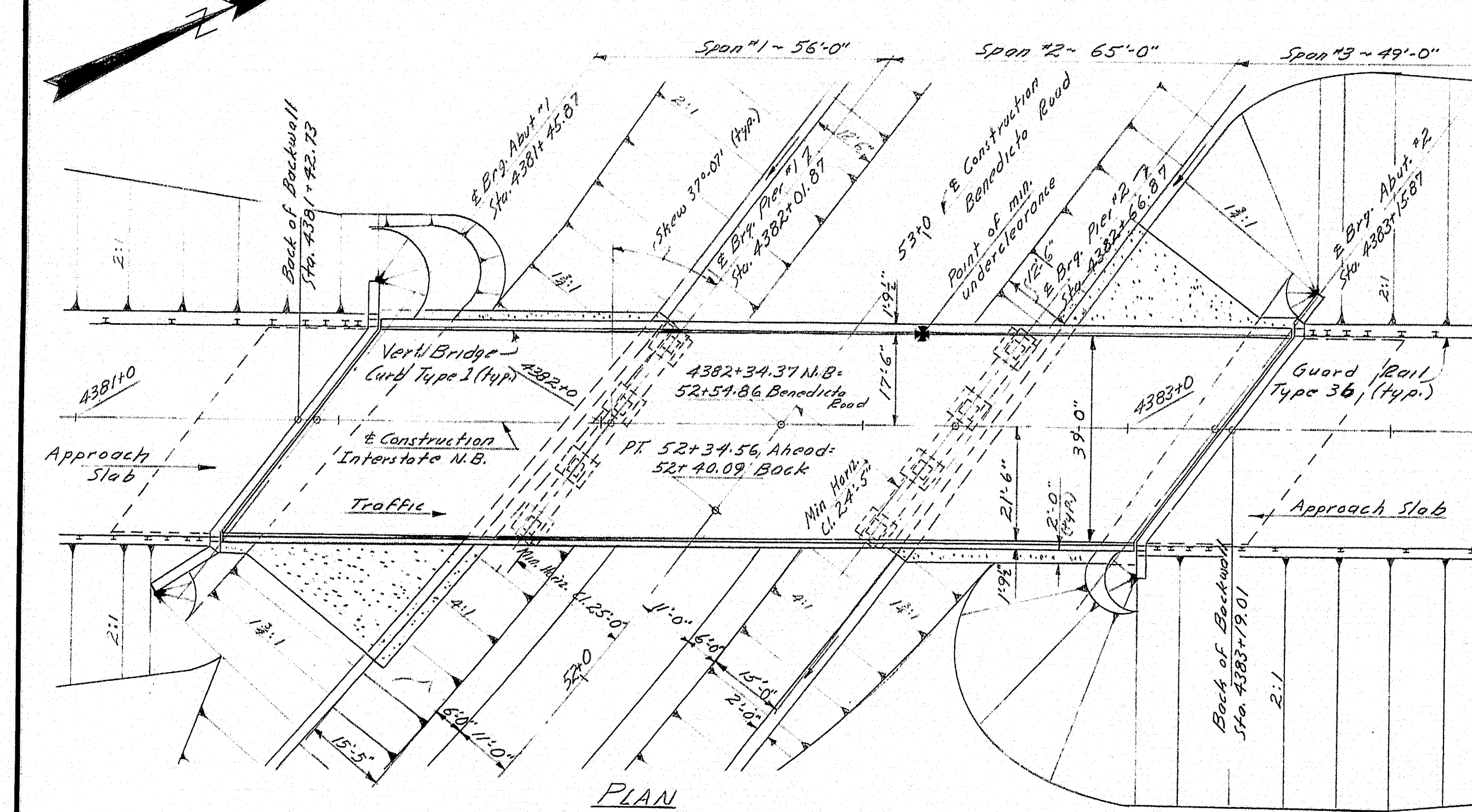
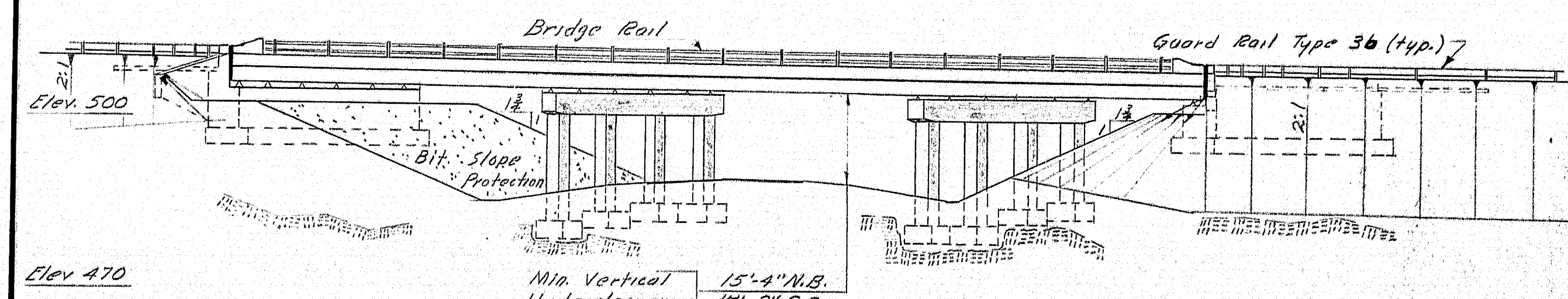


PLAN  
Southbound I-95 over Benedicta Road  
Scale 1"=20'



PLAN  
Northbound I-95 over Benedicta Road  
Scale 1"=20'



ELEVATION  
Northbound shown Southbound similar  
Scale 1"=20'

### ESTIMATE OF BRIDGE QUANTITIES - N.B. & S.B.

Description	Unit	Quantity
Rock Excavation	C.Y.	125
Gravel Borrow	C.Y.	3,500
Structural Earth Excavation Abutments and Retaining Walls	C.Y.	800
Structural Earth Excavation Piers	C.Y.	125
Structural Rock Excavation Piers	C.Y.	100
Hot Bituminous Pavement (Grading C1 Crushed Stone)	Tons	170
Structural Concrete Abutments and Retaining Walls	C.Y.	430
Structural Concrete Piers	C.Y.	270
Structural Concrete Roadway & Sidewalk Slabs on Steel Bridges (I-95 over Benedicta Road)	L.S.	Lump Sum
Structural Concrete Approach Slabs (I-95 over Benedicta Road)	L.S.	Lump Sum
Class II Set-Backer	S.Y.	240
Reinforcing Steel Fabricated and Delivered	Lbs.	162,000
Reinforcing Steel Pacing	Lbs.	162,000
Structural Steel Fabricated and Delivered (I-95 over Benedicta Road)	L.S.	Lump Sum
Structural Steel Erection (I-95 over Benedicta Road)	L.S.	Lump Sum
Field Painting Structural Steel (I-95 over Benedicta Road)	L.S.	Lump Sum
Bridge Railing	Ln.Ft.	647
Membrane Waterproofing	S.Y.	1,490
Slope Protection (Bituminous Treated Stone)	S.Y.	1,370
Curing Box For Concrete Cylinders	Each	1
Epoxy Resin Surface Sealant	S.Y.	275
Vertical Bridge Curb - Type I	Ln.Ft.	700
Field Office, Type B	Each	1
Hot Bituminous Pavement (Grading C-2)	Tons	17
Bituminous Hand Sealing - Block	S.Y.	153

The Curing Box For Concrete Cylinders shall be used also for Interstate 95 over Route 158 and Molokus Stream.

The Field Office, Type B shall also be used for Interstate 95 over Route 158.

Estimated Quantity of Structural Concrete Roadway and Sidewalk Slabs on Steel Bridges = 360 C.Y.

Estimated Quantity of Structural Concrete Approach Slabs = 57 C.Y.

Estimated Quantity of Structural Steel = 314,000 Lbs.

### INDEX OF SHEETS

Sheet No.	Title
1	General Plan & Quantities
2 & 3	Foundation Survey
4	Abutment No. 1 Northbound
5	Abutment No. 2 Northbound
6	Abutment No. 1 Southbound
7	Abutment No. 2 Southbound
8	Piers Northbound & Southbound
9	Structural Steel & Bottom Slab Elevations
10	Superstructure Slab
11	Slope Protection
12	Reinforcing Steel Schedule

BRIDGE - STANDARD DETAILS	
BD 101-64	Bearing Pedestals
BD 104-66	Diaphragms, Armored Joints
	Shear Connectors, Drain
BD 107-65	Steel Railing
BD 108-65	Aluminum Railing

### SPECIFICATIONS

DESIGN - A.A.S.H.O. Standard Specifications for Highway Bridges 1961, with Interim Specifications thru 1964.  
CONTRACT - State of Maine State Highway Commission Standard Specifications Highways and Bridges, Revision of June 1965.

### LIVE LOADING

H.S. 20-44 as Modified for Interstate

### ALLOWABLE STRESSES

CONCRETE -  $f_c = 1200$  p.s.i.  $f_t = 10$   
REINFORCING STEEL - Intermediate Grade -  $F_y = 20,000$  p.s.i.  
STRUCTURAL STEEL - A441 -  $F_y = 27,000$  p.s.i. (base, adjusted for thickness of material and fatigue)  
A36 -  $F_y = 20,000$  p.s.i.

### CONCRETE CLASSIFICATION

All concrete to be Class "A"

### STRUCTURAL STEEL CLASSIFICATION

Beams & Splice Plates - A441  
Bearing Pedestals, Diaphragms, Diaphragm Plates & Armored Joints - A36

### TRAFFIC

	Benedicta Road	Interstate 95
1966 A.D.T.	325	1490
1986 A.D.T.	520	2320
24 H.V.	62	280
%	4	14
P	60%	60%
V	4.5 H.P.H.	50 M.P.H.

DESIGN - R.F.D.  
TRACE - R.F.D.  
CHECK - R.F.D.

