Table of Contents
Structures Drawings

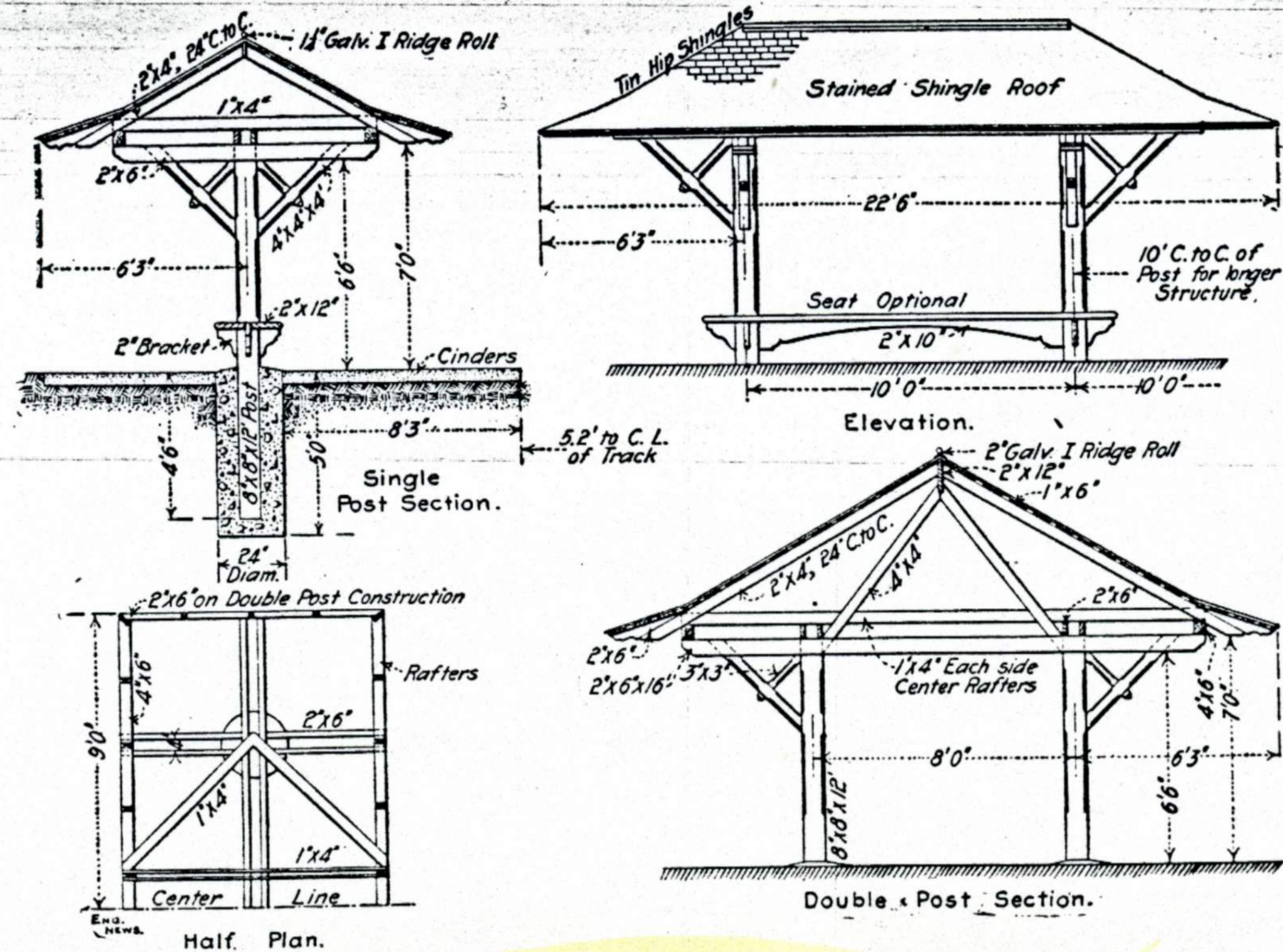
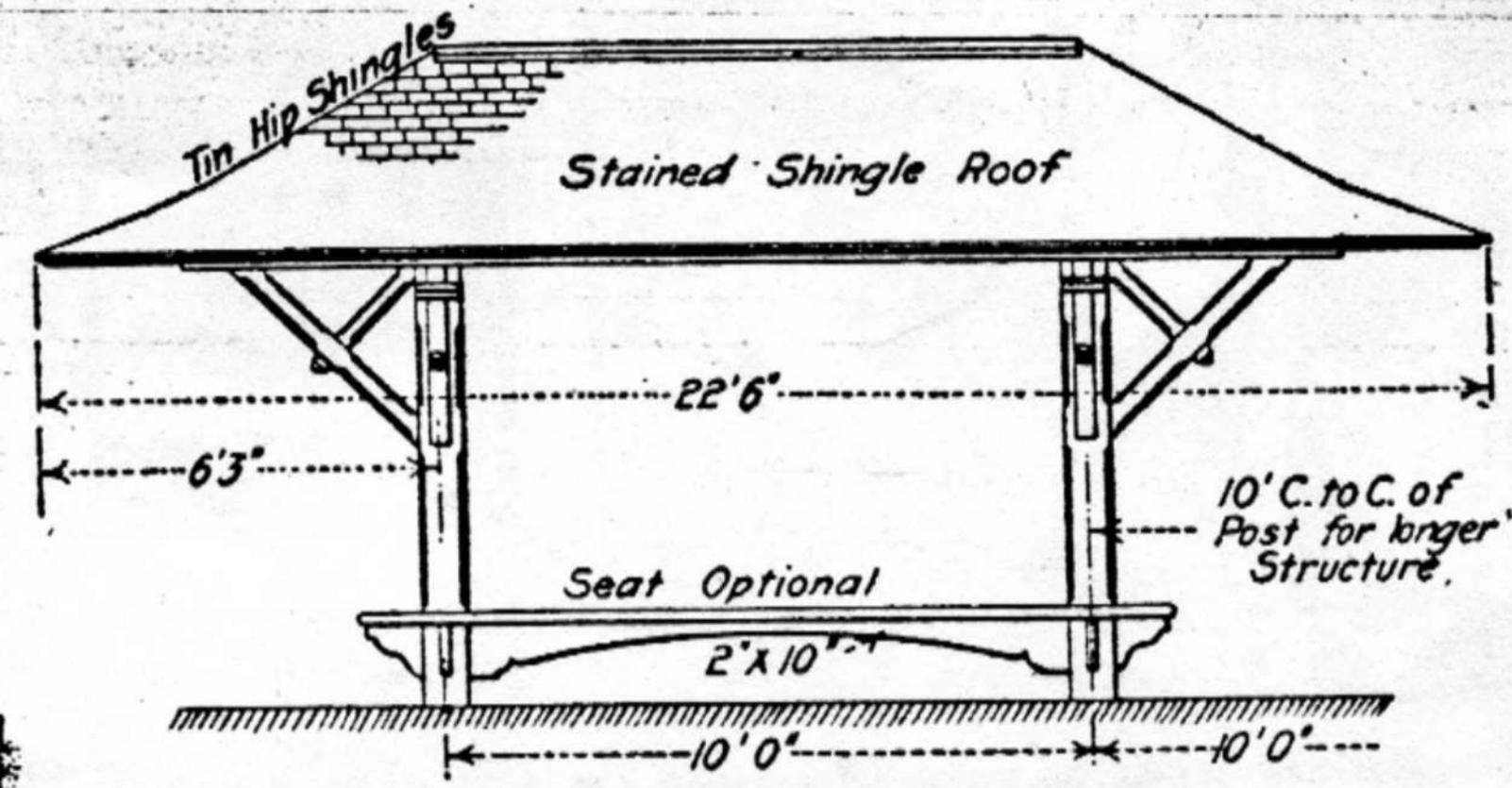
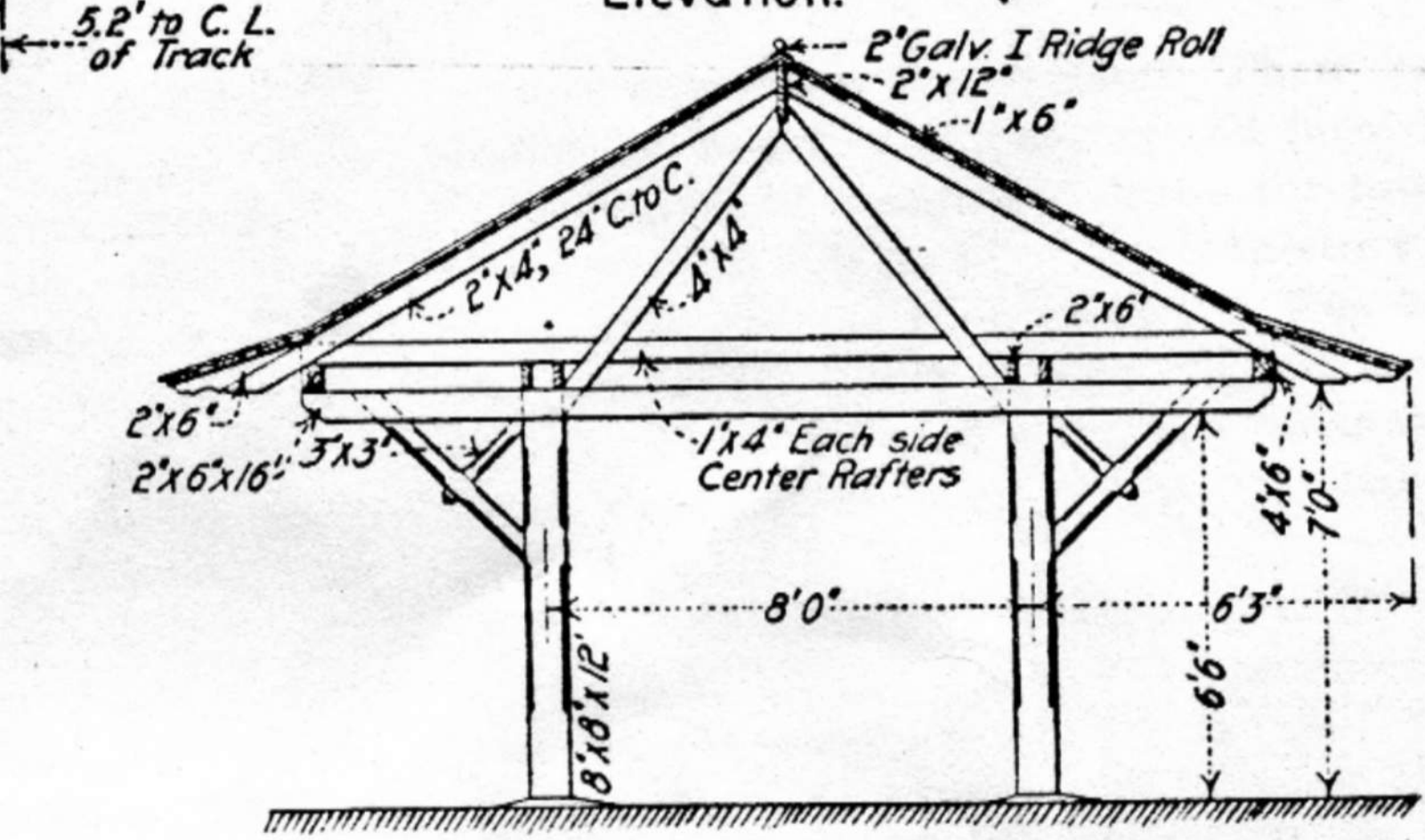


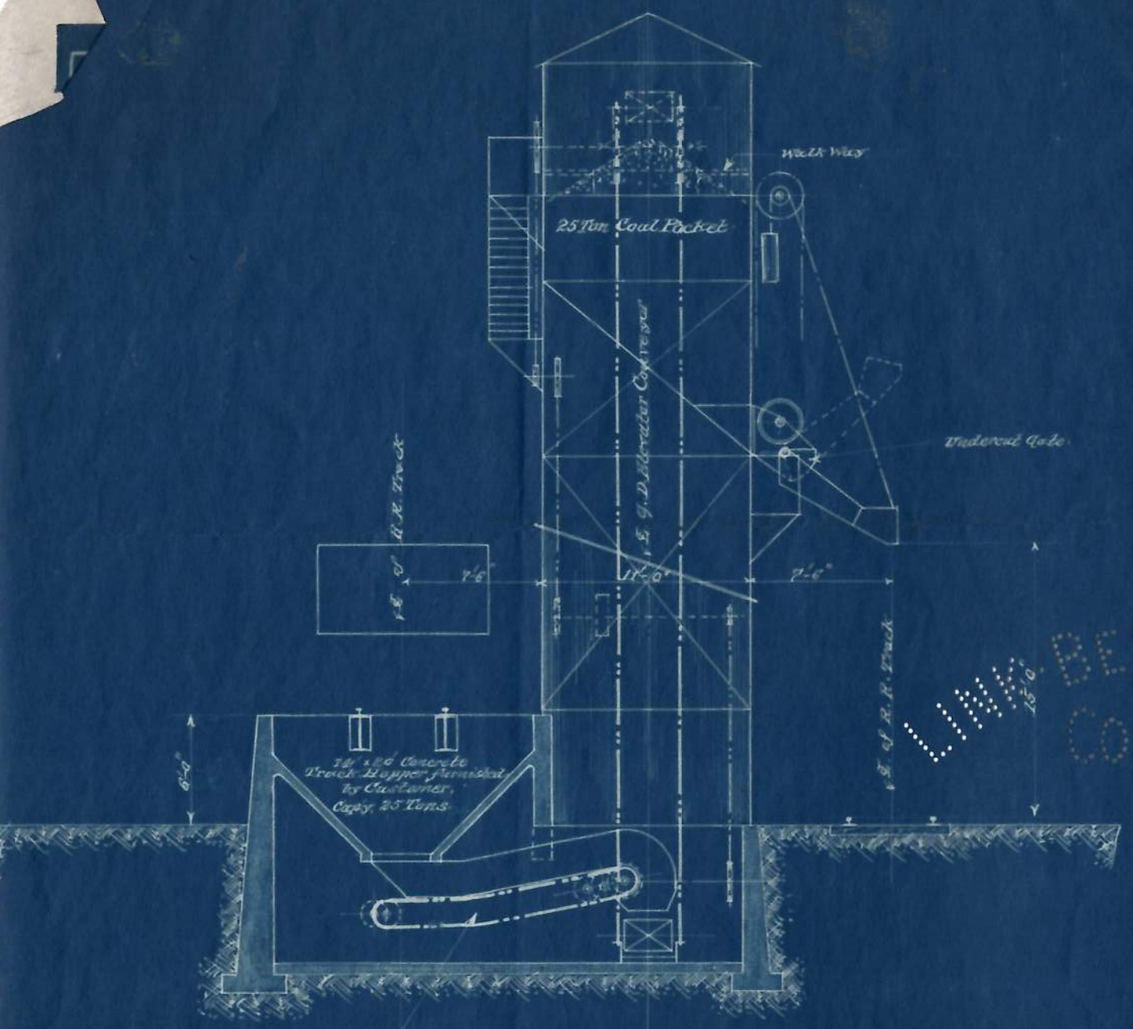
Fig. 8. Standard Designs of Canopies for Platforms at Parks, etc.



Elevation.



Double Post Section.



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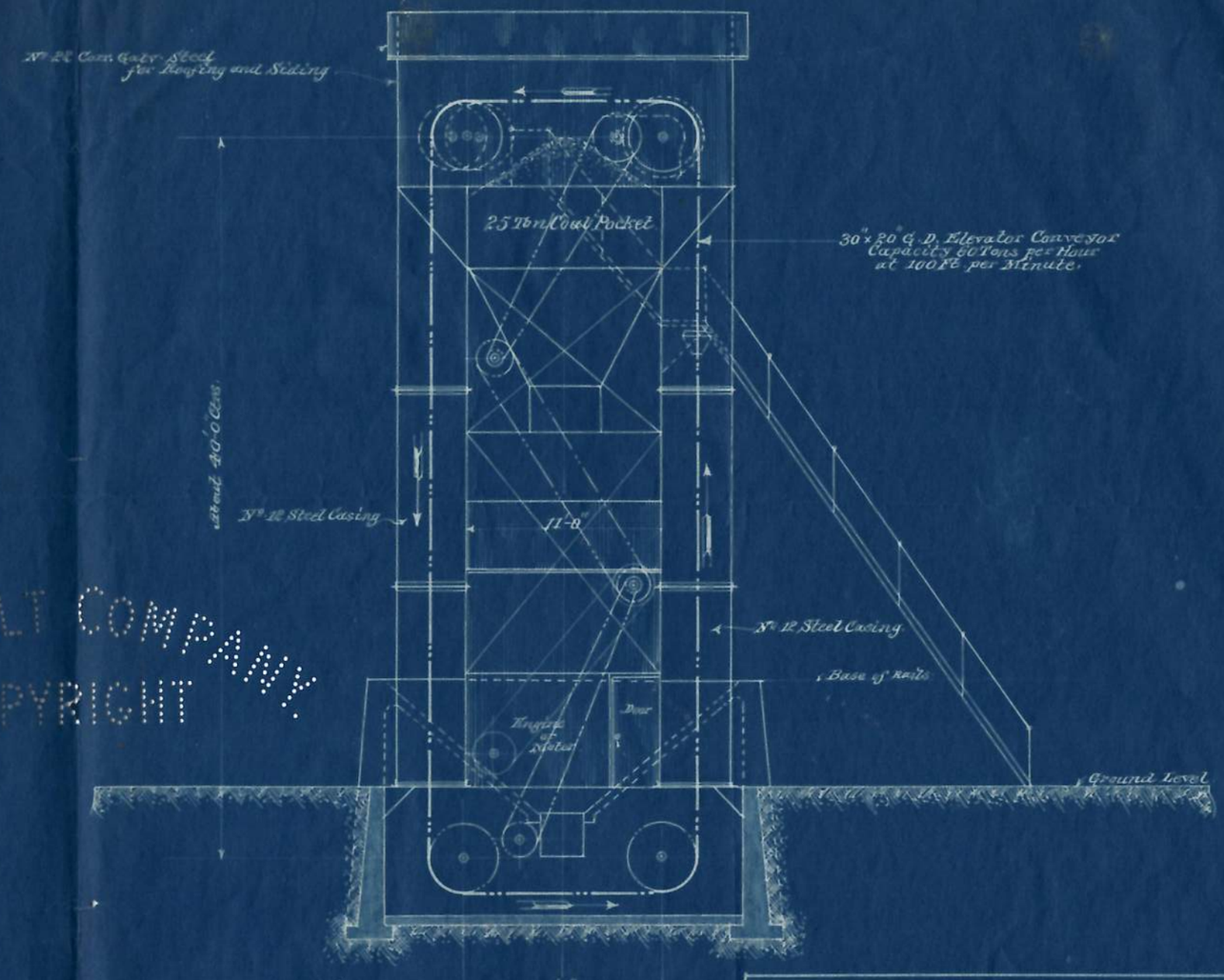


Side Elevation.

C1-27

LINK-BELT COMPANY

PHILADELPHIA CHICAGO. INDIANAPOLIS

Locomotive Coaling Station

For

LAKE SHORE and MICHIGAN SOUTHERN RY. CO.

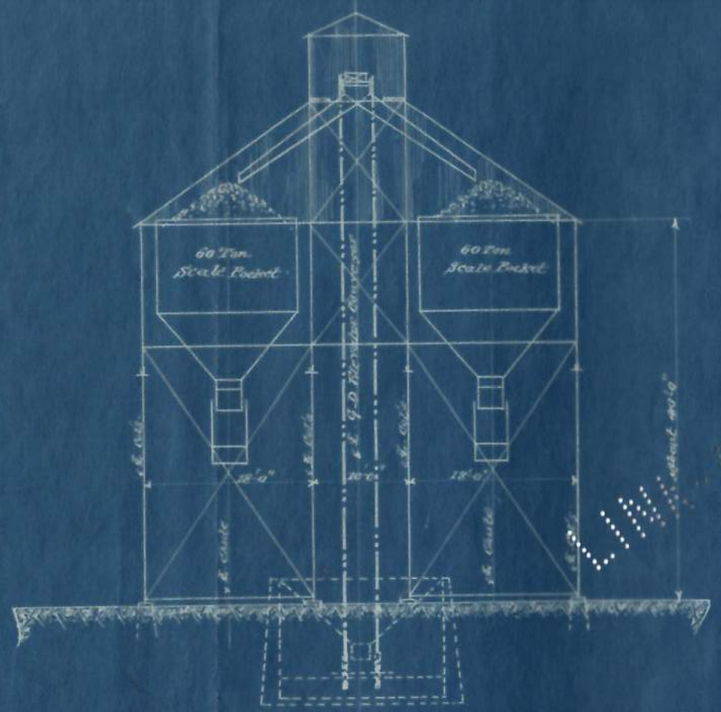
SCALE 1/8" = 1 Ft.

DATE NOVEMBER 11th 1912. ESTIMATE No. 2775.

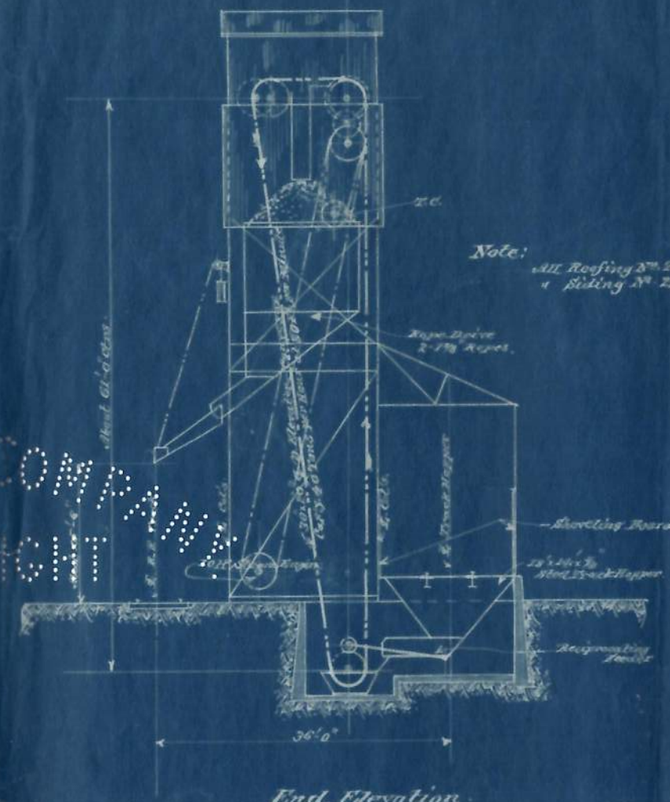
REVISED

MADE BY M.P. TRACED BY F.D.

