S. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-8(62) I-95-9(29)	1	93

STATE OF MAINE - STATE HIGHWAY COMMISSION

INTERSTATE 95
OVER
ROUTE 116
FEDERAL AID PROJECT NO. I-95-8(62)239
LENGTH = 0.274 MILES

INTERSTATE 95
OVER
PENOBSCOT RIVER
FEDERAL AID PROJECT NO. I-95-9(29)239
LENGTH = 0.245 MILES

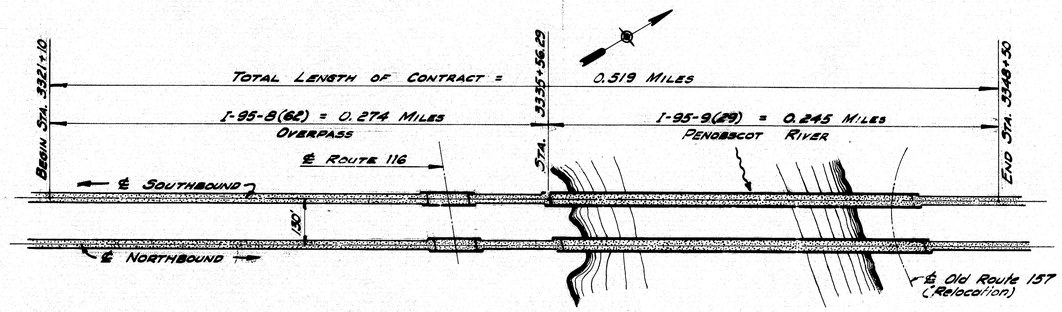
IN THE TOWN OF

MEDWAY
PENOBSCOT COUNTY
TOTAL LENGTH OF CONTRACT = 0.519 MILES

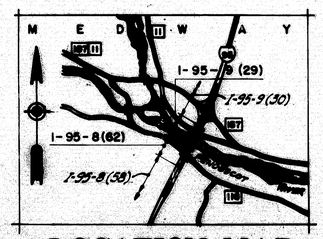
TRAFFIC

INTERSTATE		ROUTE 116	
1966 ADT	1850	1966 ADT	290
1986 ADT	2890	1986 ADT	450
DHV	350	DHV	70
T	14%	T	14%
D	60	D	60
V	60 MPH	V	45 MPH

OLD ROUTE 157
1966 ADT 190
1986 ADT 295



KEY PLAN
SCALE: 1"=200'



LOCATION MAP
APPROX. SCALE: 1" = 1 MILE

NOTE: For Specifications see Sheets 51 & 65

INDEX OF SHEETS

1 TITLE SHEET
2 TYPICAL CROSS SECTIONS - INTERSTATE
3 TYPICAL CROSS SECTIONS - ROUTES 116, OLD 157
4 QUANTITIES
5-9 HIGHWAY STANDARDS

PROJECTS I-95-8(62) & I-95-9(29)

10-13 SURVEY
14-17 PROFILE
18-25 CROSS SECTIONS - SOUTHBOUND
26-34 CROSS SECTIONS - NORTHBOUND

ROUTE 116

35,36 PLAN & PROFILE
37-41 CROSS SECTIONS

OLD ROUTE 157 RELOCATION, RIVER & CHURCH ROADS & CONNECTIONS

42 PLAN & PROFILE - OLD ROUTE 157 RELOCATION
43 LAYOUT - OLD ROUTE 157 RELOCATION
44 PLAN & PROFILE - RIVER & CHURCH ROADS
45-48 CROSS SECTIONS - RELOCATION OLD ROUTE 157
49,50 CROSS SECTIONS - CONNECTION ROADS

BRIDGE - I-95 OVER ROUTE 116

51 GENERAL PLAN
52-54 FOUNDATION SURVEY
55-58 ABUTMENTS
59 PIERS
60 STRUCTURAL STEEL
61,62 SUPERSTRUCTURE
63 REINFORCING STEEL SCHEDULE
64 SLOPE PROTECTION

BRIDGE - I-95 OVER PENOBSCOT RIVER

65 GENERAL PLAN & ELEVATIONS
66-68 FOUNDATION SURVEY
69-71 ABUTMENTS
72-75 PIERS
76 PIER CAPS & APPROACH SLABS
77-80 STRUCTURAL STEEL
81 SHEAR CONNECTORS & SLAB ELEVATIONS
82-86 SUPERSTRUCTURE SLABS
87 REINFORCING STEEL SCHEDULE
88-93 BRIDGE STANDARDS

APPROVED
MAINE STATE HIGHWAY COMMISSION

Dec. 18 Stivers — CHAIRMAN
Lucien H. Gaythen
Bertrand G. Lechasseur
Clayton Hutchins — CHIEF ENGINEER

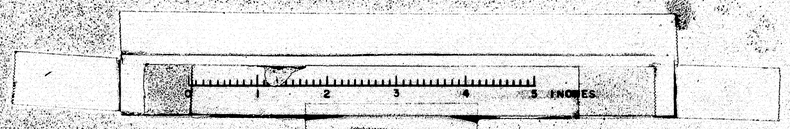
Sept 30, 1968 — DATE

DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS
REGION :

APPROVED

DIVISION ENGINEER — DATE

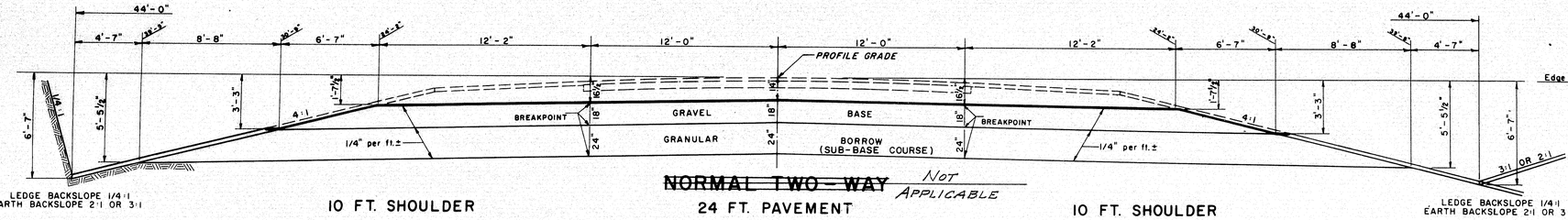
93-1



STAGE CONSTRUCTION — GRADING AND GRAVEL BASE *

B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-8 (62) I-95-9 (29)	2	93

18" GRAVEL BASE
24" GRANULAR BORROW SUBBASE

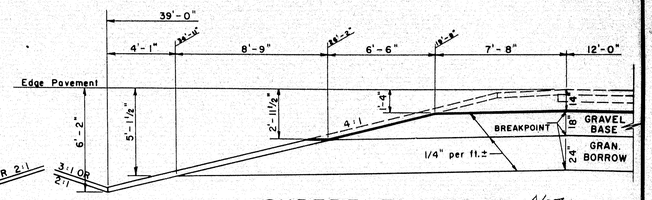


~~NORMAL TWO-WAY~~ NOT APPLICABLE

10 FT. SHOULDER
18" GRAVEL BASE = 85.65 C.Y. PER 100 L.F.
24" GRANULAR BORROW = 172.20 C.Y. PER 100 L.F.

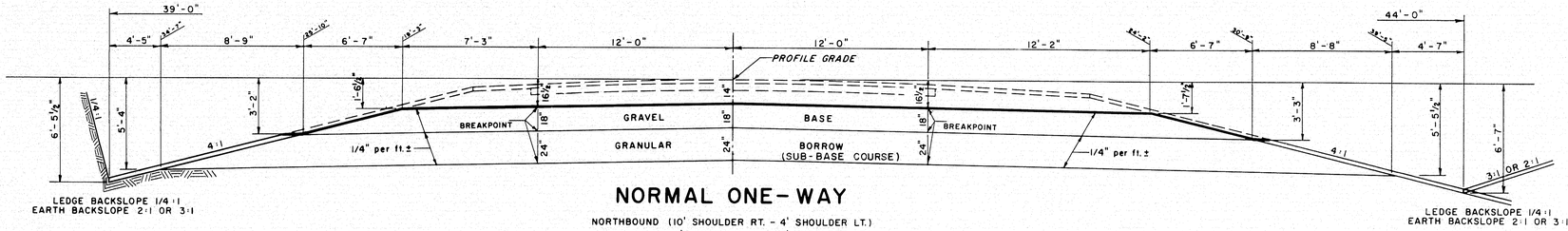
24 FT. PAVEMENT
18" GRAVEL BASE = 133.33 C.Y. PER 100 L.F.
24" GRANULAR BORROW = 177.78 C.Y. PER 100 L.F.

10 FT. SHOULDER
18" GRAVEL BASE = 85.65 C.Y. PER 100 L.F.
24" GRANULAR BORROW = 172.20 C.Y. PER 100 L.F.



~~SUPERELEVATED~~ NOT APPLICABLE

4 FT. SHOULDER HIGH SIDE
18" GRAVEL BASE = 60.42 C.Y. PER 100 L.F.
24" GRANULAR BORROW = 136.99 C.Y. PER 100 L.F.



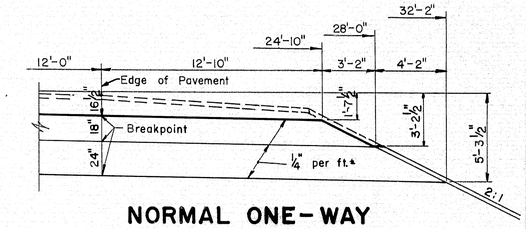
NORMAL ONE-WAY

NORTHBOUND (10' SHOULDER RT. - 4' SHOULDER LT.)
SOUTHBOUND (4' SHOULDER RT. - 10' SHOULDER LT.)

4 FT. SHOULDER
18" GRAVEL BASE = 58.21 C.Y. PER 100 L.F.
24" GRANULAR BORROW = 134.42 C.Y. PER 100 L.F.

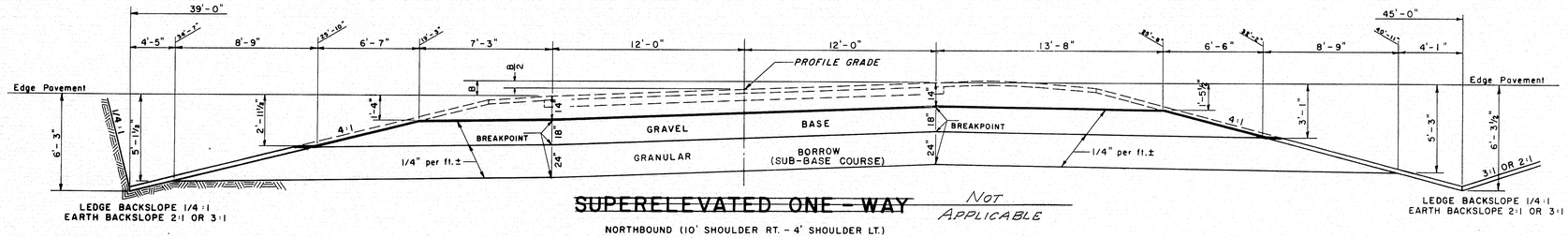
24 FT. PAVEMENT
18" GRAVEL BASE = 133.33 C.Y. PER 100 L.F.
24" GRANULAR BORROW = 177.78 C.Y. PER 100 L.F.

10 FT. SHOULDER
18" GRAVEL BASE = 85.65 C.Y. PER 100 L.F.
24" GRANULAR BORROW = 172.20 C.Y. PER 100 L.F.



NORMAL ONE-WAY
12 FT. SHOULDER — GUARD RAIL

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



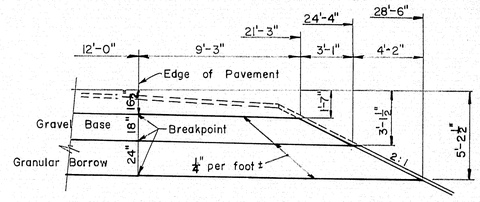
~~SUPERELEVATED ONE-WAY~~ NOT APPLICABLE

NORTHBOUND (10' SHOULDER RT. - 4' SHOULDER LT.)
SOUTHBOUND (4' SHOULDER RT. - 10' SHOULDER LT.)

4 FT. SHOULDER
18" GRAVEL BASE = 58.21 C.Y. PER 100 L.F.
24" GRANULAR BORROW = 134.42 C.Y. PER 100 L.F.

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.

10 FT. SHOULDER
18" GRAVEL BASE = 93.63 C.Y. PER 100 L.F.
24" GRANULAR BORROW = 181.26 C.Y. PER 100 L.F.



NORMAL ONE-WAY
8 FT. SHOULDER — GUARD RAIL

18" GRAVEL BASE = 59.48 C.Y. PER 100 L.F.
24" GRANULAR BORROW = 106.76 C.Y. PER 100 L.F.

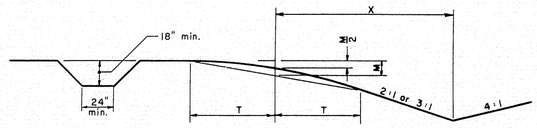
NOTE - LOAMING SLOPES

When slopes are specified to be loamed either by the engineer on notes on the plans or sections, they shall be loamed up to the bottom of the gravel base.

Superelevation shall be as specified in A.A.S.H.O. Policy of Geometric Design of Rural Highways. (e) The maximum superelevation shall not exceed 0.08' per foot width of pavement All curves shall have full superelevation at the first 50' station occurring a minimum distance of 50' after the P.C. and a minimum distance of 50' before the P.T. When superelevation exceeds 3/4" per foot, inside shoulder shall have same slope as pavement.

NOTE:
For all sections depth of ditch depends on local conditions. Depth of base as shown may be changed to meet local conditions.

***NOTE:**
The pavement and base depths as shown on the plans are intended to be nominal.



BERM DITCH

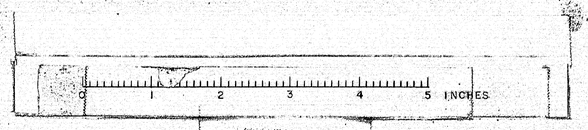
Construct berm ditch as shown on the plans or as directed by the engineer.

Where a 2:1 slope is not practical, use a 1½:1 slope.

