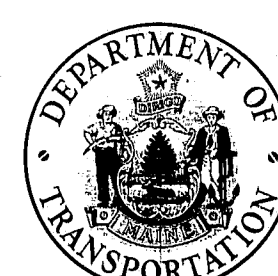


F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	1-95-9 (68)	1	25

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION



BUREAU OF HIGHWAYS  
INTERSTATE 95 NORTHBOUND  
OVER  
LINE ROAD  
IN THE TOWNS OF  
SMYRNA-LUDLOW  
AROOSTOOK COUNTY  
PROJECT NO I-95-91681285  
PROJECT LENGTH 0.017 MILES

CONVENTIONAL SIGNS

COUNTY LINES	---	TRAVELLED WAY - PROPOSED	=====
TOWN LINES	---	UNDERGROUND UTILITIES - EXISTING	----
PROPERTY LINES	---	UNDERGROUND UTILITIES - PROPOSED	----
R/W LINES - EXISTING	---	RAILROAD - SINGLE TRACK	=====
R/W LINES - NEW - ACCESS CONTROL	---	RAILROAD - DOUBLE TRACK	=====
R/W LINES - NEW - NO ACCESS CONTROL	---	UTILITY POLE - EXISTING	+
CULVERT - EXISTING	---	UTILITY POLE - JOINT OCCUPANCY	+
CULVERT - PROPOSED	---	PROPOSED UTILITY POLE - TEMPORARY	X
CURBING - EXISTING	---	PROPOSED UTILITY POLE - PERMANENT	+
CURBING - PROPOSED	---	TREES	⊗hardwood ⊗softwood
TRAVELLED WAY - EXISTING	=====	WOODS	=====

SPECIFICATIONS

DESIGN-A.A.S.H.T.O. Standard Specifications for Highway Bridges 1973 and Interim Specifications 1974, 1975, 1976.

COTRACT- State of Maine Highway Commission Standard Specifications Highways and Bridges, Revisions of June 1969.

DESIGN LOADING

LIVE LOADING-----HS 20-44 (MODIFIED FOR INTERSTATE)

MATERIALS

CONCRETE-----Wearing Surface Class "Y"  
All Other Class "A"

REINFORCING STEEL-----A.S.T.M. A 615 Grade 60

STRUCTURAL STEEL-----Beams W 36x170 A.S.T.M. A 572

All Other A.S.T.M. A 36

HIGH STRENGTH BOLTS A.S.T.M. A 325

BASIC ALLOWABLE STRESSES

CONCRETE----- $f_c$  = 1200 psi N=10

REINFORCING STEEL----- $f_s$  = 24,000 psi

STRUCTURAL STEEL-----A.S.T.M. A 572 Grade 50  $f_s$  = 27,000 psi

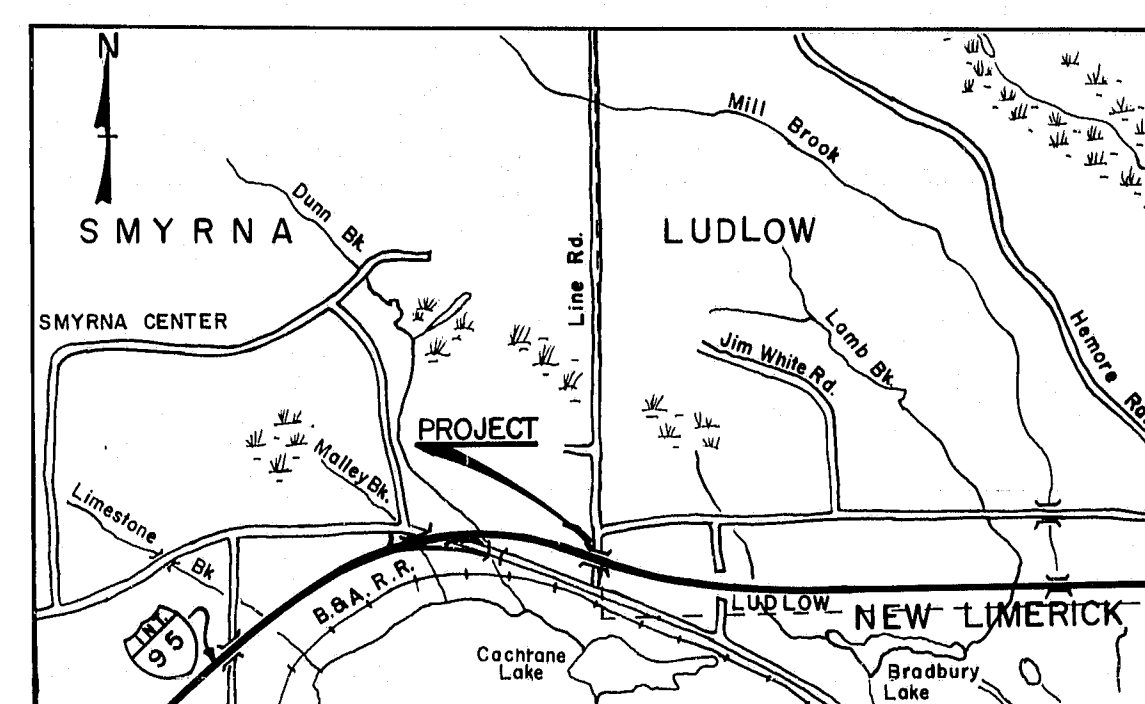
A.S.T.M. A 36  $f_s$  = 20,000 psi

A.S.T.M. A 325  $f_v$  = 13,500 psi

INDEX OF SHEETS

SHEET	TITLE	SUBJECT
1	ESTIMATED QUANTITIES	
2	GENERAL PLAN	
3	PROFILE	
4	FOUNDATION SURVEY	
5	BORING DETAILS	
6	FOOTING ABUTMENT - 1	
7	FOOTING ABUTMENT - 2	
8	ABUTMENT - 1	
9	ABUTMENT - 2	
10	WING DETAILS 1 & 2	
11	WING DETAILS 3 & 4	
12	END POST 1 & 2, 3 & 4	
13	STRUCTURAL STEEL	
14	BOTTOM OF SLAB ELEVATIONS	
15	SUPERSTRUCTURE	
16	SLOPE PROTECTION	
17	REINFORCING STEEL SCHEDULE	
18-19		
	BRIDGE STANDARDS	
20	BD-104-73 ARMORED JOINT, SHEAR CONNECTORS	
21	BD-101-74 BEARING PEDESTALS	
22	BD-113-72 DIAPHRAGM & CROSSFRAMES	
23	BD-114-73 ALUMINUM BRIDGE RAILING	
	HIGHWAY STANDARDS	
24	FIELD OFFICE (2) AUG. 1969 REV. 3-16-73	
25	GUARD RAIL (5) AUG. 1969 REV. 8-17-76	

As built Plans 12/29/78  
B.H. Munn



LOCATION MAP

1/2 0

1 IN = 1 MILE

TRAFFIC DATA

A.D.T.	1978	1333
A.D.T.	1998	1950
D.H.V.		328
T. (%)		19
D. (%)		100
V.		70mph.
P.S.D. (%)		NA
18 KIPS		341

NOTE:

ALL WORK CONTEMPLATED UNDER THIS CONTRACT SHALL BE GOVERNED BY AND IN CONFORMITY WITH THE STANDARD SPECIFICATIONS (REVISION OF JUNE 1968) AND SUPPLEMENTS THERETO, EXCEPT AS MODIFIED ON THE PLANS AND IN THE SPECIAL PROVISIONS.

Br. #1389

APPROVED:

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
COMMISSIONER  
JANUARY 1977  
BUREAU DIRECTOR  
JANUARY 1977

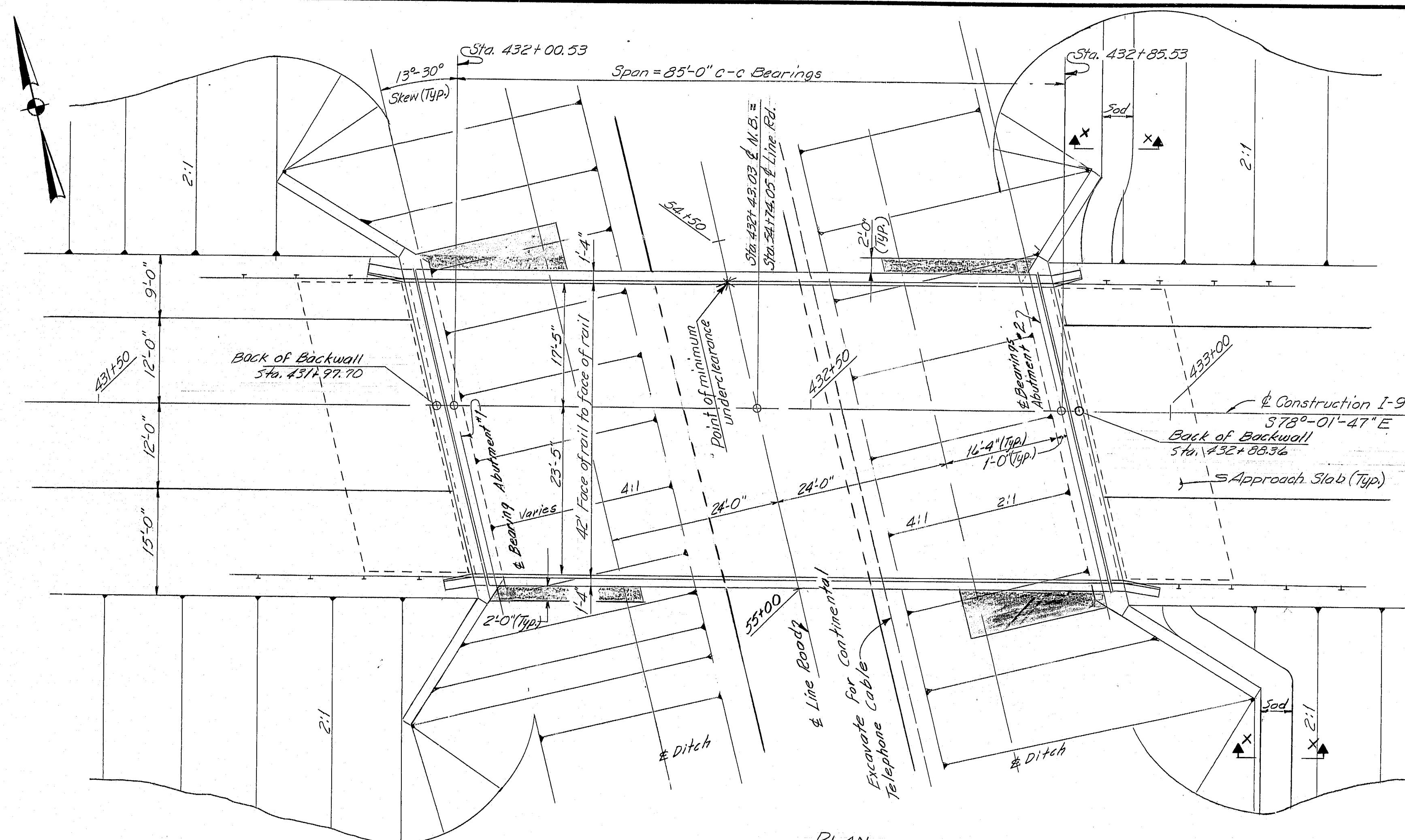
UNITED STATES  
DEPARTMENT OF TRANSPORTATION  
FEDERAL HIGHWAY ADMINISTRATION  
REGION I  
APPROVED:  
DIVISION ENGINEER  
DATE

R88-474

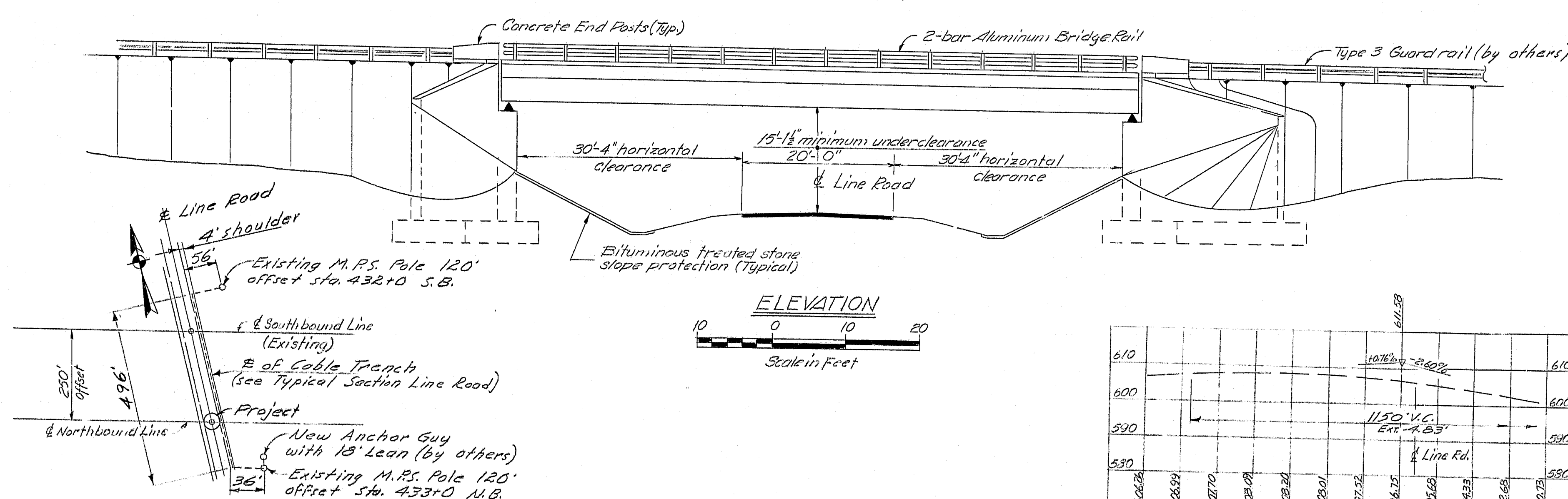




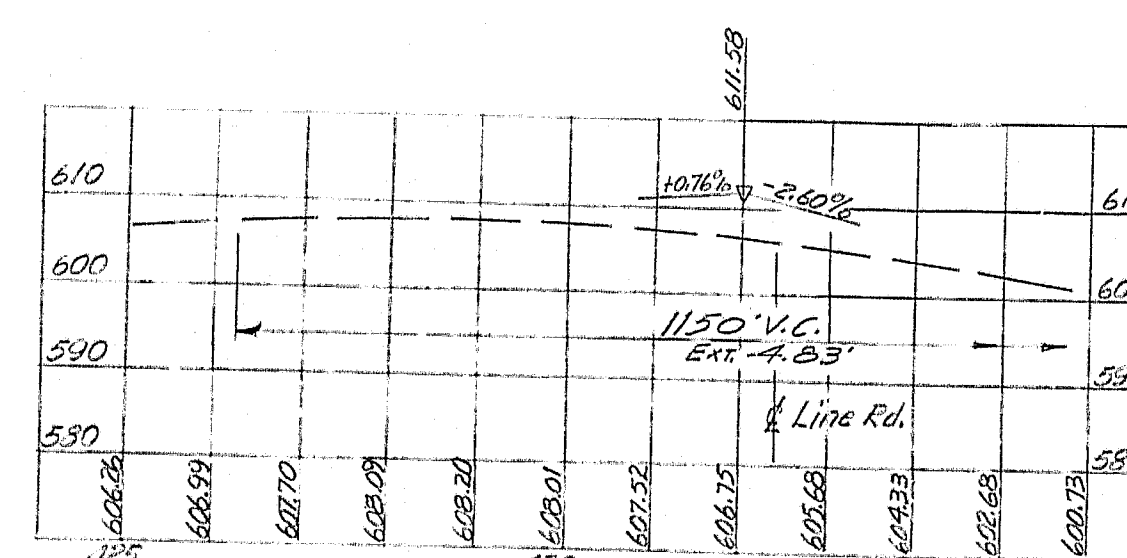
F.R.A.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	1-95-9(48)	3	25



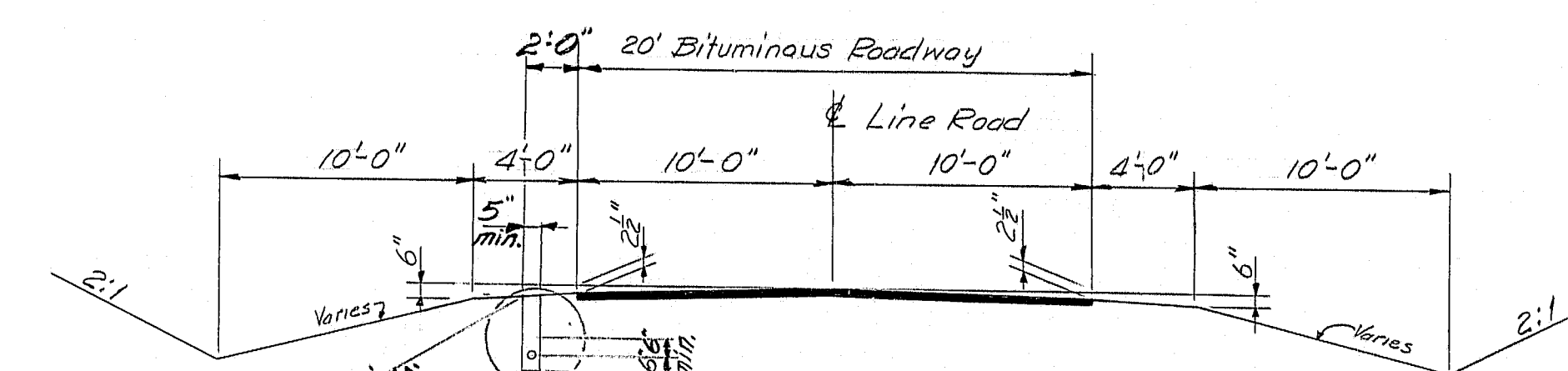
PLAN  
Scale in Feet  
0 10 20



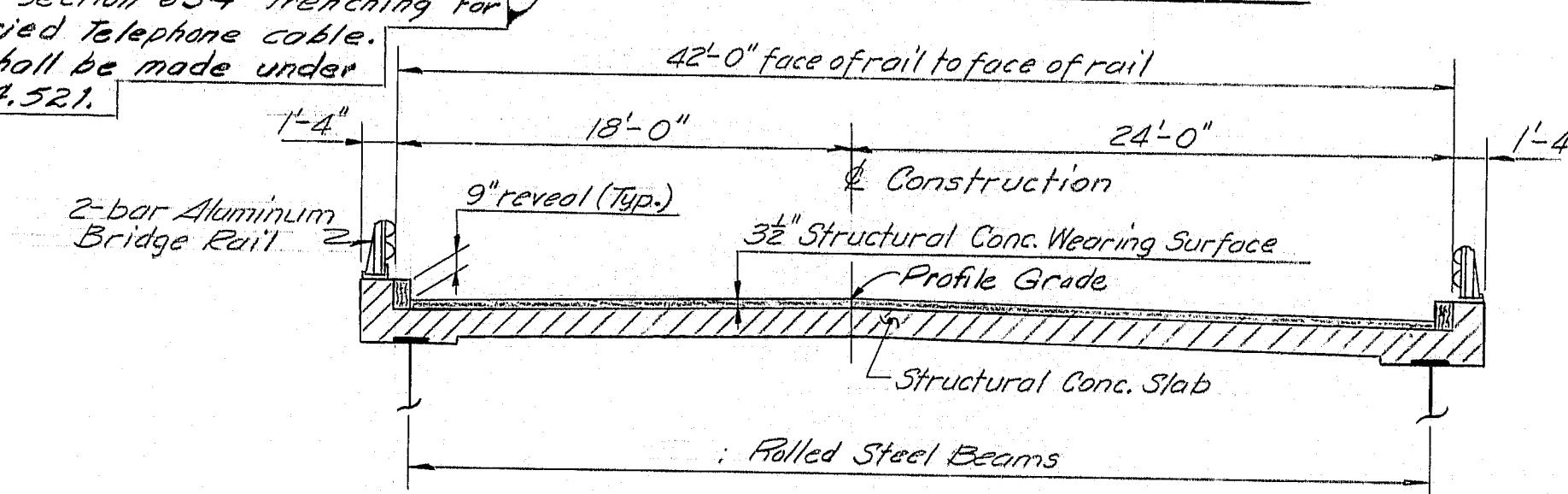
ELEVATION  
Scale in Feet  
0 10 20



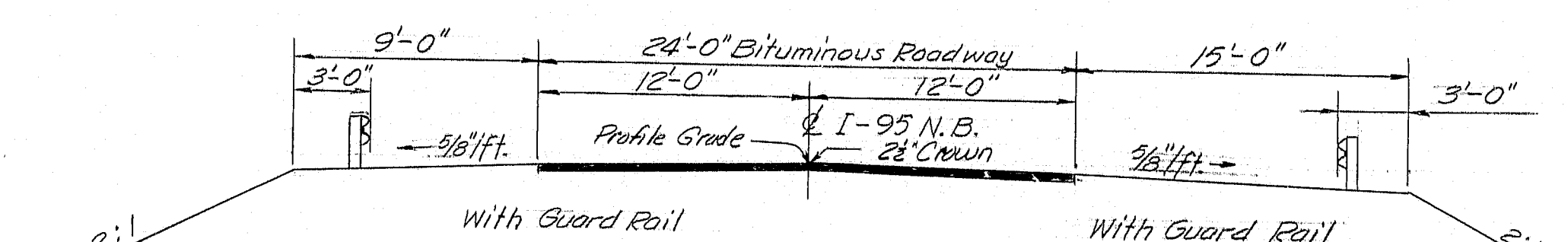
PROFILE - I-95 NB



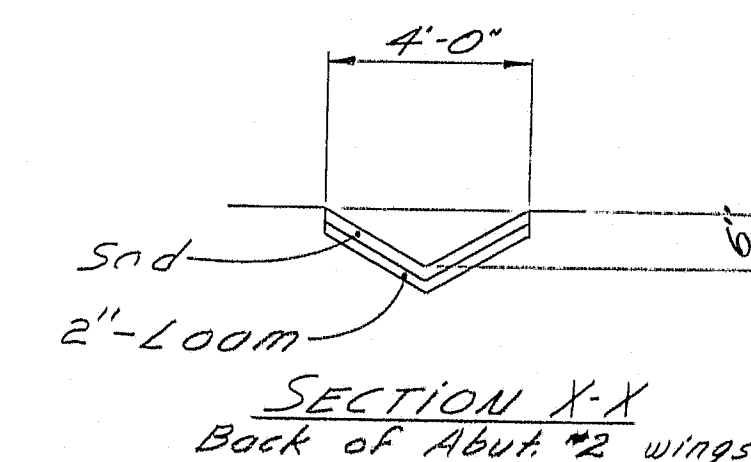
TYPICAL SECTION LINE ROAD



TYPICAL BRIDGE SECTION



TYPICAL SECTION I-95 N.B.



SECTION X-X  
Back of Abut. #2 wings

PROJECT DESIGN ENGINEER	DATE
WILLIAMS	2-76
CHECKED	2-76
REVISIONS	
FIELD CORRECTIONS	

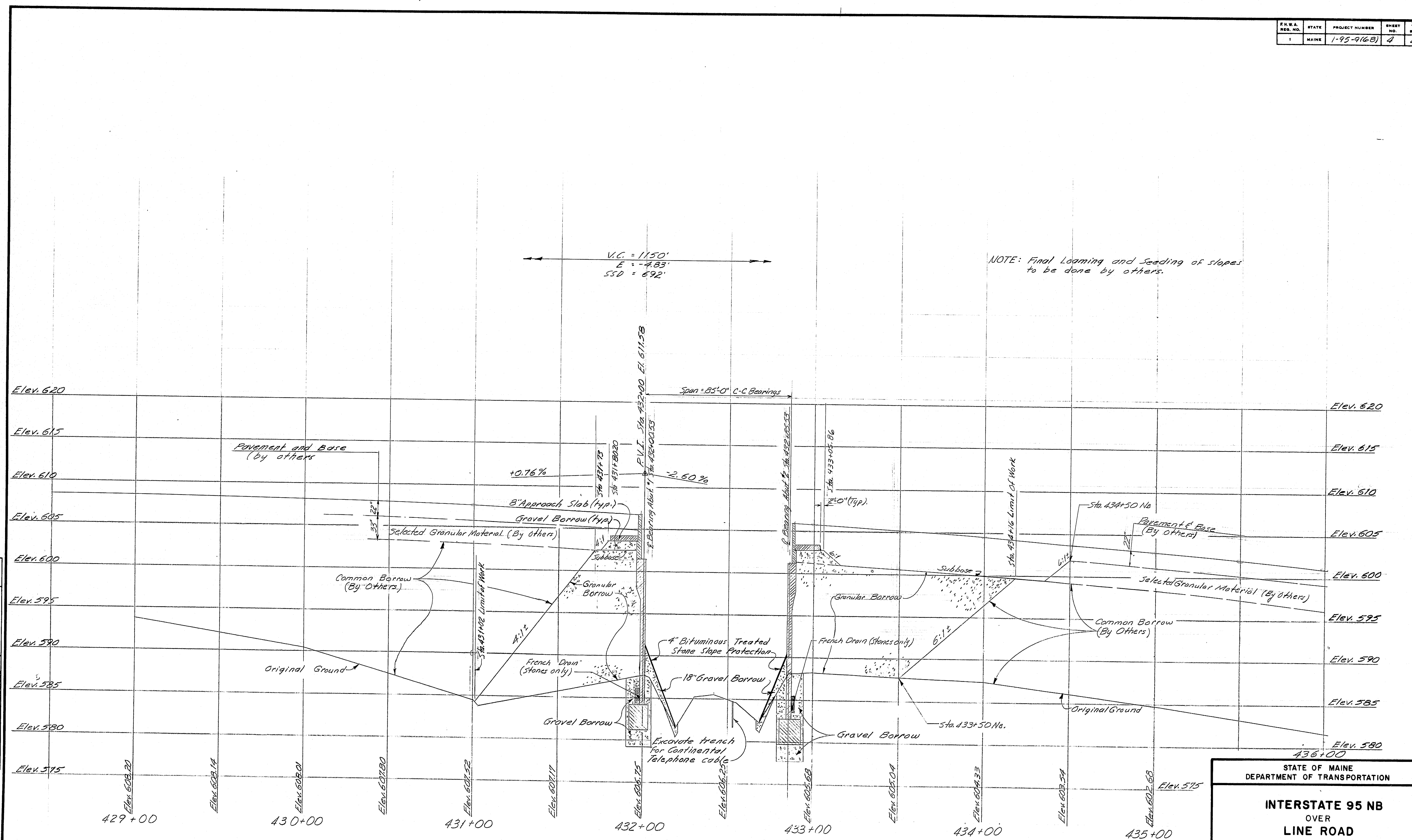
LAYOUT PLAN FOR CONTINENTAL  
TELEPHONE CABLE TRENCH

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
  
INTERSTATE 95 NB  
OVER  
LINE ROAD  
BETWEEN THE TOWNS OF  
SMYRNA - LUDLOW  
AROOSTOOK COUNTY  
  
GENERAL PLAN  
SHEET 3 OF 23 AUGUSTA, MAINE FEB. 1976

R88-476

F.R.A. REV. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	1-95-9(68)	4	25

PROJECT DESIGN ENGINEER	BY	DATE
DESIGNED	W. J. B. B.	12-7-76
DRAWN	W. J. B. B.	12-7-76
CHECKED	W. J. B. B.	12-7-76
REVISIONS		
FIELD CHANGES		



STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION

**INTERSTATE 95 NB  
OVER  
LINE ROAD  
BETWEEN THE TOWNS OF  
SMYRNA - LUDLOW  
AROOSTOOK COUNTY**

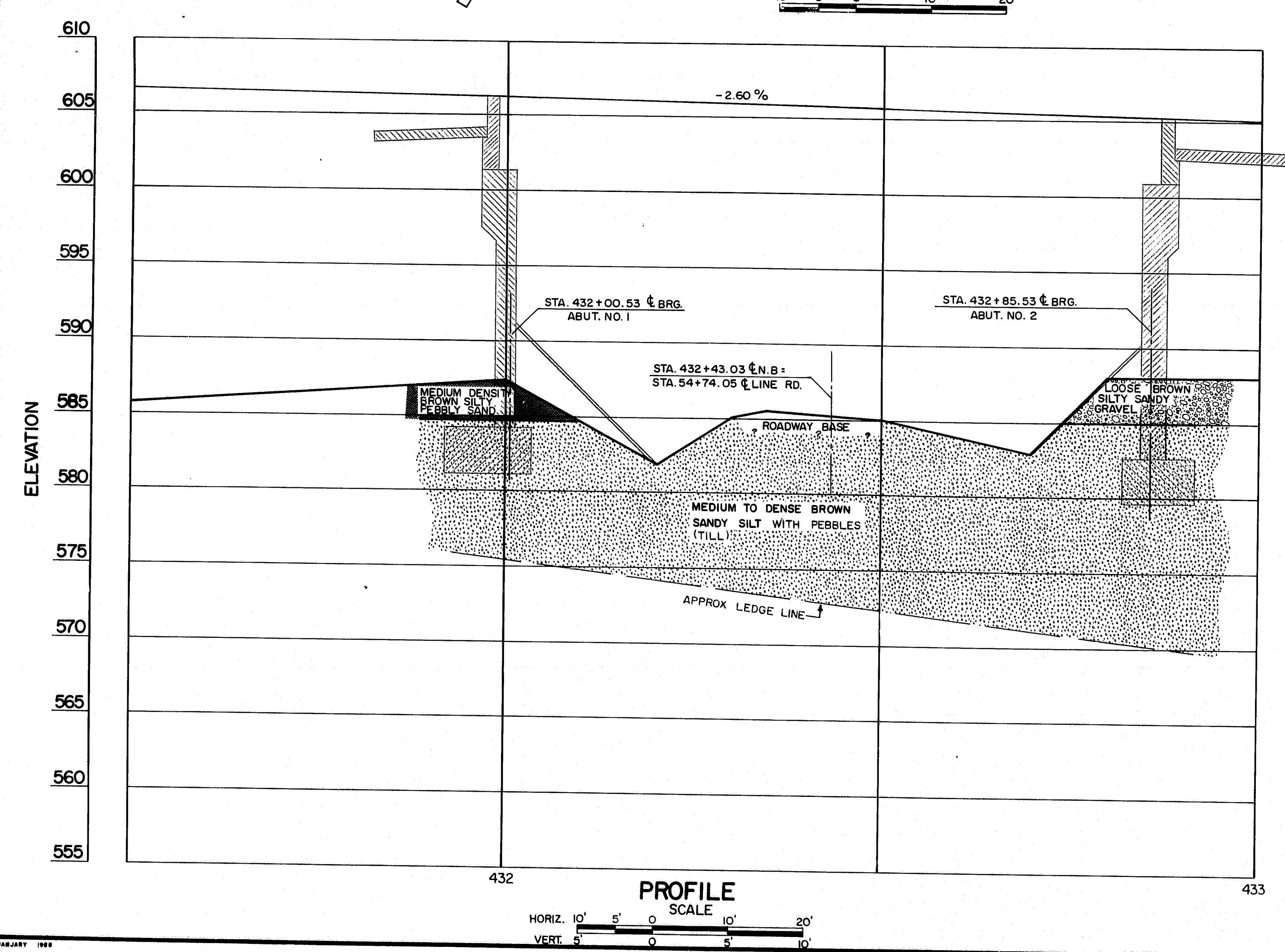
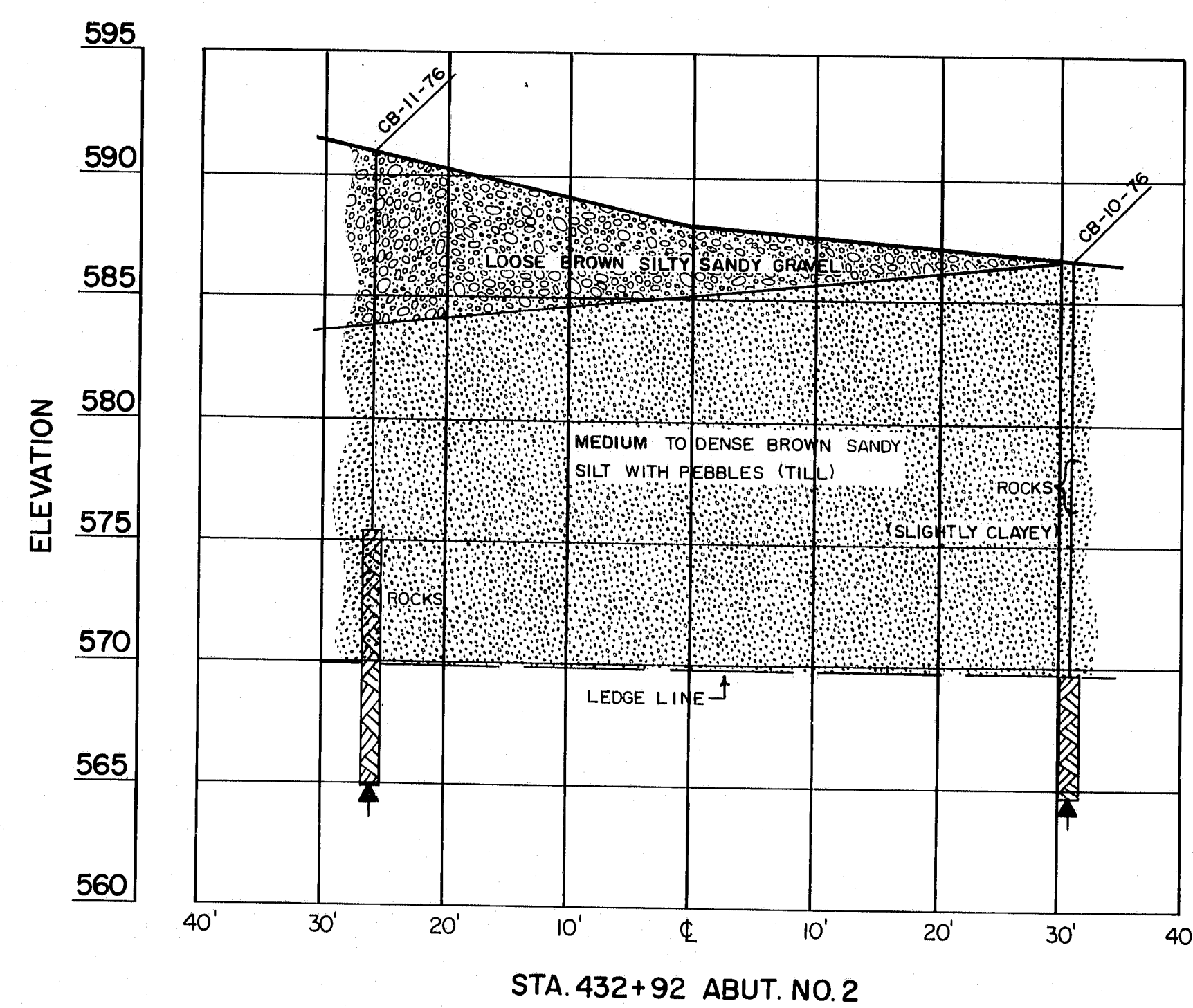
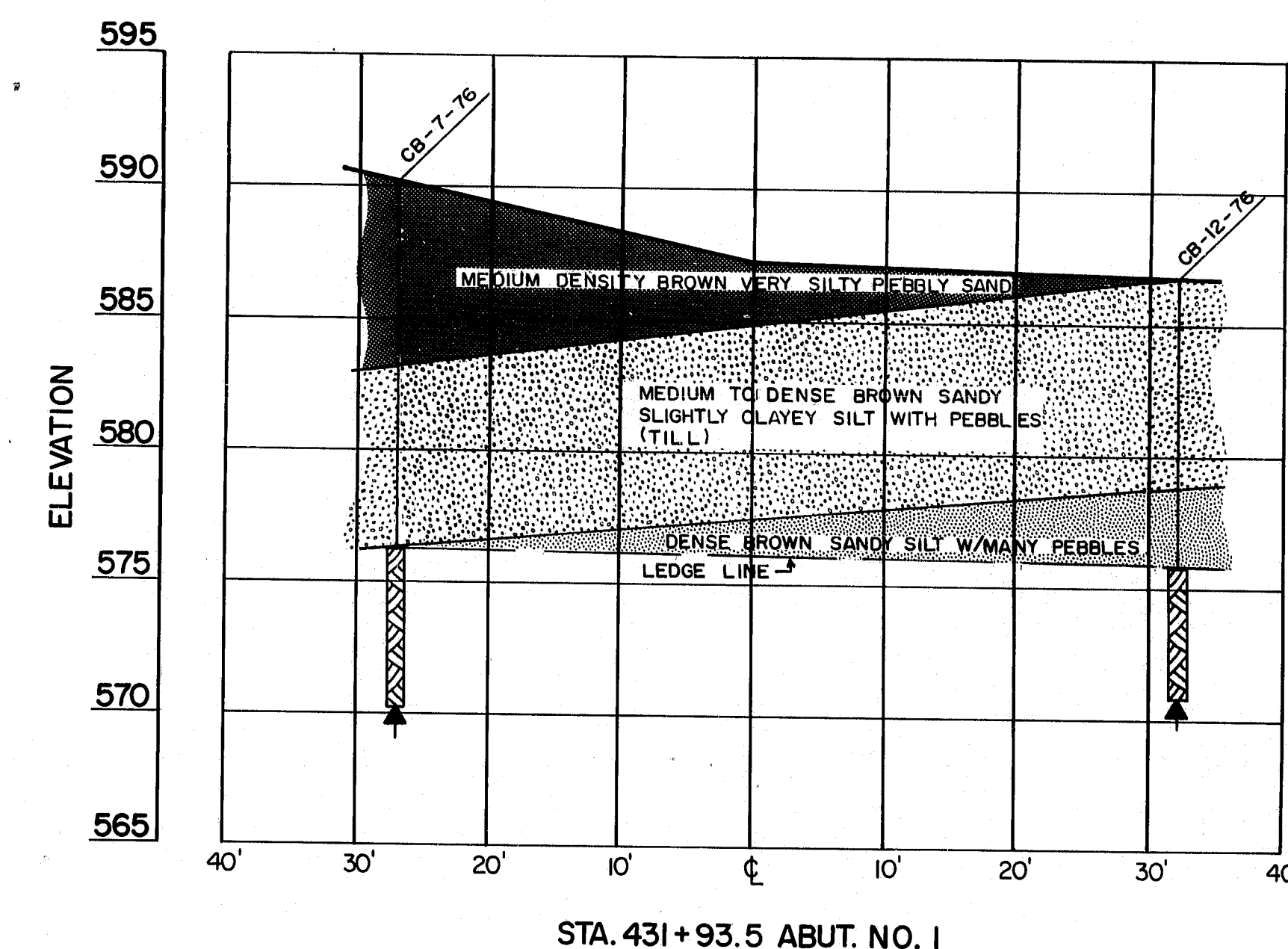
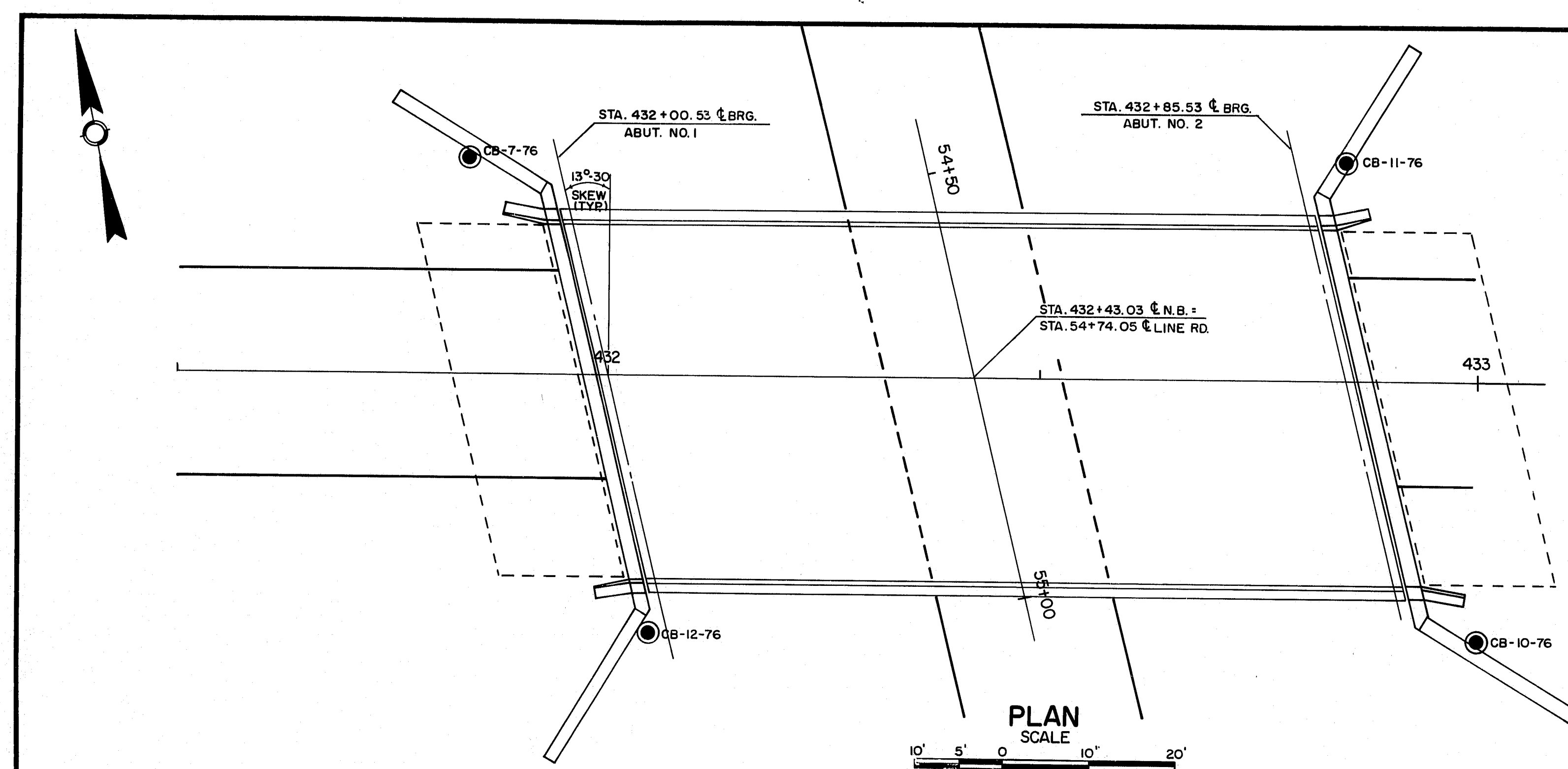
PROFILE

