



STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
16 STATE HOUSE STATION  
AUGUSTA, MAINE 04333-0016

Janet T. Mills  
GOVERNOR

Bruce A. Van Note  
COMMISSIONER

October 11, 2024  
Subject: Bridge Deck Replacement  
Location: Bangor and Hampden  
State WIN: 025631.10 & 025631.11  
**Amendment No. 1**

Dear Sir/Ms.:

In the existing plans, **ADD PLAN** – 6080 HAMPDEN 1964 AS-BUILT (16 pages) dated 6/10/1964.

In the existing plans, **ADD PLAN** – 6080 HAMPDEN 1964 SHOP (8 pages) dated 9/25/1964

The following questions have been received:

**Question:** Are there any existing plans for Bridge 6080 (Route 202 over MCRR) available?

**Response:** Existing plans for bridge 6080 have been added.

Consider these changes and information prior to submitting your bid on **October 16, 2024**.

Sincerely,

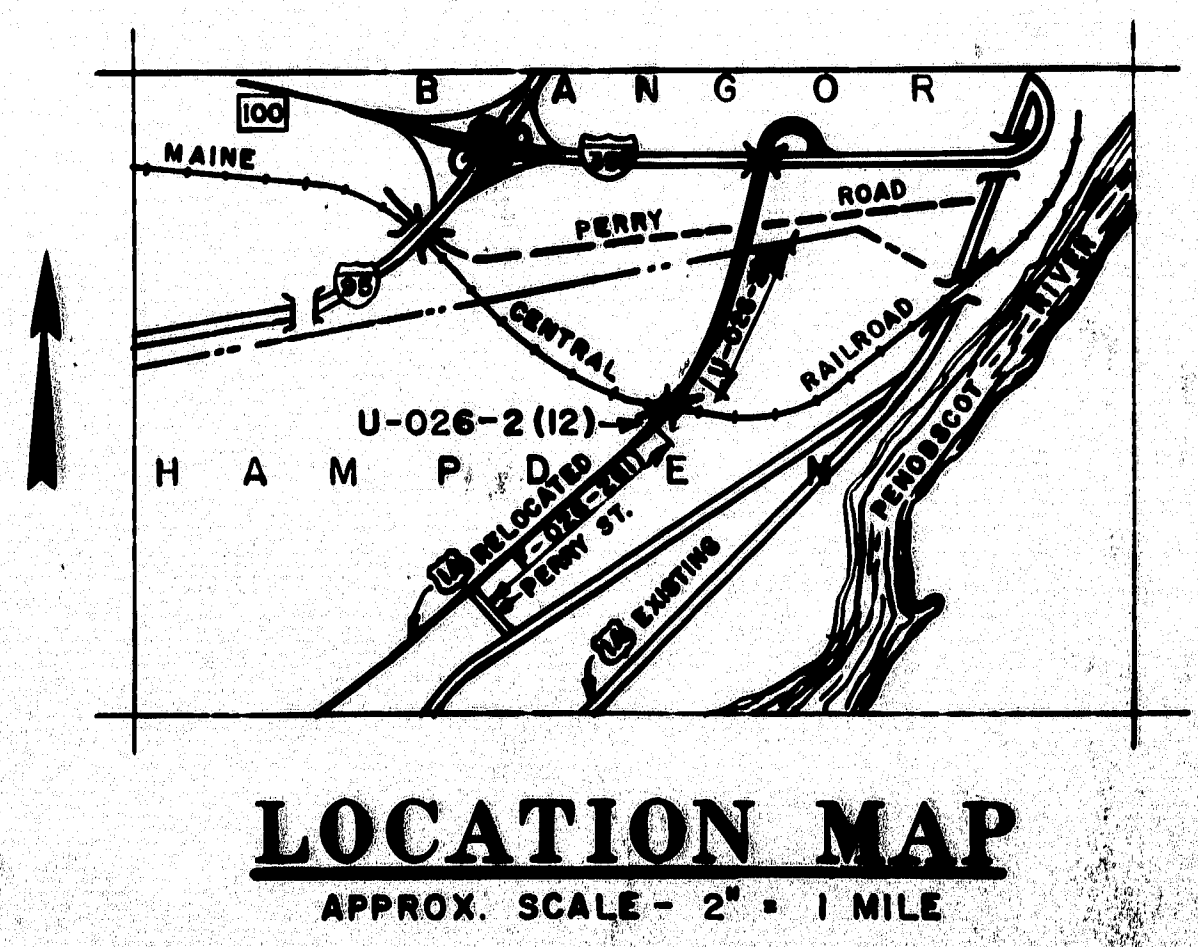
*Kevin Hanlon* for

George M. A. Macdougall P.E.  
Contracts & Specifications Engineer

STATE OF MAINE  
STATE HIGHWAY COMMISSION

—  —

**U.S. ROUTE 1A**  
OVER  
**MAINE CENTRAL RAILROAD**  
IN THE TOWN OF  
**HAMPDEN**  
**PENOBSCOT COUNTY**  
FEDERAL AID PROJECT  
NO. U - 026 - 2(12)  
LENGTH OF PROJECT 0.071 MILES



INDEX OF SHEETS	
1	TITLE SHEET
2	GENERAL PLAN (ESTIMATE OF QUANTITIES)
3	SURVEY 3A CROSS SECTIONS
4, 5, 6	FOUNDATION SURVEY
7, 8	ABUTMENTS
9	PIERS 1 & 2
10	STRUCTURAL STEEL, BLOCKING
11, 12	SUPERSTRUCTURE
13	REINFORCING STEEL & APPROACH SLABS
14	SLOPE PROTECTION

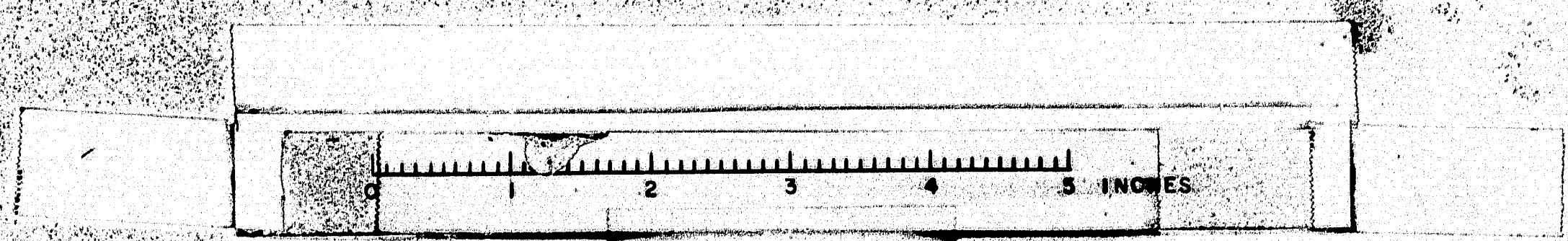
STANDARD DETAILS	
BD 101 - 64	BEARING PEDESTALS
BD 102 - 64	BRIDGE RAIL
BD 103 - 64	BEAM SPLICES
BD 104 - 64	DIAPHRAGMS, DRAINS, ARMORED JOINTS & SHEAR CONNECTORS

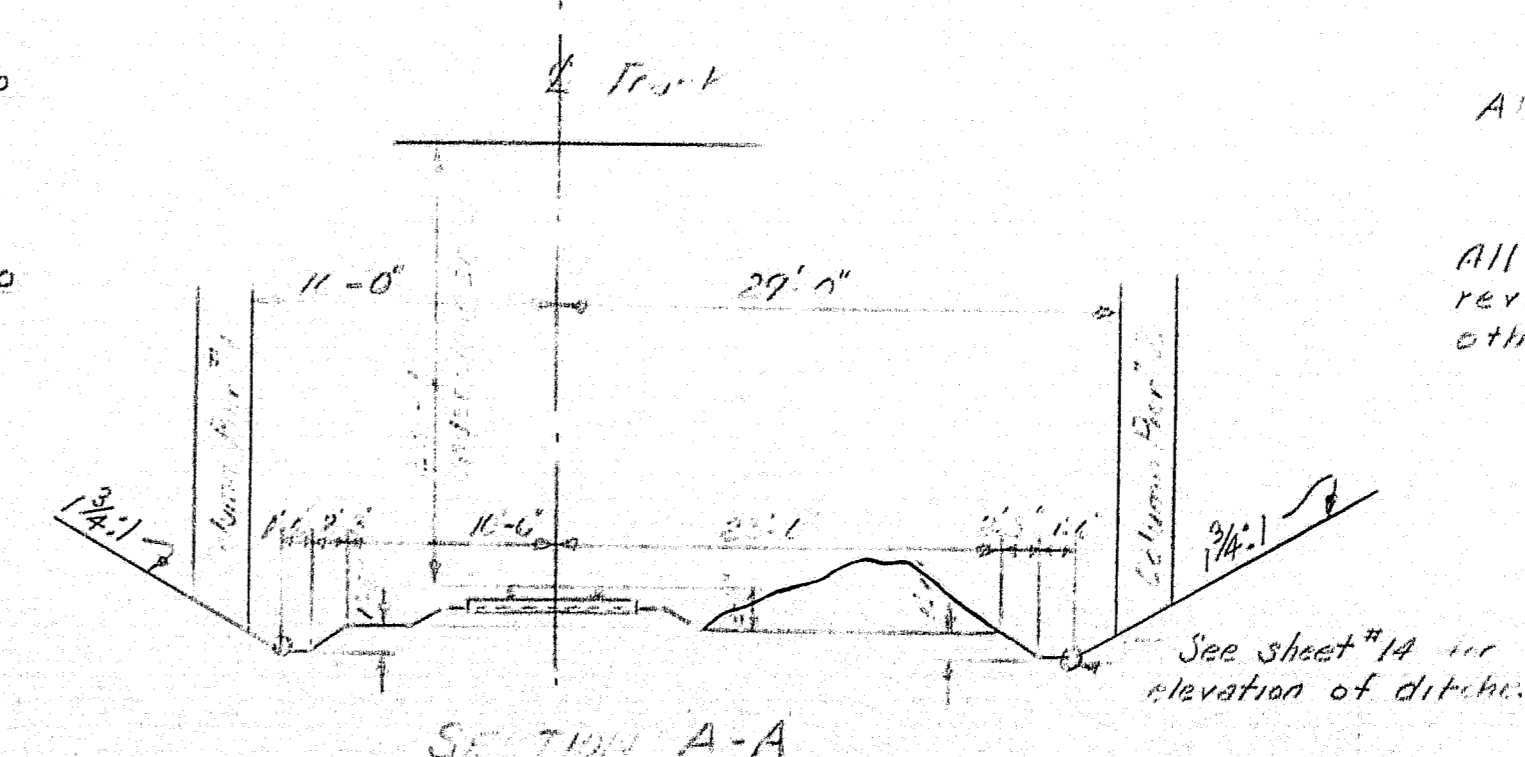
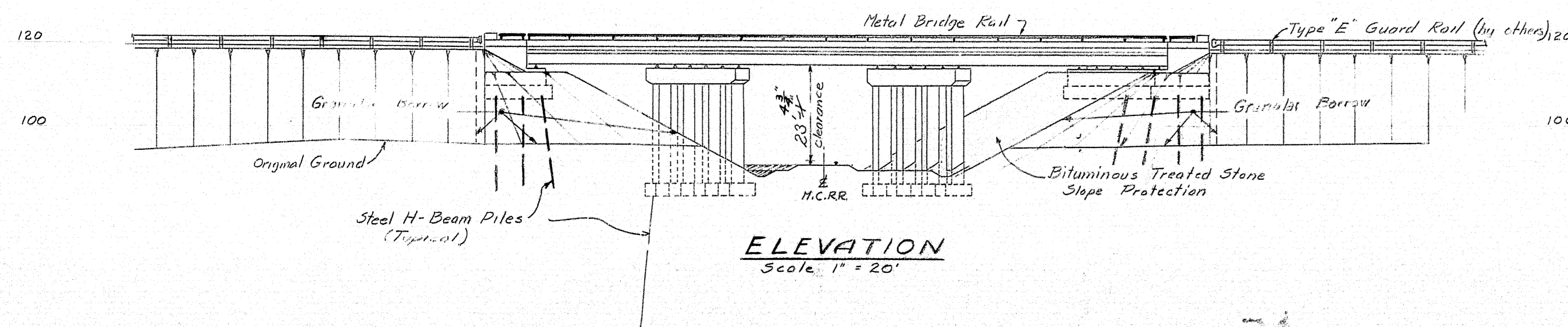
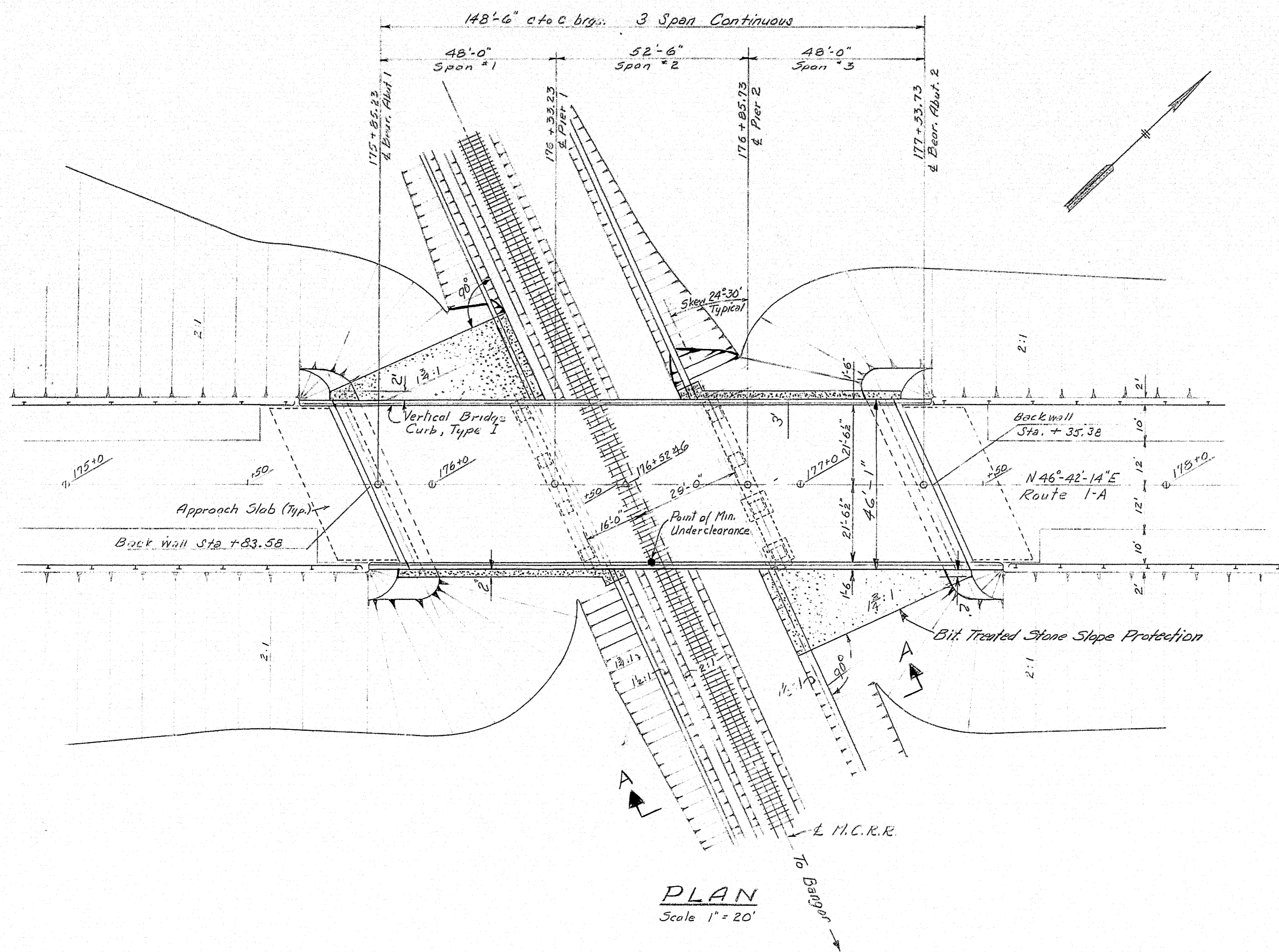
APPROVED  
MAINE CENTRAL RAILROAD  
*[Signature]*  
DATE June 12, 1964

APPROVED  
MAINE STATE HIGHWAY COMMISSION  
*[Signature]* CHAIRMAN  
*[Signature]*  
*[Signature]* CHIEF ENGINEER  
DATE June 10, 1964

**TRAFFIC**  
A.D.T. — 1963 — 5000  
A.D.T. — 1983 — 6900  
D.H.V. — 690  
T — 10 %  
D — 60 %  
V — 60 MPH

DEPARTMENT OF COMMERCE  
BUREAU OF PUBLIC ROADS  
REGION I  
APPROVED  
DIVISION ENGINEER DATE





ESTIMATE of QUANTITIES		
Description	Quantity	Unit
Structural Earth Excavation, Piers	390	c. y.
Granular Borrow	3750	c. y.
Gravel Base Course, In Place Measure	510	c. y.
Concrete Borrow	9350	c. y.
* Bituminous Conc. Surf. Course, Type A	80	tons
P.C.C. Abutments and Retaining Walls	210	c. y.
P.C.C. Piers	191	c. y.
P.C.C. Roadway & Sidewalk Slabs	200	c. y.
Curing Box for Concrete Cylinders	1	Each
Structural Steel, Fabricated & Delivered	Lump Sum	L.S.
Structural Steel, Erection	Lump Sum	L.S.
Structural Steel, Field Painting	Lump Sum	L.S.
Reinforcing Steel, Delivered	87,400	lbs.
Reinforcing Steel, Placing	87,400	lbs.
Steel H-Beam Piles 42 lbs/ft.	1972	l.f.
Bridge Rail	330	l.f.
* Membrane Waterproofing	725	s.y.
Epoxy Resin Surface Sealant	95	s.y.
Vertical Bridge Curb, Type I	347	l.f.
Bituminous Treated Stone Slope Protection	150	s.y.
Loam, In Place Measure	150	c. y.
Seeding - Method No. 2	25	Units
Hay Mulch	1	Tons
Bituminous Conc. Surf. Course, Type A (Where Paved)	16	s.y.

\* Not part of this contract.

Estimated weight of Structural Steel, including Drains = 142,000 lbs.

**SPECIFICATIONS**  
DESIGN: A.A.S.H.O. Standard Specifications for Highway Bridges 1961 with Interim Specifications 1961 & 1962.  
CONTRACT: State of Maine, State Highway Commission, Standard Specifications for Highways and Bridges, Revision of Jan. 1956 and Supplemental Specs.

**LIVE LOADING**  
HS 20 - 44

**ALLOWABLE STRESSES**  
Concrete  $f_c = 1200$  psi,  $n = 10$   
Reinforcing Steel, Intermediate Grade  $f_s = 20,000$  psi  
Structural Steel, A.S.T.M. A-36  $f_s = 20,000$  psi

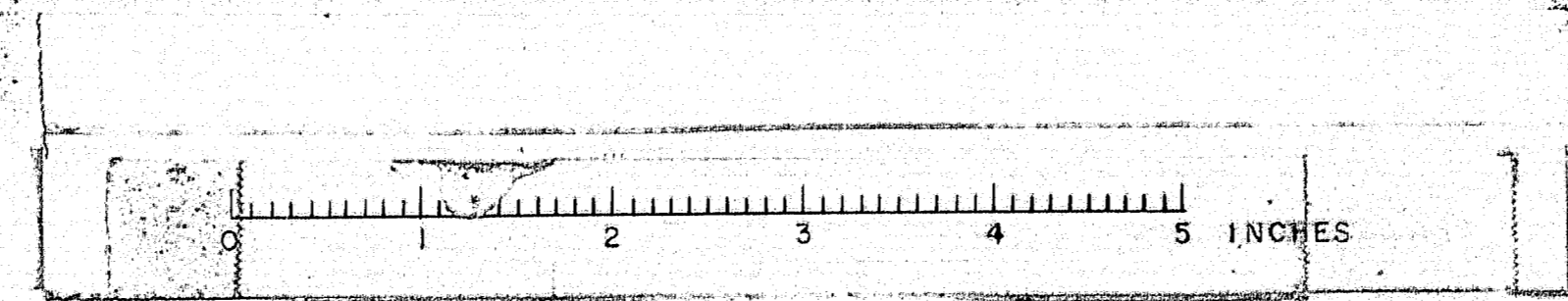
**CONCRETE CLASSIFICATION**  
All concrete Class "A"

**STRUCTURAL STEEL CLASSIFICATION**  
All Structural Steel shall conform to the latest revision of the Specification A.S.T.M. A-36 unless otherwise noted on the Standard Details.

DESIGN - McDOUGAL TRACE - DET. - FORTIER CHECK -	BRIDGE NO. SURVEY - PLOT -
STATE HIGHWAY COMMISSION BRIDGE DIVISION	
U.S. ROUTE 1A OVER MAINE CENTRAL RAILROAD IN THE TOWN OF HAMPDEN PENOBSCOT COUNTY	
GENERAL PLAN	
SHEET 2 OF 14 AUGUSTA, MAINE MARCH 1964	

As built Revisions - 12 Oct. 1965

92-102

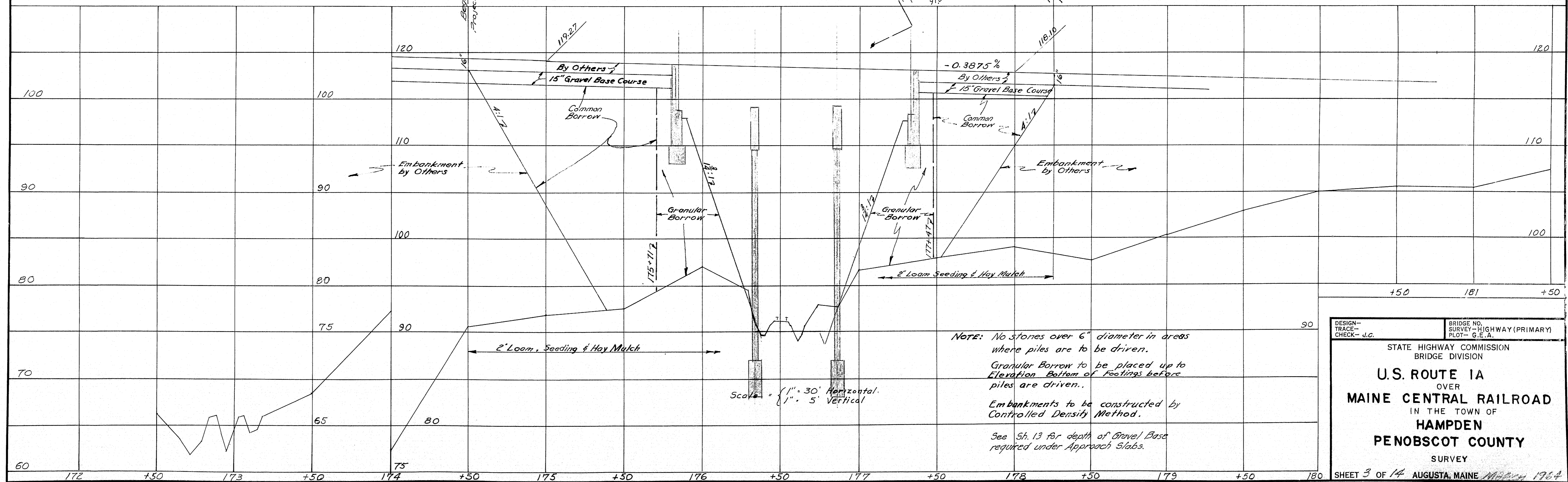


B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	2-026-2 (2)	3	14

**BENCH MARK**  
Highway TBM #1 300' left Sta. 176+0 Top of bolt  
at S.E. corner of signal #13 44. Elev. 91.60.

Small gray birches

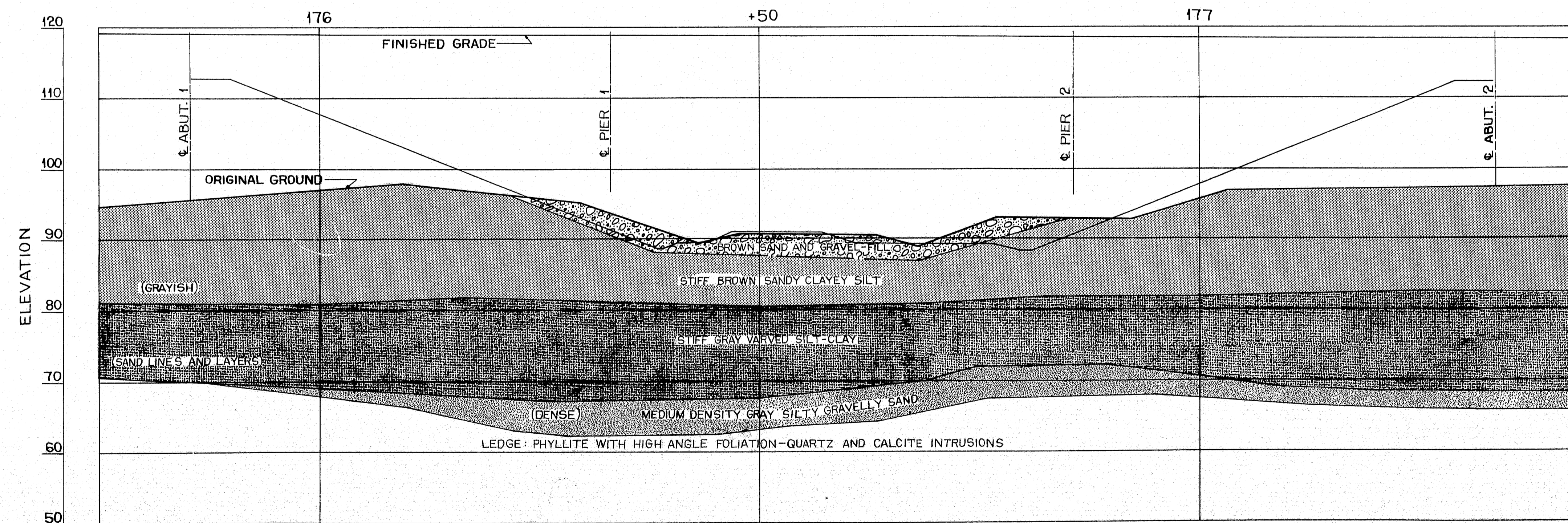
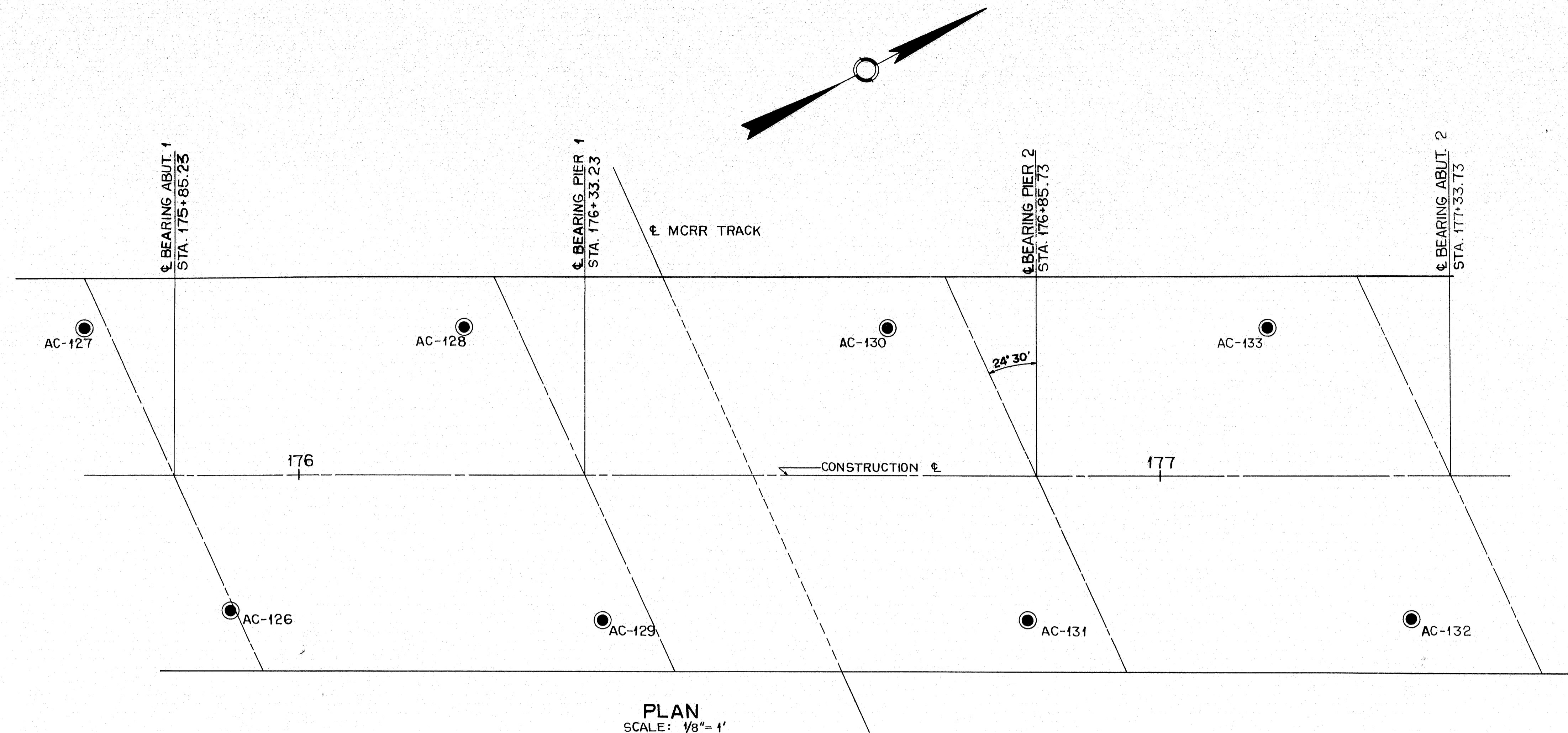
NOTE: This Survey plotted from Highway Note Books Nos 26-138 & 26-158 HAMPDEN & BANGOR - PROJECT NO. 2-026-2 (9)



