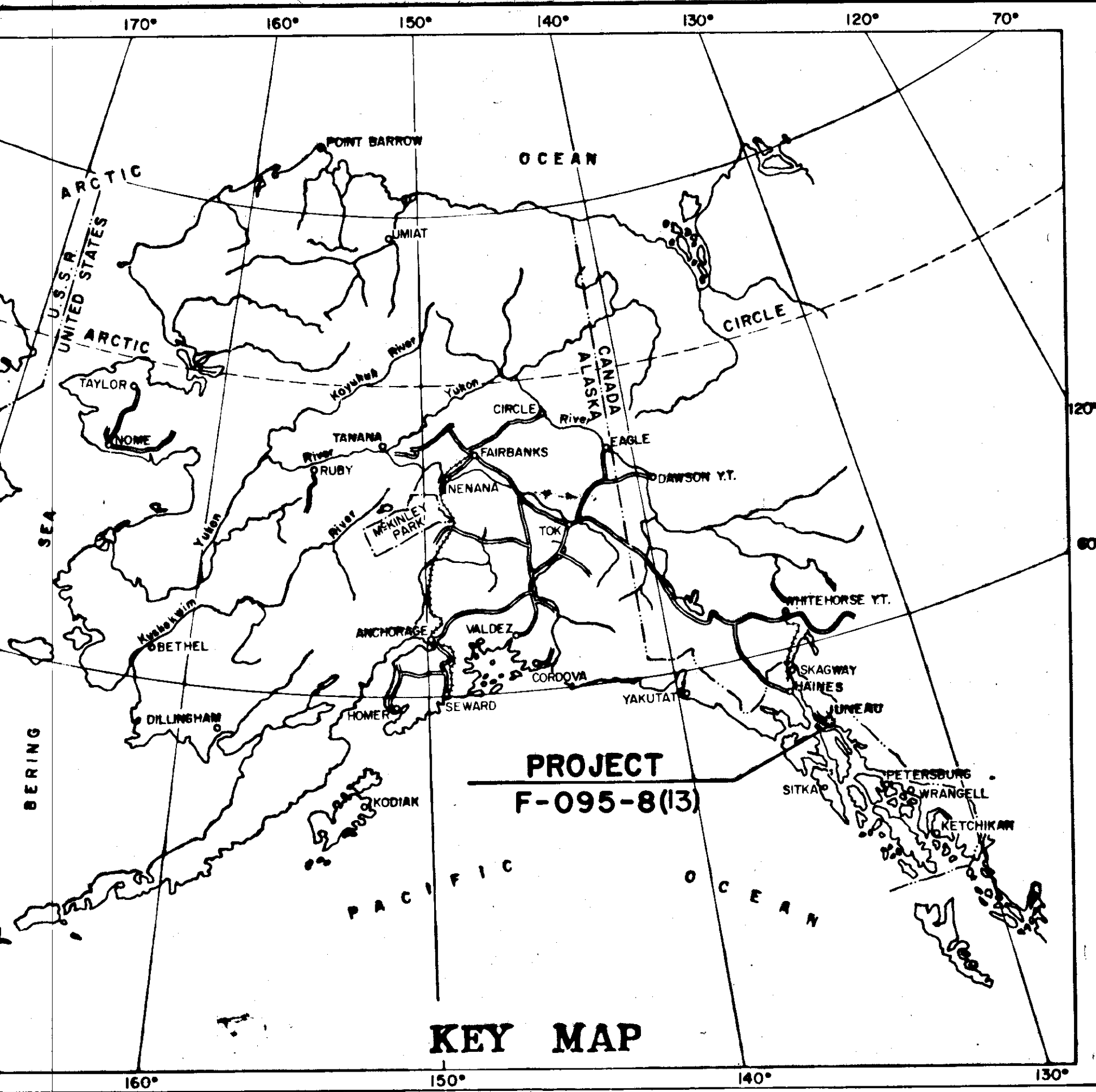


STATE	ROUTE DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	F-095-8(13)	1967	1	7



STATE OF ALASKA DEPARTMENT OF HIGHWAYS

PLAN AND PROFILE PROPOSED HIGHWAY PROJECT F-095-8(13) JUNEAU OUTER DRIVE PHASE I GRADING, DRAINAGE SURFACING, & UTILITIES

No Built's Plans
Contractor S.S. Mullen Inc.
Began 5-6-68 - Completed 7-15-69

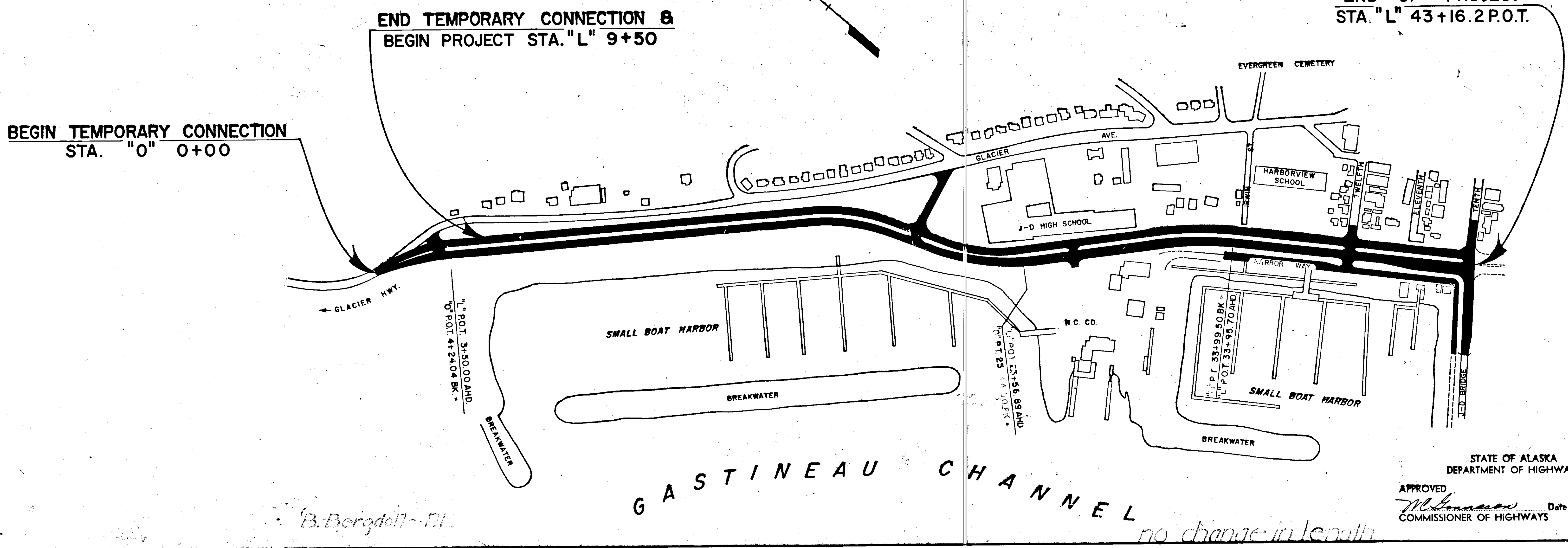
FOR INDEX OF SHEETS SEE SHEET NO.2

DESIGN DESIGNATION

ADT (1967)	= 5450
ADT (1987)	= 12900
DHV	= 1484
D	= 45-55%
T	= 5%
V	= 40 M.P.H.

PROJECT SUMMARY

WIDTH of ROADBED	70'
WIDTH of PAVEMENT	DUAL 28'
LENGTH of GRADING	4380.15' = 0.830 MI
LENGTH of PAVING	4380.15' = 0.830 MI
LENGTH of PROJECT	3430.15' = 0.650 MI
TEMPORARY CONNECTION	950.00 = 0.180 MI



B. Bergdoll - P.L.

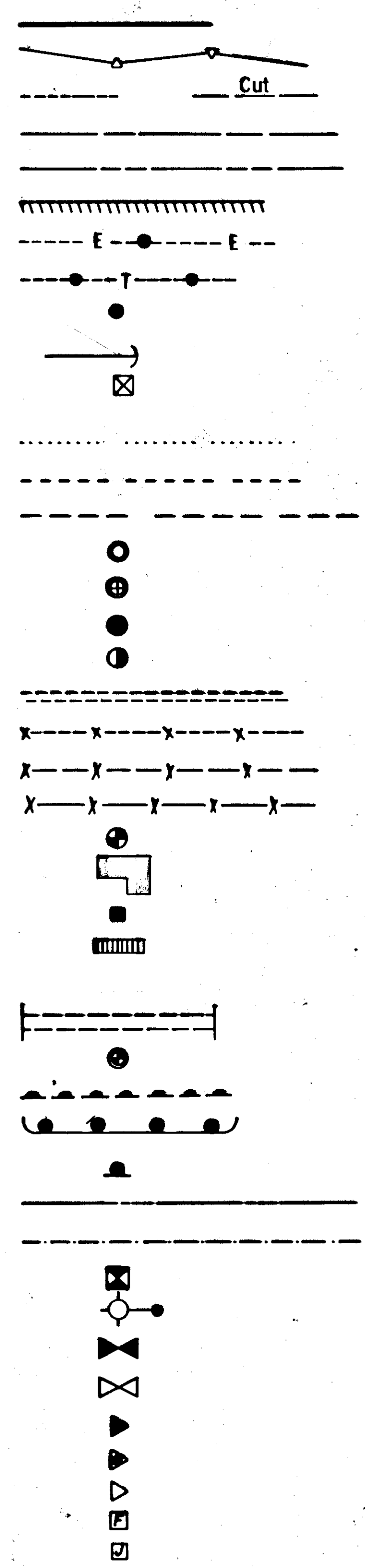
STATE OF ALASKA
DEPARTMENT OF HIGHWAYS
APPROVED
[Signature] Date *[Signature]*
COMMISSIONER OF HIGHWAYS

