

IRG-95-4(49)65  
BRUNSWICK  
FREEPORT

# STATE OF MAINE DEPARTMENT OF TRANSPORTATION



1985

## FREEPORT-BRUNSWICK

CUMBERLAND COUNTY

MAINE FEDERAL AID INTERSTATE

PROJECT NO. IR-IRG-95-4(46)64 & IRG-95-4(49)65

TOTAL LENGTH 7.394 MILES

AN OVERLAY & SAFETY  
IMPROVEMENT PROJECT

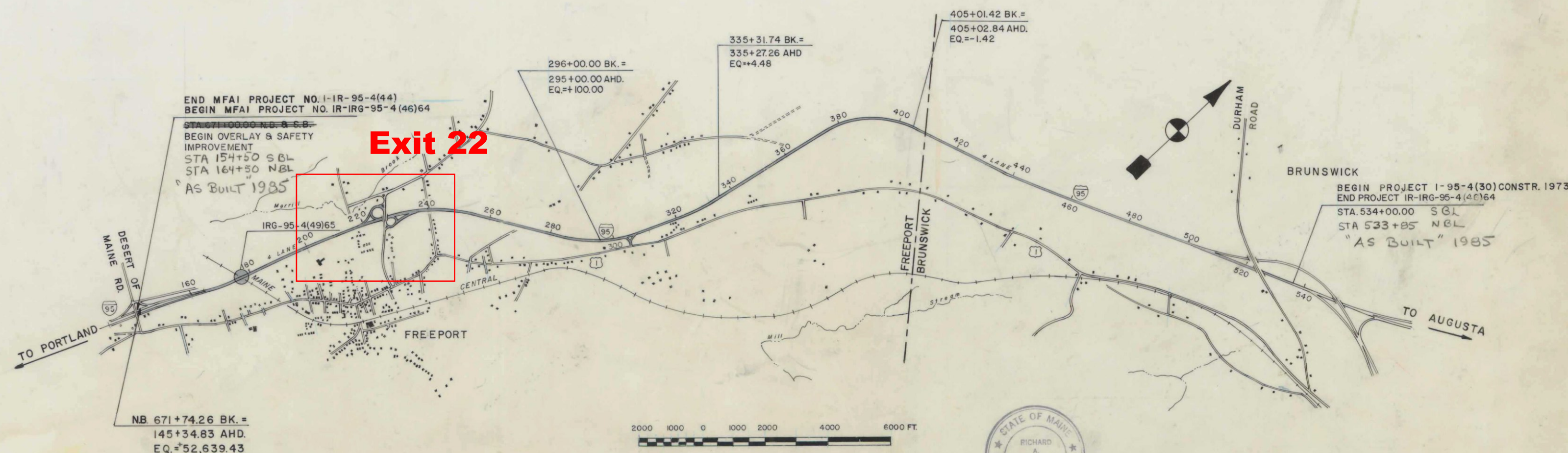
### CONVENTIONAL SIGNS

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

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APPROVED:

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION

*Richard A. Coleman*  
COMMISSIONER

*Richard A. Coleman*  
CHIEF ENGINEER

DATE

SEPT. 4, 1984

SEPT. 4, 1984

"REVISED AS BUILT" 1985 L. NEVINS

UNITED STATES  
DEPARTMENT OF TRANSPORTATION  
FEDERAL HIGHWAY ADMINISTRATION  
REGION 1

APPROVED:

DIVISION ENGINEER DATE

### TRAFFIC DATA

A.A.D.T. 1984	18,330
A.A.D.T. 2004	25,660
D.H.V.	3,592
T. (%)	9
D. (%)	55
V.	N.A.
P.S.D. (%)	N.A.
18 KIPS	N.A.

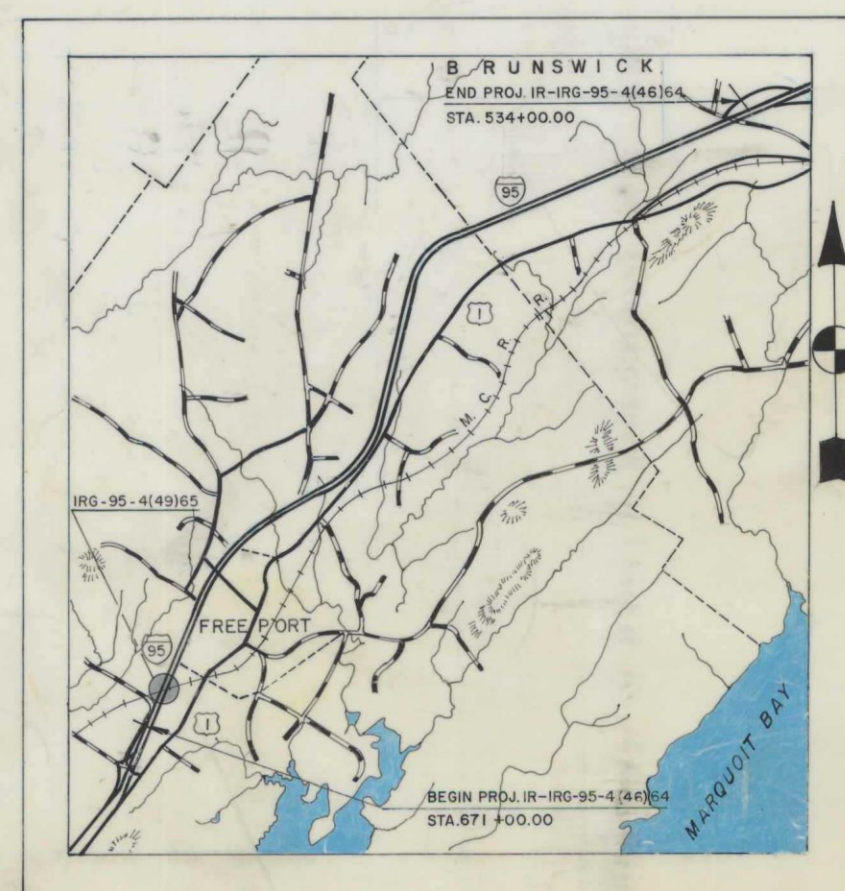
### NOTE

All work contemplated under this contract to 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.

