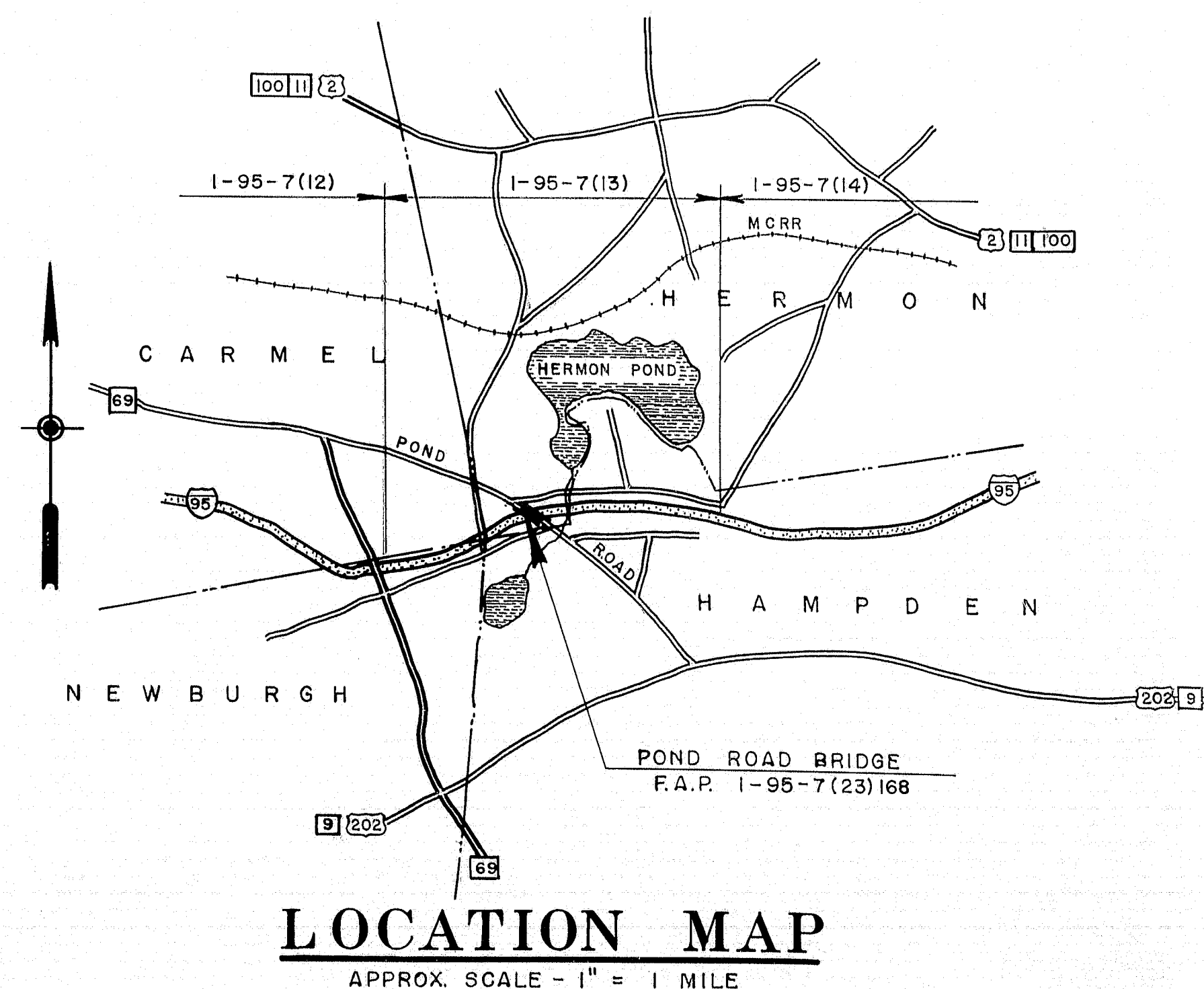


STATE OF MAINE
STATE HIGHWAY COMMISSION



POND ROAD BRIDGE
OVER
INTERSTATE HIGHWAY NO. 95
IN THE TOWN OF
HERMON
PENOBSCOT COUNTY
FEDERAL AID PROJECT NO I-95-7(23)168



INDEX OF SHEETS

1. TITLE SHEET
- 2-3. SURVEY
4. SOILS PROFILE-BORINGS
- 5-6. BORINGS
7. GENERAL PLAN (TOTAL QUANTITIES ENGINEERS ESTIMATE)
- 8-9. GENERAL LAYOUT
10. TYPICAL SECTIONS
- 11-15. CROSS SECTIONS-POND ROAD
16. CROSS SECTIONS-BOG ROAD
- 17-19. CROSS SECTIONS-NORTH COUNTY ROAD
20. CROSS SECTIONS-BOG ROAD RELOCATED
21. CULVERT AT STATION 16+05
22. ABUTMENT NO. 1
23. PIERS (BRIDGE QUANTITIES ENGINEERS ESTIMATE)
24. ABUTMENT NO. 2
25. SLOPE PAVING
- 26-27. STRUCTURAL STEEL
28. SHEAR CONNECTORS- DRAINS
- 29-30. SUPERSTRUCTURE
31. RAIL-BLOCKING-REINFORCING STEEL
32. STANDARD DETAILS

TRAFFIC

A.D.T. 1960 140
A.D.T. 1980 195
D.H.V. 23
T 11%
D 60%
V 50 MPH

APPROVED:
MAINE STATE HIGHWAY COMMISSION

David H. Brown
CHAIRMAN
Robert Williams
CHIEF ENGINEER

MARCH 28, 1962
DATE

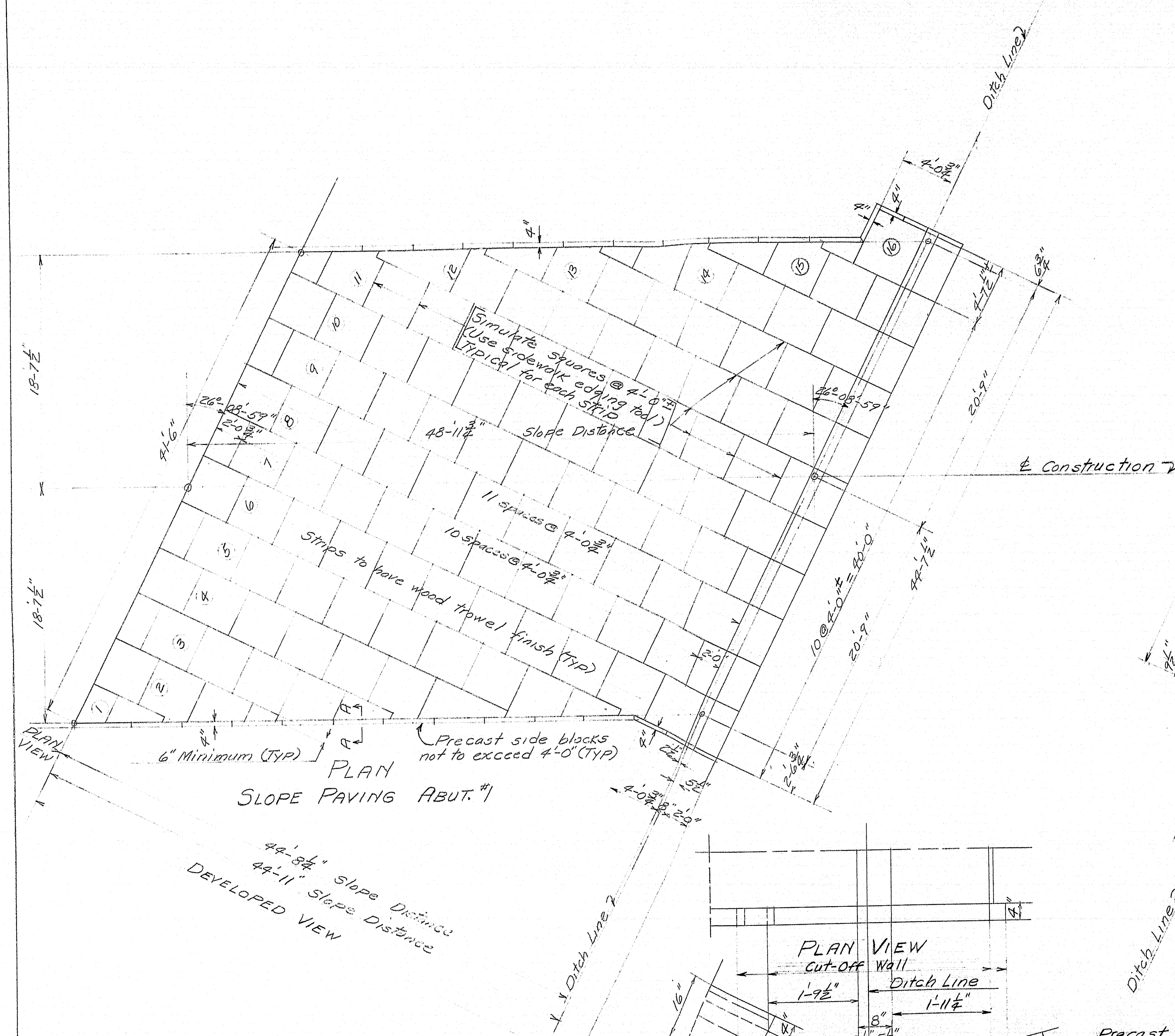
DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS
REGION 1

APPROVED:

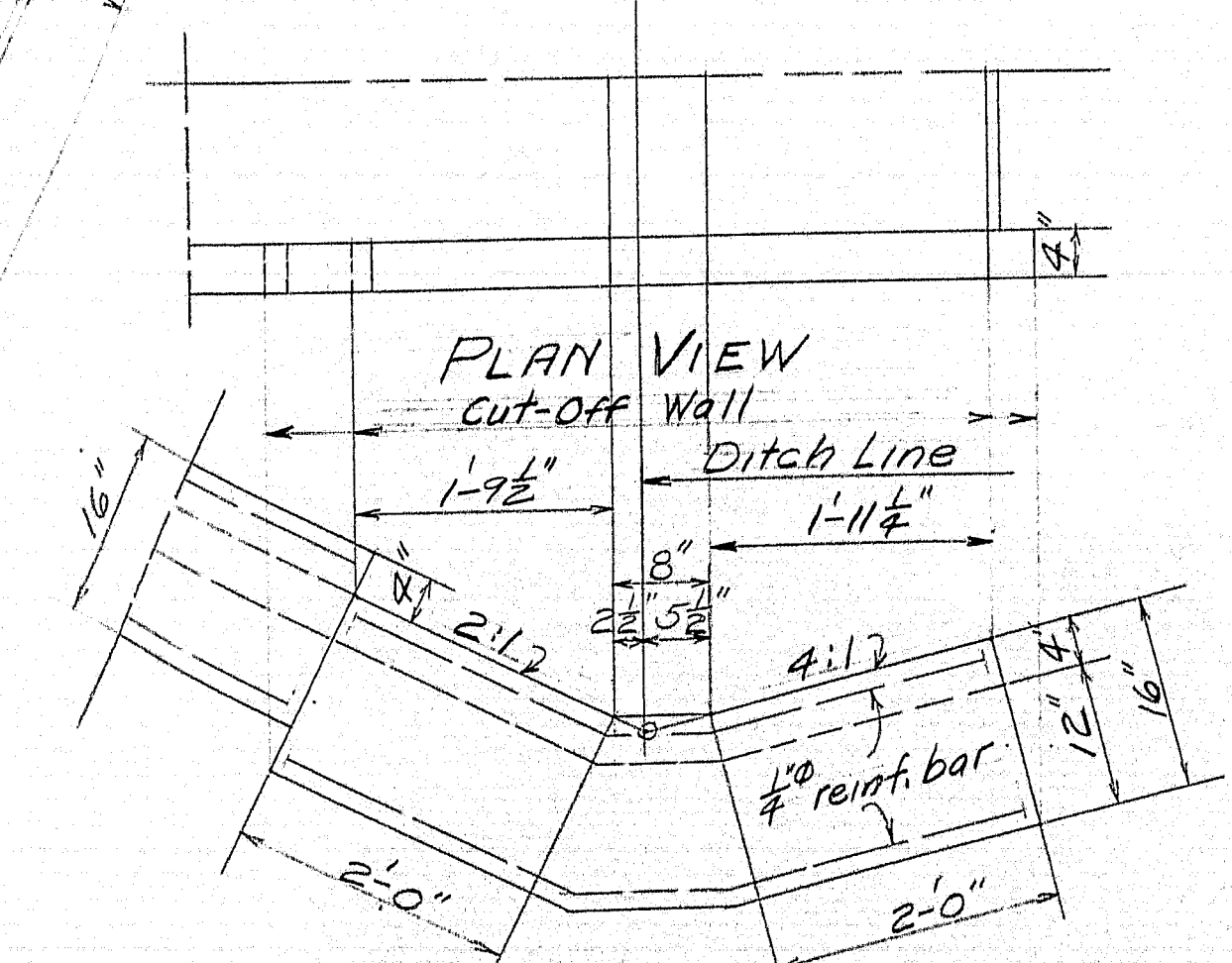
DIVISION ENGINEER DATE

86-1

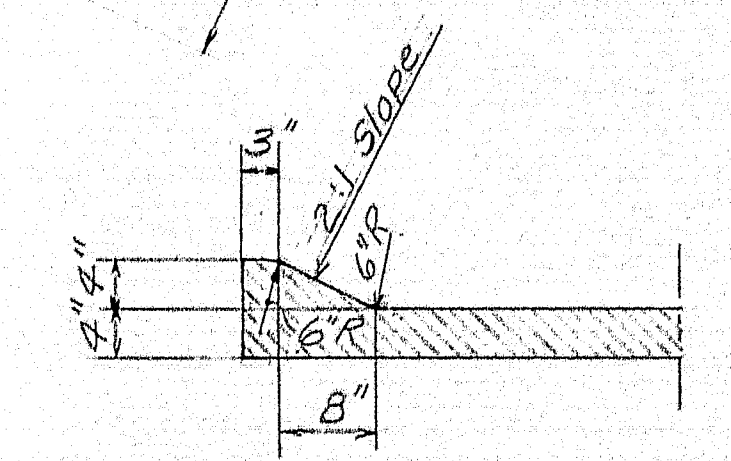
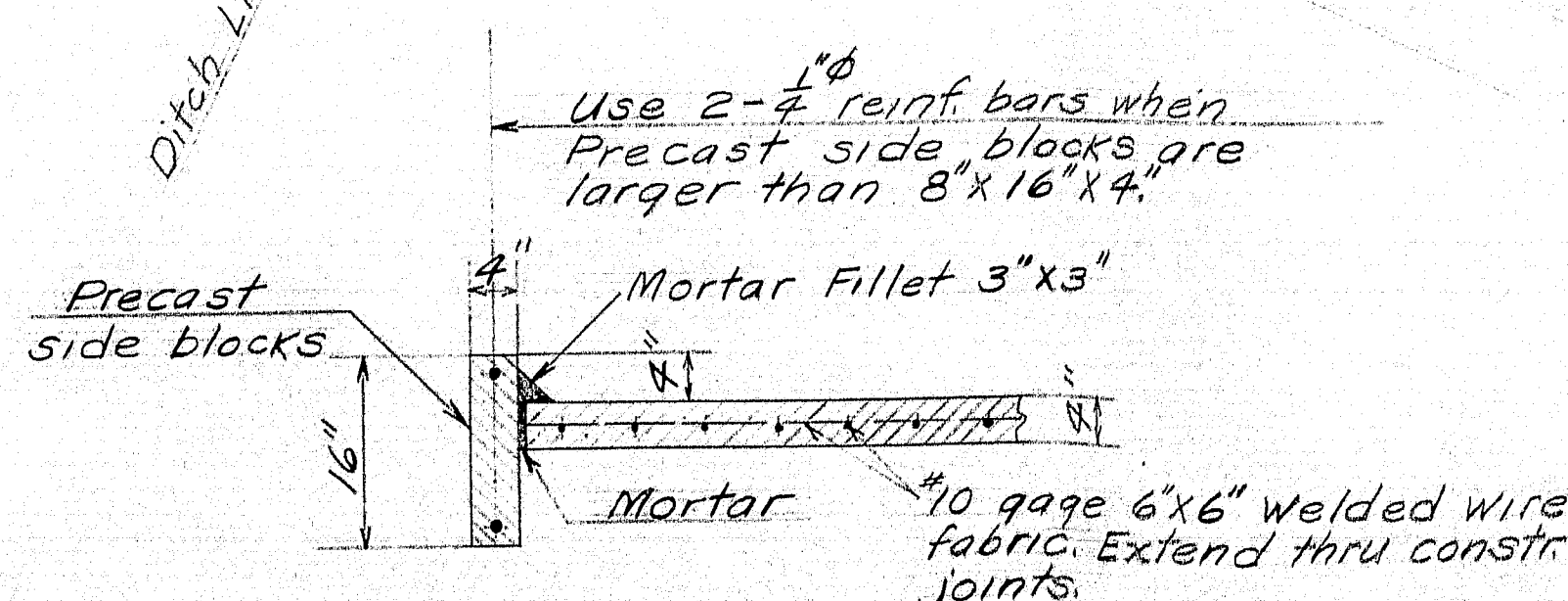
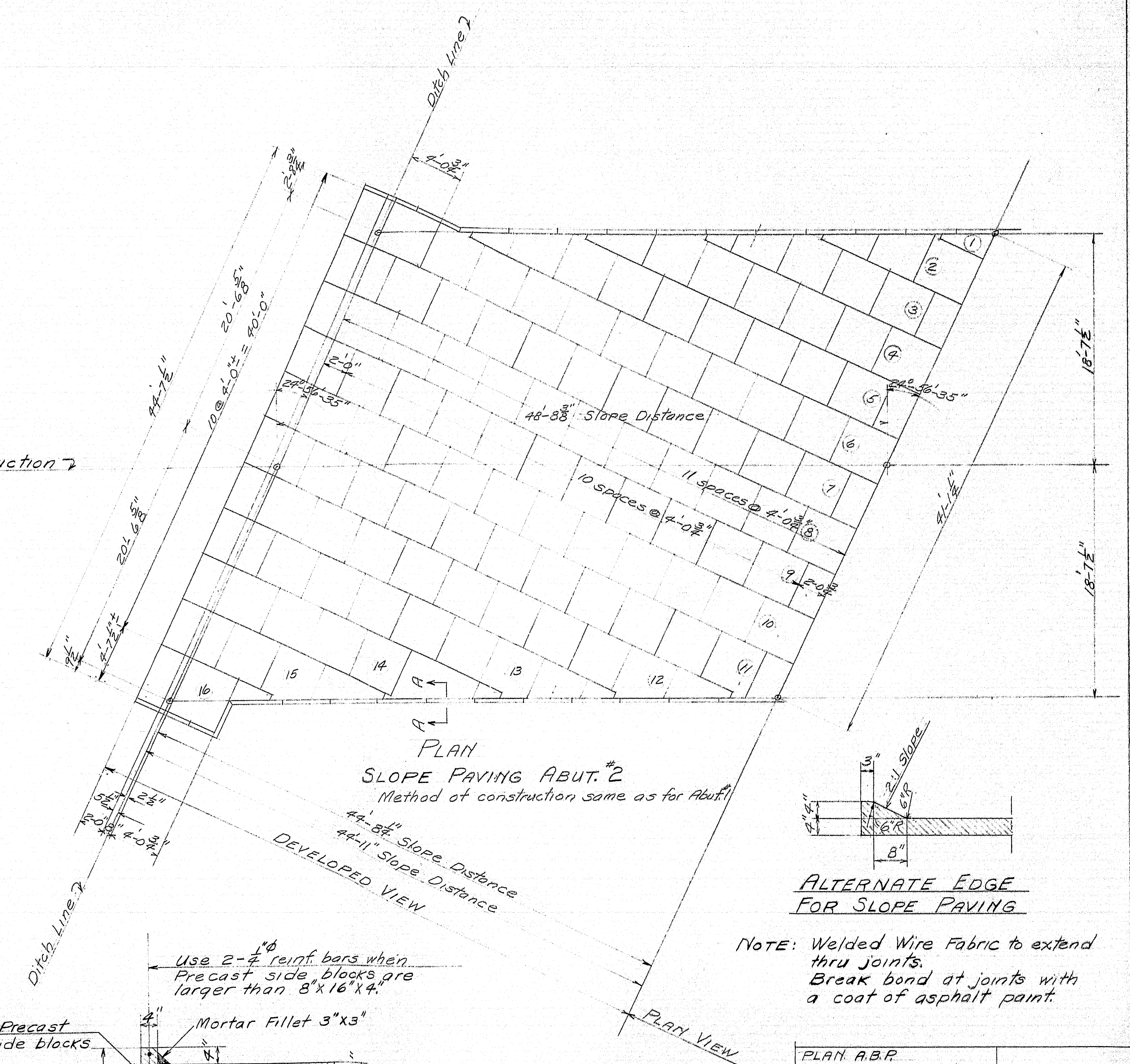
0 1 2 3 4 5 INCHES



Cast in place concrete strips to be placed in alternate bays 1-3-5-7-9-11-13-15. When forms are removed place 2-4-6-8-10-12-14-16. Side blocks are to be precast and placed after forms for concrete strips are removed.



Note: Inside form may be left in place



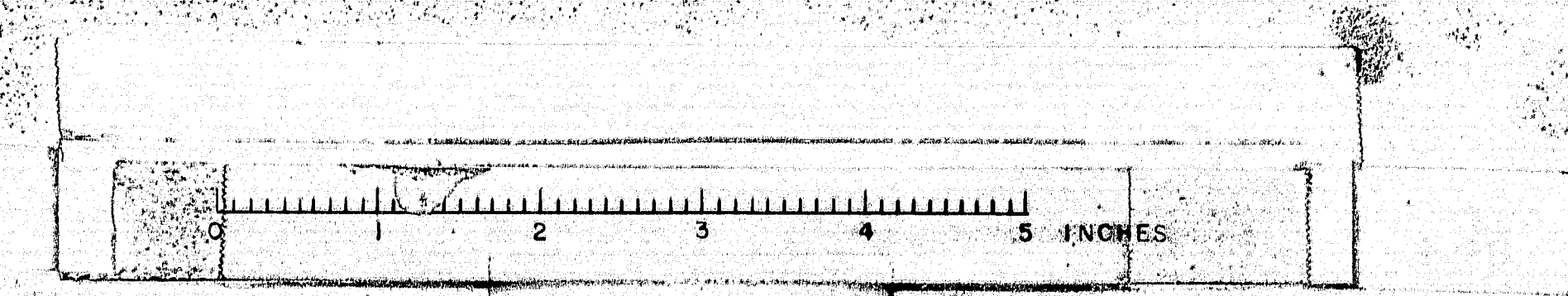
NOTE: Welded Wire Fabric to extend thru joints. Break bond at joints with a coat of asphalt paint.

PLAN, A.B.P.
CHECK L.L.R.

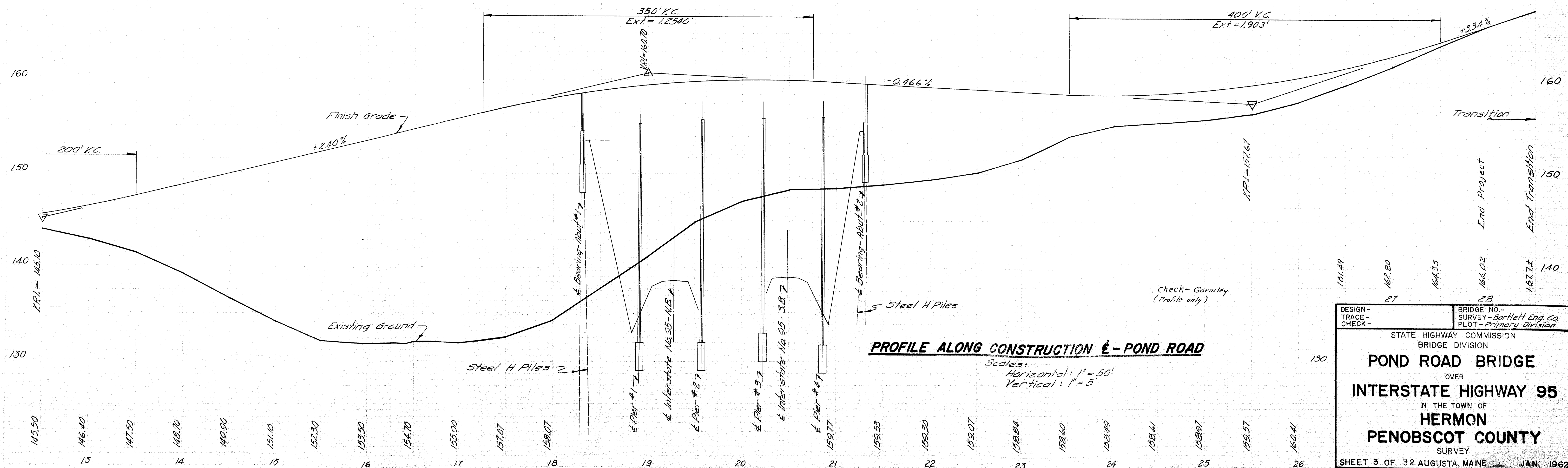
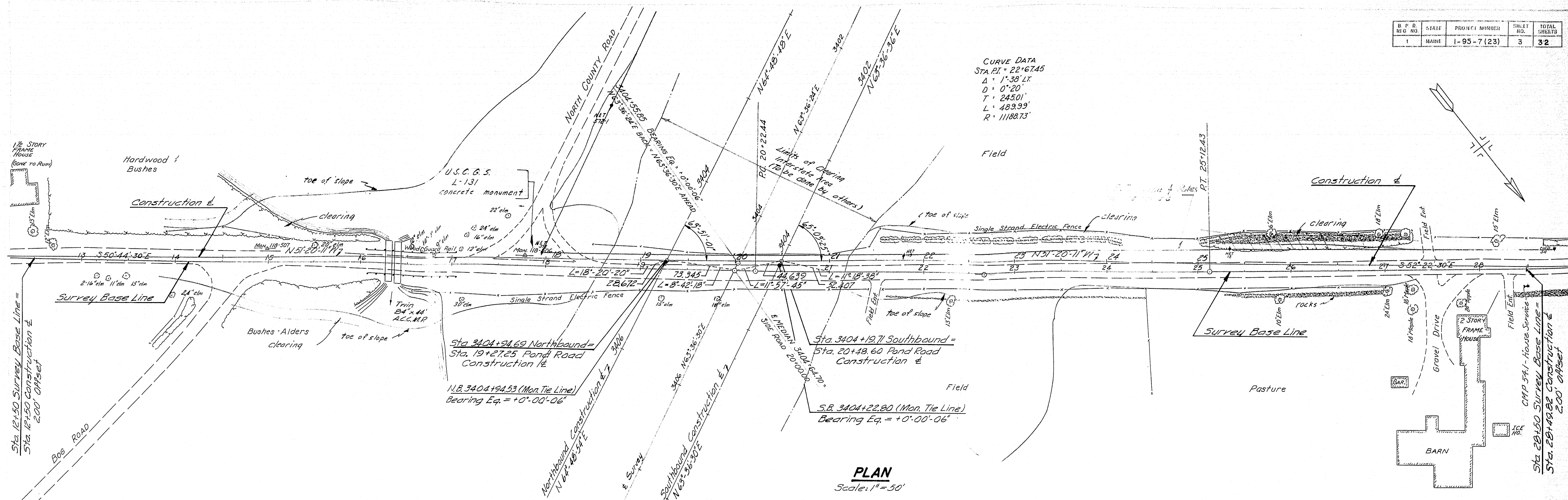
STATE HIGHWAY COMMISSION
BRIDGE DIVISION

POND ROAD BRIDGE
OVER
INTERSTATE HIGHWAY 95
IN THE TOWN OF
HERMON
PENOBSCOT COUNTY

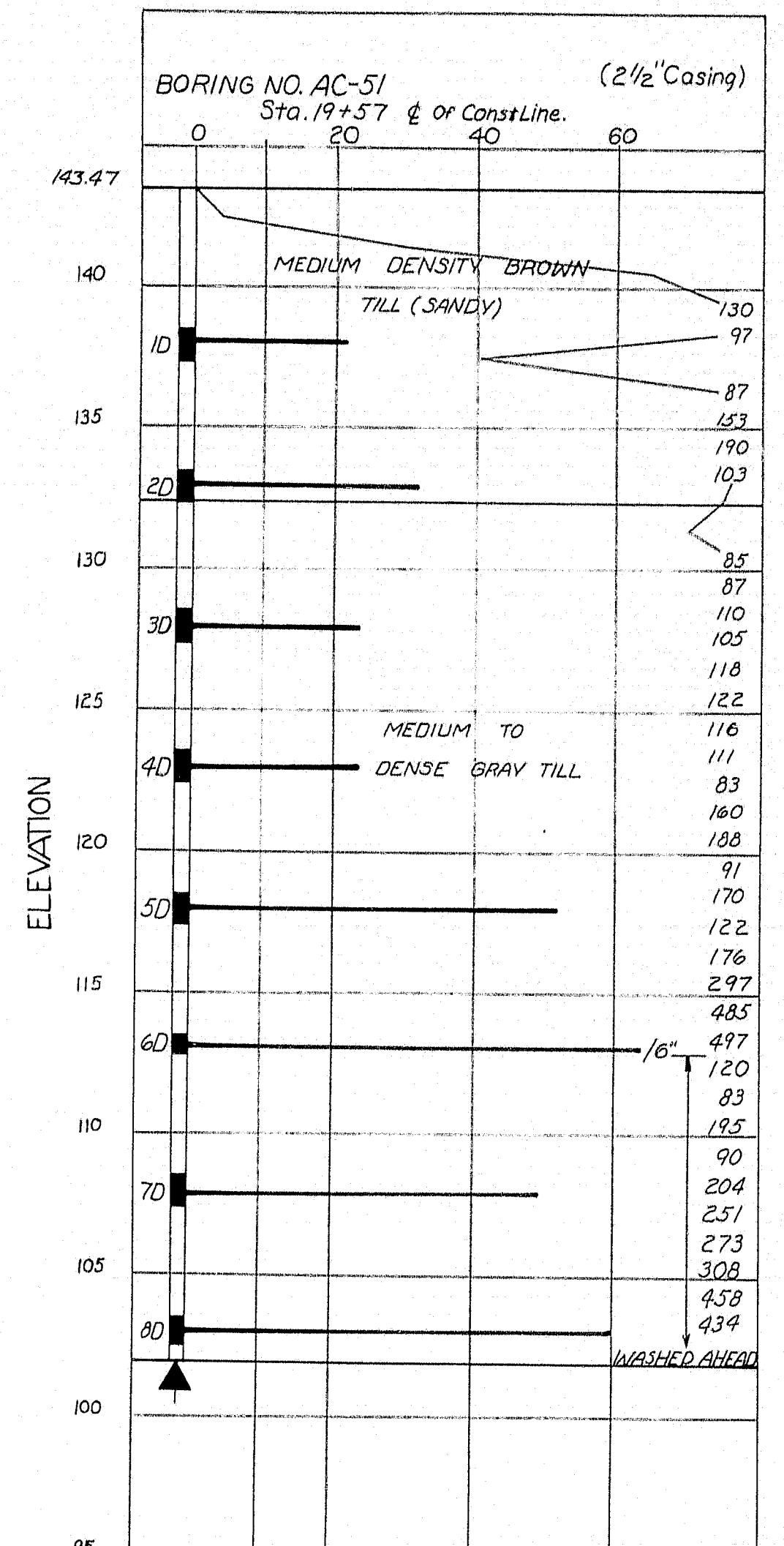
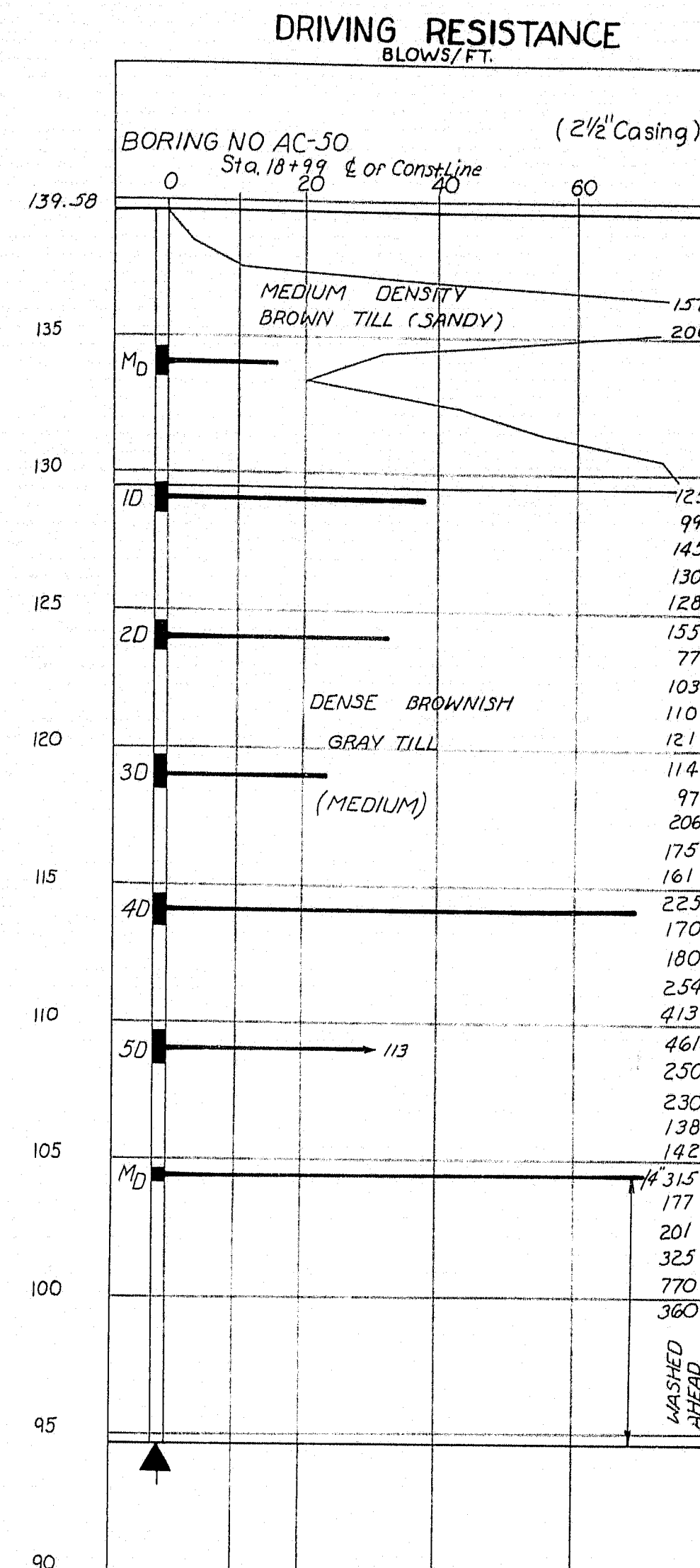
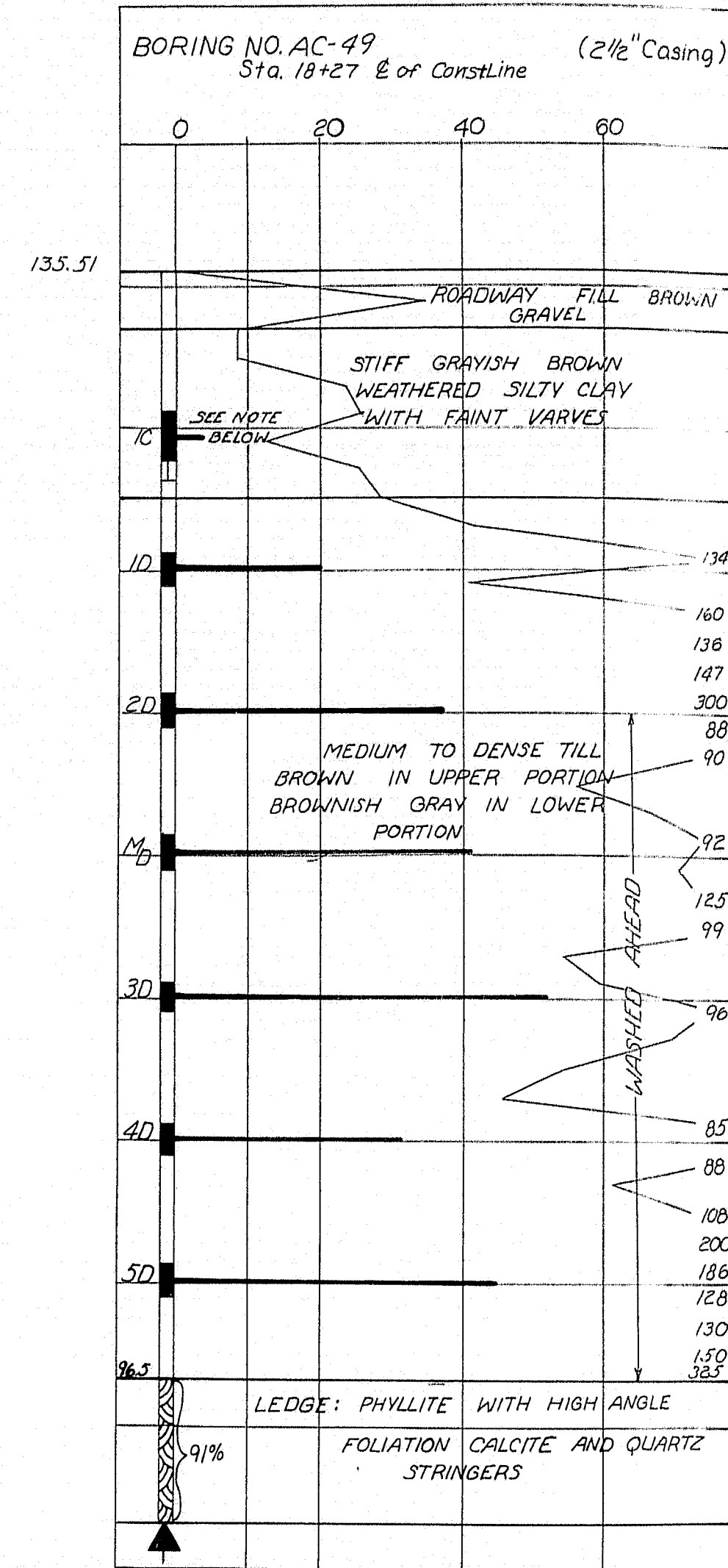
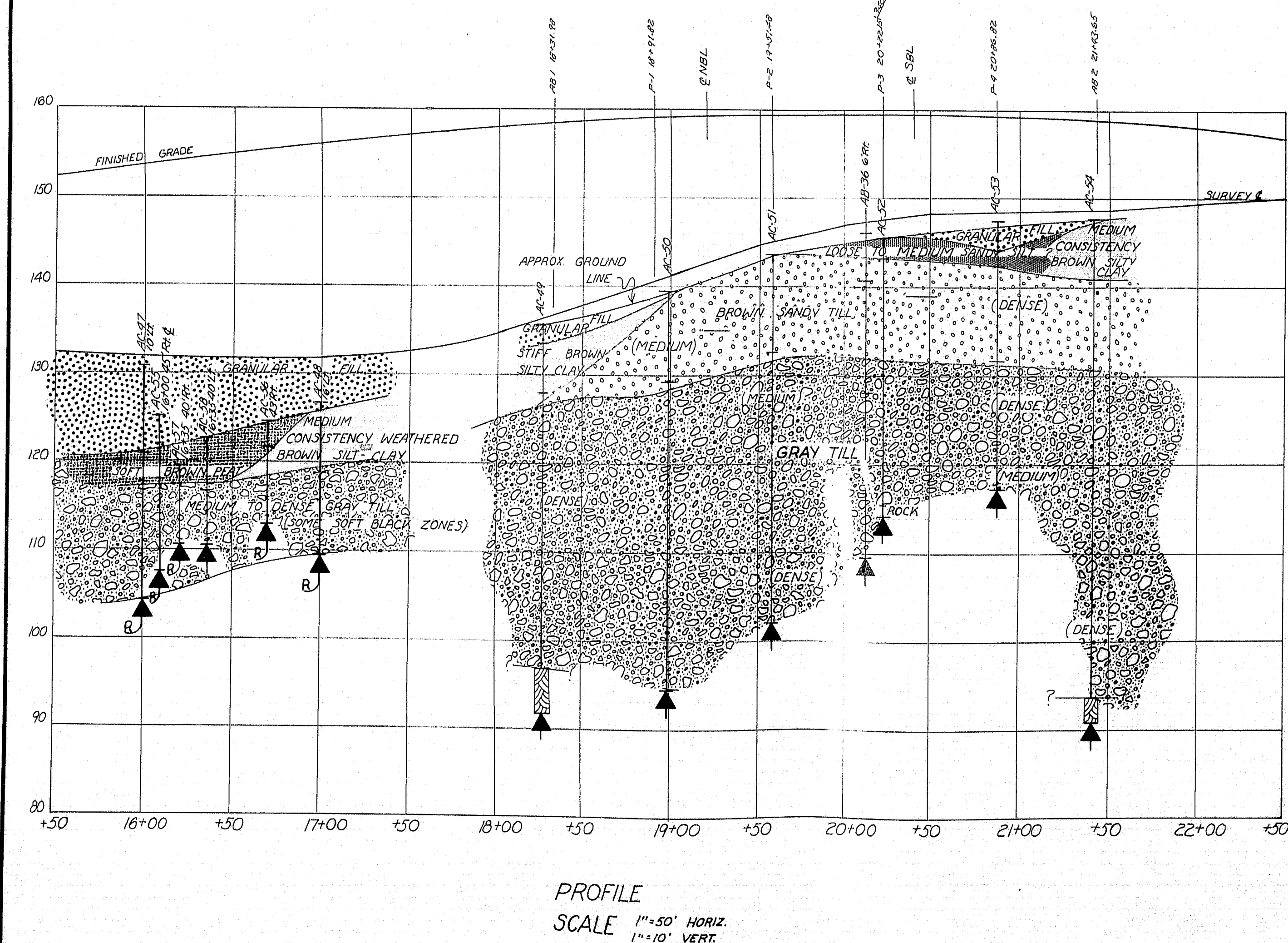
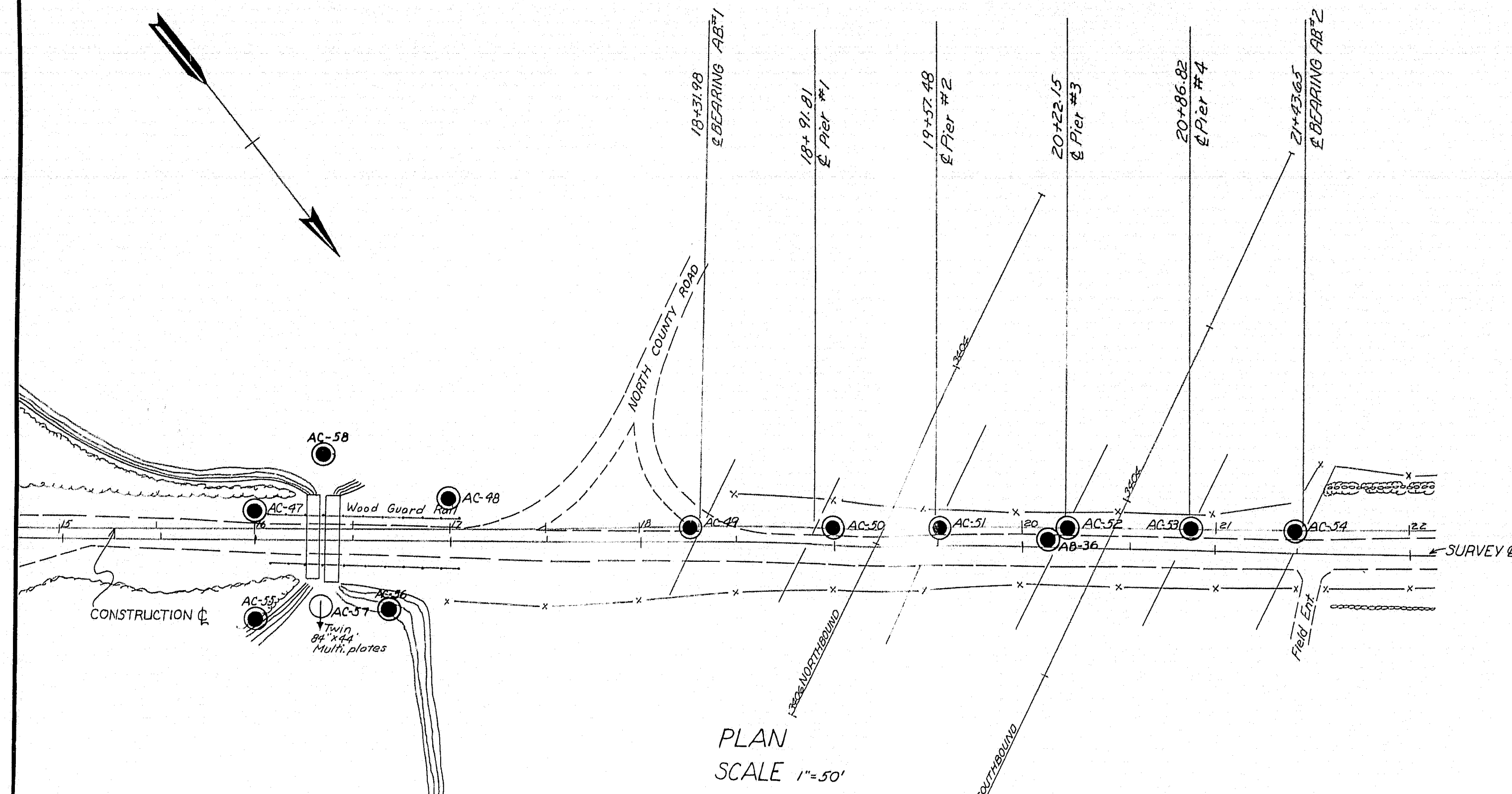
SLOPE PAVING AT CONTRACTORS REQUEST
AUGUSTA, MAINE AUG. 1962



