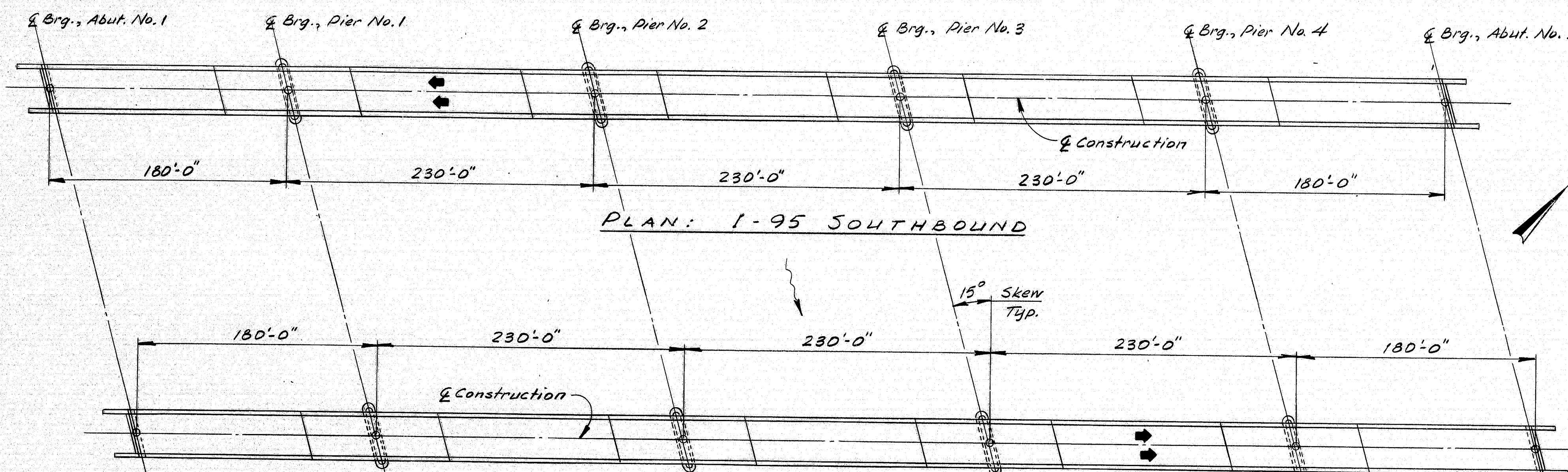


STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
MAINE	IR-95-RV01/201	1	9



SPECIFICATIONS

CONTRACT: State of Maine, Department of Transportation, Standard Specifications, Highways and Bridges, Revision of January 1984.

TRAFFIC DATA N.B. or S.B. Both

AADT 1984	1920	3840
AADT 2004	2305	4610
DHV	329	599
T%	20	20
D%	100	55
V	70	70
18 Kip P2.5		517

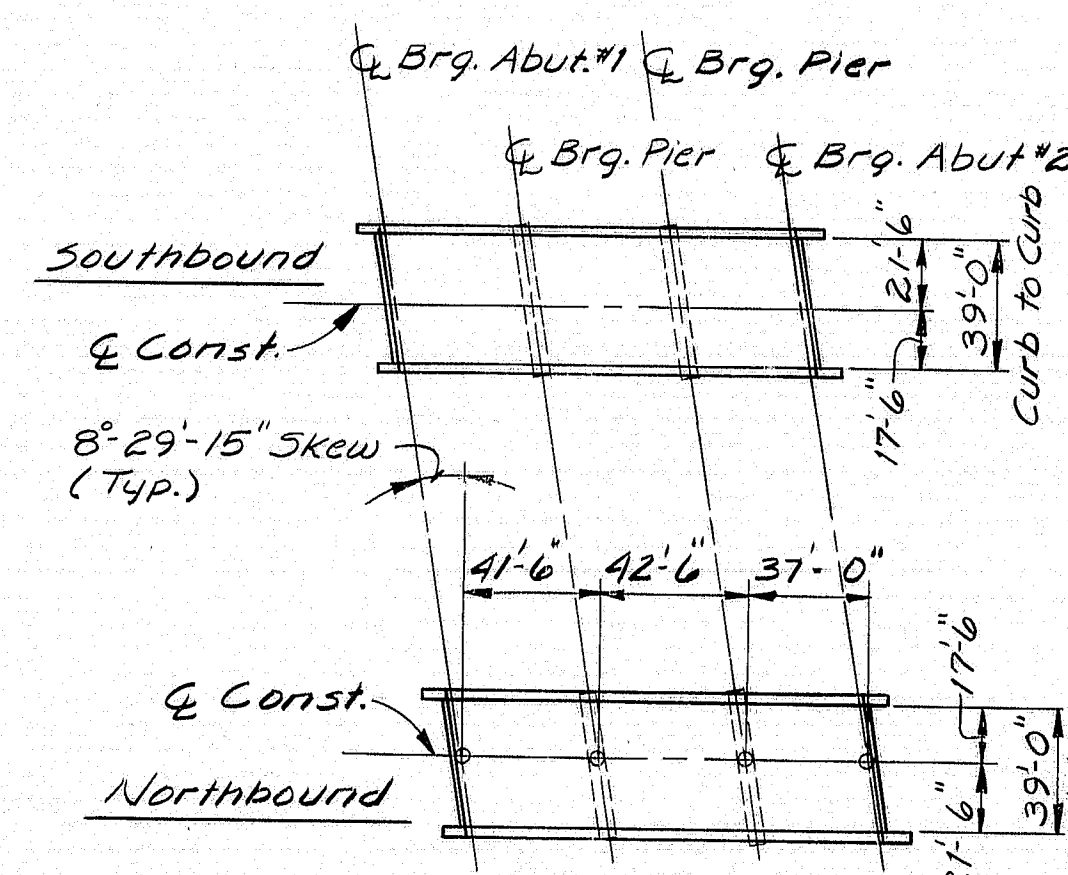
MATERIALS

CONCRETE:
Curb Renovation... Class AA modified
All other Class AA

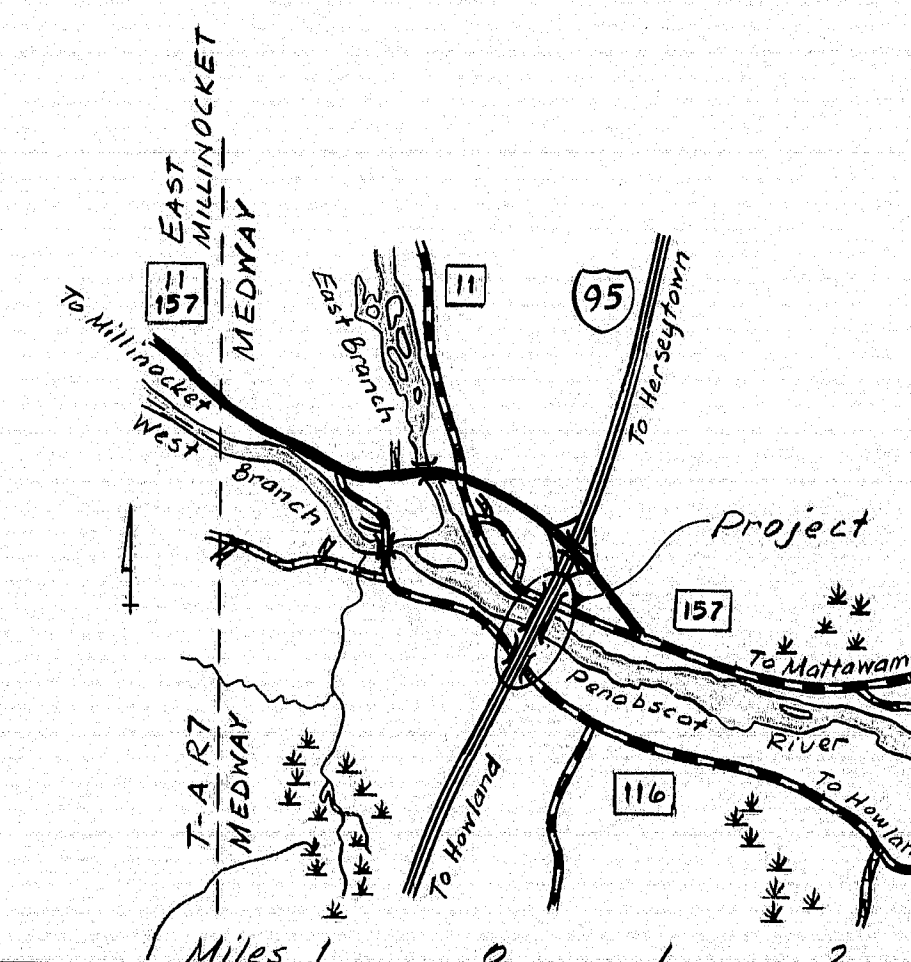
REINFORCING STEEL: ...ASTM A615 Grade 60
STRUCTURAL STEEL: ...ASTM A36

BASIC DESIGN STRESSES

CONCRETE: $f'_c = 4,000$ psi
REINFORCING STEEL: $f_y = 60,000$ psi
STRUCTURAL STEEL: $f_y = 36,000$ psi



Project Complete November 1985.
As Built

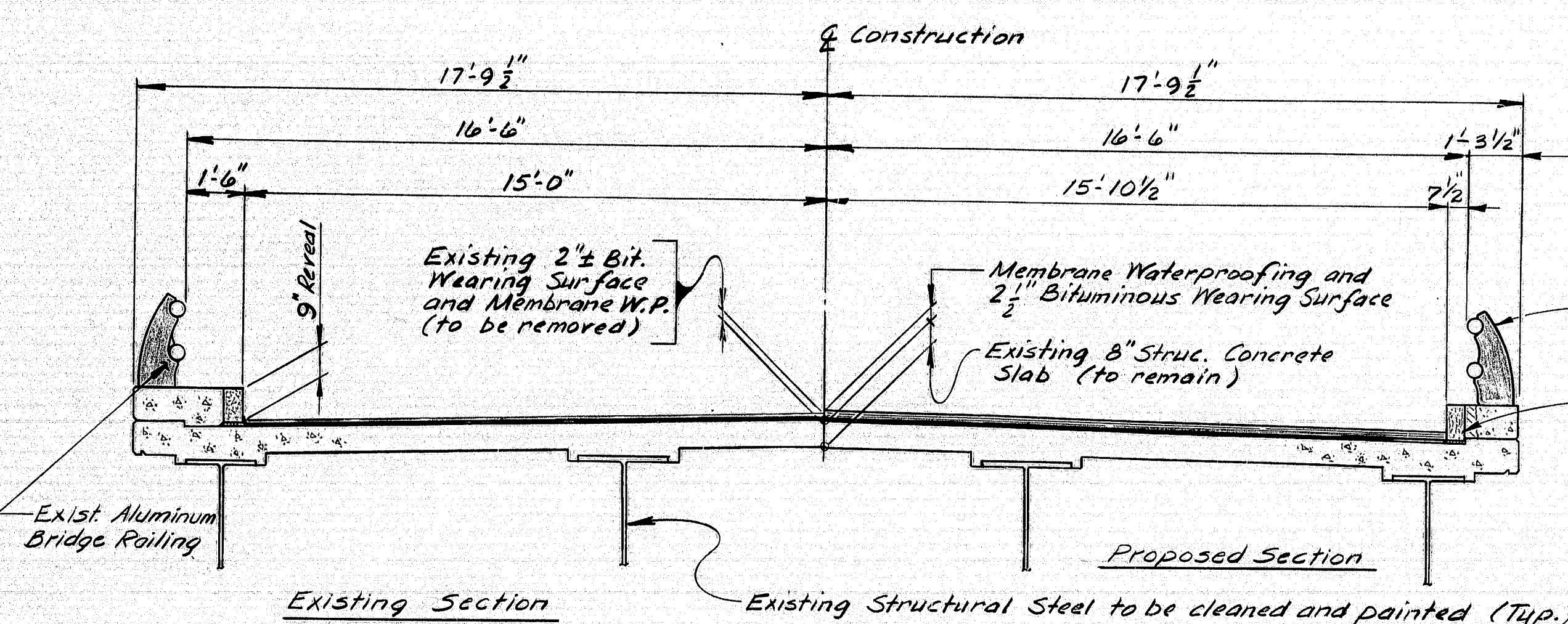


LOCATION MAP

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

VAUGHN DAGGETT MEMORIAL
BRIDGE OVER PENOBSCOT RIVER
INTERSTATE 95 OVER
ROUTE 116
IN THE TOWN OF
MEDWAY
PENOBSCOT COUNTY
GENERAL PLAN

SHEET 1 OF 9 AUGUSTA, MAINE



TRANSVERSE SECTION
Northbound and Southbound
(VAUGHN - DAGGETT)

VAUGHN DAGGETT BRIDGE NO. 6078	I-95 OVER ROUTE 116 BRIDGE NO. 6077
NOTE: All work contemplated under this contract shall be governed by and in conformity with the Standard Specifications (Revision of January 1984) and supplements thereto, except as modified on the plans and in the Special Provisions.	Plans of the existing bridge are available for the Contractor's reference at the Bridge Design Office in Augusta. The plans are reproductions of original drawings as prepared for the construction of the bridge and it is very unlikely that the plans will show any construction field changes or any alterations which may have been made to the bridge during its life span.
Approved: State of Maine Department of Transportation <i>David L. ...</i> Commissioner 3-26-85 Date	United States Department of Transportation Federal Highway Administration Region 1 Approved: Division Administrator Date
Approved: <i>Robert Coleman</i> Chief Engineer 3-26-85 Date	

R94-195

DATE	BY
2-25	DLB
2-25	ATA
2-25	ATA

PLANS

Preliminary Plan: JMD 10-84

BRUNING 44-32 4270-1

F.B.A. RES. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	IR-95-9(107)	2	9

ESTIMATED QUANTITIES

ITEM NO.	DESCRIPTION	QUANTITY			UNIT
		VAUGHN-DAGGETT	I-95 over ROUTE 116	TOTAL	
202.127	Removal of Existing Bituminous Pavement	0.9	0.1	1	L.S.
403.08	Hot Bituminous Pavement Grading C	1020	250	1,270	Ton
503.12	Reinforcing Steel Fabricated & Delivered	12,900	—	12,900	LBS.
503.13	Reinforcing Steel Placing	12,900	—	12,900	LBS.
506.142	Field Painting Existing Structural Steel	0.9	0.1	1	L.S.
506.16	Surface Preparation of Existing Structural Steel	4,500	300	4,800	M.H.
507.49	Resetting Bridge Railing	1	—	1	L.S.
508.13	Membrane Waterproofing	0.9	0.1	1	L.S.
514.06	Curing Box for Concrete Cylinders	0.9	0.1	1	Eq.
515.21	Protective Coating for Concrete Surfaces	1	—	1	L.S.
518.30	Rehabilitation of Structural Concrete Slab to Reinforcing Steel	6,600	900	7,500	S.F.
518.31	Rehabilitation of Structural Concrete Slab to Below Reinforcing Steel	660	90	750	S.F.
520.2401	Bridge Joint Modification	4	—	4	Eq.
520.2402	Bridge Joint Modification	—	4	4	Eq.
526.301	Temporary Concrete Barrier Type 1	0.9	0.1	1	L.S.
609.384	Resetting Granite Bridge Curb	4,340	—	4,340	L.F.
627.611	6" Solid White Pavement Marking Line	1,950	1,000	2,950	L.F.
627.621	6" Broken White Pavement Marking Line	2,600	1,700	4,300	L.F.
627.631	6" Solid Yellow Pavement Marking Line	1,950	1,000	2,950	L.F.
627.67	Removing Pavement Markings	100	100	200	S.F.
627.691	Temp. 6" Plastic Pavement Marking Line, Yellow or White	1,400	1,400	2,800	L.F.
639.20	Field Office Type C	0.9	0.1	1	Eq.
652.30	Flashing Arrow Board	1	1	2	Eq.
652.31	Type I Barricade	30	30	60	Eq.
652.33	Drum	5	5	10	Eq.
652.34	Cone	10	10	20	Eq.
652.35	Construction Signs	300	300	600	S.F.
652.36	Maint. of Traffic Control Devices	126	14	140	C.D.
652.38	Flagger	360	40	400	M.H.
659.10	Mobilization	0.9	0.1	1	L.S.
Estimate of Lump Sum Quantities					
202.127	Removal of Existing Bituminous Pavement	7,000	1,065	8,065	S.Y.
507.49	Resetting Bridge Railing	4,320	—	4,320	L.F.
	Weight of Existing Structural Steel	3,660,000	193,000	3,853,000	LBS.
508.13	Membrane Waterproofing	7,420	1,070	8,490	S.Y.

GENERAL CONSTRUCTION NOTES

- All utility facilities shall be adjusted by the respective utilities unless noted.
- All existing structural steel shall be cleaned and painted.
- A minimum 12' width of one lane traffic shall be maintained at each structure at all times.
- The existing railings on the Vaughn Daggett bridges shall be removed and reset as required. See Special Provisions section 507.
- The existing granite bridge curb on the Vaughn Daggett bridges shall be removed and reset. See Special Provisions section 609.

SYMBOLS

	Concrete, Plan & Elevation
	Existing Concrete to Remain, Section
	Existing Concrete to be Removed, Plan & Section
	New Concrete, Section
	Bituminous Pavement
	Granite Curb

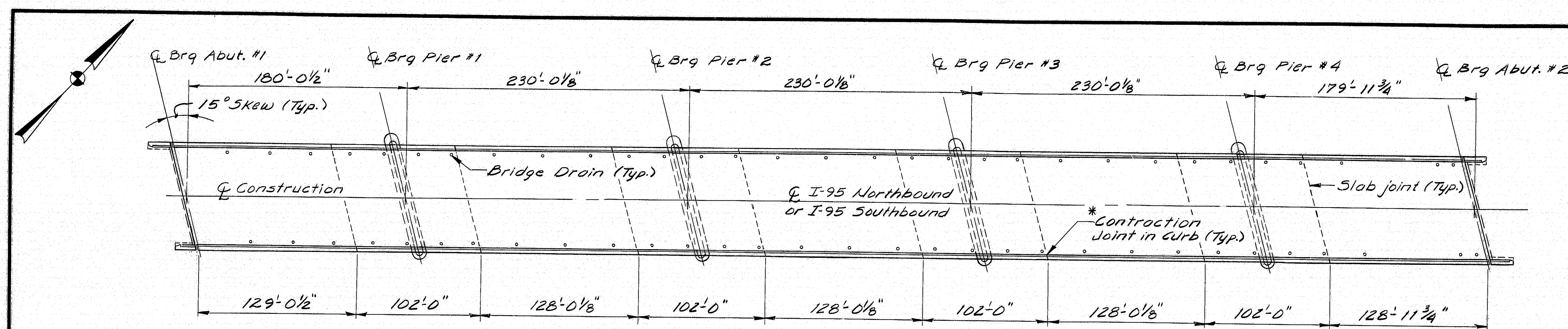
STATE OF MAINE DEPARTMENT OF TRANSPORTATION	
VAUGHN DAGGETT MEMORIAL # INTERSTATE 95 OVER ROUTE 116 MEDWAY	
ESTIMATED QUANTITIES & SYMBOLS	
SHEET 2 OF 9	AUGUSTA, MAINE

