F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	295-3(75)50	1	36

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

BUREAU OF HIGHWAYS

PORTLAND

CUMBERLAND COUNTY

MAINE FEDERAL AID INTERSTATE

PROJECT NO. I-295-3(75)50

TOTAL LENGTH 0.0222 MILES

I-295 BRIDGE OVER FRANKLIN STREET

AND

SLOPE PROTECTION AT

DEERING AVE. OVER I-295

RAMP CS-6 OVER RAMP WA-2

I-295 OVER

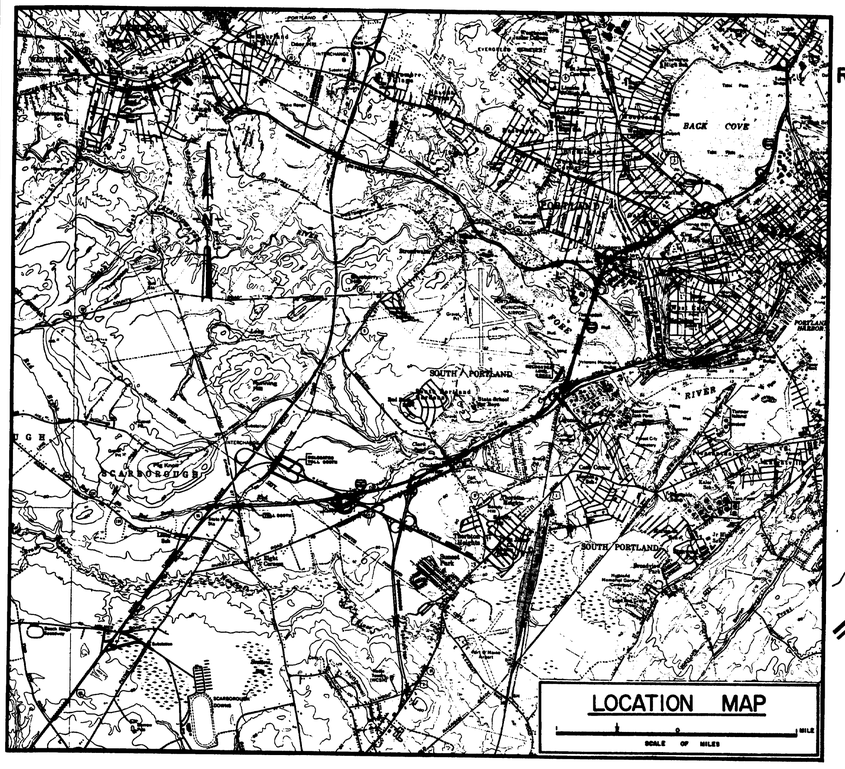
WESTBROOK ARTERIAL

CONVENTIONAL SIGNS

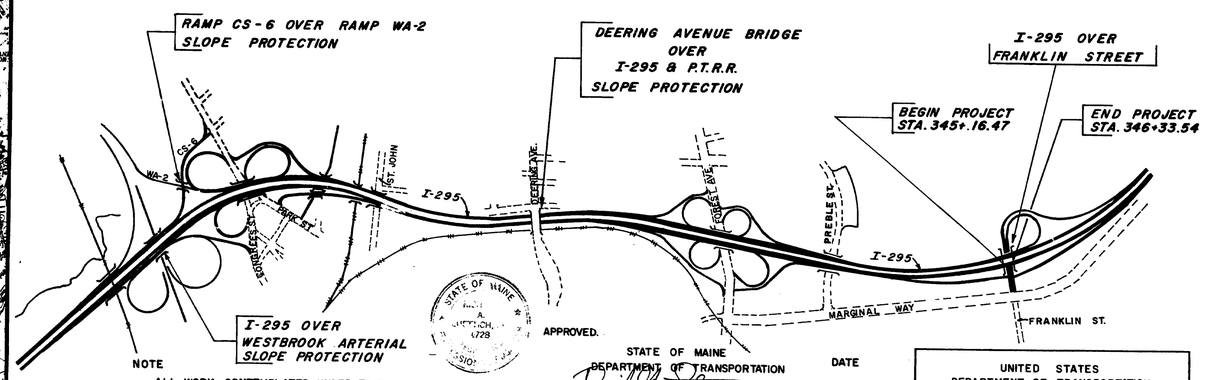
COUNTY LINES
TOWN LINES
PROPERTY LINES
R/W LINES - EXISTING
R/W LINES - NEW - ACCESS CONTROL
R/W LINES - NEW - NO ACCESS CONTROL
CULVERT - EXISTING
CULVERT - PROPOSED
CURBING - EXISTING
CURBING - PROPOSED
TRAVELLED WAY - EXISTING
TRAVELLED WAY - PROPOSED
UNDERGROUND UTILITIES - EXISTING
UNDERGROUND UTILITIES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

INDEX OF SHEETS

SHEET NO.	SUBJECT
1.	TITLE SHEET
2.	QUANTITIES & PROFILE I-295
3.	GENERAL PLAN
4.	FOUNDATION SURVEY
5&6.	BORING DETAILS
7-9.	ABUTMENT FOOTINGS
10-15.	ABUTMENTS & WINGS
16.	ARCHITECTURAL TREATMENT
17.	APPROACH SLABS
18.	SLOPE PROTECTION
19.	STRUCTURAL STEEL
20.	BLOCKING DETAIL
21-23.	SUPERSTRUCTURE
24.	DETAILS
25.	FASCIA & CONDUIT DETAILS
26-27.	REINFORCING STEEL SCHEDULES
28.	SLOPE PROTECTION - DEERING AVENUE
29.	SLOPE PROTECTION - RAMP CS-6 OVER RAMP WA-2
30.	SLOPE PROTECTION - I-295 OVER WESTBROOK ARTERIAL
31-36.	STANDARD DETAILS



LOCATION MAP



NOTE

ALL WORK CONTEMPLATED UNDER THIS CONTRACT SHALL BE GOVERNED BY AND IN CONFORMITY WITH THE STANDARD SPECIFICATIONS (REVISION OF 1958 AND SUPPLEMENTS THERETO, EXCEPT AS MODIFIED ON THE PLANS AND IN THE SPECIAL PROVISIONS.

APPROVED.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

COMMISSIONER — DATE 9-19-73

CHIEF ENGINEER AND BUREAU DIRECTOR — DATE 9-19-73

UNITED STATES
DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
REGION 1

APPROVED:

DIVISION ENGINEER — DATE

No change in plans. Revised As Built by H Cook 11-12-76

146-14

F. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	295-3(73)50	2	36

ESTIMATED QUANTITIES

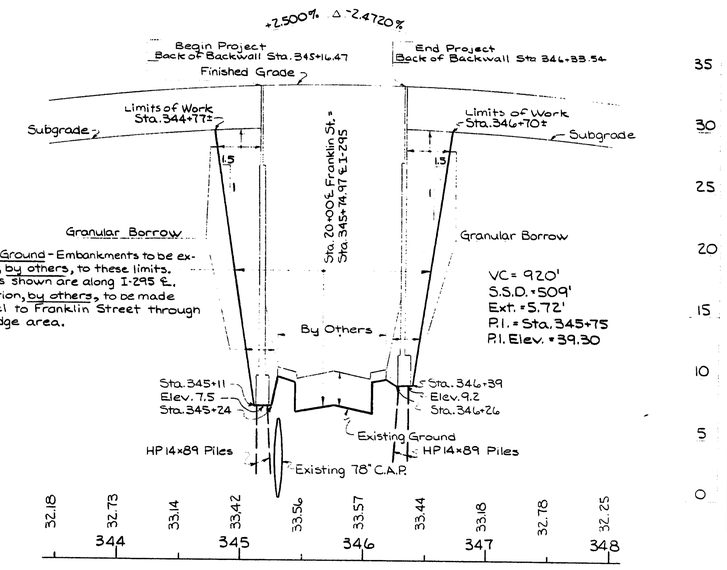
ITEM NO.	DESCRIPTION	QUANTITY	UNIT
203.25	Granular Borrow	6400	C.Y.
206.06	Str. Earth Excav.-Drainage & Minor Strs.	73	C.Y.
206.08	Str. Earth Excav.-Abuts. & Ret. Walls	530	C.Y.
304.10	Aggregate Subbase Course-Gravel	110	C.Y.
501.217	Steel H-beam Piles 89 lbs./ft.	11,900	L.F.
502.21	Structural Concrete, Abuts. & Retaining Walls	1,186	C.Y.
502.26	Structural Concrete, Roadway & Sidewalk Slabs on Steel Bridges	1	L.S.
502.31	Structural Concrete, Approach Slabs	1	L.S.
503.12	Reinforcing Steel, Fab. & Delivered	189740	Lb.
503.13	Reinforcing Steel, Placing	189740	Lb.
504.70	Structural Steel, Fab. & Delivered	1	L.S.
504.71	Structural Steel, Erection	1	L.S.
505.08	Shear Connectors	1	L.S.
506.14	Field Painting, Structural Steel	1	L.S.
507.141	Aluminum Bridge Railing, Type "A"	622	L.F.
513.09	Slope Protection-Port Cem. Concrete	1987	S.Y.
513.11	Slope Protection-Granite Block	360	S.Y.
514.06	Curing Box for Concrete Cylinders	1	Each
515.20	Protective Coating for Concrete Surfaces	260	S.Y.
605.09	6 inch Underdrain Type "B"	380	L.F.
605.10	6 inch Underdrain Outlet	180	L.F.
609.13	Vertical Bridge Curb - Type 1	600	L.F.

ESTIMATED QUANTITIES

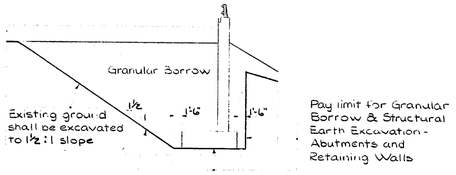
ITEM NO.	DESCRIPTION	QUANTITY	UNIT
618.15	Temporary Seeding	5	Lb.
629.05	Labor, Straight Time	10	M.Hr.
631.171	Truck-small (inc. operator)	10	Hour
631.22	Front End Loader (inc. operator)	10	Hour
638.01	Embedded Work in Structures	1	L.S.
639.08	Field Office, Type A	1	Each
657.201	Seed and Application, Method A	20	Unit
660.21	On-the-Job Training (Bid)	2000	M.H.

ESTIMATED QUANTITIES FOR LUMP SUM ITEMS

502.26	Structural Concrete, Roadway & Sidewalk Slabs on Steel Bridges	328	C.Y.
502.31	Structural Concrete, Approach Slabs	72	C.Y.
504.70	Structural Steel, Fab. & Delivered	438,000	Lb.
504.71	Structural Steel, Erection	438,000	Lb.
505.08	Shear Connectors	2,686	Ea.*
506.14	Field Painting, Structural Steel	438,000	Lb.
638.01	Embedded Work in Structures Approx. 720 L.F. of 2" dia. PVC plus fittings		



PROFILE I-295



TYPICAL WING SECTION SHOWING PAY LIMITS

*Rev.-Lb. changed to Ea. 11-12-73

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

INTERSTATE 295
OVER
FRANKLIN STREET
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY

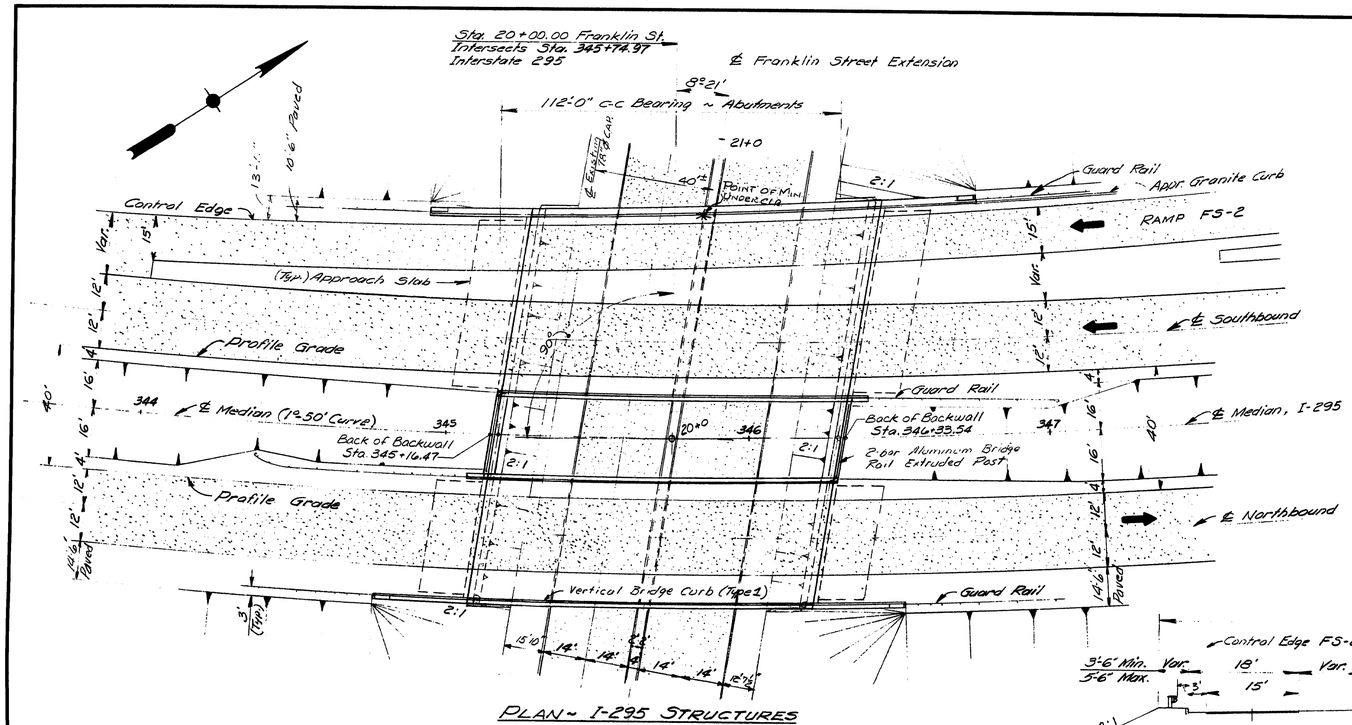
ESTIMATED QUANTITIES

SHEET 2 OF 36 AUGUSTA, MAINE AUGUST 1973

203-1 2060

146-15

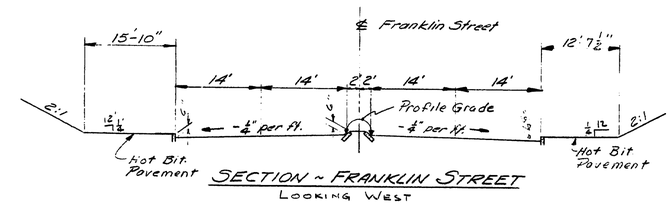
S. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	295-3(75)50	3	36



PLAN ~ I-295 STRUCTURES

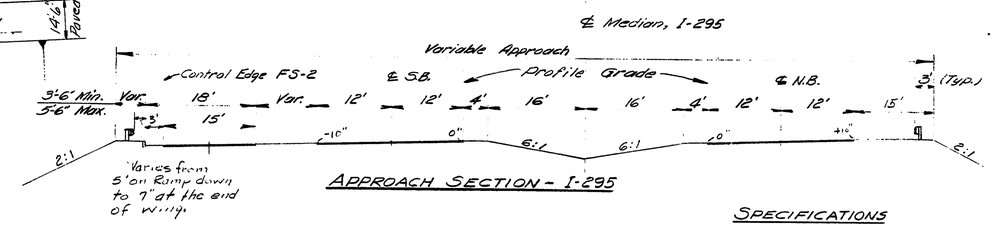
Two 1-Span Structures
Composite Welded Beams

20' 0 20' 40'

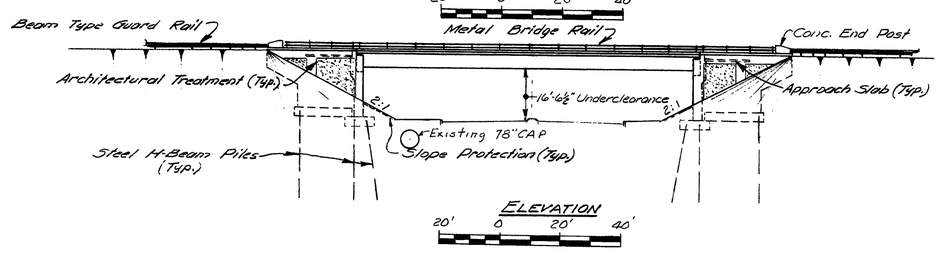


SECTION ~ FRANKLIN STREET

LOOKING WEST



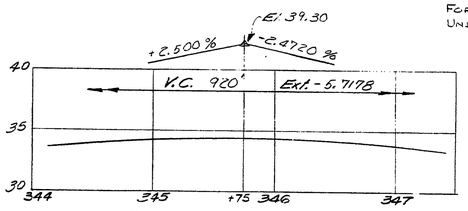
APPROACH SECTION ~ I-295



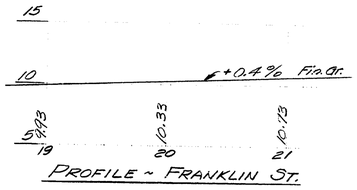
ELEVATION

20' 0 20' 40'

NOTE: THE COMPLETED PROJECT IS SHOWN HERE. FOR A DESCRIPTION OF WORK TO BE COMPLETED UNDER THIS CONTRACT SEE THE DETAILED PLANS



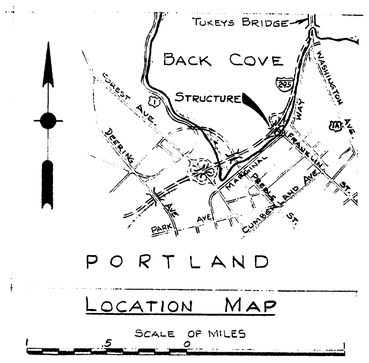
PROFILE GRADE ~ I-295



PROFILE ~ FRANKLIN ST.

TRAFFIC

FRANKLIN ST.		INTERSTATE 295
15,370	ADT 1974	21,990
27,440	ADT 1994	33,070
2,744	DHV	3,307
14%	T% A.D.T.	11%
30 mph	V	50 mph



PORTLAND

LOCATION MAP

SCALE OF MILES

SPECIFICATIONS

DESIGN - A.A.S.H.O. Standard Specifications for Highway Bridges 1969, with Interim Specifications thru 1972

CONTRACT - State of Maine, State Highway Commission, Standard Specifications, Highways and Bridges, Revision of June 1968

LIVE LOADING - HS 20-44, as modified for Interstate Highways.