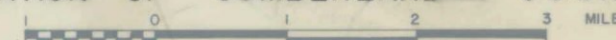


*Carl J. Mellea*  
CARL J. MELLEA

HOWARD NEEDLES TAMMEN & BERGENDOFF  
ARCHITECTS ENGINEERS PLANNERS  
BOSTON, MASSACHUSETTS



A PORTION OF CUMBERLAND COUNTY



FREEPORT - BRUNSWICK



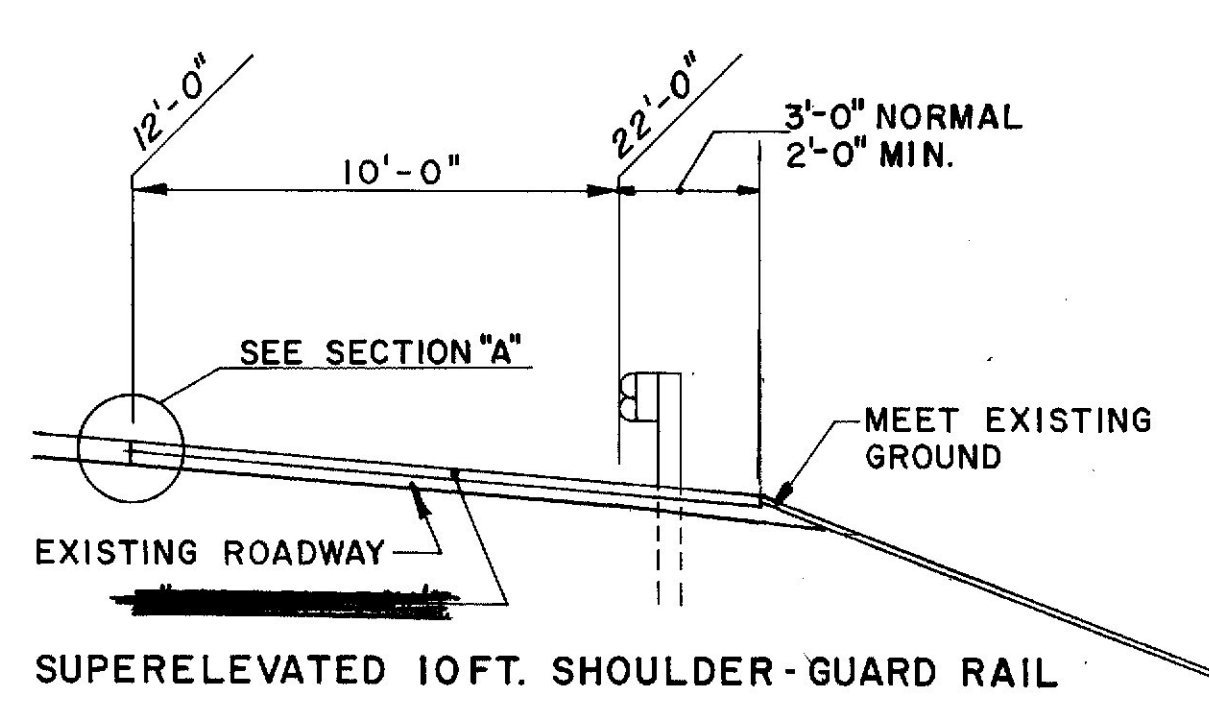
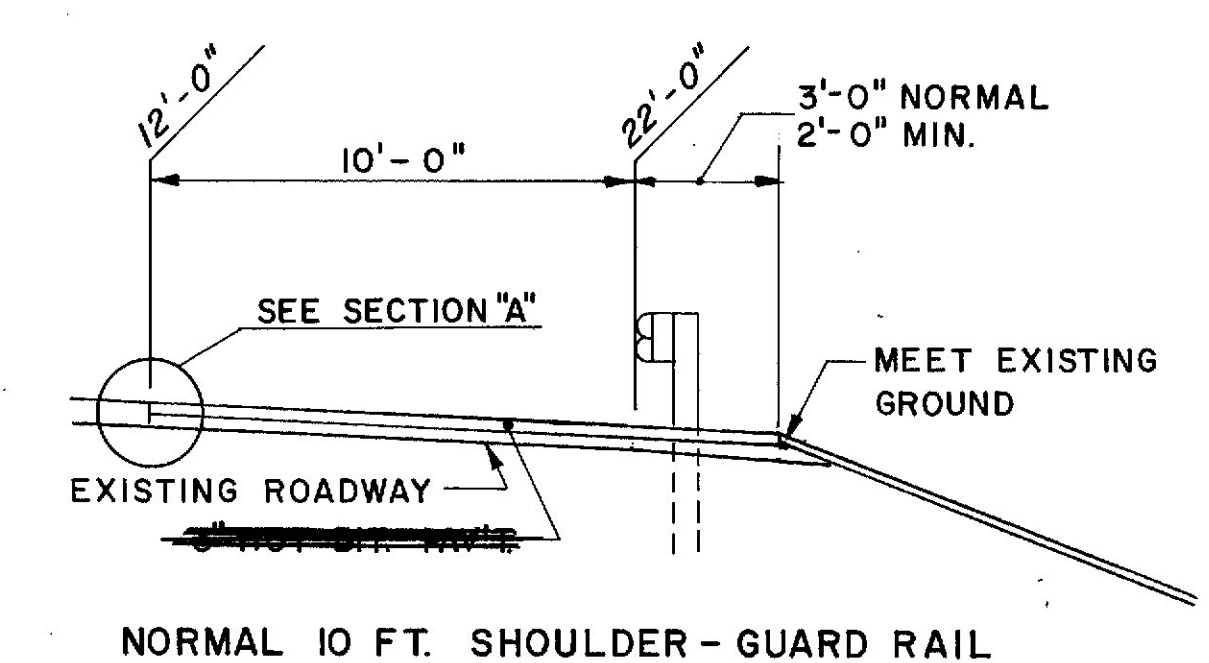
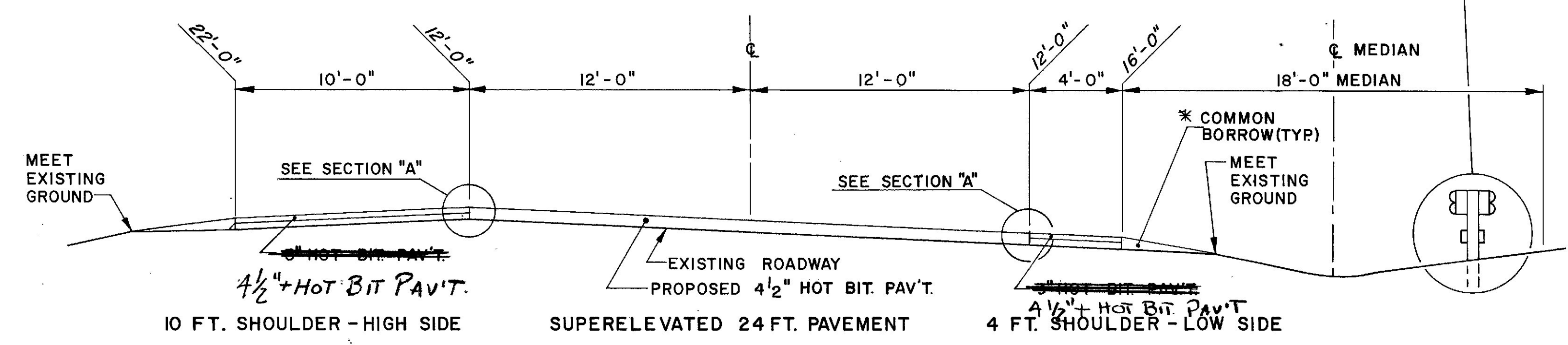
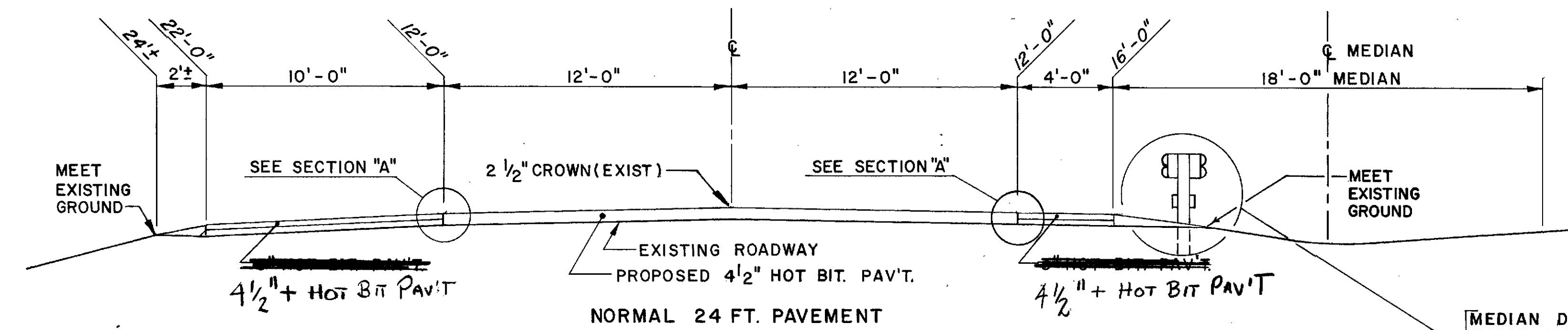
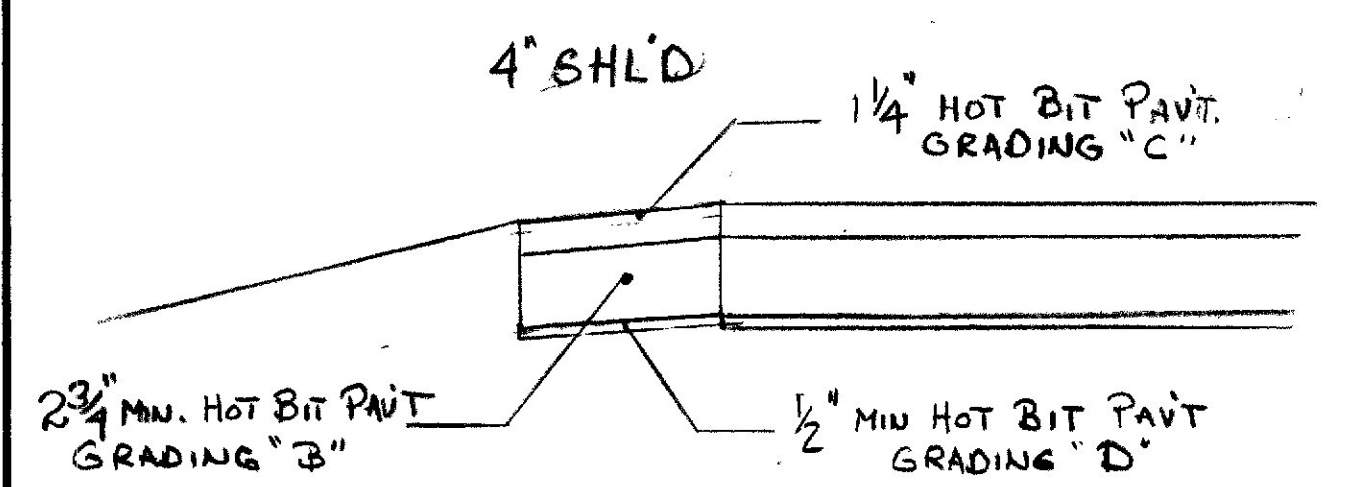
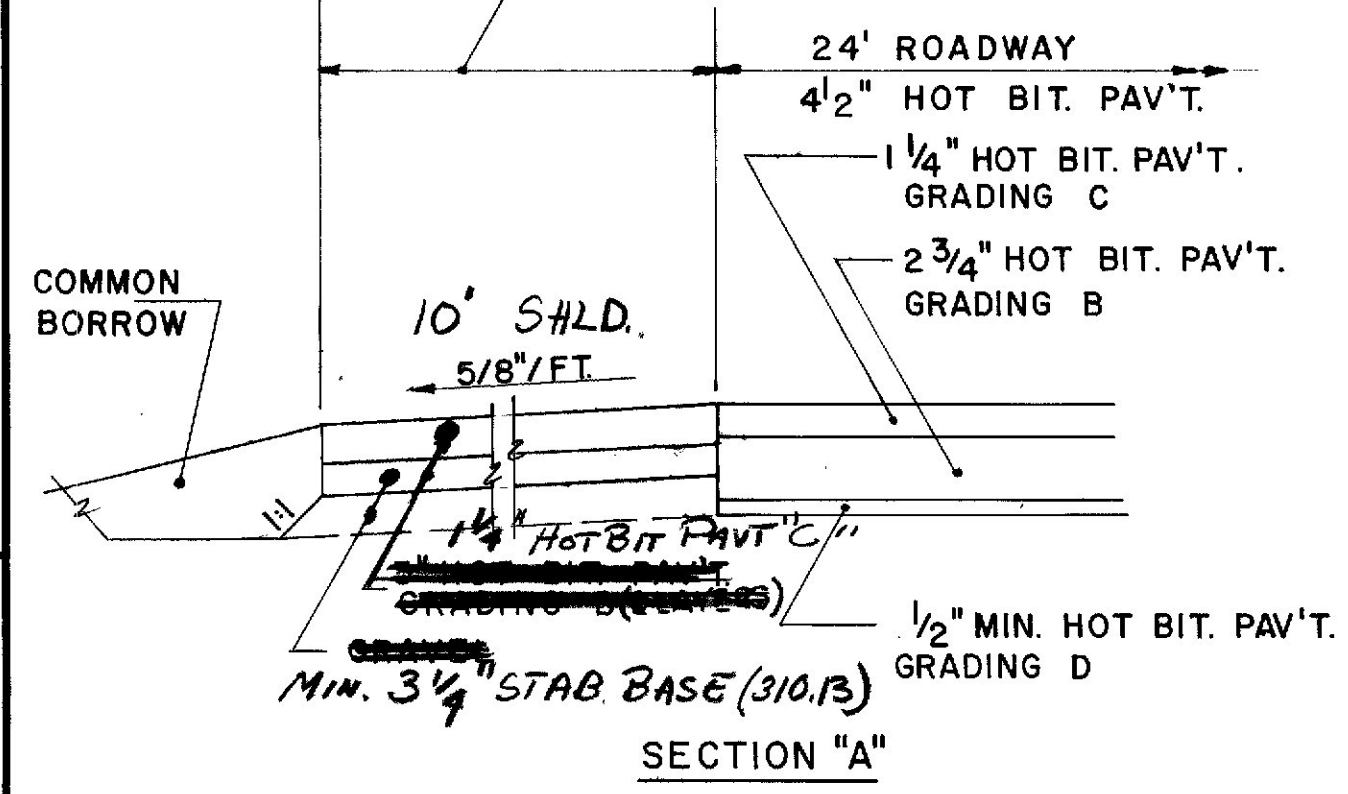
# 4 1/2" HOT BITUMINOUS PAVEMENT

