## ~NOTES~

TRAFFIC:- Temporary bridge better located upstream. 1½ MILES TO PRESQUE ISLE (U.S. 1)

EXISTING SUPERSTRUCTURE:- Covered wooden latticed truss, 430' long, with 7"x10" cross-beams, 6"x6" stringers, 3" diagonal planking and 3" longitudinally planked runways. One spandrel filled arch of 18'-0" span serves as additional waterway during high water, and in dry season as cattle-pass and underpass for teams loaded with hay.

EXISTING SUBSTRUCTURE:- Entirely of concrete. Old log-crib substructure replaced by concrete piers and abutments in 1913, except Pier #3, which was added in 1923. Abut #1 has small crack at rear junction of breast wall and wing. Pier #3 has a crack at center line of bridge extending from stream bed to about 10' from bridge seat, and appears to extend from face to face. Concrete in fair condition.

STREAM:- Swift current. Low water about El. 96.0. Ordinary high water reported at about 5.0' below lower chord, about El. 630. Extreme high water of 1923 reported at underside planking, El. 70.0.

FOUNDATION:- Rocks and gravel. No penetration.

APPROACHES:- Earth filled over log crib work and sheeting.

UNDERCLEARANCE:- About 8" below lower chord.

PUBLIC UTILITY LINES:- Telephone lines and electric lights attached to roof of old bridge. Power line spans river.

## ~MISCELLANEOUS DATA~

SUBSTRUCTURE BUILDERS:- Entire concrete work except Pier #3 built by D.S. Burpee & Sons, of Fredericton, N.B., in 1913. Information relative to this work may be obtained from Ray Burpee, Fredericton, N.B. Pier #3 built by Green & Wilson of Waterville, Me., in 1923.

BATTERS:-
- Abut. #1
  - Backs - 2" per foot
  - Front - 3¾" in 7'-6"
- Piers #2 & #3
  - Sides - ½" per foot.
  - Noses - 7" per foot.
- Abut #2 - Front plumb.

COPINGS:-
- Abut #1 and Piers #2 & #3 3"x1'-6"
- Pier #3 3"x1'-4"
- Abut #2 None.

PIER NOSES:- On upstream ends, shaft of piers extends plumb from underside of coping to top of nose, 2'-6" lower.

See Survey Notes for spans and pier dimensions.

1930

CULTIVATED C.E. HUSSEY

CULTIVATED RUFE HIGGINS

CULTIVATED C.E. HUSSEY

AROOSTOOK VALLEY RAILROAD

HOUSE, PORCH, SHED, BARN

BEN MARKS

DONAHUE

FRANK HIGGINS

AMERICAN FRUIT GROWERS ASSOCIATION

C.E. HUSSEY

WILSON POTATO CO.

C.E. HUSSEY & SONS.

W.R. CHRISTIE

DAMAGED BY A.V.R.R. - STORMS

RENTED - NIGHTINGALE POTATO CO.

A.V.R.R. STORAGE

A.V.R.R. STATION

MATCH LINE

N 41°-30' E

68°-32'

55°-18'

51°-11'

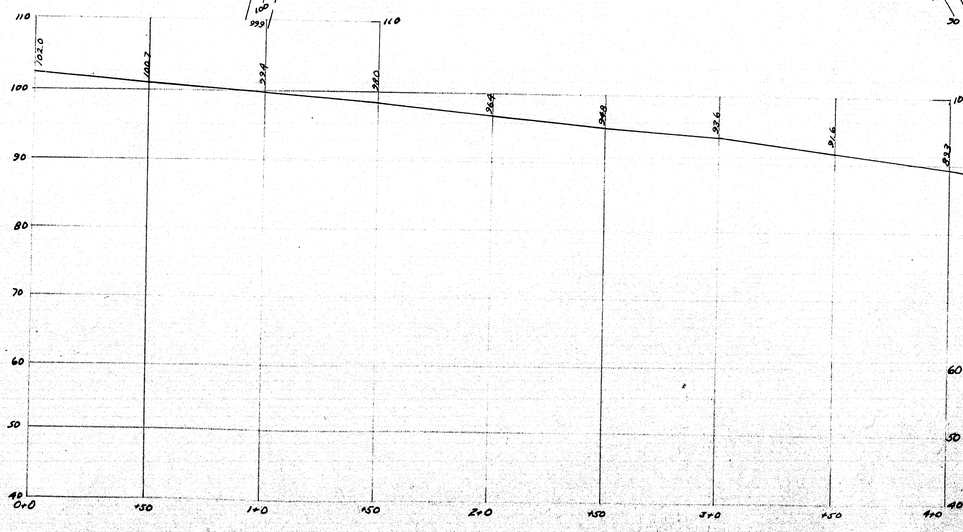
0°-54'

1°-54'

26"-CMP

30"-CMP

Town Of Easton Limit




MAINE HIGHWAY COMMISSION
BRIDGE DIVISION
# COVERED BRIDGE
OVER
# AROOSTOOK RIVER
IN THE TOWN OF
# PRESQUE ISLE, AROOSTOOK CO.
SURVEY PLAN
SHEET 1 OF 12 AUGUSTA, ME. FEB. 3, 1931

22-101

0 1 2 3 4 5 INCHES

AROOSTOOK RIVER

FIELD
AROOSTOOK VALLEY RAILROAD - ELECTRIC

MATCH LINE

TO WASHBURN

TO WASHBURN JCT. ON C.P.R.R.

Center line of roadway

PASTURE
P.A. RAMSDELL

MATCH LINE

Aux "D"

Aux "C"

Aux "A"

Aux "B"

HAY FIELD

BANGOR & AROOSTOOK RAILROAD

SECTION OFFICE
B. & A. R.R.

B. & A. - SIDING

TO GREAT ATLANTIC & PACIFIC TEA CO. POTATO STORAGE

PLAN
1" = 30'

Finished grade elev. 76.83

Abut No.1 — Pier No.1 — Pier No.2 — Pier No.3 — Pier No.4 — Abut. No.2

Exp. — Fix. — Exp. — Fix. — Exp. — Fix. — Exp. — Fix.

135'0" c-c bearings — 135'-0" c-c bearings — 70'-6" c-c bearings — 70'-6" c-c bearings

O.H.W. El. 70.0
ORD. H.W. El. 63.0

SPAN "A" — SPAN "B" — SPAN "C" — SPAN "D" — SPAN "E"

El. 48.3

PROFILE - ℄ ROAD
VERT. - 1" = 10'
HOR. - 1" = 30'

Ref. SP 3 L dist. & bearings.

0 1 2 3 4 5 INCHES

MAINE HIGHWAY COMMISSION
BRIDGE DIVISION
# COVERED BRIDGE
OVER
# AROOSTOOK RIVER
IN THE TOWN OF
# PRESQUE ISLE, AROOSTOOK CO.
SURVEY PLAN
SHEET 2 OF 12 AUGUSTA, ME. FEB. 3, 1931

Aroostook 07-GF
Bridge 2/1-10

22 - 102

MATCH LINE

TO WASHBURN
10 MILES

ARROWHEAD STORE
PORCH
PORCH

CAMP SITE PAVILION

CABIN
CABIN
CABIN
CABIN

HOUSE

TO CARIBOU
11½ MILES

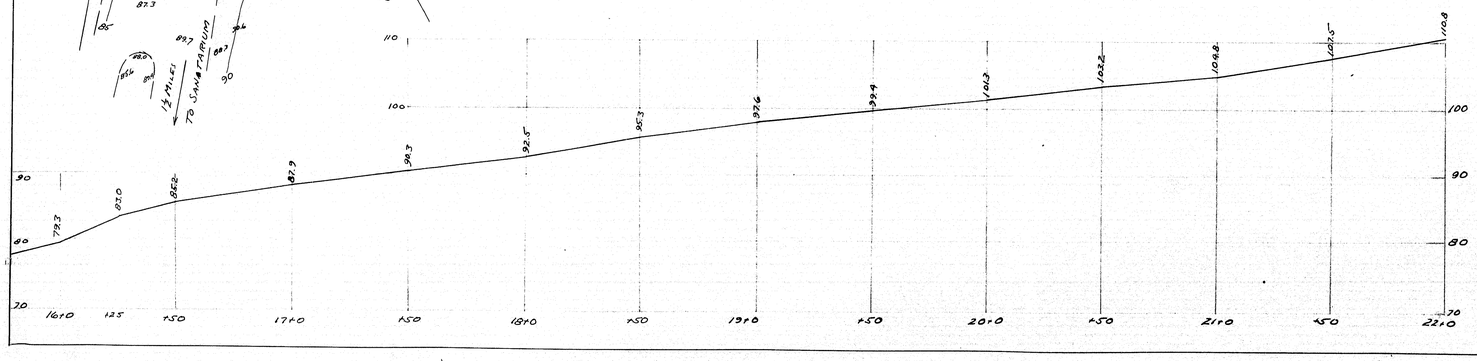
CULTIVATED
P.A. RAMSDELL

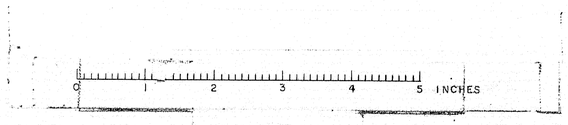
PROPERTY LINES

LAWN
H.W. KNOWLES

A & P

½ MILE TO SAWTAIRUM



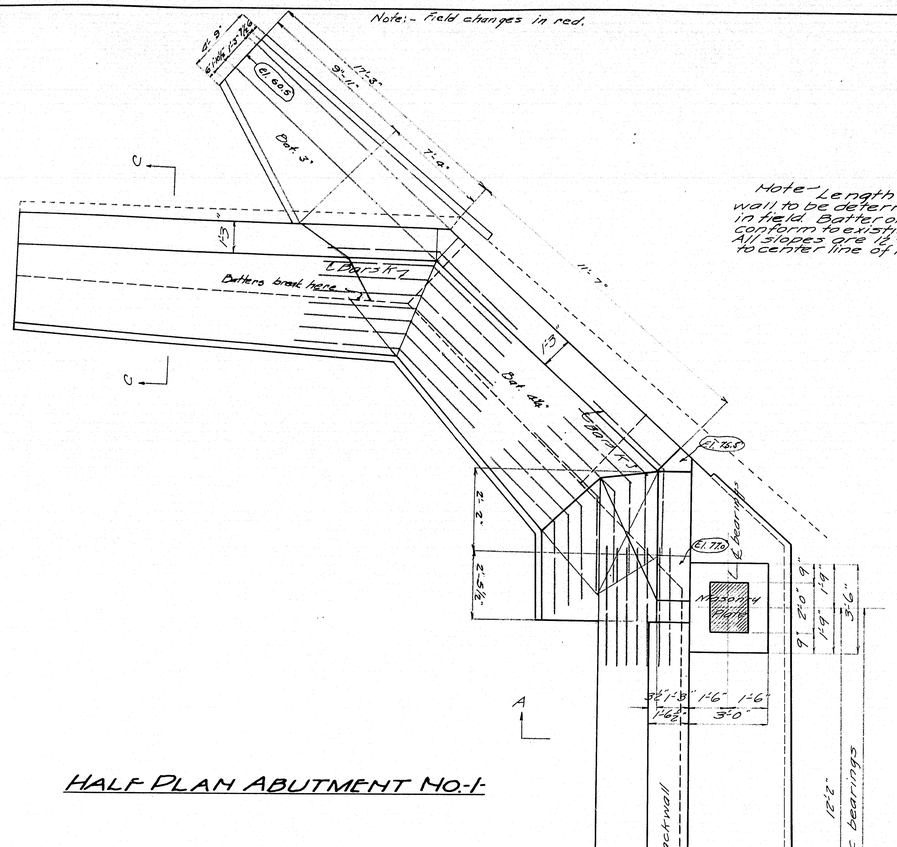




Town 02-67
Bridge 2184

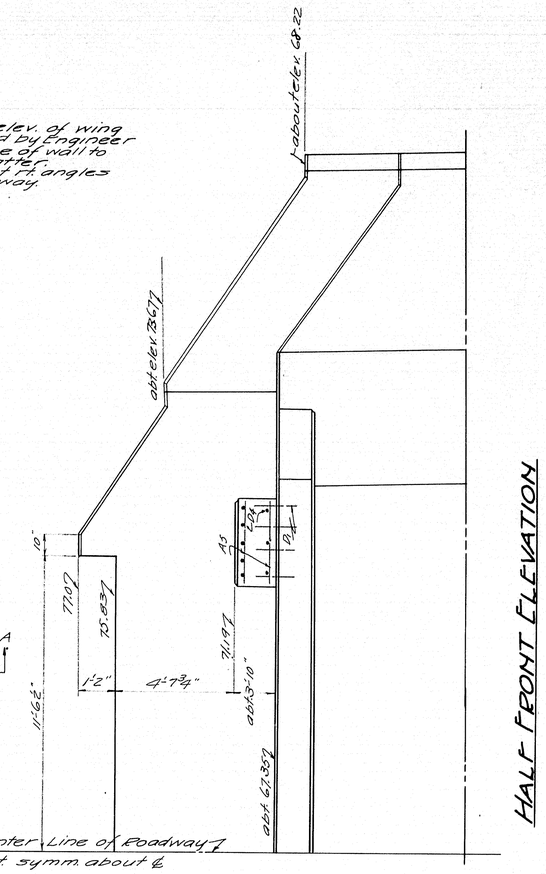
MAINE HIGHWAY COMMISSION
BRIDGE DIVISION
**COVERED BRIDGE**
OVER
**AROOSTOOK RIVER**
IN THE TOWN OF
**PRESQUE ISLE, AROOSTOOK CO.**
SURVEY PLAN
SHEET 3 OF 12 AUGUSTA, ME. FEB. 3, 1931

22-103

Note:- Field changes in red.




Note- Length and elev. of wing wall to be determined by Engineer in field. Batter on face of wall to conform to existing batter. All slopes are 1:1 to 1 at rt. angles to center line of roadway.



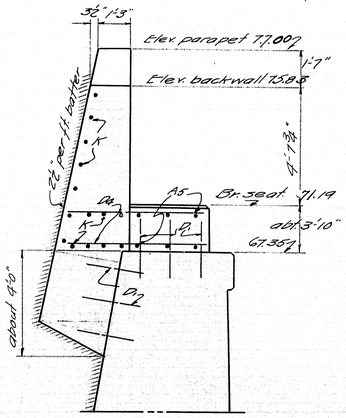

## HALF PLAN ABUTMENT NO.1

## HALF FRONT ELEVATION

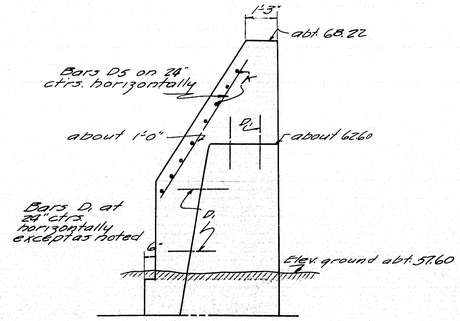
### STEEL SCHEDULE

| Mark | Size | No. | Length | Location |
|---|---|---|---|---|
| D1 | ¾" ℄ | 190 | 1'-6" | Abut. No.1. |
| D4 | ⅝" ℄ | 16 | 5'-0" | " " |
| D5 | ⅝" ℄ | 32 | 8'-0" | " " |
| A5 | ⅝" ℄ | 12 | 3'-3" | " " |
| K | ⅝" ℄ | 50 | 8'-0" | " " |
| | | | | |
| | | | | |

All steel to be plain round bars structural grade. K bars to be bent in field.




SECTION A-A




SECTION C-C

Geology Detail by the St
Checked by J.G.B.

Town 03-68
Bridge 2184

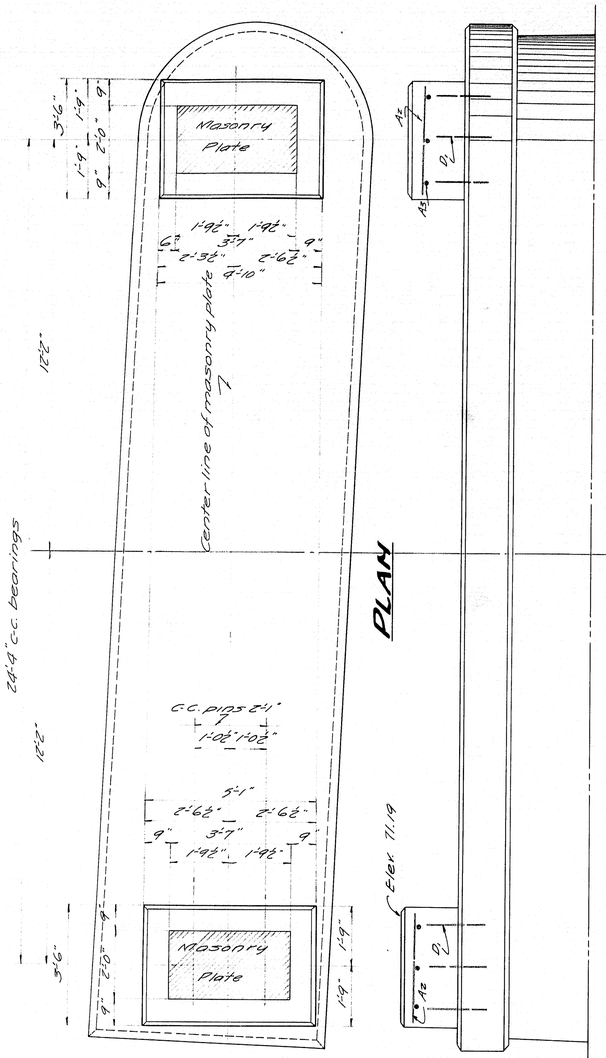
MAINE HIGHWAY COMMISSION
BRIDGE DIVISION

# COVERED BRIDGE
over
# APOOSTOOK RIVER
# PRESQUE ISLE
# APOOSTOOK COUNTY

ABUTMENT NO.1
Sheet 4 of 12 Oct. 29, 1931.