R94-196

PROJECT DESIGN ENGINEER	DATE
DESIGN - DETAIL	2-85
CHECKED	LSG
REVISIONS	RTD
FIELD CHANGES	7-82

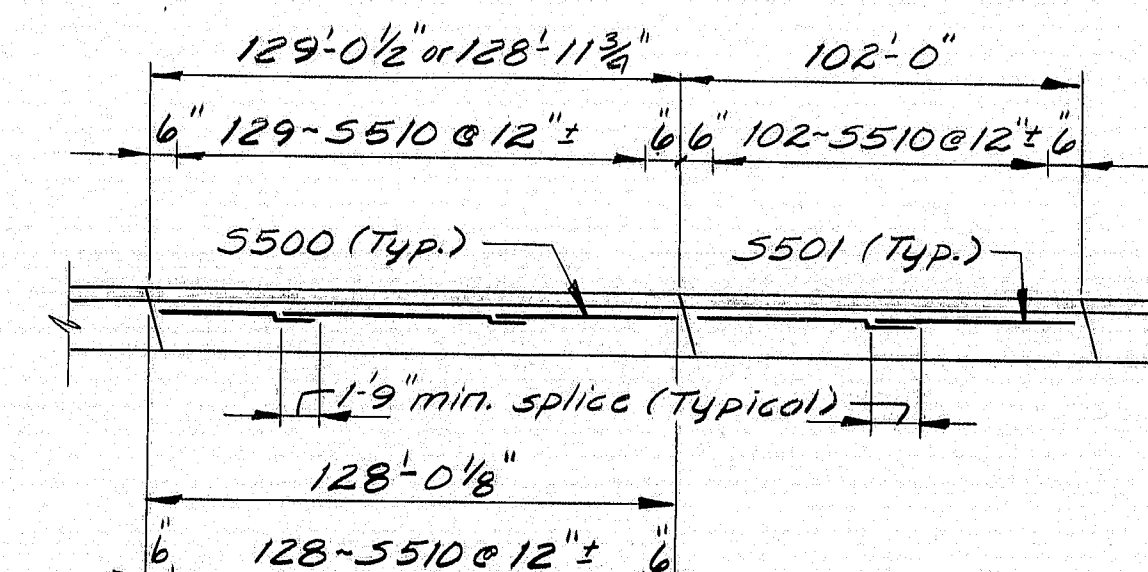
BRUNING 64-122 25715-1

F.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	TR-95-9(107)	3	

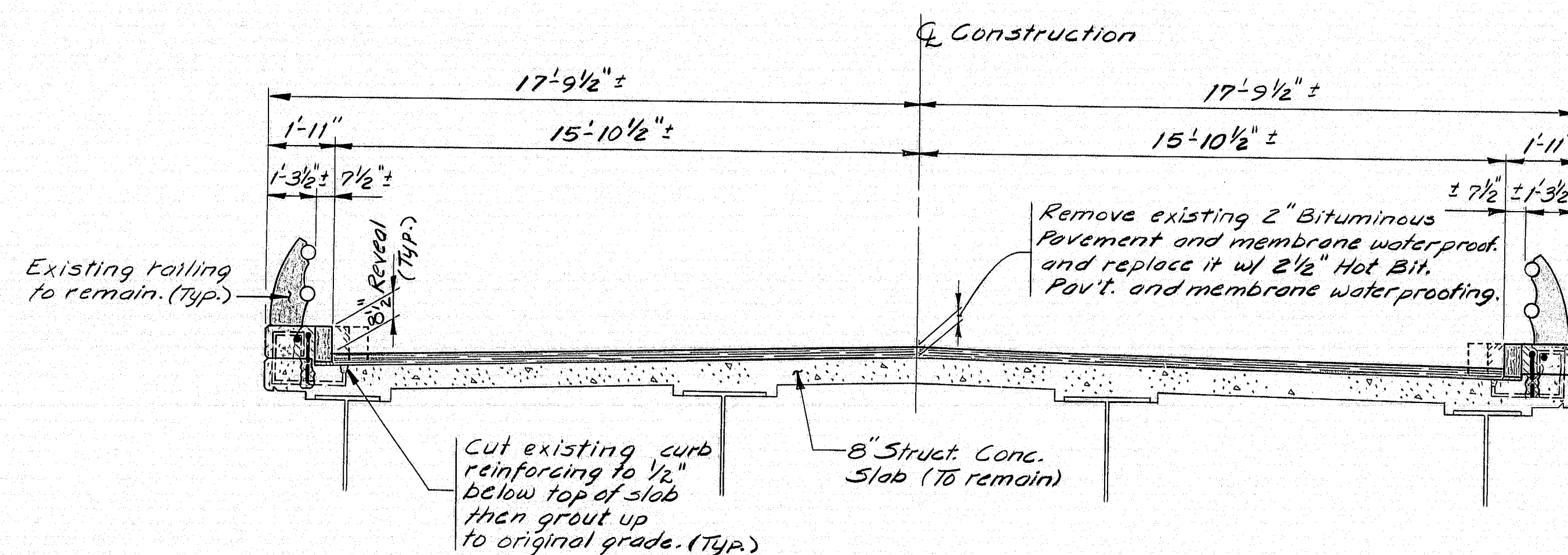


PLAN

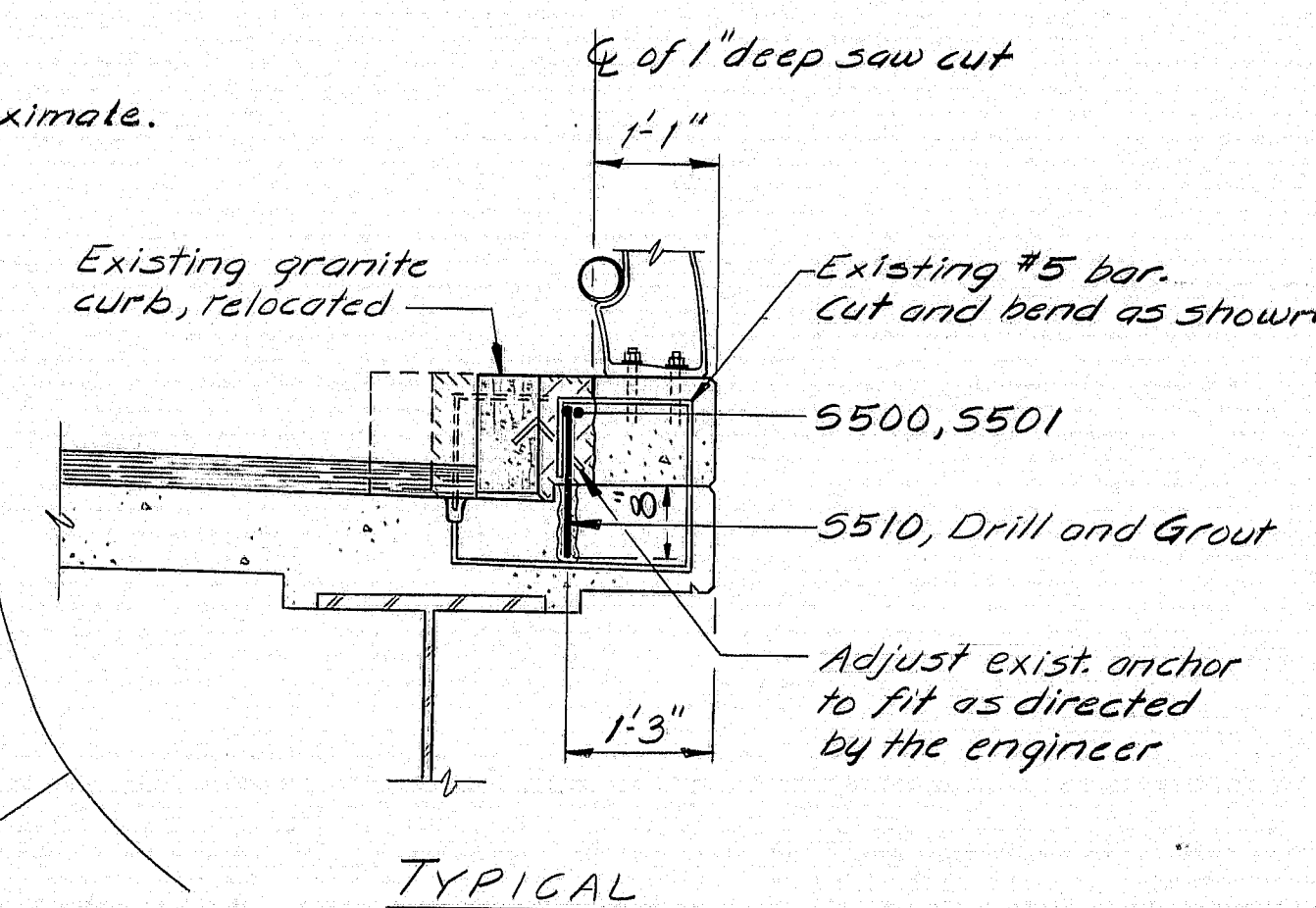
* The Contraction Joint locations shown are approximate.



TYPICAL REINFORCING PLACEMENT FOR SUPERSTRUCTURE CURBS



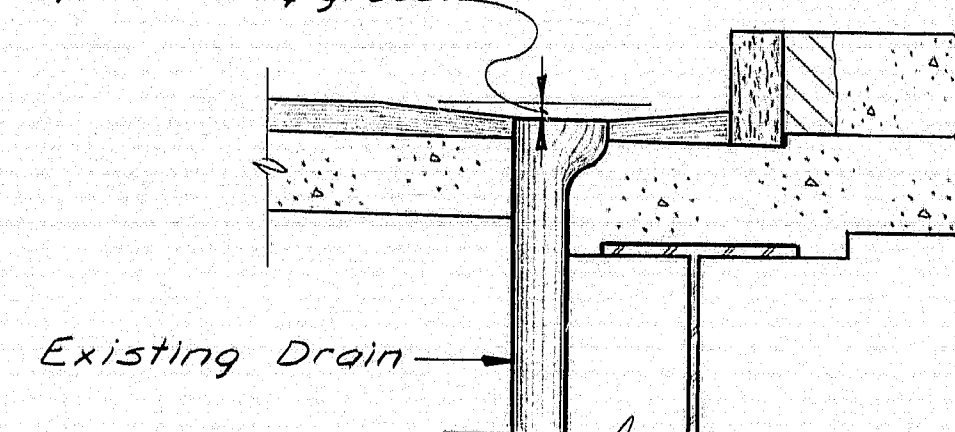
TRANSVERSE SECTION



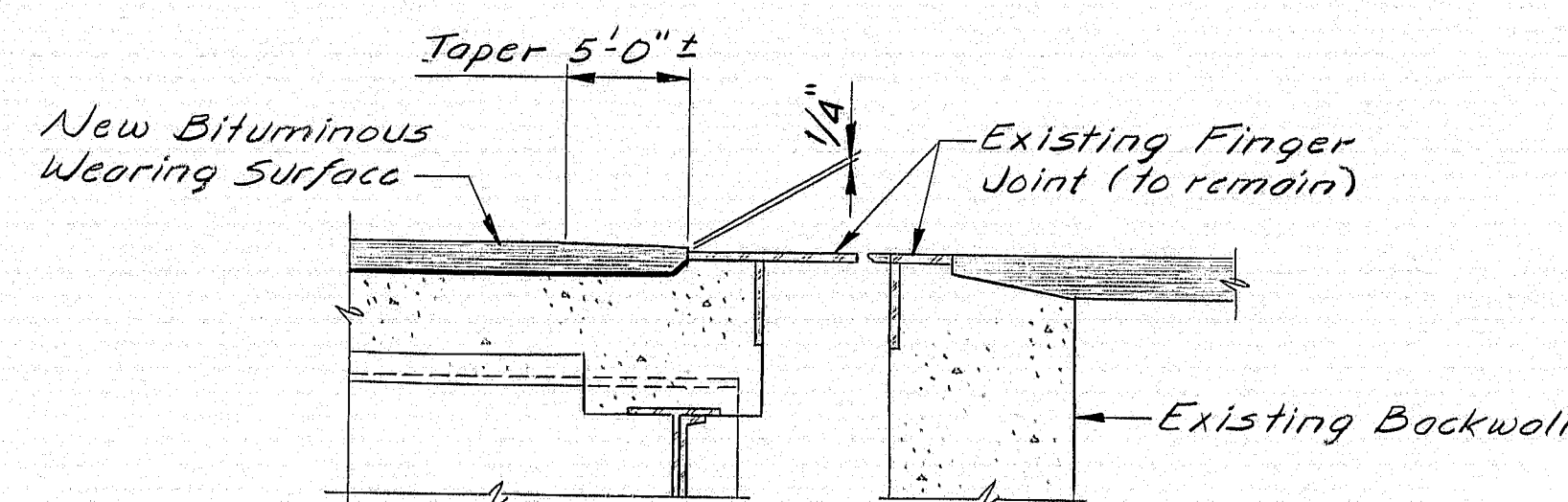
TYPICAL

PROJECT DESIGN ENGINEER	DATE
BY L.S.B.	7-85
CHECKED E.T.A.	2-86
REVISIONS	
FIELD CHANGES	

Depress wearing surface. Shape to fit crown & grade.



PAVEMENT AROUND EXISTING DRAIN



DETAIL AT END OF SLAB

SUPERSTRUCTURE NOTES

1. Reinforcing steel shall have a minimum cover of 2" unless otherwise indicated.
2. All existing reinforcing that will be exposed and re-used shall be cleaned as approved by the Engineer. Payment to be made under item 609.384.
3. Mortar for bedding and for joints in granite curb shall contain an approved non-shrink additive.
4. Protective coating for concrete surfaces shall be applied to the top of concrete curbs.
5. Holes for grouting the reinforcing in the concrete slab shall be 1 1/2 to 2 inches in diameter. Holes shall be filled with water for a minimum of two hours before grouting, at which time all water shall be removed. The grouted area shall be kept wet from the time of initial set for a minimum of twelve hours, with burlap or other suitable means. The grout shall be non-shrink and approved by the Engineer and used in accordance with the manufacturer's recommendations. No separate payment will be made for drilling and grouting, and all such work will be considered incidental to item 508.13.

As Built 1985

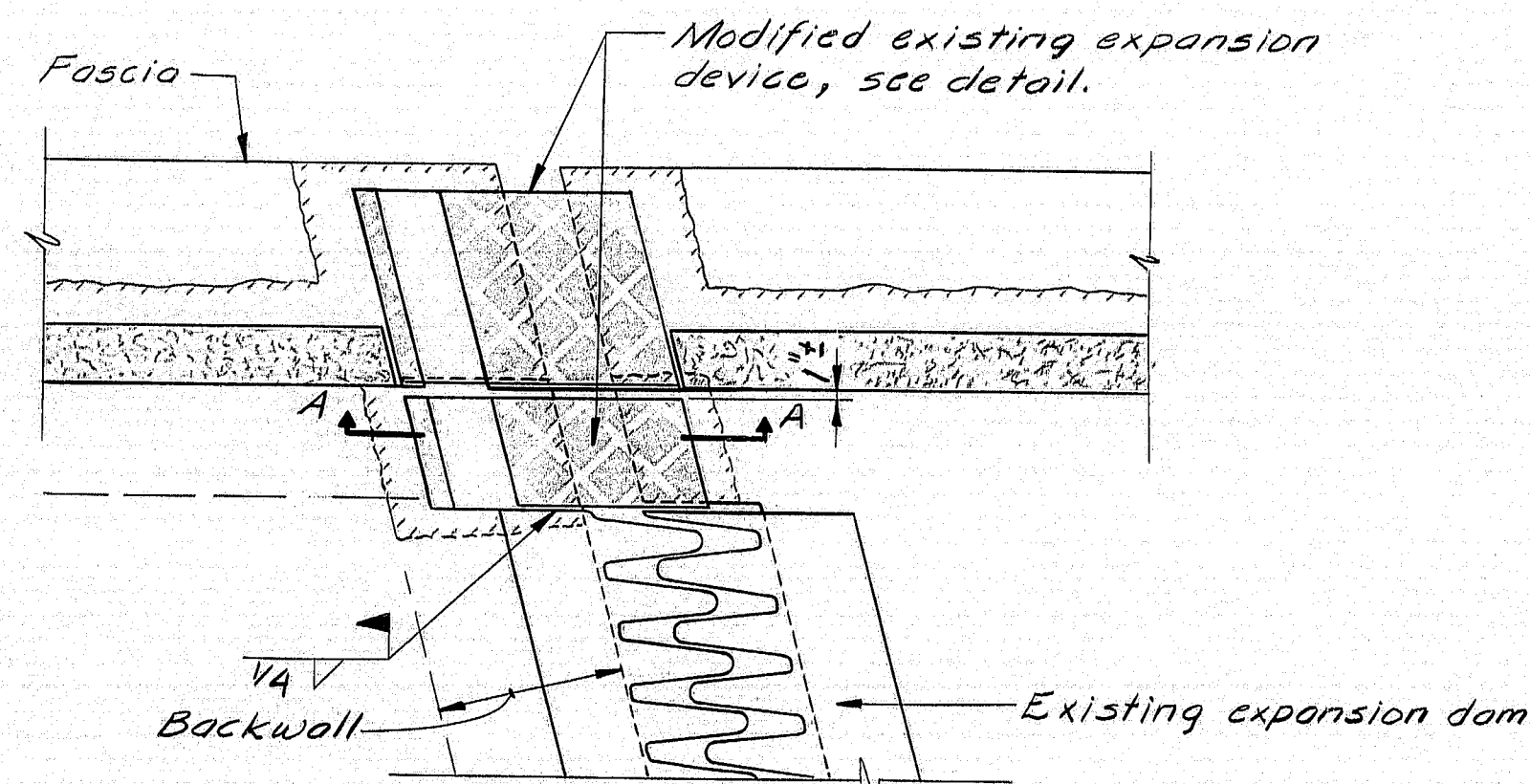
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

VAUGHN - DAGGETT
MEMORIAL BRIDGE
IN
MEDWAY

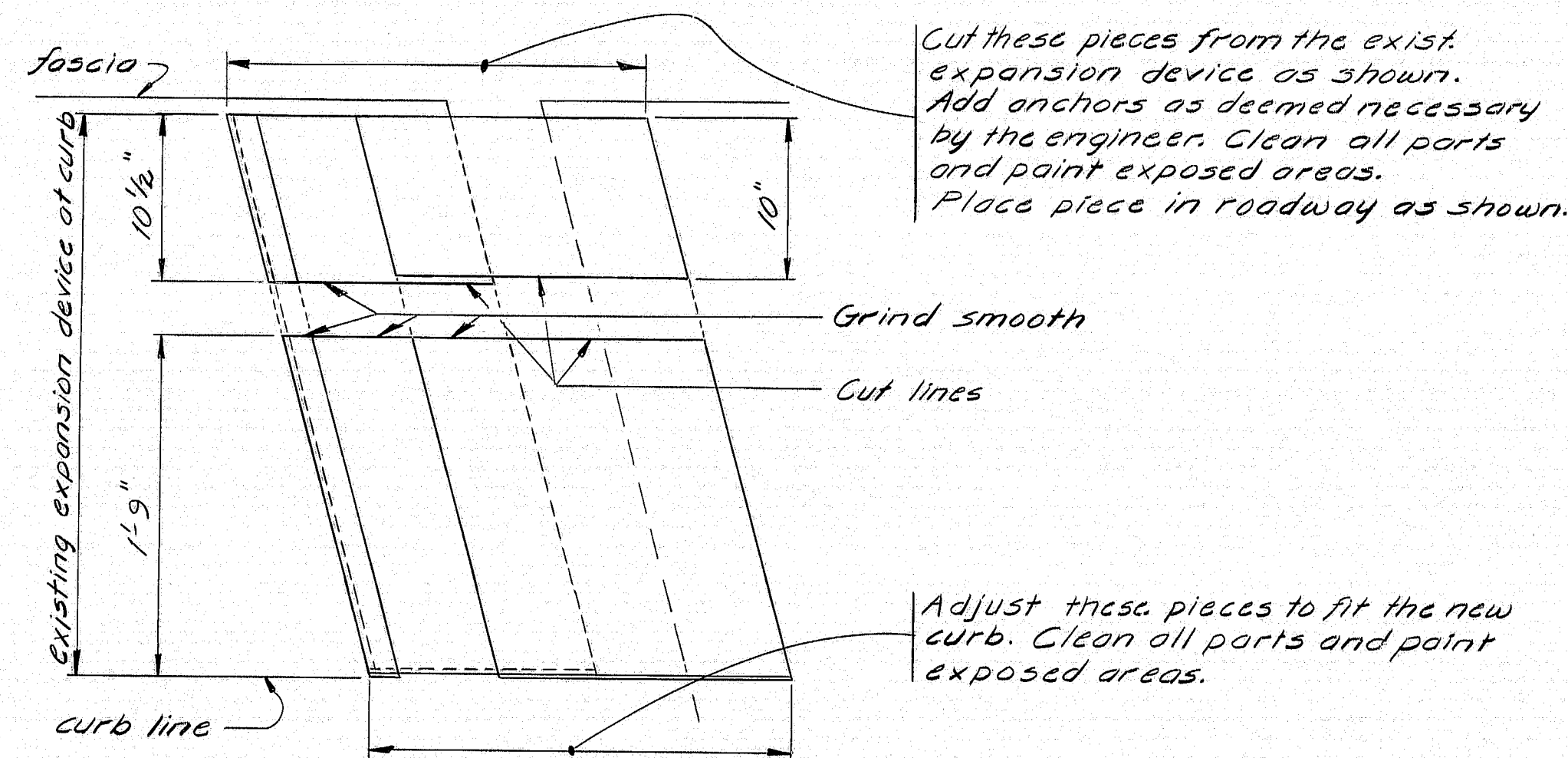
SUPERSTRUCTURE

SHEET 3 OF 9 AUGUSTA, MAINE

R94-197



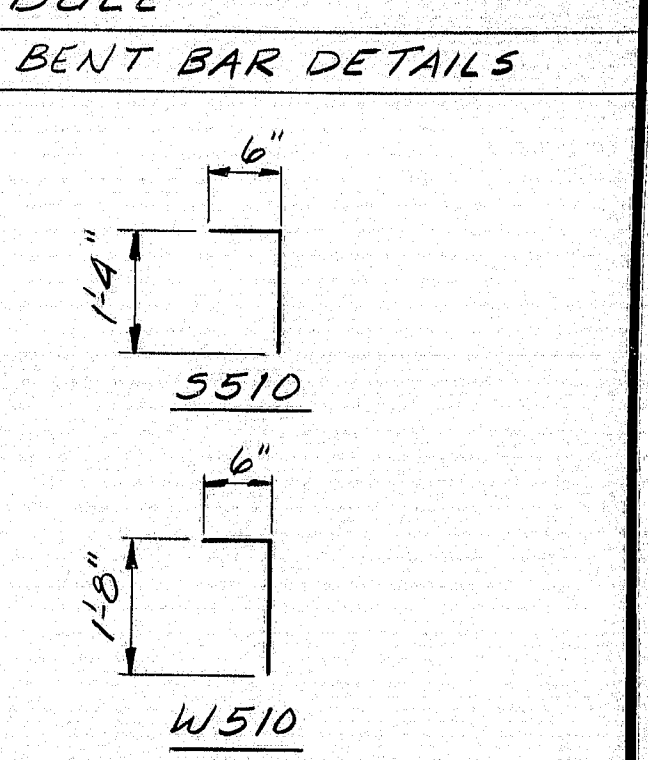
PLAN OF EXPANSION DAM AT CURBS



EXISTING EXPANSION DEVICE
(MODIFIED)
(The detail of the opposite side is similar)

