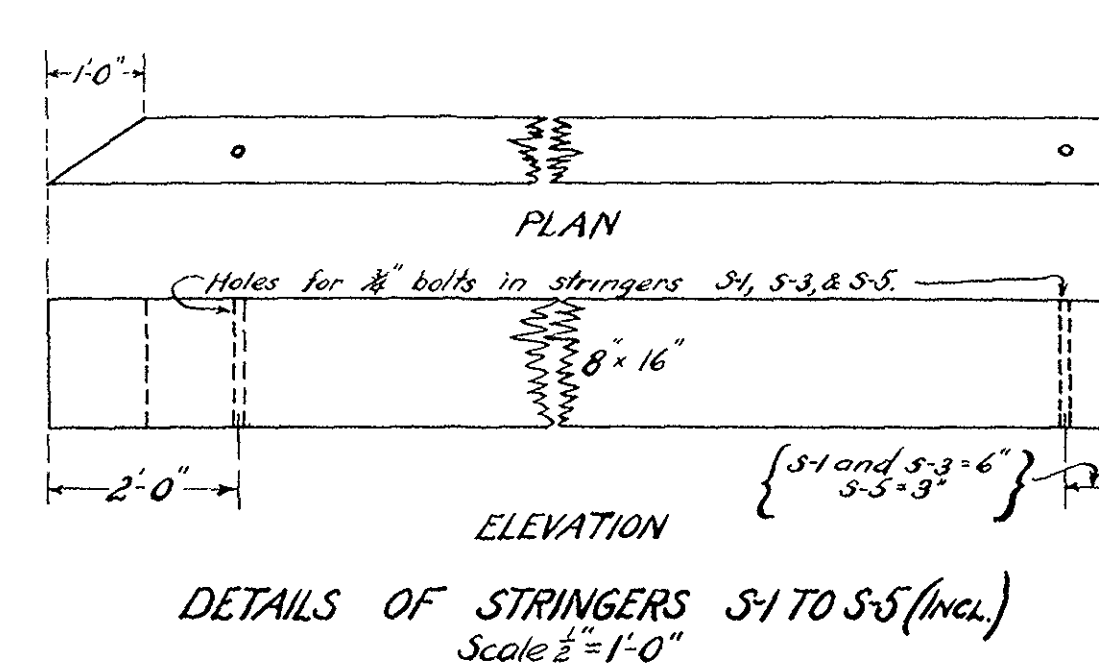
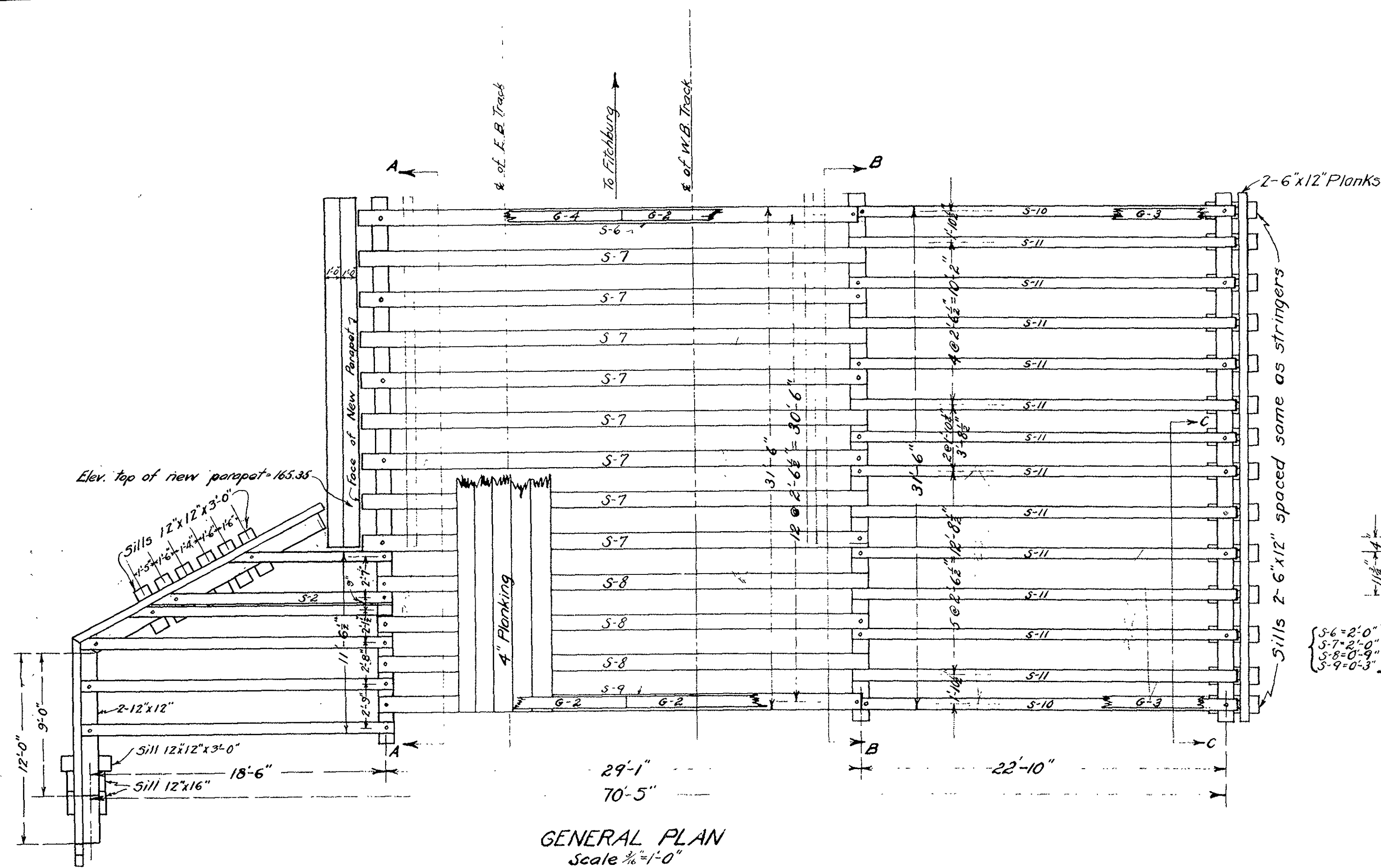
THE LEAKE & NELSON CO. Inc.
 WELDING ENGINEERS
 NEW YORK OFFICE
 1845 GRAND CENTRAL TERMINAL
 NEW YORK CITY

LICENSED UNDER PATENTED WELDING METHODS AND OTHER PATENTS PENDING

Rev. May 10, 1932.

PREFIX ALL MATERIALS ON THIS JOB WITH THE LETTER "Z"

BR. No. 5-17-16



BILL OF MATERIALS					
Mark	No.	Reg'd.	Size	Length	Remarks
S-1	1		8"x16"	10'-4"	Greasote
S-2	1		"	15'-3"	"
S-3	1		"	20'-0"	"
S-4	1		"	24'-9"	"
S-5	1		"	28'-0"	"
S-6	1		12"x16"	31'-3"	"
S-7	8		"	31'-9"	"
S-8	3		"	30'-6"	"
S-9	1		"	30'-0"	"
S-10	2		8"x16"	23'-6"	"
S-11	12		"	24'-0"	"
Caps	2		12"x12"	33'-0"	"
Wall Plate	1		12"x12"	33'-0"	"
"	1		12"x12"	26'-0"	"
Sills	24		8"x12"	3'-0"	"
Post	1		8"x12"	7'-6"	"
Post	1		8"x12"	5'-6"	"
Posts	7		8"x12"	13'-0"	"
Bracing	4		3"x8"	21'-6"	"
"	1		3"x8"	9'-6"	"
"	1		3"x8"	10'-6"	"
"	2		3"x8"	6'-0"	"
"	2		3"x8"	33'-0"	"
Blocks	26		4"x12"	1'-0"	"
"	38		5"x6"	0'-8"	"
G-1	1		6"x8"	14'-0"	"
G-2	4		6"x8"	16'-0"	"
"	2		6"x8"	24'-0"	"
G-4	1		6"x8"	18'-0"	"
Fence Posts	19		4"x6"	4'-1"	"
Fence Rail	4"x6"		165	Linear Feet	"
"	"		2"x6"	165	"
Fence Top	2"x2 1/2"		165	"	Plain
Batten	2"		165	"	"
Fill	2"x6"		80	"	"
Matched Bds.	2"		485	F. B. M.	"
Planking	4"		9100	F. B. M.	"
Planking	6"		1000	F. B. M.	Greasoted

Caso	13
Folio	17

Capacity 18 Tons

Boston and Maine Railroad
Fitch-Berk. Division. *Main Line*

Fitch-Berk. Division. Main Line

Valuation Section No. 36.1

BRIDGE No. 14.73 (OLD NO. 30)

Just West of Silver Hill Station

PLAN FOR REBUILDING

Scales: As noted
From Engineering Dept.

From Engineering Dept.

A.F.E. No. ____
Boston, Mass

Boston, Mass

ISSUE		Drawn by E.J.L.
A	7-15-27	Traced by E.J.L.
B	7-7-36	Checked by P.
		Correct ☒

Earlier Issues Obsolete

Approved: *[Signature]*

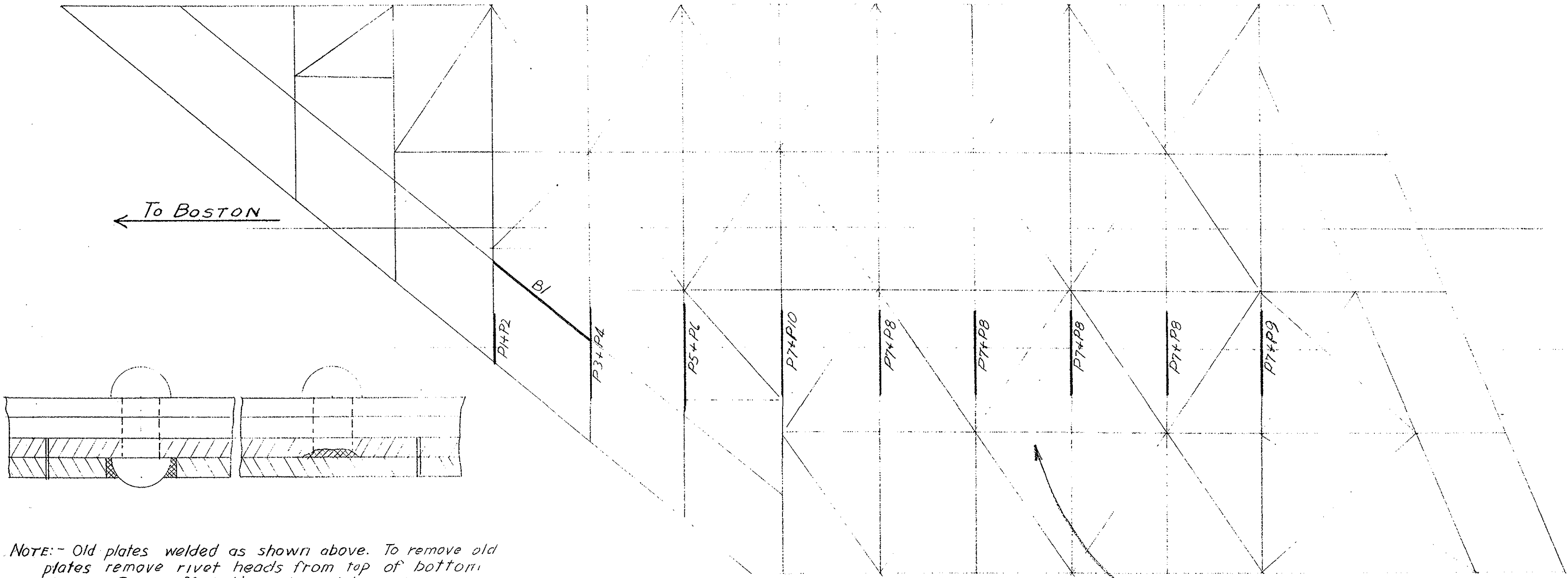
Sheet 1 of 1 Sheet

B	Tracing changed to agree with field
---	-------------------------------------

FIELD RIVET LIST			
No.	Dia.	Grip	Length
25	8	1 1/2	3 1/2
70	"	1 3/4	3 1/2
100	"	2 1/4	4
275	"	2 3/4	4 1/2
385	"	3 1/4	5 1/2

BILL OF MATERIAL				
Mark	No.	Shape	Length	Weight
P1	1	P 14"x 1/2"	5'-1 1/8"	137
P2	1	"	6'-1 1/8"	188
P3	1	P 14"x 1/2"	8'-10 1/2"	211
P4	1	"	10'-8"	254
P5	1	P 14"x 1/2"	7'-5 1/2"	178
P6	1	"	9'-2 1/2"	220
P7	6	"	7'-1"	1012
P8	4	"	10'-7"	1008
P9	1	"	10'-6 3/4"	252
A1	2	P 12"x 1/2"	1'-4 1/2"	55
A2	2	"	1'-4 1/2"	55
B1	1	15 I 50#	12'-4 3/4"	620
P10	1	P 14"x 1/2"	10'-10 3/8"	257

4447



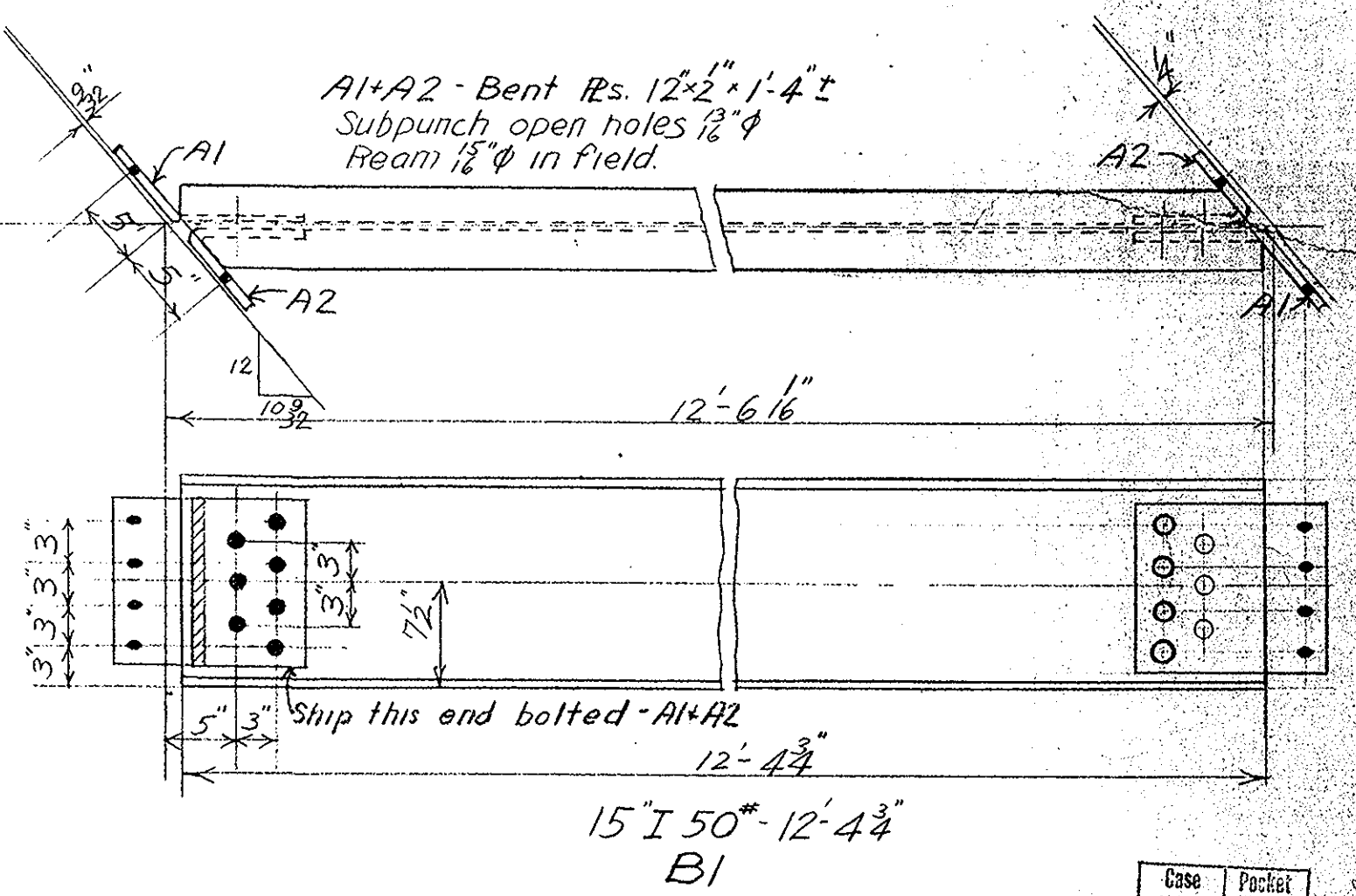
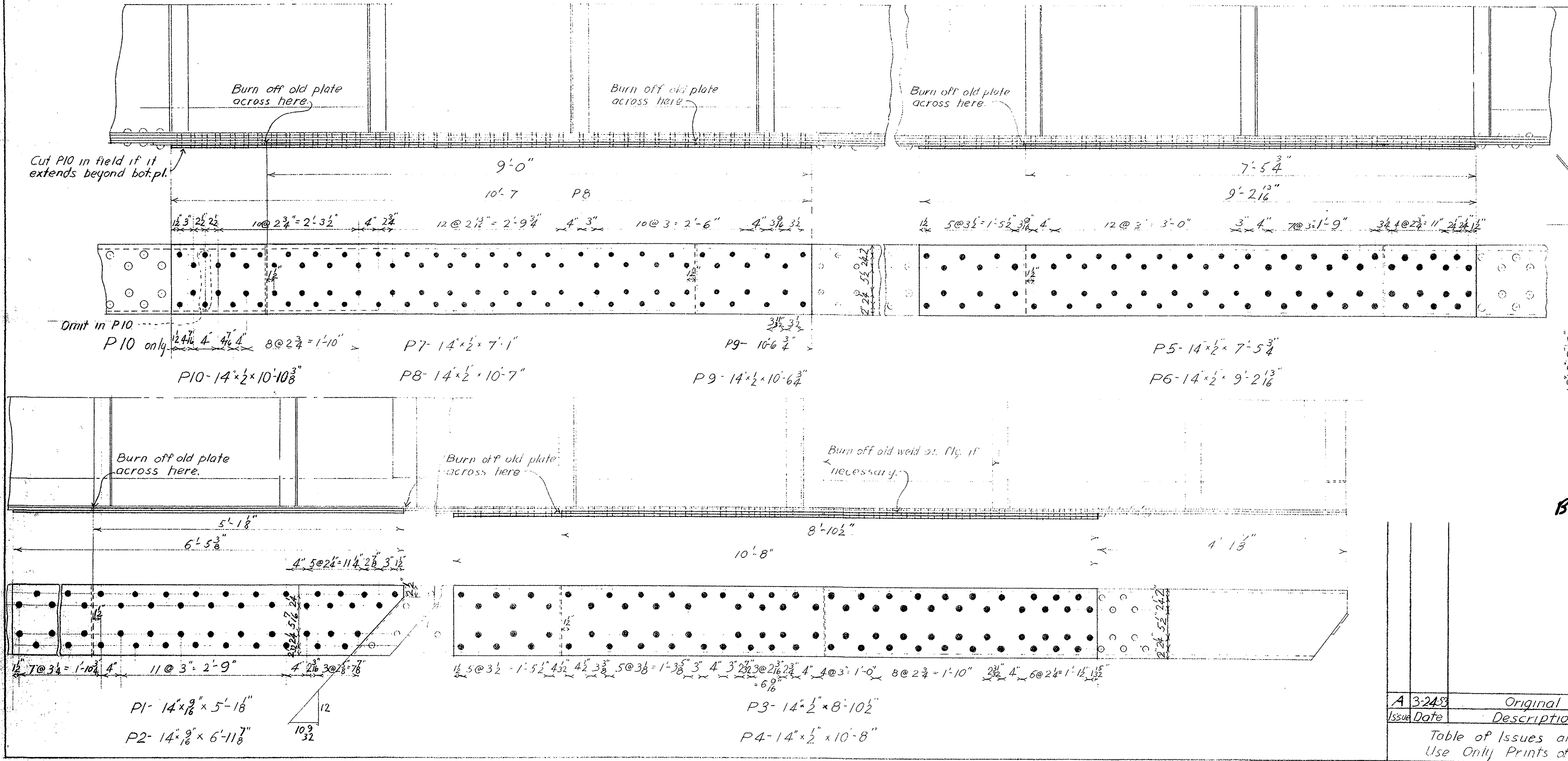
NOTE: - Old plates welded as shown above. To remove old plates remove rivet heads from top of bottom flanges. Burn off bottom two plates at proper lengths as shown below for P1 to P9. Remove old sections of plates and rivet in new plates. No live load permitted on bridge while plates are removed. Remove as much dead load as possible.

PLAN

This steelwork not done.

GENERAL NOTES:

Material and workmanship to be in accordance with Boston and Maine Railroad General Specifications for Repairing Steel Structures.
Old work shown by light lines.
New work shown by heavy lines.
Rivets 8". Holes 1/8" Ø Except as noted.
Shop inspection required. Steel Fabricator shall notify Office of Engineer of Structures when steel will be ready for inspection.



BR. No. S-17-16

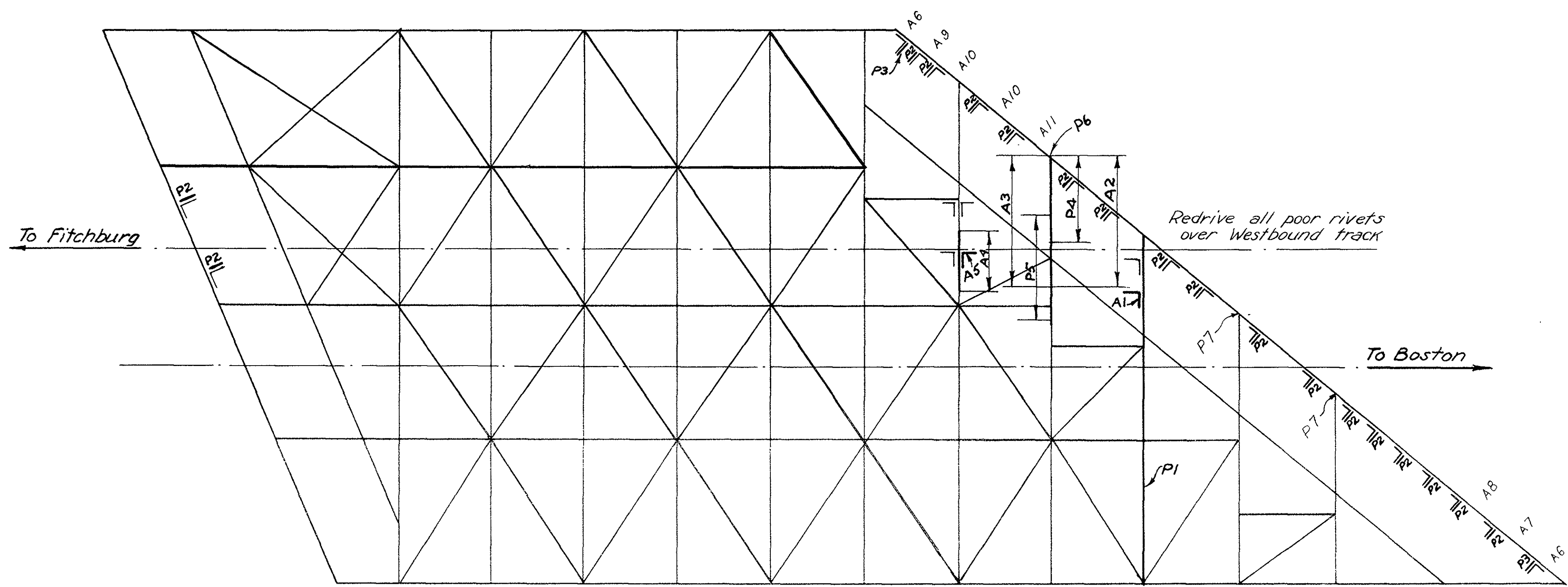
REPAIR PLAN

BOSTON AND MAINE RAILROAD
Terminal Division Fitchburg, M.L.
Valuation, Section No. 36.1
BRIDGE No. 2.01(B-5)
Union Square
SOMERVILLE, MASS.

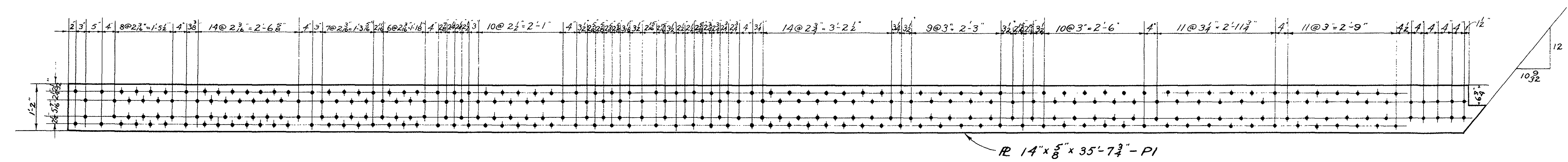
Scale: 1" = 1'-0"
From Office of Chief Engineer Boston, Mass.

Drawn V.A.G.
Check E.A.A.
Traced
Correct: J.D.
Ass't Str. Engr.
Approved: [Signature]
Engineer of Structures
Sheet 1 of 1 Sheet

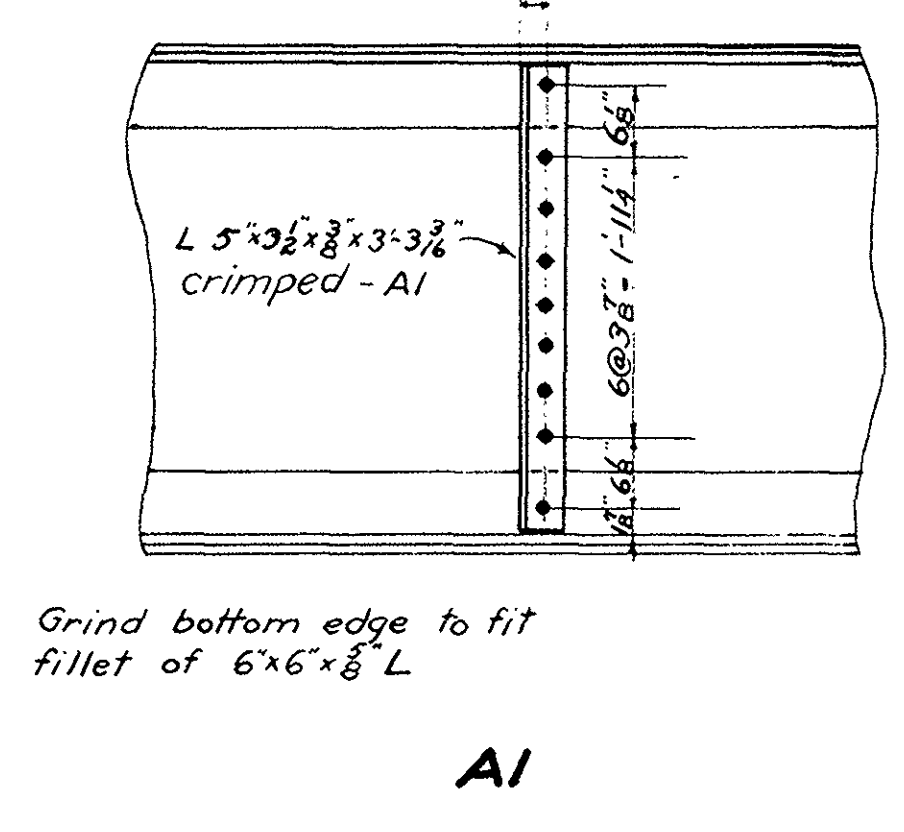
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Table of Issues and Changes				
Use Only Prints of Latest Date				



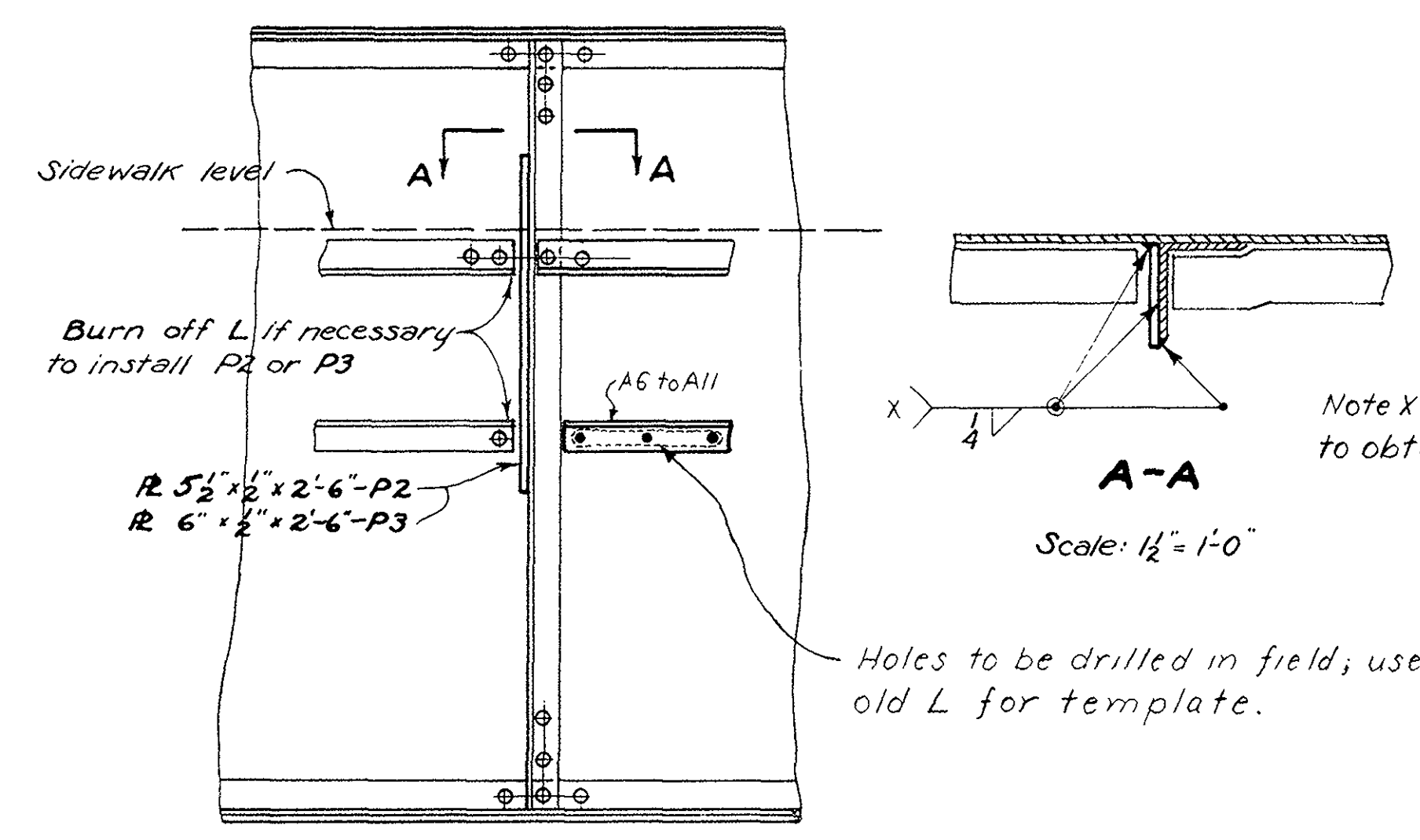
GENERAL PLAN
Scale: 8" = 1'-0"



