B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-295-3(44)45	1	103

SCARBOROUGH
SO. PORTLAND

STATE OF MAINE
STATE HIGHWAY COMMISSION

SCARBOROUGH - SOUTH PORTLAND
CUMBERLAND COUNTY
MAINE FEDERAL AID-INTERSTATE
PROJECT NO. I-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. VERT. 1 IN. = 5 FT.
- CROSS SECTIONS 1 IN. = 10 FT.

OR AS SHOWN

BUILT 1971

Reel 174

RW 2

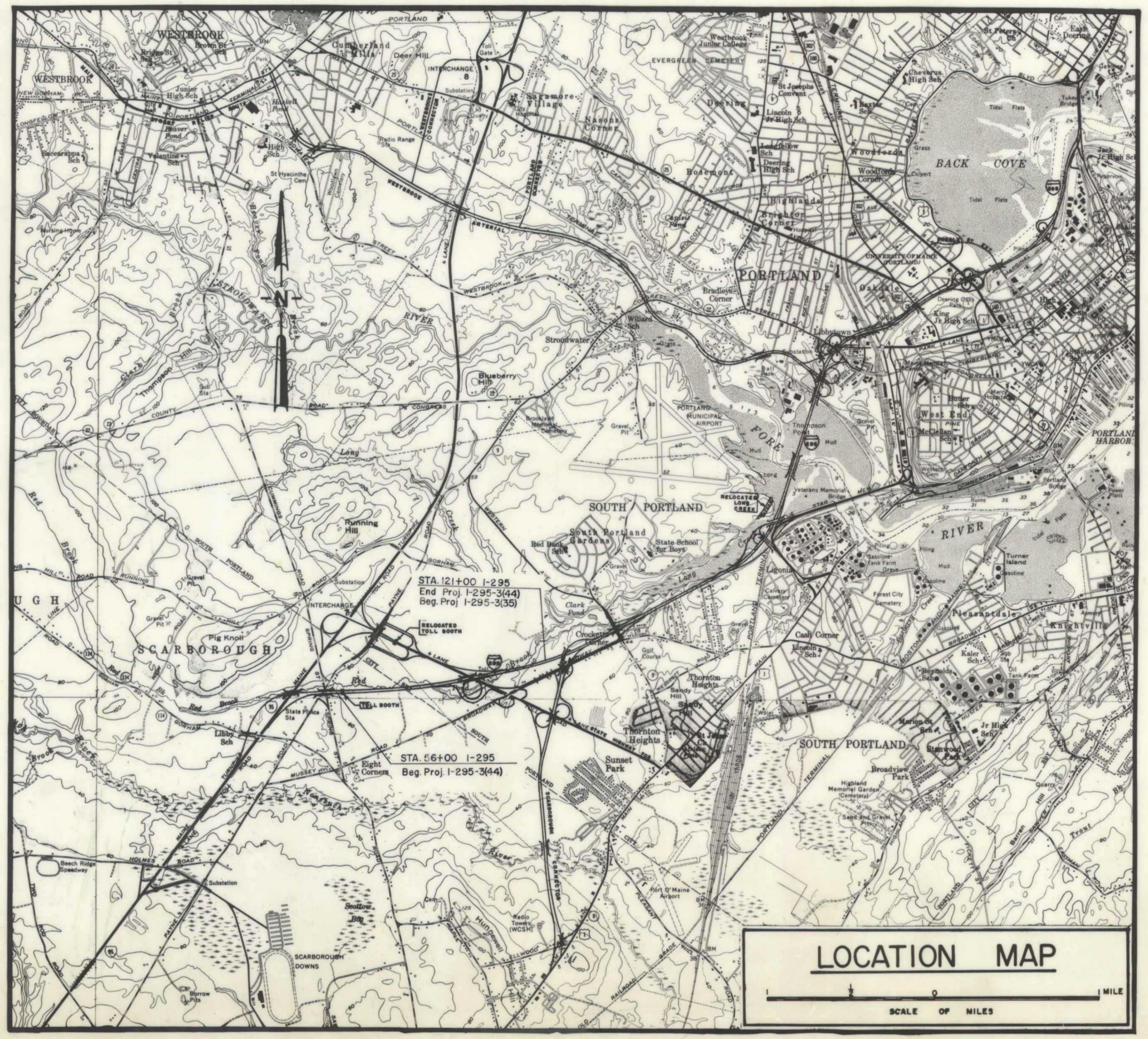
CONVENTIONAL SIGNS

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	ϕ
CULVERT - EXISTING	═ ═ ═ ═	UTILITY POLE - JOINT OCCUPANCY	ϕJ
CULVERT - PROPOSED	═══	PROPOSED UTILITY POLE - TEMPORARY	X
CURBING - EXISTING	═══	PROPOSED UTILITY POLE - PERMANENT	ϕ
CURBING - PROPOSED	━━━	TREES	hardwood softwood
TRAVELLED WAY - EXISTING	═ ═ ═ ═	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, & S.R.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

Bridge Maintenance



LOCATION MAP

TRAFFIC DATA	N.B.	S.B.
A.D.T. 1970	2,830	2,680
A.D.T. 1990	5,304	5,004
D.H.V.	743	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	DATE
David H. Stevens CHAIRMAN	September 16, 1970
Bertrand A. Lachance	September 16, 1970
Steven Shaw	September 16, 1970
Sylvester L. Poor CHIEF ENGINEER	September 16, 1970

SYLVESTER L. POOR 187

WILLIAM M. WACHTER 2193

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

WmWachter

MAY 27, 1970
DATE

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
BUREAU OF PUBLIC ROADS
REGION 1

APPROVED:

DIVISION ENGINEER DATE

JANUARY 1968

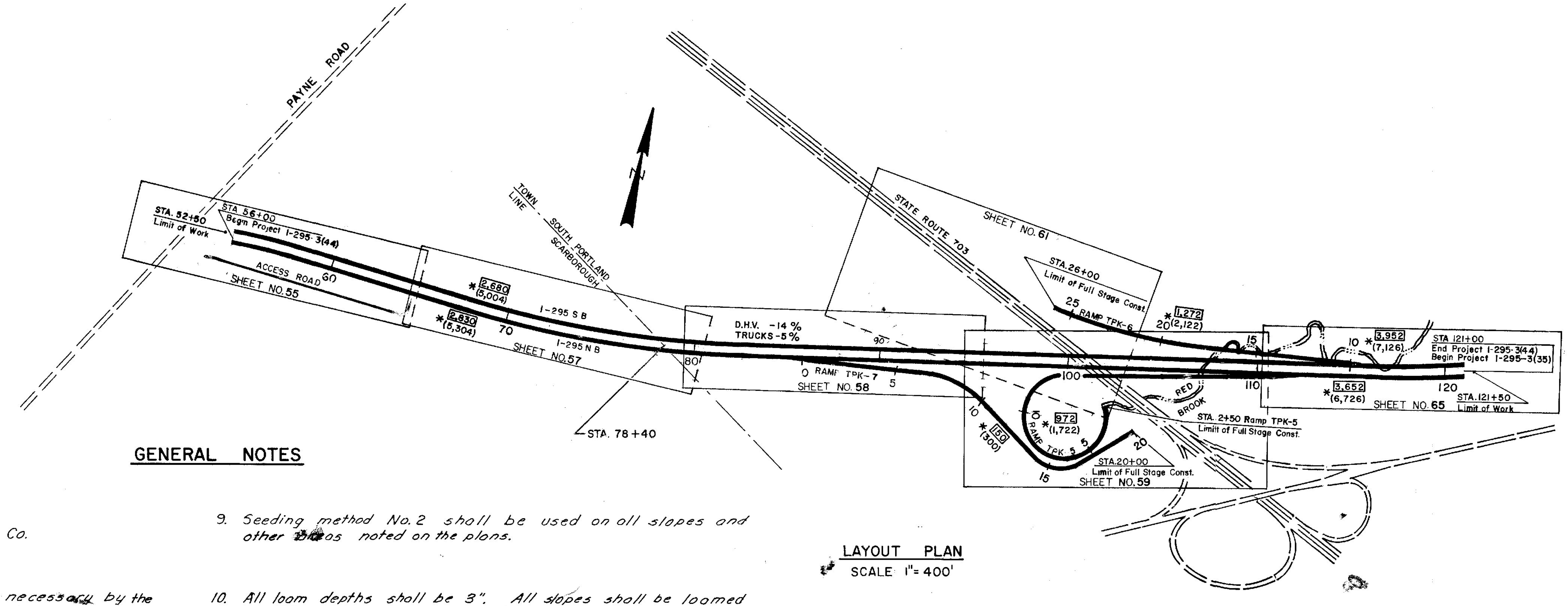
203-1 2080

I-295 Scarborough-South Portland

B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-295-3(44)	2	103

GENERAL PROJECT INFORMATION

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



LAYOUT PLAN
SCALE 1"= 400'

GENERAL NOTES

1. The utilities involved in this contract are:
   - Central Maine Power Co.
   - New England Telephone & Telegraph Co.
   - Portland Water District
   - Portland Gas & Light Co.
2. All utility facilities are to be adjusted as necessary by the respective utilities unless otherwise noted.
3. Removal or abandonment of any existing drainage must first be approved by the Engineer.
4. * 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.
5. 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.
6. P.T.H. shown on the cross sections indicates "Planimeter to Here" for use in quantity calculations only.
7. 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."
8. 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.
9. Seeding method No. 2 shall be used on all slopes and other areas noted on the plans.
10. All loam depths shall be 3". All slopes shall be loamed on this basis unless otherwise noted on the plans.
11. Hay mulch and asphalt binder shall be applied to all areas seeded by method No. 2.
12. All ditch elevations shown on the cross sections are to the top of loam unless otherwise noted.
13. All reinforced concrete pipe shall be class III unless otherwise noted on the plans.
14. All excavation for relocated channels shall be paid for under item 206.12 Structural Earth Excavation - Channel.
15. 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.
16. 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.
17. 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.
18. The Clearing Limit Lines shown on the plans are for estimating purposes only. The actual Clearing Limit Lines for payment shall be field measured.
19. 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.
20. Excavation for sight preparation where not shown as muck shall be paid for as Common Excavation.

FIELD BOOKS RELATIVE TO PROJECT

295/153	So. Portland	X-sections Sta 116+00 to 121+00
295/234	So. 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	So. 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	So. Portland	Alignment, ties, topo, X-sections N.B. Ramps I-295 to tpke spur State Highway 703, Ramps TPK-5 and TPK-7
295/246	So. Portland	Alignment, X-section Ramp "S.B." I-295, Ramp TPK-6
295/251	So. Portland	Benchmarks, ties, X-sections, alignment I-295, Access Road ℄ to toll 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
№ 14, only).
E.W. Putney Jr. 5-13-74

