Revised Retained 16 As Built Plans Completed

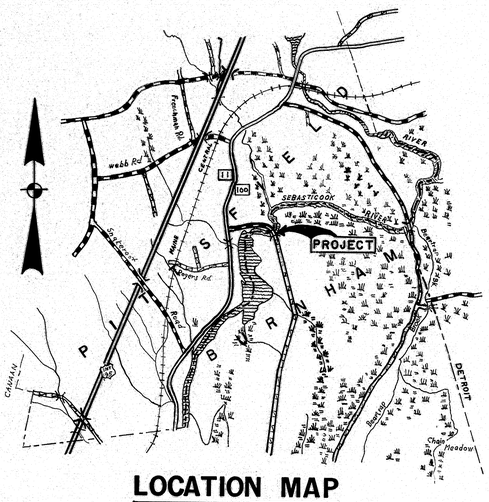
B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	6209	1	32

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

EEL WEIR BRIDGE
OVER
SEBASTICOOK RIVER
BETWEEN THE TOWNS OF
BURNHAM AND PITTSFIELD
WALDO AND SOMERSET COUNTIES
BRIDGE NO. 6209
PROJECT LENGTH .142 MILES

INDEX OF SHEETS

TITLE	SHEET NO.
TITLE SHEET	1
BRIDGE PLANS (INCLUDING SURVEY, SOILS, AND CROSS SECTIONS)	2 TO 21
BRIDGE STANDARDS	22 TO 26
HIGHWAY STANDARDS	27 TO 30
RIGHT OF WAY MAP	31 TO 32



LOCATION MAP

SCALE OF MILES 0 1 2 3

SPECIFICATIONS

DESIGN - AASHO Standard Specifications for Highway Bridges 1969 and interim Specifications 1970, 1971.

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

LIVE LOADING

HS 20-44

MATERIALS

CONCRETE - Seals - Class S
Piers - Class B
All Other - Class A

REINFORCING STEEL - ASTM A615 Grade 60

STRUCTURAL STEEL - Beams and Cover Plates & SPLICE PLATES - A572 GRADE 50
7/8" diameter High Tensile Strength Bolts - A325
All other - A36

BASIC ALLOWABLE STRESSES

CONCRETE - fc = 1200. psi. n = 10
REINFORCING STEEL - fs = 24,000. psi.
STRUCTURAL STEEL - A572 Grade 50 - fs = 27,000. psi.
A36 - fs = 20,000. psi.

"As Built Plans"
Completed Aug. 16, 1973
Minor Changes on sheets 7 & 9
L.E. Day, Res. Insp.

HYDRAULIC DATA

DRAINAGE AREA 600 SQ. MILES
Q 50 14,400 CFS.
VELOCITY 7.0 FT./SEC.

TRAFFIC DATA

A.D.T. 130, 1970
A.D.T. 230, 1990
D.H.V. 30
T. (%)
D. (%)
V.
P.S.D. (%)
18 KIPS

STATE OF MAINE — SYLVESTER L. POOR — 1973

ESTIMATED QUANTITIES

ITEM NO.	DESCRIPTION	QUANTITY	UNIT
201.11	Clearing	0.5	Acre
202.10	Removal of Exist. Superstructure (Property of Contractor)	1	L. S.
203.20	Common Excavation	550	Cu. Yd.
203.24	Common Borrow	4,300	Cu. Yd.
203.25	Granular Borrow	2,670	Cu. Yd.
205.04	Overhaul (In place measure)	2320	Yd. Mi.
205.05	Overhaul (Pit measure)	5,340	Yd. Mi.
206.06	Structural Earth Excavation, Drainage & Minor Structures	30	Cu. Yd.
206.08	Structural Earth Excavation, Abutments & Retaining Walls	190	Cu. Yd.
206.10	Structural Earth Excavation, Piers	450	Cu. Yd.
304.10	Aggregate Subbase Course, Gravel	1,250	Cu. Yd.
410.20	Bituminous Surface Treatment	1,450	Sq. Yd.
411.09	Untreated Aggregate Surface Course	60	Cu. Yd.
501.212	Steel H-beam Piles, 42 Lbs./ft.	480	L. F.
502.21	Structural Concrete, Abutments & Retaining Walls	237	Cu. Yd.
502.23	Structural Concrete, Piers	309	Cu. Yd.
502.24	Structural Concrete, Piers (Placed under water)	386	Cu. Yd.
502.26	Structural Concrete, Rdwy & Sdwlk Slabs on Steel Bridges	1	L. S.
503.12	Reinforcing Steel, Fabricated & Delivered	74,550	Lbs.
503.13	Reinforcing Steel, Placing	74,550	Lbs.
504.70	Structural Steel, Fabricated & 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.
507.08	Bridge Railing	495	L. F.
511.0101	Cofferdams, Pier No. 1	1	L. S.
511.0102	Cofferdams, Pier No. 2	1	L. S.
512.07	French Drains (Stones only)	17	Cu. Yd.
515.20	Protective Coating for Concrete Surfaces	1,220	Sq. Yd.
603.161	15" Corrugated Metal Pipe	55	L. F.
606.17	Guard Rail Type 3b, Single Rail	525	L. F.
606.22	Guard Rail Type 3b, Circular (Greater than 15' radius)	1325	L. F.
606.26	Terminal Ends, Single Rail	6	Each
610.08	Plain Riprap	1,280	Cu. Yd.
615.07	Loam	170	Cu. Yd.
616.08	Sodding	30	Sq. Yd.
618.14	Seeding, Method Number 2	27	Units
618.15	Temporary Seeding	20	Lbs.
619.09	Hay Mulch	27	Units
623.06	Right of Way Monuments	3	Each
623.07	Survey Monuments	5	Each
629.05	Labor Straight Time	10	M. Hr.
631.13	Bulldozer (including operator)	10	Hr.
631.171	Truck Small (including operator)	10	Hr.
631.22	Front End Loader (including operator)	10	Hr.
632.08	Warning Lights	2	Group
633.09	Portable Barricade	2	Each
639.09	Field Office, Type "B"	1	Each
657.20	Seed and Application, Method "A"	25	Units
657.21	Reforesting, Method "B"	1	Acre

ESTIMATED QUANTITIES FOR LUMP SUM ITEMS

Structural Concrete, Roadway & Sidewalk Slabs on Steel Bridges — 269 Cu. Yd.
Structural Steel — 201,700 Lbs.
Shear Connectors — 2,060 Each (2,020 Lbs.)

APPROVED:

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

Douglas Littlefield — COMMISSIONER — DATE AUG. 2, 1972
Richard A. Bustin — BUREAU DIRECTOR — AUG. 2, 1972
Sylvester L. Poor — CHIEF ENGINEER — AUG. 2, 1972

COAST GUARD PERMIT NOT REQUIRED

JANUARY 1968

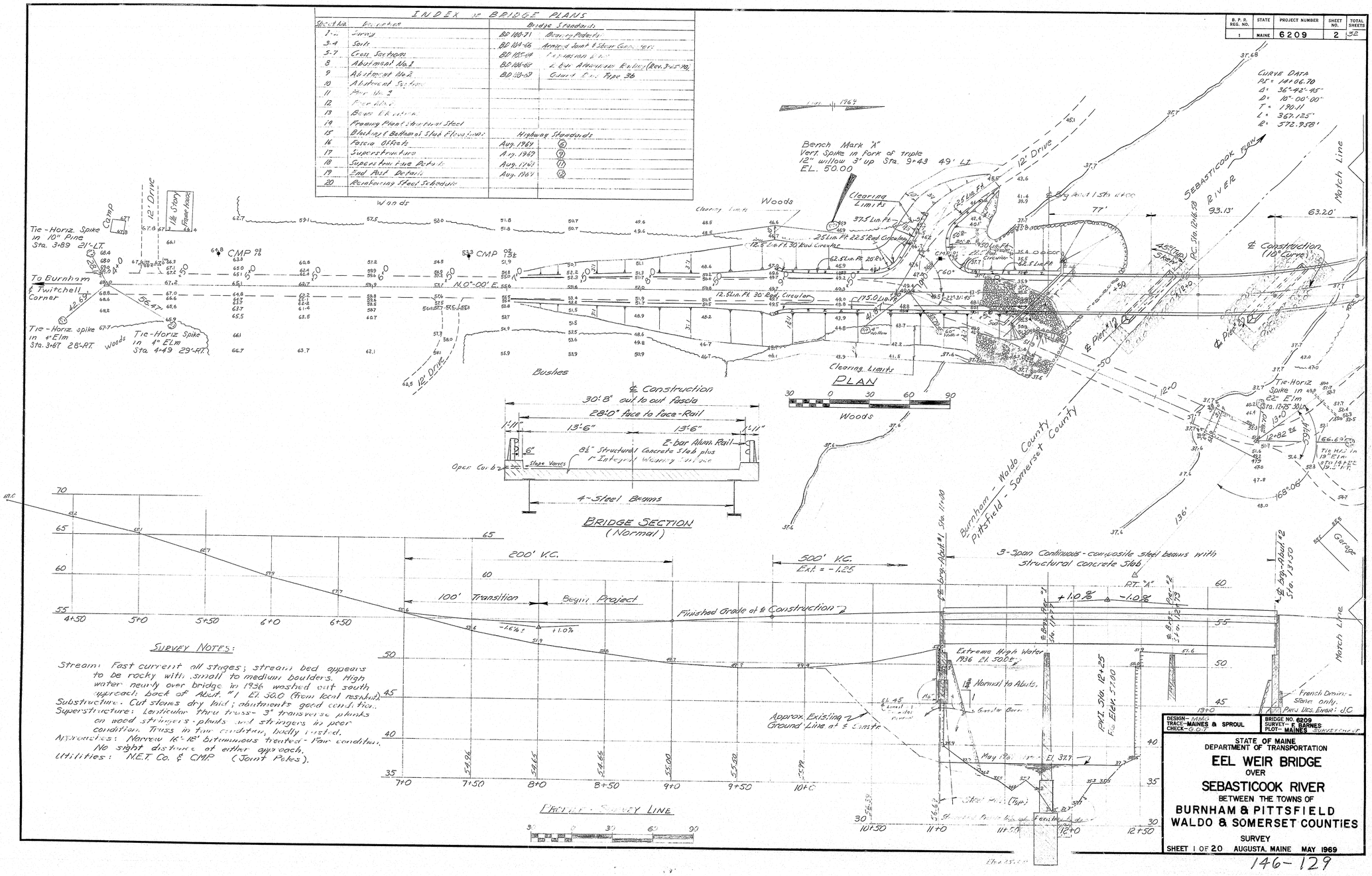
146-128

touraine paints TRUFLEX ☆ SILKY ☆ TRIPLE WHITE ☆ RYPLEX

B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	6209	2	32

INDEX OF BRIDGE PLANS

Sheet No.	Description	Bridge Standards
1	Survey	BD 100-71 Bearings Polaris
3-4	Soils	BD 104-46 Armored Joint & Slope Connection
5-7	Cross Sections	BD 105-64 Expansion Joint
8	Abutment No. 1	BD 106-65 2 Cell Armco Rubles (Rev. 3-15-10)
9	Abutment No. 2	BD 113-53 Culvert Sec. Type 36
10	Abutment Sections	
11	Pier No. 1	
12	Pier No. 2	
13	Beam Elevation	
14	Framing Plan & Transverse Steel	
15	Blocking & Bottom of Slab Elevations	Highway Standards
16	Fascia Offsets	Aug. 1969 (6)
17	Superstructure	Aug. 1969 (9)
18	Superstructure Details	Aug. 1969 (11)
19	End Post Details	Aug. 1969 (12)
20	Reinforcing Steel Schedule	



SURVEY NOTES:

Stream: Fast current all stages; stream bed appears to be rocky with small to medium boulders. High water nearly over bridge in 1936 washed out south approach back of Abut. "1" El. 50.0 (from local residents).
Substructure: Cut stones dry laid; abutments good condition.
Superstructure: Lenticular thru truss - 3" transverse planks on wood stringers - planks and stringers in poor condition. Truss in fair condition, badly rusted.
Approaches: Narrow 16'-18' bituminous treated - Fair condition. No sight distance at either approach.
Utilities: N.E.T. Co. & CMP (Joint Poles).

DESIGN - MMS	BRIDGE NO. 6209
TRACE - MAINES & SPROUL	SURVEY - E. BARNES
CHECK - G.O.T.	PLOT - MAINES 10/31/69

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

EEL WEIR BRIDGE
OVER
SEBASTICOOK RIVER
BETWEEN THE TOWNS OF
BURNHAM & PITTSFIELD
WALDO & SOMERSET COUNTIES

SURVEY

SHEET 1 OF 20 AUGUSTA, MAINE MAY 1969

146-129

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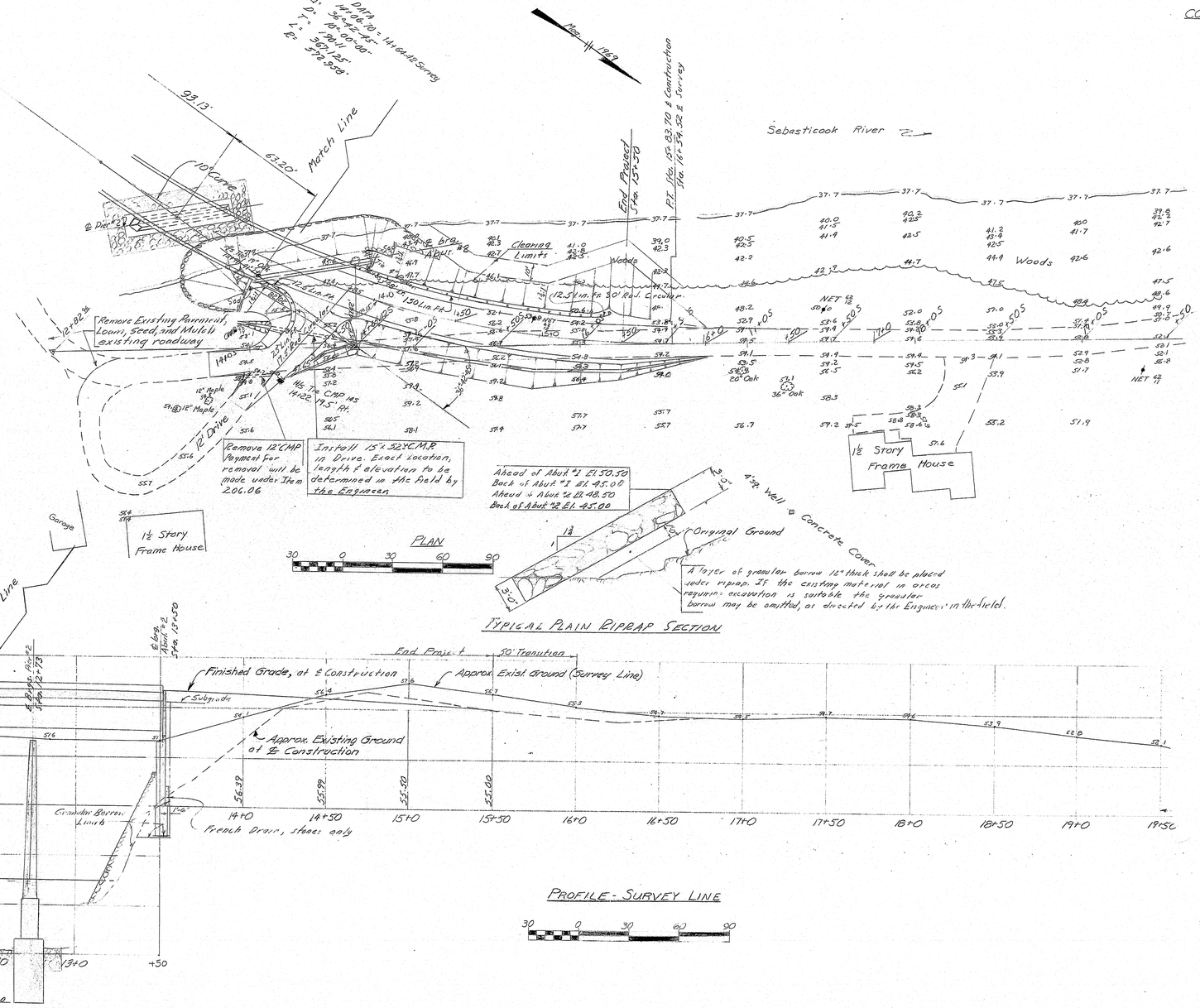
B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	6209	3	32



CONSTRUCTION NOTES

1. All utility plant shall be adjusted by the respective utilities unless noted.

2. A strip of sod 4'-0" wide shall be placed behind the abutment wings, and shall extend to the riprap. Depress center 4".

3. For Guard Rail Type 36 see sheets 1&2. 3 Beam Rail Flared ends are required, for details see standard sheet SD110-69.

4. Item 304.10 Aggregate Subbase Course - Gravel, Do not excavate where existing material is suitable.

5. Item 410.20 Bituminous Surface Treatment shall be in accordance with section 410 and shall consist of the following:
   A. The prime coat shall be Cut back Asphalt, Type RC-70 applied at a rate of 0.5 gal per sq. yd.
   B. The blotter material shall be Coarse Sand and shall be applied to a depth of ¼".
   C. The Seal coat shall be Cut back Asphalt Type RC-70, applied at 0.2 gal per sq. yd.
   D. The quantity of the blotter material may be varied or omitted in accordance with the first paragraph of Subsection 410.08 of the Standard Specifications.

6. For construction limits, right of way, & utility plant refer to sheets #31 & #32 of 32

7. Payment for removal of existing superstructure shall be made under Item 202.10 Removal of Existing Superstructure (Property of Contractor).

8. Payment for removal of existing stone fill or riprap below elevation 44.00 required to facilitate driving of piles at Abutment No. 1, will be made at 1½ times the contract unit price and in accordance with Section 206 of the Standard Specifications.

9. In the area where piles are to be driven in embankment material shall meet the requirements of Subsection 501.07 of the Standard Specifications.

10. Where granular borrow is called for the material shall meet the requirements for underwater backfill, Subsection 703.19.

11. French Drain (stones only) 2"x2" shall be placed at elevation of weep holes along the back of abutments. Weep holes shall be spaced at 20'-0". Exact location and elevation shall be determined in the field by the Engineer.

12. Existing Abutment #1 shall be removed to plane of riprap slope unless otherwise directed in the field by the Engineer. Existing Abutment #2 shall not be removed except to shape the top to present a neat appearance. Pay item will be unit cost Item 206.08 "Structural Earth Excavation - Abuts. and Ret. Walls.

13. A layer of plain riprap approximately 2' thick and 10' wide shall be placed around the pier each. The material shall meet the requirements for Plain Riprap Section 610. The top surface of the riprap shall follow the contours of the streambed as nearly as practical.

PROJECT DESIGN ENGINEER: J. Chandler

DESIGN- MMG (JC)	BRIDGE NO. 6209
TRACE- E. SPROUL	SURVEY- F. BARNES
CHECK- G.O.T.	PLOT- R. MAINES SURVEY CHIEF

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

EEL WEIR BRIDGE
OVER
SEBASTICOOK RIVER
BETWEEN THE TOWNS OF
BURNHAM & PITTSFIELD
WALDO & SOMERSET COUNTIES

SURVEY

SHEET 2 OF 20 AUGUSTA, MAINE MAY 1969

146-130

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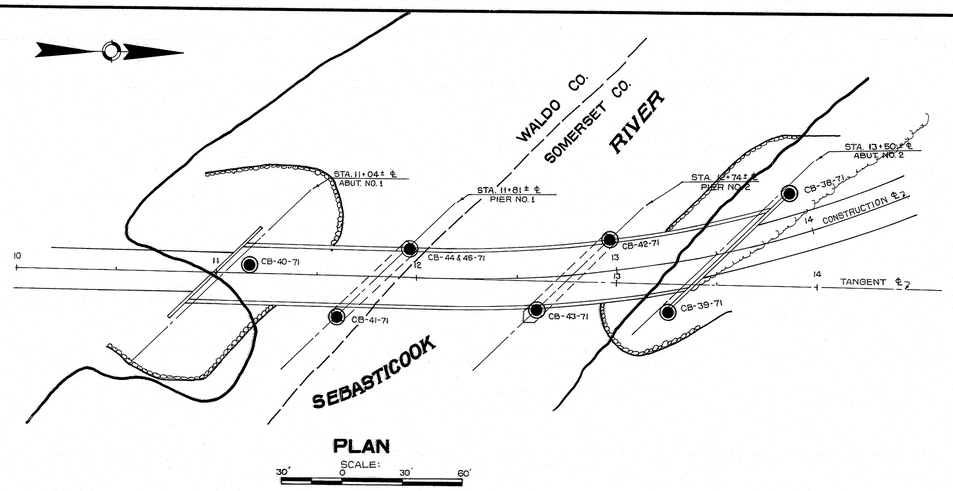
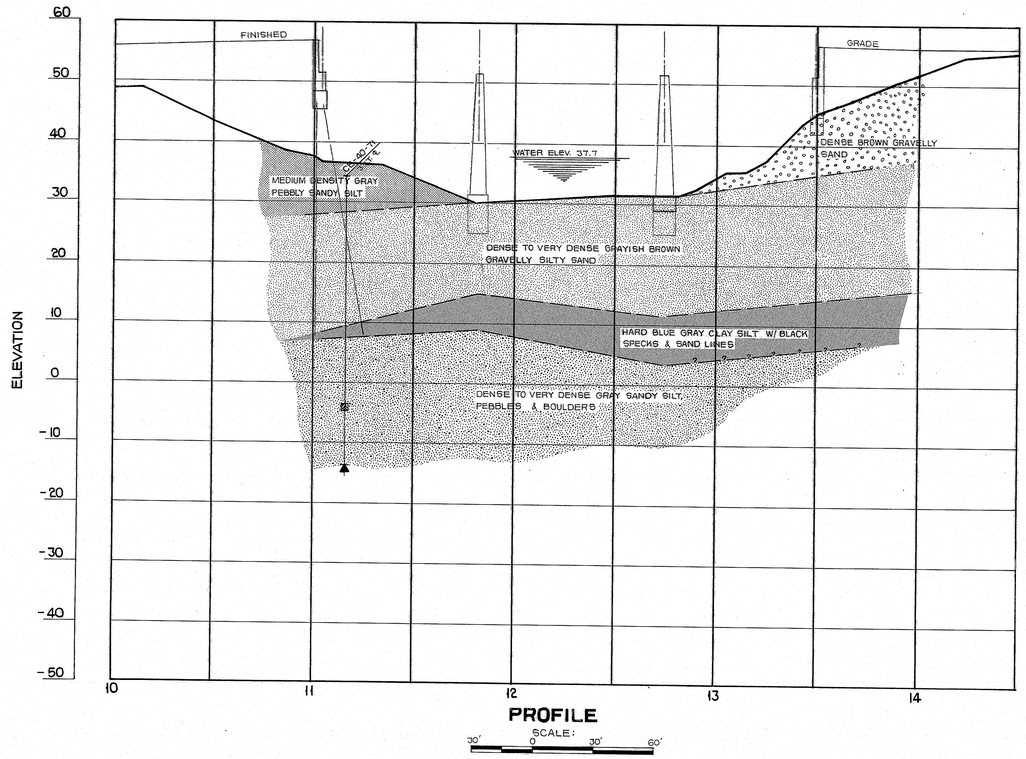
B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	6209	4	32



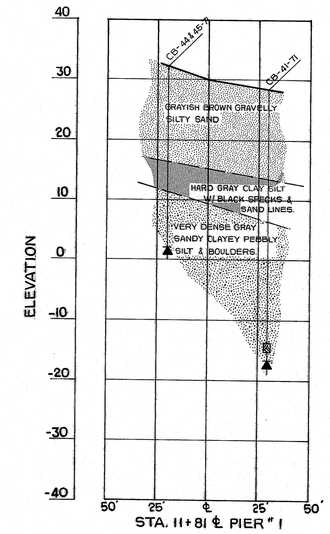
PLAN

SCALE: 30' 0 30' 60'

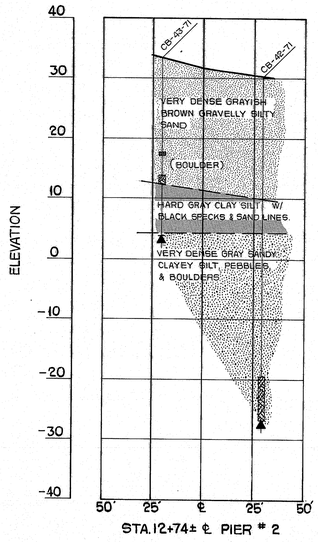


PROFILE

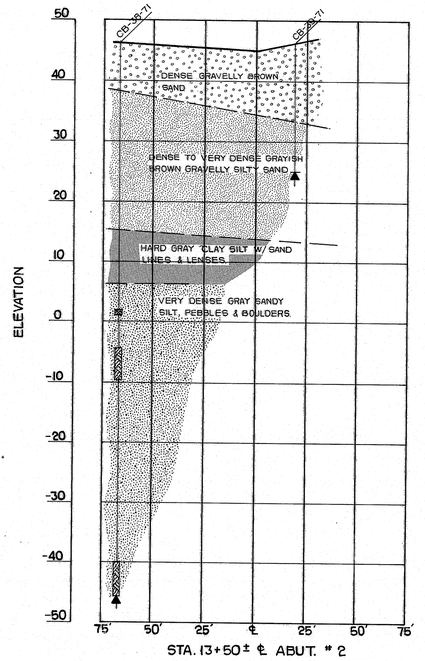
SCALE: 30' 0 30' 60'



STA. 11+81 ℄ PIER # 1



STA. 12+74± ℄ PIER # 2



STA. 13+50± ℄ ABUT. # 2

TRANSVERSE SECTIONS

PLANS

BY	DATE
DESIGN - DETAILED	
CHECKED	
REVISIONS	
FIELD CHANGES	

JANUARY 1969

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

EEL WEIR BRIDGE

OVER

SEBASTICOOK RIVER

BETWEEN THE TOWNS OF

BURNHAM & PITTSFIELD

WALDO & SOMERSET COUNTIES

FOUNDATION SURVEY

SHEET 3 OF 20 AUGUSTA, MAINE OCT. 1971

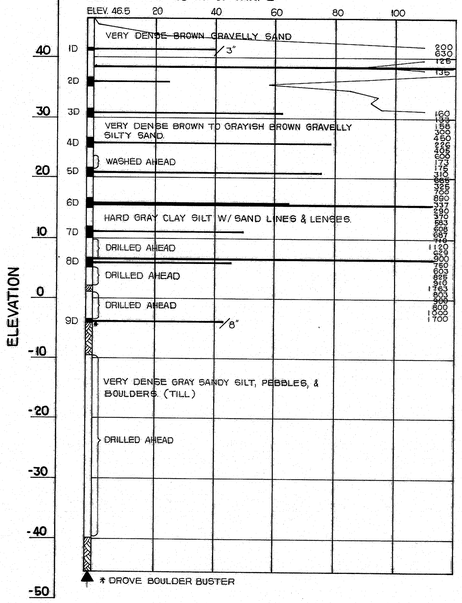
146-131

touraine paints TRUFLEX ☆ SILKY ☆ TRIPLE WHITE ☆ RYPLEX

B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	6209	5	32

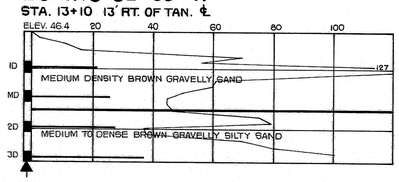
BORING CB-38-71

STA. 13+68 46' LT. OF TAN. ℄



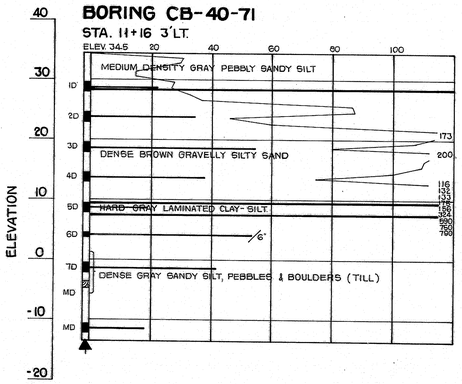
BORING CB-39-71

STA. 13+10 13' RT. OF TAN. ℄



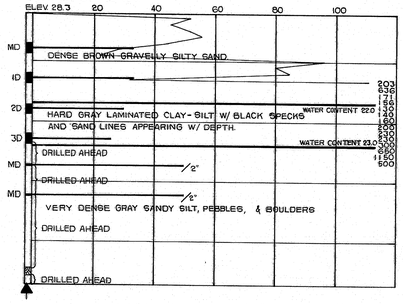
BORING CB-40-71

STA. 11+16 3' LT.