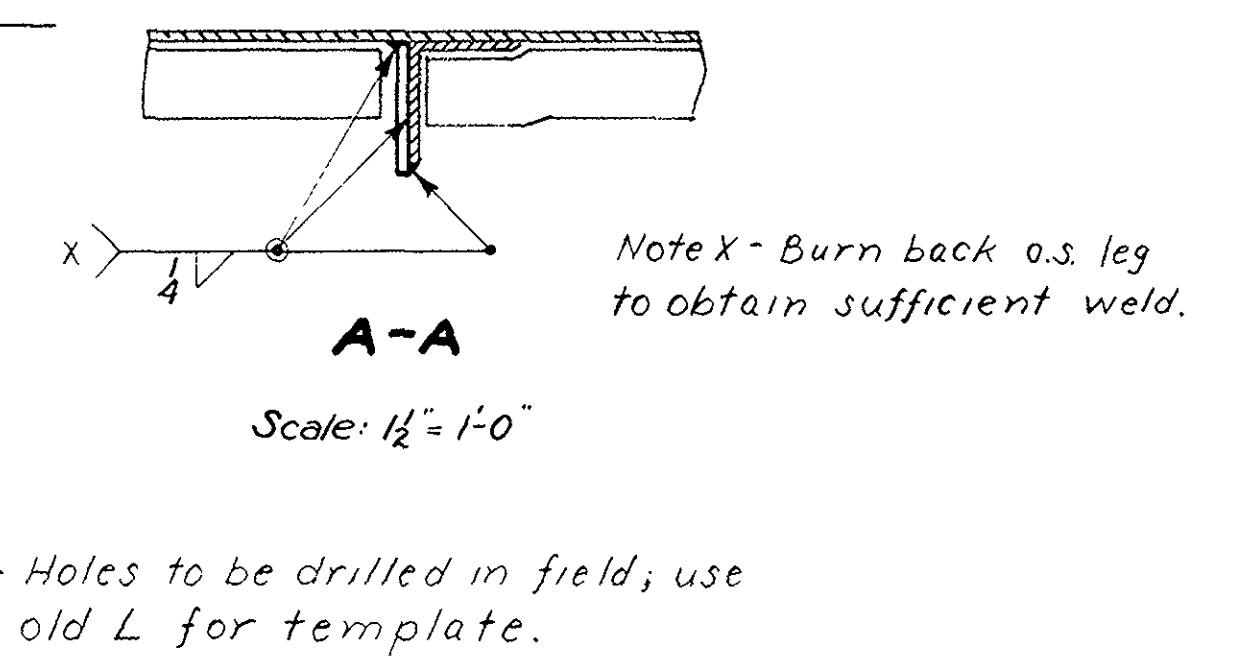
TOP COVER PLATE - P1



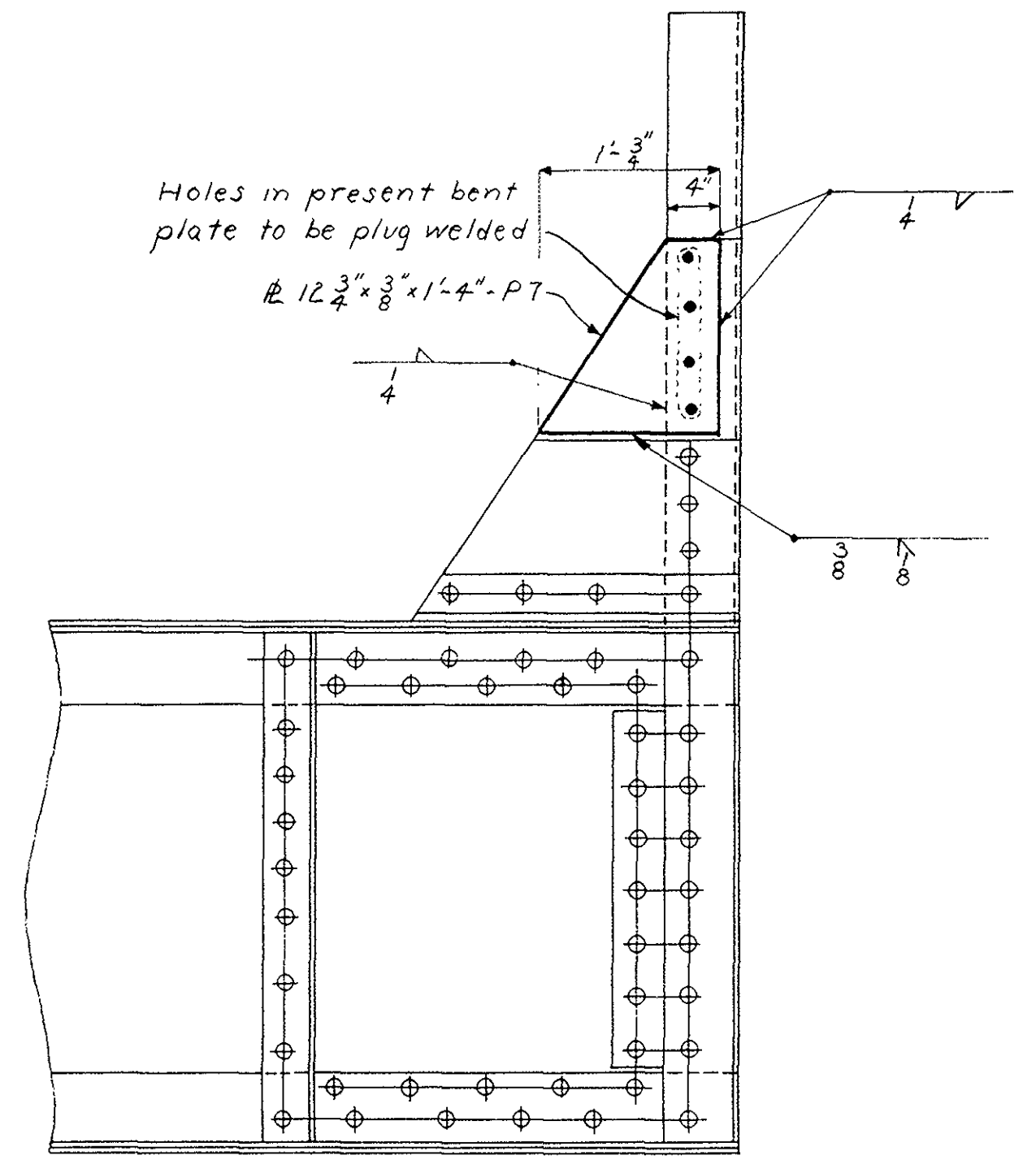
A1



P2 - P3



A-A
Scale: 1 1/2" = 1'-0"



Holes in present bent plate to be plug welded
R 12 1/2" x 3" x 1'-4" - P7

Issue A

No.	Dia.	Grip	Length
50	5/8"	1 1/2"	2 3/4"
30	1"	1 1/2"	2 3/4"
600	1"	1 1/2"	2 3/4"
50	1 1/8"	1 1/2"	3 1/4"
300	1 1/8"	1 1/2"	3 1/4"
90	2"	3 1/2"	3 1/2"
60	2 1/4"	4"	4"
50	2 1/2"	4 1/2"	4 1/2"
70	2 3/4"	4 1/2"	4 1/2"
60	1"	1"	2 1/2"

Issue B

Issue A

Field Check	Mark	No.	Shape	Length	Approx. Total Length	Remarks
	A1	1	L 5" x 3 1/2" x 3"	3'-3 1/2"	6'-6"	As detailed
	A5	1	"	3'-2 1/2"		
	A2	1	L 6" x 6" x 3"	12'-1"		
	A3	1	"	12'-1 1/2"	29'-0"	
	A4	1	"	4'-7"		
	P1	1	1 1/4" x 3"	35'-7 3/4"		
	P2	18	5 1/2" x 1 1/2"	2'-6"		ship blank
	P3	2	6" x 1 1/2"	2'-6"		
	P4	1	1 1/4" x 3"	8'-6 3/4"		As detailed
	P5	1	1 1/4" x 1 1/2"	7'-5"		
	P6	1	2 1/4" x 3"	2'-3"		
	A6	2	L 5 1/2" x 3 1/2" x 1 1/2"	8 1/2"		Ship blank
	A7	1	"	2'-10"		
	A8	1	"	3'-6"	15'-6"	
	A9	1	"	1'-11"		
	A10	2	"	2'-4"		
	A11	1	"	3'-9"		
	P7	2	12 1/2" x 3"	1'-4"		

Issue B

Size	Type	Position	Total Length	Size and weight of Rods
1/2"	✓	Flat	8'-0"	12
3/8"	✓	Flat	8'-0"	16
3/8"	✓	Vert.	12'-0"	23
3/8"	✓	O.H.	12'-0"	23
1/4"	✓	Flat	30'-0"	7
1/4"	✓	Vert.	150'	35
Totals				95# 58# 23#

SPECIAL NOTE:
P1, P4, P5, A2 & A3 may be cut as required to permit installation under sidewalk separately. Provide butt welded splices as shown, splicing plates and angles at different points.

GENERAL NOTES:
Material to be in accordance with Boston and Maine Railroad "Specifications for Fabrication and Erection of Steel Structures, 1942." Shop inspection required. Steel fabricator will notify Office of Engineer of Structures when steel will be ready for inspection. Old work shown by light lines. New work shown by heavy lines. Rivets 5/8" φ. Open holes 1/8" φ.

REPAIR PLAN

BOSTON AND MAINE RAILROAD
Terminal Division Fitchburg Route
Valuation Section No. 36.1
BRIDGE No. 2.01 (B-5)
0.1 Mile East of Station
UNION SQUARE, MASS.
Scale: 8" = 1'-0"
From Office of Chief Engineer Boston, Mass.

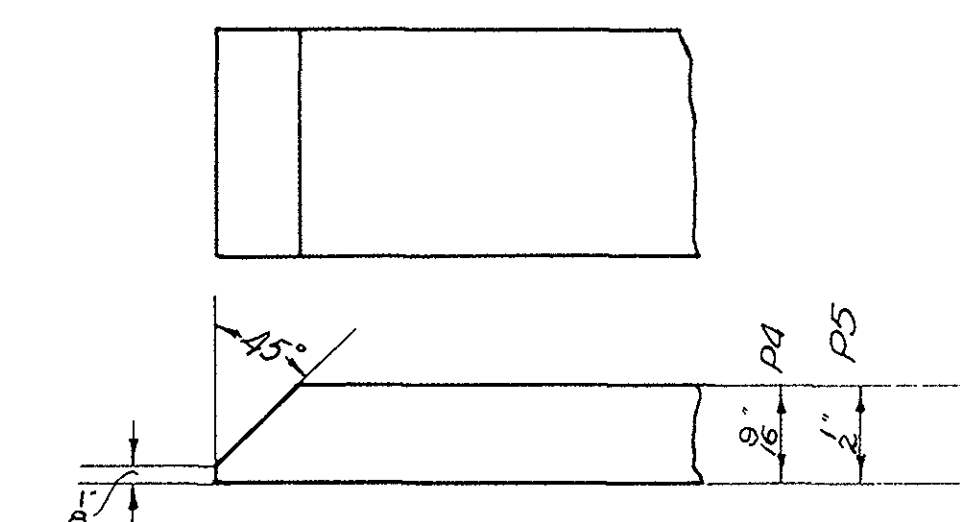
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A	5-19-43	Original	EL	

Table of Issues and Changes
Use Only Prints of Latest Date

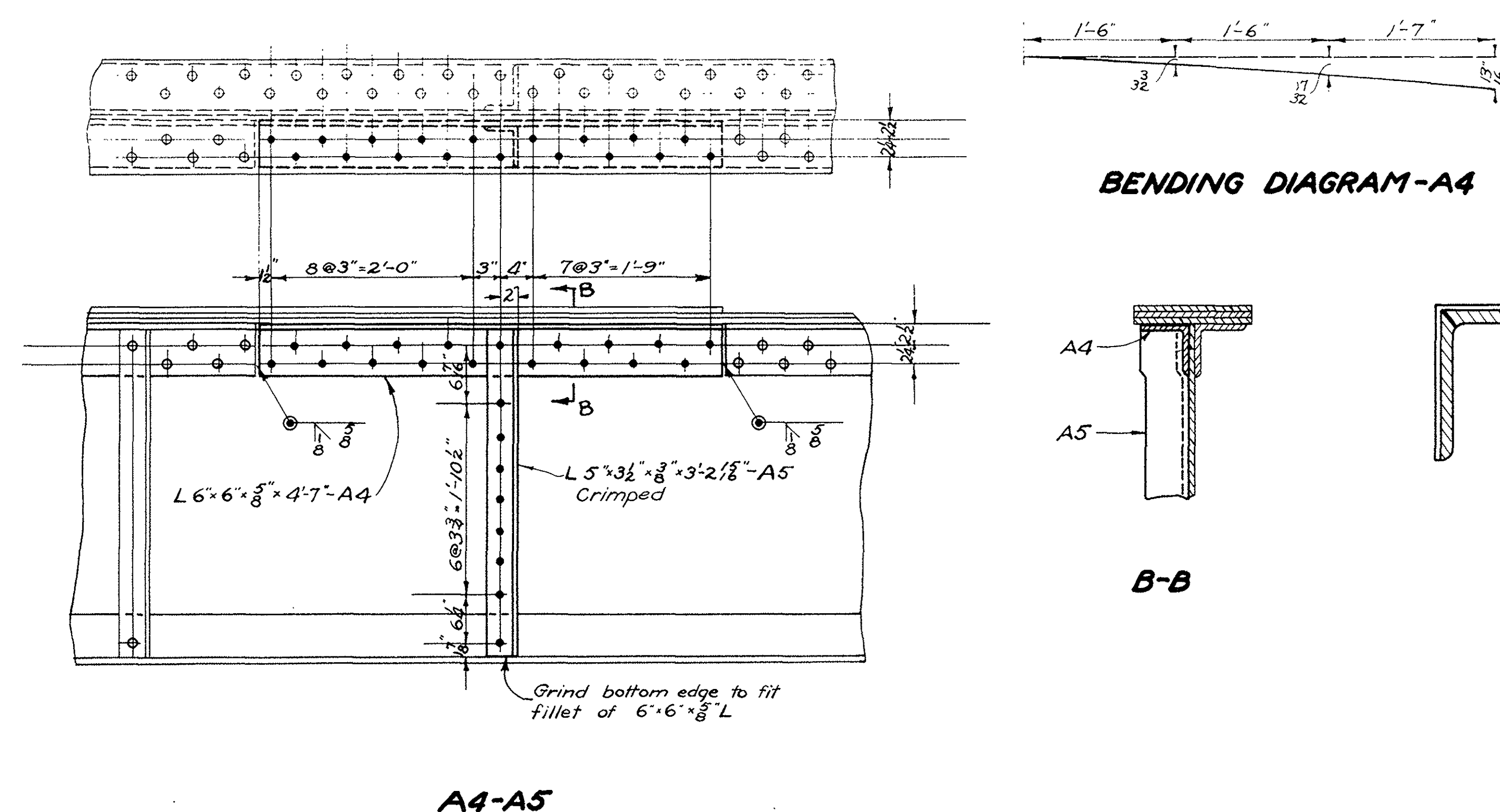
Design Check
Drawn E.L.
Check
Traced E.Y.C.
Check
Correct AM Roads

Approved: *[Signature]*
Engineer of Structures
Sheet 1 of 2

BR. No. S-17-16



NOTE:
Welding of P4 and P5 to be completed and cooled before riveting is done.



A2-A3-A4

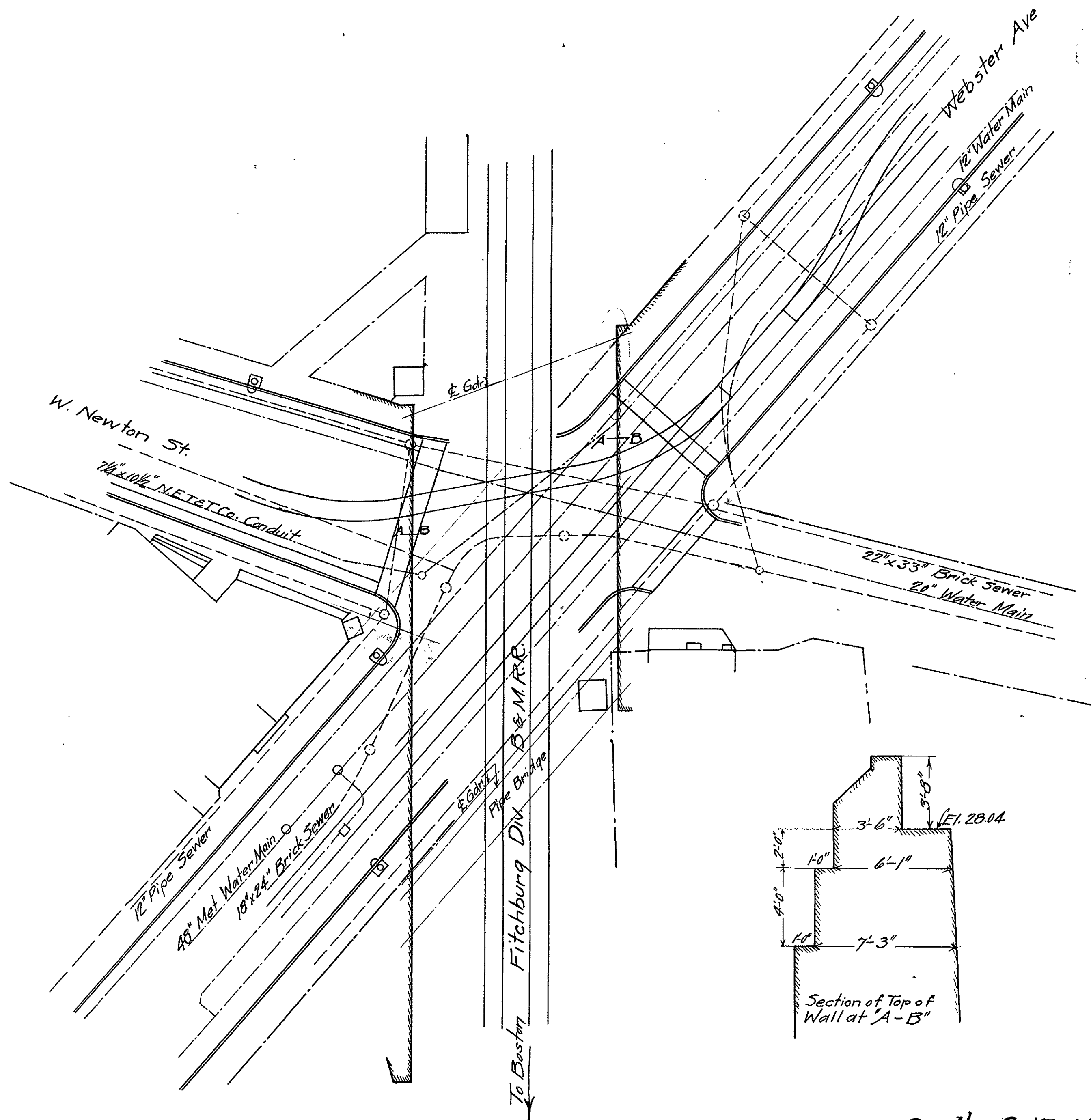
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Issue	Date	Description	Made App
Table of Issues and Changes Use Only Prints of Latest Date			

BR. No. 5.17.16

REPAIR PLAN

BOSTON AND MAINE RAILROAD
Terminal Division Fitchburg Route
Valuation Section No.36.1
BRIDGE No. 2.01 (B-5)
0.1 Mile East of Station,
UNION SQUARE, MASS.
Scales: 1" = 3' = 10"
From Office of Chief Engineer Boston, Mass.

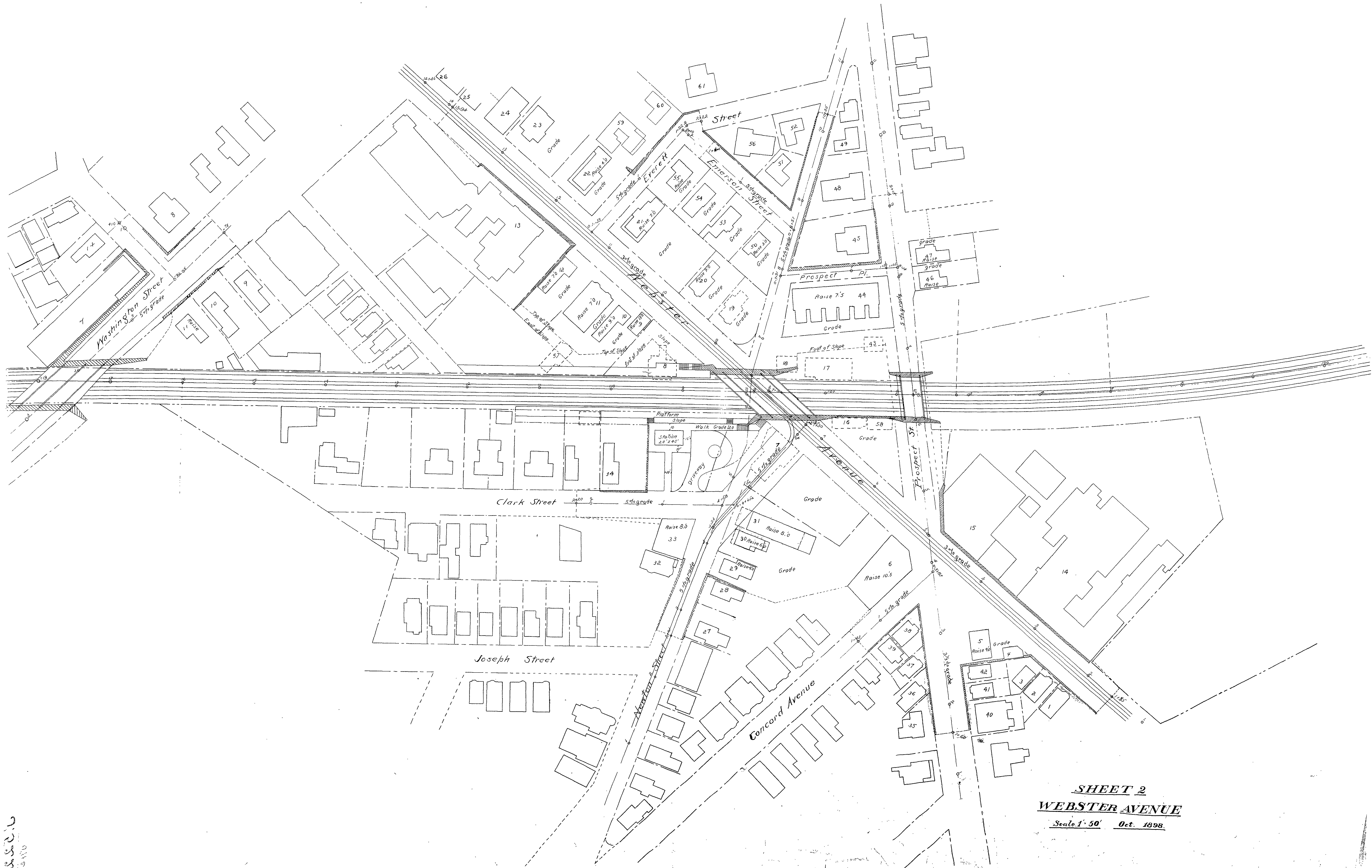
Design
Check
Drawn E.L.
Check
Traced E.Y.C.
Check
Corrected
Approved: 
Engineer of Structures
Sheet 2 of 2