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

MAINE STATE HIGHWAY COMMISSION
AUGUSTA, MAINE

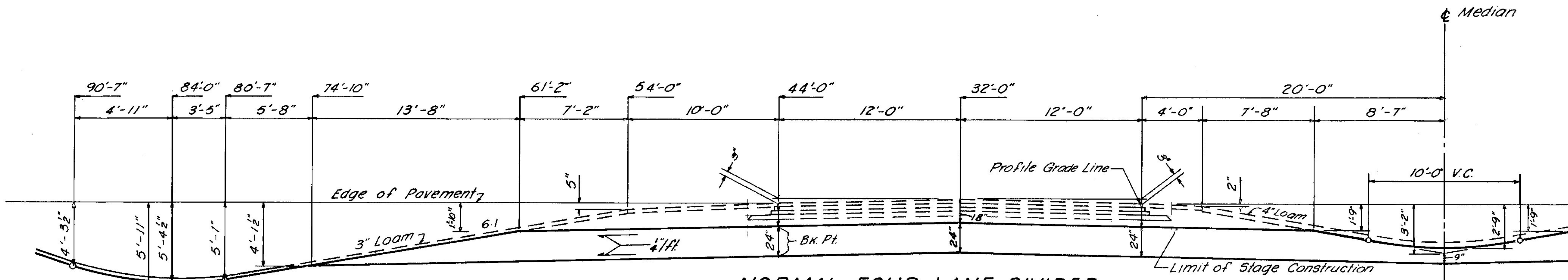
GENERAL PROJECT
INFORMATION SHEET

I-295 Scarborough - South Portland

BRUNING 44-302

STAGE CONSTRUCTION — GRADING AND SUBBASE

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



Note Full Roadway is Symmetrical about the ℄ Median

10' SHOULDER

NORMAL FOUR LANE DIVIDED
PARTIAL SECTION

24' PAVEMENT

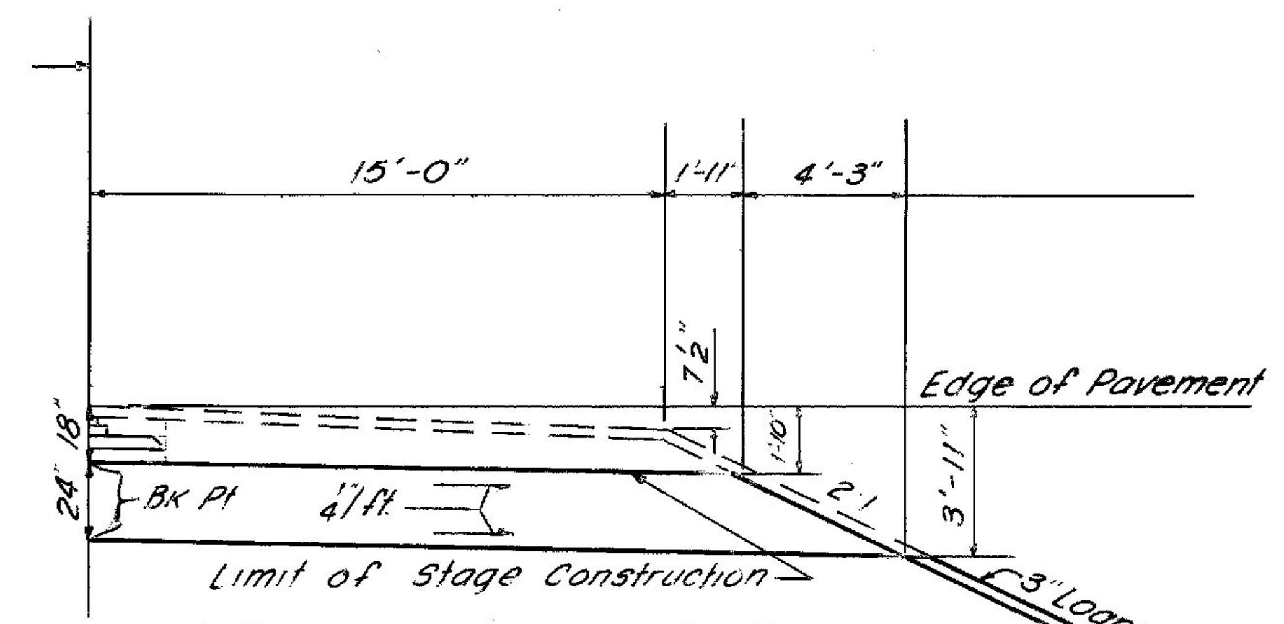
2-4' SHOULDERS

24" Aggregate Subbase Course - Sand - 178.61 CY/100 L.F.

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 L.F.

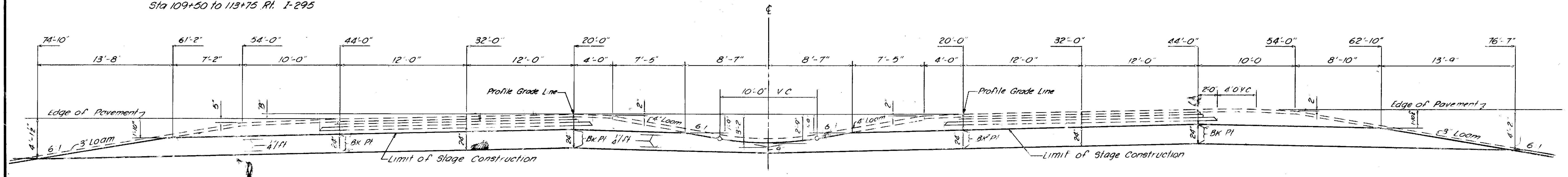
24" Aggregate Subbase Course - Sand = 260.80 CY/100 L.F.



15' SHOULDER-LOW SIDE

24" Aggregate Subbase Course - Sand = 141.04 CY/100 L.F.

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



B=6" D=1°00'00"
B=12" D=2°00'00"

10' SHOULDER-LOW SIDE

24' PAVEMENT

24' PAVEMENT

10' SHOULDER-HIGH SIDE

SUPERELEVATED FOUR LANE DIVIDED

2-4' SHOULDERS

24" Aggregate Subbase Course-Sand-178.61 CY/100 L.F.

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

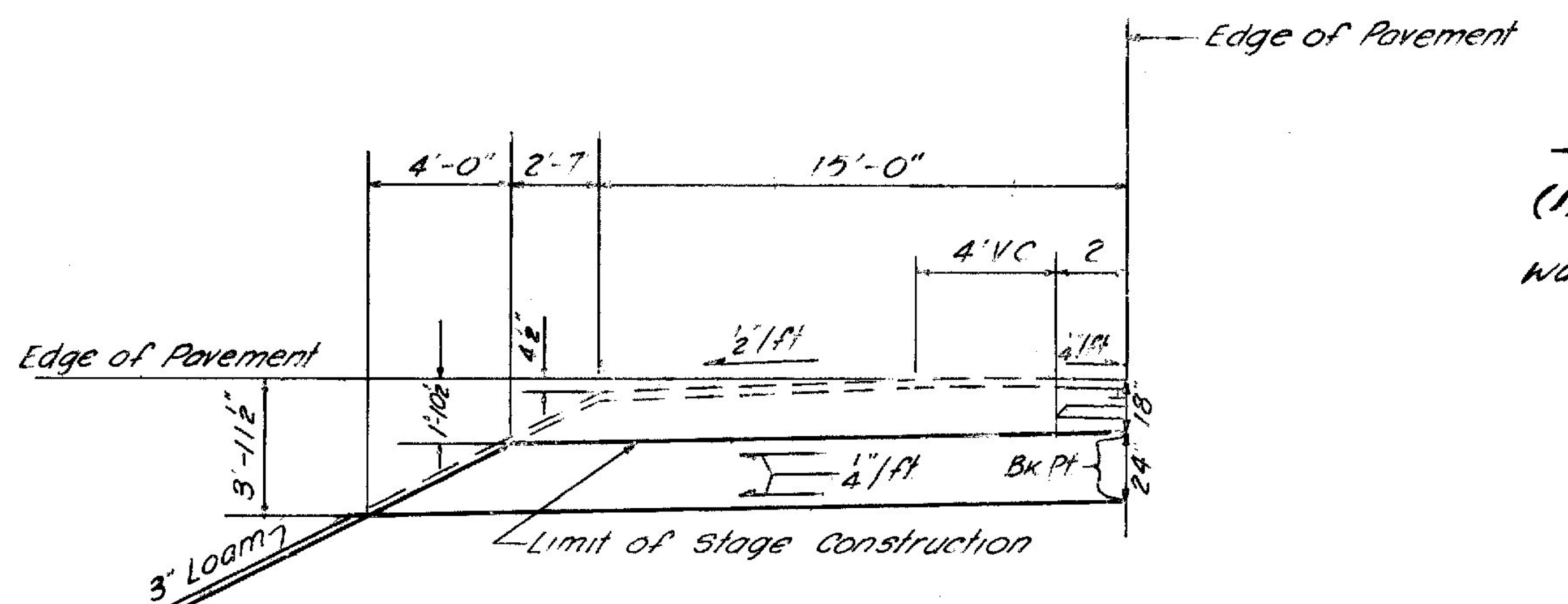
24" Aggregate Subbase Course-Sand-177.78 CY/100 L.F.

24" Aggregate Subbase Course - Sand = 260.80 CY/100 L.F.

24" Aggregate Subbase Course - Sand = 177.78 CY/100 L.F.

24" Aggregate Subbase Course - Sand = 191.06 CY/100 L.F.

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



15' SHOULDER- HIGH SIDE

24" Aggregate Subbase Course - Sand = 145.00 CY/100 L.F.

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 roadways & 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

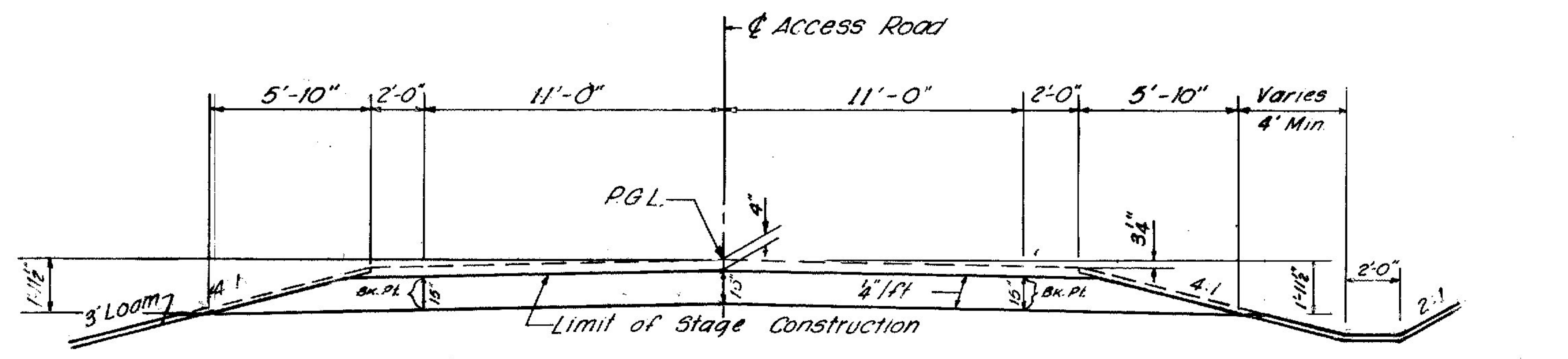
From Bridge Approach Slab @ S.R. 703
Ahead to Sta 108+00

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.



2' SHOULDERS

ACCESS ROAD

22' ROADWAY

15" Aggregate Subbase Course - Gravel = 22.39 CY/100 L.F.

15" Aggregate Subbase Course - Gravel = 101.85 CY/100 L.F.

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

MAINE STATE HIGHWAY COMMISSION
AUGUSTA, MAINE

TYPICAL SECTIONS

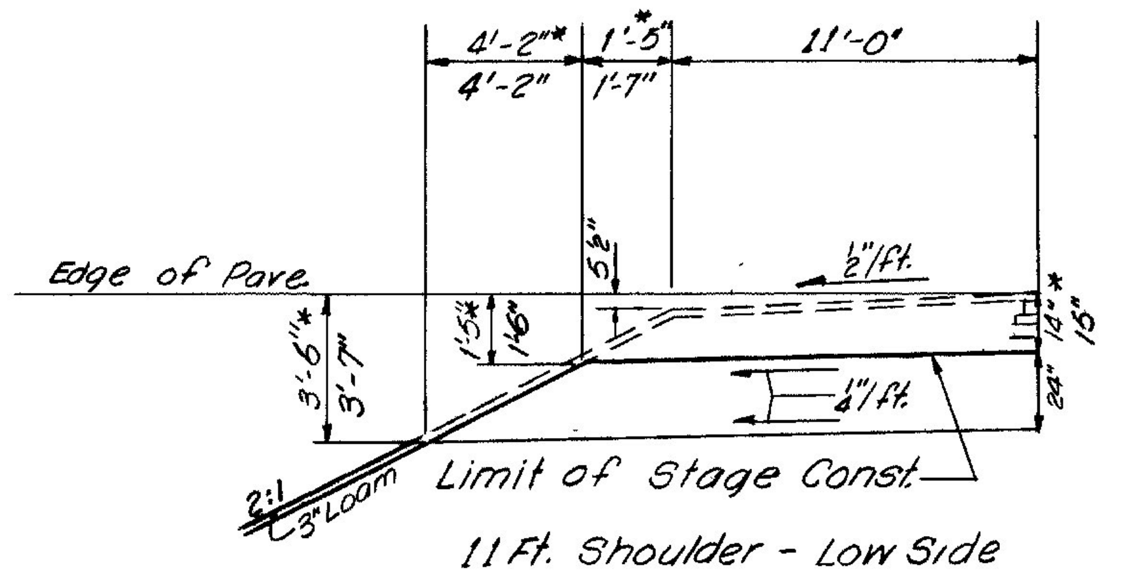
HOWARD, NEEDLES, TAMMEN & BERGENDOFF
CONSULTING ENGINEERS
NEW YORK BOSTON KANSAS CITY

BRUNING 44-302

I-295 Scarborough - South Portland

B.P.R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-295-3 (44)	4	103

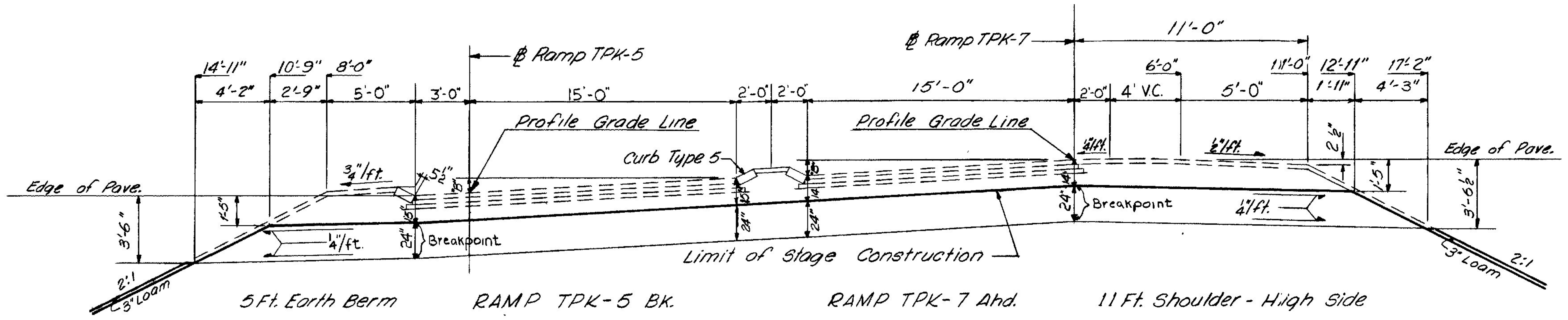
STAGE CONSTRUCTION — GRADING AND SUBBASE



11 Ft. Shoulder - Low Side

24" Aggregate Subbase Crse.- Sand = 107.39 C.Y./100 L.F. *
108.65 C.Y./100 L.F.

