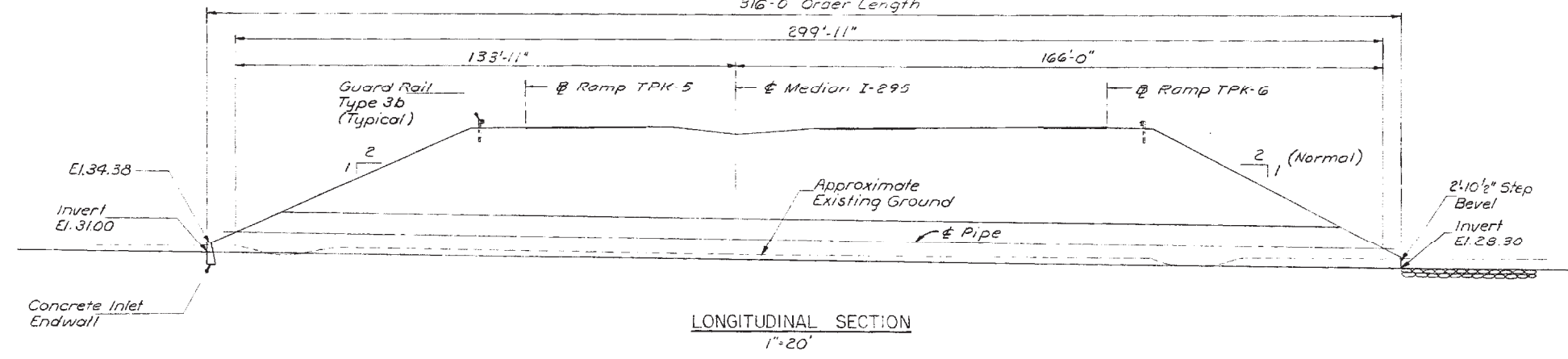
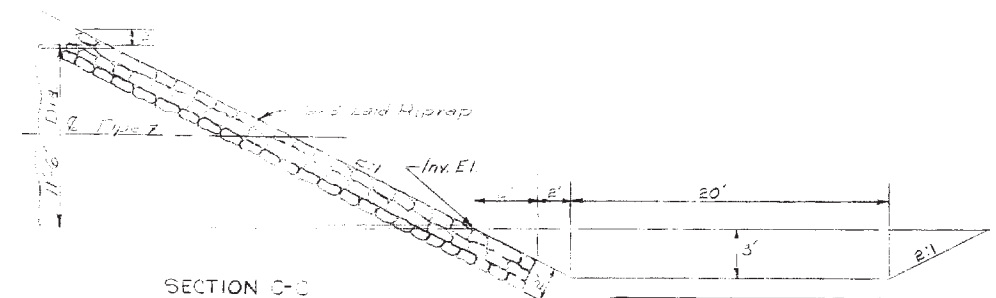
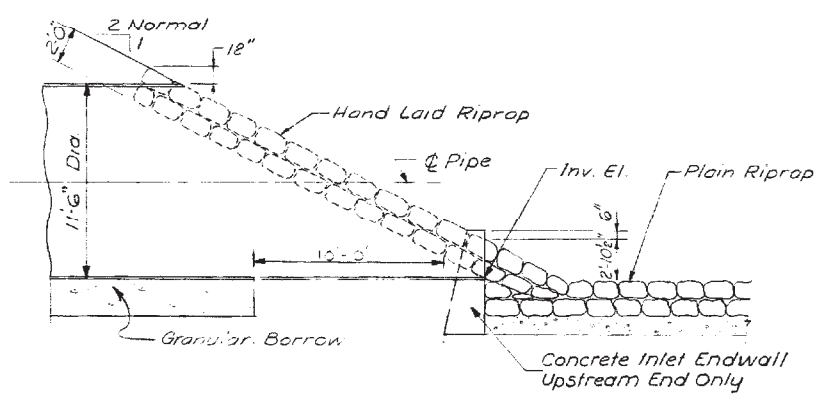
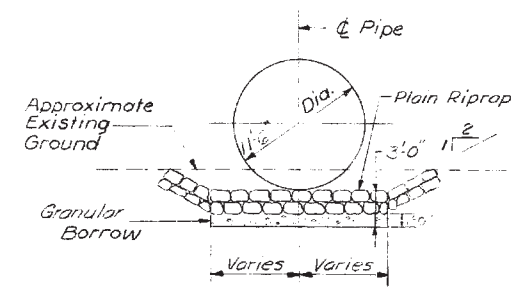
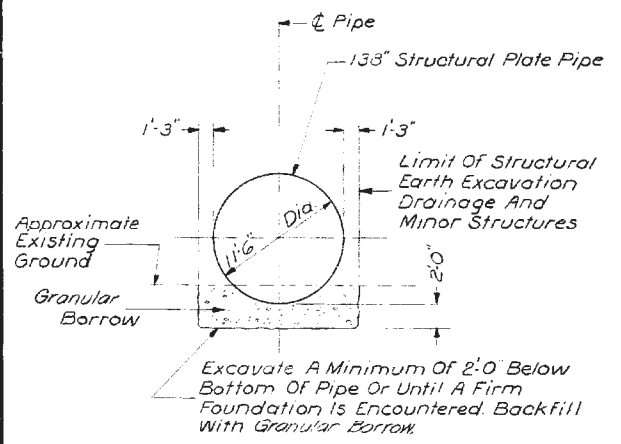


ITEM NO.	DESCRIPTION	UNIT	QUANTITY
203.25	Granular Borrow	C.Y.	520
206.06	Structural Earth Excav.-Drainage & Minor Structs.	C.Y.	675
502.32	Structural Concrete - Culvert Endwalls	C.Y.	5
509.24	138 Inch Structural Plate Pipe (Steel or Alom.)	L.S.	1#
610.08	Plain Riprap	C.Y.	85
610.09	Hand Laid Riprap	C.Y.	25

* Estimated weight of Structural Plate Pipe: Steel 125,000 lbs., Aluminum 24,000 lbs.