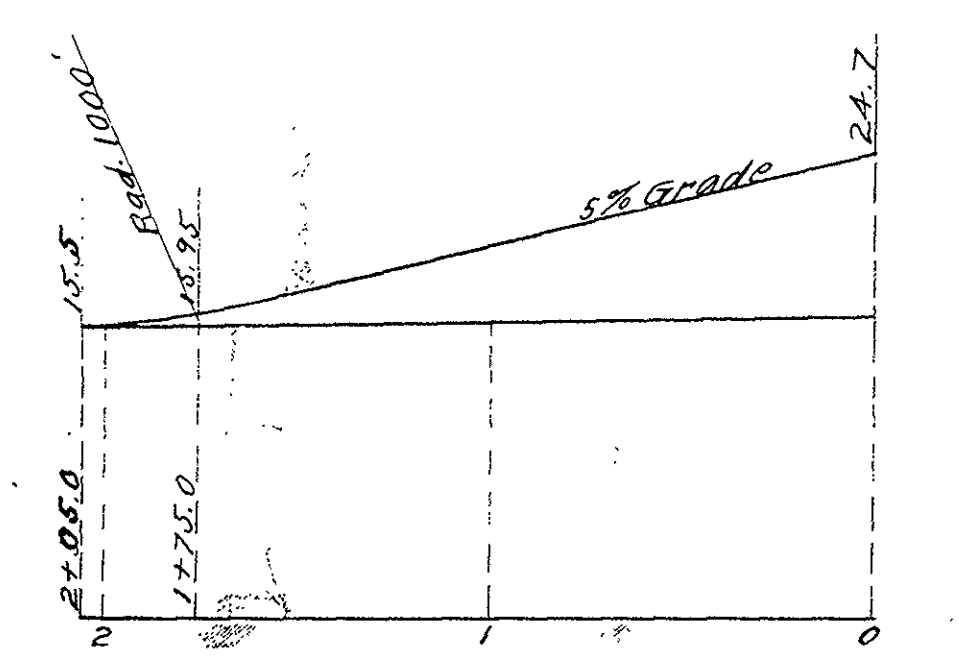
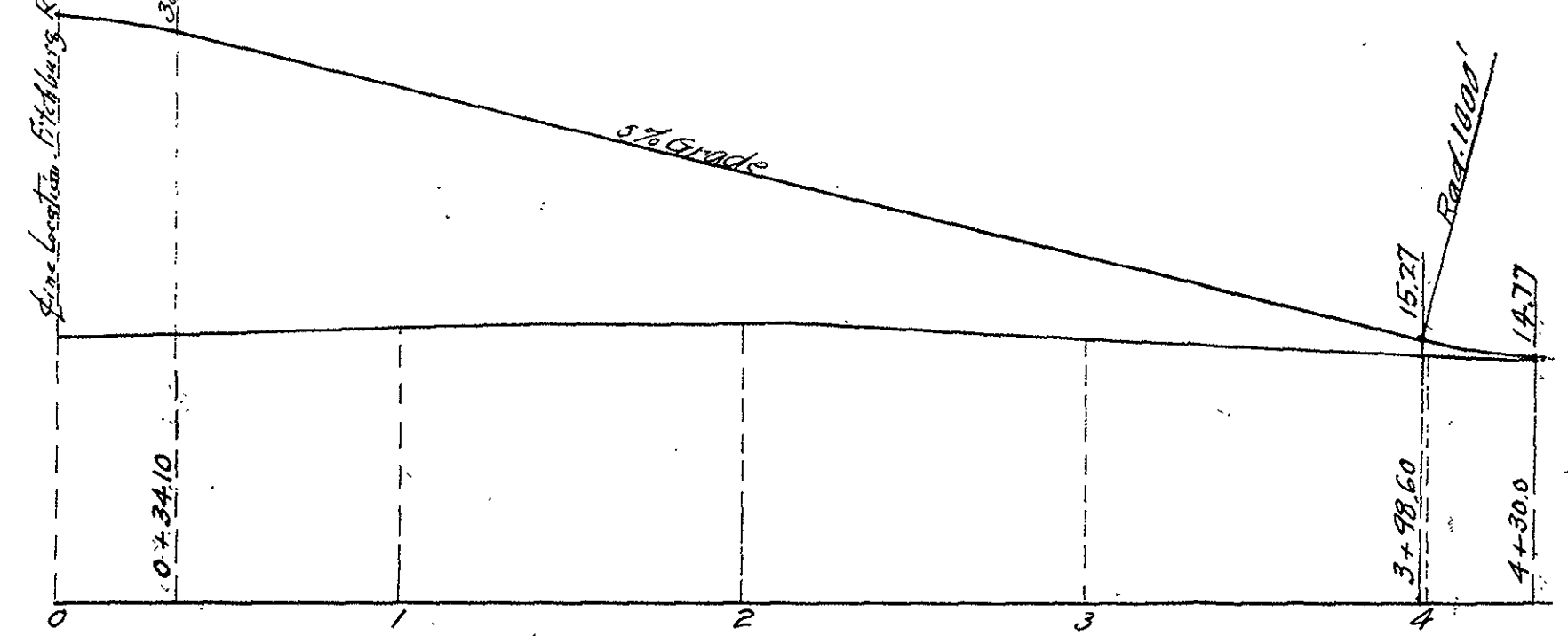
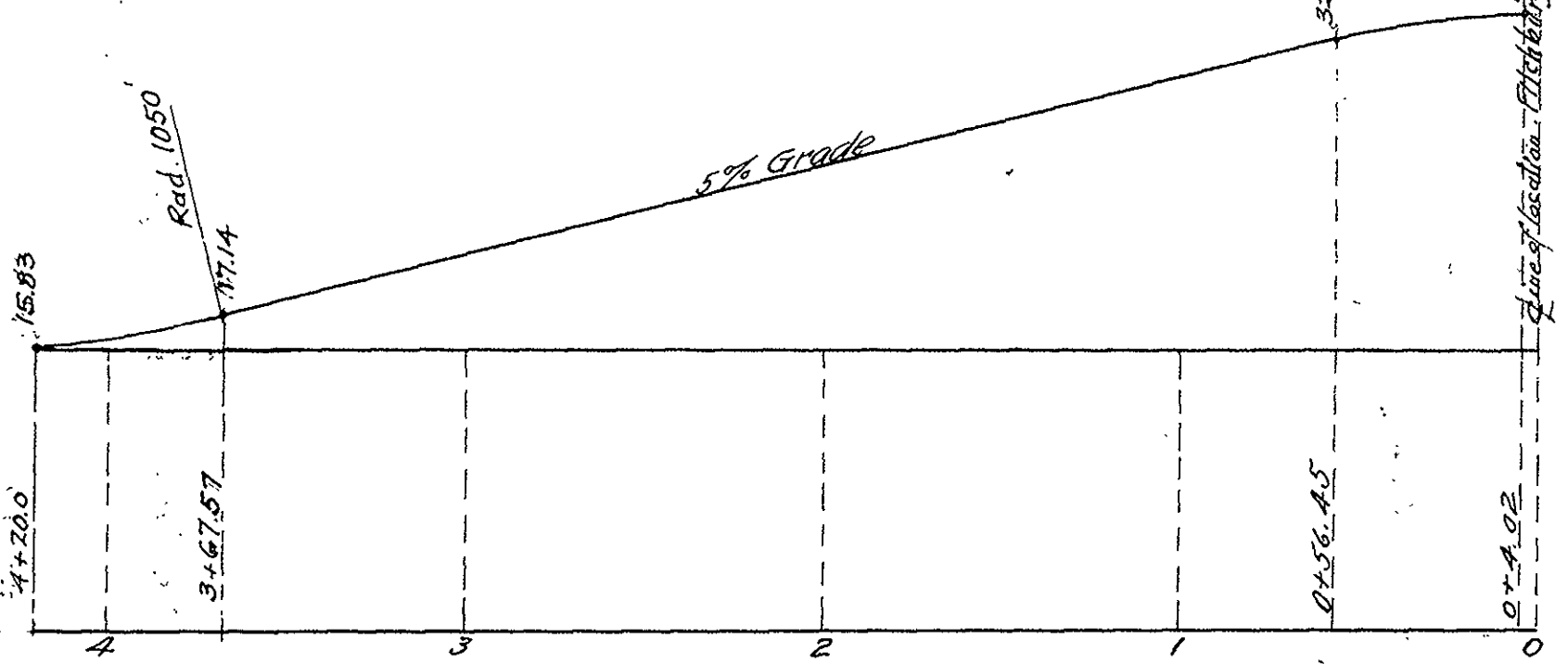
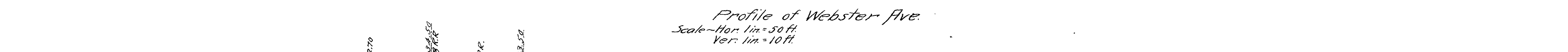
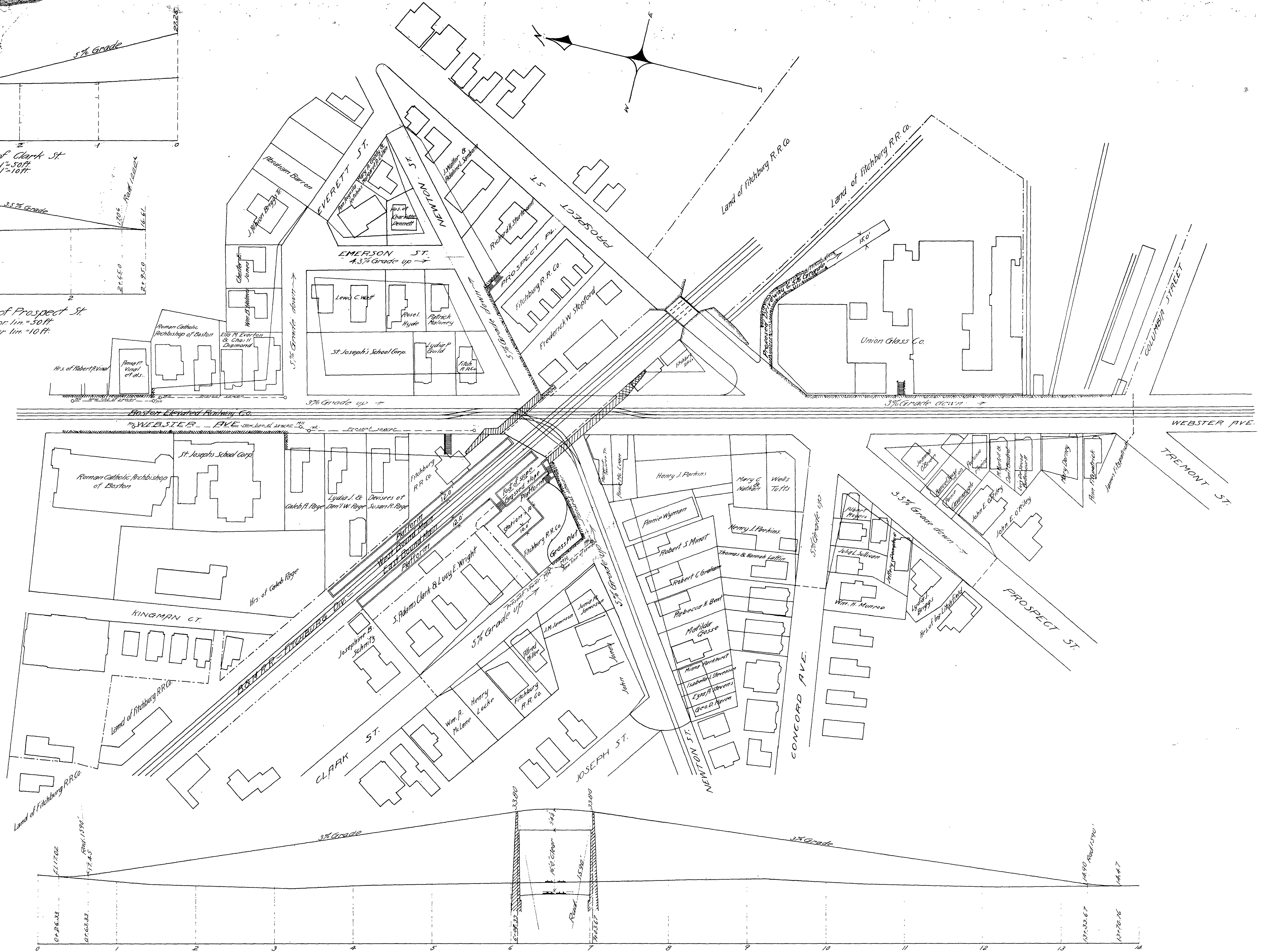
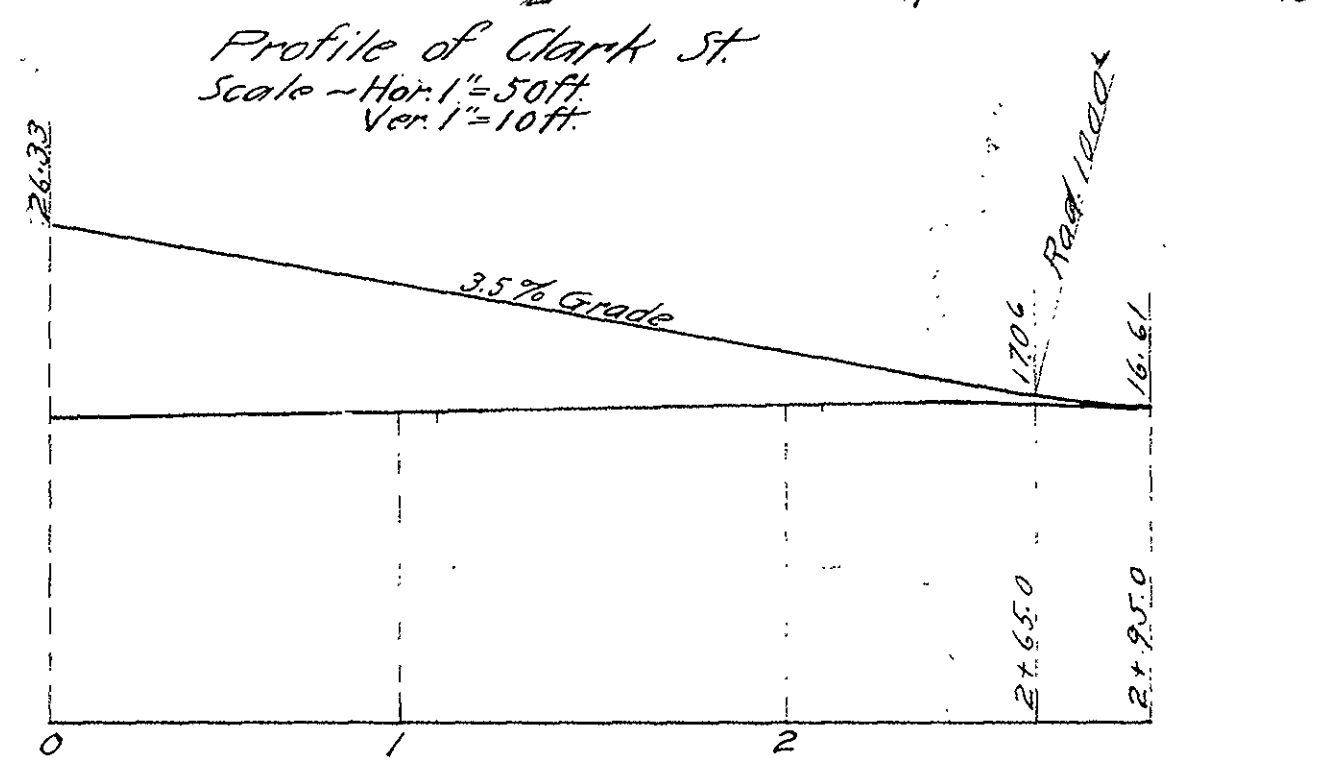
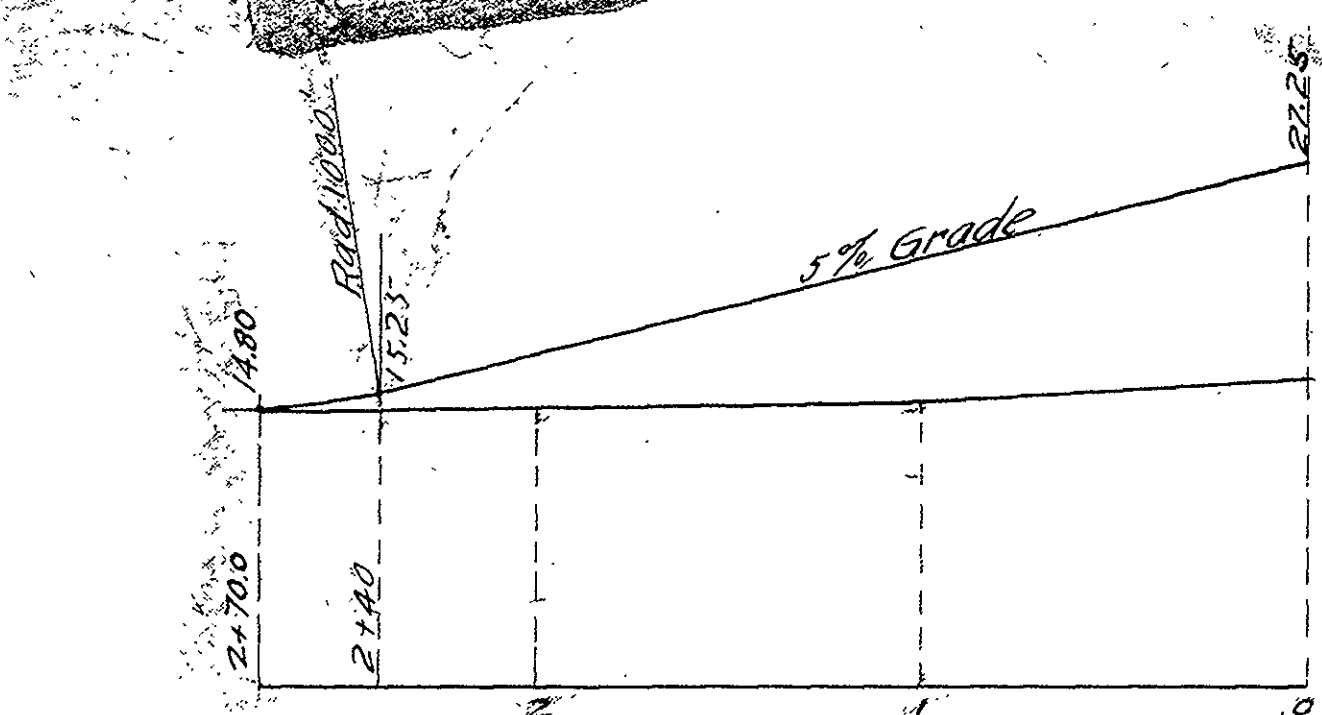


WEBSTER AVE.
CROSSING

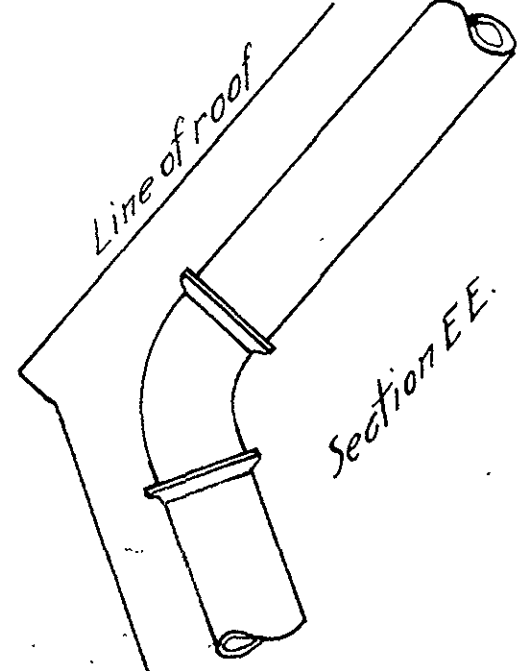
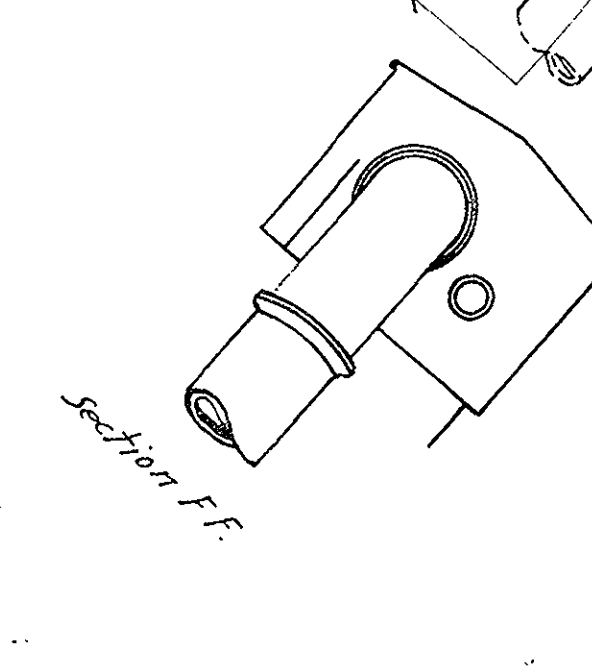
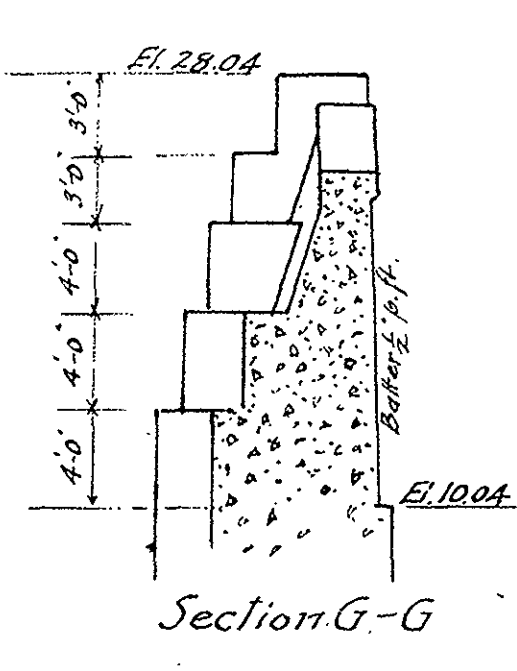
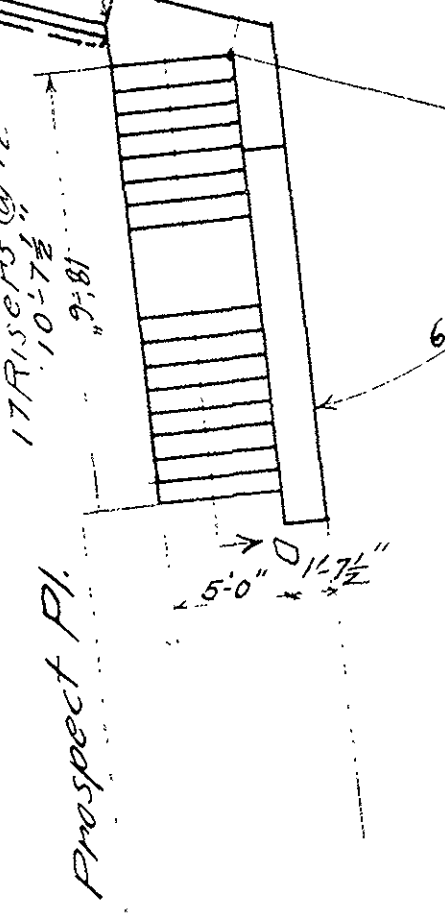
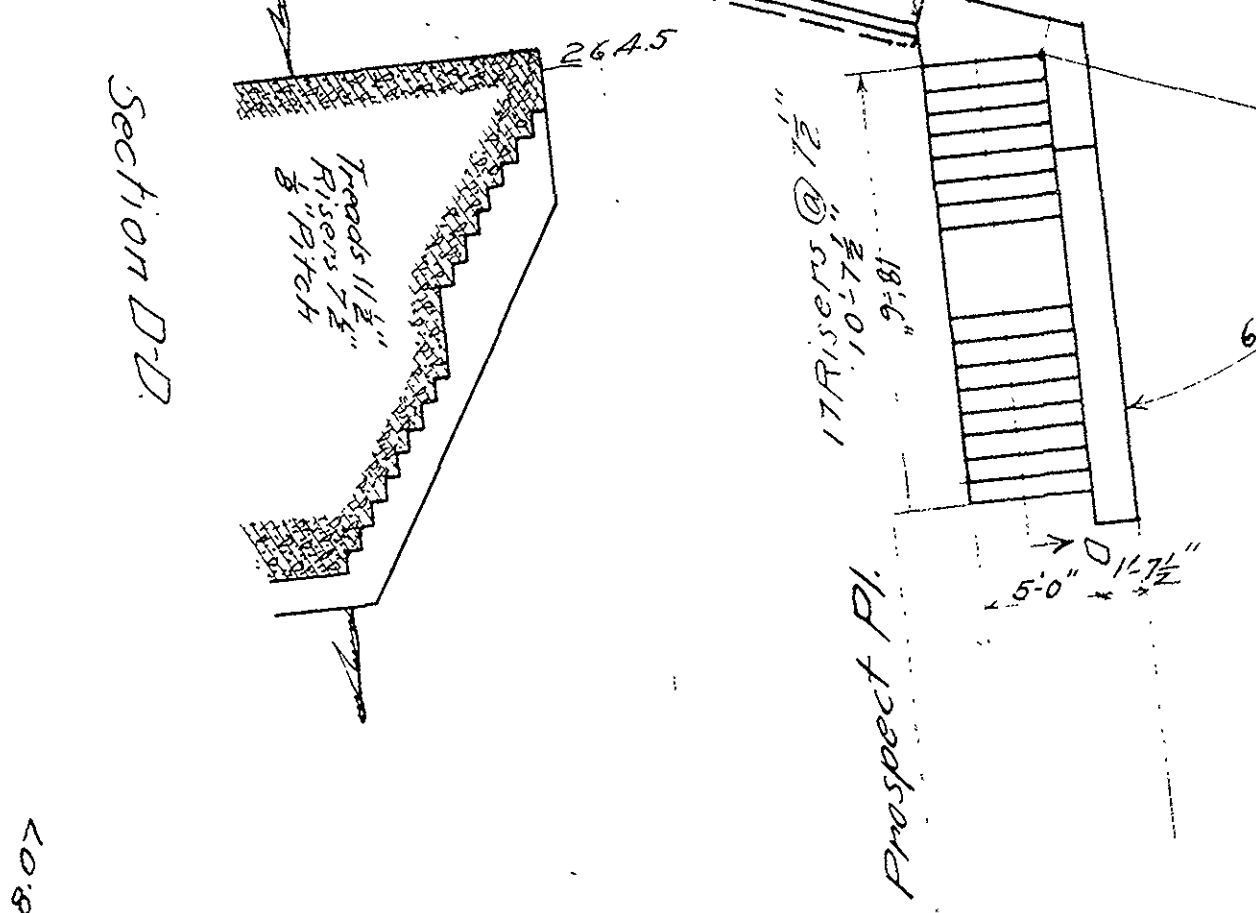
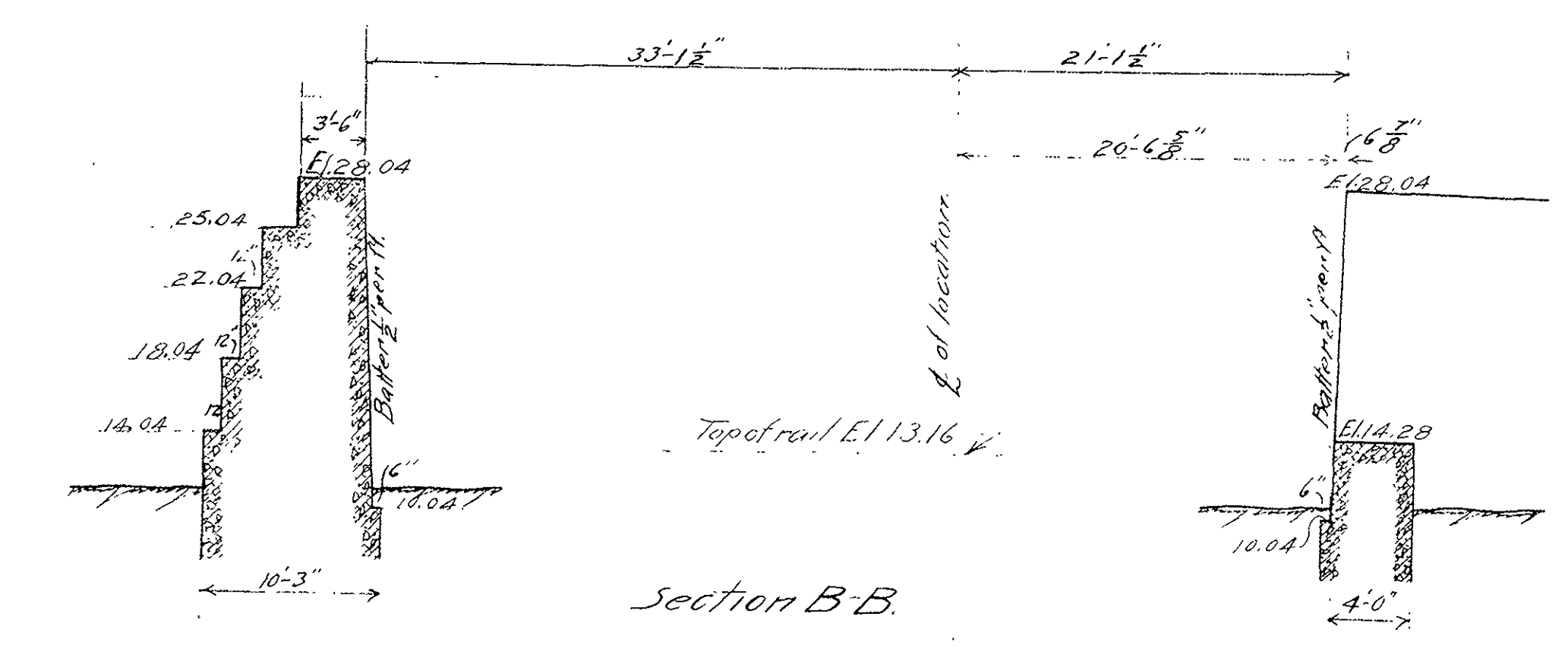
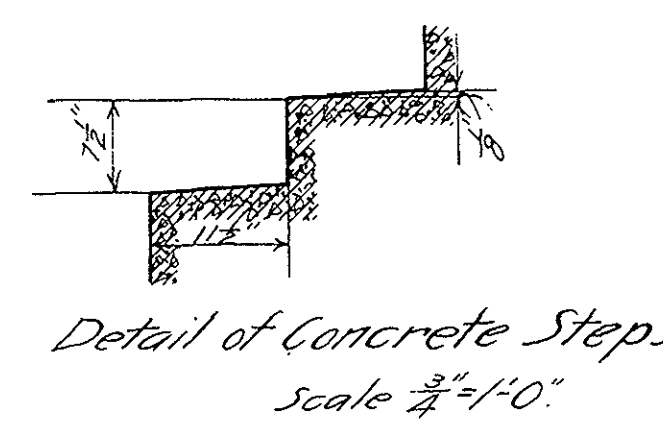
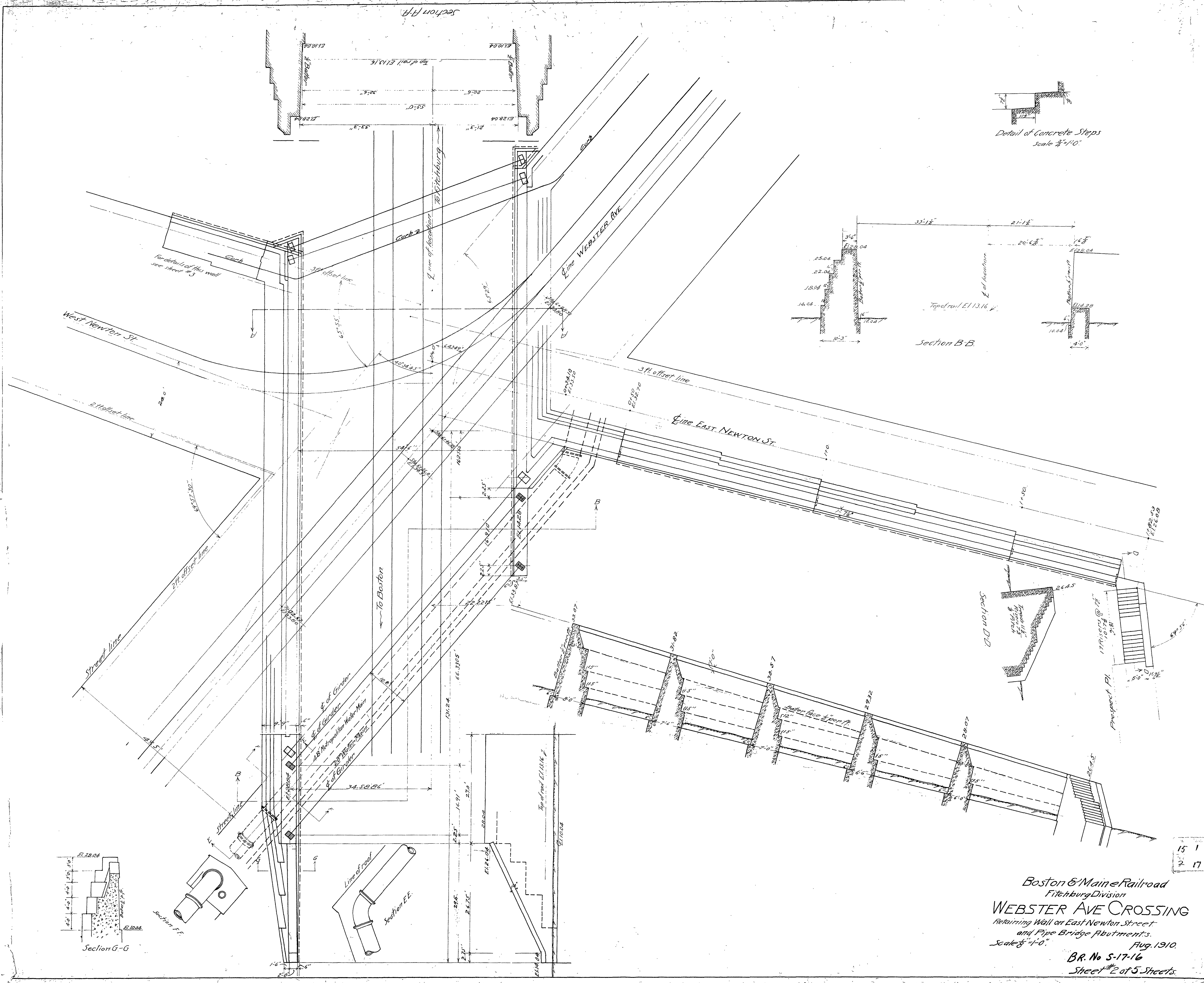
Date	15	1
Scale	2	3

BR. No. S-17-16 Scale 20' = 1"





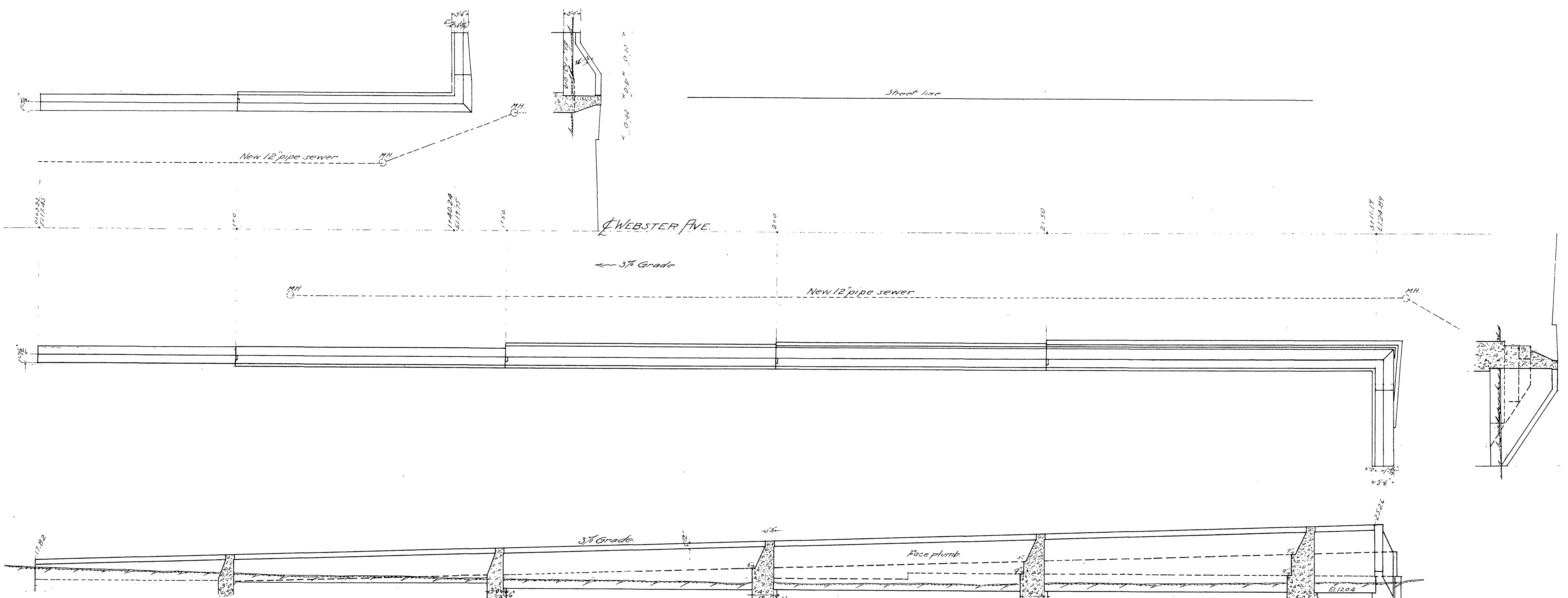
Boston & Maine Railroad
Fitchburg Division
WEBSTER AVE CROSSING
General Plan
Scale 1" = 50'-0"
Aug 1910.



