

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

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	-----
CURBING - EXISTING	=====	PROPOSED UTILITY POLE - PERMANENT	-----
CURBING - PROPOSED	=====	TREES	-----
TRAVELLED WAY - EXISTING	=====	WOODS	-----

POND ROAD OVER I-95
AND
ROUTE 126 OVER I-95

IN THE TOWN OF
WEST GARDINER
KENNEBEC COUNTY
 MAINE FEDERAL AID INTERSTATE
 PROJECT NO. I-95-5(8)95

INDEX OF SHEETS

TITLE	SHEET NO.
TITLE SHEET	1
QUANTITY SHEET	2
BRIDGE PLANS - POND ROAD	3 TO 19
BRIDGE PLANS - ROUTE 126	20 TO 35
BRIDGE STANDARDS	36 TO 39
HIGHWAY STANDARDS	40 TO 43
SOIL SURVEYS	44 TO 48
RIGHT OF WAY MAPS	49 TO 53

SPECIFICATIONS
 DESIGN - AASHO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES 1969
 AND INTERIM SPECIFICATIONS 1970, 1971.
 CONTRACT - STATE OF MAINE, STATE HIGHWAY COMMISSION, STANDARD
 SPECIFICATIONS, HIGHWAYS & BRIDGES, REVISION OF JUNE 1968.

LIVE LOADING

HS 20-44

MATERIALS

CONCRETE - CLASS - A

REINFORCING STEEL - ASTM A615 GRADE 60

STRUCTURAL STEEL:

BEAMS, SPLICE PLATES, COVER PLATES - AS NOTED ON PLANS
 7/8" DIAMETER HIGH TENSILE STRENGTH BOLTS - ASTM A325
 ALL OTHER - ASTM A36

BASIC ALLOWABLE STRESSES

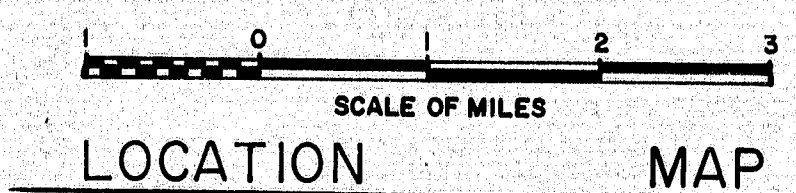
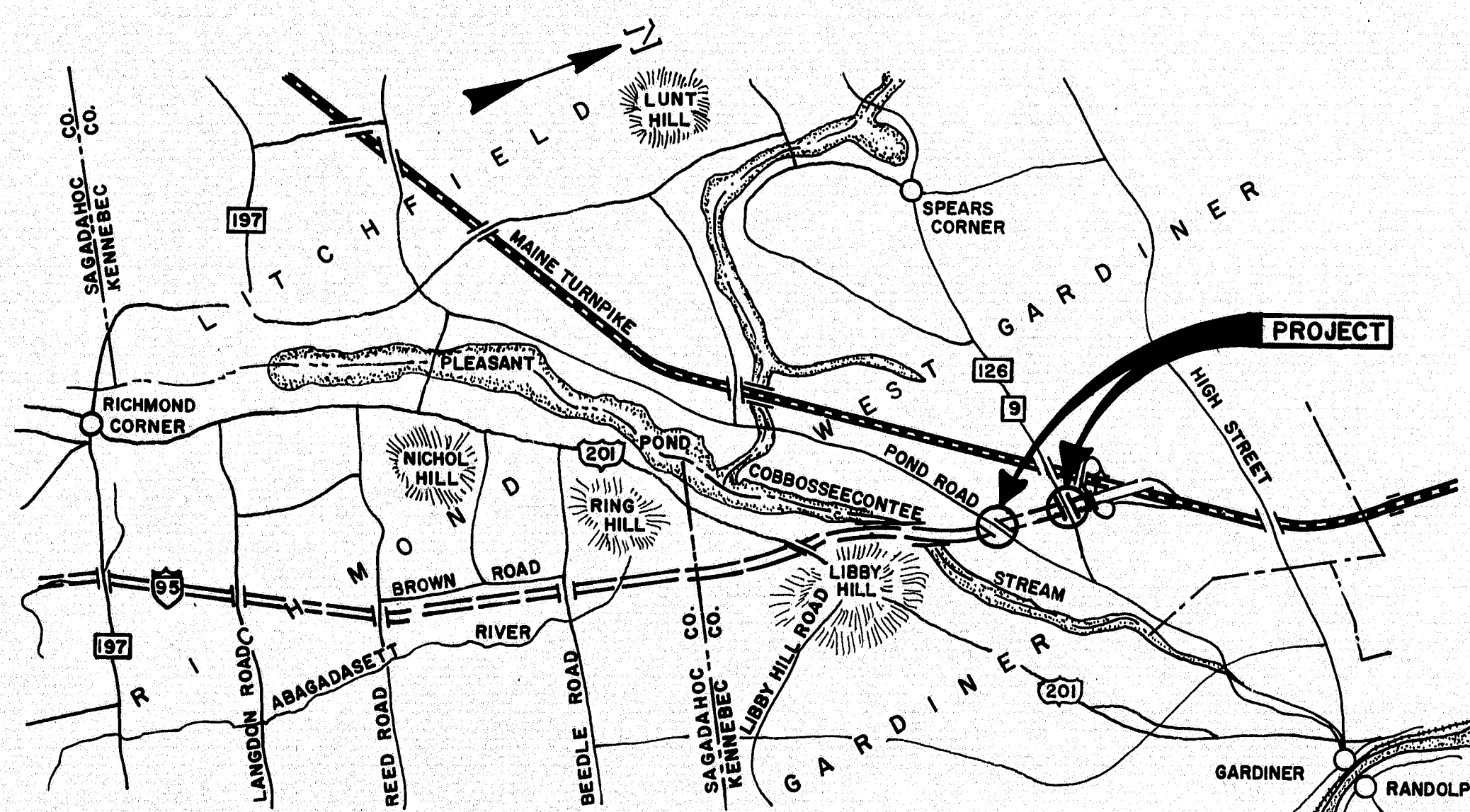
CONCRETE - $f_c = 1200$ p.s.i. $n = 10$

REINFORCING STEEL - $f_s = 24,000$ p.s.i.

STRUCTURAL STEEL - ASTM A36 - $f_s = 20,000$ p.s.i.

ASTM A572 GR.50 $f_s = 27,000$ p.s.i.

NOTE:
 ALL WORK COMTEMPLATED 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.



TRAFFIC DATA

	POND ROAD	ROUTE 126	ROUTE 201 TO ROUTE 126	ROUTE 126 TO JCT. MAINE TURNPIKE
CURRENT (1971) AADT	870	1951	7625	7860
FUTURE (1991) AADT (T.P.K.E. FREE)	1350	5460	16080	19350
DHV % OF AADT	10	13	13	13
DHV	135	710	2090	2516
% TRUCKS	5	11	11	11
DIRECTIONAL DISTRIBUTION	60	75	60	60
DESIGN VELOCITY (MPH)	45	60	60	60

APPROVED: STATE OF MAINE
 DEPARTMENT OF TRANSPORTATION

Richard A. Gauthier
 COMMISSIONER
Richard A. Gauthier
 BUREAU DIRECTOR

Sylvester L. L...
 CHIEF ENGINEER

DATE

6-30-72

6-30-72

6-30-72

DEPARTMENT OF TRANSPORTATION
 FEDERAL HIGHWAY ADMINISTRATION

REGION 1

APPROVED:

DIVISION ENGINEER DATE

148-94

PLANS	DESIGN - DETAILED	DATE
	CHECKED	6/72
	REVISIONS	
	FIELD CHANGES	

ESTIMATED QUANTITIES FOR LUMP SUM ITEMS

Structural Concrete, Roadway & Sidewalk Slabs on Steel Bridges
 Pond Road over I-95 ----- 247 C.Y.
 Route 126 over I-95 ----- 245 C.Y.

Structural Concrete, Approach Slabs
 Pond Road over I-95 ----- 21 C.Y.
 Route 126 over I-95 ----- 31 C.Y.

Structural Steel
 Pond Road over I-95 ----- 227,100 lbs
 Route 126 over I-95 ----- 241,300 lbs

Shear Connectors
 Pond Road over I-95 1488 Pcs 1453 lbs
 Route 126 over I-95 2136 Pcs 2287 lbs

ESTIMATED		QUANTITIES			
ITEM No.	DESCRIPTION	QUANTITY			UNIT
		POND RD	Rt 126	TOTAL	
203.24	Common Borrow	10,000	14,300	24,300	C.Y.
203.25	Granular Borrow	4000	6000	10,000	C.Y.
206.06	Str. Earth Excav. - Drainage & Minor Strs.	800	--	800	C.Y.
206.08	Str. Earth Excav. - Abuts & Ret. Walls	200	--	200	C.Y.
206.10	Str. Earth Excav. - Piers	130	55	185	C.Y.
501.215	Steel H- beam Piles 74 Lbs/Ft.	735	1350	2085	L.F.
502.21	Struct. Conc. & Abuts & Ret. Walls	394	390	784	C.Y.
502.23	Struct. Conc. Piers	56	64	120	C.Y.
502.2601	Str. Conc. Roadway & Sidewalk Slabs on Steel Bridge (Pond Road)	1	--	1	L.S.
502.2602	Str. Conc. Roadway & Sidewalk Slabs on Steel Bridge (Route 126)	--	1	1	L.S.
502.3101	Str. Conc. Approach Slabs (Pond Road)	1	--	1	L.S.
502.3102	Str. Conc. Approach Slabs (Route 126)	--	1	1	L.S.
503.12	Reinforcing Steel, Fab. & Delivered	87,800	95,800	183,600	Lb.
503.13	Reinforcing Steel, Placing	87,800	95,800	183,600	Lb.
504.7001	Str. Steel, Fab. & Delivered (Pond Road)	1	--	1	L.S.
504.7002	Str. Steel, Fab. & Delivered (Route 126)	--	1	1	L.S.
504.7101	Str. Steel, Erection (Pond Road)	1	--	1	L.S.
504.7102	Str. Steel, Erection (Route 126)	--	1	1	L.S.
504.74	Metal Inserts	68	68	136	Each
505.0801	Shear Connectors (Pond Road)	1	--	1	L.S.
505.0802	Shear Connectors (Route 126)	--	1	1	L.S.
506.1401	Field Painting, Str. Steel (Pond Rd)	1	--	1	L.S.
506.1402	Field Painting, Str. Steel (Route 126)	--	1	1	L.S.
507.08	Bridge Railing	436	336	772	L.F.
512.07	French Drains (Stones only)	25	22	47	C.Y.
513.09	Slope Protection, RCC	260	225	485	S.Y.
514.06	Curing Box for Conc. cylinders	1	--	1	Each
515.20	Protective Coating for Conc Surfaces	180	137	317	S.Y.
603.202	30 inch Bit. Coated C.M.P.	340	--	340	L.F.
609.13	Vertical Bridge Curb - Type I	453	351	804	L.F.
610.08	Plain Riprap	25	--	25	C.Y.
610.12	Portland Cement for Riprap Grout	10	--	10	Barrel
615.07	Loam	145	150	295	C.Y.
616.08	Sodding	170	185	355	S.Y.
618.14	Seeding, Method Number 2	23	22	45	Unit
618.15	Temporary Seeding	10	10	20	Lb.
619.09	Hay Mulch	23	22	45	Unit
629.05	Labor, Straight Time	20	--	20	M.Hr.
631.13	Bulldozer (inc operator)	20	--	20	Hr.
631.171	Truck small (inc operator)	20	--	20	Hr.
631.22	Front End Loader (inc oper.)	20	--	20	Hr.
639.08	Field Office, Type A	1	--	1	Each
657.201	Seed and Application, Method A			40	Unit
657.21	Reforestation, Method B			1	Acre
660.20	On The Job Training			1000	M. Hr.

Revised Structural Steel Estimate -
 Pond Road. 7-12-72 M.M.G.

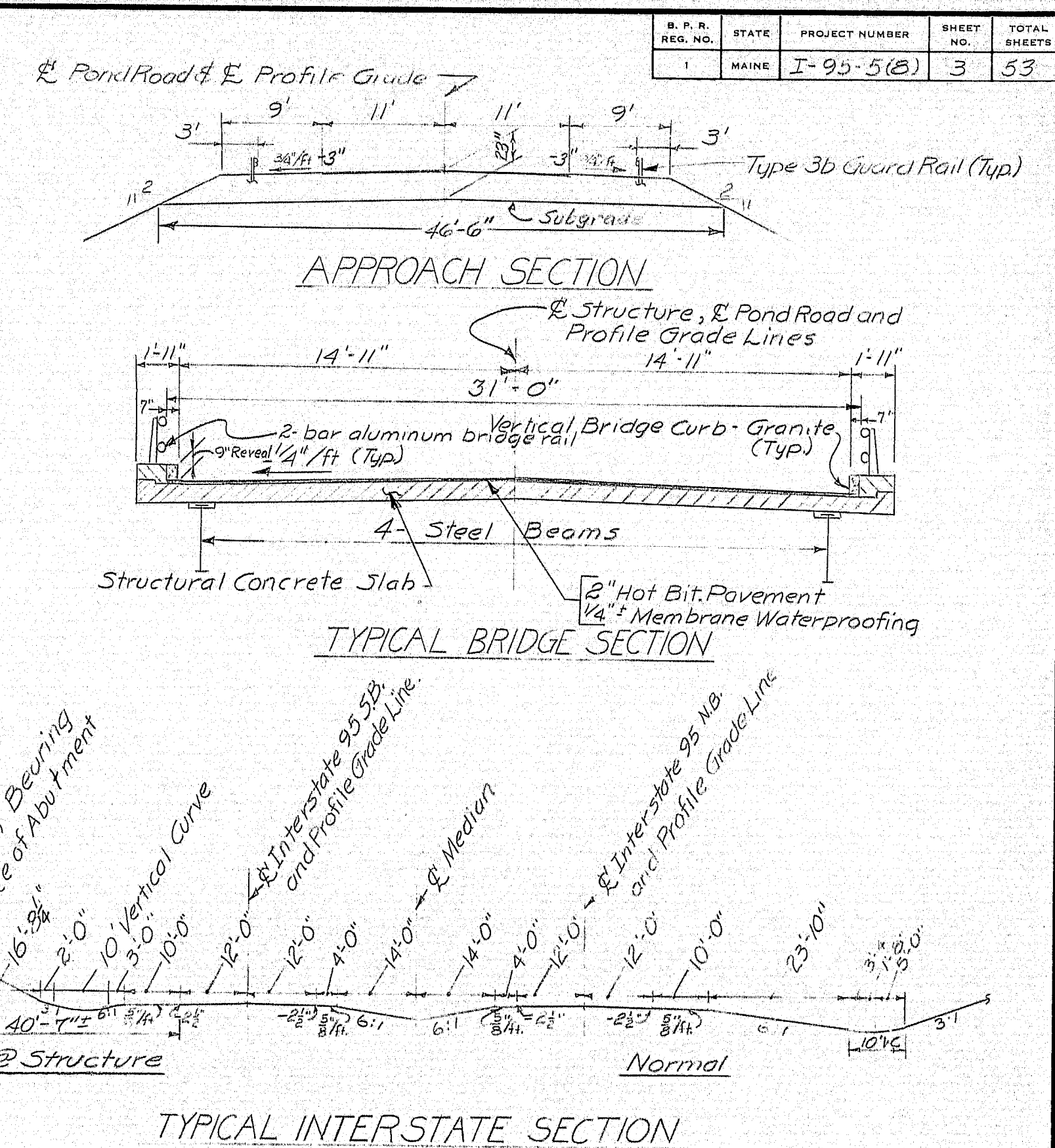
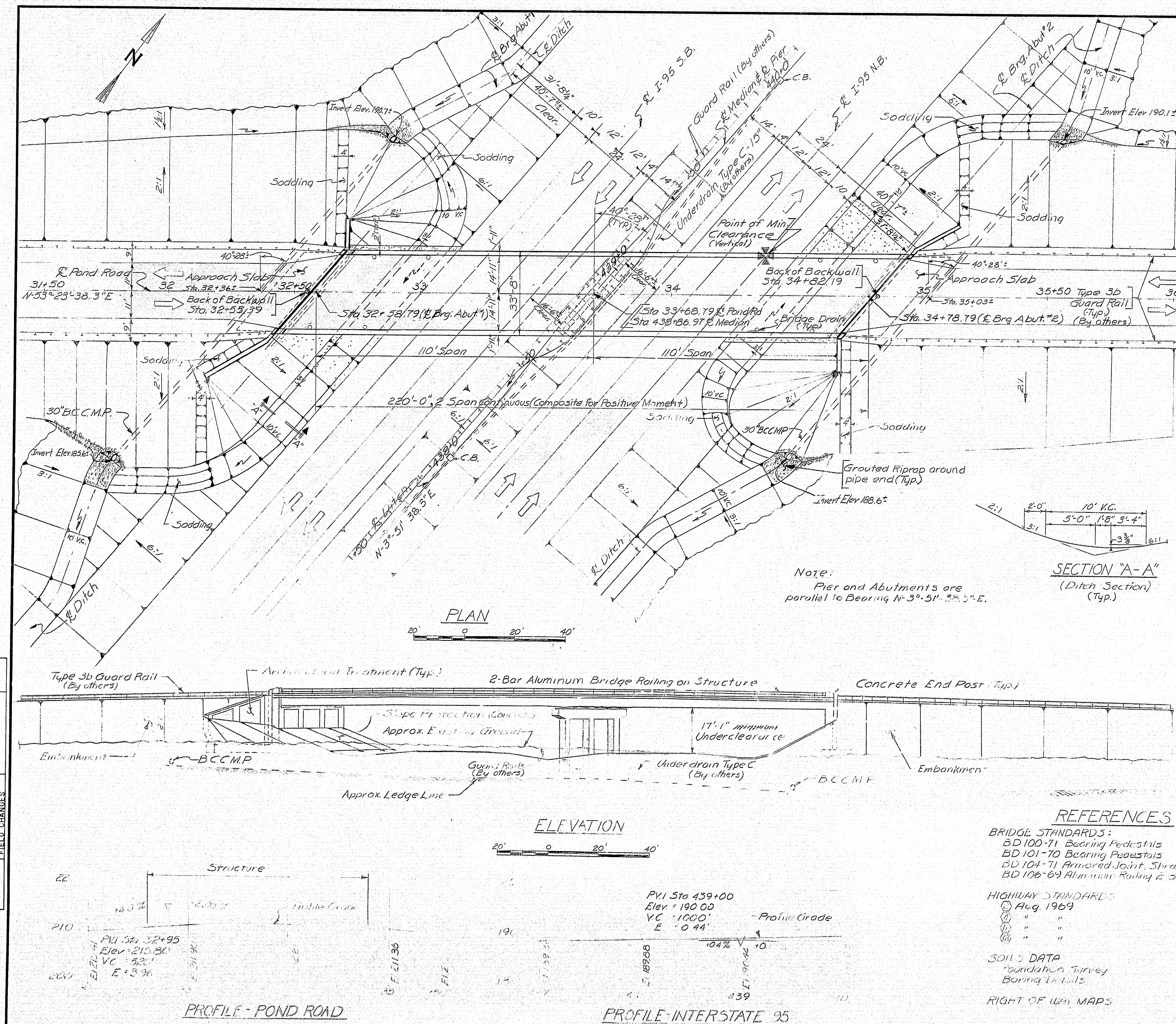
STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
MAINE	I-95-5(8)	2	53