0 1 2 3 4 5 INCHES



B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	U-026-2(12)	4	14



DESIGN—  
TRACE—  
CHECK—

Soils Division

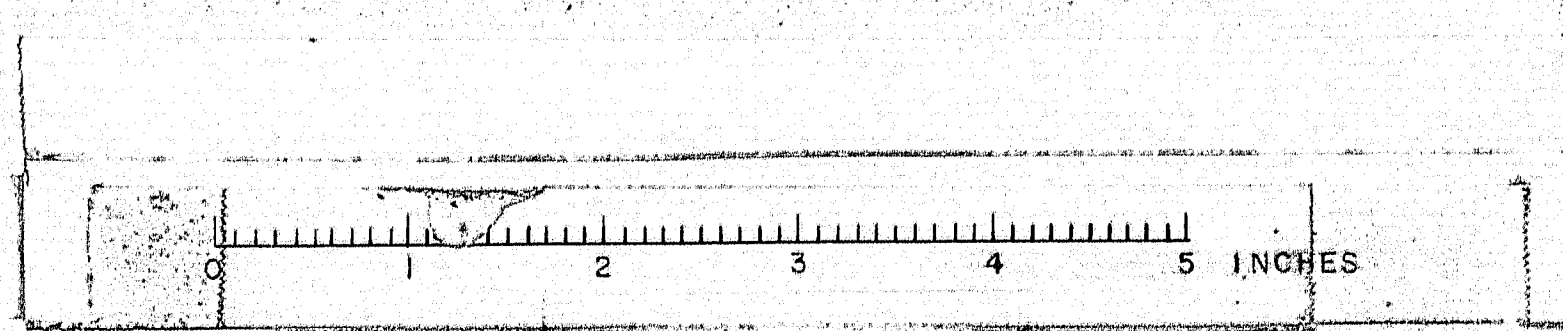
BRIDGE NO.  
SURVEY—  
PLOT—

STATE HIGHWAY COMMISSION  
BRIDGE DIVISION

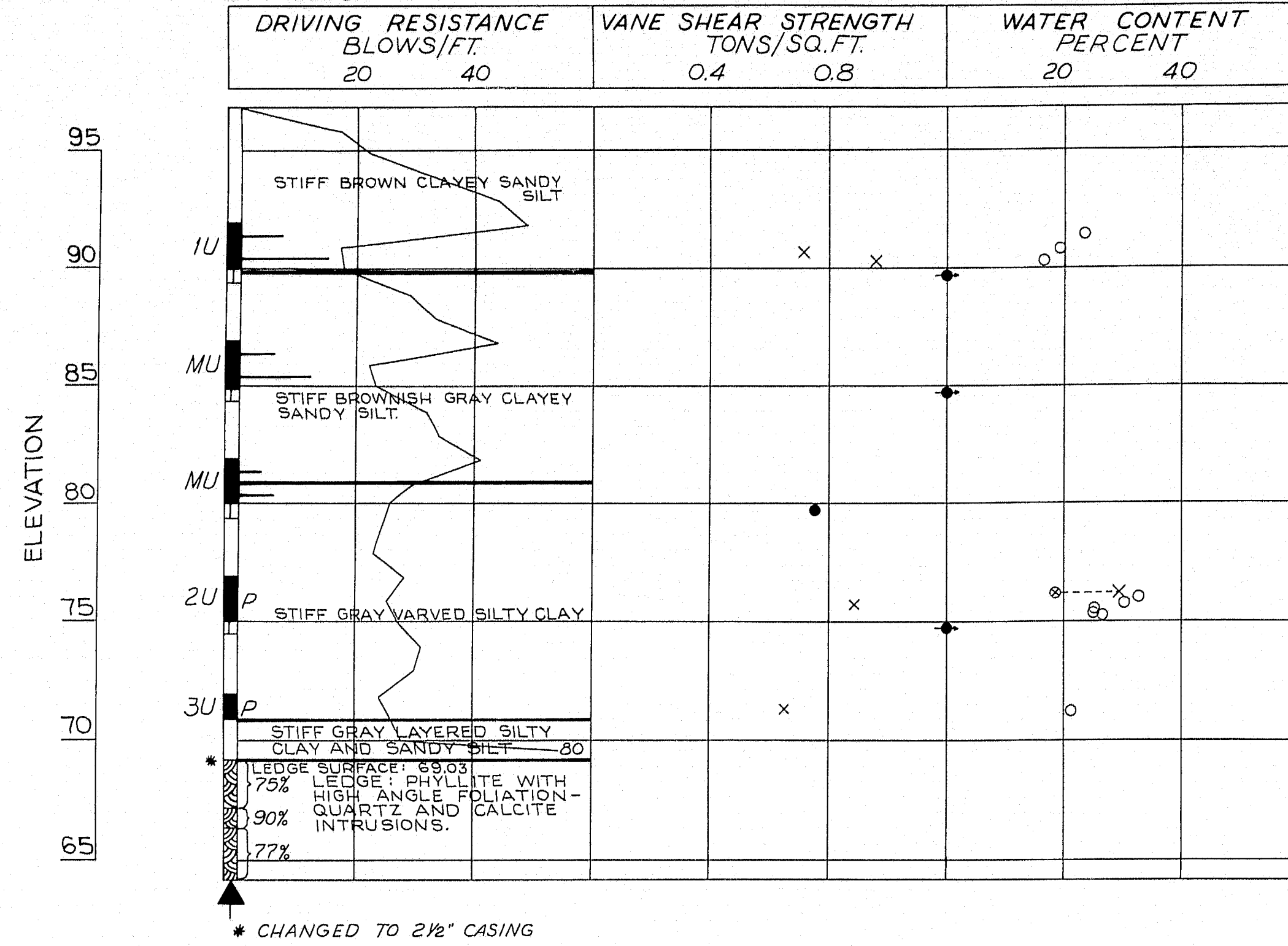
U.S. ROUTE 1A  
OVER  
MAINE CENTRAL RAILROAD  
IN THE TOWN OF  
HAMPDEN  
PENOBSCOT COUNTY  
FOUNDATION SURVEY

SHEET 4 OF 14 AUGUSTA, MAINE MAY 1964

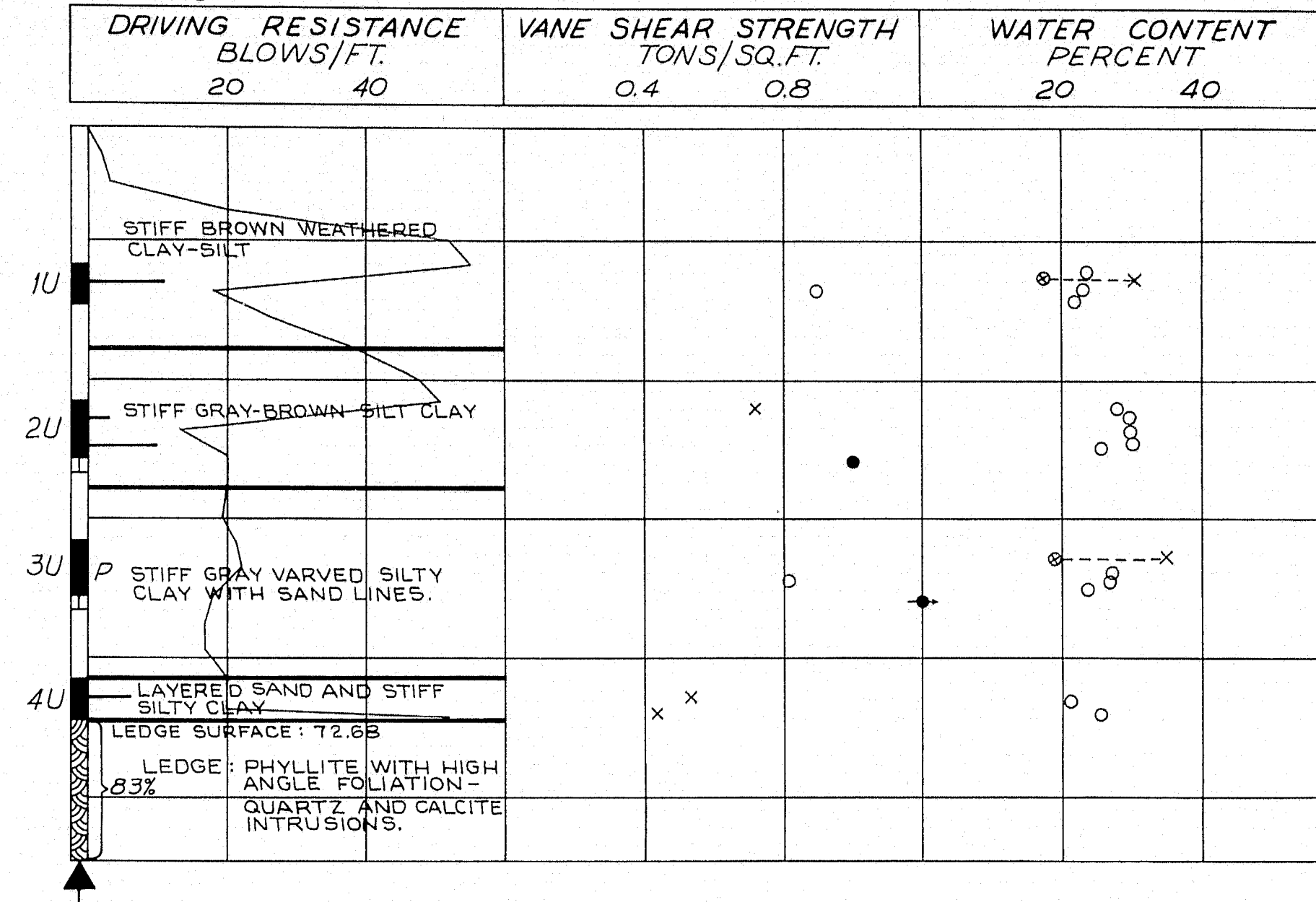
92-105



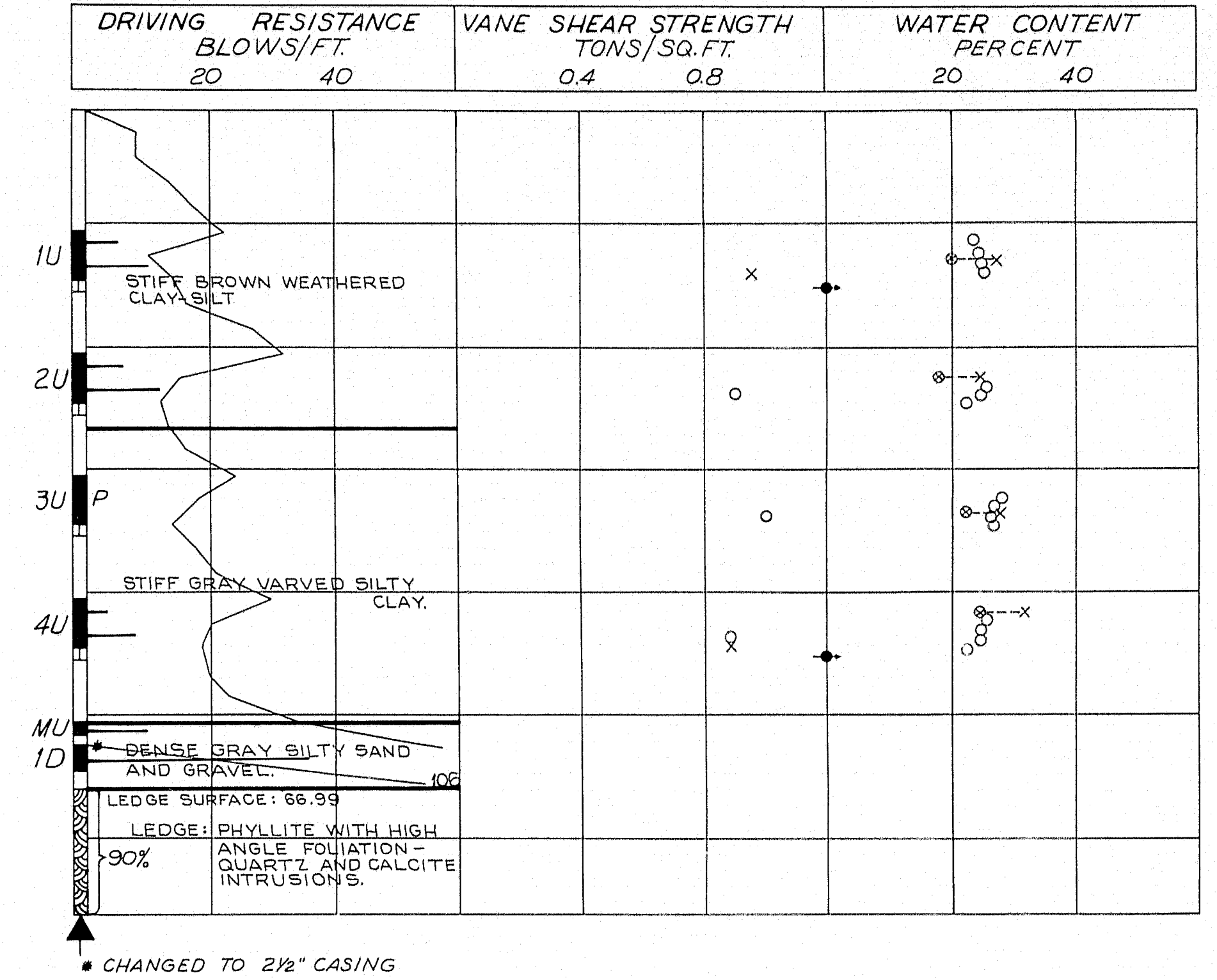
**BORING AC-126**  
STA. 175+92 16'RT.  
ELEV. 96.78 CASING SIZE 4" x 2 1/2"



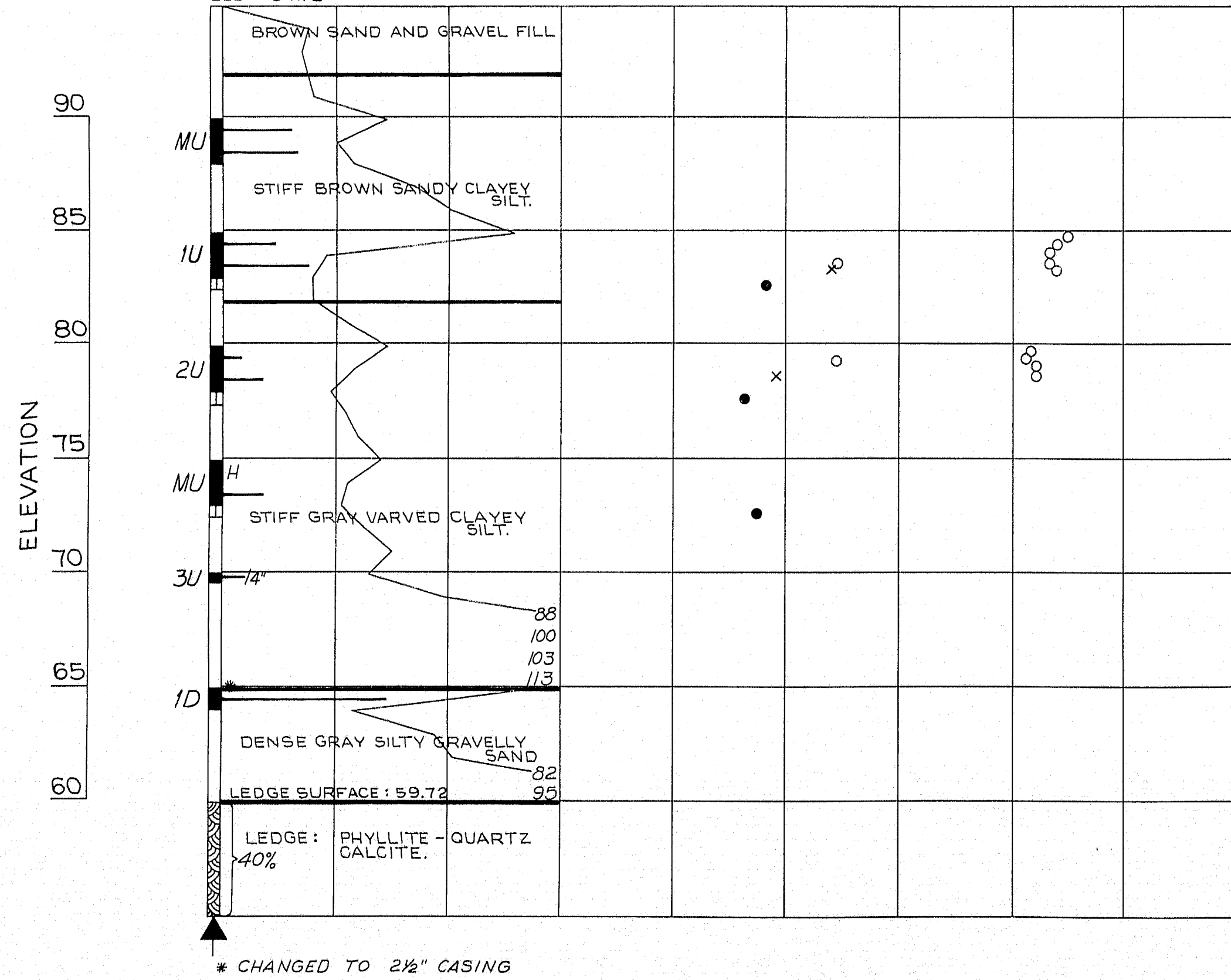
**BORING AC-127**  
STA. 175+75 17'LT.  
ELEV. 94.18 CASING SIZE 4"



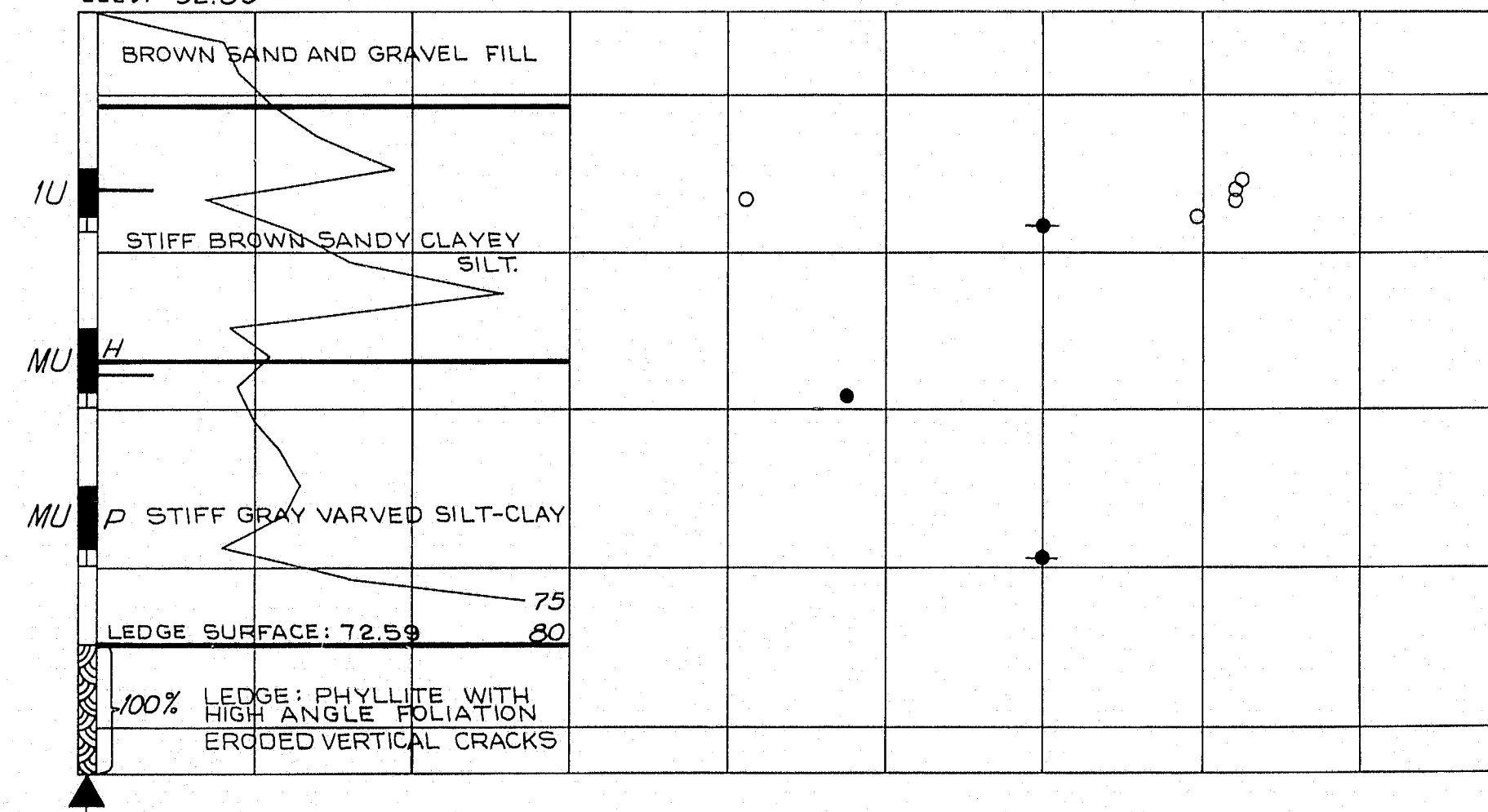
**BORING AC-128**  
STA. 176+19 17'LT.  
ELEV. 94.74 CASING SIZE 4" x 2 1/2"



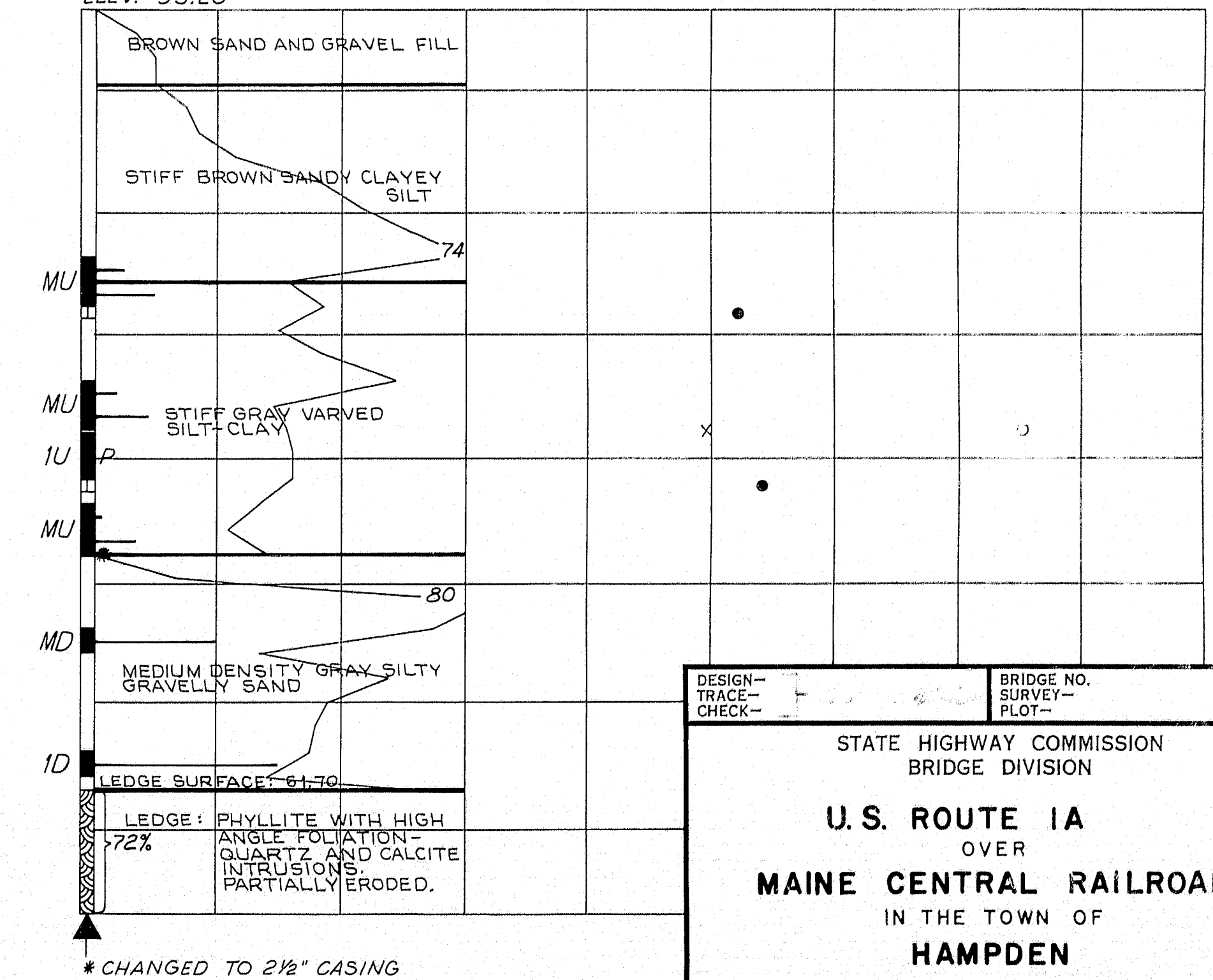
**BORING AC-129**  
STA. 176+35 17'RT.  
ELEV. 94.72 CASING SIZE 4" x 2 1/2"



**BORING AC-130**  
STA. 176+68 17'LT.  
ELEV. 92.59 CASING SIZE 4"



**BORING AC-131**  
STA. 176+84 17'RT.  
ELEV. 93.20 CASING SIZE 4" x 2 1/2"



DESIGN -  
TRACE -  
CHECK -

BRIDGE NO.  
SURVEY -  
PLOT -

STATE HIGHWAY COMMISSION  
BRIDGE DIVISION

**U.S. ROUTE 1A**  
OVER  
**MAINE CENTRAL RAILROAD**  
IN THE TOWN OF  
**HAMPDEN**  
**PENOBSCOT COUNTY**  
FOUNDATION SURVEY