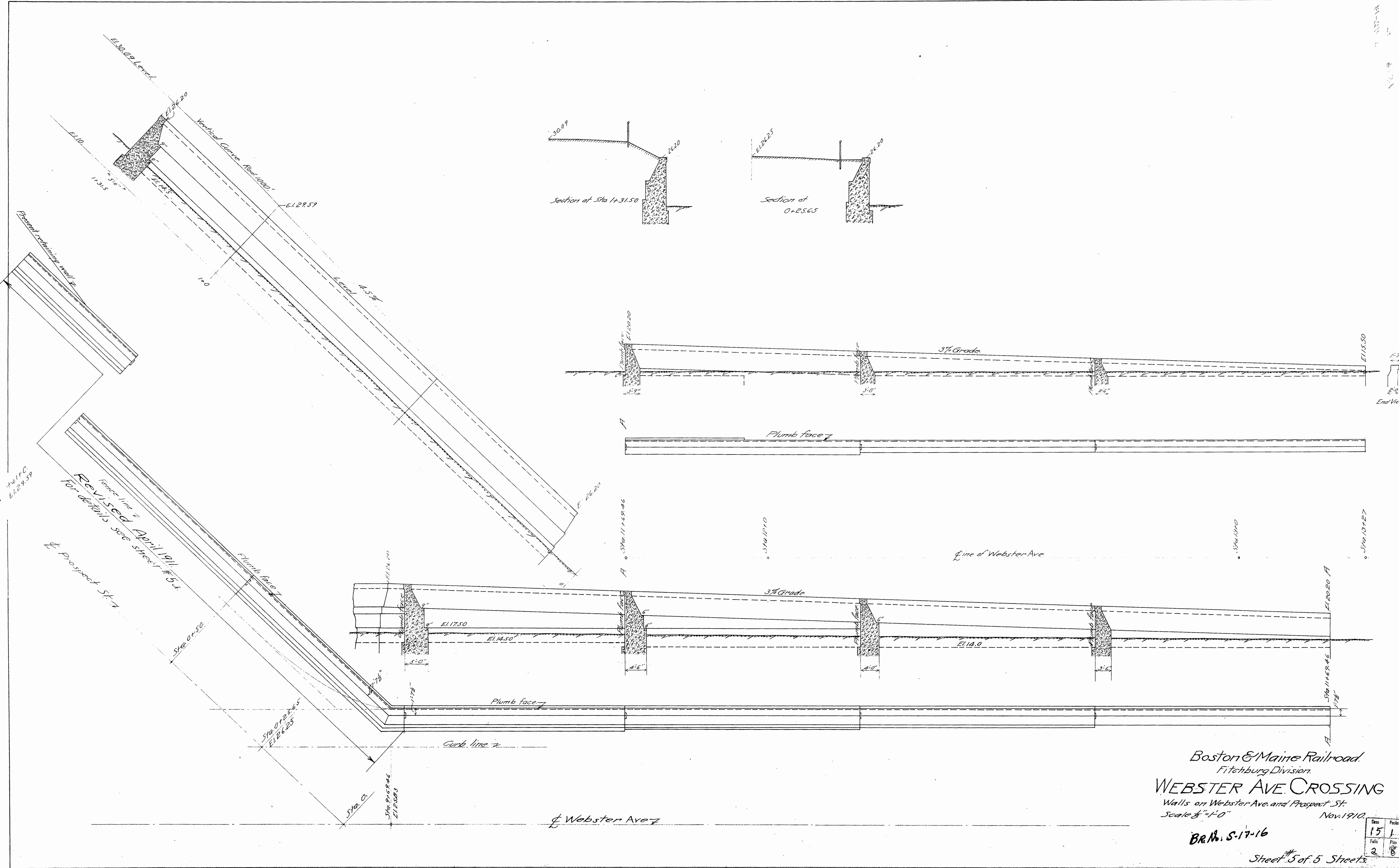
Boston & Maine Railroad
 Fitchburg Division
WEBSTER AVE CROSSING
 Retaining Wall on East Newton Street
 and Pipe Bridge Abutments.
 Scale 8"=1'-0"
 Aug. 1910.
 B.R. No S-17-16
 Sheet #2 of 5 Sheets.

15 1
 2 17



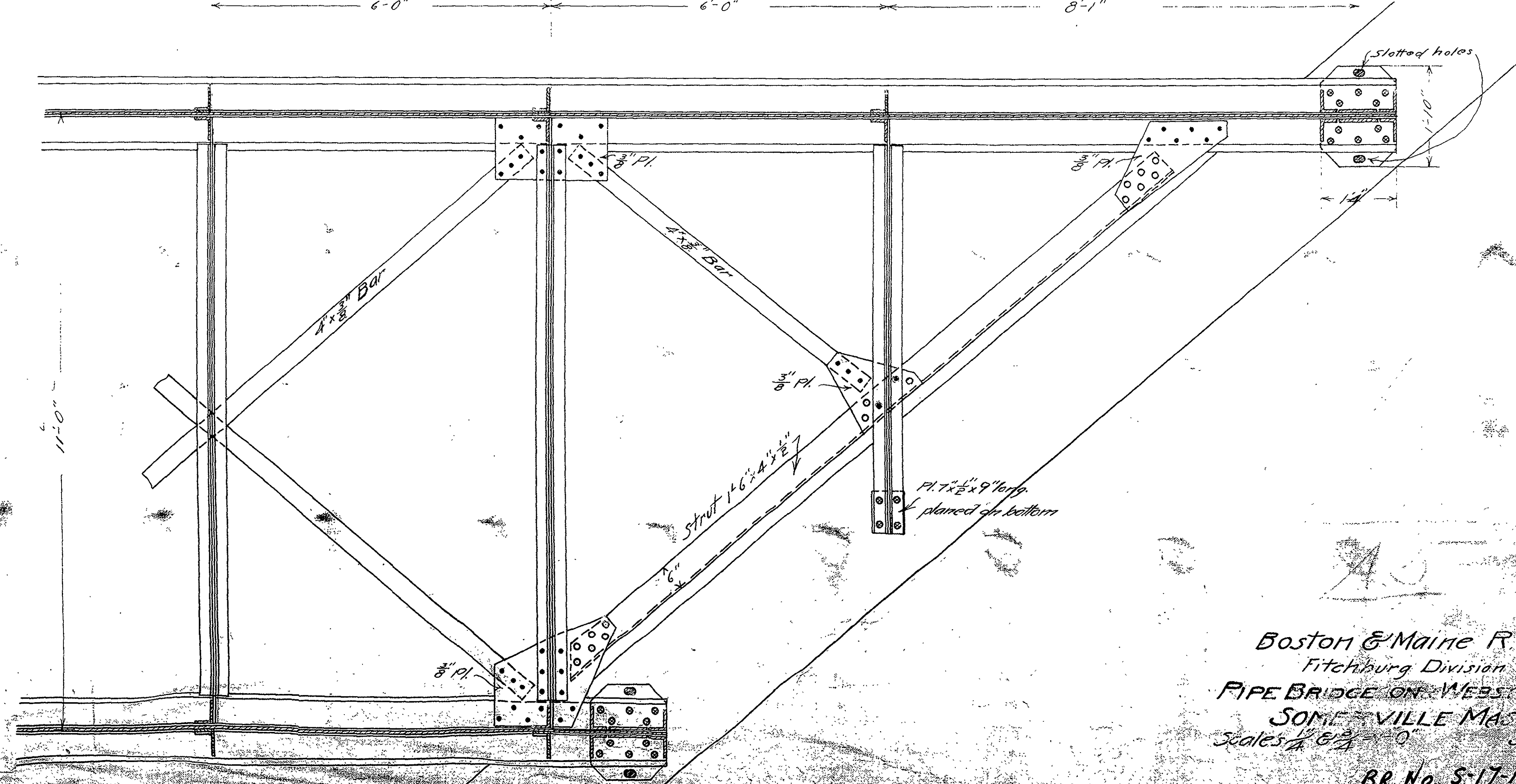
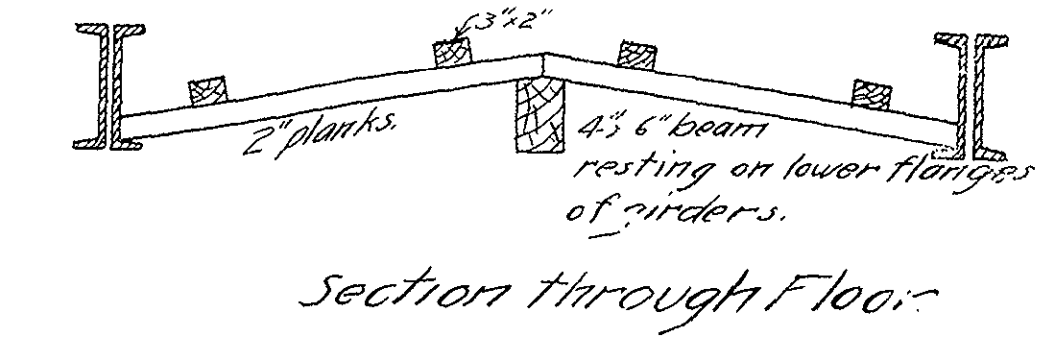
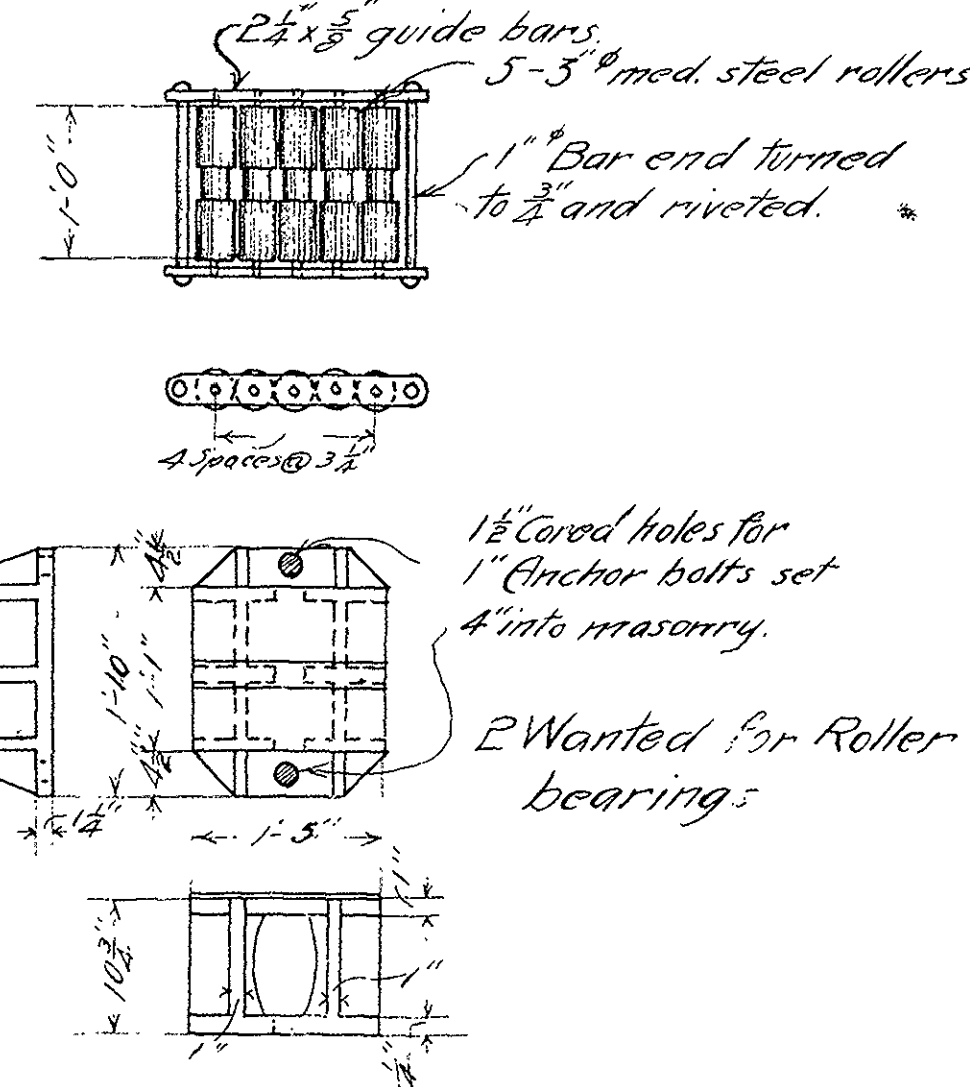
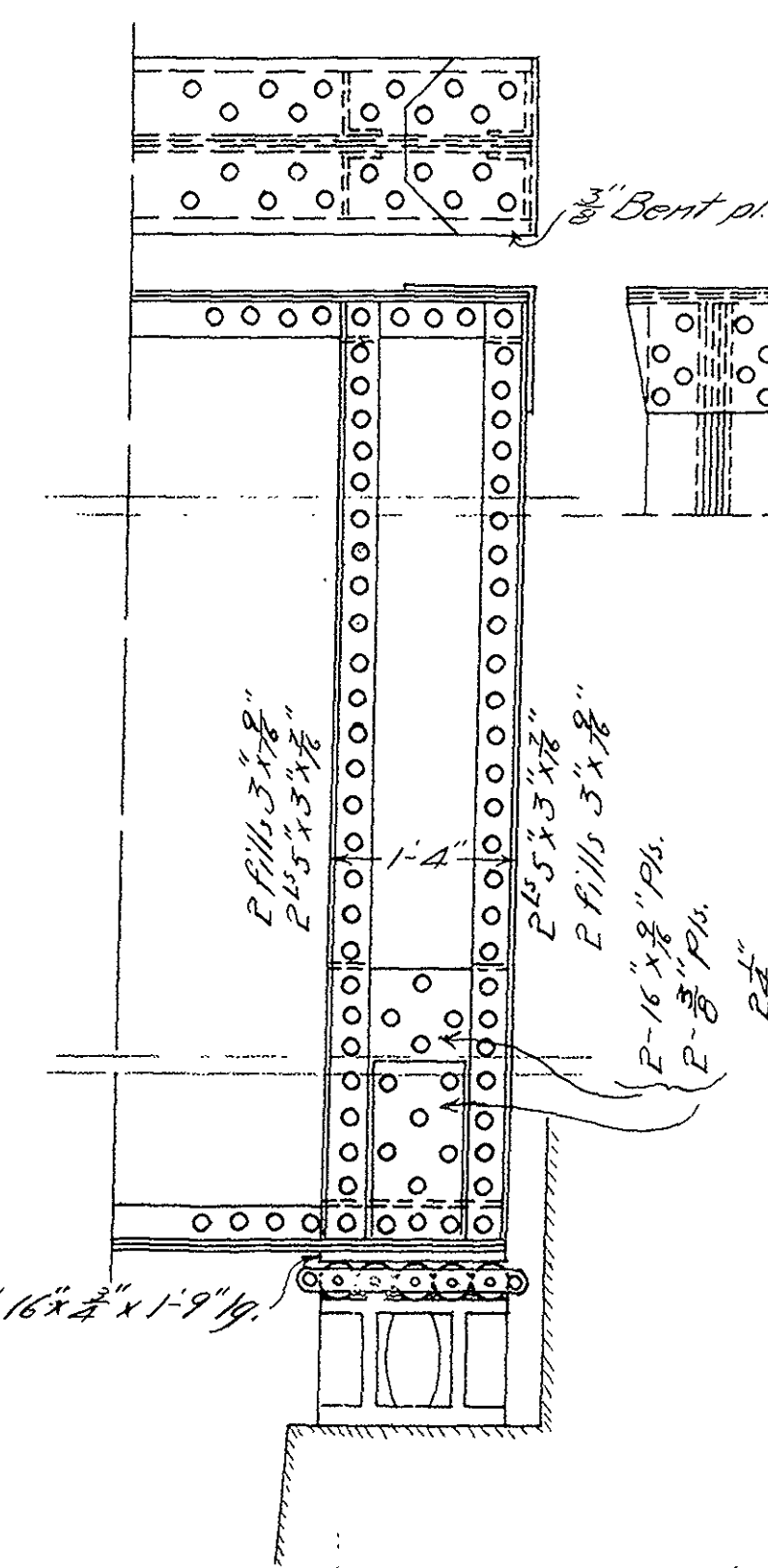
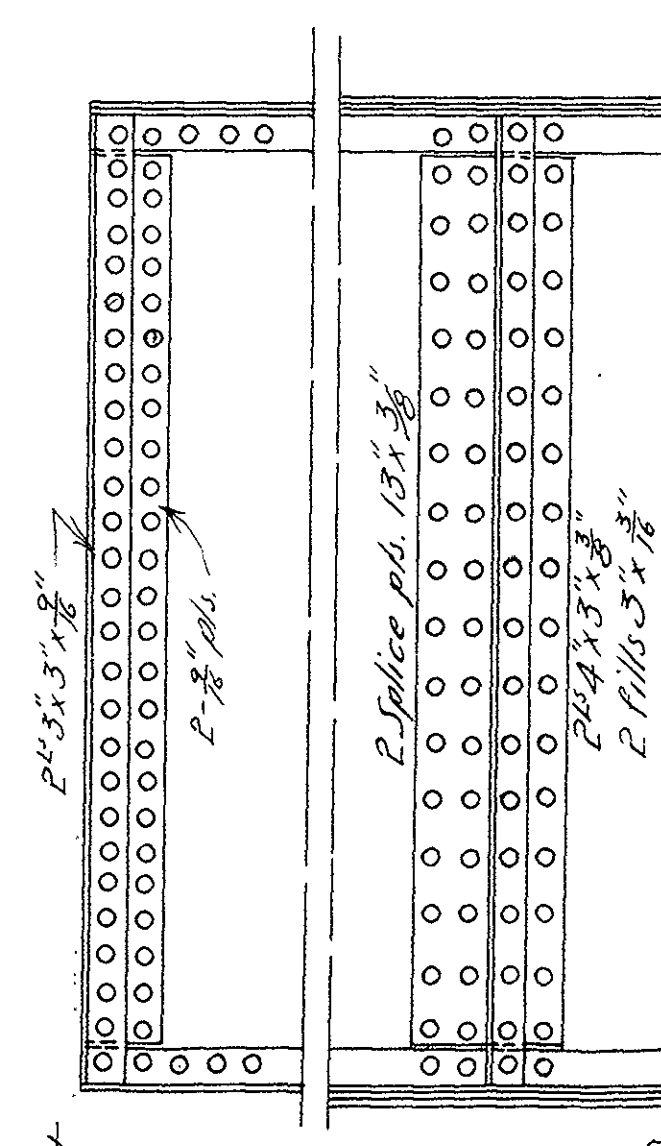
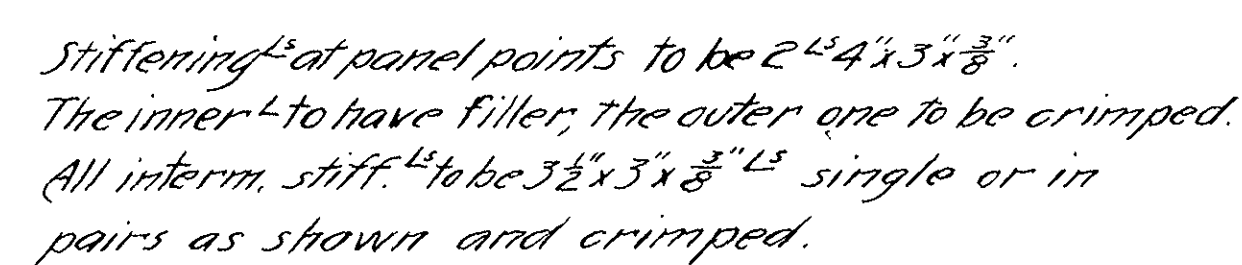
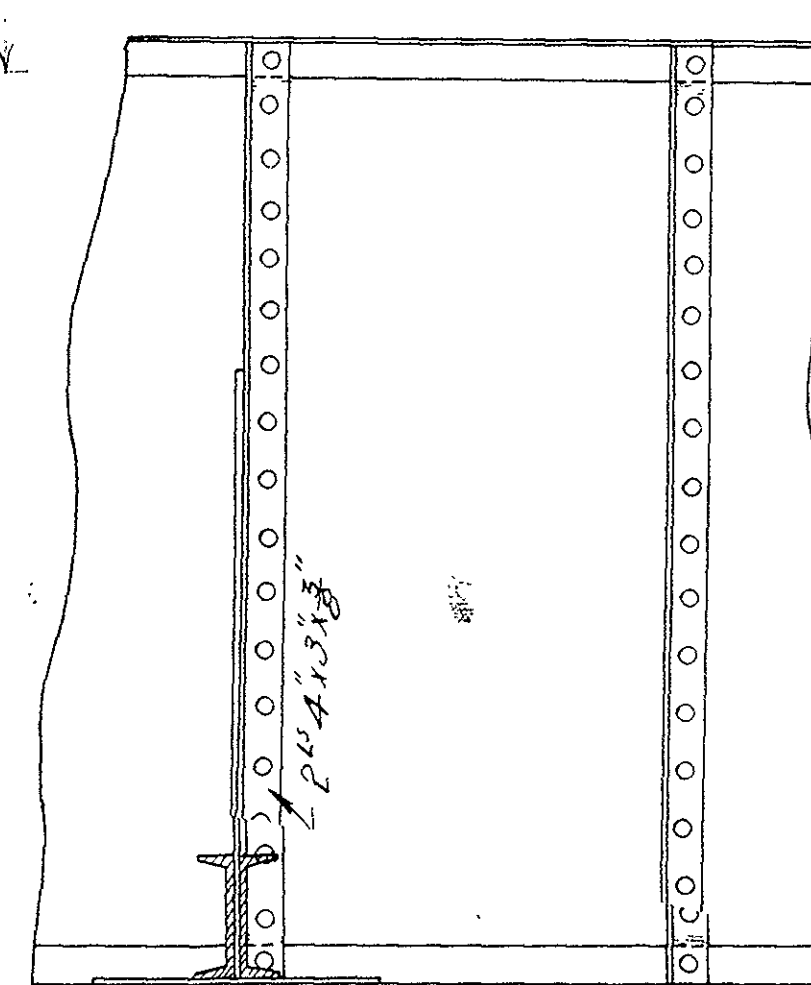


BR. No. S-17-16
Sheet #4 of 5 Sheets.

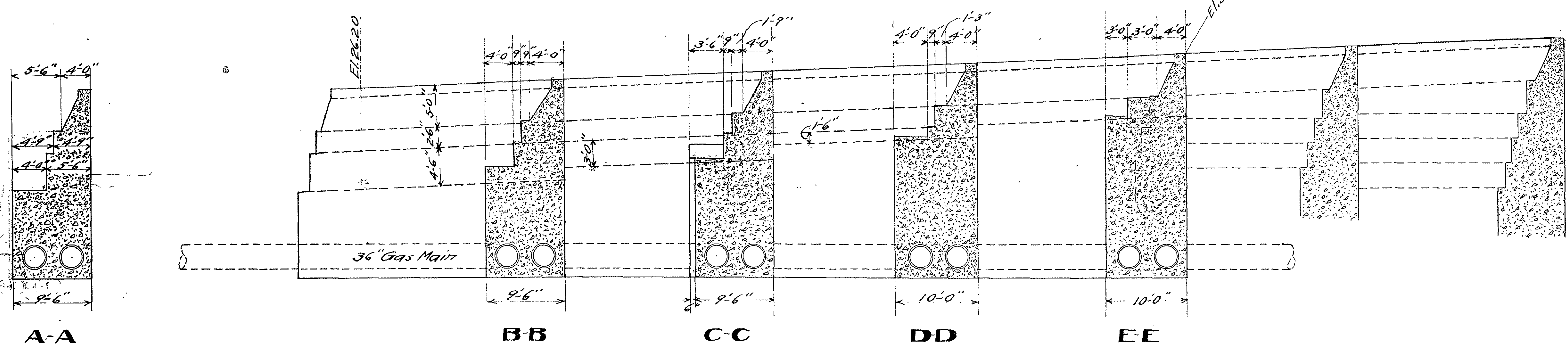
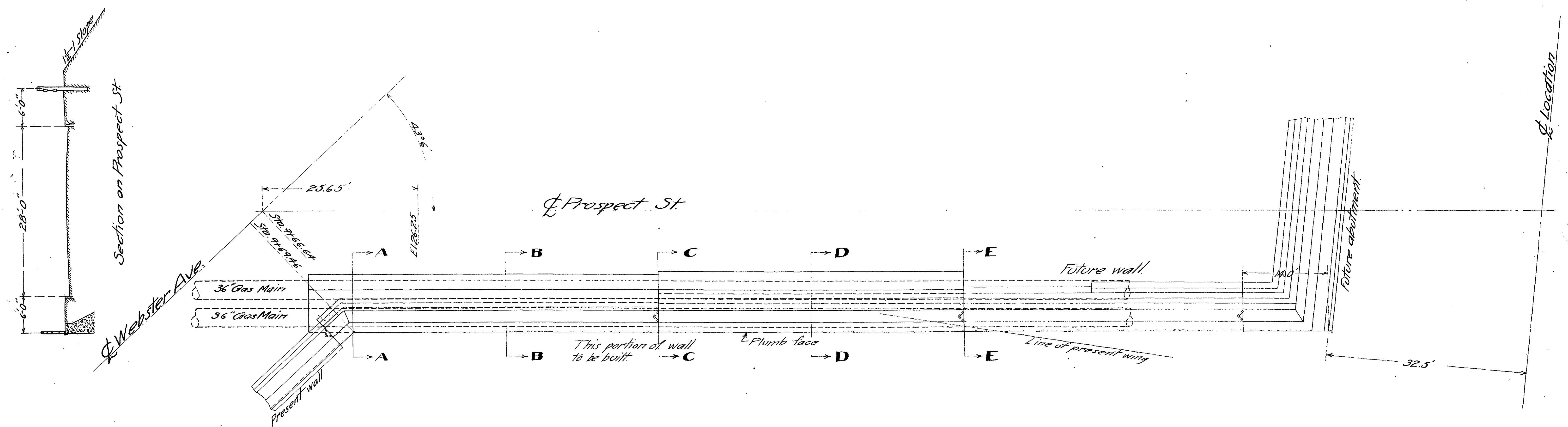


Boston & Maine Railroad.
Fitchburg Division.
WEBSTER AVE CROSSING
Walls on Webster Ave. and Prospect St.
Scale 8"=1'-0"
Nov. 1910
BRM. S-17-16
Sheet #5 of 5 Sheets

Date	15	1
File	2	8



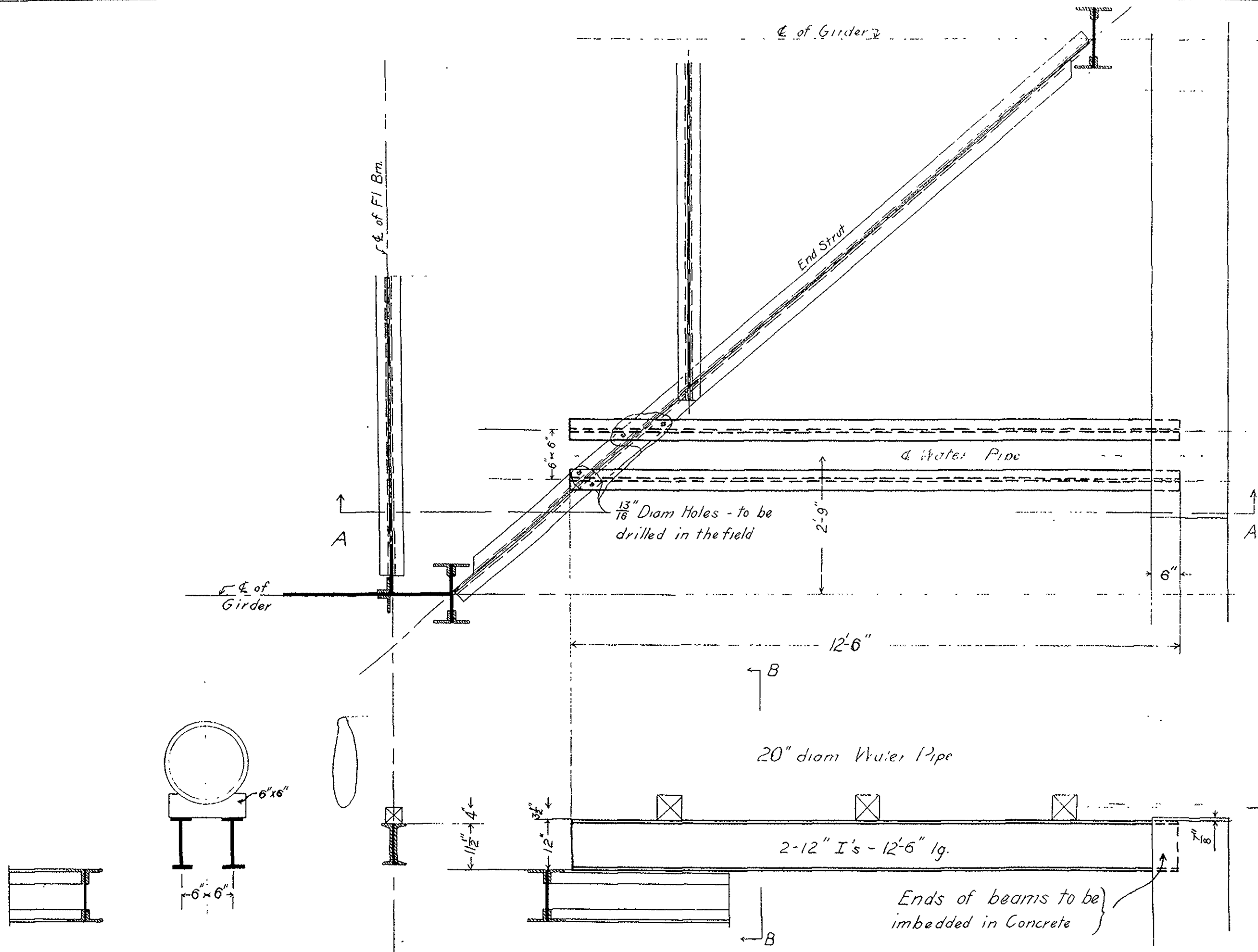
Boston & Maine R.R.
Fitchburg Division
PIPE BRIDGE ON WEBSTER AVE
SOMERVILLE MASS
Scales 1" = 60' July 1910
BR. No. S-17-16



Boston & Maine Railroad
 Fitchburg Division
WEBSTER AVE CROSSING
 Wall on Prospect St.
 Scale $\frac{1}{8}'' = 1'-0''$
 April 1911.