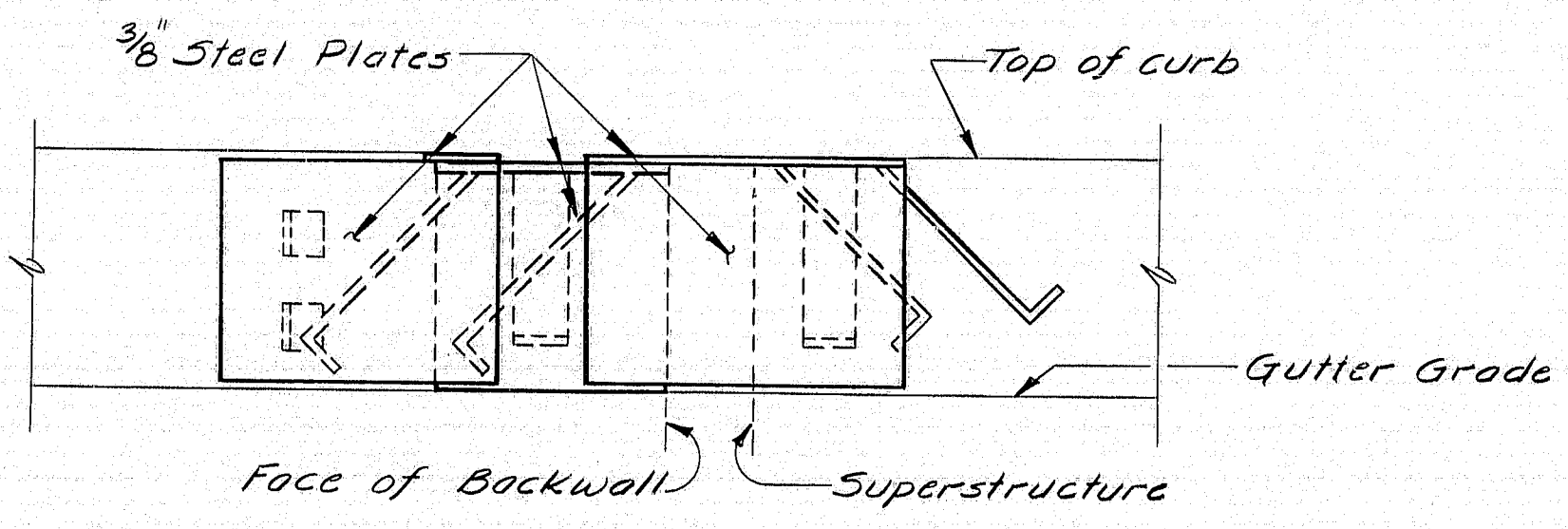
REINFORCING STEEL SCHEDULE			
STRAIGHT BARS			
MARK	NO.	LENGTH	LOCATION
VAUGHN - DAGGETT			
Superstructure			
5500	60	43'-8"	Curb
5501	32	51'-8"	Curb
Wingwall			
W500	16	7'-3"	Curb
W501	8	3'-6"	Curb
BENT BARS			
Superstructure			
5510	4,200	1'-10"	Dowel
Wingwall			
W510	104	2'-2"	Dowel
ROUTE 116			
STRAIGHT BAR			
C500	8	45'-9"	Superstructure

F.R.W.A.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	IR-95-9(107)	4	

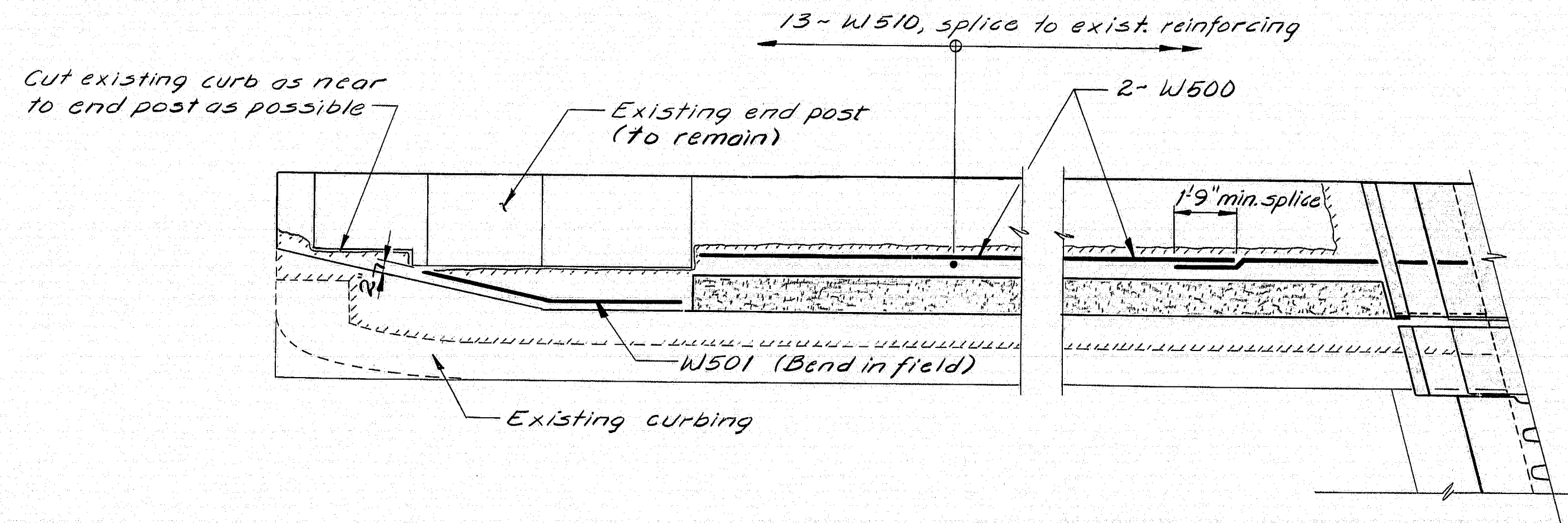


All dimensions are out to out of reinforcing.
Bending details shall conform to the recommendations of the current revision of ACI Standard 31B.

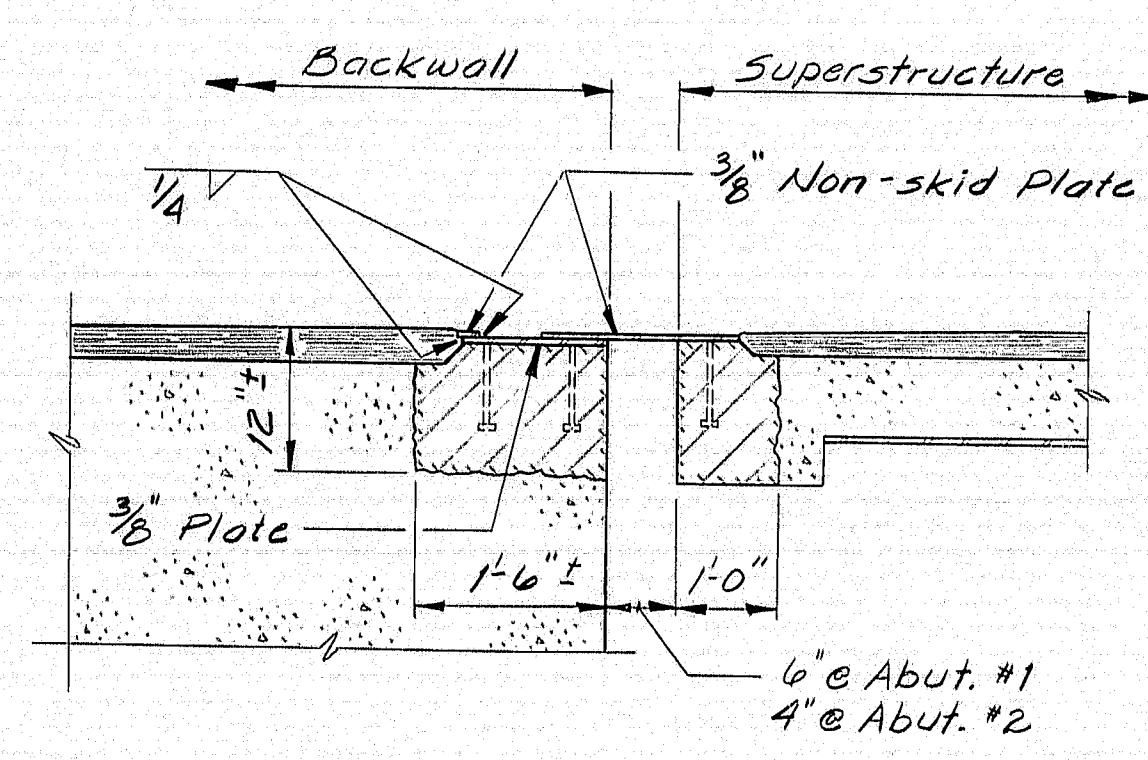
* Payment to be incidental to item 520.24.



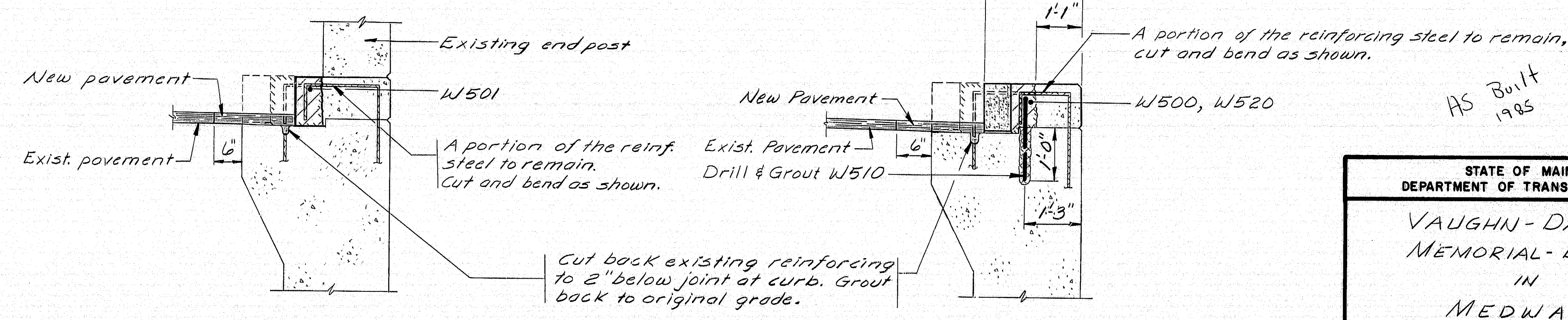
EXIST. EXPANSION DAM AT CURB



PLAN OF ADJUSTED WINGWALL



SECTION A-A



TYP. SECTION AT END POST

TYP. WING SECTION

AS BUILT
1985

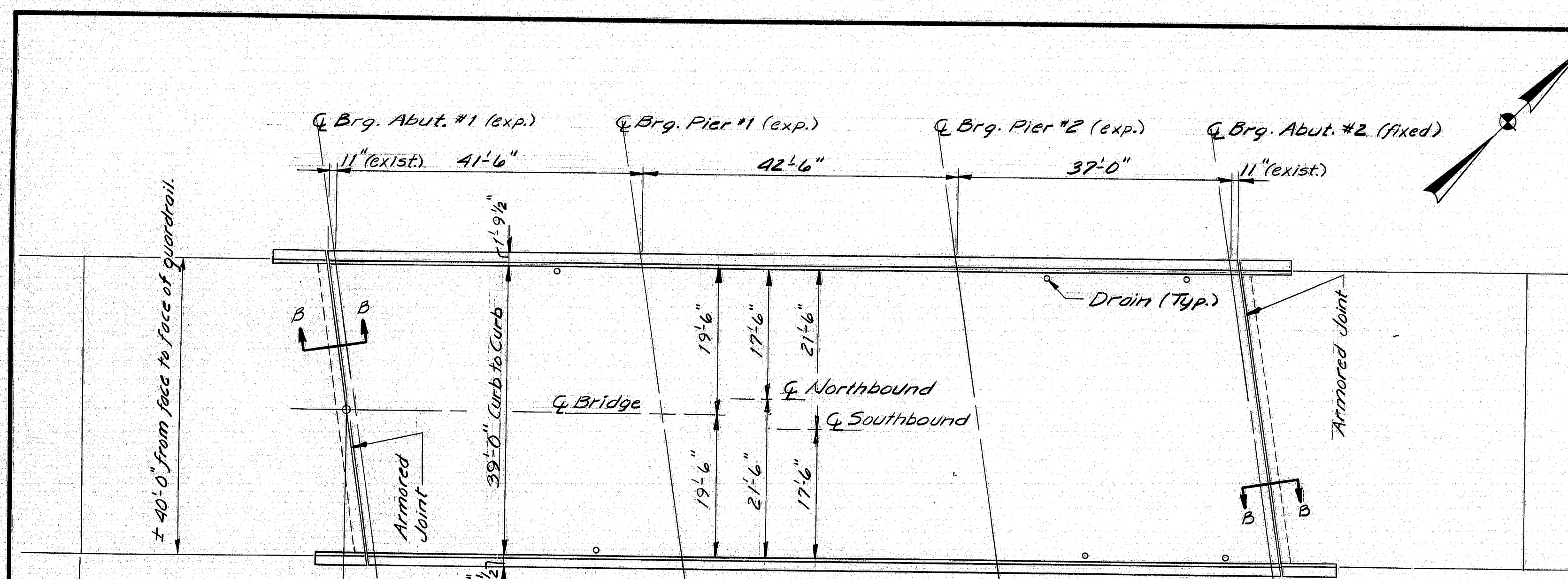
STATE OF MAINE DEPARTMENT OF TRANSPORTATION
VAUGHN - DAGGETT MEMORIAL - BRIDGE IN MEDWAY
MISCELLANEOUS DETAILS
SHEET 4 OF 9 AUGUSTA, MAINE