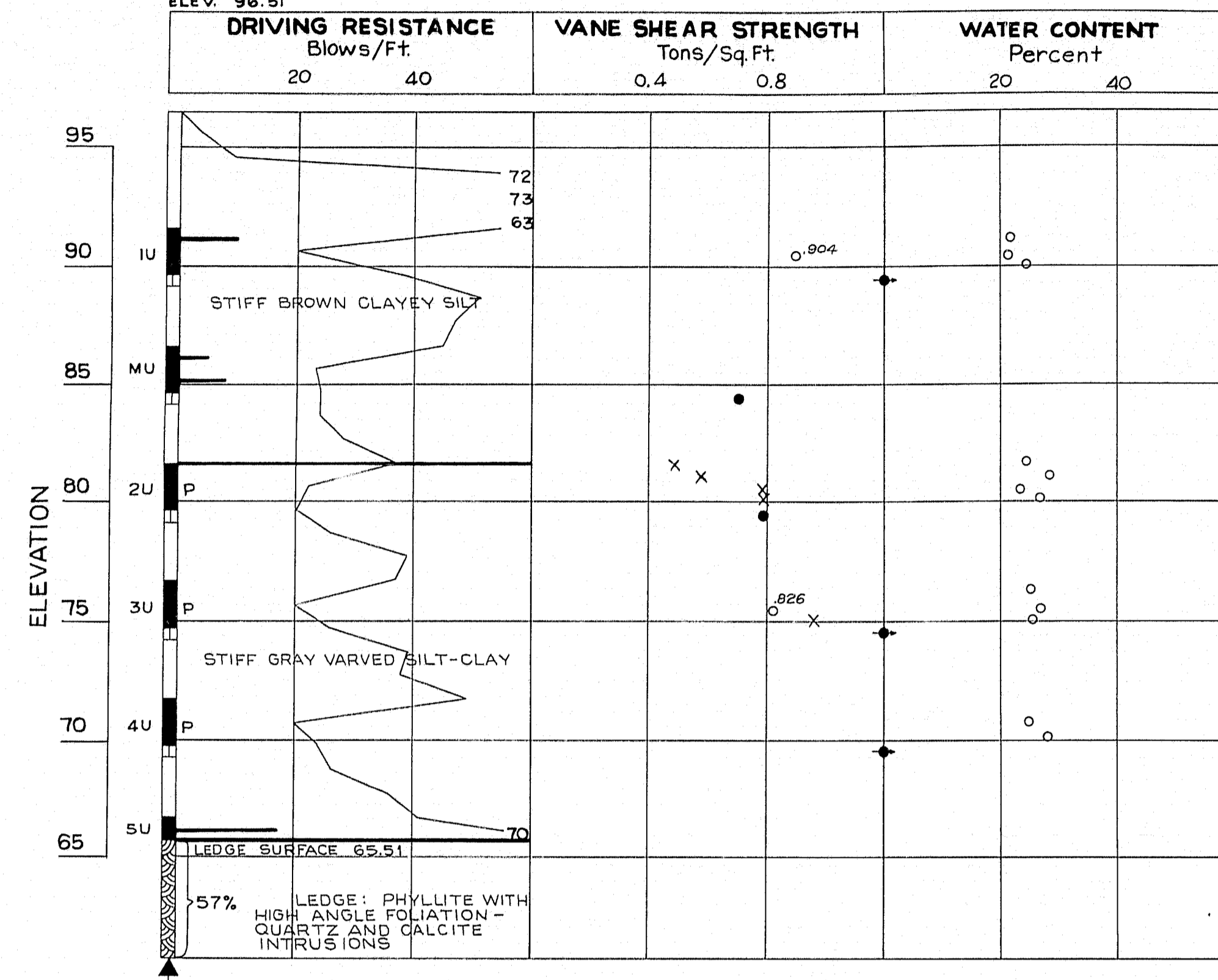
SHEET 5 OF 14 AUGUSTA, MAINE MARCH 1964

82-106

### BORING AC-132

STA. 177+28 17'RT.  
ELEV. 96.51

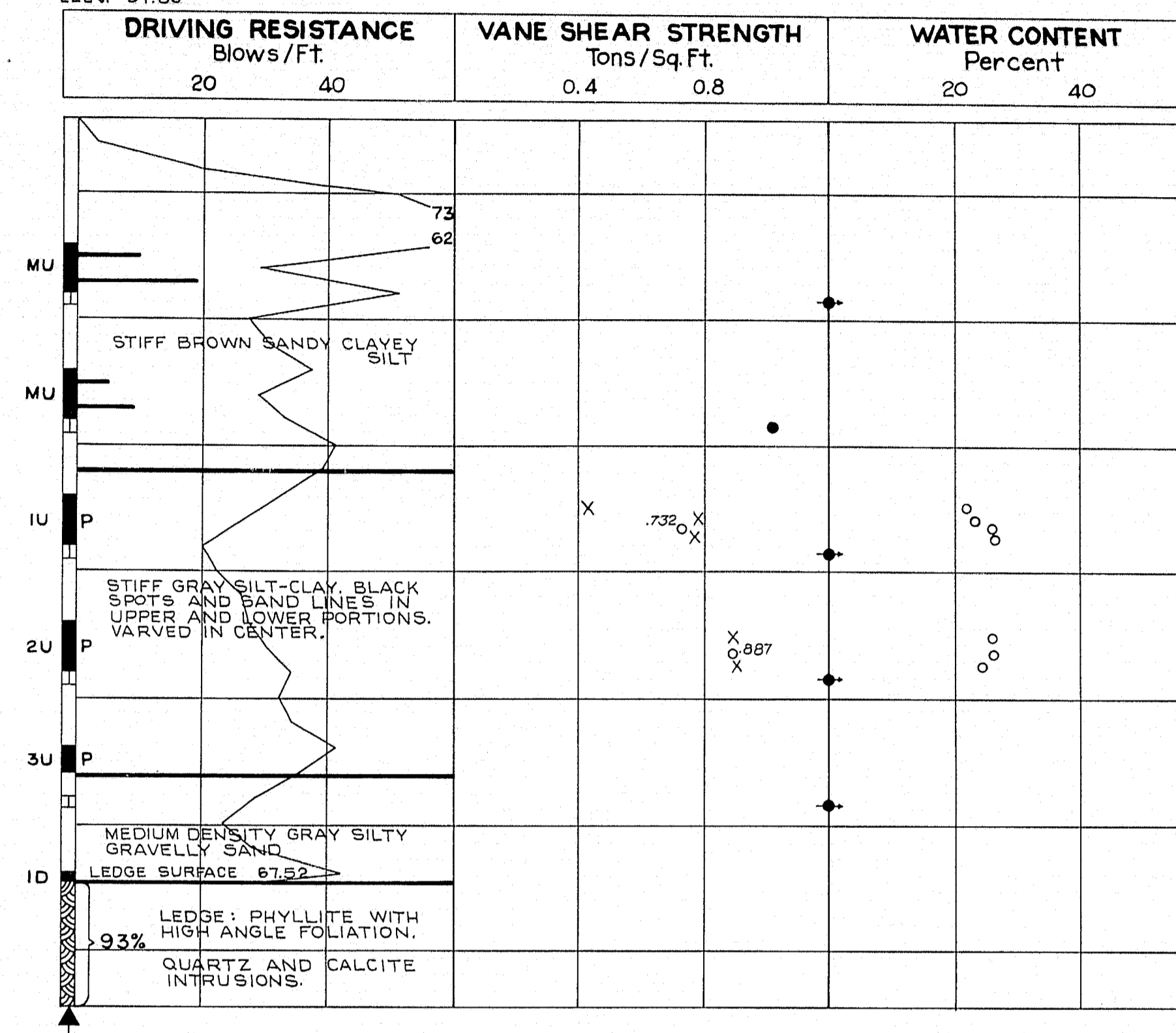
CASING SIZE 4"



### BORING AC-133

STA. 177+12 17'LT.  
ELEV. 97.86

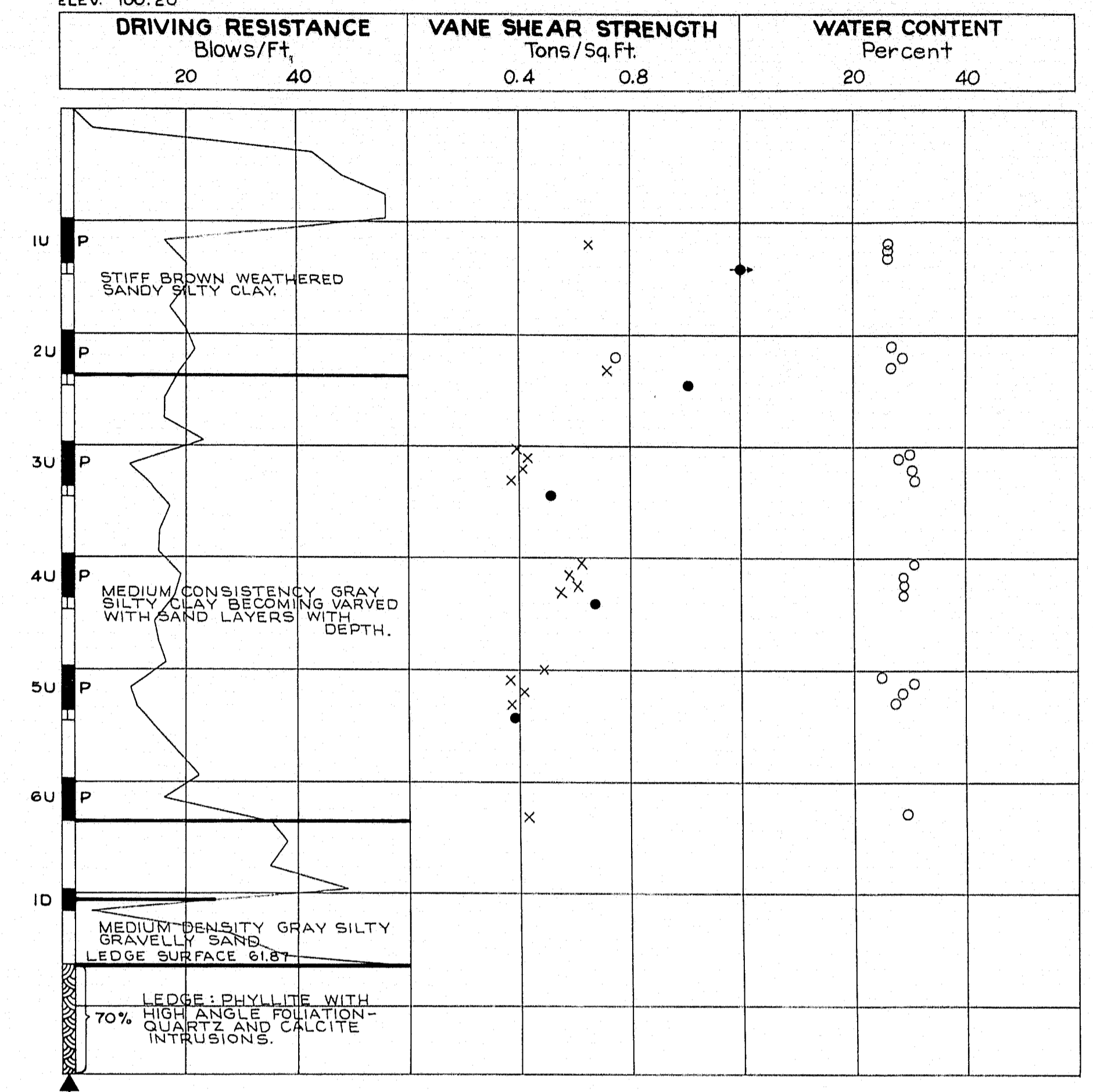
CASING SIZE 4"



### BORING AC-134

STA. 179+00 4'  
ELEV. 100.20

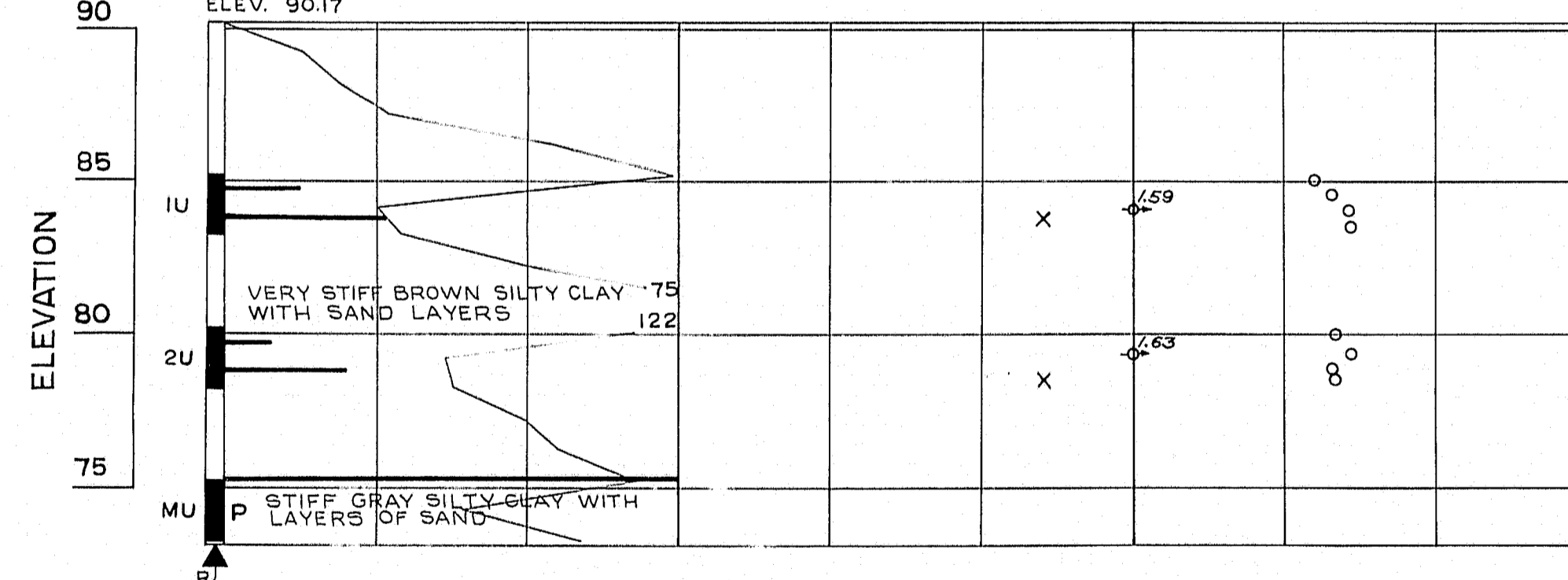
CASING SIZE 4" x 2 1/2"



### BORING AC-125

STA. 174+50 4'  
ELEV. 90.17

CASING SIZE 4"



### 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  
S+H SAMPLER #1290's  
3/8" O.D. 16 GA. SEAMLESS TUBING  
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.  
SAMPLING SPOON OR SEAMLESS TUBING DRIVEN BY STATIC WEIGHT OF DRILL RODS AND HAMMER.  
PISTON SAMPLER.  
FIELD VANE TEST.  
BOTTOM OF BORING (MAY NOT BE BOTTOM OF SOIL STRATA)  
REFUSAL OF DRILL RODS OR CASING (MAY NOT BE LEDGE)  
LOCATIONS CORED BY DIAMOND BIT AND PER CENT RECOVERY OF ROCK.

### SHEAR NOTES

• FIELD VANE SHEAR STRENGTHS.  
X LABORATORY VANE SHEAR STRENGTHS.  
+ SHEAR STRENGTHS IN EXCESS OF CAPACITY OF EQUIPMENT.

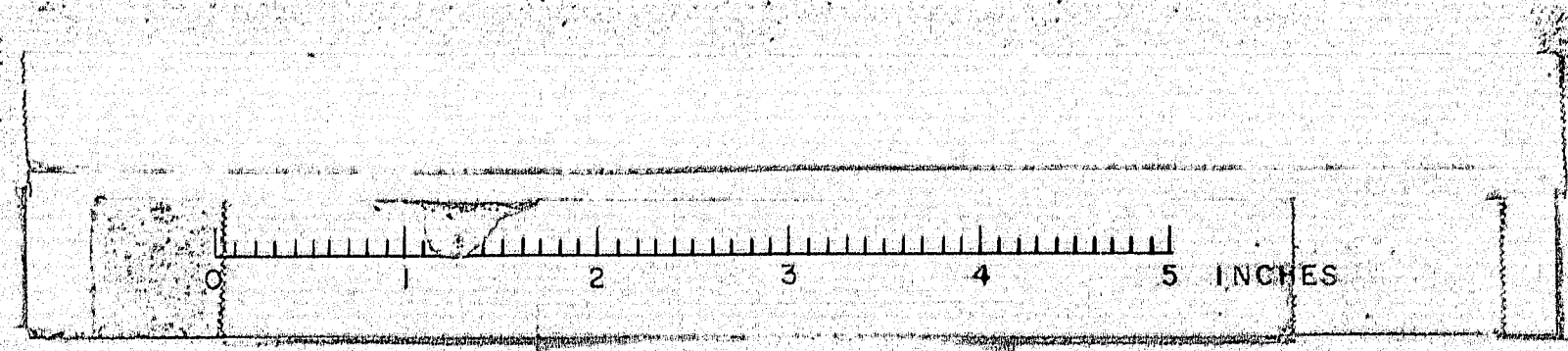
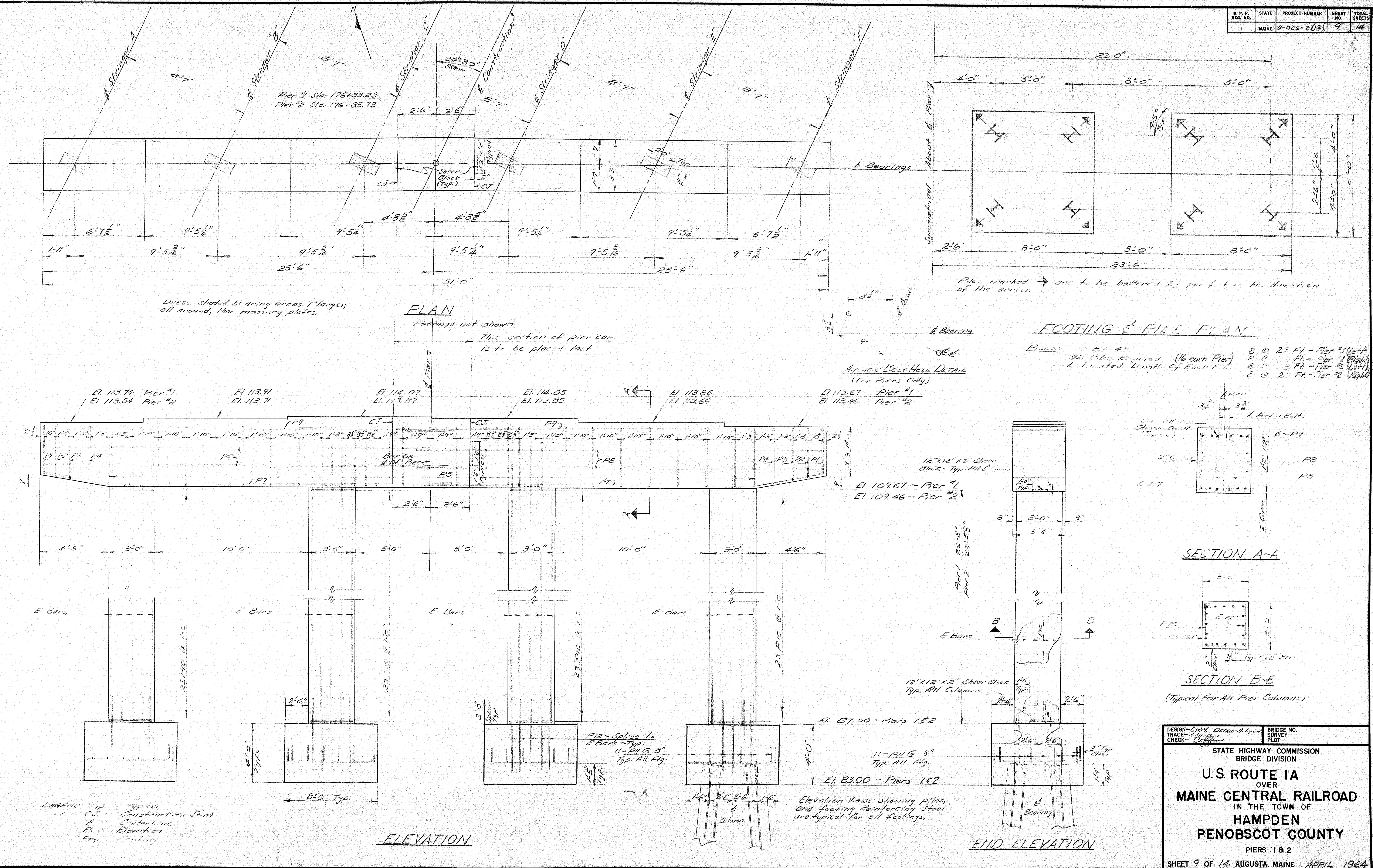
### WATER CONTENT NOTES

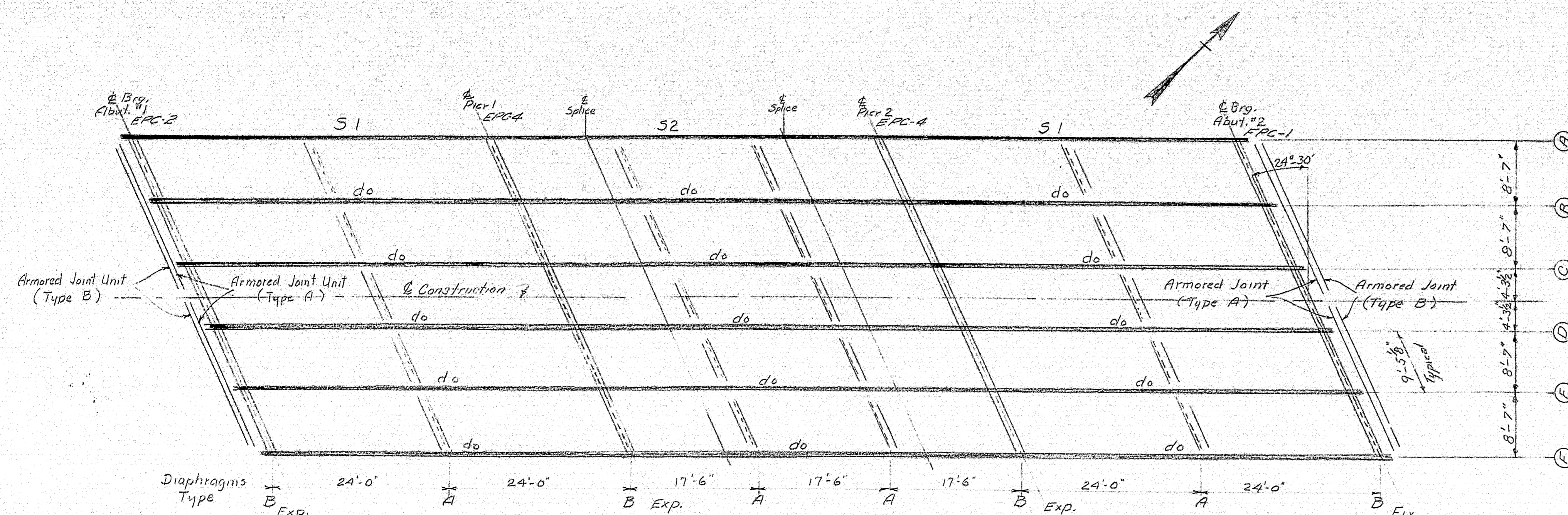
o NATURAL WATER CONTENTS, GIVEN AS PER CENT OF DRY WEIGHT.

DESIGN— TRACE— CHECK—	BRIDGE NO. SURVEY— PLOT—
STATE HIGHWAY COMMISSION BRIDGE DIVISION	
U.S. ROUTE 1A OVER MAINE CENTRAL RAILROAD IN THE TOWN OF HAMPDEN PENOBSCOT COUNTY FOUNDATION SURVEY	
SHEET 6 OF 14 AUGUSTA, MAINE MARCH 1964	

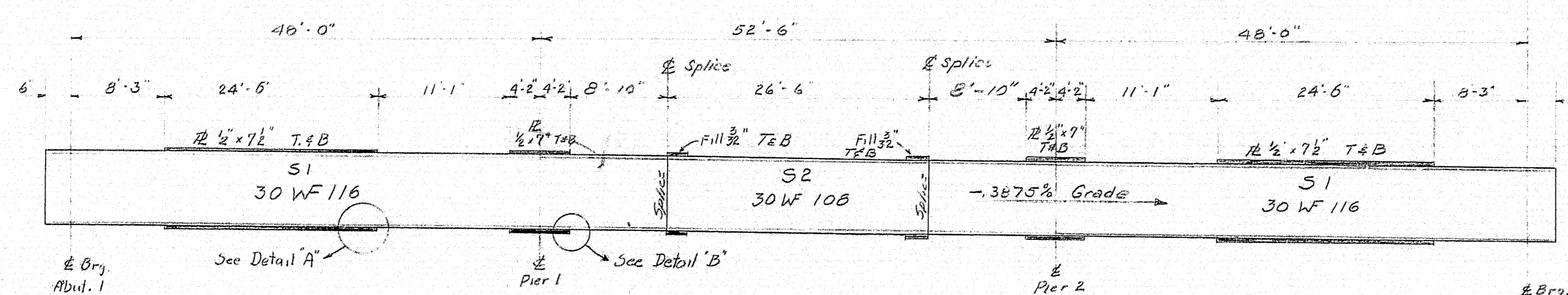




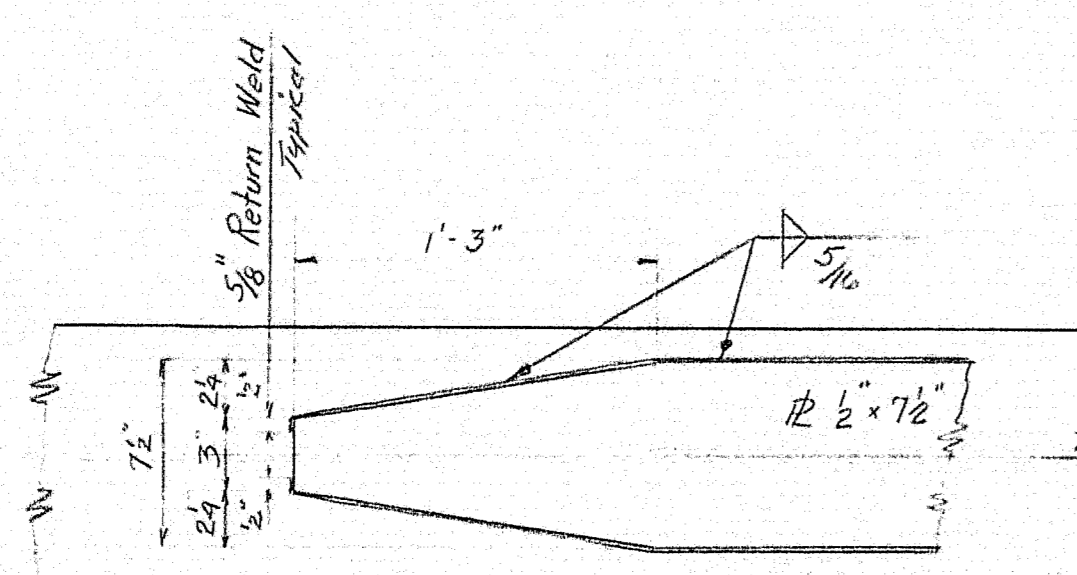




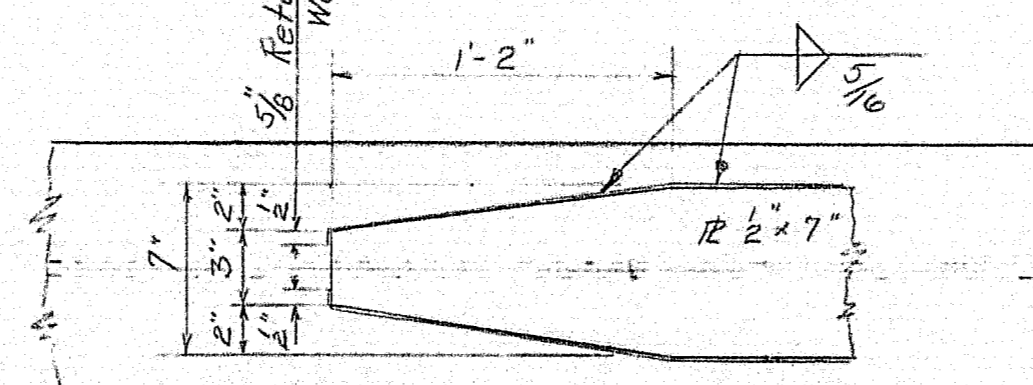
**ERECTION PLAN**  
Refer to Standard Details Sh. BD 104-64 Expansion Joints, Diaphragms, Drains - (6 Required)  
BD 103-64 Standard Splices  
BD 101-64 Bearings



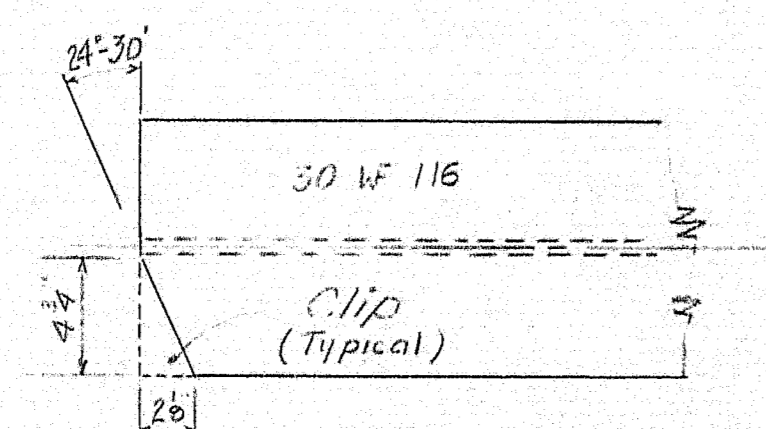
**ELEVATION - STRINGERS**  
No Camber Required



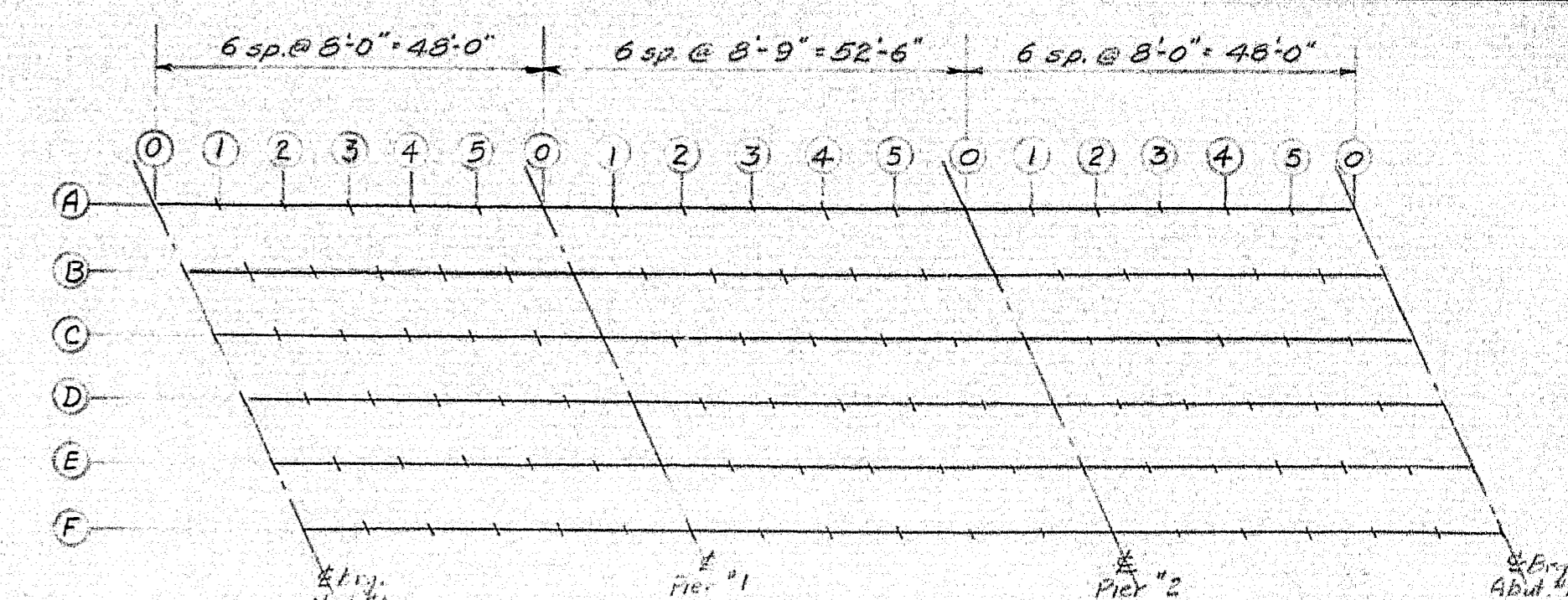
**DETAIL "A"**  
Typical End for 7 1/2" Cover Plate



