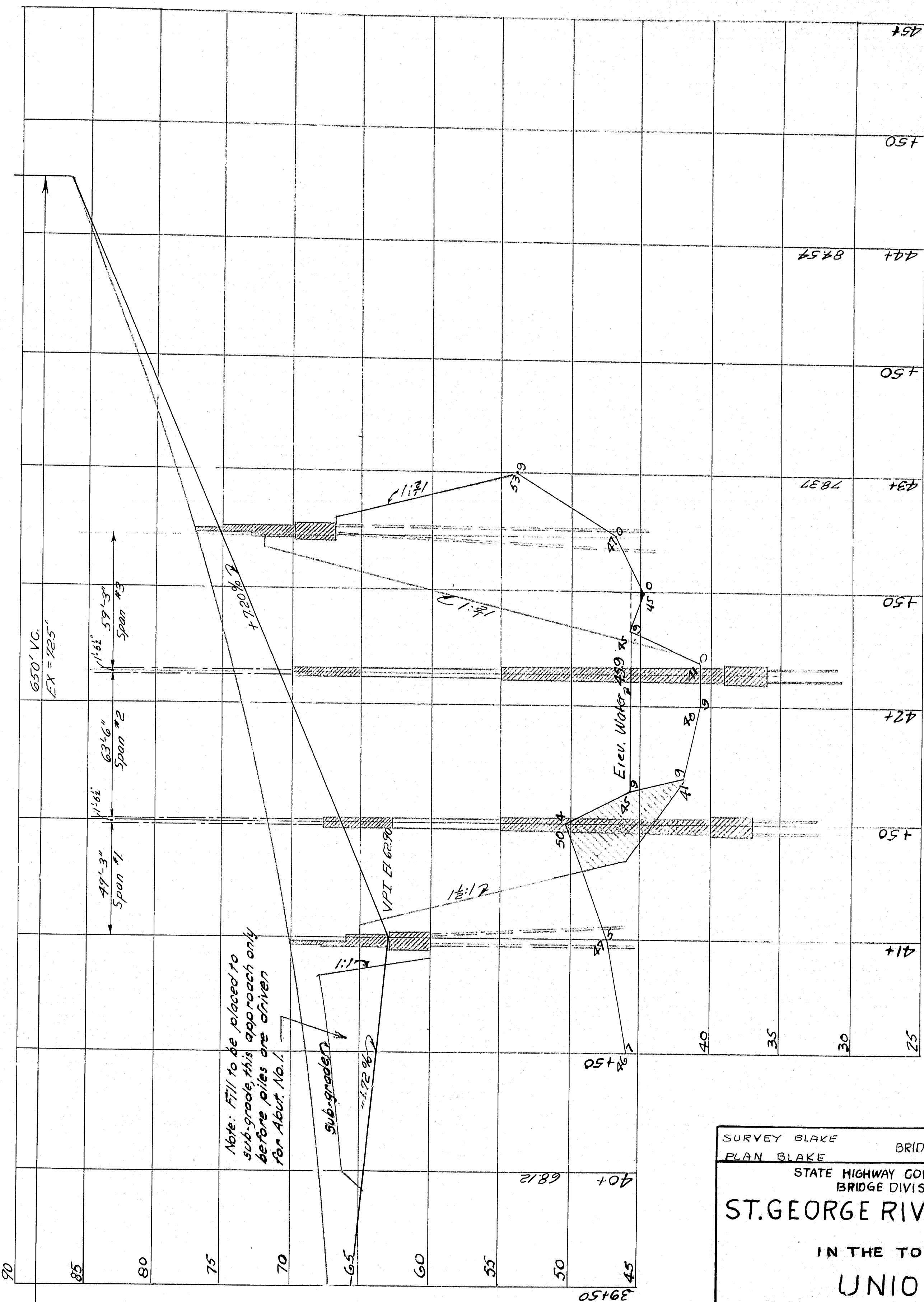
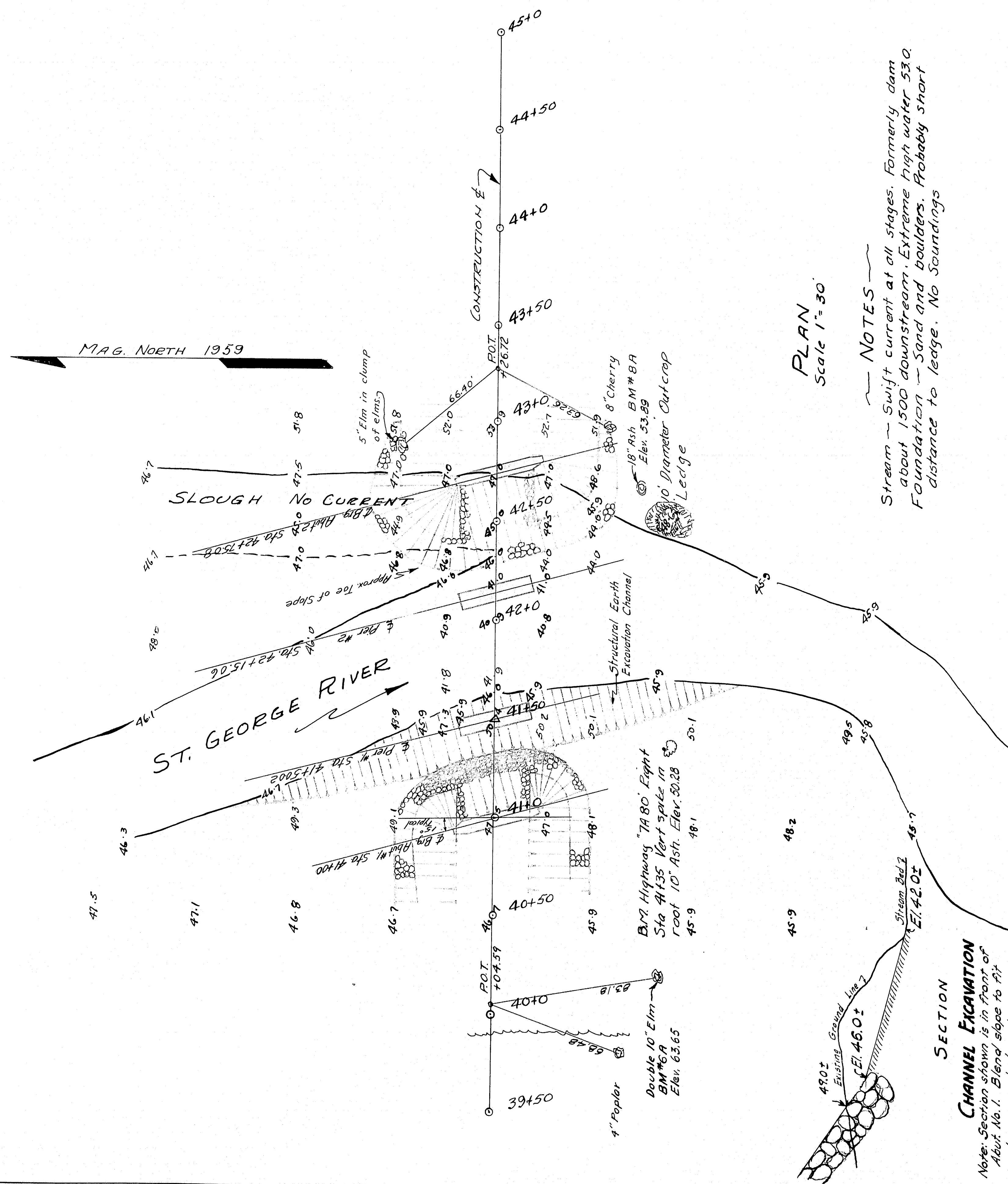




SURVEY BLAKE
PLAN BLAKE

BRIDGE NO.

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

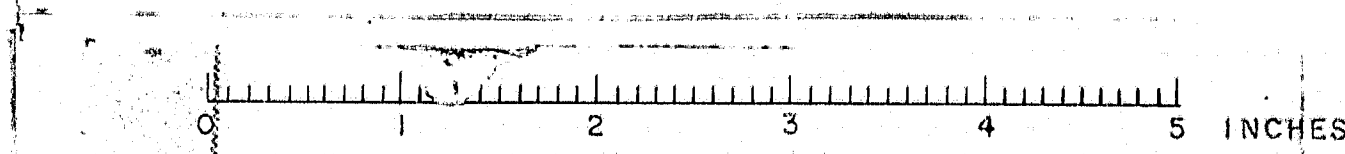
ST. GEORGE RIVER BRIDGE

IN THE TOWN OF
UNION

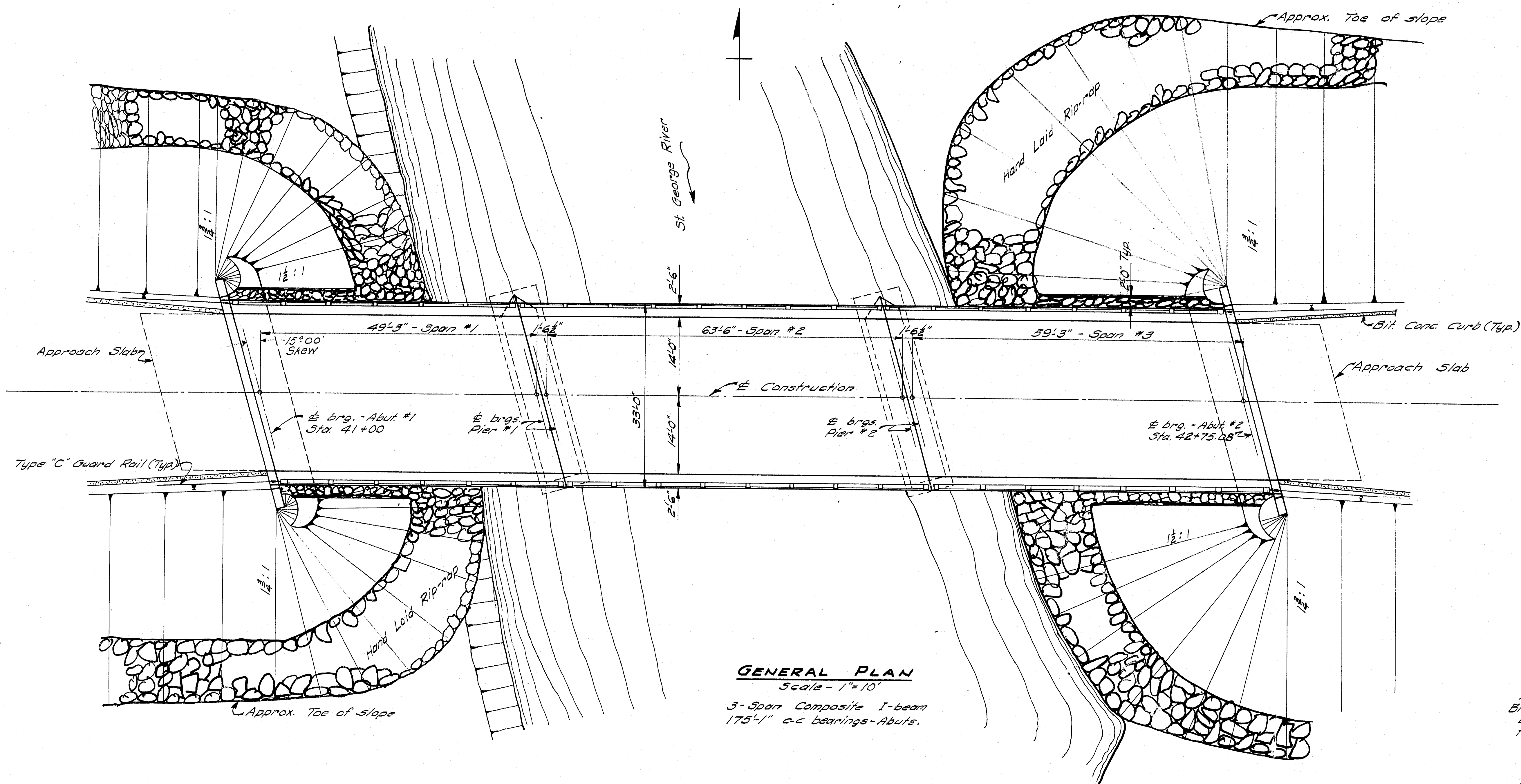
KNOX COUNTY
SURVEY PLAN

SHEET 1 OF 12 AUGUSTA, MAINE FEB 1959

M-1232



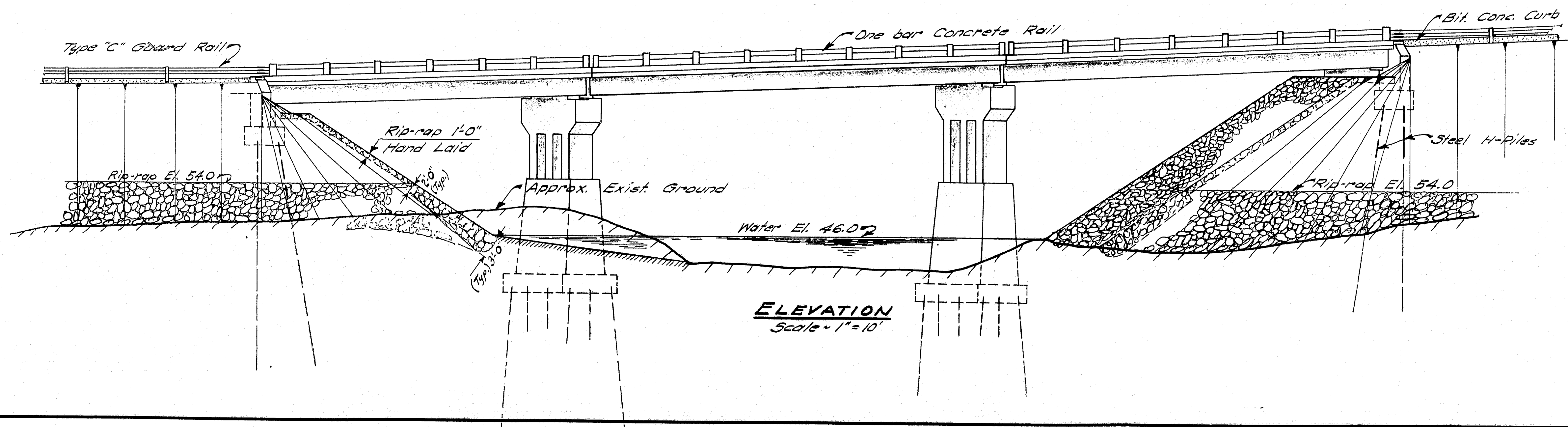
B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	S-0205(11)	8	66



DESIGN SPECIFICATIONS
A.A.S.H.O. Standard Specifications for Highway
Bridges 1957. (Including 1958 Supplement)
Loading: H20-S16-44
fs = 18,000 psi ft = 1200 psi n = 10

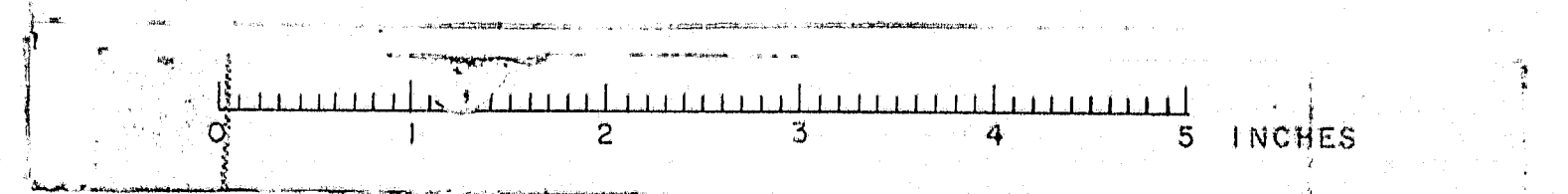
CONTRACT SPECIFICATIONS
State of Maine, State Highway Commission
Standard Specifications, Highways & Bridges
Revision of January 1956.

CONCRETE CLASSIFICATION
Superstructure, Abutments, App. Slabs,
& Piers above Elev. 55.00 ----- Class A
Piers below Elev. 55.00 ----- Class B
Rail ----- Class Y

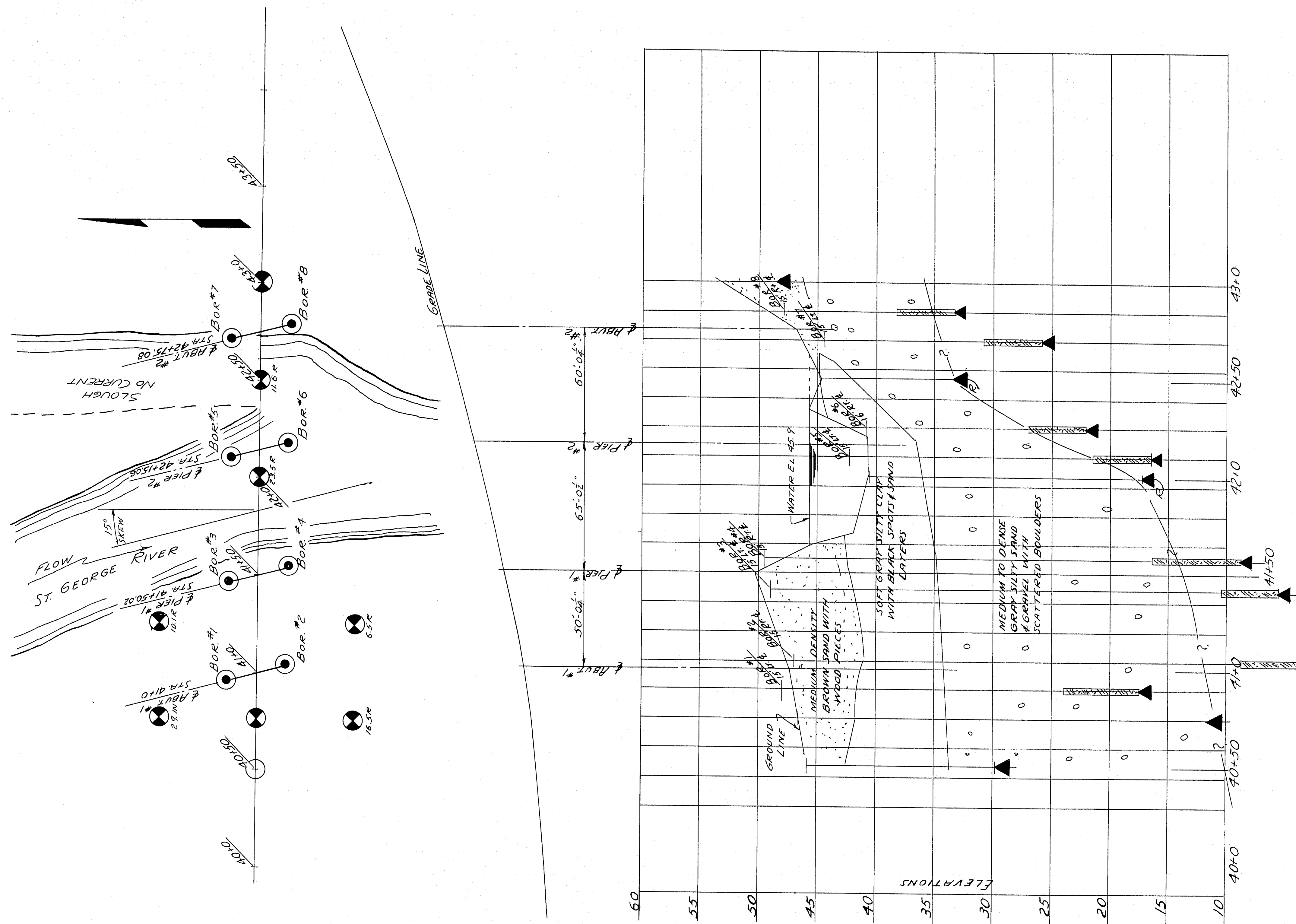


DESIGN - PLAN - A.H.R. TRACE - G.W.C. CHECK - B.H.R.	BRIDGE NO. SURVEY - PLOT -
STATE HIGHWAY COMMISSION BRIDGE DIVISION	
ST. GEORGE RIVER BRIDGE	
IN THE TOWN OF UNION	
KNOX COUNTY	
GENERAL PLAN & ELEVATION	
SHEET 2 OF 12 AUGUSTA, MAINE AUG. 1959	