APPROVED BY [illegible] CHECKED BY H.S.



Side Elevation.



End Elevation.

LINK-BELT COMPANY

PHILADELPHIA. CHICAGO. INDIANAPOLIS

120 Ton Locomotive Coaling Station

For

ILLINOIS TERMINAL RAILROAD CO.

Alton, Ills.

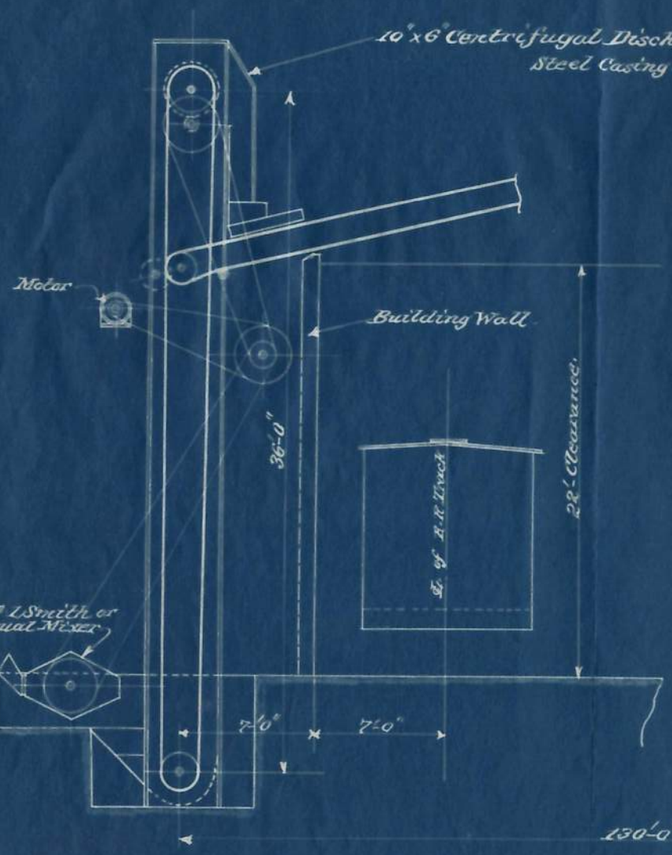
SCALE 1/16" = 1Ft.

DATE OCTOBER 11th. 1912. ESTIMATE No. 2678.

REVISED 10-23-12

MADE BY M.P. TRACED BY F.D.

APPROVED BY CHECKED BY



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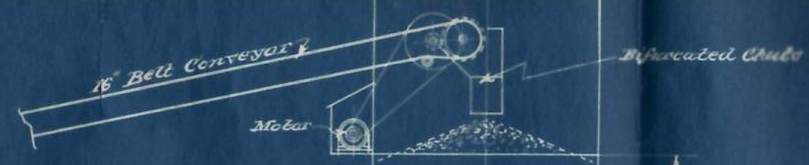
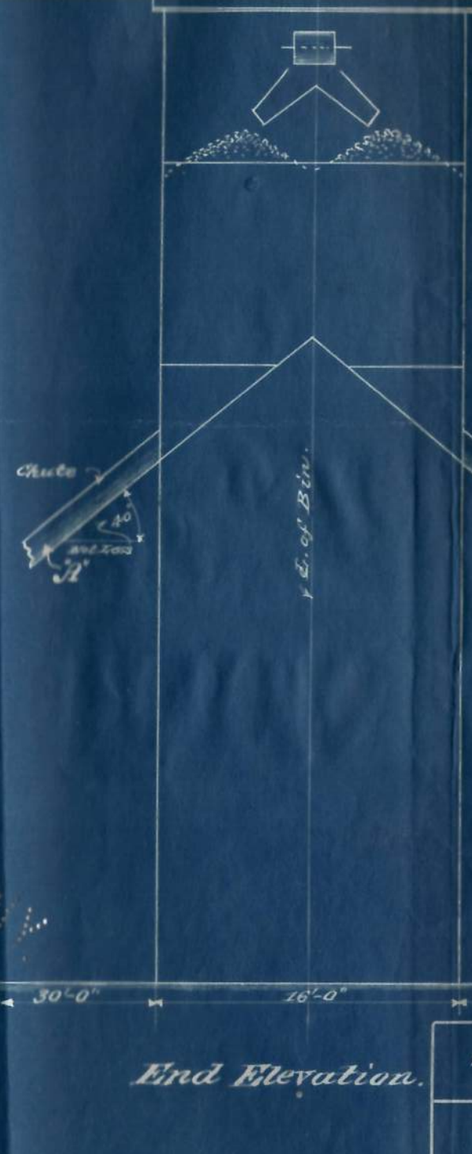
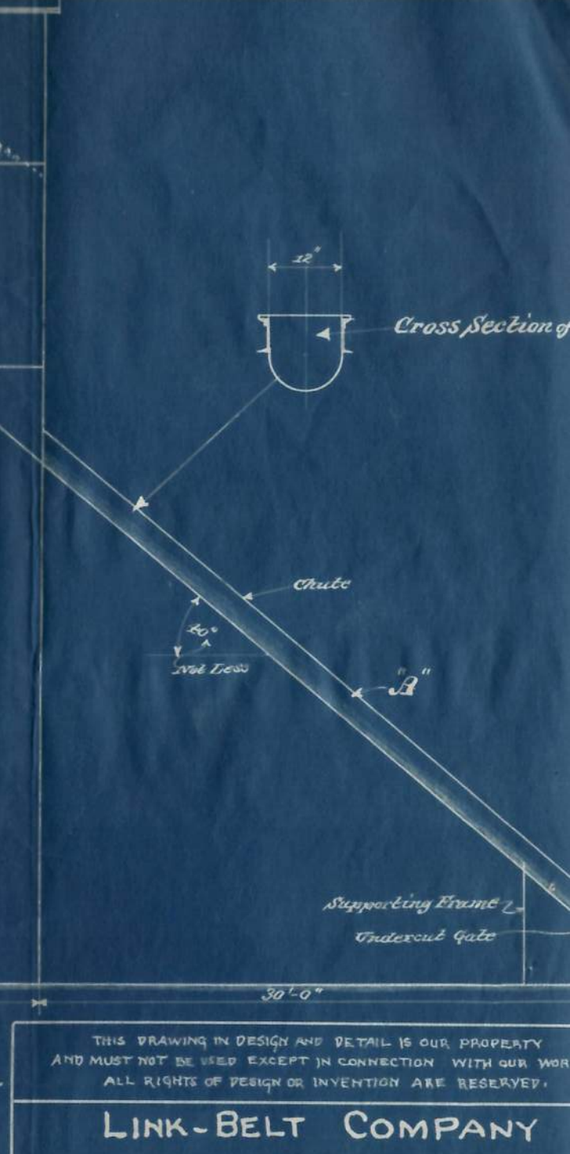






30'-0" 16'-0" 30'-0"

End Elevation.

LINK-BELT COMPANY

PHILADELPHIA. CHICAGO. INDIANAPOLIS

Batch Handling Equipment

For

ILLINOIS GLASS COMPANY

Alton, Ills.

SCALE 1/8" = 1Ft.

DATE OCTOBER 30th 1912. ESTIMATE No. 2905

REVISED

MADE BY M.G. TRACED BY F.D.

APPROVED BY CHECKED BY

A3 CE639

16" Belt Conveyor

Bifurcated Chute

Motor

Capacity 80 Tons.

E. of Bin

44'-0"

10" x 6" Centrifugal Discharge Elevator
Steel Casing

Motor

Building Wall

36'-0"

E. of R.R. Track

24' Clearance.

With or Without Scale

7'-0"

7'-0"

130'-0"

Side Elevation.

Chute

40°

Bolt Holes

"A"

E. of Bin

30'-0"

16'-0"

30'-0"

End Elevation.

12"

Cross Section of Chute.

Chute

60°

Bolt Holes

"A"

Supporting Frame

Undercut Gate

LINK-BELT COMPANY

PHILADELPHIA. CHICAGO. INDIANAPOLIS.

Batch Handling Equipment

For

ILLINOIS GLASS COMPANY

Alton, Ills.

SCALE 1/8" = 1Ft.

DATE OCTOBER 30th 1912. ESTIMATE No. 2905

REVISED

MADE BY M.G. TRACED BY F.D.

APPROVED BY CHECKED BY

CC 15 A

LINK-BELT COMPANY

2679-GHO.

Chicago, Ill., Oct. 30, 1912.

TO: ILLINOIS TERMINAL RAILROAD CO.,
St. Louis, Missouri.

We propose to furnish at the affixed price the following:

	Price
ONE "LINK-BELT" TYPE LOCOMOTIVE COALING STATION, as covered by specifications on four sheets hereto attached (exclusive of Building Structure specified on sheet No. 3); for the sum of: FIVE THOUSAND TWO HUNDRED FIFTY DOLLARS - - -	$5,250.00
BUILDING STRUCTURE, as covered by specifications under this heading on sheet No. 3 hereof; for the additional sum of: THREE THOUSAND SIX HUNDRED DOLLARS - - - -	$3,600.00
If desired, we will furnish one additional Scale Pocket with Gate and Chute to locomotives, as specified under this heading on sheet No. 3, including a steel chute from elevator-conveyor; for the additional sum of: TWO THOUSAND TWO HUNDRED DOLLARS - - - -	$2,200.00
If desired, we will furnish, in connection with the building structure mentioned above, the necessary steel supports for one additional scale pocket as specified above, complete with galvanized corrugated steel housing, for the additional sum of: SEVEN HUNDRED DOLLARS - - - - - -	$ 700.00
T O T A L - - - - - - -	$11,750.00

N.B.-

The above prices cover delivery and erection at Alton, Illinois.

TERMS: Fifty per cent (50%) cash when material is shipped (or when material is ready for shipment, if you are not ready to receive it); forty per cent (40%) cash when material has been erected; balance on successful joint test made within ten days after completion of erection, provided the erection or test be not delayed on your account, in which case payment in full shall be made not later than sixty days from date of first invoice.

C1-27 79

CC 15 E

The title and right of possession to the material furnished under this contract remains in the Link-Belt Company, until the same has been fully paid for in cash.

DELIVERY: Shipment to be made **about 90 to 100 days after receipt of acceptance of this proposal, and erection completed promptly thereafter.**

It is agreed that we shall not be liable for delays occasioned by strikes, fires or other causes beyond our reasonable control.

The material is to be at your risk of damage after delivery to the carrier in good order, and its acceptance when delivered constitutes a waiver of all claims for damages by reason of any delay.

In case of delays occasioned by you, or any other contractor with you, you are to pay for the time of our men at the regular rates and their expenses occasioned by such delay.

ALTERATIONS: It is agreed that if alterations or changes in the material covered hereby are made by us at your request, the above named price shall be increased or decreased, as such alterations or changes may affect the cost to us.

We will make no allowances for repairs and alterations unless said repairs or alterations are made with our written consent.

GUARANTY: We guarantee that the material and workmanship entering into the construction of the foregoing shall be first-class in every respect for the purpose intended. We will furnish duplicates of any parts which are proved, within one year from starting operation, to have been defective at the time we furnished them; but it is understood and agreed that our liability under this Guaranty is limited to the furnishing of such parts.

ACCEPTANCE: This proposal is submitted for your acceptance within **fifteen** days from date. It is subject to the approval of an officer of the Link-Belt Company and shall not be binding upon this Company until so approved.

AGREEMENTS: There are no verbal understandings or agreements outside of this written contract.

LINK-BELT COMPANY.

BY W B Rackey

ACCEPTED: _____ 191__

_____

_____

APPROVED _____ 191__

AT _____

BY _____

LINK-BELT COMPANY

SPECIFICATIONS

FORMING PART OF PROPOSAL DATED Chicago, Oct. 30, 1912.

TO ILLINOIS TERMINAL R. R. CO. FOR LOCOMOTIVE COALING STATION.

TRACK HOPPER AND GIRDERS:

1 - Track Receiving Hopper, 18'0" x 14'0" in plan, made up of 1/4" steel plate, with suitable angle stiffeners, and arranged for use in connection with reciprocating feeder specified below.

1 - 12" - 20½# channel for supporting one side of hopper.

2 - 20" - 112# Bethlehem steel girders for support of railway track over track hopper, with rail clips and bolts for fastening rails to girders.

RECIPROCATING FEEDER:

1 - Link-Belt automatic reciprocating feeder, of steel construction throughout and complete with cast iron supports from receiving hopper; this machine to be entirely automatic in its action, transferring coal from hopper to elevator-conveyor at a suitable uniform rate, thus obviating all danger of overloading the elevator-conveyor.

1 - Drive shaft, with collars, angle bearings fitted with grease cups, a pair of cast iron spur gears for connection to elevator-conveyor foot shaft, and two crank discs complete with connecting rods and cross-head connections to feeder plate.

MACHINERY, ETC. FOR ONE LINK-BELT GRAVITY-DISCHARGE ELEVATOR-CONVEYOR, 61'0" VERTICAL CENTERS, 9'0" HORIZONTAL CENTERS, HAVING CAPACITY OF 40 TONS PER HOUR WHEN OPERATING AT A SPEED OF 80 FEET PER MINUTE; AS FOLLOWS:

1 - 3-15/16" head shaft, with collars, angle bearings with grease cups, two 47" P.D. sprocket wheels, and one Link-Belt Spur Equalizing Gear to obviate the pulsating motion otherwise incident to the use of long pitch chain.

1 - 7'0" counter shaft, with collars, angle bearings fitted with grease cups, one cast steel spur equalizing pinion, and one spur gear.

FORMING PART OF PROPOSAL DATED Chicago, Oct. 30, 1912.

TO ILLINOIS TERMINAL R. R. CO. FOR LOCOMOTIVE COALING STATION:

ONE LINK-BELT G.D. ELEVATOR-CONVEYOR (continued):

1 - 7'6" counter shaft, 175 RPM, with collars, angle bearings fitted with grease cups, one spur pinion, and one 36" - 1-groove 1-1/8" manila rope sheave and one 36" rewinder sheave fitted with grease cups, to receive power.

1 - 3-7/16" take-up shaft, with collars, two 47" P.D. sprocket wheels, and two 36" style "D" take-ups with grease cups.

1 - 1/4" steel elevator boot, complete with bearings fitted with grease cups, foot shaft and two 36" P.D. sprocket wheels.

144 - Lin. ft. of elevator-conveyor, made up of 30" x 20" gravity-discharge buckets of 3/16" steel plate, attached at intervals of 6'0" to two strands of 3/8" x 2" x 18" pitch steel bar link bushed rolling chain with 3-1/4" diameter cast iron rollers.

1 - 7" x 8" Snell & Meharg (or equal) vertical steam engine, designed to develop 10 H.P. with 90# steam pressure at throttle, when running at 180 RPM, complete with a 36" - 1-groove 1-1/8" manila rope sheave.

1 - 36" vertical adjustable tension carriage, complete with pipe tracks and tension weights.

200 - Lin. ft. of 1-1/8" Red Thread Brand Manila Transmission rope.

1 - 1/4" steel suitably curved upper troughing corner.

The necessary 1/4" steel trough and flat steel bar tracking for horizontal run of carrier.

1 - Casing for ascending vertical run of elevator-conveyor, made up of #12 gauge steel plate and angles, and complete with 4" x 3" x 5/16" angle guides.

The necessary 4" x 3" x 5/16" angle guides for descending vertical run.

1 - 1/4" and 3/16" steel chute to bin.

LINK-BELT COMPANY

SPECIFICATIONS

FORMING PART OF PROPOSAL DATED Chicago, Oct. 20, 1912.

TO ILLINOIS TERMINAL R. R. CO. FOR LOCOMOTIVE COALING STATION.

SCALE POCKET WITH GATE AND CHUTE TO LOCOMOTIVES:

1 - Scale Pocket, of 5/16" steel plate with suitable channel and angle stiffeners, with a storage capacity for about 60 tons of bituminous coal, and mounted on a scale having a weighing capacity of 60 tons. The scale will be complete with recording beam located within easy reading distance of operator when standing on ground, and #14 gauge steel protection will be provided for the scale levers.

The above pocket will be equipped with a Link-Belt Locomotive Coaling Gate and Chute complete. The gate will be of cast iron and steel construction, with hand wheel operating mechanism. The chute will be of 1/4" and 3/16" steel plate, hooded at the outer end to prevent spilling of coal, and will be counterweighted so that it will stay in either the coaling or raised position, the operation being controlled by hand chain.

- - - - - - - - - - -

BUILDING STRUCTURE:

Steel structure for the equipment described above, complete above your foundations, including engine house and housing over track receiving hopper; complete with supports for scale hopper, machinery supports, steel stairway to scale pocket and a steel ladder from scale pocket for access to driving machinery, wooden walkways, hand railings, windows, doors, etc., together with the necessary galvanized corrugated steel housing, the roofing to be #20 gauge and the siding #22 gauge. We also include two #10 gauge steel plate shoveling boards, with suitable angle stiffeners.

- - - - - - - - - - -

LINK-BELT COMPANY

SPECIFICATIONS

FORMING PART OF PROPOSAL DATED Chicago, Oct. 30, 1912.

TO ILLINOIS TERMINAL R. R. CO. FOR LOCOMOTIVE COALING STATION.

N.B.-

Our blue-print CE-6368, herewith submitted, shows side and end elevations of coaling station of the general design as covered by this proposal, with two 60-ton capacity scale pockets.

We will furnish, in connection with the above, erection plans showing all necessary clearance dimensions and load diagrams, to enable you to provide in place suitable masonry pits and foundations, and make any other necessary preparation of the location for the reception of our material; no work in such preparation of the location to be done prior to your receipt of the above mentioned erection plans.

It is mutually understood and agreed, that, under this contract, you are to remove all obstructions; do all grading and track laying; furnish and install steam and exhaust connections to engine, lighting and heating equipment, ashes handling machinery, car-puller if required, foundations, and any other accessories not hereinabove provided for; provide suitable drainage including gutters and down-spouts; and take care of permits and inspection if required.

- - - - - - - - - - -

LINK-BELT COMPANY.

Date 2-5-1919
Carrier Ill-Term. R.R.
Valuation Section

~~W H Rogers~~ for Carrier
E E Johnstone for I. C. C.

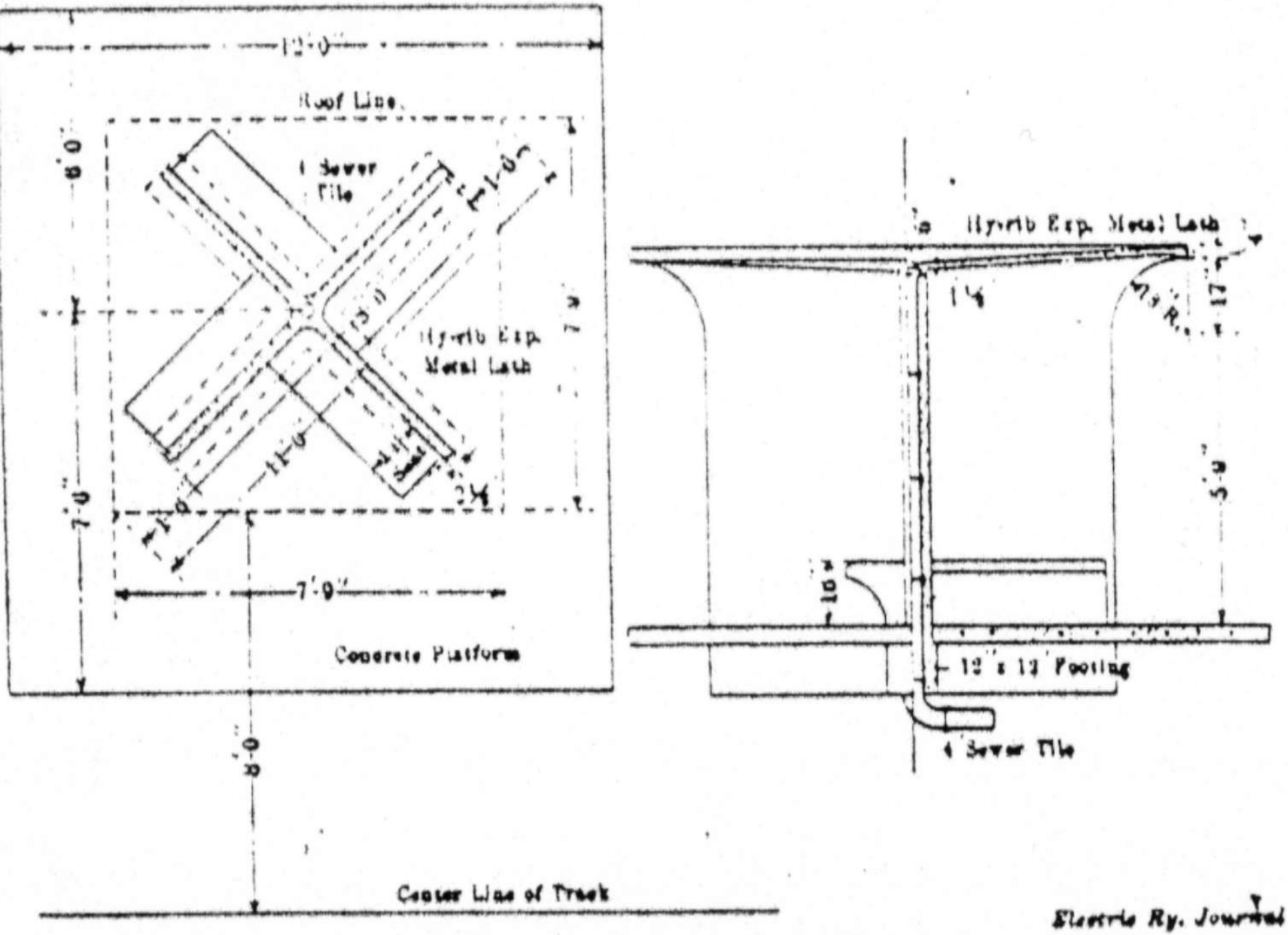
Foot 18

Federal Yard.

Coal Chute
All Steel See Plan H 15
Conc Per Found. 3'-0" to Footing. 18" Footing
37/40 — 92%

✓
✓ 1

Form approved July 15, 1915.



Electric Ry. Journal

Illinois Traction System—Reinforced Concrete Shelter Shed

B. V. Form No. 68-R

Date June 20, 1929

Carrier Ill. Trac. Inc.