BRIDGE NO. \_\_\_\_\_  
SURVEY PLOT \_\_\_\_\_

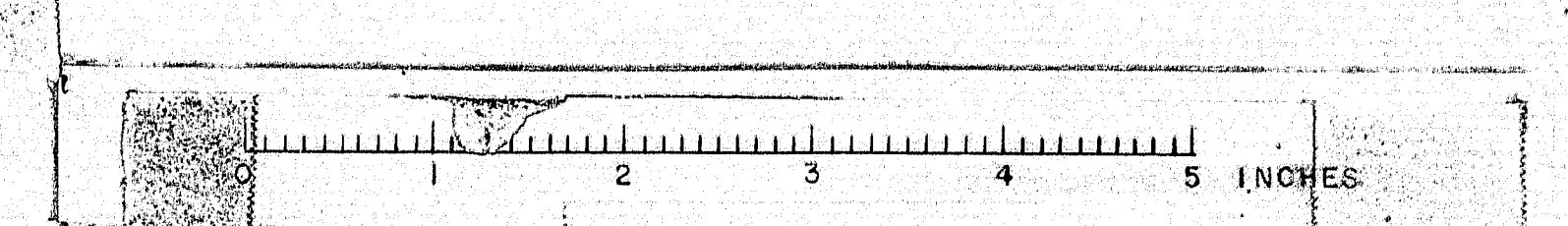
STATE HIGHWAY COMMISSION  
BRIDGE DIVISION

**INTERSTATE 95  
OVER  
BENEDICTA ROAD  
IN THE TOWN OF  
SHERMAN  
AROOSTOOK COUNTY**

GENERAL PLAN & QUANTITIES

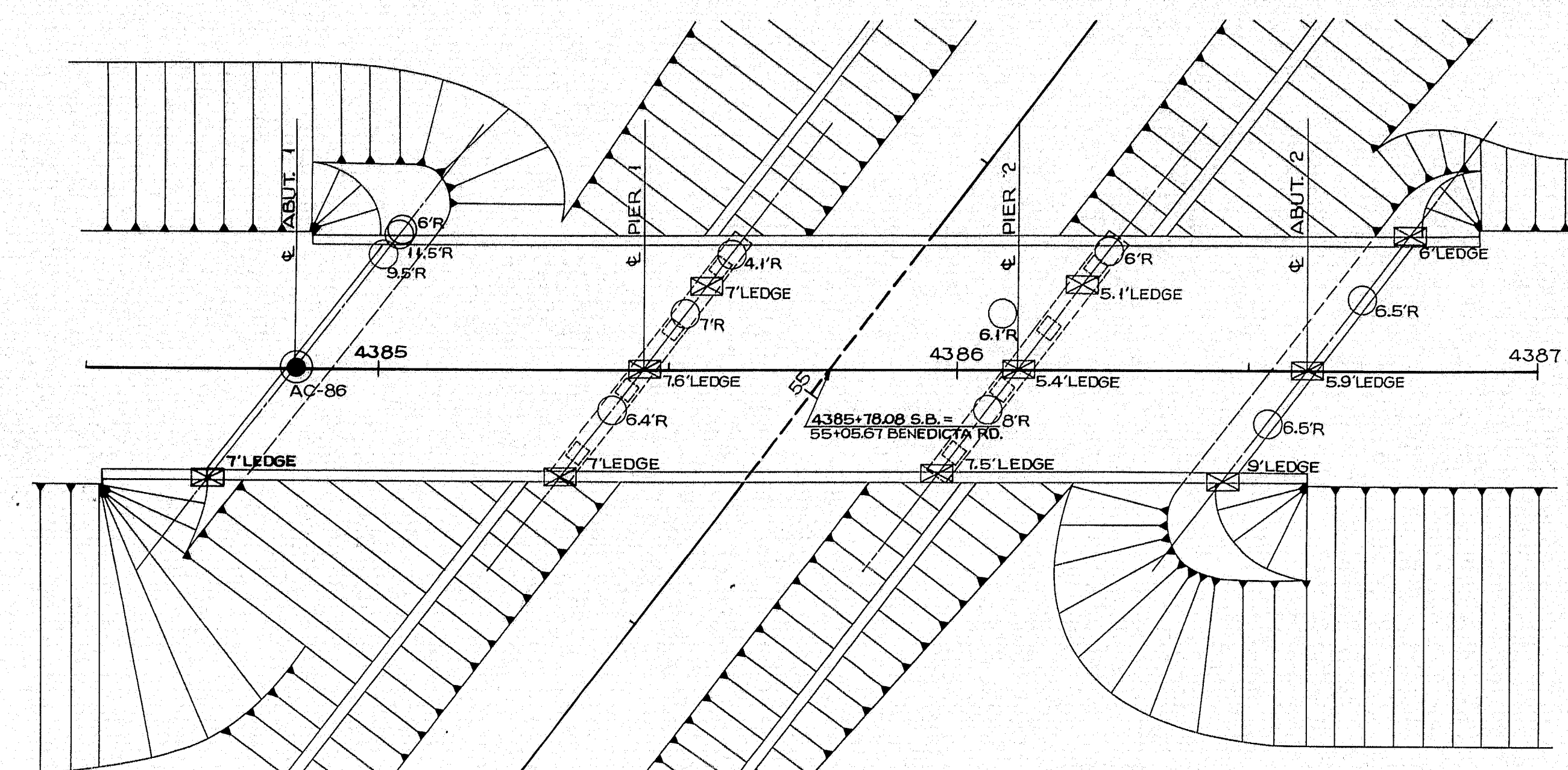
SHEET 1 OF 12 AUGUSTA, MAINE June 1966

M-2504

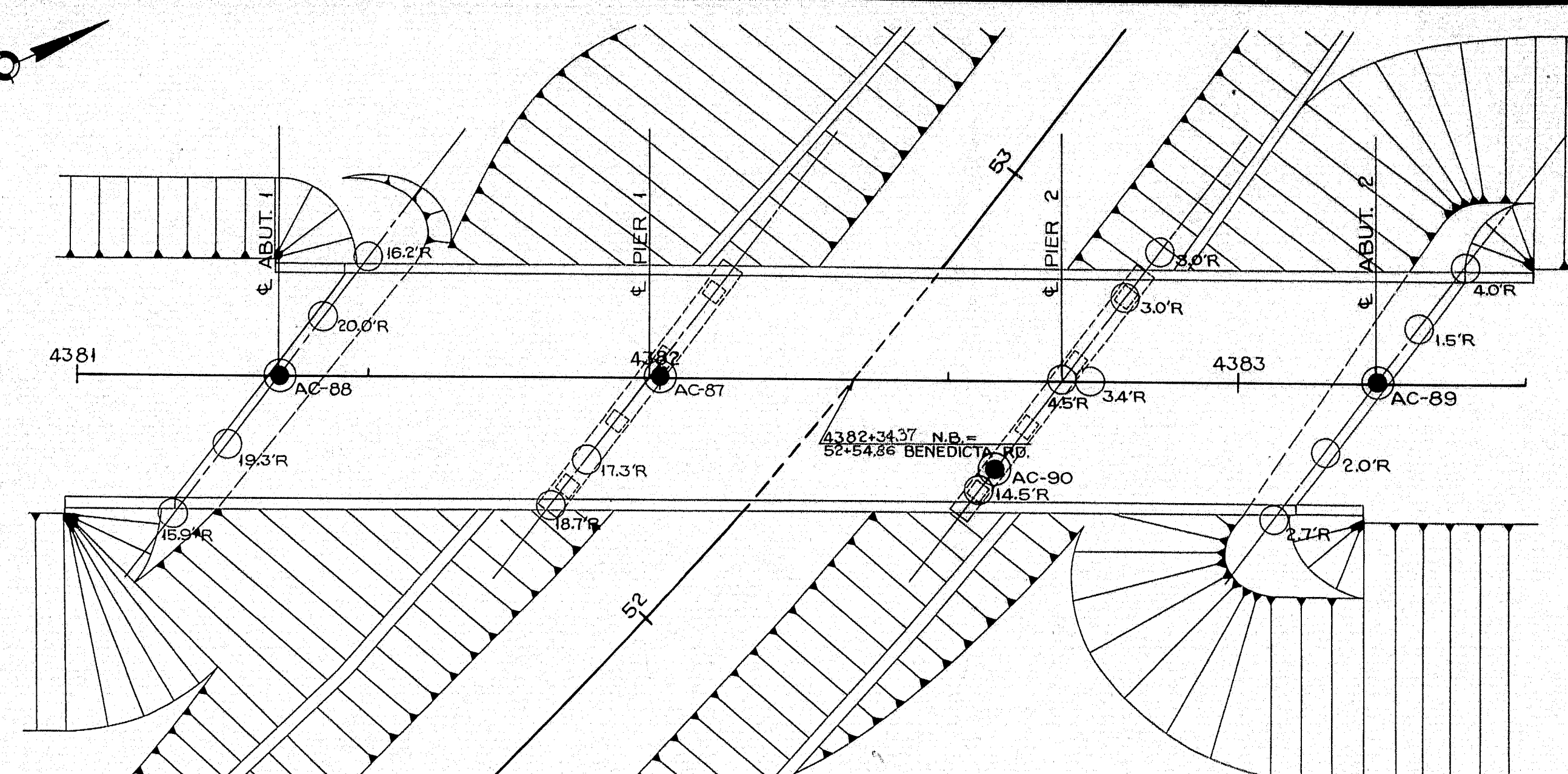




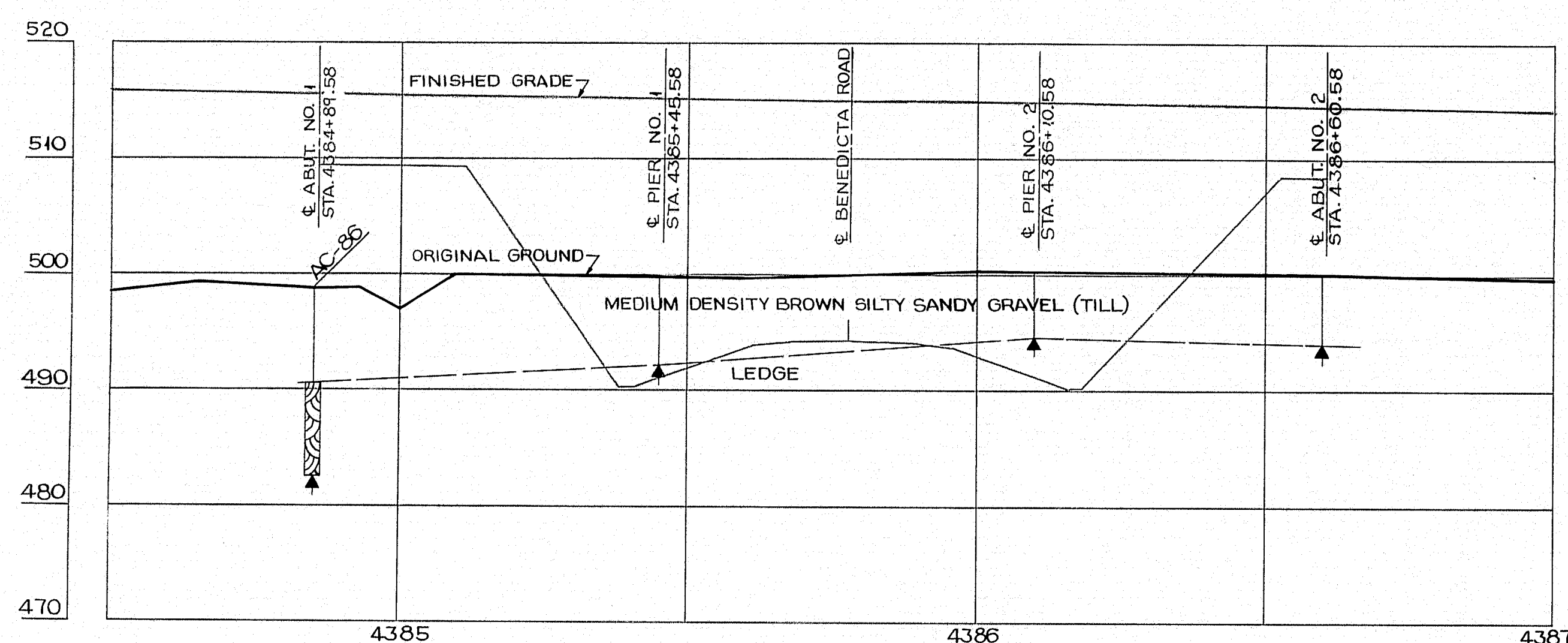
B.P.R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-9(20)	22	223



