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

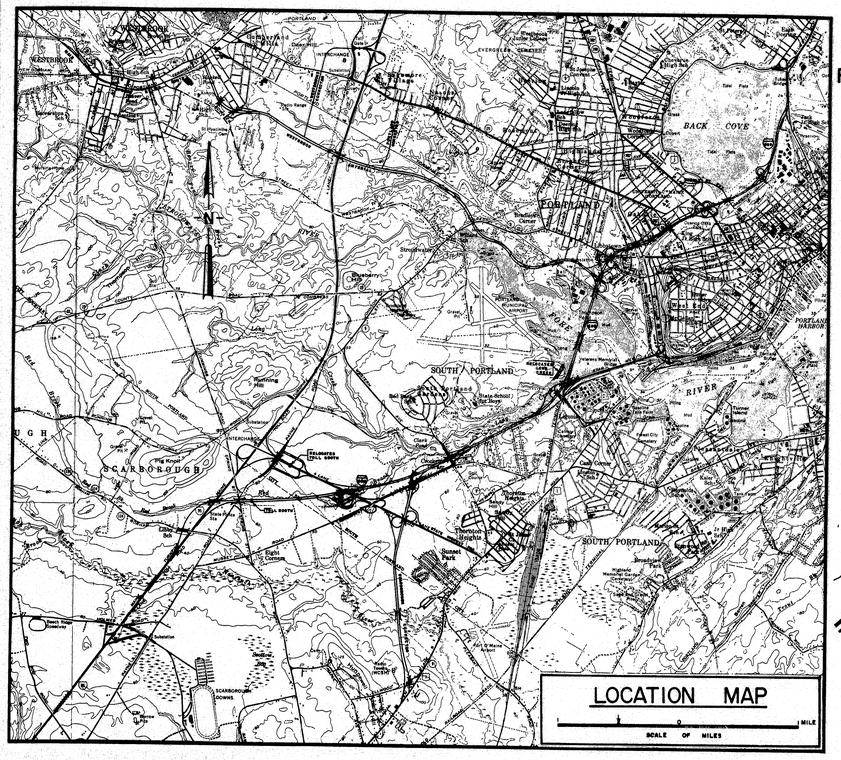
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

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

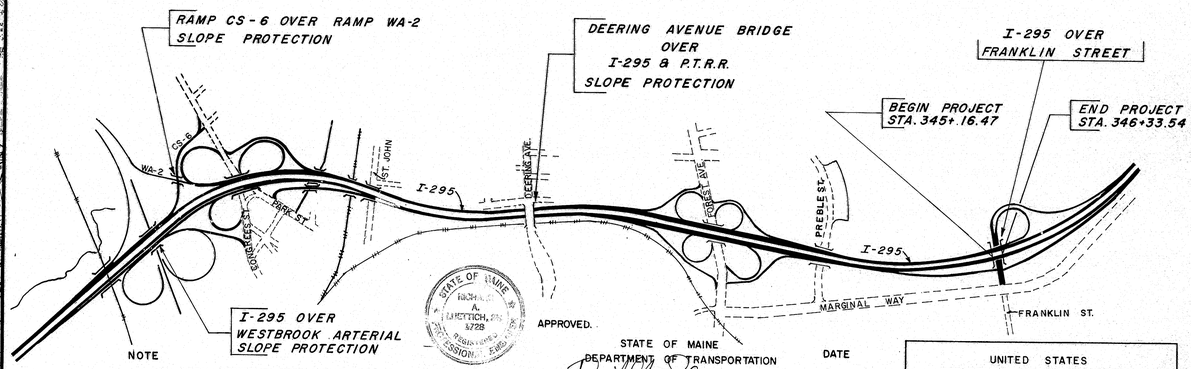
CONVENTIONAL SIGNS

COUNTY LINES	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 (hardwood, softwood)
TRAVELLED WAY - EXISTING	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



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

STATE OF MAINE
RICHARD A. LIESTICH, 5728
REGISTERED PROFESSIONAL ENGINEER

APPROVED.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION — DATE

Daniel H. Stevens, COMMISSIONER — 9-19-73

Richard A. Liestich, CHIEF ENGINEER AND BUREAU DIRECTOR — 9-19-73

UNITED STATES
DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
REGION 1

APPROVED: _____ DIVISION ENGINEER — DATE

JANUARY 1968

No change in plans "Revised As Built" by HCot 11-12-76
146-14

touraine paints TRUFLEX ☆ SILKY ☆ TRIPLE WHITE ☆ RYPLEX

B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	295-3(75)50	2	36

ESTIMATED QUANTITIES

ITEM NO.	DESCRIPTION	QUANTITY	UNIT
203.25	Granular Borrow	6,400	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	189,740	Lb.
503.13	Reinforcing Steel, Placing	189,740	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.

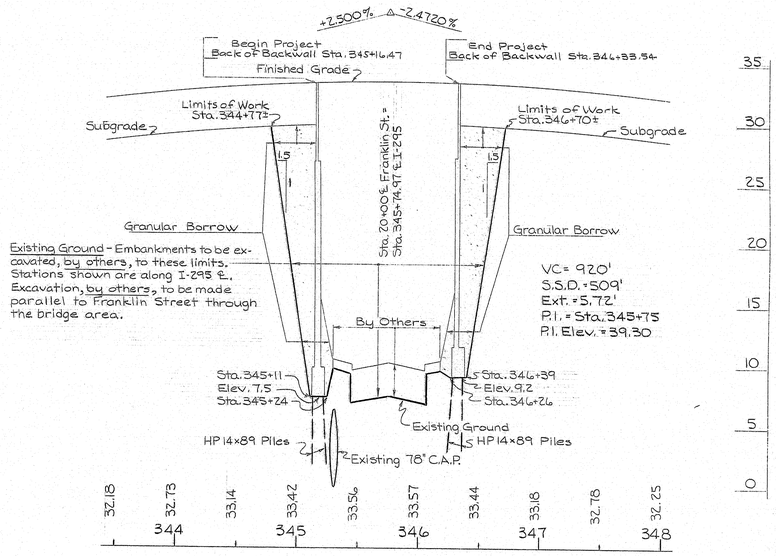
ESTIMATED QUANTITIES

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.

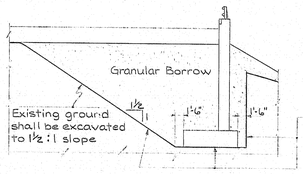
ESTIMATED QUANTITIES FOR LUMP SUM ITEMS

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

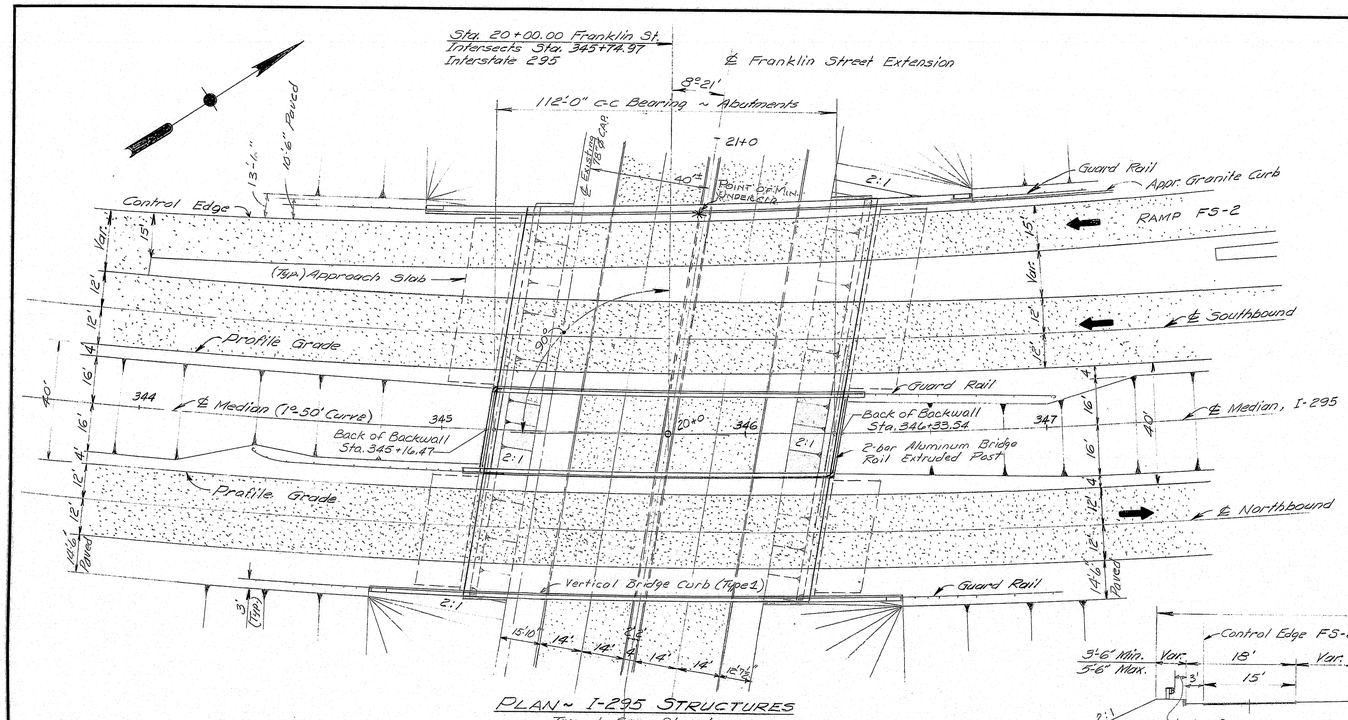
*Rev. - Lb. changed to Ea. 11-12-73

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

146-15

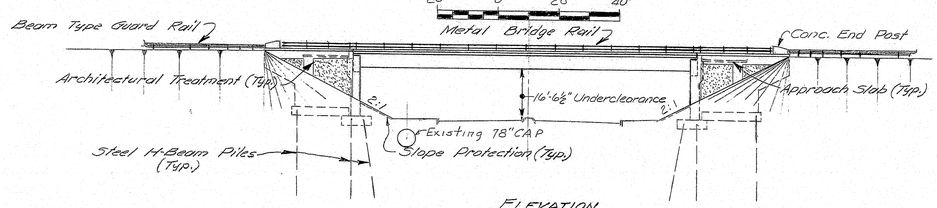
touraine paints TRUFLEX ☆ SILKY ☆ TRIPLE WHITE ☆ RYPLEX

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



PLAN ~ I-295 STRUCTURES

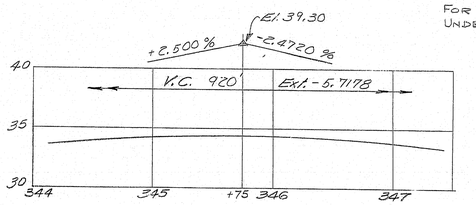
Two 1-Span Structures
Composite Welded Beams



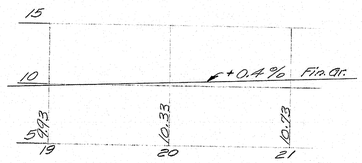
ELEVATION

20' 0 20' 40'

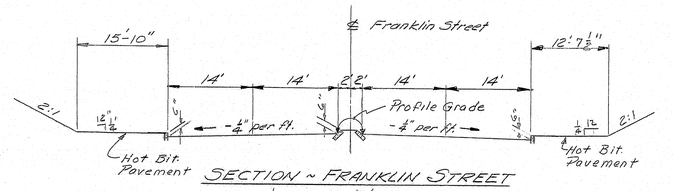
NOTE: THE COMPLETED PROJECT IS SHOWN HERE. FOR A DESCRIPTION OF WORK TO BE COMPLETED UNDER THIS CONTRACT SEE THE DETAILED PLANS



PROFILE GRADE ~ I-295

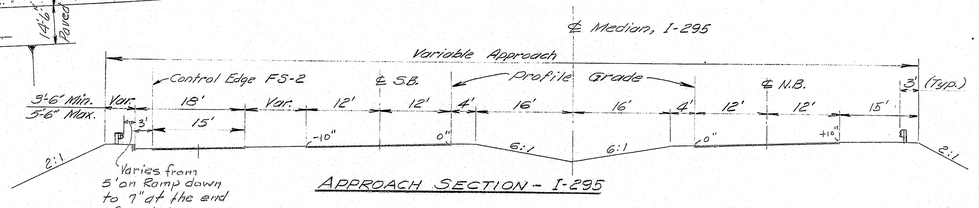


PROFILE ~ FRANKLIN ST.



SECTION ~ FRANKLIN STREET

LOOKING WEST



APPROACH SECTION ~ I-295

SPECIFICATIONS

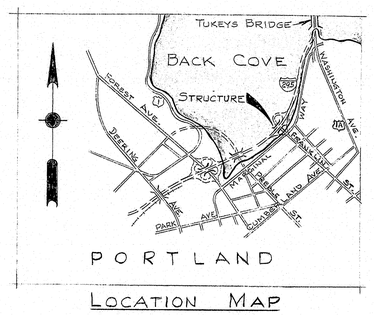
DESIGN - A.A.S.H.O. Standard Specifications for Highway Bridges 1969, with Interim Specifications thru 1972

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

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

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



LOCATION MAP

SCALE OF MILES

5 0

* Rev. - Slope Protection shelf removed in Elevation View

Proj. Des. Engr.: A.L.V.

DESIGN- A.L.V. TRACE- CHECK- R.V.D.	BRIDGE NO. SURVEY- PLOT-

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

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

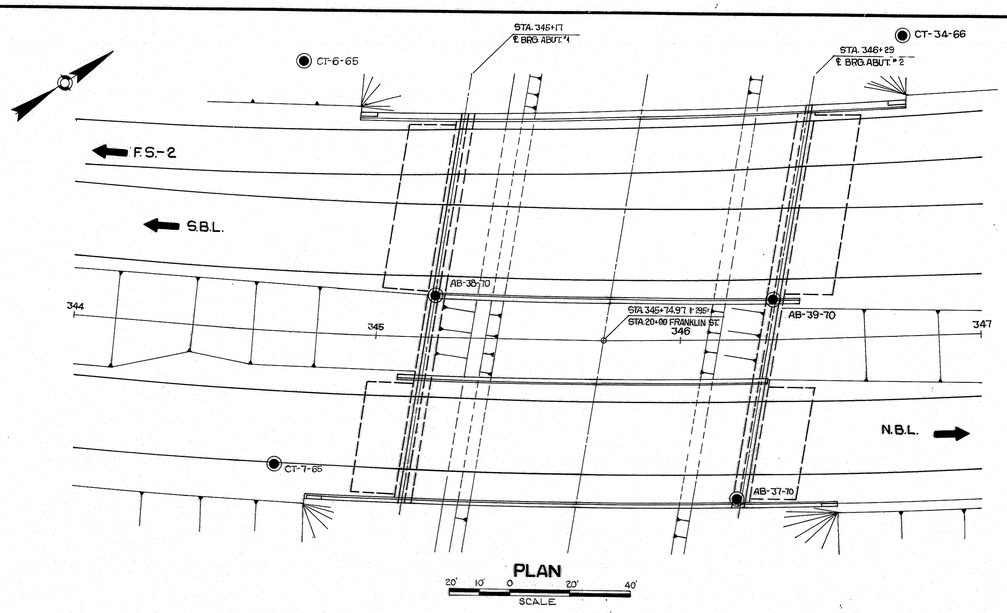
GENERAL PLAN

SHEET 3 OF 36 AUGUSTA, MAINE AUGUST 1973

146-16

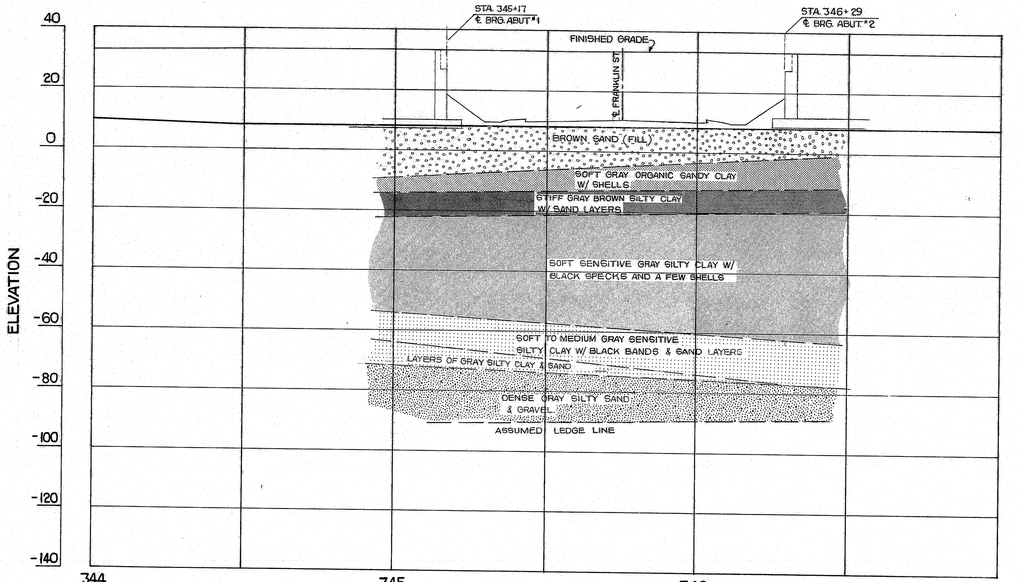
touraine paints TRUFLEX ☆ SILKY ☆ TRIPLE WHITE ☆ RYPLEX

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



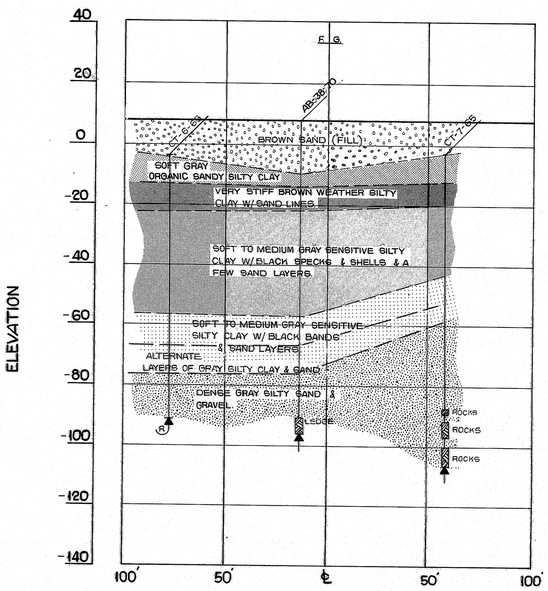
PLAN

SCALE 20' 10' 0 20' 40'

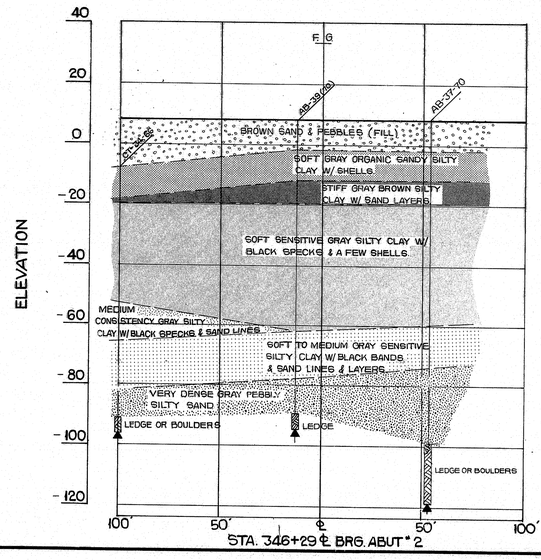


PROFILE

SCALE 20' 10' 0 20' 40'



STA. 345+17 ℄ BRG. ABUT.#1



STA. 346+29 ℄ BRG. ABUT.#2

PLANS

DESIGN - DETAILED	BY	DATE
CHECKED		
REVISIONS		
FIELD CHANGES		

JANUARY 1968

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

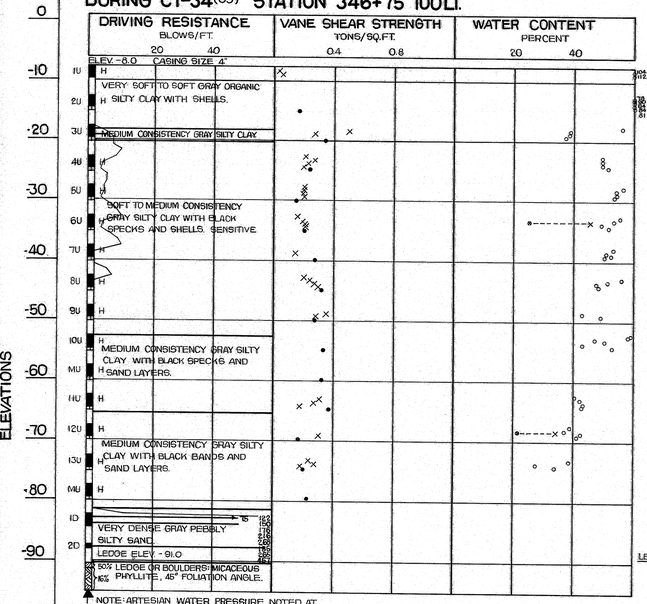
203-1 2080

146-17

touraine paints TRUFLEX ☆ SILKY ☆ TRIPLE WHITE ☆ RYPLEX

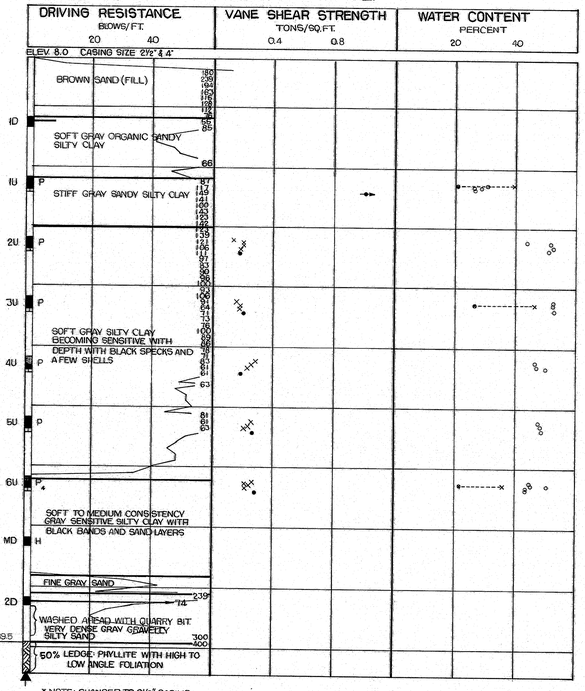
B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	295-3(75)50	5	36

BORING CT-34(65) STATION 346+75 100'LT.



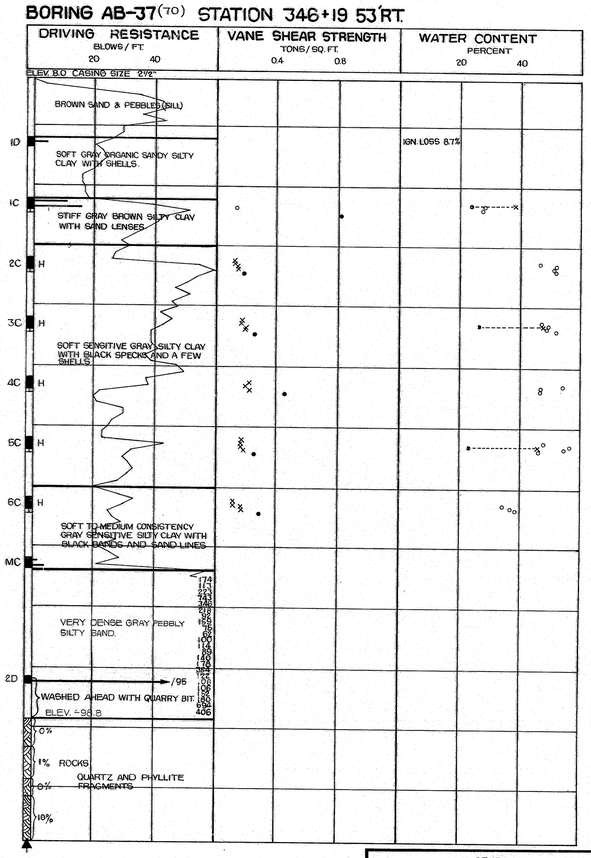
NOTE: ARTESIAN WATER PRESSURE NOTED AT START OF ROCK CORING. FLOW AT 3 GALLONS PER MIN. TO ELEV. - 1.0.

BORING AB-39(70) STATION 346+31 13'LT.



* NOTE: CHANGED TO 2½" CASING.

