

STATE OF MAINE

DEPARTMENT OF TRANSPORTATION



PLANS

CUMBERLAND

CUMBERLAND COUNTY

STATE PROJECT

PROJECT NO. 3590.00

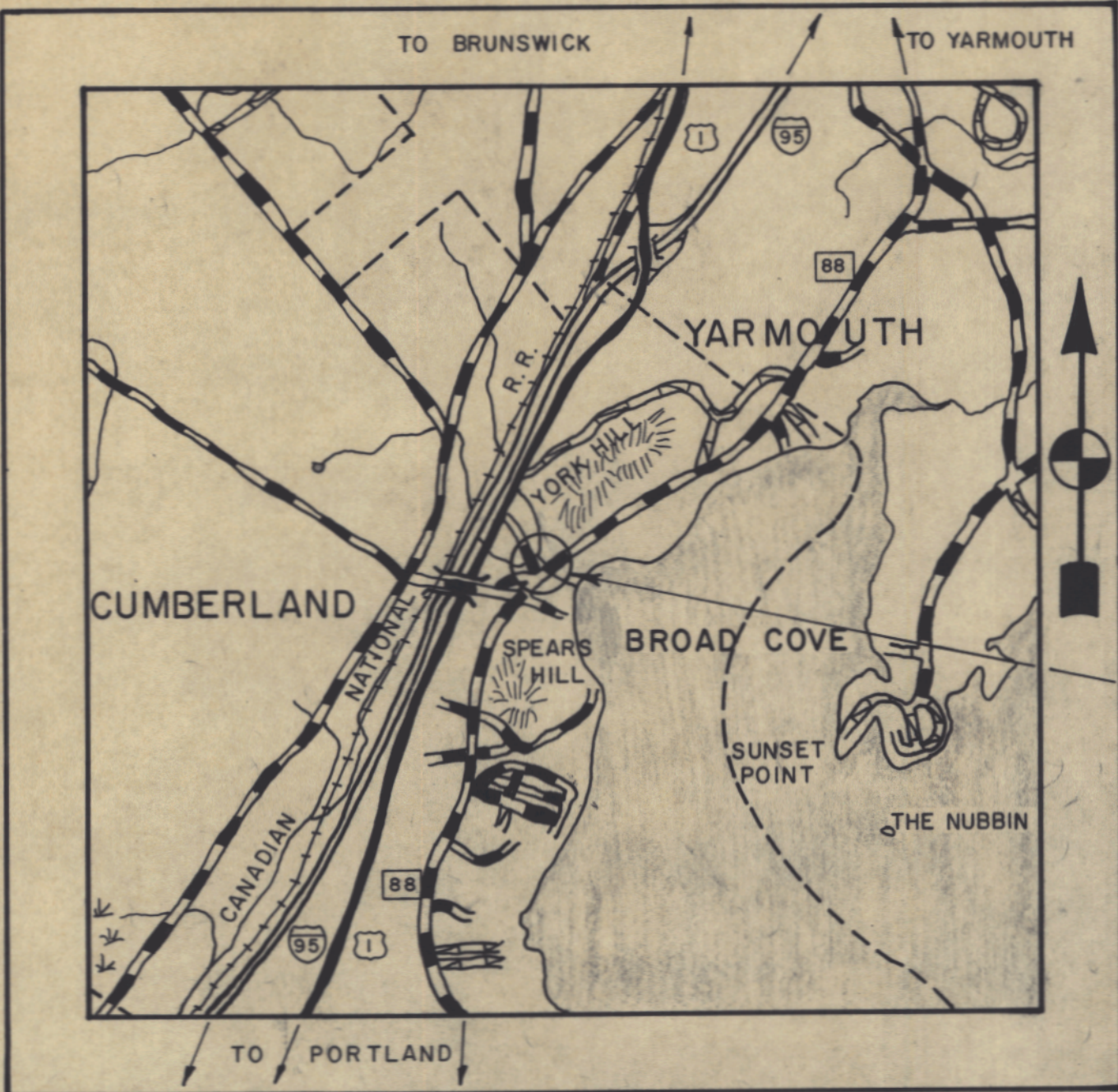
LENGTH = 0.057 MILES

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	TYPICAL SECTIONS
3	

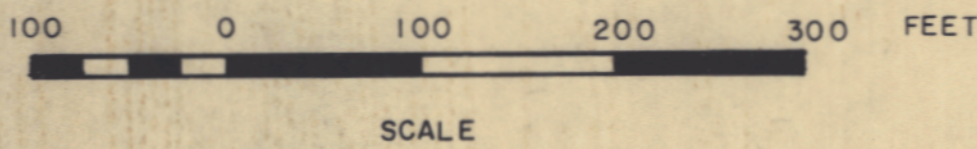
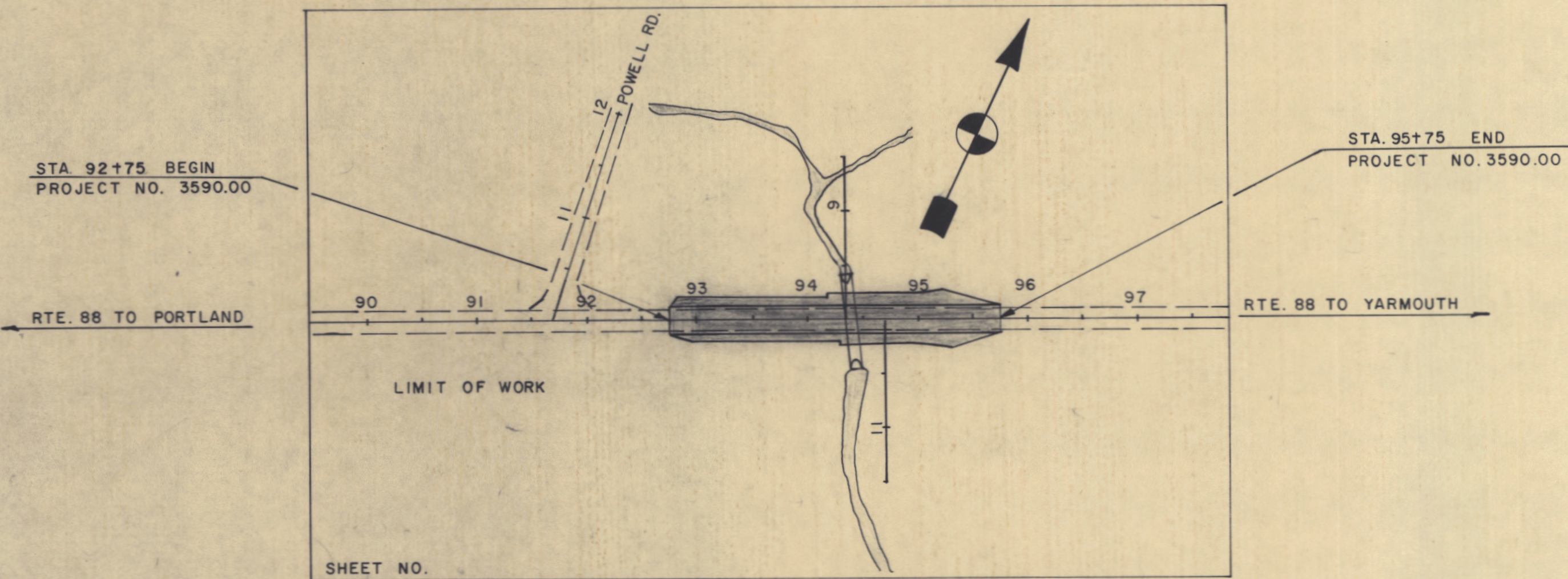
CONVENTIONAL SIGNS	
COUNTY LINES	-----
TOWN LINES	-----
PROPERTY LINES	-----
R/W LINES-EXISTING	=====
R/W LINES-NEW-ACCESS CONTROL	=====
R/W LINES-NEW-NO ACCESS CONTROL	=====
CULVERT-EXISTING	=====
CULVERT-PROPOSED	=====
CURBING-EXISTING	=====
CURBING-PROPOSED	=====
TRAVELLED WAY-EXISTING	=====
TRAVELLED WAY-PROPOSED	=====
UNDERGROUND UTILITIES-EXISTING	-----
UNDERGROUND UTILITIES-PROPOSED	-----
RAILROAD-SINGLE TRACK	=====
RAILROAD-DOUBLE TRACK	=====
UTILITY POLE-EXISTING	•
UTILITY POLE-JOINT OCCUPANCY	• J
PROPOSED UTILITY POLE-TEMPORARY	• X
PROPOSED UTILITY POLE-PERMANENT	•
TREES	○ hardwood • softwood
WOODS	=====

SCALES	PLAN	0' 25' 50'
	PROFILE { HOR. VERT.	0' 25' 50'
	CROSS SECTION	0' 5' 10'



A PORTION OF CUMBERLAND COUNTY

0 1 2 MILES



TRAFFIC DATA

A.D.T.	1987	2580
A.D.T.	2007	4130
D.H.V.		454
T. (%)		6
D. (%)		60
V.		N/A
P.S.D. (%)		N/A
18 KIPS		45

NOTE

All work contemplated under this contract to be governed by and in conformity with the STANDARD SPECIFICATIONS (revision of January 1984) and supplementals thereto, except as modified on the plans and in the special provisions.