22-104

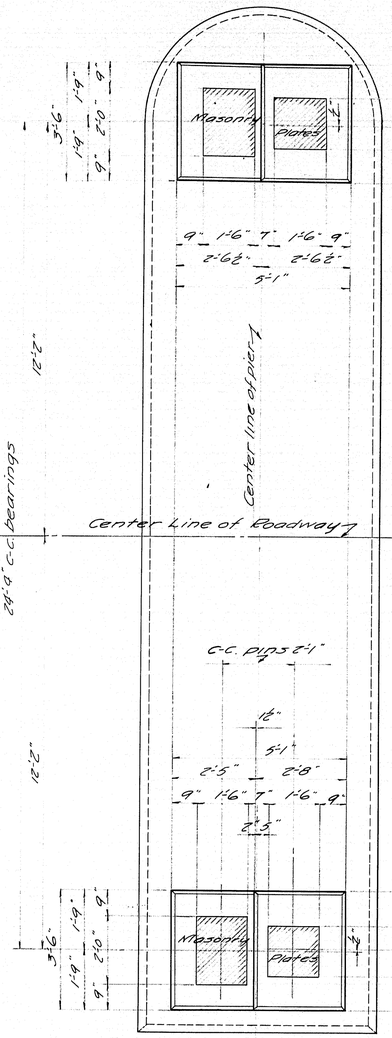
0 1 2 3 4 5 INCHES



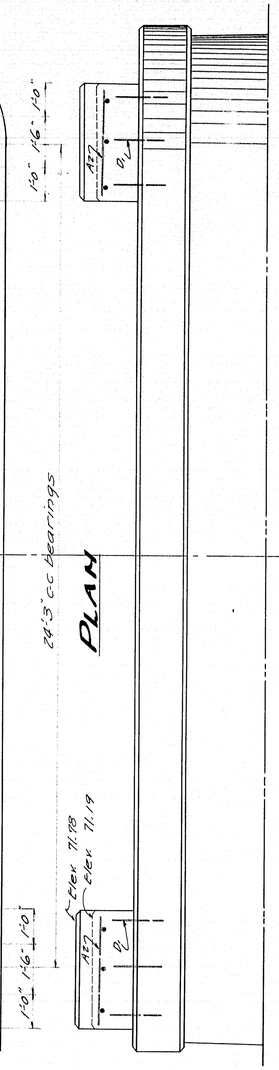

PLAN



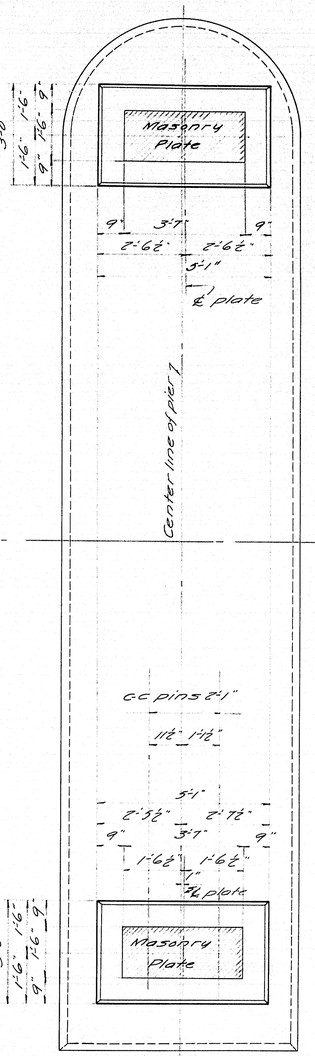
PART SIDE ELEVATION



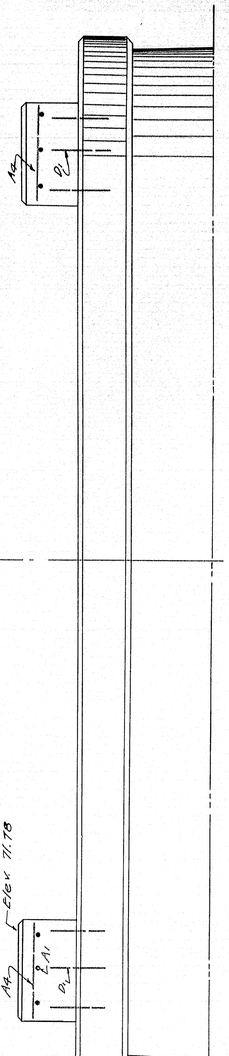

PLAN



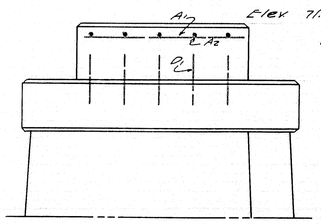
PART SIDE ELEVATION



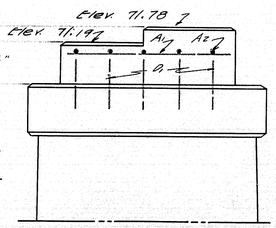

PLAN



PART SIDE ELEVATION




PIER NO. 1.




Note~ That portion of pier surface beneath pedestals to be roughened before concrete is placed.

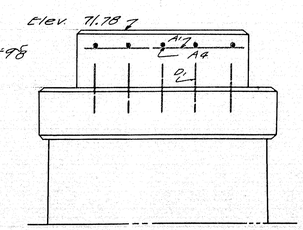
Note~ In making layout, begin by locating pedestals on pier no. 1. Location of pedestals on remainder of substructure may be varied if found necessary.

PIER NO. 2.

## STEEL SCHEDULE

| Mark | Size | No. | Length |
|---|---|---|---|
| D1 | ⅝" ø | 90 | 1'-6" |
| A1 | ⅝" ø | 15 | 4'-10" |
| A2 | ⅝" ø | 20 | 3'-3" |
| A3 | ⅝" ø | 3 | 4'-7" |
| A4 | ⅝" ø | 10 | 2'-9" |
| | | | |

Note~ Steel to be plain round bars structural grade. Holes for dowels to be drilled in tops of existing piers. Grout dowels 9" into pier.




PIER NO. 3.

Town 02-68
Bridge 2179

MAINE HIGHWAY COMMISSION
BRIDGE DIVISION

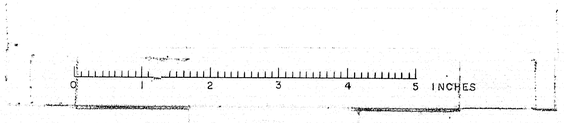
# COVERED — BRIDGE
over
# APOOSTOOK RIVER
# PRESQUE ISLE
# APOOSTOOK COUNTY

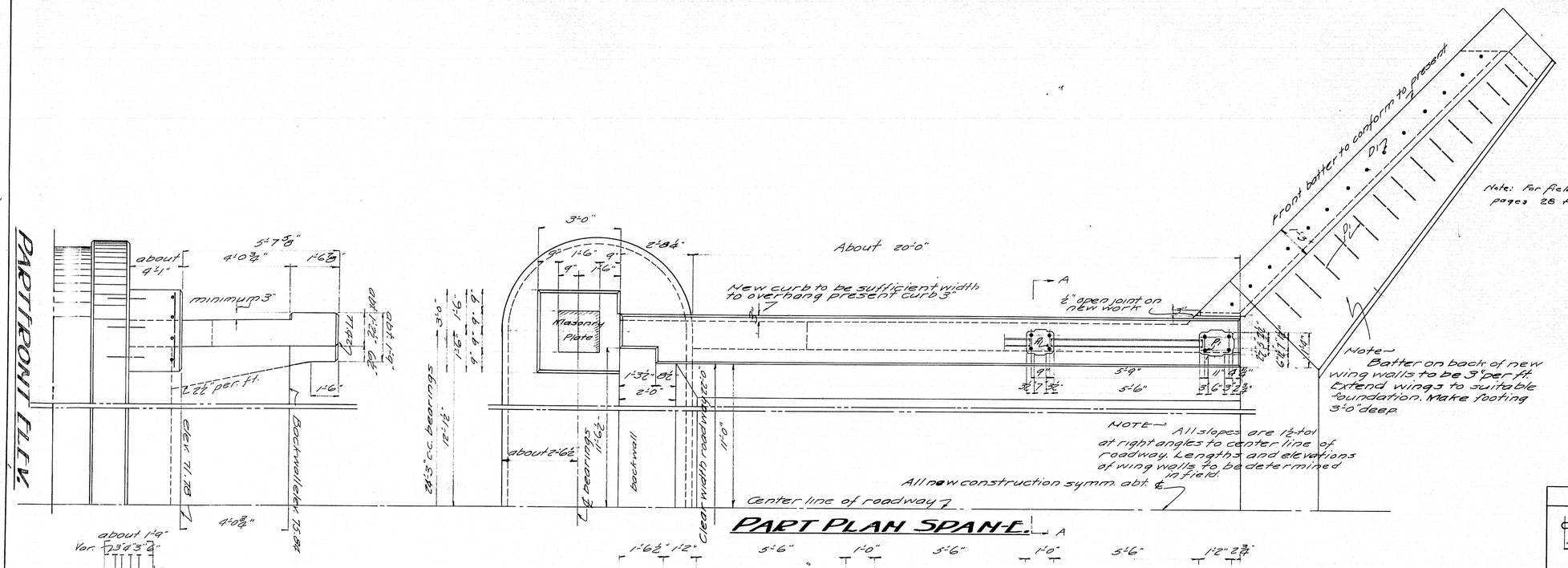
## PIERS 1-2-3

Sheet 5 of 12 Oct 23, 1931.

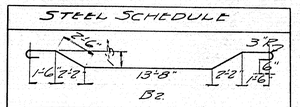
22-105

Engr's Drwg by Fenn
Checked by —






## STEEL SCHEDULE




| Mark | Size | No. | Length | Location |
|---|---|---|---|---|
| B2 | 1"ø | 23 | 24'-2 3/4" | Slab. |
| | | | 6'-2" | |
| | | | 1'-9" | |
| | | | 7'-10" | |
| S1 | | | | |
| B1 | 1/2"ø | 13 | 22'-8" | Slab. |
| A4 | 5/8"ø | 20 | 2'-9" | pedestal |
| D1 | 3/4"ø | 123 | 1'-6" | Dowels |
| D2 | 3/4"ø | 10 | 5'-0" | " |
| B3 | 1"ø | 22 | 21'-0" | Slab |
| S1 | 1/2"ø | 44 | 15'-0" | curb |
| P1 | 3/4"ø | 32 | 3'-9" | Posts |
| R | 5/8"ø | 24 | 5'-10 1/2" | Rails |

All steel to be plain round bars structural grade. Dimensions are on center lines of bars.

Town 02-68
Bridge 2147

MAINE HIGHWAY COMMISSION
BRIDGE DIVISION

# COVERED BRIDGE
over
# AROOSTOOK RIVER
# PRESQUE ISLE
# AROOSTOOK COUNTY

SPAN-E

Sheet 6 of 12 Oct. 26, 1931.

Designed by RS Everett
Traced by BE
Checked by GTB

22-106

0 1 2 3 4 5 INCHES

# LOADING

FLOOR SYSTEM AND HANGERS— 2- 15 ton trucks.
TRUSSES— Total moving uniform load of 563 lb. per. ft. 13850 lb. concentration for moment; 22880 lb. conc. for shear.

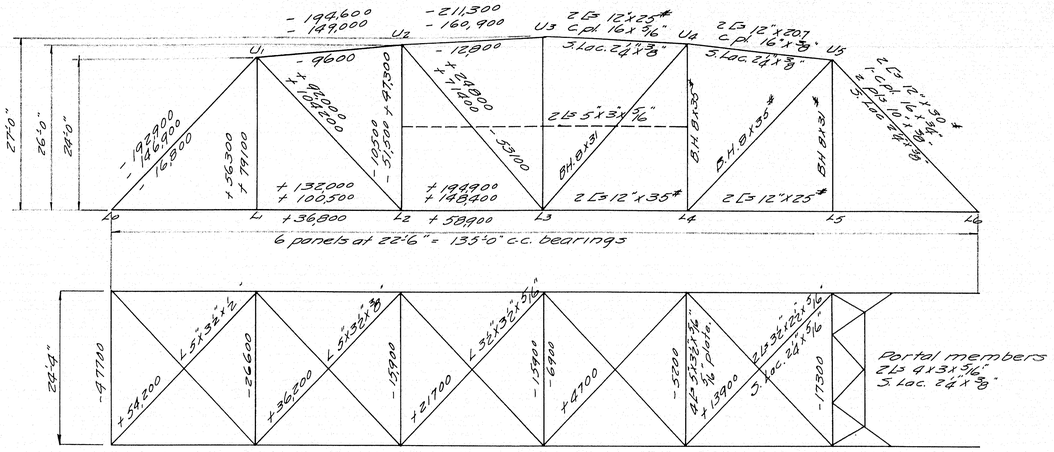
IMPACT COEFFICIENT OF LIVE LOAD STRESS—

$I = \frac{50}{L + 125}$ L = loaded length of span in feet

WIND LOADING:— 30 lb. per sq. ft. on 1½ times area of windward truss including floor, stringers, rail, etc., and considered as a moving load.

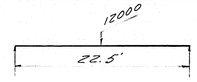
Live load increased 100 %
Wind load increased 50 %
All members figured to use a unit stress of 24,000 lb. per. sq inch.

All stresses are shown in the following order.
1— Dead load
2— Live load plus impact
3— Wind load.
+ - tension
- - compression




## HALF PLAN LOWER LATERALS  HALF PLAN TOP LATERALS

## INTERIOR STRINGER -B-




Dead Load .270 lb. surface
591 " slab
67 " stringer
928 lb. per ft.

L.L.M. = $\frac{12000 \times 22.5}{4} \times \frac{5.25}{4.5}$ = 78772 ft. lb.
+ 100 %. 78772 " "
Impact .339 = 53407 " "
D.L.M. $\frac{928 \times 22.5^2}{8}$ = 58725 " "
269676 " "

S = $\frac{269676 \times 12}{24000}$ = 134.8

Use B 22 x 67 lb. S = 145.6

## EXTERIOR STRINGER A-

Dead load. 145 lb. surface
525 " slab & curb
55 " stringer
725 lb. per ft.

L.L.M. = $\frac{12000 \times 22.5}{4} \times \frac{5}{6}$ = 56250 ft. lb.
+ 100 % 56250 " "
Imp. .339 38138 " "
D.L.M. $\frac{725 \times 22.5^2}{8}$ = 45879 " "
196517 " "

S = $\frac{196517 \times 12}{24000}$ = 98.3

Use B 20 x 55 lb. S = 107.2

## INTERIOR STRINGER -C-

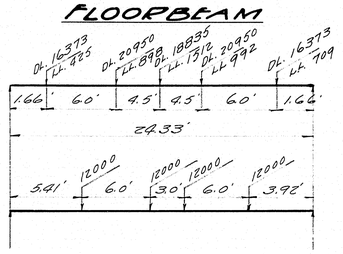
Dead Load. 270 lb. surface
306 " slab
38 " stringer
834 lb. per ft.

L.L.M. = $\frac{12000 \times 22.5}{4} \times \frac{4.5}{4.5}$ = 67500 ft. lb.
+ 100 % . 67500 " "
Impact .339 45765 " "
D.L.M. $\frac{834 \times 22.5^2}{8}$ = 52776 " "
233541 ft. lb.

S = $\frac{233541 \times 12}{24000}$ = 116.8

Use B 22 x 58 lb. S = 121.6

## FLOORBEAM




E.L. Live $\frac{709 \times 1.66 + 992 \times 7.66 + 1312 \times 12.16 + 898 \times 16.66 + 825 \times 22.66}{24.33}$ = 2127 lb.

R.L. Live $\frac{12000 (3.92 + 9.92 + 12.92 + 18.92)}{24.33}$ = 22530 lb.

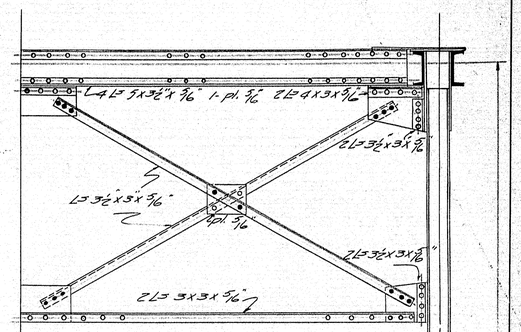
E.L. dead uniform: 141 x 24.33 x .5 = 1715 lb.

R.L. dead conc. $\frac{16373 \times 24.33 + 20950 \times 24.33 + 18835 \times 12.16}{24.33}$ = 46736 lb.