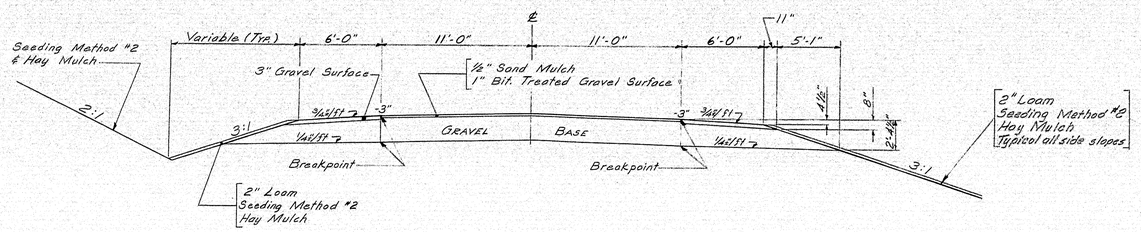
Where "X" = 7 or less, "T" = X - 2, otherwise "T" = 5.

To avoid property damage and to save shade trees, this formular may be modified by the engineer.

99-2



B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-9(29) I-95-8(62)	3	93



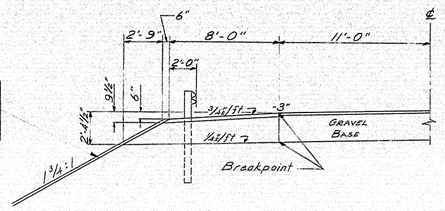
NORMAL

6 FT. SHOULDER

22 FT. ROADWAY

24"Gravel Base = 59.63 C.Y. Per 100 L.F.

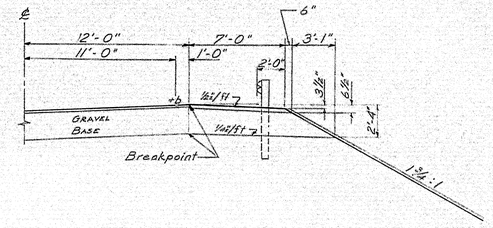
24"Gravel Base = 162.96 C.Y. Per 100 L.F.



NORMAL - WITH GUARDRAIL

8 FT. SHOULDER

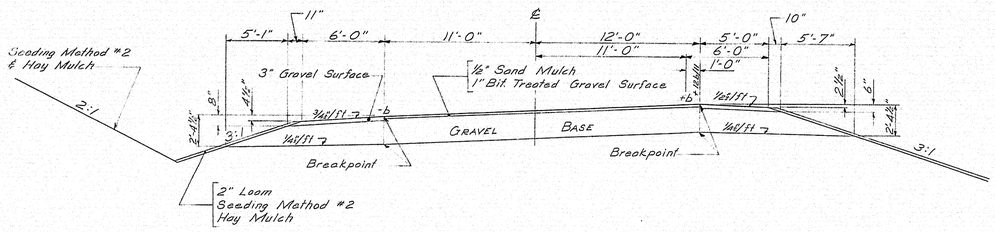
24"Gravel Base = 61.23 C.Y. Per 100 L.F.



SUPERELEVATED - WITH GUARDRAIL

7 FT. SHOULDER

24"Gravel Base = 59.97 C.Y. Per 100 L.F.



SUPERELEVATED

6 FT. SHOULDER

23 FT. ROADWAY

5 FT. SHOULDER

24" Gravel Base = 59.63 C.Y. Per 100 L.F.

24" Gravel Base = 170.37 C.Y. Per 100 L.F.

24" Gravel Base = 57.31 C.Y. Per 100 L.F.

Summary of Earth Excavation and Borrow Quantities
(Quantities in Cu. Yds.)

Description	I-95-8(62) Main Line	I-95-8(62) Route 116	I-95-9(29) Main Line	I-95-9(29) Route 157	Combined Grand Total
Earth Excavation for Estimate					
Earth Excavation (from Cross-Sections)	72835	2600	520	2430	78385
Grubbing in Fill Sections	1445	0	0	0	1445
Top 2' Muck Excavation (Muck Exc. @ P'er"), Pen. River)	3370	0	0	0	3370
Total Earth Excavation	77650	2600	520	2430	83000
Fill for Borrow Calculations					
Fill (from Cross-Sections)	59000	1200	26800	8270	95270
Grubbing (Fill areas)	1445	0	0	0	1445
Muck Excavation (incl. Top 2')	3370	0	0	0	3370
Total Fill	63815	1200	26800	8270	100185
Ledge Excavation for Estimate					
Total Ledge Excavation	460	0	0	50	510
Available Earth Excavation for Borrow Calculations					
Total Earth Excavation	77650	2600	520	2430	83000
Deductions:					
Grubbing in Cut Areas	4000	0	0	0	4000
Grubbing in Fill Areas	1445	0	0	0	1445
Top 2' Muck Excavation	3370	0	0	0	3370
Total Deductions	-8815	0	0	0	-8815
Total Available Earth Excavation	68835	2600	520	2430	74185
Computation of Gravel Borrow for Estimate					
Total Fill	63815	1200	26800	8270	100185
Total Available Earth x.85 =	58360	2210	442	2065	63057
Total Available Ledge x1.33 =	618	0	0	66	678
Total Available Earth and Ledge	58978	2210	442	2131	63735
Total Fill minus Total Available Earth and Ledge	4863	-1010	26458	6139	36450
24" Granular Borrow Subbase	11200	0	2400	0	13600
Plus 24" Granular Borrow Subbase	16063	-1010	28858	6139	50050
Total Fill minus Tot. Avail. Ea. & Ledge plus Subbase x 1.15	18472	-1161	33187	7060	57558
Excess Earth Exc. from Rt. 116 deducted from other locations	-345	0	-656	-140	-1161
Granular Borrow (for undetermined locations), prorated	3146	0	5652	1202	10000
Adjusted Fill required	21253	0	38183	8122	67558
Granular Borrow for Estimate (on Sheet 4) say	21500	0	38000	8000	67500

DESIGN– E.R.A.
TRACE– E.R.A. J.
CHECK– Harris

BRIDGE NO.
SURVEY–
PLOT–

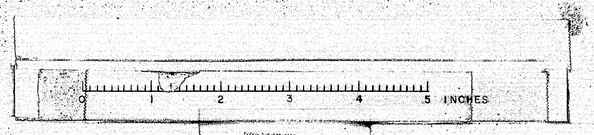
STATE HIGHWAY COMMISSION
BRIDGE DIVISION

INTERSTATE 95
OVER
PENOBSCOT RIVER & ROUTE 116
IN THE TOWN OF
MEDWAY
PENOBSCOT COUNTY

TYPICAL SECTIONS – ROUTES 116, OLD 157

SHEET 3 OF 93 AUGUSTA, MAINE OCTOBER 1964

99-3



B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-8(29) I-95-8(62)	4	93

ESTIMATE OF QUANTITIES

Item Description	Unit	I-95-8(62) Interstate Main Line (Approach)	I-95-8(62) Interstate Route 116 (Approach)	I-95-8(62) I-95 over Route 116 (Bridge)	I-95-8(62) Project Total	I-95-9(29) Interstate Main Line (Approach)	I-95-9(29) Old Rte. 157 Relocation (Approach)	I-95-9(29) I-95 over Penobscot R. (Bridge)	I-95-9(29) Project Total	Contract Grand Total
Clearing	Acres	3.10	.08		3.18	.32	.50		.82	4
Selective Clearing and Thining	Acres	1			1					1
Removing Trees (9"-24")	Each	3			3		5		5	8
Removing Trees (over 24")	Each					1	2		3	3
Earth Excavation	C.Y.	77450	2600		80050	520	2430		2950	83000
Rock Excavation	C.Y.	460			460		50		50	510
Structural Earth Excavation, Drainage	C.Y.	50	350		400		200		200	600
Structural Earth Excavation, Piers, Route 116	C.Y.			380	380					380
Structural Earth Excavation, Piers, Penobscot River	C.Y.							3400	3400	3400
Granular Borrow (See Summary on Sheet 3)	C.Y.	21500			21500	38000	8000		46000	67500
Gravel Borrow, Pit Measure	C.Y.	33000			33000	4400			4400	37400
Machine Aerating	Hours	90			90	10			10	100
Gravel Base Course - In Place Measure	C.Y.	7300	2350		9650	1850	5400		7250	16900
Sprinkling	Units	25			25	5			5	30
Calvin Culverts	Ea.	3			3	1			1	4
Gravel Surface Course	C.Y.	32	218		250		430		430	680
Road Ice	Gal.		1830		1830		3870		3870	5700
15 Inch Corrugated Metal Pipe	L.F.		37		37					37
15 Inch Asphalt Coated Corrugated Metal Pipe	L.F.						54		54	54
18 Inch Asphalt Coated Corrugated Metal Pipe	L.F.	125			125		94		94	219
24 Inch Asphalt Coated Corrugated Metal Pipe	L.F.		112		112		71		71	183
30 Inch Asphalt Coated Corrugated Metal Pipe	L.F.		129		129		94		94	223
24 Inch Reinforced Concrete Pipe - Class III	L.F.	104			104					104
Underdrain, Type "B"	L.F.	‡ 800	180		980					980
Underdrain Outlets	L.F.	‡ 200	155		355					355
Metal End Walls for 36-Inch Pipe	Each		2		2					2
Portland Cement Concrete, Abutments & Retaining Walls, Rte. 116	C.Y.			350	350					350
Port. Cem. Concrete, Abuts. & Ret. Walls, Penobscot River	C.Y.							625	625	625
Portland Cement Concrete, Piers, Route 116	C.Y.			255	255					255
Portland Cement Concrete, Piers, Penobscot River	C.Y.							3840	3840	3840
Portland Cement Concrete, Piers (Placed Under Water)	C.Y.							3600	3600	3600
Port. Cem. Conc. Rdwy. & Sidewalk Slabs on Steel Bridges, Rte. 116	C.Y.			280	280					280
Port. Cem. Conc. Rdwy. & Sidewalk Slabs on Steel Bridges, Penobscot River	C.Y.							2430	2430	2430
Portland Cement Concrete for Riprap Grout	Bbls.	287			287	13			13	300
Casing Test for Concrete Cylinders	Each							1	1	1
Structural Steel, Fabricated & Delivered, Route 116	L.S.			L.S.	L.S.					L.S.
Structural Steel, Fabricated & Delivered, Penobscot River	L.S.							L.S.	L.S.	L.S.
Structural Steel, Erection, Rte. 116	L.S.			L.S.	L.S.					L.S.
Structural Steel, Erection, Penobscot River	L.S.							L.S.	L.S.	L.S.
Structural Steel Field Painting, Route 116	L.S.			L.S.	L.S.					L.S.
Structural Steel Field Painting, Penobscot River	L.S.							L.S.	L.S.	L.S.
Reinforcing Steel, Delivered	lbs.			118560	118560			759700	759700	878260
Reinforcing Steel, Placed	lbs.			118560	118560			759700	759700	878260
Sleeve Connections	L.S.							L.S.	L.S.	L.S.
Steel H-beam Piles 42 lbs/ft.	L.F.			3076	3076					3076
Steel H-beam Piles 53 lbs/ft.	L.F.							2520	2520	2520
Steel H-beam Piles 89 lbs/ft.	L.F.							10380	10380	10380

‡ Undetermined Location

Note: If muck is encountered the removal shall be paid for under Item 2.3-9

Item Description	Unit	I-95-8(62) Interstate Main Line (Approach)	I-95-8(62) Interstate Route 116 (Approach)	I-95-8(62) I-95 over Route 116 (Bridge)	I-95-8(62) Project Total	I-95-9(29) Interstate Main Line (Approach)	I-95-9(29) Old Rte. 157 Relocation (Approach)	I-95-9(29) I-95 over Penobscot R. (Bridge)	I-95-9(29) Project Total	Contract Grand Total
Cofferdams, Pier 1 S.B.	L.S.							L.S.	L.S.	L.S.
Cofferdams, Pier 2 S.B.	L.S.							L.S.	L.S.	L.S.
Cofferdams, Pier 3 S.B.	L.S.							L.S.	L.S.	L.S.
Cofferdams, Pier 4 S.B.	L.S.							L.S.	L.S.	L.S.
Cofferdams, Pier 1 N.B.	L.S.							L.S.	L.S.	L.S.
Cofferdams, Pier 2 N.B.	L.S.							L.S.	L.S.	L.S.
Cofferdams, Pier 3 N.B.	L.S.							L.S.	L.S.	L.S.
Cofferdams, Pier 4 N.B.	L.S.							L.S.	L.S.	L.S.
Bridge Rail	L.F.		496	496				4314	4314	4810
Epoxy Resin Surface Sealant	S.Y.		220	220				330	330	550
Vertical Bridge Curb - Type 1	L.F.		550	550				4310	4310	4860
Vertical Bridge Curb, Curved - Type 1	L.F.							40	40	40
Guard Rail - Type E	L.F.						625		625	625
Guard Rail - Type E, Terminal Section	Each						8		8	8
Guard Rail - Type E, Curved	L.F.						145		145	145
Single Posts - Type A	Each	8		8			6		6	14
Fencing - Metal Posts	L.F.	1665		1665		670			670	2335
Stone Fill	C.Y.	3600		3600						3600
Hand Laid Riprap	C.Y.	668		668		32			32	700
Grout Laid Riprap Face	S.Y.	1800		1800						1800
Loam, In Place Measure	C.Y.	1040	110	1150		500	260		760	1910
Sodding	S.Y.		85	85		590	50		640	725
Jute Matting, Weave "H"	S.Y.	2830		2830		370			370	3200
Seeding, Method No. 2	Unit	245	25	270		62	48		110	380
Hay Mulch	Tons	19	2	21		5	4		9	30
Bituminous Treated Stone Slope Protection	S.Y.	775		775		325			325	1100
Right of Way Monuments	Each	4		4			14		14	18
Survey Markers	Each	2		2			9		9	11
Removing or Razing Building No. 1	L.S.	L.S.		L.S.						L.S.
Removal or Razing Building No. 3	L.S.									
Removing or Razing Building No. 4	L.S.									
Removal or Razing Building No. 5	L.S.									
Removal or Razing Buildings No. 6	L.S.									
Removal or Razing Building No. 7	L.S.									
Removal or Razing Building No. 8	L.S.									
Warning Lights & Illuminating Signs	Every	2	2	2					2	4
*Bituminous Concrete Surface Course, Type A	Tons		117	117				767	767	884
*Membrane Waterproofing	S.Y.		1064	1064				7010	7010	8074
Field Office - Type B	L.S.							L.S.	L.S.	L.S.
Moving, Repairing and Renovating Central Field Office and Soils Laboratory	L.S.							L.S.	L.S.	L.S.

