

STATE OF MAINE
STATE HIGHWAY COMMISSION



WEST ETNA ROAD BRIDGE
OVER
INTERSTATE NO. 95
IN THE TOWN OF
ETNA
PENOBSCOT COUNTY
FEDERAL AID PROJECT NO. I-95-7(19)158

F. P. R. STATE	FED. AID	SHEET	TOTAL
NO.	PROJECT NO.	NO.	SHEETS
1	MAINE I-95-7(19)	1	12

SCALES:

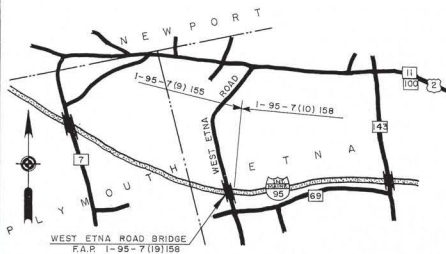
SURVEY PLAN _____ 1" = 50'
SURVEY PROFILE _____ 1" = 50'
HORIZONTAL _____ 1" = 50'
VERTICAL _____ 1" = 5'
CROSS SECTIONS _____ 1" = 5'

INDEX OF SHEETS

1. TITLE SHEET, 1A. STANDARD DETAILS
2. SURVEY
- 3, 4. CROSS SECTIONS
5. SOIL SURVEY
6. GENERAL PLAN & ESTIMATE OF QUANTITIES
7. ABUTMENT NO. 1
8. ABUTMENT NO. 2
9. PIERS
10. STRUCTURAL STEEL
11. STRUCTURAL STEEL DETAILS
12. SUPERSTRUCTURE
13. SUPERSTRUCTURE & ALUMINUM RAIL
14. REINFORCING SCHEDULE & ESTIMATE OF BRIDGE QUANTITIES

TRAFFIC

A.D.T. 1960 _____ 25
A.D.T. 1980 _____ 35
D.H.V. _____ 4
T _____ 11 %
D _____ 60 %
V _____ 50 m.p.h.



LOCATION MAP

APPROX. SCALE - 1 INCH = 1 MILE

APPROVED:
MAINE STATE HIGHWAY COMMISSION

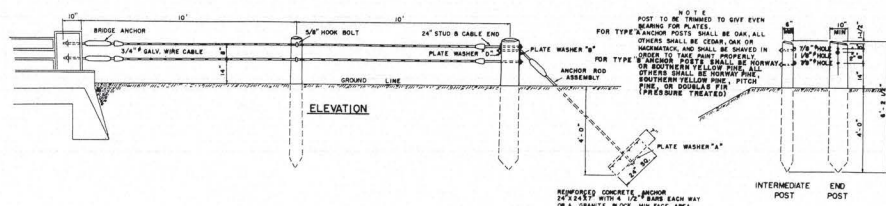
David G. Stinson
CHAIRMAN
Robert Williams
CHIEF ENGINEER

DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS
REGION I

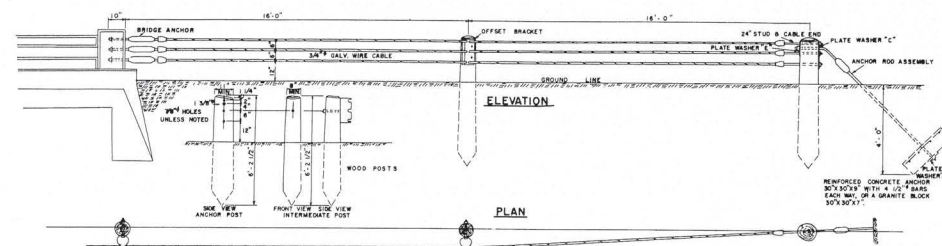
APPROVED:

DISTRICT ENGINEER DATE

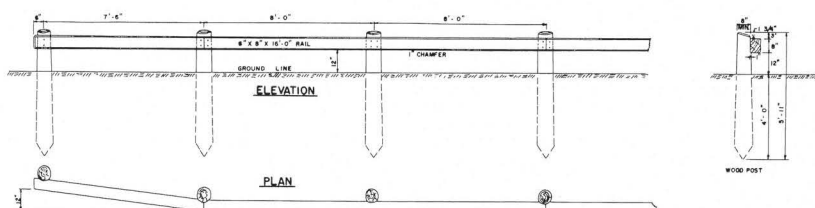




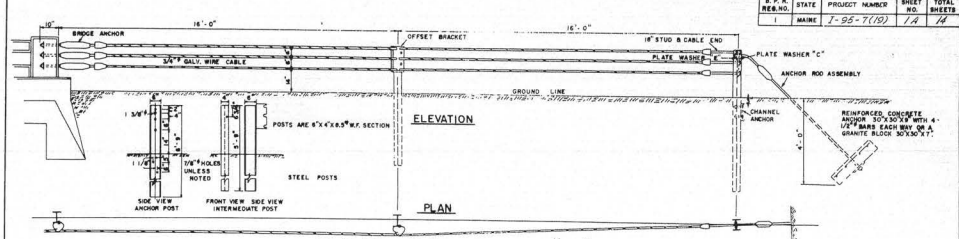
GUARD RAIL TYPE "A" & "B"



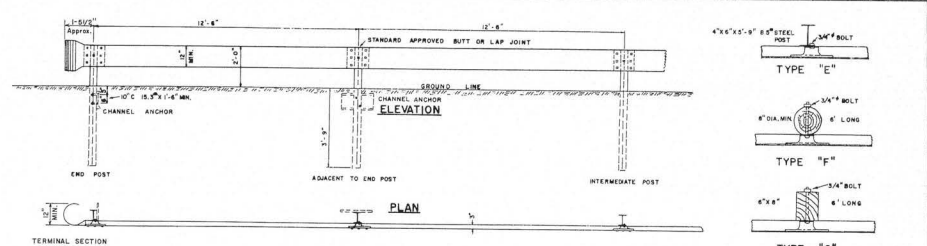
GUARD RAIL TYPE "D"



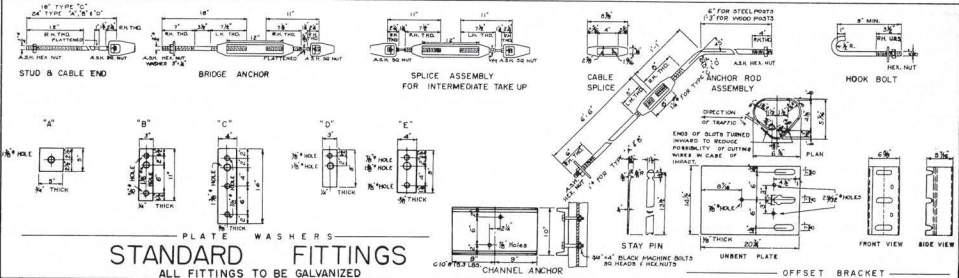
GUARD RAIL TYPE "H"



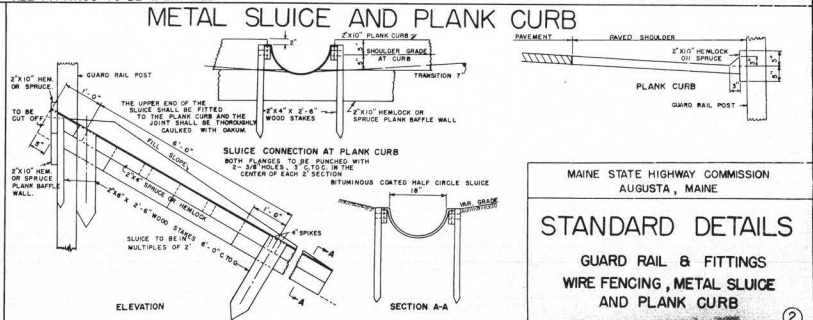
GUARD RAIL TYPE "C"



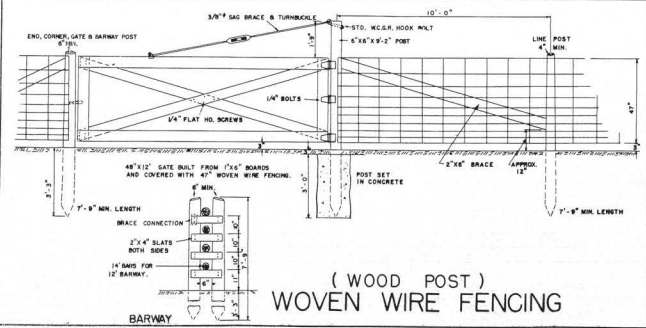
GUARD RAIL TYPE "E", "F" & "G"



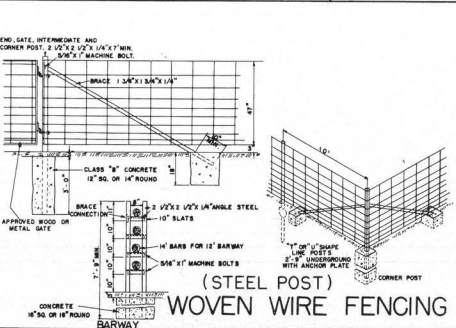
STANDARD FITTINGS
ALL FITTINGS TO BE GALVANIZED



METAL SLUICE AND PLANK CURB



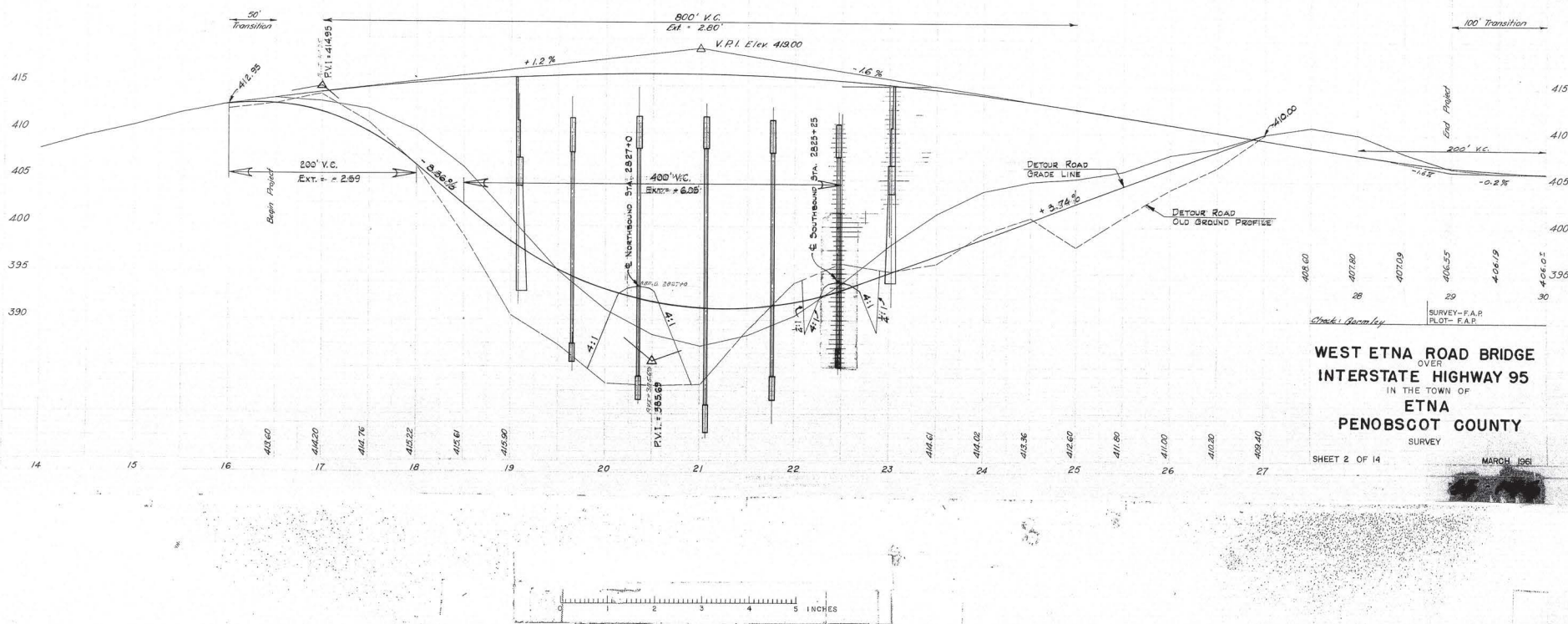
(WOOD POST)
WOVEN WIRE FENCING



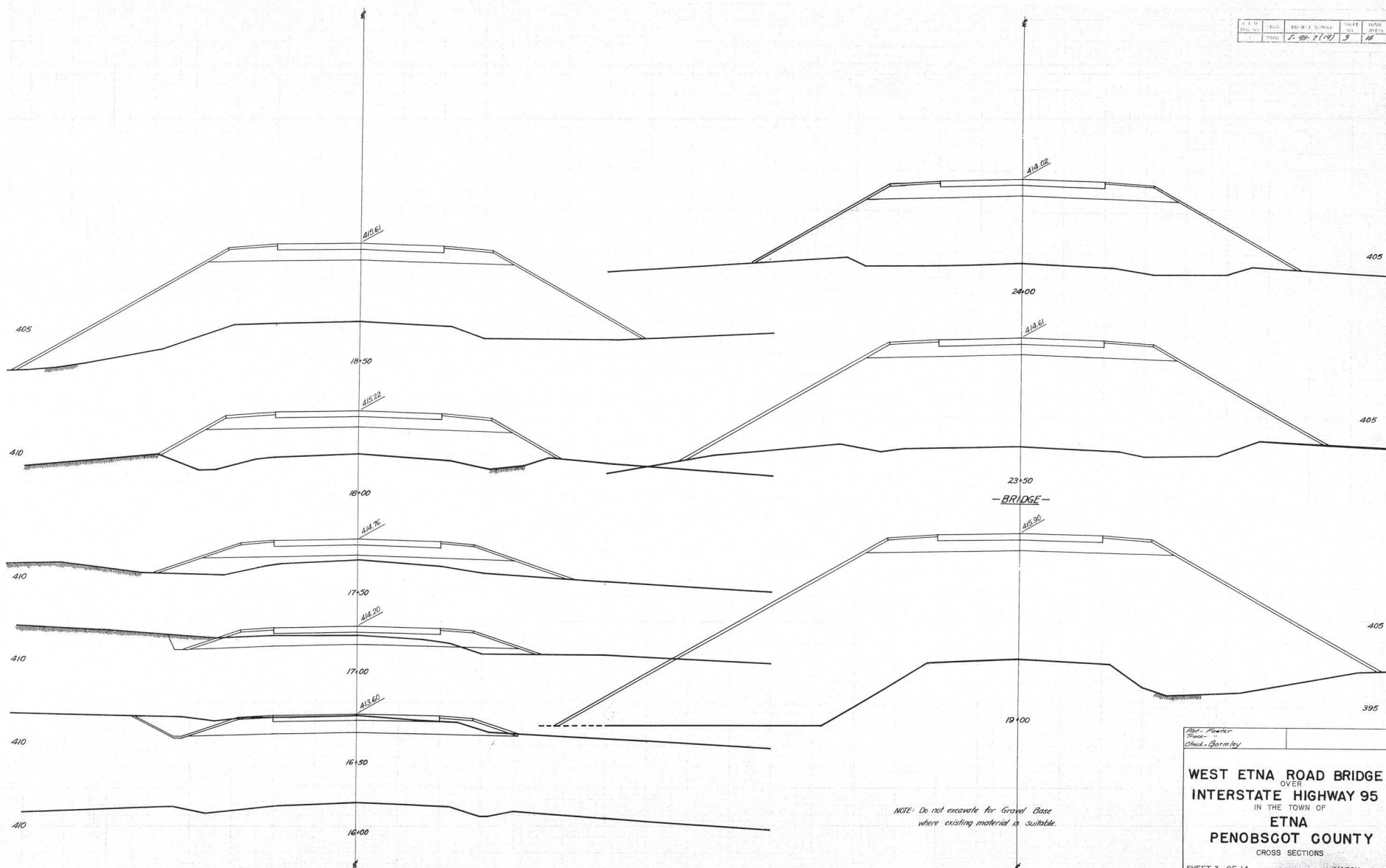
(STEEL POST)
WOVEN WIRE FENCING

MAINE STATE HIGHWAY COMMISSION
AUGUSTA, MAINE
STANDARD DETAILS
GUARD RAIL & FITTINGS
WIRE FENCING, METAL SLUICE
AND PLANK CURB



[illegible]

DATE	DESIGN	PROJECT	SHEET	NO.
12-28-77	11-10	3	14	

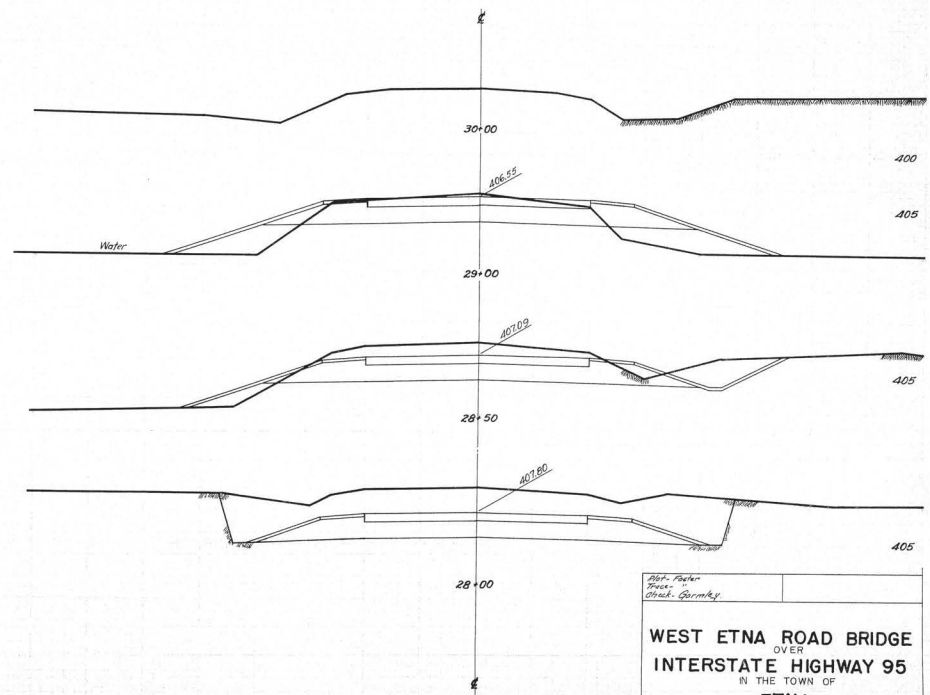
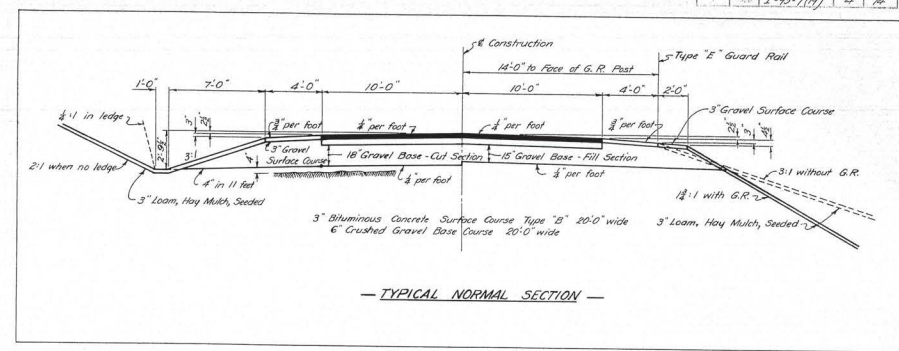
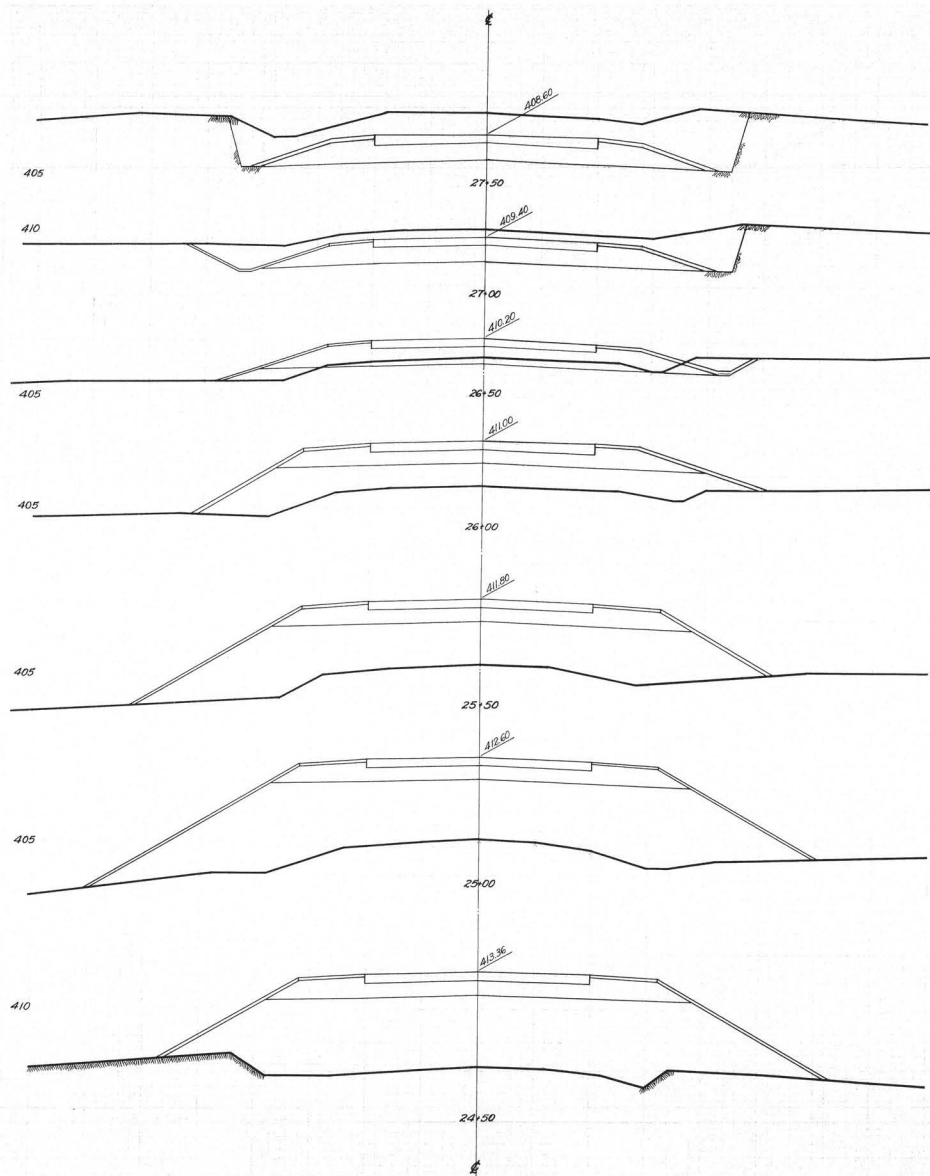


West - Etna
Road -
Check - Sperry

WEST ETNA ROAD BRIDGE
OVER
INTERSTATE HIGHWAY 95
IN THE TOWN OF
ETNA
PENOBSCOT COUNTY
CROSS SECTIONS

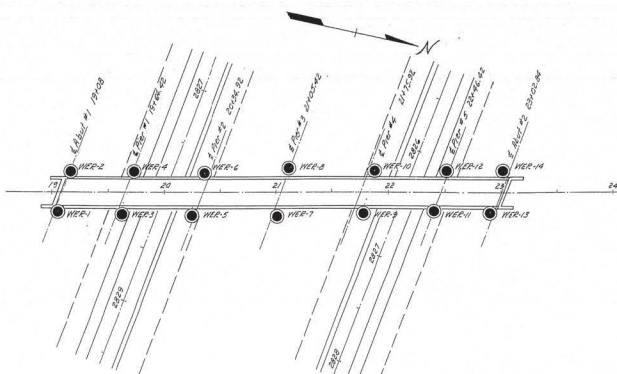
SHEET 3 OF 14 MARCH 1961



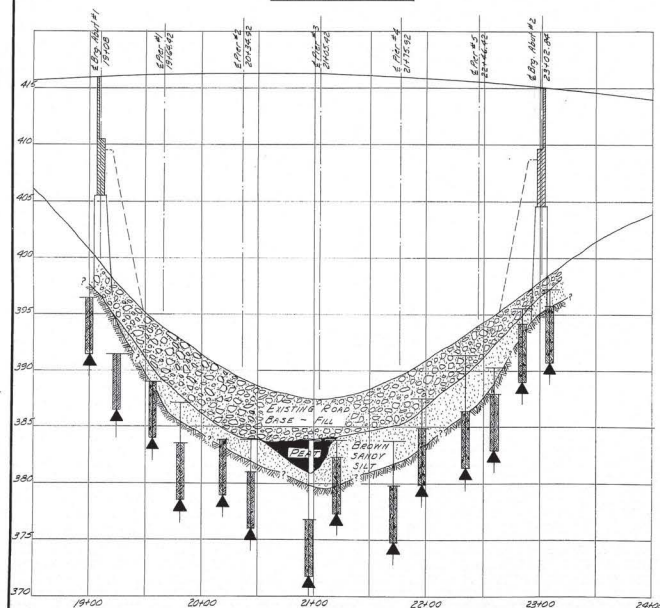


West Etna Road Bridge
 Over
 Interstate Highway 95
 In the Town of
 Etna
 Penobscot County
 Cross Sections
 SHEET 4 OF 14
 MARCH 1961



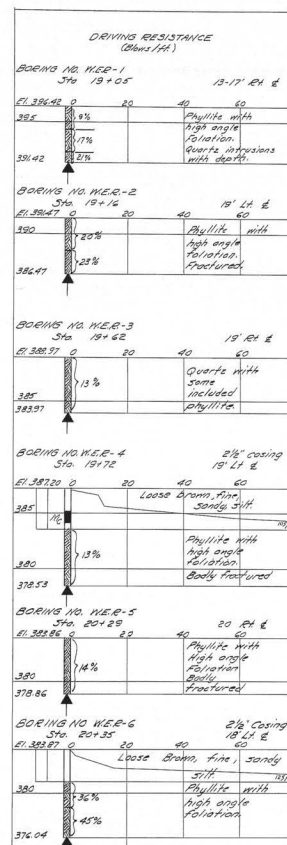


BORING PLAN



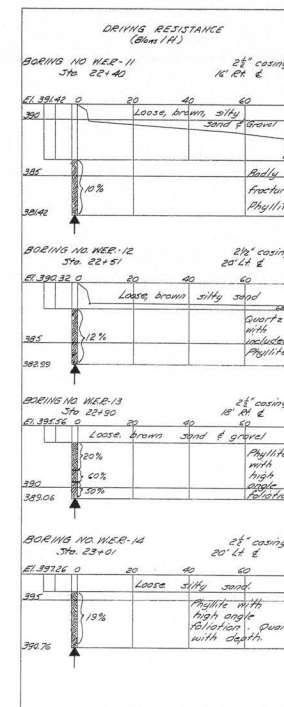
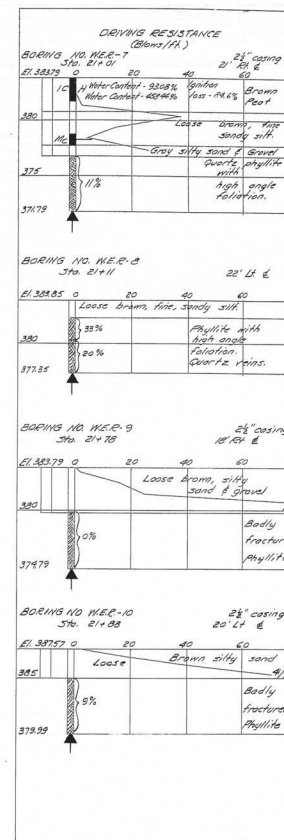
PROFILE

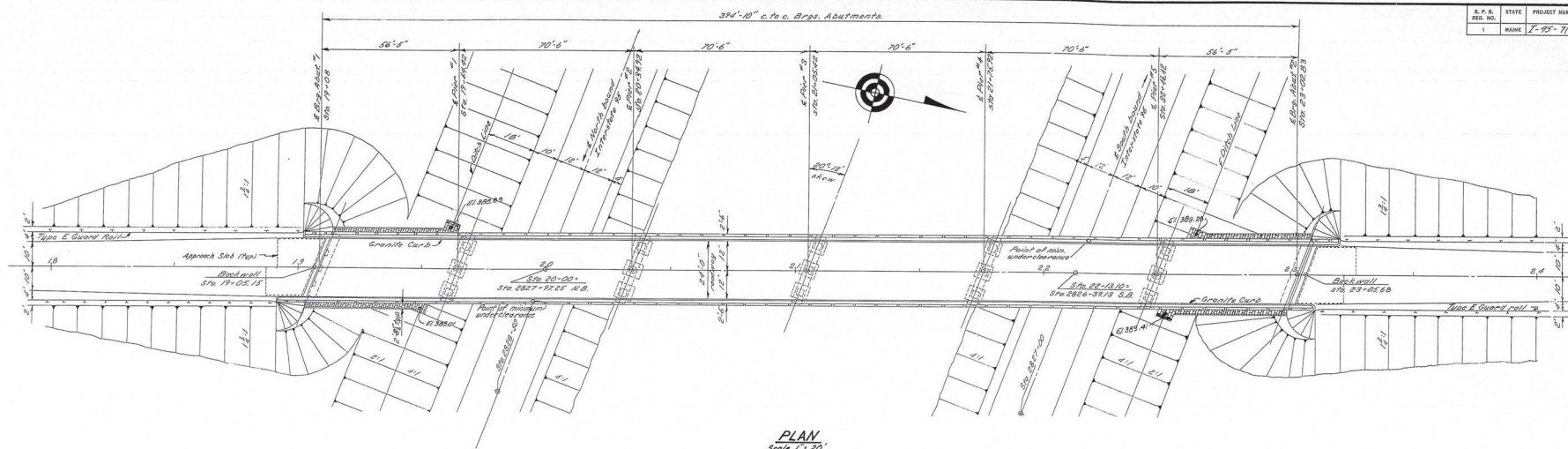
Scales 1"=50' horiz. 1/2"=5' vert.



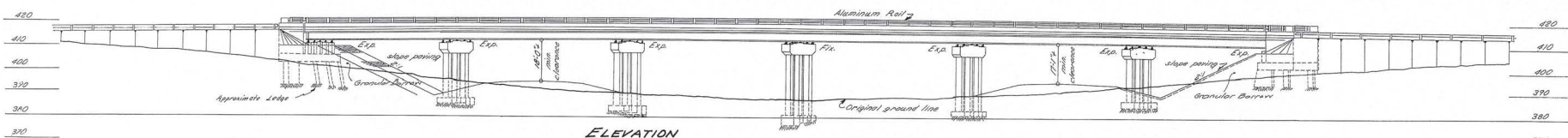
BORING NOTES:-

1. Number of blows of 275 lb hammer falling 18" required to drive extra heavy casing one foot.
2. Location and designation of dry samples taken in 2" dia. deep, seamless tubing.
3. Unsuccessful attempts to secure dry sample indicated thus followed by type of sample.
4. Percent recovery of rock core by diamond bit.
5. Bottom of boring.

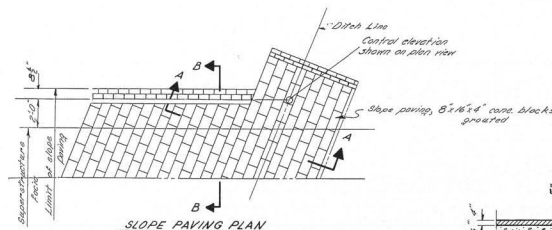




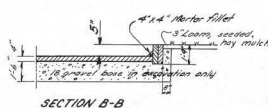
PLAN
 Scale 1"=20'



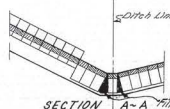
ELEVATION
 Scale: 1"=20'



SLOPE PAVING PLAN



SECTION B-B



SLOPE PAVING DETAILS

Note "A"
 If the material adjacent to the ditch is not free draining, the gravel base under the slope paving shall be drained as directed by the Engineer.
 Payment for the excavation required for this drainage will be made under Item 203-9, Earth Excavation, and if ledge is encountered, Item 203-10, Rock Excavation. Payment for the materials required for this drainage will be made under the appropriate items of the contract unit prices.

Payment for excavation for base of slope paving to be made under Item 203-9, Earth Excavation. The 18" gravel base under the slope paving may be replaced or omitted at the option of the Engineer. The existing material is suitable.

ESTIMATE OF QUANTITIES	
DESCRIPTION	QUANTITY
Earth Excavation	985 cu
Rock Excavation	650 cu
Structural Earth Excavation, Abutments & Retaining Walls	145 cu
Structural Rock Excavation, Abutments & Retaining Walls	18 cu
Structural Earth Excavation, Piers	350 cu
Structural Rock Excavation, Piers	70 cu
Common Borings	5000 cu
Gravel Base Course	1185 cu
Gravel Base Course, In Place Measurement	1830 cu
Crushed Gravel Base Course, In Place Measurement	340 cu
Gravel Surface Course	75 cu
Bituminous Concrete Surface Course, Type "B"	428 tons
Portland Cement Concrete Abutments & Retaining Walls	144 cu
Portland Cement Concrete Piers	185 cu
Portland Cement Concrete Roadway & Sidewalk Slabs on Steel Bridges	380 cu
Portland Cement	218 bags
Structural Steel, Fabrication & Delivery	33,500 lbs
Structural Steel, Erection	33,500 lbs
Reinforcing Steel, Delivery	125,840 lbs
Reinforcing Steel, Placement	125,840 lbs
Aluminum Rail	820 lf
Membrane Waterproofing	1055 sq
Slope Paving	390 sq
Bridge Granite Curbs	620 lf
Guard Rail, Type "S"	750 lf
Guard Rail, Type "L", Terminal Section	5 each
Loam Borings	290 cu
Gravel, Method No. 2	35 tons
Hay Mulch	690 gals
Asphalt Mastic Binder	65 sq
Epoxy Resin Surface Sealant	65 sq

DESIGN SPECIFICATIONS

A.A.S.H.O. - 1957

LOADING

H20-44

TRAFFIC DATA

ADT 1960 25

ADT 1980 35

DHV 4

D 11%

V 60%

50 mph

CONTRACT SPECIFICATIONS

State of Maine, State Highway Commission,

Standard Specifications, Revision of Nov. 1954

CONCRETE CLASSIFICATION - All concrete Class "A"

DESIGN - F.R. Bennett

TRACE - L.H.S.

CHECK - J.H.S.