L.L.M.: 21.27 x 12.17 - 425 x 10.5 - 898 x 4.5 = 17382 ft. lb.
L.L.M.: 22530 x 12.17 - 12000 x 7.5 " = 184190 " "
+ 100 % . 201572 " "
Impact: .294 = 118529 " "
D.L.M.: 46736 x 12.17 - 16373 x 10.5 - 20950 x 9.5 - 18835 x 4.5 = 302586 " "
D.L.M. = $\frac{141 \times 24.33^2}{8}$ = 10433 " "
834607 " "

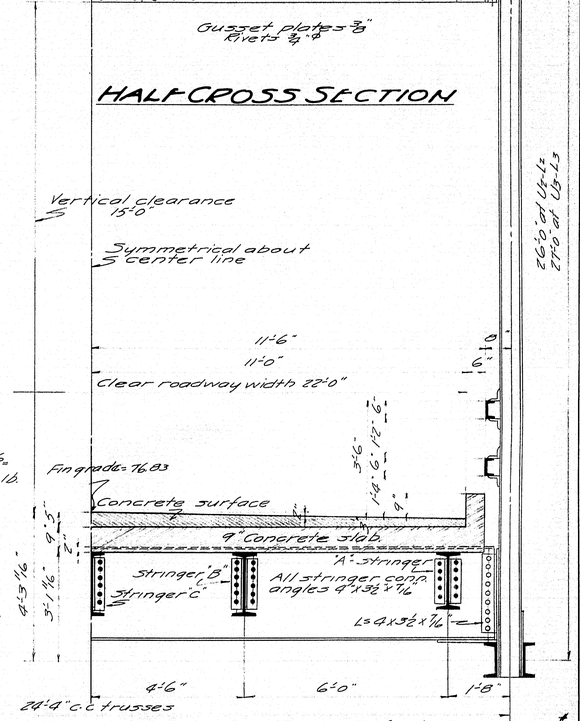
S = $\frac{834687 \times 12}{24000}$ = 417.3

Use B 33 x 141 lb. S = 446.2




Gusset plates ⅜"
Rivets ¾" ø

## HALF CROSS SECTION




Interior stringers B = B 22 x 67 lb. C = B 22 x 58
Exterior stringers A = B 20 x 55 lb.
Floorbeams B 33 x 141 lb.

Town 02.67
Bridge 5.107

MAINE HIGHWAY COMMISSION
BRIDGE DIVISION

# COVERED BRIDGE over AROOSTOOK RIVER PRESQUE ISLE AROOSTOOK COUNTY

SPANS A AND B

Sheet 7 of 12 Oct. 31, 1931.

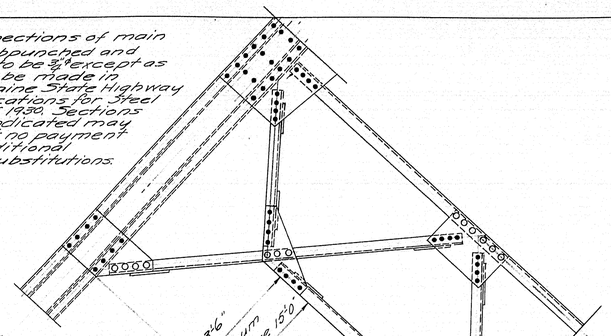
22-107

NOTE— All field connections of main members to be sub punched and reamed. All rivets to be ⅞" ø except as noted. All details shall be made in accordance with Maine Highway Commission Specifications for Steel Highway Bridges. Other sections of equal strength may be substituted, but no payment will be made for additional weight caused by substitutions. The above applies to all spans of this job.

Approved by B Everett

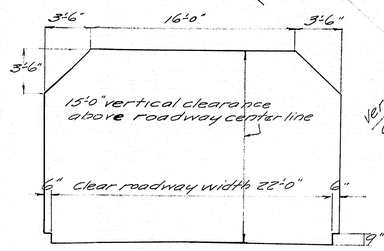
0 1 2 3 4 5 INCHES

Note- All field connections of main members to be subpunched and reamed. All rivets to be ⅞" ø except as noted. All details to be made in accordance with Maine State Highway Commission Specifications for Steel Highway Bridges of 1930. Sections other than those indicated may be substituted, but no payment will be made for additional weight caused by substitutions.

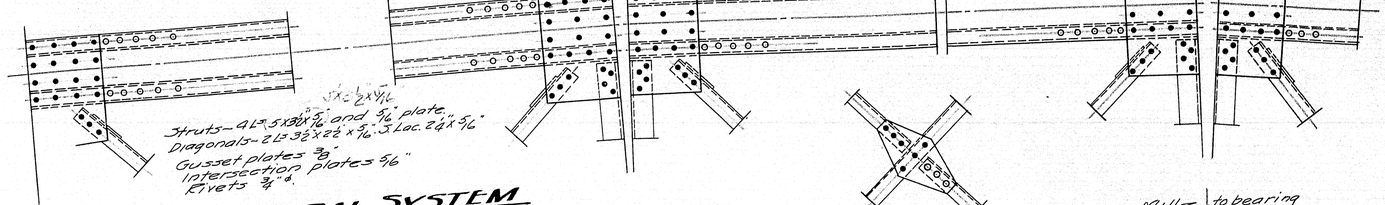



PORTAL

Note- All portal members to be of steel. Gusset plates ⅜". Intersection plates ⅝". Rivets ⅞" ø.

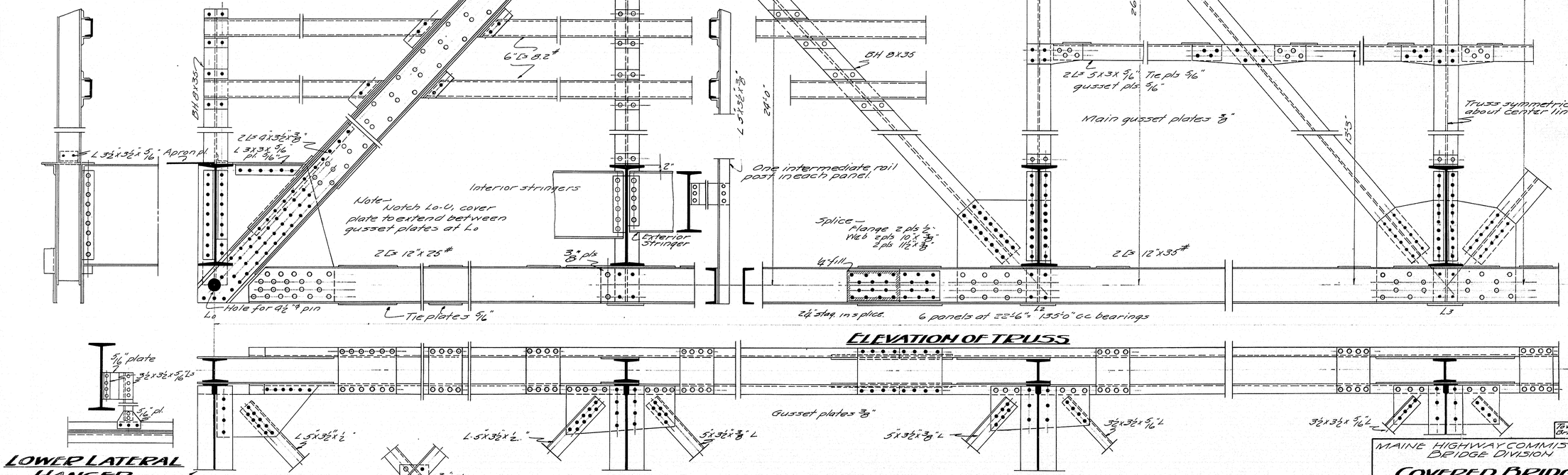



CLEARANCE DIAGRAM



Struts- 4 L's 5"x3½"x⅝" and ⅝" plate.
Diagonals- 2 L's 3½"x2½"x⅝". 3 Lac. 24"x⅝"
Gusset plates ⅜"
Intersection plates ⅝"
Rivets ⅞" ø.

TOP LATERAL SYSTEM




ELEVATION OF TRUSS




LOWER LATERAL HANGER




LOWER LATERAL SYSTEM

Rev'd. 02-68
Bridge: 21.04

MAINE HIGHWAY COMMISSION
BRIDGE DIVISION

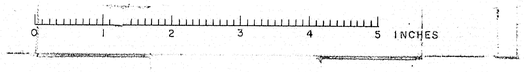
COVERED BRIDGE
over
APOOSTOOK RIVER
PRESQUE ISLE
APOOSTOOK COUNTY

SPANS A and B

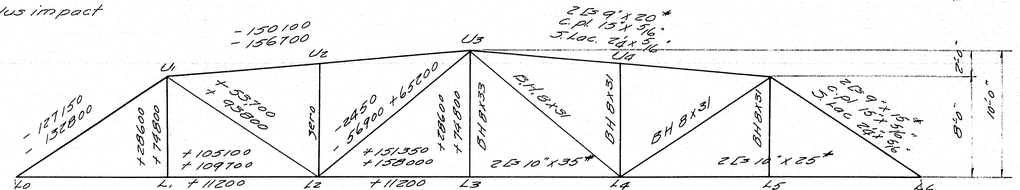
Sheet 8 of 12 Nov. 3, 1931.

22-108

Record detail by [illegible]
Checked by- C.E.P.



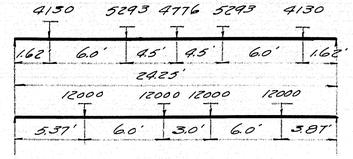
For data and loading see sheet no—
Stresses are given in the following sequence
1. Dead Load
2. Live load plus impact
3. Wind Load.




## LOWER LATERAL SYSTEM

## FLOORBEAMS

| | | | | | |
|---|---|---|---|---|---|
| Int. F.B. D.L. | 8260 | 10587 | 9553 | 10587 | 8260 |
| End F.B. D.L. | 4130 | 5293 | 4776 | 5293 | 4130 |




### INTERMEDIATE

D.L. dead. 23624

D.L.M. 23624 x 12.12 - 8260 x 10.5 - 10587 x 4.5 = 151951 ft. lb.
L.L.M. 22505 x 12.12 - 12000 x 7.5 = 182760 " "
+ 100 % = 182760 " "
Imp. .337 = 123180 " "
D.L.M. 115 x 24.25²/8 = 8453 " "
699102 " "

S. 699102 x 12 / 24000 = 349.6

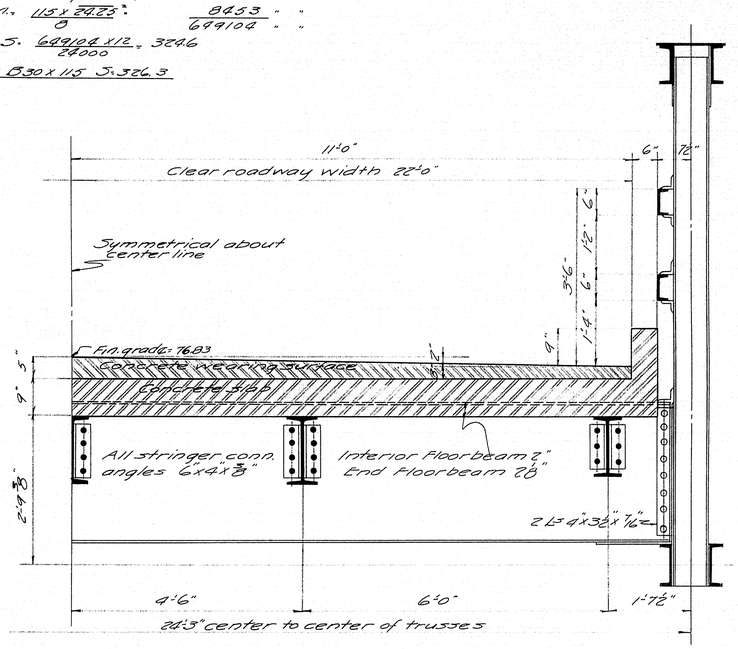
Use B30 x 115 S. 326.3

### END

D.L.M. 1181.1 x 12.12 - 9130 x 10.5 - 5293 x 4.5 = 75966 ft. lb.
L.L.M. 22505 x 12.12 - 12000 x 7.5 = 182760 " "
+ 100 % = 182760 " "
Impact = .366 = 133780 " "
D.L.M. 108 x 24.25²/8 = 7938 " "
503204 " "

S. 503204 x 12 / 20000 = 291.6

Use B30 x 108 S. 298.9




## HALF CROSS SECTION

## STRINGERS

### CENTER

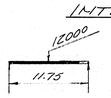
D.L. slab 506 lb.
surf. 270 "
str. 37 "
813 lb. per ft.

L.L.M. = 12000 x 11.75 / 4 x 4.5 / 4.5 = 35250 ft. lb.
+ 100 % = 35250 " "
Imp. .366 = 25803 " "
D.L.M. = 813 x 11.75² / 8 = 16030 " "
110333 " "

S. 110333 x 12 / 24000 = 55.2

Use B 16 x 37 S. 59.1

### INTERIOR



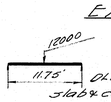

D.L. surf. 270 lb.
slab 591 "
str. 40 "
901 lb. per ft.

L.L.M. = 12000 x 11.75 / 4 x 5.25 / 4.5 = 91125 ft. lb.
+ 100 % = 91125 " "
Imp. .366 = 30103 " "
D.L.M. = 901 x 11.75² / 8 = 15549 " "
127902 " "

S. 127902 x 12 / 24000 = 63.9

Use B16 x 40 S. 65.8

### EXTERIOR




D.L. surf. 185 lb.
slab & curb = 525 "
str. = 33 "
703 lb. per ft.

L.L.M. = 12000 x 11.75 / 4 x 5/6 = 29375 ft. lb.
+ 100 % = 29375 " "
Imp. .366 = 21502 " "
D.L.M. = 703 x 11.75² / 8 = 12132 " "
92384 " "

S. 92384 x 12 / 24000 = 46.2

Use B14 x 33 S. 47.8

Design & Detail by B.S. and P.
Checked by J.C.B.

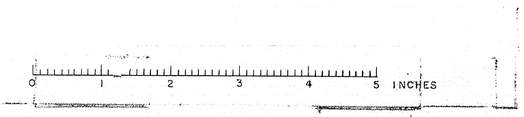
Town 02-68
Bridge 21-89

MAINE HIGHWAY COMMISSION
BRIDGE DIVISION

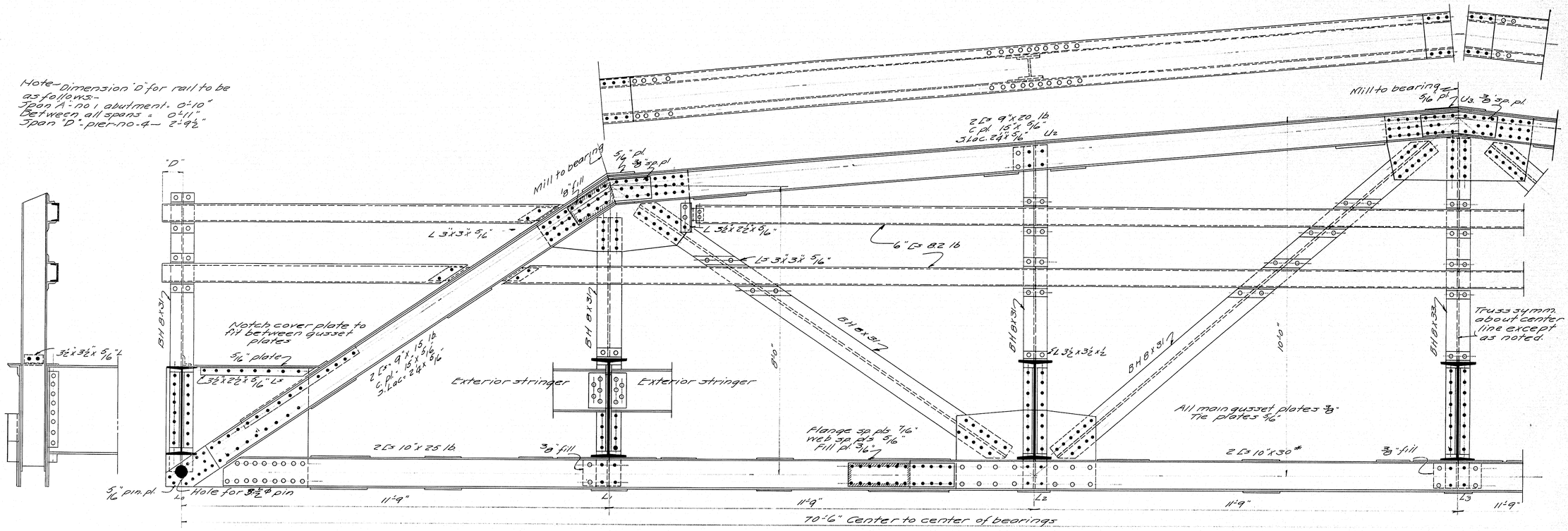
# COVERED BRIDGE
over
# AROOSTOOK RIVER
# PRESQUE ISLE
# AROOSTOOK COUNTY
# SPAN C.D.