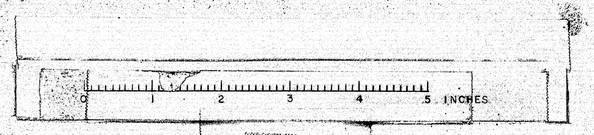
See sht. 11 & 42

*Items not included in this contract

Approximate quantity of Structural Steel for I-95 over Rte. 116 = 193,000 lbs.

Approximate quantity of Structural Steel for I-95 over Penobscot River = 3,669,000 lbs.

Estimated weight of Structural Steel includes Drains, is based on nominal sizes, and does not include Welds.



DESIGN–
TRACE–J.C.
CHECK– Harris

BRIDGE NO.
SURVEY–
PLOT–

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

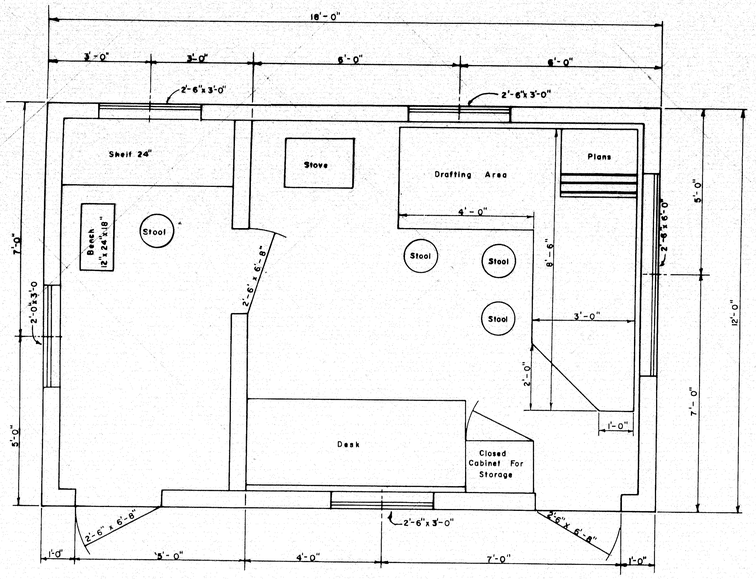
INTERSTATE 95
OVER
PENOBSCOT RIVER & ROUTE 116
IN THE TOWN OF
MEDWAY
PENOBSCOT COUNTY

QUANTITIES

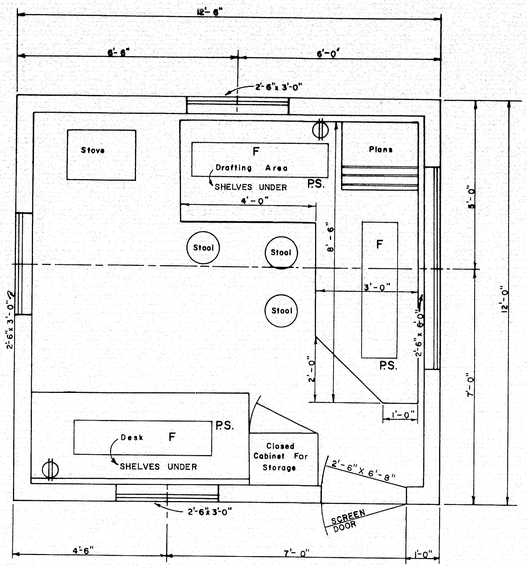
SHEET 4 OF 93 AUGUSTA, MAINE OCTOBER 1964

99-4

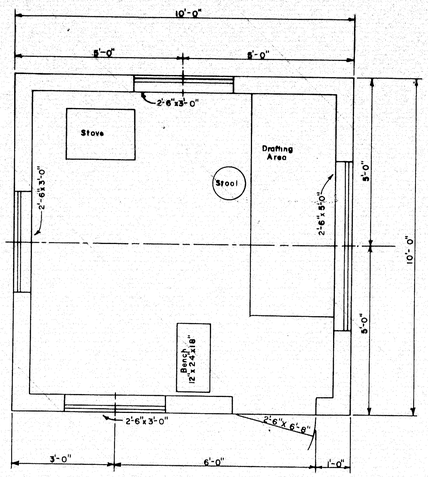
B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO	TOTAL SHEETS
1	MAINE	I-95-8 (62) I-95-9 (29)	5	93



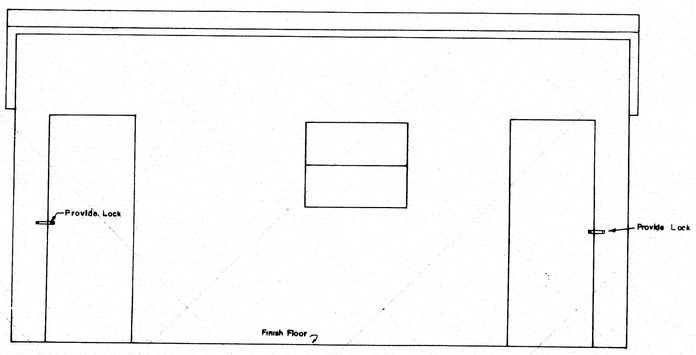
FLOOR PLAN
TYPE "A"



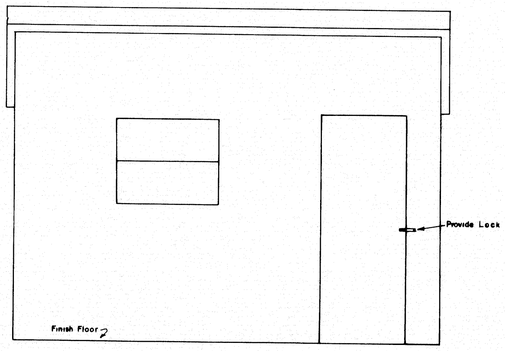
FLOOR PLAN
TYPE "B"



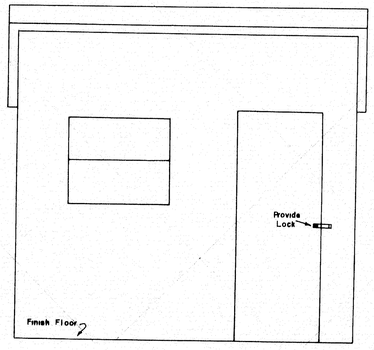
FLOOR PLAN
TYPE "C"



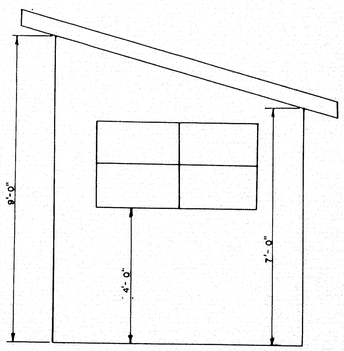
FRONT ELEVATION
TYPE "A"



FRONT ELEVATION
TYPE "B"



FRONT ELEVATION
TYPE "C"



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

NOTES:

Drafting table 3'-4" high at front edge.

Set drafting table out 2" from studs to allow prints to hang down behind table when in use.

The engineer may rearrange the items shown on the plan views during construction of the field office.

Shelves under desk to fit 11½" x 14" x 25" trans files.

ENGINEERS FIELD OFFICES

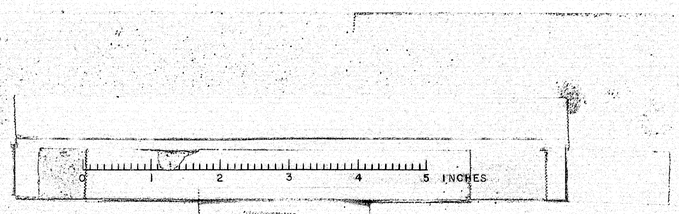
SCALE ½" = 1'-0"

FURNISHINGS TO BE SUPPLIED
2 Straight back chairs.
3 Stools.

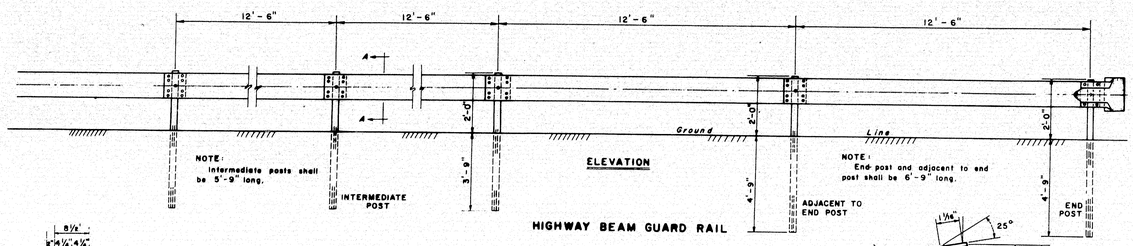
SYMBOLS
F Flourescent lights - 2 light, rapid start, 48" strips, 40 watt bulbs.
P.S. Pull switch.
Duplex Wall Outlet - 15 amp. unless otherwise noted.

SEPTEMBER 1963

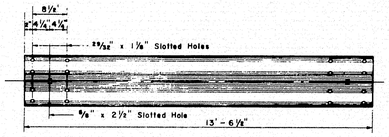
99-5



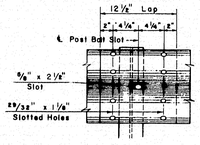
D.P.R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
	MAINE	1-95-8 (62) 1-95-9 (29)	6	93



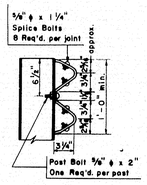
HIGHWAY BEAM GUARD RAIL



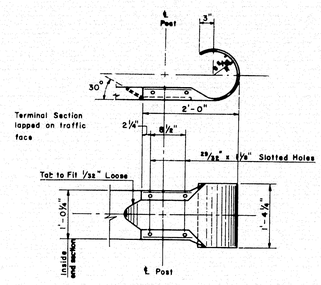
TYPICAL GUARD RAIL PANEL



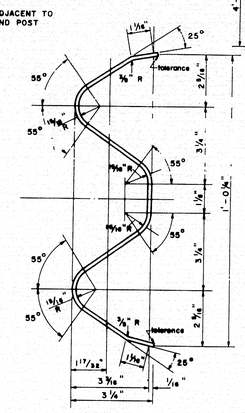
ELEVATION OF GUARD RAIL SPLICE AT POST



CROSS SECTION THROUGH GUARD RAIL SPLICE

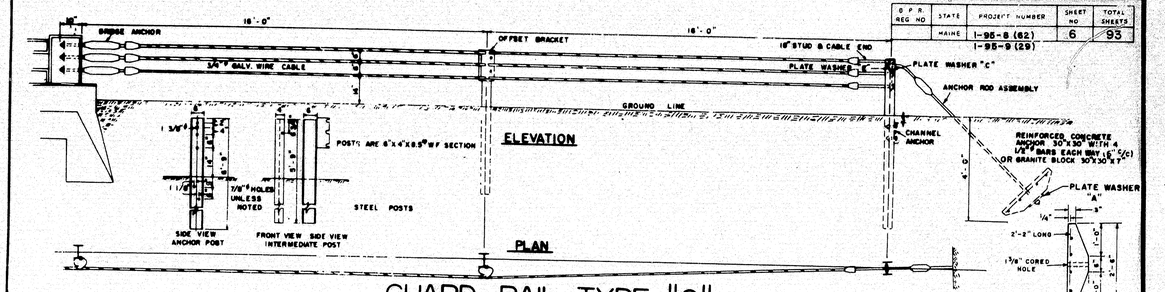


GUARD RAIL-TERMINAL END SECTION

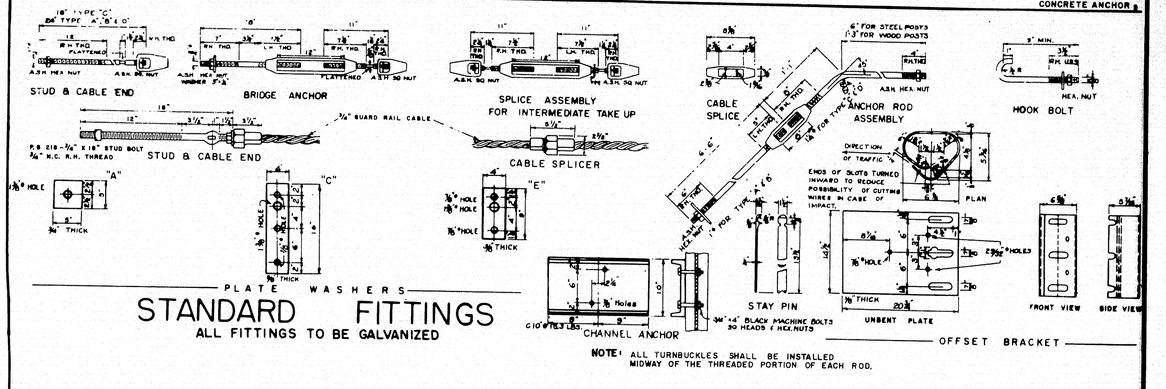


SECTION A-A

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

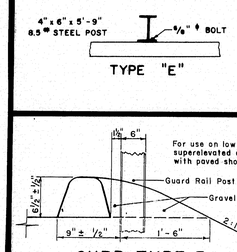


GUARD RAIL TYPE "C"



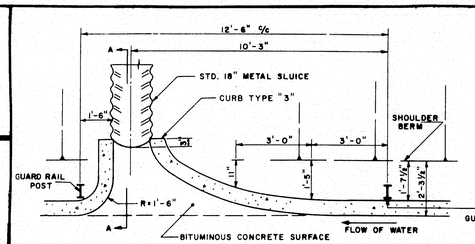
STANDARD FITTINGS

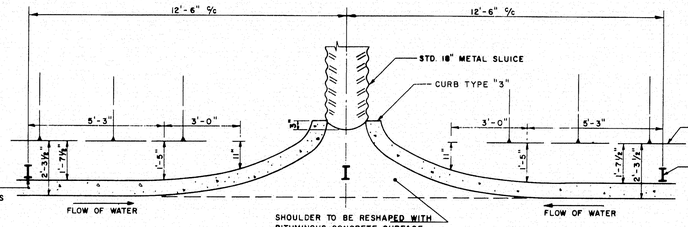
ALL FITTINGS TO BE GALVANIZED

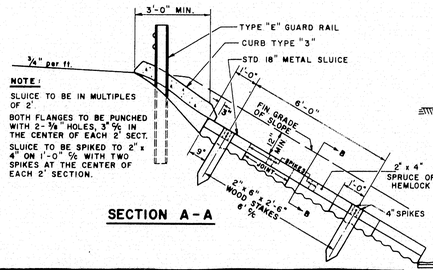


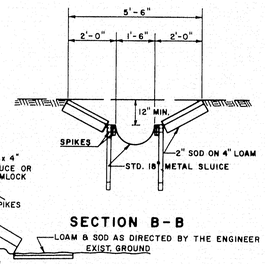
TYPE "E"