Valuation Section Ill

INTERSTATE COMMERCE COMMISSION

BUREAU OF VALUATION

Page 77

Crossing Gate

Account #7

for Carrier

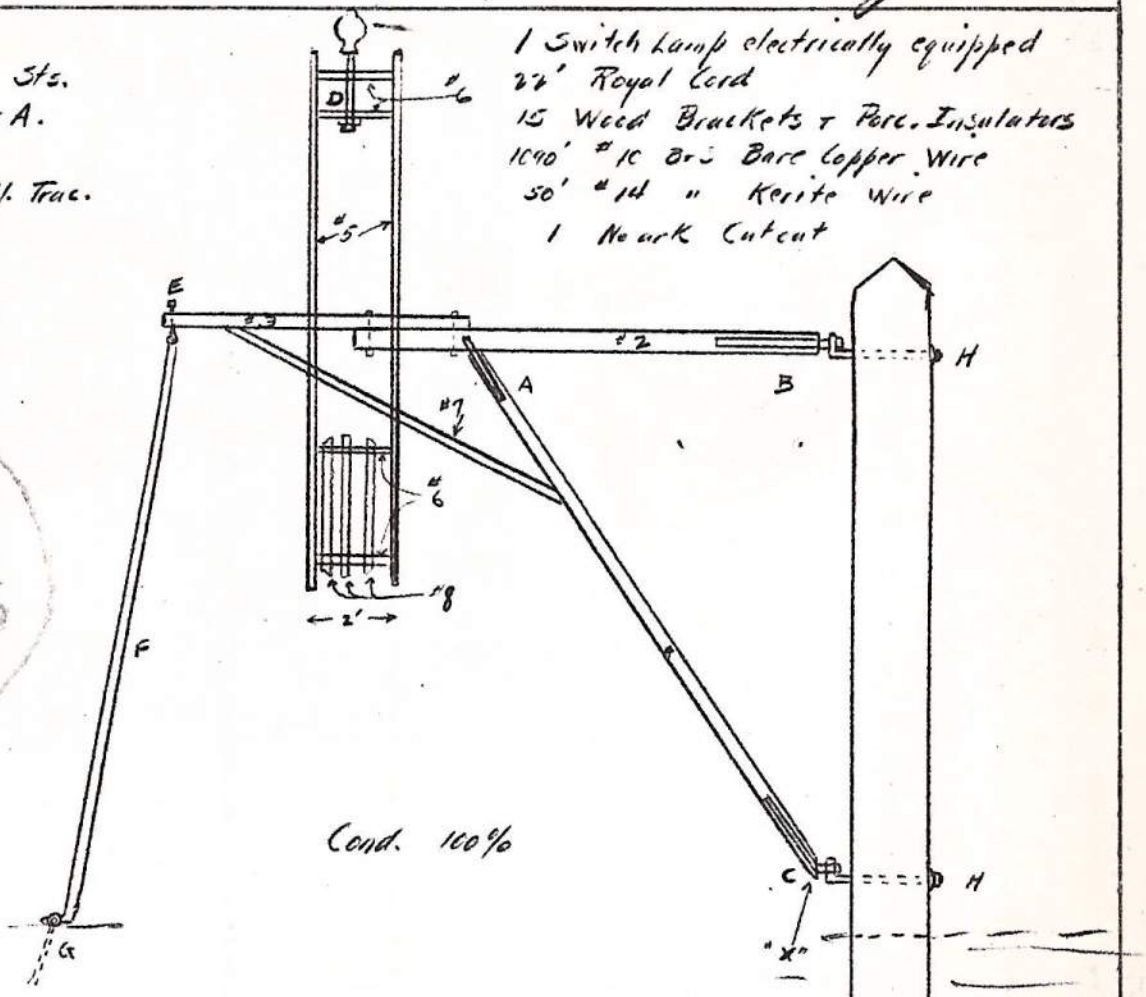
E. E. Hartung for I. C. C.

Carlinville, Ill.
West & Nicholas Sts.
Crossing with C & A.

Owned 100% Ill. Trac.

See Photo.

1 Switch Lamp electrically equipped
22' Royal Cord
15 Wood Brackets & Porc. Insulators
1090' #10 Br. Bare Copper Wire
50' #14 " Kerite Wire
1 Nourk Cutout



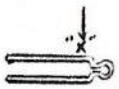
100% ITS

Cond. 100%

Bill of Material

#1	1	12"x12"x22' Fir Timber
#2	1	4"x5"x12' " "
#3	1	8' Crossarm
#4	1	4"x5"x11' " "
#5	2	3"x3"x15'
#6	4	3"x3"x2'
#7	7'	2"x4"
#8	3	7/8"x3"x42" Slats
A	2	1/2"x3"x24" strap iron 4 holes each
B	1	1/2"x4"x60" " " 4 " " side formed
C	1	1/2"x4"x60" " " 4 " " " " " " " " " " " " and also turned at 45° angle at point "X"
D	1	1"x20" Bolt and Washers
E	1	5/8"x8" Eye Bolt
F	1	3/4"x12' rod with eye at top and foot at bottom. Foot is slotted to fit over head of Eye Bolt fastened to ground
G	1	Eye Bolt. Precisely set in some concrete - 1 Padlock
H	2	7/8"x16" Bolts with 4" L turn, cast washer & nut.

2	1/2"x10" Bolts
4	1/2"x3" "
12	1/2"x6" "
3	1/2"x4" "
8	3/8"x3" "

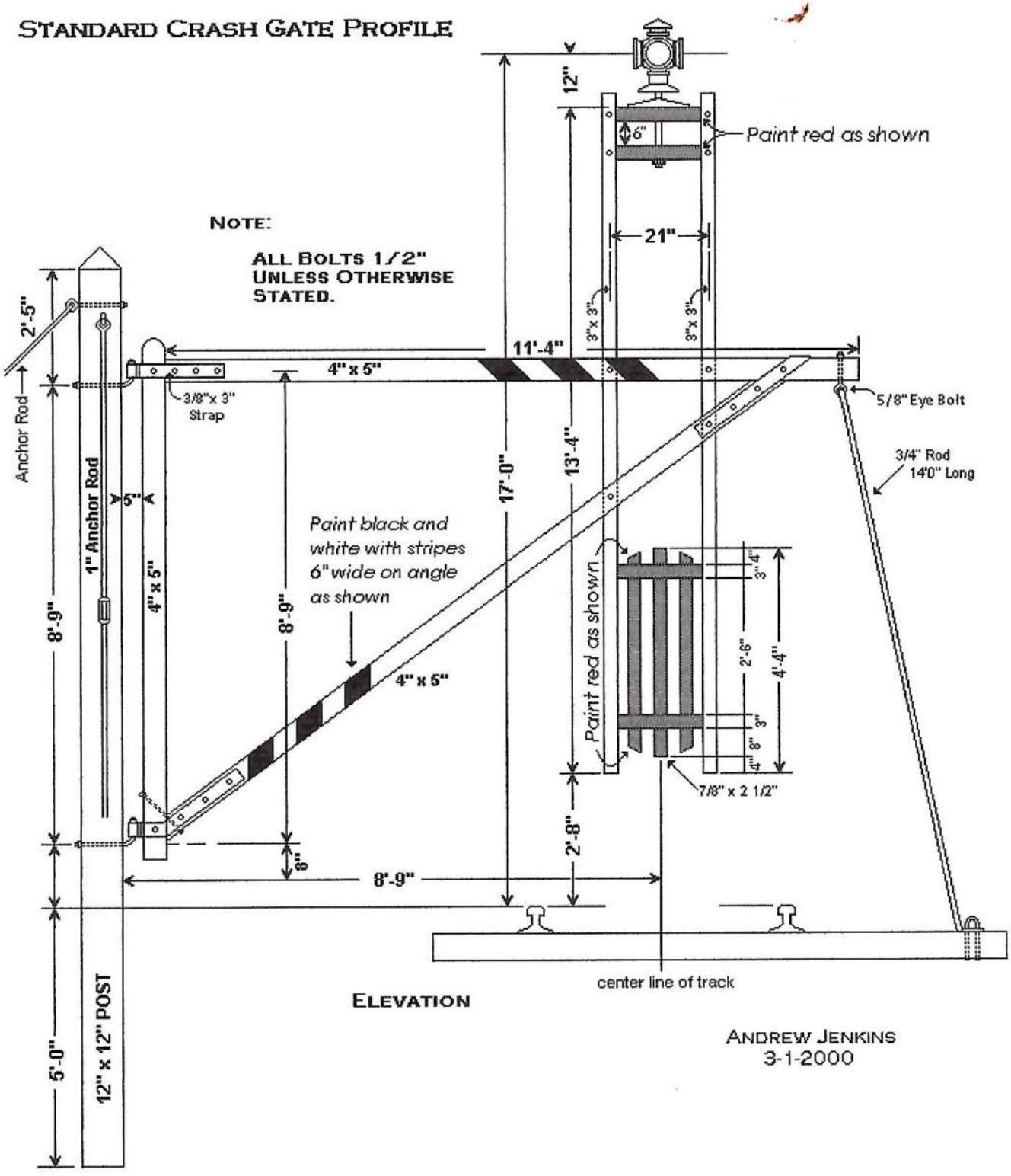


All painted white except 3' at base of post black and lower part of target red.

60" is overall length

" " 60" " " "

STANDARD CRASH GATE PROFILE



ELEVATION

ANDREW JENKINS
3-1-2000

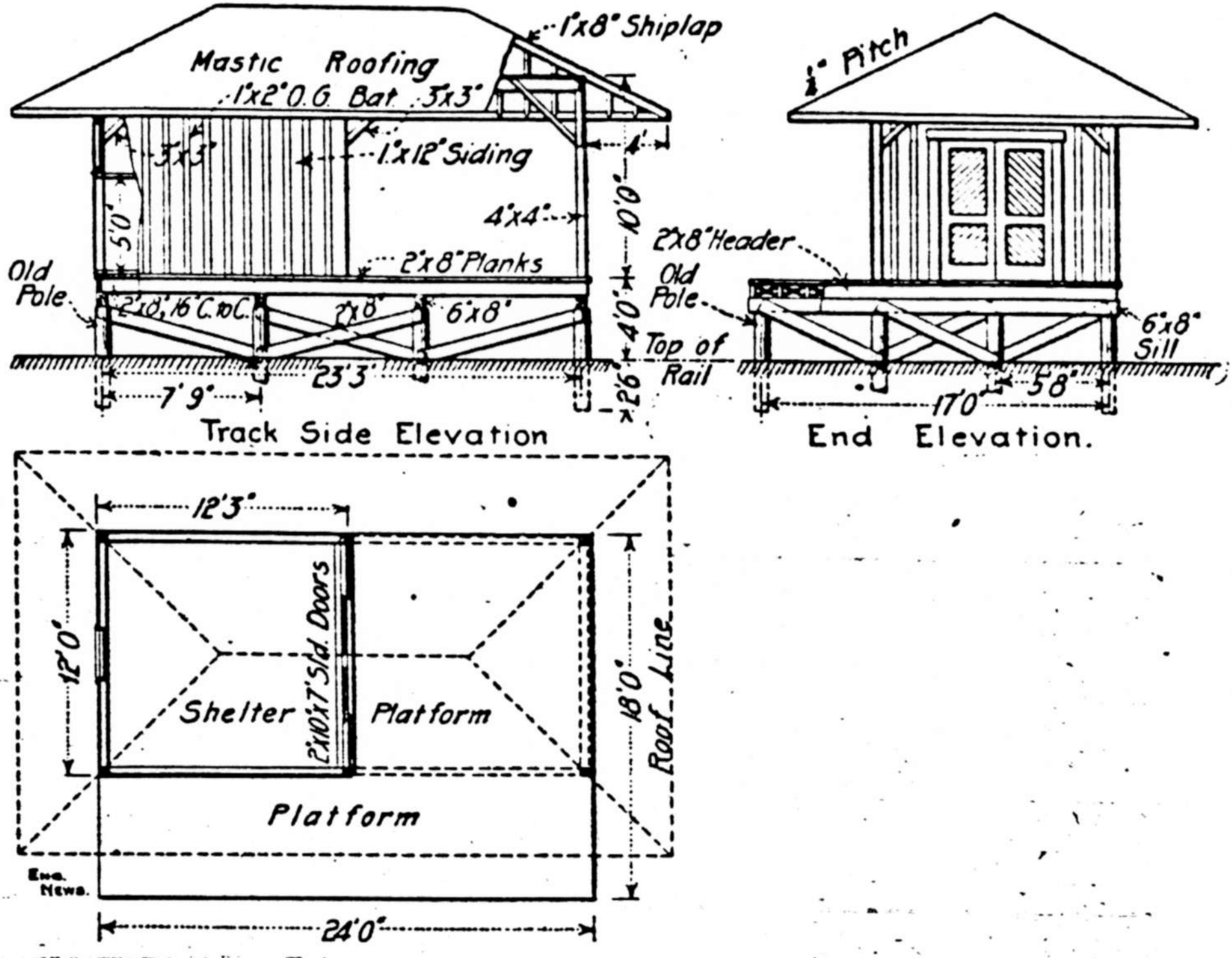
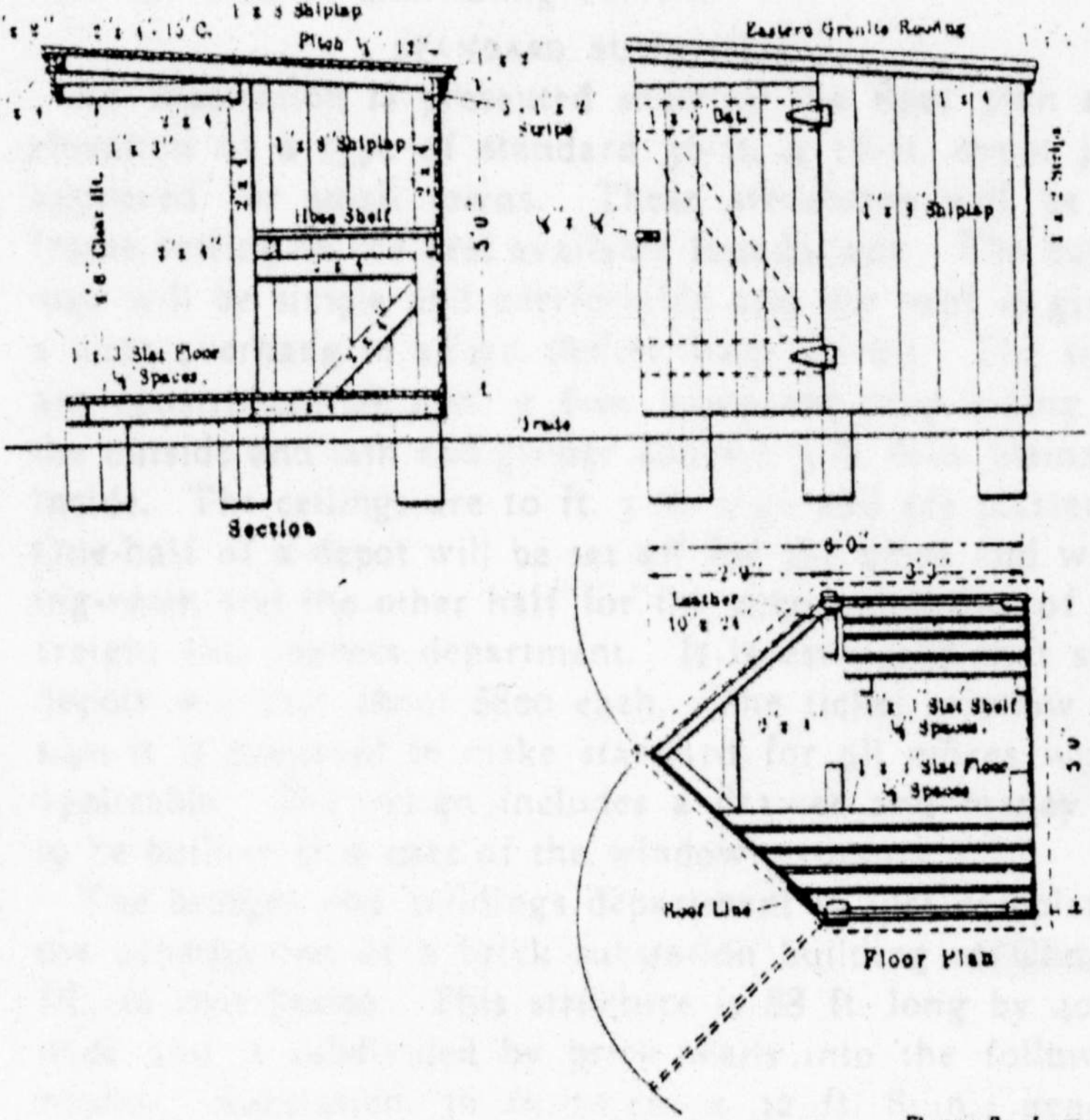
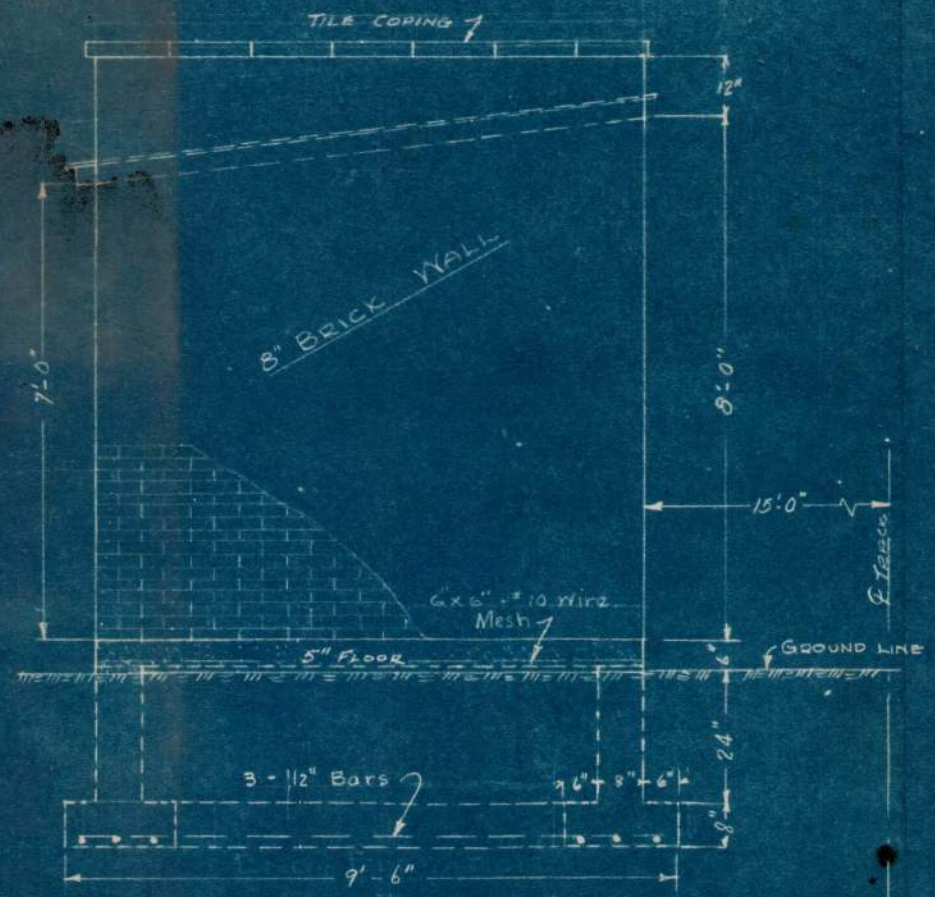


Fig. 9. Standard Freight Platform and Shelter at Road Crossing

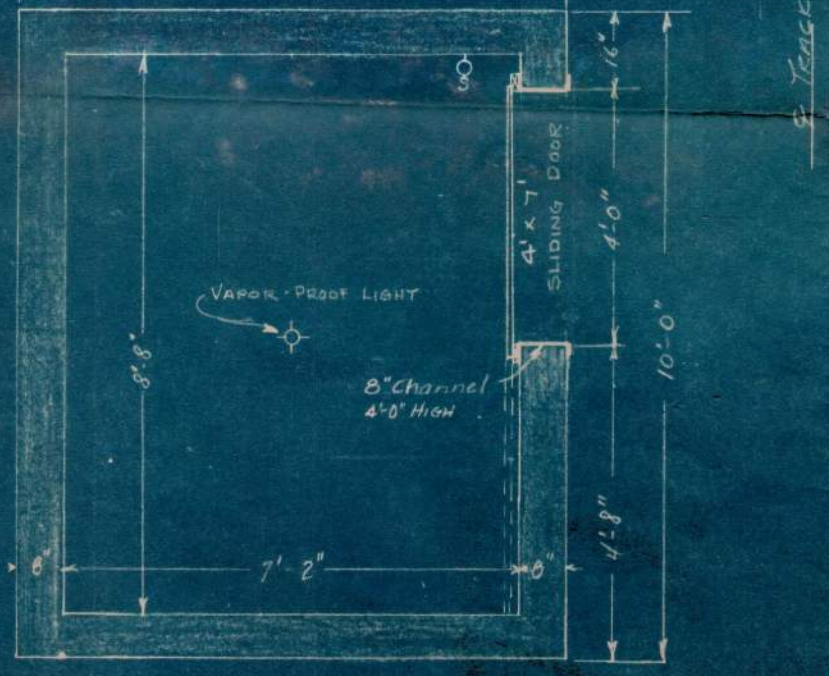


Electric Ry. Journal

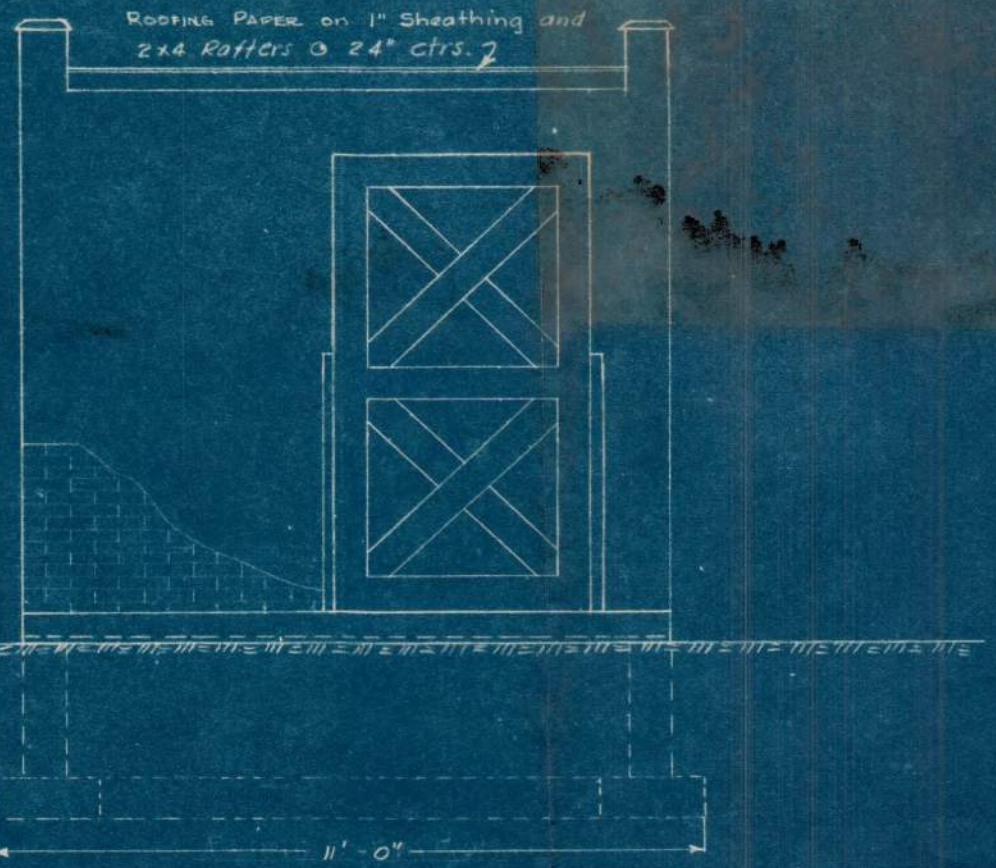
Illinois Traction System—Standard Hose House



END ELEVATION



PLAN



FRONT ELEVATION

BILL OF MATERIAL	
No.	DESCRIPTION
4 CY	CONCRETE
3200	BRICK
1	DOOR LINTEL - 2 ∠s 4"x4"x6'-0"
6	RAFTERS - 2"x4"x9'-0"
100 BF	1" SHEATHING
1 Sq.	ROOFING PAPER
1	4'x7' DOOR ON SLIDING TRACK
19 ft.	COPING TILE
8 FT.	8" CHANNEL FOR DOOR
1	ELECTRIC LIGHT & SWITCH
58.5 ft	1/2" ϕ REINFORCING BARS (401b.)
100 Sq ft.	WIRE MESH 6"x6" - #10 WIRE

ILLINOIS TERMINAL R.R. CO.