**DETAIL "B"**  
Typical End for 7" Cover Plate

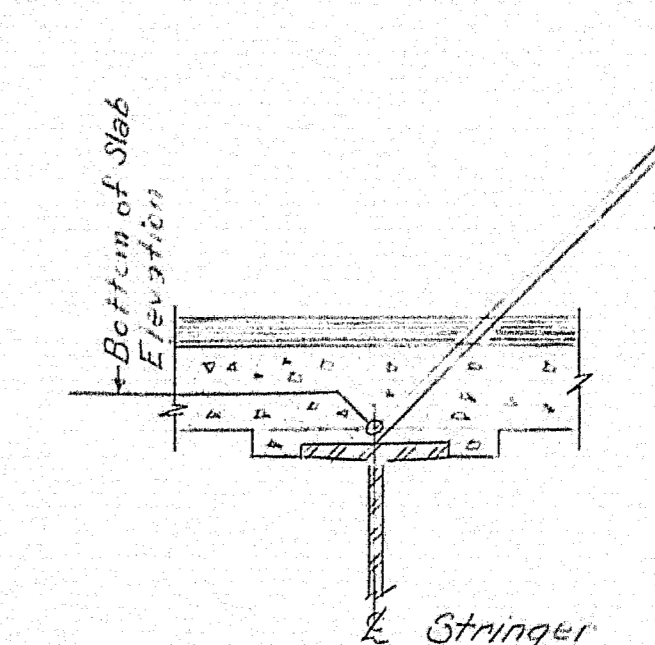


**BEAM END**  
Typ. @ Abuts



**BLOCKING DIAGRAM**

BOTTOM of SLAB - ELEVATIONS							
Line	0	1	2	3	4	5	0
Span 1	A	117.72	117.71	117.69	117.66	117.62	117.57
	B	117.88	117.87	117.85	117.82	117.78	117.74
	C	118.05	118.03	118.02	117.99	117.95	117.90
	D	118.03	118.02	118.00	117.97	117.93	117.89
	E	117.84	117.83	117.81	117.78	117.74	117.69
	F	117.64	117.63	117.61	117.58	117.54	117.50
Span 2	A	117.53	117.50	117.48	117.45	117.41	117.37
	B	117.70	117.67	117.64	117.61	117.57	117.53
	C	117.86	117.83	117.80	117.76	117.74	117.69
	D	117.84	117.81	117.79	117.76	117.72	117.68
	E	117.65	117.62	117.60	117.57	117.53	117.48
	F	117.46	117.43	117.40	117.37	117.33	117.29
Span 3	A	117.33	117.31	117.29	117.27	117.24	117.19
	B	117.49	117.47	117.45	117.43	117.40	117.36
	C	117.66	117.64	117.62	117.60	117.56	117.52
	D	117.64	117.62	117.60	117.58	117.55	117.51
	E	117.45	117.43	117.41	117.39	117.36	117.31
	F	117.25	117.23	117.22	117.19	117.16	117.07

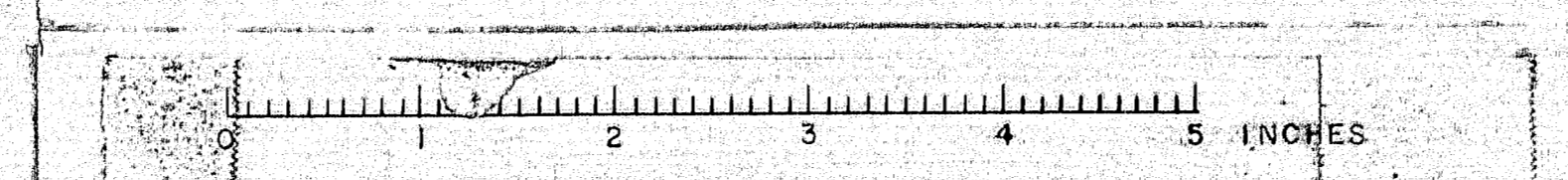


**STRINGER SECTION**  
Note: Blocking is 1" at bearings. Do not use for setting forms.

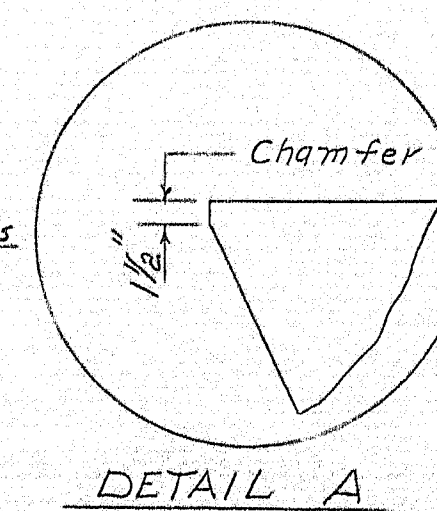
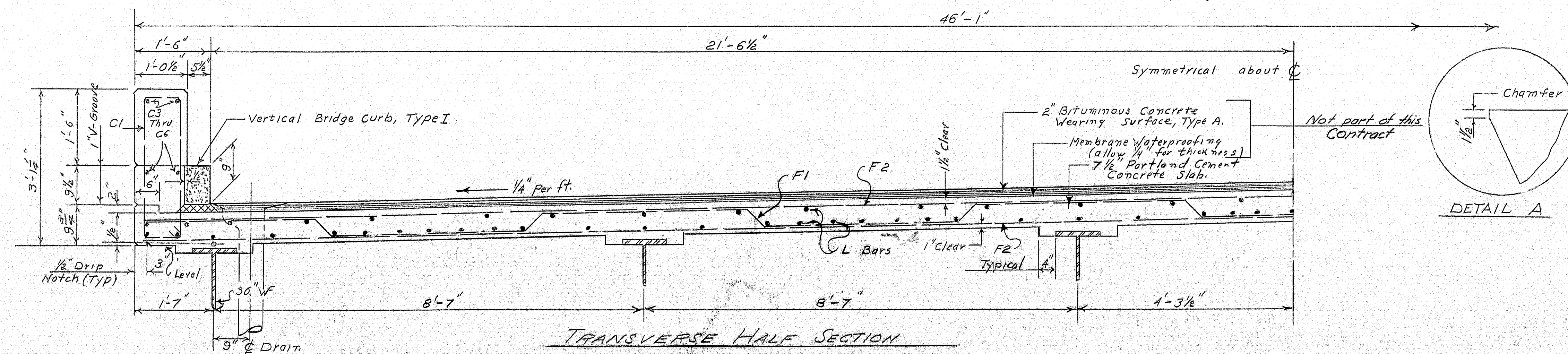
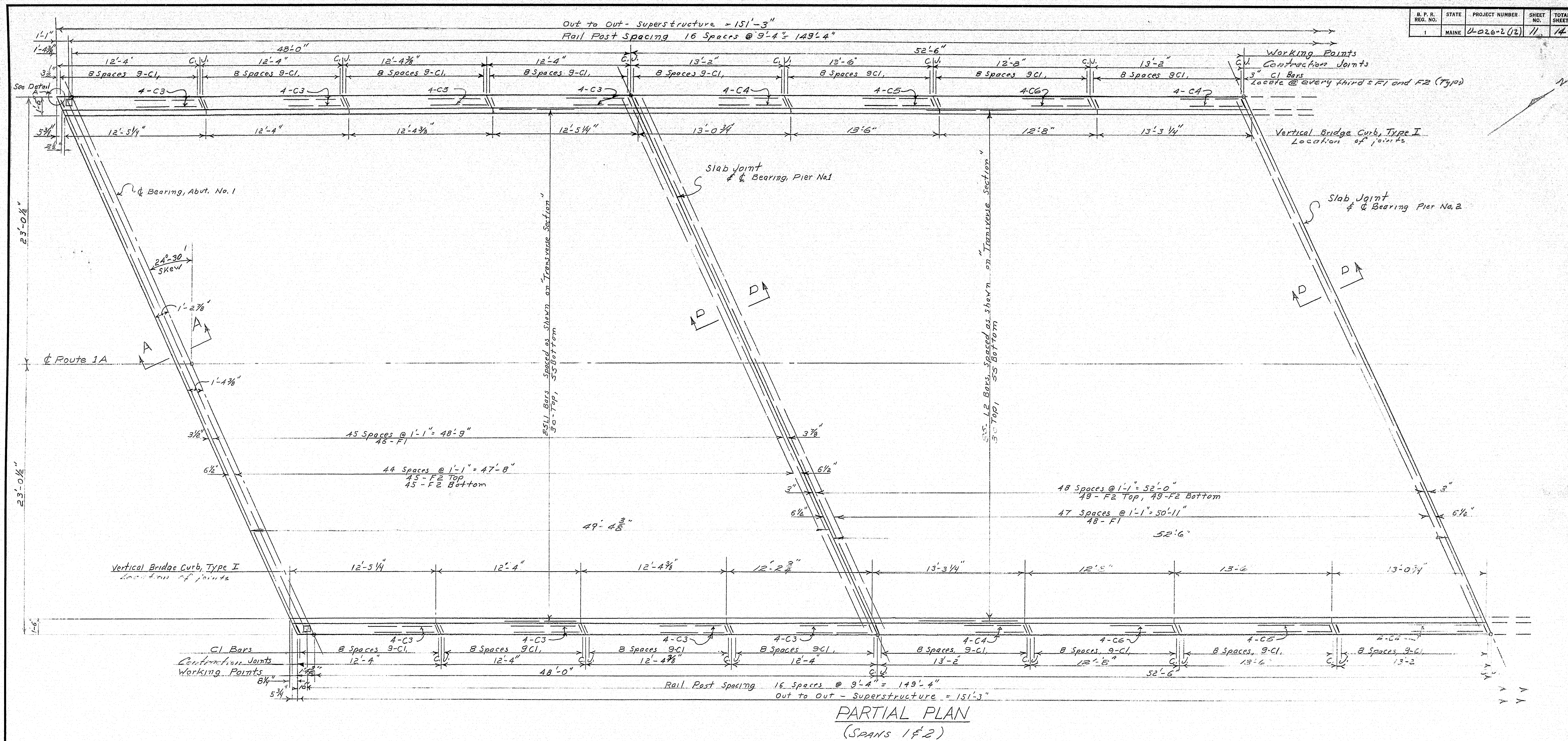
Note: To compensate for dead load deflections as well as possible irregularities in beams, set the bottom of slab elevations at the points indicated below any of the slab form work is started.

DESIGN - McDUGAL	BRIDGE NO.
TRACE - DET - FORTIER	SURVEY -
CHECK -	PLOT -
STATE HIGHWAY COMMISSION BRIDGE DIVISION	
U.S. ROUTE 1A OVER MAINE CENTRAL RAILROAD IN THE TOWN OF HAMPDEN PENOBSCOT COUNTY	
STRUCTURAL STEEL & BLOCKING	
SHEET 10 OF 14 AUGUSTA, MAINE MARCH 1964	

92-111



B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEET
1	MAINE	U-026-2 (12)	11	14



DESIGN - CWM	BRIDGE NO.
TRACE + DETAIL - ERS	SURVEY -
CHECK - <i>Chen</i>	PLOT -

STATE HIGHWAY COMMISSION  
BRIDGE DIVISION

U.S. ROUTE 1A  
OVER  
MAINE CENTRAL RAILROAD  
IN THE TOWN OF  
HAMPDEN  
PENOBSCOT COUNTY  
SUPERSTRUCTURE

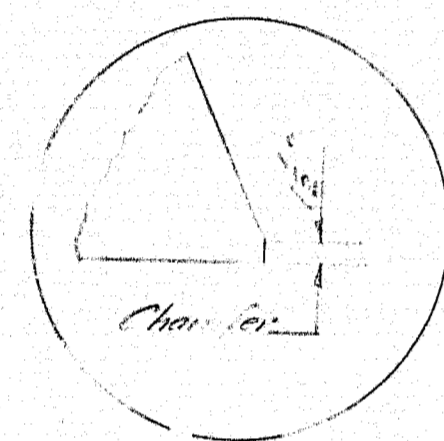
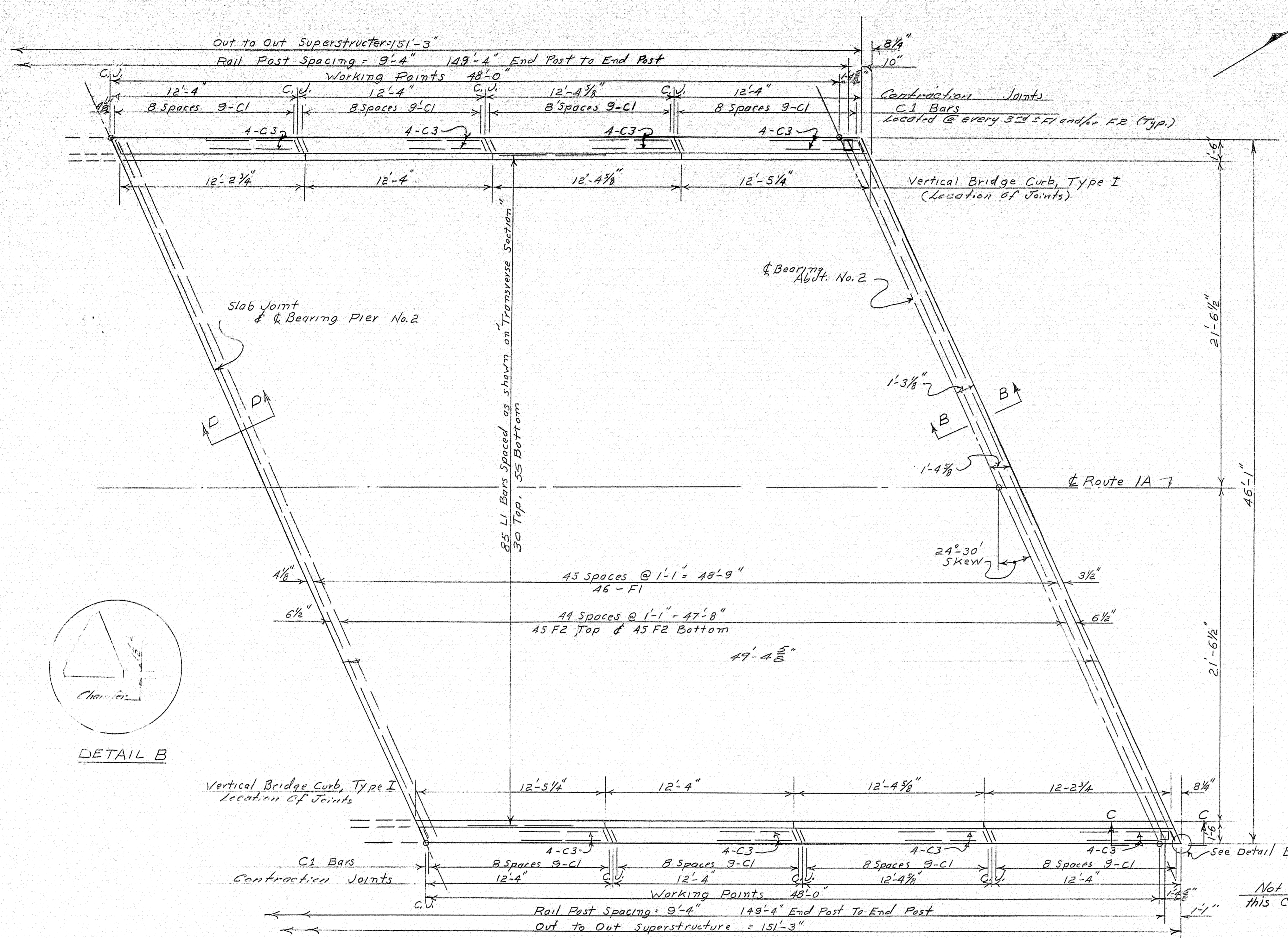
SHEET // of 14    AUGUSTA, MAINE    MARCH 1964

STATE HIGHWAY COMMISSION  
BRIDGE DIVISION

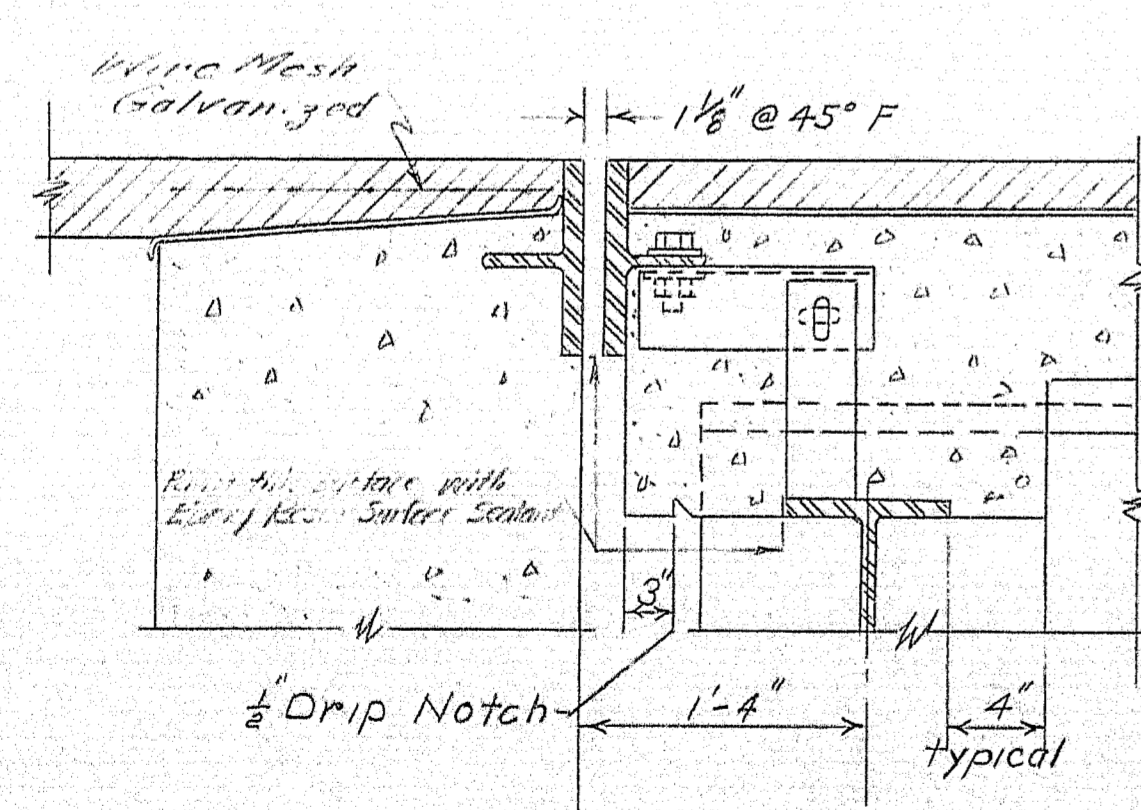
U.S. ROUTE 1A  
OVER  
MAINE CENTRAL RAILROAD  
IN THE TOWN OF  
HAMPDEN  
PENOBSCOT COUNTY  
SUPERSTRUCTURE

SHEET // OF 14 AUGUSTA, MAINE MARCH 1964

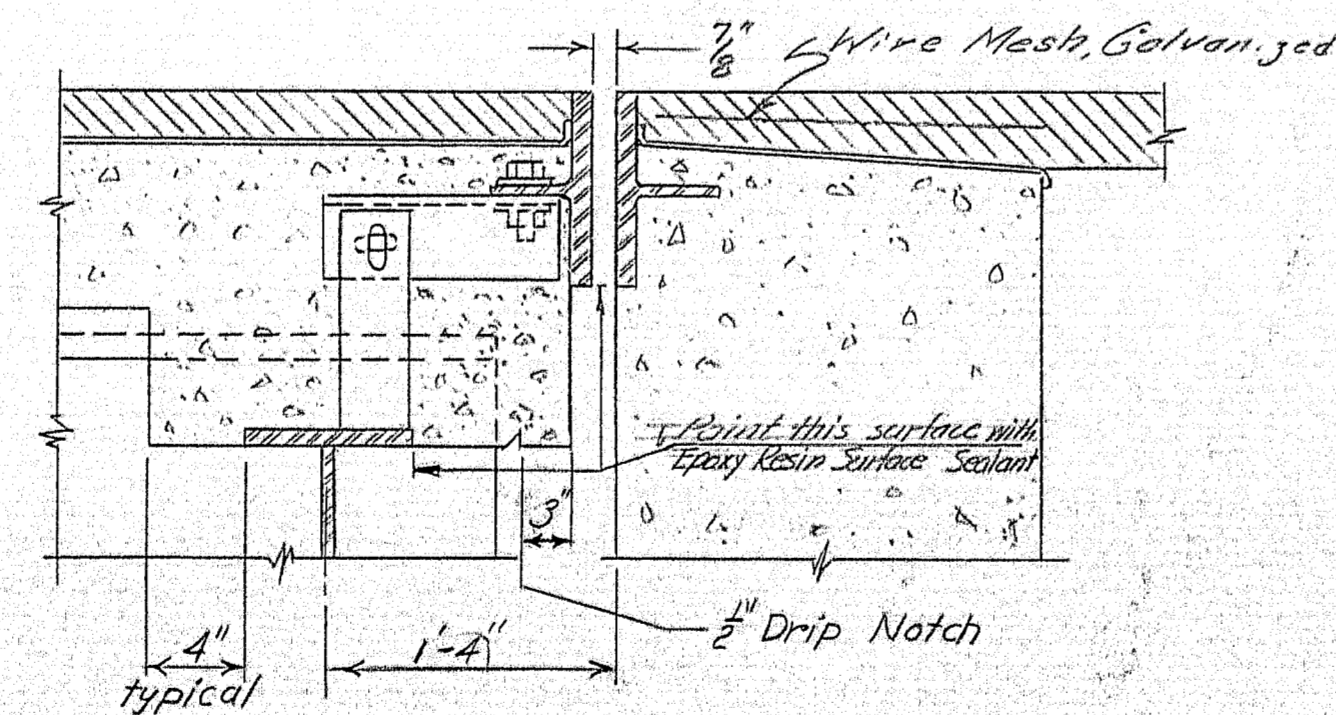




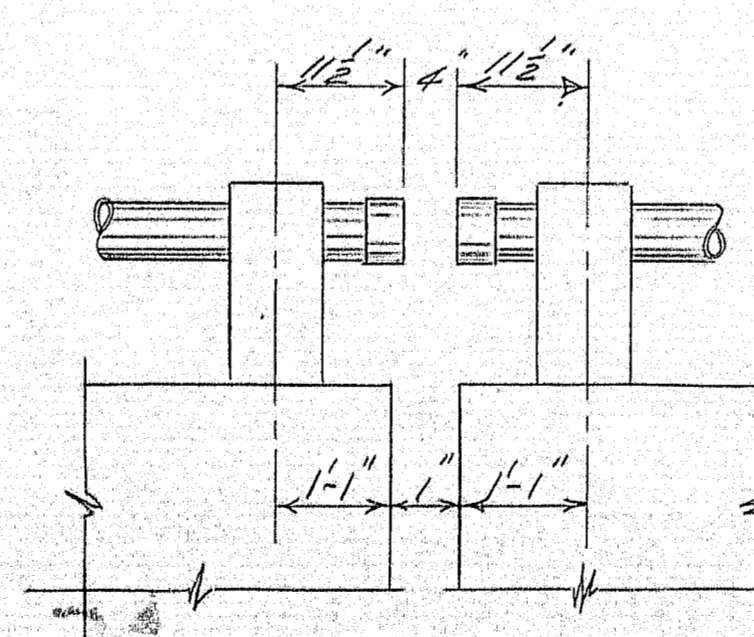
DETAIL B



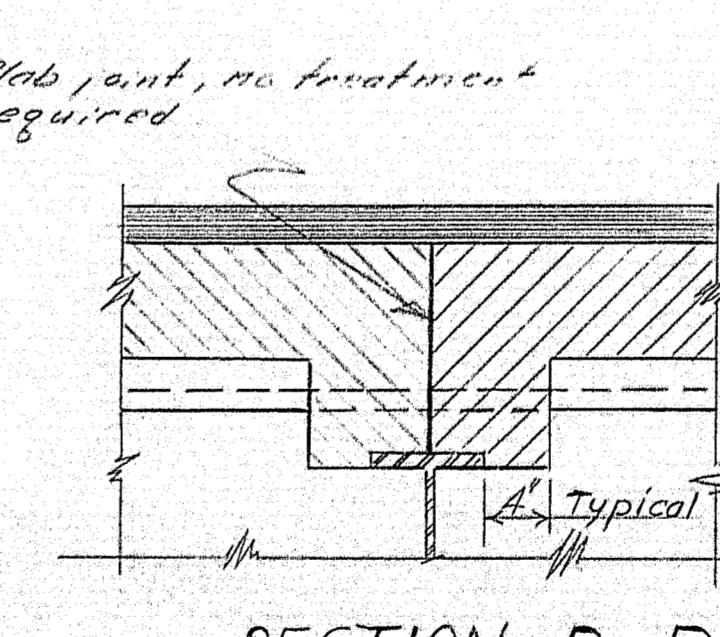
SECTION A-A



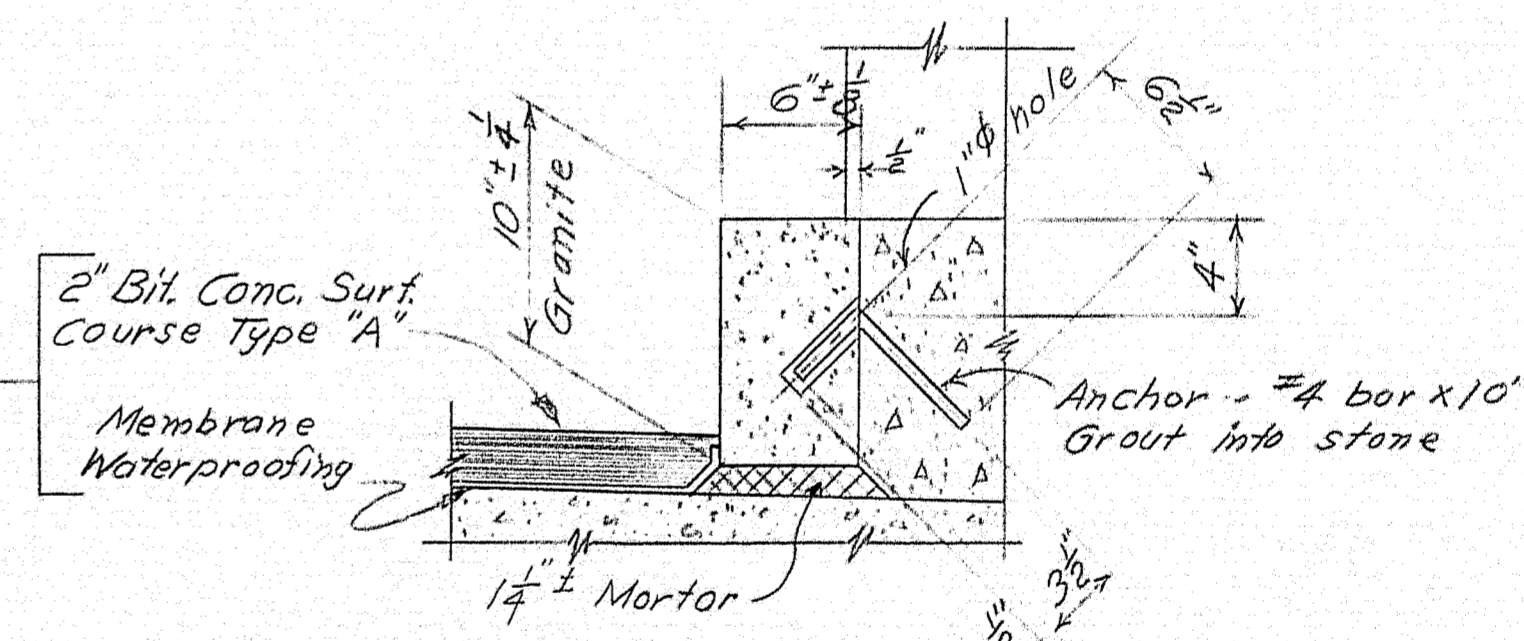
SECTION B-B



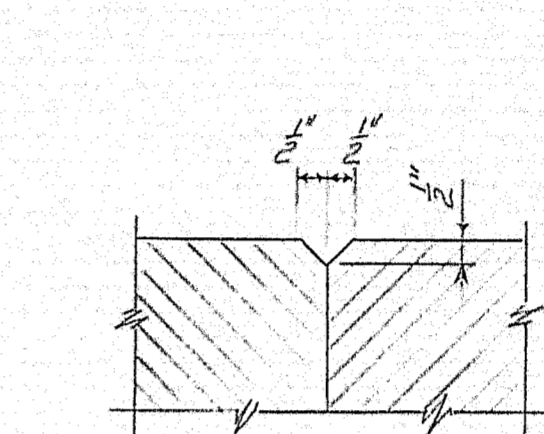
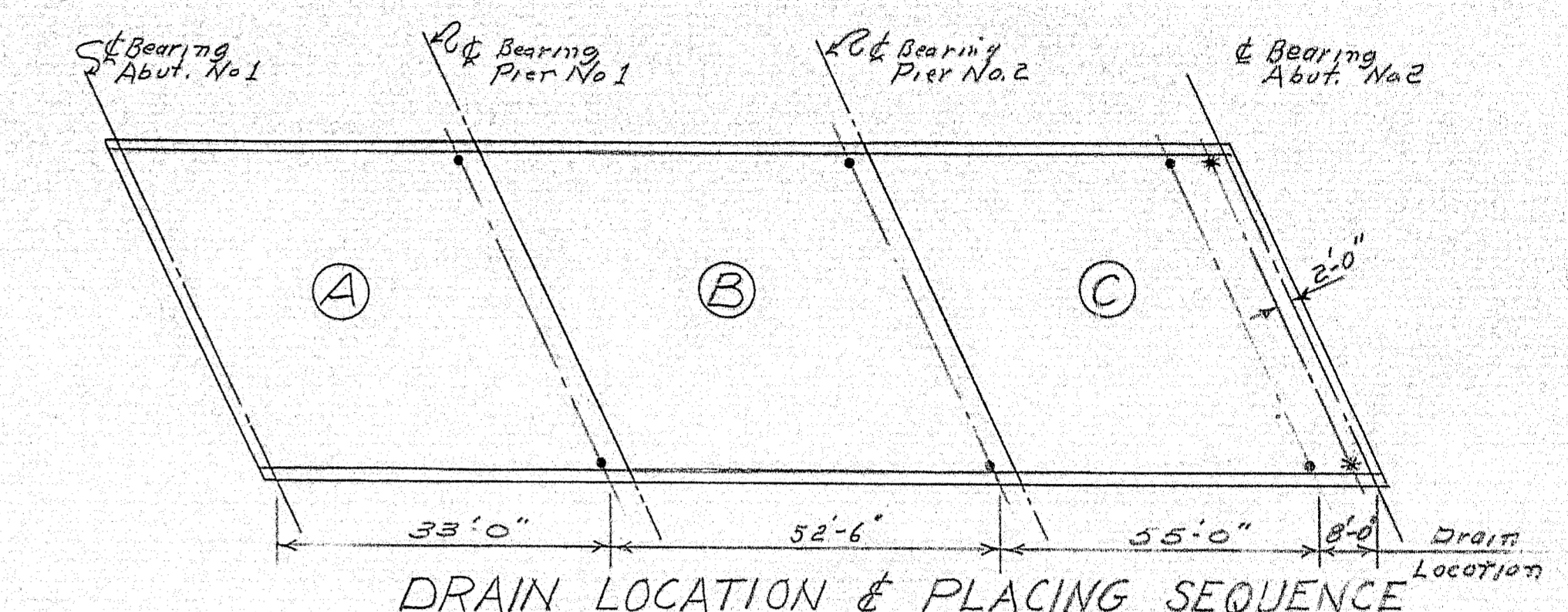
SECTION C-C



SECTION D-D



VERTICAL BRIDGE CURB, TYPE I  
Typical Section



\* 1" dia Plastic tubes through slab - Do not cover with Membrane Waterproofing. Payment to be included to Item 701-40, Portland Cement Concrete Roadway and Sidewalk Slabs on Steel Bridges. Extend tubes 2' Below Bottom of Slab.