F.H.W.A.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	IR-1R6-95-464	2	45

"AS BUILT" 1985

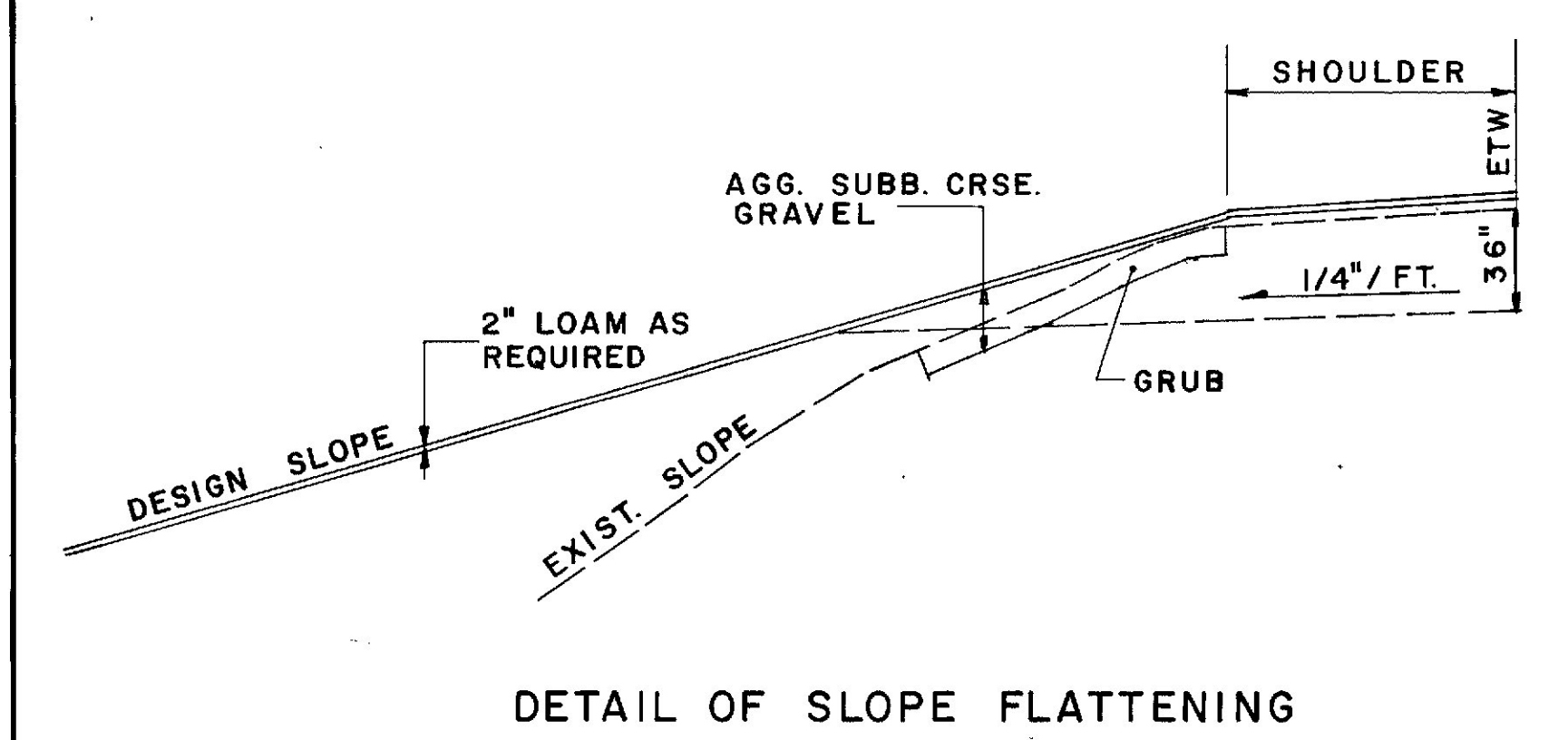
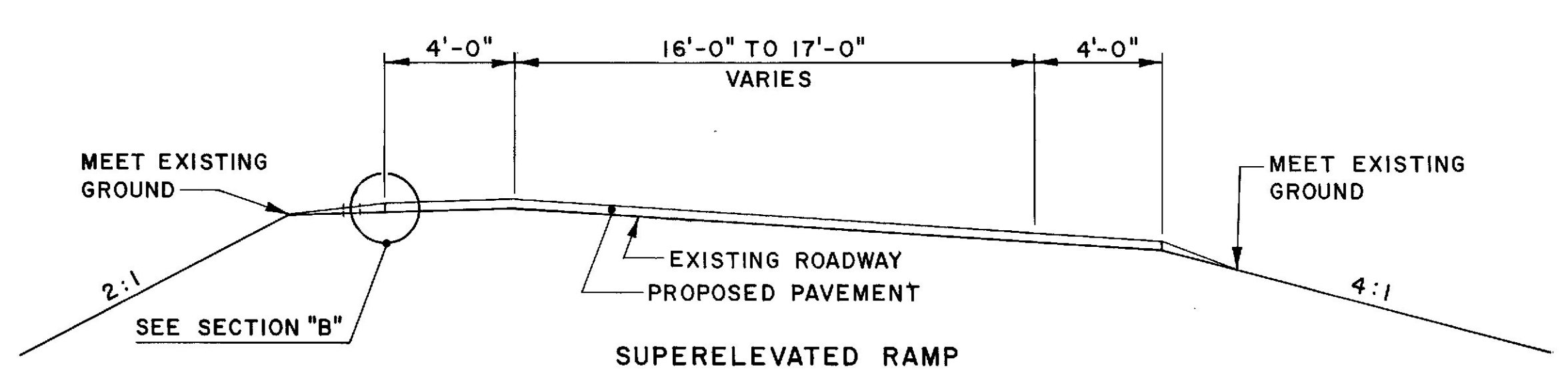
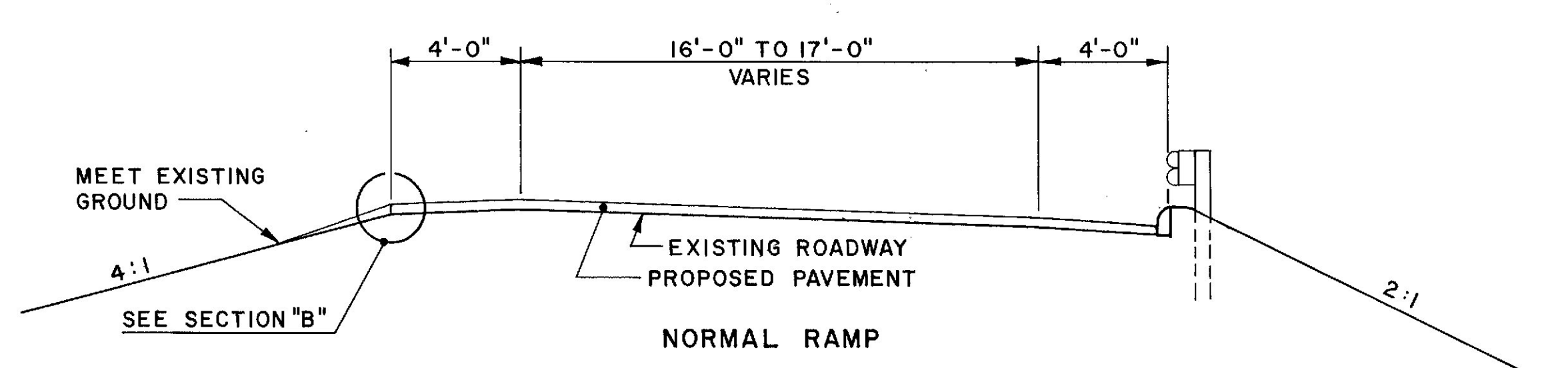
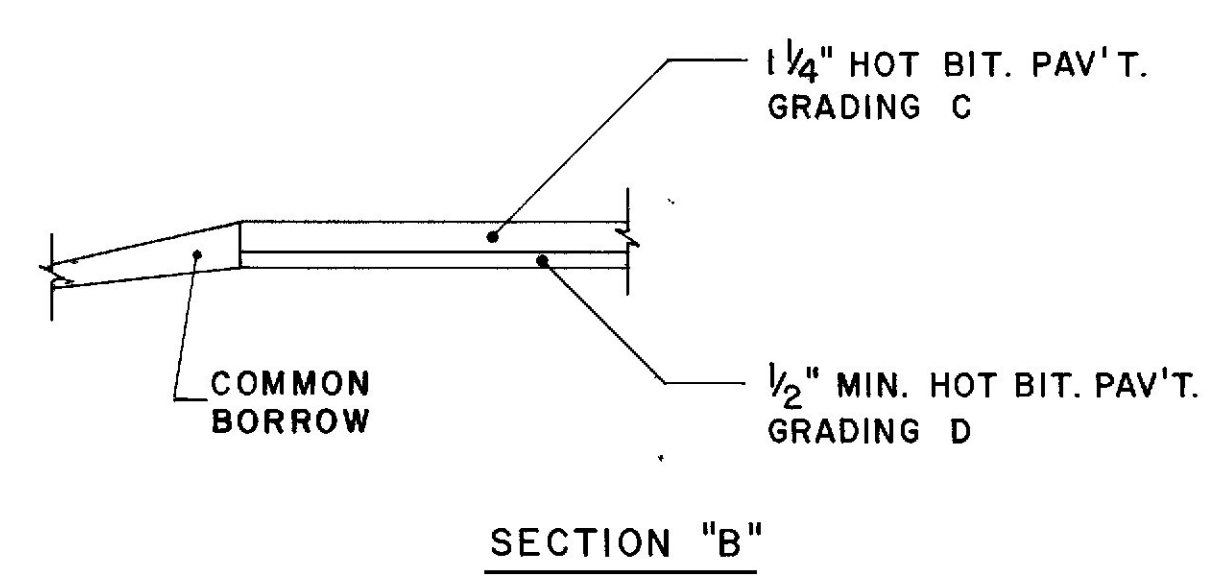
SHOULDER SEE EWD #2

PROVISIONS ITEMS 203.30 & 203.40



\*THIS IS ANTICIPATED TO BE THE MOST COMMON SITUATION, HOWEVER, IN AREAS DEEMED APPROPRIATE BY THE ENGINEER, THE IMMEDIATE INSLOPE AREA ADJACENT TO THE EDGE OF PROPOSED OVERLAY MAY BE ROTOTILLED, REGRADED, LOAMED AS REQUIRED, SEEDED AND MULCHED.

# 1 3/4" HOT BITUMINOUS PAVEMENT



"REVISED AS BUILT" 1985 J. NEVINS

NO.	REVISION	BY	DATE	IN CHARGE OF
		MADE		
		TRACED		
		CHECKED		

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

SHEET OF AUGUSTA, MAINE



## ESTIMATED QUANTITIES

ITEM NO.	DESCRIPTION	QUANTITY	UNIT
201.11	Clearing	1	Acre
201.23	Removing Single Tree Top Only	14	Each
202.11	Removing Portland Cement Concrete Pavement	380	S.Y.
202.15	Removing Manholes or Catch Basins	2	Each
203.24	Common Borrow	9200	C.Y.
203.25	Granular Borrow	200	C.Y.
203.39	Preparation of Existing Shoulders	115,250	S.Y.
203.40	New Shoulder Aggregate	115,250	S.Y.
206.00	Str. Earth Excavation-Drainage & Minor Str. Below Grade	100	C.Y.
304.103	App. Subbase Course-Gravel Truck Measure	650	C.Y.
306.50	Breaking and Sealing P.C.C. Pavement	208,215	S.Y.
403.07	Hot Bituminous Pavement Grading B	52,445	Ton
403.08	Hot Bituminous Pavement Grading C	16,445	Ton
403.10	Hot Bituminous Pavement Grading D	15,000	Ton
410.15	Emulsified Asphalt Applied	23,250	Gal.
603.158	12 Inch Culvert Pipe Option II	24	L.F.
603.172	18 Inch Bit. Coated Cor. Metal Pipe	10	L.F.
603.175	18 Inch Reinf. Concrete Pipe Class III	56	L.F.
603.178	18 Inch Culvert Pipe Option II	18	L.F.
603.193	24 Inch Reinf. Concrete Pipe Class III	368	L.F.
603.205	30 Inch Reinf. Concrete Pipe Class III	262	L.F.
603.208	30 Inch Culvert Pipe Option II	94	L.F.
603.215	36 Inch Reinf. Concrete Pipe Class III	104	L.F.
603.225	42 Inch Reinf. Concrete Pipe Class III	36	L.F.
603.230	Remove and Relay 30" Metal Pipe	12	L.F.
603.234	Remove and Relay 24" Concrete Pipe	16	L.F.
603.236	Remove and Relay 36" Concrete Pipe	12	L.F.
604.09	Catch Basin Type B-1	12	Each
604.15	Manhole	4	Each
604.161	Altering Catch Basin	90	Each
604.18	Adjusting Manholes and Catch Basins to Grade	3	Each
604.23	Steps	31	Each
605.09	6" Underdrain Type B	550	L.F.
605.10	6" Underdrain Outlet	100	L.F.
606.17	Guard Rail Type 3b-Single Rail	9,350	L.F.
606.178	Guard Rail - Beam	100	L.F.
606.265	Terminal End-Single Rail-Galvanized Steel	12	Each
606.35	Guard Rail Delineator Post	32	Each
606.351	Guard Rail Delineator Post Remove and Reset	9	Each
606.364	Guard Rail Remove, Modify and Reset Type 3b	4,100	L.F.
606.367	Replace Unusable Existing Guard Rail Post	50	Each
606.503	Guard Rail Type 3-Single Rail with Rub Rail Remove, Modify & Reset	3,000	L.F.
606.543	Guard Rail with Rub Rail Remove, Modify and Reset	37,500	L.F.
606.751	Widen Shoulder for Breakaway Cable Terminal	20	Each
606.77	Breakaway Cable Terminal	20	Each
609.38	Reset Curb Type I	210	L.F.
610.08	Plain Riprap	210	C.Y.
615.07	Loam	560	C.Y.
616.03	Sodding	400	S.Y.
617.09	Erosion Control Mesh	200	S.Y.
618.14	Seeding Method No 2	430	Unit
619.12	Mulch	430	unit
626.112	Precast Concrete Junction Box	14	Each
626.22	Non-Metallic Conduit	4,000	L.F.
626.31	18 inch Foundation	2	Each
626.32	24 inch Foundation	20	Each
626.33	30 inch Foundation	9	Each
626.36	Remove or Modify Concrete Foundation	20	Each
627.611	6 Inch Solid White Pavement Marking Line	16,750	L.F.
627.621	6 Inch Broken White Pavement Marking Line	11,750	L.F.
627.631	6 Inch Solid Yellow Pavement Marking Line	15,750	L.F.
627.681	Temporary 6 Inch Painted Pavement Marking Line White or Yellow	444,000	L.F.
627.691	Temporary 6 Inch Plastic Pavement Marking Line Yellow or White	5,300	L.F.
629.05	Hand Labor, Straight Time	200	M.H.
631.12	All Purpose Excavator (Including Operator)	85	Hrs.