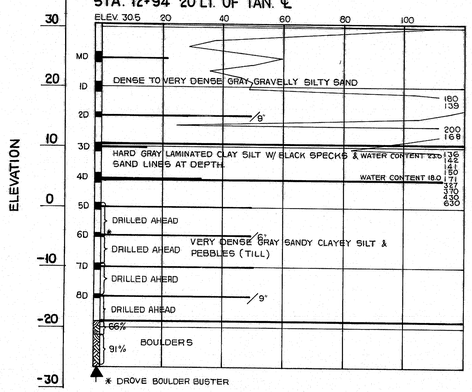
BORING CB-41-71

STA. 11+62 18' RT.

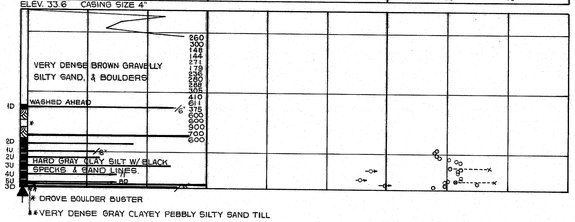


BORING CB-42-71

STA. 12+94 20' LT. OF TAN. ℄

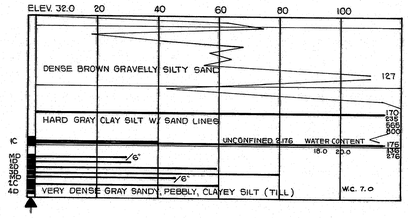


BORING CB-43-71 STATION 12+57 17' RT. OF TAN. ℄



BORING CB-44 & 45-71

STA. 11+95 14' LT.



▲ Bottom of boring (may not be bottom of soil strata.)

71% Locations cored by diamond bit and per cent recovery of rock

WATER CONTENT NOTES

○ Natural water content, given as per cent of dry weight

○-X Plastic and liquid limits

SHEAR NOTES

— Shear strengths in excess of capacity of equipment

○ One half unconfined compressive strengths

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 samples

ID S & H sampler # 1290's

IC 2" O.D. 16 ga. Seamless tubing

IU 3⅛" 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

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
EEL WEIR BRIDGE
OVER
SEBASTICOOK RIVER
BETWEEN THE TOWNS OF
BURNHAM & PITTSFIELD
WALDO & SOMERSET COUNTIES
BORING DETAILS

SHEET 4 OF 20 AUGUSTA, MAINE OCT. 1971

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

JANUARY 1968

146-132

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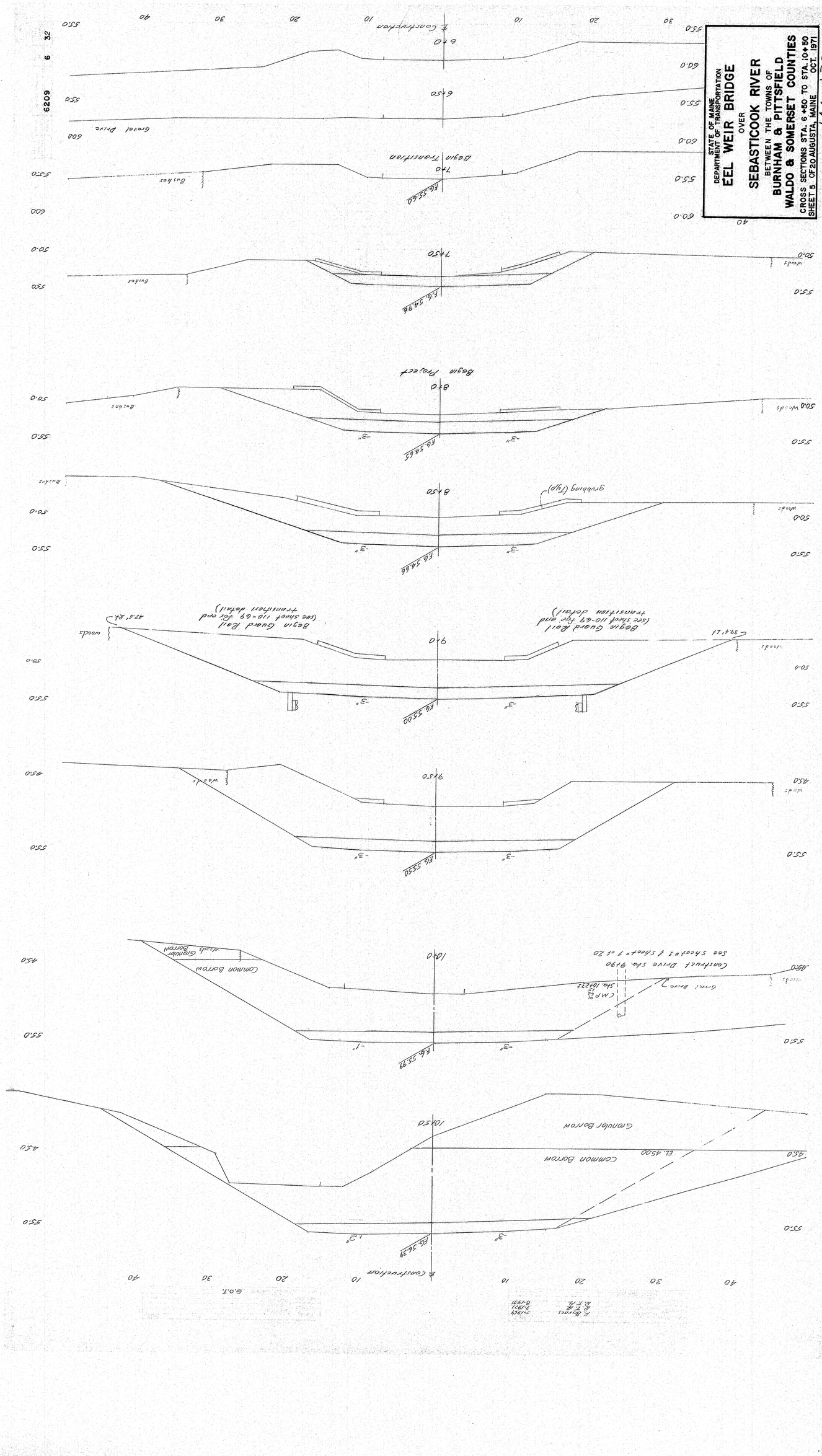
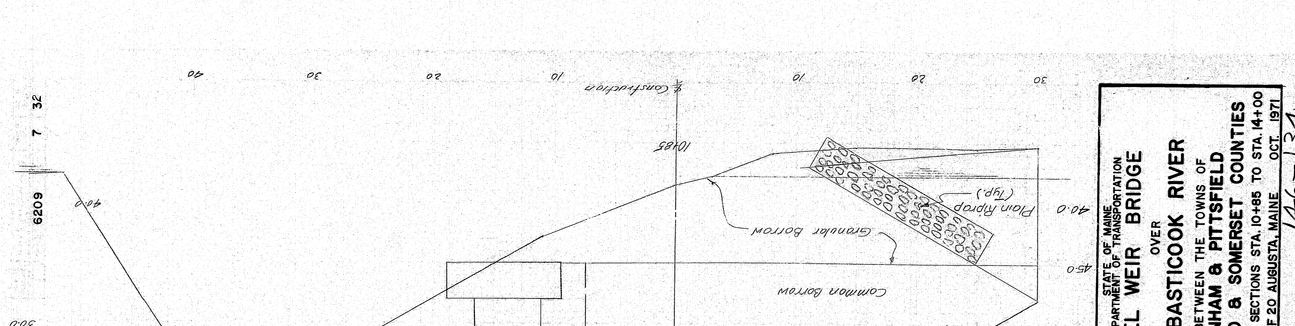
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

EEL WEIR BRIDGE
OVER
SEBASTICOOK RIVER
BETWEEN THE TOWNS OF
BURNHAM & PITTSFIELD
WALDO & SOMERSET COUNTIES

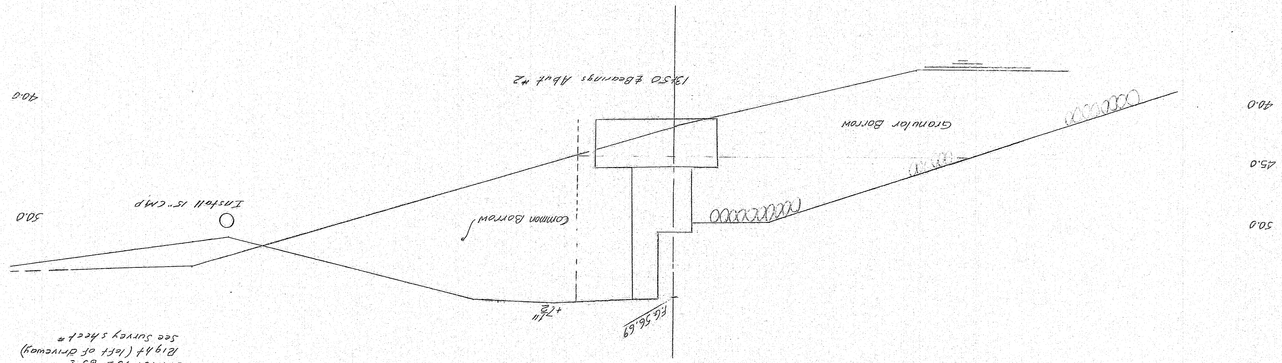
CROSS SECTIONS STA. 6+50 TO STA. 10+50
SHEET 5 OF 20 AUGUSTA, MAINE OCT. 1971

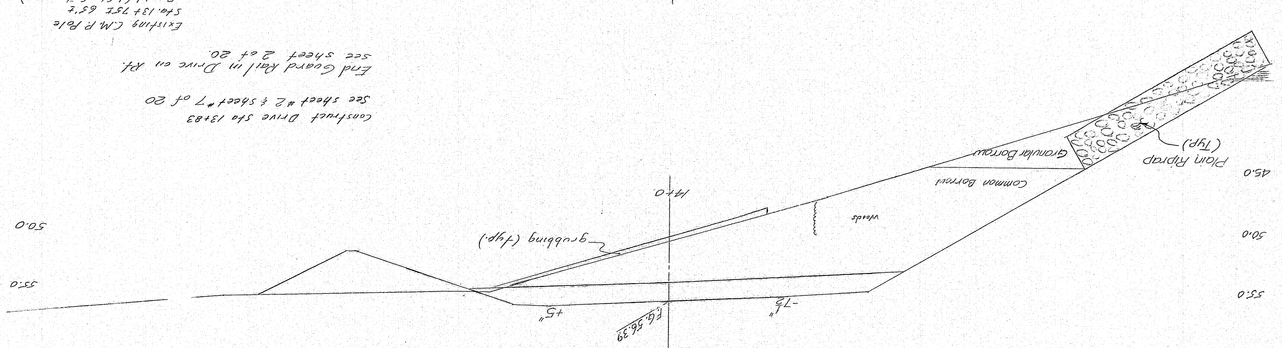
146-133




STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
EEL WEIR BRIDGE
OVER
SEBASTICOOK RIVER
BETWEEN THE TOWNS OF
BURNHAM & PITTSFIELD
WALDO & SOMERSET COUNTIES
CROSS SECTIONS STA. 10+85 TO STA. 14+00
SHEET 6 OF 20 AUGUSTA, MAINE OCT. 1971
146-134
℄ Construction
10+85
Common Borrow
Granular Borrow
Plain Rprap (Typ.)
Common Borrow Limit
Fg. 56.61
6209 7 32
40.0
50.0
45.0
40.0
50.0
℄ Bearings Abut #1
1+00

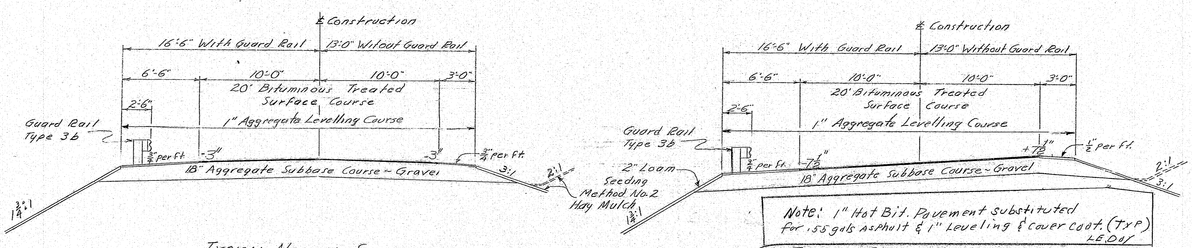
Bridge


13+50 Bearings Abut #2
Granular Borrow
Common Borrow
Fg. 56.69
+26"
Intake if CMP
50.0
45.0
40.0
40.0


℄ Construction
Fg. 56.39
+5"
-76"
Granular Borrow
Common Borrow
Plain Rprap (Typ.)
Existing C.M.P. Pole Sta. 13+ 75℄ 65'℄ Right (left of driveway) See Survey Sheet #
Construct Drive Sta 13+83 See Sheet #2 ℄ Sheet #7 of 20
End Guard Rail in Drive on Rt. See Sheet 2 of 20.
14+00
55.0
50.0
45.0
50.0
40 30 20 10 0 10 20 30 40

F. Barnes 7-1969
E. T. A. 7-1969
R. T. A. 8-1969

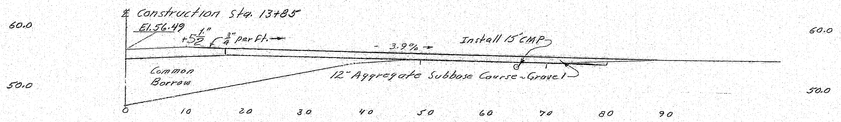
G.O.T.



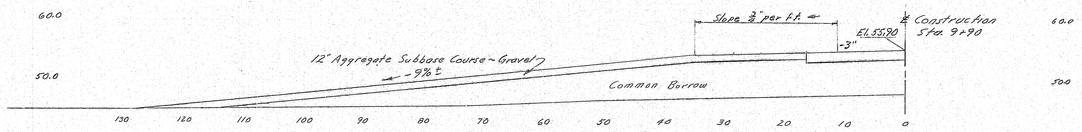
TYPICAL NORMAL SECTION

TYPICAL SUPERELEVATED SECTION

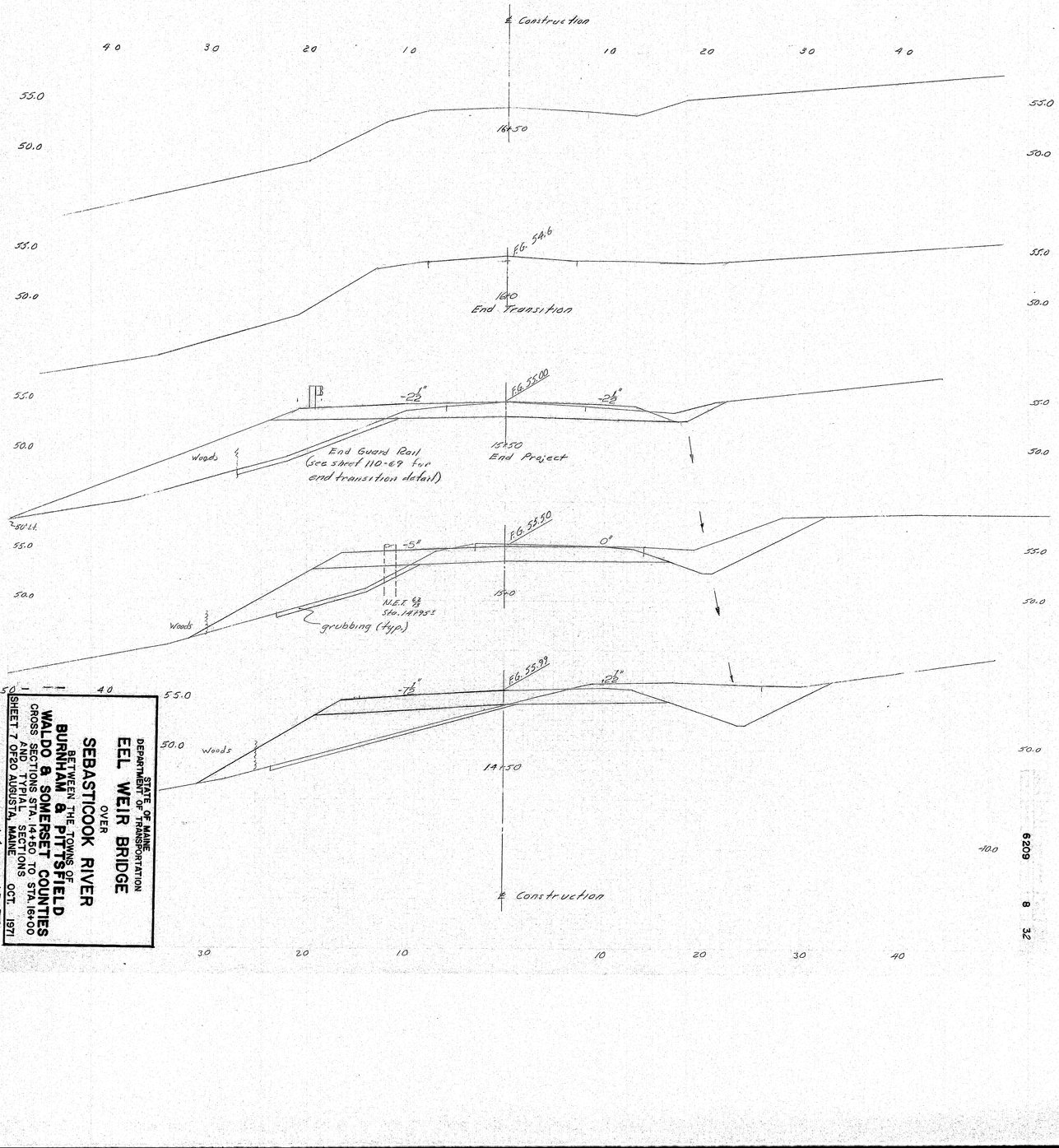
Note: For Bituminous Surface Treatment notes see sheet 2 of 20



DRIVEWAY PROFILE
Station 13+85 Right



DRIVEWAY PROFILE
Station 9+90 Left



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

EEL WEIR BRIDGE
OVER
SEBASTICOOK RIVER
BETWEEN THE TOWNS OF
BURNHAM & PITTSFIELD
WALDO & SOMERSET COUNTIES

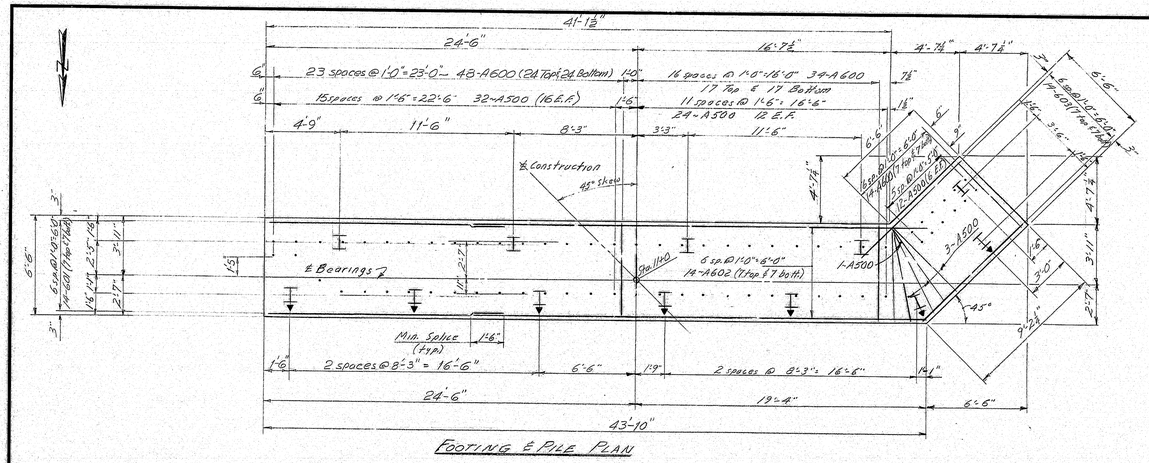
CROSS SECTIONS STA. 14+50 TO STA. 16+00
AND TYPICAL SECTIONS

SHEET 7 OF 20 AUGUSTA, MAINE OCT. 1971

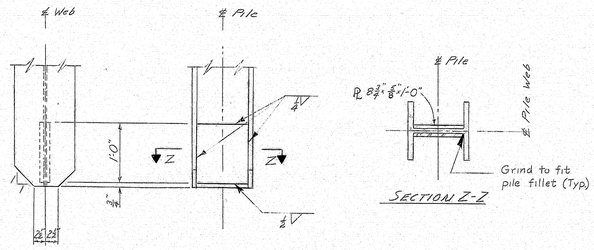
146 - 135

6209 8 32

B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	6209	9	32



FOOTING & PILE PLAN



SECTION Z-Z

POINTED REINFORCED PILE TIP DETAIL
(All Piles shall have Pointed Reinforced Pile Tips)

PILE NOTES

1. The following are pile locations, number of piles required, size of piles and estimated driven lengths:
   Abutment No. 1 12 - HP 10 x 42 @ 40'
2. Piles shall be driven to ledge or practical refusal.
3. Alternate types of pointed pile tips may be used if they are equal to or better than the pointed reinforced pile tip shown, if approved by the Engineer.
4. Estimated Driven Length of Piles are determined from available soils information with no allowance for pile cut-offs and no allowance for uncertain pile penetration.
5. Maximum Pile Load equals 55 Tons.
6. Front row of piles shall be battered 3½" per ft in the direction of arrow shown.

ABUTMENT NOTES

1. Chamfer all exposed edges of concrete ¾".
2. All reinforcing steel splices and embedments are to be a minimum of 24 bar dia.
3. Reinforcing steel to have 2" clear unless otherwise noted.
4. Place reinforcing steel in bridge seat to clear anchor bolts.
5. Place concrete in the top of abutment backwalls after the superstructure concrete has been placed.
6. Break bond at vertical contraction joints by a method to be approved by the Engineer.
7. Waterstops will not be required at vertical & horizontal joints.
8. Protective Coating For Concrete Surfaces shall be applied to the following areas in accordance with Section 515 of the Special Provisions: All exposed areas of breast wall, backwall and wings and areas to 1' below finished grade lines.

REFERENCES

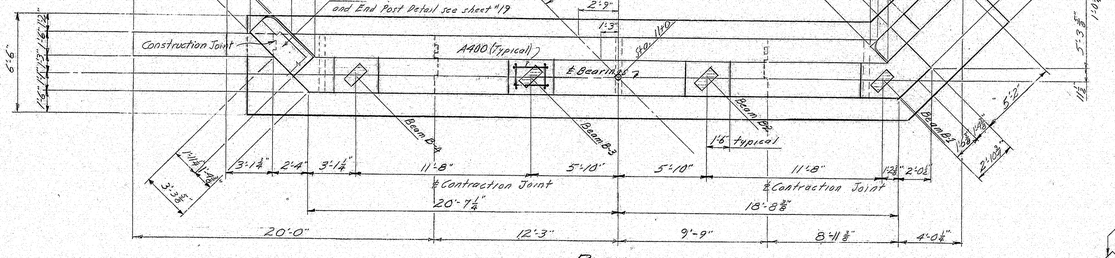
For Sections A-A thru E-E see sheet "10

For Curb & End Post Detail see sheet "19

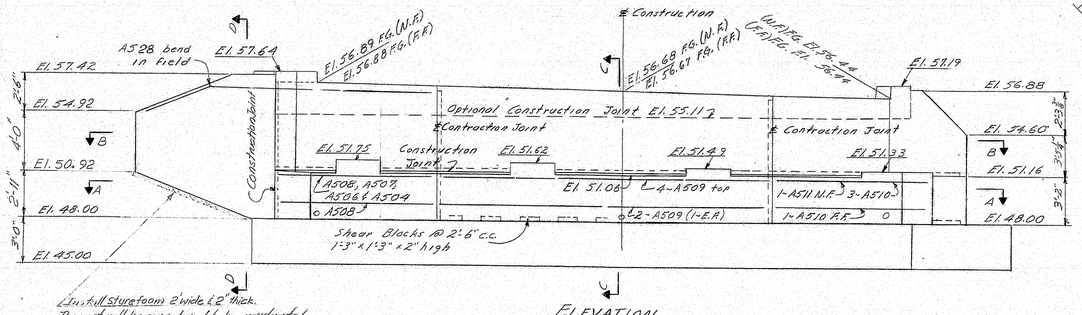
For Expansion Dam Detail see sheet "14 & Standard Sheet BD 105.64

For Construction & Contraction Joint Details see sheet "9

For Legend see sheet "9.

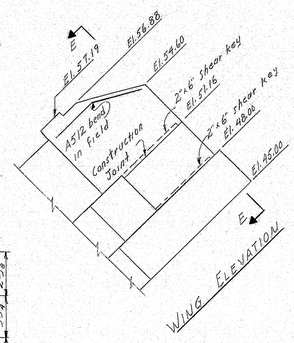


PLAN



Install Styrofoam 2" wide & 2" thick. The cost will be considered to be incidental to related contract items.