BORING AB-37(70) STATION 346+19 53'RT.



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
- 1D 5 ft sampler "1200's
- 1C 2" O.D. 16 ga. seamless tubing
- 1U 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 — CHECKED — REVISIONS — FIELD CHANGES — BY — DATE

JANUARY 1968

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

203-1 2380

146-18

touraine paints TRUFLEX ☆ SILKY ☆ TRIPLE WHITE ☆ RYPLEX

B.F.P. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	295-3(75)50	6	36

BORING CT-6 (65) STATION 344+70 90'LT.

ELEVATION

DRIVING RESISTANCE Blows/Ft: 20 40 | VANE SHEAR STRENGTH Tons/sq.ft: 0.4 0.8 | WATER CONTENT Percent: 20 40

ELEV. -3.2' CASING SIZE 4"

- GRAY ORGANIC SANDY SILTY CLAY.
- IGN. LOSS 6.7%
- IGN. LOSS 8.0%
- VERY STIFF TO STIFF BROWN WEATHERED SILTY CLAY WITH BLUE CLAY FILLED CRACKS.
- SOFT TO MEDIUM CONSISTENCY GRAY SILTY CLAY WITH BLACK SPECKS & SHELLS, SANDY & SAND LAYERS IN 9U.
- SOFT GRAY SILTY CLAY WITH BLACK BANDS AND SAND LAYERS.
- ALTERNATE LAYERS OF GRAY SILTY CLAY AND SAND.
- DENSE GRAY GRAVELLY SILTY SAND.

* DROVE "A" RODS
** TOOK SPOON SAMPLE

BORING AB-38 (70) STATION 345+19 13'LT.

DRIVING RESISTANCE Blows/Ft: 20 40 | VANE SHEAR STRENGTH Tons/sq.ft: 0.4 0.8 | WATER CONTENT Percent: 20 40

ELEV. 10.0 4" & 2½" CASING

- BROWN SAND (FILL)
- GRAY ORGANIC SANDY SILTY CLAY WITH SHELLS.
- VERY STIFF GRAY & BROWN WEATHERED SILTY CLAY WITH SAND LINES
- SOFT TO MEDIUM CONSISTENCY GRAY SILTY CLAY WITH BLACK SPECKS AND SHELLS, BECOMING SENSITIVE WITH DEPTH.
- SOFT TO MEDIUM CONSISTENCY GRAY SENSITIVE SILTY CLAY WITH BLACK BANDS AND SAND LINES
- GRAY SILTY CLAY & SAND
- GRAY SAND
- 150/6"
- WASHED AHEAD VERY DENSE GRAY SILTY SAND AND GRAVEL
- LEDGE ELEV. -89.0
- 25% LEDGE, PHYLLITE WITH HIGH ANGLE FOLIATION

* CHANGED TO 2½" CASING.
NOTE: WATER PRESSURE 7' ABOVE GROUND WHILE PULLING CASING.

BORING CT-7 (65) STATION 344+70 45'RT.

DRIVING RESISTANCE Blows/Ft: 20 40 | VANE SHEAR STRENGTH Tons/sq.ft: 0.4 0.8 | WATER CONTENT Percent: 20 40

ELEV. -2.79 4" & 2½" CASING

- SOFT GRAY ORGANIC SANDY SILTY CLAY WITH SHELLS.
- IGN. LOSS 1.4%
- IGN. LOSS 6.7%
- STIFF BROWN WEATHERED SILTY CLAY
- MEDIUM DENSITY CONSISTENCY GRAY SILTY CLAY WITH BLACK SPECKS AND SHELLS, SANDY & SAND LENSES IN 8U.
- MEDIUM CONSISTENCY GRAY SILTY CLAY WITH BLACK BANDS, SAND LAYERS NEAR BOTTOM.
- ALTERNATE LAYERS OF SAND SILT & CLAY.
- MEDIUM TO DENSE GRAY GRAVELLY SILTY SAND (TILL)
- 60/3"
- BOULDERS
- BOULDERS
- BOULDERS

* CHANGED TO 2½" CASING.

PLANS — DESIGN - DETAILED — CHECKED — REVISIONS — FIELD CHANGES — BY — DATE

JANUARY 1968

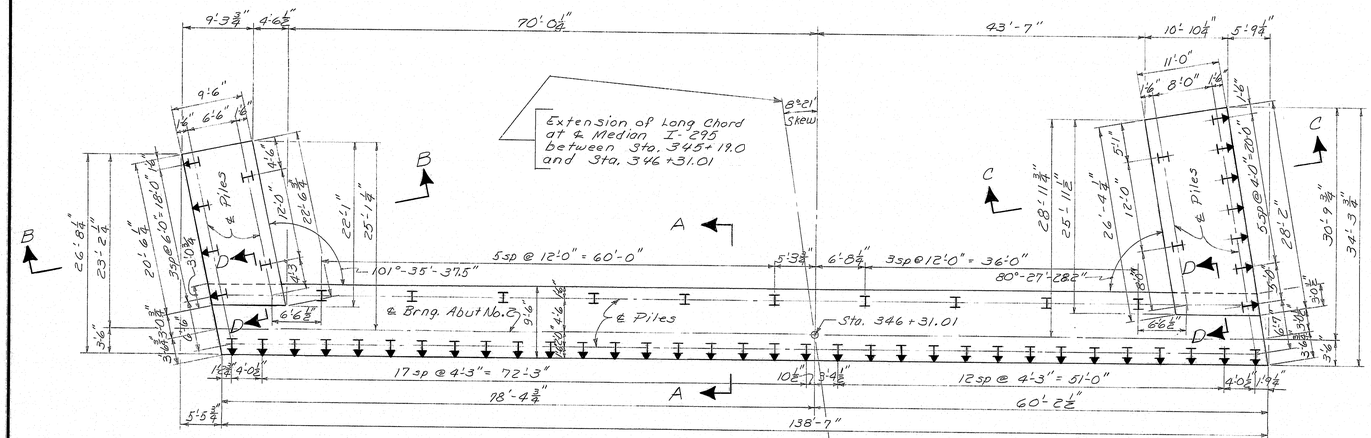
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
INTERSTATE 295
OVER
FRANKLIN STREET
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY
BORING DETAIL
SHEET 6 OF 36 AUGUSTA, MAINE AUGUST 1973

2034 2060

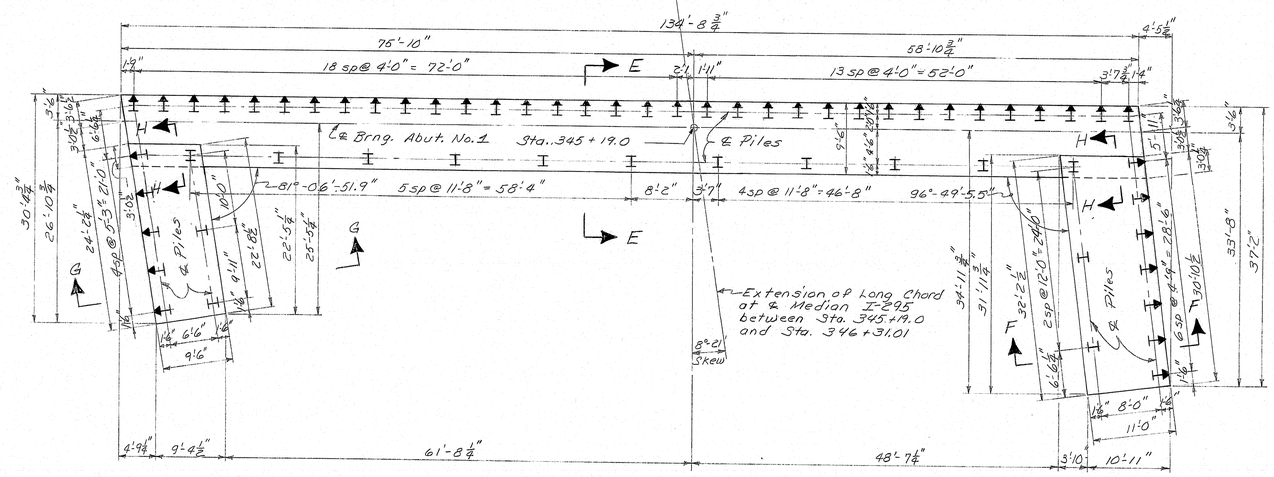
146-19

touraine paints TRUFLEX ☆ SILKY ☆ TRIPLE WHITE ☆ RYPLEX

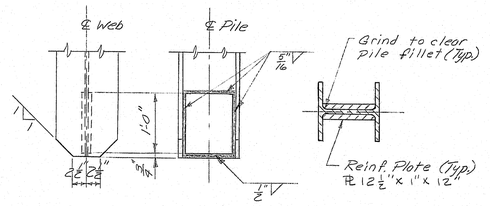
F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	295-3(75)50	7	36



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 14x89 @ 100 ft.
   Abutment No 2 58-HP 14x89 @ 100 ft.

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

By	Des. Engr.	Asst.	DATE
PLANS	DESIGN - DETAILED	ALG	6-73
	CHECKED	RWM	6-73
	REVISIONS	RDB	
	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

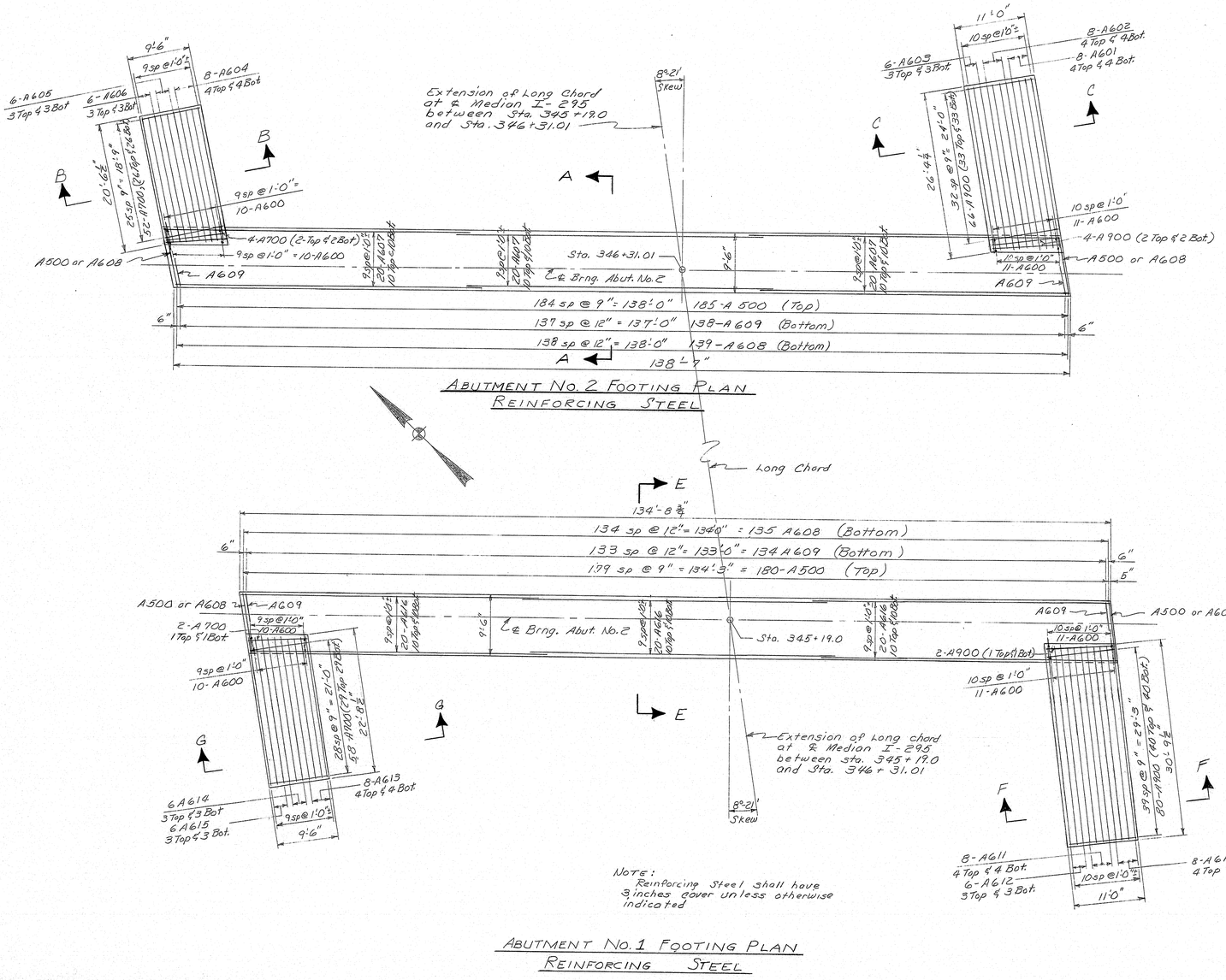
JANUARY 1968

203-1 2080

146-20

touraine paints TRUFLEX ☆ SILKY ☆ TRIPLE WHITE ☆ RYPLEX

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



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

ABUTMENT NO. 1 FOOTING PLAN
REINFORCING STEEL

By	Des. Engr.	Dr.	Ck.	Date
	A. Ware	R.K.M.		4-5-73
		MDB		

PLANS
DESIGN-DETAILED
CHECKED
REVISIONS
FIELD CHANGES

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

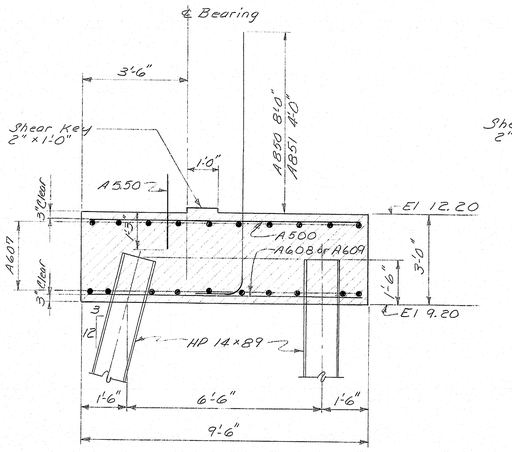
JANUARY 1968

203-1 2000

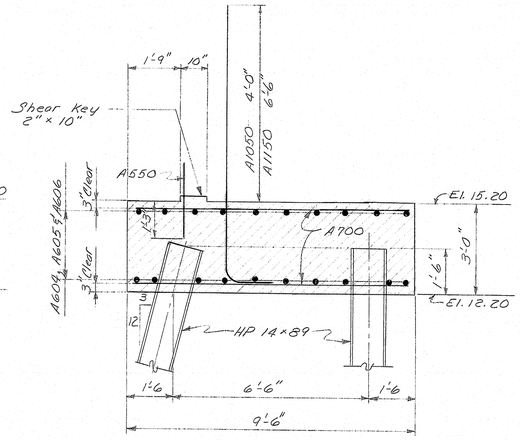
146-21

touraine paints TRUFLEX ☆ SILKY ☆ TRIPLE WHITE ☆ RYPLEX

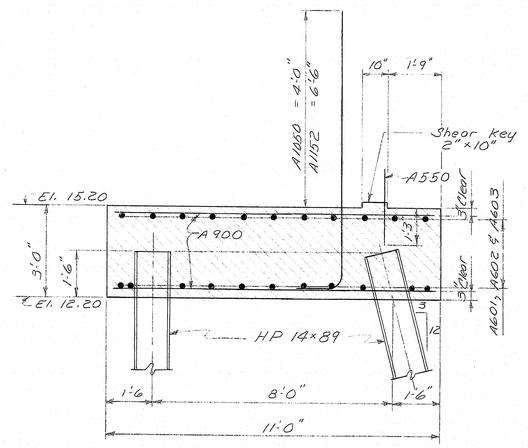
B. F. P. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	295-3(75)50	9	36



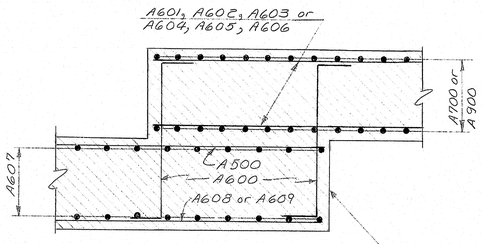
SECTION A-A



SECTION B-B

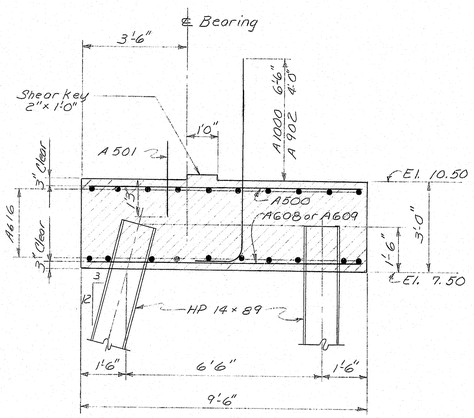


SECTION C-C

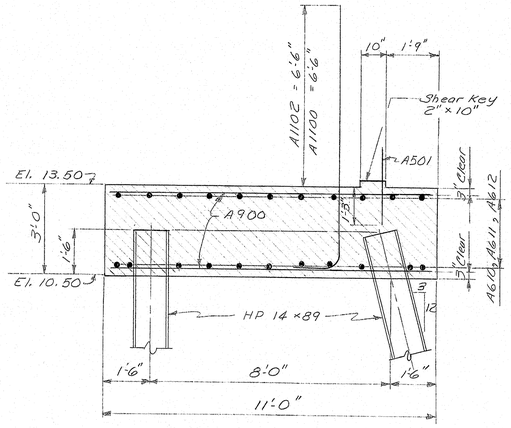


SECTION D-D

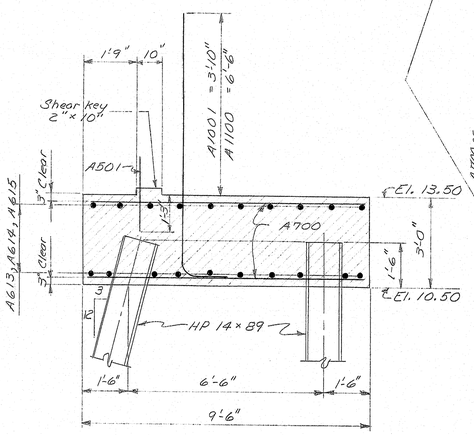
FOOTING SECTIONS - ABUTMENT No. 2



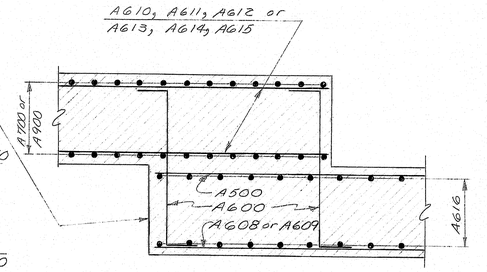
SECTION E-E



SECTION F-F



SECTION G-G



SECTION H-H

Form material may be left in place at area under wing footings (Typical)

FOOTING SECTIONS - ABUTMENT No. 1

PLANS	DESIGN - DETAILED	BY	DATE
	Rep. Dir. - Eng. - Asst.		
	DESIGN - CHECKED	R.V.M.C.	8/24/73
	REVISIONS	R.V.M.C.	9/4/73
	FIELD CHANGES		

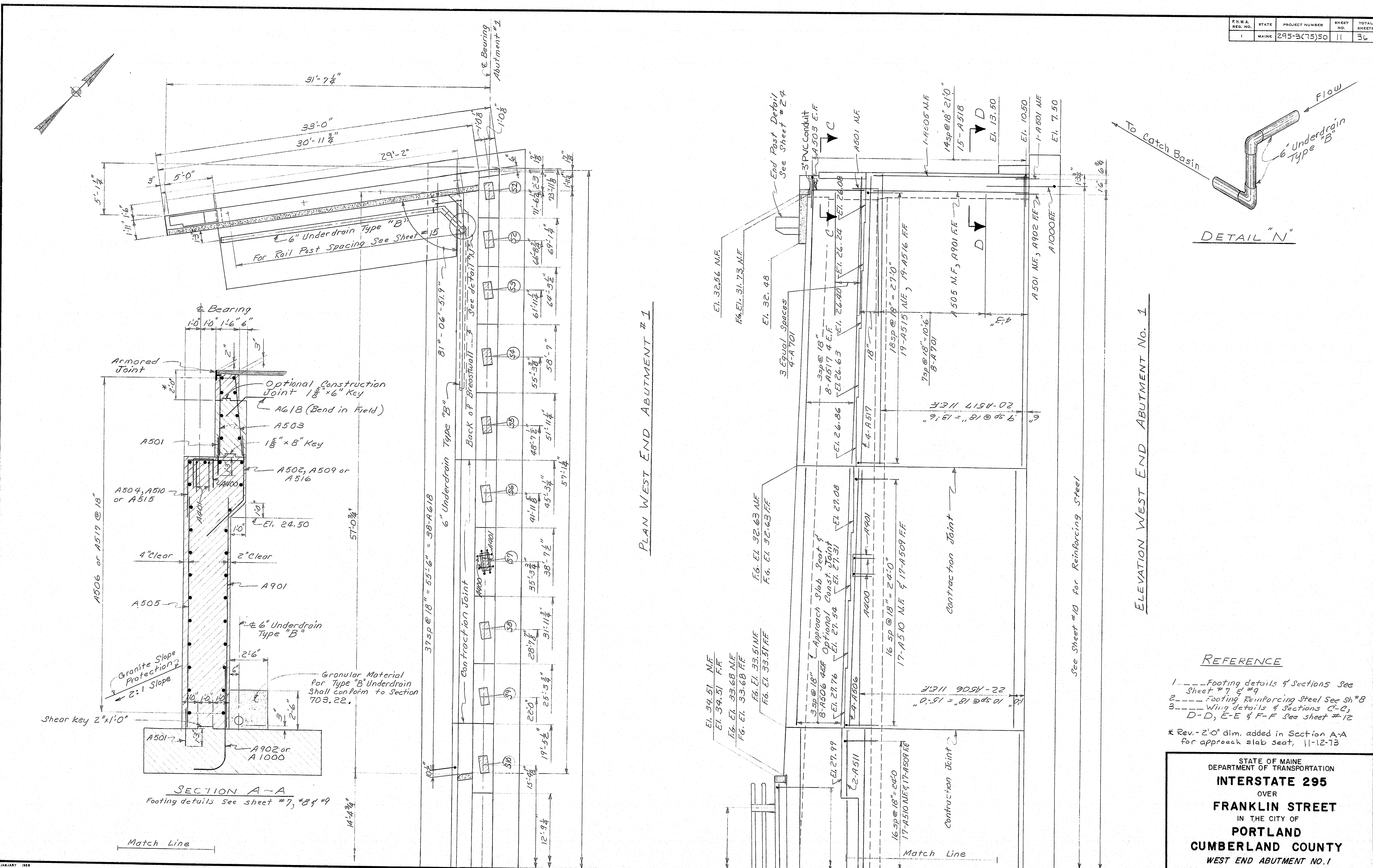
JANUARY 1968

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**
203-1 2080

146-22

touraine paints TRUFLEX ☆ SILKY ☆ TRIPLE WHITE ☆ RYPLEX

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



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

PLANS	BY	DATE
Proj. Des. Eng.: A. L...		
DESIGN - DETAILED	R.Y.N.	7-20-73
CHECKED		0.1.73
REVISIONS		
FIELD CHANGES		

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

JANUARY 1968 203-1 2080

146-23

F.H.W.A. REQ. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	295-3(75)50	10	36

ABUTMENT NOTES

1. Chamfer all exposed edges of concrete ¾ 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 2inches 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 flashing cement where it is in contact with concrete.