STATE OF MAINE
 DEPARTMENT OF TRANSPORTATION
 POND ROAD & ROUTE 126
 OVER
 INTERSTATE-95
 IN THE TOWN OF
 WEST GARDINER
 KENNEBEC COUNTY
 QUANTITIES

SHEET 1 OF 1 AUGUSTA, MAINE JUNE 1972

148-95

PROJECT DESIGN ENGINEER: Chandler
 DATE: 10-21-77
 DESIGN: DETAIL: J.C. C.H.
 REVISIONS: FIELD CHANGES



INDEX OF POND ROAD BRIDGE SHEETS

DESCRIPTION	SHEET No.
General Plan	1
Borrow Limits - Abutment #1	2
Borrow Limits - Abutment #2	3
Slope Protection	4
Footings and Pile Plan Abutment #1	5
Abutment #1	6
Sections Abutment #1	7
Footings and Pile Plan Abutment #2	8
Abutment #2	9
Sections Abutment #2	10
Pier	11
Framing Plan and Structural Steel Detail	12
Blocking and Center	13
End Posts, Approach Slabs and Armored Joint	14
Superstructure Slab	15
Reinforcing Steel	16 & 17

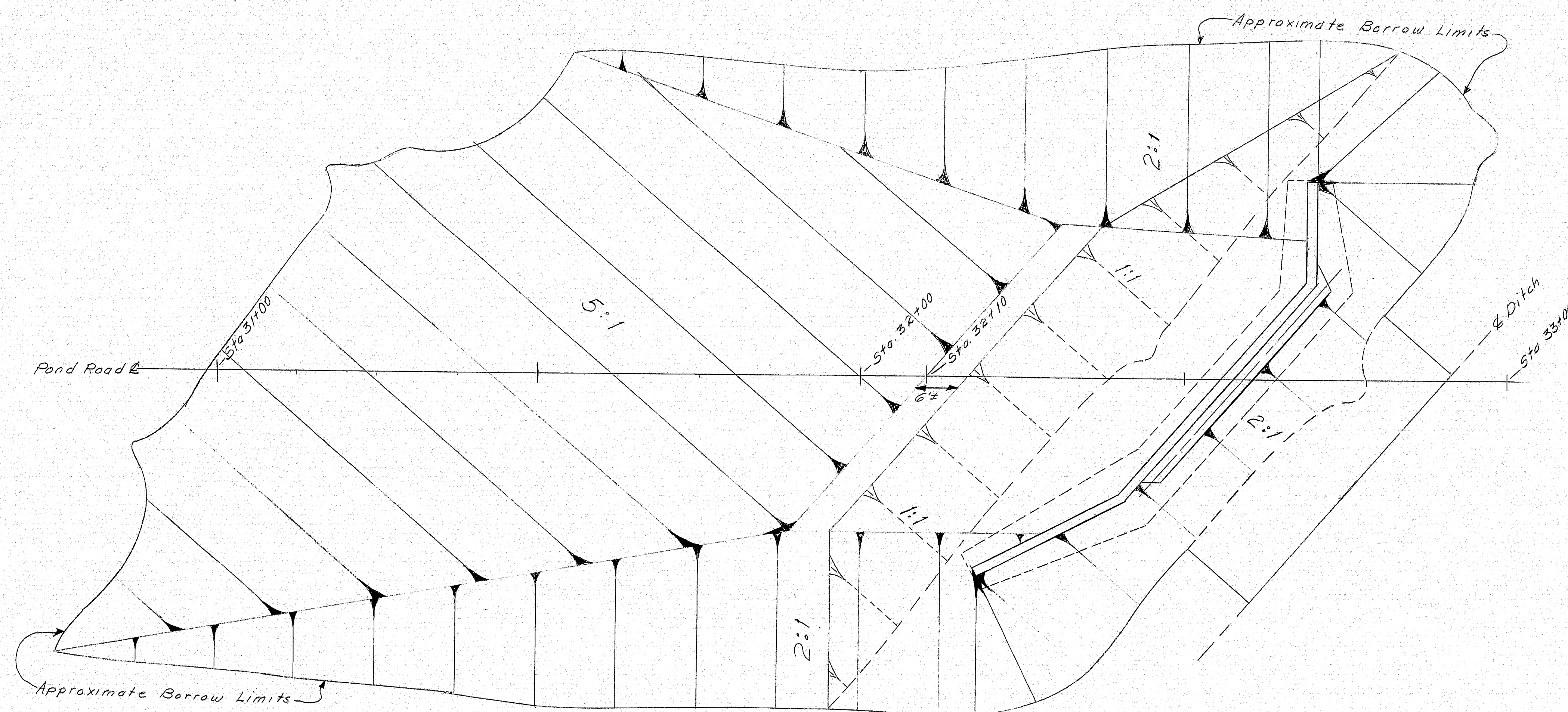
Note:
 This sheet shows the completed stage construction projects. This contract requires the construction of the bridge structure and part of the Pond Road embankments.

STATE OF MAINE
 DEPARTMENT OF TRANSPORTATION
POND ROAD
 OVER
INTERSTATE-95
 IN THE TOWN OF
WEST GARDINER
KENNEBEC COUNTY
 GENERAL PLAN

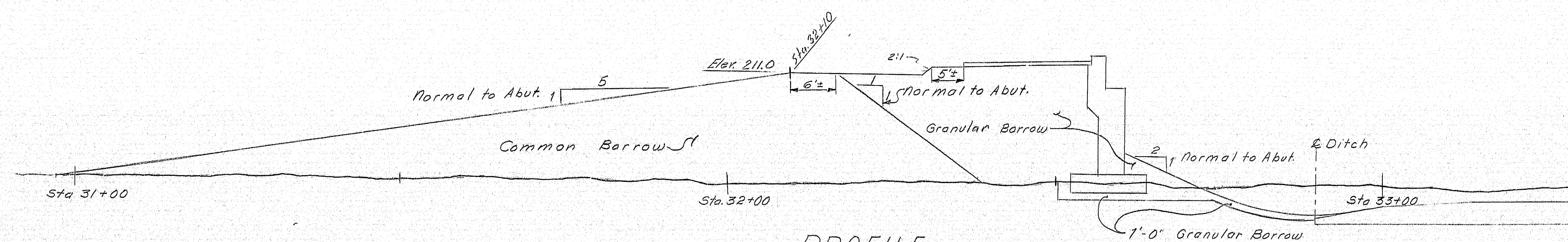
SHEET 1 OF 17 AUGUSTA, MAINE OCT. 1971

148-96

D. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOT SHE
1	MAINE	T-95-5(B)	1	52



PLAN



PROFILE

(Along E Pond Rd.)

- ### CONSTRUCTION NOTES

1. All utility plant shall be adjusted by the respective utilities unless otherwise noted.
2. Refer to Right of Way Maps for Detour Location, Right of Way Limits, Construction Limits, and Utility Plant.
3. The material used to construct embankments in areas where piles are to be driven shall meet the requirements of sub-section 501.07 of the Standard Specifications.
4. A minimum of 1'-0" of granular borrow shall be placed under the Footing, Slope Protection and Paved Ditch to the E of Ditch.
5. Where granular borrow is called for on the Bridge Plans, a 6" layer shall meet the requirements for Underway Backfill, sub-section 703.19.
6. Ditches shall be constructed as shown on the General Plan. Payment for all excavation required for grading and drainage will be paid for under Item 206.06 Structural Earth Excavation - Drainage and Minor Structures.
7. Loom (2 inches), Seed (method No.2), and Hay Mulch shall be placed on embankment slopes and cut slopes.
8. The ditch grades and the exact limits of work for borrow, excavation, loam, seeding, hay mulch, sodding, and rip-rap items for this contract will be determined in the field by the Engineer.
9. The exact length and elevation of 30" continuous coated corrugated metal pipe will be determined in the field by the Engineer.

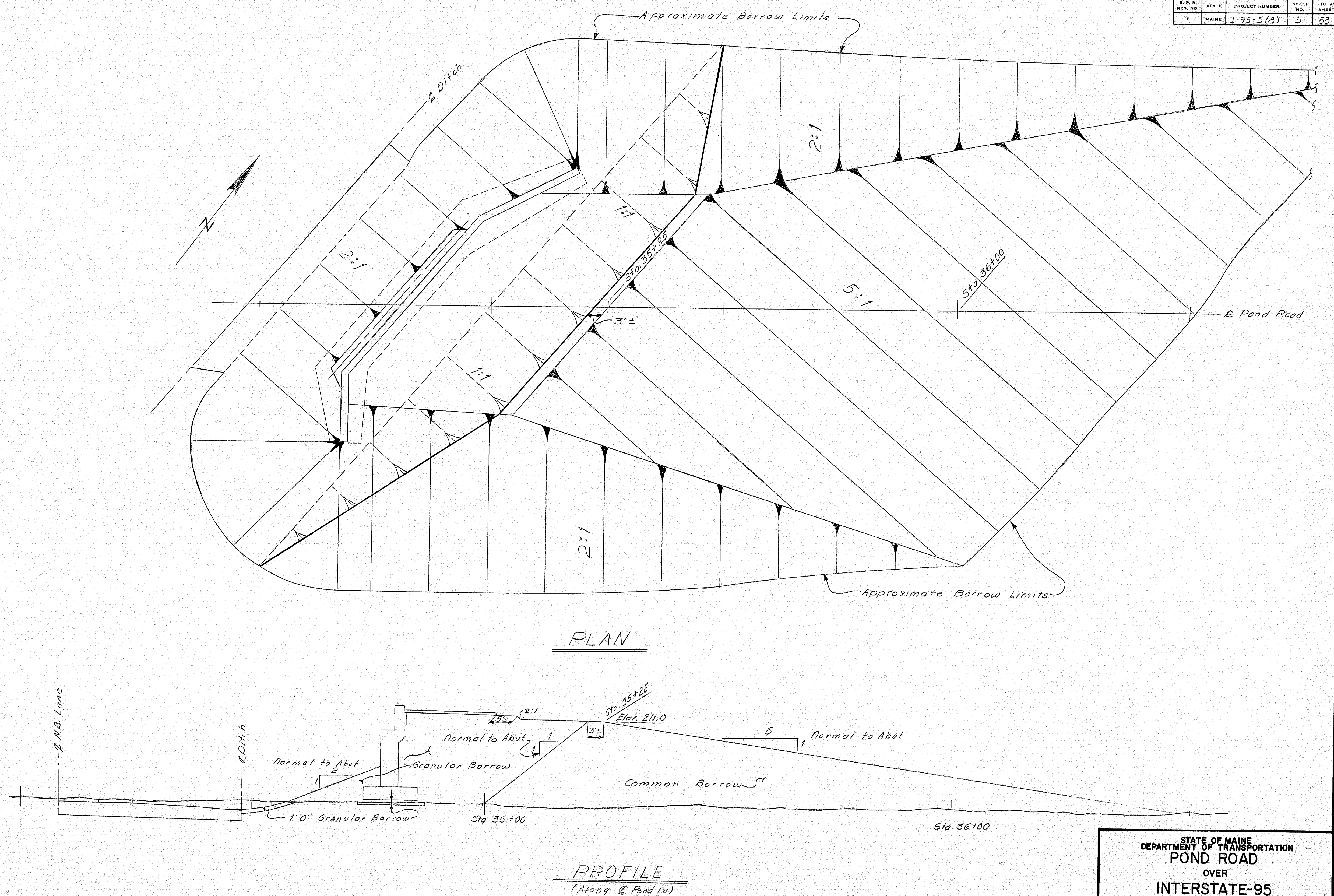
PLANS	DESIGN - DETAILED	BY	DATE
	CHECKED	MMS LAM.	3/72
	REVISIONS	RDB	6/72
	FIELD CHANGES		

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
POND ROAD
OVER
INTERSTATE-95
IN THE TOWN OF
WEST GARDINER
KENNEBEC COUNTY
BORROW LIMITS
ABUTMENT NO. 1
T 2 OF 17 AUGUSTA, MAINE March

SHEET 2 OF 17 ABUTMENT NO. 1
AUGUSTA, MAINE March 1972

148-97

PLANS	DESIGN - DETAILED	CHECKED	BY	DATE
	MMG/LAW	ADG		3/72
				6/72

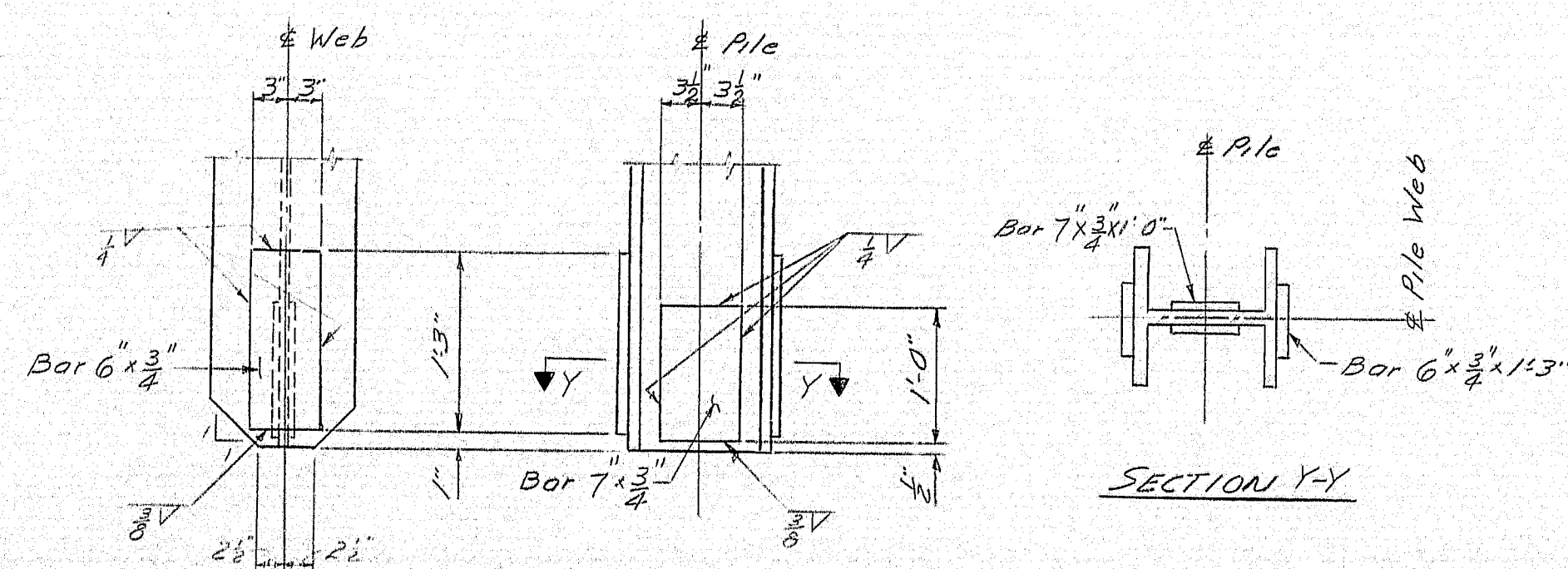
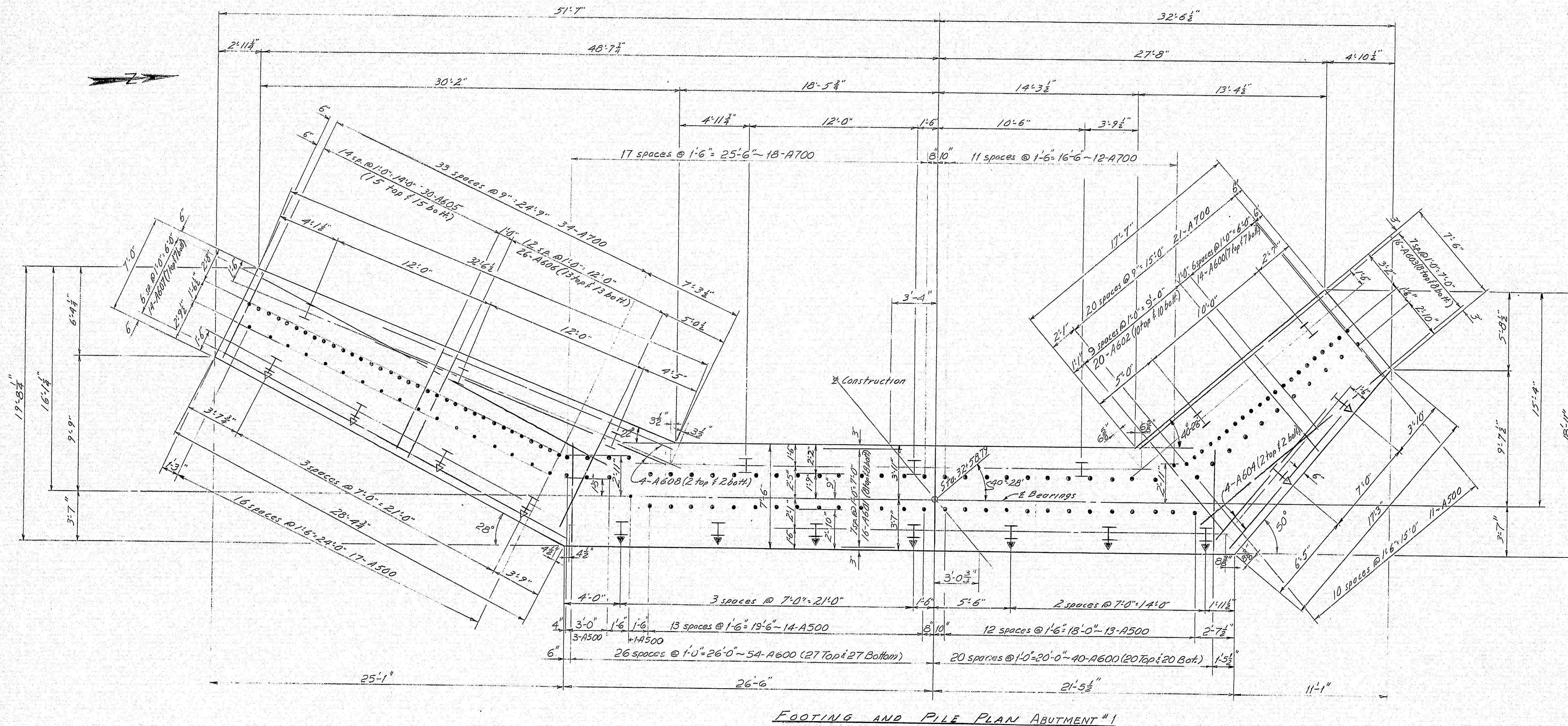


STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
POND ROAD
OVER
INTERSTATE-95
IN THE TOWN OF
WEST GARDINER
KENNEBEC COUNTY
BORROW LIMITS
ABUTMENT NO. 2
SHEET 3 OF 17
AUGUSTA, MAINE March 1972

148-98

PILE NOTES:

1. --- Piles shall be driven to ledge or practical refusal.
2. --- Alternate types of pointed pile caps may be used if they are equal or better than the pointed reinforced pile tip shown, if approved by the Engineer.
3. --- Estimated driven length of piles are determined from available soil information with no allowance for pile cut-offs and no allowance for uncertain pile penetrations.
4. --- Piles marked with arrow symbol $\rightarrow$ shall be battered 3" per foot and $\rightarrow$ shall be battered $3\frac{1}{2}$ " per foot in the direction of the arrow
5. --- Maximum pile load equals 90 tons
6. --- The following are pile locations, number of piles required, size of piles and estimated driven lengths:
Abutment No.1 21 - 12 HP 74 @ 13'
Abutment No.2 21 - 12 HP 74 @ 19'
7. --- All piles shall have pointed reinforced pile tips.



POINTED REINFORCED PILE TIP DETAIL
(Pointed Reinforced Pile Tip shall be used)

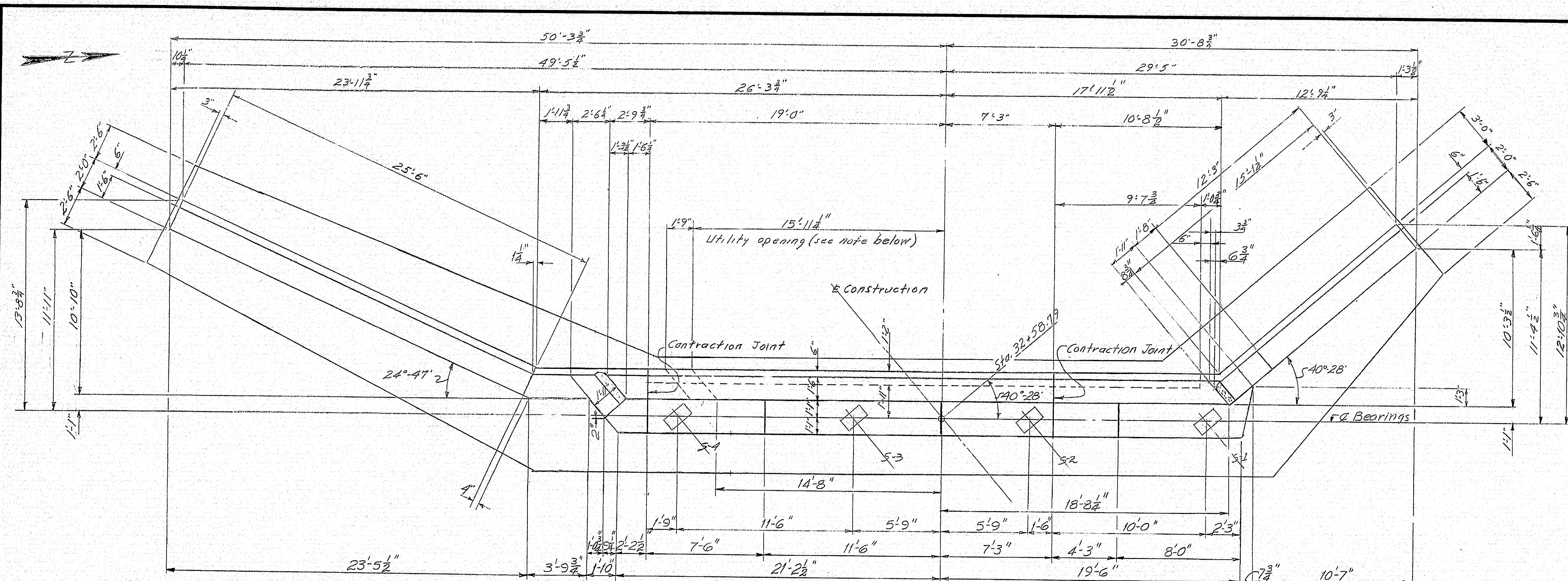
FOOTING AND PILE PLAN ABUTMENT #1

PLANS			BY	DATE
	DESIGN - DETAILED		MMG RTA	2/72
	CHECKED		RDB	5/72
	REVISIONS			
	FIELD CHANGES			

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
POND ROAD
OVER
INTERSTATE-95
IN THE TOWN OF
WEST GARDINER
KENNEBEC COUNTY
FOOTING AND PILE PLAN
ABUTMENT NO. 1
SHEET 5 OF 17 AUGUSTA, MAINE Feb 1972

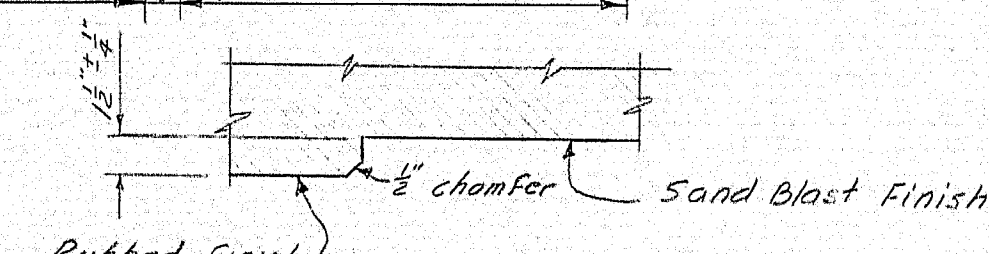
SHEET 5 OF 17 ABUTMENT NO. 1
AUGUSTA, MAINE Feb 1972
148-100 203-1 2080

S. P. R.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-5(8)	5	59



Note: Contractor shall provide an opening in backwall for utilities. After the utilities are installed the contractor shall seal the opening with concrete as directed by the Engineer.

PLAN



SECTION Z-Z

ABUTMENT NOTES

1. --- Chamfer all exposed edges of concrete $\frac{1}{2}$ ".
2. --- Reinforcing steel to have 2" clear unless otherwise noted.
3. --- Place reinforcing steel in bridge seat to clear anchor bolts.
4. --- Place concrete in the top of abutment backwall after the superstructure concrete has been placed.
5. --- Break band of contraction joints by a method approved by the Engineer.
6. --- Protective Coating for Concrete Surfaces shall be applied to the following:
All exposed areas of Concrete End Posts, Top of Concrete Curb, Top of backwall and 6" down the back.
7. --- All reinforcing steel splices and embedments are to be a minimum of 24 bar diameters unless otherwise indicated.
8. --- Cover Contraction and Construction joints (except at footing & approach slab) with layers of heavy roofing 10 inches wide. Recess area to be covered 1 inch. The concrete at the recess area and each layer of roofing shall be coated with asphalt flashing cement when the roofing is installed (See note 10 for option).
9. --- Place 4" dia. weep holes and non-metallic pipe at 20' maximum spacing. Exact location to be determined by the Engineer in the field. The 4" dia. nonmetallic pipes shall extend to the slope paving as shown on sheet #4.
10. --- At the contractor's option, a PVC waterstop approved by the Engineer, may be used at contraction joints in place of roofing & recess.

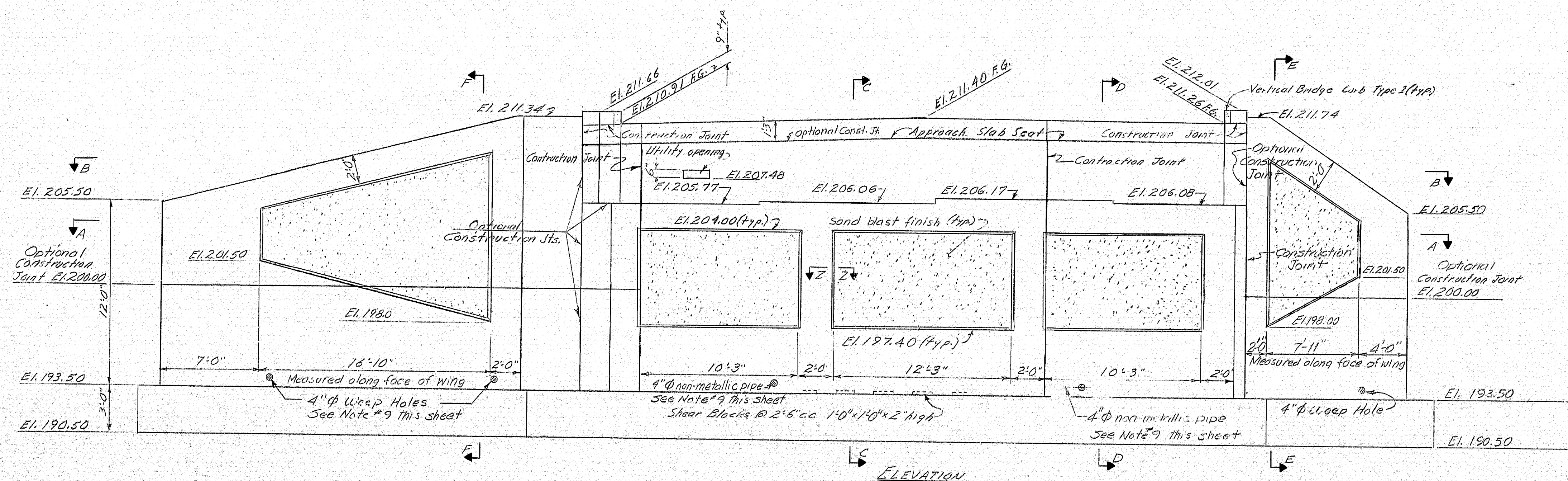
ARCHITECTURAL TREATMENT NOTES

All surfaces so designated on the plans shall be sandblasted. These surfaces shall be carried to a minimum depth of 12 inches below the finished grade.
Special care shall be exercised so that form joints at the exposed face shall be right.
Before sandblasting, all fins and projections in the concrete shall be removed and all holes patched to create a surface of uniform texture.
In order to insure a consistent surface texture for the areas to be architecturally treated, concrete aggregate shall be from the same source and portland cement shall be from the same manufacturer throughout the entire placement of the abutment wings and backwall.
At the time the concrete is placed, the contractor shall cast 3 sample slabs (2' x 2' x 4'). Prior to sandblasting, the samples shall be sandblasted, each at a different degree of penetration with a maximum depth of $\frac{3}{8}$ " of one inch approximately, and under the direction of the Engineer. The most desirable sample will be chosen by the Engineer and the designated areas shall be sandblasted to match this sample.
Concrete shall not be sandblasted for at least 28 days after placement.
The contractor shall take all the necessary steps to protect materials and equipment from damage by the sandblasting operation. Personnel shall be properly equipped: sandblast hood for operator and respirators and goggles for all other personnel exposed to dust.
Payment for the sandblasting shall be included in the contract unit price for Item 302.21, Structural Concrete Abutments and Retaining Walls.

REFERENCES

- For Footing Plan & Pile Plan see sheet #5
- For Pile Notes see sheet #5
- For abutment sections see sheet #7
- For End Post Details see sheet #14
- For Approach Slab see sheet #14
- For Armored Joint Details see sheet #14 & Standard Detail BD-14-71

PLANS	DESIGN-DETAILED	CHECKED	DATE	BY
	MMG	ETA	2/12	MMG
	REVISIONS	FIELD CHANGES		

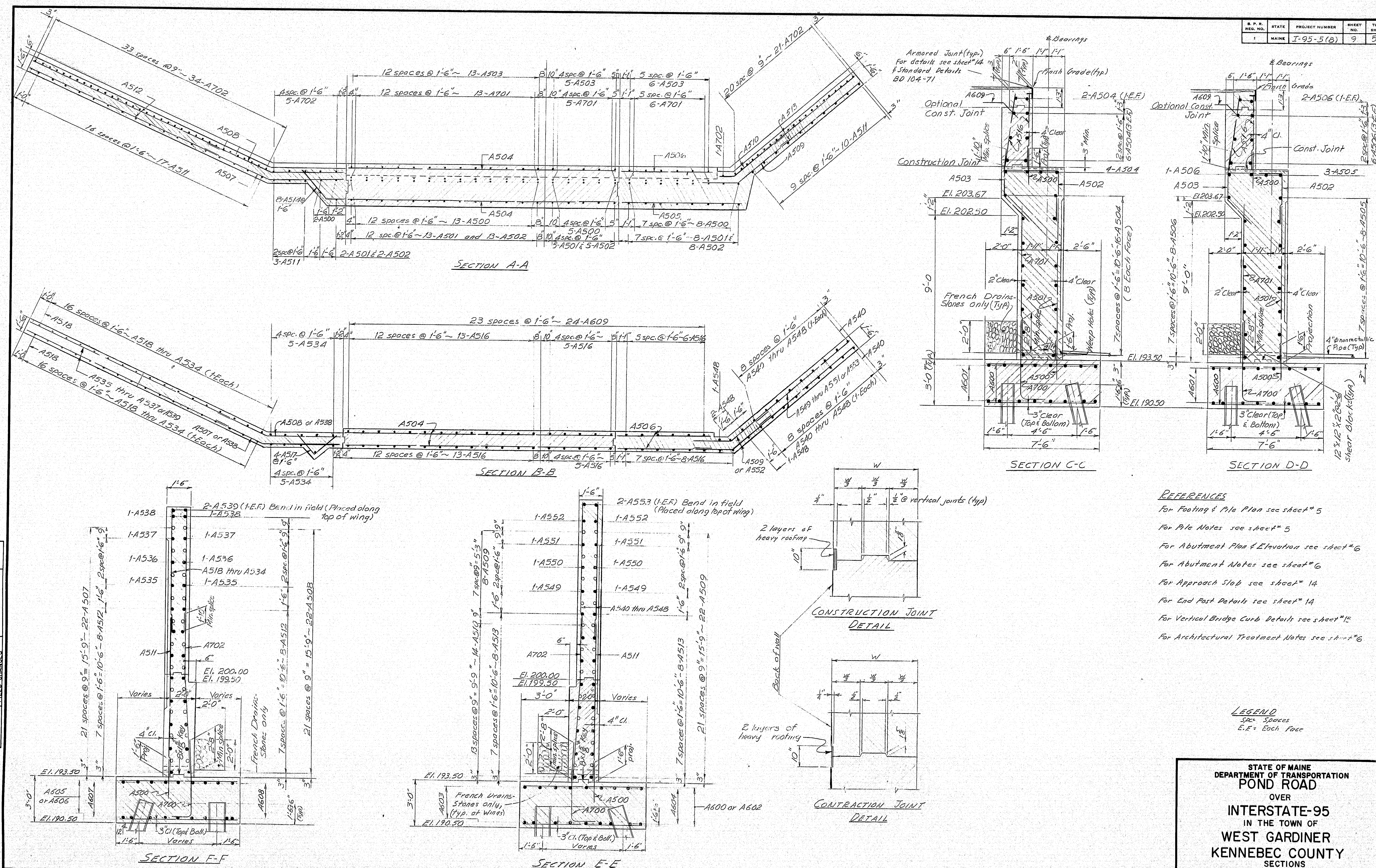


ELEVATION

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
POND ROAD
OVER
INTERSTATE-95
IN THE TOWN OF
WEST GARDINER
KENNEBEC COUNTY
ABUTMENT NO. 1
SHEET 6 OF 17 AUGUSTA, MAINE Feb. 1972