SHEET 4 OF 25 AUGUSTA, MAINE Dec. 1976

R88-477



F.R.M.A. RES. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	1-95-9168	5	25

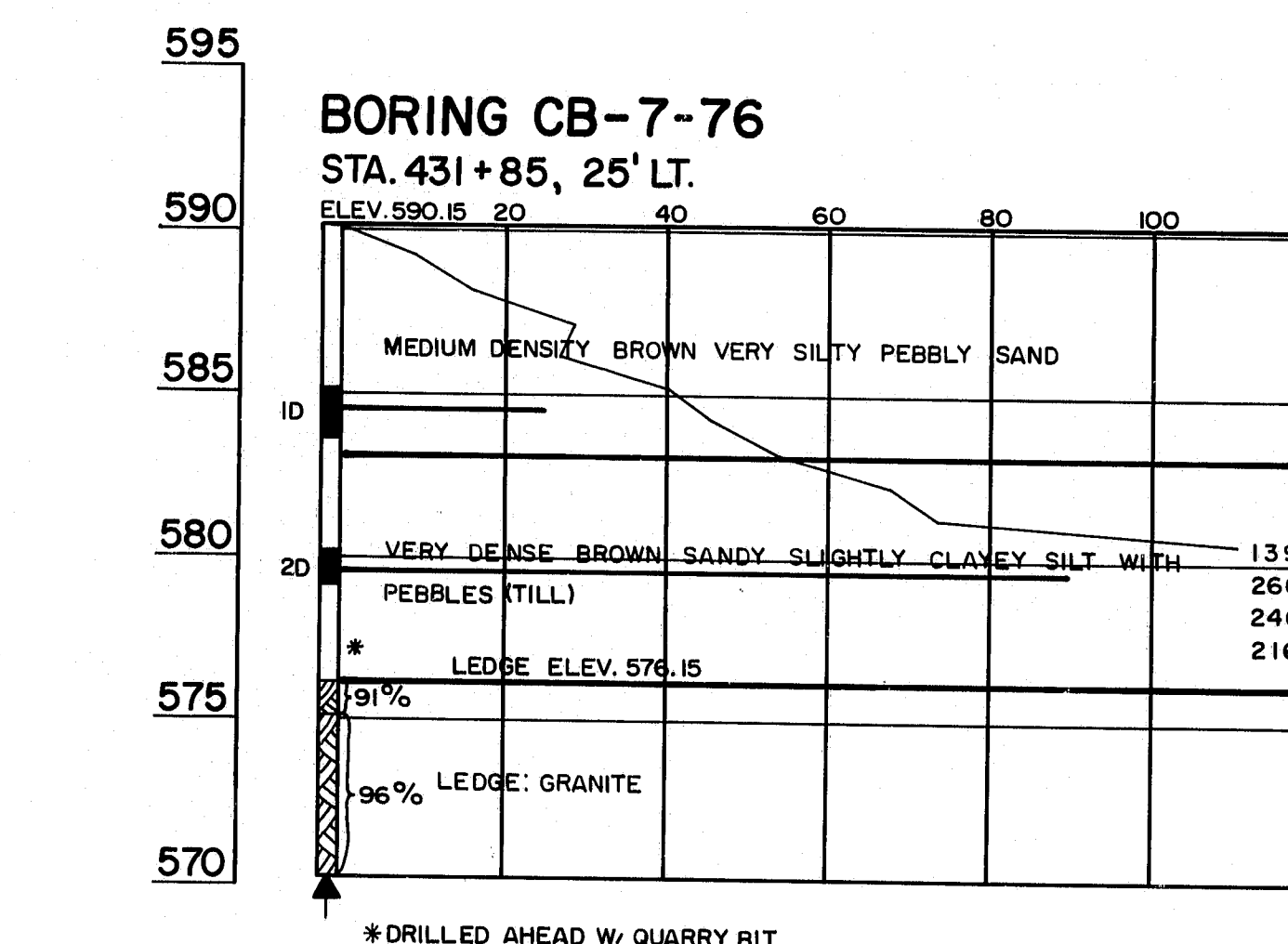


TRANSVERSE SECTIONS  
SCALE  
HORIZ. 10' 5' 0' 10' 20'  
VERT. 5' 0' 5' 10'

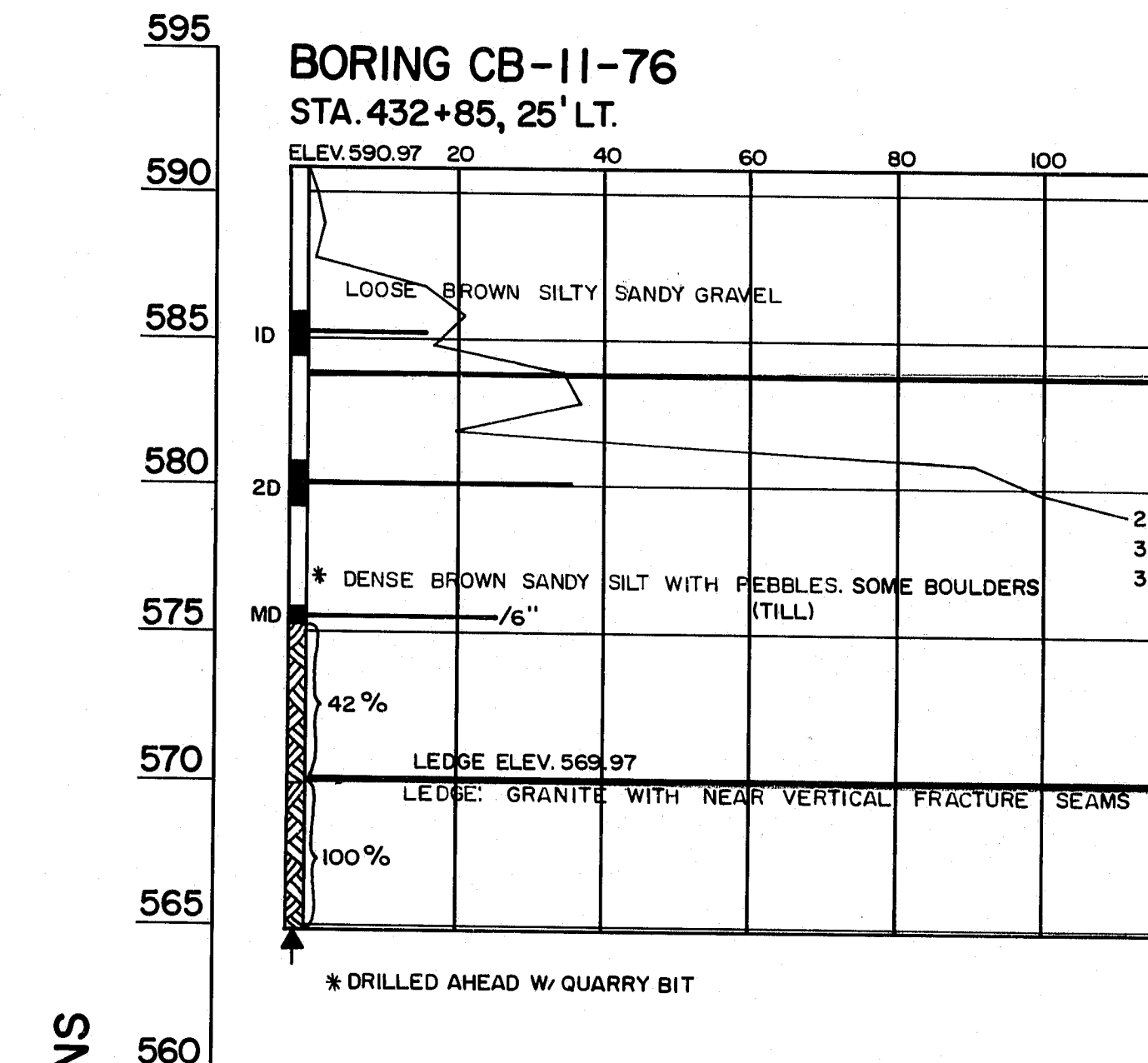
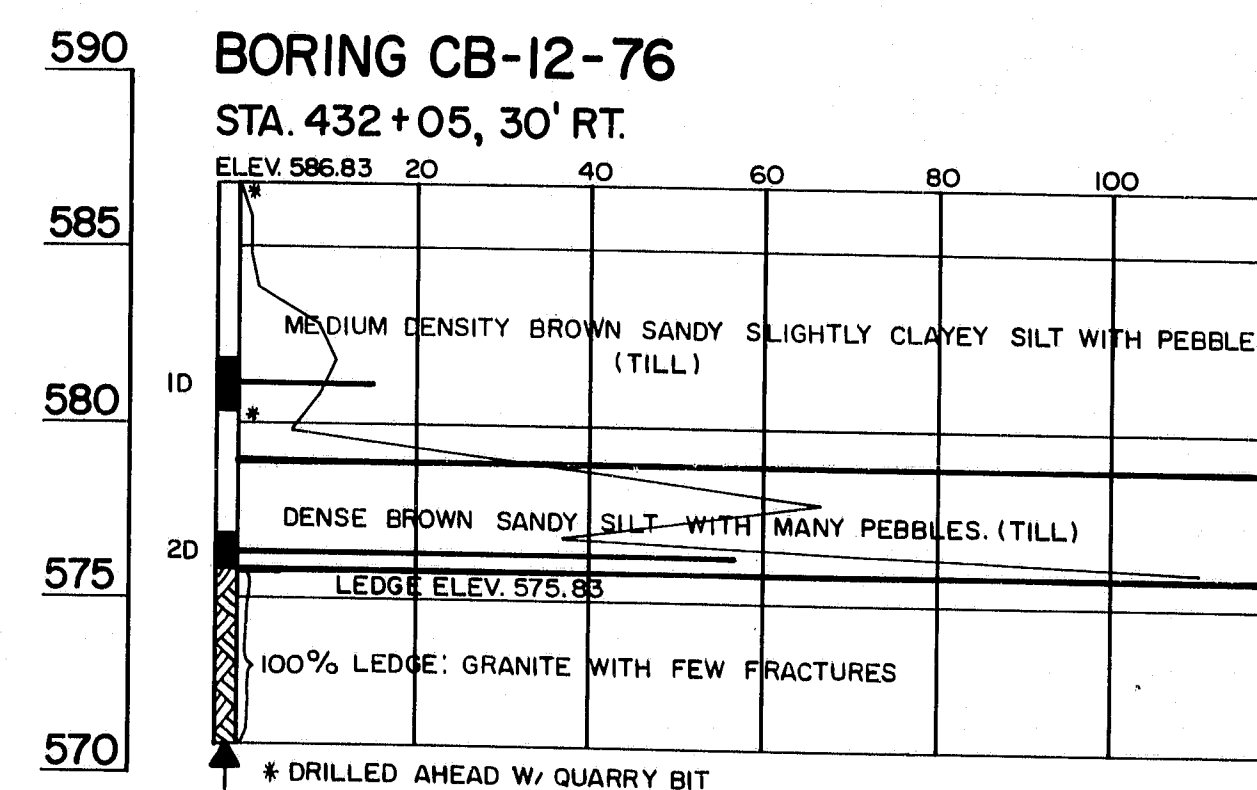
STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
  
INTERSTATE 95 NB  
OVER  
LINE ROAD  
BETWEEN THE TOWNS OF  
SMYRNA - LUDLOW  
AROOSTOOK COUNTY  
  
FOUNDATION SURVEY  
SHEETS OF 25 AUGUSTA, MAINE

R88-478

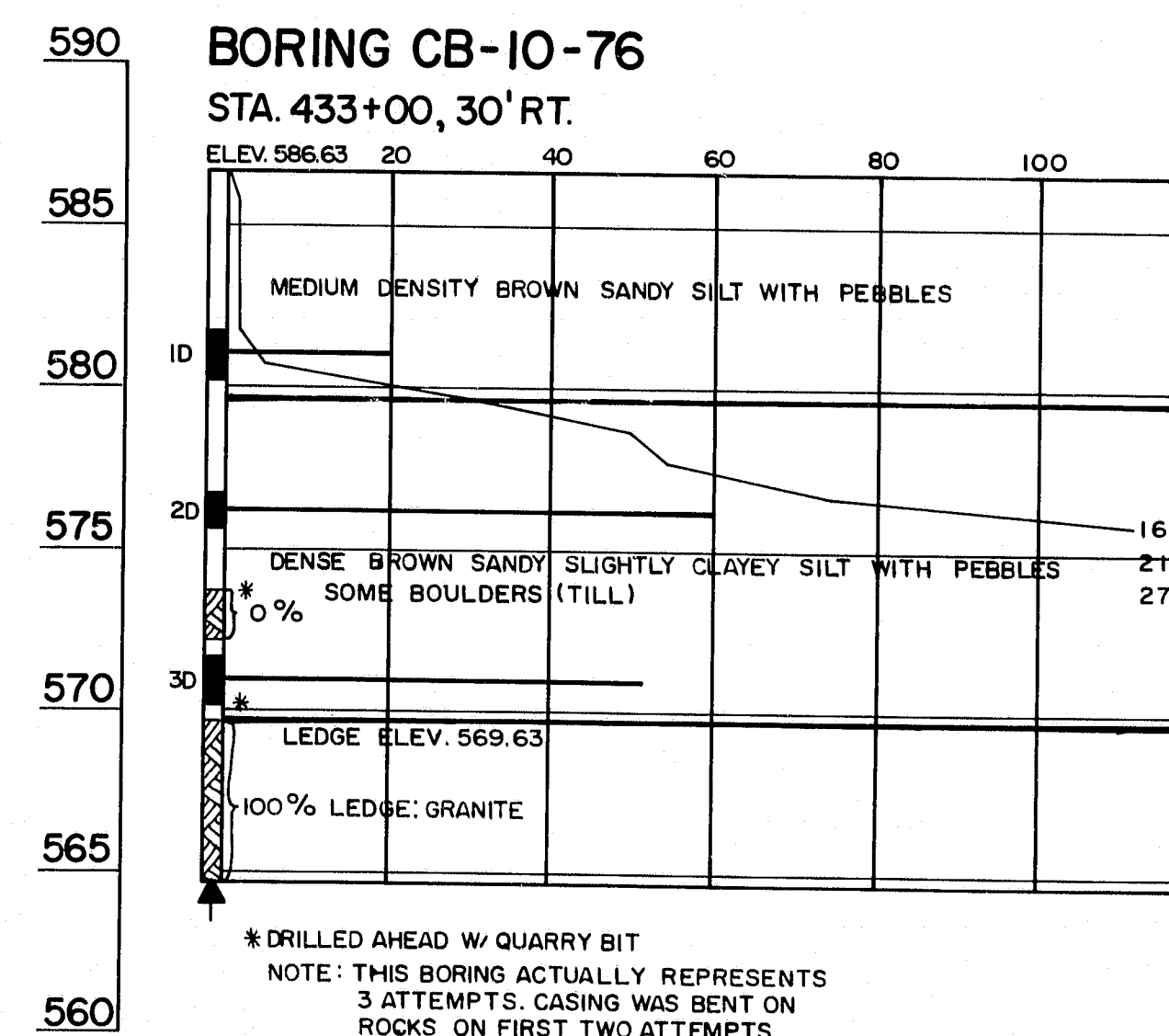
F.R.A. REQ. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	1-95-9(48)	6	25



ELEVATIONS



ELEVATIONS



#### BORING NOTES

- All samples and vane 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
- 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

PROJECT DESIGN ENGINEER	BY	DATE
DESIGN - DETAILED		
CHECKED		
REVISIONS		
FIELD CHANGES		

PLANS

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION

INTERSTATE 95 NB  
OVER  
LINE ROAD  
BETWEEN THE TOWNS OF  
SMYRNA - LUDLOW  
AROOSTOOK COUNTY

BORING DETAILS

SHEET 6 OF 25 AUGUSTA, MAINE

R88-479

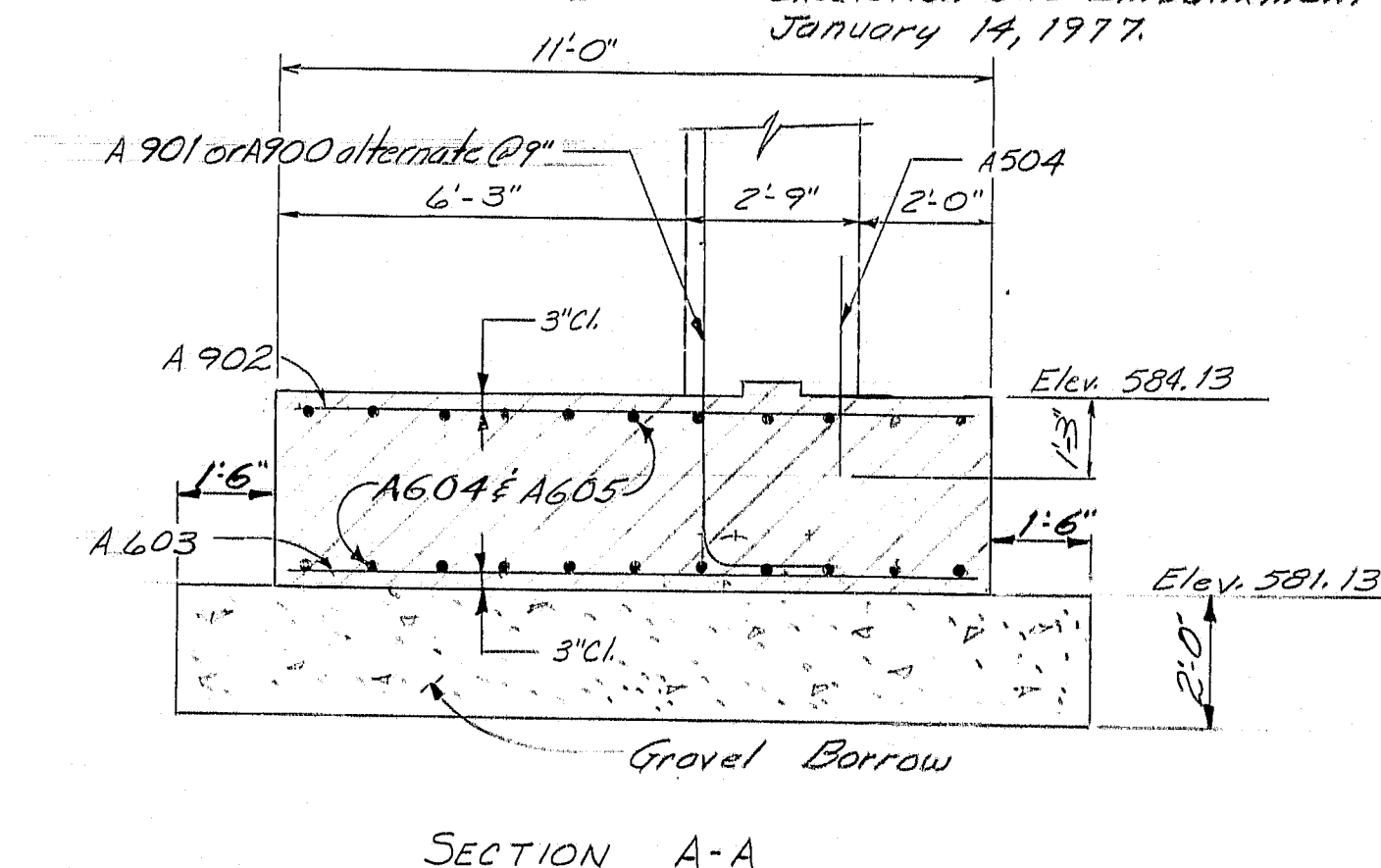


FWA REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	1-95-9(60)	7	25

#### ABUTMENTS NOTES

1. Chamfer all exposed edges of concrete a consistent dimension between 2" and 4" inclusive, unless otherwise indicated.
2. Reinforcing steel shall have 2 inches cover unless otherwise indicated.
3. Place reinforcing steel in bridge seats to clear anchor bolts.
4. Break bond at vertical contraction joints by a method approved by the Engineer.
5. P.V.C. waterstops as shown on Standard Details BD/04-19 shall be placed in all vertical contraction joints.
6. Waterstops are not required in horizontal construction joints.
7. Protective coating for concrete shall be applied to the areas: Top of concrete curbs, Top of abutment parapets, top of backwall and 10' down back of backwall.

8. Place 4" diameter drains in breastwall and wings at 20 foot maximum spacing. Exact location to be determined by the Engineer in the field.
9. Welding of reinforcing steel will be allowed in the top 3 feet of the abutment backwall.
10. Max. footing tie pressure 15"  
4.8 tons / sq. ft. Abut. #1  
3.2 tons / sq. ft. Abut. #2
11. The contractor shall not backfill above bridge seat until the superstructure is in place.
12. Gravel borrow placed under the Footings shall meet the compaction requirements of Special Provisions Section 203, Excavation and Embankment January 14, 1977.



NOTE: See Abutment #4 Sheet # 9 for placement of footing dowels.

#### LEGEND

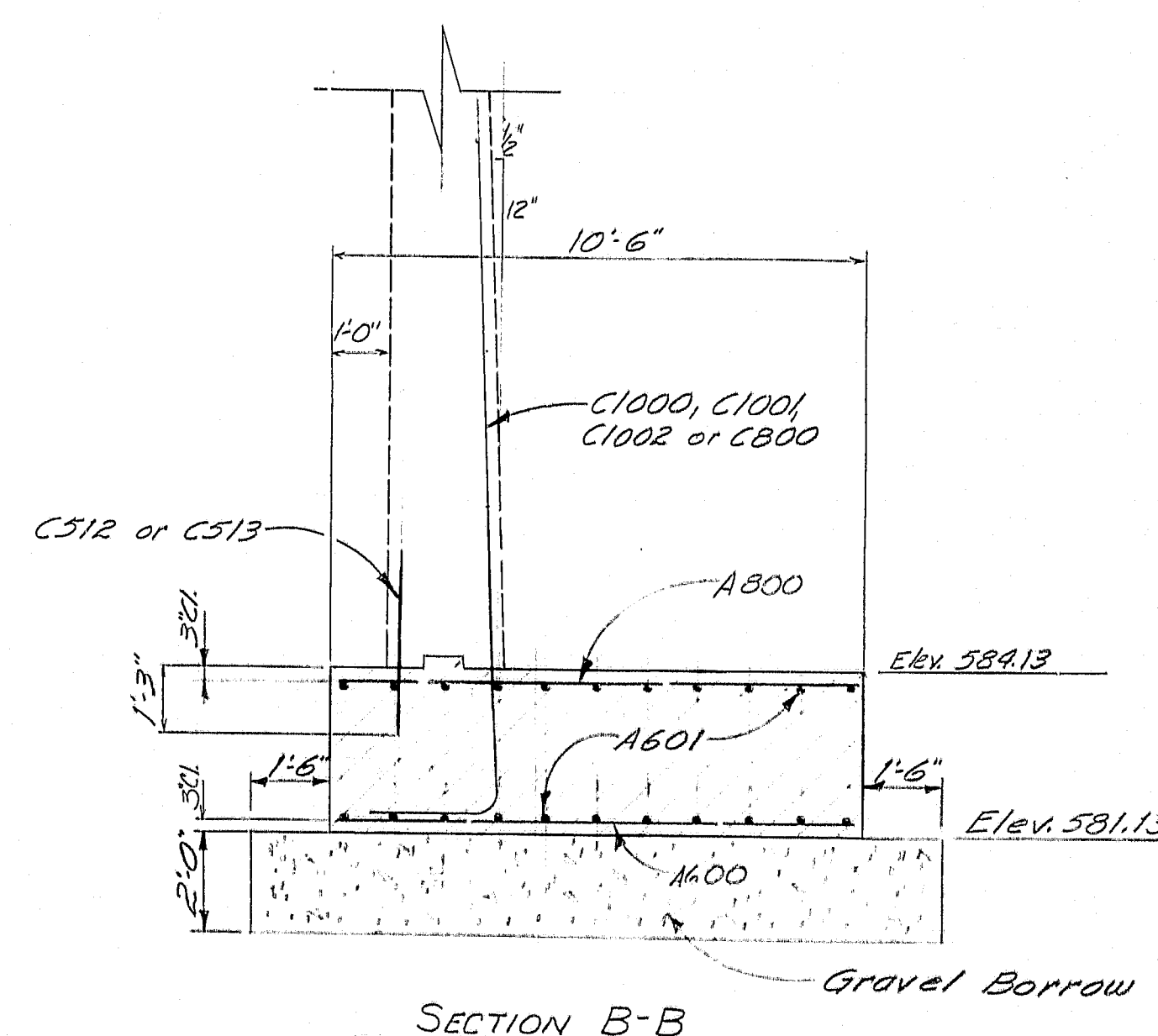
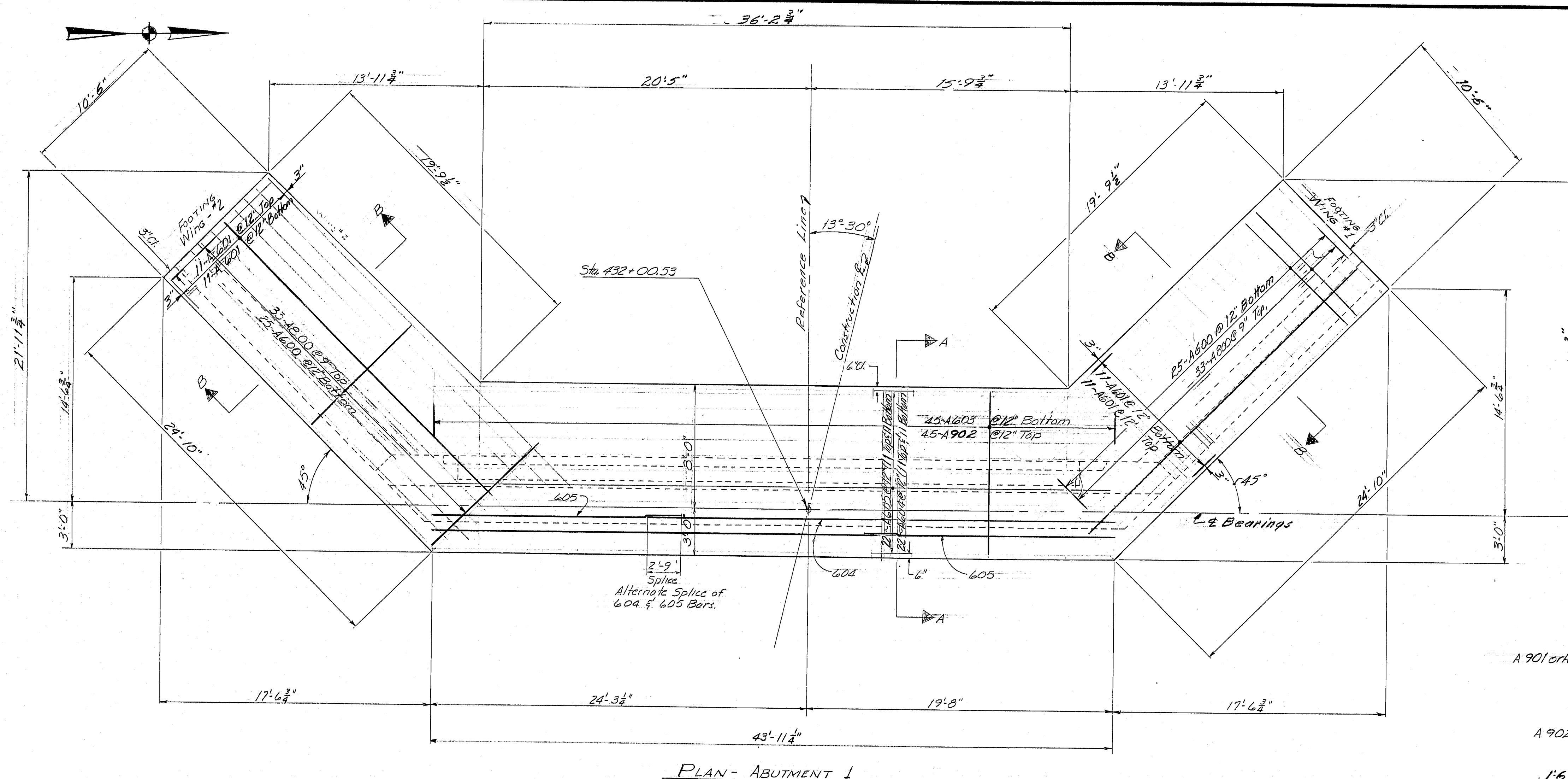
- N.F. = Near Face  
F.F. = Far Face  
E.F. = Each Face  
C.I. = Clear

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION

**INTERSTATE 95 NB**  
OVER  
**LINE ROAD**  
BETWEEN THE TOWNS OF  
**SMYRNA - LUDLOW**  
**AROOSTOOK COUNTY**  
FOOTING ABUTMENT-1

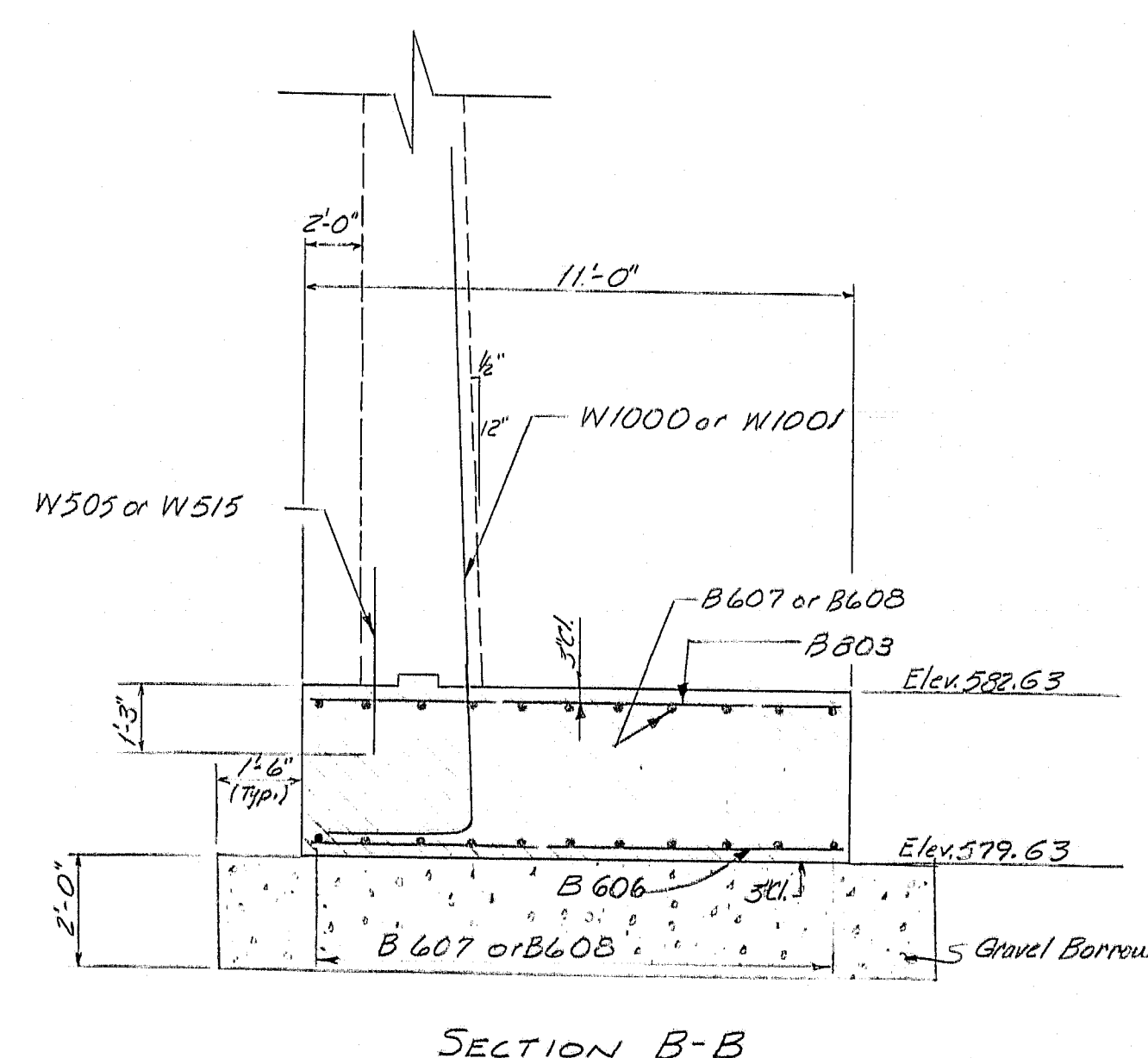
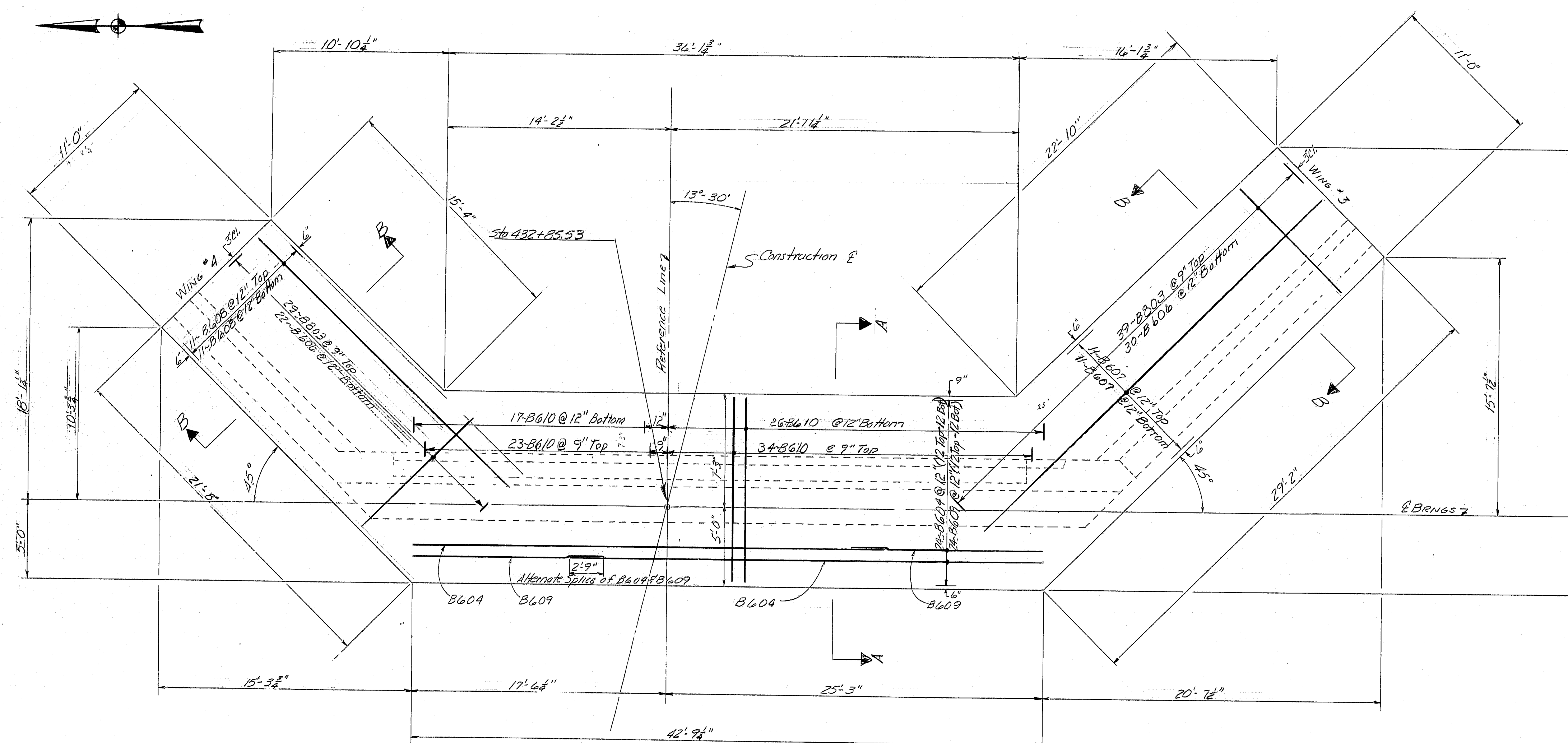
SHEET 7 OF 25 AUGUSTA, MAINE Dec. 1976