PROPOSED

OIL STORAGE BUILDING

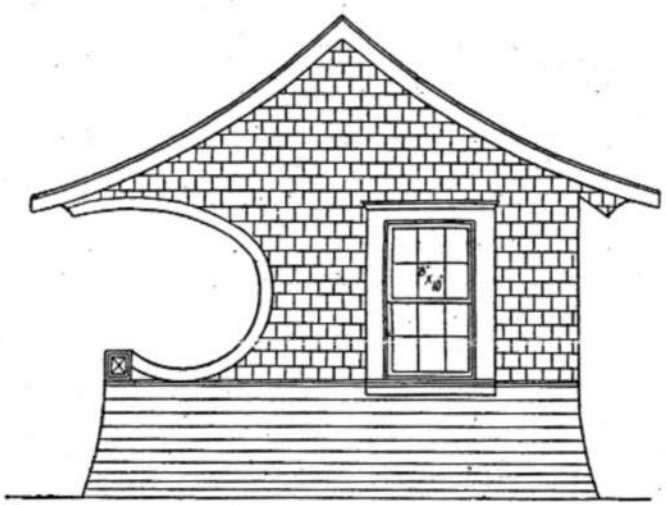
AT

McKINLEY JCT.

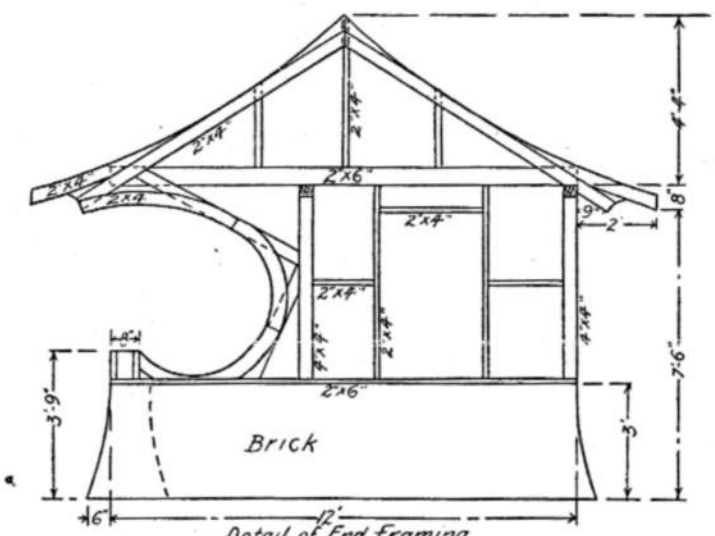
OFFICE OF CHIEF ENG. ST. LOUIS MO.

SCALE 1/2"=1'-0" OCT. 8 1947

A

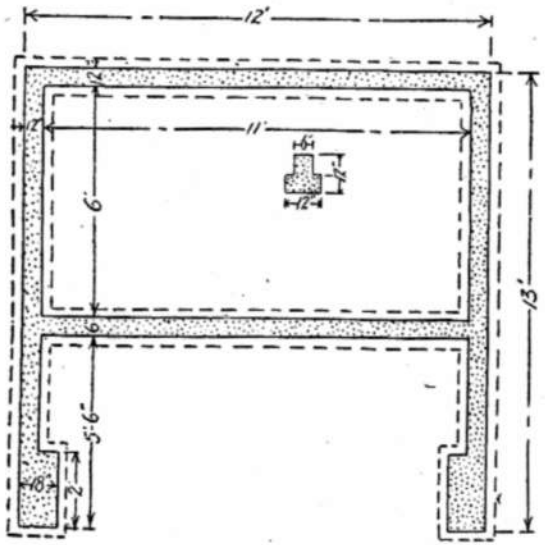


End Elevation

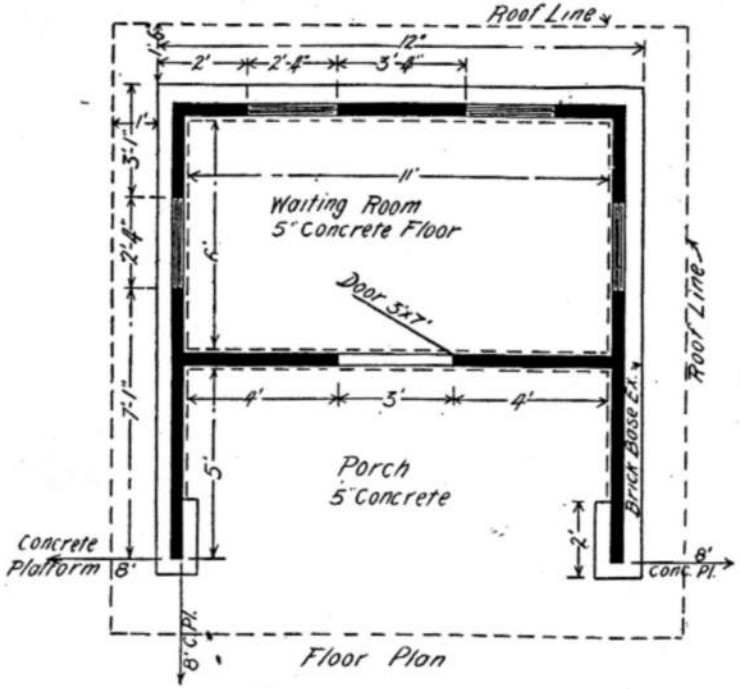


Detail of End Framing

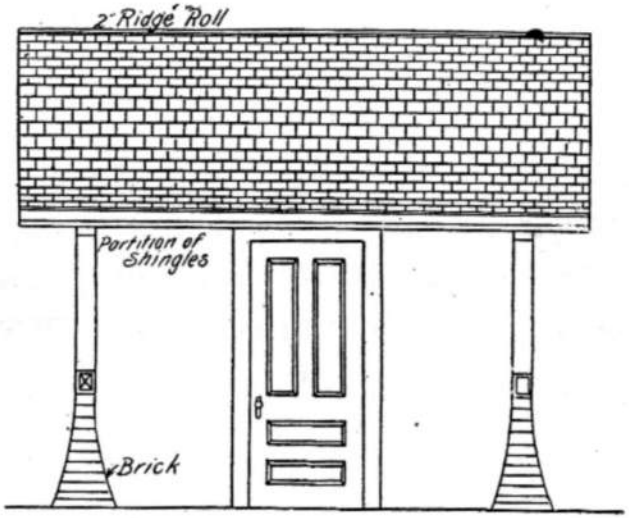
Rear Elevation



Foundation Plan

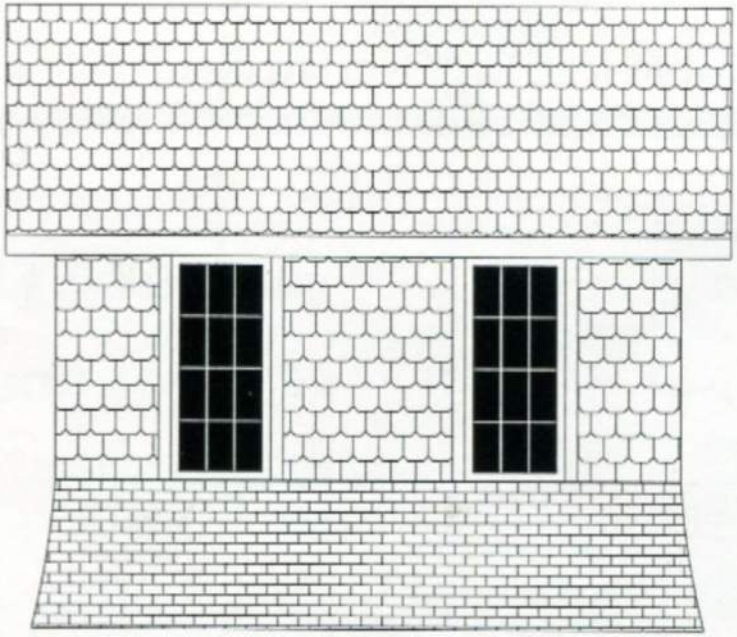


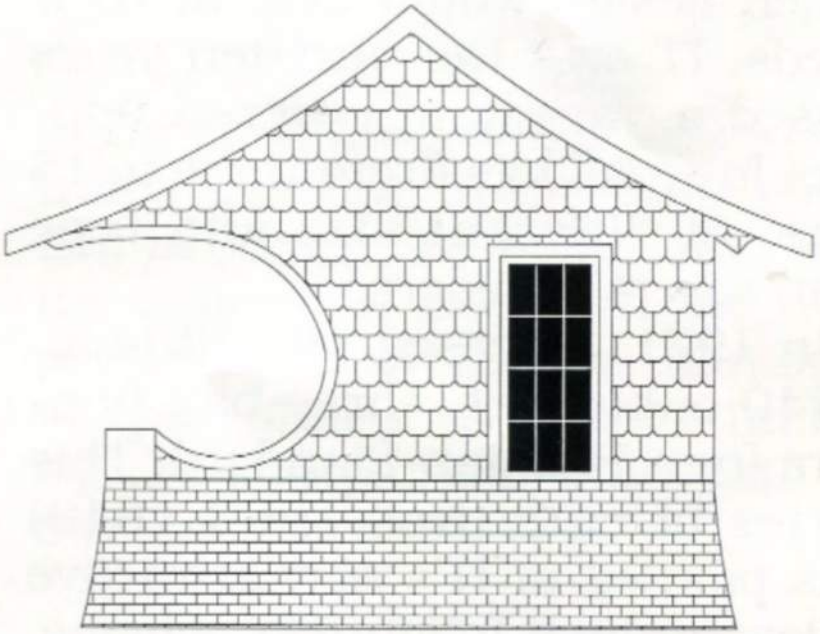
Floor Plan

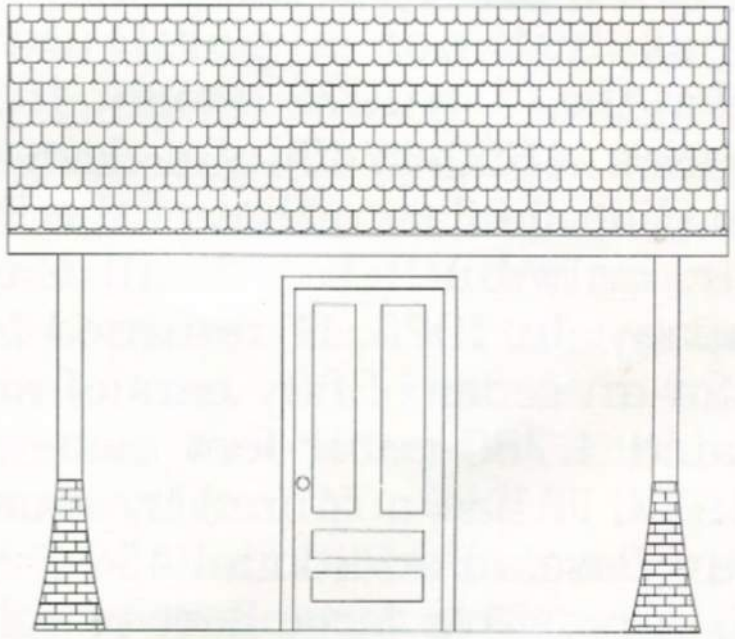


Front Elevation

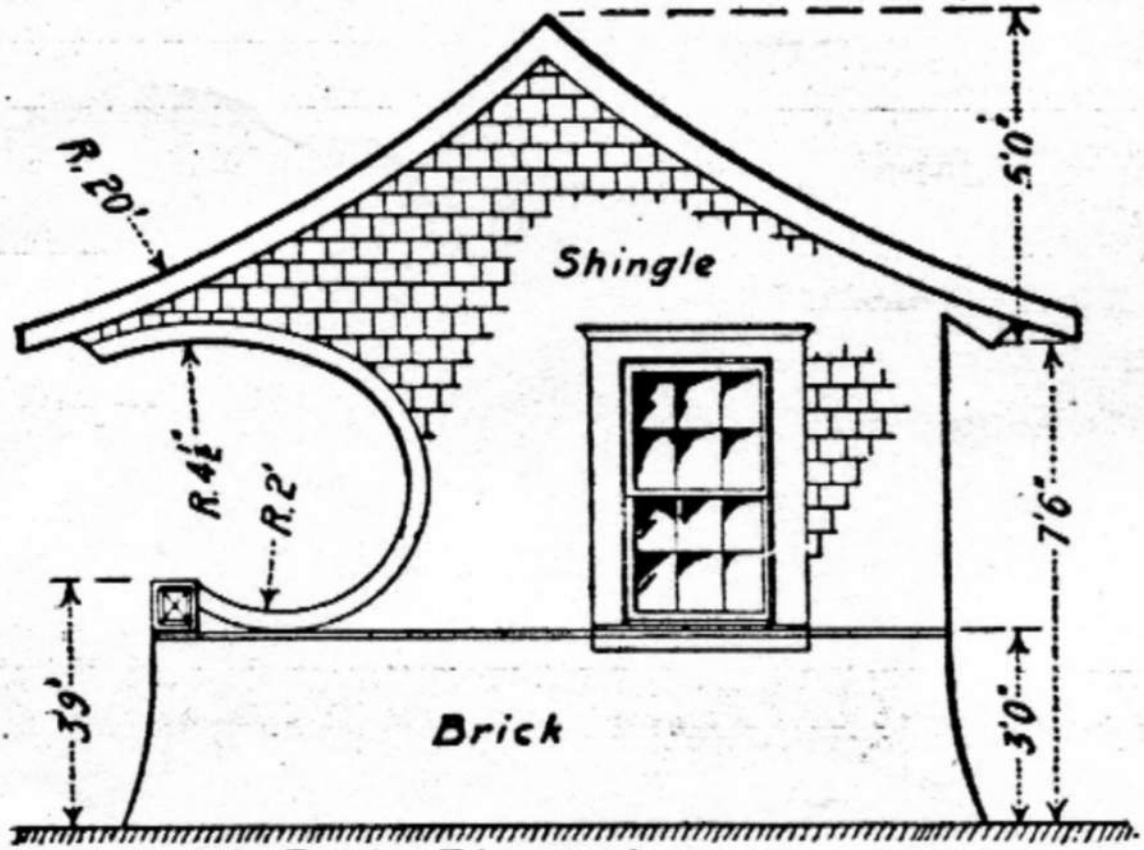
Plans, Elevations and Detail of End Framing of Standard Brick and Tile Shelter Shed



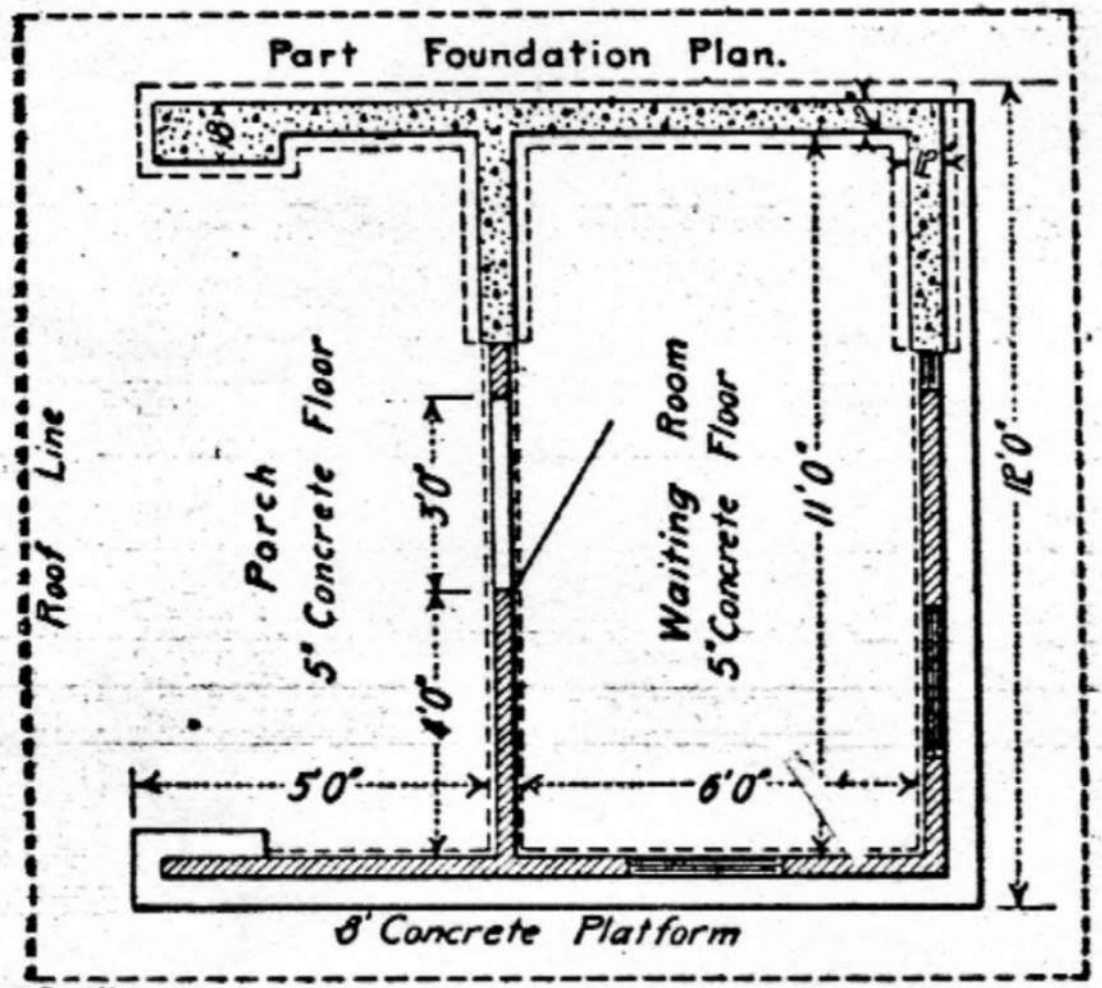




Illinois Traction standard pagoda passenger shelter

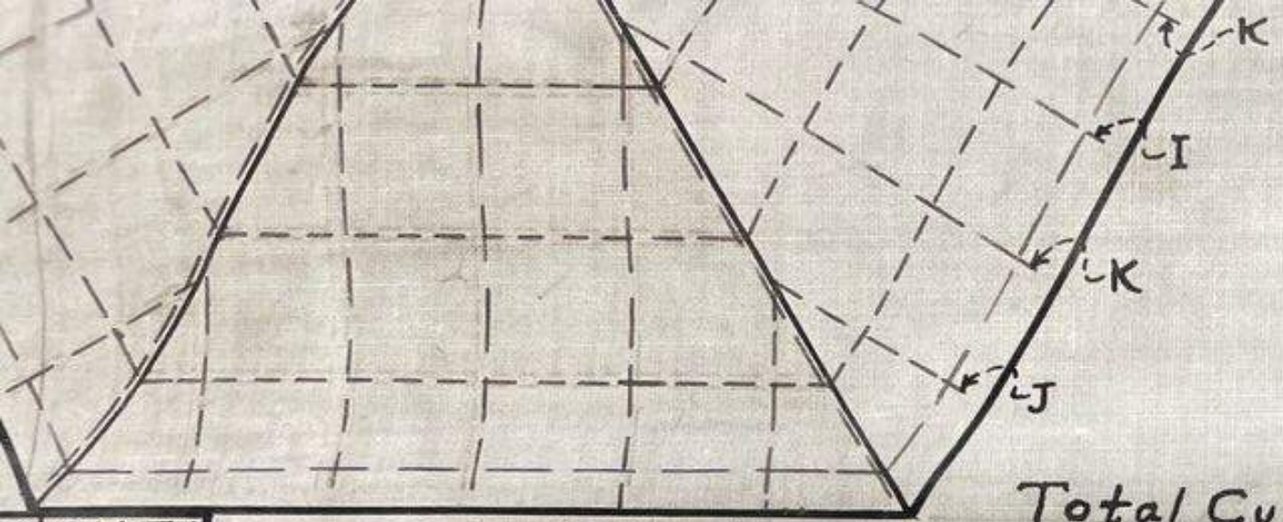


End Elevation.



