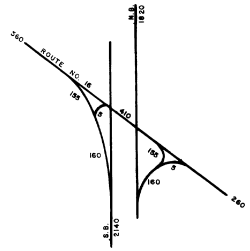
| B. P. R. BRK. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | I-95-8(39) | | |

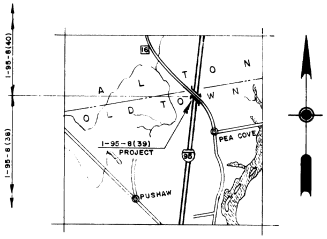
# STATE OF MAINE
## STATE HIGHWAY COMMISSION

# ROUTE 16
OVER
# INTERSTATE 95
IN THE CITY OF
# OLD TOWN
# PENOBSCOT COUNTY
## FEDERAL AID PROJECT NO. I-95-8(39)193




## TRAFFIC

A.D.T. 1963 ..... 410
A.D.T. 1983 ..... 575
D.H.V. ..... 86
D ..... 70 %
T ..... 14 %
V ..... 60 MPH




## LOCATION MAP
APPROX. SCALE 1" = 1 MILE

## INDEX OF SHEETS


1 ..... TITLE SHEET
2 ..... GENERAL PLAN & ELEVATION
3 ..... FOUNDATION SURVEY
4 ..... BORING DETAILS
5 ..... ROADWAY WORK & SLOPE PROTECTION
6 ..... ABUTMENT NO. 1
7 ..... ABUTMENT NO. 2
8 ..... PIERS NO. 1, 2, 5 & 6
9 ..... PIERS NO. 3 & 4 - QUANTITIES
10 ..... STRUCTURAL STEEL - FRAMING PLAN
11 ..... STRUCTURAL STEEL - DETAILS
12 ..... BLOCKING
13 ..... SUPERSTRUCTURE - SPANS NO. 1 & 7
14 ..... SUPERSTRUCTURE - SPANS NO. 2 & 6
15 ..... SUPERSTRUCTURE - SPANS NO. 3, 4 & 5
16 ..... SUPERSTRUCTURE DETAILS
17 ..... REINFORCING STEEL


STANDARD DETAILS SHEETS

BD 101-62 ..... BEARING DETAILS
BD 102-62 ..... BRIDGE RAIL
BD 103-62 ..... BEAM SPLICES
BD 104-62 ..... DIAPHRAGMS, ARMORED JOINT, SHEAR CONNECTORS, DRAIN
2-62 ..... GUARD RAIL, TYPE "E"

APPROVED
MAINE STATE HIGHWAY COMMISSION

CHAIRMAN

CHIEF ENGINEER — Feb. 5, 1964 DATE

DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS
REGION 1

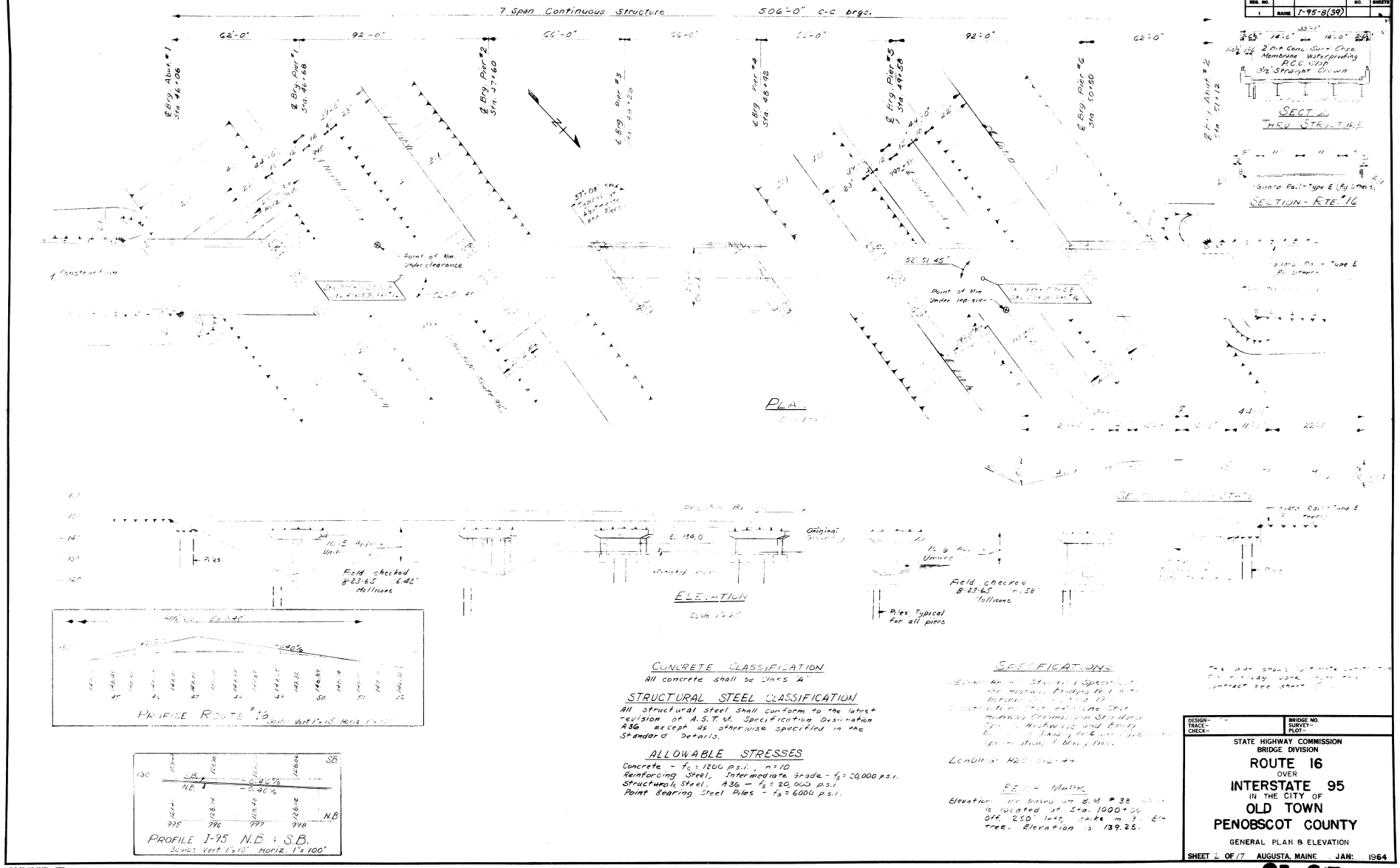
APPROVED

DIVISION ENGINEER — DATE

92-84

0 1 2 3 4 5 INCHES

| S.P.R. REG. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | I-95-8(39) | | |




## CONCRETE CLASSIFICATION

All concrete shall be Class "A"

## STRUCTURAL STEEL CLASSIFICATION

All structural steel shall conform to the latest revision of A.S.T.M. Specification Designation A36 except as otherwise specified in the Standard Details.

## ALLOWABLE STRESSES

Concrete - $f_c$ = 1200 p.s.i., n = 10
Reinforcing Steel, Intermediate Grade - $f_s$ = 20,000 p.s.i.
Structural Steel, A36 - $f_s$ = 20,000 p.s.i.
Point Bearing Steel Piles - $f_s$ = 6000 p.s.i.

## SPECIFICATIONS

Design: Standard Specifications for Highway Bridges 1961 with Interim Specifications 1962.
Construction: Standard Specifications for Highway Commission Standard Specifications Highways and Bridges [illegible] Specifications for Bridges 1962.

Loading: H20-[illegible]

## BENCH MARK

Elevation are based on B.M. #38 which is located at Sta. 1000+00 Off. 250' left, spike in 3" Elm tree. Elevation is 139.25.

This plan shows [illegible] contract see sheet [illegible]

| DESIGN- | BRIDGE NO. |
|---|---|
| TRACE- | SURVEY- |
| CHECK- | PLOT- |

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

# ROUTE 16
OVER
# INTERSTATE 95
IN THE CITY OF
# OLD TOWN
# PENOBSCOT COUNTY

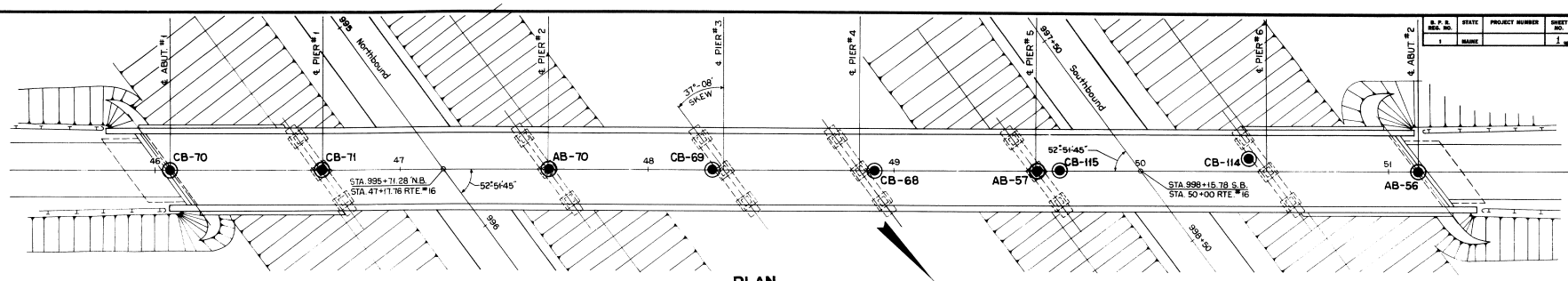
GENERAL PLAN & ELEVATION

SHEET 2 OF 17 AUGUSTA, MAINE JAN: 1964

92-85

0 1 2 3 4 5 INCHES

| B. P. R. REG. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | | 1 | |

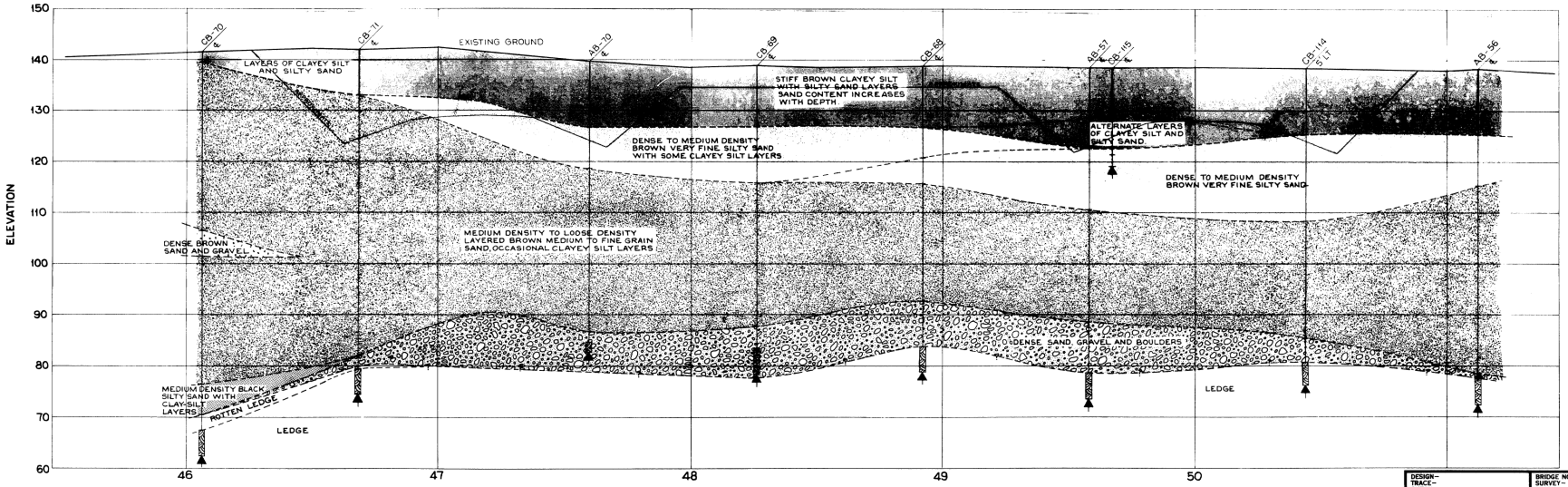



## PLAN

SCALE : 1=20'

## PROFILE

SCALE : 1= 20' HORIZ.
1= 10' VERT.




| DESIGN- TRACE- CHECK- | BRIDGE NO. SURVEY- PLOT- |
|---|---|

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

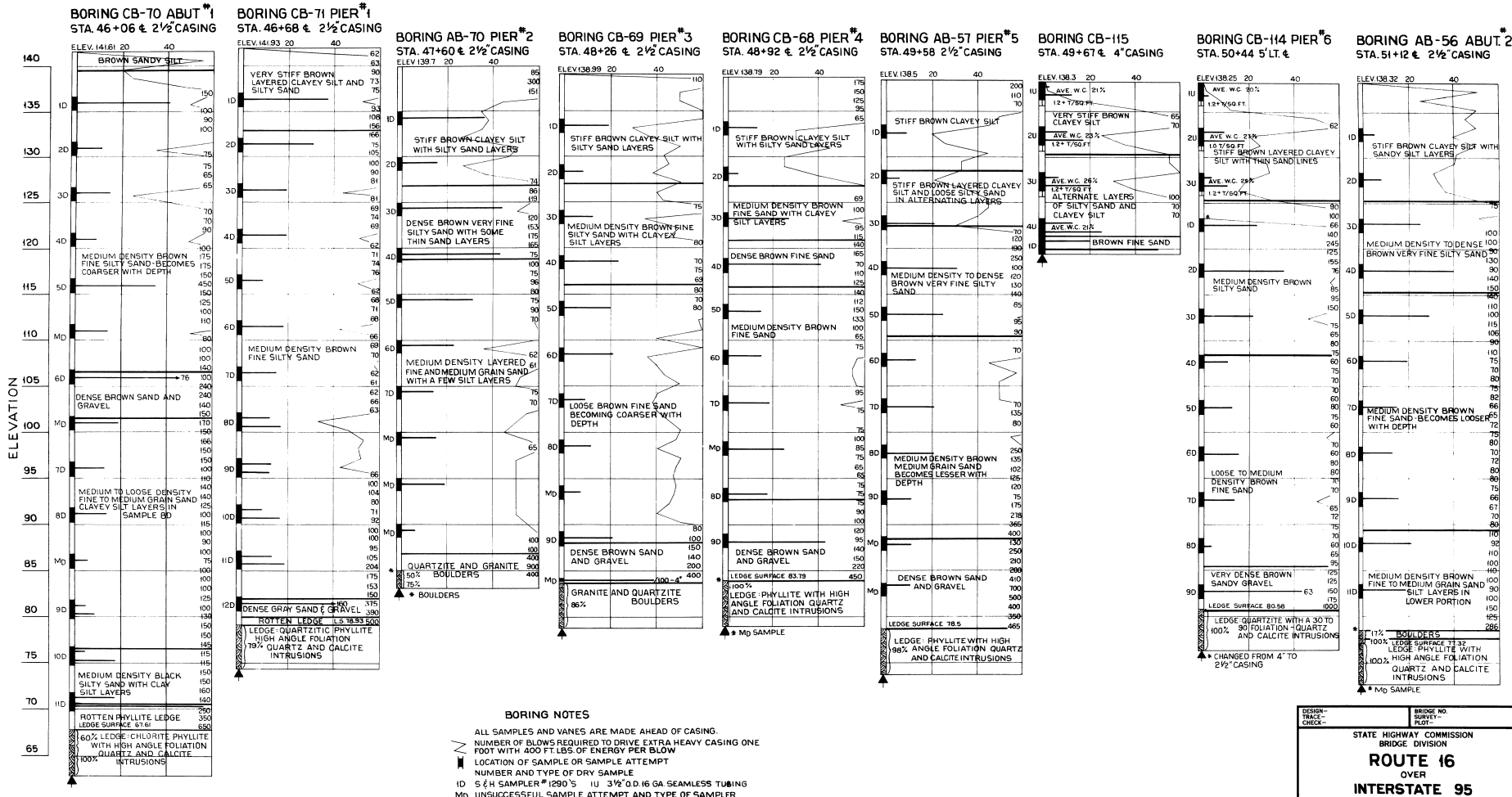
# ROUTE 16
OVER
# INTERSTATE 95
IN THE CITY OF
# OLD TOWN
PENOBSCOT COUNTY
FOUNDATION SURVEY

SHEET 3 OF 17 AUGUSTA, MAINE JAN. 1964

92-86

0 1 2 3 4 5 INCHES

| S. P. R. REG. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | | 2 | |




## BORING NOTES

ALL SAMPLES AND VANES ARE MADE AHEAD OF CASING.

NUMBER OF BLOWS REQUIRED TO DRIVE EXTRA HEAVY CASING ONE FOOT WITH 400 FT. LBS. OF ENERGY PER BLOW

LOCATION OF SAMPLE OR SAMPLE ATTEMPT

NUMBER AND TYPE OF DRY SAMPLE

1D S & H SAMPLER # 1290'S 1U 3½" O.D. 16 GA. SEAMLESS TUBING

MD UNSUCCESSFUL SAMPLE ATTEMPT AND TYPE OF SAMPLER

NUMBER OF BLOWS REQUIRED TO DRIVE SPOON OR TUBING ONE FOOT WITH 350 FT. LBS. OF ENERGY PER BLOW

FIELD VANE TEST

BOTTOM OF BORING (MAY NOT BE BOTTOM OF SOIL STRATA)

LOCATIONS CORED BY DIAMOND BIT AND PER CENT RECOVERY OF ROCK

DESIGN—
TRACE—
CHECK—

BRIDGE NO.
SURVEY—
PLOT—

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

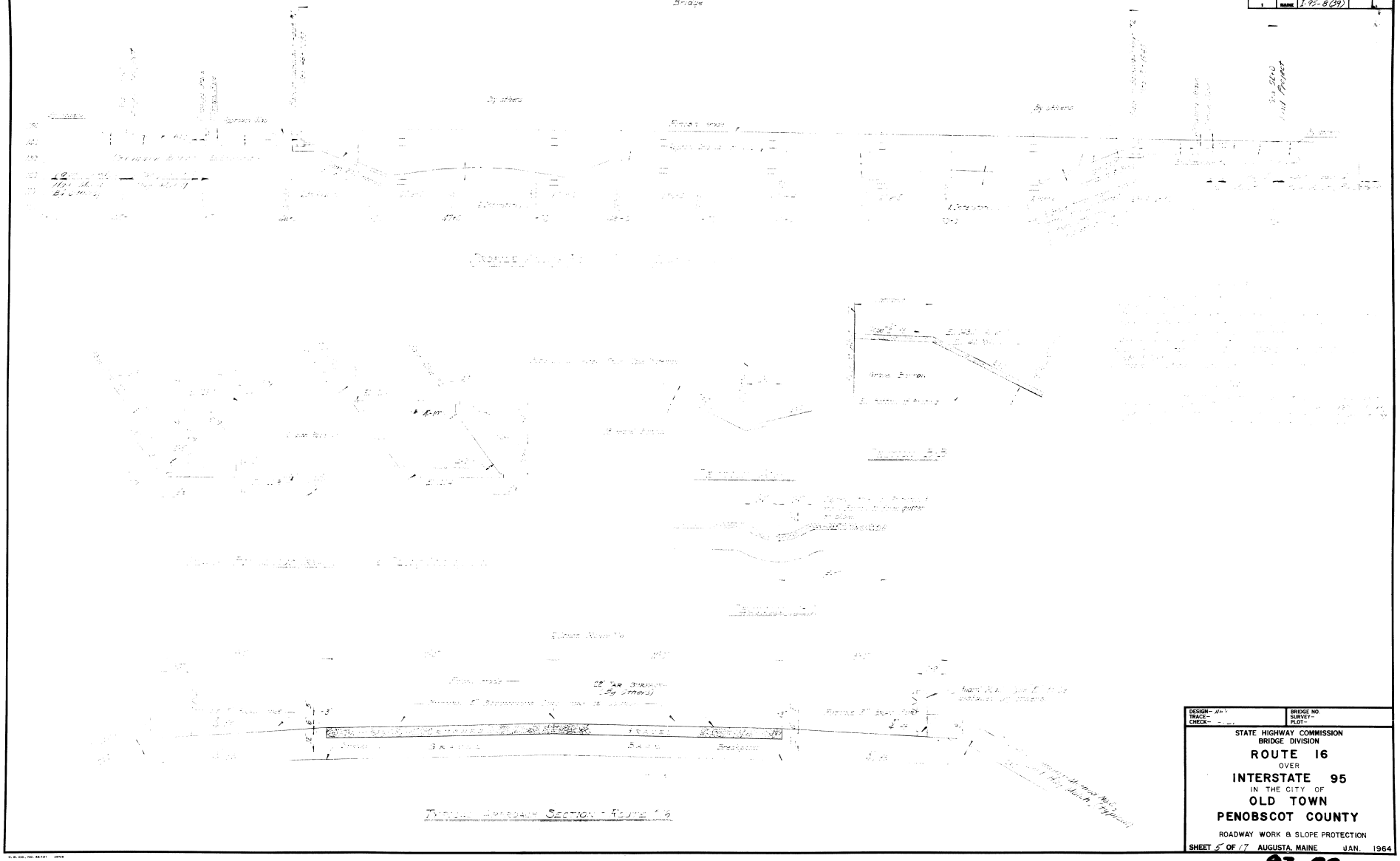
# ROUTE 16
OVER
# INTERSTATE 95
IN THE CITY OF
# OLD TOWN
PENOBSCOT COUNTY
BORING DETAILS

SHEET 4 OF 17 AUGUSTA, MAINE JAN. 1964

92-87

C. B. CO., NO. 44-131

0 1 2 3 4 5 INCHES




| S.P.R. REG. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | I-95-8(39) | | |