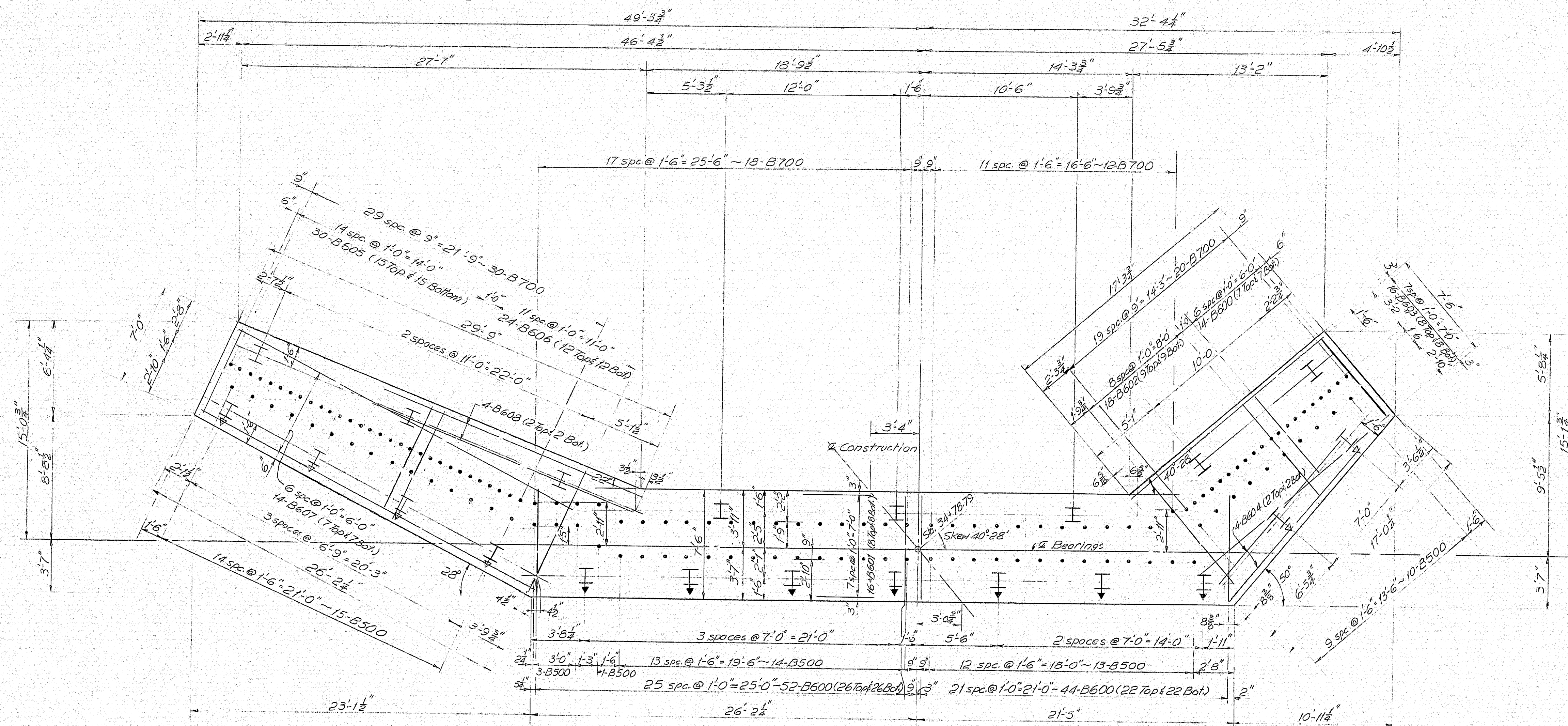
148-101

B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-5(8)	9	53



PLANS	DESIGN - DETAILED	BY	DATE
	CHECKED	MMG RTH	3/72
	REVISIONS	RDG	5/72
	FIELD CHANGES		

S. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-5(8)	10	53



FOOTING AND PILE PLAN ABUTMENT #2

- Notes:
1. For Pile Notes, see Footing and Pile Plan Abutment #1, sheet #5
 2. For Pointed Reinforced Pile Tip Details, see Sheet #5

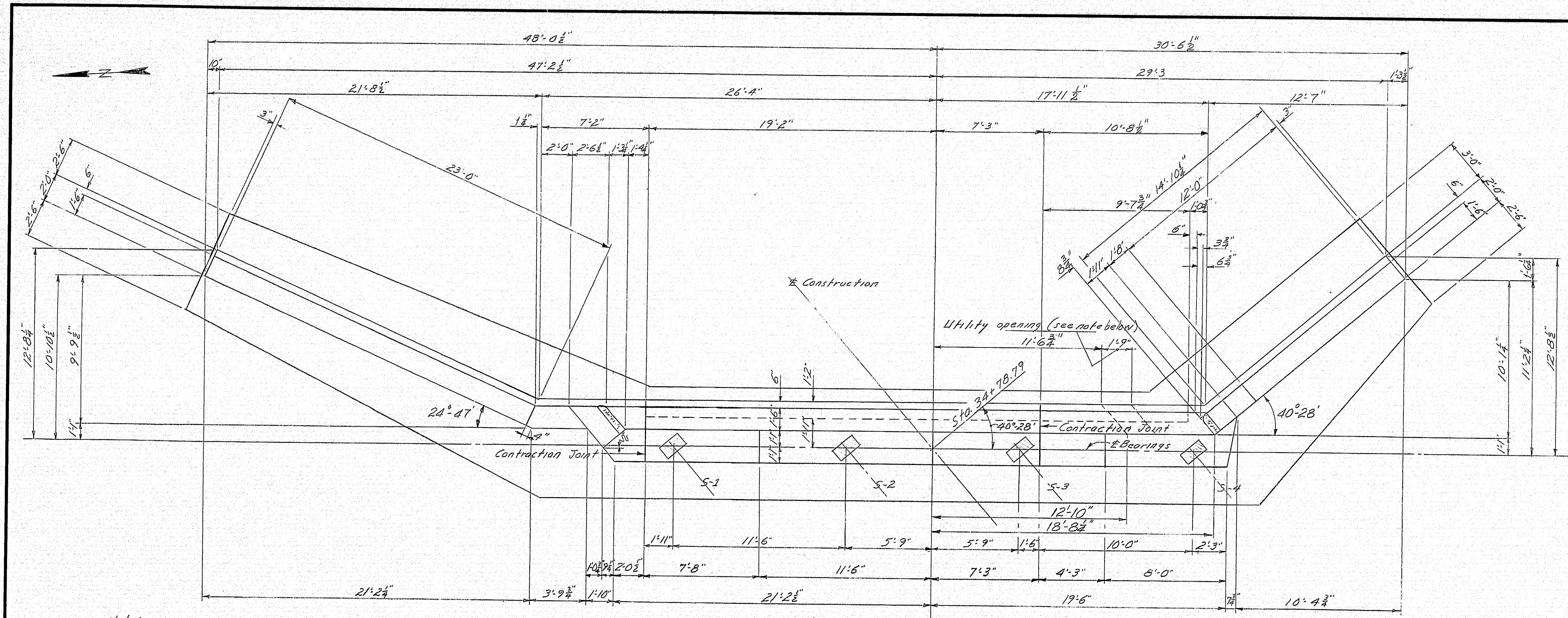
PLANS	DESIGN - DETAILED	CHECKED	BY	DATE
	MMG	ATA		3/72
		REVISIONS		
		FIELD CHANGES		

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
POND ROAD
OVER
INTERSTATE-95
IN THE TOWN OF
WEST GARDINER
KENNEBEC COUNTY
FOOTING AND PILE PLAN
ABUTMENT NO. 2

SHEET 8 OF 17 AUGUSTA, MAINE March 1972

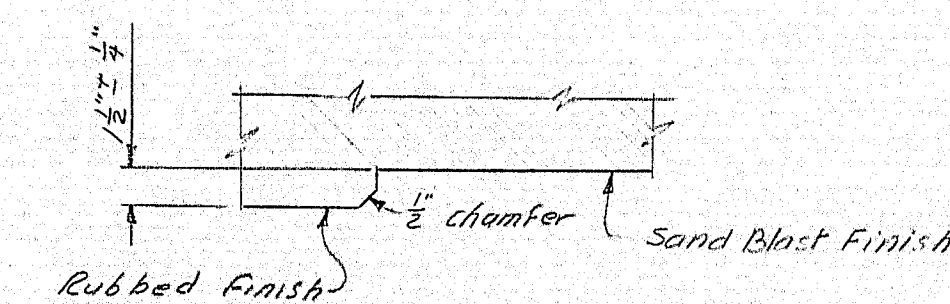
148-103

S. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-5(8)	11	53



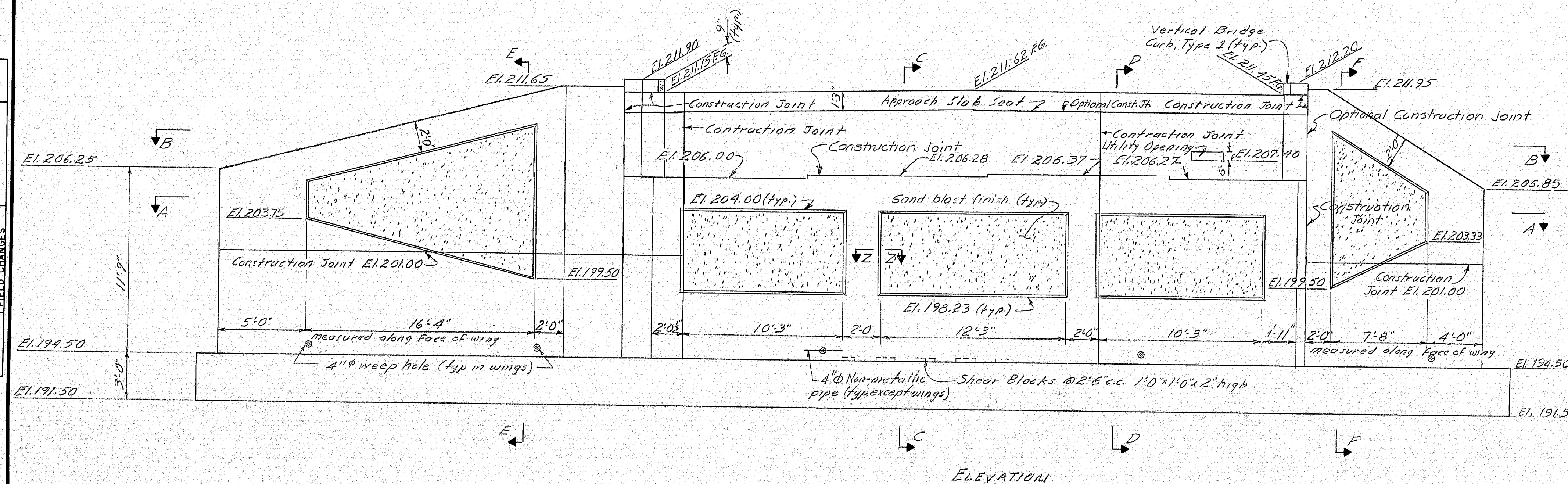
Note: Contractor shall provide an opening in backwall for utilities. After the utilities are installed the contractor shall seal the opening with concrete as directed by the Engineer.

PLAN



REFERENCES

- For Footing & Pile Plan, see sheet "B"
- For Pile notes, see sheet "5"
- For Abutment Notes, see sheet "6"
- For Abutment Sections, see sheet "10"
- For End Post Details, see sheet "1d"
- For Approach slab, see sheet "1d"
- For Armored Joint Details, see sheet "1d" & Standard Detail BD 104-71.
- For Architectural Treatment Notes, see sheet "6"



ELEVATION

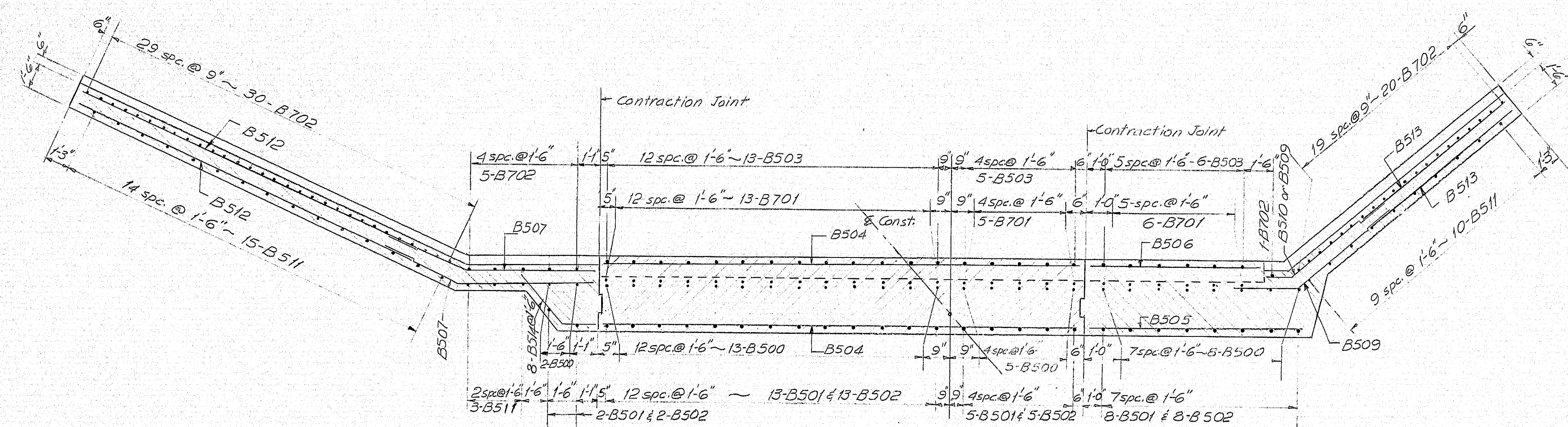
PLANS	DESIGN - DETAILED	BY	DATE	REVISIONS	
				NO.	DATE
		MMG	1/71		
		KLS	3/72		

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
POND ROAD
OVER
INTERSTATE-95
IN THE TOWN OF
WEST GARDINER
KENNEBEC COUNTY
ABUTMENT NO. 2