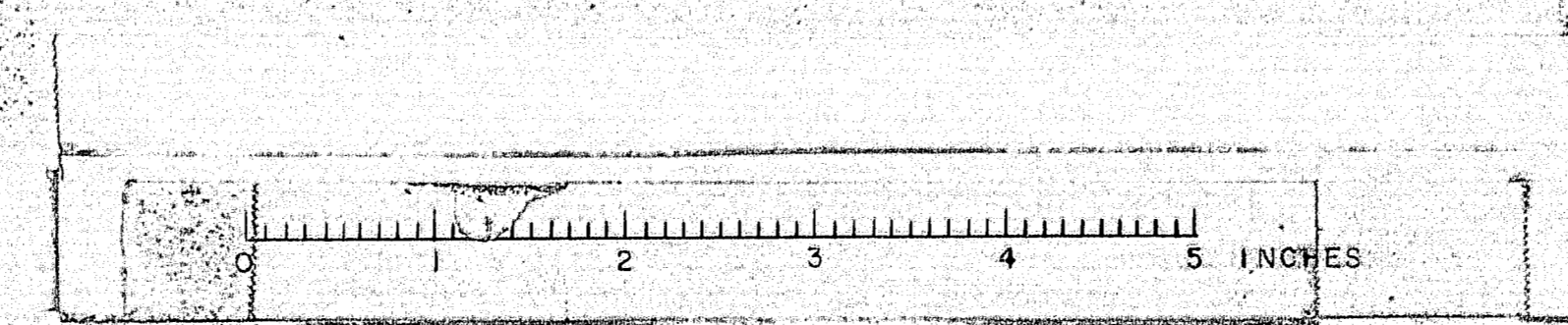
PLACING SEQUENCE - Place slabs "A" and "C" before placing slab "B". Slab "B" - place concrete from center towards slab "A" and slab "C" simultaneously.

REFERENCES AND GENERAL SUPERSTRUCTURE NOTES

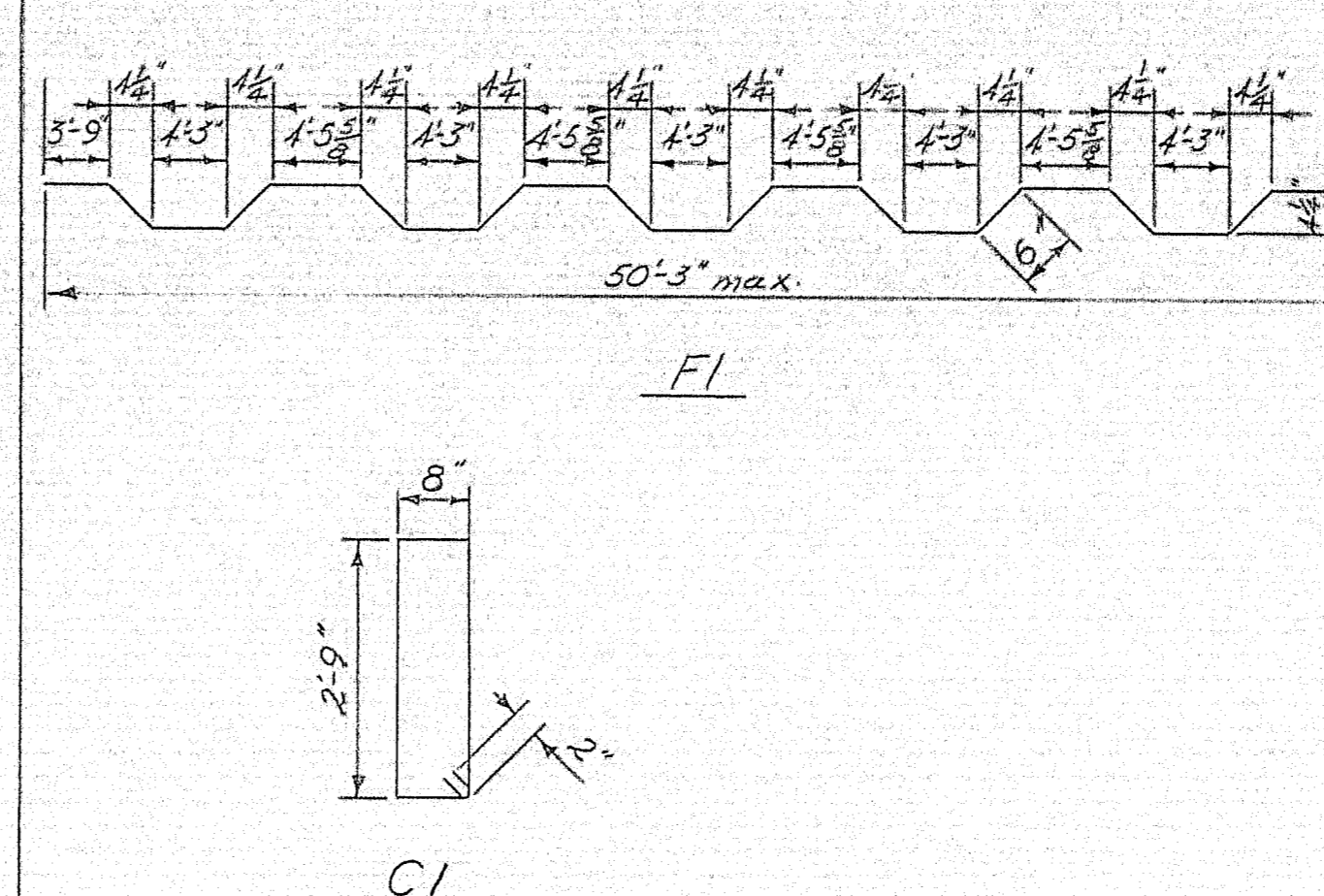
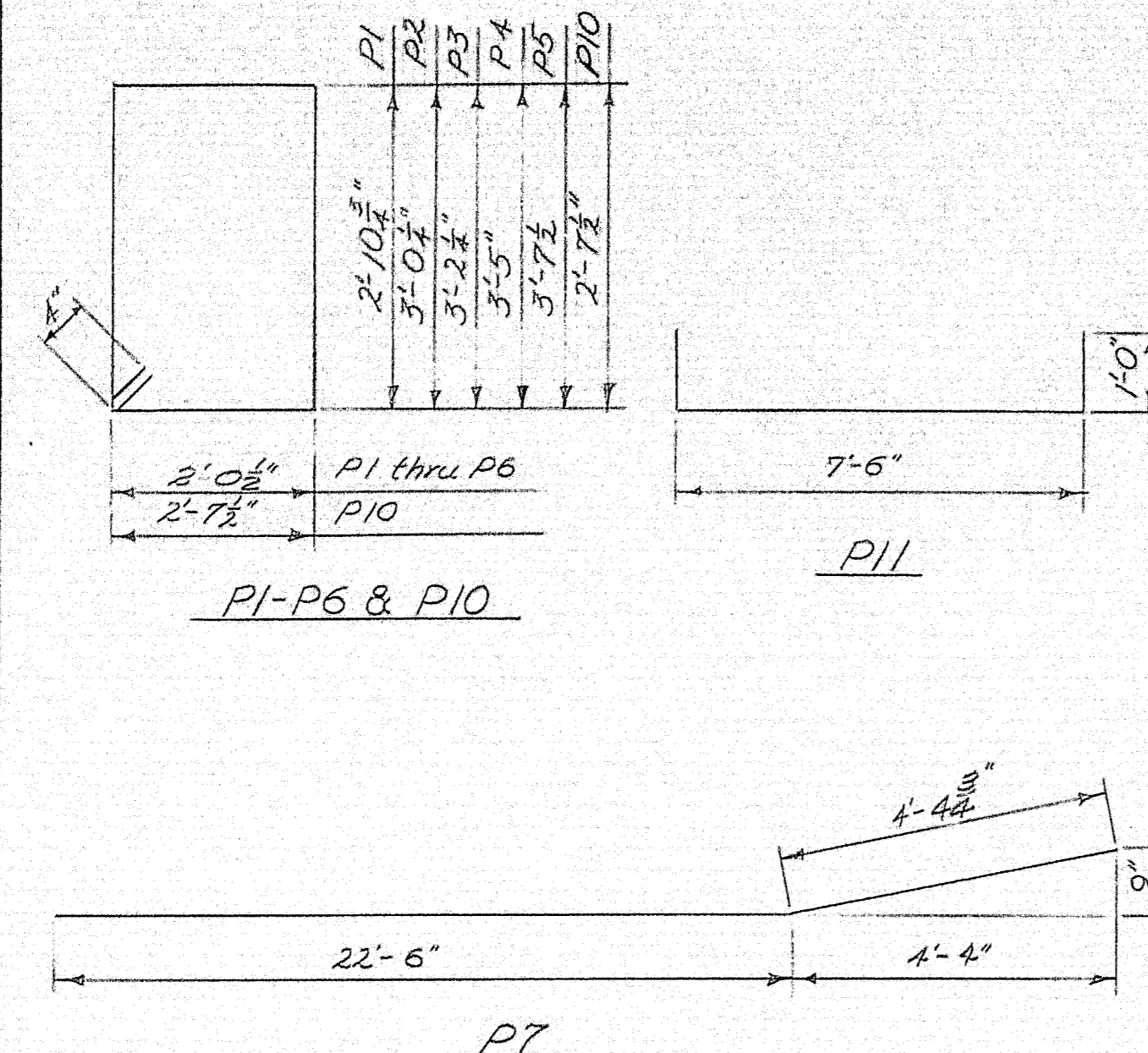
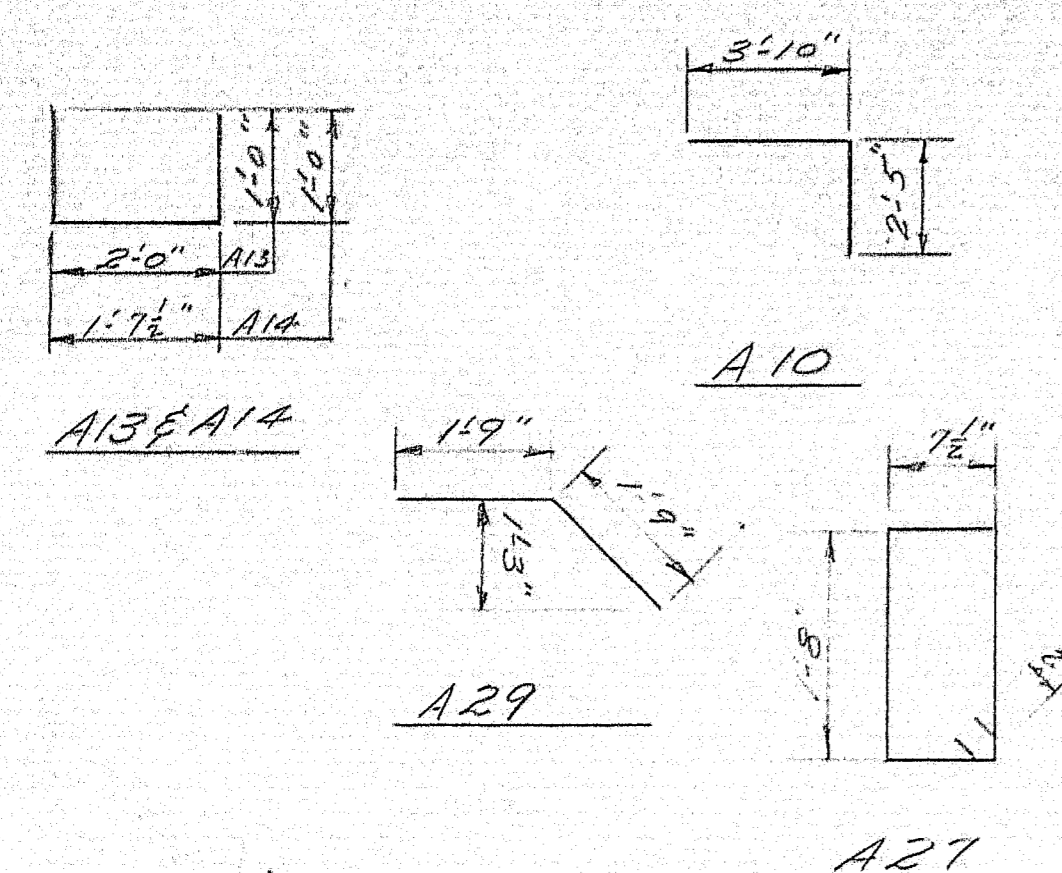
For Armored Joints see Standard Details BD-104-64  
For Bridge Rail see Standard Details BD-104-64  
For Bridge Rail see Standard Details BD-102-64  
C.J. on Joints indicates a vertical contraction joint in curbs and rail parapets.  
At contraction joints over piers, provide 1/2" preformed expansion joint filler material, bituminous treat between contact surfaces of concrete curb, vertical bridge curb and rail parapet. At all other contraction joints, in concrete curb and rail parapet, break the bond between the concrete surfaces by coating the concrete surface with a suitable grade of asphalt paint. Form a V-groove on top, inside and outside faces of rail parapet and outside face of curb and slab at each contraction joint.  
Provide a joint in the vertical bridge curb at each contraction joint in the concrete curb and rail parapet.  
For Blocking see Sheet "10" - Reinforcing cover "10" unless noted  
Use this sheet with sheet "11"

DESIGN - CWM	BRIDGE NO. SURVEY - PLOT -
TRACE & DET - ERS	
CHECK - CWM	
STATE HIGHWAY COMMISSION BRIDGE DIVISION	
U.S. ROUTE 1A OVER MAINE CENTRAL RAILROAD IN THE TOWN OF HAMPDEN PENOBSCOT COUNTY SUPERSTRUCTURE	
SHEET 12 OF 14 AUGUSTA, MAINE MARCH 1964	

92-113



# REINFORCING STEEL SCHEDULE

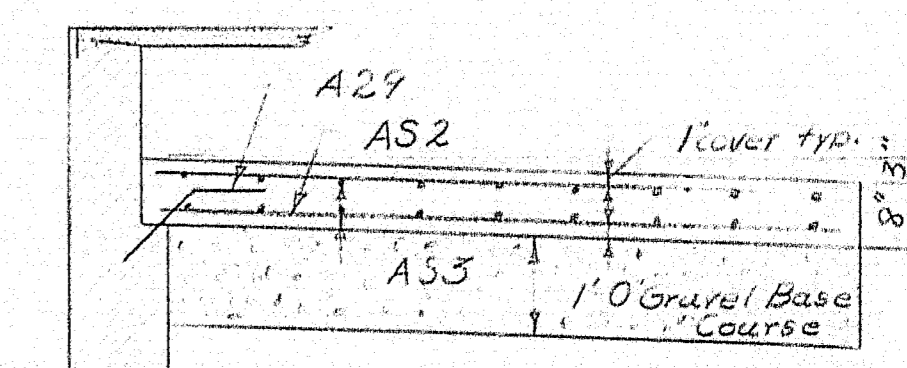
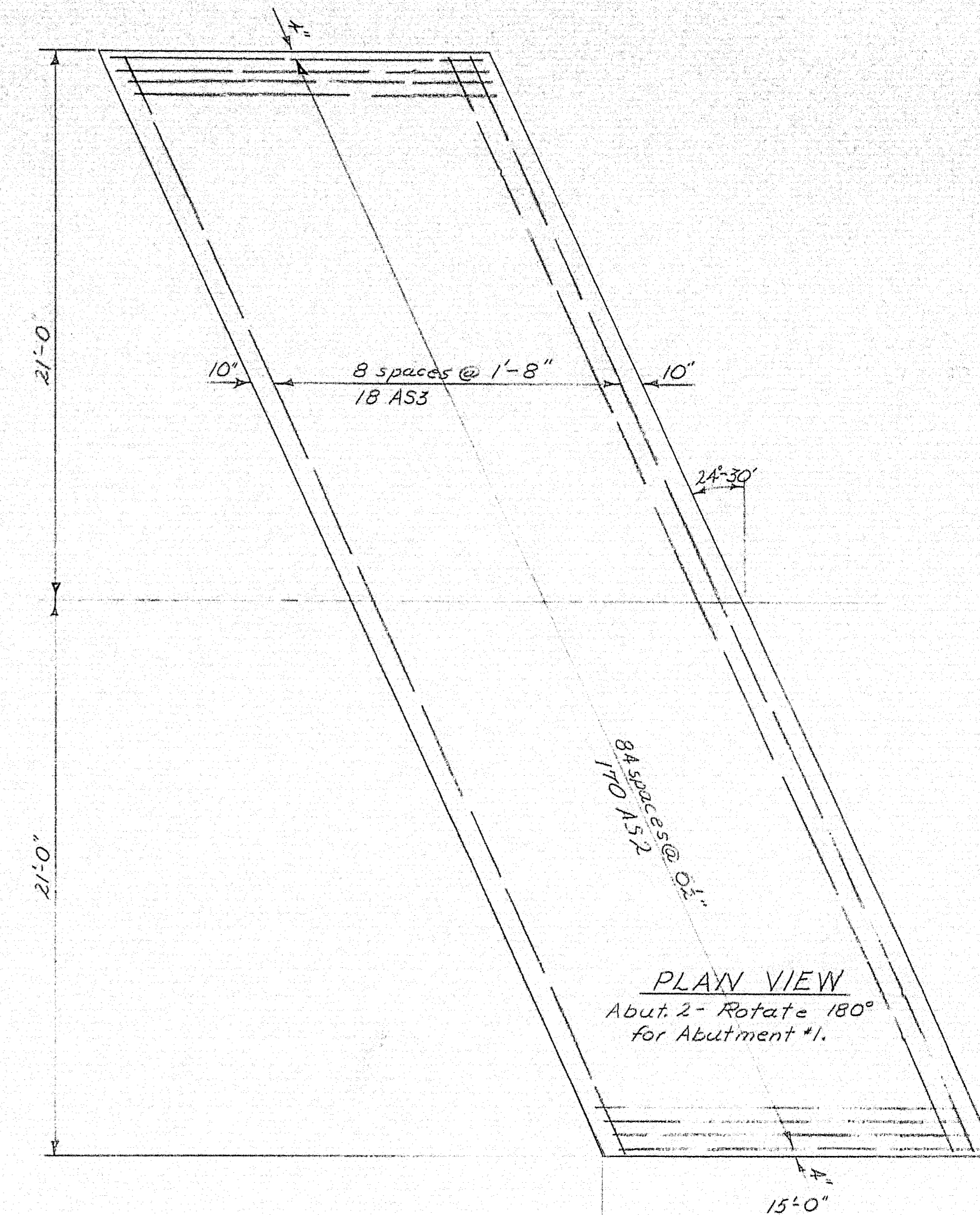


ABUTMENTS				
BENT BARS				
Mark	Size	No.	Length	Location
A10	#5	66	6'-3"	Breastwall
A13	#4	24	4'-0"	Bearing Pads
A14	#4	24	3'-7"	"
A27	#6	12	4'-11"	End Posts
A29	#6	64	3'-6"	Approach Slab
A31	#4	42	7'-2"	Curb Stirrups - See Superst. Sched.
STRAIGHT BARS				
A1	#6	18	50'-6"	Footings
A2	#6	204	6'-0"	"
A3	#6	16	10'-3"	"
A4	#6	32	2'-6"	"
A5	#6	28	4'-6"	"
A6	#6	12	7'-6"	"
A7	#6	2	12'-0"	"
A8	#5	30	3'-0"	Footings to Wing
A9	#5	120	2'-6"	Breastwall to Backwall
A11	#5	12	26'-6"	Breastwall
A12	#5	12	24'-7"	"
A15	#5	28	4'-0"	Wings
A16	#5	12	11'-5"	"
A17	#7	12	12'-6"	"
A18	#5	128	4'-3"	Abutment Breastwall
A19	#4	12	26'-6"	"
A20	#4	2	25'-0"	"
A21	#5	88	4'-4"	Wings
A22	#5	40	11'-0"	"
A24	#5	8	1'-3"	"
A26	#4	16	9'-6"	"
A28	#4	16	2'-5"	End Posts

PIERS				
STRAIGHT BARS				
Mark	Size	No.	Length	Location
P8	#6	16	26'-5"	pier caps
P9	#10	24	27'-4"	"
P12	#8	128	6'-4"	pier footings
E	#8	128	25'-6"	columns
BENT BARS				
P1	#4	8	10'-6"	pier caps
P2		8	10'-9"	"
P3		8	11'-2"	"
P4		8	11'-7"	"
P5		116	12'-0"	"
P7	#9	24	26'-11"	"
P10	#4	184	11'-2"	pier columns
P11	#6	176	9'-6"	pier footings

SUPERSTRUCTURE				
STRAIGHT BARS				
Mark	Size	No.	Length	Location
F2	#6	278	50'-3"	transverse deck steel
C3	#4	64	12'-0"	curb, sections @ & @
C4		16	12'-9"	curb, section @
C5		8	13'-2"	"
C6		8	12'-4"	"
L1	#5	170	49'-0"	distribution steel, sections @ & @
L2	#5	85	52'-2"	distribution steel, section @
AS2	#6	340	14'-6"	approach slab
AS3	#4	36	45'-8"	"
BENT BARS				
F1	#6	140	51'-9"	"cranks" in deck
C1	#4	216	7'-2"	stirrups (curbs)

Dimensions are to E of bars  
Reinforcing Steel to be intermediate grade.



## TYPICAL SECTION

Note: Approach Slab Concrete to be paid for as Portland Cement Concrete Abutments & Retaining Walls, Item 701-33.

DESIGN - McDougall  
TRACE - BARNES  
CHECK - O'Brien

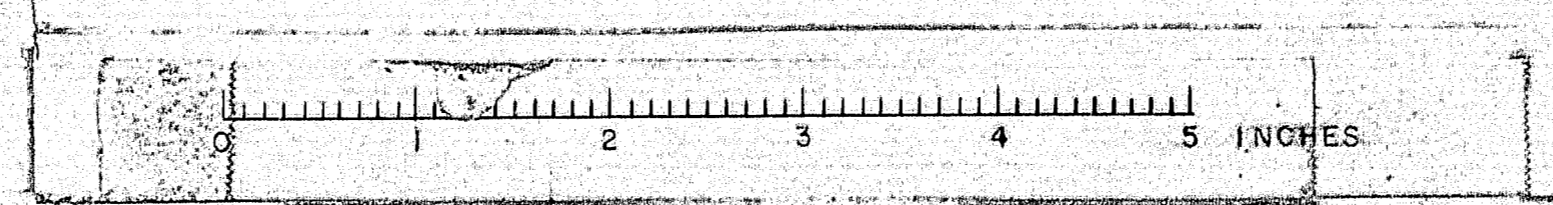
BRIDGE NO. 100  
SURVEY - 100  
PLOT - 100

STATE HIGHWAY COMMISSION  
BRIDGE DIVISION

U.S. ROUTE 1A  
OVER  
MAINE CENTRAL RAILROAD  
IN THE TOWN OF  
HAMPDEN  
PENOBSCOT COUNTY  
REINFORCING STEEL, APPROACH SLABS

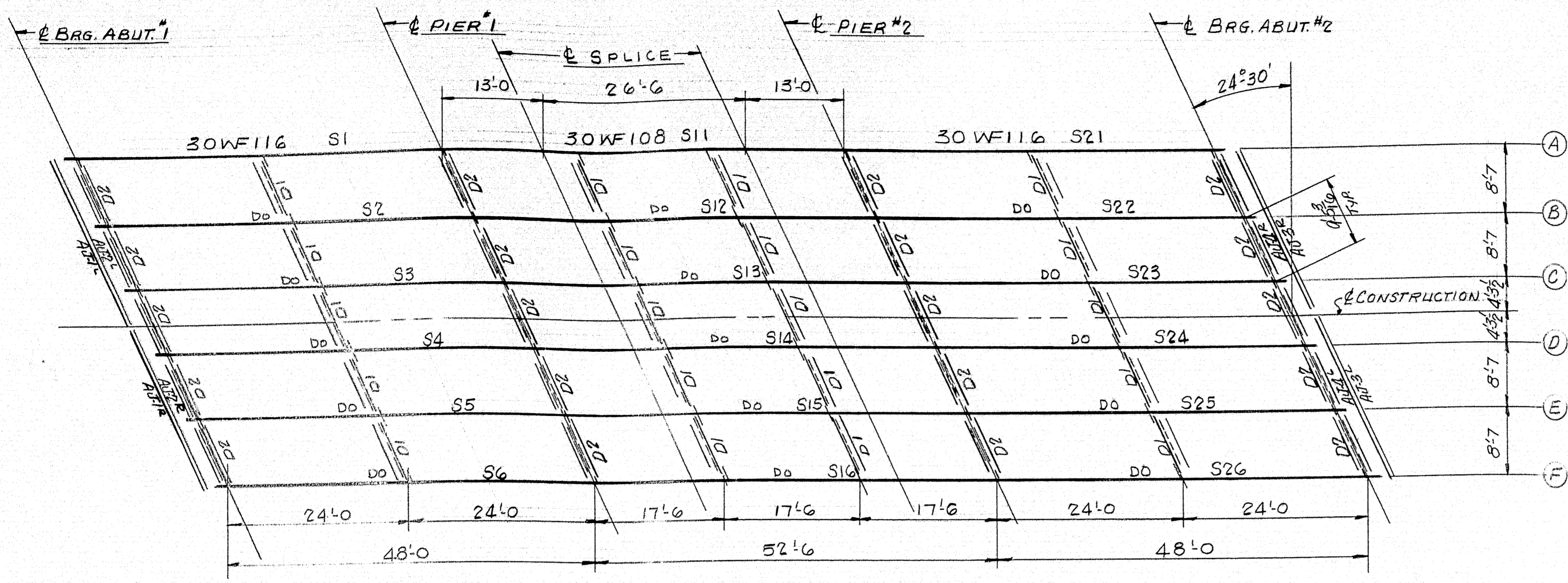
SHEET 13 OF 14 AUGUSTA, MAINE APRIL 1964