Sheet 9 of 12 NOV. 2 1931

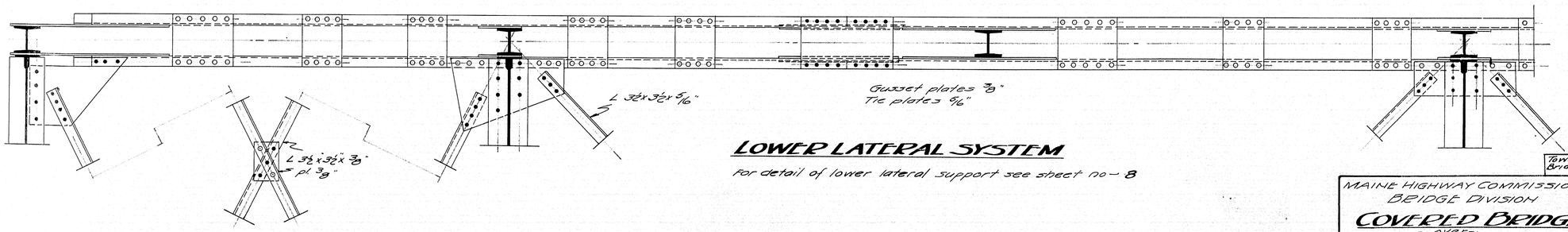
22-109



Note- Dimension 'D' for rail to be as follows:-
Span A- no 1 abutment. 0'-10"
Between all spans = 0'-11"
Span 'D'- pier no 4 — 2'-9½"




## ELEVATION OF TRUSS




## LOWER LATERAL SYSTEM

for detail of lower lateral support see sheet no — 8

Town 02-68
Bridge 2197

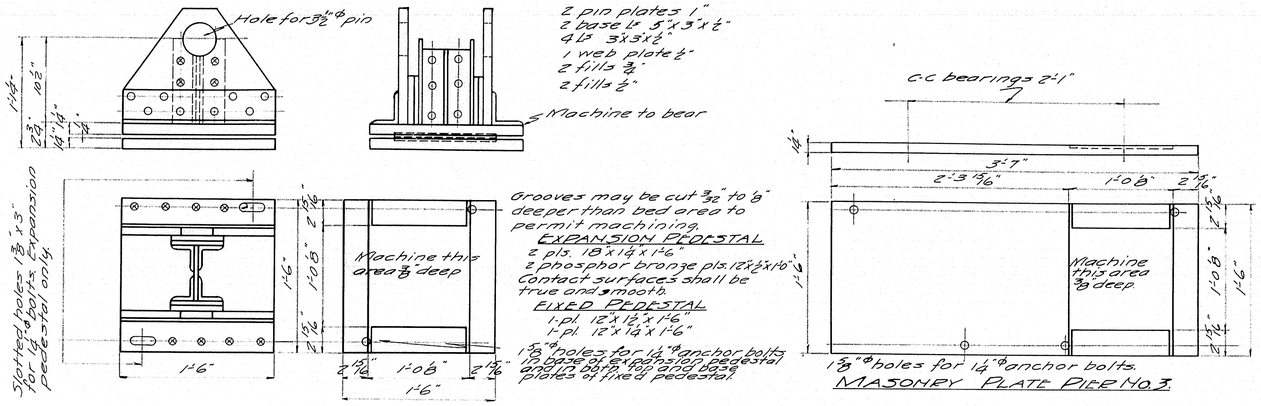
MAINE HIGHWAY COMMISSION
BRIDGE DIVISION

# COVERED BRIDGE
— over —
# AROOSTOOK RIVER
# PRESQUE ISLE
# AROOSTOOK COUNTY

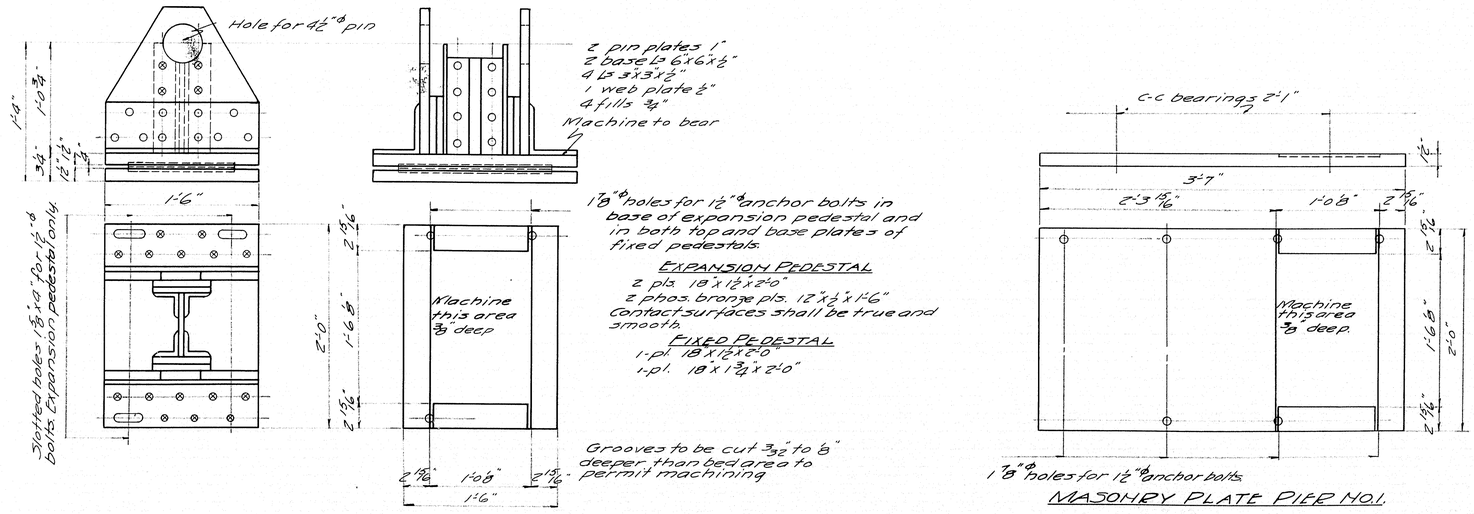
SPANS C AND D
Sheet 10 of 12 Nov. 4, 1931.

Designed, Detailed, Traced, Checked by Effacent
Checked by [illegible]

22 - 110




## EXPANSION BEARING DETAILS SPANS C AND D




## EXPANSION BEARING DETAILS SPANS A AND B

Design & Detail by W. E. Everett
Checked by C. E.

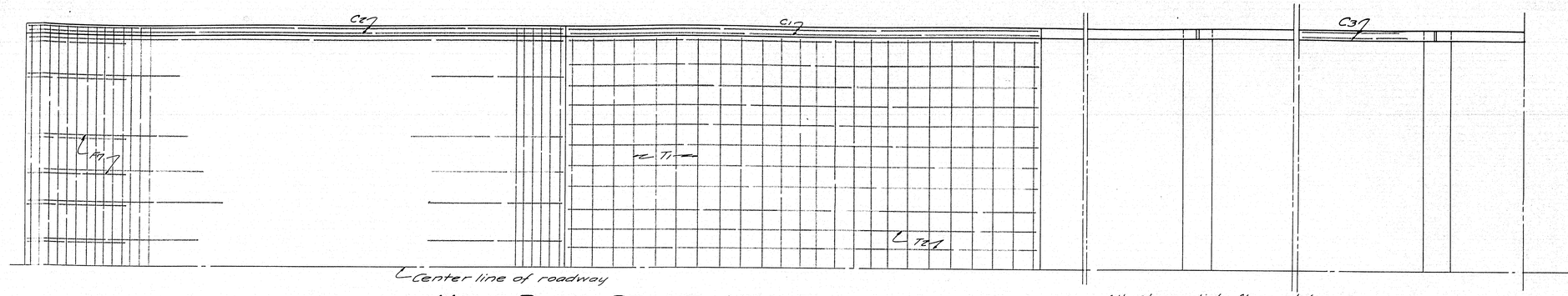
Form 02-68
Bridge 2179

MAINE HIGHWAY COMMISSION
BRIDGE DIVISION

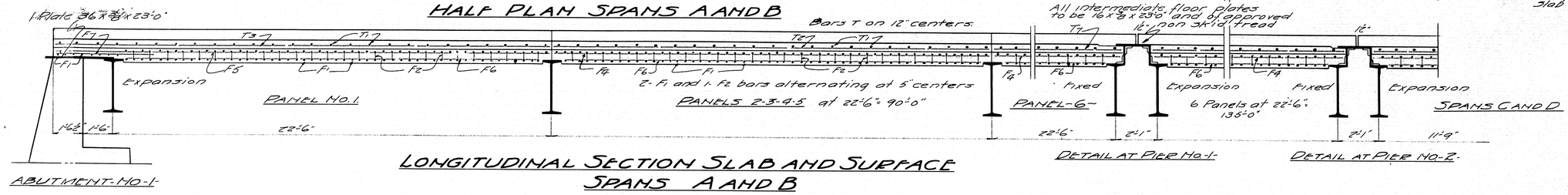
# COVERED BRIDGE
OVER
# AROOSTOOK RIVER
# PRESQUE ISLE
# AROOSTOOK COUNTY
## PEDESTALS

Sheet 11 of 12 Oct. 26 1931.

22-111




HALF PLAN SPANS A AND B

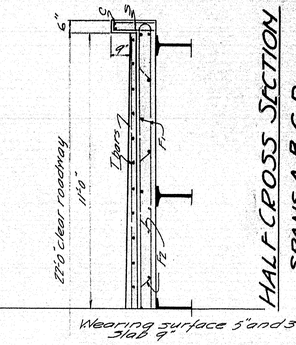



ABUTMENT-NO-1-

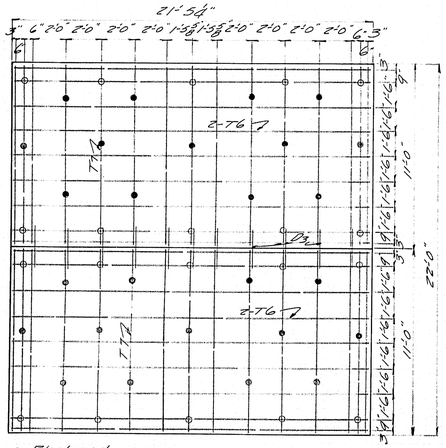
LONGITUDINAL SECTION SLAB AND SURFACE SPANS A AND B

DETAIL AT PIER NO-1-

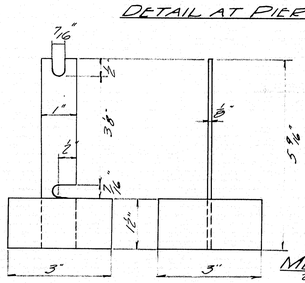
DETAIL AT PIER NO-2-



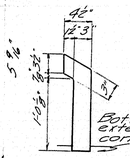

HALF CROSS SECTION SPANS A-B-C-D




PLAN OF ROADWAY SLAB SPAN-E-



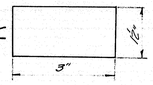

BLOCK AND SPACER
20 Required

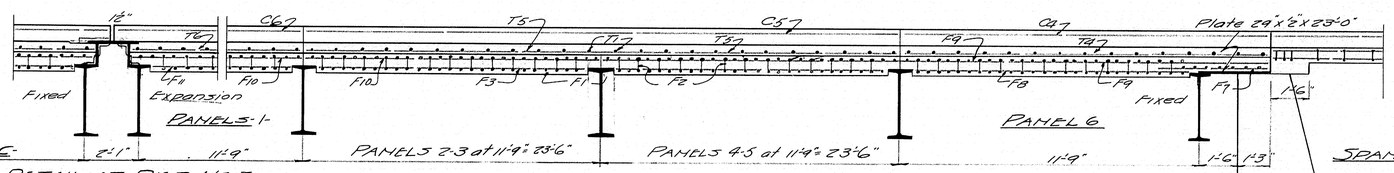



METAL DRAIN
20 required

Location of drains—
One on each side of roadway.
Span A - Panels 1-3-5
Span B - Panels 1-3-5
Span C - Panels 1-3
Span D - Panels 1-4

CEMENT BLOCK
26 Required.



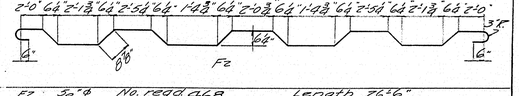

DETAIL AT PIER NO-3-

LONG. SECTION SLAB AND SURFACE SPANS-C-AND-D-

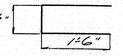
PIER NO-4-

| STRAIGHT BARS | | | | |
|---|---|---|---|---|
| Mark | Size | No. | Length | Location |
| F1 | ⅜"ø | 990 | 22'-9" | slab |
| F3 | ½"ø | 80 | 10'-10" | slab (C-D) |
| F4 | ½"ø | 55 | 22'-9" | slab (A-B) |
| F5 | ½"ø | 5 | 25'-4" | slab (Span A) |
| F6 | ½"ø | 120 | 21'-6" | slab (A+B) |
| F7 | ½"ø | 24 | 3'-0" | slab (A+B) |
| F8 | ½"ø | 10 | 10'-10" | slab (D) |
| F9 | ½"ø | 5 | 26'-8" | slab (D) |
| T1 | ⅜"ø | 926 | 21'-10" | slab (A-B-C-D) |
| T2 | ⅜"ø | 198 | 23'-6" | surf (A-B) |
| T3 | ⅜"ø | 22 | 26'-6" | surf (A) |
| T4 | ⅜"ø | 22 | 15'-6" | surf (D) |
| T5 | ⅜"ø | 198 | 12'-9" | surf (C-D) |
| C1 | ½"ø | 32 | 22'-9" | curb (A-B) |
| C2 | ½"ø | 9 | 25'-4" | curb (A) |
| C3 | ½"ø | 12 | 23'-5" | curb (A-B) |
| C4 | ½"ø | 4 | 14'-9" | curb (D) |
| F10 | ½"ø | 25 | 23'-9" | slab (C-D) |
| F11 | ½"ø | 130 | 10'-10" | slab (C-D) |
| T6 | ⅜"ø | 44 | 11'-9" | surf (C-D) |
| C5 | ½"ø | 32 | 11'-7" | curb (C-D) |
| D3 | ½"ø | 1'-6 | 22 | surf (E) |

BENT BARS




F2 ⅜"ø No. reqd. 468 Length 26'-6"




C7 ⅜"ø No. reqd. 852 Length 3'-3½"

All steel to be plain round bars, structural grade.
Dimensions are on center lines of bars.

| Mark | Size | No | A | B | C | Total length | |
|---|---|---|---|---|---|---|---|
| T6 | ⅜"ø | 36 | 11'-6" | 0'-2⅜" | 0'-8" | 29'-1½" | |
| T7 | ⅜"ø | 30 | 10'-7" | 0'-3½" | 0'-8" | 22'-5" | |
| C6 | ½"ø | 12 | | | | 12-10" | curb (C-D) straight |
| T7 | ⅜"ø | 44 | | | | 22'-4" | surf (A-B) " |

Design & Details by WEaton
Checked by - CE

Town 02-63
Bridge 2189

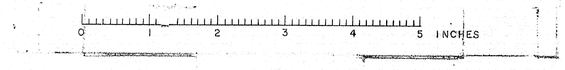
MAINE HIGHWAY COMMISSION
BRIDGE DIVISION

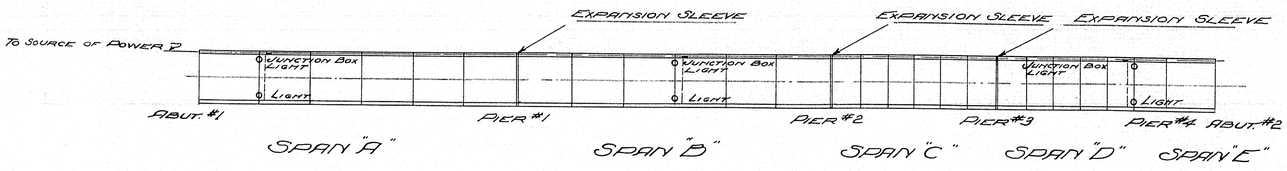
# COVERED BRIDGE
over
# AROOSTOOK RIVER
# PRESQUE ISLE
# AROOSTOOK COUNTY

ROADWAY SLAB

Sheet 12 of 12 Oct. 28, 1931.

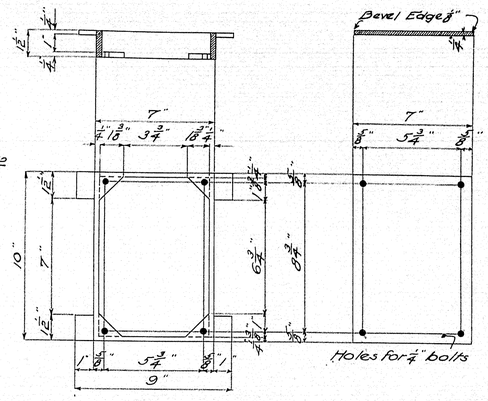
22-112





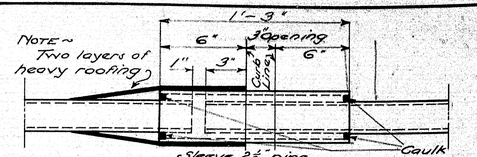

## Plan

Conduits ~ Lights ~ Junction Boxes ~ Expansion Sleeves



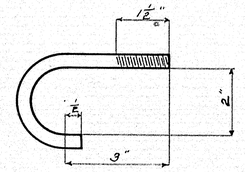

## Details of Zinc Junction Box Casting and Cover

Required ~
3 Zinc Junction Box Castings
3 Zinc Covers
12 Brass Bolts 2" x 1/4" ϕ




## Detail of Expansion Sleeve

3 Required

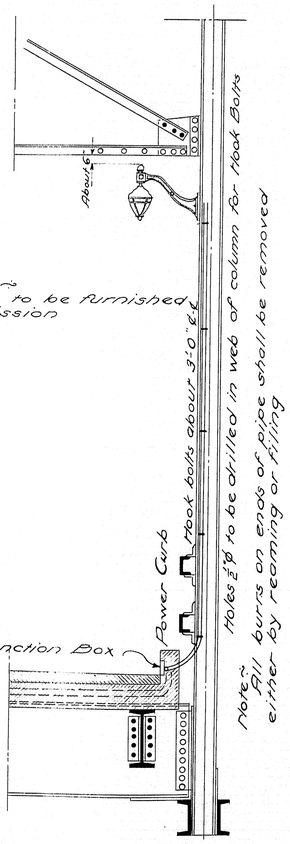



## 3/8" ϕ Hook Bolts

Each bolt to be supplied with nut and check nut.
30 req'd

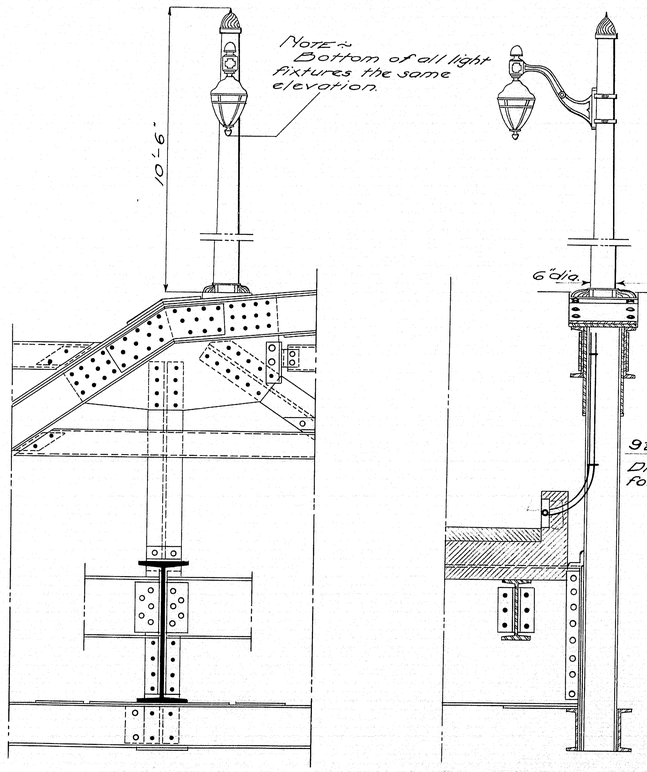
Note ~ Junction Boxes will be furnished by the Commission.