REFERENCE

1. Footing details & Sections See Sheet #7 & 9
2. Footing Reinforcing Steel See Sht. #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

ELEVATION EAST END ABUTMENT No. 1

PLAN EAST END ABUTMENT # 1

DETAIL "M"

PLANS

	BY	DATE
DESIGN - DETAILED	ALL	2-20-73
CHECKED	RDG	6-1-73
REVISIONS		
FIELD CHANGES		

JANUARY 1968

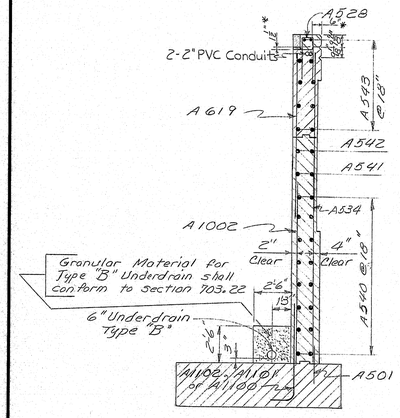
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
INTERSTATE 295
OVER
FRANKLIN STREET
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY
EAST END ABUTMENT NO. 1
SHEET 10 OF 36 AUGUSTA, MAINE AUGUST 1973

203-1 2080

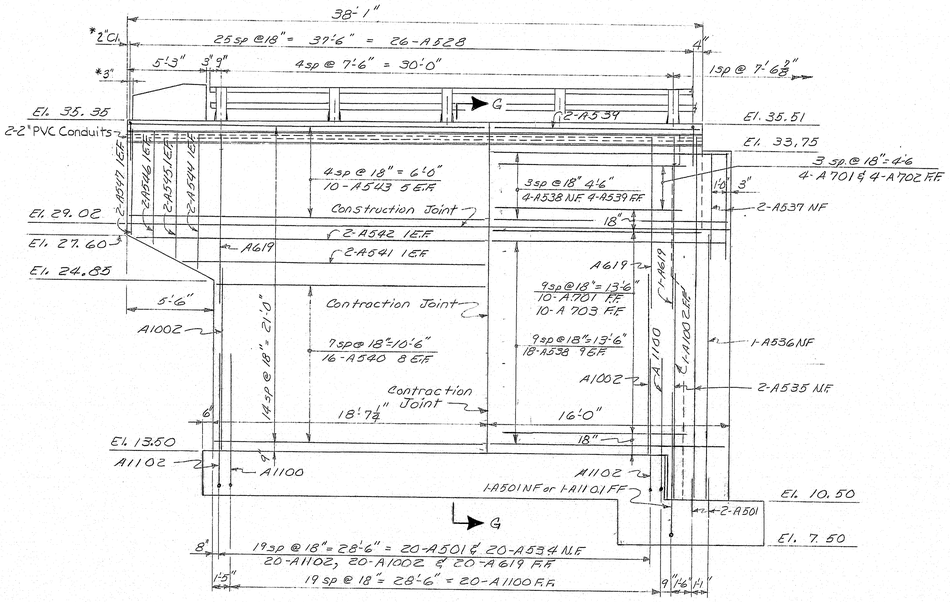
146-24

touraine paints TRUFLEX ☆ SILKY ☆ TRIPLE WHITE ☆ RYPLEX

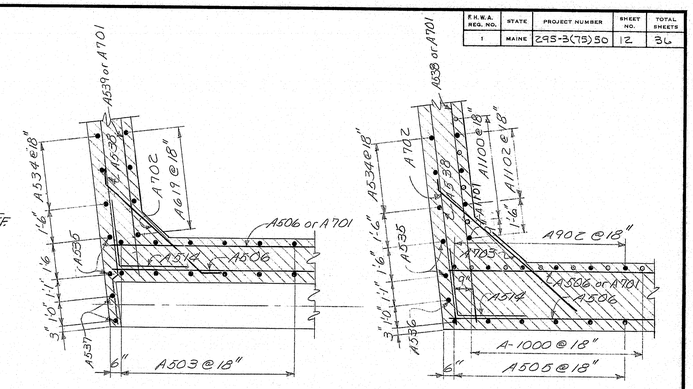
F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	295-3(75)50	12	36



SECTION G~G

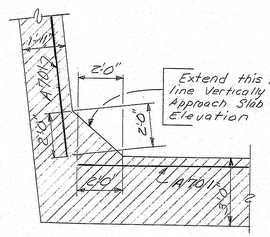


ELEVATION EAST WING

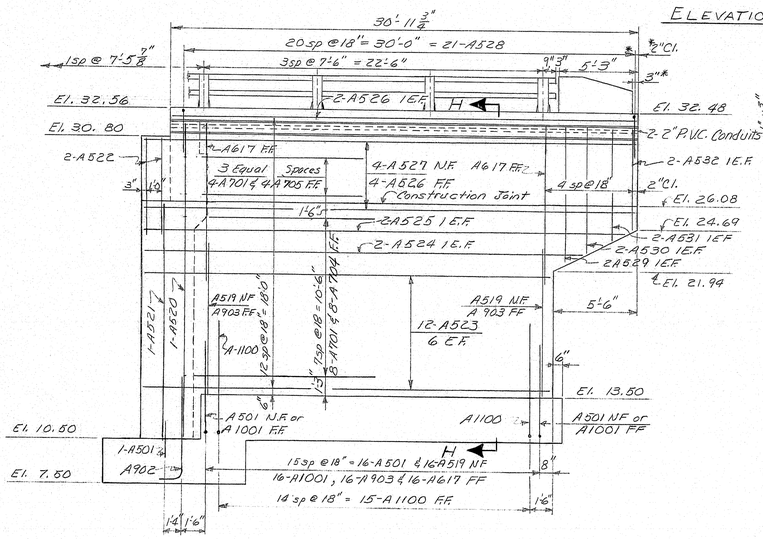


SECTION E~E

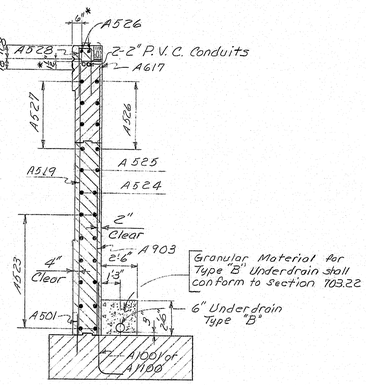
SECTION F~F



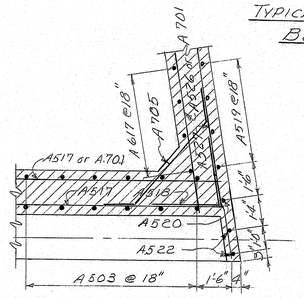
TYPICAL SECTION TAKEN BELOW HAUNCH



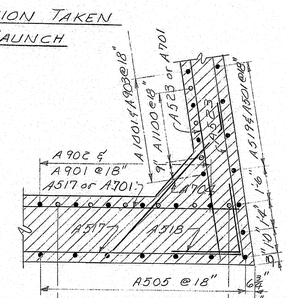
ELEVATION WEST WING



SECTION H~H



SECTION C~C



SECTION D~D

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

REFERENCE
For footing details see sheet # 7 & 9
For footing Reinforcing See sheet # 8
For Abutment # 1 See sheet # 10 & 11
For End Post details See Sheet # 24

* Rev. - 11-12-73

PLANS	BY	DATE
Prel. Plan Engineer		
DESIGN - DETAILED	ALC	2-3-73
CHECKED	TJC	2-7-73
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

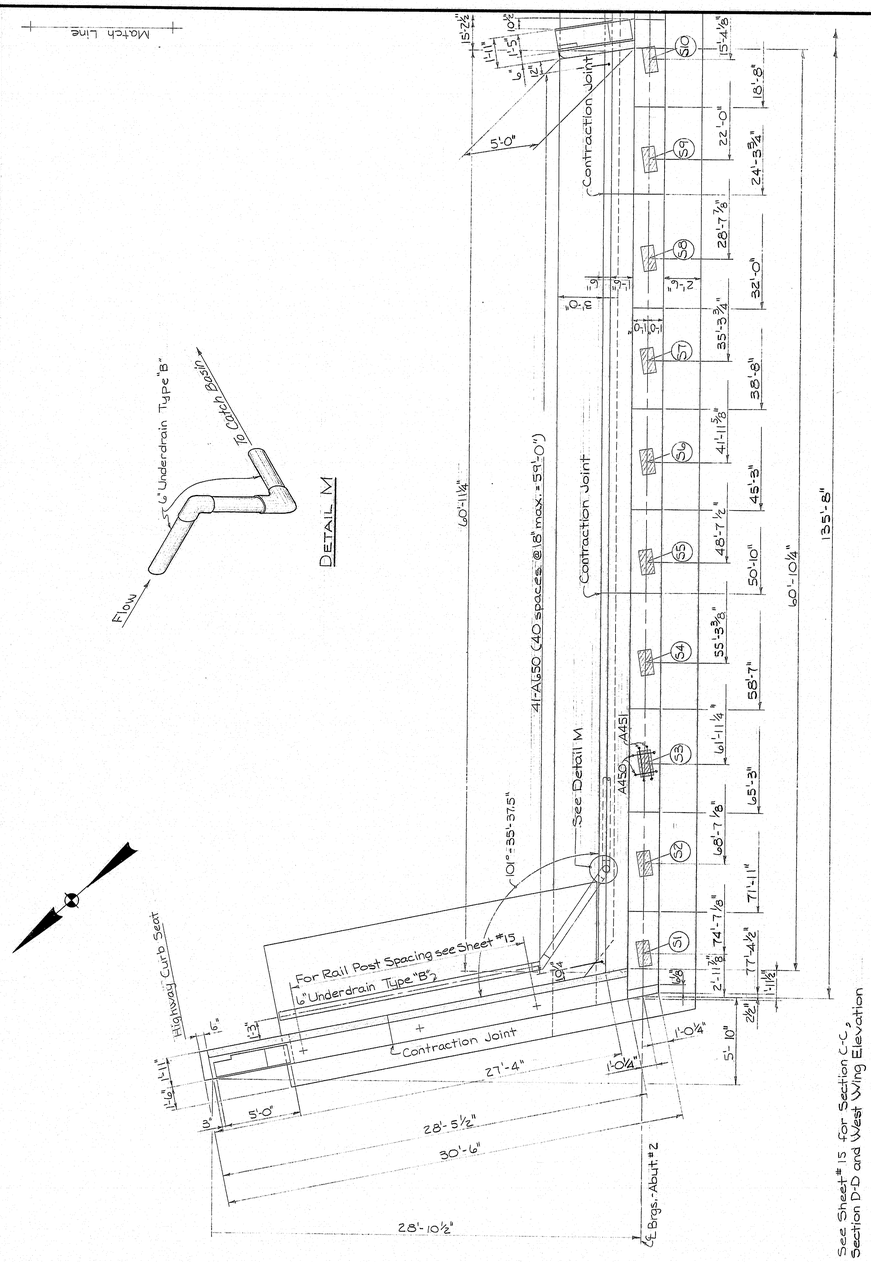
JANUARY 1968

touraine paints TRUFLEX ☆ SILKY ☆ TRIPLE WHITE ☆ RYPLEX

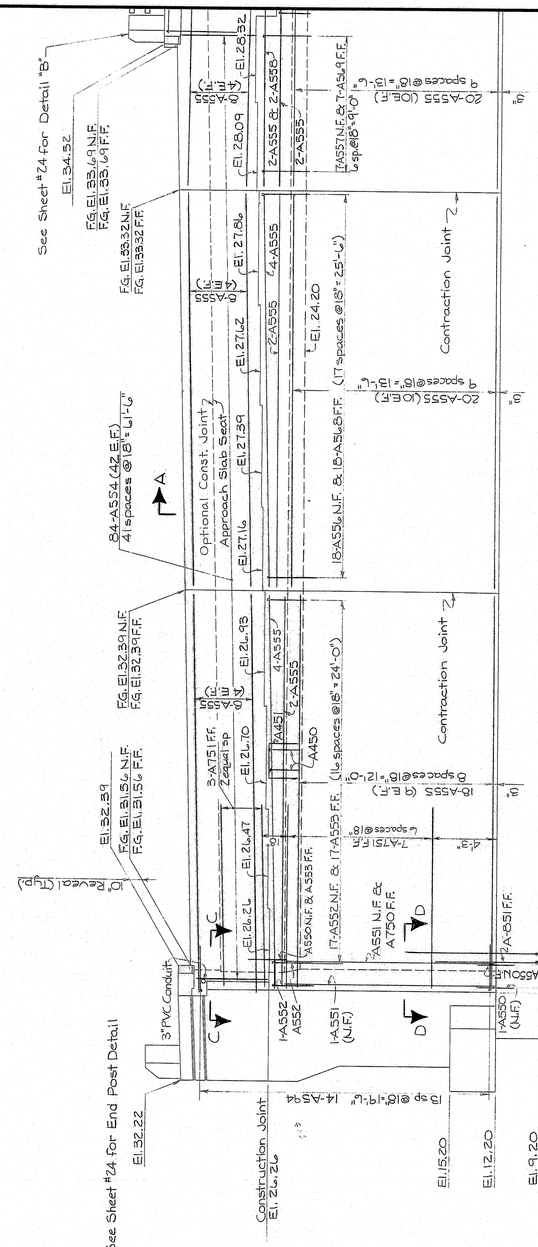
F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	295-3(75)50	13	36

Match Line

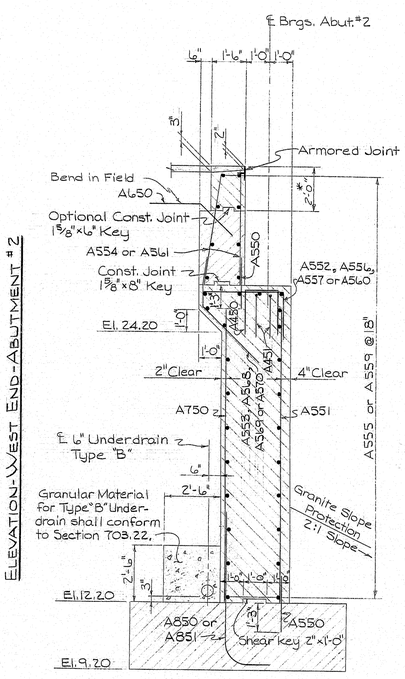
DETAIL M



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

	BY	DATE
DESIGN - DETAILED	A.L.L. R.C.B.	7-3-73
CHECKED	R.D.B.	10-17-73
REVISIONS		
FIELD CHANGES		

PLANS

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

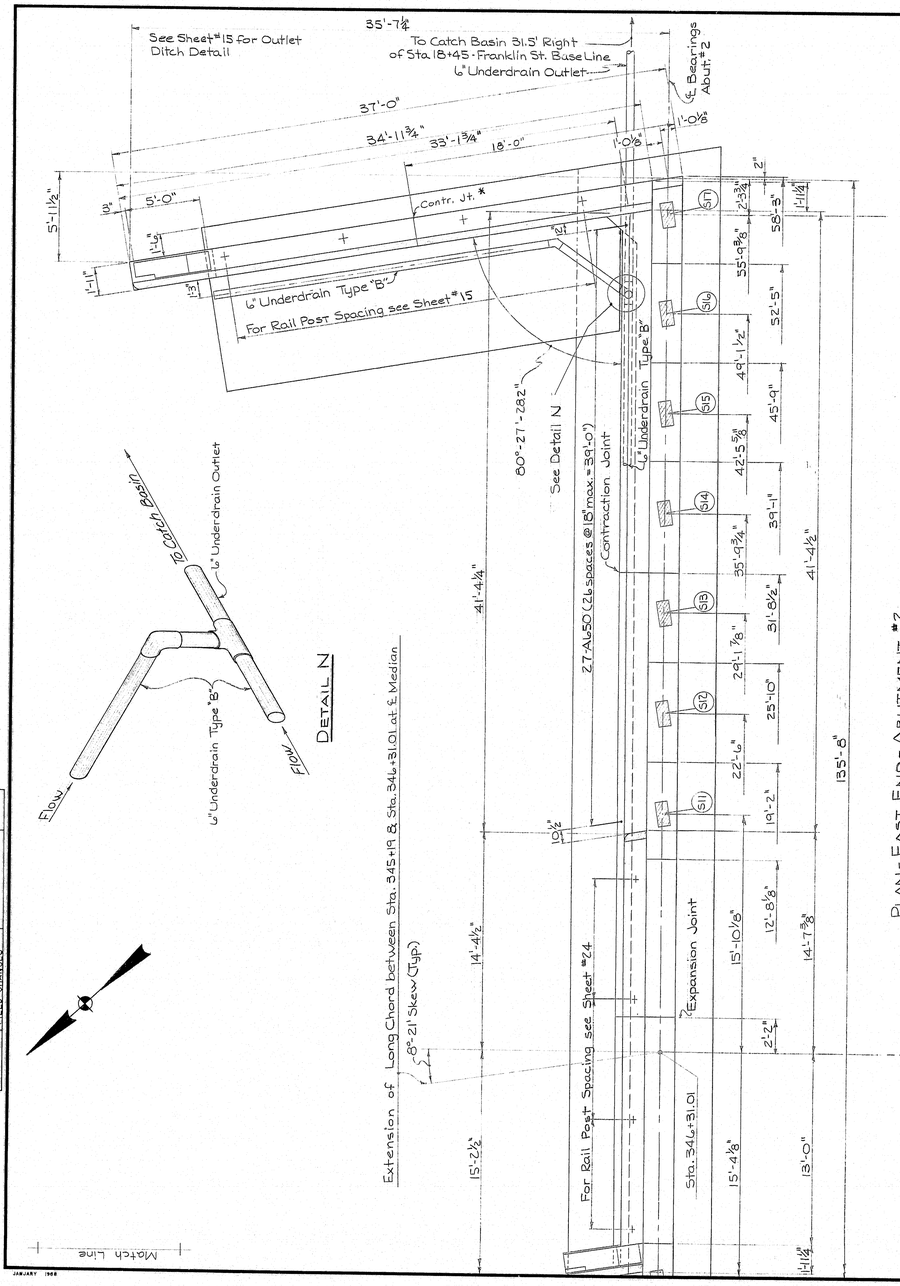
JANUARY 1968

2854 2080

146-26

touraine paints TRUFLEX ☆ SILKY ☆ TRIPLE WHITE ☆ RYPLEX

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



PLANS	DESIGN - DETAILED	BY: A.L.L.	DATE: 7-30-73
	CHECKED	R.C.B.	8-1-73
	REVISIONS		
	FIELD CHANGES		

JANUARY 1968

REFERENCES

See Sheet#24 for End Post Details
See Sheet# 15 for Section E-E
See Sheet# 15 for Section F-F

* Rev- 11-12-73

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

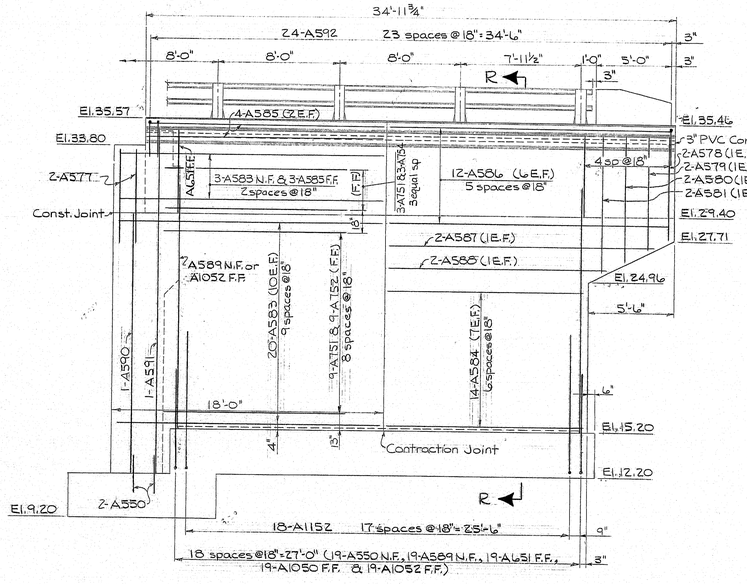
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
INTERSTATE 295
OVER
FRANKLIN STREET
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY
EAST END ABUTMENT NO. 2
SHEET 14 OF 36 AUGUSTA, MAINE **AUGUST 1973**

203-1 2080

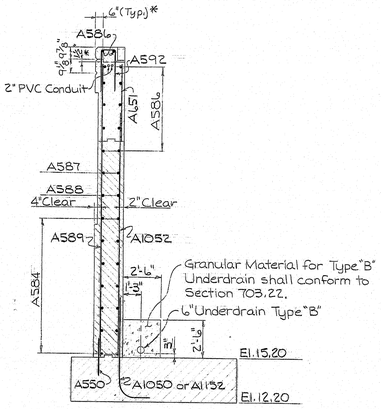
146-27

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35
touraine paints TRUFLEX ☆ SILKY ☆ TRIPLE WHITE ☆ RYPLEX

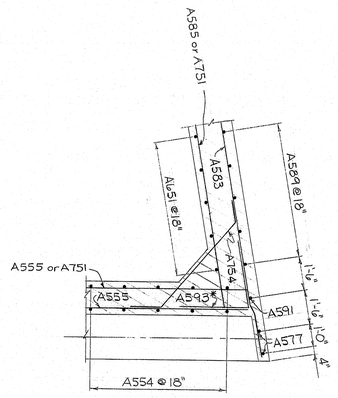
F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	295-3(75)50	15	36



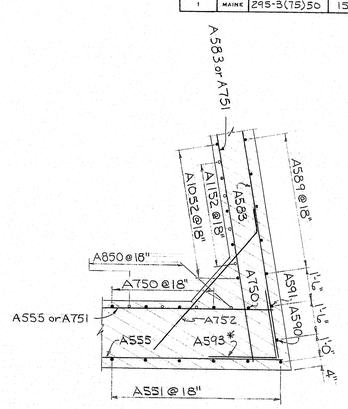
EAST WING ELEVATION - ABUTMENT # 2



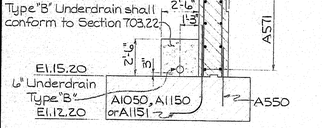
SECTION R-R



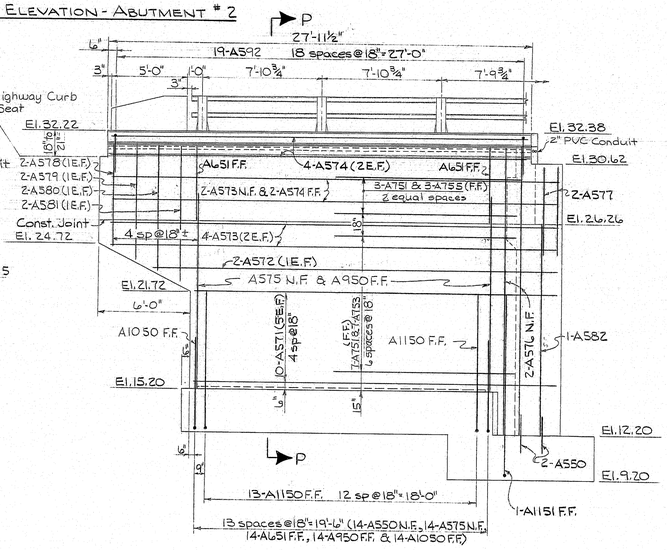
SECTION E-E



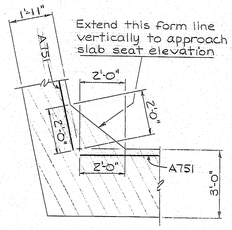
SECTION F-F



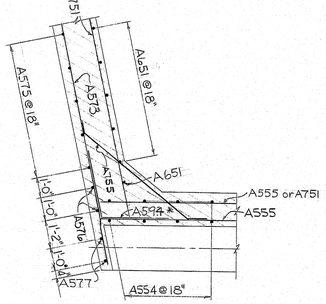
SECTION P-P



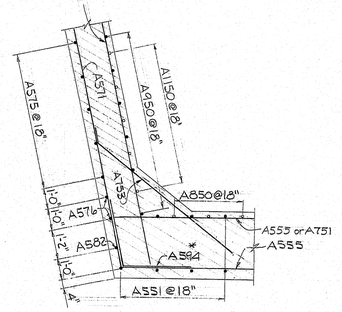
WEST WING ELEVATION - ABUTMENT # 2



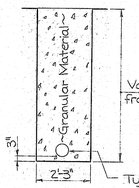
TYPICAL SECTION TAKEN BELOW HAUNCH



SECTION C-C



SECTION D-D



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

Type "B" Underdrain Outlet

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**

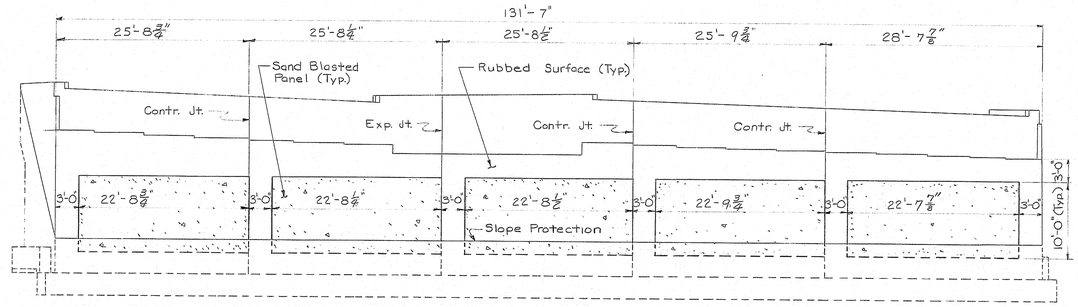
PLANS	BY	DATE
DESIGN - DETAILED	A.L.L.	8-3-73
CHECKED	R.C.B.	8-3-73
REVISIONS	D.D.J.	9-27-73
FIELD CHANGES		

JANUARY 1968

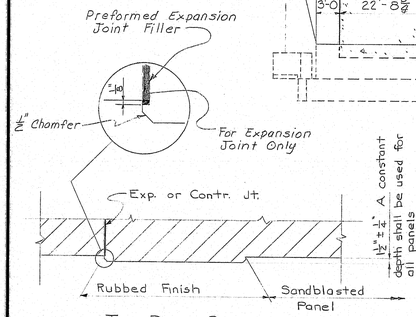
146-28

touraine paints TRUFLEX ☆ SILKY ☆ TRIPLE WHITE ☆ RYPLEX

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



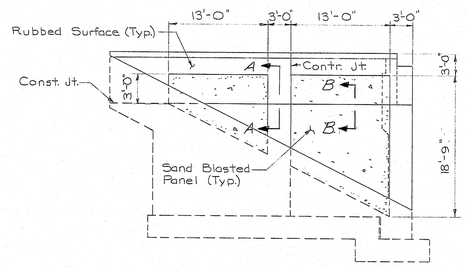
ELEVATION ~ ABUTMENT 1



TYP. PLAN SECTION

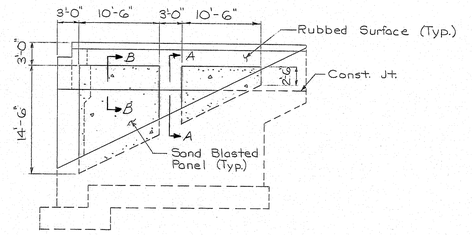
SECTION A~A

SECTION B~B

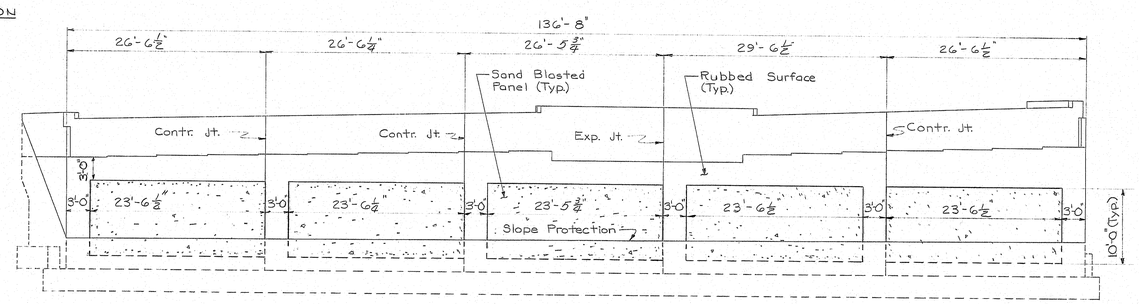


EAST WING ELEVATION
ABUTMENT 1

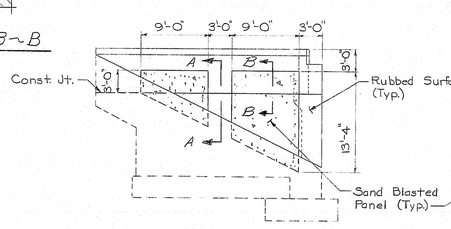
NOTE:
Payment for sandblasting shall be included in the contract unit price for Item 502.21, "Structural Concrete-Abutments and Retaining Walls." No deduction in the concrete pay volume shall be made for the recess in the orchitectural treatment.



