

# FALMOUTH

## GENERAL NOTES

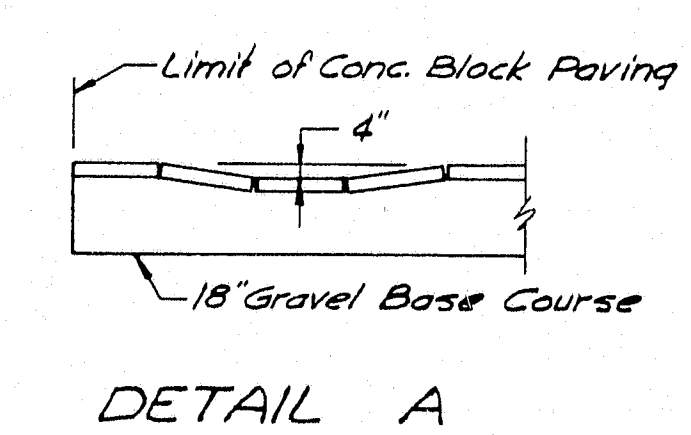
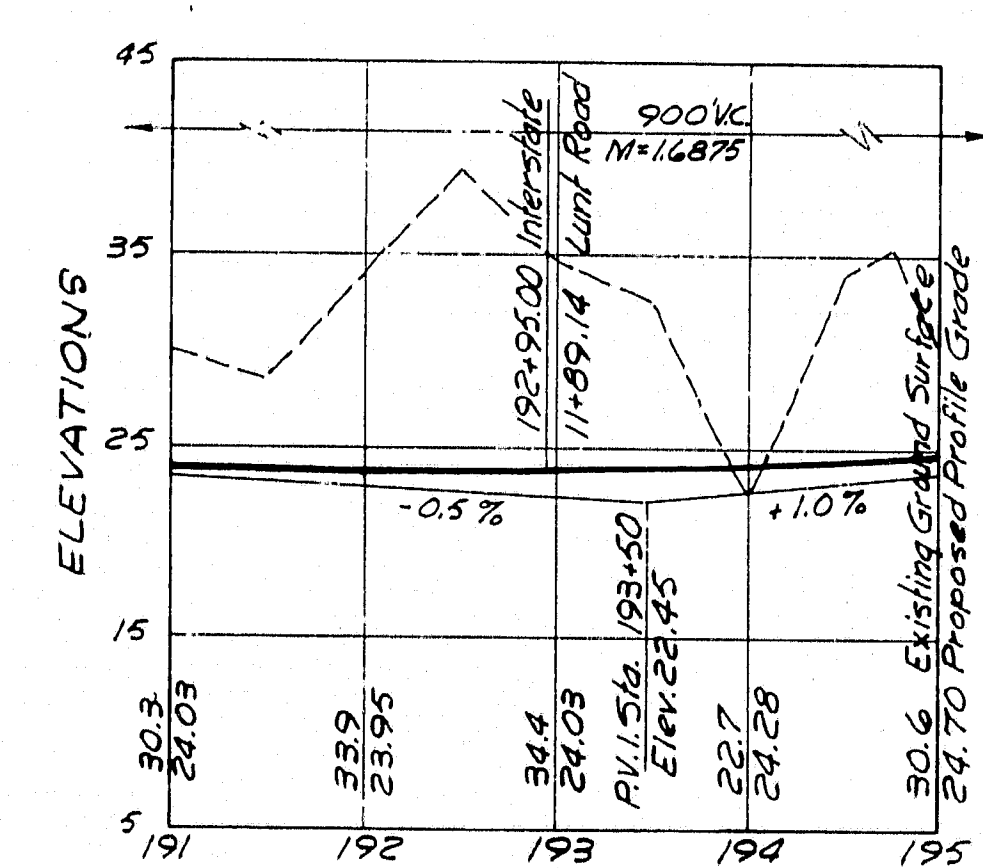
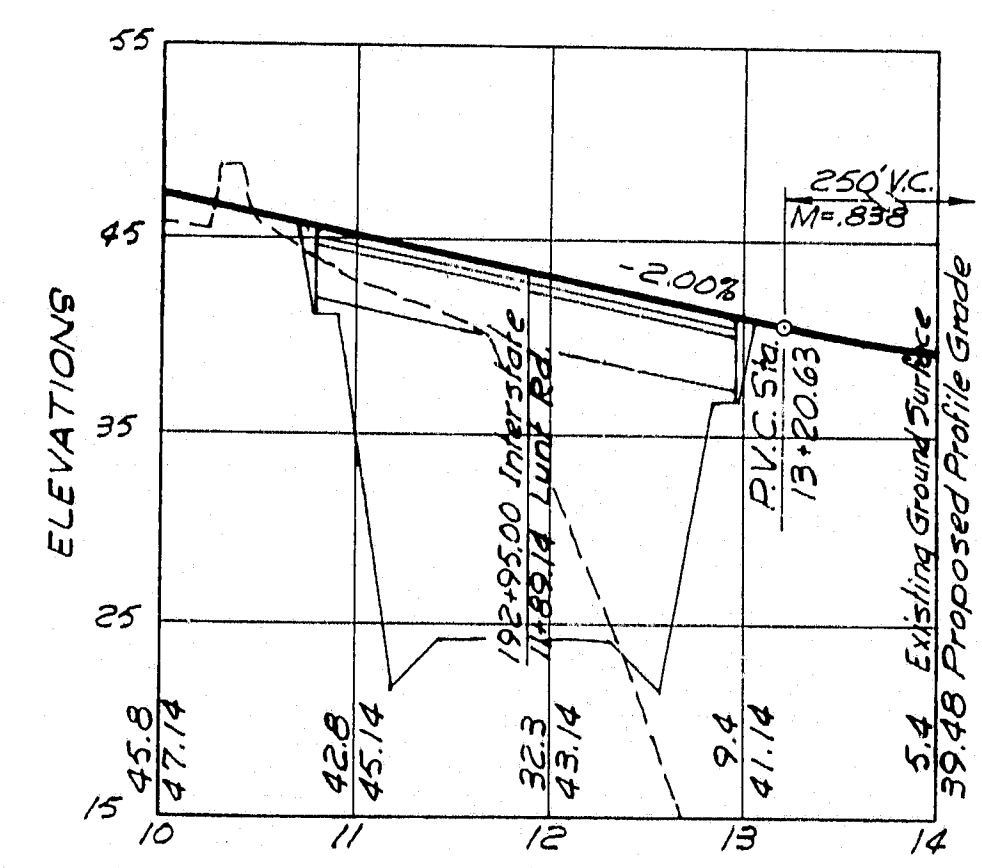
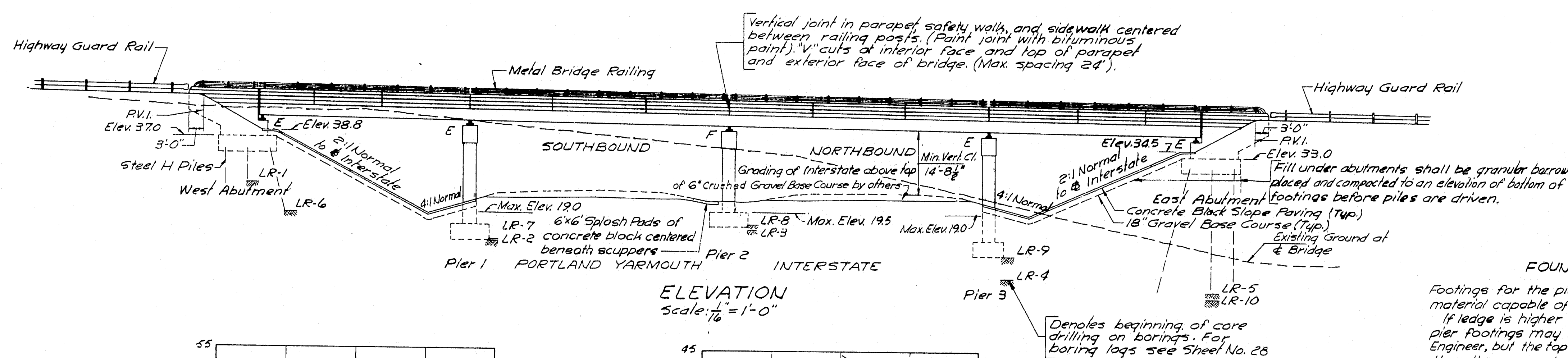
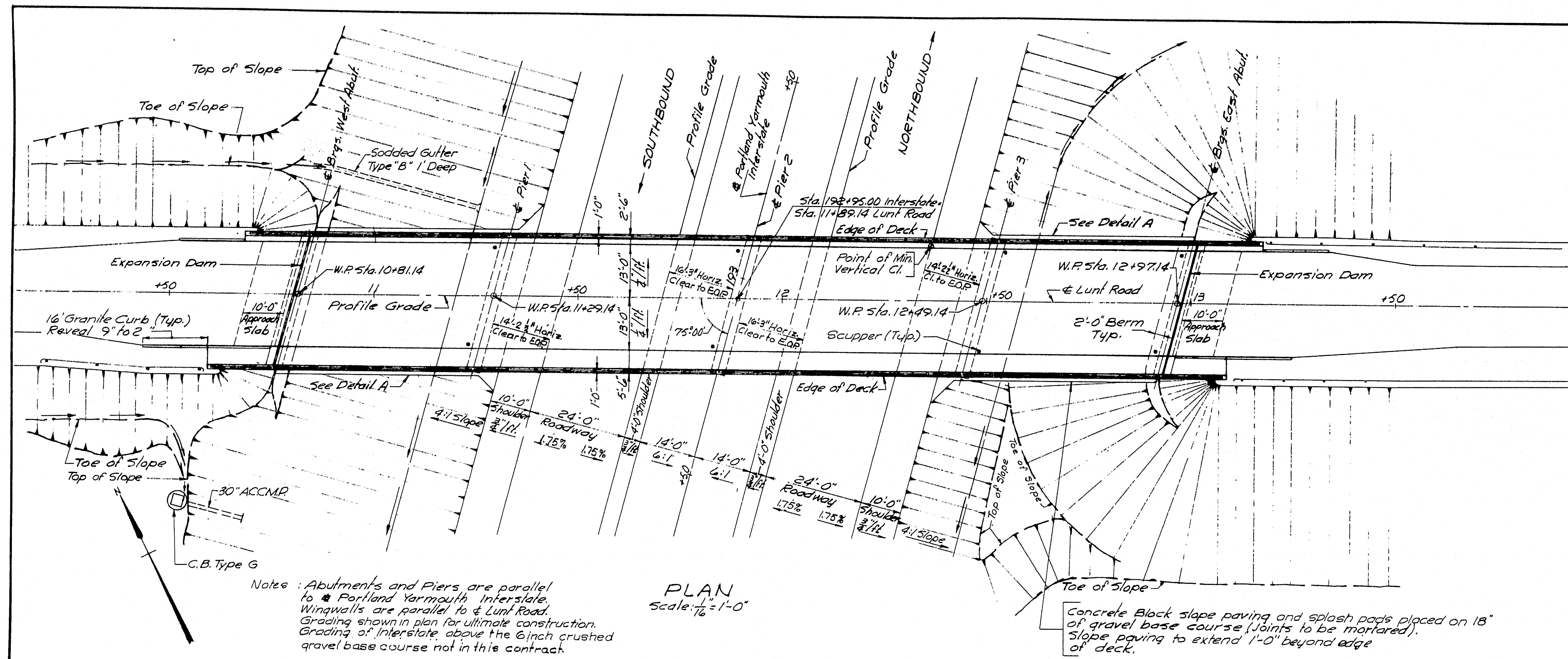
- SPECIFICATIONS**  
A.A.S.H.O., 1953  
Maine State Highway Commission, Standard Specifications and Special Provisions.
- LIVE LOAD**  
H 20-44
- ALLOWABLE STRESSES**  
Structural Steel - 18,000 p.s.i.  
Reinforcing Steel - 18,000 p.s.i.  
Concrete - 1,200 p.s.i.
- FOUNDATIONS**  
Abutments - 35 T. Steel H Piles.  
Piers - See "Foundation Notes".
- CONCRETE**  
Class "A" - Footings, Piers, Abutments, Approach Slabs and Deck.  
Class "B" - Concrete Fill Below Pier Footings.
- ELEVATIONS**  
Elevations are based on Elev. 0.00 of Mean Sea Level.

ESTIMATED QUANTITIES			
ITEM	DESCRIPTION	UNIT	QUANTITY
204-12	Structural Earth Excavation, Abutments and Retaining Walls	C.Y.	180
204-14	Structural Earth Excavation, Piers	C.Y.	485
204-15	Structural Rock Excavation, Piers	C.Y.	10
302-7	Gravel Base Course - In Place Measurement	C.Y.	245
307-8	Reinforced Portland Cement Concrete Approach Slabs	S.Y.	58
404-28	Bituminous Concrete Surface Course Type A	Ton	83
701-33	Portland Cement Concrete, Abutments and Retaining Walls	C.Y.	200
701-37	Portland Cement Concrete, Substructure Columns, Column Bases, Bents, Collision Walls, Girders, Struts, etc.	C.Y.	235
701-40	Portland Cement Concrete, Roadway and Sidewalk Slabs on Steel Bridges	C.Y.	255
701-47	Portland Cement	Bbl.	1,131
701-50	Wrought Iron Scuppers	Each	8
701-53	Portland Cement Concrete Fill (Class B)	C.Y.	25
702-103	Structural Steel Fabricated and Delivered	Lbs.	166,000
702-104	Structural Steel Erection	Lbs.	166,000
705-13	Reinforcing Steel, Delivered	Lbs.	107,000
705-14	Reinforcing Steel, Placing	Lbs.	107,000
705-15	Steel Wire Mesh, Delivered and Placed	Lbs.	23
708-16	Steel H-Beam Piles 42 Lbs. per Ft.	Lin. Ft.	1,045
709-6	Membrane Waterproofing	S.Y.	700
710-6	Waterproofing Joints	Lin. Ft.	28
804-6	French Drains	C.Y.	43
806-7	Aluminum Rail, Delivered and Erected	Lin. Ft.	500
904-10	Reinforced Concrete Sidewalk	S.Y.	13
907-12	Slope Paving for Bridge	S.Y.	440

\* Includes 1/4 L.F. Allowance for Pile Caps and 25 L.F. Allowance for Pile Splices

## FOUNDATION NOTES

Footings for the piers shall be placed on ledge or on material capable of supporting 3 Tons per square foot. If ledge is higher than indicated by the borings, the pier footings may be raised upon approval by the Engineer, but the top of the footing is not to be higher than the max. elevation shown on this plan. If material deemed unsuitable by the engineer is found (by probing and test pits during construction) below the design location of a pier footing, it shall be removed and replaced by Class "B" concrete fill.