B. P. D. NO.	DATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	1-95-7(23)	3	32



DESIGN - TRACE - CHECK -	BRIDGE NO. - SURVEY - PILOT -
STATE HIGHWAY COMMISSION BRIDGE DIVISION	SURVEY - Bartlett Eng. Co. PILOT - Primary Division
POND ROAD BRIDGE OVER INTERSTATE HIGHWAY 95 IN THE TOWN OF HERMON PENOBSCOT COUNTY SURVEY	
SHEET 3 OF 32 AUGUSTA, MAINE JAN. 1962	



BOR. NO. AC-49 SAMPLE 1C
THE AVERAGE WATER CONTENT 29.3 %
THE AVERAGE VANE SHEAR STRENGTH .81 %
LL - 35.4
PL - 18.1
FIELD VANE - 1.0

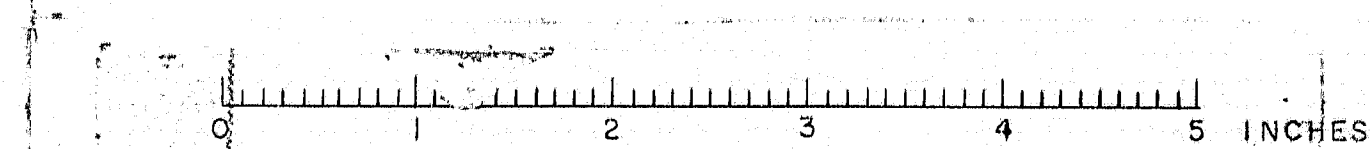
BORING NOTES

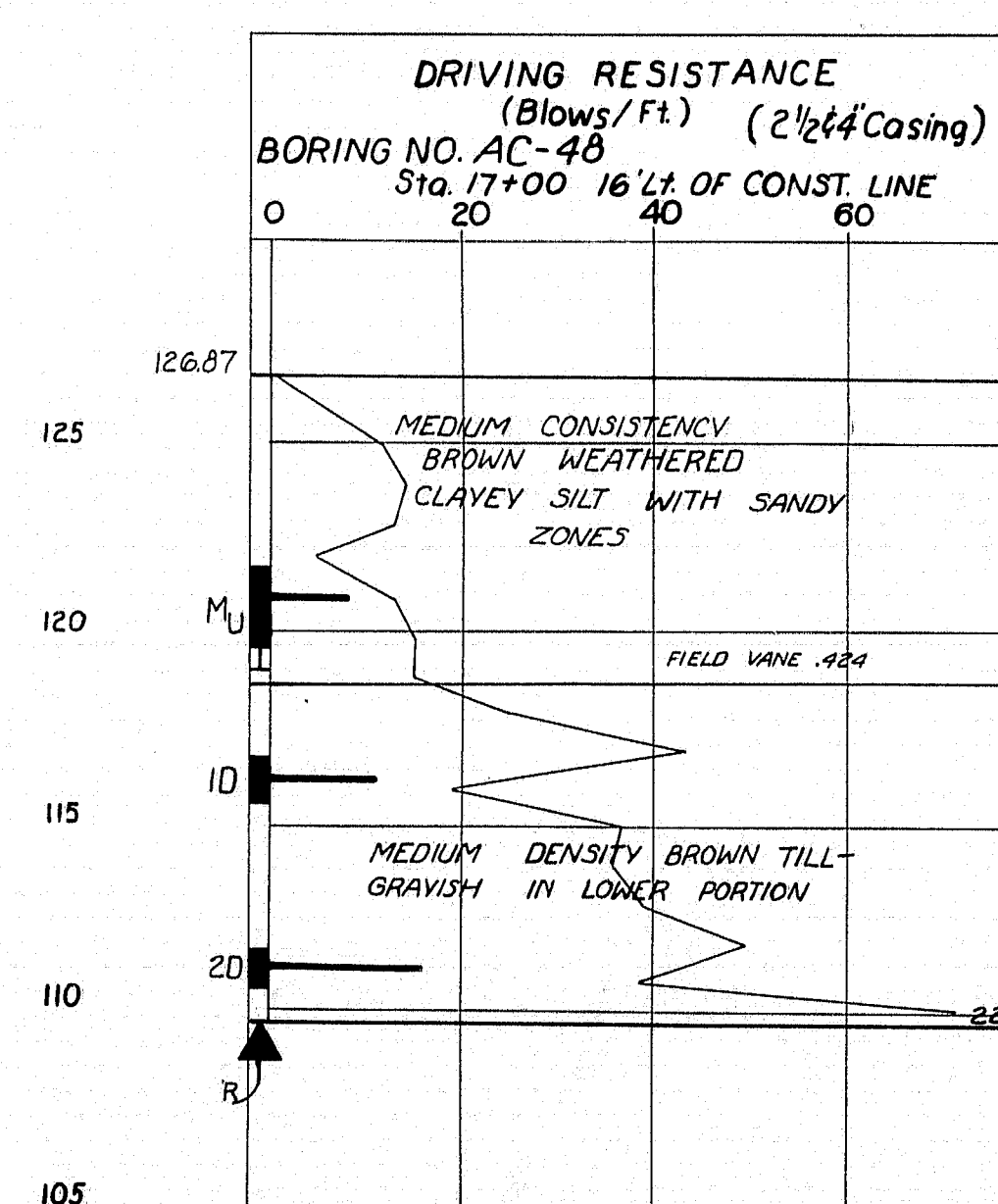
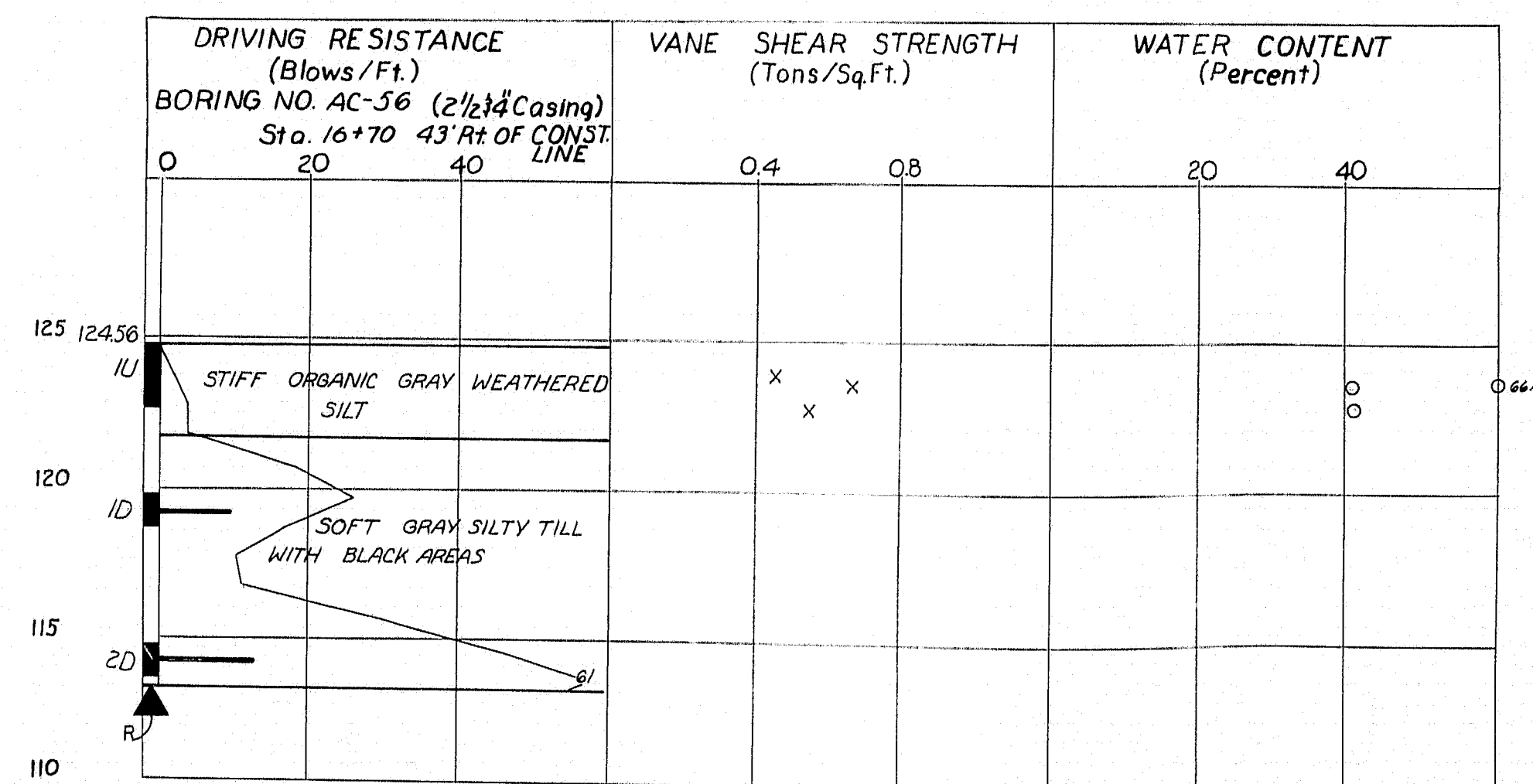
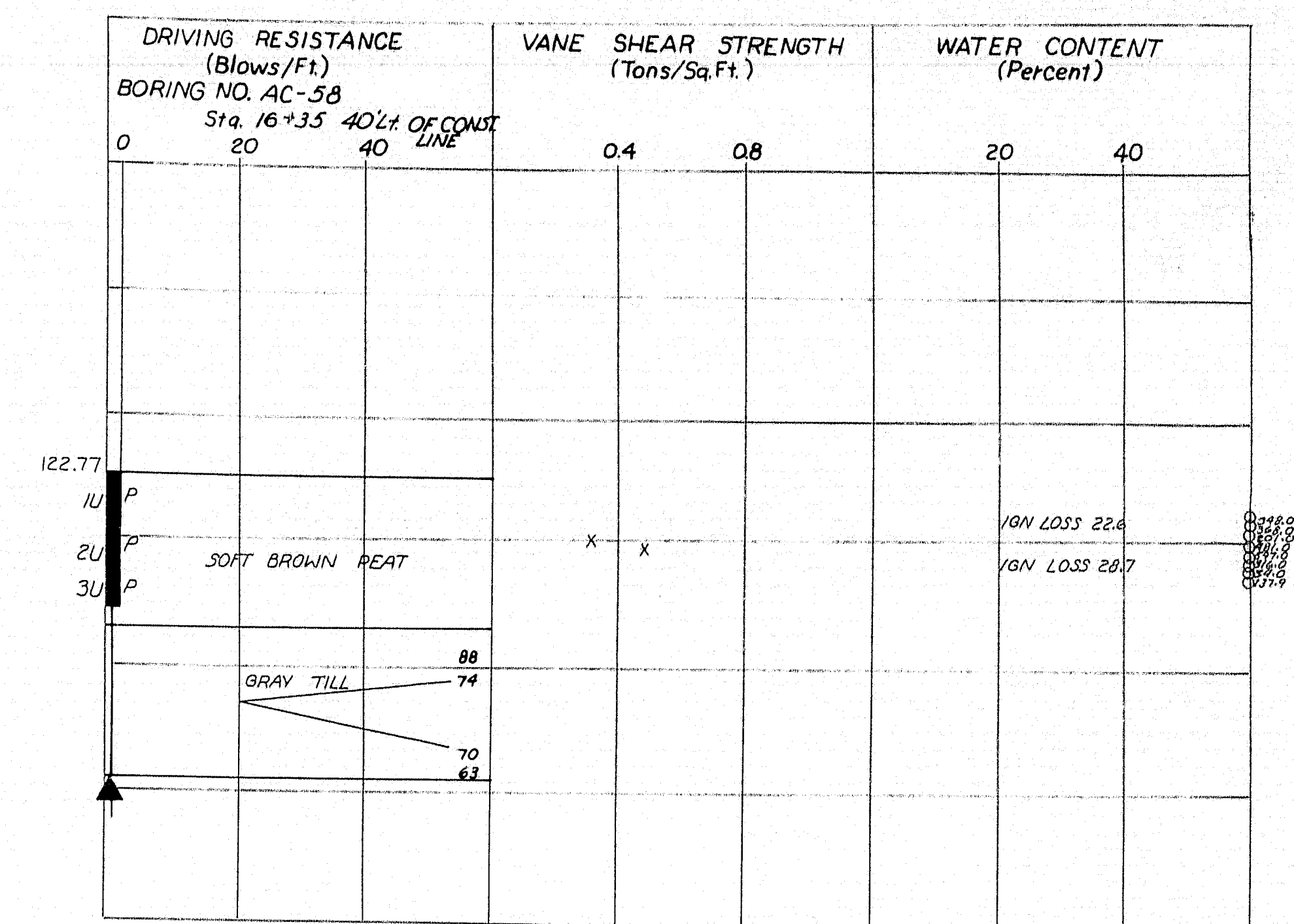
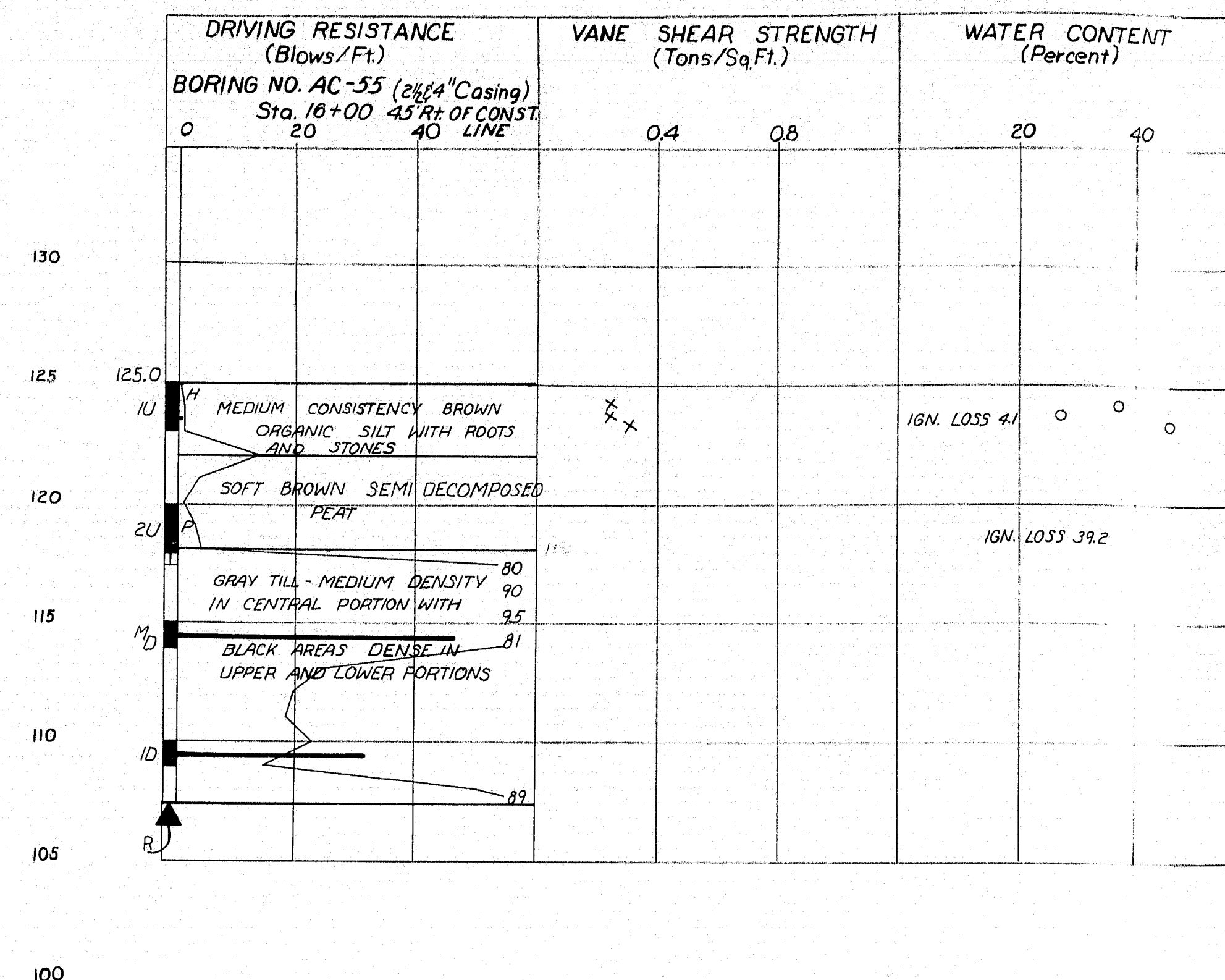
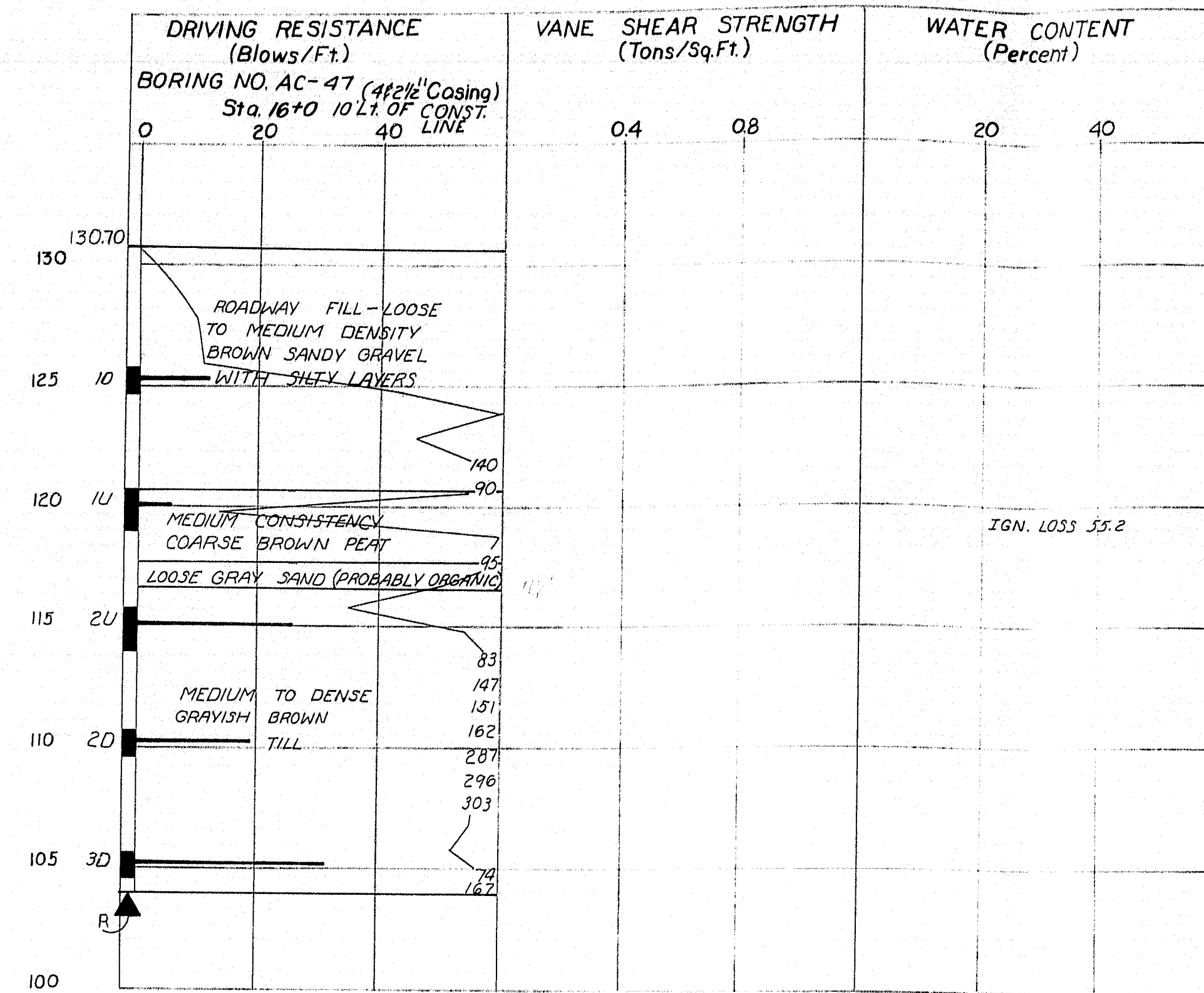
- ALL SAMPLES AND VANS ARE MADE AHEAD OF CASING
- NUMBER OF BLOWS REQUIRED TO DRIVE EXTRA HEAVY CASING ONE FOOT WITH 400# LBS. OF ENERGY PER BLOW
- LOCATION OF SAMPLE OR SAMPLE ATTEMPT
- NUMBER AND TYPE OF DRY SAMPLE
- ID 3/4" SAMPLER #1290'S
- M/D UNSUCCESSFUL SAMPLE ATTEMPT AND TYPE OF SAMPLER
- NUMBER OF BLOWS REQUIRED TO DRIVE SPOON OR TUBING ONE FOOT WITH 350# LBS. OF ENERGY PER BLOW
- BOTTOM OF BORING (MAY NOT BE BOTTOM OF SOIL STRATA)
- LOCATIONS CORED BY DIAMOND BIT AND PER CENT RECOVERY OF ROCK
- NUMBER AND TYPE OF DRY SAMPLE
- IC 2" O.D. 16' SEAMLESS TUBING
- IU 3 1/2" O.D. 16' SEAMLESS TUBING
- H SAMPLING SPOON OR SEAMLESS TUBING DRIVEN BY STATIC WEIGHT OF DRILL RODS AND HAMMER

- P PISTON SAMPLER
- F FIELD VANE TEST
- R REFUSAL OF DRILL RODS OR CASING (MAY NOT BE LEDGE)
- S SHEAR NOTES
- FIELD VANE SHEAR STRENGTHS
- X LABORATORY VANE SHEAR STRENGTHS
- WATER CONTENT NOTES
- NATURAL WATER CONTENTS, GIVEN AS PER CENT OF DRY WEIGHT
- ⊖ PLASTIC AND LIQUID LIMITS, GIVEN AS PER CENT OF DRY WEIGHT

NOTE:
TILL IS A MIXTURE OF GRAVEL, SAND, SILT AND CLAY

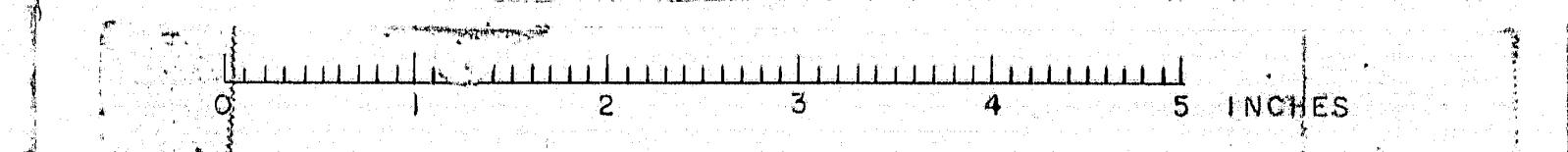
DESIGN - SOILS DIVISION	BRIDGE NO. SURVEY - PLOT
STATE HIGHWAY COMMISSION BRIDGE DIVISION	
POND ROAD BRIDGE OVER INTERSTATE HIGHWAY 95 IN THE TOWN OF HERMON	
PENOBSCOT COUNTY SOILS PROFILE - BORINGS SHEET 4 OF 32 AUGUSTA, MAINE FEB. 1962	



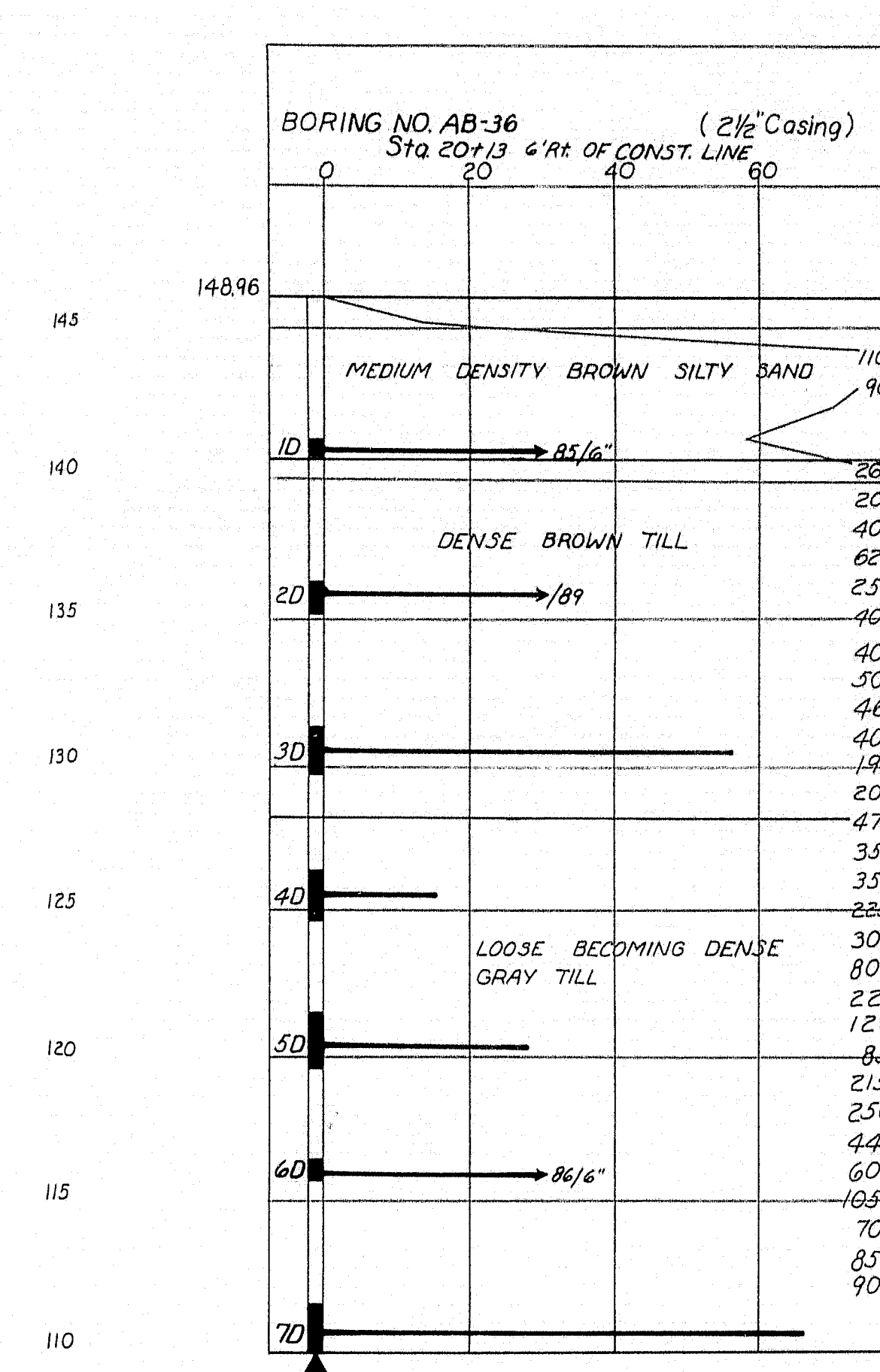
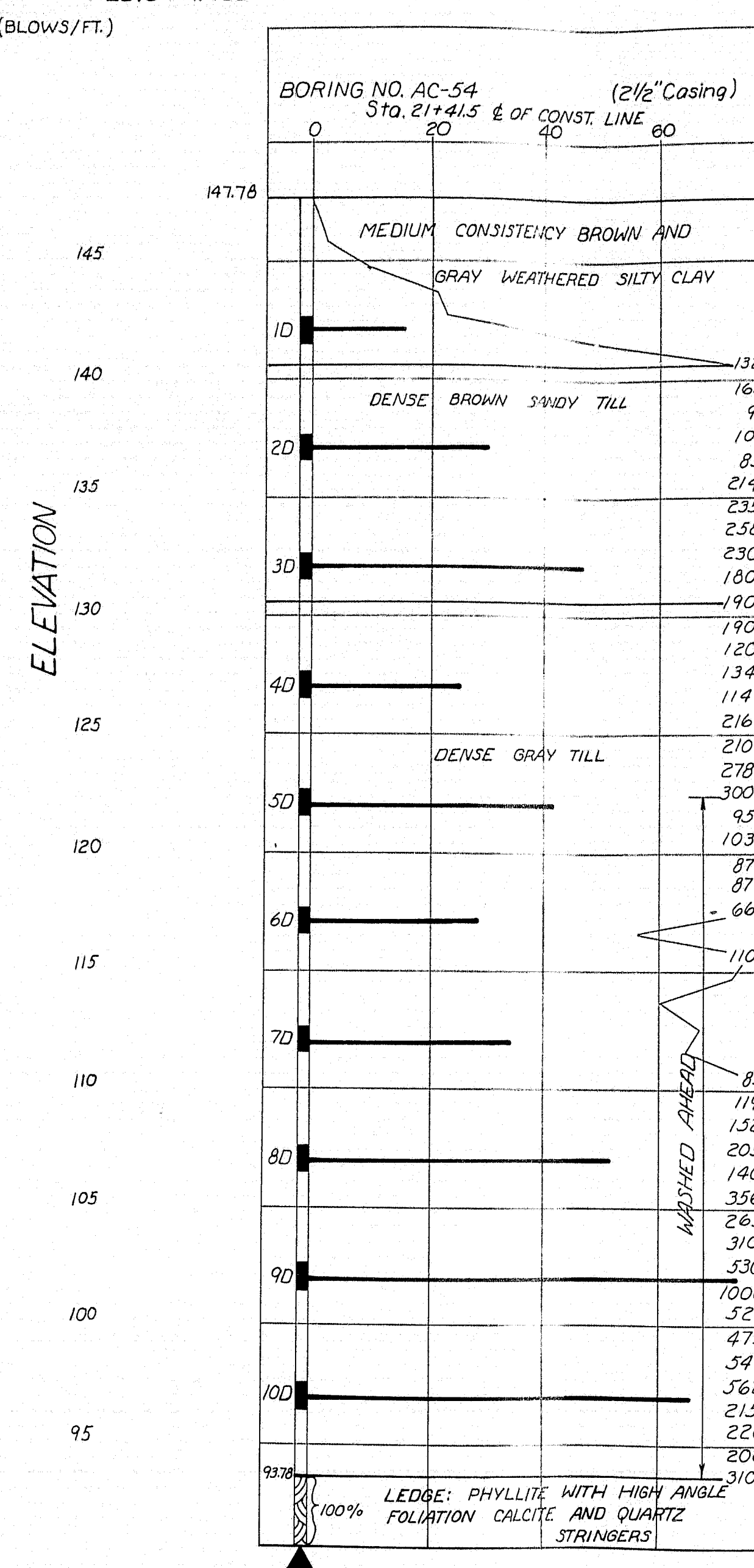
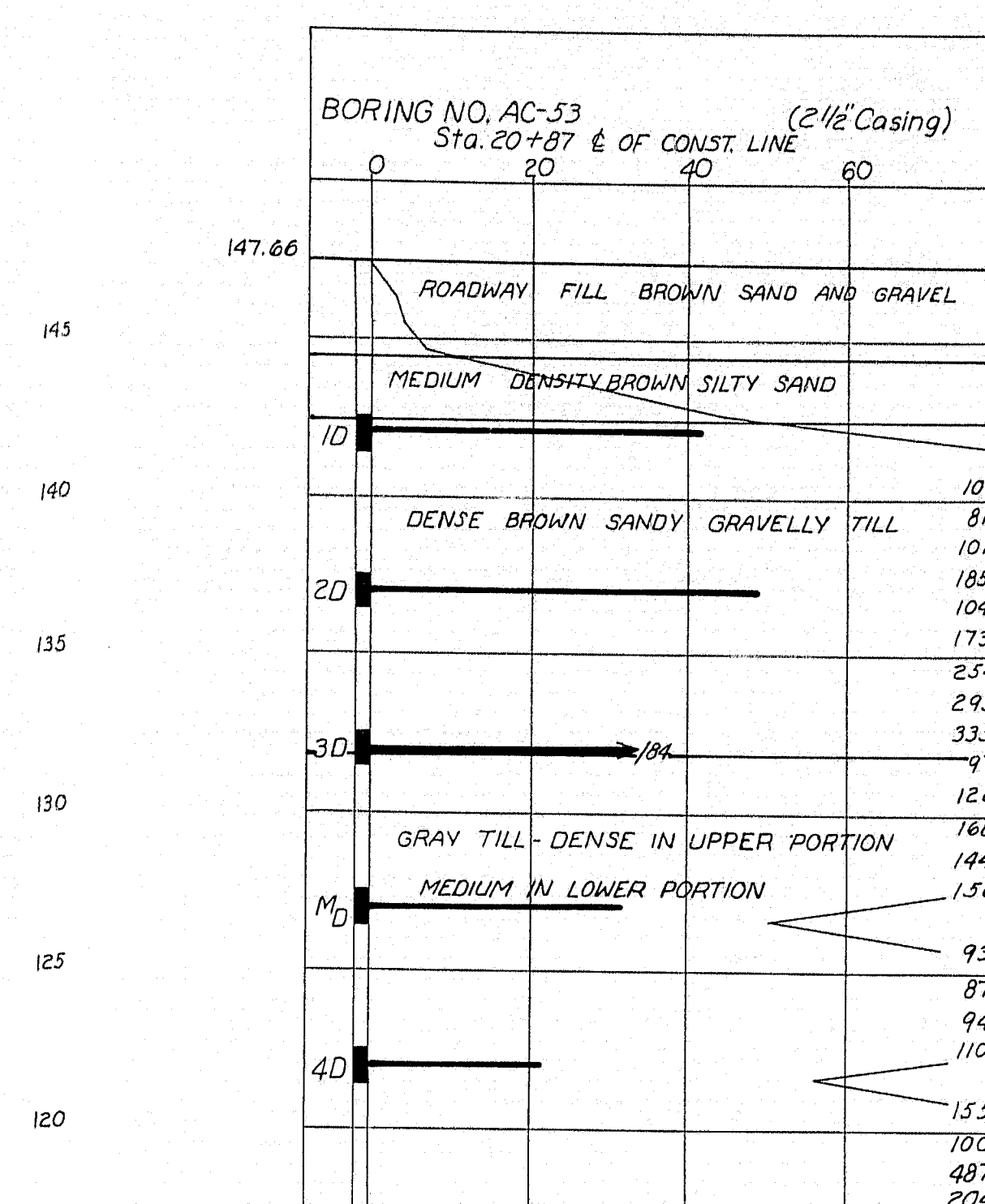
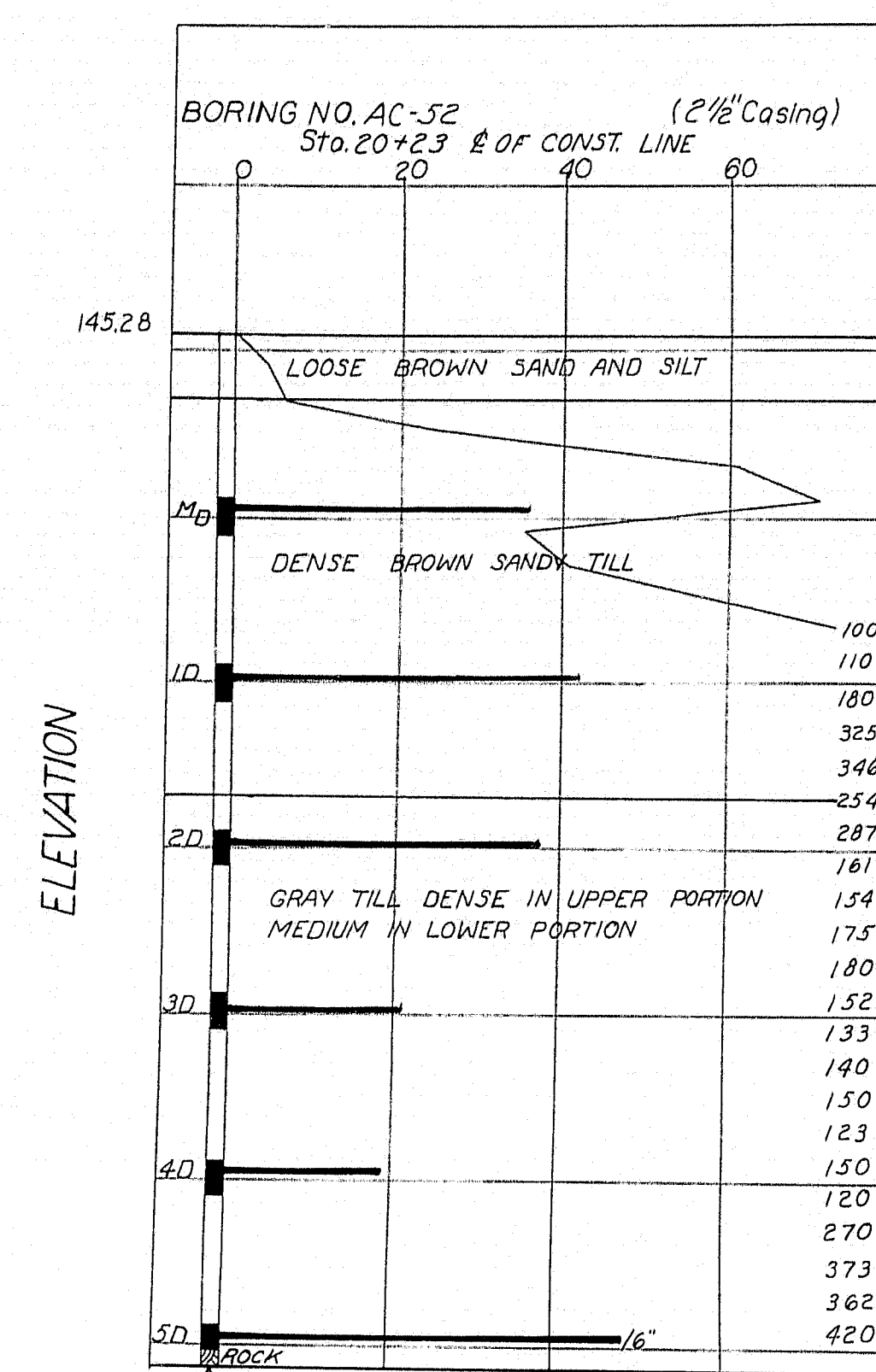