APPROVED:

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

DATE

COMMISSIONER

CHIEF ENGINEER

PRELIMINARY PLANS

DATE 1-25-88

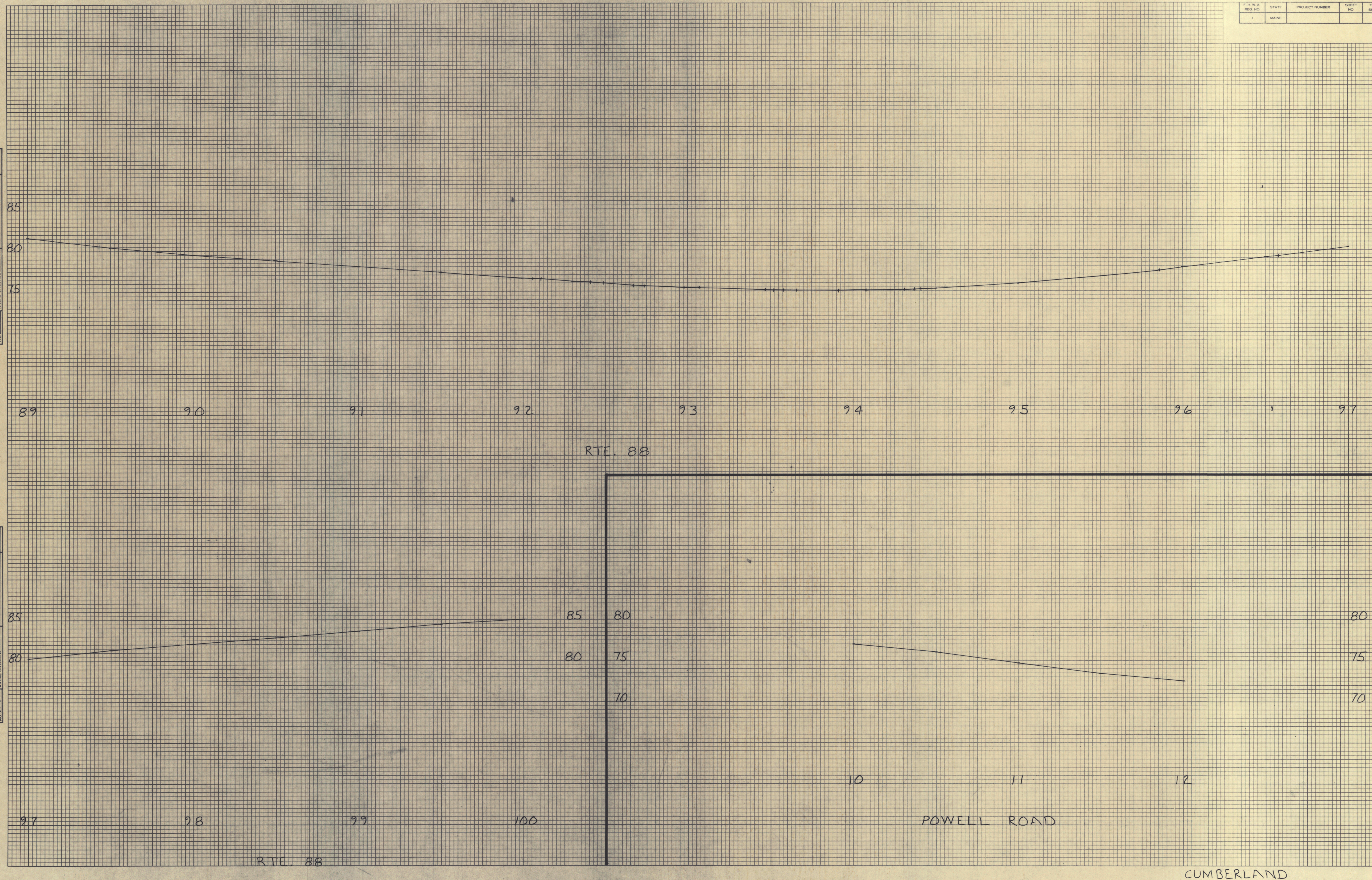
UNITED STATES
DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
REGION 1

APPROVED:

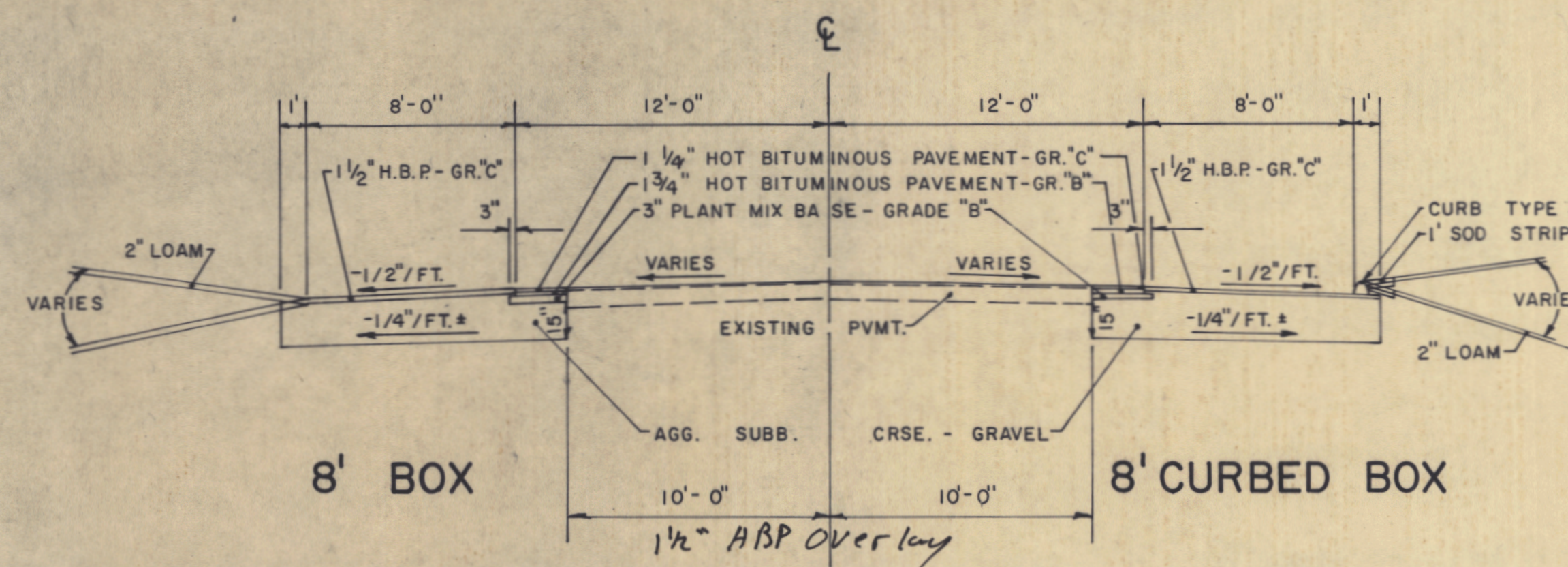
DIVISION ADMINISTRATOR DATE

FINAL SURVEY NOTE BOOK NO.	SURVEYED	DATE
	PLOTTED	
	TEMPLATE	
	AREAS CHECKED	

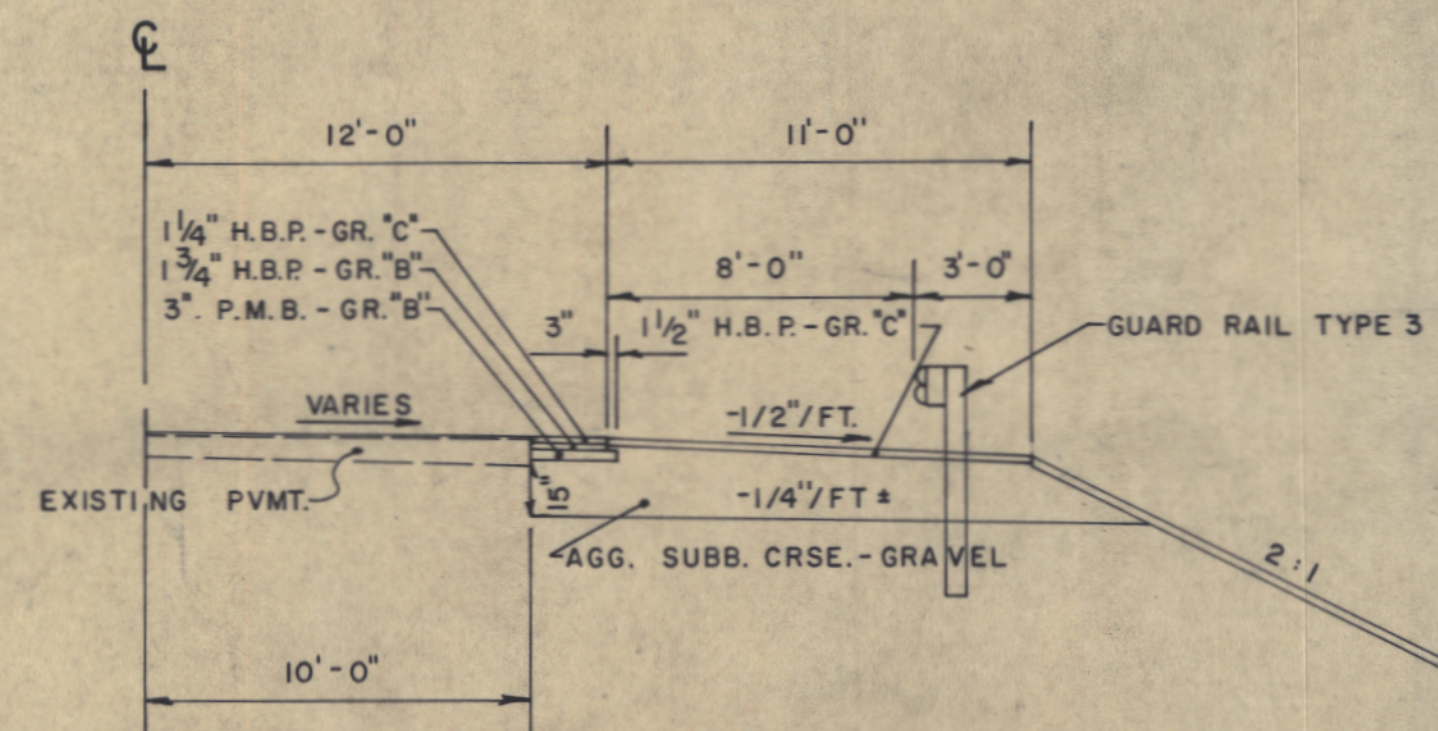
ORIGINAL SURVEY NOTE BOOK NO. 0385	SURVEYED	DATE
	PLOTTED	
	TEMPLATE	
	AREAS CHECKED	