NOTES:
1. For notes see Sheet 52



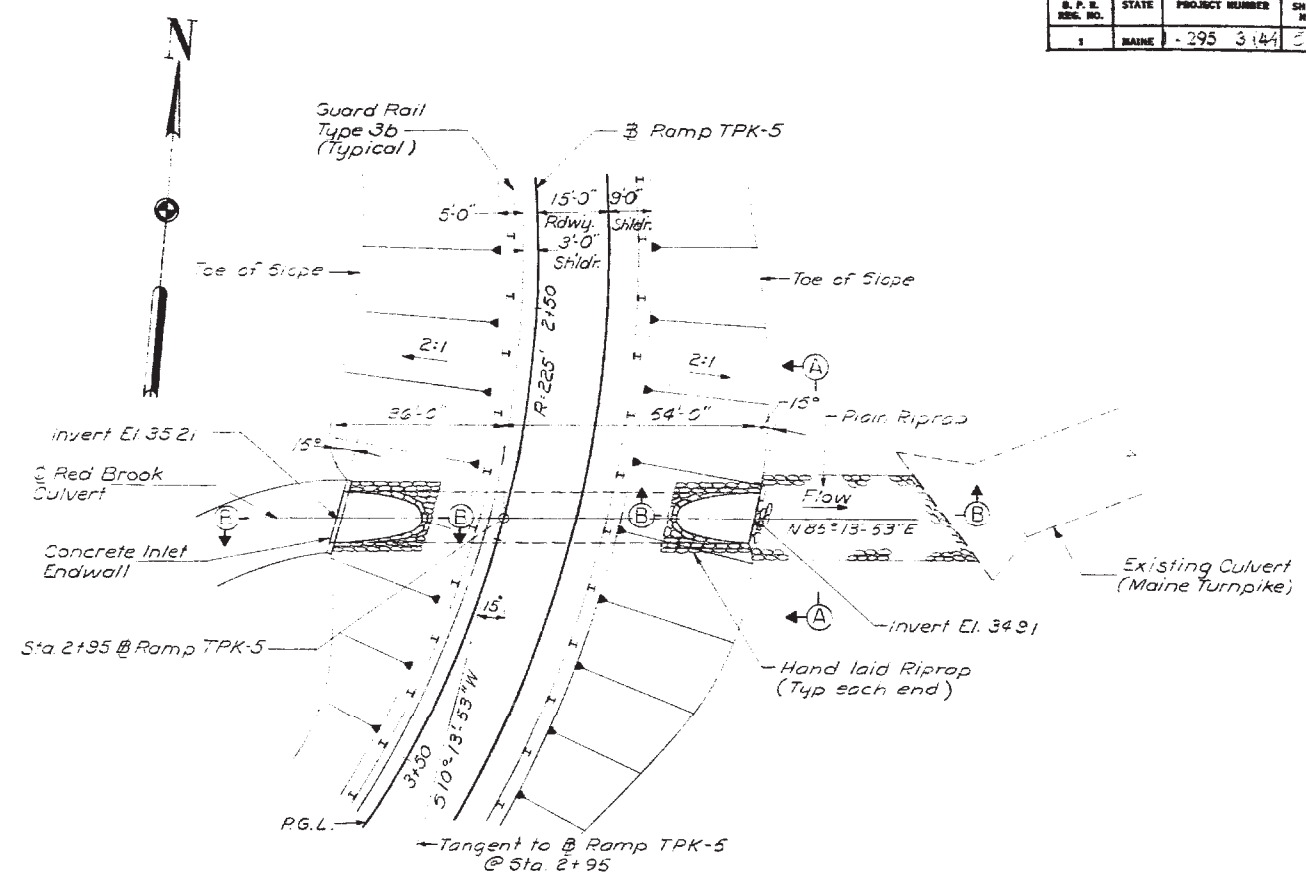
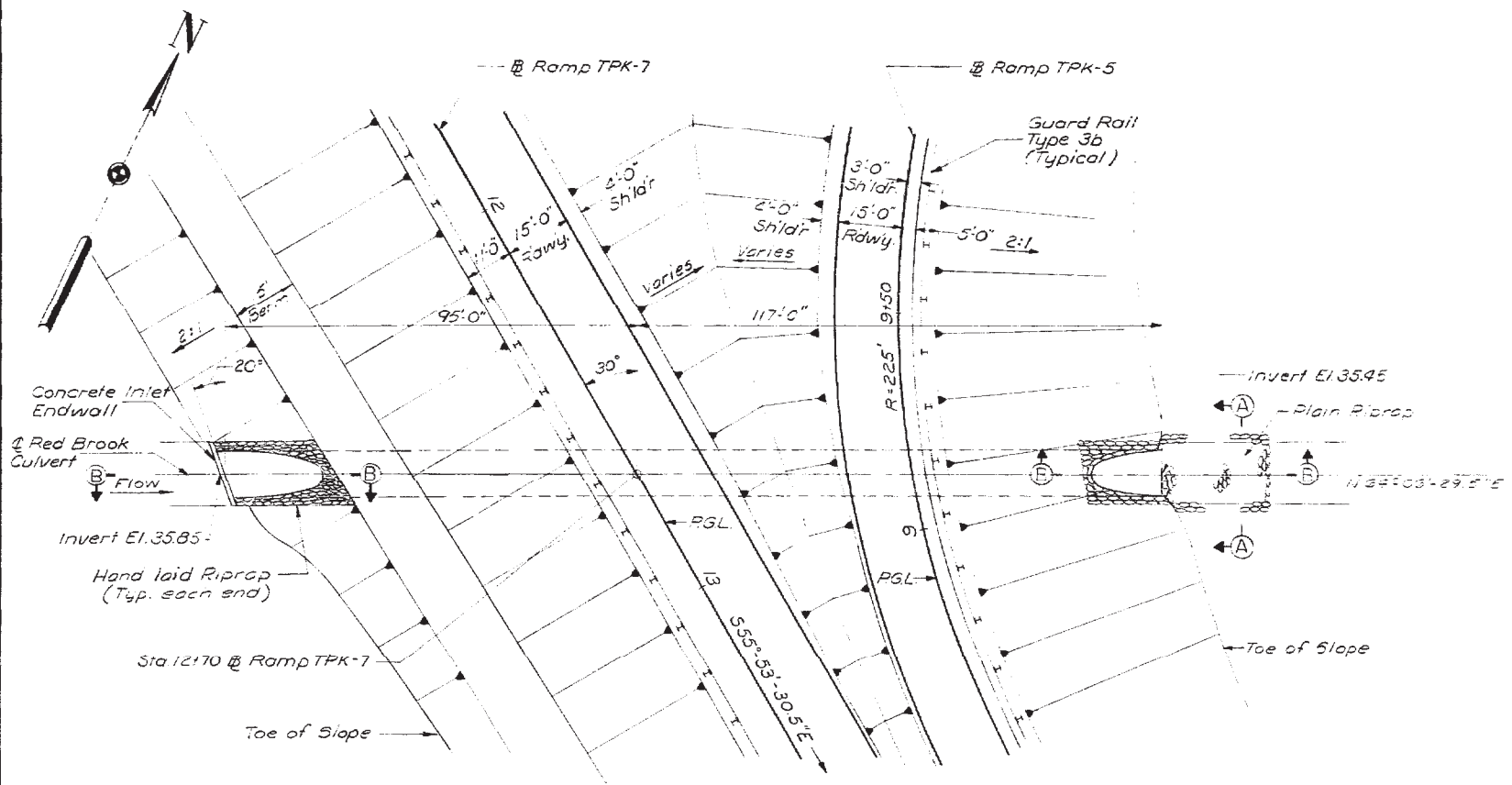
Built 1971 using Steel pipe.