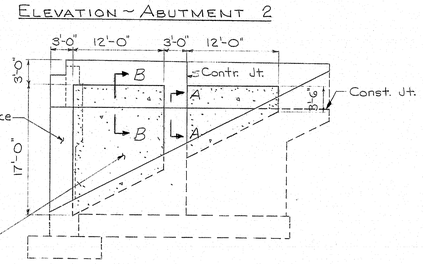
WEST WING ELEVATION
ABUTMENT 1



ELEVATION ~ ABUTMENT 2



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.

PLANS	DESIGN - DETAILED	BY	DATE
		A.L.L.	7-26-73
	CHECKED	J.L.C.	10-3-73
	REVISIONS	BVD	
	FIELD CHANGES		

*Rev.-11-12-73

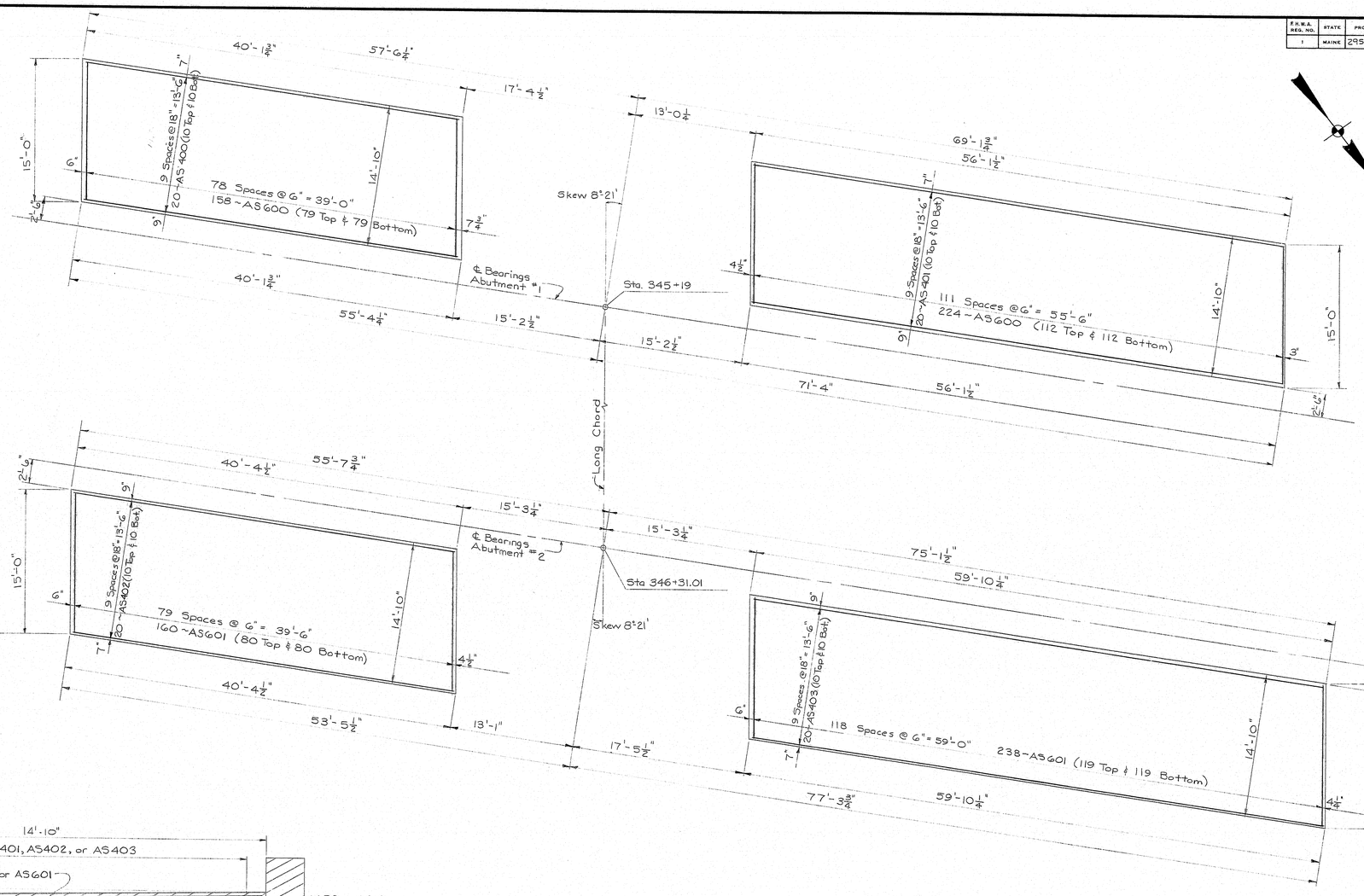
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
INTERSTATE 295
OVER
FRANKLIN STREET
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY
ARCHITECTURAL TREATMENT
SHEET 16 OF 36 AUGUSTA, MAINE **AUGUST 1973**

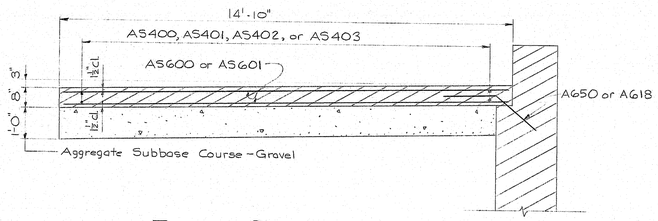
JANUARY 1968

146-29

touraine paints TRUFLEX ☆ SILKY ☆ TRIPLE WHITE ☆ RYPLEX

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	295-3(75)SO	17	36





TYPICAL SECTION

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

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

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

APPROACH SLAB

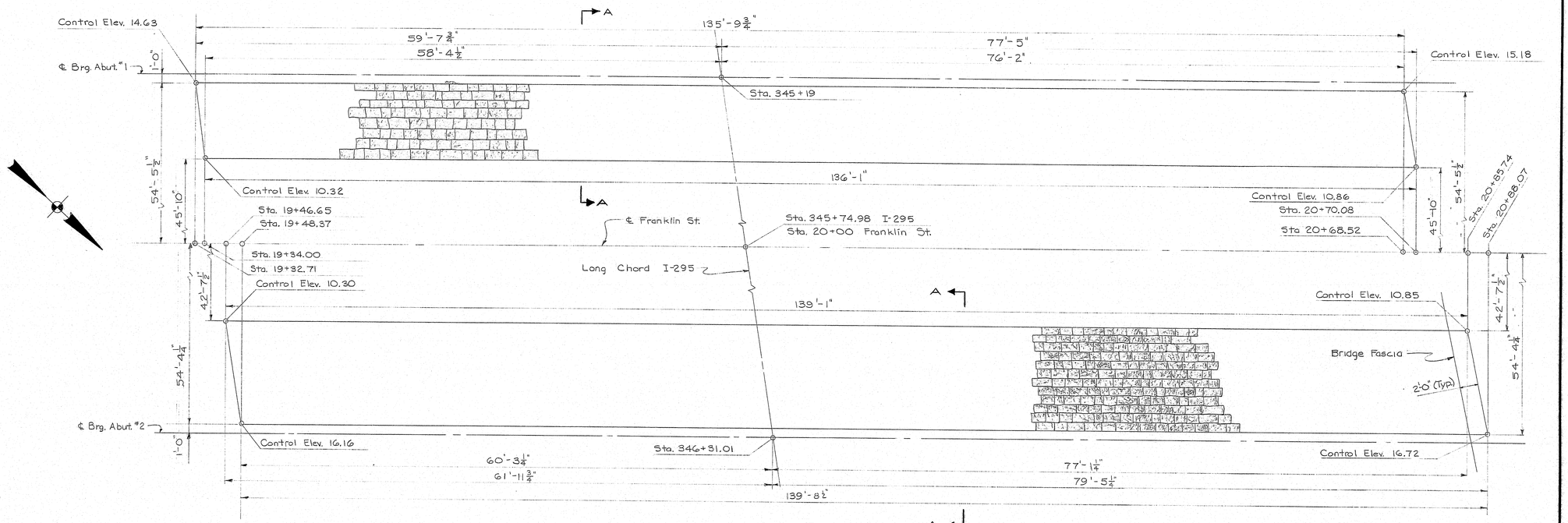
SHEET 17 OF 36 AUGUSTA, MAINE **AUGUST 1973**

JANUARY 1968

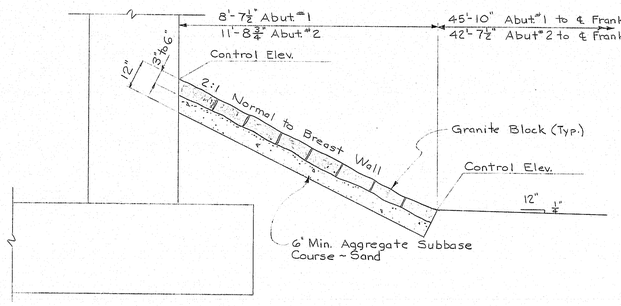
146-30

touraine paints TRUFLEX ☆ SILKY ☆ TRIPLE WHITE ☆ RYPLEX

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
Proj. Dev. Engr. Allen		
DESIGN - DETAILED	A.L.L.	7-26-73
CHECKED	J.L.C.	7-26-73
REVISIONS -	Engr.	9-26-73
FIELD CHANGES		

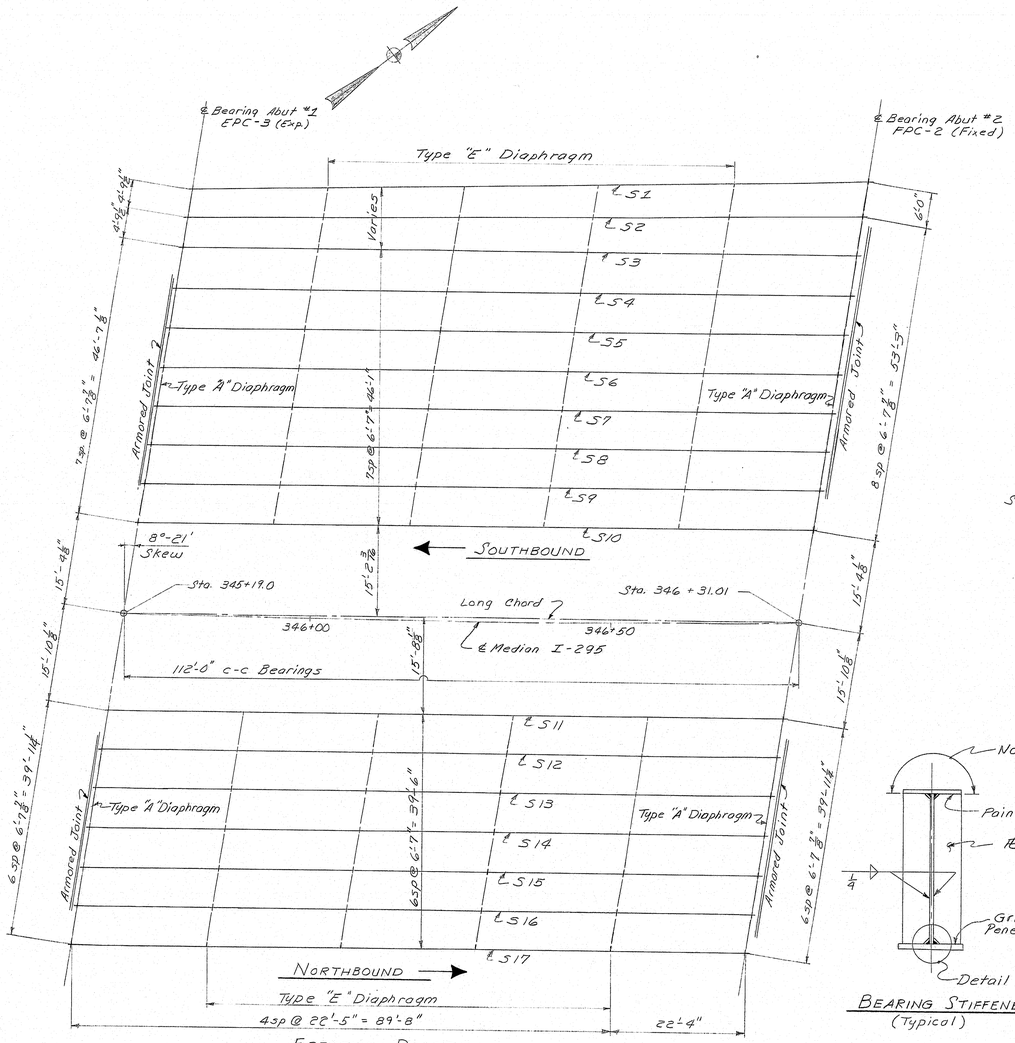
JANUARY 1968

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

touraine paints TRUFLEX ☆ SILKY ☆ TRIPLE WHITE ☆ RYPLEX

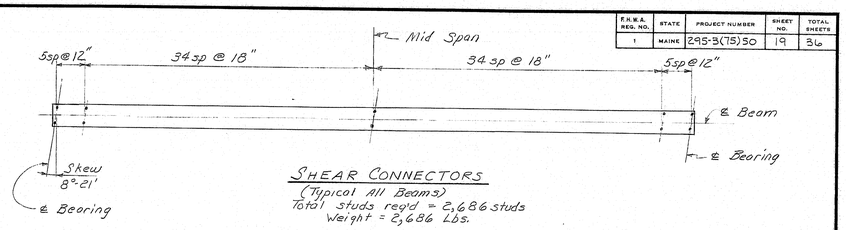
F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	295-3(75)50	19	36



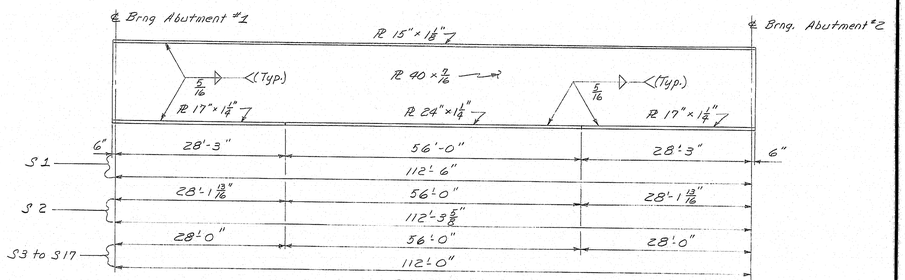
ERECTION DIAGRAM
(Dimensions are horizontal)

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

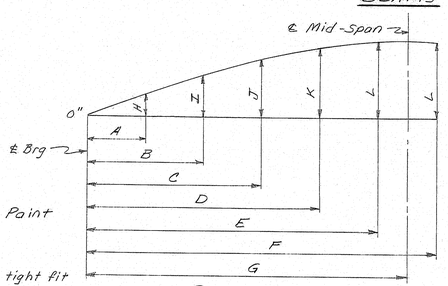
CAMBER ORDINATES



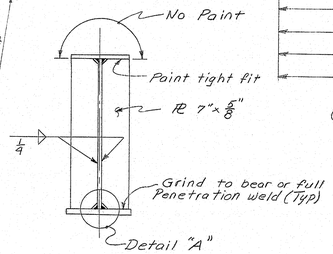
SHEAR CONNECTORS
(Typical All Beams)
Total studs req'd = 2,686 studs
Weight = 2,686 Lbs.



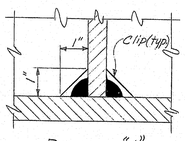
BEAMS



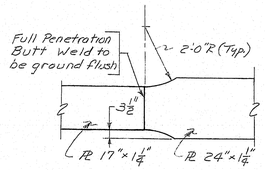
BEAM CAMBER
(Typical ℄ Symmetrical about Mid-Span)



BEARING STIFFENERS
(Typical)



DETAIL "A"



FLANGE SPLICE
(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.

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

Rev. Date	Description	BY	DATE
	DESIGN - DETAILED	ALL	12/29/72
	CHECKED	END.	10-2-73
	REVISIONS		
	FIELD CHANGES		

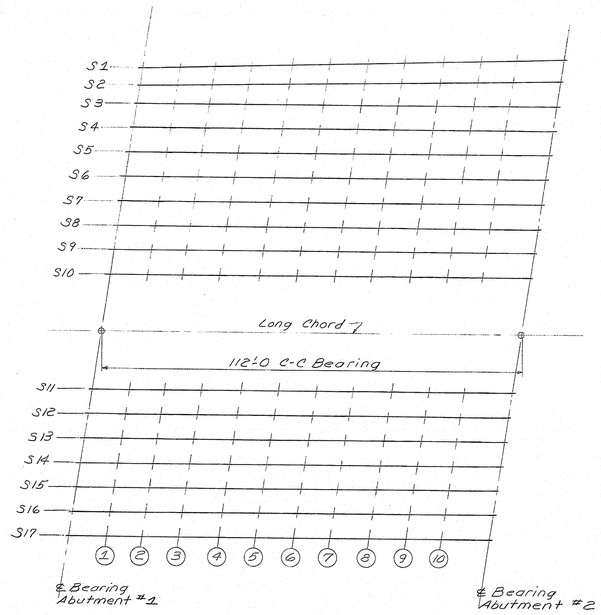
PLANS

JANUARY 1968

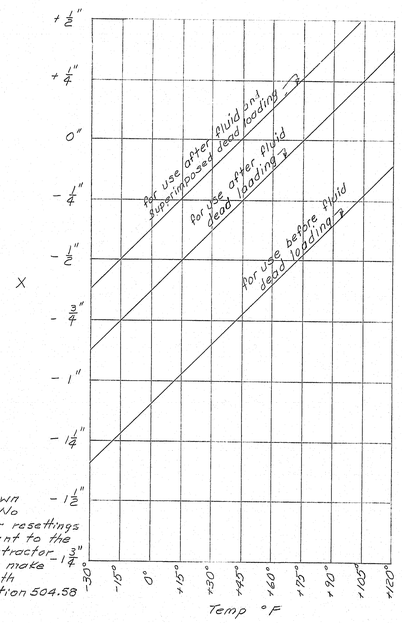
146-32

touraine paints TRUFLEX ☆ SILKY ☆ TRIPLE WHITE ☆ RYPLEX

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



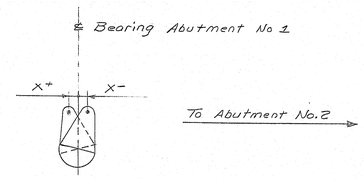
BLOCKING LAYOUT
(All dimensions are horizontal)



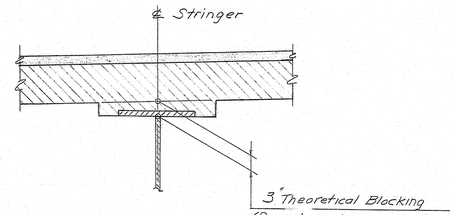
NOTE: Rocker setting data as shown shall be used as a guide only. No extra payment will be made for resettings of the rocker bearings, subsequent to the original setting, made by the contractor as required by the Engineer to make the rocker settings conform with Paragraph four (4) of Subsection 504.58

ROCKER BEARING SETTING GRAPH
(Abutment No. 1)

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



ROCKER BEARING SETTING DIAGRAM



BLOCKING DETAIL

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
STRINGERS	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

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

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.