Sta 17+50 to 19+50 Ramp TPK-6
Sta 6+75 to 12+00 Ramp TPK-7



5 Ft. Earth Berm
RAMP TPK-5 BK.
RAMP TPK-7 Ahd.
11 Ft. Shoulder - High Side

24" Aggregate Subbase Crse.- Sand = 72.75 C.Y./100 L.F.

Sta 2+50 to 3+50 Ramp TPK-5
Sta 7+50 to 11+00 Ramp TPK-5

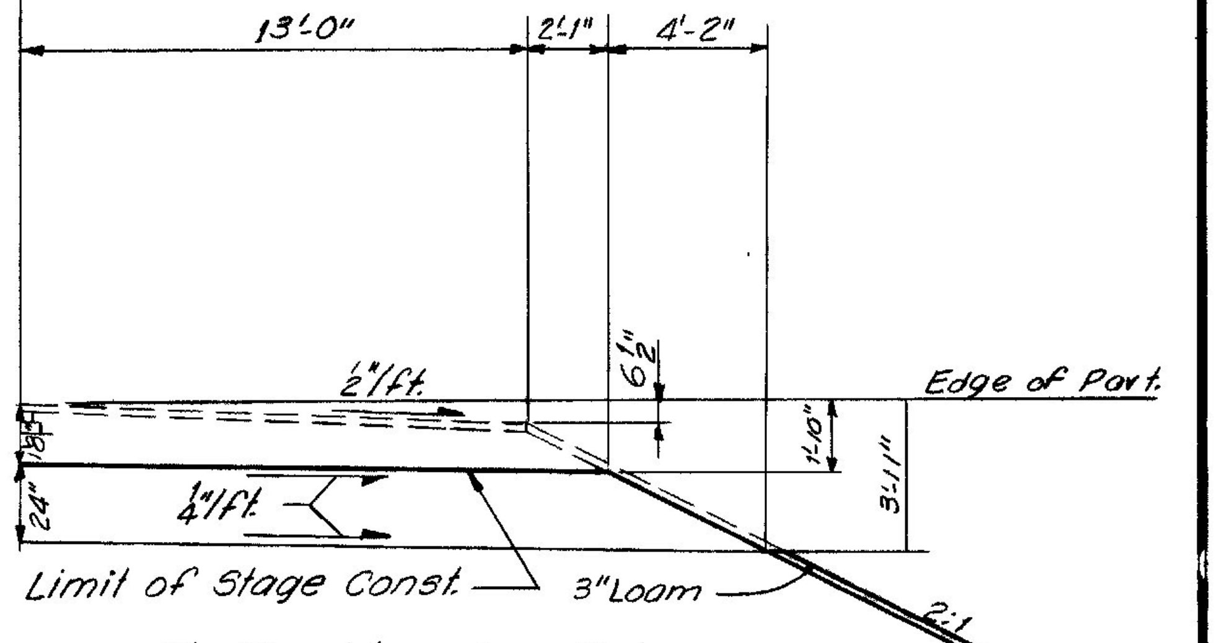
Ramp TPK-5 "B" Value
R= 225' B= 10"

18' Rdwy 24" Aggregate Subbase Crse.-Sand = 133.33 C.Y./100 L.F.
15' Rdwy " " " " " 111.11 " "
4' Median " " " " " 29.63 " "

24' Aggregate Subbase Crse.-Sand = 112.44 C.Y./100 L.F.

Sta 12+00 to 14+50 Ramp TPK-7

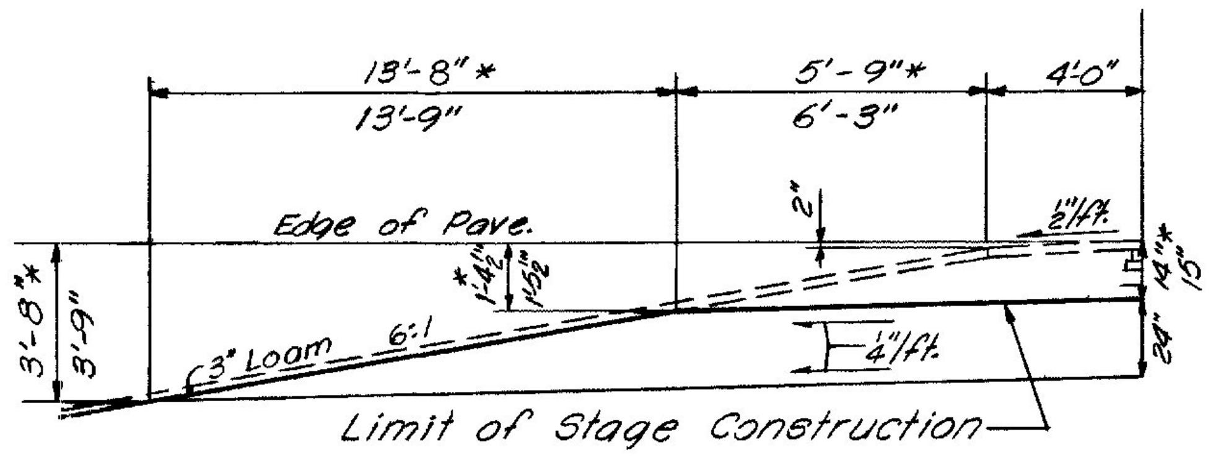
Ramp TPK-7 "B" Value
R= 475' B= 9"
R= 259' B= 10"



13 Ft. Shoulder - Low Side

24" Aggregate Subbase Crse.-Sand = 126.92 C.Y./100 L.F.

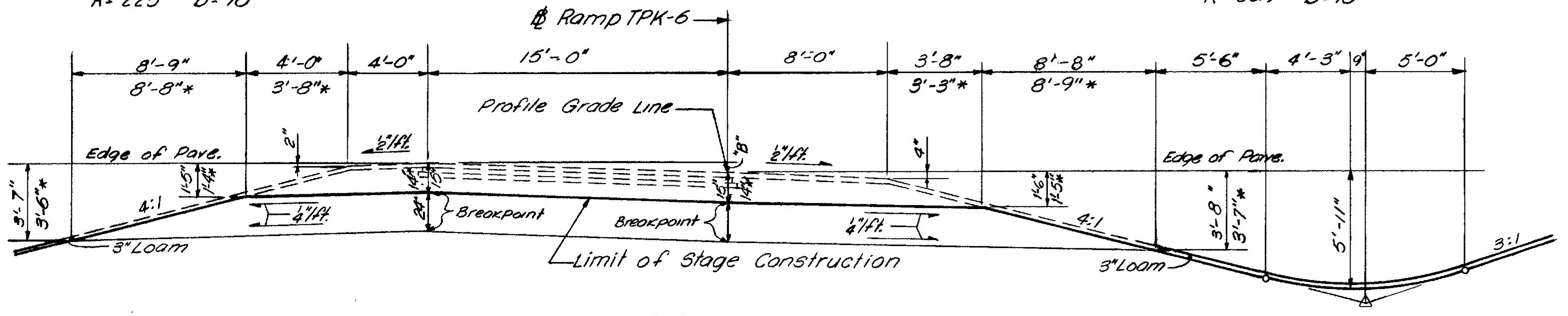
Sta. 18+80± to 22+82± Ramp TPK-5



4 Ft. Shoulder - 6:1 Side Slope

24" Aggregate Subbase Course-Sand = 122.83 C.Y./100 L.F. *
126.91 C.Y./100 L.F.

Sta 9+25 to 11+00 Ramp TPK-5
Sta 5+74 to 12+75 Ramp TPK-7



4 Ft. Shld.-High & Low Side
RAMP TPK-5,6 & 7*
8 Ft. Shoulder - Low Side
15 Roadway

24" Aggregate Subbase Crse.-Sand = 91.44 C.Y./100 L.F.
88.58 C.Y./100 L.F.*

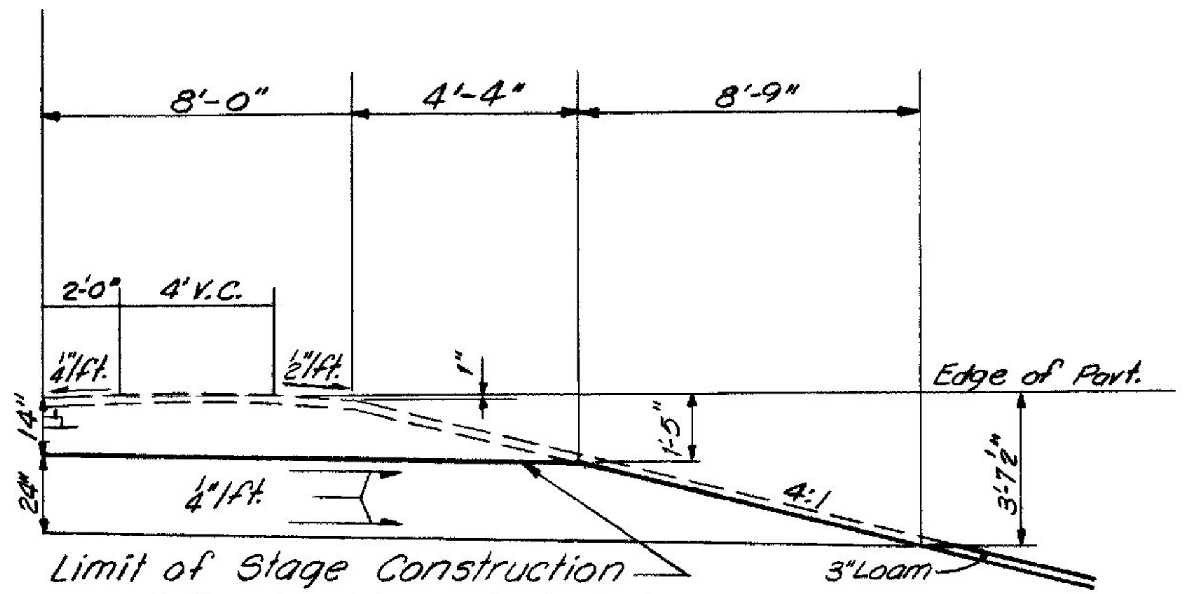
24" Aggregate Subbase Crse.-Sand = 111.11 C.Y./100 L.F.

24" Aggregate Subbase Crse.-Sand = 118.11 C.Y./100 L.F.
115.16 C.Y./100 L.F.*

Sta 3+50 to 4+25 Ramp TPK-5
Sta 15+94 to 26+00 Ramp TPK-6
Sta 18+25 to 20+00 Ramp TPK-7

Ramp TPK-6 "B" Value
D= 2°00'-00" B= 6"

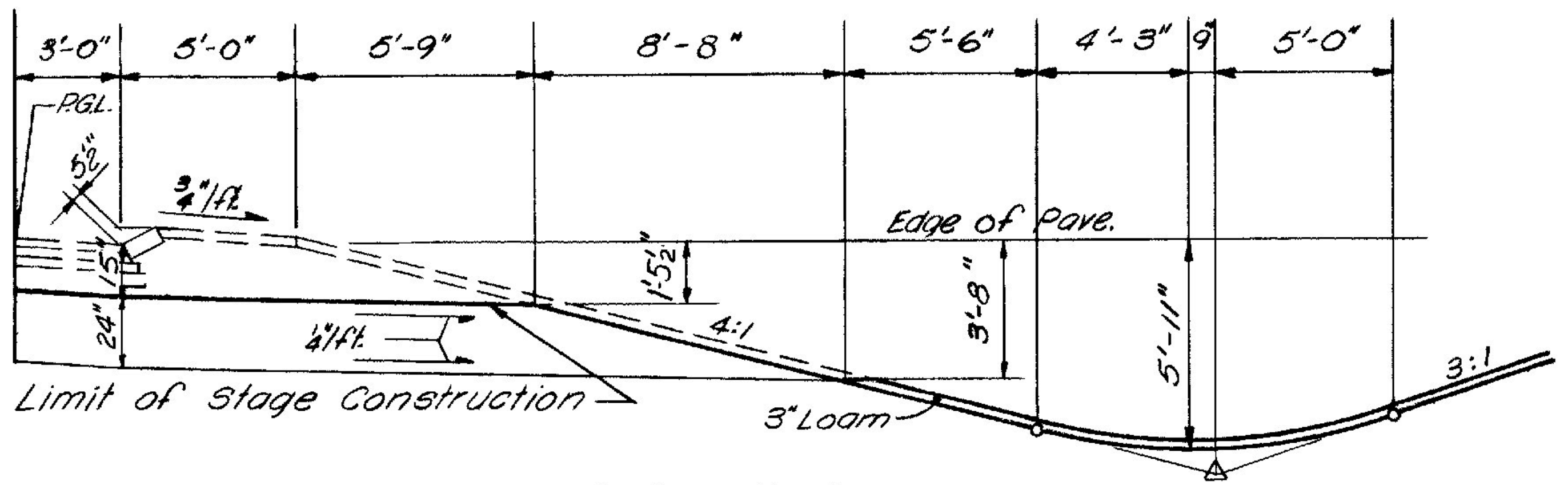
Sta 20+00 to 26+00 Ramp TPK-6
Sta 19+00 to 20+00 Ramp TPK-7



8 Ft. Shoulder - High Side

24" Aggregate Subbase Crse.-Sand = 124.47 C.Y./100 L.F.