STATE HIGHWAY COMMISSION

BRIDGE DIVISION

WEST ETNA ROAD BRIDGE

OVER

INTERSTATE HIGHWAY 95

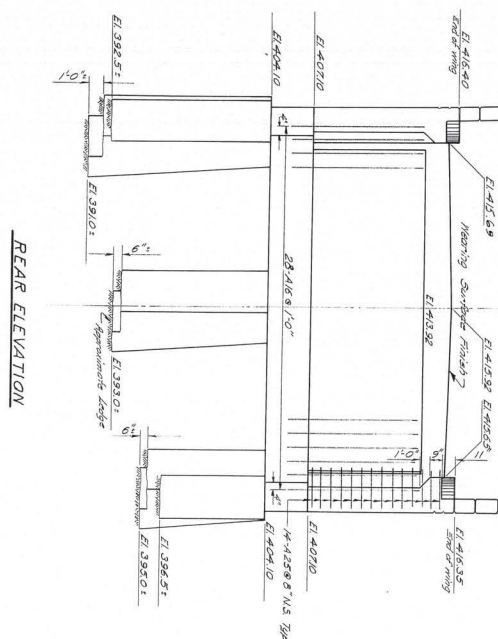
IN THE TOWN OF

ETNA

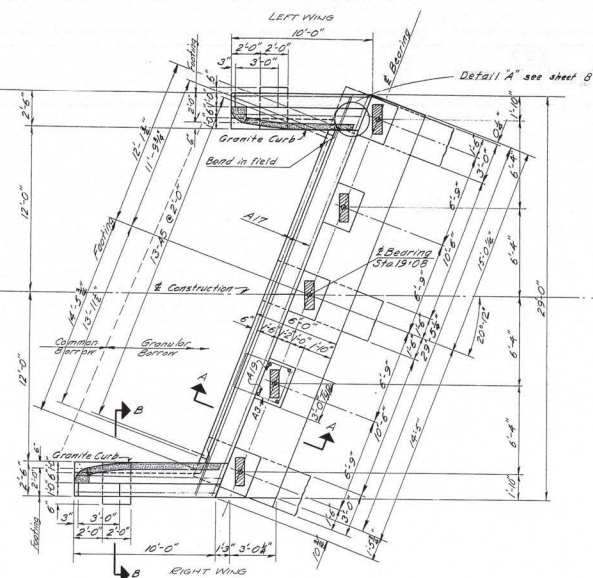
PENOBSCOT COUNTY

GENERAL PLAN

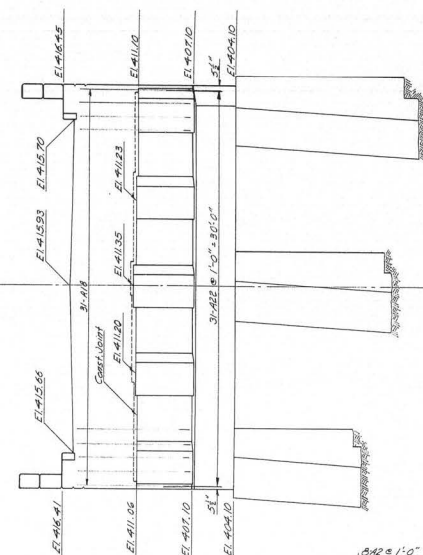
SHEET 6 OF 14 AUGUSTA, MAINE, MARCH 1961



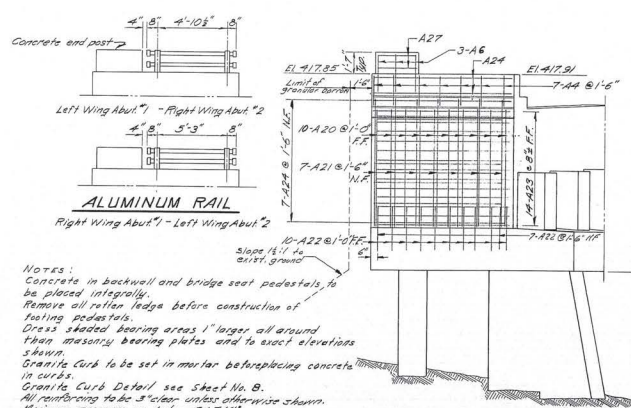
REAR ELEVATION



PLAN



FRONT ELEVATION



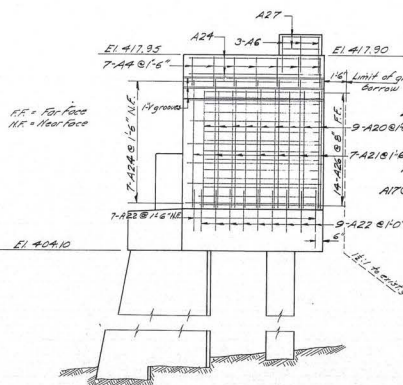
Notes:

- Concrete in backwall and bridge seat pedestals to be placed integrally.
- Remove all rotten ledge before construction of footing pedestals.
- Dress seated bearing areas 1" larger all around than masonry bearing plates and to exact elevations shown.
- Granite Curb to be set in marlar before placing concrete in curbs.
- Granite Curb Detail see Sheet No. 8.
- All reinforcing to be 5" clear unless otherwise shown.
- Maximum pressure on ledge 8,077 PSI.
- For keyway detail, see sheet no. 8

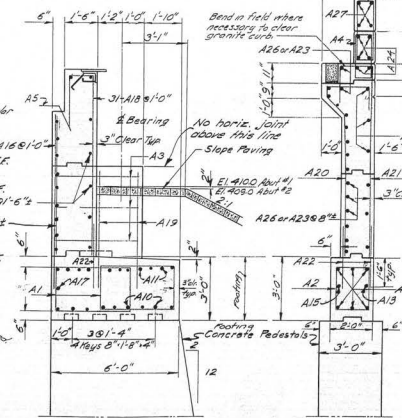
Side Elevation

Front of backwall and top, sides and front of bridge seats, down to 408.0 for Abutment #1 and Elev. 408.0 for Abutment #2 with Epoxy Resin Surface Sealant

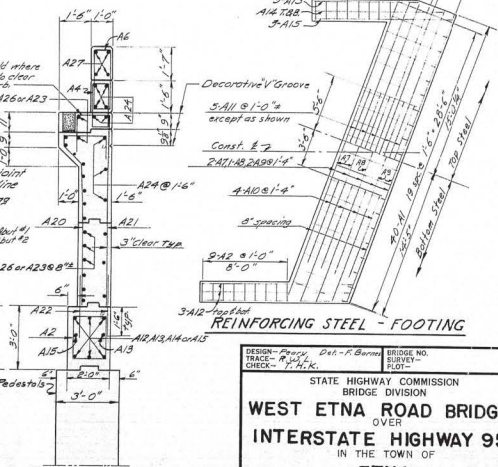
SIDE ELEVATION - RIGHT WING



SIDE ELEVATION - LEFT WING



SECTION A-A



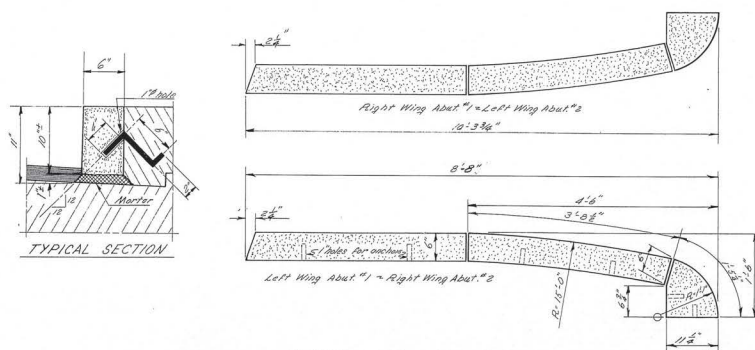
REINFORCING STEEL - FOOTING

DESIGN- *Permy* DIST- *F. Barnes* BRIDGE NO.
TRACE- *A. J. L.* SURVEY-
CHECK- *F. H. K.* PLOT-

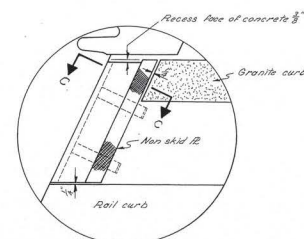
STATE HIGHWAY COMMISSION
BRIDGE DIVISION

WEST ETNA ROAD BRIDGE
OVER
INTERSTATE HIGHWAY 95
IN THE TOWN OF
ETNA
PENOBSCOT COUNTY
ABUTMENT NO. 1

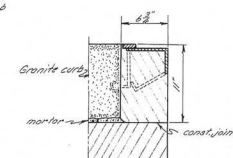
FRONT ELEVATION



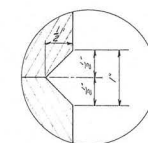
GRANITE BRIDGE CURB DETAILS
All dimensions typical



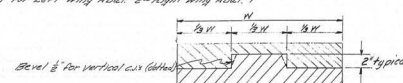
DETAIL "A"
Right wing Abut. #2 - Left wing Abut. #1
Opposite hand for Left wing Abut. #2 - Right wing Abut. #1



SECTION C-C



"V" GROOVE DETAIL (typical)



TYPICAL KEY DETAIL

DESIGN—*Frederick C. F. Barnes* BRIDGE NO.
TRACE—*L.M.C.* SURVEY—
CHECK—*T.H.K.* P.O.T.

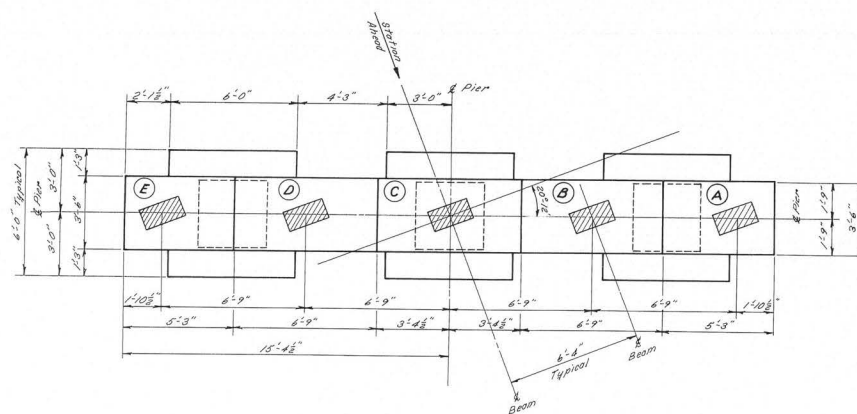
STATE HIGHWAY COMMISSION
BRIDGE DIVISION

WEST ETNA ROAD BRIDGE
OVER
INTERSTATE HIGHWAY 95
IN THE TOWN OF
ETNA
PENOBSCOT COUNTY
ABUTMENT NO. 2

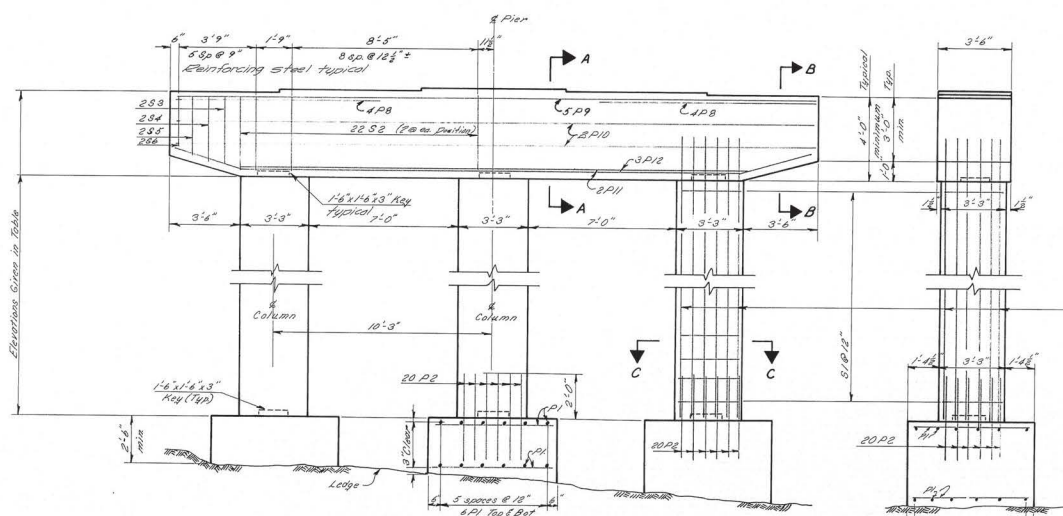
SHEET 8 OF 14 AUGUSTA, MAINE, MARCH 1961

SHEET 8 OF 14 AUGUSTA, MAINE, MARCH 196



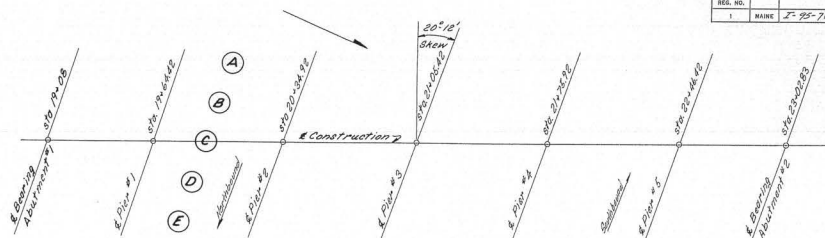


PLAN-ALL PIERS



ELEVATION ALL PIERS

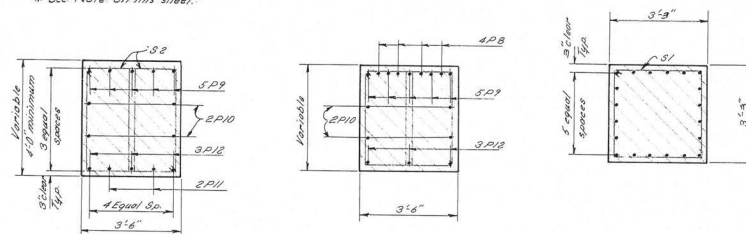
Piers are symmetrical about both their longitudinal and transverse center lines.
(except for bearing areas)



GENERAL LAYOUT

Pier Number	Top of Footing Elev.	Bottom of Cap Elev.	Bearing Area Elevations				
			A	B	C	D	E
Pier #1	387.50	407.23	411.25	411.36	411.50	411.57	412.3
Pier #2	384.00	407.34	411.34	411.67	411.60	411.87	411.34
Pier #3	381.00	407.26	411.26	411.40	411.53	411.41	411.28
Pier #4	385.00	407.01	411.01	411.15	411.89	411.77	411.05
Pier #5	388.00	406.59	410.59	410.74	410.89	410.72	410.44

* See Note on this sheet.



SECTION A-A

SECTION B-B

SECTION C-C

Notes:
Dress shaded bearing areas to exact elevation shown and one inch larger all around than the required masonry plate.
(See sheet #11 for size of masonry plate.

Reinforcing steel in top of cap to clear anchor bolts.

All weathered and or broken ledge to be removed before any footing concrete is placed.

Maximum Footing Pressure = 8 tons/sq. ft.

Note: Piers #2, #3 and #4 only.

However, the top of the footing shall not be less than 1'-0" from the surface of the final ground elevation of the pier in question.

In the case of overbreakage of ledge no payment will be made for rock excavation, concrete and cement of depths more than 6" below the elevation of the bottom of any column footing as previously determined by the Engineer.

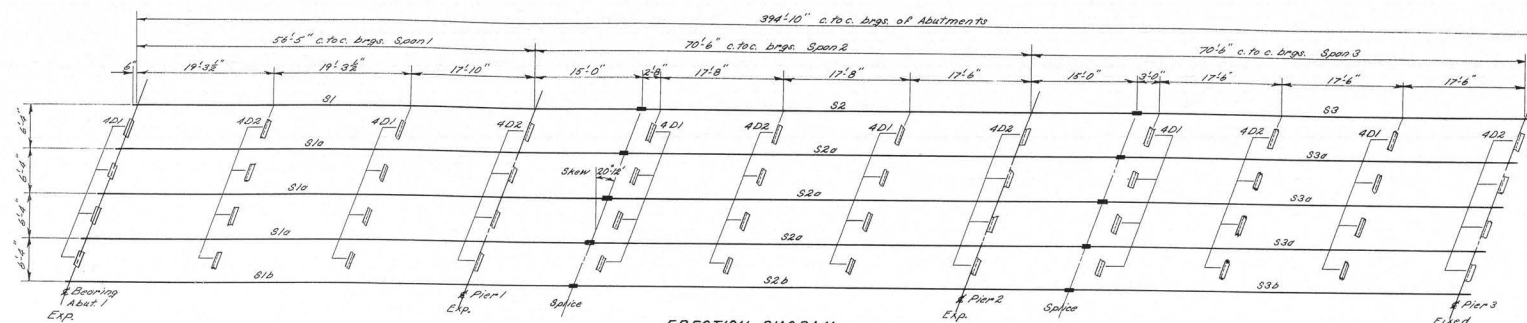
DESIGN - <i>F.H.K.</i>	BRIDGE NO.
TRACE - <i>L.M.D.</i>	SURVEY -
CHECK - <i>W.D.</i>	<i>NOT</i>

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

WEST ETNA ROAD BRIDGE
OVER
INTERSTATE HIGHWAY 95
IN THE TOWN OF
ETNA
PENOBSCOT COUNTY
PIERS

SHEET 9 of 14 AUGUSTA, MAINE MARCH, 1961

S. P. S. DES. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	F-95-7(10)	10	16



ERECTION DIAGRAM

DI-16 WF 36 dimensions to E of beams
DE-15E 339 dimensions to back of channels
394'-10" c.to c. brgs. of Abutments

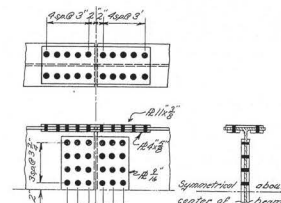
SPECIFICATIONS

Materials: Structural steel shall conform to the latest revised Specification for bridges and buildings of the A.S.T.M. Designation A-7.

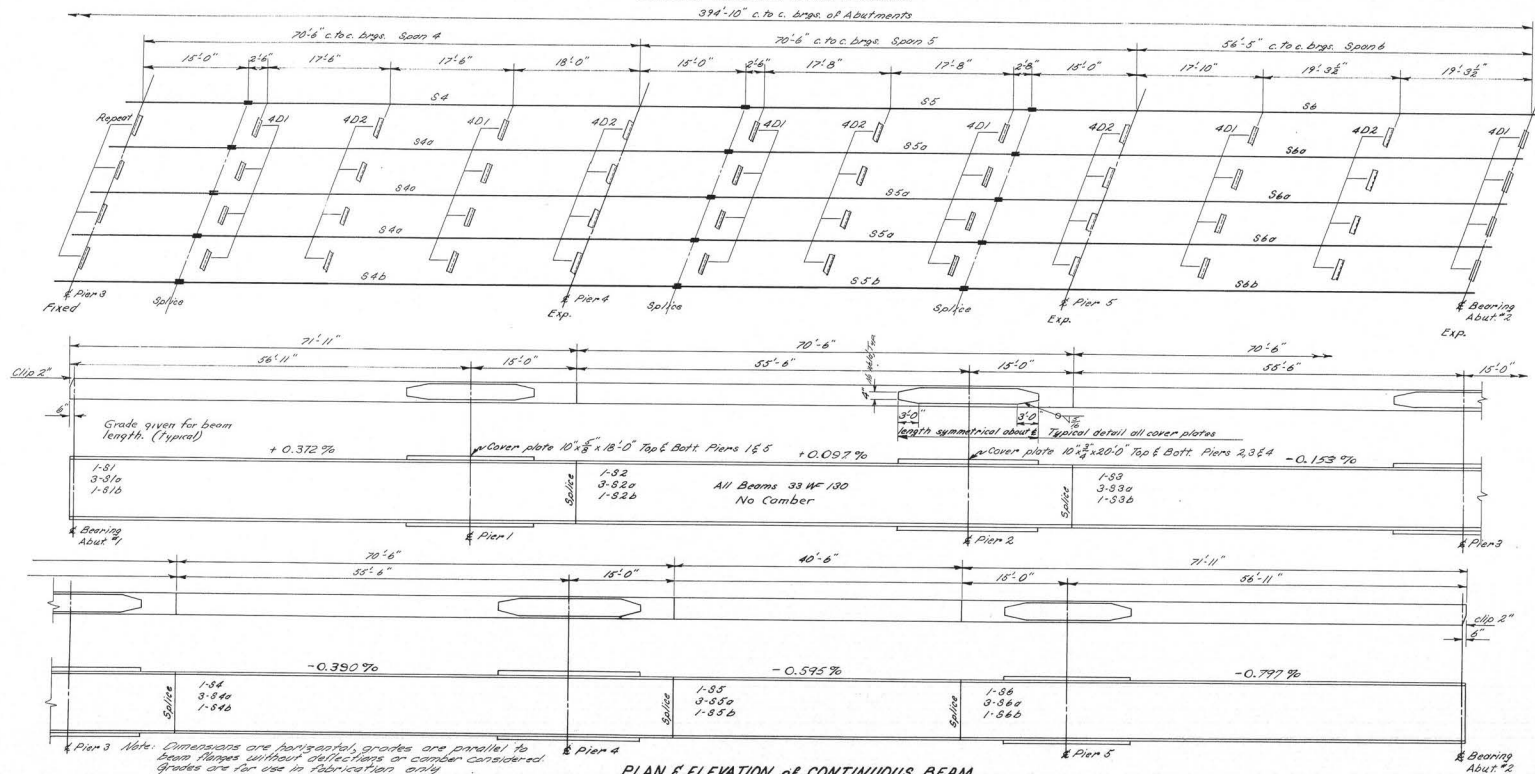
Design: A.A.S.H.O. 1957 and revisions.

Fabrication & Erection: State of Maine, Standard Specifications Highways and Bridges, Revision of January 1956.

Field Connections: 5/8" rivets or 5/8" High Tensile strength bolts, holes 1/8" dia.



TYPICAL DETAIL OF BEAM SPLICE



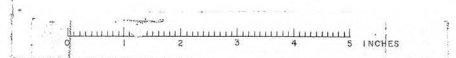
PLAN & ELEVATION OF CONTINUOUS BEAM

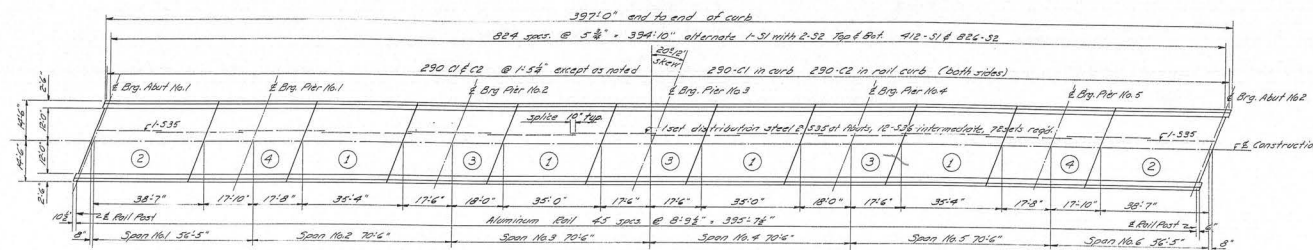
DESIGN - J. H. C. *Per. Gormley* BRIDGE NO. *100*
TRACE - *100* SURVEY - *100*
CHECK - *100* PLOT - *100*

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

WEST ETNA ROAD BRIDGE
OVER
INTERSTATE HIGHWAY 95
IN THE TOWN OF
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PENOBSCOT COUNTY
STRUCTURAL STEEL

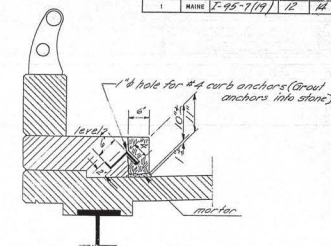
SHEET 10 OF 14 AUGUSTA, MAINE MARCH 1961



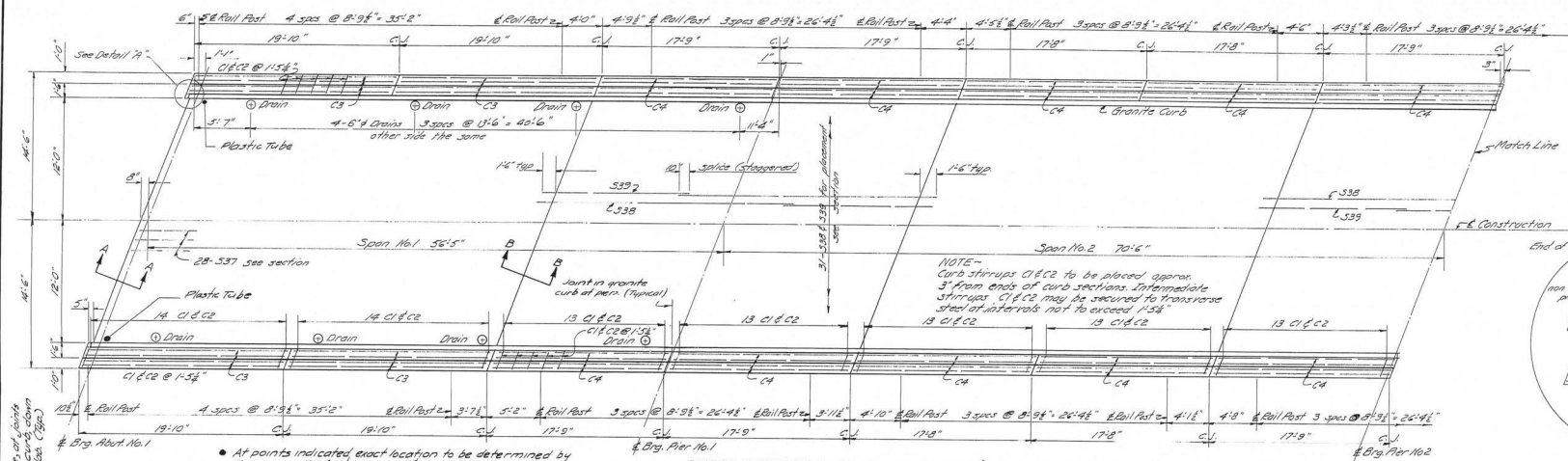


LAYOUT PLAN

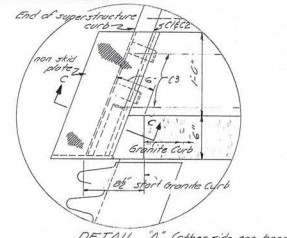
○ CONCRETE PLACING SEQUENCE: All panels ○ must be placed before starting panels ○ etc.



GRANITE CURB DETAIL
Granite curb anchors to be spaced 210" c to c. maximum and 1/2" maximum from end of stone. Minimum of two anchors per stone. Granite shall conform to Supplemental Specifications Section 301 Granite Bridge Curb.



SUPERSTRUCTURE PLAN - SPANS 1 & 2
Rotate 180° for Spans 3 & 4



DETAIL 'A' (other side opp hand)



DETAIL 'B'

DESIGN: T. M. M. DETAIL: T. M. M. BRIDGE NO. 1-95-7(19) SURV. NO. 1-95-7(19) TRACE: F. BARRIS CHECK: G. BARRIS

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

WEST ETNA ROAD BRIDGE

OVER

INTERSTATE HIGHWAY 95

IN THE TOWN OF

ETNA

PENOBSCOT COUNTY

SUPERSTRUCTURE

SHEET 12 OF 14 AUGUSTA, MAINE MARCH, 1961

43-156

43-156

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43-156

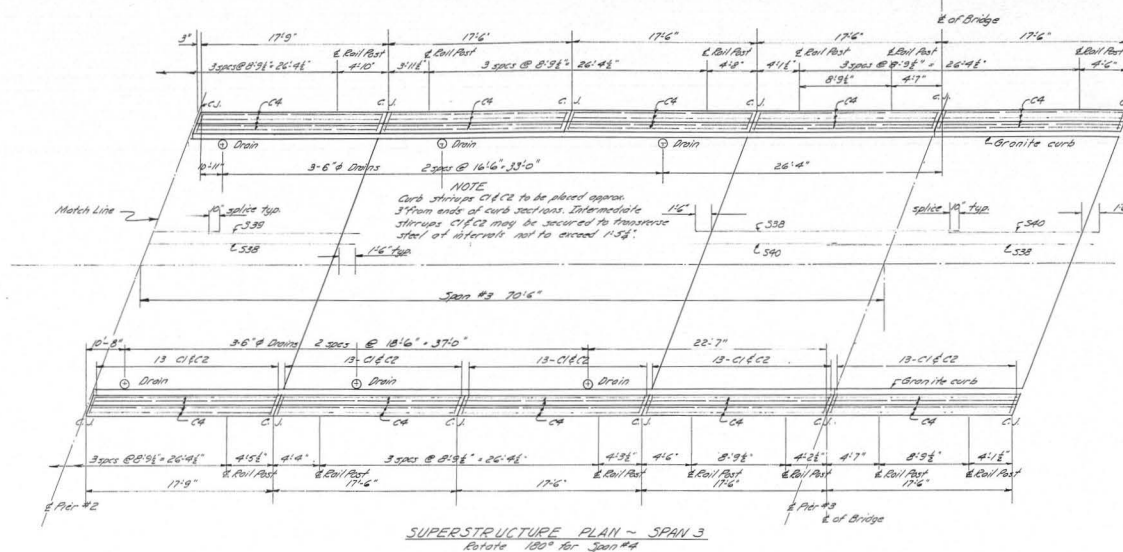
43-156

43-156

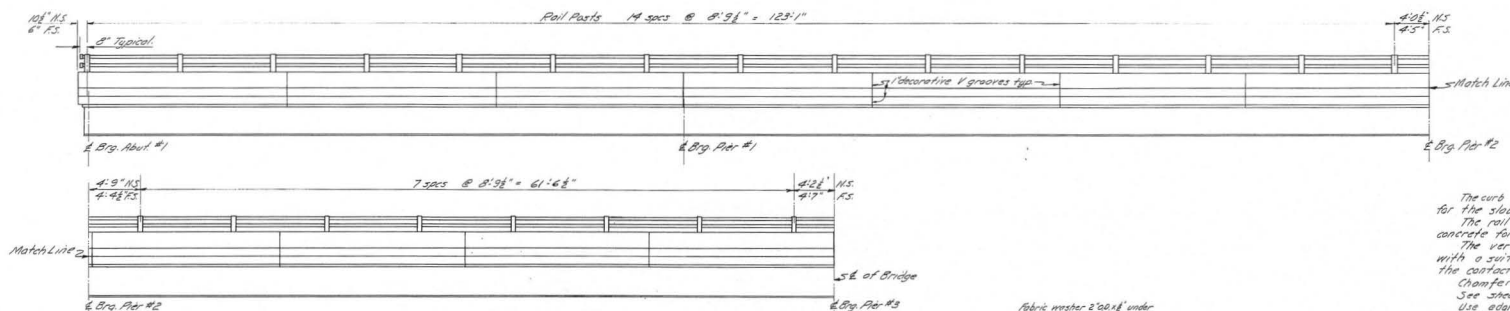
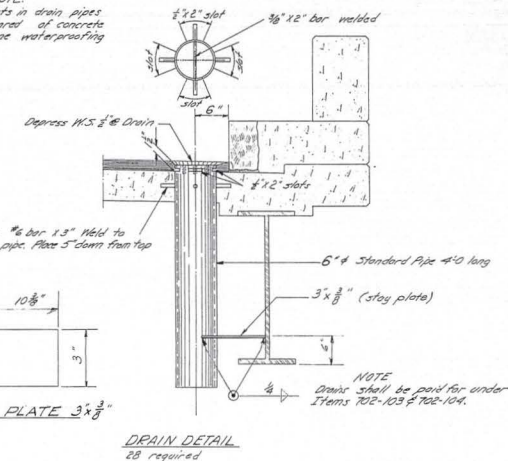
43-156

43-156

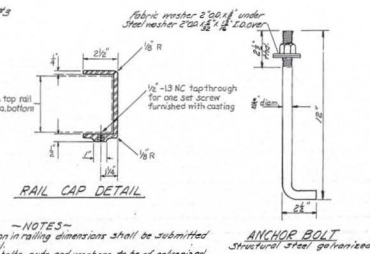
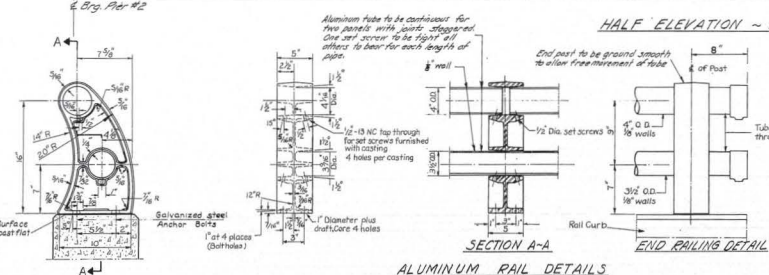
43-156



NOTE
1/2"x1/2" slots in drain pipes must be cleared of concrete and membrane waterproofing



GENERAL NOTES
The curb steel is to be in place before the concrete for the slab is placed.
The rail curb steel is to be in place before the concrete for the curb is placed.
The vertical construction joints are to be coated with a suitable grade of asphaltic paint applied to the contact surfaces.
Chamfer all exposed edges of concrete 1/4".
See sheet no. 11 for blocking table.
Use edging tool along top of curb at construction joints.



NOTES
1. Any variation in railing dimensions shall be submitted for approval.
2. All anchor bolts, nuts and washers to be galvanized steel.
3. All anchor bolts to be 1/2" x 1/2" x 1/2" (cast into concrete).
4. Provide shear for 50% of railing posts.

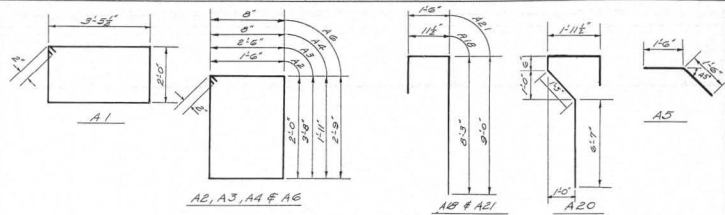
ANCHOR BOLT
Structural steel galvanized



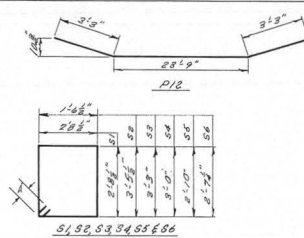
REINFORCING STEEL SCHEDULE

S. & S.	STATE	PROJECT NUMBER	SHEET	TOTAL
REC. NO.			NO.	SHEETS
1	MAINE	I-95-T(19)	14	16

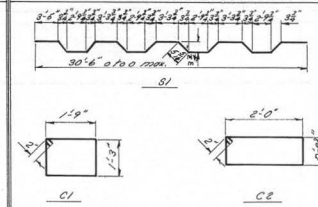
ABUTMENTS & APPROACH SLABS



PIERS



SUPERSTRUCTURE



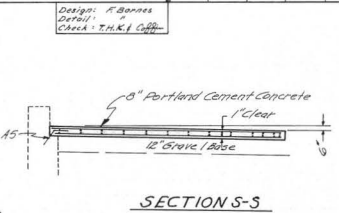
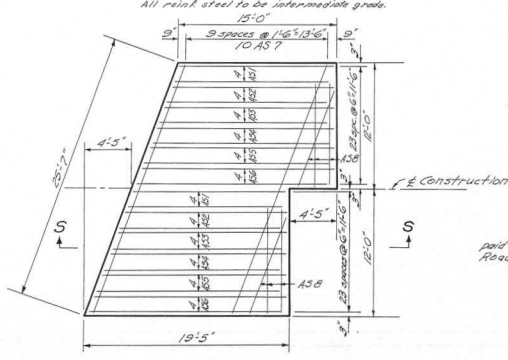
Mark	Size	Number	Length	Location
A1	#3	80	11'-3"	Footings
A2	#4	34	7'-4"	Footings Wings
A3	#4	30	12'-0"	Bridge Seats
A4	#4	28	3'-6"	Rail Curbs
A5	#3	26	3'-0"	Approach Slabs - Backwalls
A6	#4	12	7'-2"	End Posts
A8	#5	62	18'-4"	Abutment Backwalls
A10	#5	38	11'-6"	Wings
A21	#5	28	11'-0"	Wings

Mark	Size	Number	Length	Location
A24	#4	48	9'-6"	Wings & Rail Curbs
A25	#5	56	3'-0"	Backwall Corners
A26	#5	32	9'-0"	Wings
A27	#4	16	2'-8"	End Posts
A31	#6	32	14'-8"	Approach Slab
A32	#6	32	15'-3"	"
A33	#6	32	16'-0"	"
A34	#6	32	16'-9"	"
A35	#6	32	17'-6"	"
A36	#6	32	18'-2"	"
A37	#4	40	25'-11"	"
A38	#4	24	9'-6"	"

Mark	Size	Number	Length	Location
P12	#8	15	30'-8"	Cap - All Piers
S1	#4	384	11'-8"	Columns - All Piers
S2	#5	220	10'-8"	Caps - All Piers
S3	#5	20	10'-8"	"
S4	#5	20	9'-5"	"
S5	#5	20	9'-5"	"
S6	#5	20	8'-6"	Caps - All Piers

Mark	Size	Number	Length	Location
C1	#4	580	6'-8"	Curb
C2	#4	580	5'-8"	Rail Curb
S1	#5	412	3'-2"	Slab - All Spans

Note: All dimensions to E. of bars. All rebar steel to be intermediate grade.



SECTION S-S

Approach Slab concrete to be Class A and to be paid for under Item 304.0, Portland Cement Concrete Roadway and Sidewalk Slabs on Steel Bridges.

APPROACH SLAB ABUT #2

Abutment #1 Similar. Detail: T.H.K. Check: Caffen

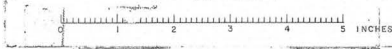
ESTIMATE OF BRIDGE QUANTITIES

Item No.	Description	Quantity
204-12	Structural Earth Excavation, Abutments & Retaining Walls	145 cu.
204-13	Structural Rock Excavation, Abutments & Retaining Walls	18 cu.
204-14	Structural Earth Excavation, Piers	350 cu.
204-15	Structural Rock Excavation, Piers	70 cu.
205-9	Granular Borrow	1185 cu.
302-7	Gravel Base Course - In Place Measurement	140 cu.
404-29	Bituminous Concrete Surface Course, Type B	118 tons
701-33	Portland Cement Concrete, Abutments & Retaining Walls	164 cu.
701-35	Portland Cement Concrete, Piers	265 cu.
701-40	Portland Cement Concrete, Roadway & Sidewalk Slabs on Steel Bridges	390 cu.
704-7	Barlaint Cement	1618 bags
702-103	Structural Steel, Fabricated & Delivered	331,500 lbs.
702-104	Structural Steel, Erection	331,500 lbs.
702-105	Structural Steel, Field Painting	331,500 lbs.
702-13	Reinforcing Steel, Delivered	125,840 lbs.
702-14	Reinforcing Steel, Placing	125,840 lbs.
806-7	Aluminum Rail	820 lin. ft.
807-9	Membrane Waterproofing	1075 sq. yd.
807-11	Epoxy Resin Surface Sealant	62 sq. yd.
808-6	Slope Paving	390 sq. yd.
801-21	Bridge Granite Curb	80 cu. yd.
808-9	Loam Borrow	60 cu. yd.
910-19	Seedling, Method No. 2	7 units
912-7	Hay Mulk	0.75 tons
915-7	Asphalt Mulch Binder	190 gals.

DESIGN - As noted
CHECK - J.M.C. RAYMOND

BRIDGE NO. 1075
STATE HIGHWAY COMMISSION
BRIDGE DIVISION
WEST ETNA ROAD BRIDGE
OVER
INTERSTATE HIGHWAY 95
IN THE TOWN OF
ETNA
PENOBSCOT COUNTY

REINFORCING SCHEDULE &
ESTIMATE OF BRIDGE QUANTITIES
SHEET 14 OF 14 AUGUSTA, MAINE, MARCH 1961

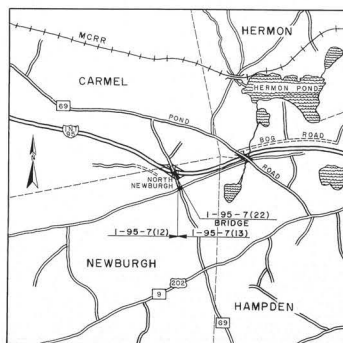


D.P. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	1-95-7 (22)	1	18

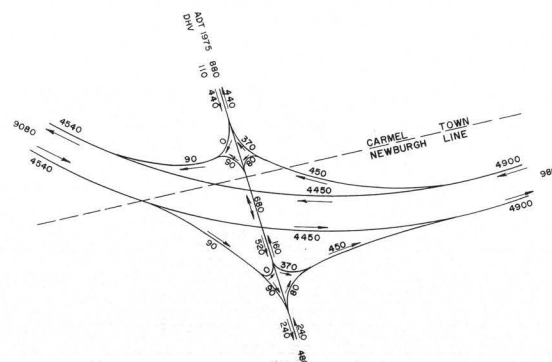
STATE OF MAINE
STATE HIGHWAY COMMISSION



ROUTE 69 BRIDGE
OVER
INTERSTATE HIGHWAY 95
IN THE TOWN OF
NEWBURGH
PENOBSCOT COUNTY
FEDERAL AID PROJECT NO. 1-95-7(22)167



LOCATION MAP
APPROX. SCALE - 1" = 1 MILE



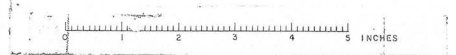
1975 A.D. TRAFFIC
T = 11%
D = 60%
V = 50 MPH. (ROUTE 69)

APPROVED
MAINE STATE HIGHWAY COMMISSION

[Signature]
CHAIRMAN
[Signature]
CHIEF ENGINEER

MARCH 28 1962
DATE

DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS
REGION I
APPROVED
DIVISION ENGINEER DATE



D.P.N. REV. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	295-722	2	18

SPECIFICATIONS

DESIGN - A.A.S.H.O. STANDARD SPECIFICATIONS FOR HIGHWAY
BRIDGES 1961.

CONTRACT - STATE OF MAINE, STATE HIGHWAY COMMISSION,
STANDARD SPECIFICATIONS HIGHWAYS AND BRIDGES, REVISION
OF JANUARY 1956, AND SUPPLEMENTAL SPECIFICATIONS.