**R88-480**

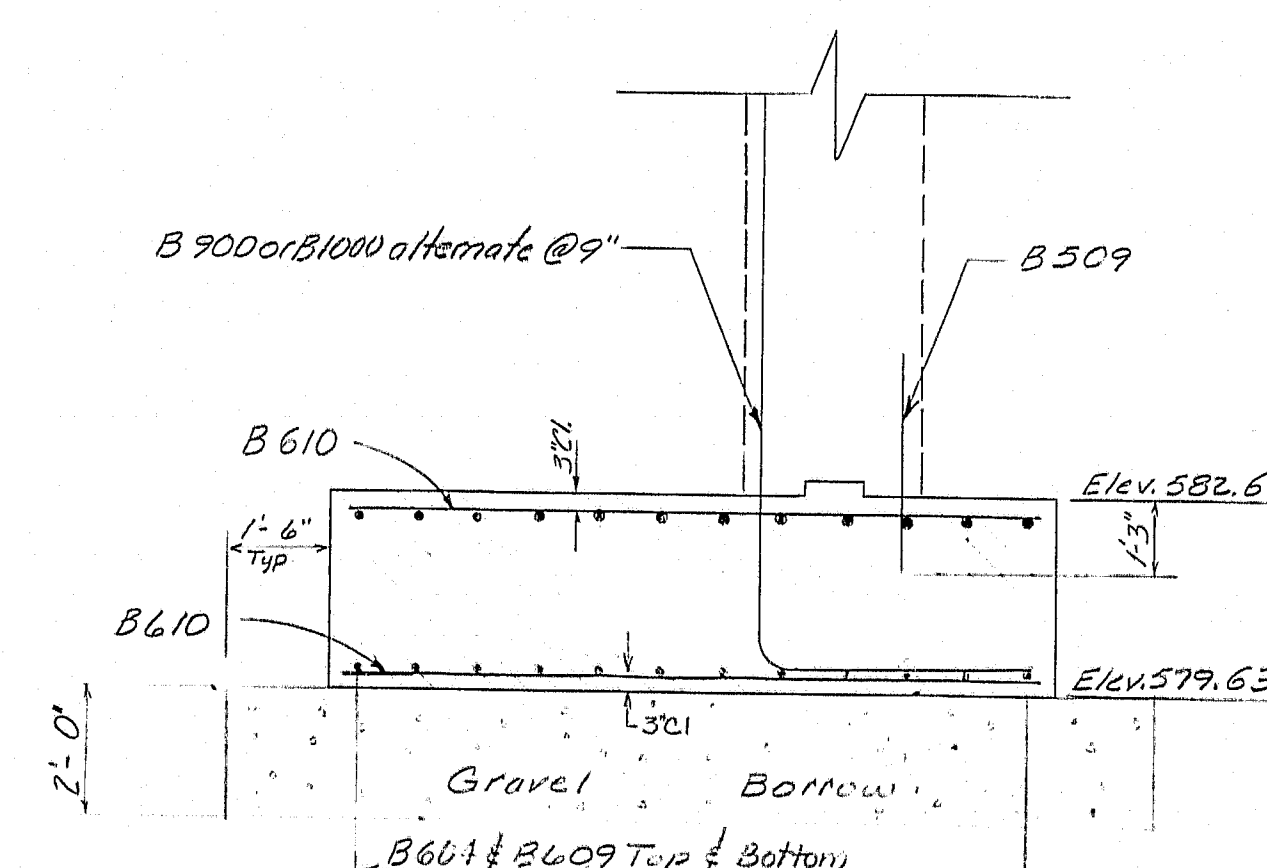


PROJECT DESIGN ENGINEER	BY	DATE
DESIGN - DETAILED	WUL	12-76
CHECKED	REL	12-76
APPROVED		
FIELD CHANGES		

F.R.W.A.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	1-95-9(68)	8	25



SECTION B-B



SECTION A-A

NOTE: For placement of Dowels in footing see Abutment #2 Sheet # 10

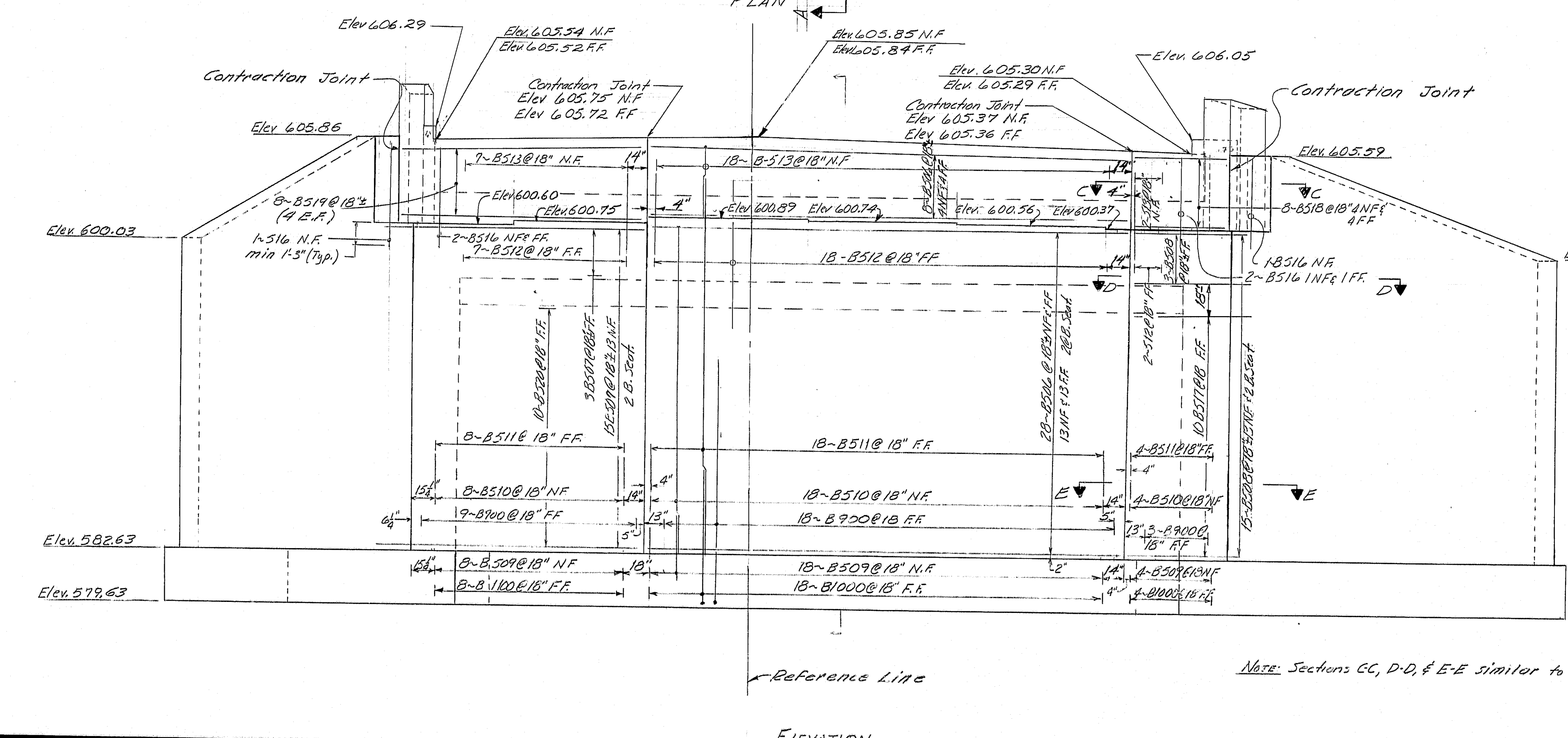
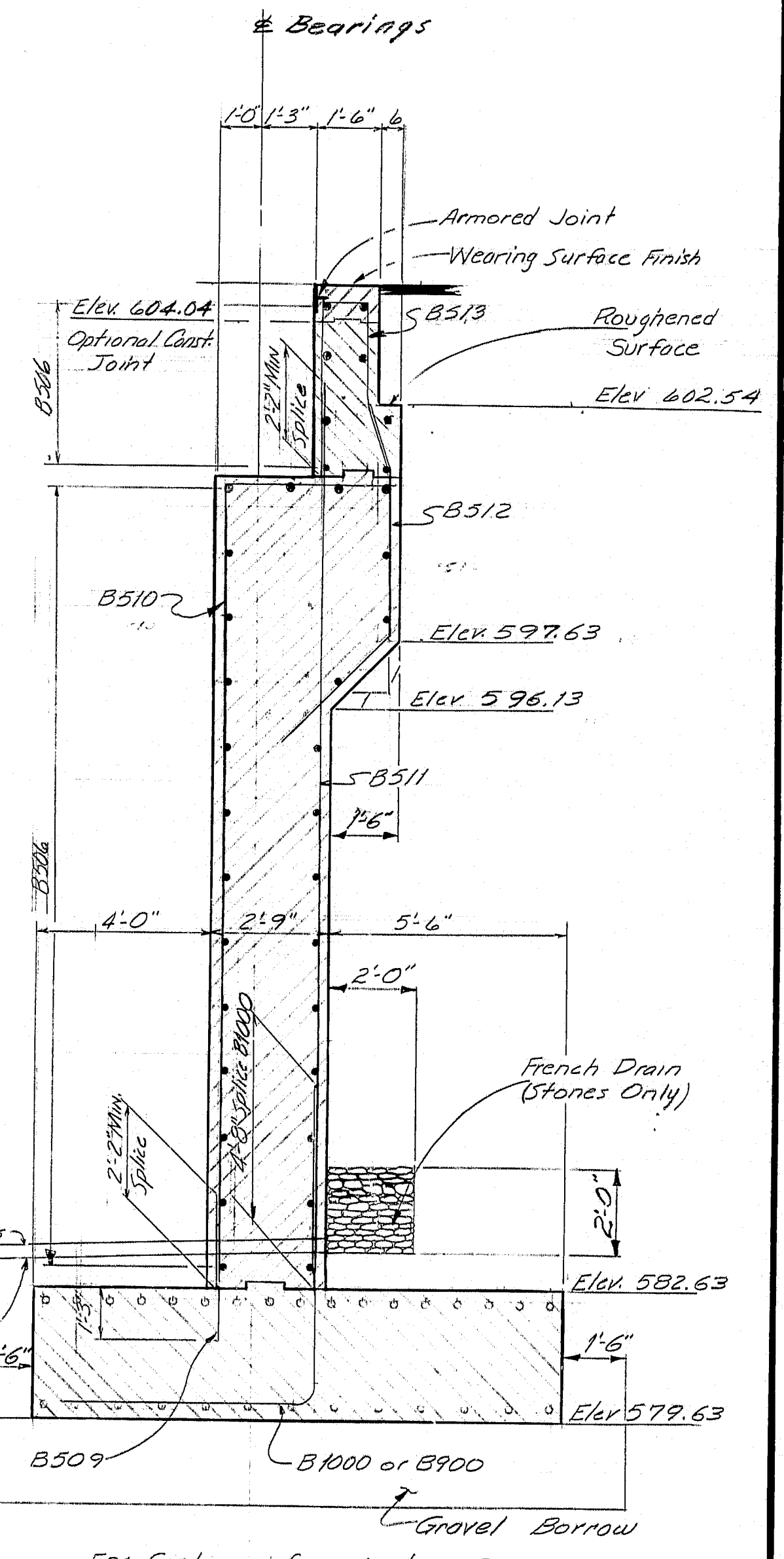
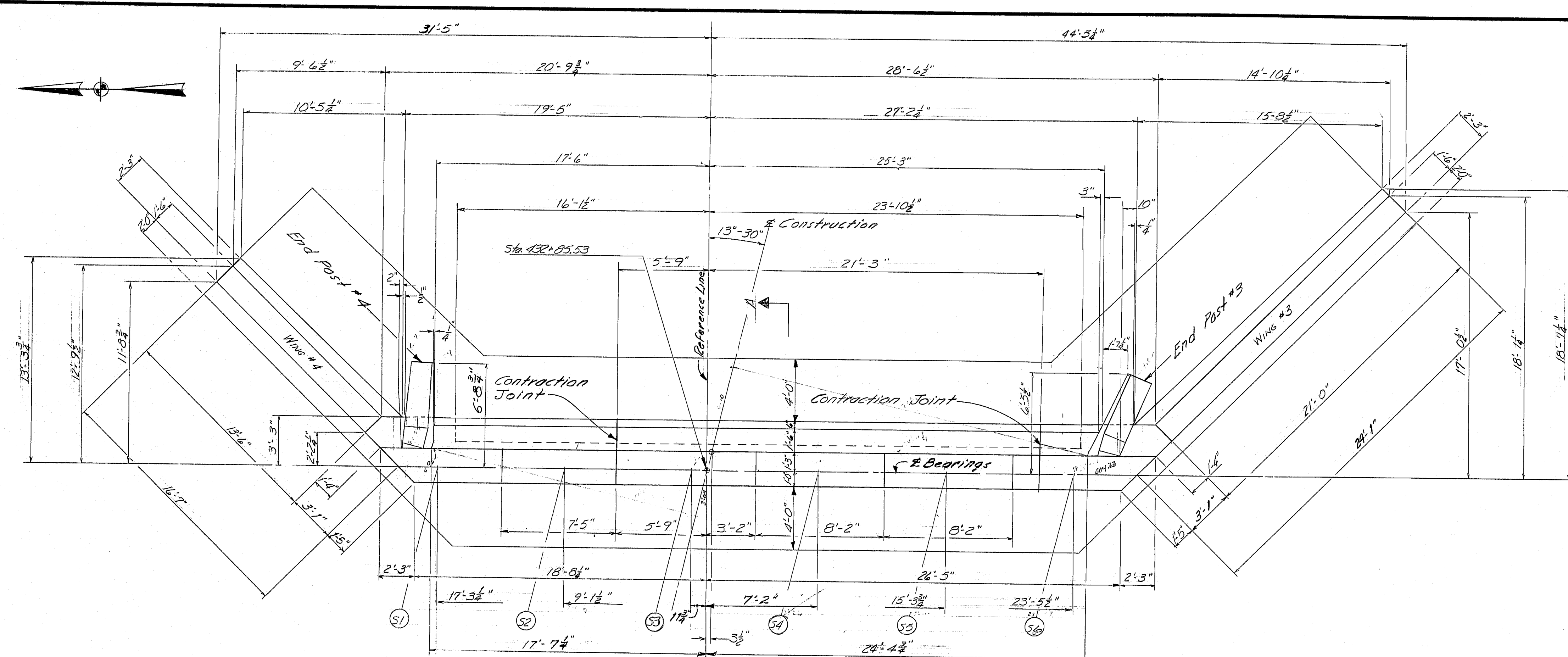
STATE OF MAINE DEPARTMENT OF TRANSPORTATION
INTERSTATE 95 NB OVER LINE ROAD BETWEEN THE TOWNS OF SMYRNA - LUDLOW AROOSTOOK COUNTY
FOOTING ABUTMENT-2
SHEETS OF 25 AUGUSTA, MAINE Dec. 1976

R88-481





F.R.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	1-95-9(68)	10	25



**References**  
 For construction & construction joint detail see Standard Detail Sheet BD-104-73  
 For Armored Joint, Detail and Workshop see Standard Detail Sheet BD-104-73  
 For End Post Detail, see Sheet #13  
 For Approach Slab Detail, see Sheet #17  
 For Retaining Wall Section, see Sheet #18  
 For Section CC, DD, & EE see Sheet #12  
 For Abutment Notes see Sheet #7

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION

INTERSTATE 95 NB  
OVER  
LINE ROAD  
BETWEEN THE TOWNS OF  
SMYRNA - LUDLOW  
AROOSTOOK COUNTY

ABUTMENT NO. 2

SHEET 10 OF 25

AUGUSTA, MAINE

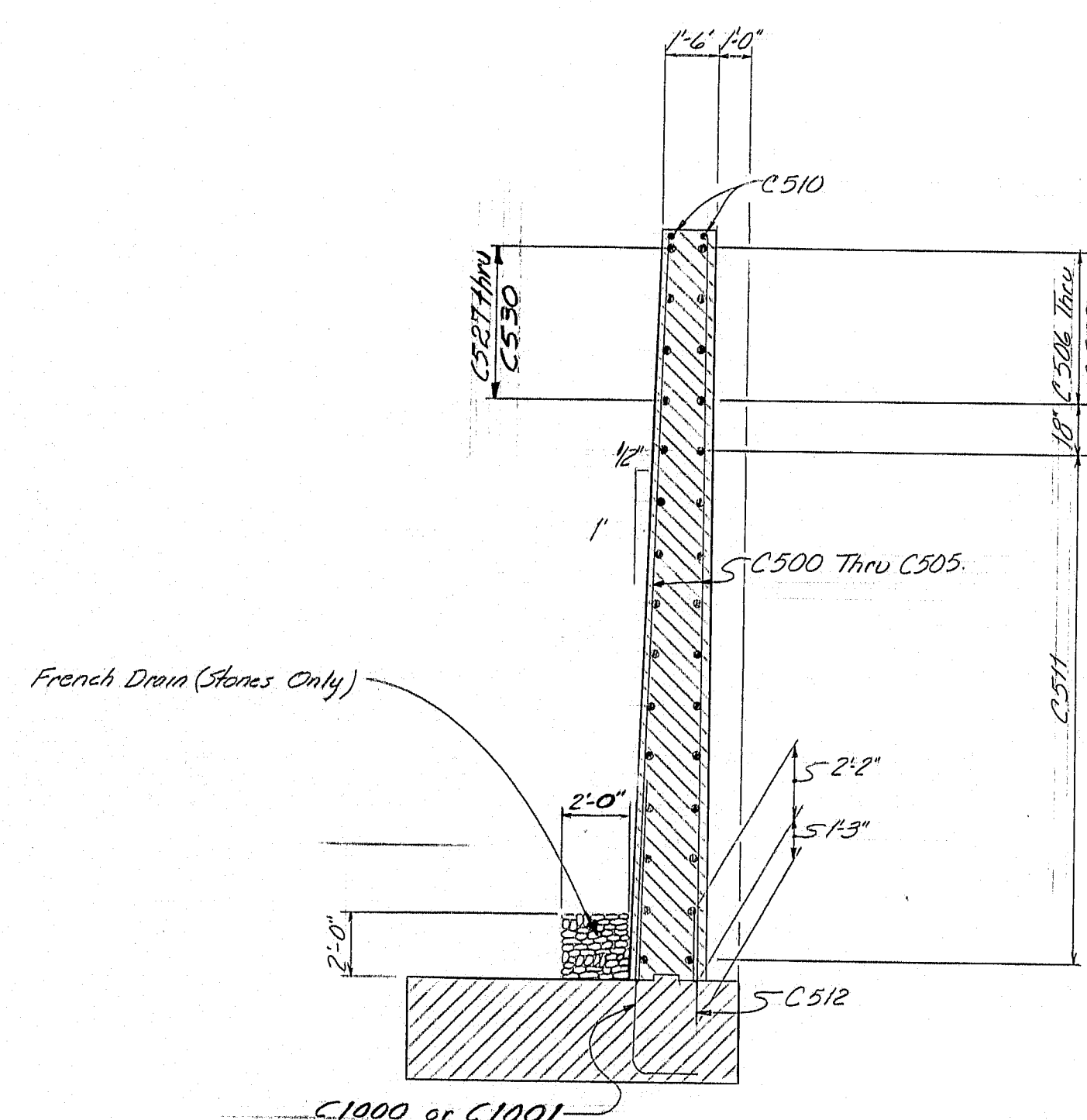
Dec. 1976

PROJECT DESIGN ENGINEER	DATE
BY <i>[Signature]</i>	12-76
CHECKED <i>[Signature]</i>	12-76
REVISIONS	
FIELD CHANGES	

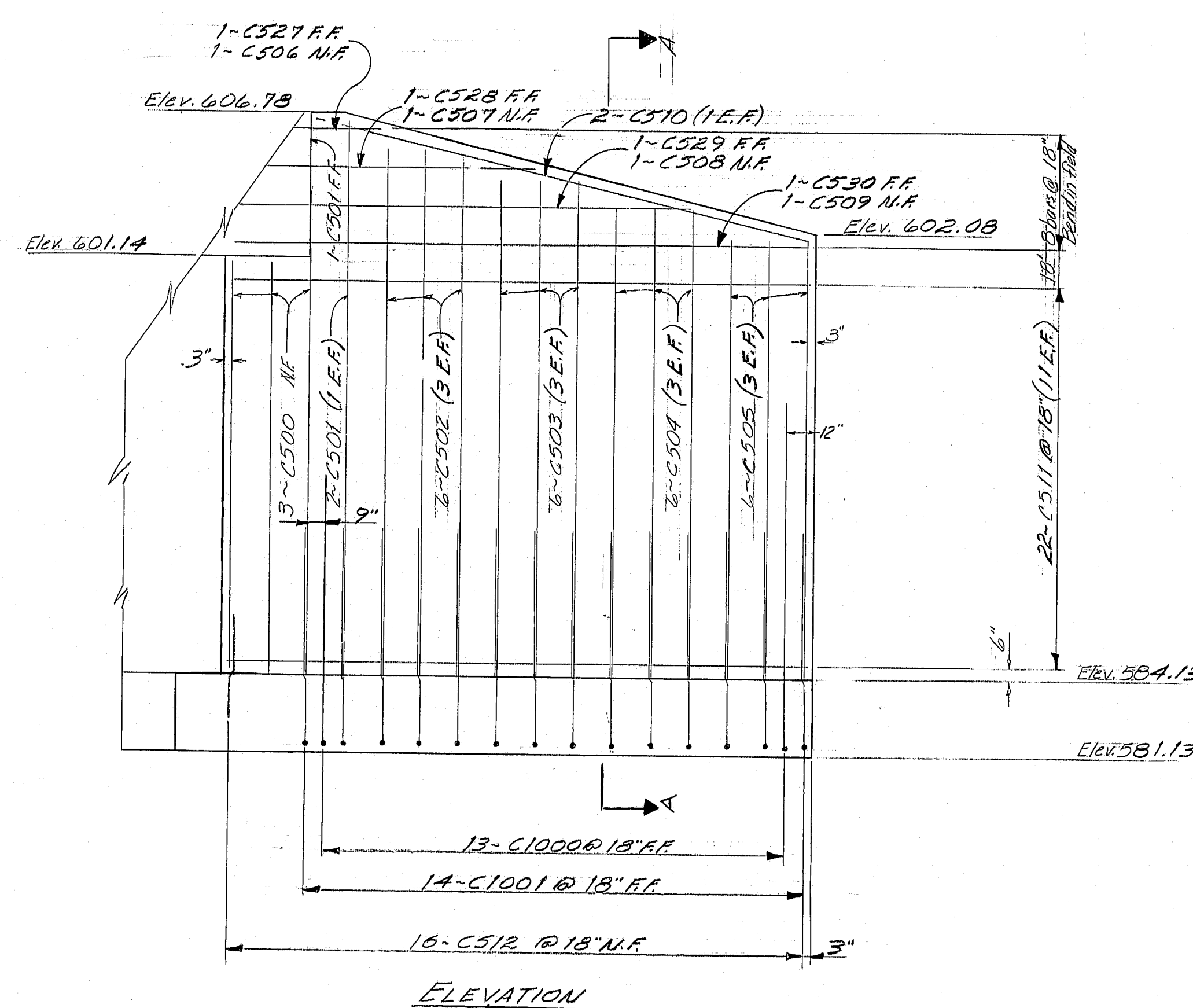
**R88-483**



F.R.A.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	1-95-9(60)	11	25

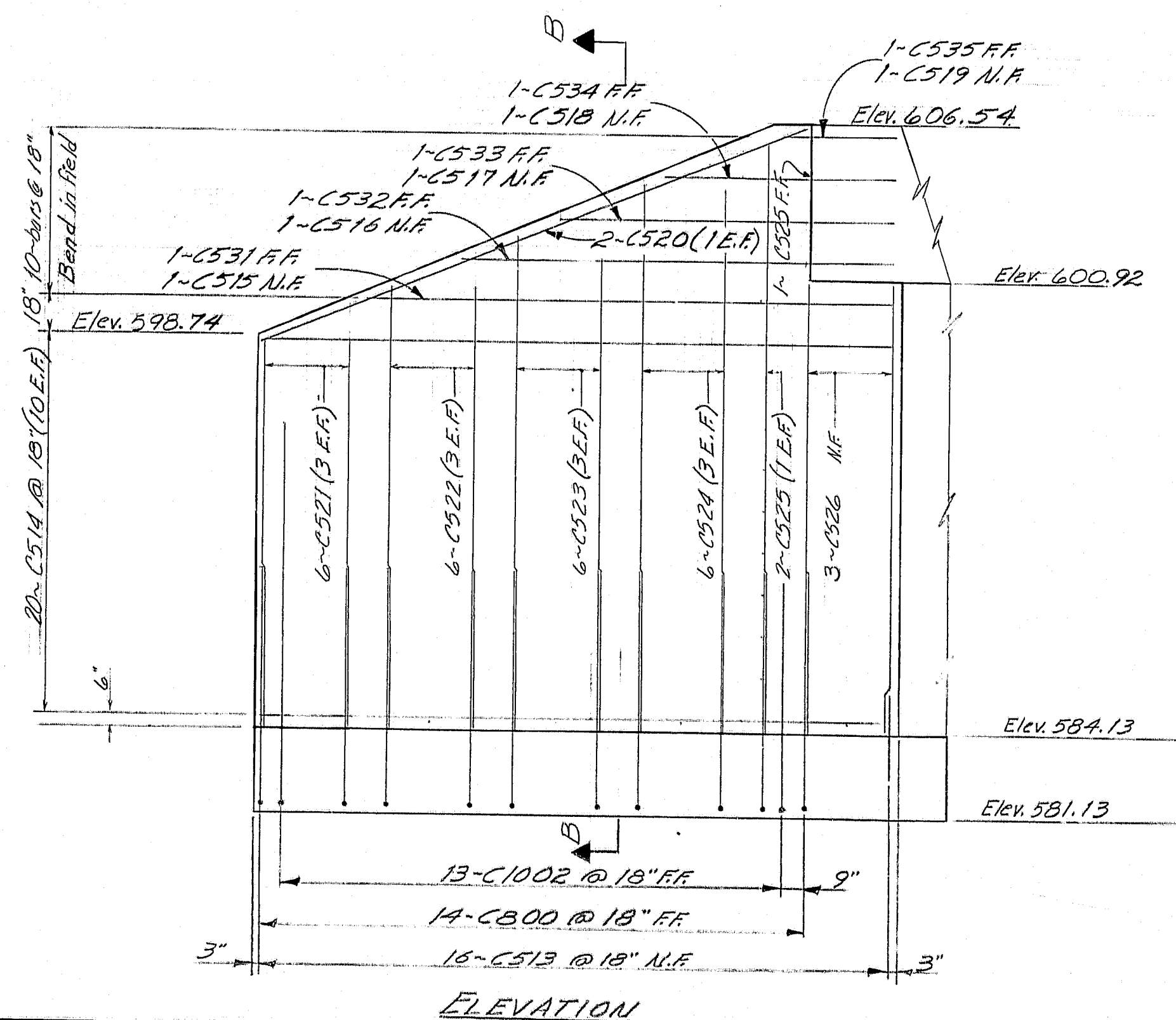


SECTION A-A



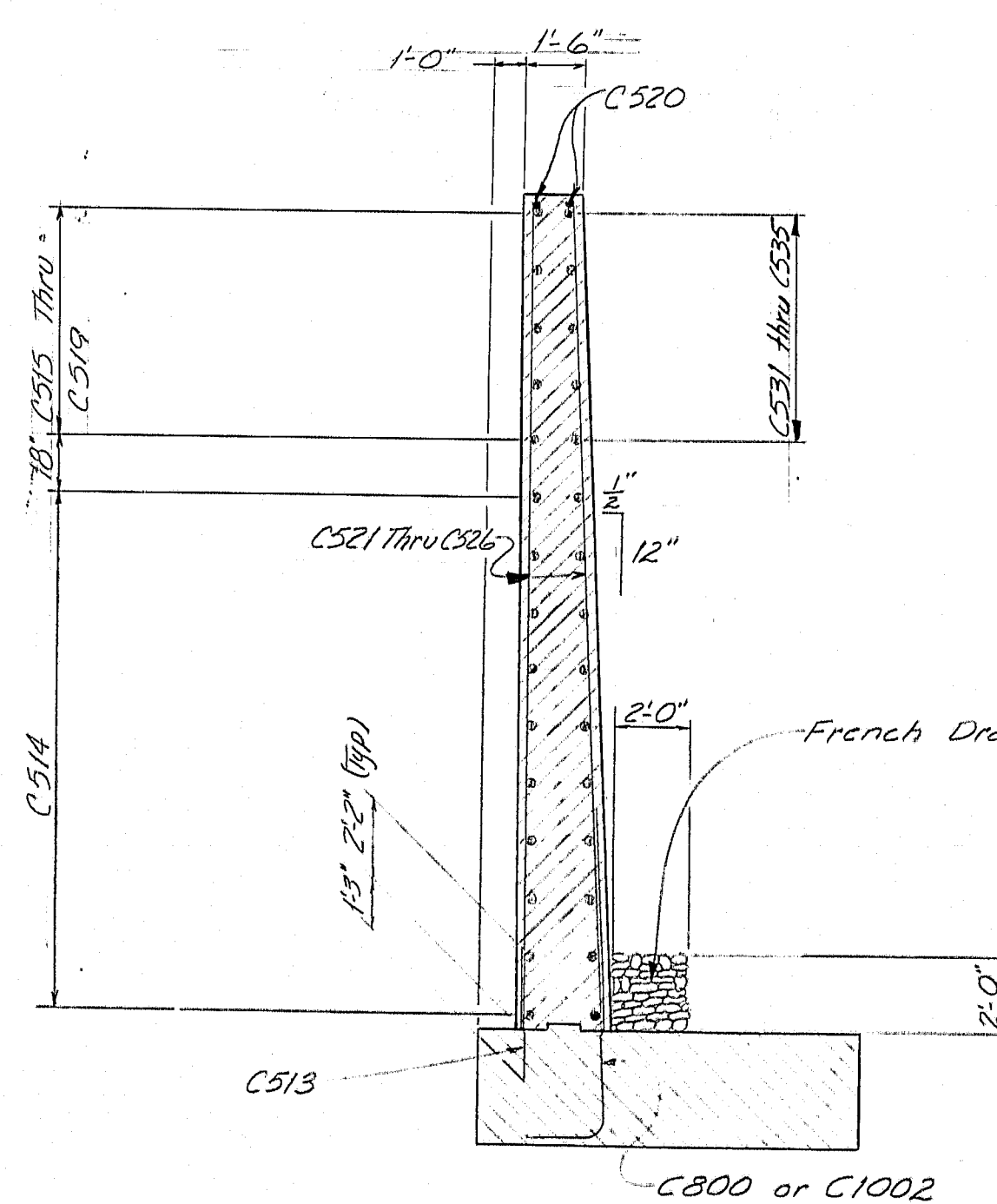
WING NO. 1

ELEVATION

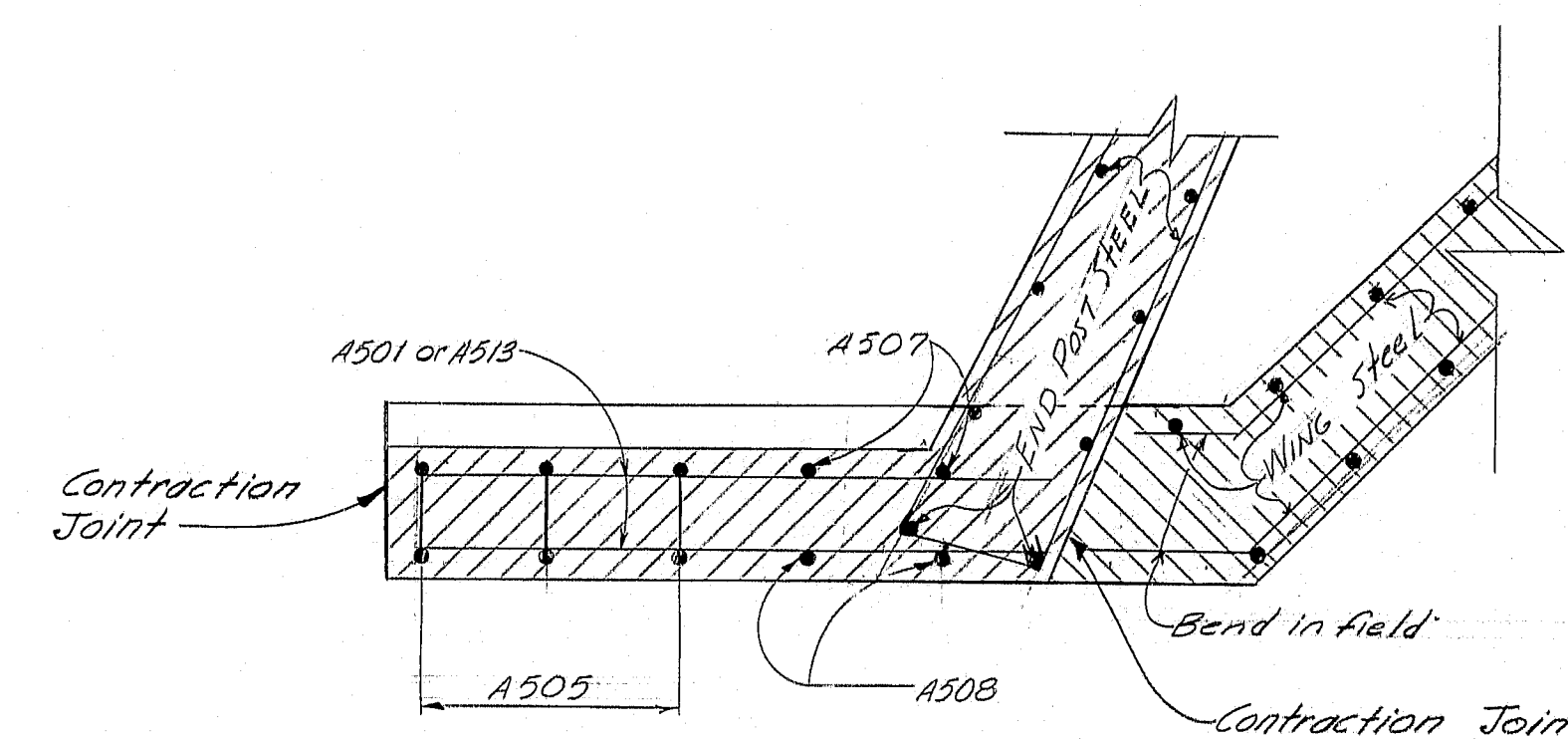


WING NO. 2

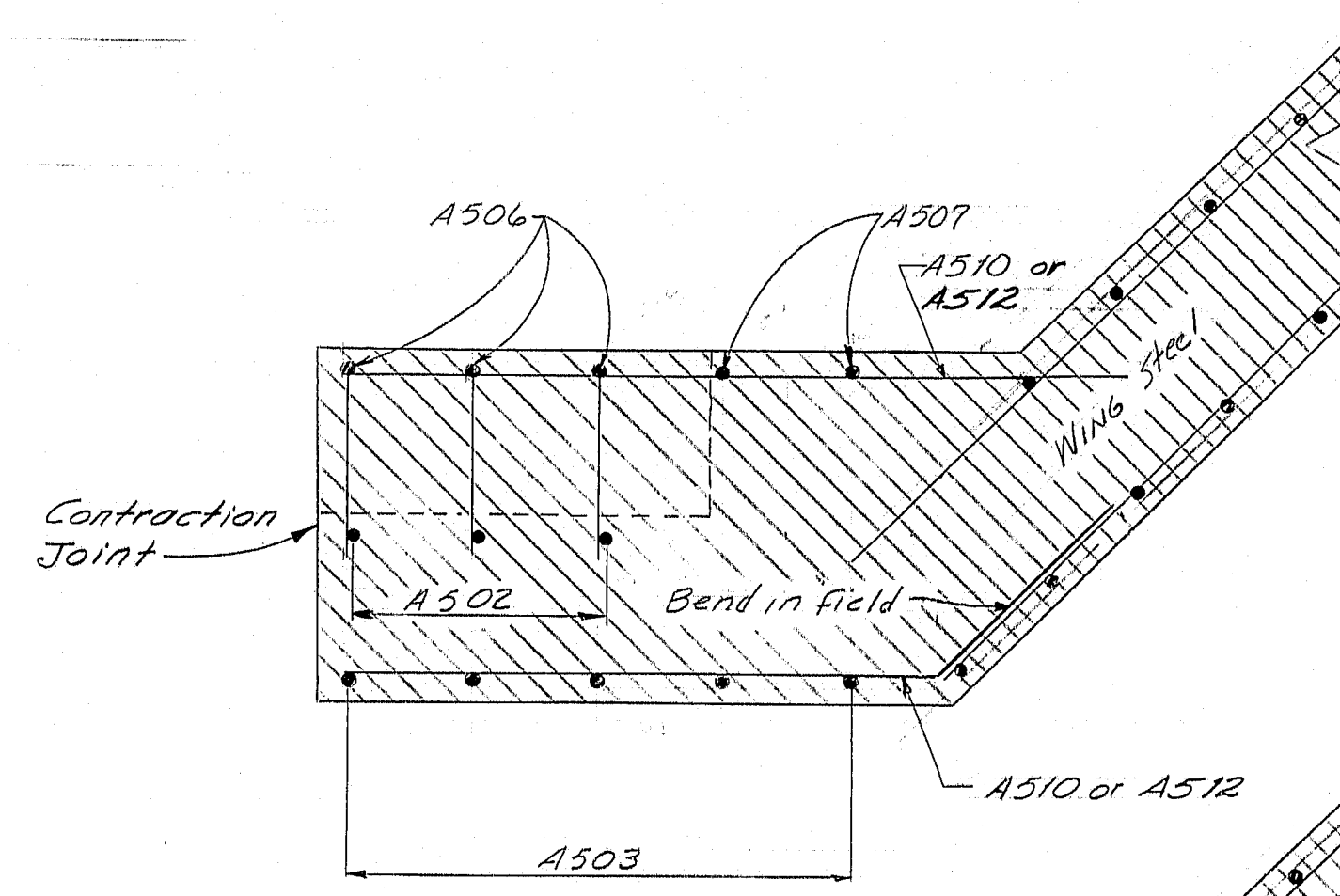
ELEVATION



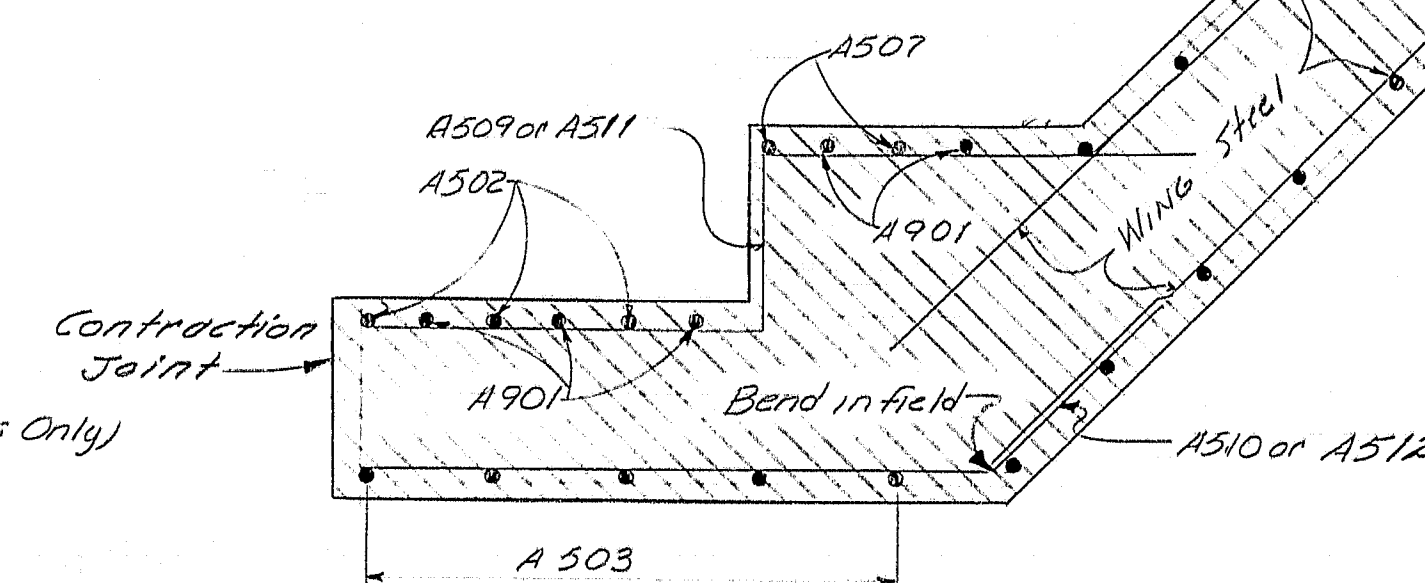
SECTION B-B



SECTION C-C  
(see sheet "9")



SECTION D-D



SECTION E-E

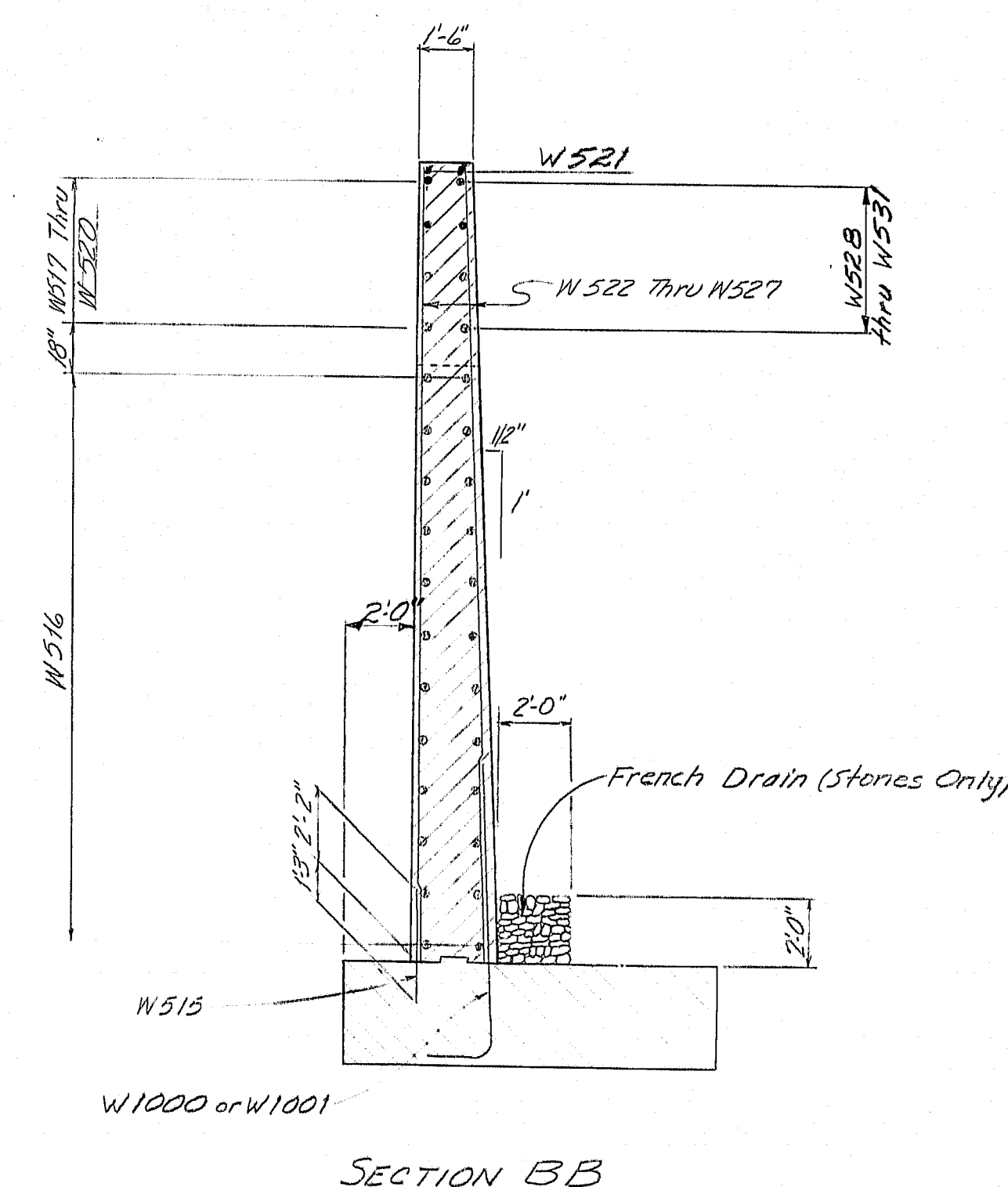
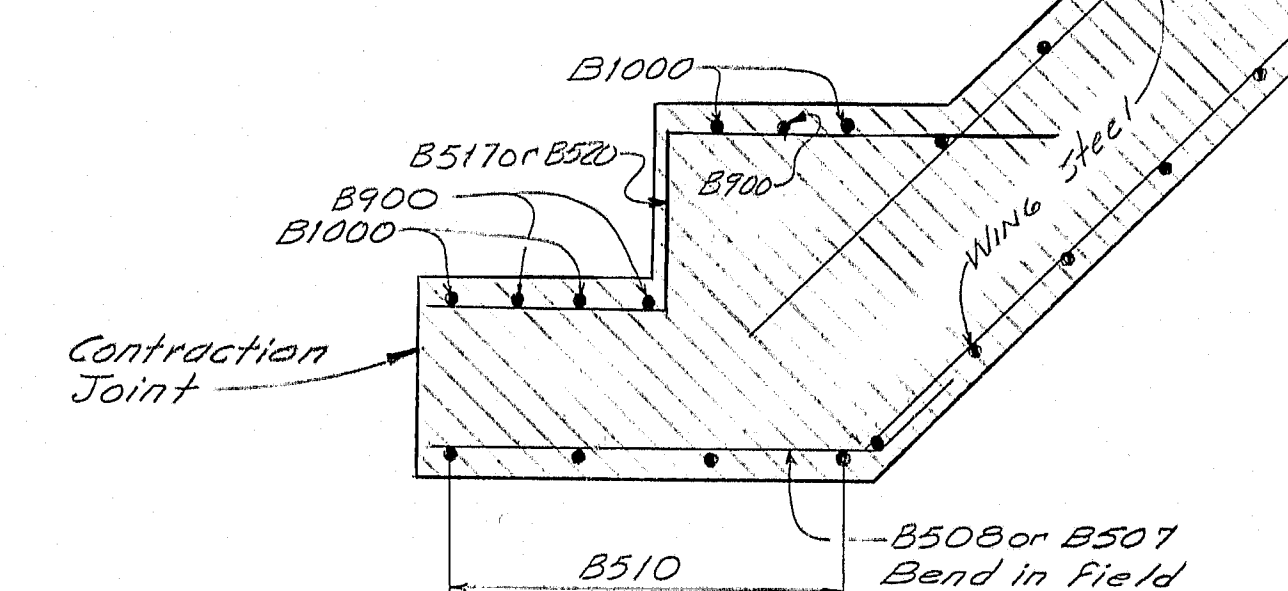
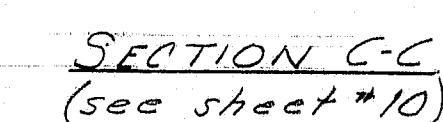
NOTE: For Footing reinforcing steel see sheet "7".