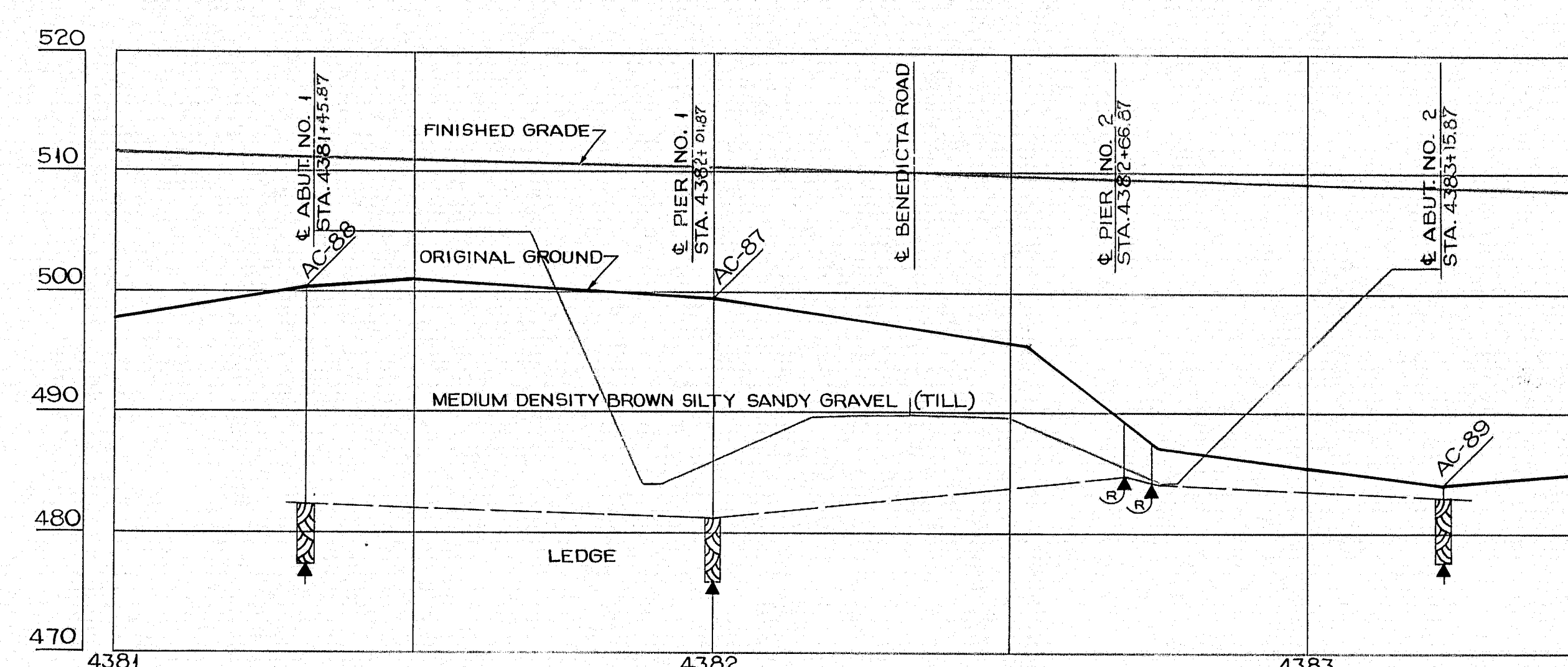
**SOUTHBOUND PLAN**  
SCALE: 1" = 20'



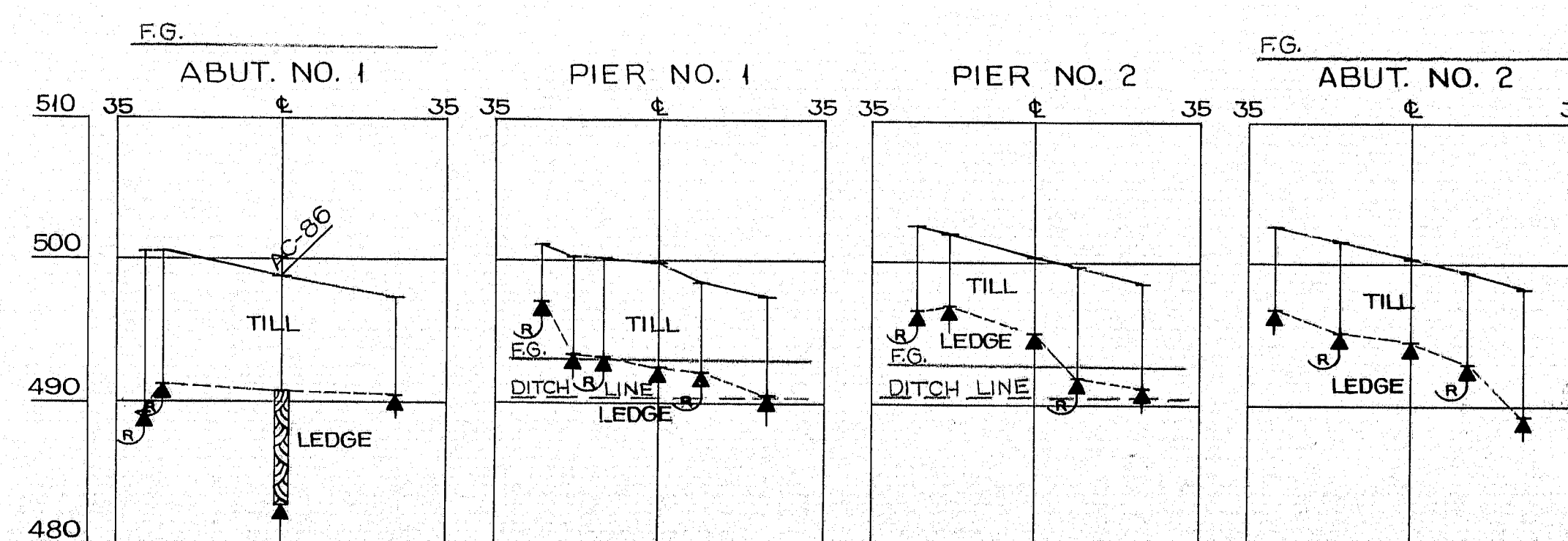
**NORTHBOUND PLAN**  
SCALE: 1" = 20'



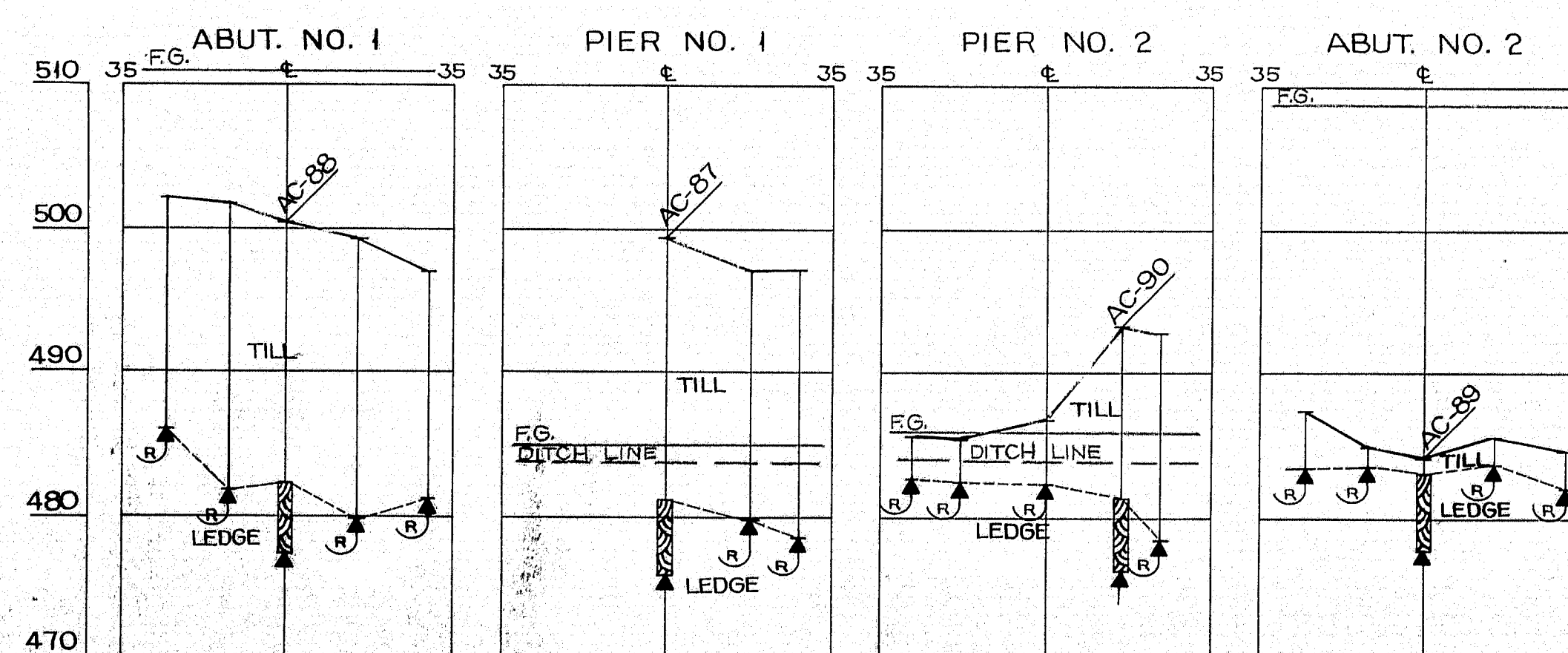
**SOUTHBOUND PROFILE**



**NORTHBOUND PROFILE**



**SOUTHBOUND LANE**



**NORTHBOUND LANE**

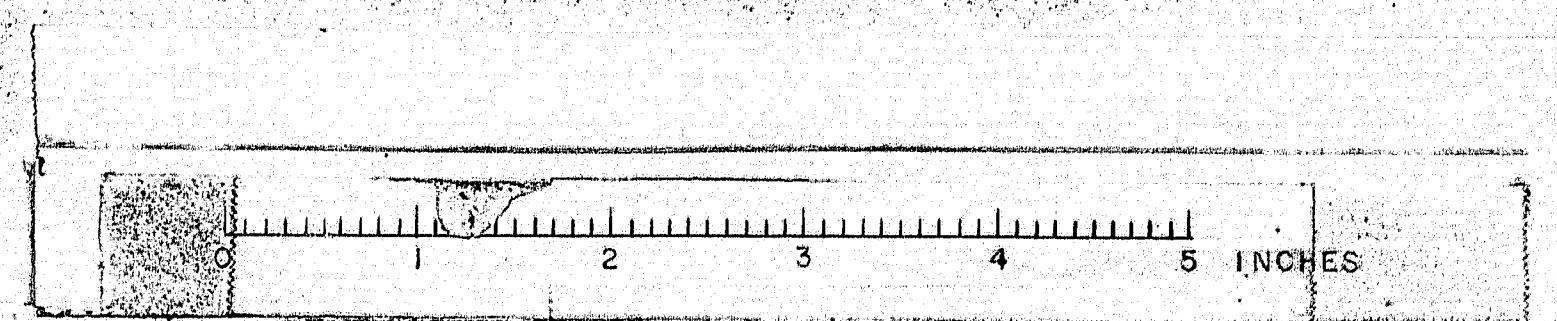
**TRANSVERSE SECTIONS**

NOTE - See Sh. #3 for Stations  
locating Borings.