NOTE: TILL IS A MIXTURE OF GRAVEL, SAND, SILT AND CLAY

DESIGN - TRACE - CHECK -	SOILS DIVISION	BRIDGE NO. SURVEY - PLOT -
STATE HIGHWAY COMMISSION BRIDGE DIVISION		
POND ROAD BRIDGE OVER		
INTERSTATE HIGHWAY 95 IN THE TOWN OF		
HERMON		
PENOBSCOT COUNTY BORINGS		
SHEET 5 OF 32 AUGUSTA, MAINE FEB. 1962		

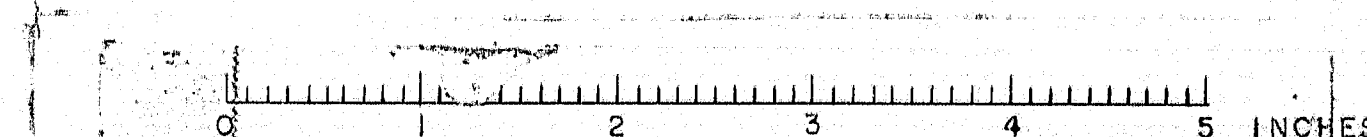


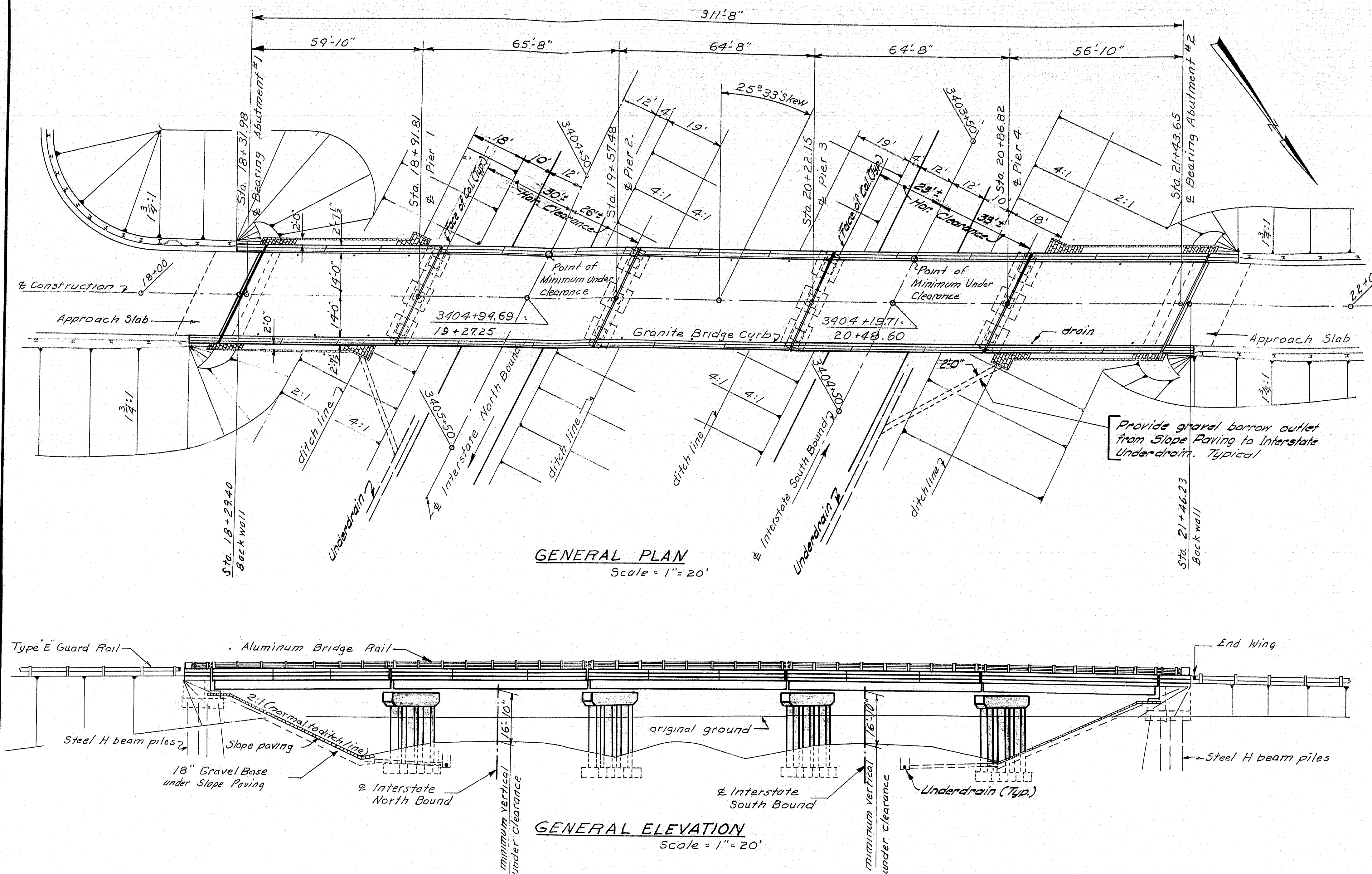
DRIVING RESISTANCE
(BLOWS/FT.)



NOTE:
TILL IS A MIXTURE OF GRAVEL, SAND, SILT AND CLAY

DESIGN-- TRACE-- CHECK--	SOILS DIVISION	BRIDGE NO. SURVEY-- PLOT--
STATE HIGHWAY COMMISSION BRIDGE DIVISION		
POND ROAD BRIDGE OVER		
INTERSTATE HIGHWAY 95 IN THE TOWN OF		
HERMON		
PENOBSCOT COUNTY BORINGS		
SHEET 6 OF 32 AUGUSTA, MAINE FEB. 1962		





See sheet #25 for Slope Paving Details and options.

LOADING.

H20-44
Structural Steel $f_s = 20,000$ psi. (except as noted)
Reinforcing Steel $f_s = 20,000$ psi.
Concrete $f_c = 12,000$ psi.
 $n = 10$

DESIGN.

A.A.S.H.O. Standard Specifications for
Highway Bridges 1961

CONSTRUCTION.

State of Maine, State Highway Commission,
Standard Specifications, Highways and
Bridges, Revision of January 1956 and
supplemental specifications.

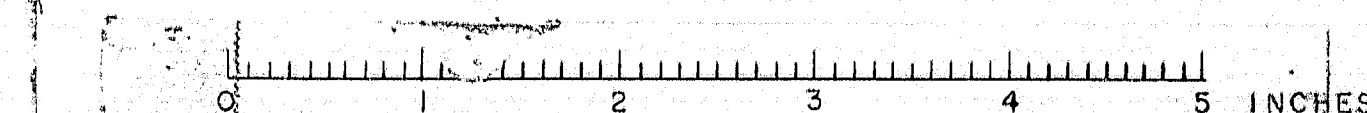
CONCRETE CLASSIFICATION.

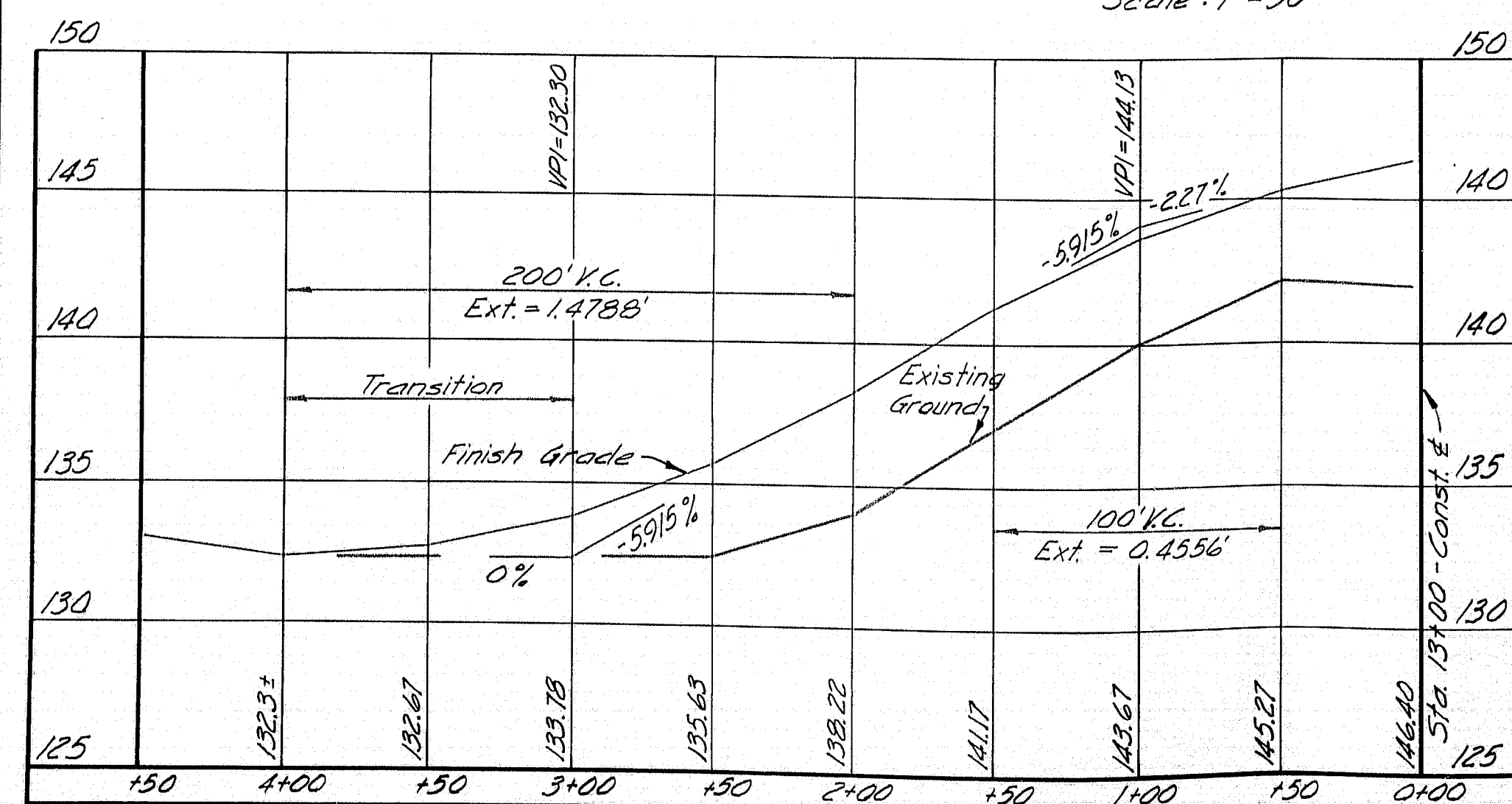
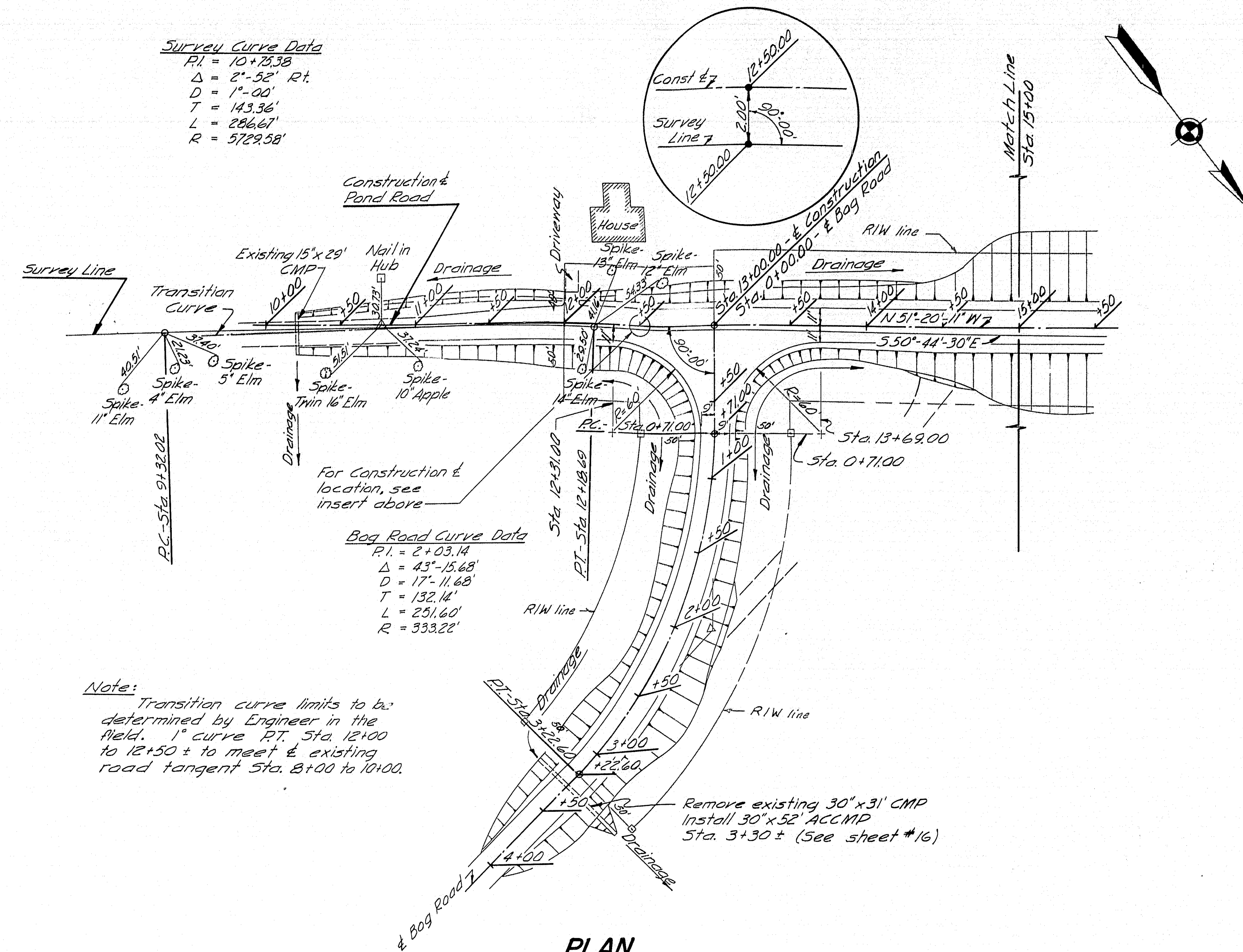
Class "A" all concrete.

TOTAL QUANTITIES - ENGINEERS ESTIMATE

CLEARING	0.60 Acres
REMOVING TREES (9" - 24")	14 Each
REMOVING TREES (OVER 24")	2 Each
EARTH EXCAVATION	1300 c.y.
MUCK EXCAVATION	5000 c.y.
STRUCTURAL EARTH EXCAVATION - DRAINAGE	240 c.y.
STRUCTURAL EARTH EXCAVATION - PIERS	325 c.y.
STRUCTURAL EARTH EXCAVATION - CHANNEL	25 c.y.
COMMON BORROW	52,500 c.y.
GRANULAR BORROW	430 c.y.
GRAVEL BORROW	2900 c.y.
GRAVEL BASE COURSE - IN PLACE MEASUREMENT	4800 c.y.
GRAVEL SURFACE COURSE	550 c.y.
BITUMINOUS CONCRETE SURFACE COURSE, TYPE "B"	815 Tons
ROAD TAR	2350 Gal.
12" ASPHALT COATED CORRUGATED METAL PIPE	130 l.f.
18" ASPHALT COATED CORRUGATED METAL PIPE	52 l.f.
30" ASPHALT COATED CORRUGATED METAL PIPE	52 l.f.
18" REINFORCED CONCRETE PIPE, CLASS III	124 l.f.
PORTLAND CEMENT CONCRETE, ABUTMENTS & RETAINING WALLS	150 c.y.
PORTLAND CEMENT CONCRETE, PIERS	240 c.y.
PORTLAND CEMENT CONCRETE, ROADWAY & SIDEWALK SLABS ON STEEL BRIDGES	350 c.y.
PORTLAND CEMENT	1110 bbls
STRUCTURAL STEEL, FABRICATED & DELIVERED	249,500 lbs.
STRUCTURAL STEEL, ERECTION	249,500 lbs.
STRUCTURAL STEEL, FIELD PAINTING	249,500 lbs.
BRONZE OR COPPER-ALLOY BEARING & EXPANSION PLATES, DELIVERED	205 lbs.
BRONZE OR COPPER-ALLOY BEARING & EXPANSION PLATES, PLACING	205 lbs.
108 INCH STRUCTURAL PLATE PIPE	130 l.f.
REINFORCING STEEL, DELIVERED	109,000 lbs.
REINFORCING STEEL, PLACING	109,000 lbs.
SHEAR CONNECTORS	Lump Sum
STEEL H-BEAM PILES 42 LBS. / FOOT	990 l.f.
REMOVAL OF EXISTING TWIN 84" A.C.C.M. PIPES	Lump Sum
ALUMINUM RAIL	650 l.f.
MEMBRANE WATERPROOFING	975 s.y.
SLOPE PAVING	490 s.y.
GRANITE BRIDGE CURB	665 l.f.
GUARD RAIL - TYPE "E"	1780 l.f.
END WINGS	4 Each
GUARD RAIL - TYPE "E" - TERMINAL SECTIONS	8 Each
GUARD RAIL - TYPE "E", CURVED	400 l.f.
HAND LAID RIP-RAP	135 c.y.
LOAM BORROW	875 c.y.
SEEDING - METHOD NO. 2	9.5 Units
HAY MULCH	6.5 Tons
ASPHALT MULCH BINDER	450 Gal.

DESIGN - P. MOLLICONE	BRIDGE NO. SURVEY -
TRACE - G.E.A.	PLOT -
CHECK - G.E.A.	
STATE HIGHWAY COMMISSION BRIDGE DIVISION	
POND ROAD BRIDGE OVER INTERSTATE HIGHWAY 95 IN THE TOWN OF HERMON PENOBSCOT COUNTY GENERAL PLAN	
SHEET 7 OF 32 AUGUSTA, MAINE FEB. 11, 1962	





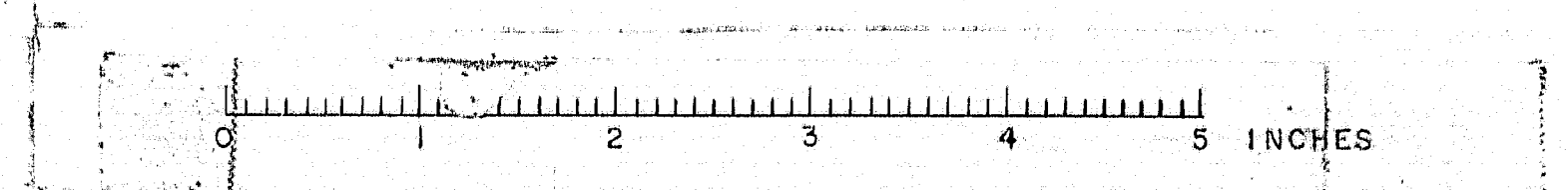
PROFILE ALONG & CONSTRUCTION-BOG ROAD

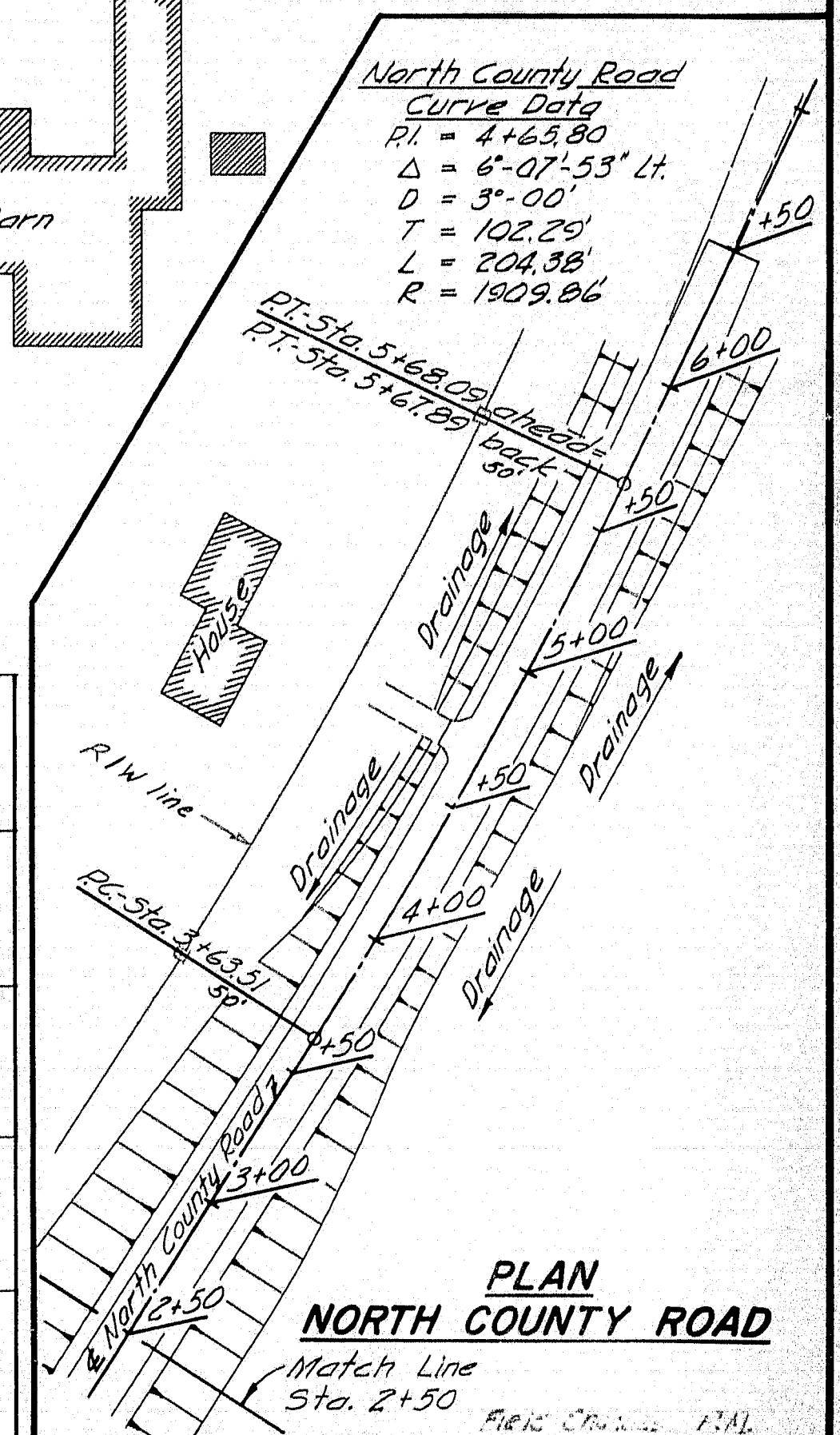
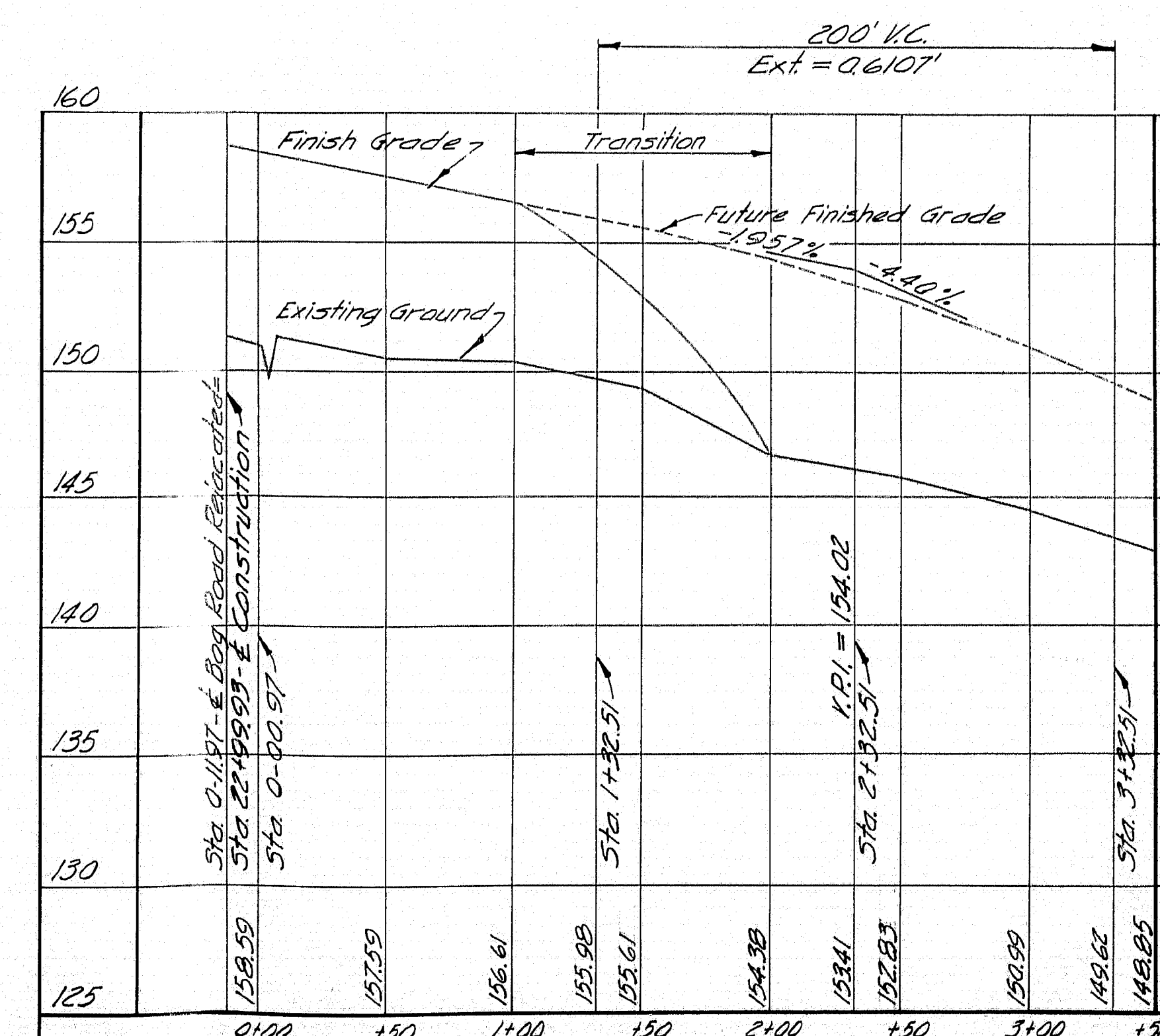
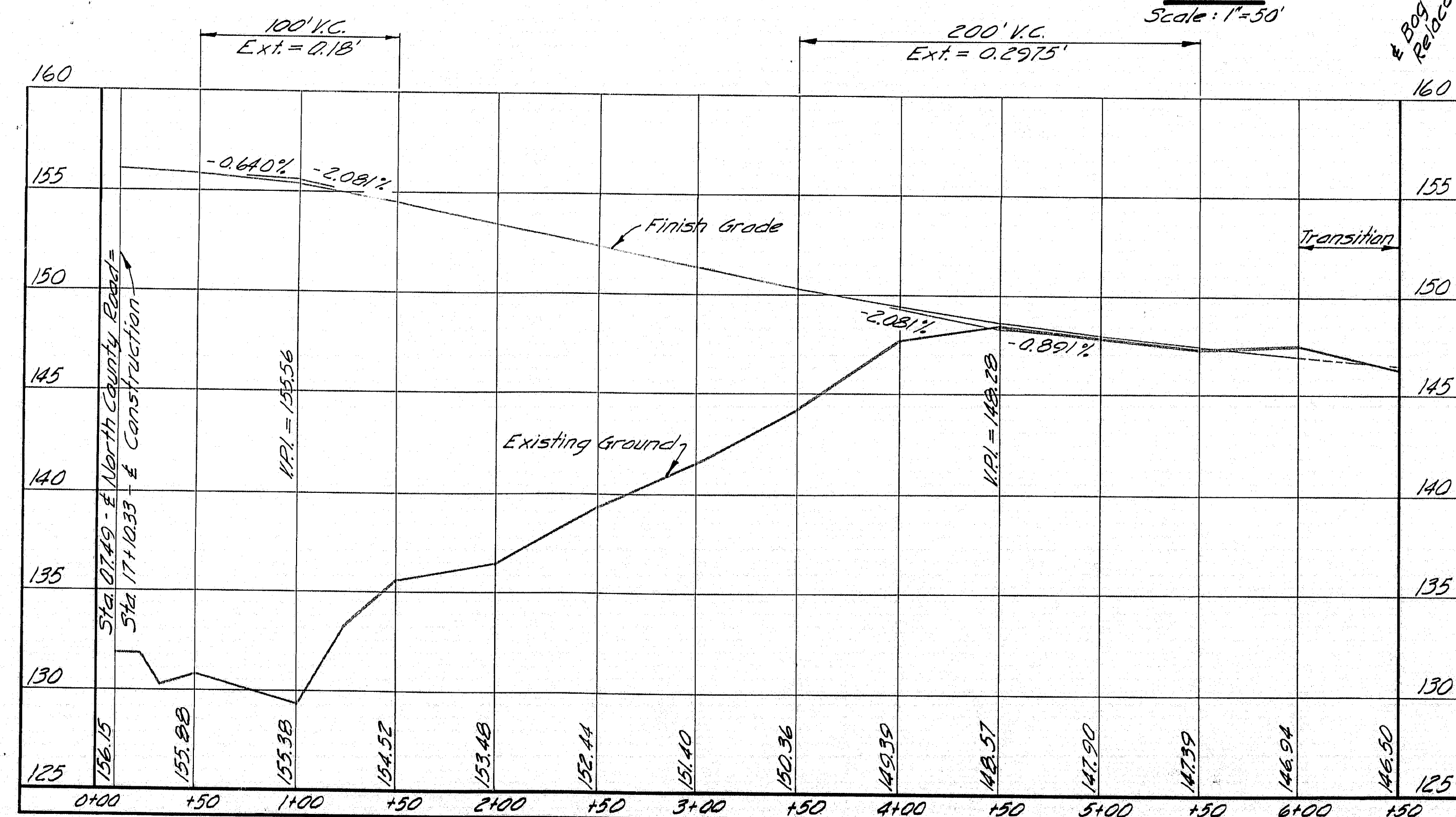
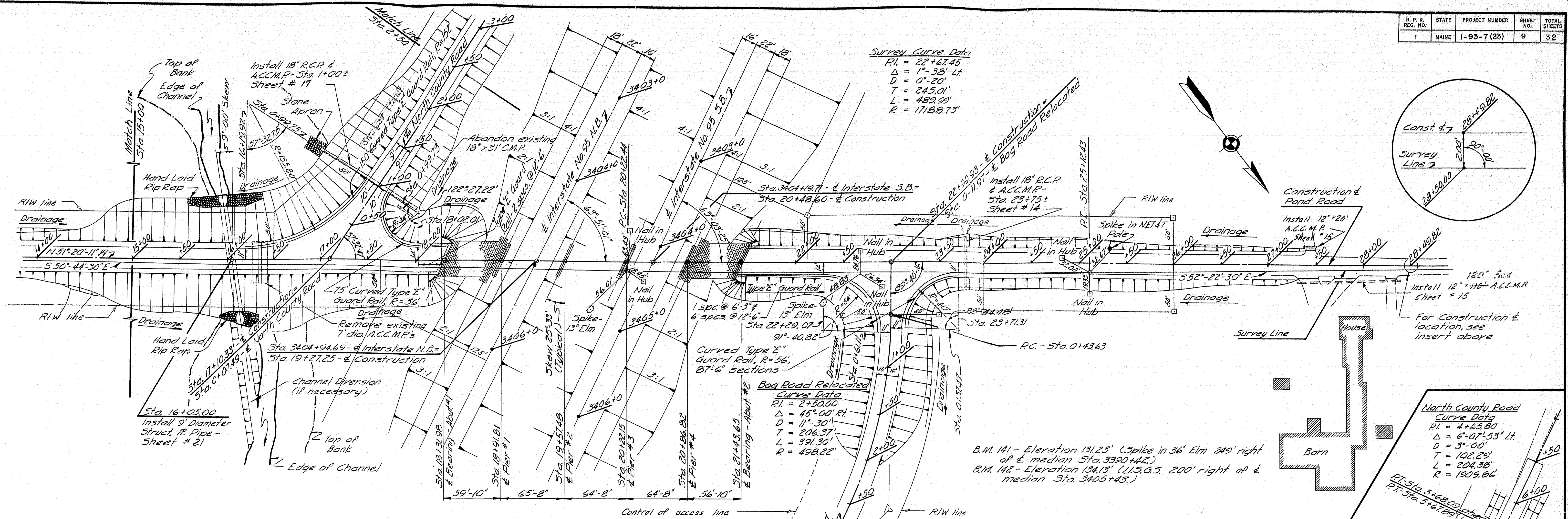
Scales:
 Horizontal: 1" = 50'
 Vertical: 1" = 5'

DESIGN - R. Mallonee	BRIDGE NO.
TRACE - J. Ault	BRIDGE DIVISION
CHECK - G. Gormley	PLOT -

STATE HIGHWAY COMMISSION
 BRIDGE DIVISION
POND ROAD BRIDGE
 OVER
INTERSTATE HIGHWAY 95
 IN THE TOWN OF
HERMON
PENOBSCOT COUNTY
 GENERAL LAYOUT

SHEET 8 OF 32 AUGUSTA, MAINE FEB. 1962





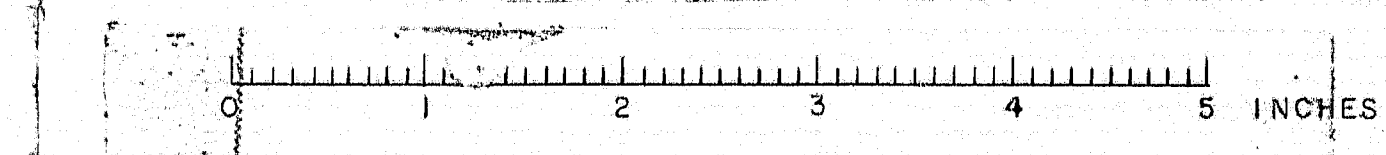
DESIGN - R. Mollison
 TRACE - J. Ault
 CHECK - J. Ault

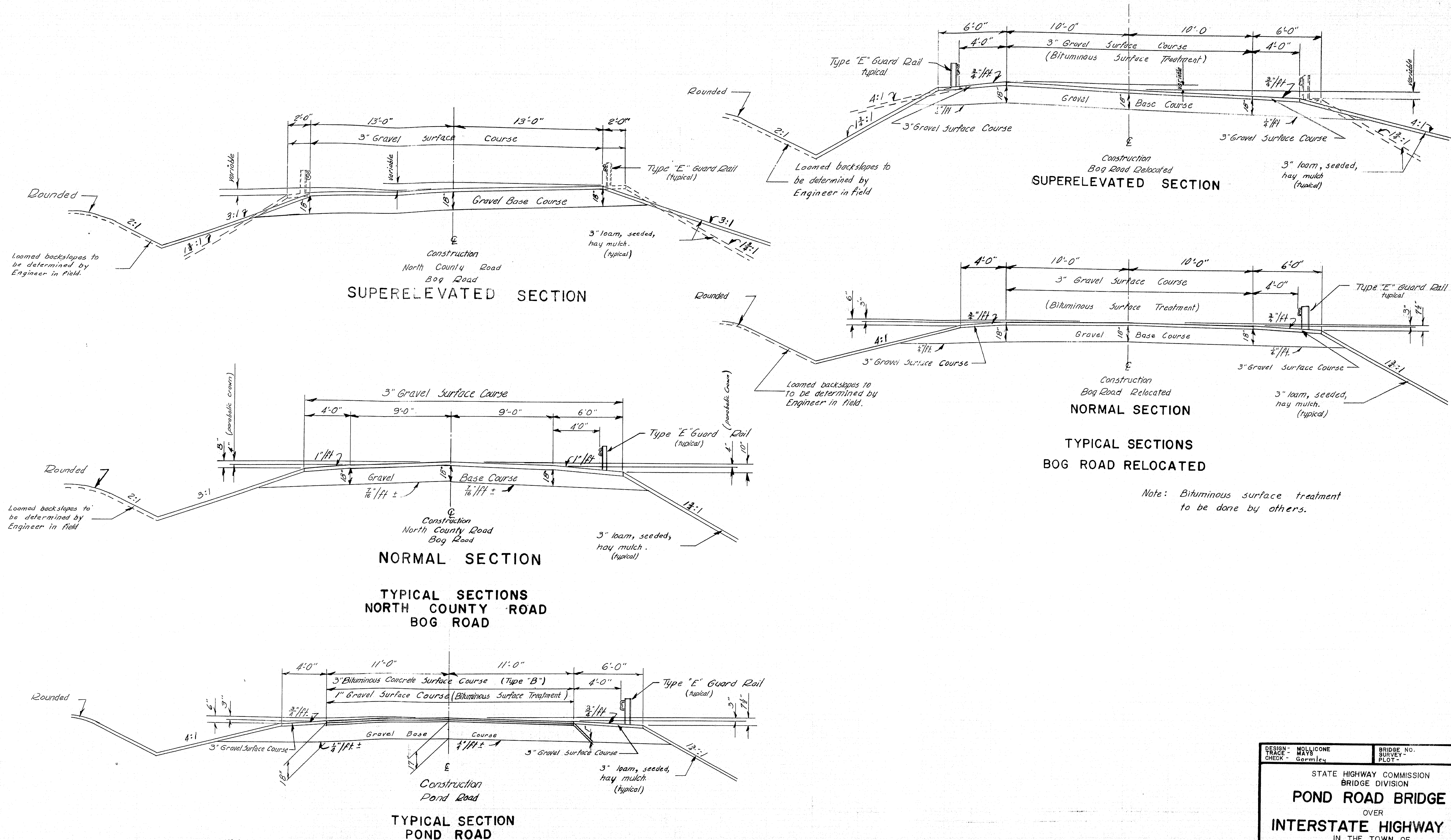
BRIDGE NO. SURVEY -
 PLOT -

STATE HIGHWAY COMMISSION
 BRIDGE DIVISION

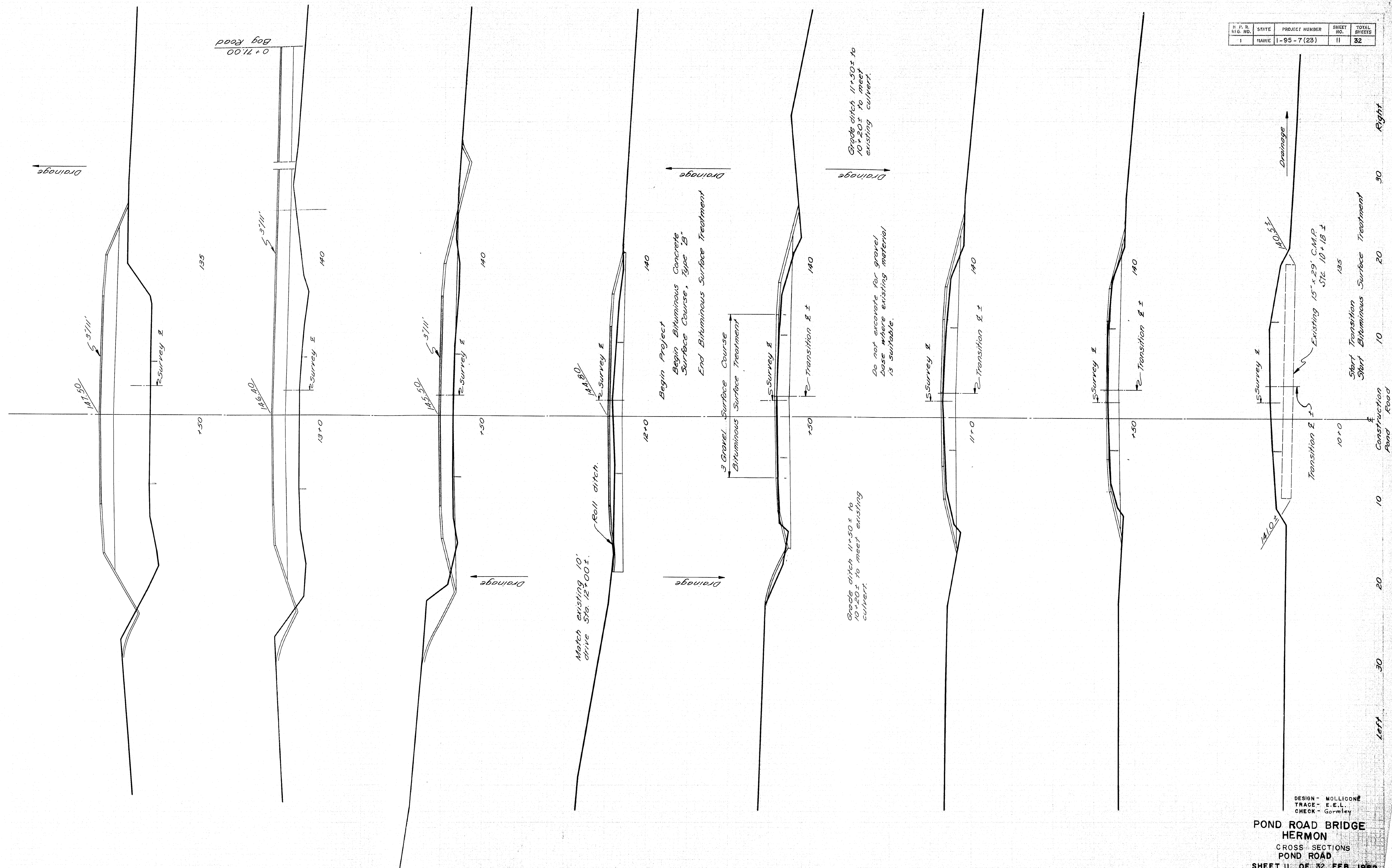
POND ROAD BRIDGE
 OVER
INTERSTATE HIGHWAY 95
 IN THE TOWN OF
HERMON
PENOBSCOT COUNTY
 GENERAL LAYOUT