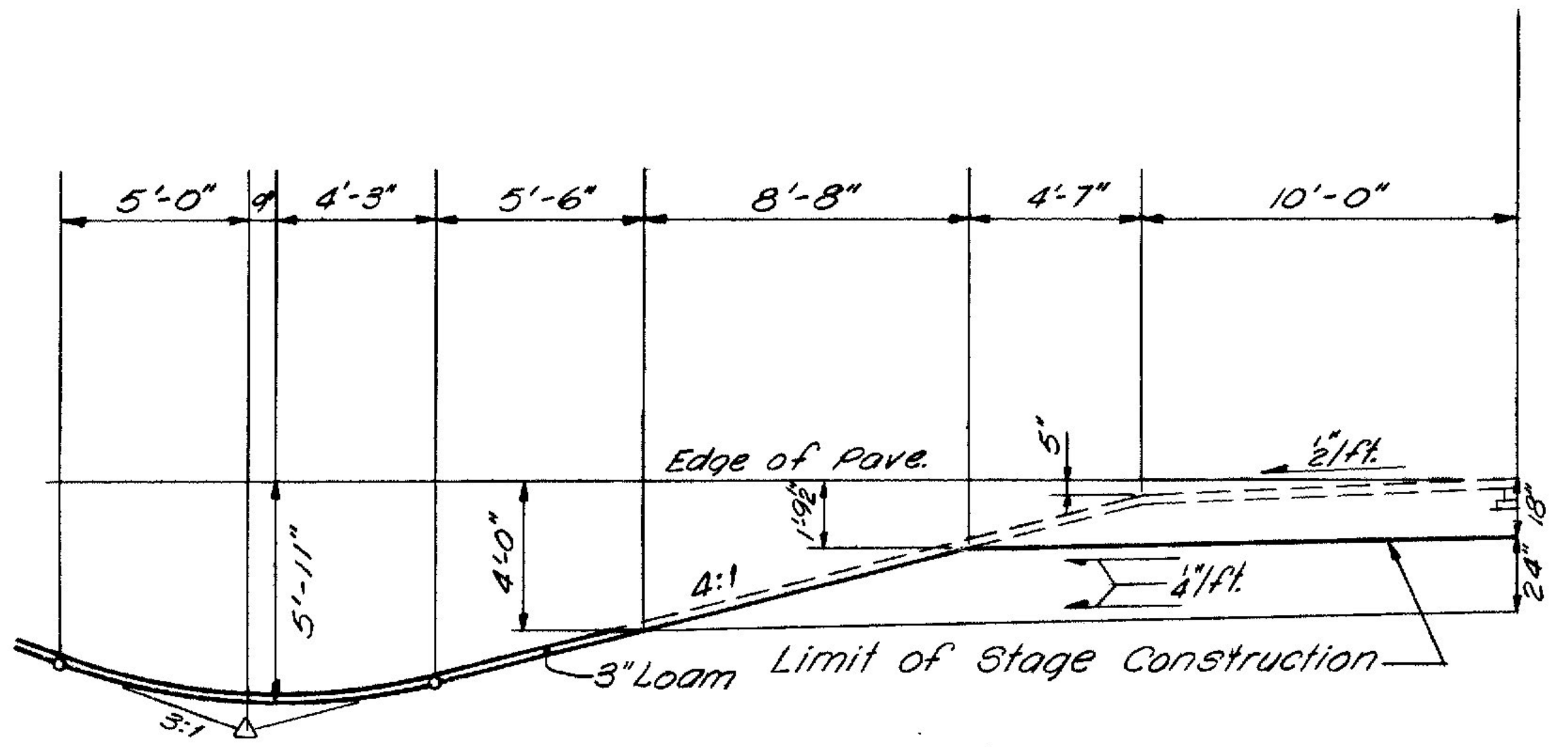
Sta 15+00 to 19+00 Ramp TPK-7



RAMP TPK-5 - 5 Ft. Earth Berm

24" Aggregate Subbase Course - Sand = 112.53 C.Y./100 L.F.

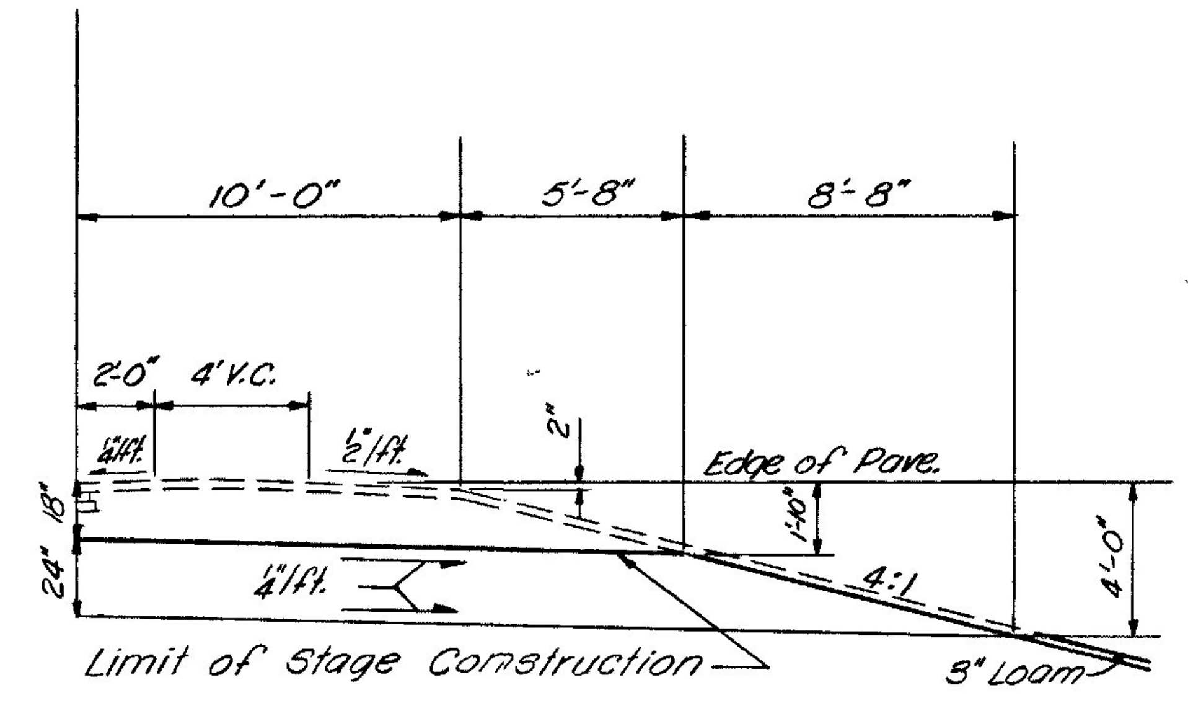
Sta 4+00 to 7+00



10 Ft. Shoulder - Low Side

24" Aggregate Subbase Crse.-Sand = 141.06 C.Y./100 L.F.

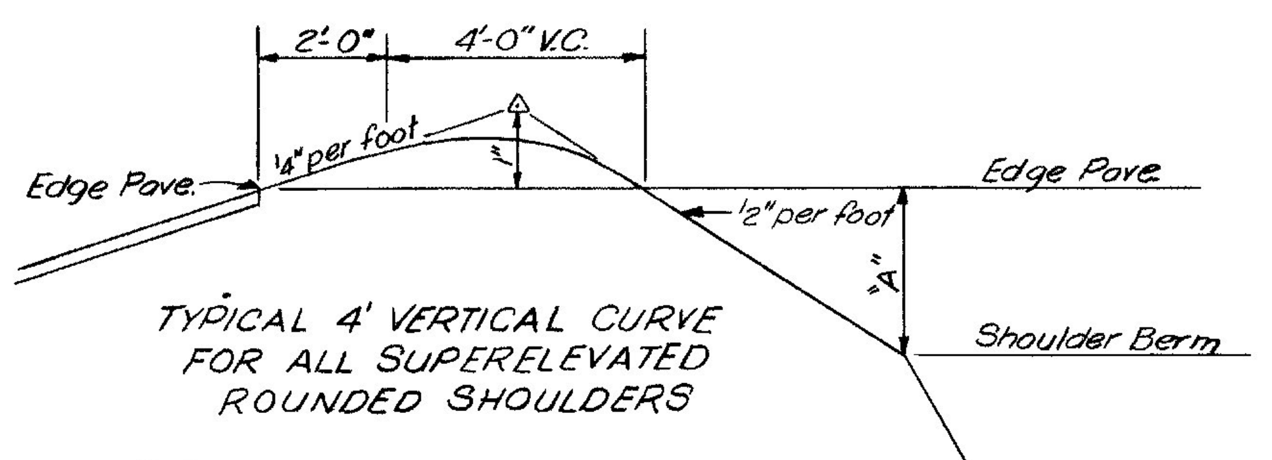
Sta 119+75 to 121+50 Lt. I-295



10 Ft. Shoulder - High Side

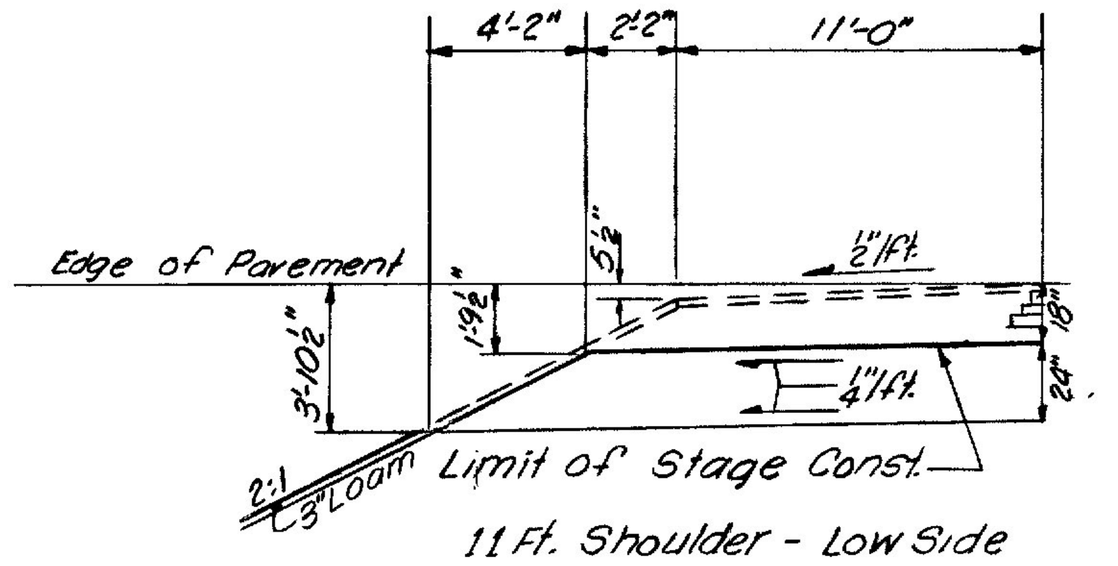
24" Aggregate Subbase Crse. - Sand = 144.55 C.Y./100 L.F.

Sta. 118+00 to 121+50 Rt. I-295



TYPICAL 4' VERTICAL CURVE
FOR ALL SUPERELEVATED
ROUNDED SHOULDERS

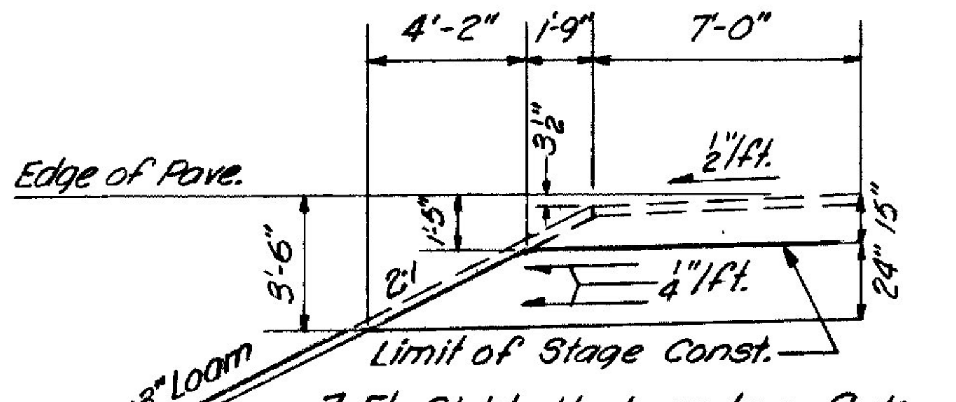
"A" and quantities are as shown for
8', 10', 13', and 15' superelevated shoulders.



11 Ft. Shoulder - Low Side

24" Aggregate Subbase Crse.-Sand = 112.74 C.Y./100 L.F.

Sta 10+00 to 17+50 Ramp TPK-6
Sta 0+00 to 6+75 Ramp TPK-7



7 Ft. Shld.-High or Low Side

24" Aggregate Subbase Crse.- Sand = 80.31 C.Y./100 L.F.