Note ~ Two Light Poles Required.



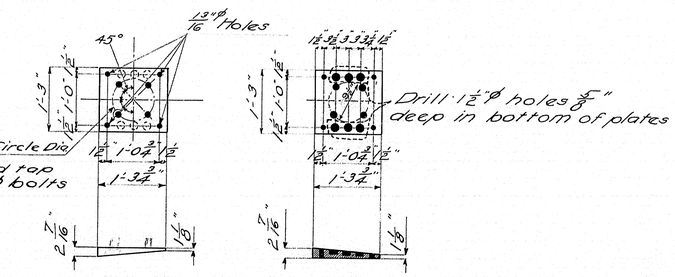

Location ~ Lights - Junction Boxes - Conduit

## Span "A" & "B"




Location of Light Fixtures

## Span "D"




## Bevel Plate

2 ~ Required

Note ~ Bevel Plates to be furnished by Commission.

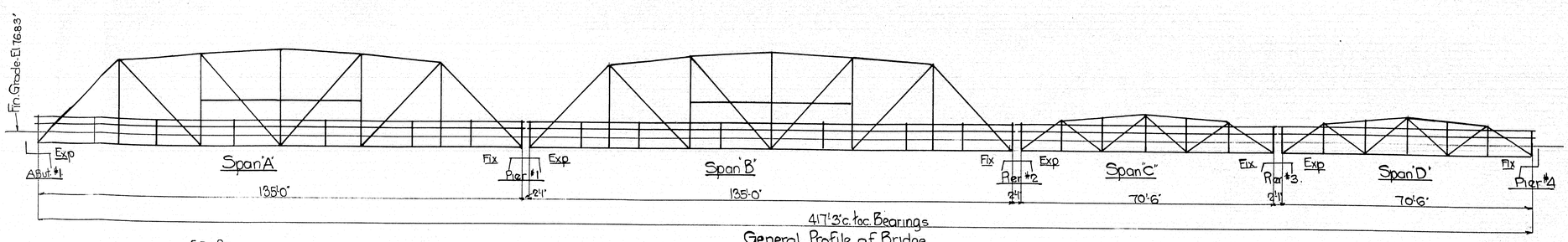
Town 02-68
Bridge 2189

Maine Highway Commission
Bridge Division
**Covered Bridge**
over
**Aroostook River**
**Presque Isle**
**Aroostook County**
Lighting Details
Sheet 12a
Nov. 2 1931

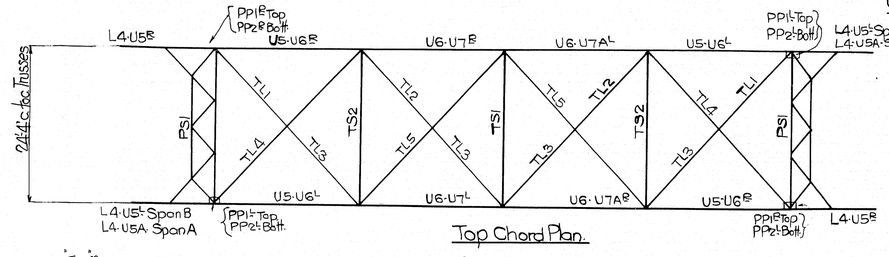
Plan ~ Hamilton
Tracer ~
Checked ~ Bradford

22-113

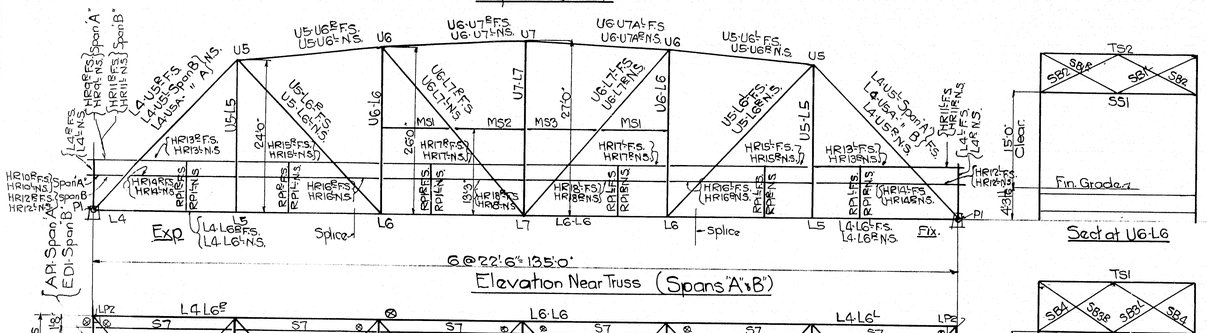
| INDEX OF DRAWINGS. | |
|---|---|
| No. | CONTENTS. |
| E1 | Erection Diagram |
| E2 | Match Marking Diagram |
| 1 | Shoes, Pins etc. |
| 2 | 70'6" Truss |
| 3 | Floor Bms, Stringer etc-70'6"Span |
| 4 | Top Chords, Diags & Posts-135'0" " |
| 5 | Bolt: Chord, Stringers & Fl. Bms. " " |
| 6 | End Posts & Bolt. Laterals " " |
| 7 | Portals, Sway Bracing etc. " " |
| 8 | Top Struts-Exp Dams etc. " " |
| | |



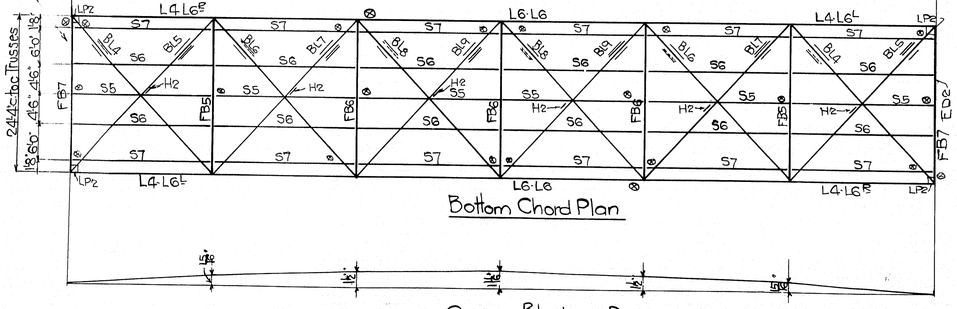

General Profile of Bridge.




Top Chord Plan.




Elevation Near Truss (Spans 'A' & 'B')

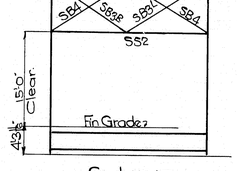


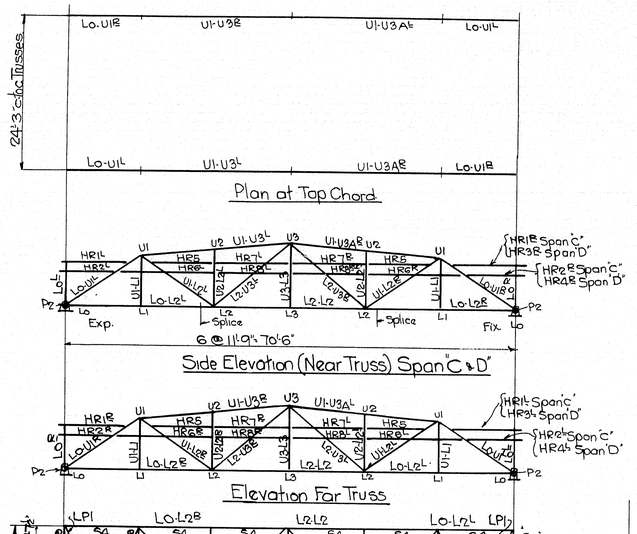

Bottom Chord Plan




Camber Blocking Diagram
Spans A' & B'



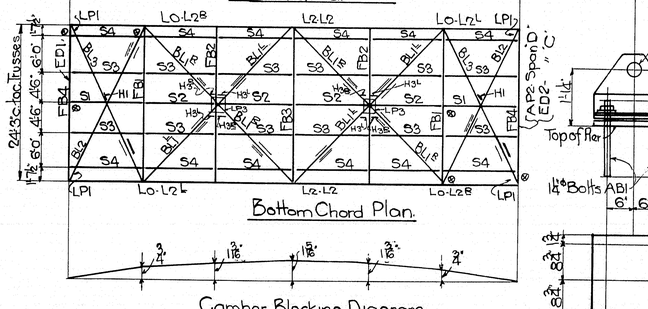

Plan at Top Chord




Side Elevation (Near Truss) Span 'C' & 'D'



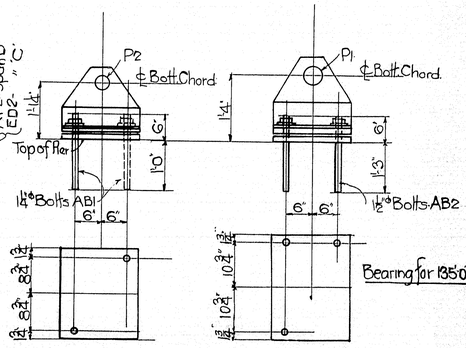

Elevation Far Truss



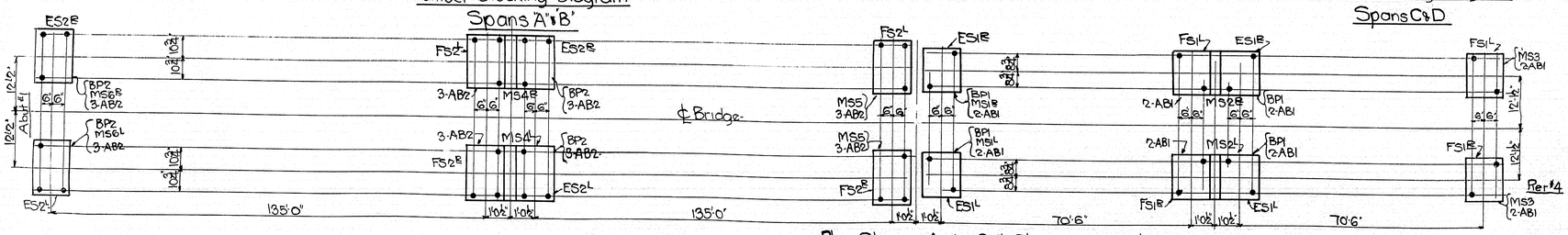

Bottom Chord Plan.




Camber Blocking Diagram
Spans C & D




Bearing for 70'6" Span




Plan Showing Anchor Bolts, Shoes & Masonry Plates.

RIVETS,
OPEN HOLES,
PAINT,

**Note**
Field connections to be riveted except hand rails which are to be bolted. Trusses to be assembled in shop and main field connections reamed. Trusses to be matchmarked See Diag E2

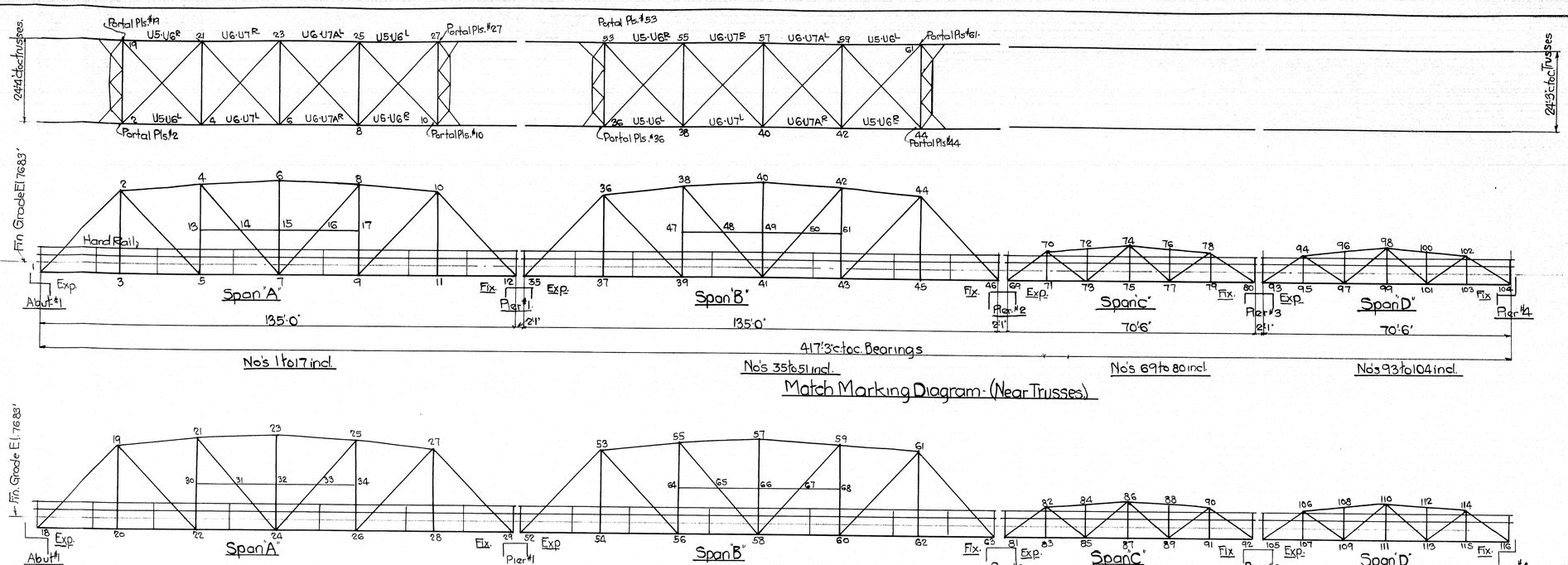
PITTSBURGH-DES MOINES STEEL CO.
PITTSBURGH, PA. DES MOINES, IA.
Bridge Over Aroostook River
Presque Isle, Maine
Maine Highway Commission

| | |
|---|---|
| MADE M.W.W. | SHEET NO. E1 |
| TRACED M.W.W. | |
| CHECKED W.J.H. | CONTRACT NO. E412 |
| REVISED | |

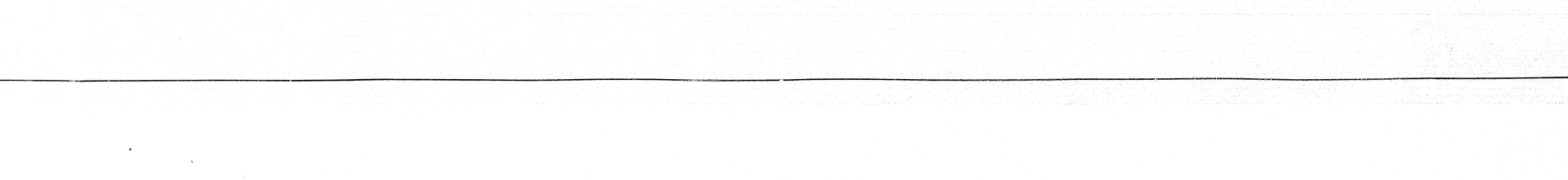
IMPERIAL TRACING CLOTH W. K. ELLIOTT CO. PHIL. PA.

22-114

0 1 2 3 4 5 INCHES




Match Marking Diagram - (Near Trusses)




Match Marking Diagram. (Far Trusses)

RIVETS,
OPEN HOLES,
PAINT,
Match Marking Diagram

PITTSBURGH-DES MOINES STEEL CO.
PITTSBURGH, PA. DES MOINES, IA.
Bridge Over Aroostook River
Presque Isle, Maine.
Maine Highway Commission.

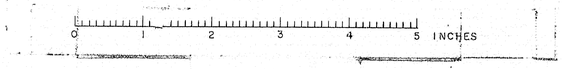
MADE M.W.W.
TRACED M.W.W.
CHECKED W.J.H.
REVISED

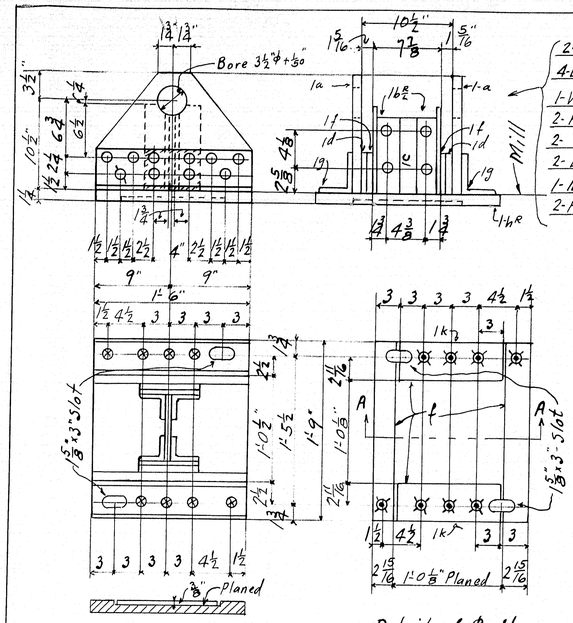
SHEET NO. E2
CONTRACT NO. E412

IMPERIAL TRACING CLOTH H. S. ELLIOTT CO. PHILA. PA.