M-1233

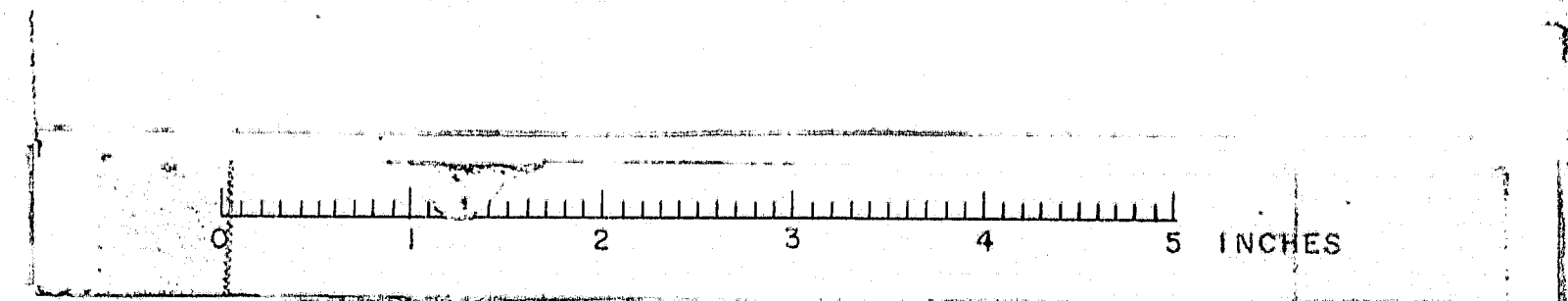


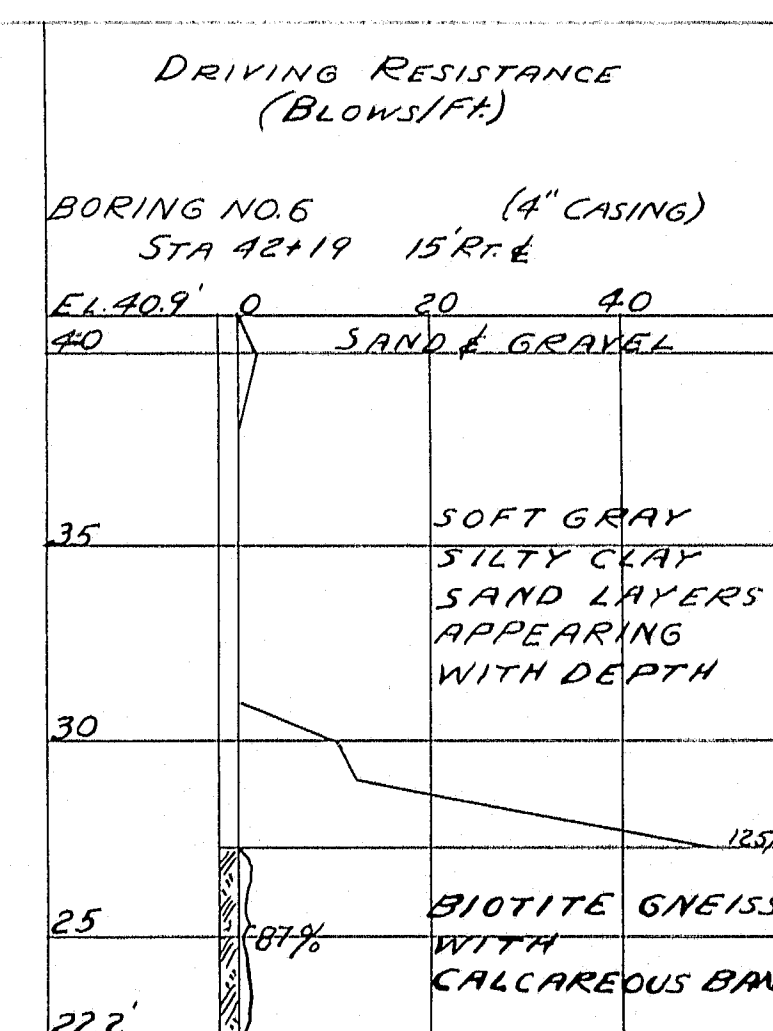
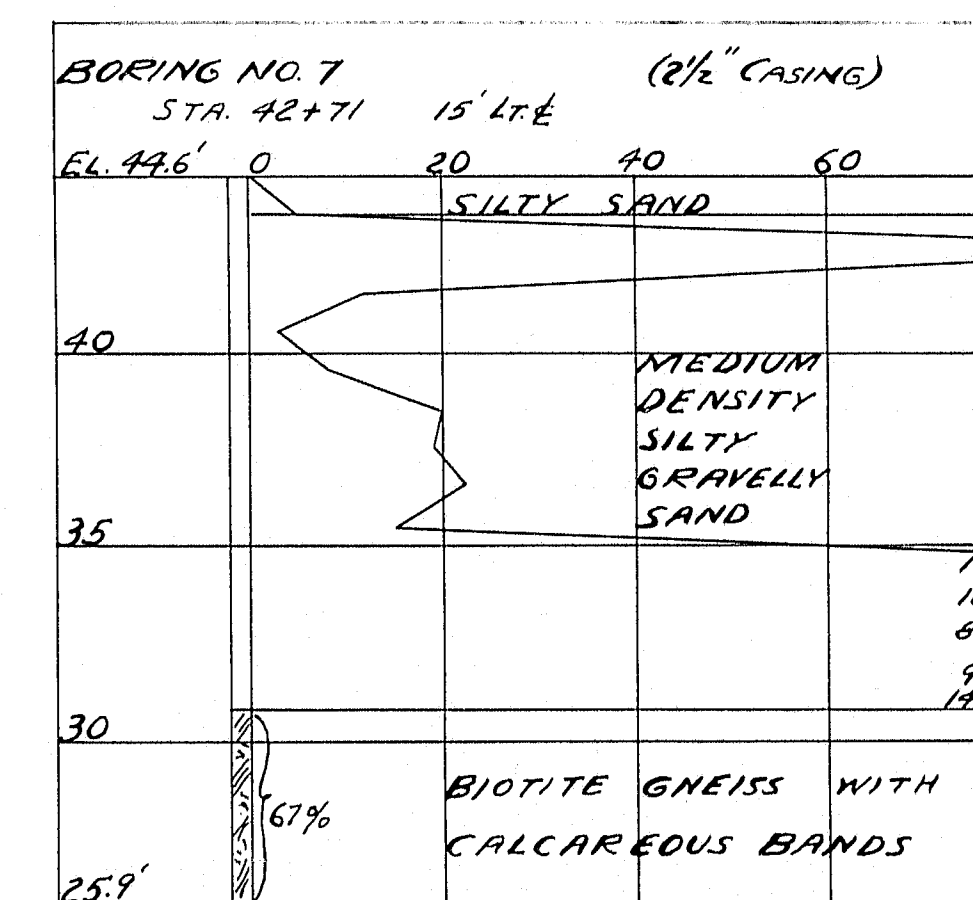
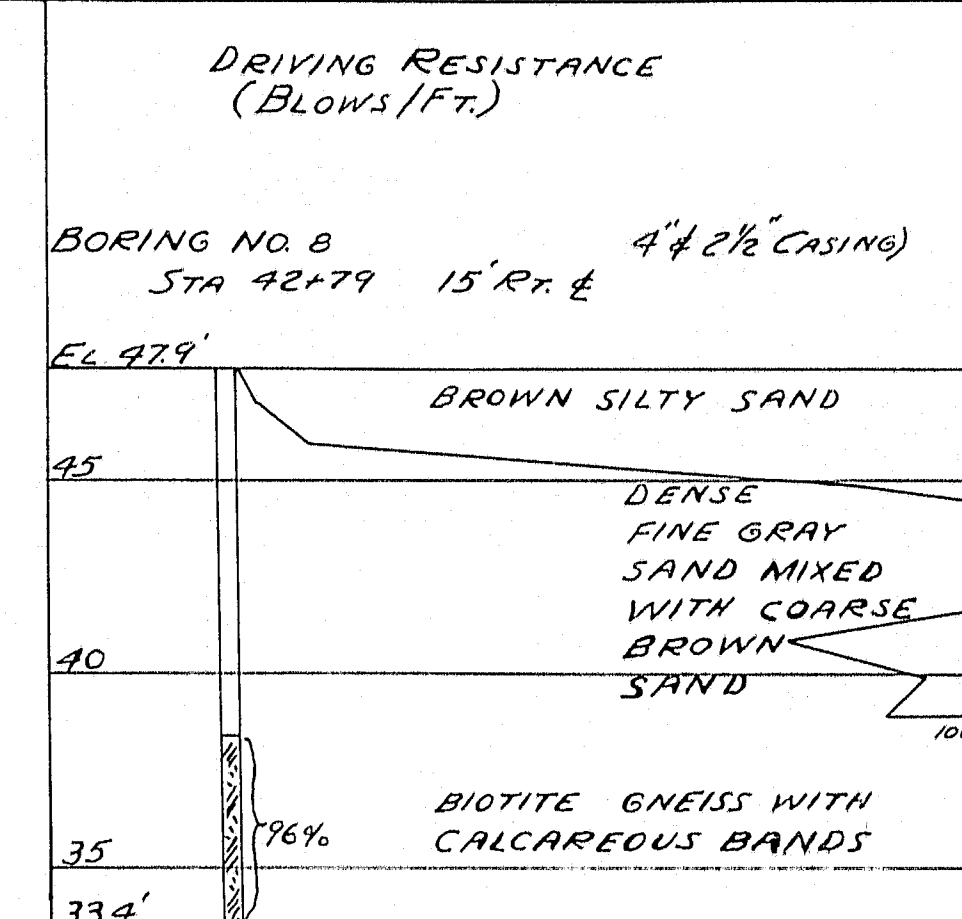
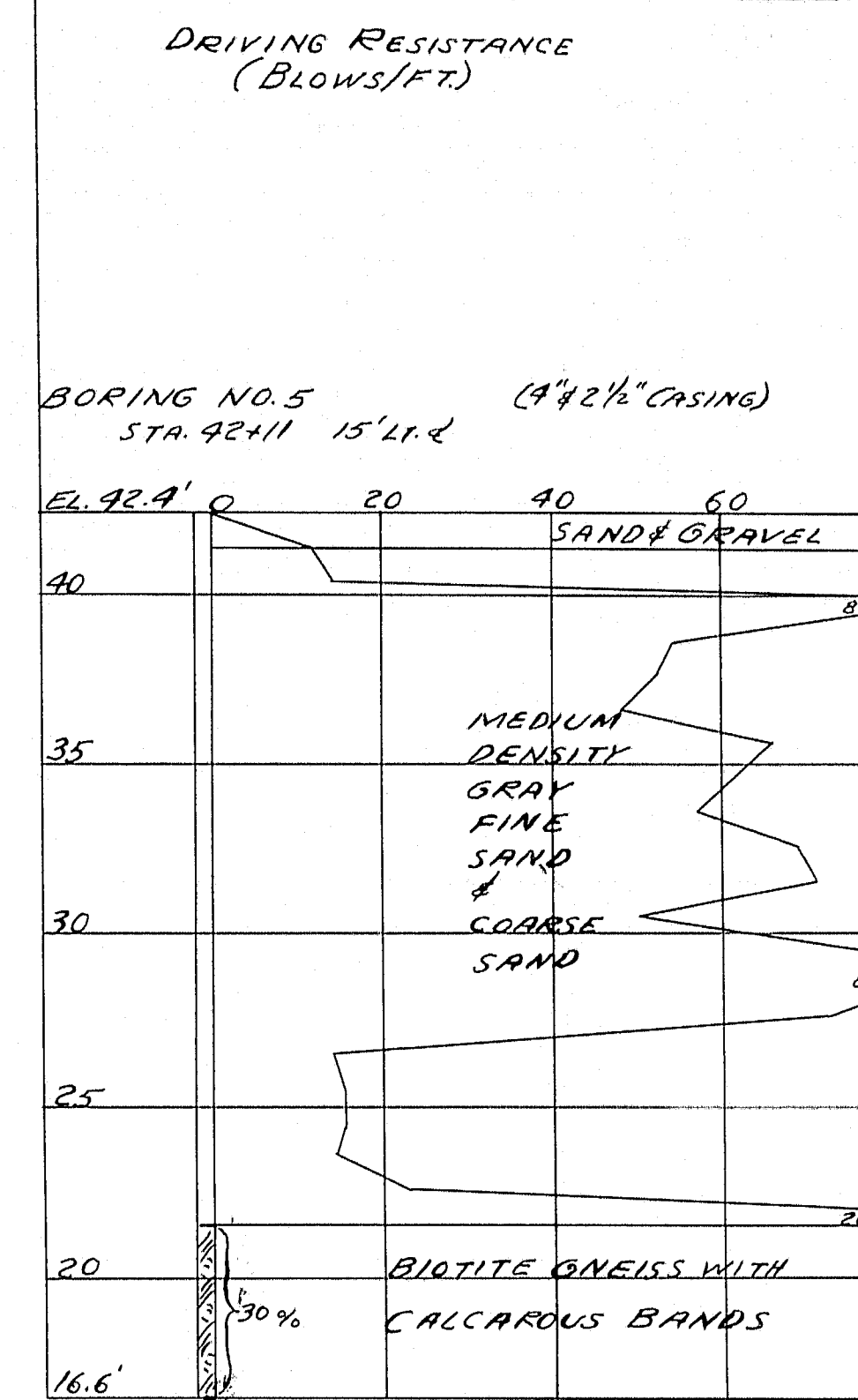
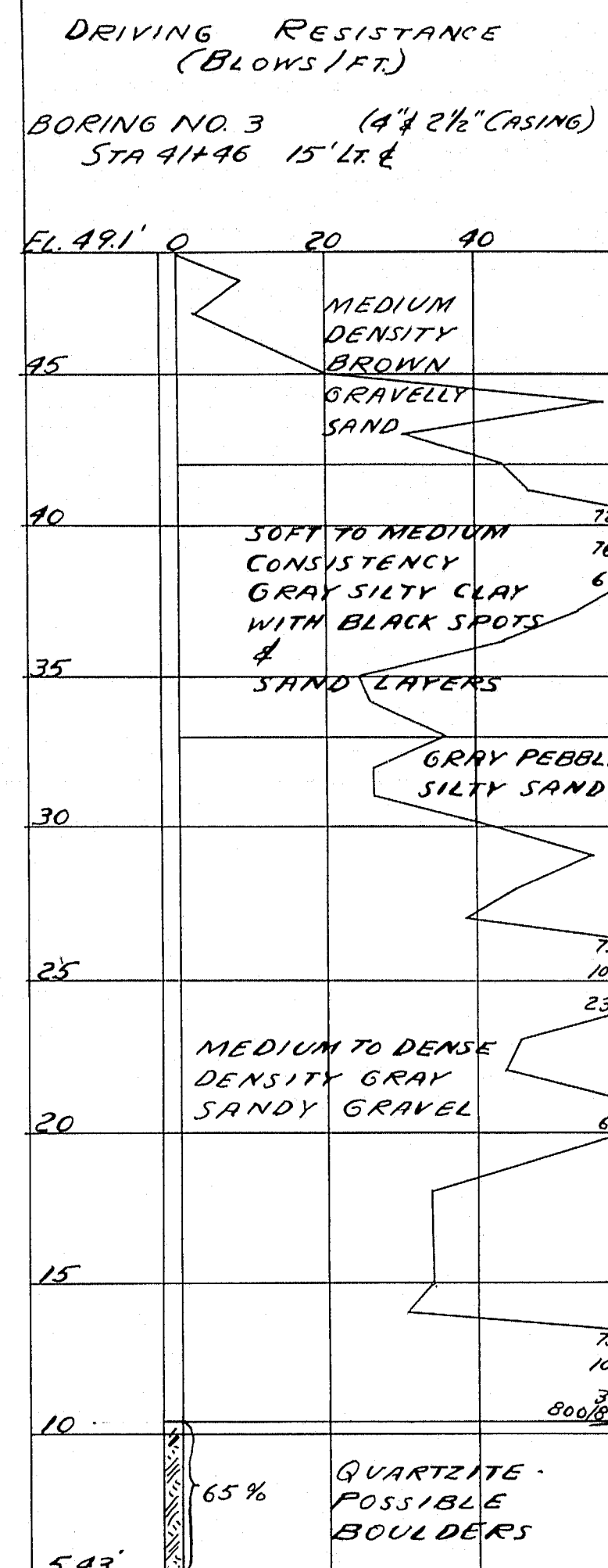
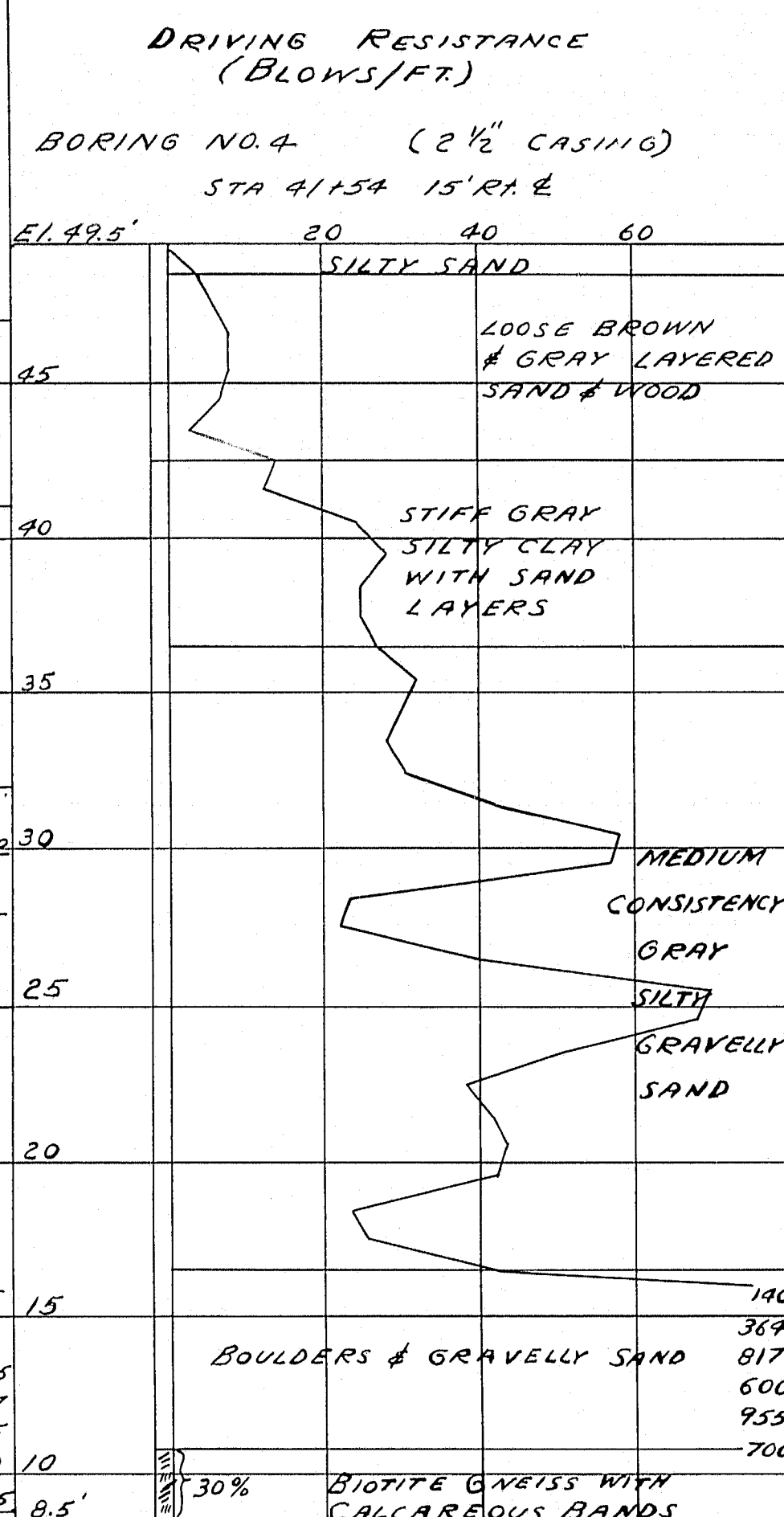
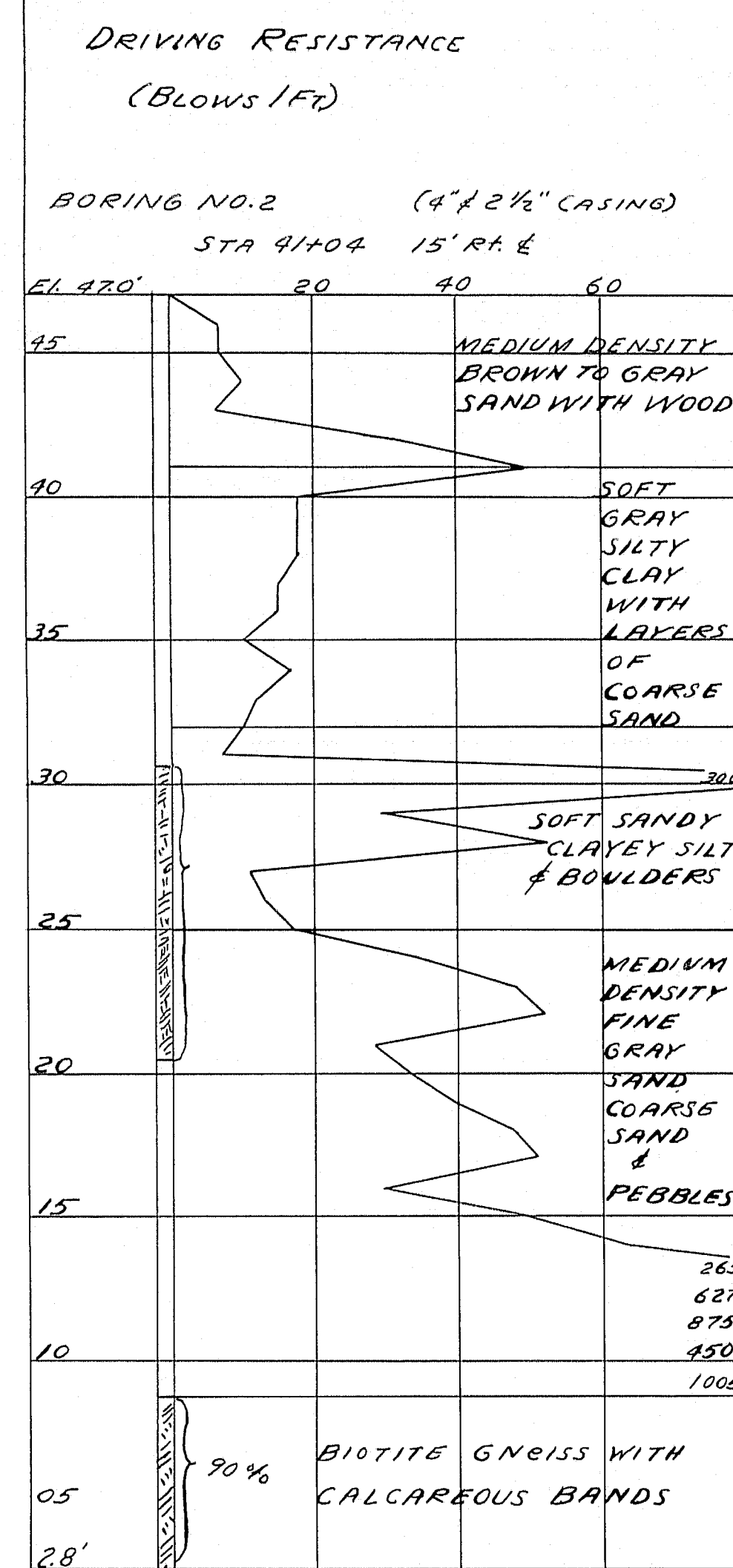
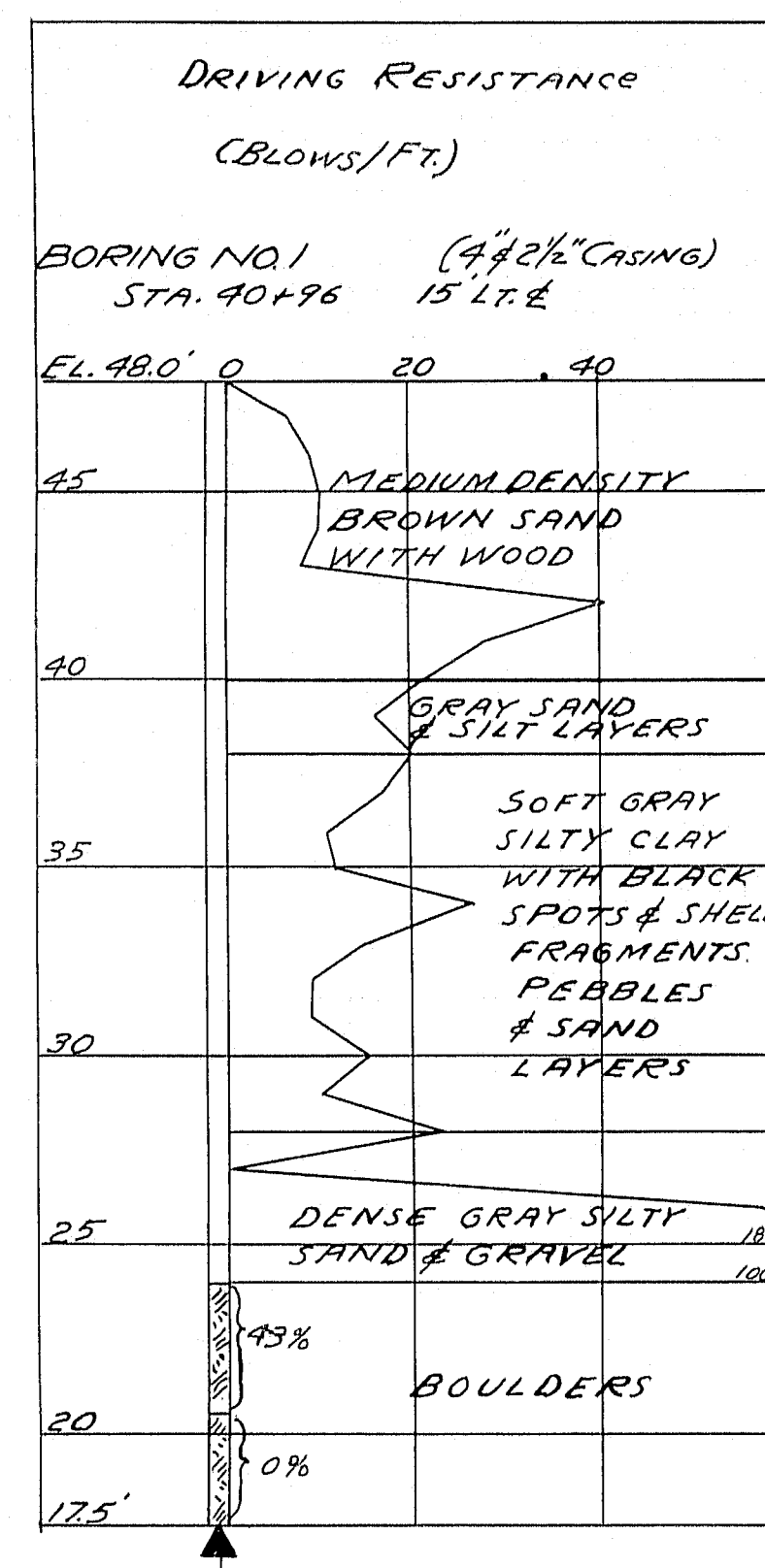
B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	5-0205 (11)	9	66