Sta. 2+50 to 3+00 Ramp TPK-5

Note: Dimensions and Quantities
Shown with an Asterisk (*)
Apply to Ramp TPK-7

See "As Built" Gravel Notes
on Sheet No. 3.
C.W. Putney Jr. 5-13-74

MAINE STATE HIGHWAY COMMISSION
AUGUSTA, MAINE

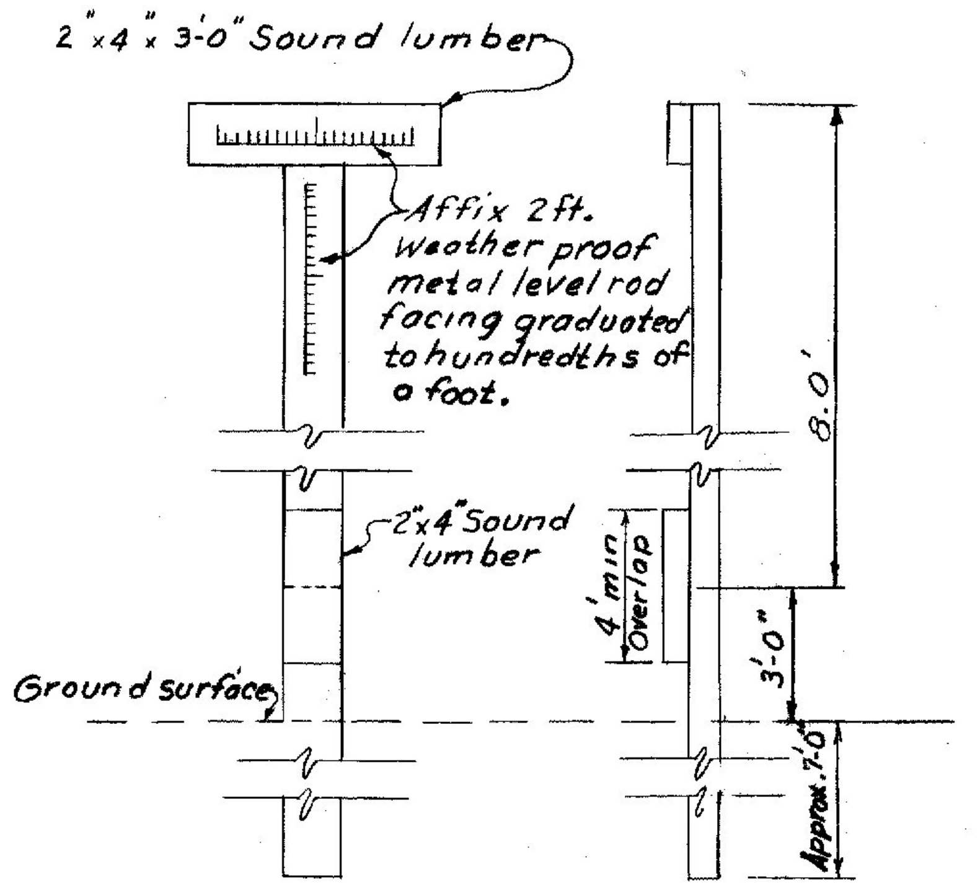
TYPICAL SECTIONS

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

BRUNING 44-302

- Scarborough

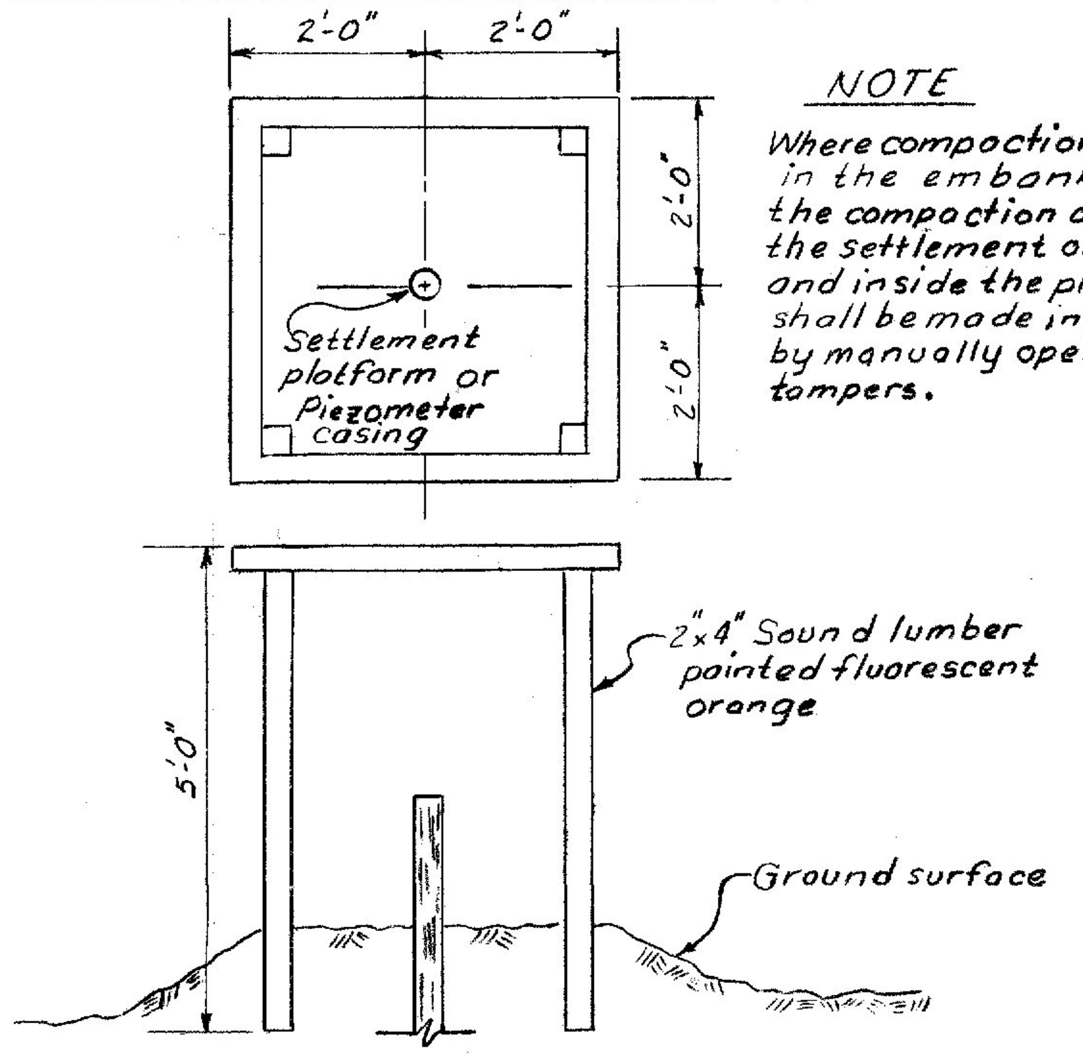
B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-295-3(44)	7	103


2"x4"x 3'-0" Sound lumber
Affix 2ft. weather proof metal level rod facing graduated to hundredths of a foot.
2"x4" Sound lumber
Ground surface
4' min Overlap
8.0'
3'-0"
Approx. 7.0'

DETAIL OF EMBANKMENT ALIGNMENT STAKE

NOT TO SCALE

(FURNISHING ONLY)

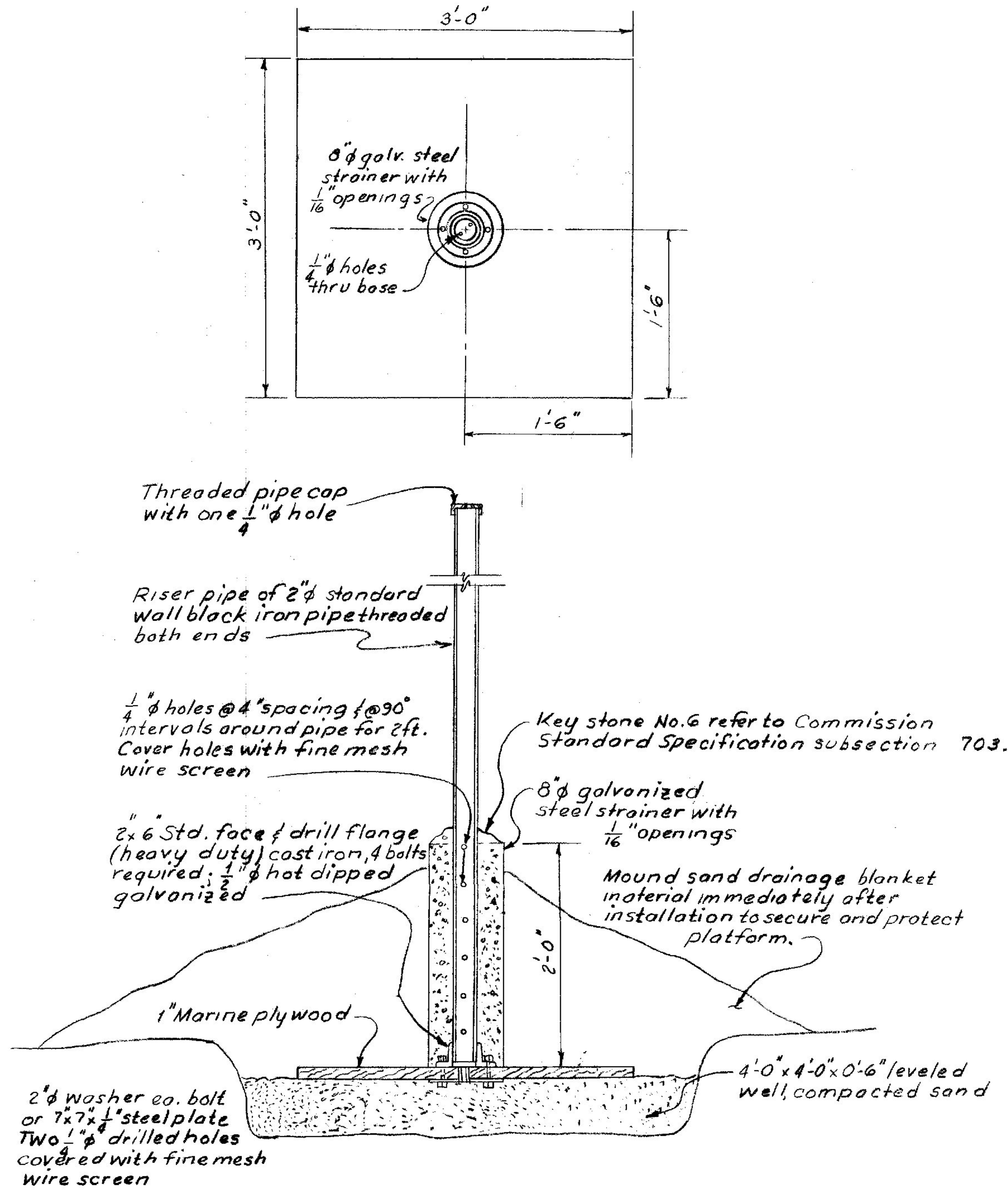

2'-0"
2'-0"
2'-0"
2'-0"
Settlement platform or Piezometer casing
2"x4" Sound lumber painted fluorescent orange
5'-0"
Ground surface

NOTE

Where compaction is required in the embankment the compaction of the fill around the settlement or piezometer pipe and inside the protective railing shall be made in progressive layers by manually operated mechanical tampers.