\* UNDETERMINED LOCATION

\*\* TO BE A PORTION OF THE TOTAL CONTRACT

## ESTIMATED QUANTITIES

ITEM NO.	DESCRIPTION	QUANTITY	UNIT
631.14	Grader (Including Operator)	25	Hrs.
631.172	Truck-Large (Including Operator)	85	Hrs.
631.22	Front End Loader (Including Operator)	85	Hrs.
631.29	Rototiller (Including Operator)	30	Hrs.
631.32	Culvert Cleaner (Including Operator)	125	Hrs.
634.160	Highway Lighting	1	L.S.
634.210	Conventional Light Standard	9	Each
639.19	Field Office Type B	1	Each
639.22	Testing Facilities Bituminous Mixes	1	L.S.
644.31	Glare Screen	1700	L.F.
645.118	Reinstall Pole	3	Each
645.103	Demount Guide Sign	39	Each
645.106	Demount Regu. Warn Confirm & Rte. Marker Assem Sign	52	Each
645.108	Demount Pole	48	Each
645.113	Reinstall Existing Guide Sign	4	Each
645.116	Reinstall Regu. Warn Confirm & Rte. Marker Assem Sign	20	Each
645.141	Special Work No. 1	1	L.S.
645.161	Breakaway Device Single Pole	20	Each
645.251	Roadside Guide Signs-Type I	168	S.F.
645.271	Regu. Warn Confirm & Rte. Marker Assem Sign Type I	40	S.F.
645.289	Steel H-Beam Poles	4100	LBS
645.291	Roadside Guide Signs Type II	323	S.F.
645.292	Regu. Warn Confirm & Rte. Marker Assem Sign Type II	215	S.F.
652.30	Flashing Arrow Board	2	Each
652.31	Type I Barricade	170	Each
652.33	Drum	40	Each
652.34	Cone	40	Each
652.35	Construction Signs	1250	S.F.
652.36	Maintenance of Traffic Control Devices	200	C.D.
652.38	Flagger	2,500	M.H.
656.50	Baled Hay, In Place	10	Each
656.51	Sand Bags in Place	10	Each
659.10	Mobilization	1	L.S.
660.21	On-the-Job Training	2000	M.H.
REHABILITATION OF BRIDGE ITEMS			
602.107	Removal of Existing Bituminous Pavement	1	L.S.
602.108	Removal of Existing Concrete Curb and Sidewalks	1	L.S.
603.07	Hot Bituminous Pavement Grading B	55	Ton
603.08	Hot Bituminous Pavement Grading C	35	Ton
606.36	Structural Concrete Modifications	1	L.S.
603.12	Reinforcing Steel Fab. & Delivered	1600	LBS
603.13	Reinforcing Steel Placing	1600	LBS
607.092	Aluminum Bridge Railing, 2 Bar	131	L.F.
608.10	Membrane Waterproofing	400	S.Y.
615.21	Protective Coating for Concrete Surfaces	1	L.S.
618.30	Rehabilitation of Concrete 316b to Reinf. Steel	200	S.F.
618.31	Rehabilitation of Concrete 316b to Below Reinf. Steel	30	S.F.
626.30	Temporary Concrete Barrier, Type I	400	L.F.
626.40	Resetting Temporary Concrete Barrier, Type I	800	L.F.
603.132	Vertical Bridge Curb Type IB	139	L.F.
627.611	6 Inch Solid White Pavement Marking Line	2250	L.F.
627.621	6 Inch Broken White Pavement Marking Line	2250	L.F.
627.631	6 Inch Solid Yellow Pavement Marking Line	2250	L.F.
627.67	Removing Pavement Markings	2500	S.F.
627.691	Temp. 6" Plastic Pavement Marking Line Yellow or White	13950	L.F.
652.30	Flashing Arrow Board	2	Each
652.31	Type I Barricade	80	Each
652.33	Drum	10	Each
652.35	Construction Signs	650	S.F.
652.38	Flagger	100	M.H.
639.20	Field Office Type C	1	Each
659.10	Mobilization	1	L.S.

A REVISED OCTOBER 9, 1989

## SUMMARY OF EXCAVATION AND BORROW

## COMPUTATION OF COMMON BORROW FOR ESTIMATE

Total Fill (From Cross Sections)	8,000 C.Y.
Total Available Non-Rock Excavation	0 x 0.85 = 0
Total Available Rock Excavation	0 x 1.33 = 0
Total Available Structural Rock Excavation	0 x 1.33 = 0
Total Available Excavation	0
Total Fill Minus Total Available Excess Excavation	8,000
Common Borrow	8,000 x 1.15 = 9,200 C.Y.

## GENERAL NOTES:

## 1. Guard Rail-

A. All Guard Rail updated on previous projects shall be removed, modified and reset in the same location.  
B. The leading ends of all guard rail, both existing and proposed, shall be modified to the detail shown for breakaway cable terminals.

C. The guard rail not being removed and reset shall be removed and stacked for pick-up by maintenance forces in areas approved by the engineer. No separate payment will be made for this work.

2. Miscellaneous work called for on the plan or directed by the Engineer, such as spot regrading or gore safety improvements shall be paid for under common borrow, loam, seed, mulch, hourly items, or other appropriate contract items.

3. Loam shall be placed as shown on the plans or as directed by the Engineer. Loam depths are 2" and considered nominal.

4. Loamed areas shall be seeded with method #2 and mulched unless otherwise directed by the engineer.

5. Where hot bituminous pavement grading 'C' is to meet existing pavement a butt joint will be required. See pavement transition details. Cutting of the joint and removal and disposal of the existing pavement will be incidental to item 403.

6. Hot Bituminous Pavement grading 'D' shall be placed along the exposed joints at the interchanges on a 12:1 taper to maintain Rump traffic. Maintenance and removal of these tapers shall be considered incidental to item 403.

7. No slope or guard rail work shall be done on or adjacent to the lane carrying traffic.

8. All truck and equipment routing shall be subject to prior approval by the Engineer.

9. The Contractor may, if necessary, construct cross-overs for his equipment, subject to prior approval of the location and design by the Engineer. All work, material and equipment required for design, construction, maintenance, signing and removal of the crossover will be considered incidental to item 403 including restoration to existing ground.

10. All waste material shall be used to fulfill the common borrow requirements unless otherwise directed by the Engineer. Excess waste material will be disposed of off the project in waste areas approved by the Engineer.

11. Any damage to slopes caused by the contractor's equipment or operations shall be repaired to the satisfaction of the Engineer. All work, equipment, and material required to make repairs shall be at the contractor's expense. Repair work if necessary shall not be done on or adjacent to the lane carrying traffic.

12. The existing wooden poles, lights and wires will be removed by Central Maine Power when and where directed by the Engineer.

13. The Utilities involved in this contract are: Central Maine Power, New England Telephone Company. All Utility facilities shall be adjusted by the respective Utilities unless otherwise noted.

14. Unless otherwise shown on the plans or directed by the Engineer, the inlet and outlet of all culvert extensions less than 24" diameter shall be soded. 24" and larger culverts shall have sod and riprap placed at each.

15. The actual location for ditch protection items shall be determined in the field by the Engineer.

16. No existing drainage shall be abandoned or removed unless shown on the plans or approved by the Engineer.

17. Where noted, existing catch basins shall be removed and pipe plugged with mortar as directed by the engineer. No separate payment shall be made for this work.

18. Estimated structural excavation required is 500 C.Y.

## 19. Clearing and Single Trees

A. As shown on the plans it is intended to clear wooded areas and single trees from the immediate roadside area, median and ramp gore areas. The intended roadside clear area is 40' from the edge of pavement or 5' beyond the toe of slope whichever governs. These distances may be decreased when trees or wooded areas are on back slopes and increased when on the outside of curves as directed by the Engineer. All remaining stumps shall be left such that they are no greater than 3" above the ground.

B. The limits of clearing shown on the plans are for estimating only. The actual limits for payment shall be established in the field by the Engineer.

20. The limits of "ditch and grade to drain" shown on the plans are for estimating only. The actual limits shall be established in the field by the Engineer. Payment for this work shall be made under Loam, Seeding and Mulch as required and the appropriate hourly rental items.

21. Removal of existing culverts, headwalls and concrete collars is incidental to the various drainage items and no separate payment will be made.

22. As noted on the plans it is intended to flatten certain fill slope areas. This work shall consist of removing the existing guard rail, flattening the existing slope to 4:1, loam, seeding and mulching, gravel clearing if necessary, and extension of existing culverts as required.

Payment for any necessary grubbing will be made under the appropriate hourly rental items.

23. Slopes on the outside edge of the road and the median shall be filled and graded to match the new pavement. These areas will be seeded with Method #2 and mulched unless otherwise directed by the Engineer.

24. Existing culverts on this project shall be cleaned as directed by the Engineer. Payment will be made under item 631.32 Culvert Cleaner (incl. Op.)

25. If foundation material is required under culverts, it shall meet the requirements for granular borrow-Under water backfill and will be paid for as granular borrow.

26. The Engineer will designate unsafe recovery areas at the toes of 4:1 and 6:1 fill slopes to be graded by bulldozer and/or other hourly rental items. Boulders, large stumps and other objects shall be buried or removed. The use of borrow or waste material may be authorized for some areas. Upon completion of the grading the area shall be seeded with Method #2 and mulched. The intended roadside clearing areas are as described in note 19.

27. One guardrail delineator post shall be installed or removed and reset at each guard rail end and at underdrain outlet.

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATIONESTIMATED QUANTITIES  
AND  
GENERAL NOTES

SHEET OF AUGUSTA, MAINE

FREEPORT-BRUNSWICK



## DRAINAGE CONT'D.

[illegible]

\*\*ALTER TO NEW B1-C FRAME AND GRATE AND ADJUST AS REQUIRED

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H NEVINS



# DRAINAGE

STATION	RCP CLASS III			BCCMP		ALTER CATCH BASIN		CULVERT PIPE OPTION II		CATCH BASINS							MAN HOLES	UNDERDRAINS		REMARKS
	SIZE	LENGTH	CLASS	SIZE	LENGTH	NEW	B1	F&G*	SIZE	LENGTH	A1-C	A1-P	B1	B1-C	C1	E	F	B'	B' OUTLET	
																		LENGTH	LENGTH	
459+50 LT.	24"	8'																		REMOVE HDWL. & 4"x24" R.C.P.
461+50 C.								I												CLEAN PIPE
461+50 RT.																				CLEAN PIPE
468+00 C.								I												CLEAN PIPE
468+00 RT.								I												CLEAN PIPE
471+50 C.								I												CLEAN PIPE
476+50 C.								I												CLEAN PIPE
476+50 RT.																				CLEAN PIPE
477+35 LT.																				CLEAN PIPE
481+25 RT.																				REMOVE 12.5' x 24" ACCMP
481+50 C.								I												CLEAN PIPE
481+50 RT.																				CLEAN PIPE
494+00 C.								I												
488+50 C.								I												
494+00 RT.																				CLEAN PIPE RIP-RAP DOWN SPOUT
501+50 LT.																				ADJUST C.B. TO GRADE ONLY
505+50 C.								I												
505+50 LT.																				ADJUST C.B. TO GRADE ONLY
508+00 RT.	24"	8'																		REMOVE 16'x24" ACCMP
510+50 C.								I												
510+50 RT.	18"	12'																		REMOVE 16'x12" ACCMP
520+00 C.								I												
520+00 LT.	24"	12'																		REMOVE 20'x24" ACCMP
520+00 RT.	24"	16'																		REMOVE 22'x24" ACCMP
523+50 C.								I												
523+50 LT.								I												CLEAN PIPE
522+00 RT.-528+50 RT.																	550	100		N.B. ROADWAY
529+00 C.								I												
534+00 C.								I												
508+00 Lt 5.0														I						REMOVE & REPLACE 10'x30" ACCMP
3+75 RAMP A LT.									30"	10'										
2+50 RAMP B									30"	10'										CLEAN PIPE
7+50 RAMP A 8' LT.								I**												
6+00 RAMP D 10' LT.								I**												