SHEET 9 OF 32 AUGUSTA, MAINE FEB. 1982



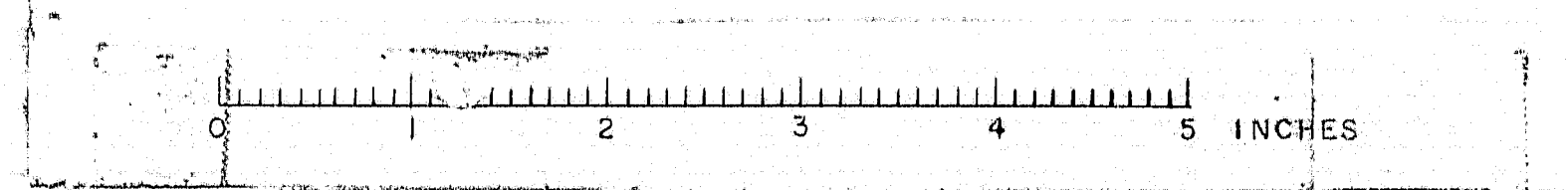


R. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	1-95-7(23)	11	32

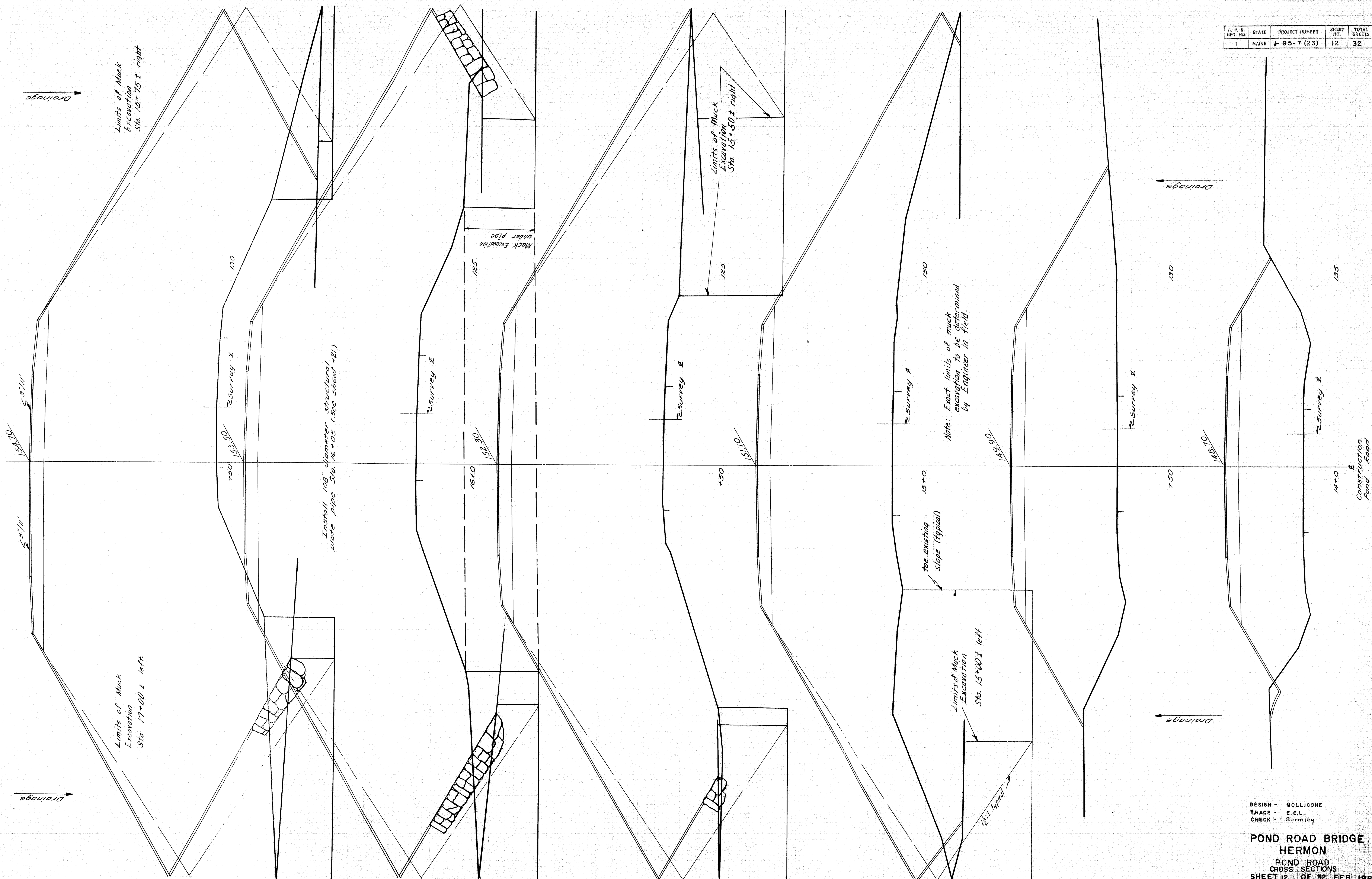


DESIGN - MOLLICONE
TRACE - E.E.L.
CHECK - Gormley

POND ROAD BRIDGE
HERMON
CROSS SECTIONS
POND ROAD
SHEET 11 OF 32 FEB 1982



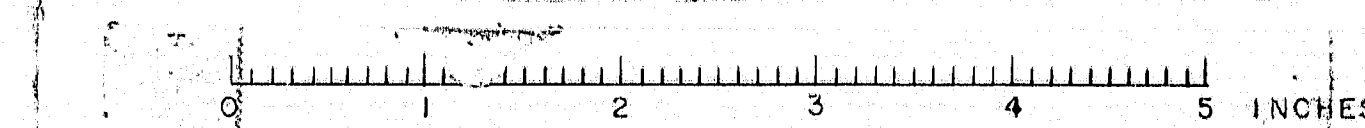
J. P. R. DES. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	1-95-7 (23)	12	32



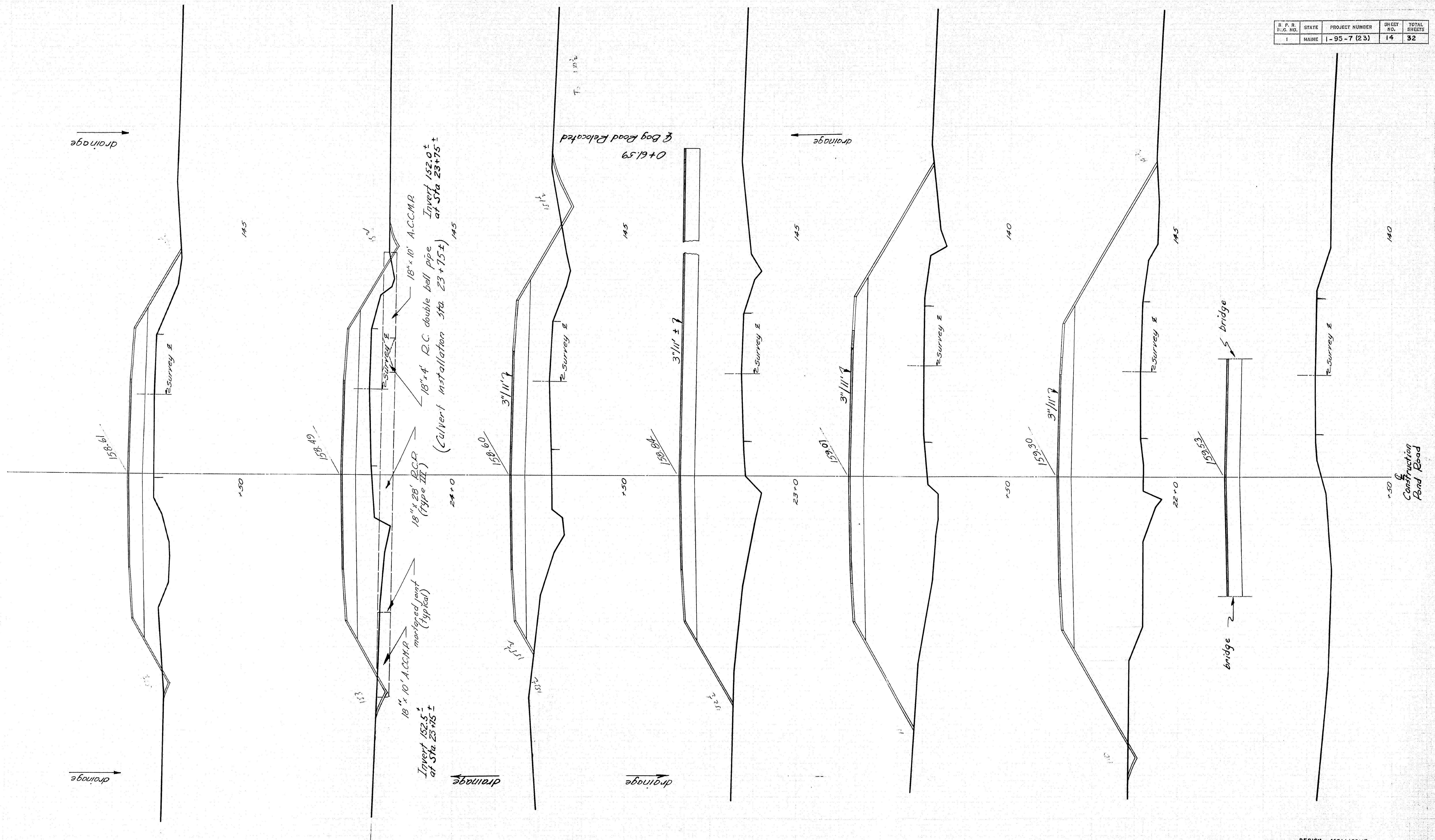
DESIGN - MOLLICONE
TRACE - E.E.L.
CHECK - Gormley

POND ROAD BRIDGE
HERMON
POND ROAD
CROSS SECTIONS
SHEET 12 OF 32 FEB. 1962

86-12

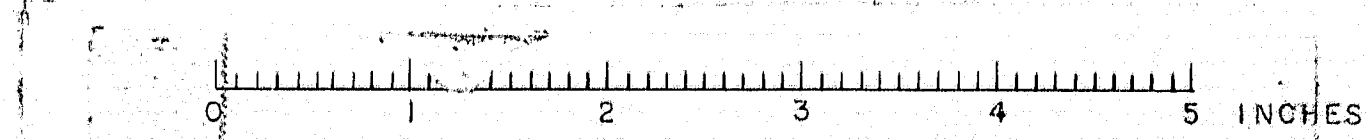


B. P. R. PAGE NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	1-95-7 (23)	14	32

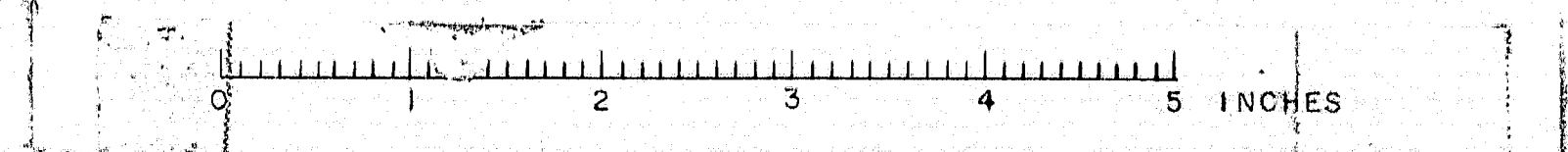
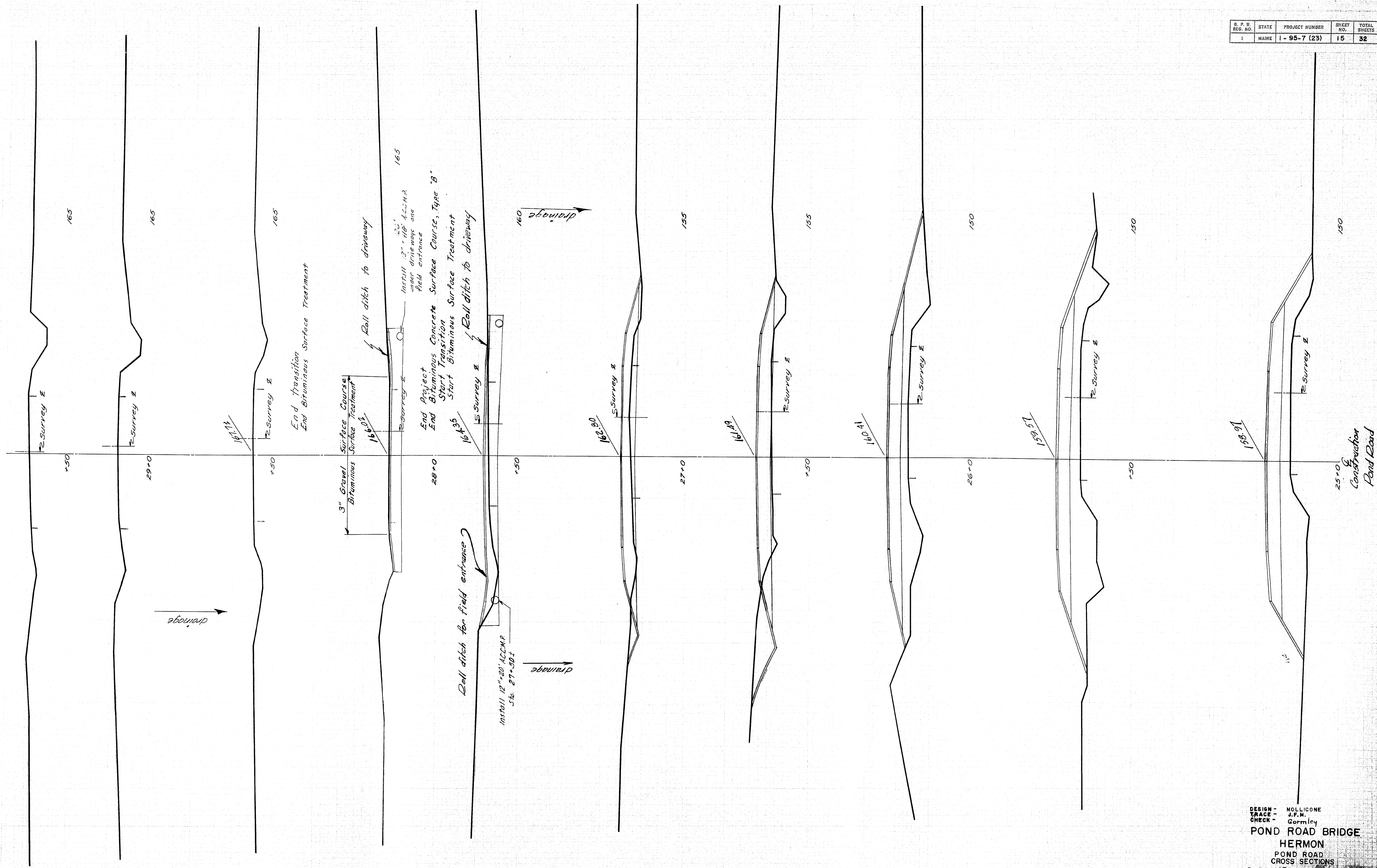


DESIGN - MOLLICONE
TRACE - JFM
CHECK - Gormley

POND ROAD BRIDGE
HERMON
POND ROAD
CROSS SECTIONS
SHEET 14 OF 32 FEB 1962

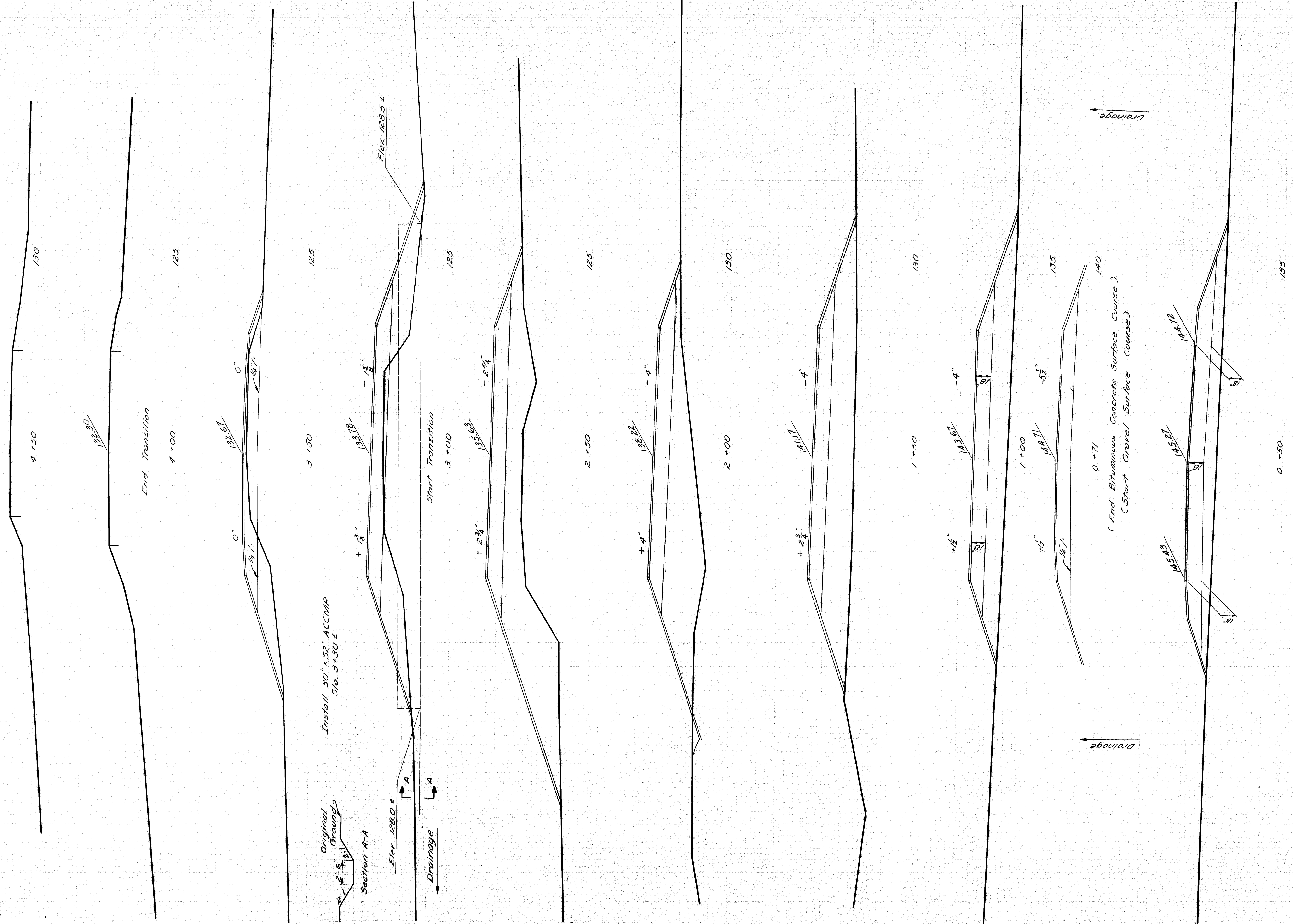


R. F. D. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	1 - 95-7 (23)	15	32

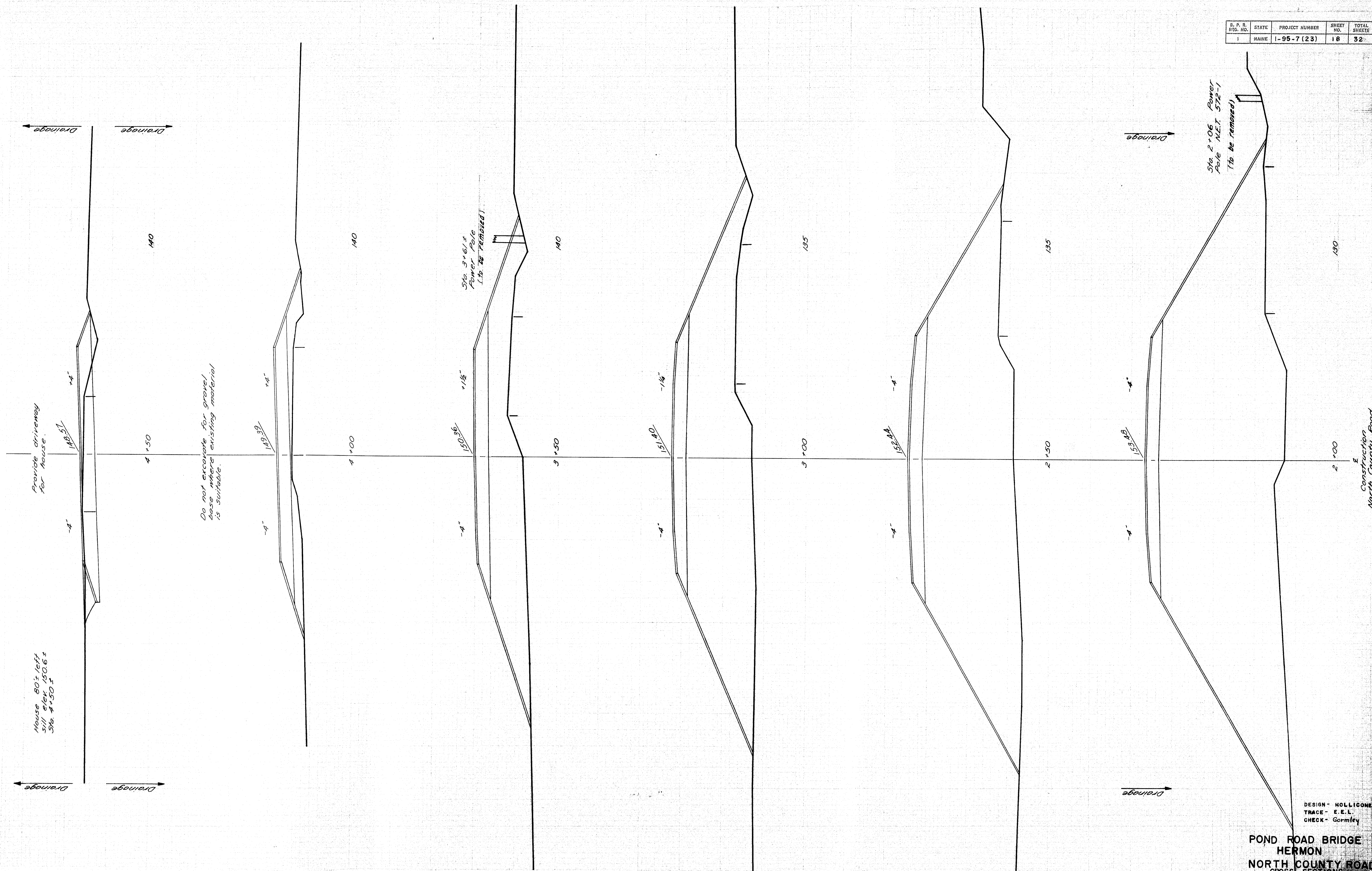


DESIGN - MOLLICONE
 TRACE - J.F.M.
 CHECK - Gormley
POND ROAD BRIDGE
HERMON
 POND ROAD
 CROSS SECTIONS
 SHEET 15 OF 32 FEB 1962

F. P. D. S. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	1-95-7(23)	16	32



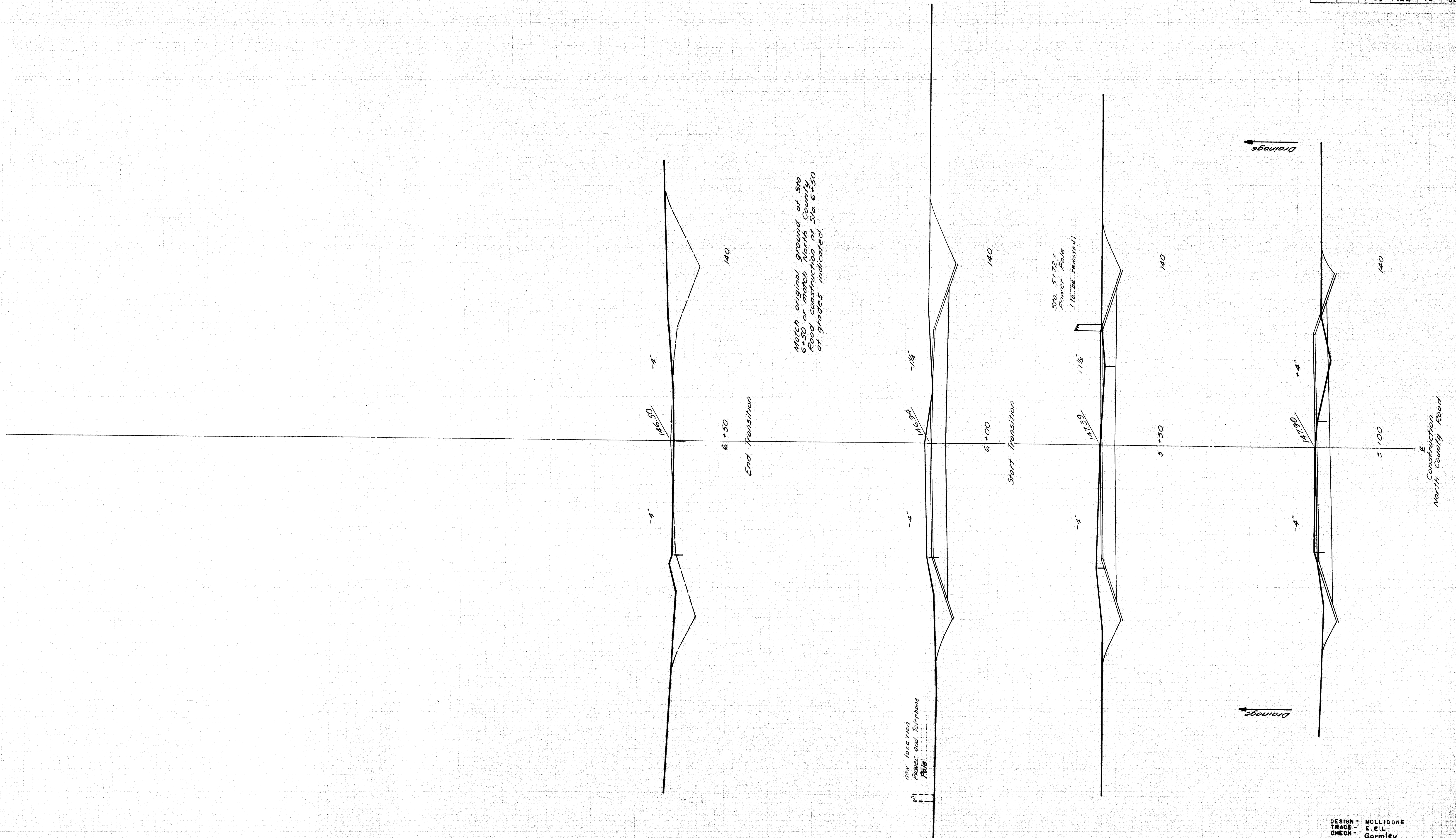
D. P. R. R.T.G. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	1-95-7 (23)	18	32



DESIGN - MOLLICONE
TRACE - E.E.L.
CHECK - Gormley

POND ROAD BRIDGE
HERMON
NORTH COUNTY ROAD
CROSS SECTIONS
SHEET 18 OF 18 FEB 1962

S. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	1-95-7(23)	19	32

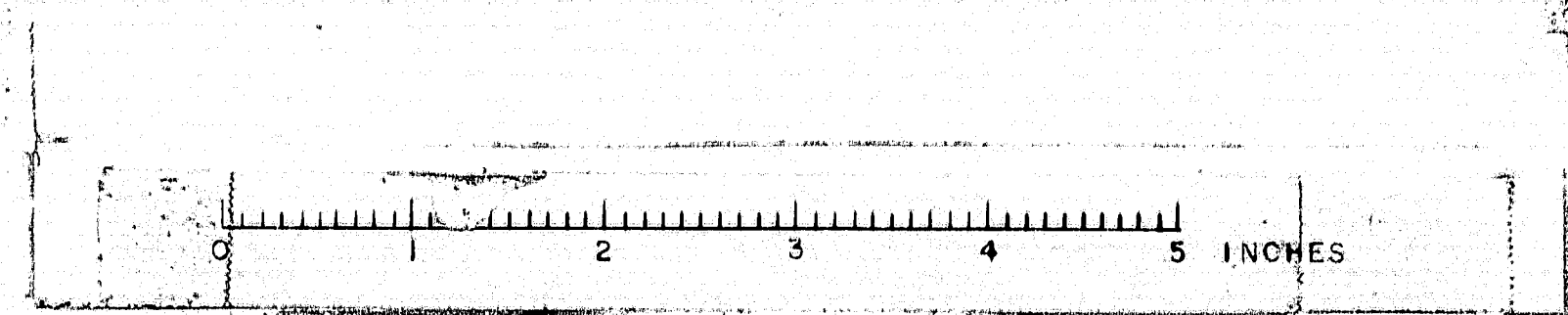


DESIGN - MOLLICONE
TRACE - E.E.L.
CHECK - Gormley

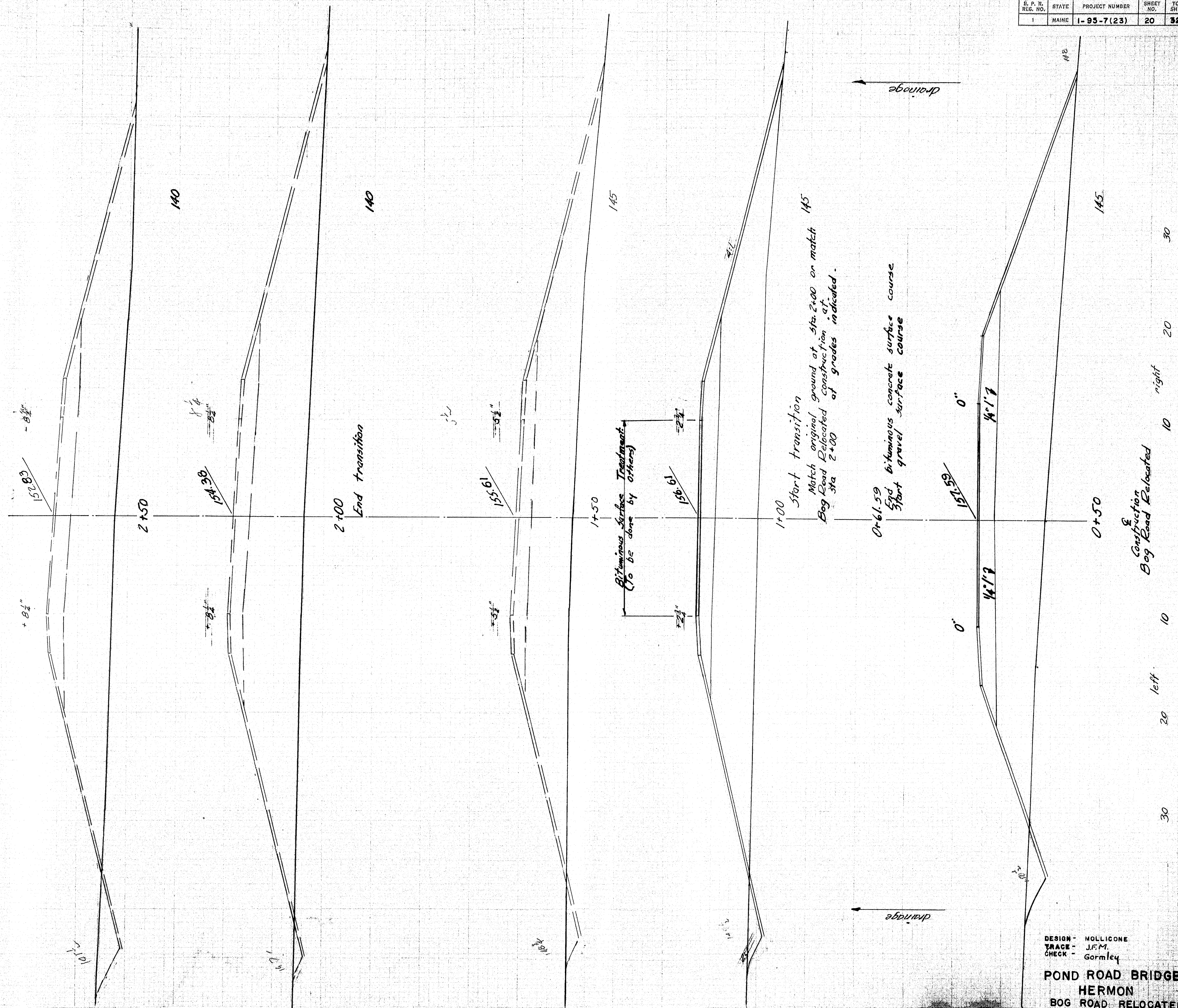
**POND ROAD BRIDGE
HERMON**

**NORTH COUNTY ROAD
CROSS SECTIONS**

SHEET 19 OF 32 FEB. 1962



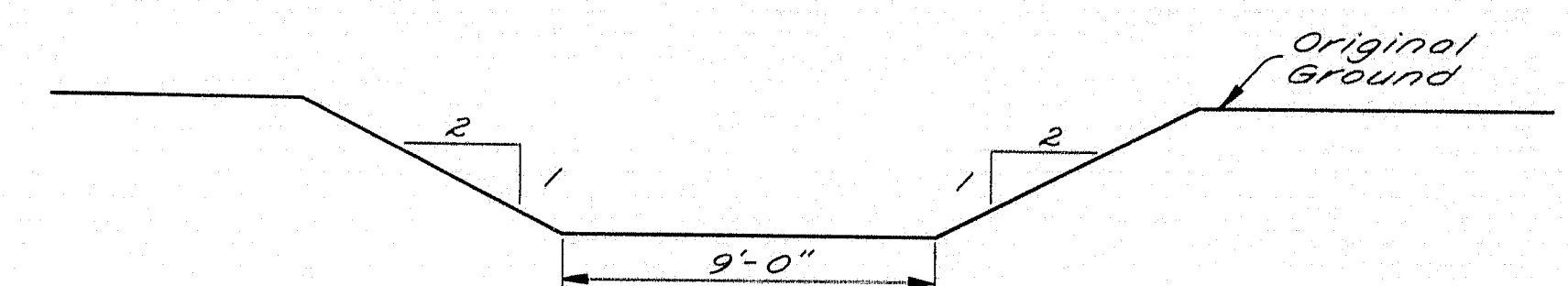
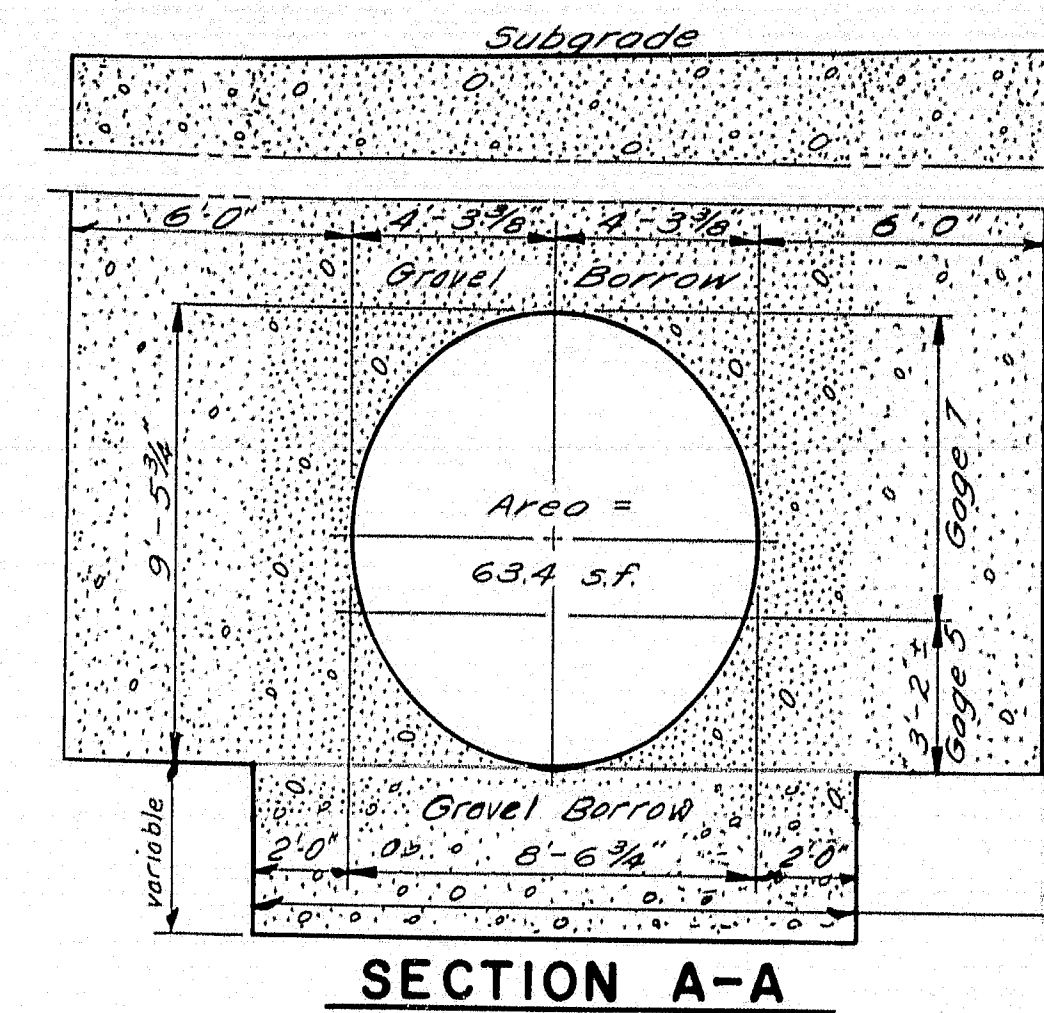
S. P. N.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	1-95-7(23)	20	32



DESIGN - MOLLICONE
TRACE - J.F.M.
CHECK - Gormley

POND ROAD BRIDGE
HERMON
BOG ROAD RELOCATED
CROSS SECTIONS
SHEET 20 OF 32 FEB. 1962

B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	1-95-7(23)	21	32



**TYPICAL SECTION
(CHANNEL DIVERSION)**

NOTES

Engineer in field to adjust bottom of new 108" diameter structural plate pipe to conform to flow line of new pipe arch installation at Station 341.4 ± Interstate.