Part Floor Plan.

Fig. 7. Standard Design for Ornamental Shelter



ZE	LENGTH
"ϕ	5'-4"
"ϕ	1'-3"
"ϕ	2'-2"
2"ϕ	1'-5"
1/2"ϕ	3'-2"
1/2"ϕ	4'-6"
"ϕ	2'-8"
"ϕ	3'-3"
ϕ	3'-10"
ϕ	4'-4"
ϕ	5'-0"

3'

Total Cu Yds in TelePhone Booth = 1.50

STANDARD REINFORCED CONCRETE TELEPHONE BOOTH

For The

ILLINOIS TERMINAL RAILROAD.

ILLINOIS TERMINAL COMPANY

ALTON-ILL.

Jan. 30, 1925.

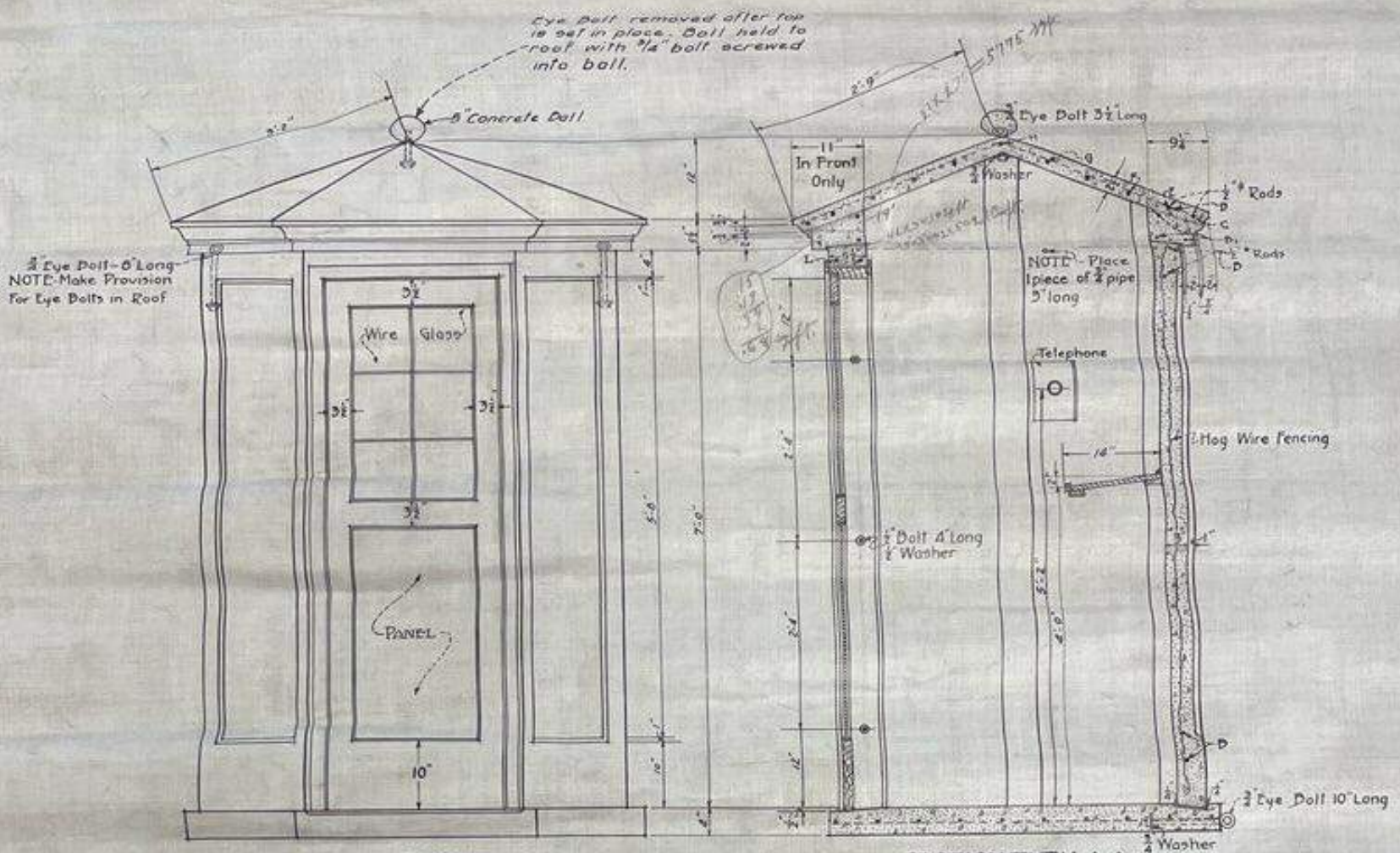
ROOF PLAN

Scale 1"=1'

Sheet No. 1.

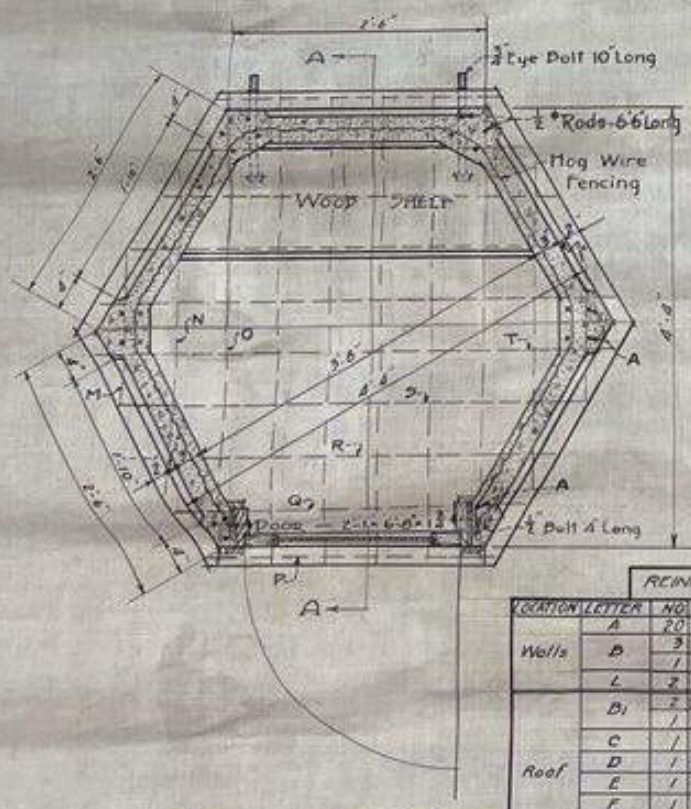
Set of 2 Sheets.

J-5

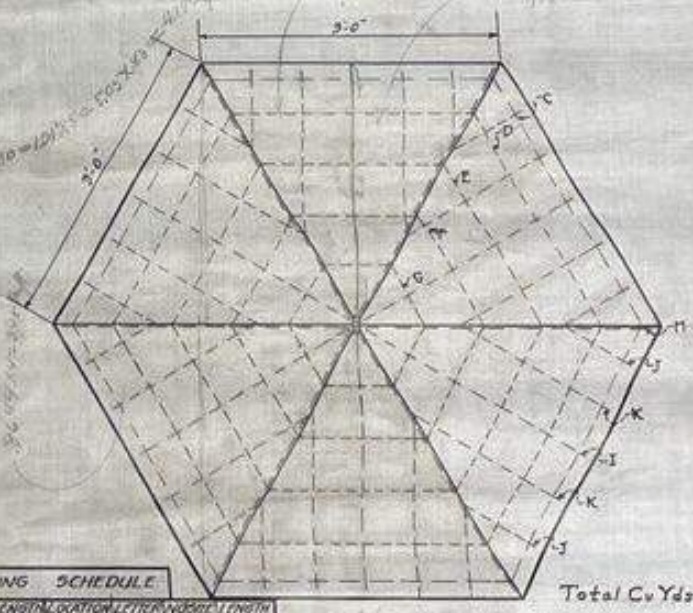


FRONT ELEVATION

SECTION THRU A-A



SECTION THRU PLAN



ROOF PLAN

REINFORCING SCHEDULE

Location	Letter	No.	Size	Length
Walls	A	20	1/2"	6-6
	B	3	3/8"	12'-3"
		1	1/2"	12'-6"
	L	2	5/8"	2'-8"
Roof	B1	2	3/8"	18'-6"
		1	1/2"	16'-0"
	C	1	5/8"	18'-6"
	D	1	3/8"	16'-0"
	E	1	5/8"	12'-6"
	F	1	5/8"	9'-6"
	G	1	5/8"	5'-6"
	H	3	3/8"	6'-0"
Roof	I	3	3/8"	9'-4"
	J	12	3/8"	1'-3"
	K	12	3/8"	2'-1"
	M	2	3/8"	1'-3"
	N	2	5/8"	3'-2"
	O	6	1/2"	4'-6"
Floor	P	2	1/2"	2'-0"
	Q	2	5/8"	3'-3"
	R	2	1/2"	3'-10"
	S	2	1/2"	4'-6"
	T	2	1/2"	5'-0"

Total Cu Yds in Telephone Booth = 1.50

STANDARD REINFORCED CONCRETE TELEPHONE BOOTH
For The
ILLINOIS TERMINAL RAILROAD

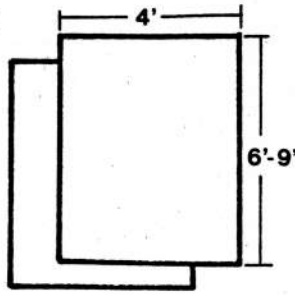
ILLINOIS TERMINAL COMPANY
ALTON-ILL.

Scale 1"-1'
Sheet No. 1.

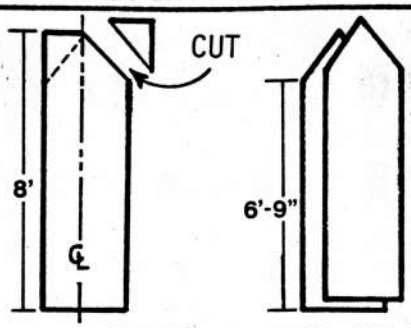
Jan. 30, 1925
Set of 2 Sheets.

J-5

DIAGRAM ONE



SIDE WALLS



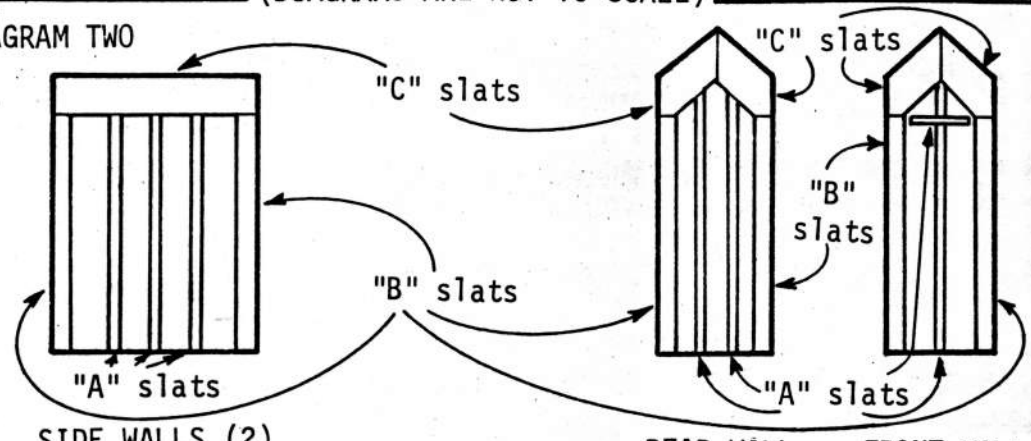
FRONT AND REAR WALLS

RAILROAD
ILLINOIS TERMINAL
HISTORICAL SOCIETY

Not connected with the
Illinois Terminal Railroad Company

(DIAGRAMS ARE NOT TO SCALE)

DIAGRAM TWO



SIDE WALLS (2) REAR WALL FRONT WALL

DIAGRAM THREE

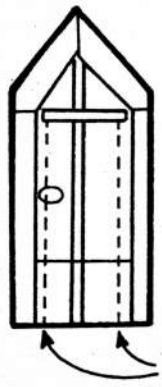
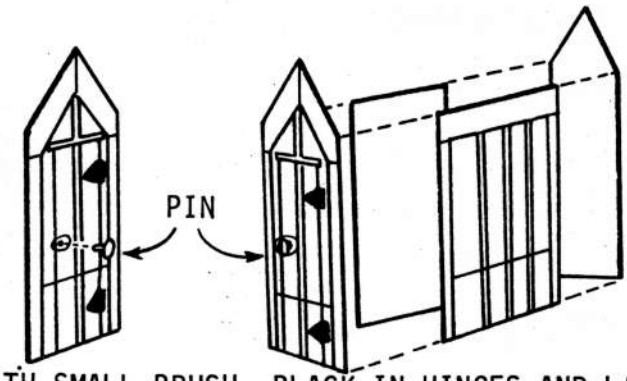
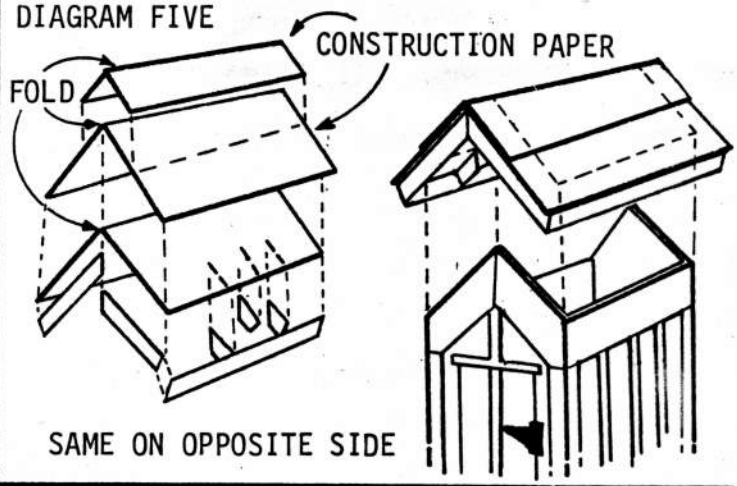


DIAGRAM FOUR

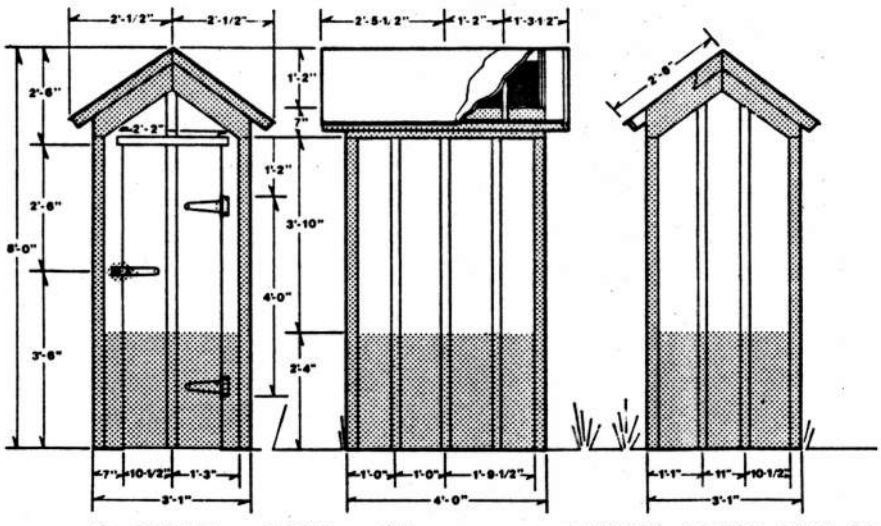


WITH SMALL BRUSH, BLACK IN HINGES AND LATCH

DIAGRAM FIVE



SAME ON OPPOSITE SIDE

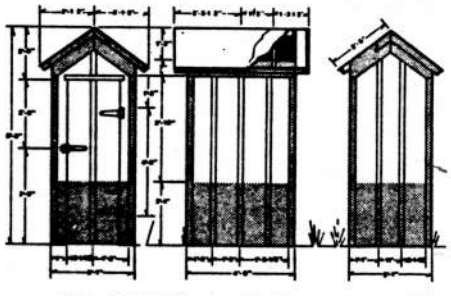


O SCALE - 1/4" = 1'

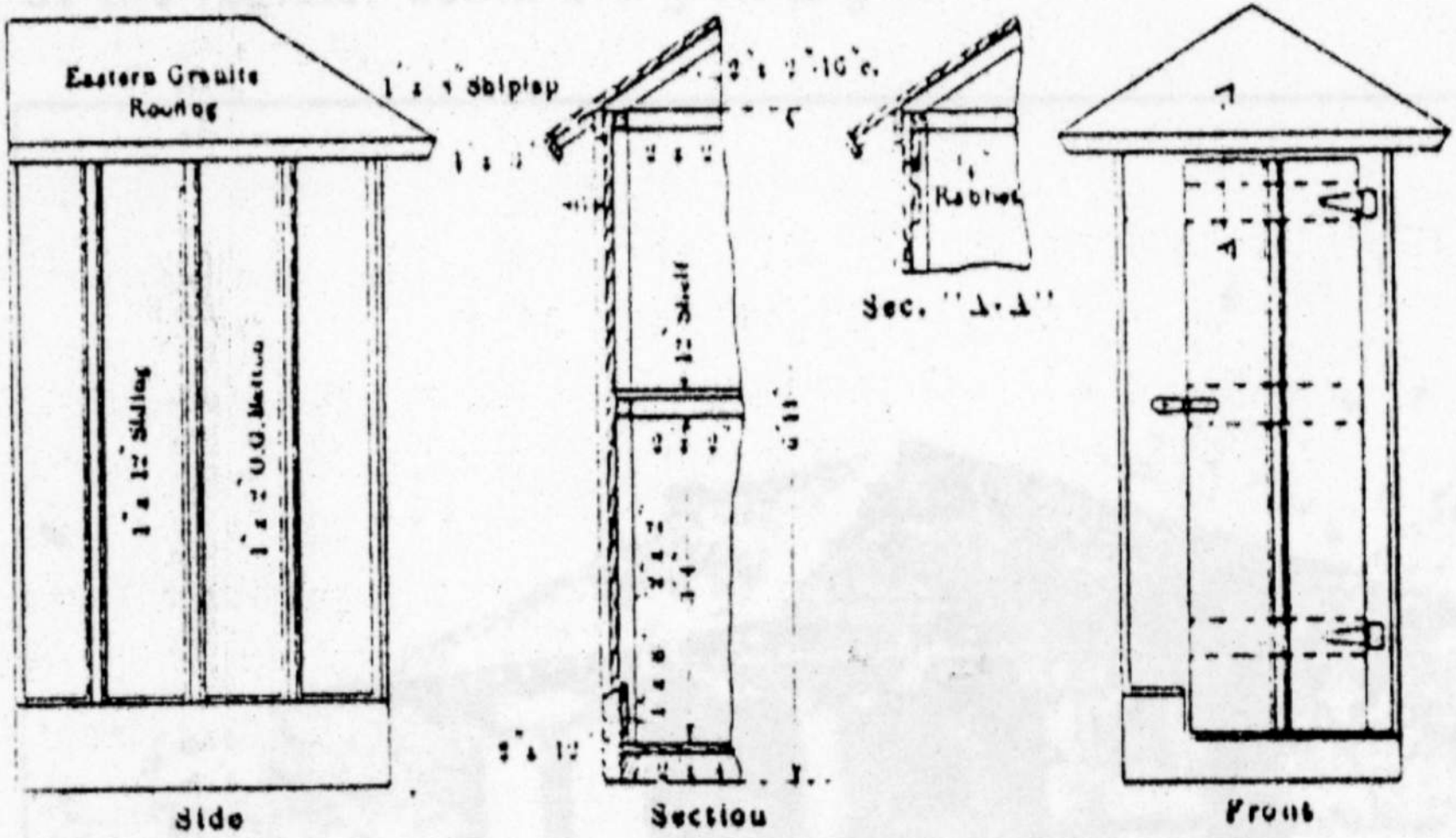
SHADED AREAS ARE GREEN

ILLINOIS TERMINAL RAILROAD
TELEPHONE BOOTH

DRAWN BY:
LARRY MILLER III
&
DALE JENKINS

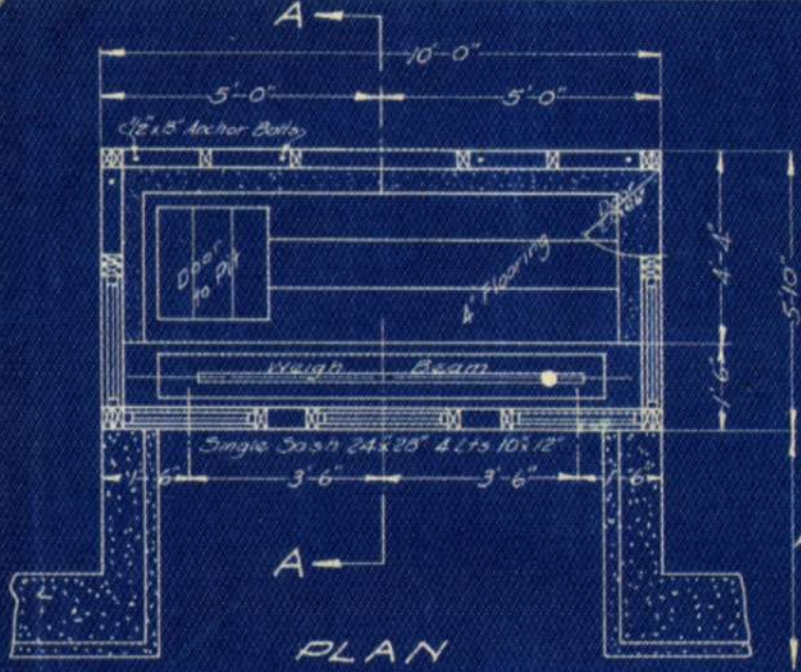


HO SCALE - 3.5 mm. = 1'