## EXISTING SUPERELEVATION LIST

SOUTHBOUND				NORTHBOUND			
Sta.	Lt.	CL	Rt.	Sta.	Lt.	CL	Rt.
672	0	+2 1/2	0	670+50	0	+3	0
				671	+2	+3	0
				671+50	+4	+3	0
				Sta. 671+74.26 Back=Sta. 145+34.83 Ahead			
+50				145+50	+6	+3	0
673	+5 1/2	+3 1/2	0				
+50	+5 1/2	+3	0	158	+6	+3	0
674	+6	+3	0	+50	+4	+3	0
+50	+6	+3	0	159	+2	+3	0
675	+6	+3	0	+50	0	+3	0
684	+6	+3	0				
(175' superelevation transition)							
(Sta. 684+46.58 Back= )							
(Sta. 158+07.58 Ahead)							
158+50	+2 3/4	+2 1/2	0				
159	+1 1/8	+2 1/2	0				
159+50	0	+2 1/2	0				
164+50	0	+2 1/2	0	165+50	0	+3	0
165	0	+2 1/2	0	166	0	+3	+2
+50	0	+2 1/2	+2 1/2	+50	0	+3	+4
166	0	+2 1/2	+4	167	0	+3	+6
+50	0	+3	+6				
177	0	+3	+6	176+50	0	+3	+6
+50	0	+2 1/2	+4	177	0	+3	+4
178	0	+2 1/2	+2 1/2	+50	0	+3	+2
+50	0	+2 1/2	+7/8	178	0	+3	0
179	0	+2 1/2	0				
212	0	+2 1/2	0	213	0	+3	0
+50	+7/8	+2 1/2	0	+50	+2	+3	0
213	+2 1/2	+2 1/2	0	214	+4	+3	0
+50	+4	+2 1/2	0	+50	+6	+3	0
214	+6	+3	0				
				255+50	+6	+3	0
256	+6	+3	0	256	+4	+3	0
+50	+4	+2 1/2	0	+50	+2	+3	0
257	+2 1/2	+2 1/2	0	257	0	+3	0
+50	+7/8	+2 1/2	0				
258	0	+2 1/2	0				

## EXISTING SUPERELEVATION LIST (cont.)

SOUTHBOUND				NORTHBOUND			
Sta.	Lt.	CL	Rt.	Sta.	Lt.	CL	Rt.
293+50	0	+2 1/2	0	293+50	0	+2 1/2	0
294	0	+2 1/2	+1	294	0	+3	+3
+50	0	+2 1/2	+3 1/8	+50	0	+4	+6
295	0	+3 1/2	+7	295	0	+5	+8
+50	0	+6	+12	+50	0	+6	+12
Sta. 295+93.93 Back=Sta. 295+31.45 Ahead							
308	0	+6	+12	308+50	0	+6	+12
+50	0	+5	+9	309	0	+5	+9
309	0	+4	+6	+50	0	+4	+6
+50	0	+3	+3	310	0	+3	+3
310	0	+2 1/2	0	+50	0	+2 1/2	0
374	0	+2 1/2	0	374	0	+2 1/2	0
+50	+3	+3 1/2	0	+50	+3	+3 1/2	0
375	+6	+4 1/2	0	375	+6	+4 1/2	0
+50	+9	+5 1/2	0	+50	+9	+5 1/2	0
376	+12	+6	0	376	+12	+6	0
405	+12	+6	0	405	+12	+6	0
+50	+9	+5 1/2	0	+50	+9	+5 1/2	0
406	+6	+4 1/2	0	406	+6	+4 1/2	0
+50	0	+3 1/2	0	+50	+3	+3 1/2	0
407	0	+2 1/2	0	407	0	+2 1/2	0

## PROPOSED SUPERELEVATION LIST

SOUTHBOUND				NORTHBOUND			
Sta.	Lt.	CL	Rt.	Sta.	Lt.	CL	Rt.
672+50	0	+2 1/2	0	670+50	0	+3	0
673	+2	+2 1/2	0	671	+2	+3	0
+50	+4	+2 1/2	0	671+50	+4	+3	0
				Sta. 671+74.26 Back=Sta. 145+34.83 Ahead			
674	+6	+3	0	145+50	+6	+3	0
+50	+8	+4	0	146	+8	+4	0
683	+8	+4	0	157+50	+8	+4	0
+50	+6	+3	0	158	+6	+3	0
684	+4	+2 1/2	0	+50	+4	+3	0
Sta. 684+46.58 Back=Sta. 158+07.58 Ahead							
158+50	+3	+2 1/2	0	159	+2	+3	0
159	+2	+2 1/2	0	+50	0	+3	0
+50	0	+2 1/2	0				
165	0	+2 1/2	0	165+50	0	+3	0
+50	0	+2 1/2	+2 1/2	166	0	+3	+2 1/2
166	0	+2 1/2	+4 1/2	+50	0	+3	+4 1/2
+50	0	+3 3/8	+6 3/4	167	0	+3 3/8	+6 3/4
167	0	+4 1/2	+9	+50	0	+4 1/2	+9
176+50	0	+4 1/2	+9	176+50	0	+4 1/2	+9
177	0	+3 3/8	+6 3/4	177	0	+3 3/8	+6 3/4
+50	0	+2 1/2	+4 1/2	+50	0	+3	+4 1/2
178	0	+2 1/2	+2 1/2	178	0	+3	+2 1/2
+50	0	+2 1/2	0	+50	0	+3	0
213	0	+2 1/2	0	213	0	+3	0
+50	+2	+2 1/2	0	+50	+2	+3	0
214	+6	+2 1/2	0	214	+4	+3	0
+50	+6	+3	0	+50	+6	+3	0
215	+8	+4	0	215	+7	+3 1/2	0
255+50	+8	+4	0	255+50	+7	+3 1/2	0
256	+6	+3	0	256	+6	+3	0
+50	+4	+2 1/2	0	+50	+4	+3	0
257	+2	+2 1/2	0	257	+2	+3	0
+50	0	+2 1/2	0	+50	0	+3	0
293+50	0	+2 1/2	0	293+50	0	+2 1/2	0
294	0	+2 1/2	+3 1/2	294	0	+2 1/2	+3 1/2
+50	0	+3 1/2	+6 1/2	+50	0	+3 1/2	+6 1/2
295	0	+4 7/8	+9 3/4	295	0	+4 7/8	+9 3/4
+50	0	+6 1/2	+13	+50	0	+6 1/2	+13
Sta. 295+93.93 Back=295+31.45 Ahead							
307	0	+6 1/2	+13	308	0	+6 1/2	+13
+50	0	+4 7/8	+9 3/4	+50	0	+4 7/8	+9 3/4
308	0	+3 1/2	+6 1/2	309	0	+3 1/2	+6 1/2
+50	0	+2 1/2	+3 1/2	+50	0	+2 1/2	+3 1/2
309	0	+2 1/2	0	310	0	+2 1/2	0

## PROPOSED SUPERELEVATION LIST (Cont.)

SOUTHBOUND				NORTHBOUND			
Sta.	Lt.	CL	Rt.	Sta.	Lt.	CL	Rt.
323	0	+2 1/2	0	323+50	0	+2 1/2	0
+50	0	+2 1/2	+2	324	0	+2 1/2	+2
324	0	+2 1/2	+4	+50	0	+2 1/2	+4
+50	0	+3	+6	325	0	+3	+6
325	0	+4	+8	+50	0	+4	+8
334+50	0	+4	+8	334+50	0	+4	+8
335	0	+3	+6	335	0	+3	+6
+50	0	+2 1/2	+4	+50	0	+2 1/2	+4
336	0	+2 1/2	+2	336	0	+2 1/2	+2
+50	0	+2 1/2	0	+50	0	+2 1/2	







F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	1R-1RG-95-4(46)	17	45

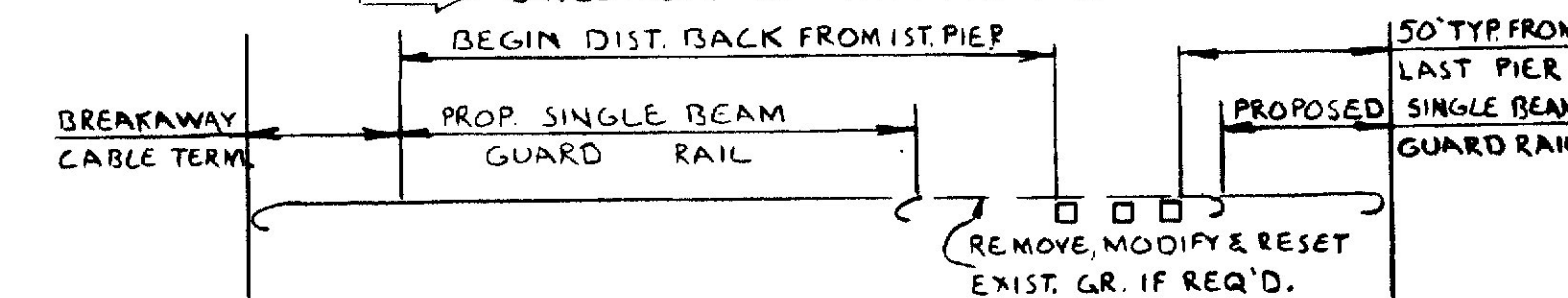
NOTES :

NOTES:

1. THE LENGTHS OF GUARD RAIL NOTED ON THE PLAN HAVE BEEN DONE ON THE FOLLOWING BASIS & SHALL BE INSTALLED IN THIS MANNER UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