Exact depth of muck excavation under pipe to be determined by Engineer in field. Muck excavation under pipe to be paid as item 203-12 "Muck Excavation".

Required: One structural plate pipe (5% elliptical) 108" diameter x 130'-0" (pay length) Gages 5 and 7.

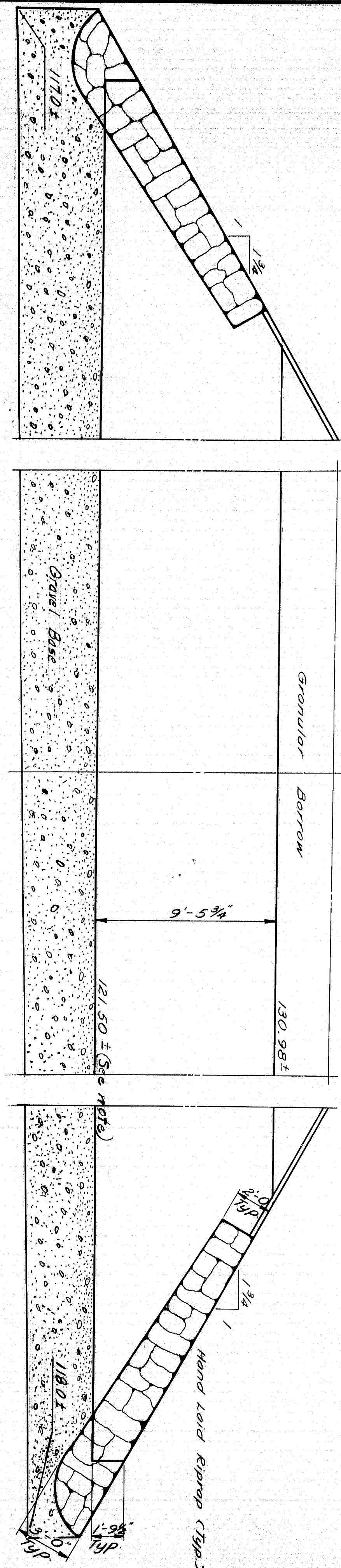
Loading: H-20-44

Specifications:
Design - A.A.S.H.O. Standard Specifications for Highway Bridges 1961.
Construction - State of Maine, State Highway Commission, Standard Specifications Highways and Bridges, Revision of January 1956 and Supplemental specifications.

Gravel Borrow placed around pipe shall be compacted in accordance with the Supplemental Specification for Section 207.

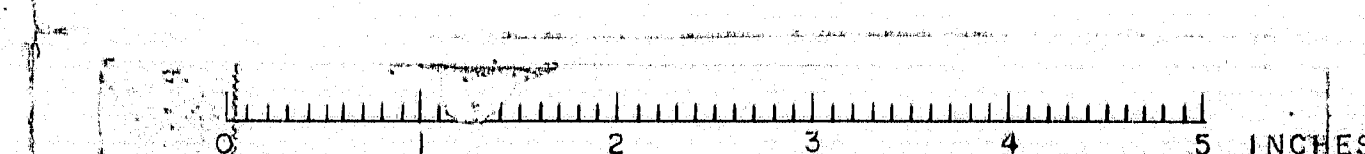
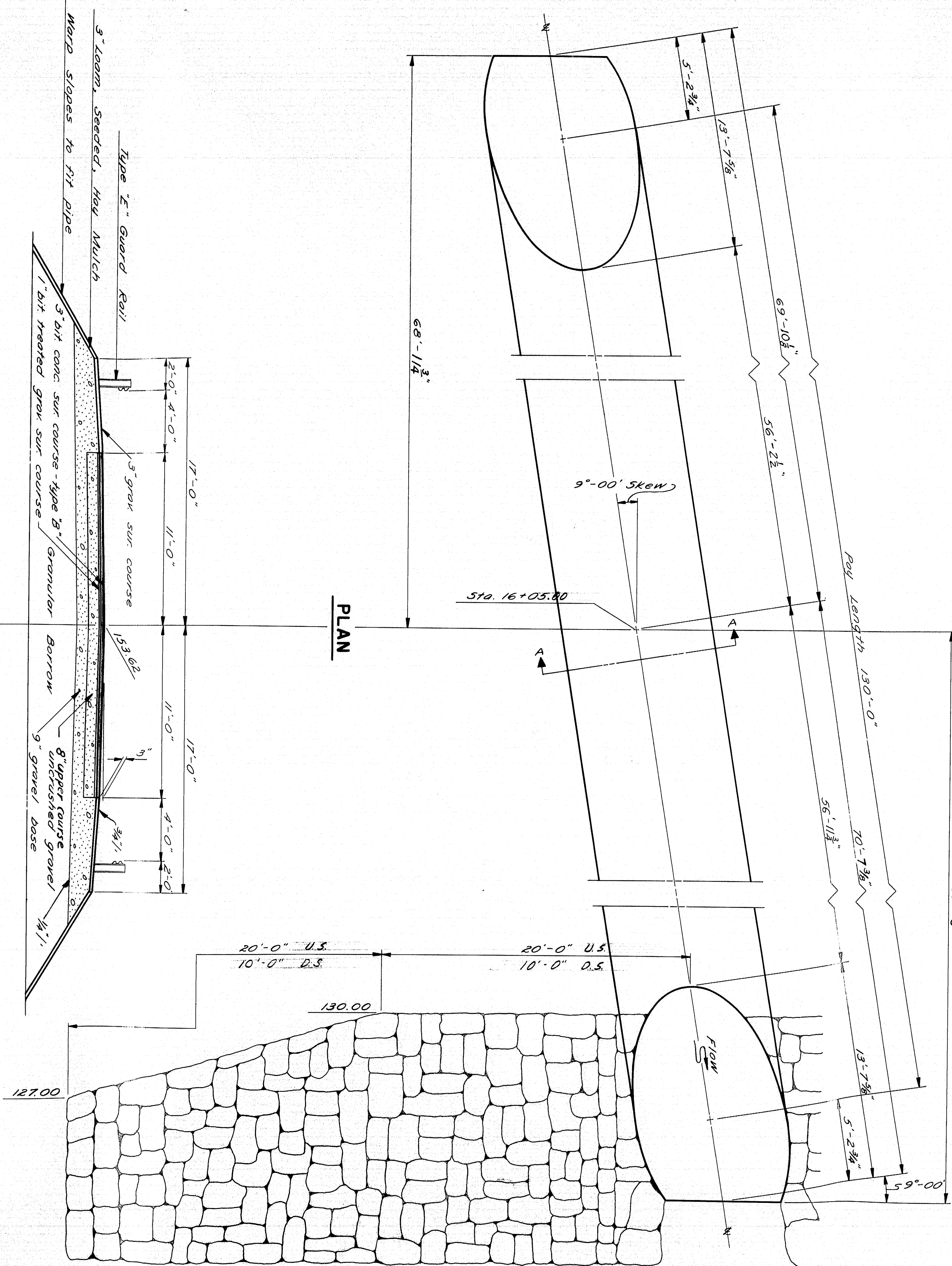
DESIGN - P.M.	DETAIL - E.E.L.	BRIDGE NO.
TRACE - E.E.L.	SURVEY -	
CHECK - Gormley	PILOT -	
STATE HIGHWAY COMMISSION BRIDGE DIVISION		
POND ROAD BRIDGE		
OVER		
INTERSTATE HIGHWAY 95		
IN THE TOWN OF		
HERMON		
PENOBSCOT COUNTY		
CULVERT AT STA. 16+05		
SHEET 21 OF 32 AUGUSTA, MAINE FEB. 1962		

TRANSVERSE SECTION



Construction E

PLAN



BRIDGE QUANTITIES - ENGINEERS ESTIMATE

EARTH EXCAVATION	90	c.y.
STRUCTURAL EARTH EXCAVATION - PIERS	325	c.y.
COMMON BORROW	450	c.y.
GRANULAR BORROW	430	c.y.
GRAVEL BASE COURSE - IN PLACE MEASUREMENT	90	c.y.
BITUMINOUS CONCRETE SURFACE COURSE, TYPE "B"	105	Tons
PORTLAND CEMENT CONCRETE, ABUTMENTS & RETAINING WALLS	150	c.y.
PORTLAND CEMENT CONCRETE, PIERS	240	c.y.
PORTLAND CEMENT CONCRETE, ROADWAY & SIDEWALK SLABS ON STEEL BRIDGES	350	c.y.
PORTLAND CEMENT	1110	bbbs.
STRUCTURAL STEEL, FABRICATED & DELIVERED	249,500	lbs.
STRUCTURAL STEEL, ERECTION	249,500	lbs.
STRUCTURAL STEEL, FIELD PAINTING	249,500	lbs.
BRONZE OR COPPER-ALLOY BEARING & EXPANSION PLATES, DELIVERED	205	lbs.
BRONZE OR COPPER-ALLOY BEARING & EXPANSION PLATES, PLACING	205	lbs.
REINFORCING STEEL, DELIVERED	109,000	lbs.
REINFORCING STEEL, PLACING	109,000	lbs.
SHEAR CONNECTORS	Lump	Sum
STEEL H-BEAM PILES, 42 lbs. / FOOT	990	l.f.
ALUMINUM RAIL	650	l.f.
MEMBRANE WATERPROOFING	975	s.y.
SLOPE PAVING	490	s.y.
GRANITE BRIDGE CURB	665	l.f.

NOTE: Soils information indicates that some water should be anticipated in foundation excavation. No direct payment will be made for unwatering foundations. This work shall be considered as incidental to the various contract items.

NOTE: Reinforcing steel in pier caps to clear anchor bolts.
Dress shaded bearing areas 1" larger all around than masonry plates to exact elevations shown.

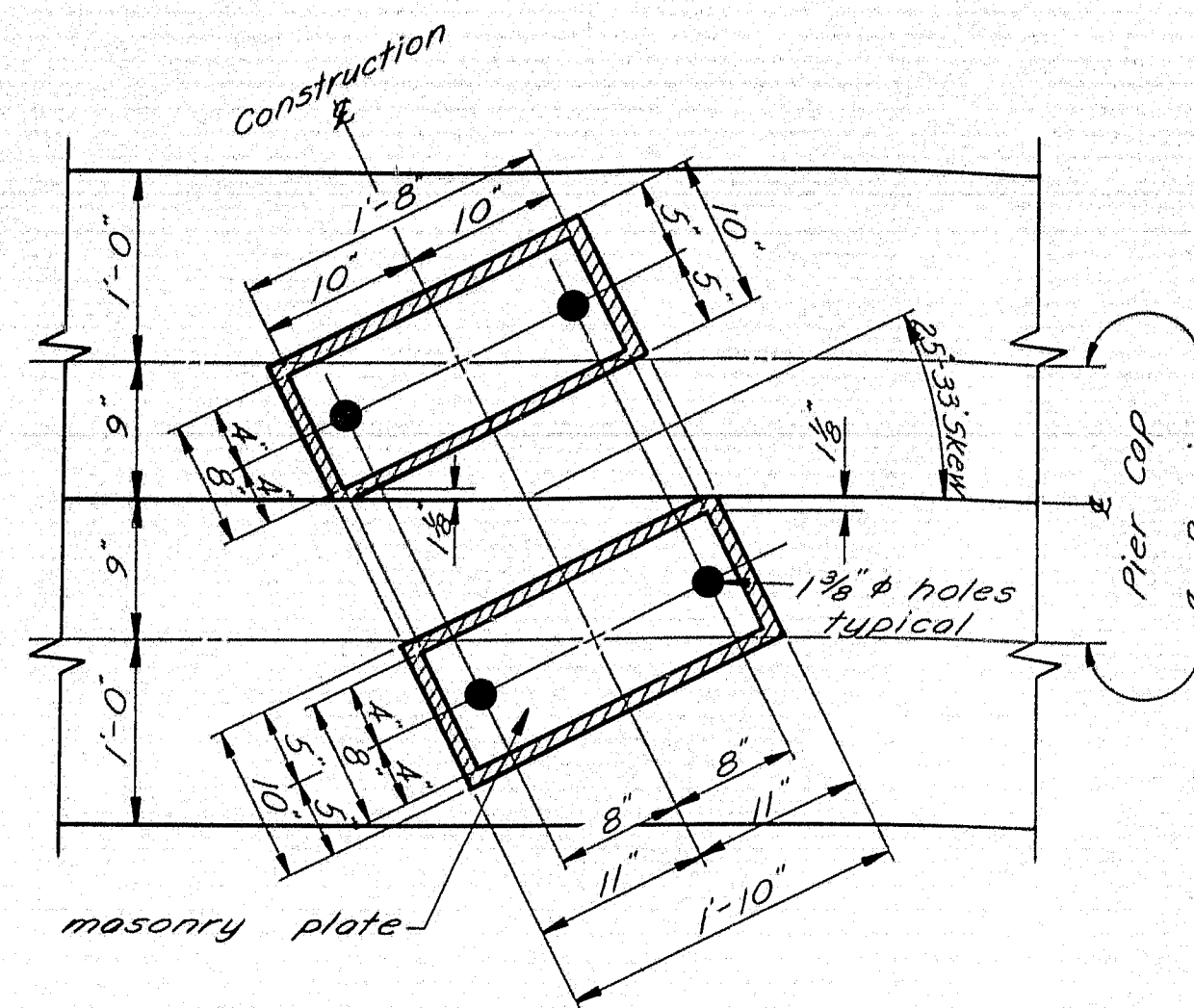
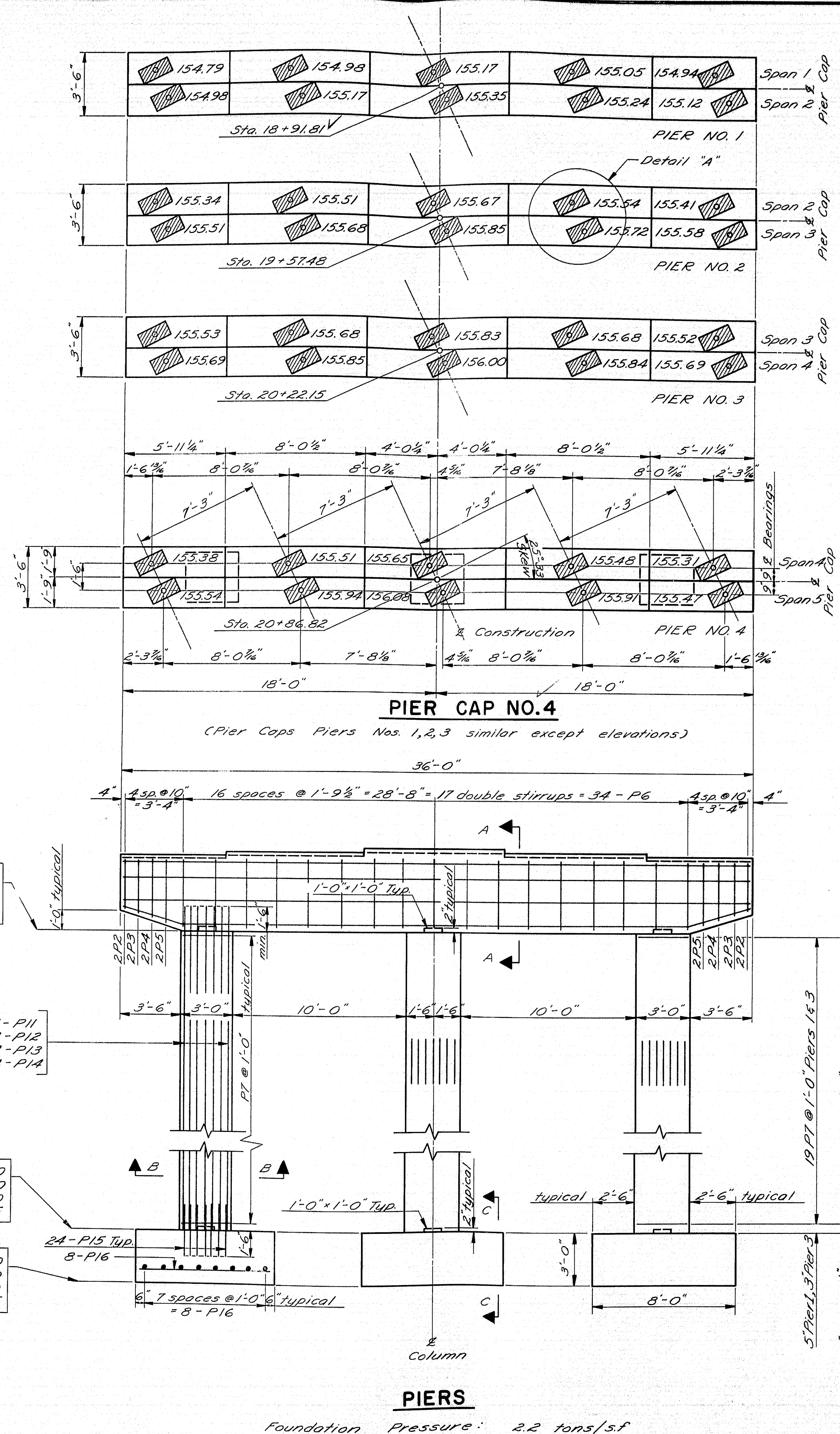
DESIGN - M. H. H. & S. L. H.
TRACE - E. E. L.
CHECK - A. B. P.

BRIDGE NO. SURVEY PLOT

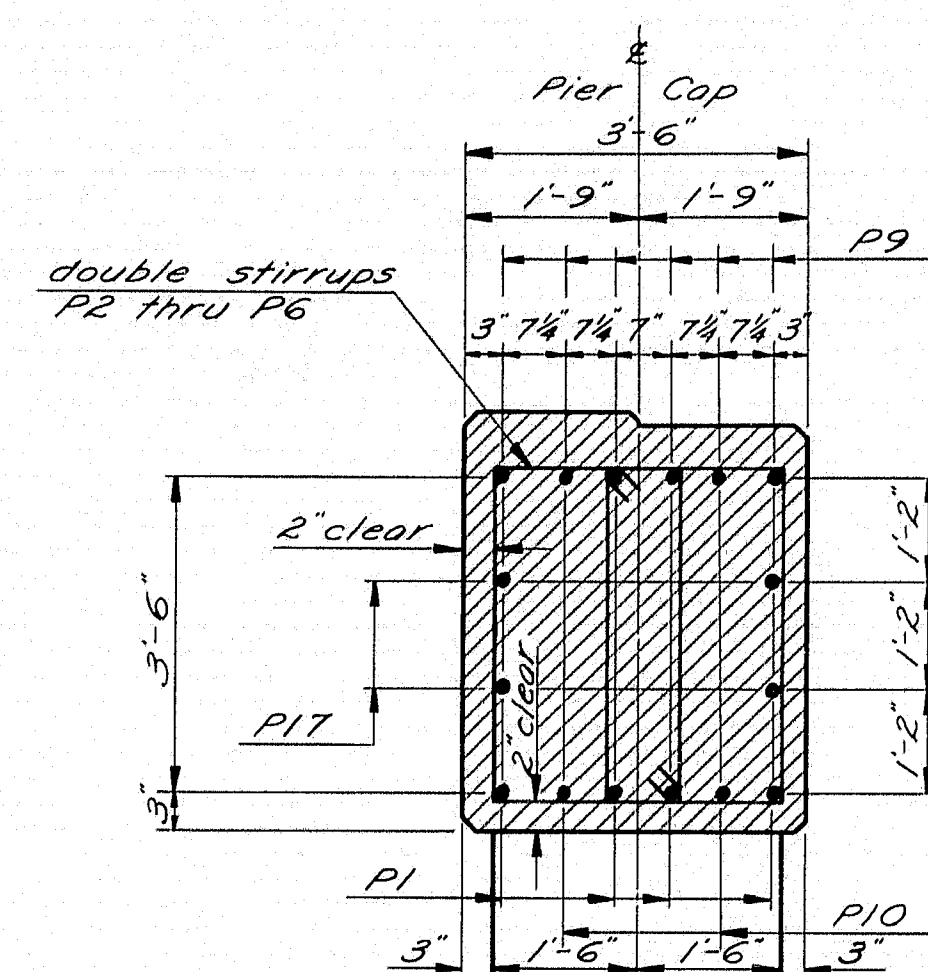
STATE HIGHWAY COMMISSION
BRIDGE DIVISION

POND ROAD BRIDGE
OVER
INTERSTATE HIGHWAY 95
IN THE TOWN OF
HERMON
PENOBSCOT COUNTY
PIERS

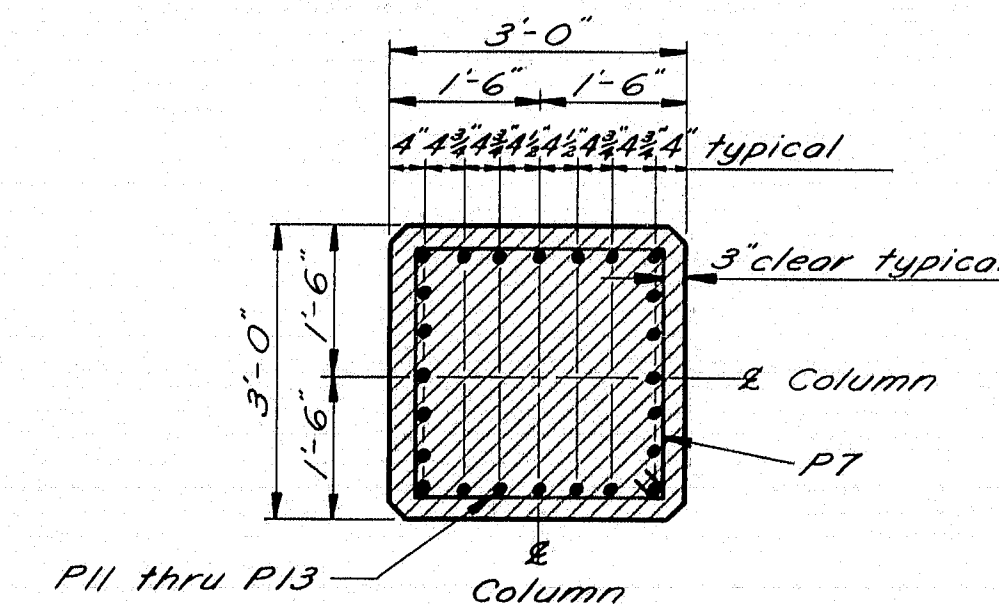
SHEET 23 OF 32 AUGUSTA, MAINE FEB. 1962



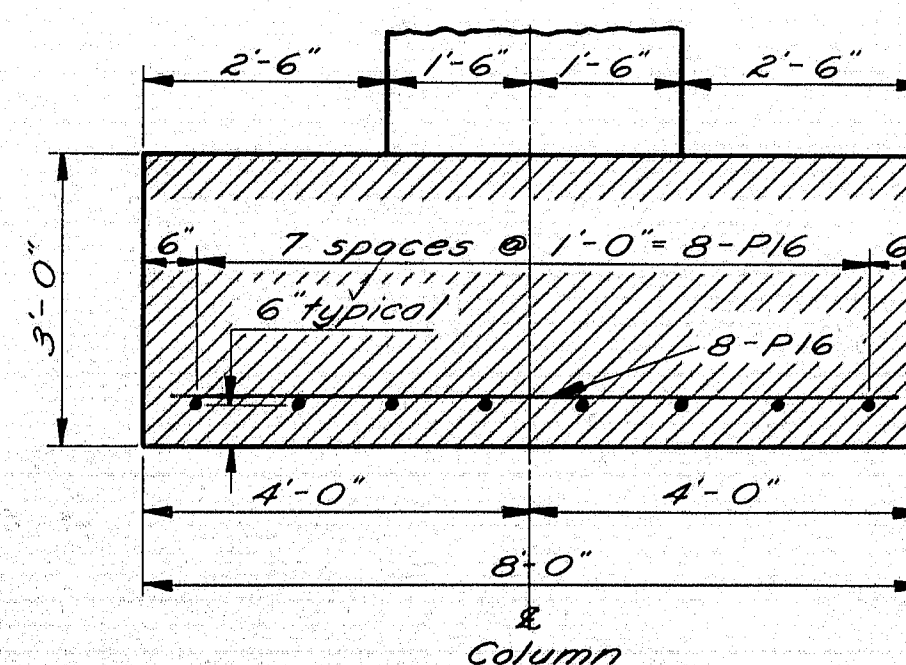
DETAIL "A"



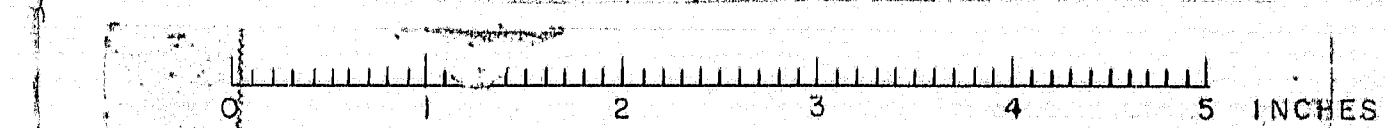
SECTION A-A

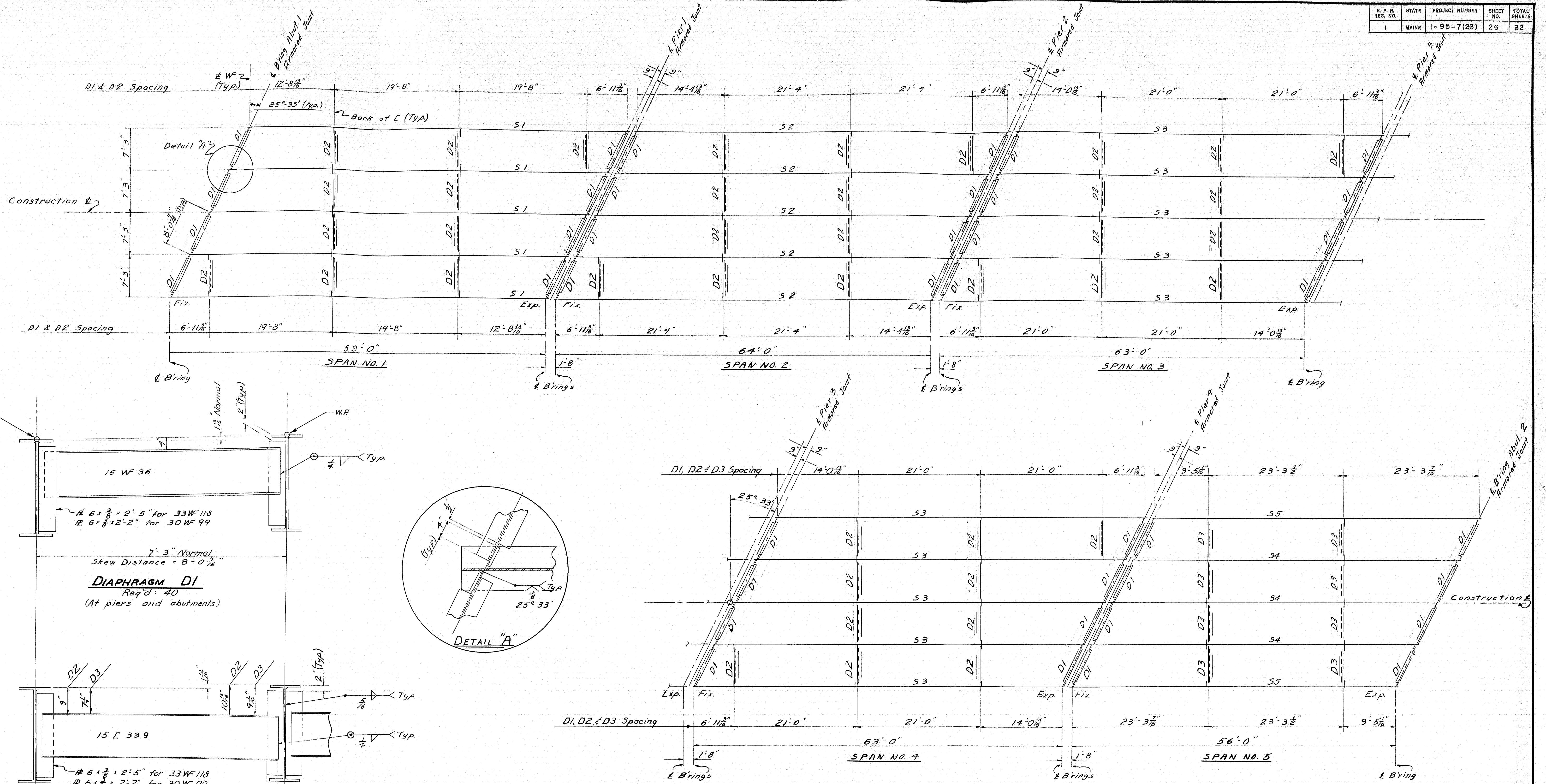


SECTION B-B



SECTION C-C





DIAPHRAGMS D2 & D3

Req'd: 40 D2
8 D3

ERECTION DIAGRAM

SPECIFICATIONS

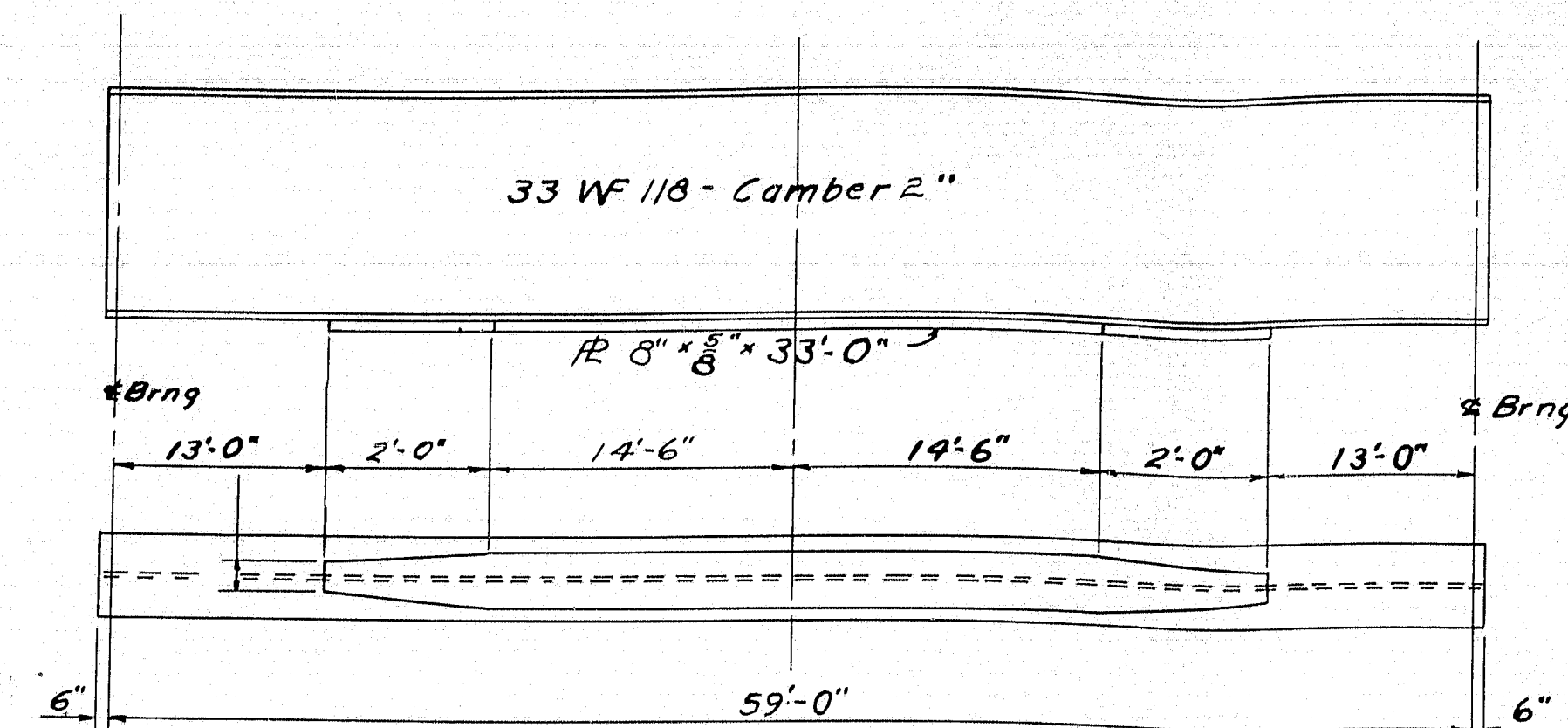
- A. Design and Detail - A.A.S.H.O. Standard Specifications 1961
- B. Fabrication and Erection - M.S.H.C. Standard Specifications for Highways and Bridges, Revision of January 1956 and 1960 Supplements.
- Loading: H20-44
- Material:
 - Stringers and cover plates shall be Structural Weldable Steel conforming to the latest revision of the Specification ASTM Designation A36.
 - All other structural steel shall conform to A.S.T.M. Designation A36 or A7.

Design Stress: A36 20,000 p.s.i.
A7 18,000 p.s.i.

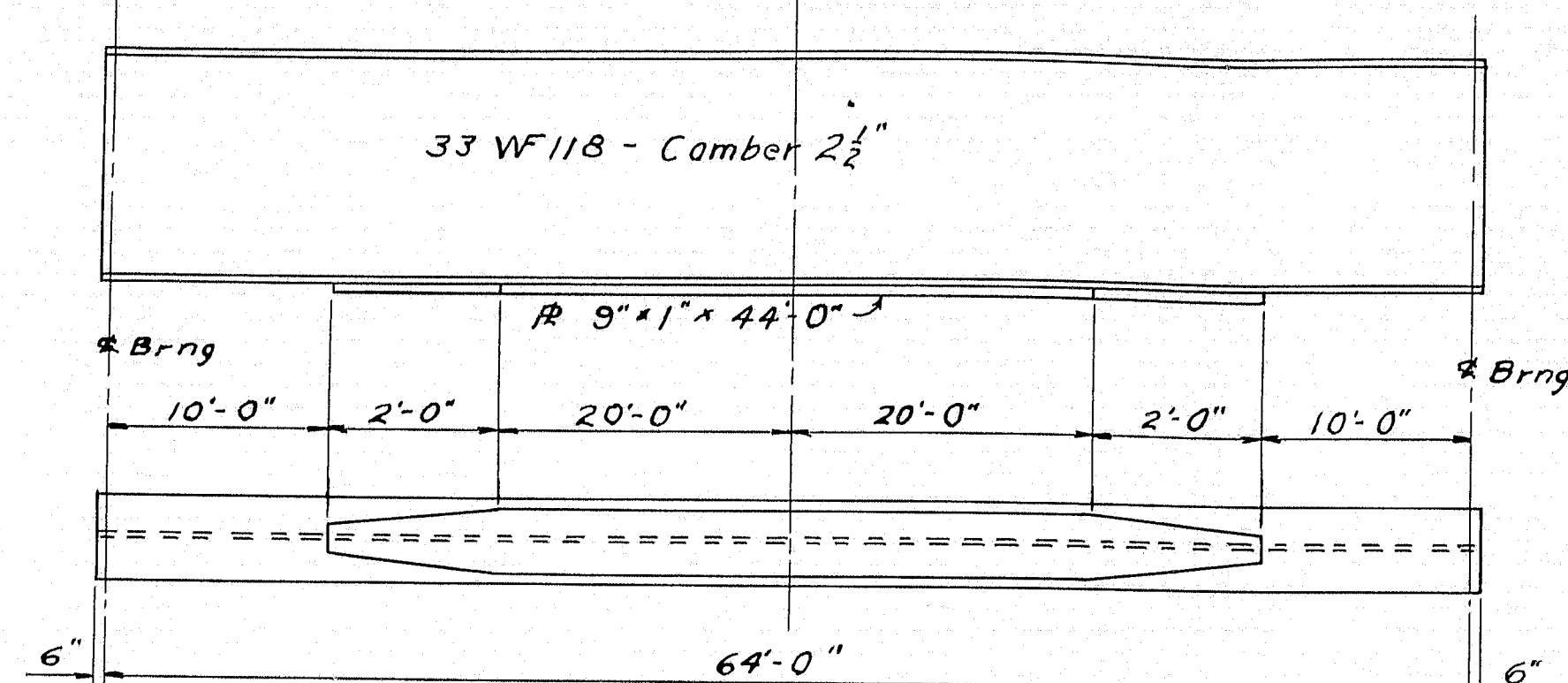
DESIGN: <i>Mullins</i>	DETAIL-WHY:	BRIDGE NO.
TRACE: <i>L.L.R.</i>	SURVEY-PLOT:	
CHECK: <i>R.B.P.</i>		

STATE HIGHWAY COMMISSION
BRIDGE DIVISION
POND ROAD BRIDGE
OVER
INTERSTATE HIGHWAY 95
IN THE TOWN OF
HERMON
PENOBSCOT COUNTY
— STRUCTURAL STEEL —

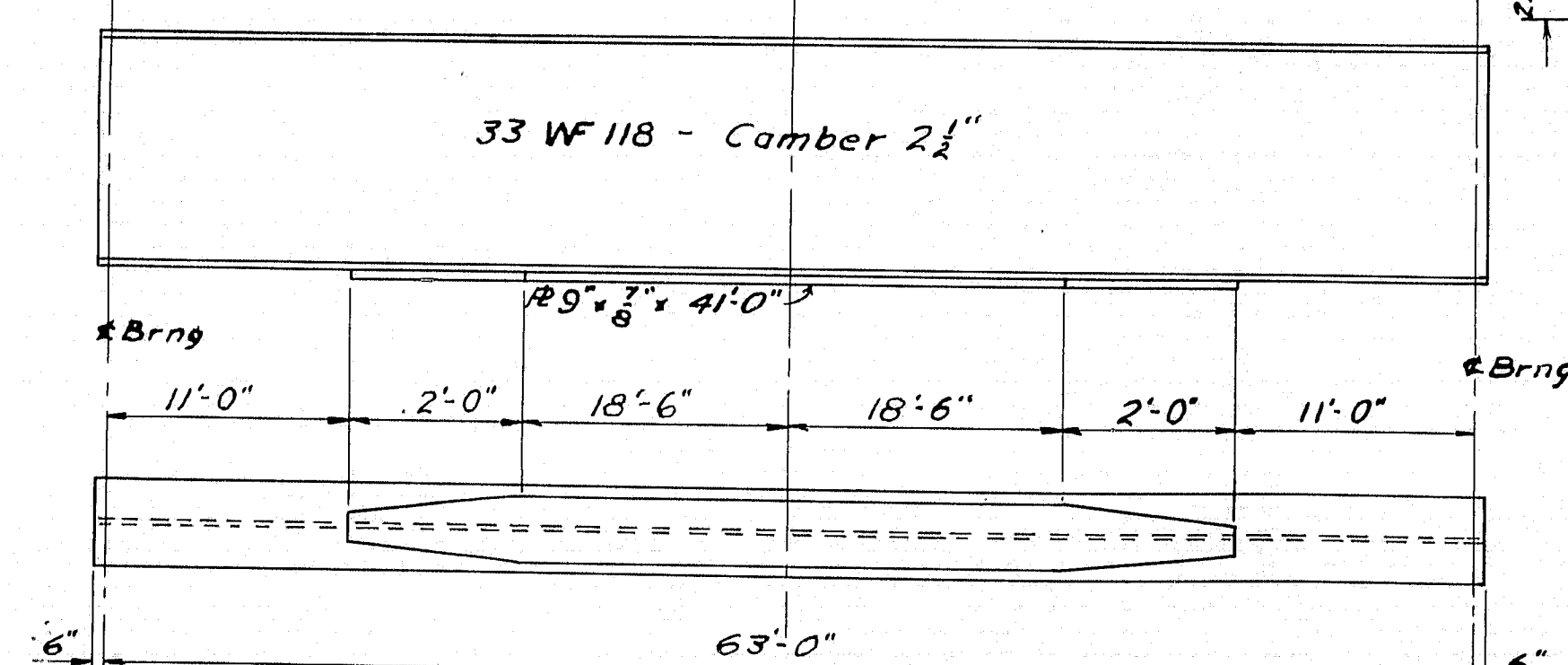
B, P, R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	1-95-7(23)	27	32