CURB TYPE 3

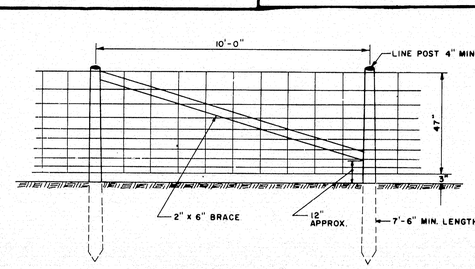




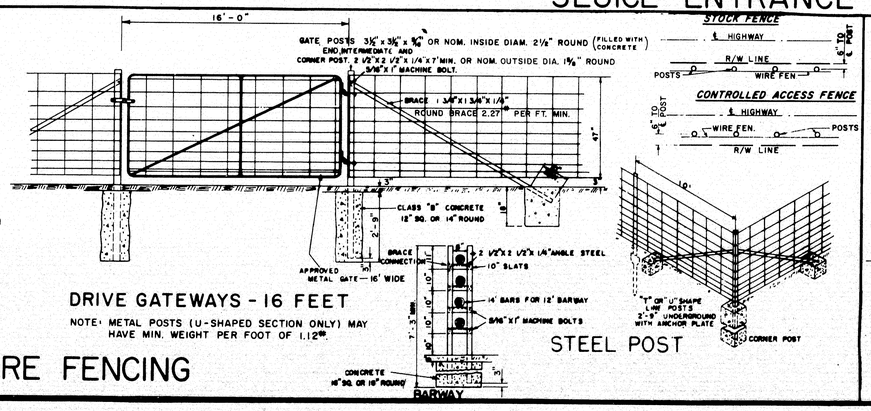




SLUICE ENTRANCE DETAIL



WOOD POST

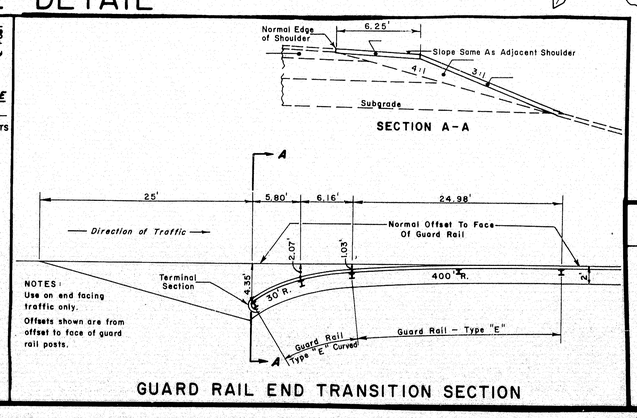


DRIVE GATEWAYS - 16 FEET

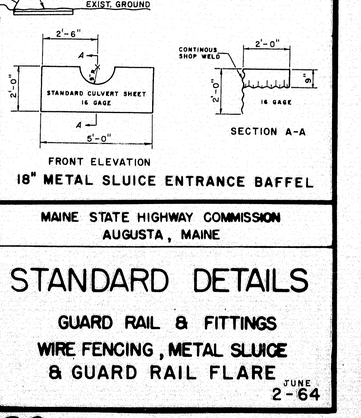
NOTE: METAL POSTS (U-SHAPED SECTION ONLY) MAY HAVE MIN. WEIGHT PER FOOT OF 1.12#.

STEEL POST

WOVEN WIRE FENCING



GUARD RAIL END TRANSITION SECTION



18" METAL SLUICE ENTRANCE BAFFEL

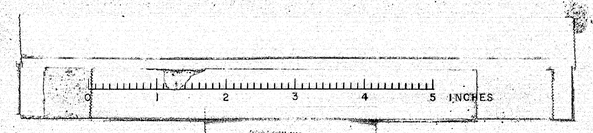
MAINE STATE HIGHWAY COMMISSION
AUGUSTA, MAINE

STANDARD DETAILS

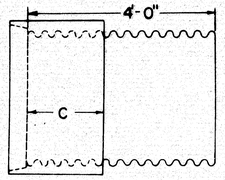
GUARD RAIL & FITTINGS
WIRE FENCING, METAL SLUICE
& GUARD RAIL FLARE

JUNE 2-64

99-6



PIPE CONNECTIONS

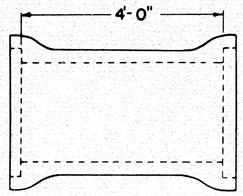


GROOVE END COMBINATION

For 24" to 72", inclusive, diameter connection between concrete and metal pipe

"C" = 17" min. for sizes 30" to 48" incl.
"C" = 23" min. for sizes over 48"

Asphalt coated corrugated metal pipe shall conform to the latest standard specifications

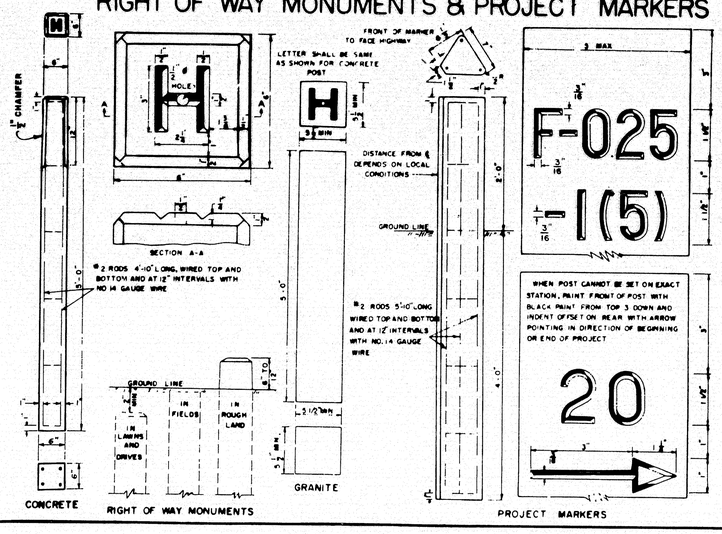


REINFORCED CONCRETE PIPE CONNECTOR DOUBLE BELL

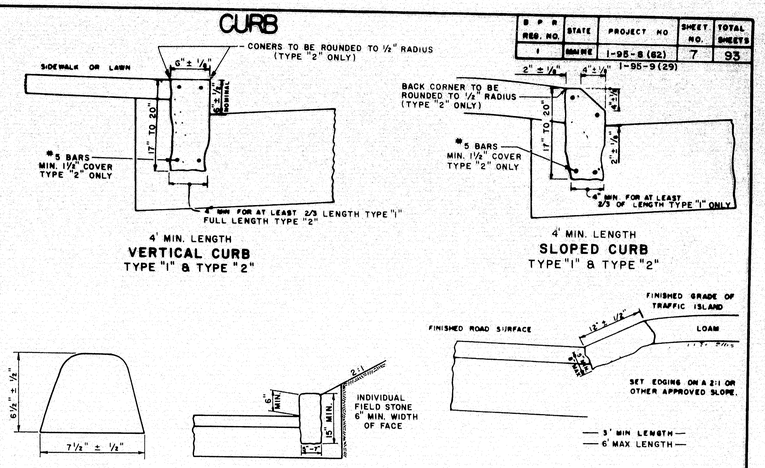
For 12" to 18", inclusive, diameter connection between concrete and metal pipe

Reinforced concrete pipe shall conform to the latest standard specifications

RIGHT OF WAY MONUMENTS & PROJECT MARKERS

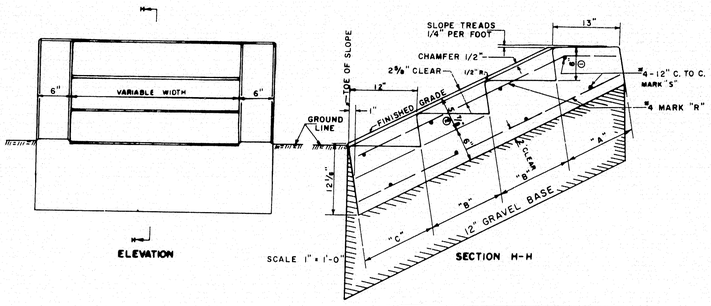


CURB



D P R REG. NO.	STATE	PROJECT NO	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-8 (82) I-95-9 (29)	7	93

CONCRETE STEPS



CONCRETE CLASS "A"		
SECTION	STEPS PER FT. OF WIDTH	PARAPET EACH WALL
"A" HEADER	.030 CU. YDS.	.015 CU. YDS.
"B" EA. INTER ST.	.030 CU. YDS.	.020 CU. YDS.
"C" FOOTER	.030 CU. YDS.	.020 CU. YDS.

6" RISE - 12" TREAD (2:1 SLOPE)

REINFORCING STEEL			
MARK	SIZE	NUMBER	LENGTH (EACH)
R	#4 .668 LBS PER FT.	2 EACH PARAPET 1 EACH FT OF WIDTH	11" FOR "A" +13.4' FOR EACH "B" +12" FOR "C"
S	#4 .668 LBS PER FT.	2 FOR "A" 2 FOR EACH "B" 2 FOR "C"	4" EACH PARAPET +12" PER FT OF WIDTH

PAY ITEMS

ITEM NO.	DESCRIPTION
204-10	Struct. earth excav. - drain.
204-11	Struct. rocks excav. - drain.
302-14	Gravel for foundations
705-13	Reinforcing steel, delivered
705-14	Reinforcing steel, placed
904-11	Reinforced concrete steps

NOTE:
To determine the quantity of *"Structural Excavation"* for payment refer to the *"Standard Specifications"* section 204-60, structural earth and rock excavation-abutments and retaining wall or piers.

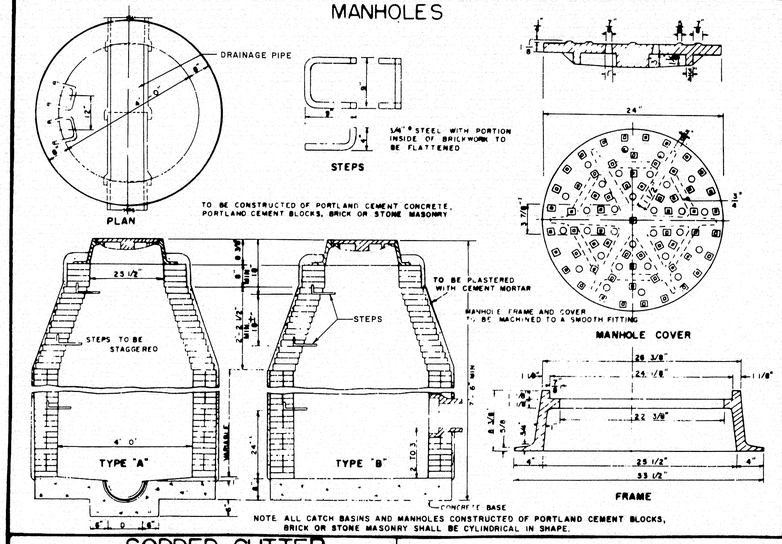
CONCRETE CLASS "A"		
SECTION	STEPS PER FT OF WIDTH	PARAPET EACH WALL
"A" HEADER	.035 CU. YDS.	.018 CU. YDS.
"B" EA. INTER ST.	.035 CU. YDS.	.024 CU YDS
"C" FOOTER	.035 CU. YDS.	.024 CU YDS

8" RISE - 12" TREAD (1½ : 1 SLOPE)

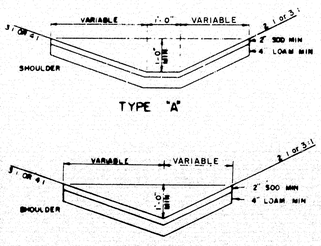
REINFORCING STEEL			
MARK	SIZE	NUMBER	LENGTH (EACH)
R	#4 .668 LBS PER FT.	2 EACH PARAPET 1 EACH FT OF WIDTH	11" FOR "A" +14⅛" FOR EACH "B" +12" FOR "C"
S	#4 .668 LBS PER FT	2 FOR "A" 2 FOR EACH "B" 2 FOR "C"	4" EACH PARAPET +12" PER FT OF WIDTH

①=8"
②=7⅛"

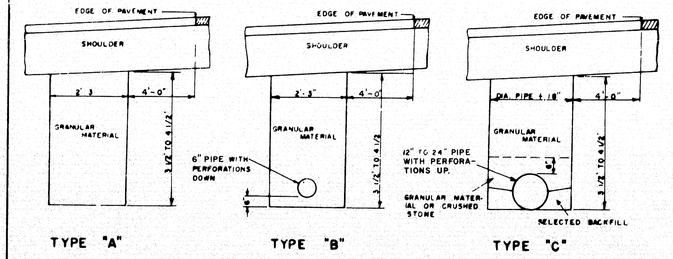
MANHOLES



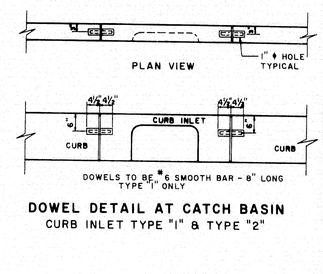
SODDED GUTTER



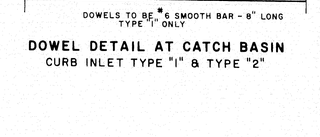
UNDERDRAIN



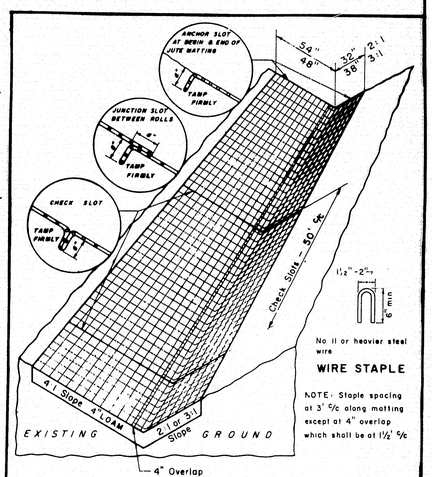
NOTE: IF FIELD CONDITIONS WARRANT, THE ENGINEER MAY CHANGE THE DIMENSIONS DETAILED ABOVE.