ELEVATION
End Posts Not Shown



WING ELEVATION

PLANS

	BY	DATE
DESIGN - DETAILED	MMG	11-71
CHECKED	GDT	11/1/71
REVISIONS		
FIELD CHANGES		

JANUARY 1968

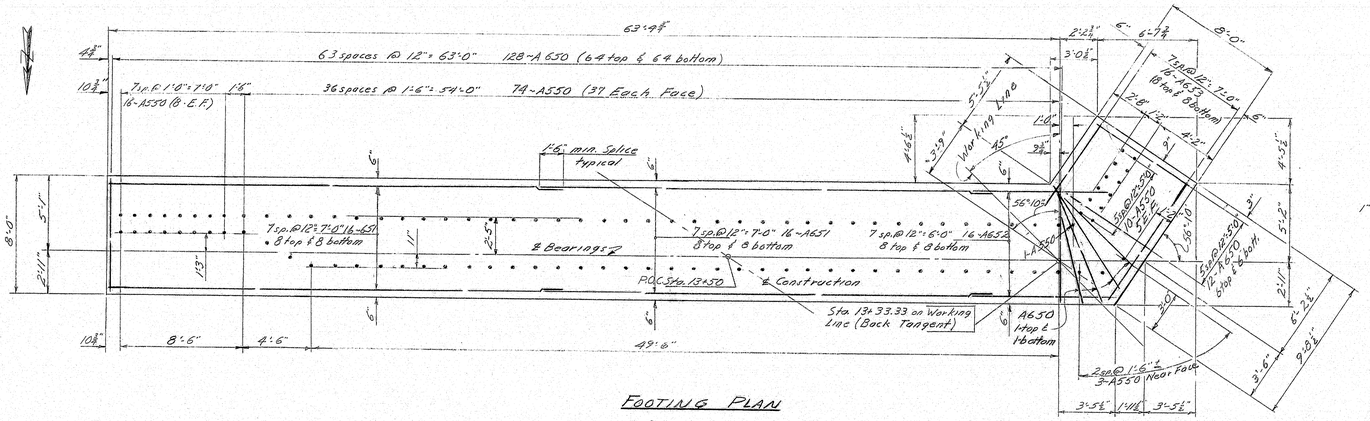
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
EEL WEIR BRIDGE
OVER
SEBASTICOOK RIVER
BETWEEN THE TOWNS OF
BURNHAM & PITTSFIELD
WALDO & SOMERSET COUNTIES
ABUTMENT NO. 1
SHEET 8 OF 20 AUGUSTA, MAINE NOV. 1971

146-136

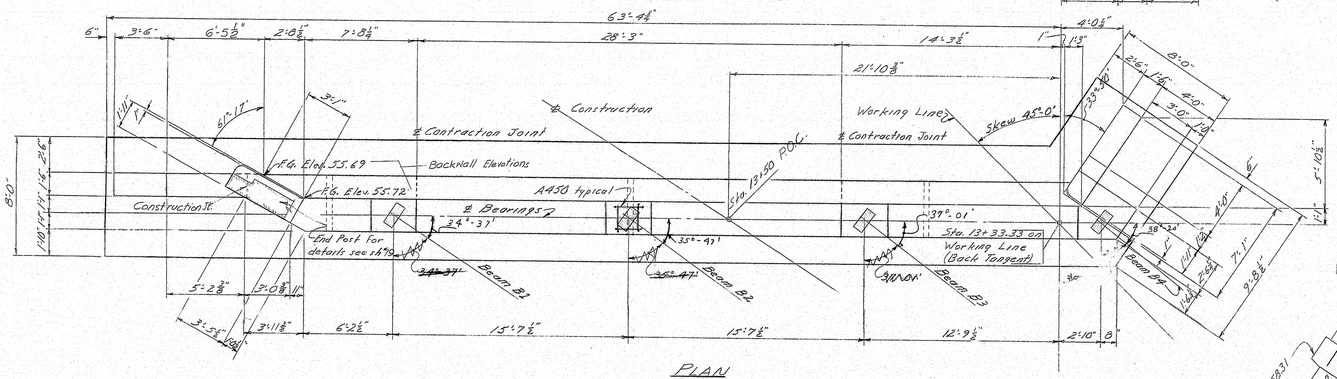
203-1 2080

touraine parts TRUFLEX SILKY KOLLEK

S. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	6209	10	32

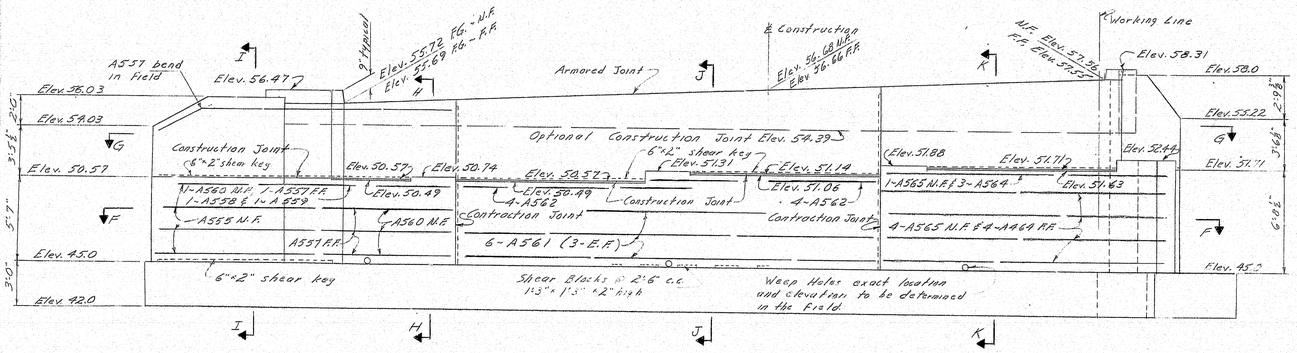


FOOTING PLAN



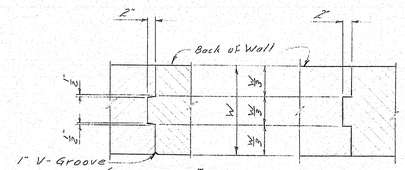
PLAN

Flow

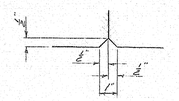


ELEVATION

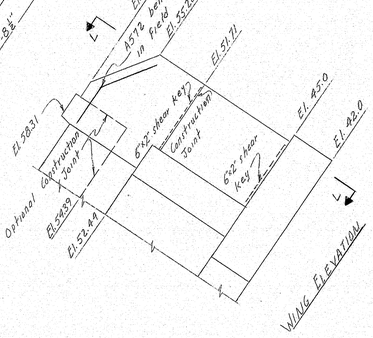
End Posts Not Shown



JOINT DETAIL



1" V-GROOVE DETAIL



REFERENCES

For Sections F-F thru L-L see sheet #10

For Abutment Notes see sheet #8

For Curb & End Post Detail see sheet #19

For Armored Joint Detail see sheet #14 and Standard Sheet BD 109-66

LEGEND

N.F. = Near Face
F.F. = Far Face
E.F. = Each Face
F.G. = Finish Grade
El. = Elevation
Sp. = Spaces

PLANS	DESIGN - DETAILED	BY	DATE
	CHECKED		
	REVISIONS		
	FIELD CHANGES		

JANUARY 1968

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

EEL WEIR BRIDGE
OVER
SEBASTICOOK RIVER
BETWEEN THE TOWNS OF
BURNHAM & PITTSFIELD
WALDO & SOMERSET COUNTIES
ABUTMENT NO. 2

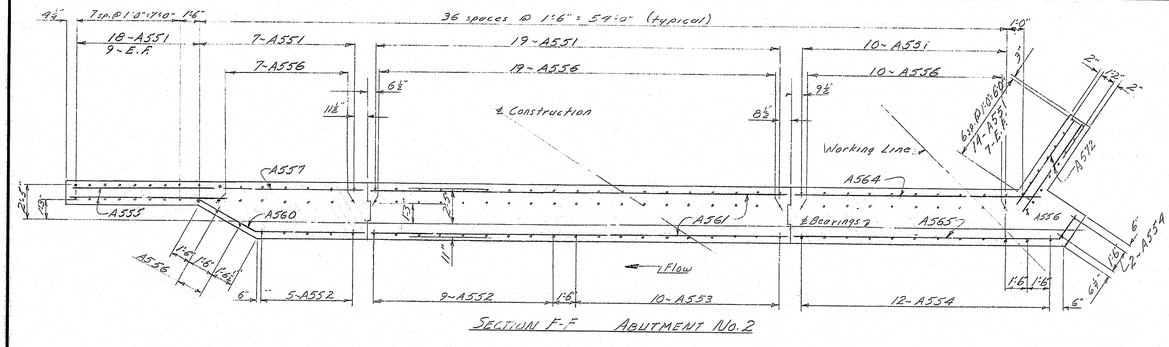
SHEET 9 OF 20 AUGUSTA, MAINE NOV. 1970

203-1 2080

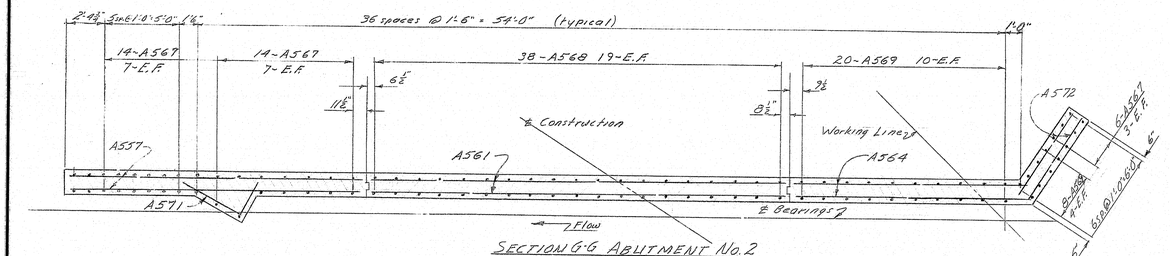
146-137

touraine paints TRUFLEX ☆ SILKY ☆ TRIPLE WHITE ☆ RYPLEX

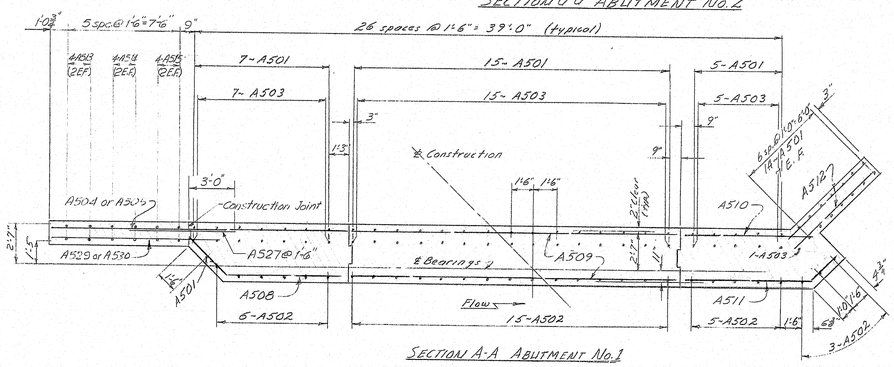
B.P.R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	6209	11	32



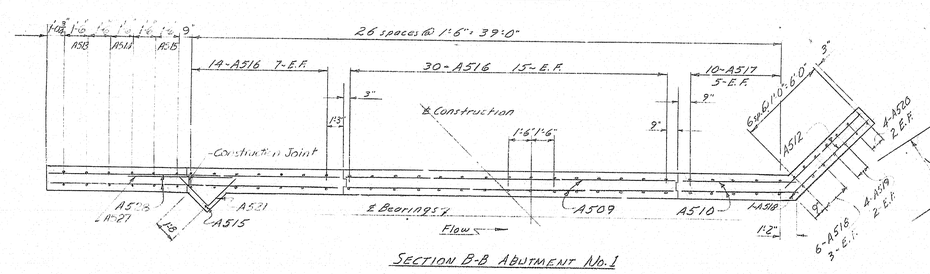
SECTION F-F ABUTMENT No.2



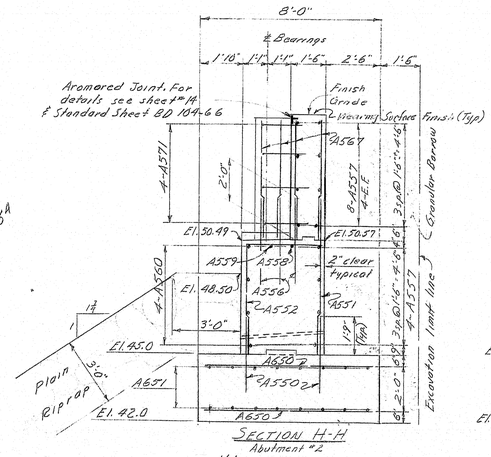
SECTION G-G ABUTMENT No.2



SECTION A-A ABUTMENT No.1

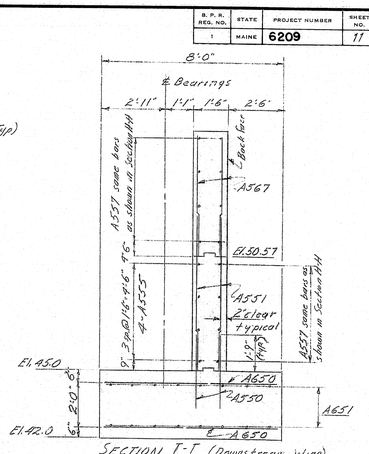


SECTION B-B ABUTMENT No.1

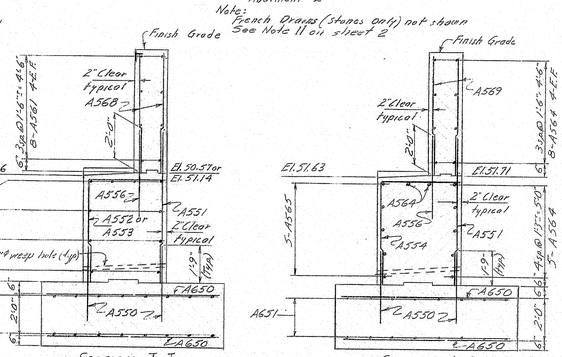


SECTION H-H
Abutment #2

Note: Breach Drawings (Stages only) not shown See Note 11 on sheet 2

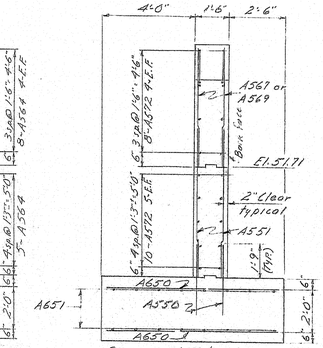


SECTION I-I (Downstream Wing)
Abutment #2

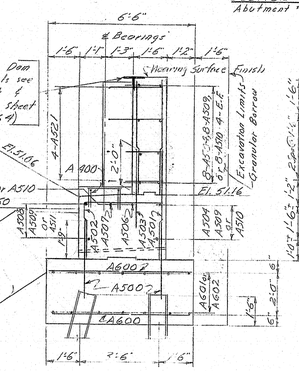


SECTION J-J
Abutment #2

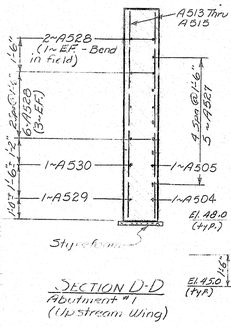
SECTION K-K
Abutment #2



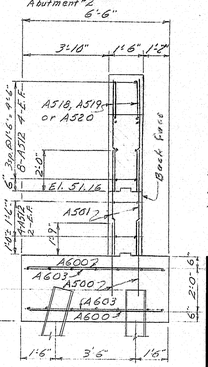
SECTION L-L (Upstream Wing)
Abutment #2



SECTION C-C
Abutment #1



SECTION D-D
Abutment #1
(Upstream Wing)



SECTION E-E
Abutment #1
(Downstream Wing)

REFERENCES
For Abutment No.1 see sheet # 8
For Abutment No.2 see sheet # 9
For Abutment & Pile Marker see sheet #8
For Painted Reinforced Pile Tip Detail see sheet #8
For Joint Details see sheet # 7
For Curb & End Post Detail see sheet #19

LEGEND
s.p. = spaces
E.F. = Each Face

PLANS

DESIGN - DETAILED	BY	DATE
CHECKED -		
REVISIONS -		
FIELD CHANGES	MWA	11-71
	E.F.A.	1/1972
	G.O.T.	1/1972

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
EEL WEIR BRIDGE
OVER
SEBASTICOOK RIVER
BETWEEN THE TOWNS OF
BURNHAM & PITTSFIELD
WALDO & SOMERSET COUNTIES
ABUTMENT SECTIONS
SHEET 10 OF 20 AUGUSTA, MAINE DEC. 1971

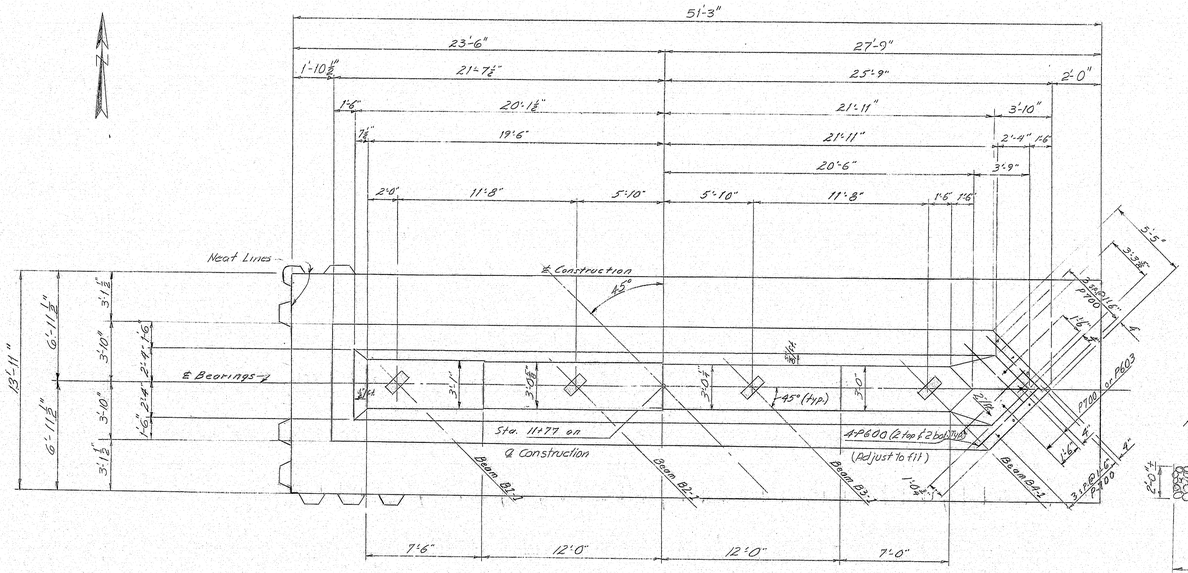
JANUARY 1968

203-1 2060

146-138

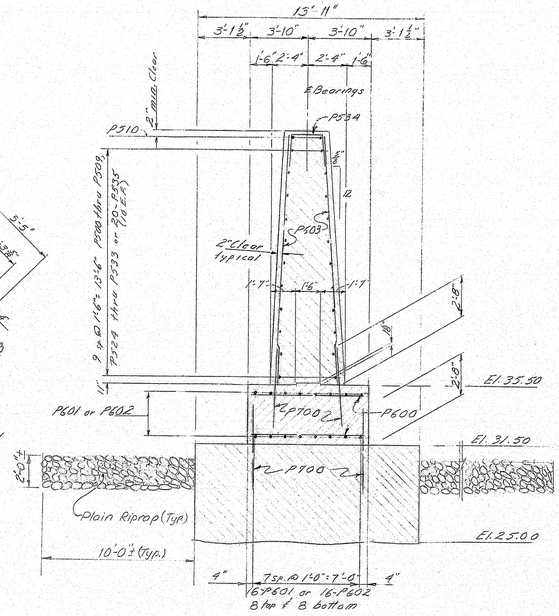
touraine paints TRUFLEX ☆ SILKY ☆ TRIPLE WHITE ☆ RYPLEX

R. P. H. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	6209	12	32

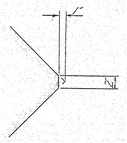


PLAN

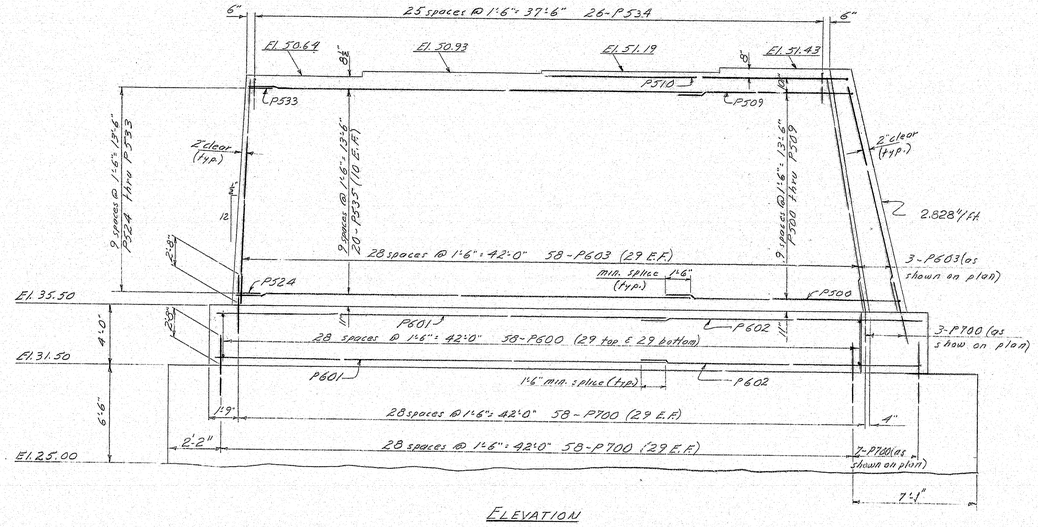
←Flow



TYPICAL PIER SECTION



NOSE CHAMFER DETAIL



ELEVATION

NOTES

1. Seal concrete dimensions shown are predicted on use of MP-116, PP-2, I-27. Alternate equal or better sheet piling with appropriate rolled corners may be used. Pay dimensions will be neat line dimensions plus 5" all around. Seal Concrete will be paid for under item 502.24 Structural Concrete - Piers - placed under water.

2. Depth of seal is set for water elevation of 400. If the water elevation at the time of construction is higher the depth of seal shall be adjusted accordingly by the Engineer.

3. In case the depth of seal concrete is increased due to higher water level, the thickness of the distribution slab may be reduced by the Engineer. But the thickness of the distribution slab shall be a min. of 3'.

4. Maximum toe pressure = 2.3 Tons/sq. Ft.

5. The method of placing dowels in the concrete seal shall be approved by the Engineer. Payment is to be incidental to item 503.13, Reinforcing Steel, Placing.

6. Place reinforcing steel in pier to clear swedge anchor bolts.

7. See Standard Detail sheet # BD-100-71, Bearing Pedestals, for preparation of Bearing Areas.

8. Chamfer all exposed edges of concrete ¾" unless otherwise noted.

DESIGN DATA

1. Critical AASHO Loading Group III

2. High water Elevation 30.0

3. Stream Velocity 8 F.P.S.

4. Stream Skew (with longitudinal axis of pier) = 10°

5. Ice:
   Thickness = 5"
   Elevation = 45.0
   Pressure = 400 p.s.i.

6. Wind:
   Longitudinal = 12 p.s.f.
   Transverse = 30 p.s.f.

LEGEND:

S.P. - - - Spaces

E.F. - - - Each Face

PLANS	BY	DATE
DESIGN - DETAILED	WMG	12-71
CHECKED	G.O.F.	1/30/72
REVISIONS		
FIELD CHANGES		

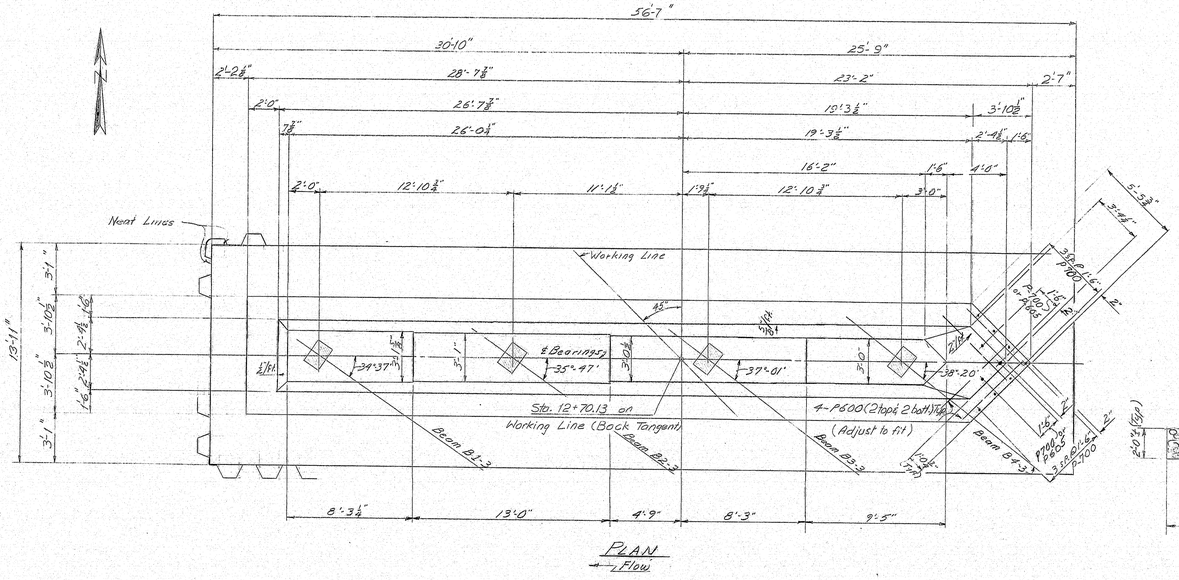
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
EEL WEIR BRIDGE
OVER
SEBASTICOOK RIVER
BETWEEN THE TOWNS OF
BURNHAM & PITTSFIELD
WALDO & SOMERSET COUNTIES
PIER NO. 1
SHEET 11 OF 20 AUGUSTA, MAINE DEC. 1971

JANUARY 1969

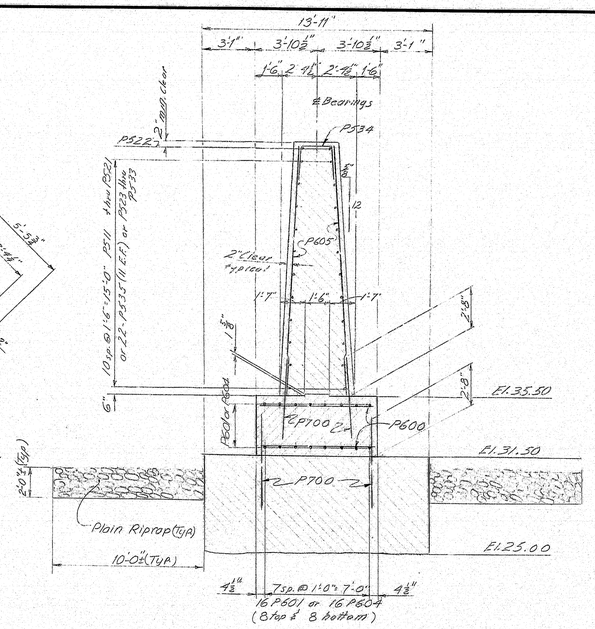
146-139

touraine paints TRUFLEX ☆ SILKY ☆ TRUFLEX ☆ TYPLEX

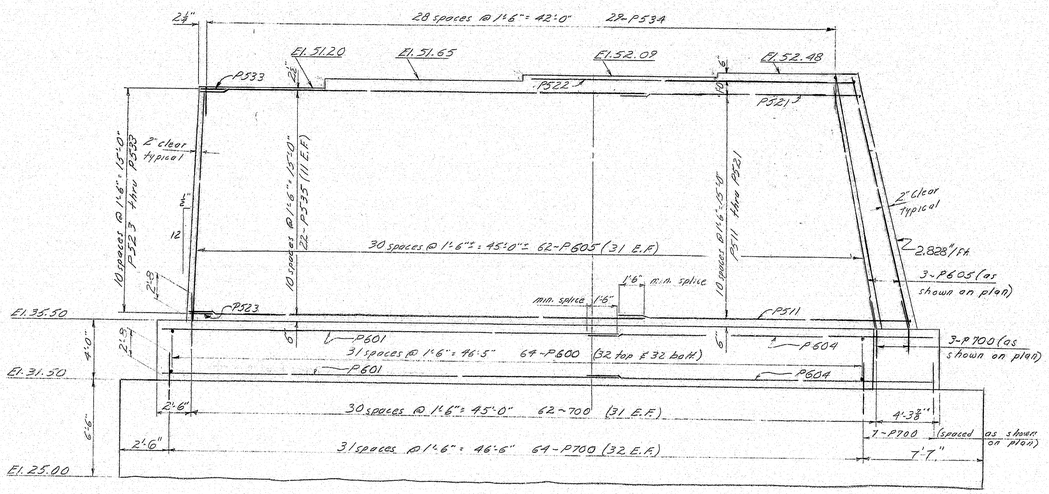
B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	6209	13	32



PLAN
↓ Flow



TYPICAL PIER SECTION



ELEVATION

REFERENCES:

For Pier Notes see sheet # 11.