DESIGN- NHY
TRACE-
CHECK-

BRIDGE NO.
SURVEY-
PLOT-

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

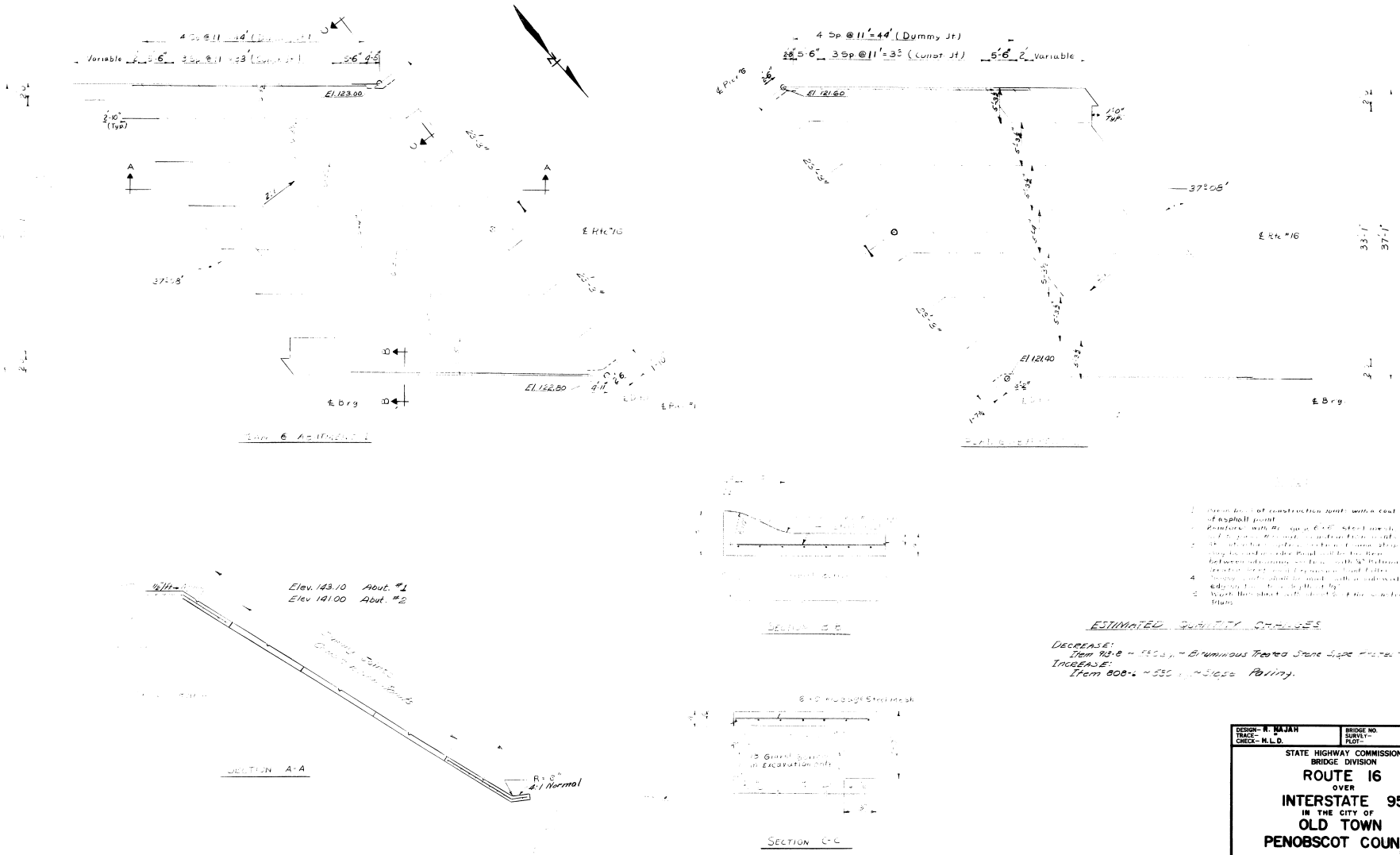
**ROUTE 16**
OVER
**INTERSTATE 95**
IN THE CITY OF
**OLD TOWN**
**PENOBSCOT COUNTY**

ROADWAY WORK & SLOPE PROTECTION

SHEET 5 OF 17 AUGUSTA, MAINE JAN. 1964

92-88

| S. P. R. REG. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | | | |




| DESIGN– R. NAJAH | BRIDGE NO. |
|---|---|
| TRACE– " " | SURVEY– |
| CHECK– H. L. D. | PLOT– |

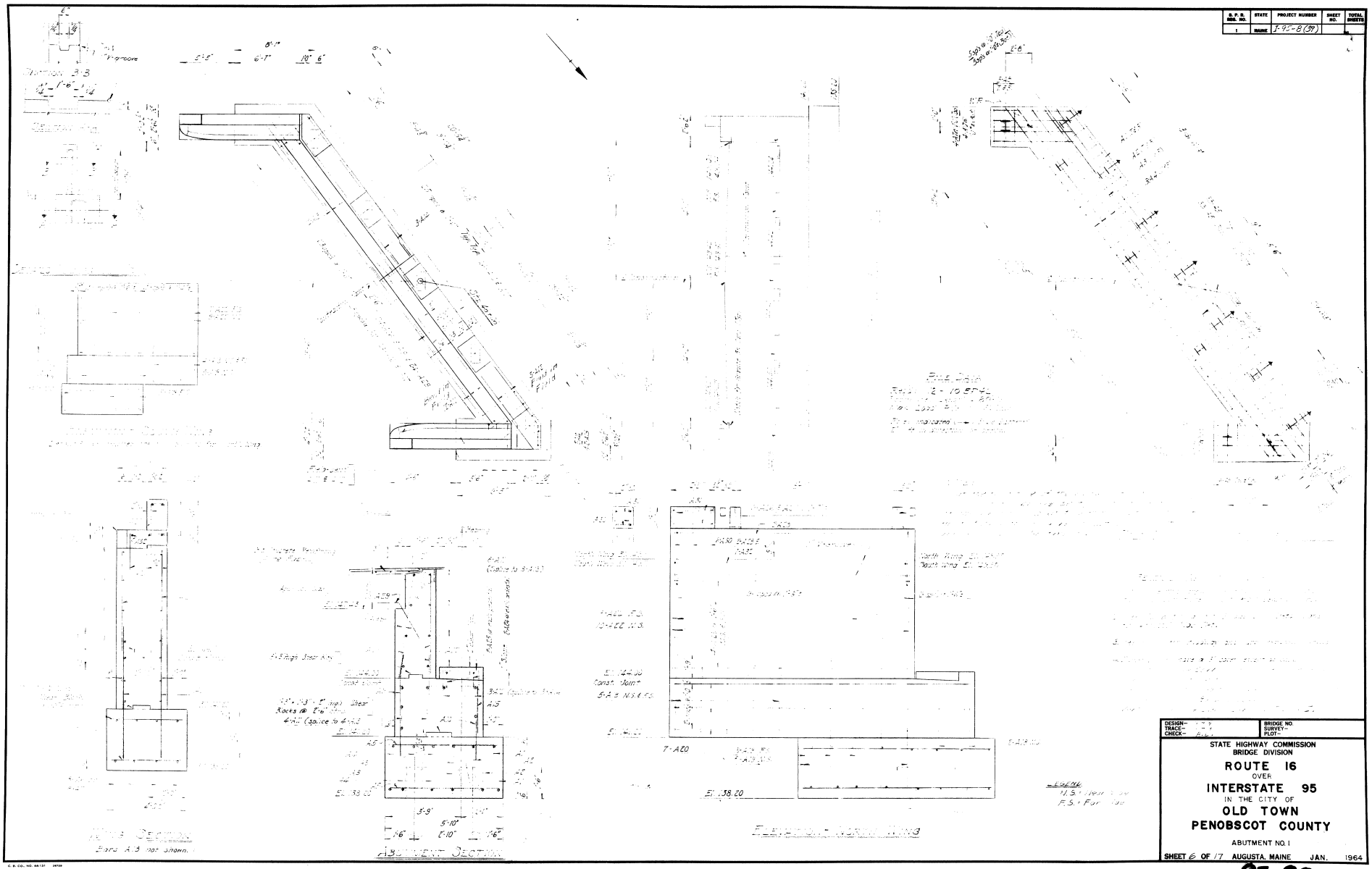
STATE HIGHWAY COMMISSION
BRIDGE DIVISION

# ROUTE 16
OVER
# INTERSTATE 95
IN THE CITY OF
# OLD TOWN
# PENOBSCOT COUNTY

SLOPE PAVING

SHEET 5A OF 17 AUGUSTA, MAINE JULY 1964

92-89




| S. P. R. SER. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | I-95-8(39) | | |

DESIGN-
TRACE-
CHECK-

BRIDGE NO.
SURVEY-
PLOT-

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

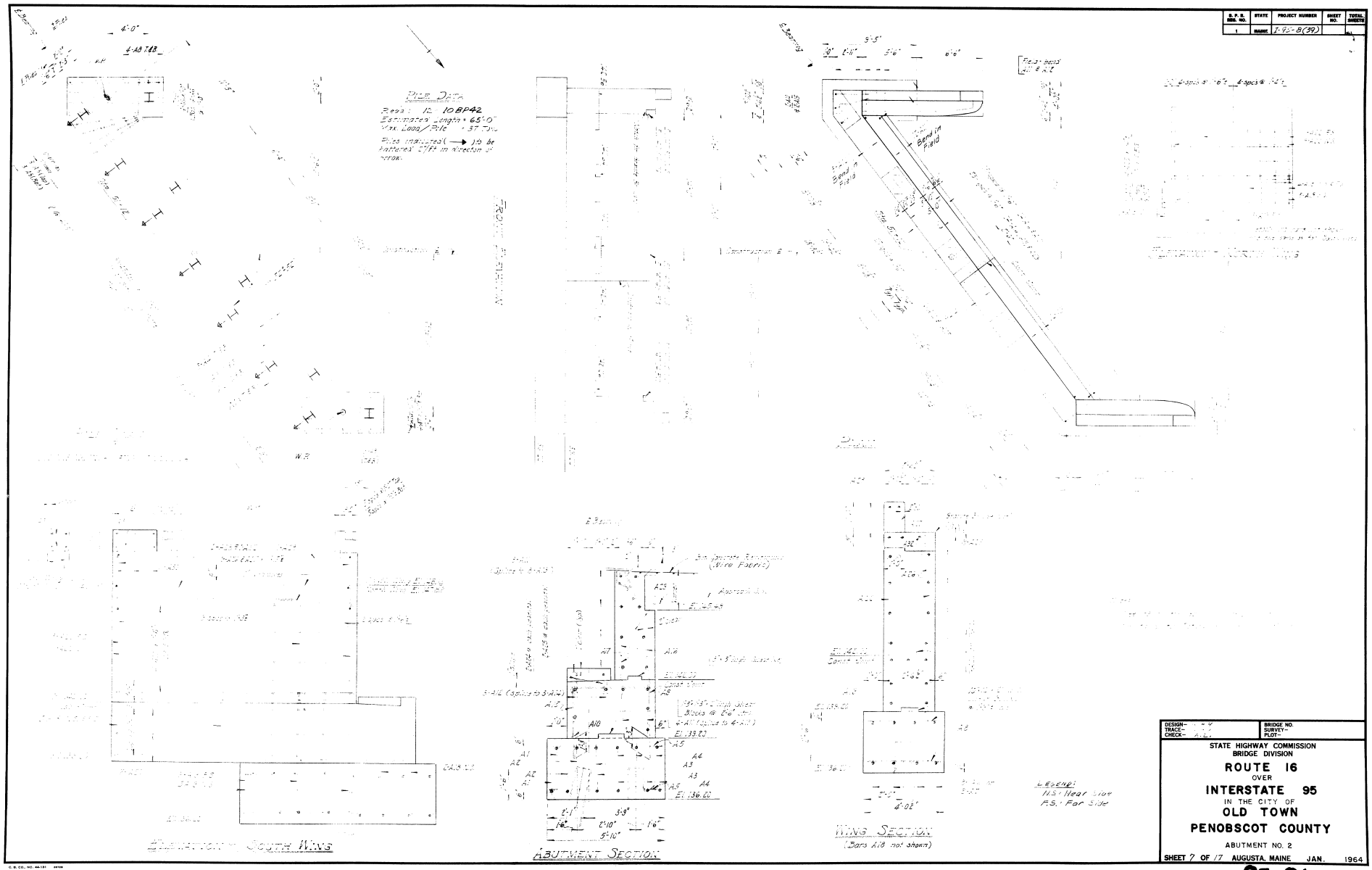
**ROUTE 16**
OVER
**INTERSTATE 95**
IN THE CITY OF
**OLD TOWN**
**PENOBSCOT COUNTY**

ABUTMENT NO. 1

SHEET 6 OF 17 AUGUSTA, MAINE JAN. 1964

92-90

0 1 2 3 4 5 INCHES




| S. P. R. REG. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | I-95-8(39) | | |

DESIGN- TRACE- CHECK- A.L.

BRIDGE NO. SURVEY- PLOT-

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

**ROUTE 16**
OVER
**INTERSTATE 95**
IN THE CITY OF
**OLD TOWN**
**PENOBSCOT COUNTY**

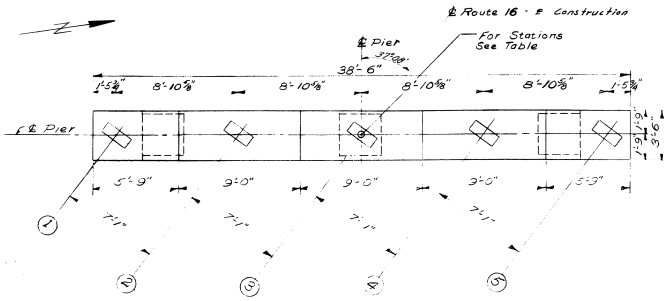
ABUTMENT NO. 2

SHEET 7 OF 17 AUGUSTA, MAINE JAN. 1964

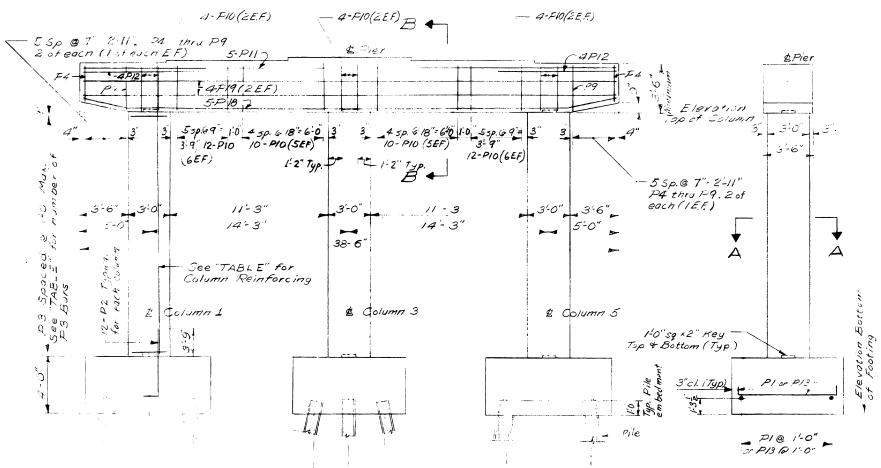
92-91

0 1 2 3 4 5 INCHES

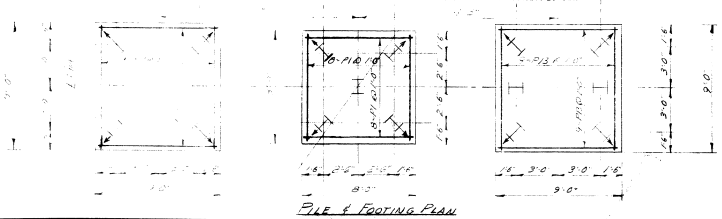
| B. P. R. SER. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | I-95-8(39) | 8 | 17 |




PLAN-PIER CAP




END ELEVATION

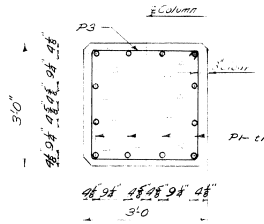



PILE & FOOTING PLAN

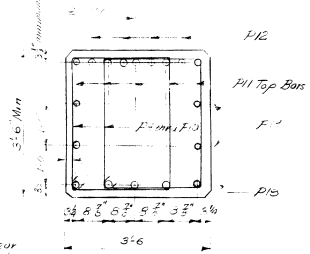
| BRIDGE SEAT ELEVATIONS | | | | |
|---|---|---|---|---|
| Location Line | Pier #1 | Pier #2 | Pier #5 | Pier #6 |
| 1 | 144.06 | 144.51 | 143.85 | 142.50 |
| 2 | 144.23 | 144.66 | 143.96 | 142.88 |
| 3 | 144.40 | 144.81 | 144.07 | 142.97 |
| 4 | 144.28 | 144.66 | 143.98 | 142.75 |
| 5 | 144.15 | 144.52 | 143.68 | 142.54 |

| TABLE | | | | | |
|---|---|---|---|---|---|
| PIER | COLUMN | Elevation Bottom of Footing | Column Reinf. | Station | Elevation Top of Column |
| #1 | 1 | 117.50 | 12-P14 19-P3 | 46+68 | 140.56 |
| | 3 | 117.50 | do | | |
| | 5 | 117.50 | do | | |
| #2 | 1 | 117.50 | 12-P15 20-P3 | 47+60 | 141.[illegible] |
| | 3 | 117.50 | do | | |
| | 5 | 117.50 | do | | |
| #5 | 1 | 116.50 | 12-P16 20-P3 | 49+58 | 140.19 |
| | 3 | 116.50 | do | | |
| | 5 | 116.50 | do | | |
| #6 | 1 | 116.50 | 12-P17 19-P3 | 50+50 | [illegible] |
| | 3 | 116.50 | do | | |
| | 5 | 116.50 | do | | |

| TABLE OF PIER [illegible] | | |
|---|---|---|
| [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] |
| #5 | 17 | 45# |
| #6 | 17 | 45# |
| Total | 96 | |




SECTION A-A
Typical for all columns




SECTION B-B

GENERAL NOTES:

1. Position reinforcing steel in pier cap, under bearings, to clear swedged anchor bolts.
2. Chamfer all exposed edges of concrete ¾ inch.
3. Dress the shaded bearing areas on the bridge seats 1 inch larger all around the masonry plates, to exact elevations shown in "Bridge Seat Elevations" table.
4. E.F. = each face of pier.

[illegible]

| | |
|---|---|
| DESIGN– CDM<br>TRACE– WM<br>CHECK– T.H.S. | BRIDGE NO.<br>SURVEY–<br>PLOT– |

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

# ROUTE 16
OVER
# INTERSTATE 95
IN THE CITY OF
# OLD TOWN
# PENOBSCOT COUNTY

PIERS – 1, 2, 5 & 6

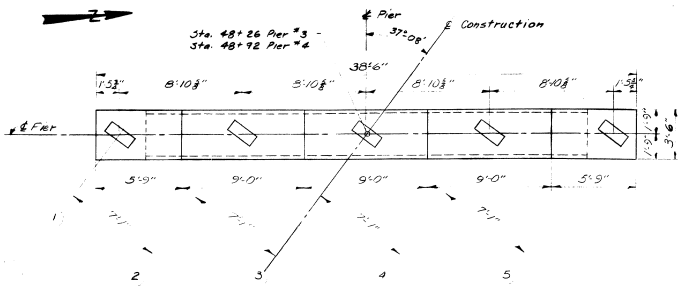
SHEET 8 OF 17 AUGUSTA, MAINE JAN. 1964

92-92

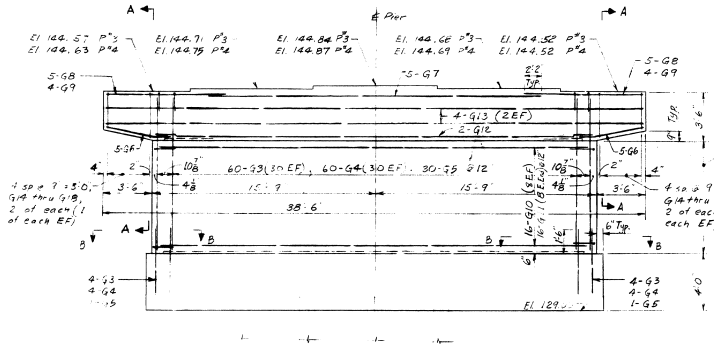
C.B. CO., NO. 46131 26756

0 1 2 3 4 5 INCHES

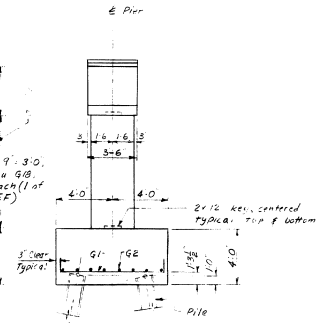
| B.P.R. BRI. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | I-95-8(39) | | |



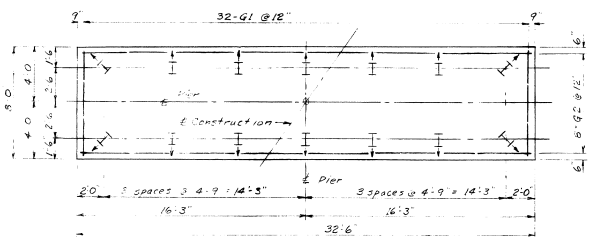

PLAN PIER CAP



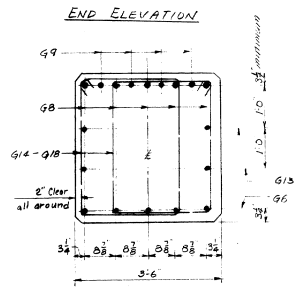

SIDE ELEVATION



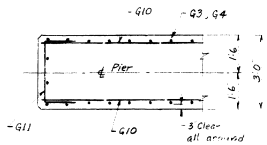

END ELEVATION




FOOTING AND PILE PLAN




SECTION A-A




SECTION B-B

## ESTIMATE OF QUANTITIES

| | |
|---|---|
| Structural Earth Excavation, Abutments and Retaining Walls | 385 C.Y. |
| Structural Earth Excavation, Piers | 450 C.Y. |
| Granular Borrow | 1,580 C.Y. |
| Gravel Borrow | 50 C.Y. |
| Gravel Base Course - In Place Measurement | 690 C.Y. |
| Crushed Gravel Base Course - In Place Measurement | 75 C.Y. |
| ► Bituminous Concrete Surface Course, Type I | 115 TONS |
| Portland Cement Concrete, Abutments and Retaining Walls | 180 C.Y. |
| Portland Cement Concrete, Piers | 50 C.Y. |
| Portland Cement Concrete, Roadway and Sidewalk Slabs on Steel Bridges | 540 C.Y. |
| Curing Box for Concrete Cylinders | [illegible] |
| Structural Steel, Fabricated and Delivered | [illegible] LBS |
| Structural Steel, Erection | [illegible] LBS |
| Structural Steel, Field Painting | [illegible] SQ. FT. |
| Reinforcing Steel, Delivered | 64,[illegible] LBS |
| Reinforcing Steel, Placing | 164,700 LBS |
| Steel H Bearing Piles, 50 LBS/FT. | 6,255 L.F. |
| Bridge Rail | [illegible] LIN. FT. |
| ► * Membrane Waterproofing | [illegible] SQ. YD. |
| Protection Surface Bituminous | 45 C.Y. |
| Vertical Bridge Curb | 1,145 LIN. FT. |
| Vertical Bridge Curb, Wooden, Type I | 20 LIN. FT. |
| Loam - In Place Measurement | 45 C.Y. |
| Seeding, Method No. 2 | [illegible] |
| Hay Mulch | [illegible] |
| Bituminous Treated Stone Course (Note [illegible]) | 420 [illegible] |

► * [illegible] part of this contract.