LIVE LOADING

H20-44

ALLOWABLE LOADING

STRUCTURAL STEEL A.S.T.M. DESIGNATION A36 - $f_y = 20,000$ p.s.i.
STRUCTURAL STEEL A.S.T.M. DESIGNATION A7 - $f_y = 18,000$ p.s.i.
REINFORCING STEEL, INTERMEDIATE GRADE - $f_y = 20,000$ p.s.i.
CONCRETE ($n=10$) $f_c = 1200$ p.s.i.

CONCRETE CLASSIFICATION

ALL CONCRETE -----, CLASS "A"

ELEVATIONS

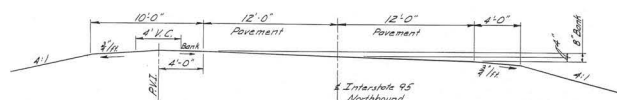
ELEVATIONS ARE BASED ON B.M. #36,
R.R. SPIKE IN 14" ELM., STA. 3342+16 N.B.
OFF. 228' R., EL. 170.40.

ESTIMATE OF QUANTITIES

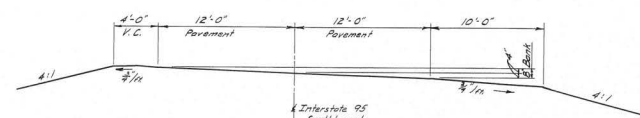
ITEM	UNIT	QUANTITY
STRUCTURAL EARTH EXCAVATION - PIERS	C.Y.	165
COMMON BORROW	C.Y.	5400
GRANULAR BORROW	C.Y.	330
GRAVEL BASE COURSE - IN PLACE MEASUREMENT	C.Y.	50
BITUMINOUS CONCRETE SURFACE COURSE - TYPE "A"	TONS	150
PORTLAND CEMENT CONCRETE - ABUTMENTS & RETAINING WALLS	C.Y.	180
PORTLAND CEMENT CONCRETE - PIERS	C.Y.	275
PORTLAND CEMENT CONCRETE - ROADWAY & SIDEWALK SLABS ON STL. BRIDGES	C.Y.	455
PORTLAND CEMENT	BBLS.	1370
STRUCTURAL STEEL - FABRICATED & DELIVERED	LBS.	386500
STRUCTURAL STEEL - ERECTION	LBS.	386500
STRUCTURAL STEEL - FIELD PAINTING	LBS.	386500
REINFORCING STEEL - DELIVERED	LBS.	149700
REINFORCING STEEL - PLACING	LBS.	149700
STEEL H-BEAM PILE 42 LBS. PER FT.	L.F.	1290
ALUMINUM RAIL	L.F.	900
MEMBRANE WATERPROOFING	S.Y.	1340
EPOXY RESIN SURFACE SEALANT	S.Y.	90
SLOPE PAVING	S.Y.	500
GRANITE BRIDGE CURB	L.F.	915

INDEX OF SHEETS

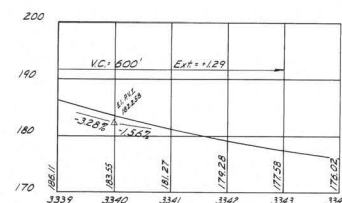
SHEET NO.	TITLE
1	TITLE SHEET
2	SPECIFICATIONS, QUANTITIES, INDEX, PROFILES
3	FOUNDATION SURVEY
4	BORING DETAILS
5	GENERAL PLAN & ELEVATION
6	ROADWAY WORK & SLOPE PAVING
7	ABUTMENTS
8	PIERS
9	STRUCTURAL STEEL - FRAMING PLAN
10	STRUCTURAL STEEL - DETAILS 1
11	STRUCTURAL STEEL - DETAILS 2
12	BLOCKING DETAILS
13	SUPERSTRUCTURE - SPAN 1 & 2
14	SUPERSTRUCTURE - SPAN 2 & 3
15	SUPERSTRUCTURE - SPAN 4 & 5
16	SUPERSTRUCTURE - SPAN 5 & 6
17	ALUMINUM RAIL
18	REINFORCING STEEL SCHEDULE



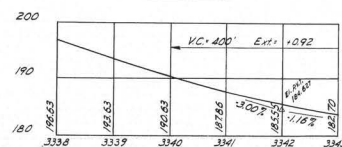
CROSS SECTION-INTERSTATE 95
NORTHBOUND LOOKING WEST



CROSS SECTION INTERSTATE 95
SOUTHBOUND LOOKING WEST



NORTHBOUND



SOUTHBOUND

PROFILES - I-95

Scales: Vert. - 1" = 10'
Hori. - 1" = 100'

CURVE DATA & I-95 N.B.

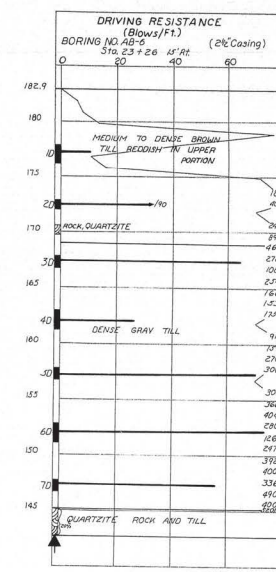
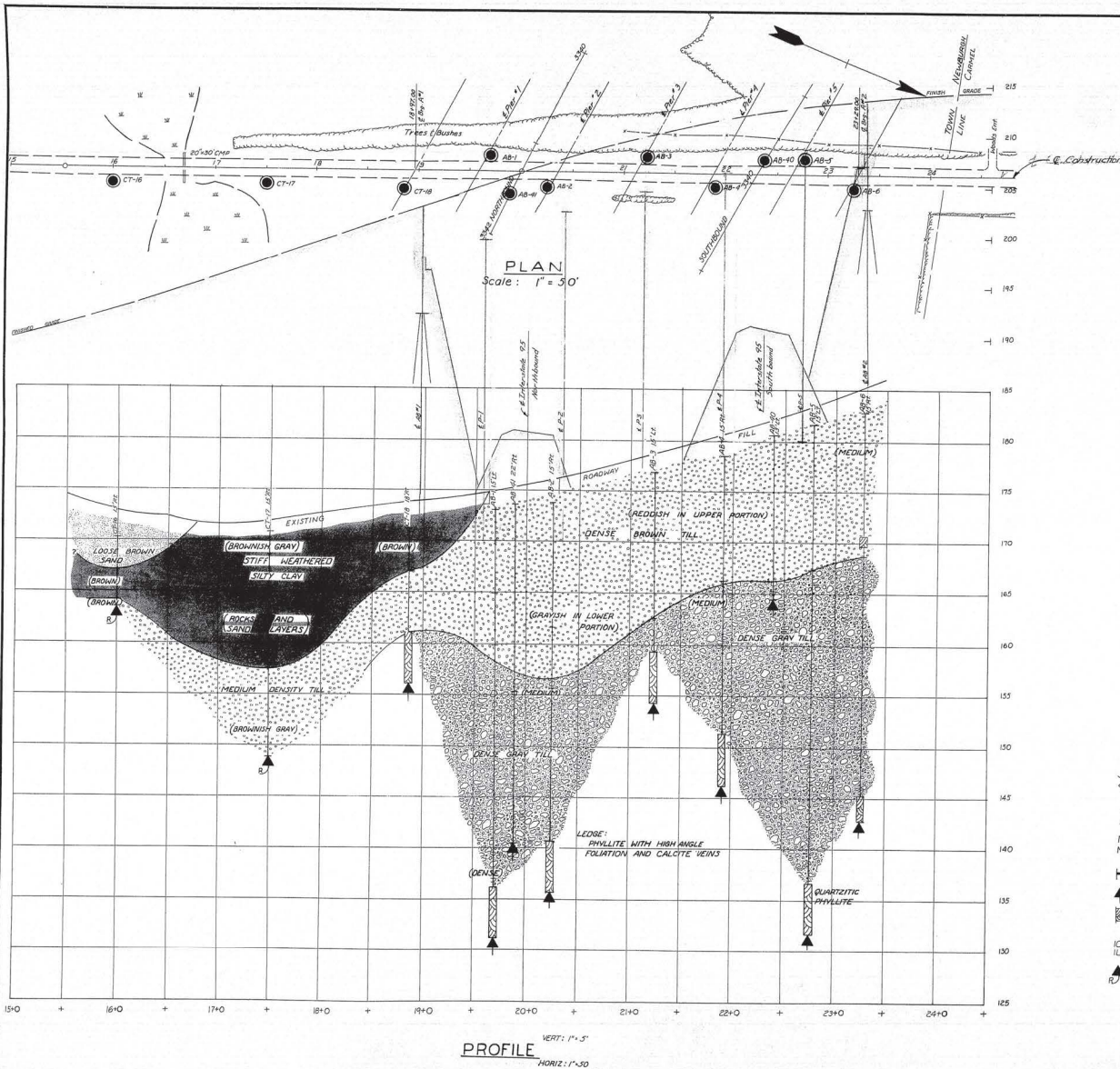
Sta. P.I. = 3337+82.70
Δ = 52° - 34' - 08" L
D = 1" = 12'
T = 2375.47'
L = 4408.52'
P = 4774.65'
E = 550.28'

CURVE DATA & I-95 S.B.

Sta. P.I. = 3340+55.30
Δ = 52° - 51' - 48" L
D = 1" = 15'
T = 2278.51'
L = 4229.06'
P = 4583.66'
E = 535.08'

DESIGN - CDH	DET. JHW	BRIDGE NO.
TRACE - JHW		SURVEY -
CHECK -		PILOT
STATE HIGHWAY COMMISSION BRIDGE DIVISION		
ROUTE 69 BRIDGE		
OVER		
INTERSTATE HIGHWAY 95		
IN THE TOWN OF		
NEWBURGH		
PENOBSCOT COUNTY		
SPECIFICATIONS, QUANTITIES, INDEX, PROFILES		
SHEET 2 OF 18 AUGUSTA, MAINE MARCH, 1962		

85-160



- BORING NOTES**
- ALL SAMPLES AND VALUES ARE MADE AHEAD OF CASING
 - NUMBER OF BLOWS REQUIRED TO DRIVE EXTRA HEAVY CASING ONE FOOT WITH 400 LB. OF ENERGY PER BLOW
 - LOCATION OF SAMPLE OR SAMPLE ATTEMPT
 - NUMBER AND TYPE OF DRY SAMPLE
 - 10 S.H. SAMPLER #12903
 - UNSUCCESSFUL SAMPLE ATTEMPT AND TYPE OF SAMPLER
 - NUMBER OF BLOWS REQUIRED TO DRIVE SPOON OR TUBING ONE FOOT WITH 350 LB. OF ENERGY PER BLOW
 - BOTTOM OF BORING (MAY NOT BE BOTTOM OF SOIL STRATA)
 - RECOVERY OF ROCK
 - LOCATIONS CORDED BY DIAMOND BIT AND PER CENT
 - NUMBER AND TYPE OF DRY SAMPLE
 - 10 6" O.D. REIN. SEAMLESS TUBING
 - 10 3/4" O.D. REIN. SEAMLESS TUBING
 - REFUSAL OF DRILL RODS OR CASING (MAY NOT BE LEDGE)

DESIGN-
TRACE-
CHECK-

SOILS DIVISION

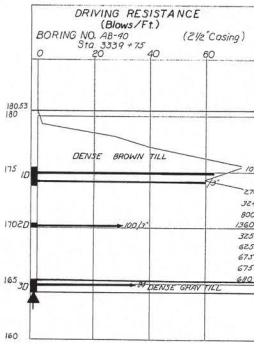
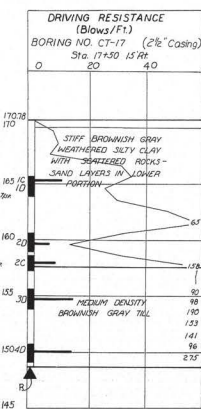
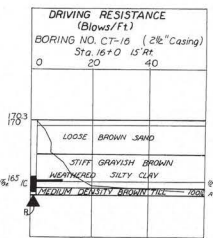
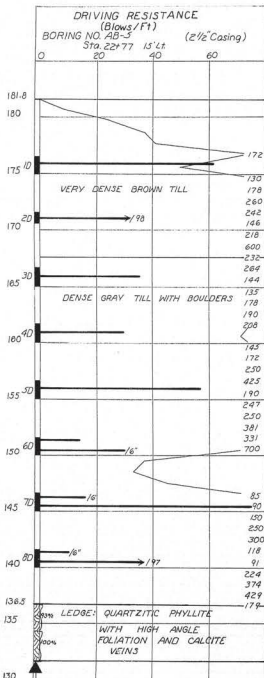
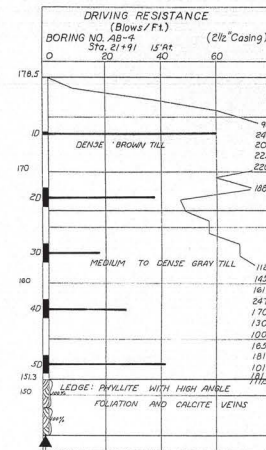
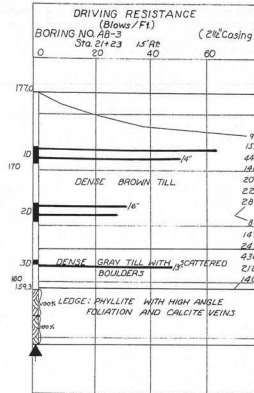
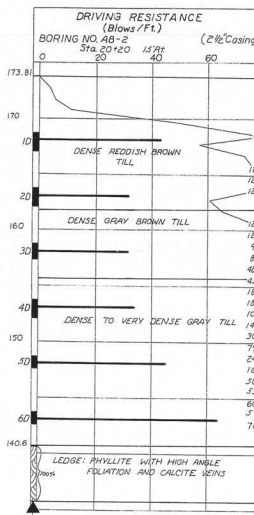
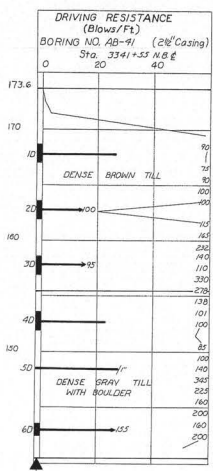
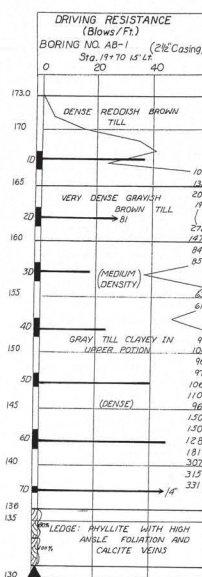
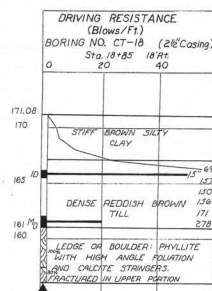
BRIDGE NO. SURVEY-
PILOT-

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

ROUTE 69 BRIDGE
OVER
INTERSTATE HIGHWAY 95
IN THE TOWN OF
NEWBURGH
PENOBSCOT COUNTY
FOUNDATION SURVEY

SHEET 3 OF 18 AUGUSTA, MAINE MARCH, 1962

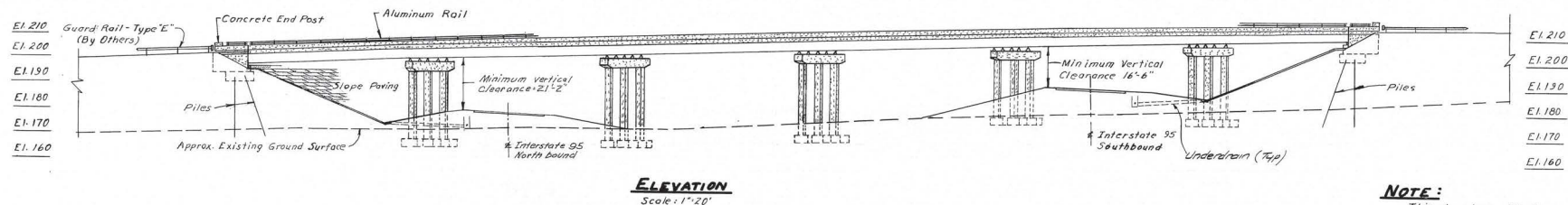
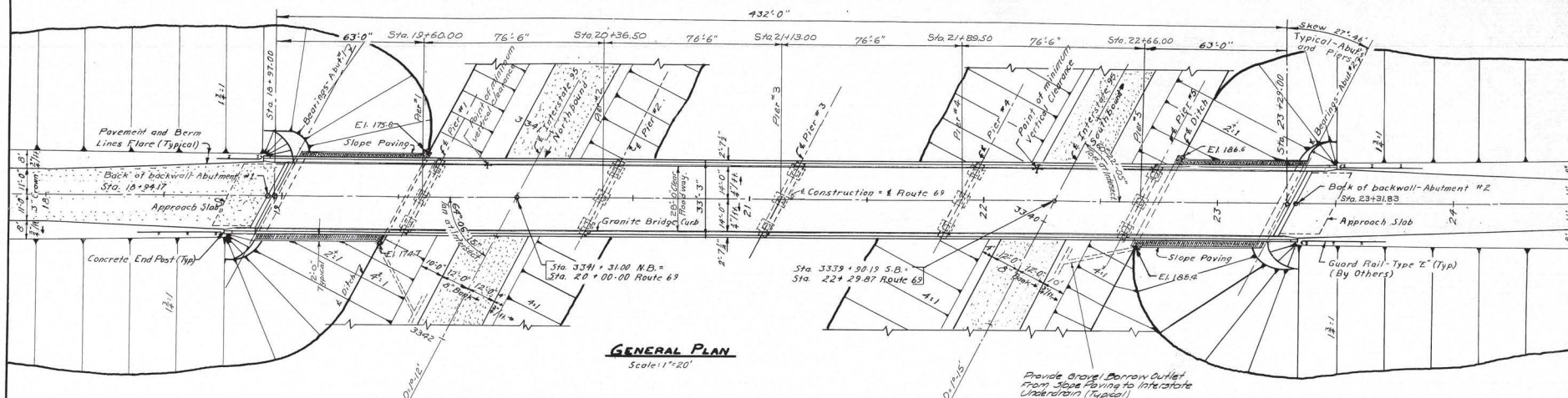




DESIGN - SOILS DIVISION
TRACE - SURVEY -
CHECK - PLOT -

STATE HIGHWAY COMMISSION
BRIDGE DIVISION
ROUTE 69 BRIDGE
OVER
INTERSTATE HIGHWAY 95
IN THE TOWN OF
NEWBURG
PENOBSCOT COUNTY
BORING DETAILS
SHEET 4 OF 18 AUGUSTA, MAINE MARCH 1982



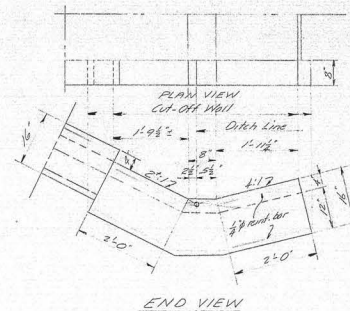


NOTE:
This plan shows ultimate construction. See Section Along & Construction (Sheet #6) for roadway work in this contract.

DESIGN - C.D.H.	BRIDGE NO.
TRACE - B.M.	SURVEY -
CHECK - C.D.H.	DATE -

STATE HIGHWAY COMMISSION
BRIDGE DIVISION
ROUTE 69 BRIDGE
OVER
INTERSTATE HIGHWAY 95
IN THE TOWN OF
NEWBURGH
PENOBSCOT COUNTY
GENERAL PLAN & ELEVATION
SHEET 5 OF 18 AUGUST 1962 MARCH 1962





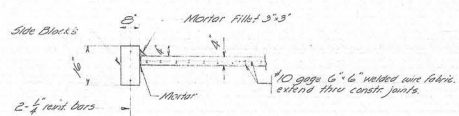
CAST IN PLACE DITCH CUT-OFF WALL
TYR BOTH ABUTS

Note: Inside form may be left in place

Note: Inside form may be left in place

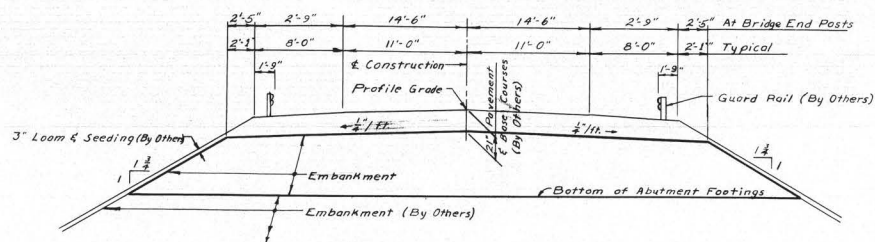
NOTE:

Welded Wire Fabric to extend thru joints.
Break bond at joints with a coat of asphalt paint.



Cast in place concrete strips to be placed in alternate bays 1-3-5-7-9-11-13-15-17. When forms are removed place 2-4-6-8-10-12-14-16. Side blocks are to be precast and placed after forms for concrete strips are removed.

PURCH CHECK	MEMBERSHIP 8044
STATE HIGHWAY COMMISSION BRIDGE DIVISION ROUTE 69 BRIDGE OVER INTERSTATE HIGHWAY 95 IN THE TOWN OF NEWBURGH PENOBSCOT COUNTY CAST IN PLACE. SLOPE PAVING Sheet 1 of 2 AUGUSTA, MAINE AUG. 1962	

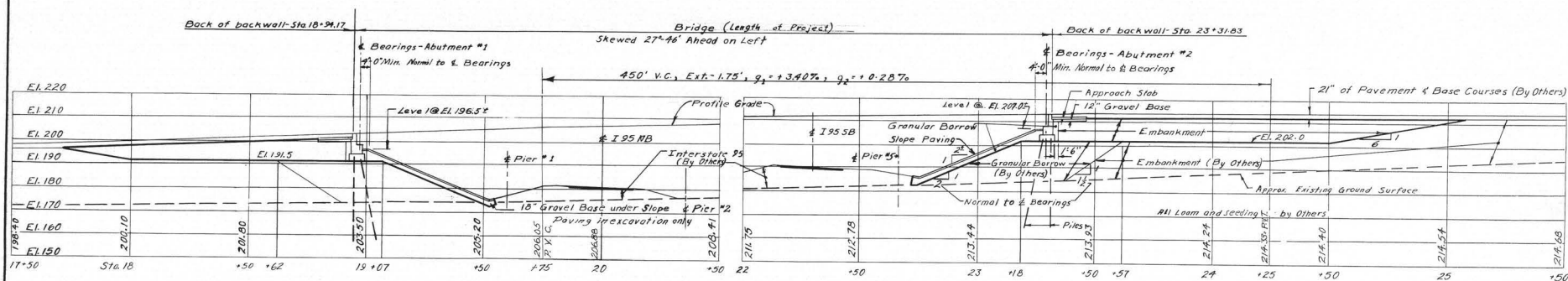


CROSS SECTION ROUTE 69

NOTES

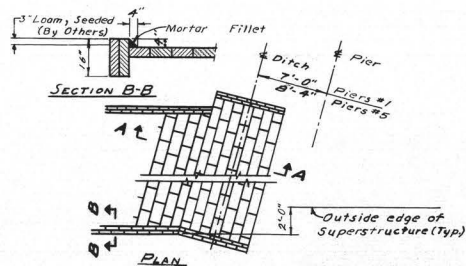
Guard Rails & Shoulders shall be flared into the bridge a distance of 1'-9" starting 100' from the bridge, in order to bring the inside face of the Guard Rail in line with the inside face of bridge Concrete End Posts.

INSIDE FACE OF CONCRETE END POSTS			
Abutment	Station	Off & Construction	
#1	18 + 75.75	15'-6" R	
	18 + 92.25	15'-6" L	
#2	23 + 33.75	15'-6" R	
	23 + 50.25	15'-6" L	



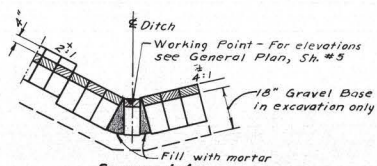
All notes in Section Sta 20+00 to Sta 25+50 apply to Section Sta 17+50 to 20+50 except as otherwise noted.

SECTION ALONG & CONSTRUCTION



SLOPE PAVING

Solid Concrete Blocks 8'16"x4', mortared



The 18" Gravel Base under the Slope Paving may be reduced or omitted; if in the opinion of the Engineer the existing material is suitable. Payment for excavation for Gravel Base under Slope Paving to be made under Item 204-14, Structural Excavation, Piers.

NOTES

- Before piles are driven, granular borrow shall be placed and compacted to Elevation of bottom of abutment footings.
- The controlled density method shall be used for placing Embankment and Granular Borrow.
- See General Plan for ultimate location of pavement (sheet #5).
- All Granular Borrow, including that portion by others in the area where piles are to be driven shall be graded so that all stones shall pass a standard 6" screen.

DESIGN: CDH
 TRACE: JAW
 CHECK: JAW

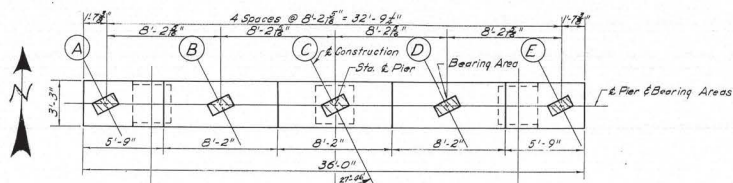
BRIDGE NO. SURVEY: 100
 STATE HIGHWAY COMMISSION
 BRIDGE DIVISION

ROUTE 69 BRIDGE
 OVER
INTERSTATE HIGHWAY 95
 IN THE TOWN OF
NEWBURN

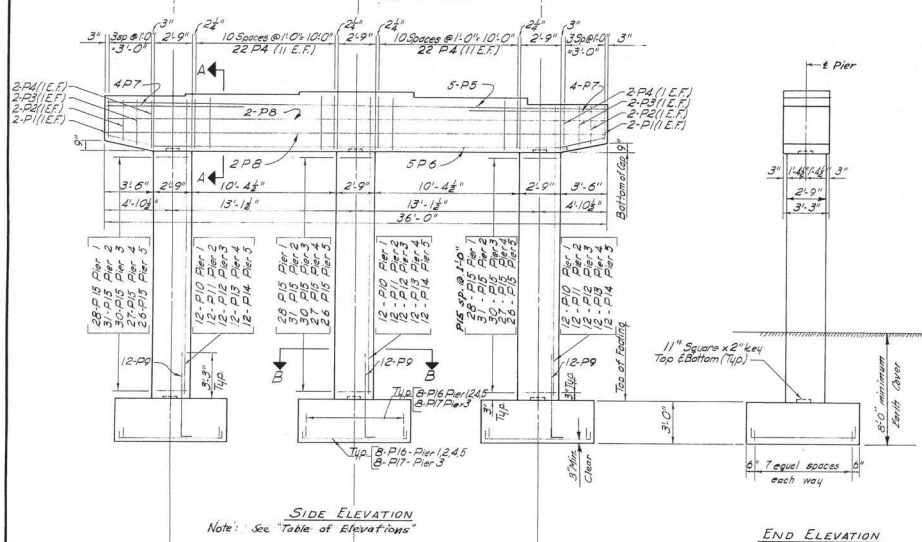
PENOBSCOT COUNTY
 ROADWAY WORK & SLOPE PAVING

SHEET 6 OF 18 AUGUSTA, MAINE MARCH, 1962



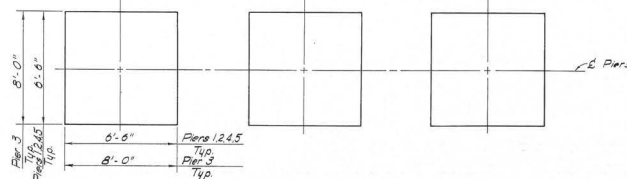


PLAN - PIER CAP
Note: Column Footings not shown



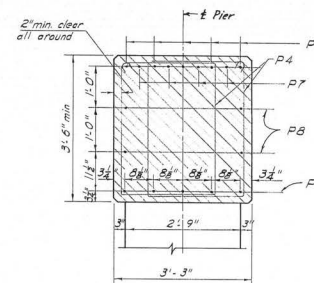
SIDE ELEVATION
Note: See "Table of Elevations"

END ELEVATION

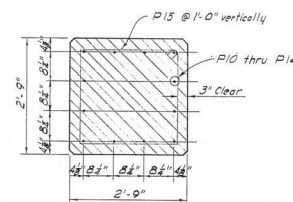


FOOTING PLAN

TABLE OF ELEVATIONS					
BEARING AREA	PIER 1	PIER 2	PIER 3	PIER 4	PIER 5
A	200.45	202.88	205.10	206.53	207.75
B	200.47	202.92	205.16	206.61	207.85
C	200.49	202.96	205.22	206.69	207.95
D	200.21	202.69	204.97	206.47	207.75
E	199.93	202.43	204.73	206.24	207.54
Bottom of Cap	196.40	198.90	201.20	202.70	204.00
Bottom of Footing	186.00	186.00	169.00	173.00	176.00
Sta. & Pier	19+60.00	20+36.50	21+13.00	21+89.50	22+66.00



SECTION A-A



SECTION B-B
Typical for all columns

GENERAL NOTES

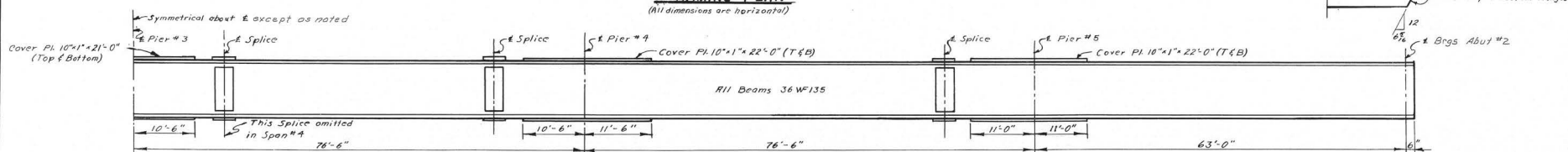
1. Position reinforcing steel in pier cap, under bearings, to clear swaged anchor bolts.
2. Chamfer all exposed edges of concrete 3/4 inch.
3. Dress the abutted bearing areas on the bridge seats 1" larger all around than masonry plates to exact elevations shown in "Table of Elevations".
4. Maximum Footing Pressure: 6.5 tons/sq. ft. - Pier 3.
5. E.F. means Each Face.

DESIGN - C.W. DET - J.W.H. BRIDGE NO. 69
TRACE - J. B. SURVEY - J.W.H. DIVISION
CHECK - J. B. SURVEY - J.W.H. DIVISION
STATE HIGHWAY COMMISSION
BRIDGE DIVISION
ROUTE 69 BRIDGE
OVER
INTERSTATE HIGHWAY 95
IN THE TOWN OF
NEWBURGH
PENOBSCOT COUNTY
PIERS
SHEET 8 OF 18 AUGUSTA, MAINE MARCH, 1962

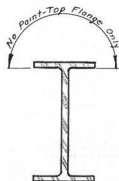


[illegible]

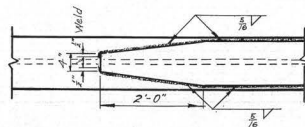
(All dimensions are horizontal)



(All dimensions are horizontal)



Typical for 36 WF.
 & 16 WF



END OF COVER PLATE DETAIL

NOTES:

1. Stringers and cover plates shall conform to the latest revision of the Specification R.S.T.M. Designation R36. All other structural steel (Bearings, Diaphragms, and Expansion Dams) shall conform to the latest revision of the Specification R.S.F.M Designation R7 or A36.
2. Field connections may be $\frac{5}{8}$ " Rivets or $\frac{5}{8}$ " High Tensile Strength Bolts.

DESIGN- C.D.M. DETAILER
TRACE- P.M.
CHECK- *Chen*

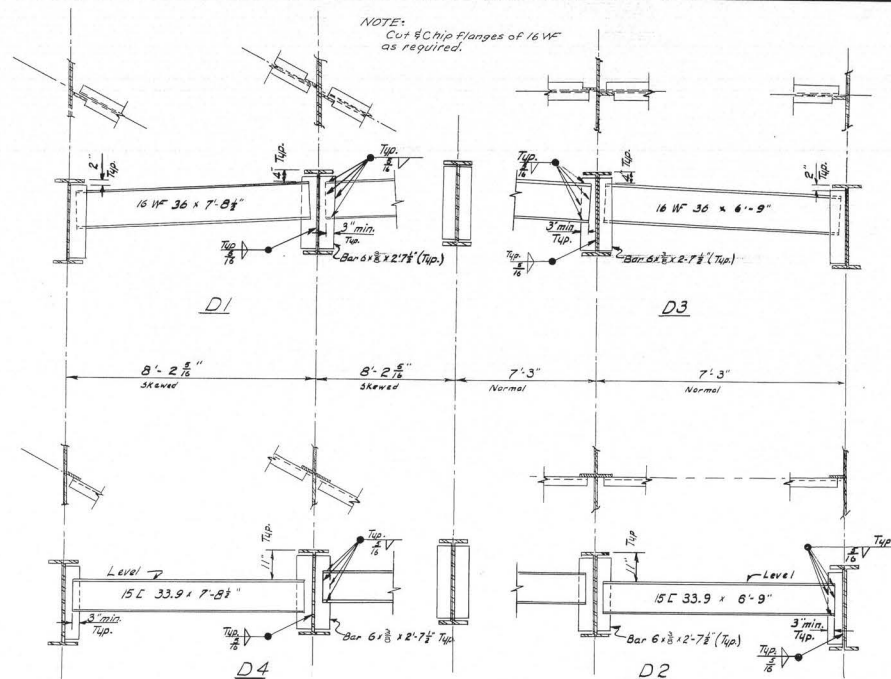
BRIDGE NO.
SURVEY-
PLAN-

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

ROUTE 69 BRIDGE
OVER
INTERSTATE HIGHWAY 95
IN THE TOWN OF
NEWBURGH
PENOBSCOT COUNTY
STRUCTURAL STEEL - FRAMING PLAN

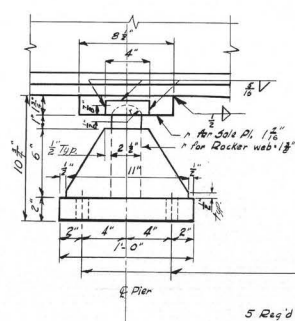
SHEET 9 OF 18 AUGUSTA, MAINE MARCH, 1962

95-167

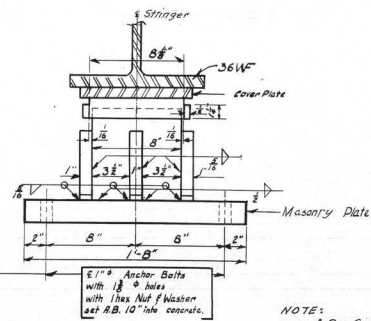


DIAPHRAGMS D1-D2-D3-D4

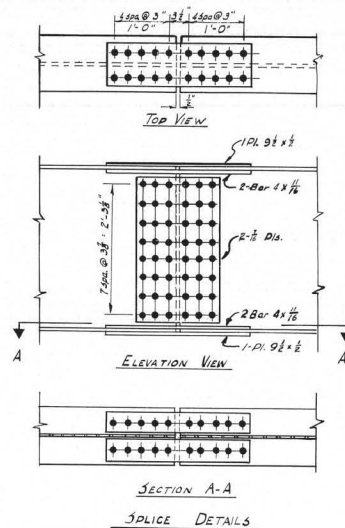
D1 - 8 Req'd.
D2 - 28
D3 - 40
D4 - 20



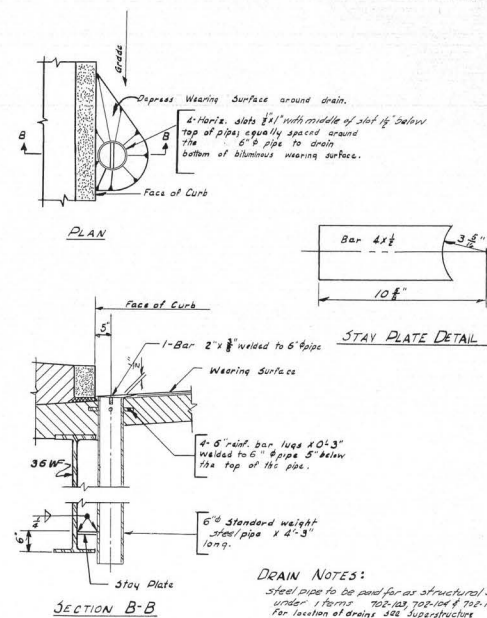
FIXED BEARINGS



EXPANSION BEARINGS



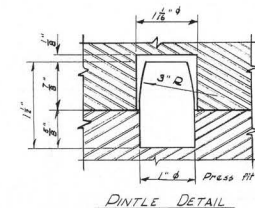
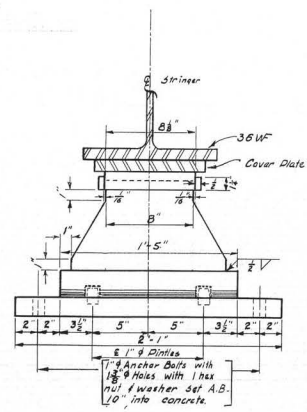
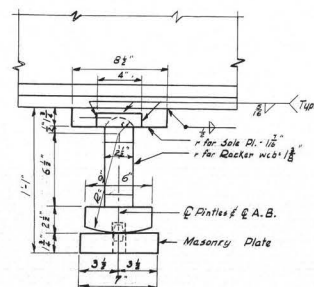
NOTE:
Location of, and number of, splices
indicated on the "Raising Plan" Sh.#9



DRAIN NOTES:
Steel pipe to be used for structural steel
under 1 forms
702-103, 702-104 & 702-105.
For location of drains see Superstructure
Sheets.