DESIGN - SOILS LAB TRACE - V. SMITH CHECK - J. H. H.	BRIDGE NO. SURVEY - PLOT -
STATE HIGHWAY COMMISSION BRIDGE DIVISION	
ST. GEORGE RIVER BRIDGE	
IN THE TOWN OF	
UNION	
KNOX COUNTY	
SOILS PROFILE	
SHEET 3 OF 12	AUGUSTA, MAINE OCT. 1959

M-1234





BORING NOTES

Number of blows of 275# hammer falling 18 inches required to drive extra-heavy casing one foot thus:

Bottom of boring indicated thus:

Refusal of drill rods or casing indicated thus:

Percent recovery of rock core by diamond bit thus:

40

U

U

71%

DESIGN - S. O. L. LAB. DET. SMITH
TRACE - V. SMITH
CHECK - S. M.

BRIDGE NO.
SURVEY -
PLOT -

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

ST. GEORGE RIVER BRIDGE

IN THE TOWN OF

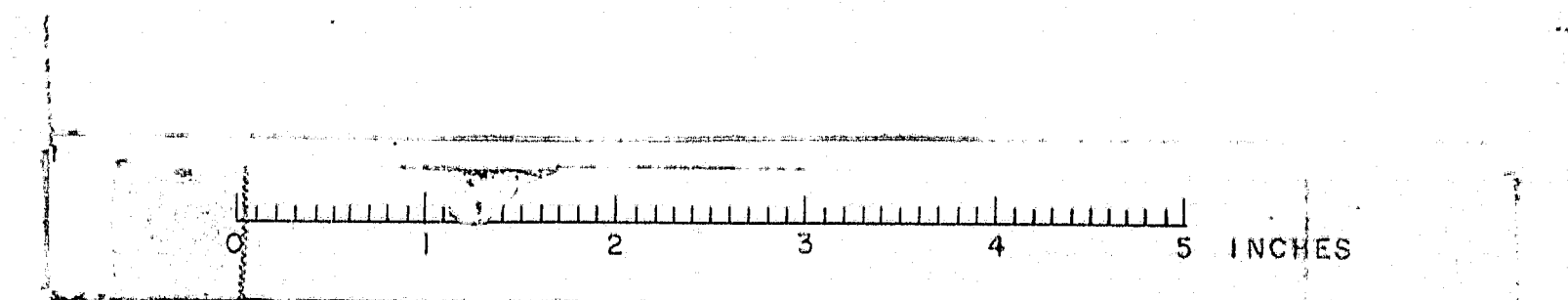
UNION

KNOX COUNTY

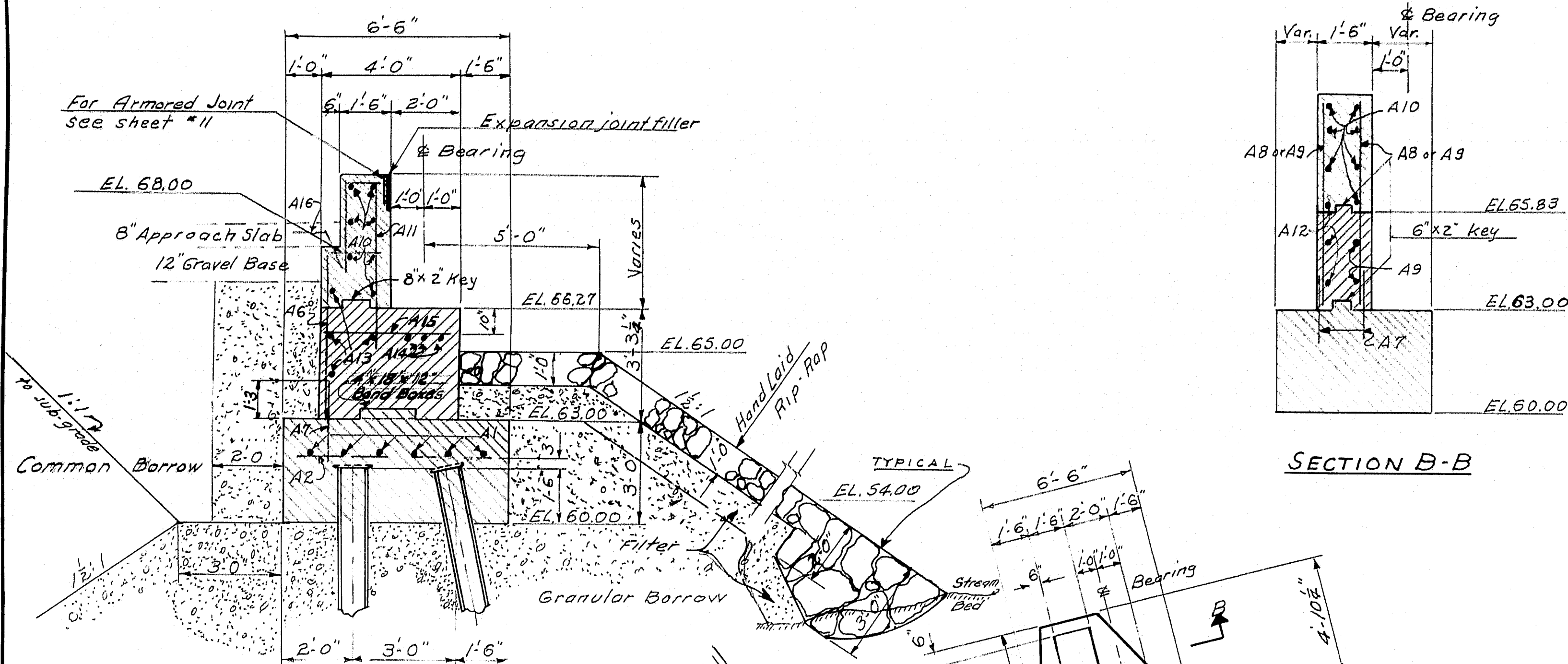
BORINGS

SHEET 4 OF 12 AUGUSTA, MAINE OCT. 1959

M-1235

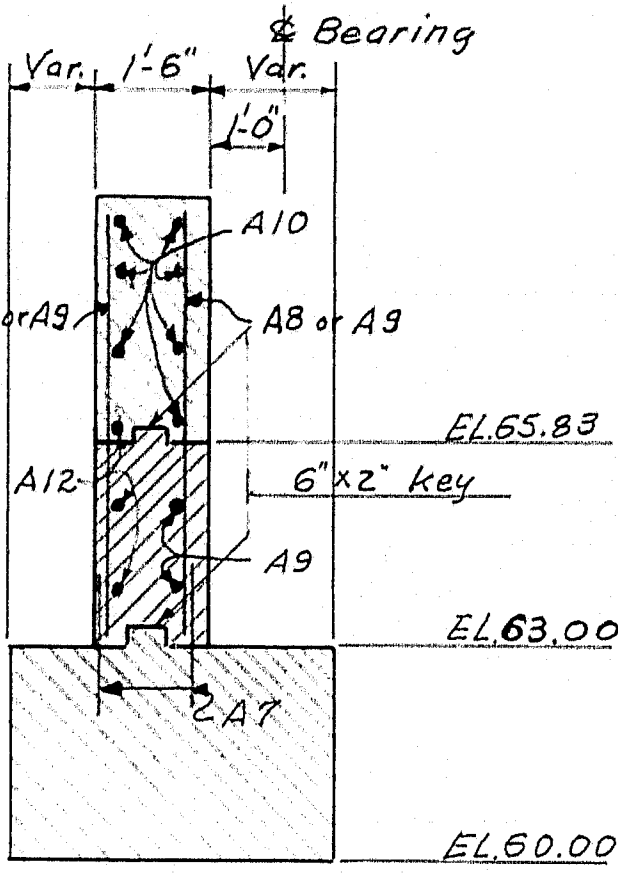
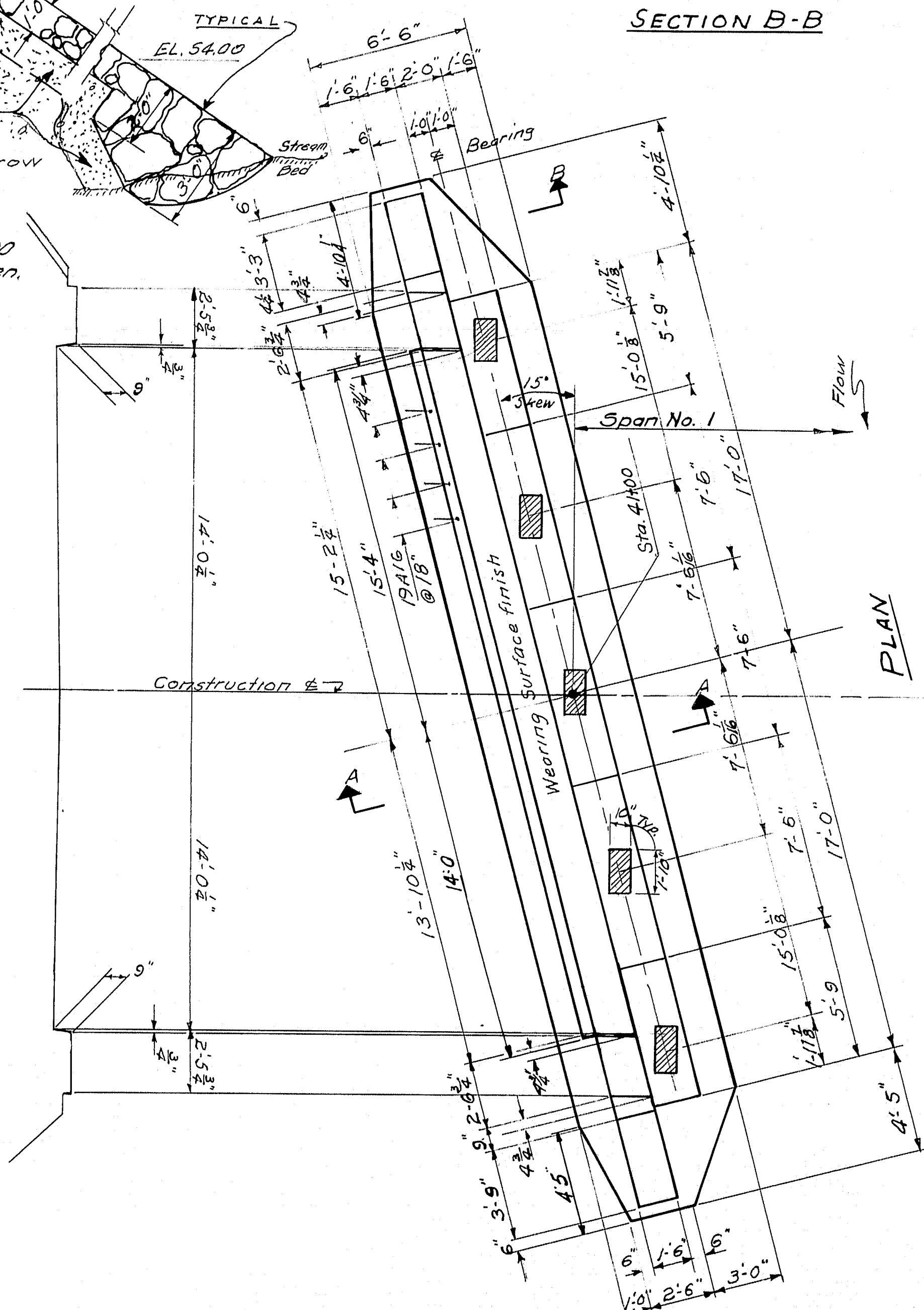
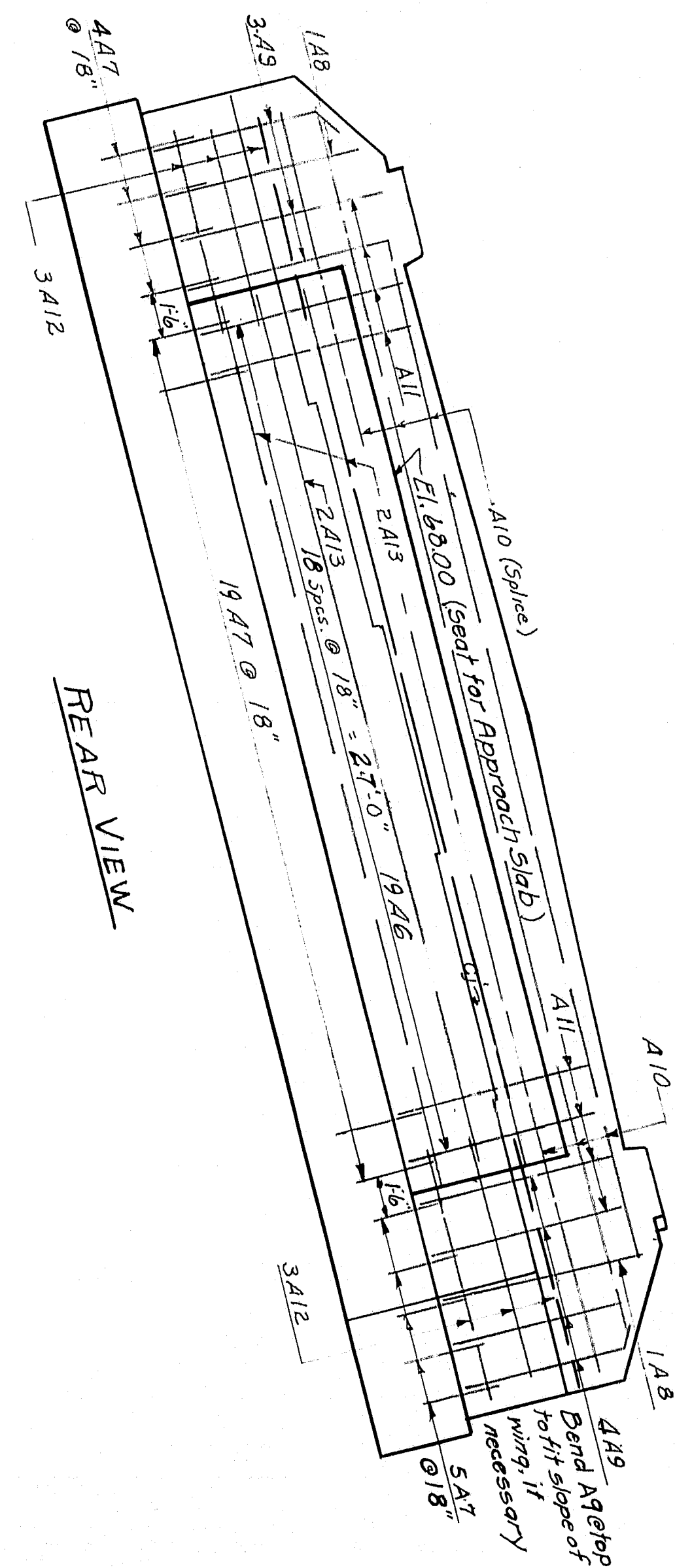