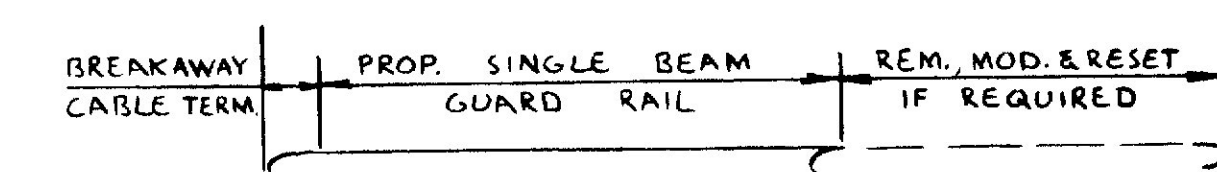
A. SIDE ROADS / I-95

⇒ DIRECTION OF TRAFFIC-1-95



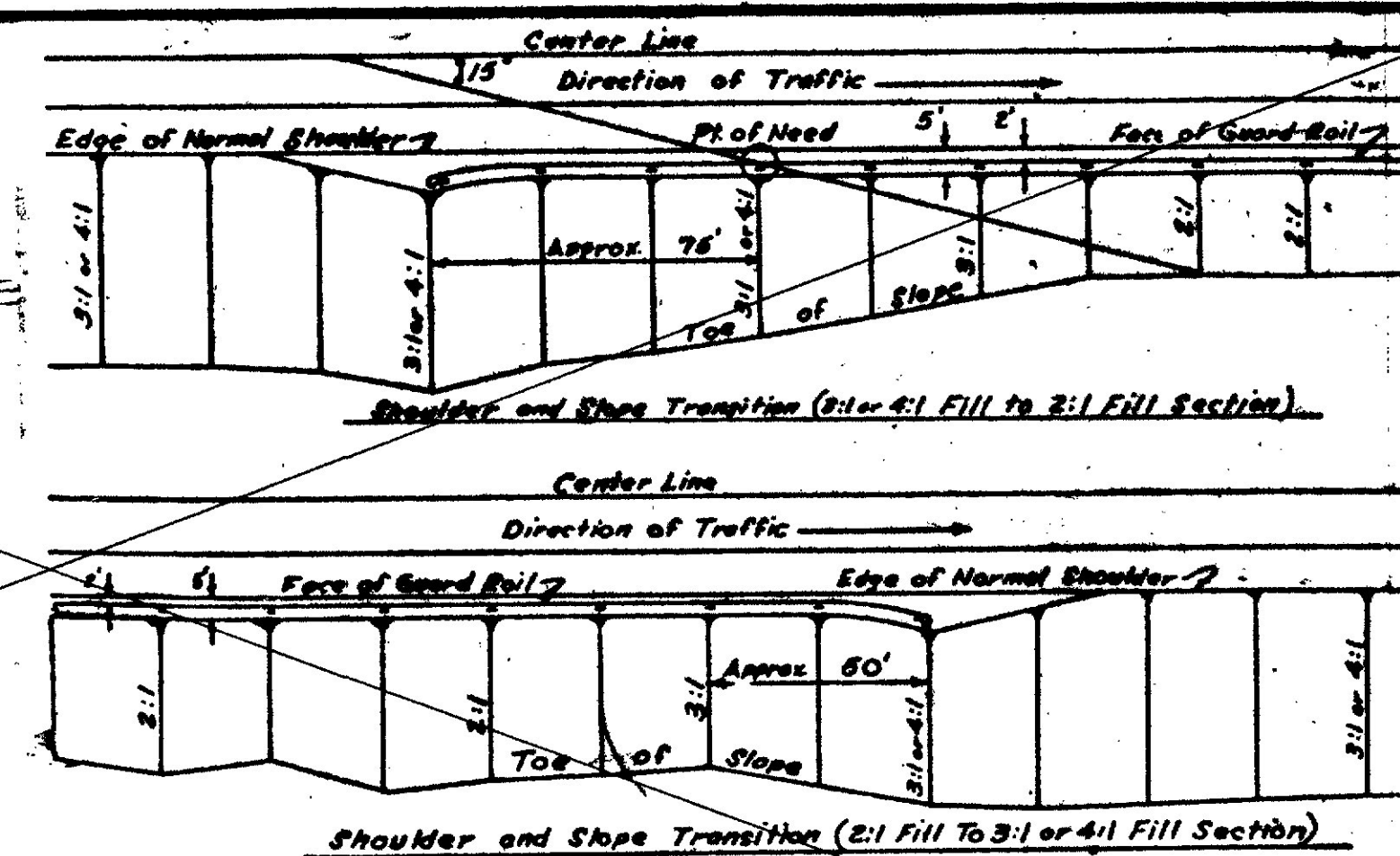
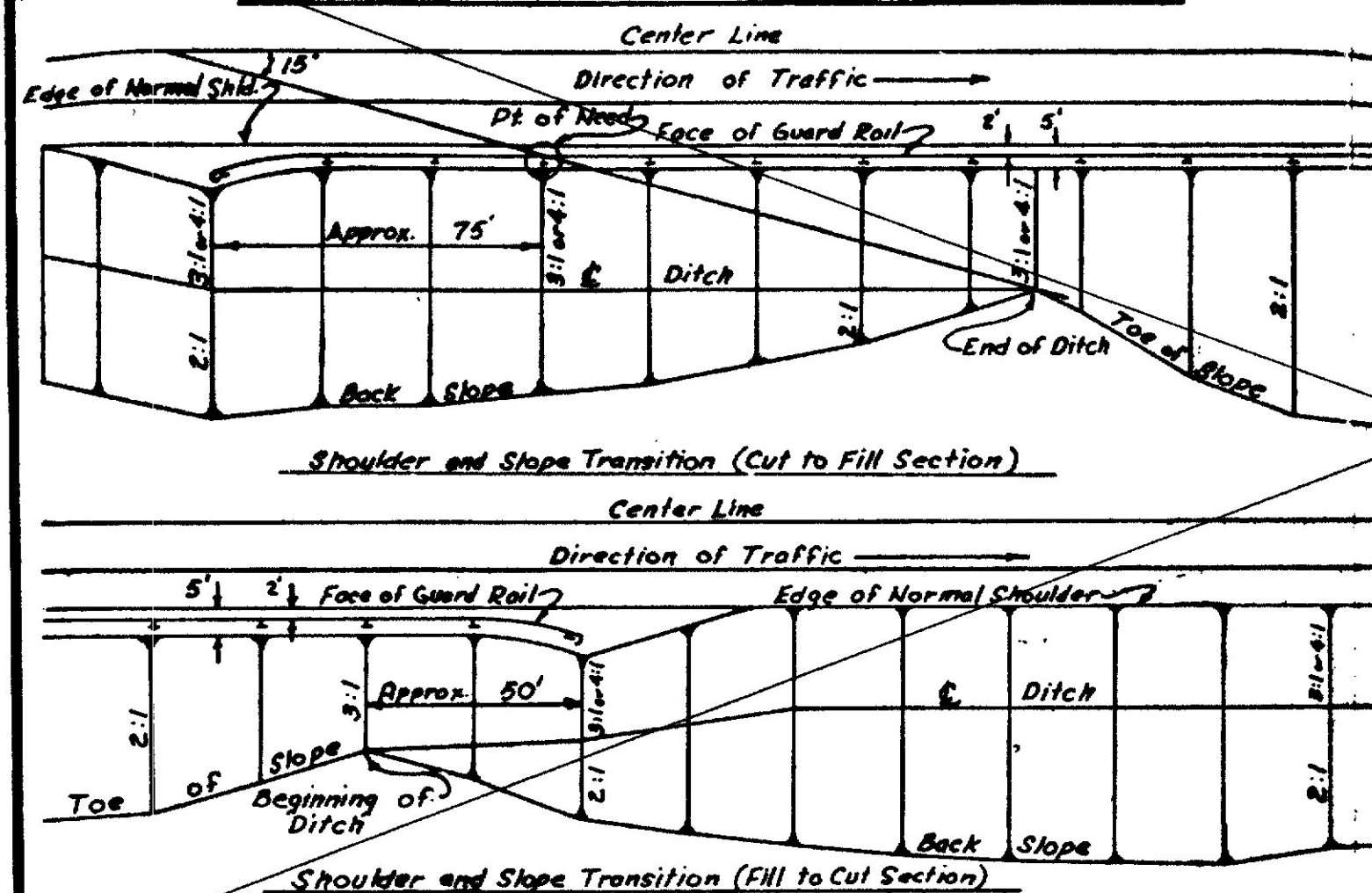
B. EXTENDING EXISTING GR. @ LOCATIONS OTHER THAN ABOVE

⇒ DIRECTION OF TRAFFIC 1-95



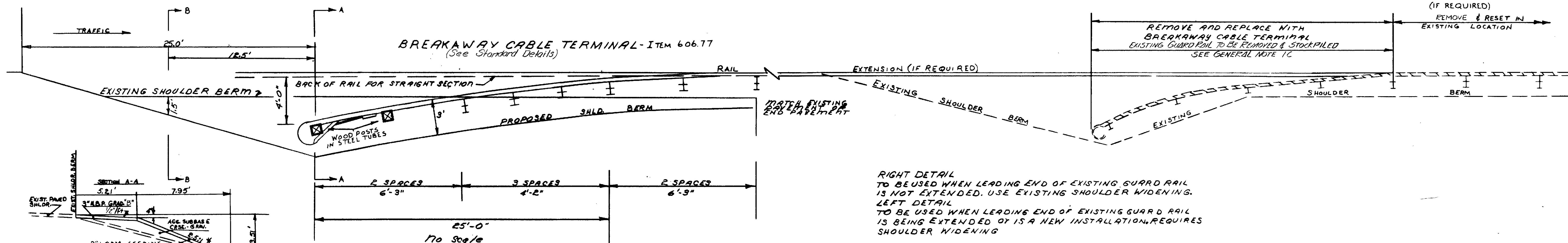
2. REMOVING & RESETTING OF TERM. ENDS & CUTTING OF POSTS &/OR  
BEAM SHALL BE CONSIDERED INCIDENTAL TO ITEM 606.

## GUARD RAIL END SLOPE TRANSITIONS



NOTE:  
THE TRANSITIONS ARE A DESIGN GUIDE ONLY.  
THESE SLOPE TRANSITIONS SHALL BE USED WITH BEAM TYPE GUARD RAIL.

BREAKAWAY CABLE TERMINAL-ITEM 606.77  
(See Standard Details)



RIGHT DETAIL  
TO BE USED WHEN LEADING END OF EXISTING GUARD RAIL  
IS NOT EXTENDED, USE EXISTING SHOULDER WIDENING.  
LEFT DETAIL  
TO BE USED WHEN LEADING END OF EXISTING GUARD RAIL  
IS BEING EXTENDED OR IS A NEW INSTALLATION, REQUIRES  
SHOULDER WIDENING

NOTE :

BREAKAWAY CABLE TERMINALS WILL BE PAID FOR UNDER ITEM 606.77

WIDENED SHOULDERS FOR BREAKAWAY CABLE TERMINALS, WHEN REQUIRED WILL BE PAID FOR UNDER ITEM 606.751 COMPLETE & IN PLACE EXCEPT FOR HOT BITUMINOUS PAVEMENT WHICH WILL BE PAID FOR SEPARATELY.

NOTE :

WHEN USING EITHER THE L<sub>4</sub> OR R<sub>4</sub> DETAILS FOR WIDENED SHOULDERS, THE ENG. WILL ENSURE THAT THE EXISTING I-95 INSLOPES AHEAD OF THE LEADING END CONFORM APPROXIMATELY TO THE DETAIL SHOWN ON THIS SHEET OR ARE FLATER. IF THE EXISTING INSLOPES DO NOT CONFORM TO THE DETAIL, THE LEADING END SHALL BE MOVED BACK UNTIL CONFORMANCE IS MET OR THE EXISTING INSLOPE MAY BE FLATTENED WHICHEVER IS DEEMED MOST PRACTICAL BY THE ENGINEER.