DRAIN DETAILS

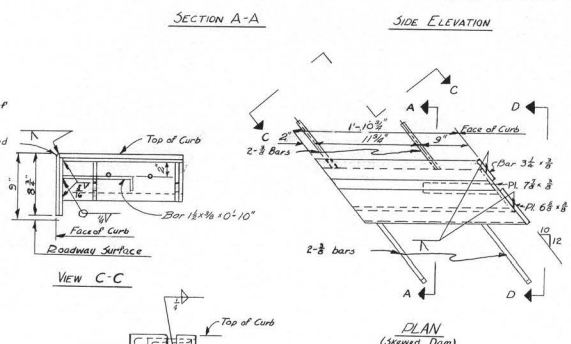
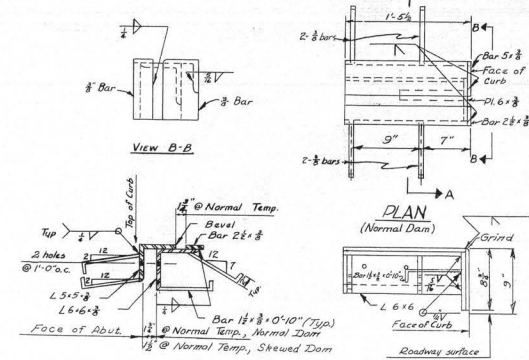
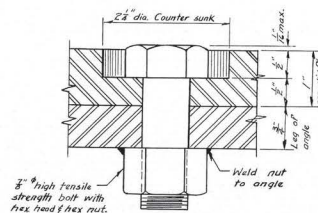
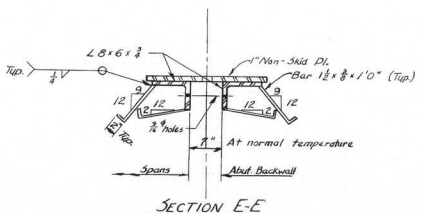
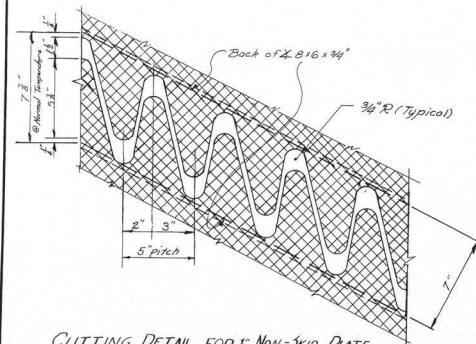
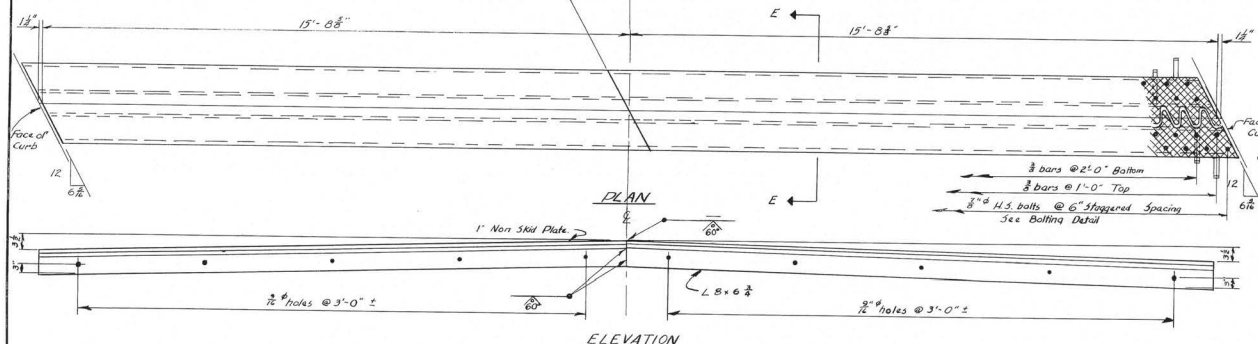
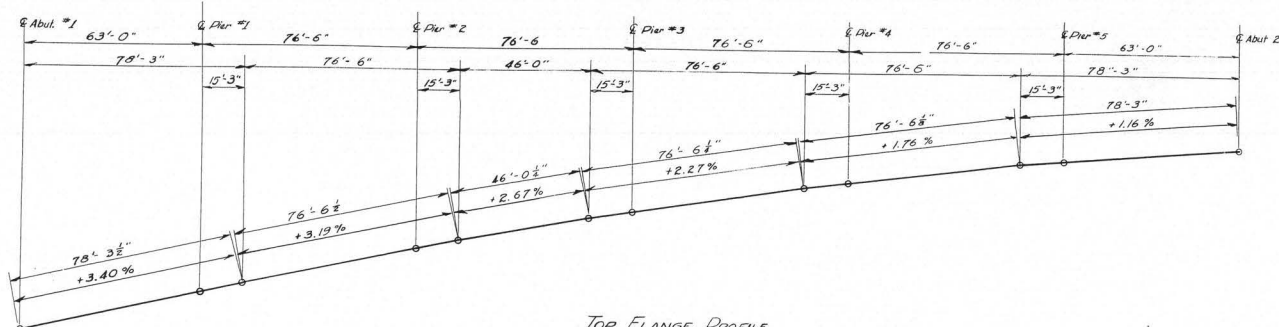
24 Req'd.



DINTLE DETAIL

DESIGN: C.M. DETAIL: J.W.M. BRIDGE NO. 702-103, 702-104 & 702-105
TRACE: SURVEY: 1962
CHECK: 1962
STATE: MAINE
BRIDGE DIVISION
ROUTE 69 BRIDGE
OVER
INTERSTATE HIGHWAY 95
IN THE TOWN OF
NEWBURN
PENOBSCOT COUNTY
STRUCTURAL STEEL DETAILS I
SHEET 10 OF 18 AUGUSTA, MAINE, MARCH, 1962

D.P.D. REQ. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	1-95-7 (23)	11	18

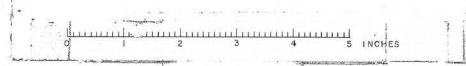


SIDEWALK EXPANSION DAM

Req'd: 2 Normal (Abut #1 Right, Abut #2 Left)
2 Skewed (Abut #1 Left, Abut #2 Right)

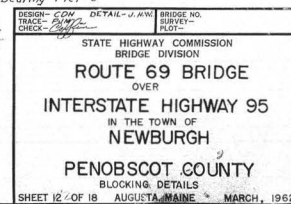
NOTE: Normal temperature is 45°F.

DESIGN - C.M.D.	DETAIL - J.H.M.	BRIDGE NO.
TRACE - J.H.M.	SURVEY - P.L.T.	1-95-7 (23)
CHECK - J.H.M.	PLAT -	
STATE HIGHWAY COMMISSION BRIDGE DIVISION		
ROUTE 69 BRIDGE OVER INTERSTATE HIGHWAY 95 IN THE TOWN OF NEWBURGH PENOBSCOT COUNTY		
STRUCTURAL STEEL DETAILS 2		
SHEET 11 OF 18 AUGUSTA, MAINE, MARCH, 1962		

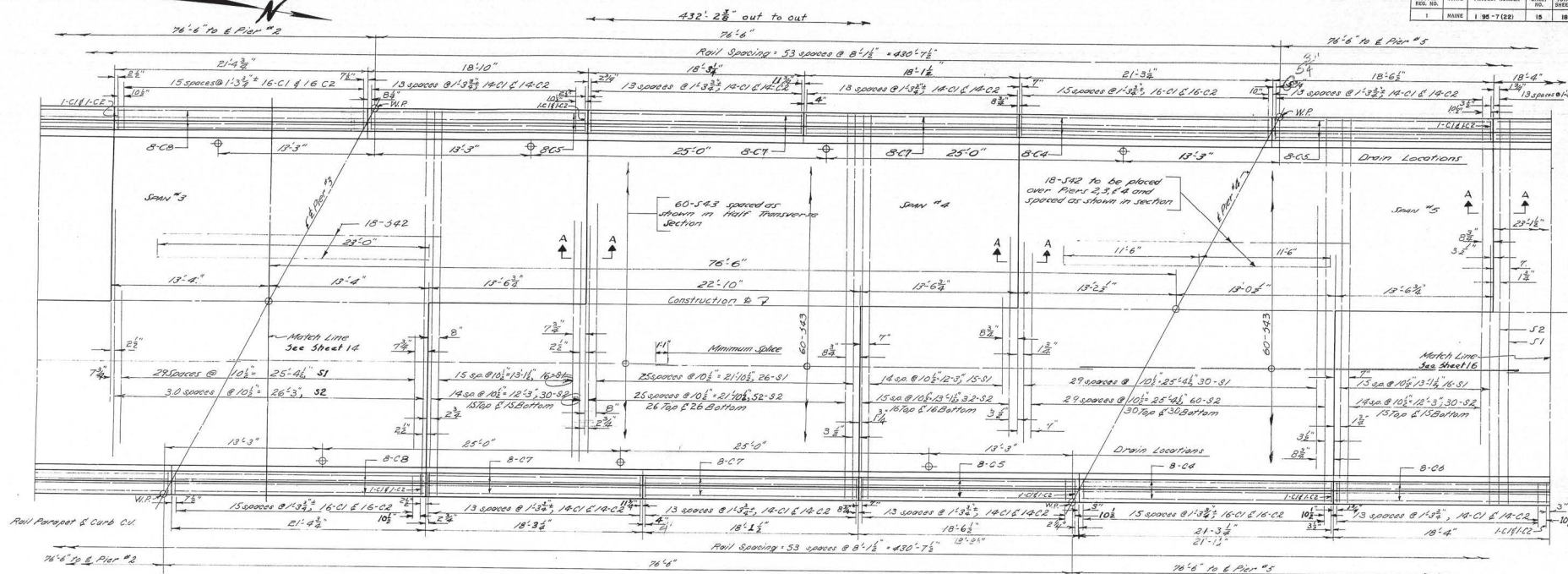


BOTTOM OF SLAB ELEVATIONS																																												
LINE	SPAN 1				SPAN 2								SPAN 3								SPAN 4								SPAN 5								SPAN 6							
	Bearing About	1/4 point	1/2 point	3/4 point	Bearing Pier 1	1/4 point	1/2 point	3/4 point	1 point	Bearing Pier 2	1/4 point	1/2 point	3/4 point	1 point	Bearing Pier 3	1/4 point	1/2 point	3/4 point	1 point	Bearing Pier 4	1/4 point	1/2 point	3/4 point	1 point	Bearing Pier 5	1/4 point	1/2 point	3/4 point	1 point	Bearing Pier 6	1/4 point	1/2 point	3/4 point	Bearing About										
A	202.58	203.17	203.31	204.22	204.73	205.06	205.46	205.75	206.05	206.34	206.62	206.89	207.16	207.46	207.74	208.06	208.31	208.59	208.79	208.97	209.19	209.42	209.64	209.90	210.09	210.30	210.47	210.65	210.81	211.00	211.19	211.37	211.53	211.67	211.79	211.91	212.03	212.26	212.47	212.62				
B	202.61	203.19	203.75	204.24	204.75	205.08	205.43	205.76	206.08	206.37	206.66	206.93	207.20	207.49	207.77	208.06	208.31	208.57	208.89	209.02	209.29	209.49	209.72	209.95	210.16	210.38	210.55	210.73	210.89	211.09	211.27	211.45	211.62	211.76	211.89	212.01	212.13	212.36	212.57	212.74				
C	202.63	203.21	203.78	204.26	204.77	205.10	205.45	205.79	206.11	206.41	206.69	206.96	207.24	207.53	207.80	208.09	208.36	208.68	208.95	209.06	209.31	209.55	209.79	210.02	210.25	210.42	210.68	210.80	210.97	211.16	211.36	211.59	211.71	211.89	212.10	212.23	212.46	212.69	212.96					
D	202.58	203.93	203.47	203.98	204.49	204.83	205.17	205.51	205.83	206.13	206.42	206.69	206.97	207.27	207.56	207.85	208.11	208.36	208.60	208.83	209.06	209.30	209.55	209.78	210.00	210.21	210.39	210.58	210.75	210.94	211.14	211.32	211.49	211.64	211.77	211.90	212.03	212.26	212.49	212.66				
E	202.57	202.65	203.19	203.70	204.21	204.59	204.93	205.23	205.55	205.86	206.15	206.43	206.71	207.01	207.31	207.59	207.88	208.11	208.35	208.58	208.82	209.06	209.31	209.59	209.76	209.99	210.16	210.33	210.52	210.72	210.92	211.10	211.28	211.43	211.56	211.69	211.82	212.06	212.29	212.46				

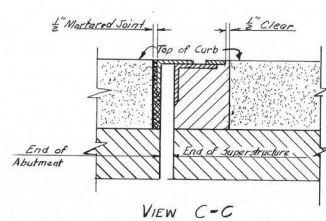
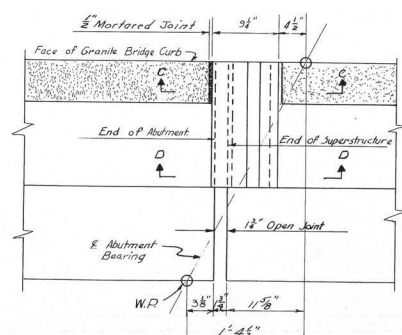
In order that the Wearing Surface may conform to the profile and cross sections shown on these plans, the accompanying tables of Bottom of Slab Elevations^a are given. These elevations, which are computed to compensate for dead load deflections, must be set before slab forms are started.



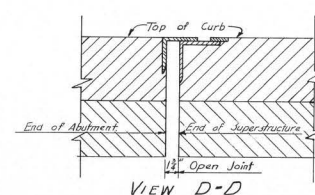
S.P. & S.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	1 95-7 (22)	15	18



PART PLAN



VIEW C-C



VIEW D-D

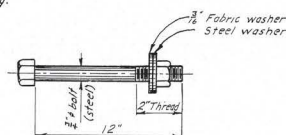
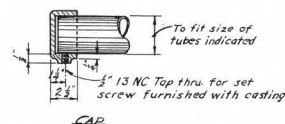
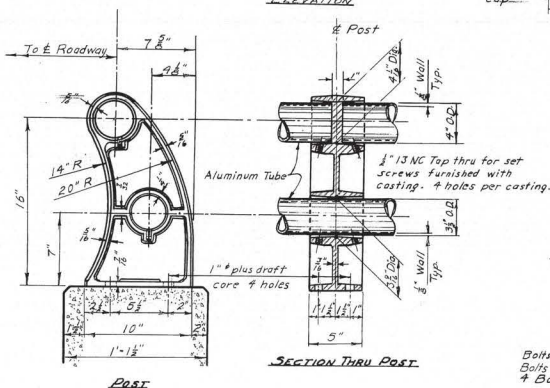
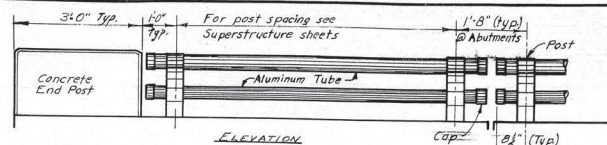
NOTE:
For Sections, Details, and General Notes
see Sheets 13, 14, & 16.

NORMAL JOINT AT END OF SUPERSTRUCTURE

DESIGN - C.M.	DETAIL - W.J.M.	BRIDGE NO.
TRACE - L.F.	PLAN - S.M.	1-95-7 (22)
CHECK - S.M.		
STATE HIGHWAY COMMISSION BRIDGE DIVISION		
ROUTE 69 BRIDGE OVER INTERSTATE HIGHWAY 95 IN THE TOWN OF PENOBSCOT COUNTY SUPERSTRUCTURE SPANS 485		
SHEET 15 OF 18	AUGUSTA, MAINE	MARCH, 1962

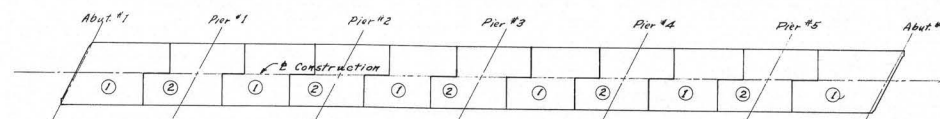


D. P. D. REV. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	1-95-T(22)	17	18



ANCHOR BOLT
Bolts, nuts, and steel washers to be galvanized.
Bolts to project 2" out of concrete.
4 Bolts per post

ALUMINUM RAIL DETAILS



CONCRETE PLACING PLAN
NOTE: Panels 1 to be placed first

DESIGN - C. H. K. TRACE - F. W. H. CHECK - D. W. H.	BRIDGE NO. SUBJECT - NOT
STATE HIGHWAY COMMISSION BRIDGE DIVISION	
ROUTE 69 BRIDGE OVER INTERSTATE HIGHWAY 95 IN THE TOWN OF NEWBURGH PENOBSCOT COUNTY ALUMINUM RAIL	
SHEET 17 OF 18 AUGUSTA, MAINE MARCH, 1962	



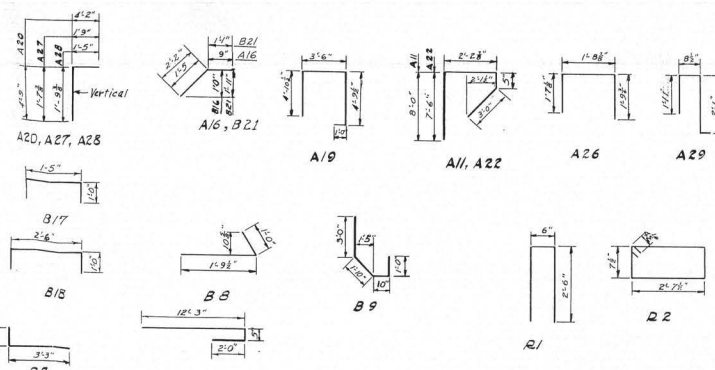
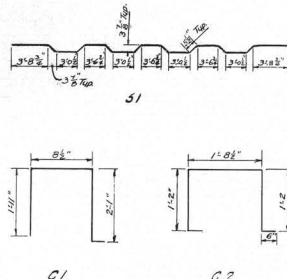
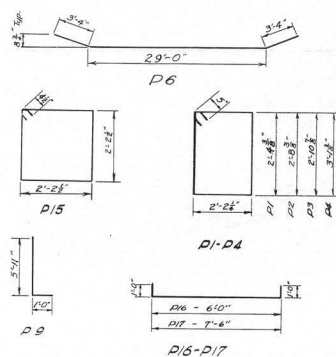
REINFORCING STEEL SCHEDULE

STATE PROJECT NUMBER SHEET TOTAL
1 MAINE 1-90-7(32) 10 18

PIERS & Girders

SUPER STRUCTURE & Parapet

ABUTMENTS & Girders



MARK	SIZE	NO.	LENGTH	LOCATION	MARK	SIZE	NO.	LENGTH	LOCATION	MARK	SIZE	NO.	LENGTH	LOCATION	MARK	SIZE	NO.	LENGTH	LOCATION
BENT BARS					BENT BARS					BENT BARS					BENT BARS				
P1	#5	20	10'-0"	Cap	S1	#5	476	34'-0"	Slab	A11	#5	20	13'-5"	Wingwall Abutment #2 Rt.	B7	#6	12	4'-3"	Backwall to Wingwall Abutment #1
P2	#5	20	10'-7"	-do-	C1	#4	660	5'-3"	Rail parapet	A16	#5	42	2'-2"	Approach slab to backwall	B8	#6	12	2'-10"	-do- f Bridge Seat Abutment #1
P3	#5	20	10'-11"	-do-	C2	#4	660	5'-1"	Curb	A19	#5	44	14'-2"	-do-	B9	#6	2	6'-8"	Wingwall
P4	#5	20	11'-5"	-do-						A20	#5	10	8'-11"	-do-	B10	#5	30	14'-8"	-do-
P6	#10	25	35'-8"	-do-						A22	#5	20	13'-2"	Wingwall Abutment #1 Rt. Abutment #2 Lt.	B11	#5	20	4'-6"	Bearing
P9	#9	180	8'-11"	Footings - Column	S3	#5			Slab @ Abut.	A23	#5	40	5'-2"	Concrete curb to Wingwall	B12	#5	12	5'-6"	End Post
P15	#4	426	9'-6"	Column	S4	#5				A27	#5	10	3'-5"	Concrete curb	B13	#5	20	7'-5"	-do-
P16	#6	192	8'-0"	Footings	S5	#5				A28	#5	40	3'-2"	-do-	B14	#5	12	3'-5"	Bearing Pad
P17	#8	48	9'-5"	-do- Pier #3	S6	#5				A29	#5	52	5'-3"	SideWalk curb	B17	#5	30	3'-5"	Bearing Pad
STRAIGHT BARS					STRAIGHT BARS					STRAIGHT BARS					STRAIGHT BARS				
P5	#10	25	35'-8"	Cap	S8	#5				A1	#5	54	5'-9"	Footings	B2	#7	2	35'-0"	Bridge seat
P7	#8	40	9'-6"	-do-	S9	#5				A2	#5	2	7'-11"	-do-	B3	#5	2	34'-4"	-do-
P8	#6	20	35'-5"	-do-	S10	#5				A3	#5	2	8'-5"	-do-	B4	#5	2	33'-4"	-do-
P10	#9	36	30'-3"	Column Pier 1	S11	#5				A4	#5	4	8'-11"	-do-	B5	#7	2	31'-1"	Bridge seat f Backwall
P11	#5		32'-9"	Column Pier 2	S12	#5				A5	#5	4	9'-6"	-do-	B6	#5	12	34'-4"	-do-
P12	#5		31'-11"	Column Pier 3	S13	#5				A6	#5	4	10'-0"	-do-	B11	#5	34	11'-3"	Wingwall
P13	#5		29'-7"	Column Pier 4	S14	#5				A7	#5	4	10'-7"	-do-	B12	#5	28	12'-3"	Curb f Rail Parapet
P14	#9	36	27'-11"	Column Pier 5	S15	#5				A8	#5	2	11'-0"	-do-	B13	#6	12	5'-0"	Sections N-N f P.P.
SUPERSTRUCTURE					S16	#5				A9	#6	2	11'-7"	-do-	B14	#6	6	2'-6"	Section Q-Q
STRAIGHT BARS					S17	#5				A9	#6	2	11'-7"	-do-	B15	#6	12	6'-0"	Sections K-K f L.L.
S29	#5	4	10'-3"	Slab @ Abutments	S18	#5				A12	#5	8	8'-0"	Wingwall Abutment #1 Lt. Abutment #2 Rt.	B16	#6	3	4'-6"	Section M-M
S30	#5	4	9'-4"	-do-	S19	#5				A14	#7	22	5'-6"	Footings	B19	#5	16	31'-1"	Back wall f Bridge Seat
S31	#5	4	8'-7"	-do-	S20	#5				A15	#7	12	39'-3"	-do-	B20	#5	4	36'-5"	Bridge Seat
S32	#5	4	7'-8"	-do-	S21	#5				A17	#6	24	16'-7"	Approach slab	B1	#7	2	34'-5"	-do-
S33	#5	4	6'-11"	-do-	S22	#5				A18	#4	40	30'-0"	-do-					
S34	#5	4	6'-1"	-do-	S23	#5				A21	#5	134	6'-2"	Backwall					
S35	#5	4	5'-3"	-do-	S24	#5				A23	#5	40	8'-0"	Wingwall					
S36	#5	4	4'-5"	-do-	S25	#5				A24	#5	8	7'-11"	Wingwall Abutment #1 Rt. Abutment #2 Lt.					
S37	#5	4	3'-7"	-do-	S26	#5				A25	#5	56	31'-1"	Footings Wingwall					
S38	#5	4	2'-8"	-do-	S27	#5													
S39	#5	4	2'-3"	-do-	S28	#5													
C7	#4	64	17'-10"	Slab @ Abutments	S29	#5	950	32'-11"	Slab @ Abut.										
C8	#4	16	21'-0"	Rail Parapet f Curbs	S31	#5	36	21'-0"	Slab @ Piers #1 f #3										
C9	#4	32	22'-0"	-do-	S32	#5	34	23'-0"	Slab @ Piers #2, #3 f #4										
					S33	#5	720	37'-0"	Slab										
					C3	#4	32	20'-6"	Rail parapet f curbs										
					C4	#4	64	20'-6"	-do-										
					C5	#4	80	18'-0"	Rail parapet f curbs										
					C6	#4	64	18'-0"	-do-										

NOTES:

- All dimensions to center of bars.
- All reinforcing steel to be intermediate grade steel, G-20,000 psi.

DESIGN: C.E.M. DETAIL: J.H.W. BRIDGE NO. SURVEY: 1962
TRACE: B. 184
STATE HIGHWAY COMMISSION
BRIDGE DIVISION
ROUTE 69 BRIDGE
OVER
INTERSTATE HIGHWAY 95
IN THE TOWN OF
NEWBURY
PENOBSCOT COUNTY
REINFORCING STEEL SCHEDULE
SHEET 10 OF 18 AUGUSTA, MAINE MARCH, 1962

85-176

STATE OF MAINE
STATE HIGHWAY COMMISSION



INTERSTATE 95
OVER
B&ARR & EXIST. ROUTE 159
AND
FISH STREAM & STATE AID-1
IN THE TOWN OF
ISLAND FALLS
AROOSTOOK COUNTY
FEDERAL AID PROJECT NO. I-IG-95-9(43) 272
LENGTH OF PROJECT 0.318 MILE

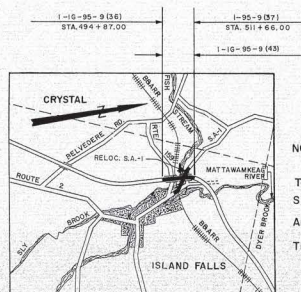
TRAFFIC

	INTERSTATE 95	ROUTE 159	STATE AID-1
1966 A.D.T.	1600	70	100
1986 A.D.T.	2500	100	140
D.H.V.	300	15	20
T.	14%	14%	14%
D.	60%	60%	60%
V.	60 MPH	50 MPH	50 MPH

INDEX OF SHEETS

1	TITLE SHEET
2	QUANTITIES
3-12	INTERSTATE 95 S.B. OVER B&A. RR. AND EXISTING ROUTE 159
13-24	INTERSTATE 95 S.B. OVER FISH STREAM AND RELOC. S.A.-1
25	TYPICAL SECTIONS
26-27	PLAN AND PROFILE STA. 494+87 TO STA. 511+66
28-29	PLAN AND PROFILE RELOC. STATE AID-1 & MARGINAL ROAD
30-35	CROSS SECTIONS STA. 494+87 TO STA. 511+66
36-45	CROSS SECTIONS RELOC. STATE AID-1 & MARGINAL ROAD

NOTE:
All Work Contemplated Under This Contract
To Be Governed By And In Conformity With The
Standard Specifications (Revision of January 1956)
And Supplementals Thereto, Except As Modified On
The Plans And In The Special Provisions.



LOCATION MAP
APPROX. SCALE - 1" = 1 MILE

STANDARD DETAIL SHEETS

BD 105-64	EXPANSION DAMS
3-65	MISCELLANEOUS ITEMS
4-65	DETAIL OF TRAP
AUGUST 1965	FIELD OFFICES & TESTING LABORATORY
2-64	GUARD RAIL, ETC.
3-64	MISCELLANEOUS ITEMS
4-64	DETAIL OF TRAP, ETC.
BD 101-64	BEARING DETAILS
BD 103-64	BEAM SPLICES
BD 104-64	DIAPHRAGMS, ARMORED JOINT, SHEAR CONNECTORS, DRAIN
BD 107-64	STEEL RAIL
BD 108-64	ALUMINUM RAIL
	STANDARD BARRICADE DETAIL

APPROVED

MAINE STATE HIGHWAY COMMISSION

DATE

David H. Stearn 7-14-65
CHAIRMAN

Carl M. Stetson 7-14-65
ENGINEER

Carroll 7-14-65
ENGINEER



HOWARD, NEEDLES, TAMMEN & BERGENDOFF
CONSULTING ENGINEERS
NEW YORK BOSTON KANSAS CITY

H. C. Lamberton, Jr. 8-25-65
DATE

DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

REGION 1

APPROVED

DIVISION ENGINEER DATE

101-191



S. P. NO.	STATE	PROJECT NUMBER	SHEET	TOTAL
10	MAINE	1295-9 (43)	3	45

SPECIFICATIONS
 DESIGN: Standard Specifications for Highway Bridges 1961 with Interim Specifications, 1961, 1962, 1963 and 1964.

CONTRACT:
 State of Maine, State Highway Commission, Standard Specifications for Highways and Bridges, Revision of January 1966 and Supplemental Specifications of February 1966.

LIVE LOADING
 HS20-44 (Modified for Interstate)

FOUNDATIONS

Abutments: 10B42 End Bearing Piles 37 Ton Capacity
 Piers: 10B42 End Bearing Piles 37 Ton Capacity

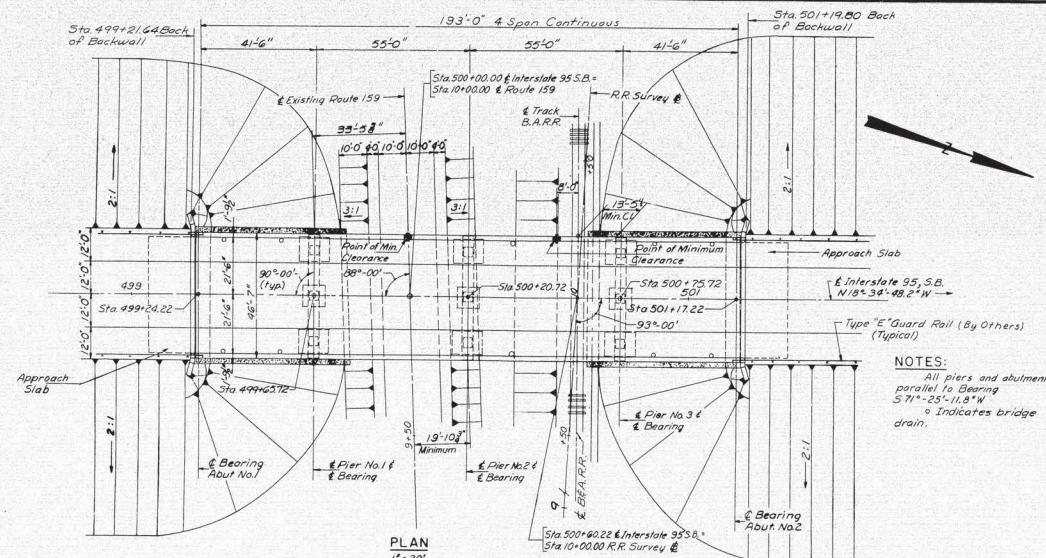
ALLOWABLE STRESSES

Concrete ($n=10$) - $f_c = 1200$ psi
 Reinforcing Steel, Intermediate Grade - $f_s = 20,000$ psi
 Structural Steel - $f_s = 20,000$ psi (ASTM-A36)

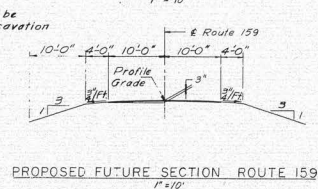
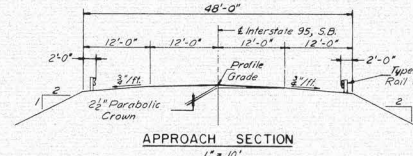
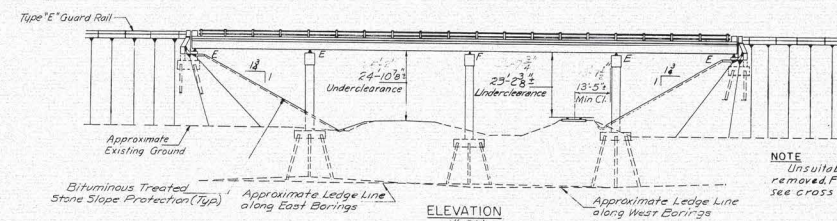
CONCRETE CLASSIFICATION
 All concrete shall be Class A.

INDEX OF SHEETS	
1	GENERAL PLAN & QUANTITIES
2	FOUNDATION SURVEY
3	ABUTMENT NO. 1
4	ABUTMENT NO. 2 & APPROACH SLAB
5	PIERS
6	STRUCTURAL STEEL & BLOCKING
7	SUPERSTRUCTURE
8	SLOPE PROTECTION
9	REINFORCING STEEL

STANDARD DETAIL SHEETS	
BD 101-64	BEARING PEDESTALS
BD 103-64	BEAM SPLICES



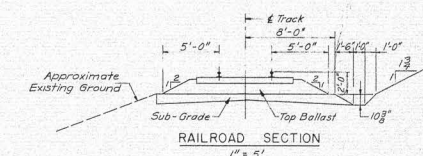
NOTES:
 All piers and abutment parallel to Bearing 571°-25'-11.8"W
 o Indicates bridge drain.



ITEM NO.	DESCRIPTION	QUANTITY	UNIT
204-14	Structural Earth Exc. Piers	246	C.Y.
404-31	Bituminous Concrete Surface Course-Type B, Hand Placed	29	Tons
701-33	P.C.C. Abut. Retaining Walls	166	C.Y.
701-35	P.C.C. Piers (24A Profile 159)	234	C.Y.
701-40	P.C.C. Rdwy. & Sidewalk Slabs on Steel Bridges	235	C.Y.
701-50	P.C.C. Approach Slabs	32	C.Y.
701-55	Curing Box for Concrete Cylinders	1	EA
702-103	Structural Steel Fabricated & Delivered (BARRIERS 159)	1.5	L.S.
702-104	Structural Steel Erection (BARRIERS 159)	1.5	L.S.
702-105	Structural Steel Field Painting (BARRIERS 159)	1.5	L.S.
705-13	Reinforcing Steel - Delivered	108.100	Lbs.
705-14	Reinforcing Steel - Placing	108.100	Lbs.
706-16	Steel H-Beam Piles 42 lbs/ft	2.6	L.F.
805-8	Bridge Rail	182	L.F.
807-11	Epoxy Resin Surface Sealant	111	S.Y.
901-24	Vertical Bridge Curb Type I	390	L.F.
901-25	Vertical Bridge Curb Type I Circular	8	L.F.
913-8	Bituminous Treated Stone Slope Protection	640	S.Y.

Estimated weight of structural steel including drains is 199,100 lbs.
 * This curing box shall also be used for I-95 S.B. over Fish Stream and Reloc. S.A-1.

All exposed surfaces of the restructure shall be given a rubbed finish.



DESIGN- CHECK	DETAIL- N.N.	BRIDGE NO. SURVEY- PLOT
FRAN		

STATE HIGHWAY COMMISSION BRIDGE DIVISION
INTERSTATE 95 SB. OVER B.B.A. RR. & EXISTING ROUTE 159 IN THE TOWN OF ISLAND FALLS AROSTOOK COUNTY
GENERAL PLAN & QUANTITIES

HOWARD, NEEDLES, TAMMEN & BERGENDOFF
 CONSULTING ENGINEERS
 NEW YORK BOSTON KANSAS CITY

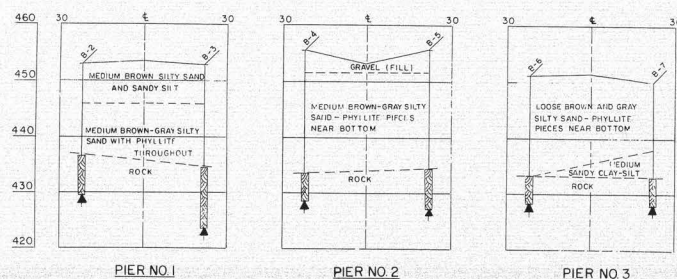
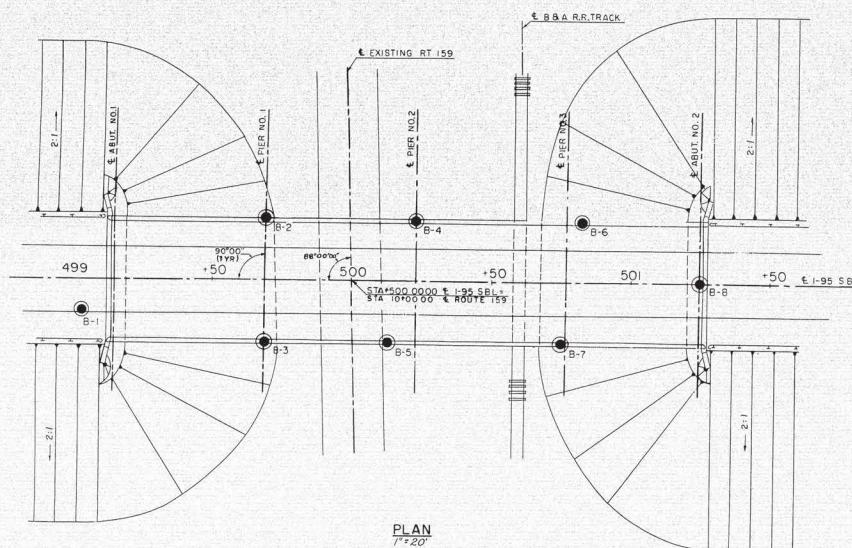
SHEET 1 OF 10 AUGUSTA, MAINE AUGUST 1965

101-193

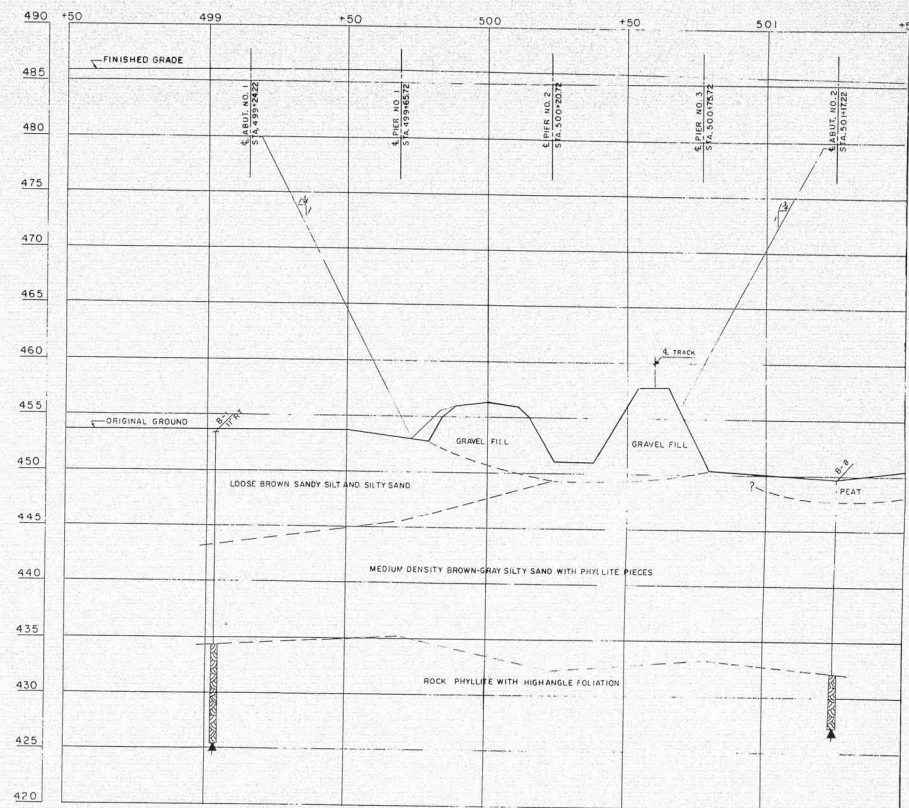
ISLAND FALLS (43)



B.P. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	1-95-9 (43)	4	45



TRANSVERSE SECTIONS



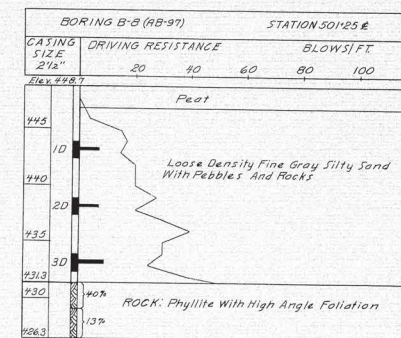
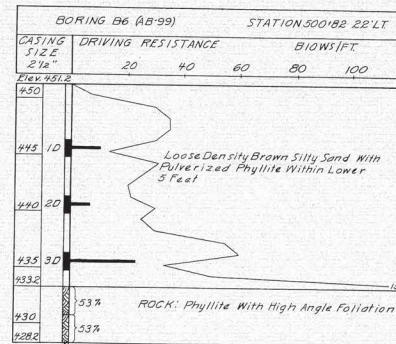
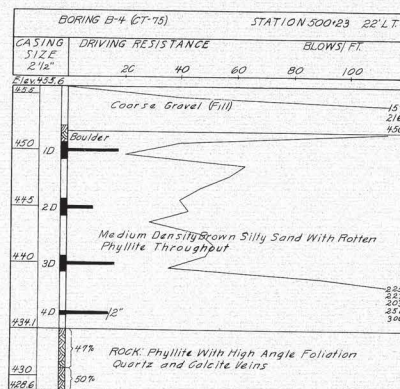
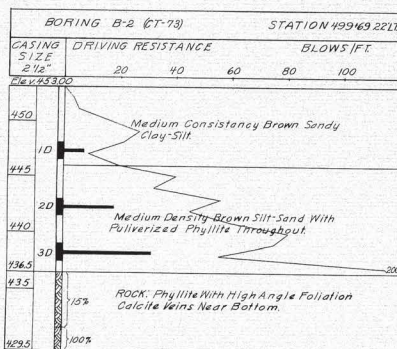
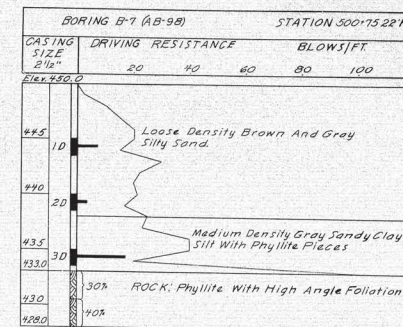
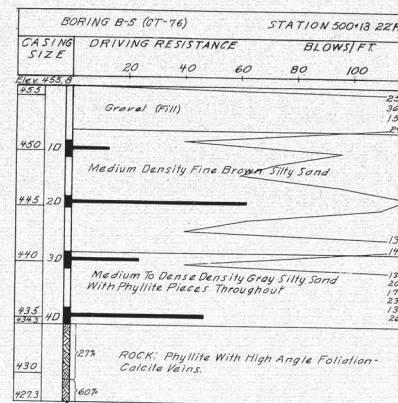
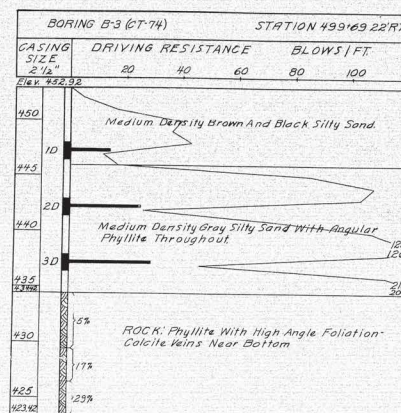
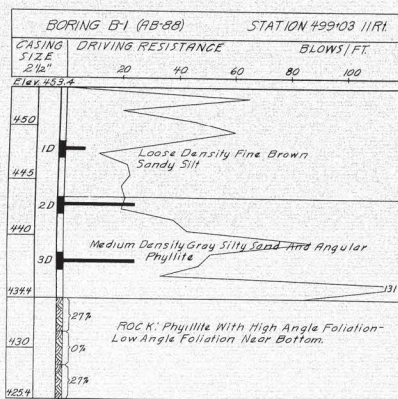
NOTE
For boring logs and notes see
Sheet 3.