AS BUILT - NO REVISION

STATE HIGHWAY COMMISSION  
AUGUSTA, MAINE

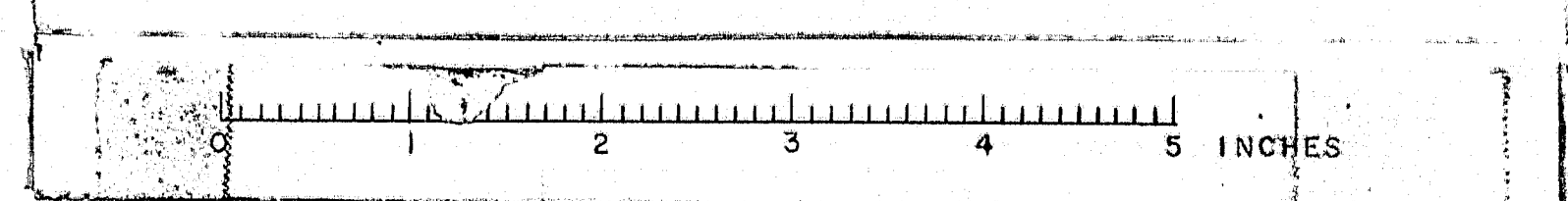
PORTLAND-YARMOUTH INTERSTATE

LUNT ROAD OVER INTERSTATE

GENERAL PLAN AND ELEVATION

SHEET NO. 20 OF 61 SCALE: AS NOTED

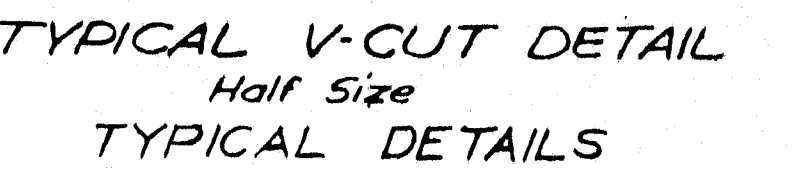
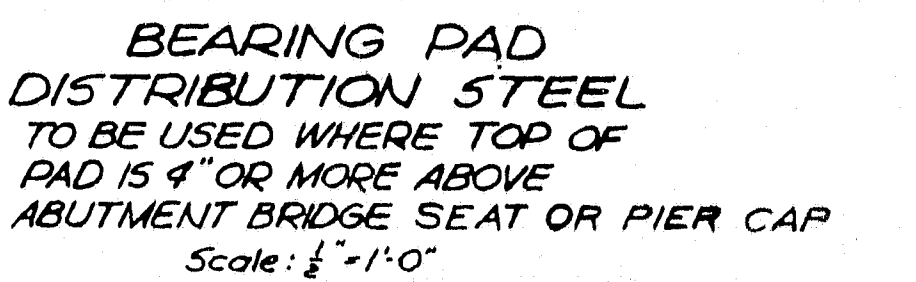
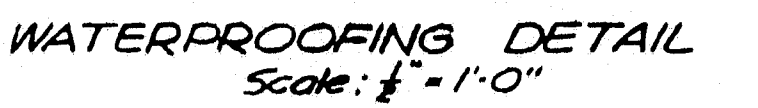
M-1309 FAY, SPOFFORD & THORNDIKE, INC. 9m-14  
ENGINEERS BOSTON, MASS. 493





**FALMOUTH**

2 Ply bituminous saturated cotton fabric with alternate layers of hot asphalt.—



1. Reinforcing steel to have 2" min. concrete cover unless otherwise noted.
2. All bar splices to lap 20 diameters (12" min.) unless otherwise noted.
3. All bar embedments to be 35 diameters unless otherwise noted.
4. Bearing pads to be of sufficient height to permit bush hammering to the proper elevation.
5. All bearing pads to be placed integrally with the piers and abutments.
6. All exposed corners except on bearing pads to have a 4" chamfer. Bearing pads to have faired edges.
7. Reinforcing steel in or beneath bearing pads to be positioned to clear swedge anchor bolts. For swedge anchor bolts see bearing types on Sh. No.

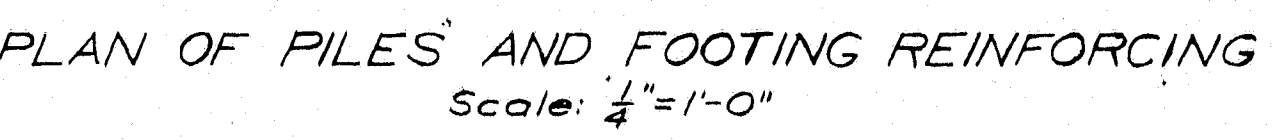
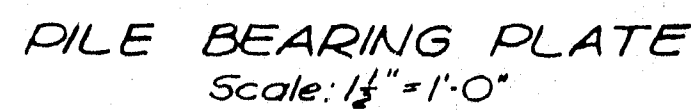
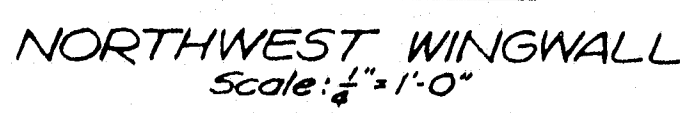
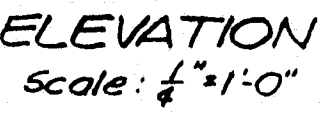
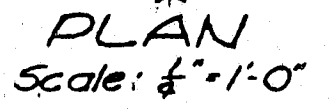
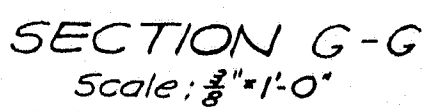
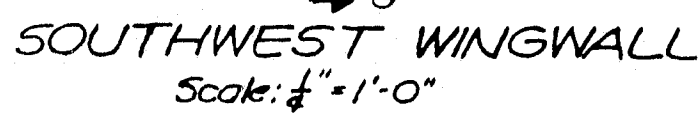
Note: For Sections A-A Thru F-F See Sheet No. 22