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION

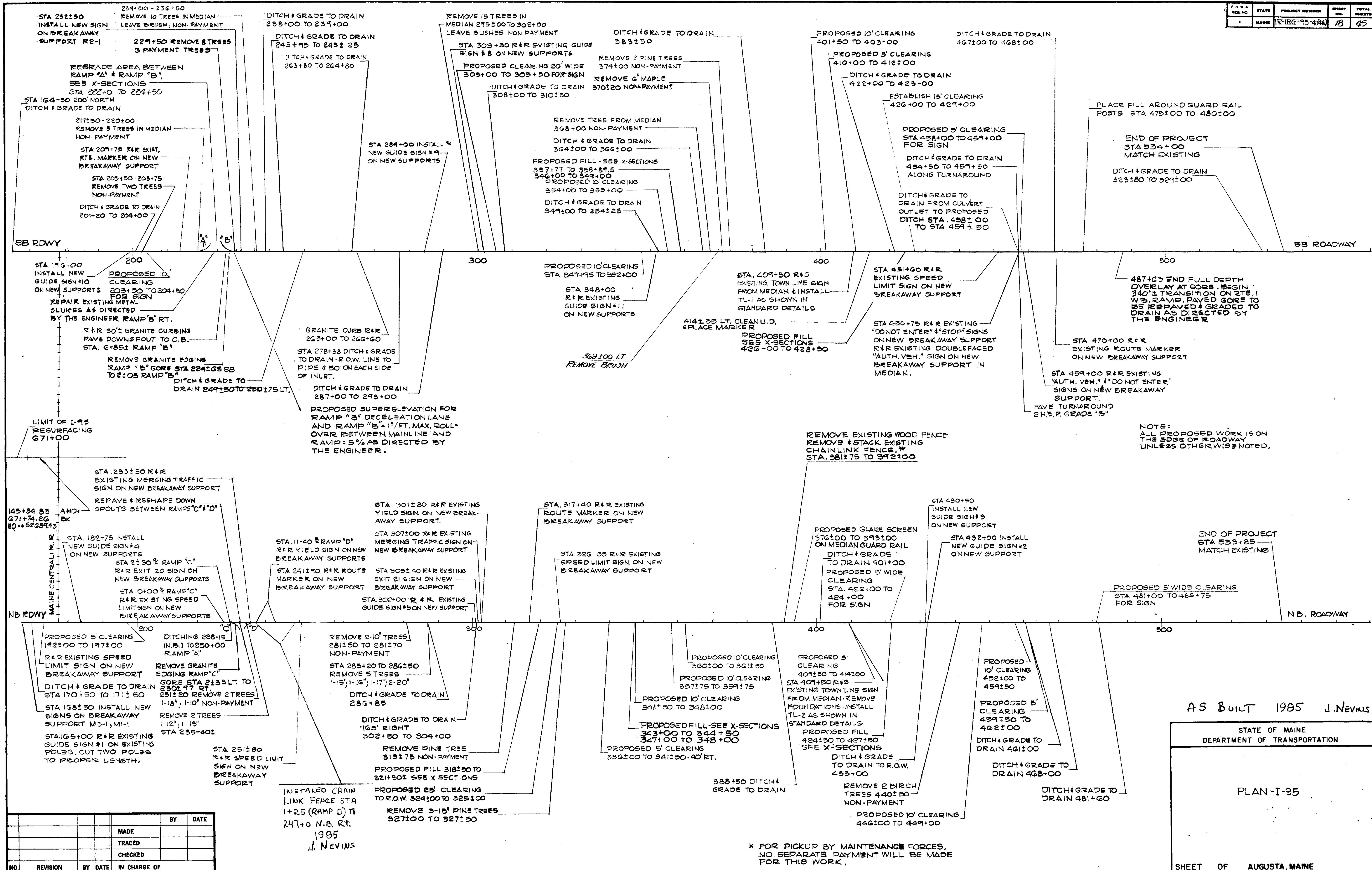
## GUARD RAIL DETAILS

SHEET OF AUGUSTA, MAINE

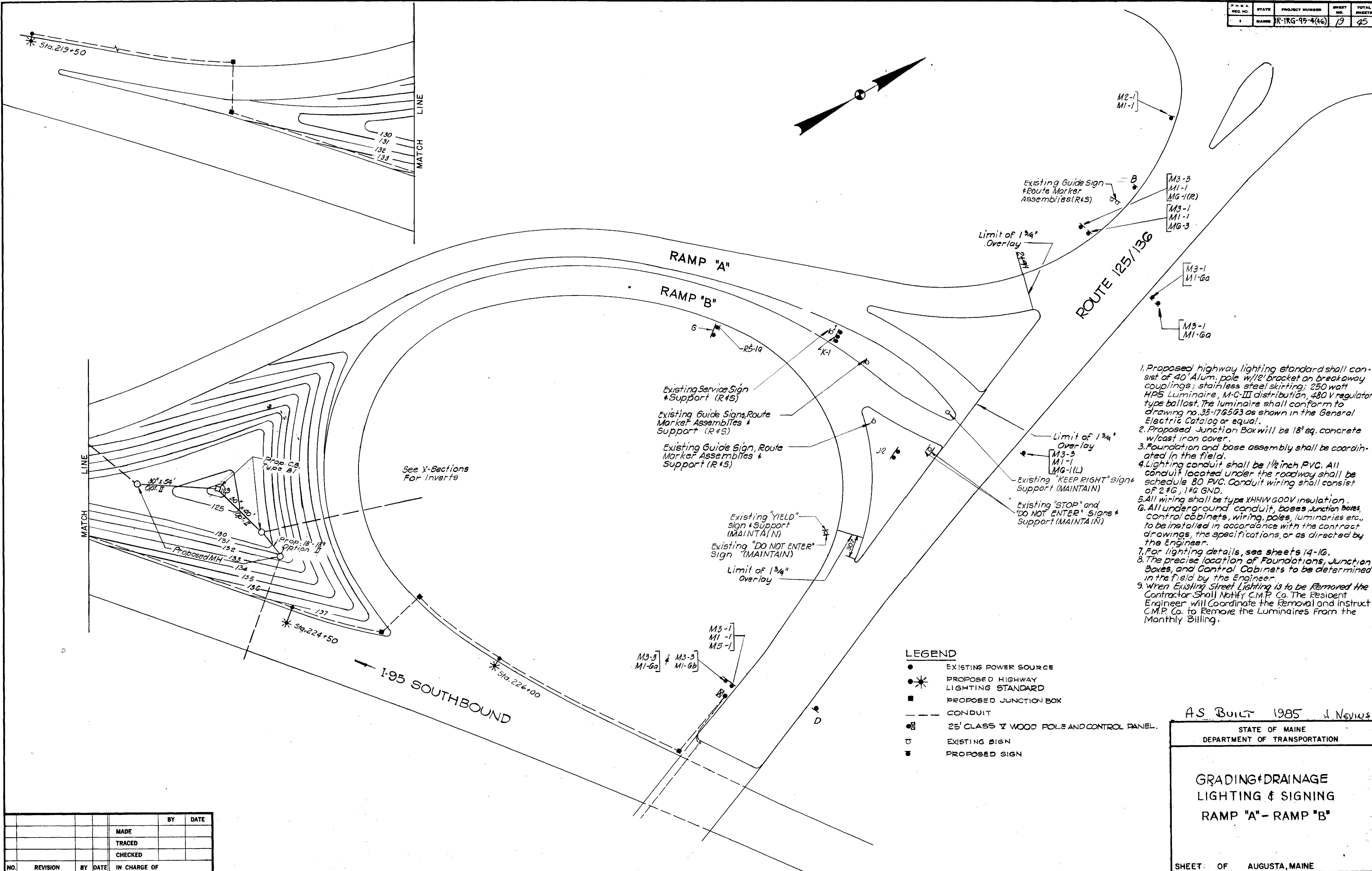
FREEPORT-BRUNSWICK

<b>PLANS</b>	<b>PROJECT DESIGN ENGINEER</b>		<b>BY</b>	<b>DATE</b>
	DESIGN - DETAILED			
	CHECKED			
	REVISIONS			









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STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION

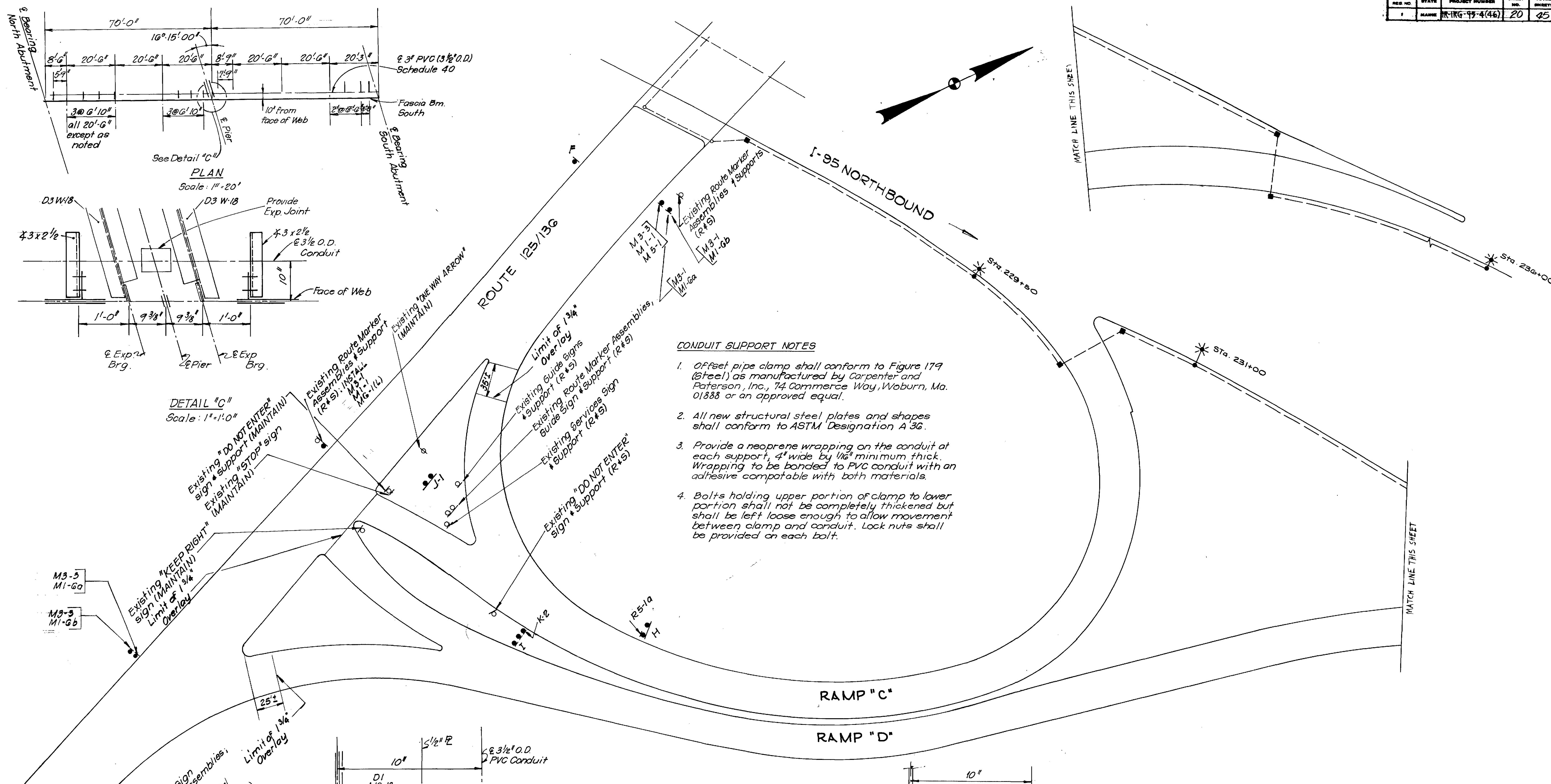
**GRADING & DRAINAGE  
LIGHTING & SIGNING  
RAMP "A" - RAMP "B"**

SHEET OF AUGUSTA, MAINE

FREEPORT-BRUNSWICK

NO.	REVISION	BY	DATE	IN CHARGE OF
		MADE		
		TRACED		
		CHECKED		





**CONDUIT SUPPORT NOTES**

1. Offset pipe clamp shall conform to Figure 179 (Steel) as manufactured by Carpenter and Paterson, Inc., 74 Commerce Way, Woburn, Ma. 01888 or an approved equal.
2. All new structural steel plates and shapes shall conform to ASTM Designation A 36.
3. Provide a neoprene wrapping on the conduit at each support, 4" wide by 1/16" minimum thick. Wrapping to be bonded to PVC conduit with an adhesive compatible with both materials.
4. Bolts holding upper portion of clamp to lower portion shall not be completely thickened but shall be left loose enough to allow movement between clamp and conduit. Lock nuts shall be provided on each bolt.