GENERAL NOTES

1. Culvert lengths and location are approximate only and are subject to minor revisions.
2. Grades and alignment shown on these plans are subject to minor revisions.
3. All encroaching permanent buildings within the right-of-way shall be removed to the existing ground level by others.
4. Miscellaneous and minor right-of-way encroachments, within the construction limits, such as fences, signs, abandoned Pile Driver foundations, etc., shall be removed by the contractor as directed by the engineer. No payment for this work shall be made as it is considered incidental to other items of work performed under this contract.
5. All waste and/or surplus material encountered on this project will be disposed of by the contractor at locations of his own choice and as approved by the engineer. There is no payment for overhaul of unclassified excavation designated as waste and/or surplus material by the engineer.
6. No unclassified excavation on this project is considered suitable for use as topsoil.
7. A butt type joint shall be used to match new pavement with existing pavement at locations shown on the plans.
8. At the option of the contractor, corrugated galvanized metal pipe, corrugated aluminum pipe or reinforced concrete pipe may be furnished for pay item 603(26) Pipe Conduit.
 - Seed 2.5# per 1000 Sq. Ft.
 - Fertilizer 15#(max) per 1000 Sq. Ft.
 - Ground Limestone 100 #(max) per 1000 Sq. Ft.
 - Mulch:
 - Wood Cellulose Fiber 30# per 1000 Sq. Ft. (or)
 - Dried Peat 60# per 1000 Sq. Ft.
9. The following application rates shall be used for Item 618, Seeding Class I.
 - Seed 2.5# per 1000 Sq. Ft.
 - Fertilizer 15#(max) per 1000 Sq. Ft.
 - Ground Limestone 100 #(max) per 1000 Sq. Ft.
 - Mulch:
 - Wood Cellulose Fiber 30# per 1000 Sq. Ft. (or)
 - Dried Peat 60# per 1000 Sq. Ft.
10. Removal of Guardrail is incidental to other items of Contract.
11. The bituminous coated sewer pipe sleeves at stations 30+62, 37+00, and 41+12 to be plugged with wood or other suitable material, and accurate survey ties recorded to establish location for future utilization.

LEGEND

- Proposed Construction Center Line
- Preliminary Survey Line
- Slope Limits
- Right-of-Way Line
- Easement Line
- Corporated or City Limits
- Power Line,
- Telephone, or Telegraph Line
- Power, Telephone or Telegraph Pole
- Pole Anchor
- Power Line Tower
- Exist. Sewer Line to be removed or abandoned
- Exist. Sewer Line to be Utilized
- Exist. Water Line
- Exist. Manhole
- Adjust Exist. Manhole
- Manhole
- Fire Hydrant
- Traveled Way
- Exist. Fence
- Exist. Fence (Relocate)
- Fence (New)
- Land Monument, Brass Cap, R. M. C. s& Corners
- Structures (To Be Removed By Others)
- Inlet
- Exist. Inlet
- Exist. Culvert
- Brass Cap Monument
- Exist. Guardrail
- Guardrail
- Standard Sign
- Direct Burial Cable
- Underground Conduit
- Metering and Distribution Center
- Mercury Vapor Luminaire, Single
- Water Valve Box to be adjusted
- Water Valve Box
- Water Meter to be removed by the City of Juneau.
- Water Meter to be adjusted
- Water Meter to be Left in Place
- Fire Alarm Box
- Junction Box

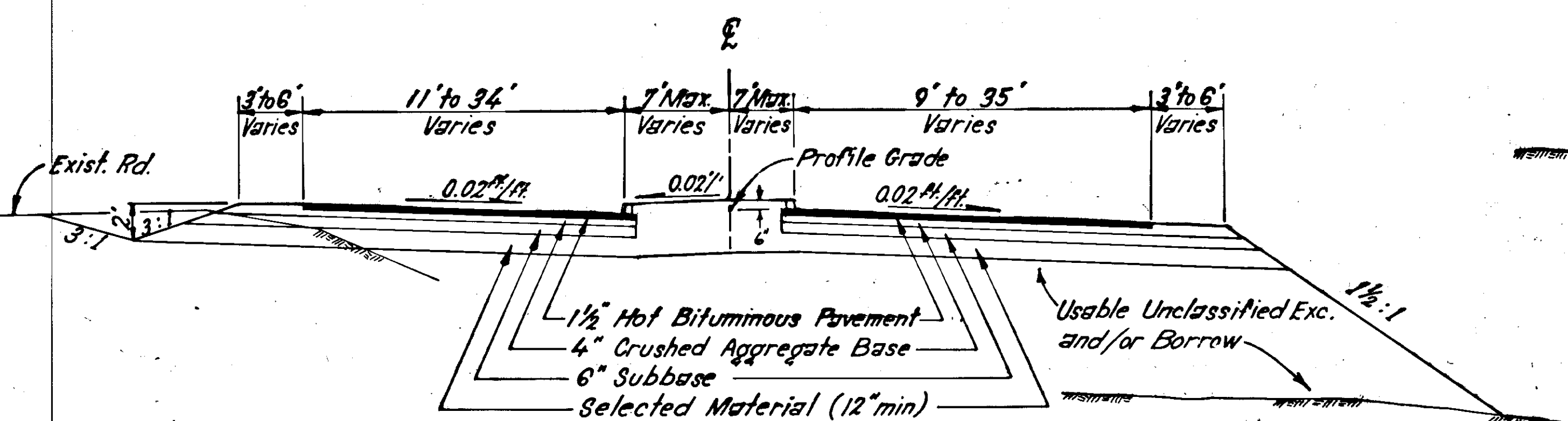


INDEX OF SHEETS

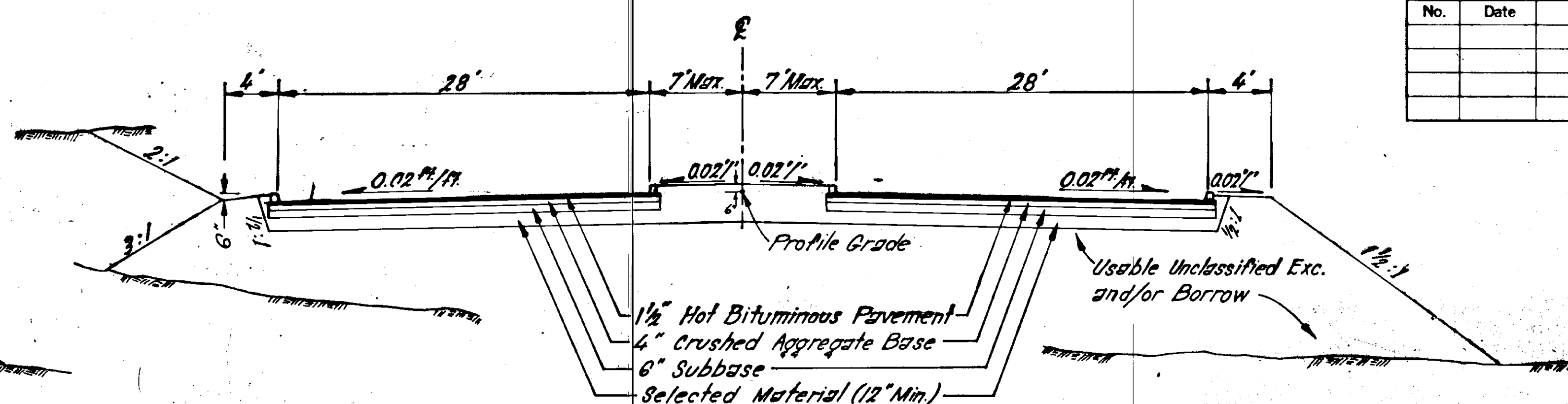
SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	LEGEND AND GENERAL NOTES
3-4	TYPICAL SECTIONS
5-6	ESTIMATE OF QUANTITIES
7-10	EXISTING TOPOGRAPHY
11	MEDIAN-DETAILS
12-15	CONSTRUCTION PLANS
16-19	INTERSECTION DETAILS
20	DRAINAGE SUMMARY
21-22	DRAINAGE DETAILS
23-26	DRAINAGE PLANS
27	SUMMARY OF SIGNS
28-29	SIGN DETAILS
30	PAVEMENT MARKING DETAILS
31	ILLUMINATION DETAILS
32-39	ILLUMINATION, SIGNING AND PAVEMENT MARKING PLANS
40	TRAFFIC SIGNAL SYMBOLS
41	SIGNALIZATION DATA
42	SIGNALIZATION LAYOUT AND DETAILS
43	SIGNALIZATION PHASING
44-46	TRAFFIC SIGNAL DETAILS
47	SUMMARY OF BRASS CAP MONUMENTS & MONUMENT CASES
48-58	UTILITY PLANS

THE FOLLOWING STANDARD DRAWINGS APPLY TO THIS PROJECT: D-1, D-3, D-4, M-1, M-2, R-1, R-4, R-8, T-1, T-2, T-9, T-11, T-16(2 sheets), and T-20.