Estimated [illegible] structure [illegible] $35,500 [illegible].

NOTE
See Sheet 3 for Pier Plans & Sports Notes.

| | |
|---|---|
| DESIGN- CDM<br>TRACE-<br>CHECK- T.H.A. | BRIDGE NO.<br>SURVEY-<br>PLOT- |

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

**ROUTE 16**
OVER
**INTERSTATE 95**
IN THE CITY OF
**OLD TOWN**
**PENOBSCOT COUNTY**

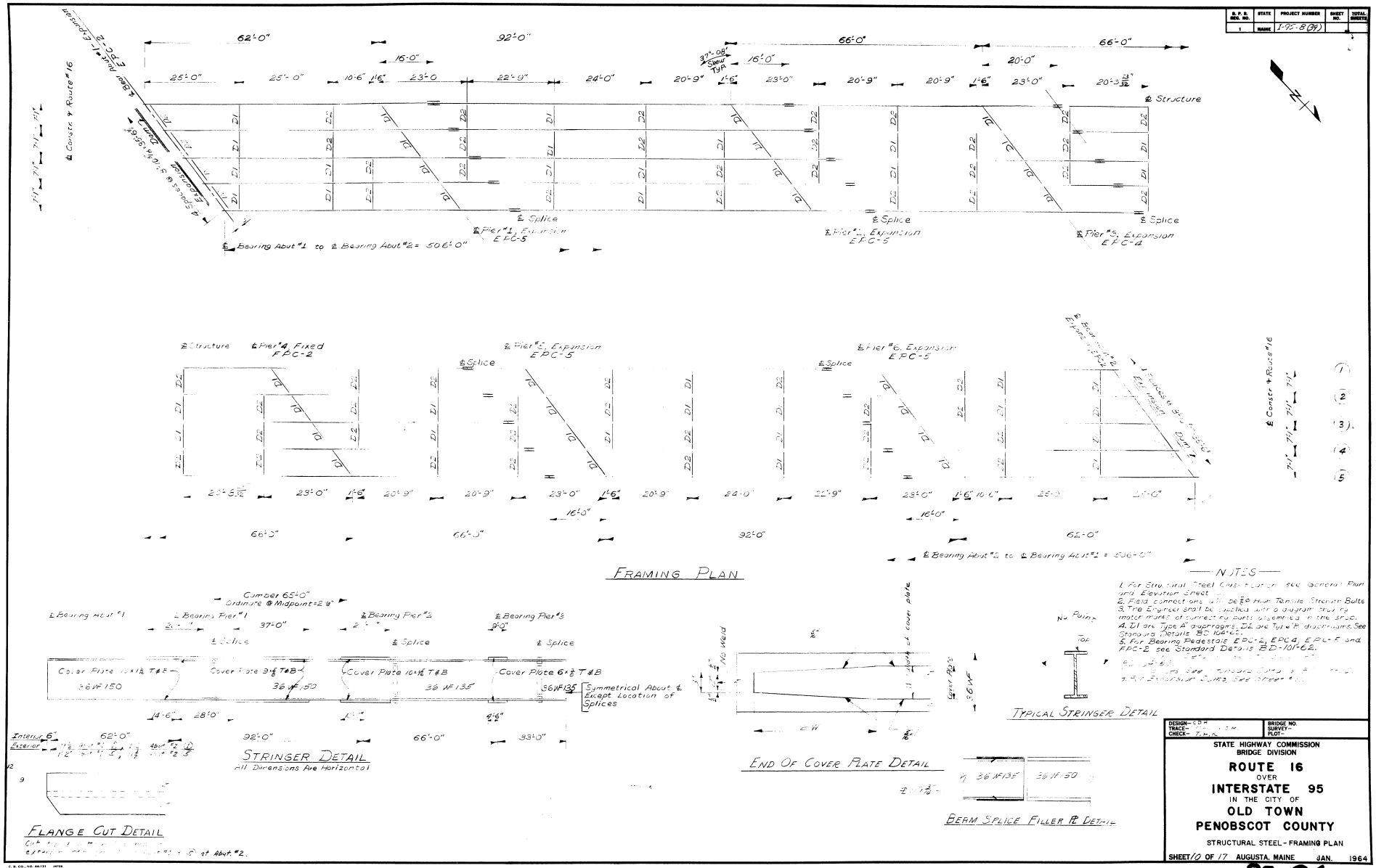
PIERS 3 & 4 - QUANTITIES

SHEET 7 OF 17 AUGUSTA, MAINE JAN. 1964

92-93

C.S. CO., NO. 68-131 1-67M

0 1 2 3 4 5 INCHES




NOTES

1. For Structural Steel Classification see General Plan and Elevation Sheet
2. Field connections will be ⅞ Ø High Tensile Strength Bolts
3. The Engineer shall be supplied with a diagram showing match marks of connecting parts assembled in the shop.
4. D1 are Type "A" diaphragms, D2 are Type "B" diaphragms. See Standard Details BD 104-62.
5. For Bearing Pedestals EPC-2, EPC4, EPC-5 and FPC-2 see Standard Details BD-101-62.

| S. P. R. REG. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | I-95-8(39) | | |

DESIGN- C.D.H.
TRACE-
CHECK- T.H.K.

BRIDGE NO.
SURVEY-
PLOT-

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

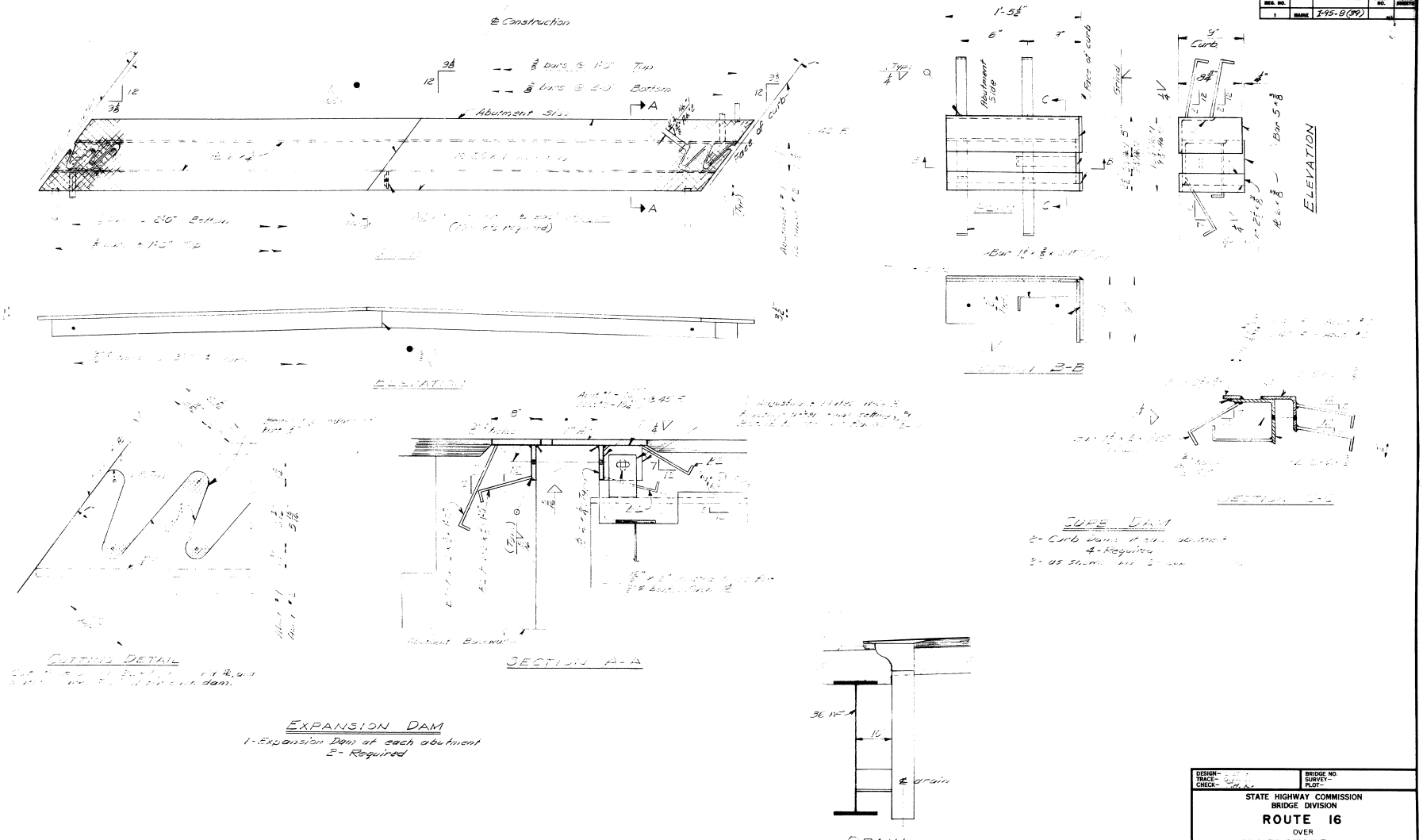
**ROUTE 16**
OVER
**INTERSTATE 95**
IN THE CITY OF
**OLD TOWN**
**PENOBSCOT COUNTY**

STRUCTURAL STEEL - FRAMING PLAN

SHEET 10 OF 17 AUGUSTA, MAINE JAN. 1964

92-94

| B. P. R. BDA. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | I-95-8(39) | | |




DESIGN-
TRACE-
CHECK-

BRIDGE NO.
SURVEY-
PLOT-

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

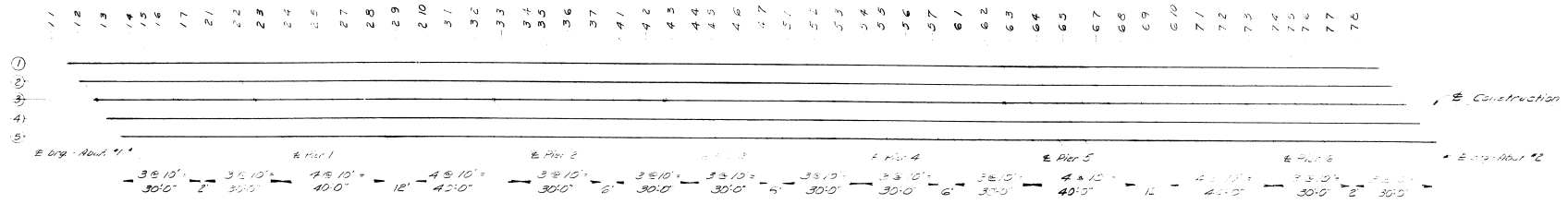
# ROUTE 16
OVER
# INTERSTATE 95
IN THE CITY OF
# OLD TOWN
# PENOBSCOT COUNTY

STRUCTURAL STEEL - DETAILS

SHEET 11 OF 17 AUGUSTA, MAINE JAN. 1964

92-95

| S.P.R. BRIDGE NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | I-95-8(39) | | |



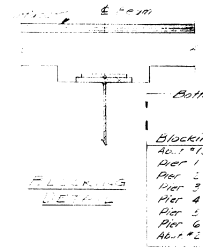

BLOCKING PLAN

BOTTOM OF SLAB ELEVATIONS

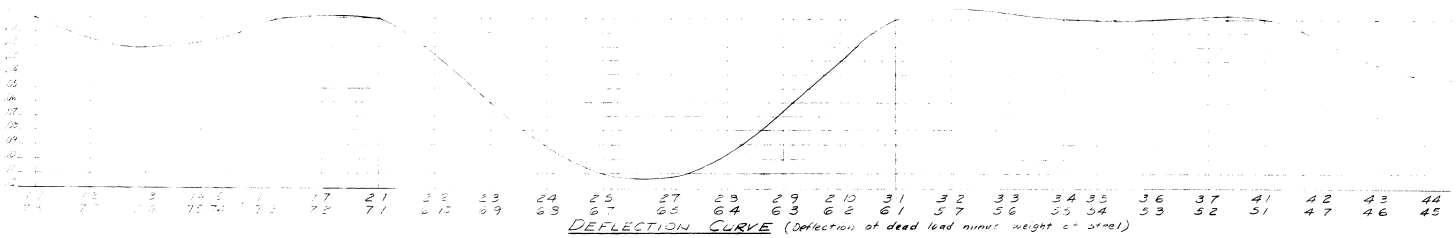
| Line | 1 1 | 1 2 | 1 3 | 1 4 | 1 5 | 1 6 | 1 7 | 2 1 | 2 2 | 2 3 | 2 4 | 2 5 | 2 7 | 2 8 | 2 9 | 2 10 | 3 1 | 3 2 | 3 3 | 3 4 | 3 5 | 3 6 | 3 7 | 4 1 | 4 2 | 4 3 | 4 4 | 4 5 | 4 6 | 4 7 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 149.39 | 149.37 | 149.40 | 149.51 | 149.52 | 149.56 | [illegible] | 149.67 | 149.74 | 149.91 | 149.95 | 149.93 | 149.97 | 149.99 | 149.97 | 149.95 | 149.93 | 149.93 | 149.93 | 149.94 | 149.94 | 149.93 | 149.92 | 149.90 | 149.89 | 149.86 | 149.85 | 149.84 | 149.90 | 149.74 |
| 2 | 149.47 | 149.55 | 149.63 | 149.69 | 149.70 | 149.74 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 149.14 | 149.19 | 149.19 | 149.09 | 149.09 | 149.09 | 149.09 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 149.56 |
| 3 | 149.66 | 149.73 | 149.91 | 149.97 | 149.98 | 149.92 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 149.29 | 149.29 | 149.29 | 149.26 | 149.23 | 149.23 | 149.23 | 149.24 | 149.26 | 149.21 | 149.19 | 149.17 | 149.15 | [illegible] | [illegible] | [illegible] | [illegible] | 149.95 |
| 4 | 149.55 | 149.62 | 149.70 | 149.75 | 149.76 | 149.80 | [illegible] | 149.39 | 149.36 | [illegible] | [illegible] | 149.12 | 149.15 | 149.15 | 149.14 | 149.11 | 149.09 | 149.09 | 149.08 | 149.07 | 149.07 | [illegible] | 149.03 | 149.01 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 149.91 |
| 5 | 149.44 | 149.51 | 149.59 | 149.63 | 149.64 | 149.68 | 149.72 | [illegible] | [illegible] | [illegible] | [illegible] | 149.19 | 149.21 | 149.01 | 149.00 | 148.97 | 148.94 | 148.93 | 148.93 | 148.92 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 149.63 |

BOTTOM OF SLAB ELEVATIONS

| Line | 5 1 | 5 2 | 5 3 | 5 4 | 5 5 | 5 6 | 5 7 | 6 1 | 6 2 | 6 3 | 6 4 | 6 5 | 6 7 | 6 8 | 6 9 | 6 10 | 7 1 | 7 2 | 7 3 | 7 4 | 7 5 | 7 6 | 7 7 | 7 8 | [illegible] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 148.42 | 148.34 | 148.28 | 148.23 | 148.19 | 148.15 | 148.15 | 147.44 | 147.82 | [illegible] | [illegible] | 147.41 | 147.21 | 147.17 | 147.17 | 147.04 | 146.91 | 146.77 | 146.62 | |
| 2 | [illegible] | 149.75 | 149.79 | 149.83 | 149.85 | 149.53 | 149.45 | 149.38 | 149.33 | 149.29 | 149.23 | 149.15 | [illegible] | 147.91 | 147.75 | 147.64 | 147.41 | 147.37 | 147.25 | 147.14 | 147.[illegible] | 146.99 | [illegible] | 146.61 | |
| 3 | [illegible] | 149.57 | 149.51 | 149.[illegible] | 149.[illegible] | 148.64 | 149.56 | 149.49 | 149.44 | 149.39 | 149.32 | 149.25 | 149.[illegible] | 147.[illegible] | 147.97 | 147.72 | 147.[illegible] | 147.[illegible] | 147.33 | 147.[illegible] | [illegible] | 147.16 | [illegible] | 146.[illegible] | |
| 4 | 149.75 | [illegible] | 149.63 | 149.57 | 149.53 | 148.45 | 149.37 | 149.30 | 149.24 | 149.20 | 149.13 | 149.05 | 147.92 | 147.90 | 147.66 | 147.51 | 147.36 | 147.24 | 147.11 | 147.10 | [illegible] | [illegible] | [illegible] | [illegible] | |
| 5 | 149.57 | [illegible] | [illegible] | 149.35 | 149.34 | 149.27 | 149.13 | 149.11 | 149.05 | 149.00 | 147.93 | 147.94 | 147.[illegible] | 147.57 | 147.45 | 147.30 | 147.15 | 147.03 | [illegible] | [illegible] | [illegible] | 146.62 | [illegible] | [illegible] | |




NOTE:
[illegible] "Bottom of Slab Elevations" are given. These elevations which are computed to compensate for dead load deflections must be set before form work is to be started.



DEFLECTION CURVE (Deflection of dead load minus weight of steel)

DESIGN– [illegible]
TRACE– [illegible]
CHECK– [illegible]

BRIDGE NO.
SURVEY–
PLOT–

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

# ROUTE 16
OVER
# INTERSTATE 95
IN THE CITY OF
# OLD TOWN
# PENOBSCOT COUNTY

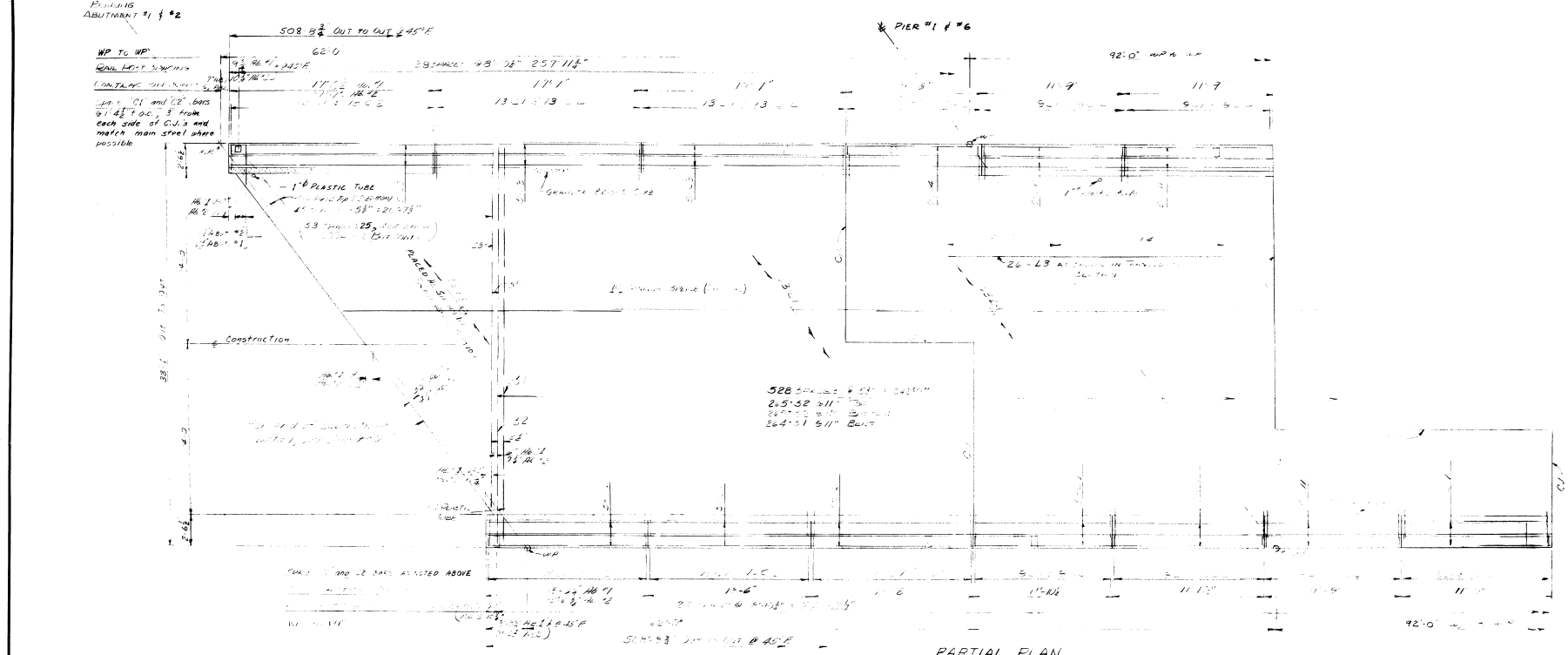
BLOCKING

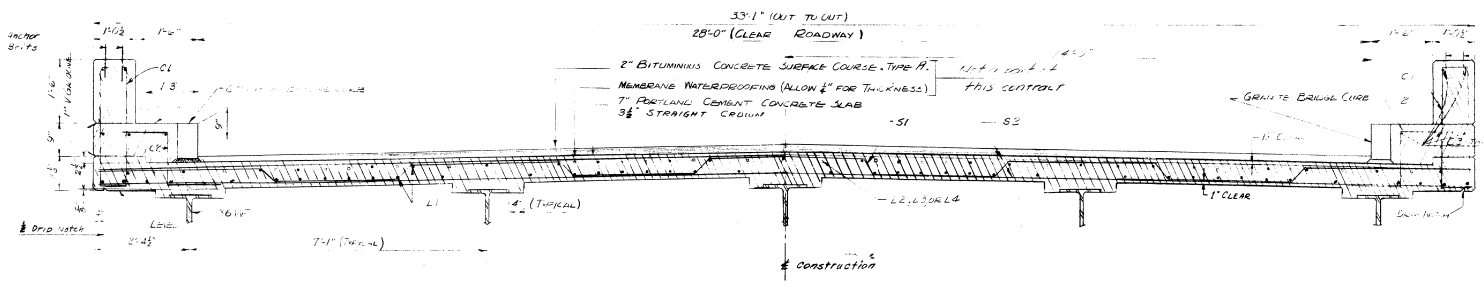
SHEET 12 OF 17 AUGUSTA, MAINE JAN. 1964

92-96

C. B. CO., NO. 66-121 20T56

| B. P. R. REF. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | I-95-8(39) | | 13 |