NOTE - This sheet is for  
foundation information  
only. Do not use for  
details of construction.

DESIGN - TRACE - CHECK -	Soils Division	BRIDGE NO. SURVEY - PLOT -
STATE HIGHWAY COMMISSION BRIDGE DIVISION		
<b>INTERSTATE 95</b> OVER <b>BENEDICTA ROAD</b> IN THE TOWN OF <b>SHERMAN</b> <b>AROOSTOOK COUNTY</b> FOUNDATION SURVEY		
SHEET 2 OF 12 AUGUSTA, MAINE June 1966		

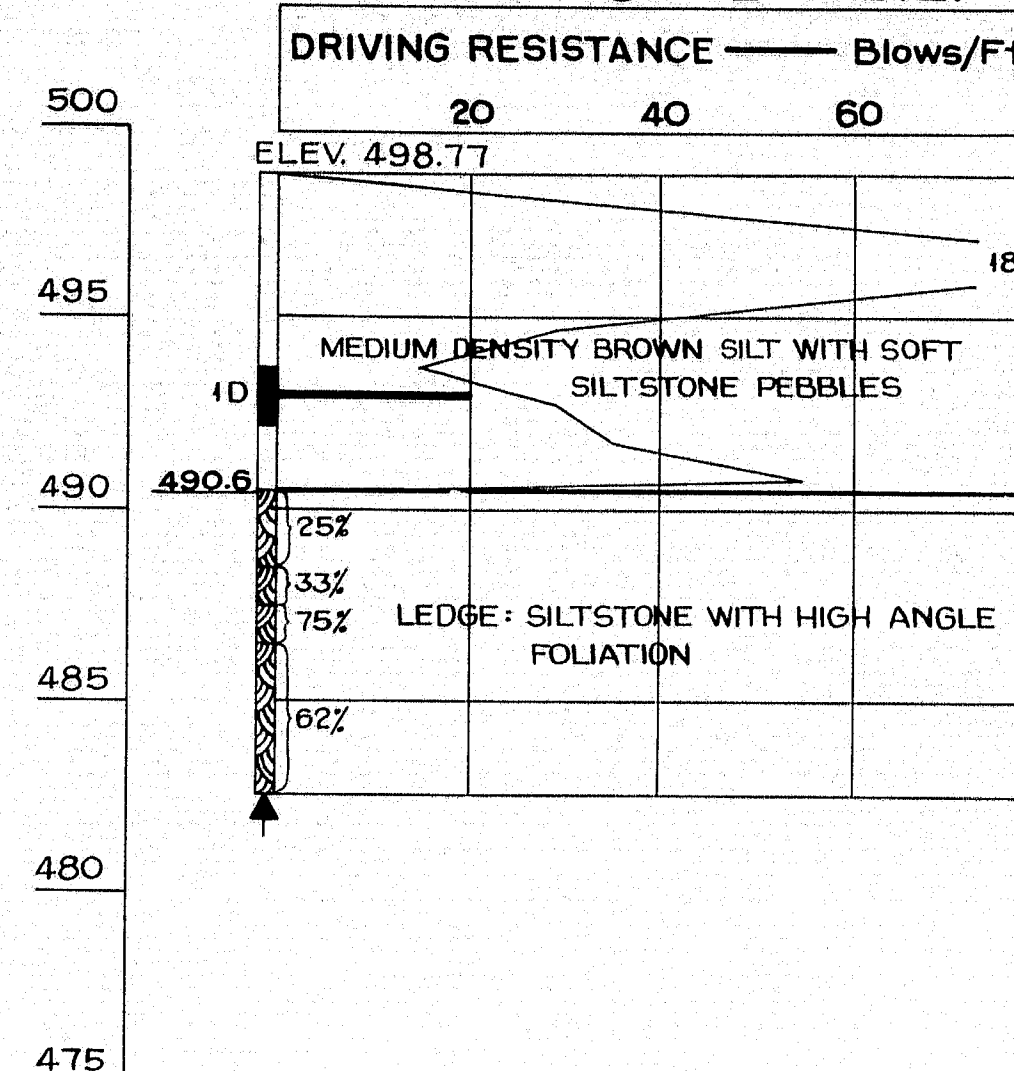
M-2505





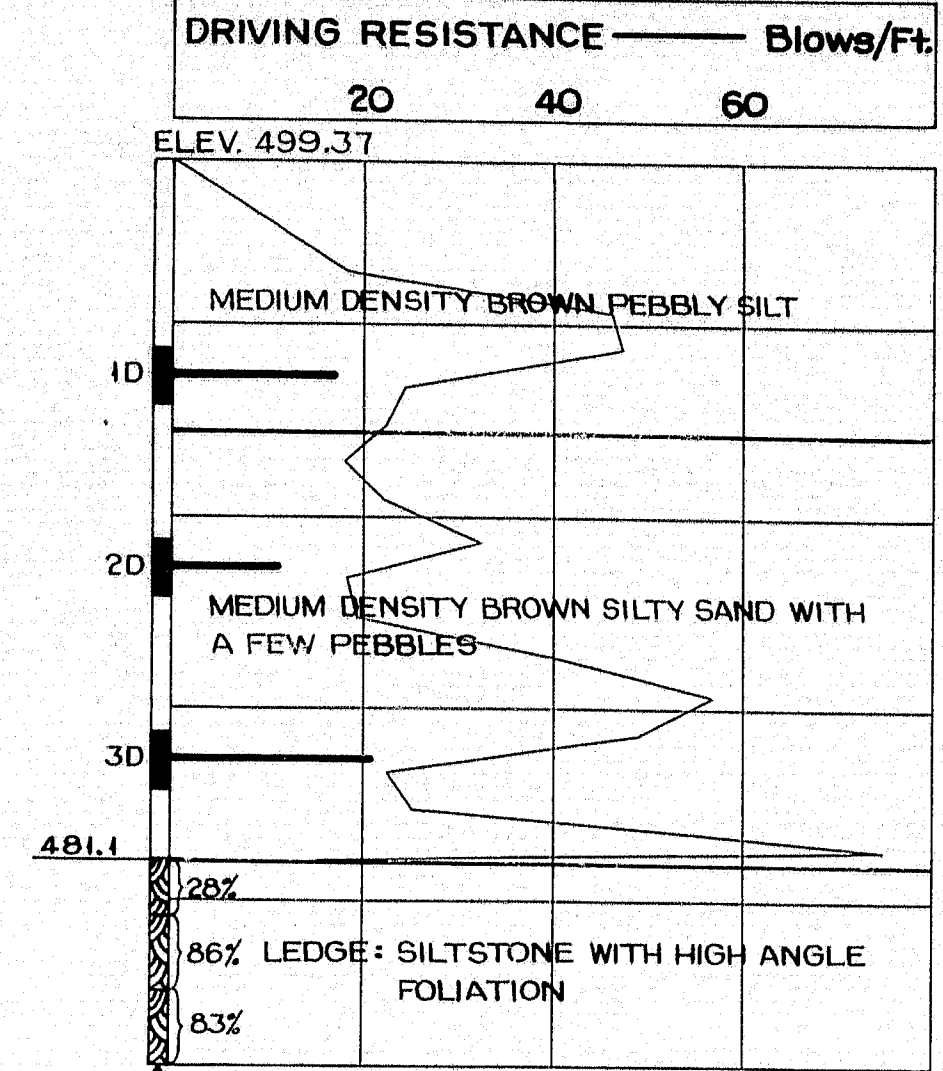
### BORING AC-86

STA. 4384+85 @ S.B.L.



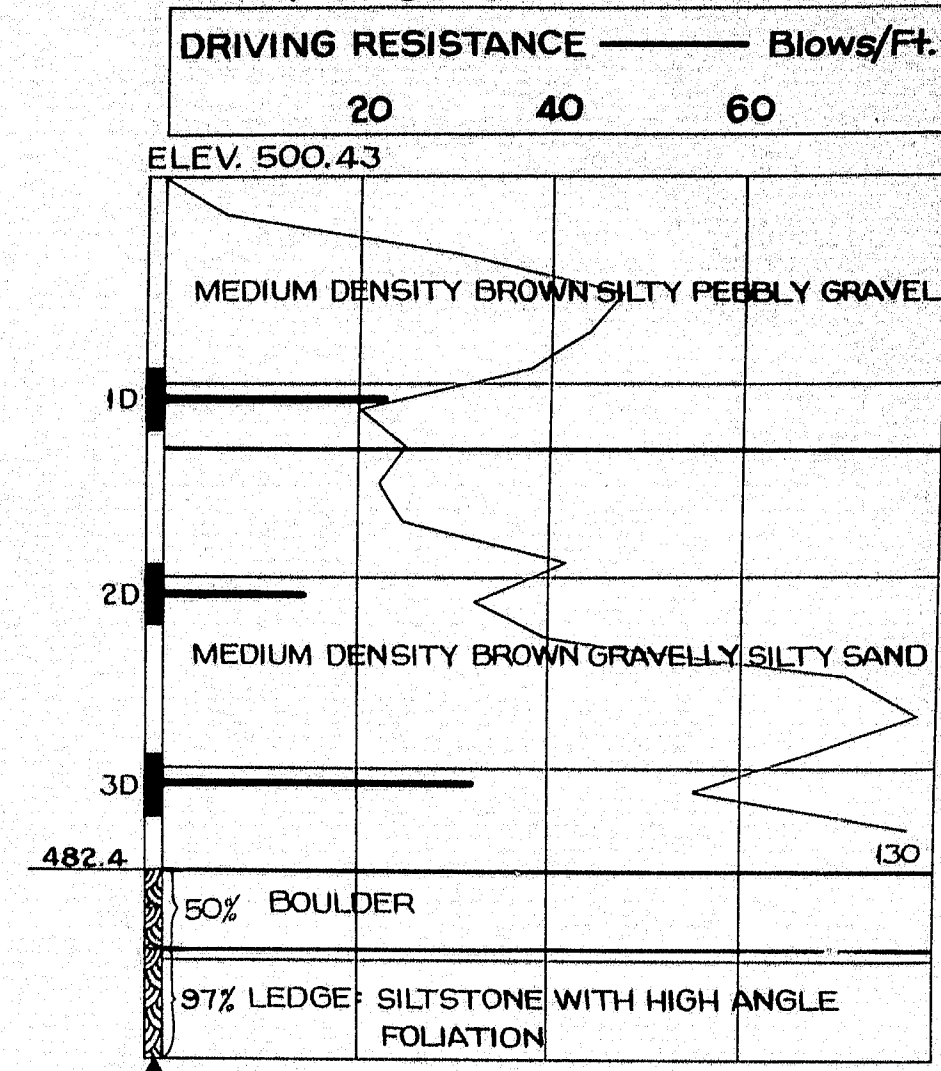
### BORING AC-87

STA. 4382+00 @ N.B.L.