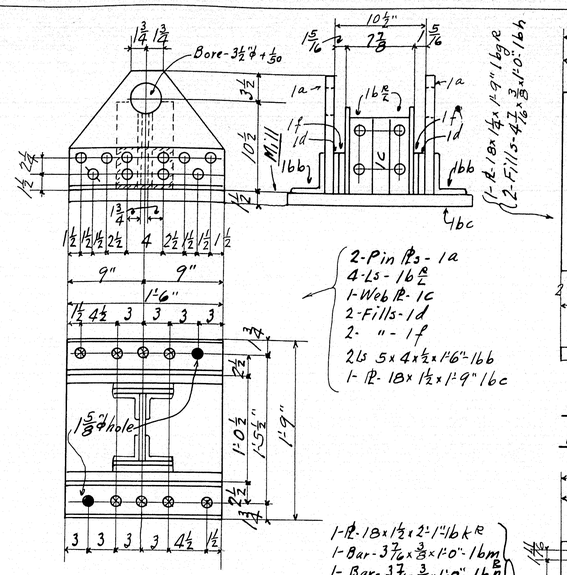
11

22-115

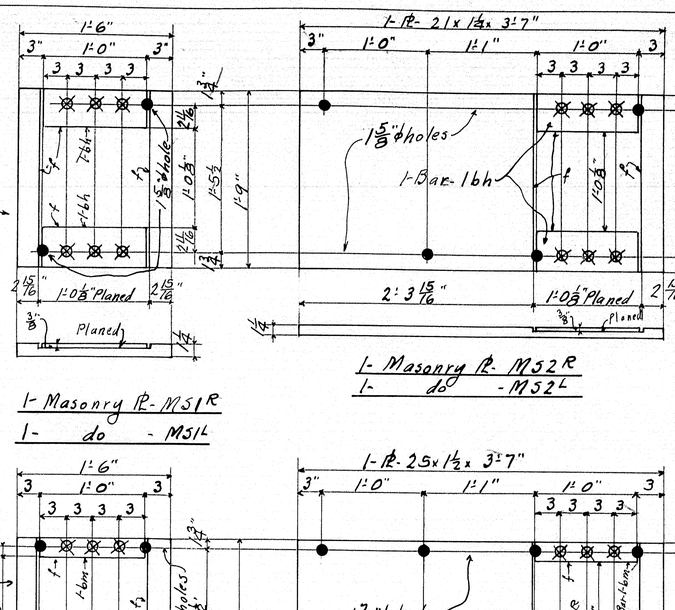





2- Exp. Shoes - E51R
2- do - E51L



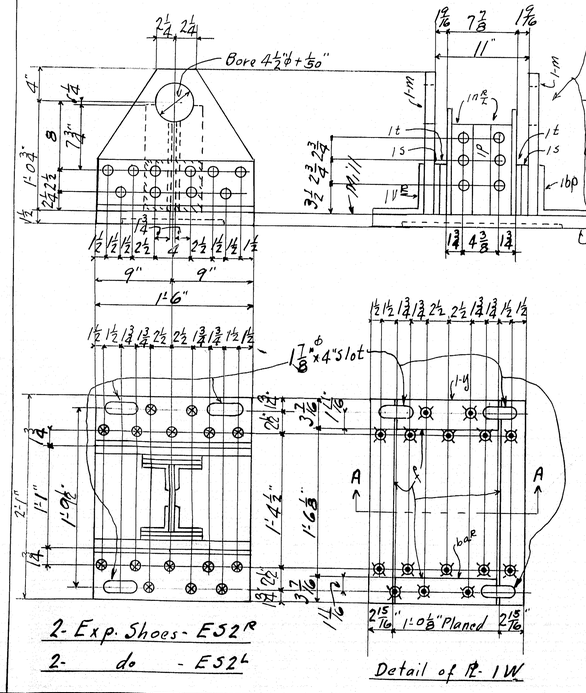

2- Fixed Shoes - F51R
2- " " - F51L



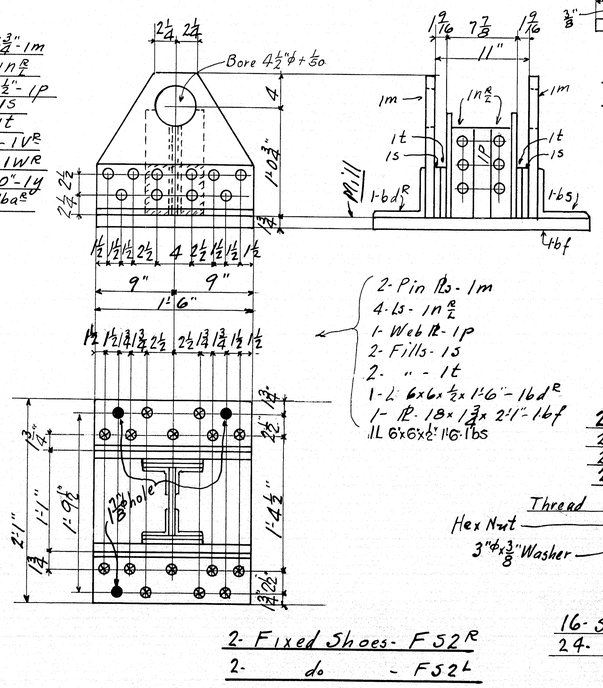

1- Masonry R - M51R
1- do - M51L

1- Masonry R - M52R
1- do - M52L

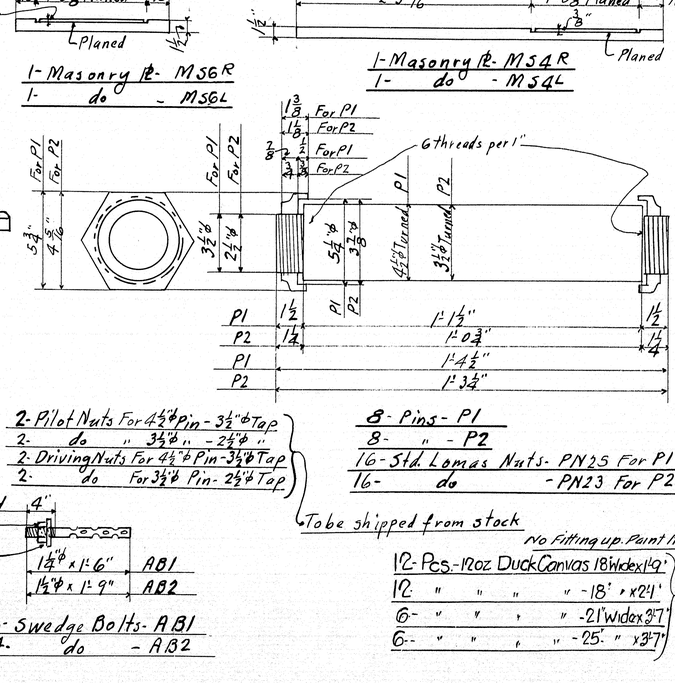
2- Masonry Rs - M53




2- Exp. Shoes - E52R
2- do - E52L



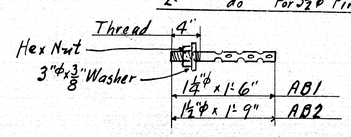

2- Fixed Shoes - F52R
2- do - F52L




2- Pilot Nuts For 4½"ϕ Pin - 3½"ϕ Tap
2- do " " 3½"ϕ " - 2½"ϕ "
2- Driving Nuts For 4½"ϕ Pin - 3½"ϕ Tap
2- do For 3½"ϕ Pin - 2½"ϕ Tap

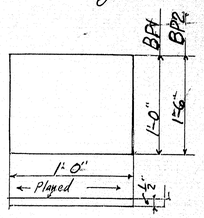
To be shipped from stock

8- Pins - P1
8- " - P2
16- Std. Lomas Nuts - PN25 For P1
16- do - PN23 For P2




16- Swedge Bolts - AB1
24- do - AB2

2- Masonry Rs - M55




8- Phos. Bronze Rs - 12x½x½ - 1'-0" BP1
8- do 12x½x1'-6" BP2

Bronze Rs must be exact size, true & smooth.

12- Pcs. - 12oz Duck Canvas 18" Wide x 19'
12- " " " " - 18' x 24'
6- " " " " - 21' Wide x 31'-7"
6- " " " " - 25' " x 31'-7"
For Shoes.

No Fitting up. Paint Required

Machine finished surfaces one coat White Lead & Tallow

RIVETS, 3/4" ϕ
OPEN HOLES, 13/16" unless noted.
PAINT, One Coat Red Lead, as per Maine Highway Commissions Spec.

PITTSBURGH-DES MOINES STEEL CO.
PITTSBURGH, PA. DES MOINES, IA.
BRIDGE OVER AROOSTOOK RIVER
PRESQUE ISLE
MAINE HIGHWAY COMMISSION.

| | |
|---|---|
| MADE W. J. H. | SHEET No. 1 |
| TRACED | |
| CHECKED | CONTRACT No. E412 |
| REVISED 5-23-32 | |

IMPERIAL TRACING CLOTH H. R. ELLIOTT CO. PHIL. PA.

4-End Posts L0-U1E as shown
4- " " - L0-U1L opp.hand
2-Top Chords-U1-U3E as shown
2- " " - U1-U3L opp.hand
2- " " - U1-U3AE as shown
2- " " - U1-U3AL opp.hand
4 Bott.Chords-L0-L2E as shown
4- " " - L0-L2L opp.hand
4- " " - L2-L2
8-Posts-U1-L1
4- " - U3-L3
4- " - U2-L2E as shown
4- " - U2-L2L opp.hand
4-Diags-U1-L2E as shown
4- " - U1-L2L opp.hand
4 " - L2-U3E as shown
4- " - L2-U3L opp.hand
4-Posts-L0E as shown
8-Lat. Plates-LP1
4-Posts-L0L opp.hand

Notes: Holes for all main field connections of trusses to be subpunched 11/16" and reamed to 13/16" with truss assembled in shop. Holes marked (RTI) to be subpunched 11/16" and reamed to 13/16" to an iron templet. Trusses to be match marked See Diag. E2.

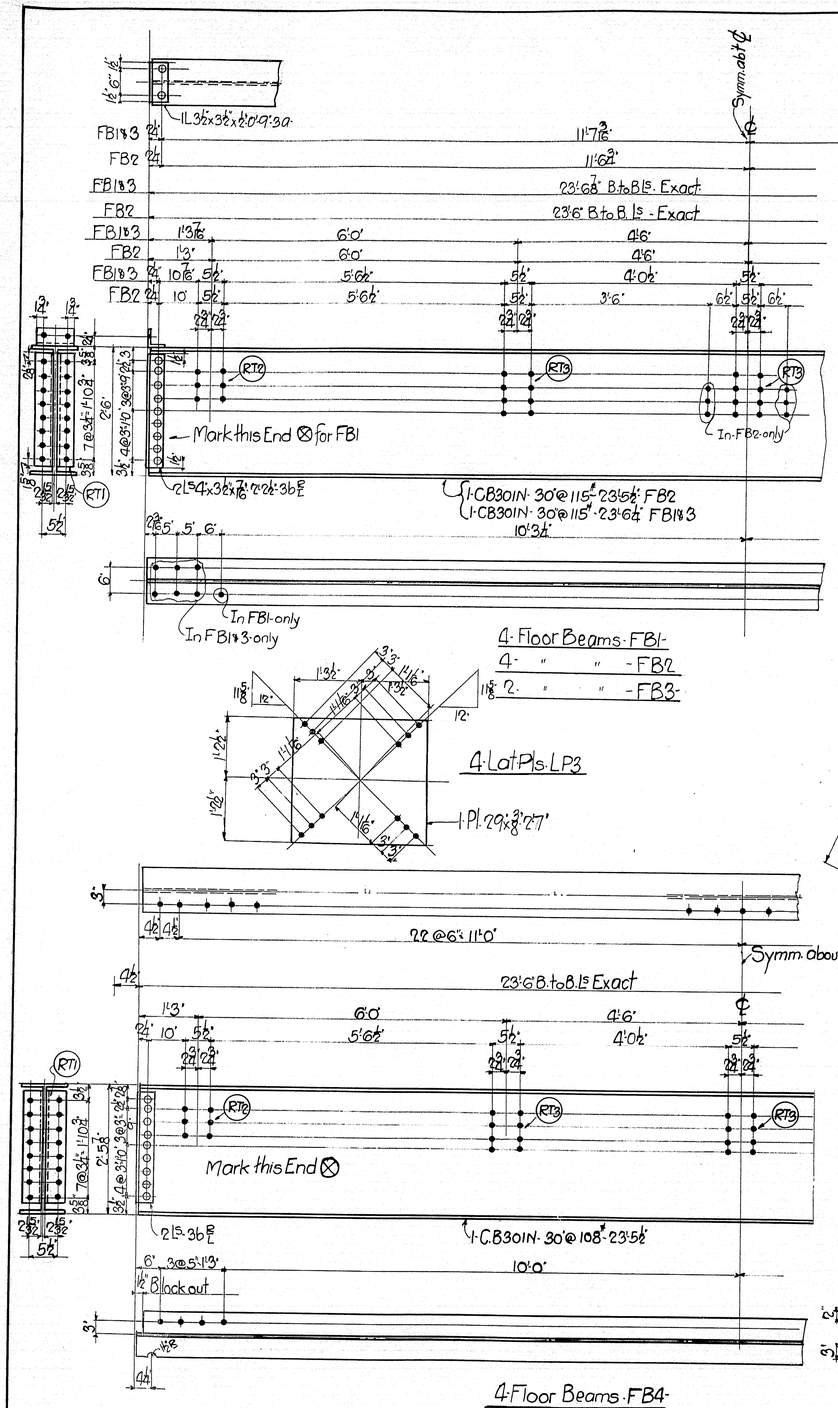
RIVETS, 7/8"
OPEN HOLES, 13/16" unless noted.
PAINT, One coat of Red Lead as per Maine Highway Comm. Spec.

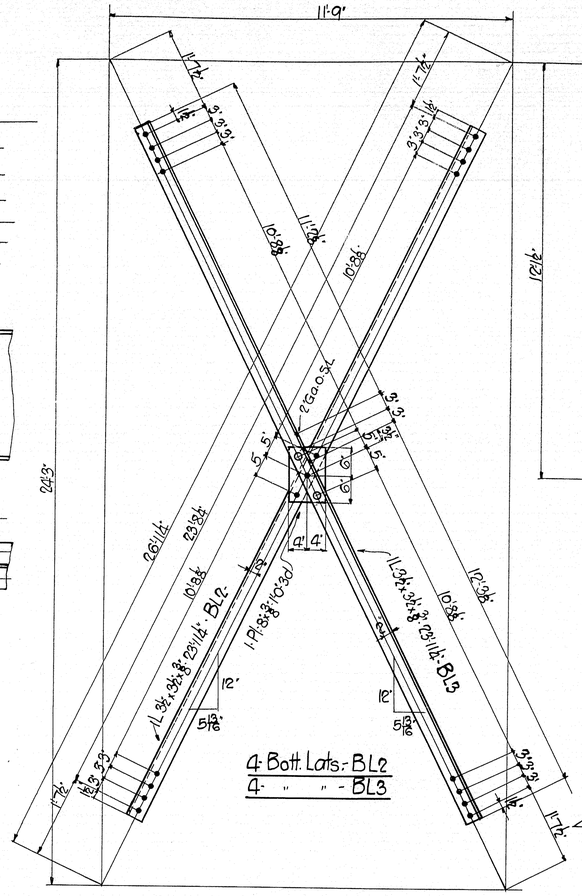
No Fitting up Paint Required.

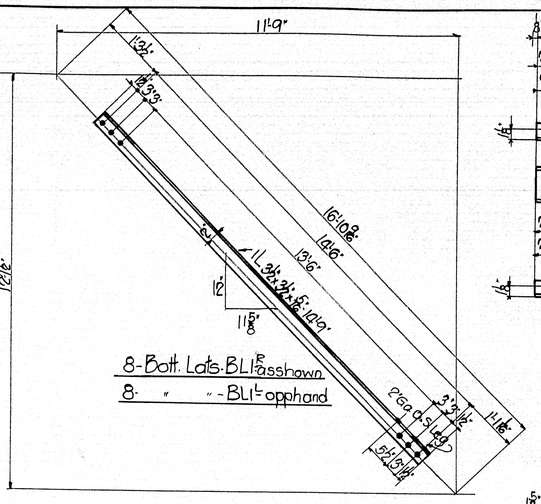
PITTSBURGH-DES MOINES STEEL CO.
PITTSBURGH, PA. DES MOINES, IA.
Bridge Over Aroostook River
Presque Isle, Maine.
Maine Highway Commission
MADE 10-26-31
TRACED
CHECKED W.J.H.
REVISED 5-27-32
SHEET No. 2
CONTRACT No. E412

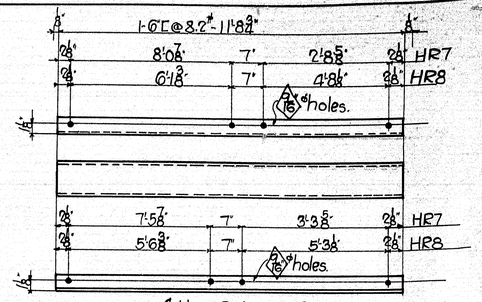
IMPERIAL TRACING CLOTH K. E. ELLIOTT CO. PHILA. PA.