TRANSVERSE SECTION

DESIGN- CDH
TRACE- JM
CHECK-

BRIDGE NO.
SURVEY-
PLOT-

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

**ROUTE 16**
OVER
**INTERSTATE 95**
IN THE CITY OF
**OLD TOWN**
**PENOBSCOT COUNTY**

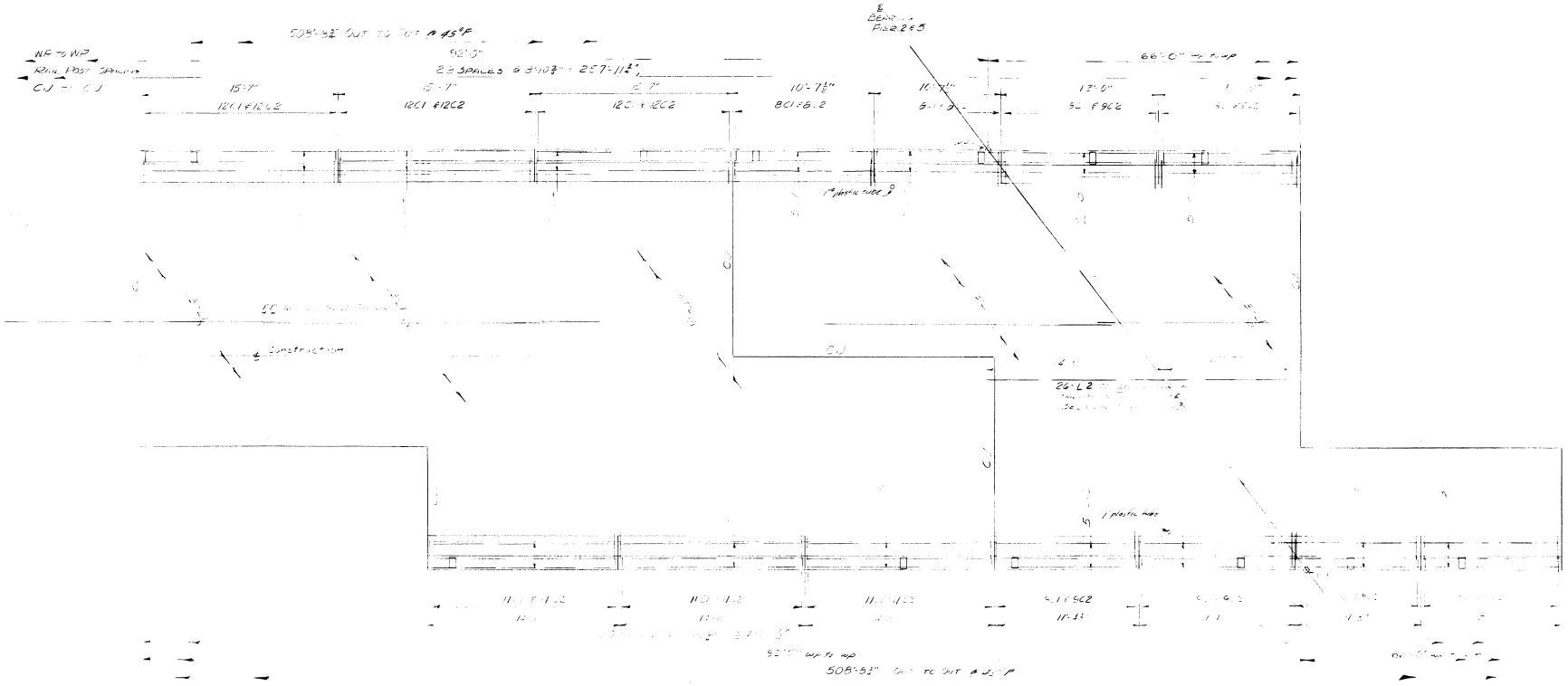
SUPERSTRUCTURE- SPAN 1 & 7

SHEET 13 OF AUGUSTA, MAINE JAN. 1964

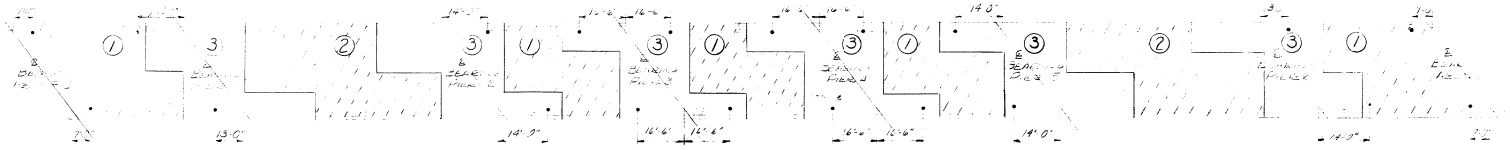
92-97

C.B. CO., NO. AA-131

| S. P. R. REG. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | I-95-8 (39) | | |




PARTIAL PLAN




CONCRETE PLACING SEQUENCE AND DRAIN SPACING

PLACE CONCRETE IN AREAS (1) THEN (2) AND FINALLY AREA (3)

FOR DRAIN DETAILS SEE SHEET BD 104-62 & SHEET # 11.

DESIGN- CDH
TRACE- JM
CHECK- THK

BRIDGE NO.
SURVEY-
PLOT-

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

**ROUTE 16**
OVER
**INTERSTATE 95**
IN THE CITY OF
**OLD TOWN**
**PENOBSCOT COUNTY**

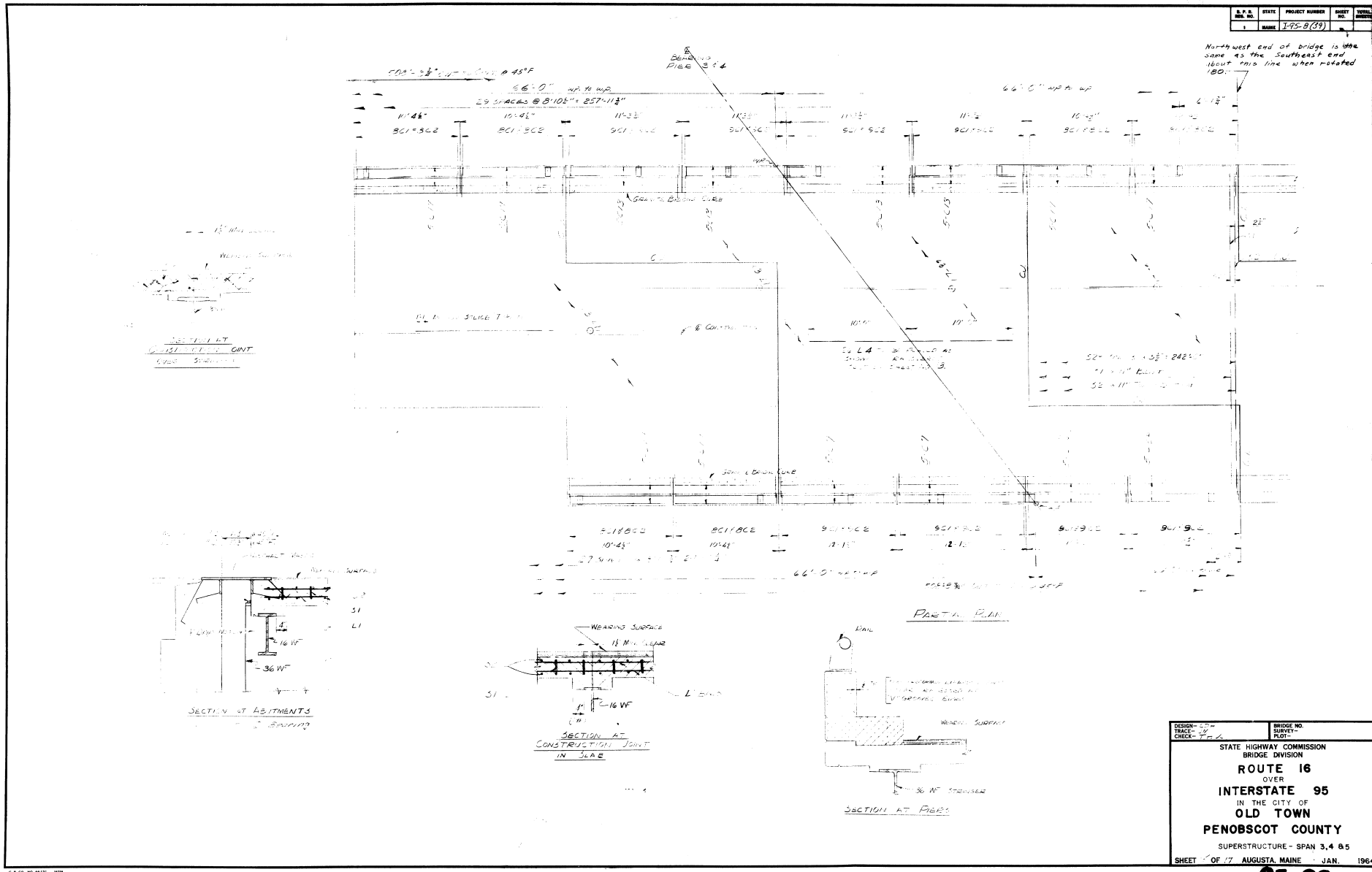
SUPERSTRUCTURE - SPAN 2&6

SHEET 2 OF 17 AUGUSTA, MAINE JAN. 1964

92-98

0 1 2 3 4 5 INCHES

| F. P. R. REG. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | I-95-8(39) | | |




DESIGN- CTH
TRACE- JN
CHECK- TH

BRIDGE NO.
SURVEY-
PLOT-

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

**ROUTE 16**
OVER
**INTERSTATE 95**
IN THE CITY OF
**OLD TOWN**
**PENOBSCOT COUNTY**

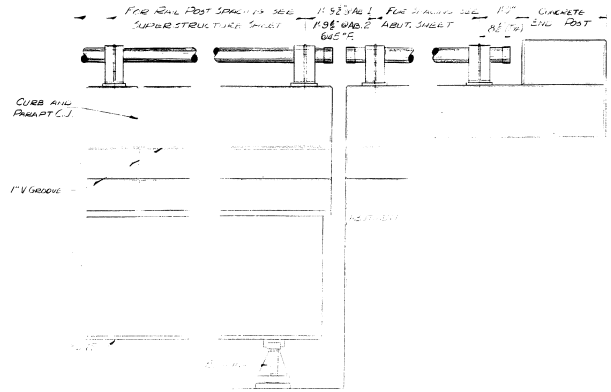
SUPERSTRUCTURE - SPAN 3,4 & 5

SHEET 1 OF 17 AUGUSTA, MAINE JAN. 1964

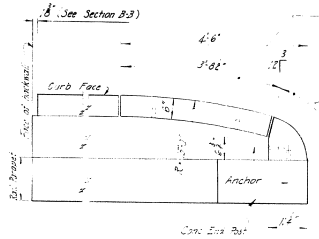
92-99

0 1 2 3 4 5 INCHES

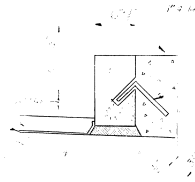
| B. P. R. BRI. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | I-95-B (39) | | |



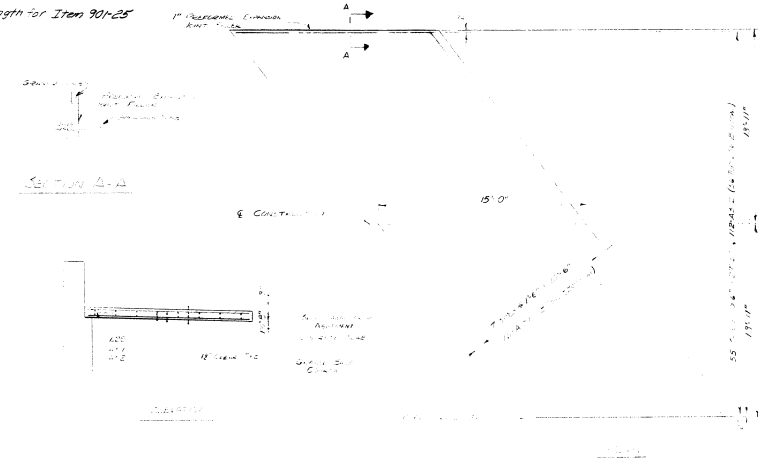

ELEVATION OF END OF SUPERSTRUCTURE




END DETAIL



GRANITE BRIDGE CURB DETAILS



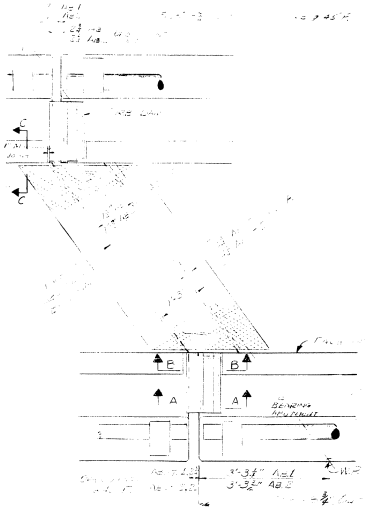

SECTION A-A

APPROACH SLAB DETAILS

Approach slab shall be cast to be flush with bridge roadway surfaces. Remove concrete, reinforcing steel and bituminous [illegible]

GENERAL NOTES AND SPECIFICATIONS

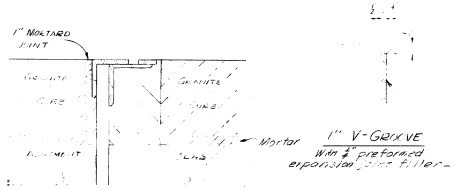
1
2
3
4



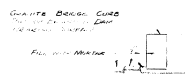

PLAN OF END OF SUPERSTRUCTURE

1" V-GROOVE

SECTION A-A




SECTION B-B




SECTION C-C

| | |
|---|---|
| DESIGN– C.D.H. TRACE– J.M. CHECK– | BRIDGE NO. SURVEY– PLOT– |

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

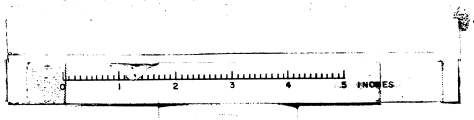
**ROUTE 16**
OVER
**INTERSTATE 95**
IN THE CITY OF
**OLD TOWN**
**PENOBSCOT COUNTY**

SUPERSTRUCTURE DETAILS

SHEET 16 OF 17 AUGUSTA, MAINE JAN. 1964

C. B. CO., NO. 66-151

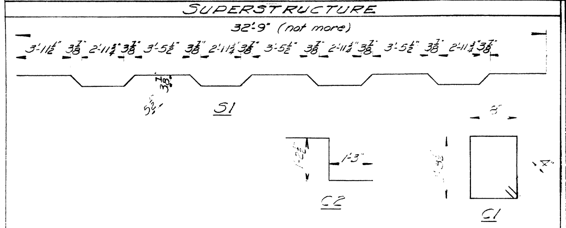
92-100



# REINFORCING STEEL SCHEDULE

| B.P.R. REG. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | I-95-8(39) | | |

## SUPERSTRUCTURE



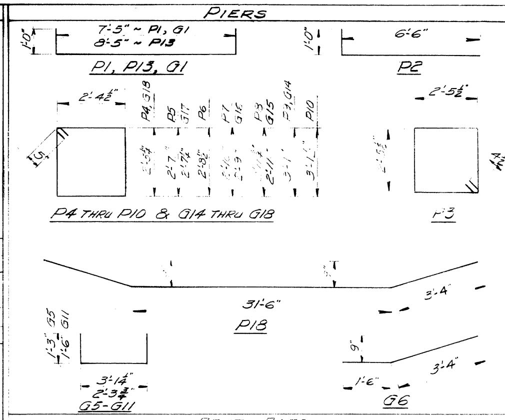

### BENT BARS

| MARK | SIZE | NO. | LENGTH | LOCATION |
|---|---|---|---|---|
| C1 | #4 | 779 | 7'-5" | Curb |
| C2 | #4 | 779 | 3'-[illegible]" | Curb |
| S1 | #5 | 528 | 33'-10" | Slab Main Steel |

### STRAIGHT BARS

| MARK | SIZE | NO. | LENGTH | LOCATION |
|---|---|---|---|---|
| C3 | #4 | 30 | [illegible] | Curb & Parapet |
| C4 | ↑ | 30 | [illegible] | |
| C5 | | 30 | 14'-[illegible]" | |
| C6 | | 30 | [illegible]'-2" | |
| C7 | | 20 | 11'-[illegible]" | |
| C8 | | 20 | [illegible] | |
| C9 | | 20 | [illegible] | |
| C11 | | [illegible] | [illegible]'-5" | |
| C12 | | 20 | [illegible]'-0" | |
| C13 | | [illegible] | [illegible] | |
| C14 | | [illegible] | [illegible]'-2" | |
| C15 | | 20 | 10'-3" | |
| C16 | ↓ | 20 | 10'-[illegible]" | |
| C17 | #4 | 20 | 10'-[illegible]" | |
| S2 | #5 | [illegible] | 32'-9" | Slab Main Steel |
| S3 | ↑ | [illegible] | 29'-[illegible]" | |
| S4 | | ↑ | 28'-4" | |
| S5 | | | 27'-1" | |
| S6 | | | [illegible] | |
| S7 | | | [illegible] | |
| S8 | | | 23'-5" | |
| S9 | | | 22'-3" | |
| S10 | | | [illegible] | |
| S11 | | | [illegible] | |
| S12 | | | [illegible] | |
| S13 | | | [illegible] | |
| S14 | | | [illegible] | |
| S15 | | | [illegible] | |
| S16 | | | [illegible] | |
| S17 | | | [illegible] | |
| S18 | | | [illegible] | |
| S19 | | | [illegible] | |
| S20 | | | [illegible] | |
| S21 | | | [illegible] | |
| S22 | | | [illegible] | |
| S23 | | | [illegible] | |
| S24 | | | [illegible] | |
| S25 | ↓ | ↓ | [illegible] | |
| S26 | #5 | 8 | 10'-0" | |
| L1 | #5 | 1449 | 23'-2" | Slab Distribution Steel |
| L2 | #5 | 52 | 24'-0" | |
| L3 | #5 | 52 | 23'-0" | |
| L4 | #5 | 52 | 20'-0" | |

## PIERS



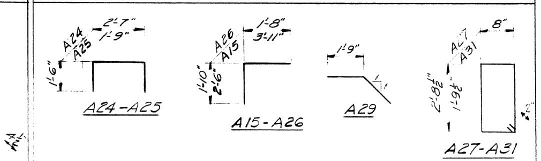

### BENT BARS

| MARK | SIZE | NO. | LENGTH | LOCATION |
|---|---|---|---|---|
| P1 | #8 | 64 | 9'-5" | Interior Footing |
| P2 | #9 | 144 | 7'-6" | Dowels Column Footing |
| P3 | #4 | 234 | 10'-7" | Column Ties |
| P4 | #5 | 16 | 10'-6" | Cap Stirrups |
| P5 | ↑ | 16 | 10'-9" | ↑ |
| P6 | | 16 | 11'-0" | |
| P7 | | 16 | 11'-3" | |
| P8 | | 16 | 11'-6" | |
| P9 | ↓ | 16 | 11'-9" | ↓ |
| P10 | #5 | 224 | 11'-10" | Cap Stirrups |
| P13 | #9 | 144 | 10'-5" | Exterior Footing |
| P18 | #10 | 20 | 38'-2" | Bottom Cap |
| G1 | #8 | 64 | 9'-5" | Footing - Pier 3 & 4 |
| G5 | #6 | 24 | 5'-8" | Top Cap |
| G6 | #6 | 20 | 4'-10" | Bottom Cantilever in Cap |
| G11 | #6 | 32 | 5'-4" | End Shaft |
| G14 | #5 | 8 | 11'-9" | Cap Stirrups - Cantilever |
| G15 | ↑ | 8 | 11'-5" | ↑ |
| G16 | | 8 | 11'-1" | |
| G17 | ↓ | 8 | 10'-10" | ↓ |
| G18 | #5 | 8 | 10'-6" | Cap Stirrups - Cantilever |

### STRAIGHT BARS

| MARK | SIZE | NO. | LENGTH | LOCATION |
|---|---|---|---|---|
| P11 | #10 | 20 | 38'-2" | Top - Cap |
| P12 | #8 | 32 | 8'-6" | Top - Cap @ Cantilever |
| P14 | #9 | 36 | 22'-3" | Column - Main Bars |
| P15 | #9 | 36 | 22'-8" | ↑ |
| P16 | #9 | 36 | 22'-10" | ↓ |
| P17 | #9 | 36 | 21'-9" | Column - Main Bars |
| P19 | #6 | 16 | 38'-2" | Sides - Cap |
| G2 | #8 | 16 | 32'-0" | Footing - Pier 3 & 4 |
| G3 | #6 | 136 | 4'-6" | Footing - Dowels |
| G4 | #6 | 136 | 11'-3¼" | Shaft |
| G7 | #6 | 10 | 25'-6" | Top - Cap |
| G8 | #9 | 20 | 8'-6" | Top - Cap in Cantilever |
| G9 | #7 | 16 | 8'-6" | " - " " " |
| G10 | #6 | 32 | 31'-0" | Shaft |
| G12 | #6 | 4 | 31'-6" | Bottom - Cap |
| G13 | #6 | 8 | 38'-2" | Sides - Cap |

## ABUTMENTS




### BENT BARS

| MARK | SIZE | NO. | LENGTH | LOCATION |
|---|---|---|---|---|
| A15 | #5 | 56 | 6'-5" | Breast Wall |
| A24 | #4 | 20 | 5'-7" | Bearing Pedestal |
| A25 | #4 | 20 | 4'-9" | " " |
| A26 | #4 | 36 | 3'-6" | Wing Curb - Dowels |
| A27 | #4 | 36 | 7'-1" | Wing Curb - Rail Parapet |
| A29 | #6 | 48 | 3'-6" | Backwall - App. Slab |
| A31 | #4 | 8 | 5'-3" | End Posts |