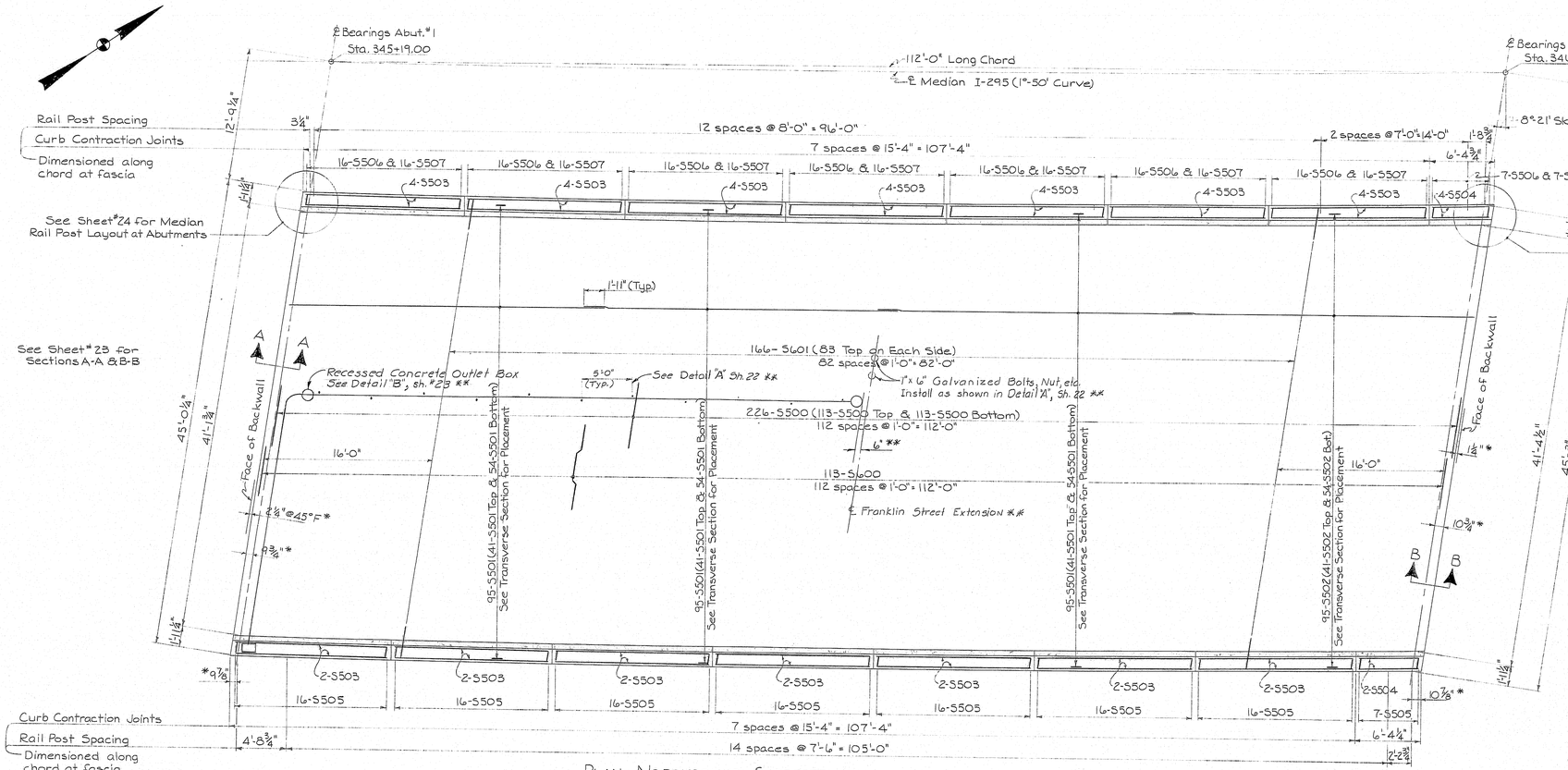
PLANS	DESIGN - DETAILED	BY	DATE
	CHECKED		
	REVISIONS		
	FIELD CHANGES		

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

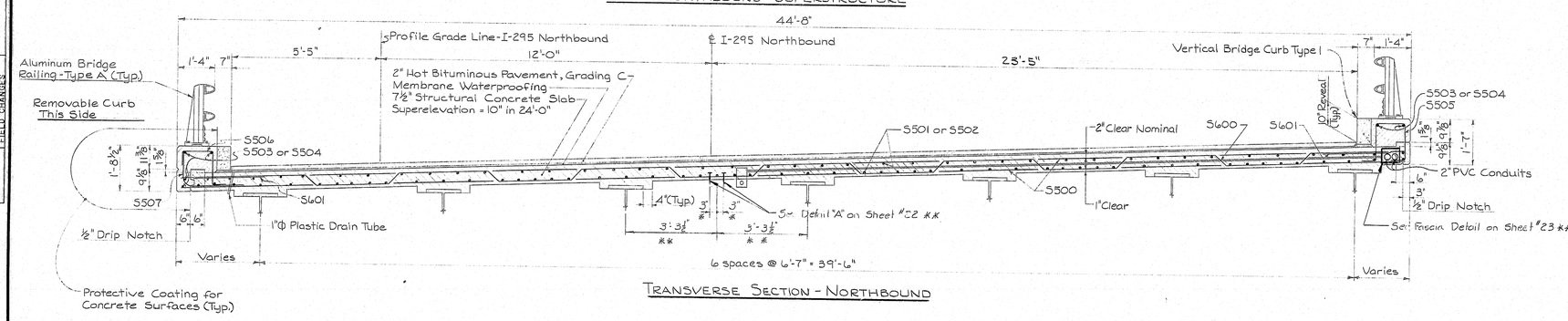
146-33

touraine paints TRUFLEX ☆ SILKY ☆ TRIPLE WHITE ☆ RYPLEX

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

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

** Rev. 8-6-74

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

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

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

NORTHBOUND SUPERSTRUCTURE

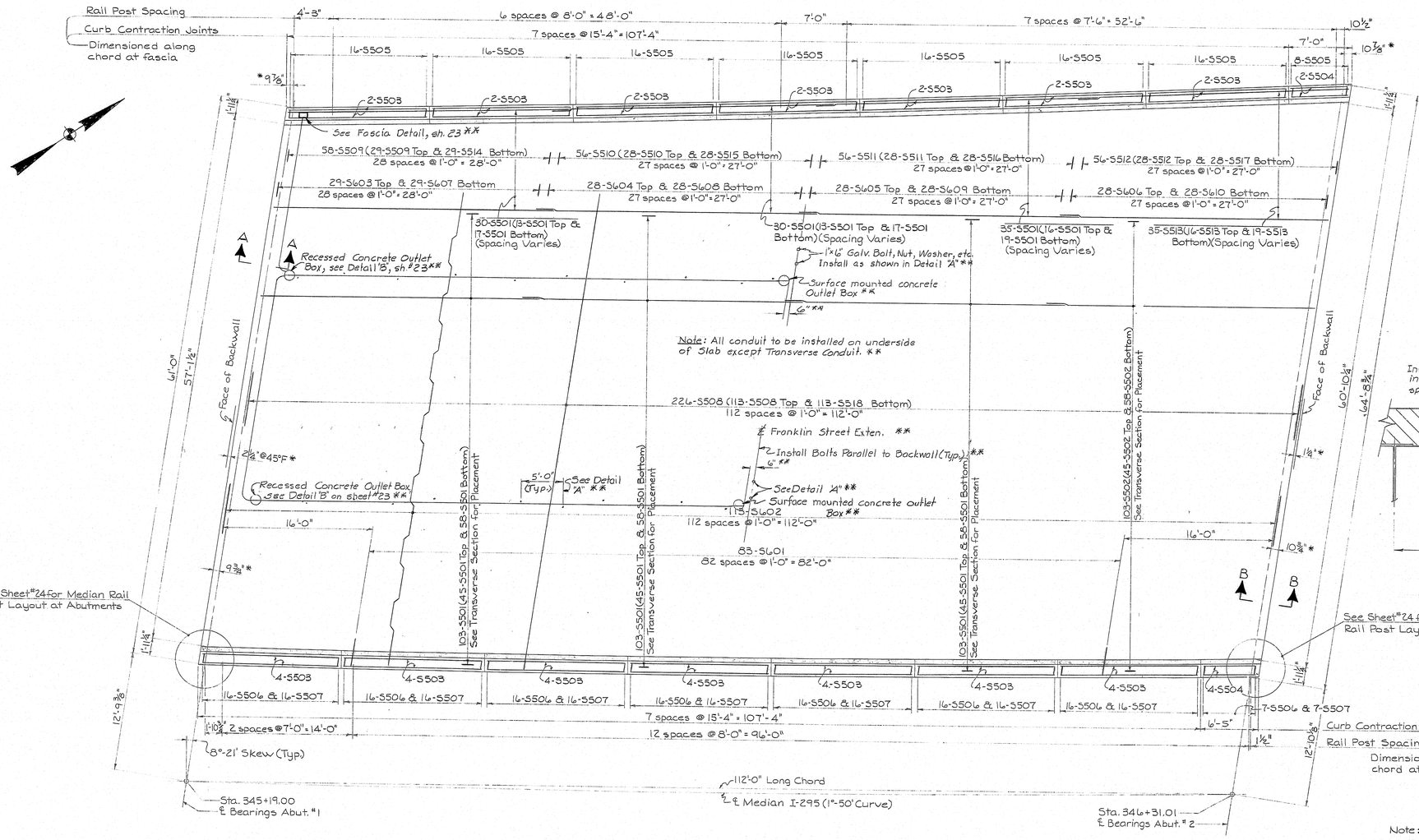
SHEET 21 OF 36 AUGUSTA, MAINE **AUGUST 1973**

JANUARY 1968

146-34

touraine paints TRUFLEX ☆ SILKY ☆ TRIPLE WHITE ☆ RYPLEX

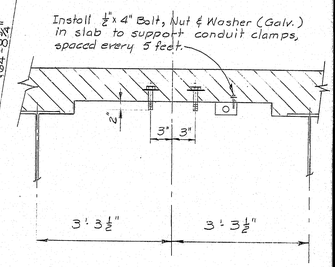
F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	295-3(75)50	22	36



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)

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	Prel. Dsn. Engr.	Date
	DESIGN - DETAILED A.L.L.	5-21-73
	CHECKED R.C.B.	8-22-73
	REVISIONS R.V.D.	
	FIELD CHANGES	

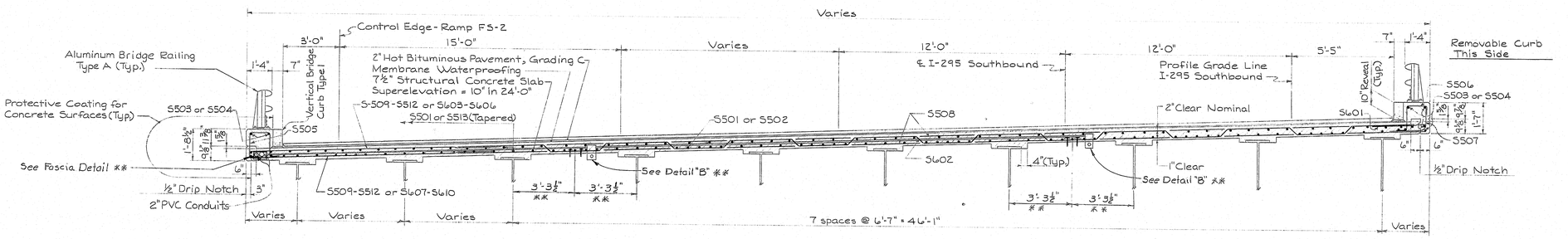
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
INTERSTATE 295
OVER
FRANKLIN STREET
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY
SOUTHBOUND SUPERSTRUCTURE
SHEET 22 OF 36 AUGUSTA, MAINE AUGUST 1973

JANUARY 1968

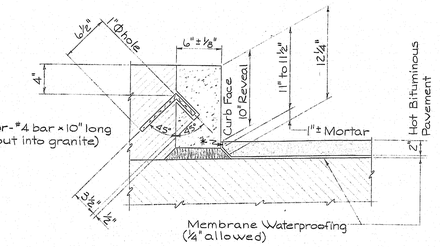
146-35

touraine paints TRUFLEX ☆ SILKY ☆ TRIPLE WHITE ☆ RYPLEX

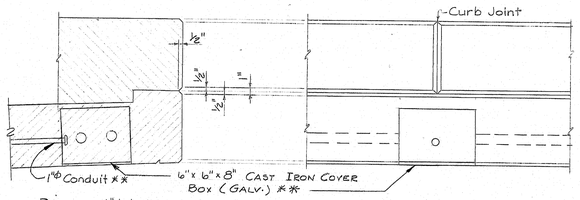
F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	295-3(75)50	23	36



TRANSVERSE SECTION - SOUTHBOUND

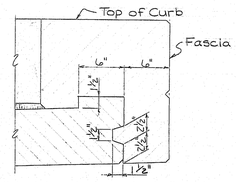


DETAIL OF VERTICAL BRIDGE CURB-TYPE 1.

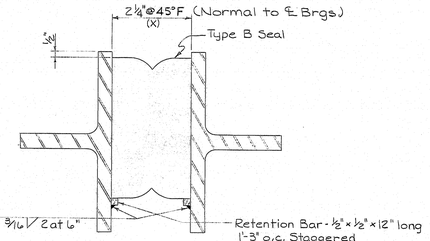


DETAIL 1" V-GROOVE

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

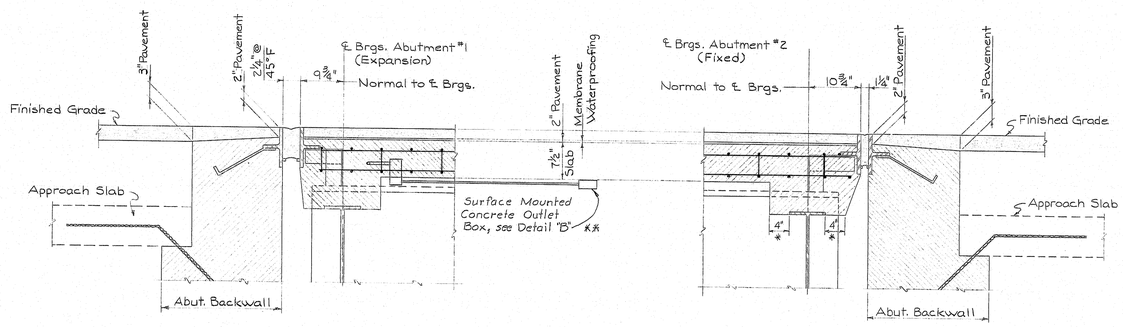
2.) The joint openings (X) shown, are for design only and are subject to change due to differences in seals as supplied by various manufacturers. Do not use for setting of joint opening during construction.

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

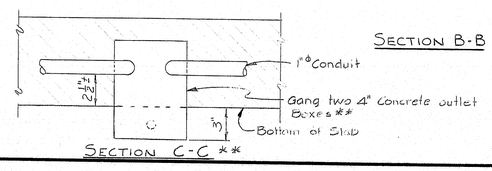
4.) The following movements, due to dead loads (slab, curb and wearing surface), shall be taken into account when setting the armored joint:

Location	Open
Abutment #1	⅛"
Abutment #2	⅜"

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

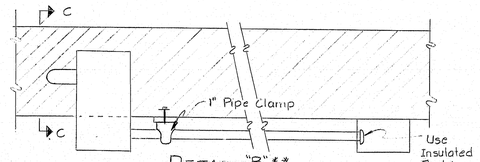


SECTION-A-A

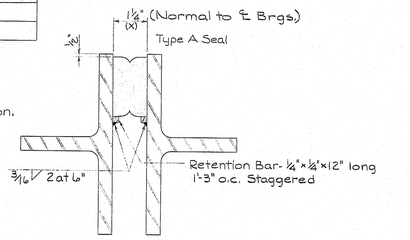


SECTION B-B

SECTION C-C **



DETAIL "B" **



SEAL AT ABUTMENT No. 2 (Fixed)

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

PLANS	BY	DATE
Bridge Engineer		
DESIGN + DETAILED	A.L.L.	5-30-73
CHECKED	R.C.B.	8-21-73
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**

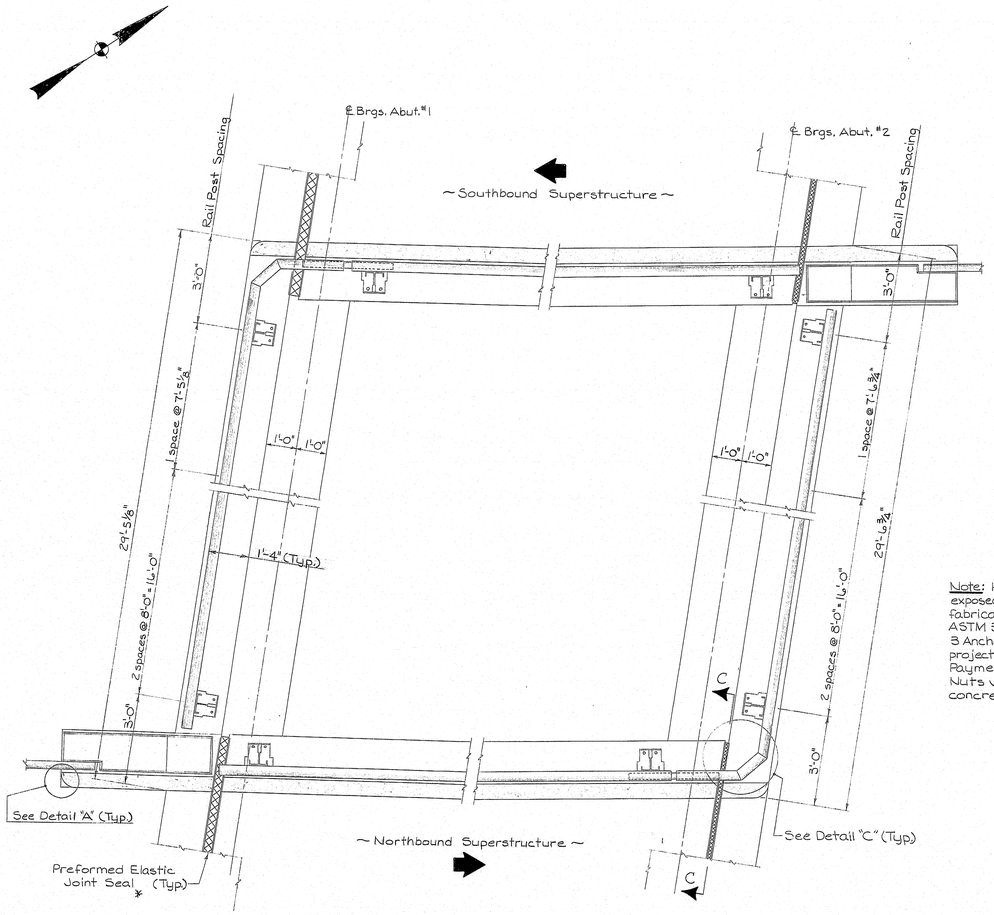
JANUARY 1968

203-1 2060

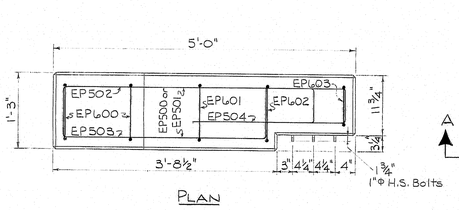
146-36

touraine paints TRUFLEX ☆ SILKY ☆ TRIPLE WHITE ☆ RYPLEX

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

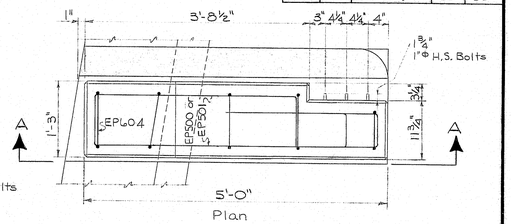


MEDIAN RAIL POST LAYOUT AT ABUTMENTS



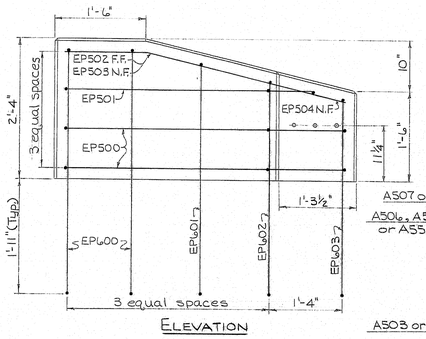
PLAN

Four of This Type Required

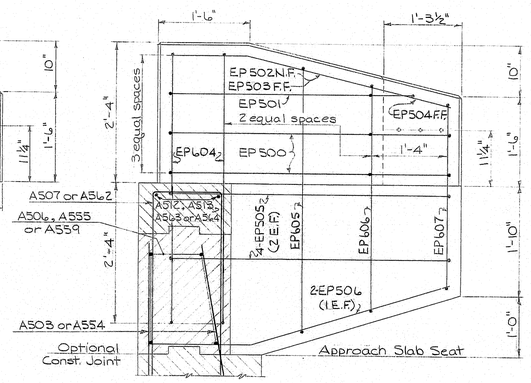


Plan

Two of This Type Required



ELEVATION



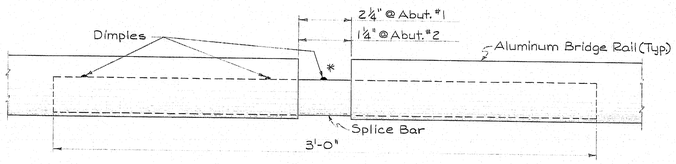
Section A-A

DETAIL "B"

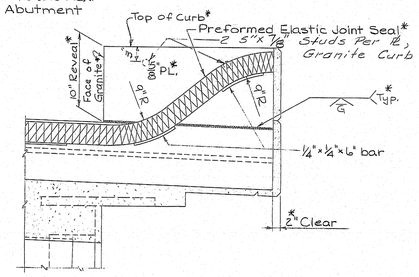
END POSTS

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 x 1" dia. with a 1¾" projection.
Payment for the Anchor Bolts and Hex. Nuts will be incidental to Abutment concrete.

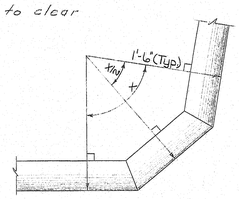
DETAIL "A"



RAIL SPLICE DETAIL



SECTION C-C



DETAIL "C"

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

PLANS

JANUARY 1968

* Rev. - 11-12-73

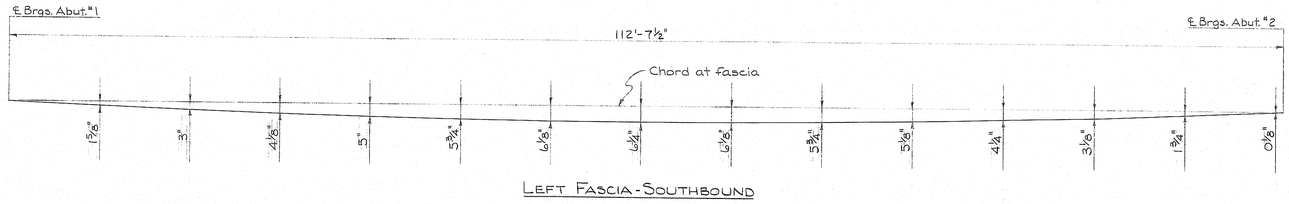
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
INTERSTATE 295
OVER
FRANKLIN STREET
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY
DETAILS
SHEET 24 OF 36 AUGUSTA, MAINE **AUGUST 1973**

2031 2580

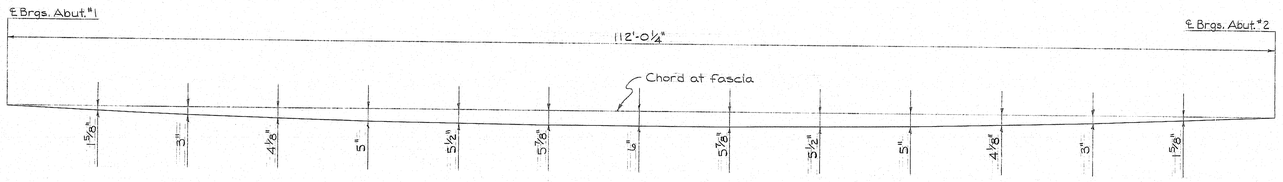
146-37

touraine paints TRUFLEX ☆ SILKY ☆ TRIPLE WHITE ☆ RYPLEX

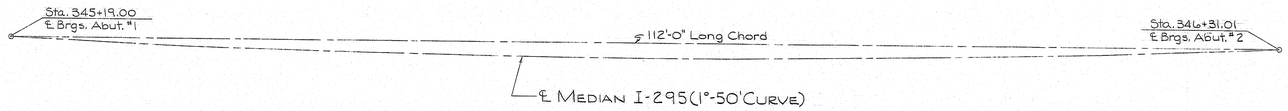
F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	295-3(75)50	25	36

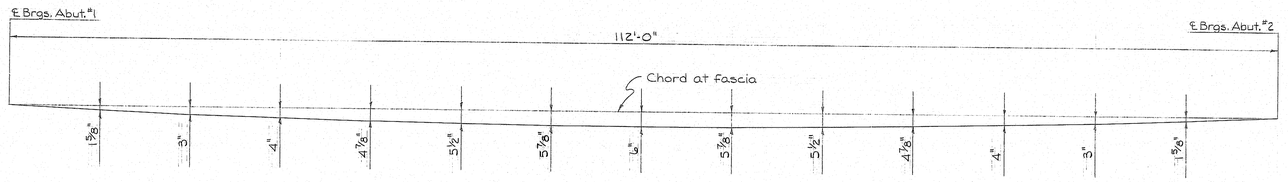


LEFT FASCIA - SOUTHBOUND

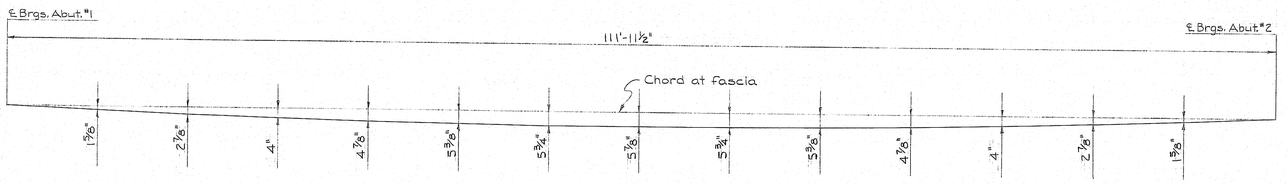


RIGHT FASCIA - SOUTHBOUND



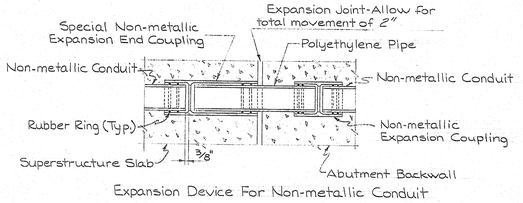


LEFT FASCIA - NORTHBOUND

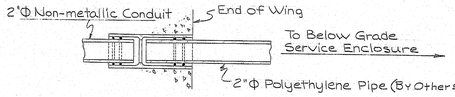


RIGHT FASCIA - NORTHBOUND

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.	6-'73
CHECKED	R.C.B.	6-'73
REVISIONS	G.O.F.	11/6/73
FIELD CHANGES		

Bridge Engineer

JANUARY 1968

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

touraine paints TRUFLEX ☆ SILKY ☆ TRIPLE WHITE ☆ RYPLEX

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	65	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"	

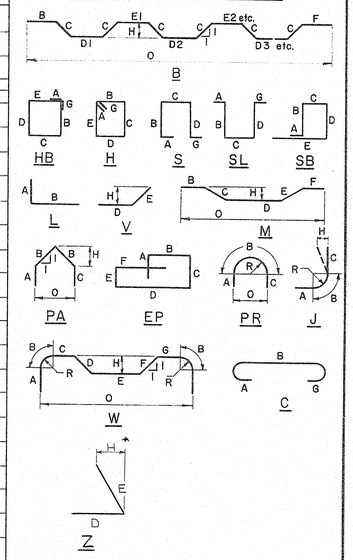
BENT BARS

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"	1'-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"	1''	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

PLANS — Design Engineer | BY | DATE
DESIGN DETAIL | A.L.T. | R.C.B. | 6-73
CHECKED | KDS | 6-73
REVISIONS
FIELD CHANGES

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 (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.