Revised As Built
C.W. Putney Jr. 5-15-74

HOWARD, NEEDES, TAMMEN & BERGENDOFF
CONSULTING ENGINEERS

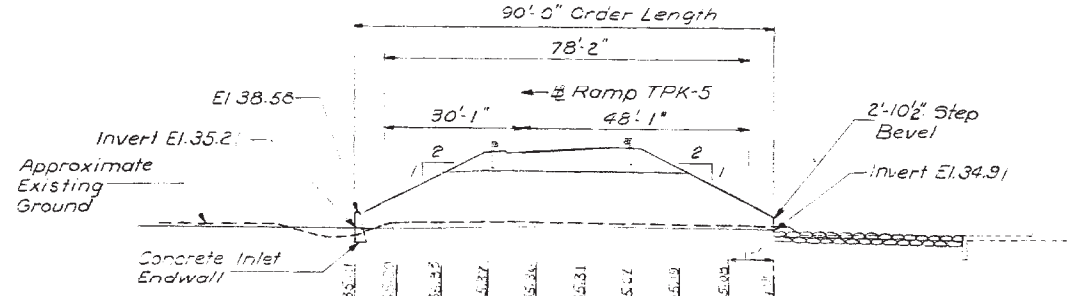
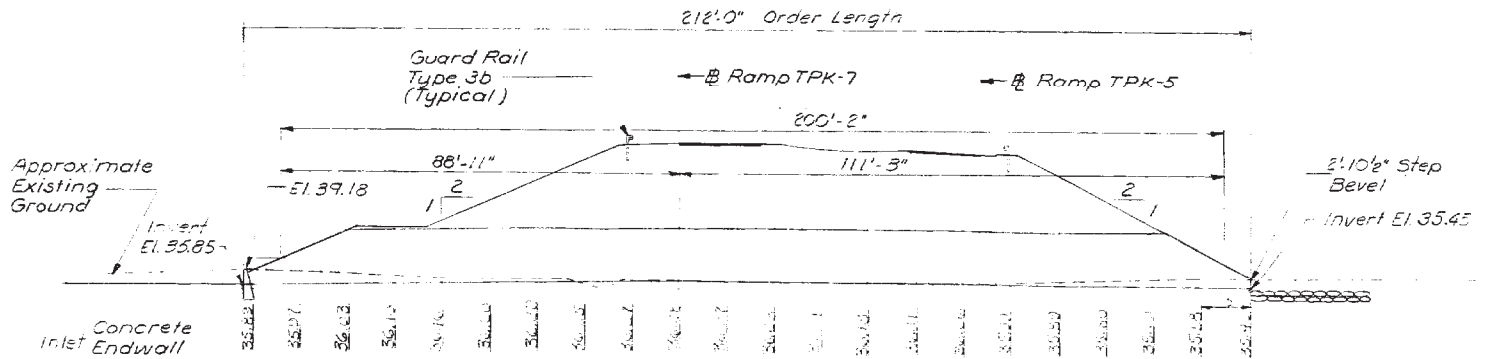
DESIGN - E.F.K.	DETAIL - R.D.F.	BRIDGE NO.
TRACED	SURVEY	
CHECK - G.U.J.	PLOT	

STATE HIGHWAY COMMISSION
BRIDGE DIVISION
I-295 (STA. 108+06)
OVER
RED BROOK
IN THE CITY OF
SOUTH PORTLAND
CUMBERLAND COUNTY
GENERAL PLAN
SHEET OF AUGUSTA, MAINE APRIL 1970



PLAN
1"=20'

PLAN
1"=20'



LONGITUDINAL SECTION
1"=20'

LONGITUDINAL SECTION
1"=20'

Note: Pipe to be laid in the cambered shape indicated by the elevations shown at 10' intervals from inlet to outlet.

NOTE: Pipe to be laid in the cambered shape indicated by the elevations shown at 10' intervals from inlet to outlet.

- NOTES:
1. For notes see Sheet 22
 2. For Section A-A and B-B see Sheet 54
 3. For typical details see Sheet 54
 4. For pipe construction detail see Sheet 52

CULVERT QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	QUANTITY
203.25	Granular Borrow	CY	360
206.06	Structural Earth Excav. - Drainage & Minor Strucs.	CY	470
502.32	Structural Concrete - Culvert Endwalls	CY	5
502.33	138 Inch Structural Plate Pipe (Steel or Alum.)	L.S.	1*
610.08	Plain Riprap	CY	40
610.09	Hand Laid Riprap	CY	25

CULVERT QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	QUANTITY
203.25	Granular Borrow	CY	145
206.06	Structural Earth Excav. - Drainage & Minor Strucs.	CY	160
502.32	Structural Concrete - Culvert Endwalls	CY	5
502.33	138 Inch Structural Plate Pipe (Steel or Alum.)	L.S.	1*
610.08	Plain Riprap	CY	60
610.09	Hand Laid Riprap	CY	25

* Estimated weight of Structural Plate Pipe = 20,400 lbs.

* Estimated weight of Structural Plate Pipe = 20,400 lbs. (minimum 7,500 lbs.)

Built in 1971 using Steel pipe

DESIGN - E.F.R. DETAIL - R.D.F. SURVEY - G.U.J. CHECK - G.U.J.

BRIDGE NO. 1-295

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

RAMP TPK-5 & TPK-7
OVER
RED BROOK
IN THE CITY OF
SOUTH PORTLAND
CUMBERLAND COUNTY

GENERAL PLAN

HOWARD, NEEDLES, TAMM & BERGENDOFF
CONSULTING ENGINEERS

NEW YORK BOSTON KANSAS CITY

SHEET OF AUGUSTA, MAINE APRIL 1970

SCARBOROUGH
SO. PORTLAND

STATE OF MAINE STATE HIGHWAY COMMISSION



SCARBOROUGH - SOUTH PORTLAND CUMBERLAND COUNTY MAINE FEDERAL AID-INTERSTATE PROJECT NO. 1-295-3(44)45 TOTAL LENGTH 1.231 MILES GRADING, DRAINAGE and BASE PROJECT