### STRAIGHT BARS

| MARK | SIZE | NO. | LENGTH | LOCATION |
|---|---|---|---|---|
| A1 | #6 | 4 | 39'-0" | Footings |
| A2 | ↑ | 4 | 41'-0" | ↑ |
| A3 | | 4 | 43'-0" | |
| A4 | | 12 | 43'-4" | |
| A5 | | 144 | 5'-4" | |
| A6 | | 16 | 8'-11" | |
| A7 | ↓ | 16 | 7'-7" | ↓ |
| A8 | #6 | 28 | 3'-6" | Footings |
| A9 | #5 | 48 | 5'-8" | Breastwalls |
| A10 | ↑ | 5[illegible] | 2'-6" | " |
| A11 | | 24 | 22'-7" | " & Backwalls |
| A12 | | 6 | 24'-4" | " |
| A13 | | 24 | 19'-0" | " & Backwalls |
| A14 | | 6 | 17'-4" | Breastwalls |
| A16 | | 96 | 4'-9" | Backwalls |
| A17 | | 48 | 2'-10" | " & Breastwalls |
| A18 | | 42 | 4'-6" | Wings |
| A19 | | 32 | 7'-3" | " [illegible] |
| A20 | | 14 | 14'-5" | " |
| A21 | | 14 | 12'-6" | " |
| A22 | ↓ | 68 | [illegible] | " |
| A23 | #5 | 32 | 11'-6" | Wings |
| A28 | #4 | 16 | 11'-7" | Curbs |
| A30 | #6 | 24 | 2'-2" | End Posts |
| A32 | #4 | 4 | 1'-7" | Rail Parapet |
| AS1 | #4 | 32 | 34'-5" | Approach Slab |
| AS2 | #6 | 224 | 14'-6" | " |

NOTE: Dimensions to [illegible] bars.
Reinforcing bars to be Intermediate Grade Steel; $f_s$ = 20,000 psi

DESIGN- C.D.H.
TRACE- G.W.C.
CHECK- [illegible]

BRIDGE NO.
SURVEY-
PLOT-

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

**ROUTE 16**
OVER
**INTERSTATE 95**
IN THE CITY OF
**OLD TOWN**
**PENOBSCOT COUNTY**

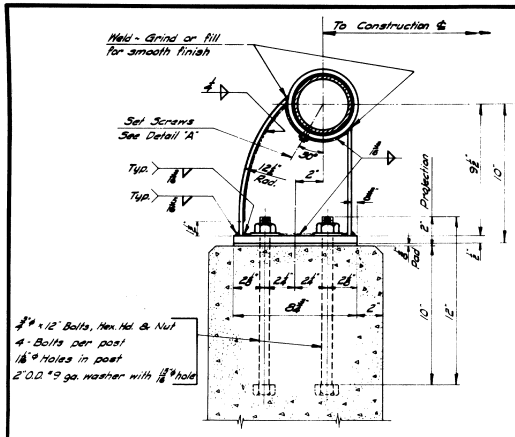
REINFORCING STEEL

SHEET 17 OF 17 AUGUSTA, MAINE JAN. 1964

92-100-A

C. B. CO., NO. 44-131

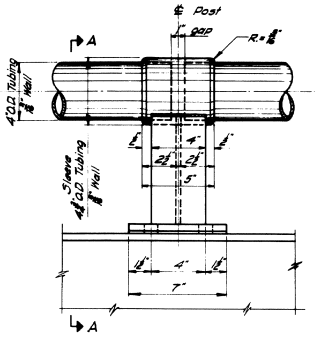
| B.P.R. REG. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | | | |




## SECTION A-A

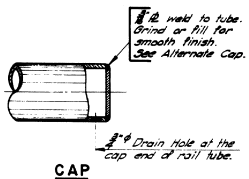
Post shown to be fabricated from 8" x 4" x 13.0# WF welded to 7" x 1/2" x 0'-8 1/2" base plate and 4 1/2" O.D., 1/8" wall x 0'-5", tube or sleeve.

An alternate cast steel post may be used if the outside dimensions conform to the dimensions shown as detailed, and is approved by the Engineer.

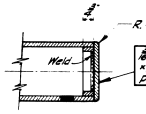



## RAIL POST

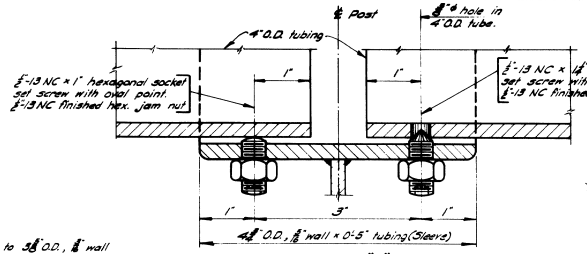
4" O.D. tubing to be continuous for a minimum of two rail panels. For tubing two or more panels long the cone point set screw to be tight in the hole provided in 4" O.D. tubing. At all other posts one oval point set screw per post shall be set to bear. Where tubes are not continuous thru posts leave 1" gap at the ℄ of post.




## CAP

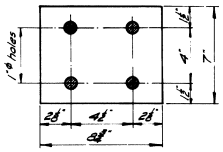



## ALTERNATE CAP



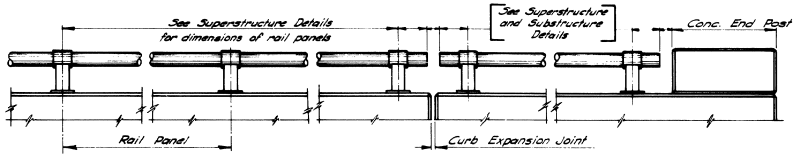

## DETAIL "A"

Drill and tap sleeve 1/2"-13 NC (2-holes). Drill 4" O.D. tubing (Rail) 1/8"φ hole, 1" from one end only.




## PAD

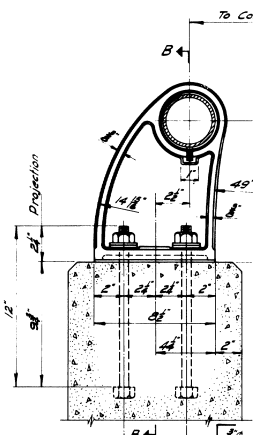
At least one pad shall be placed under each post, and the number of pads supplied shall be 10% in excess of total number of posts. See Specifications for material.



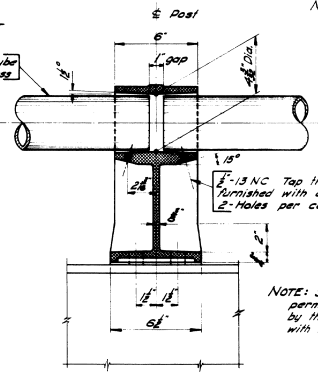

## SIDE ELEVATION - RAIL

NOTE: 4" O.D. Tubing, Posts, Bolts, Nuts & Washers to be galvanized.

# ONE BAR RAIL - STEEL



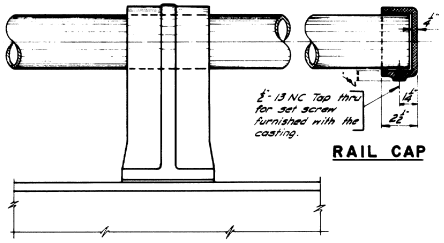

## RAIL POST




## SECTION B-B

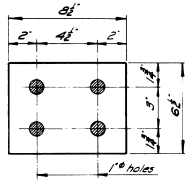
NOTE: Aluminum tubes to be continuous for a minimum of two rail panels. For tubes two or more panels long set screws to be tight at one interior post and to bear at all other posts. Where tubes are not continuous thru posts leave a 1" gap at the ℄ of post.

NOTE: Slight variations will be permitted in details, if approved by the Engineer, in order to conform with various manufacturers castings.



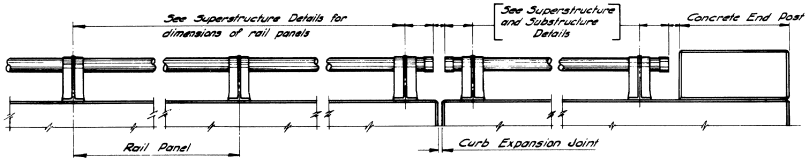

## RAIL CAP

## FRONT ELEVATION - RAIL POST




## PAD

At least one pad shall be placed under each post, and the number of pads supplied shall be 10% in excess of total number of posts. See Specifications for material.




## SIDE ELEVATION - RAIL

# ONE BAR RAIL - ALUMINUM

## GENERAL NOTES

### RAIL ON CURVE

If the curve radius is more than 1,350' feet and is less than 2700 feet, the rail tube is to be straight and one panel length only, unless otherwise called for in the design details. For curves with a radius less than 150 feet see design details. For curves with a radius more than 2700 feet rail details shall be as shown on this sheet.

Design details govern if there is conflict between dimensions shown in design details and the standards.

MAINE STATE HIGHWAY COMMISSION
AUGUSTA, MAINE

# STANDARD DETAILS
(BD 102 - 62)
## BRIDGE RAIL

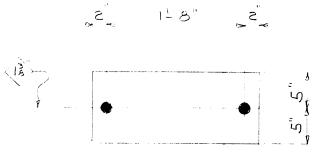
ONE BAR RAIL _____ STEEL
ONE BAR RAIL ____ ALUMINUM

NOV. 1962

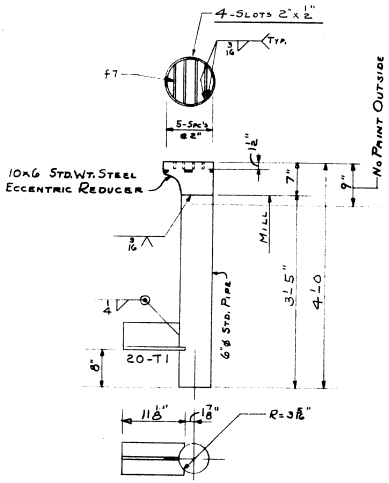
92-100B

| SHIP | BILL OF MATERIAL | | | | | | DWG. B64-59-X1 |
|---|---|---|---|---|---|---|---|
| MARK | NO. | MARK | SHAPE | LENGTH | | WT. | REMARKS |
| SP | 5 | | PL 10 x 1/2 | 2 | 0 | | |

| SHIP | BILL OF MATERIAL | | | | | | DWG. B64-59-S12 |
|---|---|---|---|---|---|---|---|
| MARK | NO. | MARK | SHAPE | LENGTH | | WT. | REMARKS |
| DP1 | 20 | | 6" STD. PIPE | 3 | 5 | | MIE |
| | 20 | | 10x6 - STD. STEEL WELDING ECCENTRIC REDUCER | | | | REQ'D |
| | | | | | | | |
| T1 | 20 | | STGWF 13.5 | 0 | 11 1/8 | | |
| | 80 | F7 | BAR 1/2 x L | 0 | 10 | | FIT |




5-SP




20-DP1

THIS IS AN EXTRA

SHOP CONNECTIONS:
FIELD CONNECTIONS:
HOLES:
PAINT:

SHOP CONNECTIONS: WELD-E70 LOW HYDROGEN
FIELD CONNECTIONS:
HOLES:
PAINT: STATE OF MAINE SPEC'S.

SHIM PLATES

| PRINT ISSUE | | |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| 5 | SHOP | 7-29-64 |
| DRAWN | 7-29-64 | D.C. |
| REVISION | | |
| REVISION | | |
| REVISION | | |

Bancroft & Martin Rolling Mills Company
Brewer, Maine

RTE 59 OVER INTERSTATE 95
OLD TOWN MAINE

CUSTOMER REED & REED
DESIGNER
ORDER
DWG. B64-59-X1

DRAINS

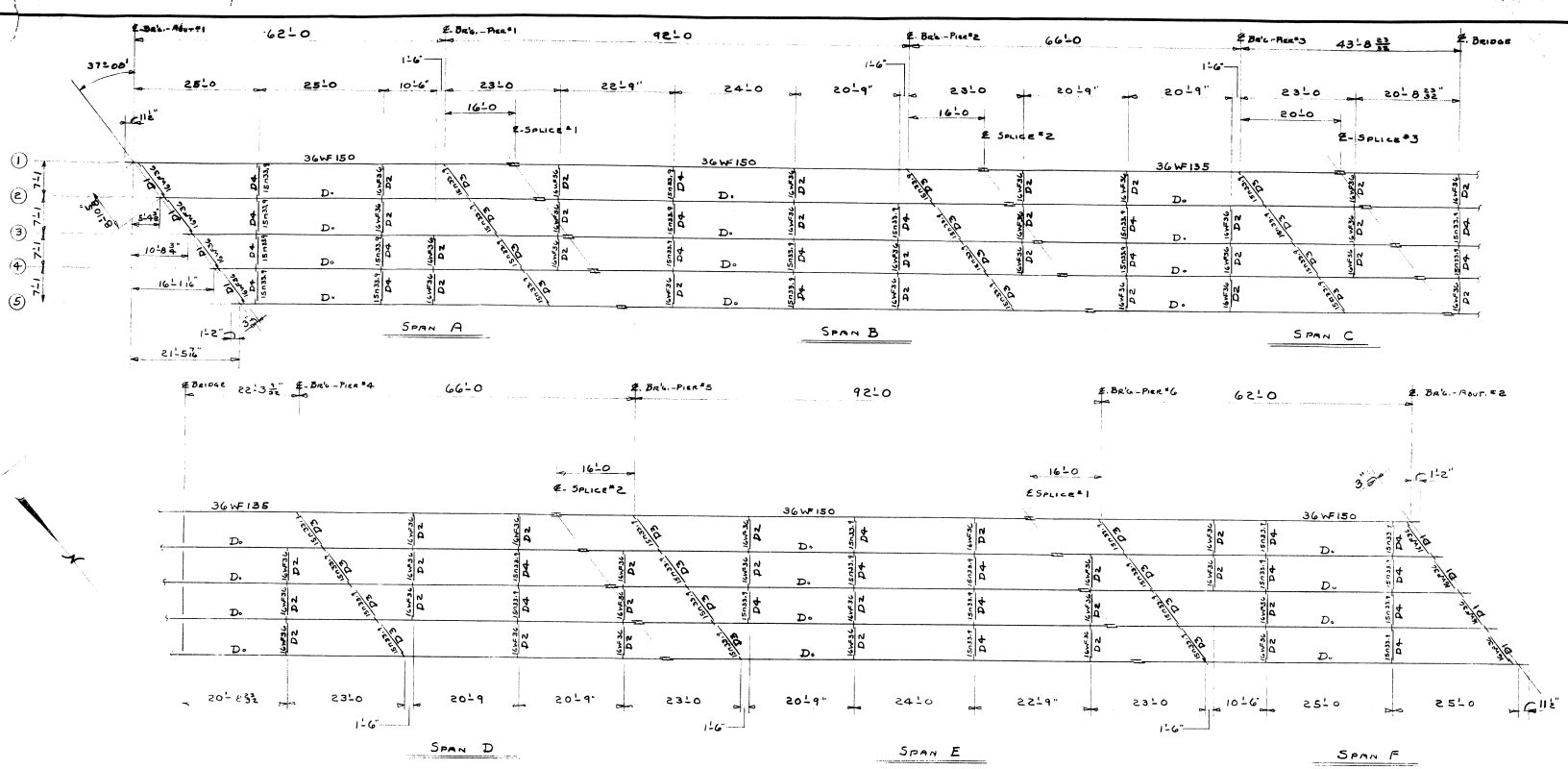
| PRINT ISSUE | | |
|---|---|---|
| | | |
| 2 | S.H.C. | 6-25-64 |
| 2 | S.H.C. | 5-4-64 |
| 3 | CUST. | 5-4-64 |
| 5 | SHOP | 5-4-64 |
| 2 | F.A. | 4-22-64 |
| DRAWN | 4-15-64 | D.C. |
| REVISION | | |
| REVISION | | |
| REVISION | | |

Bancroft & Martin Rolling Mills Company
Brewer, Maine

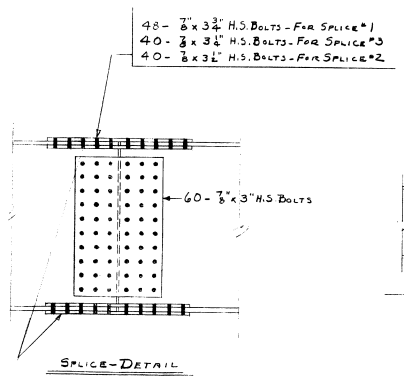
RTE 16 BRIDGE OVER I-95
OLD TOWN MAINE

CUSTOMER REED & REED
DESIGNER STATE HIGHWAY COMM.
ORDER VERBAL
DWG. B64-59-S12

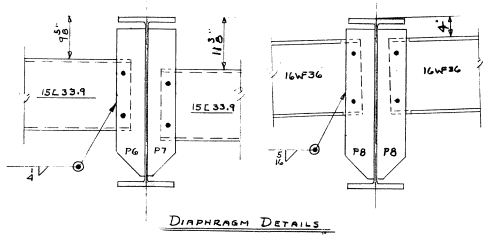
0 1 2 3 4 5 INCHES




## Framing Plan




Splice-Detail




Diaphragm Details

Notes:

Steel For Stringers, Cover Pls & Splice Pls Shall Be ASTM-A36
All Other Steel To Be ASTM-A36 or A7

Splice Bolts Shall Be ASTM-A325-7/8" ϕ Hex. Heavy Struct. Bolts With Heavy Semi-Finished Hex. Nuts & One Hardened Washer

Holes For Splice Bolts Are To Be Free From Burrs. There Shall Be No Paint Within 3" of Such Open Holes. Sub Punch or Drill Holes To 11/16" ϕ, Ream Assembled Parts (No Templates) To 15/16" ϕ, or Drill From Solid For Field Connection

Matchmark All Connecting Parts Before Disassembling & Supply Engineer With A Diagram Of Matchmarks.

SHOP CONNECTIONS:
FIELD CONNECTIONS:
HOLES:
PAINT:

Framing Plan

| PRINT ISSUE | | |
|---|---|---|
| 2 | S.H.C. | 6-25-64 |
| 2 | S.H.C. | 5-4-64 |
| 3 | Cust | 5-4-64 |
| 1 | Shop | 5-4-64 |
| 2 | F.A. | 4-22-64 |
| DRAWN | 4-6-64 | D.C. |
| REVISION | | |
| REVISION | | |
| REVISION | | |

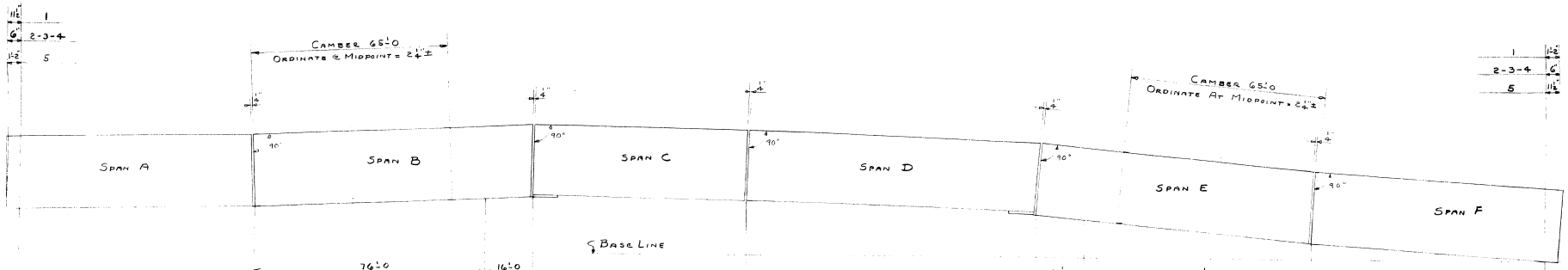
Bancroft & Martin Rolling Mills Company
Brewer, Maine

Rte. 16 Bridge Over I-95
Old Town Maine

CUSTOMER Reed & Reed
DESIGNER State Highway Comm.
ORDER Verbal DWG. B64-59-E1

95-101

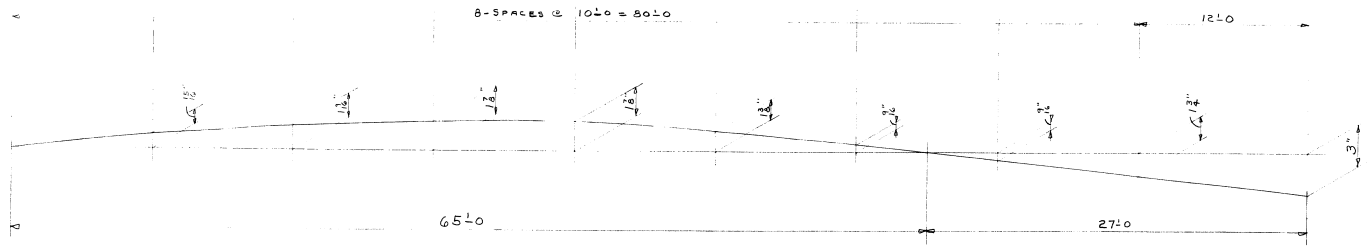
0 1 2 3 4 5 INCHES




| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 1 | 1'-8 3/16" | 1'-10 1/8" | 2'-2 13/16" | 2'-2 3/8" | 2'-2 7/8" | 1'-7 11/16" | 1'-6 15/16" | 8¼" | 0 |
| 2 | 1'-9 3/8" | 1'-11 3/16" | 2'-3 11/16" | 2'-3 3/16" | 2'-3½" | 1'-8" | 1'-7¼" | 8¼" | 0 |
| 3 | 1'-10 13/16" | 2'-0 5/16" | 2'-4 5/8" | 2'-4" | 2'-4 3/16" | 1'-8 9/16" | 1'-7 3/4" | 8 7/16" | 0 |
| 4 | 2'-0 1/8" | 2'-1 7/16" | 2'-5½" | 2'-4 3/4" | 2'-5 1/16" | 1'-9" | 1'-8 3/8" | 8 9/16" | 0 |
| 5 | 2'-1 9/16" | 2'-2 9/16" | 2'-6 9/16" | 2'-5 7/8" | 2'-5 11/16" | 1'-9 3/8" | 1'-8½" | 8 7/8" | 0 |

DIAGRAM OF STRINGER ELEVATIONS.

DIMENSIONS ARE FROM BASE LINE TO BOTT OF STRINGER OR 3/16" FILLER PL.