R88-484

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
  
INTERSTATE 95 NB  
OVER  
LINE ROAD  
BETWEEN THE TOWNS OF  
SMYRNA - LUDLOW  
AROOSTOOK COUNTY  
WING DETAILS 182  
SHEET 11 OF 25 AUGUSTA, MAINE Dec. 1976

PROJECT DESIGN ENGINEER	DATE
DESIGN - DETAIL	12-76
REVISIONS	12-76
FIELD CHANGES	

PROJECT DESIGN ENGINEER		BY	DATE
DESIGN - DETAILED		W.J.L. R. Gray	12-76
CHECKED		R. W. M.	12-76
REVISIONS			
FILED			



SECTION BB

NOTE: For footing steel  
see sheet #8

LEGEND  
N.F. = Near Face  
F.F. = Far Face  
E.F. = Each Face

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION

**INTERSTATE 95 NB  
OVER  
LINE ROAD  
BETWEEN THE TOWNS OF  
SMYRNA - LUDLOW  
AROOSTOOK COUNTY  
WING DETAILS 3&4**

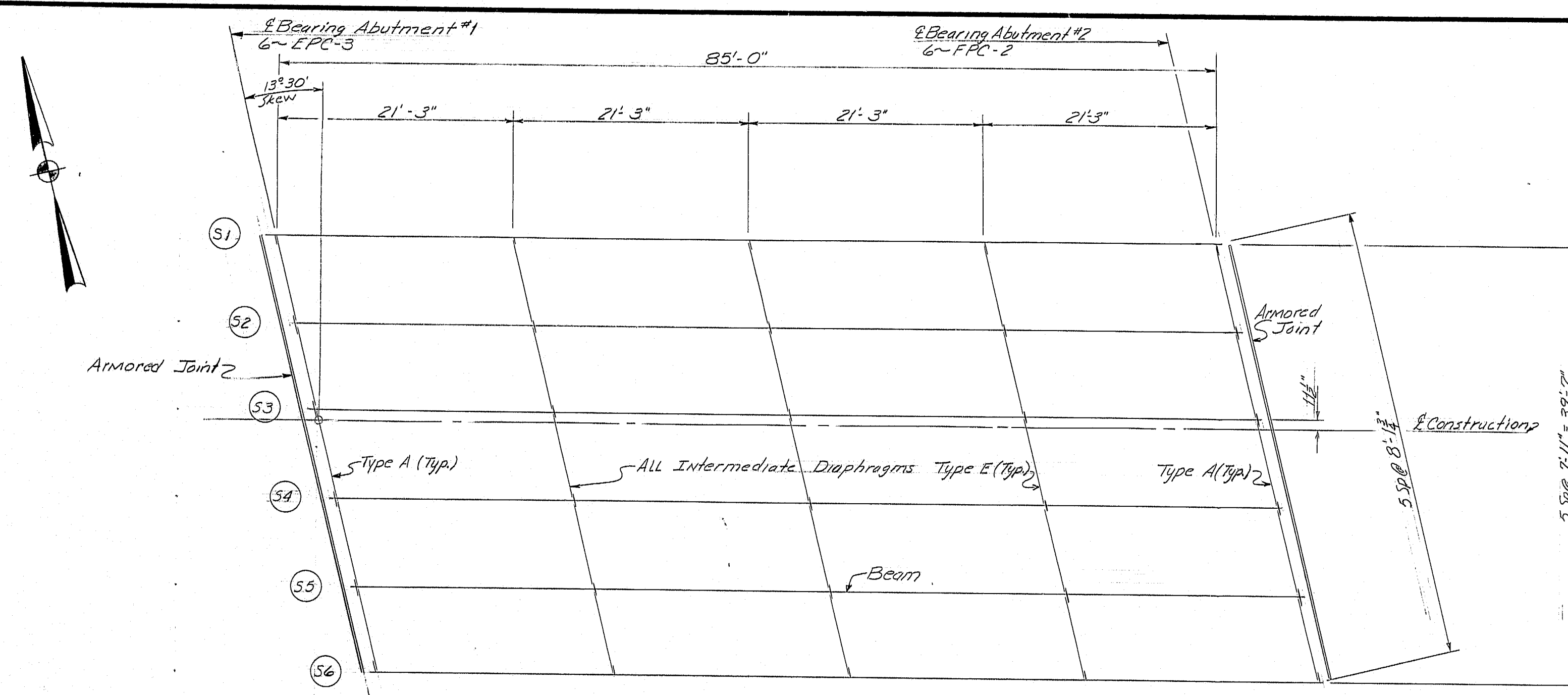
SHEET 12 OF 25 AUGUSTA, MAINE Dec. 1976

~~R88-485~~

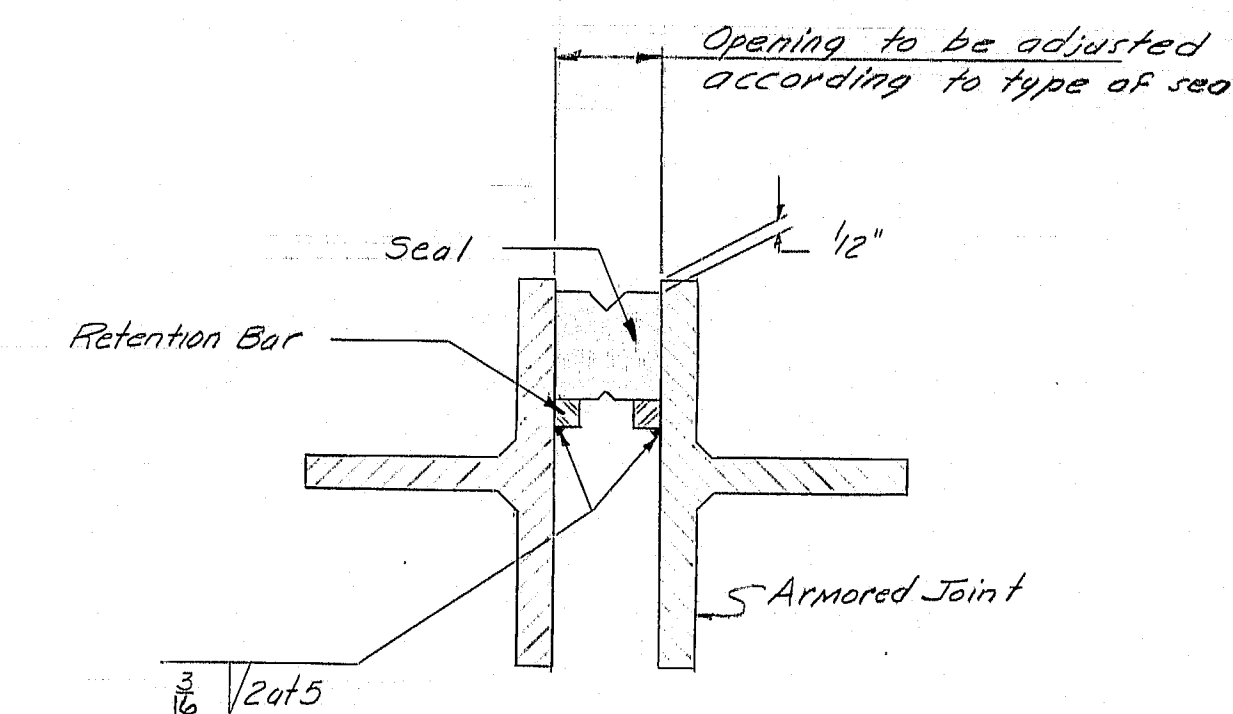




F.T.R.A. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-9(48)	14	25



**FRAMING PLAN**  
All Dimensions Are Horizontal



**SEAL ARRANGEMENT**

**STRUCTURAL STEEL NOTES**

- The 4" inch camber compensates for all dead load deflections and for the curvature of the finished grade profile.
- Diaphragm connection plates may be either plumb or normal to the top flange.
- The armored joint shall extend to within 2" of the fascias.
- Modify armored joint retention bars at Abutment #1 & #2.

**SEAL NOTES**

- The seals furnished shall be as follows:

LOCATION	MOVEMENT RATING
Abutment #1	1,000 inch
Abutment #2	0,500 inch

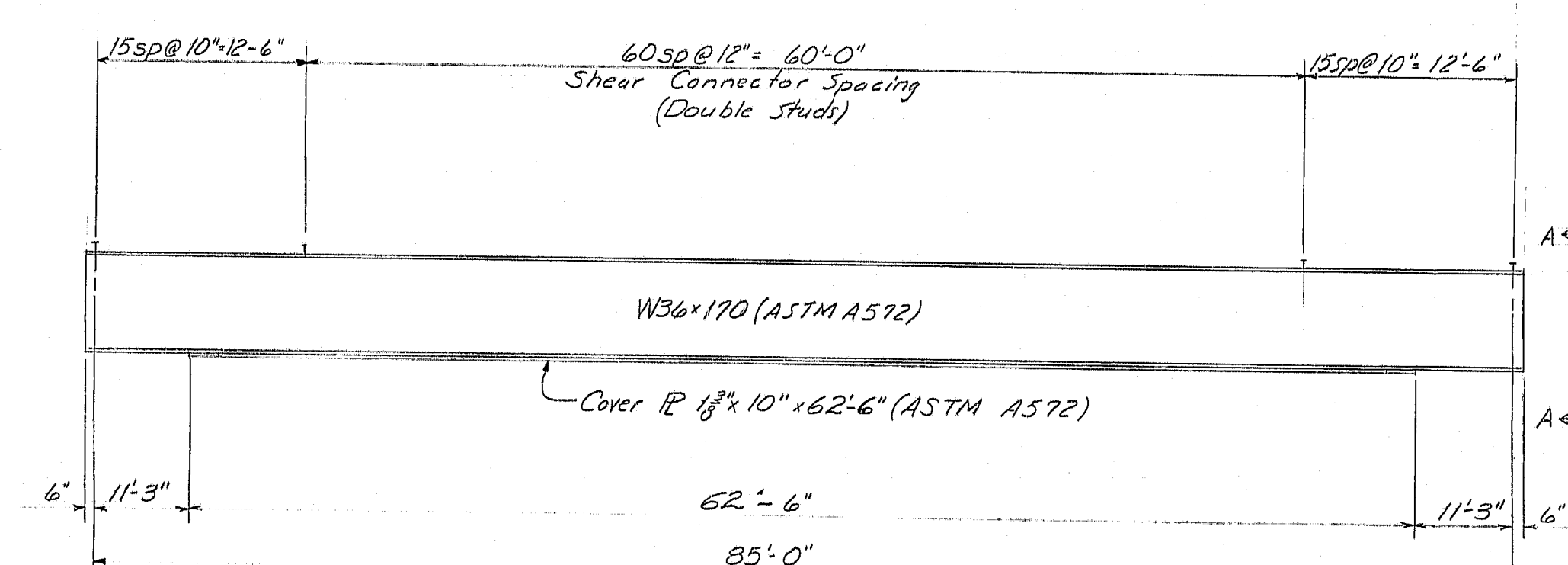
- Set joint opening according to the joint opening shown on the approved "Armored Joint" shop detail drawing.
- The seal shall be approved by the Engineer prior to fabrication of the armored joint.
- The following movements due to dead loads (slab, bridge rail, curb and wearing surface) shall be taken into account when setting the armored joint.

LOCATION	OPEN
ABUTMENT #1	1/4 INCH
ABUTMENT #2	5/8 INCH

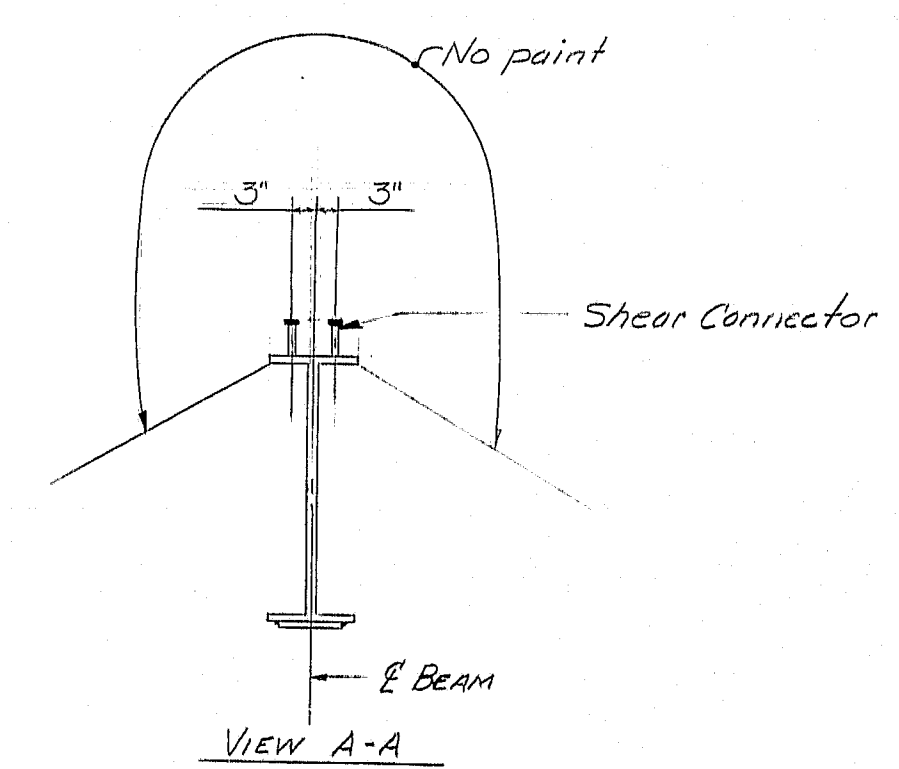
- The preformed elastic joint seal shall extend 2 inches beyond the fascias.
- The maximum joint opening shall be 3 inches at -30°F measured parallel to E of construction.

**STRUCTURAL STEEL**

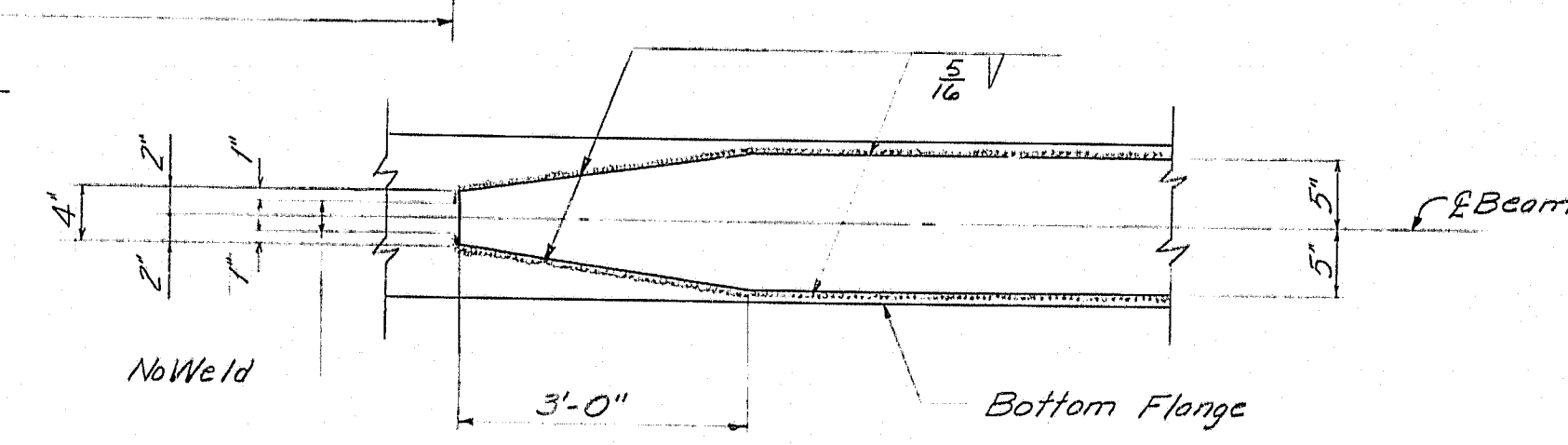
- Beams W 36 x 170 } ..... A.S.T.M. A572 Grade 50,  $F_y = 27,000$  p.s.i.  
Cover Plates } ..... A.S.T.M. A572  
High Strength Bolts ..... A.S.T.M. A325 .....  $F_u = 13,500$  p.s.i.  
All Other ..... A.S.T.M. A36 .....  $F_u = 20,000$  p.s.i.



**BEAM ELEVATION S1 THRU S6**  
DIMENSIONS ARE HORIZONTAL  
BEAMS ARE CAMBERED UP 4" INCHES  
1092 STUDS REQD. (182 PER BEAM)



**VIEW A-A**



**COVER PLATE DETAIL**

**References:**  
Armored Joints Standard Detail BD 104-72  
Bearing Pedestals BD 101-74  
Diaphragms BD 113-72  
For Shear Connector Details See Standard Details B.D. 104-73

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION

**INTERSTATE 95 NB  
OVER  
LINE ROAD  
BETWEEN THE TOWNS OF  
SMYRNA - LUDLOW  
AROOSTOOK COUNTY**

STRUCTURAL STEEL

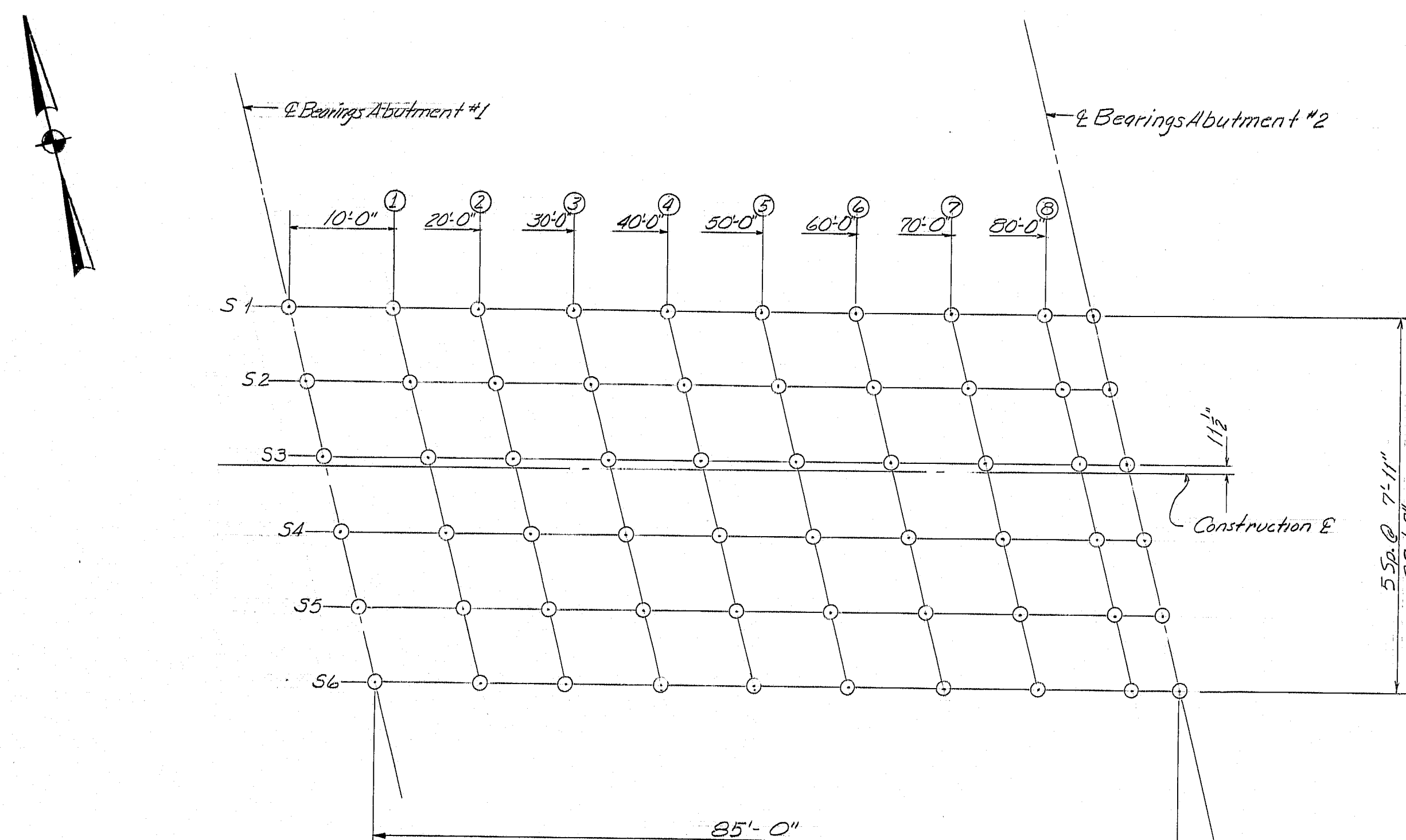
SHEET 14 OF 25 AUGUSTA, MAINE Dec. 1976

**R88-487**

PROJECT DESIGN ENGINEER	BY	DATE
DESIGN - DETAIL	W. J. J. J.	12-76
CHECKED	W. J. J. J.	12-76
REVISIONS		
FIELD CHANGES		



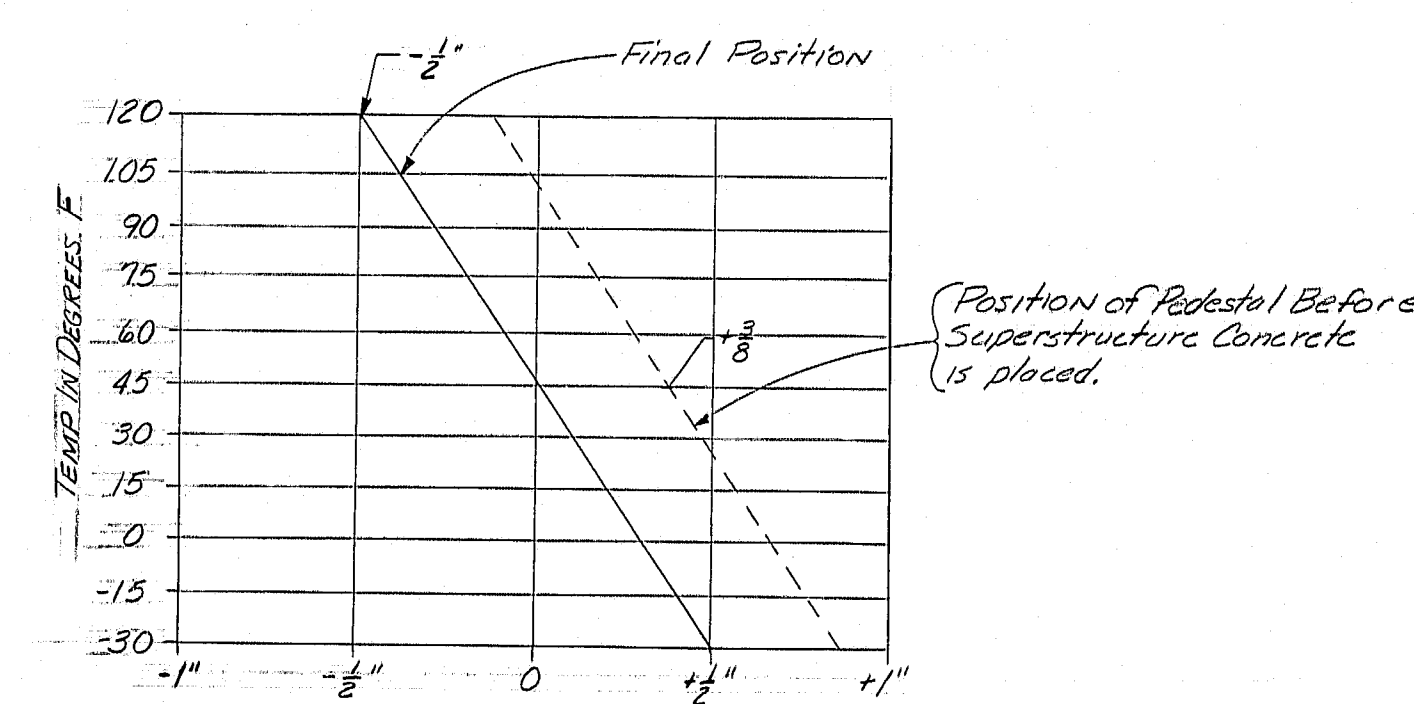
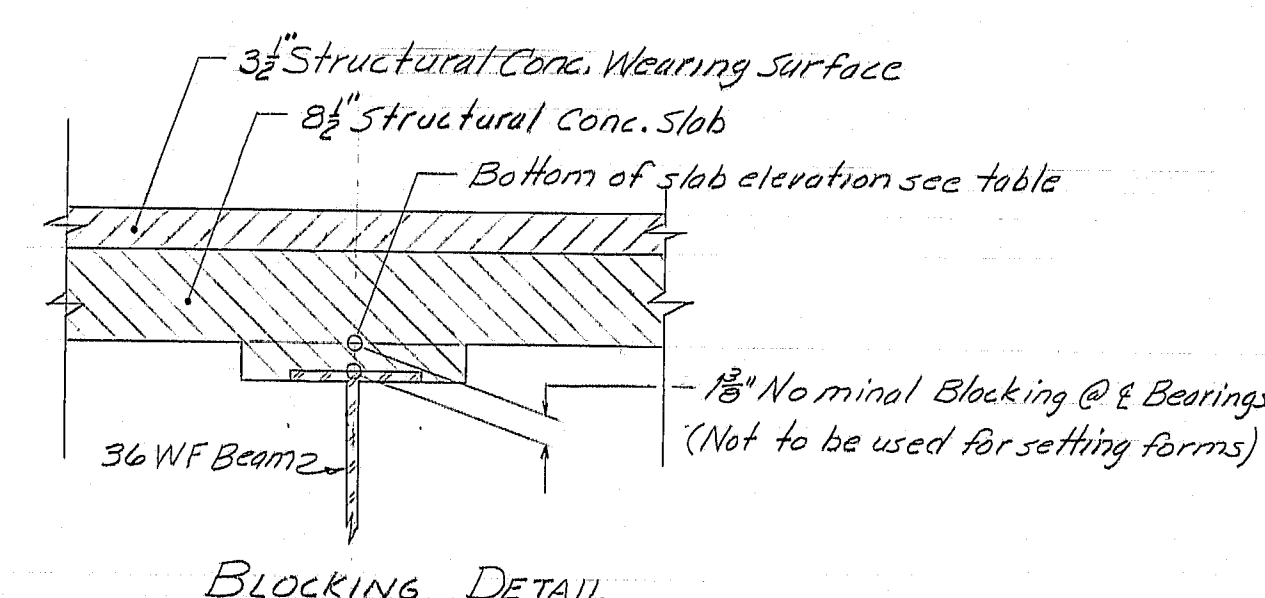
F.R.W. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	1-95-968	15	25



DEAD LOAD DEFLECTIONS IN FEET									
Dist. Along Beam From E. Bearing Abut. #1	0'-0"	10'-7 1/2"	21'-3"	31'-10 1/2"	42'-6"	53'-1 1/2"	63'-9"	74'-4 1/2"	85'-0"
SUPERIMPOSED	0.000	0.020	0.035	0.045	0.050	0.045	0.035	0.020	0.000
STEEL	0.000	0.021	0.039	0.050	0.054	0.050	0.039	0.021	0.000
FLUID	0.000	0.087	0.156	0.202	0.217	0.202	0.156	0.087	0.000

BOTTOM OF SLAB ELEVATIONS									
Blocking Bearing Strips	Bearing Abut. #1	1	2	3	4	5	6	7	8
		10'-0"	20'-0"	30'-0"	40'-0"	50'-0"	60'-0"	70'-0"	80'-0"
		10'-0"	20'-0"	30'-0"	40'-0"	50'-0"	60'-0"	70'-0"	80'-0"
S1	605.43	605.44	605.43	605.39	605.31	605.20	605.05	604.88	604.67
S2	605.58	605.59	605.57	605.53	605.46	605.35	605.20	605.02	604.82
S3	605.73	605.73	605.72	605.68	605.60	605.49	605.34	605.16	604.96
S4	605.58	605.59	605.58	605.54	605.46	605.35	605.20	605.02	604.81
S5	605.40	605.41	605.39	605.35	605.27	605.16	605.01	604.83	604.63
S6	605.22	605.22	605.21	605.17	605.09	604.98	604.83	604.65	604.43

NOTE: Bottom of slab elevations are adjusted to compensate for dead load deflections.



(-) Minus dimensions indicate position change toward Abutment #1 backwall.

Notes: Rocker Setting data as shown shall be used as a guide only. No extra payment will be made for resetting of the rocker bearings, subsequent to the original setting, made by the contractor as required by the Engineer to make the rocker settings conform with paragraph four (4) of subsection 504.5B.

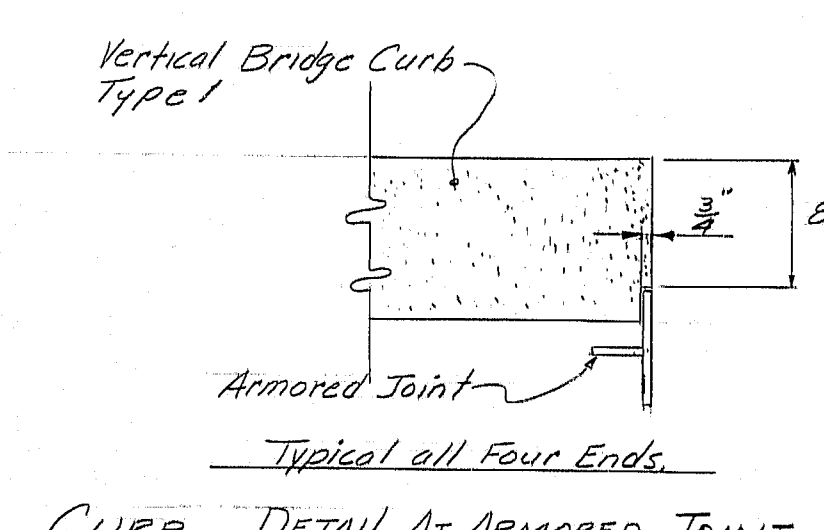
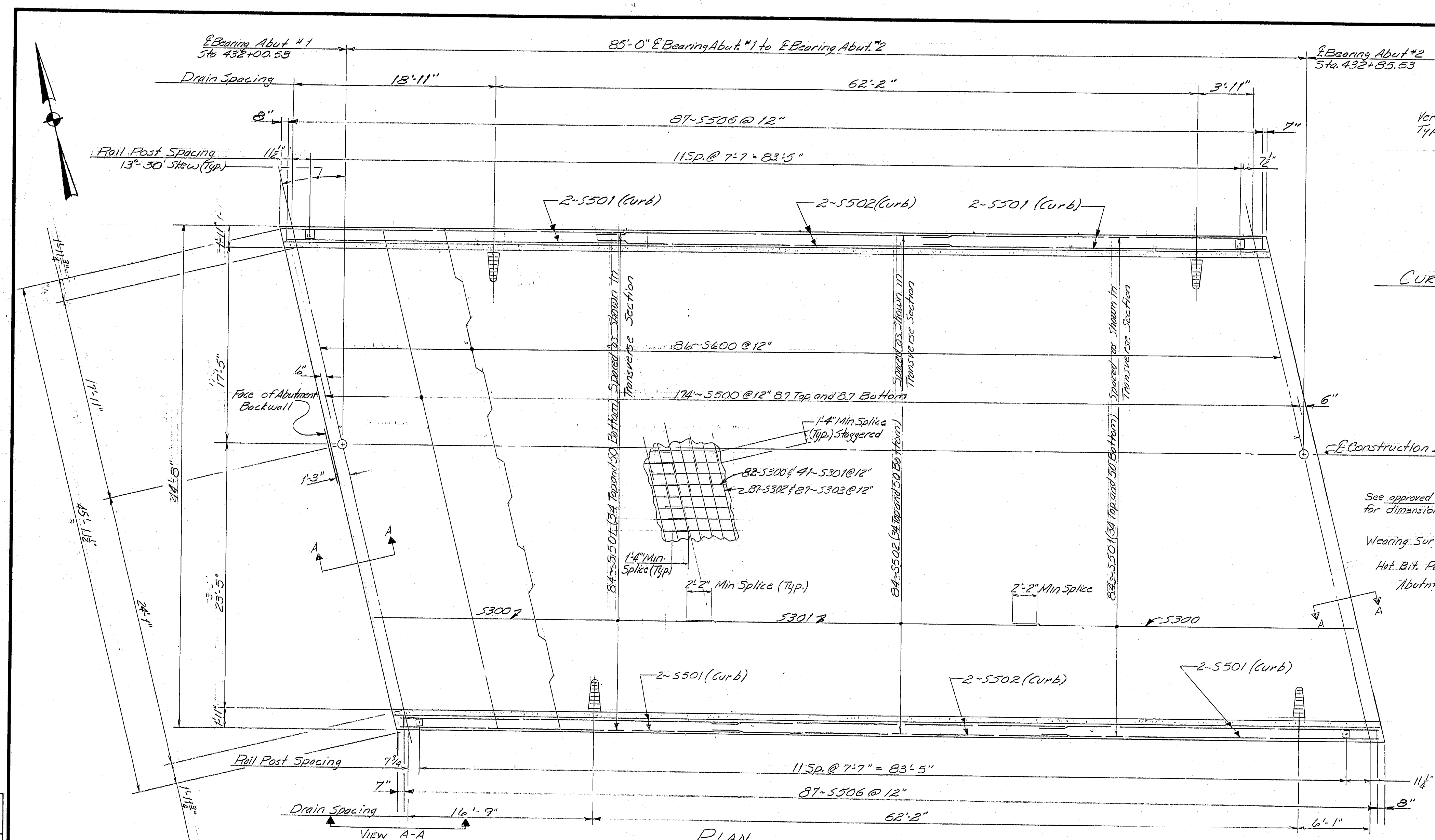
This chart of Pedestal setting compensates for longitudinal movement due to temperature changes and dead load deflection.