SCALES { PLANS 1 IN. = 50 FT.
 PROFILES { HORIZ. 1 IN. = 50 FT.
 CROSS SECTIONS { VERT. 1 IN. = 5 FT.
 OR AS SHOWN

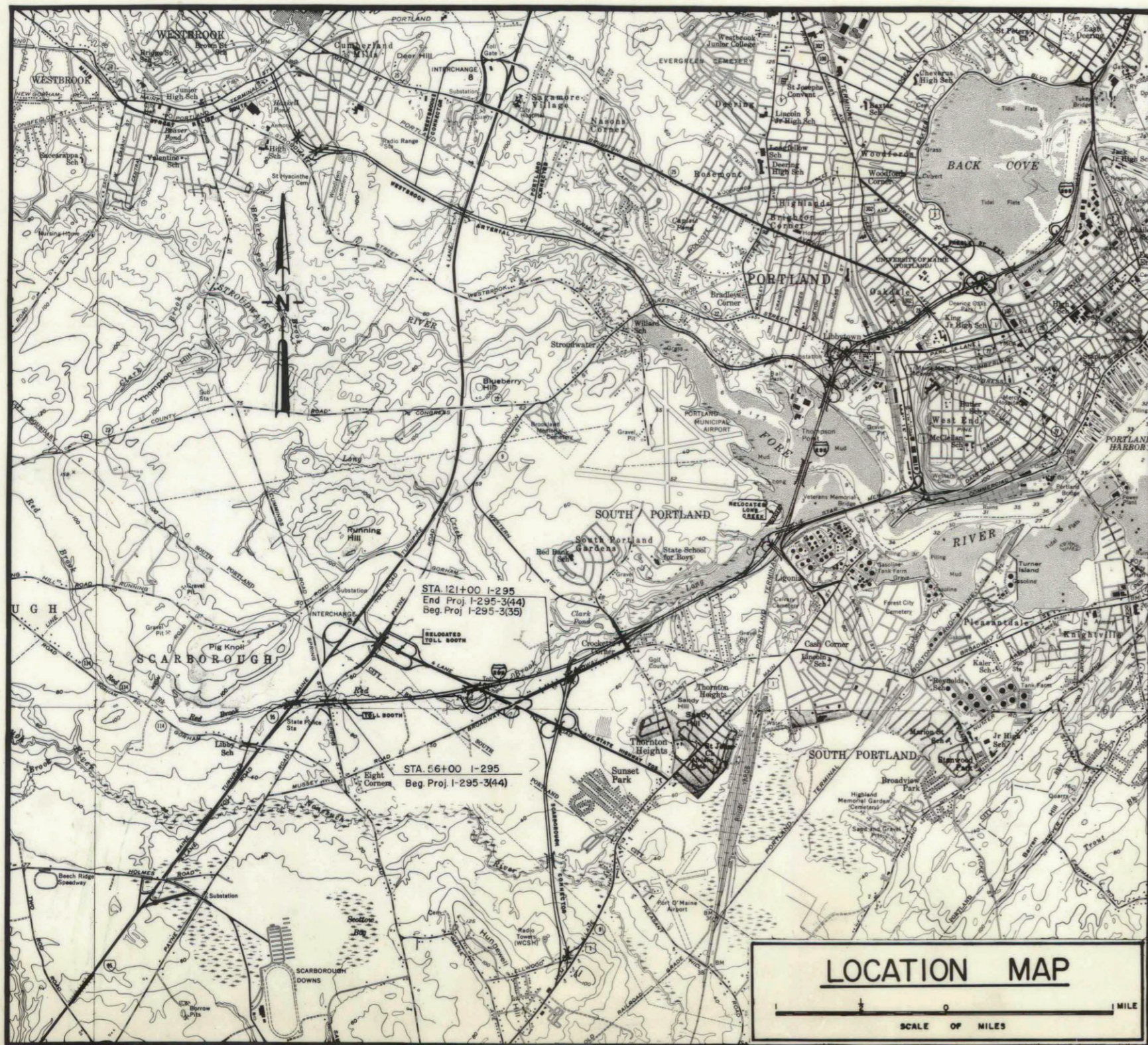
BUILT 1971

Reel 174

Bridge Maintenance

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	X
TREES	⊗ hardwood ⊕ softwood
WOODS	=====

INDEX OF SHEETS	
1	TITLE SHEET
2	GENERAL PROJECT INFORMATION SHEET
3-4	TYPICAL SECTIONS
5-6	QUANTITY AND DRAINAGE SHEET
7-19	STANDARD AND SPECIAL DETAIL SHEETS
20-47	I-295 STRUCTURES OVER STATE ROUTE 703
48-51	FOUNDATION PLANS - RED BROOK CULVERTS
52	RED BROOK CULVERT (STA.87+80 I-295)
53	" " " (STA.12+70 RAMP TPK-7) & (STA.2+95 RAMP TPK-5)
54	" " " (STA.108+00 I-295)
55-56	PLAN and PROFILE I-295 STA.50+00 to STA.65+00 & ACCESS ROAD
57	" " " STA.65+00 to STA.80+00
58	" " " STA.80+00 to STA.95+00 & RAMP TPK-7
59-64	" " " STA.95+00 to STA.110+00, RAMPS TPK-5, 6 & 7, & SR.703
65	" " " STA.110+00 to STA.125+00 & RAMP TPK-6
66	GRADING PLAN STA.59+50 to STA. 70+25 (TOLL PLAZA AREA)
67-86	CROSS SECTIONS I-295 STA.53+00 to STA.121+00 SCALE: 1"=10'
87-91	" " RAMP TPK-5 STA.0+00 to STA.13+50 " "
92-93	" " RAMP TPK-6 STA.17+50 to STA.28+00 " "
94-98	" " RAMP TPK-7 STA.6+50 to STA.21+50 " "
99-101	" " ACCESS ROAD STA.11+00 to STA.24+00 SCALE: 1"=5'
102-103	ACCESS SIGNING PLANS



TRAFFIC DATA	N.B.	S.B.
A.D.T. 1970	2,830	2,680
A.D.T. 1990	5,704	5,004
D.H.V.	43	701
T. (%)	5	5
D. (%)		
V.	50	50
P.S.D. (%)		
18 KIPS		

FOR MORE DETAILED TRAFFIC DATA, SEE SHEET NO. 2, GENERAL PROJECT INFORMATION.

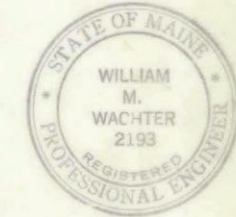
NOTE
ALL WORK CONTEMPLATED UNDER THIS CONTRACT SHALL BE GOVERNED BY AND IN CONFORMITY WITH THE STANDARD SPECIFICATIONS (REVISION OF JUNE 1968 AND SUPPLEMENTS THERETO, EXCEPT AS MODIFIED ON THE PLANS AND IN THE SPECIAL PROVISIONS.

APPROVED:
MAINE STATE HIGHWAY COMMISSION
David H. Stevens
CHAIRMAN
Robert A. Richards
Steven D. Shaw
Sylvester A. Foor
CHIEF ENGINEER