DOWEL DETAIL AT CATCH BASIN
CURB INLET TYPE "1" & TYPE "2"



TERMINAL SECTION
TYPE "1" & TYPE "2"



JUTE MATTING - DITCH SECTION

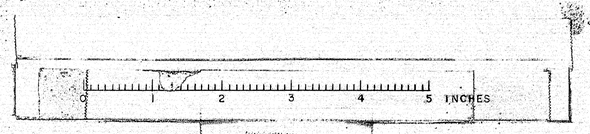
MAINE STATE HIGHWAY COMMISSION
AUGUSTA, MAINE

STANDARD DETAILS

MISCELLANEOUS ITEMS

SEPT.
3-64

99-7



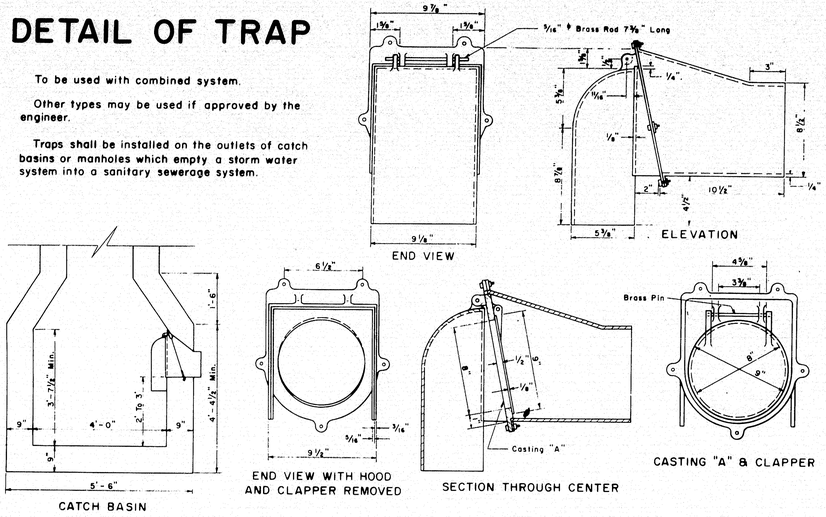
S P R REGION NO.	STATE	FEDERAL AID PROJECT NO	SHEET NO	TOTAL SHEETS
1	MAINE	I-95-8 (62)	8	93
		I-95-9 (29)		

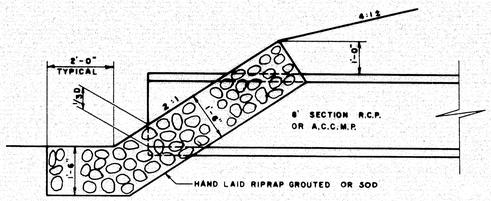
DETAIL OF TRAP

To be used with combined system.

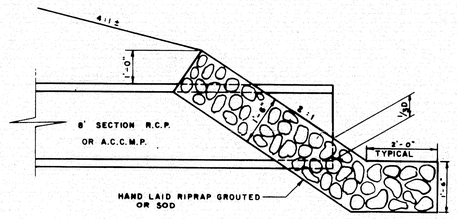
Other types may be used if approved by the engineer.

Traps shall be installed on the outlets of catch basins or manholes which empty a storm water system into a sanitary sewerage system.

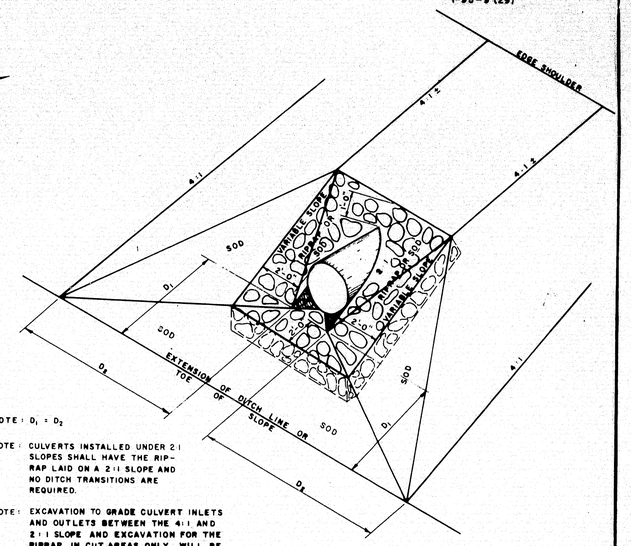




INLET



OUTLET

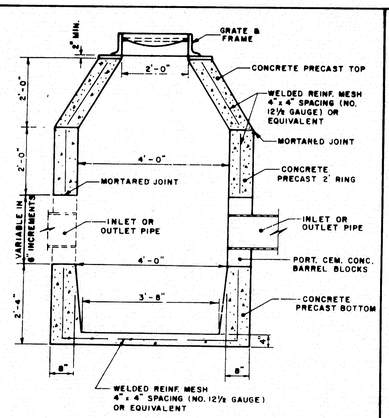


NOTE: $D_1 = D_2$

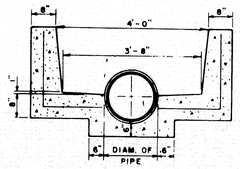
NOTE: CULVERTS INSTALLED UNDER 2:1 SLOPES SHALL HAVE THE RIP-RAP LAID ON A 2:1 SLOPE AND NO DITCH TRANSITIONS ARE REQUIRED.

NOTE: EXCAVATION TO GRADE CULVERT INLETS AND OUTLETS BETWEEN THE 4:1 AND 2:1 SLOPE AND EXCAVATION FOR THE RIPRAP, IN CUT AREAS ONLY, WILL BE PAID FOR UNDER ITEM NO. 204-10 STRUCTURAL EARTH EXCAVATION-DRAINAGE.

TYPICAL RIPRAP DETAIL FOR R.C.P. OR A.C.C.M.P.

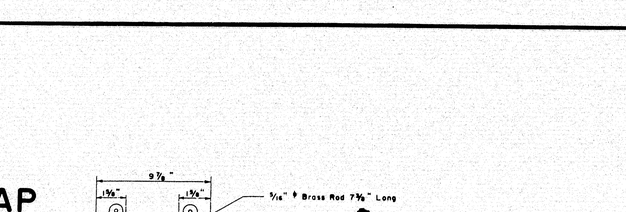


PRECAST PORTLAND CEMENT CONCRETE CATCH BASINS
TYPES C, F, H & I - MANHOLE TYPE B



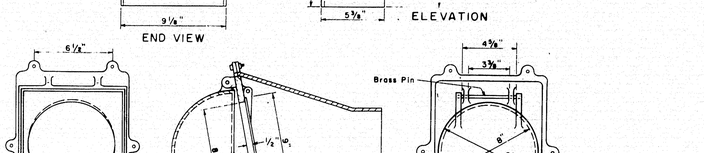
PRECAST PORTLAND CEMENT CONCRETE CATCH BASIN TYPE G MANHOLE TYPE A

NOTE:
THE THREE SECTIONS DETAILED BELOW SHALL BE USED WHEN DIRECTED BY THE ENGINEER OR AS SHOWN ON THE PLANS



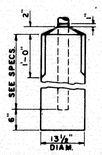
GRAVEL BASE COURSE FOR SLOPE BLANKET - BACKSLOPES

GRAVEL BASE COURSE FOR SLOPE BLANKET - FILL SLOPES



HAND LAID RIPRAP GROUTED DOWNSPOUT

PORTLAND CEMENT CONCRETE (CLASS B)

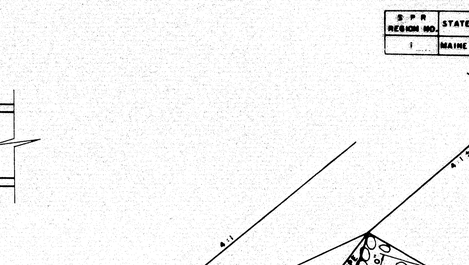


LINE, GATE AND END POST BASE

NOTE
ROUND BASES MAY BE SUBSTITUTED FOR THE SQUARE BASES SHOWN BY USING FIBRE TUBULAR FORMS. SUBSTITUTIONS SHALL BE AS FOLLOWS 13¼" I.D ROUND FOR 12" SQUARE OR 15" SQUARE

" CHAIN LINK FENCE

REINFORCED PORTLAND CEMENT CONCRETE SIDEWALK



NOTE
Sidewalk shall conform to standard specifications section 904.

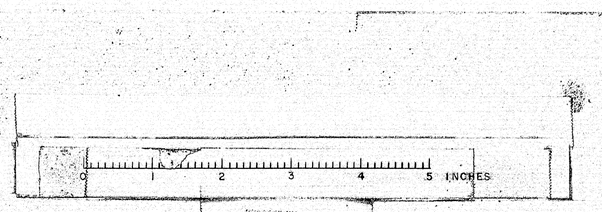
MAINE STATE HIGHWAY COMMISSION
AUGUSTA, MAINE

STANDARD DETAILS

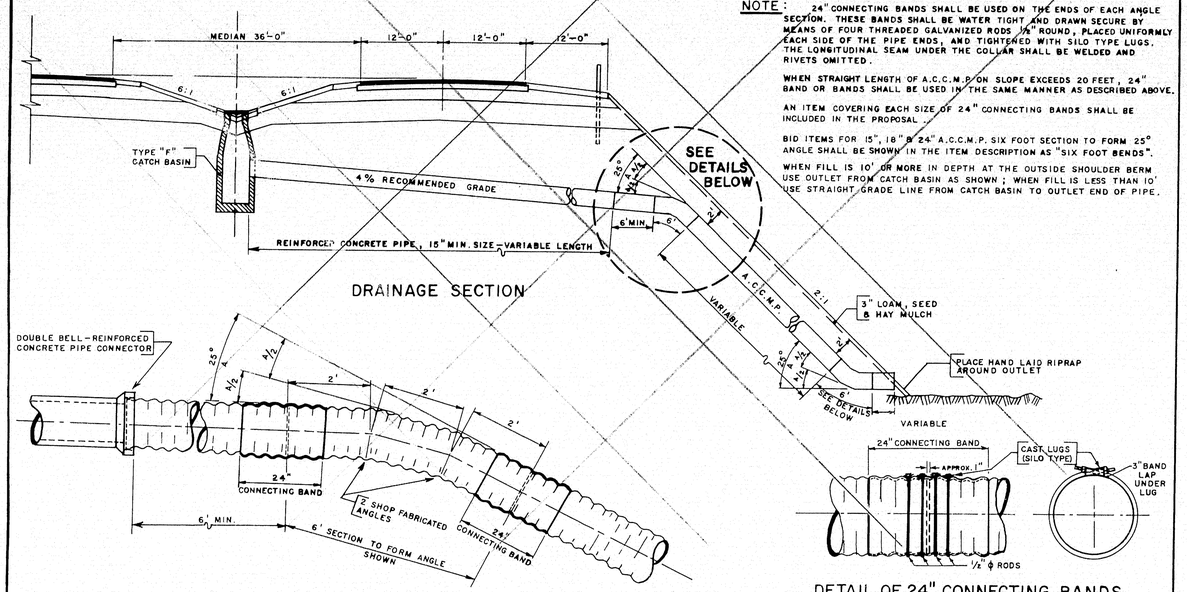
DETAIL OF TRAP, REINFORCED PORTLAND CEMENT CONCRETE SIDEWALK, CHAIN LINK FENCE, TYPICAL RIPRAP DETAIL & PRECAST CATCH BASINS & MANHOLES

SEPT. 4-64

99-8



BENDS AND BANDS for A.C.C.M.P. MEDIAN DRAINAGE



DRAINAGE SECTION

DETAIL OF SIX-FOOT BENDS

DETAIL OF 24" CONNECTING BANDS

NOTE: 24" CONNECTING BANDS SHALL BE USED ON THE ENDS OF EACH ANGLE SECTION. THESE BANDS SHALL BE WATER TIGHT AND DRAWN SECURE BY MEANS OF FOUR THREADED GALVANIZED RODS ½" ROUND, PLACED UNIFORMLY EACH SIDE OF THE PIPE ENDS, AND TIGHTENED WITH SILO TYPE LUGS. THE LONGITUDINAL SEAM UNDER THE COLLAR SHALL BE WELDED AND RIVETS OMITTED.

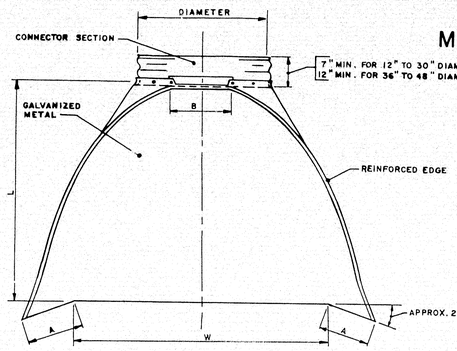
WHEN STRAIGHT LENGTH OF A.C.C.M.P. ON SLOPE EXCEEDS 20 FEET, 24" BAND OR BANDS SHALL BE USED IN THE SAME MANNER AS DESCRIBED ABOVE.

AN ITEM COVERING EACH SIZE OF 24" CONNECTING BANDS SHALL BE INCLUDED IN THE PROPOSAL.

BID ITEMS FOR 15", 18" & 24" A.C.C.M.P. SIX FOOT SECTION TO FORM 25° ANGLE SHALL BE SHOWN IN THE ITEM DESCRIPTION AS "SIX FOOT BENDS".

WHEN FILL IS 10' OR MORE IN DEPTH AT THE OUTSIDE SHOULDER BERM USE OUTLET FROM CATCH BASIN AS SHOWN; WHEN FILL IS LESS THAN 10' USE STRAIGHT GRADE LINE FROM CATCH BASIN TO OUTLET END OF PIPE.