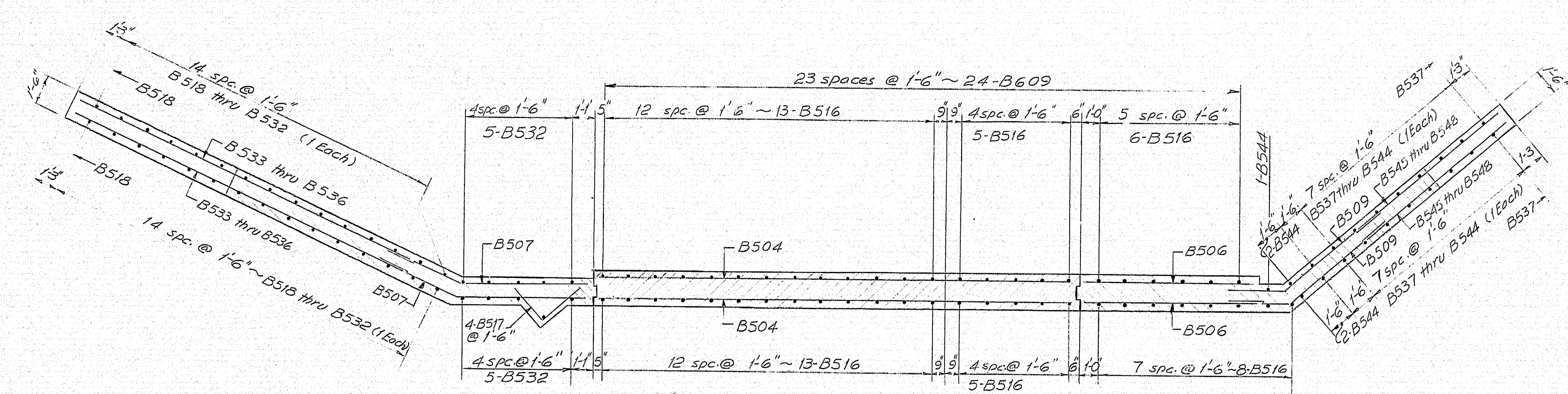
SHEET 9 OF 17 AUGUSTA, MAINE Feb. 1972

148-104

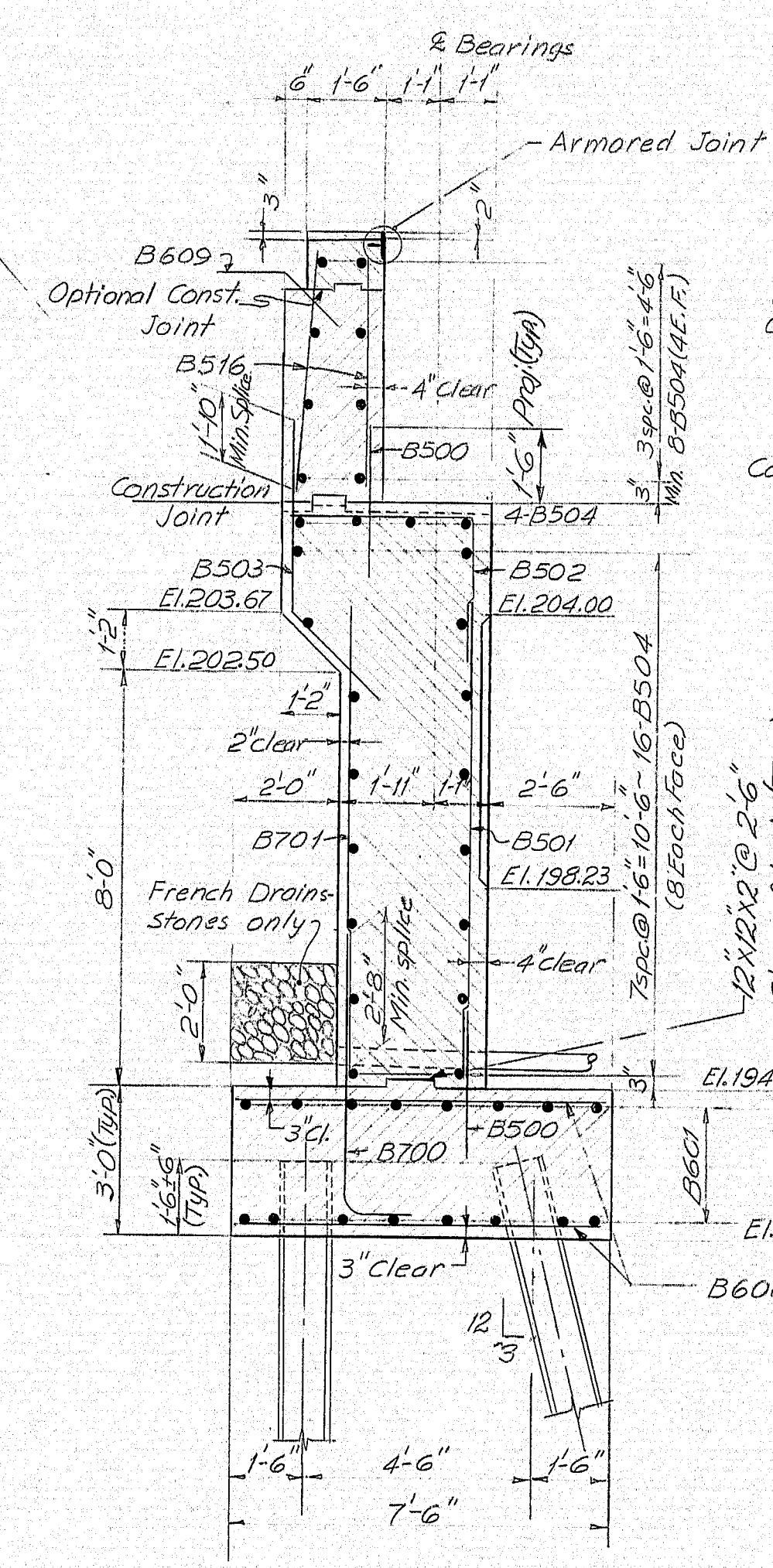
S. P. R.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-5(8)	12	53



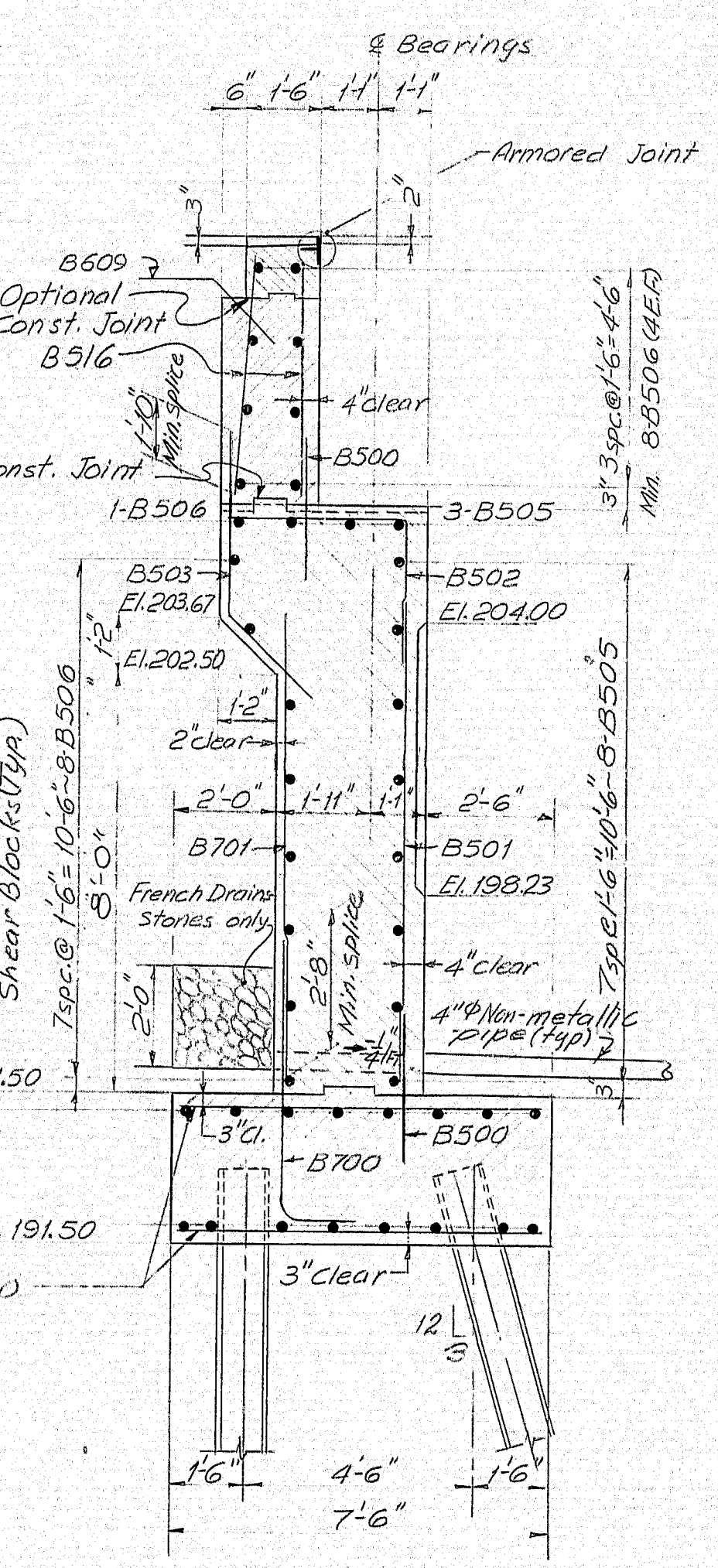
SECTION A-A



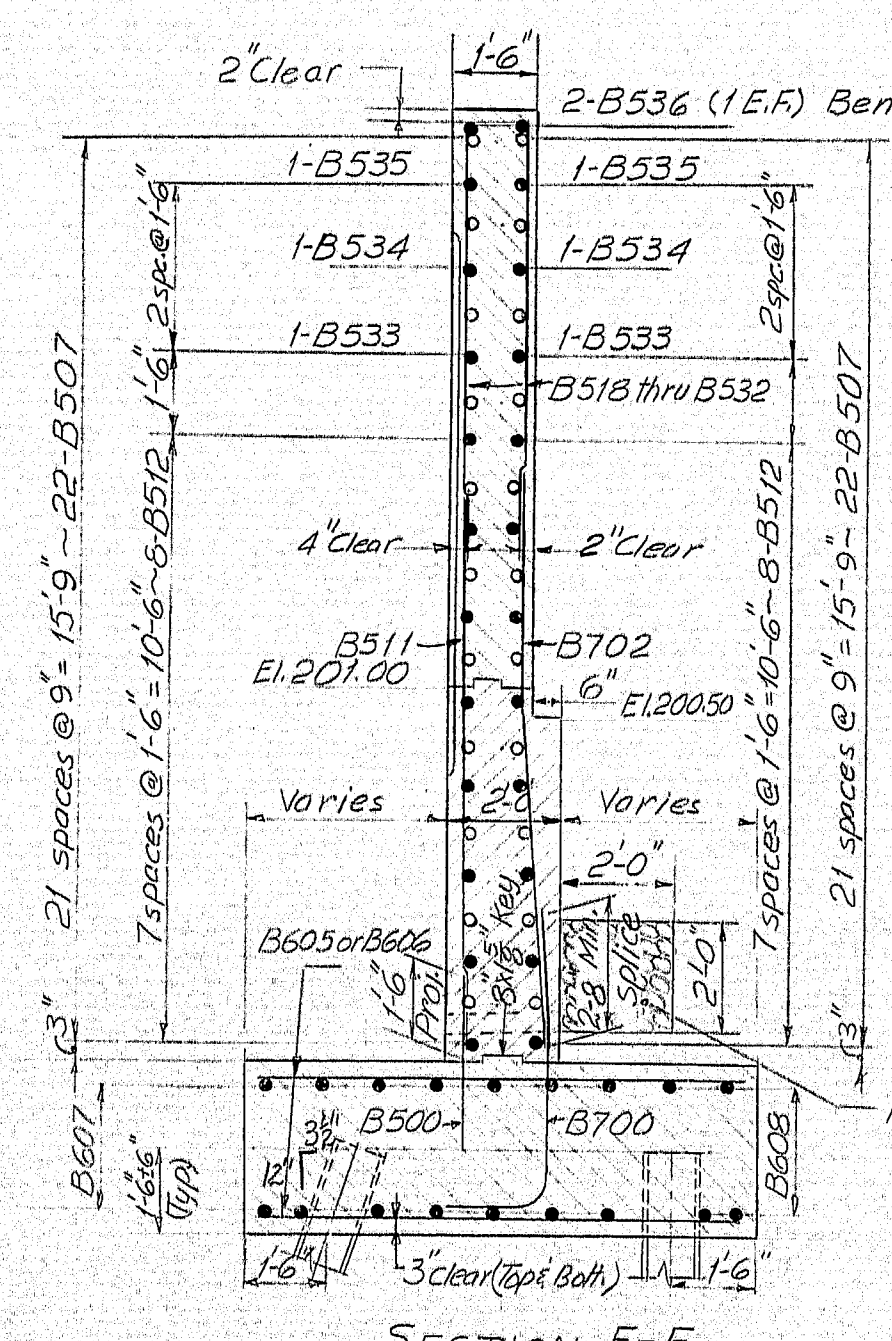
SECTION B-B



SECTION C-C



SECTION D-D



Plan view of bridge deck showing dimensions and bearings. The deck is 3'-6" wide. The layout includes several rectangular sections with internal dimensions and bearings. Key dimensions include 4'-6", 2'-6", 3'-3", 5'-9", 1'-6", 1'-6" (Typ), 5'-9", 3'-3", 2'-6", and 4'-6". Bearings are indicated for various sections, including 19°33', 14°9', 19°3', 14°9', 3°14'P, and 5°2. A note indicates "Skew 10°28". The plan view is labeled "Construction" and includes stationing information: "Sta. 33+68.79 along Q Pond Road" and "Sta. 438+86.97 along Q Median I-95".

[illegible][illegible]

 ELEVATION

SECTION A-A SECTION B-B SECTION C-C

SECTION D-D

SECTION E-E

- NOTES:
- 1- Chamfer all exposed edges of concrete $\frac{1}{2}"$
 - 2- Reinforcing steel to have 2" clear cover except as noted.
 - 3- Place reinforcing steel in pier cap to clear anchor bolts.
 - 4- Top of footing elevation may be raised to have 3 min. footing thickness if the ledge is found to be higher than shown. Length of P1002 & spacing of P501 shall be adjusted to fit.

REFERENCES:

For bearing pedestal details, see Standard Details
BD 100-70
For reinforcing steel schedule, see Sheet #16