DATE
September 14, 1970
September 16, 1970
September 16, 1970
September 16, 1970

HOWARD, NEEDLES, TAMMEN & BERGENDOFF
CONSULTING ENGINEERS
NEW YORK BOSTON KANSAS CITY
Wm. White
MAY 27, 1970
DATE

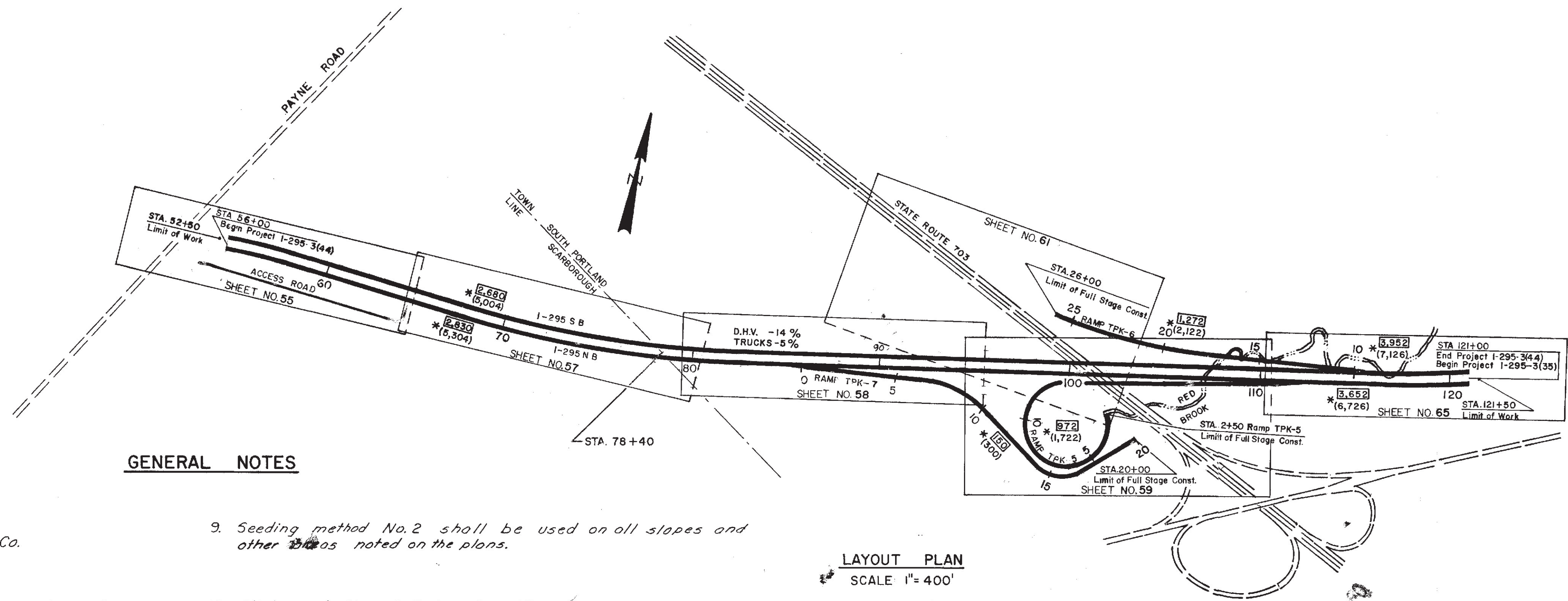
DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
BUREAU OF PUBLIC ROADS
REGION 1
APPROVED:
DIVISION ENGINEER DATE



RW 2

GENERAL PROJECT INFORMATION

* TRAFFIC DATA:
1970 AADT 1970
1990 AADT (1990)



GENERAL NOTES

- The utilities involved in this contract are:
Central Maine Power Co.
New England Telephone & Telegraph Co.
Portland Water District
Portland Gas & Light Co.
- All utility facilities are to be adjusted as necessary by the respective utilities unless otherwise noted.
- Removal or abandonment of any existing drainage must first be approved by the Engineer.
- Grubbing in fill will not be required unless the subgrade is within 5' of the existing ground in woods and fields. The width of grubbing is determined by the intersection of a one to one slope from the shoulder berm and existing ground.
- Clearing shall be performed to 5' beyond the slope line in high fill-guard rail sections and in all ditched sections where the depth of ditch is 5' or greater. In low fill sections and ditched sections less than 5' in depth, clearing shall be 15' beyond the slope line. Selective clearing and thinning shall be performed between the clearing limits and ROW lines or selective clearing and thinning lines as shown on the plans.
- P.T.H. shown on the cross sections indicates "Planimeter to Here" for use in quantity calculations only.
- Where erosion control mesh or sod is required for circular ditches the width shall be 7'-2" and each edge shall be approximately the same elevation. Methods of construction shall conform to those shown in the "Standard Details".
- Landscaping - General
The loam, seed and hay mulch notes as shown apply as a general guide. In all cases the Engineer has final authority as to the placement of these items.
- Seeding method No. 2 shall be used on all slopes and other areas noted on the plans.
- All loam depths shall be 3". All slopes shall be loamed on this basis unless otherwise noted on the plans.
- Hay mulch and asphalt binder shall be applied to all areas seeded by method No. 2.
- All ditch elevations shown on the cross sections are to the top of loam unless otherwise noted.
- All reinforced concrete pipe shall be class III unless otherwise noted on the plans.
- All excavation for relocated channels shall be paid for under item 206.12 Structural Earth Excavation - Channel.
- Riprap used on all relocated channel slopes shall be hand laid and that used on the bottom of the channel shall be plain riprap. Location of these items shall be as shown on the plans or as directed by the Engineer.
- The Contractor shall install Woven Wire fencing - Metal Posts Around the property Rt. of I-295 Sta 53+50 Before any other work in the area begins.
- All muck excavation areas shall be backfilled to 1'-0" above existing ground with granular borrow or excavation meeting the requirements for granular borrow under water backfill.
- The Clearing Limit Lines shown on the plans are for estimating purposes only. The actual Clearing Limit Lines for payment shall be field measured.
- Layout for sand drains shall be field adjusted (as directed by the soils Division) in the areas of the structural plate pipes and other culverts.
- Excavation for sight preparation where not shown as muck shall be paid for as Common Excavation.

FIELD BOOKS RELATIVE TO PROJECT

- | | | |
|---------|--------------|--|
| 295/153 | 5a. Portland | X-sections Sta 116+00 to 121+00 |
| 295/234 | 5a. Portland | Alignment, ties, topo Sta 50+00 - Sta 116+00 & Med. I-295, Sta. 40+00 - Sta 50+00 S.B. lane I-295 |
| 295/235 | 5a. Portland | X-Sections Sta 50+00 - Sta 116+00 & Med I-295, Sta. 40+00 - Sta. 49+50 S.B. lane I-295 |
| 295/244 | 5a. Portland | Alignment, ties, topo, X-sections N.B. Ramps I-295 to take spur State Highway 703, Ramps TPK-5 and TPK-7 |
| 295/246 | 5a. Portland | Alignment, X-section Ramp "S.B." I-295, Ramp TPK-6 |
| 295/251 | 5a. Portland | Benchmarks, ties, X-sections, alignment I-295, Access Road & to tall house |
21. If the contractor elects to leave the build-up of material from the sand drains on the fill, the material shall be upgraded with Common borrow to a standard acceptable to the Engineer. The only payment will be for the quantity of ITEM No. 203.24 Common Borrow actually used.

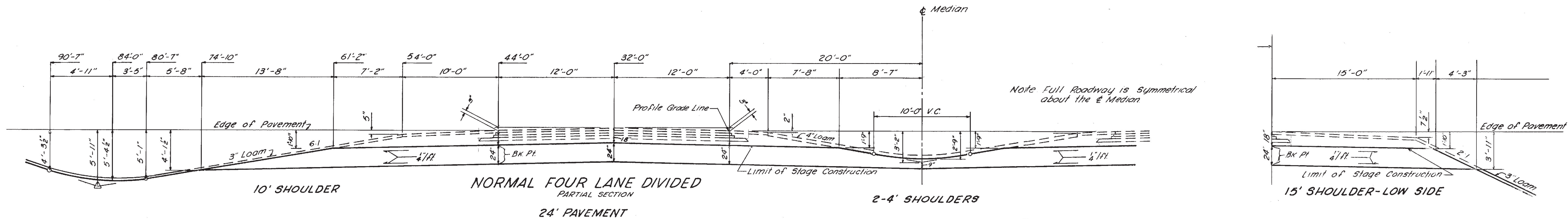
Revised As Built (General Note No. 14, only).
S.W. Ritzky Jr. 5-13-74