For Nose Chamfer Detail see sheet # 11.

LEGEND:

SP.____spaces

E.F.____Each Face

DESIGN - DETAILED	BY	DATE
CHECKED	M.M.G. / E.T.A.	12-71 / 10/72
REVISIONS	G.O.F.	
FIELD CHANGES		

PLANS

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
EEL WEIR BRIDGE
OVER
SEBASTICOOK RIVER
BETWEEN THE TOWNS OF
BURNHAM & PITTSFIELD
WALDO & SOMERSET COUNTIES
PIER NO. 2
SHEET 12 OF 20 AUGUSTA, MAINE DEC. 1971

JANUARY 1968

146-140

touraine paints TRUFLEX ☆ SILKY ☆ TRUFLEX ☆ TOPLEX

B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
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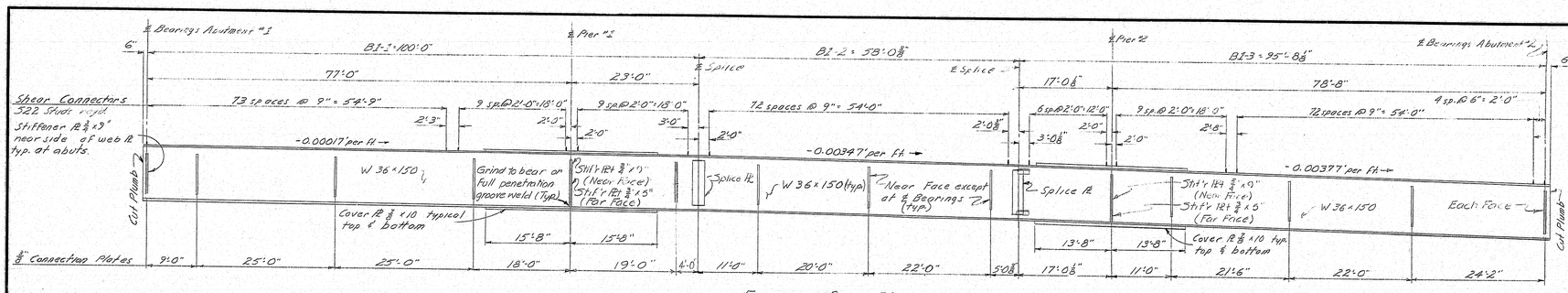
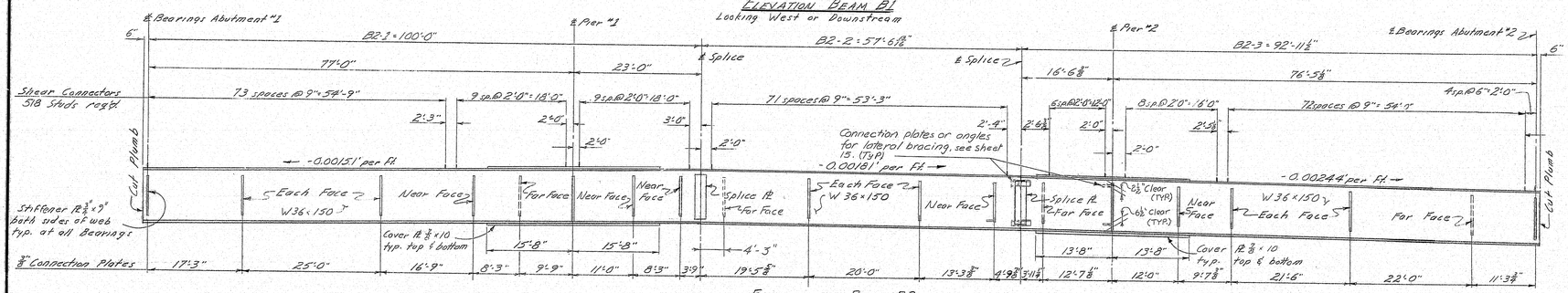
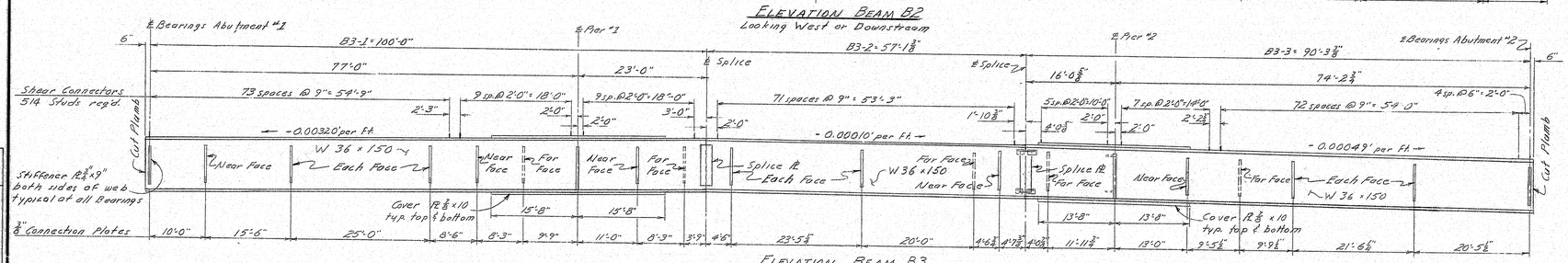


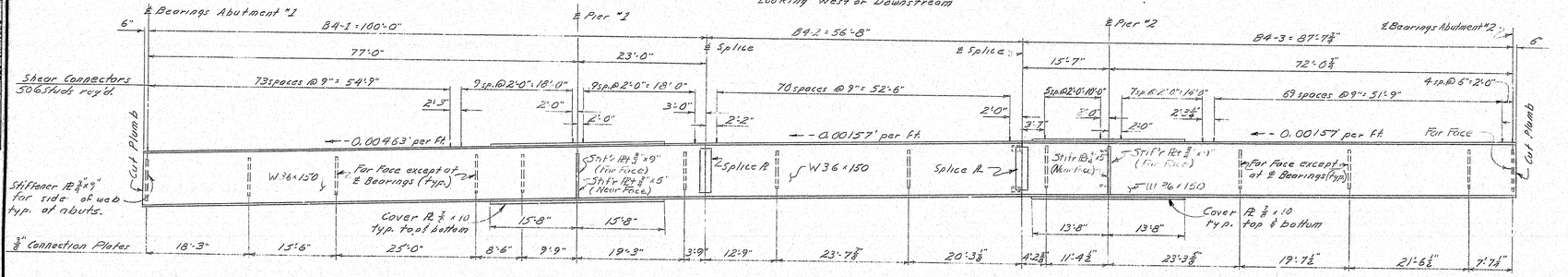
ELEVATION BEAM B1
Looking West or Downstream



ELEVATION BEAM B2
Looking West or Downstream



ELEVATION BEAM B3
Looking West or Downstream



ELEVATION BEAM B4
Looking West or Downstream

NOTES

All dimensions are horizontal or vertical except at splice detail.

Stiffener Plates at pier bearings shall extend to the bottom flange and shall be ground to bear or fitted with a full penetration weld.

All bolts shall be 7/8" high tensile strength. All holes shall be 15/16".

The minimum edge distance for all holes shall be 1 1/2" unless shown otherwise.

Intermediate Diaphragms, Type A, shall be tightened with a spud wrench only (snug tight) until placement of superstructure concrete. Tightening of bolts shall be completed after superstructure concrete is placed.

Number of studs required = 2060
Weight of studs = 2013 Lbs.

Materials (ASTM designations)
Beams, cover plates, splice plates — A572 Gr. 50
H.S. Bolts — A325
All Other — A36

Place natural camber up

REFERENCES

For Framing Plan see sheet # 14

For Bearing Pedestal Details see Standard Sheet BD 100-71

For Expansion Dam Detail see sheet # 14 and Standard Sheet BD 105-64

For Armored Joint Detail see sheet # 14 and Standard Sheet BD 104-66

For Shear Connector Details see sheet # 14 and Standard Sheet BD 104-66

For Diaphragm Details see sheet # 14 & sheet # 16

For Splice Details see sheet # 14 & Sheet # 16

For Cover Plate Detail see sheet # 14

For Blocking Detail see sheet # 15

For Rocker Pedestal setting diagram see sheet # 16.

PLANS	DESIGN - DETAILED	BY	DATE
	CHECKED		
	REVISIONS		
	FIELD CHANGES		

JANUARY 1968

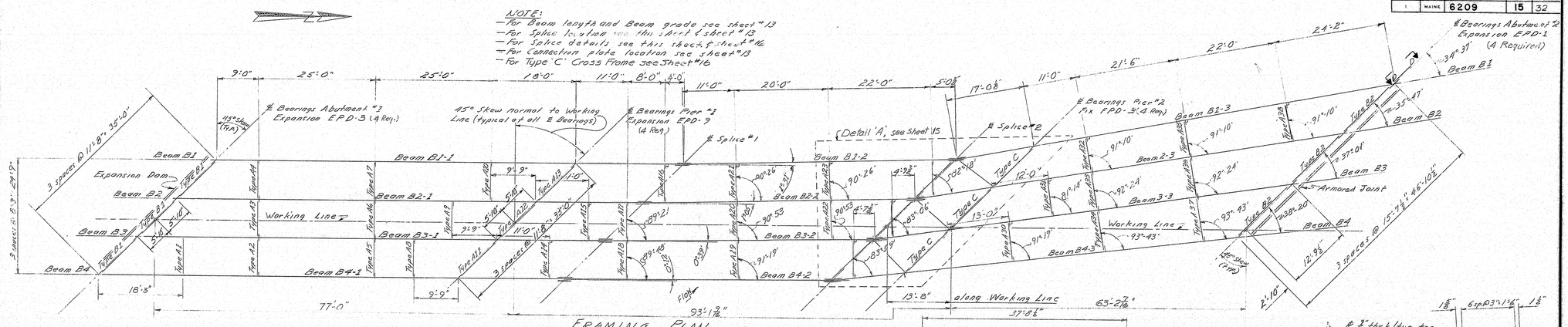
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
EEL WEIR BRIDGE
OVER
SEBASTICOOK RIVER
BETWEEN THE TOWNS OF
BURNHAM & PITTSFIELD
WALDO & SOMERSET COUNTIES
BEAM ELEVATIONS
SHEET 13 OF 20 AUGUSTA, MAINE OCT. 1971

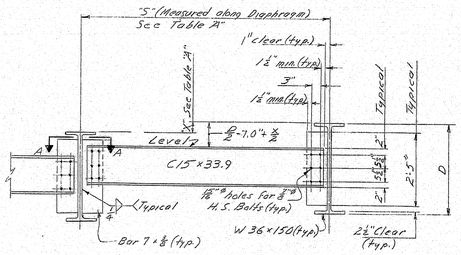
146-141

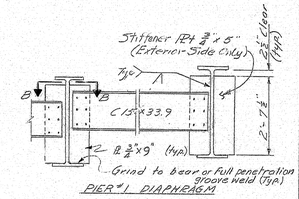
touraine paints TRUFLEX ☆ SILKY ☆ TRIPLE WHITE ☆ RYPLEX

B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	6209	15	32

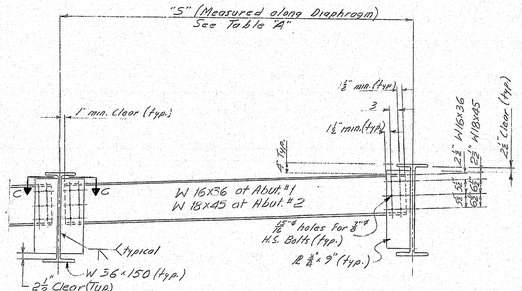
NOTE:
- For Beam length and Beam grade see sheet "13
- For Splice location see this sheet & sheet "13
- For Splice details see this sheet & sheet "16
- For Connection plate location see sheet "13
- For Type 'C' Cross Frame see Sheet "16

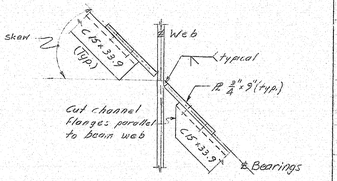


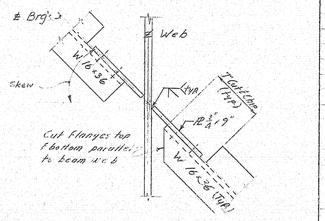




TYPE A DIAPHRAGM







TYPE B DIAPHRAGM

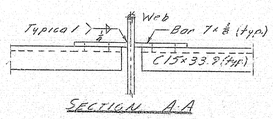
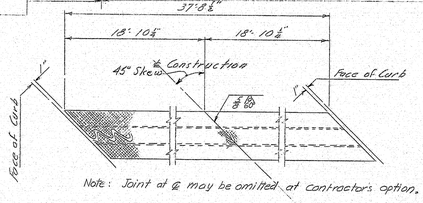
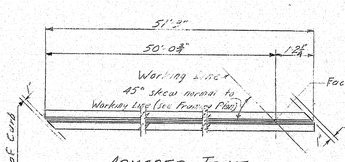


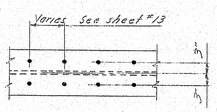
TABLE A		
Diaphragm Type	"X" Dimension	"S" Dimension
A1	2⅜"	8'-3"
A2	2¼"	8'-3"
A3	2 1/16"	8'-3"
A4	2⅛"	8'-3"
A5	2⅜"	8'-3"
A6	2⅛"	8'-3"
A7	2⅞"	8'-3"
A8	3"	8'-3"
A9	3 1/16"	8'-3"
A10	3⅛"	8'-3"
A11	2⅜"	11'-8"
A12	3⅜"	11'-8"
A13	3⅞"	11'-8"
A14	3⅛"	8'-3"
A15	3 1/16"	8'-3"
A16	4 3/16"	8'-2"
A17	3⅜"	8'-2⅞"
A18	3⅛"	8'-3⅛"
A19	4"	8'-5⅛"
A20	4"	8'-3⅜"
A21	4"	8'-2⅞"
A22	4⅜"	8'-5⅛"
A23	4⅜"	8'-4"
A24	4½"	8'-2"
A25	4⅜"	8'-0⅝"
A26	4⅞"	7'-11⅞"
A30		8'-3⅜"
A31	5⅜"	8'-0⅞"
A32	5⅛"	7'-9⅜"
A33	5⅜"	8'-2⅜"
A34	5⅛"	8'-9"
A35	5⅜"	8'-2⅜"
A36	6⅜"	8'-8⅜"
A37	6⅜"	9'-5"
A38	5⅞"	8'-7⅜"
B1	—	11'-8"
B2	—	15'-7⅜"



EXPANSION DAM
For Details see Standard Sheet BD 105-64

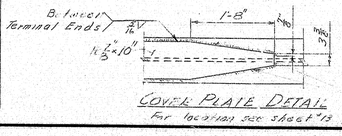


ARMORED JOINT
For Details see Standard Sheet BD 104-66

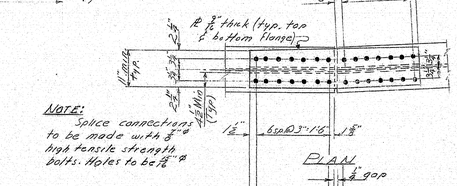


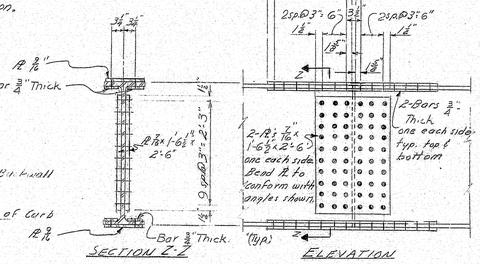
DOUBLE STUDS

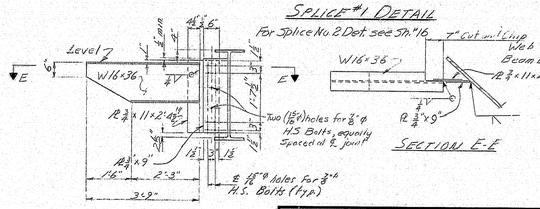
SHEAR CONNECTORS
For stud location see sheet "13
For stud Details and Notes see Standard Sheet BD 104-66



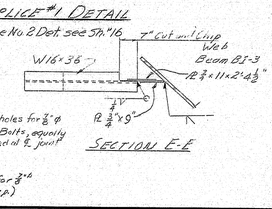
COVER PLATE DETAIL
For location see sheet "13







SPLICE #1 DETAIL
For Splice No. 2 Det. see Sh. "16



PLANS

BY	DATE
DESIGN - DETAILED	MWL	12-71
CHECKED	G.O.T.	1/1972
REVISIONS		
FIELD CHANGES		

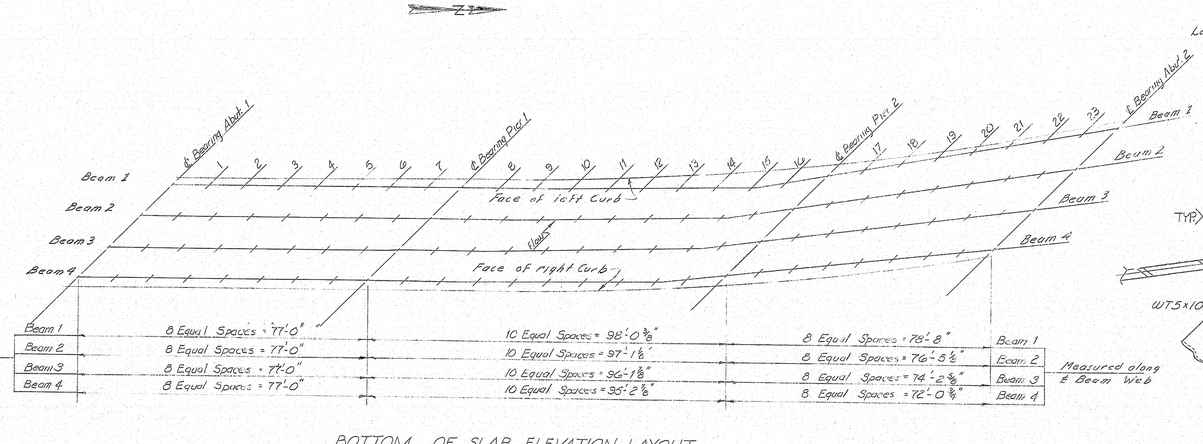
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
EEL WEIR BRIDGE
OVER
SEBASTICOOK RIVER
BETWEEN THE TOWNS OF
BURNHAM & PITTSFIELD
WALDO & SOMERSET COUNTIES
FRAMING PLAN & STRUCTURAL STEEL DETAILS
SHEET 14 OF 20 AUGUSTA, MAINE OCT. 1971

JANUARY, 1968

146-142

touraine paints TRUFLEX ☆ SILKY ☆ TRIPLE WHITE ☆ RYPLEX

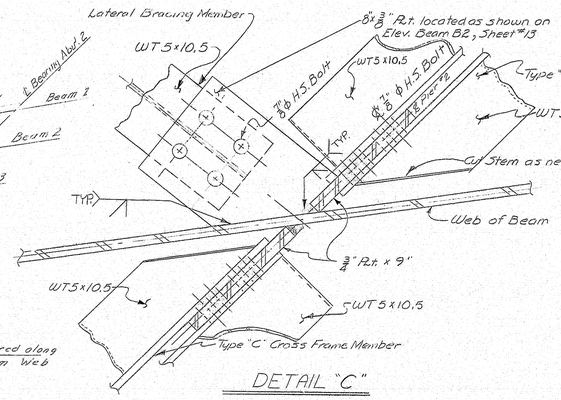
B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	6209	16	32



BOTTOM OF SLAB ELEVATION LAYOUT

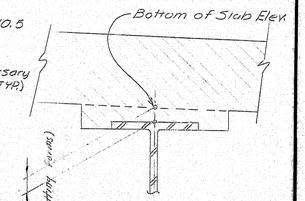
Curb spaces are measured along inside face of curbs

	Bottom of Slab Elevations				Top of Curb Elevations	
	Beam 1	Beam 2	Beam 3	Beam 4	Left Curb	Right Curb
℄ Brg. Abut 1	55.67	55.83	55.96	56.09	57.19	57.64
1	55.73	55.91	56.06	56.18	57.21	57.69
2	55.78	55.97	56.14	56.27	57.22	57.75
3	55.81	56.01	56.20	56.35	57.23	57.82
4	55.86	56.04	56.24	56.40	57.24	57.88
5	55.80	56.05	56.26	56.44	57.25	57.94
6	55.78	56.04	56.27	56.47	57.25	57.99
7	55.76	56.03	56.27	56.50	57.25	58.04
℄ Brg. Pier 1	55.74	56.03	56.29	56.53	57.24	58.09
8	55.74	56.05	56.33	56.57	57.23	58.13
9	55.75	56.08	56.37	56.63	57.22	58.17
10	55.74	56.10	56.42	56.68	57.20	58.21
11	55.73	56.12	56.46	56.73	57.18	58.24
12	55.72	56.12	56.46	56.76	57.15	58.27
13	55.69	56.10	56.46	56.78	57.12	58.29
14	55.66	56.08	56.45	56.79	57.08	58.31
15	55.63	56.05	56.44	56.79	57.05	58.33
16	55.56	55.99	56.40	56.77	57.00	58.35
℄ Brg. Pier 2	55.47	55.92	56.35	56.75	56.96	58.36
17	55.41	55.85	56.33	56.75	56.90	58.36
18	55.36	55.85	56.32	56.76	56.85	58.37
19	55.31	55.84	56.32	56.77	56.79	58.37
20	55.26	55.82	56.32	56.78	56.72	58.36
21	55.22	55.79	56.31	56.79	56.63	58.36
22	55.16	55.75	56.29	56.79	56.58	58.35
23	55.12	55.70	56.26	56.79	56.53	58.34
℄ Brg. Abut 2	55.09	55.65	56.23	56.78	56.47	58.32

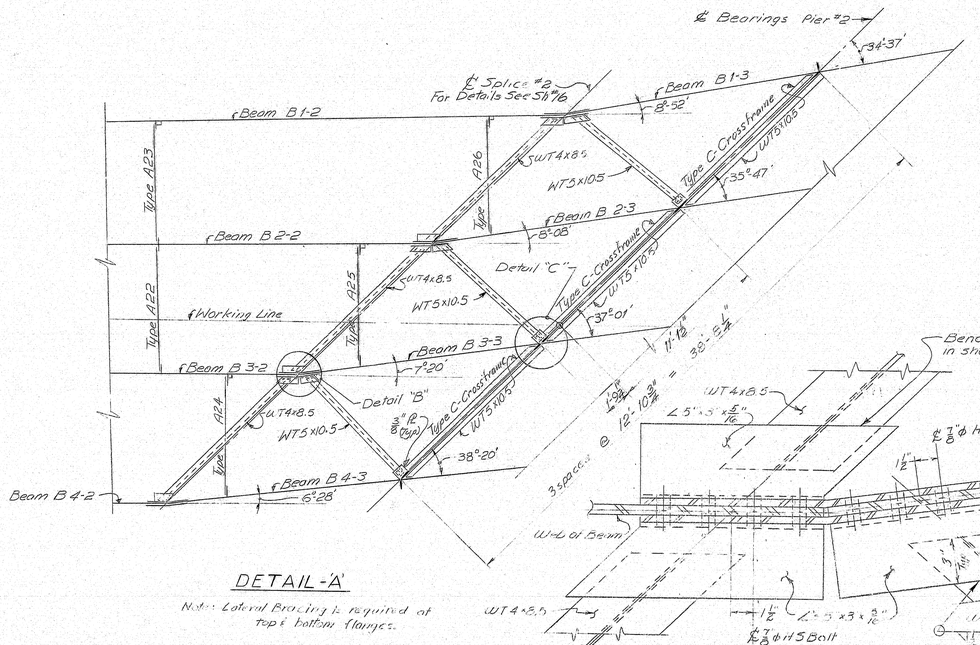


DETAIL "C"

For Type "C" Cross Frame see Sh. #16



BLOCKING DIAGRAM



DETAIL-'A'

Note: Lateral Bracing is required at top & bottom flanges.

DETAIL "B"

NOTE:
At the Contractor's option, the lateral members shall be bolt welded or Shop welded to connection plates.

NOTES

1. Bottom of slab elevations are adjusted to compensate for camber (fluid & superimposed dead load deflections, LL is in conformance with Subsection 502.10(a), except shear connectors may be installed after blocking elevations are determined.
2. Top of curb elevations have been adjusted to compensate for superimposed dead load deflections (curb & rail). Locate curb elevation points by setting off equal spaces along inside face of curb between ℄'s bearings.