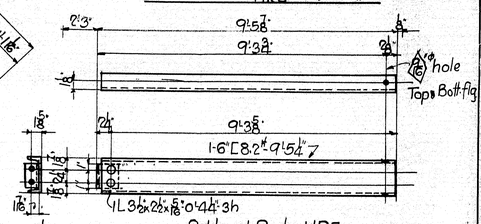
22-117

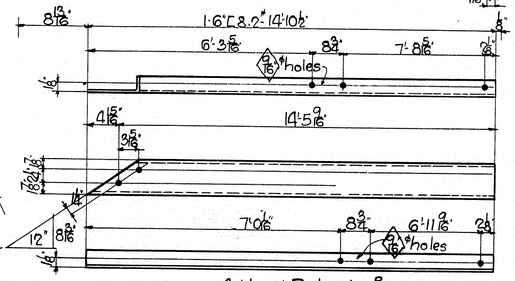


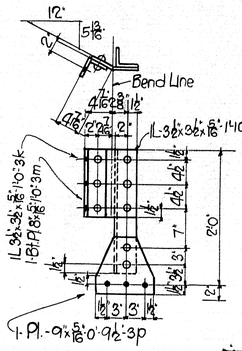



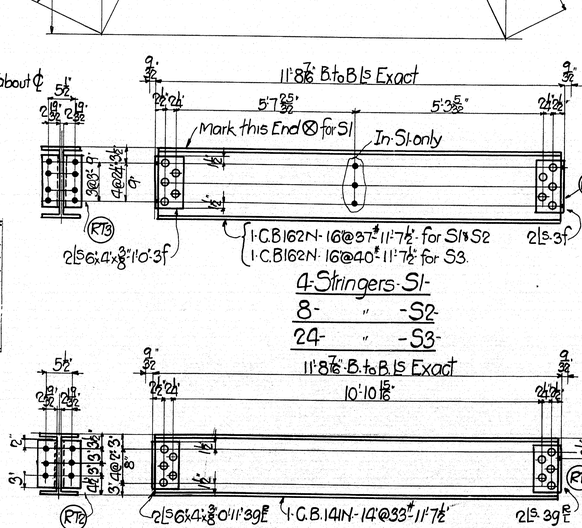



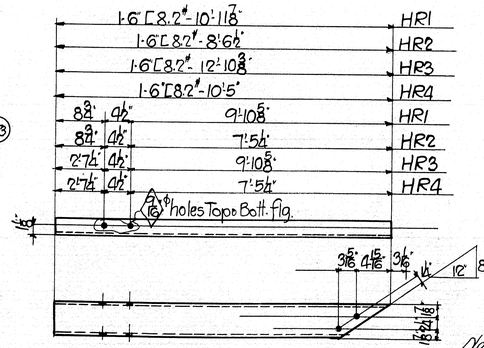










RIVETS, 7/8"ϕ
OPEN HOLES, 13/16" unless noted.
PAINT: One coat of Red Lead as per Maine Highway Comm. Spec.

No Fitting up Paint Required

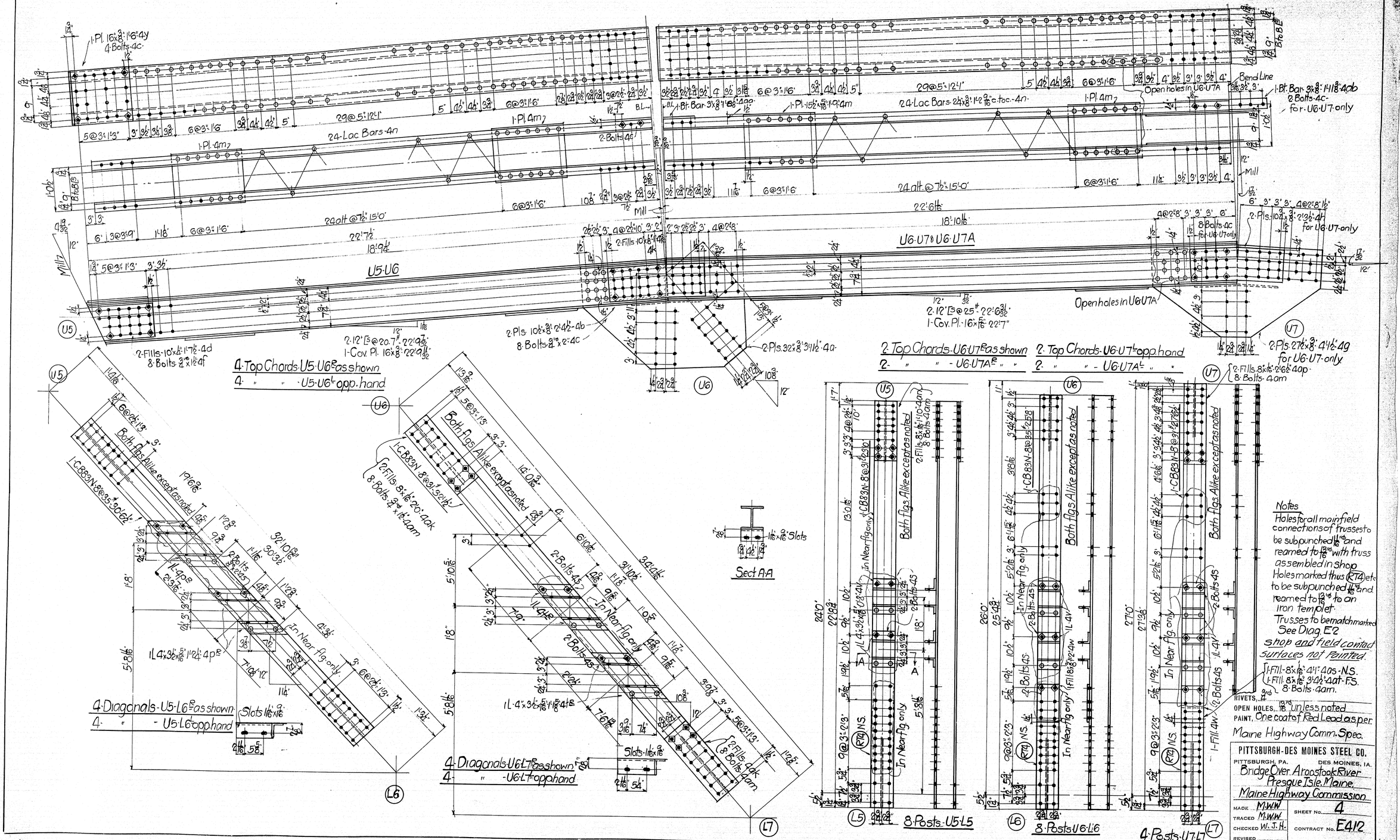
Note. Holes marked (RT1) etc to be subpunched 11/16" and reamed to 13/16" to an iron templet.

PITTSBURGH-DES MOINES STEEL CO.
PITTSBURGH, PA. DES MOINES, IA.
Bridge Over Aroostook River
Presque Isle, Maine
Maine Highway Commission
MADE 07/04/32
TRACED
CHECKED W.J.H.
REVISED 5-18-32
SHEET No. 3
CONTRACT No. E412

IMPERIAL TRACING CLOTH H. R. ELLIOTT CO. PHIL. PA.

22-118

0 1 2 3 4 5 INCHES


U5-U6
U6-U7 & U6-U7A
Open holes in U6-U7A
4-Top Chords-U5-U6 as shown
4- " " -U5-U6 opp. hand
2-Top Chords-U6-U7 as shown
2- " " -U6-U7A as shown
2-Top Chords-U6-U7 opp hand
2- " " -U6-U7A opp hand
4-Diagonals-U5-L6 as shown
4- " -U5-L6 opp hand
4-Diagonals-U6-L7 as shown
4- " -U6-L7 opp hand
Sect A-A
8-Posts-U5-L5
8-Posts-U6-L6
4-Posts-U7-L7
Both Flgs Alike except as noted
In Near Flg only
Bend Line
Mill
Notes
Holes for all main field connections of trusses to be subpunched 11/16" and reamed to 1" with truss assembled in shop. Holes marked thus (RT4) etc. to be subpunched 11/16" and reamed to 13/16" to an iron templet. Trusses to be match marked. See Diag. E2
Shop and field contact surfaces not painted.
RIVETS, 7/8" unless noted
OPEN HOLES, 13/16" unless noted
PAINT, One coat of Red Lead as per Maine Highway Comm. Spec.
PITTSBURGH-DES MOINES STEEL CO.
PITTSBURGH, PA. DES MOINES, IA.
Bridge Over Aroostook River
Presque Isle, Maine.
Maine Highway Commission
MADE M.W.W.
TRACED M.W.W.
CHECKED W.J.H.
REVISED
SHEET No. 4
CONTRACT No. E412
22-119

1-Pl. 18"x3/8"x3'-1 1/2"-LP2

1-Pl. 15"x5/16"x1'-7"-st

5-Pls. 15"x5/16"x1'-0"-sv

1-Bar Pl. 16"x5/8"x2'-0 1/2"-sy
2-L 3"x3"x5/16"x1'-11"-saa
1-L 3 1/2"x3 1/2"x5/16"x0'-10 1/2"-sab
4-Bolts-sw

1-Pl. 18 1/2"x3/8"x3'-4"-sp

5-Pls-sv

1-Pl. 15"x1/2"x3'-0 1/2"-ss
4-Bolts-sh

1-Pl. 15"x3/8"x3'-2"-sn

6-Pls-sv

1-Pl.-15"x3/8"x3'-0"-sm

View A-A

2-Pls. 45"x3/8"x3'-8 1/2"-sk

2-12"[@25#-40 1/2#

In Near E only

2-Fills 12 1/2"x7/16"x0'-11 1/2"-sc

In Near E only

1-Fill-11 1/2"x3/8"x0'-11"-sah. N.S only

2-Pls-10"x3/8"x2'-5 1/2"-sd. O.S.
2-Pls-11 1/2"x3/8"x2'-5 1/2"-sf. I.S
2-Pls-10"x4"x1'-4 3/8"-sg
8-Bolts-7/8"x2 1/2"-sh

2-Pls-34 1/2"x3/8"x2'-7"-sa

Mark this End ⊗

2-12"[@35#-52 1/2#

1-Fill-sah. N.S only.

In Near E only

2-Pls-34 1/2"x3/8"x3'-10 1/2"-sb

℄ Symm. about ℄

Bore 4 1/2"

8-Lat. Pls. LP2

4-Bott. Chords-L4-L6 E as shown

4-Bott. Chords-L4-L6 E opp hand.

4-Bott. Chords-L6-L6

Finish Smooth

2-Bolts

L 4"x3 1/2"x5/16"x0'-8 1/4"

2-L 3"x3"x5/16"x7'-11 3/16"

C B B 3N-18@3 5/8"=7'-11 3/16"

Bore assembled with batt. chord

4-Posts-L4 E as shown
4- " -L4 E opp hand

Slots 11/16"x7/16"

Sect. B-B

4-Pls. 7 1/2"x5/16"x0'-9"-sag

4-Pls. 5ag

MS1

MS2 ▸ MS3

Open holes farside

2-Pls. 6"x5/16"x1'-6"-sac

2-Bolts-sw Farside

2 L 5"x3"x5/16"x0'-9 1/2"

Shop Rivets Farside

2-Pls. 6"x5/16"x3'-0"-saf

2 L 5"x3"x5/16"x10'-3"-

Open holes farside

2-Pls. 6"x5/16"x2'-4"-sad for MS2 only

4-Bolts-sw

8-Struts-MS1

4-Struts-MS2 · 4-Struts-MS3

22'-5 3/8" B to B Ls Exact

Mark this End ⊗ for S5

In S5-only

1-CB 21 IN-21'@58#-22'-4 1/2"-for S5
1-CB 21 IN-21'@61#-22'-4 1/2"-for S6

2 L 5-0m for S5
2 L 5-0n for S6

12-Stringers-S5
24 " -S6

22'-5 3/8" B to B Ls Exact

1-CB 21 IN-20'@55#-22'-4 1/2"

2 L 5-0p

2 L 5-4"x3 1/2"x7/16"x1'-3"-sap-

24-Stringers-S7

4-Floor Beams-FB5
6- " " -FB6

L 3 1/2"x3 1/2"x5/16"x0'-9"-sas

Symm. about ℄

FB5 11'-7 1/8"
FB6 11'-7 1/8"
FB5 23'-7 7/8" B to B Ls Exact
FB6 23'-7" B to B Ls Exact
FB5 1'-3 15/16" 6'-0" 4'-6"
FB6 1'-3 1/2" 6'-0" 4'-6"
FB5 10 1/2" 5 1/2" 5'-6 1/2" 5 1/2" 4'-0 1/2" 5 1/2"
FB6 10 1/2" 5 1/2" 5'-6 1/2" 5 1/2" 4'-0 1/2" 5 1/2"

2 L 5"x4"x7/16"x2'-6"-sak

1-CB 33 IN-33'@141#-23'-7 1/2"-FB5
1-CB 33 IN-33'@141#-23'-6 1/2"-FB6

FB5 2 3/8" 4 1/2" 4 1/2" 4"
FB6 2" 6" 6"

10'-6 1/2"
10'-7 1/2"

In FB5-only

Notes.
Holes for all main field connections of trusses to be subpunched 11/16" and reamed to 13/16" with trusses assembled in Shop.
Holes marked thus (RT4) etc. to be subpunched 11/16" and reamed to 13/16" to an iron templet.
Shop + Field - Contact surfaces not painted.

RIVETS, 7/8"
OPEN HOLES, 13/16" unless noted.
PAINT, One coat of Red Lead as per Maine Highway Comm. Spes.

PITTSBURGH-DES MOINES STEEL CO.
PITTSBURGH, PA. DES MOINES, IA.
Bridge Over Aroostook River
Presque Isle, Maine
Maine Highway Commission