### WEST ABUTMENT

11/15/60 ENGINEERS BOSTON, MASS

\_\_\_\_\_

SECTION H-H  
Scale:  $\frac{3}{8}" = 1'-0"$

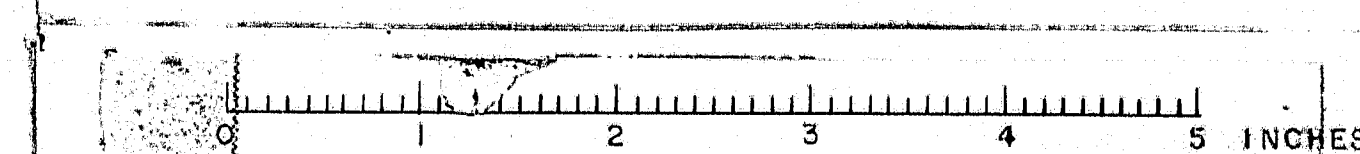


**Boston Blue Print-300-4-1**



**FALMOUTH**

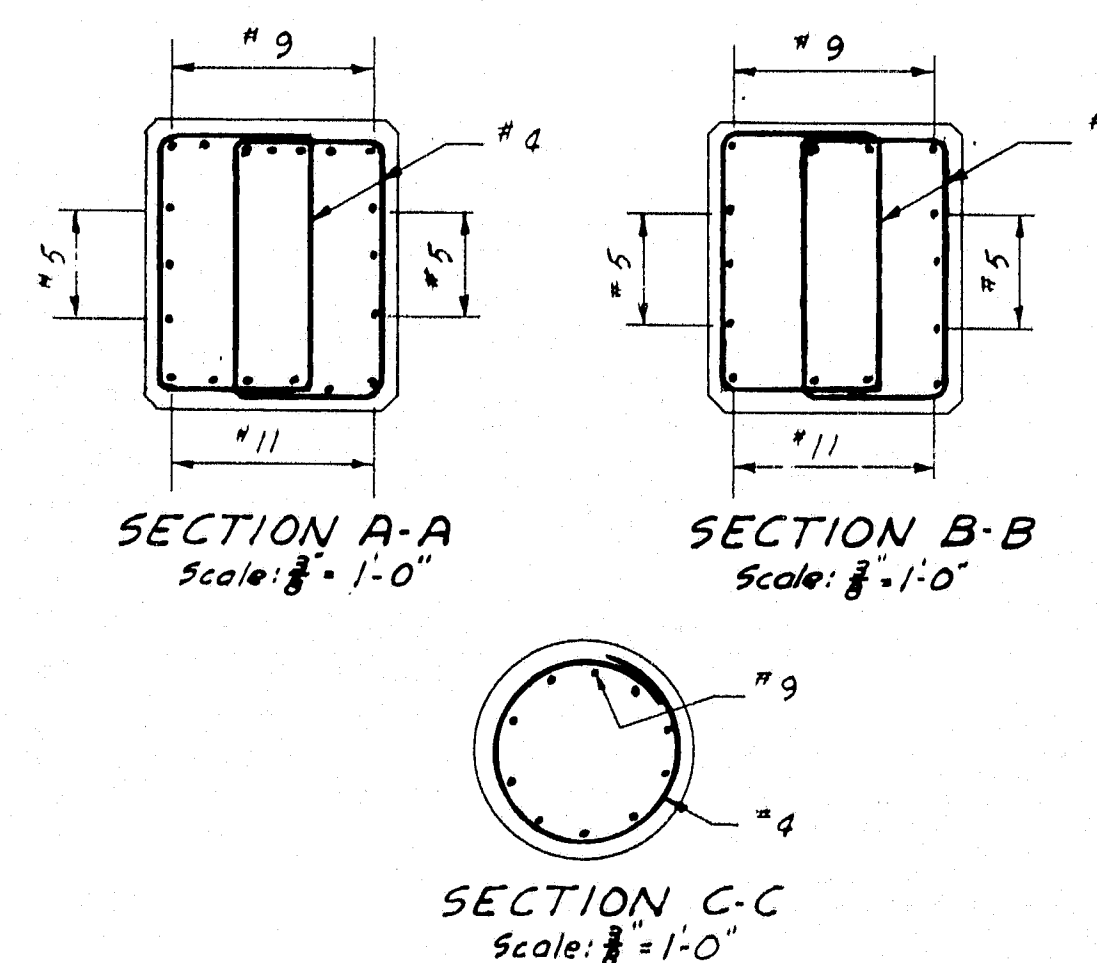
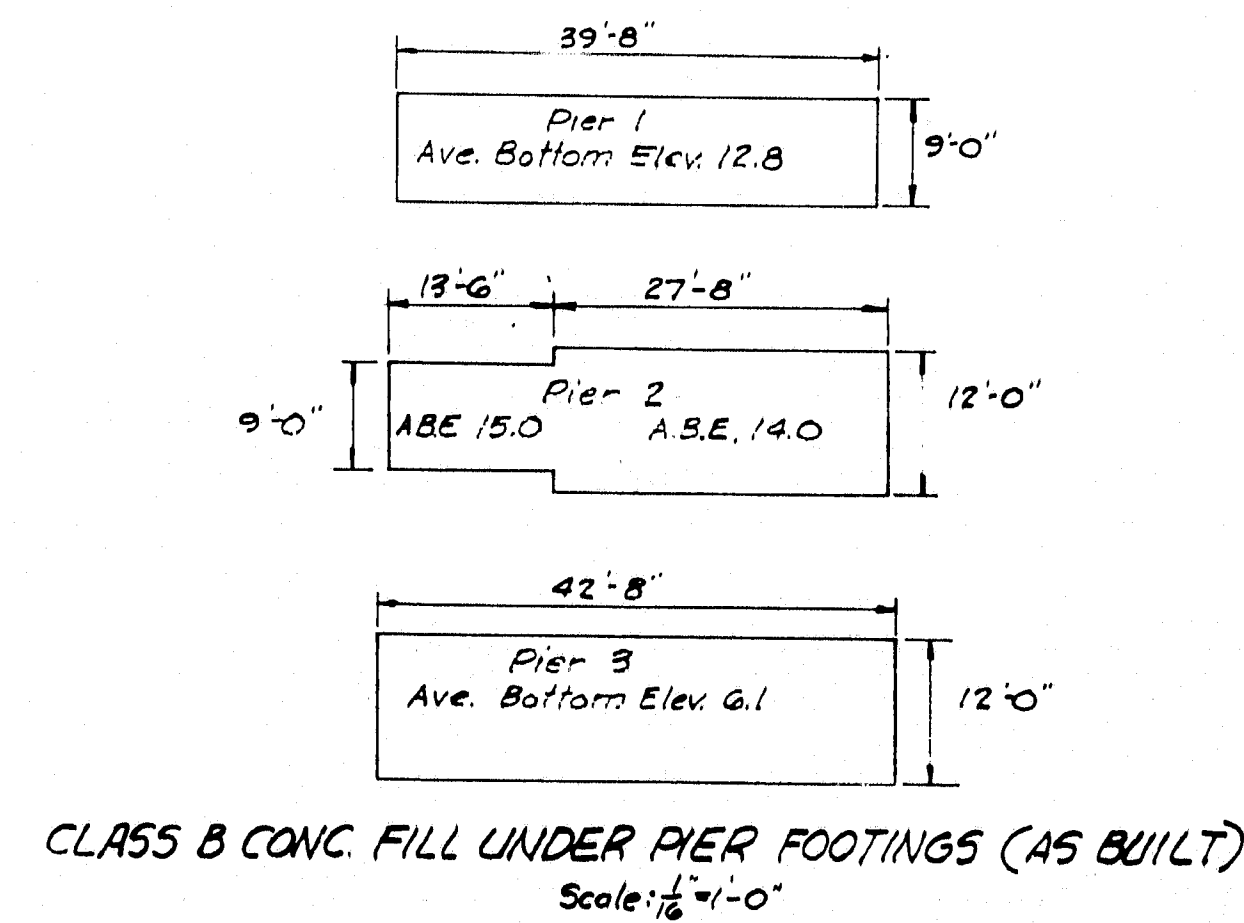
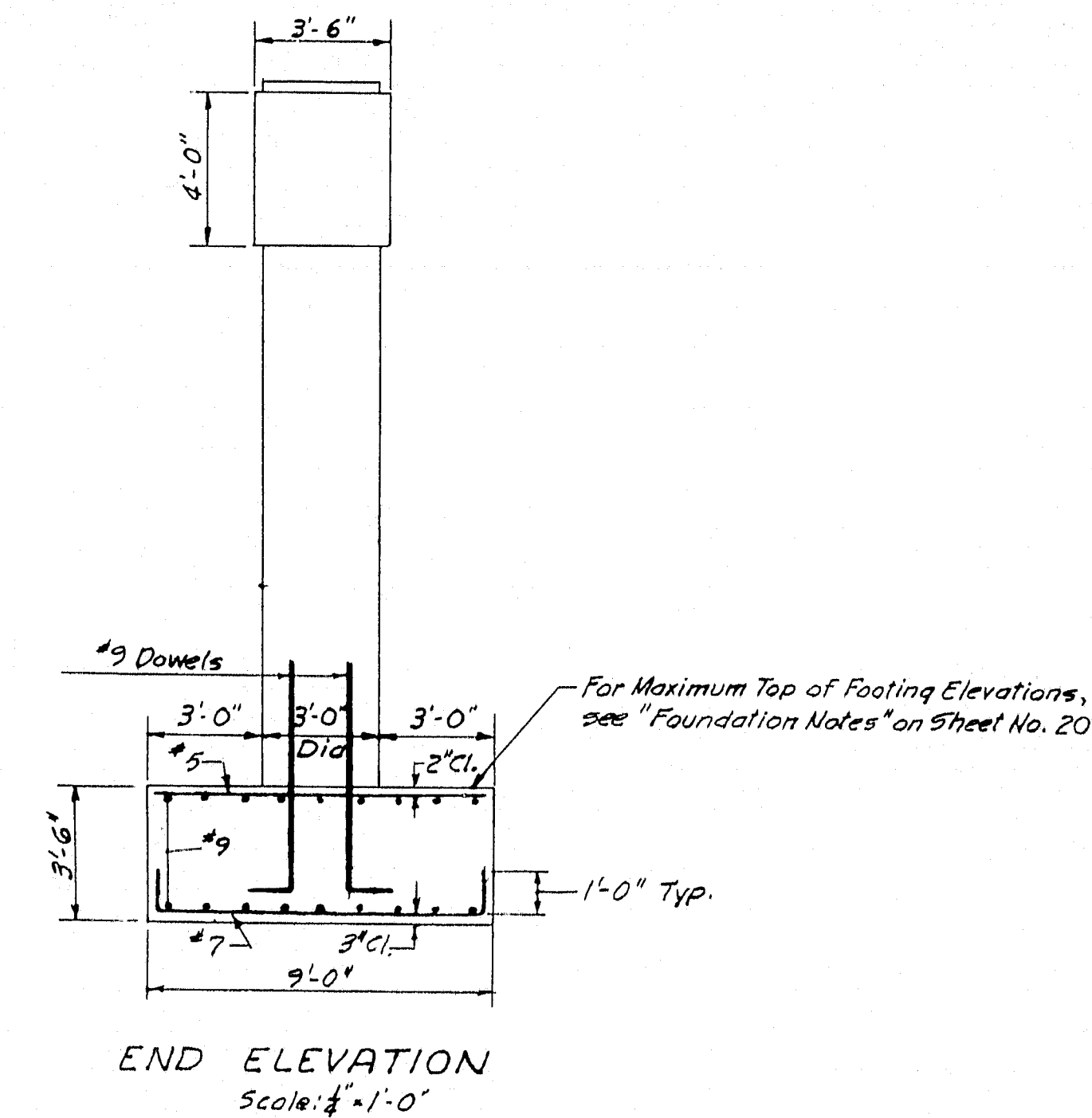
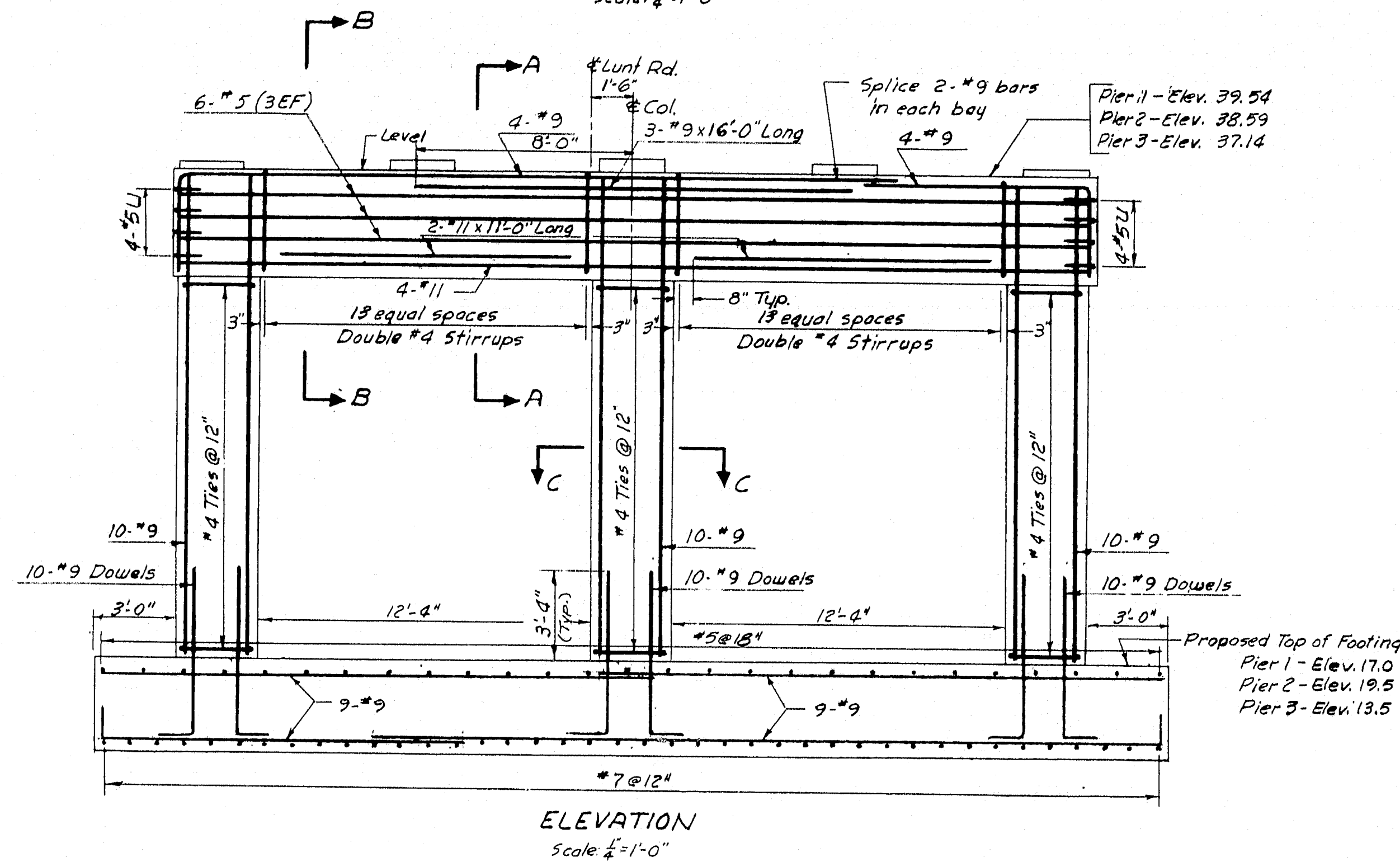
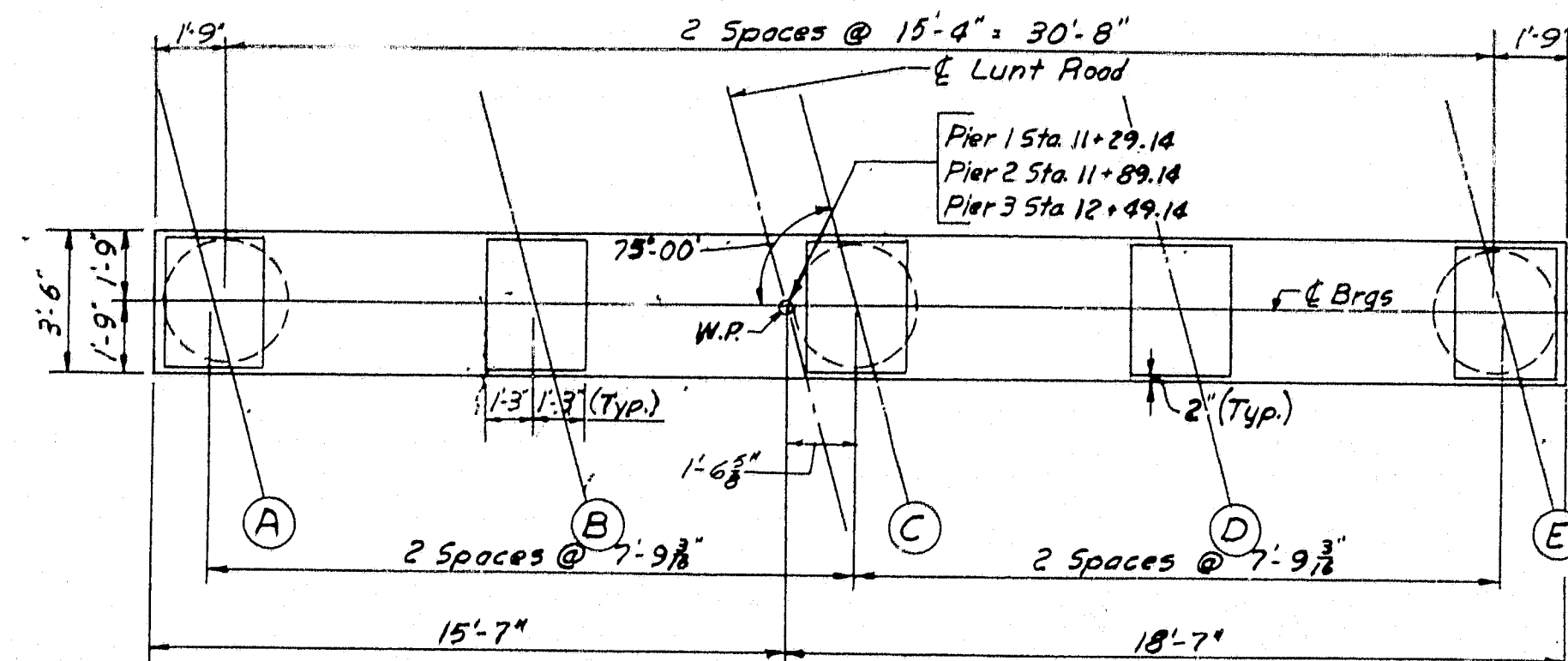
Boston Blue Ballet 2004





# FALMOUTH

BERRING PAD ELEVATIONS			
STRINGER	PIER 1	PIER 2	PIER 3
A	39.71	38.76	37.31
B	39.89	38.94	37.49
C	40.02	39.07	37.62
D	39.91	38.96	37.51
E	39.79	38.84	37.39



Note:  
For Typical Details and Construction  
Notes See Sheet No. 21.

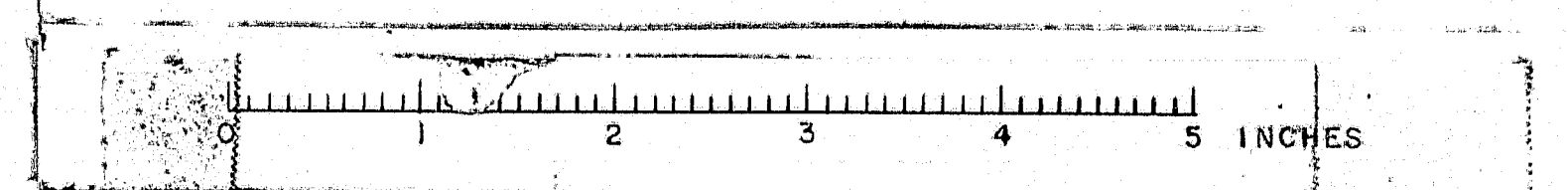
REVISED AS BUILT

STATE HIGHWAY COMMISSION AUGUSTA, MAINE
PORTLAND-YARMOUTH INTERSTATE
LUNT ROAD OVER INTERSTATE
PIER DETAILS
SHEET NO. 23 OF 61
SCALE: AS NOTED