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

MAINE STATE HIGHWAY COMMISSION AUGUSTA, MAINE
GENERAL PROJECT INFORMATION SHEET

STAGE CONSTRUCTION — GRADING AND SUBBASE

B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	-295-3(44)	3	103



24" Aggregate Subbase Course - Sand = 178.61 CY/100 LF

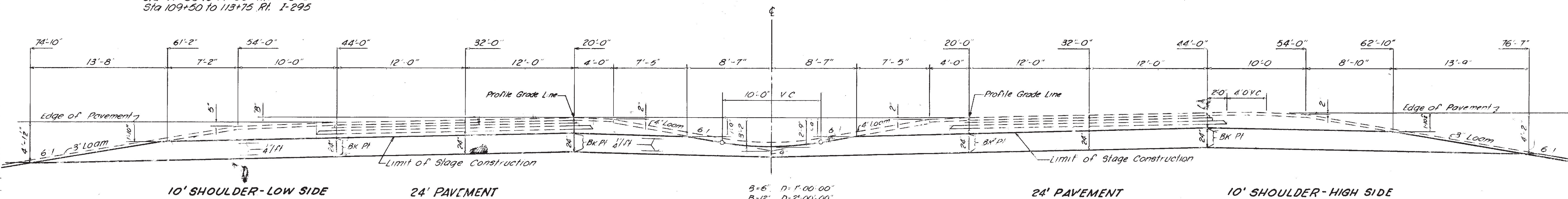
Sta 54+50 to 63+00 Rt. I-295
 Sta 65+00 to 86+00 Lt. I-295
 Sta 65+00 to 66+00 Rt. I-295
 Sta 91+50 to 97+00 Rt. I-295
 Sta 109+50 to 113+75 Rt. I-295

24" Aggregate Subbase Course - Sand = 177.78 CY/100 LF

24" Aggregate Subbase Course - Sand = 260.80 CY/100 LF

24" Aggregate Subbase Course - Sand = 141.04 CY/100 LF

Sta 86+50 to 97+00 Lt. I-295
 Sta 114+50 to 115+00 Rt. I-295
 Sta 115+00 to 119+00 Lt. I-295



24" Aggregate Subbase Course - Sand = 178.61 CY/100 LF

Sta 54+50 to 63+00 Rt. I-295
 Sta 65+00 to 86+00 Lt. I-295
 Sta 65+00 to 66+00 Rt. I-295
 Sta 91+50 to 97+00 Rt. I-295
 Sta 109+50 to 113+75 Rt. I-295