* Rev. - Slope Protection shelf removed in Elevation View

Bridge Engineer

DESIGN- A.L.L.	BRIDGE NO.
TRACE-	SURVEY-
CHECK-	PLOT-

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

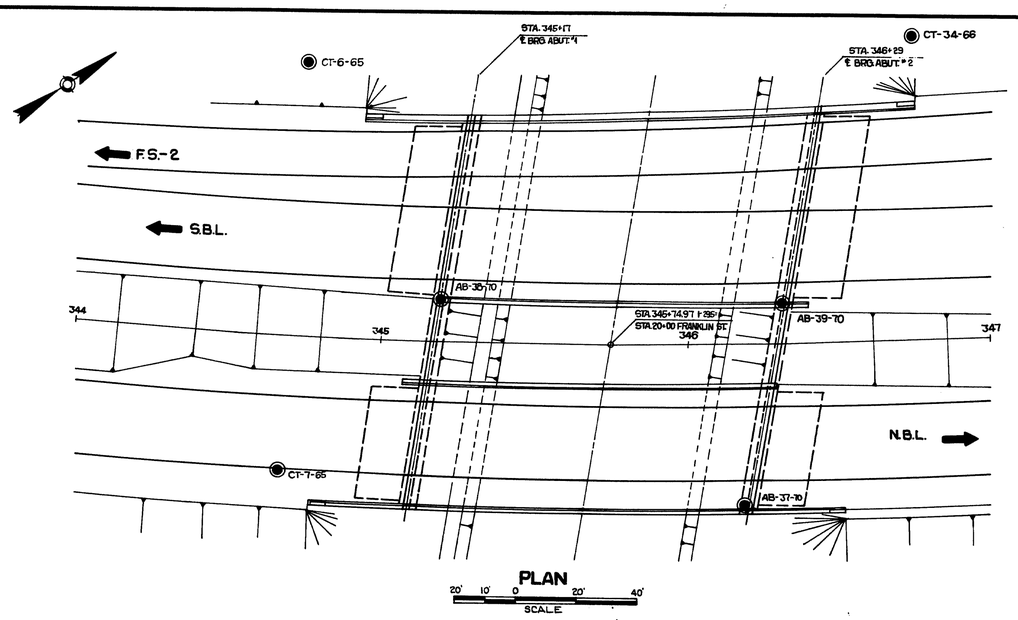
INTERSTATE 295
OVER
FRANKLIN STREET
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY

GENERAL PLAN

SHEET 3 OF 36 AUGUSTA, MAINE AUGUST 1973

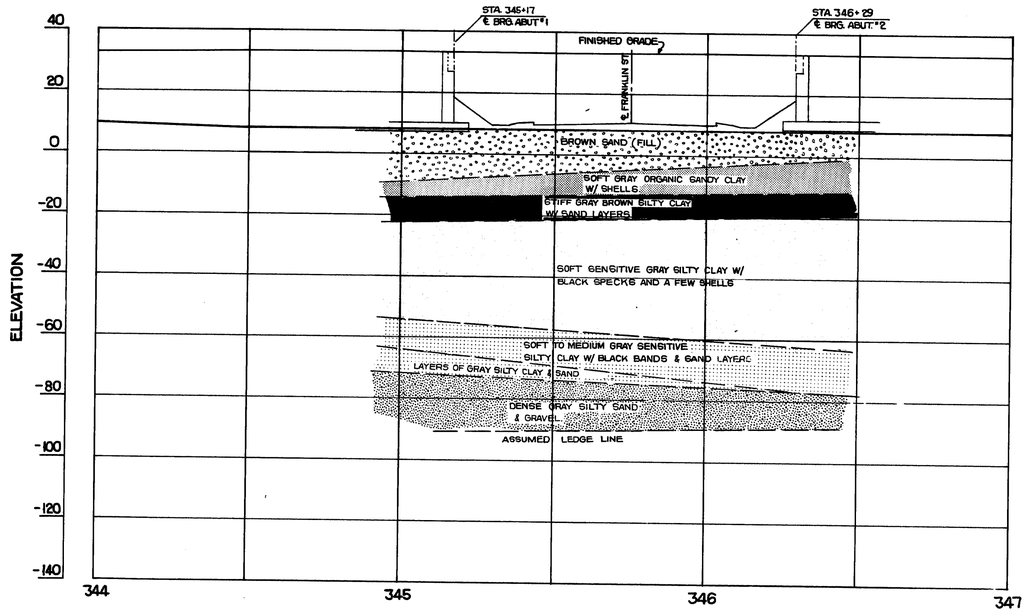
146-16

S. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	295-3(75)50	4	36



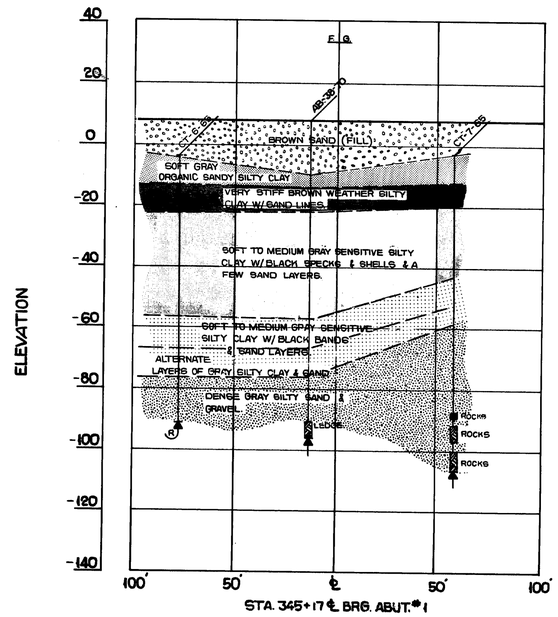
PLAN

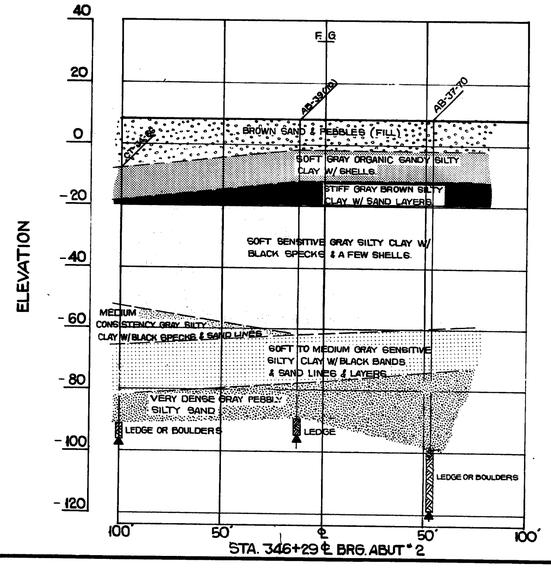
SCALE 20' 10' 0 20' 40'



PROFILE

SCALE 20' 10' 0 20' 40'





PLANS	BY	DATE
DESIGN - DETAILED		
CHECKED		
REVISIONS		
FIELD CHANGES		

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

INTERSTATE 295

OVER

FRANKLIN STREET

IN THE CITY OF

PORTLAND

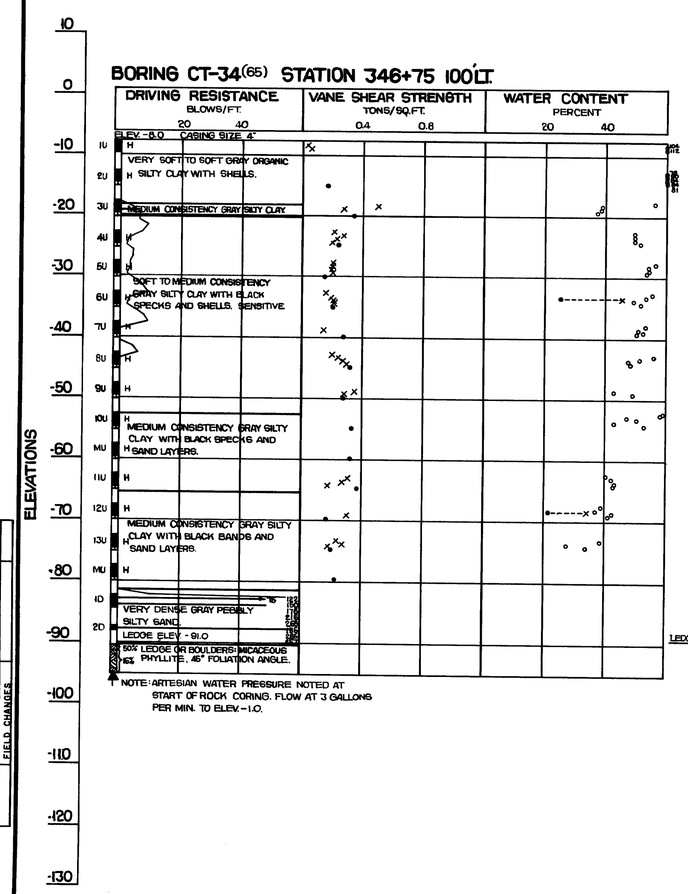
CUMBERLAND COUNTY

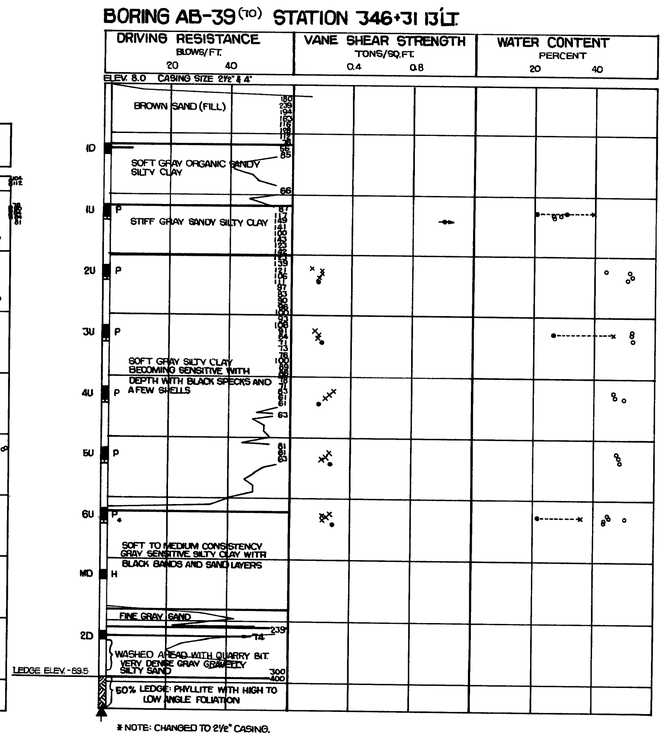
FOUNDATION SURVEY

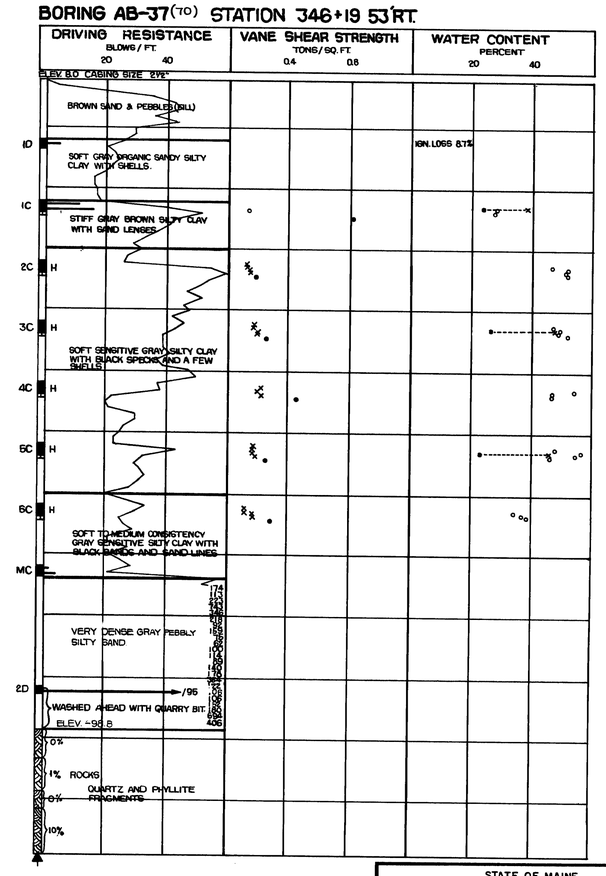
SHEET 4 OF 36 AUGUSTA, MAINE AUGUST 1973

146-17

S.P.R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	295-3(75)50	5	36







BORING NOTES

- All samples and vanes are made ahead of casing
- Water elevation
- 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
- ID S & H sampler #1290's
- IC 2" O.D. 16 ga. seamless tubing
- IU 3½" O.D. 16 ga. seamless tubing
- MD 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.
- H Sampling spoon or seamless tubing driven by static weight of drill rods and hammer
- P Piston sampler
- Field vane test
- Bottom of boring (may not be bottom of soil strata.)
- Locations cored by diamond bit and per cent recovery of rock.

SHEAR NOTES

- ● Field vane shear strengths
- × Laboratory vane shear strengths
- → Shear strengths in excess of capacity of equipment.
- ○ One half unconfined compressive strengths.

WATER CONTENT NOTES

- ○ Natural water contents, given as per cent of dry weight.
- ⊖-× Plastic & liquid limits.
- Ignition losses are given as per cent of dry weight.

PLANS

DESIGN - DETAILED	BY	DATE
CHECKED		
REVISIONS		
FIELD CHANGES		

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

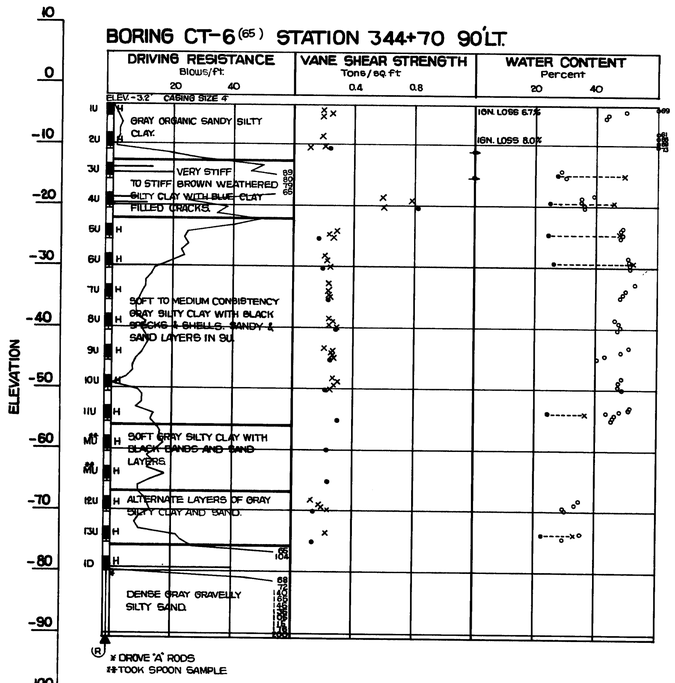
INTERSTATE 295
OVER
FRANKLIN STREET
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY

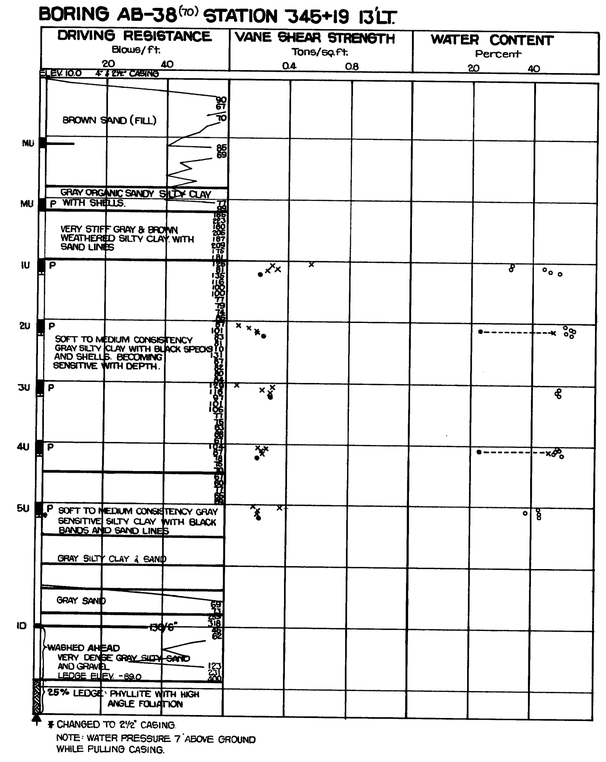
BORING DETAIL

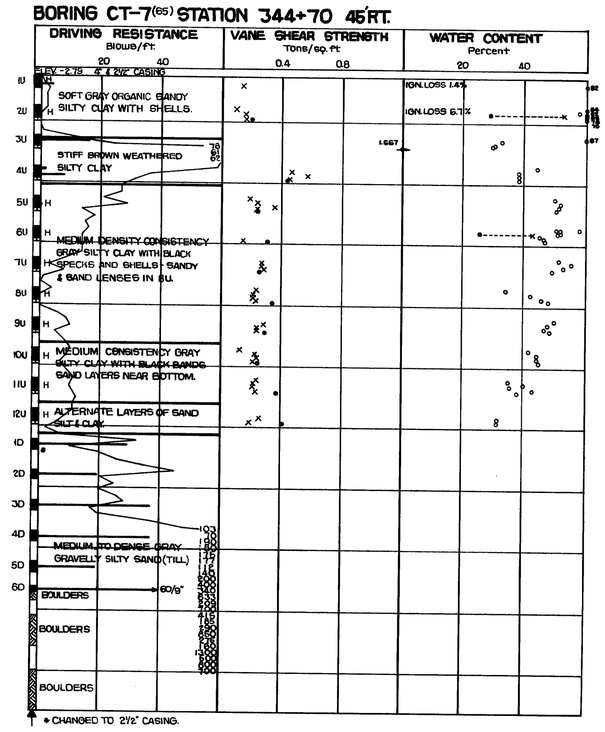
SHEET 5 OF 36 AUGUSTA, MAINE AUGUST 1973

146-18

S. P. R. RES. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	295-3(75)50	6	36







PLANS		
DESIGN - DETAILED	BY	DATE
CHECKED		
REVISIONS		
FIELD CHANGES		

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

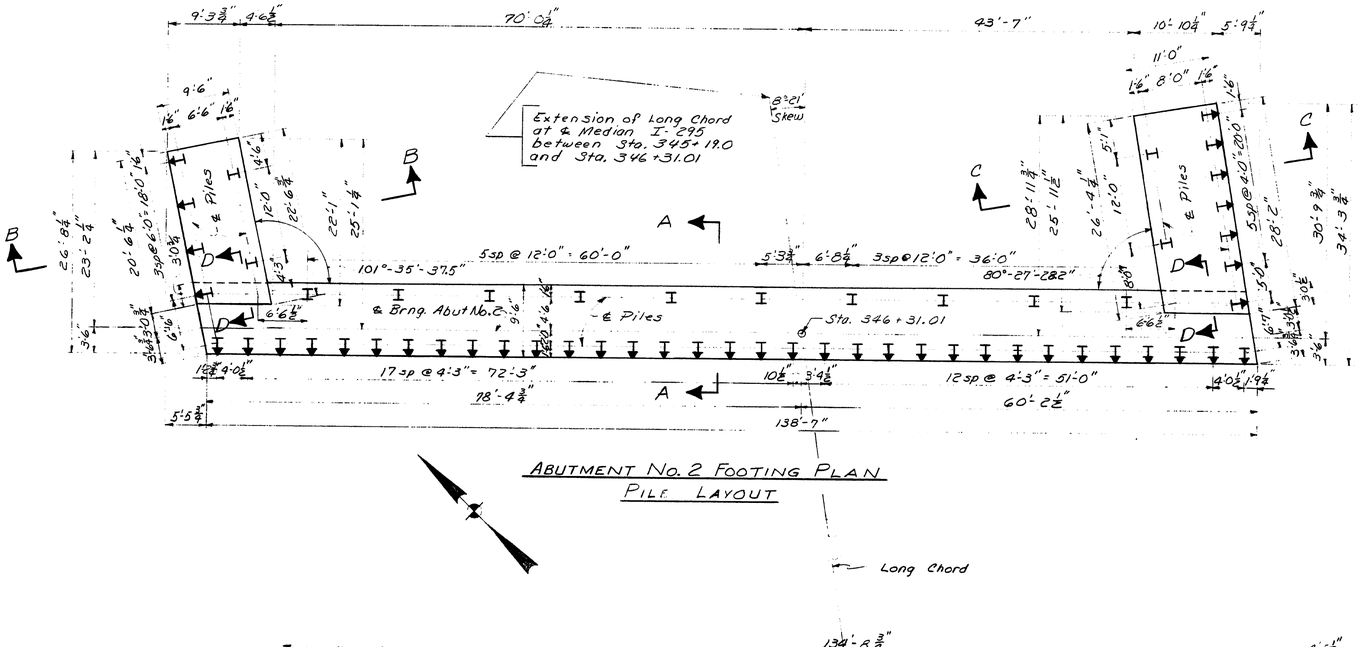
INTERSTATE 295
OVER
FRANKLIN STREET
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY

BORING DETAIL

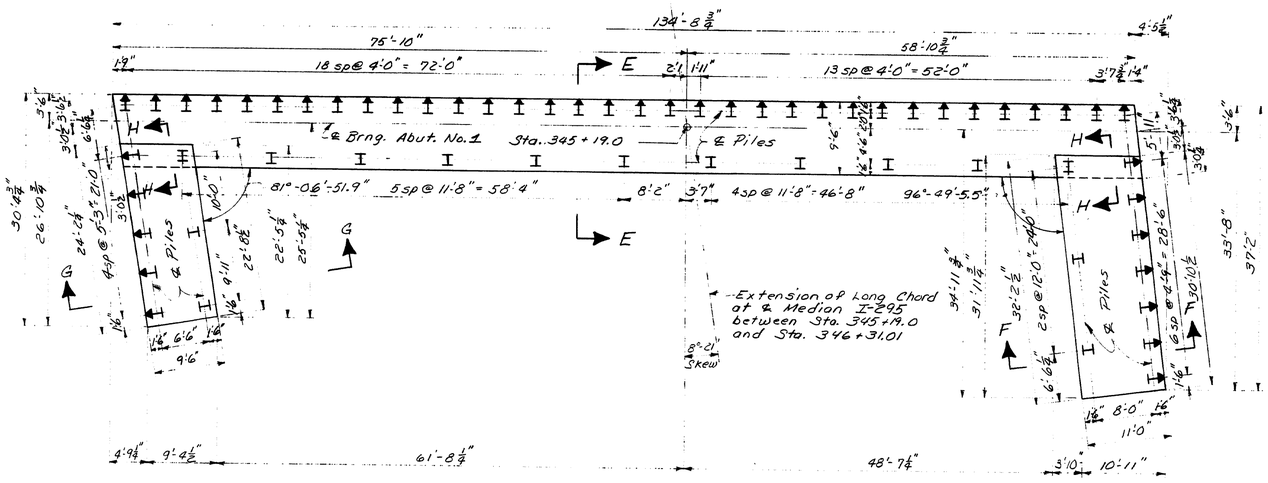
SHEET 6 OF 36 AUGUSTA, MAINE AUGUST 1973

146-19

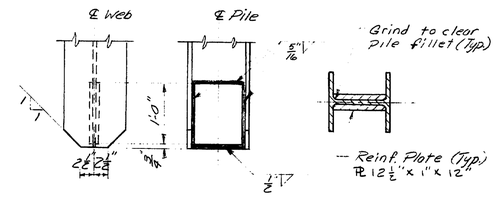
F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	295-3(75)50	7	36



ABUTMENT No. 2 FOOTING PLAN
PILE LAYOUT



ABUTMENT No. 1 FOOTING PLAN
PILE LAYOUT



POINTED REINFORCED PILE TIP
Plates may be shop or field welded

PILE NOTES

1 ---- Piles shall be driven to ledge or practical refusal.
2 ---- All piles shall have pointed reinforced tips.
3 ---- Alternate types of pointed reinforced pile tips may be used if they are equal, in X-Sectional Area, to the pointed reinforced pile tip shown, if approved by the Engineer.
4 ---- Estimated driven lengths of piles are determined from available soils information with no allowance for pile cut-offs and no allowance for uncertain pile penetration.
5 ---- Piles marked thus, ⊢▶, shall be battered 3 inches per foot in the direction of the arrow.
6 ---- Maximum pile load equals: 117 tons, (including 40 tons allowed for negative skin friction).
7 ---- Following are pile locations, number of piles required, size of piles and estimated driven lengths:
Abutment No 1 61-HP 14 x 89 @ 100 ft.
Abutment No 2 58-HP 14 x 89 @ 100 ft.