PROJECT DESIGN ENGINEER	BY	DATE
DESIGN - DETAIL	W. J. P. / P. J.	12/76
REVISIONS		
FIELD CHANGES		

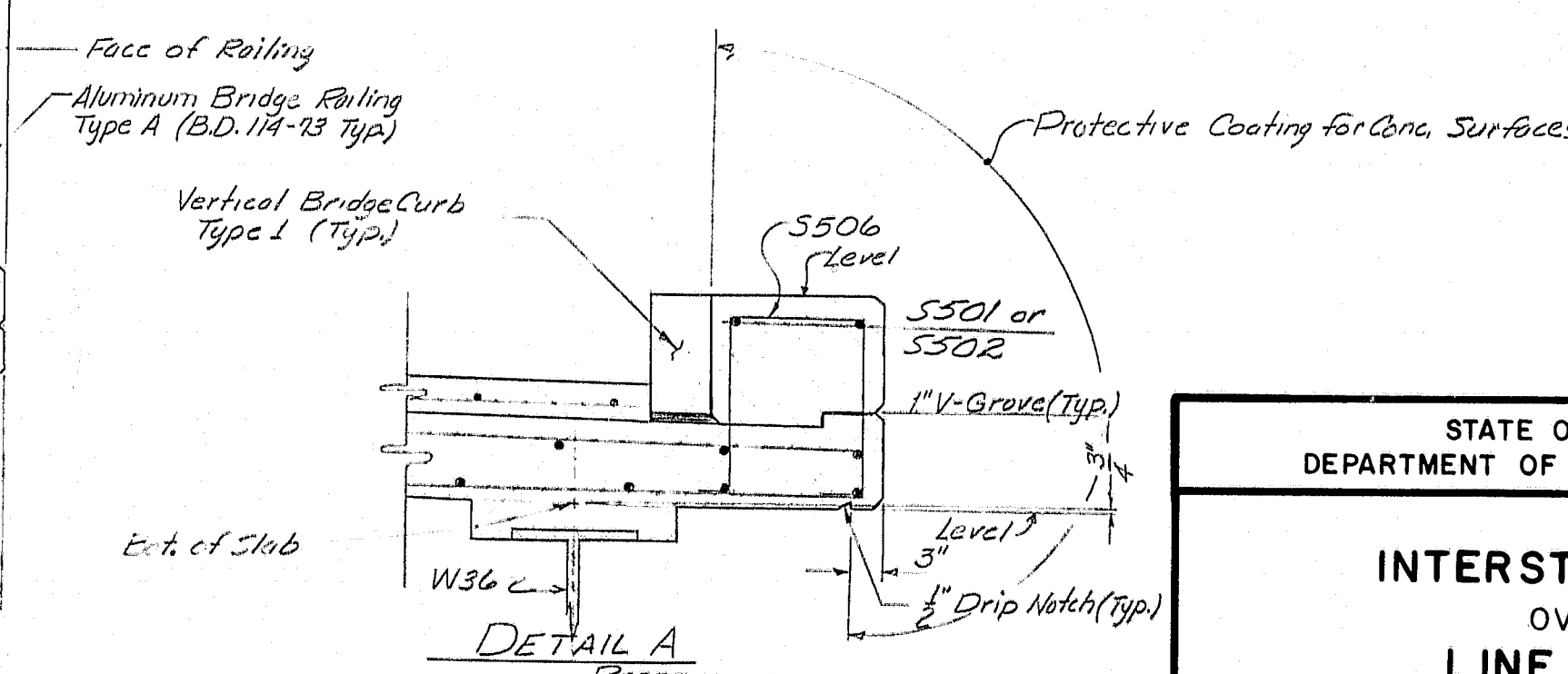
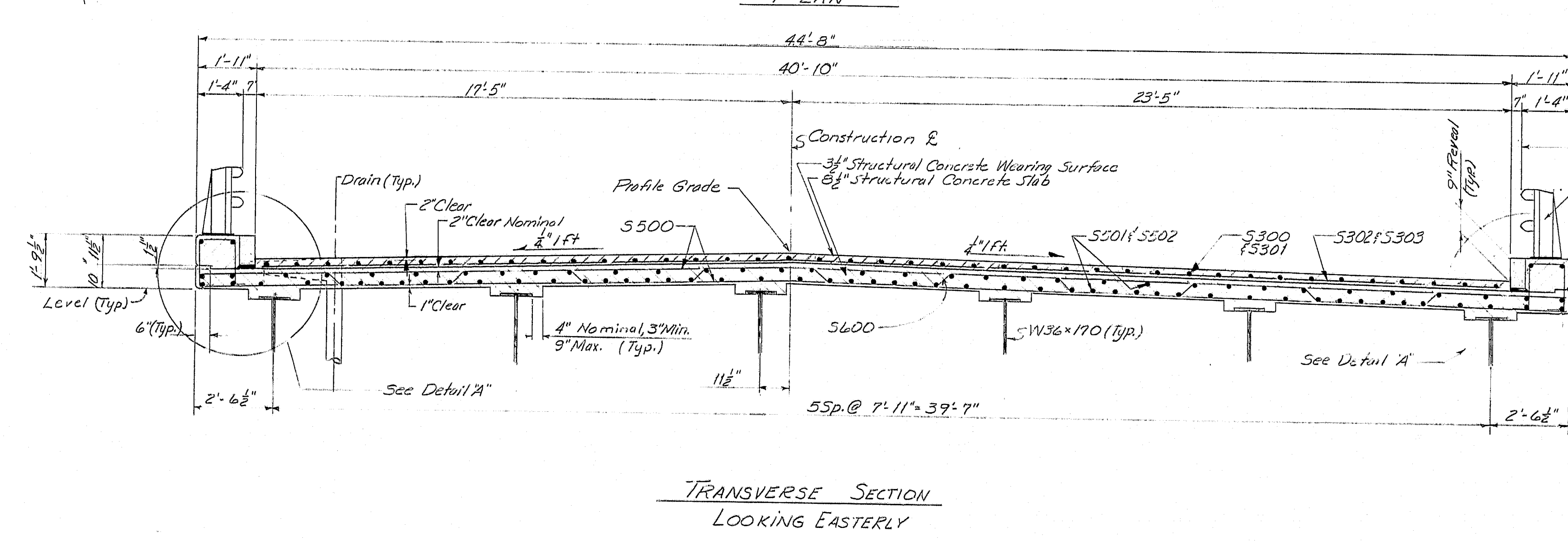
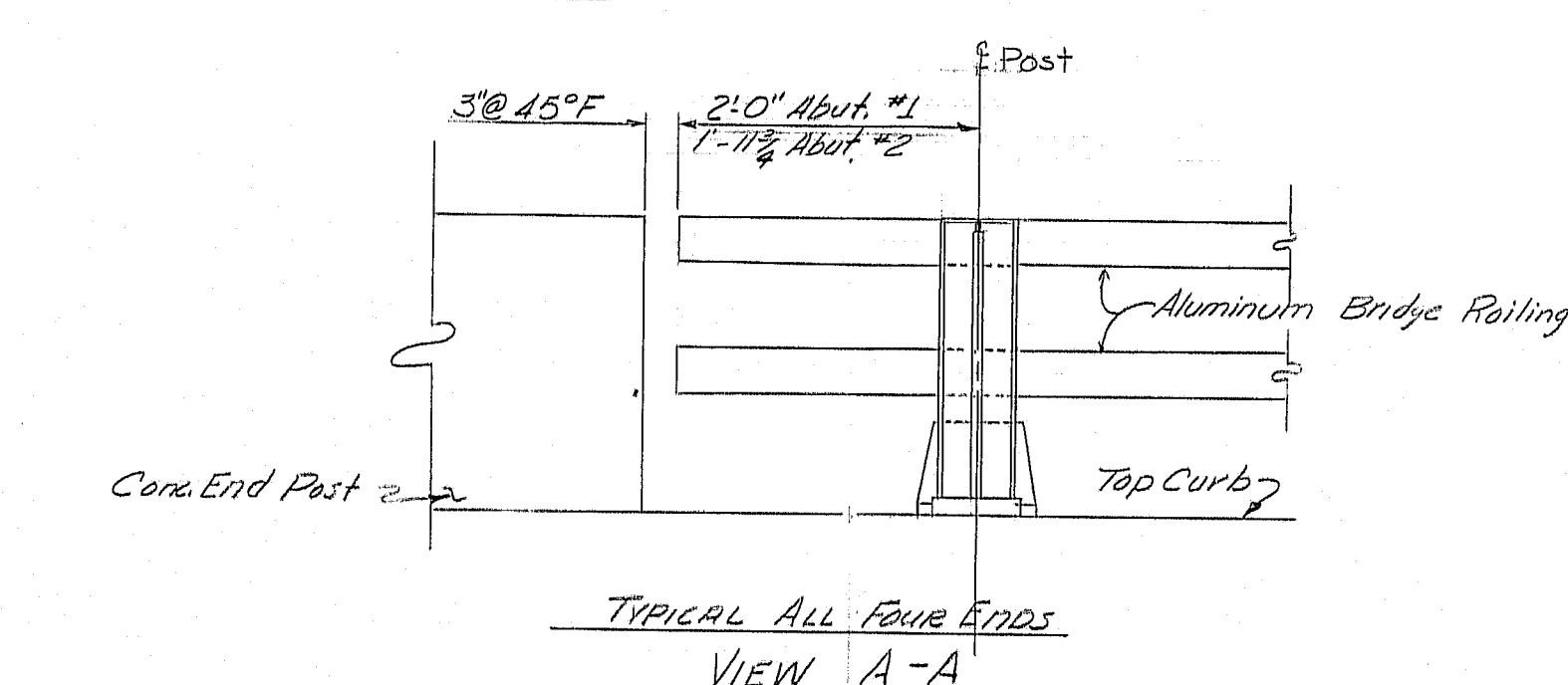
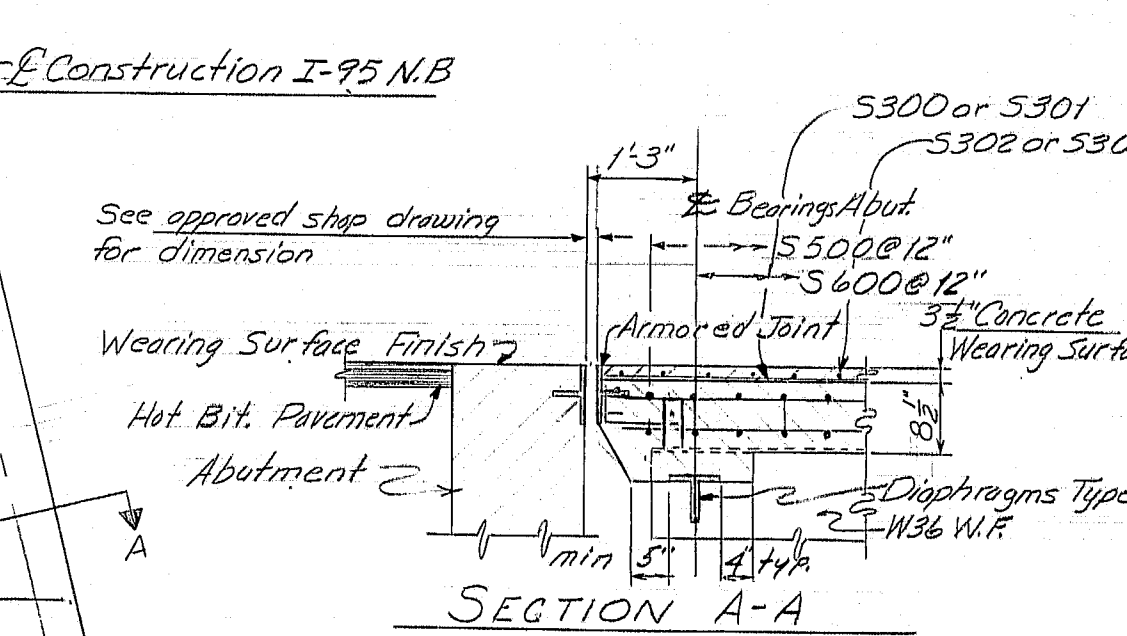
STATE OF MAINE DEPARTMENT OF TRANSPORTATION
INTERSTATE 95 NB OVER LINE ROAD BETWEEN THE TOWNS OF SMYRNA - LUDLOW AROOSTOOK COUNTY BOTTOM OF SLAB ELEVATIONS
SHEET 15 OF 25 AUGUSTA, MAINE Dec. 1976

R88-488

F.R.A. REL. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	1-95-9(68)	16	25



- SUPERSTRUCTURE NOTES**
1. Chamfer all exposed edges of concrete 3/4 inch unless otherwise indicated.
  2. Reinforcing steel shall have a minimum cover of 2 inches unless otherwise indicated.
  3. The superstructure slab shall be placed continuously. The contractor's method of placement shall be approved by the Engineer. Approved set retarding admixtures shall be used when authorized by the Engineer.
  4. Protective Coating for Concrete Surfaces shall be applied to the following Areas: Wearing Surface, Top of backwall, 1'-0" down back of backwall, Top of concrete curb, Face down to drip notch, and end posts.
  5. Mortar for bedding and for joints in granite curb shall be an approved non-shrink grout.
  6. Reinforcing steel splices shall be as indicated on the plans.



- REFERENCES**
1. Vertical Bridge Curb Type 1. BD-104-73
  2. Armored Joint. BD-104-73 Sheet 1A
  3. Curb Section. BD-104-73
  4. Drain. BD-104-73
  5. Aluminum Bridge Railing (2 Bars) BD-114-73

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION

**INTERSTATE 95 NB  
OVER  
LINE ROAD  
BETWEEN THE TOWNS OF  
SMYRNA - LUDLOW  
AROOSTOOK COUNTY**

SUPERSTRUCTURE

SHEET 16 OF 25 AUGUSTA, MAINE Dec. 1996

**R88-489**

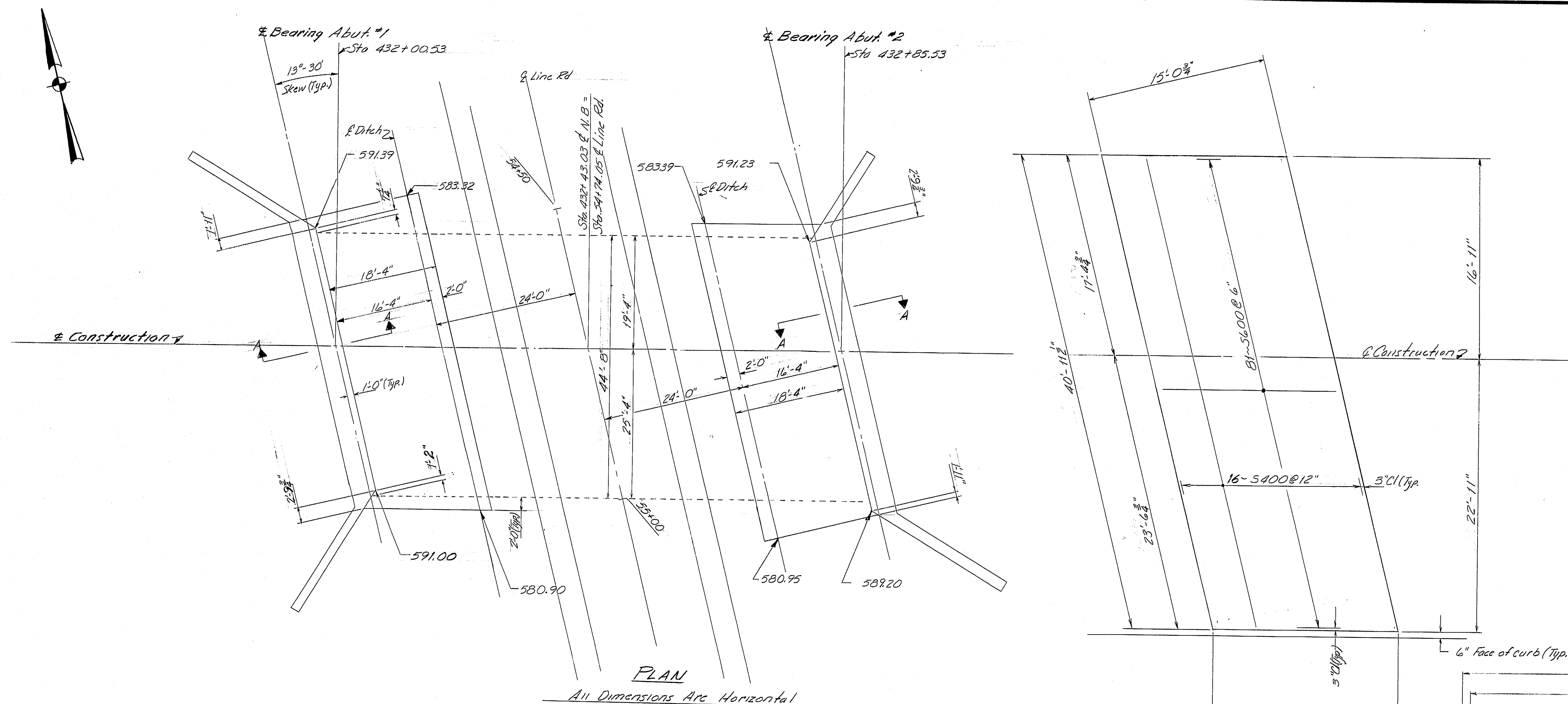
PROJECT DESIGN ENGINEER	DATE
BY <i>[Signature]</i>	12-96
DESIGN - CHECKED <i>[Signature]</i>	12-96
CHECKED <i>[Signature]</i>	12-96
REVISIONS	
FIELD CHANGES	



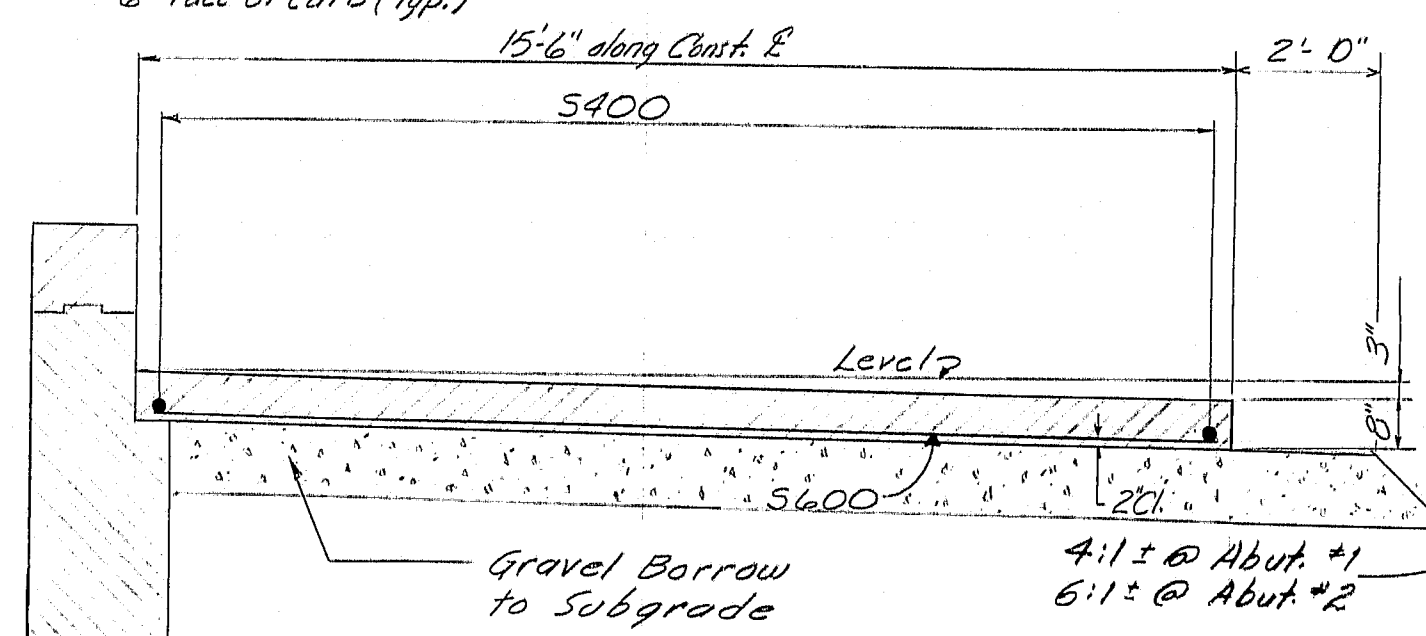
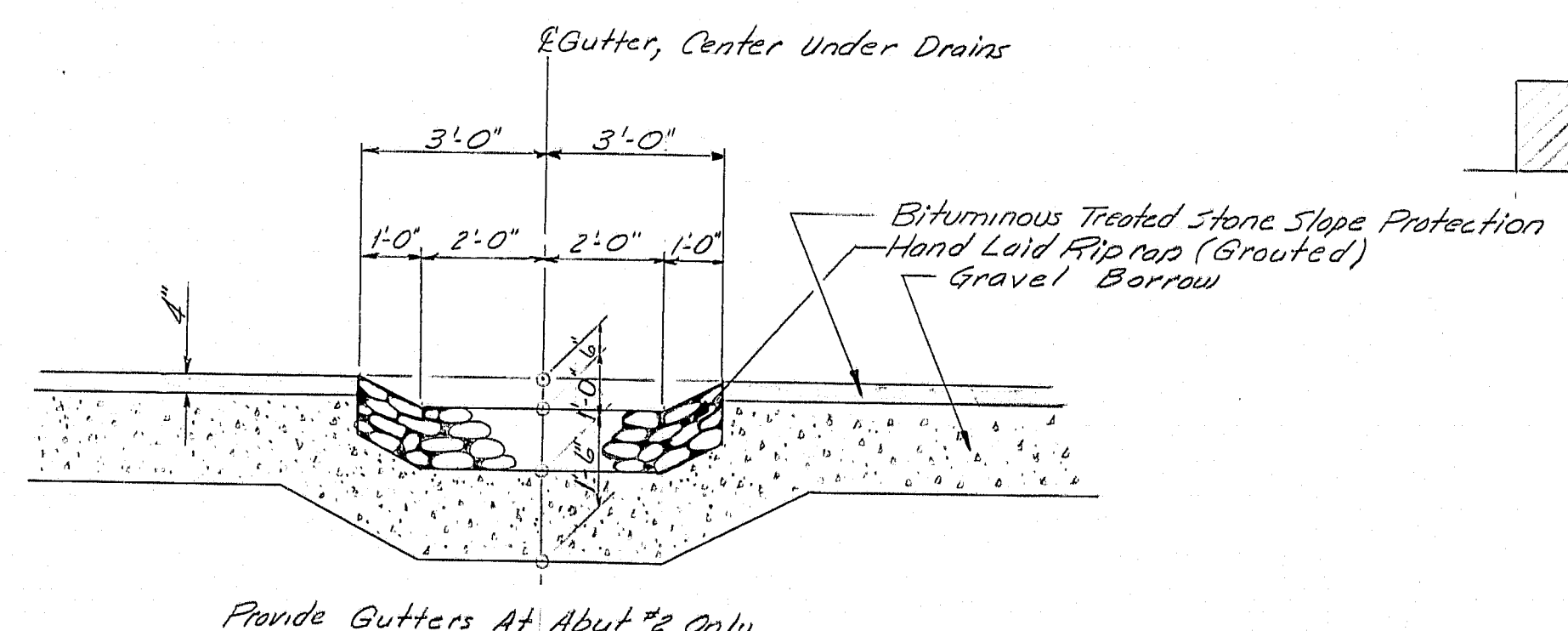
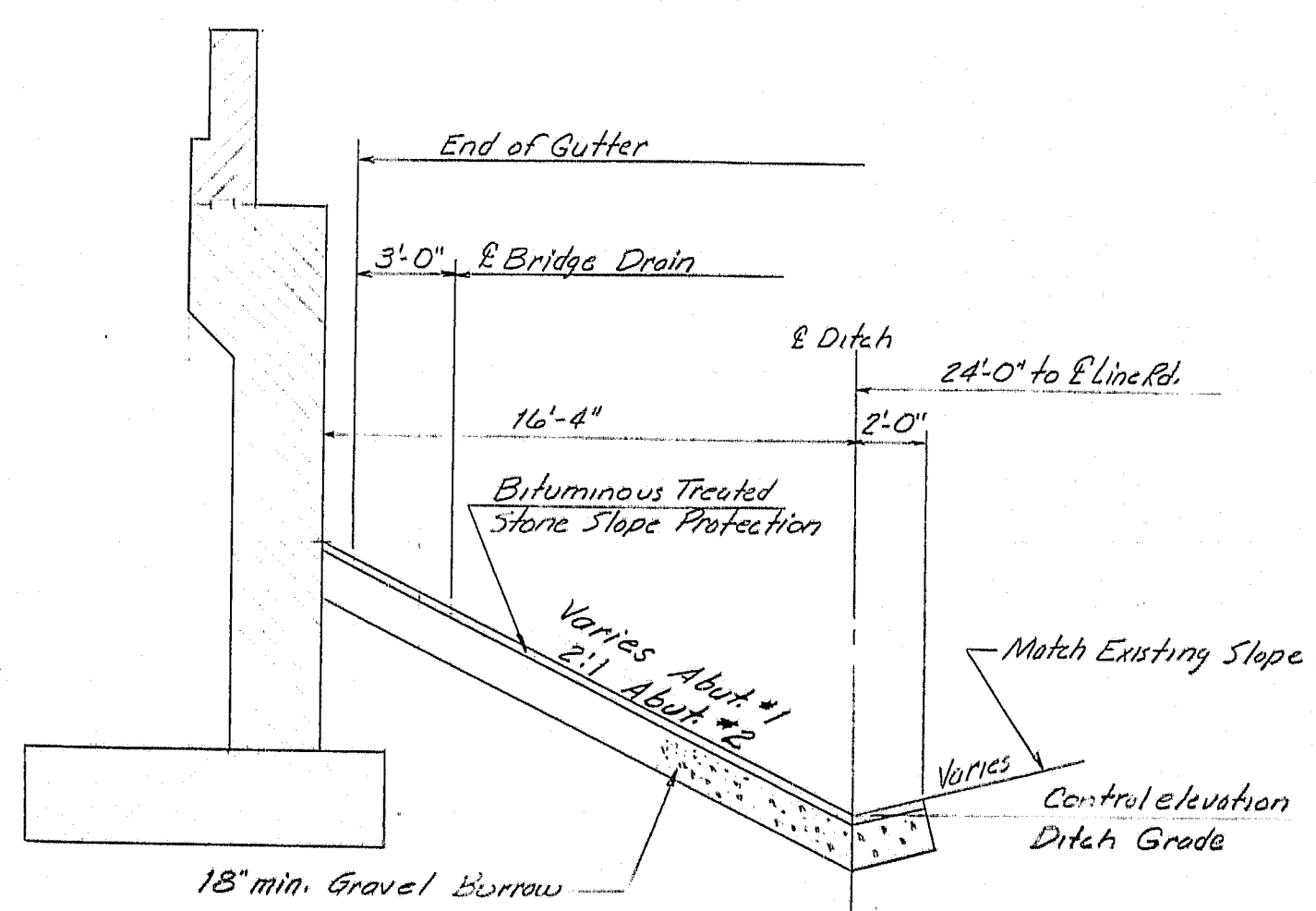
F.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	1-95-4(68)	17	25

# NOTES

1. The 18" of Gravel Borrow may be reduced or omitted if in the opinion of the Engineer the existing material is suitable.
2. Provide a minimum of 18" of Gravel Borrow under Slope Protection in excavation areas. Payment for earth excavation in areas of Slope Protection will be made under Item 204.03, 5th Earth Excavation Abutments and Retaining Walls.



APPROACH SLAB



STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION

INTERSTATE 95 NB  
OVER  
LINE ROAD  
BETWEEN THE TOWNS OF  
SMYRNA - LUDLOW  
AROOSTOOK COUNTY

SLOPE PROTECTION

SHEET 17 OF 25 AUGUSTA, MAINE Dec. 1976

R88-490

REINFORCING STEEL SCHEDULE																										
STRAIGHT BARS												BENT BARS														
MARK	NO.	LENGTH	LOCATION	MARK	NO.	LENGTH	LOCATION	MARK	NO.	LENGTH	LOCATION	MARK	NO.	LENGTH	TYPE	A	B	C	D	E	F	G	H	O	R	LOCATION
Abutment #1				Wing #1				Wing #3				FOOTING ABUTMENTS														
A 500	34	29'-8"	Abutment	C500	3	16'-9"	Wing	W500	1	3'-2"	Wing	C1000	13	20'-6"	J	2'-0"	9 1/2"	17'-9"						9"	16"	Wing #1
A 501	8	7'-2"	"	C501	3	22'-4"	"	W501	1	7'-8"	"	C1001	14	9'-9"	J	2'-0"	9 1/2"	7'-0"						3 3/4"	6"	Wing #1
A 502	26	19'-6"	"	C502	6	21'-2"	"	W502	1	13'-3"	"															
A504	30	3'-5"	Abutment Dowels	C503	6	20'-1"	"	W503	1	18'-9"	"	C800	14	9'-0"	J	2'-0"	9 1/2"	6'-3"						3"	6"	Wing #2
A507	4	21'-10"	Abutment	C504	6	18'-11"	"	W504	24	25'-1"	"	C1002	13	19'-4"	J	2'-0"	9 1/2"	16'-7"						8 3/4"	6"	Wing #2
A508	6	6'-1"	"	C505	6	17'-9"	"	W505	17	3'-5"	"															
A510	14	9'-9"	"	C506	1	6'-10"	"	W506	3	17'-6"	"															
A512	14	8'-10"	"	C507	1	12'-9"	"	W507	2	22'-9"	"															
A513	8	7'-10"	"	C508	1	18'-8"	"	W508	4	21'-11"	"															
A600	50	10'-0"	Footing Wing 1 & 2	C509	1	21'-5"	"	W509	6	20'-8"	"															
A601	44	24'-7"	" Wing 1 & 2	C510	2	19'-10"	"	W510	6	19'-6"	"	A503	30	20'-6"	L	3'-11"	16'-9"									Abutment #1
				C511	22	22'-6"	"	W511	6	18'-3"	"	A505	26	10'-8"	S		4'-9"	1'-2"	4'-9"							
				C512	16	3'-3"	Wing Dowels	W512	6	17'-1"	Wing	A506	26	8'-6"	V			5'-6"	3'-0"					2'-1 1/2"	"	
A604	22	30'-0"	Abutment Footing									A509	10	11'-3"	SL	0"	0"	4'-8"	1'-6"					5'-1"		
A605	22	16'-1"	Abutment Footing	C527	1	5'-2"	Wing	W514	2	22'-6"	Wing	A511	10	12'-5"	SL	0"	0"	5'-4"	1'-6"					5'-7"		
A800	66	10'-0"	Wing #1 & #2 Footing	C528	1	11'-1"	"	W532	1	1'-4"	"	A900	30	8'-9"	J	2'-0"	9 1/2"	5'-11"					0		6"	Footing
				C529	1	17'-0"	"	W533	1	5'-10"	"	A901	30	19'-2"	J	2'-0"	9 1/2"	7'-4"					0		6"	Footing
A902	45	18'-6"	Abutment	C530	1	19'-9"	"	W534	1	11'-5"	"															
						Wing #2		W535	1	16'-11"	Wing															
				C513	16	3'-5"	Wing																			
				C514	20	22'-8"	"			Wing #4																
				C515	1	18'-2"	"	W515	13	3'-5"	Wing															
				C516	1	14'-3"	"	W516																		

Mark (A 502) bar size - #5  
Mark (P 1001) bar size - #10  
Mark (S 603) bar size - #6

1. First digit(s) following the letter of the Mark indicates size of reinf. bar.

Mark (A 502) bar size - #5  
Mark (P 1001) bar size - #10  
Mark (S 603) bar size - #6

SHEET 18 OF 25      AUGUSTA, MAINE      Dec. 1876

**R88-491**



DESIGN - DETAIL  
CHECKED  
FIELD CHANGES

BY  
DATE  
12-76  
12-76

PLANS

REINFORCING STEEL SCHEDULE																															
STRAIGHT BARS													BENT BARS																		
MARK	NO.	LENGTH	LOCATION	MARK	NO.	LENGTH	LOCATION	MARK	NO.	LENGTH	LOCATION	MARK	NO.	LENGTH	TYPE	A	B	C	D	E	F	G	H	O	R	LOCATION					
END POST #1				END POST #1								END POST #1																			
EP507	2	7'-4"		EP522	4	7'-7"						EP513	4	12'-9"	Z	4'-9"	4'-8"	1'-2"	1'-6 1/2"	4"	4"			O			End Post #1				
EP508	2	7'-6"		EP523	2	7'-4"						EP514	3	12'-1"	F	4'-8"	3'-9 1/2"	1'-8"	1'-0"	1'-0 1/2"	2"	4"	4"				" "				
EP509	2	7'-8"		EP524	2	7'-1"						EP515	5	3'-6"	S		1'-3"	1'-0"	1'-3"								End Post #1				
EP510	2	7'-10"		EP525	2	6'-10"																									
EP511	2	7'-11"		EP526	5	5'-4"																									
EP512	5	5'-8"																													
												END POST #2																			
												EP506	4	13'-6"	Z	5'-1"	5'-0"	7'-2"	1'-7 1/2"	4"	4"			2"			End Post #2				
												EP527	3	12'-10"	E	5'-0"	3'-10"	1'-3"	1'-0"	1'-1"	2'-8"	4"	4"				" "				
												EP516	5	3'-6"	S		1'-3"	1'-0"	1'-3"								End Post #2				
END POST #2				APPROACH SLAB																											
EP500	2	7'-4"		5400	32	40'-5"	slab																								
EP501	2	7'-6"										END POST #3																			
EP502	2	7'-9"		5400	162	15'-0"	slab					EP513	4	12'-9"	Z	4'-9"	4'-8"	1'-2"	1'-6 1/2"	4"	4"			O			End Post #3				
EP503	2	7'-10"										EP514	3	12'-1"	F	4'-8"	3'-9 1/2"	1'-8"	1'-0"	1'-0 1/2"	2"	4"	4"				" "				
EP504	2	7'-11"										EP515	5	3'-6"	S		1'-3"	1'-0"	1'-3"								" "				
EP505	5	5'-8"																													
												END POST #4																			
												EP506	4	13'-6"	Z	5'-1"	5'-0"	1'-2"	1'-7 1/2"	4"	4"			2"			End Post #4				
												EP515	5	3'-6"	S		1'-3"	1'-0"	1'-3"								" "				
												EP527	3	12'-10"	F	5'-0"	3'-10"	1'-3"	1'-0"	1'-1"	2'-8"	4"	4"				" "				
END POST #3																															
EP516	2	6'-10"																													
EP517	2	7'-1"																													
EP518	2	7'-3"																													
EP519	2	7'-6"																													
EP520	2	7'-7"																													
EP521	5	5'-4"																													

FHWA REG. NO. 1	STATE MAINE	PROJECT NUMBER 1-95-9(68)	SHEET NO. 19	TOTAL SHEETS 25
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**TYPE-BENDING DIAGRAMS**

All dimensions are out to out of reinf. bar.  
Bending details and hooks shall conform to the recommendations of ACI Standard 315-65.  
Reinforcing Bar: ASTM A615 Grade 60

**GENERAL NOTES**

1. First digit(s) following the letter of the Mark indicates size of reinf. bar.  
Mark (A 502) bar size - #5  
Mark (P 1001) bar size - #10  
Mark (S 603) bar size - #6