REVISIONS		
No.	Date	Description

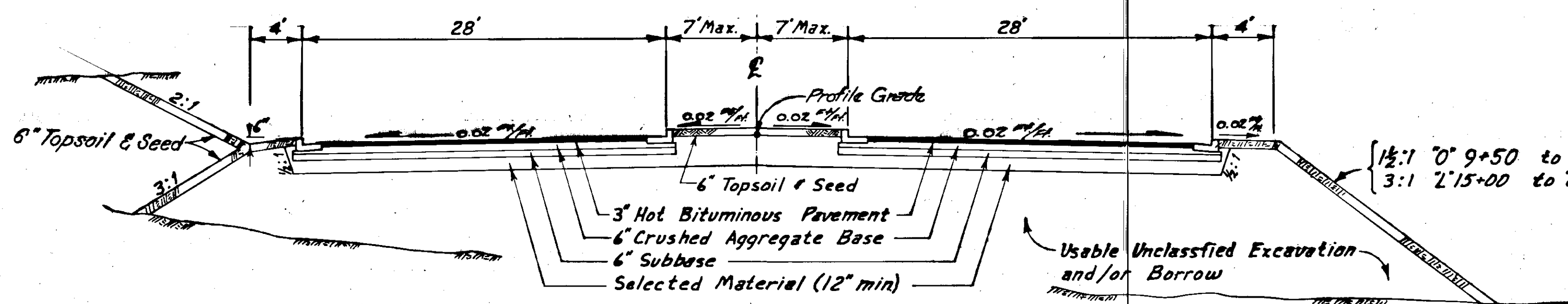


Sta. 0' 0+00 to Sta. 0' 3+30.40

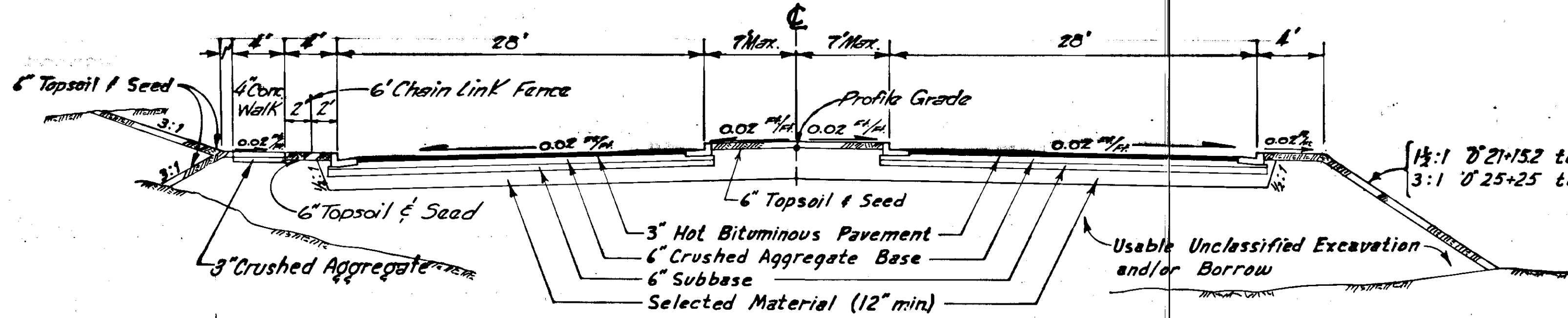


Sta. 0' 3+30.40 to Sta. 0' 9+50

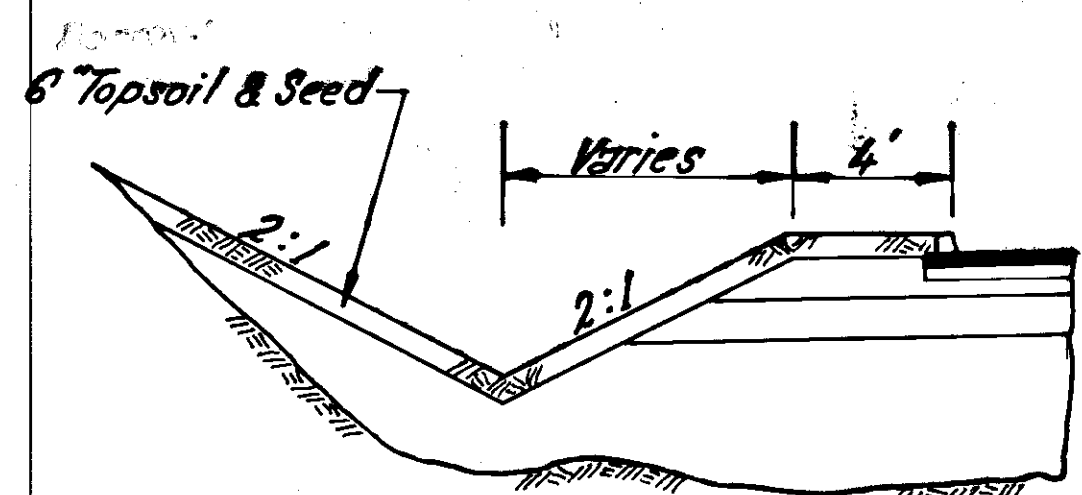
TEMPORARY CONNECTION



Sta. 0' 9+50.00 to Sta. 0' 21+15.20

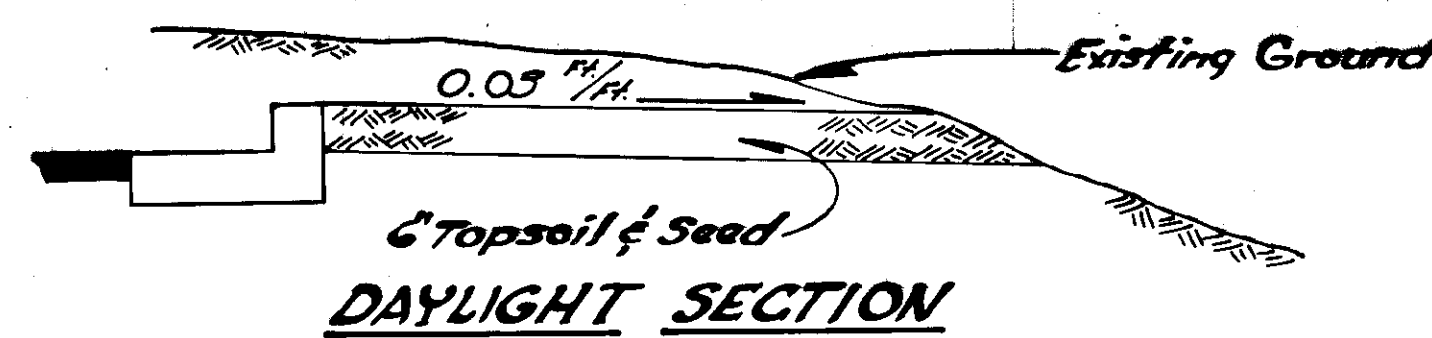


Sta. 0' 21+15.20 to Sta. 1' 34+00

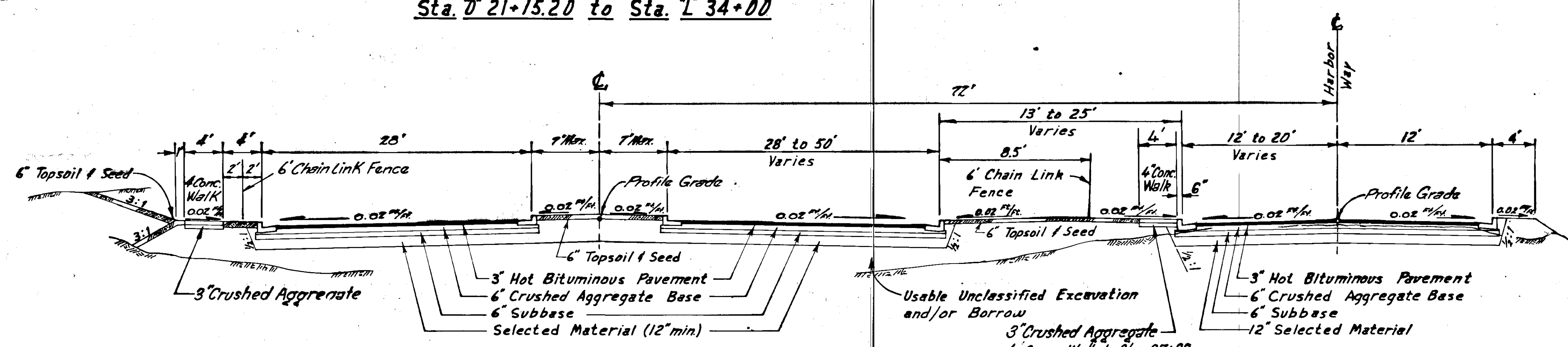


SPECIAL DITCH