HOWARD, NEEDLES, TAMMEN & BERGENDOFF
CONSULTING ENGINEERS
NEW YORK BOSTON BANGOR CITY

DESIGN—
CHECK—P.R.N.
DETAIL A.J.M.
BRIDGE NO.
SURVEY—
NOTED—
STATE HIGHWAY COMMISSION
BRIDGE DIVISION
INTERSTATE 95 S.B.
OVER
B&A R.R. & EXISTING ROUTE 159
IN THE TOWN OF
ISLAND FALLS
AROOSTOOK COUNTY
FOUNDATION SURVEY
SHEET 2 OF 10 AUGUSTA, MAINE AUGUST, 1965
ISLAND FALLS (43)

101-194





BORING NOTES

- 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.
- 1D 5 ft Sampler #1290's
- Number of blows required to drive spoon or tubing one foot with 350 ft/lbs of energy per blow.
- Bottom of boring (may not be bottom of soil strata)
- Location cored by diamond bit and percent recovery of rock.

DESIGN- TRAC- CHECK - P.M.	DETAIL G.F.K.	BRIDGE NO. SURVEY- PLOT
STATE HIGHWAY COMMISSION BRIDGE DIVISION INTERSTATE 95 S.B OVER B&A R.R. & EXISTING ROUTE 159 IN THE TOWN OF ISLAND FALLS AROSTOOK COUNTY FOUNDATION SURVEY		

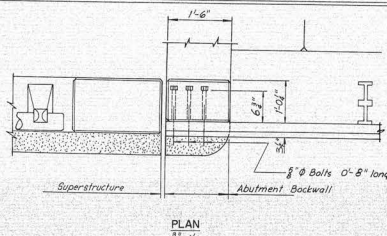
HOWARD, NEEDLES, TAMMEN & BERGENDOFF
 CONSULTING ENGINEERS
 NEW YORK BOSTON KANSAS CITY

SHEET 3 OF 10 AUGUSTA, MAINE AUGUST 1965

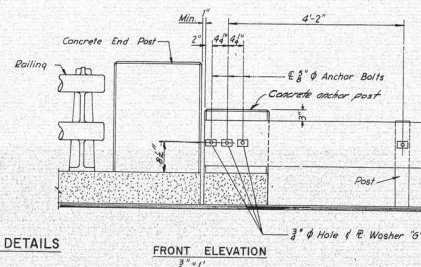
101-195

ISLAND FALLS (43)

ANCHOR POST NOTES

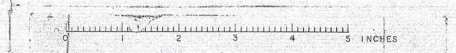


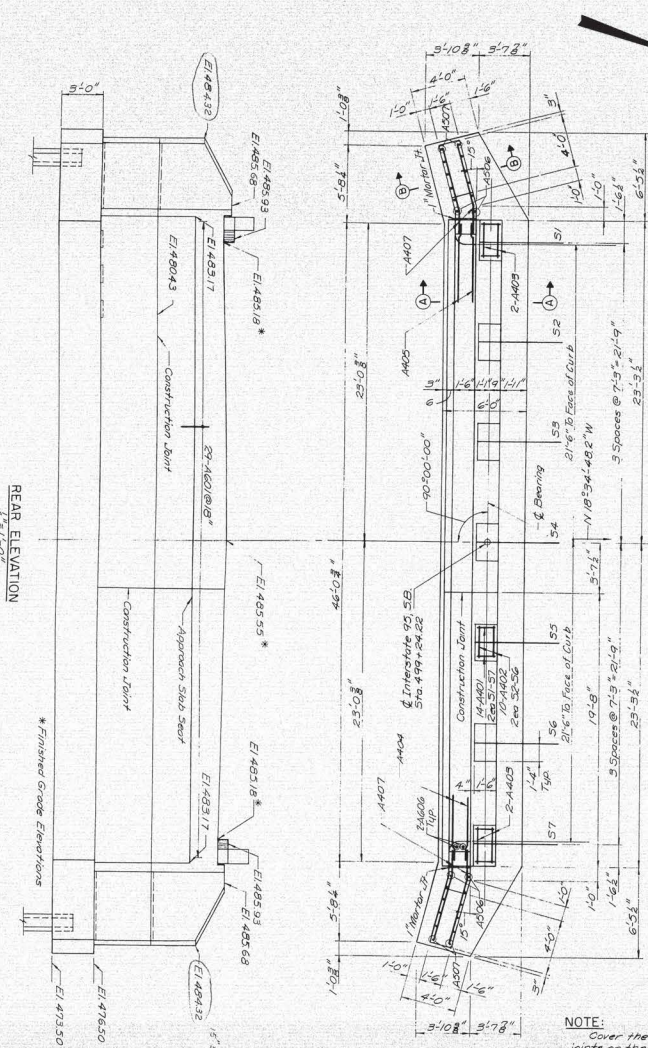
ANCHOR POST DETAILS



FRONT ELEVATION 3/4"

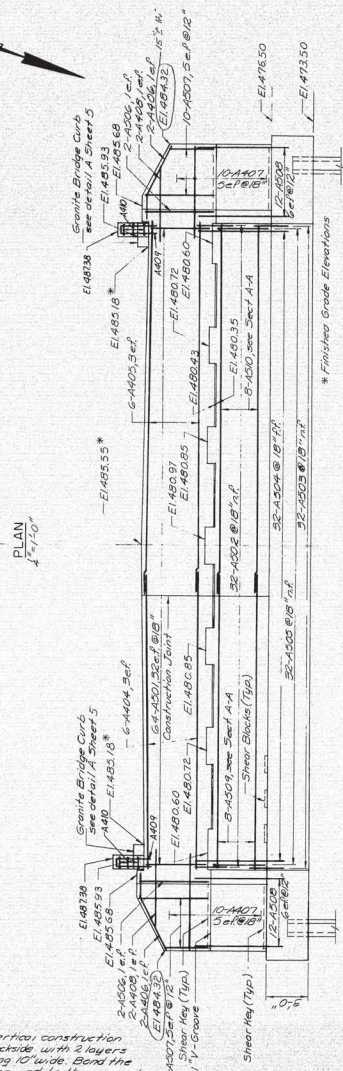
- Concrete in anchor post to be paid for under Item 701-33
- Three anchor bolts required at each anchor post. Bolts to be furnished with hex head nut and washer. All parts to be galvanized. Payment for furnishing and installing bolts shall be incidental to concrete items.



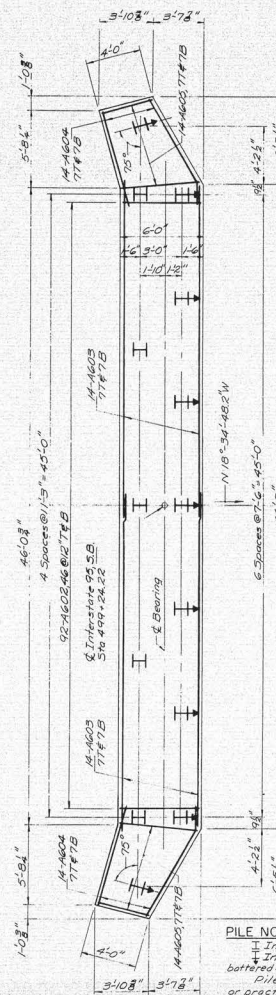


NOTE:

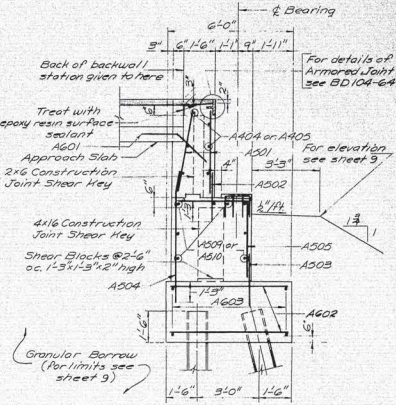
Cover the vertical construction joints on the backside with 2 layers of heavy roofing 10" wide. Bond the layers together and to the concrete with a suitable grade of roofing cement. Recess the vertical areas to be covered $\frac{1}{4}$ ". Paint vertical construction joints with a suitable grade of asphalt paint to break bond.



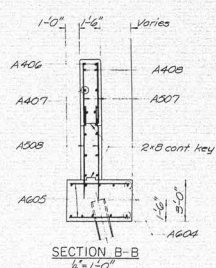
FRONT ELEVATION



FOOTING & PILE PLAN



SECTION A-
 $\frac{2}{3}'' = 1'-0''$



SECTION B—
1/2" = 1'-0"

NOTES:

- NOTES:**
- 1. For approach slab details see sheet 5.
 - 2. Parap bridge seat, face of backwall, and 1'-0" below top of slope protection on face and ends of breast wall with gray epoxy resin surface sealant.
 - 3. Indicate bearing areas 1" larger all around than the masonry plates to exact elevations shown.
 - 4. Reinforcing steel to have 5" minimum cover unless otherwise shown.
 - 5. Place reinforcing to clear anchor bolts.
 - 6. n.f. denotes near face, c.f. denotes far face, e.f. denotes exact face.
 - 7. For guard rail and post details see sheet 3.

PILE NOTES:

- ↑ Indicates vertical piles.
 ↓ Indicates battered piles.
 battered 3/2 in direction of arrow.
 Piles to be driven to ledge
 or practical refusal to develop
 end bearing
 For pile point detail see Sh. 5
 All piles are 10BP42 with
 a capacity of 57 tons
 Estimated pile length 46'

HOWARD, NEEDLES, TAMMEN & BERGENDOFF
CONSULTING ENGINEERS

NEW YORK	BOSTON	KANSAS CITY
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DETAIL—R.O'L.	BRIDGE NO. SURVEY— PLOT—
---------------	--------------------------------

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

INTERSTATE 95 SB
OVER

A.R.R. & EXISTING ROUTE 159

IN THE TOWN OF

ISLAND FALLS

ARROSTOCK COUNTY

ABUTMENT NO. 1

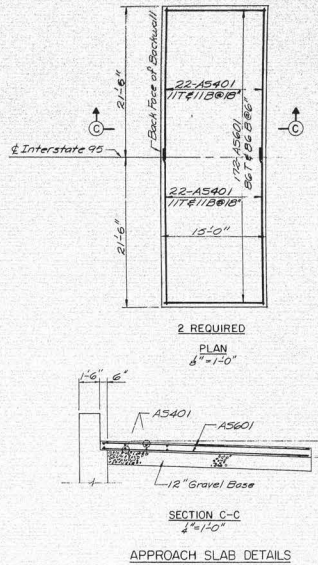
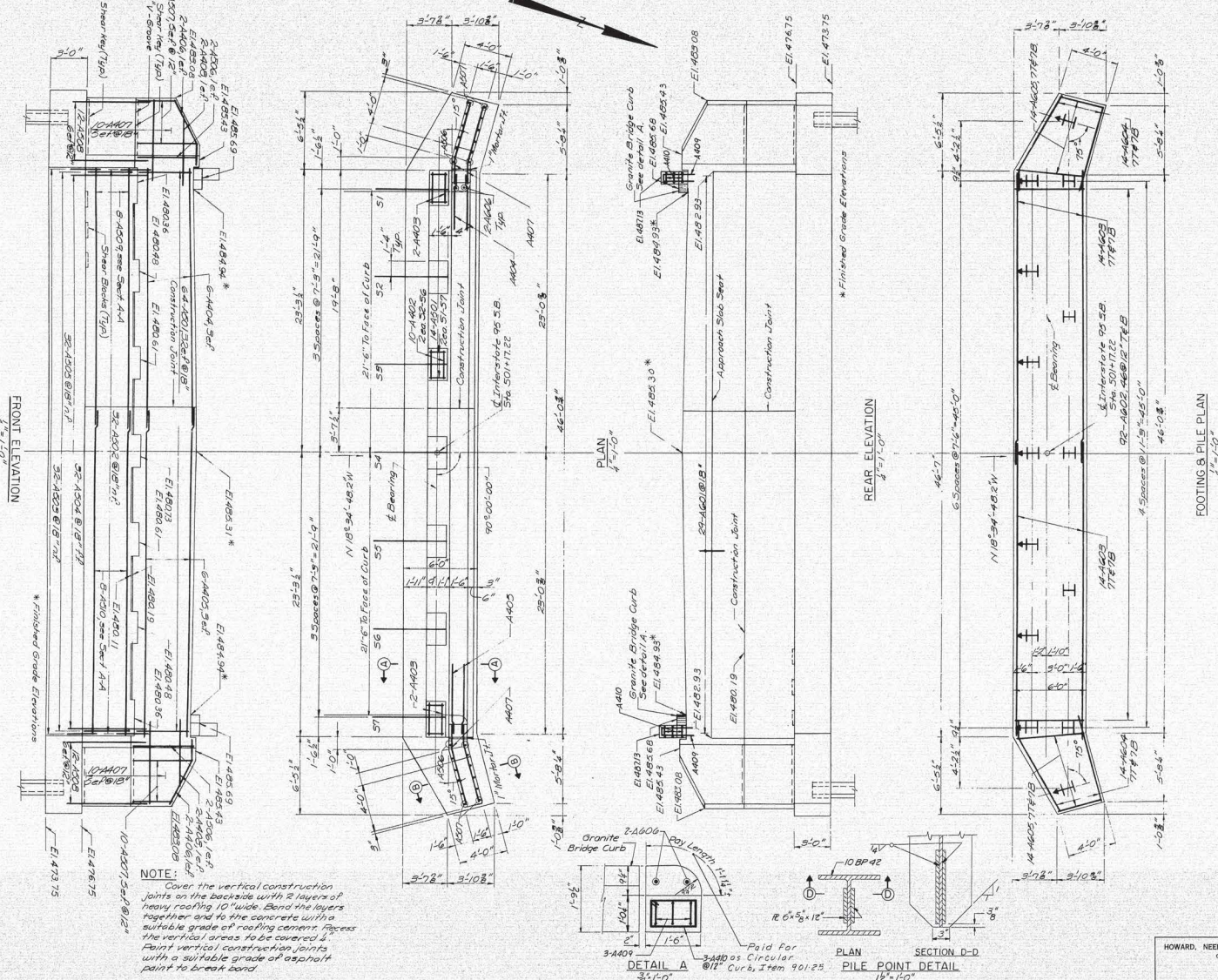
RESTRICTION NOTICE

OF 10 AUGUSTA, MAINE AUG

ISLAND FALLS (43)

1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 2674, 2675, 2676, 2677, 2678, 2679, 26

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NOTES:

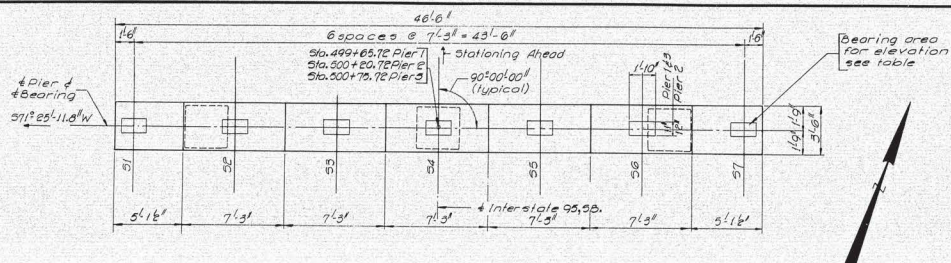
- For General Notes and Pile Notes, see Sheet 4.
- For Sections A-A & B-B, see Sheet A.
- Estimated Pile Length 50'

GRANITE CURB NOTES:

Grout A606 bars into 14" holes in stone prior to setting stone on backwall. Drill 14" holes in backwall to suit A606 bars. Payment for drilling for and grouting of A606 bars to be included in the price for Item 702-1d, Reinforcing Steel, placing. Granite blocks shall be placed in position after or at the same time as curb on bridge is positioned.

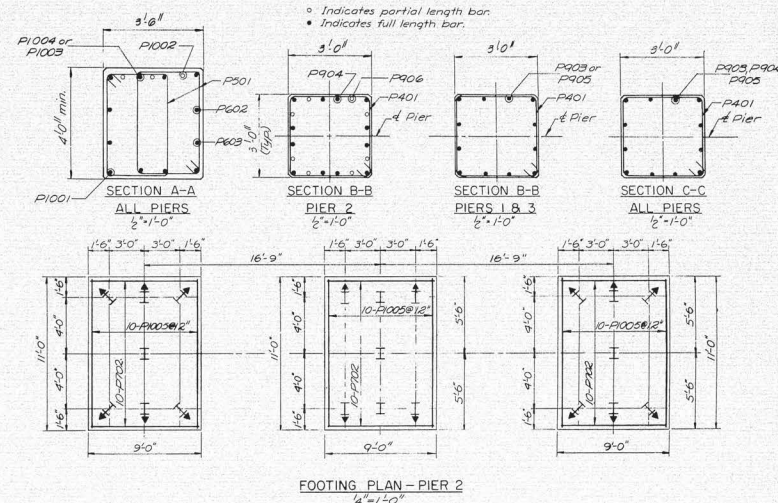
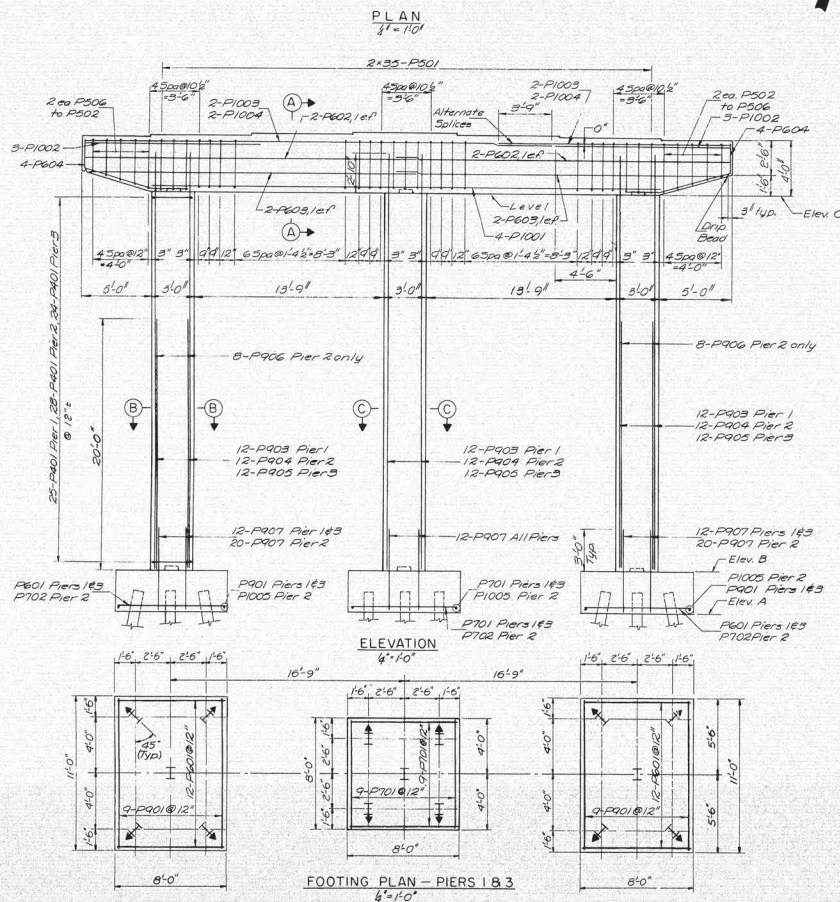
DESIGN - C.H. TRACE, C.E.	DETAIL - R.O.L. SURVEY - R.C.	BRIDGE NO. 195-9 (43)
STATE HIGHWAY COMMISSION BRIDGE DIVISION		
INTERSTATE 95 S.B. OVER B&A.R. & EXISTING ROUTE 159 IN THE TOWN OF ISLAND FALLS AROSTOOK COUNTY		
ABUTMENT NO. 2 & APPROACH SLAB		

HOWARD, NEEDLES, TAMMEN & BERGENDOFF
CONSULTING ENGINEERS



Beam	Pier No. 1	Pier No. 2	Pier No. 3
51	400.44	400.73	400.30
52	400.57	400.86	400.43
53	400.69	400.98	400.56
54	400.82	401.11	400.68
55	400.69	400.98	400.56
56	400.57	400.86	400.43
57	400.44	400.73	400.30

	A	B	C
Pier 1	449.50	452.50	476.44
Pier 2	446.00	449.00	476.73
Pier 3	450.00	453.00	476.30



- NOTES:
1. Reinforcing steel to have 2" minimum cover unless otherwise shown.
 2. All exposed corners to have 1" chamfer.
 3. Dress bearing areas 1" longer all around than masonry plate to each elevation shown.
 4. Place reinforcing to clear anchor bolts.
 5. Soils information indicates that some ground water should be anticipated at footing elevation of pier 3.

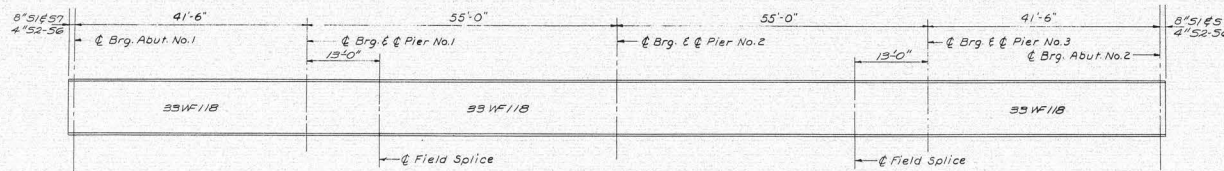
- PILE NOTES
1. H Indicates vertical piles.
 2. H Indicates battered piles, with 3:12 batter in direction of arrow.
 3. All piles 10BP42, 37 Ton Capacity.
 4. Estimated Pile Lengths:
Pier 1 26
Pier 2 19
Pier 3 23
 5. Piles to be driven to ledge or practical refusal to develop end bearing.
 6. Pile points not required for pier footing piles.



REFERENCE
Splice - See Standard Details BD103-64
Diaphragms - See Standard Details BD104-64
Pedestals - See Standard Details BD101-64
Armored Joints - See Standard Details BD104-64

Fabrication and Erection: State of Maine Standard Specifications, Highways and Bridges, Revision of Jan. 1956 and Supplemental Specifications of Feb. 1960
Design and Detail: A.A.S.H.O. Standard Specifications for Highway Bridges of 1964 and Interim Specifications 1961, 1962, 1963 & 1964
Materials: Except as otherwise noted on the Standard Details, all materials shall conform to A.S.T.M. designation A-36

14 EPC-2 Required
14 EPC-3 Required
7 FPC-2 Required



TYPICAL STRINGER ELEVATION
All Dimensions Are Horizontal

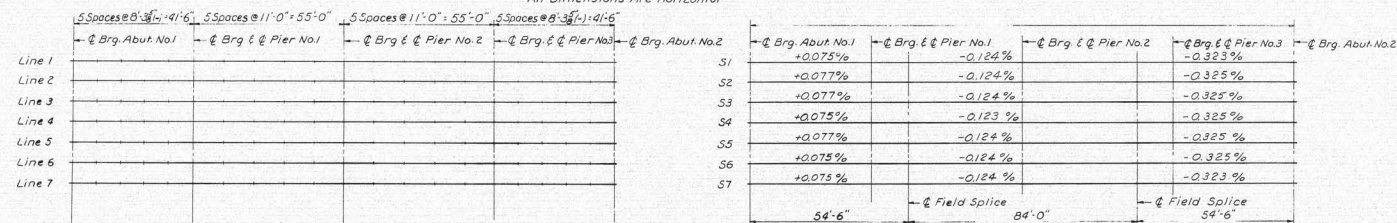
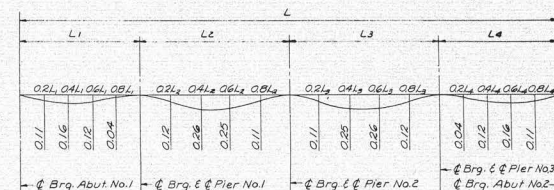


DIAGRAM OF BLOCKING POINTS

BEAM GRADES

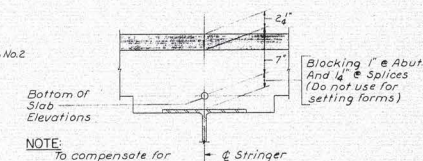


DEAD LOAD DEFLECTION DIAGRAM

All Deflections in Inches

NOTE

NOTE:
No shop camber required - natural mill camber to be placed up.



NOT

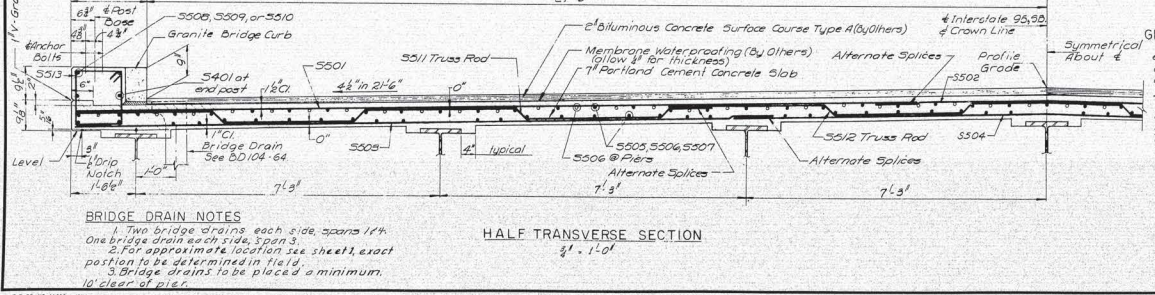
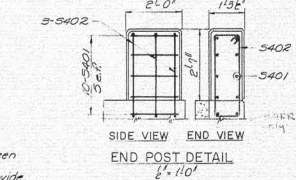
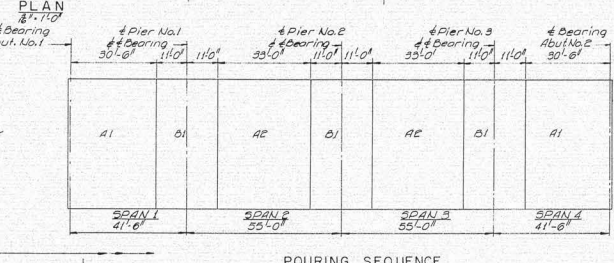
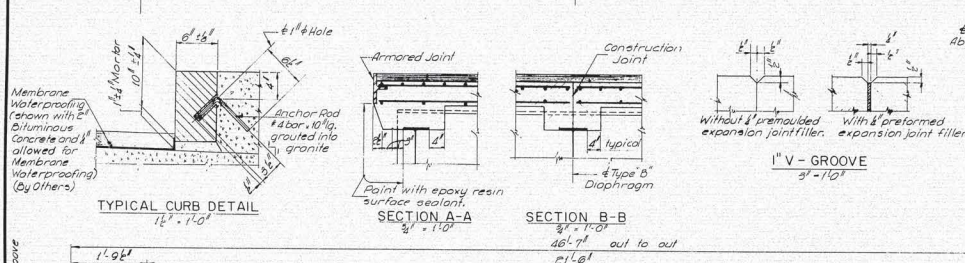
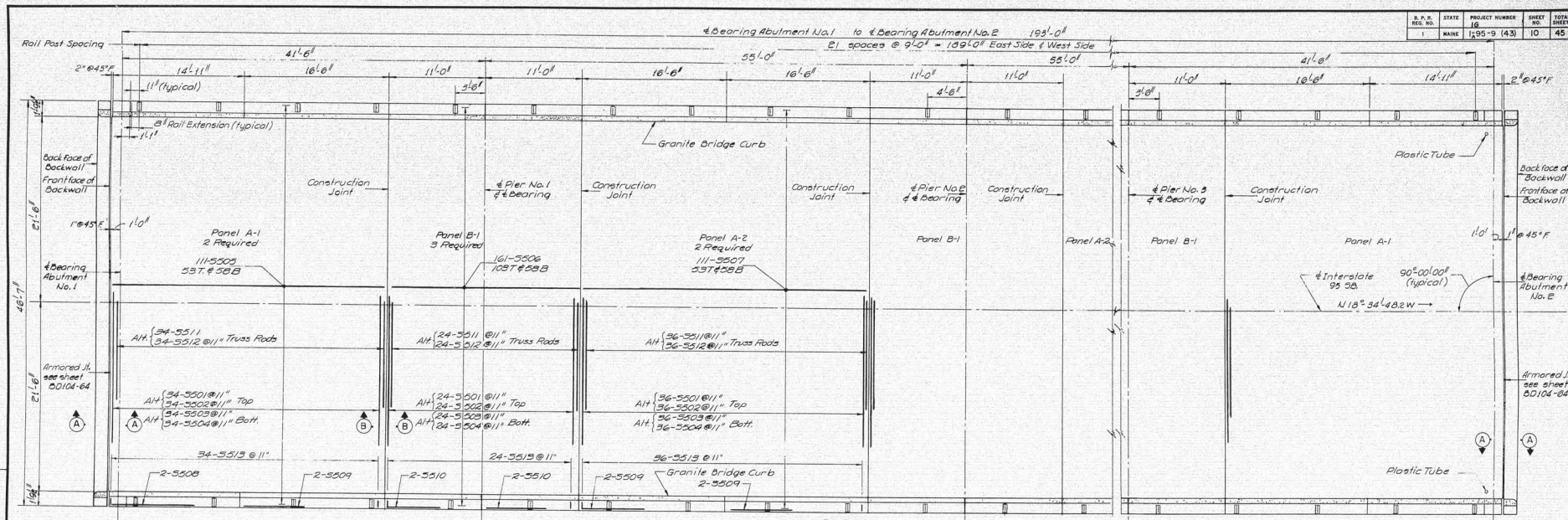
NOTE: To compensate for dead load deflections as well as possible irregularities in beams, set the bottom of slab elevations at the points indicated before any of the slab formwork is started.

BLOCKING DETAIL

No Scale

HOWARD, NEEDLES, TAMMEN & BERGENDORF
CONSULTING ENGINEERS





GENERAL SUPERSTRUCTURE NOTES

1. All joints in curbs and granite bridge curbs, over piers, use 1" preformed expansion joint filler. At all other curb joints, break the bond between concrete surfaces with a suitable grade of asphalt paint. Form 1/2" groove on outside face of curb and slab of each vertical joint. Provide joints in granite bridge curbs of curb construction joint.
2. At low point in slabs, place a plastic tube 1/4" through the slab for drainage. Exact location to be determined in the field. Do not cover the tube with waterproofing. This work will be incidental to contract items. Tubes shall extend 2' below bottom of slab. Place tubes to drip clear of bridge seal.
3. For bridge rail, see standard details, 50-107-64, 50-108-64.
4. Place concrete in A panels before placing concrete in B panels.
5. Concrete in End Posts will be paid for under item 701-40.
6. Granite bridge curb means Vertical Bridge Curb - Type 1 and will be paid for under items 901-24 or 901-25.

BRIDGE DRAIN NOTES

1. Two bridge drains each side, spans 1 & 4.
2. One bridge drain each side, spans 2 & 3.
3. For approximate location see sheet, exact position to be determined in field.
4. Bridge drains to be placed a minimum 10' clear of pier.

HALF TRANSVERSE SECTION

HOWARD, NEEDLES, TAMMEN & BERGENSOFF
CONSULTING ENGINEERS

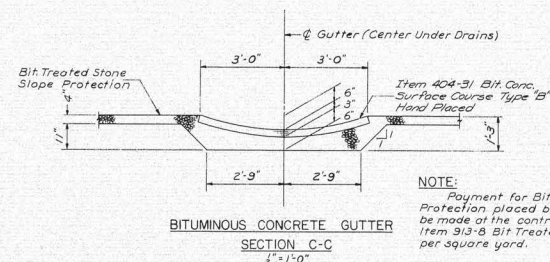
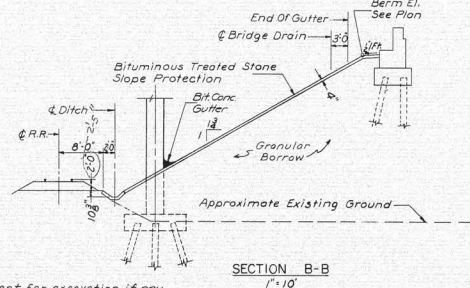
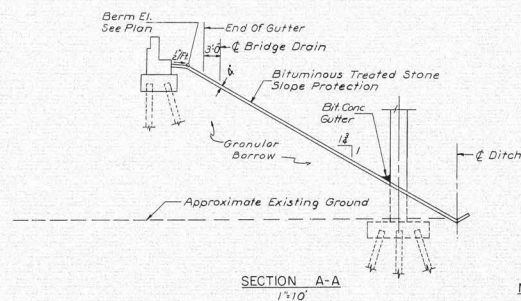
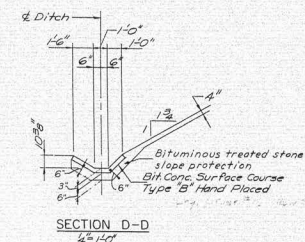
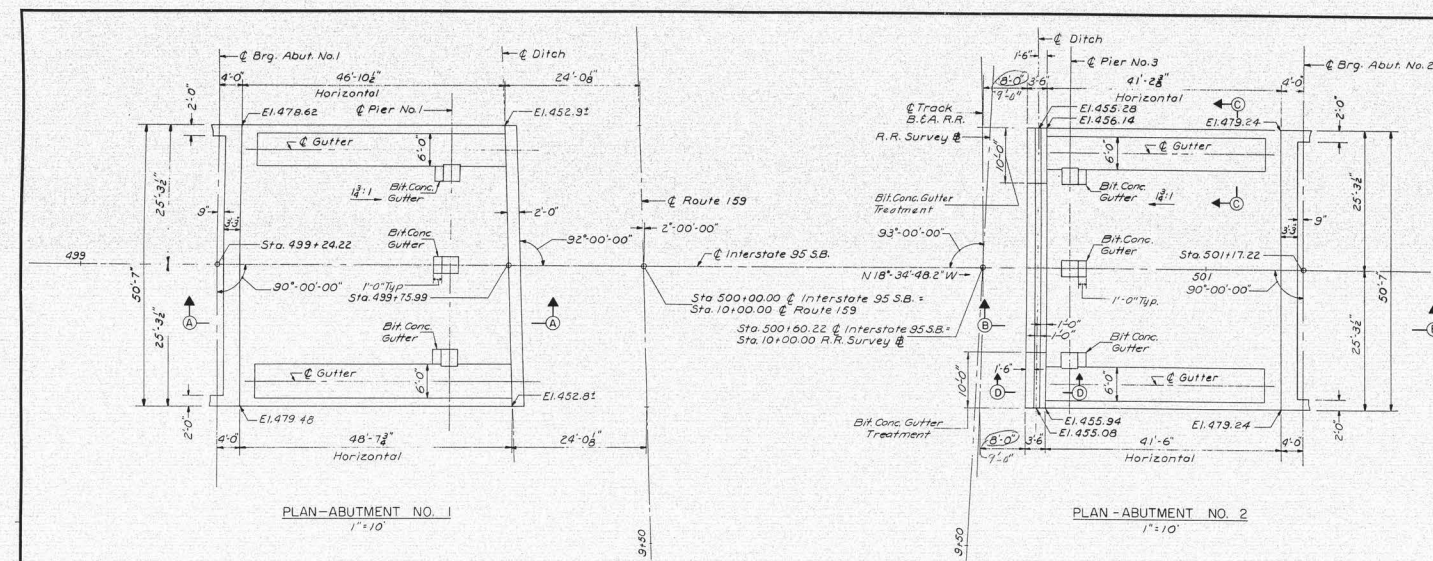
DESIGN - G.H.
CHECK - P.H.L.
DETAIL - D.A.T.
BRIDGE NO. 101-200
STATE HIGHWAY COMMISSION
BRIDGE DIVISION
INTERSTATE 95 SB
OVER
B.A. & R.R. & EXISTING ROUTE 159
IN THE TOWN OF
ISLAND FALLS
ARROSTOCK COUNTY
SUPERSTRUCTURE

SHEET 8 OF 10 AUGUSTA, MAINE AUGUST 1965

101-200

ISLAND FALLS (43)

B. P. R. REG. NO.	STATE	PROJECT NUMBER IG	SHEET NO.	TOTAL SHEET
1	MAINE	1-95-9 (43)	11	45



NOTE:
Payment for Bit Treated Stone Slope Protection placed beneath the gutter shall be made at the contract unit price for Item 913-B Bit Treated Stone Slope Protection per square yard.