R94-198

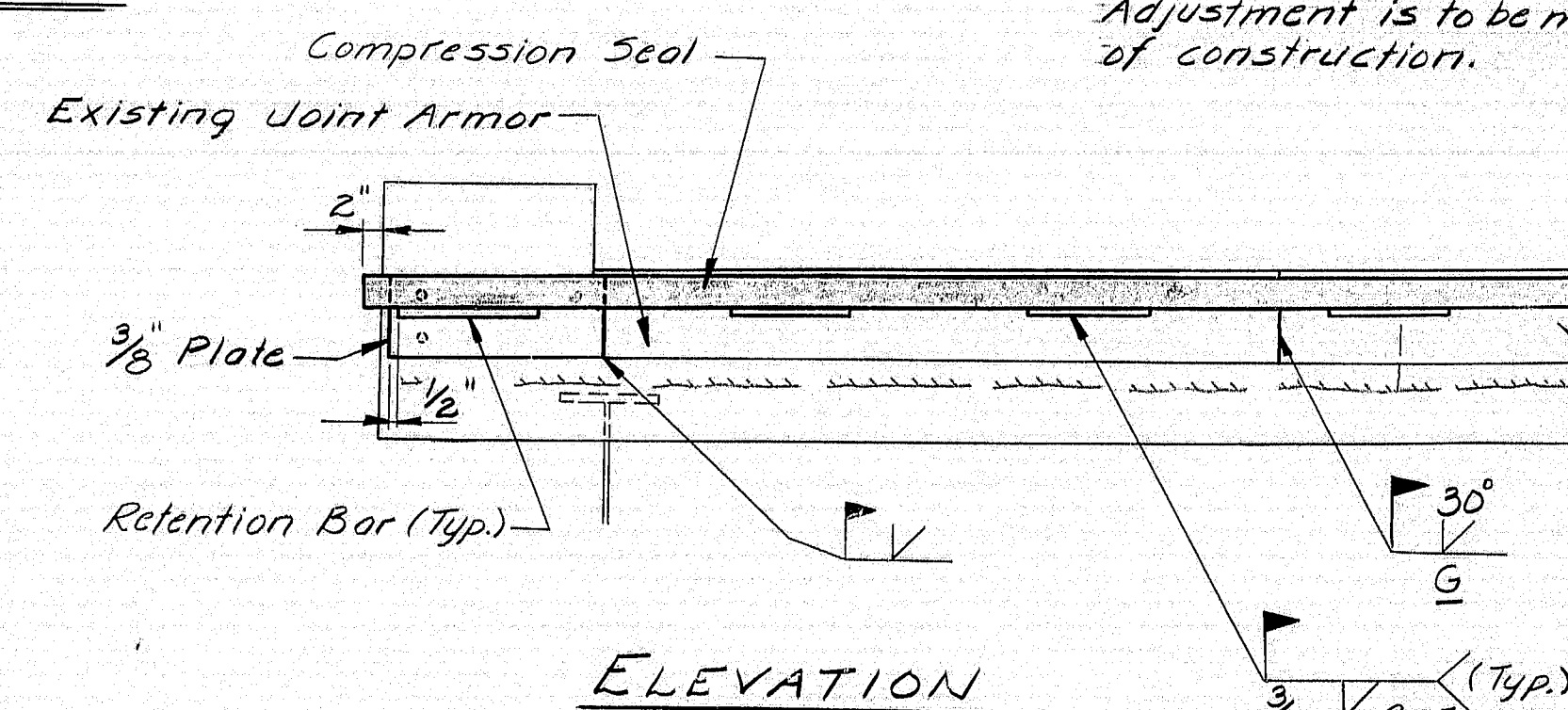
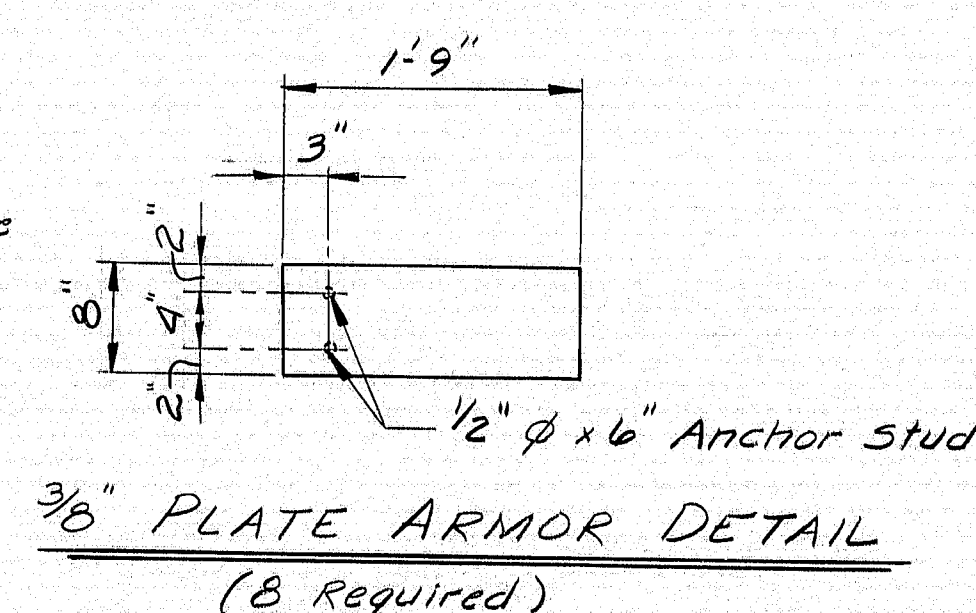
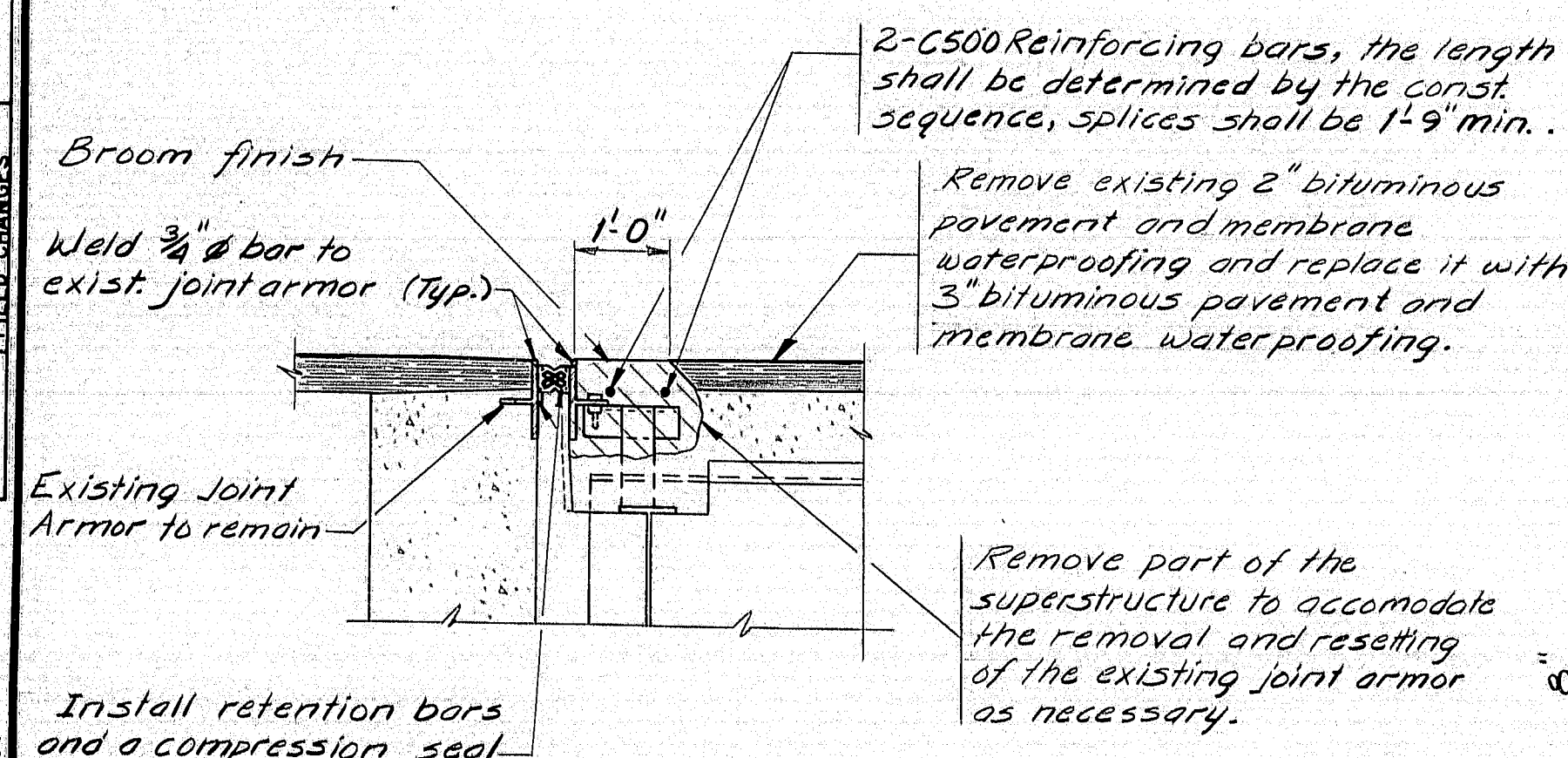
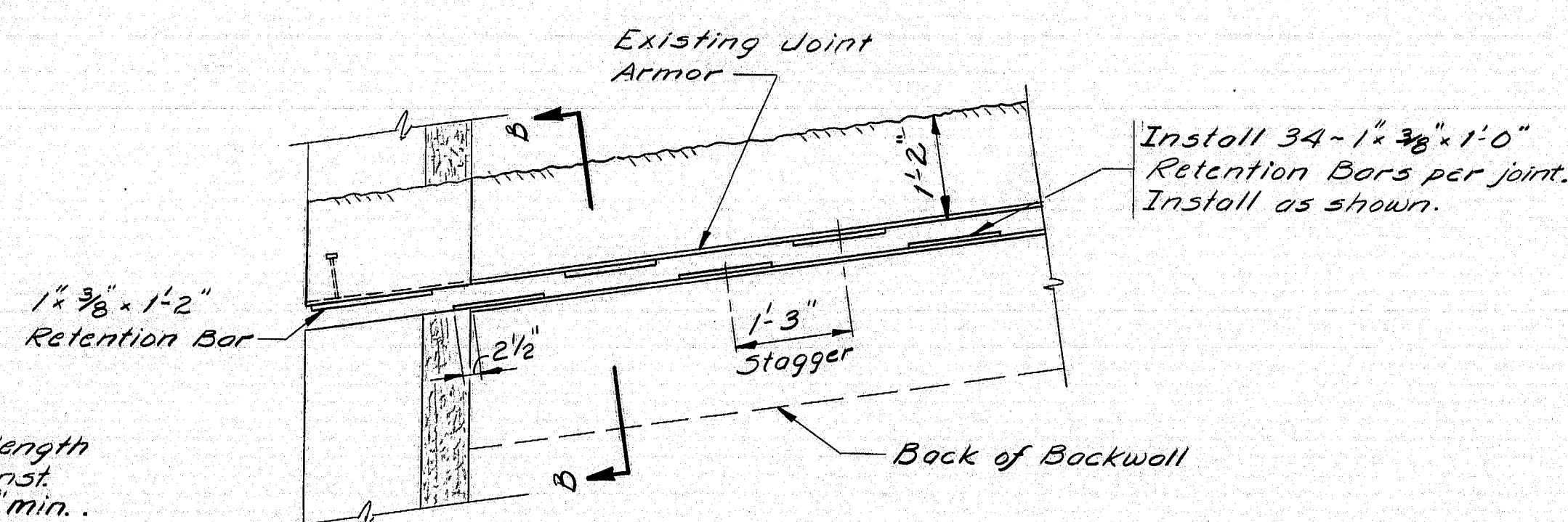
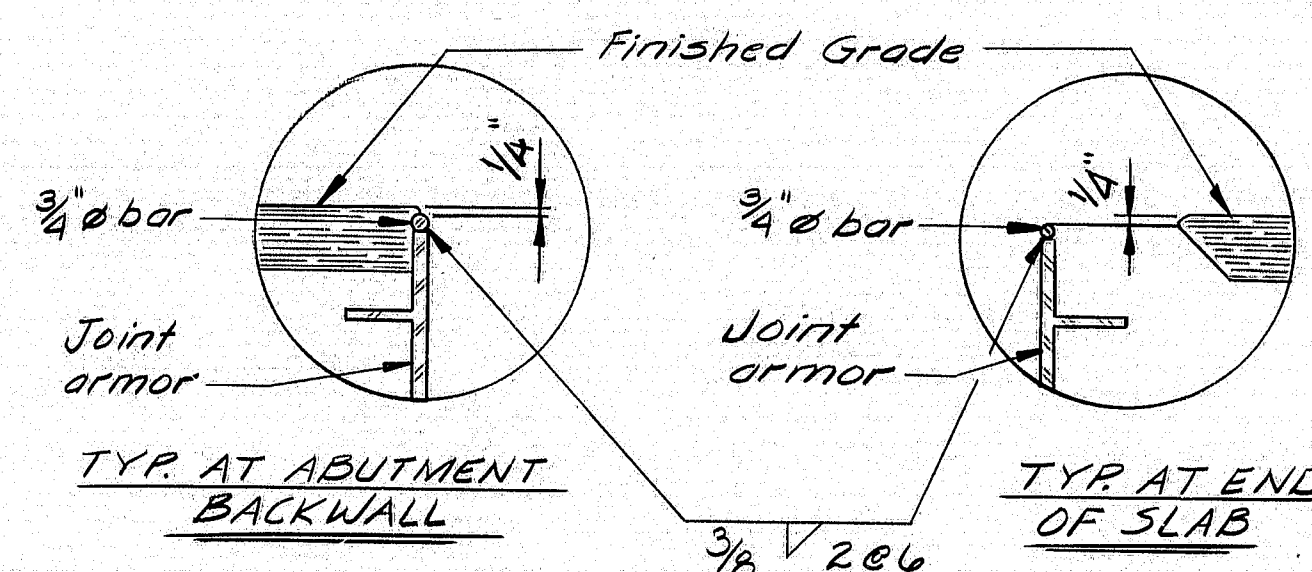
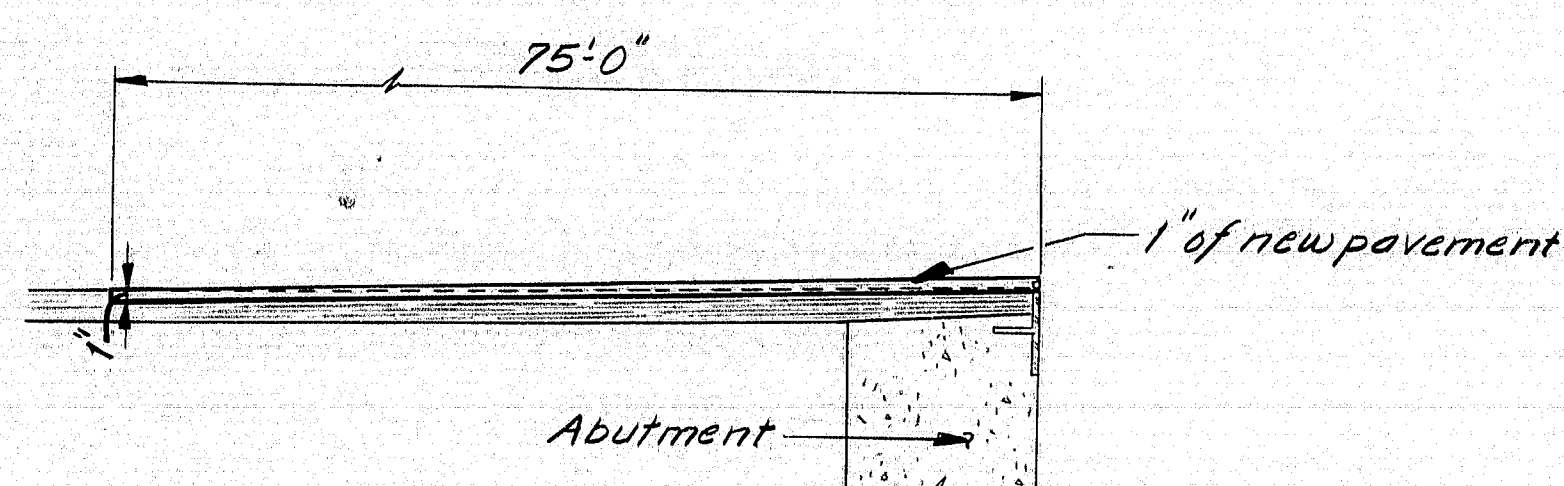
PROJECT DESIGN ENGINEER	DATE
DESIGN - DETAILED	1-85
CHECKED	2-85
REVISIONS	
FIELD CHANGES	

BRUNING 44129-207101

F.R.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	IR-95-9(107)	5	

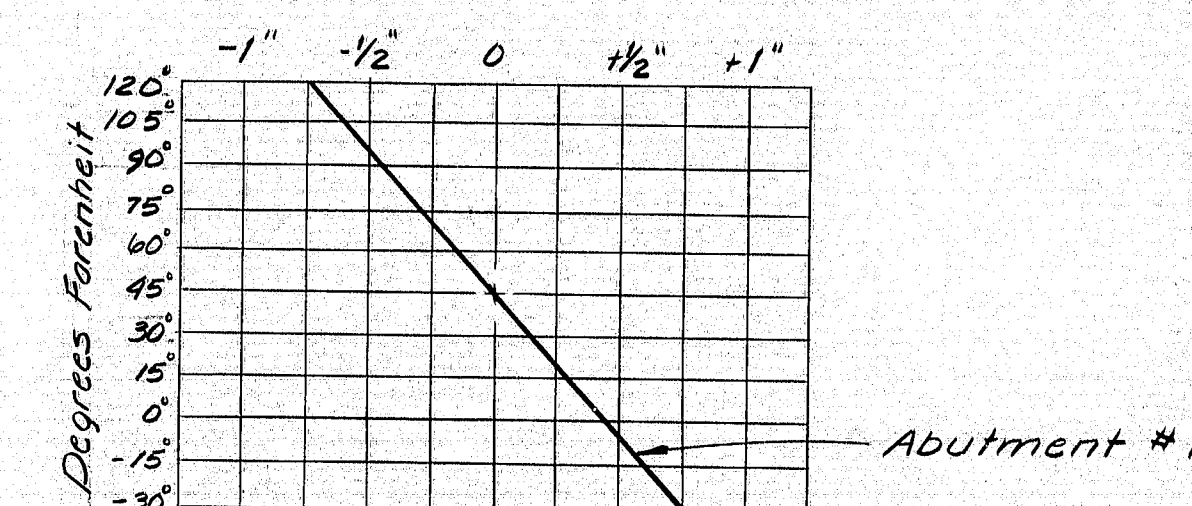


Pave 75'-0" of Approach as detailed (Typ.)
Overlayed Full Length Between Bridges.



GENERAL NOTES:

- Form a 1" V-groove on the fascias at the horizontal joint between the curb and slab.
- Depress new pavement around drain, shape to fit crown and grade.
- Reinforcing steel to have 2" min. cover unless otherwise indicated.
- The 3/8" Plate and #5 reinf bars shall be incidental to item 520.24.
- The armored joint shall be cut as required for stage construction.
- The removal of the existing bituminous pavement on the approaches shall be incidental to item 202.127.



COMPRESSION SEAL ADJUSTMENT CHART

- The seals to be furnished shall have a minimum Movement Rating of 1/2" at Abut. #1, 1/2" at Abut. #2.
- The seal shall be approved by the Engineer prior to fabrication of the joint armor, placement of retention bars.
- The joint opening will vary depending on the dimensions of the seal selected by the Contractor. The joint opening shall be set according to the opening shown on the approved shop detail drawings.
- The Compression Seal adjustment chart shows the adjustment necessary to adjust the joint opening shown on the shop detail drawings for temps other than 45°F. Adjustment is to be measured parallel to the centerline of construction.

AS BUILT
1985

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

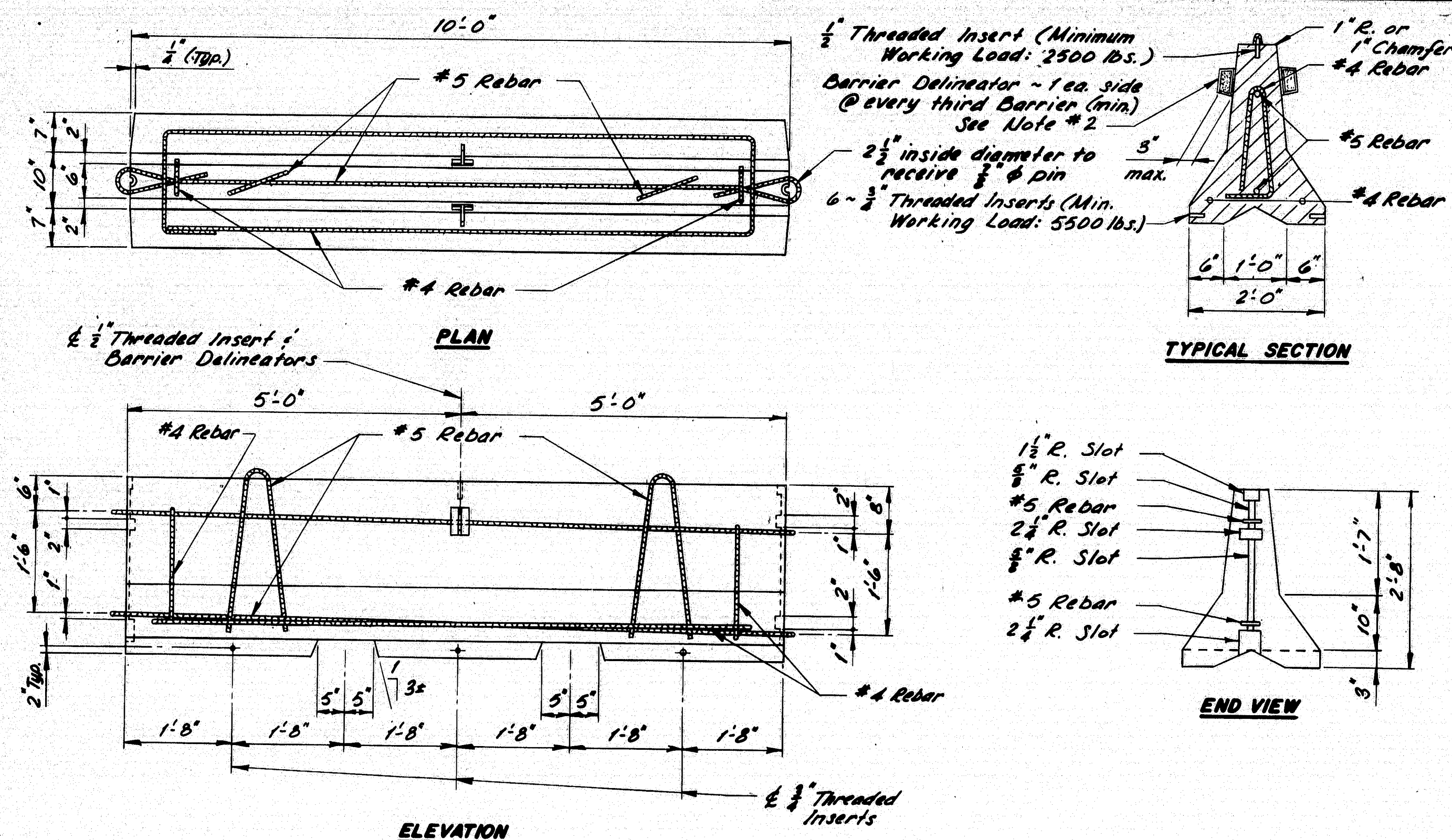
INTERSTATE 95
OVER
ROUTE 116
MEDWAY

SUPERSTRUCTURE PLAN
& DETAILS

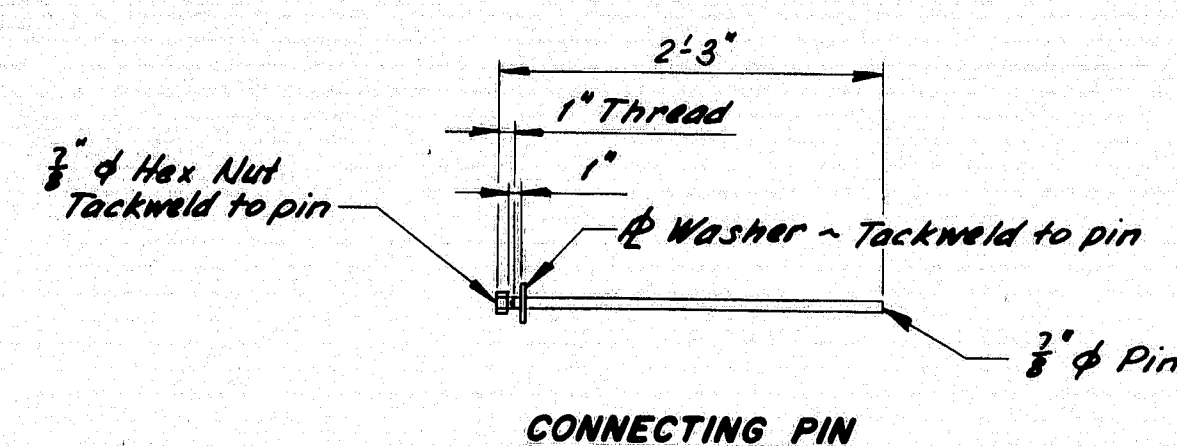
SHEET 5 OF 9 AUGUSTA, MAINE

R94-199

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
MAINE	TR-95-9(107)	6	9

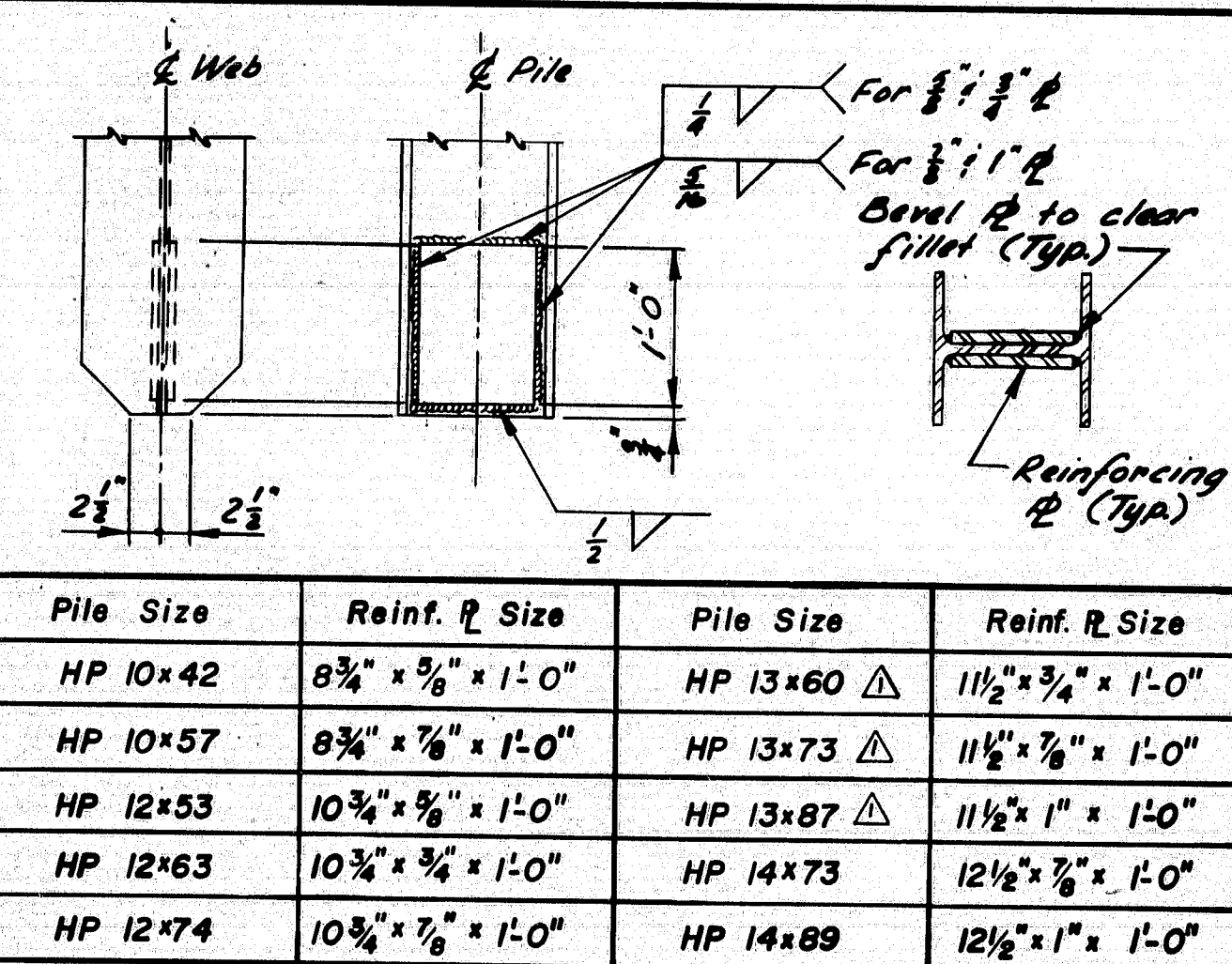


TEMPORARY CONCRETE BARRIER - TYPE 1



NOTES:

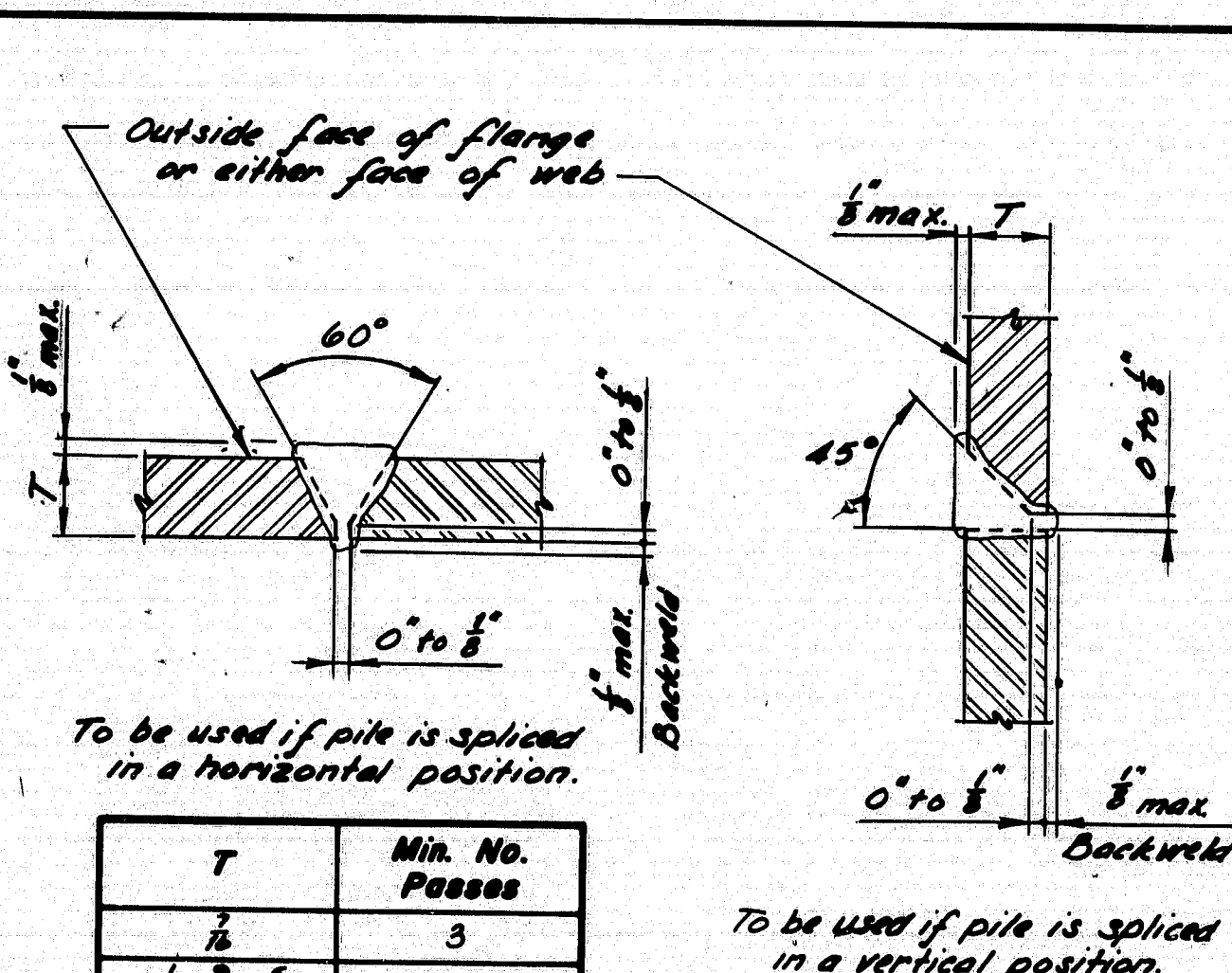
- The reinforcing steel, and connections, lifting arrangement, and sizes and locations of hold-down inserts are advisory only. It shall be the Contractor's responsibility to provide adequate reinforcing, and connections, lifting points, and hold-down arrangements.
- Barrier Delineators shall be bi-directional with a minimum effective reflex area of 8.0 square inches as approved by the Engineer. The Reflector shall preferably be of Methyl Methacrylate, and the Housing of Acrylonitrile Butadiene Styrene.



NOTES:

- Alternate Pointed Reinforced Pile Tip may be used if they have at least the cross-sectional area of the pile tip shown and are approved by the Engineer.
- Plates may be shop or field welded.
- Use Manual Shielded Metal-Arc Process and 6010, 6011, or 6012 electrodes, unless a different process has been approved by the Engineer.
- Electrodes shall be dry when used, in accordance with the provisions of A.W.S. Spec. D1.1, as amended by AASHTO.

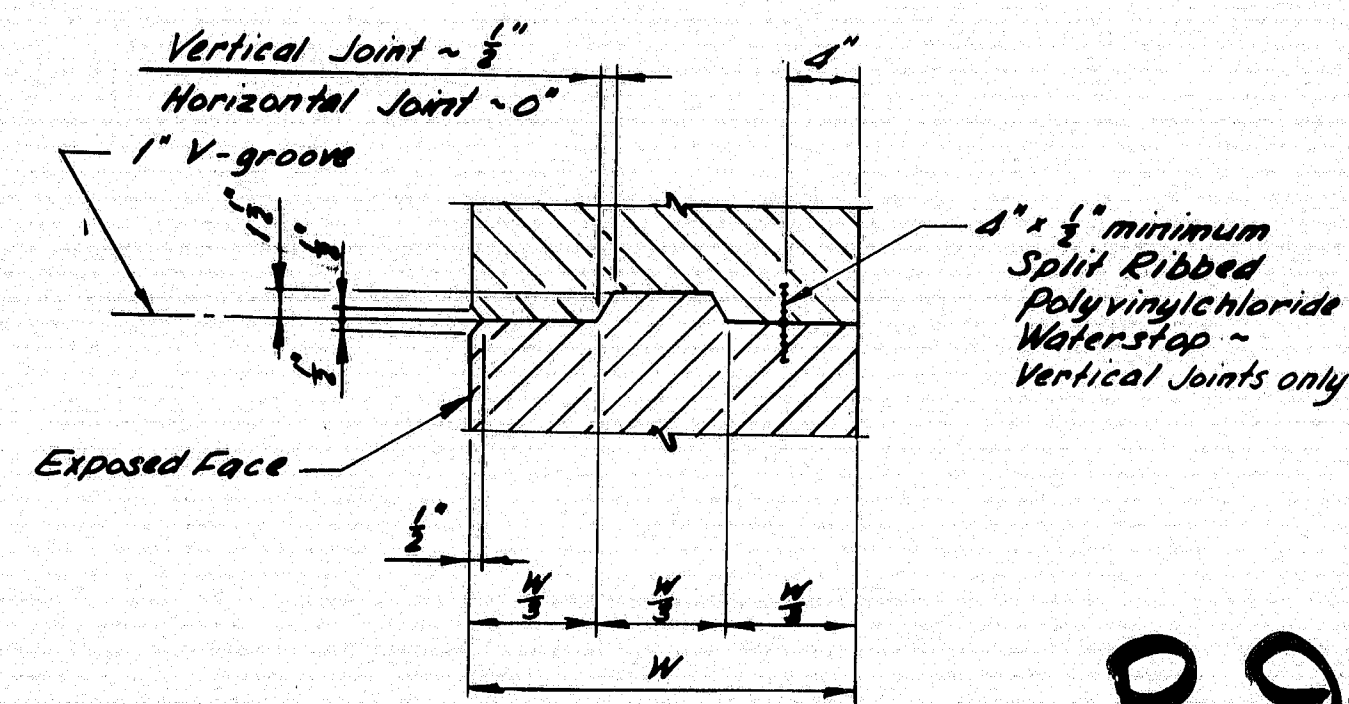
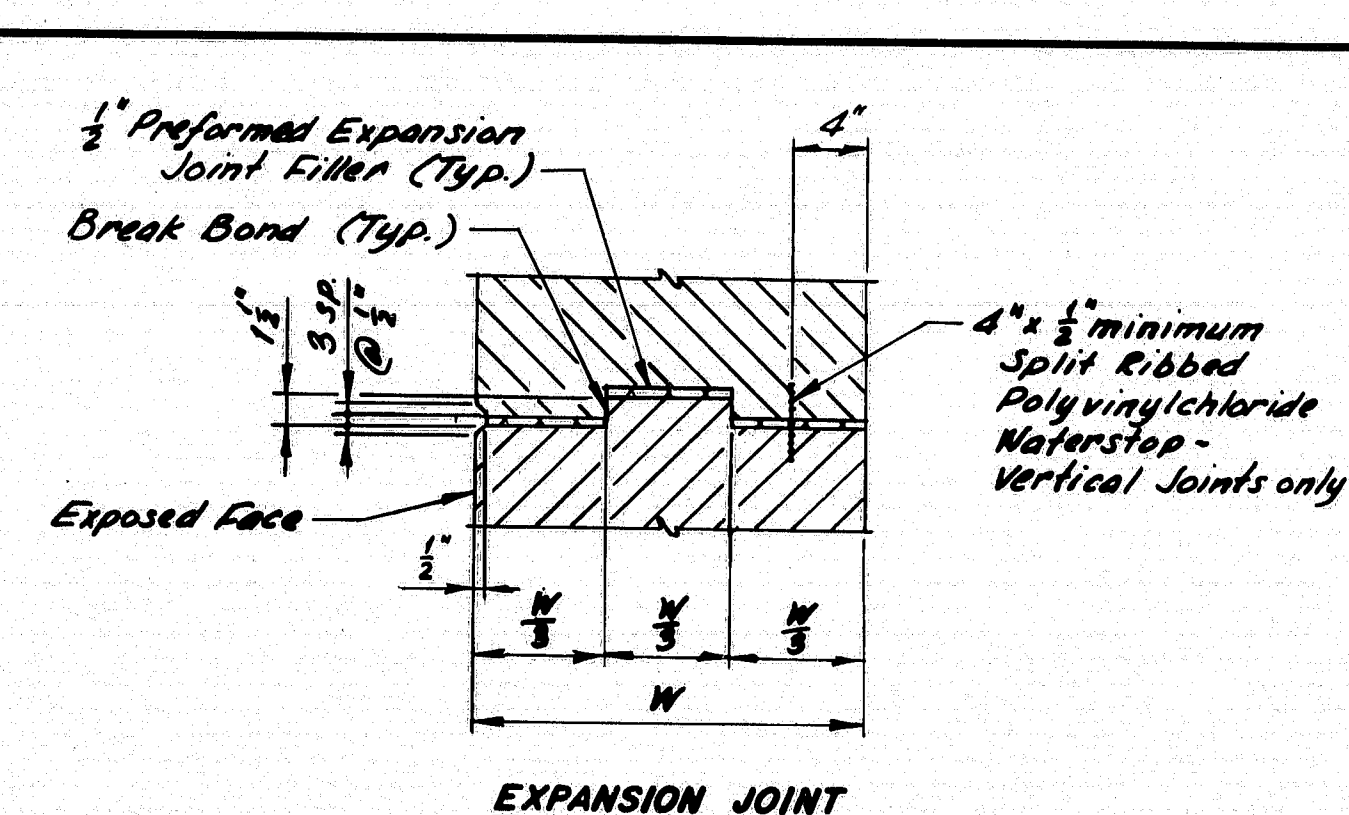
POINTED REINFORCED PILE TIP



NOTES:

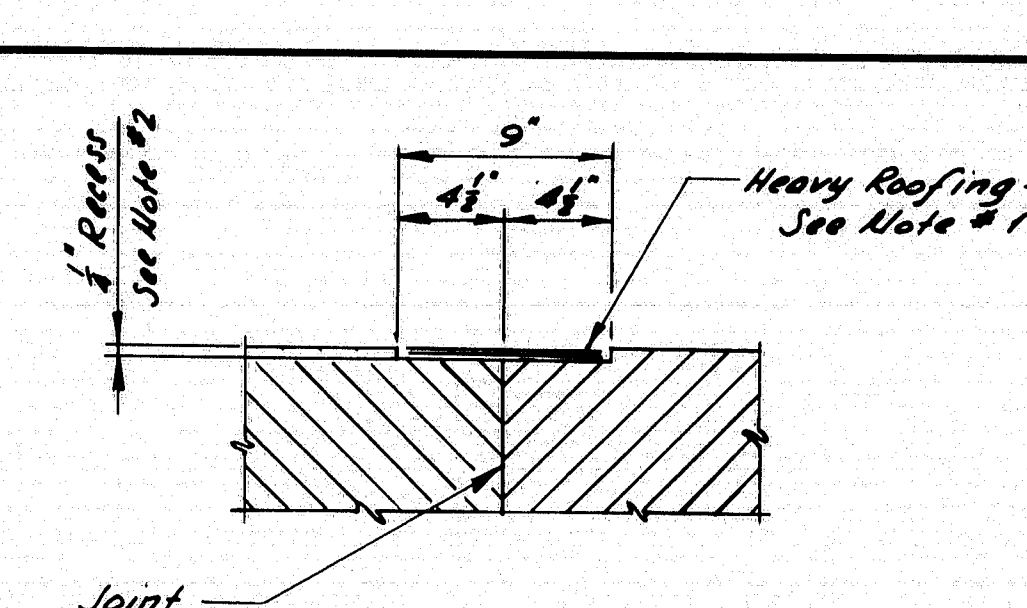
- All cutting shall be done with the use of a mechanical guide.
- Use Manual Shielded Metal-Arc Process and 6010, 6011, or 6012 electrodes, unless a different process has been approved by the Engineer.
- Electrodes shall be dry when used, in accordance with the provisions of A.W.S. Spec. D1.1, as amended by AASHTO.
- Gouge root before welding second side.

PILE SPLICE



CONSTRUCTION OR CONTRACTION JOINTS

CONCRETE JOINTS



NOTES:

- Where called for, cover horizontal and vertical construction, contraction, or expansion joints with two (2) 9" wide layers of heavy roofing felt. Coat the concrete and back of each layer as applied with plastic roofing cement.
 - Recess the covered area 1/8" unless otherwise indicated on Design Drawings.
- NOTE: If there is a conflict between this Standard Detail and the Design Drawings, the requirements of the Design Drawings shall be followed.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STANDARD DETAILS
(BD 127-81)

MISCELLANEOUS DETAILS
TEMP. CONC. BARRIER - TYPE 1
POINTED REINFORCED PILE TIP
PILE SPLICE - CONC. JOINTS
CONCRETE JOINT COVER

ADDED NOTE	1-85
Added 13 HP's	7-83
REVISIONS	Date

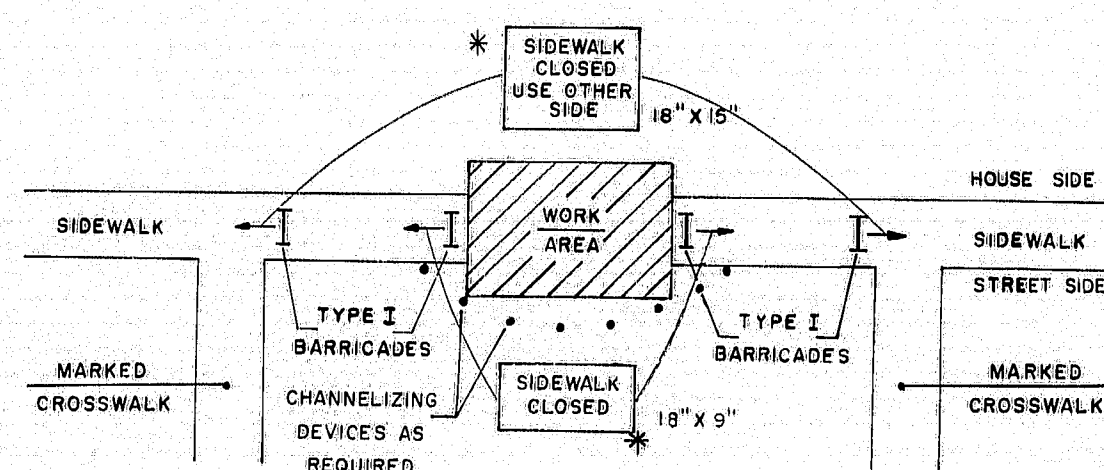
SHEET 6 OF 9 AUGUSTA, MAINE JUNE 1981

Medway

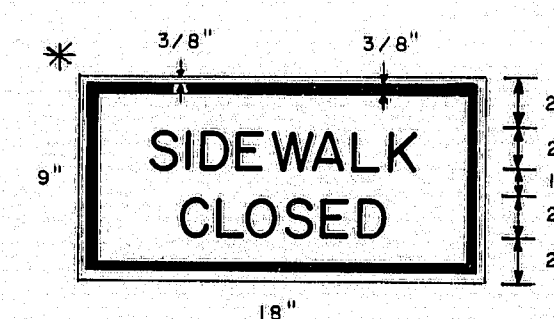
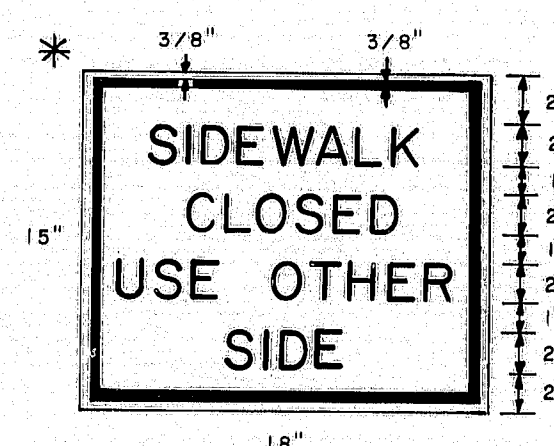
R94-200