PLANS	DESIGN - DETAILED	MARC	AMES	9/71
	CHECKED	MARC	G.D. S.	11/72
	REVISIONS			
	FIELD CHANGES			

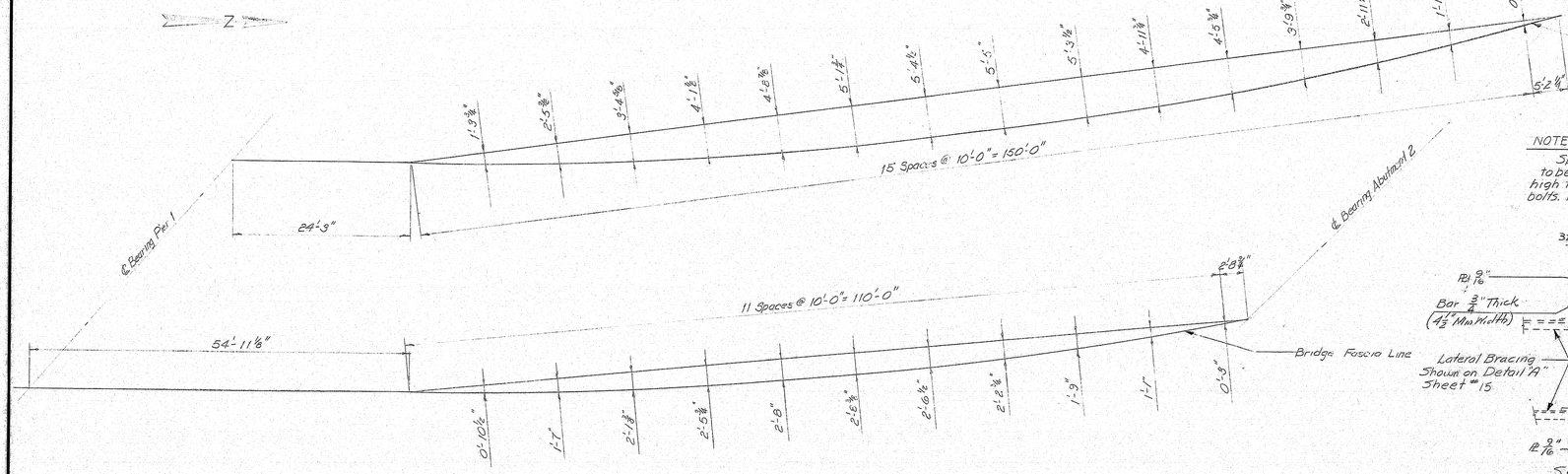
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
EEL WEIR BRIDGE
OVER
SEBASTICOOK RIVER
BETWEEN THE TOWNS OF
BURNHAM & PITTSFIELD
WALDO & SOMERSET COUNTIES
BLOCKING & BOTTOM OF SLAB ELEVATIONS
SHEET 15 OF 20 AUGUSTA, MAINE OCT. 1971

146-143

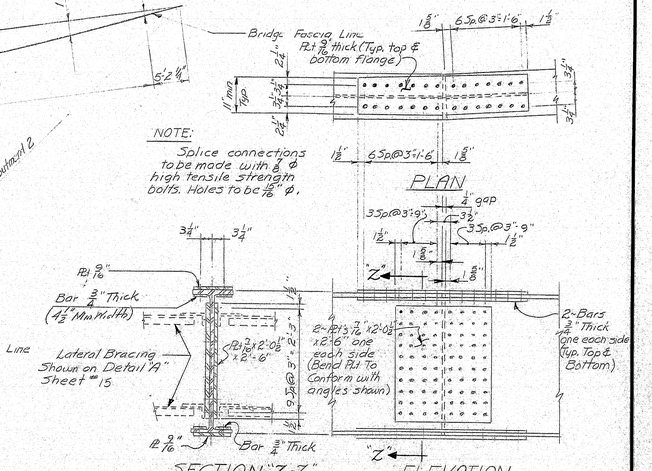
JANUARY 1968

touraine paints TRUFLEX ☆ SILKY ☆ TRIPLE WHITE ☆ KYLEX

B.P.R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	6209	17	32

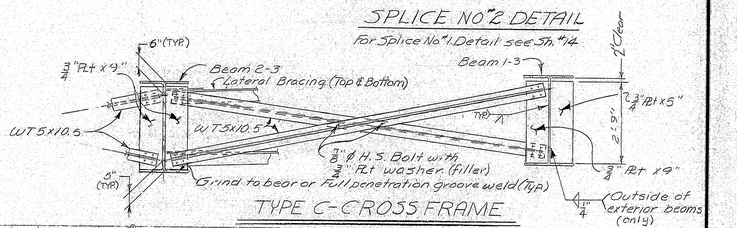


FASCIA OFFSETS

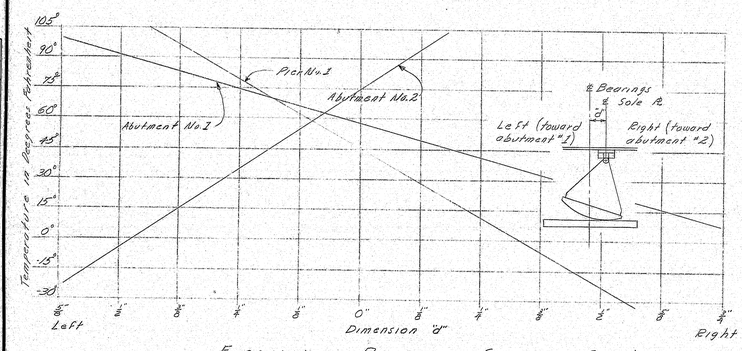


SPLICE NO "2" DETAIL

For Splice No "1" Detail see Sh. "14

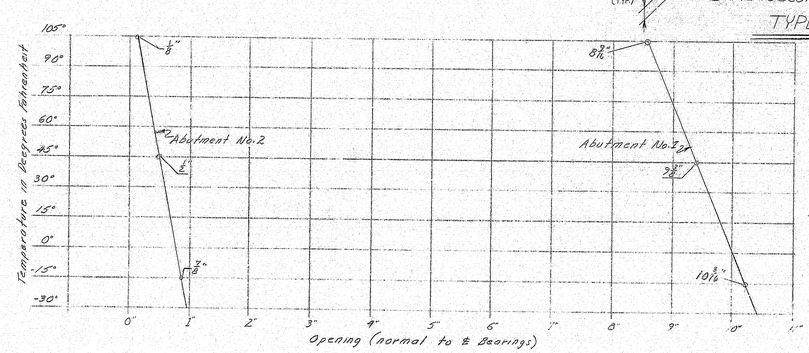


TYPE C-CROSS FRAME



EXPANSION PEDESTAL SETTING CHART

(For use prior to placing slab concrete.)



EXPANSION JOINT SETTING CHART

PLANS	DESIGN - DETAILED	MMC JMS	DATE 9/71
	CHECKED	CDZ	11/71
	REVISIONS		
	FIELD CHANGES		

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

EEL WEIR BRIDGE

OVER

SEBASTICOOK RIVER

BETWEEN THE TOWNS OF

BURNHAM & PITTSFIELD

WALDO & SOMERSET COUNTIES

FASCIA OFFSETS

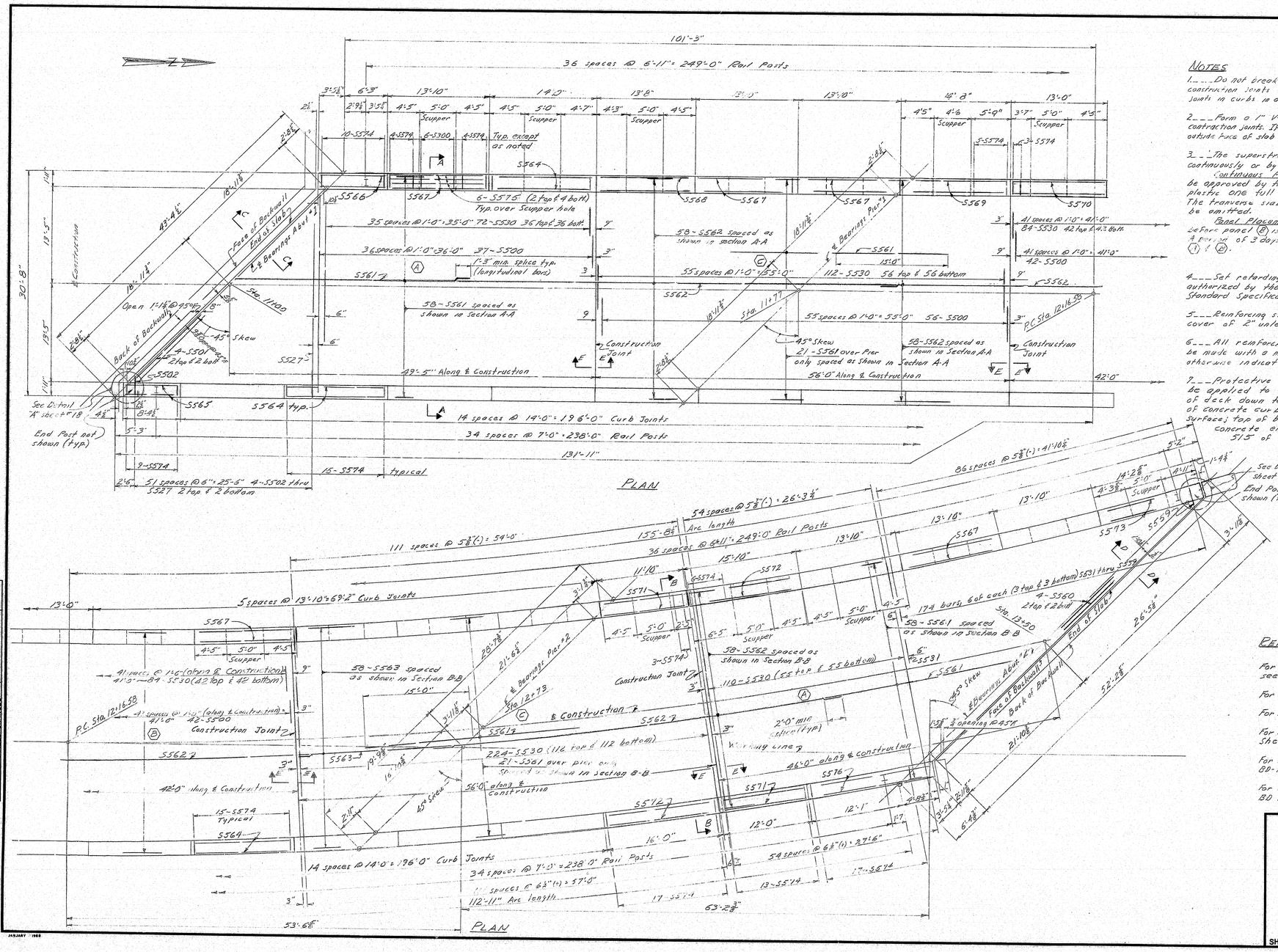
SHEET 16 OF 20 AUGUSTA, MAINE OCT. 1971

146-144

JANUARY 1968

touraine parts

B. F. P. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	6209	18	32



NOTES

1. Do not break the bond between the surfaces of vertical construction joints in superstructure slab. Break the bond in vertical joints in curbs in a manner approved by the Engineer.

2. Form a 1" V-Groove on the outside face of curb at curb contraction joints. If panel placement is used form a 1" V-Groove on the outside face of slab construction joints. For details see sheet "18.

3. The superstructure slab may be placed either continuously or by panels as follows:
   Continuous Placement - The contractor's method shall be approved by the Engineer; the concrete shall be kept plastic one full span back of the span being placed. The transverse slab construction joints shown on Plan shall be omitted.
   Panel Placement - Both panels (A) shall be placed before panel (B) is placed. Panels (C) shall be placed last. A period of 3 days shall lapse between placement of panels (1) & (2).

4. Set retarding admixtures shall be used when authorized by the Engineer and in accordance with the Standard Specifications.

5. Reinforcing steel shall have a minimum concrete cover of 2" unless otherwise indicated.

6. All reinforcing steel splices or embedments are to be made with a minimum of 36 bar diameters unless otherwise indicated.

7. Protective Coating for Concrete Surfaces shall be applied to the following areas: fascia surface of deck down to the ¾" drip notch; exposed surfaces of concrete curbs; all surfaces inside scuppers, top of wearing surfaces; top of backwall; and all exposed surfaces of concrete end posts in accordance with Section 515 of the Special Provisions.

8. Slab Construction Joints shall be adjusted to clear shear connectors as directed by the Engineer, in the field.

9. A smoothly finished edge, 4" wide shall be made at the face of the curb on the low side of the bridge. (See Detail 'B', sheet # 16)

10. Each truss bar may be replaced with 2 straight size 5 bars (one top & one bottom). Payment in either case will be based on truss bars as scheduled on the plans.

REFERENCES

For Sections A-A; B-B; C-C; D-D; & E-E see sheet # 18

For End Post Detail see sheet "19

For 1" V-Groove & ¾" Chamfer see sheet "20

For 2-Bar Aluminum Railing see Standard Sheet BD 106-69

For Expansion Dam Details see Standard Sheet BD-105-64 and sheet # 14

For Armored Joint Details see Standard Sheet BD 104-66 and sheet # 14

PLANS	DATE
DESIGN - DETAILED BY	MMG 12-A 8-71
CHECKED	GDT 11/72
REVISIONS	
FIELD CHANGES	

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

EEL WEIR BRIDGE
OVER
SEBASTICOOK RIVER
BETWEEN THE TOWNS OF
BURNHAM & PITTSFIELD
WALDO & SOMERSET COUNTIES

SUPERSTRUCTURE

SHEET 17 OF 20 AUGUSTA, MAINE OCT. 1971

JANUARY 1968

146-145

touraine paints TRUFLEX ☆ SILKY ☆ TRIPLE WHITE ☆ RYPLEX

S. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
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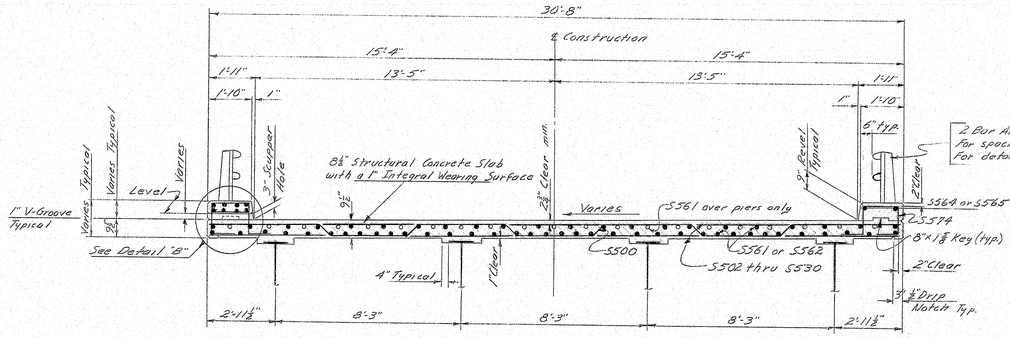
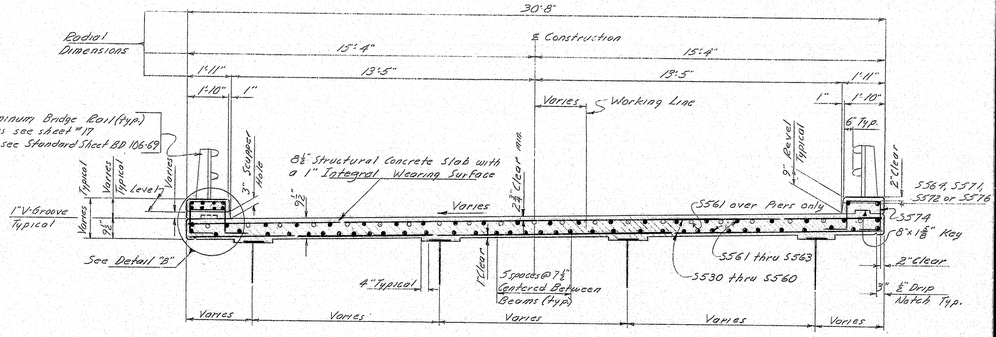
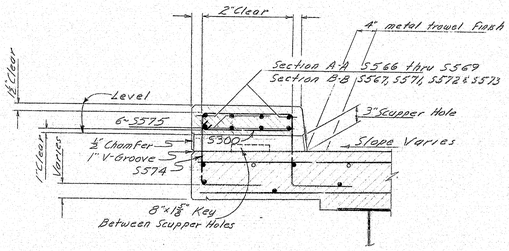


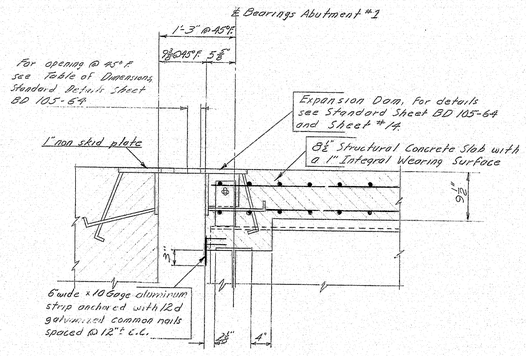
SECTION A-A



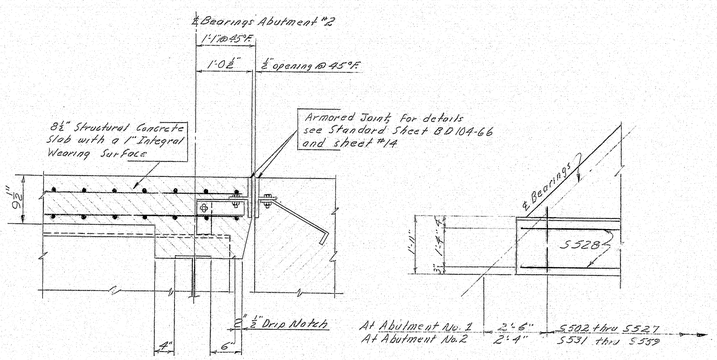
SECTION B-B



DETAIL "B"

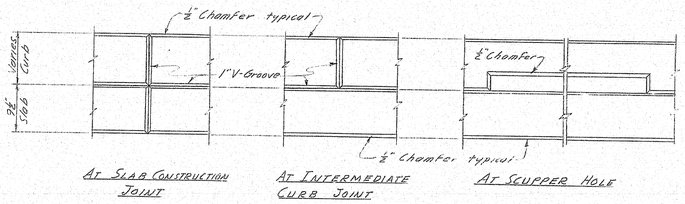


SECTION C-C

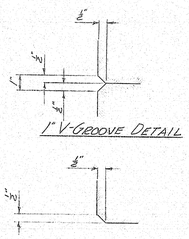


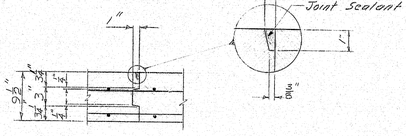
SECTION D-D

DETAIL "A"



ELEVATION - 1" V-GROOVE AND ½" CHAMFER





SECTION E-E

PLANS	DESIGN - DETAILED	BY	DATE
	CHECKED		
	REVISIONS		
	FIELD CHANGES		

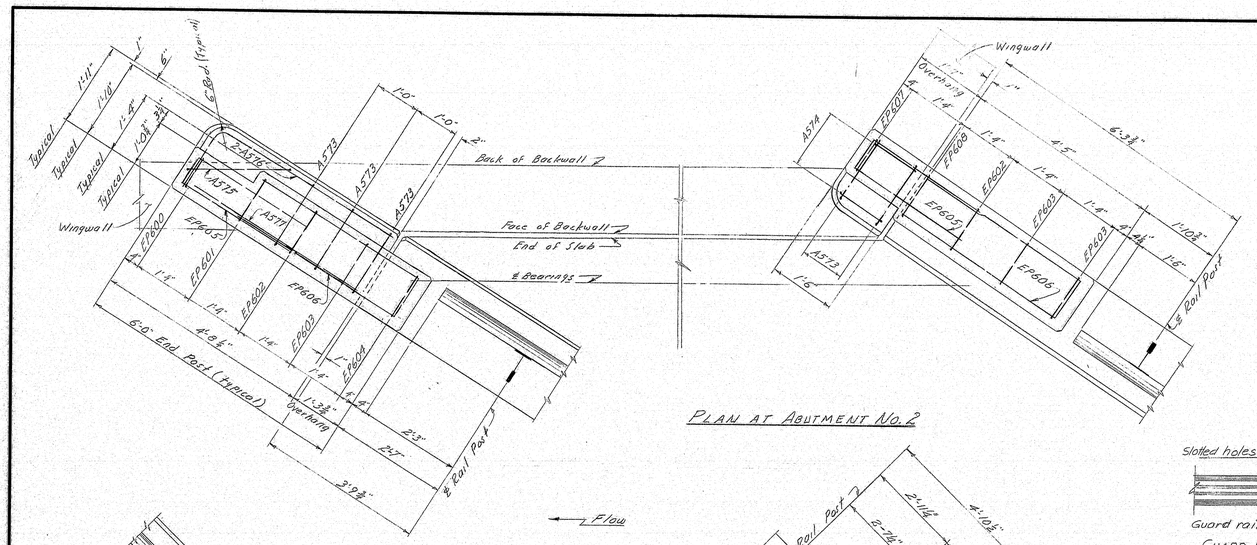
JANUARY 1968

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
EEL WEIR BRIDGE
OVER
SEBASTICOOK RIVER
BETWEEN THE TOWNS OF
BURNHAM & PITTSFIELD
WALDO & SOMERSET COUNTIES
SUPERSTRUCTURE DETAILS
SHEET 18 OF 20 AUGUSTA, MAINE OCT. 1971

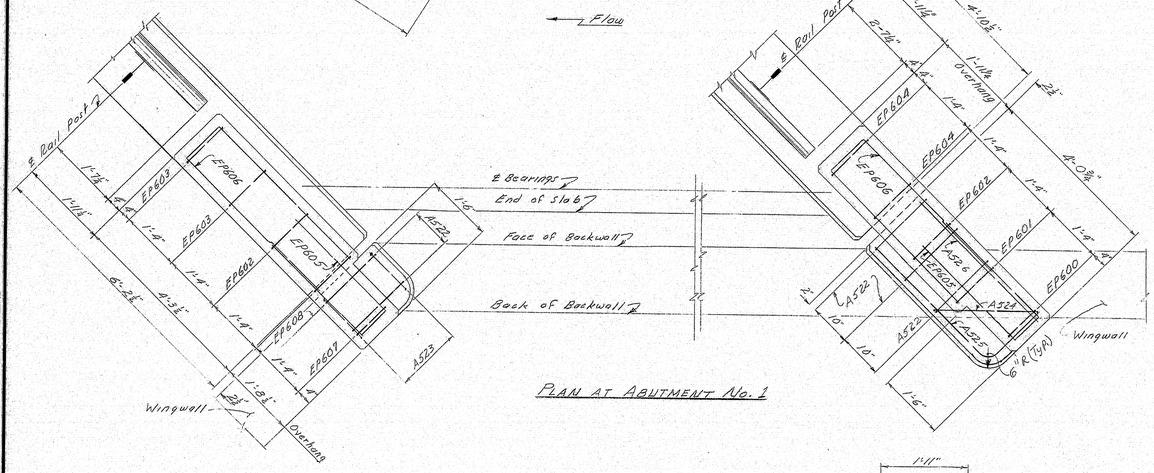
146-146

touraine paints · TRUFLEX ☆ SILKY ☆ TRIPLE WHITE ☆ RYPLEX

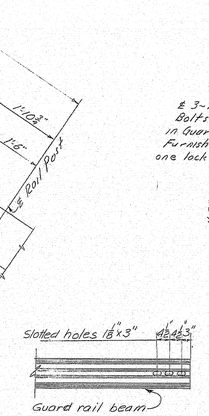
B. F. P. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	6209	20	32



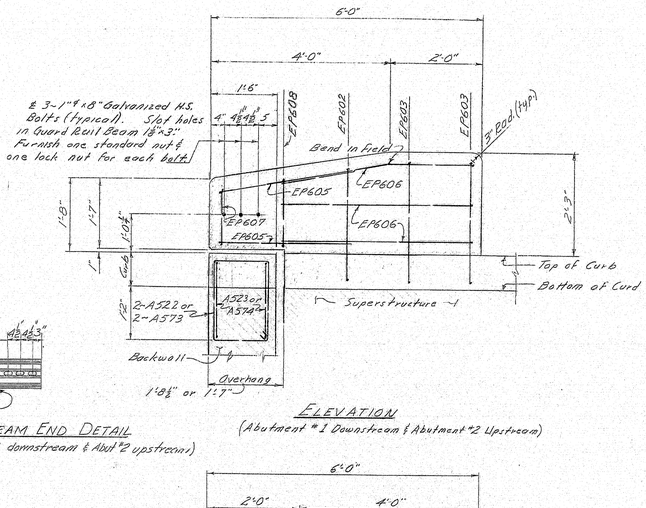
PLAN AT ABUTMENT No. 2



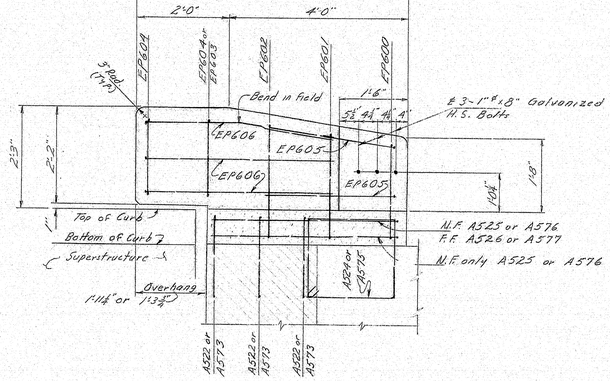
PLAN AT ABUTMENT No. 1



GUARD RAIL BEAM END DETAIL
(For use at Abut "1 downstream & Abut "2 upstream)



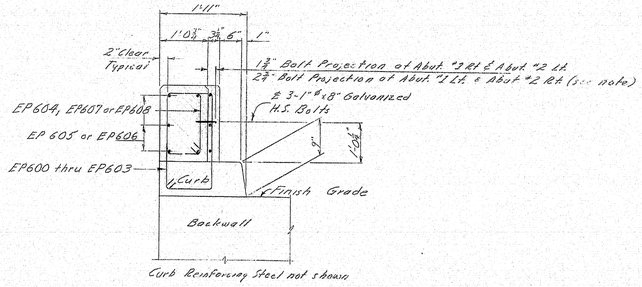
ELEVATION
(Abutment "1 Downstream & Abutment "2 Upstream)



ELEVATION
(Abutment "1 Upstream & Abutment "2 Downstream)

NOTES

1. Payment for Rail Anchorage shall be considered incidental to related contract Items.
2. Payment for all end post concrete shall be incidental to Item 502.26 Structural Concrete, Roadway & Sidewalk Slabs on Steel Bridges.
3. Apply Protective Coating for Concrete Surfaces on all exposed surfaces of the end post.
4. Chamfer all exposed edges ¾".
5. For attachment of Type 3 b Guard Rail to concrete End Post, see standard Details Aug. 1969 (6) except as shown on this sheet.