CAMBER DIAGRAM — SPANS B & E

SHOP CONNECTIONS:
FIELD CONNECTIONS:
HOLES:
PAINT:

APPD AS NOTED 6-19-64

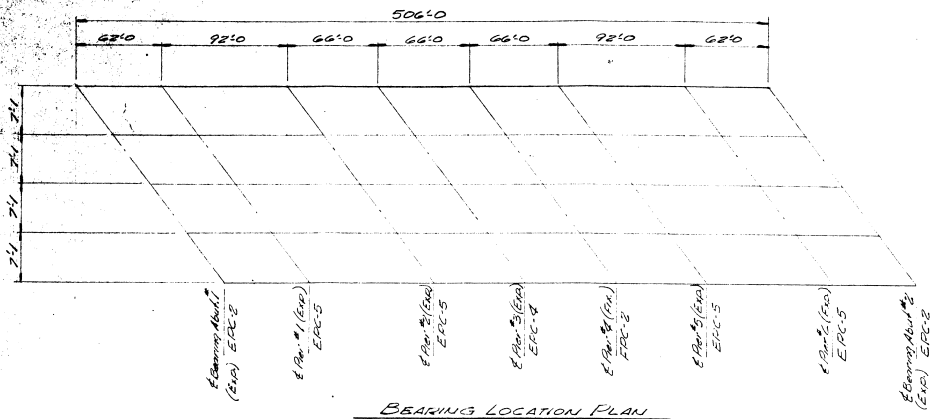
DIAGRAM OF STRINGER ELEVATIONS

| PRINT ISSUE | | |
|---|---|---|
| 2 | S.H.C. | 6-25-64 |
| 2 | F.A. | 6-16-64 |
| 2 | F.A. | 5-6-64 |
| 2 | S.H.C. | 5-4-64 |
| 3 | CUST | 5-4-64 |
| 3 | SHOP | 5-4-64 |
| 2 | F.A. | 4-22-64 |
| DRAWN | 4-9-64 | D.C. |
| REVISION | | |
| REVISION | | |
| REVISION | | |

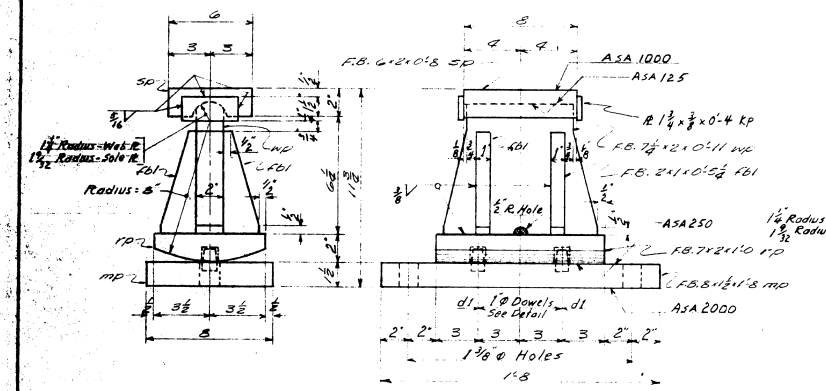
Bancroft & Martin Rolling Mills Company
Brewer, Maine

RTE. 16 BRIDGE OVER I-95
OLD TOWN MAINE

CUSTOMER REED & REED
DESIGNER STATE HIGHWAY COMM.
ORDER
DWG. B64-59-E2

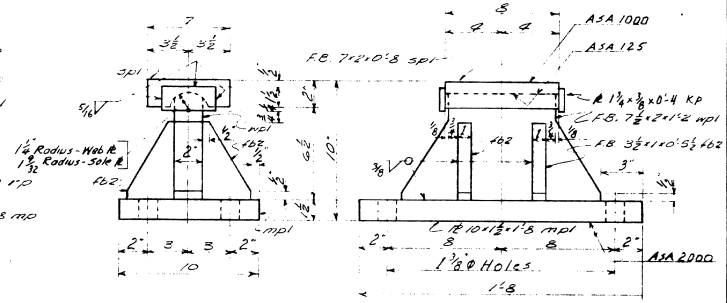



BEARING LOCATION PLAN




EXPANSION PEDESTAL EPC-2

10 - REQ'D.




FIXED PEDESTAL - FPC-2 5-REQ'D.

| SHIP MARK | NO. | MARK | SHAPE | LENGTH | | WT. | REMARKS |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| EPC-2 | 10 | | SHOP ASSY. | | | | |
| | 10 | SP | F.B. 6×½ | 0 | 8 | | |
| | 10 | MP | F.B. 7½×2 | 0 | 11 | | |
| | 10 | RP | F.B. 7×2 | 1 | 0 | | |
| | 10 | MD | F.B. 8×1½ | 1 | 8 | | |
| | 40 | fb1 | F.B. 2×1 | 0 | 5½ | | |
| | 20 | kp | F.B. 1¾×⅜ | 0 | 4 | | |
| | 20 | d1 | 1"Φ Bar | 0 | 1½ | | |
| | | | | | | | |
| FPC-2 | 5 | | SHOP ASSY. | | | | |
| | 5 | SP1 | F.B. 7×2 | 0 | 8 | | |
| | 5 | MP1 | F.B. 7½×2 | 1 | 2 | | |
| | 5 | MD1 | R 10×1½ | 1 | 8 | | |
| | 20 | fb2 | F.B. 3½×1 | 0 | 5½ | | |
| | 10 | kp | F.B. 1¾×⅜ | 0 | 4 | | |
| | | | | | | | |
| AB1 | 40 | | 1"Φ×1'-3 | | | | |
| | 80 | Shop | 1"Φ Hex Nut | | | | |
| | 40 | WO | 1" Sq. Washer | | | | 2½"Φ×8 Ga. 1 1/16"Φ Hole |

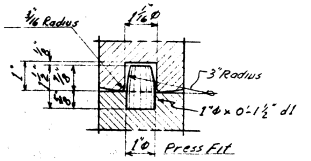
NOTE:
Allowance to be made for Machining when cutting above material.

Item 702.103

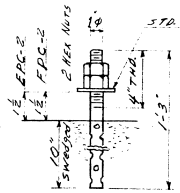
BEARING MATERIAL TO BE ASTM A36
ANCHOR BOLTS TO BE A7, A36 OR A307
SHOP CONNECTIONS: WELDED
FIELD CONNECTIONS:
HOLES: AS NOTED
PAINT: RED LEAD PER MAINE S.H.C. SPEC.
SOLE PLATES "SP" FIELD WELDED TO STRINGERS SP1

PAINT NOTE

NO PAINT ON TOP OF SOLE PLATES "SP" AND 1" DOWN FROM TOP ON SIDES; COAT WITH BOILED LINSEED OIL.
NO PAINT ON SURFACE WITH ASA 125 FINISH, COAT WITH MIXTURE OF WHITE LEAD AND TALLOW.




DOWEL DETAIL




ANCHOR BOLTS 1"Φ×1'-3 AB1 40-REQ'D.
2 REQ FOR EPC-2 4 REQ'D FOR FPC-2
NO PAINT ~ OIL THDS.

TYPE EPC & FPC

BEARING DETAILS

Bancroft & Martin Inc.
South Portland 7, Maine

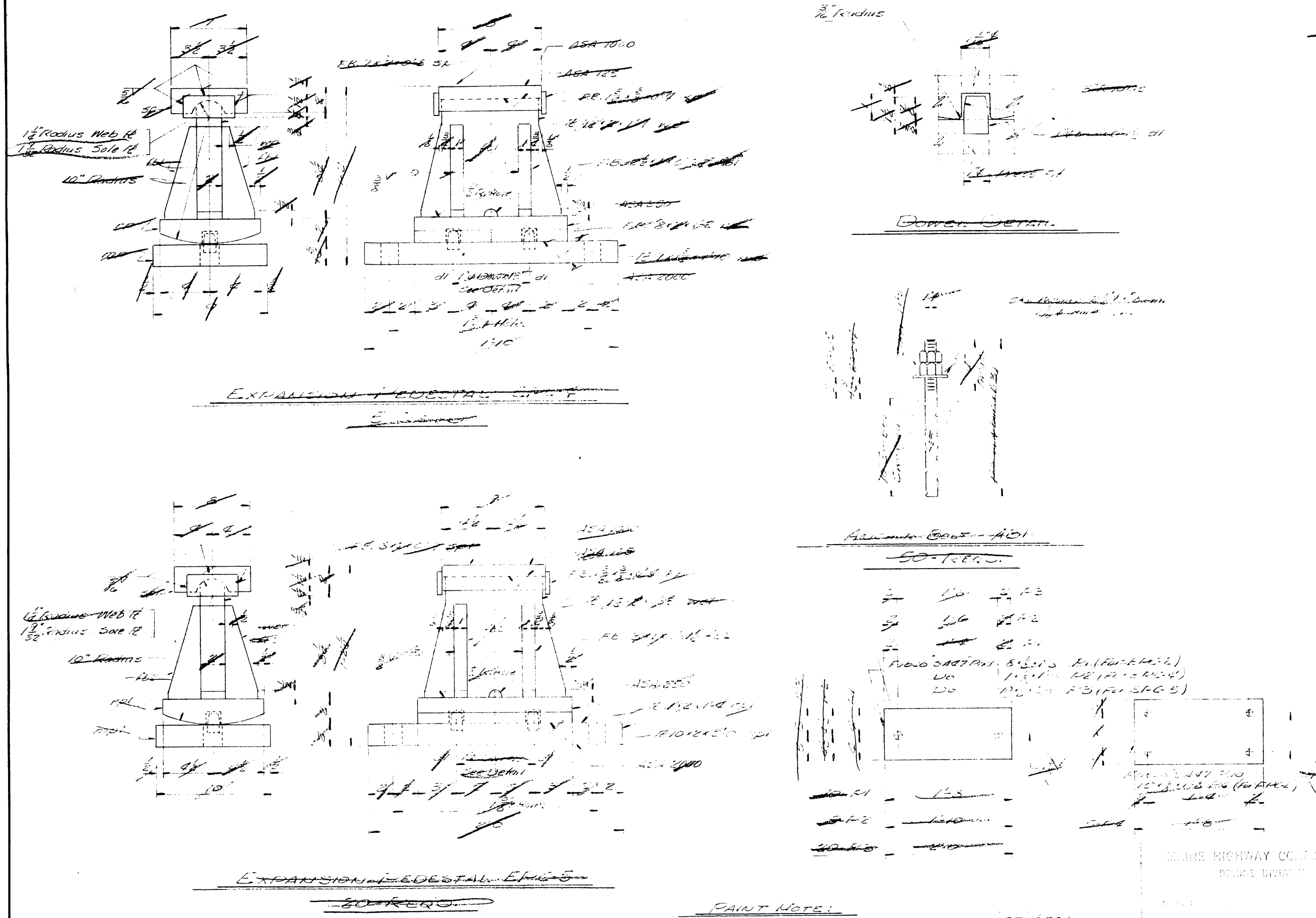
ROUTE 16 OVER INTERSTATE 95
OLD TOWN, MAINE.

CUSTOMER REED & REED
DESIGNER Maine State Highway Comm.
ORDER NO. Verbal
DWG. NO. A-59-31

| | | |
|---|---|---|
| DRAWN | 4-6-60 | M.L. |
| REVISION | | |
| REVISION | | |
| REVISION | | |

Approved 6-8-60

INCHES



PAINT NOTE:
~~No Paint on top of Sole Plates SP. & SP4 and 1½" down from top on sides; coat with Boiled Linseed Oil.~~
No Paint on surfaces with ASA 125 finish; coat with mixture of white lead and tallow.

| SHIP MARK | NO. | MARK | SHAPE | LENGTH | WT. | REMARKS |
|---|---|---|---|---|---|---|
| | | | | | | Enoco "SA47" Pad |
| | | | | | | -Do- |
| | | | | | | Do |
| | | | | | | -Do- |

BILL OF MATERIAL DWG. NO. 64-59-52

Bearing material to be ASTM. A-36
Anchor bolts to be A7, A36 or A307

SHOP CONNECTIONS: Welded
FIELD CONNECTIONS:
HOLES: As Noted
PAINT: Red lead per M.S.H.C. Spec.

BEARING DETAILS

Bancroft & Martin Inc.
South Portland 7, Maine

ROUTE 16 OVER
INTERSTATE 95
OLD TOWN, MAINE.

CUSTOMER REED & REED
DESIGNER M.S.H.C. BRIDGE DIV.

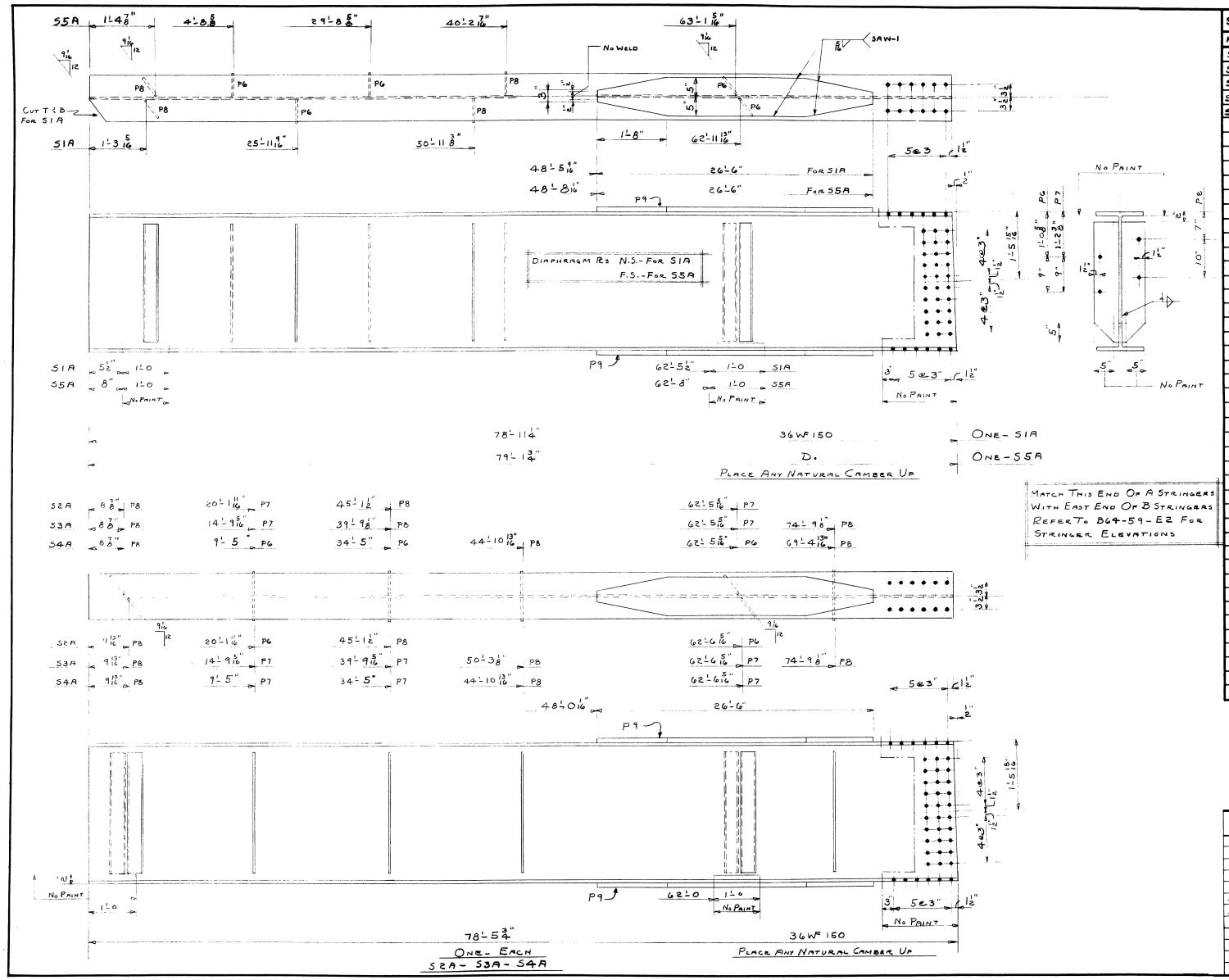
| DRAWN | | |
|---|---|---|
| REVISION | | |
| REVISION | | |
| REVISION | | |

ORDER NO. Verbal DWG. NO. 64-59-52

95-104

MAINE HIGHWAY COMMISSION
BRIDGE DIVISION

0 1 2 3 4 5 INCHES




| SHIP MARK | NO. | MARK | BILL OF MATERIAL SHAPE | LENGTH | | WT. | REMARKS |
|---|---|---|---|---|---|---|---|
| S1A | 1 | | 36WF150 | 78 | 11¼ | | A36 |
| S2A | 1 | | D. | 78 | 5¾ | | A36 |
| S3A | 1 | | D. | 78 | 5¾ | | A36 |
| S4A | 1 | | D. | 78 | 5¾ | | A36 |
| S5A | 1 | | D. | 79 | 1¾ | | A36 |
| | 10 | P9 | PL 10x1 3/16 | 26 | 6 | | A36 |
| | 10 | P6 | PL 6x⅜ | 2 | 7 | | A7 or A36 |
| | 10 | P7 | D. | 2 | 7 | | A7 or A36 |
| | 19 | P8 | D. | 2 | 7 | | A7 or A36 |
| FIELD | 1500 | | ⅞ H.S. BOLT | 0 | 3 | | Heavy Struct. Bolt & Heavy Nuts |
| D. | 200 | | D. | 0 | 3¼ | | |
| D. | 400 | | D. | 0 | 3½ | | |
| D. | 480 | | D. | 0 | 3¾ | | |
| D. | 2880 | | ⅞ H.S. WASHERS. | | | | |
| D. | 440 | | ¾ M. BOLTS | 0 | 1½ | | For Diaphragms |

SHOP CONNECTIONS: Weld - E70 Low Hydrogen Electrodes Unless Noted
FIELD CONNECTIONS: Do
HOLES: 15/16" ϕ
PAINT: State Of Maine Spec's.

App'd As Noted 6-17-64

Stringers Span A

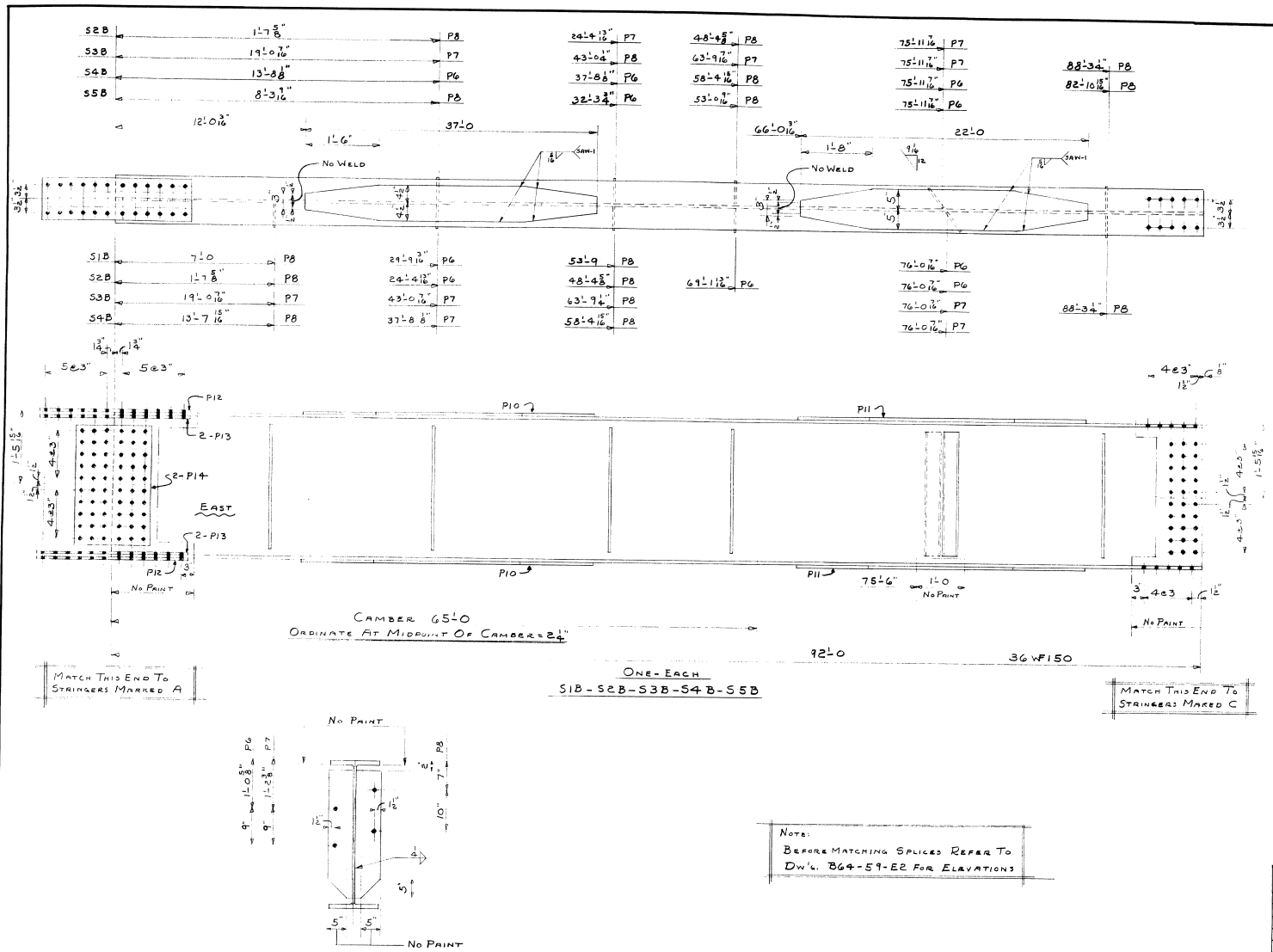
| PRINT ISSUE | | |
|---|---|---|
| 5 | Shop | 6-25-67 |
| 2 | S.H.C. | 6-25-64 |
| 2 | S.H.C. | 5-4-64 |
| 3 | Cust. | 5-9-64 |
| 5 | Shop | 5-4-64 |
| 2 | F.A. | 4-22-64 |
| DRAWN | 4-10-64 | D.C. |
| REVISION | | |
| REVISION | | |
| REVISION | | |

Bancroft & Martin Inc.
Brewer, Maine

Rte 16 Bridge Over I-95
Old Town Maine

CUSTOMER Reed & Reed
DESIGNER State Highway Comm.
ORDER Verbal
DWG. B64-59-S3

0 1 2 3 4 5 INCHES




| SHIP MARK | NO. | MARK | SHAPE | LENGTH | | WT. | REMARKS |
|---|---|---|---|---|---|---|---|
| S1B | 1 | | 36WF150 | 92 | 0 | | Camber 65' A36 |
| S2B | 1 | | Do | 92 | 0 | | Do A36 |
| S3B | 1 | | Do | 92 | 0 | | Do A36 |
| S4B | 1 | | Do | 92 | 0 | | Do A36 |
| S5B | 1 | | Do | 92 | 0 | | Do A36 |
| | 10 | P10 | PL 9 x 5/8 | 37 | 0 | | A36 |
| | 10 | P11 | PL 10 x 15/16 | 22 | 0 | | A36 |
| | 10 | P12 | PL 11 x 1/2 | 3 | 0 1/2 | | A36 |
| | 20 | P13 | PL 4 x 13/16 | 3 | 0 1/2 | | A36 |
| | 10 | P14 | PL 18 1/2 x 1/2 | 2 | 6 | | A36 |
| | 10 | P6 | PL 6 x 3/8 | 2 | 7 | | A7 or A36 |
| | 10 | P7 | Do | 2 | 7 | | A7 or A36 |
| | 16 | P8 | Do | 2 | 7 | | A7 or A36 |

BILL OF MATERIAL — DWG. B64-59-54




Notes:
Before Matching Splices Refer To Dw'g. B64-59-E2 For Elevations

SHOP CONNECTIONS: Weld - E70 Low-Hydrogen Electrodes Unless Noted
FIELD CONNECTIONS: Do
HOLES: 13/16" ø
PAINT: State Of Maine Spec's.