92-114

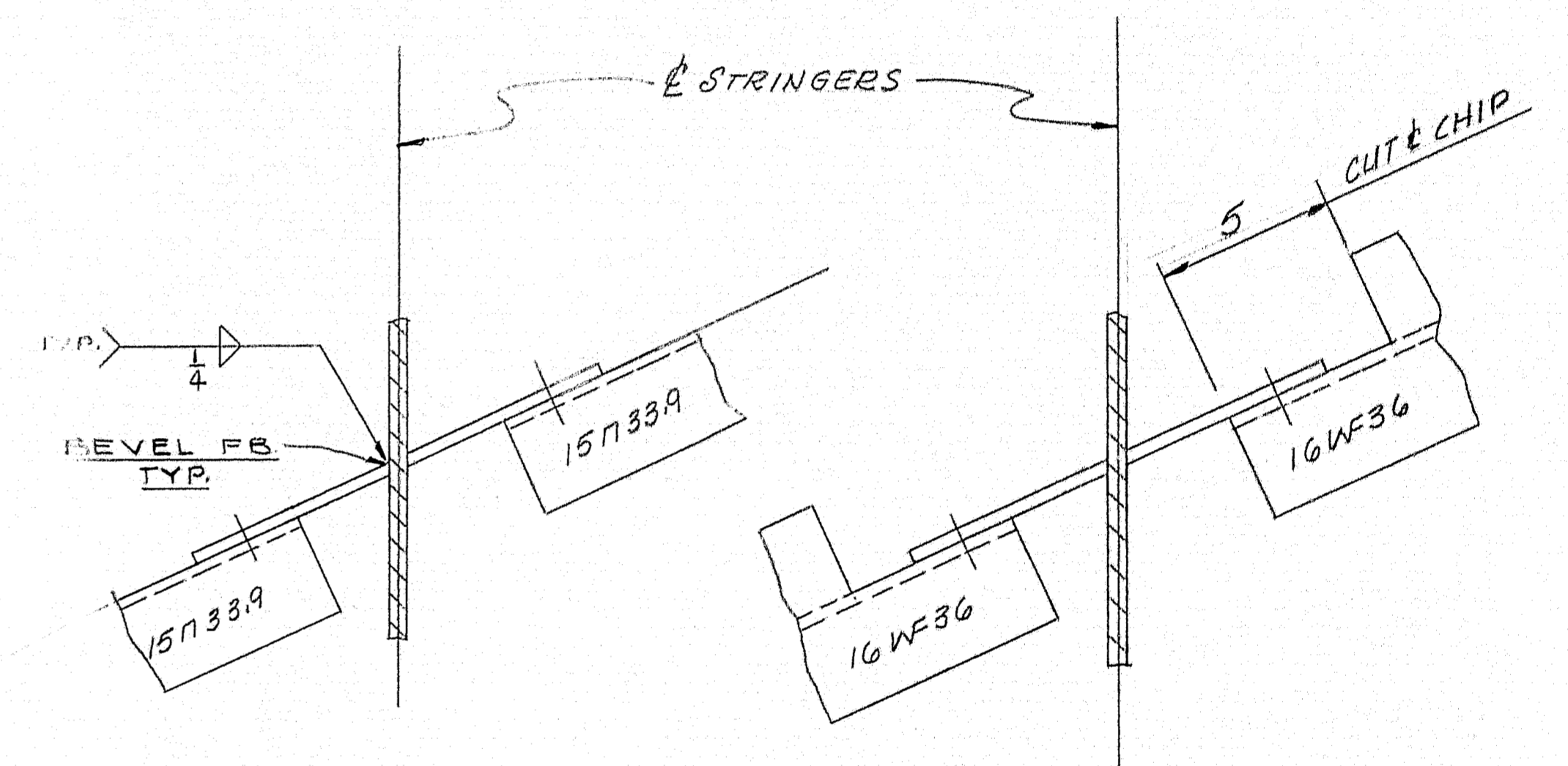
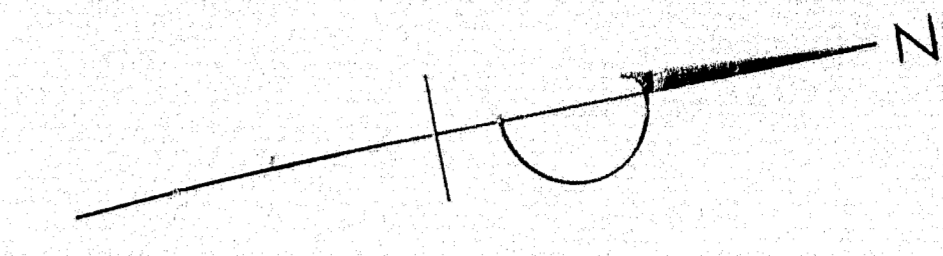






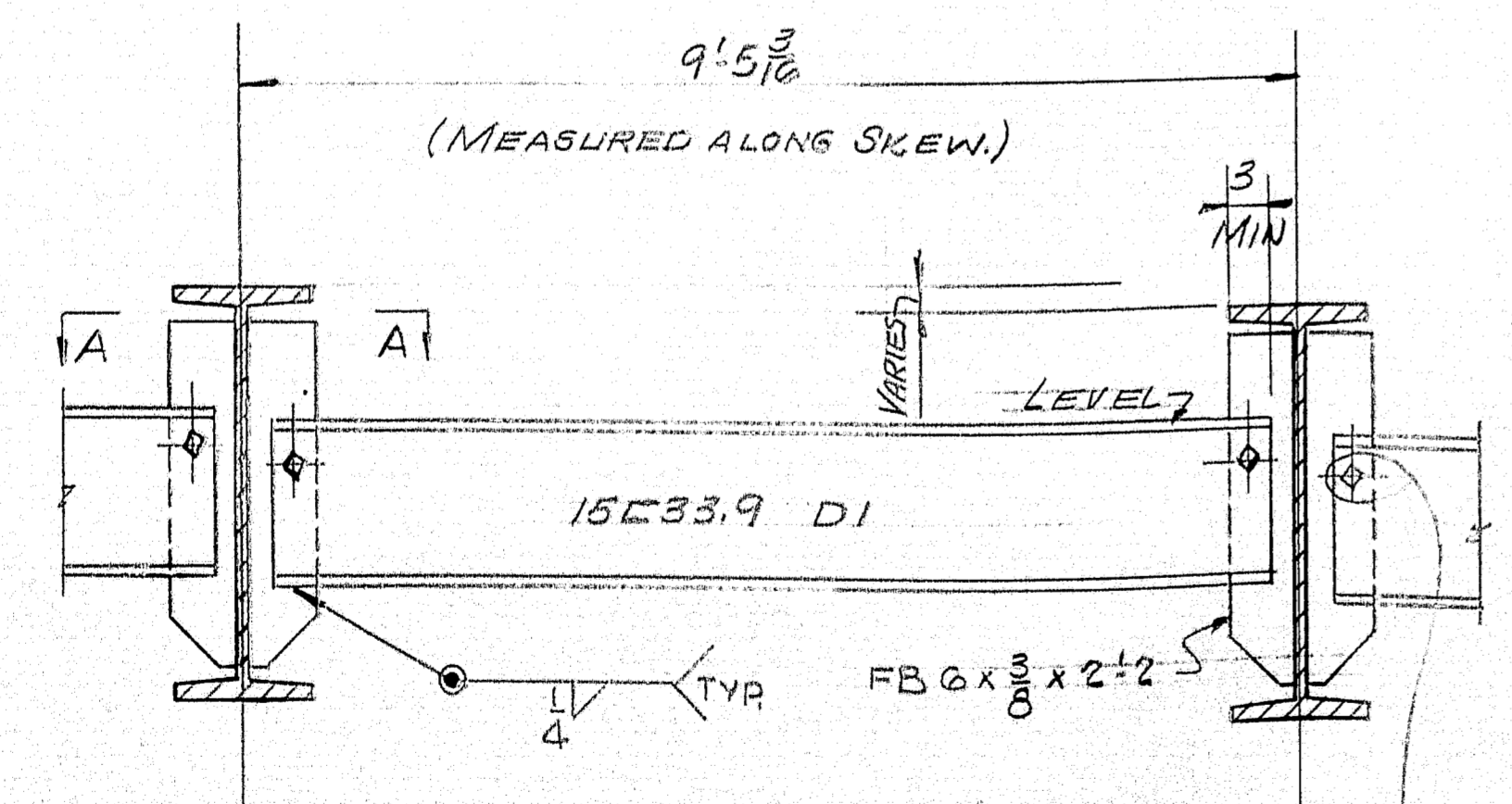


ERECTION PLAN

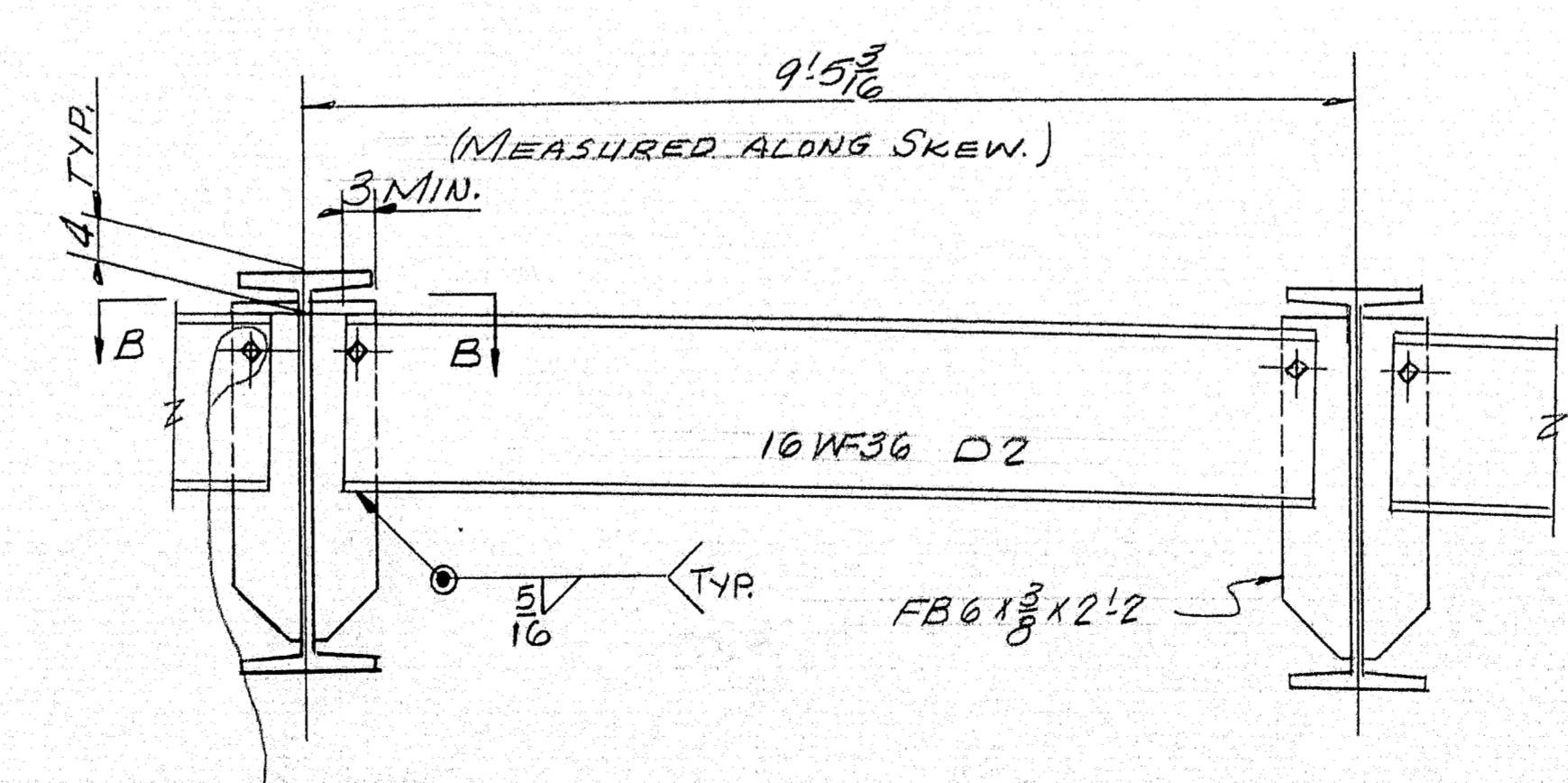


SECT. A-A

SECT. B-B



INTERMEDIATE DIAPHRAGMS

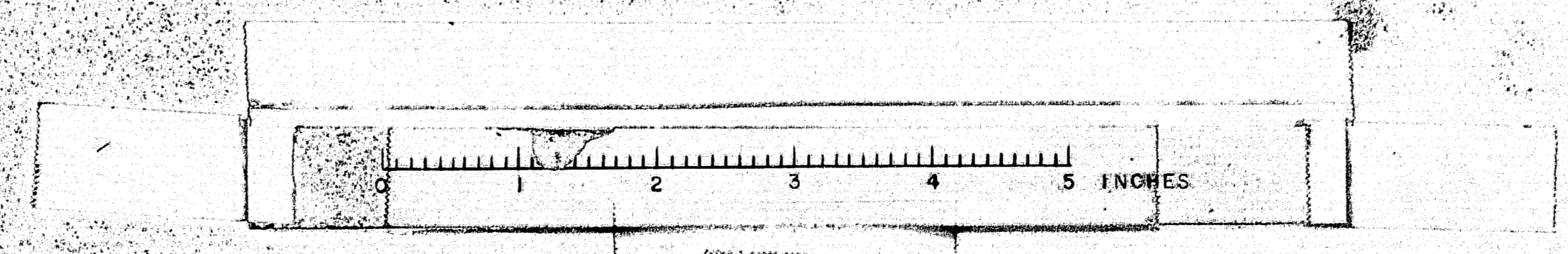


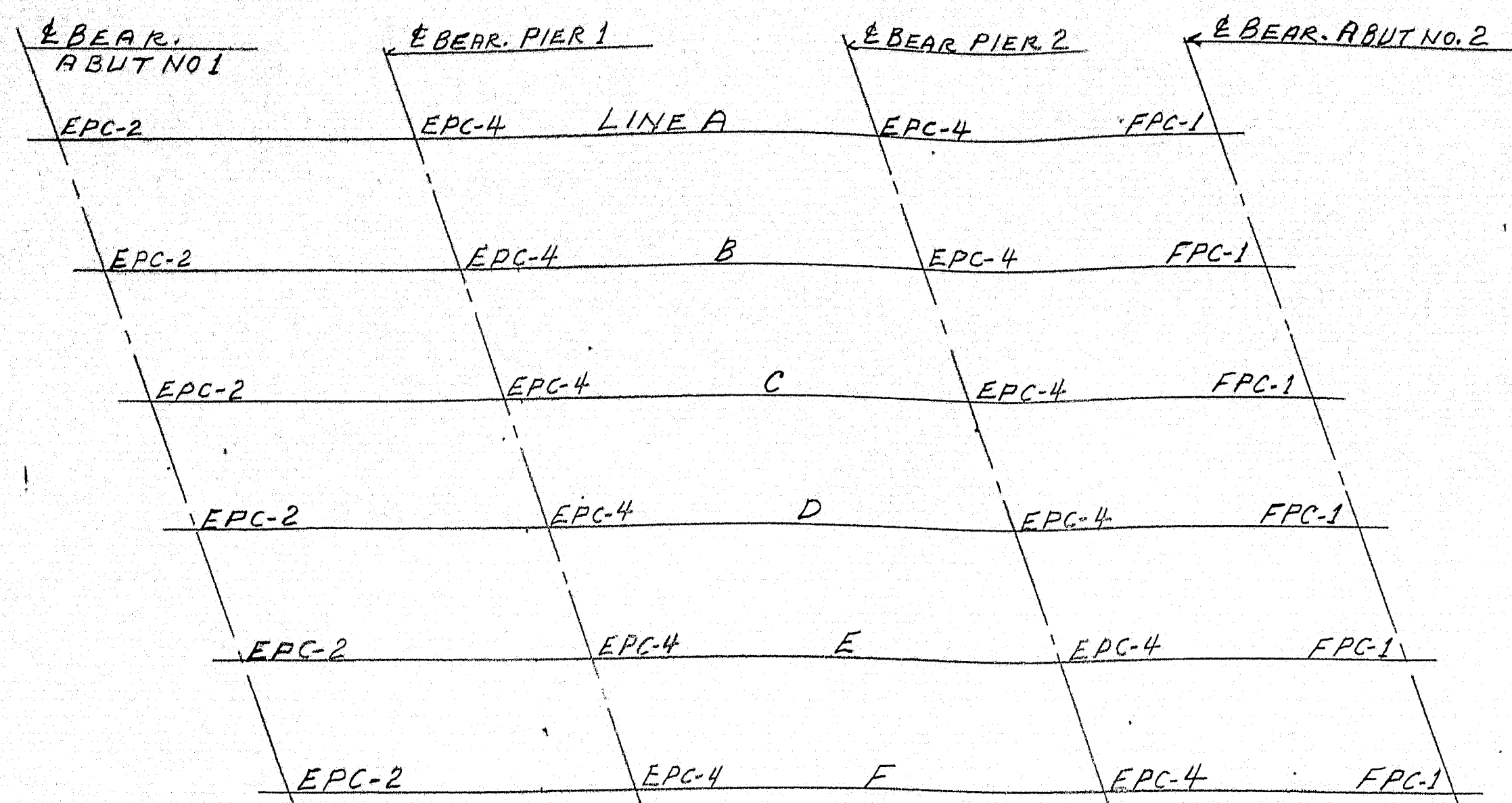
DIAPHRAGMS @ ABUT. & PIERS

ERECTION PLAN			
Bancroft & Martin Inc. South Portland, Maine			
U.S. ROUTE 1 A OVER M.C.R.R. HAMPTON MAINE			
CUSTOMER C.H. GOODRICH			
DESIGNER M.S.H.C. BRIDGE DIV.			
ORDER NO. VERBAL		DWG. NO. 64-312-EI	

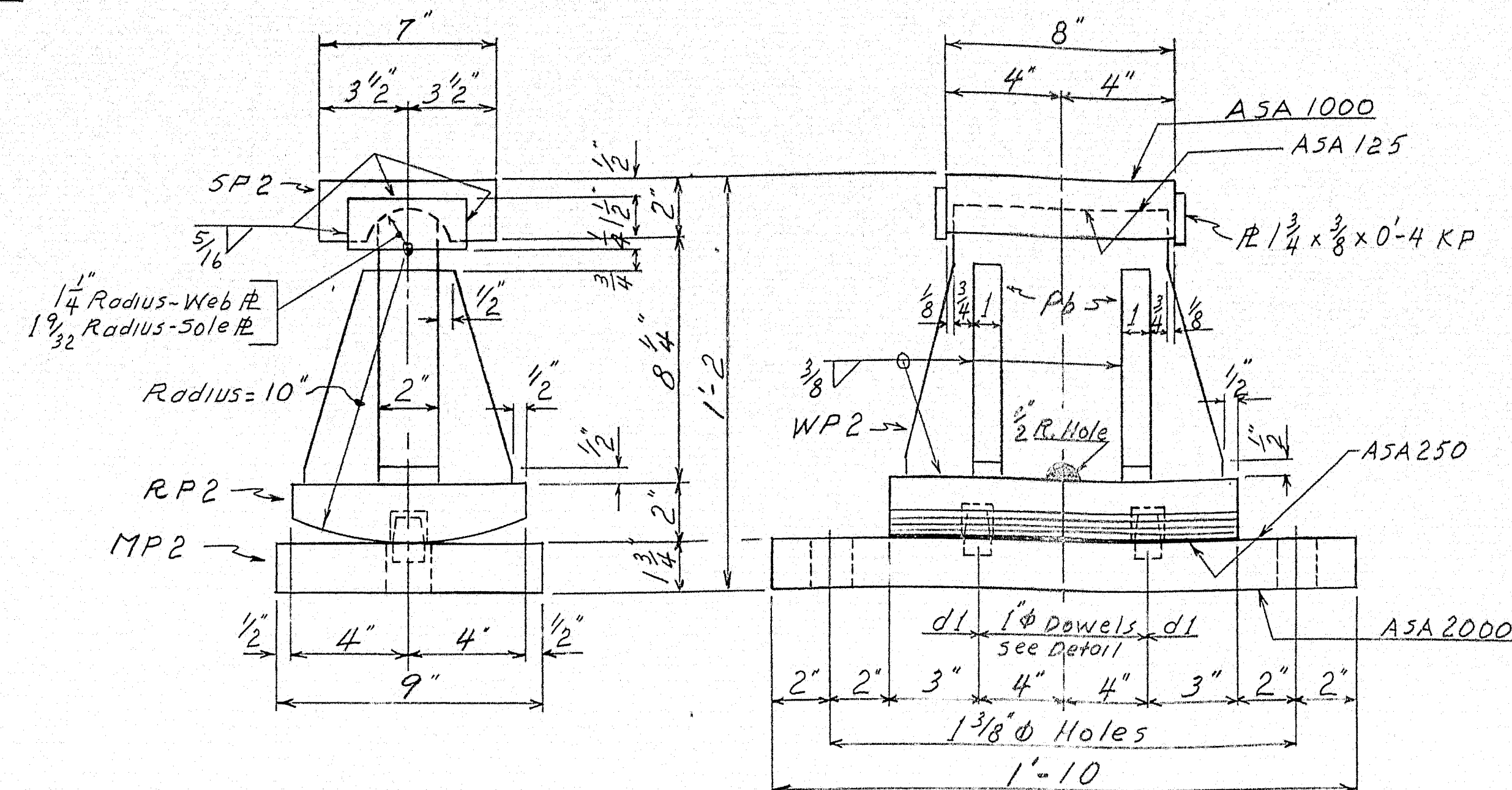
DRAWN	7-25-64	REM
REVISION		
REVISION		
REVISION		

90-111

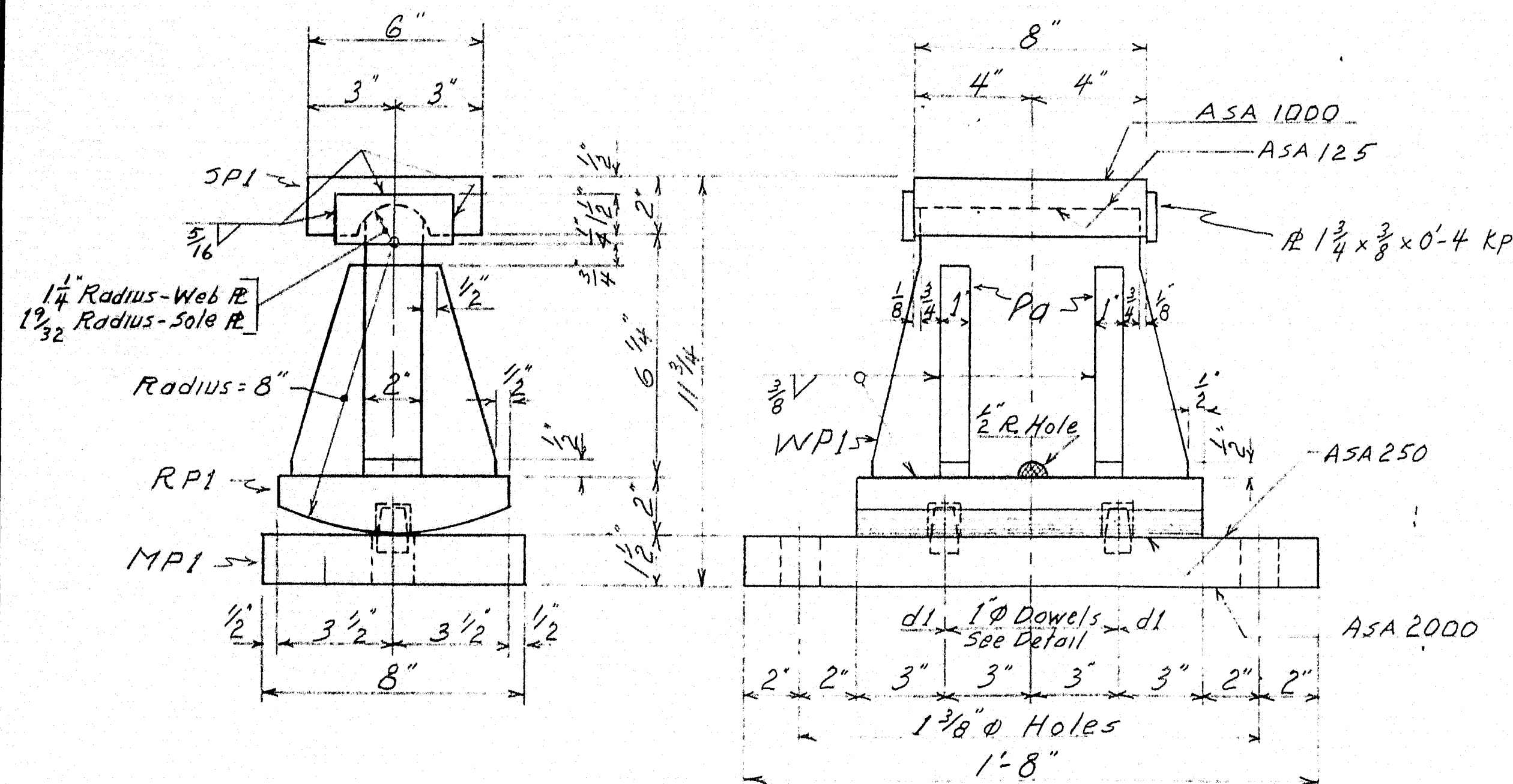




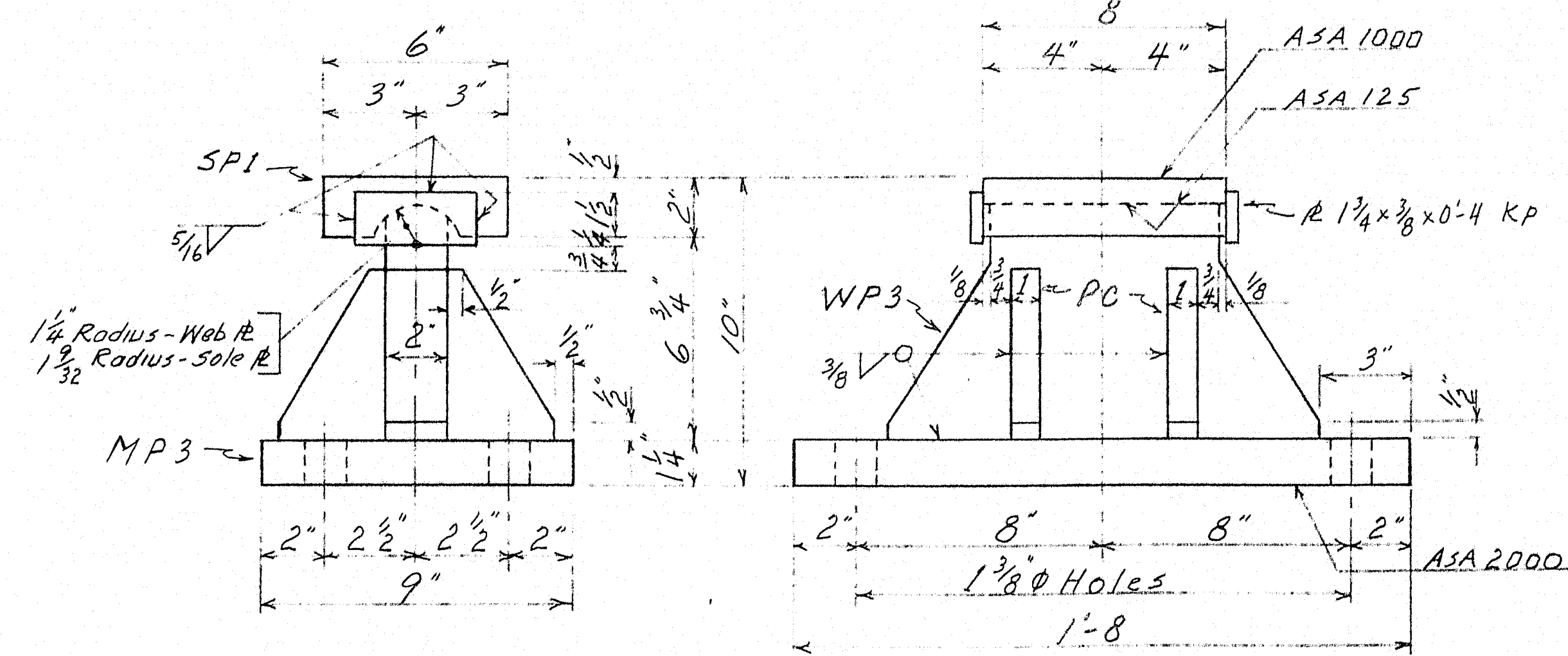
PLAN SHOWING LOCATION OF BEARINGS



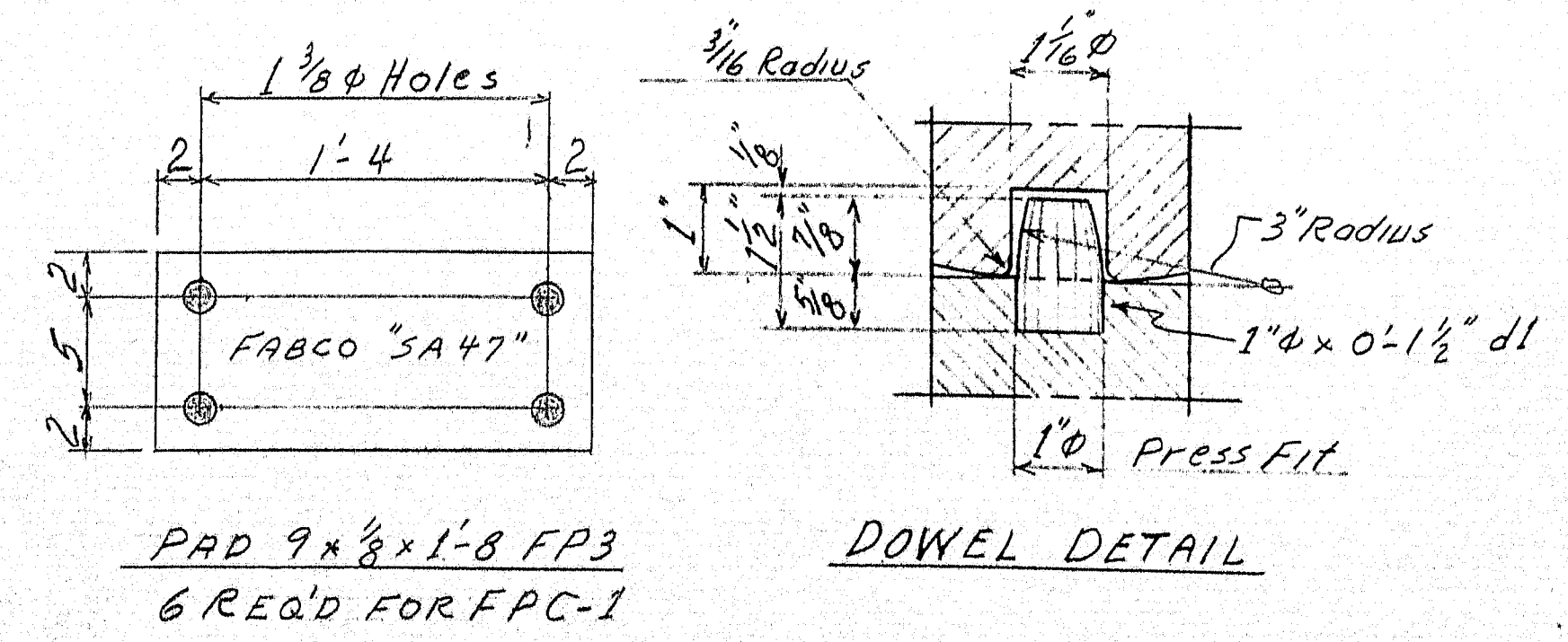
EXPANSION PEDESTAL EPC-4  
12 REQ'D.