B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	S-0205(II)	11	66

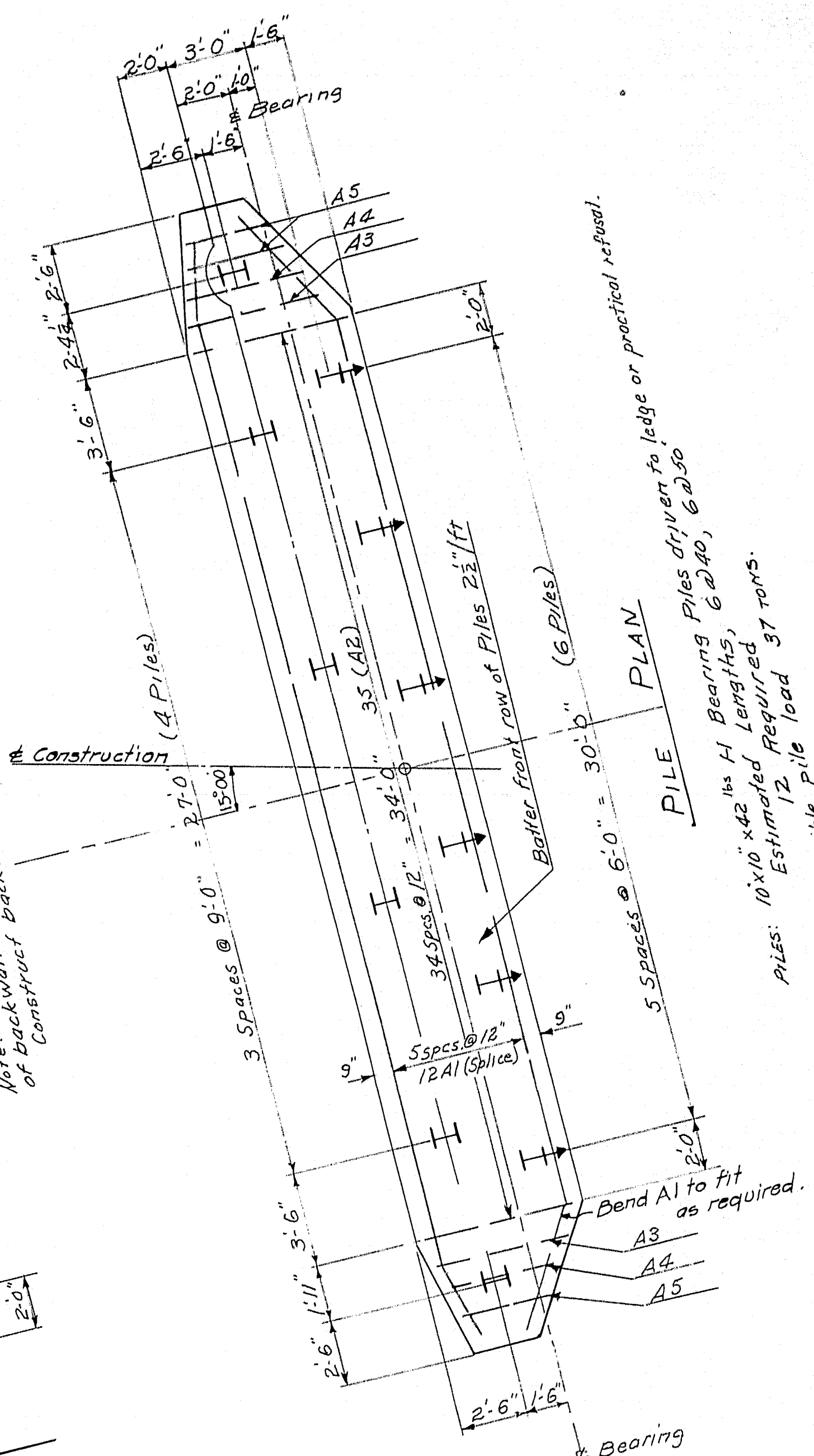
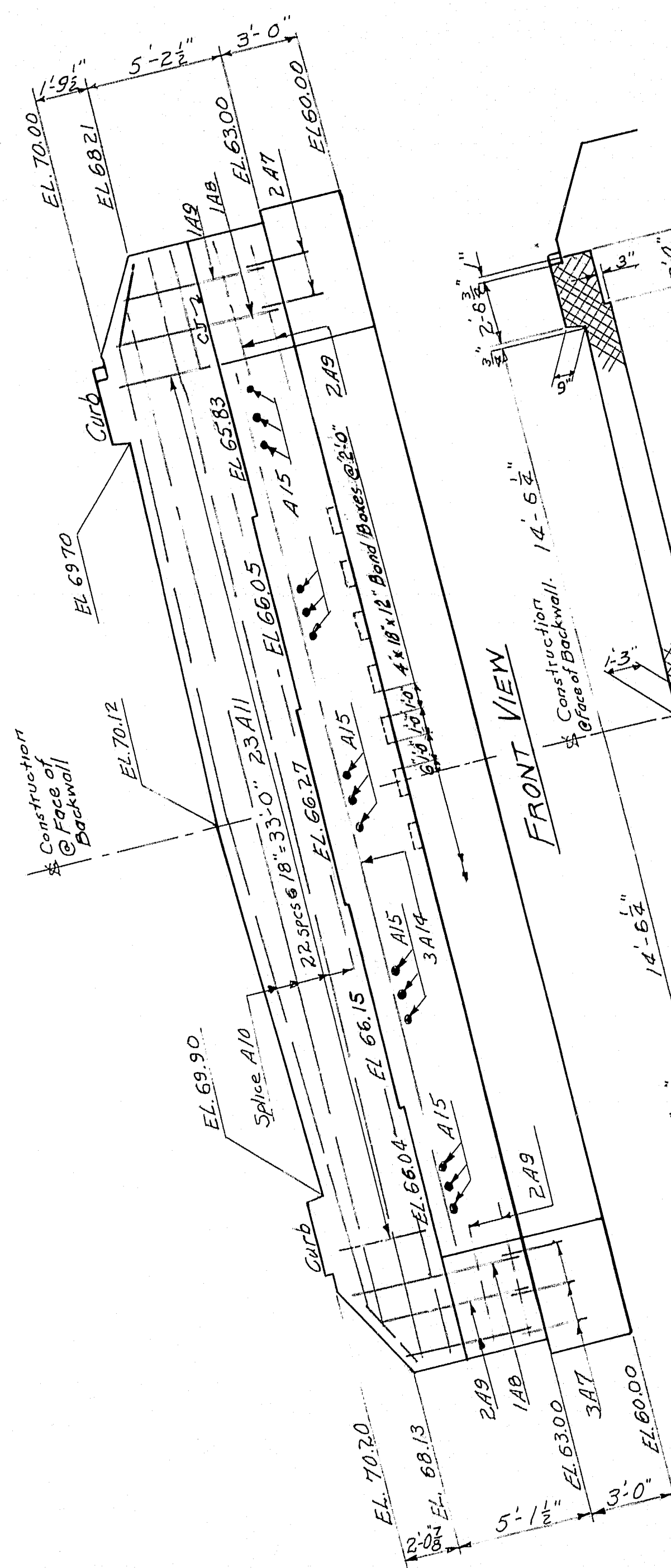


Note: Fill to be placed to sub-grade from Sta 40+00 to 1:1 slope line at Abut. No. 1, as indicated before piles are driven.