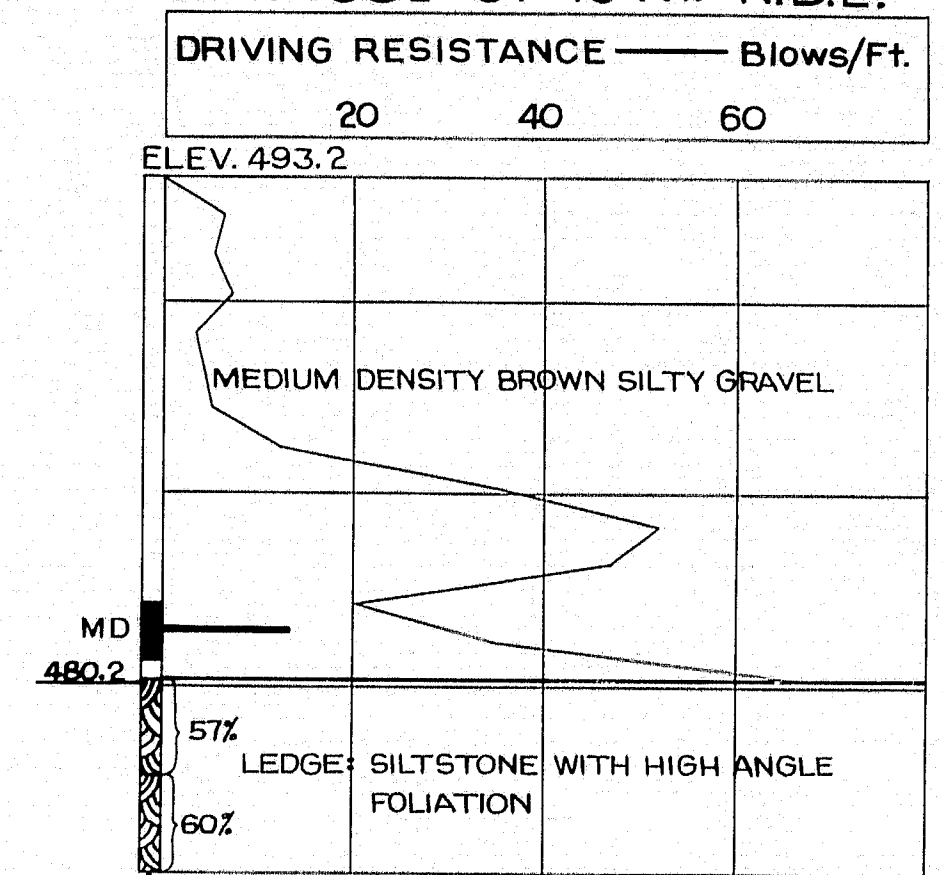
### BORING AC-88

STA. 4381+32 @ N.B.L.



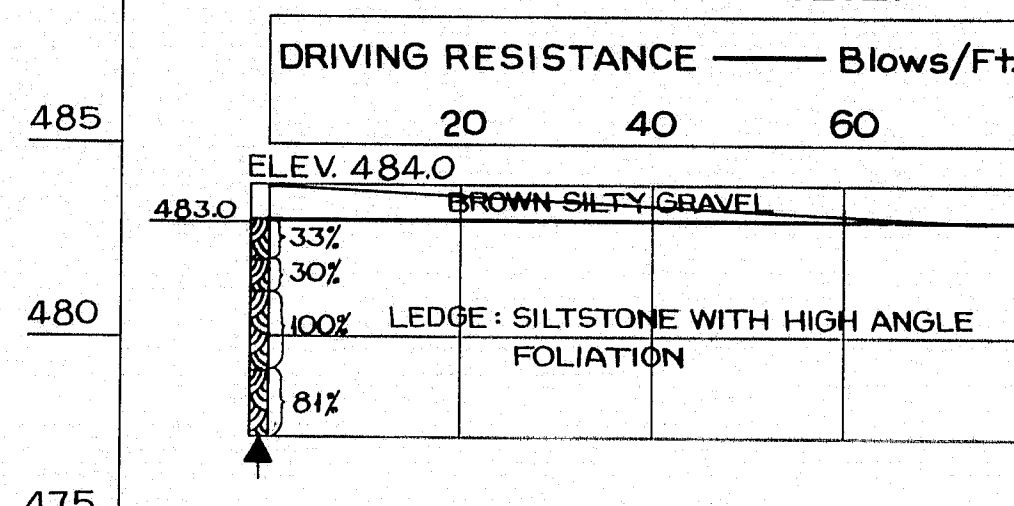
### BORING AC-90

STA. 4382+57 16' RT. N.B.L.



### BORING AC-89

STA. 4383+23 @ N.B.L.

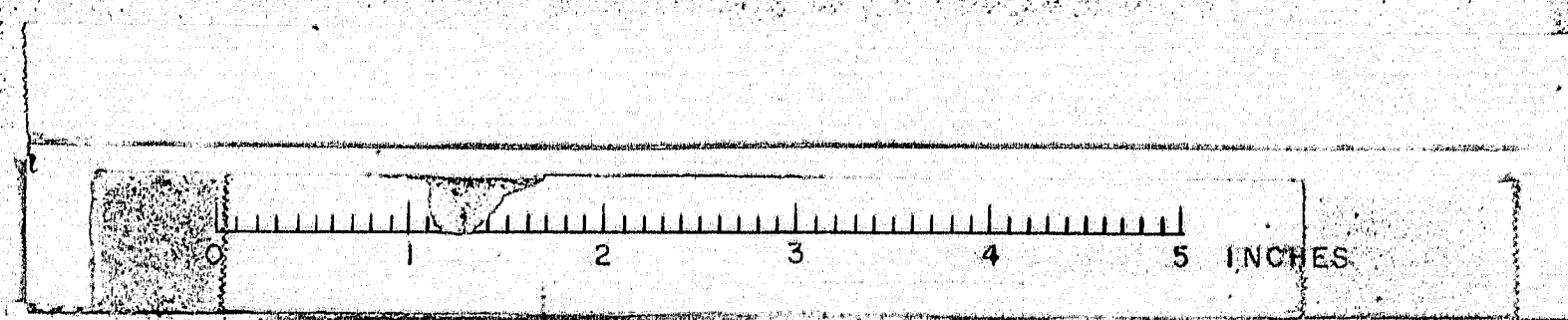


### BORING NOTES

- 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 #12905
- 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.
- Bottom of boring (may not be bottom of soil strata).
- Locations cored by diamond bit and per cent recovery of rock.

DESIGN TRACE CHECK	Soils Division	BRIDGE NO. SURVEY PLOT
STATE HIGHWAY COMMISSION BRIDGE DIVISION		
INTERSTATE 95 OVER BENEDICTA ROAD IN THE TOWN OF SHERMAN AROOSTOOK COUNTY FOUNDATION SURVEY		
SHEET 3 OF 12 AUGUSTA, MAINE JUNE 1966		