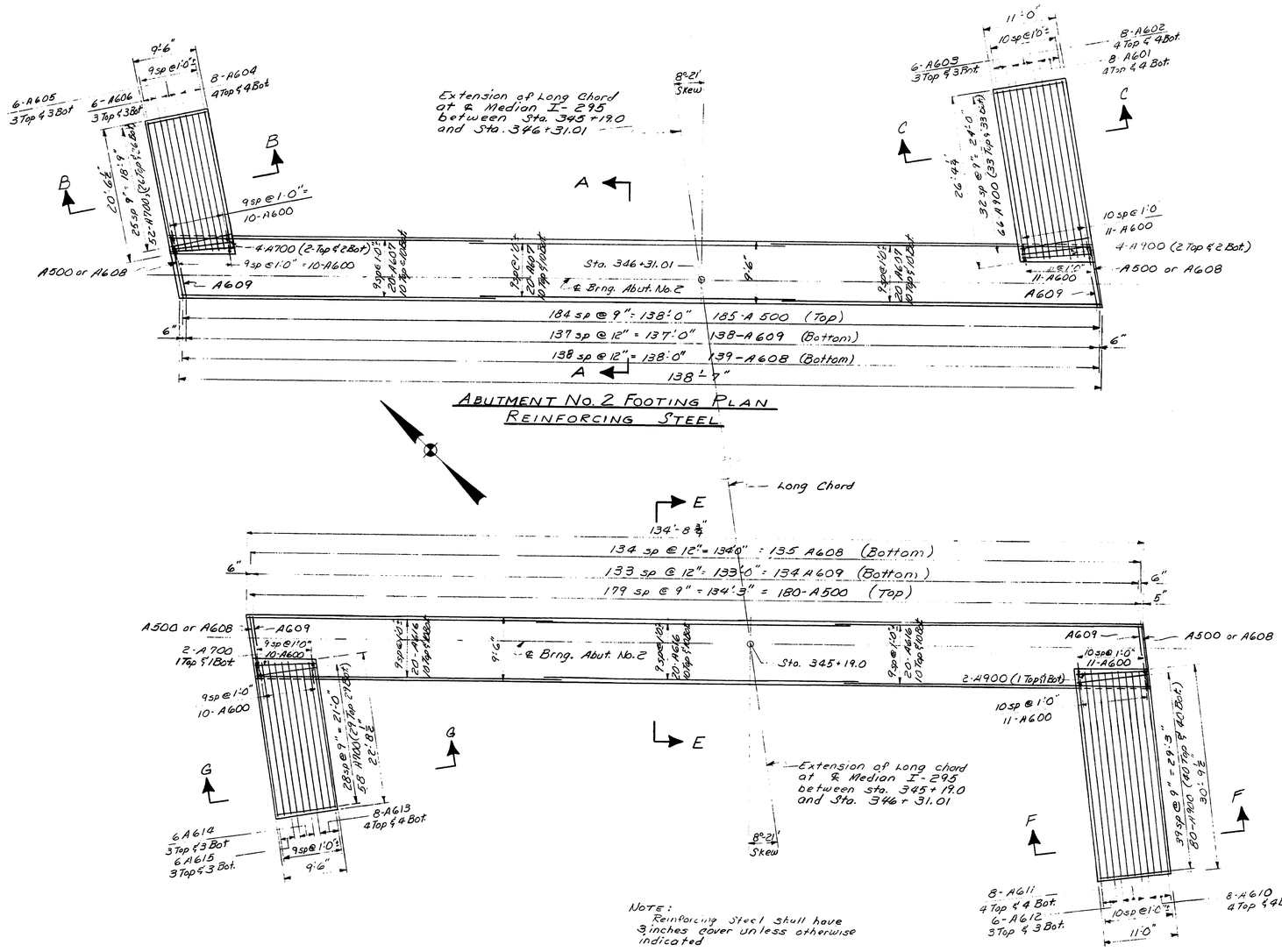
NOTE:
1. For Reinforcing Steel see sheet No. 8
2. For Section A-A, B-B, CC, D-D, E-E, F-F, G-G & H-H See Sheet No. 9

PLANS		BY	DATE
Pre-Des. Engr. Albert			
DESIGN-DETAILED	ALL	R.V.N.	6-8-73
CHECKED			
REVISIONS			
FIELD CHANGES			

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
INTERSTATE 295
OVER
FRANKLIN STREET
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY
FOOTING & PILE DETAILS
SHEET 7 OF 36 AUGUSTA, MAINE AUGUST 1973

146-20

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	295-3(75)50	8	36



ABUTMENT No. 2 FOOTING PLAN
REINFORCING STEEL

NOTE:
Reinforcing Steel shall have 3 inches cover unless otherwise indicated

ABUTMENT No. 1 FOOTING PLAN
REINFORCING STEEL

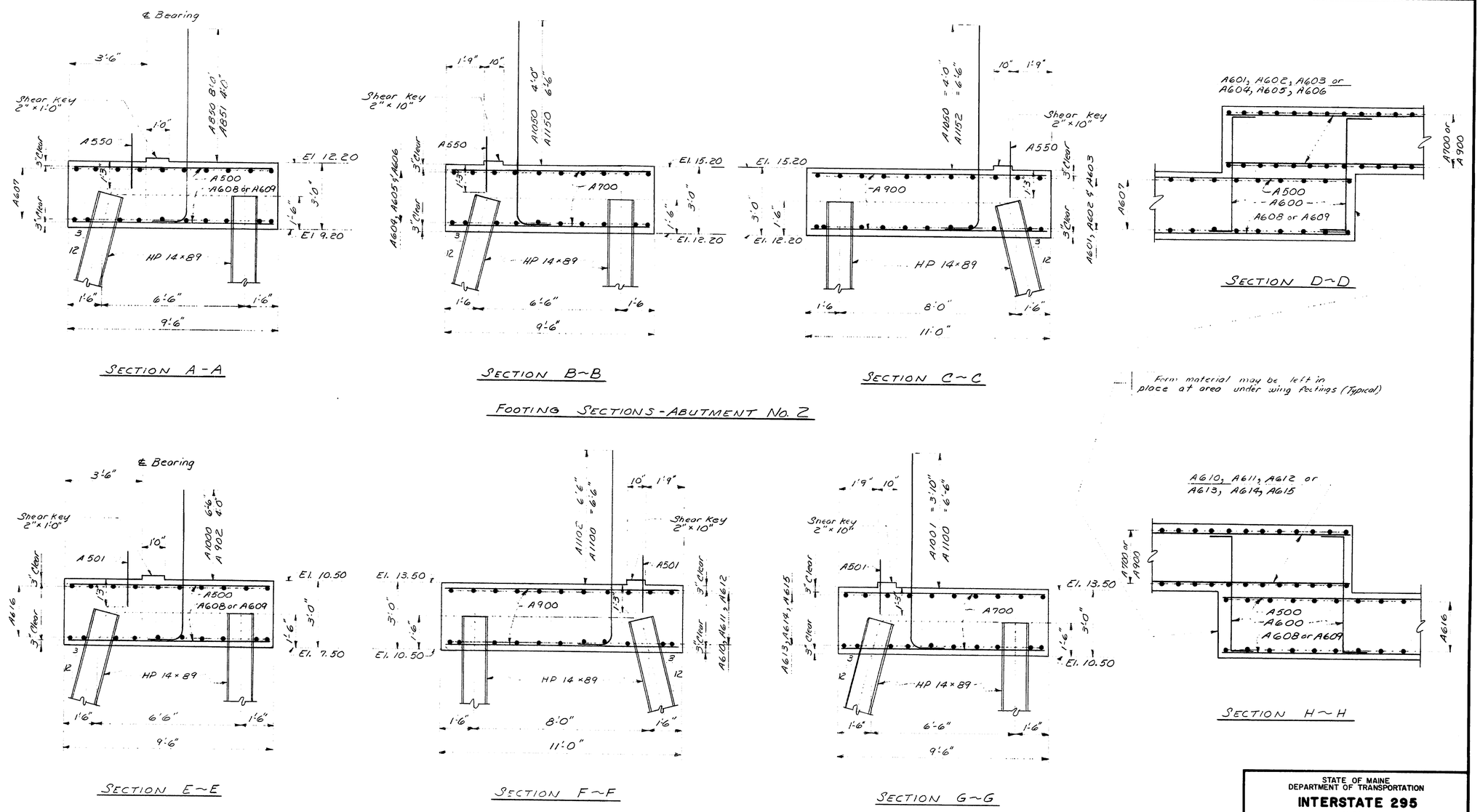
NOTE:
1. For Reinforcing Steel schedule See sheet No. 26
2. For Section A-A, B-B, C-C, E-E, F-F & G-G See sheet No. 9

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
INTERSTATE 295
OVER
FRANKLIN STREET
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY
REINFORCING STEEL DETAIL
SHEET 8 OF 36 AUGUSTA, MAINE AUGUST 1973

146-21

PLANS	BY	DATE
Proj. Des. Eng. A. Lewis		
DESIGN - DETAILED	R.V.N.	6-21-73
CHECKED		
REVISIONS		
FIELD CHANGES		

S.P.R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	295-3(75)50	9	36

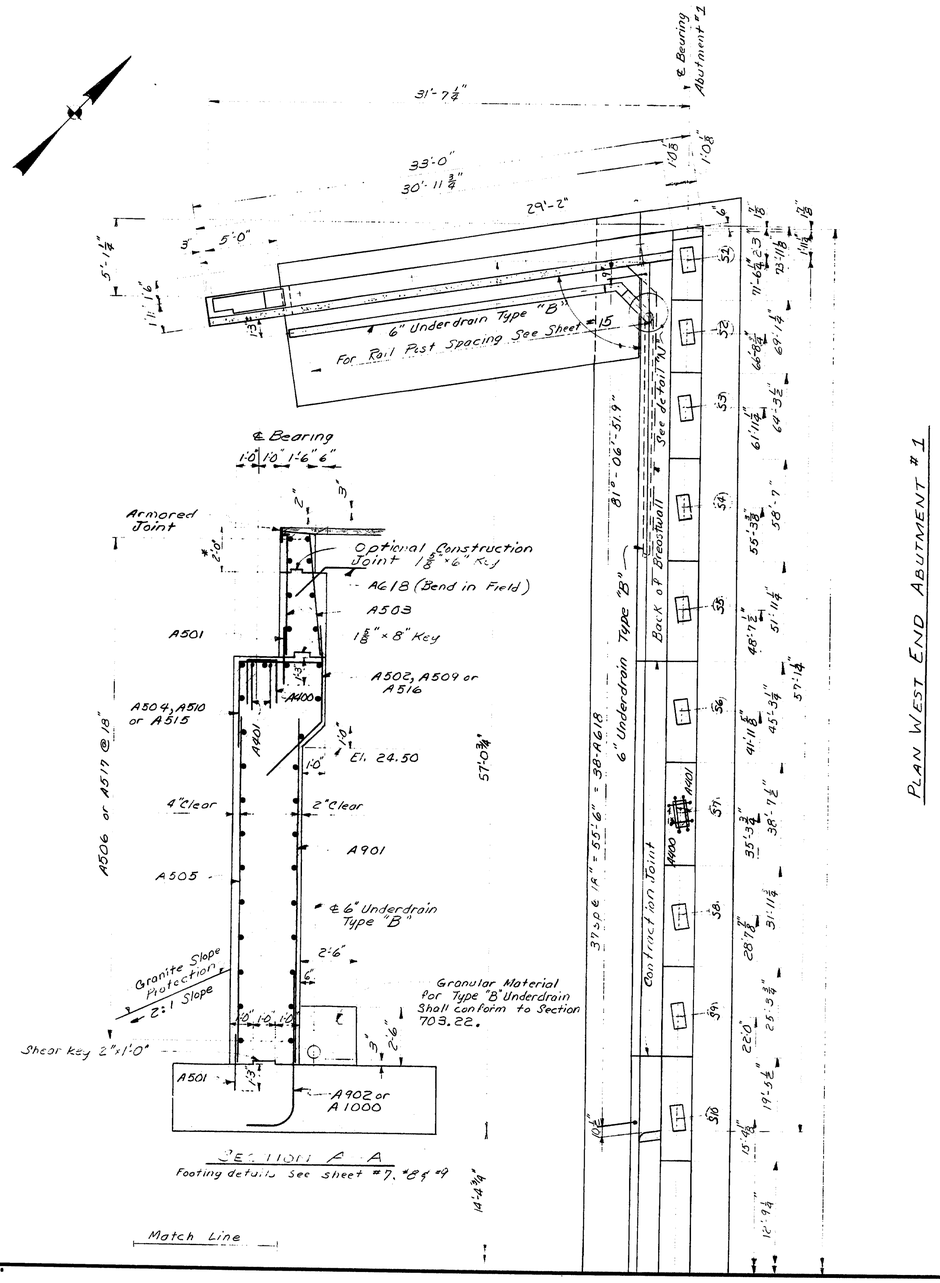


PLANS	BY	DATE
Proj. Des. Eng. Assoc.	R.V.N.	6-26-73
DESIGN - DETAILED		
CHECKED		
REVISIONS		
FIELD CHANGES		

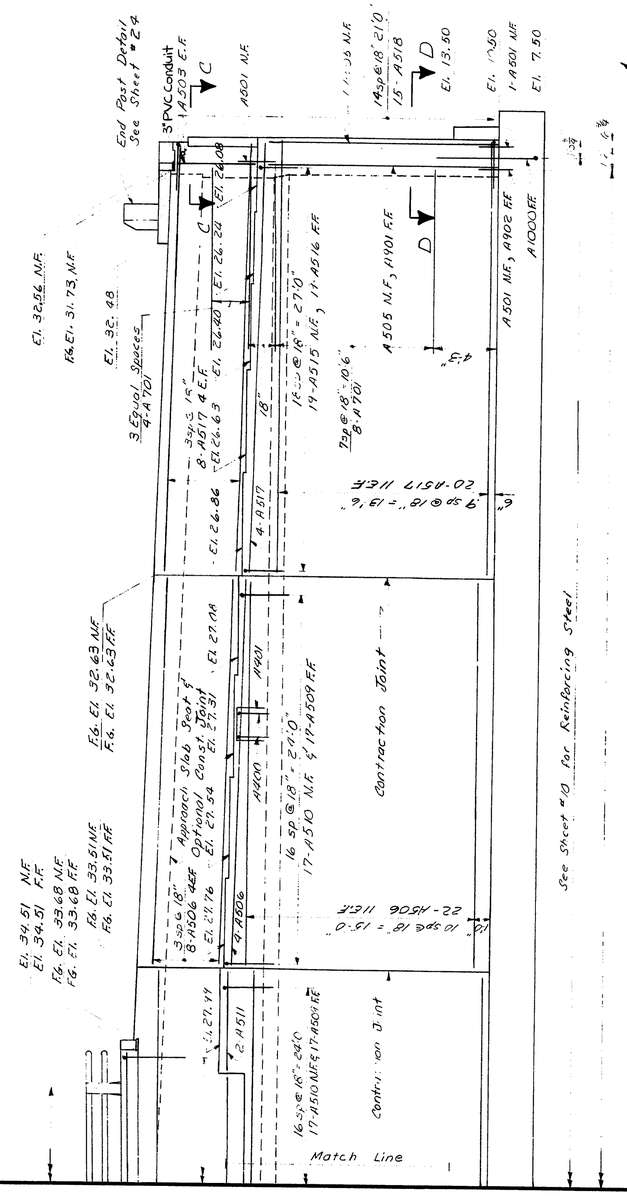
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
INTERSTATE 295
OVER
FRANKLIN STREET
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY
FOOTING SECTIONS
SHEET 9 OF 36 AUGUSTA, MAINE AUGUST 1973

146-22

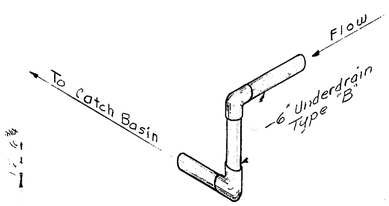
F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	295-3(75)50	11	36



PLAN WEST END ABUTMENT #1



ELEVATION WEST END ABUTMENT No. 1



DETAIL "N"

See Sheet #10 for Reinforcing Steel

REFERENCE

1 ---- Footing details & sections See Sheet #7 & #9
2 ---- Footing Reinforcing Steel See Sh #8
3 ---- Wing details & Sections C-C, D-D, E-E & F-F See sheet #12