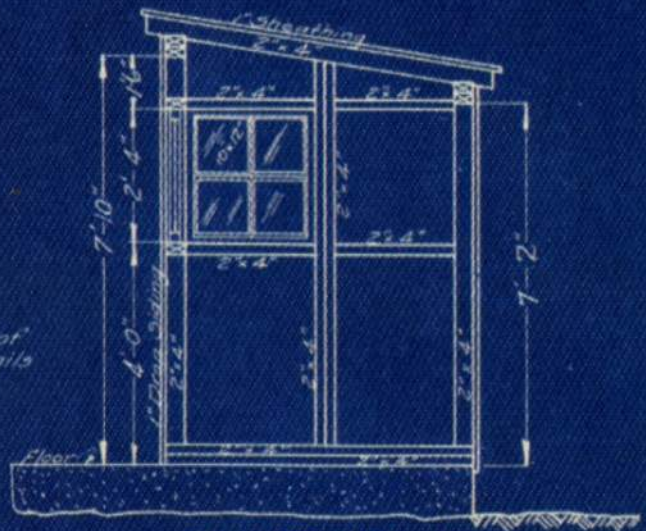


Electric Ry. Journal

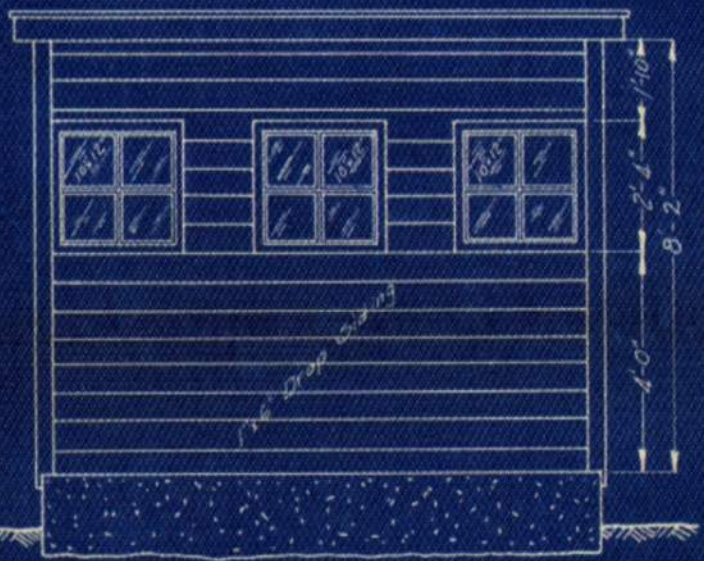
Illinois Traction System—Standard Telephone Booth



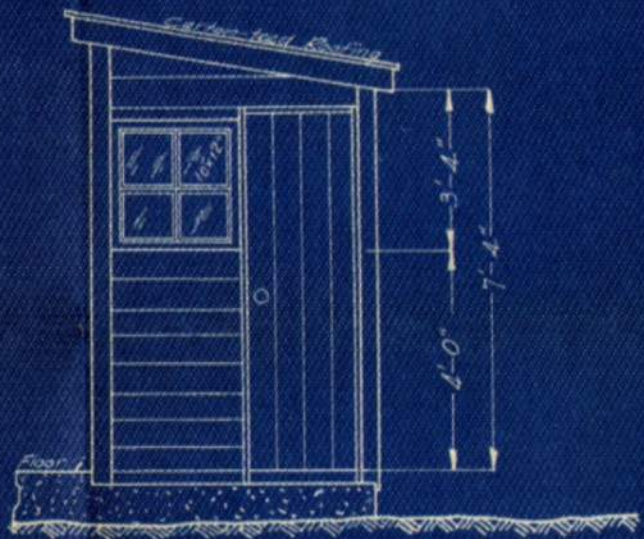
PLAN



SECTION A-A



SOUTH ELEVATION



EAST ELEVATION

INSTALLED UNDER I.T. C

ILLINOIS TERMINAL CO

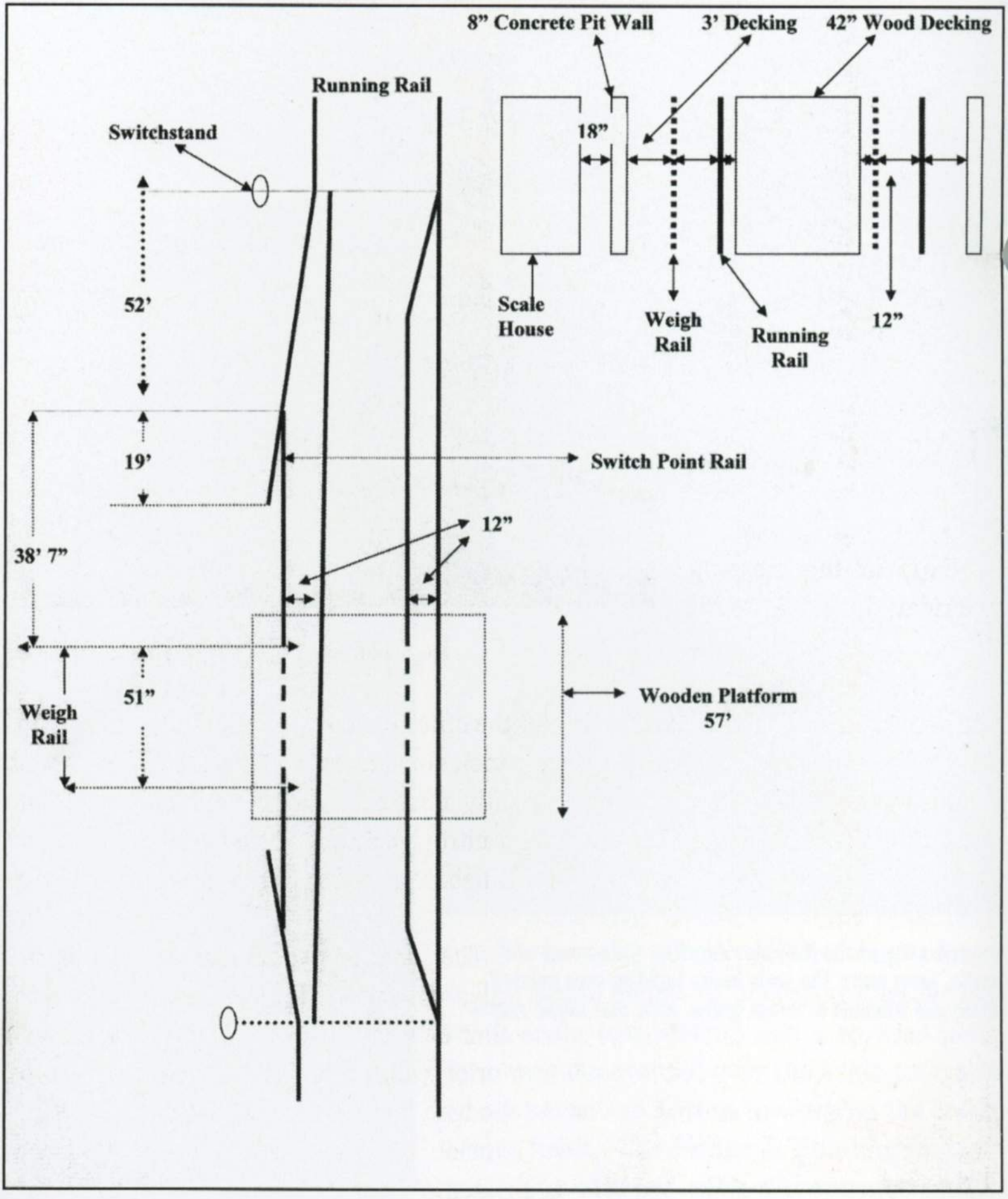
PROPOSED

SCALE HOUSE

FEDERAL, ILLINOIS

OFFICE ASST. CHIEF ENG ST LOUIS, MO

SCALE: NONE DEC. 1, 1936


8" Concrete Pit Wall
3' Decking
42" Wood Decking
Running Rail
Switchstand
18"
52'
Scale House
Weigh Rail
Running Rail
12"
19'
Switch Point Rail
12"
38' 7"
51"
Weigh Rail
Wooden Platform
57'

THE SCALE HOUSE

A northward view of the East Belt (Springfield) scale track. Note that the yard office was attached to the yard office. DALE JENKINS PHOTO

BY DALE JENKINS

The revenue generated by freight traffic was based on a rate to transport a product from one point to another determined by the weight of that product. With this, railroad track scales were located at key locations near originating stations to weigh the cars. The cars were spotted on the "scale" track which was an isolated piece of track mounted on a balancing beam of the scale. With the car spotted, the weighmaster, usually a clerk certified to weigh cars, would slide the balancing weight, stopping when the scale balancing arm was in balance. With that, a scale ticket was inserted into a mechanism which would stamp the weight of the car with contents on the ticket. The clerk would also write on the ticket the tare weight of the car, and subtract the difference giving the net weight of the product from which the tariff rate would be used to compute the revenue to ship the car.

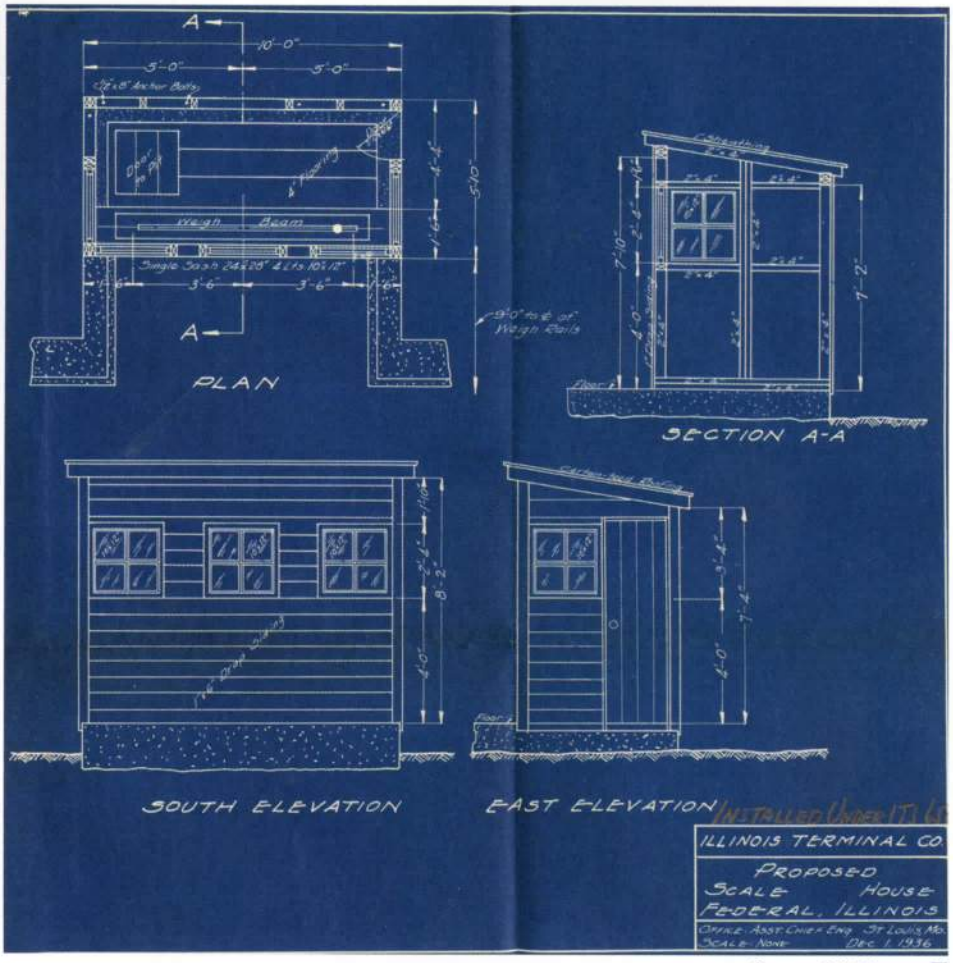
The scalehouse was a wooden structure that housed the scale itself and provided shelter to the clerk during inclement weather. Two sets of tracks passed over the scale; the running track which was used for regular movements and the scale track itself which was mounted on the scale. Because the running rail and scale rail were separated by 12 inches, a switch point attached to the scale rail, connected to the scale lead track was used. An entrance pit was located in the scale house to access the under-the track scale components and a wooden platform was maintained over the scale pit track which permitted access to work on the track scales itself. The Bridge & Building Department was charged with maintenance of the scale and assigned a scale test car which would travel the system annually, calibrating the scale's weight for accuracy or after work had been performed on the scale.

SCALE LOCATIONS

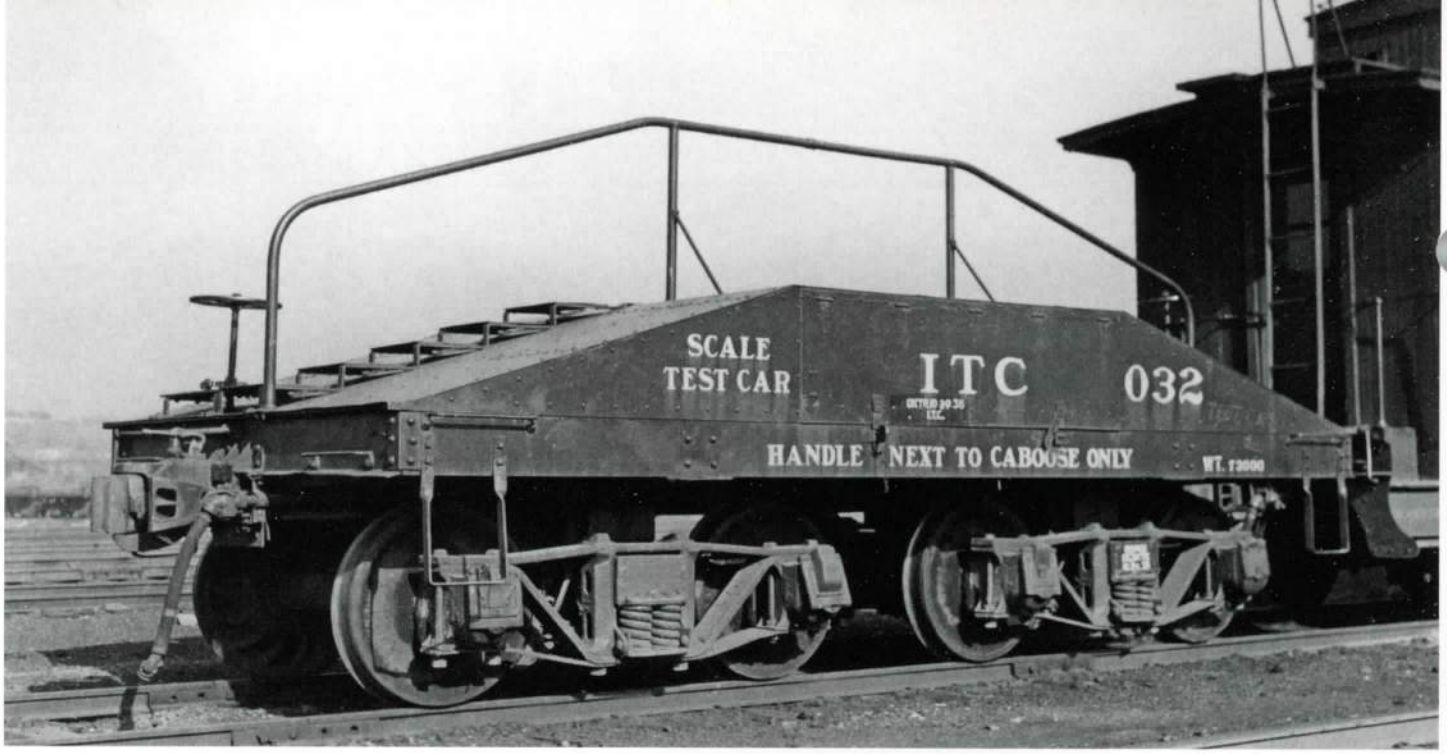
LOCATION	LENGTH	CAPACITY	MANUFACTURER
Alton	50 feet, 4 inches	300,000	Fairbanks
Federal	50 feet, 4 inches	300,000	Howe
McKinley Jct.	50 feet, 4 inches	300,000	Strait
East St. Louis	50 feet, 4 inches	300,000	Fairbanks
Chemical	50 feet, 4 inches	100,000	Fairbanks
Springfield*	50 feet, 4 inches	250,000	Fairbanks
Peoria	50 feet, 4 inches	150,000	Fairbanks
Decatur	50 feet, 4 inches	250,000	Howe

* East Belt

All beams are type registering.

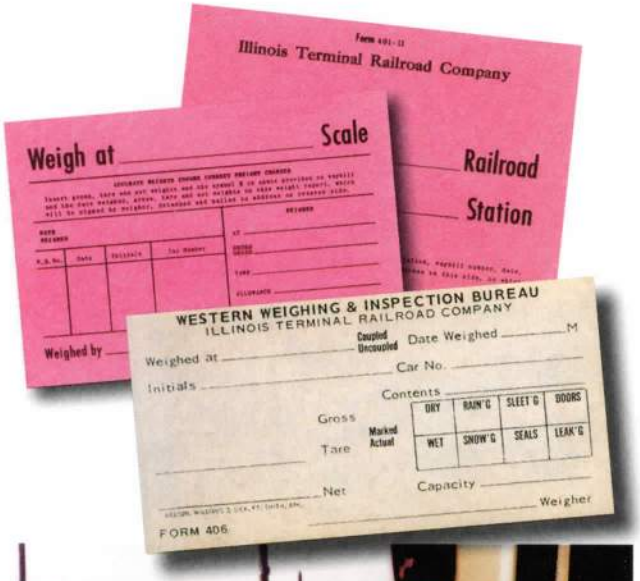


ABOVE: A view of the McKinley Junction scale house and tracks. ABOVE RIGHT: The scale house building was painted white and trimmed in forest green. *BOTH, DALE JENKINS PHOTOS*

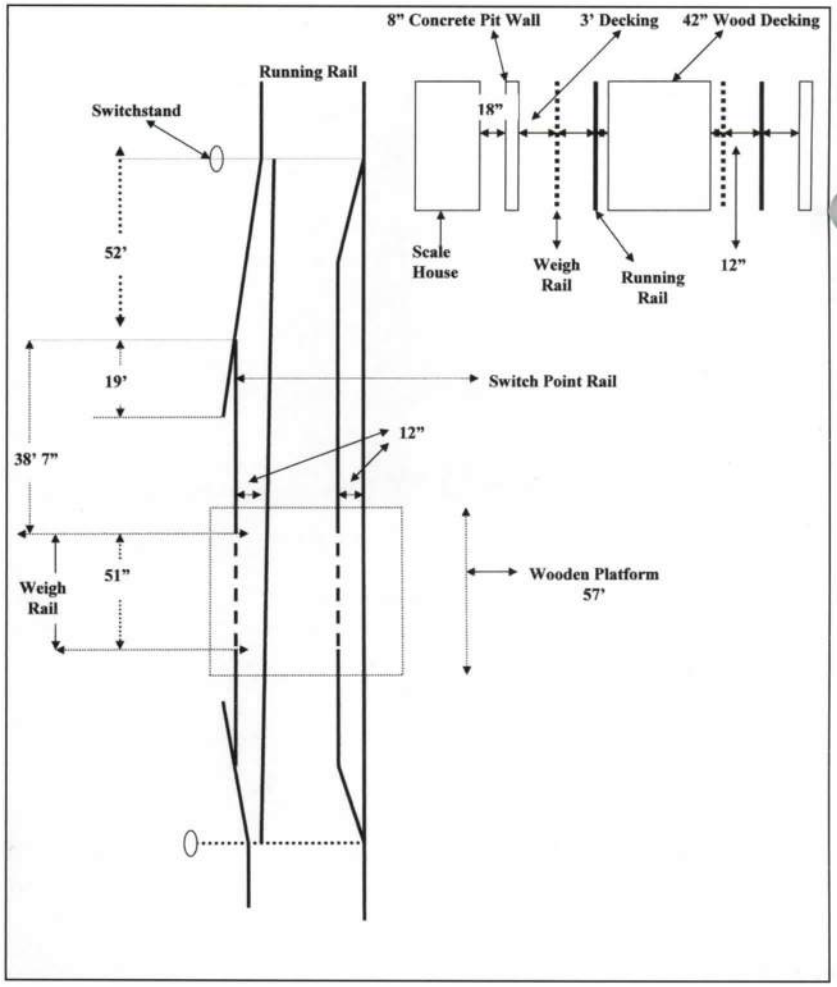


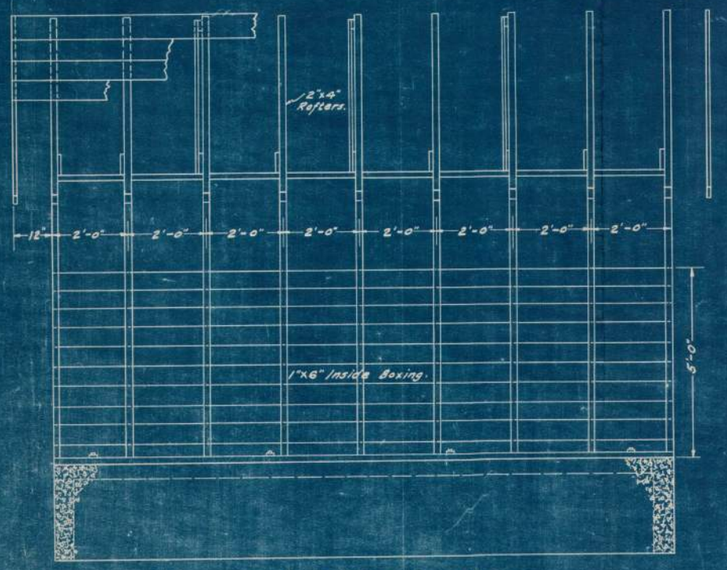
ABOVE: The scale test car was used to test and calibrate the track scales. *PAUL STRINGHAM PHOTO, MIKE RAIA COLLECTION*

BELOW: The scale ticket was used to record the weighing of the railcar and the pink tickets were attached to the waybill as a notice to weight the car. *DALE JENKINS COLLECTION*

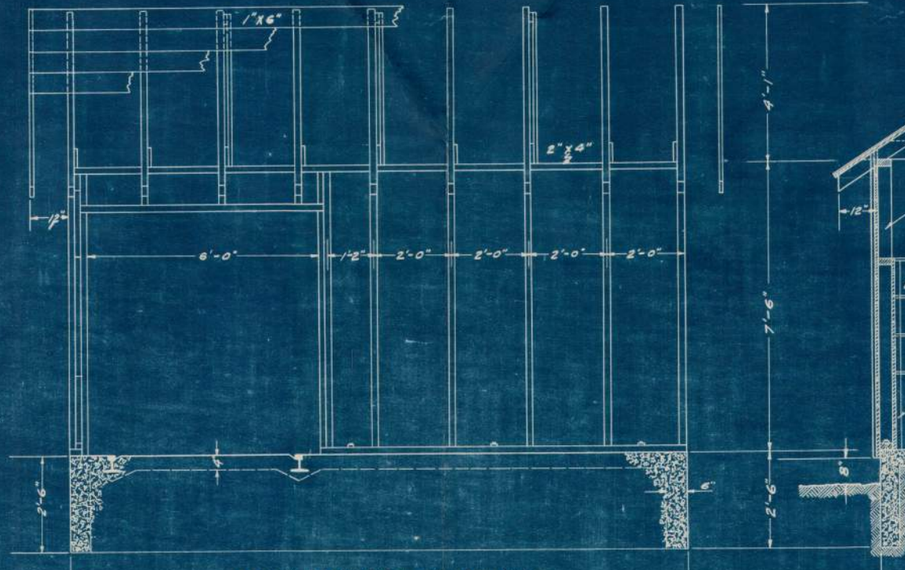


LEFT: A view of the east Belt scale track from the cab of the yard job. *DALE JENKINS PHOTO*

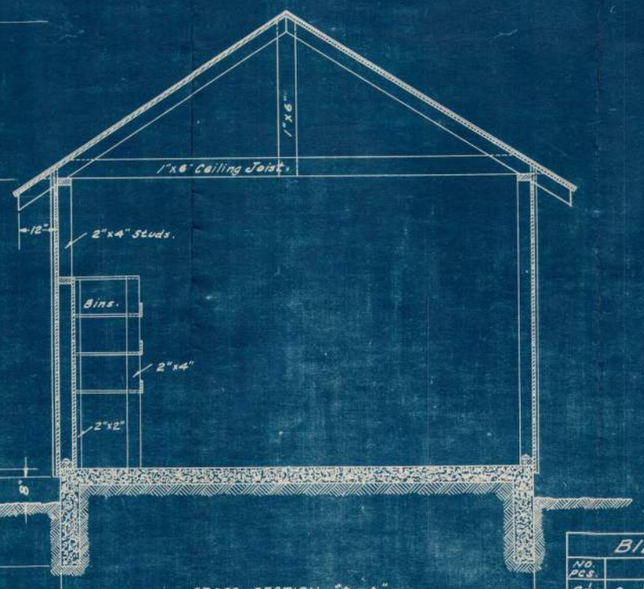




REAR ELEVATION OF FRAMING.