SECTION A-A



SECTION B-B

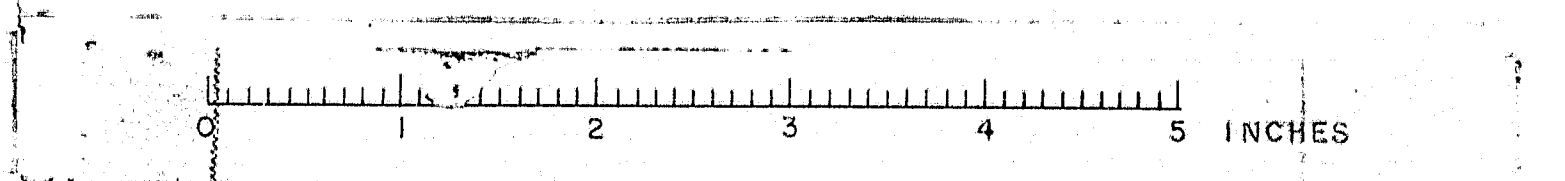


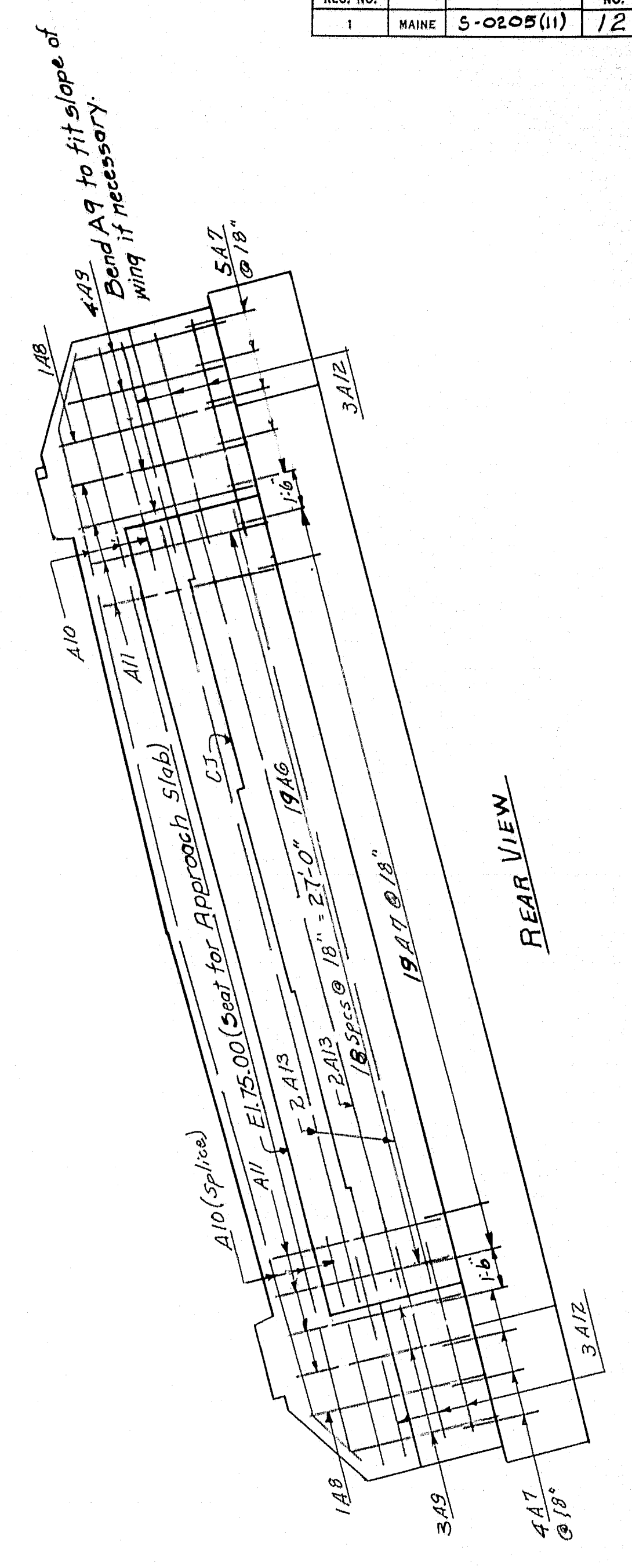
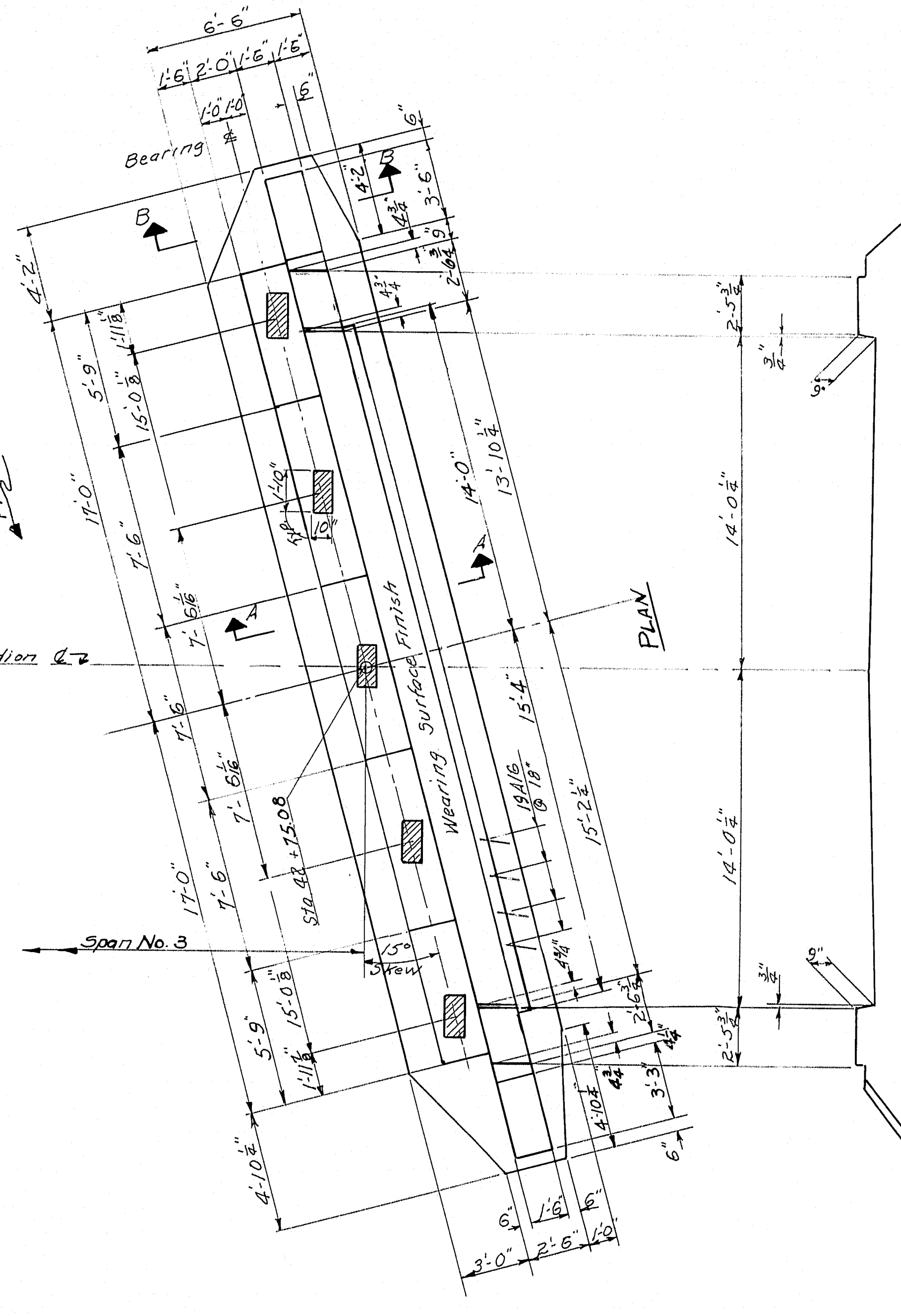
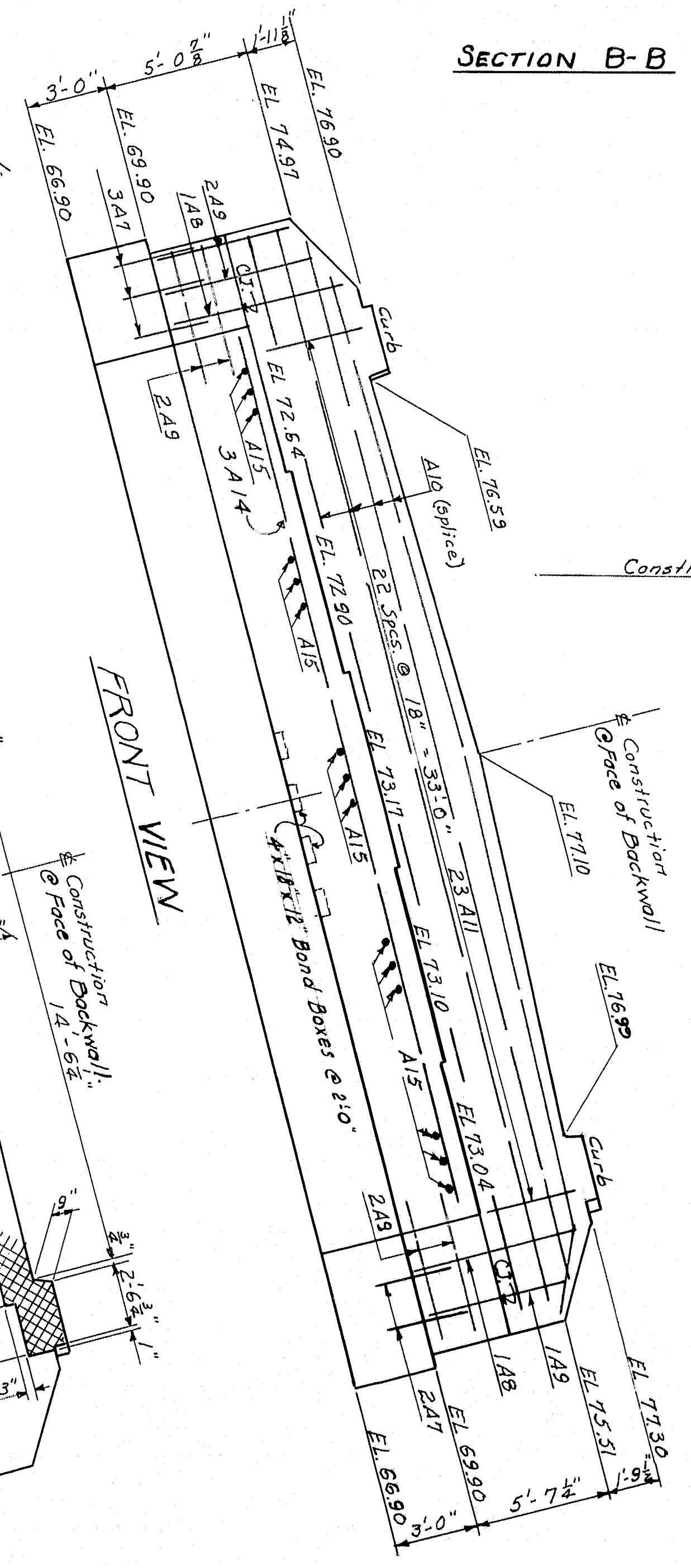
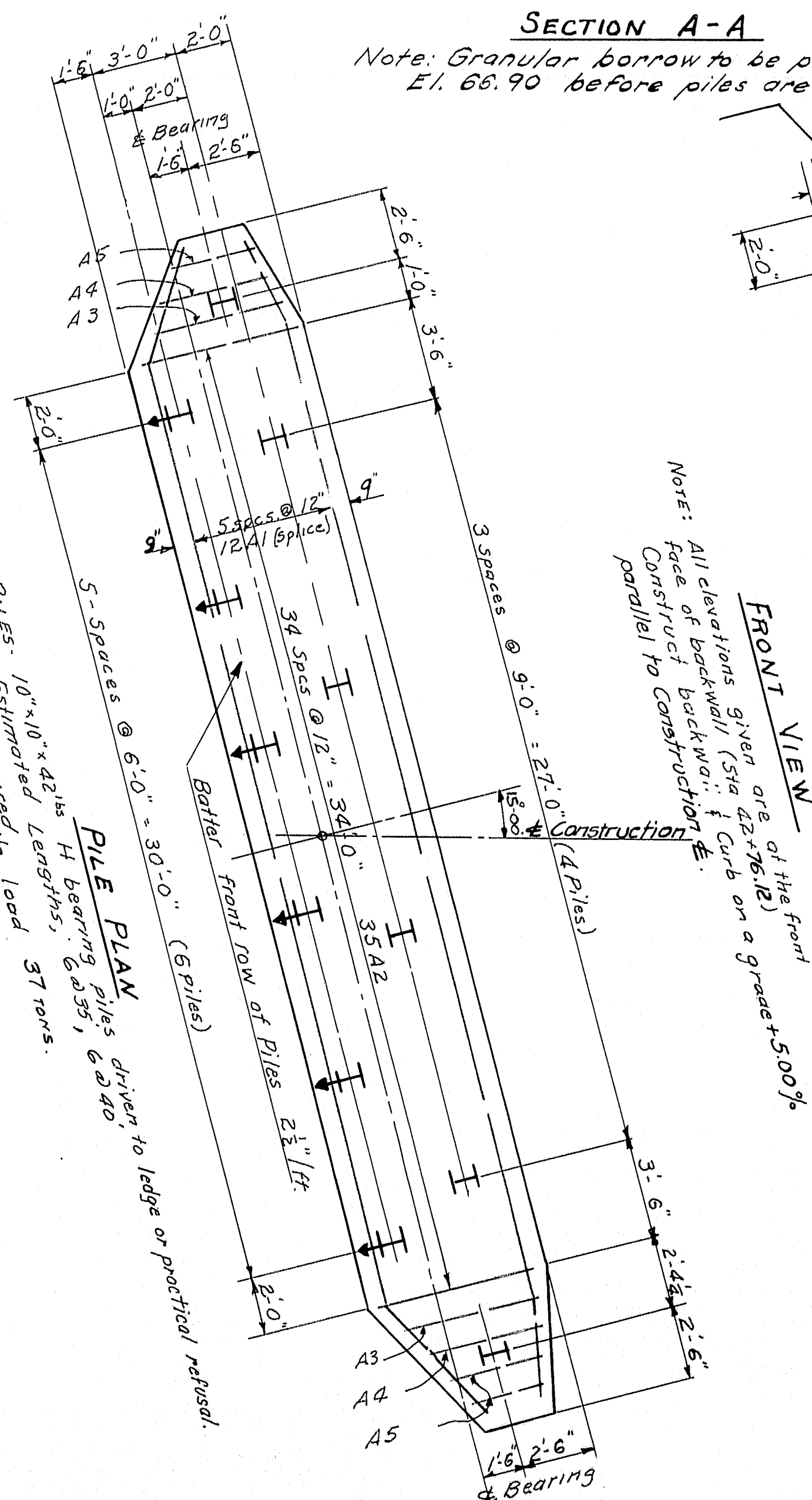
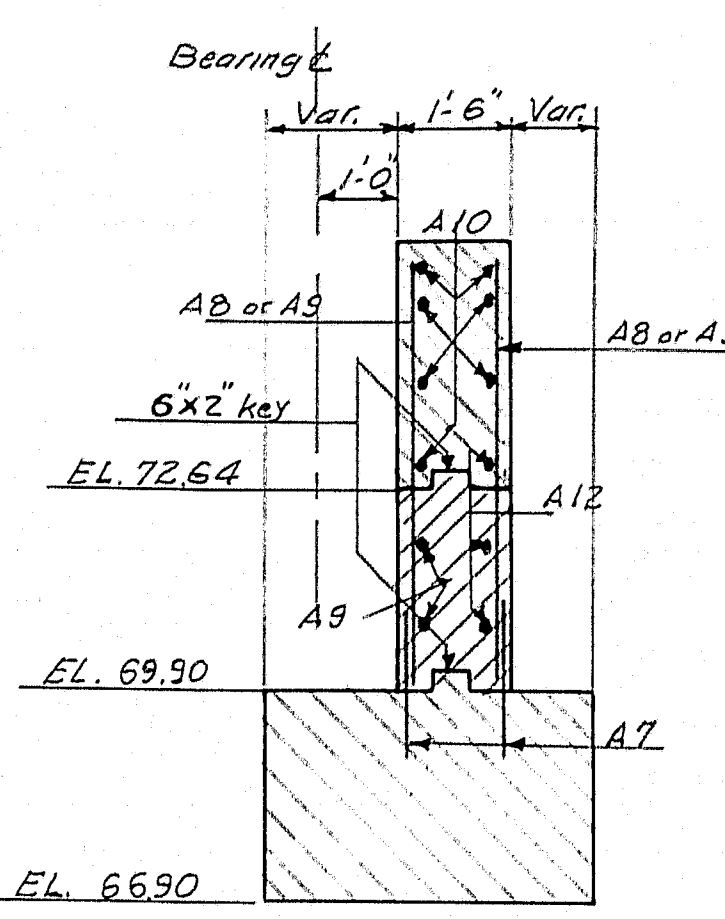
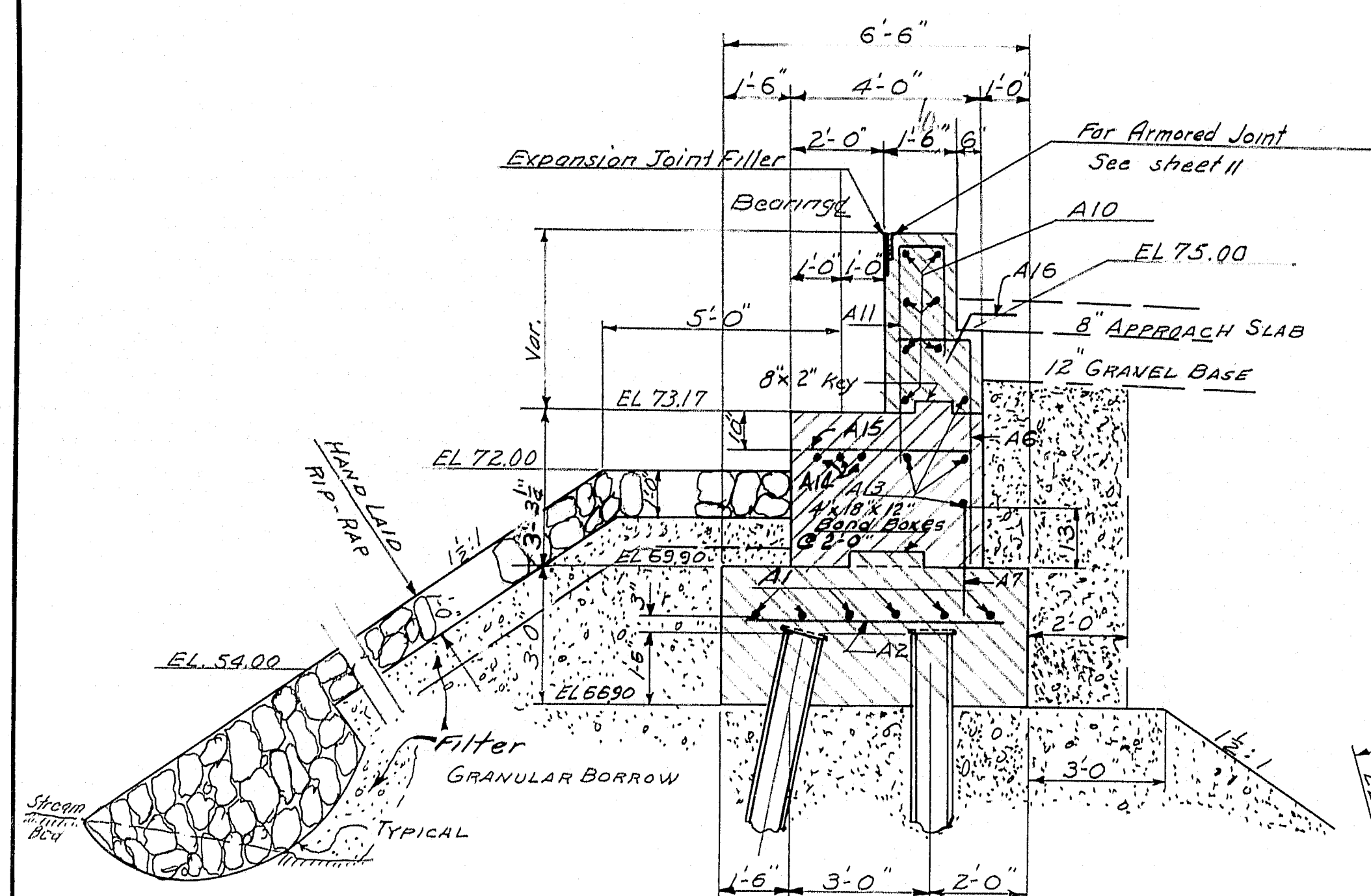
NOTES:
Dress shaded bearing areas to exact dimensions and elevations shown.
Place reinforcement in bridge seat so as to clear anchor bolts.
Minimum cover for reinforcement to be 3" except as otherwise shown.
Chamfer all exposed edges of concrete $\frac{1}{4}$ ".

See Sh. # 7 for pile cap details.

DESIGN - T. H. K. TRACE - G. E. A. CHECK -	BRIDGE NO. SURVEY - PLOT -
STATE HIGHWAY COMMISSION BRIDGE DIVISION	
ST. GEORGE RIVER BRIDGE	
IN THE TOWN OF UNION	
KNOX COUNTY	
ABUTMENT NO. 1	
SHEET 5 OF 12 AUGUSTA, MAINE AUG. 1959	

M-1236





For general notes see Abutment #1
See Sh. #7 for pile cap details.

DESIGN - T. H. K.
TRACE - G. E. A.
CHECK - H. J. K.