PROTECTIVE RAILING FOR SETTLEMENT PLATFORM AND PIEZOMETER

NOT TO SCALE


3'-0"
3'-0"
8"ϕ galv. steel strainer with 1/16" openings
1/4"ϕ holes thru base
1'-6"
1'-6"
Threaded pipe cap with one 1/4"ϕ hole
Riser pipe of 2"ϕ standard wall black iron pipe threaded both ends
1/4"ϕ holes @ 4" spacing & @ 90° intervals around pipe for 2ft. Cover holes with fine mesh wire screen
Key stone No. 6 refer to Commission Standard Specification subsection 703.12
8"ϕ galvanized steel strainer with 1/16" openings
2"x 6" Std. face & drill flange (heavy duty) cast iron, 4 bolts required; 1/2"ϕ hot dipped galvanized
Mound sand drainage blanket material immediately after installation to secure and protect platform.
2'-0"
1" Marine plywood
2"ϕ washer ea. bolt or 7"x7"x1/4" steel plate Two 1/4"ϕ drilled holes covered with fine mesh wire screen
4'-0"x 4'-0"x 0'-6" leveled well, compacted sand

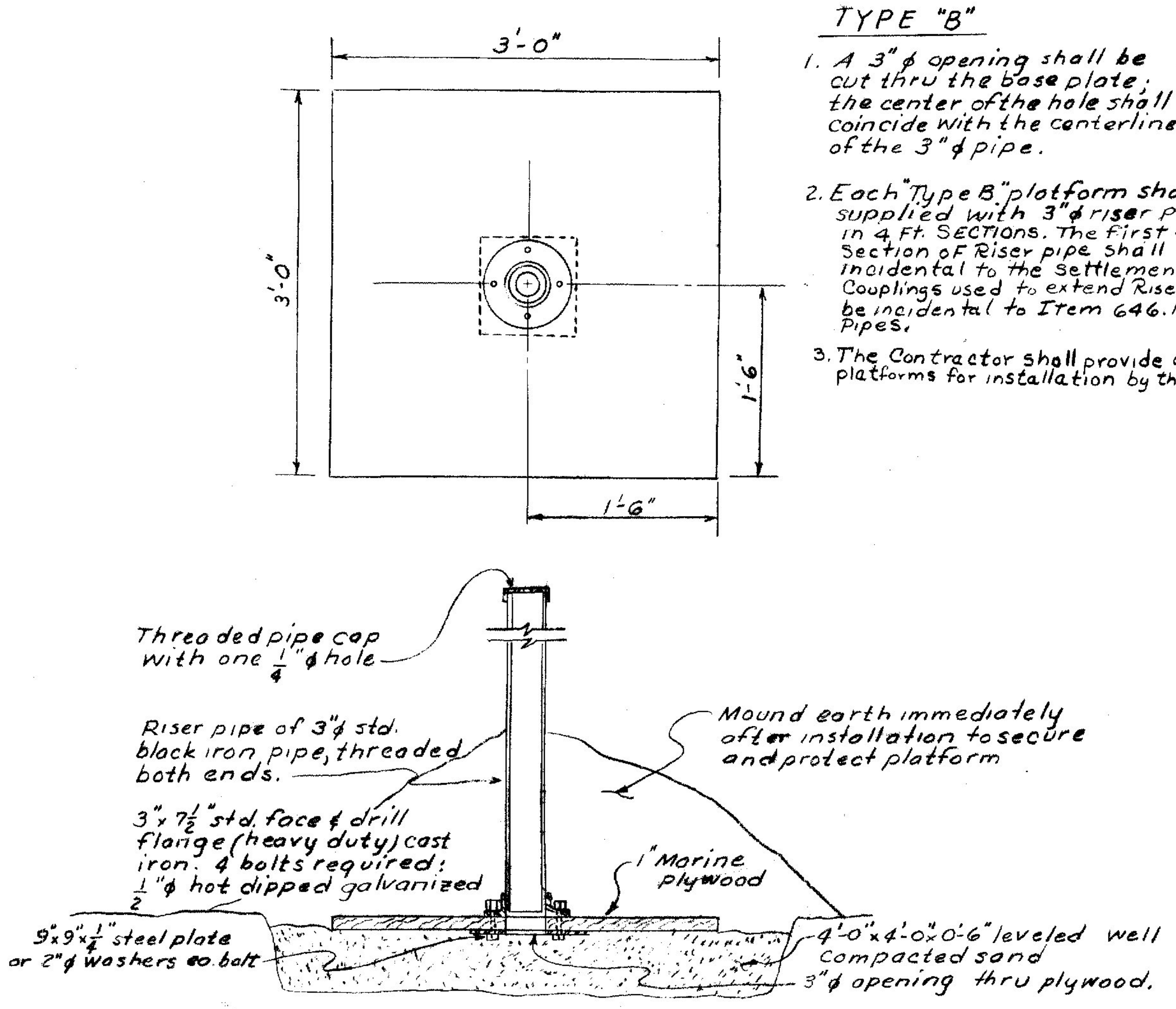
NOTES

TYPE "A"

1. Each TYPE "A" platform shall be supplied with 2"ϕ riser pipes in 4ft sections. The first 4 ft. section of riser pipe shall be considered incidental to the settlement platform. Couplings used to extend Riser pipes shall be incidental to ITEM 646.13 2"ϕ riser pipe.
2. The Contractor shall provide all Type A settlement platforms for installation by the Engineer

SETTLEMENT PLATFORM - TYPE A (FURNISHING ONLY)

SCALE 1" = 1'-0"


3'-0"
3'-0"
1'-6"
1'-6"
Threaded pipe cap with one 1/4"ϕ hole
Riser pipe of 3"ϕ std. black iron pipe, threaded both ends.
3"x 7 1/2" std. face & drill flange (heavy duty) cast iron. 4 bolts required: 1/2"ϕ hot dipped galvanized
Mound earth immediately after installation to secure and protect platform
1" Marine plywood
9"x9"x1/4" steel plate or 2"ϕ washers ea. bolt
4'-0"x4'-0"x0'-6" leveled well compacted sand
3"ϕ opening thru plywood.

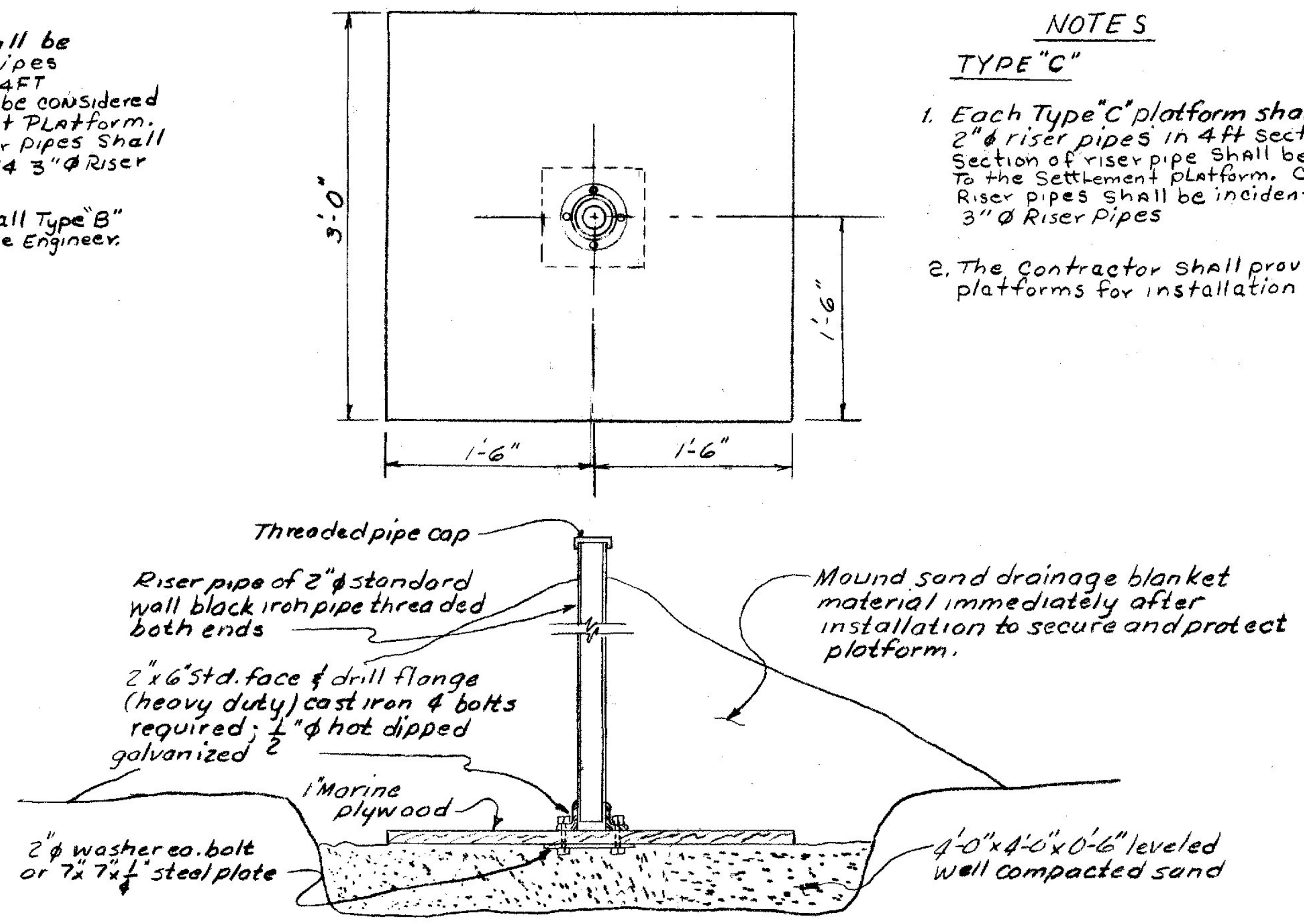
NOTES

TYPE "B"

1. A 3"ϕ opening shall be cut thru the base plate; the center of the hole shall coincide with the centerline of the 3"ϕ pipe.
2. Each "Type B" platform shall be supplied with 3"ϕ riser pipes in 4 Ft. SECTIONS. The first 4FT Section of Riser pipe shall be considered incidental to the settlement PLAtform. Couplings used to extend Riser pipes shall be incidental to Item 646.14 3"ϕ Riser Pipes.
3. The Contractor shall provide all Type "B" platforms for installation by the Engineer.

SETTLEMENT PLATFORM - TYPE B (FURNISHING ONLY)

SCALE 1" = 1'-0"


3'-0"
1'-6"
1'-6"
1'-6"
Threaded pipe cap
Riser pipe of 2"ϕ standard wall black iron pipe threaded both ends
2"x 6" Std. face & drill flange (heavy duty) cast iron 4 bolts required; 1/2"ϕ hot dipped galvanized
Mound sand drainage blanket material immediately after installation to secure and protect platform.
1" Marine plywood
2"ϕ washer ea. bolt or 7"x 7"x1/4" steel plate
4'-0"x4'-0"x0'-6" leveled well compacted sand

NOTES

TYPE "C"

1. Each Type "C" platform shall be supplied with 2"ϕ riser pipes in 4ft sections. The first 4ft Section of riser pipe shall be considered incidental to the Settlement platform. Couplings used to extend Riser pipes shall be incidental to ITEM 646.13 3"ϕ Riser Pipes
2. The Contractor shall provide all Type "C" Settlement platforms for installation by the Engineer.

SETTLEMENT PLATFORM - TYPE C (FURNISHING ONLY)

SCALE 1" = 1'-0"

PLANS		
DESIGN - DETAILED		
CHECKED		
REVISIONS		
FIELD CHANGES		
	BY	DATE

STATE HIGHWAY COMMISSION

SPECIAL DETAILS

ALIGNMENT STAKE, PROTECTIVE
RAILING SETTLEMENT PLATFORMS
A, B & C

SHEET OF AUGUSTA, MAINE

JANUARY 1968

203-1 2050

I-295 Scarborough - South Portland

B.P.R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I - 295 - 3 (44)	55	103

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.

Sta. 56+00
Begin Project I-295-3(44) 45
Constructed 1971

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

Toll Plaza to be Constructed by others.

Sta. 64+00 I-295 = ℄ Toll Plaza

Sta 64+75.00 I-295 = Sta 26+14.27 Acc. Rd.

I-295
P.I. Sta. 53+93.03
Δ = 15°-45'-44" Rt.
D = 2°-00'-00"
R = 2864.79'
T = 396.56
L = 788.11'
E = 27.32

Sta 19+50 ℄ Access Rd.
Install 18"x48' BCCMP

Sta 60+50 ℄ Med.
Const. C.B. Type B-1

Install 24"x88' RCP Rt. & 24"x100' RCP Lt. Const. Sodded Downspout.

Sta. 60+52 to 61+40
Install 6"x88' Type "B" U.D.

Access Road
P.I. Sta 24+75.00
Δ = 90°-00'-00"
D = 229°-10'-59.5"
T = 25.00'
L = 39.27'
R = 25.00'
E = 10.35'

ACCESS ROAD
P.I. Sta 13+02.68
Δ = 64°-27'-37"
D = 22°-54'-58"
R = 250.00'
T = 157.62'
L = 281.26'
E = 45.49'

Catch Basin - Type B-1
Sta 60+50 ℄ Med. I-295

6 Inch Underdrain, Type "B"
Sta 60+52 to Sta 61+40 - 88 L.F.

24" Reinforce Concrete Pipe
Sta 60+50 Rt. to Lt. - 188 L.F.

18" Bit. Coated Corr. Metal Pipe
Sta 19+50 Access Rd., Rt. to Lt. - 48 L.F.

Clearing
Sta 53+50± to Sta 74+50± Lt
Sta 54+75± to Sta 55+10± Rt
Sta 55+10± to Sta 72+50 Rt.

Seeding Method No. 2
Sta 54+50± to Sta 97+00± Lt & Rt.

Grubbing in Fill
Sta 55+40 to Sta 86+00

Survey Monuments
Sta 57+84.58 150.00' Lt.

Right of Way Monuments
Sta 57+84.58 200.00' Rt.
Sta 62+00.00 200.00' Rt.

Selective Clearing & Thinning
Sta 53+50± to Sta 75+00± Lt
Sta 65+00± to Sta 72+50± Rt.

Toll Plaza to be Constructed by others.

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.

5" Aggregate Subbase Crse - Gravel
Sta 56+00 to 63+50 I-295
Sta 64+50 to 85+25 I-295

Bracing Assembly, Type I - Metal Posts

Sta	Offset	Route
Sta 55+10	190' Rt	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+69	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

Sta. 56+00
Begin Project I-295-3(44)

LIMIT OF STAGE CONSTRUCTION
BUILT 1971

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

Revised As Built
C.W. [illegible] 5-16-74

PLAN
NOTE BOOK
NO.
SURVEYED
PLOTTED
ALIGNMENT CHECKED
RT. OF WAY CHECKED

PROFILE		BY	DATE
NOTE BOOK	SURVEYED		
NO.	PLOTTED	T.J.W. & R.C.A.	7-3-69
	GRADES CHECKED		
	B. M.s NOTED		
	STRUCTURE NOTAT'NS CH'KD		

K+E PLATE 1, PLAN-PROFILE KEUFFEL & ESSER CO.