Sta. 1' 4+00 to Sta. 1' 8+50

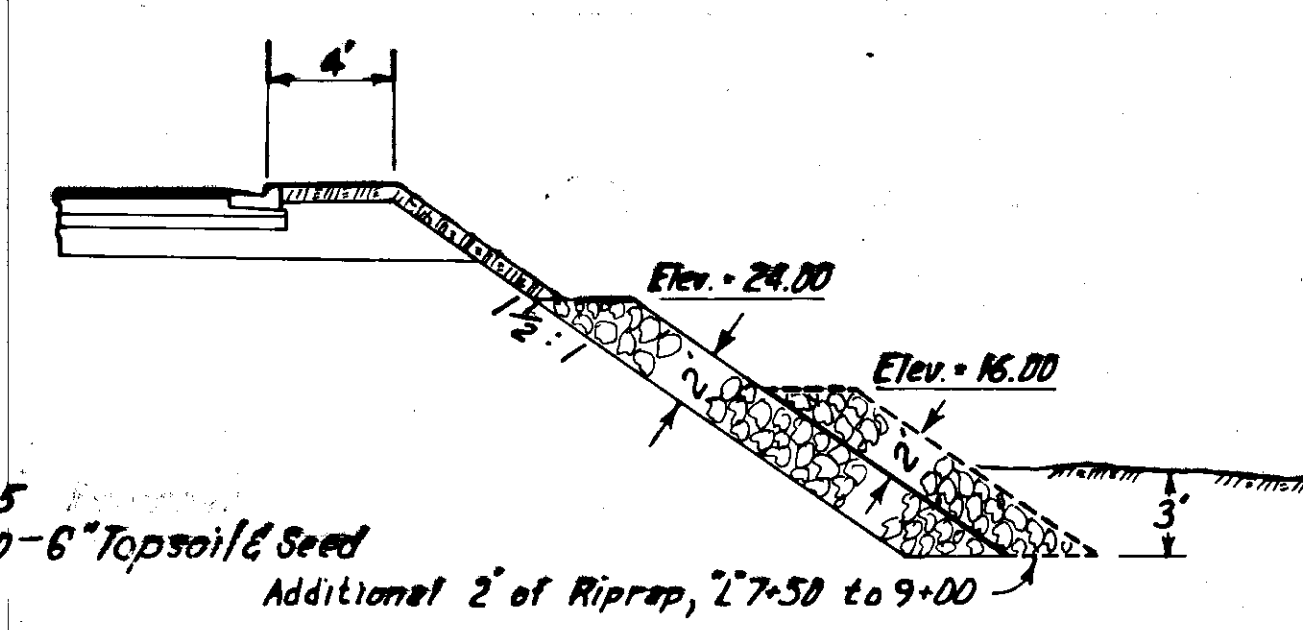


DAYLIGHT SECTION



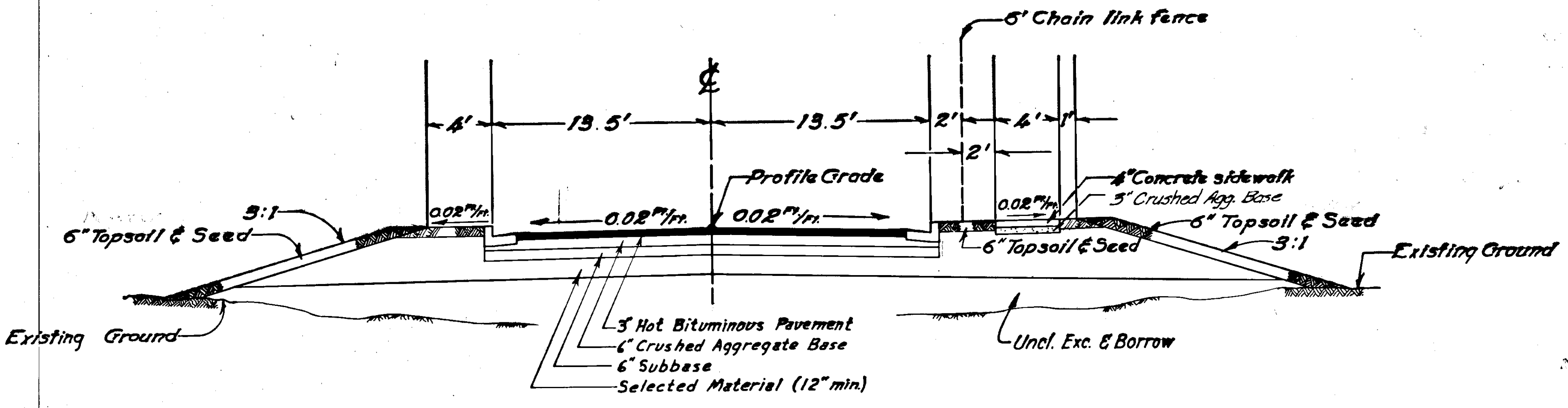
Sta. 1' 34+00 to Sta. 1' 43+16.20

- Notes:
- MC-30 Liquid Asphalt Prime Coat shall be placed under all Hot Bituminous Pavement at the rate of approximately 0.25 gal/S. Y.
 - Crushed Aggregate Base and Subbase shall extend 3" beyond back of curb.
 - All 3" Hot Bituminous Pavement to be in two lifts.