BRIDGE NO. 1
SURVEY - PLOT

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

ST. GEORGE RIVER BRIDGE

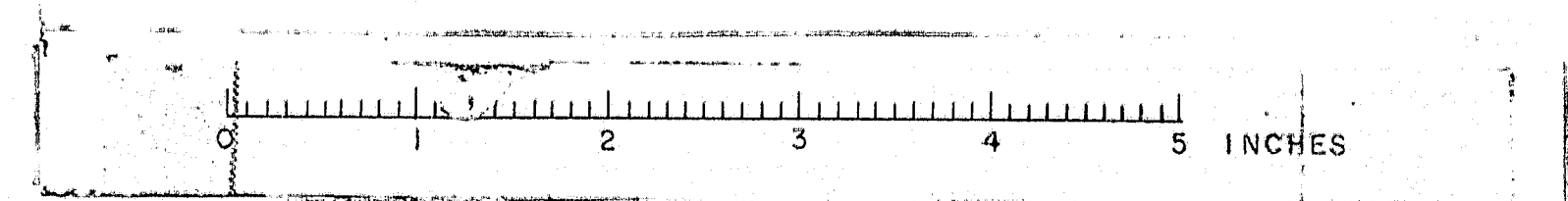
IN THE TOWN OF
UNION

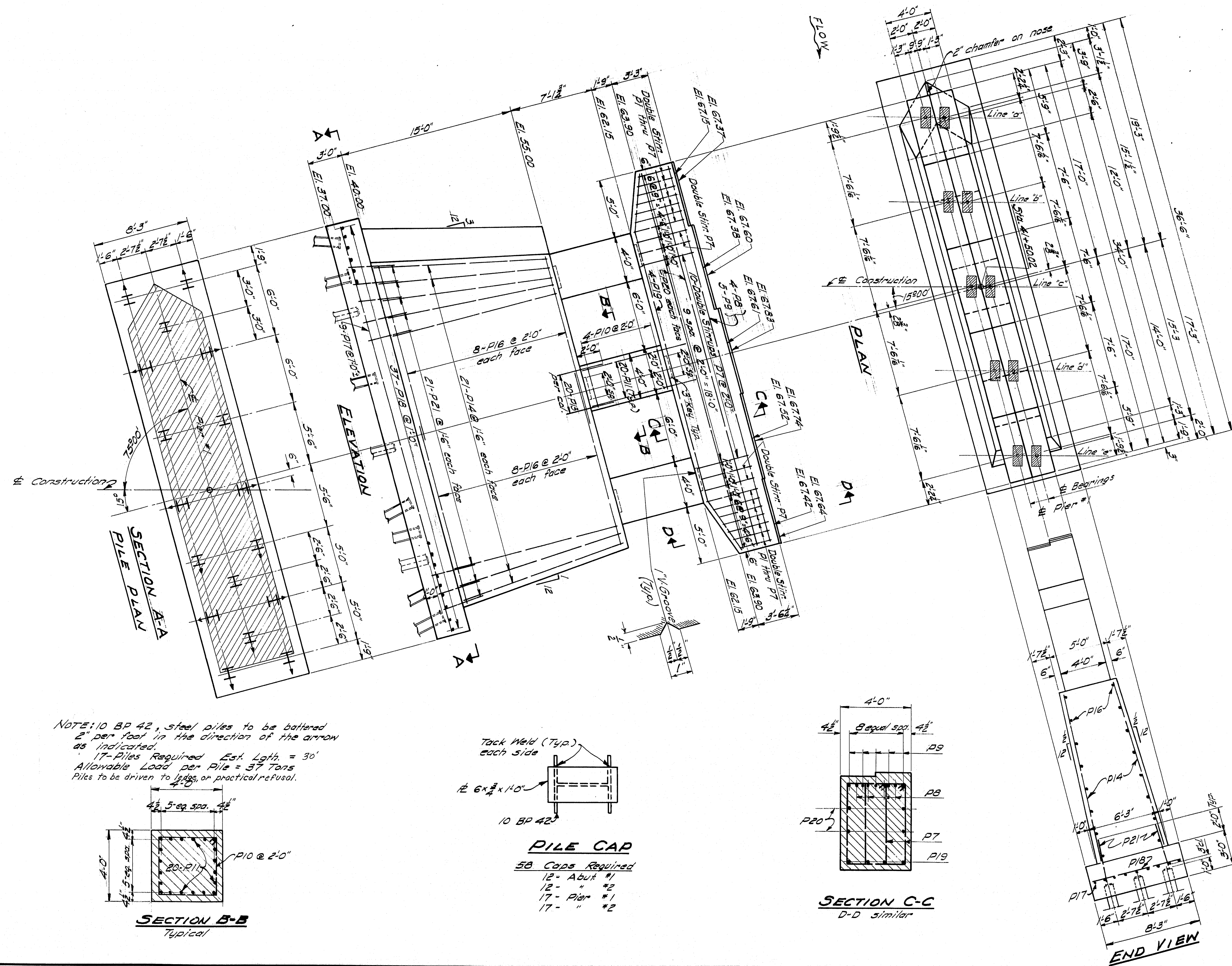
KNOX COUNTY

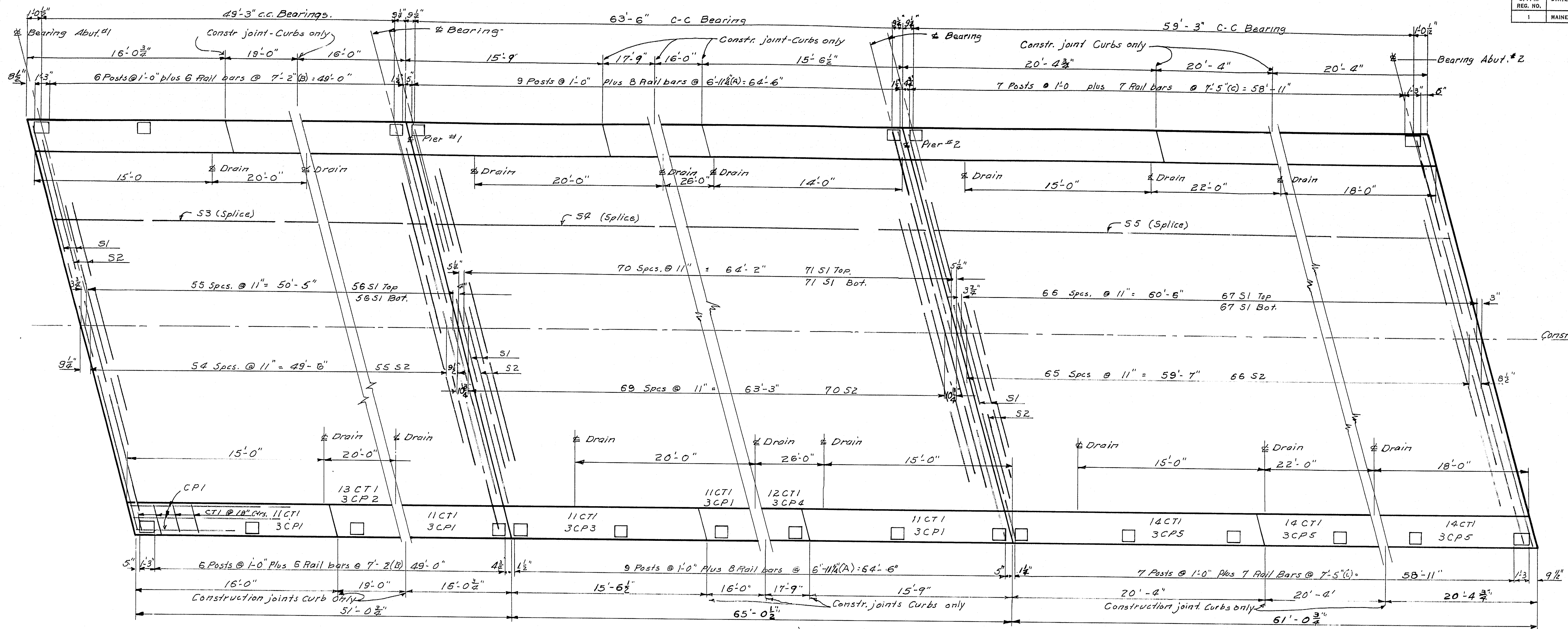
ABUTMENT NO. 2

SHEET 6 OF 12 AUGUSTA, MAINE AUG. 1959

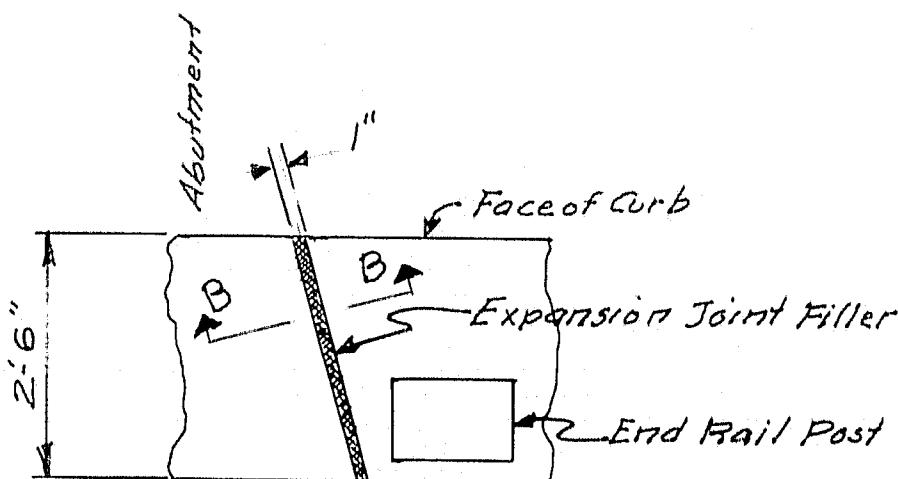
M-1237



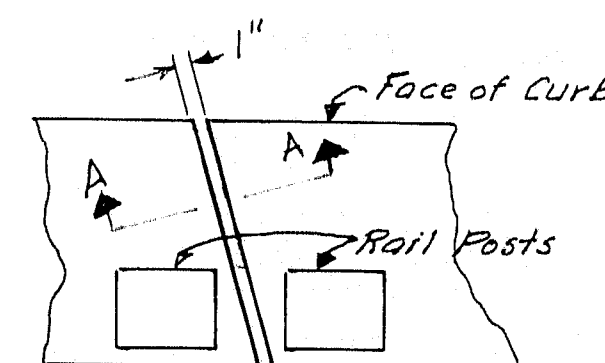




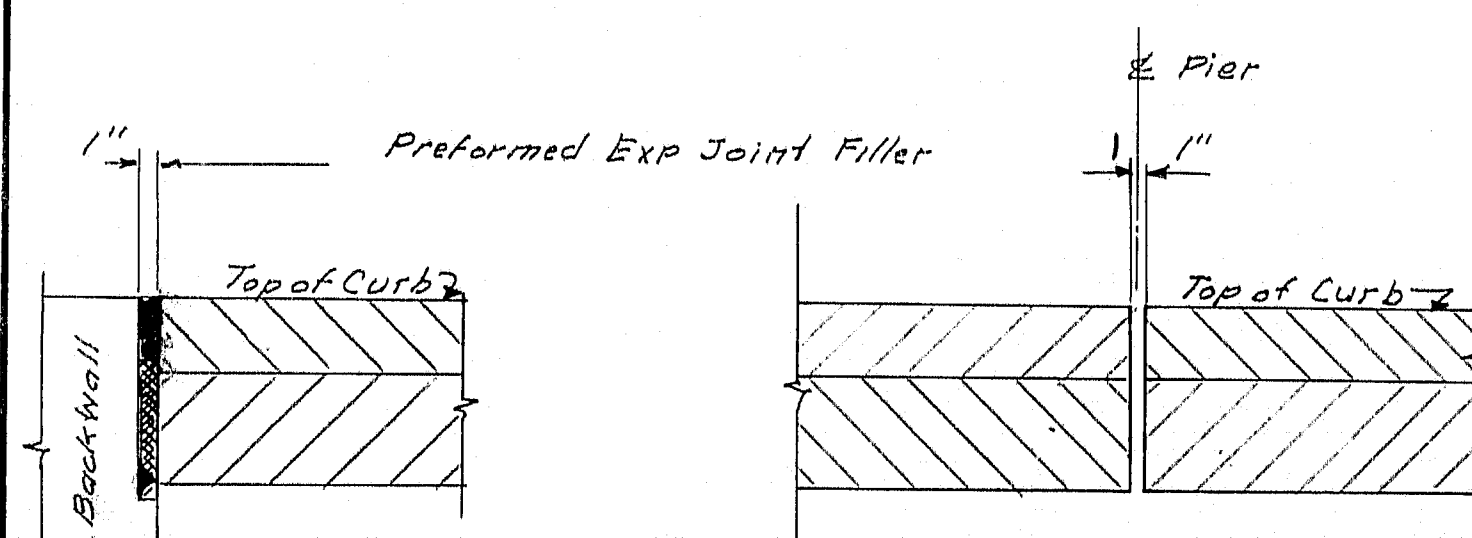
PLAN



TYPICAL
CURB JOINT
ABUTMENTS

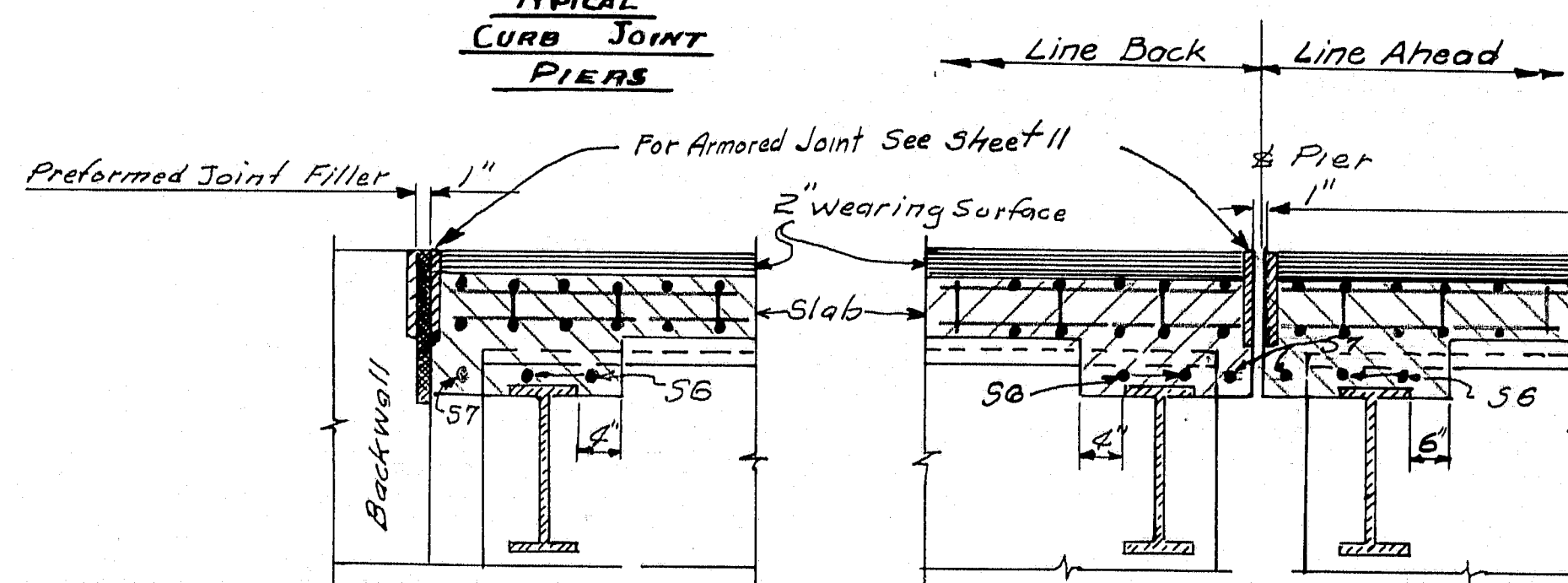


TYPICAL
CURB JOINT
PIERS



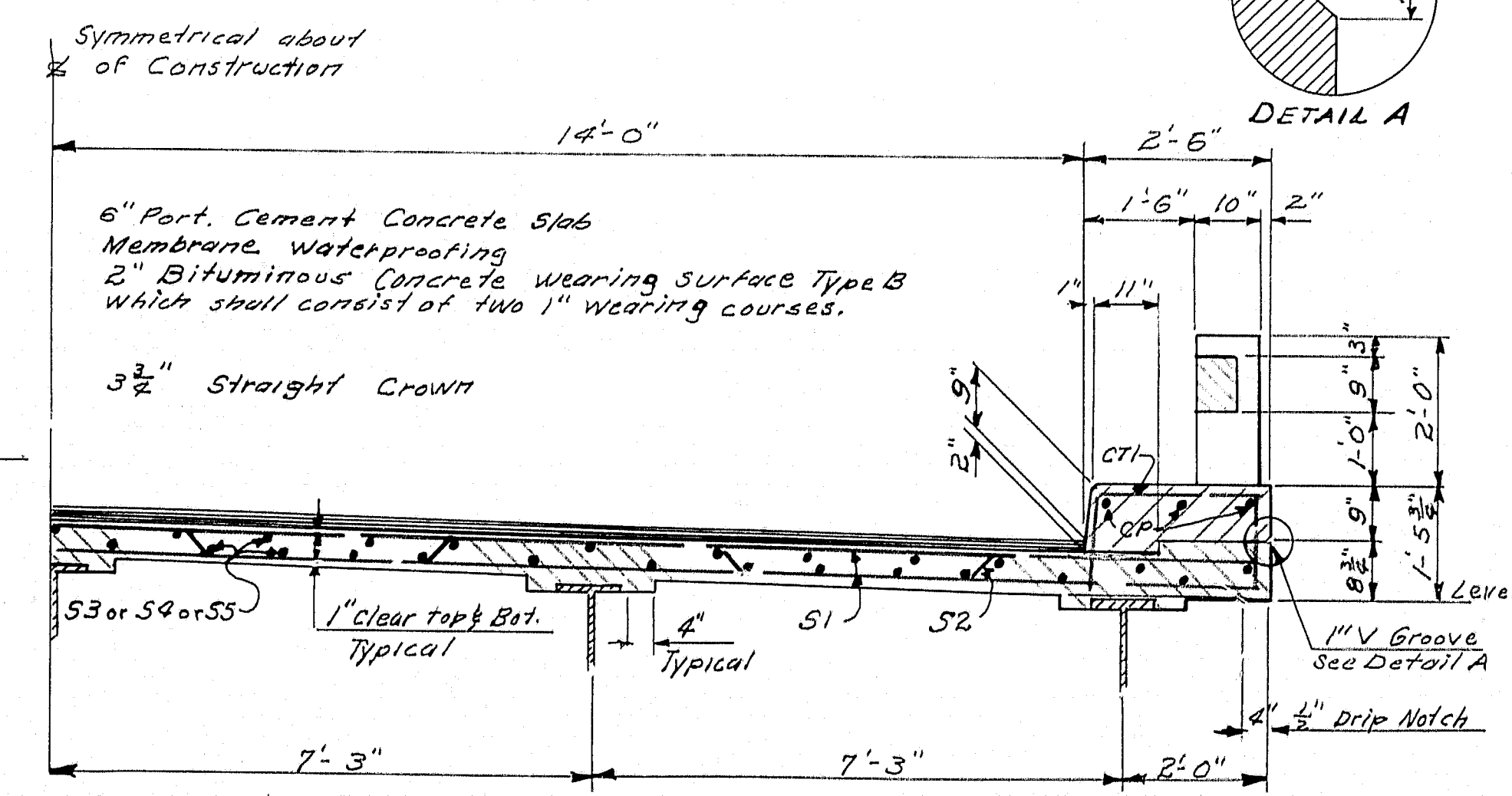
SECTION B-B

SECTION A-A

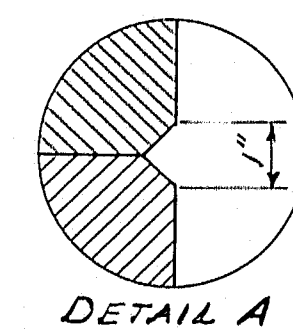


TYPICAL SECTION
@ ABUTMENTS

TYPICAL SECTION
@ PIERS



HALF NORMAL SECTION
Shear Connectors, Plates & Diaphragms not shown, see sheet 10



DETAIL A

NOTE: Concrete for curbs shall not be placed until concrete in superstructure slab has been in place for a minimum period of seven days. During the seven day period form work may be placed but hand equipment only shall be allowed on the slab. Break the band of the vertical curb construction joints with a coating of asphalt paint. Chamfer all exposed edges of concrete 3/4" except Rail. Chamfer edges of Rail Posts and Rail Bars 1/2".

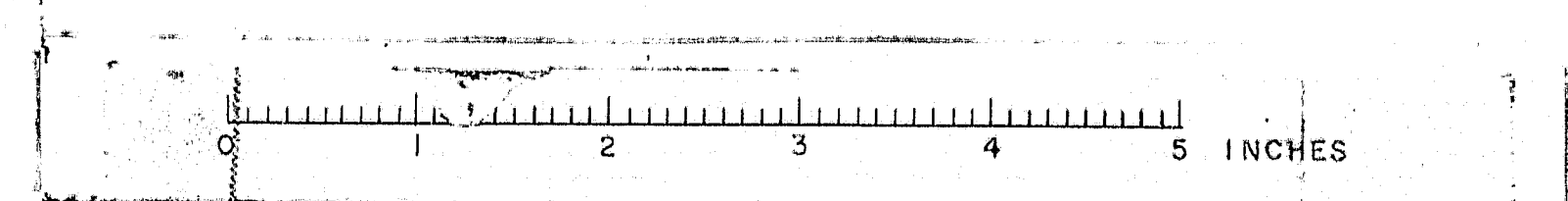
DESIGN - T. H. K.
TRACE - G. E. A.
CHECK - *[Signature]*

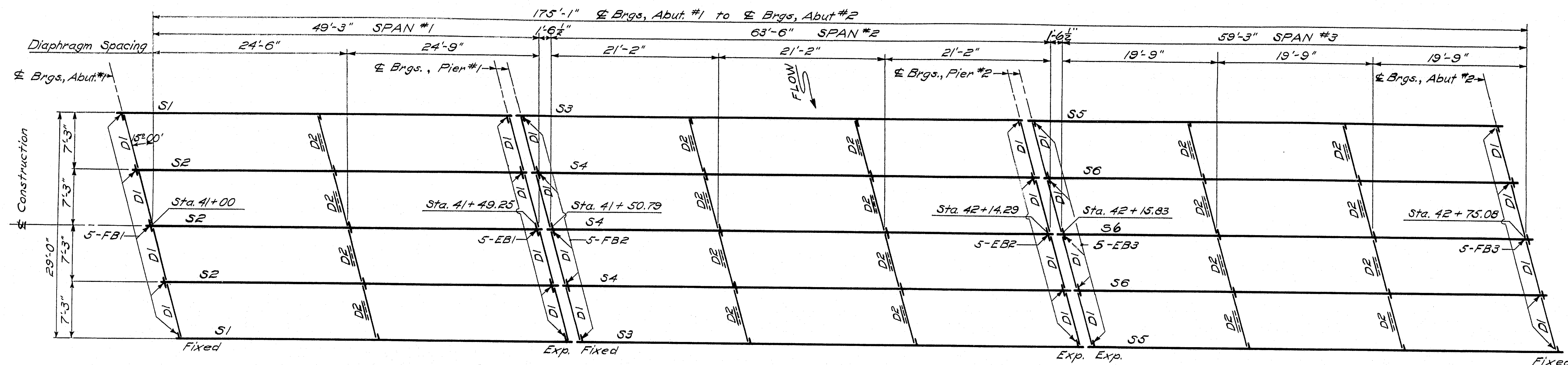
BRIDGE NO. _____
SURVEY - _____
PLOT - _____

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

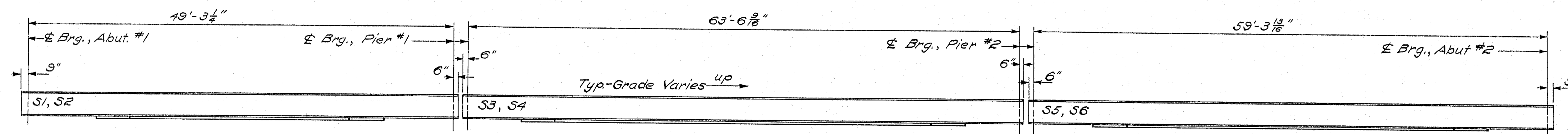
ST. GEORGE RIVER BRIDGE
IN THE TOWN OF
UNION
KNOX COUNTY
SUPERSTRUCTURE
SHEET 7 OF 12 AUGUSTA, MAINE AUG. 1959

M-1240





ERECTION DIAGRAM
Dimensions are horizontal.



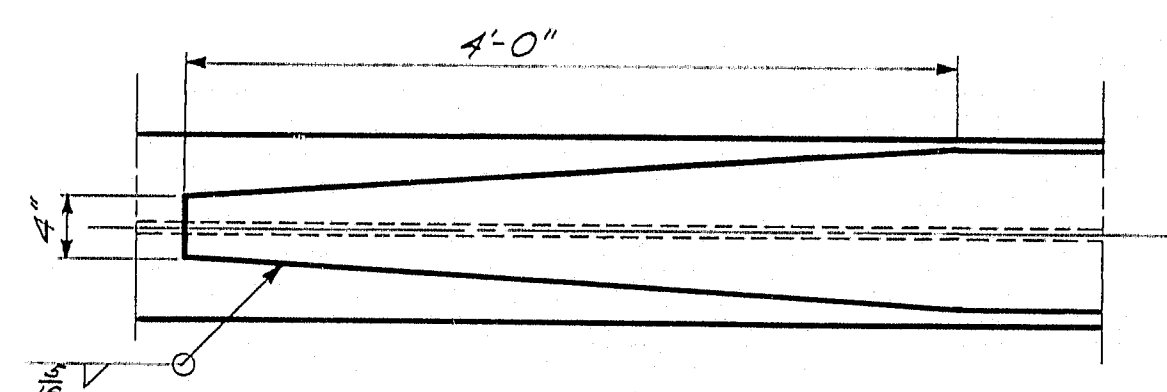
S1 - 33 WF 130 - No Cov. Pl.
S2 - do - 8" x 3/8" Cov. Pl. x 33'-6"

S3 - 33 WF 130 - 10" x 1" Cov. Pl. x 49'-6"
S4 - do - 10" x 1/2" Cov. Pl. x 52'-0"

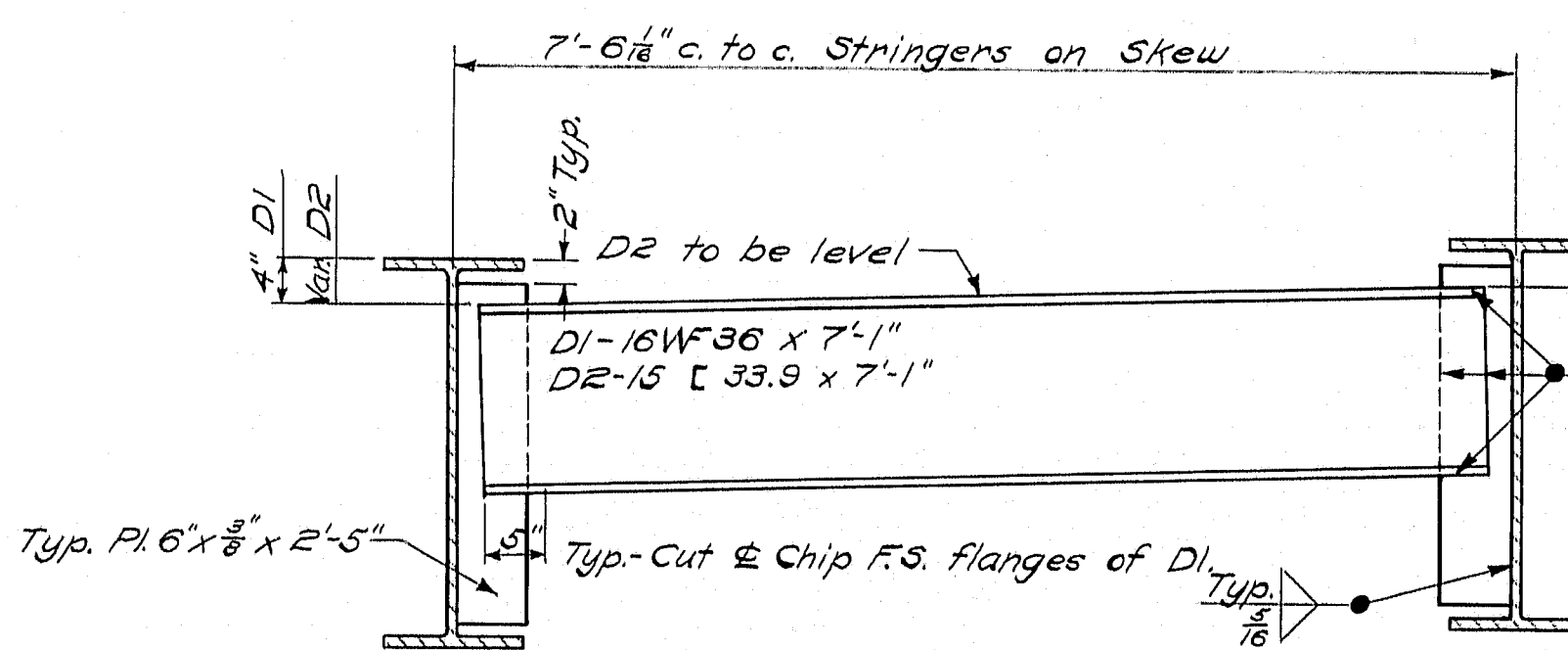
S5 - 33 WF 130 - 10" x 3/8" Cov. Pl. x 44'-6"
S6 - do - 10" x 3/8" Cov. Pl. x 45'-6"

STRINGER DETAILS

NOTE: No Camber for all stringers.
Cov. Pls. are symm. about c. of spans.