* Rev.- 2'-0" dim. added in Section A-A for approach slab seat, 11-12-73

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

INTERSTATE 295

OVER

FRANKLIN STREET

IN THE CITY OF

PORTLAND

CUMBERLAND COUNTY

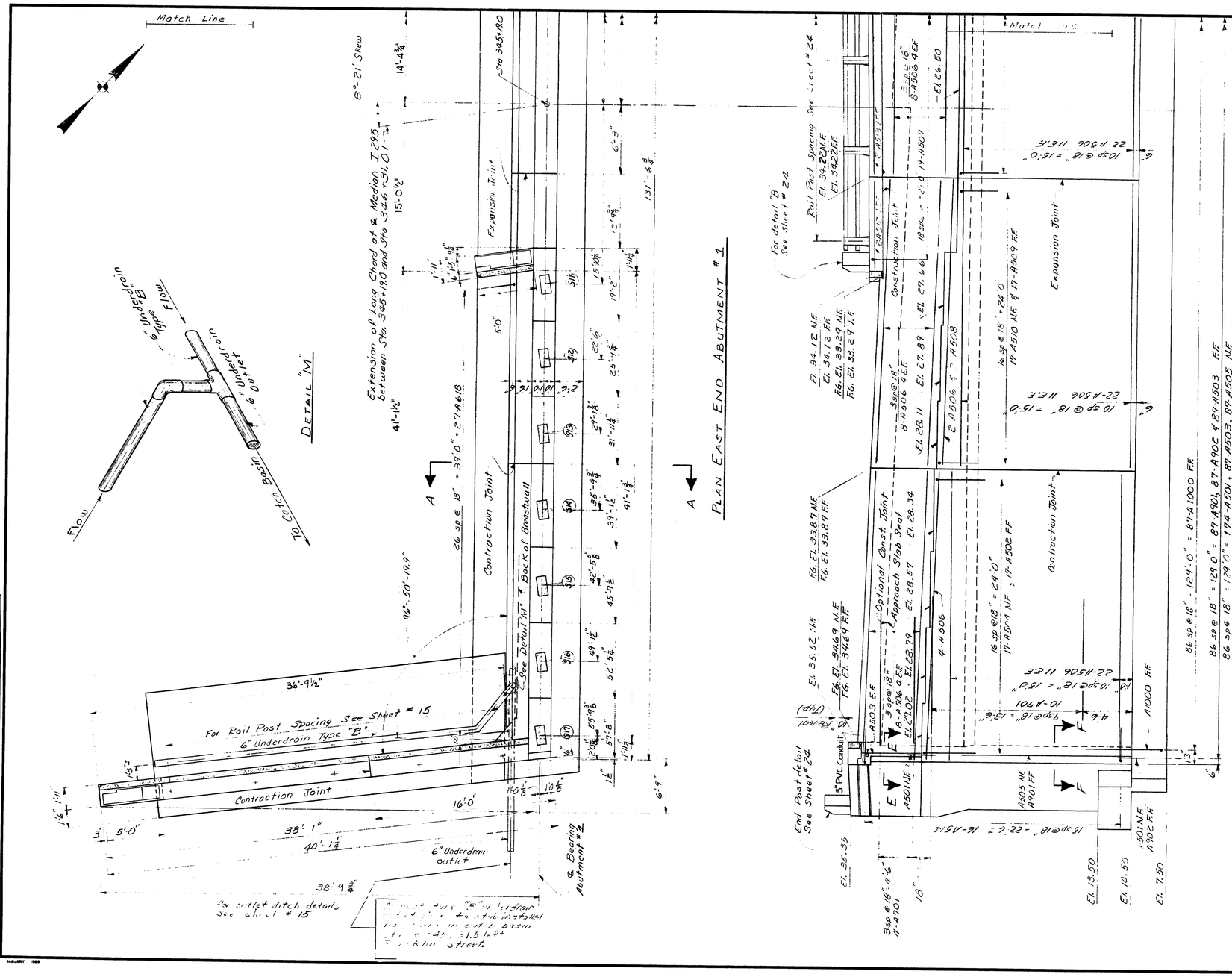
WEST END ABUTMENT NO. 1

SHEET 11 OF 36 AUGUSTA, MAINE AUGUST 1973

PLANS	BY	DATE
DESIGN - DETAILED	R/N	7-20-73
CHECKED		
REVISIONS		
FIELD CHANGES		

146-23

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	295-5(75)50	10	36



ABUTMENT NOTES

1. ____Chamfer all exposed edges of concrete ¼ inch unless otherwise indicated.
2. ____All reinforcing steel splices and embedments shall be a minimum of 36 bar diameters unless otherwise indicated.
3. ____Reinforcing steel shall have 2 inches cover unless otherwise indicated.
4. ____Place reinforcing steel in bridge seats to clear anchor bolts.
5. ____Break bond at vertical contraction joints by a method approved by the Engineer.
6. ____Place concrete in top of abutment backwalls after the superstructure slab has been placed.
7. ____Polyvinylchloride waterstops shall be placed in all vertical contraction and expansion joints.
8. ____Waterstops are not required in horizontal construction joints.
9. ____Protective coating for concrete surfaces shall be applied to the following areas: Top of Backwall, Back of Backwall, Top of wings 1'-0" below finished Grade.
10. ____If aluminum underdrain is used coat with asphalt fibering cement where it is in contact with concrete.

REFERENCE

1. ____Footing details & Sections See Sheet # 7, & 9
2. ____Footing Reinforcing Steel See Sh. # 8
3. ____Wing details & Sections C-C, D-D, E-E & F-F See Sheet # 12
4. ____Abutment #1 Section A-A See sheet # 11

PLANS	BY	DATE
DESIGN-DETAILED	A.L.F.	7-26-73
CHECKED	R.V.M.	7-27-73
REVISED		
FIELD CHANGES		

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

INTERSTATE 295
OVER
FRANKLIN STREET
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY

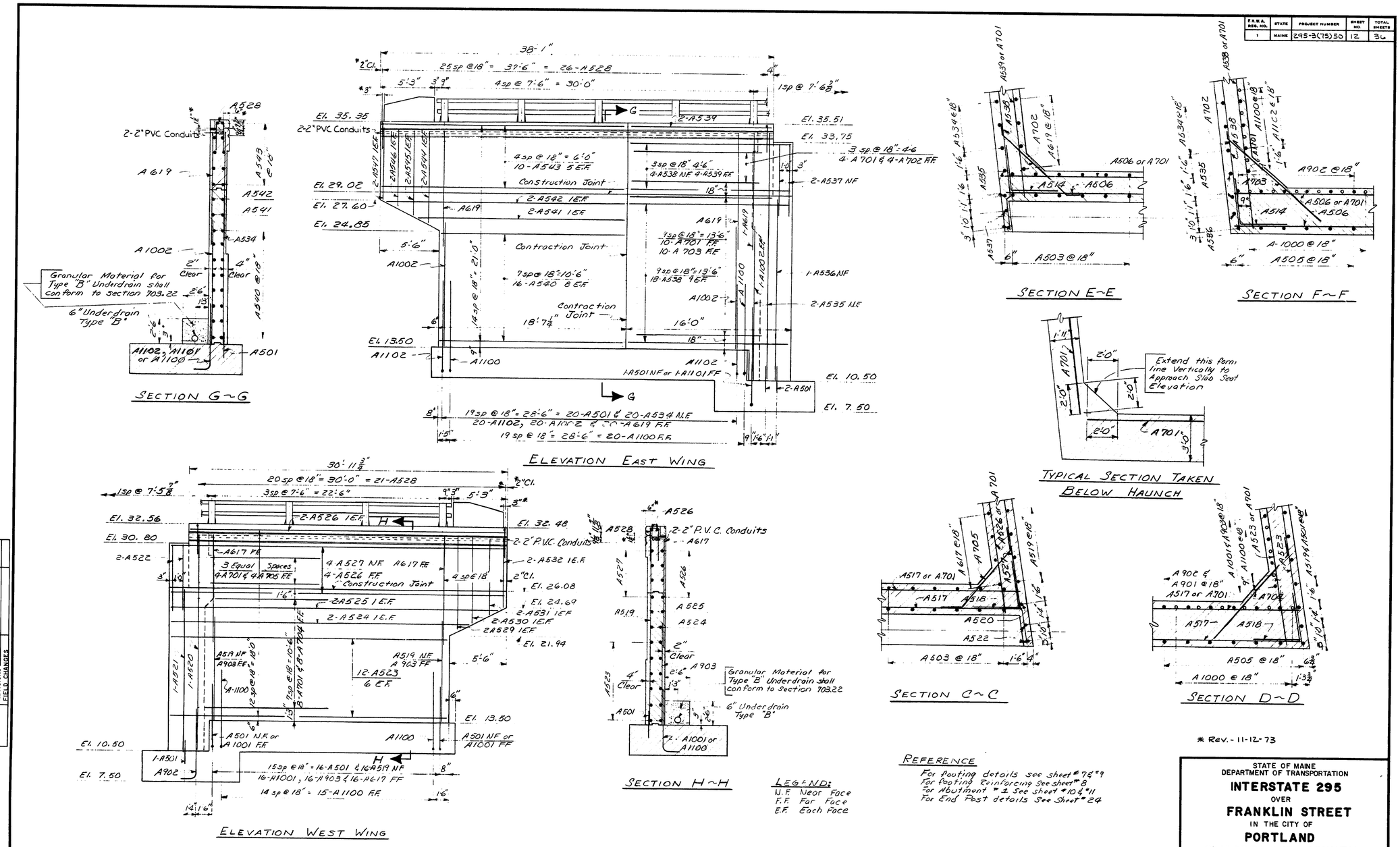
EAST END ABUTMENT NO. 1

SHEET 10 OF 36 AUGUSTA, MAINE AUGUST 1973

JANUARY 1968

146-24

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	295-3(75)50	12	36



PLANS	BY	DATE
DESIGN - DETAILED	ALL	2-23-73
CHECKED		
REVISIONS		
FIELD CHANGES		

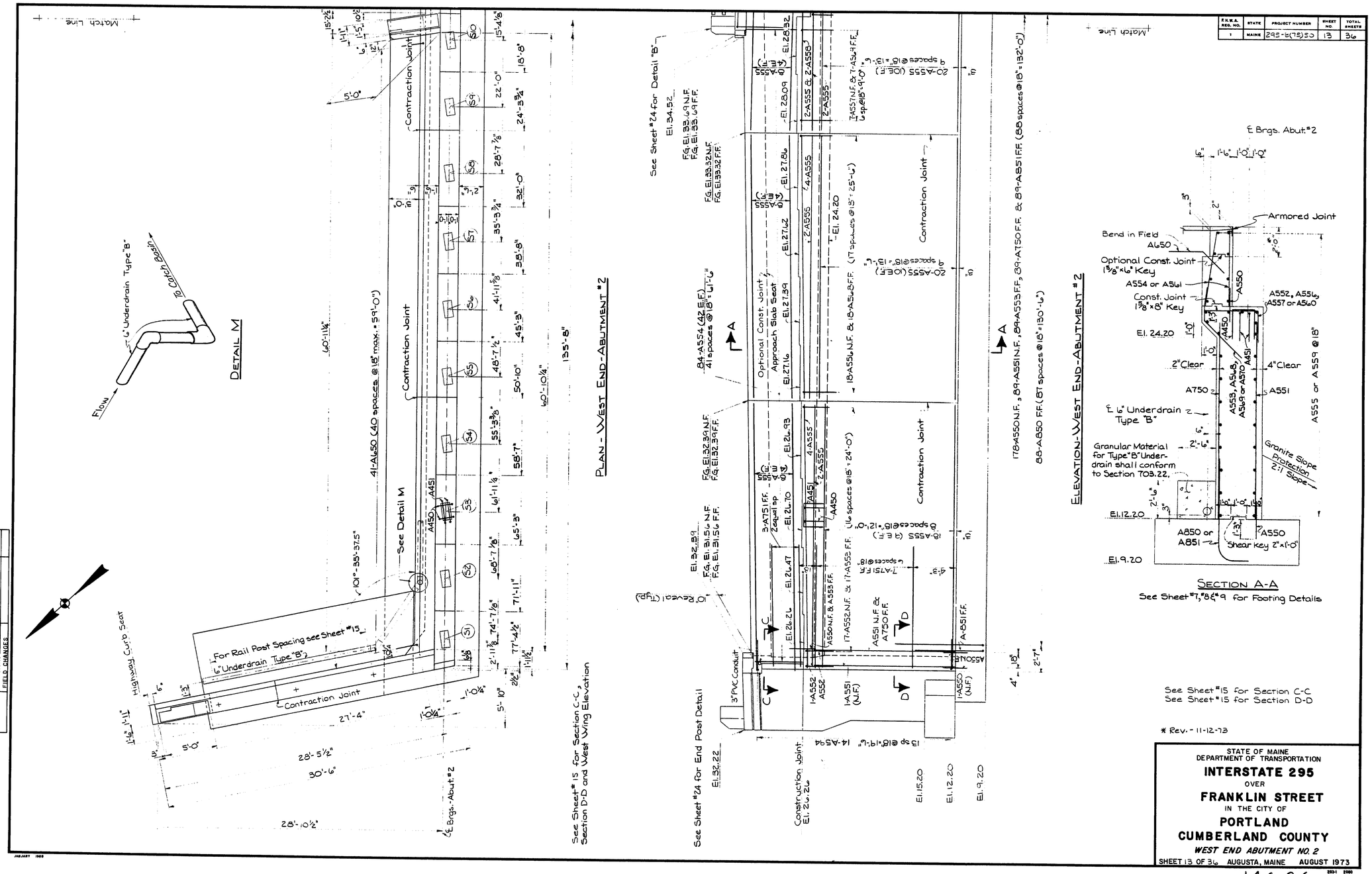
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

INTERSTATE 295
OVER
FRANKLIN STREET
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY

ABUTMENT NO. 1 WING DETAILS

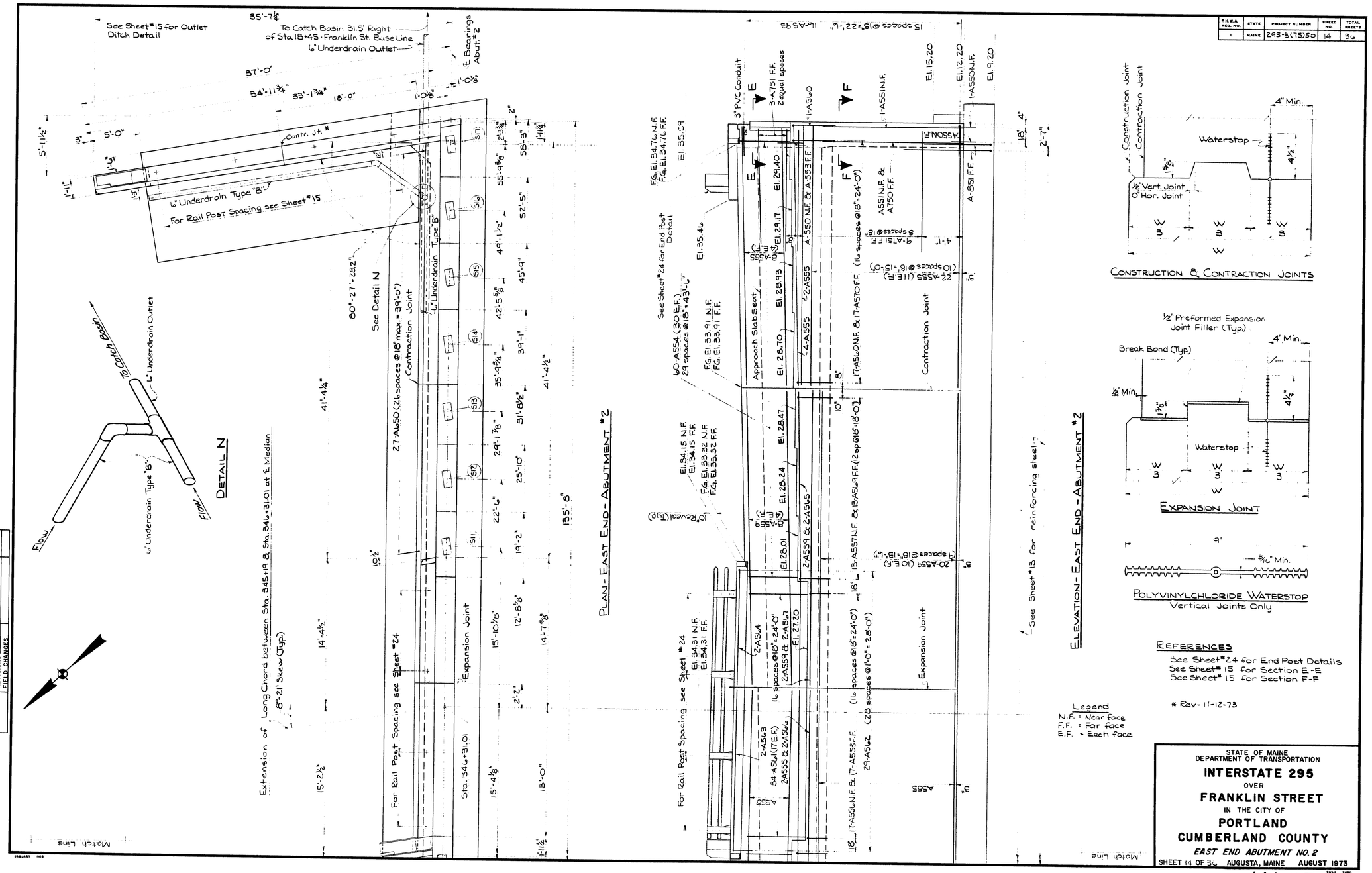
SHEET 12 OF 36 AUGUSTA, MAINE AUGUST 1973

146-25



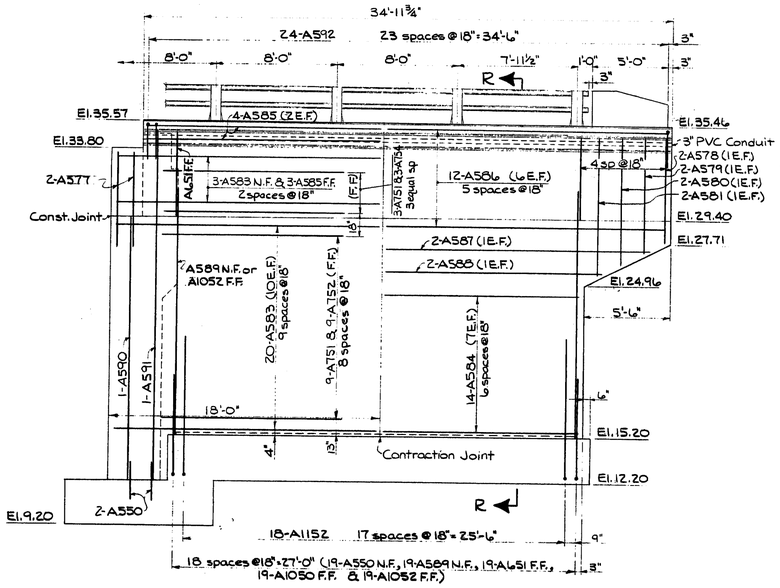
PLANS
DESIGN-DETAILED
CHECKED
REVISIONS
FIELD CHANGES
BY
A.L.L.
R.C.B.
DATE
7-3-73
DETAIL M
PLAN - WEST END-ABUTMENT #2
ELEVATION-WEST END-ABUTMENT #2
SECTION A-A
See Sheet #7, #8 & #9 for Footing Details
See Sheet #15 for Section C-C
See Sheet #15 for Section D-D
* Rev. - 11-12-73
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
INTERSTATE 295
OVER
FRANKLIN STREET
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY
WEST END ABUTMENT NO. 2
SHEET 13 OF 36 AUGUSTA, MAINE AUGUST 1973
146-26

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	295-3(75)50	14	36

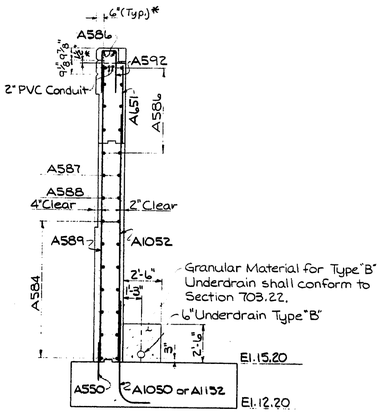


146-27

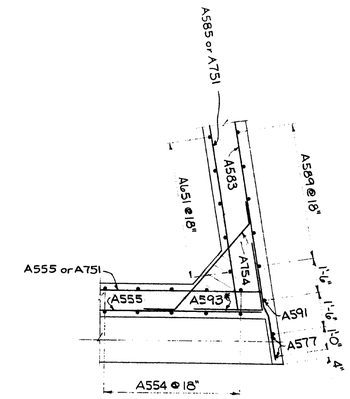
F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	295-3(75)50	15	36