TYPICAL SECTION

PLANS

DESIGN - DETAILED	BY	DATE
CHECKED		
REVISIONS		
FIELD CHANGES		

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
EEL WEIR BRIDGE
OVER
SEBASTICOOK RIVER
BETWEEN THE TOWNS OF
BURNHAM & PITTSFIELD
WALDO & SOMERSET COUNTIES
END POST DETAILS
SHEET 19 OF 20 AUGUSTA, MAINE DEC. 1971

146-147

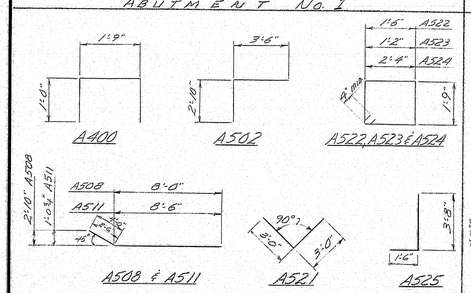
JANUARY 1968

touraine paints TRUFLEX ★ SILKY ★ TRUFLEX FLAT ★ KYLEK

REINFORCING STEEL SCHEDULE

B.F.B. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	6209	21	32

ABUTMENT No. 1



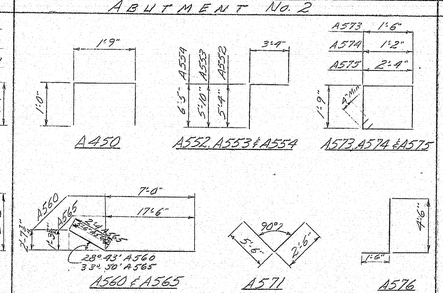
BENT BARS

MARK	SIZE	NO.	LENGTH	LOCATION
A400	#4	16	3'-9"	Bearing Areas
A502	#7	29	6'-9"	Breastwall
A508		2	12'-0"	Breastwall
A511		2	11'-0"	Breastwall
A521		4	6'-0"	Backwall to Wing
A522		3	7'-2"	Curb
A523		2	6'-6"	Curb
A524		1	8'-10"	Curb
A525	#5	2	5'-2"	Curb

STRAIGHT BARS

MARK	SIZE	NO.	LENGTH	LOCATION
A500	#5	72	3'-6"	Footing Dowels
A501		41	5'-2"	Breastwall to Backwall & Wings
A503		27	9'-0"	Breastwall to Backwall
A504		1	13'-0"	Breastwall & Wing
A505		1	18'-0"	Wing
A506		1	9'-0"	Breastwall
A507		1	8'-6"	Breastwall
A509		14	21'-8"	Breastwall & Backwall
A510		12	9'-10"	Breastwall
A512		12	6'-9"	Wing
A513		4	4'-3"	Wing
A514		4	6'-6"	Wing
A515		4	8'-6"	Wing
A516		44	3'-3"	Backwall
A517		10	5'-0"	Backwall
A518		7	5'-9"	Wing
A519		4	4'-6"	Wing
A520		4	3'-3"	Wing
A526		1	3'-8"	Curb
A527		5	7'-0"	Wing
A528		8	20'-0"	Wing
A529		1	4'-0"	Wing
A530	#5	1	9'-0"	Wing
A600	#6	102	6'-0"	Footing
A601	#6	14	14'-0"	Footing
A602	#6	14	30'-0"	Footing
A603	#6	14	8'-10"	Footing

ABUTMENT No. 2



BENT BARS

MARK	SIZE	NO.	LENGTH	LOCATION
A450	#4	16	3'-9"	Bearing Areas
A552	#5	14	8'-3"	Breastwall
A553		10	9'-2"	Breastwall
A554		14	9'-9"	Breastwall
A560		9	12'-6"	Breastwall
A565		5	19'-10"	Breastwall
A571		4	8'-0"	Backwall & Wing
A573		5	7'-2"	Curb
A574		2	6'-6"	Curb
A575		1	8'-10"	Curb
A576	#5	2	6'-0"	Curb

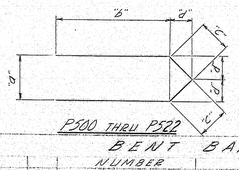
STRAIGHT BARS

MARK	SIZE	NO.	LENGTH	LOCATION
A550	#5	108	3'-6"	Footing Dowels
A551		62	9'-0"	Breastwall Backwall
A555		9	10'-10"	Wing
A556		39	4'-0"	Breastwall Dowels
A557		12	19'-10"	Backwall Wing
A558		1	11'-0"	Breastwall
A559		1	9'-0"	Breastwall
A561		14	27'-11"	Breastwall
A562		8	15'-9"	Breastwall
A564		15	4'-8"	Breastwall
A567		34	3'-0"	Backwall & Wing
A568		38	5'-2"	Backwall
A569		28	5'-0"	Backwall
A572		18	6'-8"	Wing
A577	#5	1	4'-6"	Curb
A650	#6	148	7'-6"	Footing
A651		32	30'-0"	Footing
A652		16	10'-0"	Footing
A653	#6	18	9'-2"	Footing

PLERS

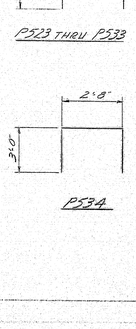
P500 THRU P522

Mark	"a"	"b"	"c"	"d"
P500	4'-2 7/8"	13'-10"	3'-0"	2'-1 5/8"
P501	4'-1"	13'-5"	2'-10 5/8"	2'-0 3/8"
P502	3'-11"	13'-0"	2'-9 1/4"	1'-11 1/8"
P503	3'-9"	12'-7"	2'-8"	1'-10"
P504	3'-7 5/8"	12'-2"	2'-6 3/4"	1'-9 5/8"
P505	3'-5 3/8"	11'-9"	2'-5 3/8"	1'-8 5/8"
P506	3'-3 1/8"	11'-4"	2'-4"	1'-7 3/8"
P507	3'-1 1/8"	10'-11"	2'-2 3/8"	1'-7"
P508	2'-11 3/8"	10'-6"	2'-1 3/8"	1'-6"
P509	2'-10"	10'-1"	2'-0"	1'-5"
P510	2'-8 3/8"	10'-9"	1'-11"	1'-3 7/8"
P511	4'-4"	17'-11"	3'-1"	2'-2"
P512	4'-2 5/8"	17'-6"	3'-0"	2'-1 5/8"
P513	4'-1"	17'-1"	2'-10 3/8"	2'-0 5/8"
P514	3'-11"	16'-8"	2'-9 3/4"	1'-11 5/8"
P515	3'-9"	16'-3"	2'-8"	1'-10 3/8"
P516	3'-7 5/8"	15'-10"	2'-6 3/4"	1'-9 5/8"
P517	3'-5 3/8"	15'-5"	2'-5 1/4"	1'-8 3/8"
P518	3'-3 1/8"	15'-0"	2'-4"	1'-7 1/8"
P519	3'-1 1/8"	14'-7"	2'-2 3/8"	1'-7"
P520	2'-11 3/8"	14'-2"	2'-1 3/8"	1'-6"
P521	2'-10"	13'-9"	2'-0"	1'-5"
P522	2'-8 3/8"	20'-6"	1'-10 5/8"	1'-4 3/8"



P523 THRU P533

P523	4'-4"
P524	4'-2 5/8"
P525	4'-1"
P526	3'-11"
P527	3'-9"
P528	3'-7 5/8"
P529	3'-5 3/8"
P530	3'-3 1/8"
P531	3'-1 1/8"
P532	2'-11 3/8"
P533	2'-10"



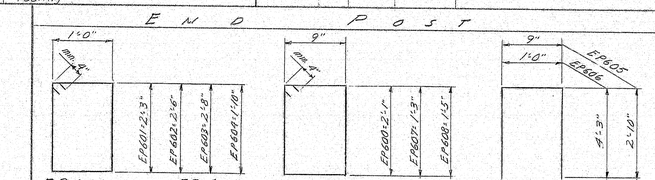
BENT BARS

MARK	SIZE	PIER "1"	PIER "2"	TOTAL	LENGTH	LOCATION
		NUMBER				
P500	#5	1	—	1	33'-8"	Shaft, Pier No. 1 (Horiz.)
P501		1	—	1	32'-8"	
P502		1	—	1	31'-6"	
P503		1	—	1	30'-6"	
P504		1	—	1	29'-5"	
P505		1	—	1	28'-4"	
P506		1	—	1	27'-4"	
P507		1	—	1	26'-4"	
P508		1	—	1	25'-3"	
P509		1	—	1	24'-2"	
P510		1	—	1	9'-1 4"	Shaft Pier No. 1 (Horiz.)
P511		—	1	1	42'-0"	Shaft Pier No. 2 (Horiz.)
P512		—	1	1	41'-0"	
P513		—	1	1	39'-11"	
P514		—	1	1	38'-10"	
P515		—	1	1	37'-10"	
P516		—	1	1	36'-9"	
P517		—	1	1	35'-8"	
P518		—	1	1	34'-8"	
P519		—	1	1	33'-8"	
P520		—	1	1	32'-7"	
P521		—	1	1	31'-6"	
P522		—	1	1	9'-1 10"	Shaft, Pier No. 2 (Horiz.)
P523		—	1	1	7'-9"	Shaft (Downstream end)
P524		1	1	2	7'-3"	
P525		1	1	2	7'-1"	
P526		1	1	2	6'-10"	
P527		1	1	2	6'-9"	
P528		1	1	2	6'-8"	
P529		1	1	2	6'-6"	
P530		1	1	2	6'-4"	
P531		1	1	2	6'-2"	
P532		1	1	2	6'-0"	
P533		1	1	2	5'-10"	Shaft (Downstream end)
P534	#5	26	29	55	8'-8"	Top of Shaft

STRAIGHT BARS

P535	#5	20	22	42	30'-0"	Shaft
P600	#6	66	72	138	7'-9"	Distribution Slab
P601		16	16	32	30'-0"	Distribution Slab
P602		16		16	18'-0"	Distribution Slab
P603		58		58	15'-0"	Shaft (Vertical)
P604			16	16	22'-6"	Distribution Slab
P605	#6		65	65	15'-6"	Shaft (Vertical)
P700	#7	126	136	262	5'-9"	Dowels

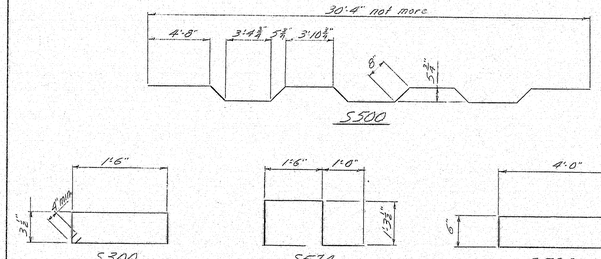
END POST



BENT BARS

MARK	SIZE	NO.	LENGTH	LOCATION
EP600	#6	2	6'-4"	End Post
EP601		2	7'-2"	
EP602		4	7'-8"	
EP603		5	8'-0"	
EP604		3	6'-9"	
EP605		2	6'-5"	
EP606		2	5'-6"	
EP607		2	4'-8"	
EP608	#6	2	5'-0"	End Post

SUPERSTRUCTURE



BENT BARS

MARK	SIZE	NO.	LENGTH	LOCATION
S300	#3	108	4'-3"	Curb (scuppers)
S200	#5	135	31'-5"	Slab (crank bar)

MARK	SIZE	NO.	LENGTH	LOCATION
A528	#5	4	8'-6	Curbs
S74	#5	421	6'-1"	Curbs

STRAIGHT BARS

S501	#5	4	42'-0"	End of Slab at Abut "1		
S502			21'9"	Transverse (Abut "1 and		
S503			3'-9"			
S504			4'-9"			
S505			5'-9"			
S506			6'-9"			
S507			7'-9"			
S508			8'-9"			
S509			9'-9"			
S510			10'-9"			
S511			11'-9"			
S512			12'-9"			
S513			13'-9"			
S514			14'-9"			
S515			15'-9"			
S516			16'-9"			
S517			17'-9"			
S518			18'-9"			
S519			19'-9"			
S520			20'-9"			
S521			21'-9"			
S522			22'-9"			
S523			23'-9"			
S524			24'-9"			
S525			25'-9"			
S526			26'-9"			
S527		4	27'-9"	Transverse (Abut "2 end)		
S529						
S530		602	30'-4"	Slab (Transverse)		
S531		6	27'-3"	Transverse (Abut "2 end)		
S532			26'-9"			
S533			25'-5"			
S534			24'-6"			
S535			23'-9"			
S536			22'-5"			
S537			21'-5"			
S538			20'-9"			
S539			19'-6"			
S540			18'-7"			
S541			17'-8"			
S542			16'-10"			
S543			15'-10"			
S544			14'-10"			
S545			14'-0"			
S546			13'-0"			
S547			12'-3"			
S548			11'-4"			
S549			10'-5"			
S550			9'-7"			
S551			8'-8"			
S552			7'-10"			
S553	#5	6	7'-0"	Transverse (Abut "2 end)		

MARK	SIZE	NO.	LENGTH	LOCATION
S554	#5	6	6'-0"	Transverse (Abut "2 end)
S555			5'2"	
S556			4'3"	
S557			3'5"	
S558			2'7"	
S559		6	2'-0"	Transverse (Abut "1 end)
S560		4	38'-0"	End of Slab at Abut "2
S561		158	30'-0"	Longitudinal
S562		174	60'-0"	Longitudinal
S563		58	28'-0"	Longitudinal
S564		30	17'-8"	Curb
S565		2	8'-0"	
S566		2	9'-4"	
S567		22	13'6"	
S568		2	13'-9"	
S569			14'-4"	
S570			12'-8"	
S571			11'-6"	
S572			15'-0"	
S573		2	13'-10"	Curb
S575		108	8'-0"	Curb over Scuppers
S576	#5	2	16'5"	Curb

NOTE:

REINFORCING STEEL TO BE A615 GRADE 60.

ALL DIMENSIONS ARE OUT TO OUT OF BARS.

PLANS	BY	DATE
DESIGN - DETAILED	MNG	1/72
CHECKED	E.O.J.	1/3/72
REVISIONS		
FIELD CHANGES		

JANUARY 1968

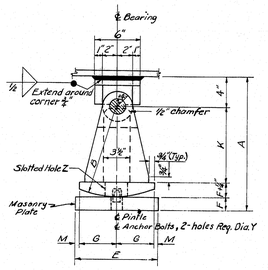
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
EEL WEIR BRIDGE
OVER
SEBASTICOOK RIVER
BETWEEN THE TOWNS OF
BURNHAM & PITTSFIELD
WALDO & SOMERSET COUNTIES
REINFORCING STEEL SCHEDULE
SHEET 20 OF 20 AUGUSTA, MAINE DEC. 1971

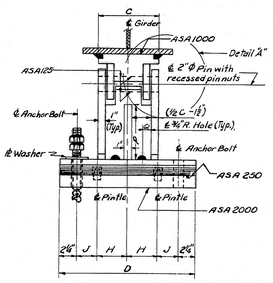
203-1 2080

146 - 148

touraine paints TRUFLEX ☆ SILKY ☆ TRUFLEX MATTE ☆ KYPLEX

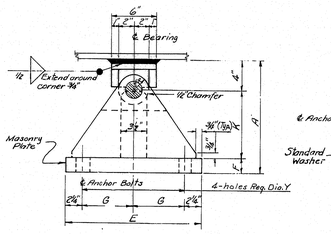
B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	[illegible]	22	32

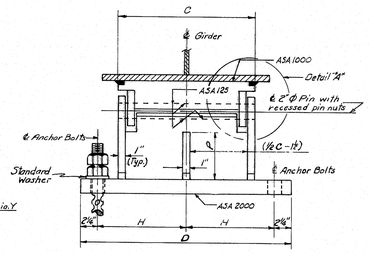




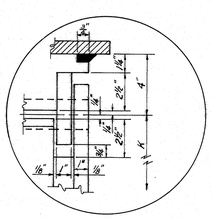
EXPANSION PEDESTAL — EPD

MARK	LOAD	A	B	C	D	E	F	G	H	J	K	M	P	Q	R	S	T		V	X - Anchor Bolt Diameter	Y - Masonry Plate Hole Size	Number Anchor Bolts Required	Z - Slotted Hole for Anchor Bolts or Cap Screws	℄ Washer Size for Anchor Bolts or Cap Screws	A1 Embedment Depth	MARK
EPD-1	100 K	1'-2⅜"	9"	8"	1'-6"	8"	1⅜"	3½"	4"	2½"	7"	¼"	–	3"	1'-4⅝"	3"	4½"		–	1"	1⅛"	2	3" × 1⅛"	3" × 5" × ¼"	10"	EPD-1
EPD-2	100 K	1'-2⅜"	9"	8"	1'-6"	9"	1⅜"	4"	4"	2½"	7"	½"	–	3"	1'-4⅝"	3"	4½"		–	1"	1⅛"	2	3" × 1⅛"	3" × 5" × ½"	10"	EPD-2
EPD-3	100 K	1'-2⅜"	9"	8"	1'-6"	10"	1⅜"	4½"	4"	2½"	7"	½"	–	3"	1'-4⅝"	3"	4½"		–	1"	1⅛"	2	3" × 1⅛"	3" × 5" × ½"	10"	EPD-3
EPD-4	100 K	1'-3½"	1'-0"	8"	1'-6"	11"	1⅜"	5"	4"	2½"	10"	½"	–	3"	1'-5"	3"	4½"		–	1"	1⅛"	2	3" × 1⅛"	3" × 5" × ½"	10"	EPD-4
EPD-5	200 K	1'-9⅜"	1'-3"	10"	1'-8"	1'-0"	2½"	5½"	4"	3½"	1'-0⅝"	½"	–	4"	2'-0⅜"	4"	6½"		–	1½"	1⅛"	2	4" × 1⅛"	4" × 7" × ½"	1'-3"	EPD-5
EPD-6	200 K	1'-9½"	1'-3"	10"	1'-8"	1'-1"	2½"	6"	4"	3½"	1'-0⅝"	½"	–	4"	2'-1"	4"	6½"		–	1½"	1⅛"	2	4" × 1⅛"	4" × 7" × ½"	1'-3"	EPD-6
EPD-7	200 K	1'-9⅝"	1'-3"	10"	1'-8"	1'-2"	2½"	6½"	4"	3½"	1'-0⅝"	½"	–	4"	2'-1"	4"	6½"		–	1½"	1⅛"	2	4" × 1⅛"	4" × 7" × ½"	1'-3"	EPD-7
EPD-8	200 K	1'-9½"	1'-3"	10"	1'-8"	1'-3"	2½"	7"	4"	3⅜"	1'-0⅝"	½"	–	4"	2'-1"	4"	6⅝"		–	1½"	1⅛"	2	4" × 1⅛"	4" × 7" × ½"	1'-3"	EPD-8
EPD-9	300 K	1'-10"	1'-3"	1'-2"	2'-0"	1'-4"	3"	7⅛"	5"	4½"	11⅜"	½"	–	6"	2'-2½"	4"	8"		–	1½"	1⅛"	2	5" × 1⅛"	4" × 8" × ½"	1'-3"	EPD-9
EPD-10	400 K	1'-10⅛"	1'-3"	1'-6"	2'-4"	1'-6"	3½"	8½"	6"	5½"	11⅝"	½"	8½"	3½"	2'-3"	4"	8⅝"		-	1½"	1⅛"	2	5" × 1⅛"	4" × 8" × ½"	1'-3"	EPD-10
EPD-1	200 K	1'-10"	1'-3"	10"	1'-7"	1'-6"	3"	4"	4"	3¼"	1'-0"	2⅞"	–	4"	1'-10"	4½"	–		3⅜"	1½"	1⅜"	4	3½" × 1⅜"	3½" × 4½" × ½"	1'-3"	EPE-1
EPE-2	200 K	1'-10"	1'-3"	11"	1'-8"	1'-9"	3"	5½"	4½"	3¼"	1'-0"	2⅞"	–	4½"	1'-10"	4½"	–		4"	1½"	1⅜"	4	4" × 1⅜"	3½" × 5½" × ½"	1'-3"	EPE-2
EPE-3	200 K	1'-10"	1'-3"	11"	1'-8"	1'-10"	3"	6"	4½"	3¼"	1'-0"	2⅞"	–	4½"	1'-10"	4½"	–		4½"	1½"	1⅜"	4	4" × 1⅜"	3½" × 5½" × ½"	1'-3"	EPE-3
EPE-4	200 K	1'-10"	1'-3"	11"	1'-8"	1'-10"	3"	6½"	4½"	3¼"	1'-0"	2⅞"	–	4½"	1'-10"	4½"	–		4½"	1½"	1⅜"	4	4½" × 1⅜"	3½" × 6" × ½"	1'-3"	EPE-4
EPE-5	200 K	1'-10"	1'-3"	11"	1'-8"	2'-0"	3"	7"	4½"	3½"	1'-0"	2⅞"	–	4½"	1'-10"	4½"	–		4¾"	1½"	1⅜"	4	4½" × 1⅜"	3½" × 6" × ½"	1'-3"	EPE-5
EPE-6	300 K	1'-10"	1'-3"	1'-2"	1'-11"	1'-6"	3"	4"	5"	4½"	1'-0"	2⅞"	–	6"	1'-10"	4½"	–		3⅜"	1½"	1⅜"	4	2½" × 1⅜"	3½" × 4½" × ½"	1'-3"	EPE-6
EPE-7	300 K	1'-10⅛"	1'-3"	1'-2"	1'-11"	1'-8"	3⅛"	5"	5"	4½"	1'-1⅛"	2⅞"	–	6"	1'-10"	4½"	–		4"	1½"	1⅜"	4	3" × 1⅜"	3½" × 5" × ½"	1'-3"	EPE-7
EPE-8	300 K	1'-10⅛"	1'-3"	1'-2"	1'-11"	1'-10"	3½"	6"	5"	4½"	1'-1⅛"	2⅞"	–	6"	1'-10½"	4½"	–		4½"	1½"	1⅜"	4	4½" × 1⅜"	3½" × 6" × ½"	1'-3"	EPE-8
EPE-9	300 K	1'-10⅛"	1'-3"	1'-2"	1'-11"	2'-0"	3½"	7"	5"	4½"	1'-1⅛"	2⅞"	–	6"	1'-10½"	4½"	–		4⅝"	1½"	1⅜"	4	5" × 1⅜"	3½" × 6½" × ½"	1'-3"	EPE-9
EPE-10	300 K	1'-10⅛"	1'-3"	1'-2"	1'-11"	2'-3"	3⅜"	8"	5"	4½"	11"	3¼"	–	6"	1'-10½"	4½"	–		5½"	1⅝"	1⅜"	4	5" × 1⅜"	3½" × 7" × ½"	1'-3"	EPE-10
EPE-11	400 K	1'-10⅛"	1'-3"	1'-7"	2'-4"	1'-7"	3½"	4½"	5"	6⅜"	1'-1⅜"	2⅞"	9"	4"	1'-10"	4½"	–		3¾"	1½"	1⅜"	4	4" × 1⅜"	3½" × 5" × ½"	1'-3"	EPE-11
EPE-12	400 K	1'-10⅛"	1'-3"	1'-7"	2'-4"	1'-11"	3⅝"	6½"	5"	6⅜"	1'-1⅝"	2⅞"	8½"	4"	1'-10½"	4½"	–		5"	1½"	1⅜"	4	5" × 1⅜"	3½" × 6" × ½"	1'-3"	EPE-12
EPE-13	400 K	1'-11"	1'-3"	1'-7"	2'-4"	2'-4"	4"	8½"	5"	6⅜"	11"	3½"	8½"	4"	1'-11"	4½"	–		6½"	1½"	1⅜"	4	6½" × 1⅜"	3½" × 8" × ½"	1'-3"	EPE-13
EPE-14	600 K	2'-1⅜"	1'-6"	1'-11"	3'-0"	1'-10"	3⅜"	6"	7"	8⅜"	1'-2⅝"	2⅞"	11⅜"	5"	1'-10½"	4½"	–		4⅝"	1½"	1⅜"	4	4½" × 1⅜"	4" × 5½" × ½"	1'-3"	EPE-14
EPE-15	600 K	2'-2½"	1'-6"	1'-11"	3'-0"	2'-3"	4½"	9"	7"	8⅜"	1'-1⅝"	3½"	11"	5"	1'-11"	4½"	–		6¼"	1½"	1⅜"	4	6½" × 1⅜"	4" × 8" × ½"	1'-3"	EPE-15
EPE-16	800 K	2'-2"	1'-6"	2'-6"	3'-10"	1'-11"	4"	6½"	10"	10⅜"	1'-2"	2⅞"	11¼"	5"	1'-11"	4½"	–		5"	1½"	1⅜"	4	4½" × 1⅜"	4" × 6" × ½"	1'-3"	EPE-16
EPE-17	800 K	2'-2½"	1'-6"	2'-6"	3'-10"	2'-3"	4½"	9"	10"	10⅜"	1'-1½"	3½"	10⅜"	6⅜"	1'-11⅜"	4½"	–		6⅝"	1½"	1⅝"	4	6½" × 1⅜"	4" × 8½" × ½"	1'-3"	EPE-17
FPD-1	100 K	1'-0"	–	8"	1'-6"	9"	2"	2¼"	6½"	–	6"	–	–	–	1'-3"	3½"	–		–	1"	1⅛"	4	–	Standard	10"	FPD-1
FPD-2	200 K	1'-0"	–	10"	1'-8"	1'-2"	2"	4½"	7½"	–	6"	–	–	–	1'-8"	4"	–		–	1½"	1⅜"	4	–	Standard	1'-3"	FPD-2
FPD-3	300 K	1'-0"	–	1'-2"	2'-0"	1'-4"	2"	5½"	9½"	–	6"	–	–	–	1'-8"	4"	–		–	1½"	1⅜"	4	–	Standard	1'-3"	FPD-3
FPD-4	400 K	1'-3"	–	1'-6"	2'-4"	1'-6"	2"	6½"	11½"	–	9"	–	6½"	–	1'-8"	4"	–		–	1½"	1⅜"	4	–	Standard	1'-3"	FPD-4
FPD-5	600 K	1'-3"	–	1'-11"	3'-0"	1'-10"	3"	8½"	1'-3½"	–	8"	–	5½"	–	1'-9"	4"	–		–	1½"	1⅜"	4	–	Standard	1'-3"	FPD-5
FPD-6	800 K	1'-3"	–	2'-6"	3'-10"	1'-11"	3"	9½"	1'-8½"	–	8"	–	5½"	–	1'-9"	4"	–		–	1½"	1⅝"	4	–	Standard	1'-3"	FPD-6



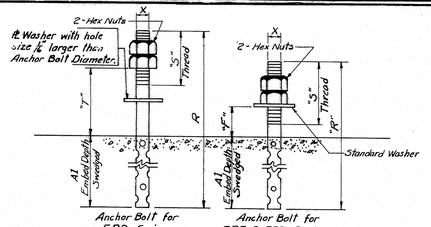


FIXED PEDESTAL — FPD

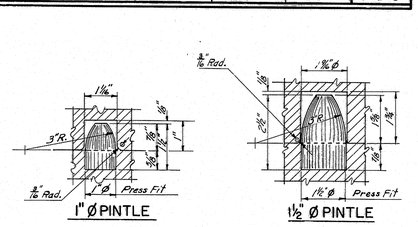


DETAIL "A"

CAP SCREW DETAIL



ANCHOR BOLT DETAILS



PINTLE DETAILS

NOTE:
Use 1" Ø Pintles with 1" Ø Anchor Bolts & 1⅛" Ø Pintles with 1½" Ø Anchor Bolts.