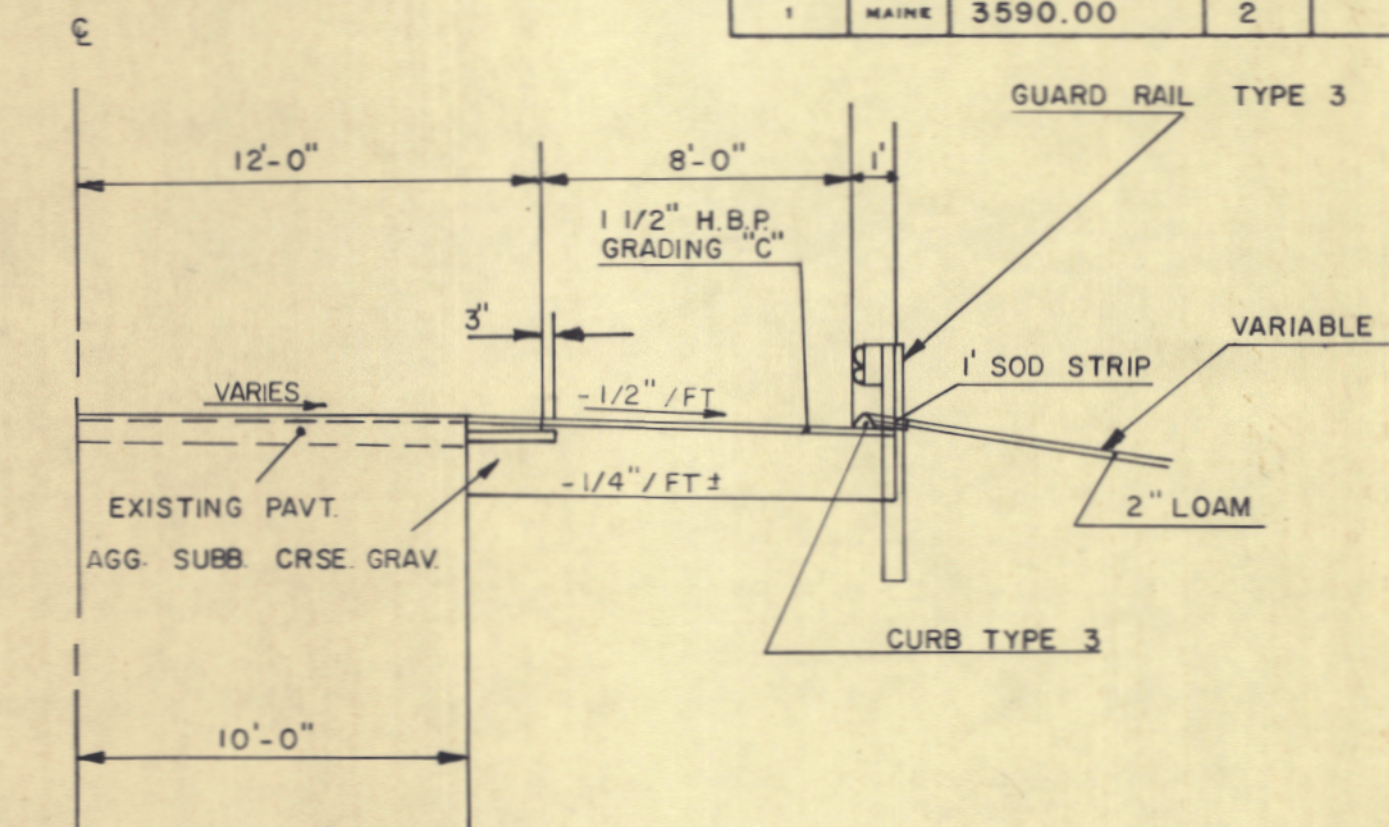
F.W.B. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	3590.00	2	



OVERLAY & WIDENING

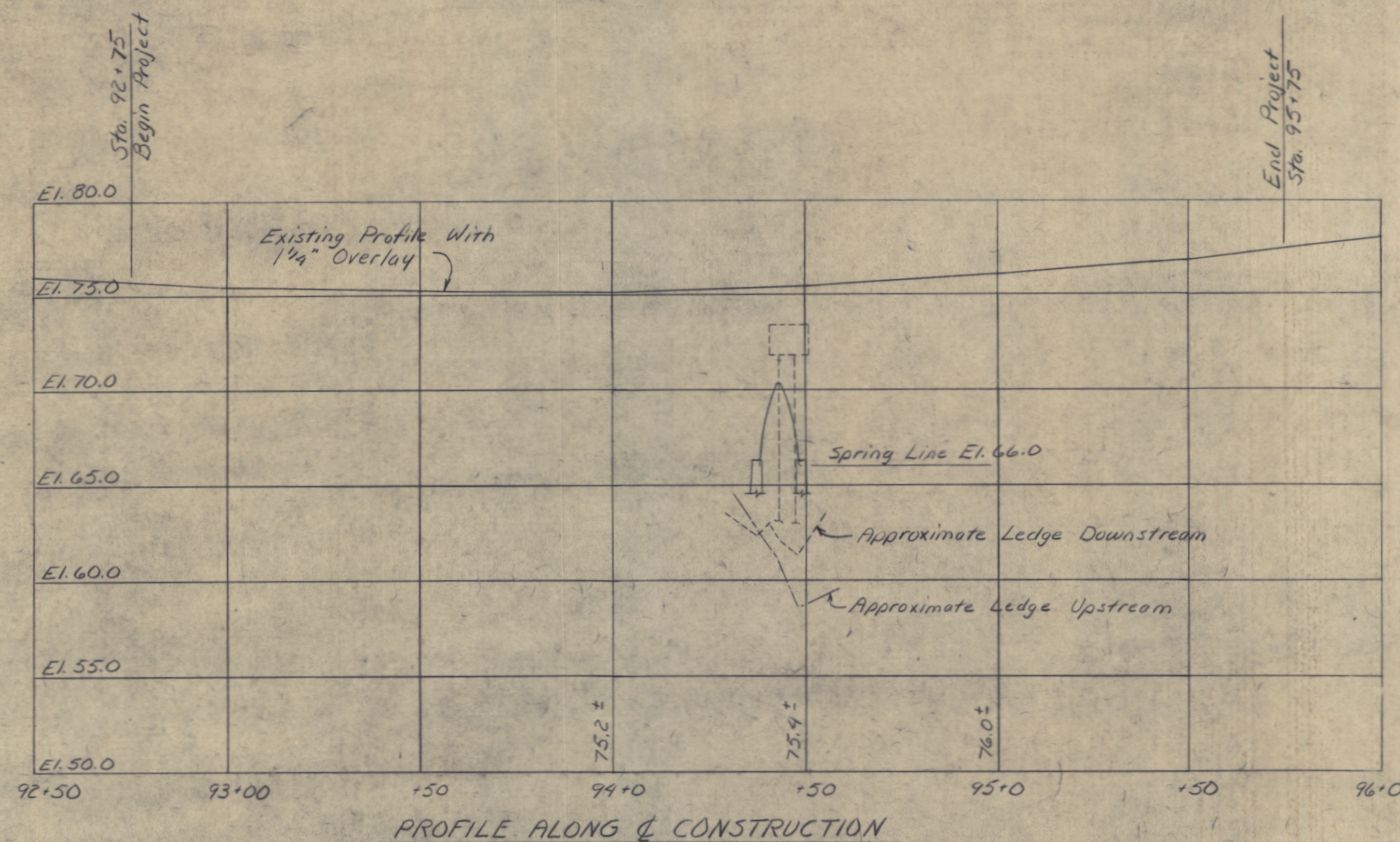


11 FT. GUARD RAIL SHOULDER



8' CURBED BOX GUARD RAIL

- NOTES:
1. THE PAVEMENT AND SUBBASE DEPTHS AS SHOWN ON THE PLANS ARE INTENDED TO BE NOMINAL.
 2. CROWNS FOR ALL COURSES OF SUBBASE AND PAVEMENTS SHALL BE STRAIGHT.



Note:

Two-way traffic shall be maintained over a 12' roadway with 3' clear shoulders and temporary traffic signals. Temporary Concrete Barrier, Type 3 Guard Rail, or a combination of each shall be used with 6:1 tapered ends to protect traffic where side slopes are steeper than 3:1.