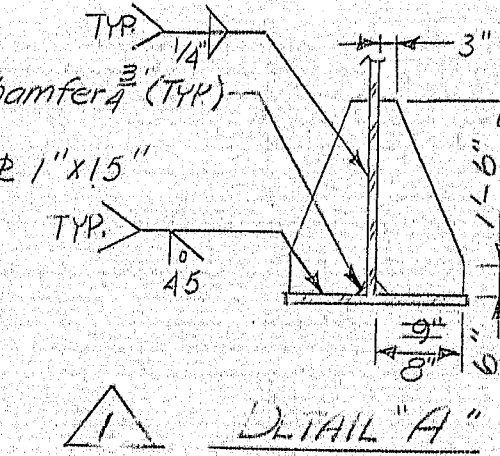
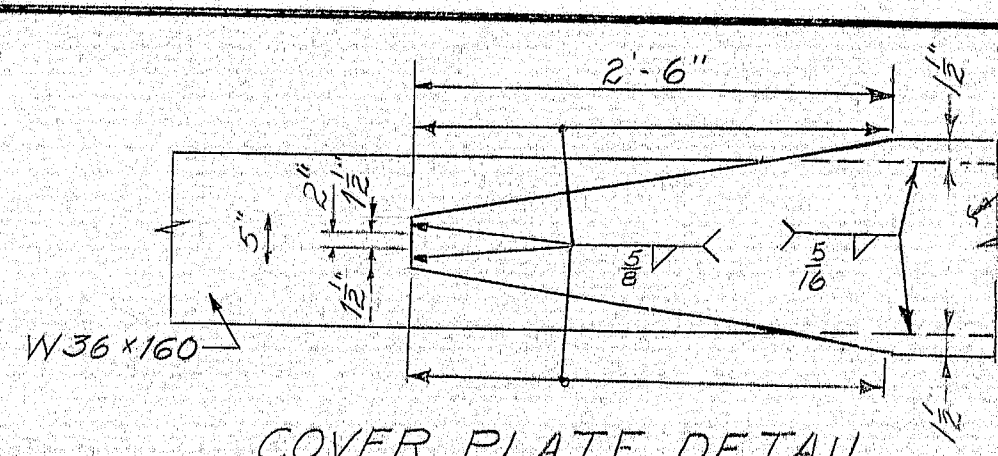
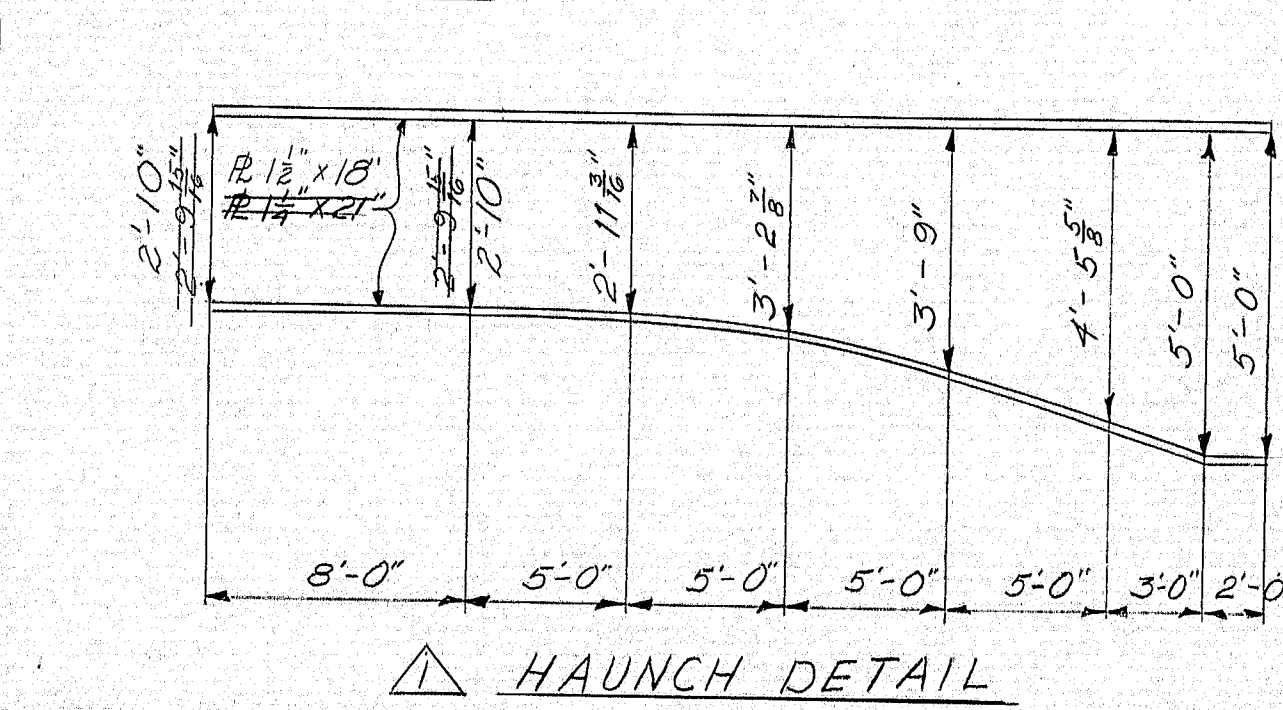
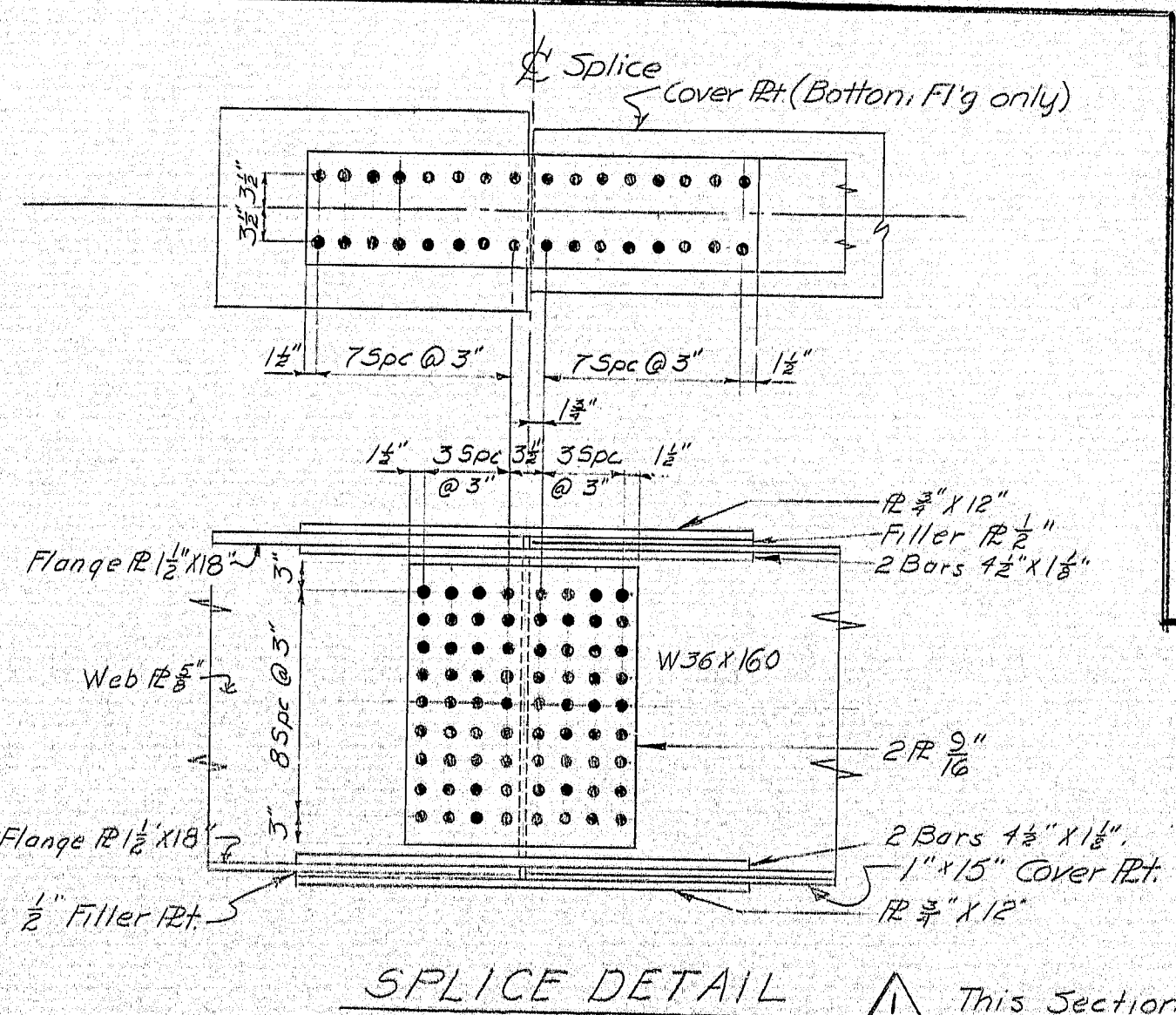
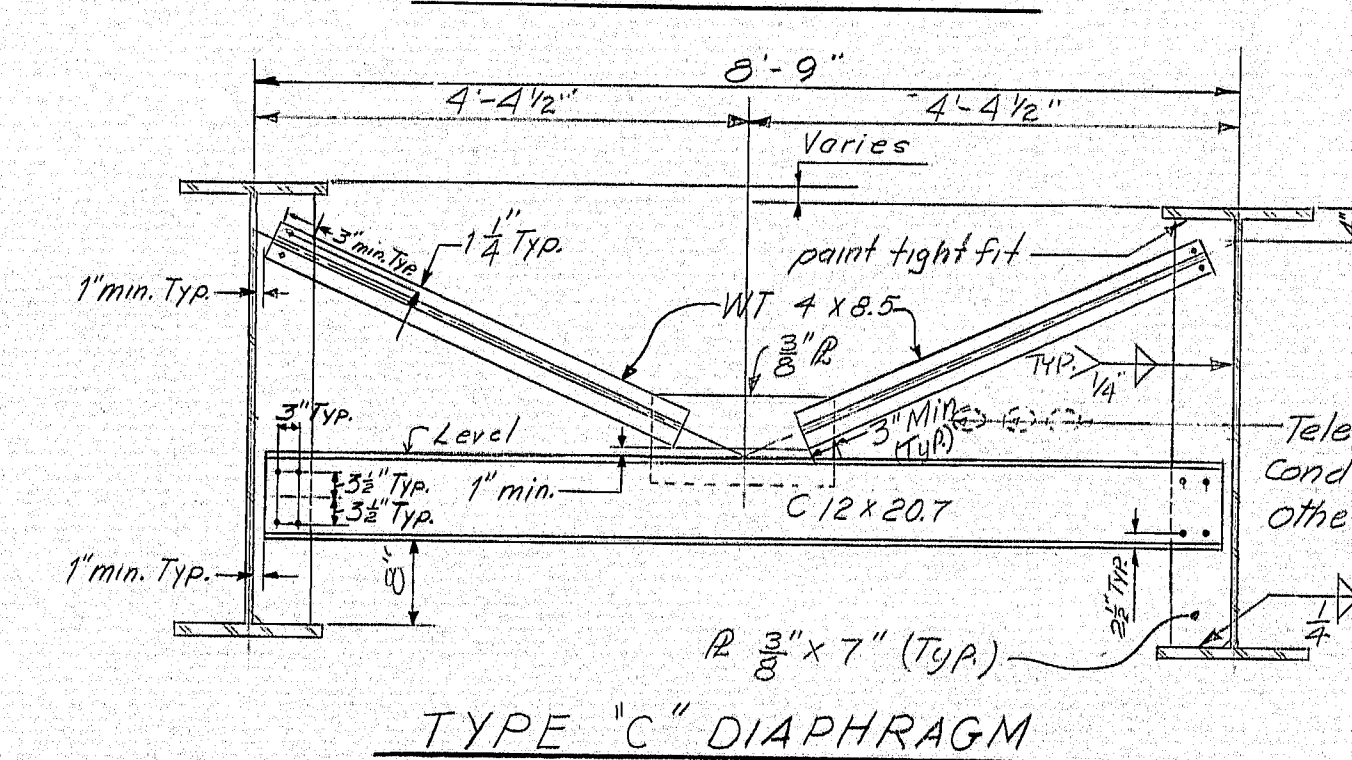
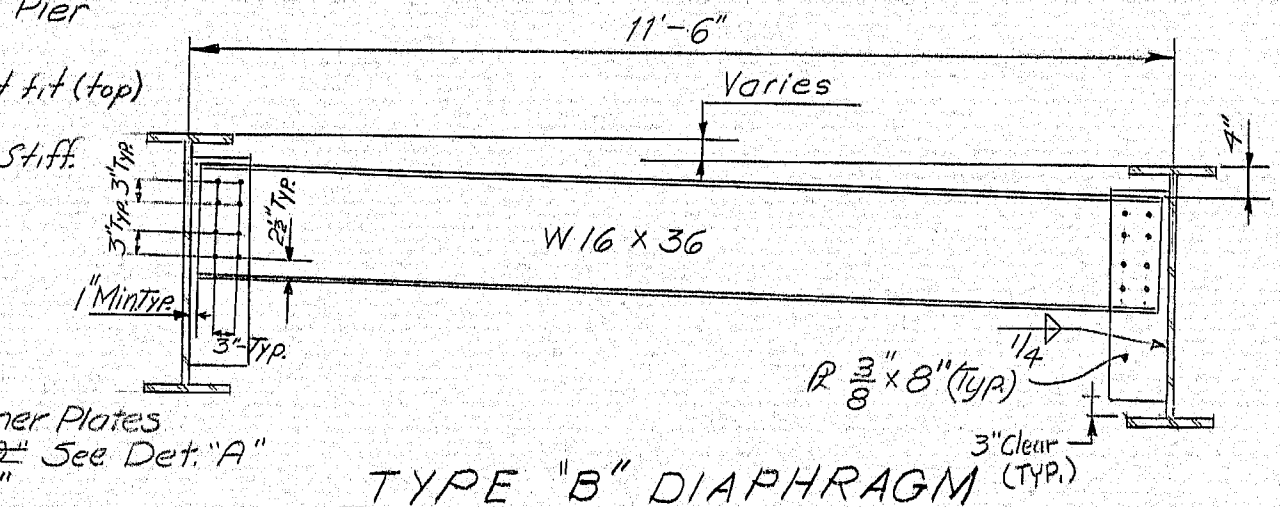
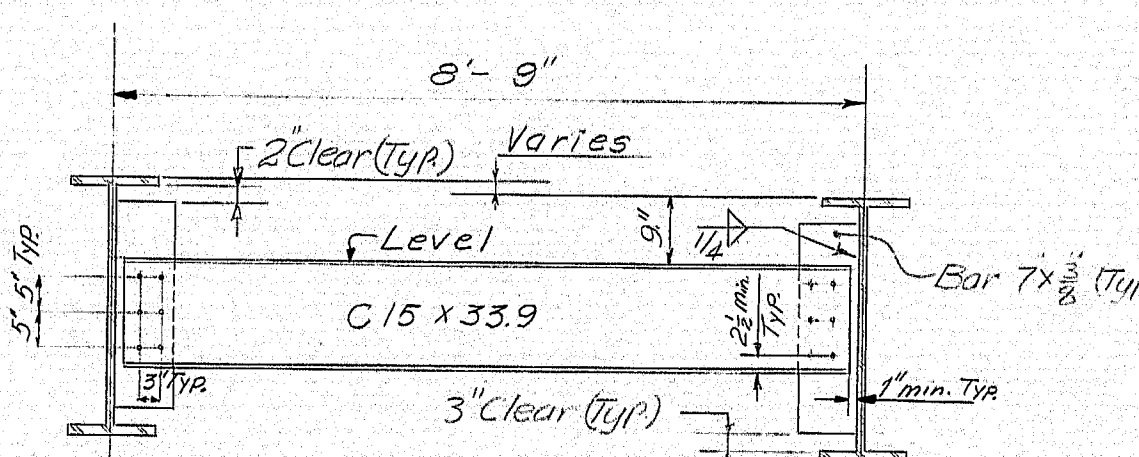
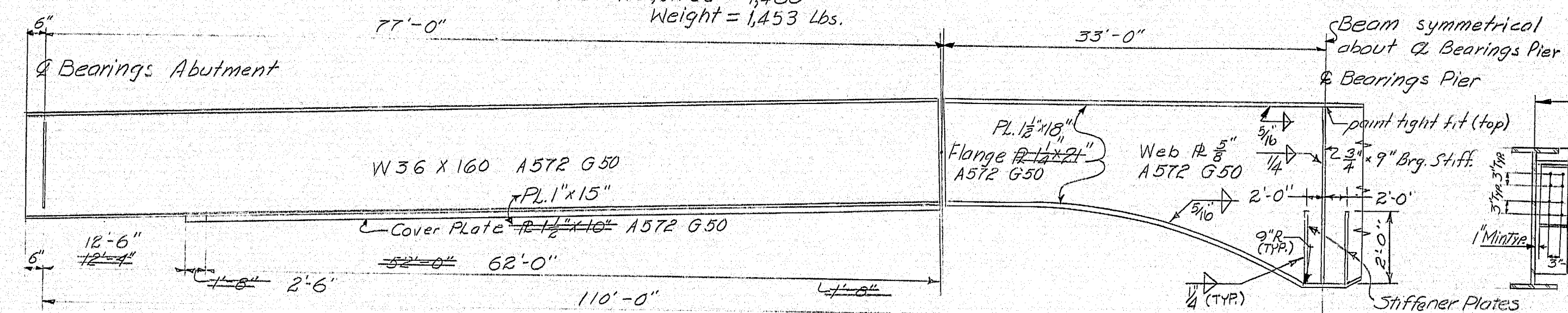
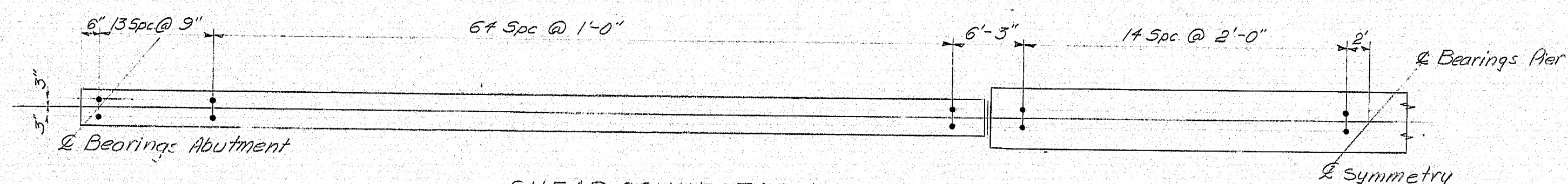
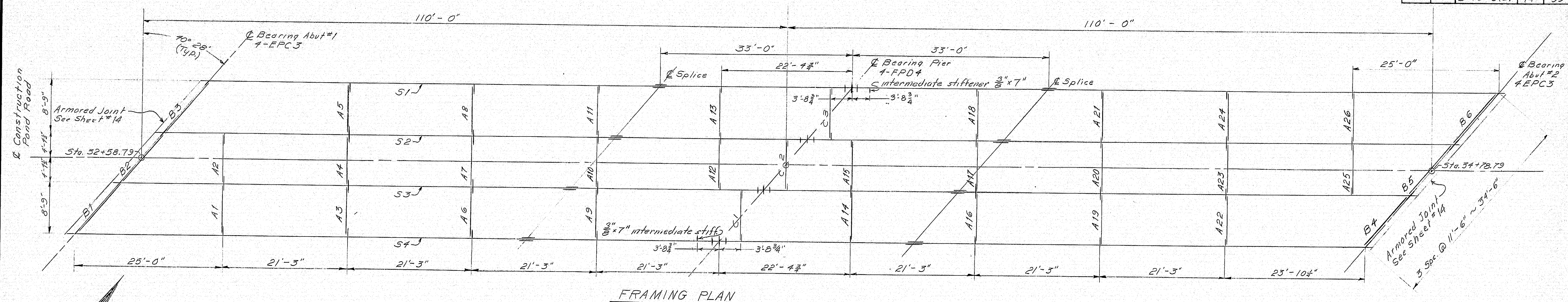
Journal of Management Inquiry 21(1) 3-15

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
POND ROAD
OVER
INTERSTATE-95
IN THE TOWN OF
WEST GARDINER
KENNEBEC COUNTY
PIER

SHEET 11 OF 17 AUGUSTA, MAINE Feb. 1972

148-106

B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-5(8)	14	53



- ## FABRICATION NOTES
- 1.----- All dimensions are horizontal or vertical except at splice detail.
 - 2.----- Splice plate material shall conform with the requirements of ASTM A572 Gr. 50, except filler plates may be A36 and mild fasts will not be req'd. For filler plates.
 - 3.----- All bolts shall be $\frac{1}{2}"$ H.S. and holes shall be $\frac{1}{16}"$ ϕ .
 - 4.----- Intermediate stiffeners shall have a paint tight fit at top flange and $\frac{1}{4}"$ fillet weld at bottom flange.
 - 5.----- Bearing stiffener plates at pier shall extend to the bottom flange and shall be fastened to the bottom flange with a full penetration groove weld or ground to bear.
 - 6.----- Diaphragms at abutments and pier shall be plumb after superstructure slab is in place. Intermediate diaphragms may be plumb or normal to beams.
 - 7.----- Camber ordinates, as shown, are computed to compensate for all dead load deflections and for the curvature of the finish grade profile.
 - 8.----- Two transverse welds per beam will be allowed in the web of welded beams. These welds shall be a minimum distance of 10' from the E bearing of pier.
 - 9.----- One longitudinal weld per beam will be allowed in the web of welded beams. Feathered edges between longitudinal welds and bottom flanges will not be allowed.
 - 10.----- Any portions of longitudinal or transverse welds closer than 18" to the top of the web shall be considered Tension splices and shall be tested in accordance with Supplemental Specifications, Section 504, Welding, paragraph 607(h).
 - 11.----- Minimum edge distance for all bolt holes shall be $1\frac{1}{2}"$ unless otherwise noted.
- For Shear connector details, see sheet BD 104-71
For Camber diagram, see sheet #13

For Shear connector details, see sheet BD 104-7
For camber diagram, see sheet #13

⚠ Revised Splice, Cover Plate,
Haunch Details 7-10-72 M.M.G.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
POND ROAD
OVER
INTERSTATE-95
IN THE TOWN OF
WEST GARDINER
KENNEBEC COUNTY
FRAMING PLAN AND
STRUCTURAL STEEL DETAIL