GENERAL NOTES:

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 a min. slope of ¼ inch per foot. No separate payment for this work will be made as it shall be considered incidental to contract items.

Fabricate pedestals with ¼" fillet welds. The diameter of the pin hole shall not exceed that of the pin by more than ⅛ inch.

Pedestals EPD-1 thru EPD-9 and EPE-1 thru EPE-10 have no center stiffeners and have only one drainage hole.

Pedestals EPD-10 and EPE-11 thru EPE-17 have a center stiffener and have two drainage holes.

Pedestals FPD-1 thru FPD-3 have no center stiffeners and have no drainage holes.

Pedestals FPD-4 thru FPD-6 have a center stiffener and no drainage holes.

DESIGN SPECIFICATIONS

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

A.S.T.M. STEEL CLASSIFICATION

All structural steel shall be - A36 except the following:
2" Ø Pin - A36; A235, Class E or A108, Grade 1016 - 1030 inclusive.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STANDARD DETAILS
(BD 100-71)

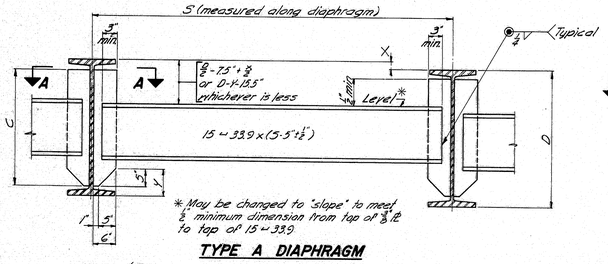
BEARING PEDESTALS

JULY 1971

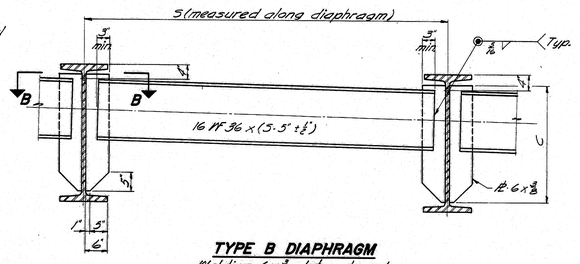
146-149

touraine paints TRUFLEX ☆ SILKY ☆ TRIPLE WHITE ☆ RYPLEX

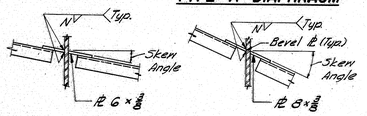
B.P.R. DIV. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	6209	23	32



TYPE A DIAPHRAGM



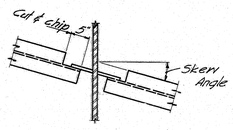
TYPE B DIAPHRAGM
Welding 6 x ⅜ plates to web same as for Type A Diaphragm.



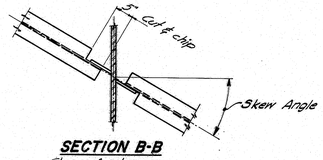
SECTION A-A
Skew Angle 0° to 10°-00'

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

FILLET WELD SIZE "N" & DIMENSION "C" FOR DIAPHRAGM PLATES		
BEAM	C	N
27 WF 84 to 114 incl.	1'-11"	½"
30 WF 99 to 132 incl.	2'-2"	½"
33 WF 118 to 152 incl.	2'-5"	½"
36 WF 135 to 194 incl.	2'-7"	½"
36 WF 230 to 300 incl.	2'-6"	⅝"



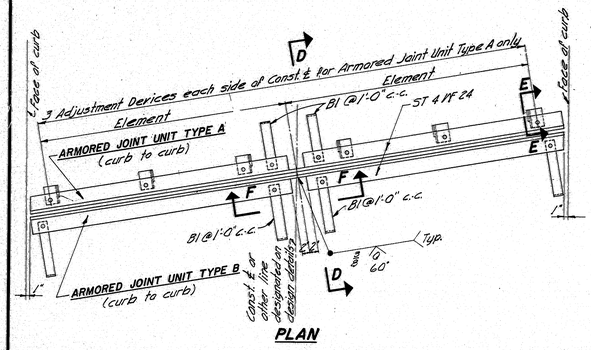
SECTION B-B
Skew Angle 0° to 10°-00'



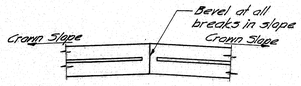
SECTION B-B
Skew Angle over 10°-00'

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

DIAPHRAGMS



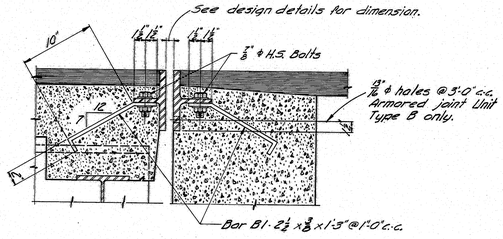
PLAN



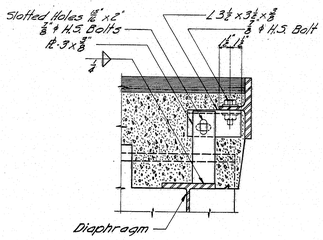
SECTION F-F
Note: See design details for Const. ℄ to curb dimensions, skew, crown slope, slab thickness, other dimensions necessary to complete the fabrication details, and location.

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.



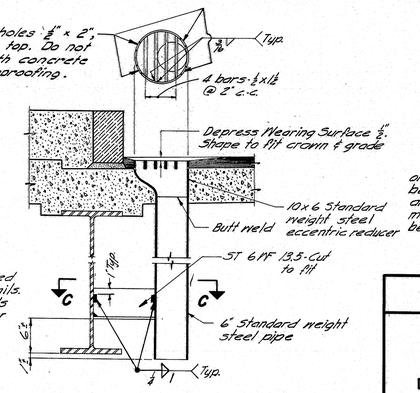
SECTION D-D



SECTION E-E
Showing Adjustment Device Armored Joint Unit Type A only - after Unit is in final position weld ⅜ fl. to angle with ¼ fillet

SECTION C-C

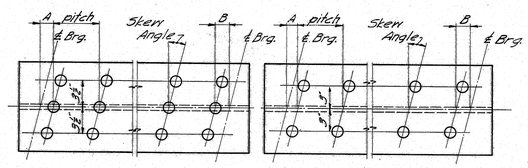
NOTE
1. Drain may be rotated 180°. See design details.
2. See design details for location and number of drains and beam size to which it is connected.



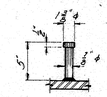
DRAIN

SHEAR CONNECTOR NOTE

The connectors may be either steel studs or spirally formed bars. At the request of the contractor a plan for using spirally formed bars will be provided.



TRIPLE STUDS **DOUBLE STUDS**



STUD DETAIL

NOTE
1. Studs shall be granular or solid flux filled and automatically end 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

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.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STANDARD DETAILS
(BD 104-66)

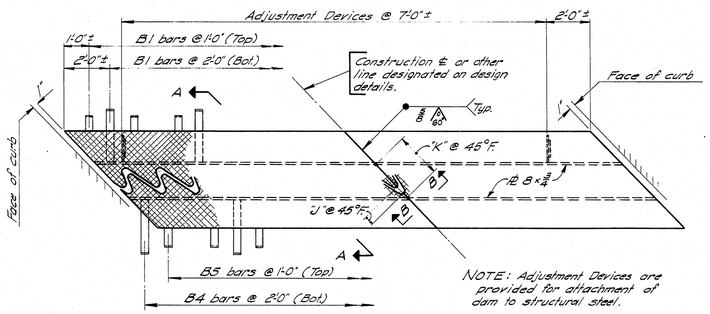
DIAPHRAGMS, ARMORED JOINT, SHEAR CONNECTORS, DRAIN

SEPTEMBER 1966

146-150

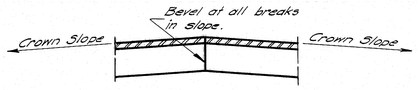
touraine paints TRUFLEX ☆ SILKY ☆ TRIPLE WHITE ☆ RYPLEX

B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	[illegible]	29	32



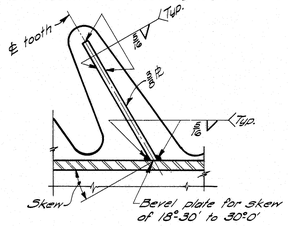
PLAN

Right skew indicated



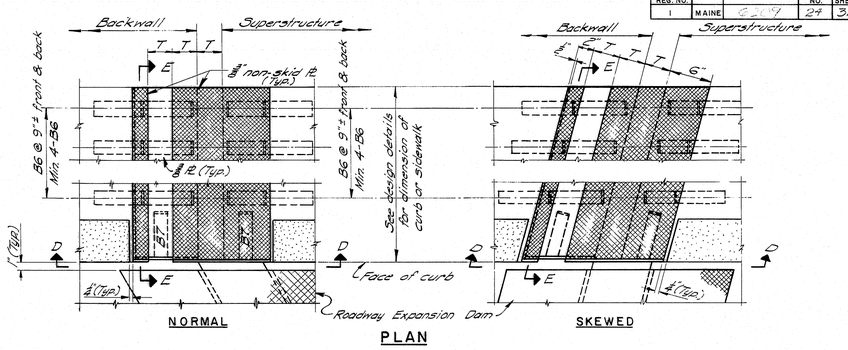
SECTION B-B

See design details for construction ℄ to curb dimensions, skew, crown slope, slab thickness, other dimensions & angles that are necessary to complete fabrication details and location of Roadway Expansion Dam.

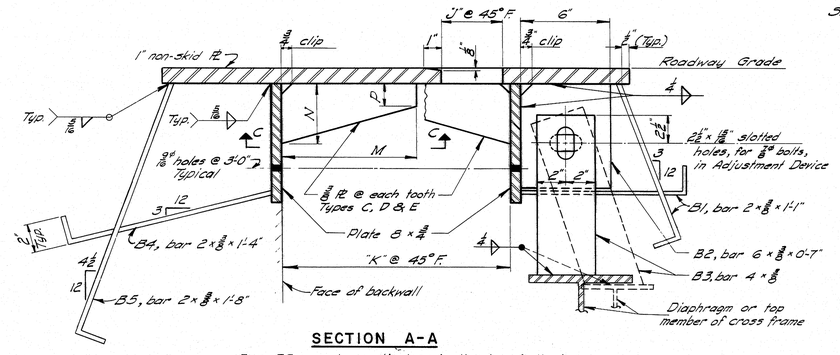


SECTION C-C

Skew ~0° to 30°-0'

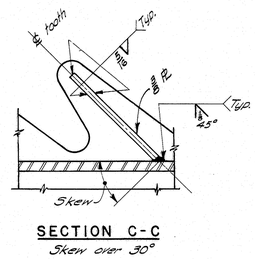


PLAN



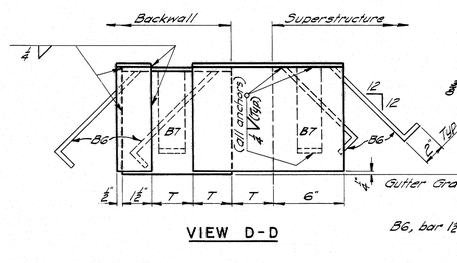
SECTION A-A

Bar B3 may be vertical or inclined as indicated, depending on design conditions. After Adjustment Device is in final position weld bars B2 to B3 with 1/4" fillet weld.

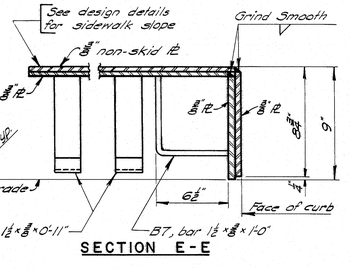


SECTION C-C

Skew over 30°



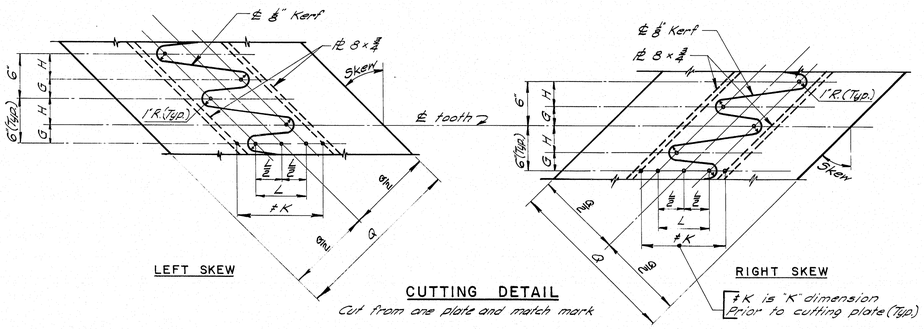
VIEW D-D



SECTION E-E

TYPE	V	W	X	Y	Z
Exp. Length	100'-280'	280'-440'	440'-600'	600'-760'	760'-920'
T	3"	4"	5"	6"	7"

CURB AND SIDEWALK EXPANSION DAM - DETAILS



ROADWAY EXPANSION DAM - DETAILS

TABLE OF DIMENSIONS												
Type	Exp. Length	Skew	≠K	L	G	H	K@45°	J@45°	M	N	P	Q
A	100'-280'	0°-5° incl.	7"	4"	3"	3"	9"	28"	—	—	—	21"
		5°-10°	7 1/8"	4 1/4"	2 5/8"	3 5/8"	9 1/4"	28"	—	—	—	22"
		10°-20°	8"	4 3/8"	2 5/8"	3 5/8"	10"	28"	—	—	—	22"
		20°-30°	8 3/8"	5 1/4"	2 5/8"	3 5/8"	10 3/8"	28"	—	—	—	23"
		30°-40°	9 3/8"	5 3/4"	2 5/8"	3 5/8"	11 3/8"	28"	—	—	—	23"
		40°-50° incl.	11 1/4"	6 5/8"	2 3"	3 5/8"	13 3/8"	28"	—	—	—	23"
B	280'-440'	0°-5° incl.	9"	6"	3"	3"	12"	38"	—	—	—	23"
		5°-10°	9 3/8"	6 1/4"	2 5/8"	3 5/8"	12 1/4"	38"	—	—	—	24"
		10°-20°	10"	6 3/8"	2 5/8"	3 5/8"	13"	38"	—	—	—	24"
		20°-30°	10 3/8"	7 1/4"	2 5/8"	3 5/8"	13 3/8"	38"	—	—	—	25"
		30°-40°	12"	8"	2 5/8"	3 5/8"	15"	38"	—	—	—	25"
		40°-50° incl.	13 3/4"	8 3/4"	2 5/8"	3 5/8"	16 3/8"	38"	—	—	—	25"
C	440'-600'	0°-10° incl.	11 1/4"	8 1/4"	3"	3"	15 3/8"	48"	9"	4"	1 3/8"	26"
		10°-20°	12"	8 3/8"	2 5/8"	3 5/8"	16"	48"	10"	4"	1 3/8"	26"
		20°-30°	12 3/8"	9 1/4"	2 5/8"	3 5/8"	16 3/8"	48"	11"	4"	1 3/8"	26"
		30°-40°	14"	10"	2 5/8"	3 5/8"	18"	48"	11"	4"	1 3/8"	26"
		40°-50° incl.	15 3/8"	10 3/8"	2 5/8"	3 5/8"	19 3/8"	48"	12"	4"	1 3/8"	26"
D	600'-760'	0°-10° incl.	13 3/4"	10 3/4"	3"	3"	18 3/8"	58"	11"	5"	2"	30"
		10°-20°	14"	10 3/8"	2 5/8"	3 5/8"	19"	58"	12"	5"	2"	30"
		20°-30°	14 3/8"	11 1/4"	2 5/8"	3 5/8"	19 3/8"	58"	13"	5"	2"	30"
		30°-40°	16"	12"	2 5/8"	3 5/8"	21"	58"	13"	5"	2"	30"
		40°-50° incl.	17 3/8"	13"	2 5/8"	3 5/8"	22 3/8"	58"	15"	5"	2"	30"
E	760'-920'	0°-10° incl.	15 3/4"	12 1/4"	3"	3"	21 1/8"	68"	13"	6"	2 3/8"	36"
		10°-20°	16"	12 3/8"	2 5/8"	3 5/8"	22"	68"	14"	6"	2 3/8"	36"
		20°-30°	16 3/8"	13 1/4"	2 5/8"	3 5/8"	22 3/8"	68"	15"	6"	2 3/8"	36"
		30°-40°	18"	14"	2 5/8"	3 5/8"	24"	68"	15"	6"	2 3/8"	36"
		40°-50° incl.	19 3/8"	15"	2 5/8"	3 5/8"	25 3/8"	68"	17"	6"	2 3/8"	36"

GENERAL NOTES

Expansion Dams to be paid for as Structural Steel.

If there is conflict between this Standard Detail and the design details, the requirements of the design details shall be followed.

Steel Classification: A.S.T.M. A36

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STANDARD DETAILS

(BD 105 - 64)

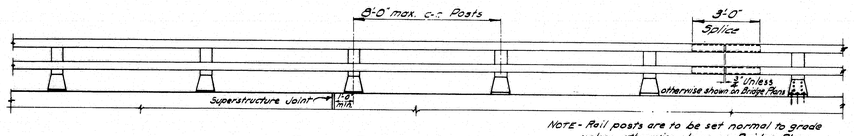
EXPANSION DAMS

APRIL 1964

146-151

touraine paints TRUFLEX ☆ SILKY ☆ TRIPLE WHITE ☆ RYPLEX

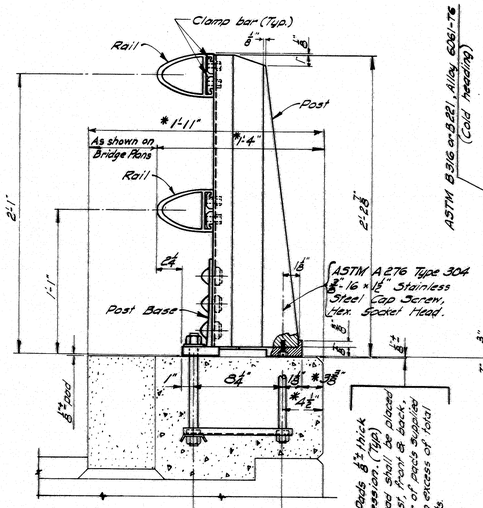
B.P.R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	6207	28	32



NOTE - Rail posts are to be set normal to grade unless otherwise shown on Bridge Plans.

RAIL - ELEVATION

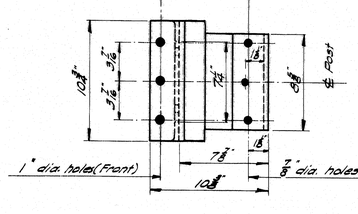
Lengths of rail shall be attached to a minimum of (4) four rail posts, wherever possible, and in any case never less than (2) two.



BRIDGE RAIL

Assembly

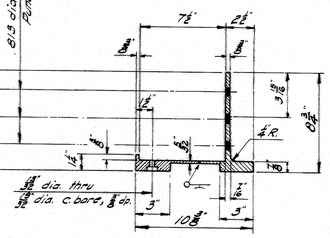
* Preferable minimum dimensions.



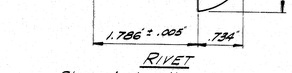
POST BASE

(Bottom View)

REAR ELEV.

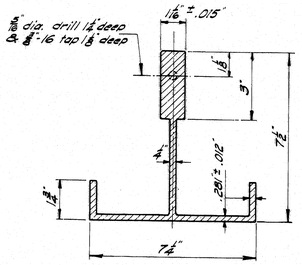


POST BASE SECTION



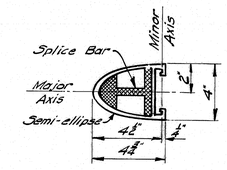
RIVET

Shop rivet rail post to base



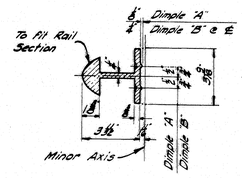
POST SECTION

Post & Post Base = ASTM B221, Alloy 6061-T6.

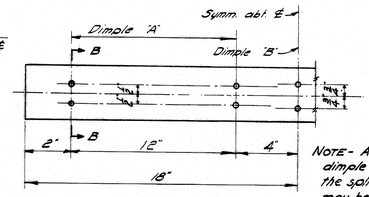


RAIL SECTION

See "Rail Detail"



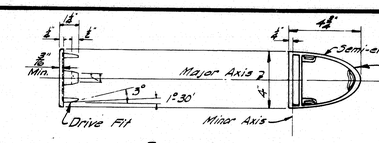
SECTION B-B



SPLICE BAR

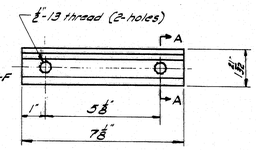
Ⓐ Rail, Splice Bar, & Clamp Bar = ASTM B221, Alloy 6351-T5 or 6061-T6.

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

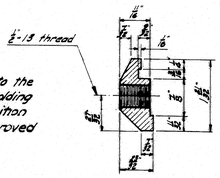


RAIL CAP

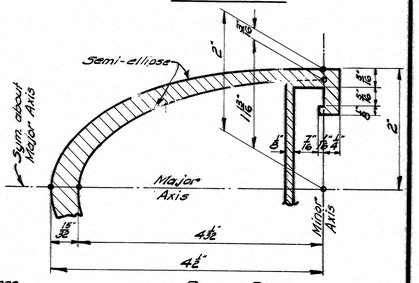
ASTM B26 or B108, Aluminum Assoc. Alloy 43-F or 356-F



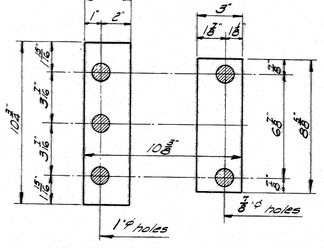
CLAMP BAR



SECTION A-A

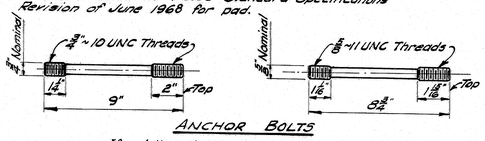


RAIL DETAIL



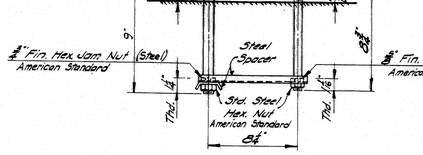
PREFORMED PADS

See Subsection 713.03 Standard Specifications Revision of June 1968 for pad.



ANCHOR BOLTS

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



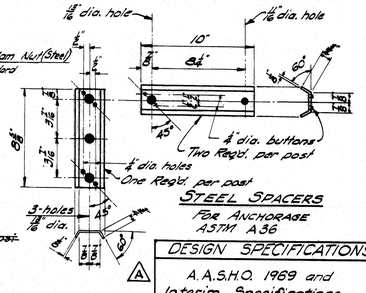
RAIL POST ANCHORAGE

Assembly

NOTE: Anchor Bolts, exposed Hex. Nuts (Amer. Std. Heavy) and washers shall conform to Designation "Stainless Steel Designation ASTM A 307.

Ⓐ ~~*ASTM A 276 Type 304, Ultimate Tensile Strength 100,000psi minimum, Elongation 15% minimum.~~

* See Supplemental Specification.



STEEL SPACERS

For ANCHORAGE
ASTM A36

DESIGN SPECIFICATIONS

A.A.S.H.O. 1969 and Interim Specifications.

MARK	ALTERATIONS
	Changed ASTM B221, to include Alloy 6351-T5 for Rail, Splice & Clamp Bars.
Ⓐ 3-25-70	Changed ASTM Designations A276 & B209 A276 ~~Type 430 to 403~~ (Post Anchorage) B209 - 73 to T4 (Washers) Changed AASHO Design Specifications from 1965 to 1969.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STANDARD DETAILS

(BD 106 - 69)

ALUMINUM RAILING

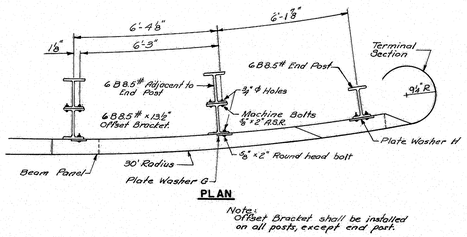
2 - BAR (SEMI-ELLIPSE)
EXTRUDED POST

JANUARY 1969

146-152

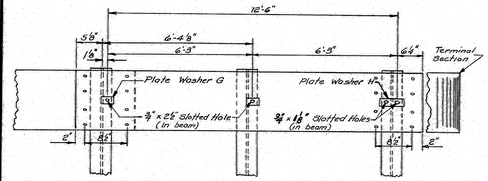
touraine paints TRUFLEX ☆ SILKY ☆ TRIPLE WHITE ☆ RYPLEX

B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	6209	26	32



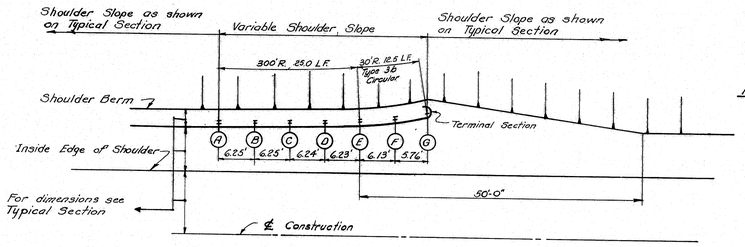
PLAN

Note: Offset Bracket shall be installed on all posts, except end post.



ELEVATION

END BEAM ASSEMBLY-SPACING OF POSTS GUARD RAIL TYPE 3b



Note: Offset in feet from the normal face of the Guard Rail.