BR. No. S-17-16 Sheet #5-a

Case	1
File	5



SECTION B-B

SECTION AA

Boston & Maine R.R.
Third Division Fitchburg R.R.
BRIDGE N° B5 WEBSTER AVE.
Somerville - Mass.

SUPPORT FOR 20" WATER PIPE

Scale $\frac{1}{2}" = 1'$

Correct

Oct. 1911

Approved

E. P. Lane
Structural Engineer

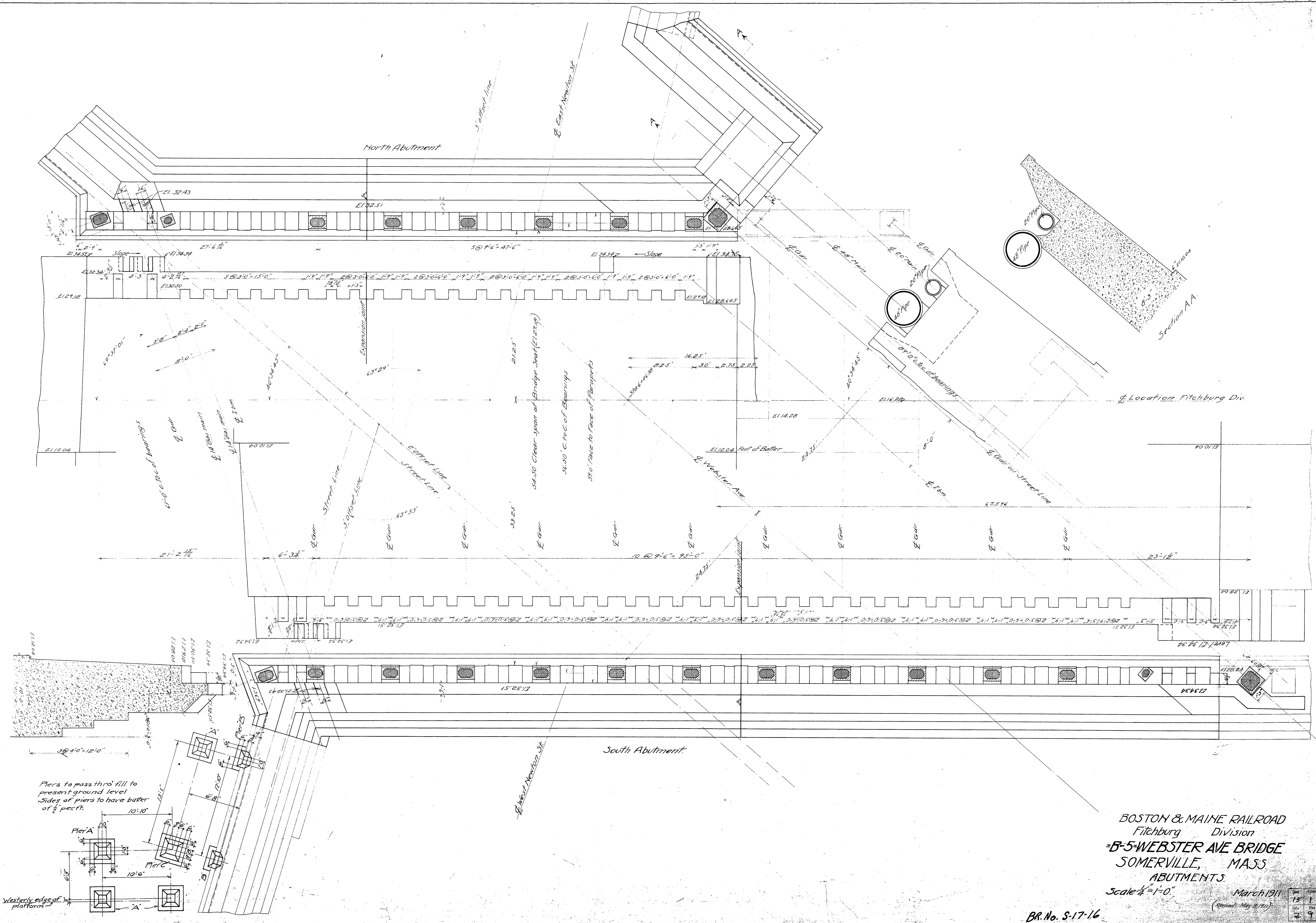
E. P. Lane
Engineer of Structures

S-17-16

15 1

2 14

1222
3-24-12

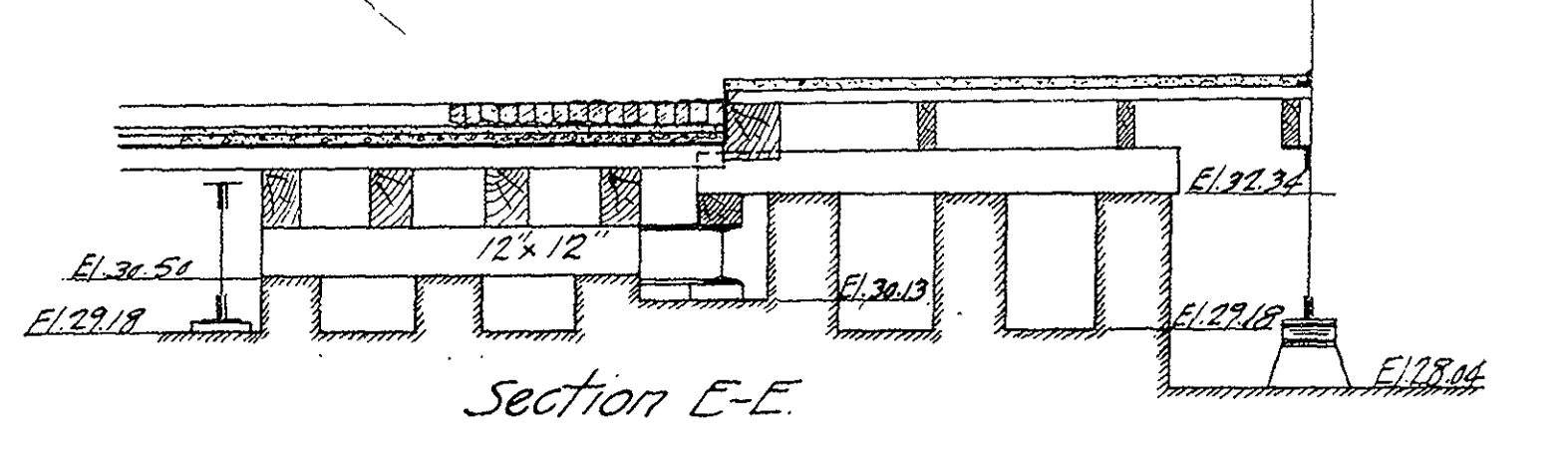
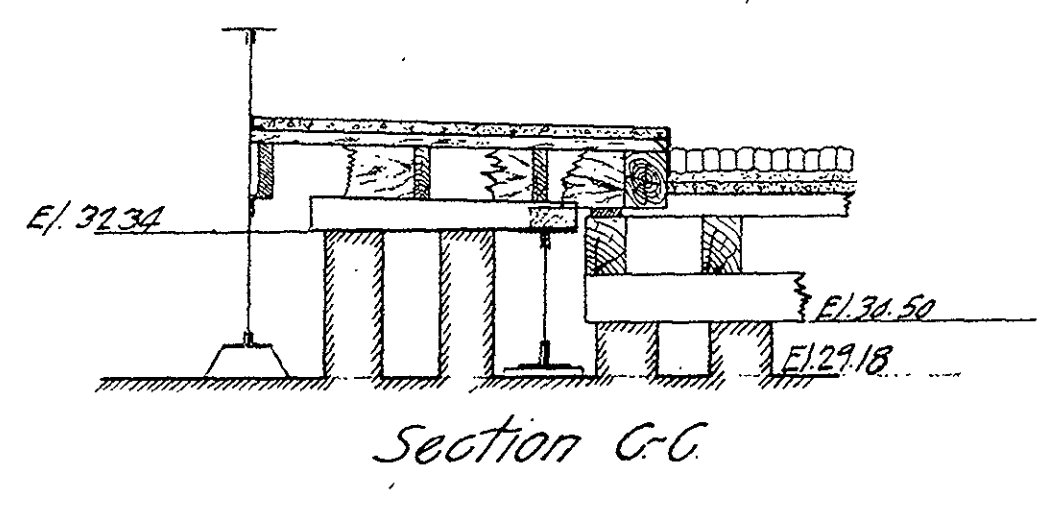
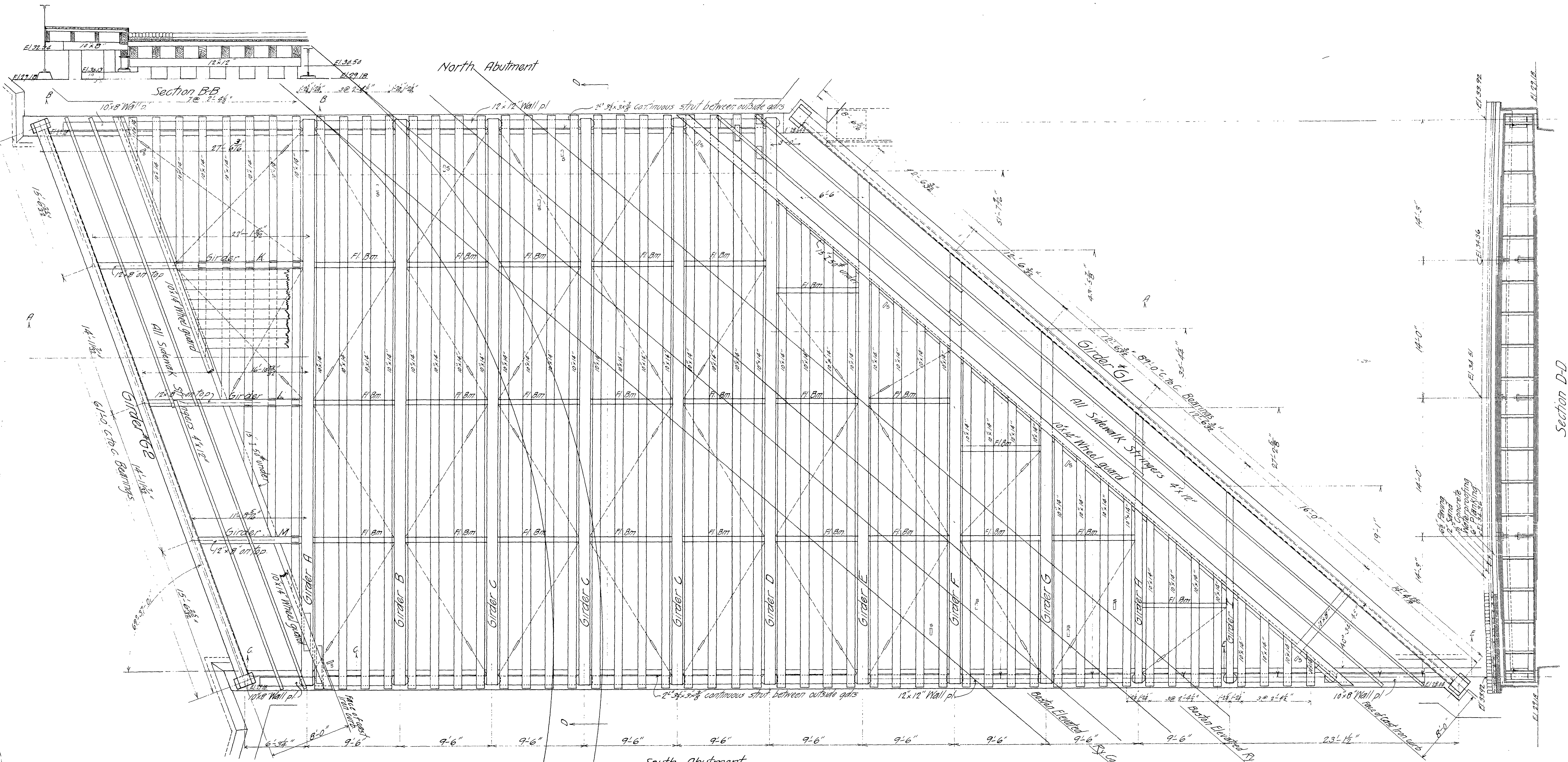
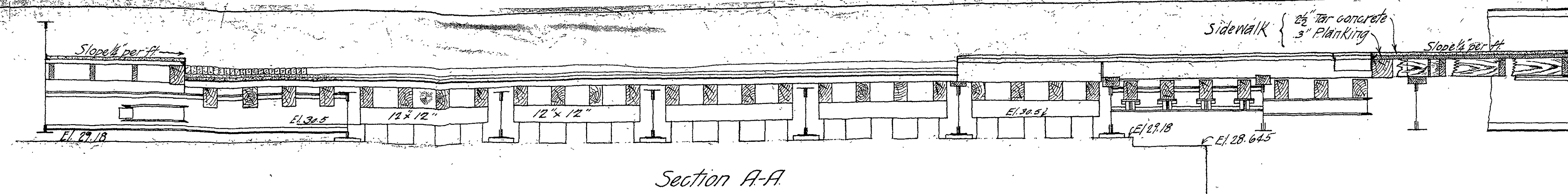


BOSTON & MAINE RAILROAD
 Fitchburg Division
B-5 WEBSTER AVE BRIDGE
 SOMERVILLE, MASS
 ABUTMENTS
 Scale 1/4" = 1'-0"