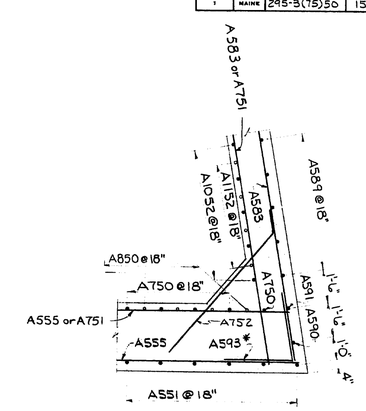
EAST WING ELEVATION - ABUTMENT # 2



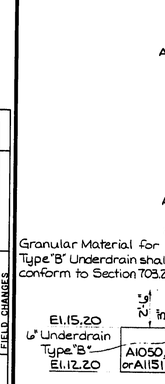
SECTION R-R



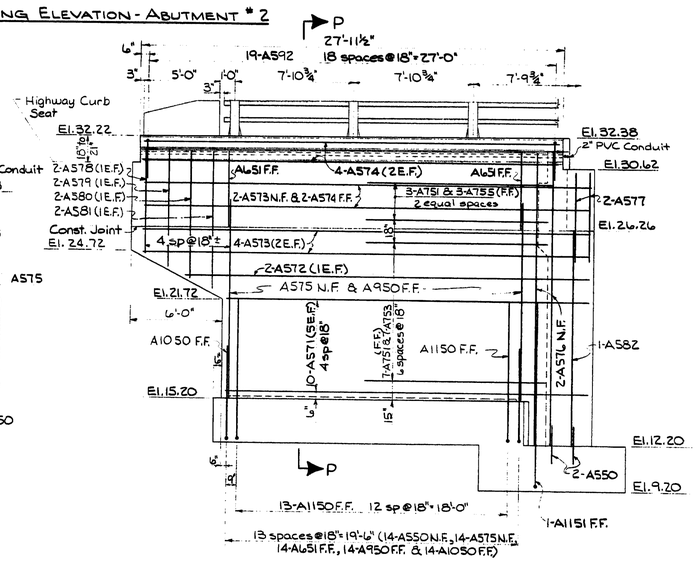
SECTION E-E



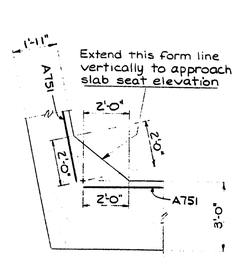
SECTION F-F



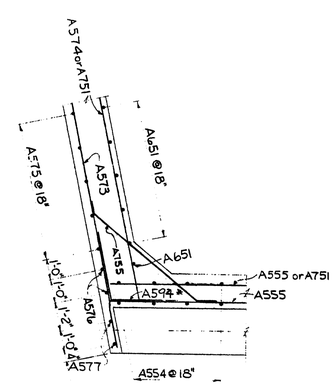
SECTION P-P



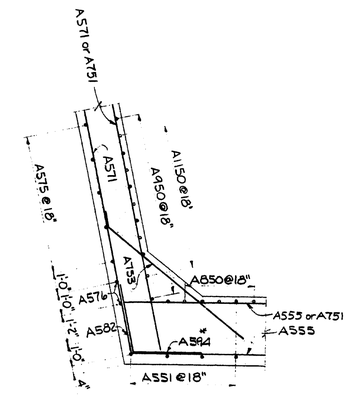
WEST WING ELEVATION - ABUTMENT # 2



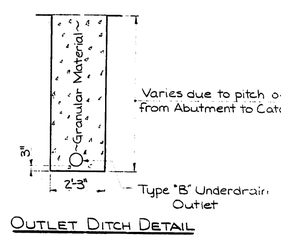
TYPICAL SECTION TAKEN BELOW HAUNCH



SECTION C-C



SECTION D-D



Varies due to pitch of Type "B" Underdrain Outlet from Abutment to Catch Basin

OUTLET DITCH DETAIL

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

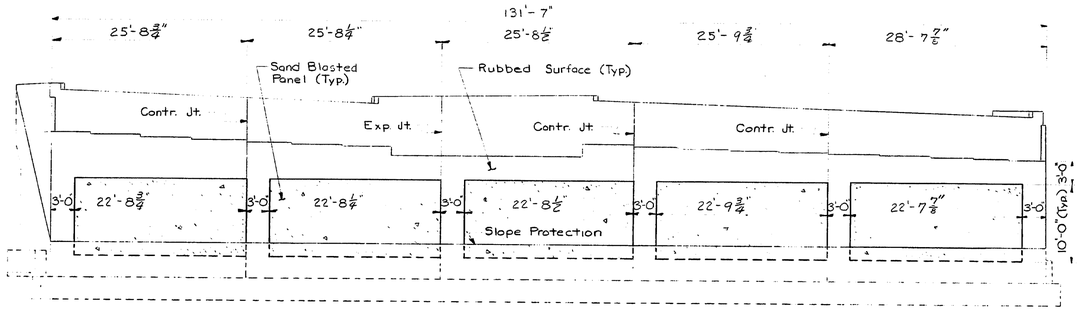
* Rev. - 11-12-73

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
INTERSTATE 295
OVER
FRANKLIN STREET
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY
ABUTMENT NO. 2 WING DETAILS
SHEET 15 OF 36 AUGUSTA, MAINE AUGUST 1973

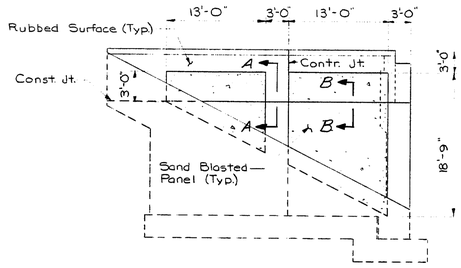
PLANS	BY	DATE
DESIGN - DETAILED	A.L.L.	8-73
CHECKED	R.C.B.	8-73
REVISIONS		
FIELD CHANGES		

146-28

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	295-3(75)50	16	36

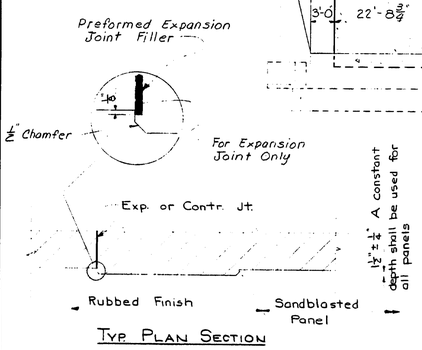


ELEVATION ~ ABUTMENT 1

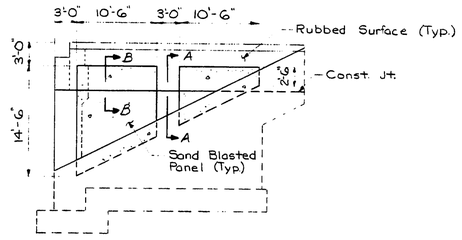


EAST WING ELEVATION
ABUTMENT 1

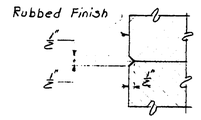
NOTE:
Payment for sandblasting shall be included in the contract unit price for Item 502.21, "Structural Concrete-Abutments and Retaining Walls." No deduction in the concrete pay volume shall be made for the recess in the architectural treatment.



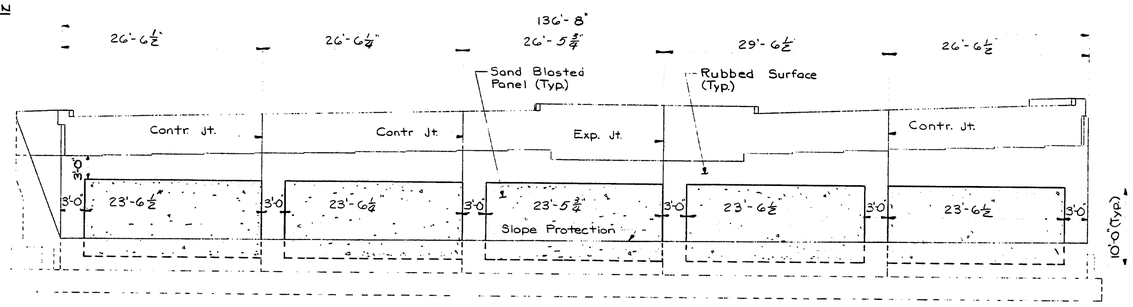
TYP PLAN SECTION



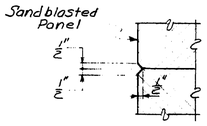
WEST WING ELEVATION
ABUTMENT 1



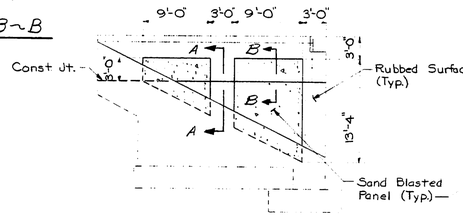
SECTION A~A



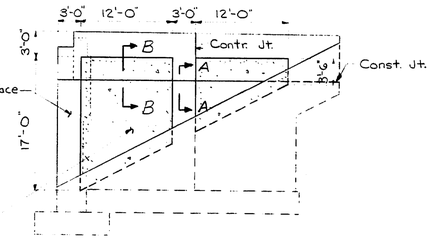
ELEVATION ~ ABUTMENT 2



SECTION B~B



WEST WING ELEVATION
ABUTMENT 2



EAST WING ELEVATION
ABUTMENT 2

NOTES:

All surfaces so designated on the plans shall be sandblasted. These surfaces shall be carried to a minimum depth of 18 inches below the finished ground.

Special care shall be exercised so that form joints at the exposed face of concrete shall be tight.

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 consistant 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 breastwalls.

At the time the concrete is placed, the contractor shall cast 3 sample slabs (2'×2'×4").

Prior to sandblasting, the samples shall be sandblasted, each to a different degree of penetration with a maximum depth of 3/16 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 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.

The contractor shall conform to any applicable safety specifications, such as O.S.H.A., in the sandblasting operation.

*Rev.-11-12-73

PLANS	BY	DATE
DESIGN DETAILED	A.L.L. J.L.C.	7-27-73
CHECKED	EVD	10-5-73
REVISIONS		
FIELD CHANGES		

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

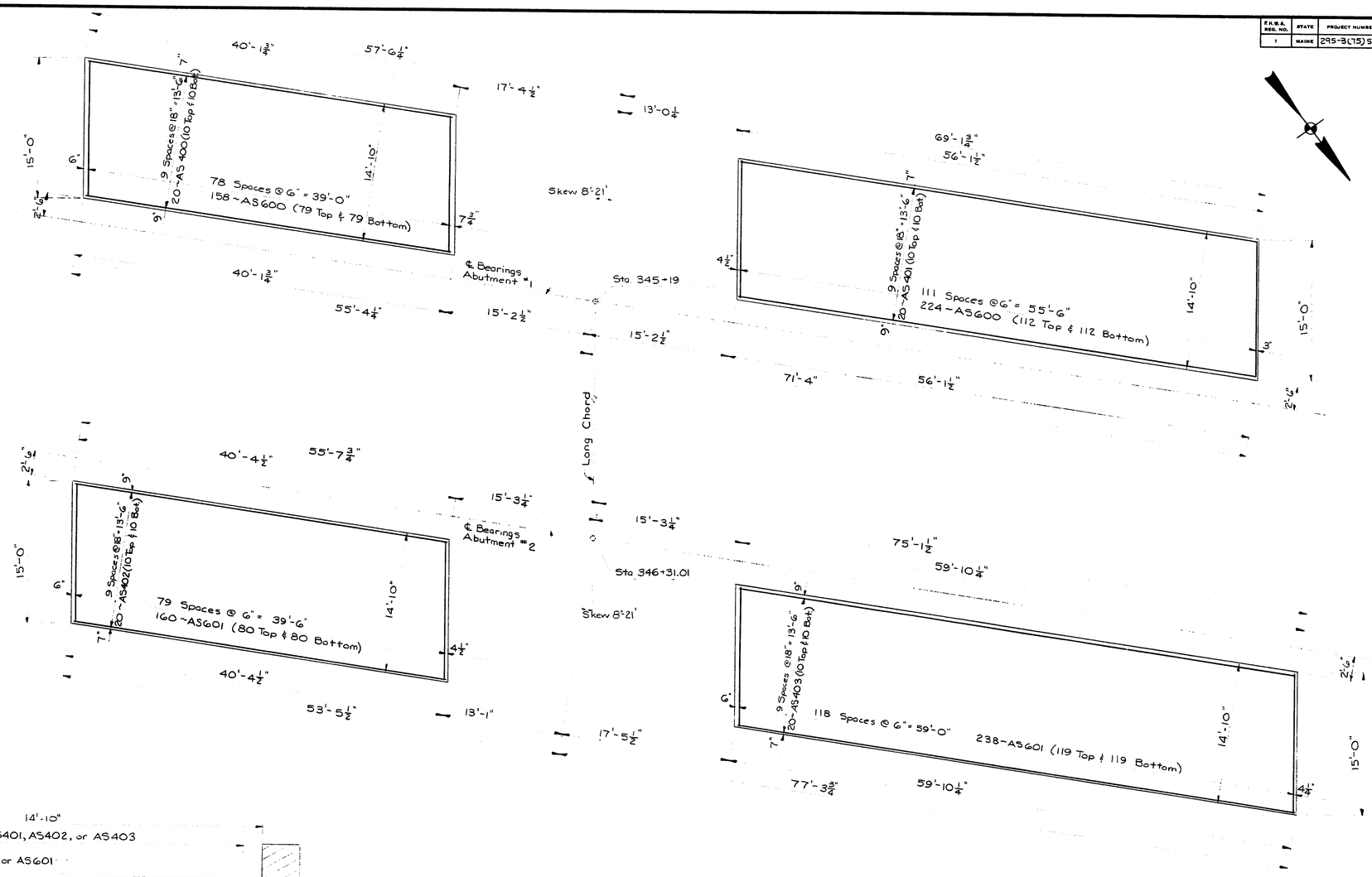
INTERSTATE 295
OVER
FRANKLIN STREET
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY

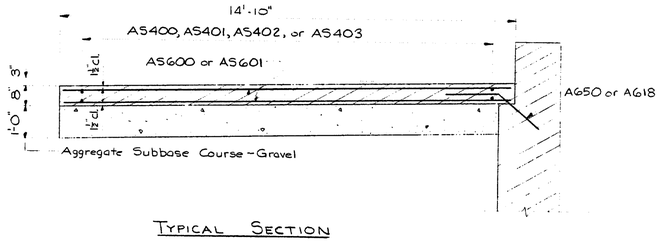
ARCHITECTURAL TREATMENT

SHEET 16 OF 36 AUGUSTA, MAINE **AUGUST 1973**

146-29

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	295-3(15)50	17	36





TYPICAL SECTION

PLANS	BY	DATE
DESIGN - DETAILED	A.L.L.	7-26-73
CHECKED	J.L.C.	9-27-73
REVISIONS	R.V.D.	
FIELD CHANGES		

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

INTERSTATE 295
OVER
FRANKLIN STREET
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY

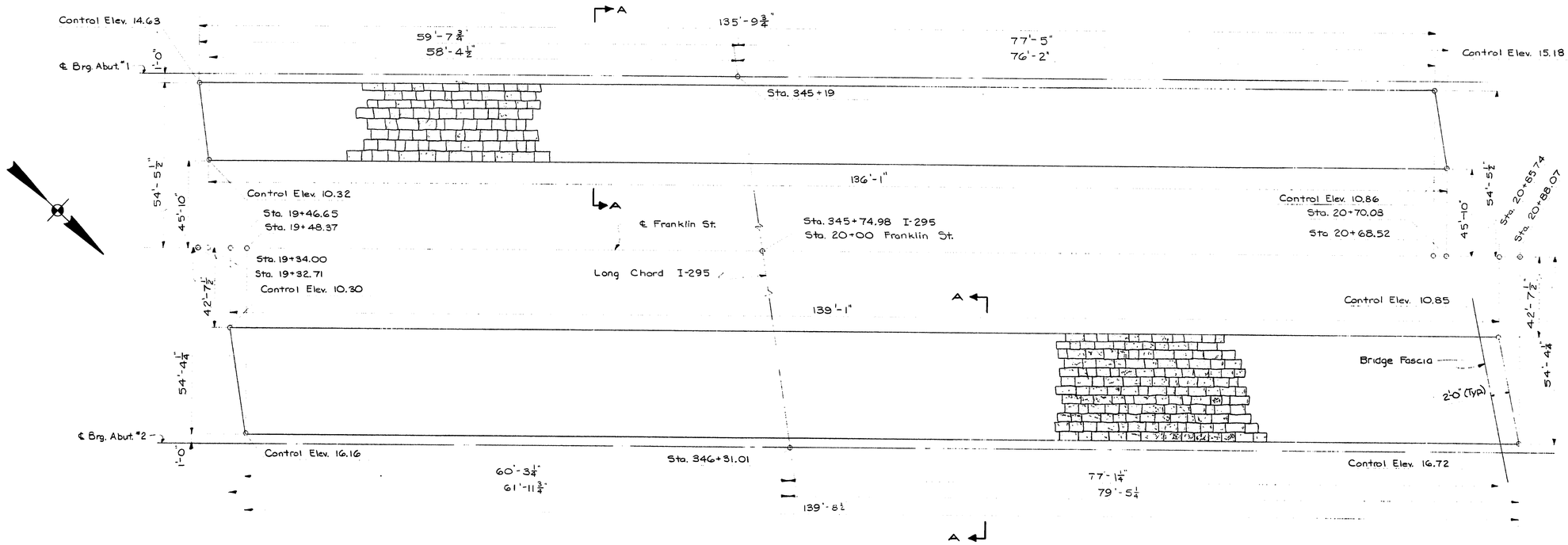
APPROACH SLAB

SHEET 17 OF 36 AUGUSTA, MAINE AUGUST 1973

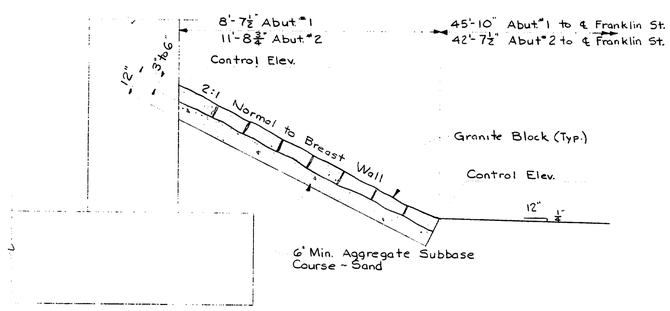
146-30

JANUARY 1968

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	295-3(75)50	18	36



PLAN
GRANITE BLOCK SLOPE PROTECTION



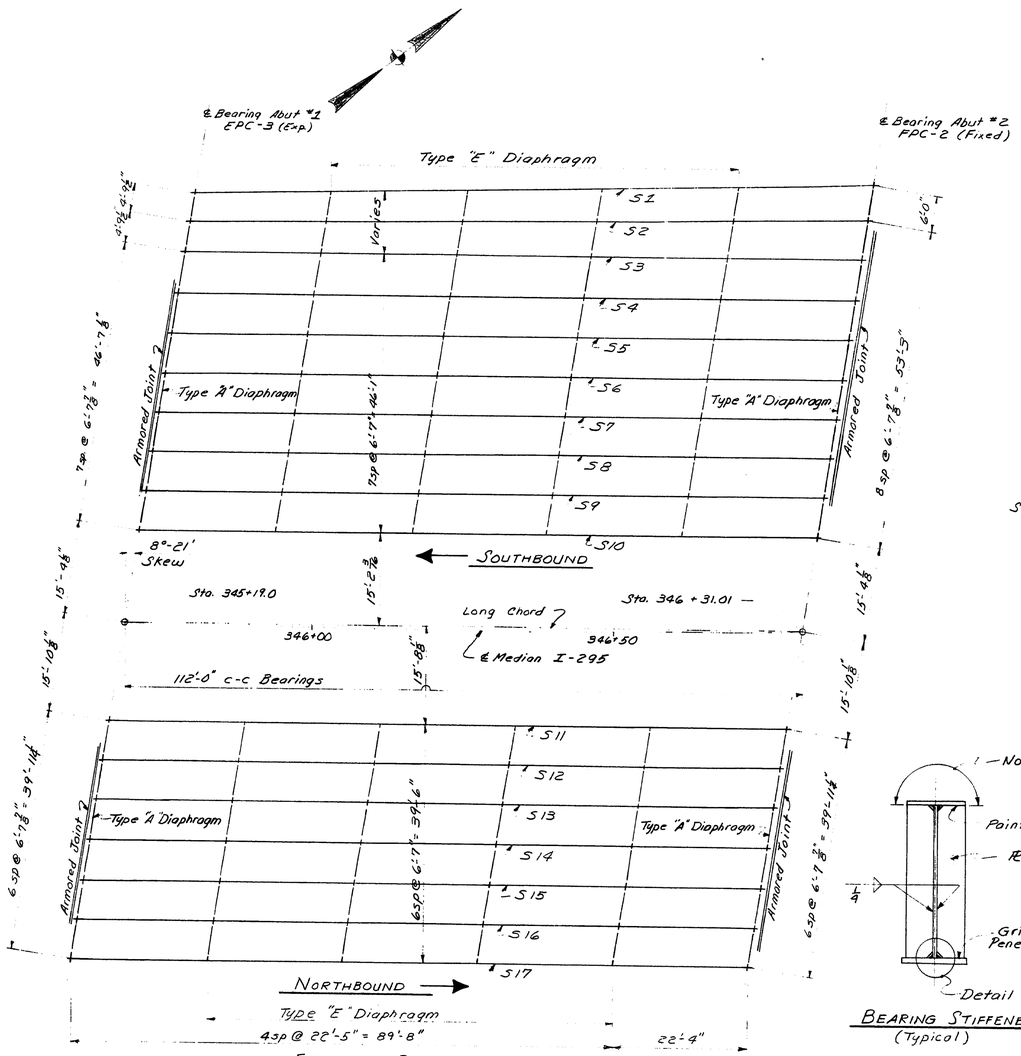
SECTION A-A

PLANS		BY	DATE
Reg. Dec. Eng. Sub.			
DESIGN - DETAILED	A.L.L.	J.L.C.	7-26-73
CHECKED	R.V.D.		9-26-73
REVISIONS			
FIELD CHANGES			