Post	Offset
A	0.00'
B	0.06'
C	0.26'
D	0.59'
E	1.04'
F	2.20'
G	4.61'

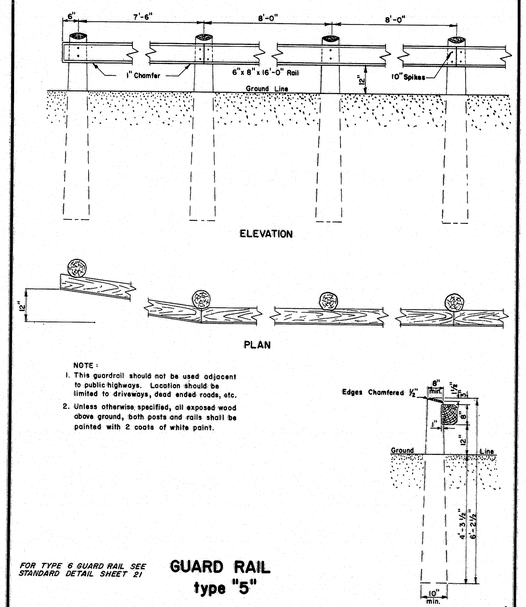
GUARD RAIL END TRANSITION

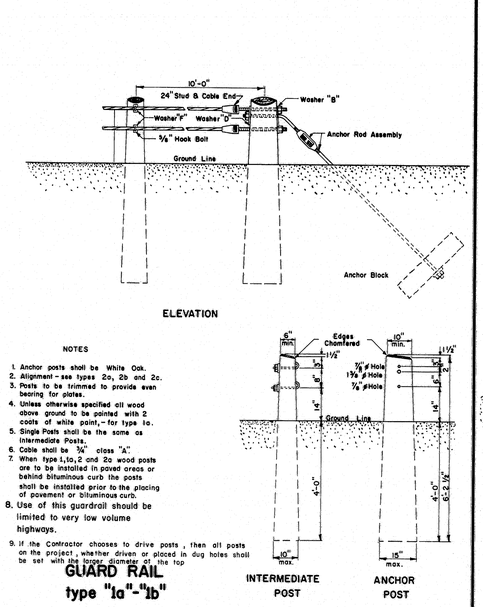
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

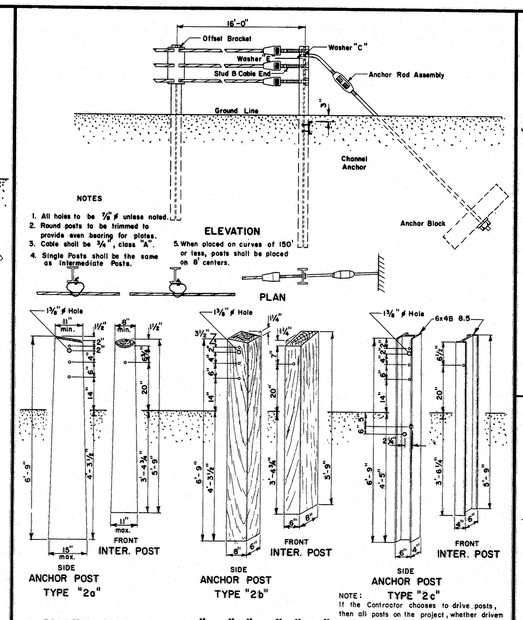
STANDARD DETAILS
(BD 110-69)
GUARD RAIL—TYPE 3b
(FLARED ENDS)

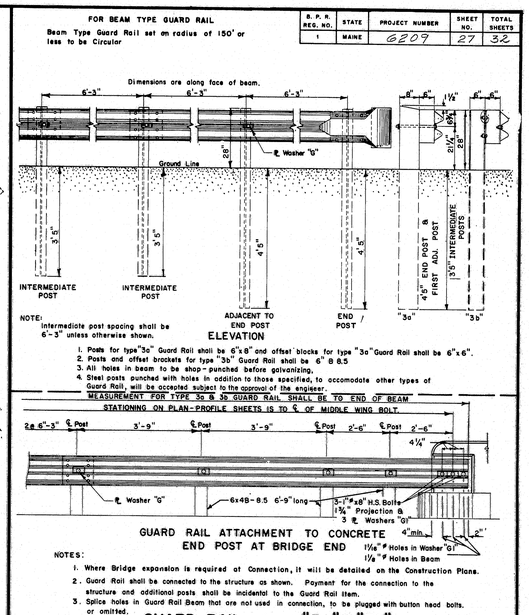
FEBRUARY 1969

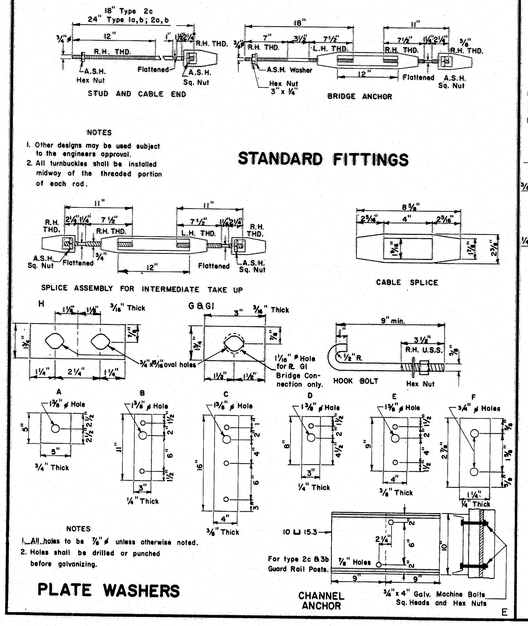
touraine paints TRUFLEX ☆ SILKY ☆ TRIPLE WHITE ☆ RYPLEX

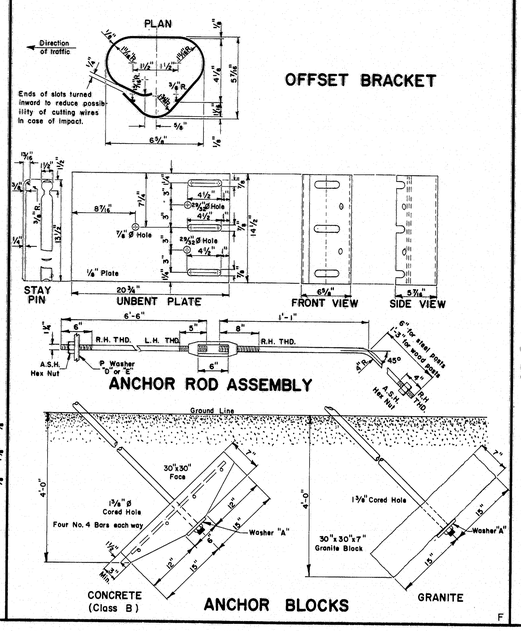


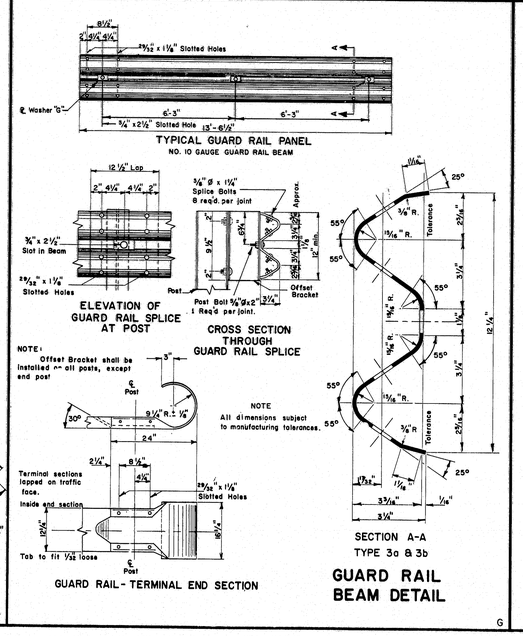


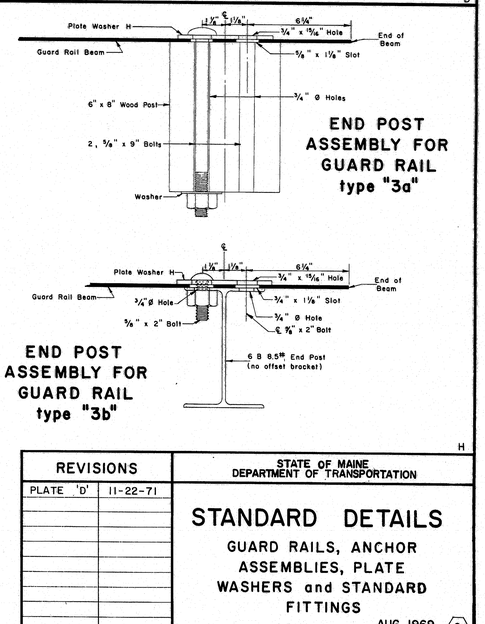












REVISIONS	
PLATE 'D'	11-22-71

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STANDARD DETAILS

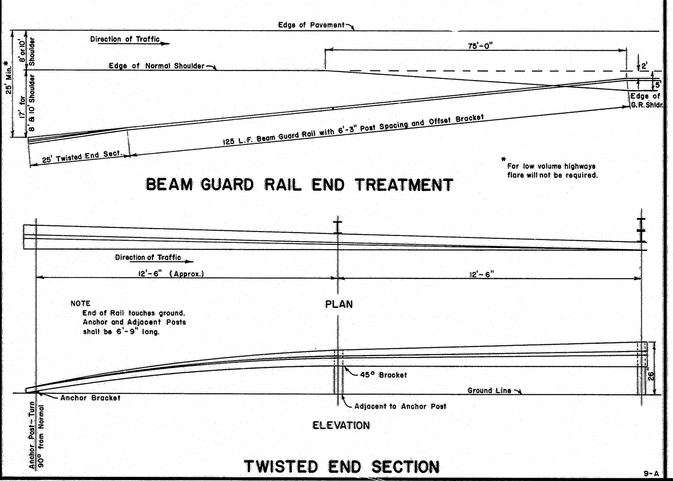
GUARD RAILS, ANCHOR ASSEMBLIES, PLATE WASHERS and STANDARD FITTINGS

AUG. 1969 (6)

146-153

touraine paints TRUFLEX ☆ SILKY ☆ TRIPLE WHITE ☆ RYPLEX

B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	6309	28	32

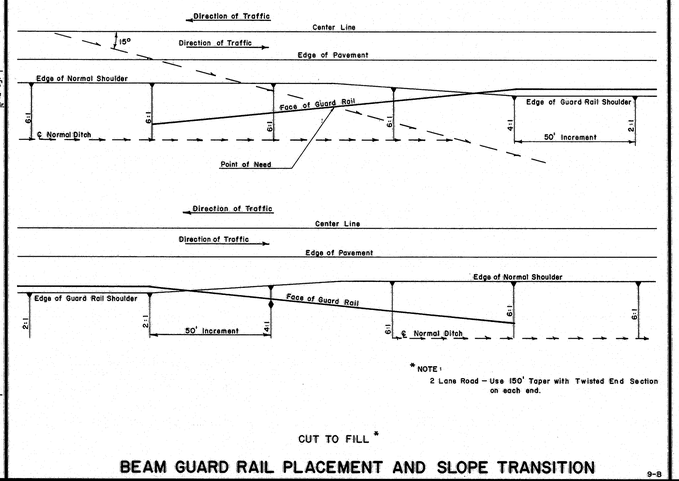


* For low volume highways flare will not be required.

BEAM GUARD RAIL END TREATMENT

TWISTED END SECTION

9-A

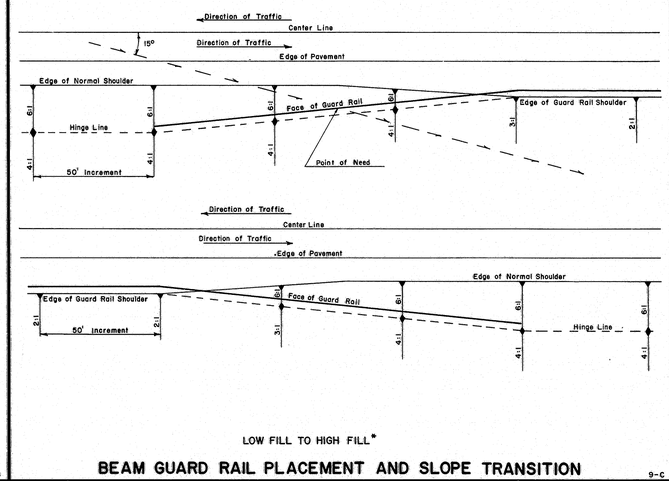


* NOTE:
2 Lane Road – Use 150' Taper with Twisted End Section on each end.

CUT TO FILL *

BEAM GUARD RAIL PLACEMENT AND SLOPE TRANSITION

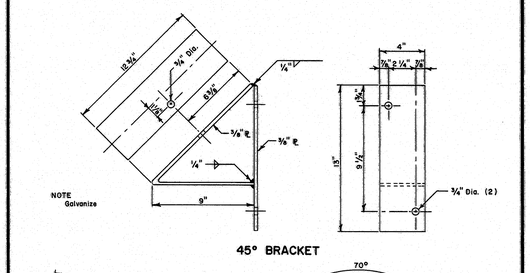
9-B



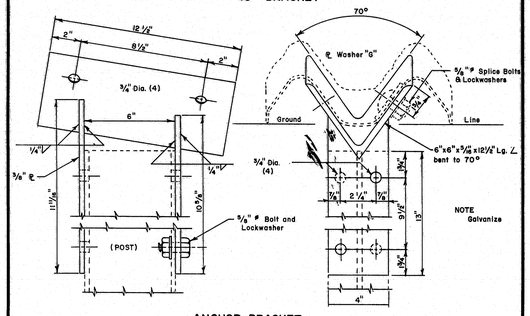
LOW FILL TO HIGH FILL*

BEAM GUARD RAIL PLACEMENT AND SLOPE TRANSITION

9-C



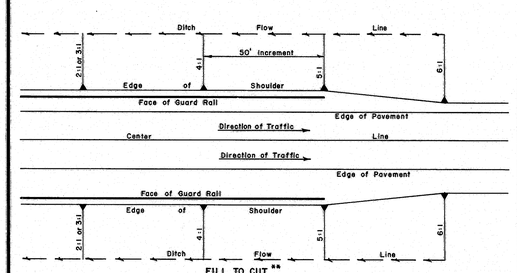
45° BRACKET



ANCHOR BRACKET

TWISTED END SECTION ANCHOR DETAIL

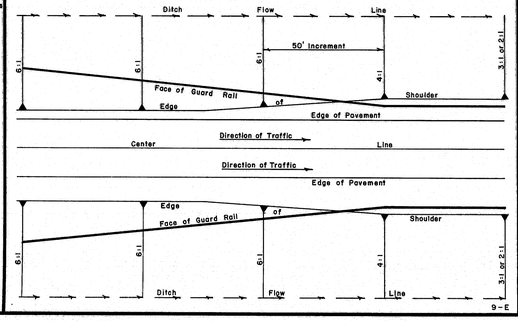
9-D



FILL TO CUT **

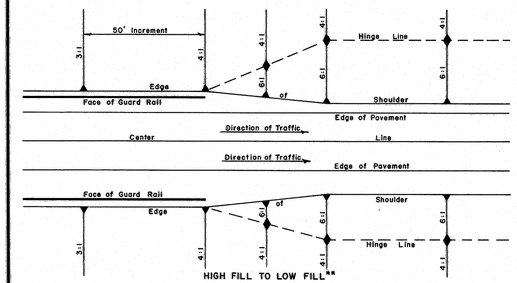
BEAM GUARD RAIL PLACEMENT AND SLOPE TRANSITION

CUT TO FILL **



BEAM GUARD RAIL PLACEMENT AND SLOPE TRANSITION

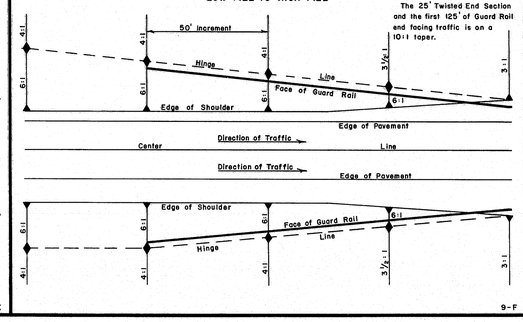
9-E



HIGH FILL TO LOW FILL **

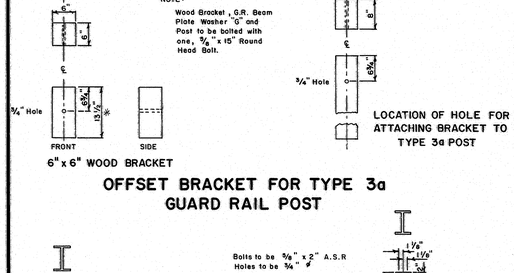
BEAM GUARD RAIL PLACEMENT AND SLOPE TRANSITION

LOW FILL TO HIGH FILL **



** NOTE:
The 25' Twisted End Section and the first 125' of Guard Rail and facing traffic is on a 10:1 taper.

9-F



LOCATION OF HOLE FOR ATTACHING BRACKET TO TYPE 3a POST

9-G

REVISIONS	
Added Plates 9E & 9F	NOV. 1969
PLATE 9G	12-20-71
PLATE 9G	1-19-72

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STANDARD DETAILS

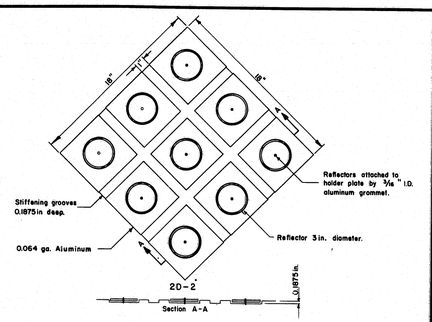
BEAM GUARD RAIL END TREATMENT

AUG. 1969 (9)

146-154 orig

touraine paints TRUFLEX ☆ SILKY ☆ TRIPLE WHITE ☆ RYPLEX

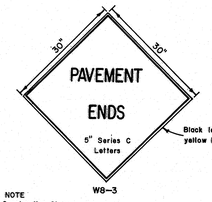
B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	6209	29	32



HAZARD MARKER

NOTE

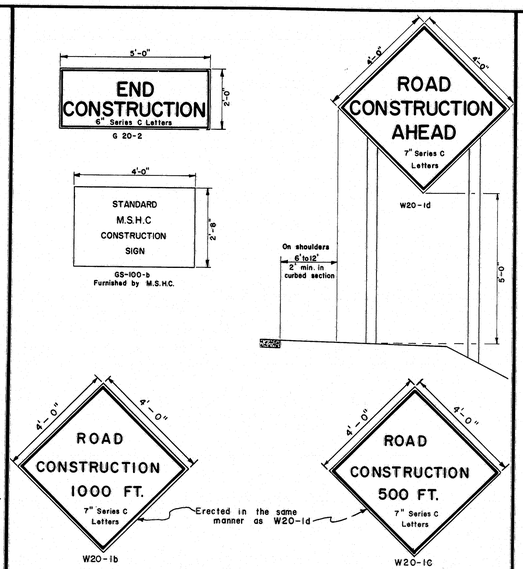
SIGNING IN AN AREA WHERE BLASTING IS NECESSARY SHALL BE PLACED AS OUTLINED IN THE "MANUAL", AND THE PRECAUTIONS OF SUBSECTION 107.12 OF THE STANDARD SPECIFICATIONS SHALL BE OBSERVED.



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, 1/2" Space from sign edge.
   c. 3' x 4' Sign - 1/4" Border, 1/2" Space from sign edge.
   d. 4' x 4' Sign - 1/4" Border, 3/4" Space from sign edge.

A



CONSTRUCTION SIGNS

B

GENERAL NOTES - BARRICADES

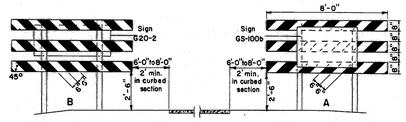
1. Unless otherwise designated, sign designation letters shall refer to the "Manual of Uniform Traffic Control Devices for Streets and Highways," published by the U.S. Department of Transportation, Federal Highway Administration, 1971.
2. White stripes shall be of silver reflective sheeting bonded to 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 3/4" 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

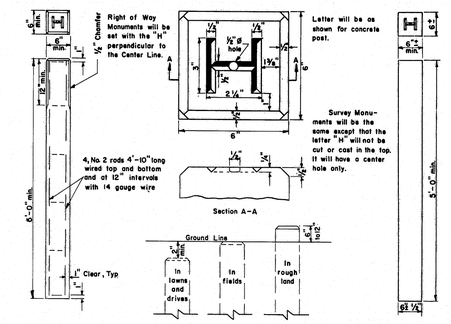
1. Lumber sizes for wing barricades shall be 1" x 8" except posts which shall be 4" x 4" (nominal sizes).
2. Wing barricades will not be required unless specifically called for in the special provisions.
3. Location of signs and barricades will be determined by the Engineer.



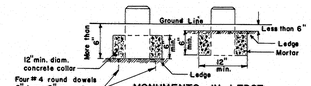
WING BARRICADES

C

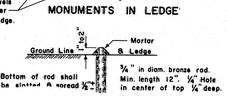
RIGHT OF WAY & SURVEY MONUMENTS



CONCRETE MONUMENT | MONUMENTS IN EARTH | GRANITE MONUMENT



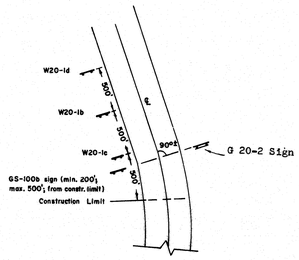
MONUMENTS IN LEDGE

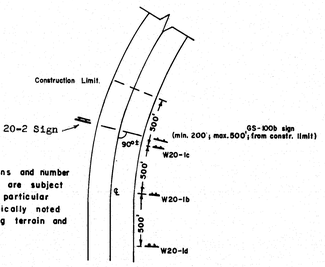


BRONZE PIN MARKERS

D

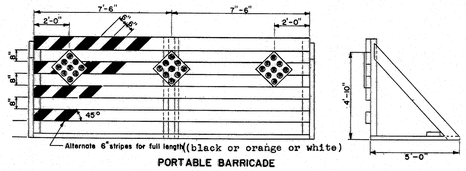
STANDARD SIGN LOCATIONS



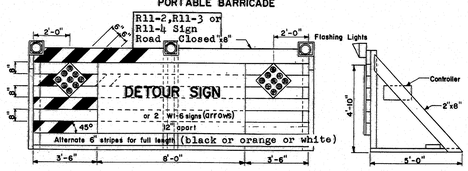


NOTE:
Standard locations and number of signs required are subject to variation on particular projects if specifically noted due to surrounding terrain and land use.

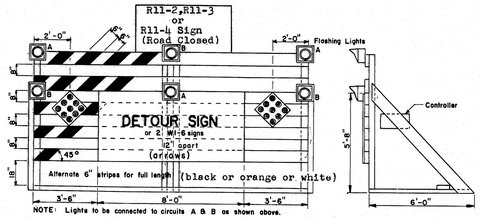
F



PORTABLE BARRICADE



PORTABLE BARRICADE WITH FLASHING LIGHTS (NORMAL SIZE)

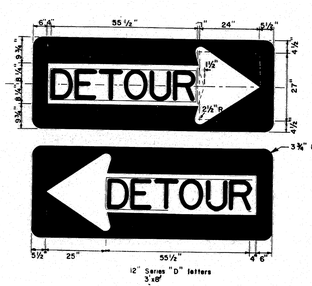


NOTE: Lights to be connected to circuits A & B as shown above.

OVERSIZED PORTABLE BARRICADE WITH FLASHING LIGHTS

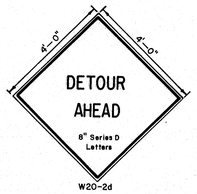
BARRICADES

G

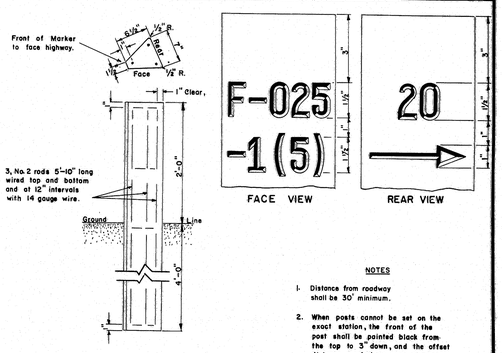


Detachable DETOUR message shall have 1" clearance from letters to edge on all sides.

DETOUR SIGN
M 4-(L)



E



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 pointed 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 & G	12-15-71

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

BARRICADES
WARNING SIGNS
MONUMENTS
PROJECT MARKERS

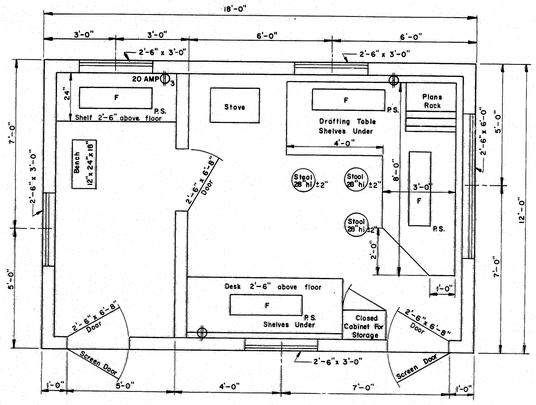
AUG. 1969

(11)

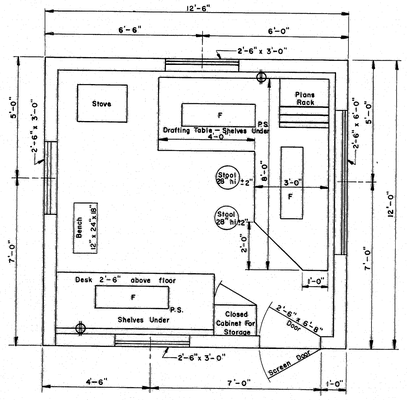
146-155 OK

touraine paints TRUFLEX ☆ SILKY ☆ TRIPLE WHITE ☆ RYPLEX

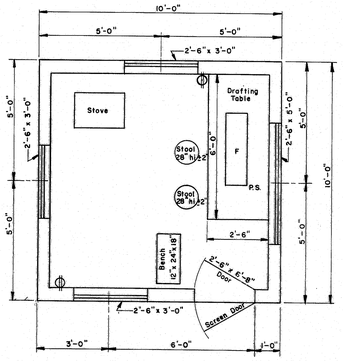
B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	6209	30	32



FLOOR PLAN
TYPE "A"



FLOOR PLAN
TYPE "B"

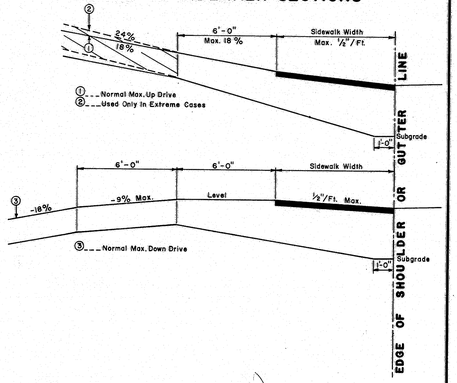


FLOOR PLAN
TYPE "C"

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.
   - 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.

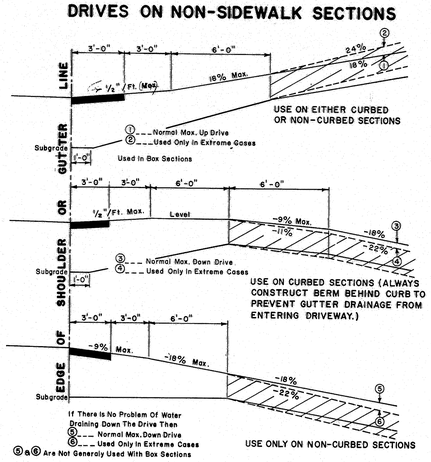
DRIVES ON SIDEWALK SECTIONS



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 abuting 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.
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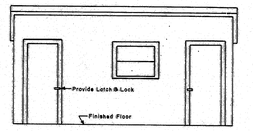
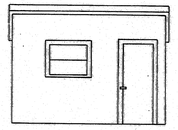
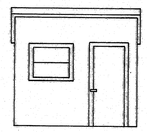


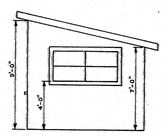
FRONT ELEVATION
TYPE "A"



FRONT ELEVATION
TYPE "B"



FRONT ELEVATION
TYPE "C"



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

REVISIONS	

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STANDARD DETAILS

DRIVEWAY DETAILS
FIELD OFFICES
TESTING LABORATORY

AUG. 1969 (12)

146-156

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