M-1312  
FAY, SPOFFORD & THORNDIKE, INC.  
ENGINEERS  
BOSTON, MASS.  
Qm-14  
496

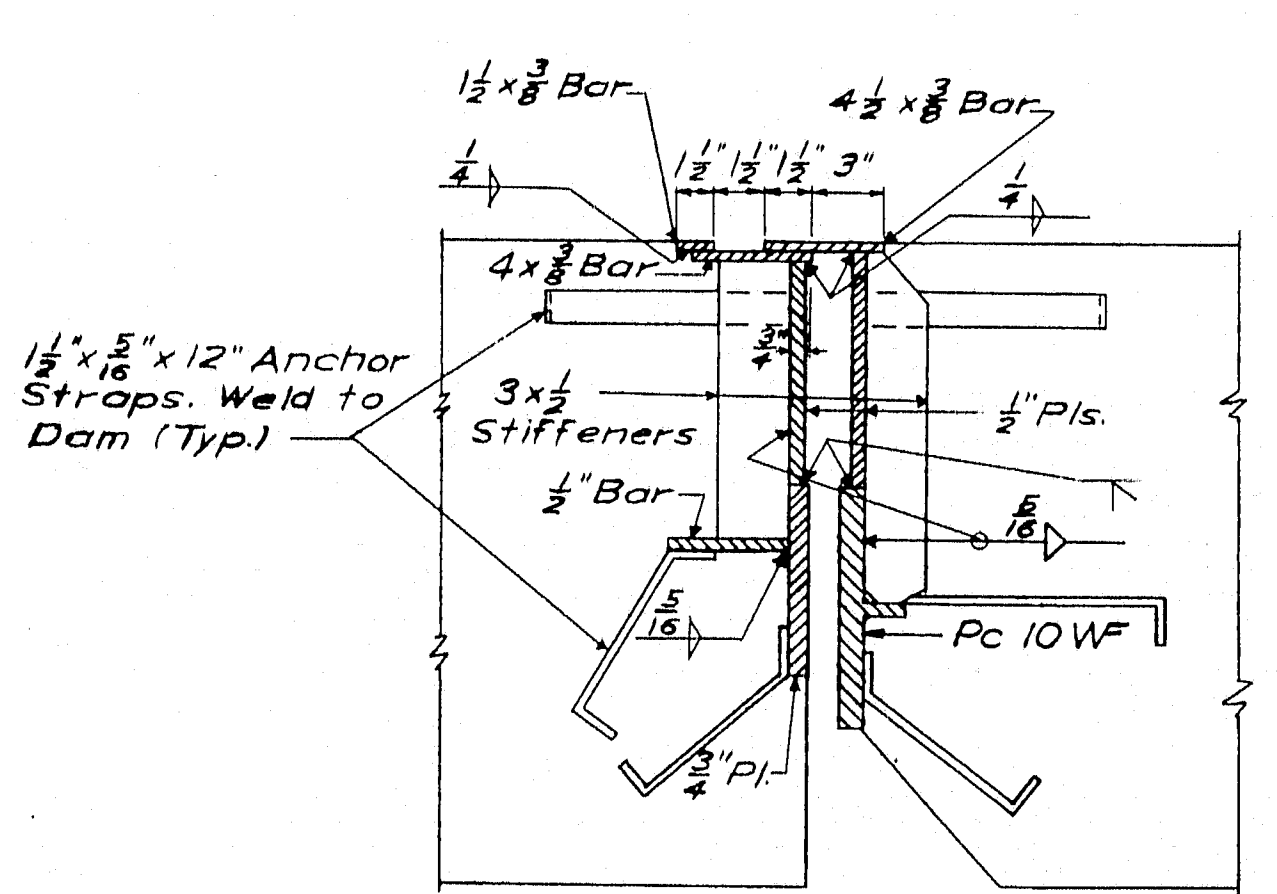
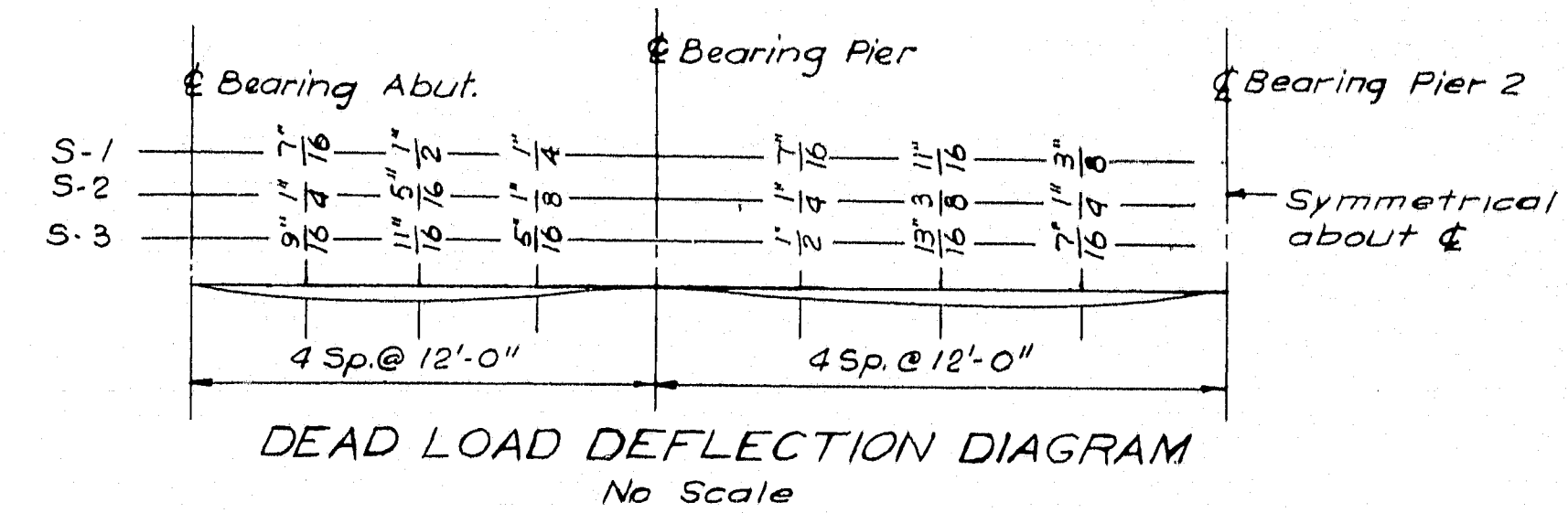
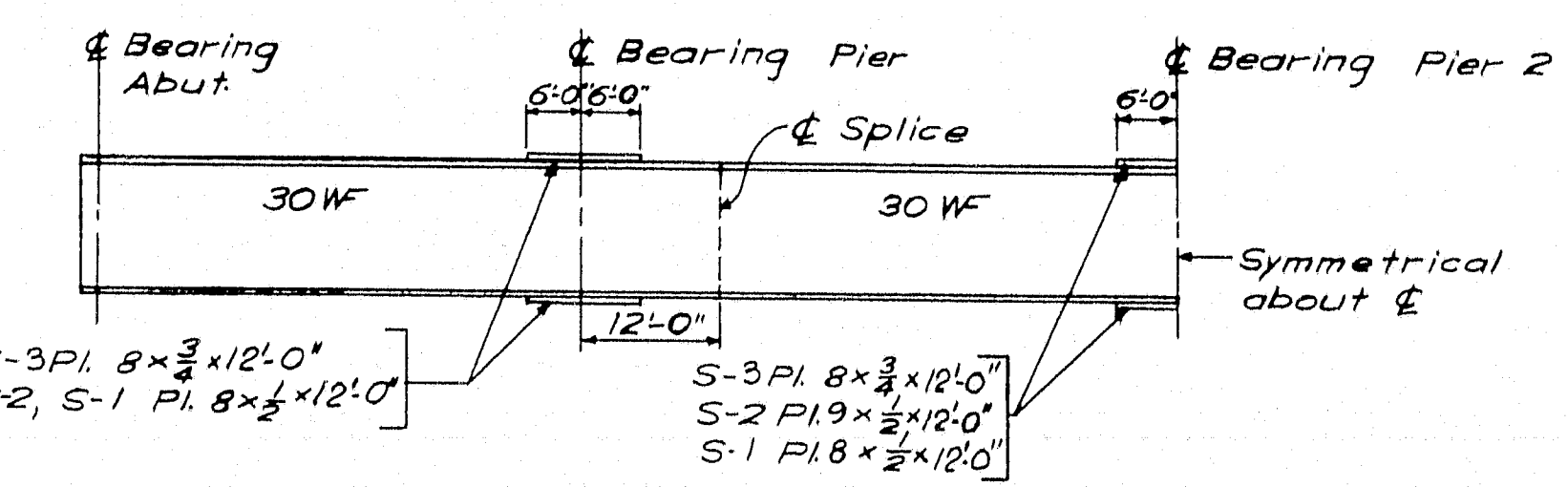
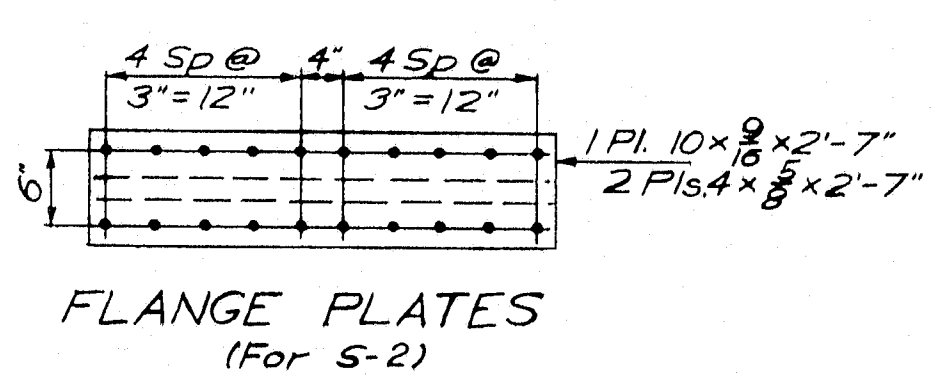
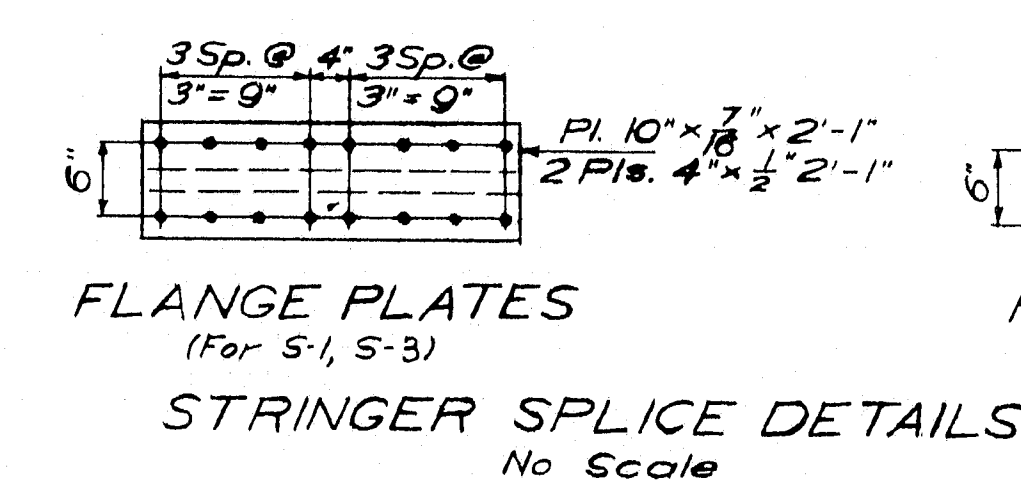
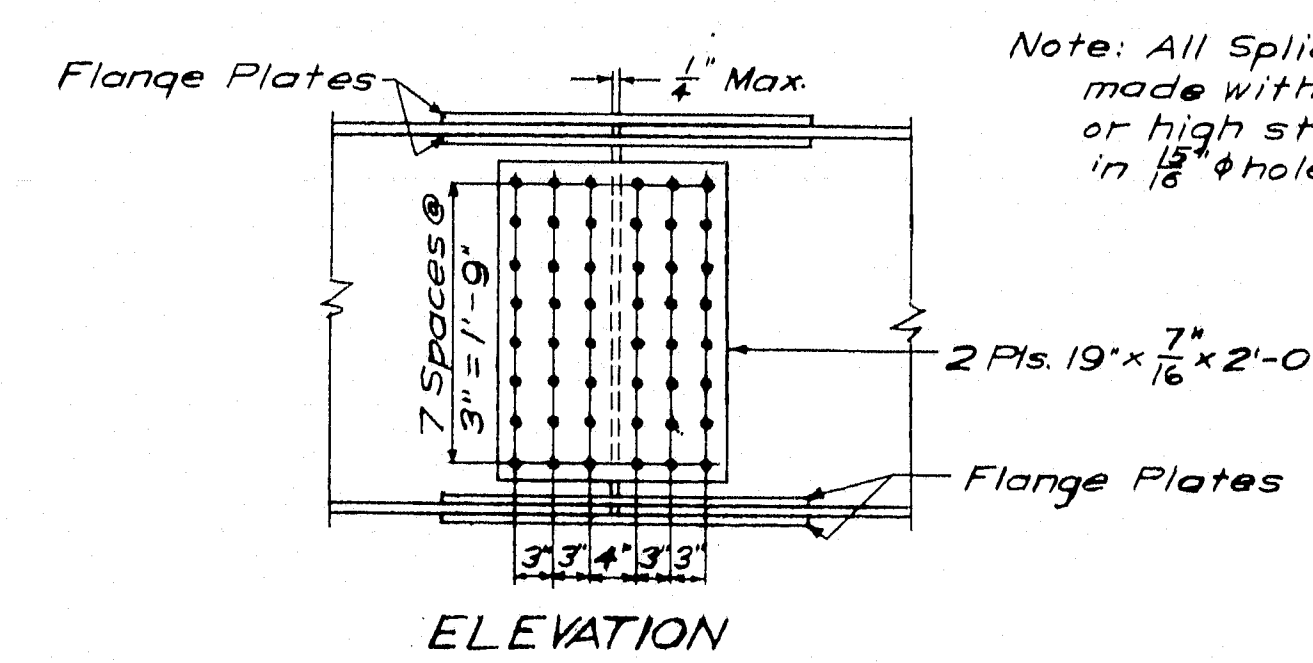
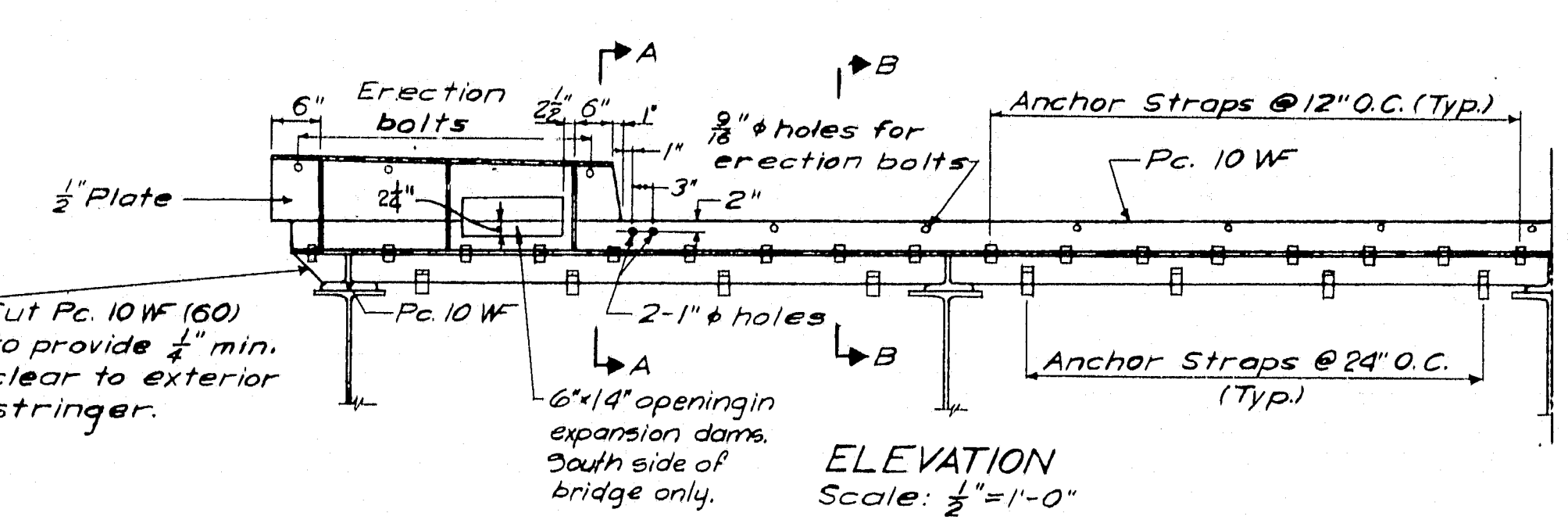
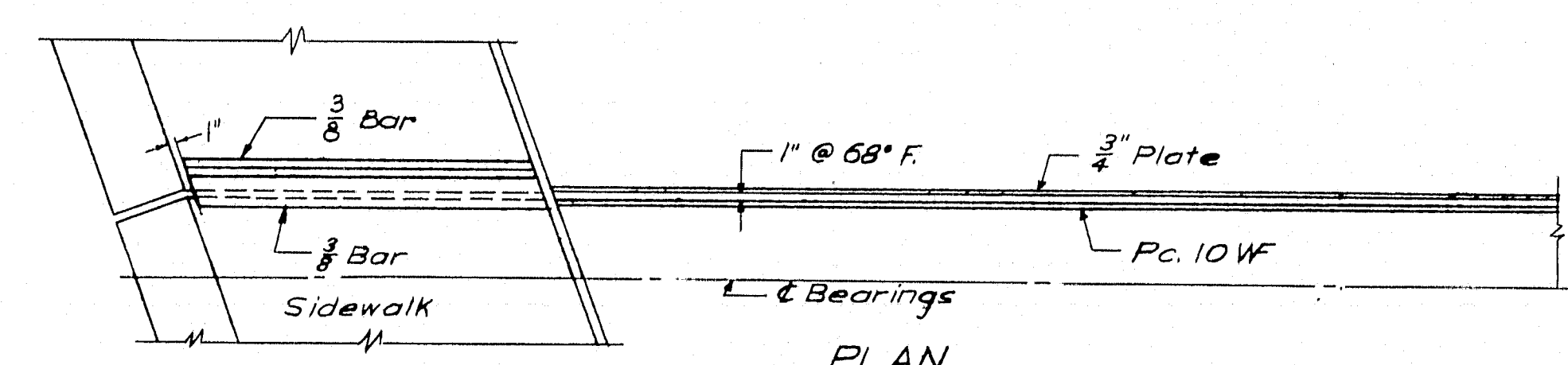
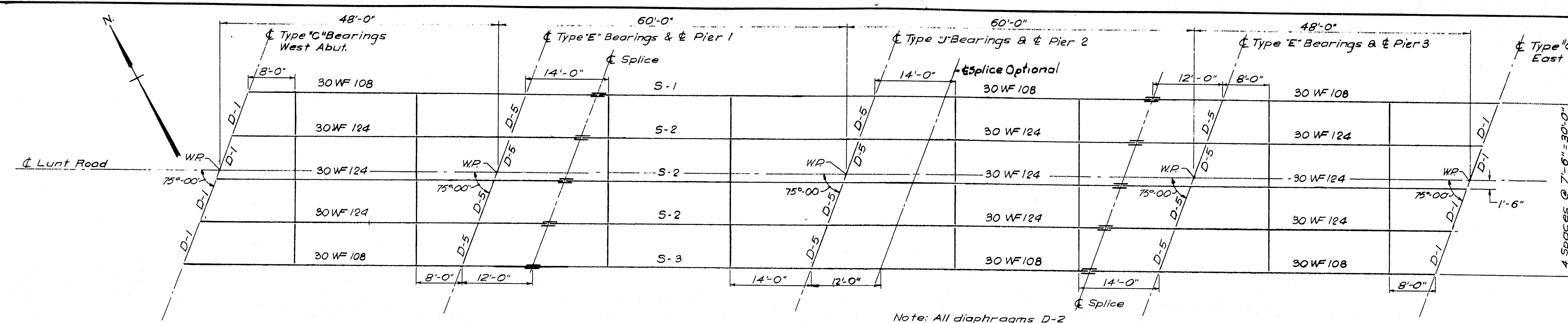
DES. RPK  
DR. DAM  
TR. —  
CHK. RW-RPK  
APPD. H.J.W.