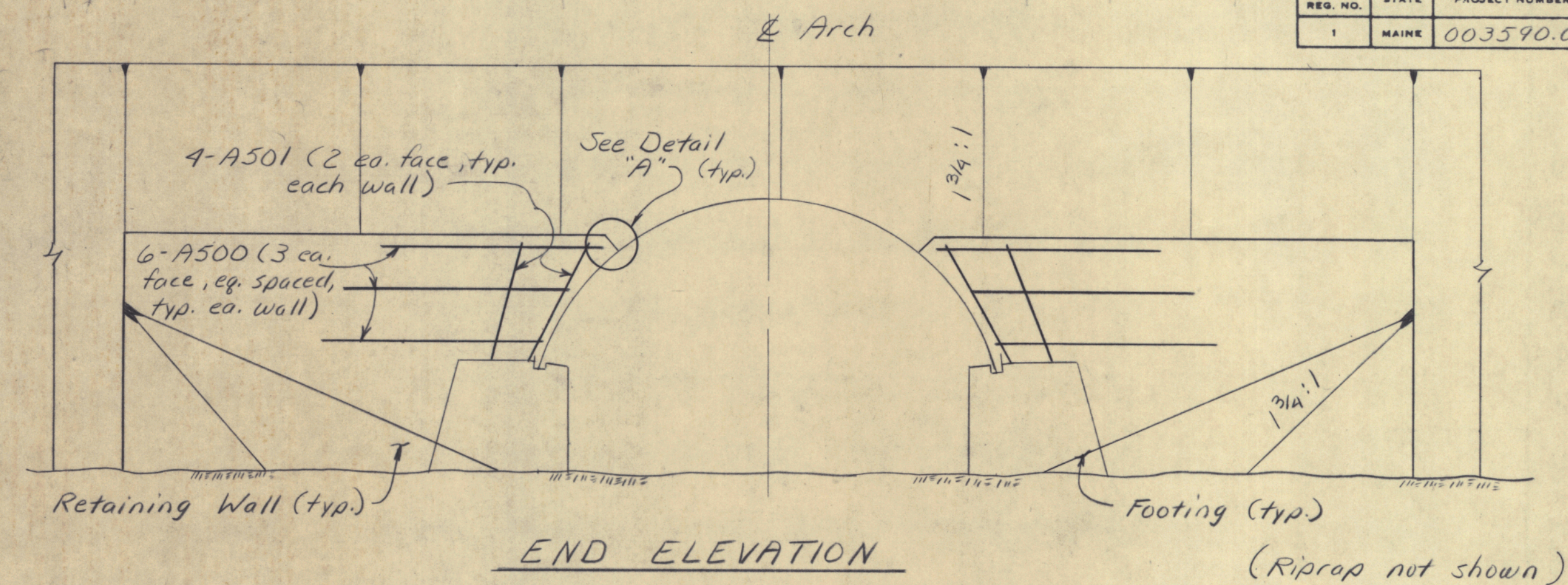
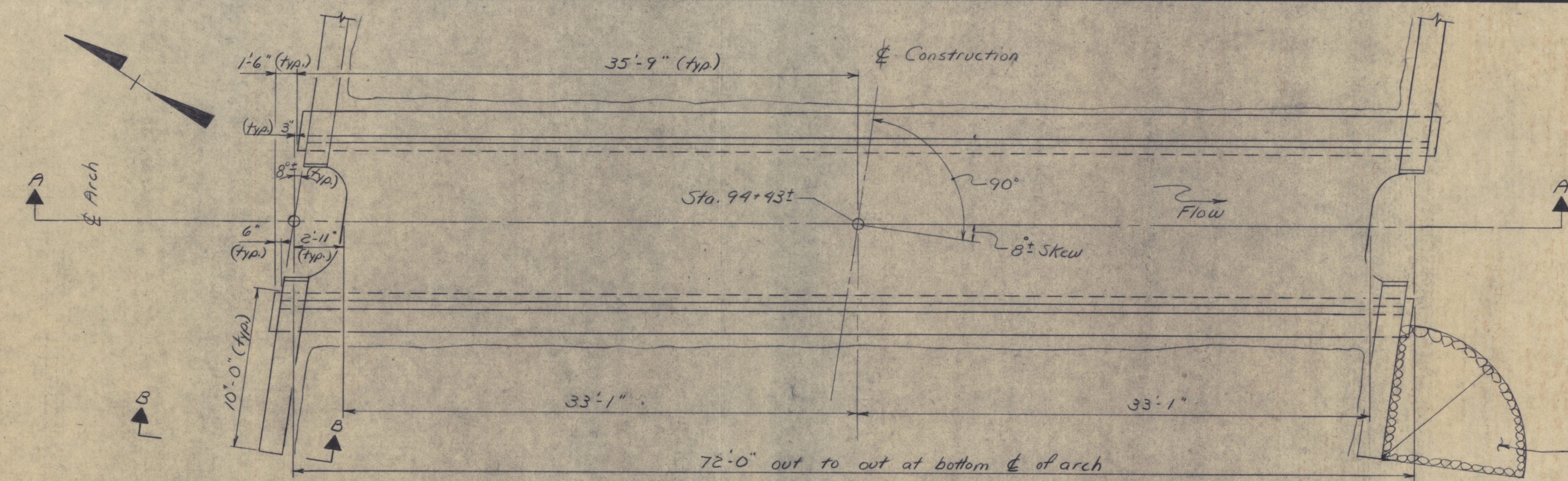
The temporary roadway shall be provided by maintaining traffic over a partial width of the existing structure while the remaining portion is removed. Sufficient length of the new structure shall then be constructed to carry the relocated temporary roadway while the remaining portion of the new structure is constructed. A minimum fill of 30" shall be in place over the new structure before traffic is allowed over it.

Temporary Concrete Barrier or Type 3 Guardrail shall be paid for under Item 526.301, Temporary Concrete Barrier. All other costs of providing the temporary roadway will be incidental to the contract items.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