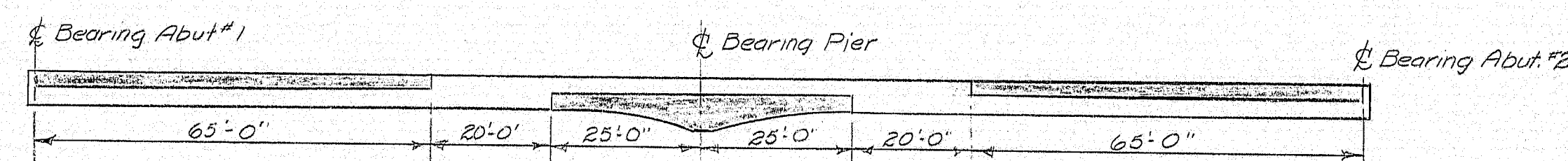
148-107

203-1 2080

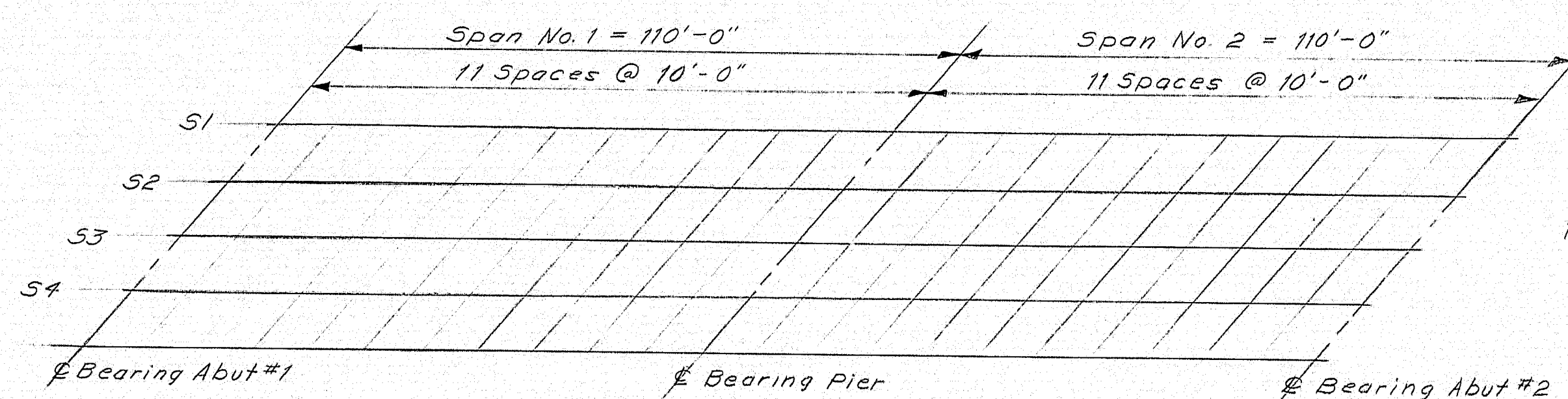
BOTTOM OF SLAB ELEVATIONS																								
SPAN No. 1													SPAN No. 2											
Beam Point	Abut #1	10'-0"	20'-0"	30'-0"	40'-0"	50'-0"	60'-0"	70'-0"	80'-0"	90'-0"	100'-0"	Pier	10'-0"	20'-0"	30'-0"	40'-0"	50'-0"	60'-0"	70'-0"	80'-0"	90'-0"	100'-0"	Abut #2	Beam Point
Beam S1	210.36	210.57	210.75	210.90	211.01	211.07	211.10	211.10	211.08	211.05	211.04	211.03	211.03	211.04	211.06	211.07	211.07	211.03	210.96	210.85	210.69	210.50	210.29	Beam S1
Beam S2	210.45	210.67	210.86	211.01	211.13	211.20	211.24	211.25	211.24	211.22	211.21	211.21	211.22	211.24	211.27	211.29	211.29	211.27	211.20	211.10	210.95	210.77	210.56	Beam S2
Beam S3	210.34	210.57	210.77	210.94	211.06	211.14	211.19	211.21	211.20	211.19	211.19	211.20	211.22	211.25	211.29	211.32	211.33	211.31	211.26	211.16	211.02	210.85	210.65	Beam S3
Beam S4	210.05	210.29	210.50	210.67	210.80	210.90	210.95	210.97	210.98	210.98	210.99	211.01	211.03	211.07	211.12	211.16	211.18	211.17	211.12	211.03	210.91	210.74	210.55	Beam S4
*Defl. 1	.0000	.0171	.0308	.0402	.0443	.0428	.0366	.0271	.0164	.0073	.0018	.0000	.0018	.0073	.0164	.0271	.0366	.0428	.0443	.0402	.0308	.0171	.0000	*Defl. 1
*Defl. 2	.0000	.0788	.1417	.1842	.2024	.1956	.1670	.1232	.0740	.0325	.0077	.0000	.0077	.0325	.0740	.1232	.1670	.1956	.2024	.1842	.1417	.0788	.0000	*Defl. 2
*Defl. 3	.0000	.0141	.0256	.0338	.0381	.0382	.0343	.0273	.0177	.0082	.0020	.0000	.0020	.0082	.0177	.0273	.0343	.0382	.0381	.0338	.0256	.0141	.0000	*Defl. 3

*DEFLECTION DEFINITIONS (in feet).
 Defl. 1 = deflection caused by steel loads.
 Defl. 2 = deflection caused by fluid concrete loads.
 Defl. 3 = deflection caused by superimposed loads.

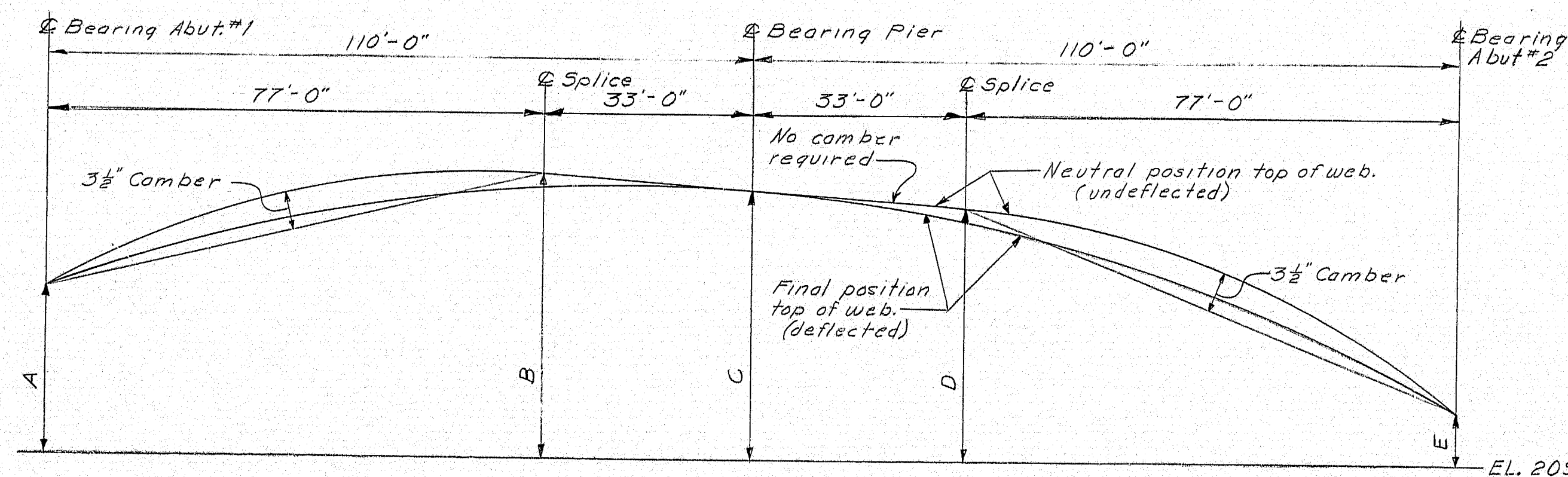
NOTE:
 Bottom of slab elevations have been adjusted to compensate for concrete dead load deflections (fluid and superimposed) use in conformance with sub-section 502.10(a) of the specifications except shear connectors may be installed after bottom of slab elevations are determined.



NOTE: Areas of the beam which will always be in compression. All other areas will be in tension or areas which have stress reversal.

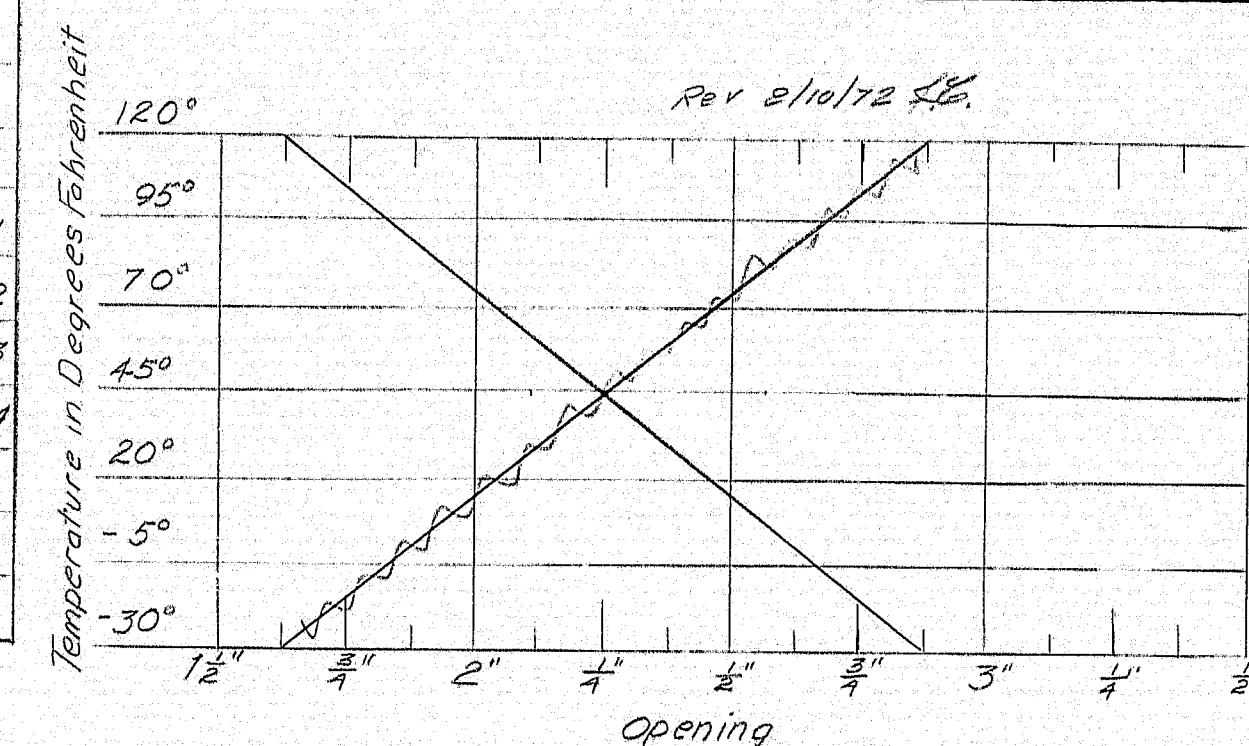


BLOCKING POINT DIAGRAM



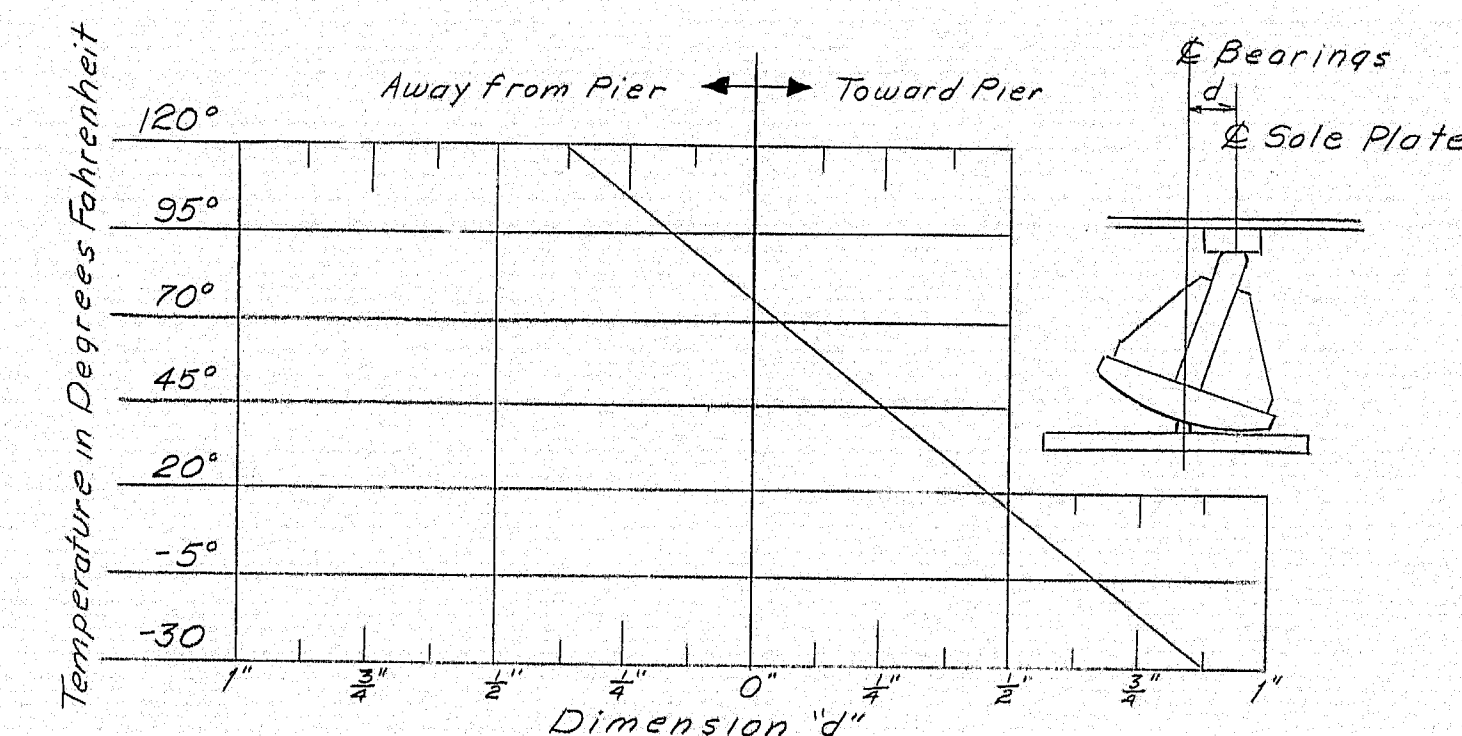
CAMBER DIAGRAM

BEAM	A	B	C	D	E
S1	1'-1 1/2"	1'-10"	1'-9 3/4"	1'-9 3/4"	1'-1"
S2	1'-2 7/8"	1'-11 3/4"	2'-0"	2'-0 1/4"	1'-4 1/2"
S3	1'-1 5/8"	1'-11 3/8"	2'-0"	2'-0 1/2"	1'-5 3/8"
S4	0'-10 1/2"	1'-8 3/4"	1'-9 3/8"	1'-10 1/2"	1'-4 1/2"

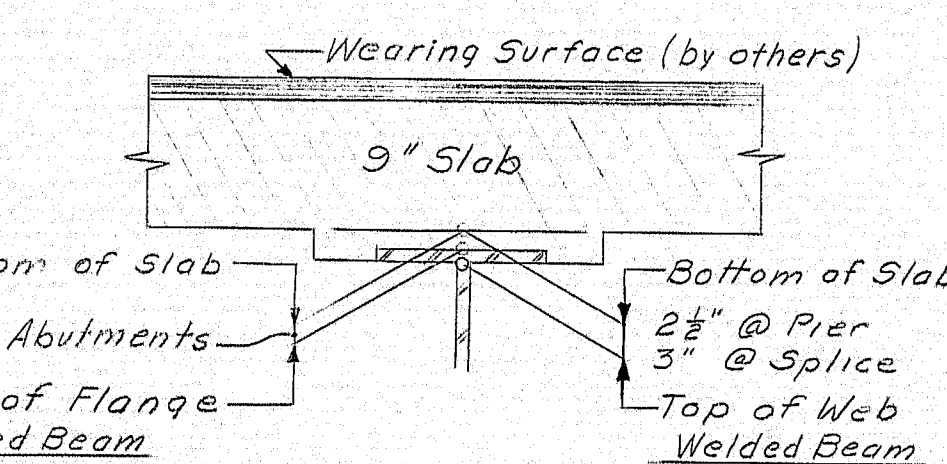


EXPANSION JOINT SETTING TABLE

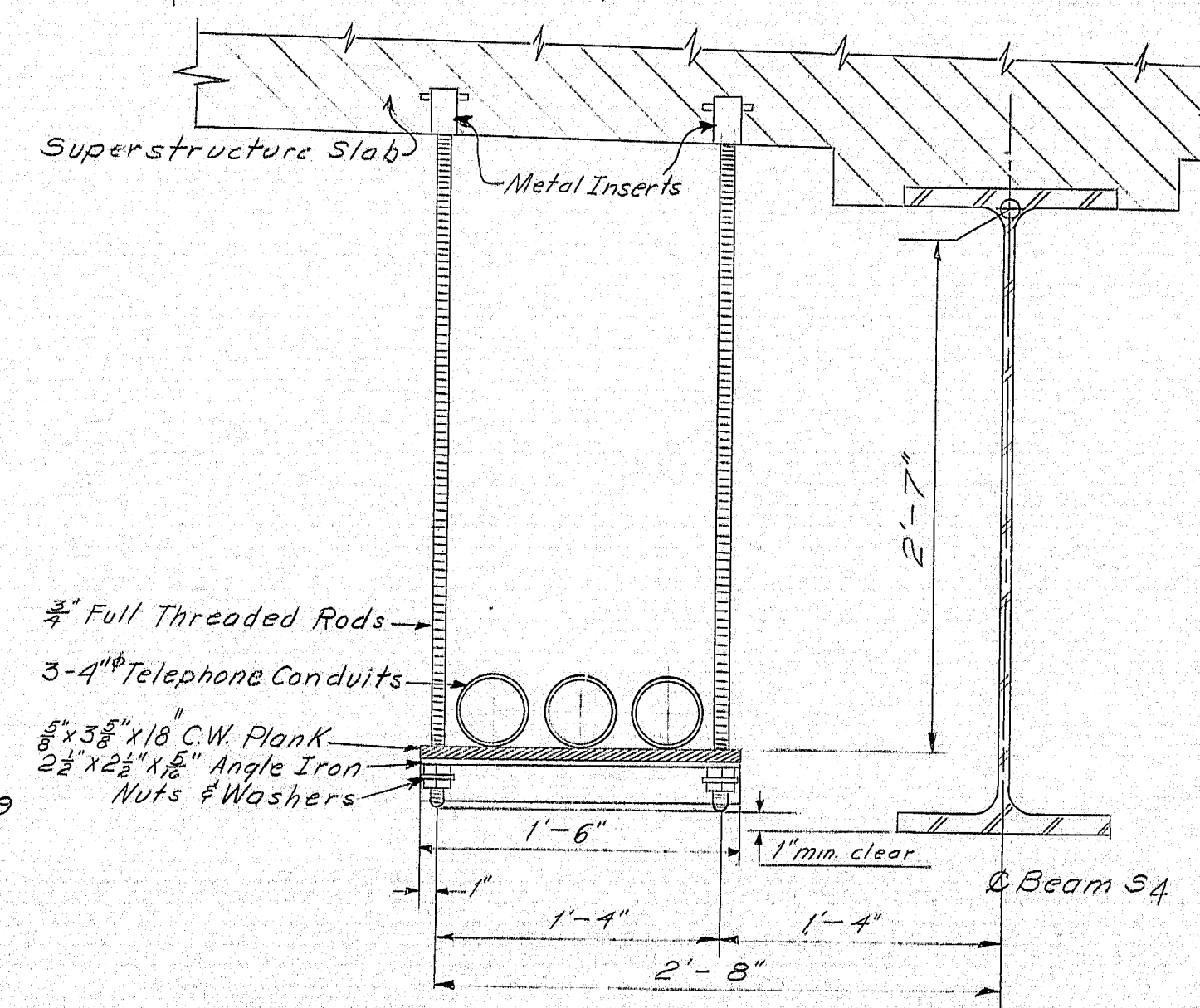
Note: Opening requirements shown above are for the preformed elastic joint sealer detailed on sheet 14. If different sealer is used, the opening requirements shall be modified by the Engineer.