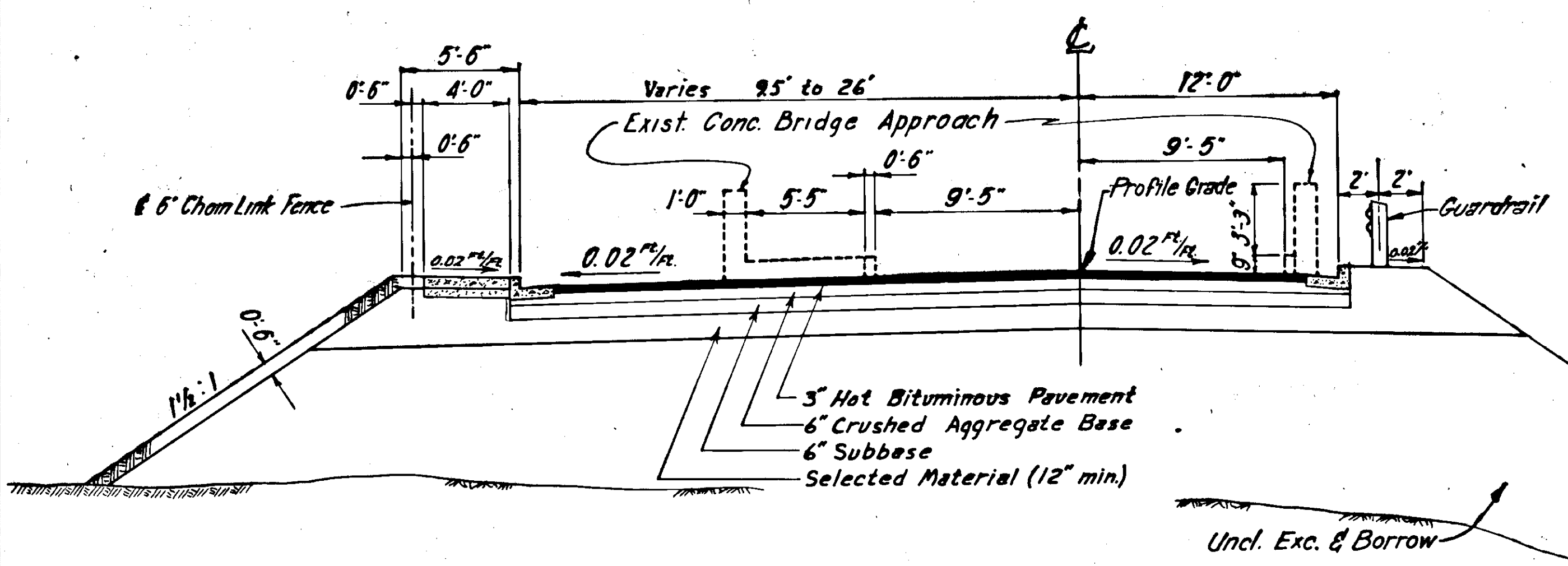


RIPRAP DETAIL

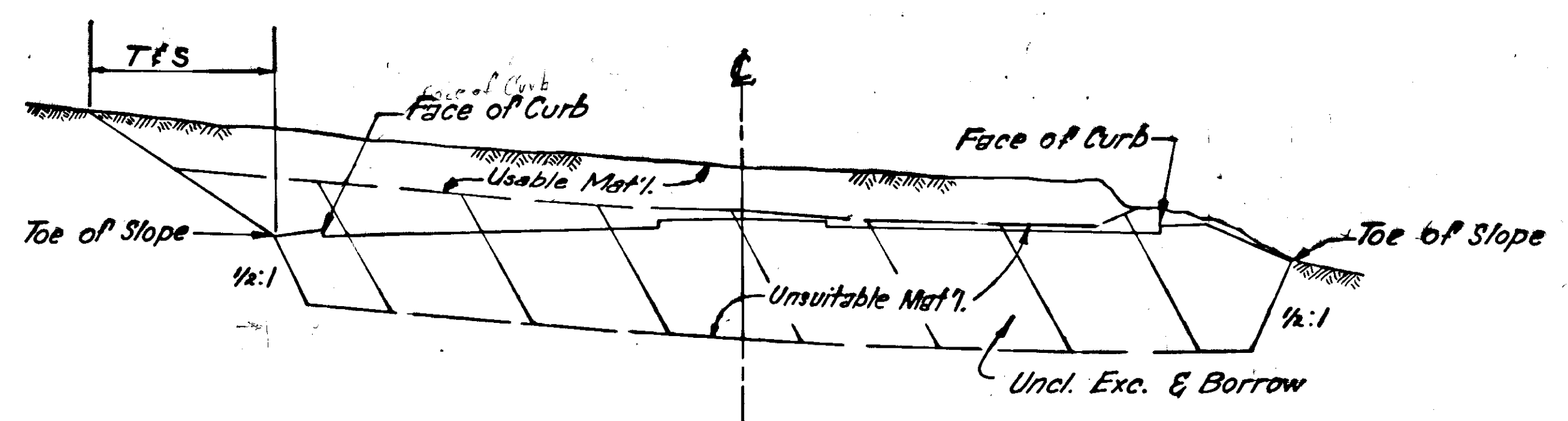
Sta. 0' 4+00 to Sta. 1' 13+25
 Sta. 0' 19+00 to Sta. 0' 25+25



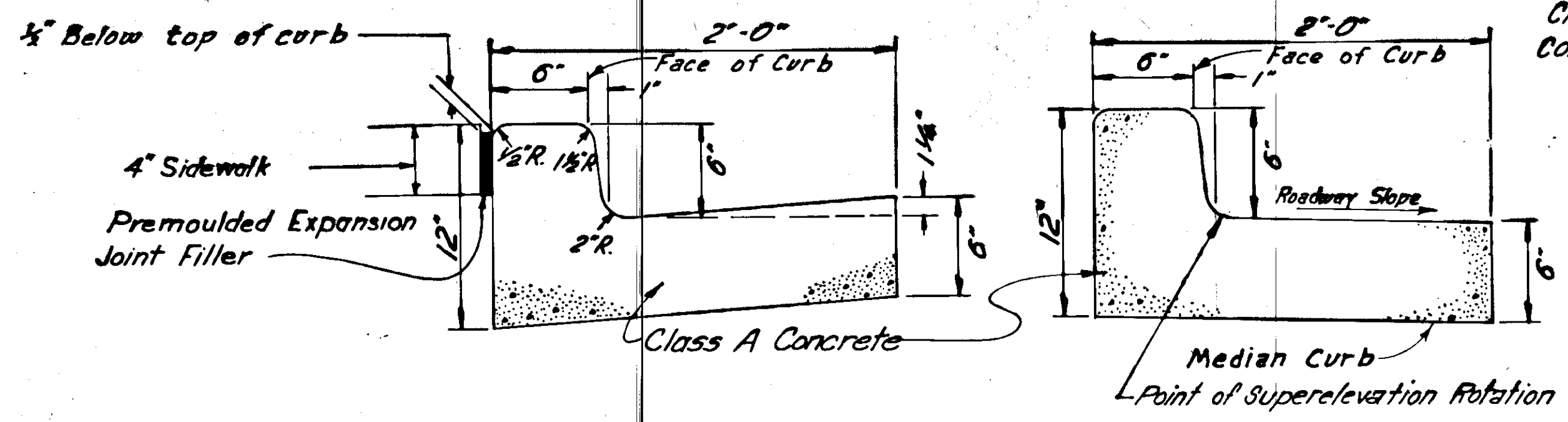
APPROACH ROAD
 0+21+15.21 Left



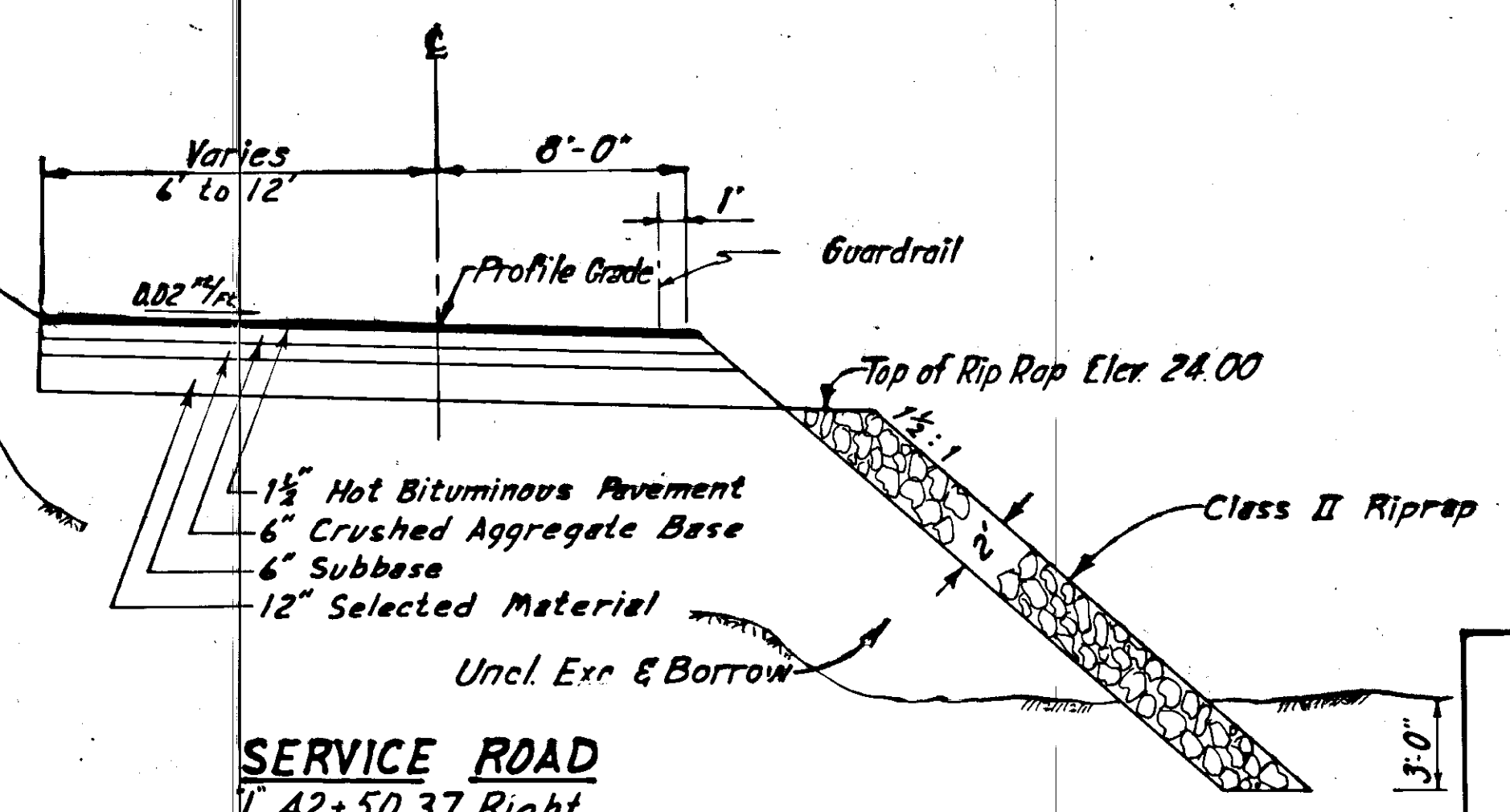
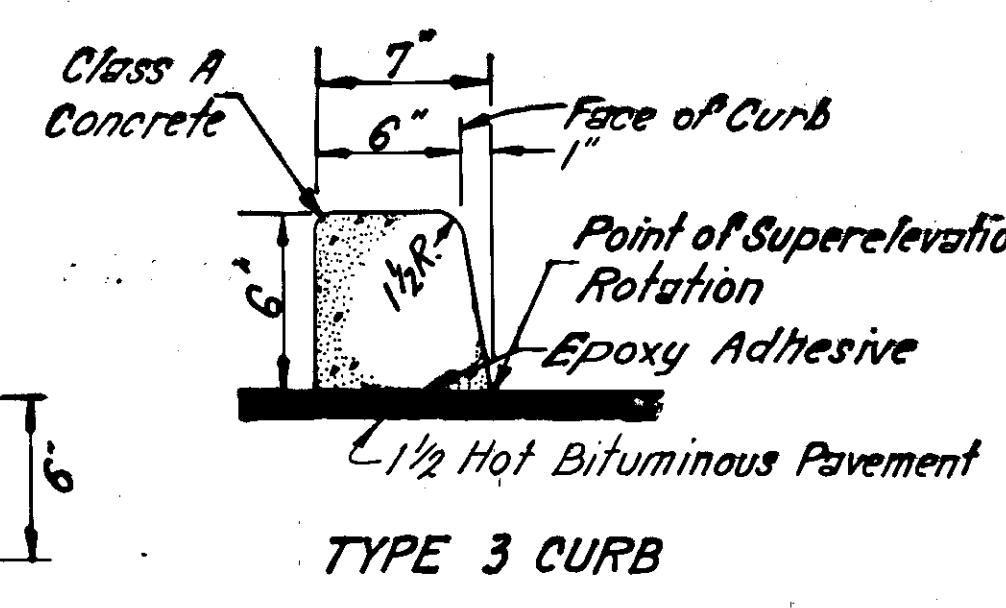
10th STREET BRIDGE APPROACH