24" Aggregate Subbase Course - Sand = 177.78 CY/100 LF

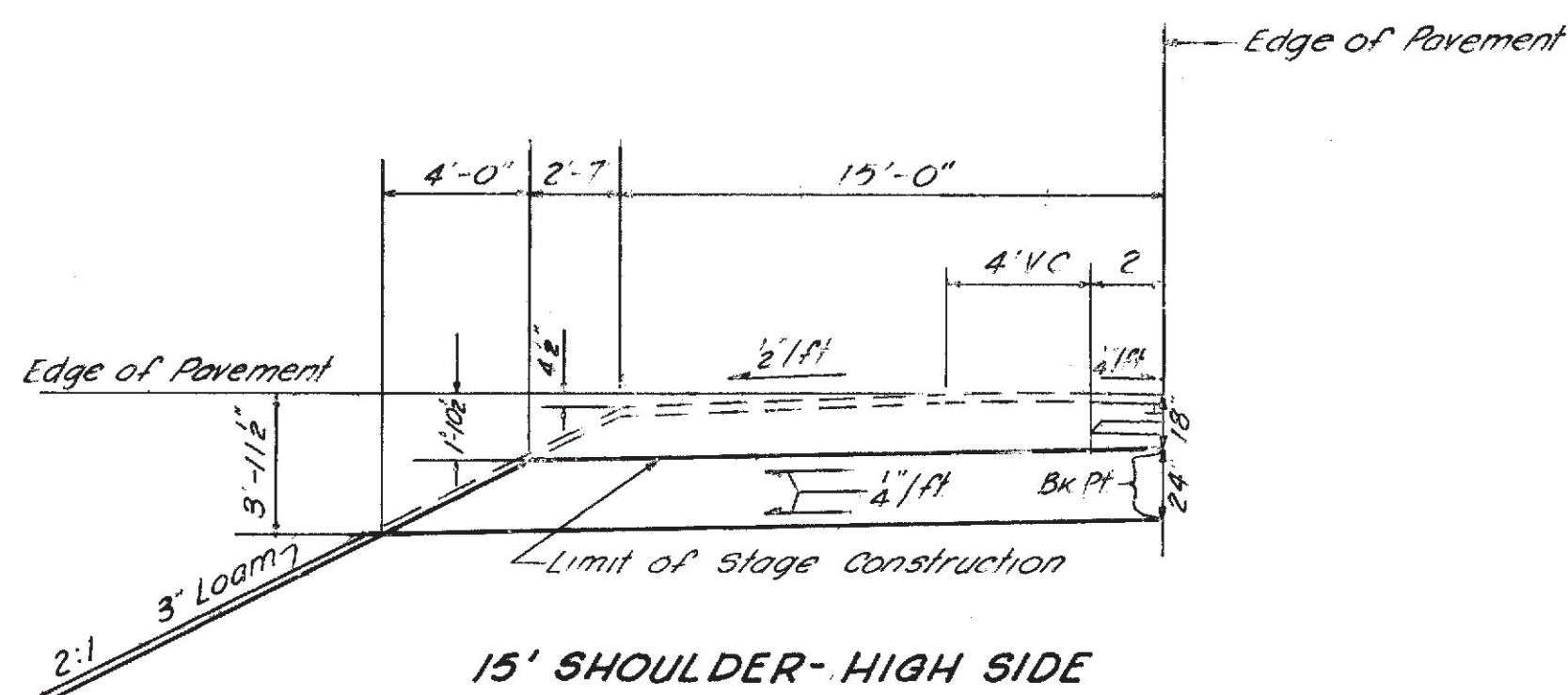
2-4' SHOULDERS

24" Aggregate Subbase Course - Sand = 260.80 CY/100 LF

24" Aggregate Subbase Course - Sand = 177.78 CY/100 LF

24" Aggregate Subbase Course - Sand = 191.06 CY/100 LF

Sta 57+25 to 59+50 Lt. I-295
 Sta 66+00 to 83+50 Rt. I-295

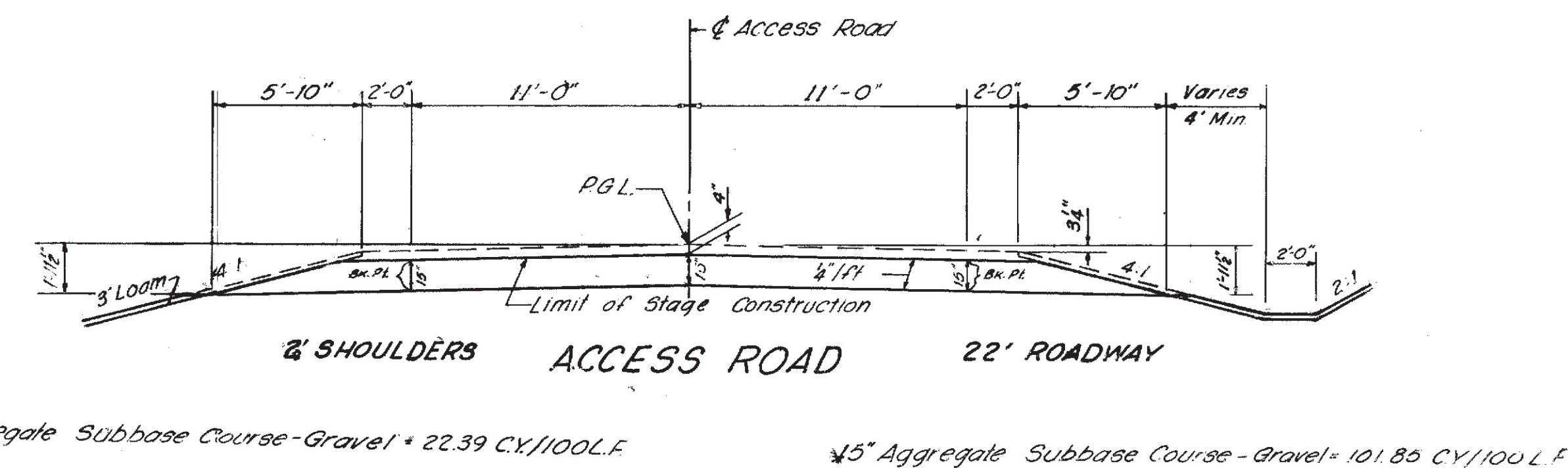


24" Aggregate Subbase Course - Sand = 145.00 CY/100 LF

Sta 54+50 to 56+50 Lt. I-295
 Sta 115+00 to 117+50 Lt. I-295

- Notes:** (As Built, 1971)
- (1) A 5" Layer of Aggregate Subbase Course - Gravel was placed in the following areas:
- Main Line roadway & shoulders NB & SB
 - Sta 56+00 to 63+50
 - 64+50 to 85+25
 - 89+25 to 93+25
 - 96+00 to Bridge Approach Slab @ S.R. 703
 - Main Line roadway & shoulders SB only
 - From Bridge Approach Slab @ S.R. 703 Ahead to Sta 108+00
 - Ramp Tpk-7 roadway & shoulders
 - Sta 3+50 ± (opposite ML 89+25) to 6+75.

- (2) A 4" Layer of Agg. Subbase Crse. - Gravel was placed in the following areas:
- Ramp Tpk-7 roadway & shoulders
 - Sta 6+75 to 7+00 & Sta 12+50 to 20+00.



15" Aggregate Subbase Course - Gravel = 22.39 CY/100 LF

45" Aggregate Subbase Course - Gravel = 101.85 CY/100 LF

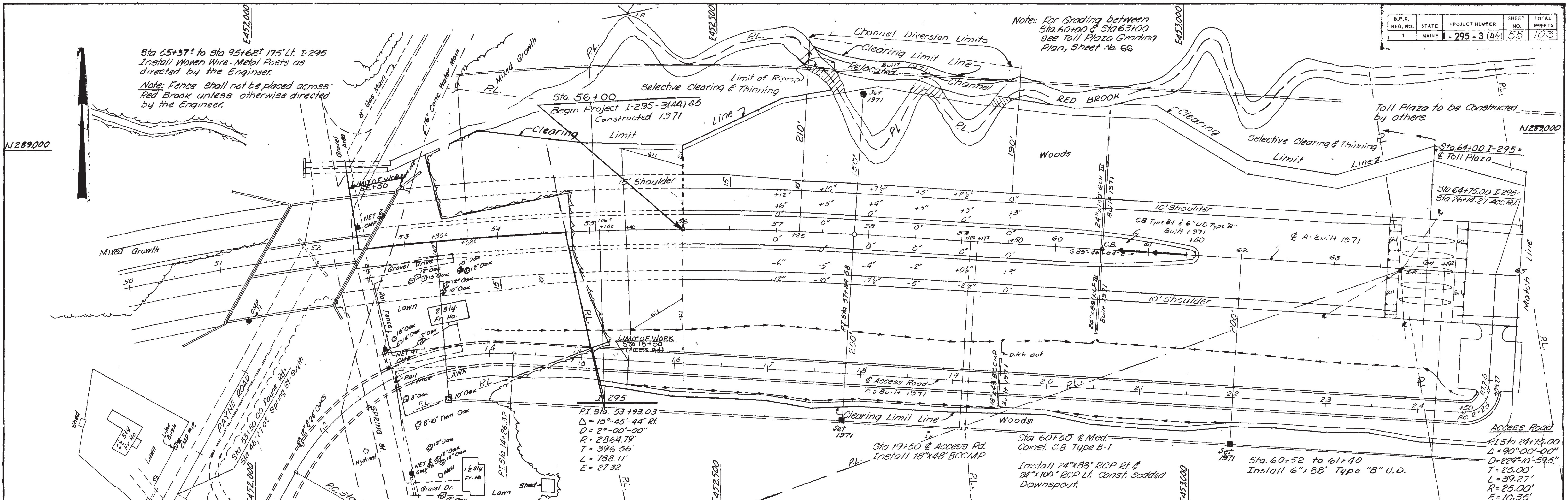
Revised As Built
 (Added Gravel Notes)
 C.W. Putney Jr. 5-13-74

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

MAINE STATE HIGHWAY COMMISSION
 AUGUSTA, MAINE

TYPICAL SECTIONS

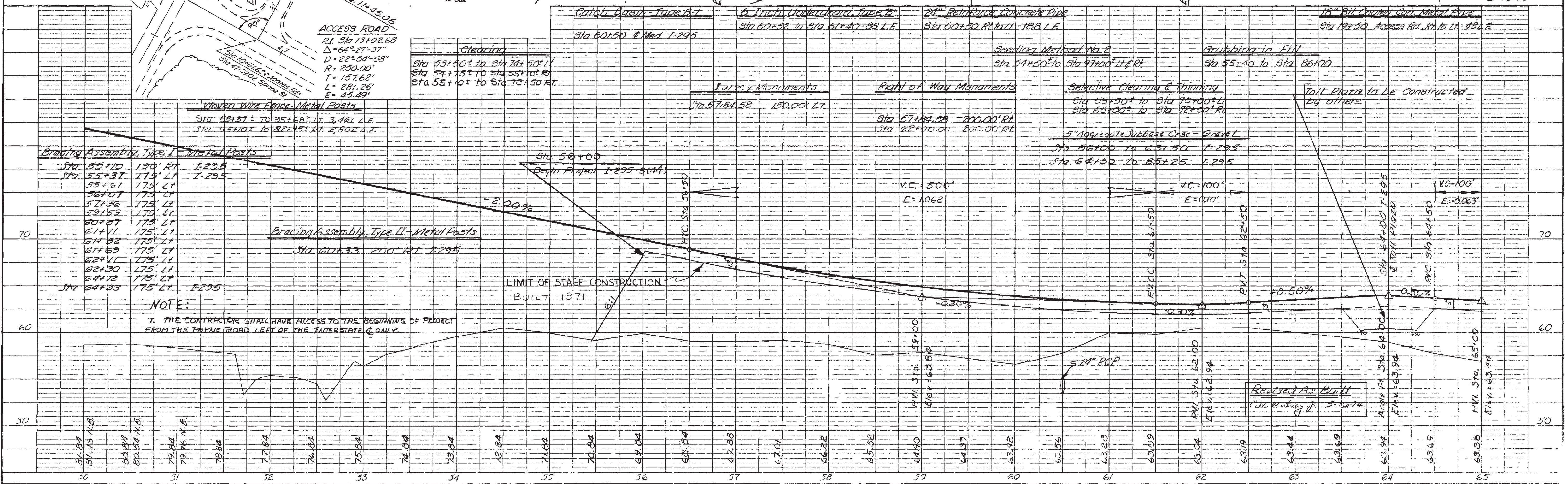
Note: For Grading between Sta. 60+00 & Sta. 63+00 see Toll Plaza Grading Plan, Sheet No. 66