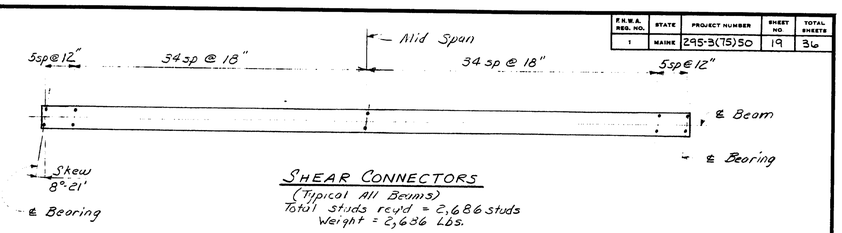
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
INTERSTATE 295
OVER
FRANKLIN STREET
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY
SLOPE PROTECTION
SHEET 18 OF 36 AUGUSTA, MAINE AUGUST 1973

146-31

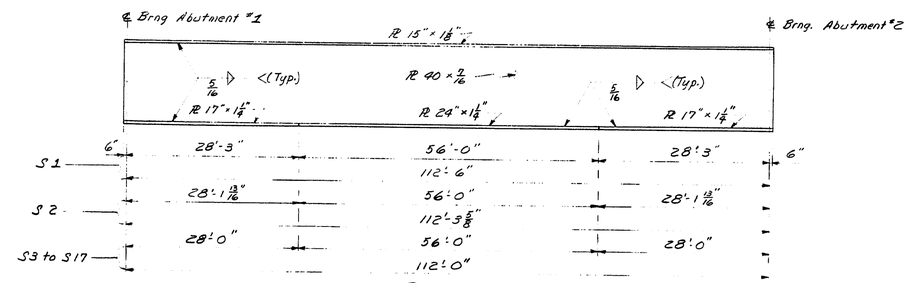
F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO	TOTAL SHEETS
1	MAINE	295-3(75)50	19	36



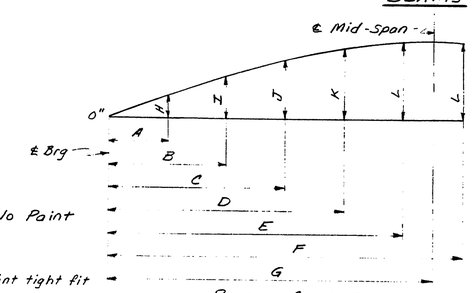
ERECTION DIAGRAM
(Dimensions are horizontal)



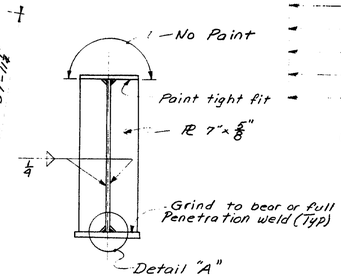
SHEAR CONNECTORS
(Typical All Beams)
Total studs reqd = 2,686 studs
Weight = 2,636 Lbs.



BEAMS



BEAM CAMBER
(Typical & Symmetrical about Mid-Span)



BEARING STIFFENERS
(Typical)

GENERAL NOTES

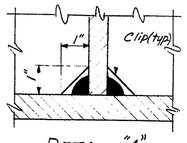
1 ___ Camber ordinates, as shown, are computed to compensate for all dead load deflections and for the curvature of the finish grade profile.
2 ___ No transverse butt weld splices in the flange plates or web plates within 10 feet from the mid-span point of the beam will be allowed.
3 ___ Sections of flange plates or web plates between transverse butt weld splices shall be not less than 30 feet in length.
4 ___ Butt weld splices in flanges shall be not closer than one foot from transverse welds in the web plates.
5 ___ A maximum of two (2) transverse butt welds per beam flange or per beam web will be allowed.
6 ___ Bearing stiffeners shall be detailed on the shop drawings to be plumb after all dead loading.
7 ___ Cross frame or diaphragm connection plates may be either plumb or normal to the top flange.

STRUCTURAL STEEL CLASSIFICATION

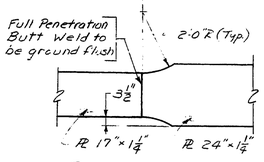
Flanges and web plates for beams shall conform to A.S.T.M. designation A572 (Grade 50). All other steel shall conform to A.S.T.M. A36 unless otherwise noted.
High strength bolts A.S.T.M. Designation A325.

Beam	A	B	C	D	E	F	G	H	I	J	K	L
1	10'-2 3/4"	20'-5 3/8"	30'-8 1/2"	40'-10 7/8"	51'-1 5/8"	61'-4 1/4"	56'-3"	1 7/8"	3 1/2"	4 13/16"	5 11/16"	6 3/16"
2	10'-2 1/2"	20'-5"	30'-7 1/2"	40'-10"	51'-0 1/2"	61'-3"	56'-1 13/16"	2 1/8"	3 3/4"	5 3/16"	6 3/16"	6 11/16"
3, 10, 11	10'-2 1/8"	20'-4 3/8"	30'-6 1/2"	40'-8 3/4"	50'-11"	61'-1"	56'-0"	2 1/8"	3 15/16"	5 3/8"	6 7/16"	6 15/16"
4 to 9 & 12 to 16	10'-2 1/8"	20'-4 3/8"	30'-6 1/2"	40'-8 3/4"	50'-11"	61'-1"	56'-0"	2 1/8"	4 1/16"	5 9/16"	6 8/16"	7 3/16"
17	10'-2 1/8"	20'-4 3/8"	30'-6 1/2"	40'-8 3/4"	50'-11"	61'-1"	56'-0"	2"	3 11/16"	5 1/8"	6 1/16"	6 9/16"

CAMBER ORDINATES



DETAIL "A"



FLANGE SPLICE
(Typical)

REFERENCES

Diaphragms	BD 113-72
Bearing Pedestals	BD 101-70
Armored Joint & Shear Connectors	BD 104-71

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

INTERSTATE 295
OVER
FRANKLIN STREET
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY

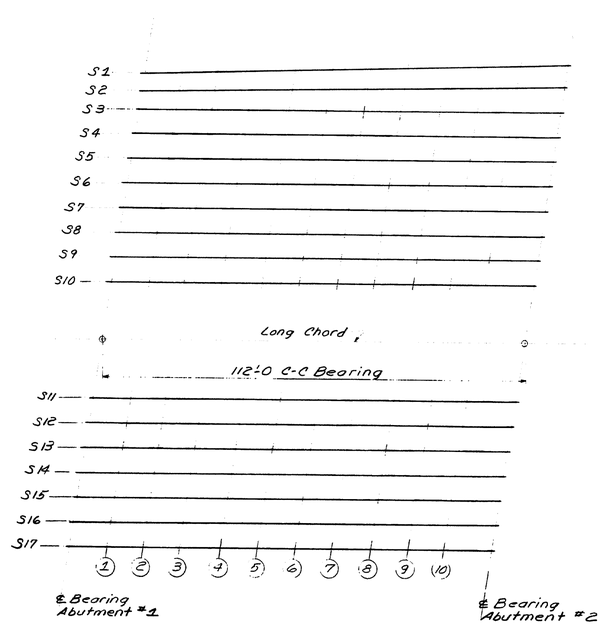
STRUCTURAL STEEL DETAILS

SHEET 19 OF 36 AUGUSTA, MAINE AUGUST 1973

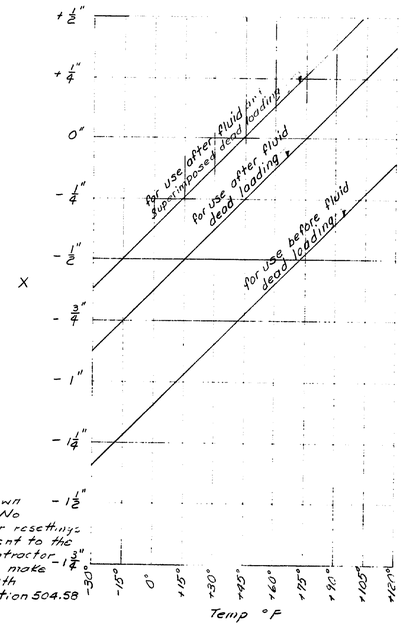
PLANS	BY	DATE
DESIGN-DETAILED	A.L.L.	6-29-73
CHECKED	R.W.P.	10-2-73
REVISIONS		
FIELD CHANGES		

146-32

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	295-3(75)50	20	36



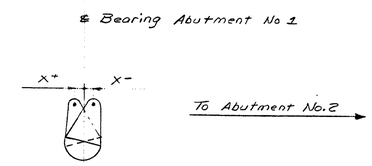
BLOCKING LAYOUT
(All dimensions are horizontal)



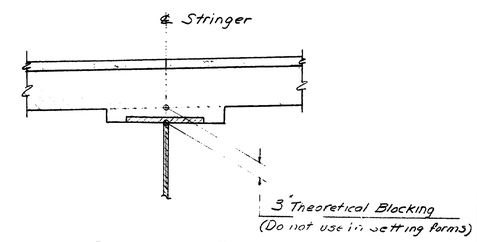
NOTE: Rocker setting data as shown shall be used as a guide only. No extra payment will be made for resettings of the rocker bearings, subsequent to the original setting, made by the contractor as required by the Engineer to make the rocker settings conform with Paragraph four (4) of Subsection 504.58

ROCKER BEARING SETTING GRAPH
(Abutment No. 1)

This table of bearing setting temperatures for longitudinal movement due to temperature change & dead load deflection.



ROCKER BEARING SETTING DIAGRAM



BLOCKING DETAIL

NOTE:

Before taking elevations on the tops of the beams for purposes of setting bottom of slab elevations the welding of shear connectors to the beams and the diaphragm and cross frame connections to the beams shall have been completed.

BOTTOM OF SLAB ELEVATIONS

Span		+10'	+20'	+30'	+40'	+50'	+60'	+70'	+80'	+90'	+100'	
Points	℄ Abut #1	1	2	3	4	5	6	7	8	9	10	℄ Abut #2
S1	30.93	31.03	31.13	31.20	31.25	31.27	31.26	31.22	31.15	31.06	30.94	30.78
S2	31.09	31.21	31.32	31.41	31.47	31.49	31.49	31.45	31.38	31.28	31.16	30.99
S3	31.25	31.39	31.51	31.61	31.67	31.71	31.71	31.67	31.61	31.51	31.39	31.22
S4	31.48	31.62	31.75	31.85	31.92	31.96	31.96	31.92	31.85	31.75	31.63	31.45
S5	31.71	31.85	31.98	32.08	32.15	32.18	32.19	32.15	32.08	31.98	31.86	31.68
S6	31.93	32.08	32.20	32.30	32.38	32.41	32.42	32.38	32.31	32.21	32.09	31.91
S7	32.16	32.30	32.43	32.53	32.60	32.64	32.64	32.61	32.54	32.44	32.32	32.14
S8	32.39	32.53	32.66	32.76	32.83	32.87	32.87	32.84	32.77	32.67	32.55	32.38
S9	32.61	32.76	32.88	32.99	33.06	33.10	33.10	33.07	33.00	32.90	32.78	32.61
S10	32.84	32.97	33.09	33.19	33.25	33.29	33.29	33.26	33.20	33.11	33.00	32.84
S11	32.51	32.65	32.77	32.87	32.94	32.97	32.98	32.95	32.89	32.80	32.69	32.53
S12	32.74	32.88	33.01	33.12	33.19	33.24	33.24	33.21	33.15	33.05	32.93	32.76
S13	32.96	33.11	33.24	33.35	33.42	33.46	33.47	33.44	33.38	33.28	33.16	32.99
S14	33.19	33.34	33.47	33.57	33.65	33.69	33.70	33.67	33.61	33.51	33.39	33.22
S15	33.42	33.56	33.70	33.80	33.88	33.92	33.93	33.90	33.84	33.74	33.62	33.45
S16	33.64	33.79	33.92	34.03	34.10	34.15	34.15	34.13	34.06	33.97	33.85	33.69
S17	33.87	34.00	34.12	34.22	34.29	34.33	34.34	34.31	34.26	34.17	34.07	33.92

STRINGERS

DEAD LOAD DEFLECTIONS IN FEET

Distance from ℄ Brngs Abut #1 (Feet)	S1			S2 & S17			S3, S10 & S11			S4 TO S9 & S12 TO S16		
	Superimp	Steel	Fluid	Superimp	Steel	Fluid	Superimp	Steel	Fluid	Superimp	Steel	Fluid
Abut #1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
+10'	0.020	0.031	0.077	0.026	0.031	0.084	0.019	0.031	0.092	0.027	0.031	0.096
+20'	0.038	0.060	0.147	0.050	0.060	0.160	0.036	0.060	0.176	0.051	0.060	0.182
+30'	0.053	0.083	0.204	0.069	0.083	0.221	0.049	0.083	0.244	0.071	0.083	0.252
+40'	0.063	0.099	0.244	0.082	0.099	0.265	0.059	0.099	0.291	0.085	0.099	0.302
+50'	0.068	0.108	0.266	0.089	0.108	0.290	0.064	0.108	0.317	0.092	0.108	0.329
+60'	0.069	0.109	0.268	0.090	0.109	0.292	0.064	0.109	0.320	0.093	0.109	0.331
+70'	0.064	0.101	0.251	0.084	0.101	0.274	0.060	0.101	0.299	0.087	0.101	0.309
+80'	0.055	0.087	0.215	0.072	0.087	0.234	0.051	0.087	0.255	0.074	0.087	0.264
+90'	0.041	0.065	0.161	0.054	0.065	0.176	0.039	0.065	0.191	0.056	0.065	0.198
+100'	0.024	0.037	0.093	0.031	0.037	0.102	0.022	0.037	0.110	0.032	0.037	0.114
Abut #2	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

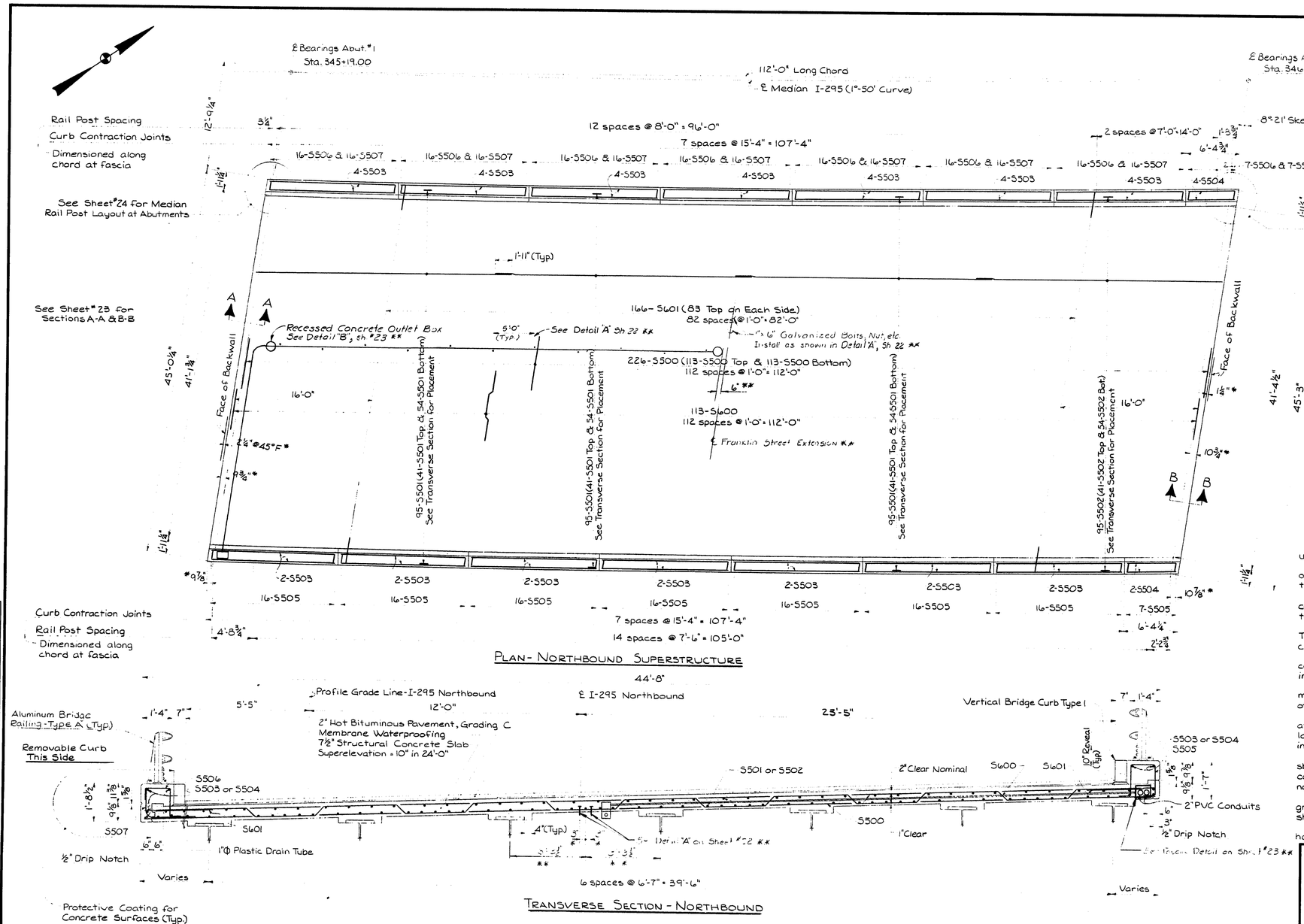
PLANS	BY	DATE
DESIGN - DETAILED	ALL & GC	5-29-73
CHECKED	RVM	
REVISIONS		10-1-73
FIELD CHANGES	PWP	

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
INTERSTATE 295
OVER
FRANKLIN STREET
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY
BLOCKING DETAIL
SHEET 20 OF 36 AUGUSTA, MAINE **AUGUST 1973**

146-33

[redacted]

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	295-3(75)50	21	36



PLAN - NORTHBOUND SUPERSTRUCTURE

TRANSVERSE SECTION - NORTHBOUND

Protective Coating for Concrete Surfaces (Typ.)

** Rev. 8-6-74

Note: Place curb stirrups at 1 foot intervals.
* Dimensions may vary depending on type of seal used.

SUPERSTRUCTURE NOTES

Chamfer all exposed edges of concrete ½ inch unless otherwise indicated.

Form a 1 inch V-groove on the outside faces of each contraction joint in the curbs and at the joint between the curb and slab.

Break the bond in contraction joints in the concrete curbs by a method approved by the Engineer.

Provide joints in the Vertical Bridge Curb, Type I at each contraction joint in the concrete curb.

Reinforcing steel shall have a minimum cover of 2 inches unless otherwise indicated.

Reinforcing steel splices shall be a minimum of 36 bar diameters unless otherwise indicated.

Place 1 inch diameter plastic tube drains at 10 foot intervals along the curb at the low side of the superstructure as described in Subsection 502.17.

Protective Coating for Concrete Surfaces shall be applied to the following areas: concrete curb and fascia down to the drip notch.