UNSUITABLE MAT'L. EXC.
 2+13+00 to 2+16+00



CURB & CURB & GUTTER DETAIL



SERVICE ROAD
 2+42+50.37 Right

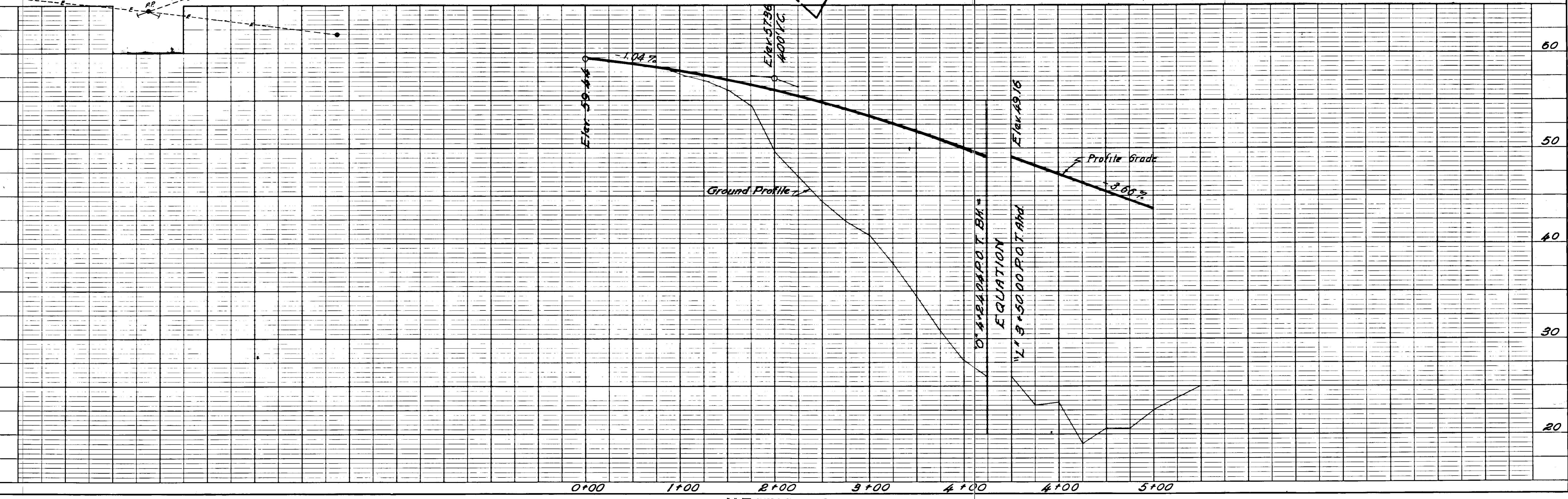
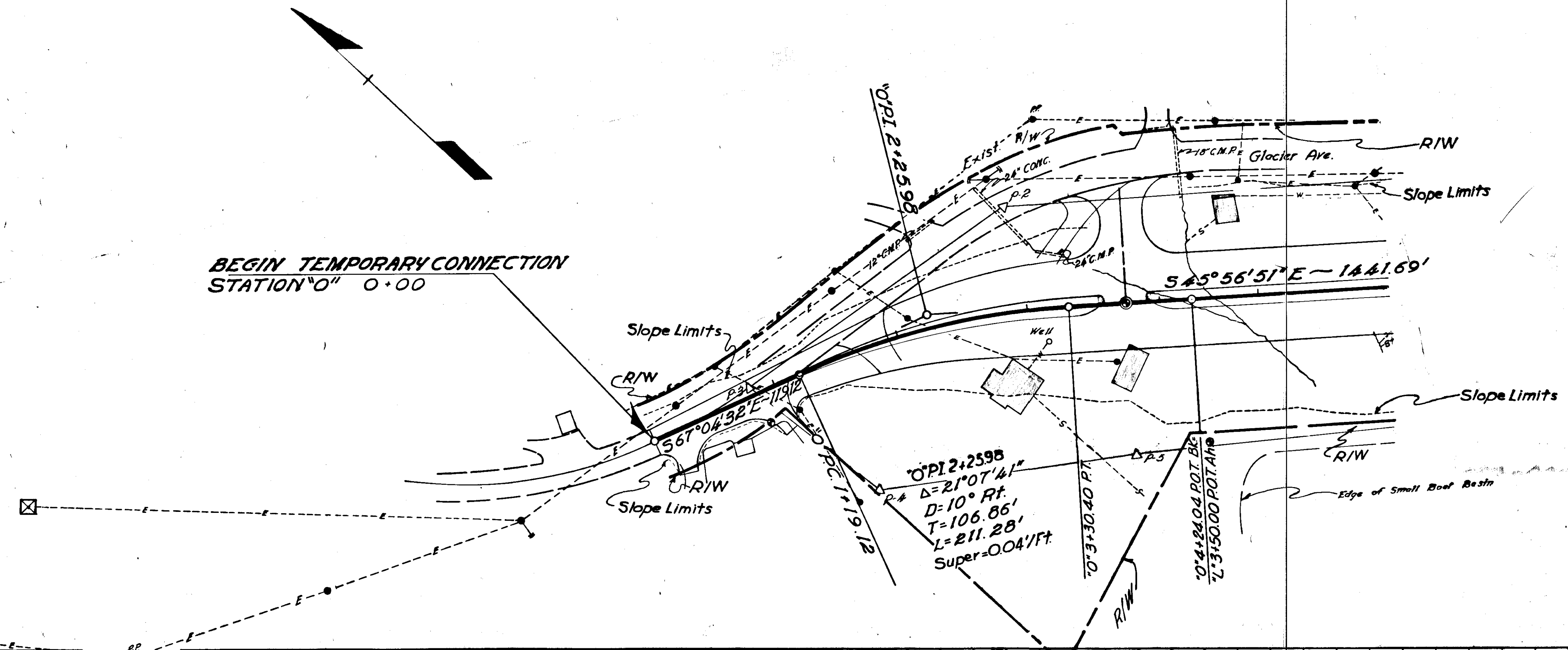
STATE of ALASKA
 Department of Highways
 JUNEAU OUTER DRIVE-PHASE
 Project No. F-095-8(13)