Sta 55+37' to Sta 95+68' 175' Lt. I-295
Install Woven Wire-Metal Posts as directed by the Engineer.
Note: Fence shall not be placed across Red Brook unless otherwise directed by the Engineer.

PLAN	DATE
SURVEYED	
PLOTTED	
ALIGNMENT CHECKED	
RT. OF WAY CHECKED	
NO.	

PROFILE	DATE
SURVEYED	
CHECKED	
NOTE BOOK	
STRUCTURE NOTATIONS	
NO.	



ACCESS ROAD
PI Sta 13+02.68
Δ = 64°-21'-31"
D = 222.54'-58"
R = 250.00'
T = 157.62'
L = 281.26'
E = 45.49'

Woven Wire Fence-Metal Posts
Sta 55+37' to 95+68' Lt. 3,461 L.F.
Sta 55+10' to 82+95' Rt. 2,802 L.F.

Bracing Assembly, Type I - Metal Posts

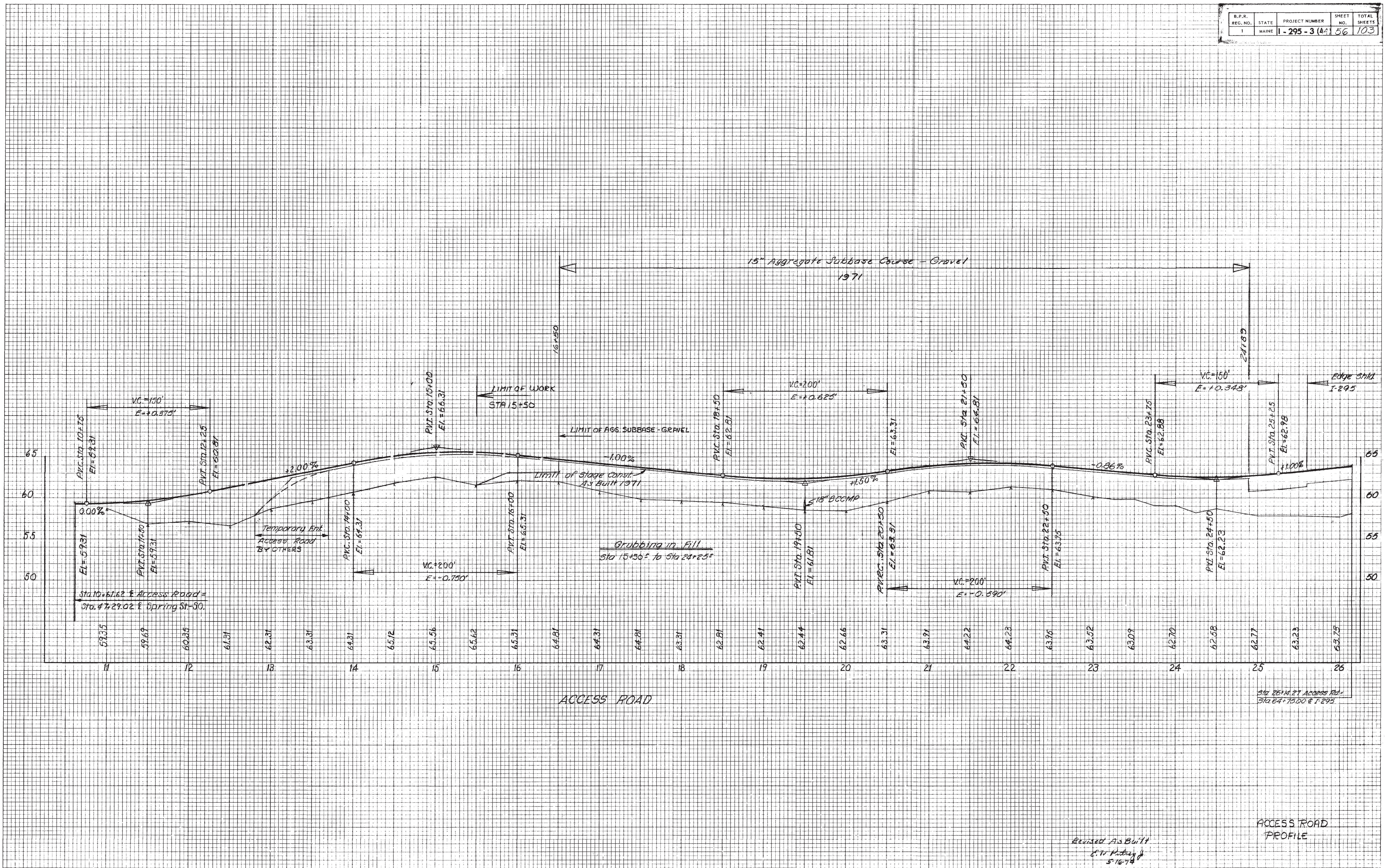
Sta 55+10	190' Lt	I-295
Sta 55+37	175' Lt	I-295
55+61	175' Lt	
56+07	175' Lt	
57+36	175' Lt	
59+59	175' Lt	
60+87	175' Lt	
61+11	175' Lt	
61+52	175' Lt	
61+63	175' Lt	
62+11	175' Lt	
62+30	175' Lt	
64+12	175' Lt	
Sta 64+33	175' Lt	I-295

Bracing Assembly, Type II - Metal Posts
Sta 60+33 200' Rt I-295

NOTE:
1. THE CONTRACTOR SHALL HAVE ACCESS TO THE BEGINNING OF PROJECT FROM THE PAYNE ROAD LEFT OF THE INTERSTATE CORNER.

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

ORIGINAL SURVEY NOTE BOOK NO. _____
 SURVEYED, PLOTTED, TEMPLATE AREAS CHECKED
 BY *SLC* DATE 7/28/89



ACCESS ROAD

ACCESS ROAD PROFILE

Revised As Built
 E. W. Huber Jr.
 5/16/74