PROJECT DESIGN ENGINEER	BY	DATE
PLANS		
DESIGN - DETAILED		
CHECKED		
REVISIONS		
FIELD CHANGES		

Profile Detail SKL 12-87
Check LAW 12/87

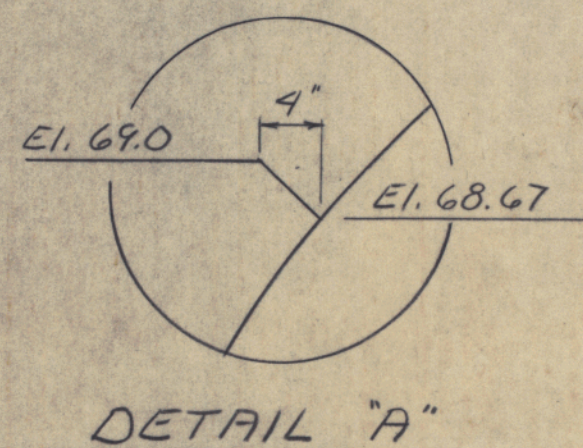


DESIGN LOADING
Live Loading: HS 25

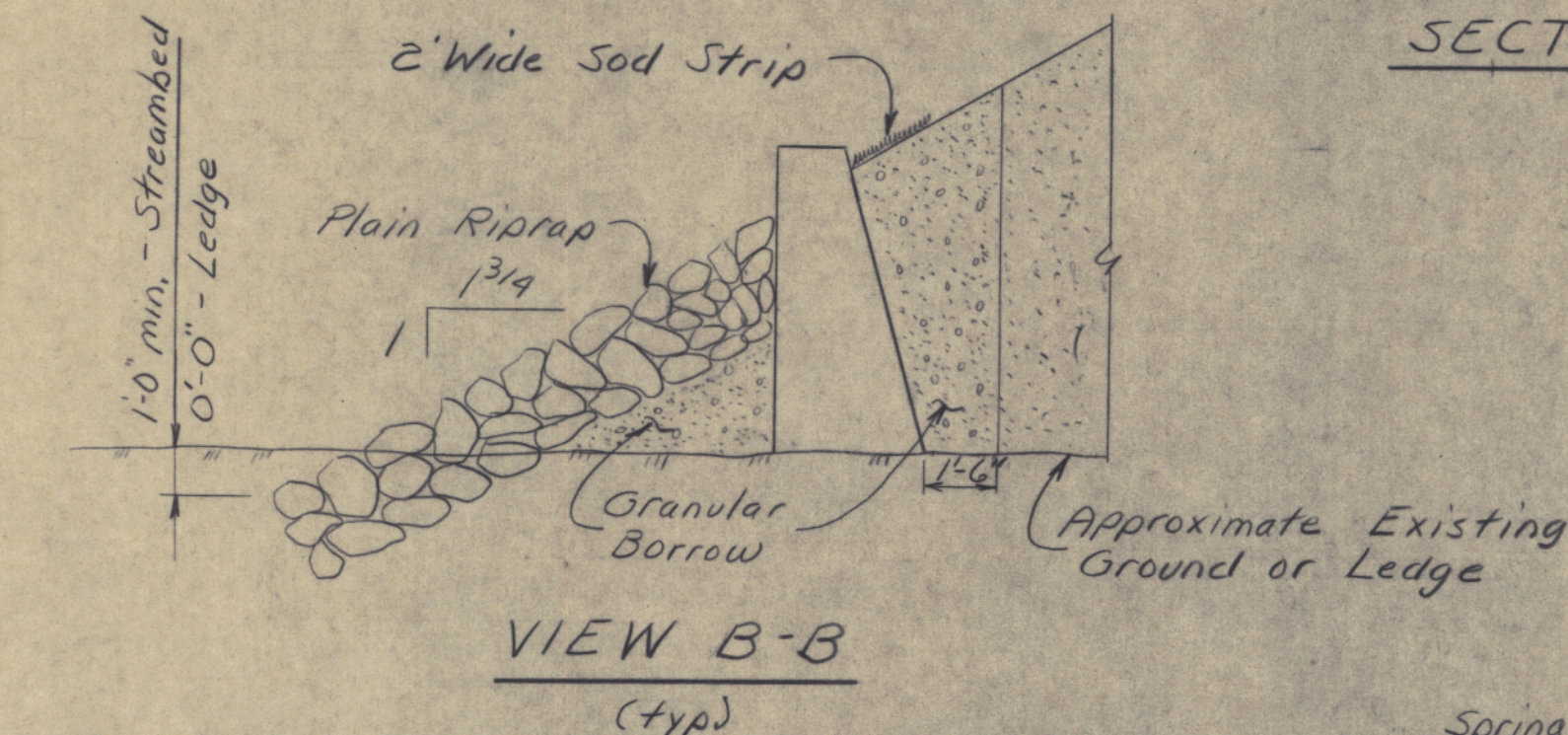
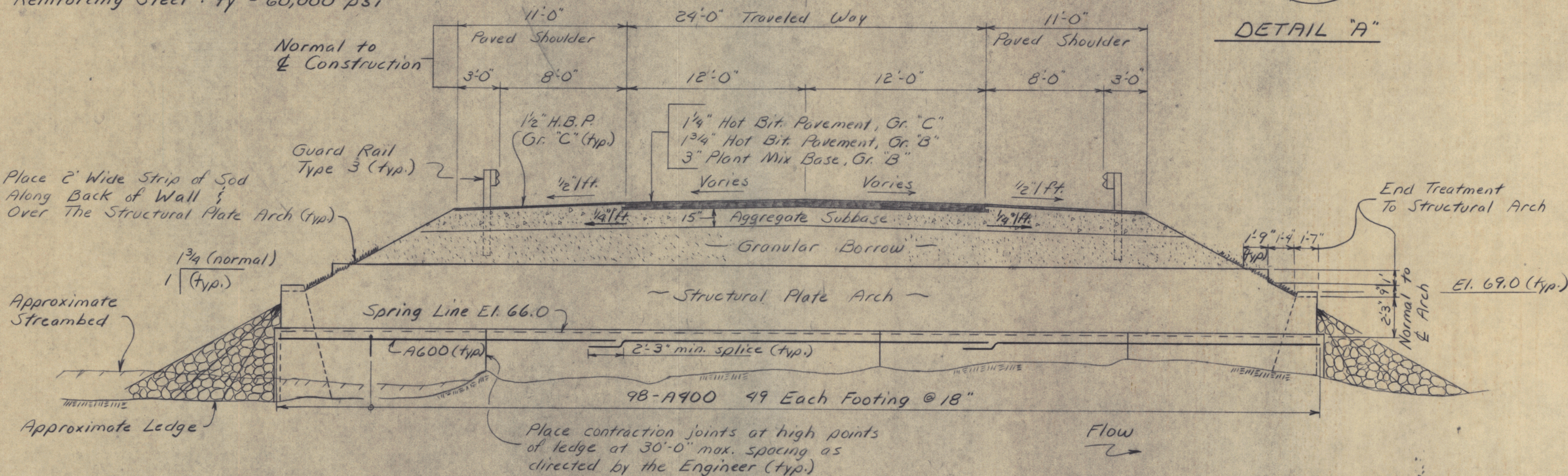
MATERIALS
Concrete: Class A
Reinforcing Steel: ASTM A615 Grade 60

BASIC ALLOWABLE STRESSES
Concrete: $f'_c = 3,000$ psi
Reinforcing Steel: $f_y = 60,000$ psi

PLAN

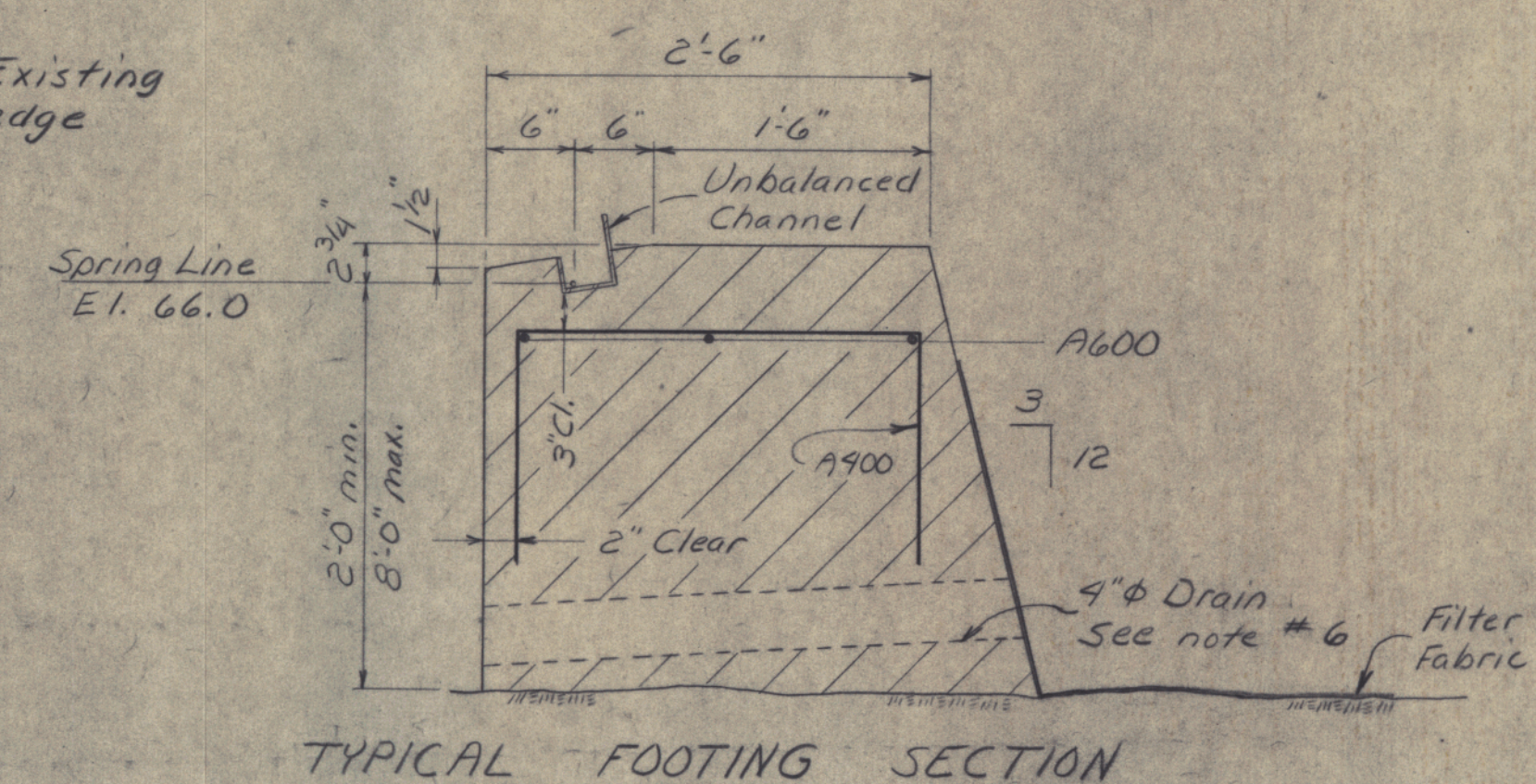


- STRUCTURAL PLATE ARCH NOTES**
- 1) Ends of the Structural Plate Arch shall be cut to slope and stepped as shown.
 - 2) If depth of footing below spring line exceeds 8'-0", notify Bridge Design Section for check on wall design.
 - 3) One 120 inch span, 53 inch rise Steel Structural Plate Arch is required. The plates shall be 0.138 inches thick.
 - 4) Unbalanced channel shall be furnished in proper lengths to make one unit 72'-0" long for each footing.
 - 5) Payment for earth or rock excavated below Elev. 56.0 will be paid for at 1 1/2 times the contract bid price for Item 206.081 or 206.091 respectively.
 - 6) Granular Borrow shall meet the requirements of Subsection 703.19, Material for Underwater Backfill.
 - 7) Place 4" ϕ drains in abutments at 20'-0" maximum spacing and at all low points in the ledge. Exact location to be determined by the Engineer in the field.
 - 8) All inlets of 4" ϕ drains shall be covered with a 4'-0" x 4'-0" blanket of Geotextile Fabric. The Geotextile Fabric shall meet the specifications of Subsection 722.02 Drainage Geotextile. Payment for all work and materials will be considered incidental to related contract items.