* 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**

146-39

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 *

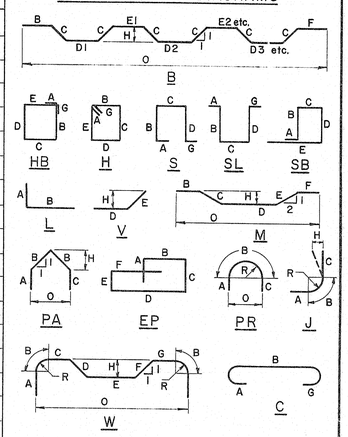
BENT BARS

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'-4½"	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"	7⅜"	3'-3¼"	7⅜"	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

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

PLANS	BY	DATE
Prel. Des. Eng.: A. Wood		
DESIGN - DETAIL	A.L.L. / R.C.B.	6-8-73
CHECKED	EVD	10-4-73
REVISIONS		
FIELD CHANGES		

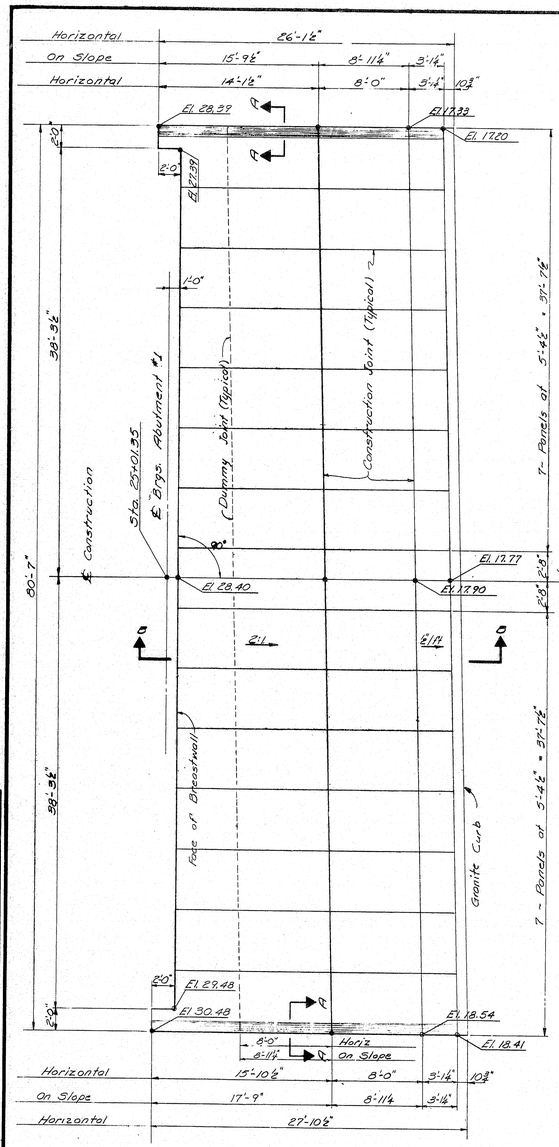
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

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

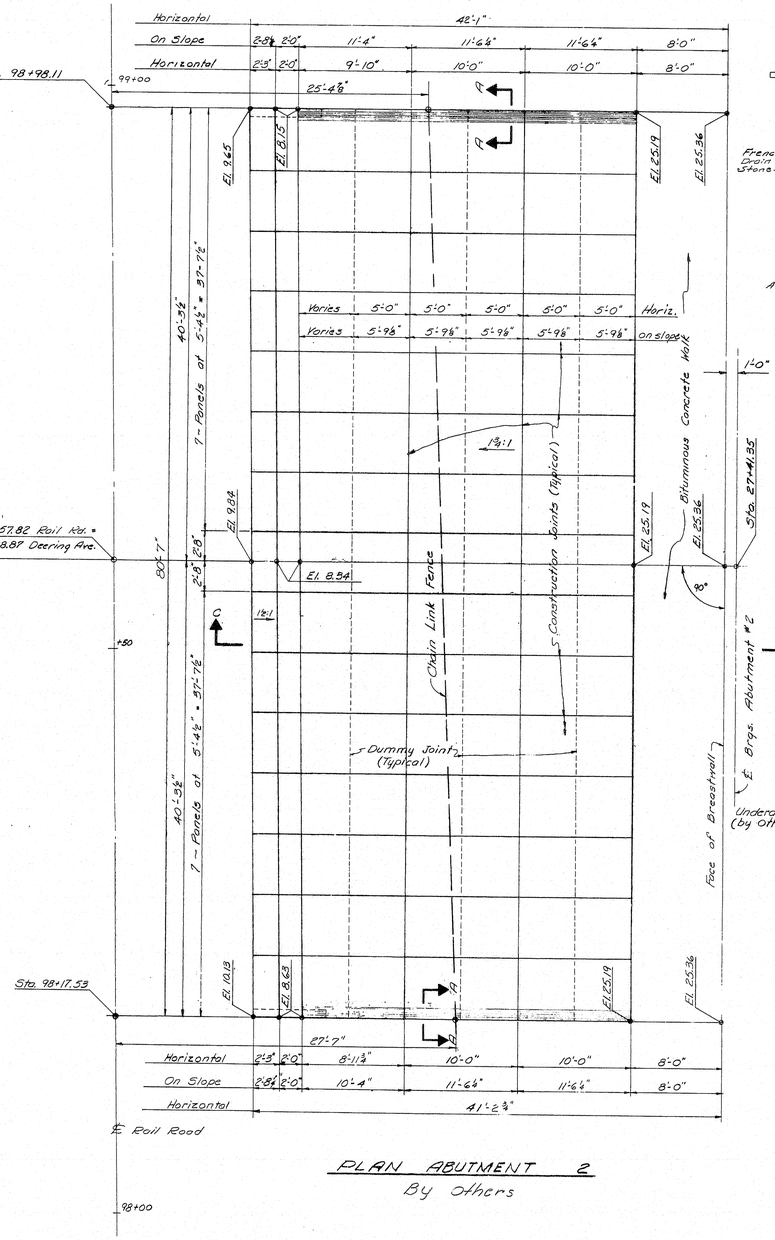
REINFORCING STEEL SCHEDULE
SHEET 27 OF 36 AUGUSTA, MAINE **AUGUST 1973**

146-40

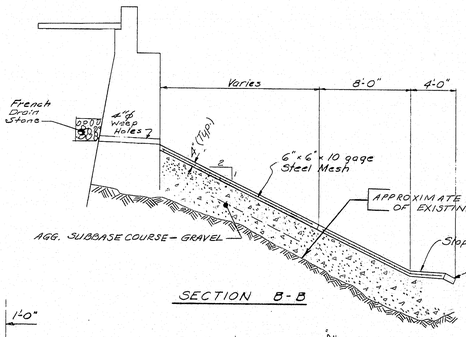
FHWA REG NO.	STATE	PROJECT NUMBER	SHEET NO	TOTAL SHEETS
1	MAINE	295-3(15)50	28	36



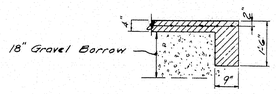
PLAN ABUTMENT 1



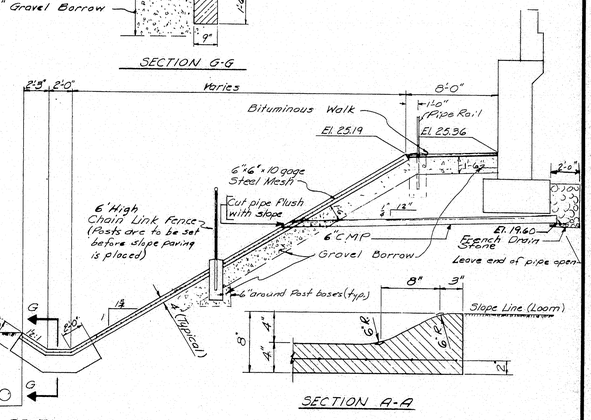
PLAN ABUTMENT 2
By Others



SECTION B-B



SECTION G-G



SECTION C-C
(By Others)

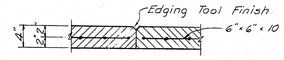
SECTION A-A

Notes:
Mesh shall not pass thru any Construction Joint
Coat Construction Joints with asphalt paint to prevent bond.

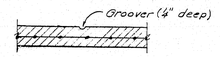
ESTIMATED QUANTITIES

SLOPE PROTECTION PORTLAND CEMENT CONCRETE = 262 S.Yds.

Portland Cement Concrete for Slope Protection to be Class A.



CONSTRUCTION JOINT



DUMMY JOINT

	BY	DATE
DESIGN - DETAILED	GoT	6-'70
CHECKED	EDH	7-10-70
REVISIONS		
FIELD CHANGES		

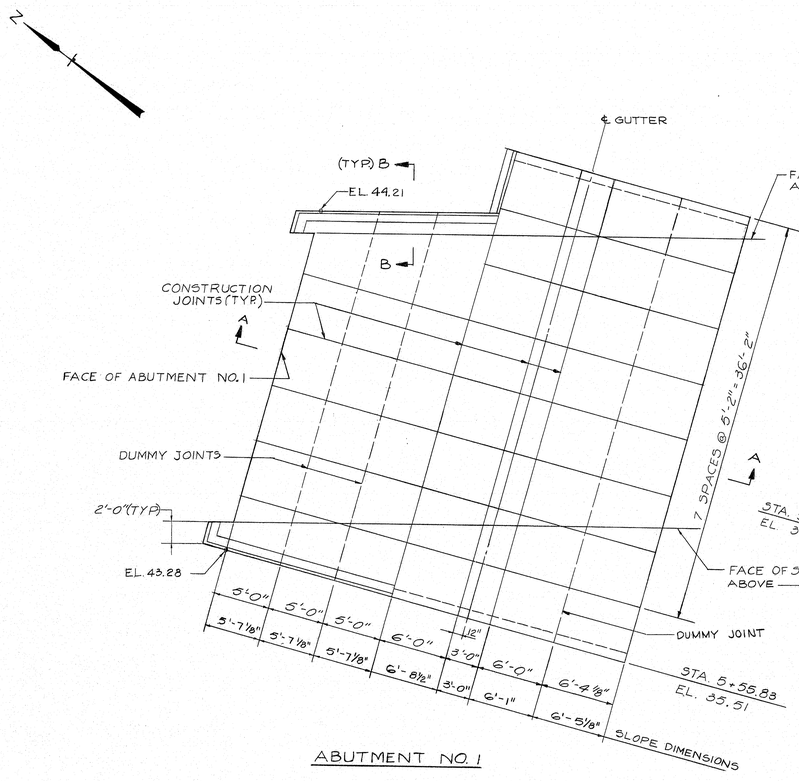
PLANS

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
DEERING AVENUE BRIDGE
OVER
I-295 & PORTLAND TERMINAL R.R.
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY
SLOPE PROTECTION
SHEET 28 OF 36 AUGUSTA, MAINE

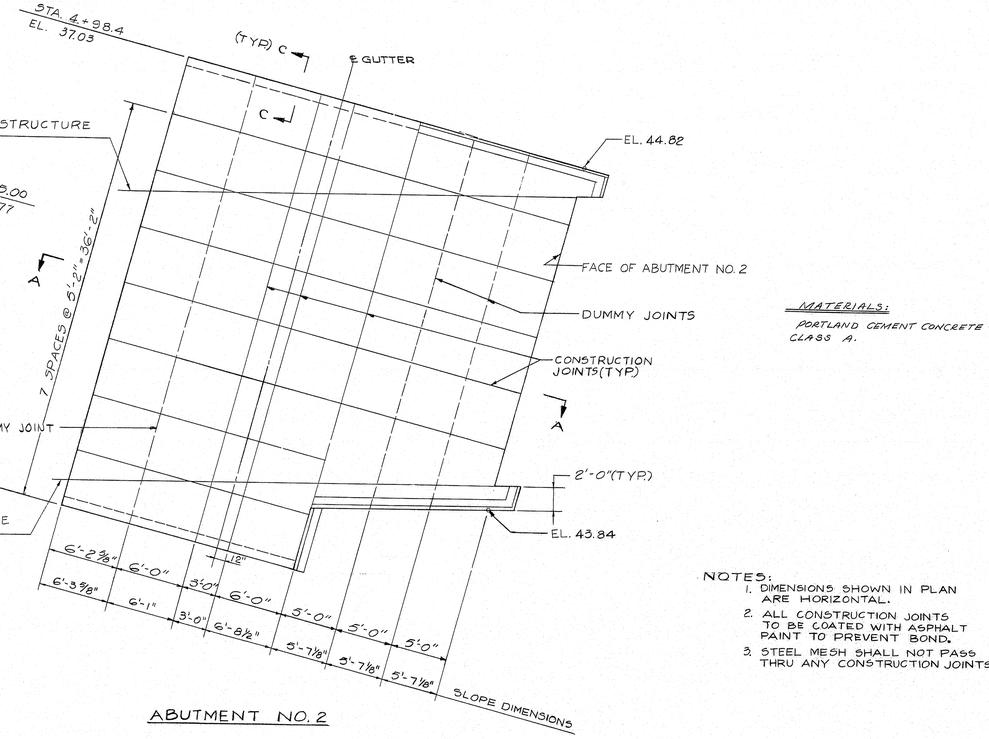
146-41

touraine paints TRUFLEX ☆ SILKY ☆ TRIPLE WHITE ☆ RYPLEX

F.H.W.A. REG.NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	295-3(75)50	29	36



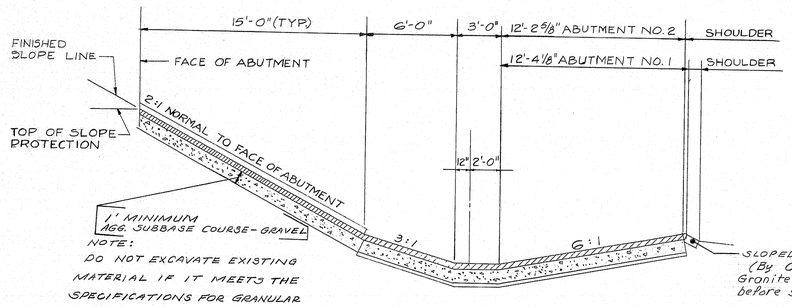
ABUTMENT NO. 1



ABUTMENT NO. 2

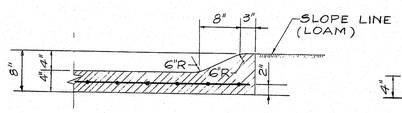
NOTES:
1. DIMENSIONS SHOWN IN PLAN ARE HORIZONTAL.
2. ALL CONSTRUCTION JOINTS TO BE COATED WITH ASPHALT PAINT TO PREVENT BOND.
3. STEEL MESH SHALL NOT PASS THRU ANY CONSTRUCTION JOINTS.

PLAN

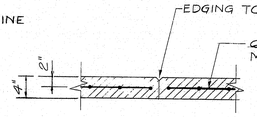


NOTE:
DO NOT EXCAVATE EXISTING MATERIAL IF IT MEETS THE SPECIFICATIONS FOR GRANULAR BORROW.

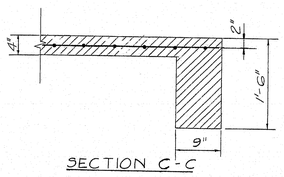
SECTION A-A



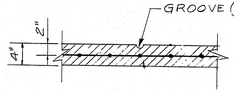
SECTION B-B



CONSTRUCTION JOINT



SECTION C-C



DUMMY JOINT

MATERIALS:
PORTLAND CEMENT CONCRETE SHALL BE CLASS A.

QUANTITIES
SLOPE PROTECTION - PORTLAND CEMENT CONCRETE = 335 S.YDS.

BY	DATE
N.K.D.	1/72
J.P.N.	2/72
R.E.B.	

PLANS
DESIGN - DETAILED
CHECKED
REVISIONS
FIELD CHANGES

FILE NO.		PLAN NO.
VL-57		45
DES. N.K.D.	CHK R.E.B.	
DR J.P.N.	CHK N.K.D.	
EST. N.K.D.	CHK R.E.B.	

R. Albert
ENGINEER IN CHARGE

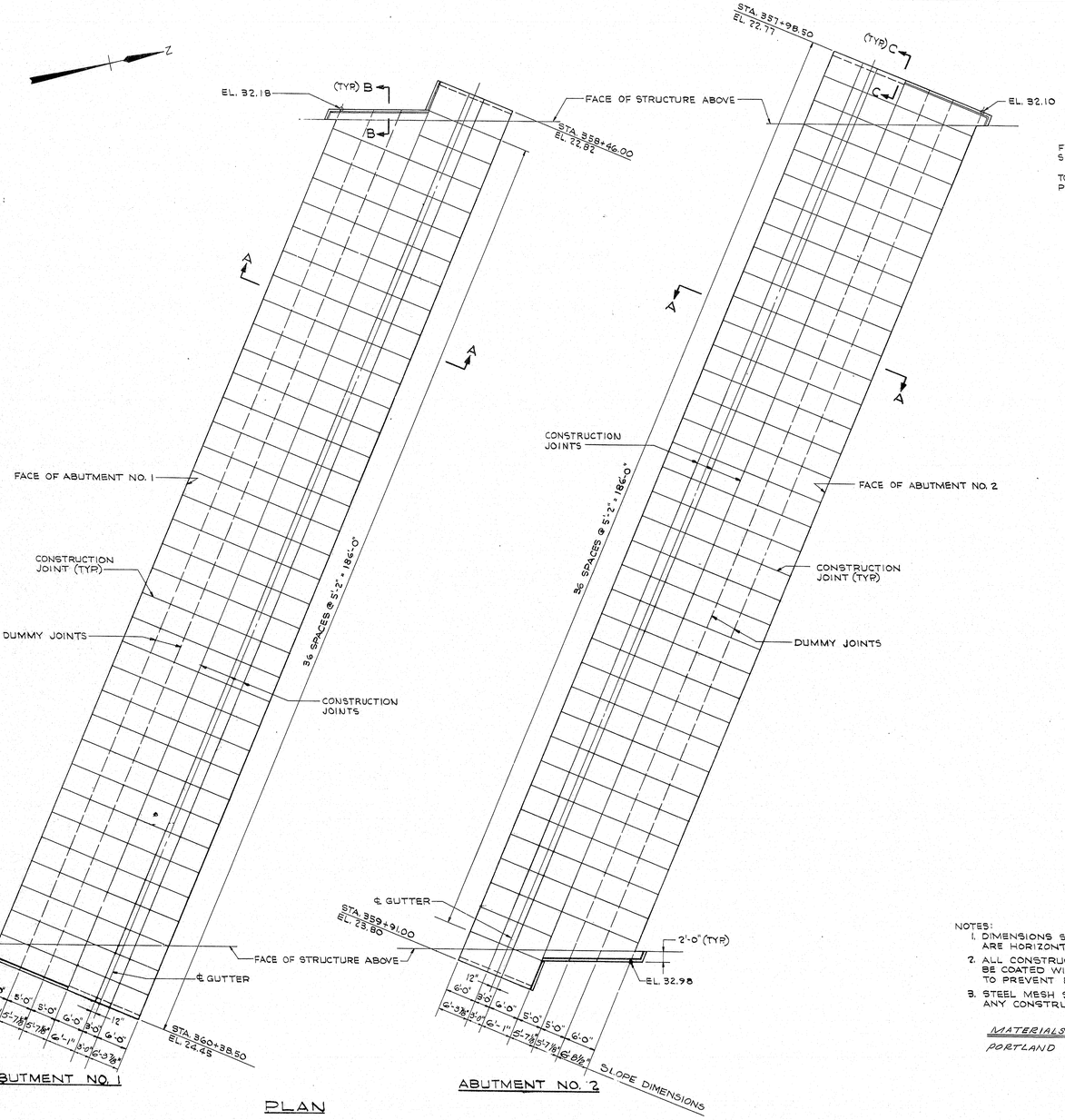
MBPC - 2000 - 4 - 6-9 3700

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
RAMP CS-6
OVER
RAMP WA-2
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY
SLOPE PROTECTION
SHEET 29 OF 36 AUGUSTA, MAINE

14-6-42

touraine paints TRUFLEX ☆ SILKY ☆ TRIPLE WHITE ☆ RYPLEX

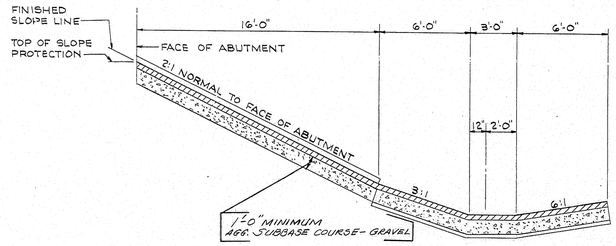
F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	295-B(73)S0	30	36



ABUTMENT NO. 1

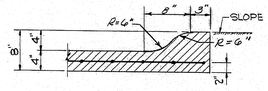
ABUTMENT NO. 2

PLAN

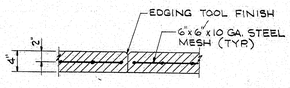


SECTION A-A

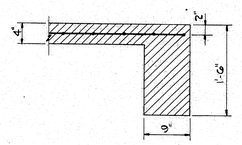
NOTE:
DO NOT EXCAVATE EXISTING MATERIAL IF IT MEETS THE SPECIFICATIONS FOR GRANULAR BORROW.



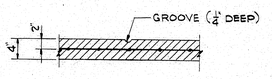
SECTION B-B



CONSTRUCTION JOINT



SECTION C-C



DUMMY JOINT

QUANTITIES

SLOPE PROTECTION – PORTLAND CEMENT CONCRETE = 1390 S.Y.

NOTES:
1. DIMENSIONS SHOWN IN PLAN ARE HORIZONTAL EXCEPT AS NOTED.
2. ALL CONSTRUCTION JOINTS TO BE COATED WITH ASPHALT PAINT TO PREVENT BOND.
3. STEEL MESH SHALL NOT PASS THRU ANY CONSTRUCTION JOINTS.

MATERIALS:
PORTLAND CEMENT CONCRETE SHALL BE CLASS A.

PLANS	BY	DATE
DESIGN - DETAILED	C.K.L.	1/12
CHECKED	D.A.M.	2/12
REVISIONS	R.E.B.	
FIELD CHANGES		

FILE NO.		PLAN NO.
VL-57		26
DES C.K.L.	CHK	R.E.B.
DR D.A.M.	CHK	R.E.B.
EST R.E.B.	CHK	C.K.L.