Boston Blue Print 300-4-51

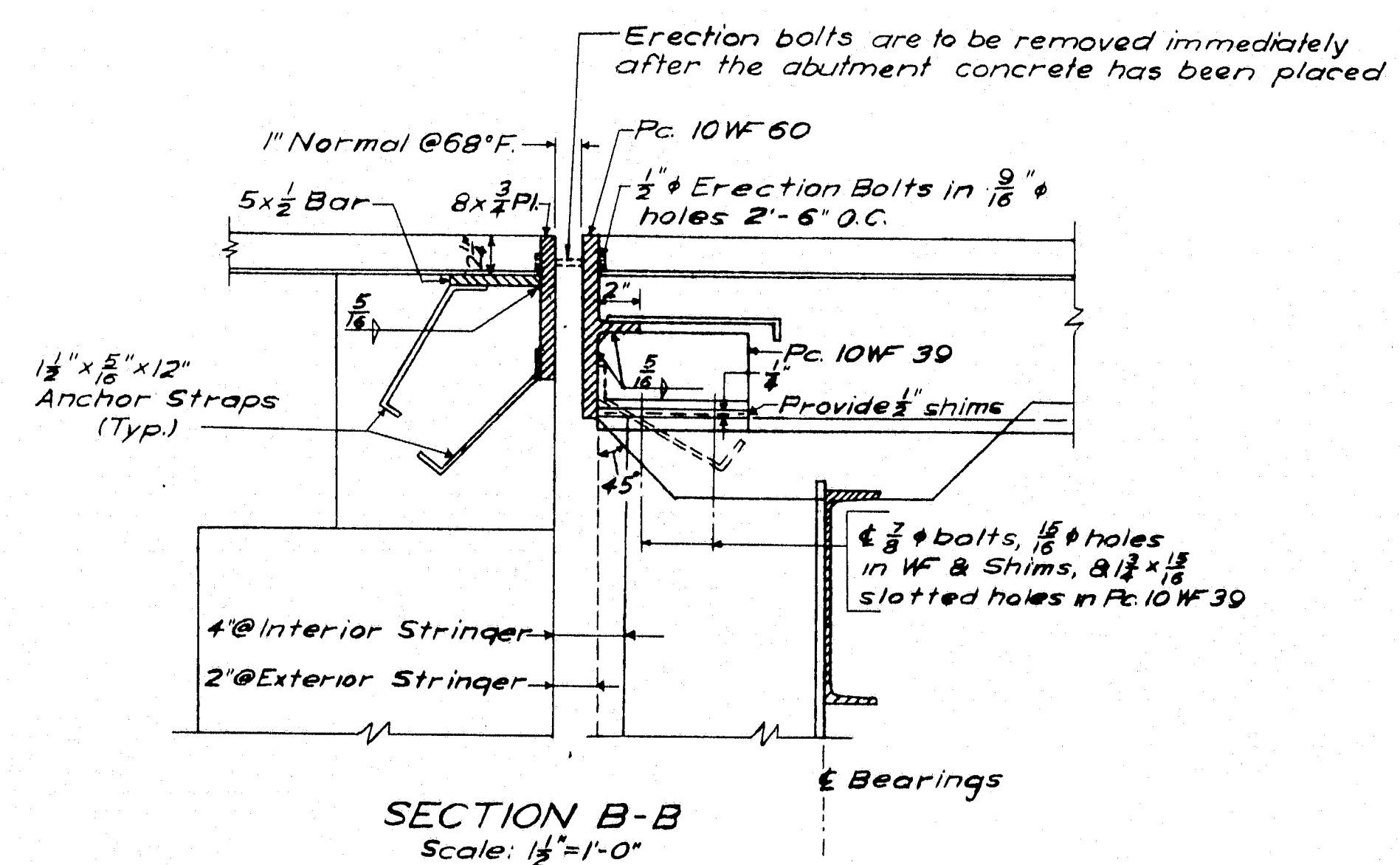


B.P.R. REG. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	1-295-5(5)	24	61

FALMOUTH



EXPANSION DAM DETAILS



- NOTE: Where rolled stringers have cover plates the steel for both shall conform to ASTM A-373. All other structural steel shall conform to ASTM A-7 or A-373 unless specified otherwise.
- FRAMING NOTES
1. For diaphragm and bearing details see Sheet No. 27.
  2. All dimensions shown on framing plan are horizontal.
  3. All E Bearings are parallel. All Stringers are parallel to Lunt Road.
  4. Stringers not to be cambered but shall be erected with natural bow up.

AS BUILT - NO REVISION

STATE HIGHWAY COMMISSION  
AUGUSTA, MAINE

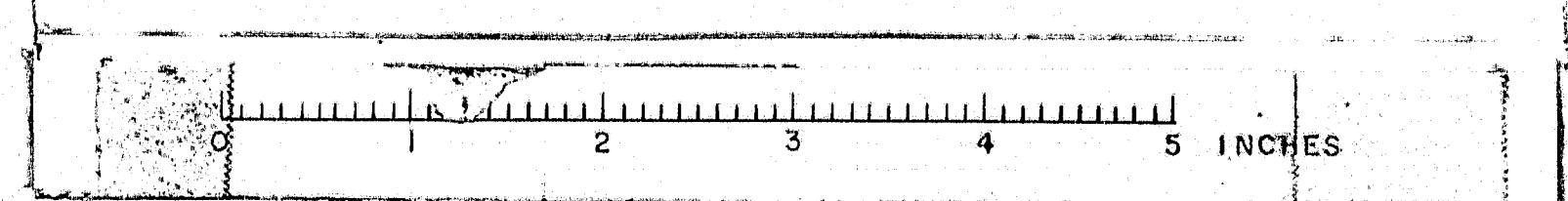
PORTLAND-YARMOUTH INTERSTATE

LUNT ROAD OVER INTERSTATE

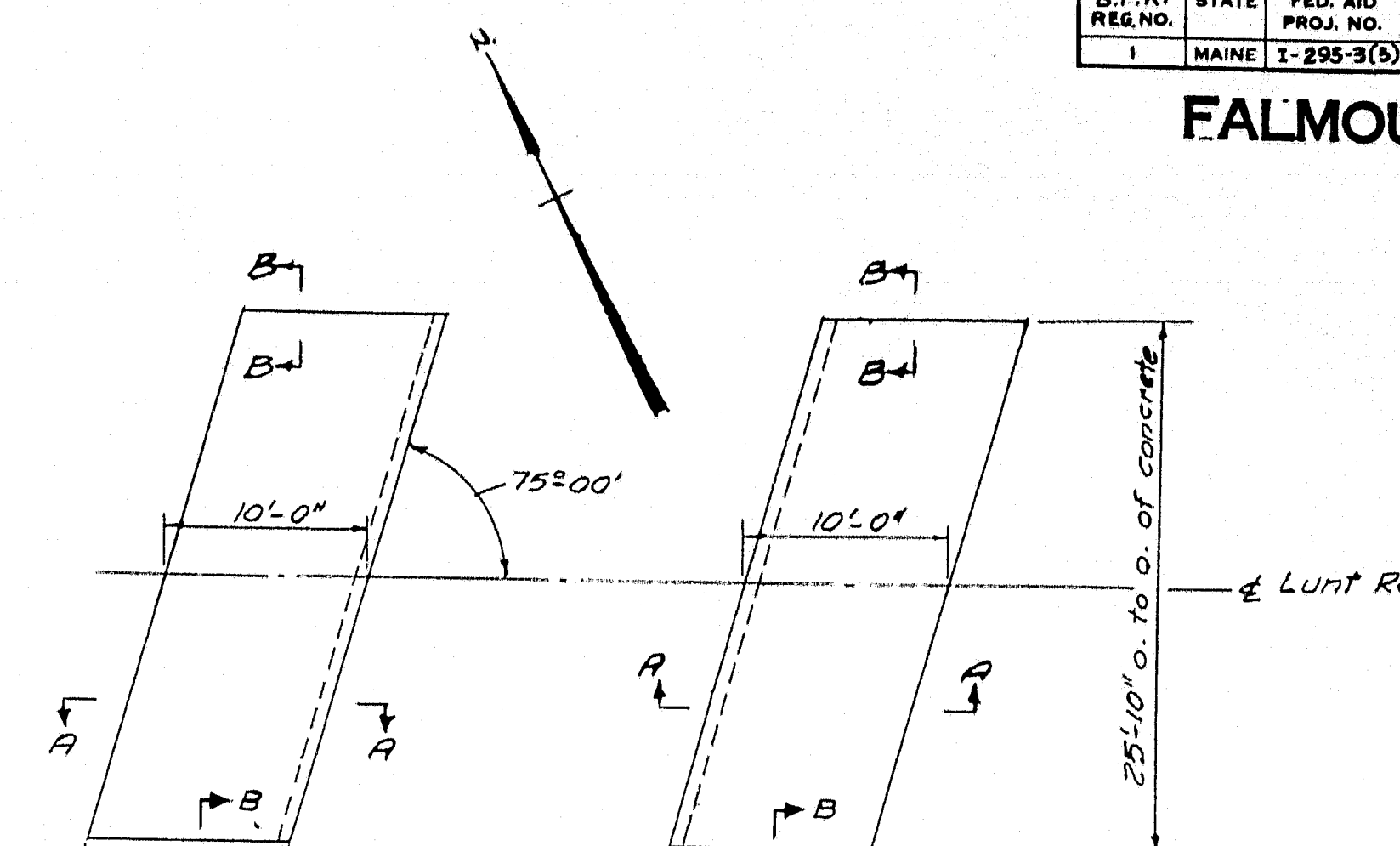
FRAMING PLAN AND DETAILS

SHEET NO. 24 OF 61 SCALE: AS NOTED

M-1313 FAY, SPOFFORD & THORNDIKE, INC. ENGINEERS BOSTON, MASS. Qm-14 497



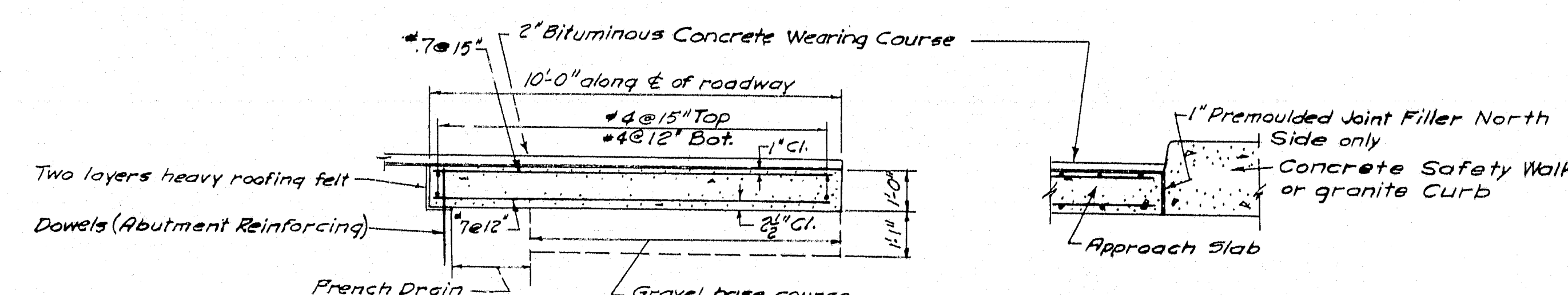




### PLAN OF APPROACH SLABS

Scale:  $\frac{1}{8}'' = 1'-0''$

Note: Longitudinal reinforcing steel to be placed parallel to  
 & Lunt Road. Transverse reinforcing steel to be  
 placed parallel to & bearings.