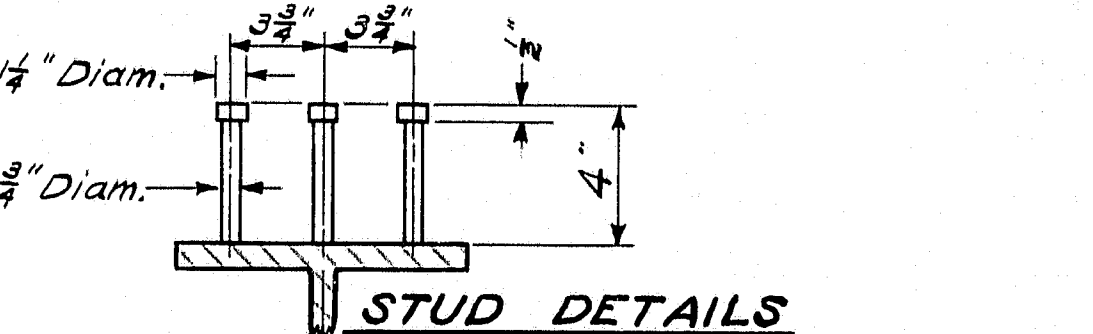
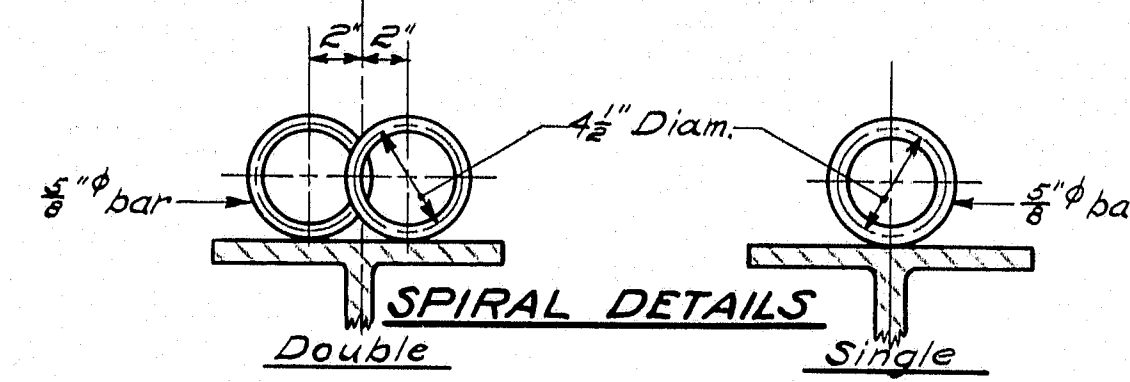
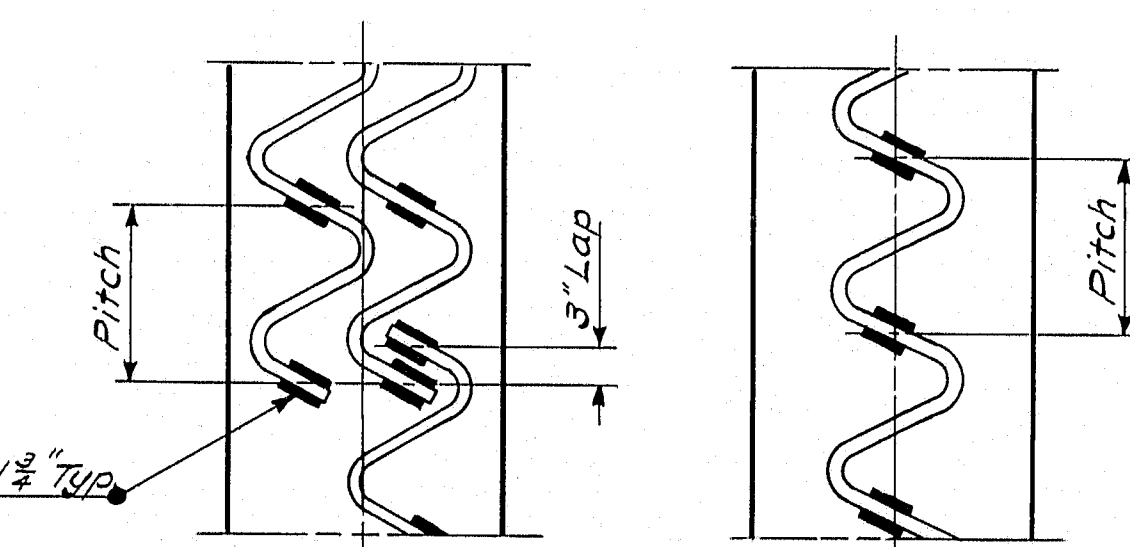


COV. PL. DETAILS
TYPICAL



DIAPHRAGM DETAILS

24 - D1 REQ.
20 - D2 REQ.

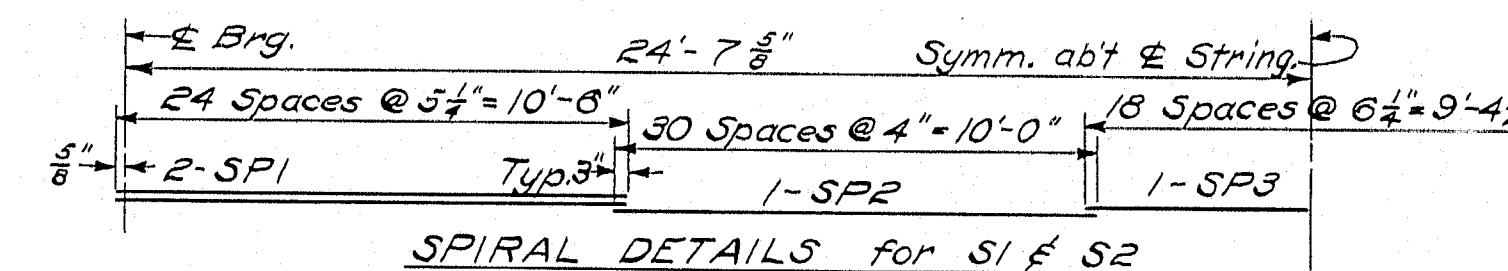


3 Studs each per pitch

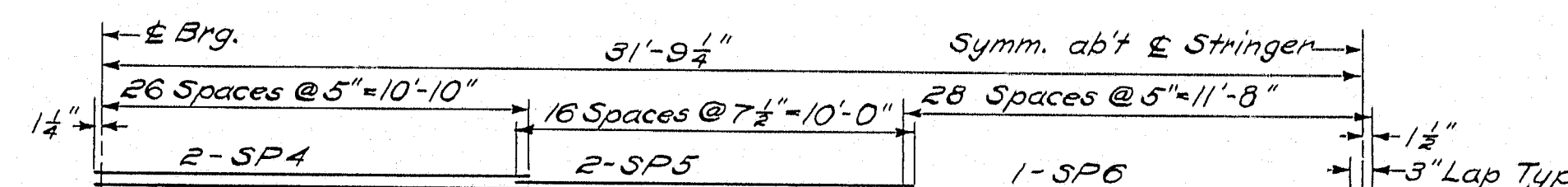
NOTE: Solid or granular flux filled studs
end welded in either shop or field.

SHEAR CONNECTORS

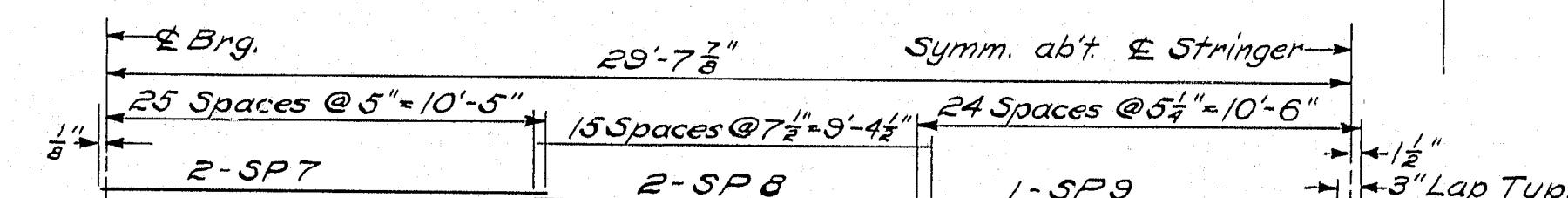
MARK	NO.	SPACES	PITCH	LENGTH
SP1	20	24	5 1/4"	10'-6"
SP2	10	30	4"	10'-0"
SP3	5	18	6 1/4"	9'-4 1/2"
SP4	20	26	5"	10'-10"
SP5	20	16	7 1/2"	10'-0"
SP6	10	28	5"	11'-8"
SP7	20	25	5"	10'-5"
SP8	20	15	7 1/2"	9'-4 1/2"
SP9	10	24	5 1/4"	10'-6"



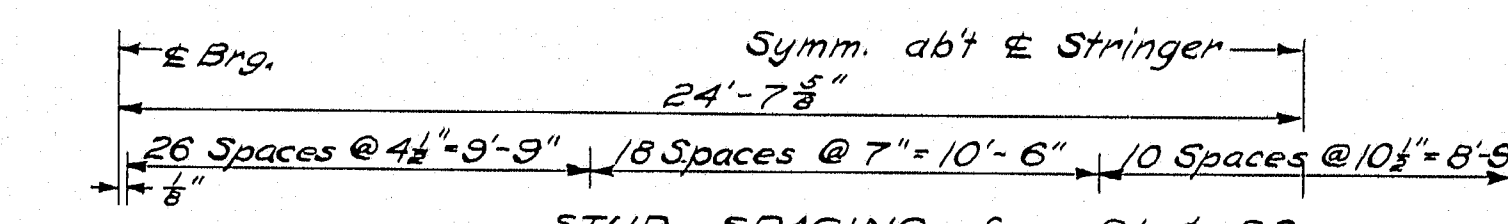
SPIRAL DETAILS for S1 & S2



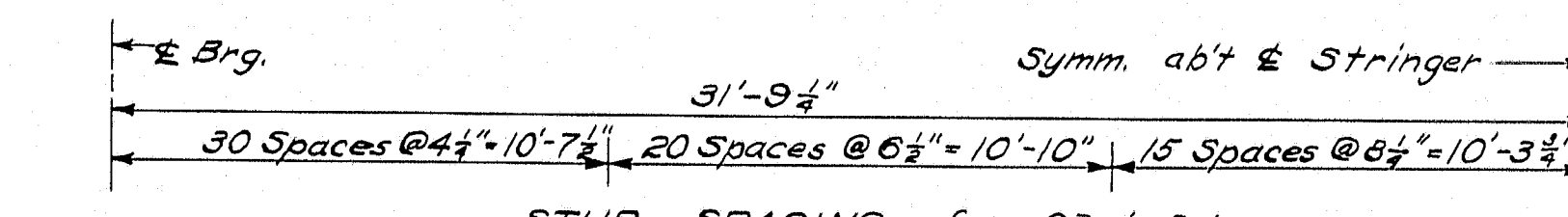
SPIRAL DETAILS for S3 & S4



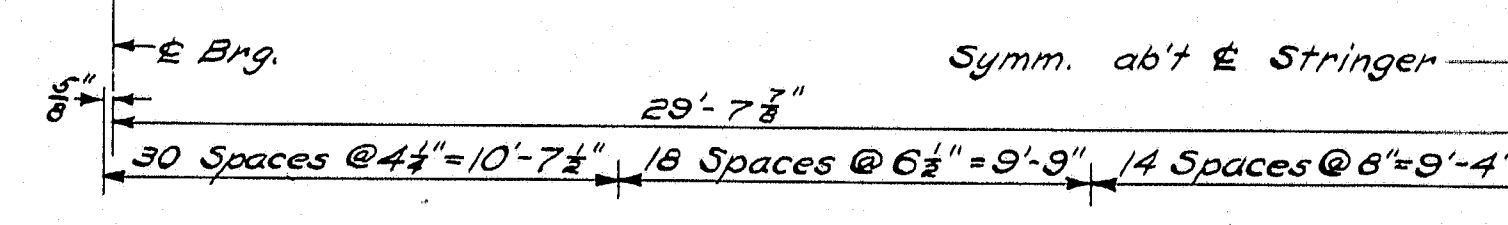
SPIRAL DETAILS for S5 & S6



STUD SPACING for S1 & S2



STUD SPACING for S3 & S4



STUD SPACING for S5 & S6

SPECIFICATIONS

Fabrication & Erection - State of Maine
Standard Specifications, Highways and
Bridges, Revision of January 1956
Design & Detail - A.A.S.H.O. 1957

Materials - Stringers and Cover Plates
shall conform to Specification A.S.T.M.
Designation A-373.
Other steel members shall conform to
either Specification A.S.T.M. Designation
A-373 or Specification A.S.T.M.
Designation A-7.

NOTE: The use of Spirals or Studs
shall be at the option of the
Contractor.

DESIGN - A. H. R.
TRACE - H. SIMMONS
CHECK - J. M. HENRY

BRIDGE NO.
SURVEY -
PLOT -

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

ST. GEORGE RIVER BRIDGE

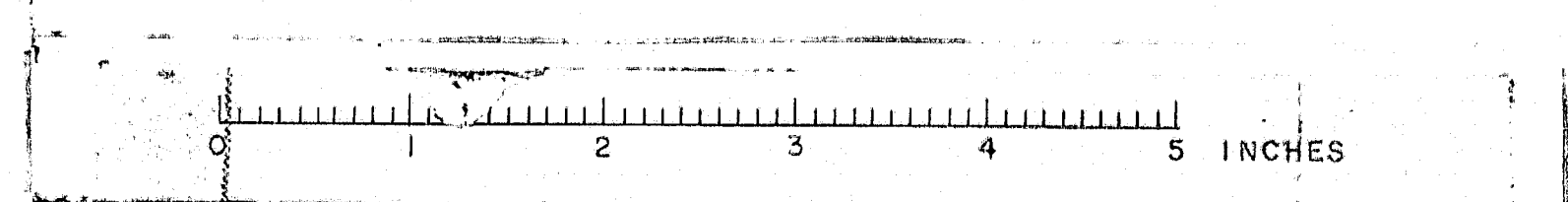
IN THE TOWN OF
UNION

KNOX COUNTY

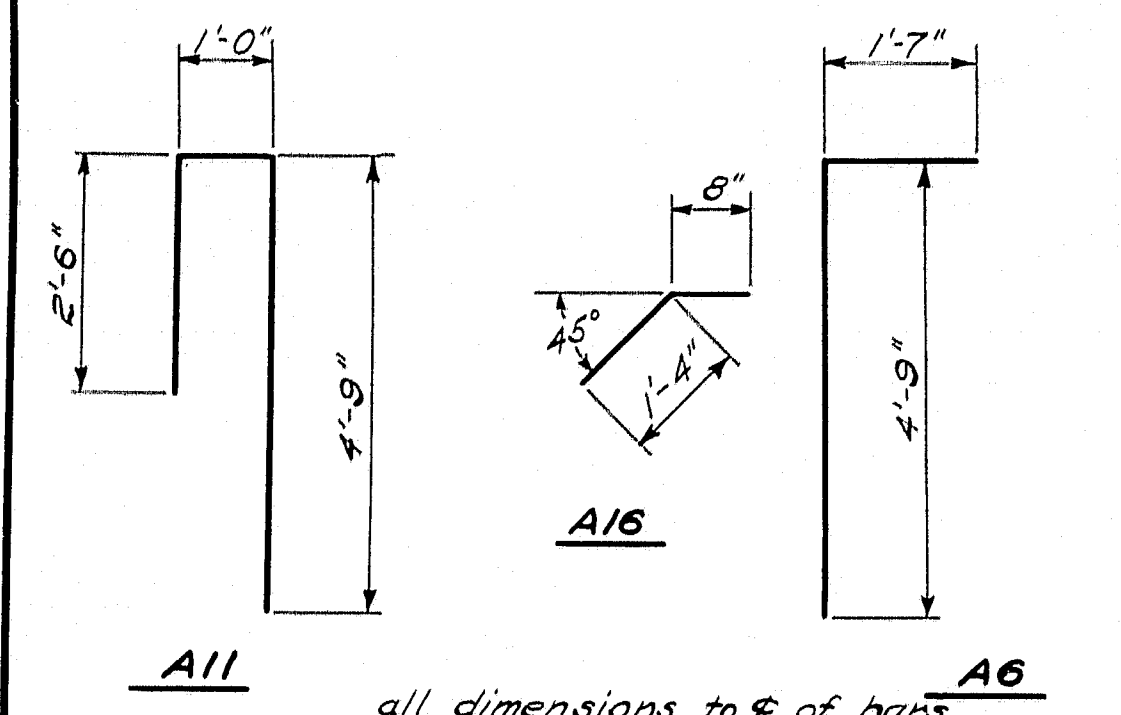
STRUCTURAL STEEL

SHEET 10 OF 12 AUGUSTA, MAINE AUG. 1959

M-1241



ABUTMENTS #1 & 2 Des. T.H.K.



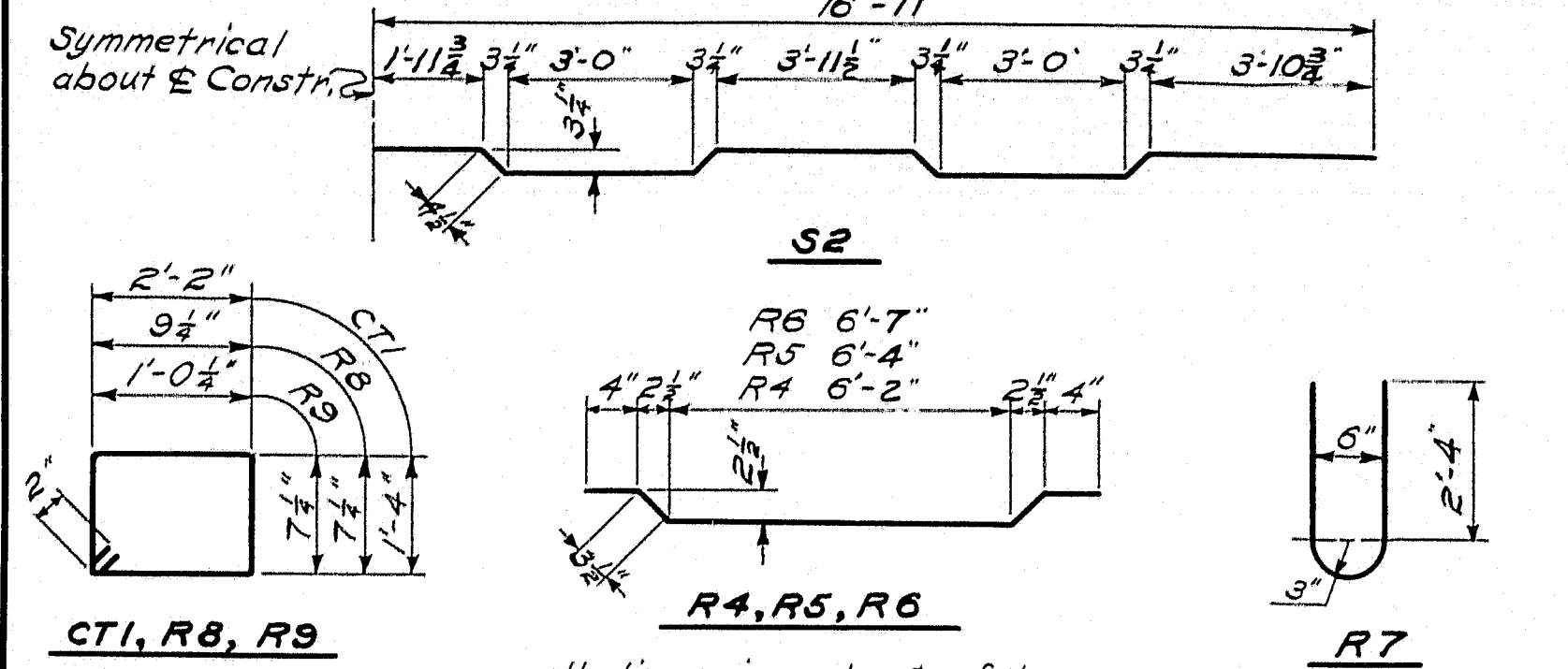
all dimensions to center of bars

MARK	SIZE	NO.	LENGTH	LOCATION
BENT BARS				
A61	#6	38	6'-4"	Abut. 1 & 2
A71	#6	46	8'-3"	" "
A16	#5	38	2'-0"	" "

STRAIGHT BARS

MARK	SIZE	NO.	LENGTH	LOCATION
A1	#6	24	2'-10"	Footings, Abut. 1 & 2
A2	#6	70	5'-6"	" "
A3	#6	4	5'-0"	" "
A4	#6	4	4'-3"	" "
A5	#6	6	3'-0"	" "
A7	#6	66	2'-6"	Abut. 1 & 2
A8	#5	8	6'-0"	" "
A9	#5	28	6'-6"	" "
A10	#5	28	2'-3"	" "
A12	#5	12	7'-6"	" "
A13	#5	8	28'-0"	" "
A14	#5	6	33'-0"	" "
A15	#5	30	3'-6"	" "
A51	#4	40	28'-8"	Approach Slab, Ab. 1 & 2
A52	#6	224	14'-6"	" "

SUPERSTRUCTURE Des. T.H.K.