BR. No. S-17-16

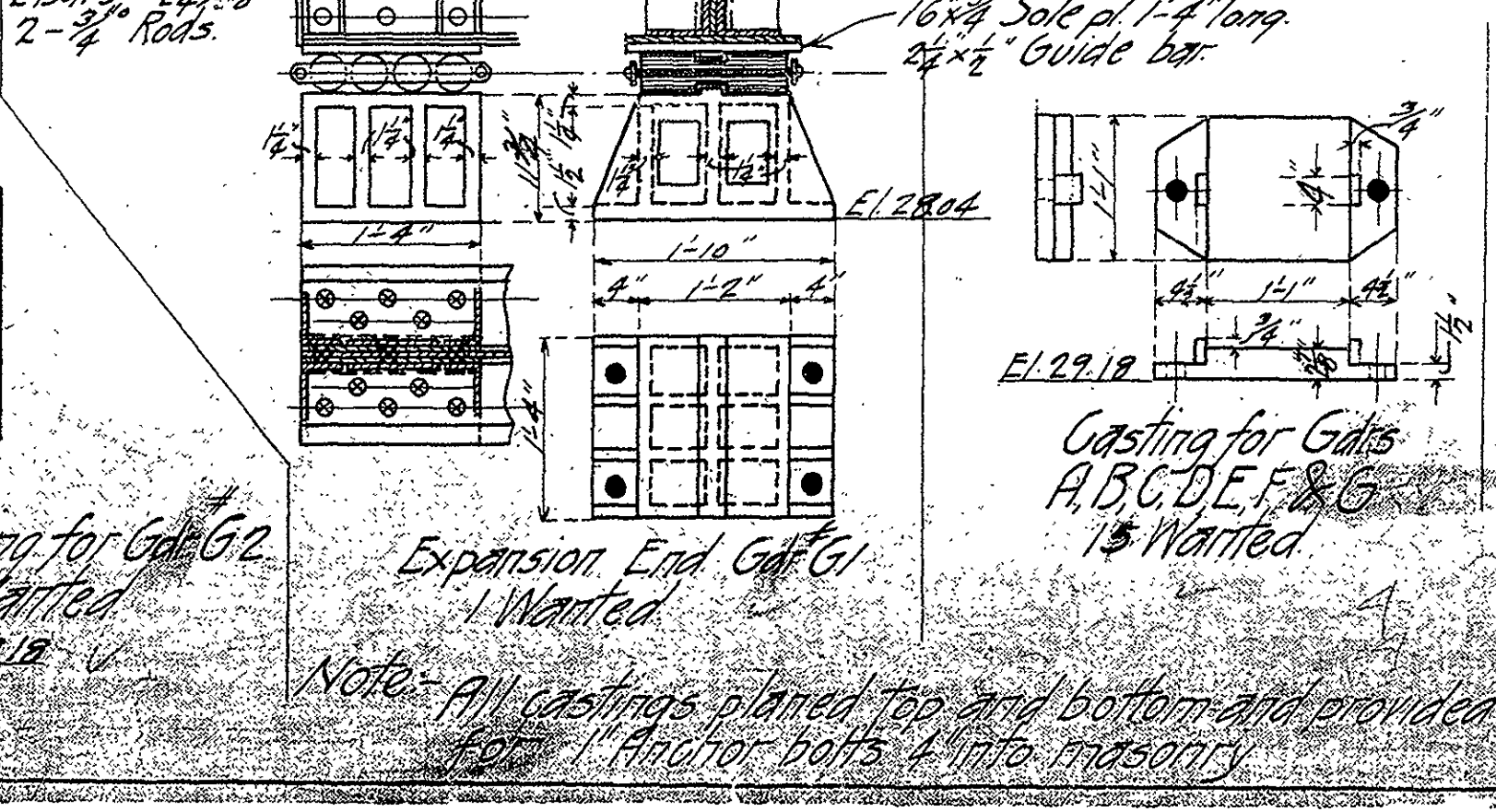
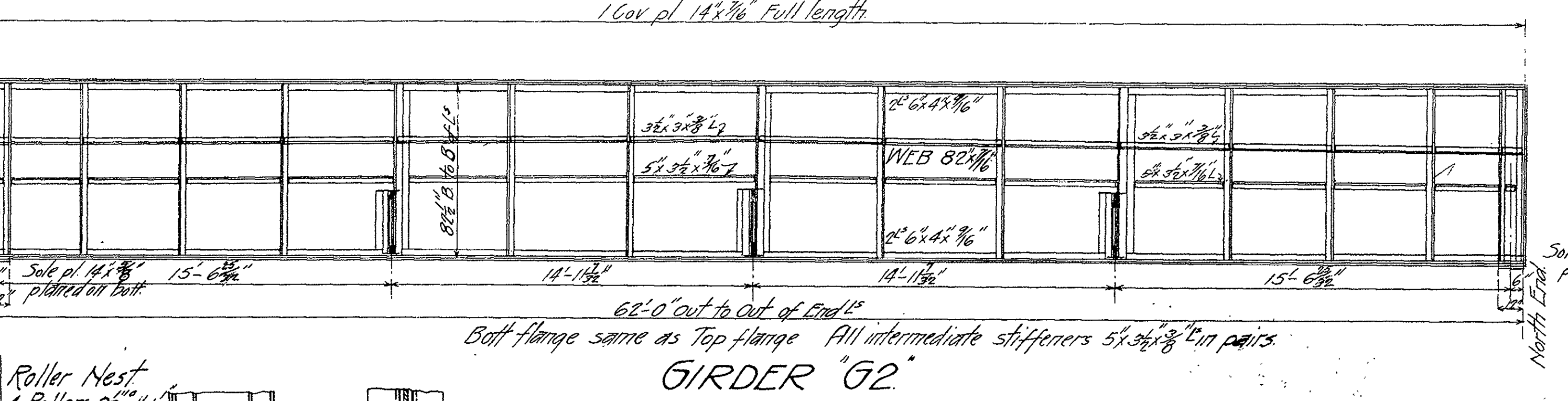
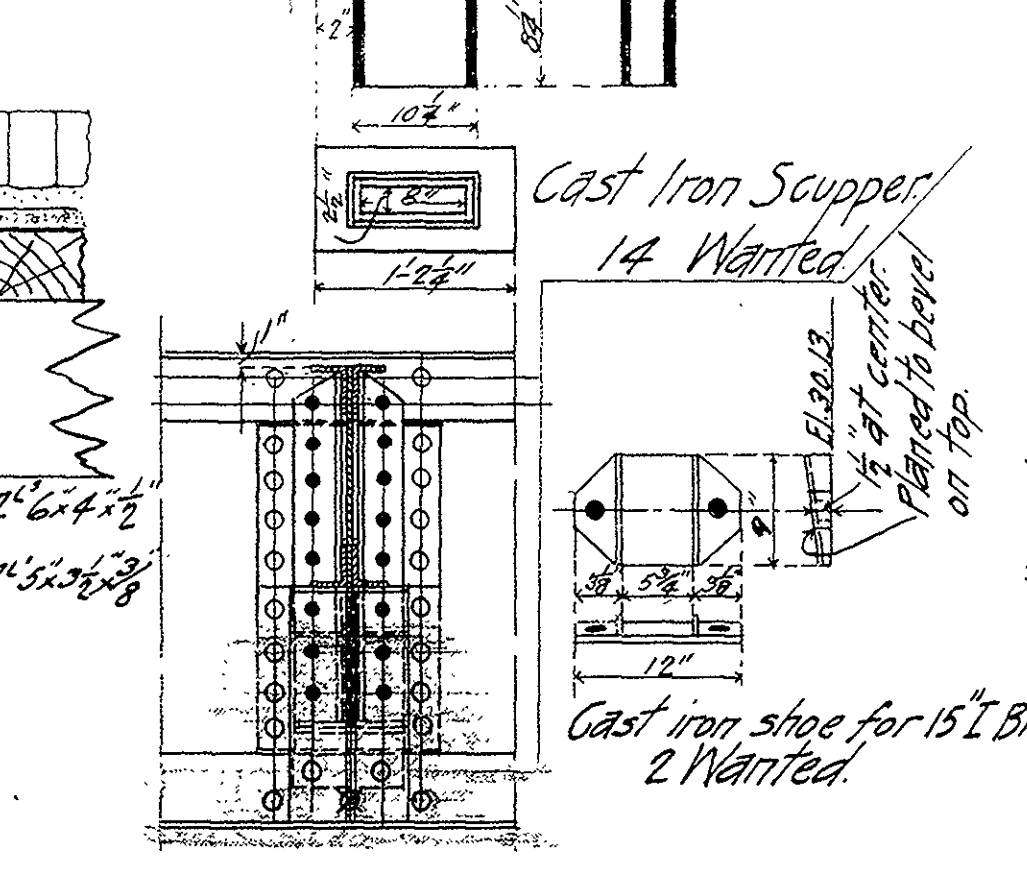
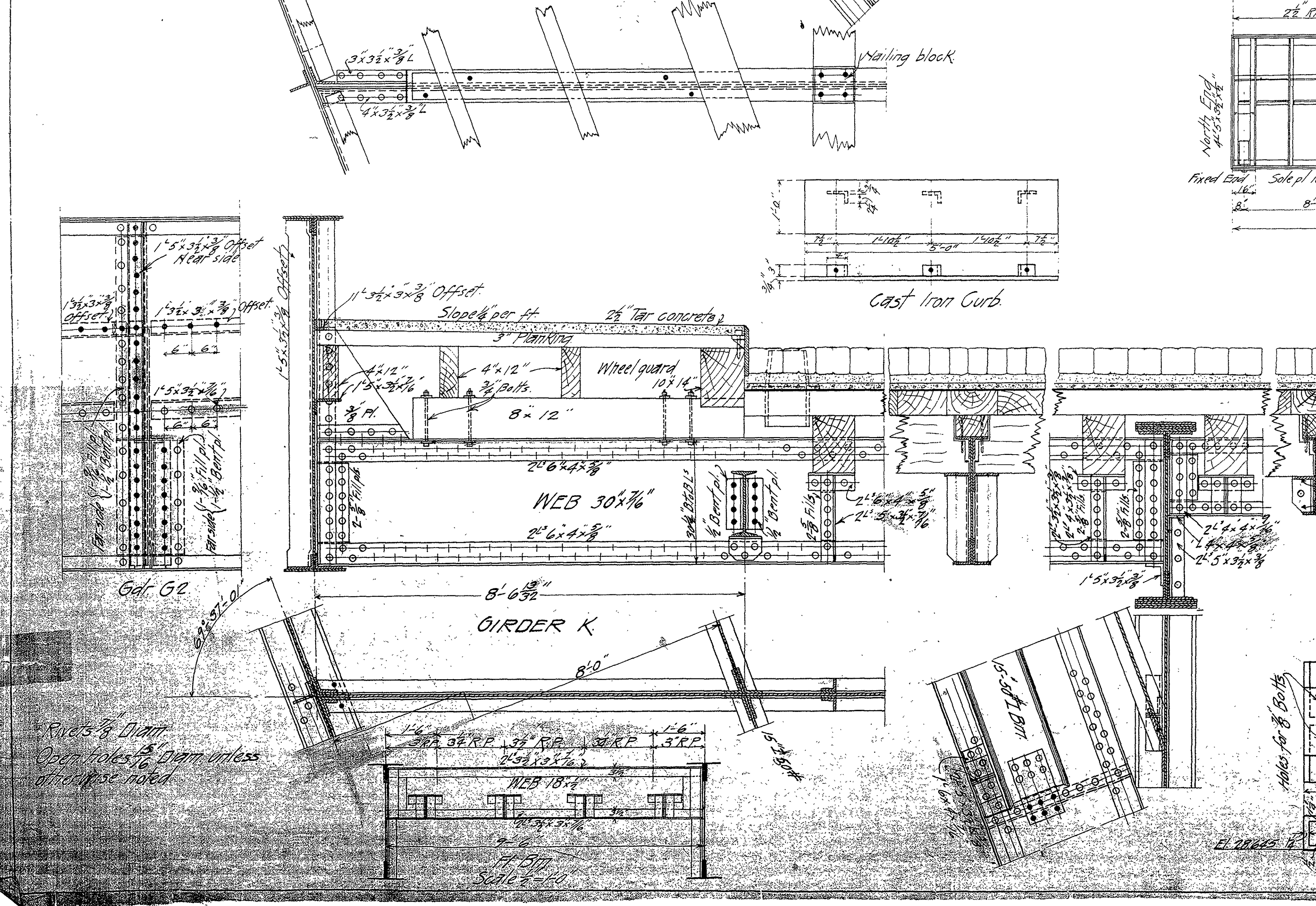
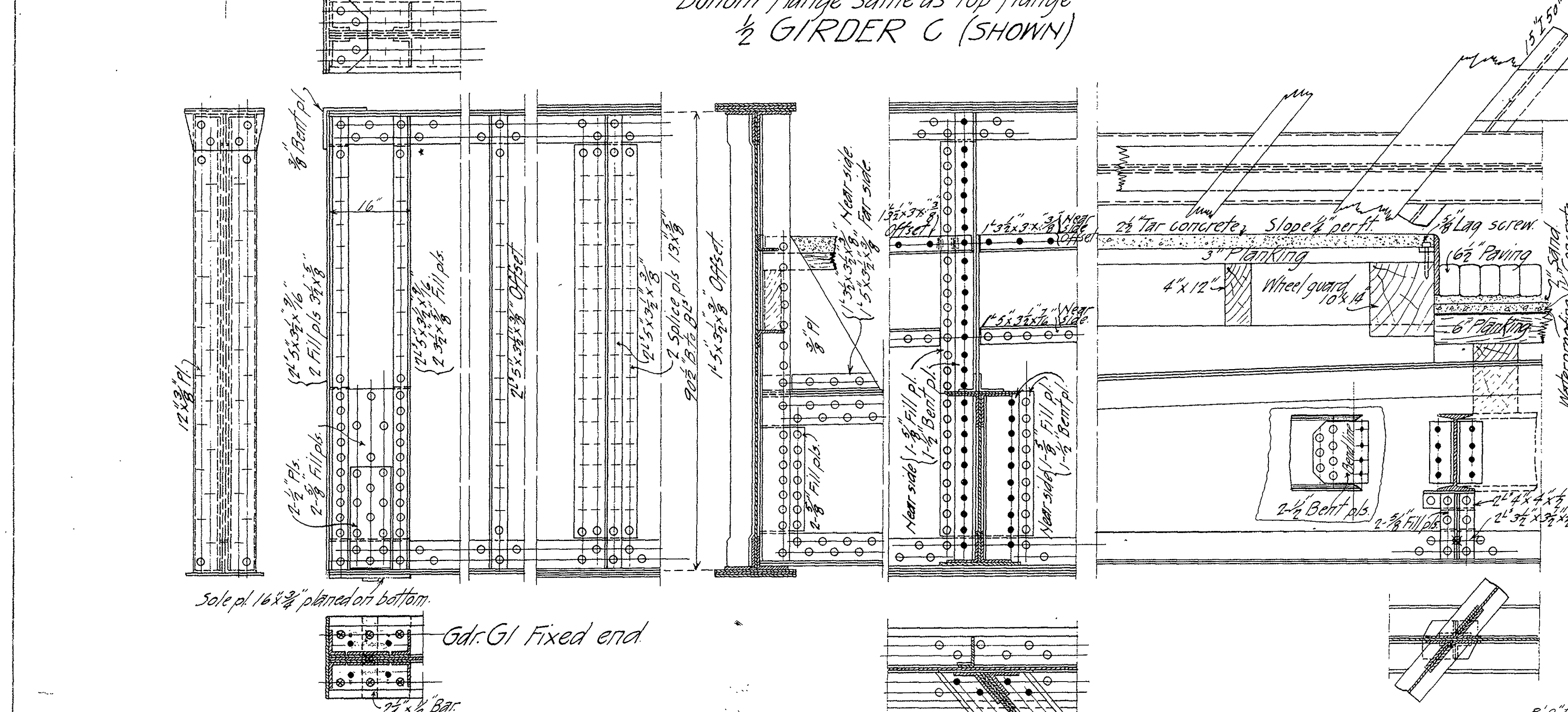
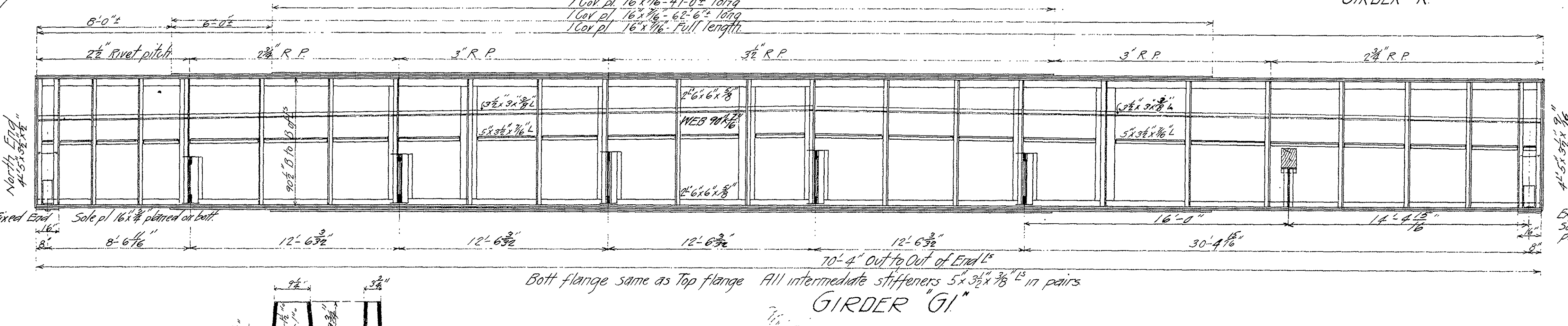
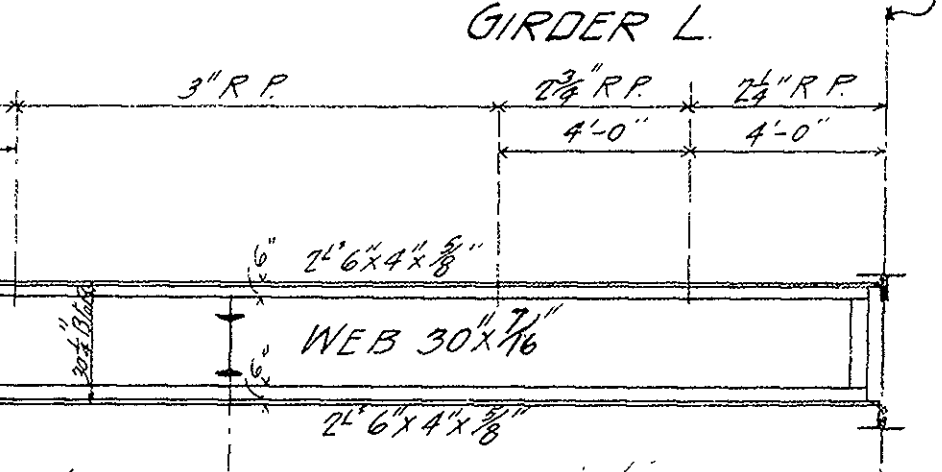
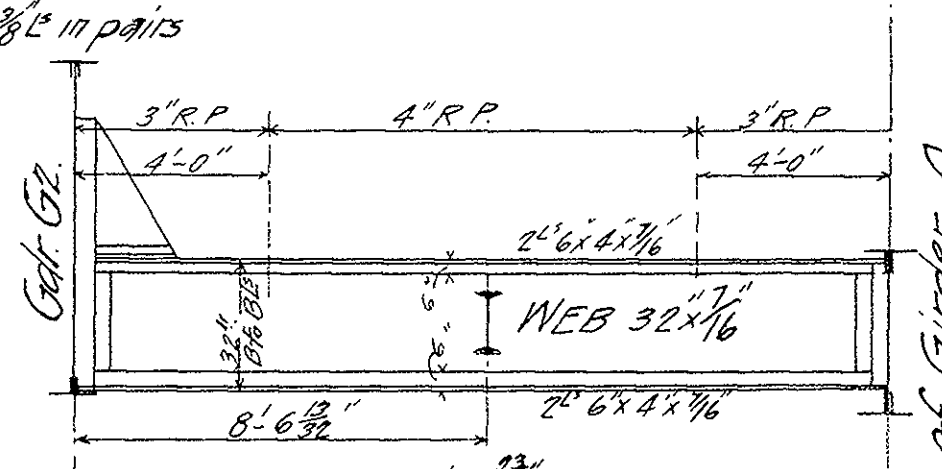
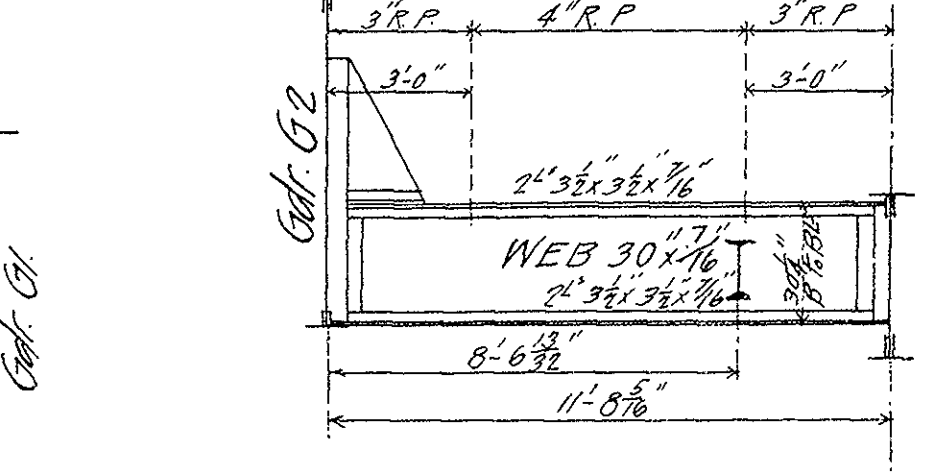
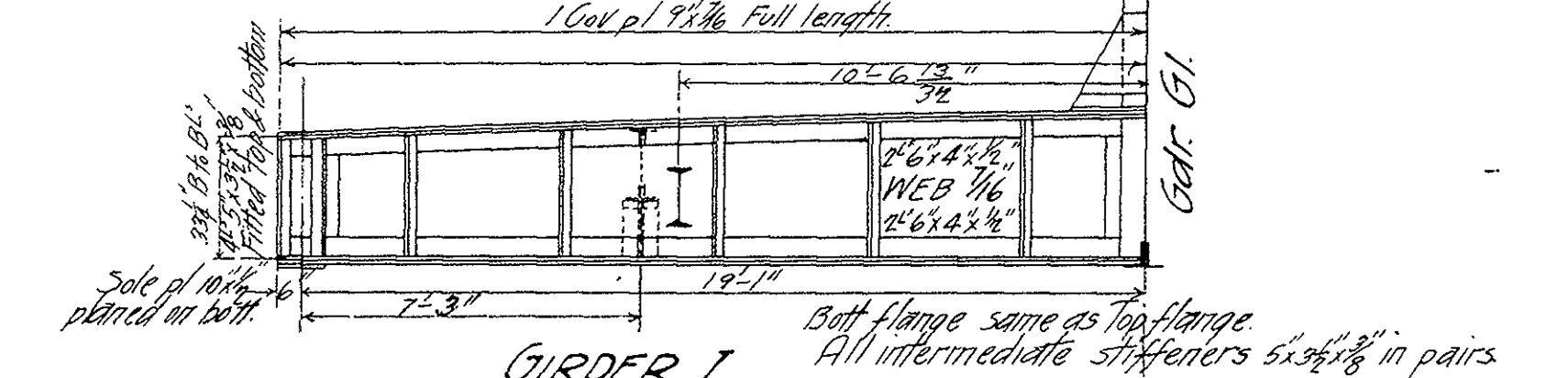
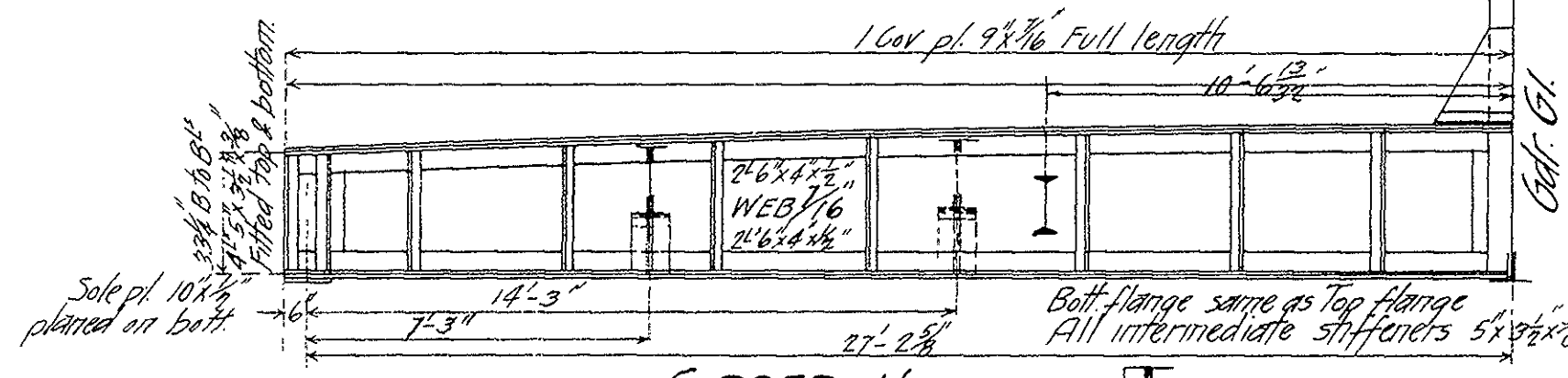
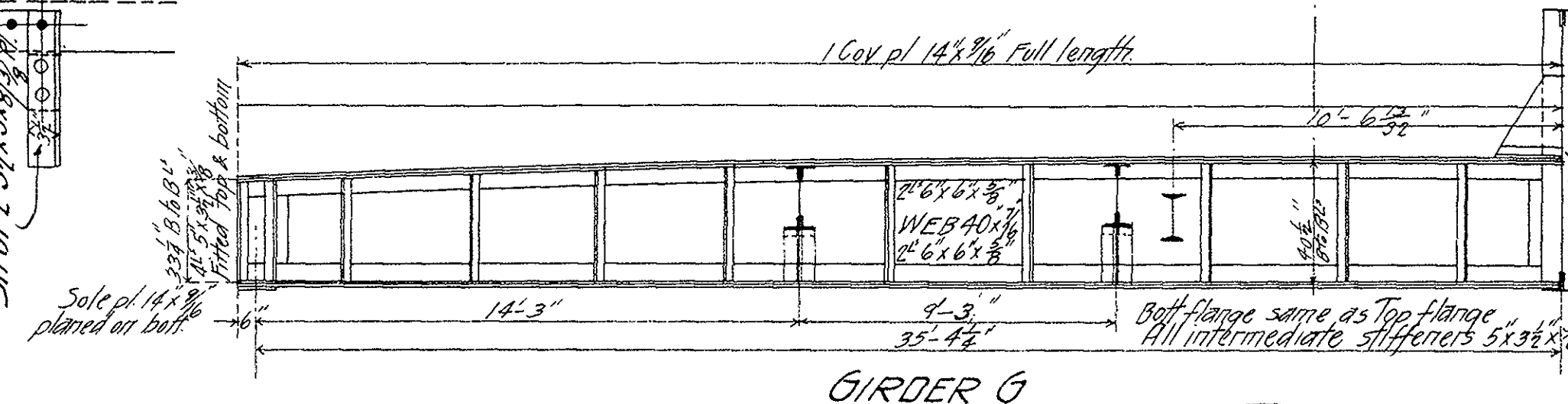
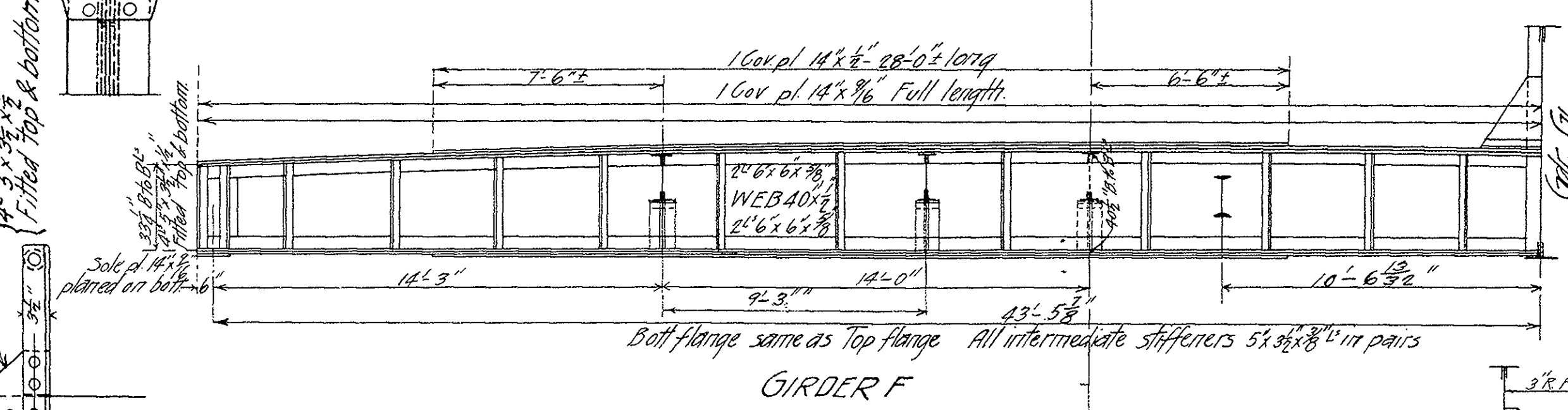
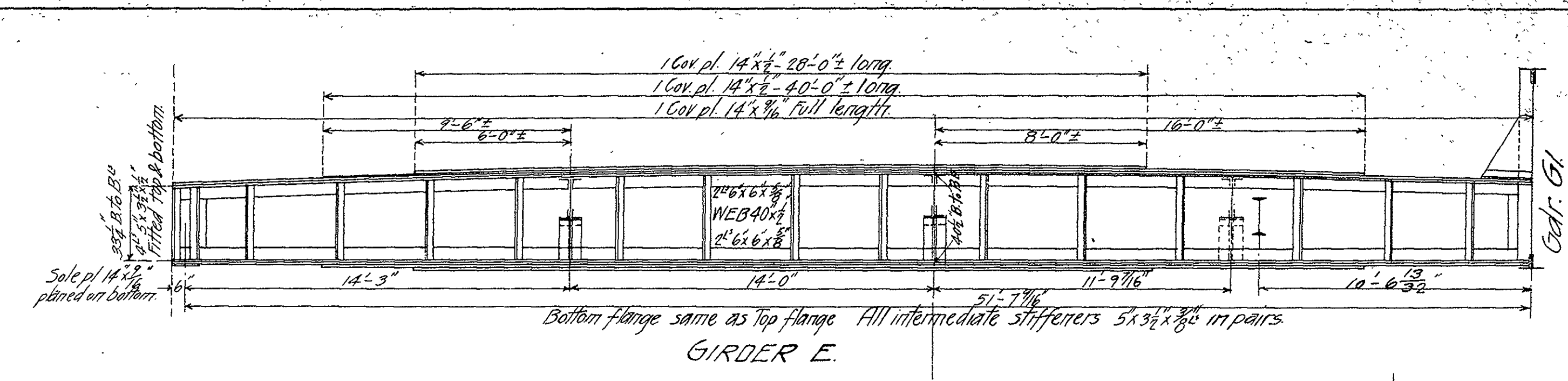
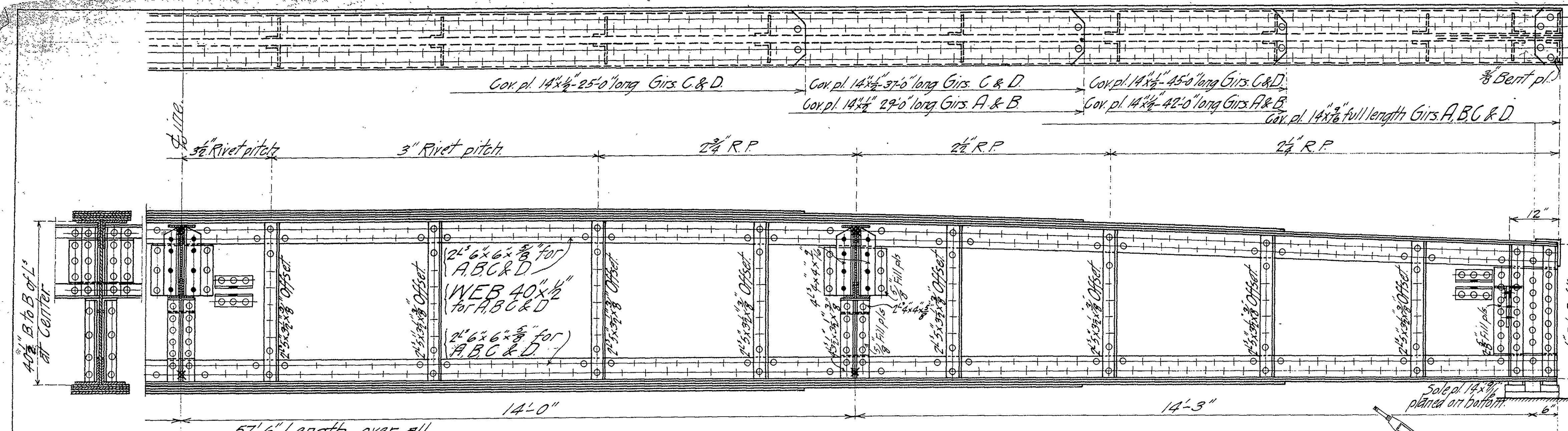
March 1911
 (Revised May 8, 1911)

15	1
16	9

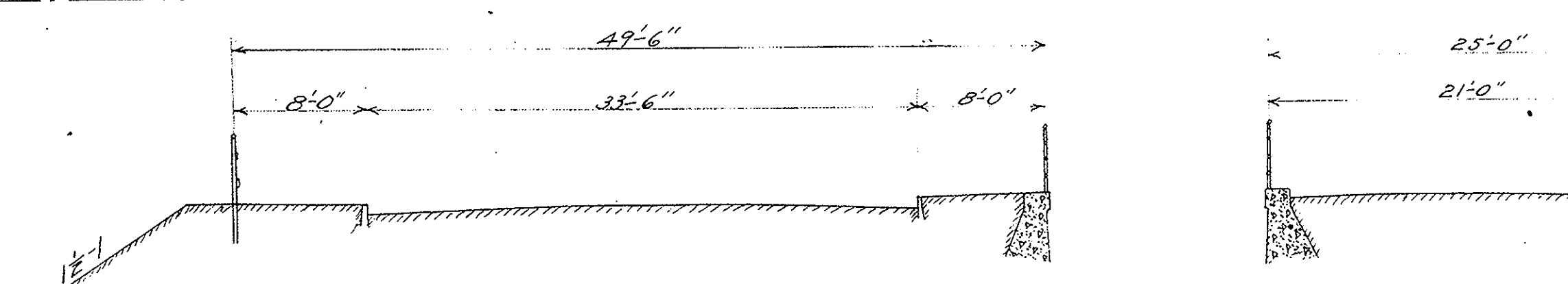
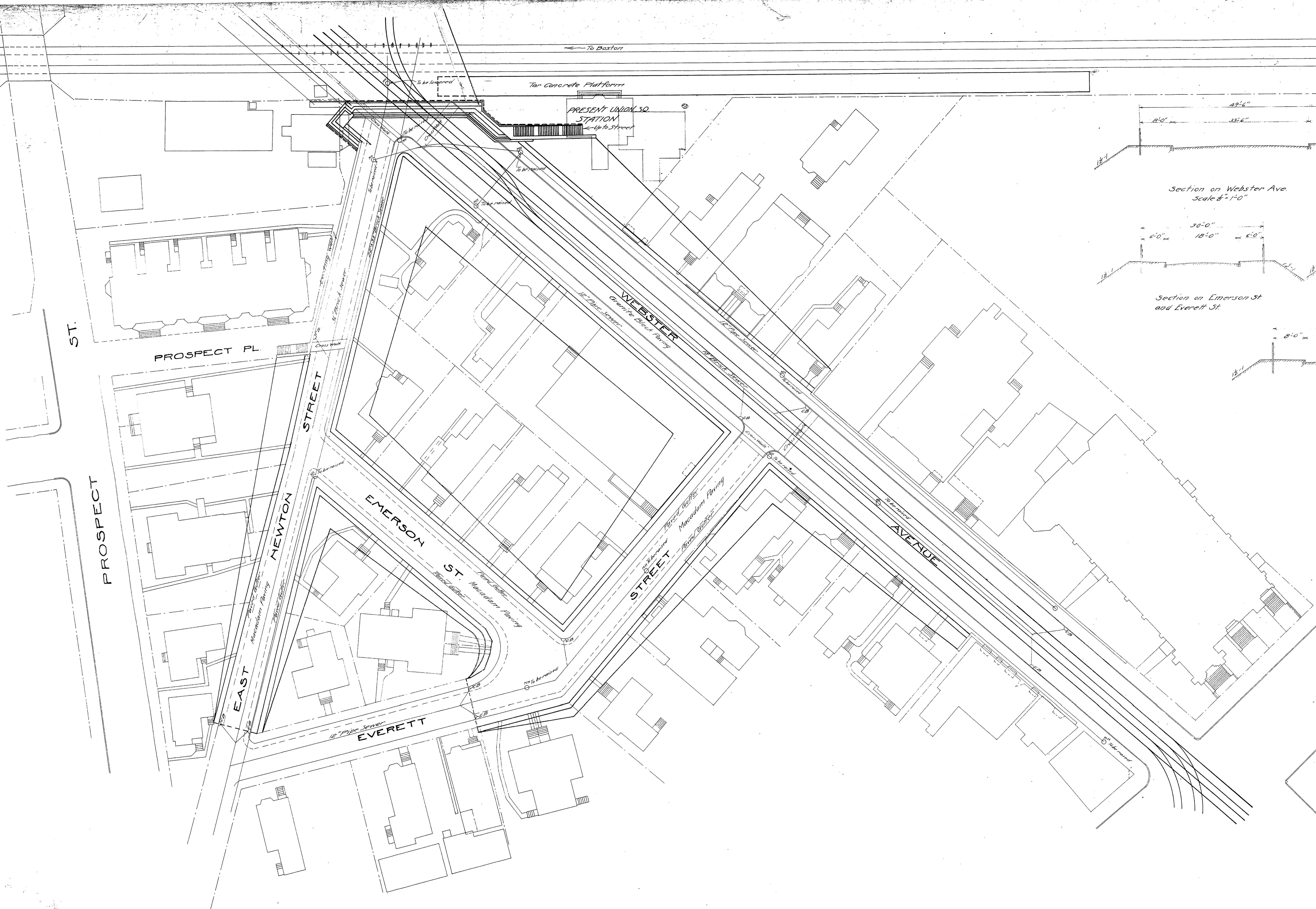


South Abutment
 Note: All bracing rods 1" with turnbuckles
 Pin 1/2"

BOSTON & MAINE RAILROAD
 Fitchburg Division
B-5-WEBSTER AVE BRIDGE
 SOMERVILLE, MASS.
 Scale 1/4"=1'-0"
 March 1911

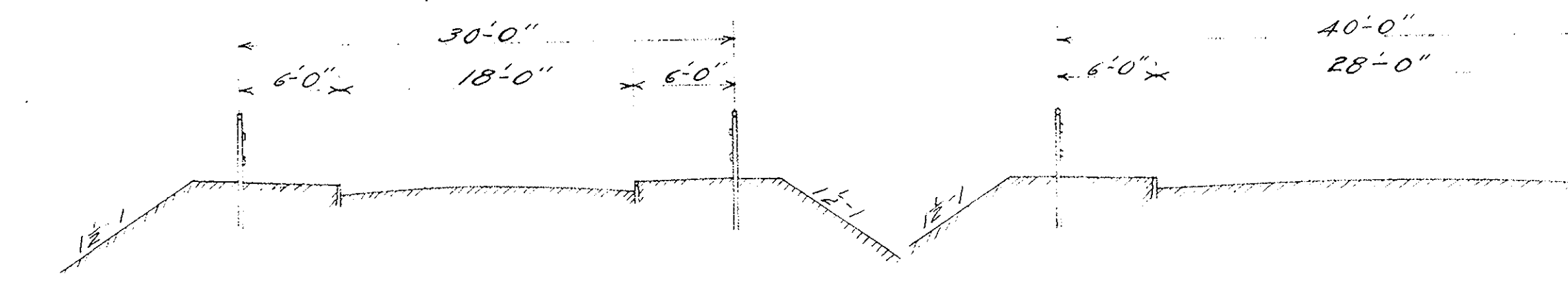


BOSTON & MAINE RAILROAD
Fitchburg Division
B-S WEBSTER AVE BRIDGE
SOMERVILLE, MASS
Scale 1/4" = 1'-0"
March 1911
BR No. 5-17-16
Sheet #2 of 2

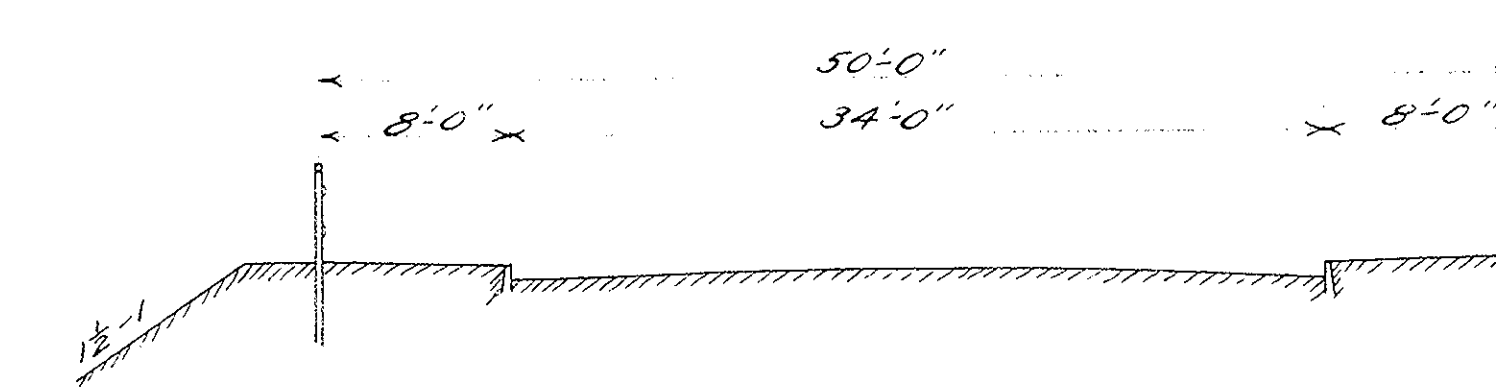


Section on Webster Ave.
Scale 8"=1'-0"

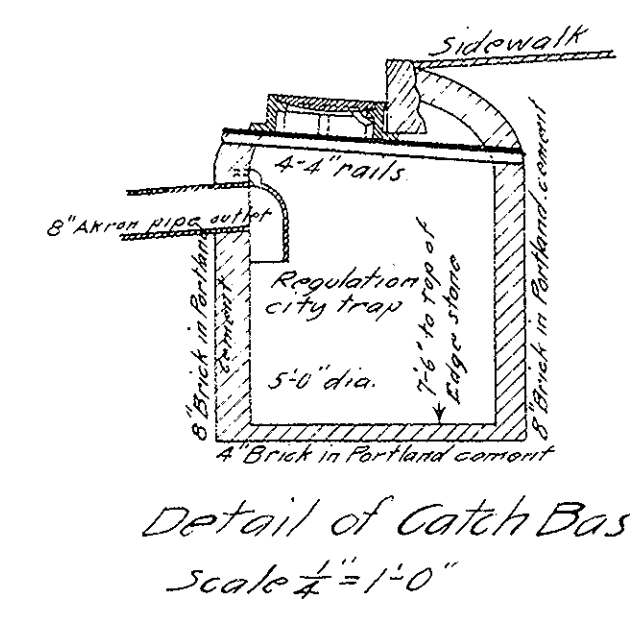
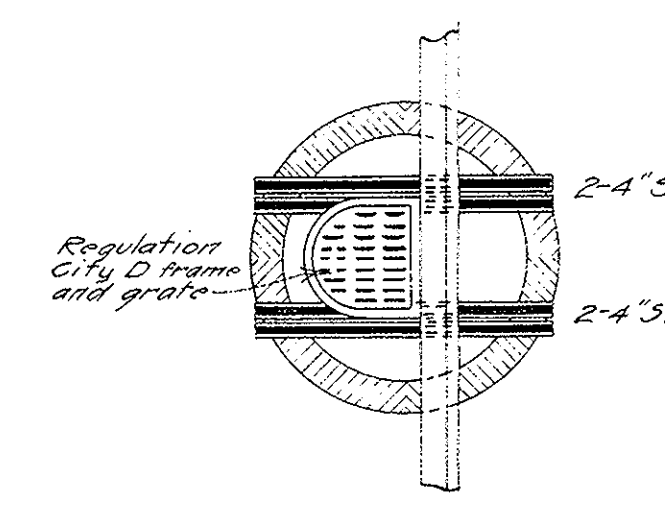
Section on Emerson St.
Scale 8"=1'-0"