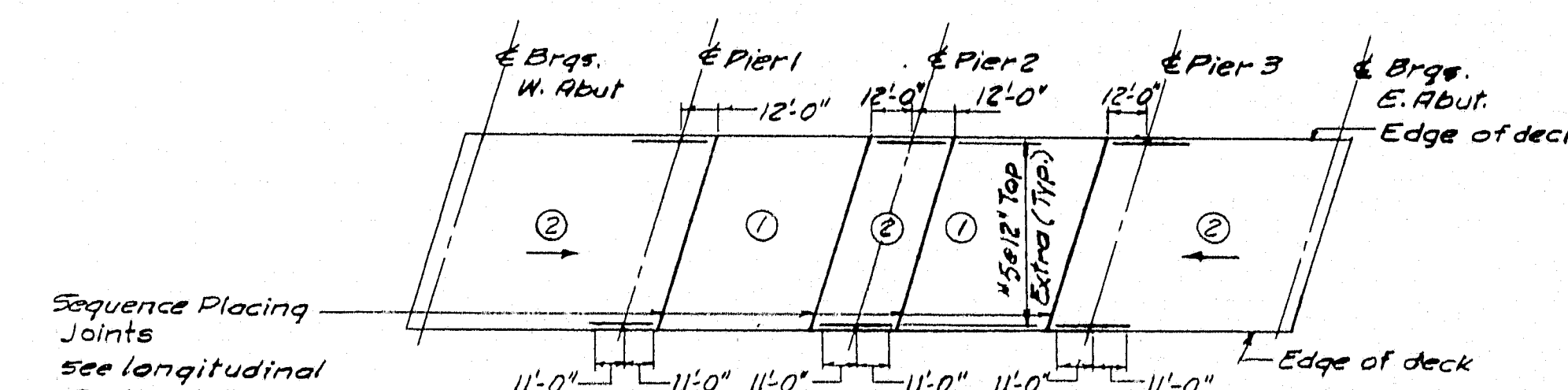


SECTION A-A

Scale:  $\frac{3}{4}" = 1'-0"$

SECTION B-A

Scale:  $\frac{3}{4}'' = 1'-0''$



SEQUENCE PLACING DIAGRAM

### PLACING DIAGRAM

Notes for Placing:

*Notes for Placing:*  
Slabs designated by ① shall be placed before those marked ②. Slabs of the same number may be placed simultaneously or in sequence. Slabs may be placed starting from either end, unless the direction of placing concrete is shown with an arrow. Once the placing of a slab has been started, it shall be completed without interruption.

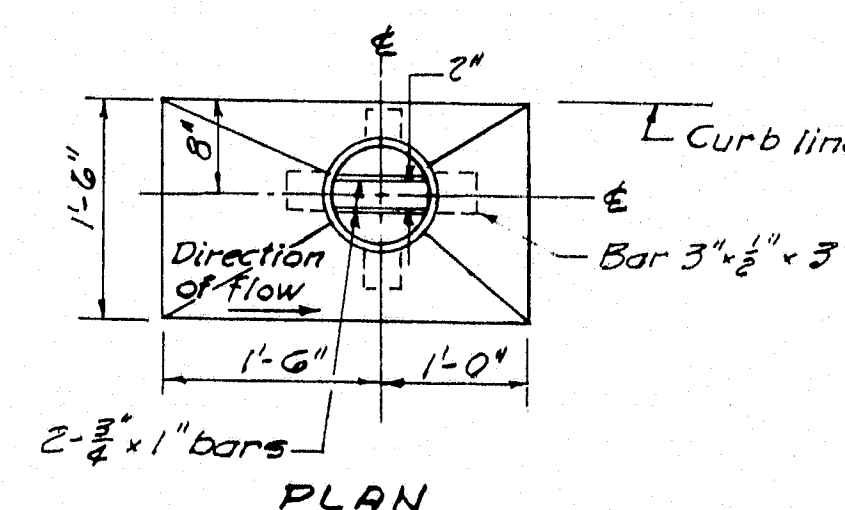
Notes for 5 greeds.

Notes for Screeds:

After structural steel has been erected, levels are to be run on top flanges of stringers. Screeds for slab are to be set on the basis of these levels corrected for  $\frac{1}{4}$  of the dead load deflection shown on Sheet No. 24.

Changes in screed elevations will not be allowed on continuous structures after any portion of the deck slab has been placed.

AS BUILT - NO REVISION



SECTION THRU SCUPPER

SCRIPPER DETAILS

Scale:  $\frac{3}{8}'' = 1'-0''$

Notes: For location of scuppers,  
see Sheet No. 20  
For construction notes,  
see Sheet No. 21

M-1314. FAY, SPOFFORD & THORNDIKE, INC.  
ENGINEERS BOSTON, MASS. Qm-14  
49R

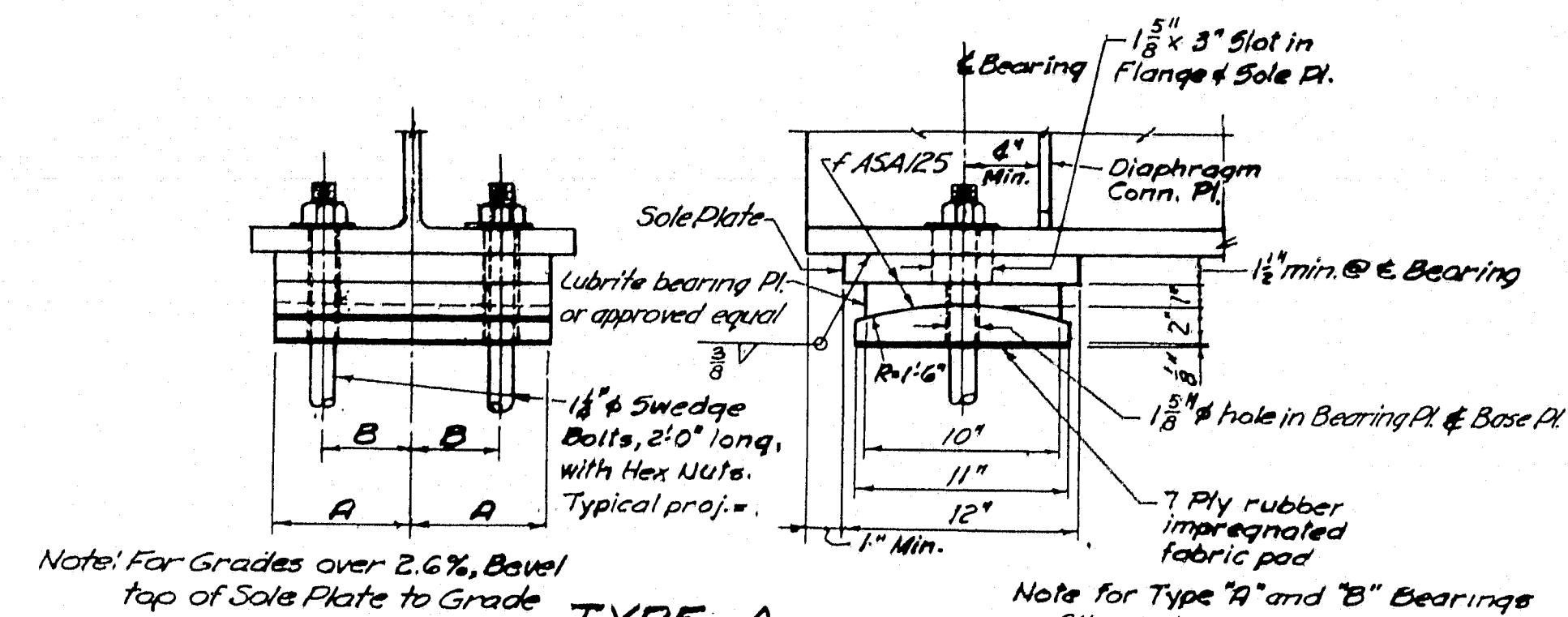
M-1314. FAY, SPOFFORD & THORNDIKE, INC.  
ENGINEERS BOSTON, MASS. Qm-14  
498

Qm-1  
498





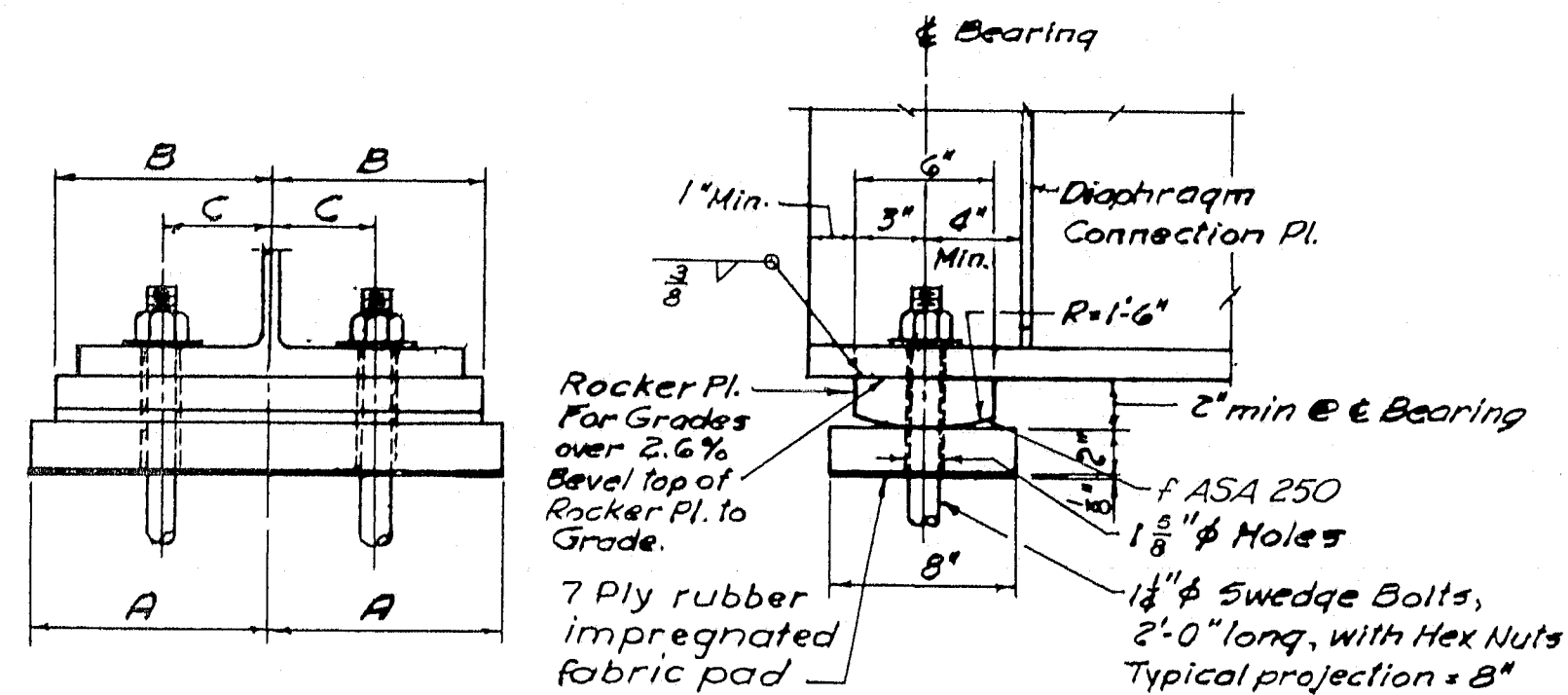
FALMOUTH



TYPE A (EXPANSION)			
FLANGE WIDTH	A	B	
16 1/2"	7"	4 1/2"	
12"	5"	2 3/4"	
11 1/2"	5"	2 3/4"	
10 1/2"	4 1/2"	2 3/4"	
10"	4 1/2"	2 3/4"	
9"	4"	2 3/4"	

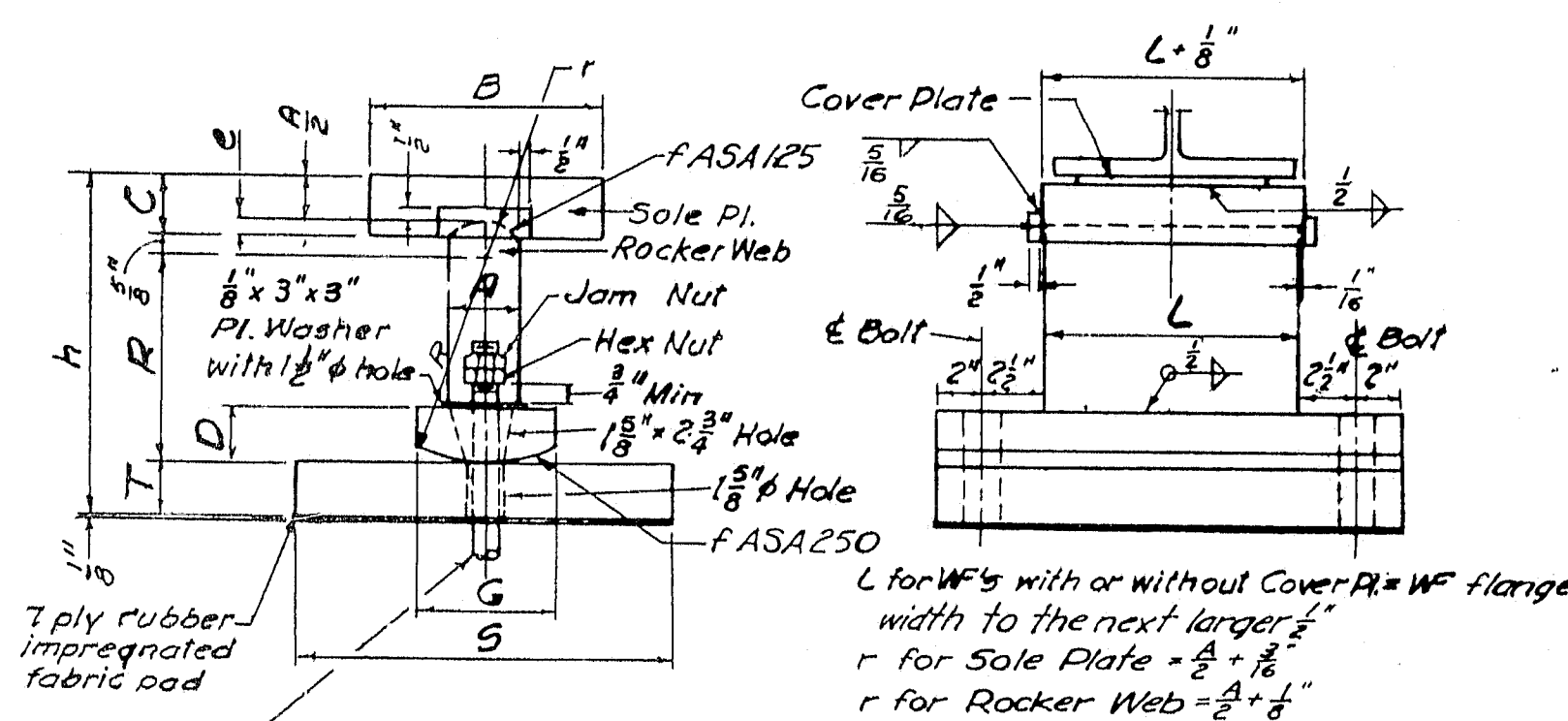
Note: For Grades over 2.6%, Bevel top of Sole Plate to Grade.  
**TYPE A (EXPANSION BEARING)**  
Scale: 1 1/2" = 1'-0"

Note for Type "A" and "B" Bearings:  
All nuts to be drawn up finger tight, then backed off one turn and the threads of the bolts barred off at the face of the nuts with a pointed tool.