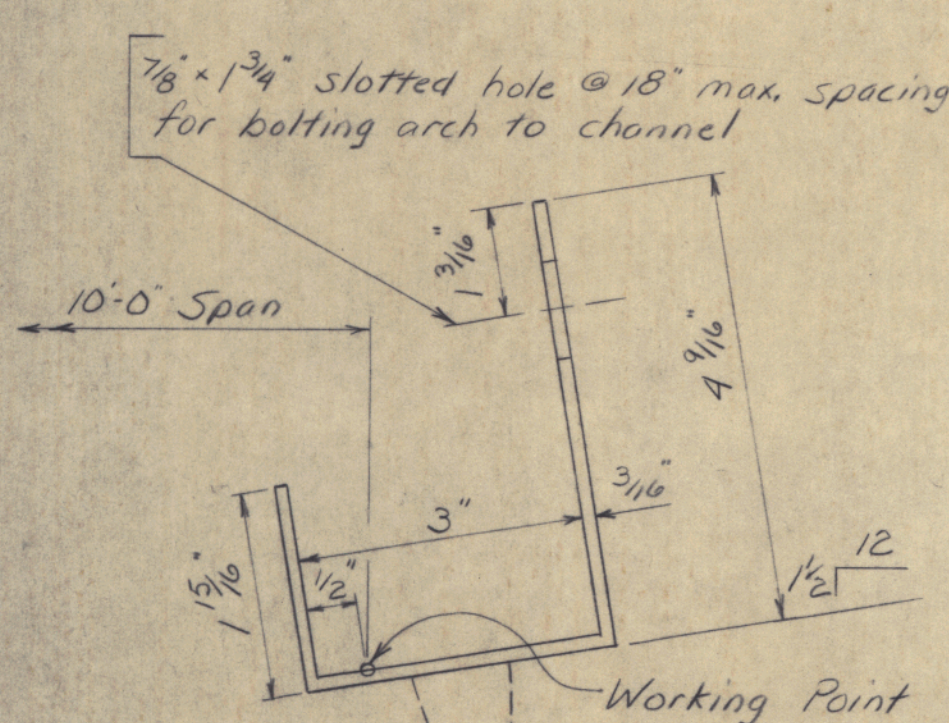


SECTION A-A

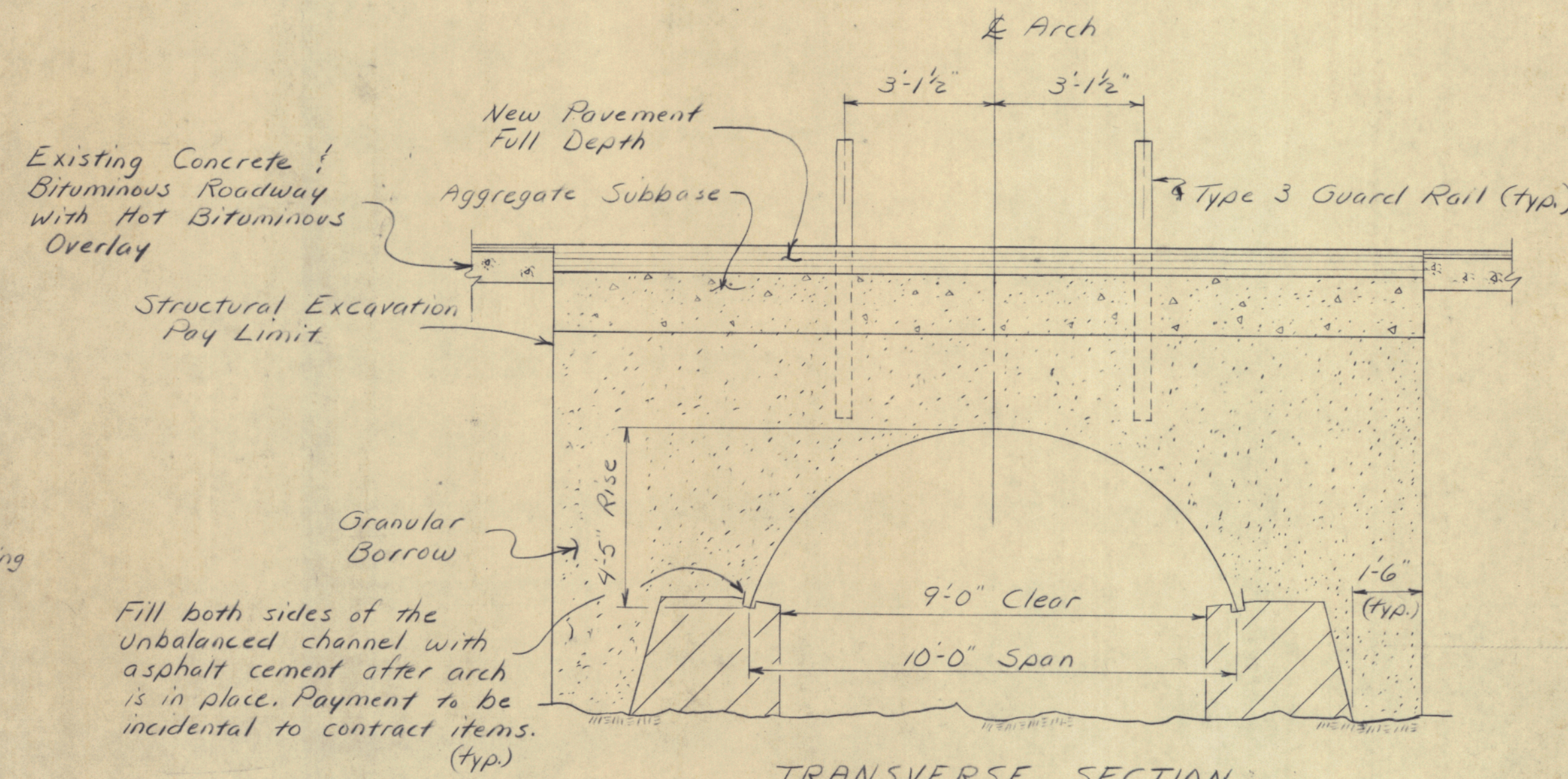
REINFORCING STEEL			
Mark	No.	Length	Location
A400	98	5'-3"	Abut. (bent)
A500	29	5'-0"	Ret. Wall
A501	16	2'-9"	Ret. Wall
A600	18	26'-0"	Abut.



TYPICAL FOOTING SECTION

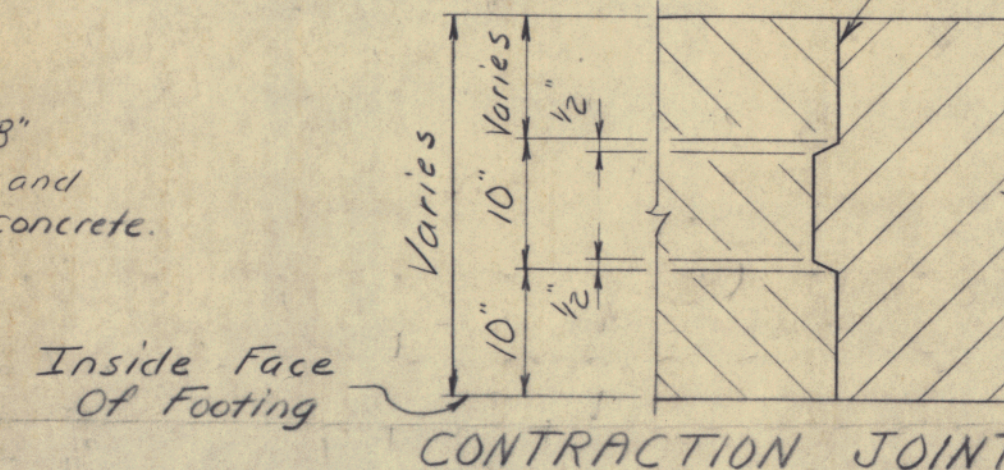


UNBALANCED CHANNEL
(Hot dipped galvanized after fabrication)



TRANSVERSE SECTION

Break bond in a manner approved by the Engineer.



CONTRACTION JOINT

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
STRUCTURAL PLATE ARCH
AT
STATION 94+93
IN THE TOWN OF
CUMBERLAND
CUMBERLAND COUNTY
DETAILS
SHEET 1 OF 1 AUGUSTA, MAINE 11-87