F.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	IR 95-9007	7	9

* NON-REFLECTORIZED WHITE BACKGROUND, BLACK TEXT
AND BORDER-2" SERIES C UPPER CASE LETTERS

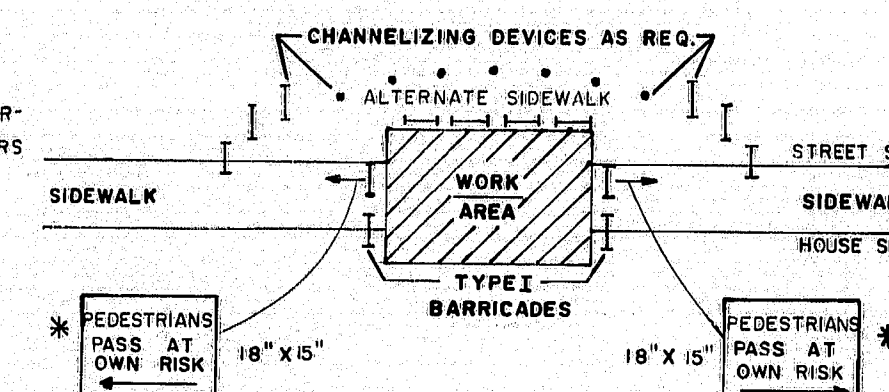


**SIDEWALK CLOSURE
WITHOUT ALTERNATE SIDEWALK**

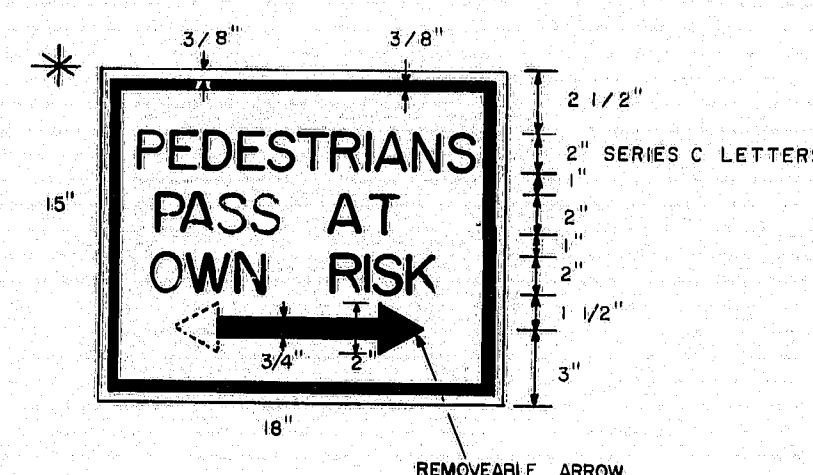


A

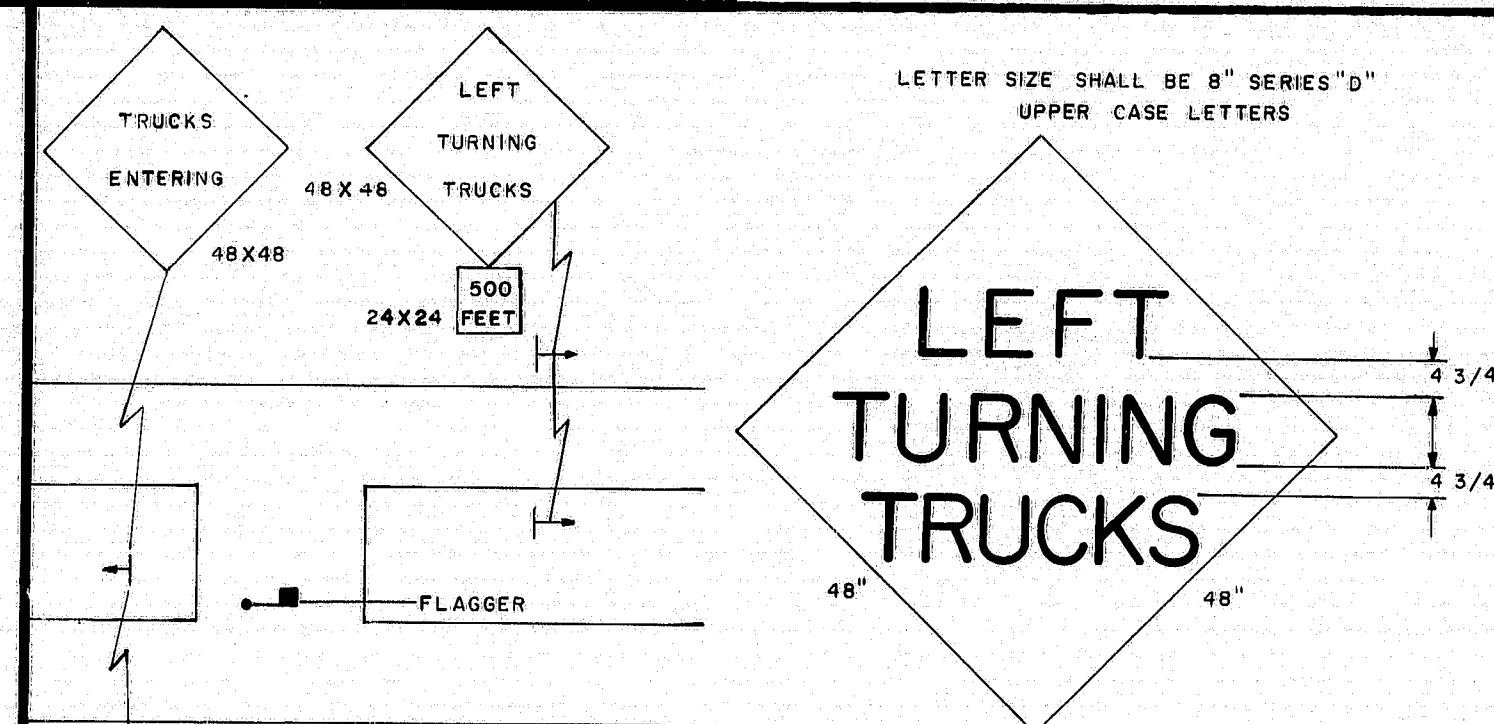
* NON-REFLECTORIZED WHITE BACK
GROUND, BLACK TEXT AND BORDER-
2" SERIES C UPPER CASE LETTERS



**SIDEWALK CLOSURE
WITH ALTERNATE SIDEWALK**



B



MEDIAN CROSSOVER

E

GENERAL NOTES

- Distances shown for sign placement are nominal, exact locations shall be determined by the Engineer.
- Grades on temporary roadways through the construction zone used by the public shall not exceed 10 percent.
- Advisory speed consistent with prevailing conditions shall be as determined by the Engineer.
- Use shaded signs when specified in the Special Provisions.
- The length of tapers shall be determined from the following formulae:

$$\text{If } S \text{ is equal to or less than } 40 \text{ MPH} \\ L = (W \times S \times S) / 60$$

$$\text{If } S \text{ is equal to or greater than } 45 \text{ MPH} \\ L = WS$$

Where:

L = taper length in feet
S = operating speed in MPH
W = width of roadway to be closed in feet

Taper lengths shall be rounded to the nearest five feet.

It may be required to extend lane closure tapers to provide a smooth transition where geometric alignment reduces sight distance.

- The maximum longitudinal spacing of channelizing devices shall conform to the following:

- 50' feet through work areas
- A distance in tapers equal to the numerical value of the operating speed, i.e., 45 MPH = 45 feet
- In all areas not covered above maximum spacing shall be as follows:

Radius of curve Spacing

80' to 300' 25'

300' to 700' 50'

700' to 1000' 75'

over 1000' 5 times the operating speed

The maximum transverse spacing in tapers shall be determined from the following formula:

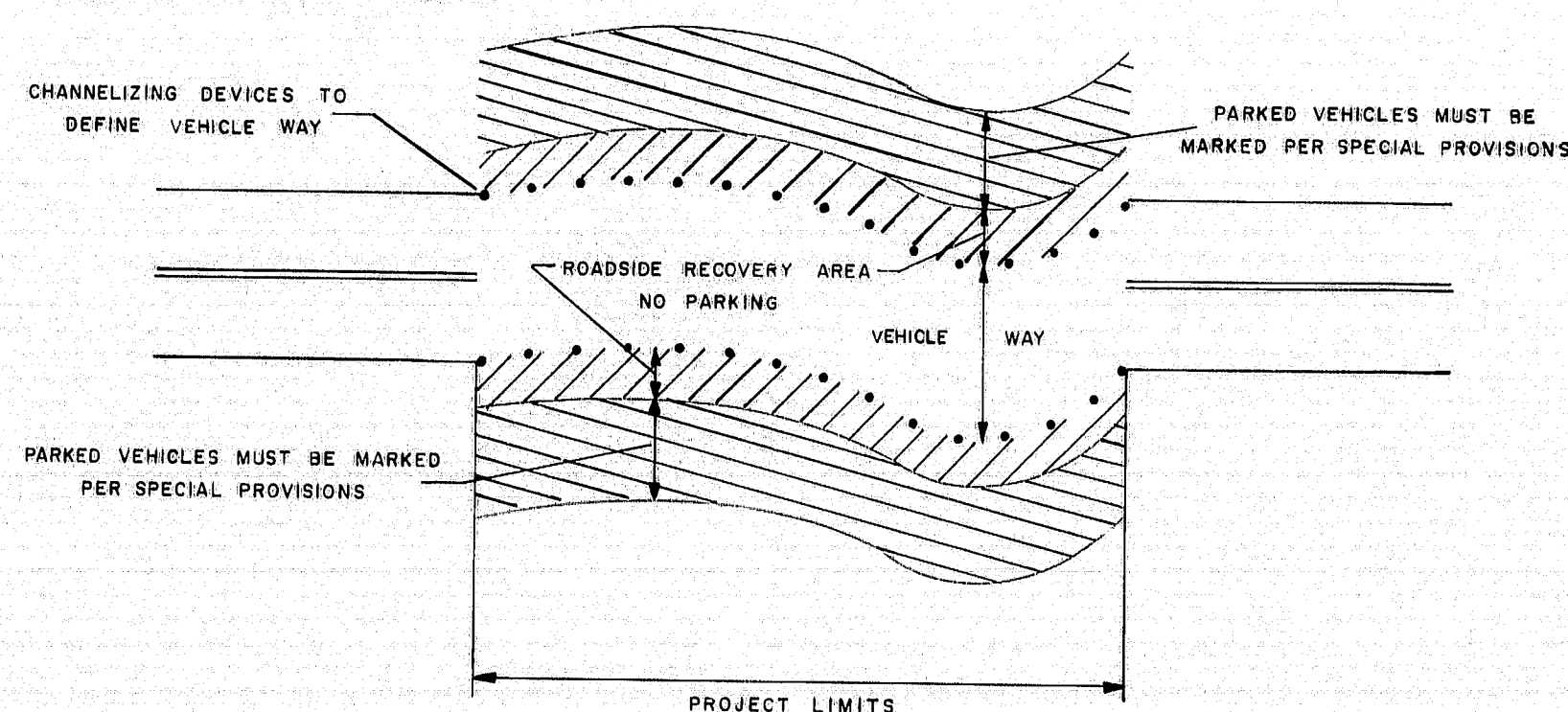
$$D = (W \times S) / L$$

Where:

D = transverse spacing in feet
W = width of roadway to be closed in feet
L = taper length in feet
S = operating speed in MPH

- BORDER DIMENSIONS AND LEGEND DESIGN SHALL CONFORM TO THE STANDARD HIGHWAY SIGNS BOOKLET.

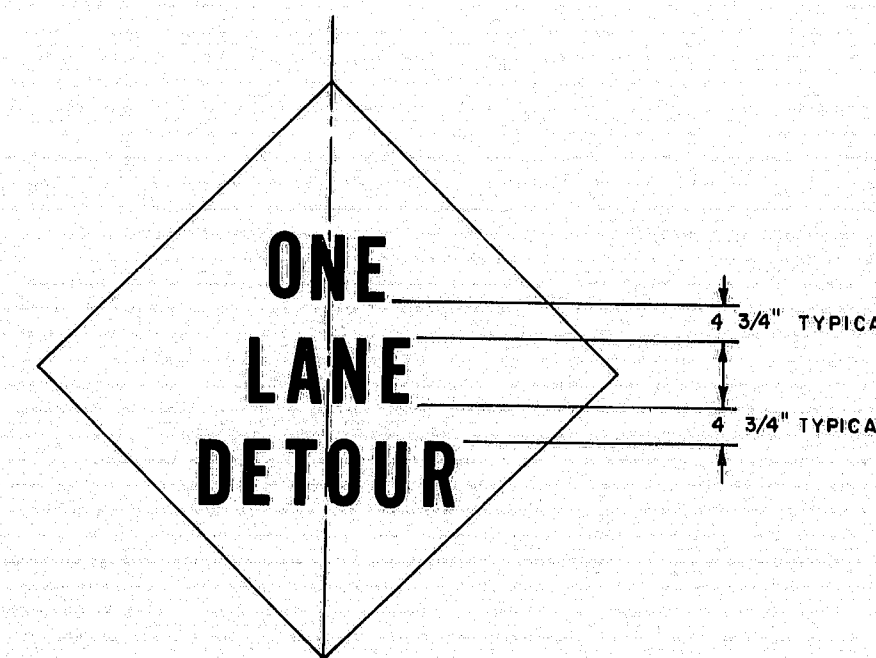
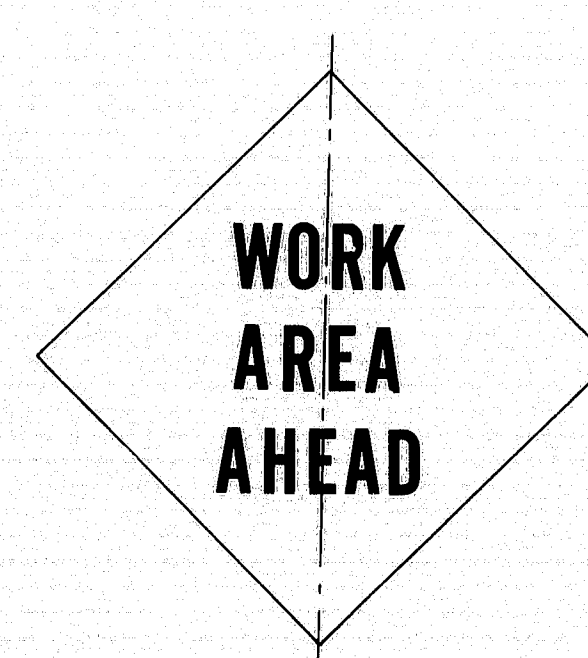
ALL DIMENSIONS AND OTHER REQUIREMENTS AS
SPECIFIED IN THE SPECIAL PROVISIONS



ROADSIDE RECOVERY AREA

C

CONSTRUCTION WARNING SIGN DETAIL



- Letter size shall be 8" Series 'D'.
- Border dimensions and legend design shall conform to "Standard Highway Signs".

D

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

PLANS

REVISIONS

3-4-80	GENERAL NOTES
4/3/80 PF	A,B,C,G,N

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

MAINTENANCE
OF
TRAFFIC
IN CONSTRUCTION ZONES

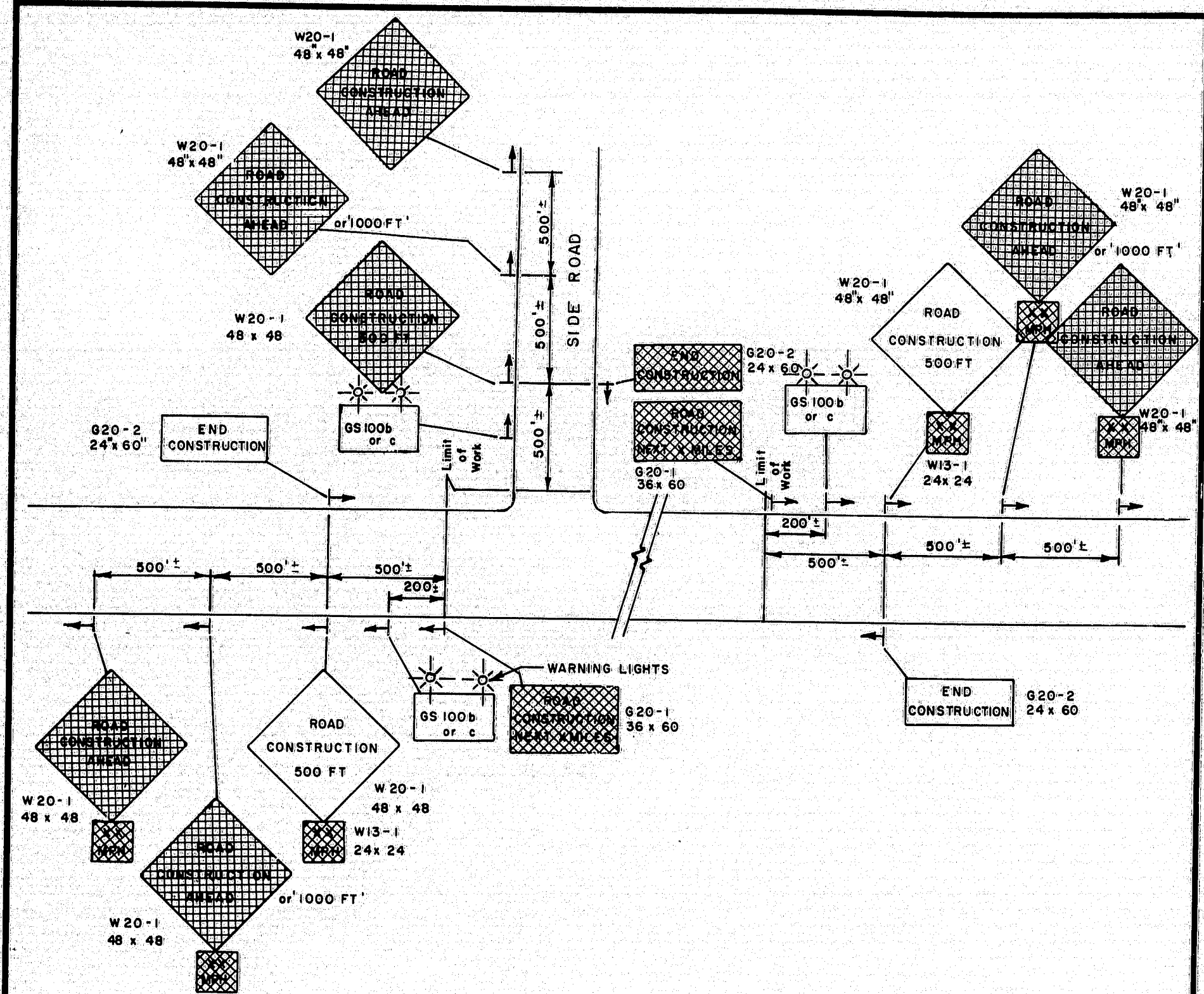
R94-201

SHEET 1 OF 3 AUGUSTA, MAINE

Medway

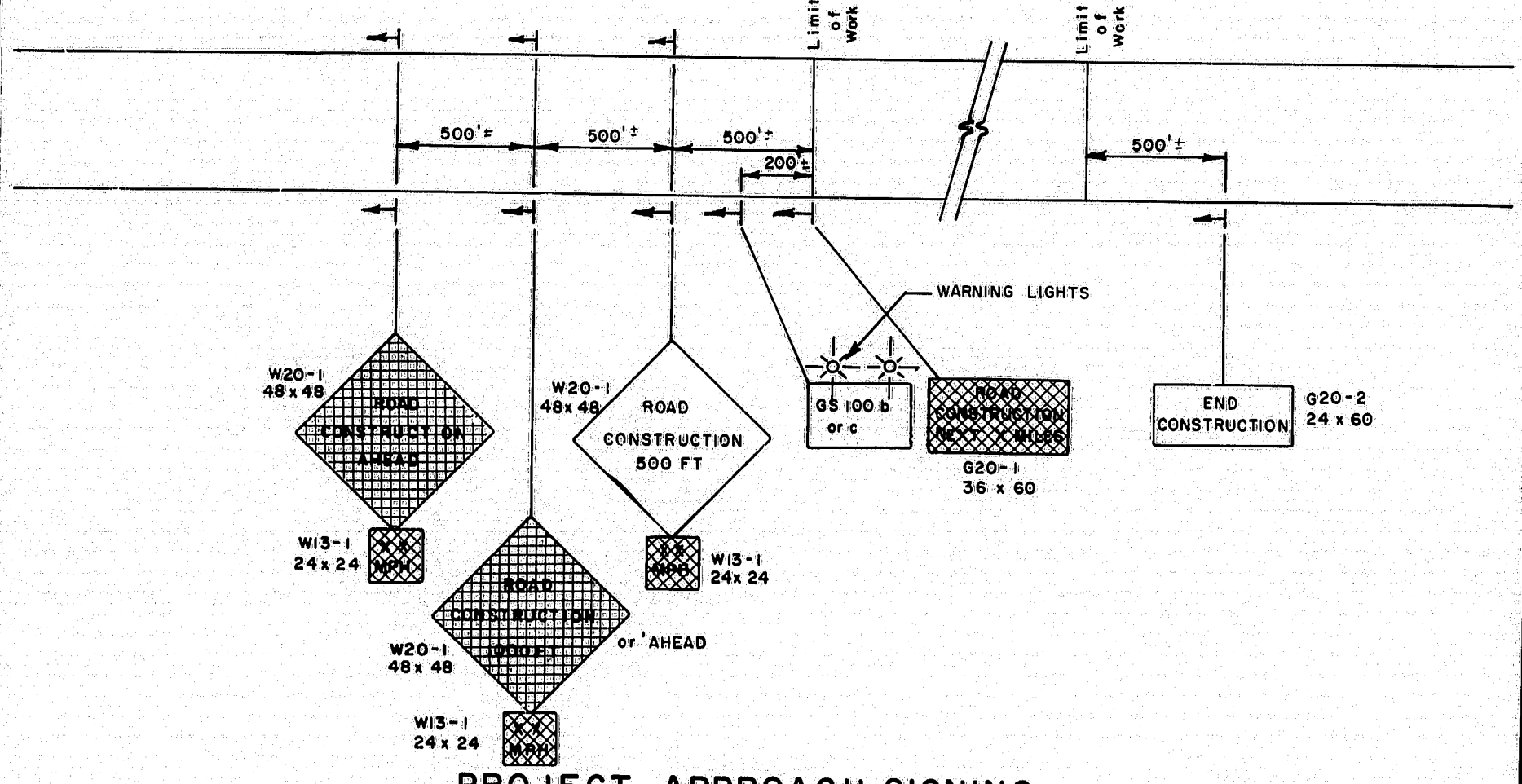
5004 5000

F.R.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	TR 95-9/07	8	9



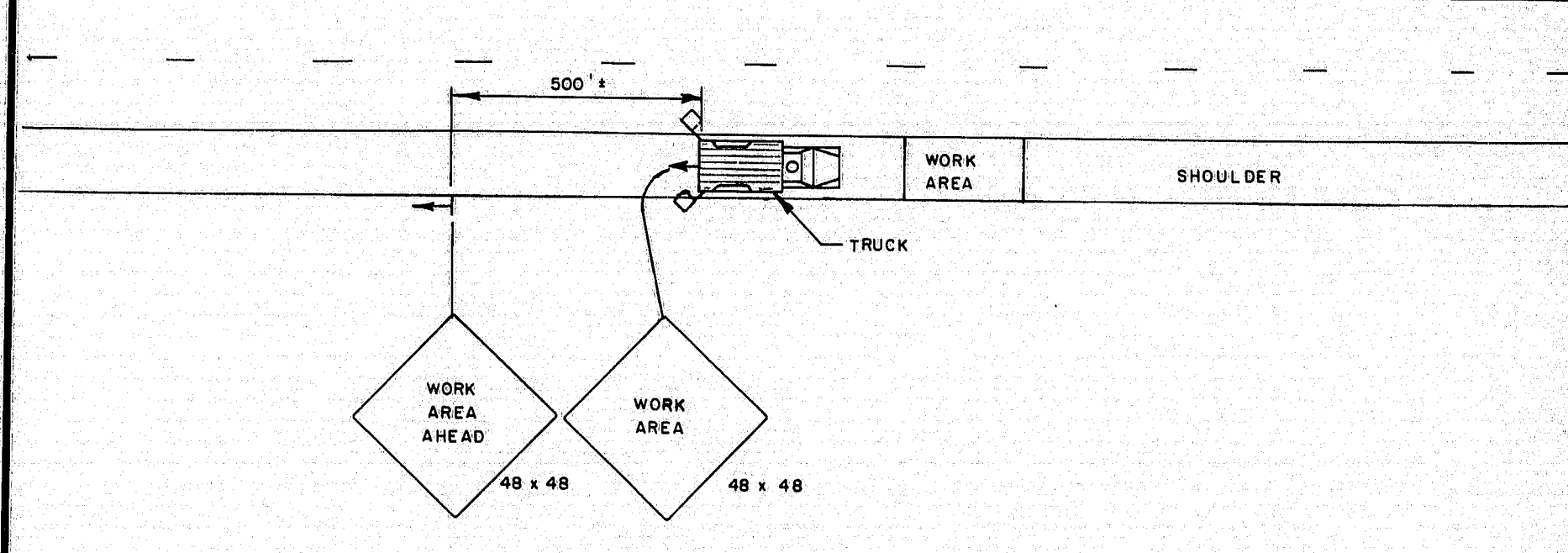
PROJECT APPROACH SIGNING
Two Way Traffic