I-295 Scarborough - South Portland

B.P.R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I - 295 - 3 (4A)	56	103

FINAL SURVEY

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

ORIGINAL SURVEY

NOTE BOOK NO. 295/251		BY	DATE
	SURVEYED	SHC	12/69
	PLOTTED	CLA	
	TEMPLATE		
	AREAS		
	AREAS CHECKED		

ACCESS ROAD
PROFILE

Revised As Built
E.W. Putney Jr.
5-16-74

K+E PLATE 3, CROSS SECTION
KEUFFEL & ESSER CO.

I-295 Scarborough - South Portland

B.P.R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I - 295 - 3 (44)	57	103

PLAN	BY	DATE
SURVEYED		
PLOTTED		
ALIGNMENT CHECKED		
RT. OF WAY CHECKED		

NOTE BOOK
NO.

I-295
P.I. Sta. 75+01.28
Δ=15°-08'-49.6"
D=1°-00'-00"
R=5,729.578'
T=761.798'
L=1514.711'
E=50.422'
E453,500
E454,000
E454,500
N289,000
N289,000
P.L.
P.L.
RED BROOK
P.L.
Set 1971
Set 1971
175'
Selective Clearing & Thinning
Line
Limit
Limit of Riprap
Reloc. Channel Built 1971
Limit of Riprap
Channel to be Backfilled, Graded, Loam and Seeded as Directed by the Engineer.
10' TOTE ROAD
Sta 75+50± Lt. Item No. 202.0801 Remove Building No. 1, 1½ Sty. Ho.
Sta 75+95± Lt. Item No. 202.0802 Remove Building No. 2, Garage
Sta 76+45± Lt Item No. 202.0803 Remove Building No. 3, Hen House
24" Tile Pipe - Spring
Spring Hole
Bldg #2
Reserved
Gar.
Hen House
Removed Bldg #3 1971
Removed 1971
1½ Sty Fr. Ho.
Bldg #1
(JAN 15 1971)
Reserved Limit
Line
Garden
Garden
Garden
Clearing
Selective Clearing & Thinning
Limit Line
P.C. Sta 67+39.48
125'-1½"
Set 1971
+6"
-3"
0"
24'
24'
+3"
+6"
0"
65
+49
+56
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
S 85° 46'-04.0" E
Type "B" U.D. Built 1971
C.B. B-1 Built 1971
℄ As Built 1971
12" Type "C" U.D. Built 1971
+39
24"x88' RCP II Built 1971
24"x92' RCP III Built 1971
C.B. B-1 Built 1971
+10
Reserved (JAN 15 1971)
Limit Line
Type "B" U.D. Built 1971
+90
C.B. B-1 Built 1971
42'
42'
40'
Removed 1971
Garage
Bldg #4
Reserved Limit (JAN 15 1971)
Reserved (JAN 15 1971)
175'
175'
175'
175'
200'
CMP
Town Line
So. Portland
Scarborough
Clearing Limit Line
Selective Clearing & Thinning
WOODS
WOODS
FIELD
Clearing
Limit
Line
Selective Clearing & Thinning
Set 1971
Set 1971
Set 1971
Sta 66+58 to Sta 68+48 ℄ Med. Install 6"x190' Type "B" U.D.
Sta 68+50 ℄ Med. Const. Type B-1 C.B. Install
Sta 68+52 to Sta 73+98 ℄ Med. Install 12"x546' Type "C" U.D.
Note: For Grading Between Sta 65+00 and Sta 68+00 See Toll Plaza Grading Plan, Sh. 42
Sta 74+00 ℄ Med. Const. Type B-1 C.B. Install 24"x92' RCP Rt. & 24"x88' RCP Lt.
Sta 76+37±, 45'± Rt. Item 202.0804 Remove Building No. 4, Garage
Sta 74+10 to Sta 79+48 ℄ Med. Install 6"x538' Type "B" U.D.
Sta 79+50 ℄ Med. Const. C.B. Type B-1
Sta 79+52 to Sta 84+28 ℄ Med. Install 12"x476' Type "C" U.D.
Note: Contractor Must Maintain Drive Between Reserved Areas LT. AND RT. OF Sta 76+10 UNTIll JANUARY 1st 1971

Right of Way Monuments

Sta 65+49.00	175.00' Rt.
Sta 65+56.00	200.00' Rt.
Sta 67+39.48	175.00' Lt. & Rt.
Sta 74+50.00	175.00' Lt. & Rt.

Survey Monuments

Sta 67+39.48	125.00' Lt.

Catch Basin - Type B-1

Sta 68+50 ℄ Med. I-295
Sta 74+00 ℄ Med. I-295
Sta 79+50 ℄ Med. I-295

6 Inch Underdrain, Type "B"

Sta 66+58 to Sta 68+48 - 190 L.F.
Sta 74+10 to Sta 79+48 - 538 L.F.

12 Inch Underdrain, Type "C"

Sta 68+52 to Sta 73+98 - 546 L.F.
Sta 79+52 to Sta 84+28 - 476 L.F.

24" Reinforced Concrete Pipe

Sta 74+00 Rt. & Lt. - 180 L.F.

Selective Clearing & Thinning

Sta 77+00± to Sta 80+50± Lt.
Sta 75+50± to Sta 82+00± Rt.

Bracing Assembly, Type II - Metal Posts

Sta 65+49	175' Rt.	I-295
Sta 65+56	200' Rt.	I-295
Sta 71+30	175' Rt.	I-295
Sta 77+10	175' Rt.	I-295

Bracing Assembly, Type I - Metal Posts

(All 175' Lt. I-295)

Sta	Sta
66+05	71+74
66+51	72+65
67+20	72+93
67+40	73+20
68+70	73+46
68+90	73+94
69+49	74+12
70+10	74+90
71+49	75+12

PROFILE	BY	DATE
SURVEYED		
PLOTTED	T.L.W. & R.C.A.	7-3-69
GRADES CHECKED		
B. M.s NOTED		
STRUCTURE NOTAT'NS CH'KD		

NOTE BOOK
NO.

Revised As Built
5-16-74

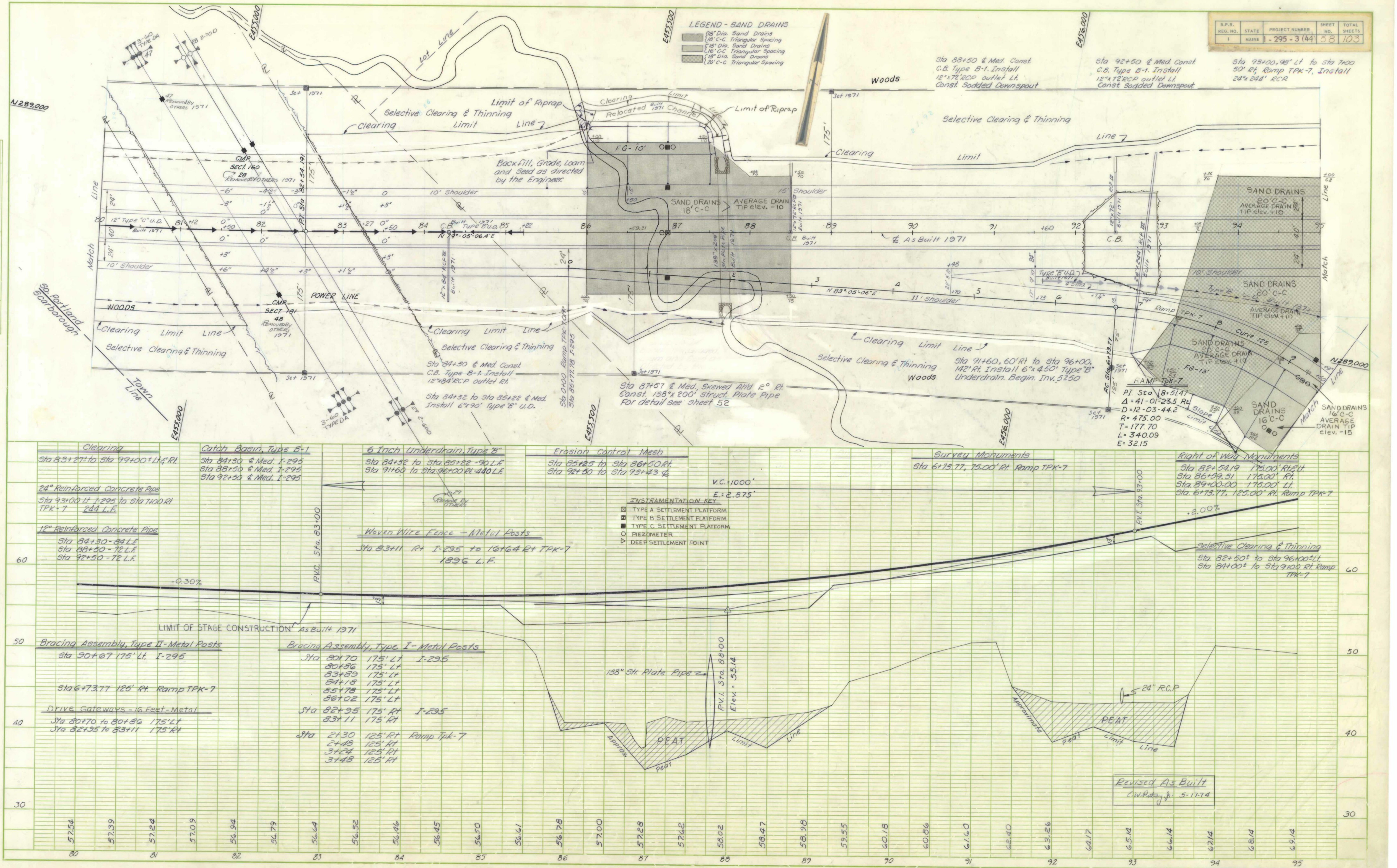
I-295 Scarborough - So. Portland

58

B.P.R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I - 295 - 3 (44)	58	103

PLAN
NOTE BOOK
NO.
SURVEYED
PLOTTED
ALIGNMENT CHECKED
RT. OF WAY CHECKED
BY
DATE

PROFILE
NOTE BOOK
NO.
SURVEYED
PLOTTED T.J.W. & R.C.A. 7-3-69
GRADES CHECKED
B. M.s NOTED
STRUCTURE NOTAT'NS CH'KD
BY
DATE



LEGEND - SAND DRAINS

▨	18" Dia. Sand Drains 18' C-C Triangular Spacing
▨	18" Dia. Sand Drains 16' C-C Triangular Spacing
▨	18" Dia. Sand Drains 20' C-C Triangular Spacing

Backfill, Grade, Loam and Seed as directed by the Engineer.

Sta 88+50 ℄ Med. Const.
C.B. Type B-1. Install
12"x72' RCP outlet Lt.
Const. Sodded Downspout

Sta 92+50 ℄ Med. Const.
C.B. Type B-1. Install
12"x72' RCP outlet Lt.
Const. Sodded Downspout

Sta 93+00, 98' Lt to Sta 7+00
50' Rt, Ramp TPK-7, Install
24"x 244' RCP.

Sta 84+30 ℄ Med. Const.
C.B. Type B-1. Install
12"x84' RCP outlet Rt.

Sta 84+32 to Sta 85+22 ℄ Med.
Install 6"x90' Type "B" U.D.

Sta 87+67 ℄ Med., Skewed Ahd 2° Rt.
Const. 138"x 200' Struct. Plate Pipe
For detail see sheet 52

Sta 91+60, 60' Rt to Sta 96+00,
142' Rt. Install 6"x 450' Type "B"
Underdrain. Begin. Inv. 57.50

RAMP TPK-7
P.I. Sta. 8+51.47
Δ = 41-01-23.5 Rt.
D = 12-03-44.2
R = 475.00
T = 177.70
L = 340.09
E = 32.15

Clearing
Sta 83+27± to Sta 99+00± Lt & Rt.

Catch Basin, Type B-1
Sta 84+30 ℄ Med. I-295
Sta 88+50 ℄ Med. I-295
Sta 92+50 ℄ Med. I-295

6 Inch Underdrain, Type "B"
Sta 84+32 to Sta 85+22 - 90 L.F.
Sta 91+60 to Sta 96+00 Rt - 440 L.F.

Erosion Control Mesh
Sta 85+25 to Sta 86+50 Rt.
Sta 92+50 to Sta 93+43 ℄

Survey Monuments
Sta 6+73.77, 75.00' Rt. Ramp TPK-7

Right of Way Monuments

Sta 82+54.19	175.00' Rt & Lt.
Sta. 86+59.31	175.00' Rt.
Sta. 89+00.00	175.00' Lt.
Sta. 6+73.77,	125.00' Rt. Ramp TPK-7

24" Reinforced Concrete Pipe
Sta 93+00 Lt I-295 to Sta 7+00 Rt TPK-7 244 L.F.

12" Reinforced Concrete Pipe
Sta 84+30 - 84 L.F.
Sta 88+50 - 72 L.F.
Sta 92+50 - 72 L.F.

Woven Wire Fence - Metal Posts
Sta 83+11 Rt I-295 to 16+64 Rt TPK-7
1896 L.F.