PROJECT DESIGN ENGINEER	DATE
BY	11-87
DESIGN - DETAILED	
CHECKED	
REVISIONS	
FIELD CHANGES	

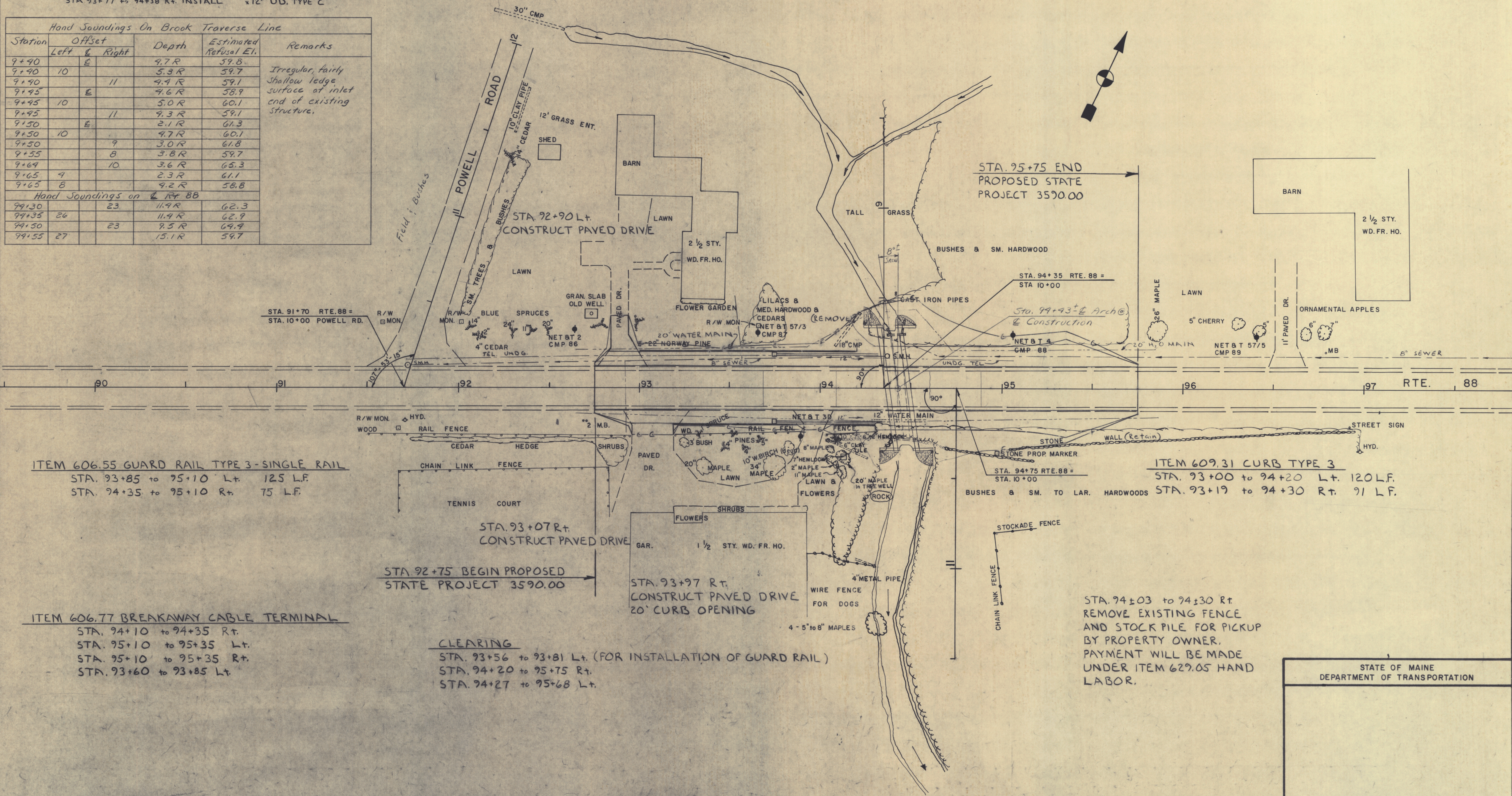
HYDRAULIC DATA

Drainage Area = 15 sq. miles
Design Discharge (Q50) = 300 cfs
Check Discharge (Q100) = 350 cfs
Headwater Elev. (Q50) = 69.0
Headwater Elev. (Q100) = 69.7

DRAINAGE

STA. 93+75-18.88' R+ CONSTRUCT C.B. TYPE FG-C
STA. 93+75-18.88' L+ CONSTRUCT C.B. TYPE FG-C
STA. 93+77 to 94+33 L+ INSTALL 12" UD. TYPE C
STA. 93+77 to 94+38 R+ INSTALL 12" UD. TYPE C

Hand Soundings On Brook Traverse Line				
Station	Offset		Depth	Estimated Refusal El.
	Left	Right		
9+40			4.7 R	59.8
9+40	10		5.3 R	59.7
9+40		11	4.4 R	59.1
9+45			4.6 R	58.9
9+45	10		5.0 R	60.1
9+45		11	4.3 R	59.1
9+50			2.1 R	61.3
9+50	10		4.7 R	60.1
9+50		9	3.0 R	61.8
9+55		8	3.8 R	59.7
9+64		10	3.6 R	65.3
9+65	4		2.3 R	61.1
9+65	8		4.2 R	58.8
Hand Soundings on R+ 88				
94+30		23	11.4 R	62.3
94+35	26		11.4 R	62.9
94+50		23	9.5 R	64.4
94+55	27		15.1 R	59.7



ITEM 606.55 GUARD RAIL TYPE 3-SINGLE RAIL
STA. 93+85 to 95+10 L+ 125 L.F.
STA. 94+35 to 95+10 R+ 75 L.F.

ITEM 606.77 BREAKAWAY CABLE TERMINAL
STA. 94+10 to 94+35 R+
STA. 95+10 to 95+35 L+
STA. 95+10 to 95+35 R+
STA. 93+60 to 93+85 L+

CLEARING
STA. 93+56 to 93+81 L+ (FOR INSTALLATION OF GUARD RAIL)
STA. 94+20 to 95+75 R+
STA. 94+27 to 95+68 L+

ITEM 609.31 CURB TYPE 3
STA. 93+00 to 94+20 L+ 120 L.F.
STA. 93+19 to 94+30 R+ 91 L.F.

STA. 94+03 to 94+30 R+
REMOVE EXISTING FENCE
AND STOCK PILE FOR PICKUP
BY PROPERTY OWNER.
PAYMENT WILL BE MADE
UNDER ITEM 629.05 HAND
LABOR.

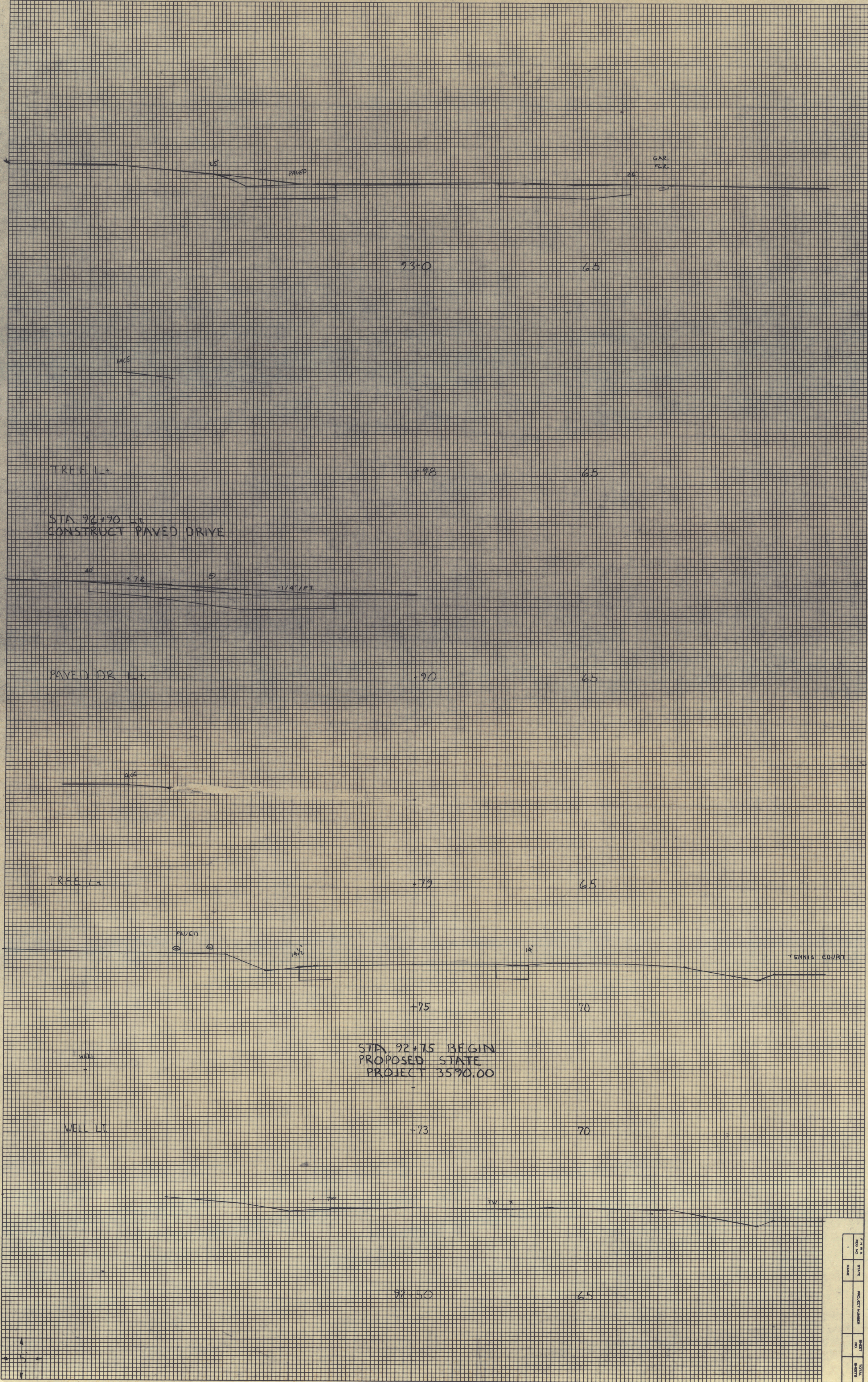
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

Arch. Detail SRL 12/87
Check L&W 12/87

PROJECT DESIGN ENGINEER	DATE	BY
	7-13-87	MB
	DESIGN - DETAILED	
	CHECKED	
PLANS	REVISIONS	
	FIELD CHANGES	

ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED	W. H. B. CREW	6-11-87
NO. 10397	TEMPLATE	MM. BARDEN S. R.	7-18-87
	AREAS CHECKED	MM. BARDEN	7-87

FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
NO.	TEMPLATE		
	AREAS CHECKED		



STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1			

ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED	W. HAN & CREW	6/1/87
NO. 10397	TEMPLATE	M. BARDEN SR.	7-18-87
	AREAS		
	AREAS CHECKED		

FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		

STA. 93+85 to 95+10 Lt.
INSTALL G.R. TYPE 3 SINGLE RAIL 125 LF

STA. 93+77 to 94+ Rt.
INSTALL x12" UD. TYPE C

STA. 93+77 to 94+ Lt.
INSTALL x12" UD. TYPE

STA. 93+75-18.88' Lt. CONST.
C.B. TYPE F6-C

STA. 93+75-18.88' Rt.
CONST. C.B. TYPE F6-C

+66

65

TREE Rt.