2506















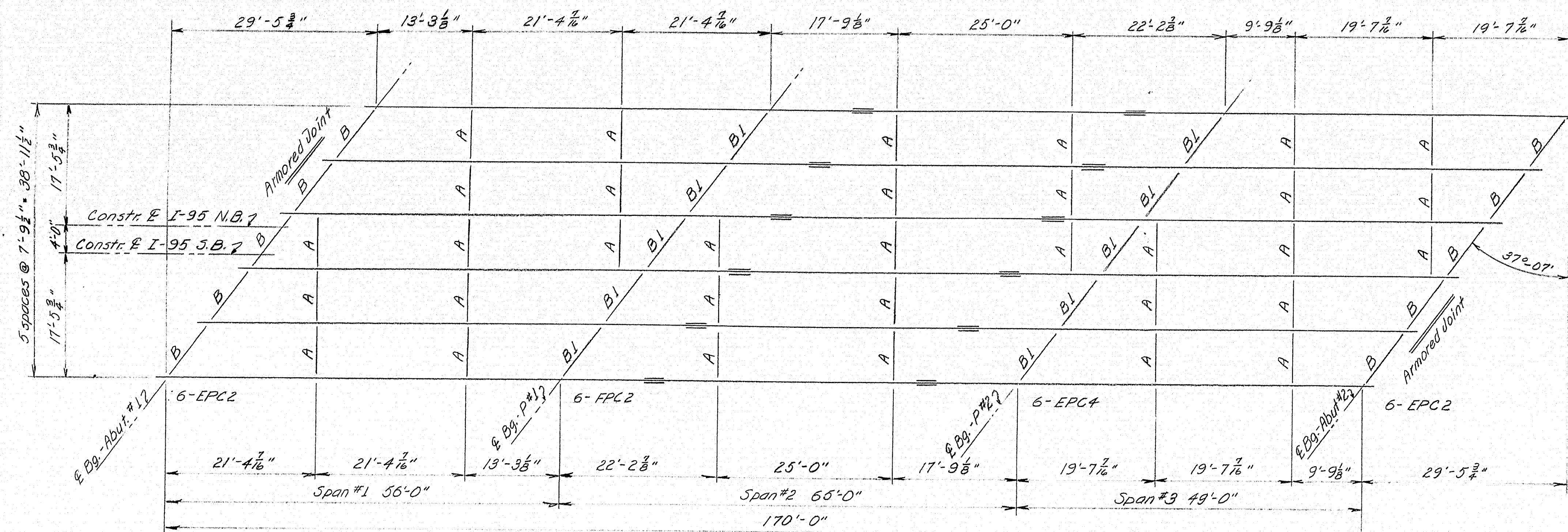




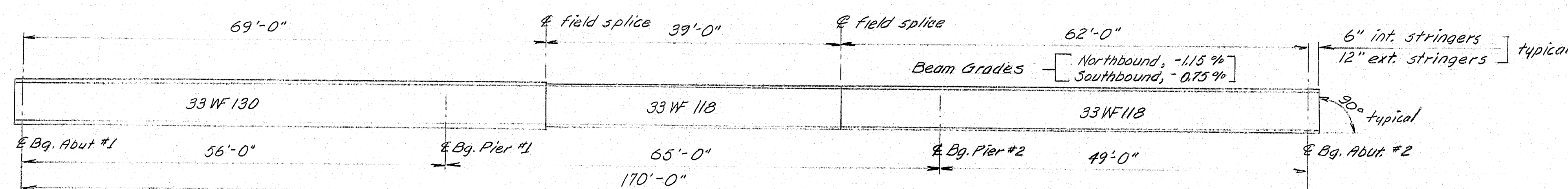




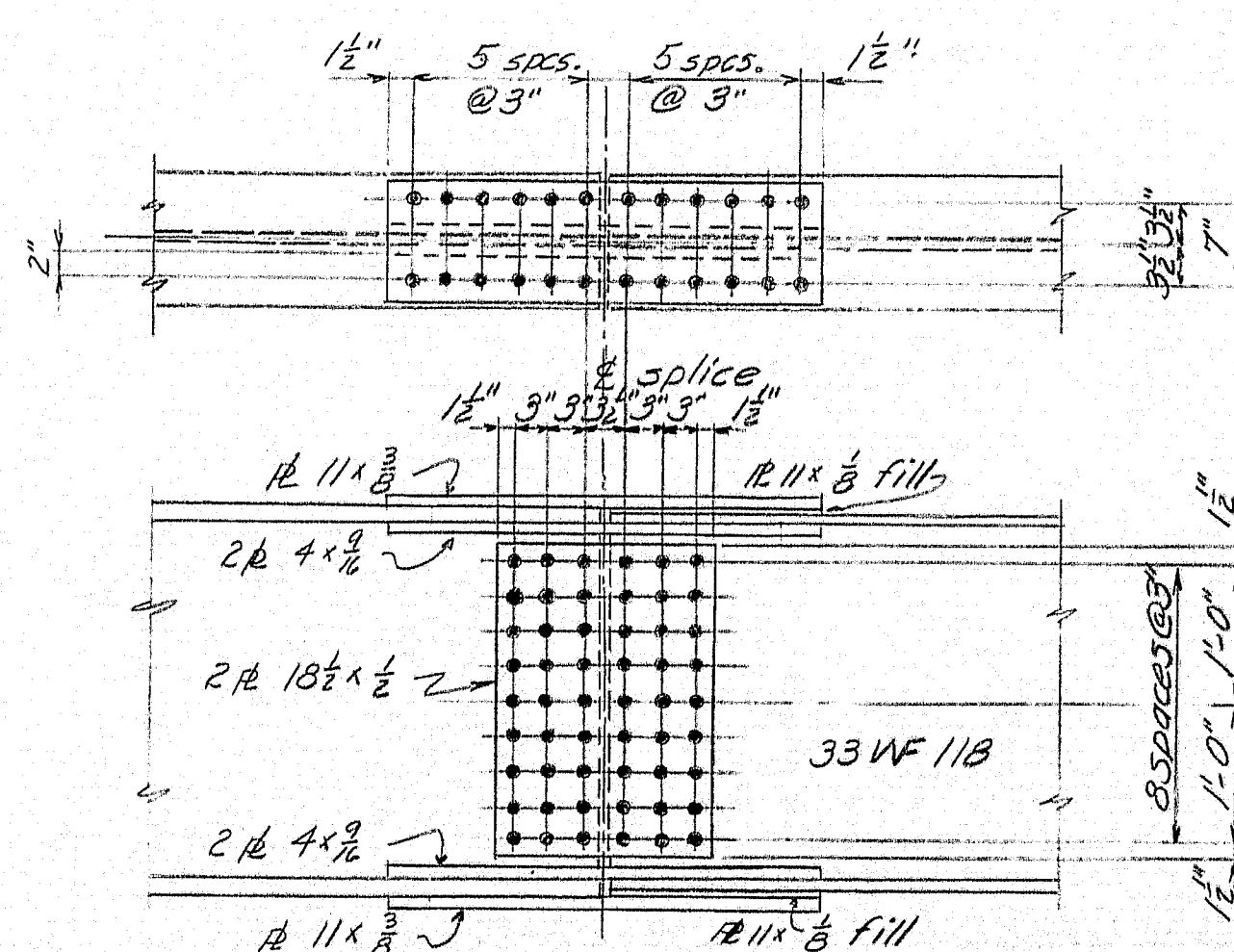




FRAMING PLAN - N.B. & S.B.

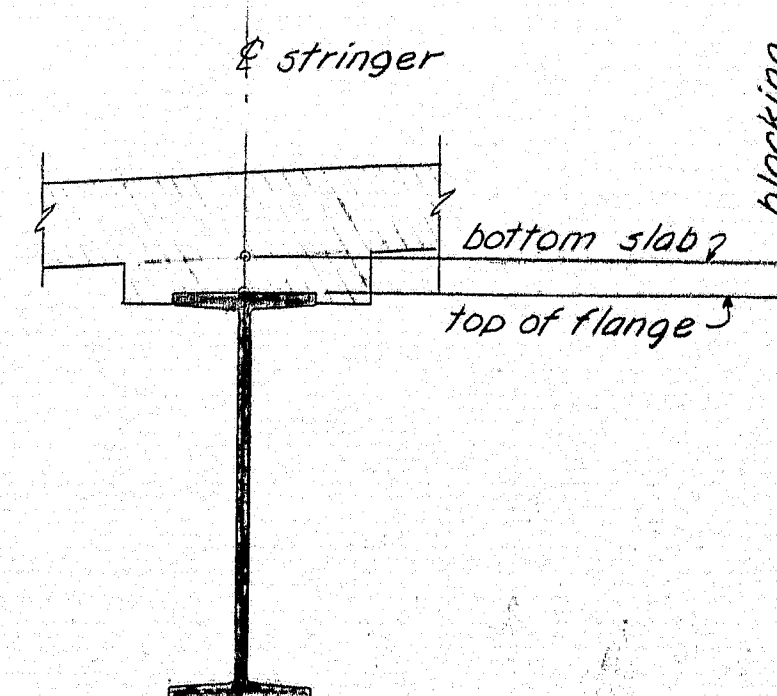


TYPICAL STRINGER ELEVATION  
No camber required - natural camber up.



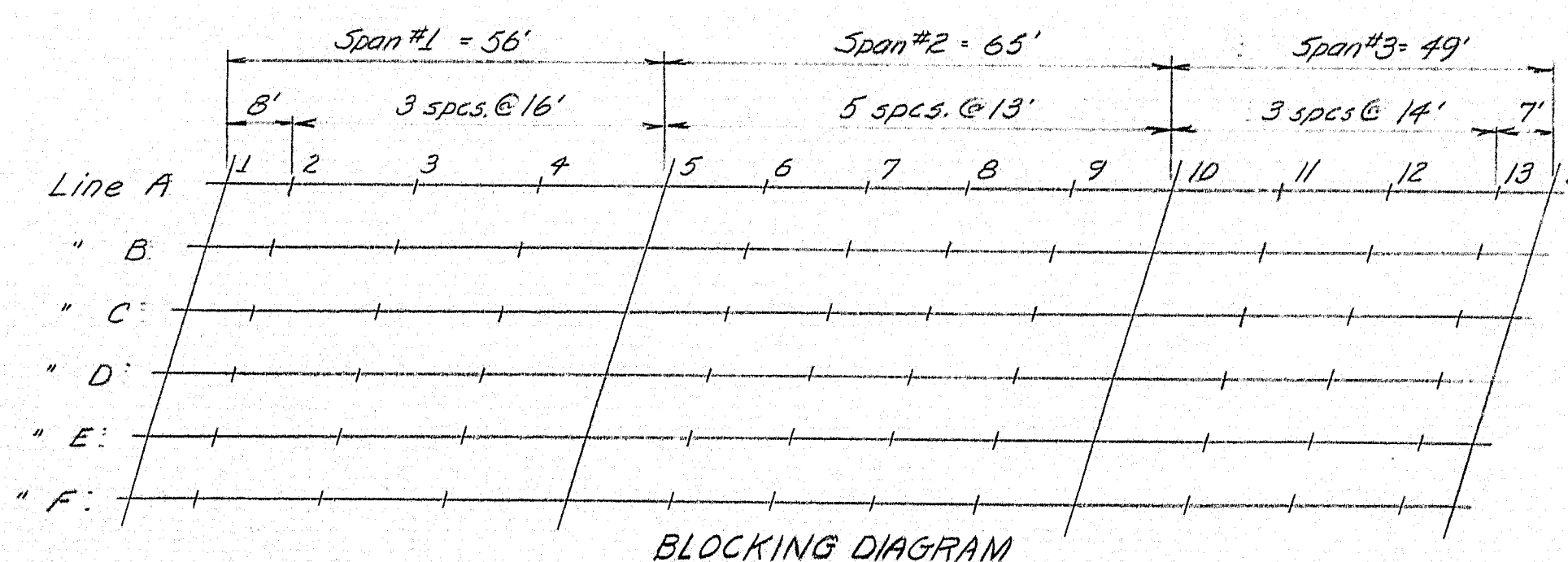
SPlice DETAILS

Bolts - 3/4" P. ASTM A325  
Holes - 15/16" φ



BLOCKING DETAIL

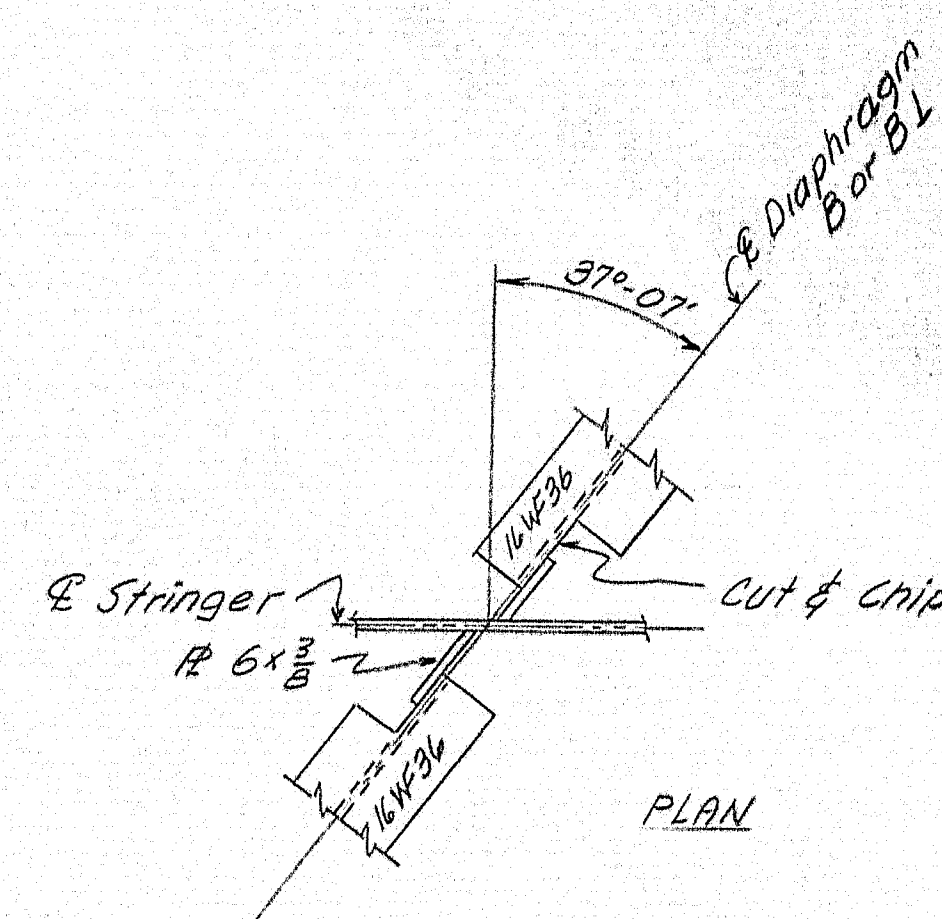
Nominal Blocking  
Abut. #1 & Pier #1 = 1 1/2"  
Pier #2 & Abut. #2 = 1 1/2"  
Do not use for setting forms.