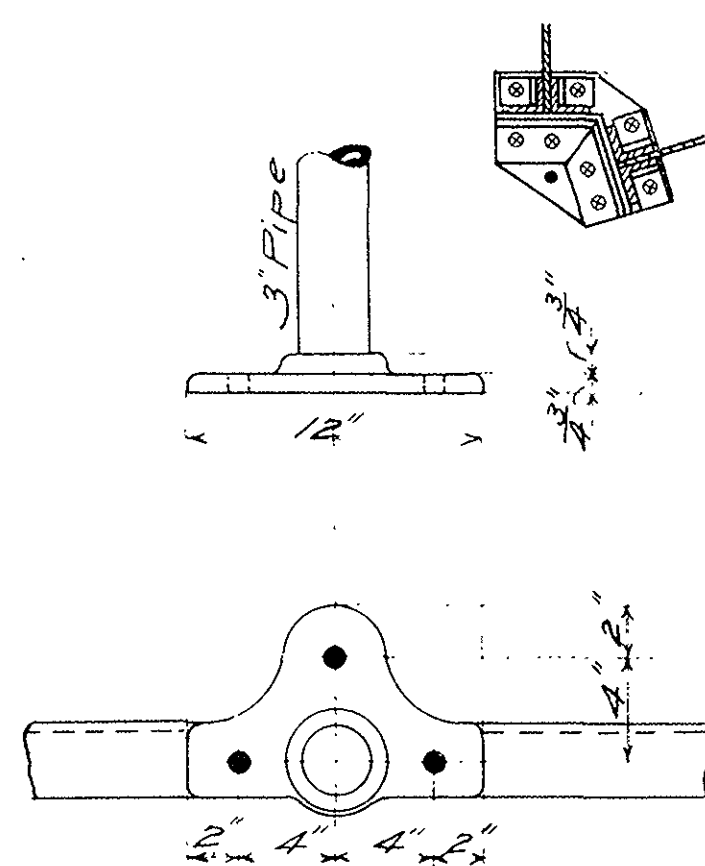
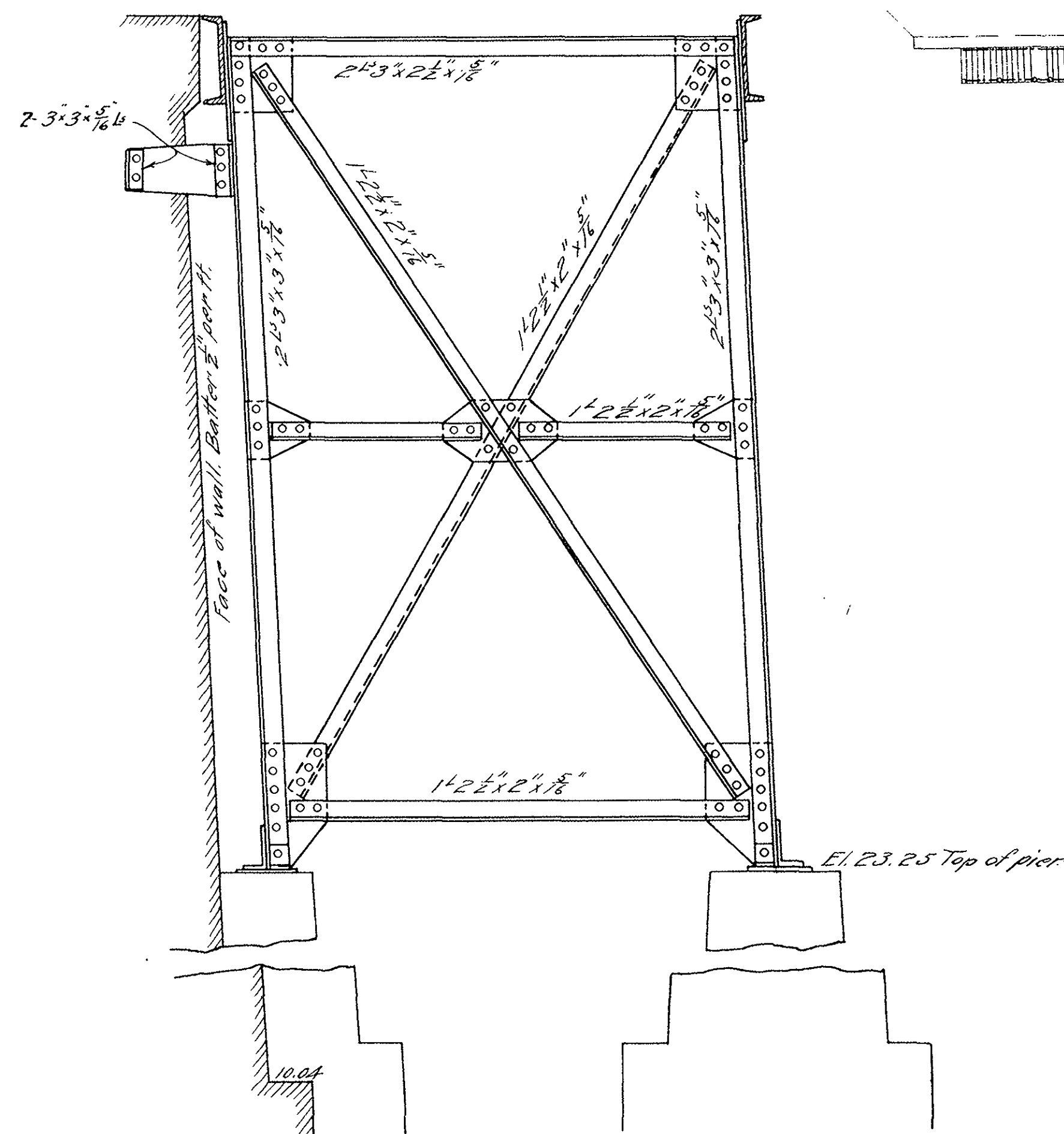
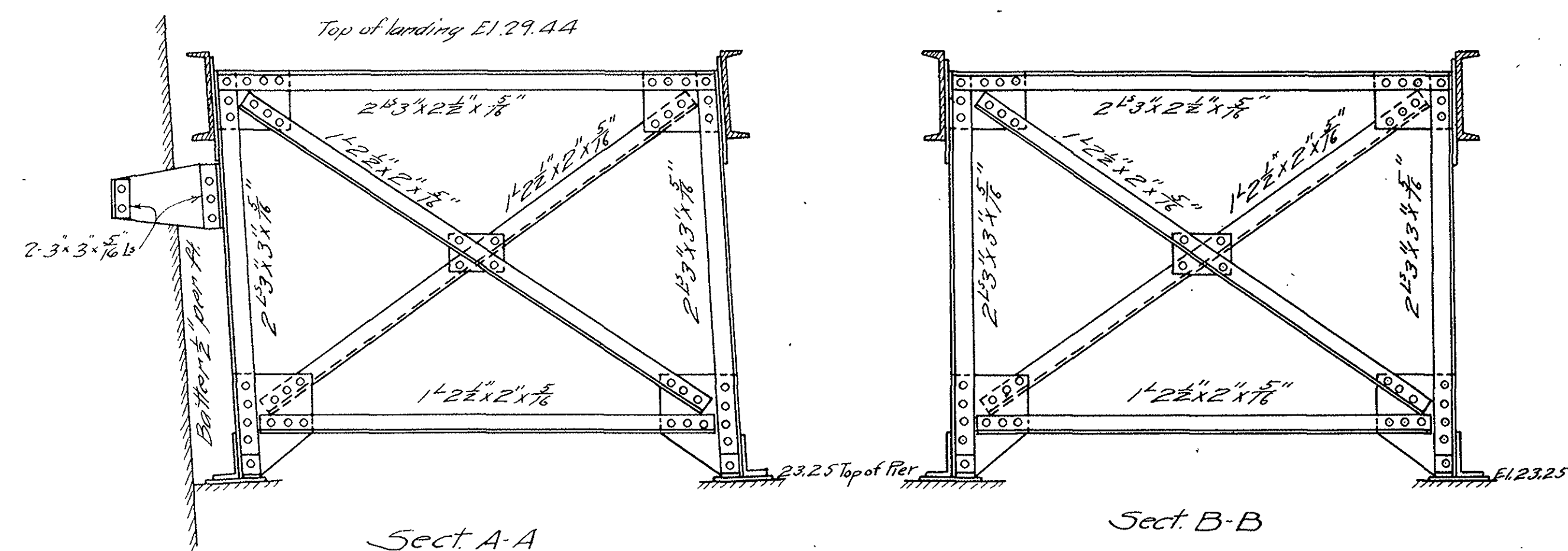


Section on Emerson St
and Everett St.
Scale 8"=1'-0"



Section on Prospect St.
Scale 8"=1'-0"



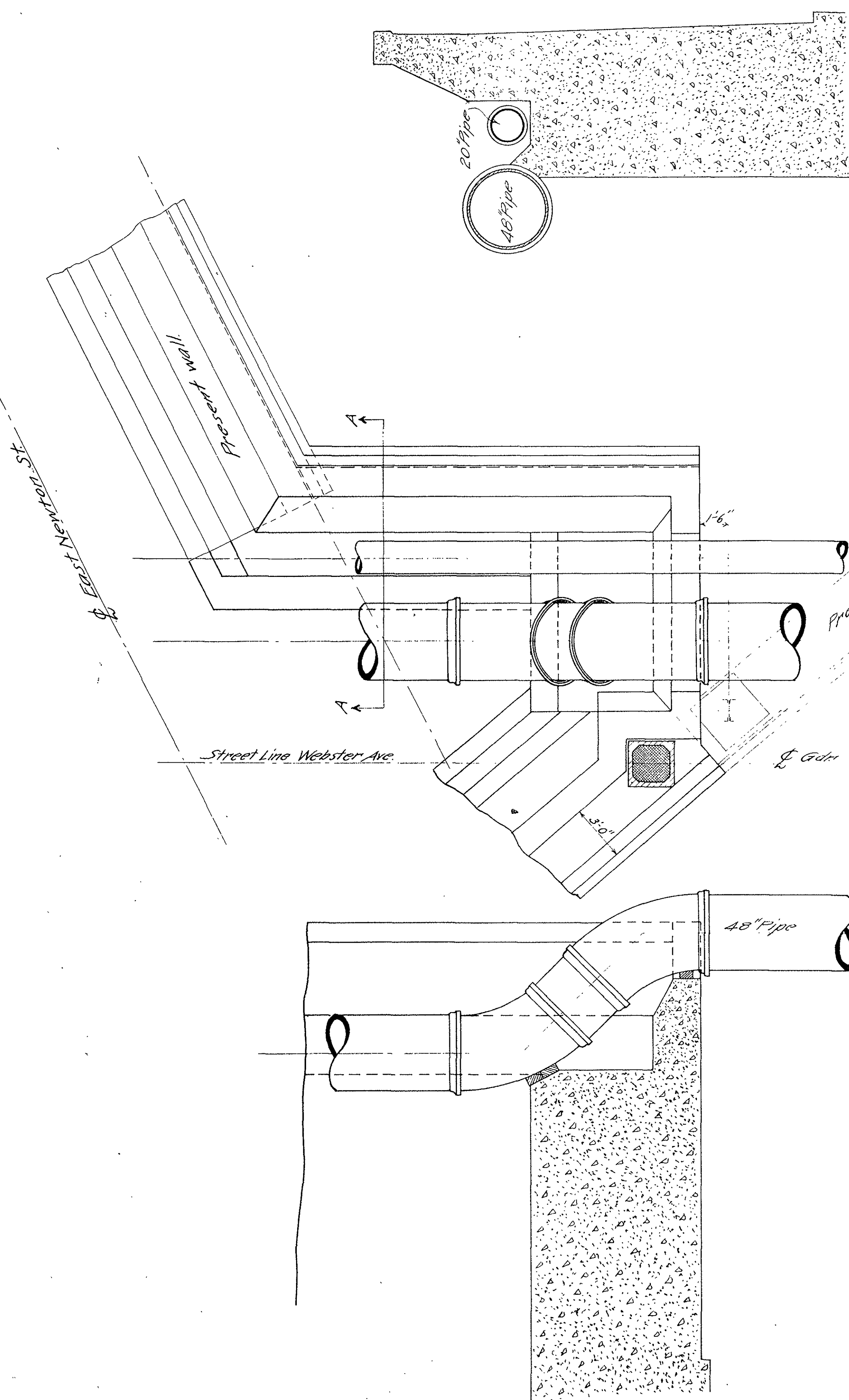


Note- Contractor to verify all measurements in the field.

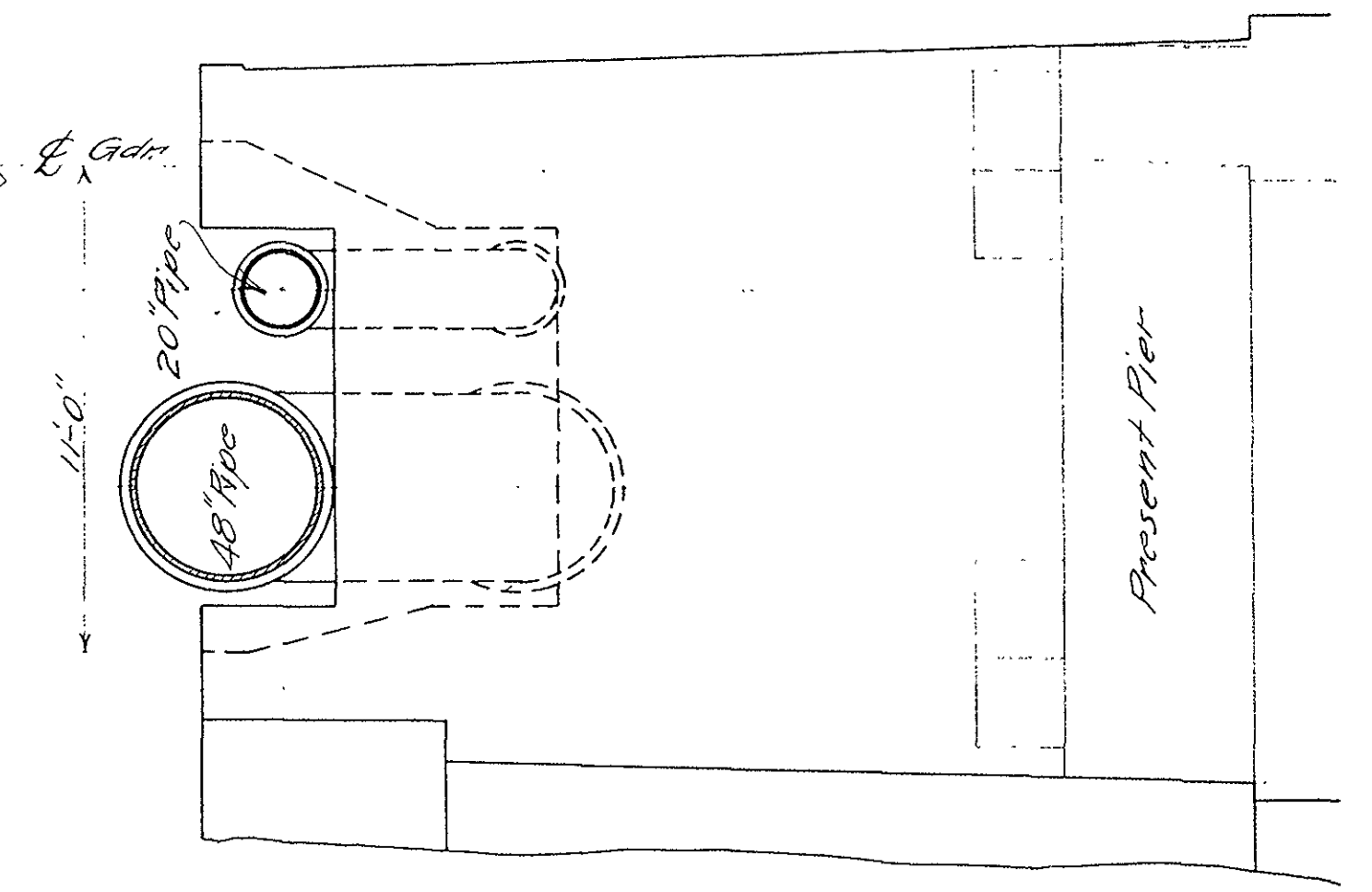
BOSTON & MAINE R.R.
Fitchburg Div.
WEBSTER AVE. CROSSING
Details of Iron Stairs
Scales $\frac{3}{4}$ ", $1\frac{1}{2}$ " & 3 " = 1'-0" March 1911.

BR. No. 5-17-16

Case	Packs
15	1
Folio	11
2	20



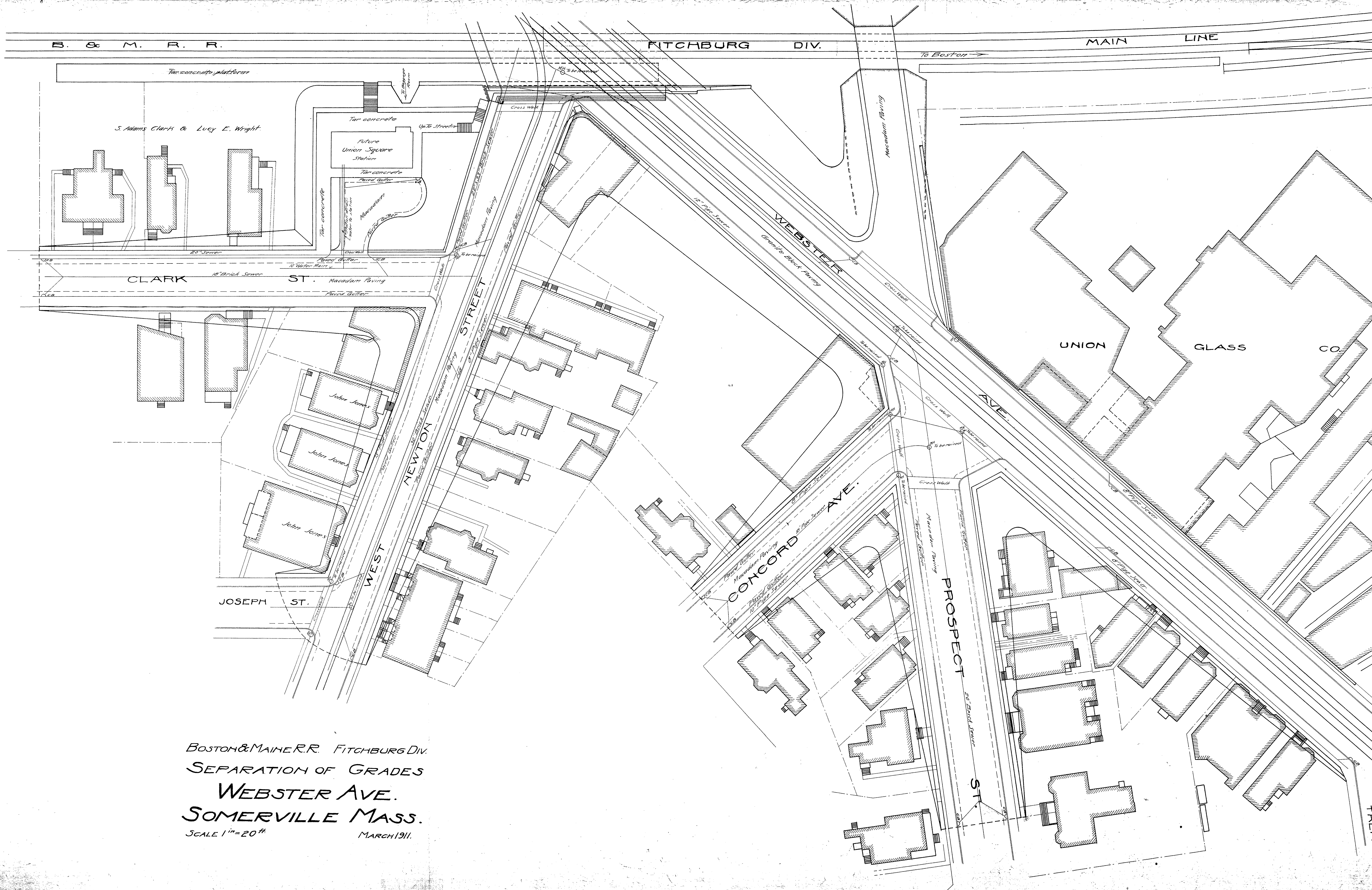
Section A-A.



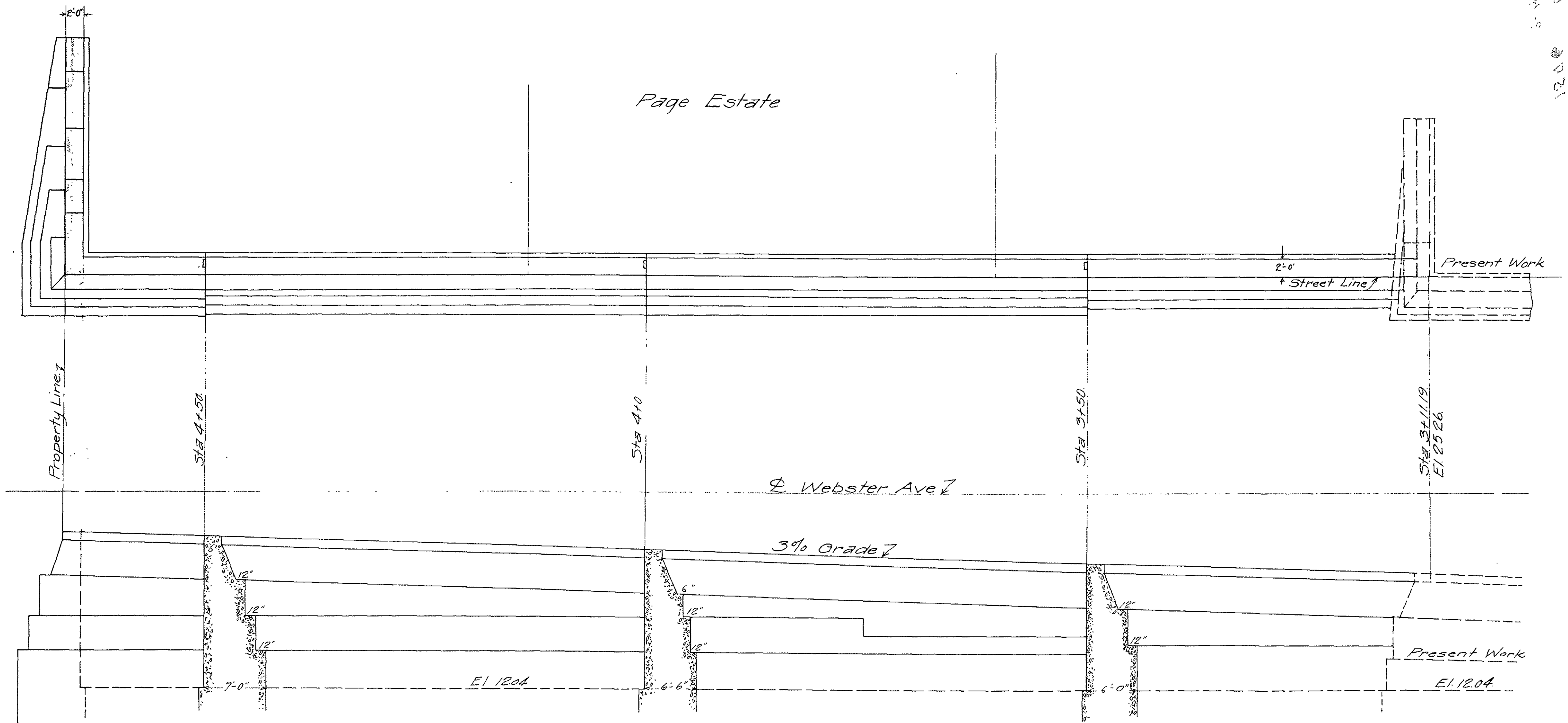
BOSTON & MAINE R.R.
 Fitchburg Division
 Relocation of 48" Main
 WEBSTER AVE. SOMERVILLE
 Detail at North Abutment of Bridge
 Scale $\frac{1}{4}" = 1'-0"$ March 1911.

BR. No. S-17-16

Case	Sheet
15	1
Folio	Plan
2	4



BOSTON & MAINE R.R. FITCHBURG DIV.
SEPARATION OF GRADES
WEBSTER AVE.
SOMERVILLE MASS.
SCALE 1"=20'
MARCH 1911.



Boston & Maine R.R.

Fitchburg Division.

WEBSTER AVE. CROSSING.

Wall in front of the Page Estate. 15 1

Scale 1/8"=1'-0"

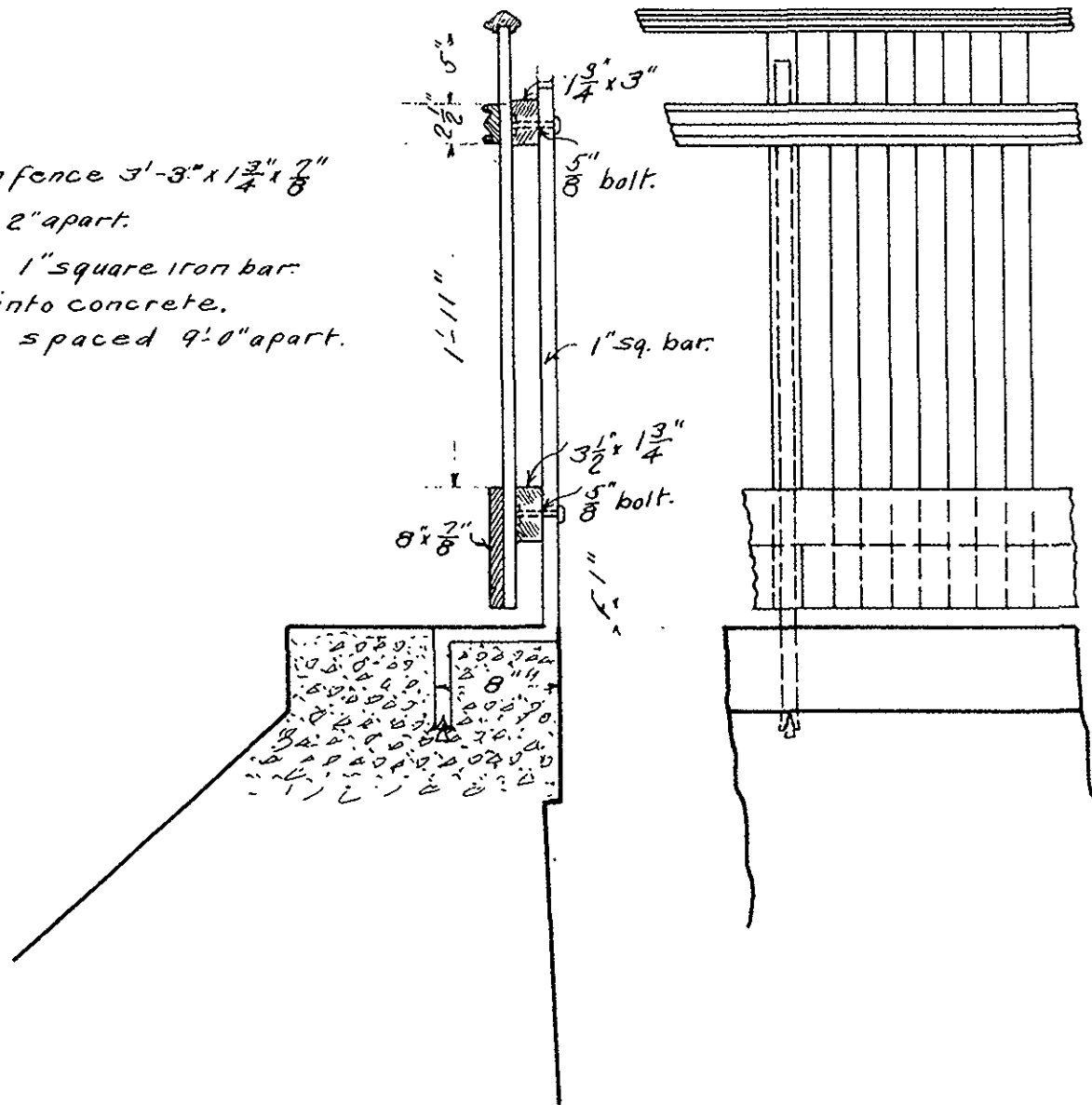
May 1911. 2 2

BR. No. S-17-16

Slats on fence 3'-3" x $1\frac{3}{4}$ " x $\frac{7}{8}$ "
spaced 2" apart.

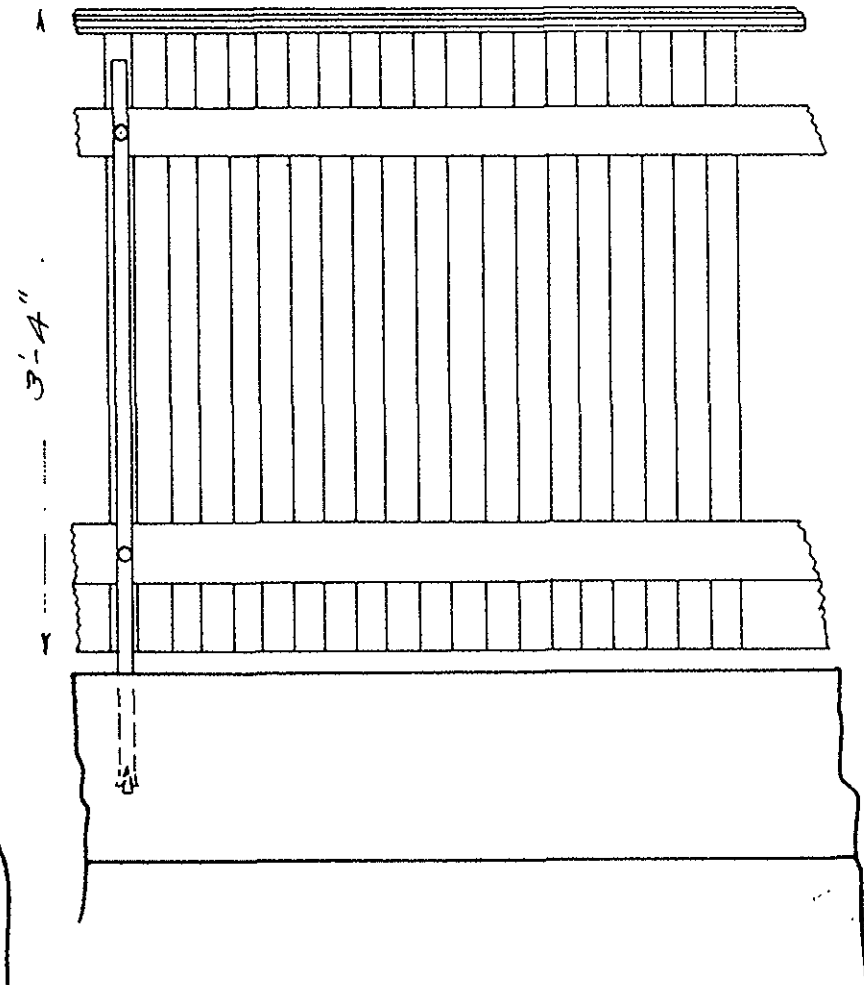
Posts 1" square iron bar
wedged into concrete.

Posts spaced 9'-0" apart.



SECTION.

FRONT ELEVATION.



REAR ELEVATION.

DETAIL OF FENCES ON TOP OF CONCRETE WALLS

SEPARATION OF GRADES.

WEBSTER AVE.

SOMERVILLE, MASS.

Scale 1"=1'-0"

Sept. 1911.