TYPE B (FIXED)			
FLANGE WIDTH	A	B	C
16 1/2"	10"	9"	4 1/2"
12"	8"	7"	2 3/4"
11 1/2"	8"	7"	2 3/4"
10 1/2"	7"	6"	2 3/4"
10"	7"	6"	2 3/4"
9"	7"	6"	2 3/4"

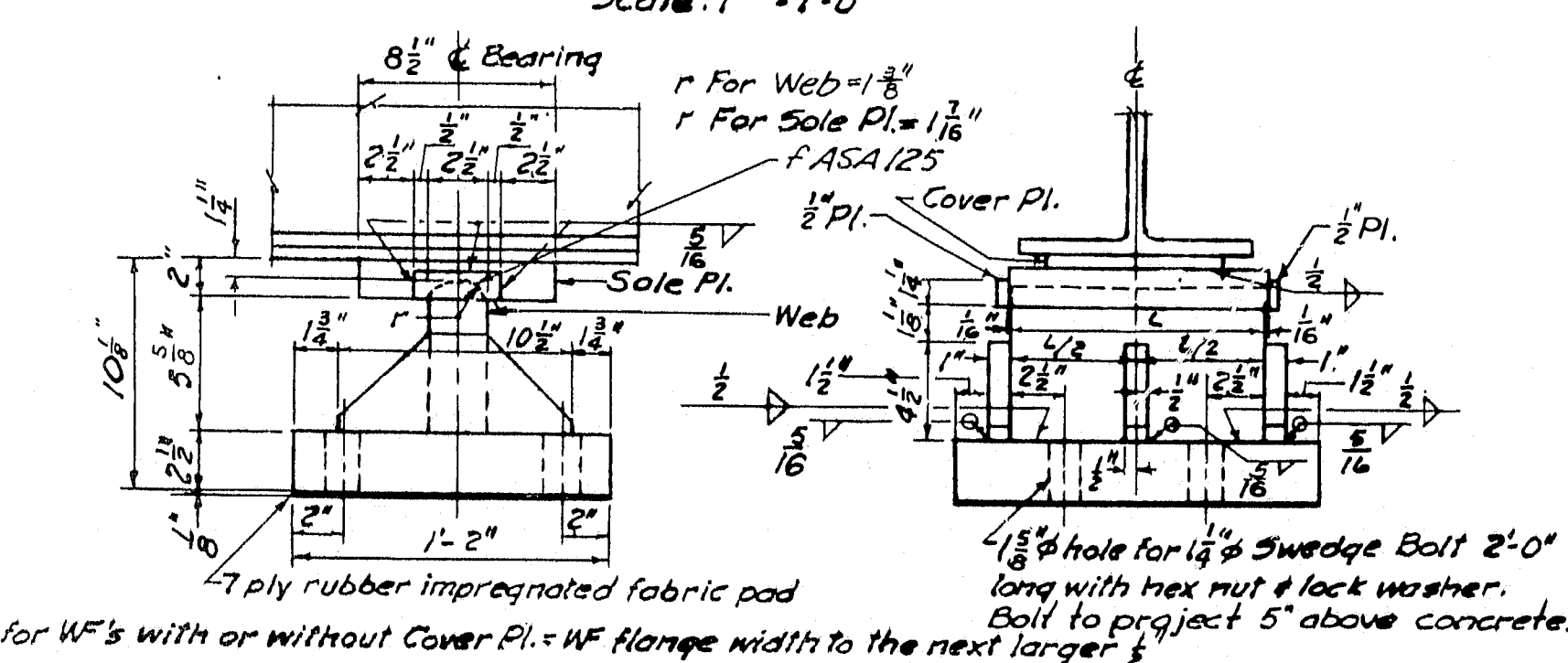
**TYPE B (FIXED BEARING)**  
Scale: 1 1/2" = 1'-0"



**TYPE C, D, E, F, G, H (EXPANSION BEARING)**  
Scale: 1" = 1'-0"

DIMENSIONS										
BEARING TYPE	A	B	C	D	E	G	H	R*	S	T
C	2 1/2"	8 1/2"	2"	2 1/4"	3/4"	6"	10 1/2"	6"	12"	1 1/2"
D	2 1/2"	8 1/2"	2"	2 1/4"	3/4"	6"	11 3/8"	7"	14"	1 3/8"
E	3"	10"	2 1/2"	2 1/2"	1"	6"	12 1/8"	8"	14"	2"
F	3"	10"	2 1/2"	2 1/2"	1"	6"	14 3/8"	9"	16"	2 1/2"
G	3 1/2"	10"	3"	2 1/2"	1 1/4"	7"	16 3/8"	10"	16"	2 3/4"
H	3 1/2"	10"	3"	2 1/2"	1 1/4"	7"	17 3/8"	11"	18"	2 3/4"

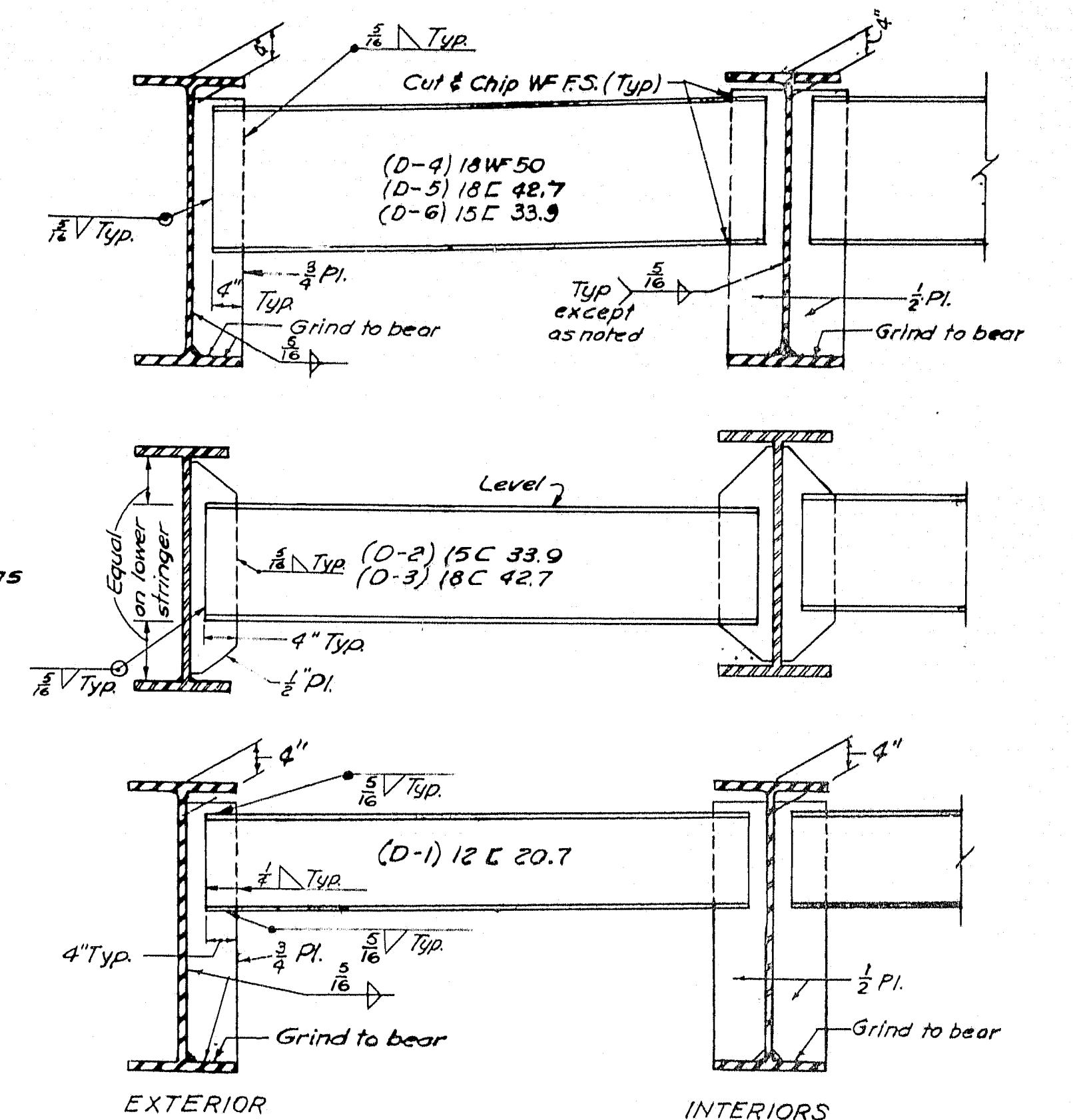
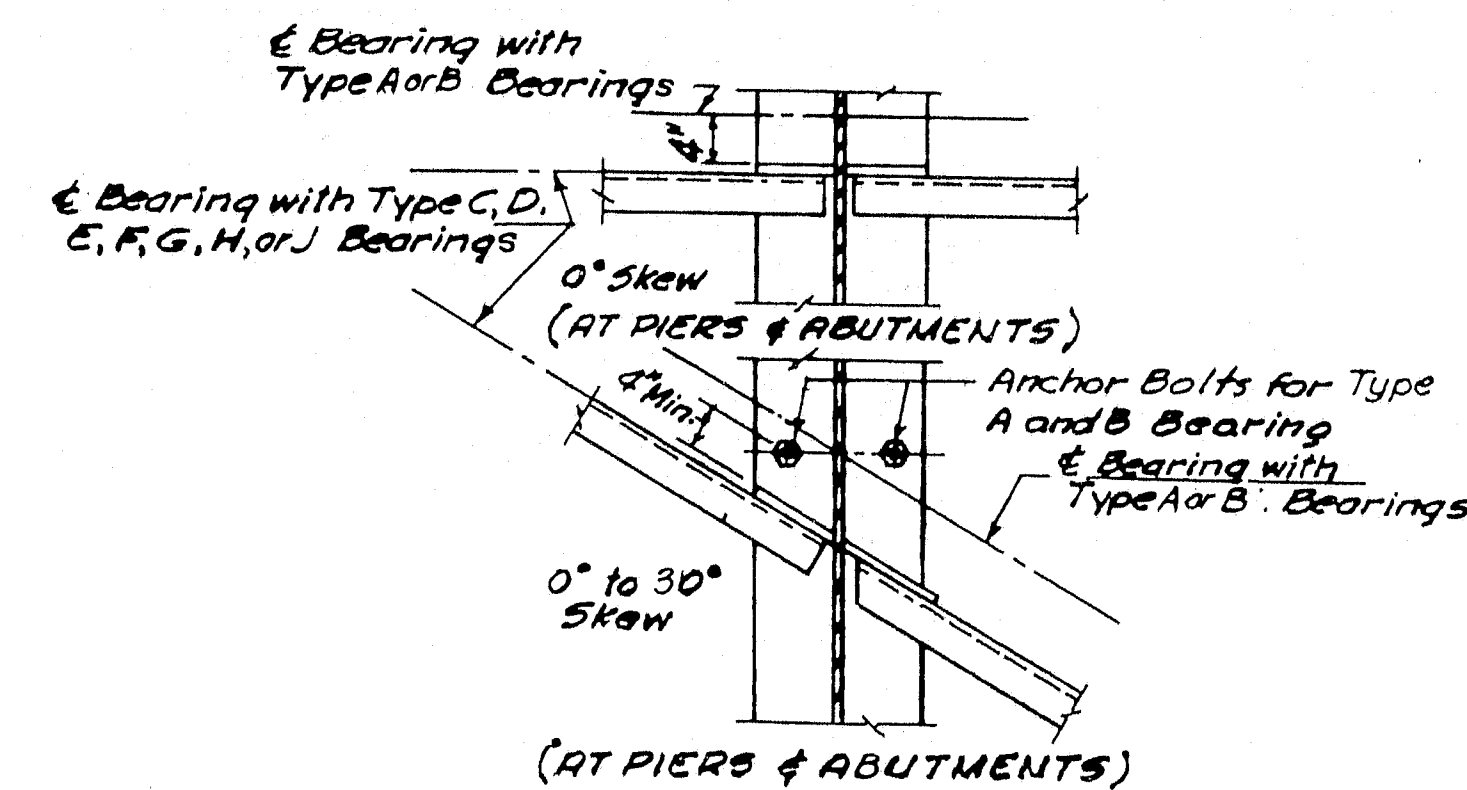
\* R is Rocker Radius and is concentric with r for Rocker Web.