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION

**INTERSTATE 95 NB  
OVER  
LINE ROAD  
BETWEEN THE TOWNS OF  
SMYRNA - LUDLOW  
AROOSTOOK COUNTY**

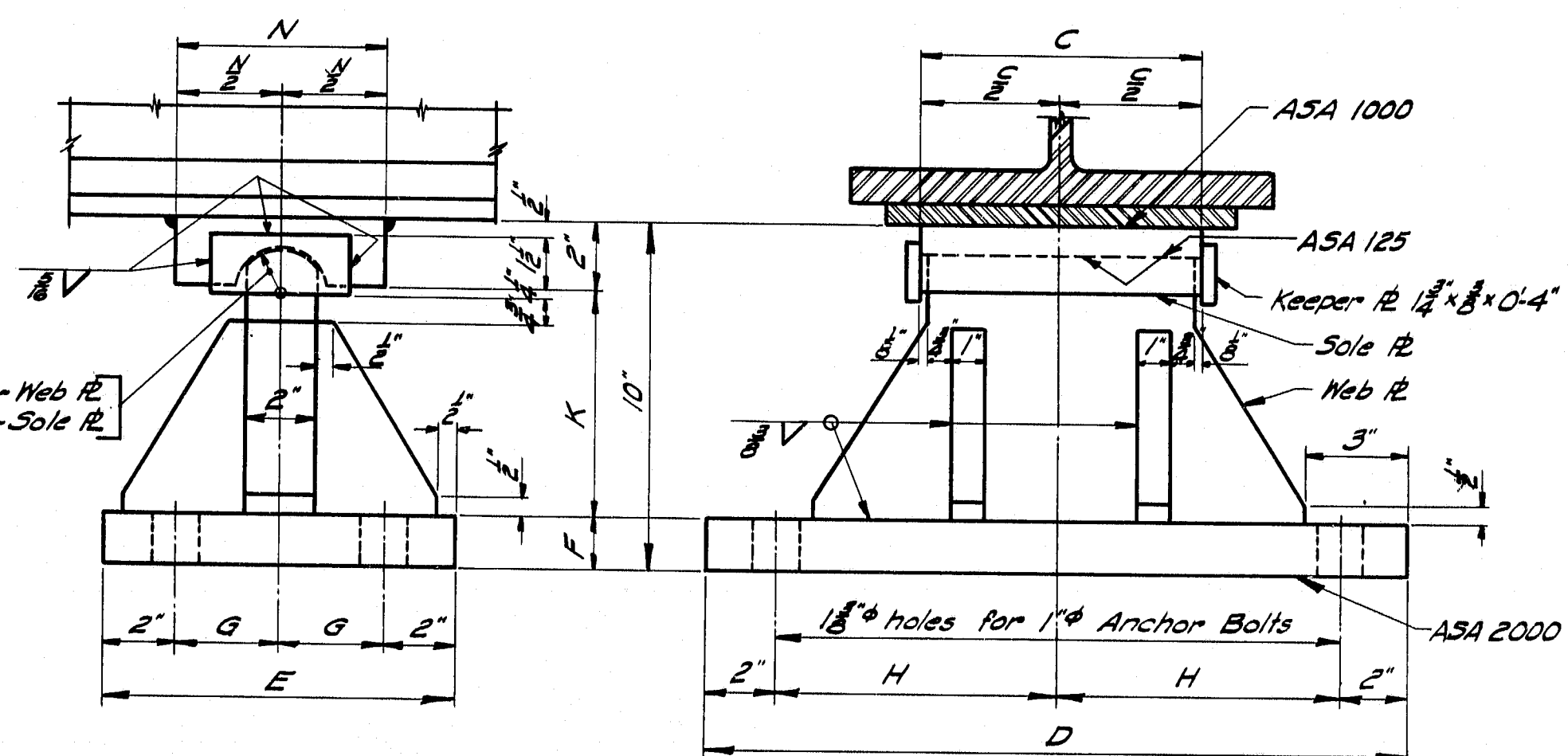
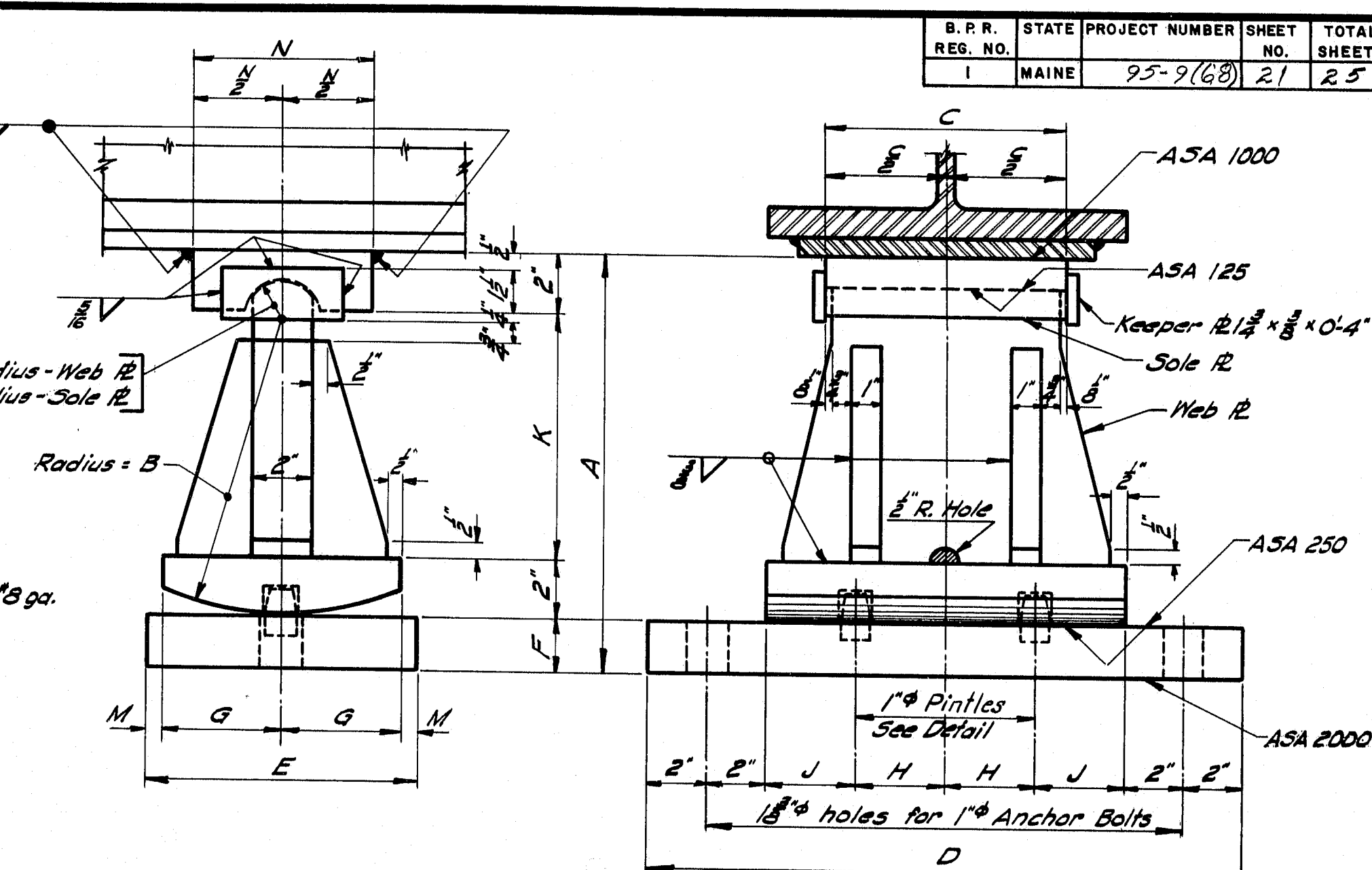
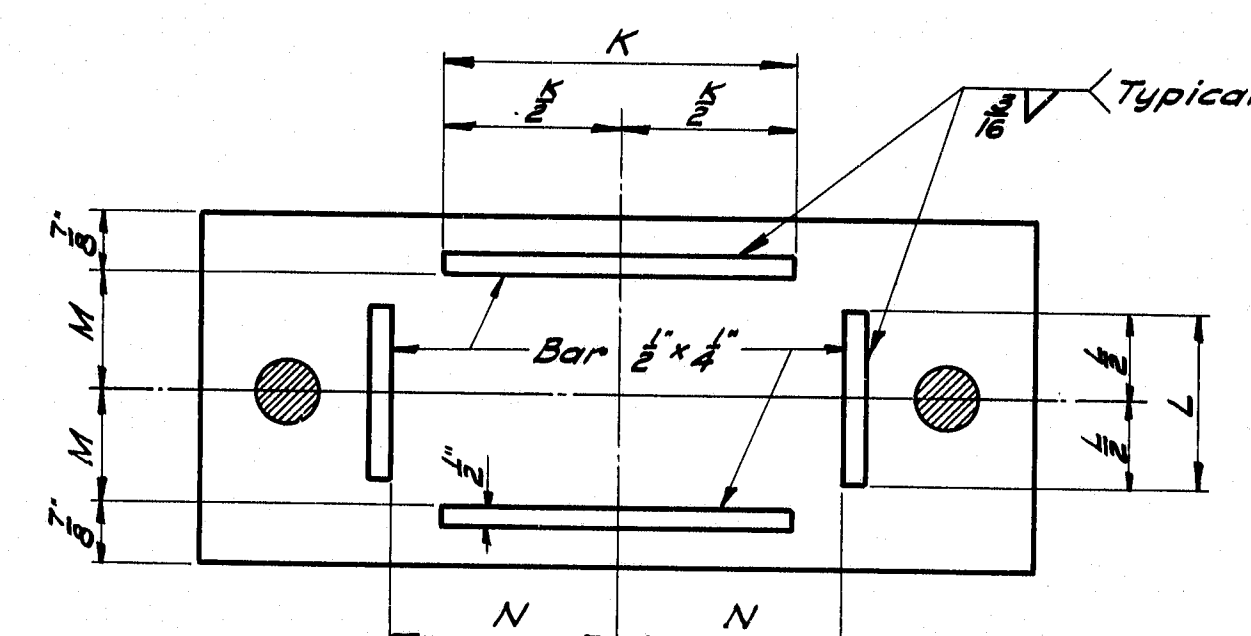
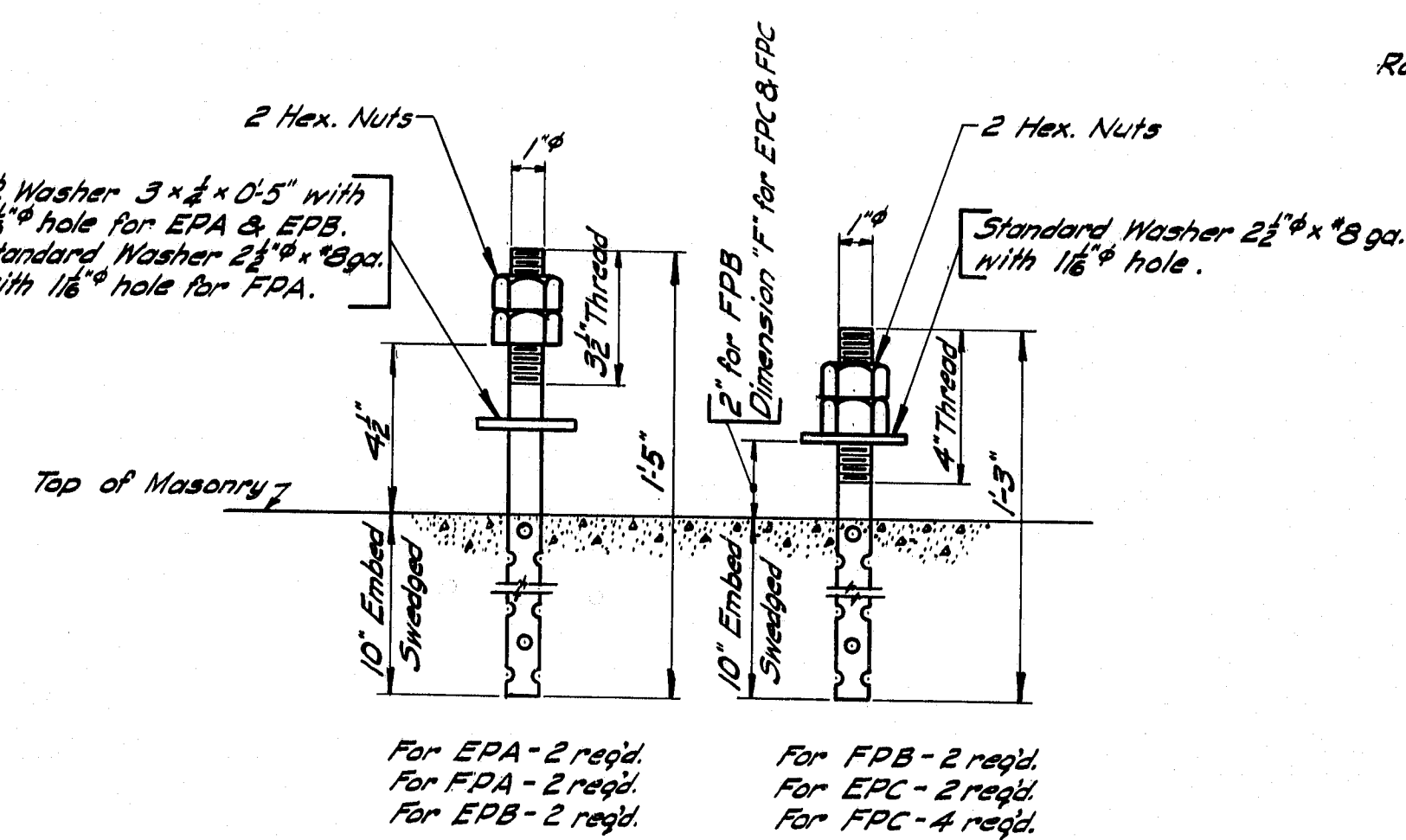
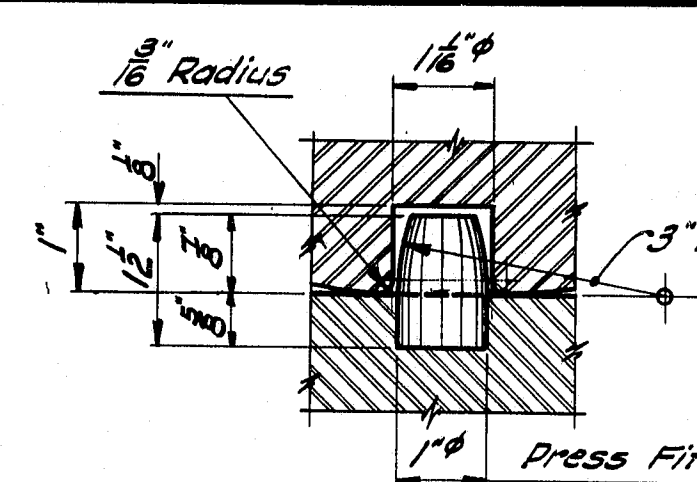
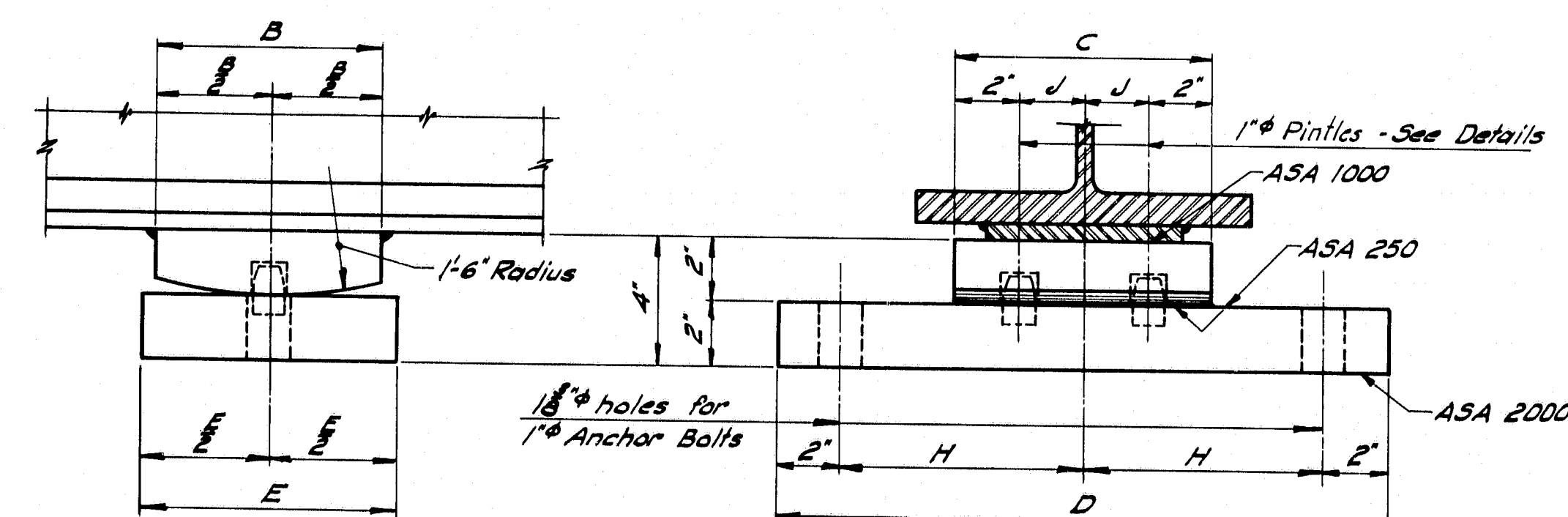
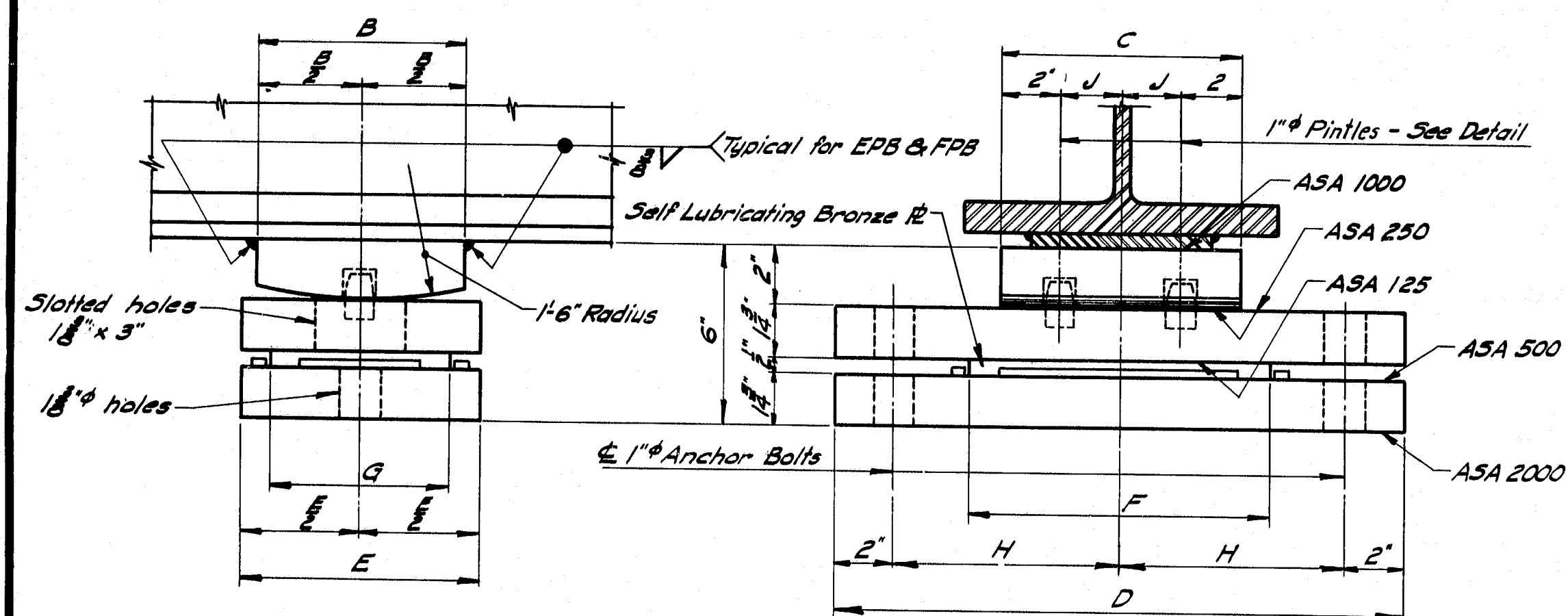
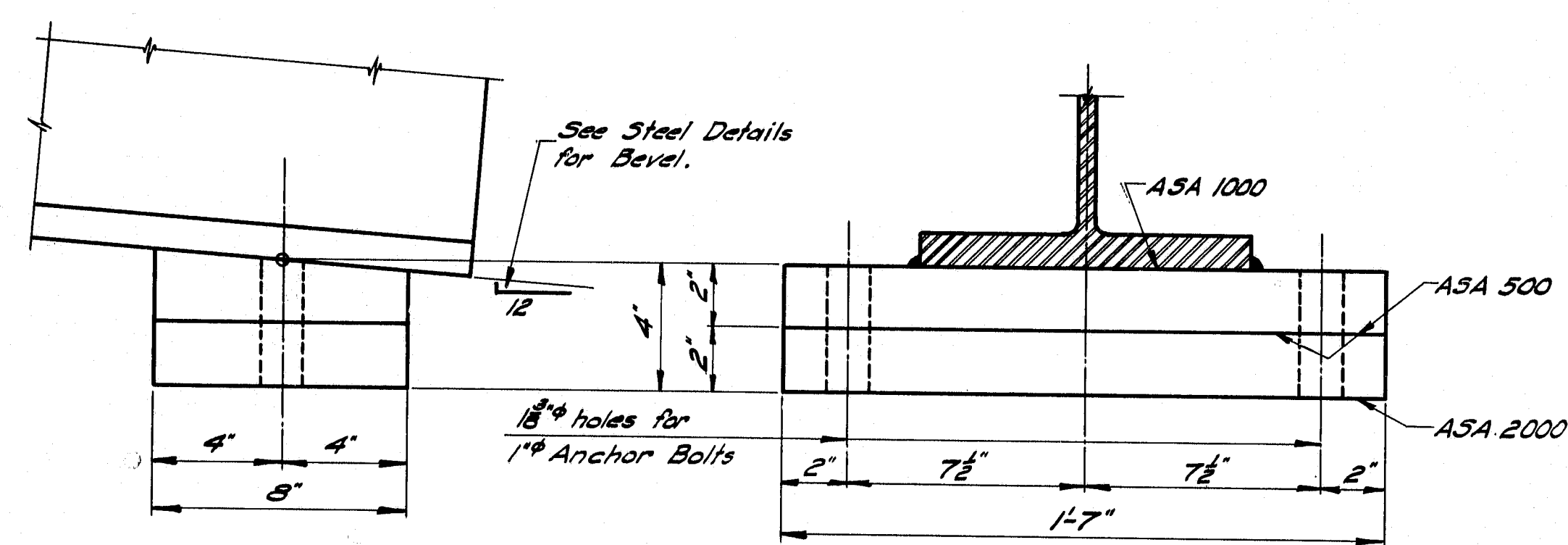
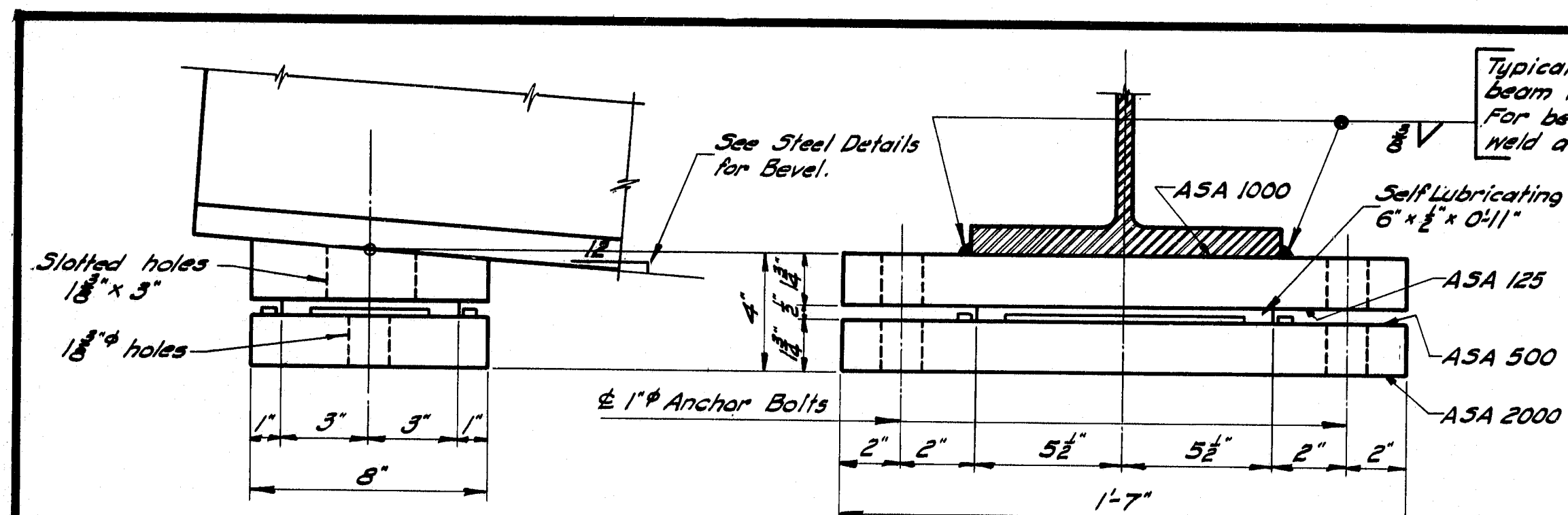
REINFORCING STEEL SCHEDULE  
SHEET 19 OF 25 AUGUSTA, MAINE Dec. 1976

R88-492









PEDESTALS		ALLOWABLE LOADS & DIMENSIONS													
<i>Pedestal</i>	<i>Load</i>	A	B	C	D	E	F	G	H	J	K	L	M	N	
EP4	132 <sup>K</sup>	—	—	—	—	—	—	—	—	—	8"	4"	3 1/2"	3 1/2"	
FPA	150 <sup>K</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—	
EPB-1	120 <sup>K</sup>	—	6"	8"	1 1/2"	8"	10"	6"	7 1/2"	2"	8"	4"	3 1/2"	5 1/2"	
EPB-2	165 <sup>K</sup>	—	7"	10"	1 1/2"	9"	1 1/2"	7"	8"	3"	10"	5"	3 1/2"	5 1/2"	
EPB-3	224 <sup>K</sup>	—	8"	1 1/2"	2 1/2"	10"	1 1/4"	8"	10"	4 1/2"	1 1/2"	5"	4 1/2"	6 1/2"	
FBB-1	120 <sup>K</sup>	—	6"	8"	1 1/2"	8"	—	—	7 1/2"	2"	—	—	—	—	
FBB-2	165 <sup>K</sup>	—	7"	10"	1 1/2"	9"	—	—	8"	3"	—	—	—	—	
FBB-3	224 <sup>K</sup>	—	8"	1 1/2"	2 1/2"	10"	—	—	10"	5"	—	—	—	—	
EPAC-1	70 <sup>K</sup>	2 1/2"	6"	8"	1 1/2"	8"	1 1/2"	3 1/2"	3"	3"	4 1/2"	—	8"	6"	
EPAC-2	100 <sup>K</sup>	1 1/2"	8"	8"	1 1/2"	8"	1 1/2"	3 1/2"	5"	3"	6 1/2"	—	8"	6"	
EPAC-3	130 <sup>K</sup>	1 1/2"	10"	8"	1 1/2"	9"	1 1/2"	4"	3"	3"	8 1/2"	—	8"	7"	
EPAC-4	160 <sup>K</sup>	1 1/2"	10"	8"	1 1/2"	9"	1 1/2"	4"	4"	3"	8 1/2"	—	8"	7"	
EPAC-5	190 <sup>K</sup>	1 1/2"	10"	9"	2 1/2"	10"	2"	4 1/2"	5"	3"	8 1/2"	—	8"	9"	
EPAC-6	220 <sup>K</sup>	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	2 1/2"	5"	5"	3"	10 1/2"	7"	8"	
EPAC-7	250 <sup>K</sup>	1 1/2"	1 1/2"	1 1/2"	2 1/2"	1 1/2"	1 1/2"	2 1/2"	5"	5"	4"	10 1/2"	7"	8"	
FAC-1	100 <sup>K</sup>	—	—	8"	1 1/2"	9"	1 1/2"	2 1/2"	8"	—	10 1/2"	—	—	6"	
FAC-2	160 <sup>K</sup>	—	—	8"	1 1/2"	10"	1 1/2"	3"	8"	—	6 1/2"	—	—	7"	
FAC-3	190 <sup>K</sup>	—	—	9"	2 1/2"	10"	1 1/2"	3"	10"	—	6 1/2"	—	—	8"	
FPC-4	220 <sup>K</sup>	—	—	10"	2 1/2"	10"	1 1/2"	4"	10"	—	6 1/2"	—	—	8"	
FDC-5	250 <sup>K</sup>	—	—	10"	2 1/2"	10"	2"	4"	10"	—	6"	—	—	9"	

**NOTE:** At the location of bearing pedestals the concrete bridge seats shall be dressed one inch larger all around than the size of masonry plates and to extend where shown on the plans. If dressed seats are below the surface of the surrounding bridge seat a small channel shall be cut to the edge of the bridge seat for drainage where required by the Engineer. Channels shall have a min. width of 2" and min. slope of 1 inch per foot. No separate payment for this work will be made as it shall be considered incidental to contract items.

## DESIGN SPECIFICATIONS

*A.A.S.H.O., Standard Specifications  
for Highway Bridges, 1973*

### A.S.T.M. STEEL CLASSIFICATION

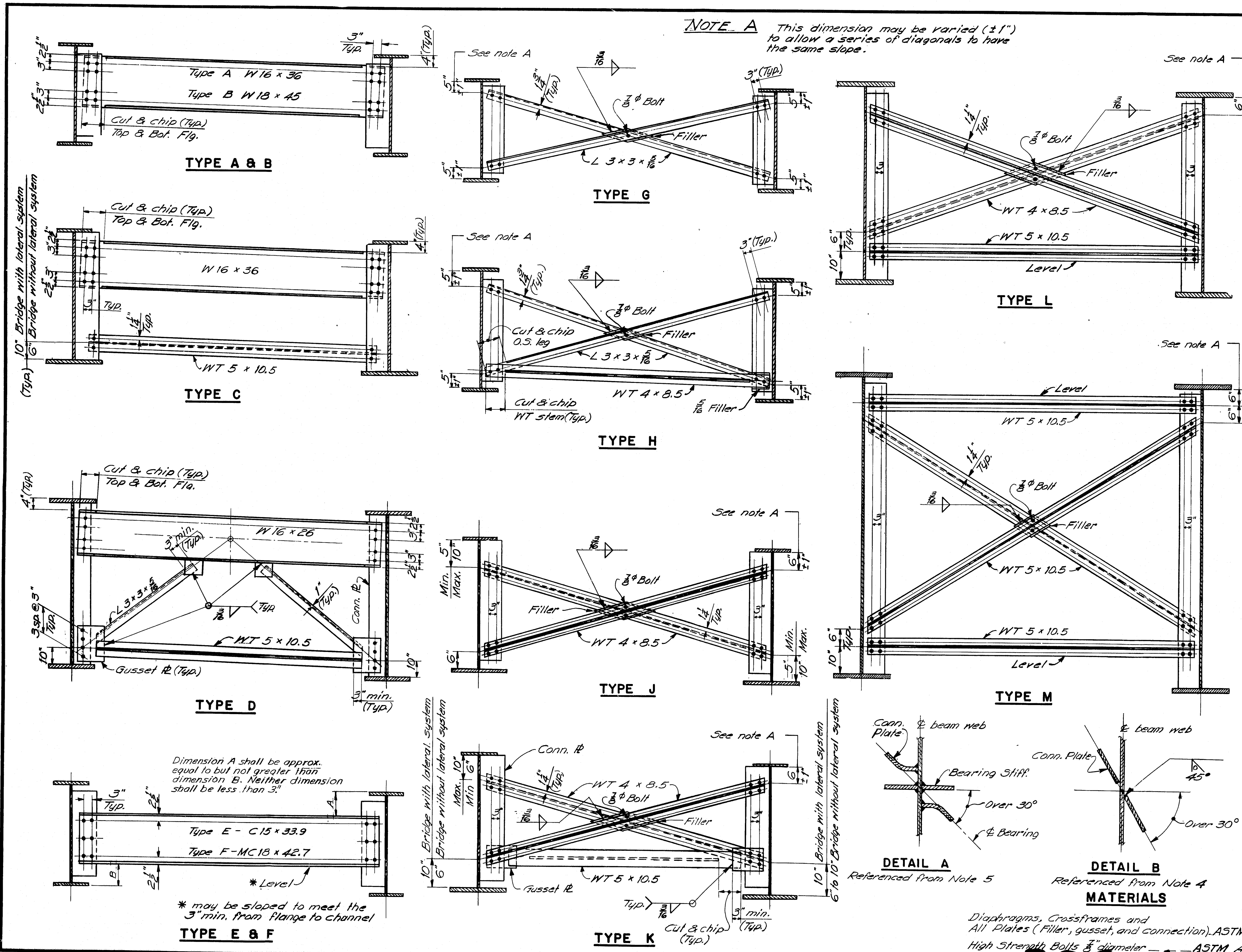
Anchor Bolts ~ A36  
All other ~ A36.

## STANDARD DETAILS

( BD 101 -74 )

### BEARING PEDESTALS

DESIGN - DETAILED	DATE
CHECKED	BY
FIELD CHANGES	
PLANS	



STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
MAINE	95-9(68)	22	25

### FABRICATION NOTES

- For location and type of diaphragm or crossframe see design details.
  - Holes for 3" diameter bolts shall be 1/8" dia. and edge distances shall be 1 1/2" minimum unless otherwise shown.
  - Connection plates and gusset plates shall have a minimum thickness of 3/8" and shall have sufficient width to provide erection clearances. When bearing stiffeners or intermediate stiffeners are used as connection plates, the plate size will be given on the design details.
  - Connection plates shall be fastened to beam and girder webs as follows:  
0° to 30° skew - fillet weld both sides.  
Over 30° skew - full penetration groove weld (see Detail B) except as indicated in Note 5  
Over 45° skew - weld prequalification will be required.
- The skew angle is the angle between the connection plate and a line normal to the beam.
- Bearing stiffeners shall be used as connection plates when the skew is not over 30°. When the skew is over 30° a bent connection plate shall be attached to the web adjacent to the bearing stiffener as shown in Detail A.
  - All fillet weld sizes shall be the minimum for the thickness of metal being joined according to AWS Specifications for Welded Highway & Railway Bridges.
  - Connection plates on welded beams and girders shall extend to the top flange in areas where the top flange is always in compression or when used as a bearing stiffener or intermediate stiffener.
  - Connection plates shall extend to the bottom flange when used as a bearing stiffener, at points where lateral bracing is attached & on welded beams and girders in areas where the bottom flange is always in compression.
  - When a conn. plate is extended to a flange it shall be a paint tight fit except as otherwise indicated on design details.
  - Conn. plates shall be 2 1/2" clear from flanges, except as indicated by Notes 7 & 8.
  - Use only those items called for on the design details. In case of conflict between these standard details and the design details, the design details shall be followed.

### MATERIALS

Diaphragms, Crossframes and All Plates (Filler, gusset, and connection) ASTM A36  
High Strength Bolts 3/4" diameter - ASTM A325

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION

**STANDARD DETAILS**  
(BD 113 - 72)

**DIAPHRAGMS & CROSSFRAMES**

SHEET 22 OF 25 AUGUSTA, MAINE SEPT. 1972

R88-495



DESIGN SPECIFICATIONS  
A.A.S.H.O. Standard Specifications for  
Highway Bridges 1969 and  
Interim Specifications.

The diagram illustrates a cross-section of a rail track. It features two main horizontal lines representing the rails. Between them, several vertical lines represent ties. A central section is labeled "Superstructure Joint". Above the rails, there are dimension lines indicating "1'0" Min." and "9'0" max. c.c. Posts". To the right, a "Splice" is shown with a "9'0" dimension. Below the rails, a dimension of "3" Min." is noted. The entire diagram is titled "RAIL - ELEVATION" in bold, underlined capital letters. Below the title, there is a note: "Length of vertical ties to be determined by design". At the bottom right, there is a note: "TYP. At Superstr. Exp. Joints. See Design Drawg. for actual Dim's".

Lengths of rail shall be attached to a minimum of four (4) rail posts wherever possible, and in any case never less than two (2). Rail posts are to be set normal to grade unless otherwise shown on the Bridge Plans.

[illegible][illegible]

NOTE - An alternate to the dimple system for holding the splice bar in position may be used if approved by the Engineer.

See "Rail Detail"

[illegible]

1 1/2" UNC thread (2 holes)

1"

5 1/8"

7 1/2"

The drawing consists of two main parts: a cross-section of a hull structure and a detailed view of a plate connection.

**Cross-section (Left):** Shows a hull structure with a vertical centerline. Dimensions include a total width of  $10\frac{1}{2}$ " at the base, a height of  $9\frac{1}{2}$ " for the upper section, and a vertical spacing of  $8" \times 18"$  for  $\frac{1}{2}"$  bolts. The structure is labeled "BEAR PLATE" at the bottom.

**SECTION A-A (Right):** A detailed view of a plate connection. It shows a cross-section of a plate with a thickness of  $\frac{1}{2}"$  and a width of  $10\frac{1}{2}"$ . The plate is connected to a structure with a thickness of  $1\frac{1}{2}"$ . Dimensions include a total width of  $7\frac{1}{2}"$ , a height of  $10\frac{1}{2}"$ , and a vertical spacing of  $8"$  for  $\frac{1}{2}"$  bolts. The section is labeled "SECTION A-A" and "6 Holes. Bldg for  $\frac{1}{2}"$  Bolts".

Technical drawing showing two rectangular plates with holes. The left plate has a height of  $10\frac{3}{4}"$  and a width of  $3"$ . It contains three  $1" \phi$  holes. The vertical spacing between the holes is  $3\frac{1}{2}"$ . The right plate has a height of  $10\frac{1}{2}"$  and a width of  $3"$ . It contains two  $1" \phi$  holes. The vertical spacing between the holes is  $6\frac{3}{4}"$ . The horizontal distance between the right edge of the left plate and the left edge of the right plate is  $10\frac{1}{4}"$ .

Diagram illustrating the geometry of a semi-elliptical arch. The arch is defined by a semi-ellipse with a horizontal Major Axis and a vertical Minor Axis. The total height of the arch is 10'0". The base of the arch is divided into three segments: 3'0" on the left, 4'0" in the middle, and 3'0" on the right. The total width of the base is 10'0". The arch is labeled "Semi-ellipse". The vertical axis is labeled "Minor Axis" and the horizontal axis is labeled "Major Axis". The height of the arch is labeled "10'0\"". The base segments are labeled "3'0\"", "4'0\"", and "3'0\"". The total width is labeled "10'0\"". The arch is labeled "Semi-ellipse". The vertical axis is labeled "Minor Axis" and the horizontal axis is labeled "Major Axis". The height of the arch is labeled "10'0\"". The base segments are labeled "3'0\"", "4'0\"", and "3'0\"". The total width is labeled "10'0\"".

\* Preferable minimum dimensions. For actual dimensions see Bridge Plan.

Anchor Bolts	Anchor Bolts
--------------	--------------

Technical drawing of a semi-elliptical rail section. The drawing shows a cross-section of the rail with various dimensions and labels. The top view shows a semi-elliptical shape with a major axis of 12" 30" and a minor axis of 4". The side view shows a semi-elliptical shape with a major axis of 12" 30" and a minor axis of 4". The drawing includes labels for "Major Axis", "Minor Axis", "Semi-ellipse", "Cap shall match Rail Section", and "Drive Fit". Dimensions include 1 1/2", 1/2", 1/4", 1/8", 1/16", 1/32", 1/64", 1/128", 1/256", 1/512", 1/1024", 1/2048", 1/4096", 1/8192", 1/16384", 1/32768", 1/65536", 1/131072", 1/262144", 1/524288", 1/1048576", 1/2097152", 1/4194304", 1/8388608", 1/16777216", 1/33554432", 1/67108864", 1/134217728", 1/268435456", 1/536870912", 1/1073741824", 1/2147483648", 1/4294967296", 1/8589934592", 1/17179869184", 1/34359738368", 1/68719476736", 1/137438953472", 1/274877906944", 1/549755813888", 1/1099511627776", 1/2199023255552", 1/4398046511104", 1/8796093022208", 1/17592186044416", 1/35184372088832", 1/70368744177664", 1/140737488355328", 1/281474976710656", 1/562949953421312", 1/1125899906842624", 1/2251799813685248", 1/4503599627370496", 1/9007199254740992", 1/18014398509481984", 1/36028797018963968", 1/72057594037927936", 1/144115188075855872", 1/288230376151711744", 1/576460752303423488", 1/1152921504606846976", 1/2305843009213693952", 1/4611686018427387904", 1/9223372036854775808", 1/18446744073709551616", 1/36893488147419103232", 1/73786976294838206464", 1/147573952589676412928", 1/295147905179352825856", 1/590295810358705651712", 1/1180591620717411303424", 1/2361183241434822606848", 1/4722366482869645213696", 1/9444732965739290427392", 1/18889465931478580854784", 1/37778931862957161709568", 1/75557863725914323419136", 1/151115727451828646838272", 1/302231454903657293676544", 1/604462909807314587353088", 1/1208925819614629174706176", 1/2417851639229258349412352", 1/4835703278458516698824704", 1/9671406556917033397649408", 1/19342813113834066795298816", 1/38685626227668133590597632", 1/77371252455336267181195264", 1/154742504910672534362390528", 1/309485009821345068724781056", 1/618970019642690137449562112", 1/1237940039285380274899124224", 1/2475880078570760549798248448", 1/4951760157141521099596496896", 1/9903520314283042199192993792", 1/19807040628566084398385987584", 1/39614081257132168796771975168", 1/79228162514264337593543950336", 1/158456325028528675187087900672", 1/316912650057057350374175801344", 1/633825300114114700748351602688", 1/1267650600228229401496703205376", 1/2535301200456458802993406410752", 1/5070602400912917605986812821504", 1/10141204801825835211973625643008", 1/20282409603651670423947251286016", 1/40564819207303340847894502572032", 1/81129638414606681695789005144064", 1/162259276829213363391578010288128", 1/324518553658426726783156020576256", 1/649037107316853453566312041152512", 1/1298074214633706907132624082305024", 1/2596148429267413814265248164610048", 1/5192296858534827628530496329220096", 1/10384593717069655257060992658440192", 1/20769187434139310514121985316880384", 1/41538374868278621028243970633760768", 1/83076749736557242056487941267521536", 1/166153499473114484112975882535043072", 1/332306998946228968225951765070086144", 1/664613997892457936451903530140172288", 1/1329227995784915872903807060280344576", 1/2658455991569831745807614120560689152", 1/5316911983139663491615228241121378304", 1/10633823966279326983230456482242756608", 1/21267647932558653966460912964485513216", 1/42535295865117307932921825928971026432", 1/85070591730234615865843651857942052864", 1/170141183460469231731687303715884105728", 1/340282366920938463463374607431768211456", 1/680564733841876926926749214863536422912", 1/1361129467683753853853498429727072845824", 1/2722258935367507707706996859454145691648", 1/5444517870735015415413993718908291383296", 1/10889035741470030830827987437816582766592", 1/21778071482940061661655974875633165533184", 1/43556142965880123323311949751266331066368", 1/87112285931760246646623899502532662132736", 1/174224571863520493293247799005065324265472", 1/348449143727040986586495598010130648530944", 1/696898287454081973172991196020261297061888", 1/1393796574908163946345982392040522594123776", 1/2787593149816327892691964784081045188247552", 1/5575186299632655785383929568162090376495104", 1/11150372599265311570767859136324180752990208", 1/22300745198530623141535718272648361505980416", 1/44601490397061246283071436545296723011960832", 1/89202980794122492566142873090593446023921664", 1/178405961588244985132285746181186892047843328", 1/35

ANCHOR BOLTS

If cut threads are used, body diameter shall be not less than nominal diameter.