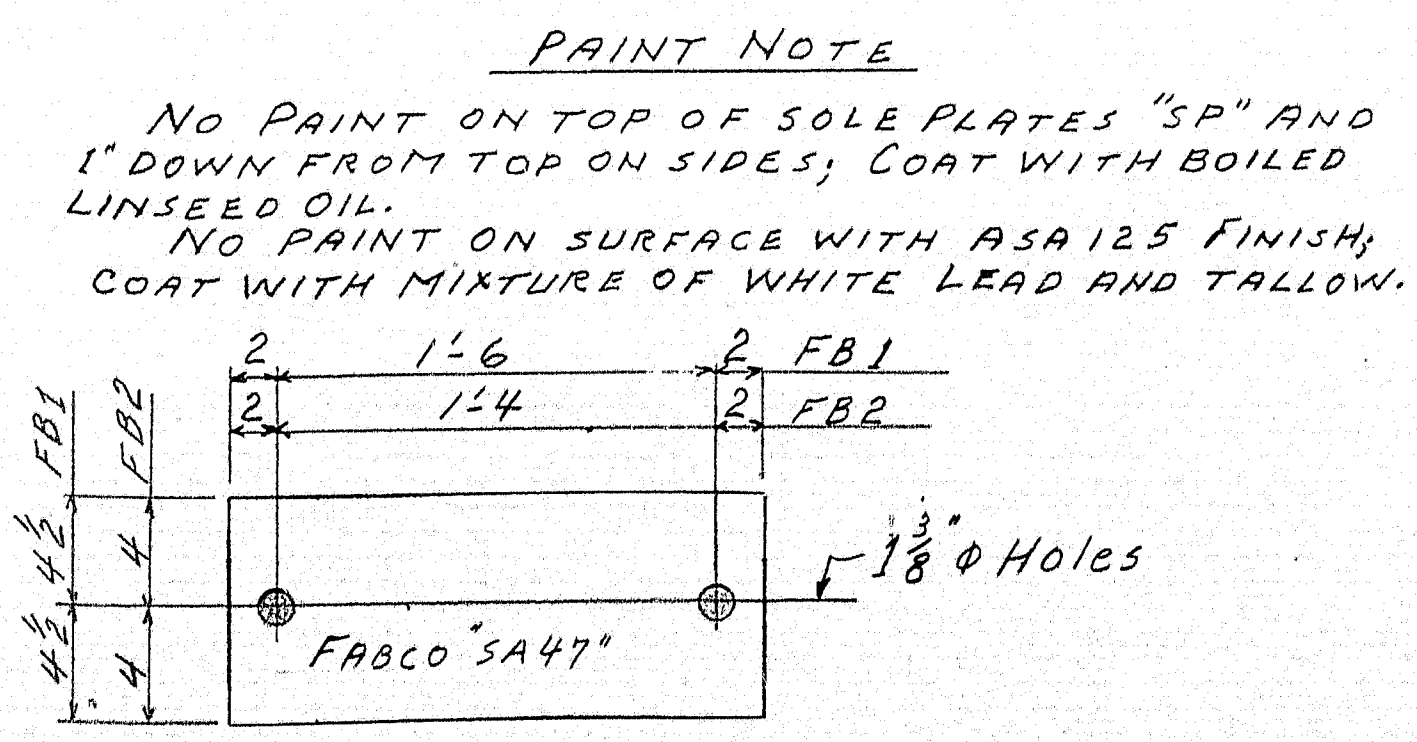
EXPANSION PEDESTAL EPC-2  
6 REQ'D.



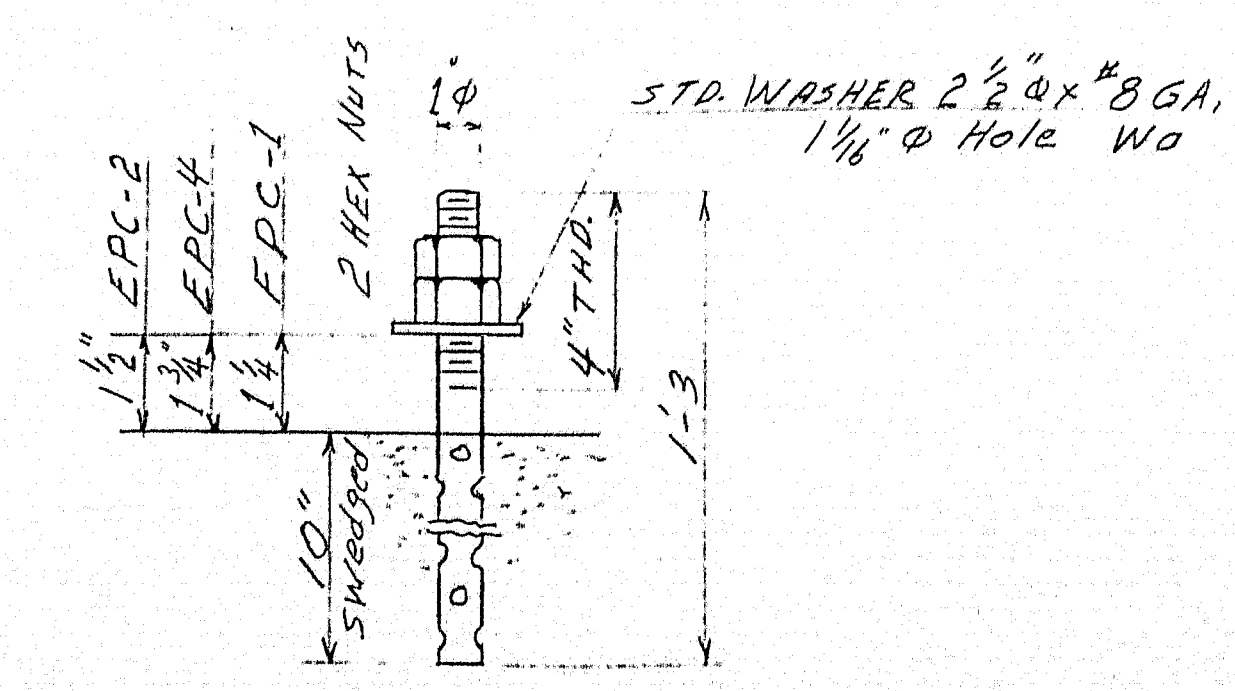
FIXED PEDESTAL FPC-1 6 REQ'D.



DOWEL DETAIL



PAINT NOTE



ANCHOR BOLTS 10x13 AB1  
2 REQ FOR EPC- 4 REQ'D FOR FPC-  
NO PAINT - OIL THDS.

SHIP		BILL OF MATERIAL			DWG. NO. 64-312-51	
MARK	NO.	MARK	SHAPE	LENGTH	WT.	REMARKS
FPC-1	6		ASSEMBLY			
EPC-2	6		do			
EPC-4	12		do			
	12	SP1	FB 6x2	0 8		
	12	SP2	FB 7x2	0 8		
	6	RP1	do	1 0		
	12	RP2	FB 8x2	1 2		
	6	WP1	FB 7 1/4x2	0 11		
	12	WP2	FB 9 1/4x2	1 1		
	6	MP1	FB 8x1 1/2	1 8		
	12	MP2	FB 9x1 3/4	1 10		
	6	MP3	FB 9x1 1/4	1 8		
	6	WP3	FB 7 3/4x2	1 2		
	24	PO	FB 2x1	0 5 1/4		
	48	PB	FB 2 1/2x1	0 7 1/4		
	24	PC	FB 3x1	0 5 3/4		
	48	KP	FB 1 3/4x 3/8	0 4		
	36	d1	1" BAR	0 1 1/2		
AB1	60		1" BAR	1 3		
	120	NUTS	1" HEX	-		
	60	WA	1" Washers	-		2 1/2" Φ 8 GA.
FB1	12		Pad 9x1/8	1 10		FABCO "SA47"
FB2	6		Pad 8x1/8	1 8		do
FB3	6		Pad 9x1/8	1 8		do
						REQ # 5604

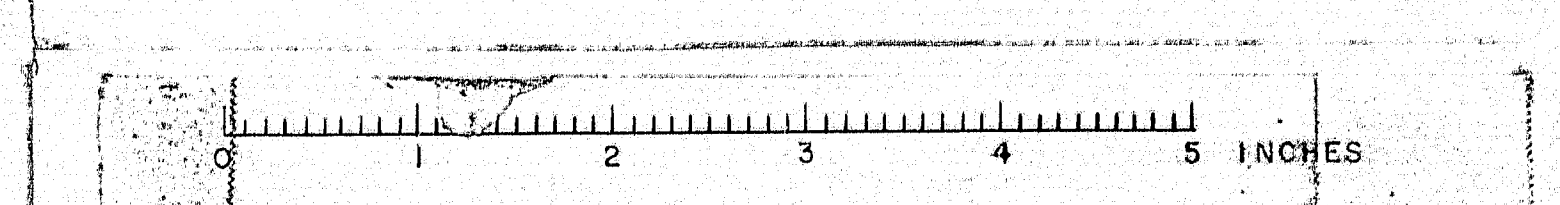
BEARING MATERIAL TO BE ASTM A36  
ANCHOR BOLTS TO BE A7, A36 OR A307  
SHOP CONNECTIONS: WELDED  
FIELD CONNECTIONS:  
HOLES: AS NOTED  
PAINT: RED LEAD PER MAINE SHC SPEC.  
SOLE PLATES "SP" FIELD WELDED TO STRINGERS

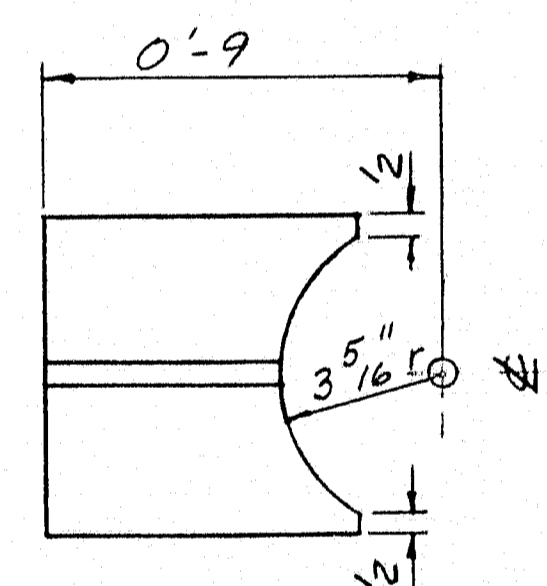
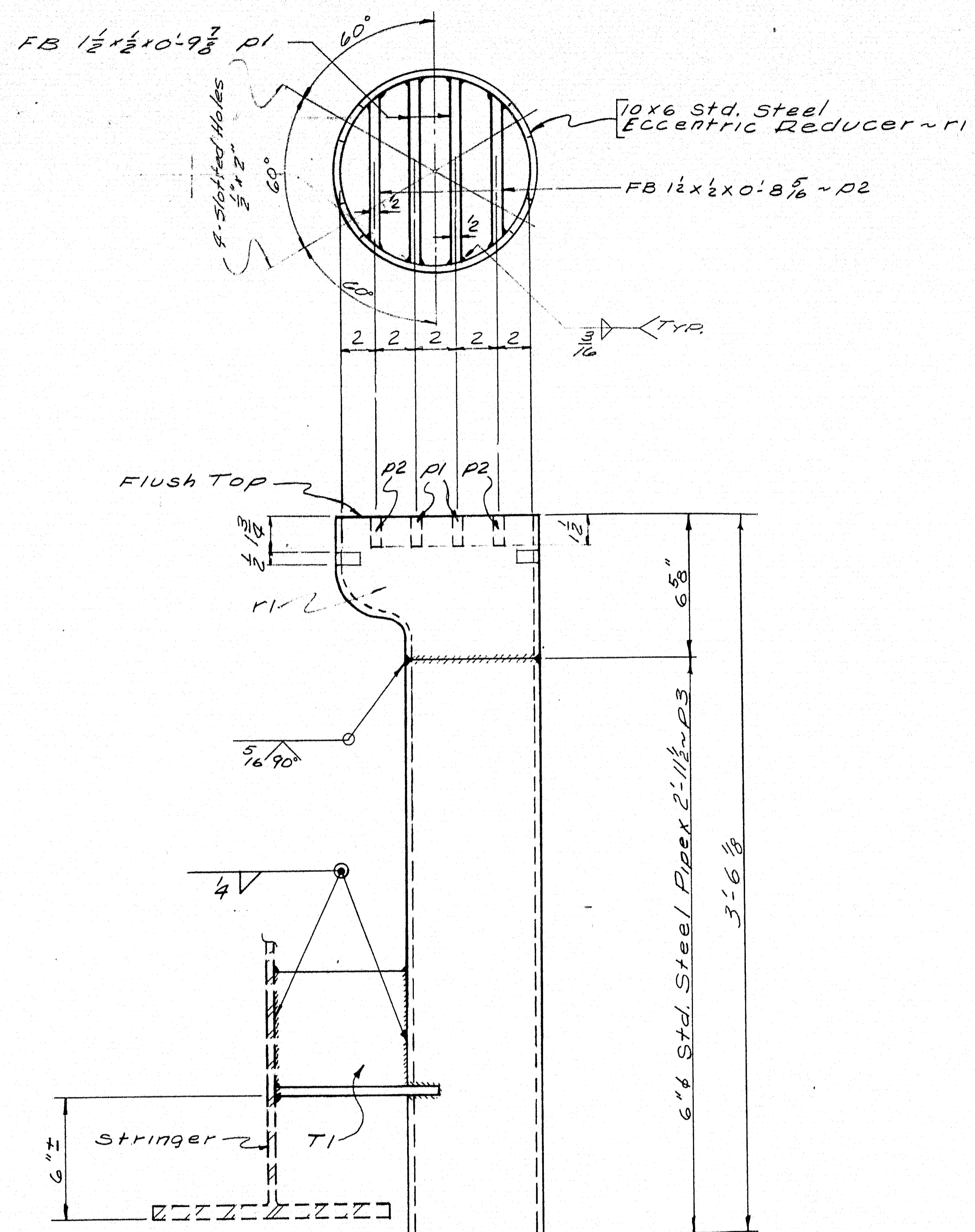
BEARING DETAILS	
Bancroft & Martin Inc. South Portland 7, Maine	
U.S. ROUTE 1A OVER M.C.R.R. HAMPTON-ME.	
CUSTOMER C.H. GOODRICH	
DESIGNER Maine State Highway Comm.	
ORDER NO.	DWG. NO. 64-312-51

TYPE EPC & FPC

APPROVED 10-1-64

DRAWN	
REVISION	
REVISION	
REVISION	





ST 6 WF 13.5 x 0-7 1/4 ~ T1  
6 REQ'D.

DRAIN DRI ~ 6 REQ'D.

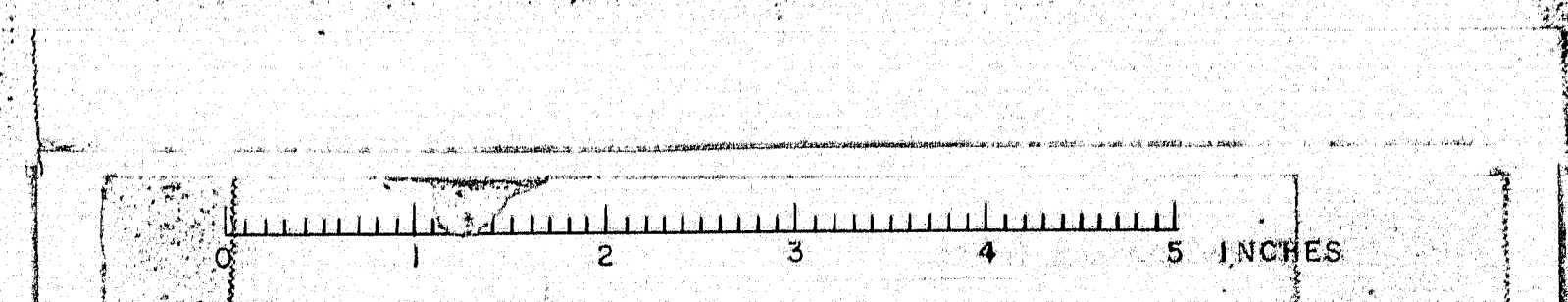
NOTE:  
SEE STATE'S DWGS. FOR  
DRAIN LOCATION

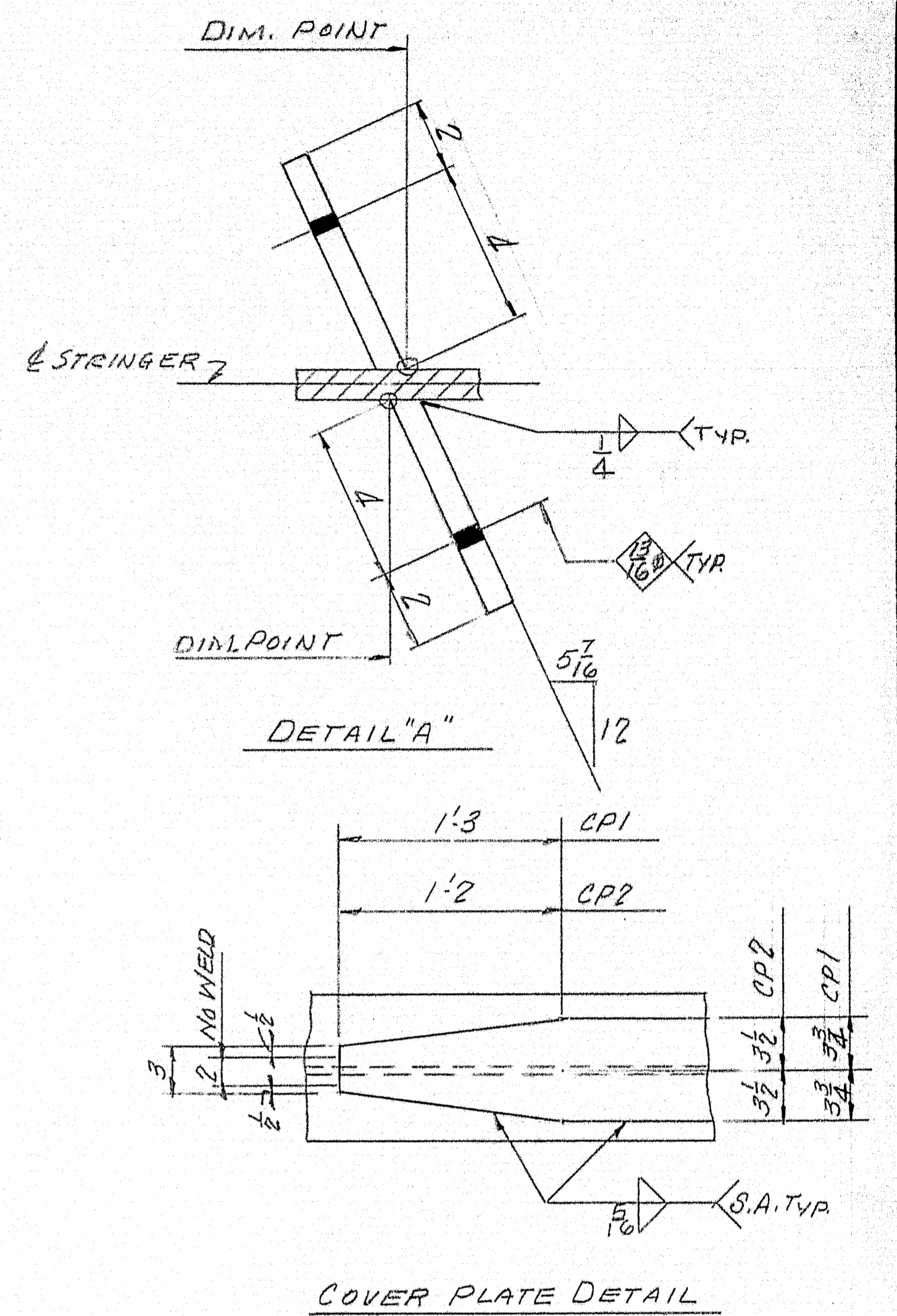
SHIP		BILL OF MATERIAL				DWG. NO. 64-312-52
MARK	NO.	MARK	SHAPE	LENGTH	WT.	REMARKS
DRI	6		Shop Assy	—		
T1	6		ST6WF13.5	0 7 1/4		
	12	P1	FB 1 1/2 x 1/2	0 9 7/8		
	12	P2	do	0 8 5/8		
	6	P3	64 Std. Pipe	2 1 1/2		
	6	P1	10 x 6	0 7		Std. Steel Eccentric Reducer Req. # 5748

SHOP CONNECTIONS: WELDED  
FIELD CONNECTIONS: WELDED  
HOLES: \_\_\_\_\_  
PAINT: PER ME. STATE SPECS.  
RED LEAD & OIL & AS NOTED

APPROVED 10-1-64  
DRAIN DETAILS  
Bancroft & Martin Inc.  
South Portland, Maine  
U.S. ROUTE 1A OVER M.C.R.R.  
HAMPTON-ME  
CUSTOMER: C.H. GOODRICH  
DESIGNER: M.S.H.C.  
ORDER NO. \_\_\_\_\_ DWG. NO. 64-312-52