R Albright
ENGR IN CHARGE

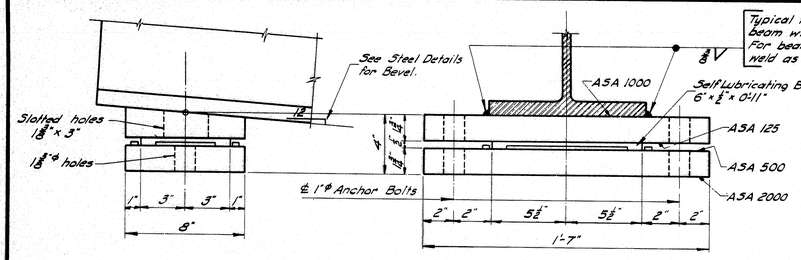
MBPC - 2000 - 4 - 8-9 3700

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
INTERSTATE ROUTE 295
OVER
WESTBROOK ARTERIAL
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY
SLOPE PROTECTION
SHEET 30 OF 36 AUGUSTA, MAINE

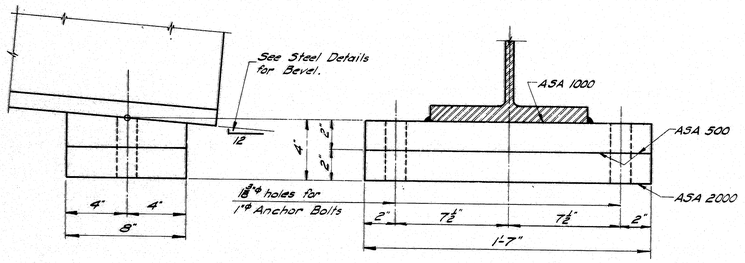
146-43

touraine paints TRUFLEX ☆ SILKY ☆ TRIPLE WHITE ☆ RYFLEX

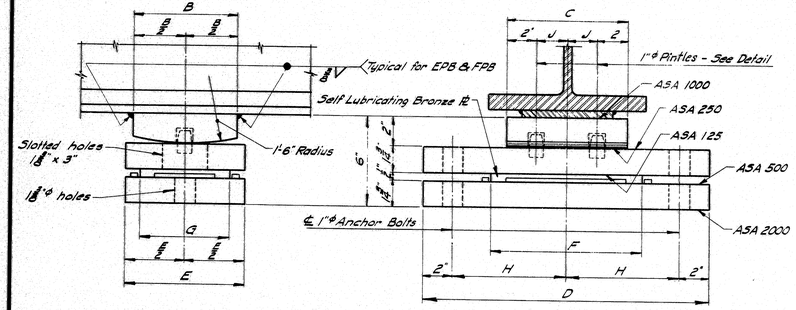
B.P.R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	295-B(15)50	31	36



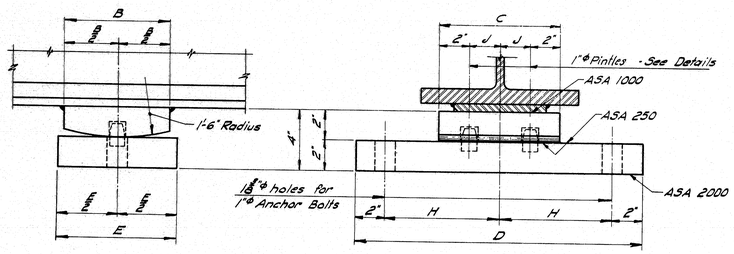
EXPANSION PEDESTAL - EPA



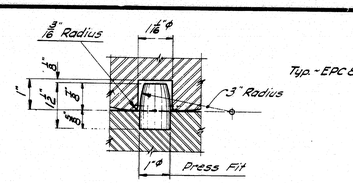
FIXED PEDESTAL - FPA



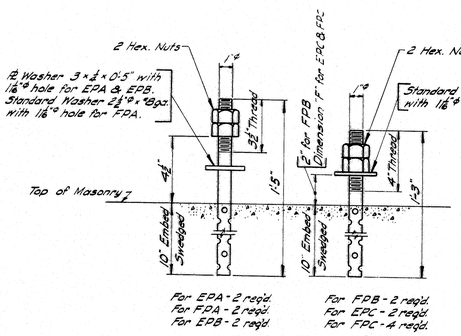
EXPANSION PEDESTAL - EPB



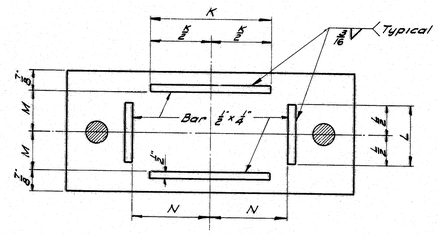
FIXED PEDESTAL - FPB



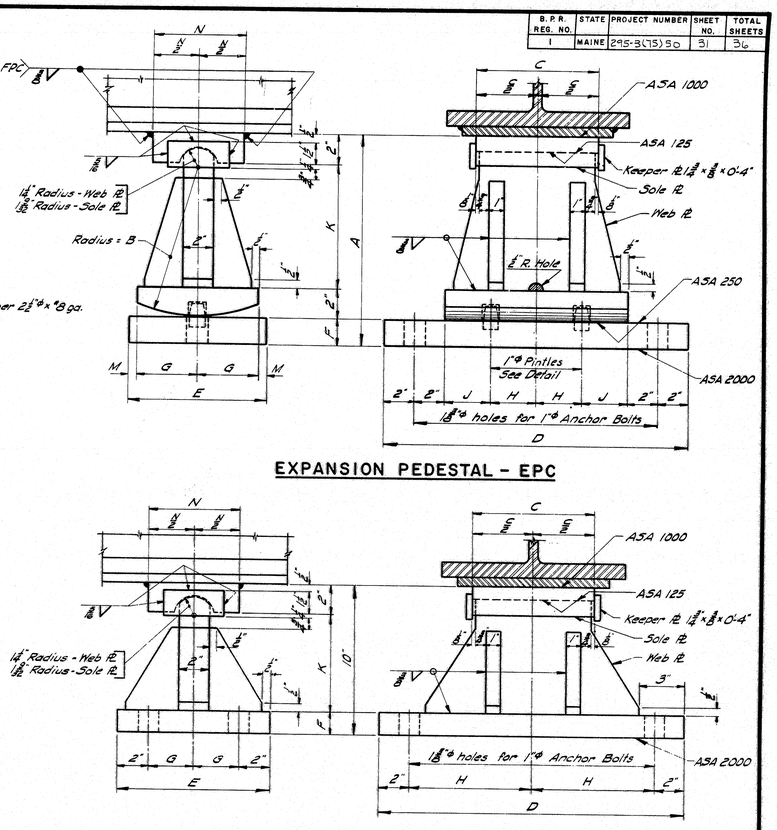
PINTLE DETAIL



ANCHOR BOLT DETAIL



MASONRY PLATE



EXPANSION PEDESTAL - EPC

FIXED PEDESTAL - FPC

PEDESTALS — ALLOWABLE LOADS & DIMENSIONS														
Pedestal	Load	A	B	C	D	E	F	G	H	J	K	L	M	N
EPA	132 K	—	—	—	—	—	—	—	—	—	8"	4"	3 3/8"	5 3/8"
FPA	150 K	—	—	—	—	—	—	—	—	—	—	—	—	—
EPB-1	120 K	—	6"	8"	1'-7"	8"	10"	6"	7 1/2"	2"	8"	4"	3 3/8"	5 3/8"
EPB-2	165 K	—	7"	10"	1'-8"	9"	1'-0"	7"	8"	3"	10"	5"	3 3/8"	6 3/8"
EPB-3	224 K	—	8"	1'-1"	2'-0"	10"	1'-4"	7"	10"	4 1/2"	1'-2"	5"	3 3/8"	8 3/8"
FPB-1	120 K	—	6"	8"	1'-7"	8"	—	—	7 1/2"	2"	—	—	—	—
FPB-2	165 K	—	7"	10"	1'-8"	9"	—	—	8"	3"	—	—	—	—
FPB-3	224 K	—	8"	1'-2"	2'-0"	10"	—	—	10"	5"	—	—	—	—
EPC-1	70 K	9 1/2"	6"	8"	1'-8"	8"	1 1/2"	3 1/2"	3"	3"	4 1/2"	—	1 1/2"	6"
EPC-2	100 K	11 1/2"	8"	8"	1'-8"	8"	1 1/2"	3 1/2"	3"	3"	6 1/2"	—	1 1/2"	6"
EPC-3	130 K	1'-2"	10"	8"	1'-8"	9"	1 1/2"	4"	3"	3"	8 1/2"	—	1 1/2"	7"
EPC-4	160 K	1'-2"	10"	8"	1'-10"	9"	1 1/2"	4"	4"	3"	8 1/2"	—	1 1/2"	7"
EPC-5	190 K	1'-2 1/2"	10"	9"	2'-0"	10"	2"	4 1/2"	5"	3"	8 1/2"	—	1 1/2"	8"
EPC-6	220 K	1'-4 1/2"	1'-0"	10"	2'-0"	1'-0"	2 1/2"	5"	5"	3"	10 1/2"	—	1"	8"
EPC-7	250 K	1'-4 1/2"	1'-0"	1'-0"	2'-2"	1'-0"	2 1/2"	5"	5"	4"	10 1/2"	—	1"	8"
FPC-1	100 K	—	—	8"	1'-8"	9"	1 1/2"	2 1/2"	8"	—	6 1/2"	—	—	6"
FPC-2	160 K	—	—	8"	1'-8"	10"	1 1/2"	3"	8"	—	6 1/2"	—	—	7"
FPC-3	190 K	—	—	9"	2'-0"	10"	1 1/2"	3"	10"	—	6 1/2"	—	—	8"
FPC-4	220 K	—	—	10"	2'-0"	1'-0"	1 1/2"	4"	10"	—	6 1/2"	—	—	8"
FPC-5	250 K	—	—	1'-0"	2'-0"	1'-0"	2"	4"	10"	—	6"	—	—	8"

NOTE: At the location of bearing pedestals the concrete bridge seats shall be dressed one inch larger all around than size of masonry plates and to exact elevations shown on the plans. If dressed areas are below the surface of the surrounding bridge seat a small channel shall be cut to the edge of the bridge seat for drainage where required by the Engineer. Channels shall have a min. width of 2" and min. slope of 1/8 inch per foot. No separate payment for this work will be made as it shall be considered incidental to contract items.

DESIGN SPECIFICATIONS

A.A.S.H.O., Standard Specifications for Highway Bridges, 1969

A.S.T.M. STEEL CLASSIFICATION

Anchor Bolts - A36
All other - A36

Revised- Design Specifications and A.S.T.M. Steel Classification 1969

MAINE STATE HIGHWAY COMMISSION
AUGUSTA, MAINE

STANDARD DETAILS
(BD 101 - 70)

BEARING PEDESTALS

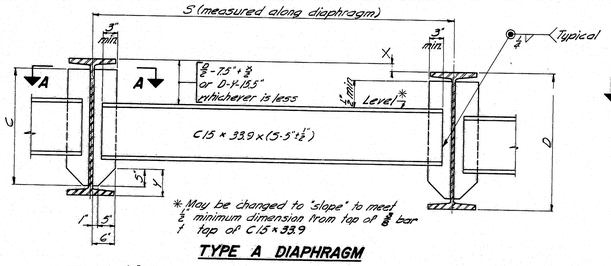
JANUARY 1970

146-44

touraine paints TRUFLEX ☆ SILKY ☆ TRIPLE WHITE ☆ RYPLEX

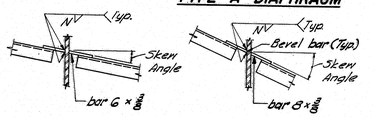
B.P.R. DIV. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	295-B(75)50	32	36

DIAPHRAGMS



* May be changed to 'slope' to meet ½ minimum dimension from top of ⅞" bar ↑ top of C15 x 33.9

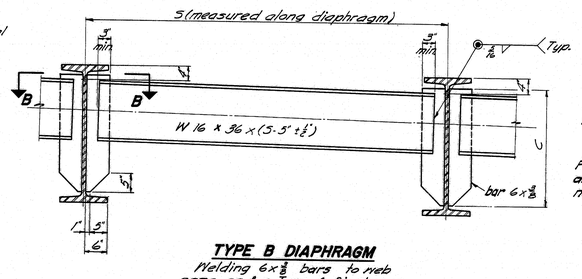
TYPE A DIAPHRAGM



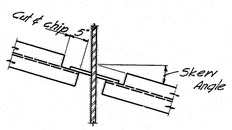
SECTION A-A
Skew Angle 0° to 10°-00'

SECTION A-A
Skew Angle over 10°-00' to 20°-00'

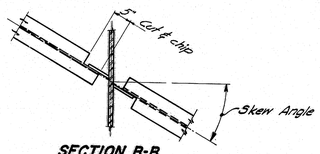
FILLET WELD SIZE "N" & DIMENSION "C" FOR DIAPHRAGM BARS		
BEAM	C	N
W27 x 84 to 114 incl.	1'-11"	¼"
W30 x 99 to 132 incl.	2'-2"	¼"
W33 x 118 to 152 incl.	2'-5"	¼"
W36 x 135 to 194 incl.	2'-7"	¼"
W36 x 230 to 300 incl.	2'-6"	⅜"



TYPE B DIAPHRAGM
Welding 6 x ⅞" bars to web same as for Type A Diaphragm.

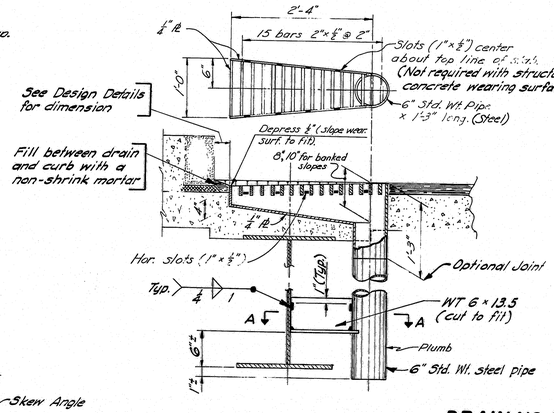


SECTION B-B
Skew Angle 0° to 10°-00'

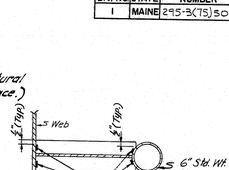


SECTION B-B
Skew Angle over 10°-00'

NOTE
See design details for diaphragm type, location and skew.

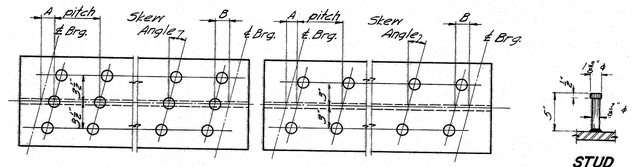


DRAIN NO. 1



SECTION A-A

NOTE: See design details for location and number of drains and basin size to which it is connected.

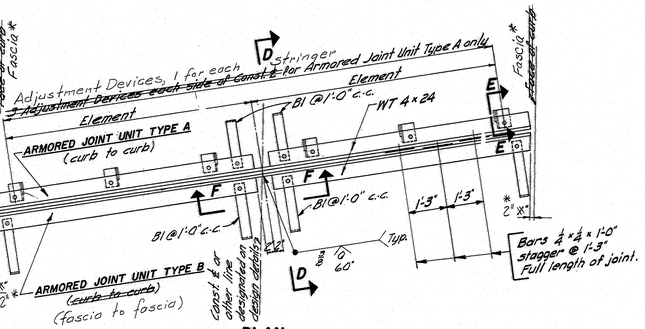


TRIPLE STUDS **DOUBLE STUDS**

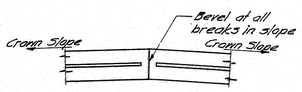
STUD DETAIL

NOTE
1. Studs shall be granular or solid flux filled and automatically and welded to top flange in the shop or field.
2. See the design details for Dimensions "A" & "B", stud pitch and skew angle for studs.

SHEAR CONNECTORS



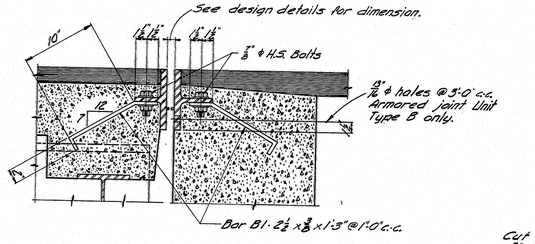
PLAN



SECTION F-F
Note: See design details for Const. ℄ to curb dimensions, skew, crown slope, slab thickness, other dimensions necessary to complete the fabrication details, and location.

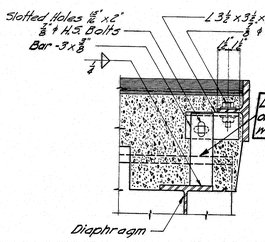
NOTE
1. Type A Armored Joint Units are intended to be used for attachment to superstructures. Type B Armored Joint Units are intended to be used for attachment to abutments. At armored joints over piers, two (2) Type A Armored Joint Units shall be used.
2. If more elements than the two shown in the "Plan" are required by the design details, there shall be three adjustment devices for each element for Armored Joint Unit Type A and the elements of both units shall be field welded together in the same manner as shown in the "Plan".
3. Armored Joints to be paid for as Structural Steel.

ARMORED JOINT
An armored joint consists of two armored joint units. See note 1.

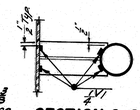


ARMORED JOINT UNIT TYPE A — ARMORED JOINT UNIT TYPE B

SECTION D-D

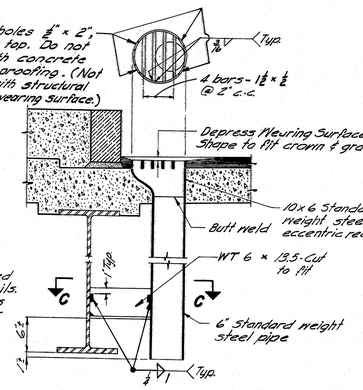


SECTION E-E
Shoring Adjustment Device Armored Joint Unit Type A only - After Unit is in final position weld ⅜ bar to angle with ¼ Fillet



SECTION C-C

NOTE
1. Drain may be rotated 180°. See design details.
2. See design details for location and number of drains and beam size to which it is connected.



DRAIN NO. 2

GENERAL NOTE

Use only those items called for on design details. In case of conflict between these Standard Details and the design details, the requirements of the design details shall be followed.

Drains to be incidental, see Section 502.20

* Rev. 11-12-78

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

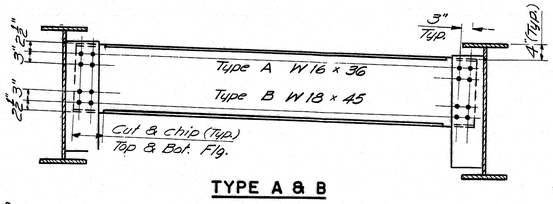
STANDARD DETAILS
(BD 104-71)
DIAPHRAGMS, ARMORED JOINT, SHEAR CONNECTORS, DRAIN
DECEMBER 1971

14-6-45

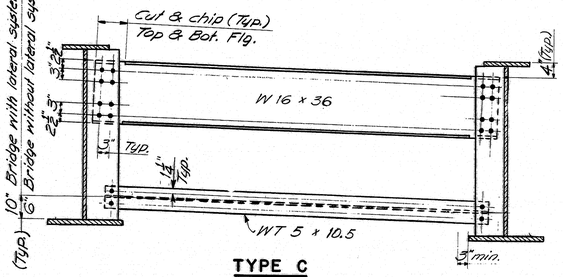
touraine paints TRUFLEX ☆ SILKY ☆ TRIPLE WHITE ☆ RYPLEX

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	295-3(78)50	33	36

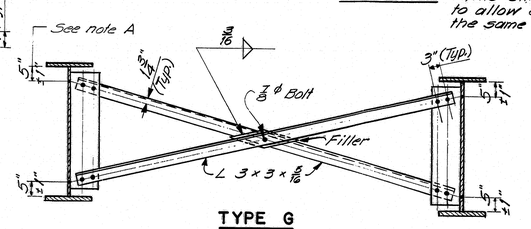
NOTE A This dimension may be varied (±1") to allow a series of diagonals to have the same slope.



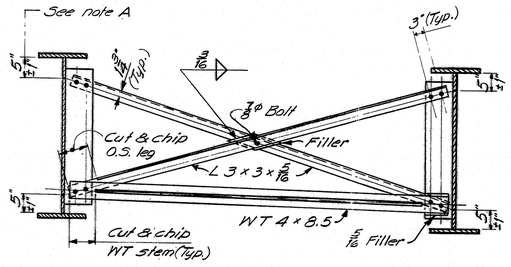
TYPE A & B



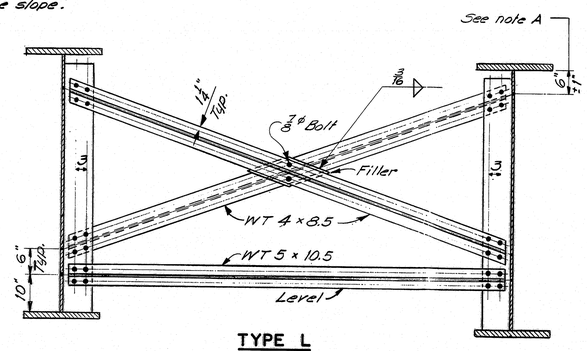
TYPE C



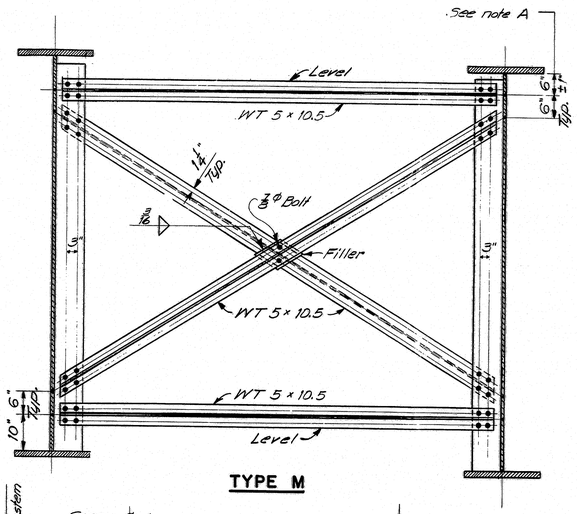
TYPE G



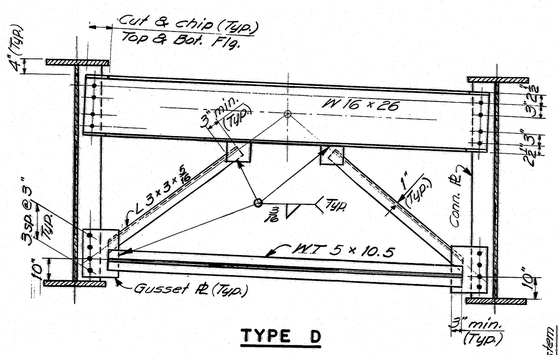
TYPE H



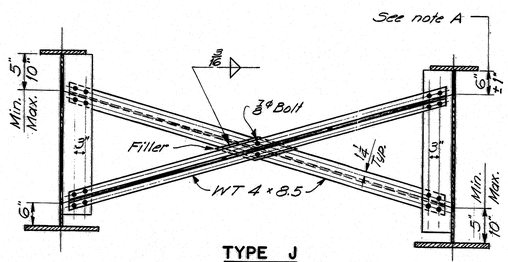
TYPE L



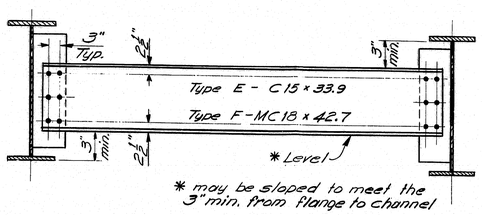
TYPE M



TYPE D

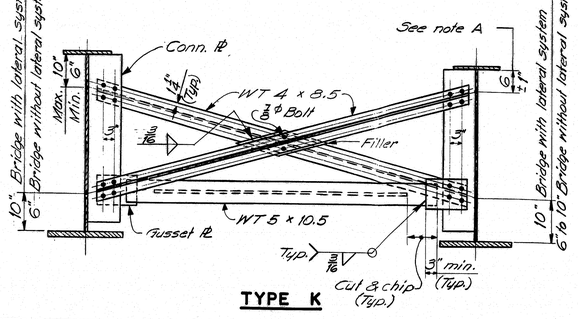


TYPE J

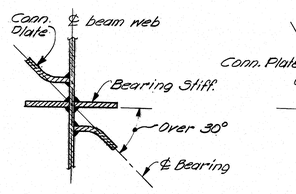


* may be sloped to meet the 3" min. from flange to channel

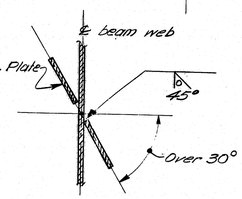
TYPE E & F



TYPE K



DETAIL A
Referenced from Note 5



DETAIL B
Referenced from Note 4

MATERIALS

Diaphragms, Crossframes and All Plates (Filler, gusset, and connection)..ASTM A36
High Strength Bolts ⅞" diameter _ _ _ ASTM A325

FABRICATION NOTES

1. For location and type of diaphragm or crossframe see design details.
2. Holes for ⅞" diameter bolts shall be 15/16" dia. and Edge distances shall be 1¼" minimum unless otherwise shown.
3. Connection plates and gusset plates shall have a minimum thickness of ⅜" and shall have sufficient width to provide erection clearances. When bearing stiffeners or intermediate stiffeners are used as connection plates, the plate size will be given on the design details.
4. Connection plates shall be fastened to beam and girder webs as follows:
   - 0° to 30° skew... fillet weld both sides.
   - Over 30° skew... full penetration groove weld (See Detail B) except as indicated in Note 5
   - Over 45° skew... weld prequalification will be required.