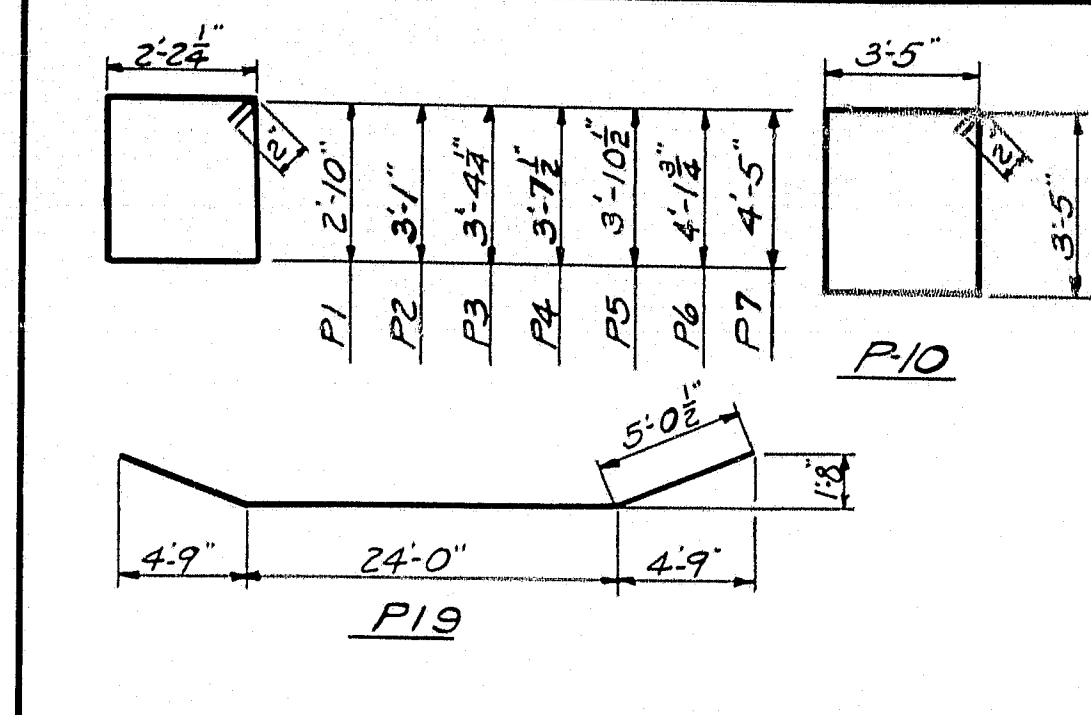
all dimensions to center of bars

MARK	SIZE	NO.	LENGTH	LOCATION
BENT BARS				
S2	#5	191	34'-8"	Superst. Slab
CT1	#4	244	7'-4"	Curb
R4	#4	32	7'-5"	Rail bars
R5	#4	24	7'-7"	" "
R6	#4	28	7'-10"	" "
R7	#6	96	5'-5"	Rail Posts
R8	#4	132	3'-1"	" "
R9	#4	12	3'-7"	" "
STRAIGHT BARS				
S1	#5	388	33'-9"	Superst. Slab
S3	#5	98	25'-11"	" "
S4	#5	98	32'-10"	" "
S5	#5	98	30'-10"	" "
S6	#5	48	7'-2"	" "
S7	#5	6	29'-6"	" "
CP1	#4	24	15'-6"	Curbs
CP2	#4	6	18'-6"	" "
CP3	#4	6	15'-0"	" "
CP4	#4	6	17'-3"	" "
CP5	#4	18	19'-10"	" "
R1	#4	32	7'-3"	Rail bars
R2	#4	24	7'-6"	" "
R3	#4	28	7'-9"	" "

RAIL NOTES

Post steel to be in position before curb is placed. Rail bars to be precast and placed so the tongue ends project 2" into posts. Wrap the tongue ends with two layers of roofing felt. Rail posts to be cast in place. Wire stirrups to be constructed in the field from a single strand of #9 annealed wire making a complete turn around each R-bar in rail. Chamfer all exposed edges of concrete 1/2".

PIERS #1 & 2 Des. A.H.R.

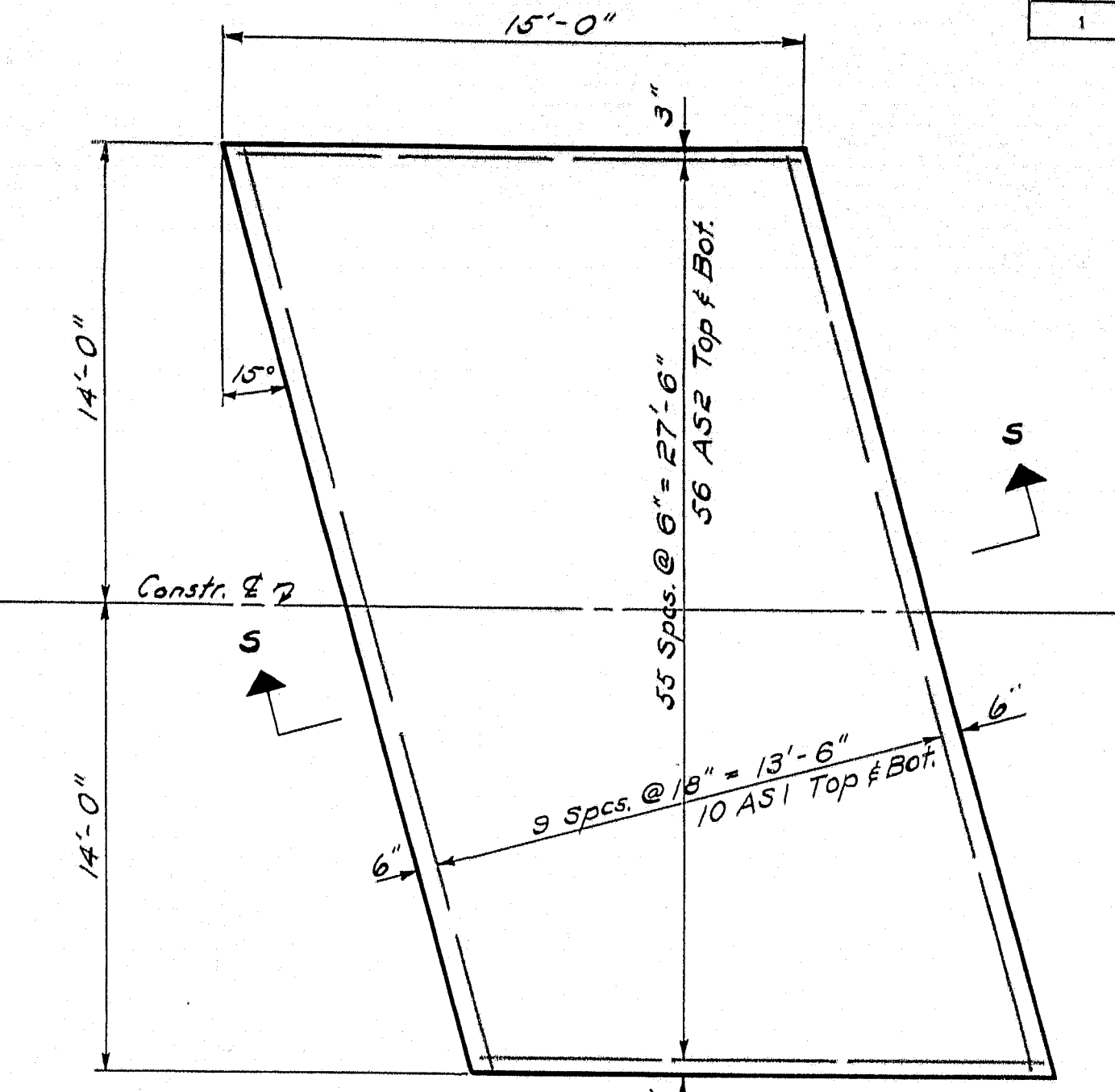


all dimensions to center of bars

MARK	SIZE	NO.	LENGTH	LOCATION
BENT BARS				
P1	#5	8	10'-5"	Caps
P2	#5	8	10'-11"	do.
P3	#5	8	11'-5"	do.
P4	#5	8	12'-0"	do.
P5	#5	8	12'-6"	do.
P6	#5	8	13'-0"	do.
P7	#5	64	13'-7"	do.
P10	#5	27	14'-0"	Columns
P19	#6	8	34'-1"	Caps

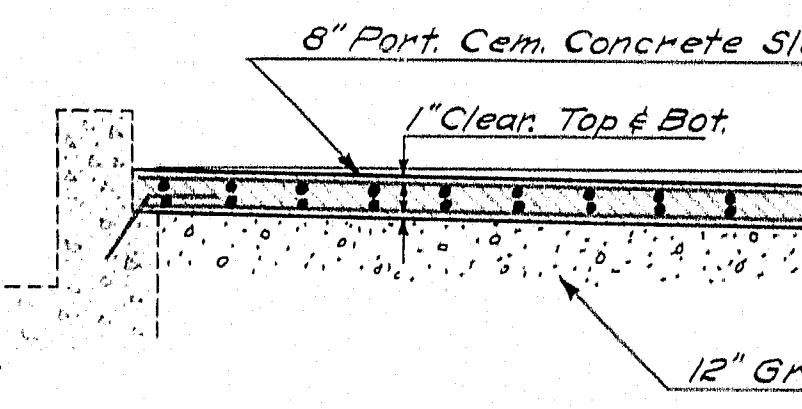
STRAIGHT BARS

MARK	SIZE	NO.	LENGTH	LOCATION
P8	#9	8	33'-6"	Caps
P9	#10	10	33'-6"	do.
P11	#8	60	9'-2"	Pier #1 Columns
P12	#8	60	11'-8"	Pier #2 Columns
P13	#8	120	4'-0"	Stem to Columns
P14	#6	42	14'-9"	Pier #1 Stem
P15	#6	42	15'-9"	Pier #2 Stem
P16	#5	64	15'-6"	Stems
P17	#6	18	36'-0"	Footings
P18	#6	74	7'-9"	do.
P20	#6	8	33'-6"	Caps
P21	#6	84	4'-0"	Footings to Stem



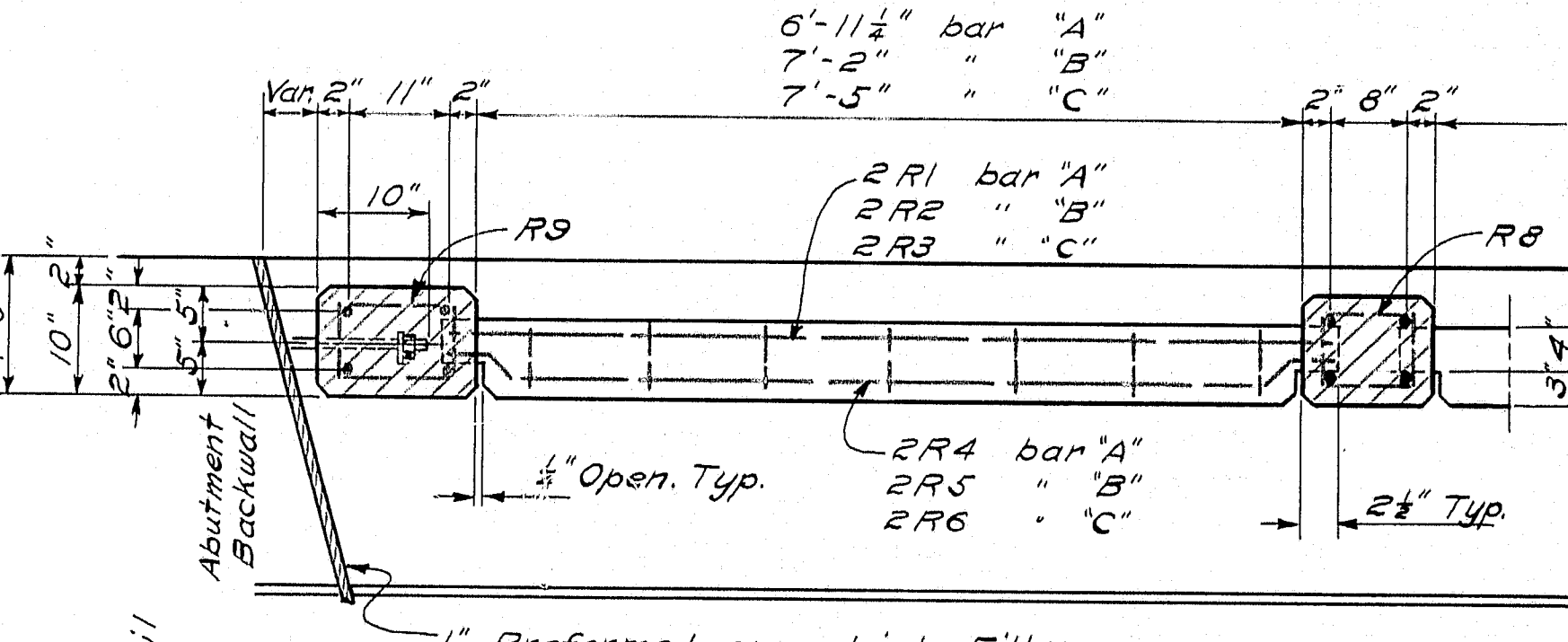
SECTION S-S

Abutment #1 Similar



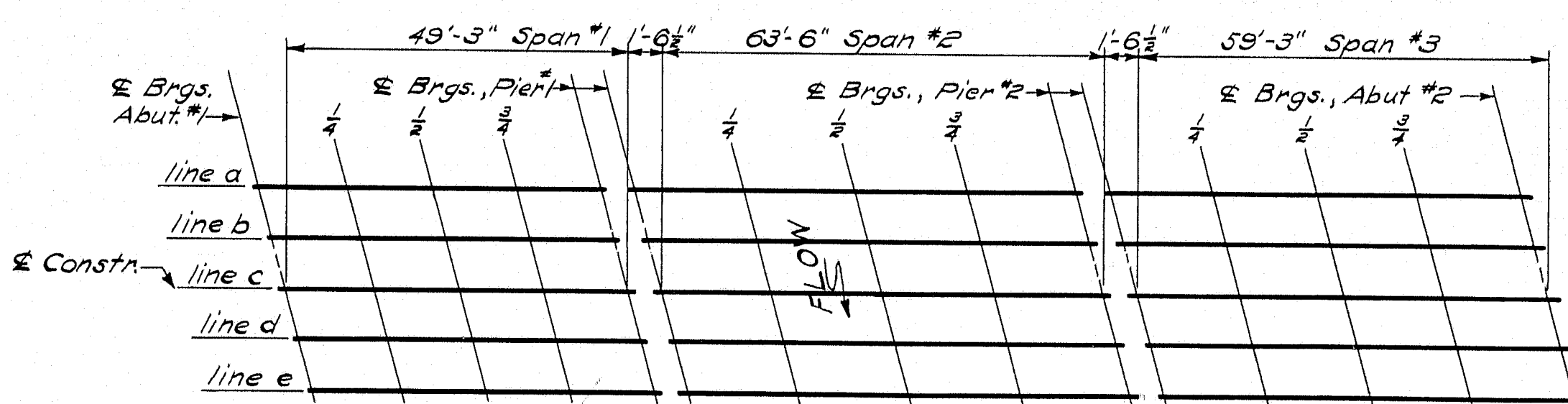
NOTE: Approach slab concrete to be Class 'A' and will be paid for under Item 701-40.

Des. T.H.K.



RAIL DETAIL

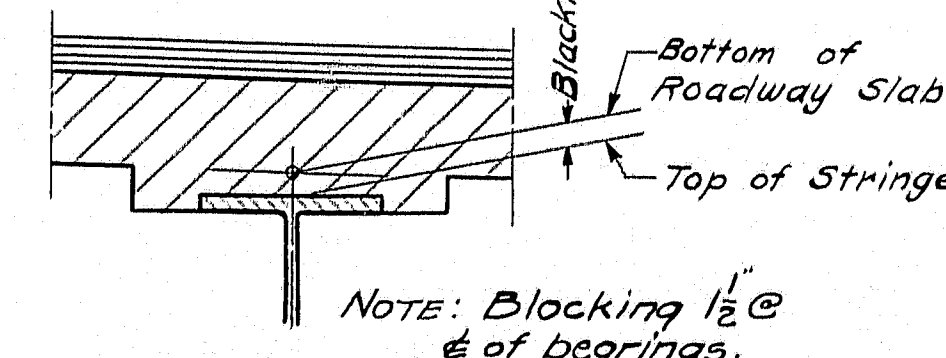
Des. T.H.K.



BLOCKING DIAGRAM

ELEVATIONS~ BOTTOM OF ROADWAY SLAB										Des. A.H.R.									
SPAN #1					SPAN #2					SPAN #3									
Line	Brigs.	Abut.	1 Pt.	2 Pt.	Line	Brigs.	Abut.	1 Pt.	2 Pt.	Line	Brigs.	Abut.	1 Pt.	2 Pt.	Line	Brigs.	Abut.	1 Pt.	2 Pt.
a	69.04	69.42	69.79	70.16	70.53	a	70.59	71.20	71.81	72.41	73.01	a	73.08	73.78	74.47	75.17	75.85		
b	69.27	69.64	70.02	70.39	70.77	b	70.82	71.44	72.05	72.66	73.26	b	73.33	74.03	74.72	75.42	76.12		
c	69.48	69.86	70.24	70.62	70.99	c	71.05	71.67	72.29	72.90	73.51	c	73.57	74.27	74.98	75.68	76.38		
d	69.37	69.75	70.13	70.52	70.90	d	70.96	71.58	72.20	72.82	73.43	d	73.50	74.20	74.91	75.61	76.32		
e	69.26	69.64	70.03	70.41	70.80	e	70.85	71.48	72.11	72.73	73.34	e	73.41	74.13	74.84	75.54	76.25		

NOTE: To allow for the effect of the vertical curve and to compensate for dead load deflections as well as inequalities in rolling steel, the following procedure will be used. Before any slab forms are constructed, elevations are to be taken on top of the stringer flanges at the stations indicated and subtracted from "Elevations-Bottom of Roadway Slab". The result is the blocking to be used in the form work.



NOTE: Blocking 1/2" @ 6" of bearings.

DESIGN - AS NOTED
TRACE - H. SIMMONS
CHECK -

BRIDGE NO. SURVEY PLOT -

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

ST. GEORGE RIVER BRIDGE

IN THE TOWN OF
UNION
KNOX COUNTY

REINFORCING, RAIL DETAILS, APPROACH
SLAB, & BLOCKING TABLE

SHEET 12 OF 12 AUGUSTA, MAINE AUG. 1959

M-1243