Mortar for bedding and for joints in the granite curb shall contain an approved non-shrink additive.

The top of the superstructure slab shall have a light broomed finish.

PLANS	BY	DATE
DESIGN - DETAILED	A.L.L.	5-16-73
CHECKED	R.C.B.	8-20-73
REVISIONS	R.V.D.	
FIELD CHANGES		

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

INTERSTATE 295
OVER
FRANKLIN STREET
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY

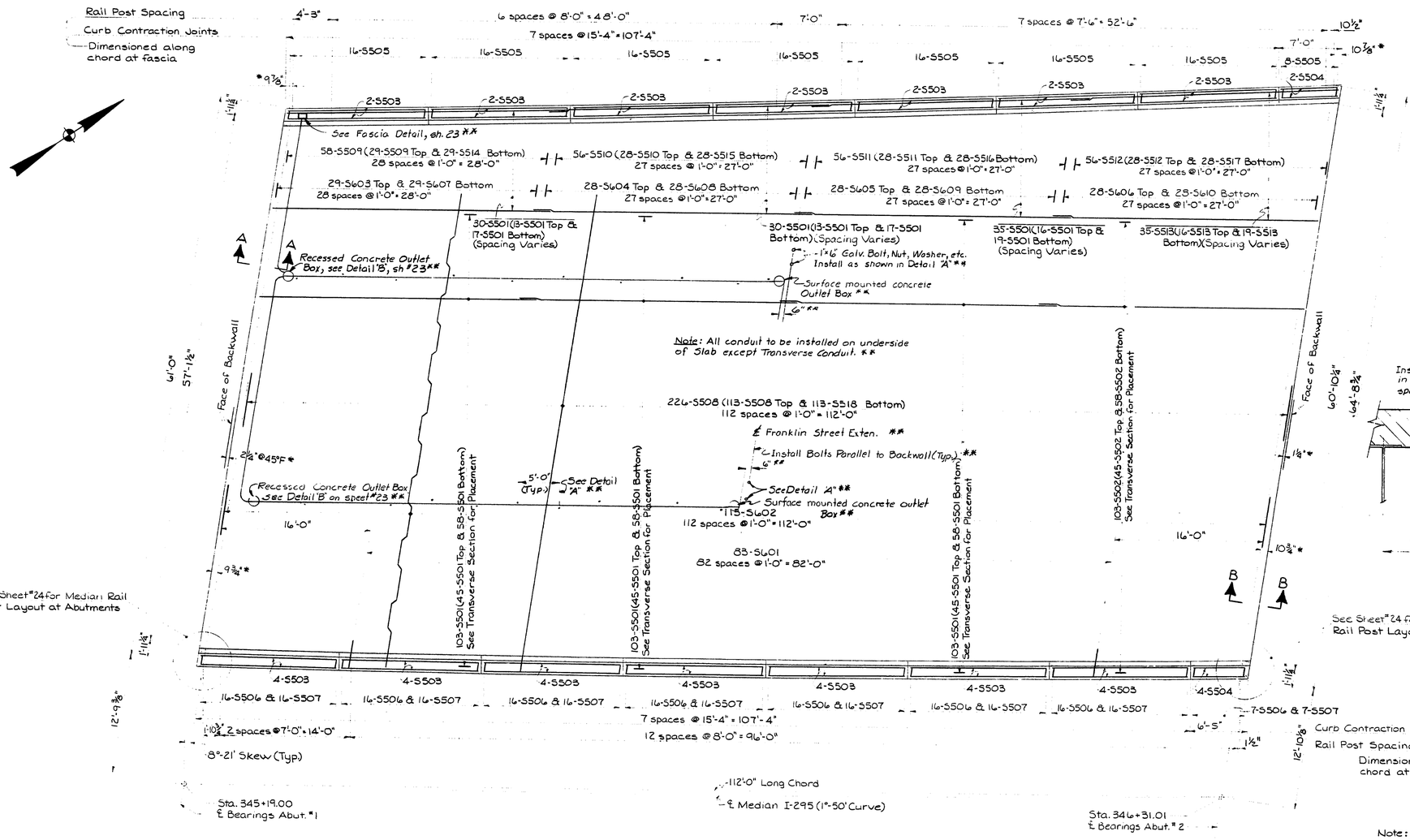
NORTHBOUND SUPERSTRUCTURE

SHEET 21 OF 36 AUGUSTA, MAINE AUGUST 1973

146-34

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	295-3(75)50	22	36

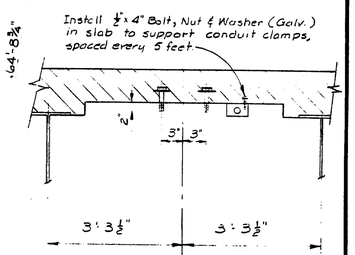
Rail Post Spacing
Curb Contraction Joints
Dimensioned along chord at fascia



PLAN - SOUTHBOUND SUPERSTRUCTURE

Notes: **

1. All conduit to be Galvanized 1" Φ steel.
2. Use Malleable Iron one hole pipe straps to support conduit @ 5'-0" C.-C.



DETAIL "A" **
(TYPICAL)

See Sheet #24 for Median Rail Post Layout at Abutments

Note: For Transverse Section see Sheet #23
For Sections A-A & B-B see Sheet #23

* Dimensions may vary depending on type of seal used.

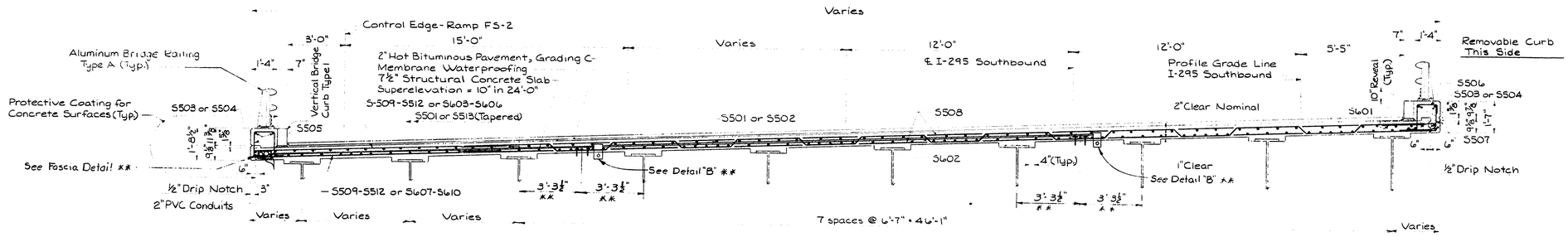
** Rev. 8-6-74

PLANS	BY	DATE
DESIGN DETAILED	A.L.L.	8-23-73
CHECKED	R.C.B.	8-22-73
REVISIONS	Rev. D.	
FIELD CHANGES		

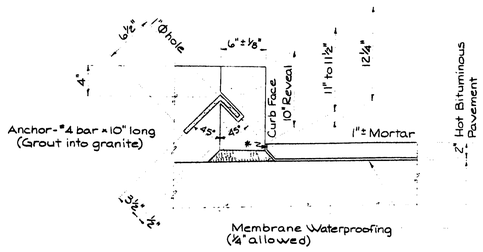
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
INTERSTATE 295
OVER
FRANKLIN STREET
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY
SOUTHBOUND SUPERSTRUCTURE
SHEET 22 OF 36 AUGUSTA, MAINE AUGUST 1973

146-35

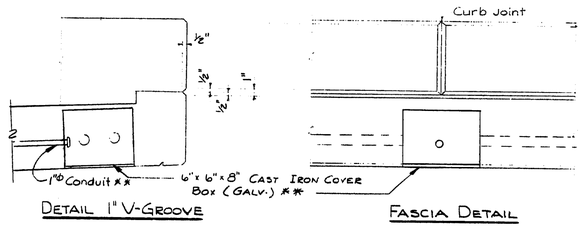
F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO	TOTAL SHEETS
1	MAINE	295-3(75)50	23	36



TRANSVERSE SECTION - SOUTHBOUND

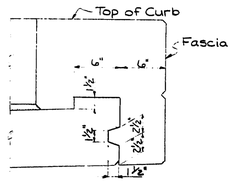


DETAIL OF VERTICAL BRIDGE CURB - TYPE 1

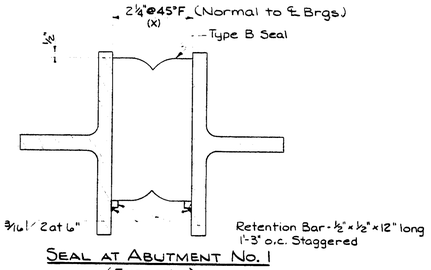


DETAIL 1" V-GROOVE

FASCIA DETAIL



KEY DETAIL AT REMOVABLE CURB



SEAL AT ABUTMENT NO. 1 (Expansion)

NOTES:

1.) The seals furnished shall be as follows:

LOCATION	TYPE	MOVEMENT RATING
Abutment #1	B	1.500
Abutment #2	A	0.500

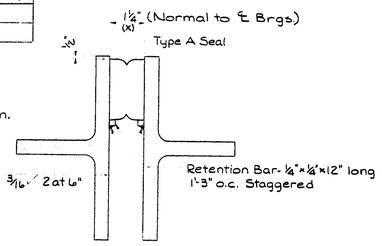
2.) The joint openings (X) shown, are for design only and are subject to change due to differences in seals as supplied by various manufacturers. Do not use for setting of joint opening during construction.

3.) The seal characteristics shall be submitted to the engineer for approval, prior to the fabrication of the armored joint.

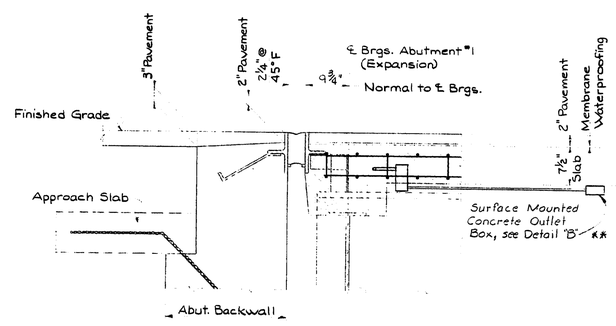
4.) The following movements, due to dead loads (slab, curb and wearing surface), shall be taken into account when setting the armored joint:

Location	Open
Abutment #1	⅛"
Abutment #2	¾"

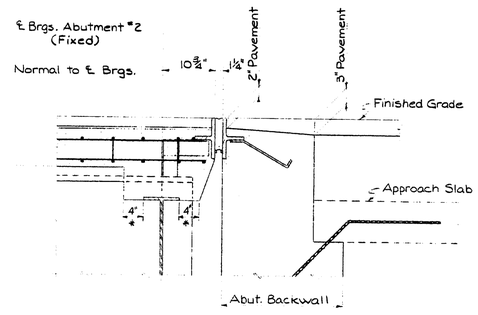
5.) The maximum joint opening (X) shall be 2⅞ inches at -30°F.



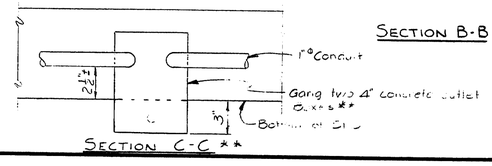
SEAL AT ABUTMENT NO. 2 (Fixed)



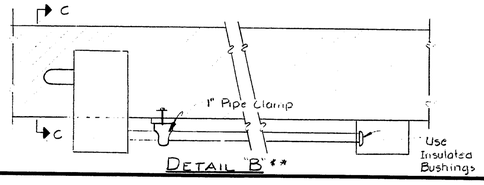
SECTION - A - A



SECTION B - B



SECTION C - C **



DETAIL "B" **

* Rev. - 11-12-73 ** Rev. 8-6-74

PLANS	BY	DATE
DESIGN - DETAILED	A.L.L.	5-30-73
CHECKED	R.C.B.	8-27-73
REVISIONS	R.V.D.	
FIELD CHANGES		

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

INTERSTATE 295
OVER
FRANKLIN STREET
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY

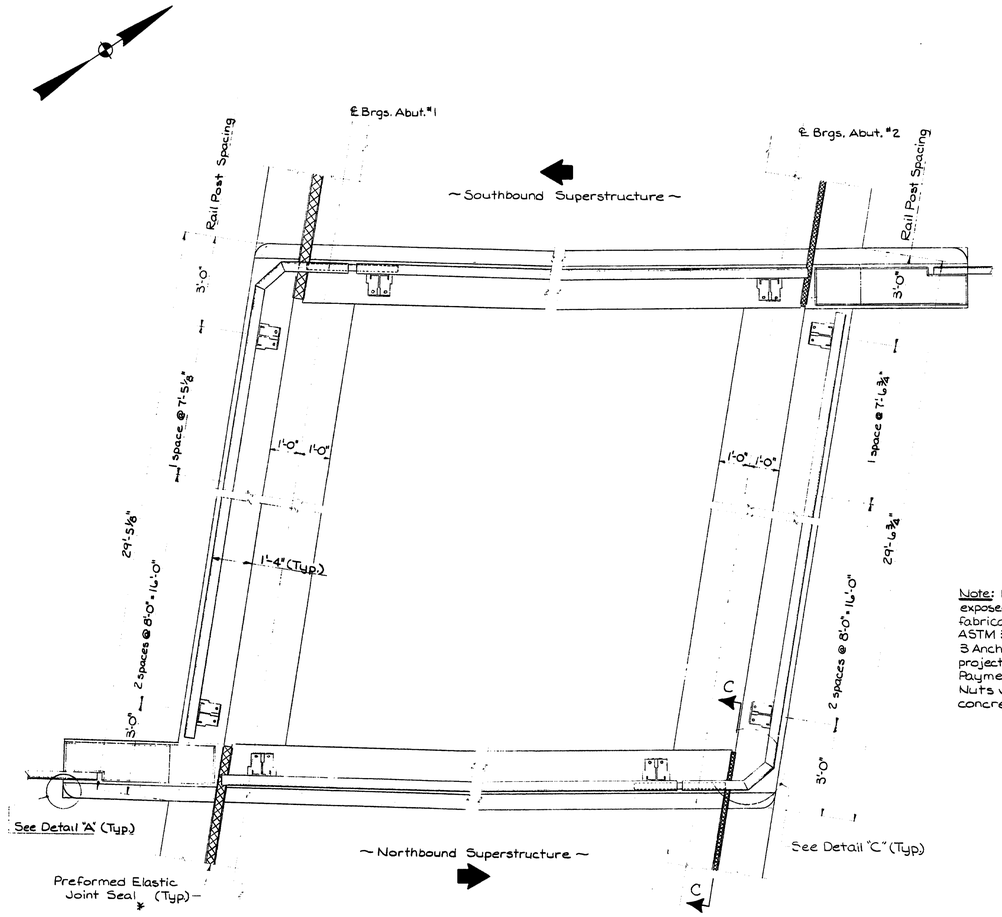
SUPERSTRUCTURE DETAILS

SHEET 23 OF 36 AUGUSTA, MAINE AUGUST 1973

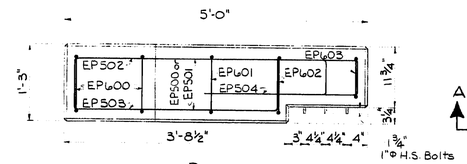
JANUARY 1962

146-36

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	295-3(75)50	24	36

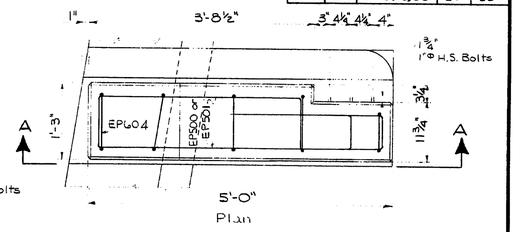


MEDIAN RAIL POST LAYOUT AT ABUTMENTS



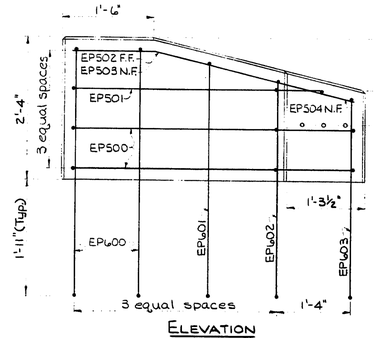
PLAN

Four of This Type Required

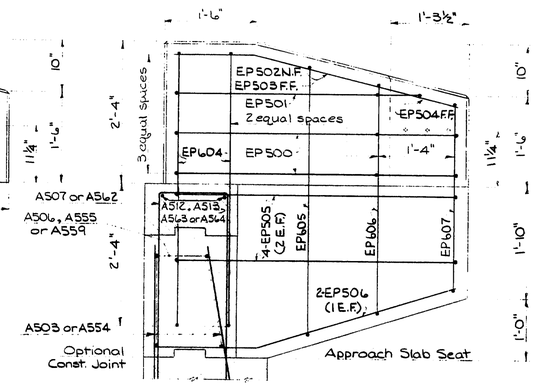


Plan

Two of This Type Required



ELEVATION

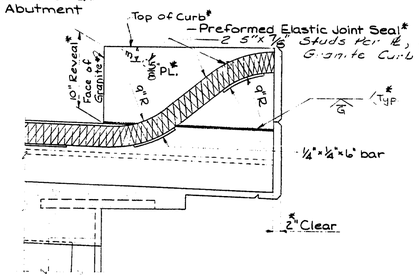


Section A-A

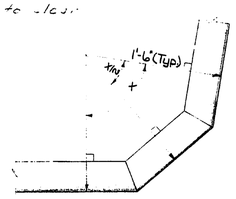
DETAIL "B"

Note: High Strength Anchor Bolts and exposed Hex. Nuts shall be galvanized after fabrication and shall conform to Designation ASTM 325. Each End Post will require 3 Anchor Bolts 8" long × 1" dia. with a 1¾" projection.
Payment for the Anchor Bolts and Hex. Nuts will be incidental to Abutment concrete.