Apr'd As Noted 6-17-64

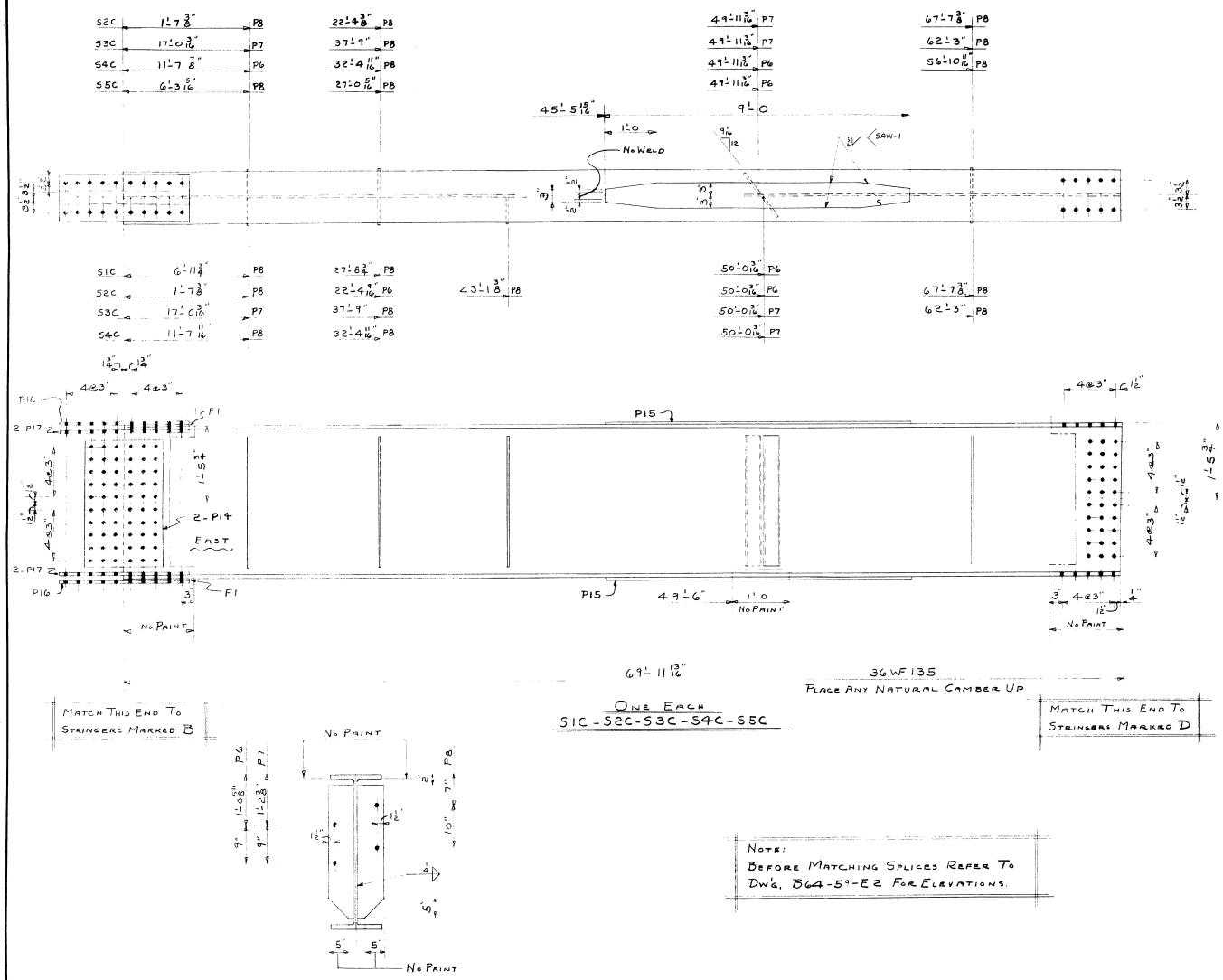
Stringers Span B

| PRINT ISSUE | | |
|---|---|---|
| 5 | Shop | 6-25-64 |
| 2 | S.H.C. | 6-25-64 |
| 2 | S.H.C. | 5-4-64 |
| 3 | Cust. | 5-4-64 |
| 5 | Shop | 5-4-64 |
| 2 | F.A. | 4-22-64 |
| DRAWN | 4-13-64 | D.C. |
| REVISION | | |
| REVISION | | |
| REVISION | | |

Bancroft & Martin Inc.
Brewer, Maine

Rte. 16 Bridge Over I-95
Old Town Maine

CUSTOMER Reed & Reed
DESIGNER State Highway Comm.
ORDER Verbal
DWG. B64-59-54




Note:
Before Matching Splices Refer To Dw'g. B64-59-E2 For Elevations.

| SHIP | BILL OF MATERIAL | | | | | | DWG. B64-59-S5 |
|---|---|---|---|---|---|---|---|
| MARK | NO. | MARK | SHAPE | LENGTH | | WT. | REMARKS |
| S1C | 1 | | 36WF135 | 69 | 11 13/16 | | A36 |
| S2C | 1 | | D. | 69 | 11 13/16 | | A36 |
| S3C | 1 | | D. | 69 | 11 13/16 | | A36 |
| S4C | 1 | | D. | 69 | 11 13/16 | | A36 |
| S5C | 1 | | D. | 69 | 11 13/16 | | A36 |
| | 10 | P15 | PL 6 x 3/8 | 9 | 0 | | A36 |
| | 10 | P14 | PL 18 1/2 x 1/2 | 2 | 6 | | A36 |
| | 10 | P16 | PL 11 x 7/16 | 2 | 6 1/2 | | A36 |
| | 20 | P17 | PL 4 x 11/16 | 2 | 6 1/2 | | A36 |
| | 10 | F1 | PL 11 x 3/16 | 1 | 3 | | FILLER A7 or A36 |
| | 6 | P6 | PL 6 x 3/8 | 2 | 7 | | A7 or A36 |
| | 6 | P7 | D. | 2 | 7 | | A7 or A36 |
| | 18 | P8 | D. | 2 | 7 | | A7 or A36 |

SHOP CONNECTIONS: WELD - E70 LOW-HYDROGEN ELECTRODE UNLESS NOTED
FIELD CONNECTIONS: D.
HOLES: 15/16" Ø
PAINT: STATE OF MAINE SPEC'S.

APPD AS NOTED 6-19-64

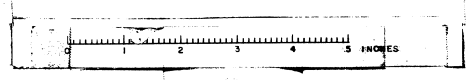
STRINGERS SPAN C

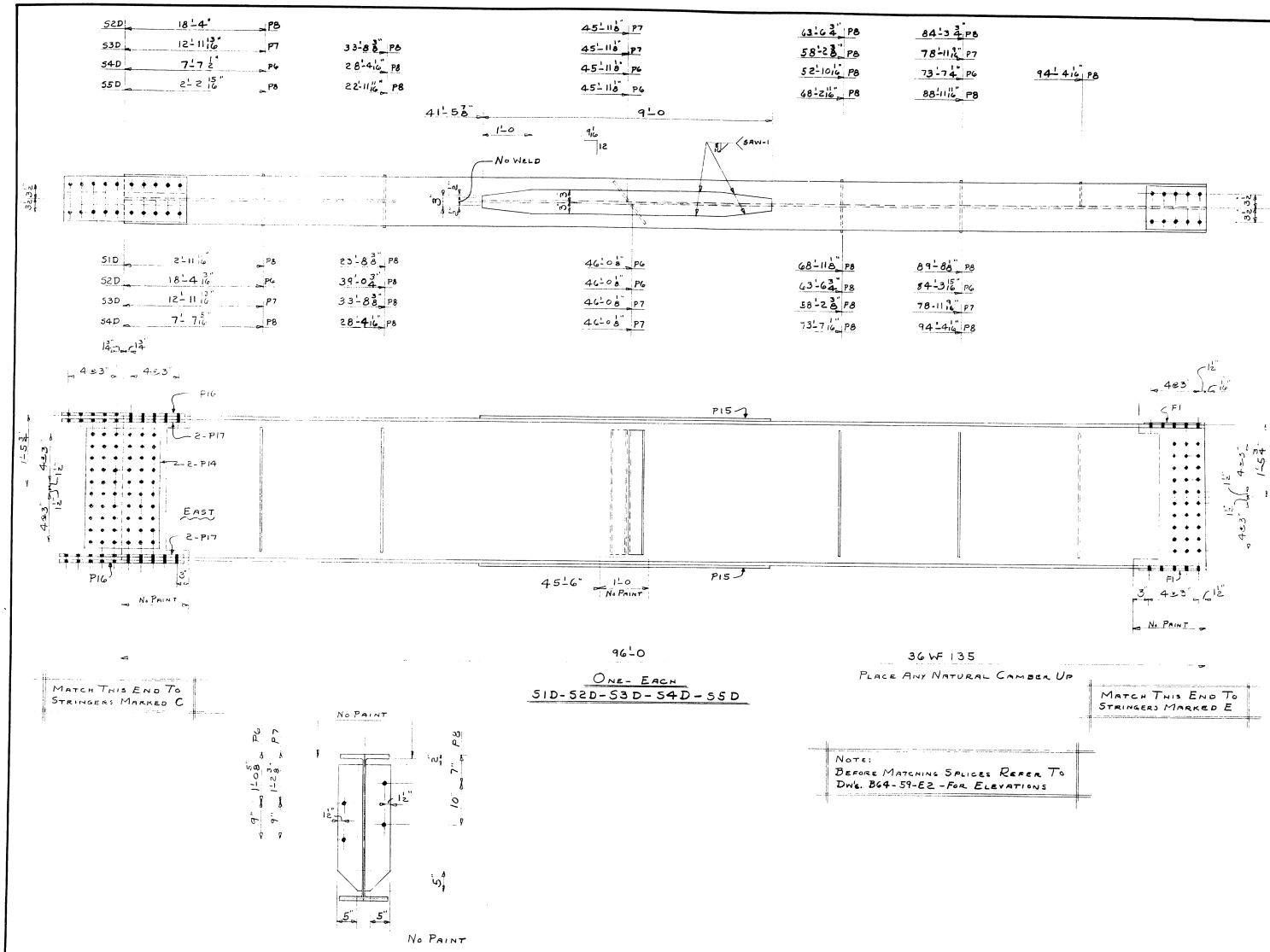
| PRINT ISSUE | | |
|---|---|---|
| 5 | SHOP | 6-25-64 |
| 2 | S.H.C. | 6-25-64 |
| 2 | S.H.C. | 5-4-64 |
| 3 | CUST. | 5-4-64 |
| 5 | SHOP | 5-4-64 |
| 2 | F.A. | 4-22-64 |
| DRAWN | 4-13-64 | D.C. |
| REVISION | | |
| REVISION | | |
| REVISION | | |

Bancroft & Martin Inc.
Brewer, Maine

RTE. 16 BRIDGE OVER I-95
OLD TOWN MAINE

CUSTOMER REED & REED
DESIGNER STATE HIGHWAY COMM.
ORDER VERBAL DWG. B64-59-S5






ONE- EACH
S1D-S2D-S3D-S4D-S5D

NOTE:
BEFORE MATCHING SPLICES REFER TO DWG. B64-59-E2 - FOR ELEVATIONS

| SHIP MARK | NO. | MARK | SHAPE | LENGTH | | WT. | REMARKS |
|---|---|---|---|---|---|---|---|
| | | | BILL OF MATERIAL | | | | DWG. B64-59-S6 |
| S1D | 1 | | 36WF135 | 96 | 0 | | A36 |
| S2D | 1 | | D. | 96 | 0 | | A36 |
| S3D | 1 | | D. | 96 | 0 | | A36 |
| S4D | 1 | | D. | 96 | 0 | | A36 |
| S5D | 1 | | D. | 96 | 0 | | A36 |
| | 10 | P15 | PL 6 x 3/8 | 9 | 0 | | A36 |
| | 10 | P16 | PL 11 x 7/16 | 2 | 6 1/2 | | A36 |
| | 20 | P17 | PL 4 x 11/16 | 2 | 6 1/2 | | A36 |
| | 10 | P14 | PL 16 1/2 x 1/2 | 2 | 6 | | A36 |
| | 10 | F1 | PL 11 x 3/16 | 1 | 3 | | FILLER A7 OR A36 |
| | 8 | P6 | PL 6 x 3/8 | 2 | 7 | | A7 OR A36 |
| | 8 | P7 | D. | 2 | 7 | | A7 OR A36 |
| | 24 | P8 | D. | 2 | 7 | | A7 OR A36 |

SHOP CONNECTIONS: WELD-E70 LOW-HYDROGEN ELECTRODES UNLESS NOTED
FIELD CONNECTIONS: D.
HOLES: 15/16"ϕ
PAINT: STATE OF MAINE SPEC'S.

APP'D 6-19-64

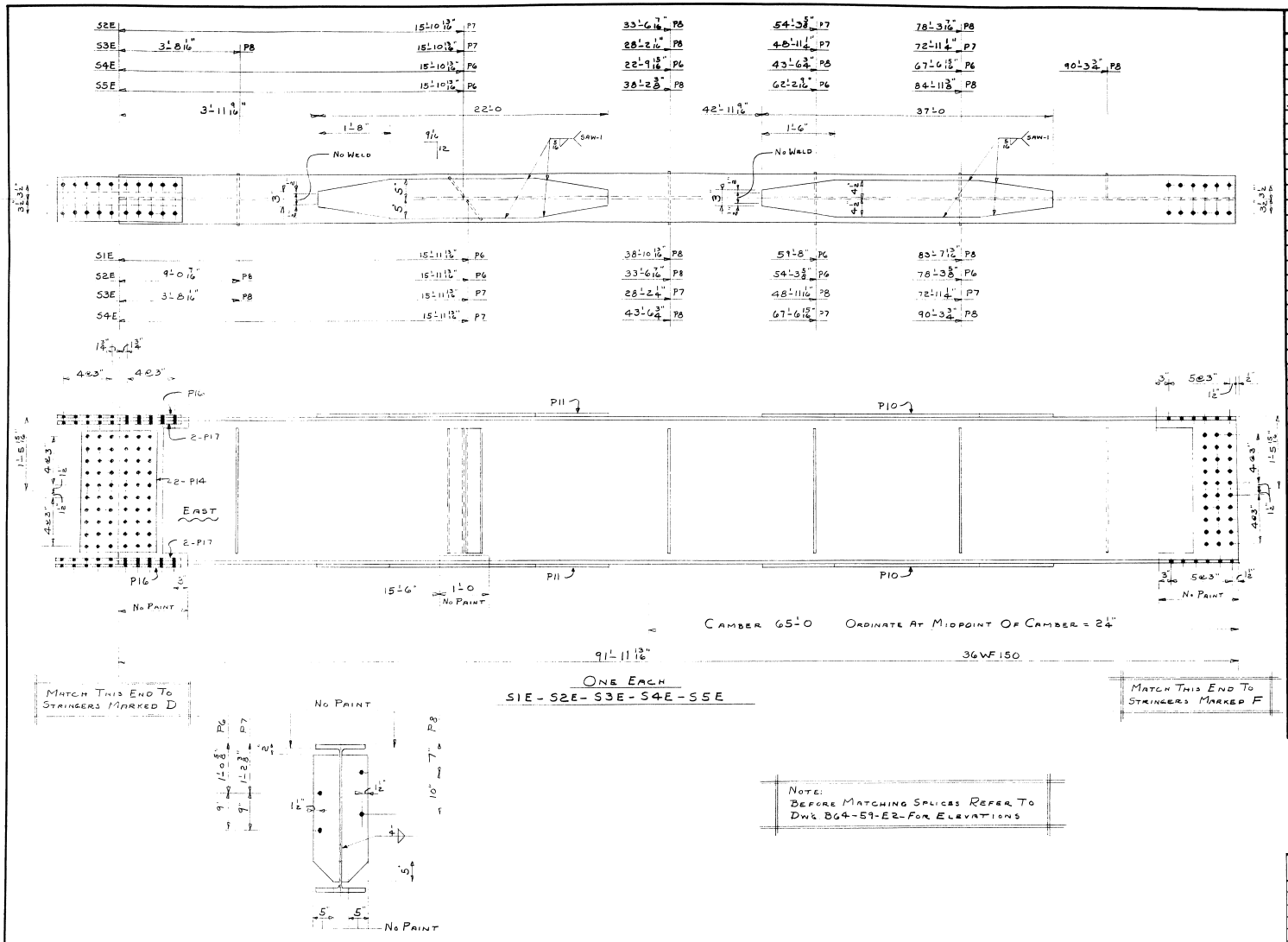
STRINGERS SPAN D

| PRINT ISSUE | | |
|---|---|---|
| 5 | SHOP | 6-25-64 |
| 2 | S.H.C. | 6-25-64 |
| 2 | S.H.C. | 5-4-64 |
| 3 | CUST. | 5-4-64 |
| 5 | SHOP | 5-4-64 |
| 2 | F.A. | 4-22-64 |
| DRAWN | 4-14-64 | D.C. |
| REVISION | | |
| REVISION | | |
| REVISION | | |

Bancroft & Martin Inc.
Brewer, Maine

RTE 16 BRIDGE OVER I-95
OLD TOWN MAINE

CUSTOMER REED & REED
DESIGNER STATE HIGHWAY COMM.
ORDER VERBAL DWG. B64-59-S6




| SHIP | BILL OF MATERIAL | | | | | | DWG. B64-59-57 |
|---|---|---|---|---|---|---|---|
| MARK | NO. | MARK | SHAPE | LENGTH | | WT. | REMARKS |
| S1E | 1 | | 36WF150 | 91 | 11 13/16 | | Camber 65'-0 A36 |
| S2E | 1 | | Do | 91 | 11 13/16 | | Do A36 |
| S3E | 1 | | Do | 91 | 11 13/16 | | Do A36 |
| S4E | 1 | | Do | 91 | 11 13/16 | | Do A36 |
| S5E | 1 | | Do | 91 | 11 13/16 | | Do A36 |
| | 10 | P10 | PL 9 x 5/8 | 37 | 0 | | A36 |
| | 10 | P11 | PL 10 x 15/16 | 22 | 0 | | A36 |
| | 10 | P14 | PL 18 1/2 x 1/2 | 2 | 6 | | A36 |
| | 10 | P16 | PL 11 x 7/16 | 2 | 6 1/2 | | A36 |
| | 20 | P17 | PL 4 x 11/16 | 2 | 6 1/2 | | A36 |
| | 10 | P6 | PL 6 x 3/8 | 2 | 7 | | A7 or A36 |
| | 10 | P7 | Do | 2 | 7 | | A7 or A36 |
| | 16 | P8 | Do | 2 | 7 | | A7 or A36 |

SHOP CONNECTIONS: Weld E70 Low-Hydrogen Electrodes Unless Noted
FIELD CONNECTIONS: Do
HOLES: 15/16"ϕ
PAINT: State Of Maine Spec's

App'd As Noted 6-19-64

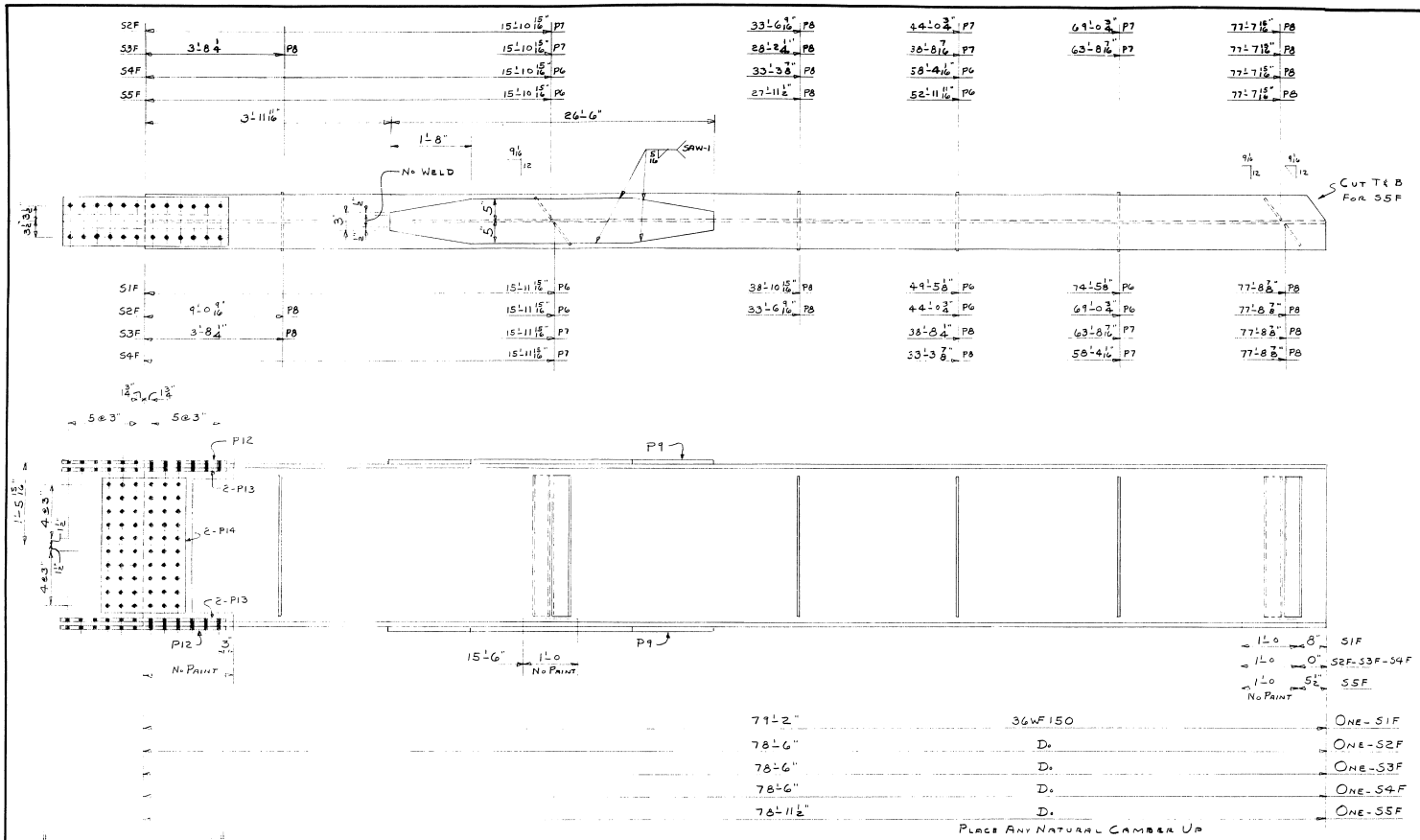
Stringers Span E

| PRINT ISSUE | | |
|---|---|---|
| 5 | Shop | 6-25-64 |
| 2 | S.H.C. | 6-25-64 |
| 2 | S.H.C. | 5-4-64 |
| 3 | Cust. | 5-4-64 |
| 5 | Shop | 5-4-64 |
| 2 | F.A. | 4-22-64 |
| DRAWN | 4-19-64 | D.C. |
| REVISION | | |
| REVISION | | |
| REVISION | | |

Bancroft & Martin Inc.
Brewer, Maine

Rte. 16 Bridge Over I-95
Old Town Maine

CUSTOMER Reed & Reed
DESIGNER State Highway Comm.
ORDER Verbal
DWG. B64-59-57




| SHIP MARK | NO. | MARK | SHAPE | LENGTH | | WT. | REMARKS |
|---|---|---|---|---|---|---|---|
| | | | BILL OF MATERIAL | | | | DWG. B64-59-58 |
| S1F | 1 | | 36WF150 | 79 | 2 | | A36 |
| S2F | 1 | | D. | 78 | 6 | | A36 |
| S3F | 1 | | D. | 78 | 6 | | A36 |
| S4F | 1 | | D. | 78 | 6 | | A36 |
| S5F | 1 | | D. | 78 | 11½ | | A36 |
| | | | | | | | |
| | 10 | P9 | PL 10 x 1 7/16 | 26 | 6 | | A36 |
| | 10 | P12 | PL 11 x ½ | 3 | 0½ | | A36 |
| | 20 | P13 | PL 4 x 1 3/16 | 3 | 0½ | | A36 |
| | 10 | P14 | PL 18½ x ½ | 2 | 6 | | A36 |
| | | | | | | | |
| | 10 | P6 | PL 6 x ⅜ | 2 | 7 | | A7 OR A36 |
| | 10 | P7 | D. | 2 | 7 | | A7 OR A36 |
| | 19 | P8 | D. | 2 | 7 | | A7 OR A36 |

SHOP CONNECTIONS: WELD- E70-LOW-HYDROGEN ELECTRODES UNLESS NOTED
FIELD CONNECTIONS: D.
HOLES: 15/16" ø
PAINT: STATE OF MAINE SPEC'S.