S.17-16 Sheet #1

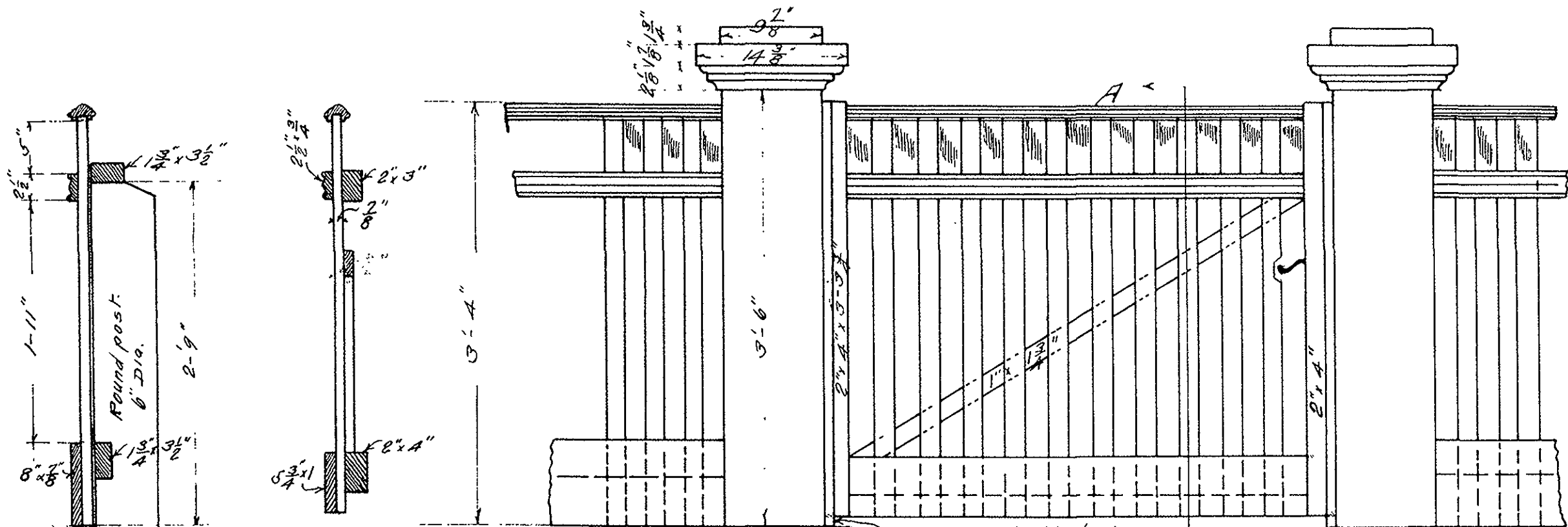
Case

15

2

12

3-45-12



SECTION THRO A-A.

Note. Posts spaced 9'-6" apart.
 Fence Slats spaced. 2"
 Gate Slats " 2 1/4"
 Fence " 1 3/4" x 7/8" x 3'-3"
 Gate " 1 3/4" x 7/8" x 3'-2"
 Posts set 4'-0" into ground.

SECTION THRO' MAIN FENCE.

FRONT ELEVATION OF GATE.

DETAIL OF WOODEN FENCE.
 SEPARATION OF GRADES.
 WEBSTER AVE.
 SOMERVILLE MASS.

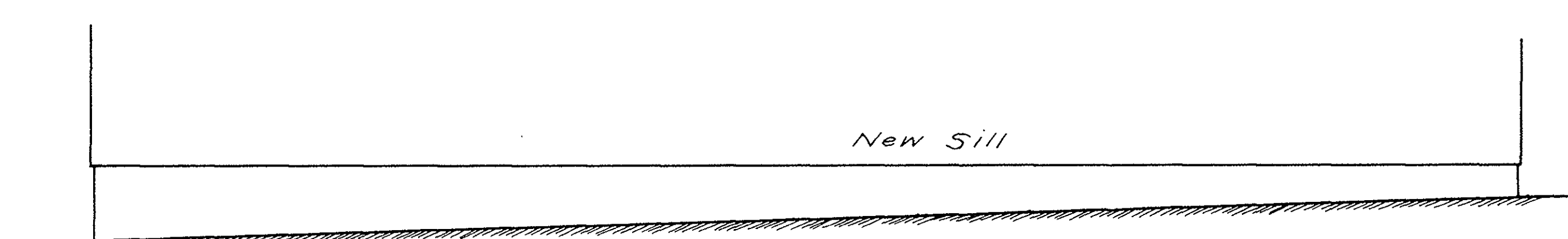
Scale 1" = 1'-0"

Sept 1911.

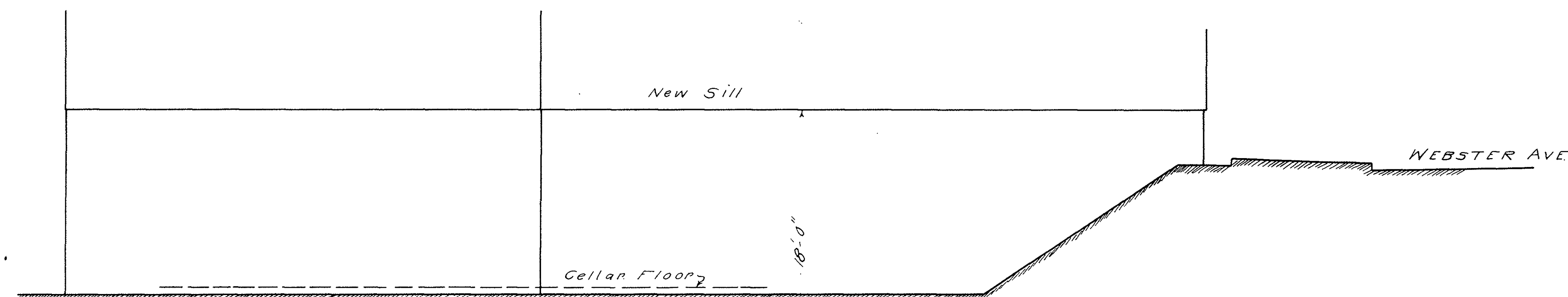
5-17-16

Sheet #2.

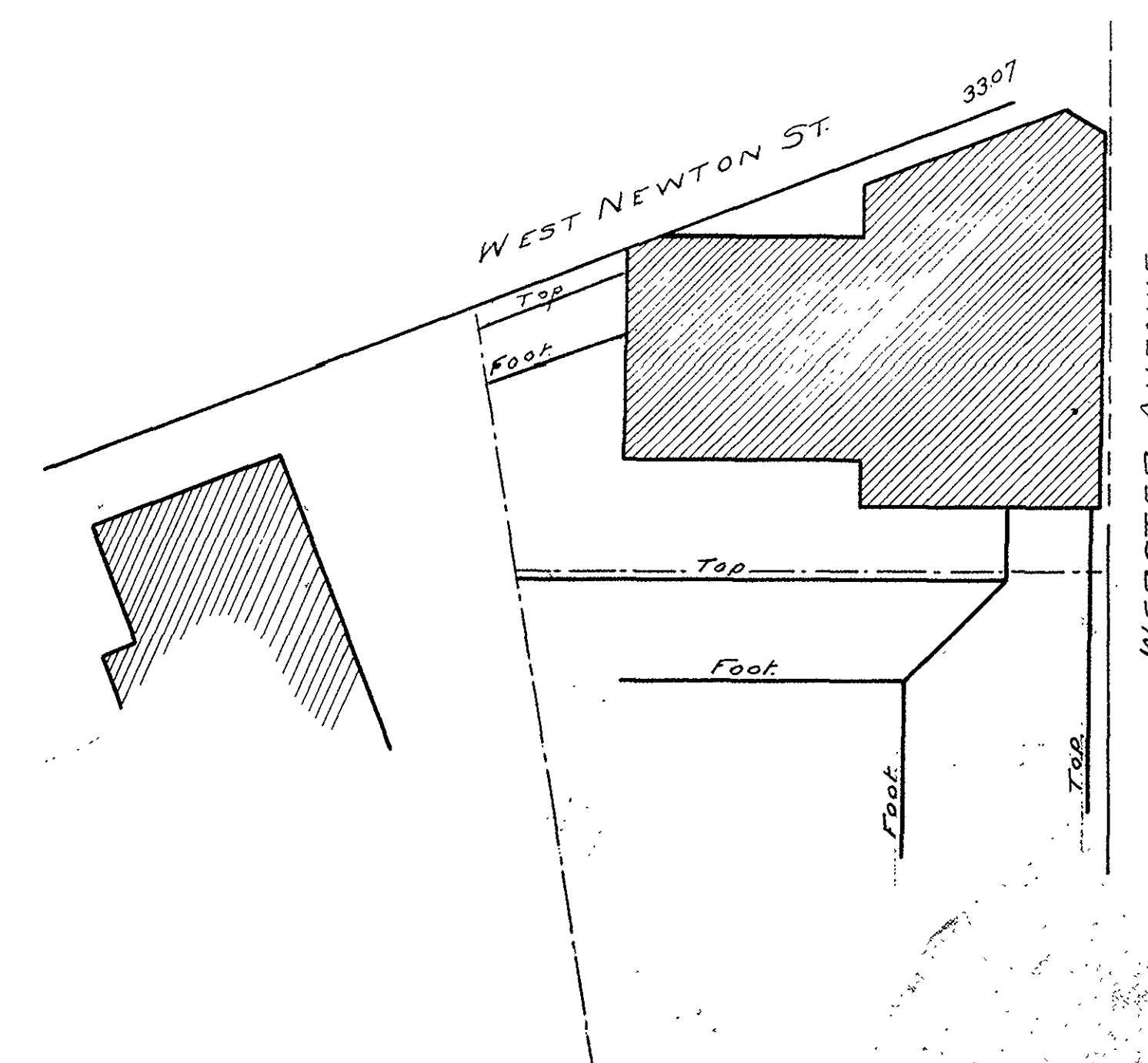
15 1
2 13



Sill
 Ground
 ELEVATION ON WEBSTER AVE.



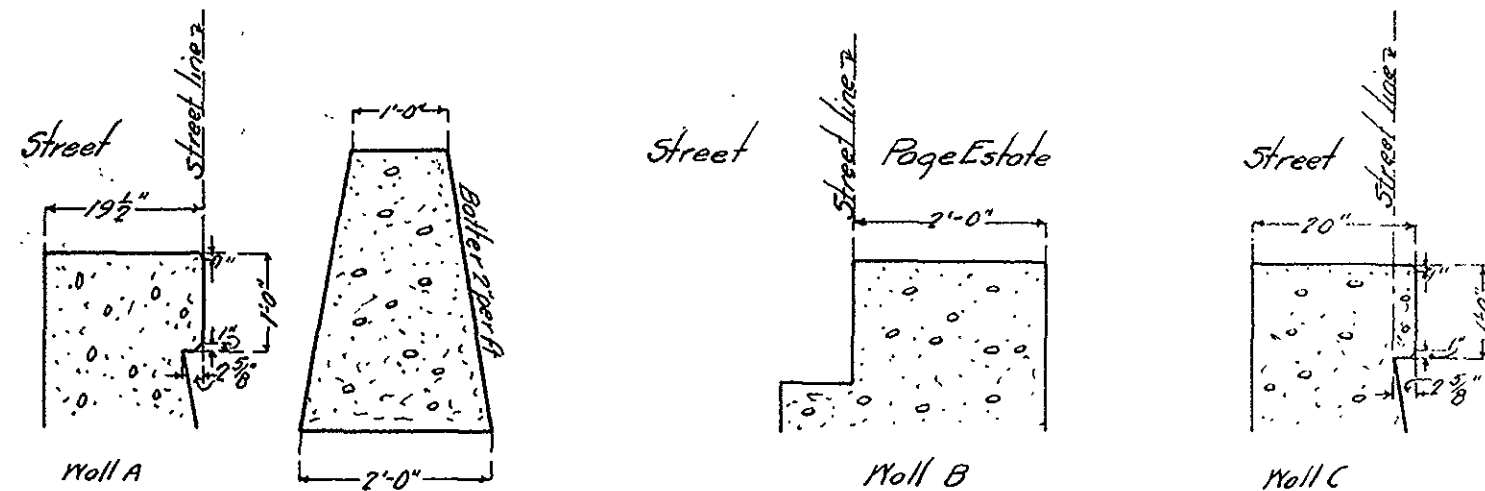
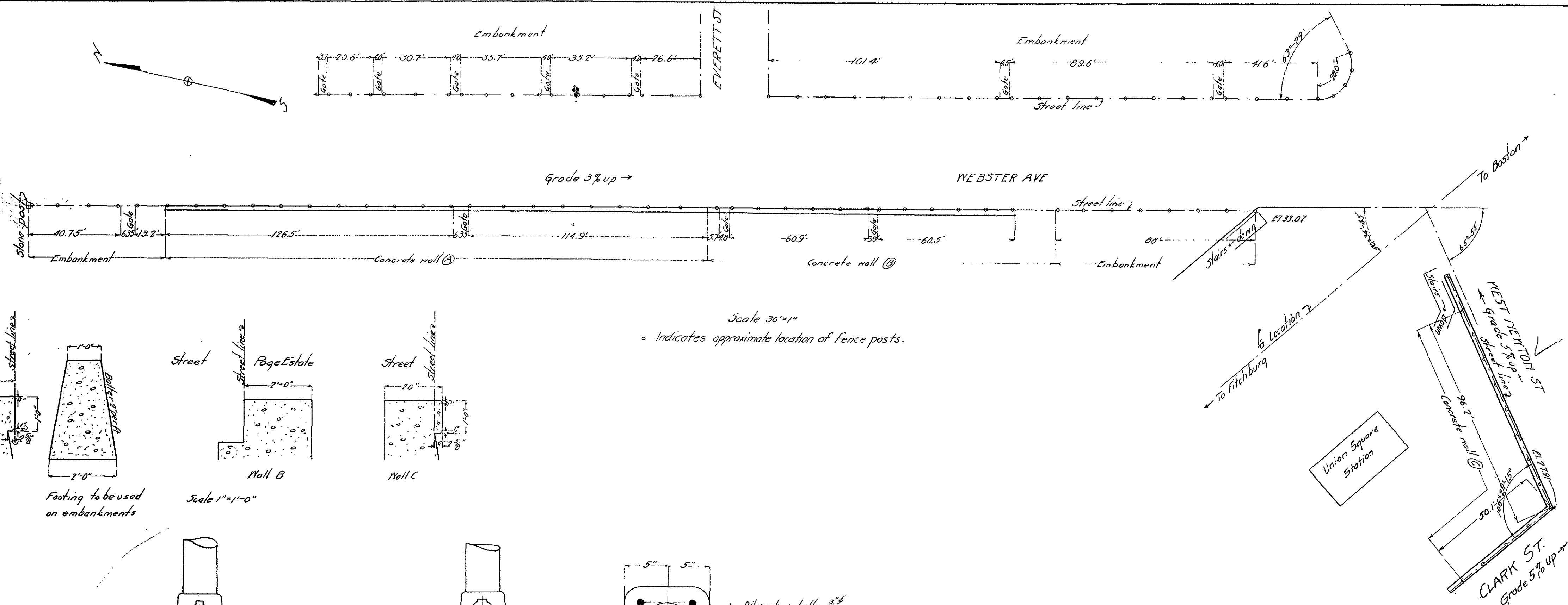
Present Sill El. 17.93
 Present Ground El. 16.5
 SOUTH ELEVATION



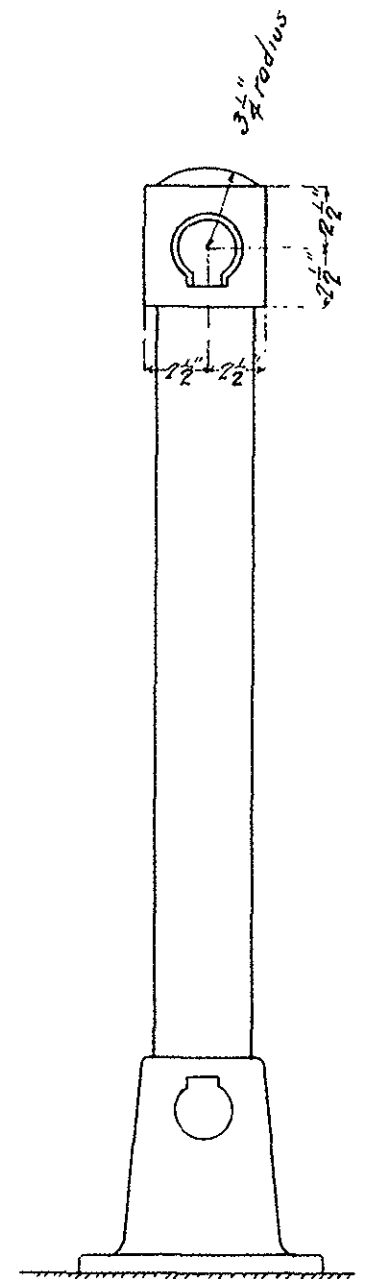
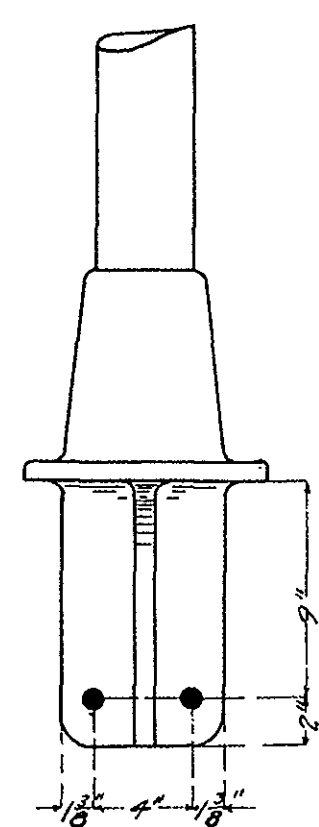
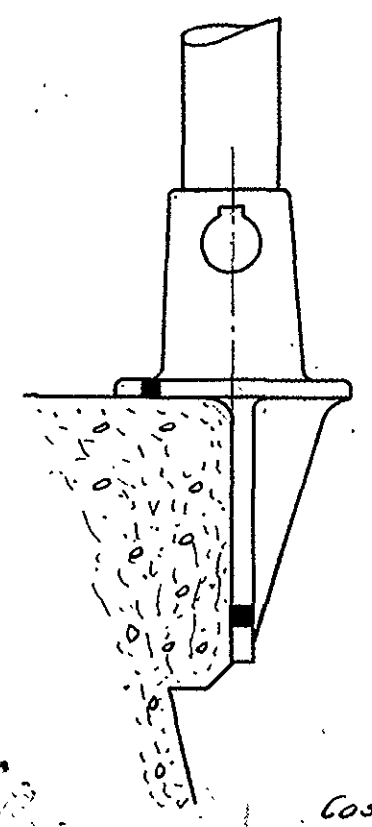
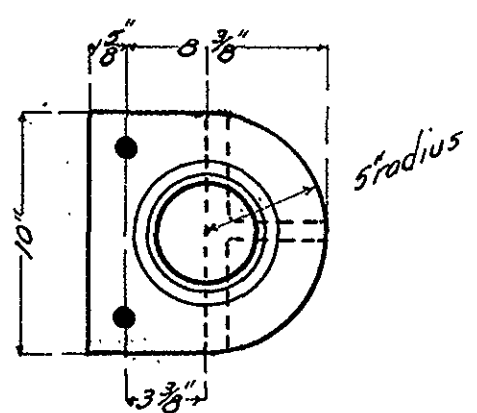
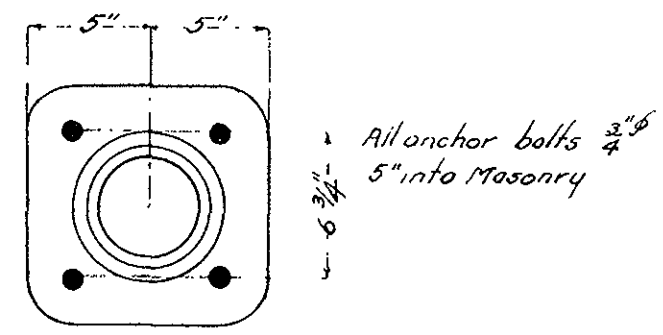
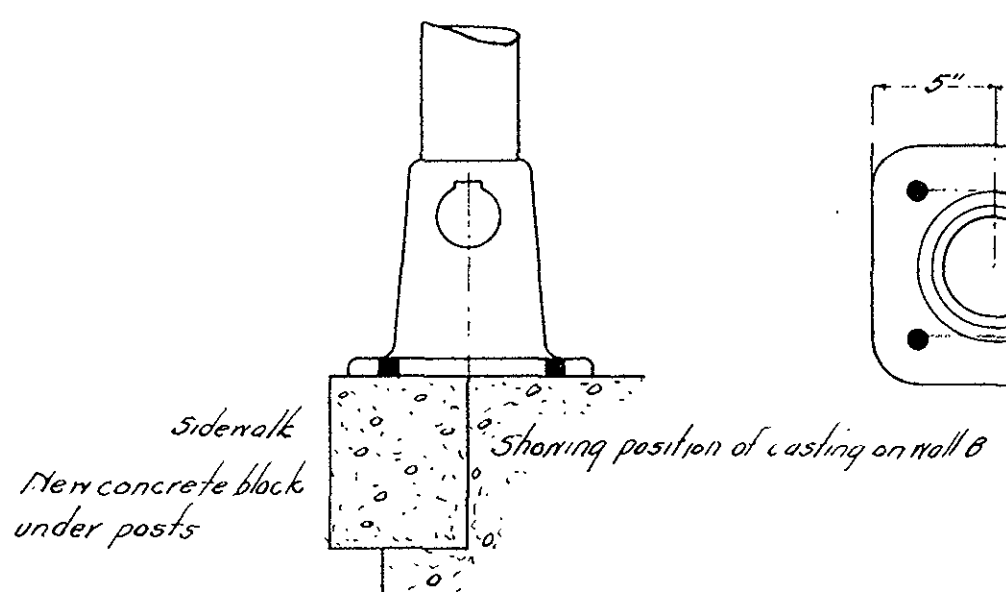
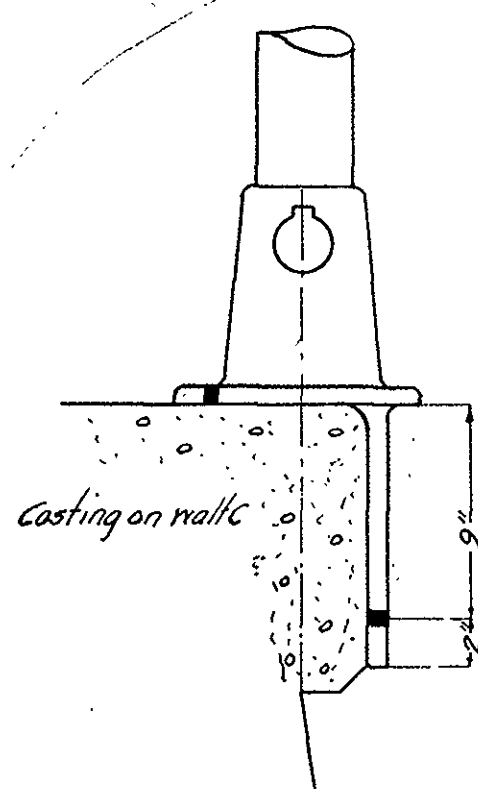
SKETCH FOR RAISING BUILDING
 NOS 33, 35, 37 WEBSTER AVE
 SOMERVILLE, MASS.
WEBSTER AVE. GRADE CROSSING
 May 1911. Scale 1/4" = 1'-0"

BR. No. 5-17-16

Date	Page
15	1
2	7

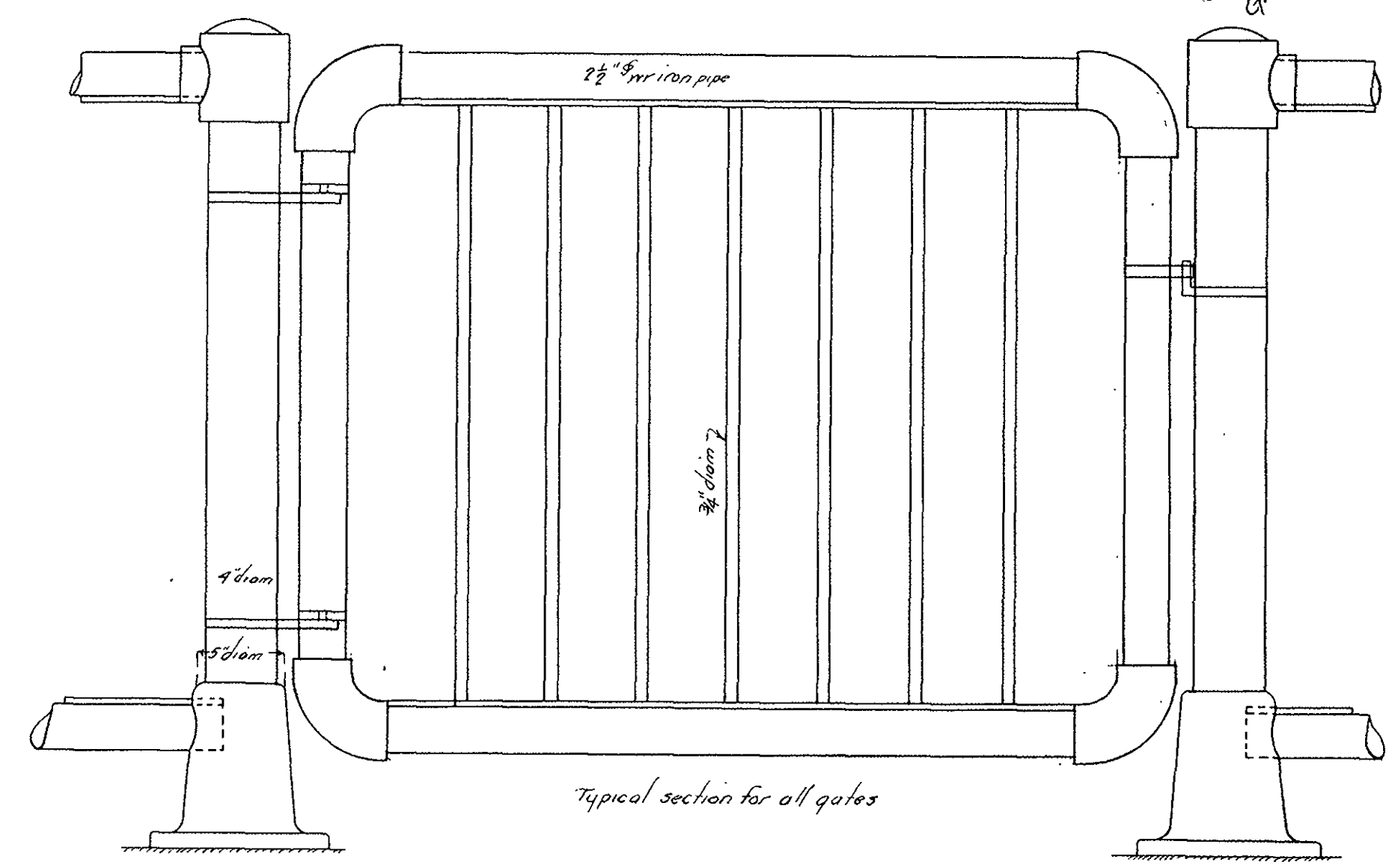
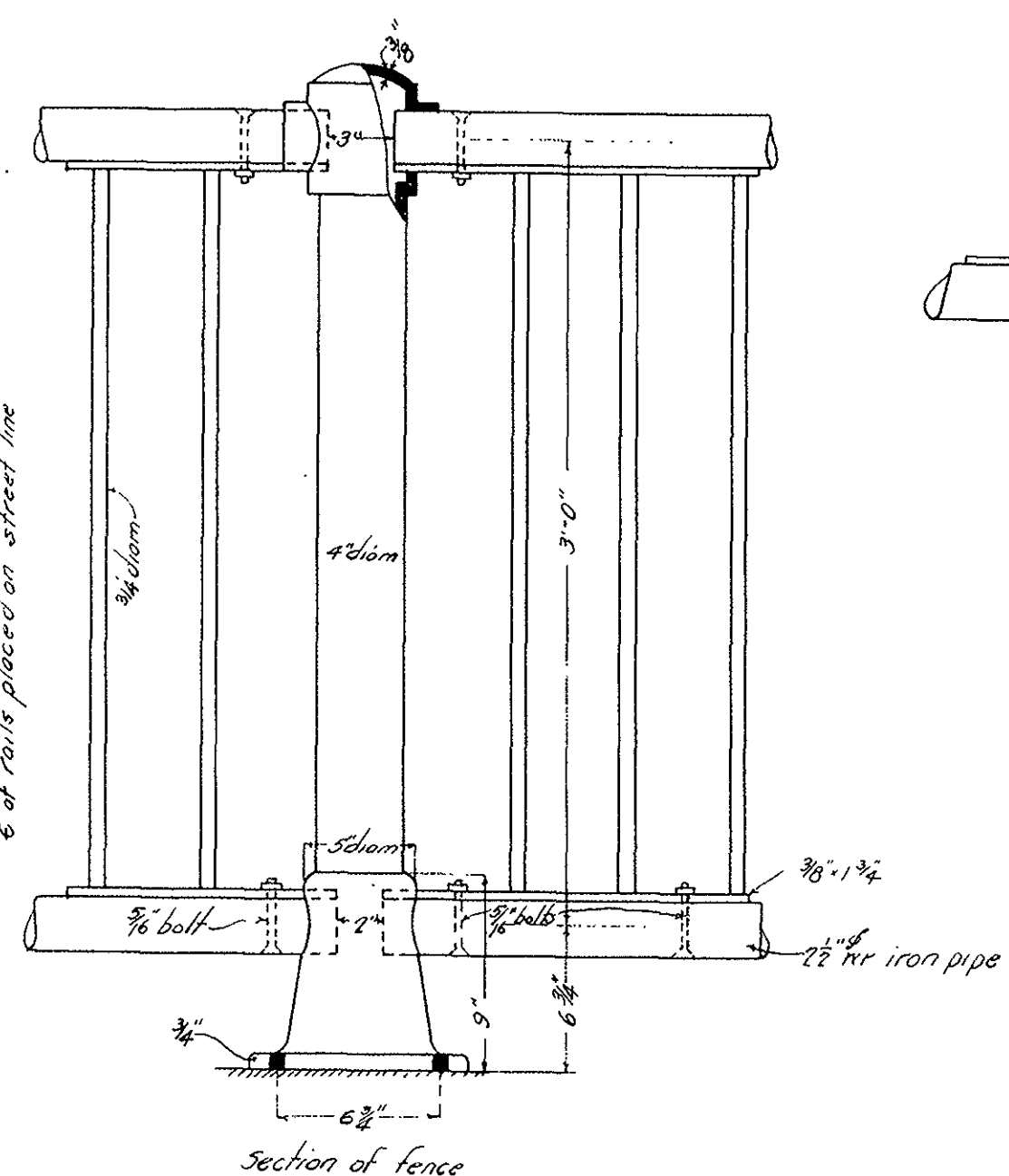


Footing to be used on embankments



Scale 1/2" = 1'-0"

Rails parallel to grade Posts vertical 6 of rails placed on street line



BOSTON AND MAINE RAILROAD
Office of Engineer of Structures
THIRD DIV FITCHBURG R.R.
FENCES ON WEBSTER AVE & NEWTON ST
at Somerville Mass
GENERAL PLAN & DETAILS

Scales - 1" = 10' & 3/4" = 10' & 30' = 1"

Corrected -

Approved: *[Signature]*
Engineer of Structures

Aug 1912

151
215