DRAWN	
REVISION	
REVISION	
REVISION	



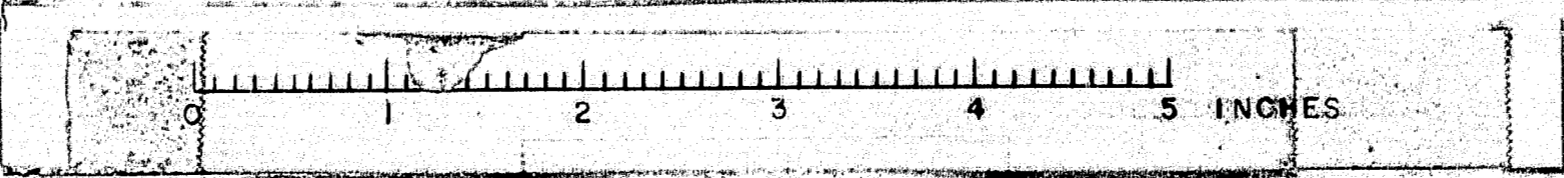


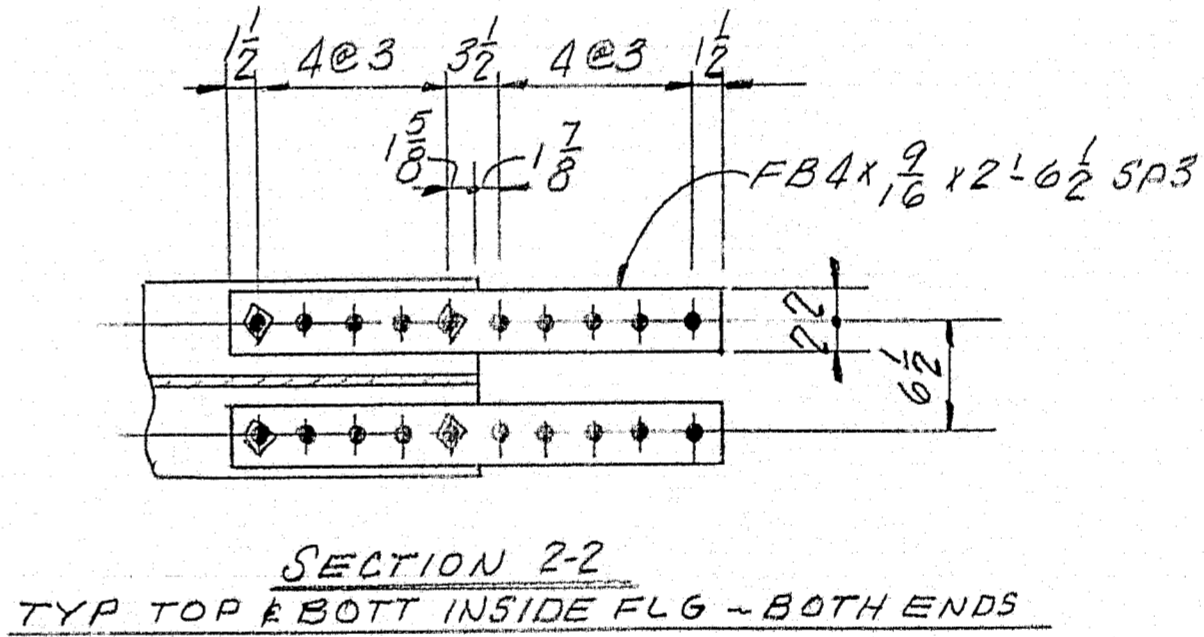
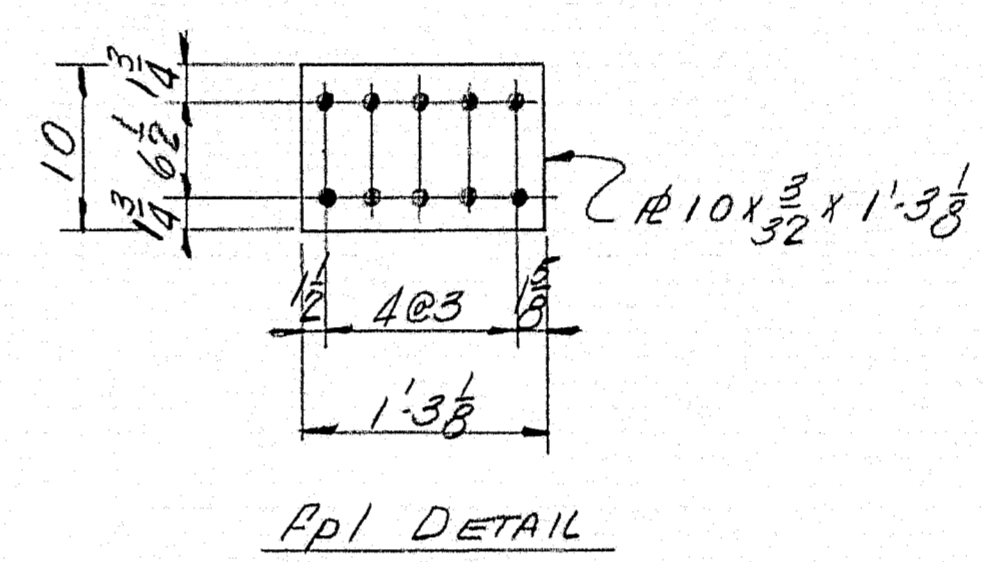
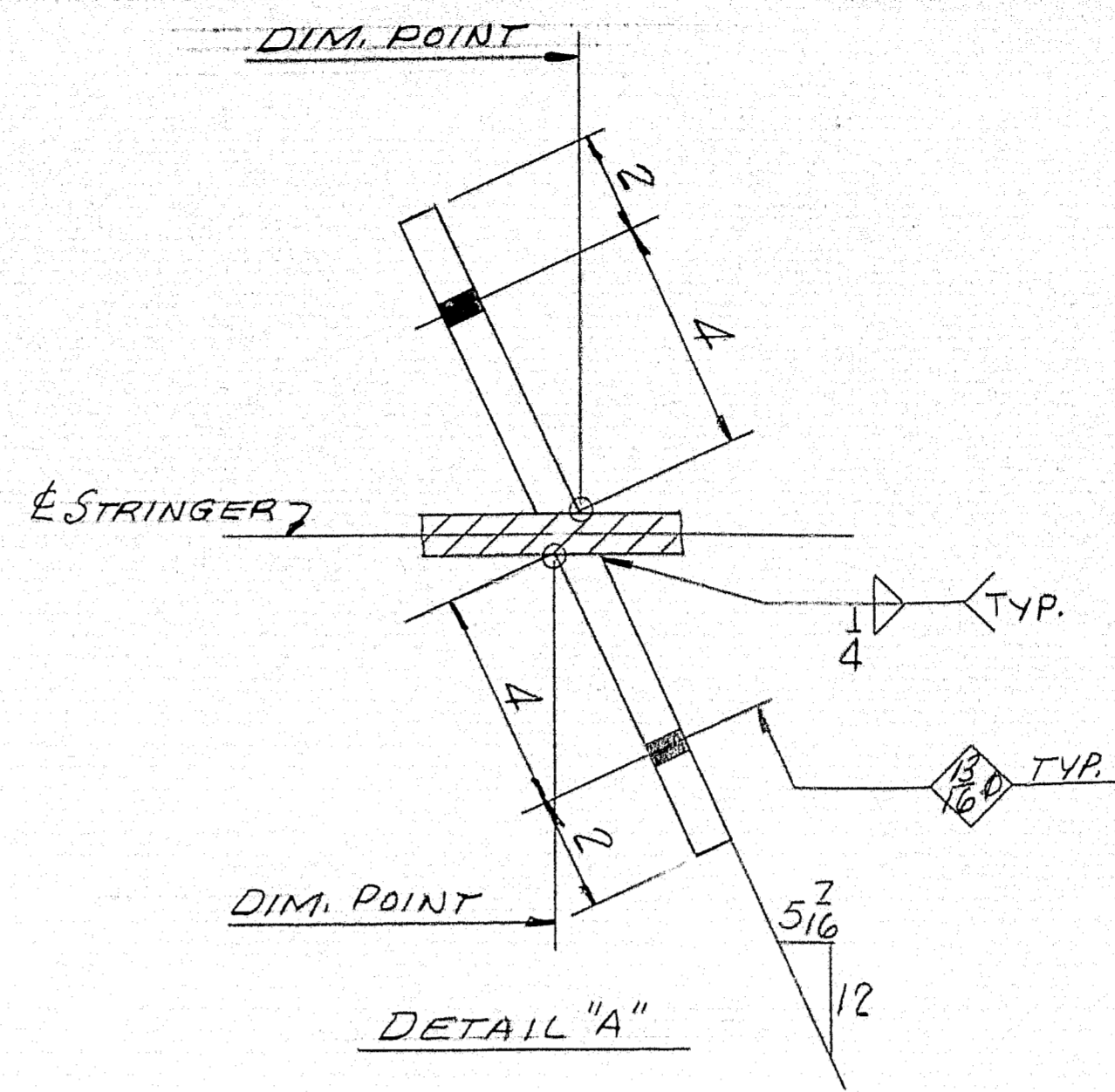
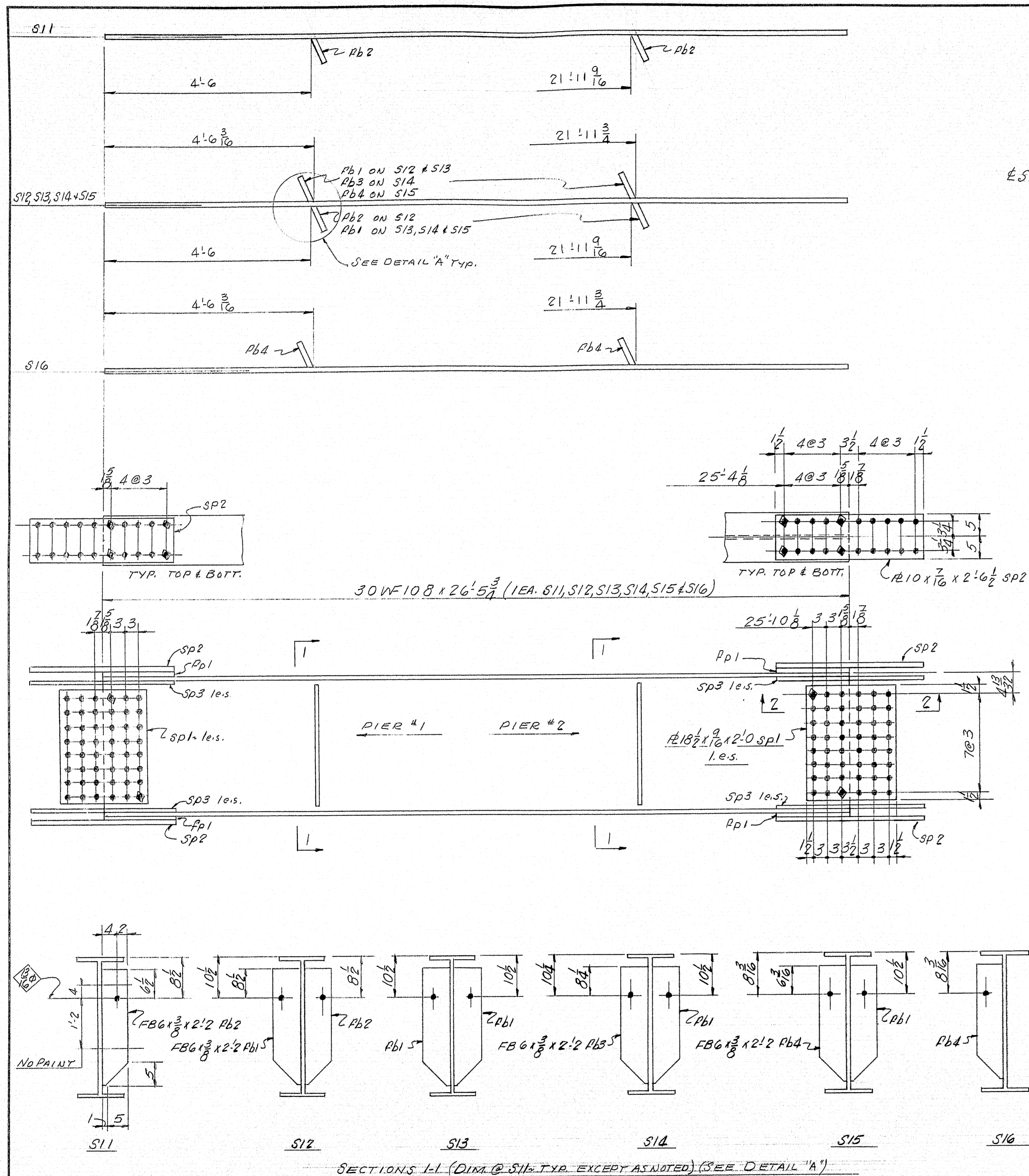
$\frac{1.5}{16} \phi$  HOLES ARE FOR HIGH TENSILE BOLTS  
They are to be free from burrs  
and shall not be painted on any  
surface within 5" of such open  
holes.

FOR B.O.M. & GENERAL NOTES SEE  
DWG. S4.

STRINGER DETAILS	
Bancroft & Martin Inc. South Portland ? Maine	
U.S. ROUTE 1A OVER M.C.R.R. HAMPDEN, MAINE	
CUSTOMER <u>C.H. GOODRICH</u>	
DESIGNER <u>M.S.H.C. BRIDGE DIV.</u>	
ORDER NO. <u>VERBAL</u>	DWG. NO. <u>64-312-53</u>

90-114





- NOTES:
- 1.) HOLES IN FIELD SPLICES OF CONTINUOUS BEAMS ARE TO BE DRILLED FROM SOLID  $\frac{15}{16}$ "  $\phi$ .
  - 2.) ANY NATURAL CAMBER TO BE PLACED UP.
  - 3.) PAINT NOTE:  
NO PAINT TOP F.L.G. AND EDGES OF ALL STRINGERS.

$\frac{15}{16}$ " HOLES ARE FOR HIGH TENSILE BOLTS  
They are to be free from burrs and shall not be painted on any surface within 5" of such open holes.

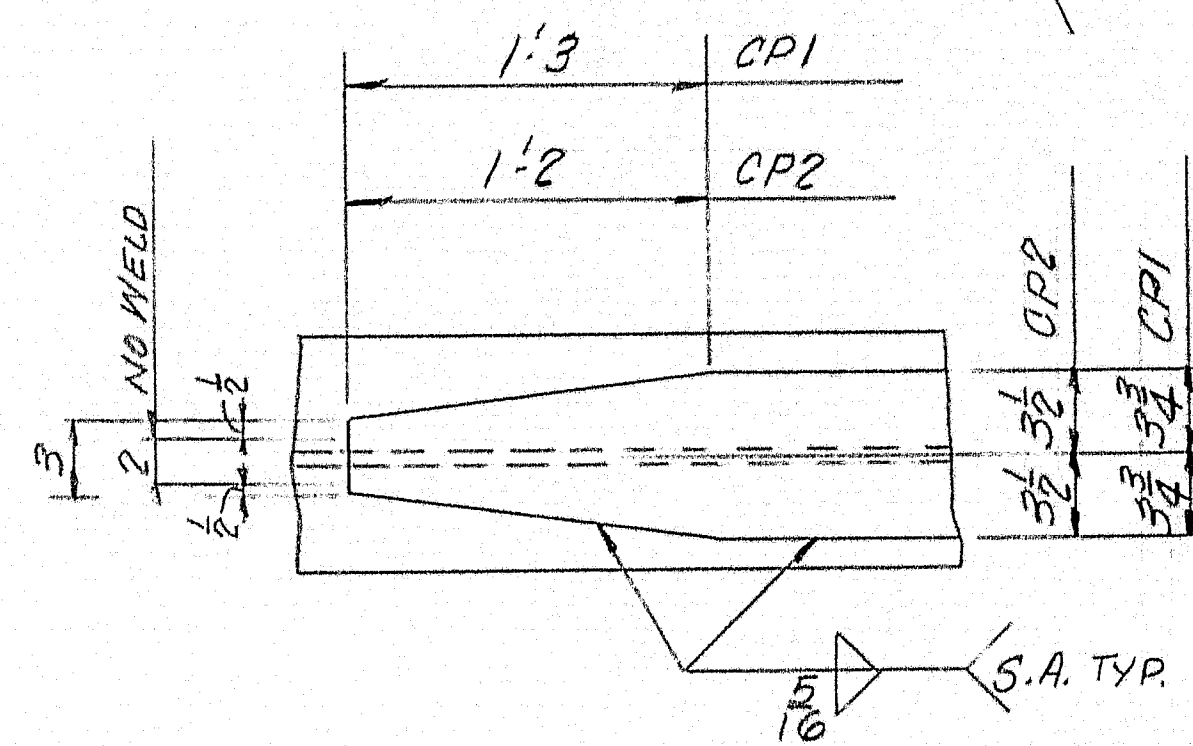
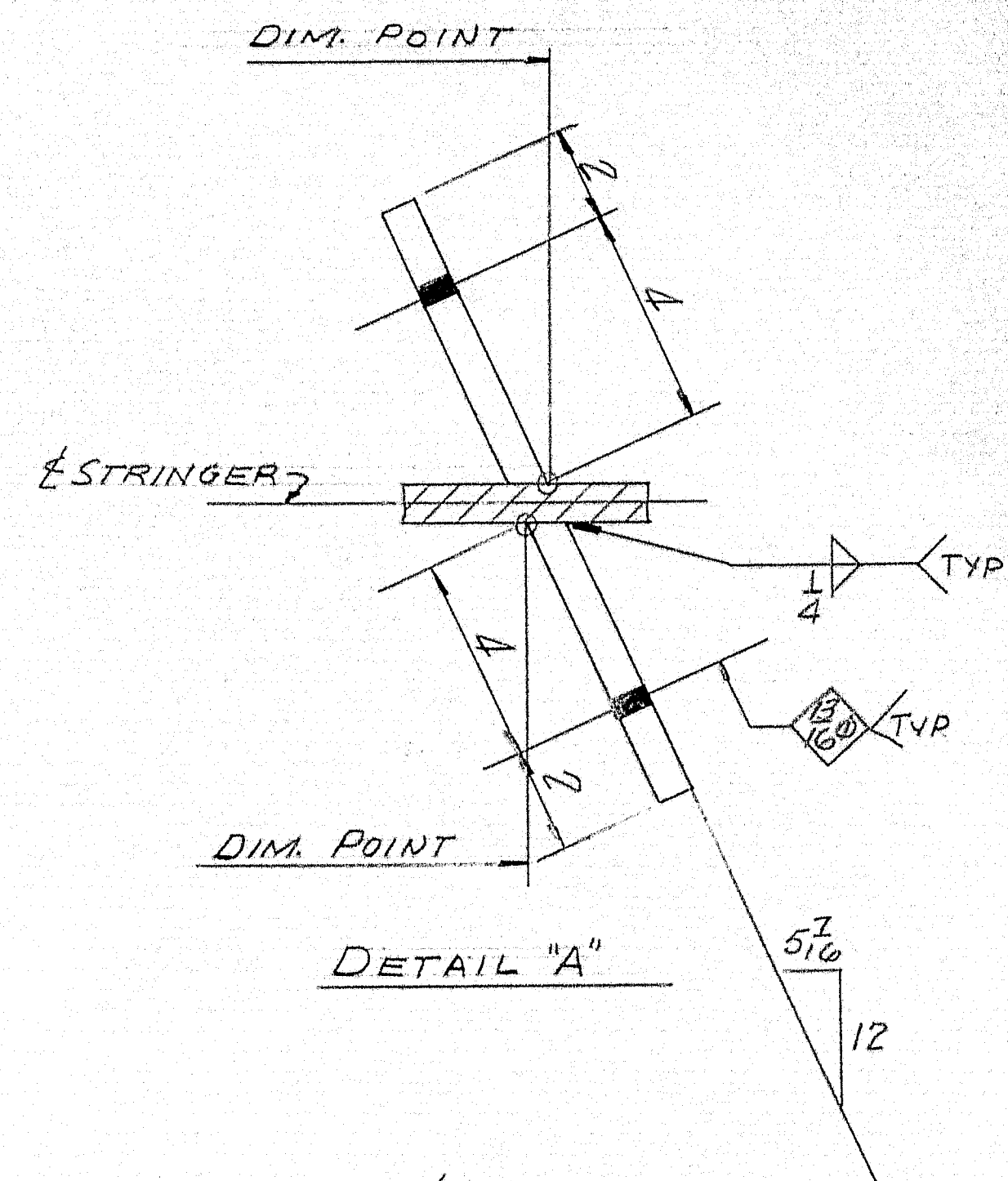
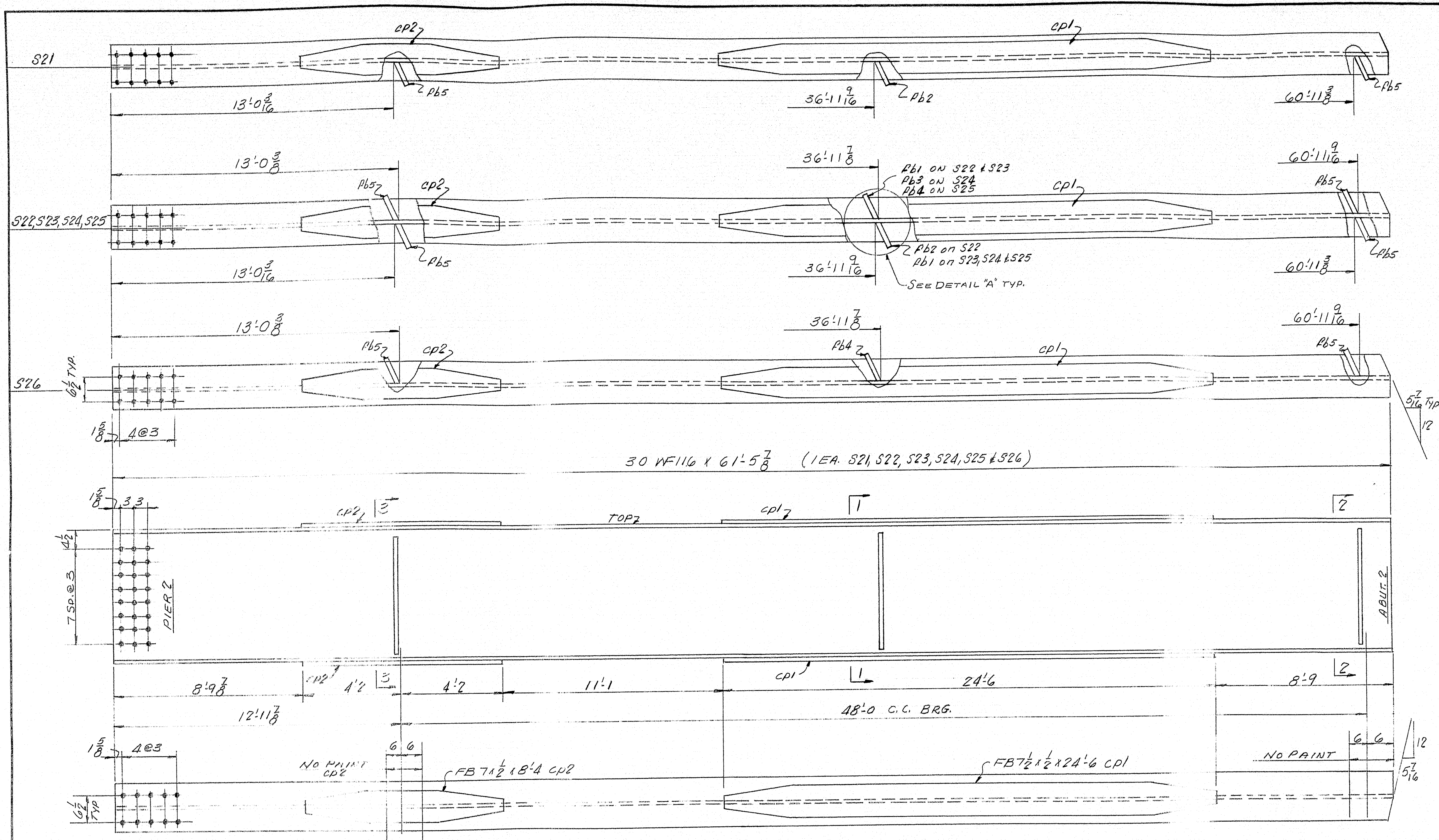
SHIP		BILL OF MATERIAL			DWG. NO. 64-312-54	
MARK	NO.	MARK	SHAPE	LENGTH	WT.	REMARKS
S1			30WF116	61.58		
S2			do	61.58		
S3			do	61.58		
S4			do	61.58		
S5			do	61.58		
S6			30WF116	61.58		
S11			30WF108	26.52		
S12			do	26.52		
S13			do	26.52		
S14			do	26.52		
S15			do	26.52		
S16			30WF108	26.52		
S21			30WF116	61.58		
S22			do	61.58		
S23			do	61.58		
S24			do	61.58		
S25			do	61.58		
S26			30WF116	61.58		
24	Op1		FB 7 1/2 x 1 1/2	24.6		
24	Op2		FB 7 x 1 1/2	8.4		
20	Pb1		FB 6 x 1 3/8	2.2		
8	Pb2			2.2		
4	Pb3			2.2		
8	Pb4			2.2		
40	Pb5		FB 6 x 1 3/8	2.2		
24	Sp1		FB 1 1/2 x 1 1/2	2.0		
24	Sp2		FB 1 1/2 x 1 1/2	2.0		
48	Sp3		FB 4 x 1 1/2	2.6		
24	Op1		FB 10 x 1 1/2	1.35		
FIELD 160			30 HT. BOLTS	0.5		
DO 160			3 HARD WASHERS			
20 SHOP			30 HT. BOLTS	0.5		
20 DO			3 HARD WASHERS			
ITEM 702-103						
STEEL ASTM A36						
WELDING ROD E70						

ABOVE B.O.M. COVERS DWGS. 33 & 55 ALSO.

SHOP CONNECTIONS: WELDED & BOLTED  
FIELD CONNECTIONS: BOLTED  
HOLES: AS NOTED  
PAINT: RED LEAD PER M.S. H.C. SPECS.  
AND AS NOTED.

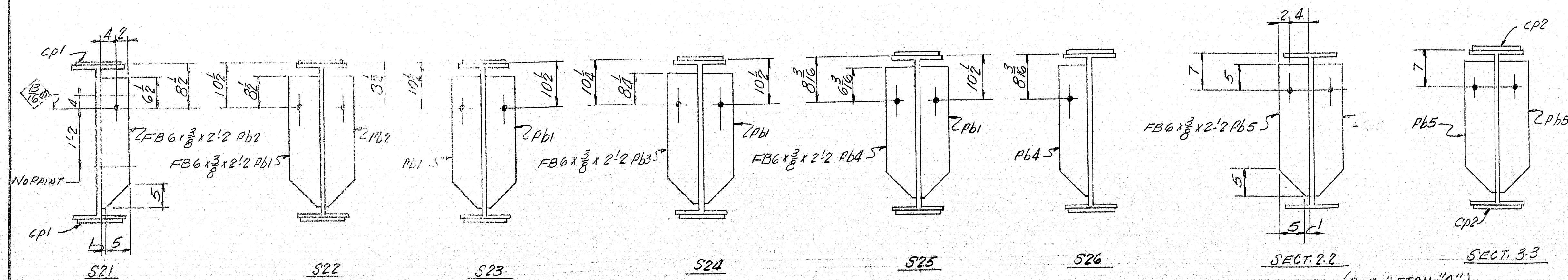
STRINGER DETAILS	
Bancroft & Martin Inc. South Portland 7, Maine	
U.S. ROUTE 1A OVER M.C.R.R. HAMPTON, MAINE	
CUSTOMER C.H. GOODRICH	
DESIGNER M.S.H.C. BRIDGE DIV.	
ORDER NO. VERBAL	
DWG. NO. 64-312-54	

DRAWN	9.30.64 RGM
REVISION	
REVISION	
REVISION	



15/16" bolts on top and bottom flanges. They are to be free from burrs and shall not be painted on end surface within 6" of bolt head.

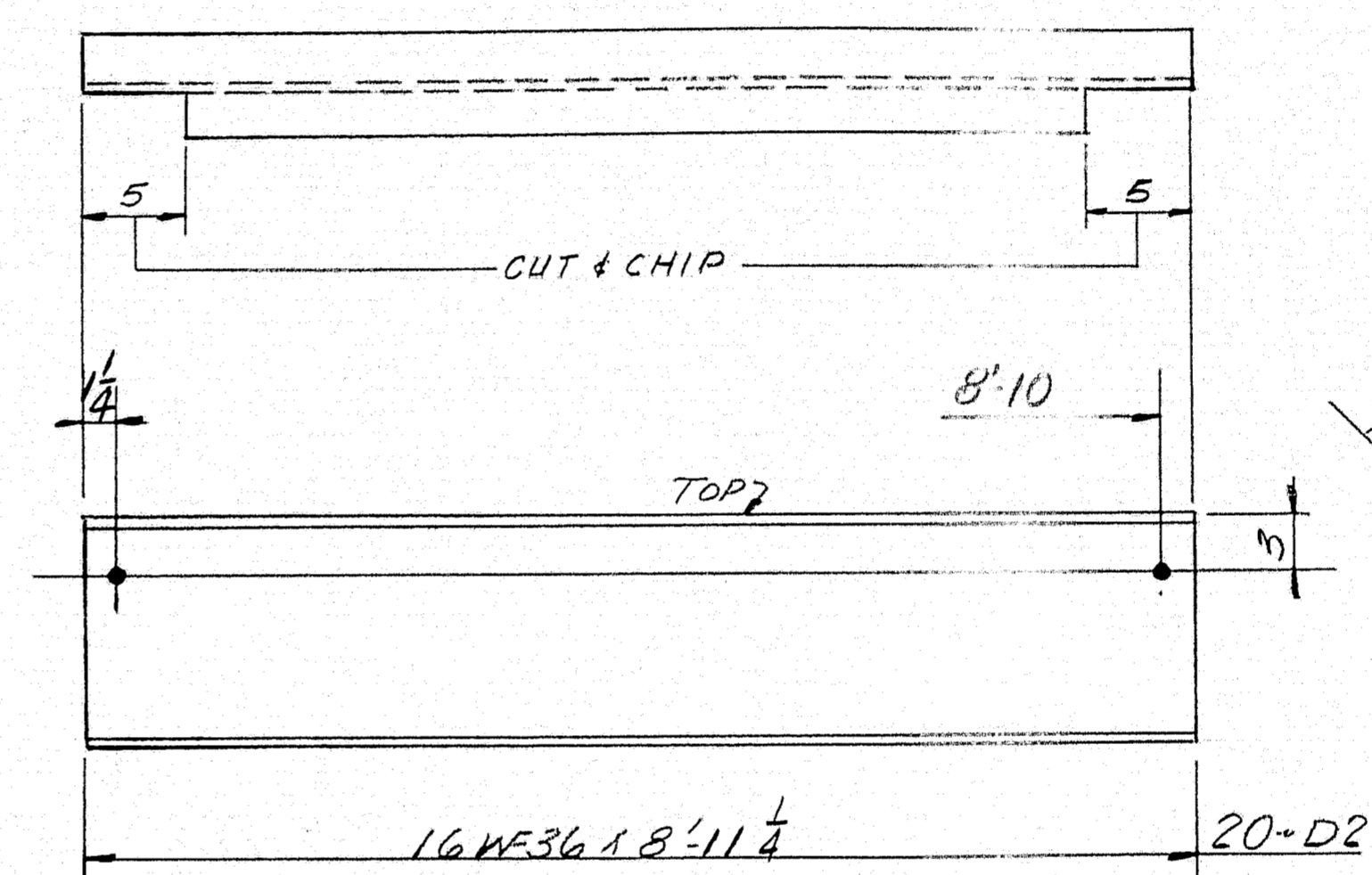
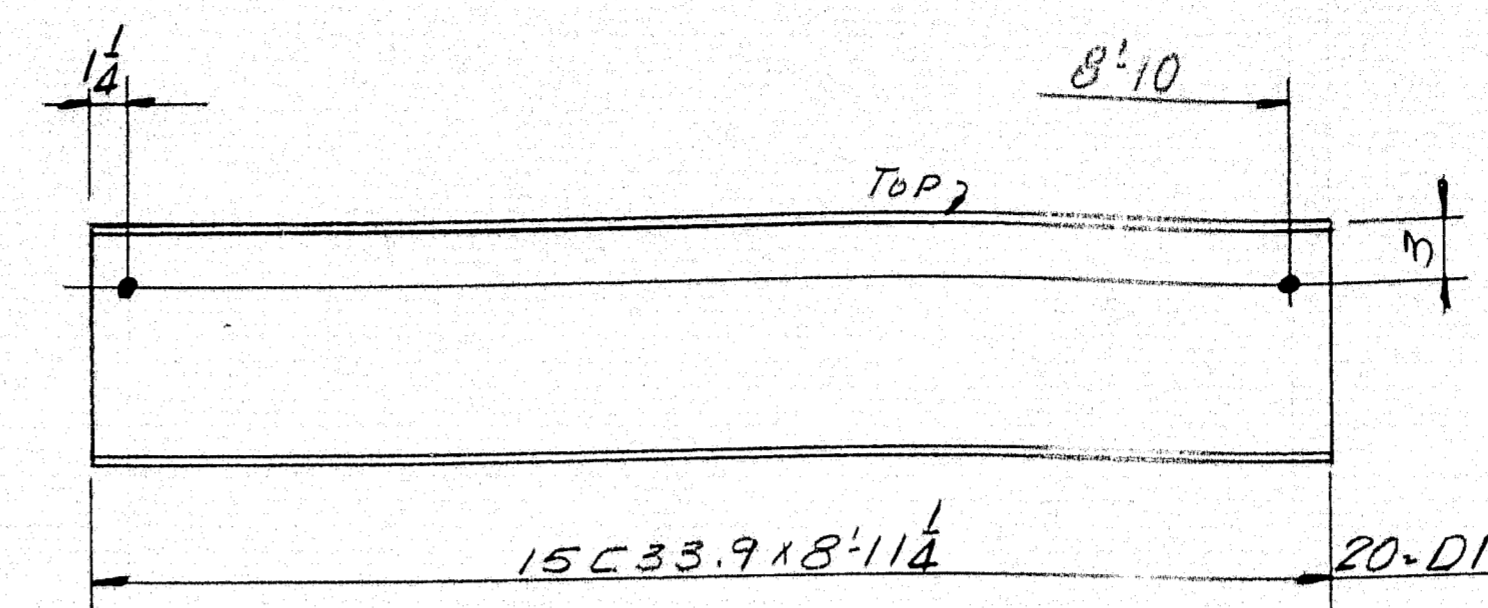
FOR B.O.M. & GENERAL NOTES SEE DWG. 54.



SECTIONS 1-1 (DIM @ S21-TYP. EXCEPT AS NOTED SEE DETAIL 'A')

DRAWN	7-20-64	RGM
REVISION		
REVISION		
REVISION		

STRINGER DETAILS	
Bancroft & Martin Inc. South Portland 7, Maine	
U. S. ROUTE 1A OVER M.C.R.R. HAMPTON, MAINE	
CUSTOMER C.H. GOODRICH	
DESIGNER M.S.H.C. BRIDGE DIV.	
ORDER NO. VERBAL	DWG. NO. 64-312-55



NOTE:  
NO PAINT WITHIN 5" EA. END D1 & D2

[illegible]

SHOP CONNECTIONS:  
FIELD CONNECTIONS: BOLTED  $\frac{5}{8}$  IN. BOLTS  
HOLES:  $\frac{13}{16}$  IN.  
PAINT: RED LEAD PER M.S.H.C. AND  
AS NOTED.

## DIAPHRAGM DETAILS

*Bancroft & Martin Inc.*  
*South Portland 7, Maine*

U.S. ROUTE 1A OVER M.C.R.R.  
HAMPDEN, MAINE

CUSTOMER C.H. GOODRICH  
DESIGNER M.S.H.C. BRIDGE DIV.

ORDER NO. VERBAL DWG. NO. 64312-S6