**PLAN**  
Scale: 1" = 20'

**DETAIL "C"**  
Scale: 1" = 1'-0"

**DETAIL "A"**  
Not to Scale

**SECTION 1-1**  
Not to Scale

**DETAIL "B-B"**  
Scale: 3/4" = 1'-0"

**SECTION 2-2**  
Scale: 3/4" = 1'-0"

**SUPPORT AT INTERMEDIATE DIAPHRAGM**

**INTERMEDIATE SUPPORT**

NO.	REVISION	BY	DATE	IN CHARGE OF
		MADE		
		TRACED		
		CHECKED		

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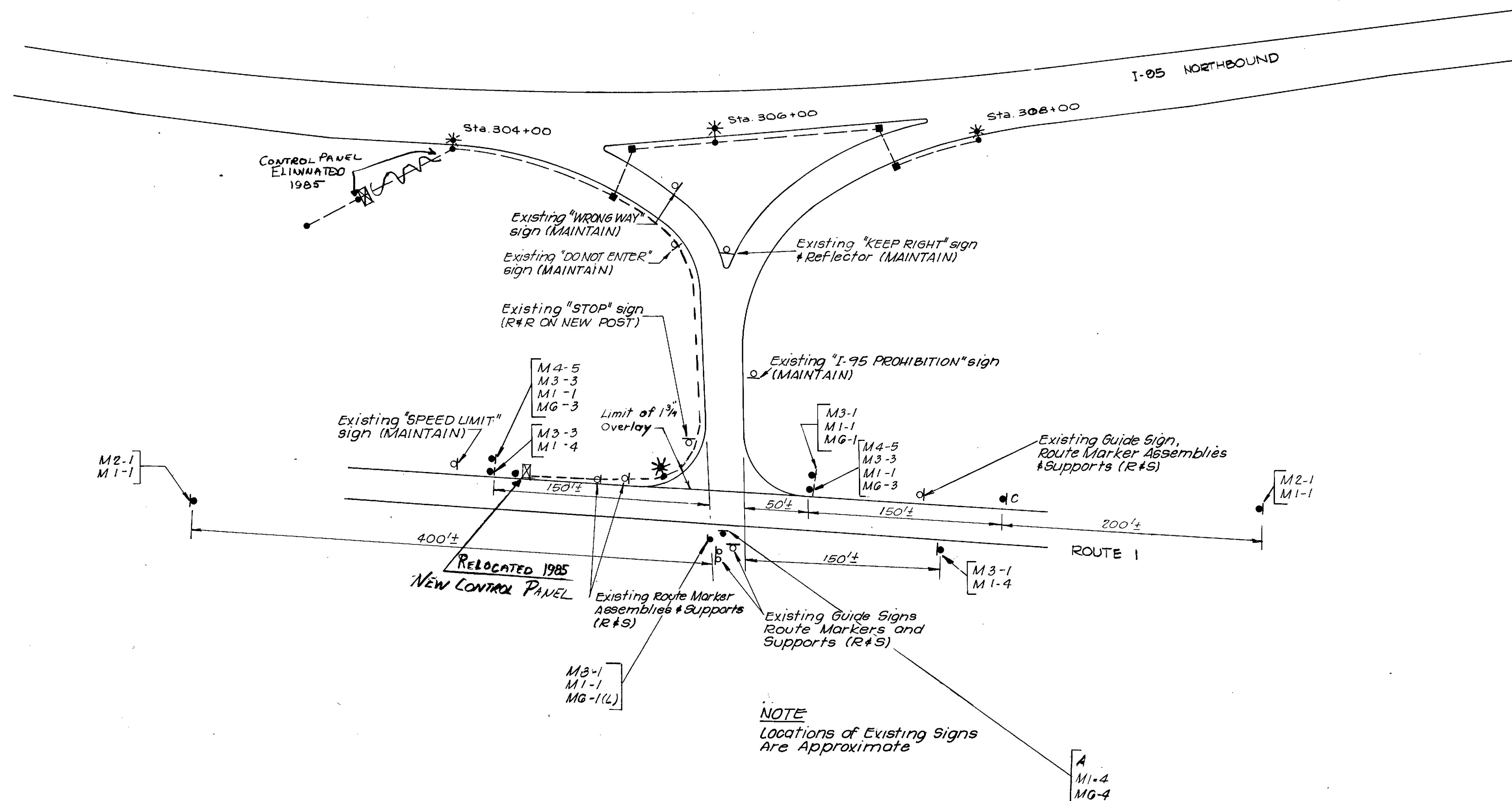
STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION

**LIGHTING & SIGNING  
RAMP "C" & RAMP "D"**

SHEET OF AUGUSTA, MAINE

FREEMPORT-BRUNSWICK





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STATE OF MAINE DEPARTMENT OF TRANSPORTATION	
LIGHTING & SIGNING	
SHEET	OF AUGUSTA, MAINE

FFEDNPT- R011151111

NO.	REVISION	BY	DATE	IN CHARGE OF
		MADE		
		TRACED		
		CHECKED		



TRAFFIC

## SIGN

## SUMMARY

[illegible][illegible]

A = D9-7                      E = D9-2  
B = D9-8                      F = D9-3a  
C = D9-9                      G = D9-10  
D = D9-1                      I = D9-11  
\* MUTCD SIGN DESIGNATION

NOTE: HIGHWAY SERVICE SIGNS.  
FOR MULTIPLE SERVICE SIGNS EACH  
INDIVIDUAL SERVICE SIGN SHALL BE  
MOUNTED ON ITS OWN PANEL WHICH  
SHALL THEN BE ATTACHED TO THE  
MAIN PANEL.

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION

SIGN	SUMMARY
FOR	MAINLINE



TRAFFIC

SIGN

SUMMARY

MAINE	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	1R-1RG-95-1(46)	23	40

ITEM NO.	I. D. NO.	SIGN SIZE		TEXT	SIGN LOCATION		SIGN AREA IN SQ. FT.	NO. OF SIGNS REQD.	POST	
		HEIGHT	WIDTH		STATION	OFFSET				
645291	A	30"	68"		SEE PLAN SHEET NO. 21		14.16	1	2-4" X 6" WOOD POST	
645291	B	42"	68"		STA. 30+95 27' LT. & APPROACH RD.		19.83	1	2-6" X 6" WOOD POST	
645291	C	30"	68"		SEE PLAN SHEET NO. 21		14.16	1	2-4" X 6" WOOD POST	
645292	MI-1	24"	24"		28+05 & APPR RD. 27' RT. 24+20 & APPR RD. 30' RT. 26+30 & APPR RD. 30' LT. 18+20 & APPR RD. 25' RT. 19+08 & APPR RD. 30' RT. 19+08 & APPR RD. 34' RT. 21+58 & APPR RD. 24' LT. 30+46 & APPR RD. 38' LT. 30+46 & APPR RD. 34' LT. 31+50 & APPR RD. 35' LT.		4.0	10	1-4" X 4" WOOD 1-4" X 4" WOOD 1-4" X 4" WOOD 1-4" X 4" WOOD 1-4" X 4" WOOD 1-4" X 4" WOOD 1-4" X 4" WOOD 1-4" X 4" WOOD 1-4" X 4" WOOD 1-4" X 4" WOOD	
					SEE PLAN SHEET NO. 21			6	1-4" X 4" WOOD	
645292	MI-6a	24"	30"		19+80 & APPR RD. 23' LT. 24+20 & APPR RD. 34' RT. 26+30 & APPR RD. 34' LT. 30+40 & APPR RD. 33' RT.		5.0	4	1-4" X 4" WOOD 1-4" X 4" WOOD 1-4" X 4" WOOD 1-4" X 4" WOOD	
645292	MI-6b	24"	30"		19+80 & APPR RD. 27' LT. 24+20 & APPR RD. 34' RT. 26+30 & APPR RD. 34' LT. 30+40 & APPR RD. 37' RT.		5.0	4	1-4" X 4" WOOD 1-4" X 4" WOOD 1-4" X 4" WOOD 1-4" X 4" WOOD	
645292	M3-1	12"	24"		SEE PLAN SHEET NO. 21		2.0	8	MOUNT (4) WITH MI-1 MOUNT (2) WITH MI-6a MOUNT (2) WITH MI-6b MOUNT (2) WITH MI-1 MOUNT (1) WITH MI-4	
					SEE PLAN SHEET NO. 21			3		
645292	M3-3	12"	24"		SEE PLAN SHEET NO. 21		2.0	8	MOUNT (4) WITH MI-1 MOUNT (2) WITH MI-6a MOUNT (2) WITH MI-6b MOUNT (2) WITH MI-1 MOUNT (1) WITH MI-4	
					SEE PLAN SHEET NO. 21			3		
645292	M2-1	15"	21"		SEE SHEET	PLAN NO. 21	2.19	2	MOUNT (2) WITH MI-1 MOUNT (2) WITH MI-1	
645292	M4-5	12"	24"		SEE SHEET	PLAN NO. 21	2.0	2	MOUNT (2) WITH MI-1	
645292	M5-1	15"	21"				2.19	2	MOUNT (2) WITH MI-1	
645292	M6-1(R) & (L)	15"	21"		SEE SHEET	PLAN NO. 21	2.19	4	MOUNT (4) WITH MI-1 MOUNT (2) WITH MI-1	
					SEE SHEET	PLAN NO. 21		2		
645292	M6-3	15"	21"		SEE PLAN SHEET NO. 21		2.19	2	MOUNT (2) WITH MI-1 MOUNT (2) WITH MI-1	
					SEE PLAN SHEET NO. 21			2		
645292	R5-1a	24"	36"		MOUNT (1) WITH SIGN "G" AND (1) WITH SIGN "H"		6.0	2	NONE REQUIRED	

ITEM NO.	I. D. NO.	SIGN SIZE		TEXT	SIGN LOCATION		SIGN AREA IN SQ. FT.	NO. OF SIGNS REQD.	POST	
		HEIGHT	WIDTH		STATION	OFFSET				
645291	D	42"	68"		26+53 & APPR RD.	30' RT.	19.83	1	2-6" X 6" WOOD POST	
645291	E	30"	68"		18+70 & APPR RD.	30' RT.	14.16	1	2-4" X 6" WOOD POST	
645291	F	30"	68"		24+00 & APPR RD.	25' LT.	14.16	1	2-4" X 6" WOOD POST	
645291	G	42"	72"		6+33 & RAMP "B"	15' RT.	21.0	1	2-6" X 6" WOOD POST	
645291	H	42"	72"		6+75 & RAMP "C"	18' RT.	21.0	1	2-6" X 6" WOOD POST	
645291	I	24"	24"		7+03 & RAMP "B"	21' LT.	12.19	2	1-4" X 6" WOOD	
		15"	21"		7+45 & RAMP "C"	21' LT.			1-4" X 6" WOOD	
645291	J1 (RIGHT ARROW) J2 (LEFT ARROW)	48"	96"		8+45 & RAMP "C-C"	35' RT.	32.0	2	2-6" X 6" WOOD POST 2-6" X 6" WOOD POST	
					8+02 & RAMP "B-B"	26' RT.				
645291	K1 (RIGHT ARROW) K2 (LEFT ARROW)	48"	48"		7+03 & RAMP "B"	17' LT.	48.0	2	1-6" X 6" WOOD POST 1-6" X 6" WOOD POST	
		24"	48"		7+45 & RAMP "C"	17' LT.				
645292	M6-4	15"	21"		SEE SHEET	PLAN NO. 21	2.19	1	MOUNT WITH MI-4	
645292	MI-4	24"	24"		SEE SHEET	PLAN NO. 21	4.0	3	1-4" X 4" WOOD POST	

A = D9-7\*      E = D9-2  
B = D9-8      F = D9-3a  
C = D9-9      G = D9-10  
D = D9-1      I = D9-11  
\* MUTCD SIGN DESIGNATION

NOTE: HIGHWAY SERVICE SIGNS, FOR MULTIPLE SERVICE SIGNS, EACH INDIVIDUAL SERVICE SIGN SHALL BE MOUNTED ON ITS OWN PANEL WHICH SHALL THEN BE ATTACHED TO THE MAIN PANEL.

STATE OF MAINE DEPARTMENT OF TRANSPORTATION
<b>SIGN SUMMARY</b> FOR SECONDARY ROADS



FHWA REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	1R-1RG-95-A(46)	24	45

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DEPARTMENT OF TRANSPORTATION

SIGN POLE  
SUMMARY - SHEET

SHEET OF AUGUSTA, MAINE

FREEPORT - BRUNSWICK