[illegible]

Technical drawing of a mechanical part with the following dimensions and features:

- Top diameter:  $\frac{5}{16}$ " dia.
- Drilling instruction: 8.  $\frac{5}{8}$ "-16UNC top 18 deep
- Top diameter:  $\frac{1}{16}$ "  $\pm .015$ "
- Internal thread:  $\frac{1}{8}$ "
- Internal thread length: 3"
- Internal thread specification:  $\frac{1}{8}$ "-20  $\pm .012$ "
- Internal thread length: 4"
- Internal thread specification:  $\frac{1}{8}$ "-20  $\pm .012$ "
- Internal thread length: 7  $\frac{1}{4}$ "
- Internal thread specification:  $\frac{1}{8}$ "-20  $\pm .012$ "
- Internal thread length: 1  $\frac{1}{2}$ "
- Internal thread specification:  $\frac{1}{8}$ "-20  $\pm .012$ "

[illegible][illegible]

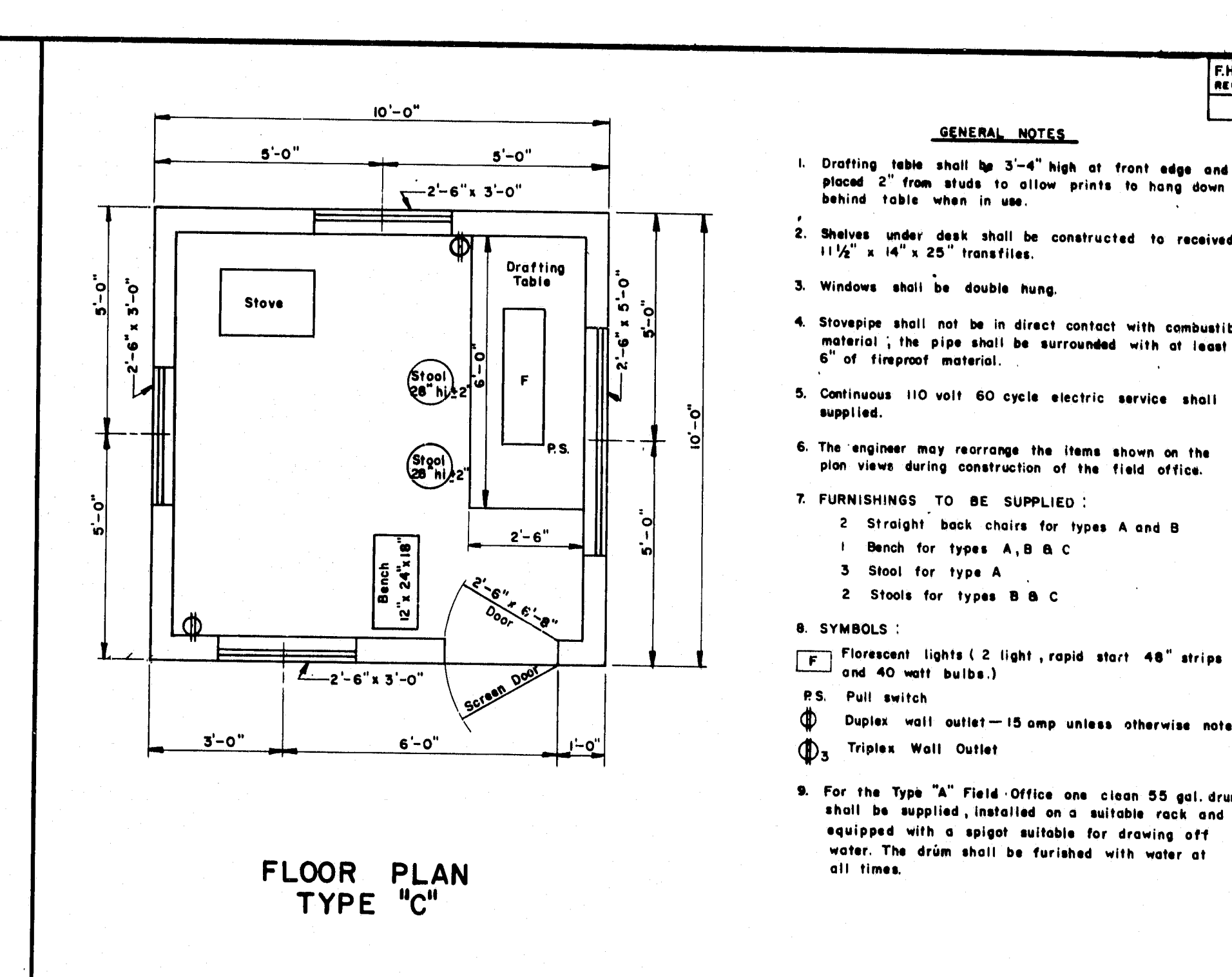
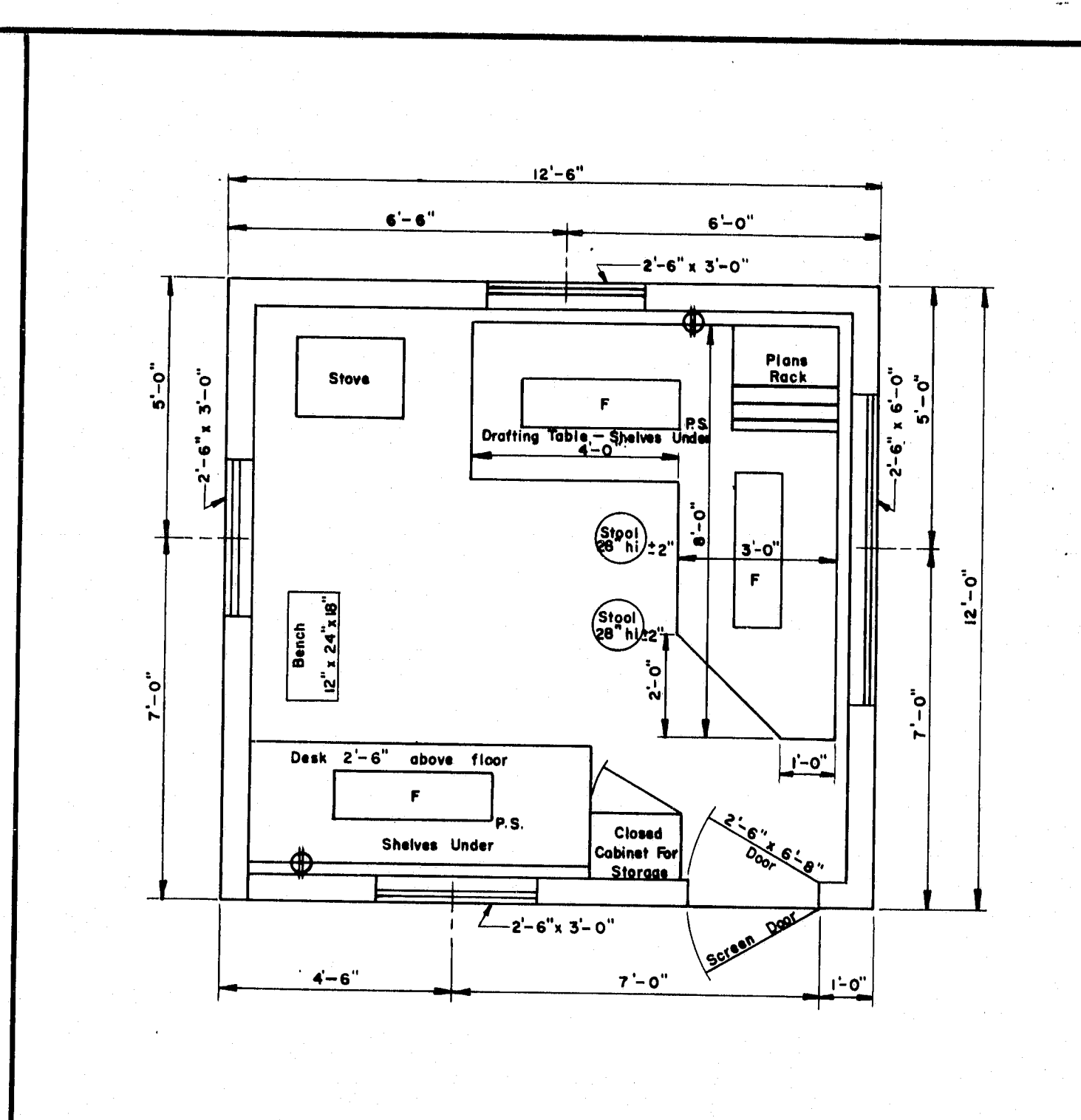
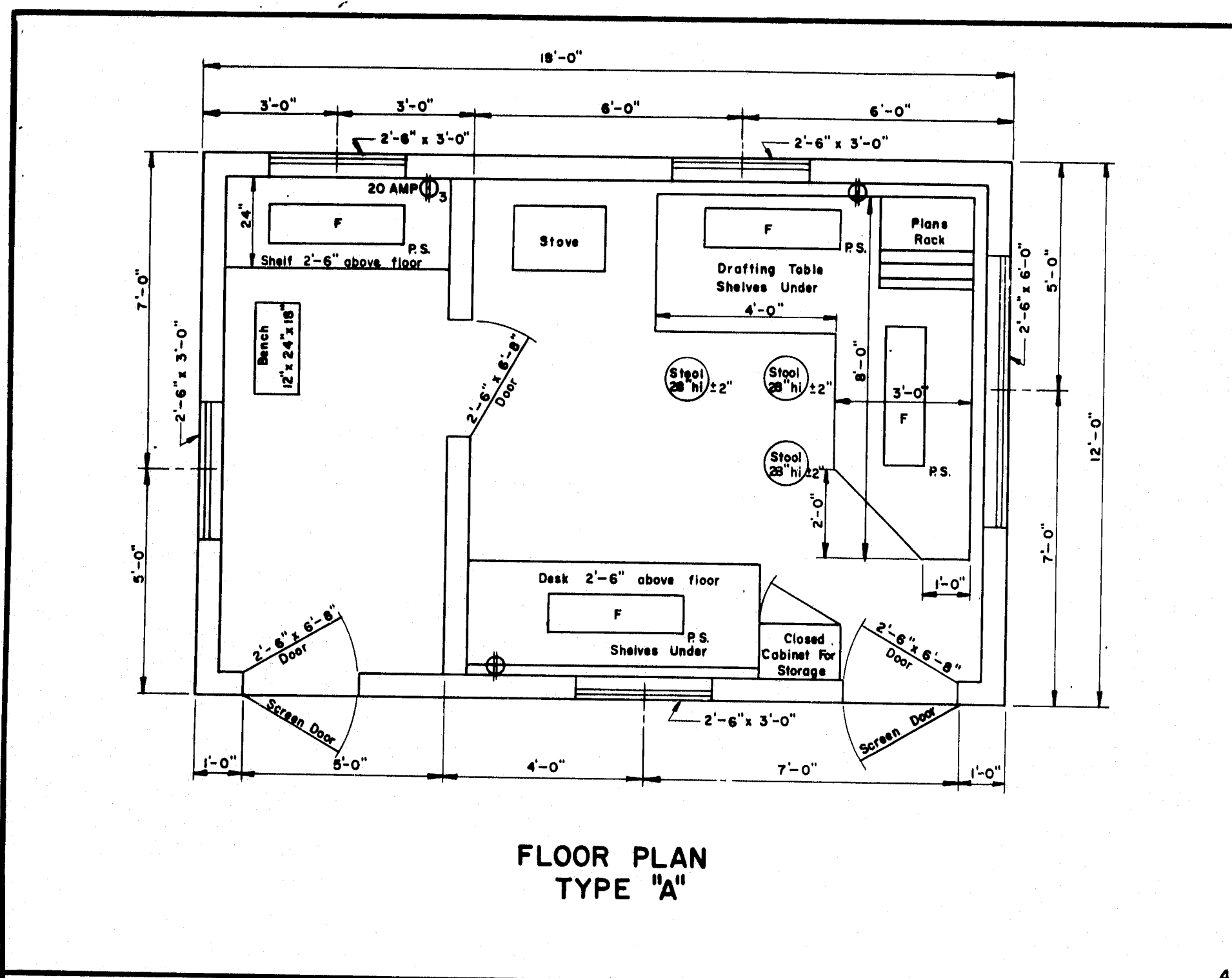
STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION

**STANDARD DETAILS**  
(BD 114 - 73)

**ALUMINUM RAILING**  
**2 - BAR (SEMI-ELLIPSE)**  
**EXTRUDED POST**

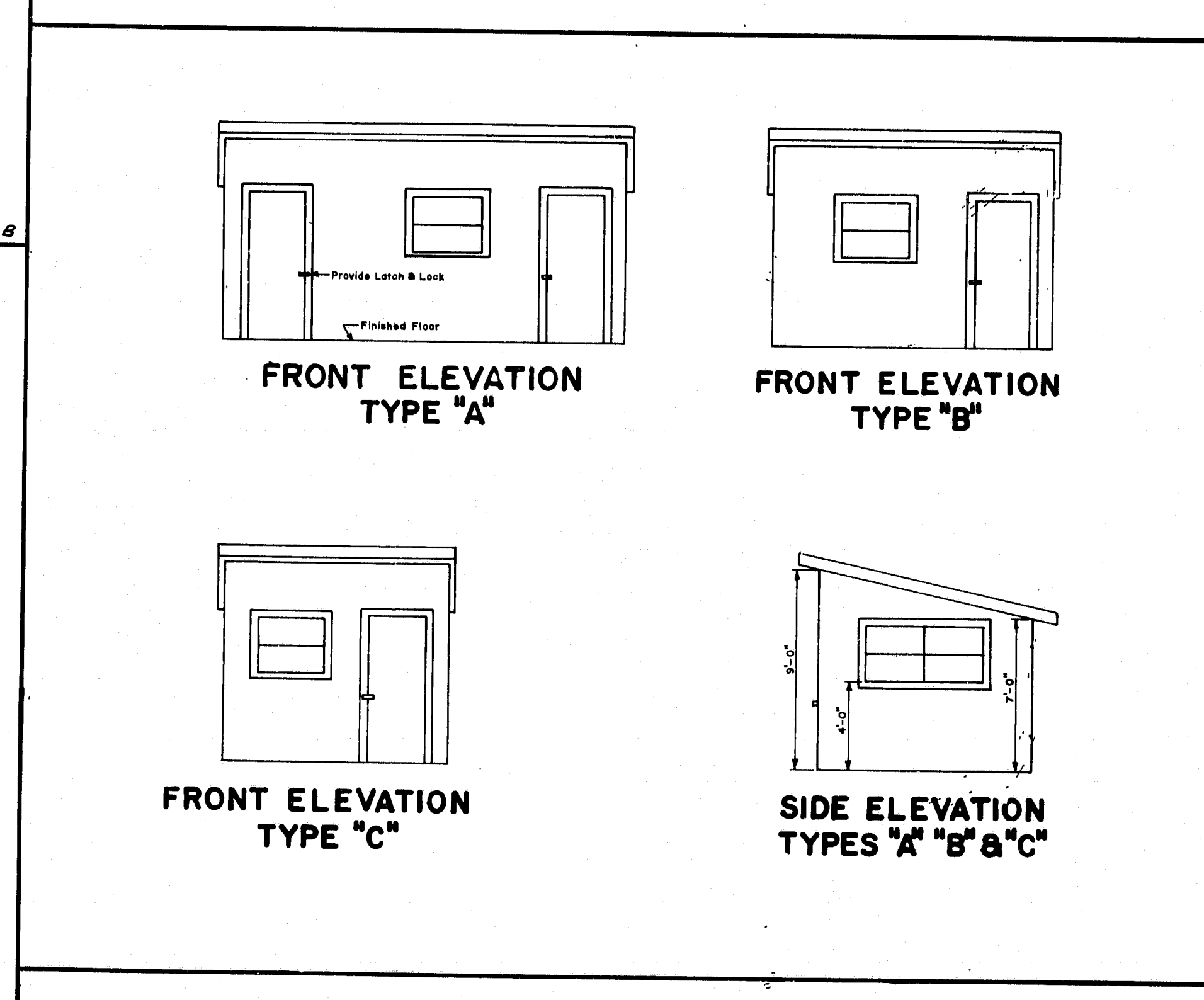
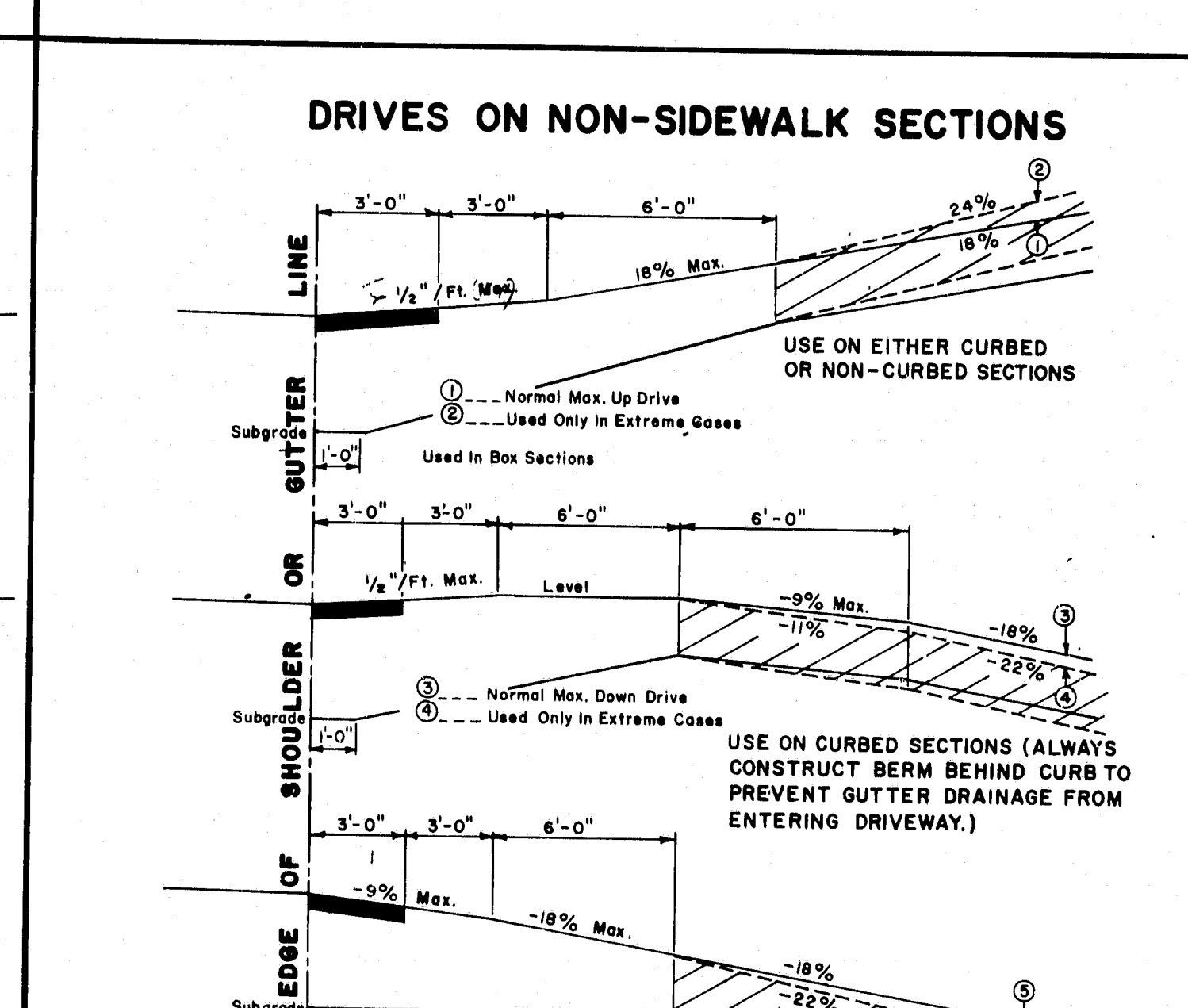
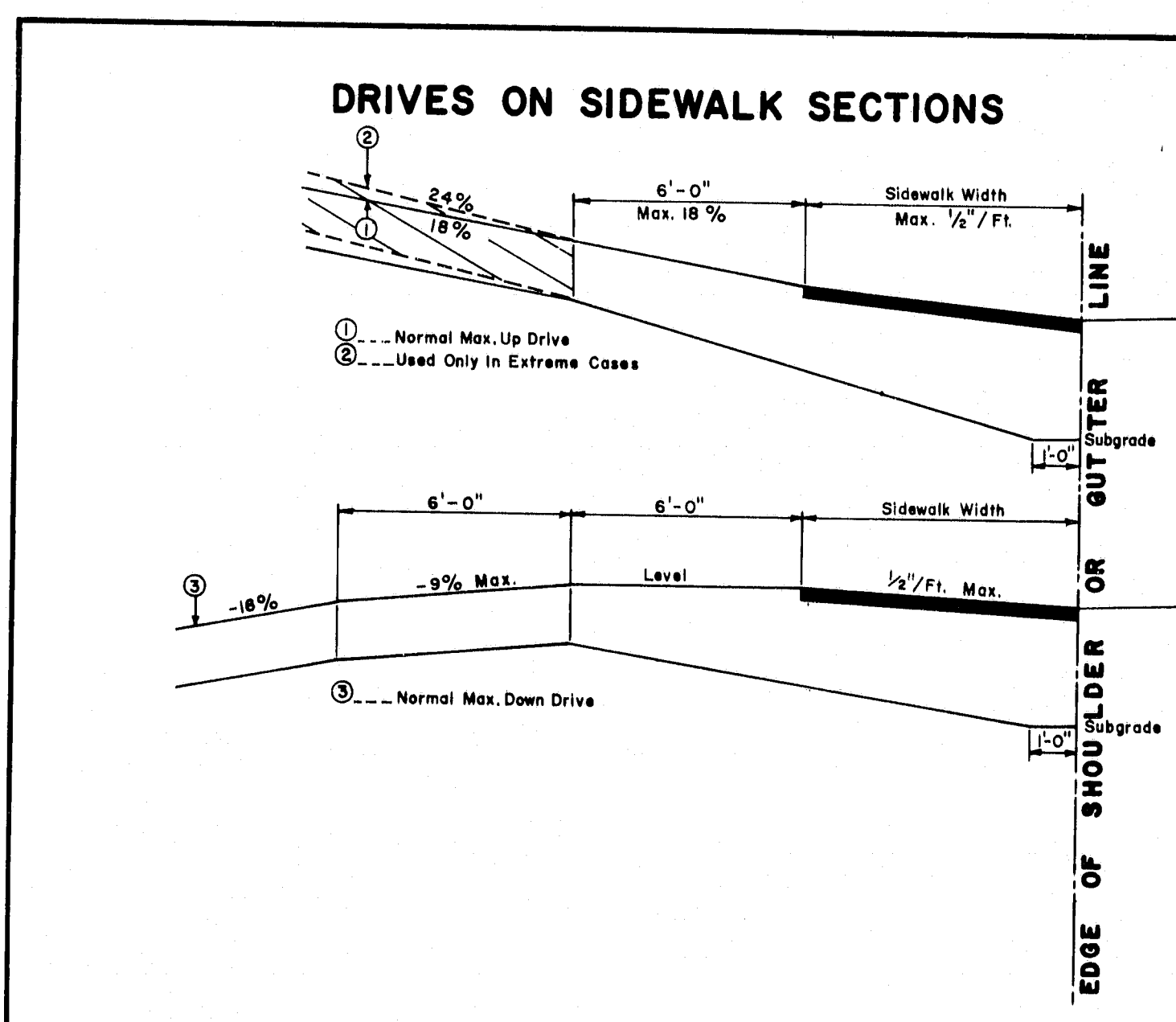
SHEET 23 OF 25 AUGUSTA, MAINE FEBRUARY 1973

~~R88-496~~



STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
MAINE	25-9(6B)	24	25

- GENERAL NOTES**
- Drafting table shall be 3'-4" high at front edge and placed 2" from studs to allow prints to hang down behind table when in use.
  - Shelves under desk shall be constructed to receive 11 1/2" x 14" x 25" transfiles.
  - Windows shall be double hung.
  - Stovepipe shall not be in direct contact with combustible material; the pipe shall be surrounded with at least 6" of fireproof material.
  - Continuous 110 volt 60 cycle electric service shall be supplied.
  - The engineer may rearrange the items shown on the plan views during construction of the field office.
  - FURNISHINGS TO BE SUPPLIED:
    - 2 Straight back chairs for types A and B
    - 1 Bench for types A, B & C
    - 3 Stool for type A
    - 2 Stools for types B & C
  - SYMBOLS:
    - F Fluorescent lights (2 light, rapid start 48" strips and 40 watt bulbs.)
    - P.S. Pull switch
    - ⊕ Duplex wall outlet—15 amp unless otherwise noted
    - ⊕ Triplex Wall Outlet
  - For the Type "A" Field Office one clean 55 gal. drum shall be supplied, installed on a suitable rack and equipped with a spigot suitable for drawing off water. The drum shall be furnished with water at all times.



- GENERAL NOTES**
- The sidewalk width shall be paved in all cases.
  - All residential or commercial drives 10% and over shall be paved.
- NOTES ON MAXIMUM DRIVEWAY PROFILES**
- These profiles are a guide for the majority of cases, but should be field checked when the mainline grade is steep (4% to 6% or greater) or the angle of approach to the drive is unusual.
  - Generally the majority of drives on a project will be built with flatter profiles than these maximum cases.
  - When grading drives which are flatter than the maximum profiles the following rule of thumb should be used, do not exceed a grade % change of more than 9% in a 6 foot increment of driveway length. This applies to both up and down profiles.

- GENERAL NOTES**
- The first 3' shown as pavement shall be paved only when abutting a paved area.
  - All residential or commercial drives 10% and over shall be paved.
- NOTES ON MAXIMUM DRIVEWAY PROFILES**
- These profiles are a guide for the majority of cases, but should be field checked when the mainline grade is steep (4% to 6% or greater) or the angle of approach to the drive is unusual.
  - Generally the majority of drives on a project will be built with flatter profiles than these maximum cases.
  - When grading drives which are flatter than the maximum profiles the following rule of thumb should be used, do not exceed a grade % change of more than 9% in a 6 foot increment of driveway length. This applies to both up and down profiles.

REVISIONS	
PLATE	DIC 5-16-73

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
AUGUSTA, MAINE

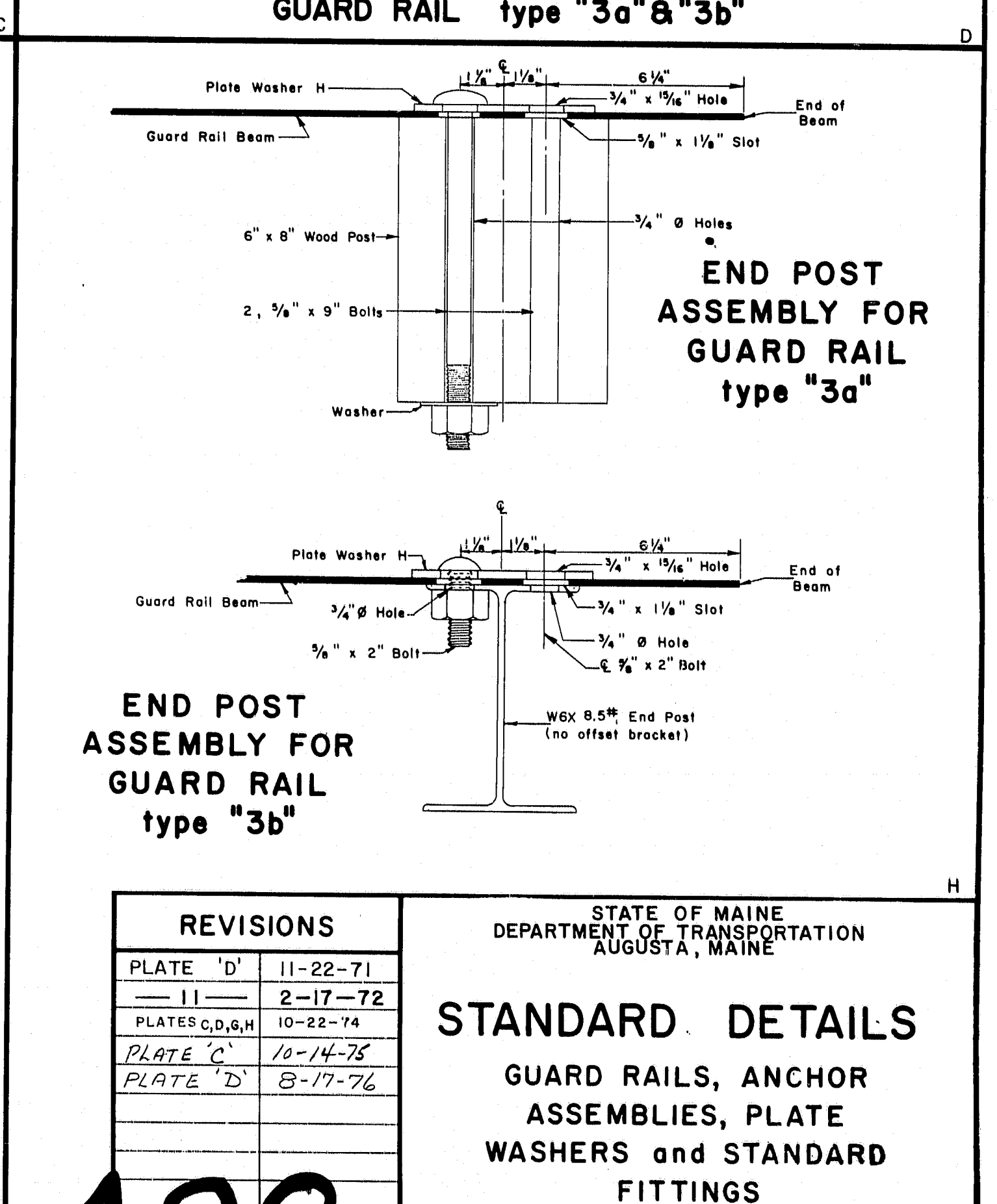
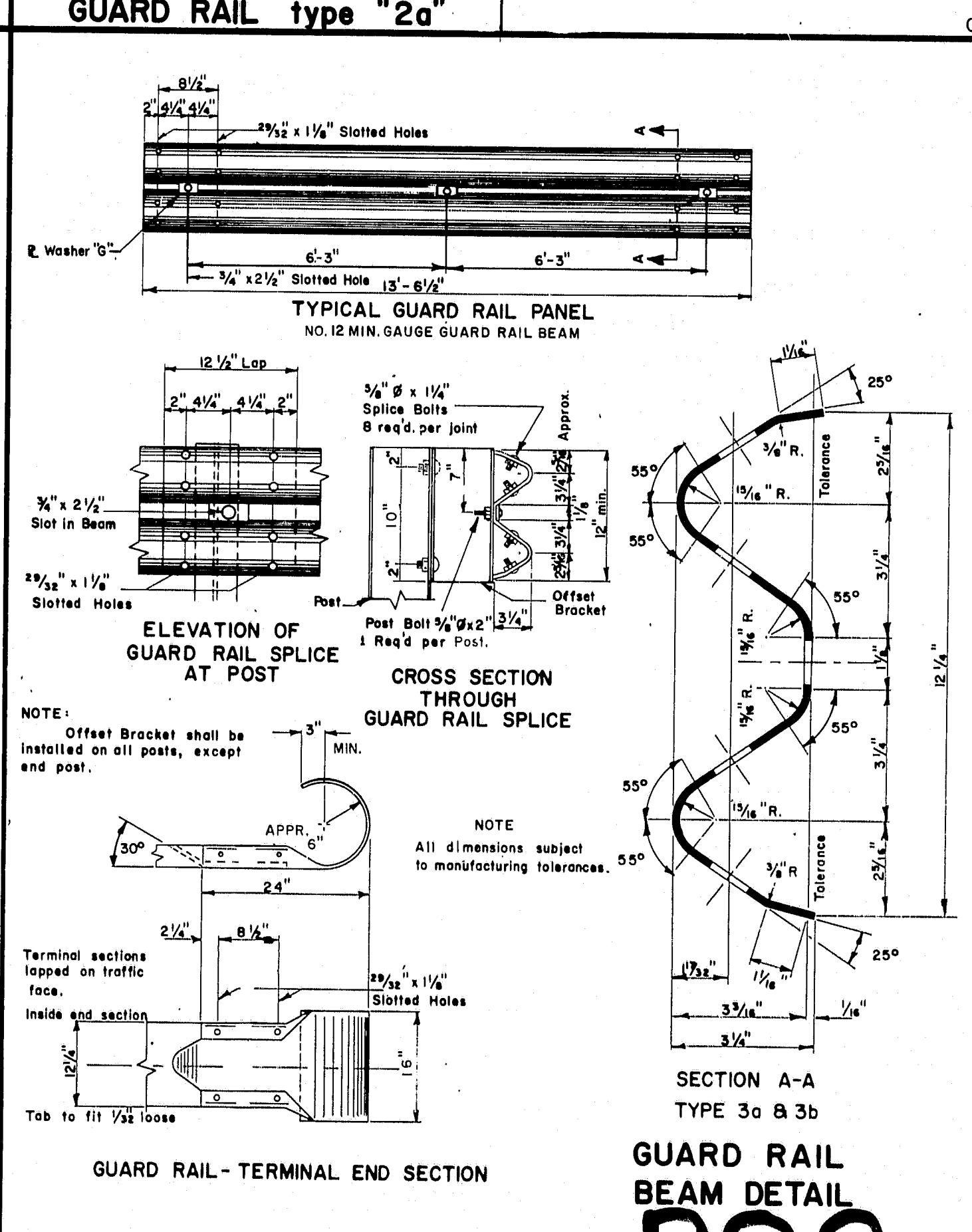
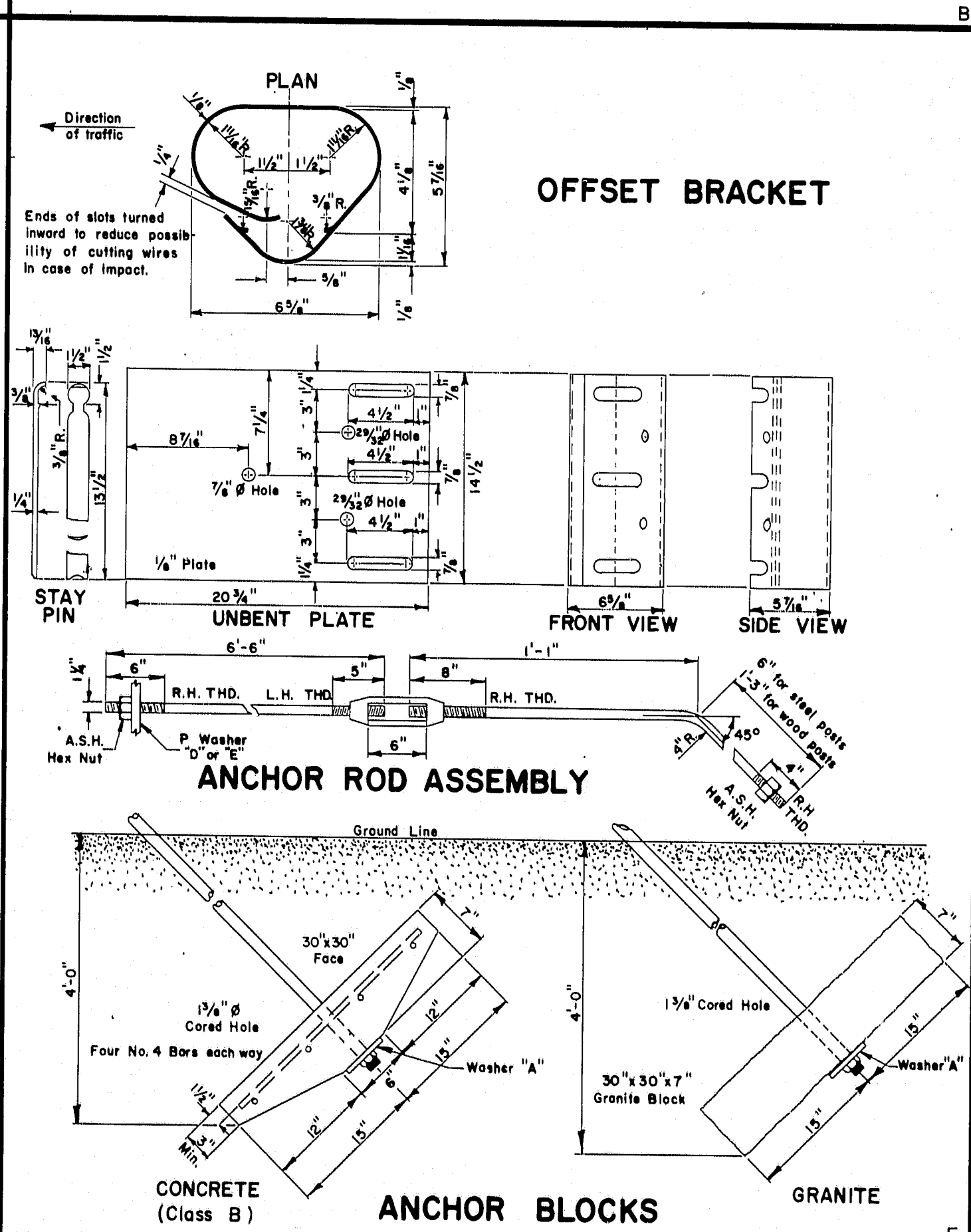
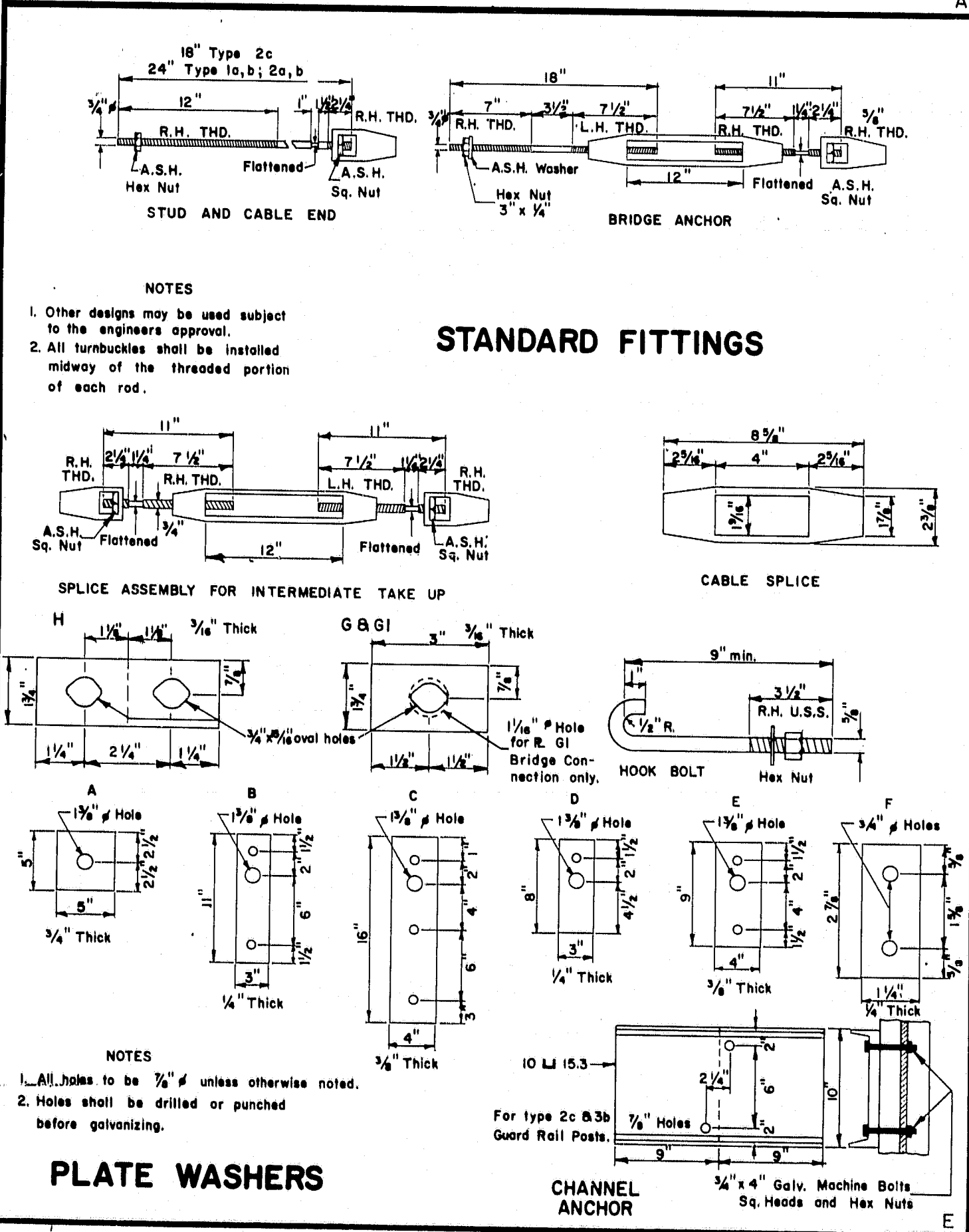
**STANDARD DETAILS**

DRIVEWAY DETAILS  
FIELD OFFICES  
TESTING LABORATORY

AUG. 1969

R88-497





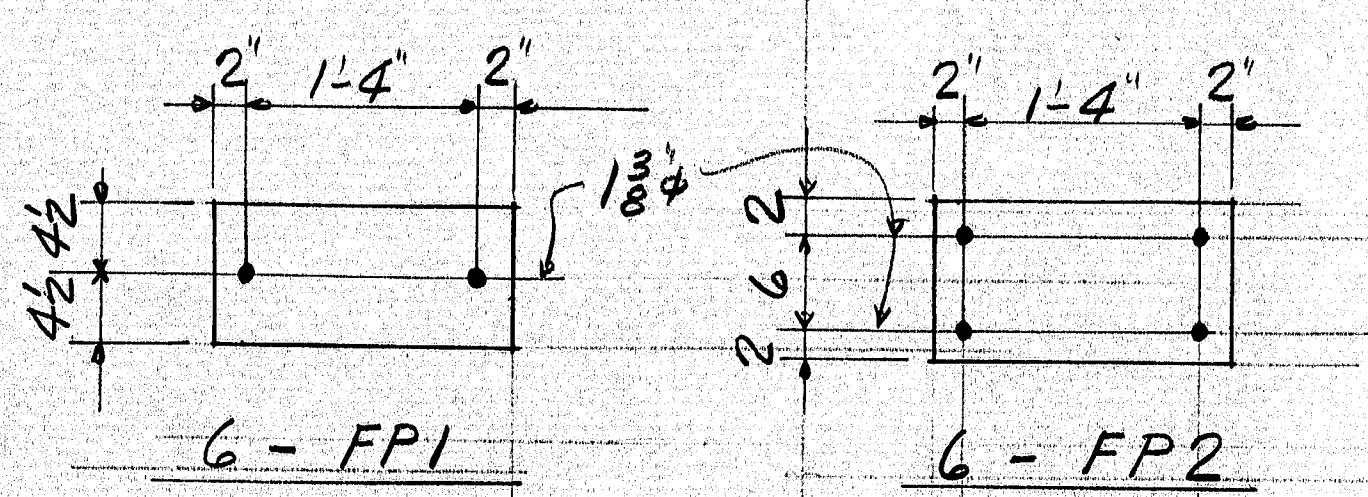
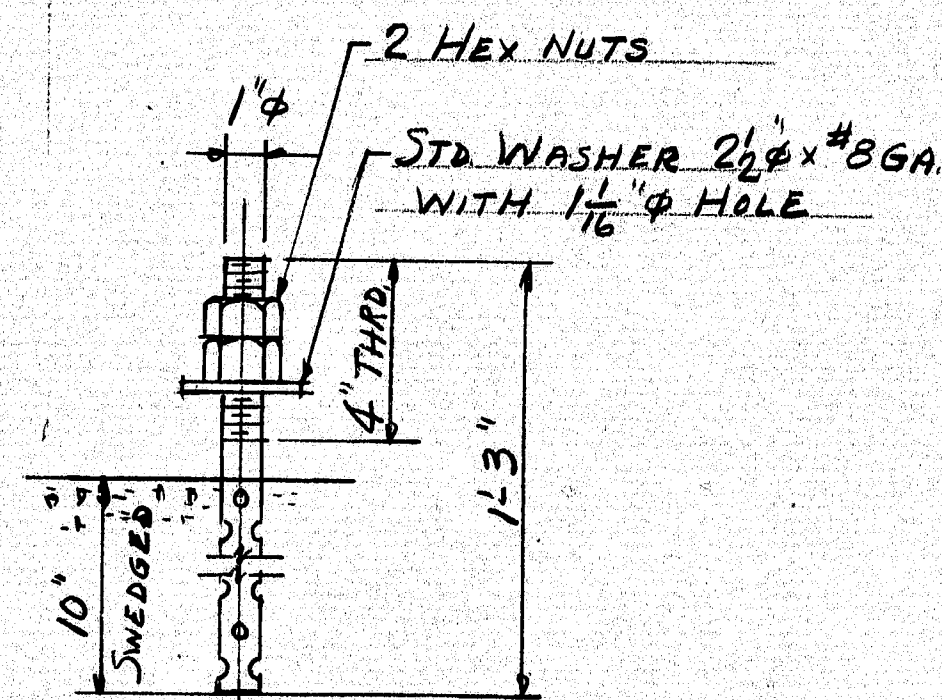
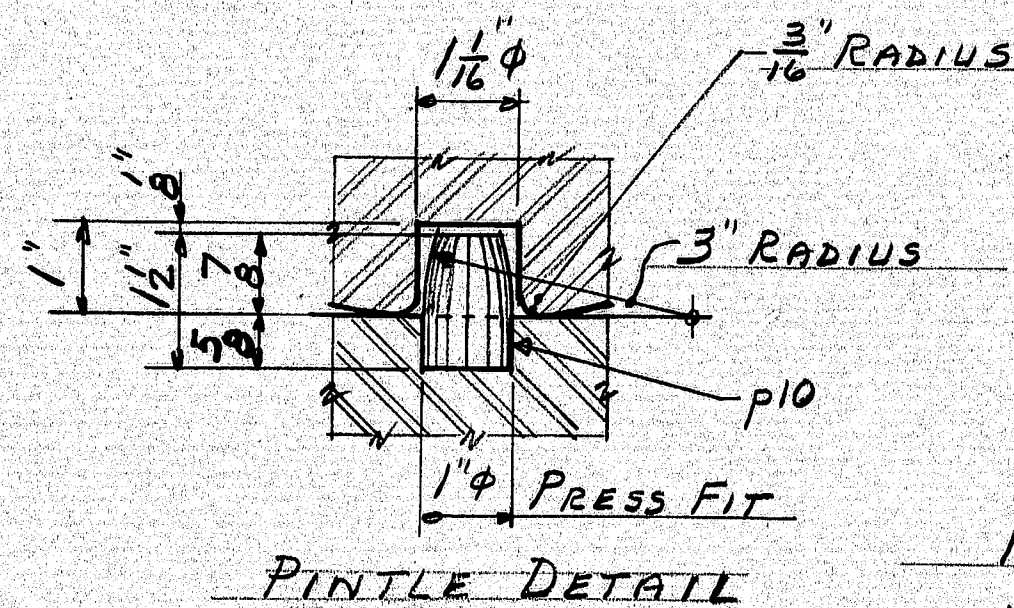
REVISIONS	
PLATE 'D'	11-22-71
— II —	2-17-72
PLATES C,D,G,H	10-22-74
PLATE 'C'	10-14-75
PLATE 'D'	8-17-76