+58

65

TREE Rt.

+52

65

TREE Rt.

STA. 93+60 to 93+85 Lt.
INSTALL BREAKAWAY CABLE TERMINAL

+50

65

HO. LT.

+47

70

TREE RT

STA. 93+12 to 94+30 Rt.
INSTALL CURB TYPE 3

FACE OF HOUSE

STA. 93+00 to 94+20 Lt.
INSTALL CURB TYPE 3

+25

70

STA. 93+07 Rt. CONST.
PAVED DRIVE

CAR.
FLR.

93+07

65

PAVED DR. Rt.

STA. 93+07 to 93+66

E

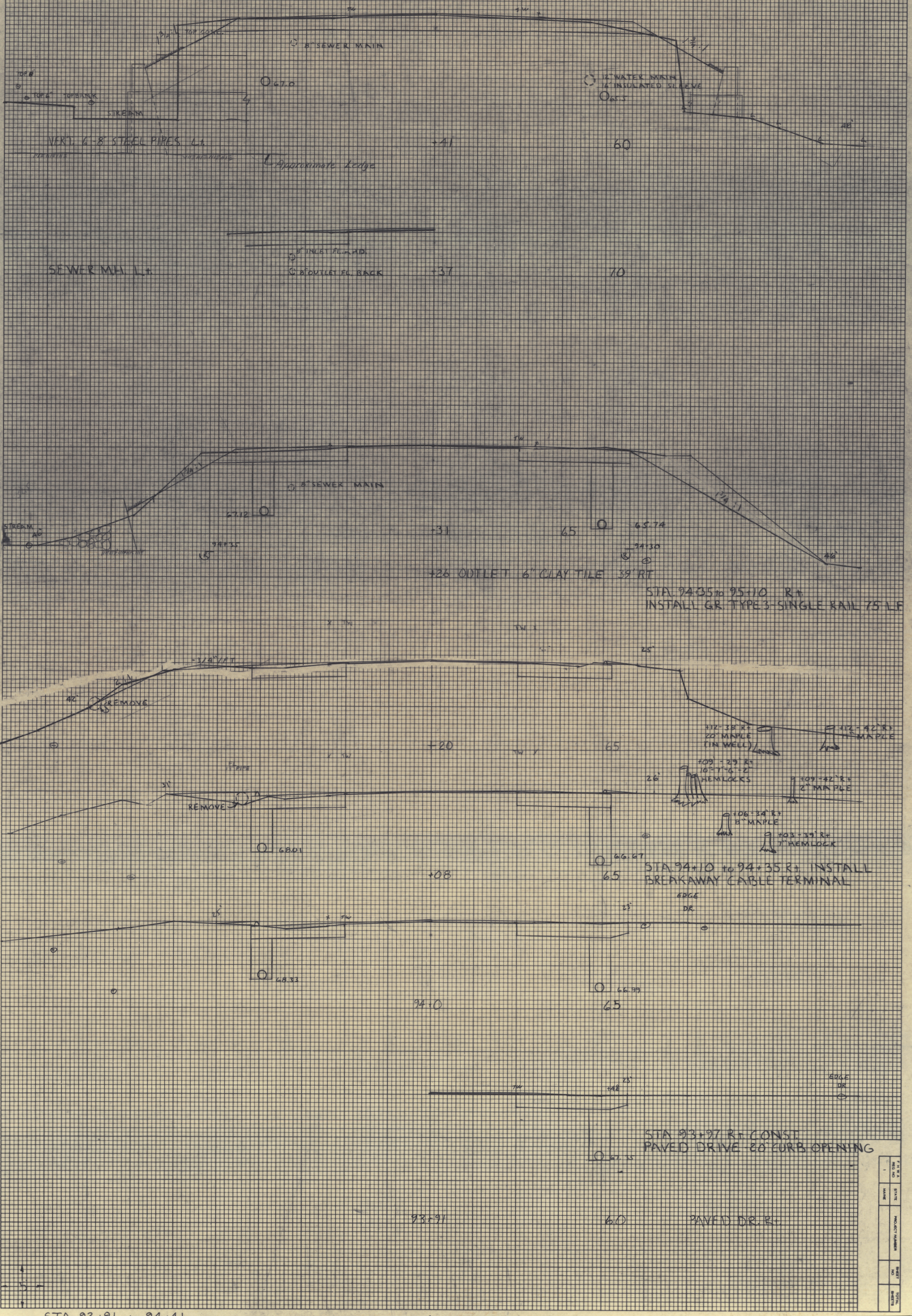
STATE	PROJECT NUMBER	SHEET	TOTAL
NO.	NAME	NO.	SHEETS

CUMBERLAND

ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	WILKIN & CREW	6-11-27	
NO. 0372	TEMP. PLATE	M. BARDEN S.M.	7-16-27
	AREAS CHECKED		

FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK			
NO.	TEMP. PLATE		
	AREAS CHECKED		

Sta 94+93⁺ Construct 10'-0" Span x 4'-5" Rise
Structural Plate Arch on Concrete Footings
Skewed Back 8" on the Left



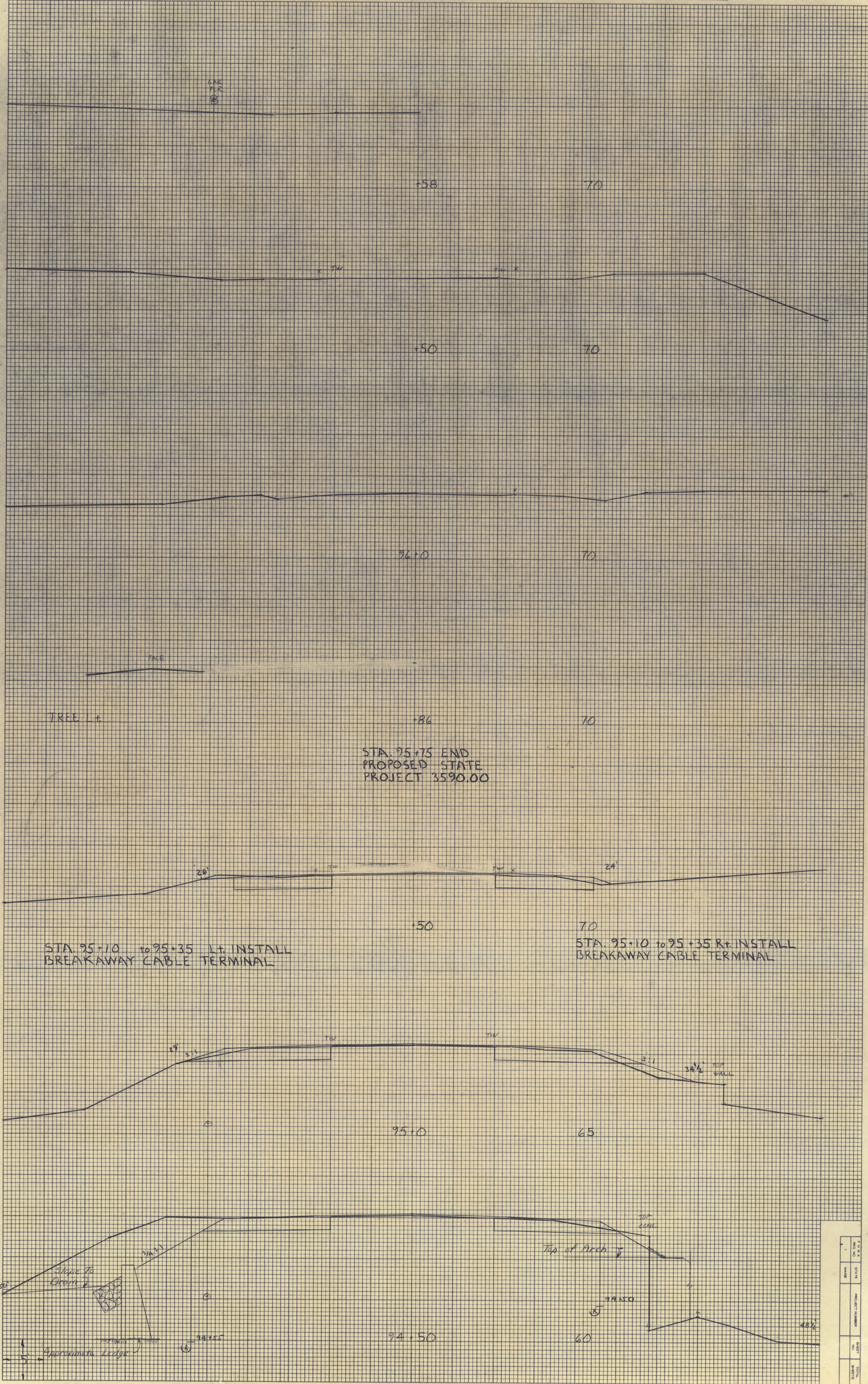
CUMBERLAND

STA. 93+91 to 94+41

DATE	STATE	PROJECT NUMBER	NO.	TOTAL SHEETS

ORIGINAL SURVEY	SURVEYED	BY	DATE
	W. HAM + CREW		6-11-87
NOTE BOOK	PLOTTED	W. BARON	5-1-87
	TEMPLATE		
	AREAS		
NO. 10397	AREAS CHECKED		

FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	TEMPLATE		
	AREAS		
NO.	AREAS CHECKED		



CUMBERLAND

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
MD	10397	1	1

STA. 94+50 to 96+58