METAL ENDWALLS



PLAN

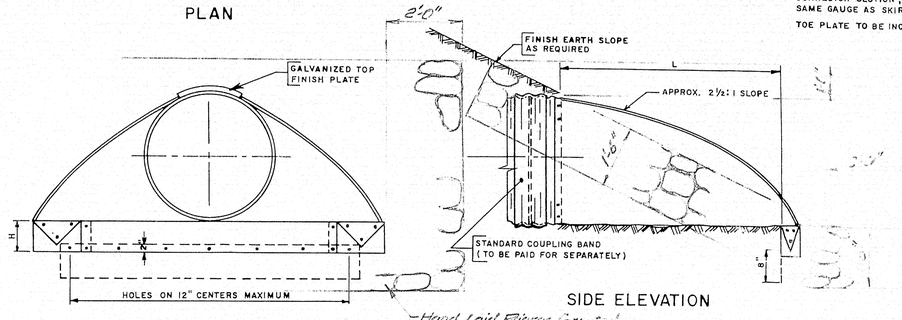
PIPE DIAM.	GAUGE	DIMENSIONS A 1" TOL.	B MAX.	H 1" TOL.	L 1½" TOL	W 2" TOL.
12"	18	4¾"	6"	6"	21"	24"
15"	16	6"	8"	6"	26"	30"
18"	16	7"	9"	6"	31"	36"
21"	16	8¼"	11"	6"	36"	42"
24"	14	9½"	12"	6"	42"	48"
30"	14	12"	15"	7½"	52½"	60"
36"	12	14"	18"	9"	63"	72"
42"	12	16"	21"	10½"	73½"	84"

TOE PLATE TO BE PUNCHED TO MATCH HOLES IN SKIRT LIP. LENGTH OF TOE PLATE IS W+10" FOR 12" TO 30" DIAMETER PIPE, INCLUSIVE, AND W+22" FOR 36" TO 42" DIAMETER PIPE INCLUSIVE.

SKIRT SECTION FOR 12" TO 24" DIAMETER PIPE, INCLUSIVE, TO BE MADE IN ONE PIECE. SKIRT SECTION FOR 30" TO 48" DIAMETER PIPE MAY BE MADE FROM TWO SHEETS JOINED BY RIVETING OR BOLTING ON CENTERLINE.

CONNECTOR SECTION, CORNER PLATE AND TOE PLATE TO BE SAME GAUGE AS SKIRT AND EACH TO BE GALVANIZED.

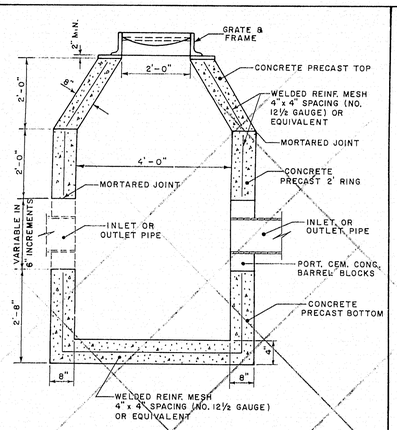
TOE PLATE TO BE INCLUDED IN UNIT COST.



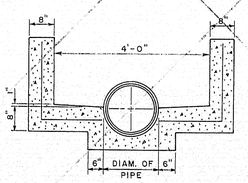
ELEVATION

SIDE ELEVATION

B.P.R. REGION NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-8 (62)	9	93

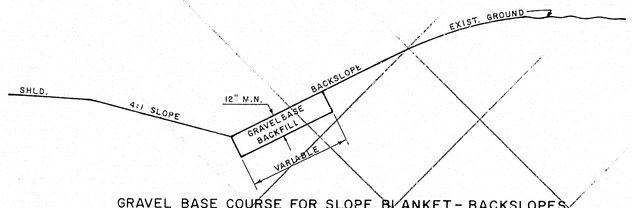


PRECAST PORTLAND CEMENT CONCRETE CATCH BASINS TYPES C, F, H & I - MANHOLE TYPE B

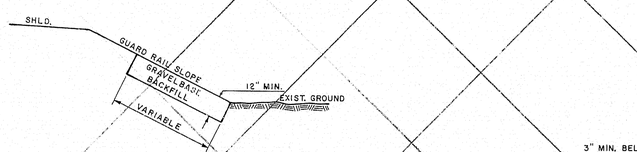


PRECAST PORTLAND CEMENT CONCRETE CATCH BASIN TYPE G MANHOLE TYPE A

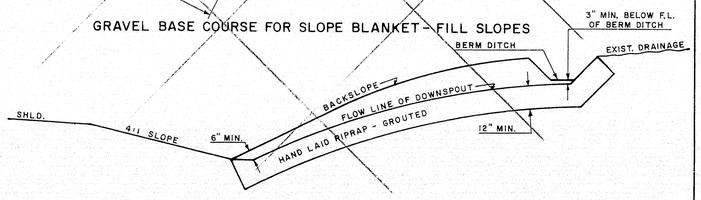
NOTE: THE THREE SECTIONS DETAILED BELOW SHALL BE USED WHEN DIRECTED BY THE ENGINEER OR AS SHOWN ON THE PLANS.



GRAVEL BASE COURSE FOR SLOPE BLANKET - BACKSLOPES

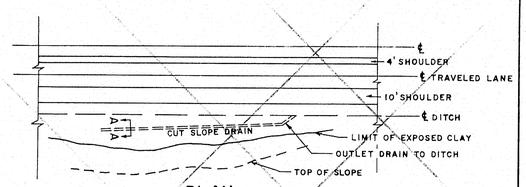


GRAVEL BASE COURSE FOR SLOPE BLANKET - FILL SLOPES

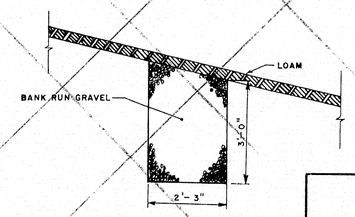


HAND LAID RIPRAP GROUTED DOWNSPOUT

CUT SLOPE DRAIN

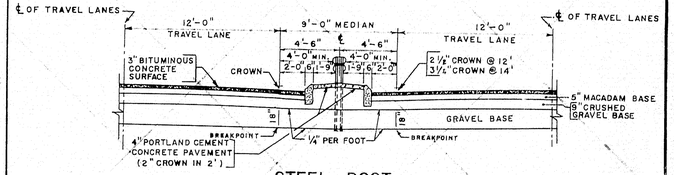


PLAN

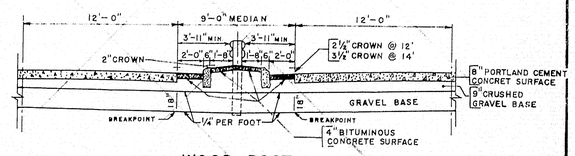


SECTION A-A

9-FOOT MEDIAN

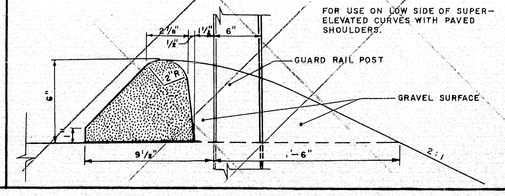


STEEL POST



WOOD POST

BITUMINOUS CONCRETE CURB



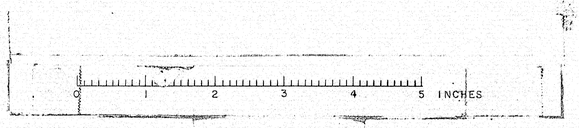
MAINE STATE HIGHWAY COMMISSION
AUGUSTA, MAINE

STANDARD DETAILS

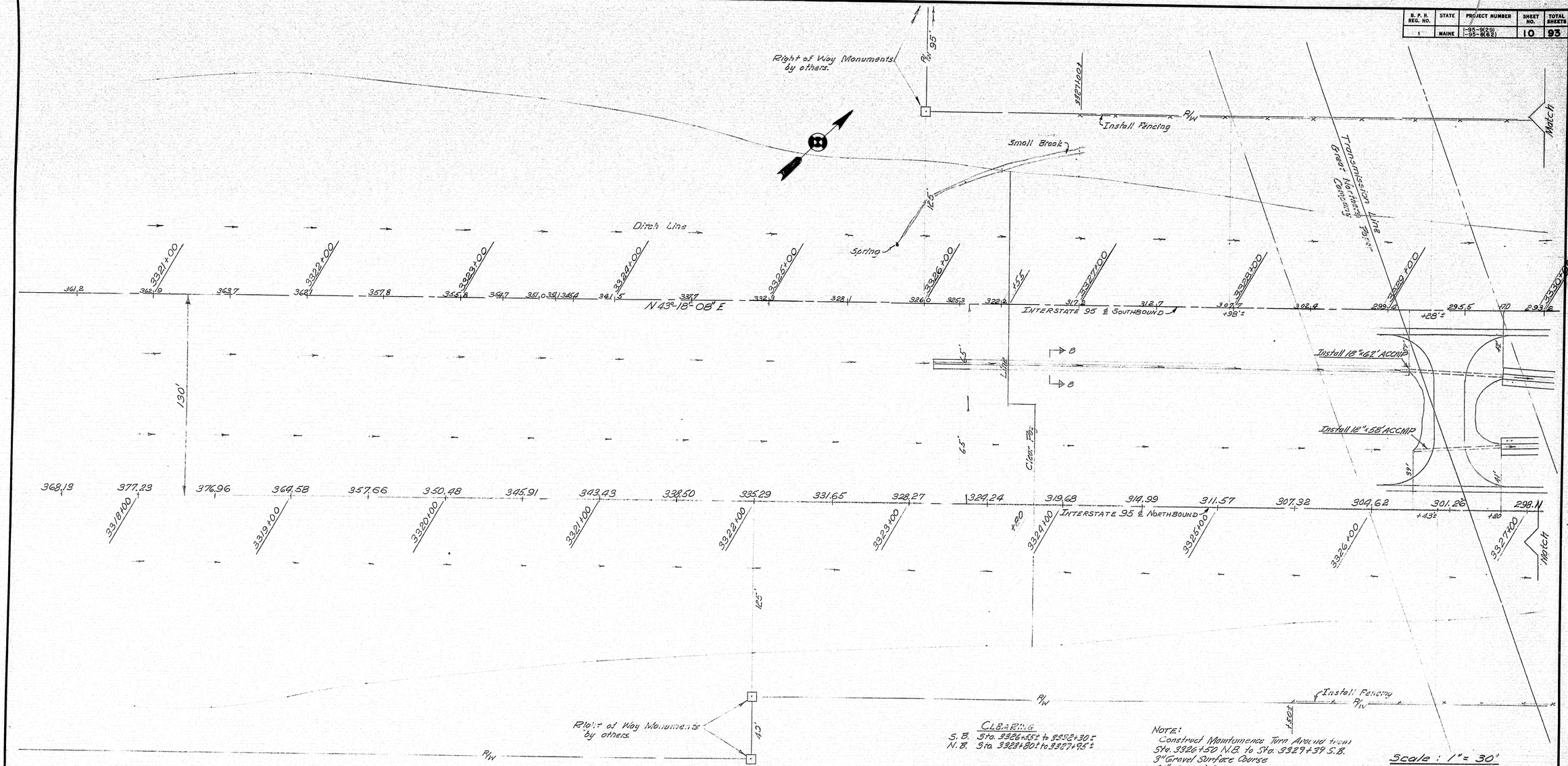
~~BENDS & BANDS~~, METAL ENDWALLS, ~~GUARD RAIL ON RAMPS, CUT SLOPE DRAIN, 9-FOOT MEDIAN & BITUMINOUS CONCRETE CURB~~

4-62

99-9



B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-9(29) I-95-8(62)	10	93



Scale : 1" = 30'

NOTE:
Construct Maintainence Turn Around from
Sta. 3326+50 N.B. to Sta. 3329+39 S.B.
3" Gravel Surface Course
21" Gravel Base
Install 18"x58' ACCMP Sta 3326+50 N.B. 40'± Lt. (2 Bends)
Install 18"x62' ACCMP Sta 3329+50 S.B. 41'± Rt. (3 Bends)
Place Hand Laid Riprap Grouted around Inlets & Outlets

CLEARING
S.B. Sta. 3326+55± to 3332+30±
N.B. Sta. 3323+80± to 3327+95±

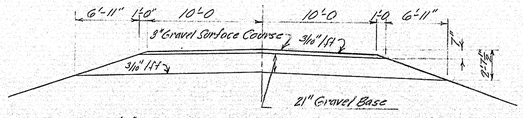
GRUBBING IN FILLS
S.B. Sta. 3330+25± to 3331+80± (95'±)
N.B. Sta. 3327+90± to 3331+80± (100'±)

JUTE MATTING - WEAVE "H"
SB Left Sta. 3321+10 to 3330+50
SB Right Sta. 3321+10 to 3329+12±
NB Left Sta. 3319+75 to 3326+75±

Note: Begin Hand Laid Riprap Grouted
Ditch NB Right Sta. 3319+85±
SB Right Sta. 3326+06±

INTERSTATE
GENERAL NOTES

1. All backslopes in earth shall be 3:1 unless noted.
2. All fill slopes below bottom of gravel base shall be loamed 2" unless otherwise directed by the Engineer.
3. All loam areas and depths must be authorized by the Engineer unless specified on the Sections, Plans or in the Specifications.
4. Seeding, Method No. 2 and hay mulch on all slopes.
5. Grubbing in fills shall be done for a width as indicated by the heavy vertical black marks shown on the cross sections and shall be for a maximum width as follows unless otherwise directed by the Engineer:
   30' from ℄ for 10' shoulders
   25' from ℄ for 4' shoulders
6. All utility facilities are to be adjusted as necessary by the respective utilities unless noted.
   Utilities involved:
   New England Telephone & Telegraph Co.
   Bangor Hydro-Electric Co.



MAINTAINANCE TURN AROUND

DESIGN–
TRACE– R.T.A.
CHECK– Coffin
BRIDGE NO.
SURVEY– } HIGHWAY
PLOT–

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

INTERSTATE 95
OVER
PENOBSCOT RIVER & ROUTE 116
IN THE TOWN OF
MEDWAY
PENOBSCOT COUNTY

SURVEY

SHEET 10 OF 93 AUGUSTA, MAINE OCTOBER 1964

99-10

B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-8(62) I-95-9(29)	11	93

Temporary power and telephone cables. See Sh. 35

10X42 Ho. Trailer

Install Fencing

To be removed by others before May 15, 1965

Hand Laid Riprap Grouted

8' Trailer

1st Gravel Drive

36" ACCMP

15" Gravel Drive

Buildings (No. 2) to be removed by others before April 1, 1965.

Junk to be removed by others.

Install Underdrain

Removed 54" ACCMP

Cedar Post & Board Fence

Junk Automobile Yard

Install Fencing

Iron Pin driven flush @ Sta. 3332+00 N.B.