DESIGN-
TRACE-
CHECK- R.R.S.

DETAIL- R.D.F.

BRIDGE NO.
SURVEY-
R.O.T.

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

INTERSTATE 95 S.B.

OVER

B.B.A. R.R. & EXISTING ROUTE 159

IN THE TOWN OF
ISLAND FALLS
AROOSTOOK COUNTY

SLOPE PROTECTION

SHEET 9 OF 10 AUGUSTA, MAINE AUGUST 1965

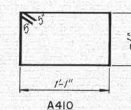
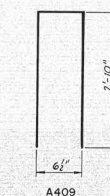
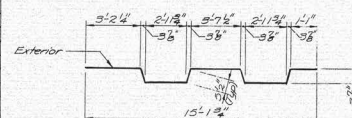
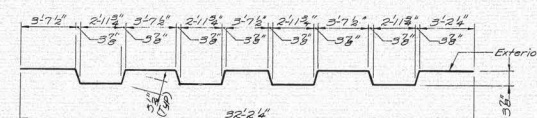
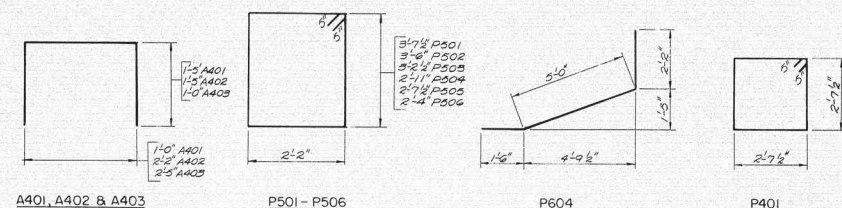
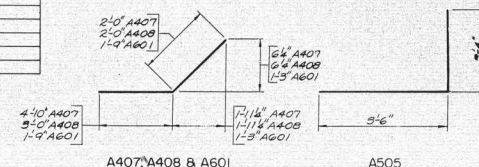
ISLAND FALLS (43)



MARK	SIZE	NUMBER	LENGTH	INCR	LOCATION
ABUTMENTS #2					
STRAIGHT BARS					
A404	4	12	20'-6"		Totals are for two abutments
A403	4	12	26'-7"		Backwall
A406	4	9	6'-8"		Backwall
					Wingwall (Bend in Field)
BENT BARS					
A501	5	128	4'-5"		Backwall
A502	5	64	2'-9"		Stem & Backwall
A503	5	64	3'-0"		Footings & Stem
A504	5	64	6'-0"		Footings & Stem
A506	5	8	5'-0"		Wingwall
A507	5	40	3'-0" to 6'		Wingwall & Groups of 5
A508	5	48	5'-0"		Wingwall & Footings
A509	5	16	20'-6"		Stem
A510	5	16	26'-7"		Stem
A603	6	184	3'-6"		Footings
A603	6	56	24'-0"		Footings
A604	6	56	19'-8"		Footings
A605	6	56	9'-6" to 2"		Footings & Groups of 7
A606	6	3	1'-0"		Footings & Groups of 7
A606	6	3	1'-0"		Curb Dowels
BENT BARS					
A401	4	20	3'-0"		Pads
A402	4	20	5'-0"		Pads
A403	4	8	4'-5"		Pads
A407	4	40	6'-0"		Wingwall
A408	4	8	5'-0"		Wingwall
A409	4	12	6'-11"		Guard Rail End Post
A410	4	12	4'-5"		Guard Rail End Post
A505	5	64	6'-10"		Stem
A601	6	38	3'-6"		Approach Slab Seat
APPROACH SLABS					
STRAIGHT BARS					
A5401	4	80	2'-15"		Approach Slab
A5601	6	344	14'-8"		Approach Slab
PIER 1					
STRAIGHT BARS					
P601	6	24	7'-6"		Footings
P602	6	4	23'-9"		Cap
P603	6	4	22'-6"		Cap
P701	7	18	7'-6"		Footings
P901	9	18	10'-6"		Footings
P903	9	36	27'-3"		Columns
P907	9	36	5'-9"		Dowels
P1001	10	4	36'-6"		Cap
P1002	10	6	12'-4"		Cap
P1003	10	4	39'-4"		Cap
P1004	10	4	16'-7"		Cap
BENT BARS					
P401	4	75	11'-4"		Column Ties
P501	5	70	12'-5"		Stirrups
P502	5	4	12'-8"		"
P503	5	4	11'-7"		"
P504	5	4	11'-0"		"
P505	5	4	10'-5"		"
P506	5	4	9'-10"		Stirrups
P604	6	8	8'-8"		Cap
SUPERSTRUCTURE					
STRAIGHT BARS					
S401	4	40	1'-8"		End Posts
S501	5	212	20'-1"		Top Transverse
S502	5	212	27'-4"		Top Transverse
S503	5	212	18'-5"		Bottom Transverse
S504	5	212	30'-11"		Bottom Transverse
S505	5	222	31'-11"		Longitudinal A-1
S506	5	489	21'-8"		Longitudinal A-1
S507	5	222	32'-8"		Longitudinal A-2
S508	5	8	14'-7"		Sidewalk A-1
S509	5	24	16'-2"		Sidewalk A-1, A-2
S510	5	24	10'-8"		Sidewalk B-1

MARK	SIZE	NUMBER	LENGTH	INCR	LOCATION
PIER 2					
STRAIGHT BARS					
P602	6	4	23'-9"		Cap
P603	6	4	22'-6"		Cap
P702	7	30	8'-6"		Footings
P904	9	36	31'-0"		Columns
P906	9	16	20'-0"		Columns
P907	9	32	5'-9"		Column Dowels
P1001	10	4	36'-6"		Cap
P1002	10	6	12'-4"		"
P1003	10	4	39'-4"		"
P1004	10	4	16'-7"		Cap
P1005	10	30	10'-6"		Footings
BENT BARS					
P401	4	84	11'-4"		Column Ties
P501	5	70	12'-5"		Stirrups
P502	5	4	12'-8"		"
P503	5	4	11'-7"		"
P504	5	4	11'-0"		"
P505	5	4	10'-5"		"
P506	5	4	9'-10"		Stirrups
P604	6	8	8'-8"		Cap
PIER 3					
STRAIGHT BARS					
P601	6	24	7'-6"		Footings
P602	6	4	23'-9"		Cap
P603	6	4	22'-6"		Cap
P701	7	18	7'-6"		Footings
P901	9	18	10'-6"		Footings
P903	9	36	26'-6"		Column
P907	9	36	5'-9"		Dowels
P1001	10	4	36'-6"		Cap
P1002	10	6	12'-4"		Cap
P1003	10	4	39'-4"		Cap
P1004	10	4	16'-7"		Cap
BENT BARS					
P401	4	72	11'-4"		Column Ties
P501	5	70	12'-5"		Stirrups
P502	5	4	12'-8"		"
P503	5	4	11'-7"		"
P504	5	4	11'-0"		"
P505	5	4	10'-5"		"
P506	5	4	9'-10"		Stirrups
P604	6	8	8'-8"		Cap
SUPERSTRUCTURE					
STRAIGHT BARS					
S401	4	40	1'-8"		End Posts
S501	5	212	20'-1"		Top Transverse
S502	5	212	27'-4"		Top Transverse
S503	5	212	18'-5"		Bottom Transverse
S504	5	212	30'-11"		Bottom Transverse
S505	5	222	31'-11"		Longitudinal A-1
S506	5	489	21'-8"		Longitudinal A-1
S507	5	222	32'-8"		Longitudinal A-2
S508	5	8	14'-7"		Sidewalk A-1
S509	5	24	16'-2"		Sidewalk A-1, A-2
S510	5	24	10'-8"		Sidewalk B-1

MARK	SIZE	NUMBER	LENGTH	INCR	LOCATION
SUPERSTRUCTURE (CONT)					
BENT BARS					
S402	4	12	10'-2"		End Posts
S511	5	212	13'-9"		Truss Rod
S512	5	212	98'-3"		Truss Rod
S513	5	424	5'-0"		Sidewalk



NOTES:
 1. All dimensions are to the center of bars.
 2. All reinforcing bars shall be intermediate grade steel.
 3. Reinforcing steel to have 2" minimum cover, unless otherwise shown.
 4. Maximum length of splice is 17 bar diameters.

DESIGN - TRAC - CHECK - R.M.	DETAIL - R.D.L.	BRIDGE NO. SURVEY - PLOT -
STATE HIGHWAY COMMISSION BRIDGE DIVISION		
INTERSTATE 95 S.B. OVER		
B BARR & EXISTING ROUTE 159		
IN THE TOWN OF ISLAND FALLS		
AROOSTOOK COUNTY		
REINFORCING STEEL		

HOWARD, NEEDLES, TAMMEN & BERGENDOFF
 CONSULTING ENGINEERS
 NEW YORK BOSTON KANSAS CITY

SHEET 10 OF 10 AUGUSTA, MAINE AUGUST 1965

101-202

ISLAND FALLS (43)



SHEET NO.	STATE	PROJECT NUMBER	SHEET	TOTAL
1	MAINE	195-9 (43)	13	45

SPECIFICATIONS

DESIGN:

AASHTO Standard Specifications for Highway Bridges 1961, with
Interim Specifications, 1961, 1962, 1963, & 1964.

CONTRACT:

State of Maine, State Highway Commission Standard Specifications
for Highways and Bridges, Revision of January 1956 and
Supplemental Specifications of February 1960.

LIVE LOADING

H520-44 (Modified for Interstate)

FOUNDATIONS

Abutments: 10BP42 End Bearing Piles. 37 Ton Capacity.
Piers: Spread Footings on Ledge.

ALLOWABLE STRESSES

Concrete ($n=10$) - $f_c = 1620$ psi.
Reinforcing Steel, Intermediate Grade - $f_s = 20,000$ psi.
Structural Steel - $f_s = 20,000$ psi. (A.S.T.M. - A36).

CONCRETE CLASSIFICATION

All concrete shall be Class "A".

HYDRAULIC DATA:

$A = 113.2$ Sq. Ft.

$S = 1/11$ Ft./M.

$Q_{50} = 5250$ cfs

ITEM NO.	DESCRIPTION	QUANTITY	UNIT
204-14	Structural Earth Exc. - Piers	561	C.Y.
205-12	Gravel Borrow (IRM)	5,010	C.Y.
404-31	Bit. Conc. Surface Course (Hand Placed) Type "B"	6	Tons
701-33	R.C.C. Abut. & Retaining Wall	246	C.Y.
701-35	R.C.C. Piers (4-30" over Fish Stream & S.A.#1)	543	C.Y.
701-40	R.C.C. R.Way & S.Way Slope, 50 Steel Bridges	472	C.Y.
701-50	R.C.C. Approach Slabs	32	C.Y.
701-54	Portland Cement for Riprap Grout	4	Bb/ls
705-103.5	Structural Steel Fabrication (Delivered) (Fish Stream & S.A.)	L.S.	L.S.
705-104.2	Structural Steel Erection (Fish Stream & S.A.)	L.S.	L.S.
705-105.2	Structural Steel Field Painting (Fish Stream & S.A.)	L.S.	L.S.
705-13	Reinforcing Steel - Delivered	174,100	Lbs.
705-14	Reinforcing Steel - Placing	174,100	Lbs.
705-17	Shear Connectors (1-95 over Fish Stream & S.A.#1)	L.S.	L.S.
705-16	Shear Connectors (1-15 over Fish Stream & S.A.#1)	1,485	L.F.
803-7	Cofferdam Pier 1 (1-95 over Fish Stream & S.A.#1)	L.S.	L.S.
803-8	Cofferdam Pier 2 (1-95 over Fish Stream & S.A.#1)	L.S.	L.S.
803-8	Bridge Pier	636	L.F.
901-11	Epoxy Resin Surface Sealant	137	S.Y.
901-24	Vertical Bridge Curb Type I	644	L.F.
901-25	Vertical Bridge Curb Type I Circular	5	L.F.
903-10	Hand Laid Riprap	777	C.Y.
913-8	Bituminous Treated Stone Slope Protection	204	C.Y.

Estimated weight of structural steel including drains is 462,800 lbs.
Curing Box for 1-95 S.A. over B.A. R.R. and Existing Rte. 159 shall be
used for this structure.
Estimated weight of shear connectors - 7530 lbs.

Estimated number of shear connectors - 1384 pcs.
All exposed surfaces of the
substructure shall be given a
rubbed finish.

INDEX OF SHEETS

1. GENERAL PLAN & QUANTITIES
2. FOUNDATION SURVEY
3. FOUNDATION SURVEY
4. ABUTMENT NO. 1
5. ABUTMENT NO. 2
6. APPROACH SLAB & ABUT. NO. 2 SECTIONS
7. PIERS 1 & 2
8. PIER 3
9. STRUCTURAL STEEL & BLOCKING
10. SUPERSTRUCTURE
11. SLOPE PROTECTION
12. REINFORCING STEEL

STANDARD DETAILS

- BD 101-64 BEARING FEDESTALS
- BD 103-64 BEAM SPICES
- BD 104-64 DIAPHRAGMS, ARMORED JOINT,
- BD 105-64 SHEAR CONNECTORS, GRAIN
- BD 107-64 EXPANSION DAMS
- BD 108-64 STEEL RAIL
- BD 109-64 ALUMINUM RAIL

DESIGN - TRACK - SURVEY - BRIDGE NO. SURVEY -

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

INTERSTATE 95 S.B.

OVER

IN THE TOWN OF

ISLAND FALLS

AROOSTOOK COUNTY

GENERAL PLAN & QUANTITIES

SHEET 1 OF 12 AUGUSTA, MAINE AUGUST 1965

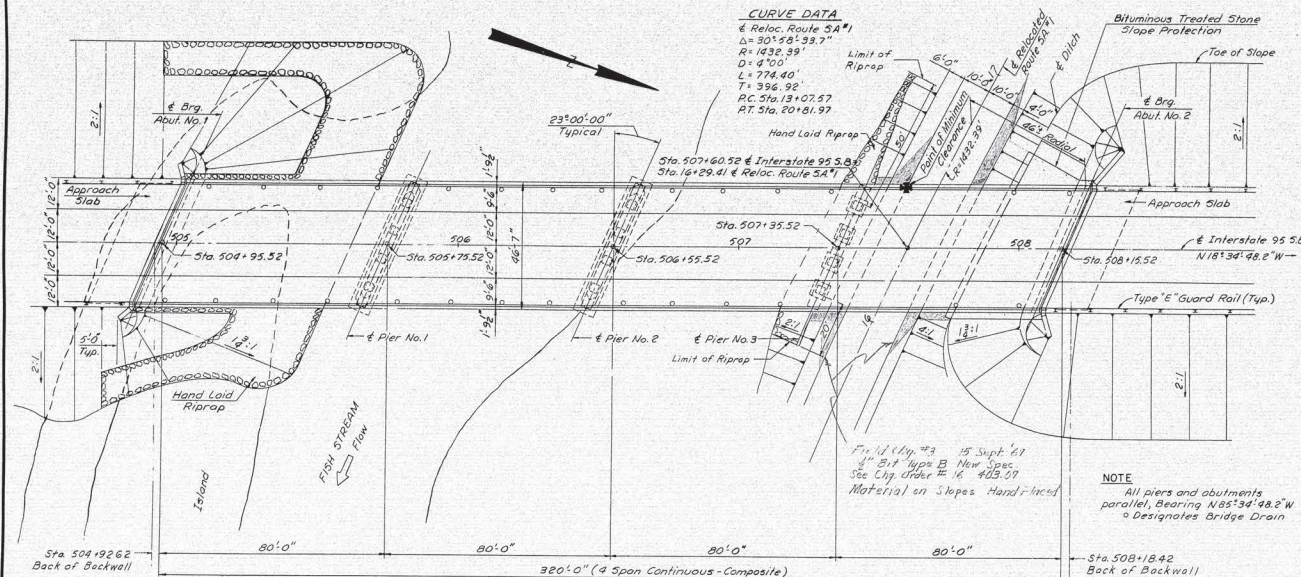
101-203

ISLAND FALLS (43)

13

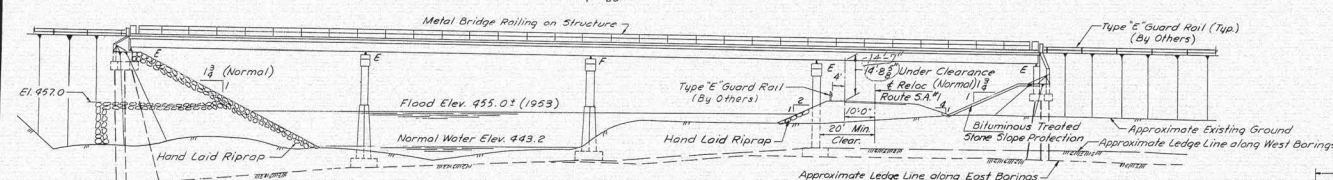
CURVE DATA

& Reloc. Route S.A.#1
 $\Delta = 30^\circ 58' 33.7''$
 $R = 1432.39'$
 $D = 4' 10.0''$
 $L = 774.40'$
 $T = 396.98'$
 $RC Sta. 13+07.57$
 $RT Sta. 20+81.97$



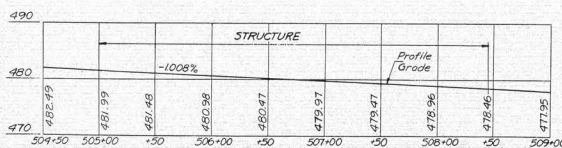
PLAN

1" = 20'



ELEVATION

1" = 20'



PROFILE INTERSTATE 95

1" = 50' Horiz.

1" = 10' Vert.

NOTES:

1. All fill within the limits as shown on Profile, sheet 27, shall be placed by the controlled density method.
2. Size of stone in gravel or granular borrow through which abutment piles are driven should not exceed 6 inches and concentrations of stones in the area shall be avoided.
3. Place gravel, borrow or granular borrow to elevation of abutment footings before driving piles.

PROFILE RELOCATED ROUTE S.A. NO. 1

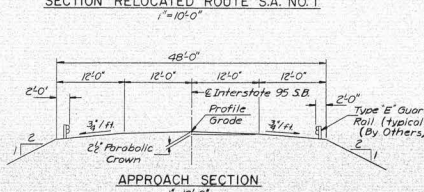
1" = 50' Horiz.

1" = 10' Vert.



NOTE
All piers and abutments
parallel, bearing N 85° 34' 48.2" W
Designates Bridge Drain

SECTION RELOCATED ROUTE S.A. NO. 1



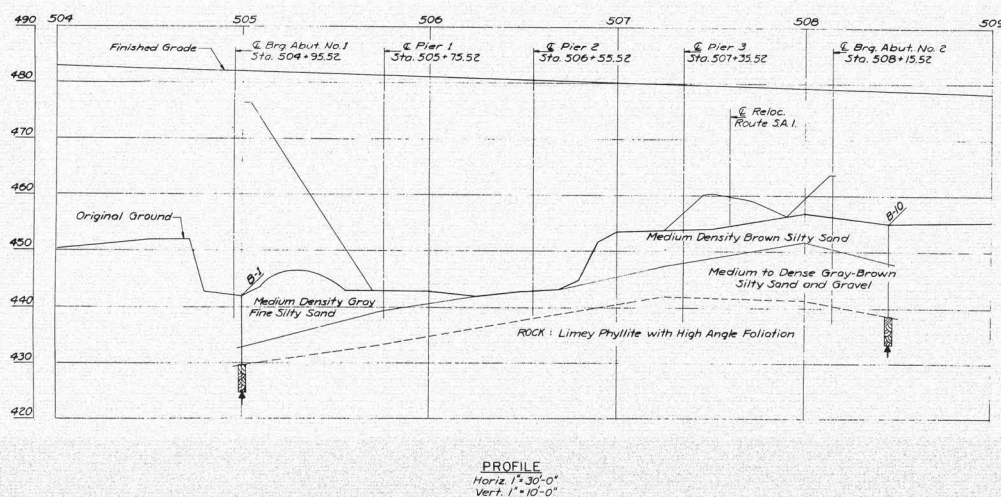
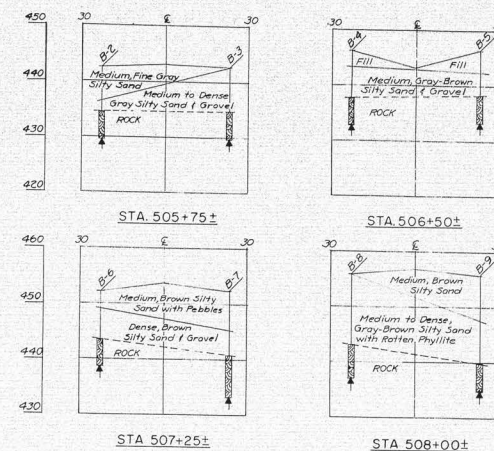
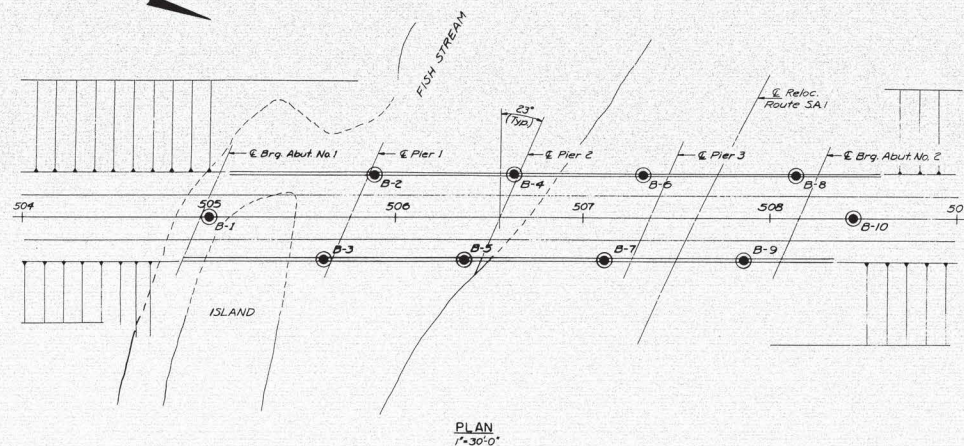
APPROACH SECTION

1" = 10' 0"

HOWARD, NEEDLES, TAMMEN & BERGENDOFF
CONSULTING ENGINEERS

NEW YORK BOSTON KANSAS CITY

B.P. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	1295-9 (43)	14	45



NOTES:
For Boring Logs and notes, see sheet 3.

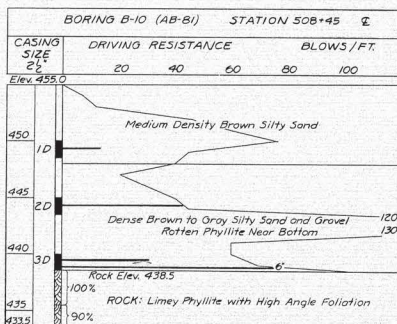
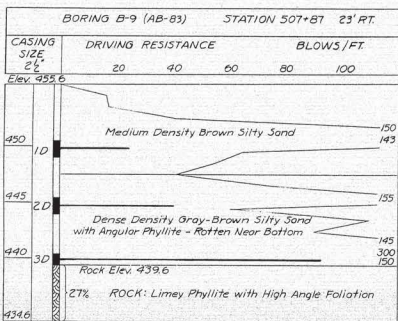
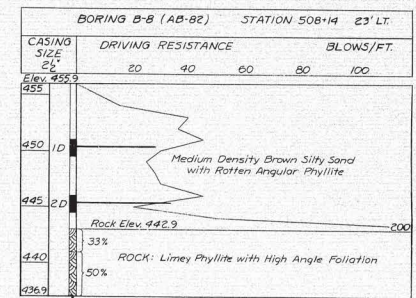
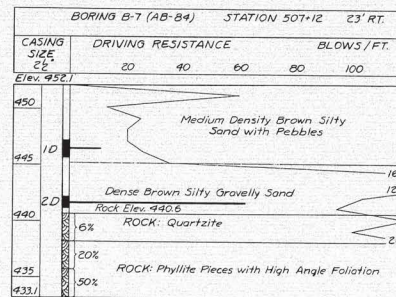
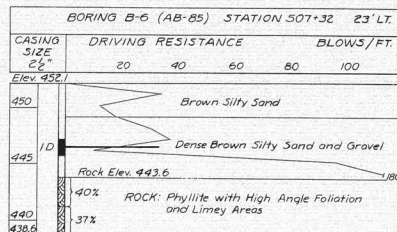
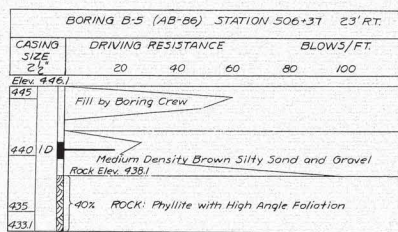
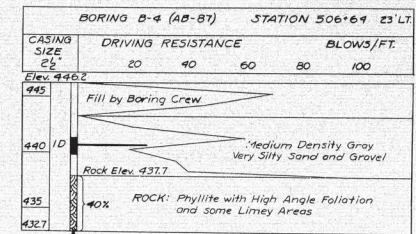
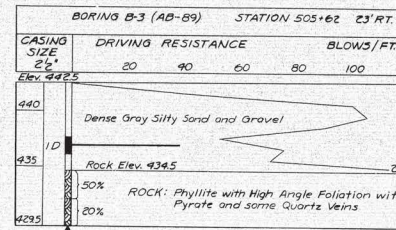
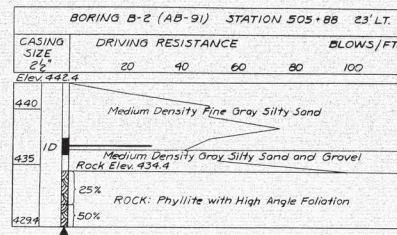
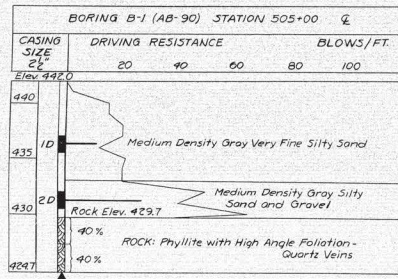
DESIGN - CHECK - P.E.N.	DETAIL - R.R.S. SURVEY - P.L.C.	BRIDGE NO.
STATE HIGHWAY COMMISSION BRIDGE DIVISION		
INTERSTATE 95 S.B.		
OVER		
FISH STREAM & RELOC. ROUTE S.A.1		
IN THE TOWN OF		
ISLAND FALLS		
ARROSTOOK COUNTY		
FOUNDATION SURVEY		

HOWARD, NEEDLES, TAMMEN & BERGENDOFF
CONSULTING ENGINEERS

NEW YORK BOSTON KANSAS CITY SHEET 2 OF 12 AUGUSTA, MAINE AUGUST 1965

101-204 ISLAND FALLS (43)





BORING NOTES:

- 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. S & H Sampler #1290's
- Number of blows required to drive spoon or tubing one foot with 350 ft. lbs. of energy per blow.
- Bottom of boring. (May not be bottom of soil strata).
- Locations cored by diamond bit and percent recovery of rock.

NOTES

For Plan, Profile, and Transverse Sections, see sheet 2.

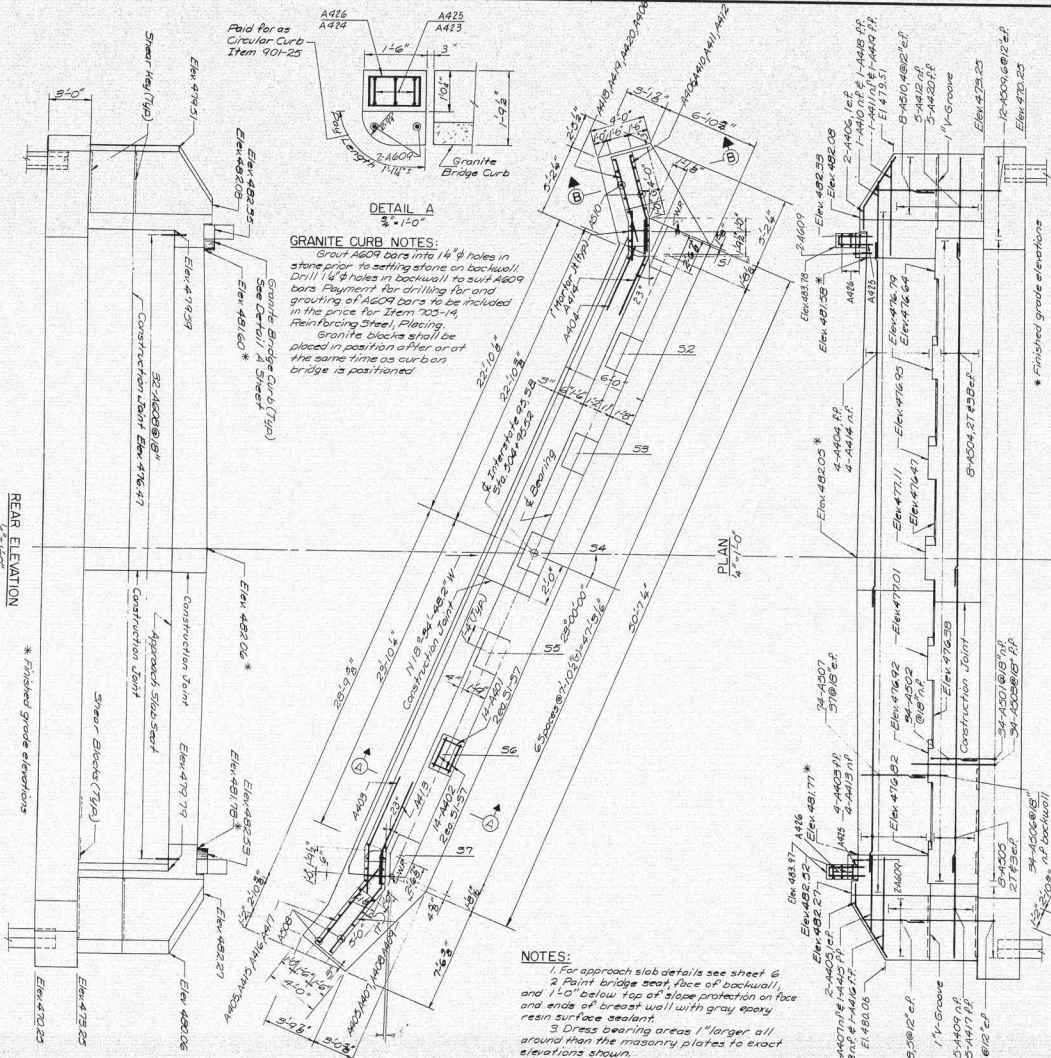
DESIGN- TRACE- CHECK- S.M.	DETAIL- R.A.S.	BRIDGE NO. SURVEY- NOT-
STATE HIGHWAY COMMISSION BRIDGE DIVISION INTERSTATE 95 S.B. OVER FISH STREAM & RELOC. ROUTE S.A.1 IN THE TOWN OF ISLAND FALLS ARROSTOOK COUNTY FOUNDATION SURVEY		

HOWARD, NEEDLES, TAMMEN & BERGENDOFF
CONSULTING ENGINEERS
NEW YORK BOSTON KANSAS CITY

SHEET 3 OF 12 AUGUSTA, MAINE AUGUST 1965

101-205 ISLAND FALLS (43)





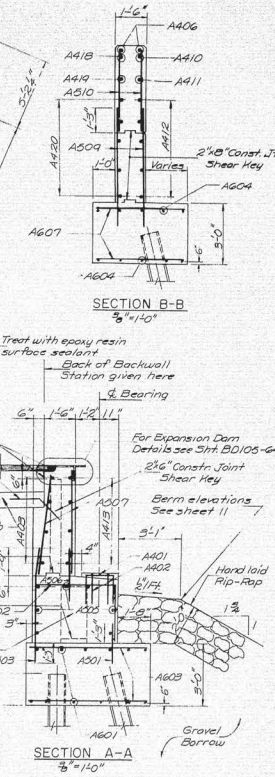
NOTE:
Cover the vertical construction joints on the backside with 2 layers of heavy roofing 10' wide. Band the layers together and to the concrete with a suitable grade of roofing cement. Recess the vertical areas to be covered 1/2". Paint vertical construction joints with a suitable grade of asphalt paint to break band.

DETAIL A
2'-10"

GRANITE CURB NOTES:
Grout A609 bars into 1 1/2" holes in stone prior to setting stone on backwall. Drill 1 1/2" holes in backwall to suit A609 bars. Payment for drilling for and grouting of A609 bars to be included in the price for Item 100-14, Reinforcing Steel, Placing. Granite blocks shall be placed in position after or at the same time as curb on bridge is positioned.

NOTES:
1. For approach slab details see sheet 5.
2. Paint bridge rear face of backwall, and 1'-0" below top of slope protection on face and ends of breast wall with gray epoxy resin surface sealant.
3. Dress bearing areas 1" larger all around than the masonry plates to exact elevations shown.
4. Reinforcing steel to have 3" minimum cover unless otherwise shown.
5. Place reinforcing to clear anchor bolts.
6. n.f. denotes near face, r.f. denotes far face, e.f. denotes each face.
7. For guard rail and post details see sheet 6.

PILE NOTES:
+ Indicates vertical piles.
+ Indicates battered piles battered 3/12 in direction of arrow.
Piles to be driven to ledge or practical refusal to develop end bearing.
All piles are 10.8 p. 42 with a capacity of 37 tons.
Estimated pile length 47'.