EXPANSION PEDESTAL SETTING CHART
 (For use before slab is placed)



BLOCKING DETAIL
 (Do not use for construction)



CONDUIT SUPPORT ASSEMBLY

- SUPPORT ASSEMBLY NOTES
- 1.- All Metal Support Assembly parts shall be galvanized.
 - 2.- Conduit and Support Assembly except inserts shall be supplied and installed by the utility owner.
 - 3.- See sheet 15 of 16 for insert detail and location.

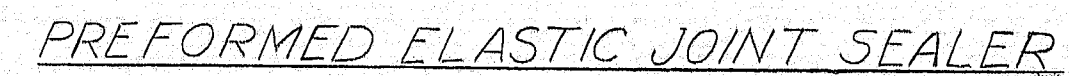
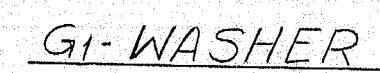
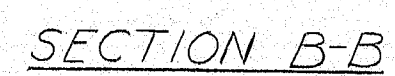
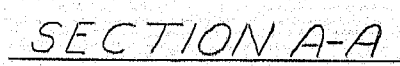
STATE OF MAINE
 DEPARTMENT OF TRANSPORTATION
 POND ROAD
 OVER
 INTERSTATE-95
 IN THE TOWN OF
 WEST GARDINER
 KENNEBEC COUNTY
 BLOCKING AND CAMBER

SHEET 13 OF 17 AUGUSTA, MAINE Feb. 1972

148-108

DATE	BY	DESIGN - DETAILED	REVISIONS	FIELD CHANGES
2/12/72	AWL			
	KDS			

PLANS



ARMORED JOINT NOTES

- ## REFERENCES

- Slot holes in the guard rail beam $1\frac{1}{2} \times 2\frac{1}{2}$. Furnish one standard nut & one lock nut per bolt (At End Posts attached to Superstructure Slab only) (Guard Rail Beam by others)

PLAN

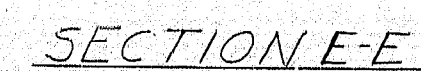
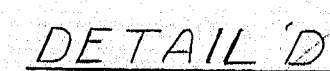
At North End Abutment #1
South End Abutment #2



At South End Abutment #1 &
North End Abutment #2

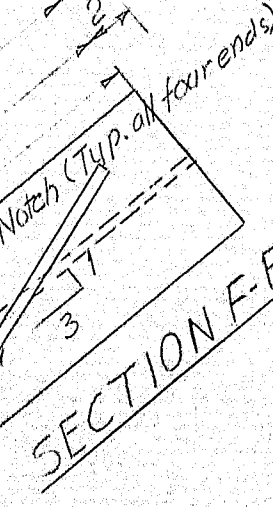
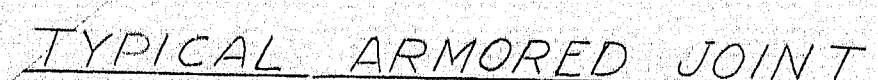
END POST DETAILS

Note: End Post concrete shall be incidental to Item 502.26
All bolts, nuts and washers shall be incidental to Item 502.26



APPROX. CH SLAB

Abutment #1 shown, Abutment #2 similar


$$T_{yp} > \frac{1}{4} V \tau^{-5}$$

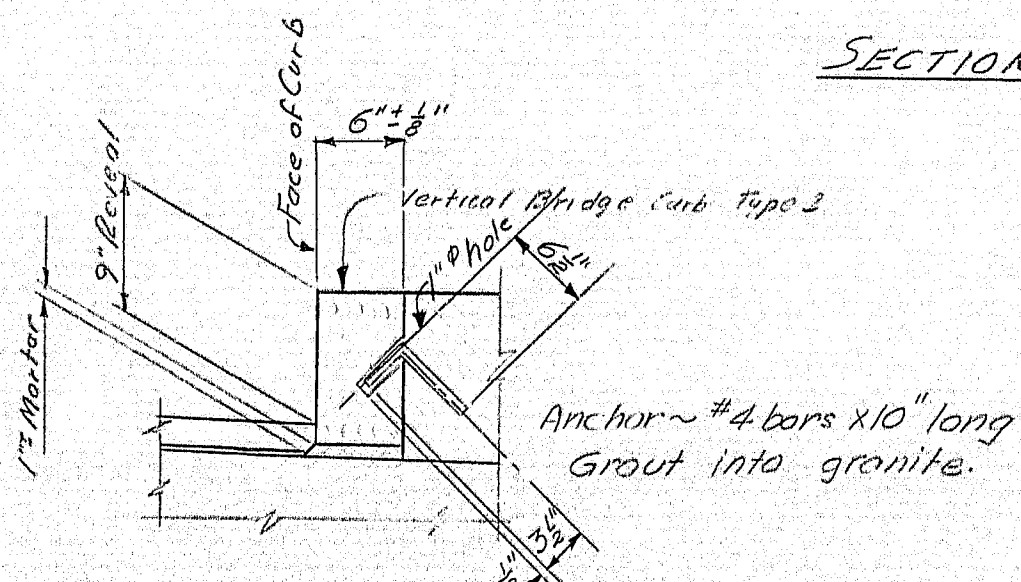
SHEET 14 OF 17 AUGUSTA, MAINE Feb. 1972

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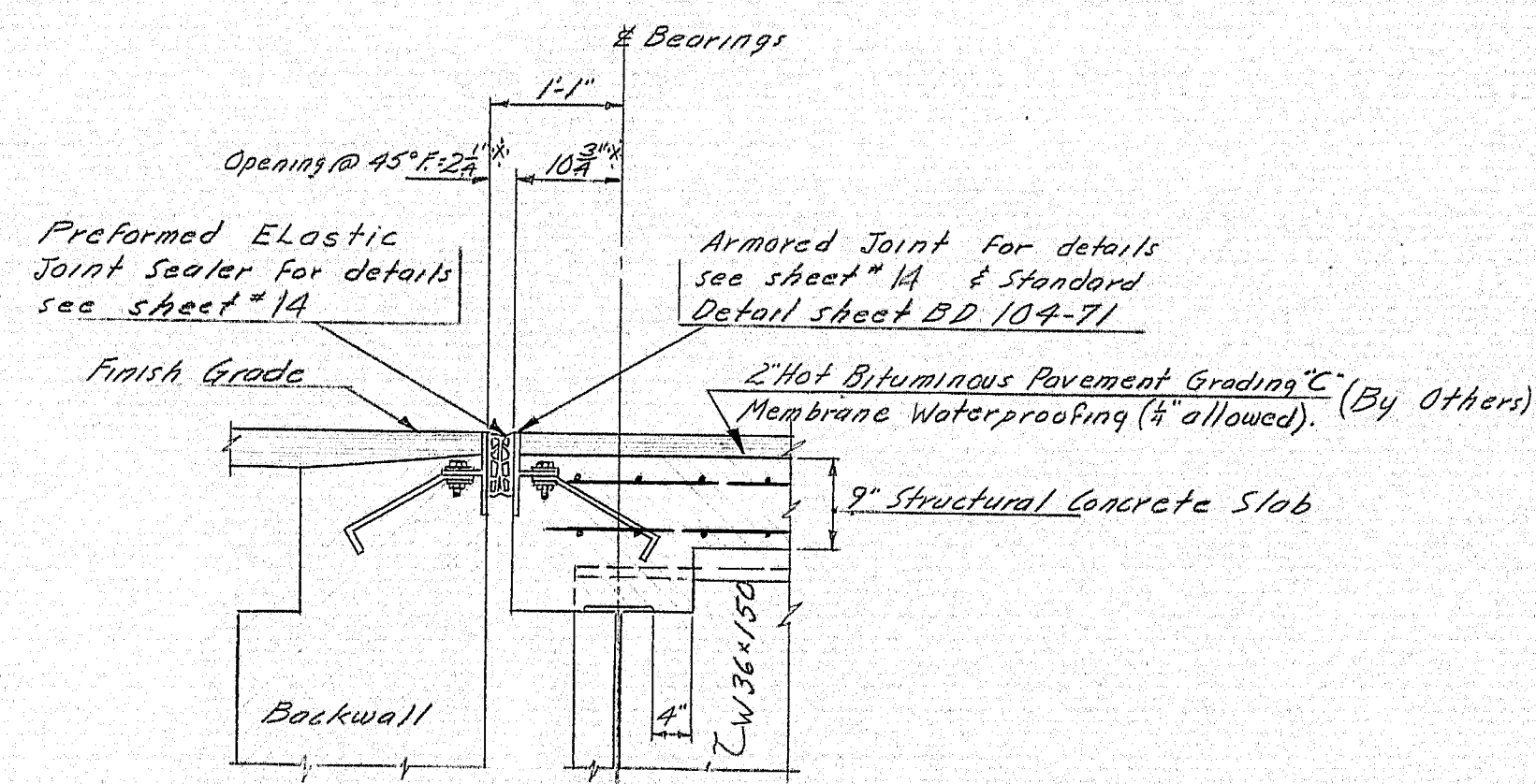
[illegible][illegible]

METAL INSERT

1. Other configurations may be used if approved by the Engineer.
2. Metal inserts shall be threaded to receive $\frac{3}{4}$ inch diameter bolts with National Coarse threads. Inserts shall have a minimum working load of 2,500 pounds, and a minimum ultimate strength of 9,000 pounds.
3. Inserts will be paid for under Item Number 504.74.
4. See blocking and camber sheet for details of Conduit Support Assembly.
5. BB Inserts required.



Mortar for bedding and jointing Granite Curb shall contain an approved non-shrink additive.



REFERENCES:

- For Armored Joint Detail see sheet*14
 & Standard Detail sheet BD 104-71.
 For Drain Detail see standard sheet
 BD 104-71 (Type "Drain No.1 shall be used")
 For Performed Elastic Joint Sealer
 see sheet*14
 For 2-Bor aluminum bridge rail see
 standard sheet BD 106-6X.

- STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
POND ROAD
OVER
INTERSTATE-95
IN THE TOWN OF
WEST GARDINER
KENNEBEC COUNTY
SUPERSTRUCTURE SLAB
- SHEET 15 OF 17 AUGUSTA, MAINE Feb 1972

SHEET 15 OF 17 AUGUSTA, MAINE Feb 1972

REINFORCING STEEL SCHEDULE																															
STRAIGHT BARS				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				ABUTMENT #1 CONT.				ABUTMENT #2 CONT.					ABUTMENT #1															
A500	87	3'-0"	Footing & Backwall Dowels	A600	108	7'-2"	Footing	B541	2	6'-1"	Wing (South)	A502	28	7'-3"	L	3'-7"	3'-8"														
A501	28	10'-0"	Breastwall	A601	16	48'-0"		B542	2	6'-11"		A503	24	6'-6"	V				4'-0"	2'-6"				1'-9"		Breastwall					
A504	28	25'-10"	Breastwall	A602	20	8'-3"		B543	2	7'-9"		A507	22	14'-7"	V				7'-8"	6'-11"				2'-11"		Breastwall					
A505	11	11'-10"	Breastwall	A603	16	18'-0"		B544	7	8'-7"		A508	22	13'-8"	V				7'-1"	6'-7"				2'-9"		Wing (South) Corner					
A506	17	9'-4"	Breastwall & Backwall	A604	4	12'-0"		B545	2	5'-2"		A509	30	9'-11"	V				6'-11"	3'-0"				1'-11 1/4"		Wing (North) Corner					
A511	30	10'-3"	Wings	A605	30	6'-8"		B546	2	5'-2"		A510	14	6'-11"	V				6'-1"	10"				6 1/2"		Wing (North) Corner					
A512	16	20'-0"	Wing (South)	A606	26	8'-6"		B547	2	2'-3"		A514	8	5'-9"	V				1'-7"	4'-2"				3'-2"		Breastwall					
A513	16	10'-0"	Wing (North)	A607	14	28'-0"		B548	2	16'-0"		A538	2	11'-1"	V				7'-1"	4'-0"				1'-8 1/2"		Wing (South)					
A516	50	4'-9"	Backwall	A608	4	22'-0"						A552	2	5'-7"	V				2'-7"	3'-0"				1'-11 1/4"		Wing (North)					
												A517	4	5'-0"	L	2'-6"	2'-6"										Backwall				
A518	2	3'-9"	Wing (South)					B600	110	7'-0"	Footing	A609	24	4'-6"	V				2'-3"	2'-3"				1'-7 1/4"		Approach Slab Seat					
A519	2	4'-1"		A701	24	10'-0"	Breastwall	B601	16	47'-6"																					
A520	2	4'-5"						B602	18	8'-3"		A700	85	6'-7"	J	1'-0"	7"	5'-0"							6"	4 1/2"	Footing Dowels				
A521	2	4'-9"					ABUTMENT #2	B603	16	17'-0"		A702	61	10'-6"	V				4'-5 3/4"	6'-0 1/4"				6"		Wings & Breastwall					
A522	2	5'-1"		B500	84	3'-0"	Footing & Backwall Dowels	B604	4	13'-6"						ABUTMENT #2															
A523	2	5'-5"		B501	28	9'-6"	Breastwall	B605	30	6'-6"					L	3'-6"	3'-8"									Breastwall					
A524	2	5'-9"		B504	28	26'-0"	Breastwall & Backwall	B606	24	8'-3"		B502	28	7'-2"	L	3'-6"	3'-8"									Breastwall					
A525	2	6'-1"		B505	11	11'-11"	Breastwall	B607	14	26'-0"		B503	24	7'-6"	V				5'-0"	2'-6"				1'-9"		Breastwall					
A526	2	6'-5"		B506	17	9'-4"	Breastwall	B608	4	20'-0"		B507	44	11'-9"	V				7'-0"	4'-9"				2'-0"		Wing (North)					
A527	2	6'-9"		B511	28	10'-0"	Wings					B509	32	9'-6"	V				6'-6"	3'-0"				1'-11 1/2"		Wing (South)					
A528	2	7'-1"		B512	16	20'-0"	Wing (North)																								

GENERAL NOTES

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

Mark (A 502)	bar size - #5
Mark (P 1001)	bar size - #10
Mark (S 603)	bar size - #6
2. Letter of Marks A, P & S locates bars of Abutments, Piers, and Superstructure parts respectively.
3. Splices in tension bars approved during construction and not shown on Plans shall have a minimum lapped length of 36 bar diameters.

SHEET 16 OF 17 AUGUSTA, MAINE

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[illegible]

Reinforcing Bar: ASTM A615 Grade 60

1. First digit(s) following the letter of the Mark indicates size of reinforcement bar.
Mark (A 502) bar size - #5
Mark (P 1001) bar size - #10
Mark (S 603) bar size - #6
2. Letter of Marks A, B & S locates bars of Abutments, Piers, and Superstructure parts respectively.
3. Splices in tension bars approved during construction and not shown on Plans shall have a minimum lapped length of 36 bar diameters.

SHEET 17 OF 17 AUGUSTA, MAINE

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PLANS	DESIGN - DETAIL	BY	DATE
	CHECKED	MMS	5/72
	REVISIONS	RD3	6/72
	FIELD CHANGES		