MADE M.W.W.
TRACED M.W.W.
CHECKED W.J.H.
REVISED

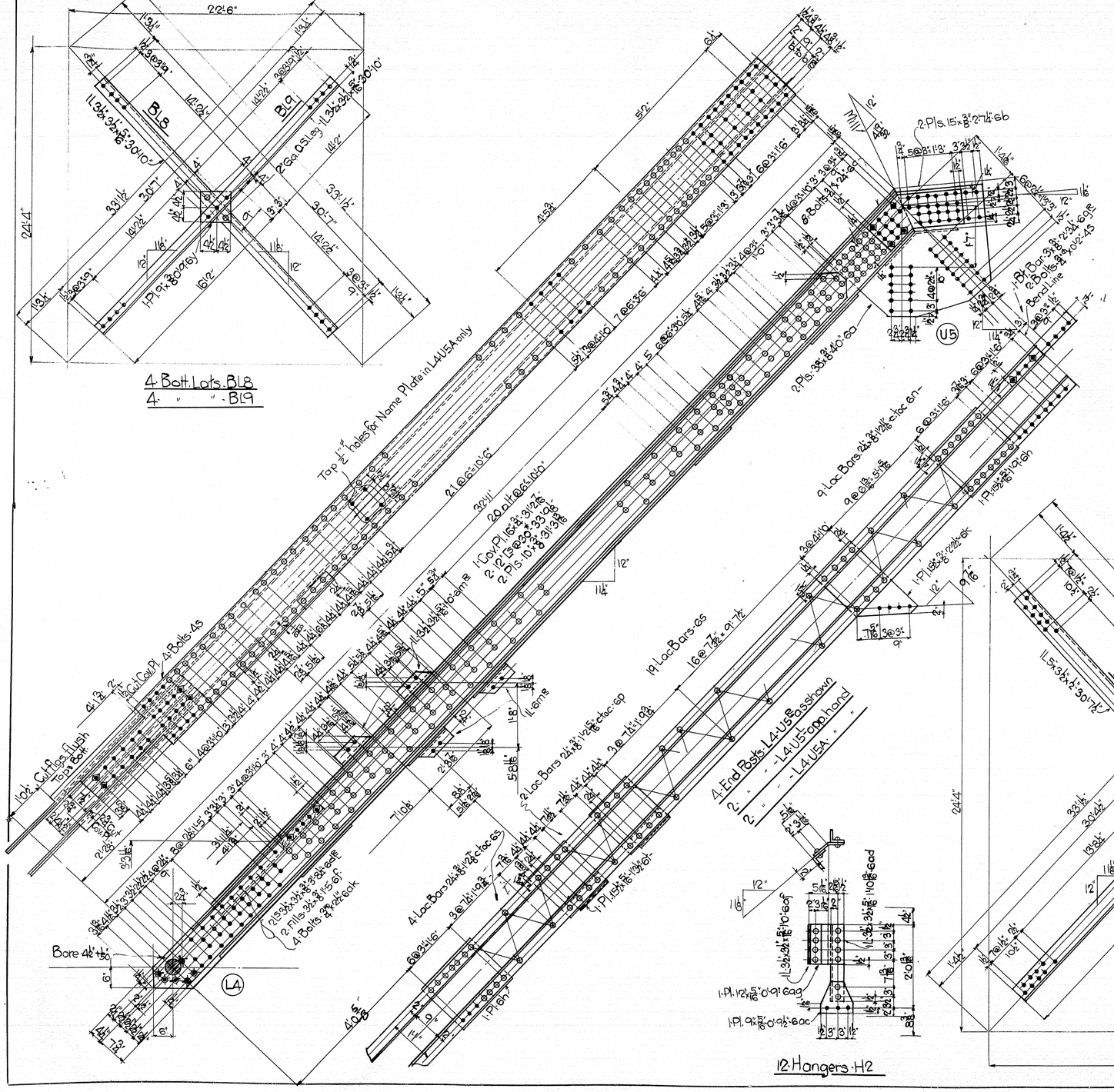
SHEET No. 5
CONTRACT No. E412

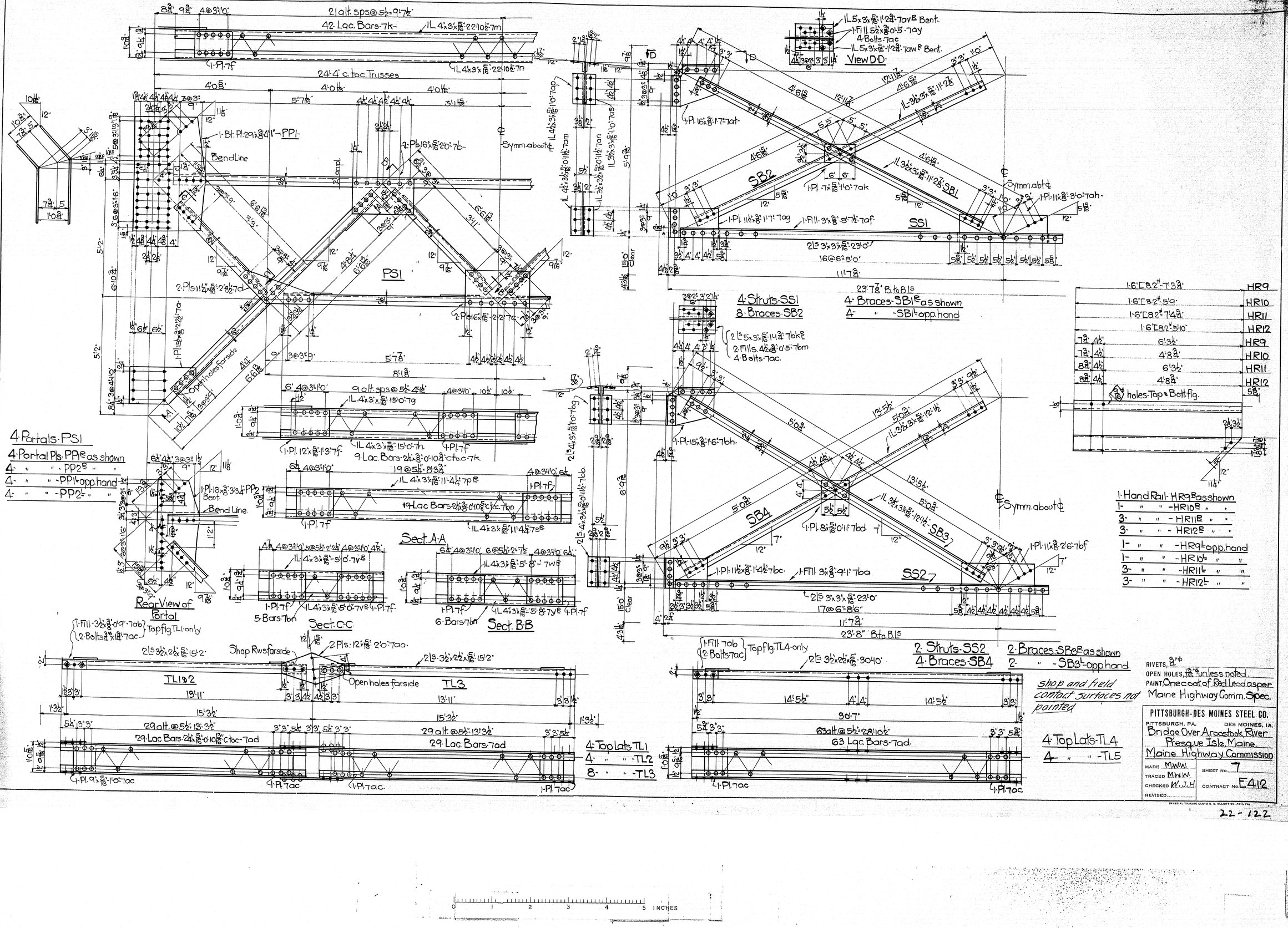
IMPERIAL TRACING CLOTH H. K. ELLIOTT CO., PITTSBURGH, PA.

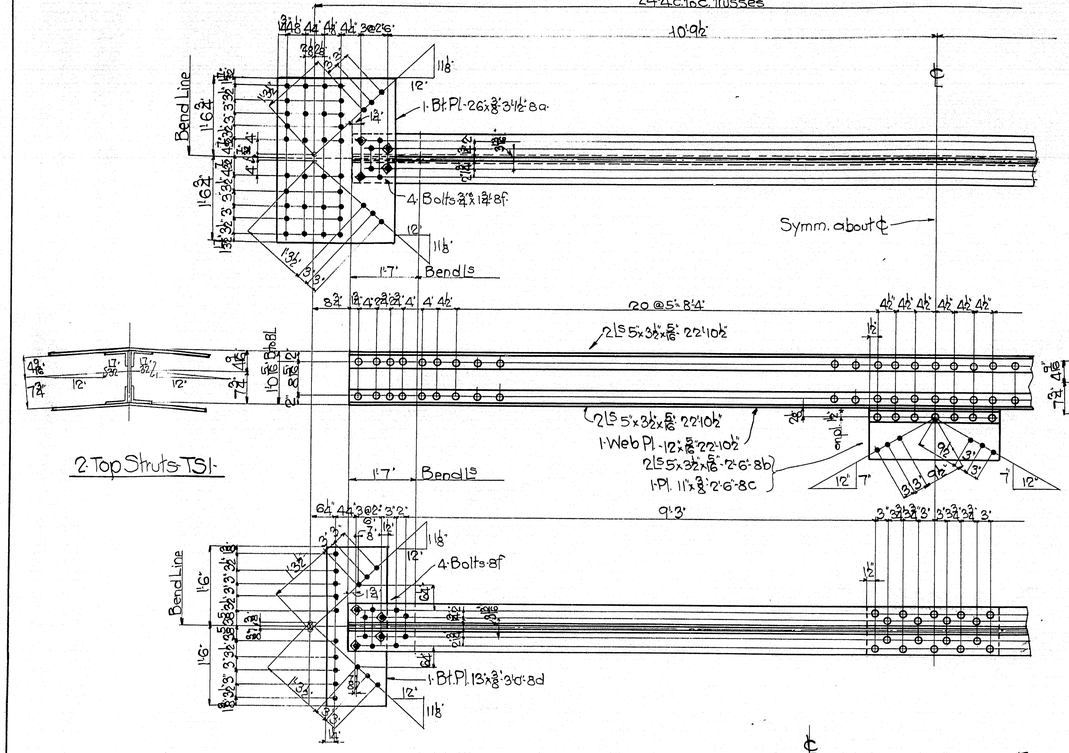
13

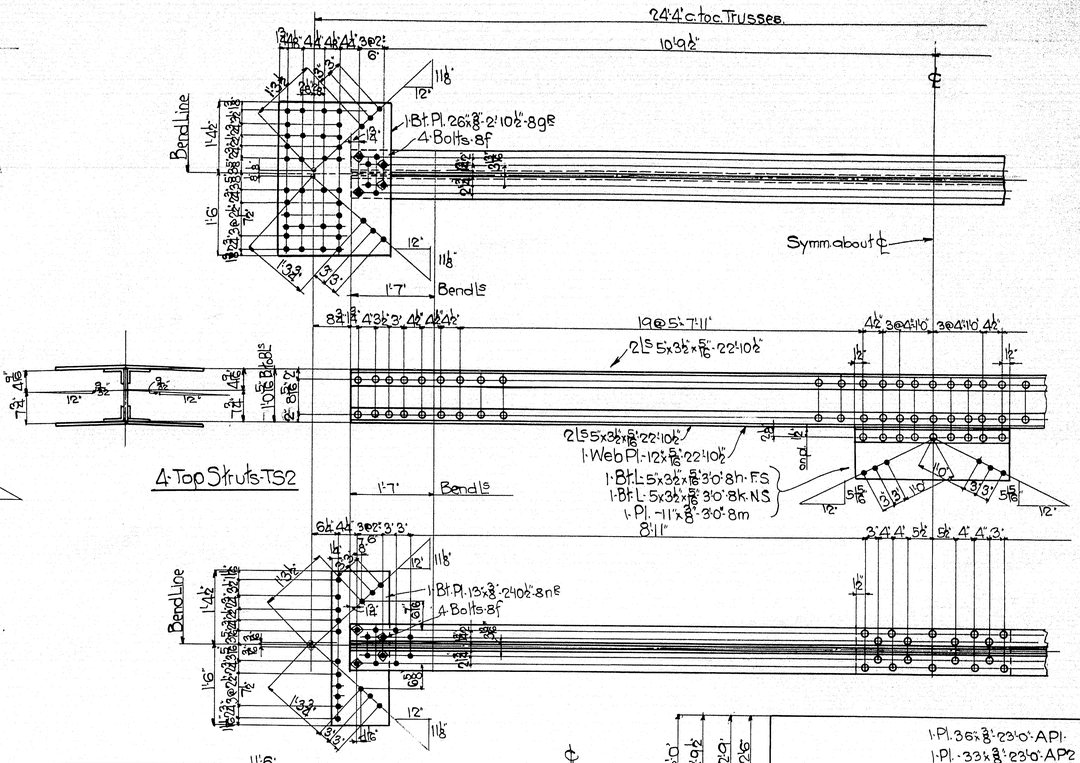
22-120

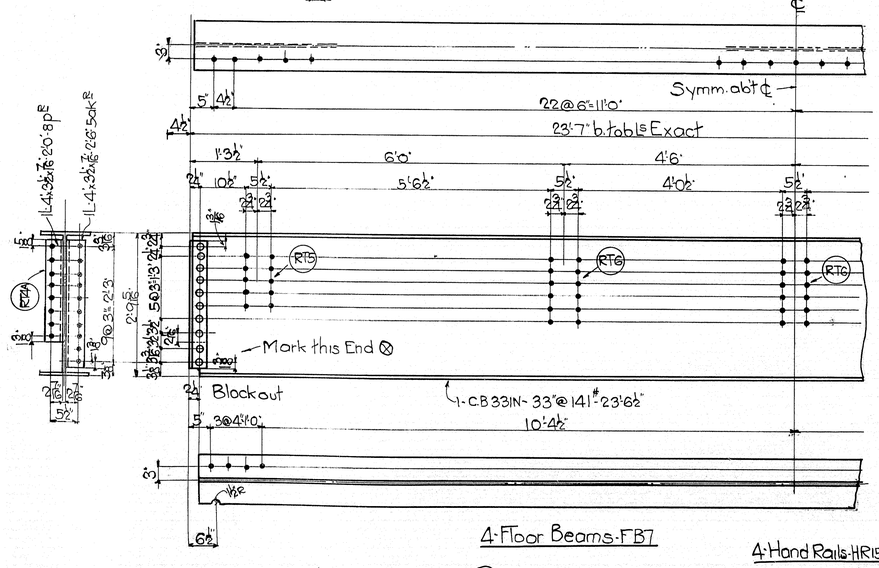
0 1 2 3 4 5 INCHES


Top ¼" holes for Name Plate in L4U5A only
21 @ 6"=10'-6"
20 @ 6"=10'-0"
41'-5"
1-Cov. Pl. 16"×3'-3"×⅜
2-12" Pls. 15"×3'-3"×⅜
2-Pls. 15"×8'-2"×¾×6'-6"
2-Pls. 38"×8'-4"×⅝×6'-0"
9 Loc. Bars 2½×8"×1'-2" stagg'd
9 @ 6"=4'-6"
1-Pl. 15"×8'-2"×⅜×6'-6"
1-Pl. 16"×8'-0"×⅜
4 Loc. Bars 2½×8"×1'-2" stagg'd
3 @ 7"=1'-9"
19 Loc. Bars 2½×8"×1'-2" stagg'd
16 @ 7½"=9'-7½"
2 Loc. Bars 2½×8"×1'-2" stagg'd
3 @ 7"=1'-9"
4-End Posts L4U5 B as shown
2-" " " -L4U5 A opp hand
2-" " " -L4U5A " "
1-Pl. 15"×8"×⅜×6'-6"
1-Pl. 12½"×8"×⅜×9'-0" Eag
1-Pl. 9"×8"×⅜×9'-0" Eac
L 3½×3½×⅜×1'-6" Eac
L 3½×3½×⅜×10'-6" Eac
Bore 42" ⌀
Conc. Fill
4 Bolts 4S
2 Fills ⅜×8"×1'-5½" Eac
4 Bolts 4S
2 Fills ⅜×8"×1'-5½" Eac
4 Bolts 4S
4 Bolts 4S
4 Bolts 4S

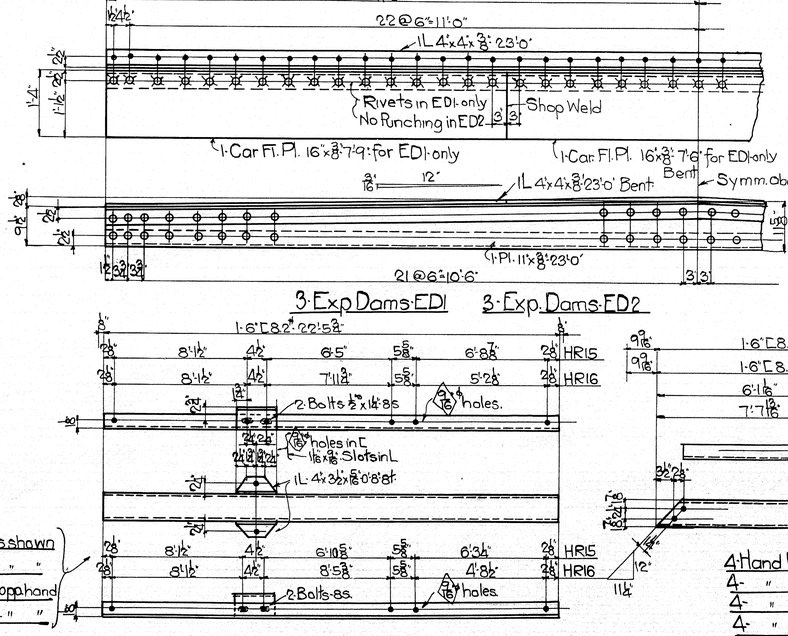

PS1
SB1
SS1
SB2
SS2
SB4
Sect. A-A
Sect. B-B
Sect. C-C
Rear View of Portal
View D-D
Symm. about ℄
Open holes farside
Bend Line
Shop Rivs farside
TL1&2
TL3
4 Struts-SS1
8 Braces-SB2
4 Braces-SB1 as shown
4 " -SB1 opp hand
23'7⅞" B. to B. ℓs
2 Struts-SS2
4 Braces-SB4
2 Braces-SB3 as shown
2 " -SB3 opp hand
4 Portals-PS1
4 Portal Pls-PP1 as shown
4 " " -PP2 " "
4 " " -PP1 opp hand
4 " " -PP2 " "
4 Top Lats-TL1
4 " -TL2
8 " -TL3
4 Top Lats-TL4
4 " -TL5
1 Hand Rail-HR9 as shown
1- " " -HR10 " "
3- " " -HR11 " "
3- " " -HR12 " "
1- " " -HR9 opp hand
1- " " -HR10 " "
3- " " -HR11 " "
3- " " -HR12 " "
⅝ holes-Top & Bott fig.
RIVETS, ⅞"ø
OPEN HOLES, 1⅛" unless noted.
PAINT, One coat of Red Lead as per Maine Highway Comm. Spec.
shop and field contact surfaces not painted
PITTSBURGH-DES MOINES STEEL CO.
PITTSBURGH, PA. DES MOINES, IA.
Bridge Over Aroostook River Presque Isle, Maine
Maine Highway Commission
MADE M.W.W.
TRACED M.W.W.
CHECKED W. J. H.
REVISED
SHEET No. 7
CONTRACT No. E412
IMPERIAL TRACING CLOTH E. K. ELLIOTT CO. PHIL. PA.
22-122
0 1 2 3 4 5 INCHES

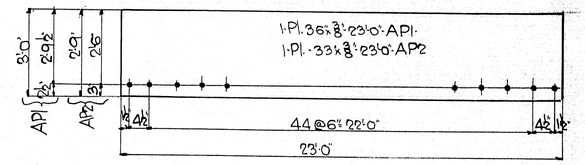


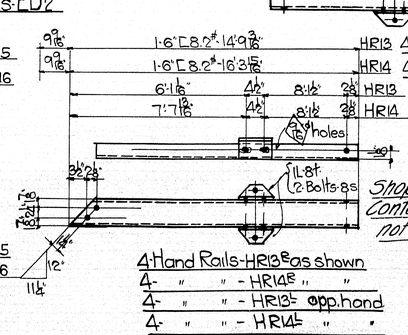

Note- Holes marked (RT5) etc. to be subpunched 1 1/16" and reamed to 1 3/16" to an iron templet.










4-Hand Rails-HR15 as shown
4- " " -HR16 " "
4- " " -HR15 opp. hand
4- " " -HR16 " "

4-Hand Rails-HR13 as shown
4- " " -HR14 " "
4- " " -HR13 opp. hand
4- " " -HR14 " "

4-Hand Rails-HR17 as shown 4-Hand Rails-HR17 opp. hand
4- " " -HR18 " " 4- " " -HR18 " "

RIVETS, ⅞"
OPEN HOLES, 1 1/16" unless noted
PAINT, One coat of Red Lead as per Maine Highway Comm. Specs.

Shop and Field Contact Surfaces not Painted

PITTSBURGH-DES MOINES STEEL CO.
PITTSBURGH, PA. DES MOINES, IA.
Bridge Over Aroostook River
Presque Isle, Maine.
Maine Highway Commission

| | |
|---|---|
| MADE MWW | SHEET NO. 8 |
| TRACED MWW | |
| CHECKED WJH | CONTRACT NO. E412 |
| REVISED | |

IMPERIAL TRACING CLOTH W. K. ELLIOTT CO., PHIL. PA.

22-123

0 1 2 3 4 5 INCHES