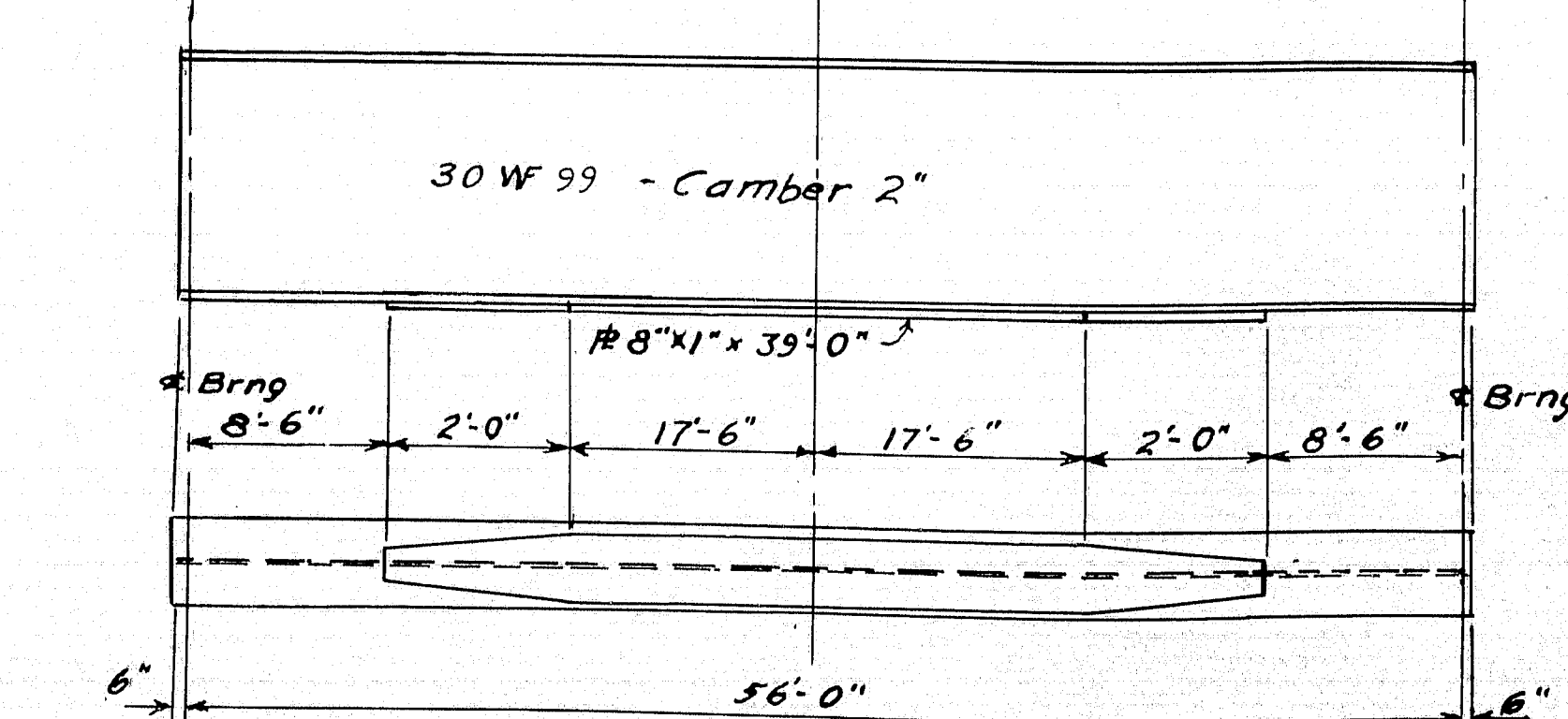
STRINGER 51
5 REQ'D



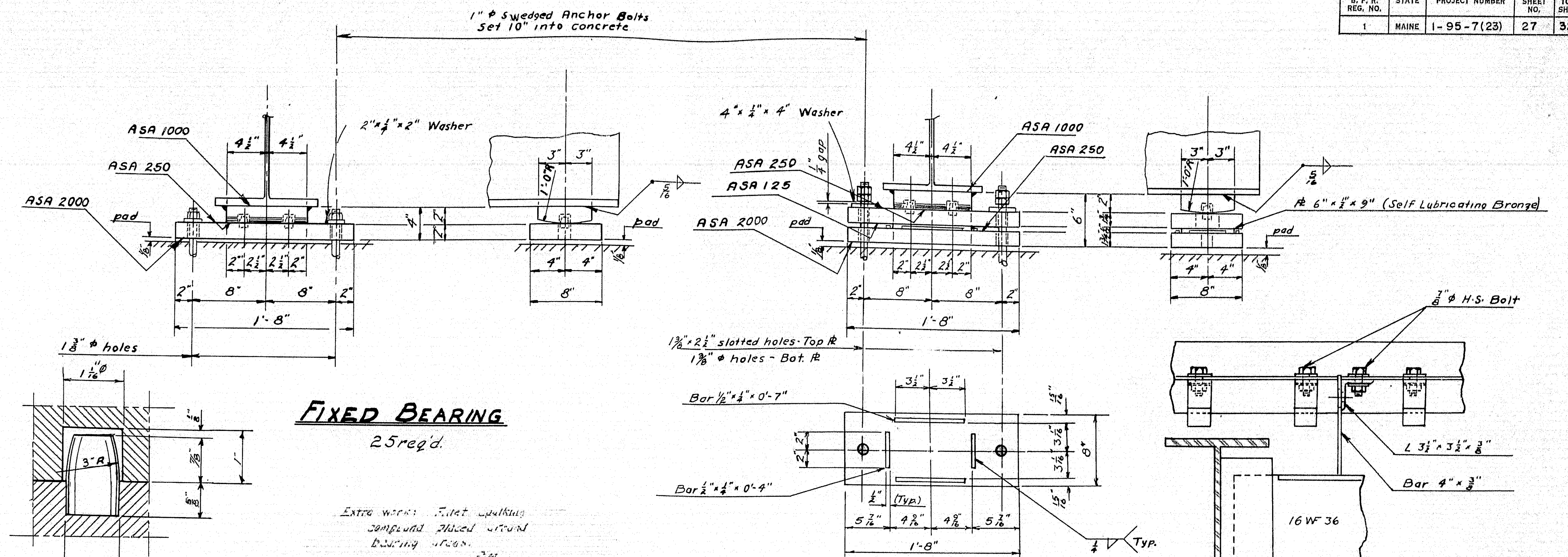
STRINGER 52
5 REQ'D



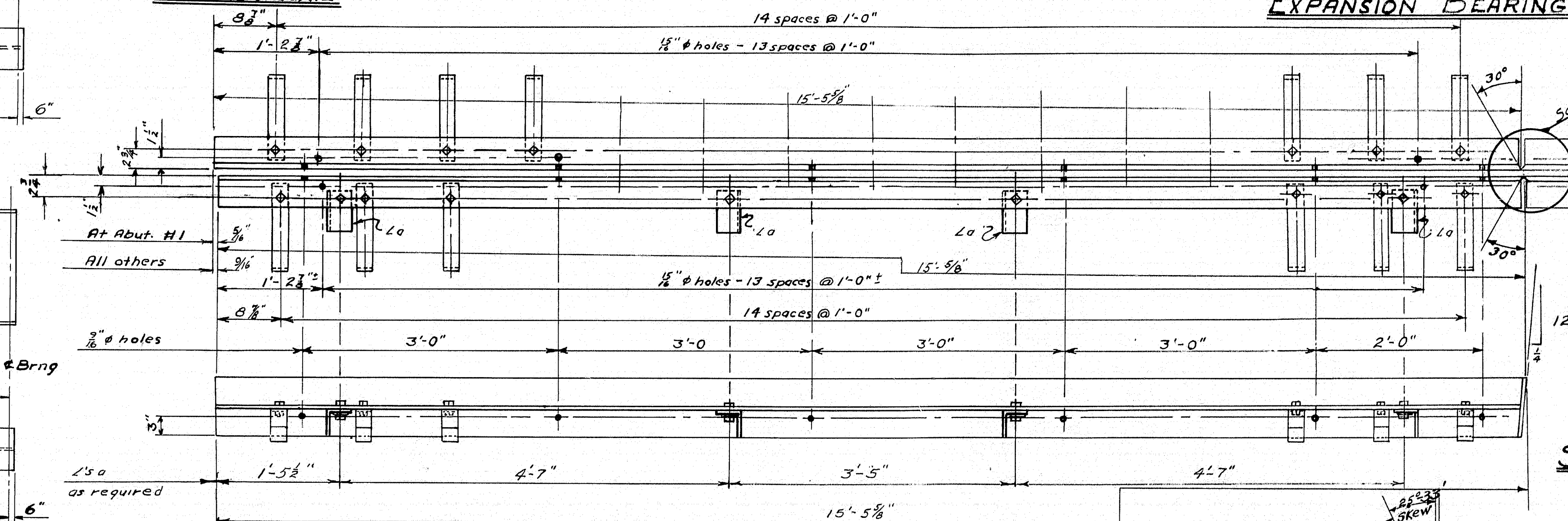
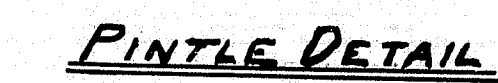
STRINGER 53
10 REQ'D



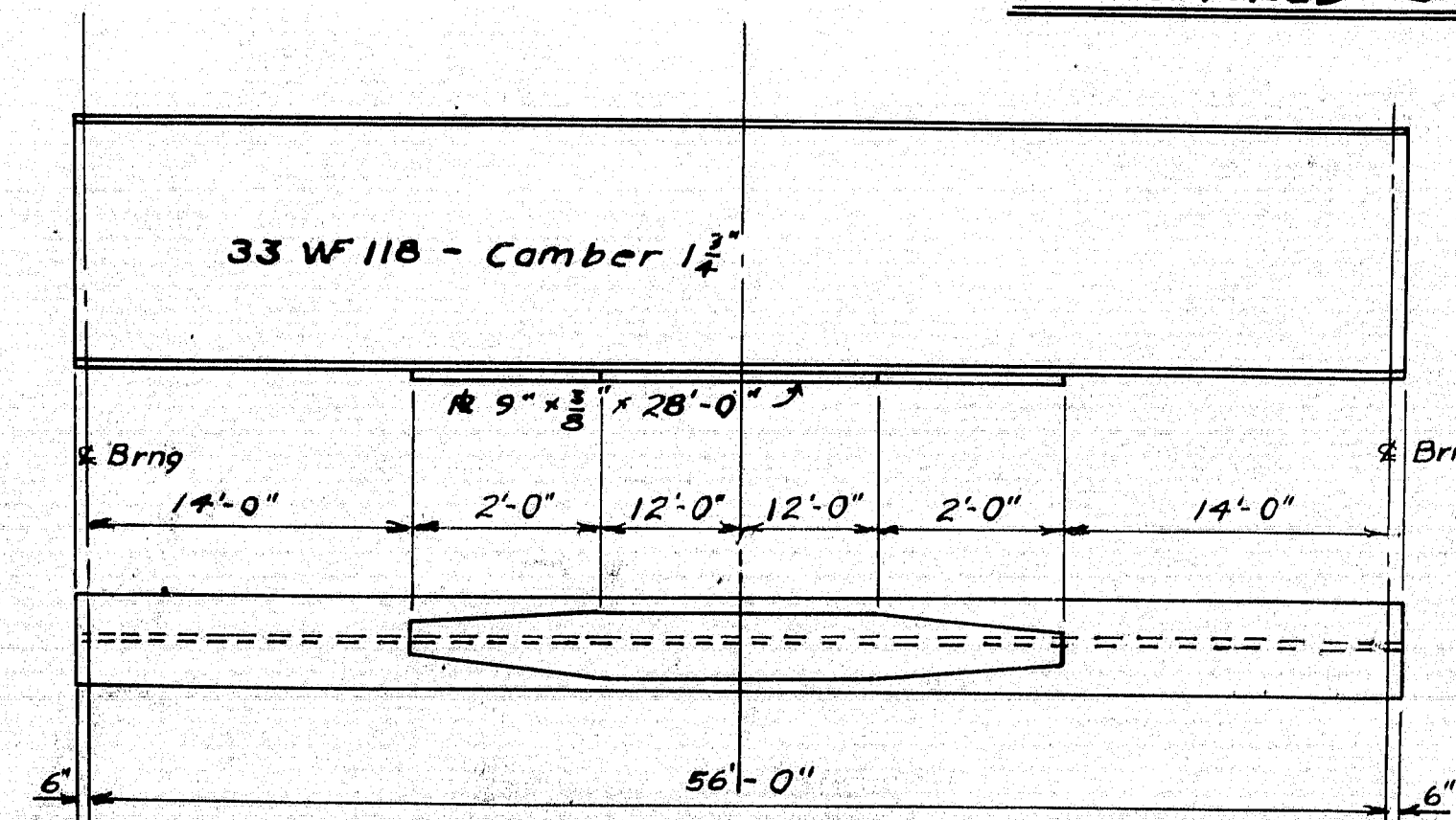
STRINGER 54
3 REQ'D



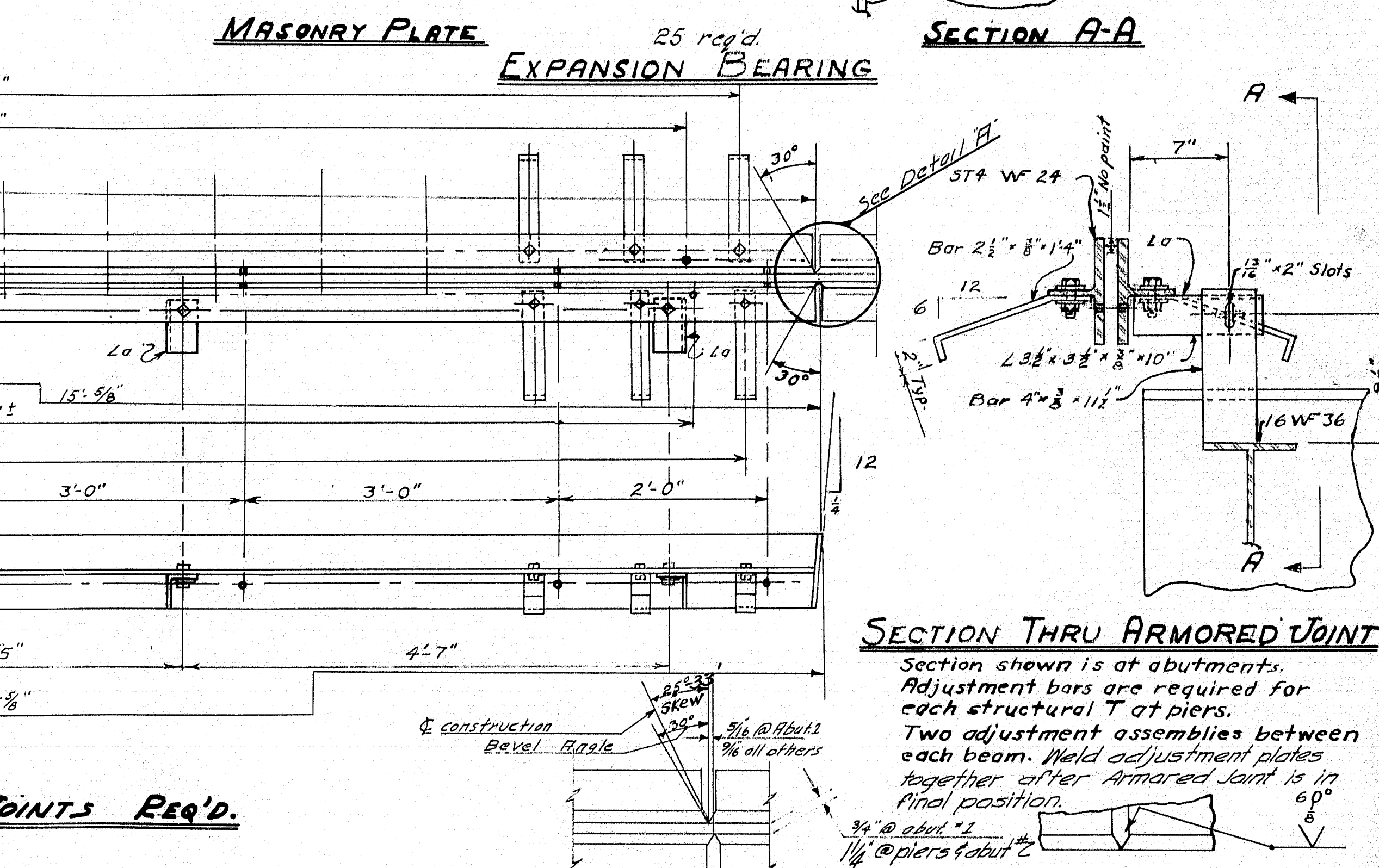
FIXED BEARING
25 req'd.



6 ARMORED JOINTS REQ'D.



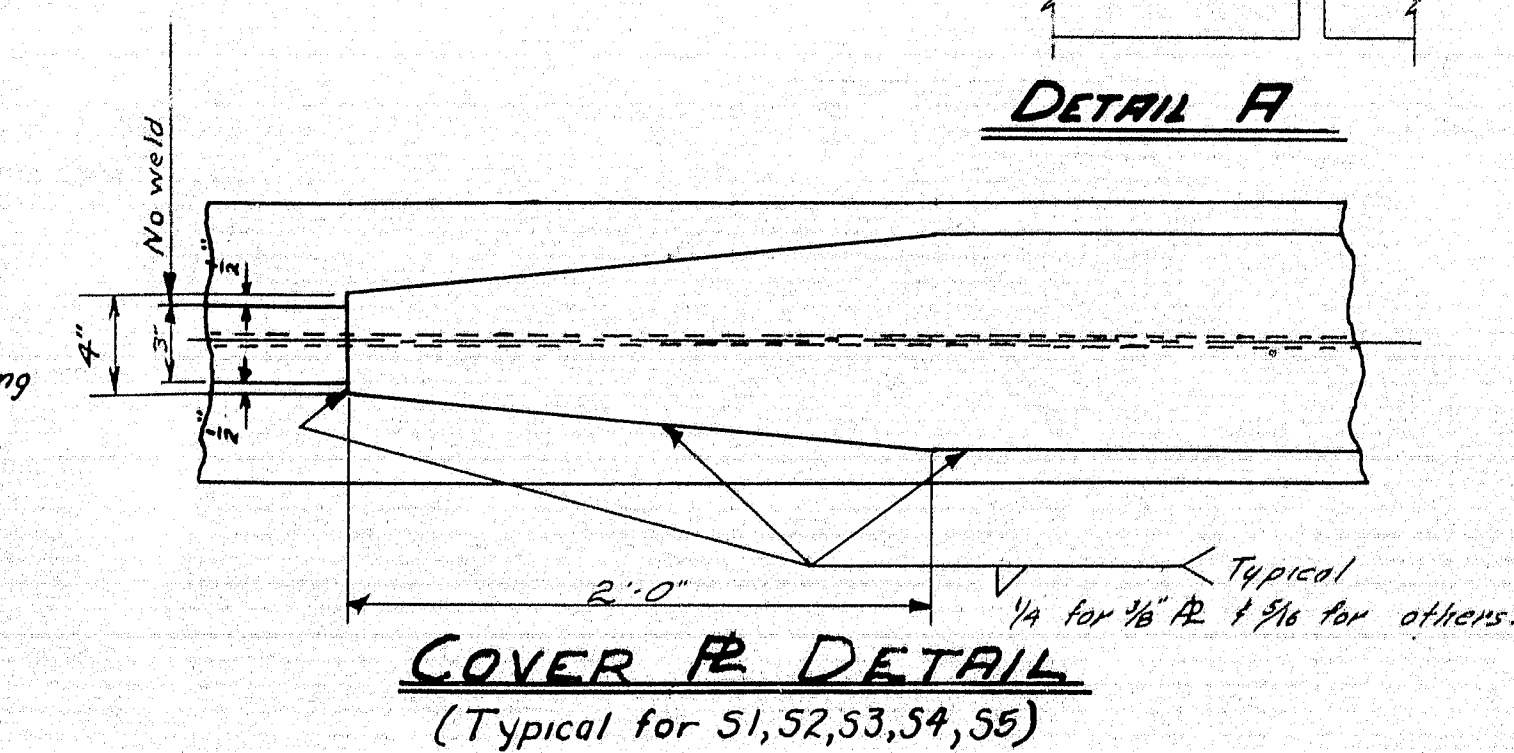
STRINGER S5
2 REQ'D



SECTION THRU ARMORED JOINT

Section shown is at abutments.
Adjustment bars are required for
each structural T at piers.
Two adjustment assemblies between
each beam. Weld adjustment plates
together after Armored Joint is in
final position. 60°

WELD DETAIL
for Str. T Flanges @ Const. #



COVER & DETAIL
(Typical for 51, 52, 53, 54, 55)

DESIGN - *Mellencamp* DETAIL *W. H. Y.* BRIDGE NO. _____
TRACE - *P. J. M.* SURVEY NO. _____
CHECK - *A. B. R.* PLOT - _____

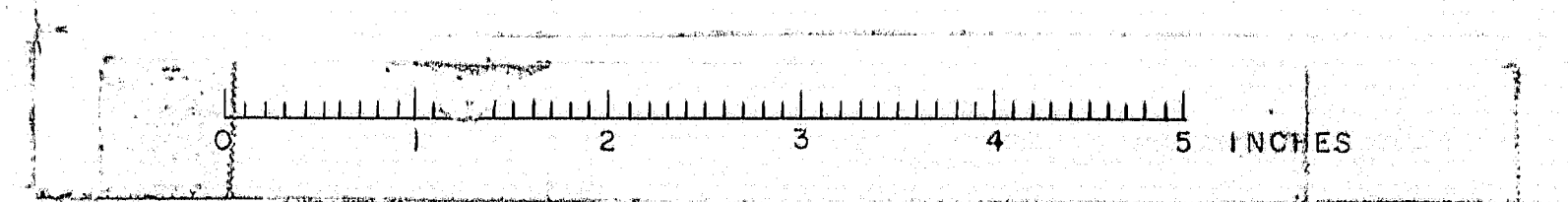
STATE HIGHWAY COMMISSION
BRIDGE DIVISION

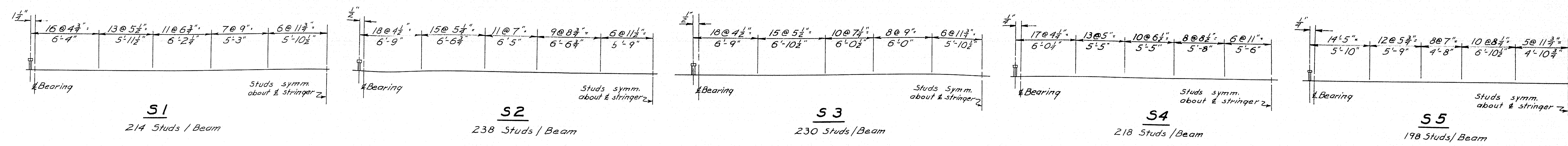
POND ROAD BRIDGE
OVER

INTERSTATE HIGHWAY 95
IN THE TOWN OF
HERMON
PENOBSCOT COUNTY

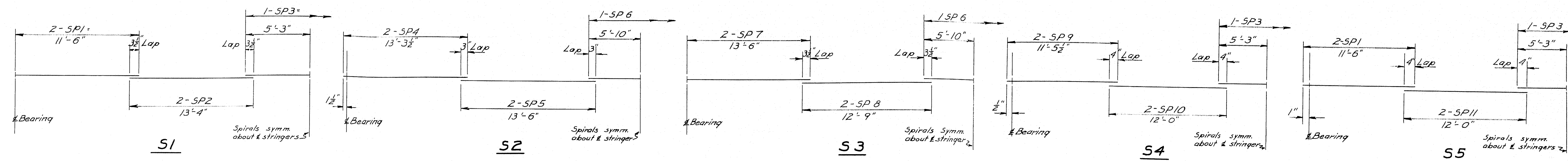
— STRUCTURAL STEEL —

SHEET 27 OF 32 AUGUSTA, MAINE FEB. 1962.

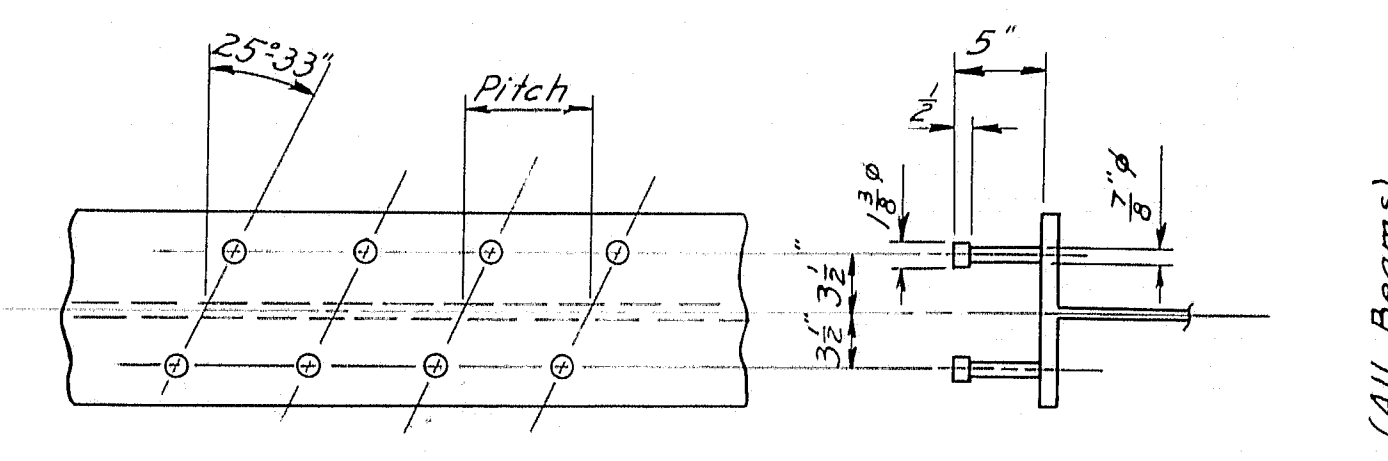




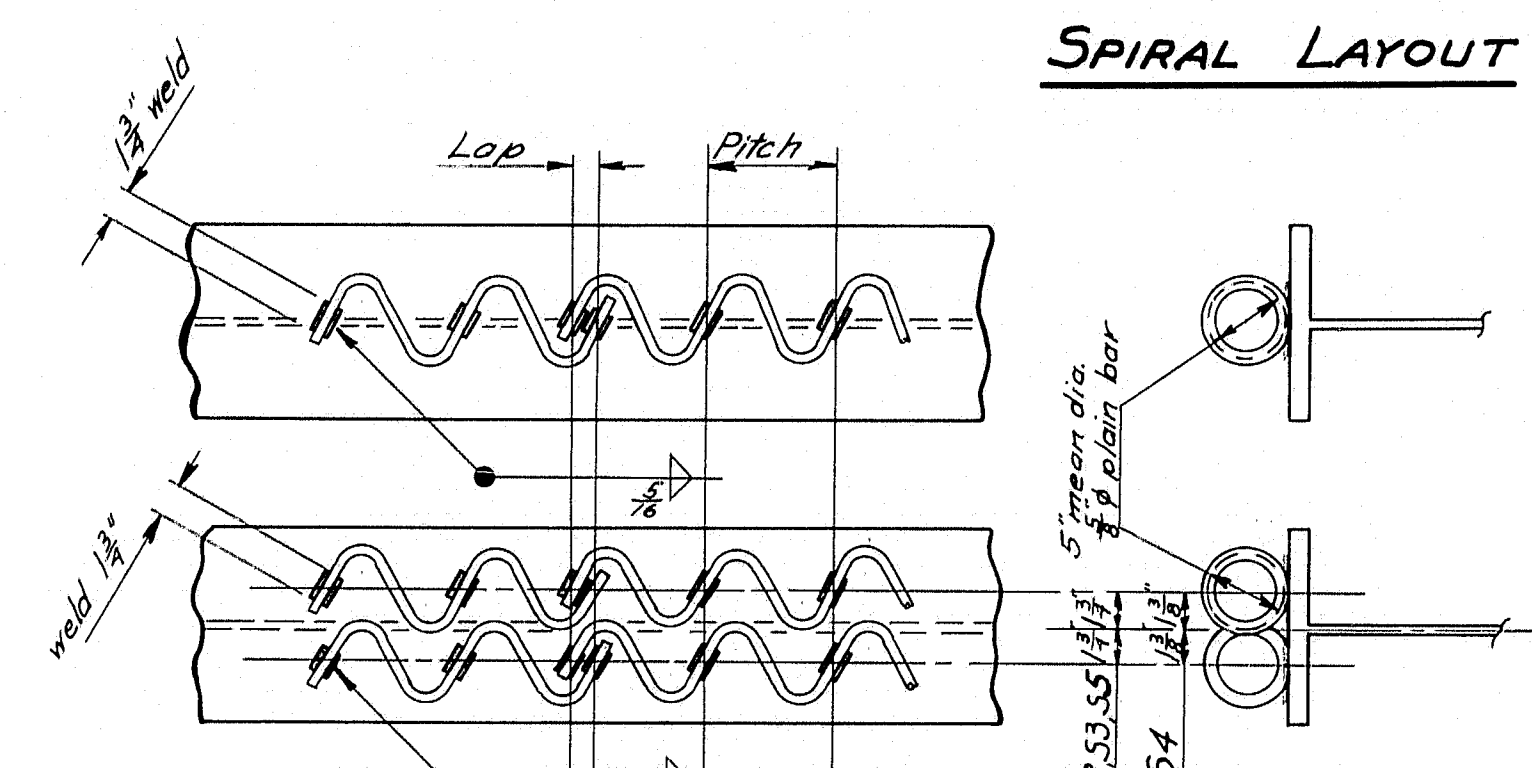
STUD LAYOUT



SPIRAL LAYOUT



STUD DETAIL



SPIRAL DETAIL

NOTES

Studs are a patented product. If the Contractor elects to use them, he shall pay the royalty, and payment to the Contractor will be included in the lump sum price paid for "Shear Connectors," Item 705-17.

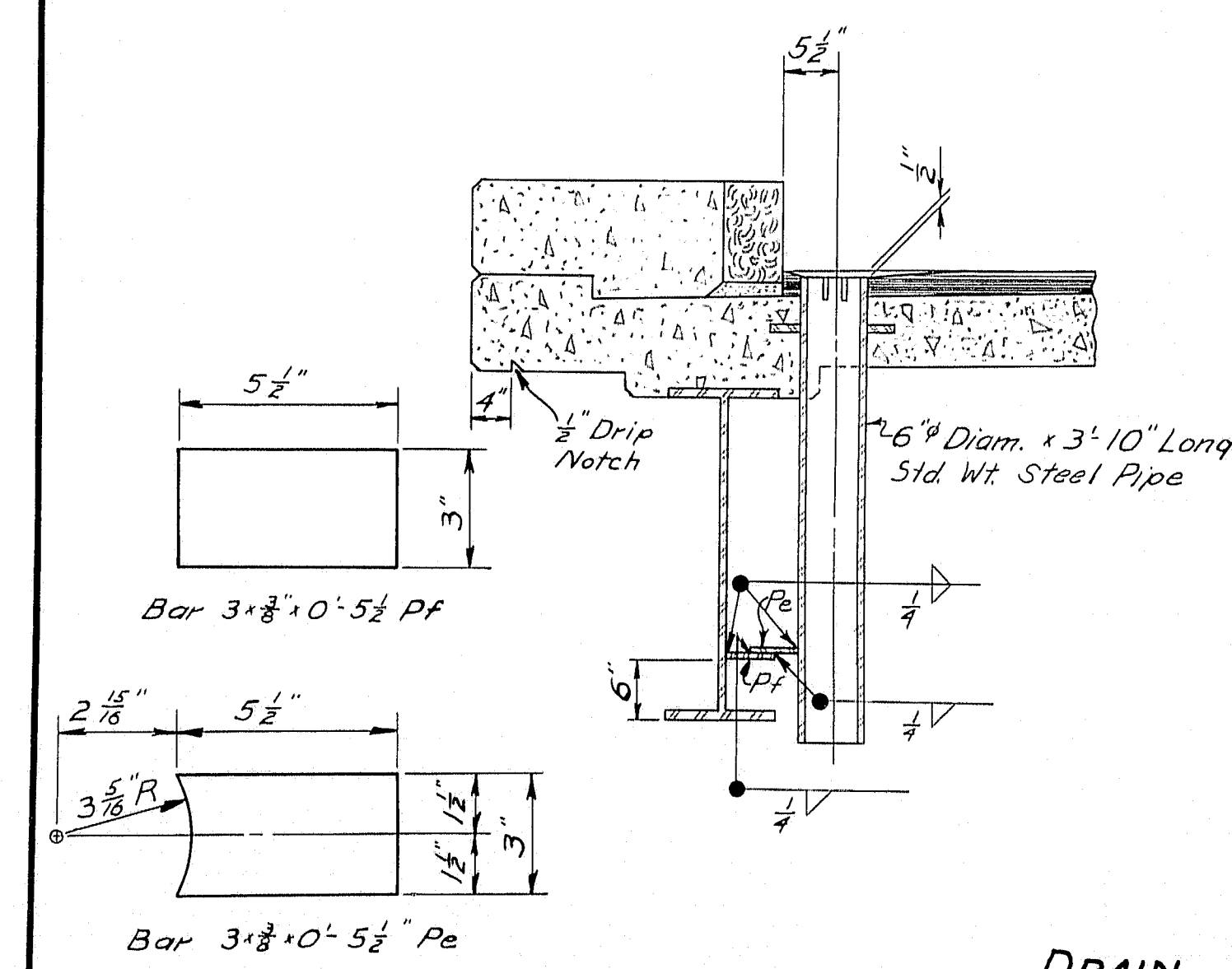
Studs are to be granular or solid flux filled studs. They are to be automatically end welded to stringers in the shop or in the field.

The type of shear connectors, spiral or stud, to be used shall be the option of the Contractor.

For "materials" notes, see sheet "26"
Spiral Shear Connectors $\frac{1}{2}$ " 18,000 p.s.i.

SPIRAL TABLE				
Mark	No.	Pitch Spaces	Pitch	Length
SP1	28	23	6"	11'-6"
SP2	20	20	8"	13'-4"
SP3	10	18	7"	10'-6"
SP4	20	29	5 1/2"	13'-3 1/2"
SP5	20	18	9"	13'-6"
SP6	15	20	7"	11'-8"
SP7	40	27	6"	13'-6"
SP8	40	17	9"	12'-9"
SP9	12	25	5 1/2"	11'-5 1/2"
SP10	12	18	8"	12'-0"
SP11	8	16	9"	12'-0"

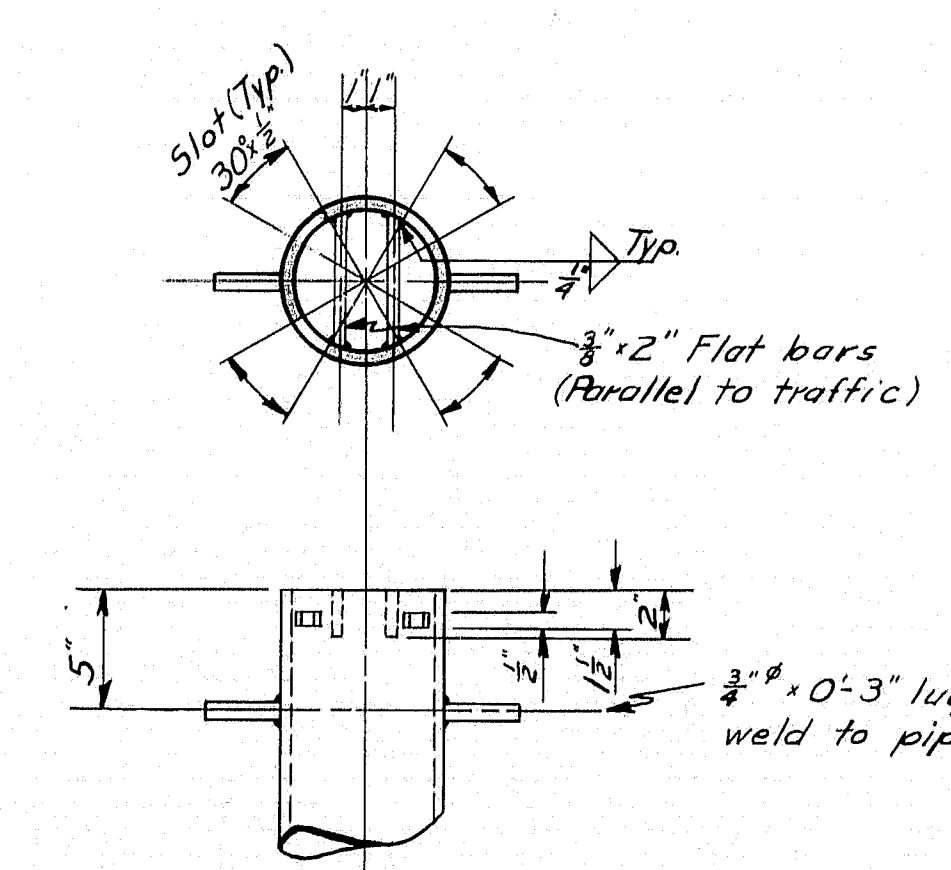
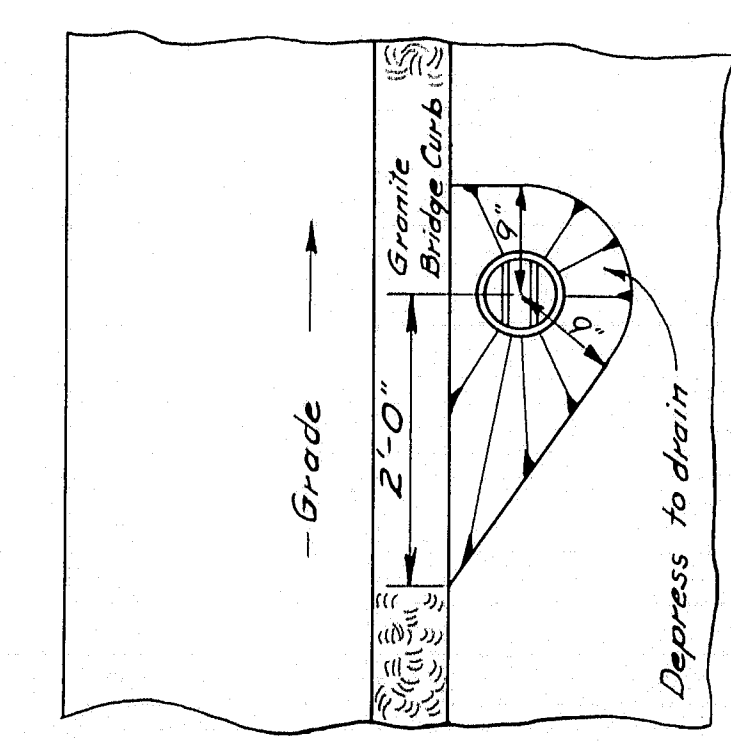
5510 Studs Req'd



DRAIN DETAILS

No. Req'd 18

Note: Adjust reinforcing steel to clear drains. Furnishing and erection of drains to be paid for as structural steel under items 702-103, 702-104 & 702-105.