Grout Crane Laid Riprap Face 6'-0" wide along Slope, to water elevation, to match Section B-B & Section C-C

6'-0" min Stone Fill with Crane Laid Riprap Face to Elev. 250.00

Sta. 3337+40 S.B
Sta. 3337+74.83 N.B

Interstate 95 & Northbound

Interstate 95 & Southbound

N 43° 18'-08" E

PENOBSCOT RIVER

Match

Match

Match

Match

STATION EQUATION
Sta. 3328+10.91 N.B. Back = 280.3
= Sta. 3331+00 N.B. Ahead

Ditch as shown in Section B-B

50' Transition Ditch Section

Ditch as shown in Section A-A

Building No. 1

Install Fencing

1st Conc. Block Garage

Hand Laid Riprap Grouted

Route 116

Scale: 1" = 30'

Sta. 3331+17 S.B. Skd. Ahd 20° Lt.
Install by Precompacted Method
24"×104" R.C.P. Class III
Place Hand Laid Riprap, Grouted around Inlet & Outlet.

Note: For details of culverts & underdrain under Rts. 116 see Rte. 116 Plans.

SECTION B-B
Hand Laid Riprap, Grouted

SECTION A-A
Hand Laid Riprap, Grouted

FENCING - METAL POSTS

S.B. Sta.	3327+00±	to	3331+94±
S.B. Sta.	3333+37±	to	3335+45±
N.B. Sta.	3335+50±	to	3335+90±
N.B. Sta.	3329+54±	to	3328+25±
S.B. Sta.	3331+94±	to N.B. Sta.	3332+12±
S.B. Sta.	3333+36±	to N.B. Sta.	3333+44±

RIGHT OF WAY MONUMENTS

N.B. Sta. 3331+00 Ahd.	125' Rt. & 150' Rt.	
S.B. Sta. 3331+96.94	125' Lt.	
S.B. Sta. 3332+94.32	150' Lt.	

SURVEY MARKERS

S.B. Sta. 3331+96.94	70' Lt.	
S.B. Sta. 3332+94.32	80' Lt.	

Gutter, Coater under Grates.

Bituminous Stone Slope Protection

SECTION C-C

Note: Work this sheet with sheet 32.

DESIGN— BRIDGE NO.
TRACE— G.E.A. SURVEY—
CHECK— Coffin PLOT— G.E.A.

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

INTERSTATE 95
OVER
PENOBSCOT RIVER & ROUTE 116
IN THE TOWN OF
MEDWAY
PENOBSCOT COUNTY

SURVEY

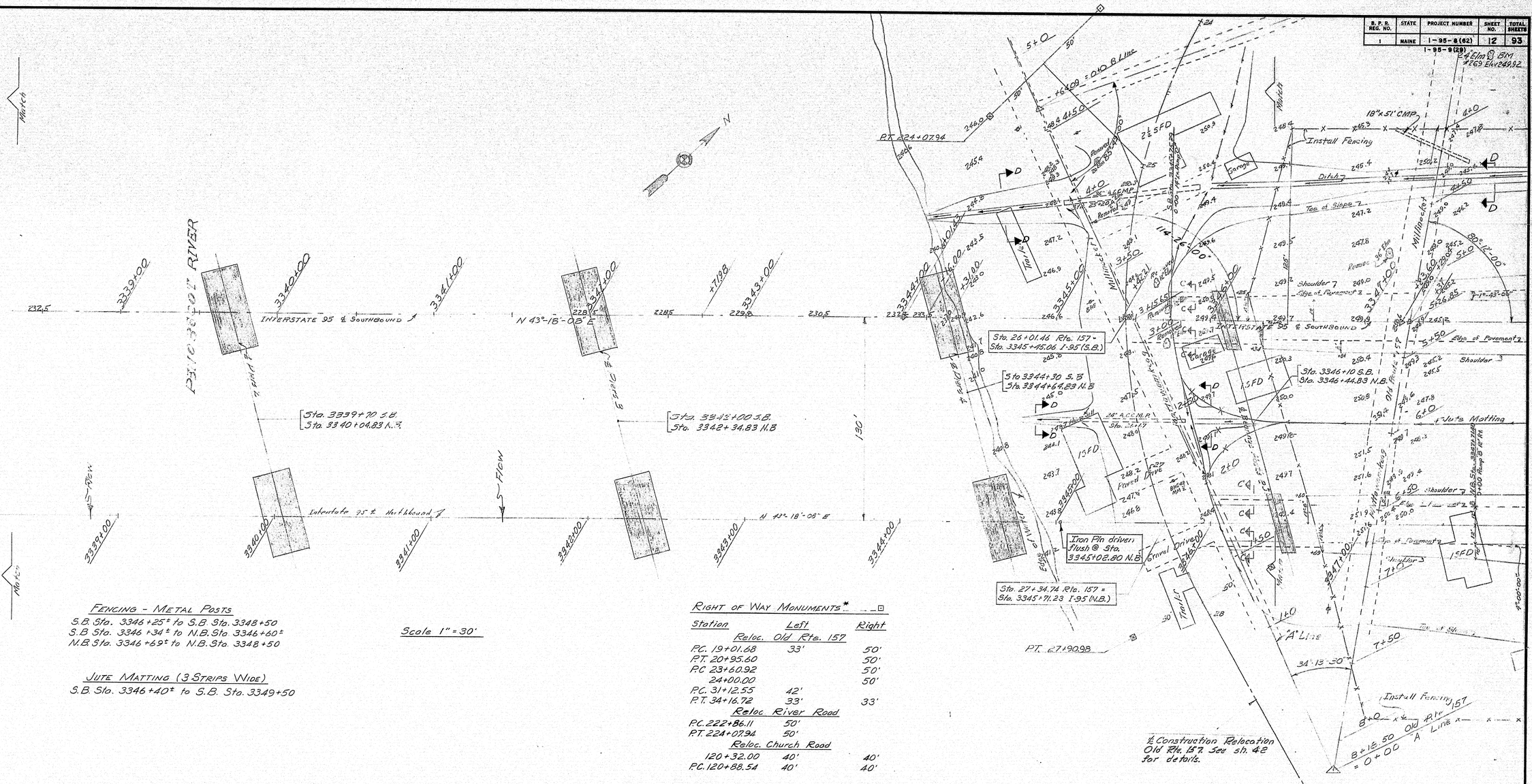
SHEET 11 OF 93 AUGUSTA, MAINE OCT. 1964

99-11

C. B. CO., NO. 44-131 28726

0 1 2 3 4 5 INCHES

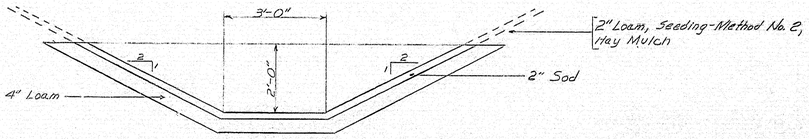
B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-8(62)	12	93
		I-95-9(29)		



FENCING - METAL POSTS
S.B. Sta. 3346+25± to S.B. Sta. 3348+50
S.B. Sta. 3346+34± to N.B. Sta. 3346+60±
N.B. Sta. 3346+69± to N.B. Sta. 3348+50

JUTE MATTING (3 STRIPS WIDE)
S.B. Sta. 3346+40± to S.B. Sta. 3349+50

Scale 1" = 30'



Section D-D

RIGHT OF WAY MONUMENTS*

Station	Left	Right
Reloc. Old Rte. 157		
P.C. 19+01.68	33'	50'
P.T. 20+95.60		50'
P.C. 23+60.92		50'
24+00.00		50'
P.C. 31+12.55	42'	
P.T. 34+16.72	33'	33'
Reloc. River Road		
P.C. 222+86.11	50'	
P.T. 224+07.94	50'	
Reloc. Church Road		
120+32.00	40'	40'
P.C. 120+88.54	40'	40'

SURVEY MARKERS*

Station	Left	Right
Reloc. Old Rte. 157		
P.T. 20+95.60	50'	
P.C. 23+60.92	50'	
P.T. 27+90.98	50'	50'
P.C. 31+12.55		50'
Reloc. River Road		
P.C. 222+86.11		35'
P.T. 224+07.94		50'
Reloc. Church Road		
P.T. 122+00.00	40'	40'

*Work with Sheet #42

*Construction Relocation Old Rte. 157 See sh. 42 for details.

DESIGN–	BRIDGE NO.
TRACE– G.E.A.	SURVEY–
CHECK– [illegible]	PLOT– G.E.A.

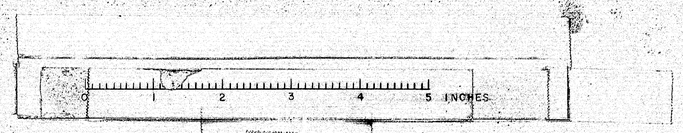
STATE HIGHWAY COMMISSION
BRIDGE DIVISION

INTERSTATE 95
OVER
PENOBSCOT RIVER & ROUTE 116
IN THE TOWN OF
MEDWAY
PENOBSCOT COUNTY

SURVEY
SHEET 12 OF 93 AUGUSTA, MAINE OCT. 1964

99-12

C. B. CO., NO. 44-131 28726



B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-8 (62) I-95-9 (29)	13	93

Limit of Work - Sta. 3349+50

Limit of Work - Sta. 3349+50

Note: Loam, Seed, and Hay Mulch to Sta. 3349+50.

Note: For Section D-D see Sheet # 12.

Scale 1" = 30'

DESIGN-
TRACE- G.E.A.
CHECK-

BRIDGE NO.
SURVEY-
PLOT- G.E.A

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

INTERSTATE 95
OVER
PENOBSCOT RIVER & ROUTE 116
IN THE TOWN OF
MEDWAY
PENOBSCOT COUNTY

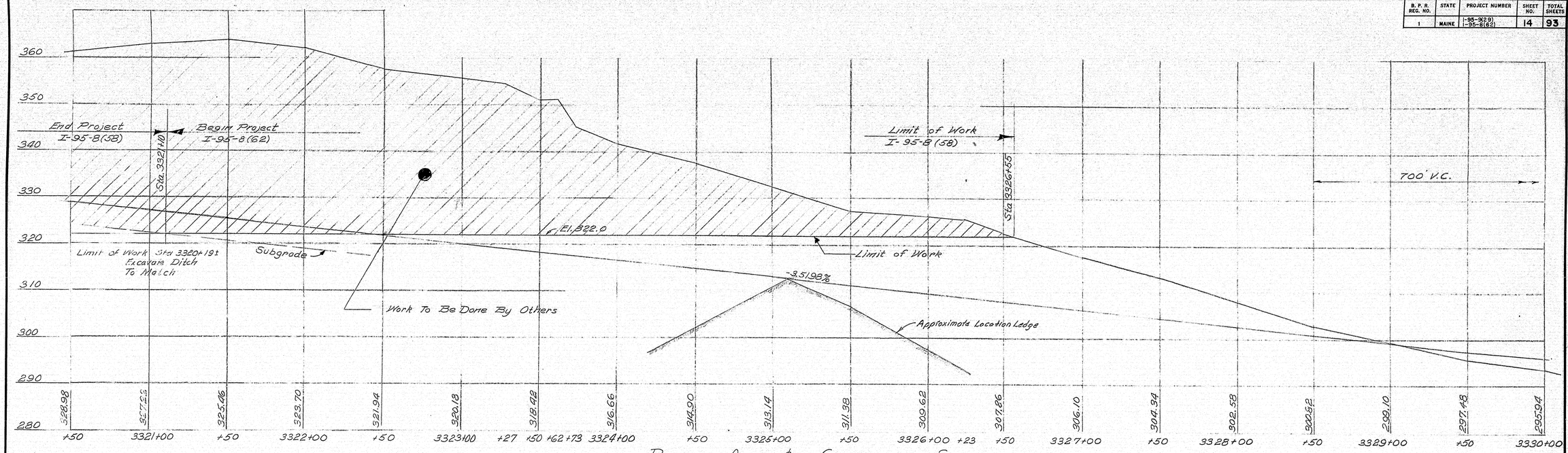
SURVEY

SHEET 13 OF 93 AUGUSTA, MAINE OCT. 1964

99-13

C. B. CO., NO. 44-131 28726

B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-3(29) I-95-8(62)	14	93



DESIGN— TRACE— W.J.M. CHECK— Sutton

BRIDGE NO. SURVEY— HIGHWAY PLOT—

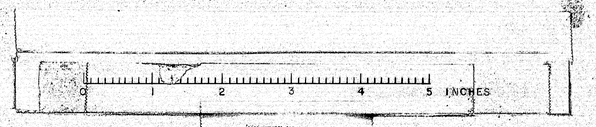
STATE HIGHWAY COMMISSION
BRIDGE DIVISION

INTERSTATE 95
OVER
PENOBSCOT RIVER & ROUTE 116
IN THE TOWN OF
MEDWAY
PENOBSCOT COUNTY

PROFILE

SHEET 14 OF 93 AUGUSTA, MAINE OCTOBER 1964

99-14



DATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
ORIGINAL	I-95-8(62)	15	93
	I-95-9(29)		

700' V.C. Ext. = 2.204'

+00.87 (Back of Backwall Abut #1, I95 over Rte 116)

End Project I-95-8(62) Begin Project I-95-9(29)

+26.93 (Back of Backwall Abut #1, I95 over Rte 116)

+56.29 (Back of Backwall Abutment No.1, I95 over Penobscot River S.B.)

-3.519 %

-1.0 %

25'

Bit Treated Stone Slope Protection

Gravel Base Course (Typical I-95 over Rte 116)

1'-6" Typ.