A



PROJECT APPROACH SIGNING
Expressway

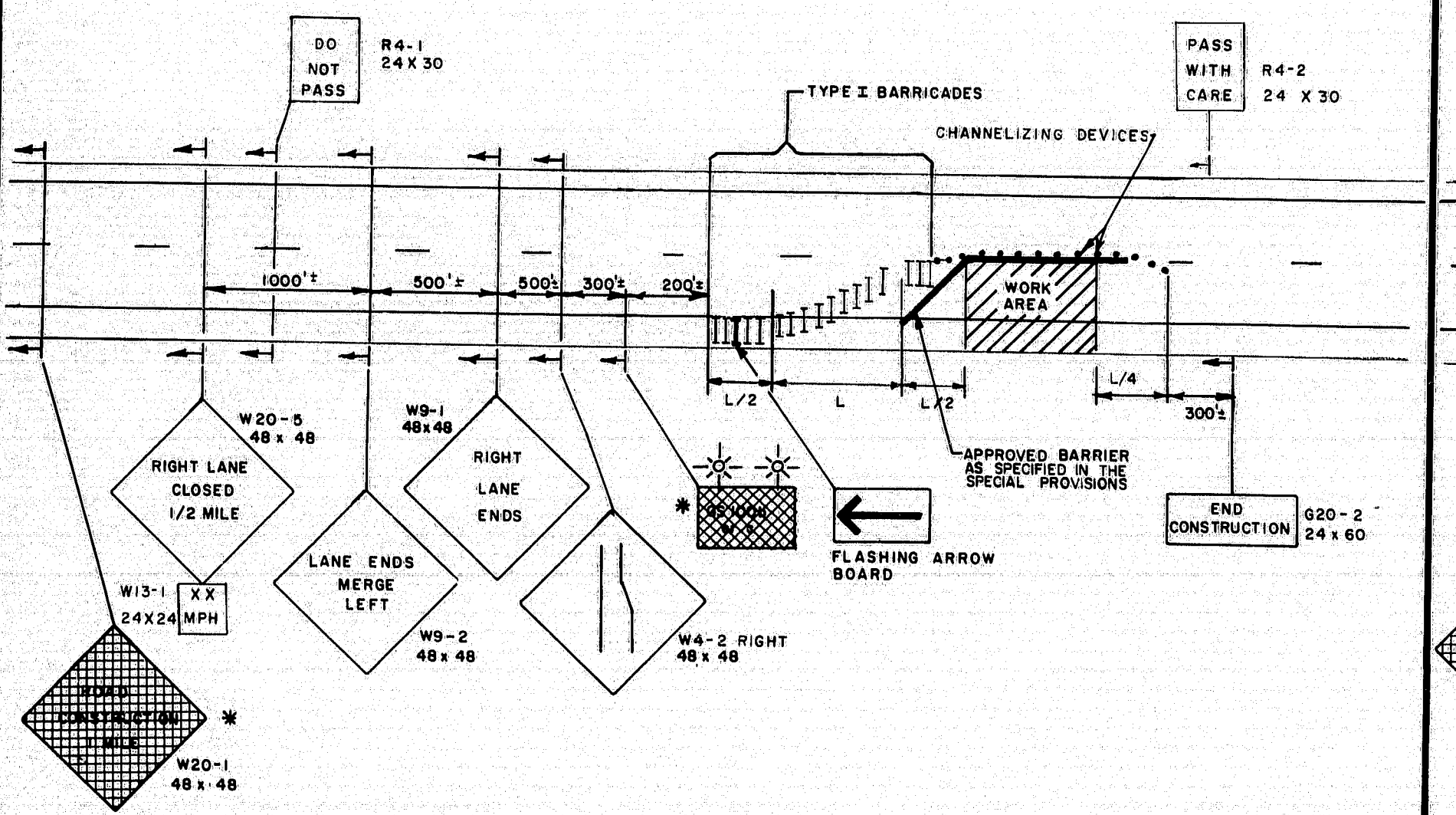
B



SHOULDER WORK - MOBILE

C

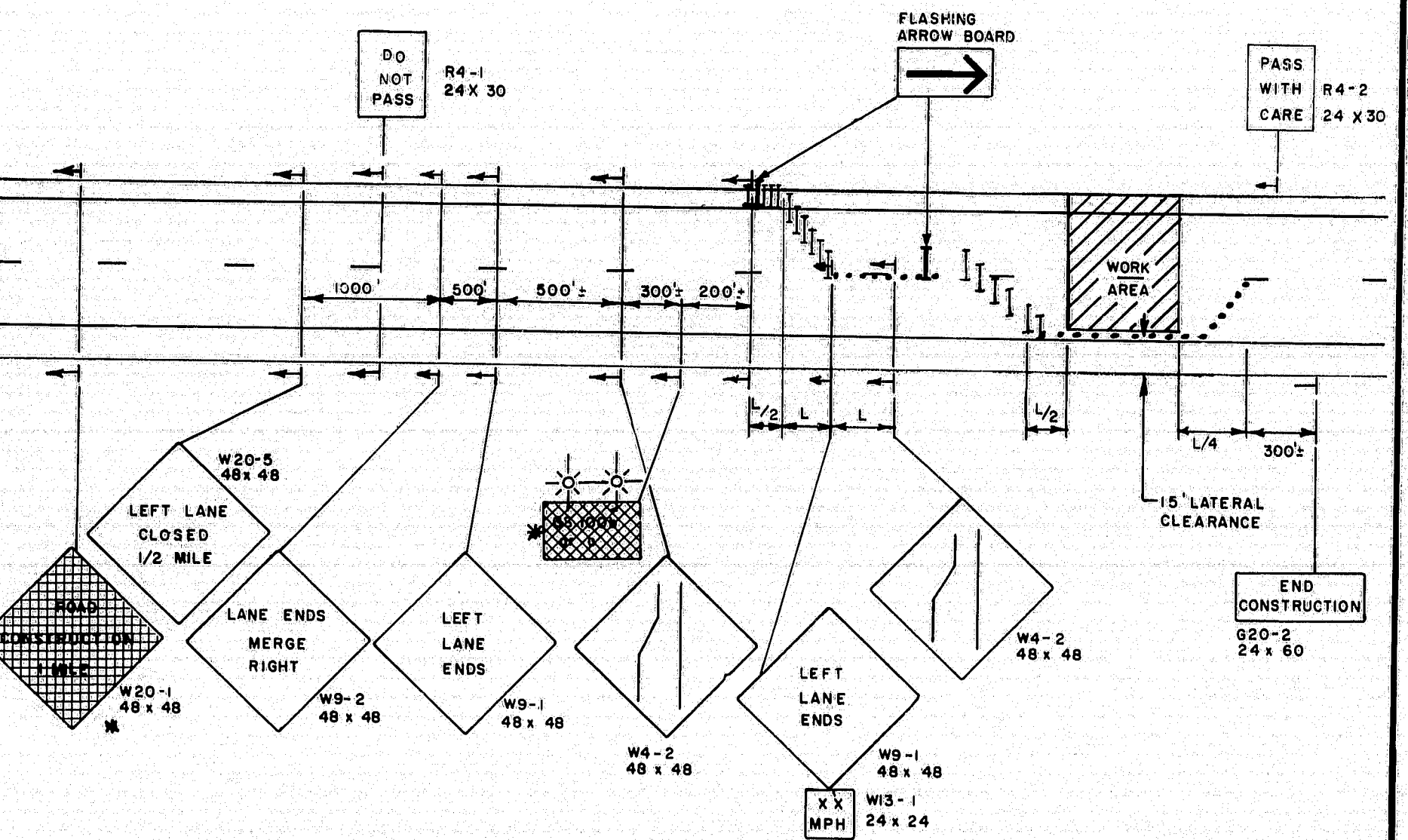
NOTE
* OMIT W20-1 AND GS-100C OR B IF LANE CLOSURE SIGNING ARRAY IS WITHIN PROJECT LIMITS.
ALTER PAVEMENT MARKINGS AS REQUIRED. MAINTAIN 15 FT LATERAL CLEARANCE.
USE SIMILAR SIGNING FOR LEFT LANE CLOSURE.



EXPRESSWAY LANE CLOSURE

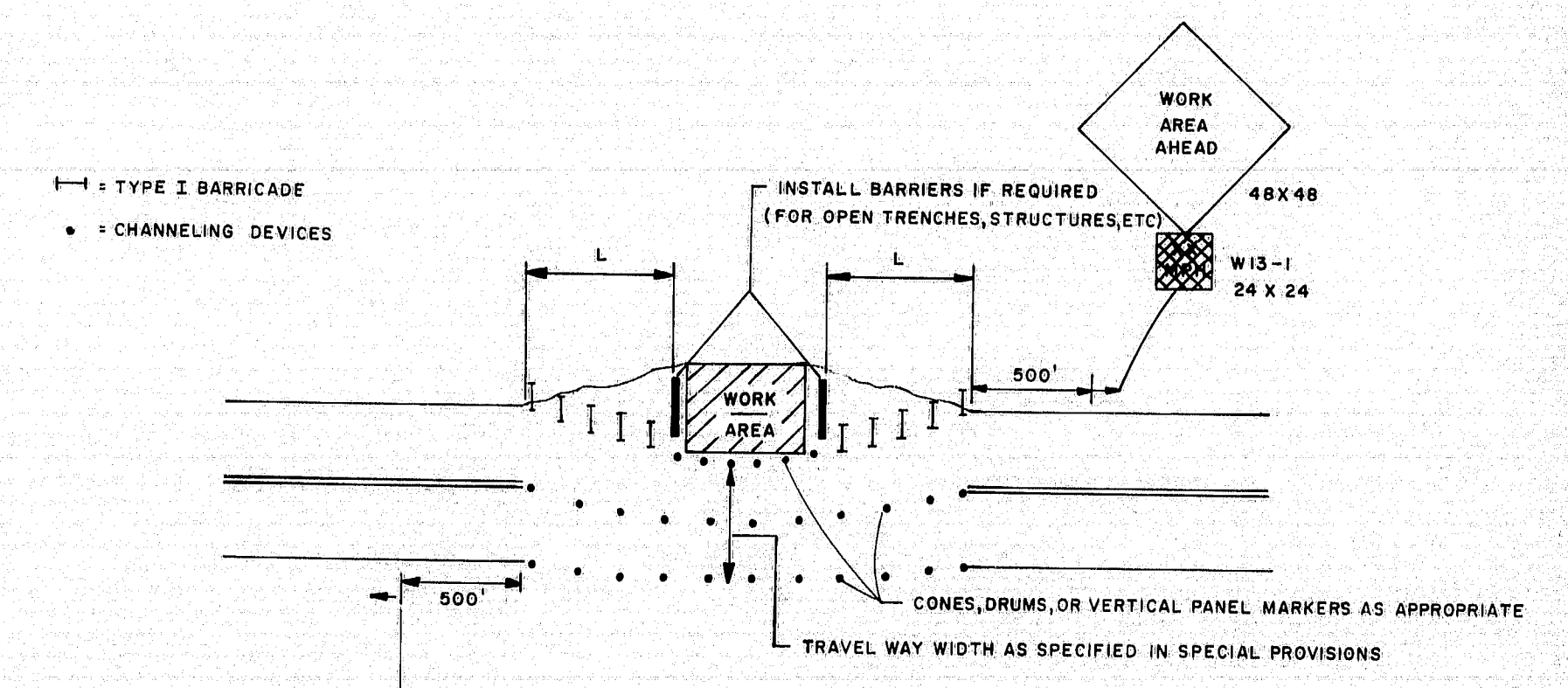
D

NOTE
W20-1 AND GS-100B OR C SHALL BE USED ONLY WHEN THE CLOSURE IS THE ACTUAL CONSTRUCTION PROJECT AND NOT A PART THEREOF.
ALTER PAVEMENT MARKINGS AS NECESSARY.
USE SIMILAR SIGNING FOR RIGHT LANE CLOSURE.