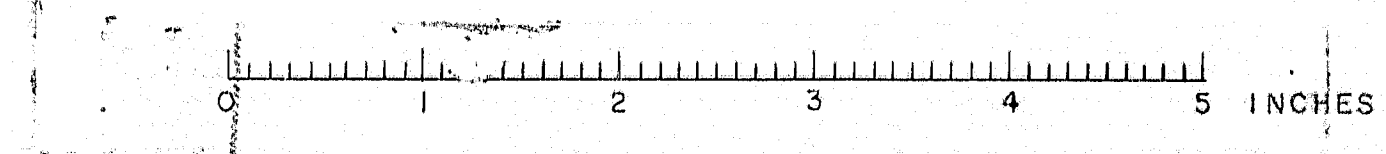


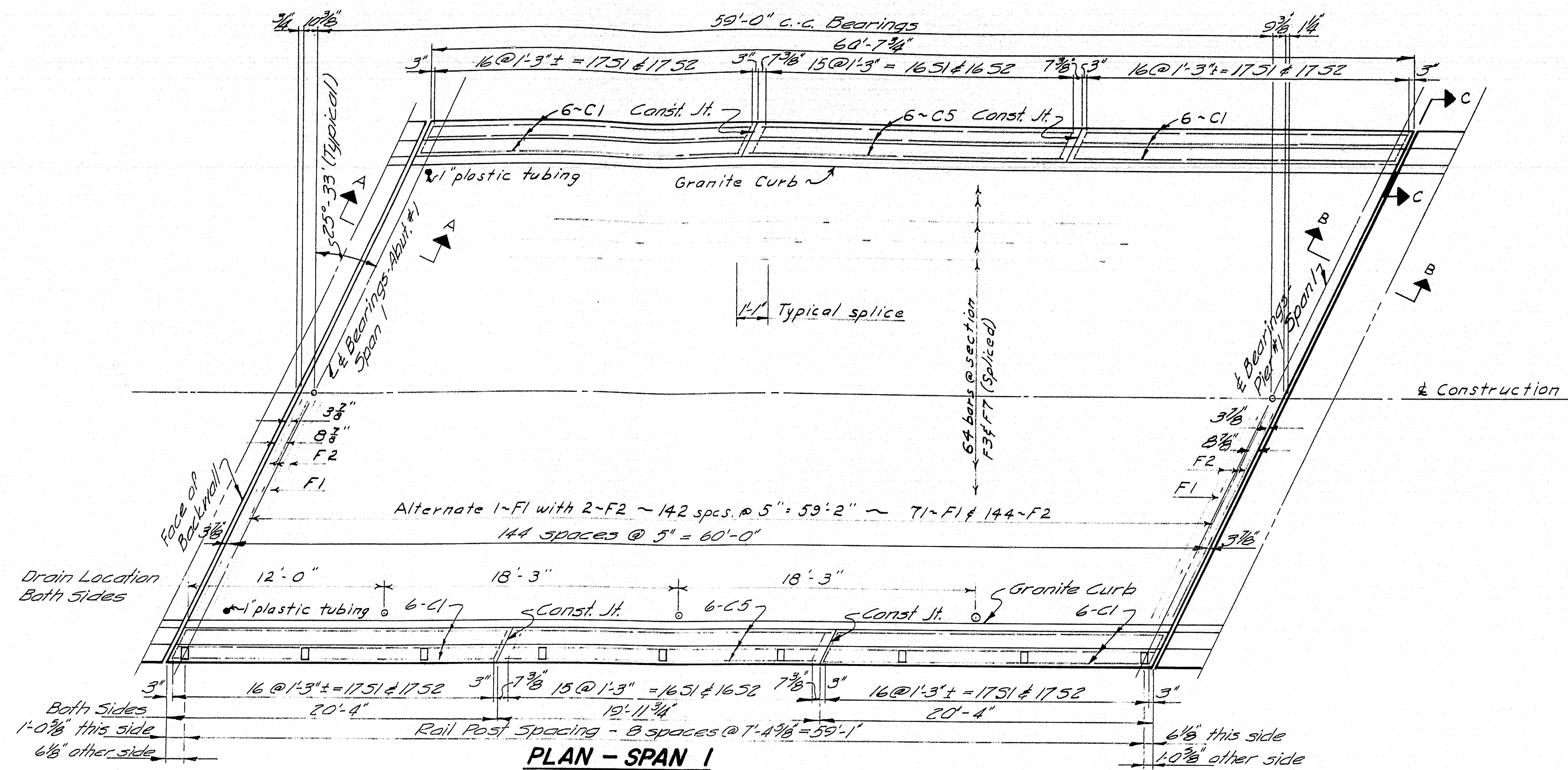
DESIGN-MOLICONE-DET-WHY
 CHECK-ABB

BRIDGE NO.
 SURVEY
 PLOT-

STATE HIGHWAY COMMISSION
 BRIDGE DIVISION
POND ROAD BRIDGE
 OVER
INTERSTATE HIGHWAY 95
 IN THE TOWN OF
HERMON
PENOBSCOT COUNTY
 SHEAR CONNECTORS — DRAINS

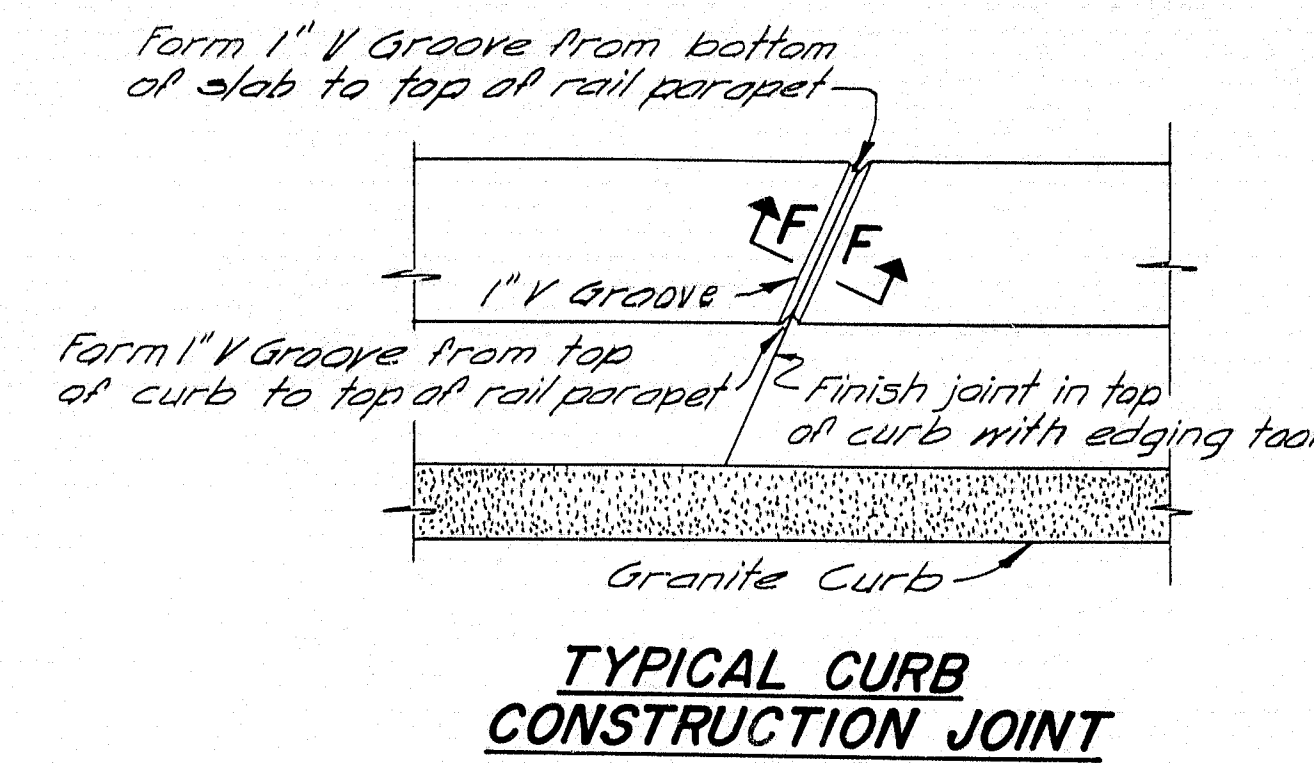
SHEET 28 OF 32 AUGUSTA, MAINE FEB. 1962





GENERAL NOTES

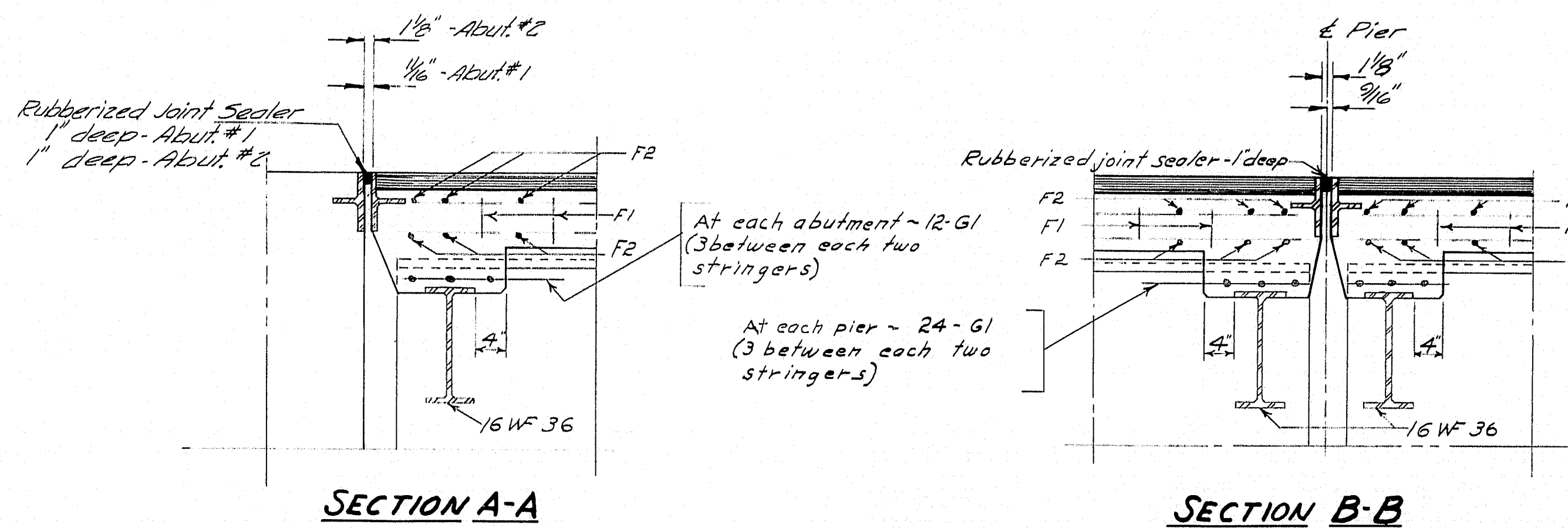
1. Location of drains, curb construction joints, curb reinforcing and rail posts similar either side unless otherwise shown.
2. Chamfer all exposed edges of concrete 1/4".
3. Break band of curb & rail parapet construction joints with a suitable grade of asphalt point Form V groove on top, inside & outside faces of rail parapet, and outside face of curb & slab at each vertical joint.
4. Concrete for curbs shall not be placed until concrete in superstructure slab has been in place a minimum period of seven (7) days. During the seven day period form work may be placed, but hand equipment only shall be allowed on the slab.
5. At the low points of the slabs, exact location to be determined by the Engineer, place 1" plastic tubing through slab for drainage. Do not cover with waterproofing. Payment to be considered incidental to contract items.



SECTION F-F

SECTION G-G

Inside face of rail parapet similar.

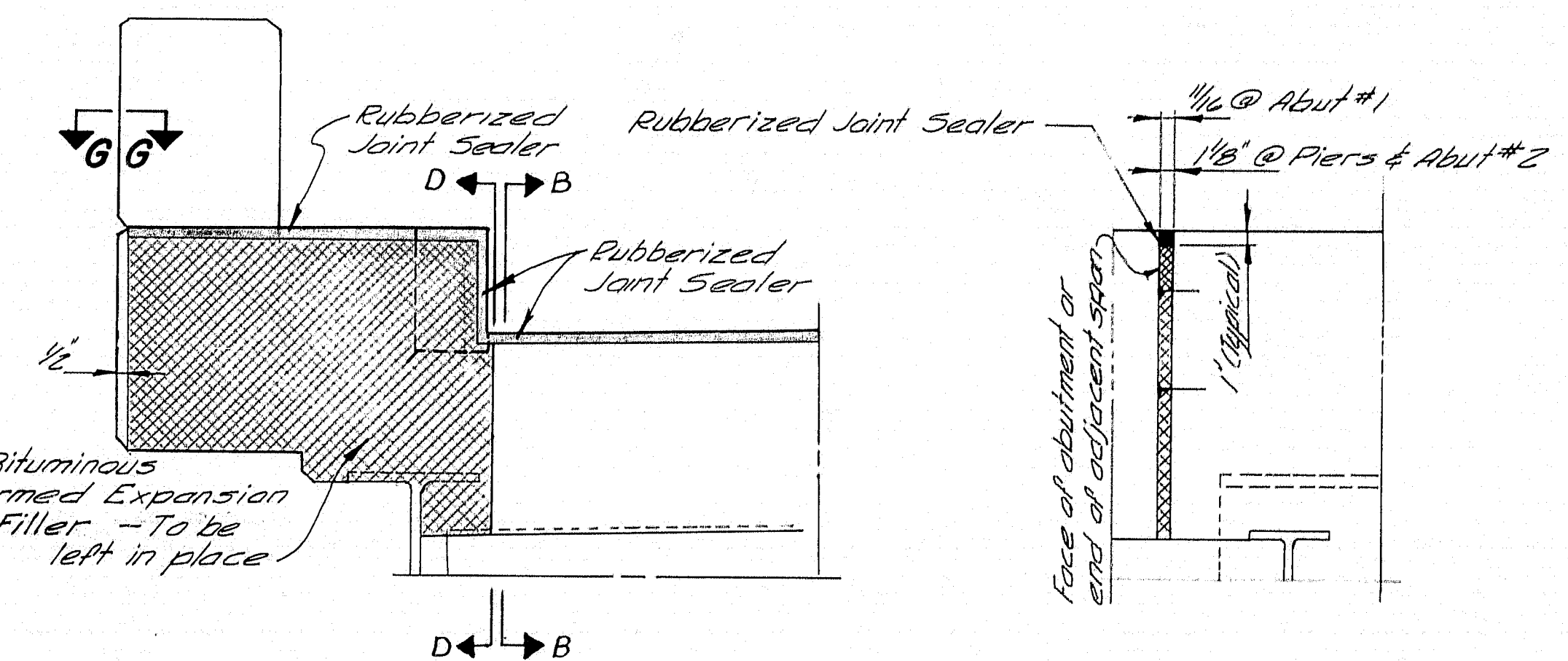


Note: Openings between slabs and backwalls (at abutments) and between slabs (at piers) are to be sealed along the top of safety curb, along the roadway face of Granite Bridge Curb, and along the roadway with Rubberized Joint Sealer.

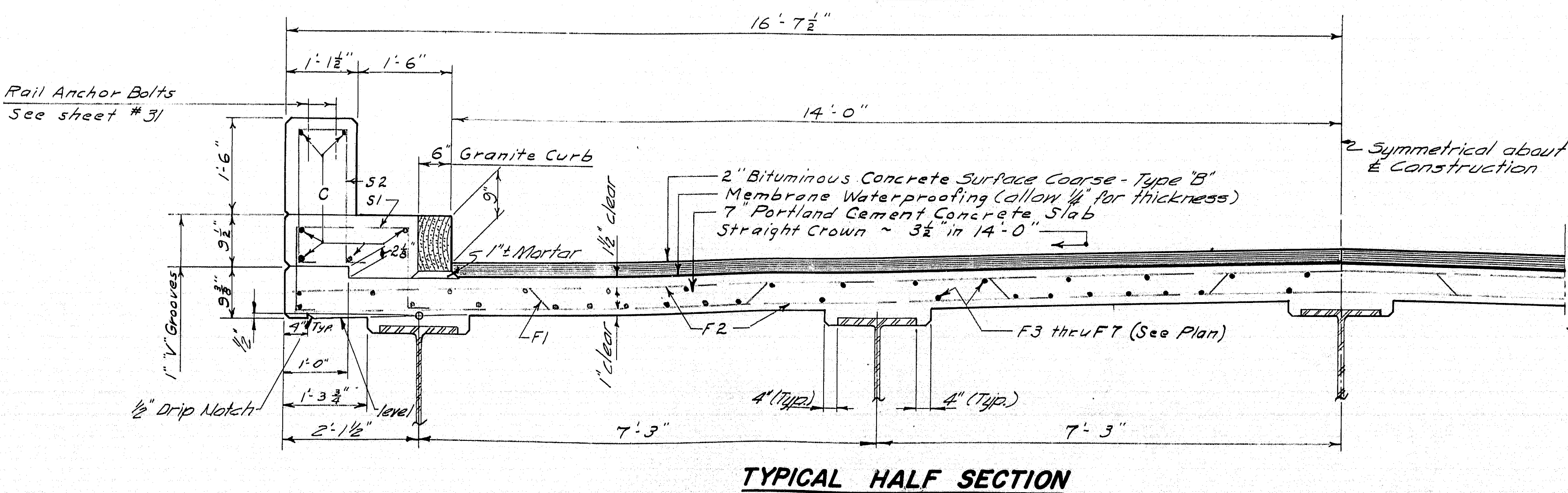
Rubberized Joint Sealer shall be supported on non-bituminous material. At the Contractor's option, the supporting material may be left in place or removed, except as noted.

If the supporting material is left in place it shall be compressible in accordance with specification AASHTO: M 153-54.

If the supporting material is to be removed, banding with the Rubberized Joint Sealer shall be prevented by a method satisfactory to the Engineer (layer of fine sand, wax paper, etc.).



Secure preformed expansion joint filler to end of slab with galvanized nails.



Curb joint treatment typical @ all piers and abutments.

GRANITE CURB DETAIL

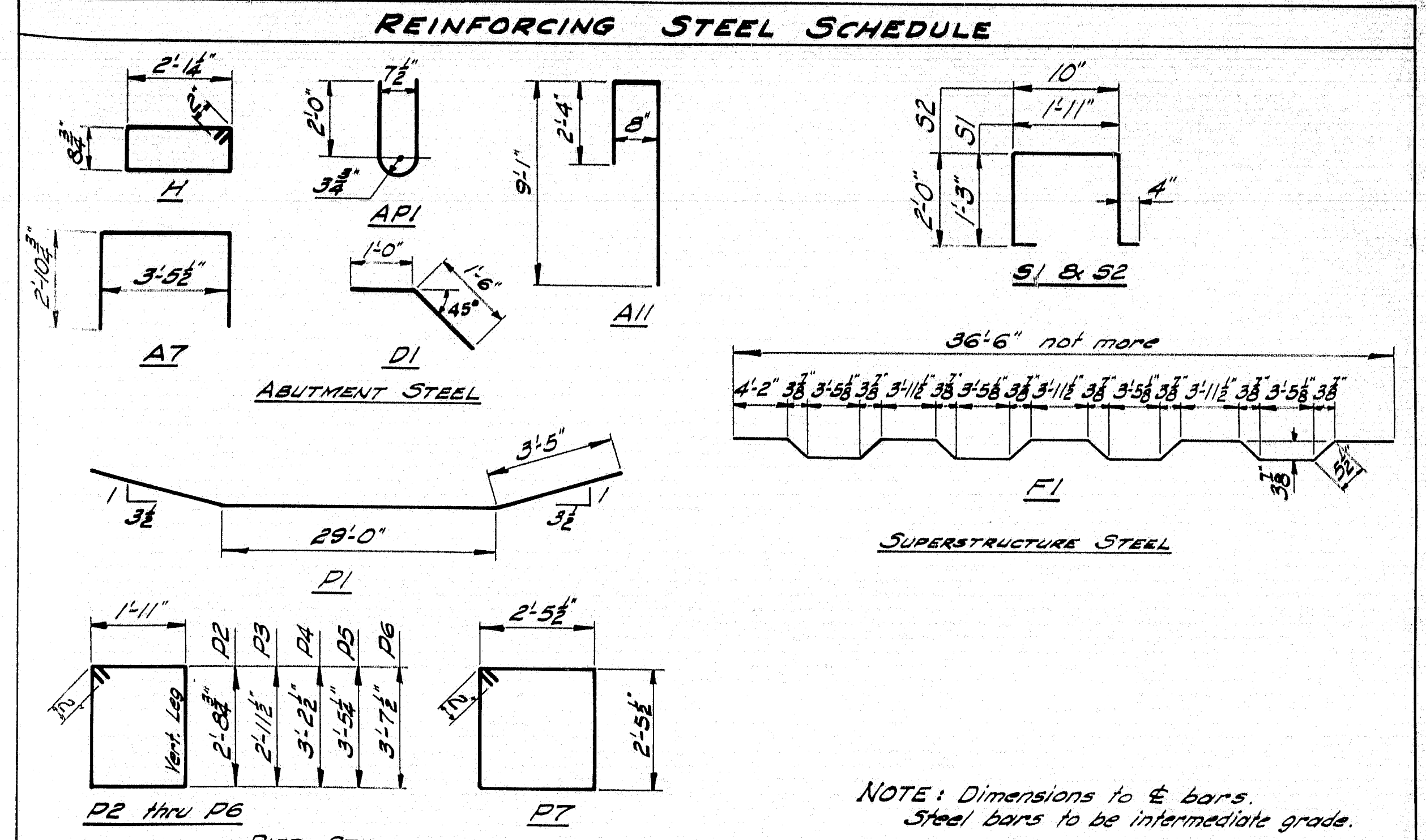
Joint shown occurs at expansion joints and at ends of bridge. Intermediate joints need not coincide with curb construction joints.

SECTION E-E

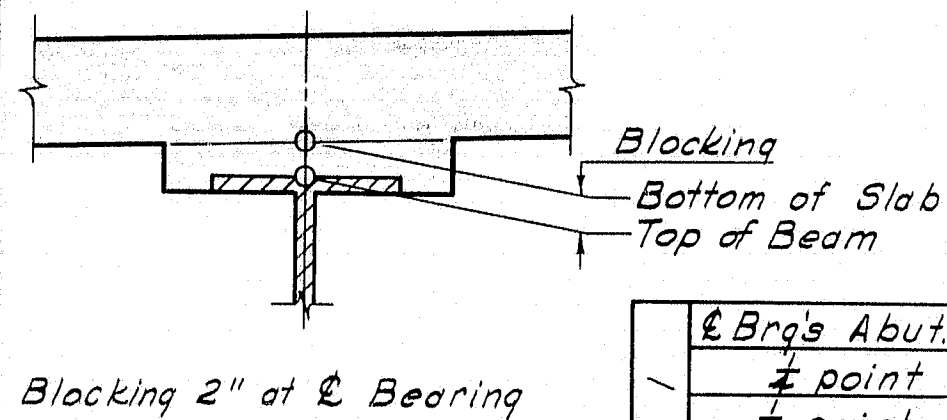
DESIGN - MOLLICONE DETHICKS
TRACE - H.B.P.
CHECK - H.B.P.

BRIDGE NO. SURVEY - PLOT -

STATE HIGHWAY COMMISSION
BRIDGE DIVISION
POND ROAD BRIDGE
OVER
INTERSTATE HIGHWAY 95
IN THE TOWN OF
HERMON
PENOBSCOT COUNTY
SUPERSTRUCTURE
SHEET 29 OF 32 AUGUSTA, MAINE FEB. 1962



To the extent possible, Aluminum tubes to be continuous for two panels with joints in top and bottom rails staggered. For rails two panels long, set screws at center post to be tight, set screws at ends to bear. For rails one panel long, set screws at one end to be tight, the others to bear.



ELEVATIONS - BOTTOM OF SLAB

		Line				
		A	B	C	D	E
Span 4	6 Brqs Pier 3	158.94	159.09	159.25	159.10	158.94
	1/2 point	159.00	159.15	159.31	159.16	159.02
	1/4 point	158.98	159.14	159.30	159.16	159.02
	3/4 point	158.88	159.05	159.22	159.08	158.94
	6 Brqs Pier 4	158.73	158.90	159.07	158.93	158.80
Span 5	6 Brqs Pier 4	158.72	158.89	159.06	158.92	158.79
	1/2 point	158.72	158.89	159.06	158.93	158.78
	1/4 point	158.67	158.86	159.02	158.88	158.74
	3/4 point	158.59	158.76	158.93	158.80	158.65
	6 Brqs Abut 2	158.46	158.63	158.79	158.66	158.53

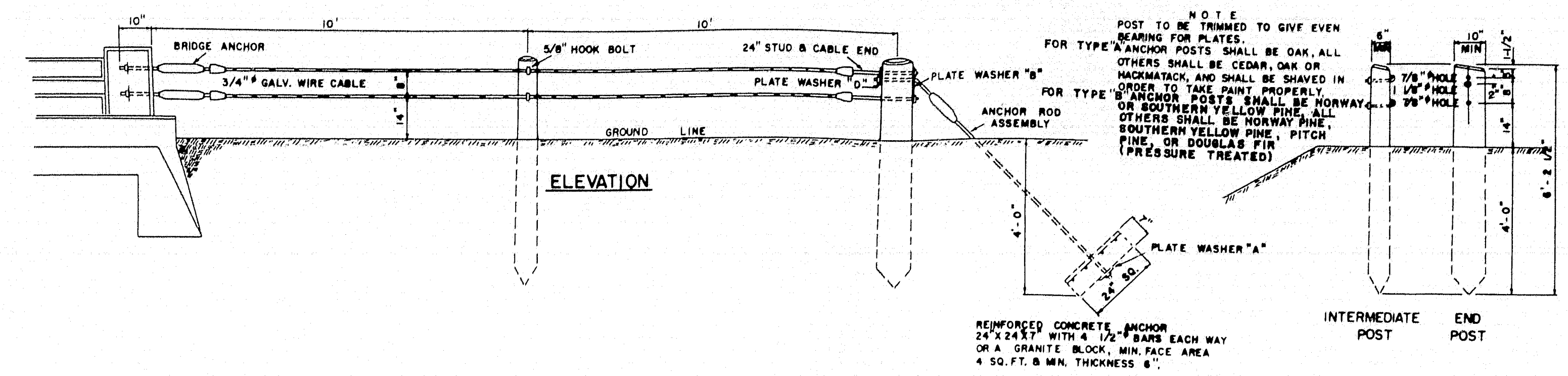
In order to compensate for dead load deflections and possible irregularities in the rolling of steel, set the bottom of slab elevations at the points indicated before any of the slab forms are started.

ABUTMENTS					SUPERSTRUCTURE				
BENT BARS					BENT BARS				
MARK	SIZE	No.	LENGTH	LOCATION	MARK	SIZE	No.	LENGTH	LOCATION
A7	*5	63	9'-3"	Bridge Seats	F1	*5	367	37'-7"	Slab
A11	*5	38	12'-1"	Wings	S1	*4	516	5'-1"	Curbs
D1	*5	32	2'-6"	Approach Slab Seats	S2	*4	516	5'-6"	Rail Parapet
API	*6	12	5'-0"	Concrete End Posts					
H	*4	8	6'-0"	" " "					
STRAIGHT BARS					STRAIGHT BARS				
A1	*6	24	33'-6"	Footings	F2	*5	766	36'-6"	Slab
A2	*6	128	5'-2"	"	F3	*5	320	30'-0"	"
A3	*6	16	12'-6"	"	F4	*5	64	36'-4"	"
A4	*6	60	3'-7"	"	F5	*5	128	35'-4"	"
A5	*6	16	11'-6"	"	F6	*5	64	28'-4"	"
A6	*5	144	2'-9"	"	F7	*5	64	31'-5"	"
A8	*5	136	5'-0"	Backwall					
A9	*4	20	36'-0"	" , Br. Wall	G1	*5	120	7'-5"	End diaphragms
A10	*5	38	7'-8"	Wings					
A12	*5	16	11'-0"	"	C1	*4	120	20'-0"	Curbs
A13	*5	16	10'-0"	"	C2	*4	24	23'-6"	"
A14	*5	26	8'-0"	"	C3	*4	12	24'-6"	"
A15	*5	26	9'-3"	"	C4	*4	12	16'-7"	"
A16	*6	10	36'-4"	Bridge Seats	C5	*4	12	19'-7"	"
PIERS					APPROACH SLAB				
BENT BARS					BENT BARS				
P1	*8	16	35'-10"	Caps	A51	*4	36	30'-6"	Slab
P2	*4	16	9'-8"	"	A52	*6	220	14'-6"	"
P3	*4	16	10'-1"	"					
P4	*4	16	10'-7"	"					
P5	*4	16	11'-1"	"					
P6	*4	136	11'-5"	"					
P7	*4	234	10'-2"	Columns					
STRAIGHT BARS									
P9	*8	24	35'-8"	Caps					
P10	*8	8	29'-0"	"					
P11	*7	72	20'-4"	Columns					
P12	*7	72	20'-11"	"					
P13	*7	72	20'-1"	"					
P14	*7	72	21'-1"	"					
P15	*7	288	3'-0"	"					
P16	*6	192	7'-6"	Footings					
P17	*5	18	35'-8"	Caps					

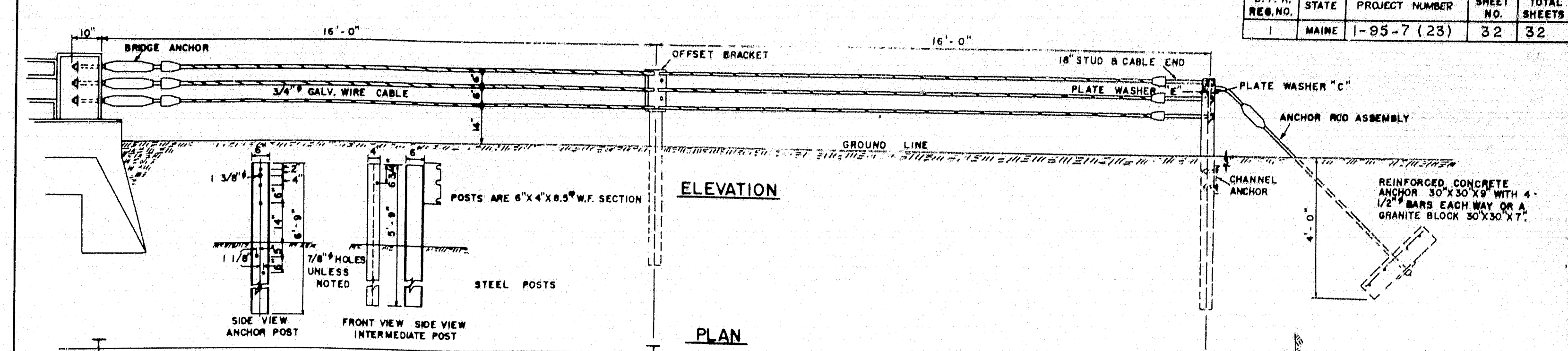
DESIGN - *Hollicott* HICKS
 TRACE - *E. Bergerd*
 CHECK - *H.B.P.*

BRIDGE NO.
 SURVEY -
 PLOT -

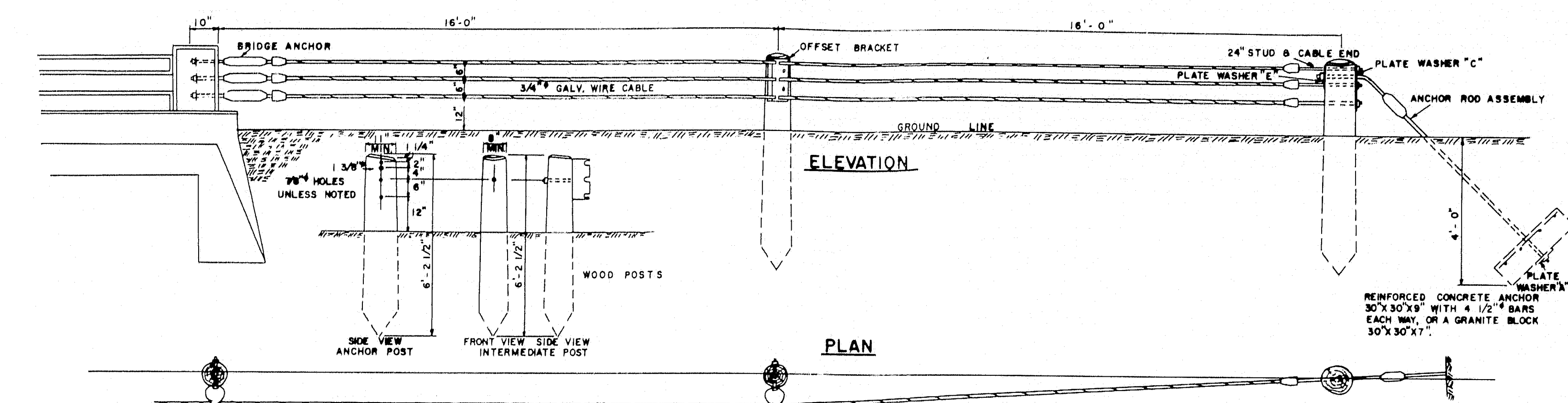
STATE HIGHWAY COMMISSION
 BRIDGE DIVISION
POND ROAD BRIDGE
 OVER
INTERSTATE HIGHWAY 95
 IN THE TOWN OF
HERMON
PENOBSCOT COUNTY
 RAIL - BLOCKING-REINFORCING STEEL
 SHEET 31 OF 32 AUGUSTA, MAINE FEB. 1966



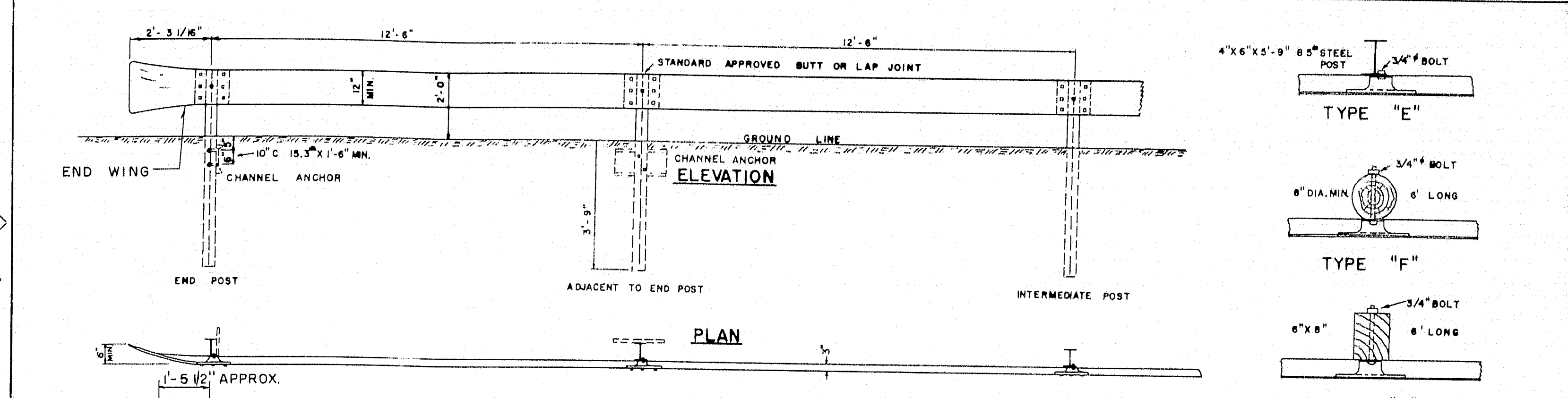
GUARD RAIL TYPE "A" & "B"



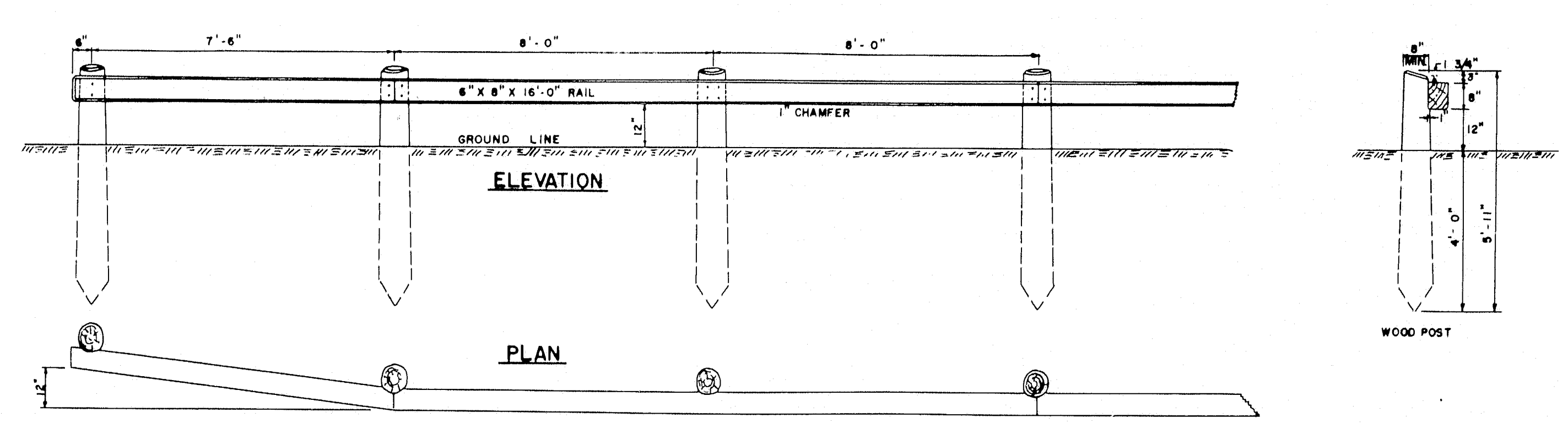
GUARD RAIL TYPE "C"



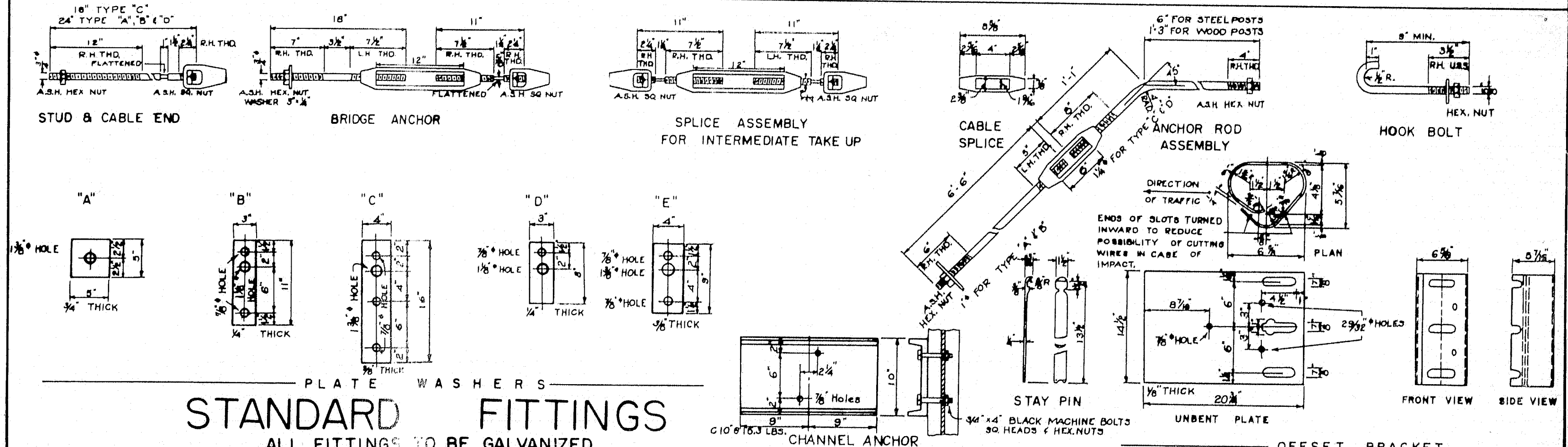
GUARD RAIL TYPE "D"



GUARD RAIL TYPE "E", "F" & "G"

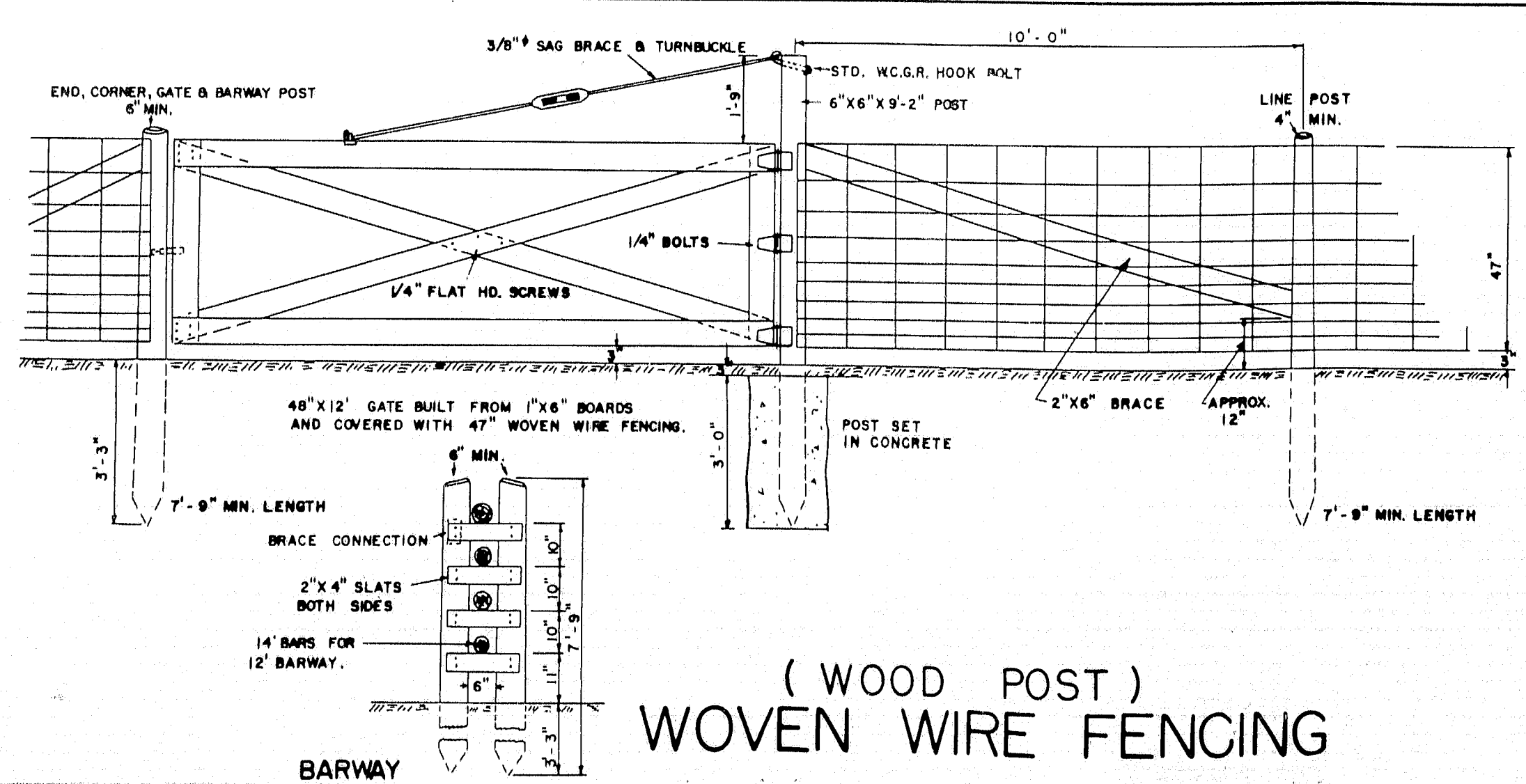


GUARD RAIL TYPE "H"