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
AUGUSTA, MAINE

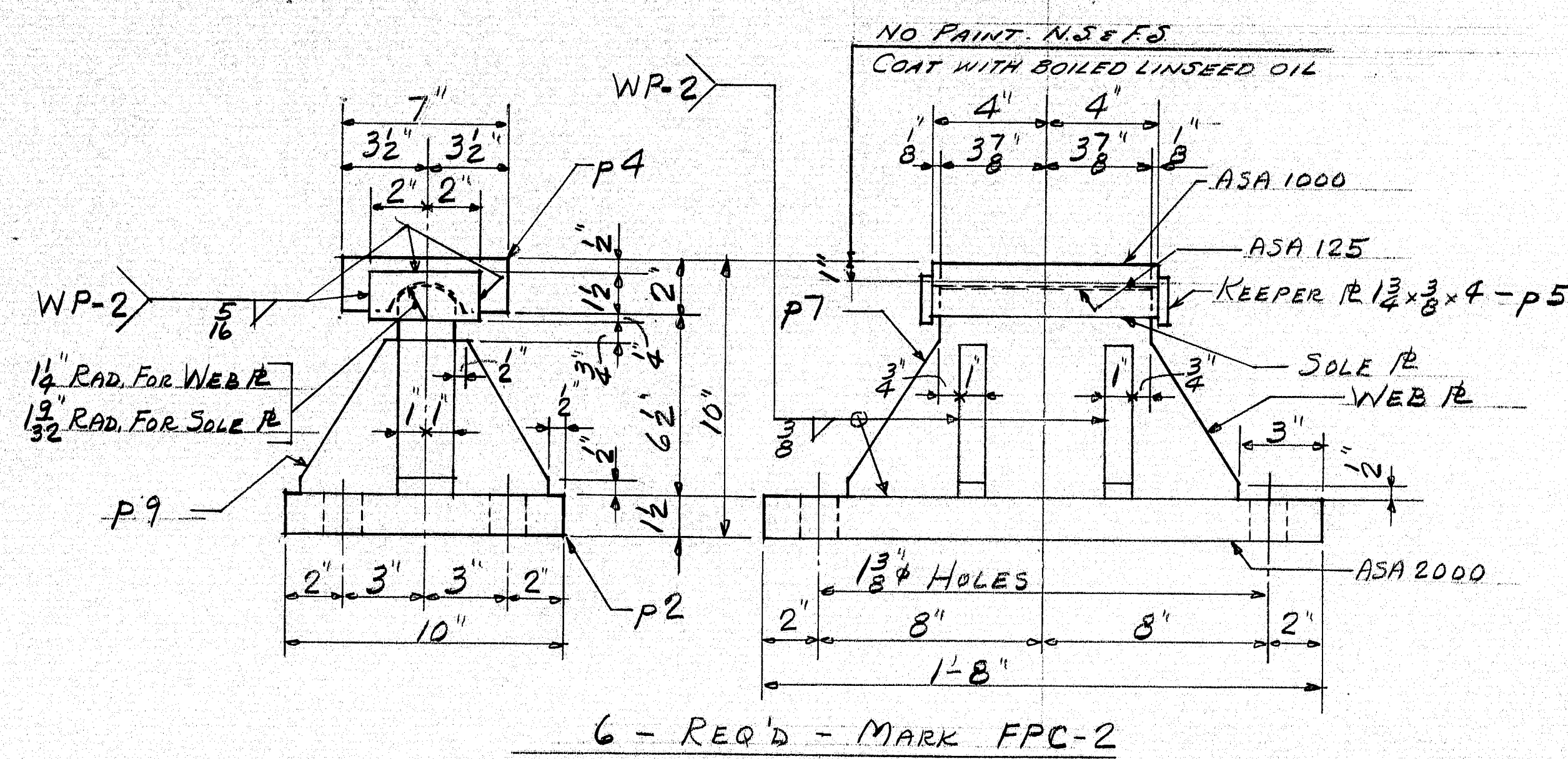
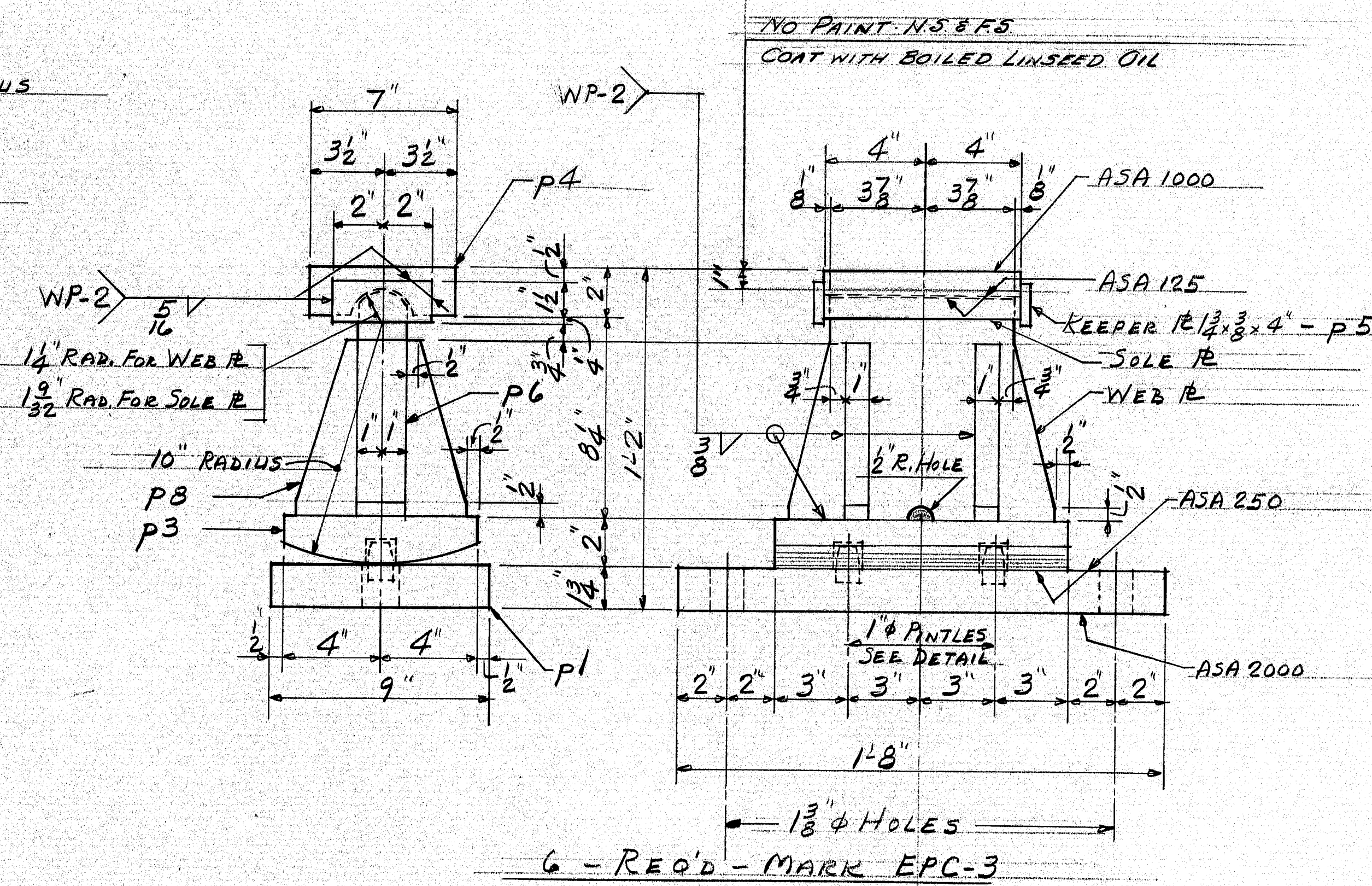
**STANDARD DETAILS**

**GUARD RAILS, ANCHOR  
ASSEMBLIES, PLATE  
WASHERS and STANDARD  
FITTINGS**





PREFORMED PADS



PAINT NOTE:  
 PAINT TWO COATS BASIC LEAD SILICO CHROMATE (ORANGE)  
 4 MILS WET (MIN.) EXCEPT AS NOTED.  
 NO PAINT ON TOP OF TOP PLATE (P4). COAT WITH  
 BOILED LINSEED OIL.  
 NO PAINT ON SURFACES MACHINED TO ASA 125. COAT  
 WITH WHITE LEAD AND TALLOW.  
 PIECE MARKS SHALL BE PAINTED UPON SURFACES  
 PREVIOUSLY PAINTED WITH SHOP COAT.

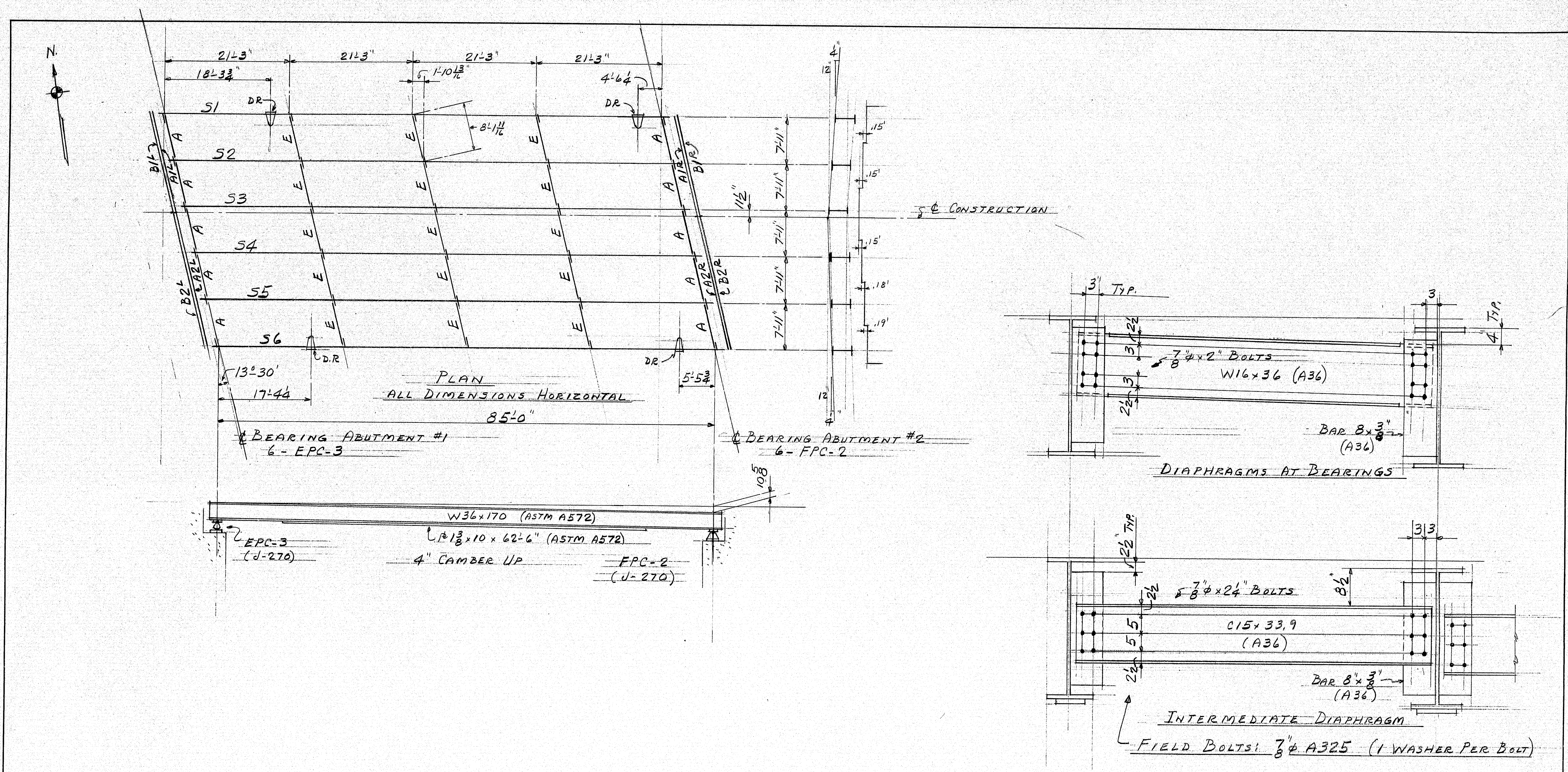
SHIP		BILL OF MATERIAL			JOB NO. J-270		DWG. NO. 1	
MARK	NO.	MARK	SHAPE	LENGTH	WT.	REMARKS		
EPC-3	6	ASSEMBLY			—			
FPC-2	6	Do.			—			
	6	p1	1 1/2 x 9	1	8			
	6	p2	1 1/2 x 10	1	8			
	6	p3	1 1/2 x 8	1	0			
	12	p4	1 1/2 x 7	0	8			
	24	p5	1 1/2 x 1 1/2	0	4			
	6	p6	1 1/2 x 9 1/4	0	11			
	6	p7	1 1/2 x 7 1/2	1	2			
	24	p8	1 1/2 x 2 1/2	0	7 1/2			
	24	p9	1 1/2 x 3 1/2	0	5 1/2			
	12	p10	BAR 1" φ	0	1 1/2			
DIMENSIONS OF ABOVE PDS ARE NEAT. ANY ALLOWANCE FOR MACHINING SHOULD BE ADDED.								
AB1	36	BAR 1" φ	1	3				
N	72	1" HEX. NUT				STD.		
W	36	1" STD. WASHER				2 1/2" x #8 GA.		
PREFORMED BEARING PADS								
FP1	6	9" x	1	8				
FP2	6	10" x	1	8				
BLAST CLEAN: - SP6 (COMMERCIAL BLAST)								
A36 STEEL E70 WELDS								
ITEM 504.70								
PROD. NO. I-95-9 (68) 285								
CUSTOMER ORDER NO.: VERBAL								
REFERENCE DRAWINGS: 21 OF 25 (D.O.T.)								
HOLES: AS NOTED.								
FIELD CONN: WELD.								
PAINT: SEE PAINT NOTE								
BEARING PEDESTALS								
MEGQUIER & JONES CORP.								
1155 BROADWAY								
SOUTH PORTLAND, MAINE 04106								
I-95 N.B. OVER LINE ROAD								
- SMYRNA - LUDLOW, MAINE								
CUSTOMER REED & REED								
ARCHITECT MAINE D.O.T.								
JOB NO. J-270								
DWG. NO. 1								

FOR APPR.		3-22-77
APPR.		4-26-77
SHOP		4-16-77
F. & O.		4-28-77
DRAWN	D.R.	3-9-77
CHECKED	PLF	3-17-77
REVISION	PLF	4-25-77
REVISION		
REVISION		

FINAL

161-162





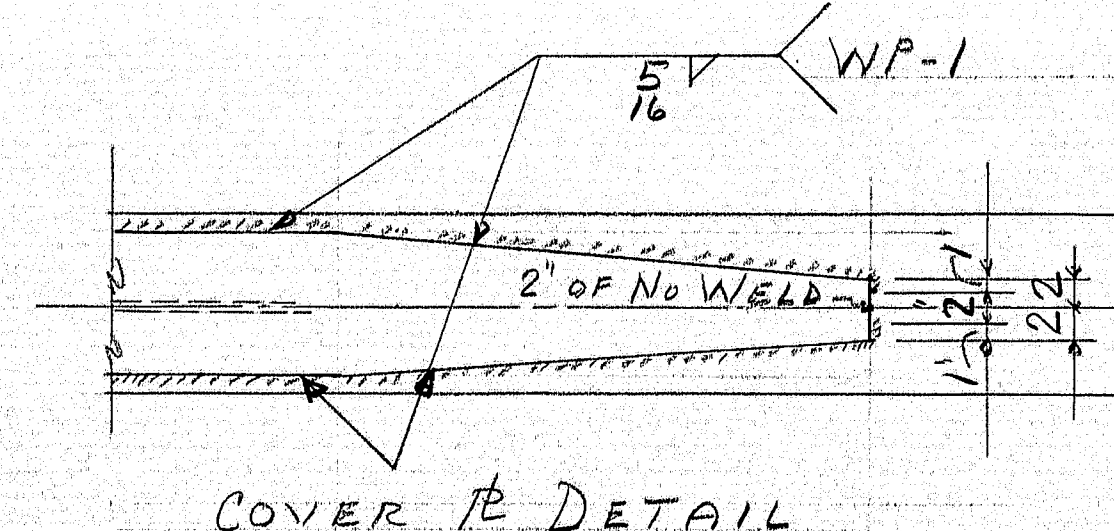
FINAL

PROD. NO. I-95-9(68) 285

STEEL FRAMING		
MEGQUIER & JONES CORP.		
1186 BROADWAY SOUTH PORTLAND, MAINE 04106		
APPR.	3-28-77	I-95 N.B. OVER LINE ROAD SMYRNA - LUDLOW, MAINE
APPR.	4-26-77	
SHOP	4-29-77	
F. & O.	4-29-77	CUSTOMER REED & REED ARCHITECT MAINE D.O.T.
DRAWN	D.R. 3-7-77	
CHECKED	FLF 3-14-77	JOB NO. J-269
REVISION		
REVISION		DWG. NO. E-1

161-163





51

1

W36x170

86

0

52

1

DO.

86

0

53

1

DO.

86

0

54

1

DO.

86

0

55

1

DO.

86

0

56

1

DO.

86

0

6

CP1

21 3/8 x 10

62

6

10

p1

BAR 8 x 3/8

2

4 3/8

10

p2

DO.

2

4 3/8

15

p3

DO.

2

4 3/8

15

p4

DO.

2

4 3/8

SHEAR CONNECTORS:

1092

STUD

7/8" x

0

5

SEE DWG. SET

BLAST CLEAN: SPG (COMMERCIAL BLAST)

BEAMS: ITEM 504.70

SHEAR CONNECTORS (STUDS): ITEM 505.08

PROJ. NO. I-95-9(68) 285

CUSTOMER ORDER NO: VERBAL

REFERENCE DRAWINGS: 14 OF 25 (D.O.T.)

HOLES: 1 1/2"

FIELD CONN. WELD TO BEARINGS

50% LEAD 50% CHRONATE (ORANGE)

PAINT: 4 MILS. WET (MIN.) - EXCEPT AS NOTED

BEAMS (6)

MEGQUIER & JONES CORP.

1156 BROADWAY

SOUTH PORTLAND, MAINE 04106

I-95 N.B. OVER LINE ROAD

3MYRNA - LUDLOW, MAINE

CUSTOMER REED & REED

ARCHITECT MAINE D.O.T.

JOB NO. J-269

DWG. NO. 1

FOR APPR.

APPR.

SHOP

F. & O.

DRAWN D.R. 3-7-77

CHECKED R.L.F. 3-15-77

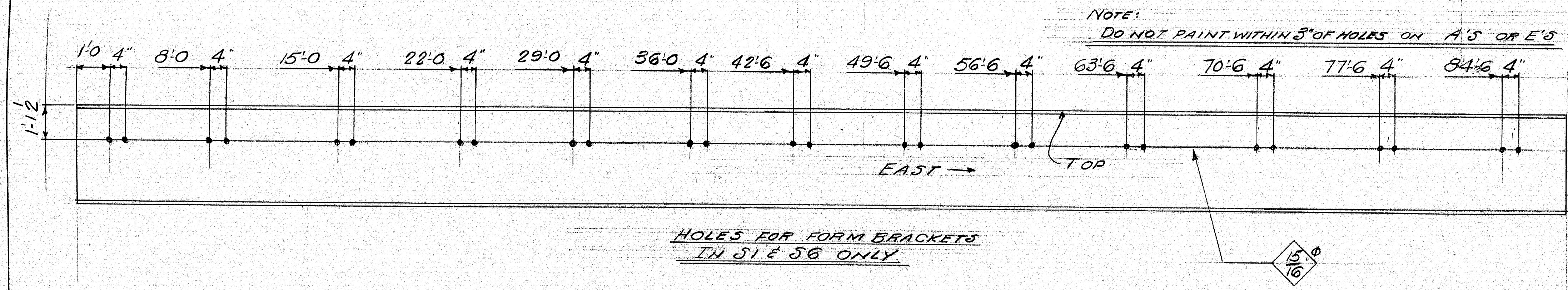
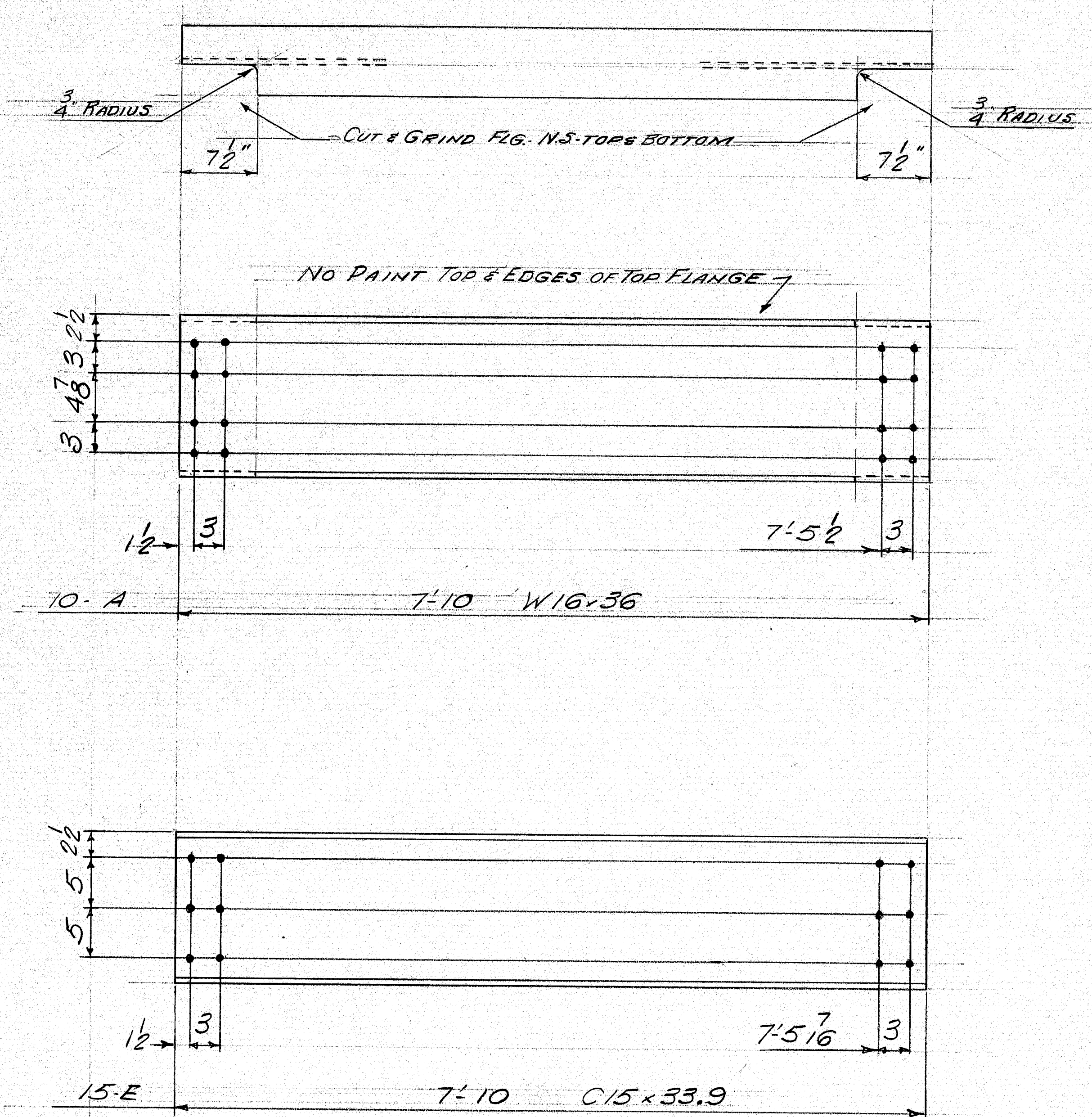
REVISION R.L.F. 4-25-77

REVISION

REVISION

161-164





SHIP		BILL OF MATERIAL		JOB NO. J269		DWG. NO. 2	
MARK	NO.	MARK	SHAPE	LENGTH	WT.	REMARKS	
A	10		W16x36	7	10		
E	15		C15x33.9	7	10		
2A	164		3/8" BOLT	0	2	A325 - TYPE 1	
2B	184		3/8" BOLT	0	24	A325 - TYPE 1	
2C	348		3/8" WASHER			A325 -	
2D	60		3/8" BOLT	0	12	FOR FILLING FORM BRKT HOLES	

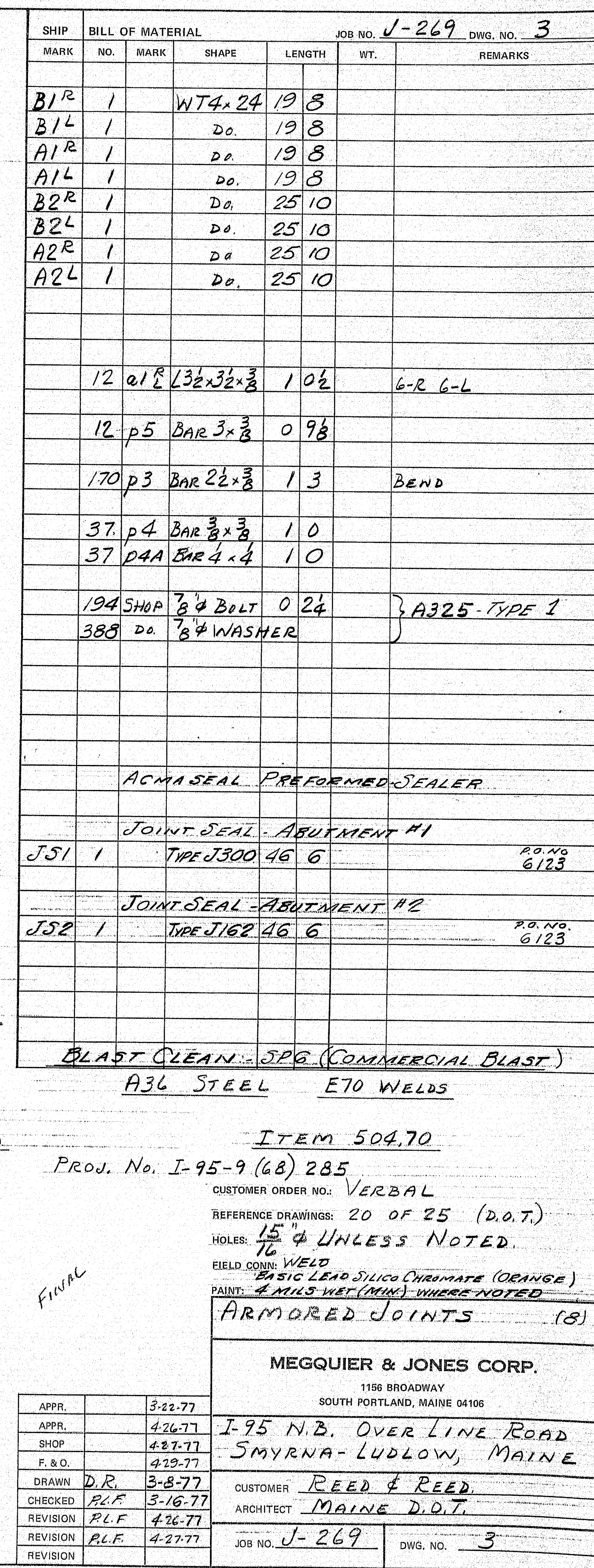
BLAST CLEAN: SP6 (COMMERCIAL BLAST)  
 STEEL A36  
 ITEM NO. 504.70  
 PROJECT NO. I-95-9(68)285

CUSTOMER ORDER NO: VERBAL  
 REFERENCE DRAWINGS:  
 HOLES: 15'-0"  
 FIELD CORR: 3/8" BOLTS - A325  
 BASIC LEAD SILICO CHROMATE (ORANGE)  
 PAINT: 4 MILS WET (MIN) UNLESS NOTED  
 DIAPHRAGMS (25)  
 MEGQUIER & JONES CORP.  
 1156 BROADWAY  
 SOUTH PORTLAND, MAINE 04106  
 I-95 NB OVER LINE ROAD  
 SMYRNA-LUDLOW, MAINE  
 CUSTOMER: REED & REED  
 ARCHITECT: MAINE DEPT. OF TRANSPORTATION  
 JOB NO. J269 DWG. NO. 2

FOR APPR.	3-22-77
APPR.	4-26-77
SHOP	4-16-77
F. & O.	4-29-77
DRAWN	D.R. 3-8-77
CHECKED	PLF 3-17-77
REVISION	PLF 4-25-77
REVISION	
REVISION	

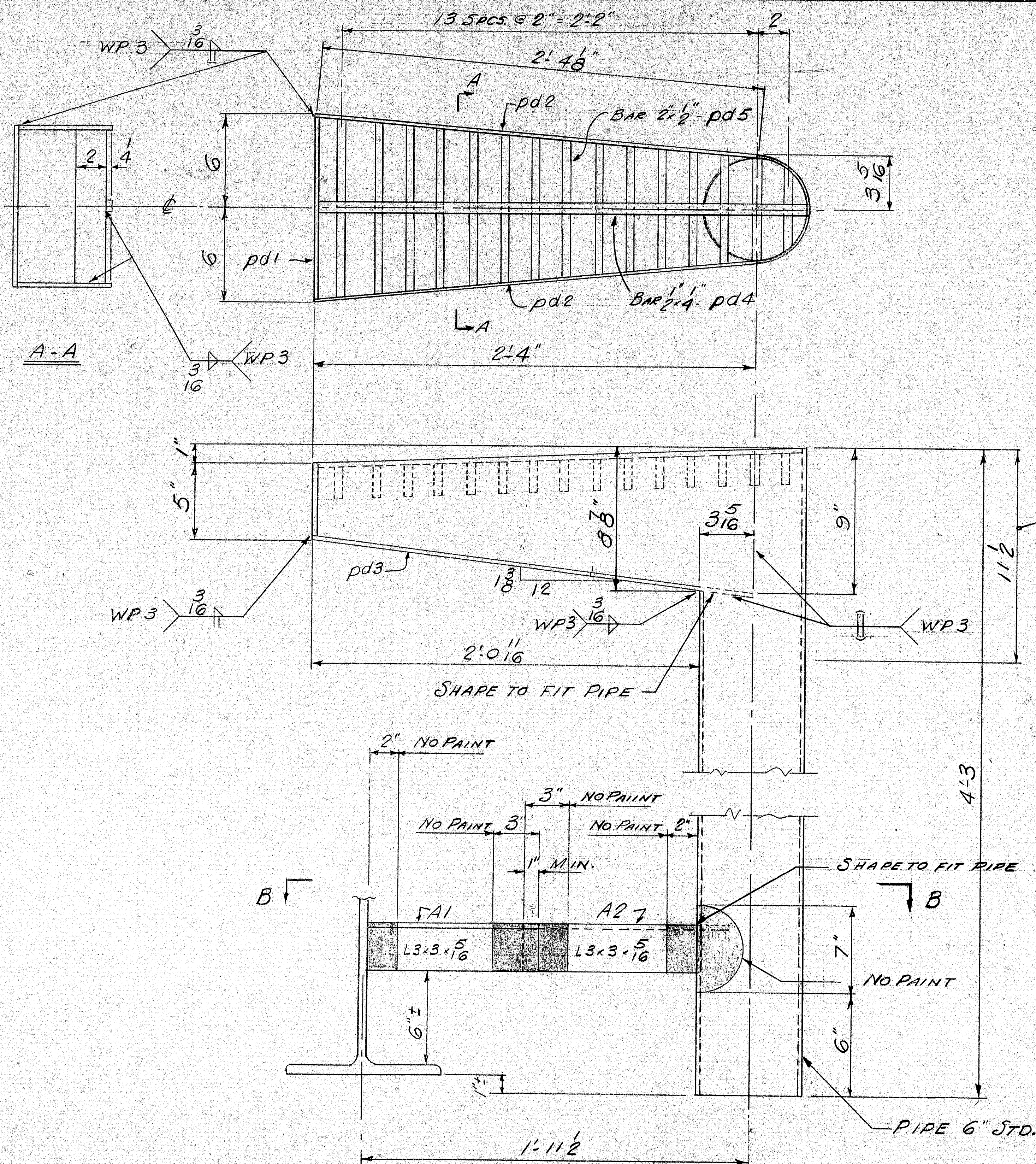
161-165





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DRAIN  
MAKE 4 MARK "DR"

SHIP		BILL OF MATERIAL		JOB NO. J-269		DWG. NO. 4	
MARK	NO.	MARK	SHAPE	LENGTH	WT.	REMARKS	
DR	4		PIPE 6" STD	4	3	ASTM A53 GRADE B	
	4	pd1	R 4 x 4 3/4	0	11 1/2		
	8	pd2	R 4 x 9	2	4 1/8		
	4	pd3	R 4 x 12	2	4 1/8		
	4	pd4	BAR 1/4 x 4	2	6 3/4		
	4	pd5	BAR 2 x 2	12	0	CUT TO FIT	
A1	4		L3x3x5/16	1	0		
A2	4		L3x3x5/16	1	0		

ITEM NO. 504.70 (STRUCTURAL STEEL)  
PROJECT NO. 195-9 (68) 285  
A36 STEEL EXCEPT AS NOTED  
BLAST CLEAN SP6 (COMMERCIAL BLAST)

CUSTOMER ORDER NO.: VERBAL  
REFERENCE DRAWINGS: B.D. 104.73  
HOLES: NONE  
FIELD CONN: WELD  
BASIC LEAD SILICO CHROMATE (ORANGE)  
PAINT: 4 MILS WET (MIN.) UNLESS NOTED

DRAINS (4)

MEGQUIER & JONES CORP.

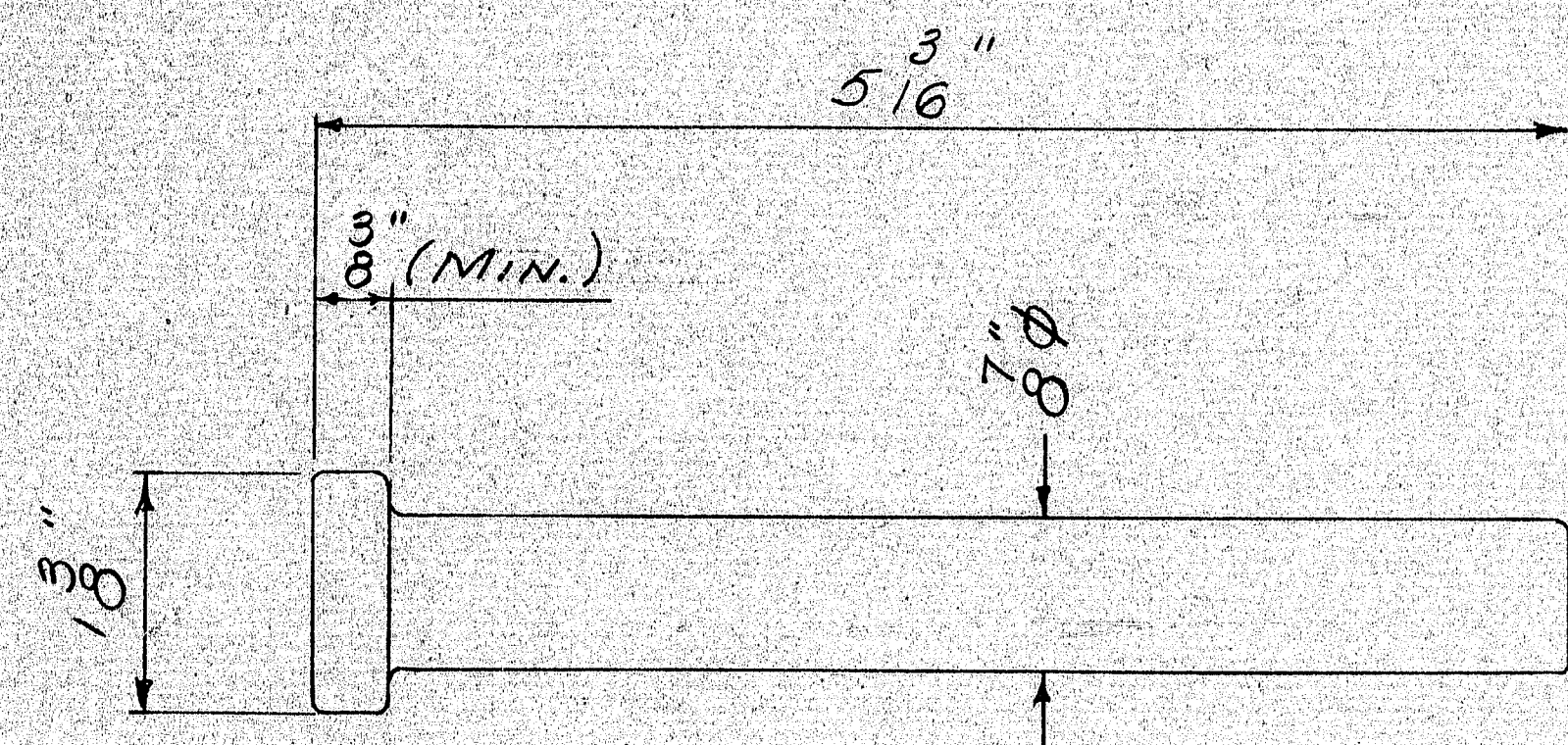
1156 BROADWAY  
SOUTH PORTLAND, MAINE 04106

195 NB OVER LINE ROAD  
S. MYRNA LUDLOW, MAINE  
CUSTOMER: REED & REED  
ARCHITECT: MAINE DEPT. OF TRANSPORTATION  
JOB NO. J-269 DWG. NO. 4

FINAL  
APPR. 3-22-77  
SHOP 4-26-77  
F. & O. 4-29-77  
DRAWN RLF 3-16-77  
CHECKED RLF 3-18-77  
REVISION RLF 4-25-77

161-167





SHEAR CONNECTOR STUD  
(PART NO. 101-098-035)

MATERIAL: LOW CARBON STEEL - ASTM A 108-58T

C - .23 % MAX.

MN - .60 % MAX.

P - .040 % MAX.

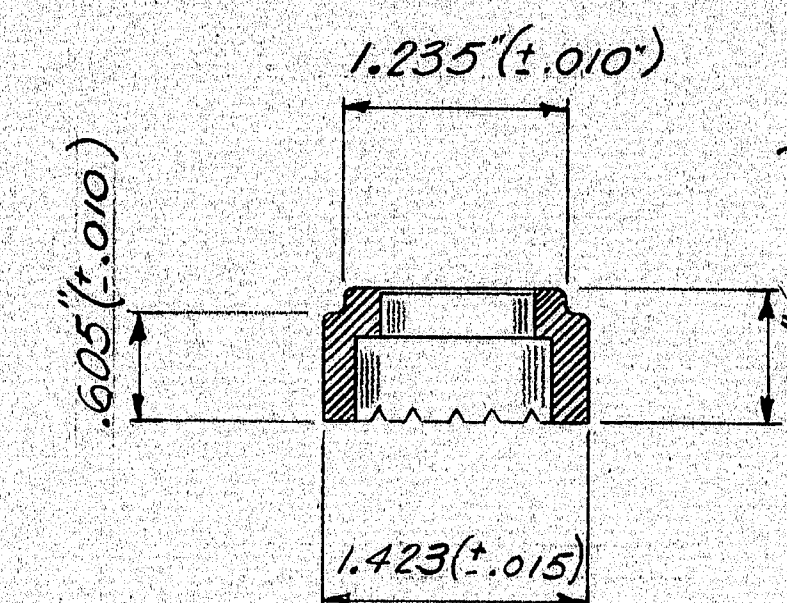
S - .050 % MAX.

MECHANICAL PROPERTIES (AS COLD DRAWN)

TENSILE 60,000 PSI. MIN.

YIELD 50,000 PSI. MIN.

ELONGATION 20 % IN 2" MIN.



ARC SHIELD  
(FERRULE NO. 100-101-140)

PROJECT NO. I-95-9(68) 285

MANUFACTURER  
NELSON STUD WELDING  
DIVISION OF GREGORY INDUSTRIES, INC.  
LORAIN, OHIO 44055

SHEAR CONNECTOR STUD & ARC SHIELD			
MEGQUIER & JONES CORP.			
1156 BROADWAY SOUTH PORTLAND, MAINE 04106			
APPR.		3-22-77	
SHOP			
F. & O.			
DRAWN	RLF	3-16-77	
CHECKED			
REVISION			
REVISION			
REVISION			
JOB NO. J-269		DWG. NO. 501	

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