TYPICAL SECTIONS
 Approved: _____ Date: _____

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	F-095-8(13)	1967	7	73

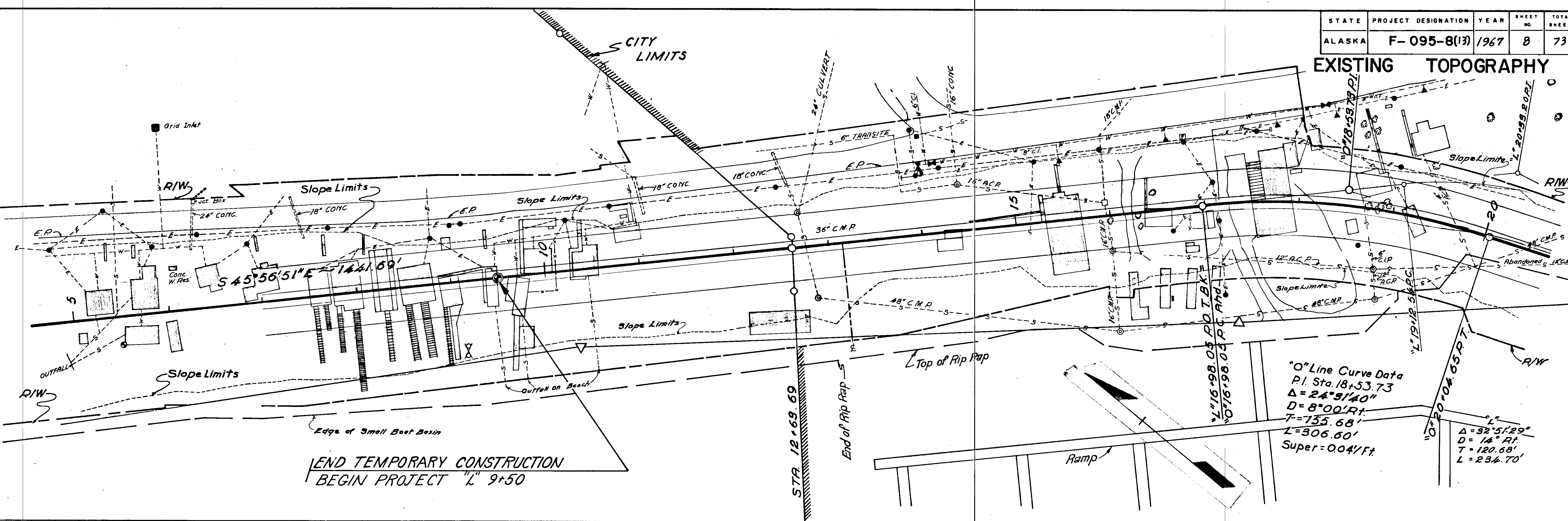
EXISTING TOPOGRAPHY

BEGIN TEMPORARY CONNECTION
STATION "0" 0+00

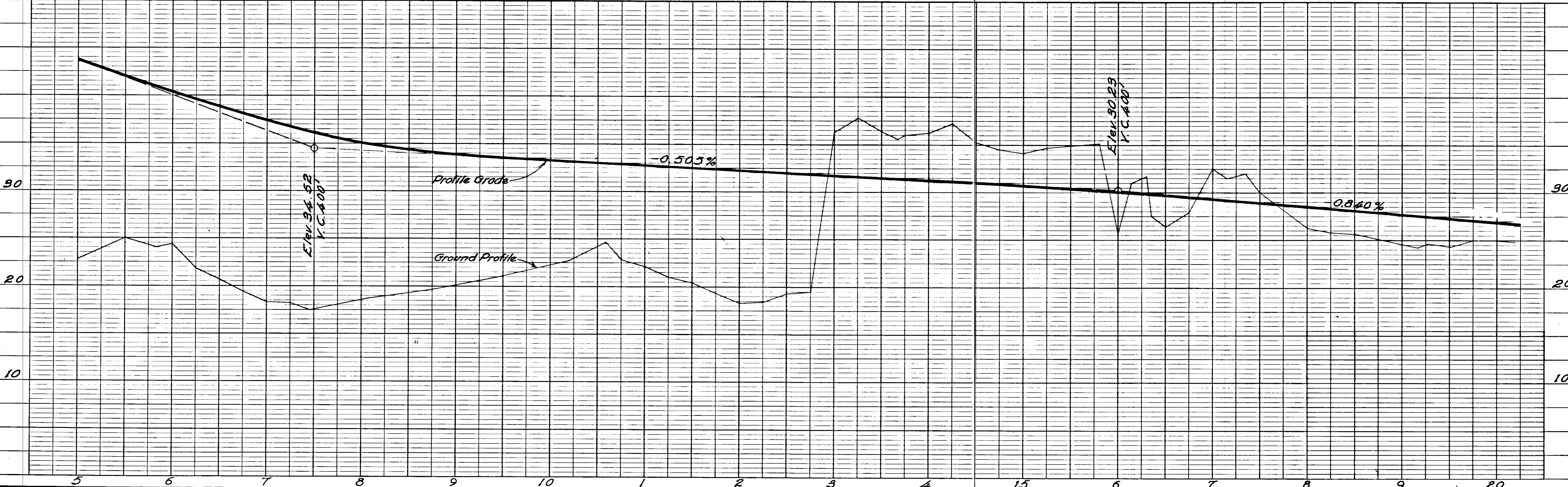


STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	F-095-8(13)	1967	8	73

EXISTING TOPOGRAPHY

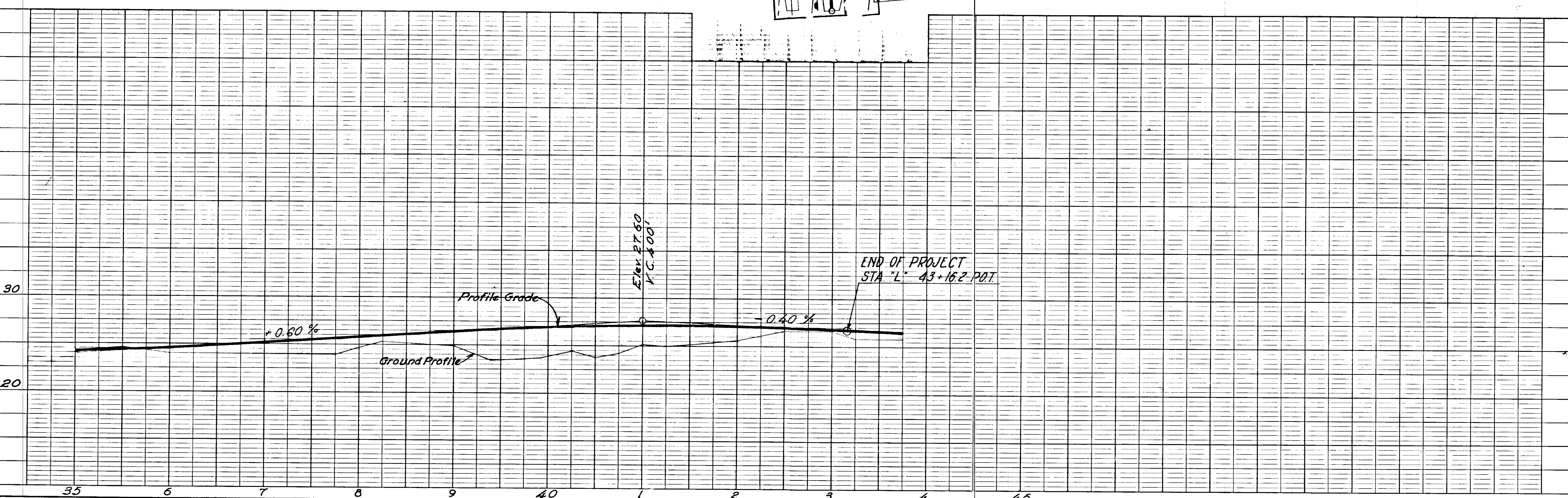
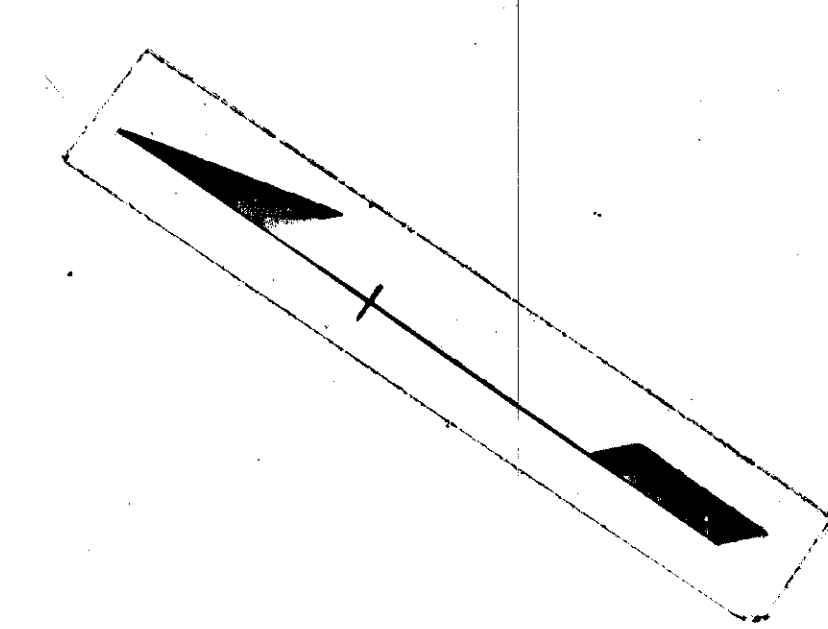
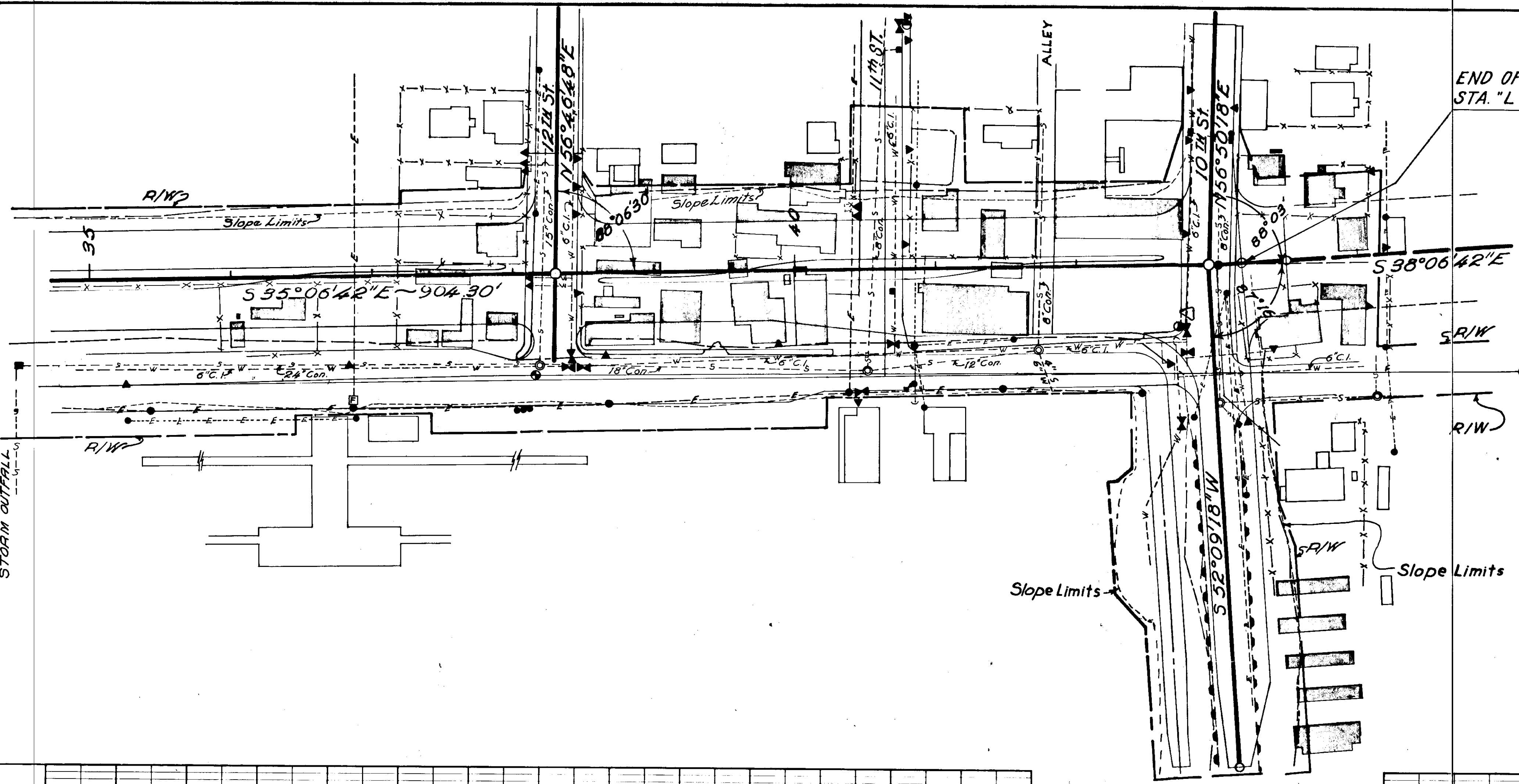