FRONT ELEVATION OF FRAMING.
16'-0"

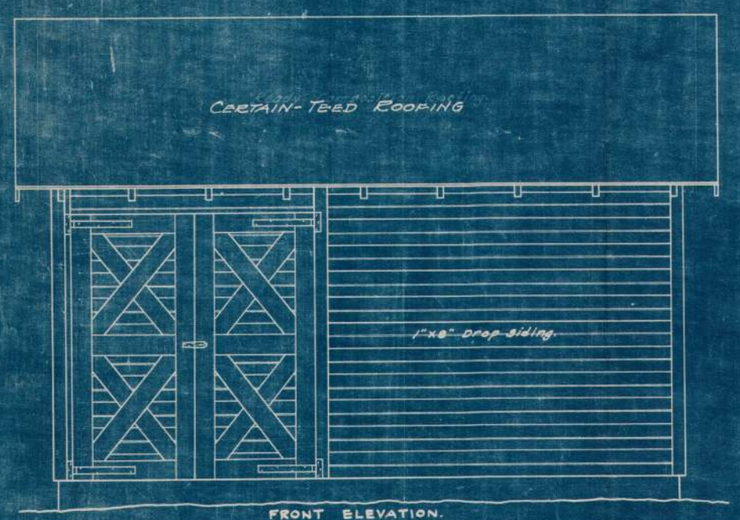


CROSS SECTION "A-A"
12'-0"

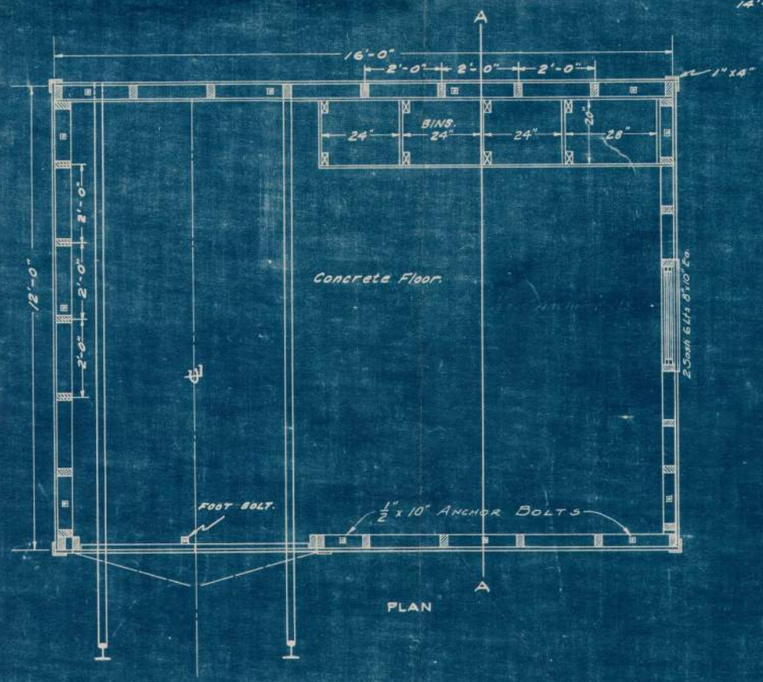
NOTE:
BUILDING TO BE LOCATED 14'-0" FROM ℄ OF TRACK.

BILL OF MATERIAL.

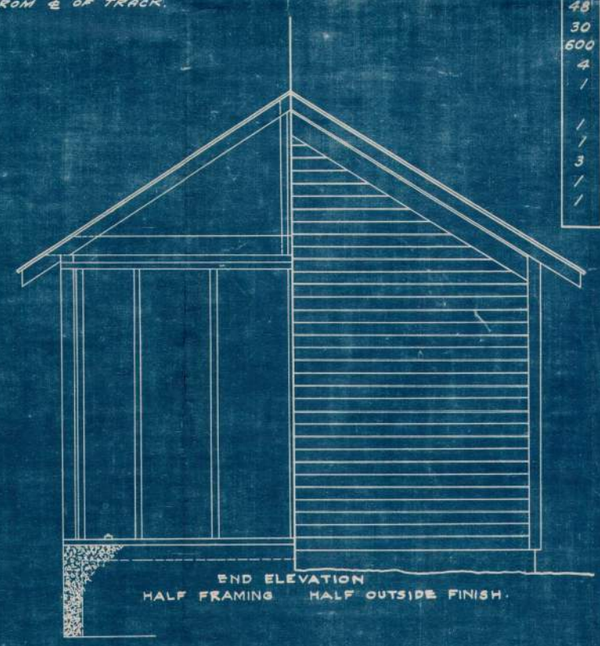
NO. PCS.	MATERIAL.
2½	Cu. Yds. Gravel.
13	Sacks Cement.
13	½" x 10" Machine Bolts.
28	Pcs. 2"x4"x16'-0" No.1. Common Y.P.S.2.S.
9	Pcs. 2"x4"x18'-0" No.1. " " "
13	Pcs. 1"x4"x16'-0" No.1. " " "
48	Pcs. 1"x6"x16'-0" No.1. " " "
30	Pcs. 1"x8"x18'-0" No.1. Y.P. Ship Lap.
600	Ft. B.M. 1"x8"x16'-0" No.109 Drop Siding.
4	Rolls Roofing Paper.
1	Galv. Smoke Jack 6" Pipe 3' High. For ½ Pitch Roof.
1	6" Foot Bolt.
1	6" Chain Bolt.
3	Pair. 10" Tee Hinges.
1	10" Hinge Hasp.
1	Gross 1¼" No.12. Bright Flat Head Wood Screws.



FRONT ELEVATION.



PLAN



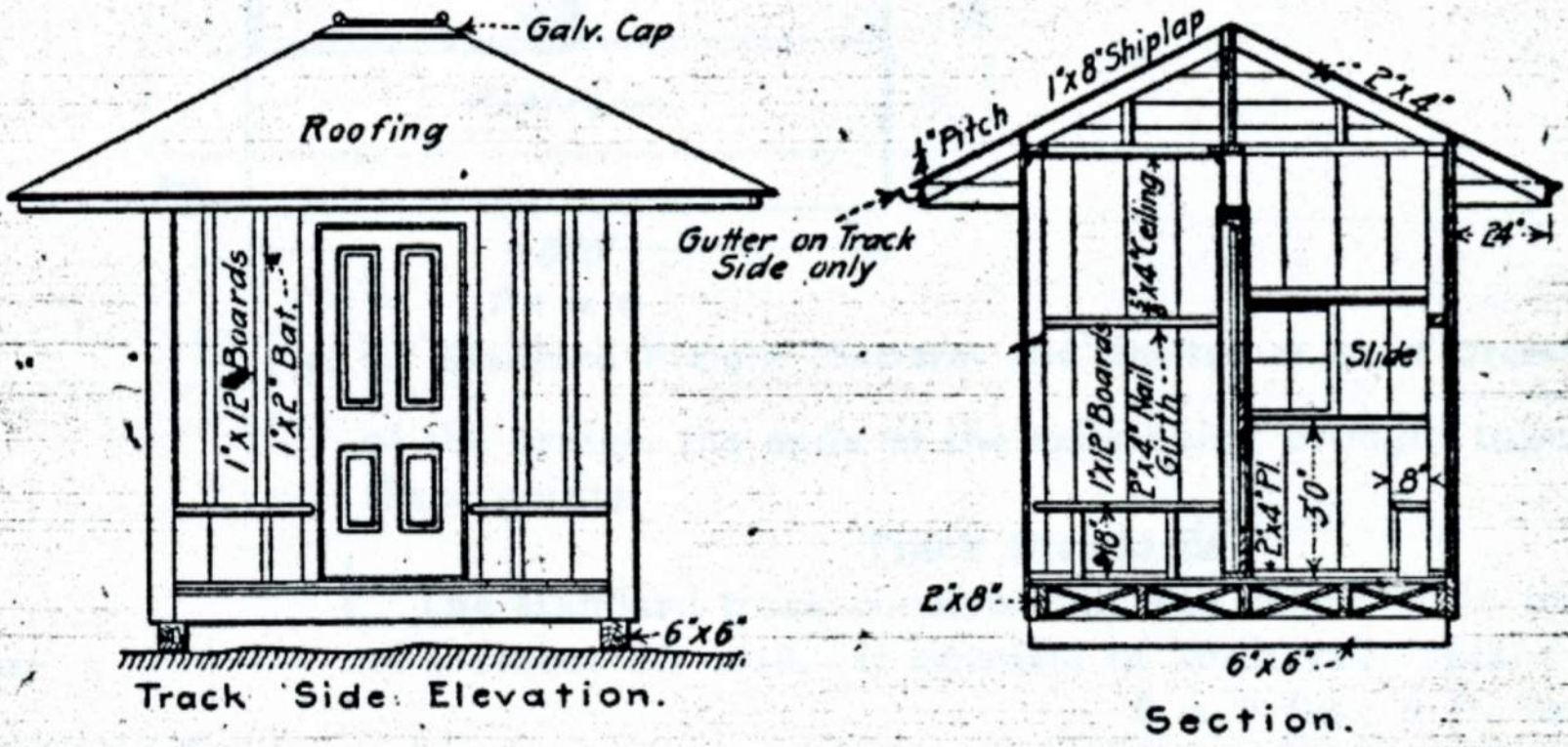
END ELEVATION
HALF FRAMING HALF OUTSIDE FINISH.

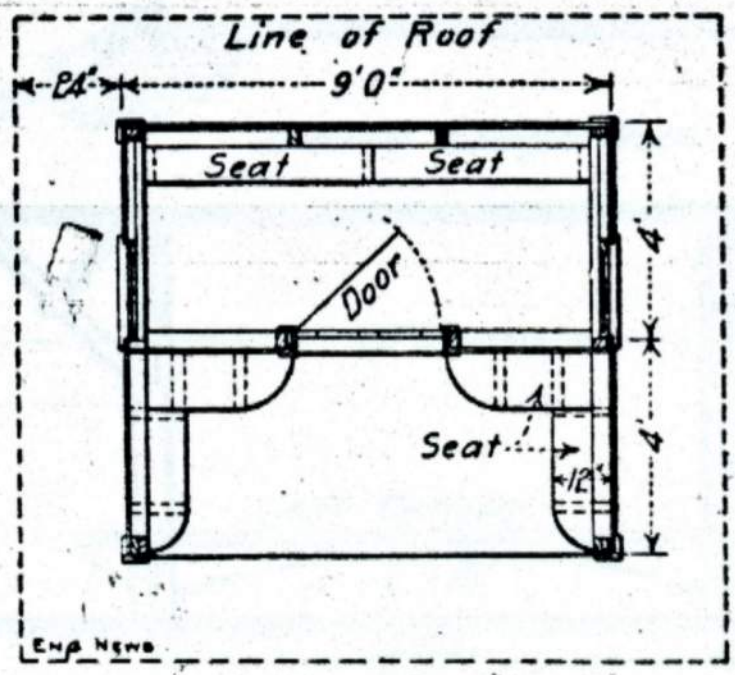
ILLINOIS TRACTION INC.

STANDARD SECTION TOOL HOUSE.

OFFICE ENGR. M OF W. SPFLD. ILL.
SCALE. ½" = 1' JULY. 22, 1925.
RAUSCH.

2-8-1





on Cables

Fig. 6. Standard Shelter for Stops at Road Crossings

ment above the crown. Where greater waterway is required a similar culvert is used, but 5 ft. wide and 4 ft. 9 ins. high (4-in. invert). This has 1 cu. ft. of concrete per lin. ft. of barrel; and 13 cu. yds. in the wing, apron and parapet (including barrel in the parapet wall). It is used for a maximum drainage area of 300 acres. The culvert design is simple and no coping is used on the wing walls. This means a low cost for forms and less chance for defects in the concrete work. Some railways are now building the wing walls of bridge abutments without coping.

The standard pile trestle has bents 13 or 16 ft. c. to c. Each bent has two vertical piles and two batter piles, a cap, two sway braces, and a horizontal cross brace just above the ground. The packed stringers rest on corbels. The sawed ties are 6 x 8 ins., 4 ins. apart, and have outside guard timbers 6 x 8 ins. Inside guard rails consist of old 40-lb. rails, laid with 8-in. flangeway; they extend 50 ft. beyond each end of the bridge, the ends of the rails being brought together at these points.

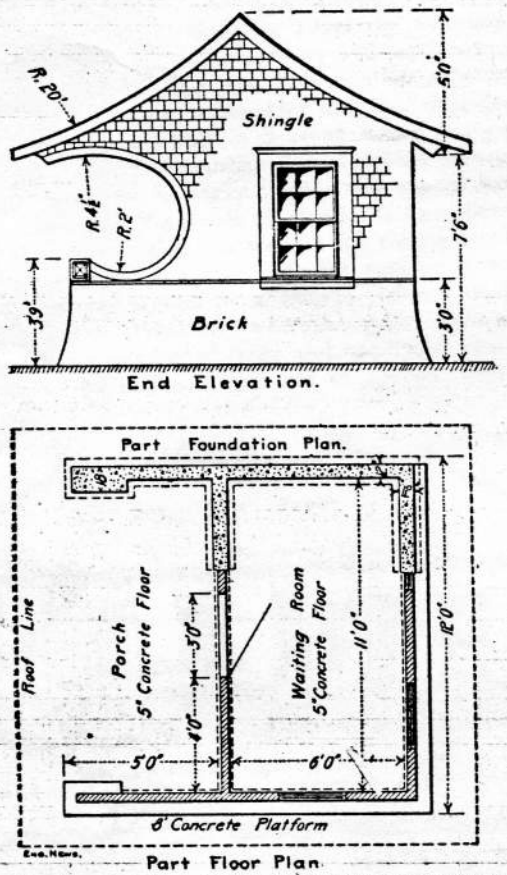


Fig. 7. Standard Design for Ornamental Shelter

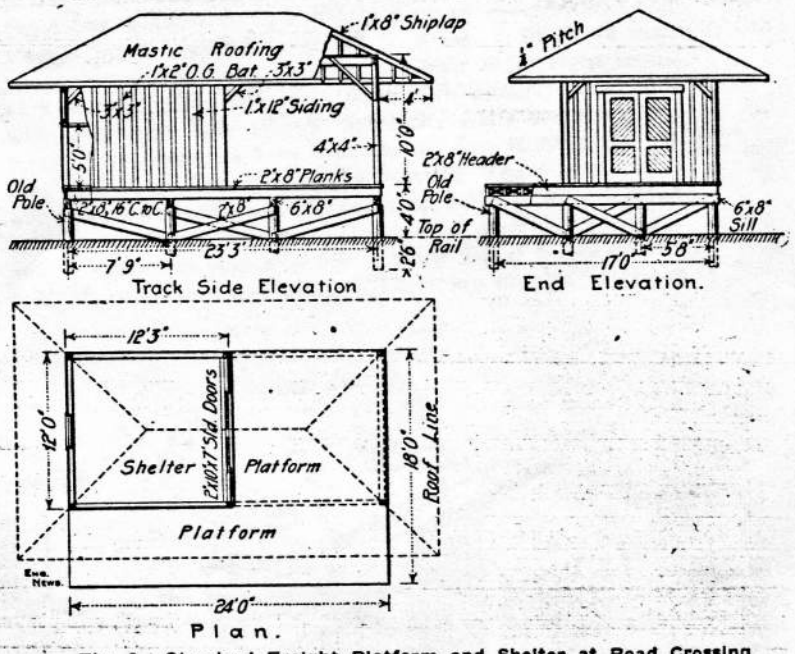


Fig. 9. Standard Freight Platform and Shelter at Road Crossing

Track Standards

The standard track construction was described in our issue of October 27, 1910. It consists of 70-lb. rails spiked to ties 6 x 8 ins., 8 ft. long (18 to a 30-ft. rail length) and laid on 8 ins. of gravel ballast. The standard split switch has 15-ft. switch rails, each reinforced by a ⅜-in. bar riveted to the inner side of the web for a length of 15 ft. from the point. these rails are connected by two tie-bars ¾ x 2½ ins. The six ties carrying the moving portion of the switch rails have steel slide plates, and over the next tie is a stop riveted to the switch rail and bearing against the web of the stock rail when the switch is set. The throw of the switch is 4½ ins., and the bend of the turnout stock rail is made 8 ins. ahead of the point. The No. 9 spring rail frog is 15 ft. long, with a double spring on each side of the throat. The width of throat and flangeway is 1¾ ins. The fixed point

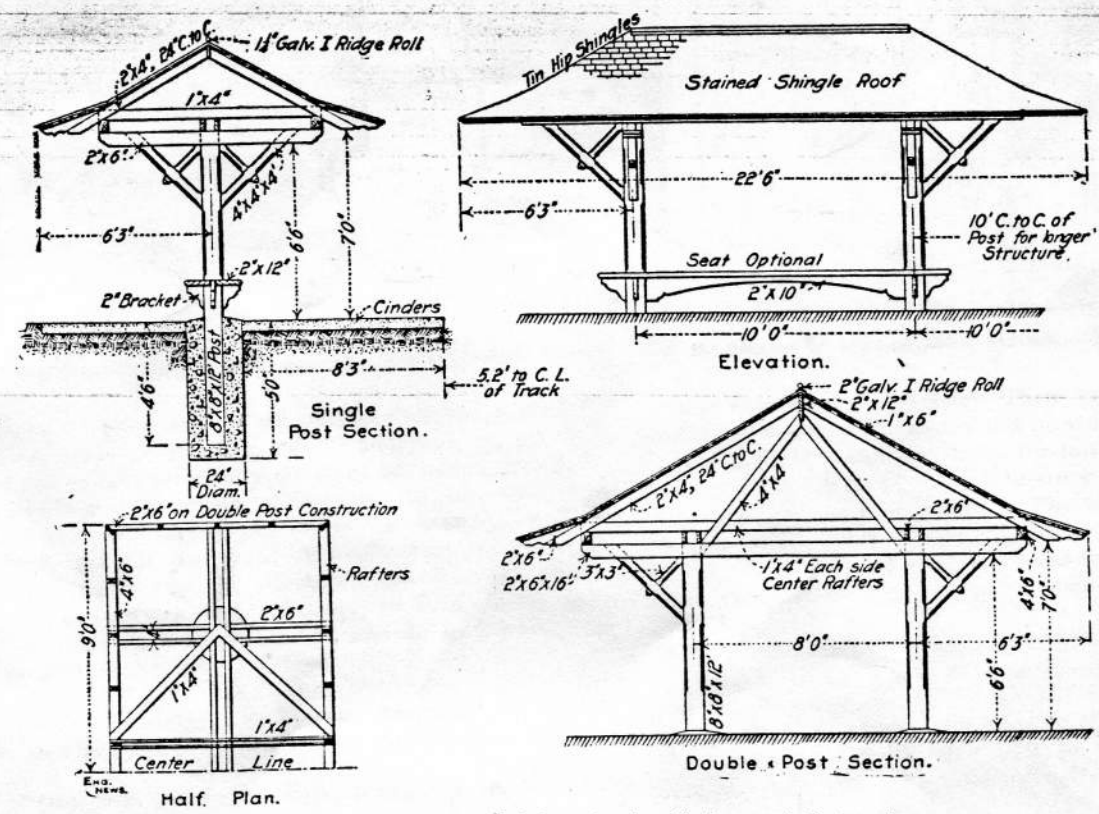


Fig. 8. Standard Designs of Canopies for Platforms at Parks, etc.

Electric Traction Weekly, June 10, 1911

Standards of the Illinois Traction System

Designs Adopted for Frame and Brick Stations, Shelters, Section Tool Houses, Fences, Cattle Guards and Track Signs

The development of electric interurban railways into long lines and extensive systems is bringing about the adoption of standard designs for various structures and equipment, partly for the sake of uniformity and reduction of expense, and partly as an improvement upon older and less satisfactory designs. The Illinois Traction System, which has an extent of over 500 miles of interurban lines (besides several miles of street railway lines in various cities and towns) has taken up this matter, and a number of standards have been adopted for track and structures as well as for rolling stock and electrical equipment. The standards for smaller structures, such as shelters, section tool houses, fences, track signs, etc., have been carried out over the entire system. There are, of course, a number of large and important structures which cannot be included, and are of special design in each case. These include steel bridges (although standard designs of plate girder spans may be adopted), the new passenger and freight terminal stations at St. Louis, Mo., and a large freight and storehouse at Granite City, Ill. The standardizing has been carried out under the direction of H. E. Chubbuck, general manager. We illustrate and describe herewith a number of the standards, for drawings and information as to which we are indebted to E. M. Haas, superintendent of bridges and buildings, and L. B. Martin, engineer of maintenance of way.