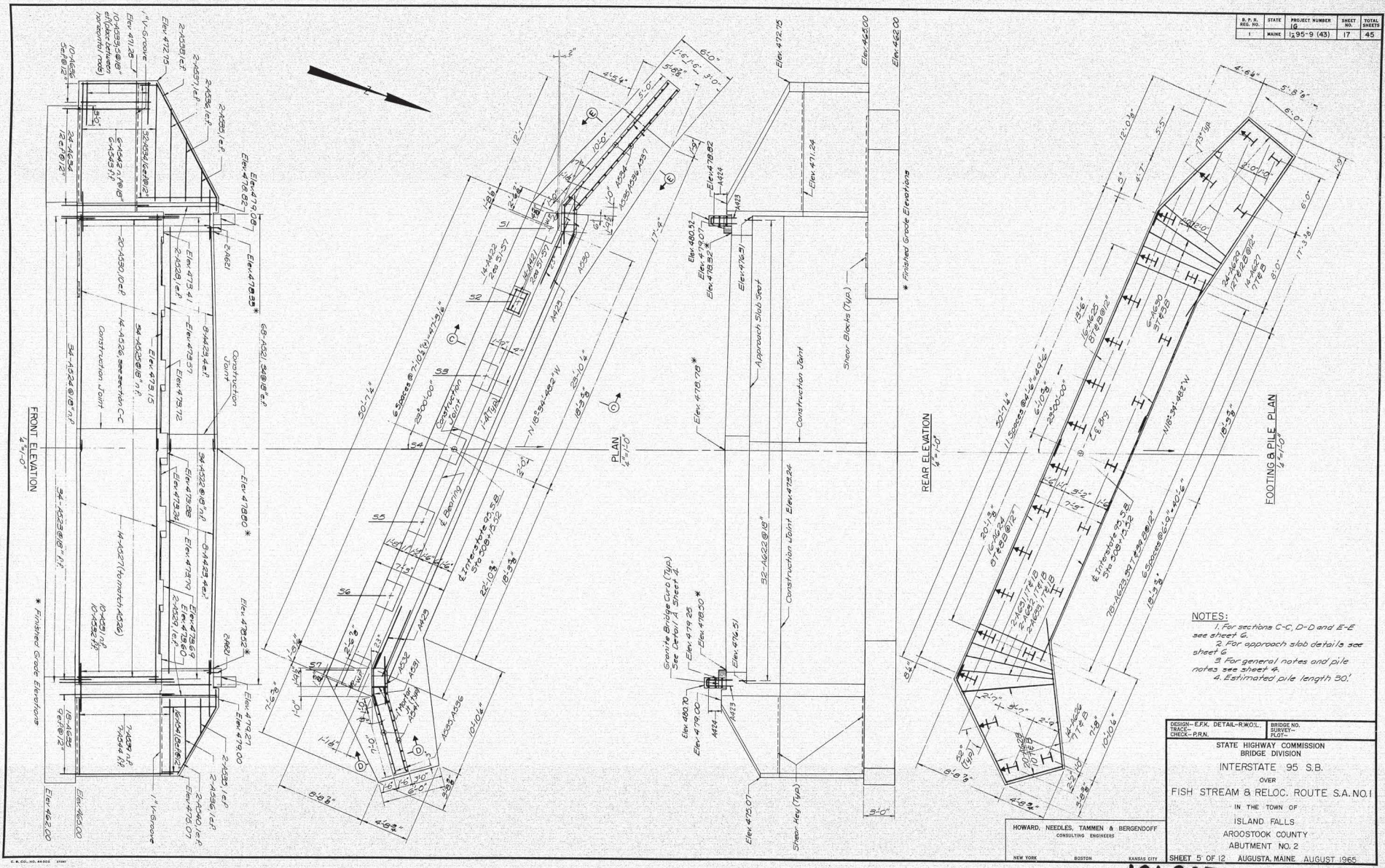


DESIGN - C.F.K. DETAIL - R.W.D.
TRACE - R.W.D.
BRIDGE NO. SURVEY - R.O.S.
STATE HIGHWAY COMMISSION
BRIDGE DIVISION
INTERSTATE 95 S.B.
OVER
FISH STREAM & RELOC. ROUTE S.A. NO. 1
IN THE TOWN OF
ISLAND FALLS
ARROOSTOOK COUNTY
ABUTMENT NO. 1

HOWARD, NEEDLES, TAMMEN & BERGENDOFF
CONSULTING ENGINEERS
NEW YORK BOSTON KANSAS CITY

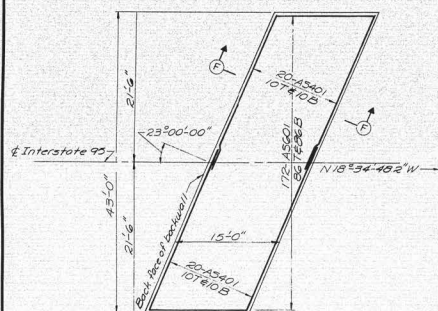


S. P. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	1595-9 (43)	17	45

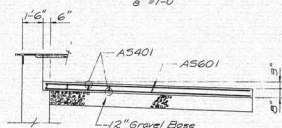


101-207 ISLAND FALLS (43) 17

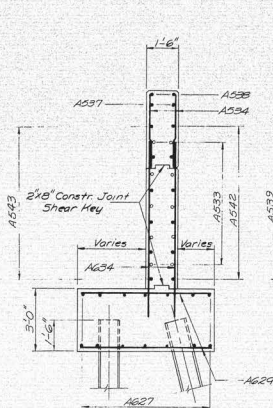
S. P. D.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	1255-9 (43)	18	45



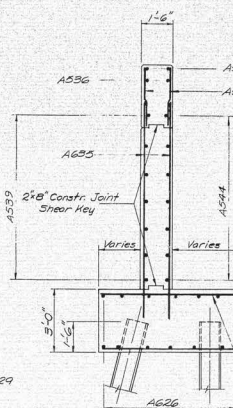
2 REQUIRED
8"=1'-0"



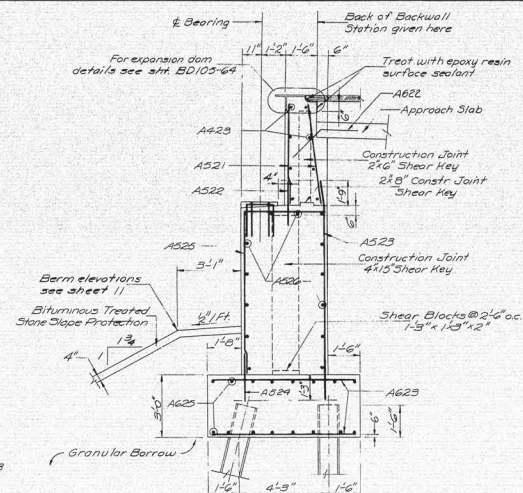
SECTION F-F
8"=1'-0"
APPROACH SLAB DETAILS



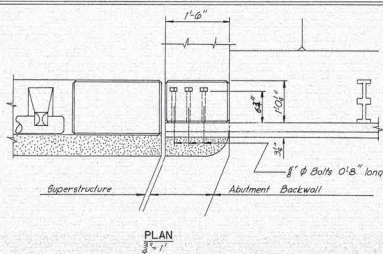
SECTION E-E
8"=1'-0"



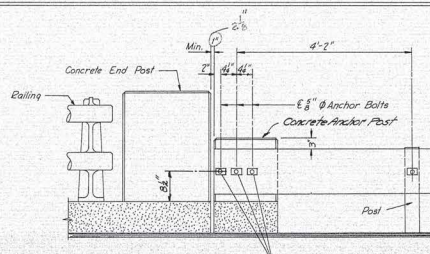
SECTION D-D
8"=1'-0"



SECTION C-C
8"=1'-0"



PLAN
3/8"=1'



FRONT ELEVATION
3/8"=1'

ANCHOR POST DETAILS

ANCHOR POST NOTES

- Concrete in anchor posts to be paid for under Item 701-33.
- Three anchor bolts required at each anchor post. Bolts to be furnished with hex head nut and washer. All parts to be galvanized. Payment for furnishing and installing bolts shall be incidental to concrete items.

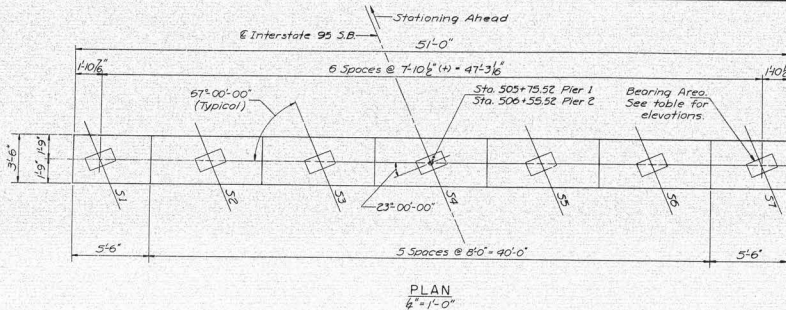
NOTES:

- For general notes and pile notes see sheet 4.
- For locations of Sections C-C, D-D & E-E see sheet 5.

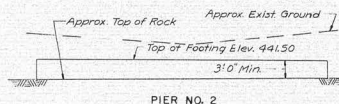
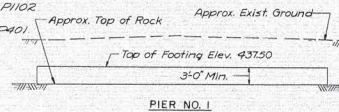
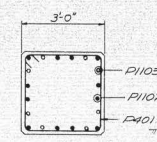
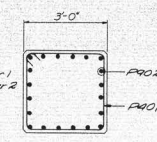
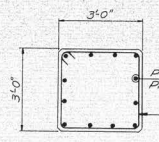
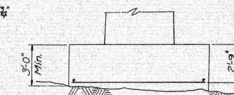
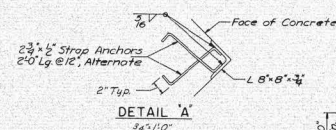
DESIGN - E.F.K. DETAIL - R.W.D.L.	BRIDGE NO.
TRACK - S.M.	SURVEY -
CHECK - S.M.	PLOT -
STATE HIGHWAY COMMISSION	
BRIDGE DIVISION	
INTERSTATE 95 S.B.	
OVER	
FISH STREAM & RELOC. ROUTE S.A. NO. 1	
IN THE TOWN OF	
ISLAND FALLS	
ARROSTOCK COUNTY	
APPROACH SLAB & ABUTMENT NO. 2 SECTIONS	
SHEET 6 OF 12 AUGUSTA, MAINE AUGUST 1965	

HOWARD, NEEDLES, TAMMEN & BERGENDOFF
CONSULTING ENGINEERS
NEW YORK BOSTON KANSAS CITY

101-208 ISLAND FALLS (43)



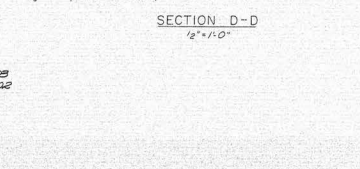
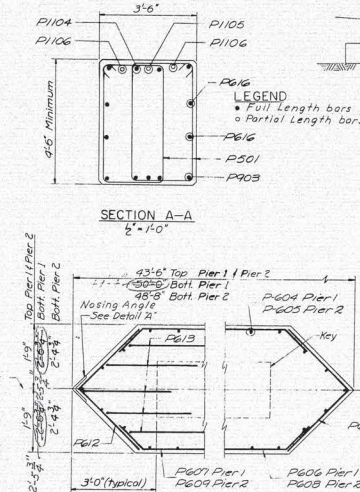
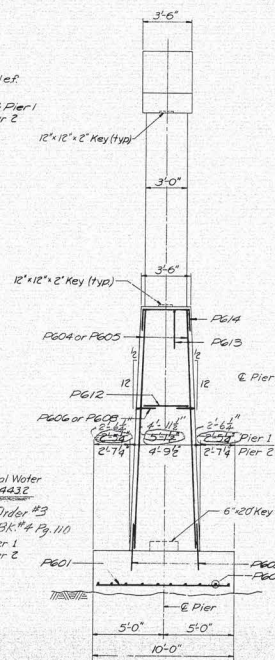
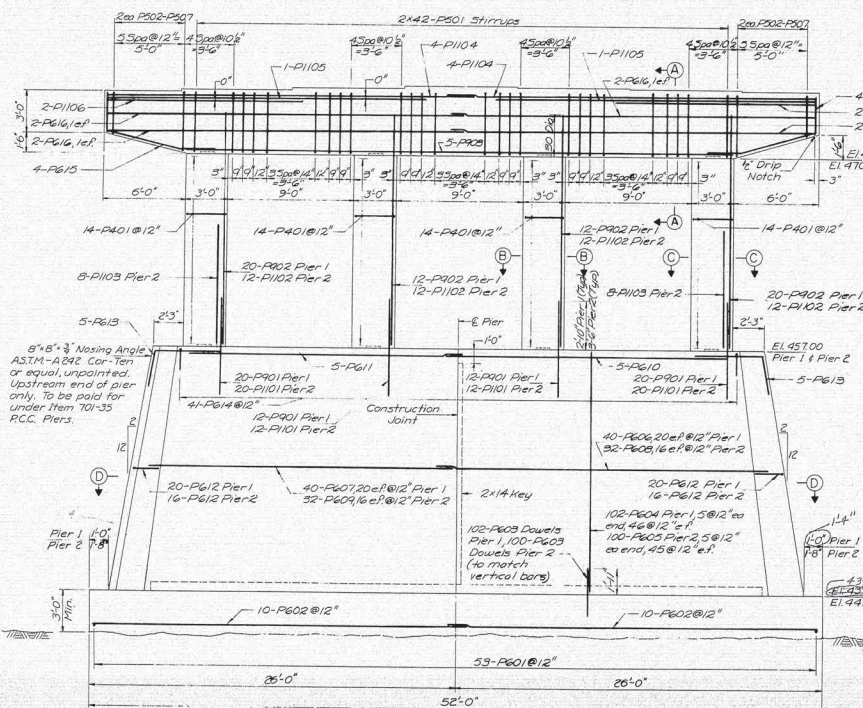
BEARING ELEVATIONS		
BEAM	PIER 1	PIER 2
S1	475.34	475.12
S2	475.50	475.28
S3	475.66	475.43
S4	475.81	475.59
S5	475.97	475.75
S6	475.62	475.90
S7	475.53	475.31



LEDGE PROFILE
Looking Upstream

NOTES

1. All weathered or broken ledge shall be removed before any footing concrete is placed.
2. Top of footing elevation may be altered to suit field conditions. No change in top of footing elevation greater than 2 feet shall be made without approval of the Engineer.
3. Top of footing shall be at or below bottom of existing channel.
4. Reinforcing steel to have 2" minimum cover unless otherwise shown.
5. All exposed corners to have 1" chamfer.
6. Dress bearing areas 1" larger all around than masonry plates to exact elevations shown.
7. Maximum Footing Pressure:
Group I Loading 2.5 Tons/S.F.
Group III Loading 3.0 Tons/S.F.



DESIGN - E.P.K. DETAIL - R.R.S. BRIDGE NO. 195-9 143
TRACE - S.S. SURVEY - S.S.
CHECK - P.B.N.
STATE HIGHWAY COMMISSION
BRIDGE DIVISION
INTERSTATE 95 S.B.
OVER
FISH STREAM & RELOC. ROUTE SA NO. 1
IN THE TOWN OF
ISLAND FALLS
ARROOSTOOK COUNTY
PIERS 1 & 2
SHEET 7 OF 12 AUGUSTA, MAINE AUGUST 1965

161-204 ISLAND FALLS (43)



[illegible][illegible]

SECTION A-A
 $I_2 = I - O''$

SECTION B-B
1/2" x 1'-0"

Diagram illustrating a footing on a ledge. The footing is shown with a width of 3'-0" and a height of 2'-0". The ledge it sits on is 2'-0" wide. The footing is labeled "FOOTING ON LEDGE" and "Approximate Ledge Line".

FOOTING ON LEDGE
3" = 1'-0"

HOWARD, NEEDLES, TAMMEN & BERGENDOFF
CONSULTING ENGINEERS

SHEET 8 OF 12 AUGUSTA, MAINE AUGUST 1965

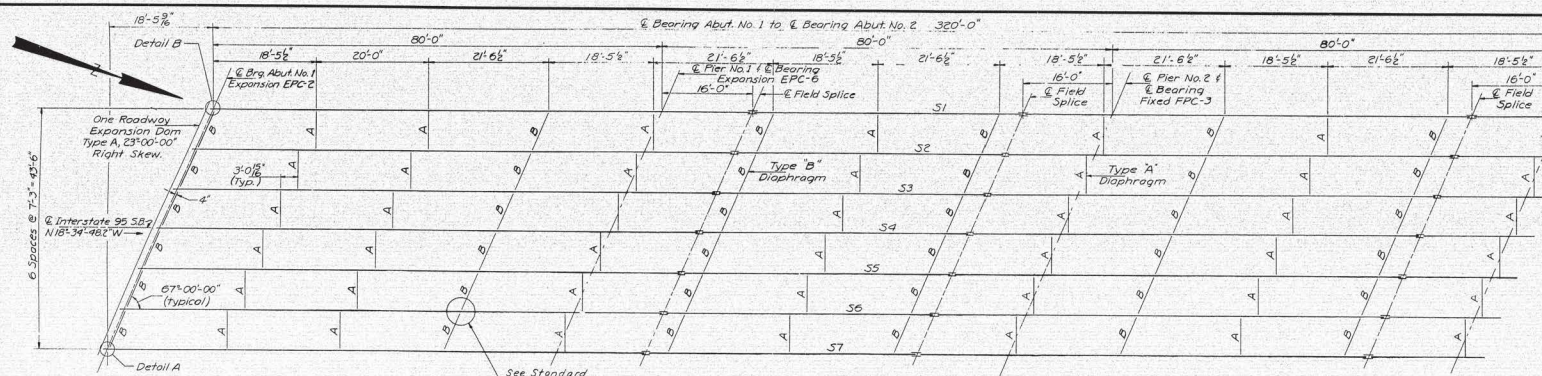
101-210

ISLAND FALLS (43)

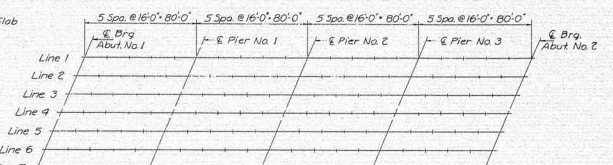
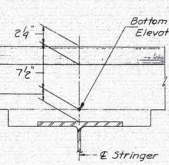
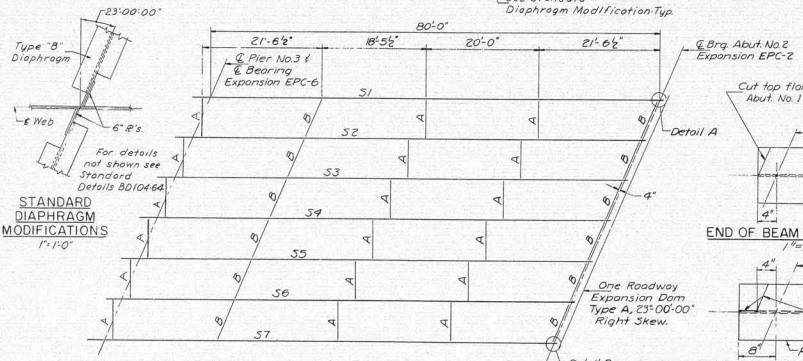


PEDESTALS
EPC-2 14 Required
EPC-6 14 Required
FAC-3 7 Required

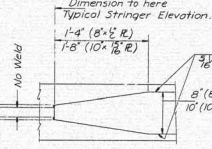
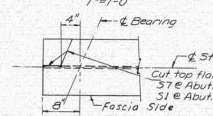
REFERENCE
Splice - See Standard Details, BD 103-64.
Pedestals - See Standard Details, BD 101-64.
Expansion Dams - See Standard Details, BD 105-64.
Diaphragms - See Standard Details, BD 104-64.
and Standard Diaphragm Modification This sheet
Shear Connectors See Standard Details BD 104-64.
SPECIFICATION
Fabrication and Erection: State of Maine
Standard Specifications, Highways and Bridges,
Revision of Jan. 1956 & Supplemental
Specifications of Feb. 1960.
Design and Detail: A.A.S.H.O. Standard
Specification For Highway Bridges of 1961 and
Interim Specifications of 1961, 1962, 1963, and 1964.
Materials: Except as otherwise noted on the
standard details, all material shall conform to
A.S.T.M. designation A36.



ERECTION DIAGRAM
1"=10'-0"



END OF BEAM DETAIL S2-S6
1"=1'-0"

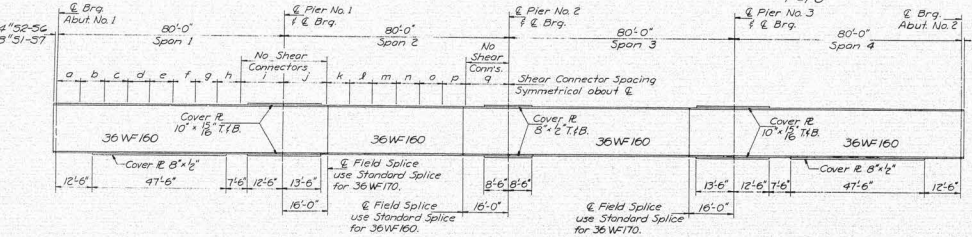


BEAM GRADES

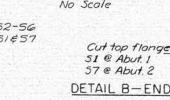
Line	Span 1	Span 2	Span 3	Span 4
Line 1	-1.024%	-0.985%	-1.021%	-0.992%
Line 2	-1.025%	-0.986%	-1.020%	-0.992%
Line 3	-1.025%	-0.986%	-1.020%	-0.992%
Line 4	-1.025%	-0.986%	-1.020%	-0.992%
Line 5	-1.025%	-0.986%	-1.020%	-0.992%
Line 6	-1.025%	-0.986%	-1.020%	-0.992%
Line 7	-1.024%	-0.985%	-1.021%	-0.992%

ERECTION DIAGRAM (cont.)

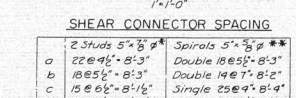
DETAIL A - END OF BEAM DETAIL S1 & S7
1"=1'-0"



COVER PLATE DETAIL
No Scale



DETAIL B - END OF BEAM DETAIL S1 & S7
1"=1'-0"



SHEAR CONNECTOR SPACING

Studs	Double	Single
2 Studs 5" x 5/8"	Double 18" x 5/8"	Single 24" x 5/8"
a 22" x 5/8"	Double 18" x 5/8"	Single 24" x 5/8"
b 18" x 5/8"	Double 18" x 5/8"	Single 24" x 5/8"
c 15" x 5/8"	Double 18" x 5/8"	Single 24" x 5/8"
d 12" x 5/8"	Double 18" x 5/8"	Single 24" x 5/8"
e 10" x 5/8"	Double 18" x 5/8"	Single 24" x 5/8"
f 8" x 5/8"	Double 18" x 5/8"	Single 24" x 5/8"
g 6" x 5/8"	Double 18" x 5/8"	Single 24" x 5/8"
h 4" x 5/8"	Double 18" x 5/8"	Single 24" x 5/8"
i 3" x 5/8"	Double 18" x 5/8"	Single 24" x 5/8"
j 2" x 5/8"	Double 18" x 5/8"	Single 24" x 5/8"
k 1" x 5/8"	Double 18" x 5/8"	Single 24" x 5/8"
l 1" x 5/8"	Double 18" x 5/8"	Single 24" x 5/8"
m 1" x 5/8"	Double 18" x 5/8"	Single 24" x 5/8"
n 1" x 5/8"	Double 18" x 5/8"	Single 24" x 5/8"
o 1" x 5/8"	Double 18" x 5/8"	Single 24" x 5/8"
p 1" x 5/8"	Double 18" x 5/8"	Single 24" x 5/8"
q 1" x 5/8"	Double 18" x 5/8"	Single 24" x 5/8"

SPIRAL LAP DETAIL



TYPICAL STRINGER ELEVATION

Line	Span 1	Span 2	Span 3	Span 4
Line 1	480.75	480.67	480.54	480.37
Line 2	480.91	480.83	480.70	480.53
Line 3	481.07	480.99	480.86	480.69
Line 4	481.22	481.14	481.01	480.84
Line 5	481.33	481.25	481.12	480.95
Line 6	481.43	481.35	481.22	481.05
Line 7	481.54	481.46	481.33	481.16

DEAD LOAD DEFLECTION DIAGRAM

ALL DEFLECTIONS IN INCHES

Line	Span 1	Span 2	Span 3	Span 4
Line 1	0.09	0.07	0.05	0.03
Line 2	0.10	0.08	0.06	0.04
Line 3	0.11	0.09	0.07	0.05
Line 4	0.12	0.10	0.08	0.06
Line 5	0.13	0.11	0.09	0.07
Line 6	0.14	0.12	0.10	0.08
Line 7	0.15	0.13	0.11	0.09

NOTE

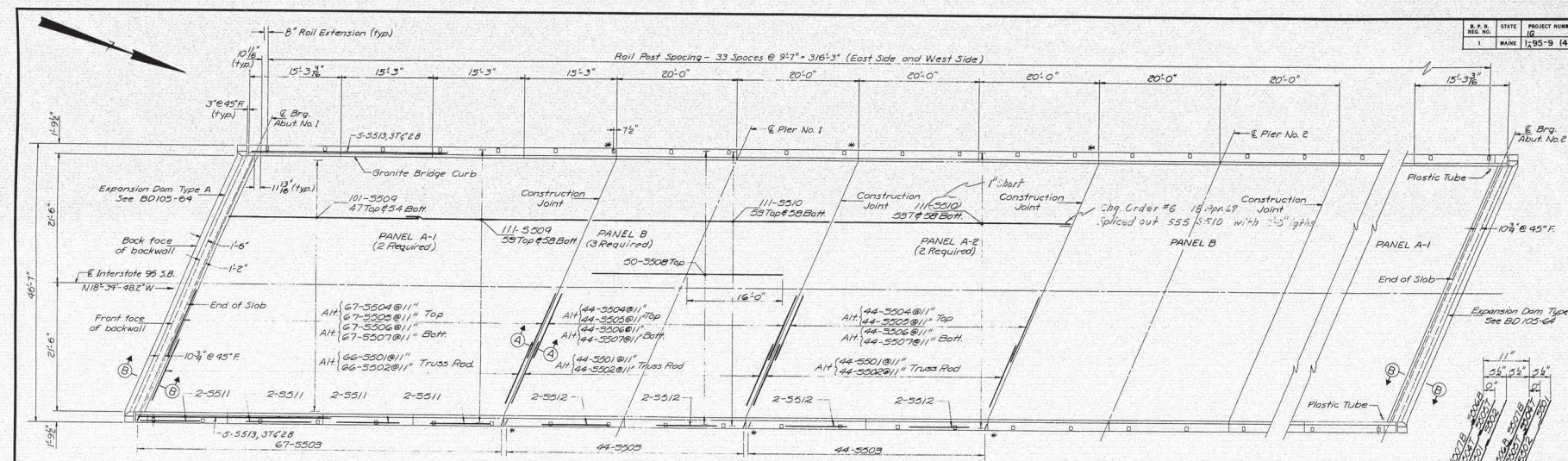
To compensate for dead load deflections as well as possible irregularities in beams set the bottom of slab elevations of the points indicated before any of the slab formwork is started. Bottom of slab grades for blocking shall be set after Shear Connectors are welded to the top flanges.

Total number of studs 6,384

HOWARD, NEEDLES, TAMMEN & BERGENDOFF
CONSULTING ENGINEERS

STATE HIGHWAY COMMISSION
BRIDGE DIVISION
INTERSTATE 95 S.B.
OVER
FISH STREAM & RELOC. ROUTE SA. NO. 1
IN THE TOWN OF
ISLAND FALLS
ARROOSTOOK COUNTY
STRUCTURAL STEEL & BLOCKING

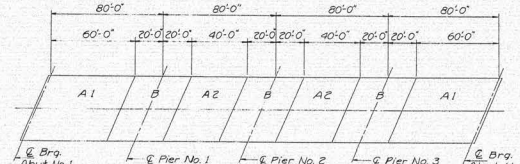
SHEET NO.	STATE	PROJECT NUMBER	SHEET TOTAL
22	MAINE	12-95-9 (43)	45



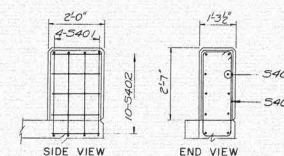
TYPICAL REINFORCING PATTERN

GENERAL SUPERSTRUCTURE NOTES

- At joints in curbs and granite bridge curbs over piers, use 1/2" preformed expansion joint filler. At all other curb joints, break the bond between concrete surfaces with a suitable grade of asphalt point. Form V-groove on outside face of curb and slab at each vertical joint. Provide joints in granite bridge curb of curb construction joints.
- At low points in slabs, place a plastic tube 1" x 4" through the slab for drainage. Exact location to be determined in the field. Do not cover the tube with waterproofing. This work will be incidental to contract items. Tubes shall extend 6" below bottom of slab. Place tubes to drip clear of bridge seat.
- For bridge rail, see Standard Details, BD107-64 f BD108-64.
- Place concrete in 'A' panels before placing concrete in 'B' panels.
- Payment for concrete end posts shall be made under Item 101-40.
- Granite Bridge Curb means Vertical Bridge Curb-Type 1 and will be paid for under Items 901-29 and 901-25.
- Field bend rod to accommodate joint in slab.
- Safety walk reinforcing applies to both sides.
- All reinforcing to have 2" minimum cover unless otherwise shown.
- No work other than form work utilizing hand tools will be permitted on the slab for a period of seven days following placing of slab.



POURING SEQUENCE



END POST DETAIL

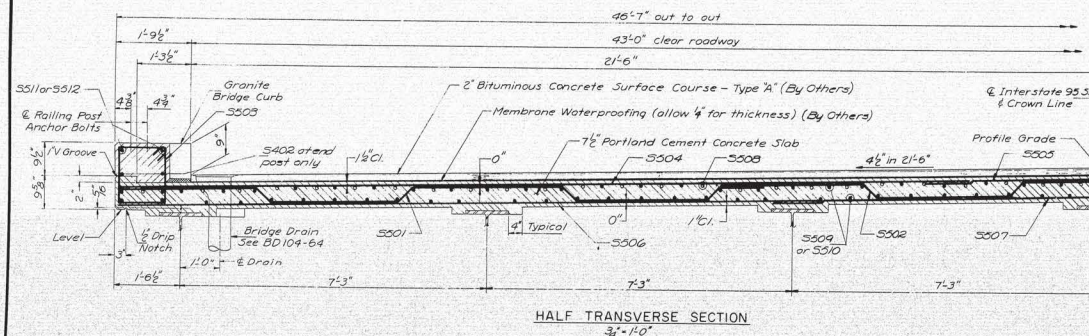
BRIDGE DRAIN NOTES

- Four drains each side, spans 1, 2, 3. Two drains each side, span 4.
- For approximate locations see sheet 1. Exact position to be determined in field.
- Bridge drains to be placed a minimum of 10' clear of piers.

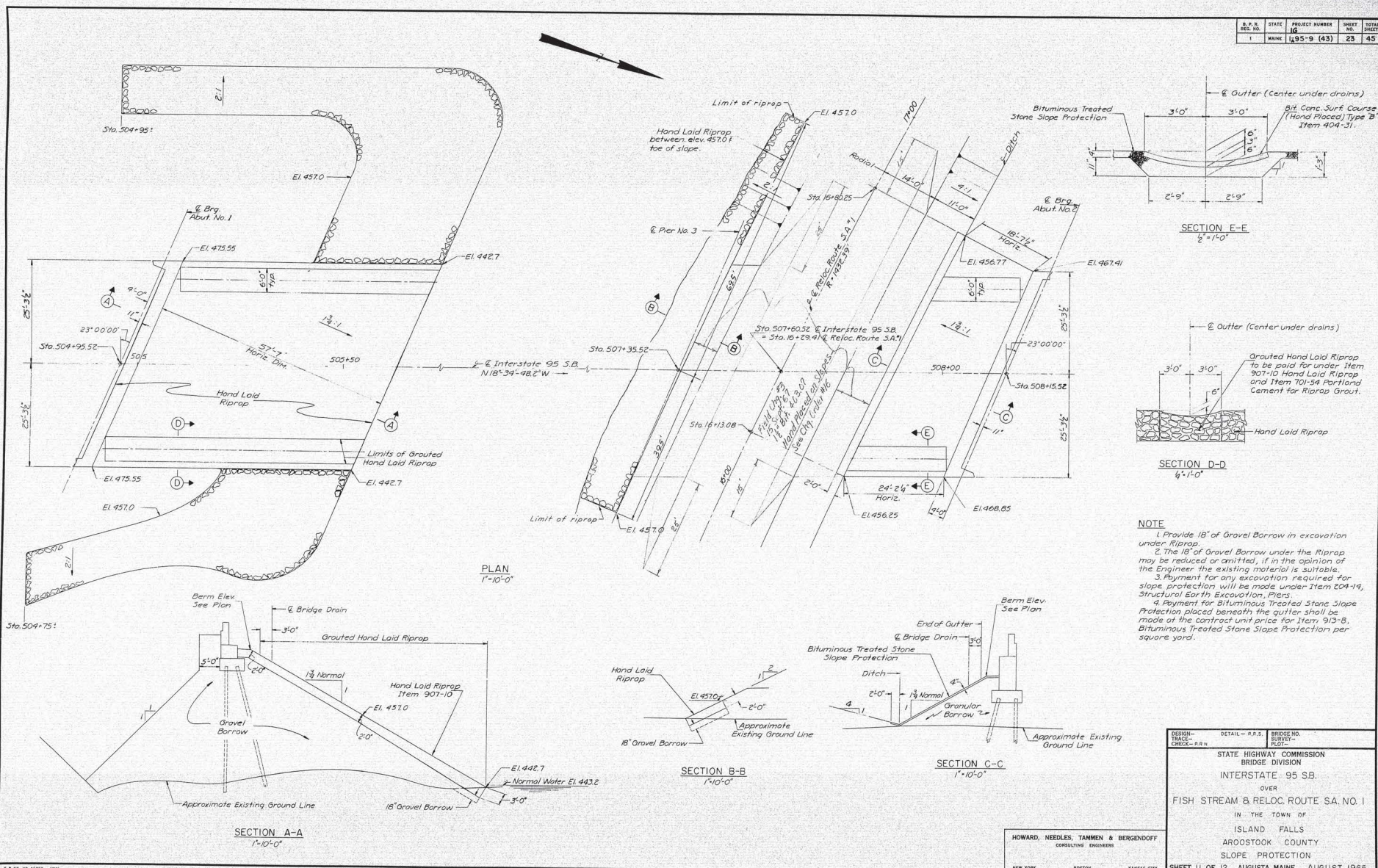
DESIGN - E.P.K.	DETAIL - R.S.	BRIDGE NO.
TRACE - E.N.		SURVEY -
CHECK - E.N.		ELOC.
STATE HIGHWAY COMMISSION		
BRIDGE DIVISION		
INTERSTATE 95 S.B.		
OVER		
FISH STREAM & RELOC. ROUTE SA NO. 1		
IN THE TOWN OF		
ISLAND FALLS		
ARROSTOCK COUNTY		
SUPERSTRUCTURE		
SHEET 10 OF 12 AUGUSTA, MAINE AUGUST 1965		

101-212

ISLAND FALLS (43)



S.P. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	195-9 (43)	25	45

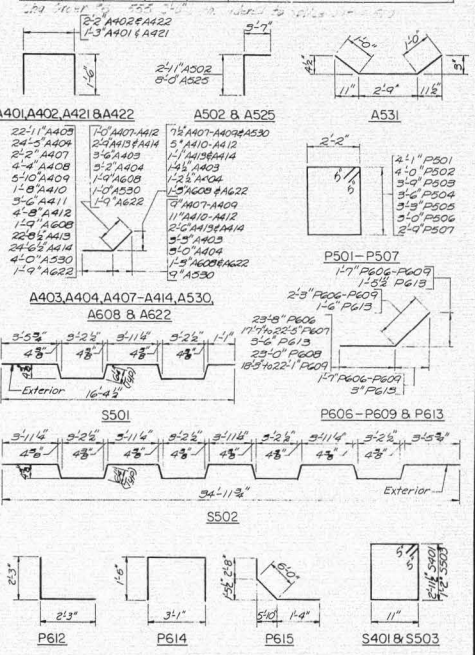


MARK	SIZE	NUMBER	LENGTH	INCR.	LOCATION
ABUTMENT 1					
STRAIGHT BARS					
A405	4	2	6'-10"		Bend in field Wingwall
A406	4	2	6'-0"		Bend in field "
A415	4	1	2'-7"		"
A416	4	1	4'-9"		"
A417	4	3	6'-1"		"
A418	4	1	2'-6"		"
A419	4	1	4'-4"		"
A420	4	3	5'-0"		Wingwall
A501	5	34	2'-6"		Dowels
A503	5	34	6'-3"		Stem
A504	5	8	2'-10"		"
A505	5	8	2'-16"		Stem
A506	5	34	3'-0"		Dowels
A507	5	74	4'-10"		Backwall
A508	5	10	3'-6"		"
A509	5	24	3'-9"		Wingwall 2 Groups of 3
A510	5	8	2'-10"		"
A511	5	8	5'-4"		Wingwall 2 Groups of 4
A601	6	12	30'-0"		Footings
A602	6	12	22'-7"		"
A603	6	96	5'-6"		"
A604	6	20	8'-0"		"
A605	6	6	3'-6"		"
A606	6	12	3'-6"		"
A607	6	16	3'-6"		"
A608	6	4	1'-0"		"
BENT BARS					
A401	4	14	4'-3"		Pads
A402	4	14	3'-2"		Pads
A403	4	4	26'-3"		Stem
A404	4	4	2'-7"		Stem
A407	4	1	3'-2"		Wingwall
A408	4	1	5'-4"		"
A409	4	3	6'-10"		"
A410	4	1	5'-8"		"
A411	4	1	4'-6"		"
A412	4	3	4'-8"		Wingwall
A413	4	4	25'-3"		Backwall
A414	4	4	27'-5"		Backwall
A425	4	6	6'-2"		Guard Rail End Post
A426	4	6	4'-3"		Guard Rail End Post
A502	5	34	6'-6"		Stem
A608	6	32	5'-6"		Approach Slab Seat
ABUTMENT 2					
STRAIGHT BARS					
A429	4	16	24'-6"		Backwall
A521	5	68	4'-0"		Backwall
A522	5	34	3'-0"		Stem & Backwall
A523	5	34	1'-3"		Footings & Stem
A524	5	34	2'-8"		Dowels
A525	5	14	25'-6"		Stem
A527	5	14	27'-2"		Stem
A528	5	2	7'-4"		Wingwall
A529	5	2	5'-6"		Wingwall
A532	5	10	5'-0"		Stem & Wingwall
A533	5	10	6'-0"		Wingwall
A534	5	32	14'-7"		"
A535	5	4	3'-6"		"
A536	5	4	6'-6"		"
A537	5	2	7'-6"		"
A538	5	2	17'-0"		Bend in field
A539	5	7	7'-9"		"
A540	5	2	9'-6"		Bend in field
A541	5	16	17'-7"		"
A542	5	6	18'-9"		Wingwall 2 Groups of 8

MARK	SIZE	NUMBER	LENGTH	INCR.	LOCATION
ABUTMENT 2 (CONT.)					
STRAIGHT BARS					
A543	5	6	16'-9"		Wingwall
A544	5	7	8'-9"		Wingwall
A621	6	4	10'-0"		Curb Dowels
A622	6	78	6'-9"		Footings
A623	6	16	26'-0"		"
A624	6	16	13'-0"		"
A625	6	14	13'-6"		"
A626	6	14	13'-6"		"
A627	6	14	14'-8"		"
A628	6	20	5'-4"		"
A629	6	24	5'-6"		"
A630	6	6	7'-6"		"
A631	6	2	8'-0"		"
A632	6	2	8'-6"		"
A633	6	2	9'-0"		"
A634	6	24	3'-9"		Footings
A635	6	18	10'-9"		"
A636	6	10	7'-3"		Wingwall
BENT BARS					
A423	4	6	6'-2"		Guard Rail End Post
A424	4	6	4'-3"		Guard Rail End Post
A425	4	14	4'-3"		Pads
A426	4	14	5'-3"		Pads
A523	5	34	17'-7"		Stem
A524	5	34	20'-3"		Stem & Wingwall
A525	5	10	4'-9"		Stem & Wingwall
A622	6	32	3'-6"		Approach Slab Seat
APPROACH SLABS					
STRAIGHT BARS					
A5401	4	80	25'-8"		Totals are for two approach slabs
A5601	6	344	14'-6"		Approach Slabs
PIER 1					
STRAIGHT BARS					
P401	6	20	7'-6"		Footings
P402	6	20	28'-0"		"
P403	6	102	3'-0"		Dowels
P404	6	102	19'-3"		Pilth
P410	6	5	20'-9"		Pilth
P411	6	5	19'-6"		Pilth
P416	6	8	26'-0"		Cap
P401	9	64	6'-8"		Column Dowels
P402	9	64	18'-9"		Column
P403	9	3	39'-0"		Cap
P1104	11	8	27'-5"		Cap
P1105	11	2	23'-0"		"
P1106	11	4	13'-9"		Cap
BENT BARS					
P401	4	36	11'-4"		Column Ties
P501	5	84	13'-4"		Stirrups
P502	5	4	13'-2"		"
P503	5	4	12'-8"		"
P504	5	4	12'-2"		"
P505	5	4	11'-8"		"
P506	5	4	11'-2"		"
P507	5	4	10'-8"		Stirrups
P606	6	40	25'-11"		Pilth
P607	6	40	14'-0"		"
P612	6	40	24'-8"		"
P613	6	10	4'-6"		"
P614	6	41	6'-1"		Pilth
P615	6	8	10'-0"		Cap

MARK	SIZE	NUMBER	LENGTH	INCR.	LOCATION
PIER 2					
STRAIGHT BARS					
P401	6	20	7'-6"		Footings
P402	6	20	28'-0"		"
P403	6	102	3'-0"		Dowels
P404	6	102	19'-3"		Pilth
P410	6	5	20'-9"		Pilth
P411	6	5	19'-6"		Pilth
P416	6	8	26'-0"		Cap
P403	9	5	39'-0"		Cap
P1101	11	64	7'-0"		Column Dowels
P1102	11	48	17'-2"		Column
P1103	11	16	9'-0"		Column
P1104	11	8	27'-3"		Cap
P1105	11	2	23'-0"		"
P1106	11	4	13'-9"		Cap
BENT BARS					
P401	4	36	11'-4"		Column Ties
P501	5	84	13'-4"		Stirrups
P502	5	4	13'-2"		"
P503	5	4	12'-8"		"
P504	5	4	12'-2"		"
P505	5	4	11'-8"		"
P506	5	4	11'-2"		"
P507	5	4	10'-8"		Stirrups
P608	6	32	25'-3"		Pilth
P609	6	32	20'-6"		"
P612	6	32	4'-6"		"
P613	6	10	5'-0"		"
P614	6	41	6'-1"		Pilth
P615	6	8	10'-0"		Cap
PIER 3					
STRAIGHT BARS					
P416	6	8	26'-0"		Cap
P417	6	60	5'-6"		Footings
P418	6	36	7'-6"		Footings
P701	7	16	7'-6"		Footings
P901	9	48	5'-8"		Dowels
P903	9	5	39'-0"		Cap
P904	9	12	27'-4"		Column
P905	9	12	28'-0"		"
P906	9	12	25'-0"		"
P907	9	12	26'-6"		Column
P1104	11	8	27'-5"		Cap
P1105	11	2	23'-0"		"
P1106	11	4	13'-9"		Cap
BENT BARS					
P401	4	97	11'-4"		Column Ties
P501	5	84	13'-4"		Stirrups
P502	5	4	13'-2"		"
P503	5	4	12'-8"		"
P504	5	4	12'-2"		"
P505	5	4	11'-8"		"
P506	5	4	11'-2"		"
P507	5	4	10'-8"		Stirrups
P613	6	8	10'-0"		Cap
SUPERSTRUCTURE					
STRAIGHT BARS					
S402	4	40	1'-8"		End Post
S504	5	354	2'-10"		Top Transverse

MARK	SIZE	NUMBER	LENGTH	INCR.	LOCATION
SUPERSTRUCTURE (CONT.)					
STRAIGHT BARS					
S505	5	354	29'-7"		Top Transverse
S506	5	354	17'-0"		Bottom Transverse
S507	5	354	39'-7"		Bottom Transverse
S508	5	100	32'-0"		Longitudinal B
S509	5	424	30'-0"		Longitudinal A-1
S510	5	354	39'-7"		Longitudinal A-1
S511	5	32	18'-11"		Sidewalk A-1
S512	5	40	19'-8"		Sidewalk B A-2
S513	5	20	31'-4"		Longitudinal A-1
BENT BARS					
S401	4	16	8'-7"		End Post
S501	5	352	17'-0"		Truss Rod
S502	5	352	36'-2"		Truss Rod
S503	5	708	5'-0"		Sidewalk

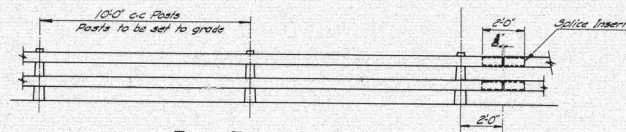


NOTES:
1. All dimensions are to center of bars.
2. All reinforcing bars shall be intermediate grade steel.
3. Reinforcing steel to have 2" minimum cover, unless otherwise shown.
4. Minimum length of splice is 17 bar diameters.