STRINGERS SPAN F

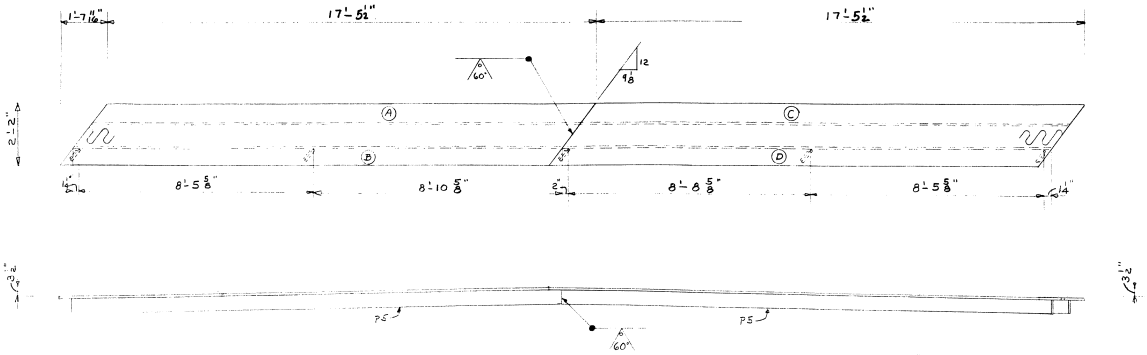
| PRINT ISSUE | | |
|---|---|---|
| 2 | S.H.C. | 6-25-64 |
| 2 | S.H.C. | 5-4-64 |
| 3 | CUST. | 5-4-64 |
| 5 | SHOP | 5-4-64 |
| 2 | F.A. | 4-22-64 |
| DRAWN | 4-14-64 | D.C. |
| REVISION | | |
| REVISION | | |
| REVISION | | |

Bancroft & Martin Inc.
Brewer, Maine

RTE. 16 BRIDGE OVER I-95
OLD TOWN MAINE

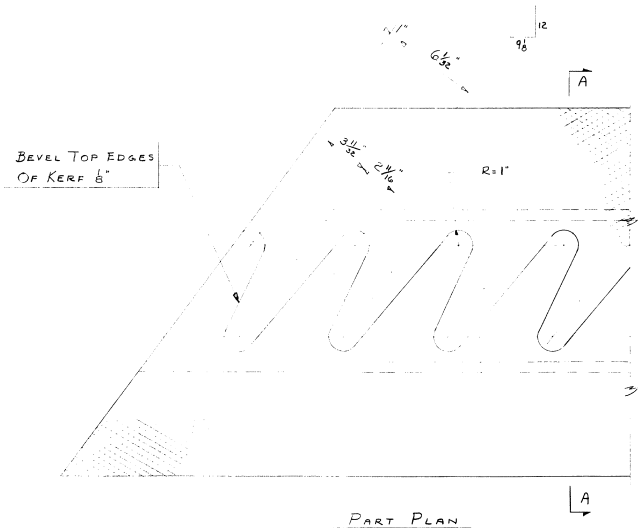
CUSTOMER REED & REED
DESIGNER STATE HIGHWAY COMM.
ORDER VERBAL
DWG. B64-59-58

0 1 2 3 4 5 INCHES

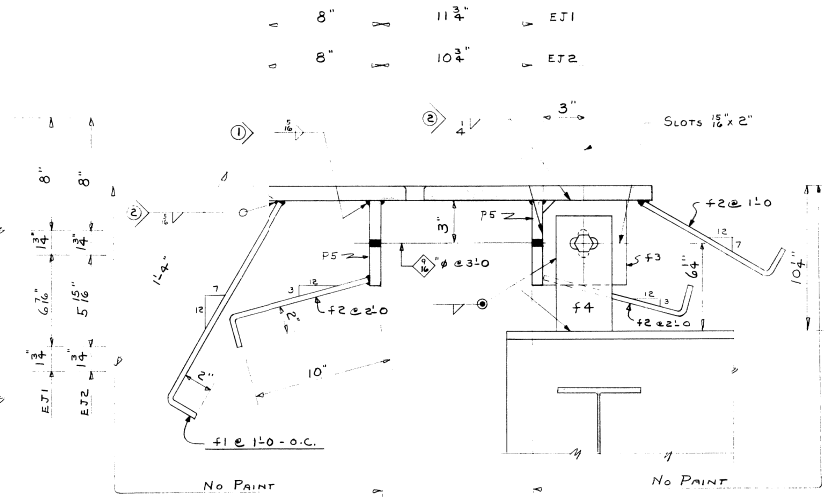



ONE EJ1 @ ABUT #1
ONE EJ2 @ ABUT #2

NOTE
WELDS MARKED ① USE SAW-1
WELDS MARKED ② USE E70 ELECTRODE & PREHEAT TO 200°F
OR USE E70 LOW HYDROGEN ELECTRODE




PART PLAN




SECTION - A-A

| SHIP MARK | NO. | MARK | BILL OF MATERIAL SHAPE | LENGTH | | WT. | REMARKS |
|---|---|---|---|---|---|---|---|
| EJ1A | 1 | | UNIT | | | | |
| EJ1B | 1 | | Do | | | | |
| EJ1C | 1 | | Do | | | | |
| EJ1D | 1 | | Do | | | | |
| EJ2A | 1 | | Do | | | | |
| EJ2B | 1 | | Do | | | | |
| EJ2C | 1 | | Do | | | | |
| EJ2D | 1 | | Do | | | | |
| | 2 | | PL 26 x 1 | 36 | 6 11/16 | | CHK'D PL |
| | 8 | P5 | PL 6 x 3/4 | 17 | 6 | | |
| | 64 | f1 | BAR 2 x 3/8 | 1 | 6 | | |
| | 136 | f2 | Do | 1 | 0 | | |
| | 10 | f3 | PL 6 x 3/8 | 0 | 6 | | |
| | 10 | f4 | BAR 4 x 3/8 | 0 | 8 1/4 | | |
| | 10 | SHOP | 7/8 H.S. BOLT | 0 | 2 1/4 | | |
| | 10 | Do | 7/8 H.S. WASHERS. | | | | |

DWG. B64-59-59

SHOP CONNECTIONS: WELD E70-LOW HYDROGEN
FIELD CONNECTIONS: WELD
HOLES: AS NOTED
PAINT: STATE OF MAINE SPEC'S.

APP'D AS NOTED 4/13/64

EXPANSION JOINTS (BRIDGE DECK)

| PRINT ISSUE | | |
|---|---|---|
| 2 | S.H.C. | 6-25-64 |
| 2 | S.H.C. | 5-4-64 |
| 3 | CUST. | 5-4-64 |
| 5 | SHOP | 4-14-64 |
| 2 | F.A. | 4-9-64 |
| DRAWN | 4-8-64 | DC. |
| REVISION | | |
| REVISION | | |
| REVISION | | |

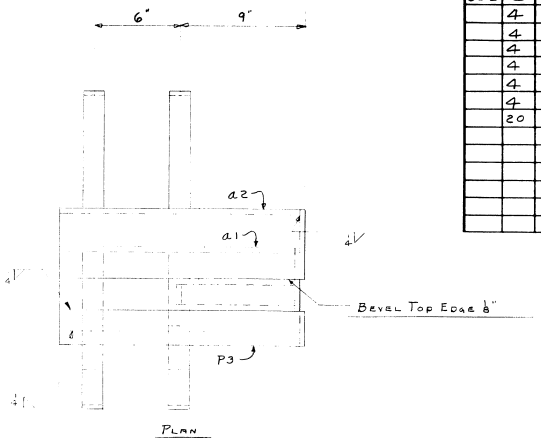
Bancroft & Martin Inc.
Brewer, Maine

RTE. 16 BRIDGE OVER I-95
OLD TOWN MAINE

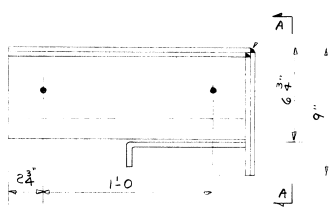
CUSTOMER REED & REED
DESIGNER STATE HIGHWAY COMM.
ORDER VERBAL
DWG. B64-59-59

0 1 2 3 4 5 INCHES

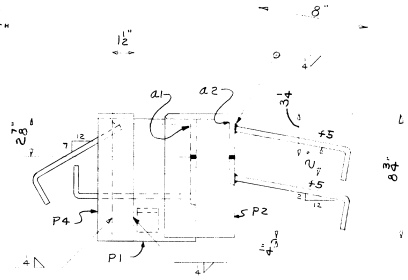
| SHIP MARK | NO. | MARK | SHAPE | LENGTH | | WT. | REMARKS |
|---|---|---|---|---|---|---|---|
| | | | **BILL OF MATERIAL** | | | | DWG. B64-59-510 |
| SD1 | 2 | | Curb Dam | | | | |
| SD2 | 2 | | Do | | | | |
| | 4 | a1 | 6x6x3/4 | 1 | 4 3/4 | | |
| | 4 | a2 | 5x5x3/4 | 1 | 5 1/8 | | |
| | 4 | P1 | Pl 6x3/8 | 0 | 8 1/4 | | |
| | 4 | P2 | Pl 5x3/8 | 0 | 8 3/8 | | |
| | 4 | P3 | Bar 2 1/2x3/8 | 1 | 5 1/8 | | |
| | 4 | P4 | Do | 0 | 8 3/8 | | |
| | 20 | f5 | Bar 1/2x3/8 | 0 | 10 | | |




Plan




Elevation




Section A-A

2-SD1
2-SD2- Opp. Hand.

Note:
For Welds Use E70 Electrode & Preheat To 200°F
Or Use E70 Low Hydrogen Electrode

SHOP CONNECTIONS: Weld - See Note
FIELD CONNECTIONS:
HOLES: 9/16" ϕ
PAINT: State Of Main Spec's.

App'd As Noted 4/13/64

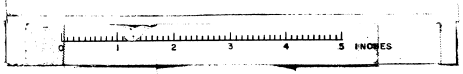
Curb Dams

| PRINT ISSUE | | |
|---|---|---|
| 2 | S.H.C. | 6-25-64 |
| 2 | S.H.C. | 5-4-64 |
| 3 | Cust. | 5-4-64 |
| 5 | Shop | 4-14-64 |
| 2 | F.A | 4-9-64 |
| DRAWN | 4-8-64 | D.C. |
| REVISION | | |
| REVISION | | |
| REVISION | | |

Bancroft & Martin Rolling Mills Company
Brewer, Maine

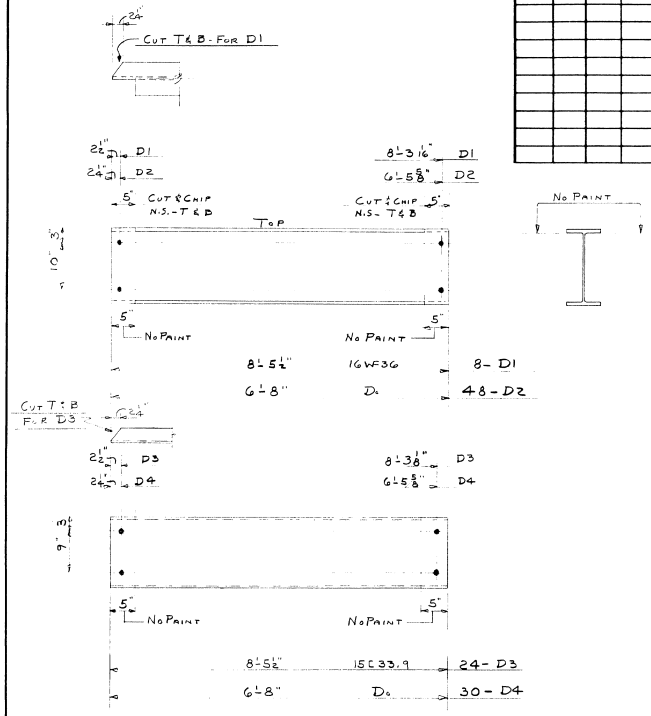
Rte 16 Bridge Over I-95
Old Town Maine

CUSTOMER Reed & Reed
DESIGNER State Highway Comm.
ORDER Verbal
DWG. B64-59-510



| SHIP MARK | NO. | MARK | SHAPE | LENGTH | | WT. | REMARKS |
|---|---|---|---|---|---|---|---|
| D1 | 8 | | 16WF36 | 8 | 5½ | | |
| D2 | 48 | | Do | 6 | 8 | | |
| D3 | 24 | | 15[33.9 | 8 | 5½ | | |
| D4 | 30 | | Do | 6 | 8 | | |

BILL OF MATERIAL — DWG. B64-59-S11







SHOP CONNECTIONS:
FIELD CONNECTIONS:
HOLES: 15/16" ϕ
PAINT: STATE OF MAINE SPEC'S.

DIAPHRAGMS

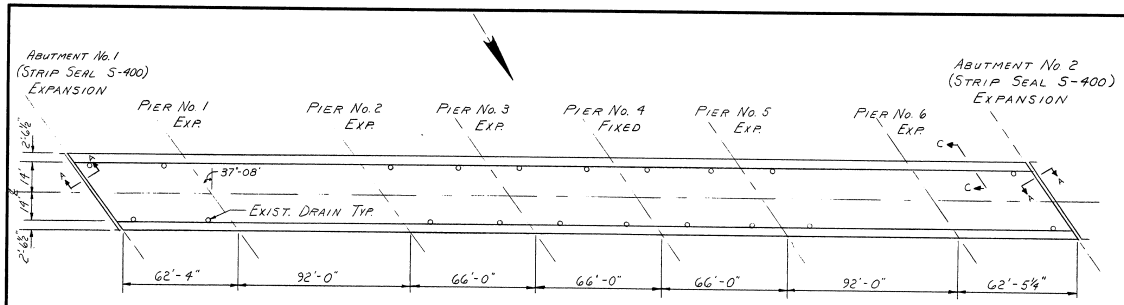
| PRINT ISSUE | | |
|---|---|---|
| 2 | S.H.C. | 6-25-64 |
| 2 | S.H.C. | 5-4-64 |
| 3 | CUST | 5-4-64 |
| 5 | SHOP | 5-4-64 |
| 2 | F.A. | 4-22-64 |
| DRAWN | 4-15-64 | D.C. |
| REVISION | | |
| REVISION | | |
| REVISION | | |

Bancroft & Martin Rolling Mills Company
Brewer, Maine

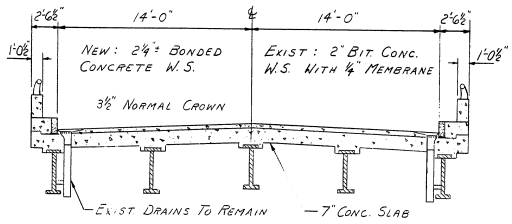
RTE 16 BRIDGE OVER I-95
OLD TOWN MAINE

CUSTOMER REED & REED
DESIGNER STATE HIGHWAY COMM.
ORDER VERBAL DWG. B64-59-S11

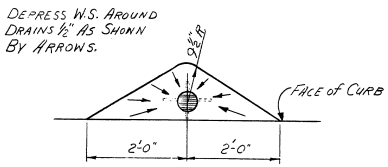
| F.A.M.S. REG. NO. | STATE | PROJECT NUMBER | SHEET NO | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | | | |



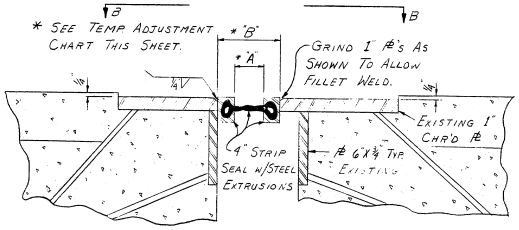

PLAN




TRANSVERSE SECTION

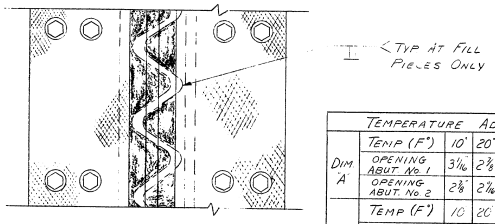



TYPICAL DRAIN SLOPE DETAIL




SECTION A~A

CUT TIPS OF FINGERS AS SHOWN IN SHADED PORTION. USE PIECES TO FILL GAP AFTER EXTRUSIONS ARE IN PLACE. SIDES MUST BE CUT PARALLEL.




VIEW B~B

## SCOPE OF WORK

REMOVE THE FOLLOWING ITEMS: EXISTING 2" BITUMINOUS CONCRETE W.S. AND ¼" MEMBRANE WATERPROOFING, EXISTING END POSTS AND PORTIONS OF PARAPETS NECESSARY TO INSTALL NEW END POSTS, AND PORTION OF STEEL FINGERS AT ABUTMENTS No. 1 & 2.

INSTALL THE FOLLOWING ITEMS: NEW STRIP SEALS (S-400) WITH TYPE "A" STEEL EXTRUSIONS AT ABUTMENTS No. 1 & 2, AND 4 NEW END POSTS.

ALSO PLACE A NEW 2¼"± BONDED CONCRETE WEARING SURFACE AND PAINT THE STRUCTURAL STEEL.

## MATERIALS

JOINTS: 140 L.F.± ~ TYPE "A" STEEL EXTRUSIONS FOR STRIP SEALS, 2 ~ 4" STRIP SEALS (S-400) APPROXIMATELY 35' LONG.

ENDPOSTS: SEE SHEET No. 2

## EST. CONCRETE VOLUME

$$\frac{(507'\pm)(28')(2\tfrac{1}{4}")}{(27)\ (12)} = 98.5 \text{ C.Y.}$$

SAY 99 C.Y.

| TEMPERATURE ADJUSTMENT CHART | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| DIM. "A" | TEMP (F°) | 10° | 20° | 30° | 40° | 50° | 60° | 70° | 80° | 90° |
| | OPENING ABUT. No. 1 | 3 1/16" | 2 7/8" | 2 5/8" | 2 3/8" | 2 1/8" | 1 7/8" | 1 5/8" | 1 3/8" | 1 3/16" |
| | OPENING ABUT. No. 2 | 2 7/8" | 2 7/16" | 2 1/2" | 2 5/16" | 2 3/16" | 2" | 1 13/16" | 1 5/8" | 1 7/16" |
| DIM. "B" | TEMP (F°) | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 |
| | OPENING ABUT. No. 1 | 6 1/16" | 5 7/8" | 5 5/8" | 5 3/8" | 5 1/8" | 4 7/8" | 4 5/8" | 4 3/8" | 4 3/16" |
| | OPENING ABUT. No. 2 | 5 7/8" | 5 11/16" | 5 1/2" | 5 5/16" | 5 3/16" | 5" | 4 13/16" | 4 5/16" | 4 7/16" |

100 - 403

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

BRIDGE NO 6062
ROUTE No. 16
OVER
INTERSTATE 95
IN THE CITY OF
OLD TOWN
PENOBSCOT COUNTY
CONC. W.S., STRIP SEALS

SHEET 1 OF 2 AUGUSTA, MAINE FEB 1987

| PROJECT DESIGN ENGINEER | BY | DATE |
|---|---|---|
| PLANS DESIGN - DETAILED | | |
| CHECKED | | |
| REVISIONS | | |
| FIELD CHANGES | | |

BRUNING 44 132 457101