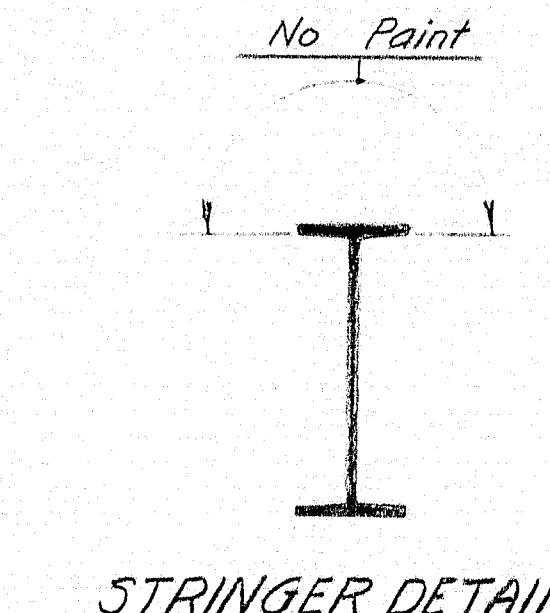
BLOCKING DIAGRAM

BOTTOM SLAB ELEVATIONS *														
POINT	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Line A	509.41	509.34	509.17	508.97	508.76	508.63	508.50	508.35	508.18	508.02	507.86	507.71	507.54	507.45
" B	509.61	509.54	509.37	509.17	508.97	508.84	508.71	508.56	508.39	508.22	508.07	507.92	507.75	507.65
" C	509.81	509.74	509.58	509.37	509.17	509.04	508.91	508.76	508.59	508.42	508.27	508.12	507.95	507.86
" D	509.81	509.74	509.58	509.37	509.17	509.04	508.91	508.76	508.59	508.42	508.27	508.12	507.95	507.86
" E	509.74	509.67	509.51	509.30	509.10	508.96	508.84	508.69	508.52	508.35	508.20	508.05	507.88	507.79
" F	509.68	509.60	509.44	509.24	509.03	508.90	508.77	508.62	508.45	508.28	508.13	507.98	507.81	507.72
NORTHBOUND	Line A	514.25	514.21	514.11	513.97	513.83	513.76	513.68	513.59	513.46	513.35	513.25	513.16	513.04
" B	514.43	514.39	514.29	514.15	514.01	513.94	513.86	513.76	513.64	513.53	513.43	513.33	513.22	513.16
" C	514.61	514.57	514.47	514.33	514.19	514.11	514.04	513.94	513.82	513.70	513.61	513.51	513.40	513.34
" D	514.72	514.69	514.58	514.45	514.31	514.23	514.15	514.05	513.94	513.82	513.72	513.64	513.51	513.45
" E	514.63	514.59	514.49	514.35	514.21	514.14	514.06	513.96	513.84	513.73	513.63	513.54	513.42	513.36
" F	514.54	514.50	514.40	514.26	514.12	514.05	513.97	513.87	513.78	513.64	513.54	513.45	513.33	513.27
SOUTHBOUND	Line A	514.25	514.21	514.11	513.97	513.83	513.76	513.68	513.59	513.46	513.35	513.25	513.16	513.04
" B	514.43	514.39	514.29	514.15	514.01	513.94	513.86	513.76	513.64	513.53	513.43	513.33	513.22	513.16
" C	514.61	514.57	514.47	514.33	514.19	514.11	514.04	513.94	513.82	513.70	513.61	513.51	513.40	513.34
" D	514.72	514.69	514.58	514.45	514.31	514.23	514.15	514.05	513.94	513.82	513.72	513.64	513.51	513.45
" E	514.63	514.59	514.49	514.35	514.21	514.14	514.06	513.96	513.84	513.73	513.63	513.54	513.42	513.36
" F	514.54	514.50	514.40	514.26	514.12	514.05	513.97	513.87	513.78	513.64	513.54	513.45	513.33	513.27

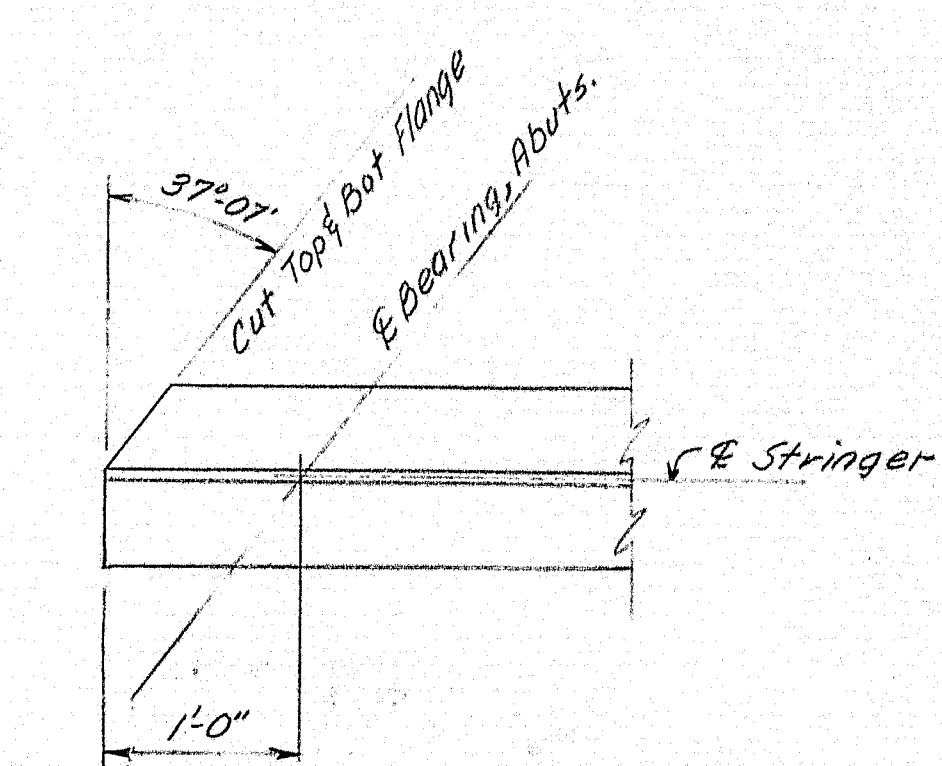
\* Compensated for dead load deflections. (Struct. steel not included)



DIAPHRAGM MODIFICATION (B & B1)



STRINGER DETAIL



DETAIL - EXTERIOR STRINGERS

Abut. #1 East - As shown  
" #2 West - Rotate 180°  
No cut - Abut. #1 West & Abut. #2 East

NOTES

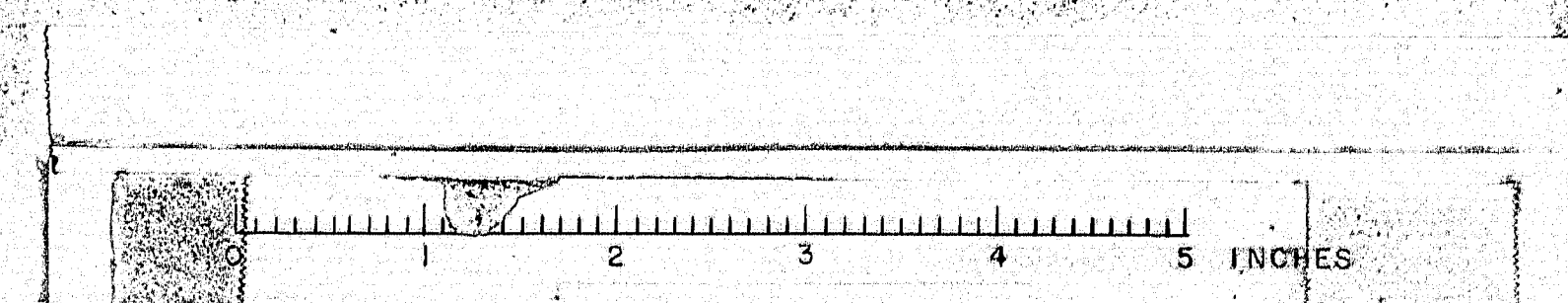
- All dimensions are horizontal.
- Set diaphragms normal to grade.
- Set Diaphragms "B1" below top of stringers same as Diaphragms "A".
- Armored Joints shall consist of two elements with a joint at Construction E.
- Drains on sh. #10

REFERENCES

Bearing Pedestals BD 101-64  
Diaphragms BD 104-66  
Armored Joint  
Structural Steel Classification - Sheet 1.

DESIGN - R.A.S.	BRIDGE NO.
CHECK - H.L.D.	SURVEY -
STATE HIGHWAY COMMISSION BRIDGE DIVISION	
INTERSTATE 95 OVER BENEDICTA ROAD IN THE TOWN OF SHERMAN AROOSTOOK COUNTY STRUCTURAL STEEL & BOT. SLAB ELEVATIONS SHEET 9 OF 12 AUGUSTA, MAINE MAY 1986	

M-2512













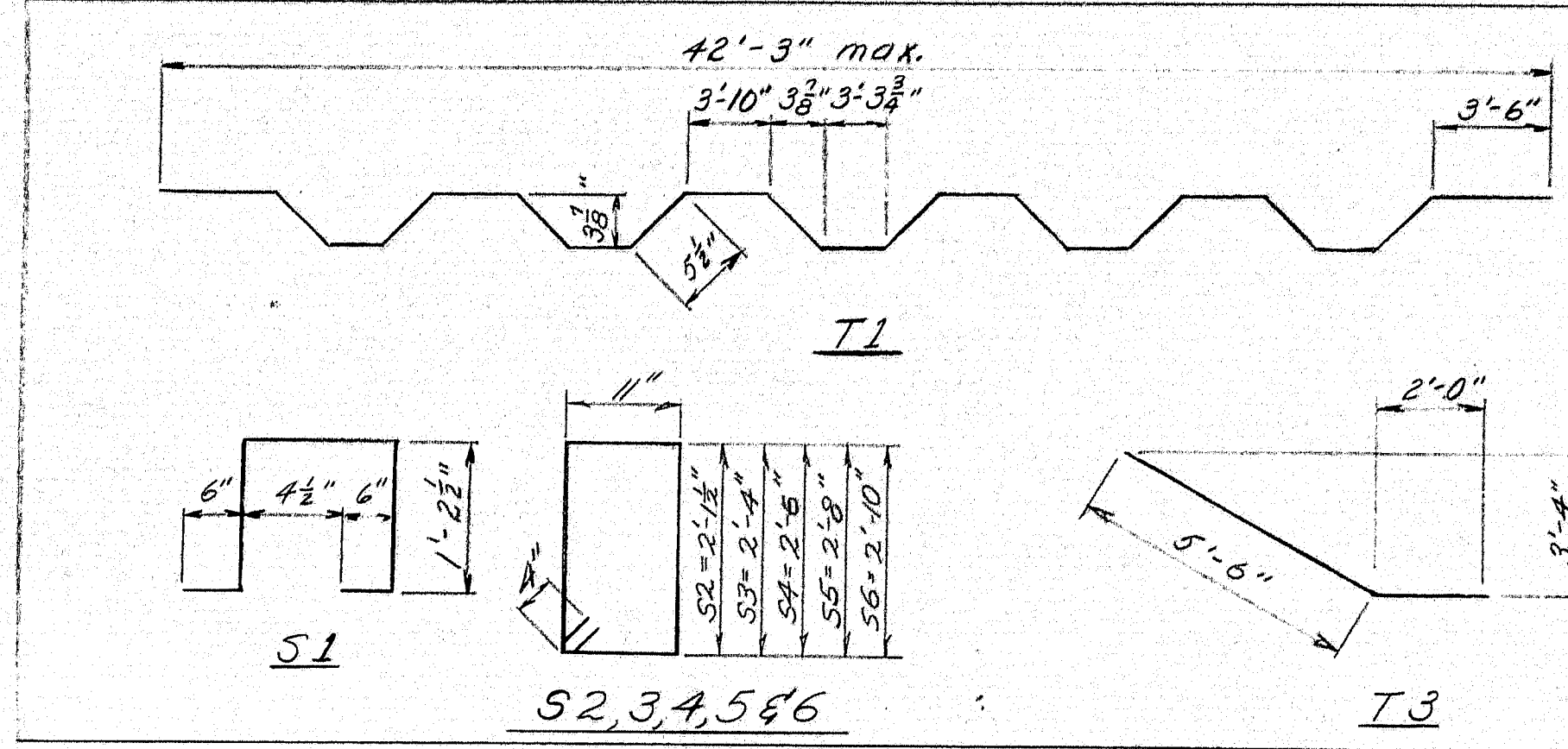
\* One half of Superstructure re-bars to be placed in each structure (N.B. & S.B.)