2:1

Gravel Borrow

Gravel Borrow

4:1

Embankment

Bit Treated Stone Slope Protection

Gravel Borrow

Stone Fill with Crane Laid Riprap Face

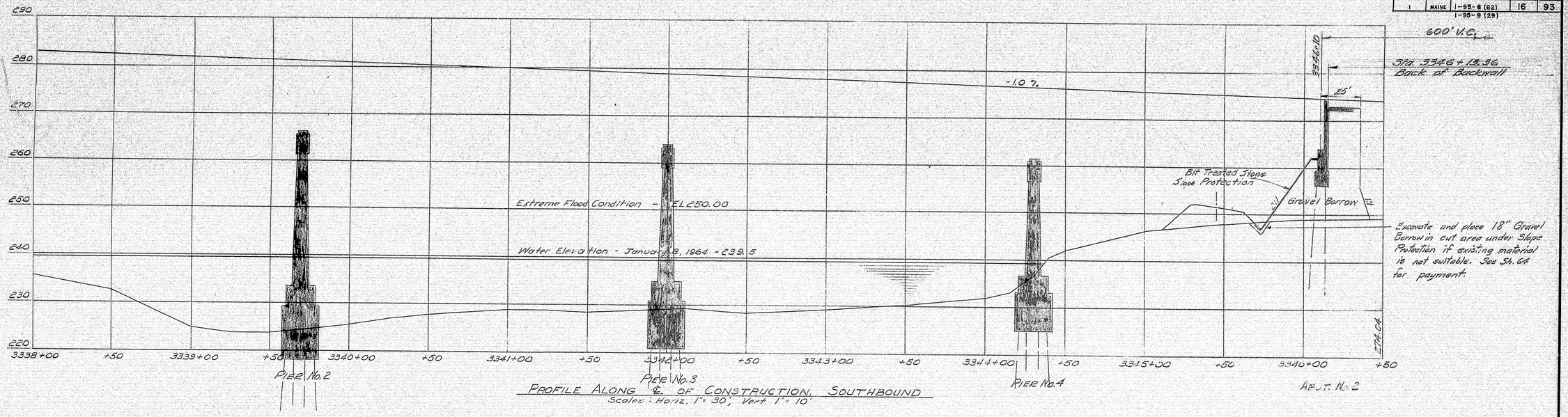
P.V.I. EL 288.50

ABUT #1 PIER #1 PIER #2 ABUT #2

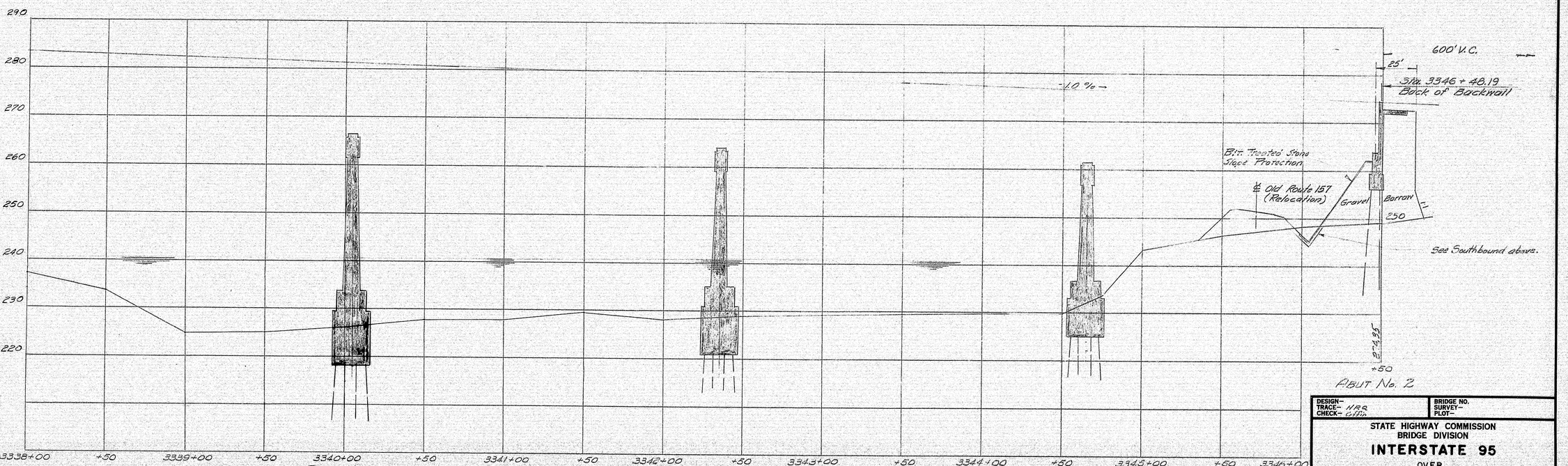
Excavate 8'± layer of soft silt sand or muck out to toes of slopes before placing Gravel Borrow. Excavation to be paid for under Item 203-9, Earth Excavation.

| | | |

B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-8 (62) I-95-9 (29)	16	93



PROFILE ALONG ℄ OF CONSTRUCTION, SOUTHBOUND
Scales: Horiz. 1" = 30', Vert. 1" = 10'



PROFILE ALONG ℄ OF CONSTRUCTION, NORTHBOUND
Scales: Horiz. 1" = 30', Vert. 1" = 10'

DESIGN–
TRACE– H.A.R.
CHECK– C.H.D.

BRIDGE NO.
SURVEY–
PLOT–

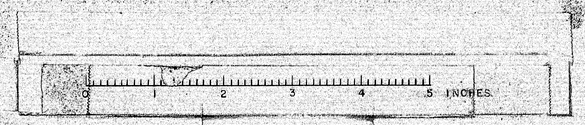
STATE HIGHWAY COMMISSION
BRIDGE DIVISION

INTERSTATE 95
OVER
PENOBSCOT RIVER & ROUTE 116
IN THE TOWN OF
MEDWAY
PENOBSCOT COUNTY

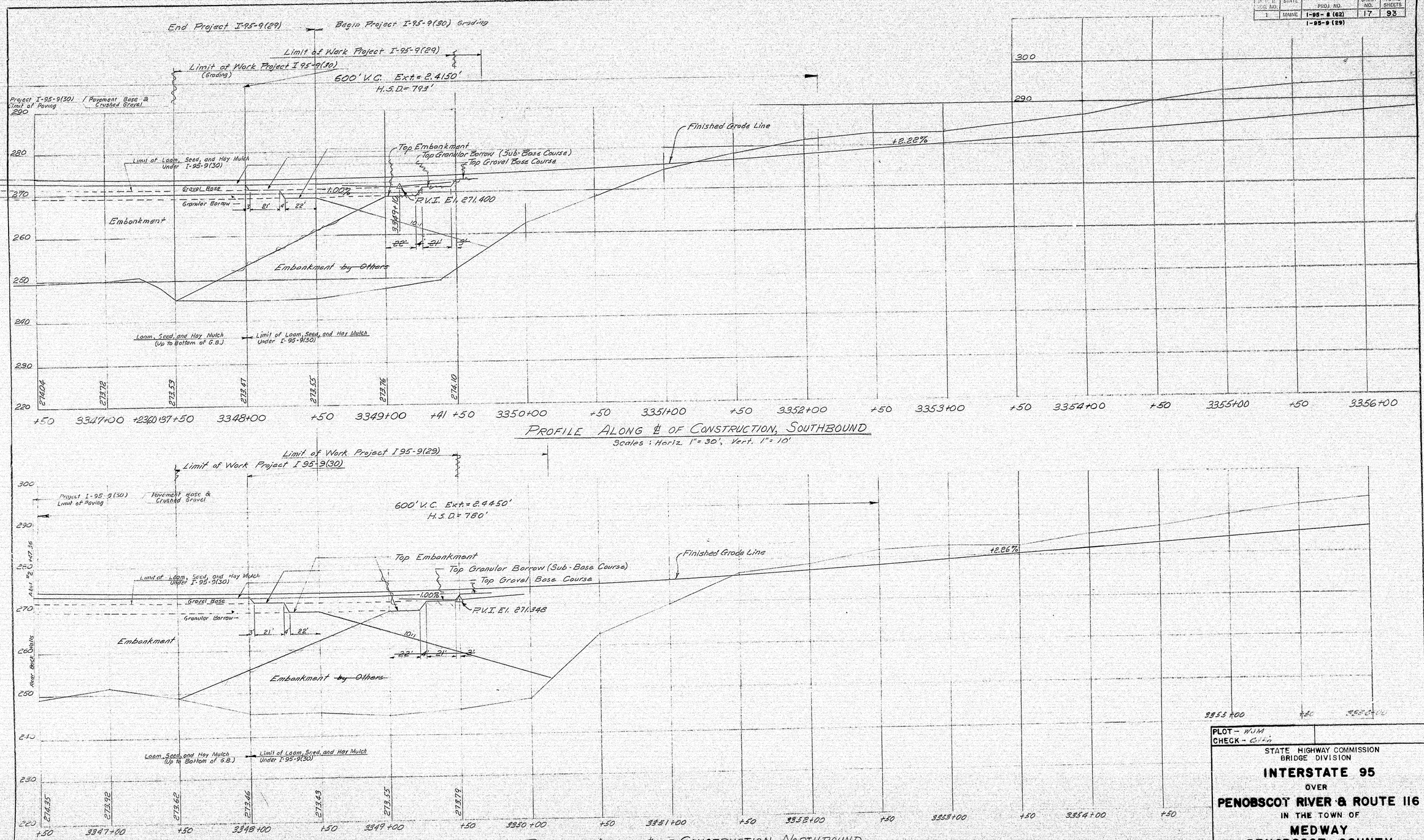
PROFILE

SHEET 16 OF 93 AUGUSTA, MAINE OCT. 1964

99-16



I. D. NO.	STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-8 (62) I-95-9 (29)	17	93



PLOT - WJM
CHECK - GWH

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

INTERSTATE 95
OVER
PENOBSCOT RIVER & ROUTE 116
IN THE TOWN OF
MEDWAY
PENOBSCOT COUNTY

PROFILE

SHEET 17 OF 93 AUGUSTA, MAINE OCT. 1964

99-17

D. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-8(62)	18	93

Place Tote Markers - Weave "H"
In Right Ditch SB
Sta. 3321+10 to 3324+12

Work to be done by others

Work to be done this project

Match Line

320

320.18

321.94

323.76

325.46

327.22

329.00

3320

3321+10

3322+10

3323+10

3324+12

2:1

1:50

SCALE
Hor. + Vert: 1" = 10'

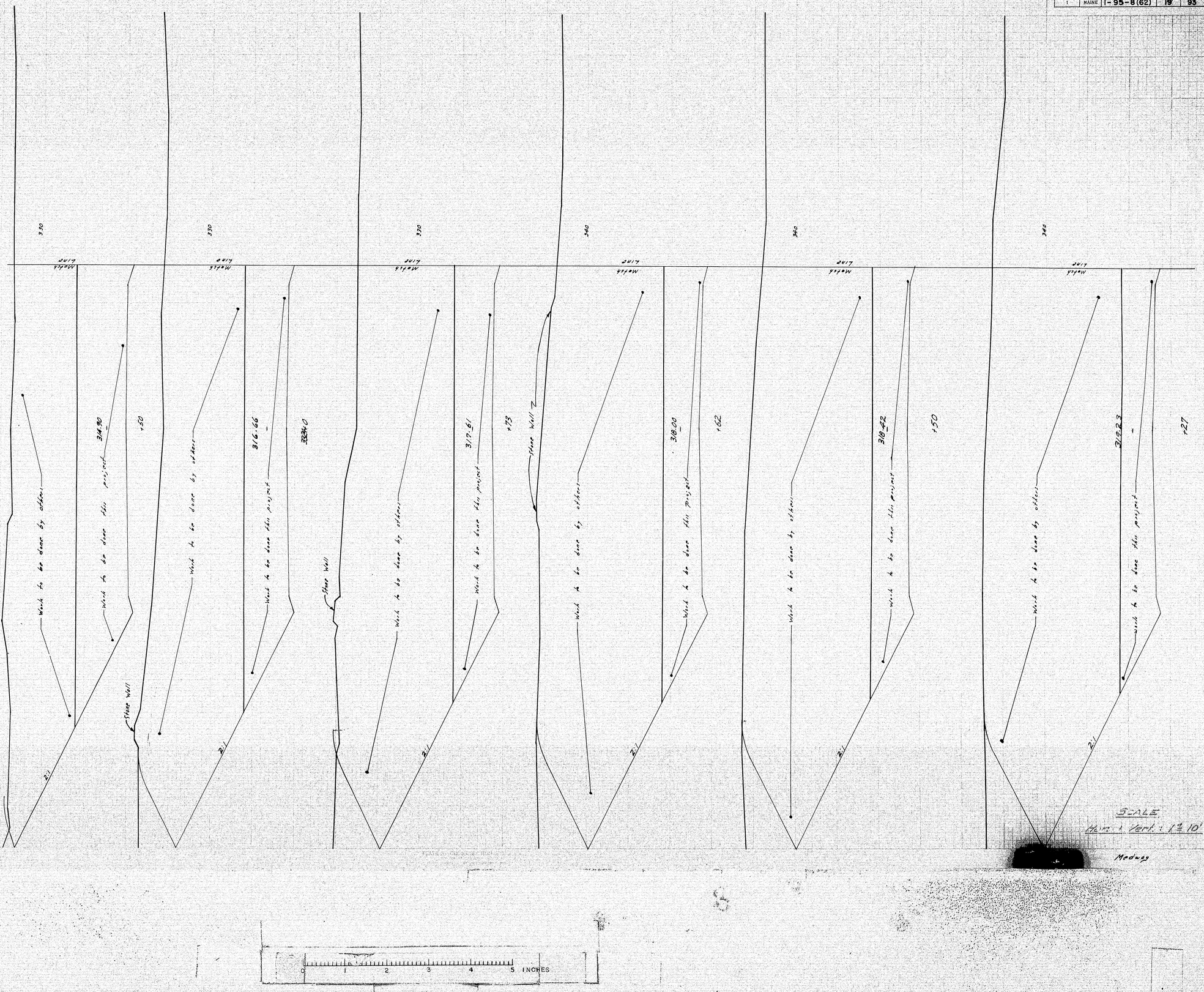
Medway

Work to be done this project begins @ Sta. 3320+09

Sta. 3320+09 to Sta. 3324+12

0 1 2 3 4 5 INCHES

D. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-8(62)	19	93



Sta 3323+27 to 3324+52.58

D. O. T. FED. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-8(62)	20	93

SCALE
1"=1', 1"=5', 1"=10'

Brook

work to be done by others
work to be done this project
308.81
2:1
420
320

Brook

work to be done by others
work to be done this project
309.62
2:1
320
332640

work to be done by others
work to be done this project
311.38
2:1
310
350

work to be done by others
work to be done this project
313.14
2:1
310
332540

Brook

work to be done this project
302.58
2:1
300
332840

Brook

work to be done by others
work to be done this project
304.34
2:1
310
350

Brook

work to be done by others
work to be done this project
306.10
2:1
310
332940

Brook

work to be done by others
work to be done this project
307.86
2:1
310
350

332540 & 332840 SB