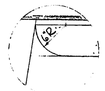
END POSTS



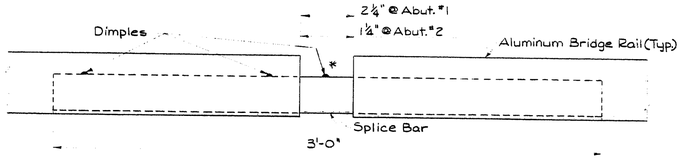
SECTION C-C



DETAIL "C"



DETAIL "A"



RAIL SPLICE DETAIL

PLANS	BY	DATE
DESIGN - DETAILED	A.L.L.	6-5-73
CHECKED	R.C.B.	10-3-73
REVISIONS	R.V.D.	
FIELD CHANGES		

* Rev. - 11-12-73

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

INTERSTATE 295
OVER
FRANKLIN STREET
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY

DETAILS

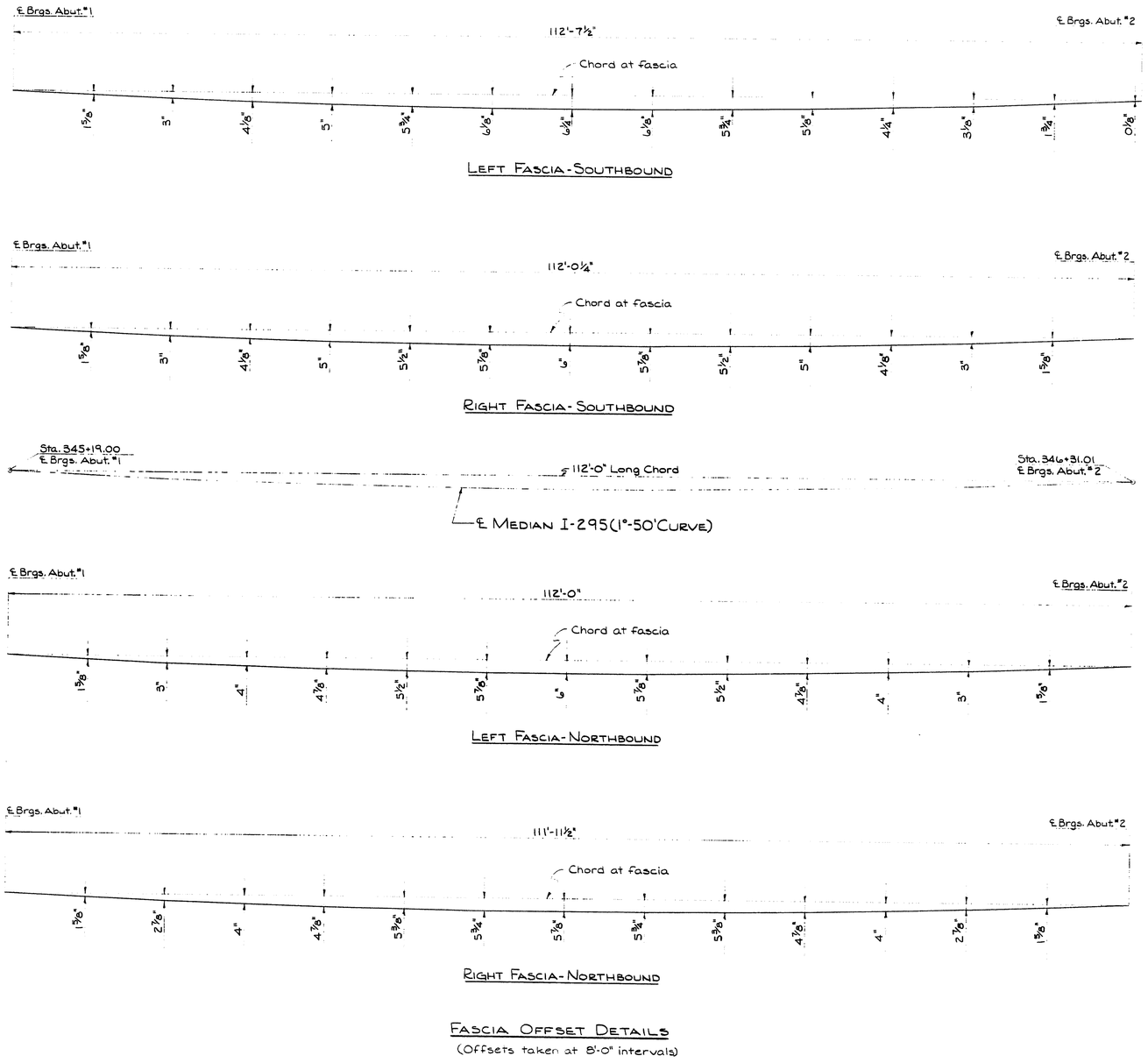
SHEET 24 OF 36 AUGUSTA, MAINE AUGUST 1973

295-1 2960

146-37

JANUARY 1969

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	295-3(75)50	25	36



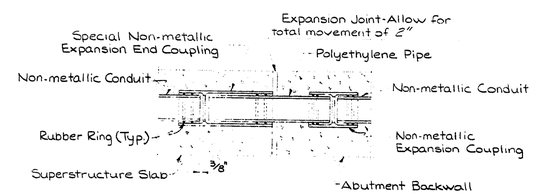
LEFT FASCIA-SOUTHBOUND

RIGHT FASCIA-SOUTHBOUND

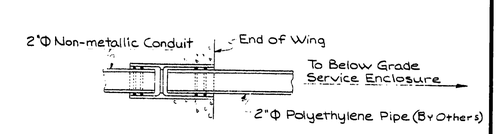
LEFT FASCIA-NORTHBOUND

RIGHT FASCIA-NORTHBOUND

FASCIA OFFSET DETAILS
(Offsets taken at 8'-0" intervals)



Expansion Device For Non-metallic Conduit
AT ABUTMENT & END OF SLAB
8 Required



Connection Between Non-metallic Conduit Embedded in Structure And Direct Buried Polyethylene Pipe
DEVICE AT END OF RETURN WING
8 Required

PLANS	BY	DATE
DESIGN-DETAILED	A.L.L. / R.C.B.	6-6-73
CHECKED	G.V.T.	10/16/73
REVISIONS		
FIELD CHANGES		

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
INTERSTATE 295
OVER
FRANKLIN STREET
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY
FASCIA AND CONDUIT DETAILS
SHEET 25 OF 36 AUGUSTA, MAINE AUGUST 1973

146-38

REINFORCING STEEL SCHEDULE

STRAIGHT BARS

MARK	NO.	LENGTH	LOCATION
			ABUTMENT #1
A500	365	9'-0"	Footing-Abut.#1 & #2
A501	215	2'-9"	Footing
A503	174	5'-3"	Backwall
A505	88	15'-0"	"
A506	130	25'-4"	Breastwall & Backwall
A508	2	18'-10"	Breastwall
A511	2	6'-6"	Median
A512	2	8'-0"	"
A513	2	19'-11"	"
A517	32	27'-10"	Breastwall & Backwall
A519	16	18'-0"	West Wing
A520	1	21'-0"	" "
A521	1	15'-6"	" "
A522	2	6'-6"	" "
A523	12	27'-0"	" "
A524	2	29'-2"	" "
A525	2	31'-10"	" "
A526	6	30'-9"	" "
A527	4	32'-6"	" "
A529	2	8'-11"	" "
A530	2	8'-2"	" "
A531	2	7'-4"	" "
A532	2	6'-7"	" "
A533	2	3'-4"	" "
A534	20	21'-2"	East Wing
A535	2	24'-2"	" "
A536	1	18'-4"	" "
A537	2	6'-6"	" "
A538	22	15'-6"	" "
A539	4	13'-6"	" "
A540	16	17'-10"	" "
A541	2	20'-3"	" "
A542	2	23'-4"	" "
A543	10	23'-9"	" "
A544	2	9'-0"	" "
A545	2	8'-3"	" "
A546	2	7'-6"	" "
A547	2	6'-10"	" "
A601	8	27'-0"	Footing-Abut.#2
A602	8	26'-4"	" " "
A603	6	25'-10"	" " "
A604	8	21'-4"	" " "
A605	6	20'-7"	" " "
A606	6	20'-0"	" " "
A607	60	47'-6"	" " "

MARK	NO.	LENGTH	LOCATION
A608	274	9'-0"	Footing-Abut.#1 & #2
A609	272	4'-3"	" " " "
A610	8	30'-3"	" " " "
A611	8	30'-9"	Footing-Abut.#1
A612	6	31'-3"	" " "
A613	8	22'-2"	" " "
A614	6	22'-8"	" " "
A615	6	23'-4"	" " "
A616	60	46'-3"	" " "
A617	16	9'-1"	West Wing
A618	68	4'-6"	Approach Slab Seat
A619	20	11'-6"	East Wing
A700	116	9'-0"	Footing-Abut.#1 & #2
A701	44	12'-0"	Wings & Abut.
A702	11	6'-2"	East End of Abut.
A900	152	10'-6"	Footing-Abut.#1 & #2
A901	87	15'-0"	Breastwall
A903	16	12'-0"	West Wing
A1002	20	12'-0"	East Wing
			ABUTMENT #2
A550	217	2'-9"	Footing & Abut.
A551	91	13'-0	Breastwall
A554	144	4'-10"	Backwall
A555	134	26'-2"	Breastwall & Backwall
A558	2	11'-1"	Breastwall
A559	32	29'-2"	Breastwall & Backwall
A561	34	5'-8"	Backwall
A563	2	16'-2"	"
A564	2	11'-5"	"
A565	2	18'-6"	Breastwall
A566	2	15'-0"	"
A567	2	10'-4"	"
A571	10	24'-1"	West Wing
A572	2	26'-9"	" "
A573	6	29'-7"	" "
A574	6	27'-7"	" "
A575	14	16'-4"	" "
A576	2	19'-4"	" "
A577	4	6'-1"	East & West Wing
A578	4	6'-8"	" " "
A579	4	7'-5"	" " "
A580	4	8'-2"	" " "
A581	4	8'-11"	" " "

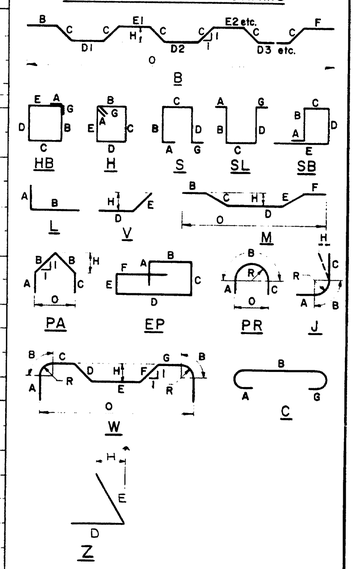
MARK	NO.	LENGTH	LOCATION
A582	1	14'-0"	West Wing
A583	23	17'-6"	East Wing
A584	14	13'-1"	" "
A585	7	15'-8"	" "
A586	12	18'-7"	" "
A587	2	17'-6"	" "
A588	2	14'-6"	" "
A589	19	19'-5"	" "
A590	1	21'-5"	" "
A591	1	22'-5"	" "
A650	68	4'-6"	Approach Slab Seat
A651	33	4'-10"	East & West Wing
A750	89	13'-0"	Breastwall
A751	38	12'-0"	Wings & Abut.
A753	9	6'-2"	West End of Abut.
A950	14	12'-11"	West Wing
A1052	19	17'-11"	East Wing
			APPROACH SLABS
AS400	20	39'-9"	
AS401	20	56'-9"	
AS402	20	40'-0"	
AS403	20	59'-6"	
AS600	382	14'-8"	
AS601	398	14'-8"	

BENT BARS

MARK	NO.	LENGTH	TYPE	A	B	C	D	E	F	G	H	O	R	LOCATION
							ABUTMENT #1							
A400	34	5'-4"	S	—	1'-11"	1'-6"	1'-11"	—	—	—	—	—	—	Bridge Seat
A401	34	6'-1"	S	—	1'-11"	2'-3"	1'-11"	—	—	—	—	—	—	" "
A702	3	7'-4"	M			8"	5'-9"	11"			7"			East Corner
A705	3	7'-7"	M	—	—	1'-4"	4'-9"	11'-6"	—	—	11"			West Corner
A502	17	8'-1"	V	—	—	—	4'-9"	3'-4"	—	—	2'-5"	—	—	Breastwall
A504	17	8'-3"	L	3'-8"	4'-7"	—	—	—	—	—	—	—	—	
A507	19	10'-2"	S	—	4'-6"	1'-2"	4'-6"	—	—	—	—	—	—	Backwall
A509	51	7'-2"	V	—	—	—	3'-10"	3'-4"	—	—	2'-5"	—	—	Breastwall
A510	51	7'-3"	L	3'-8"	3'-7"	—	—	—	—	—	—	—	—	"
A514	16	6'-0"	V	—	—	—	3'-0"	3'-0"	—	—	2'-11"	—	—	East Corner
A515	19	6'-4"	L	3'-8"	2'-8"	—	—	—	—	—	—	—	—	Breastwall
A516	19	6'-0"	V	—	—	—	2'-8"	3'-4"	—	—	2'-5"	—	—	"
A518	15	6'-0"	Z	—	—	—	3'-0"	3'-0"	—	—	6"*	—	—	West Corner
A528	47	6'-6"	S	—	2'-9"	1'-0"	2'-9"	—	—	—	—	—	—	East & West Wing
A600	84	7'-6"	S	—	—	1'-0"	5'-6"	—	—	1'-0"	—	—	—	Footings
A703	10	8'-7"	V	—	—	—	8'-1"	8"	—	—	6"	—	—	East Corner
A902	87	8'-4"	J	1'-0"	1'-7"	5'-9"	—	—	—	—	—	—	1'-0"	Footing
A704	8	8'-4"	V	—	—	—	7'-2"	1'-2"	—	—	10"	—	—	West Corner
A1000	87	10'-10"	J	1'-0"	1'-7"	8'-3"	—	—	—	—	—	—	1'-0"	Footing
A1001	16	8'-2"	J	1'-0"	1'-7"	5'-7"	—	—	—	—	—	—	1'-0"	"
A1100	15	10'-10"	J	1'-0"	1'-7"	8'-3"	—	—	—	—	—	—	1'-0"	"
A1101	1	13'-10"	J	1'-0"	1'-7"	11'-3"	—	—	—	—	—	—	1'-0"	"
A1102	20	10'-10"	J	1'-0"	1'-7"	8'-3"	—	—	—	—	—	—	1'-0"	"
							ABUTMENT #2							
A450	34	5'-4"	S	—	1'-11"	1'-6"	1'-11"	—	—	—	—	—	—	Bridge Seat
A451	34	6'-1"	S	—	1'-11"	2'-3"	1'-11"	—	—	—	—	—	—	" "
A752	9	8'-0"	V				7'-0"	1'-0"			10"			East Corner
A753	7	8'-4"	V				7'-8"	8"			8"			West Corner
A552	18	6'-10"	L	3'-6"	3'-4"	—	—	—	—	—	—	—	—	Breastwall
A553	34	7'-2"	V	—	—	—	3'-10"	3'-4"	—	—	2'-4"	—	—	"
A556	18	6'-7"	L	3'-6"	3'-1"	—	—	—	—	—	—	—	—	"
A557	20	7'-10"	L	3'-6"	4'-4"	—	—	—	—	—	—	—	—	"
A560	18	8'-10"	L	3'-6"	5'-4"	—	—	—	—	—	—	—	—	"
A562	29	5'-4"	S	—	2'-1"	1'-2"	2'-1"	—	—	—	—	—	—	Backwall
A568	18	8'-1"	V	—	—	—	4'-9"	3'-4"	—	—	2'-4"	—	—	Breastwall
A569	20	8'-6"	V	—	—	—	5'-2"	3'-4"	—	—	2'-4"	—	—	"
A570	17	9'-5"	V	—	—	—	6'-1"	3'-4"	—	—	2'-4"	—	—	"
A592	43	6'-1"	S	—	2'-7"	11"	2'-7"	—	—	—	—	—	—	Backwall
A593	16	6'-0"	Z	—	—	—	3'-0"	3'-0"	—	—	6"*	—	—	East Corner
A594	14	6'-0"	V	—	—	—	3'-0"	3'-0"	—	—	2'-11"	—	—	West Corner
A850	88	12'-4"	J	1'-0"	1'-7"	9'-9"	—	—	—	—	—	—	1'-0"	Breastwall
A851	89	8'-4"	J	1'-0"	1'-7"	5'-9"	—	—	—	—	—	—	1'-0"	"
A1050	33	8'-4"	J	1'-0"	1'-7"	5'-9"	—	—	—	—	—	—	1'-0"	East & West Wing
A754	3	7'-4"	M			1'-4"	5'-0"	1'-0"			11"		—	East Corner
A755	3	7'-5"	M			6"	6'-0"	11"			8"		—	West Corner
A1150	13	10'-10"	J	1'-0"	1'-7"	8'-3"	—	—	—	—	—	—	1'-0"	West Wing
A1151	1	13'-10"	J	1'-0"	1'-7"	11'-3"	—	—	—	—	—	—	1'-0"	" "
A1152	18	10'-10"	J	1'-0"	1'-7"	8'-3"	—	—	—	—	—	—	1'-0"	East Wing
MARK	NO.	LENGTH	TYPE	A	B	C	D	E	F	G	H	O	R	LOCATION

FHWA REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	295-3(75)50	26	36

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 (A502) bar size - #5
   Mark (P1001) bar size - #10
   Mark (S603) bar size - #6
2. Letter of Marks A, P & S locates bars of Abutments, Piers, and Superstructure parts respectively.

* Rev 11-12-73

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

INTERSTATE 295
OVER
FRANKLIN STREET
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY

REINFORCING STEEL SCHEDULE

SHEET 26 OF 36 AUGUSTA, MAINE **AUGUST 1973**

PLANS	BY	DATE
DESIGN-DETAIL	A.L.L.	8-7-73
CHECKED	R.C.B.	8-7-73
REVISIONS		
FIELD CHANGES		

Bridge Engineer

146-39

FHWA REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	295-3(75)50	27	36

REINFORCING STEEL SCHEDULE

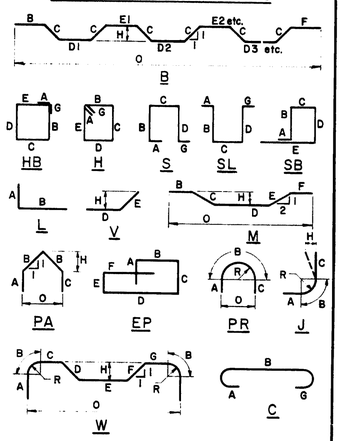
STRAIGHT BARS

MARK	NO.	LENGTH	LOCATION
SUPERSTRUCTURE			
S500	226	44'-4"	N.B. Deck
S501	689	30'-0"	N.B. & S.B. Deck
S502	198	29'-4"	" " "
S503	84	15'-0"	" " Curbs
S504	12	5'-11"	" " "
S508	113	51'-1"	S.B. Deck
S509	58	11'-0"	" "
S510	56	12'-2"	" "
S511	56	13'-4"	" "
S512	56	14'-6"	" "
S513	35	29'-6"	" "
S514	29	14'-6"	" "
S515	28	15'-9"	" "
S516	28	17'-0"	" "
S517	28	18'-3"	" "
S518	113	47'-7"	" "
S601	249	3'-3"	N.B. & S.B. Deck
S603	29	11'-4"	S.B. Deck
S604	28	12'-6"	" "
S605	28	13'-8"	" "
S606	28	14'-10"	" "
S607	29	14'-0"	" "
S608	28	15'-2"	" "
S609	28	16'-4"	" "
S610	28	17'-6"	" "
END POSTS			
EP504	6	2'-7"	Bend in Field *

BENT BARS

MARK	NO.	LENGTH	TYPE	A	B	C	D	E	F	G	H	O	R	LOCATION
SUPERSTRUCTURE														
S505	239	4'-8"	S	6"	1'-4"	1'-0"	1'-4"	—	—	6"	—	—	—	N.B. & S.B. Curbs
S506	238	3'-4"	S	—	6"	1'-0"	1'-4"	—	—	6"	—	—	—	" " "
S507	238	3'-6"	J	1'-0"	6"	2'-0"	—	—	—	—	—	—	4"	" " "
S600	113	46'-4"	B	—	4'-4¼"	6½"	2'-7½"	3'-3¼"	3'-4½"	—	4½"*	44'-4"	—	N.B. Deck
S602	113	53'-8"	B	—	4'-7"	6½"	2'-7½"	3'-3¼"	3'-6"	—	4½"	51'-4"	—	S.B. Deck
END POSTS														
EP500	12	12'-9"	EP	10"	3'-4½"	9½"	4'-8"	6"	2'-7"	—	—	—	—	
EP501	6	11'-8"	EP	10"	3'-4½"	9½"	4'-2"	6"	2'-0"	—	—	—	—	
EP502	6	4'-8"	V	—	—	—	1'-4"	3'-4"	—	—	10"	—	—	
EP503	6	3'-5"	V	—	—	—	1'-4"	2'-1"	—	—	6"	—	—	
EP505	8	6'-6"	S	—	11"	4'-8"	11"	—	—	—	—	—	—	End Post Haunch
EP506	4	4'-10"	V	—	—	—	1'-8"	3'-2"	—	—	1'-0"	—	—	" " "
EP600	8	11'-1"	H	6½"	11"	4'-1"	11"	4'-1"	—	6½"	—	—	—	
EP601	4	10'-7"	H	6½"	11"	3'-10"	11"	3'-10"	—	6½"	—	—	—	
EP602	4	10'-0"	H	6½"	11"	3'-6½"	11"	3'-6½"	—	6½"	—	—	—	
EP603	4	8'-11"	H	6½"	7¾"	3'-3¼"	7¾"	3'-3"	—	6½"	—	—	—	
EP604	4	11'-11"	H	6½"	11"	4'-6"	11"	4'-6"	—	6½"	—	—	—	
EP605	2	11'-10"	H	6½"	11"	4'-5½"	11"	4'-5½"	—	6½"	—	—	—	
EP606	2	10'-6"	H	6½"	11"	3'-9½"	11"	3'-9½"	—	6½"	—	—	—	
EP607	2	8'-6½"*	H	6½"	7¾"*	3'-1"	7¾"*	3'-1"	—	6½"	—	—	—	
MARK	NO.	LENGTH	TYPE	A	B	C	D	E	F	G	H	O	R	LOCATION

TYPE-BENDING DIAGRAMS



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Reinforcing Bar: ASTM A615 Grade 60

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REINFORCING STEEL SCHEDULE

SHEET 27 OF 36 AUGUSTA, MAINE **AUGUST 1973**

PLANS	BY	DATE
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CHECKED	R.C.B.	10-4-73
REVISIONS	RVD	
FIELD CHANGES		

146-40