HOWARD, NEEDLES, TAMMEN & BERGENDOFF
CONSULTING ENGINEERS

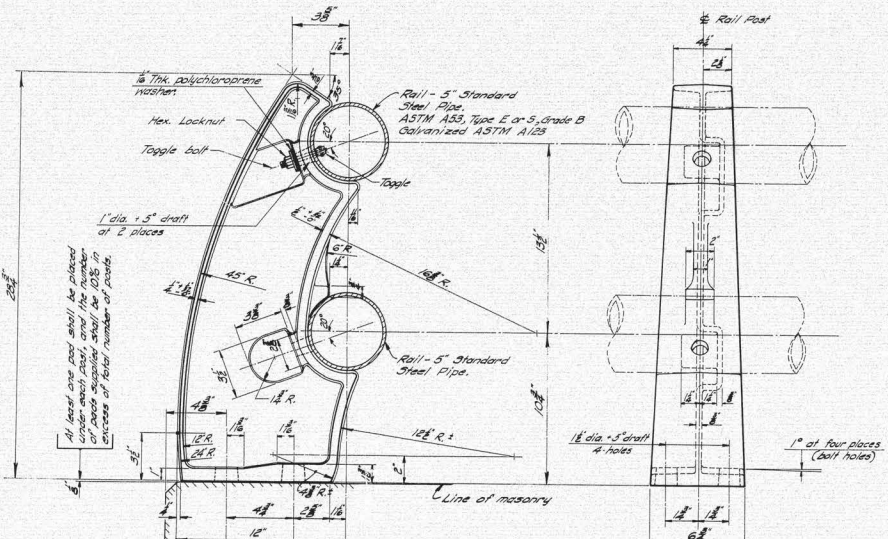
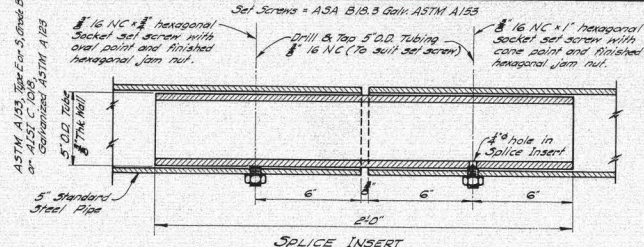
STATE HIGHWAY COMMISSION
BRIDGE DIVISION
INTERSTATE 95 S.B.
OVER
FISH STREAM & RELOC. ROUTE S.A.NO.1
IN THE TOWN OF
ISLAND FALLS
AROSTOOK COUNTY
REINFORCING STEEL

SHEET 12 OF 12 AUGUSTA, MAINE AUGUST 1965

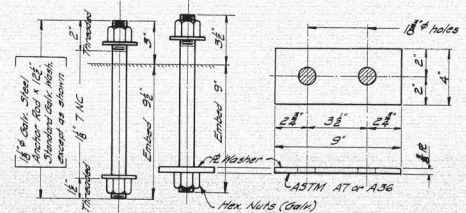


RAIL ELEVATION

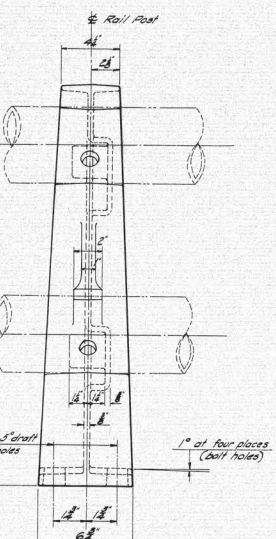
Lengths of rail shall be attached to a minimum of (4) four rail posts, whenever possible, and in any case never less than (2) two.



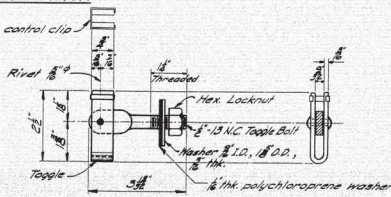
RAIL POST
ASTM A27, Grade 65-35, Galvanized ASTM A153



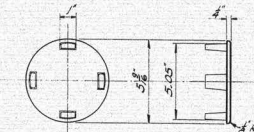
RAIL POST ANCHORAGE
Bolts, Nuts, & Std Washers = ASTM A325 Galvanized ASTM A153



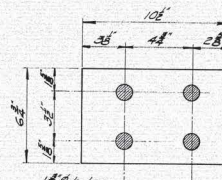
FRONT ELEVATION



TOGGLE BOLT DETAIL
Cadmium Plate metal parts ASTM A165-35, Type N2, .0025\"/>



RAIL CAP
ASTM A27, Grade 65-35, Galv ASTM A153



RAIL PAD
At each rail post
See Article 702-80 Supplemental Specifications of Feb. 1960.

DESIGN SPECIFICATIONS
A.A.S.H.O. Interim Specifications Int. 1 (64)

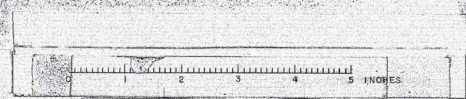
- Toggle: ASTM A303, 1015 H.R. Steel.
- Rivet: ASTM A195, 125B C.R. Steel, Heat Treated
- Toggle Bolt: ASTM A334, 1335 C.R. Steel, Heat Treated RC 32-38
- Washer: ASTM A7, 1020 H.R. Steel
- Hex Locknut: Finished Hexagonal Locknut

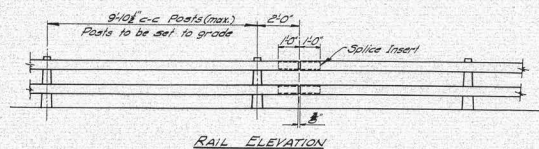
MAINE STATE HIGHWAY COMMISSION
AUGUSTA, MAINE

STANDARD DETAILS
(BD 107 - 64)
STEEL RAIL
(2-BAR PIPE RAIL)
CAST POST

OCT. 1964

101-215 ISLAND FALLS (43)

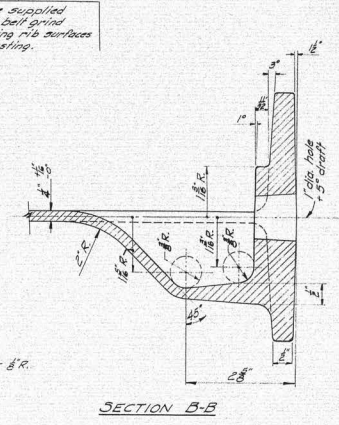
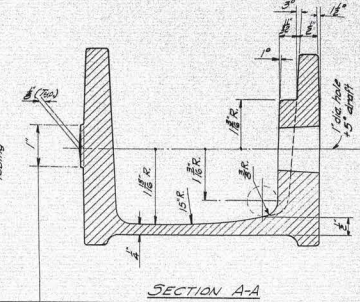
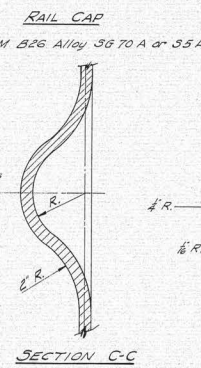
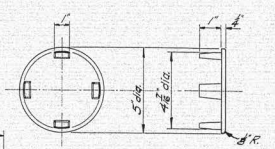
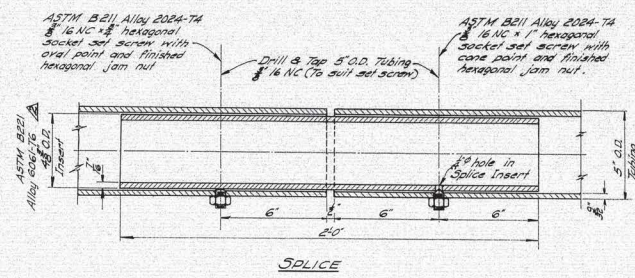
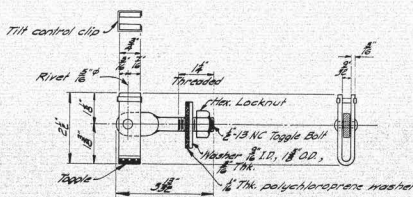
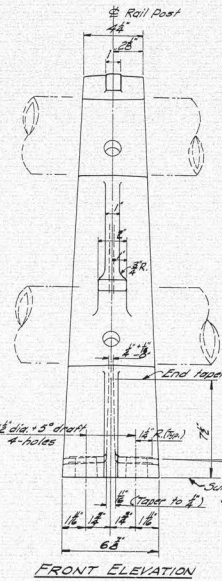
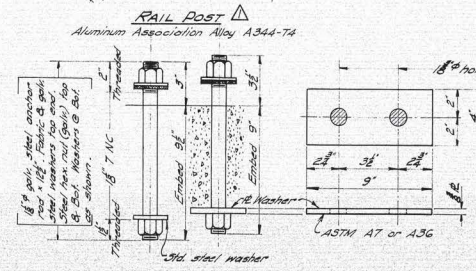
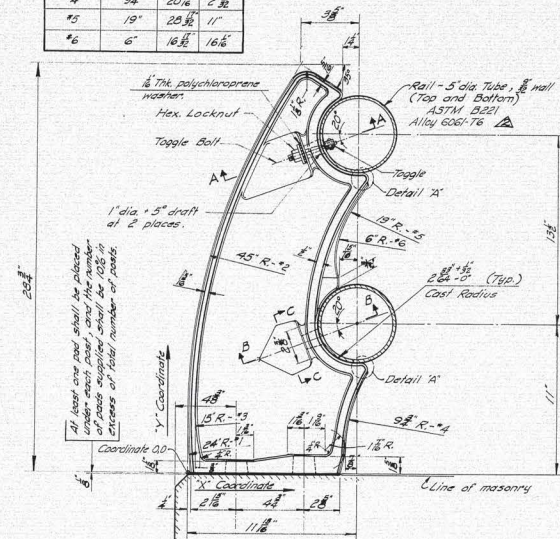




ORIGIN LOCATION-PRINCIPAL CURVES

Curve	Radius	"X"	"Y"
#1	24'	24'	3 1/8"
#2	45'	45'	2 5/8"
#3	15'	13 1/8"	4 3/8"
#4	20'	20 1/8"	2 1/8"
#5	19'	20 1/8"	11"
#6	6'	16 1/8"	16 1/8"

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



DESIGN SPECIFICATIONS

A.A.S.H.O. Interim Specifications
Int. I (64).

A344-T4 Alloy to meet the
Specification outlined by Aluminum
Association.

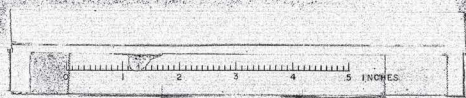
ALTERATION:
- Added Detail 'A' and Origin Location-
Principal Curves. Nov. 19, 1964.
- Revised Alloy 6062-T6 May 5, 1965

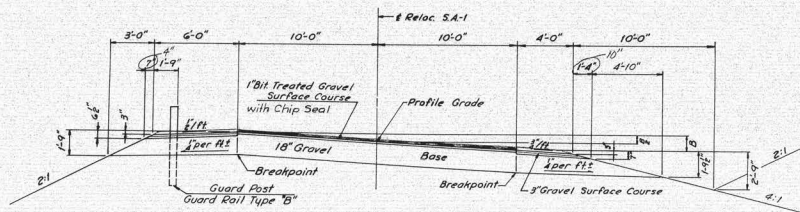
MAINE STATE HIGHWAY COMMISSION
AUGUSTA, MAINE

STANDARD DETAILS
(BD 108-64)
ALUMINUM RAIL
2-BAR (TUBE RAIL)
CAST POST

OCT. 1964

101-216 LAND FALLS (43)



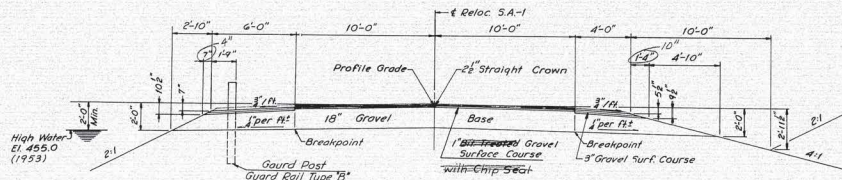


RELOC. S.A.-1
SUPERELEVATED
20 FT. ROADWAY

6 FT. SHOULDER
3" GRAVEL SURFACE = 5.83 C.Y. PER 100 L.F.
16" GRAVEL BASE = 35.64 C.Y. PER 100 L.F.

1" GRAVEL SURFACE = 6.17 C.Y. PER 100 L.F.
16" GRAVEL BASE = 111.11 C.Y. PER 100 L.F.

4 FT. SHOULDER
3" GRAVEL SURFACE = 4.32 C.Y. PER 100 L.F.
16" GRAVEL BASE = 34.05 C.Y. PER 100 L.F.

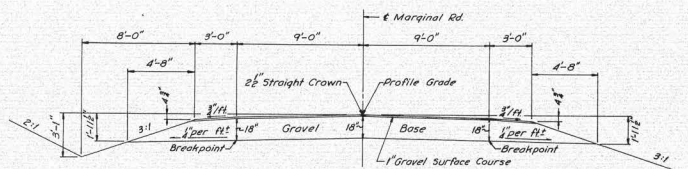


RELOC. S.A.-1
NORMAL
20 FT. ROADWAY

6 FT. SHOULDER
3" GRAVEL SURFACE = 5.83 C.Y. PER 100 L.F.
16" GRAVEL BASE = 33.80 C.Y. PER 100 L.F.

1" GRAVEL SURFACE = 6.17 C.Y. PER 100 L.F.
16" GRAVEL BASE = 111.11 C.Y. PER 100 L.F.

4 FT. SHOULDER
3" GRAVEL SURFACE = 4.32 C.Y. PER 100 L.F.
16" GRAVEL BASE = 34.05 C.Y. PER 100 L.F.

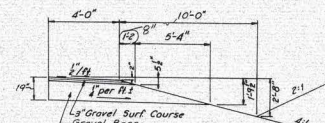


RELOC. MARGINAL ROAD
NORMAL
18 FT. ROADWAY

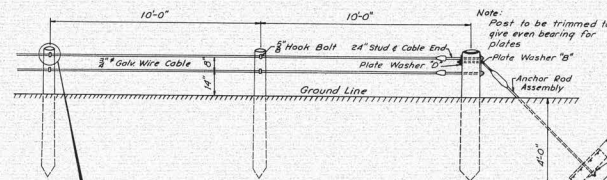
3 FT. SHOULDER
1" GRAVEL SURFACE = 0.96 C.Y. PER 100 L.F.
16" GRAVEL BASE = 28.38 C.Y. PER 100 L.F.

1" GRAVEL SURFACE = 5.56 C.Y. PER 100 L.F.
16" GRAVEL BASE = 100.00 C.Y. PER 100 L.F.

3 FT. SHOULDER
1" GRAVEL SURFACE = 0.96 C.Y. PER 100 L.F.
16" GRAVEL BASE = 28.38 C.Y. PER 100 L.F.



SUPERELEVATED
4 FT. SHOULDER-HIGH SIDE
3" GRAVEL SURFACE = 4.24 C.Y. PER 100 L.F.
16" GRAVEL BASE = 36.59 C.Y. PER 100 L.F.

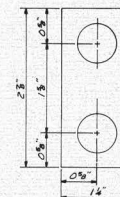


HOOK BOLT PLATE DETAIL
GUARD RAIL TYPE "B"

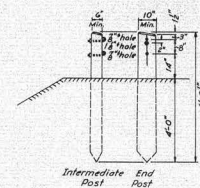
NOTES:
Superelevation Shall Be As Specified In AASHTO Policy Of Geometric Design Of Rural Highways (6). The Maximum Superelevation Shall Not Exceed 0.03' Per Foot Width Of Pavement. All Curves Shall Have Full Superelevation At The First 50' Station Occurring A Minimum Distance Of 50' After The PC And A Minimum Distance Of 50' Before The PT. When Superelevation Exceeds 1/8" Per Foot, Inside Shoulder Shall Have Same Slope As Pavement.

For All Sections, Depth Of Ditch Depends On Local Conditions. Depth Of Base As Shown May Change To Meet Local Conditions.

The Pavement And Base Depths As Shown On The Plans Are Intended To Be Nominal.



Note:
Thickness 12" (5a-10-1046)
Holes May Be Drilled Or Punched 1/2" Before Galvanizing



Type "B" Anchor Posts shall be Norway or Southern Yellow Pine, all others shall be Norway Pine, Southern Yellow Pine, Ditch Pine, or Douglas Fir (pressure treated).

Reinforced Concrete Anchor 24"x24"x12" with four #4 bars each way or a Granite Block, min. face area 4 sq. ft. & min. thickness 6".

MAINE STATE HIGHWAY COMMISSION
AUGUSTA, MAINE

TYPICAL SECTIONS

HOWARD, NEEDLES, TAMMEN & BERGENOFF
CONSULTING ENGINEERS
NEW YORK BOSTON KANSAS CITY

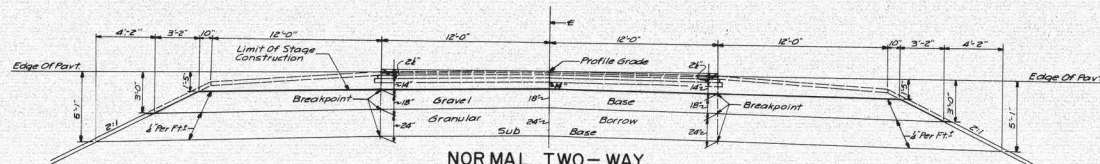
101-217

ISLAND FALLS (43)



STAGE CONSTRUCTION - GRADING AND GRAVEL BASE*

18" GRAVEL BASE
24" GRANULAR BORROW SUBBASE



12 FT. SHOULDER

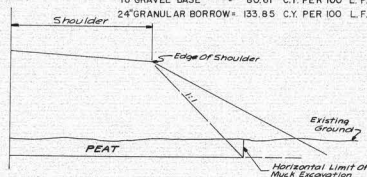
18" GRAVEL BASE = 80.61 C.Y. PER 100 L.F.
24" GRANULAR BORROW = 133.85 C.Y. PER 100 L.F.

NORMAL TWO-WAY
24 FT. PAVEMENT

18" GRAVEL BASE = 133.33 C.Y. PER 100 L.F.
24" GRANULAR BORROW = 177.78 C.Y. PER 100 L.F.

12 FT. SHOULDER

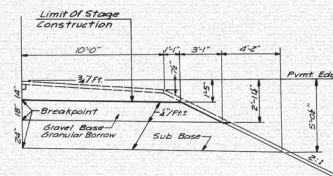
18" GRAVEL BASE = 80.61 C.Y. PER 100 L.F.
24" GRANULAR BORROW = 133.85 C.Y. PER 100 L.F.



DETAIL OF MUCK EXCAVATION

NOTES:

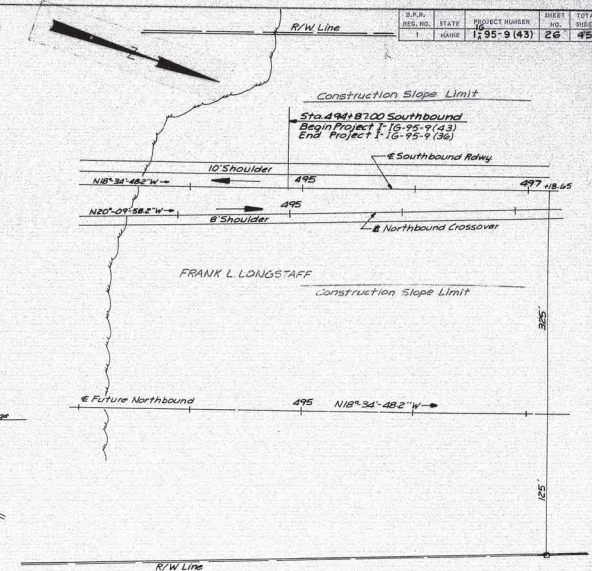
- * The Pavement And Base Depths As Shown On The Plans Are Intended To Be Nominal.
- When Slopes Are Specified To Be Loamed Either By The Engineer Or Notes On The Plans Or Sections, They Shall Be Loamed Up To The Bottom Of Gravel Base.



CROSSOVER

10 FT. SHOULDER - LOW SIDE

18" GRAVEL BASE = 69.57 C.Y. PER 100 L.F.
24" GRANULAR BORROW = 120.31 C.Y. PER 100 L.F.



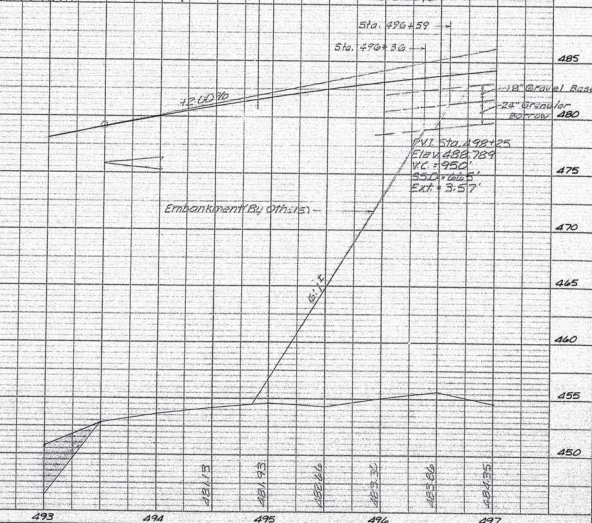
GENERAL NOTES

1. ALL LOAM AREAS AND DEPTHS MUST BE AUTHORIZED BY THE ENGINEER UNLESS SPECIFICALLY CALLED FOR ON THE TYPICAL SECTIONS, PLANS OR IN THE SPECS. LOAMING OF SLOPES HAS BEEN INDICATED ON A F.D. 100.
2. ALL SLOPES SHALL BE LOAMED EXCEPT SAIL AND MARGINAL RD. UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
3. ALL S.D. ROCKY, EARTH BACKSLOPES SHALL BE 3:1 UNLESS OTHERWISE SHOWN.
4. ALL UTILITY FACILITIES ARE TO BE ADJUSTED AS NECESSARY BY THE RESPECTIVE UTILITIES UNLESS NOTED.
5. THE UTILITIES INVOLVED IN THIS CONTRACT ARE: THE MAJOR PUBLIC SERVICE CO., THE KATAHDIN FARMERS TELEPHONE CO. AND THE S.F.A. R.O.
6. SEEDING METHOD, NO. 2 AND HAY MULCH ON ALL SLOPES AS DIRECTED BY THE ENGINEER.
7. ALL MUCK EXCAVATION AREAS SHALL BE BACKFILLED TO AN ELEVATION OF 1' ABOVE EXISTING GROUND WITH GRANULAR BORROW OR EQUIVALENT MATERIAL MEETING THE REQUIREMENTS FOR GRANULAR BORROW EMBANKMENT CONSTRUCTION.
8. UNLESS OTHERWISE DIRECTED BY THE ENGINEER THE GRUBBING IN FILL WIDTHS ARE AS FOLLOWS:
SAIL - 50' EACH SIDE OF 1/2"
MARGINAL RD. - 15' EACH OF 1/2"
9. INSTALL AUTOMATICALLY ADJUSTING INLET AND OUTLET DITCHES AS DIRECTED BY THE ENGINEER.
10. ALL EXCAVATION, DEEMED NECESSARY BY THE ENGINEER FOR THE INSTALLATION OF HANG LAD, RIGID END OR DOWNPOUTS WHERE EXISTING IS NOT SUITABLE FOR UNDER ANY OTHER ITEM SHALL BE PATCHED UNDER THEM TO 20% STABLE EARTH EXC. DRAINAGE OR ITEM 204.11 STRUCT. ROCK EXC. DRAINAGE.
11. REMOVING TREES, RIGHT OF WAY MONUMENTS AND SURVEY MARKERS TO BE DONE BY OTHERS.

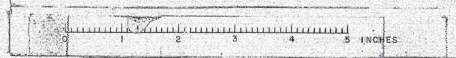
CHARD RAIL SECTIONS
Sta. 494+87.10 To 499+200 L.F.
Sta. 494+187.10 To 499+200 L.F.

FENCING - METAL POSTS
Sta. 494+00 To Sta. 499+200 L.F.
Sta. 492+50 To Sta. 499+200 L.F.

Sta. 494+87.10 To 499+200 L.F.
Begin Project 1: 18-95-9 (43)
End Project 1: 18-95-9 (36)
Sta. 496+59
Sta. 496+59

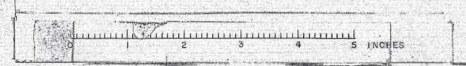
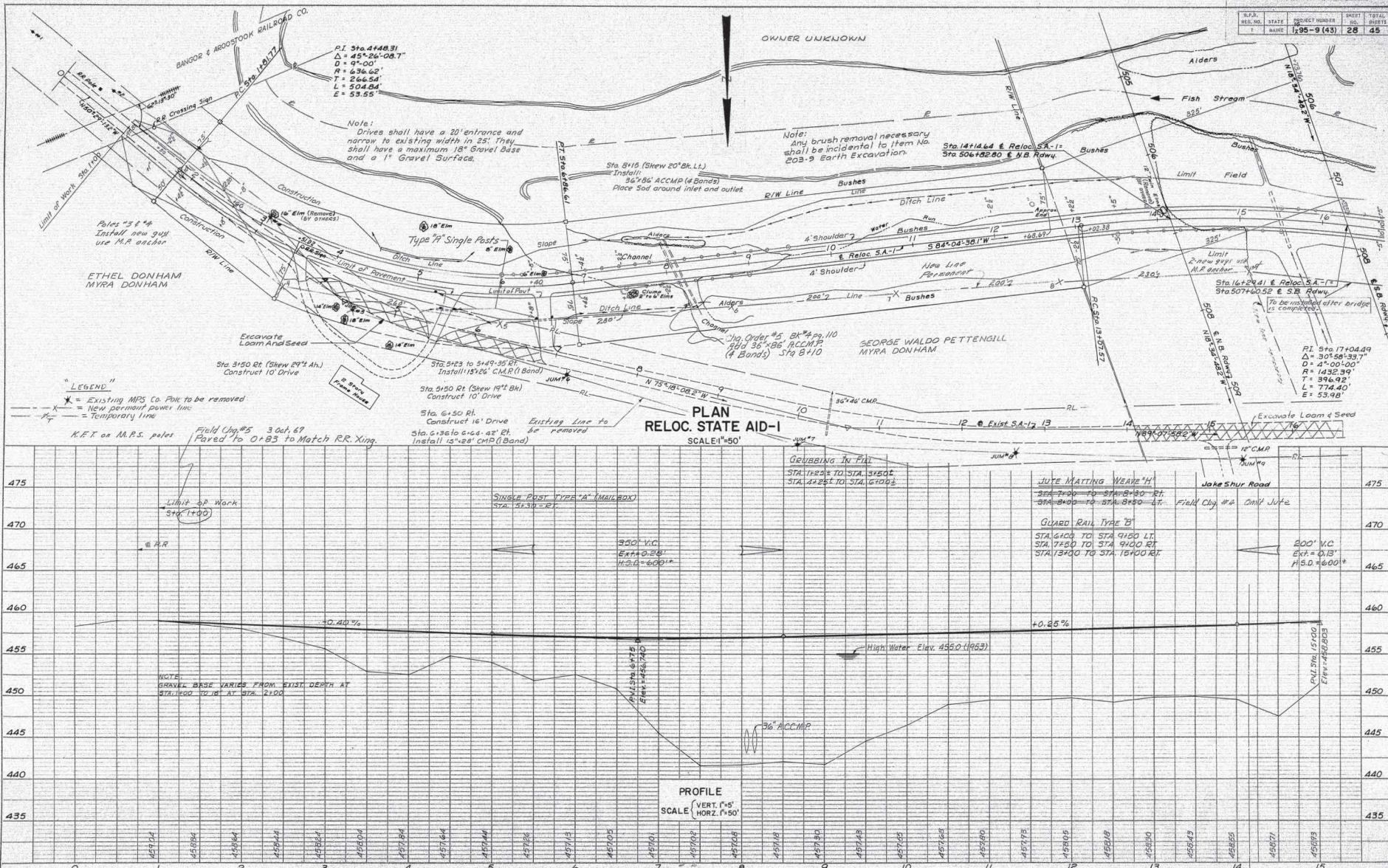


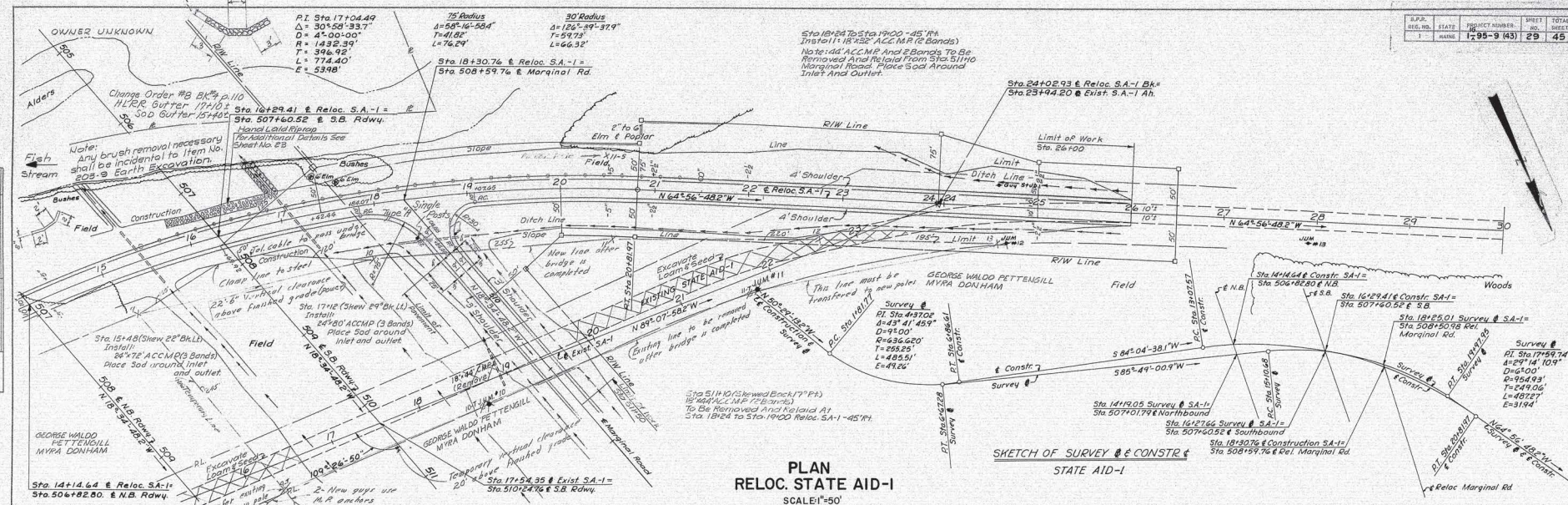
101-218 ISLAND FALLS (43)



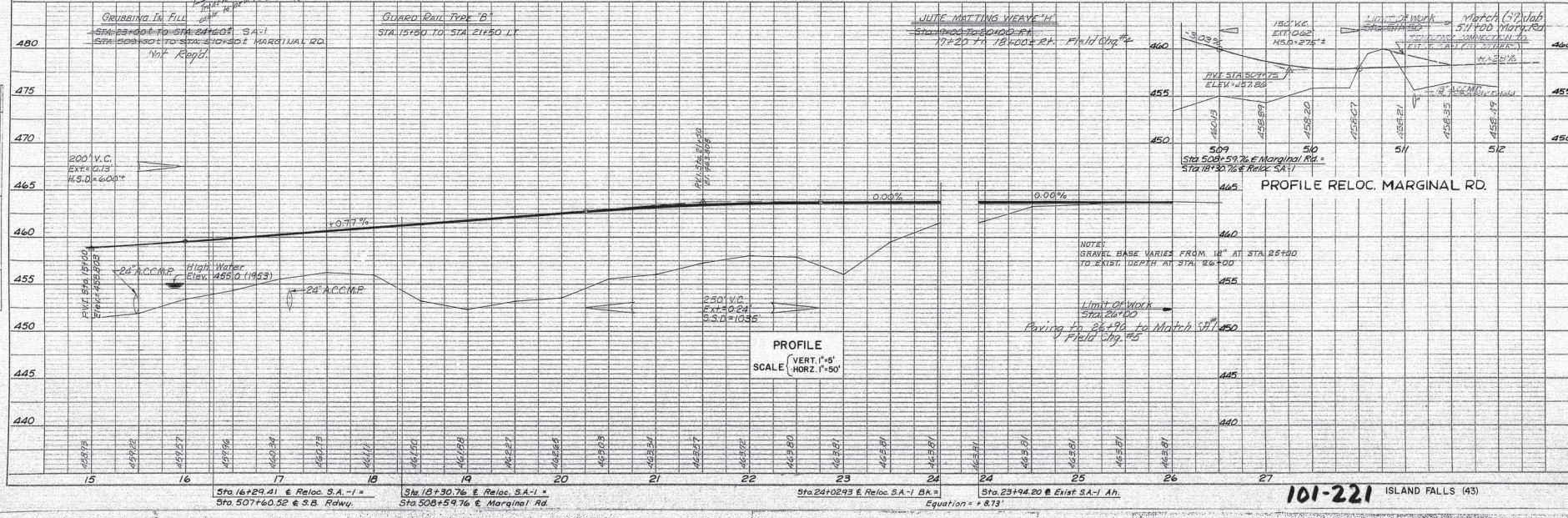
DATE	BY	REVISION

DATE	BY	REVISION

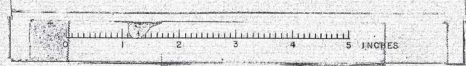




**PLAN
RELOC. STATE AID-1
SCALE 1"=50'**

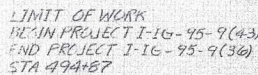


**PROFILE
SCALE (VERT. 1"=5'
HORIZ. 1"=50')**



S.H.C. 3-64
J.A.W. & D.D.D. 10-64
C.A. 12-64
G.F.H. 1-65
J.A.W. 2-65

A



S. P. X-SECTIONS 495+00 TO 497+00

B.P.R.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
SEC. NO.	MAINE	1695-9(A)	30	45
1				