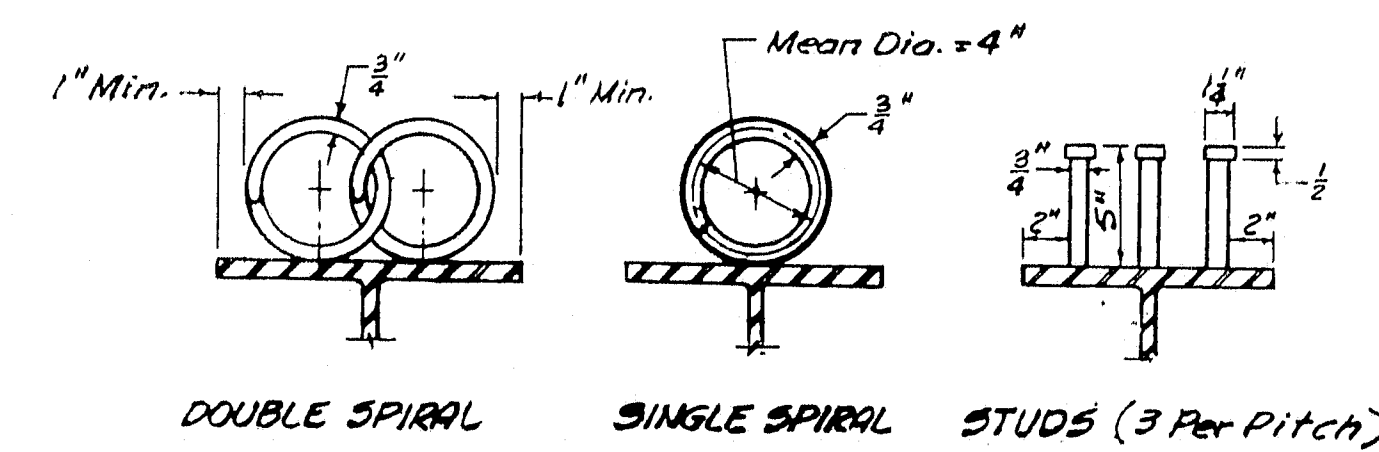
**TYPE J (FIXED BEARING)**  
Scale: 1 1/2" = 1'-0"

DES.	RWB:RZ
DR.	RB
TR.	
CHK.	R.K.
APPRO.	J.W.

Boston Blue Print 300-4-37

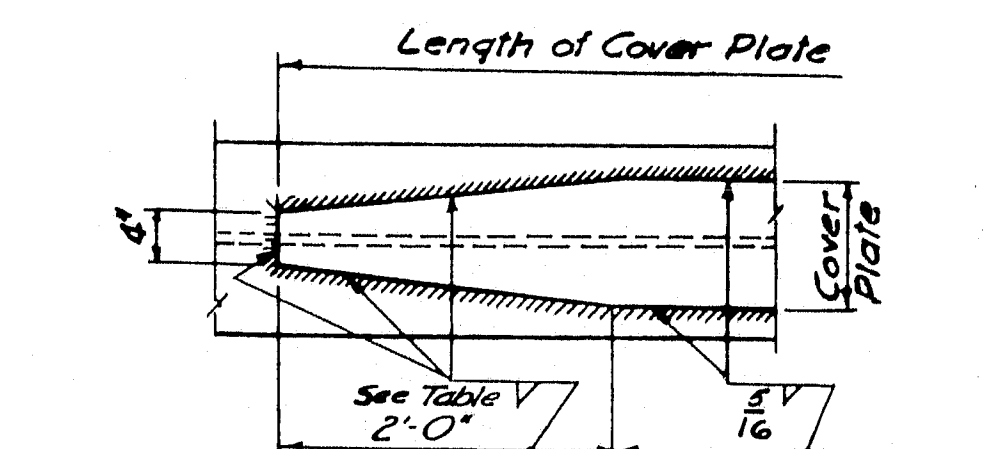


**TYPICAL DIAPHRAGM DETAILS**  
Scale: 3/4" = 1'-0"



**DOUBLE SPIRAL SINGLE SPIRAL STUDS (3 Per Pitch)**  
**SHEAR CONNECTOR DETAILS**  
Scale: 1 1/2" = 1'-0"

Note: Shear Connectors To Be Used On Bridges When Called For On "Framing Plan And Details" sheets.



**TYPICAL COVER PLATE DETAIL**  
No Scale

PLATE THICKNESS	FILLET WELD
1/4" to 3/4"	1/4"
3/4" to 1"	7/16"
1" to 1 1/4"	1"

- Spiral Notes**
- All spirals to be fabricated with 3/8" plain bars and to have a mean diameter of 4 inches.
  - Spirals to be welded to stringer flange with two 1/8" fillet welds, 2 1/2" long at each point of contact.
  - Spiral lengths given on framing plan are net lengths and do not include any allowance for laps.
  - Where spiral sections are joined, they shall be lapped for a distance of one-half the smaller pitch.

AS BUILT - NO REVISION

STATE HIGHWAY COMMISSION  
AUGUSTA, MAINE

PORTLAND-YARMOUTH INTERSTATE

LUNT ROAD OVER INTERSTATE

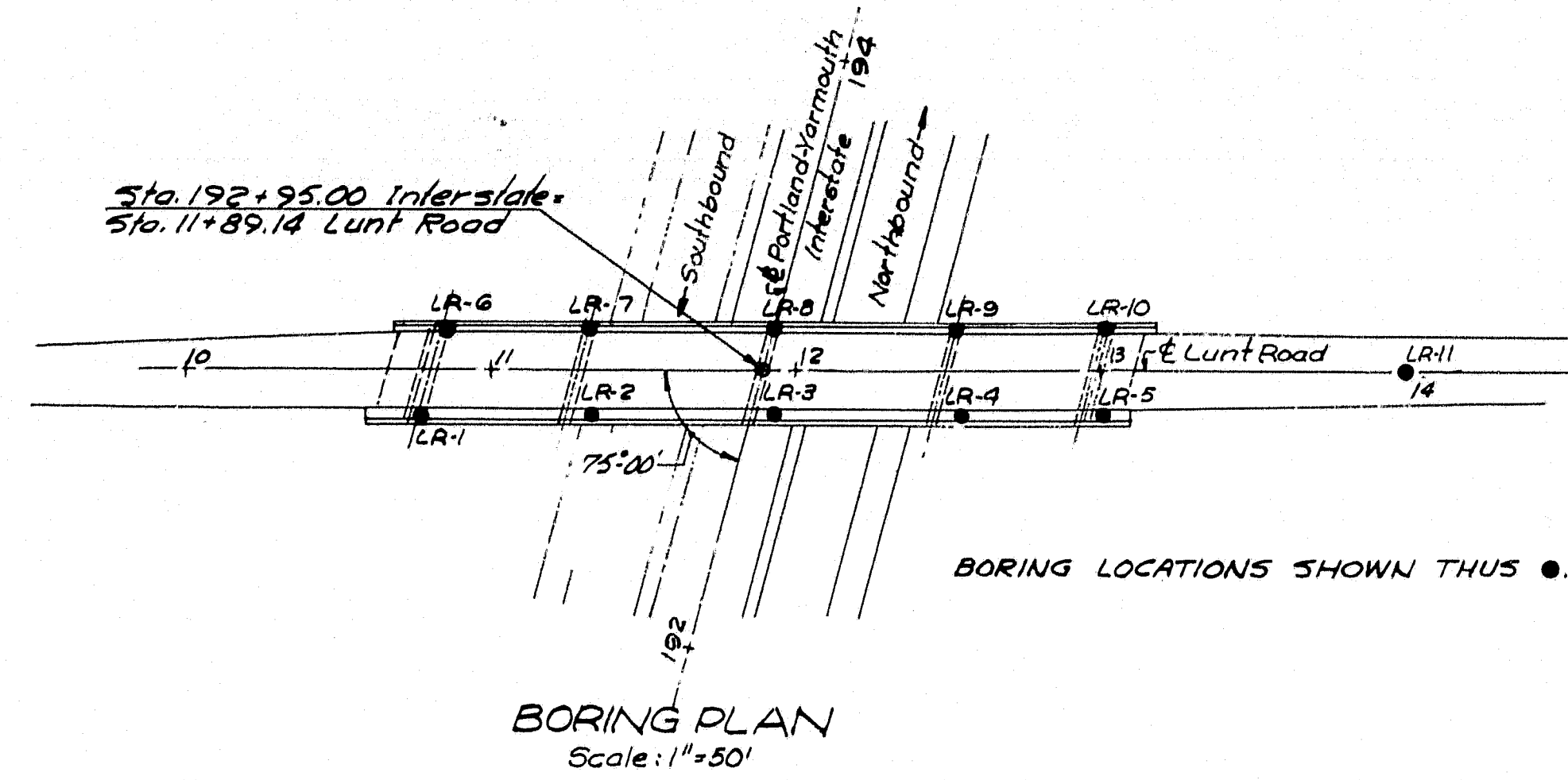
FRAMING DETAILS

SHEET NO. 27 OF 61 SCALE: AS NOTED

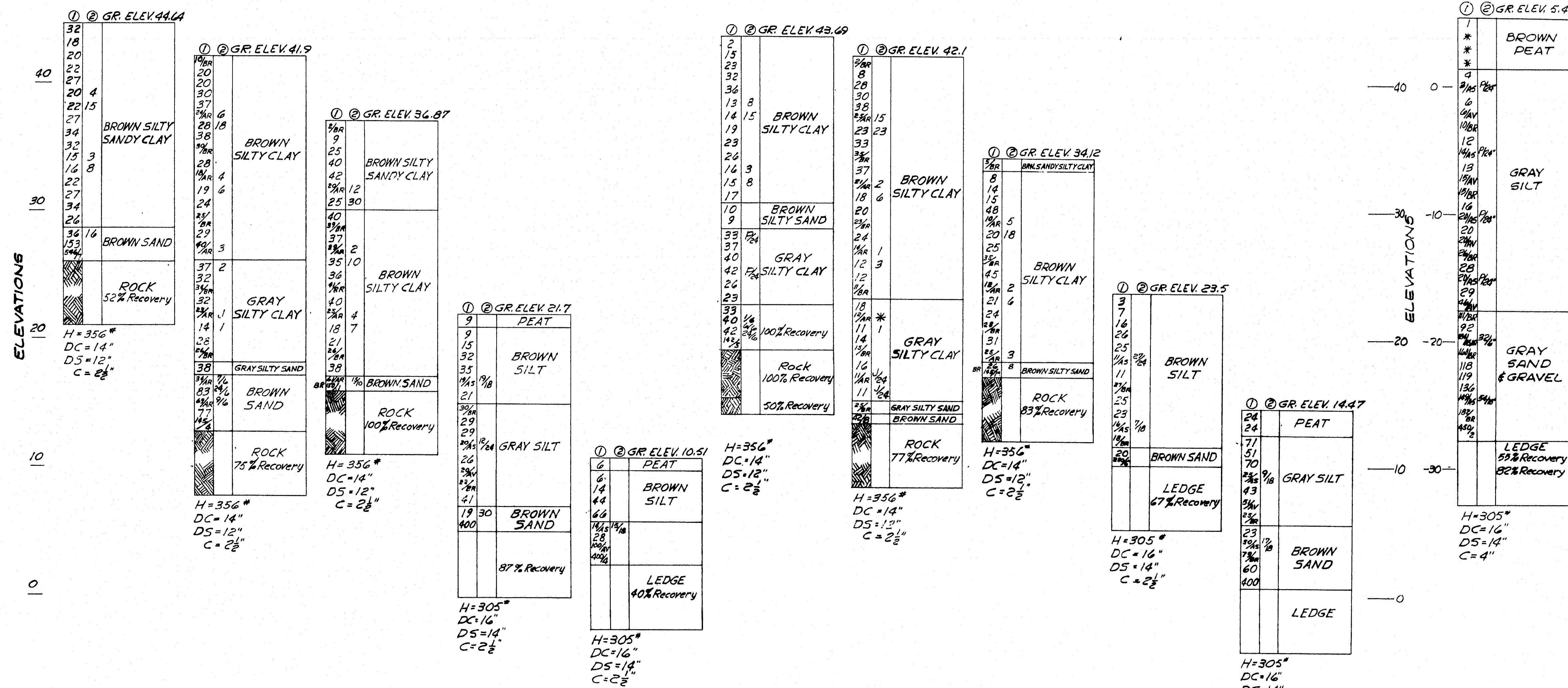
M-1316 FAY, SPOFFORD & THORNDIKE, INC.  
ENGINEERS BOSTON, MASS.

QM-14  
500





50 BORING LR-1 BORING LR-2 BORING LR-3 BORING LR-4 BORING LR-5 BORING LR-6 BORING LR-7 BORING LR-8 BORING LR-9 BORING LR-10 50 10 BORING LR-11  
STA. 10+74-16'R STA. 11+29-15'R STA. 11+89-15'R STA. 12+49-15'R STA. 12+96-15'R STA. 10+83-15'L STA. 11+29-15'L STA. 11+89-15'L STA. 12+49-15'L STA. 12+96-15'L STA. 14+00



GENERAL NOTES

- BORINGS WERE MADE BY THE MAINE STATE HIGHWAY COMMISSION DECEMBER, 1957 AND JANUARY, 1958.
- FIGURES IN COLUMN ① = BLOWS PER FOOT ON CASING EXCEPT AS NOTED.
- FIGURES IN COLUMN ② = BLOWS PER FOOT ON SAMPLER ROD EXCEPT AS NOTED.
- ELEVATIONS ARE REFERRED TO MEAN SEA LEVEL.
- ADDITIONAL SOIL INFORMATION OBTAINED FROM LABORATORY TESTS IS AVAILABLE FROM THE MAINE STATE HIGHWAY COMMISSION.

LEGEND

- AS = CASING WAS DRIVEN AFTER SAMPLING.  
AR = CASING WAS DRIVEN WASHING AHEAD OF CASING.  
H = WEIGHT OF HAMMER IN POUNDS.  
J = CASING OR SAMPLER DRIVEN BY STATIC LOAD NOT EXCEEDING 1/2 TON.  
P = PISTON  
DC = DROP ON CASING IN INCHES.  
DS = DROP ON SAMPLER ROD IN INCHES.  
AV =  
BR =  
C = DIAMETER OF CASING IN INCHES  
\* = DRIVEN BY WEIGHT OF HAMMER

STATE HIGHWAY COMMISSION AUGUSTA, MAINE	
PORTLAND-YARMOUTH INTERSTATE	
LUNT ROAD OVER INTERSTATE	
BORING DATA	
SHEET NO. 28 OF 61.	SCALE: AS NOTED

M-1317 FAY, SPOFFORD & THORNDIKE, INC. BOSTON, MASS. 02114