- Dimensions are to center of reinforcing bars.  
- Reinforcing Steel is to be of intermediate grade.

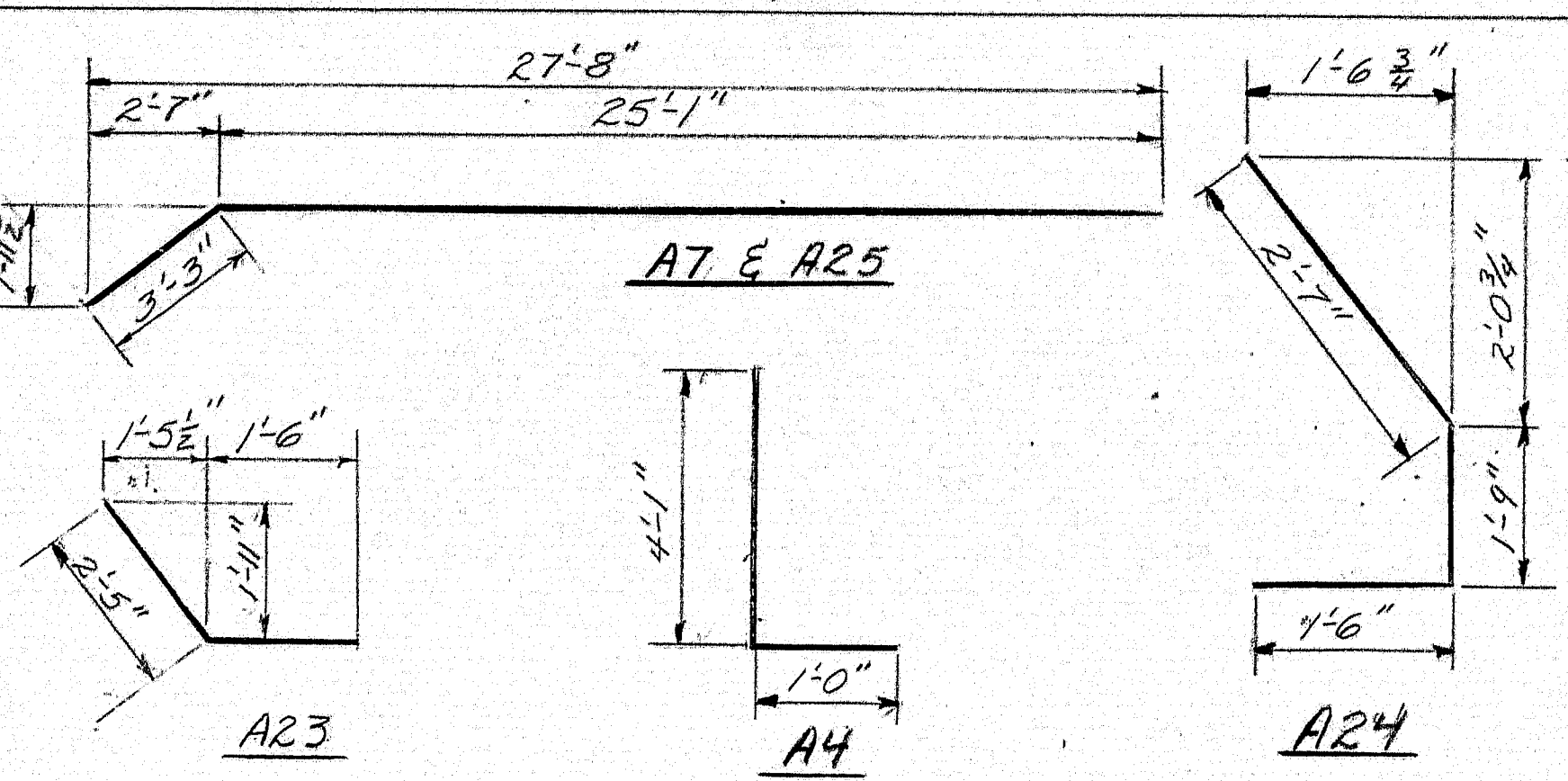
\*\* Number of bars shown include bars for: Piers #1, N.B. & S.B.  
Piers #2, N.B. & S.B.

B.P.R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	7-95-9(3)	32	223

DETAIL: R.A.S.  
CHECK: H.L.DORITY



DETAIL: R.A.S.  
CHECK: H.L.DORITY



MARK	SIZE	*NO.	LENGTH	REMARKS
T1	#5	342	43'-6"	Slab transverse
T3	#5	24	7'-6"	Slab transverse
S1	#5	844	4'-3"	Superstructure Posts
S2	#5	16	6'-9"	
S3	#5	8	7'-2"	
S4	#5	8	7'-6"	
S5	#5	8	7'-10"	
S6	#5	16	8'-2"	

MARK	SIZE	*NO.	LENGTH	REMARKS
T2	#5	684	42'-3"	Slab transverse, top & bottom
T4	#5	16	3'-6"	
T5	#5		4'-7"	
T6	#5		5'-8"	
T7	#5		6'-10"	
T8	#5		7'-11"	
T9	#5		9'-0"	
T10	#5		10'-1"	
T11	#5		11'-2"	
T12	#5		12'-4"	
T13	#5		13'-5"	
T14	#5		14'-6"	
T15	#5		15'-7"	
T16	#5		16'-9"	
T17	#5		17'-10"	
T18	#5		18'-11"	
T19	#5		20'-0"	
T20	#5		21'-1"	
T21	#5		22'-3"	
T22	#5		23'-4"	
T23	#5		24'-5"	
T24	#5		25'-6"	
T25	#5		26'-7"	
T26	#5		27'-9"	
T27	#5		28'-10"	
T28	#5		29'-11"	
T29	#5		31'-0"	
T30	#5		32'-1"	
T31	#5		33'-3"	
T32	#5		34'-4"	
T33	#5		35'-5"	
T34	#5		36'-6"	
T35	#5		37'-8"	
T36	#5		38'-9"	
T37	#5	16	39'-10"	
T38	#5	760	35'-3"	Slab longitudinal - spliced
T39	#5	66	18'-2"	" " @ Piers
T40	#5	66	17'-1"	" " " "
C1	#5	24	13'-8"	Curbs
C2	#5	8	14'-10"	"
C3	#5	32	15'-11"	"
C4	#5	16	17'-8"	"
C5	#5	8	13'-10"	"
SPI	#5	32	4'-8"	Superstructure Posts

T13	13'-5"
T14	14'-6"
T15	15'-7"
T16	16'-9"
T17	17'-10"
T18	18'-11"
T19	20'-0"
T20	21'-1"
T21	22'-3"
T22	23'-4"
T23	24'-5"
T24	25'-6"

MARK	SIZE	*NO.	LENGTH	REMARKS
P19	#8	32	19'-3"	Columns
P20	#8	16	16'-9"	"
P1	#9	16	25'-9"	Caps
P2	#8	40	25'-9"	"
P3	#6	32	25'-9"	"
P4	#8	64	17'-6"	Pier #2, N.B. Col. #1 & 2; Pier #2, S.B. Col. #1, 2 & 3
P5	#8	64	18'-6"	Pier #1, N.B. & S.B. Col. #1 & 2; Pier #2, N.B. Col. #3; Pier #2, S.B. Col. #4
P6	#8	48	20'-6"	Pier #1, N.B. Col. #3; Pier #2, N.B. Col. #4; Pier #1, S.B. Col. #3 & 4
P7	#8	16	22'-3"	Pier #1, N.B. Col. #4
P8	#5	384	5'-6"	Footings
P9	#8	16	21'-3"	Columns

T37		16	39'-10"					
T38		760	35'-3"	Slab - longitudinal - spliced				
T39		66	18'-2"	"	"	@ Piers		
T40		66	17'-1"	"	"	"	"	
C1		24	13'-8"	Cutbs				
C2		8	14'-10"	"				
C3		32	15'-7 1/2"	"				
C4		16	17'-8"	"				
C5		8	13'-10"	"				
SP1	#5	32	4'-8"	Superstructure Posts				

Detail: RJM				APPROACH SLABS			
Check: H.L.DORRITY							
				SOUTHBOUND		NORTHERN TOTAL	
Mark	Size	Length	Abut.#	Abut.#	Abut.#	Abut.#	Location
AS1	#6	14'-8"	190	190	190	190	Longitudinal
AS2	#4	24'-8"	32	32	32	32	Lateral Spliced

BENT BARS										
k	Size	Length	SOUTHBOUND				NORTHBOUND		TOTAL	Location
			Abut 1	Abut 2	Abut 3	Abut 4	Abut 5	Abut 6		
#5	5'-1	33	33	33	33	33	132		Footing - Breastwall	
#5	10'-0	34					34		Breastwall	
#4	5'-0	12	12	12	12	12	48		Bridge Seat	
#4	6'-0	12	12	12	12	12	48		" "	
#6	3'-6"	32	32	32	32	32	128		Backwall - Approach Slab	
#5	9'-1			34			34		Breastwall	
J	21'-6"		24				24			

2	#5	8'-1"	34	34	"
3	#5	5-11	4	34	"
4	#5	3-10	4	3	End of Breastwall
5	#5	28'-4"	12	12	"
6	#5	4-0	4	4	Backwall - horizontal
7	#5	28'-4"	10	8	Substructure Posts
8	#5	10-8	7	8	Breastwall
9	#5	10-2	10	7	Wings - Horizontal
10	#5	5-2	6	10	"
11	#5	4-8	6	6	"
12	#5	4-8	6	12	"