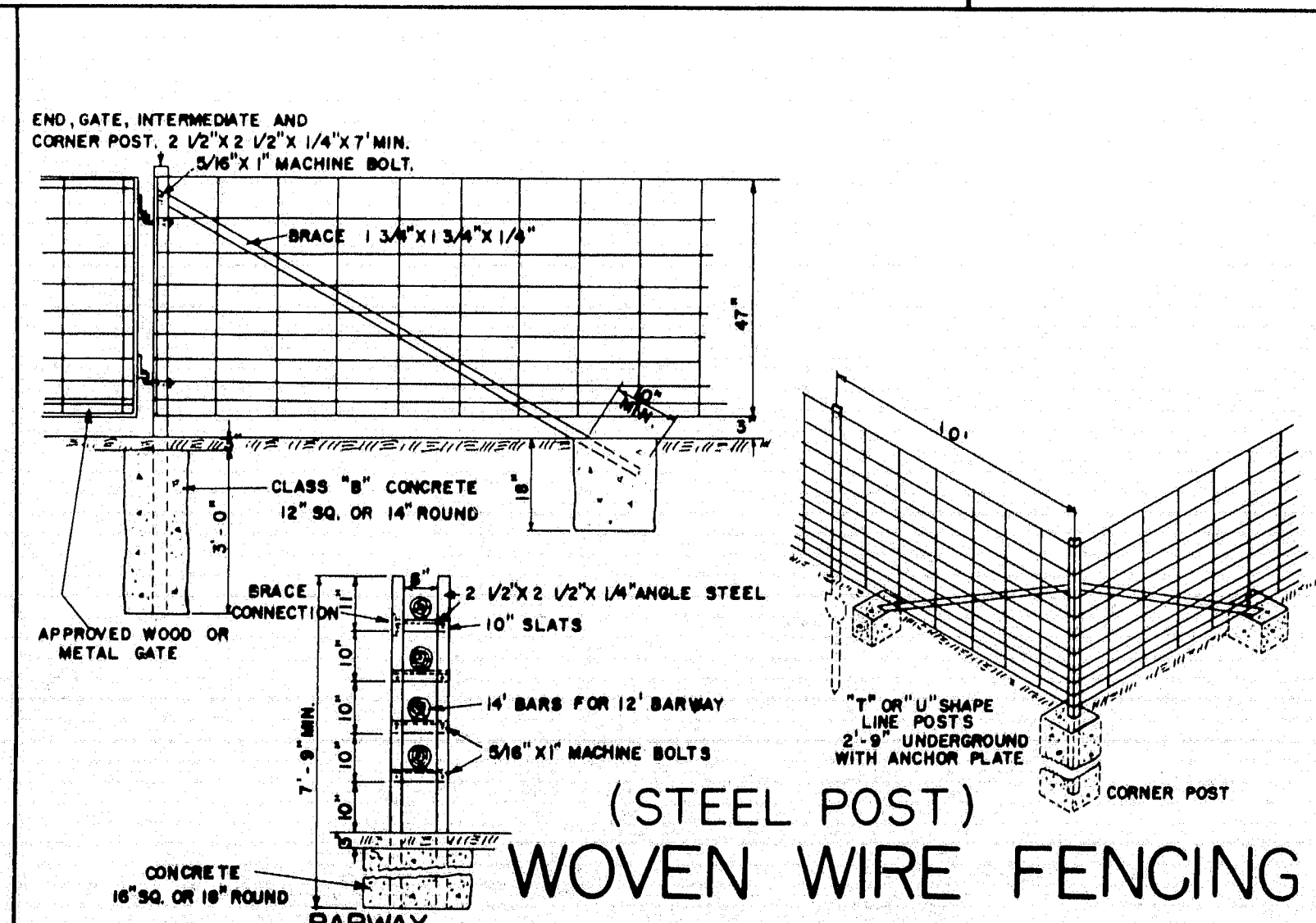


STANDARD FITTINGS
ALL FITTINGS TO BE GALVANIZED

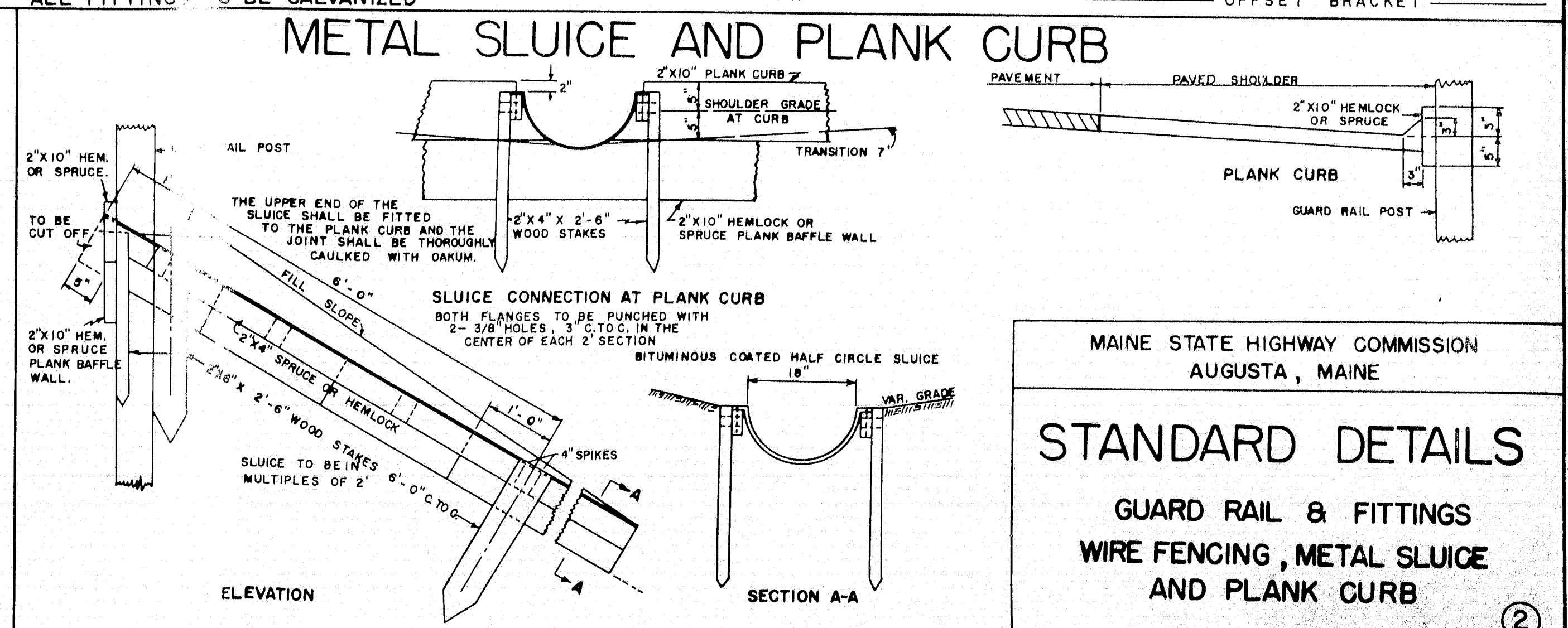
METAL SLUICE AND PLANK CURB



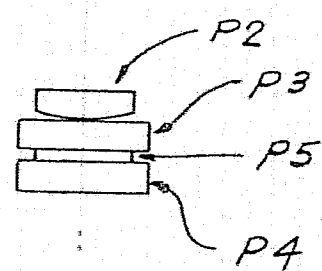
(WOOD POST)
WOVEN WIRE FENCING



(STEEL POST)
WOVEN WIRE FENCING

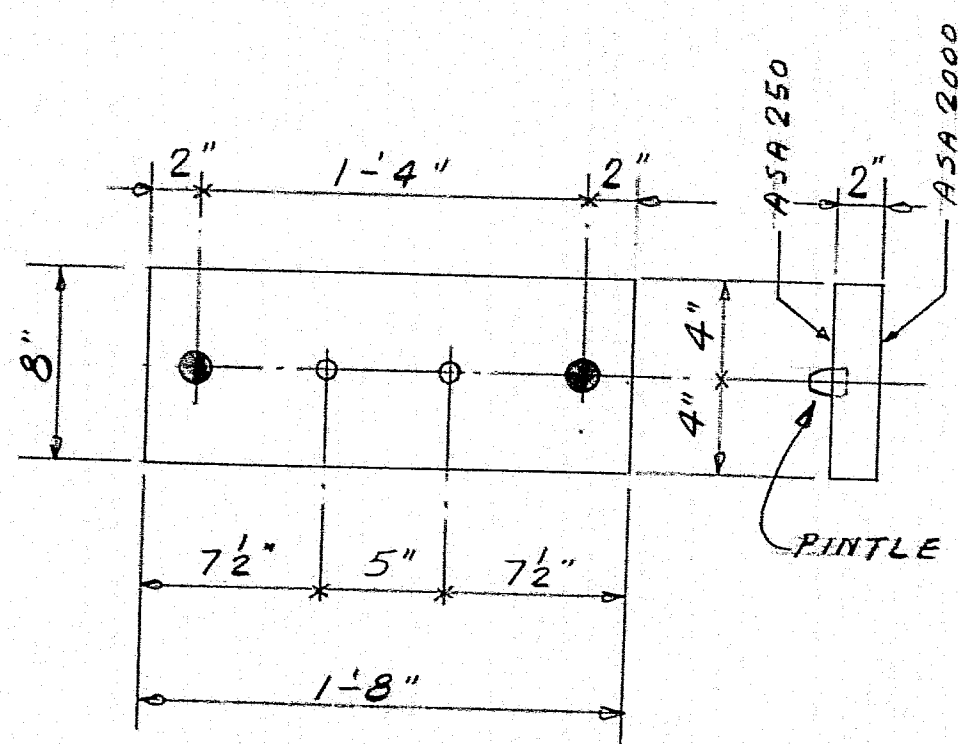


MAINE STATE HIGHWAY COMMISSION
AUGUSTA, MAINE
STANDARD DETAILS
GUARD RAIL & FITTINGS
WIRE FENCING, METAL SLUICE
AND PLANK CURB

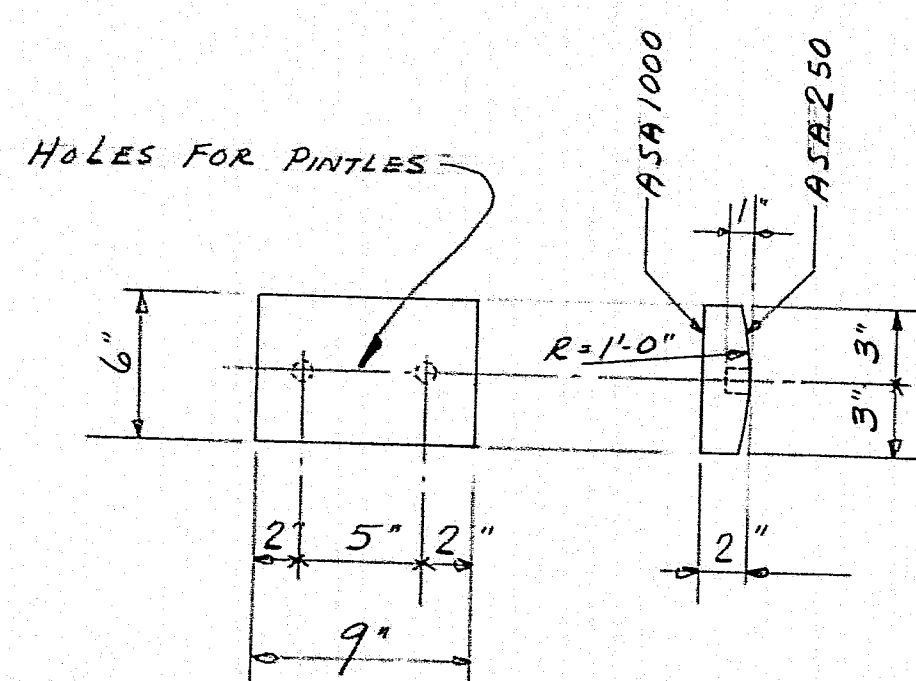


FIXED BEARING
25-REQ'D.

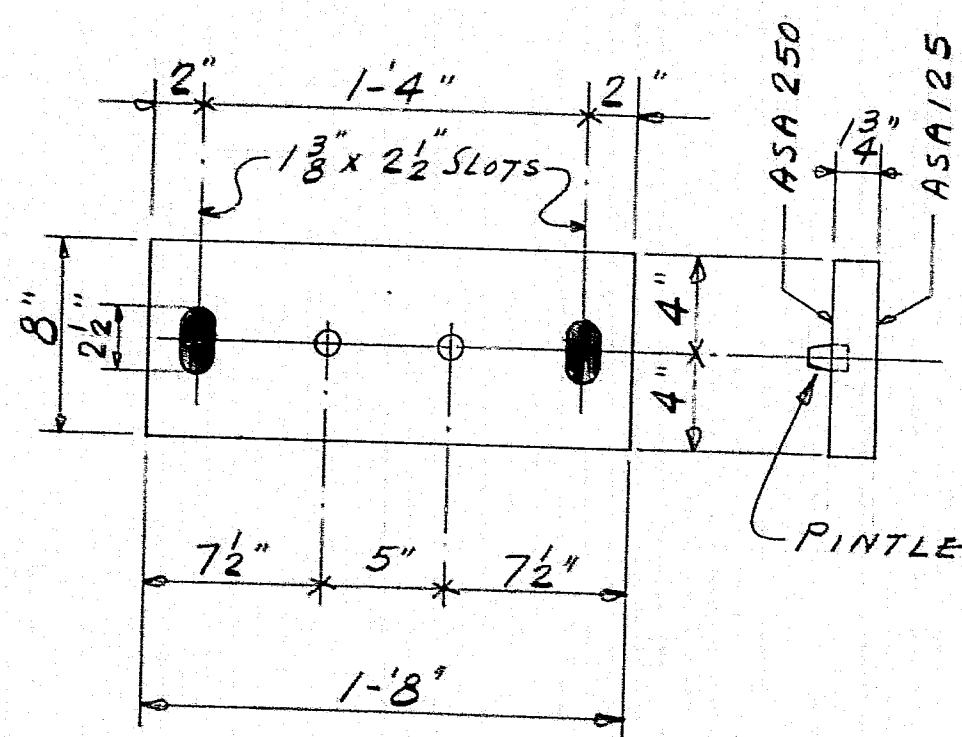
EXPANSION BEARING
25-REQ'D.



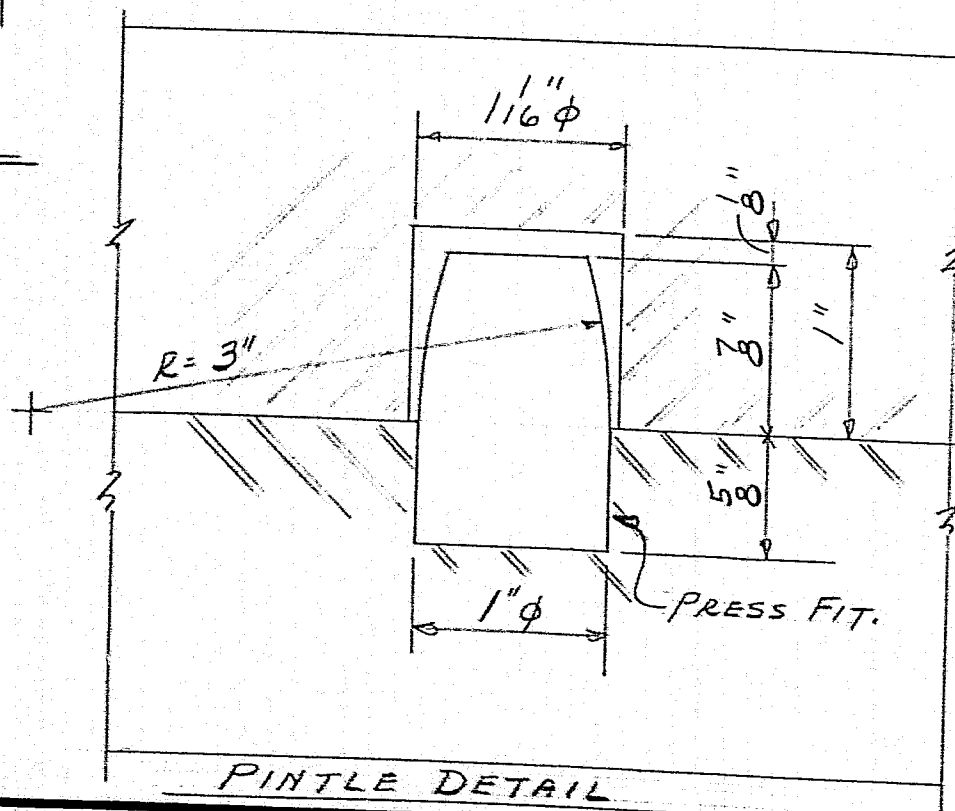
25-P1



50-P2



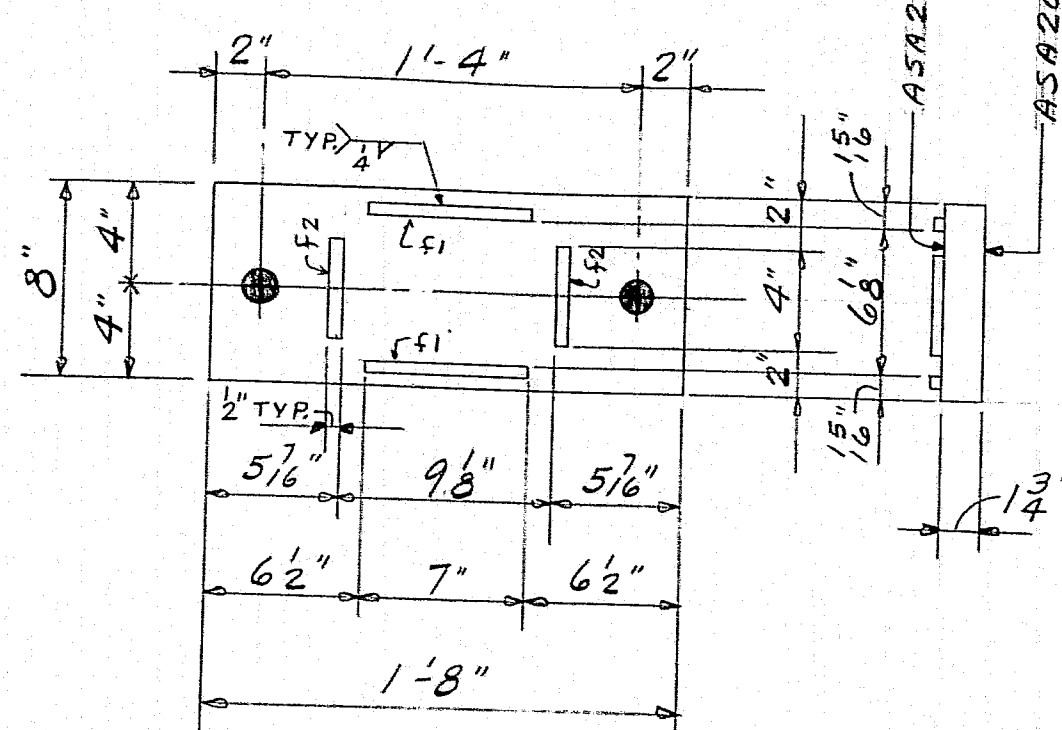
25-P3



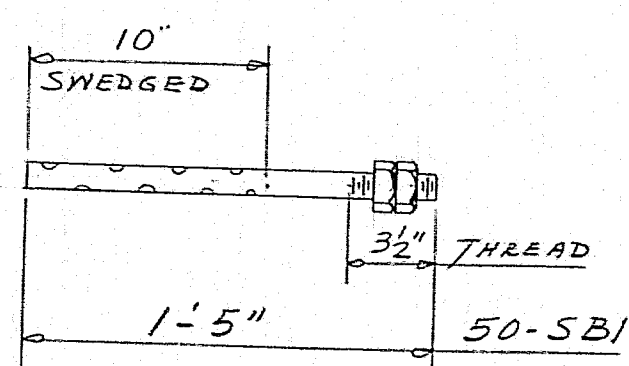
PINTLE DETAIL

SHIP		BILL OF MATERIAL			DWG. <u>B62-133-S1</u>	
MARK	NO.	MARK	SHAPE	LENGTH	WT.	REMARKS
P1	25		1/2 x 8	1	8	
P2	50		1/2 x 6	0	9	
P3	25		1/3/4 x 8	1	8	
P4	25		DO	1	8	
W1	50		BAE 2 x 4	0	2	
W2	50		BAE 4 x 4	0	4	
	50	f1	BAE 3 x 4	0	7	
	50	f2	DO	0	4	
	100		1" φ ROD	0	1 1/2	PINTLE
SB1	50		1" φ ROD	1	5	SWEDGE BOLTS
SB2	50		DO	1	2	DO
	150		1" HEX. NUTS			
P5	25		1/2 x 6	0	9	SELF LUB. BRONZE, REQ. #1726
STRUCT STEEL				15	ITEM 7	102-103

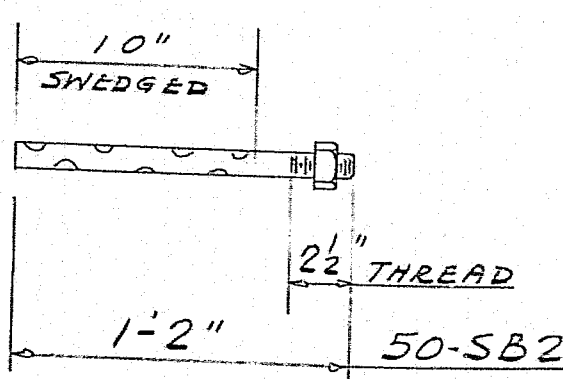
- SCALE WT.



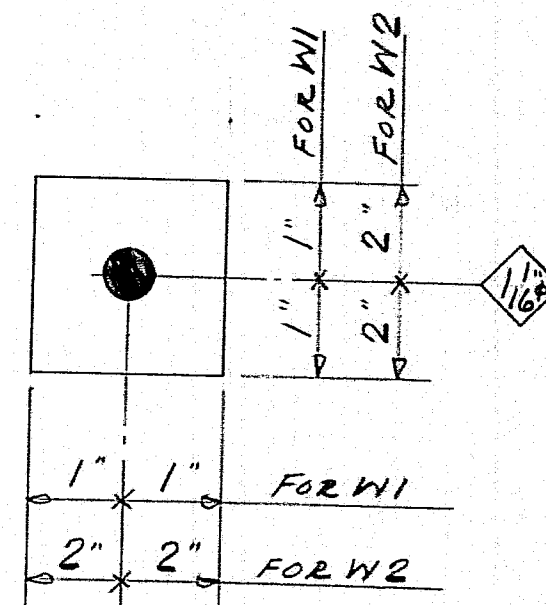
25-P4



50-SB/



50-5B2



50-W1

50-W2

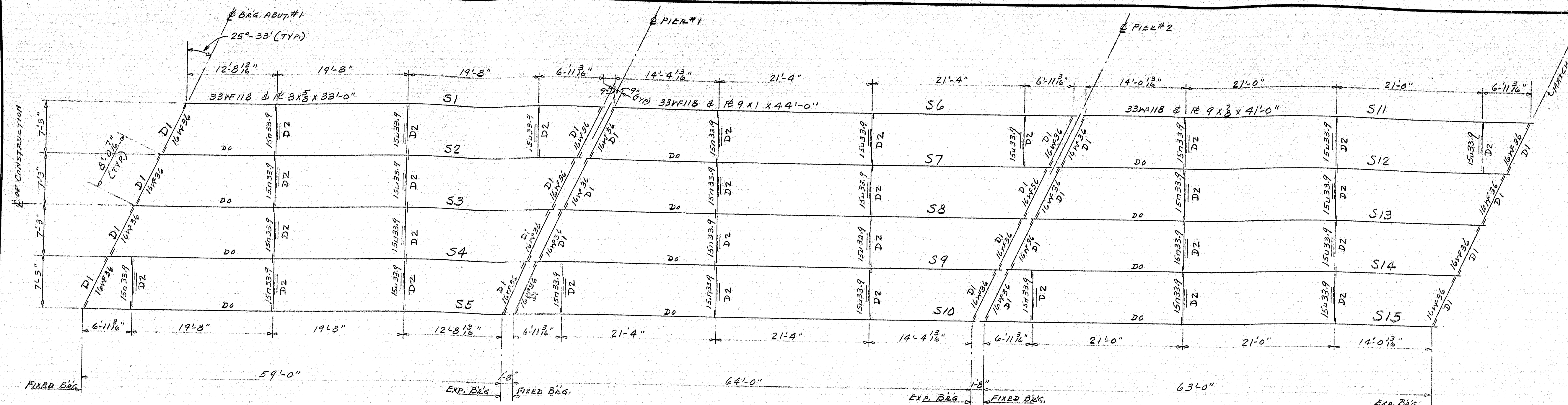
SHOP CONNECTIONS: WELD
FIELD CONNECTIONS: WELD
HOLES: $1\frac{3}{8}\phi$ UNLESS NOTED
PAINT: STATE SPECS.

APP. AS NOTED 7-25-62 PAIN

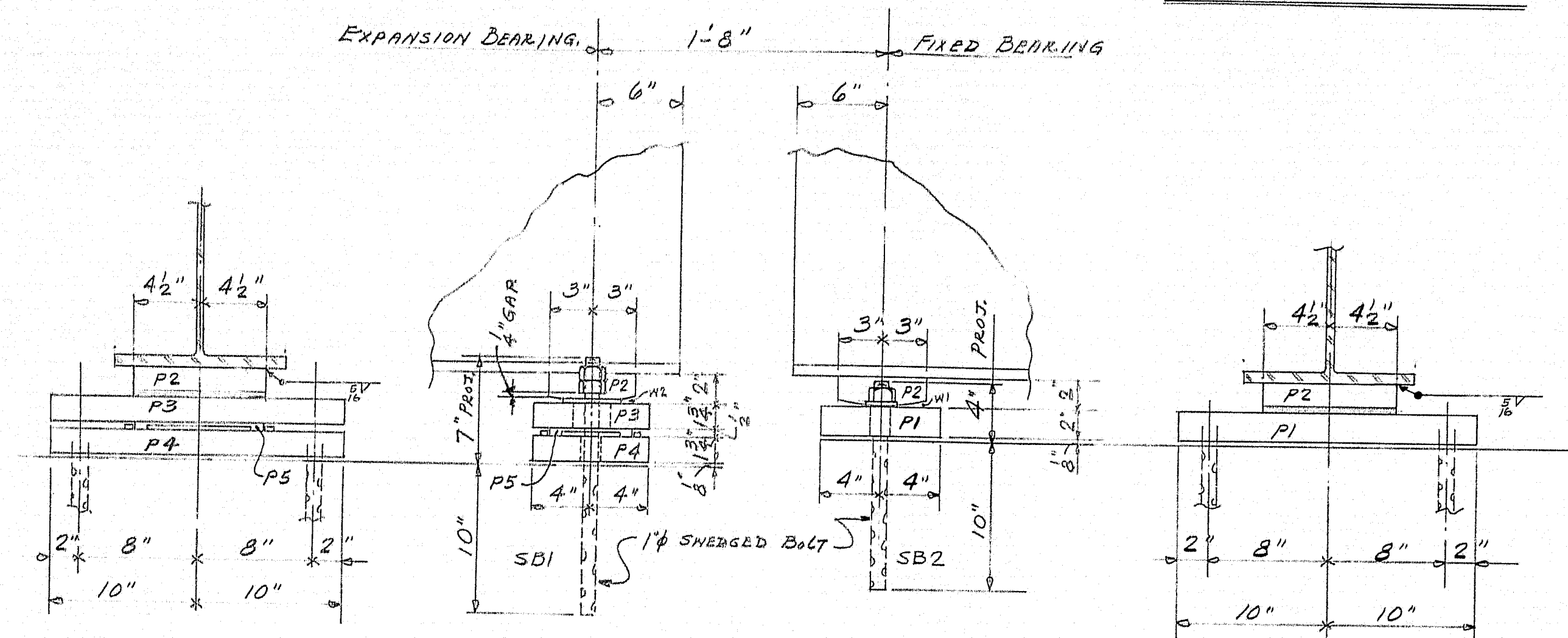
BEARING PLATES & ANCHOR BOLTS.

PRINT ISSUE		<i>Bancroft & Martin Rolling Mills Company</i> <i>Brewer, Maine</i>	
3	CUST.	8-2-62	
4	PORT	8-2-62	
2	F.A.	7-21-62	
DRAWN	6-28-62	E.W.M.	
REVISION	8-2-62	E.W.M.	
REVISION			
REVISION			
		POND ROAD BRIDGE HERMON MAINE CUSTOMER <u>CALLAHAN BROS.</u> DESIGNER <u>STATE HIGHWAY DEPT.</u>	
		ORDER <u>VERBAL</u>	DWG. <u>B62-133-S1</u>

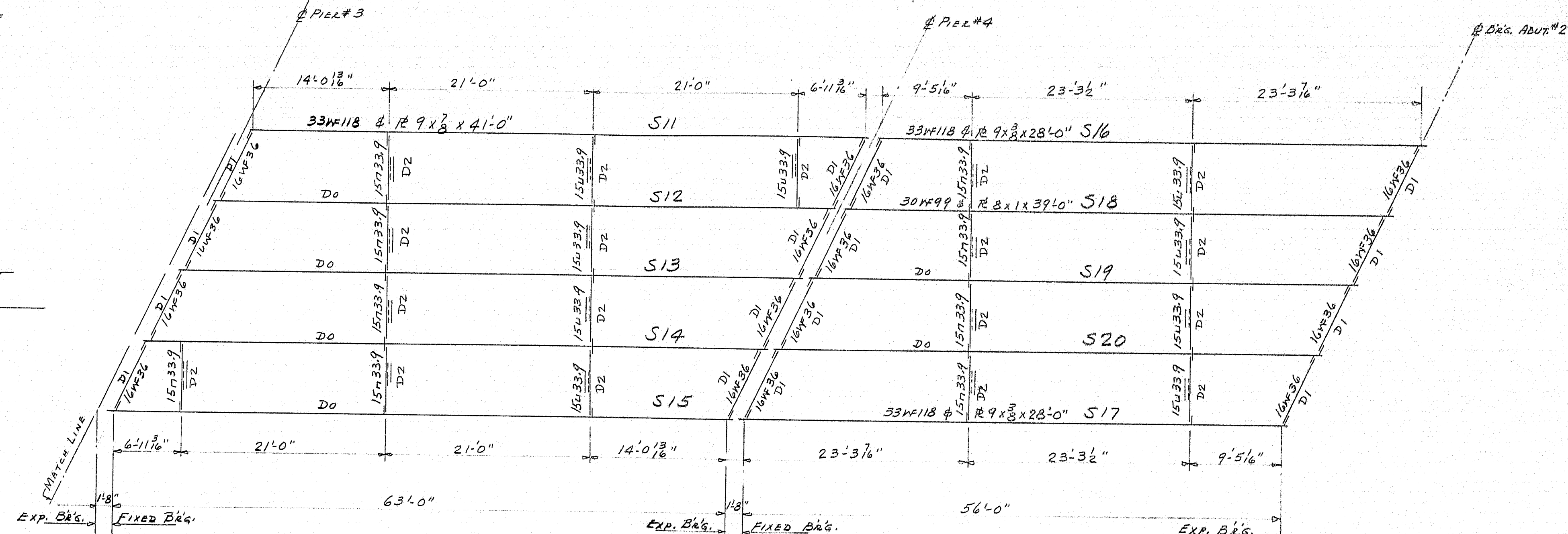
86-33A



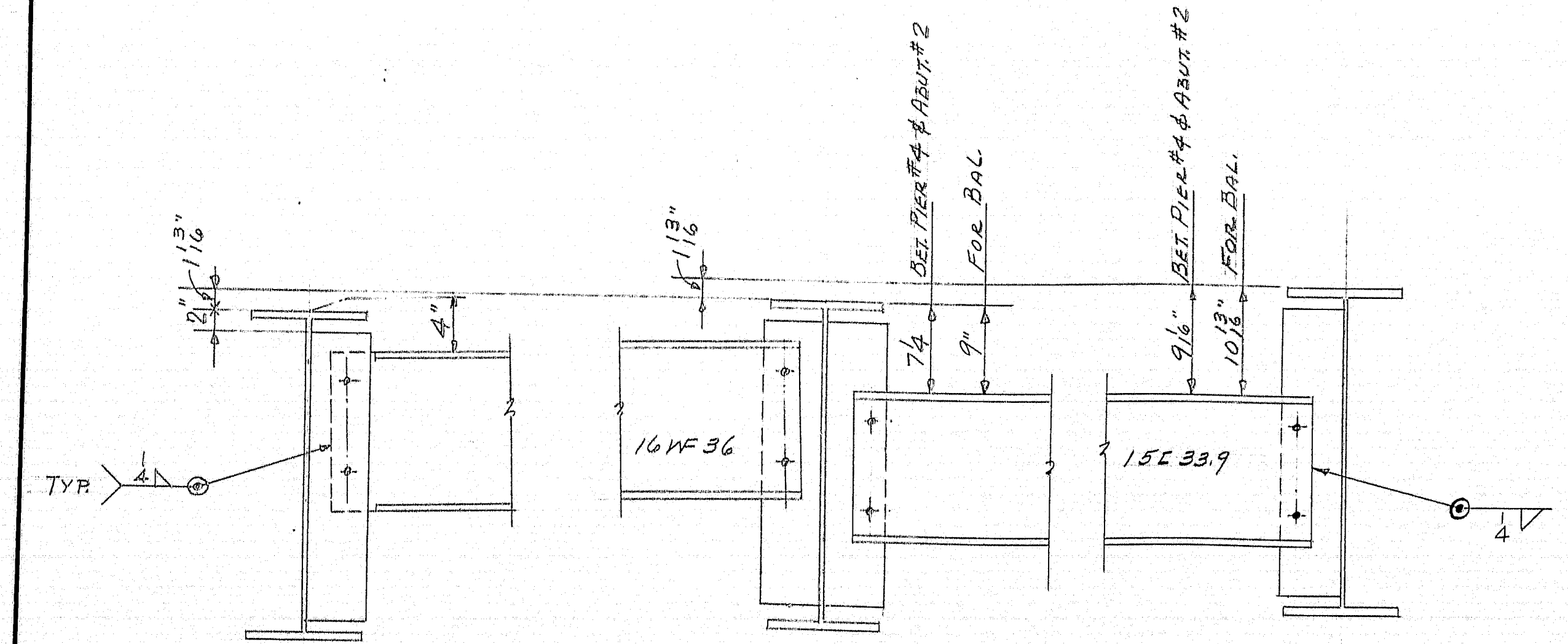
FRAMING PLAN



BEARING DETAILS



FRAMING PLAN (CONT.)

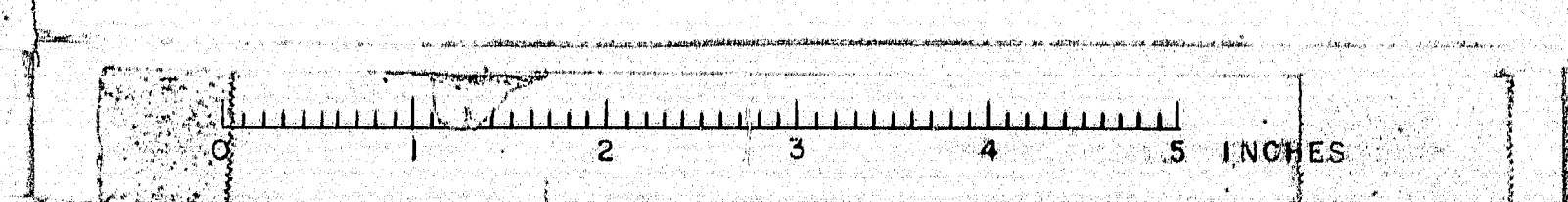


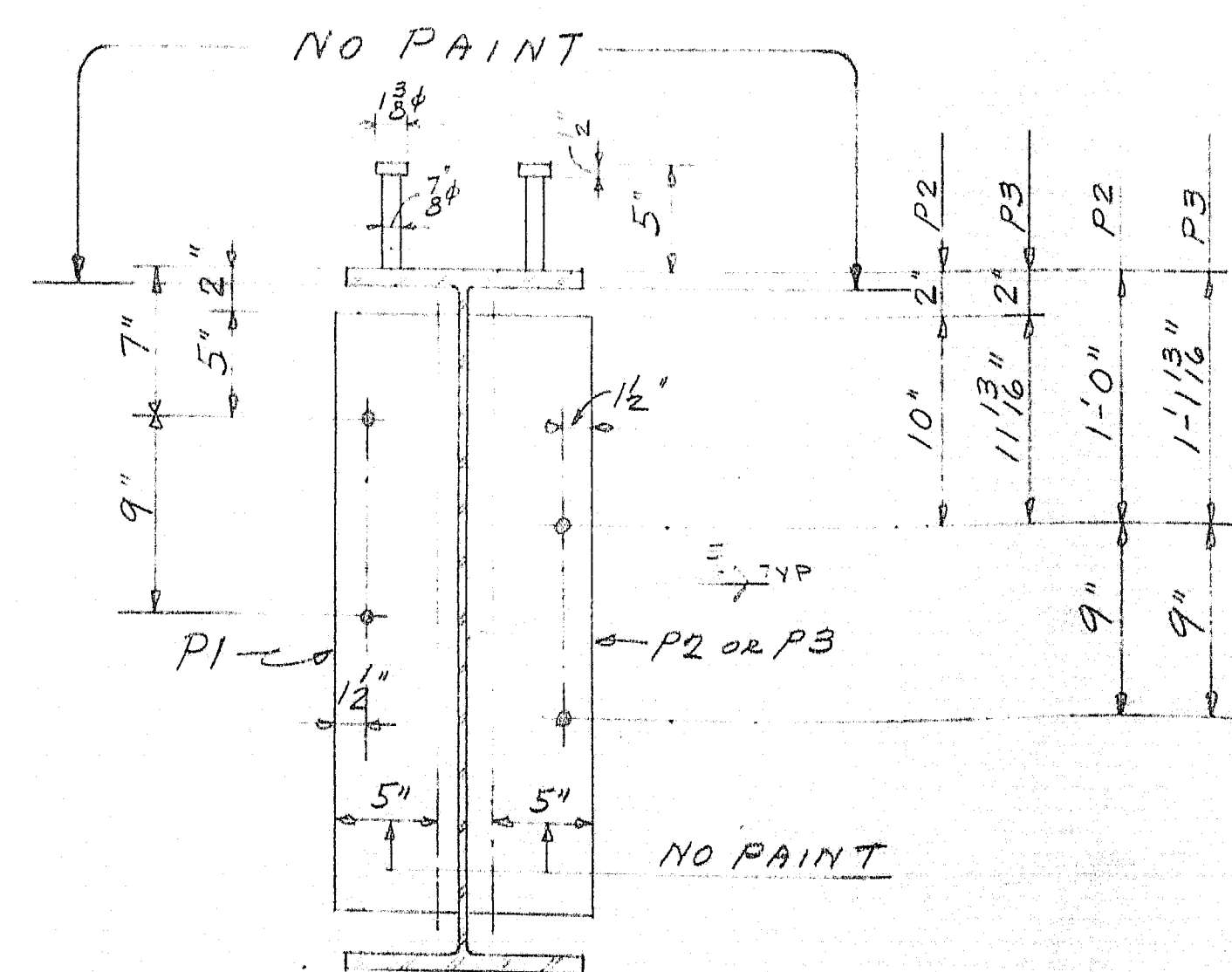
DIAPHRAM DETAILS

STRINGERS & COVER PLATES: A36
BAL. : A36 & A7
SHOP CONNECTIONS: WELD
FIELD CONNECTIONS: WELD
HOLES: AS NOTED
PAINT: STATE SPECS.

APPROVED AS NOTED 7-25-62

PRINT ISSUE		Rancroft & Martin Rolling Mills Company	
		Brewer, Maine	
		POND ROAD BRIDGE	
		HERMON MAINE	
		CUSTOMER CALLAHAN BROS.	
		DESIGNER STATE HIGHWAY DEPT.	
		ORDER VERBAL	
		DWG B62-133-E1	





SHOP CONNECTIONS: WELD
FIELD CONNECTIONS: WELD
HOLES: 1/6"
PAINT: STATE SPECS

4-20-62 7-25-62					
STRINGERS					
PRINT ISSUE			Bancroft & Martin Rolling Mills Company Brewer, Maine		
			POND ROAD BRIDGE		
\$ COST.	8-2-62		HERMON MAINE		
+ + GP.	8-2-62				
G. F.W.G.	7-21-62		CUSTOMER CALLAHAN BROS.		
DRAWN	7-14-62 E.M.		DESIGNER STATE HIGHWAY DEPT.		
REVISION					
REVISION					
REVISION					
			ORDER VERBAL DWG. B62-133-SA		

86-33 F