TWO LANE CLOSURE - UTILIZING RIGHT SHOULDER

E



TWO WAY TRAFFIC
MAINTAINED THROUGH WORK AREA

F

REVISIONS

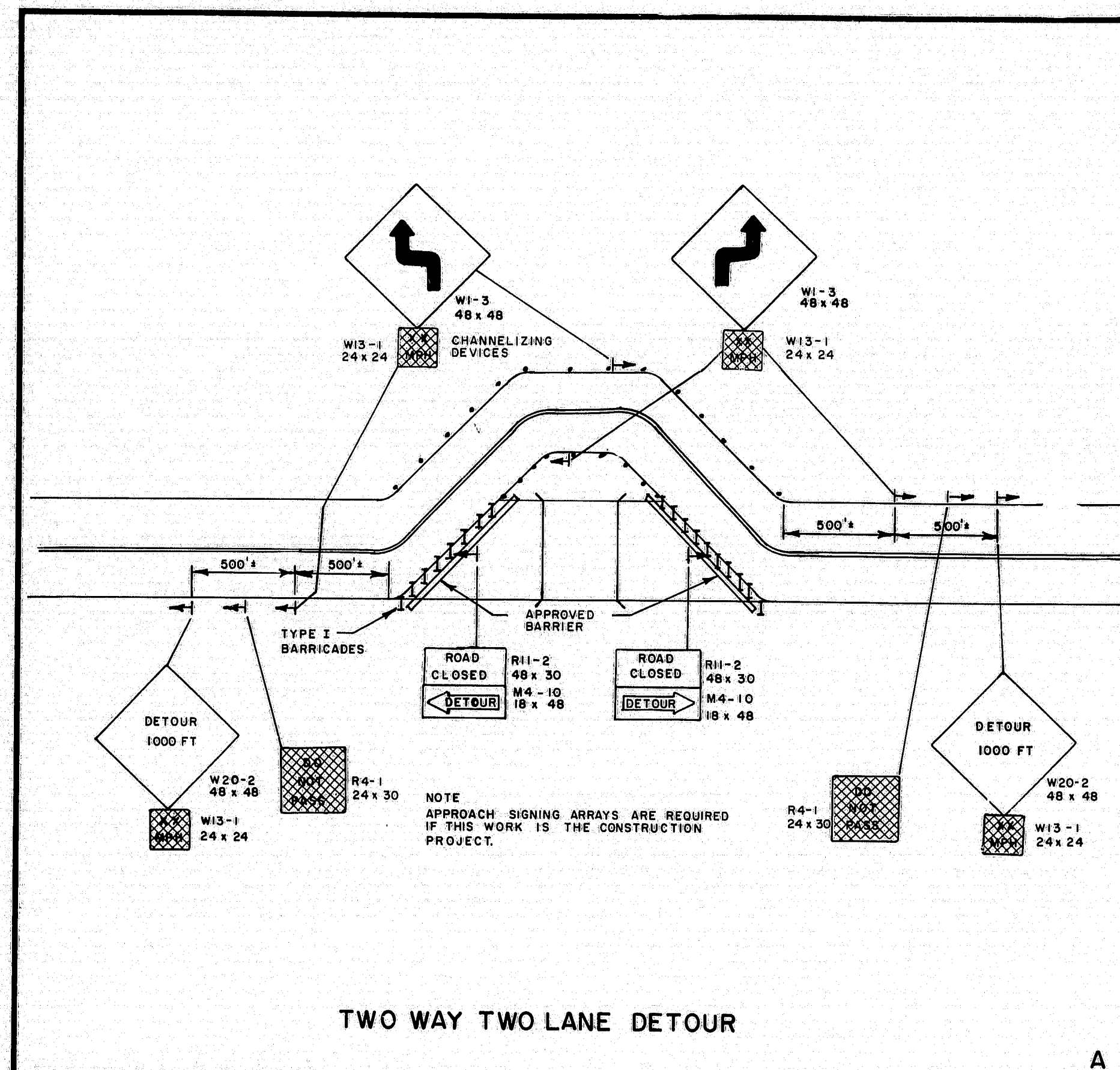
1-28-80	
3-4-80	PLATE "F"
4/3/80 PF	D,E

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

MAINTENANCE
OF
TRAFFIC
IN CONSTRUCTION ZONES

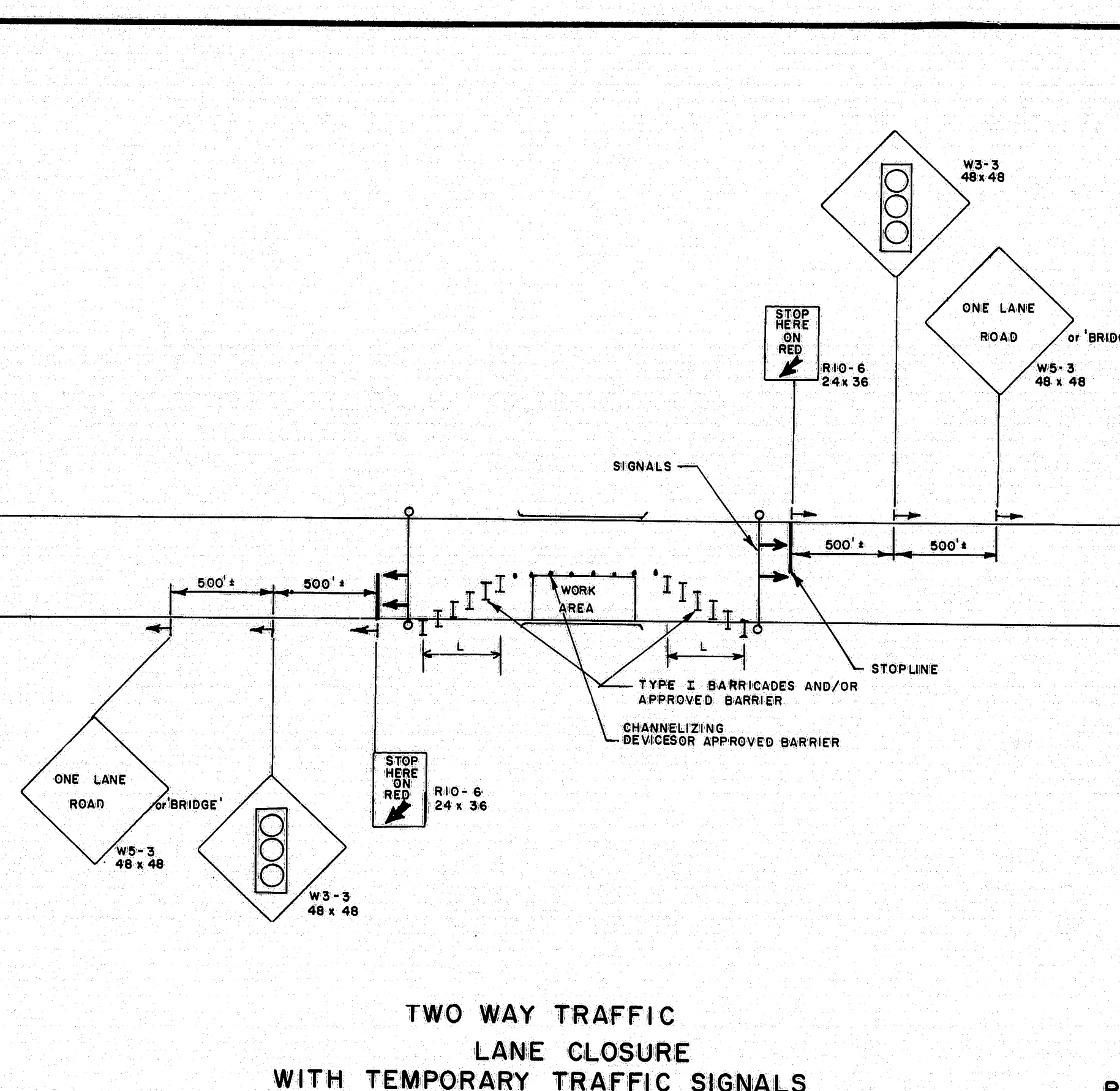
R94-202

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



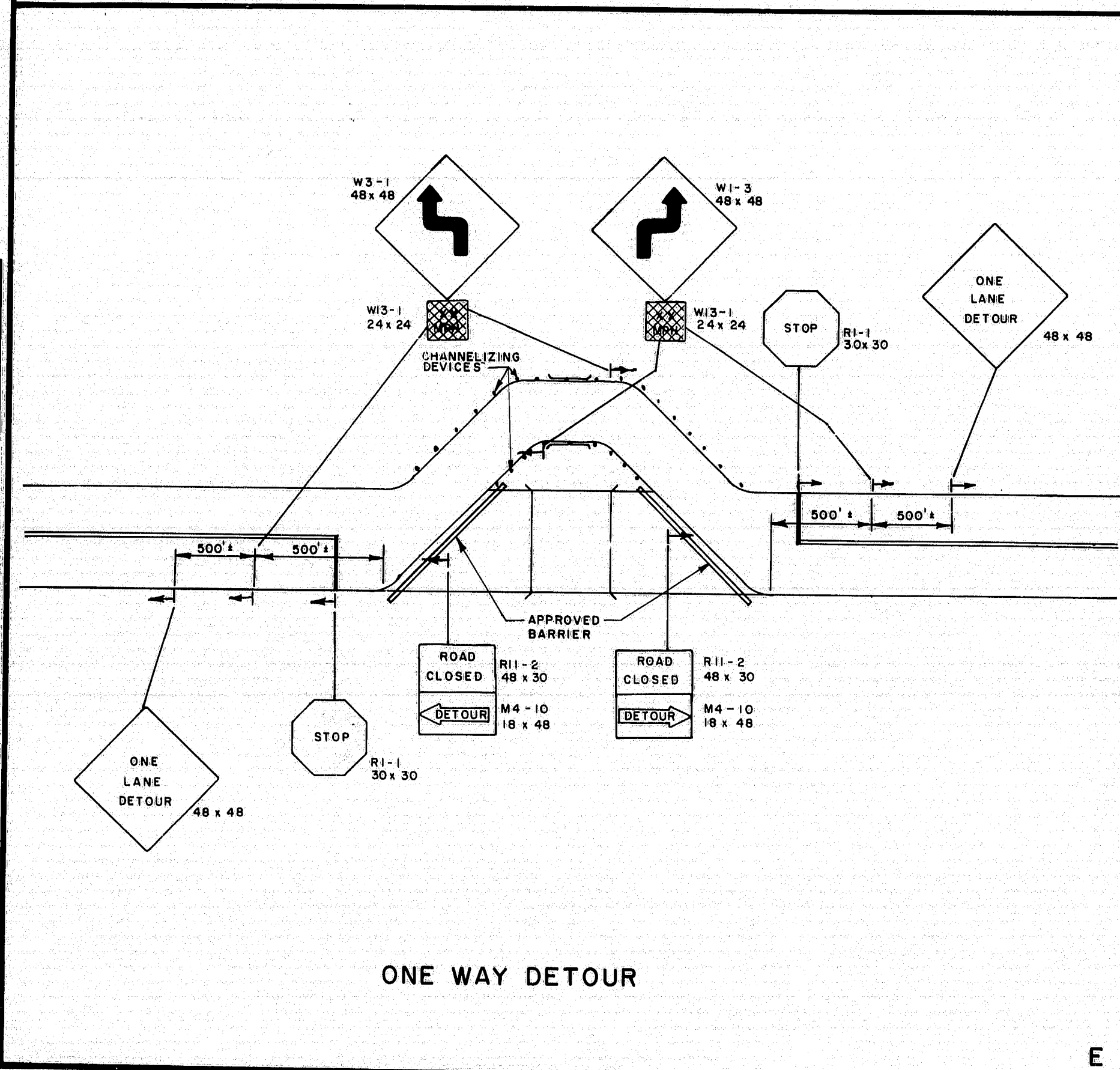
TWO WAY TWO LANE DETOUR

A



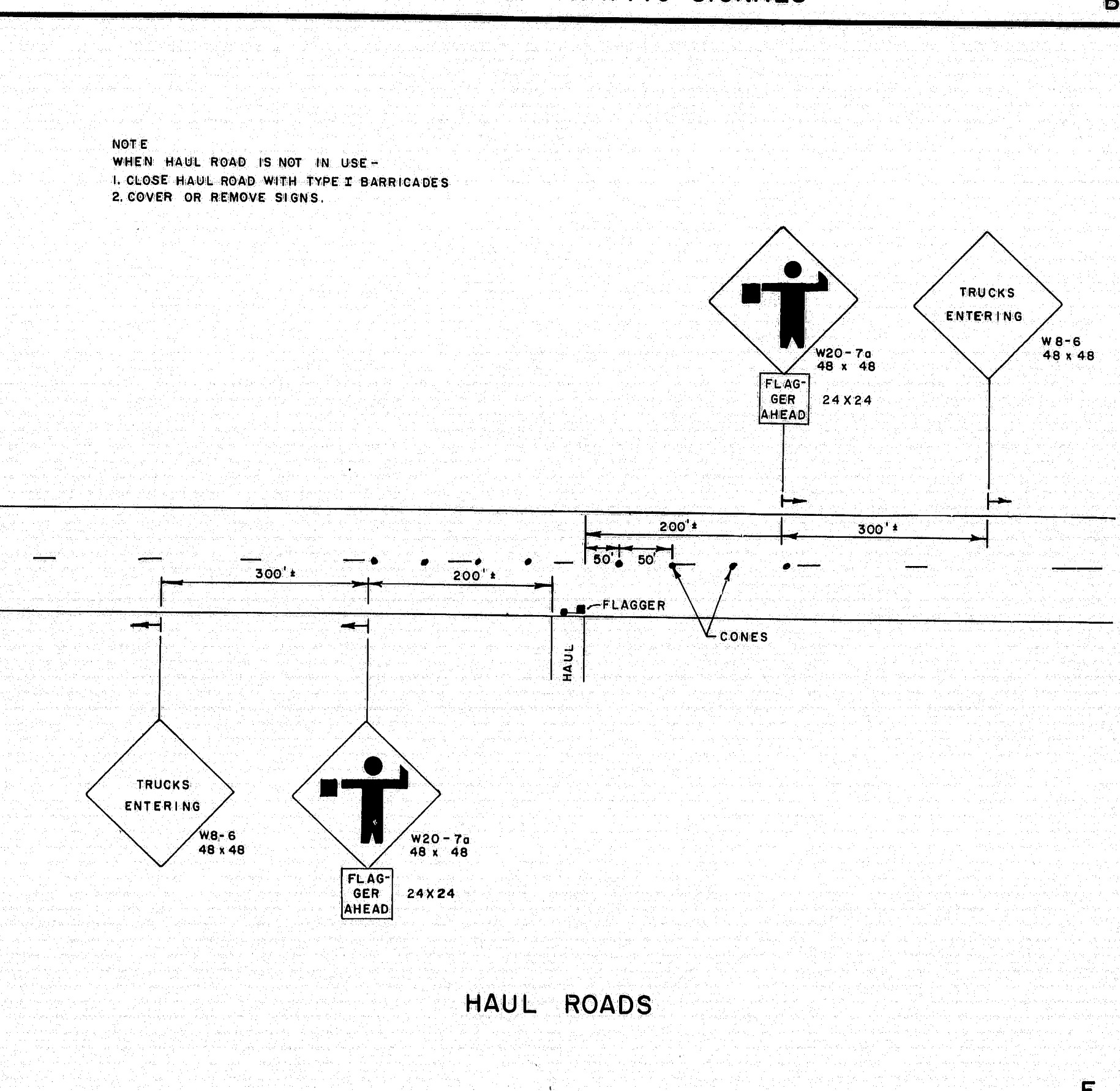
TWO WAY TRAFFIC
LANE CLOSURE
WITH TEMPORARY TRAFFIC SIGNALS

B



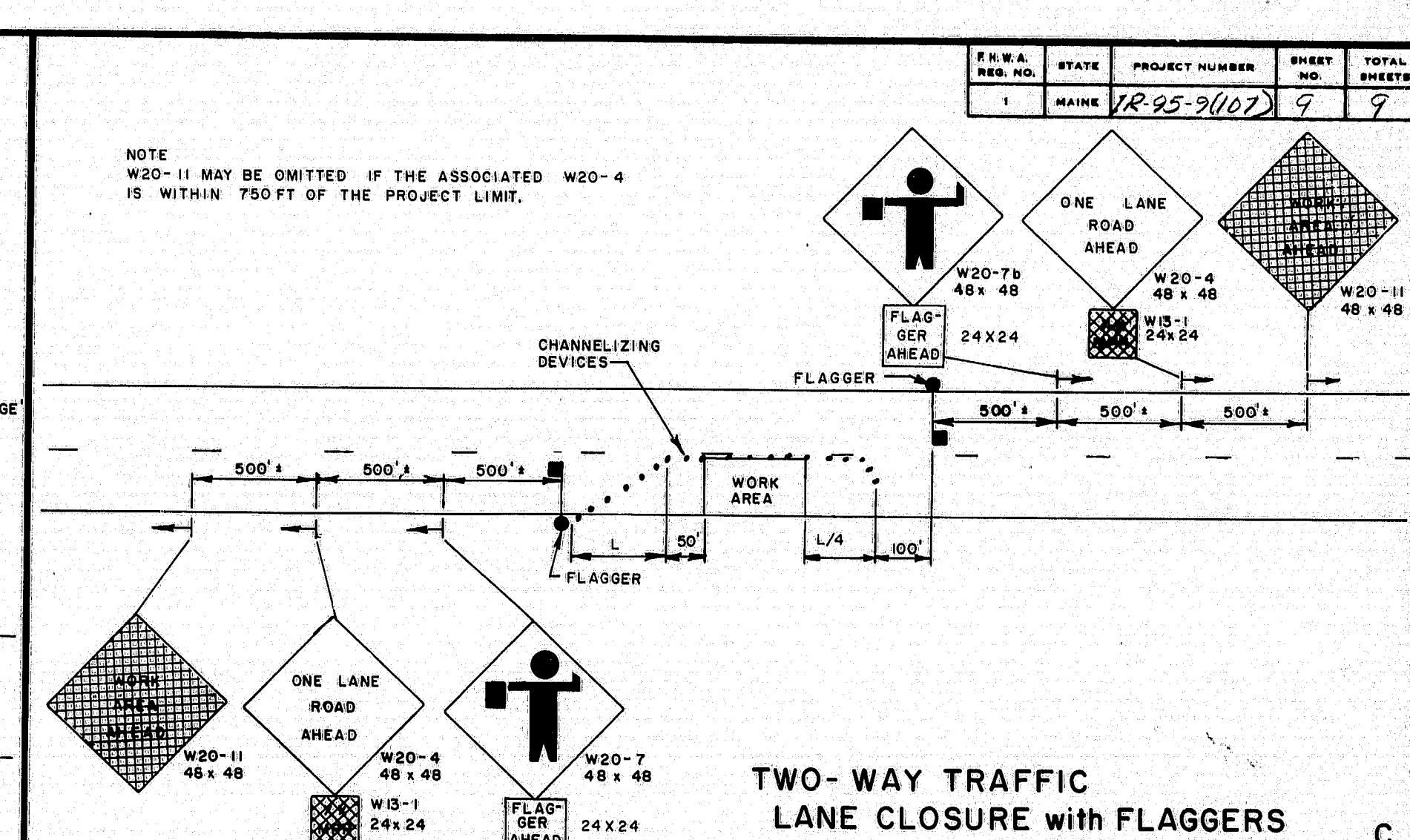
ONE WAY DETOUR

E



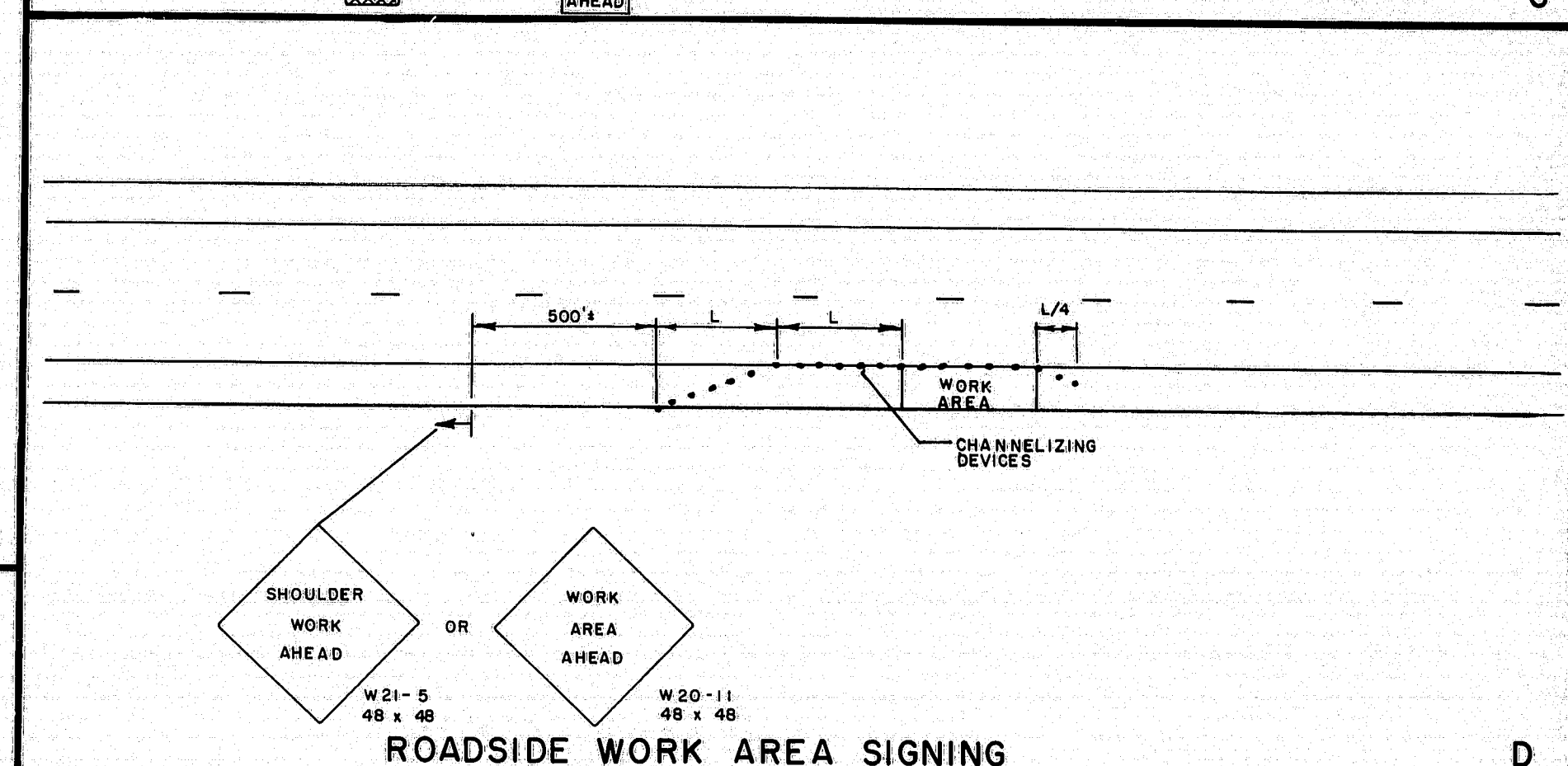
HAUL ROADS

F



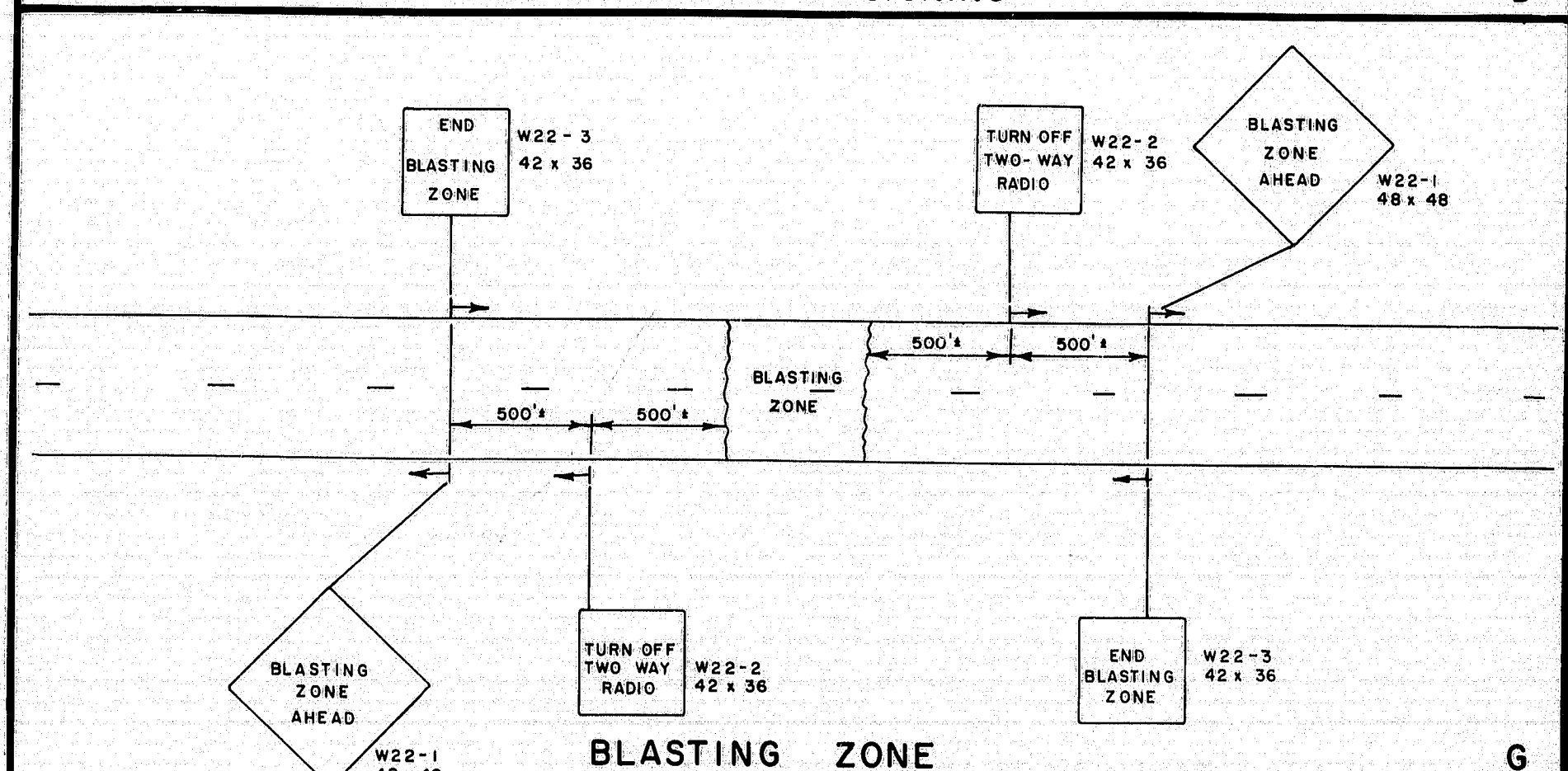
TWO-WAY TRAFFIC
LANE CLOSURE WITH FLAGGERS

C



ROADSIDE WORK AREA SIGNING

D



BLASTING ZONE

G

REVISIONS

4/3/80 PF B, C, D

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

MAINTENANCE
OF
TRAFFIC
IN CONSTRUCTION ZONES

R94-203

SHEET 3 OF 3 AUGUSTA, MAINE

JULY, 1979

Medway

5004 3500

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