   The skew angle is the angle between the connection plate and a line normal to the beam.
5. Bearing stiffeners shall be used as connection plates when the skew is not over 30°. When the skew is over 30° a bent connection plate shall be attached to the web adjacent to the bearing stiff. as shown in Detail A.
6. All fillet weld sizes shall be the minimum for the thickness of metal being joined according to AWS Specifications for Welded Highway & Railway Bridges.
7. Connection plates on welded beams and girders shall extend to the top flange in areas where the top flange is always in compression or when used as a bearing stiffener or intermediate stiff.
8. Connection plates shall extend to the bottom flange when used as a bearing stiffener, at points where lateral bracing is attached & on welded beams and girders in areas where the bottom flange is always in compression.
9. When a conn. plate is extended to a flange it shall be a paint tight fit except as otherwise indicated on design details.
10. Conn. plates shall be 2½" clear from flanges, except as indicated by Notes 7&8.
11. Use only those items called for on the design details. In case of conflict between these standard details and the design details, the design details shall be followed.

PLANS	DATE	BY
DESIGN - DETAILED		
CHECKED		
REVISIONS		
FIELD CHANGES		

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STANDARD DETAILS
(BD 113 - 72)
DIAPHRAGMS & CROSSFRAMES

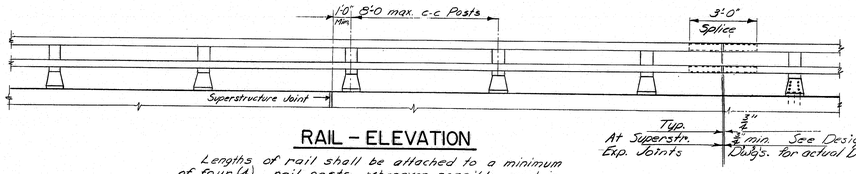
SHEET 33 OF 36 AUGUSTA, MAINE SEPT. 1972

146-46

touraine paints TRUFLEX ☆ SILKY ☆ TRIPLE WHITE ☆ RYPLEX

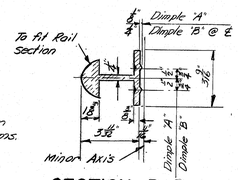
F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	295-3(75)50	34	36

DESIGN SPECIFICATIONS
AASHO Standard Specifications for Highway Bridges 1969 and Interim Specifications.

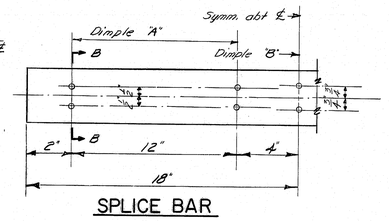


RAIL - ELEVATION

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

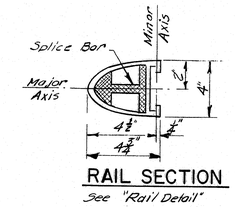


SECTION B-B



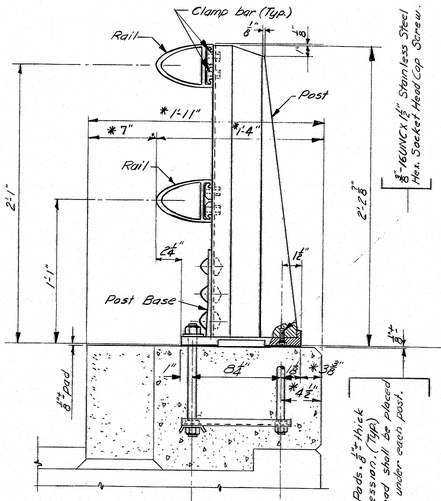
SPLICE BAR

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



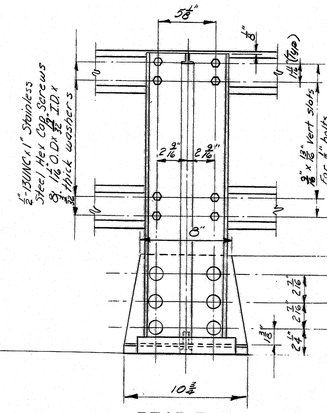
RAIL SECTION

See "Rail Detail"

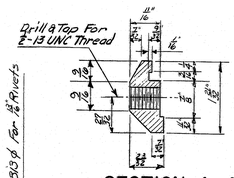


BRIDGE RAIL

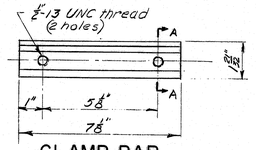
(Assembly)



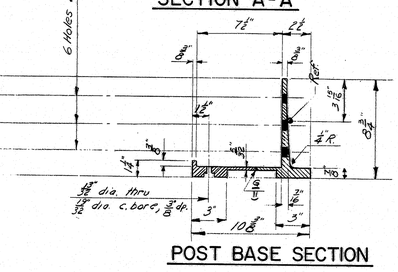
REAR ELEV.



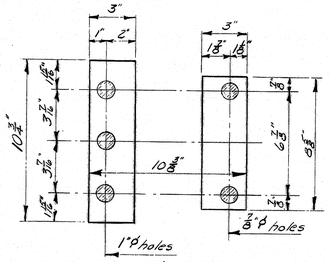
SECTION A-A



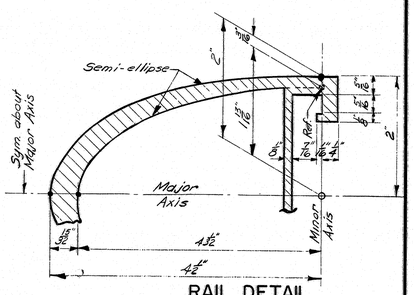
CLAMP BAR



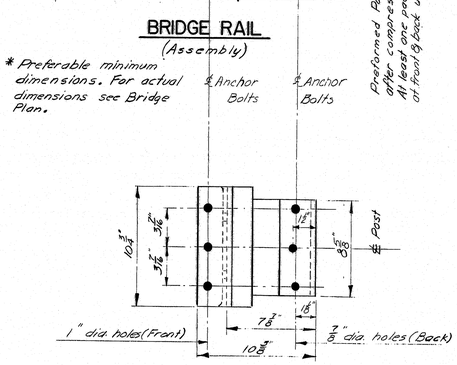
POST BASE SECTION



PREFORMED PADS

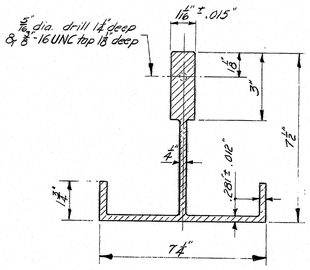


RAIL DETAIL

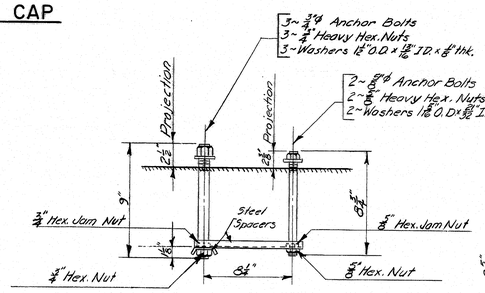


POST BASE

(Bottom View)

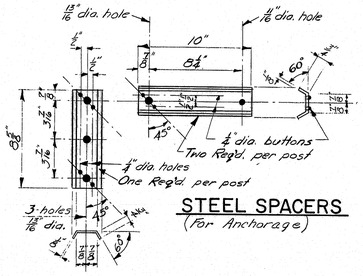


POST SECTION



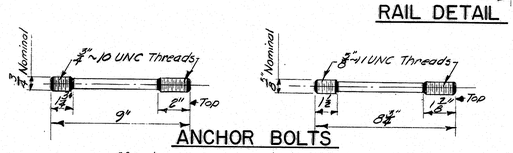
RAIL POST ANCHORAGE

(Assembly)



STEEL SPACERS

(For Anchorage)



ANCHOR BOLTS

If cut threads are used, body diameter shall be not less than nominal diameter. If rolled threads are used, body diameter shall be not less than root diameter of the threads.

PLANS

	BY	DATE
DESIGN - DETAILED	K. Leech	Nov. 1972
CHECKED		
REVISIONS		
FIELD CHANGES		

JANUARY 1968

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STANDARD DETAILS
(BD 114-73)

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

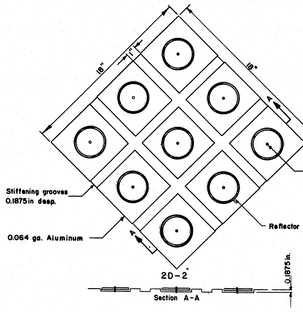
SHEET 34 OF 36 AUGUSTA, MAINE FEBRUARY 1973

203-1 2060

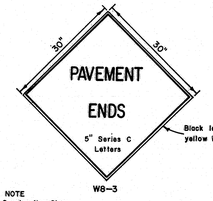
146-47

touraine paints TRUFLEX ☆ SILKY ☆ TRIPLE WHITE ☆ RYPLEX

B. P. R. REC. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	295-3(715)50	35	36



HAZARD MARKER



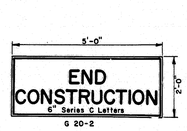
NOTE

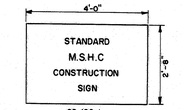
SIGNING IN AN AREA WHERE BLASTING IS NECESSARY SHALL BE PLACED AS OUTLINED IN THE "MANUAL", AND THE PRECAUTIONS OF SUBSECTION 107.12 OF THE STANDARD SPECIFICATIONS SHALL BE OBSERVED.

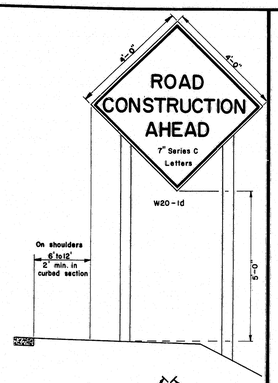
GENERAL NOTE
Construction Signs

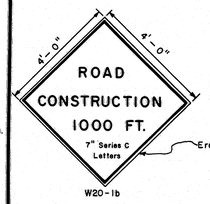
1. Sign Borders: All signs shall have borders conforming to the sizes and spacing as shown below:
   a. 30"x30" Sign - 3/4" Border, 1/2" Space from sign edge.
   b. 2' x 5' Sign - 3/4" Border, 3/8" Space from sign edge.
   c. 3' x 4' Sign - 3/4", 1/2" Space from sign edge.
   d. 4' x 4' Sign - 1 1/4" Border, 3/4" Space from sign edge.

A

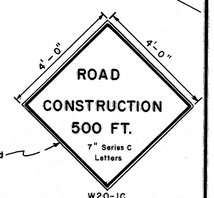








Erected in the same manner as W20-1d



CONSTRUCTION SIGNS

B

GENERAL NOTES - BARRICADES

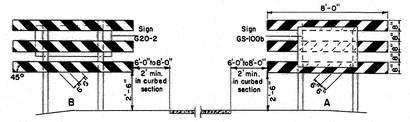
1. Unless otherwise designated, sign designation letters shall refer to the "Manual of Uniform Traffic Control Devices for Streets and Highways," published by the U.S. Department of Transportation, Federal Highway Administration, 1971.
2. White stripes shall be of silver reflective sheeting bonded to 0.019 minimum gauge aluminum, 16 minimum gauge galvanized steel, or 1/4" plywood. Individual white sheets may be attached to a black or orange painted background to form the black or orange and white stripes. At the Contractor's option the reflective sheeting and backing may extend the full width of the barricade with an opaque film or paint applied to form the stripes.
3. All signs shall be of reflective sheeting on 5/8" thick plywood. The plywood shall conform to subsection 712.25, Maine State Highway Commission, Standard Specifications, June 1968.
4. Pressure sensitive reflective sheeting will be an acceptable alternate to the reflective sheeting required by Maine State Highway Commission, Standard Specifications.

NOTES - PORTABLE BARRICADES

1. Lumber sizes for portable barricades shall be 2" x 8" except posts which shall be 4" x 4" (nominal sizes).
2. The detour sign shall be an oversized M4-10 sign with a demountable "DETOUR" message which shall be made of screened reflective sheeting on 1/4" plywood, masonite, sheet steel or sheet aluminum.
3. Hazard markers shall be attached to the barricade with a bolt assembly of steel cadmium plated 5/16" bolt, lock washer and vandal resistant nuts.
4. When two W1-6 signs are required, R11-2, R11-3, or R11-4 signs shall be omitted.
5. Flashing lights housings shall be mounted to permit rotating in a vertical axis to allow for adjustment to face oncoming traffic.
6. Location of electric service and meter to be determined after the power source has been located.

NOTES-WING BARRICADES

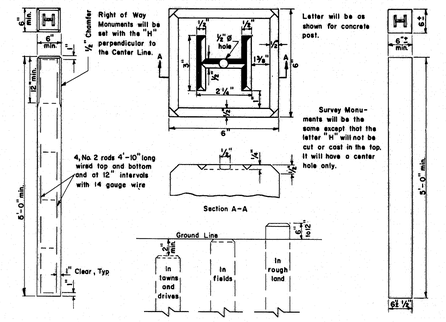
1. Lumber sizes for wing barricades shall be 1" x 8" except posts which shall be 4" x 4" (nominal sizes).
2. Wing barricades will not be required unless specifically called for in the special provisions.
3. Location of signs and barricades will be determined by the Engineer.

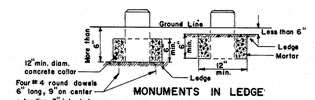


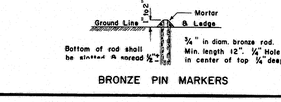
WING BARRICADES

C

RIGHT OF WAY & SURVEY MONUMENTS

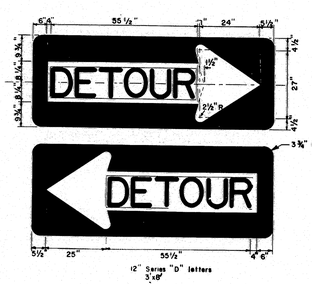






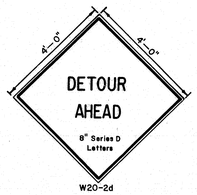
BRONZE PIN MARKERS

D



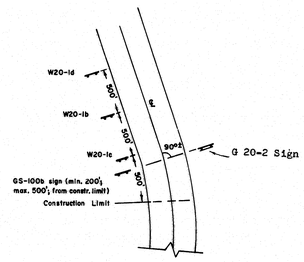
DETOUR SIGN

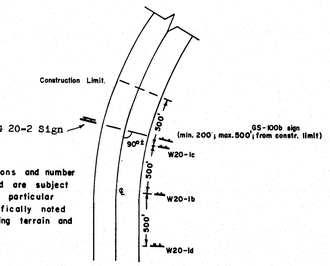
M 4-(L)



E

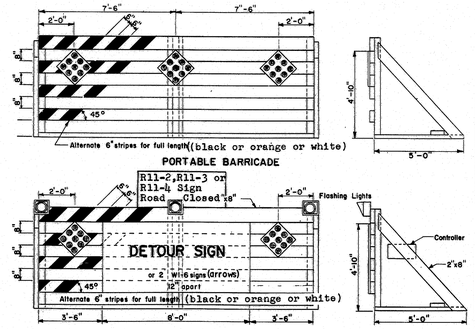
STANDARD SIGN LOCATIONS





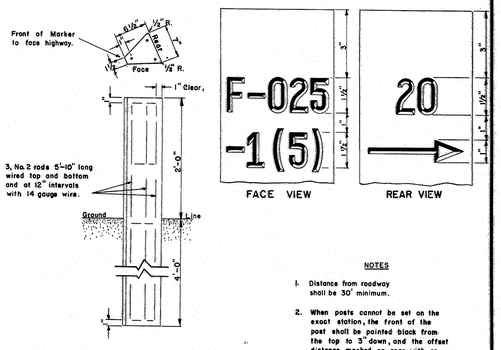
NOTE:
Standard locations and number of signs required are subject to variation on particular projects if specifically noted due to surrounding terrain and land use.

F



BARRICADES

G



NOTES

1. Distance from roadway shall be 30' minimum.
2. When posts cannot be set on the exact station, the front of the post shall be painted black from the top to 3' down, and the offset distance marked on rear with an arrow pointing in direction of beginning or end of project.
3. All markings to be 1/4" deep and 3/16" wide.

PROJECT MARKERS

H

REVISION	
PLATE B	12-21-70
PLATES A, C, E, F & G	12-15-71

MAINE STATE HIGHWAY COMMISSION
AUGUSTA, MAINE

BARRICADES
WARNING SIGNS
MONUMENTS
PROJECT MARKERS

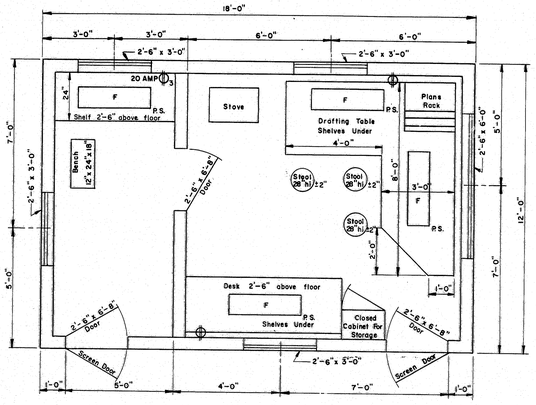
AUG. 1969

11

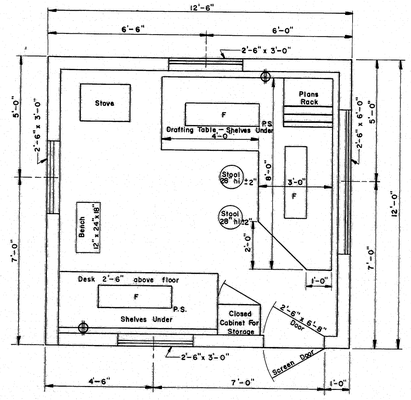
146-48

touraine paints TRUFLEX ☆ SILKY ☆ TRIPLE WHITE ☆ RYPLEX

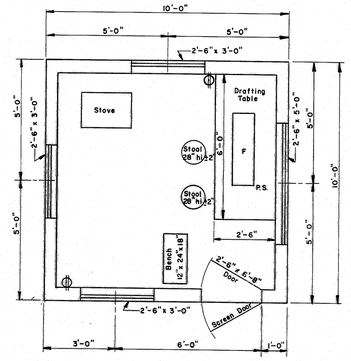
B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	295-3(75)50	36	36



FLOOR PLAN
TYPE "A"



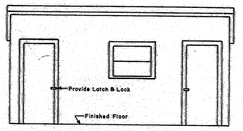
FLOOR PLAN
TYPE "B"



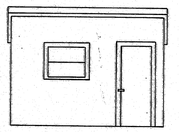
FLOOR PLAN
TYPE "C"

GENERAL NOTES

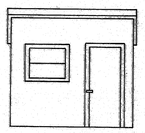
1. Drafting table shall be 3'-4" high at front edge and placed 2" from studs to allow prints to hang down behind table when in use.
2. Shelves under desk shall be constructed to received 11½" x 14" x 25" transfiles.
3. Windows shall be double hung.
4. Stovepipe shall not be in direct contact with combustible material, the pipe shall be surrounded with at least 6" of fireproof material.
5. Continuous 110 volt 60 cycle electric service shall be supplied.
6. The engineer may rearrange the items shown on the plan views during construction of the field office.
7. FURNISHINGS TO BE SUPPLIED:
   - 2 Straight back chairs for types A and B
   - 1 Bench for types A, B & C
   - 3 Stool for type A
   - 2 Stools for types B & C
8. SYMBOLS:
   - F — Florescent lights (2 light, rapid start 48" strips and 40 watt bulbs.)
   - P.S. — Pull switch.
   - Duplex wall outlet — 15 amp unless otherwise noted.
   - $\oplus_3$ — Triplex Wall Outlet
9. For the Type "A" Field Office one clean 55 gal. drum shall be supplied, installed on a suitable rack and equipped with a spigot suitable for drawing off water. The drum shall be furished with water at all times.



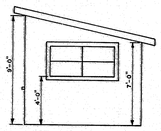
FRONT ELEVATION
TYPE "A"



FRONT ELEVATION
TYPE "B"

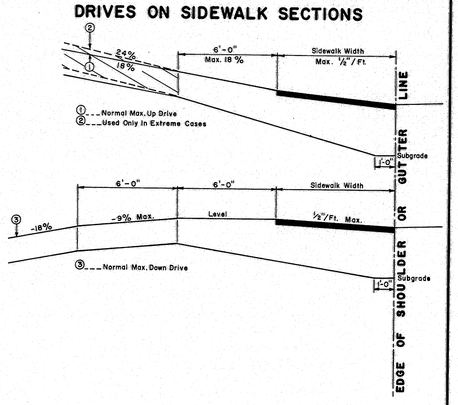


FRONT ELEVATION
TYPE "C"



SIDE ELEVATION
TYPES "A" "B" & "C"

DRIVES ON SIDEWALK SECTIONS



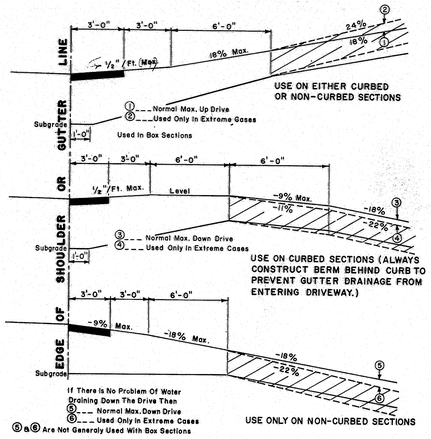
GENERAL NOTES

1. The sidewalk width shall be paved in all cases.
2. All residential or commercial drives over 10% to be paved.

NOTES ON MAXIMUM DRIVEWAY PROFILES

1. These profiles are a guide for the majority of cases, but should be field checked when the main line grade is steep (4% to 6% or greater) or the angle of approach to the drive is unusual.
2. Generally the majority of drives on a project will be built with flatter profiles than these maximum cases.
3. When grading drives which are flatter than the maximum profiles the following rule of thumb should be used, do not exceed a grade % change of more than 9% in a 6 foot increment of driveway length. This applies to both up and down profiles.

DRIVES ON NON-SIDEWALK SECTIONS



GENERAL NOTES

1. The first 3' shown as pavement shall be paved only when abutting a paved area.
2. All residential or commercial drives over 10% to be paved.

NOTES ON MAXIMUM DRIVEWAY PROFILES

1. These profiles are a guide for the majority of cases, but should be field checked when the main line grade is steep (4% to 6% or greater) or the angle of approach to the drive is unusual.
2. Generally the majority of drives on a project will be built with flatter profiles than these maximum cases.
3. When grading drives which are flatter than the maximum profiles the following rule of thumb should be used, do not exceed a grade % change of more than 9% in a 6 foot increment of driveway length. This applies to both up and down profiles.

REVISIONS	

MAINE STATE HIGHWAY COMMISSION
AUGUSTA, MAINE

STANDARD DETAILS

DRIVEWAY DETAILS
FIELD OFFICES
TESTING LABORATORY

AUG. 1969 (12)

14-6-49

touraine paints TRUFLEX ☆ SILKY ☆ TRIPLE WHITE ☆ RYPLEX