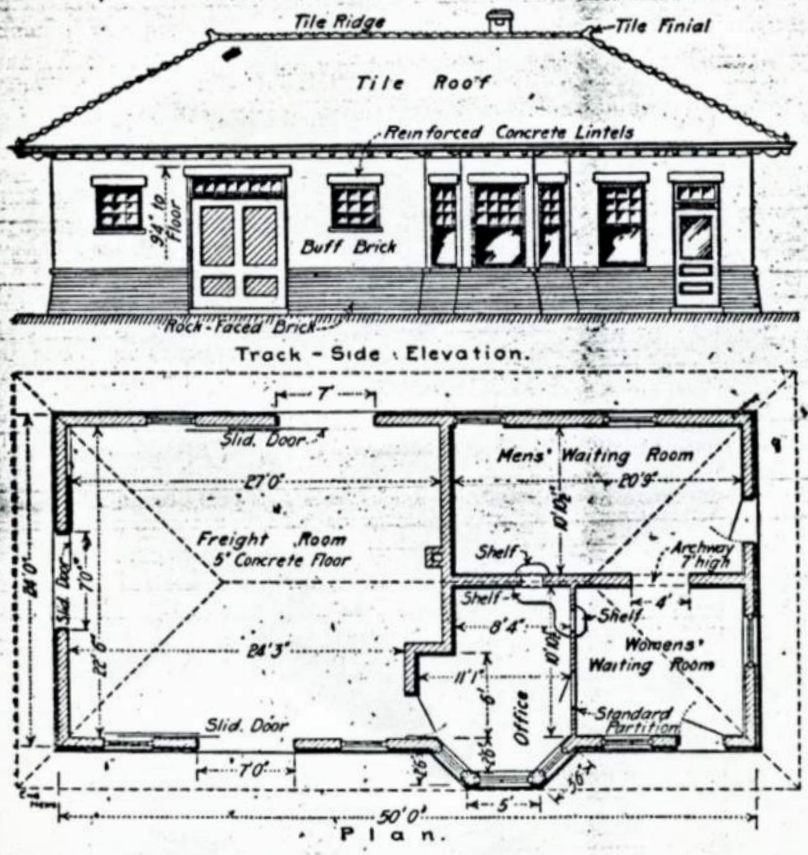


Fig. 1. Standard Design of Brick Station, Illinois Traction System

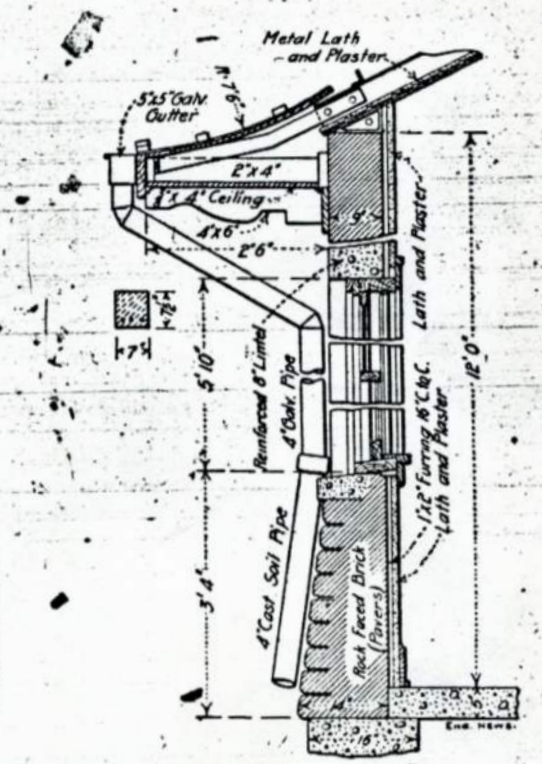


Fig. 2. Section of Wall of Brick Station, Illinois Traction System

Buildings

Passenger and Freight Stations

The standard design (for towns of about 1,000 to 3,000) is a one-story brick structure, with concrete foundation, steel roof trusses and tile roofing. The lintels are rectangular beams of reinforced concrete, and the chimney caps also are of concrete. The building is 50x24 ft., and includes an office (with bay window commanding a view of the platform and track); men's waiting room, 20 ft. 9 ins. x 10 ft. 10 ins.; women's waiting room, 12 x 10 ft. 4 ins.; and freight room, 27 x 22½ ft. This last room has a 5-in. concrete floor and wide doorways with sliding doors; its walls are not plastered. The doorways have concrete lintels 8 ft. long, 7 x 7½ ins., with three 1-in. rods at the bottom. There is no toilet accommodation, the water closets or privies being located in separate frame buildings (of standard design). The plan and elevation are shown in Fig. 1, while Fig. 2 shows the details of wall, eaves and gutter. There are now five stations of this design on the system. Their average cost is about $3,000 (or $4,000, with fixtures and furnishings complete).

The standard design of station for towns having a population of about 300 to 1,000 is a one-story frame building 36 x 16 ft. with shingle roof, shown in Fig. 3. There are already five stations of this design. Their average cost is about $1,200. They are used where the business does not warrant a large expenditure, and where the chances of fire are very limited.

Combined Station and Sub-Station

These buildings are of two types: (1) with waiting room and freight room occupying one end of the building (each being half of its width), and the remainder being devoted to the machinery; (2) with waiting room and freight rooms at opposite ends, and the machinery room in the middle. The

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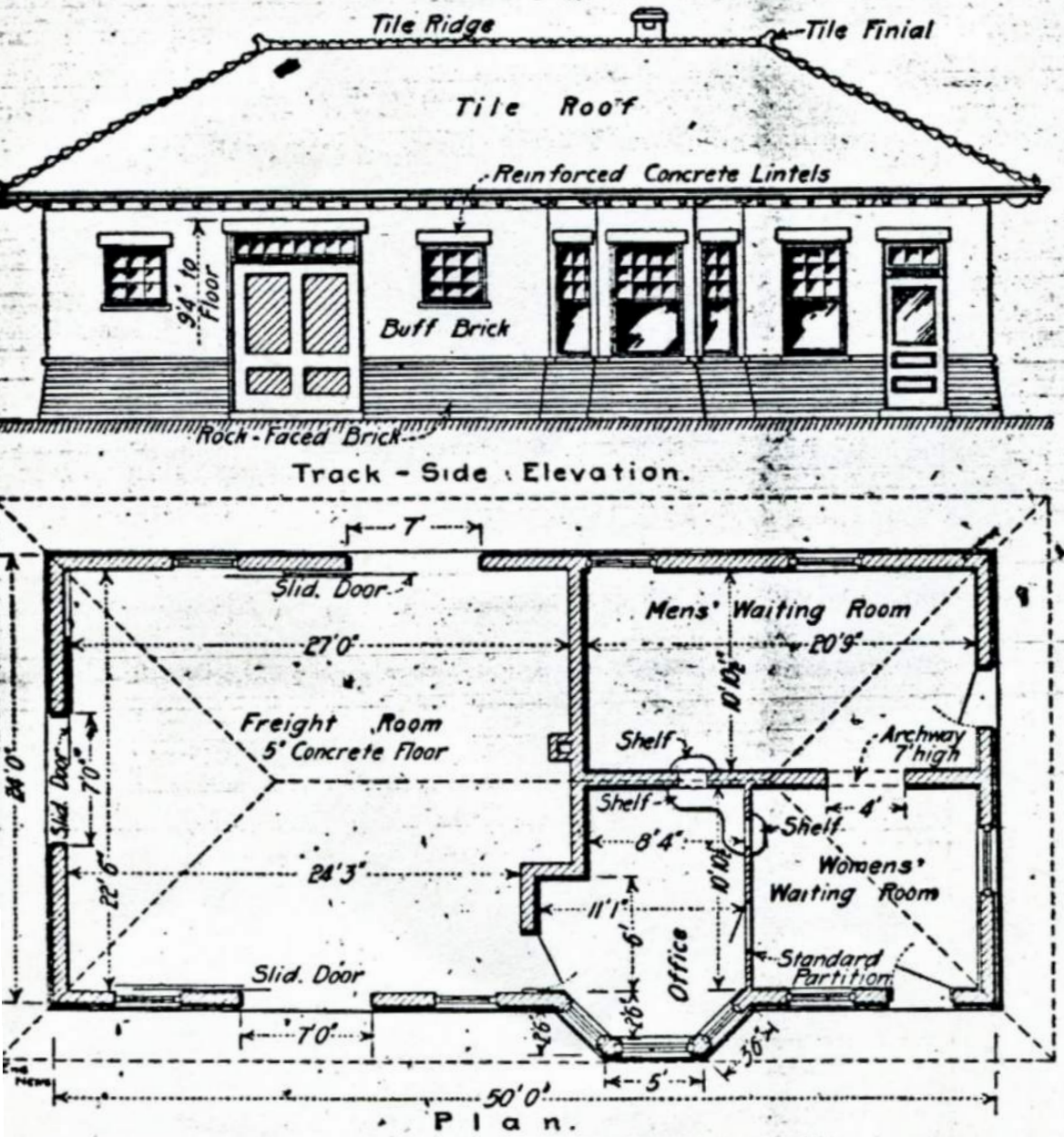


Fig. 1. Standard Design of Brick Station, Illinois Traction System

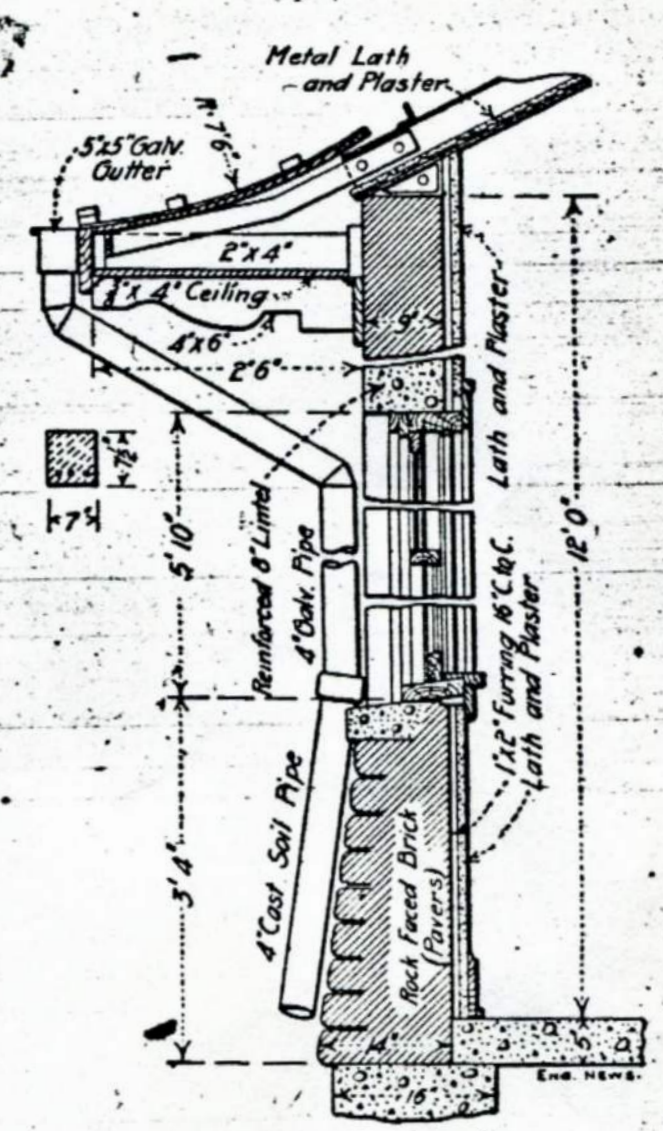
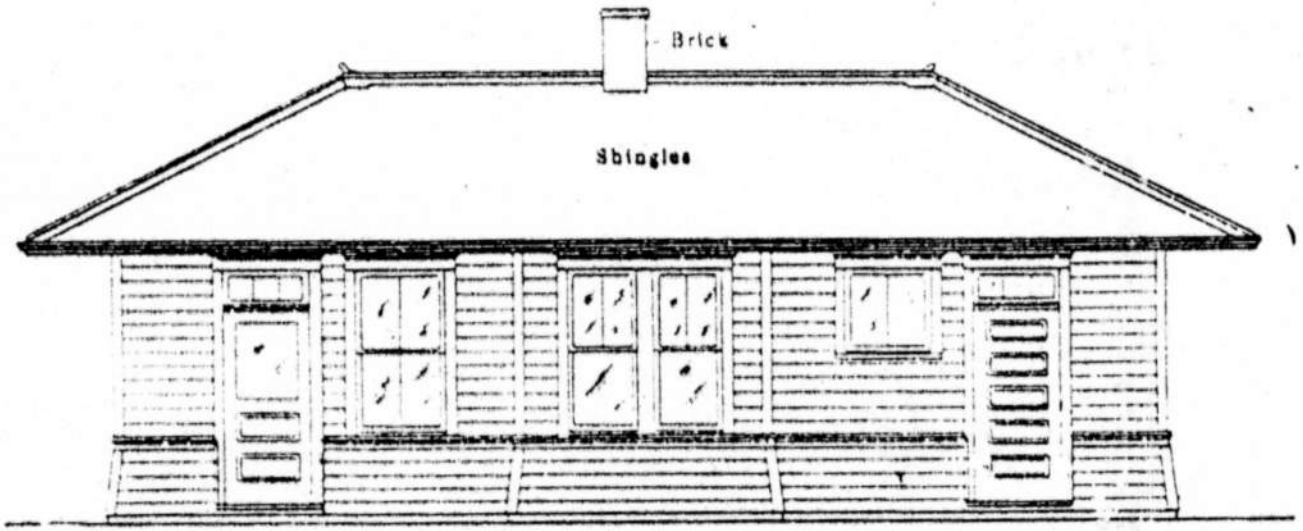
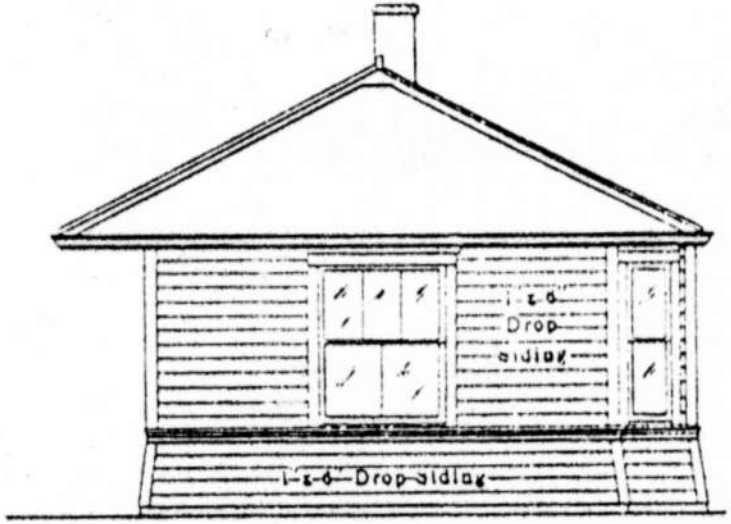


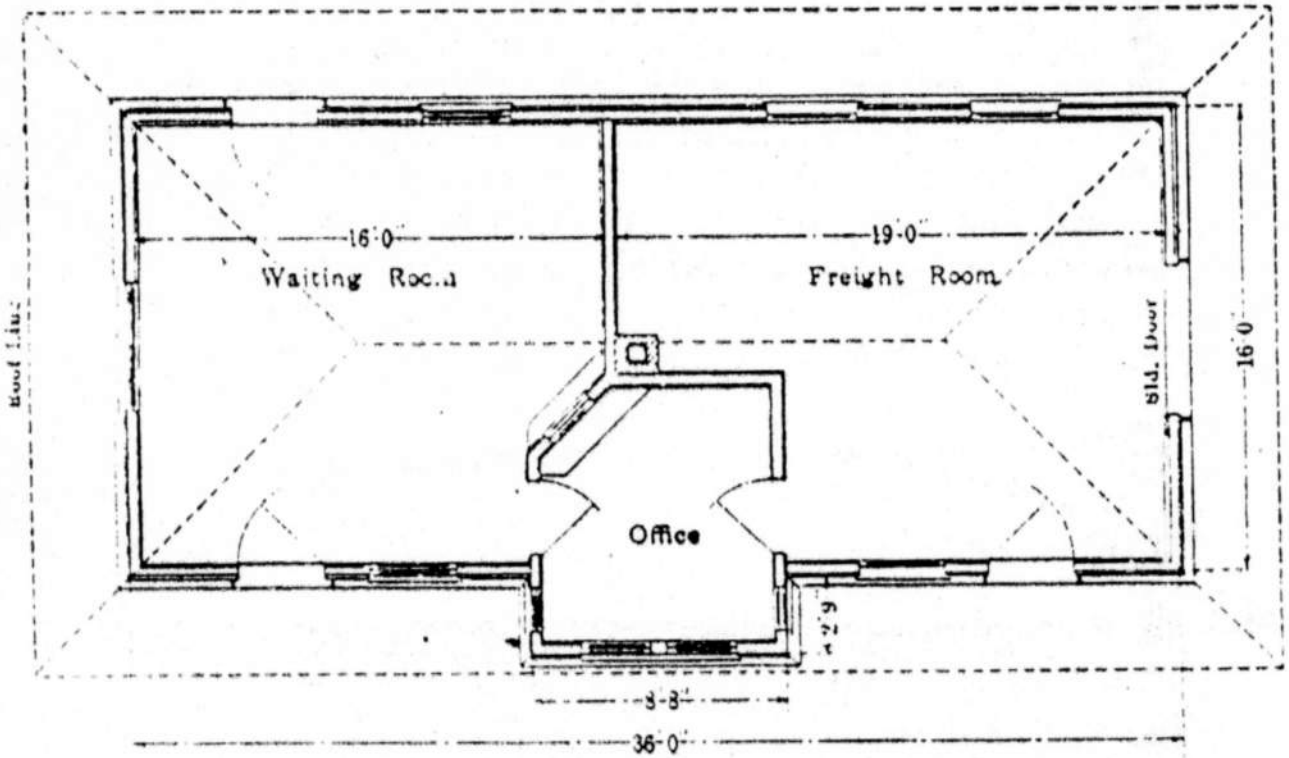
Fig. 2. Section of Wall of Brick Station, Illinois Traction System



Track Side Elevation



End Elevation



Floor Plan

Illinois Traction System Improvements—Standard Depot for Small Town

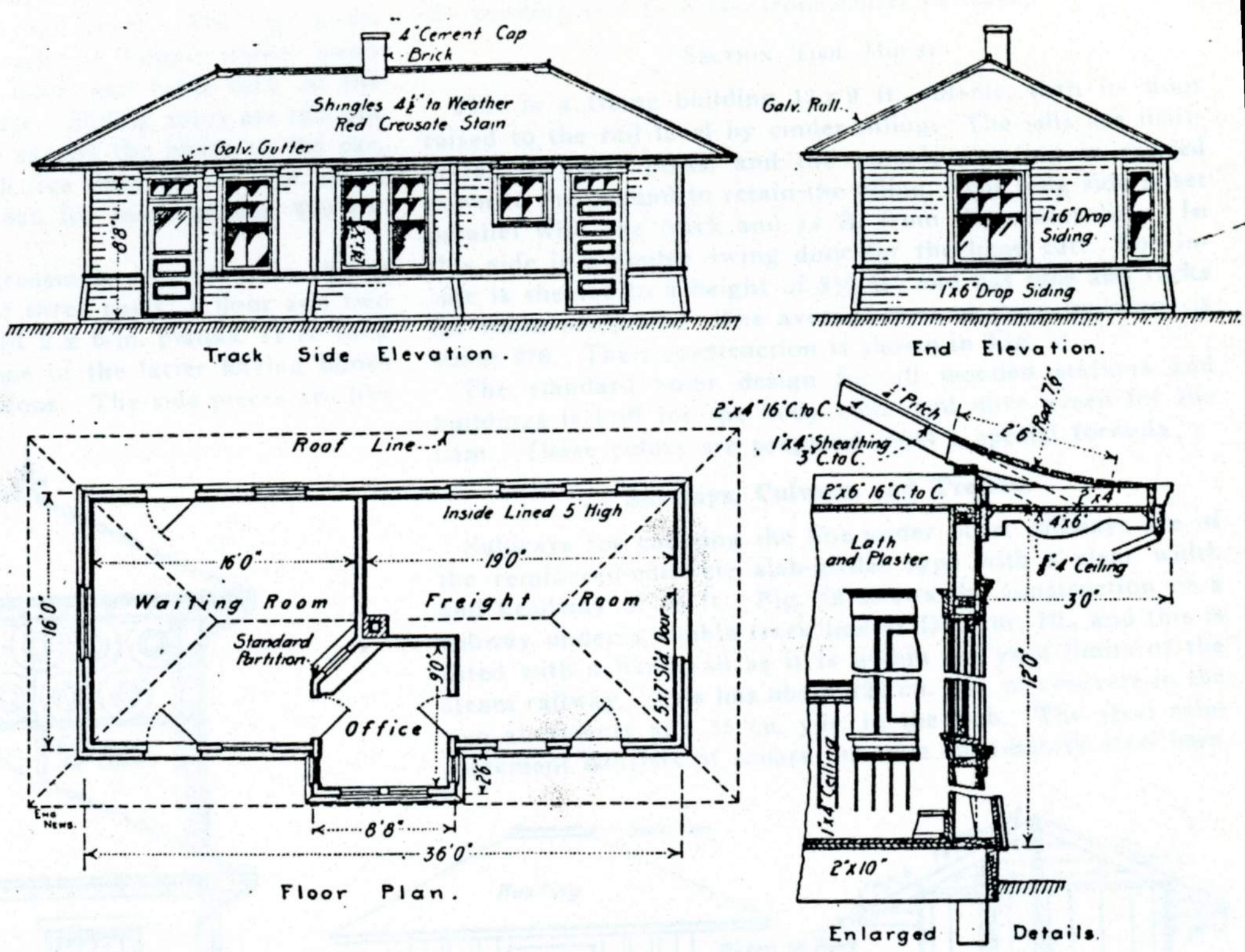


Fig. 3. Standard Design of Frame Station Building, Illinois Traction System.