INSTRAMENTATION KEY
- ☒ TYPE A SETTLEMENT PLATFORM
- ⊠ TYPE B SETTLEMENT PLATFORM
- ■ TYPE C SETTLEMENT PLATFORM
- ○ PIEZOMETER
- ▷ DEEP SETTLEMENT POINT

Selective Clearing & Thinning
Sta. 82+50± to Sta 96+00± Lt.
Sta 84+00± to Sta 9+00 Rt. Ramp TPK-7

Bracing Assembly, Type II - Metal Posts
Sta 90+67 175' Lt. I-295

Sta 6+73.77 125' Rt. Ramp TPK-7

Drive Gateways - 16 Feet - Metal
Sta 80+70 to 80+86 175' Lt
Sta 82+95 to 83+11 175' Rt

Bracing Assembly, Type I - Metal Posts

Sta	80+70	175' Lt	I-295
	80+86	175' Lt	
	83+89	175' Lt	
	84+18	175' Lt	
	85+78	175' Lt	
	86+02	175' Lt	
Sta	82+95	175' Rt	I-295
	83+11	175' Rt	
Sta	2+30	125' Rt	Ramp Tpk-7
	2+48	125' Rt	
	3+24	125' Rt	
	3+48	125' Rt	

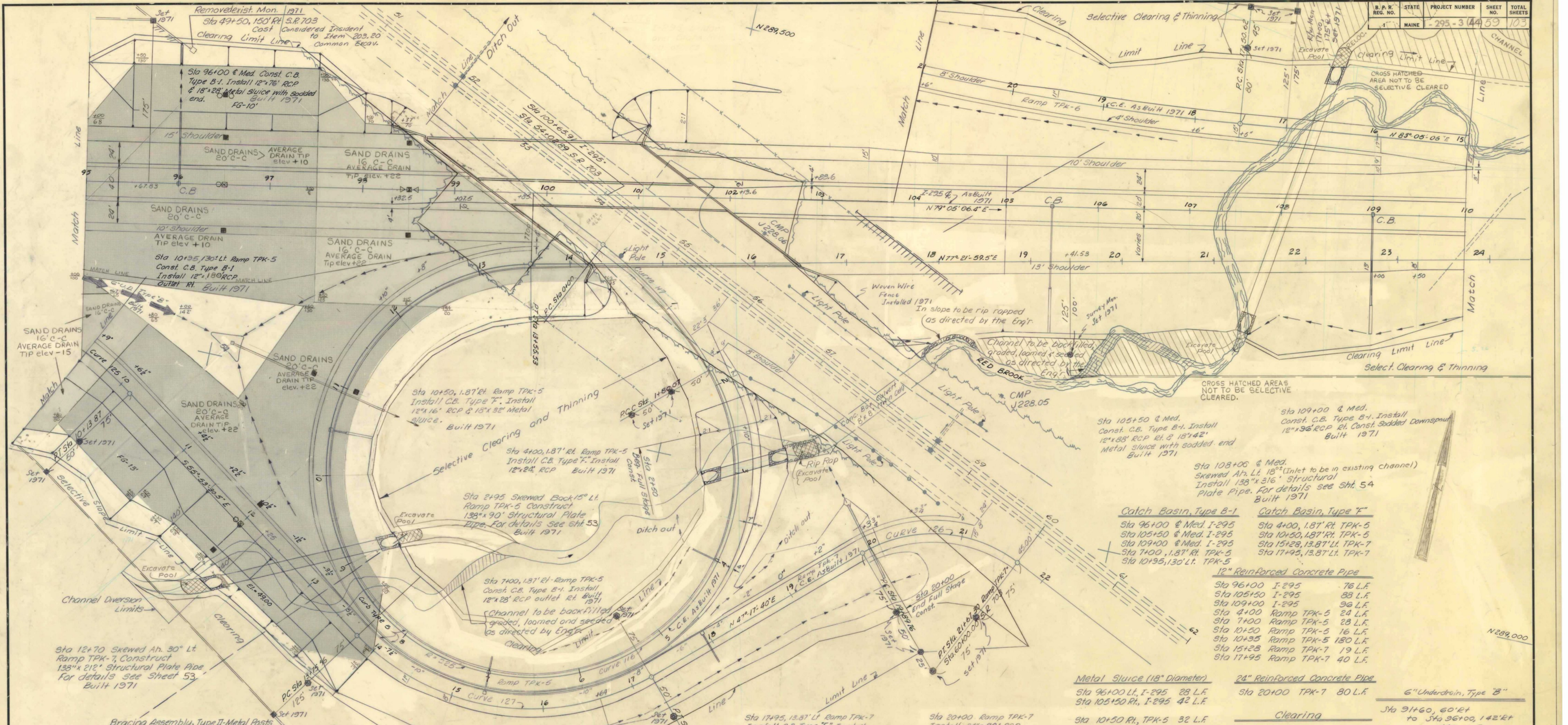
Revised As Built
C.W. Patey Jr. 5-17-74

K+E PLATE 1, PLAN-PROFILE
KEUFFEL & ESSER CO.

I-295 Scarborough - South Portland.

59

B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-295-3(44)	59	103



Removed exist. Mon. 1971
Sta 49+50, 150' Rt. S.R. 703
Cost Considered Incident to Item 203.20 Common Excav.

Sta 96+00 ℄ Med. Const. C.B. Type B-1. Install 12"x 76' R.C.P. & 18"x 28' Metal Sluice with sodded end. Built 1971
FG-10'

Sta 10+95, 130'± Lt. Ramp TPK-5
Const. C.B. Type B-1
Install 12"x 180' RCP
Outlet Rt. Built 1971

Sta 10+50, 1.87' Rt. Ramp TPK-5
Install C.B. Type "F". Install 12"x 16' RCP & 18"x 32' Metal sluice.
Built 1971

Sta 4+00, 1.87' Rt. Ramp TPK-5
Install C.B. Type "F." Install 12"x 24' RCP Built 1971

Sta 2+95 Skewed Back 15° Lt.
Ramp TPK-5 Construct 138"x 90' Structural Plate Pipe. For details See Sht. 53
Built 1971

Sta 7+00, 1.87' Rt - Ramp TPK-5
Const. C.B. Type B-1. Install 12"x 28' RCP outlet Rt. Built 1971

Channel to be backfilled graded, loamed and seeded as directed by Eng'r.

In slope to be rip rapped (as directed by the Eng'r.

Channel to be backfilled, graded, loamed & seeded as directed by the Eng'r.

CROSS HATCHED AREAS NOT TO BE SELECTIVE CLEARED.

Select. Clearing & Thinning

Sta 105+50 ℄ Med.
Const. C.B. Type B-1. Install 12"x 88' RCP Rt. & 18"x 42' Metal Sluice with sodded end
Built 1971

Sta 109+00 ℄ Med.
Const. C.B. Type B-1. Install 12"x 96' RCP Rt. Const. Sodded Downspout
Built 1971

Sta 108+06 ℄ Med.
Skewed Ah. Lt. 18°± (Inlet to be in existing channel)
Install 138"x 316' Structural Plate Pipe. For details see Sht. 54
Built 1971

Sta 12+70 Skewed Ah. 30° Lt.
Ramp TPK-7, Construct 138"x 212' Structural Plate Pipe
For details see Sheet 53
Built 1971

Sta 15+28, 13.87' Lt. Ramp TPK-7
Install C.B. Type "F." Install 12"x 19' RCP C.B. to C.B. Built 1971

Sta 17+95, 13.87' Lt Ramp TPK-7
Install C.B. Type "F." Install 12"x 40' RCP outlet Rt.
Built 1971

Sta 20+00 Ramp TPK-7
Install 24"x 80' RCP
Built 1971

Catch Basin, Type B-1

Sta 96+00 ℄ Med. I-295
Sta 105+50 ℄ Med. I-295
Sta 109+00 ℄ Med. I-295
Sta 7+00, 1.87' Rt. TPK-5
Sta 10+95, 130' Lt. TPK-5

Catch Basin, Type "F"

Sta 4+00, 1.87' Rt. TPK-5
Sta 10+50, 1.87' Rt. TPK-5
Sta 15+28, 13.87' Lt. TPK-7
Sta 17+95, 13.87' Lt. TPK-7

12" Reinforced Concrete Pipe

Sta 96+00	I-295	76 L.F.
Sta 105+50	I-295	88 L.F.
Sta 109+00	I-295	96 L.F.
Sta 4+00	Ramp TPK-5	24 L.F.
Sta 7+00	Ramp TPK-5	28 L.F.
Sta 10+50	Ramp TPK-5	16 L.F.
Sta 10+95	Ramp TPK-5	180 L.F.
Sta 15+28	Ramp TPK-7	19 L.F.
Sta 17+95	Ramp TPK-7	40 L.F.

Metal Sluice (18" Diameter)

Sta 96+00 Lt., I-295	28 L.F.
Sta 105+50 Rt., I-295	42 L.F.
Sta 10+50 Rt., TPK-5	32 L.F.

24" Reinforced Concrete Pipe

Sta 20+00 TPK-7 80 L.F.

6" Underdrain, Type "B"

Sta 91+60, 60' Rt
to Sta 96+00, 142' Rt
440 L.F.

Clearing

Sta 102+75± to Sta 116+35± Lt & Rt.

Bracing Assembly, Type II-Metal Posts

Sta 11+50 125' Rt Ramp TPK-7
Sta 17+00 175' Rt Ramp TPK-6
Sta 17+00 125' Rt. Ramp TPK-6

Right of Way Monuments

Sta. 95+67.83, 175.00' Lt. I-295
Sta. 13+75.56, 125.00' Rt. Ramp TPK-7
Sta 16+64.00, 125.00' Rt. " "
Sta 10+13.87, 125.00' Rt. Ramp TPK-5
Sta 24+56.02, 125.00' Rt. Ramp TPK-5
Sta 17+00.00, 175.00' Rt. Ramp TPK-6
Sta 17+00.00, 125.00' Rt. " "
Sta 17+50.62, 125.00' Rt. " "

Survey Monuments

Sta 10+13.87, 75.00' Rt. Ramp TPK-7
Sta 13+75.56, 75.00' Rt. " "
Sta 17+22.79, 75.00' Lt & 50' Rt "
Sta 19+89.76, 75.00' Rt. " "
Sta. 19+89.76, 125.00' Rt. " "
Sta. 21+67.30, 75.00' Rt. " "
Sta. 21+67.30, 150.00' Rt. " "

~~Sta 0+00.00, 50' Rt. Ramp TPK-5~~
Sta 19+41.53, 100' Rt. Ramp TPK-5
Sta 1+80.07, 50' Rt. " "
Sta 1+80.07, 100' Rt. " "
Sta 17+50.62, 80' Rt Ramp TPK-6

Bracing Assembly, Type I-Metal Posts

Sta. 95+68 175' Lt. I-295
Sta. 11+79 125' Rt. Ramp TPK-7
Sta. 12+13 125' Rt. Ramp TPK-7
Sta. 16+64 125' Rt. Ramp TPK-7

Sta 16+90 20' Rt Ramp TPK-5
17+73 113' Rt " "
20+00 125' Rt " "
20+67 125' Rt " "
21+12 125' Rt " "
21+50 125' Rt " "

Selective Clearing & Thinning

Sta 10+00± to Sta 22+30± Ramp TPK-7
Sta 1+00± to Sta 14+50± Ramp TPK-5
Sta 106+00± to Sta. 112+75± Rt.

Woven Wire Fence - Metal Posts

Sta 16+90, 20' Rt. Ramp TPK-5 to
Sta 120+50, 150' Rt I-295 - 1527 L.F.

LEGEND - SAND DRAINS

▨ 18" Dia. Sand Drains 18' C-C Triangular Spacing
▨ 18" Dia. Sand Drains 16' C-C Triangular Spacing
▨ 18" Dia. Sand Drains 20' C-C Triangular Spacing

CURVE DATA

CURVE 116	CURVE 117	CURVE 125	CURVE 126	CURVE 127
P.I. Sta	P.I. Sta. 0+91.26	P.I. Sta. 8+36.17	P.I. Sta. 20+90.59	P.I. Sta. 15+80.49
Δ = 299°-19'-44.5" Rt.	Δ = 22°-55'-38" Rt.	Δ = 41°-01'-23.5" Rt.	Δ = 67°-43'-57.3" Rt.	Δ = 76°-48'-49.5" Lt.
D =	D = 12°-43'-56.6"	D = 12°-03'-44.2"	D = 38°-11'-49.9"	D = 22°-07'-18.9"
R = 225.00'	R = 450.00'	R = 475.00'	R = 150.00'	R = 259.00'
T =	T = 91.26'	T = 177.70'	T = 100.83'	T = 205.33'
L = 1175.42'	L = 180.07	L = 340.09'	L = 177.54'	L = 347.23'
E =	E = 9.15'	E = 32.15'	E = 30.74'	E = 71.52'

Revised As Built
C.W. Putney Jr. 5-20-74

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

MAINE STATE HIGHWAY COMMISSION
AUGUSTA, MAINE

STA 95+00-STA 110+00
RAMPS TPK 5, TPK.6 & TPK 7
STATE ROUTE 703

BRUNING 44-302

I-295 Scarborough - South Portland

60