END TEMPORARY CONSTRUCTION
BEGIN PROJECT "L" 9+50

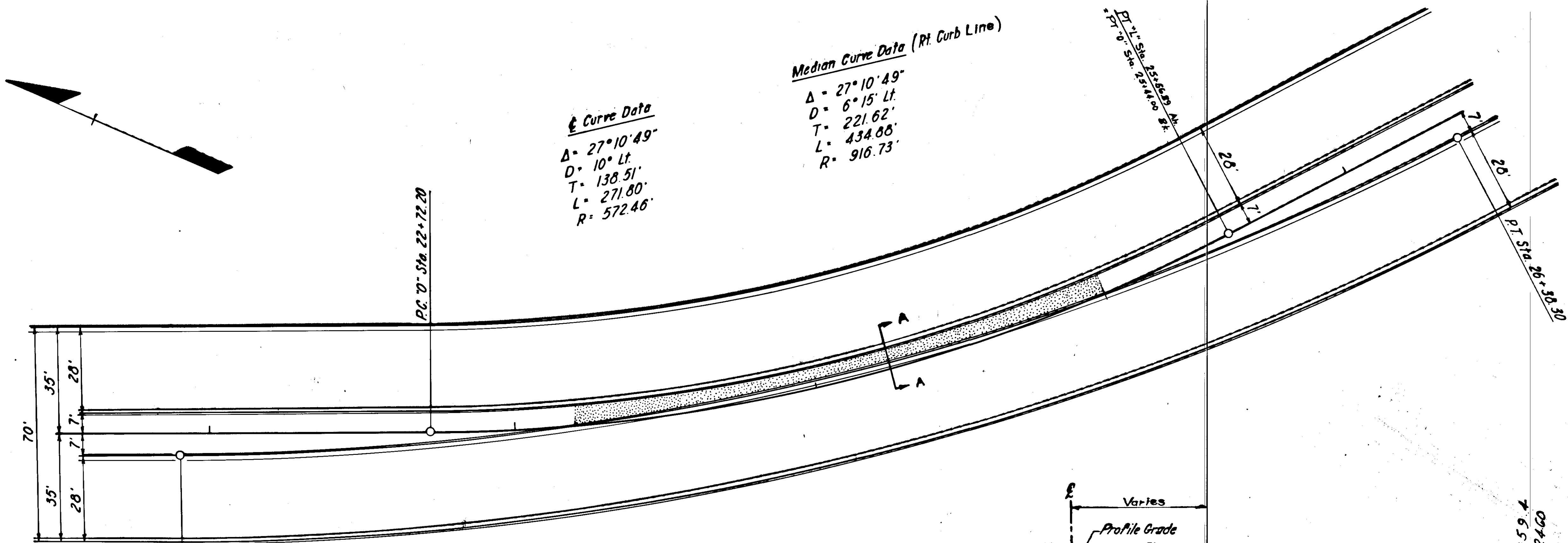


STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOT. SHEETS
ALASKA	F-095-8(13)	1967	10	73

EXISTING TOPOGRAPHY



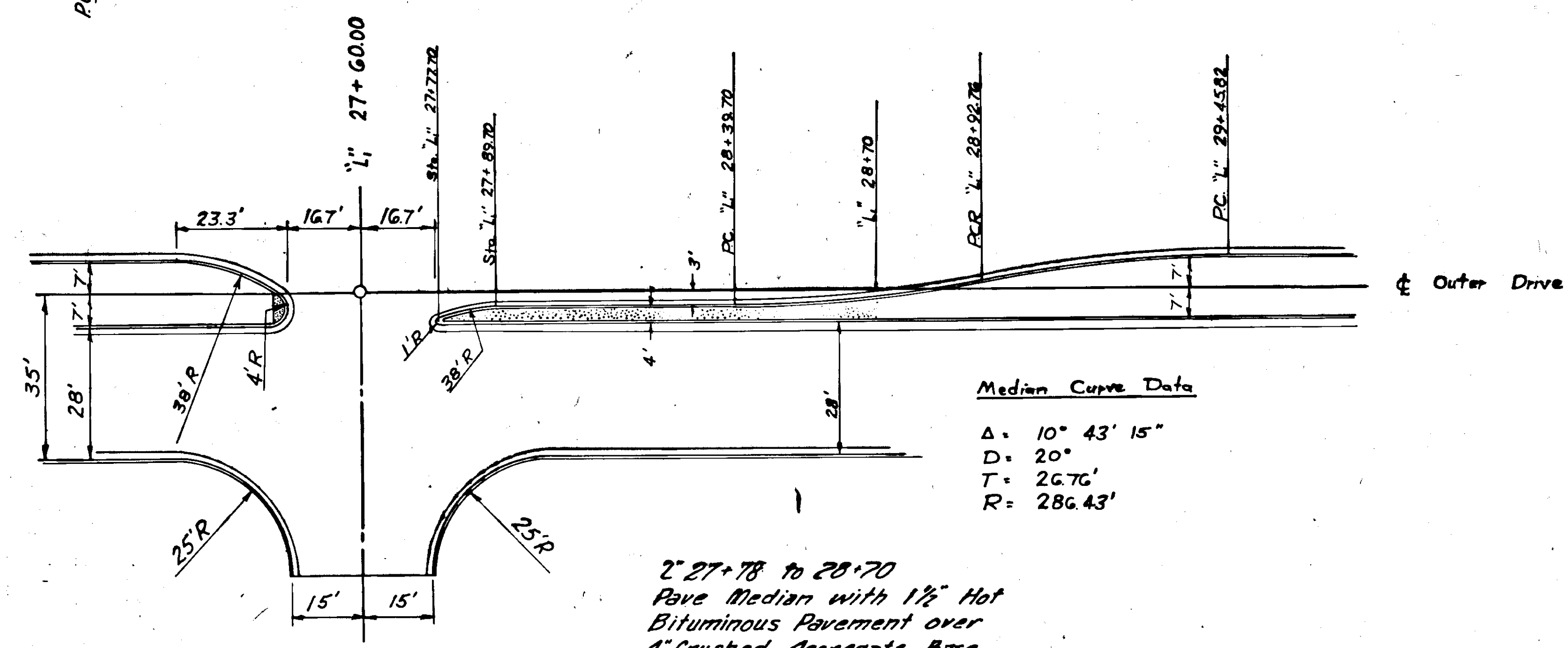
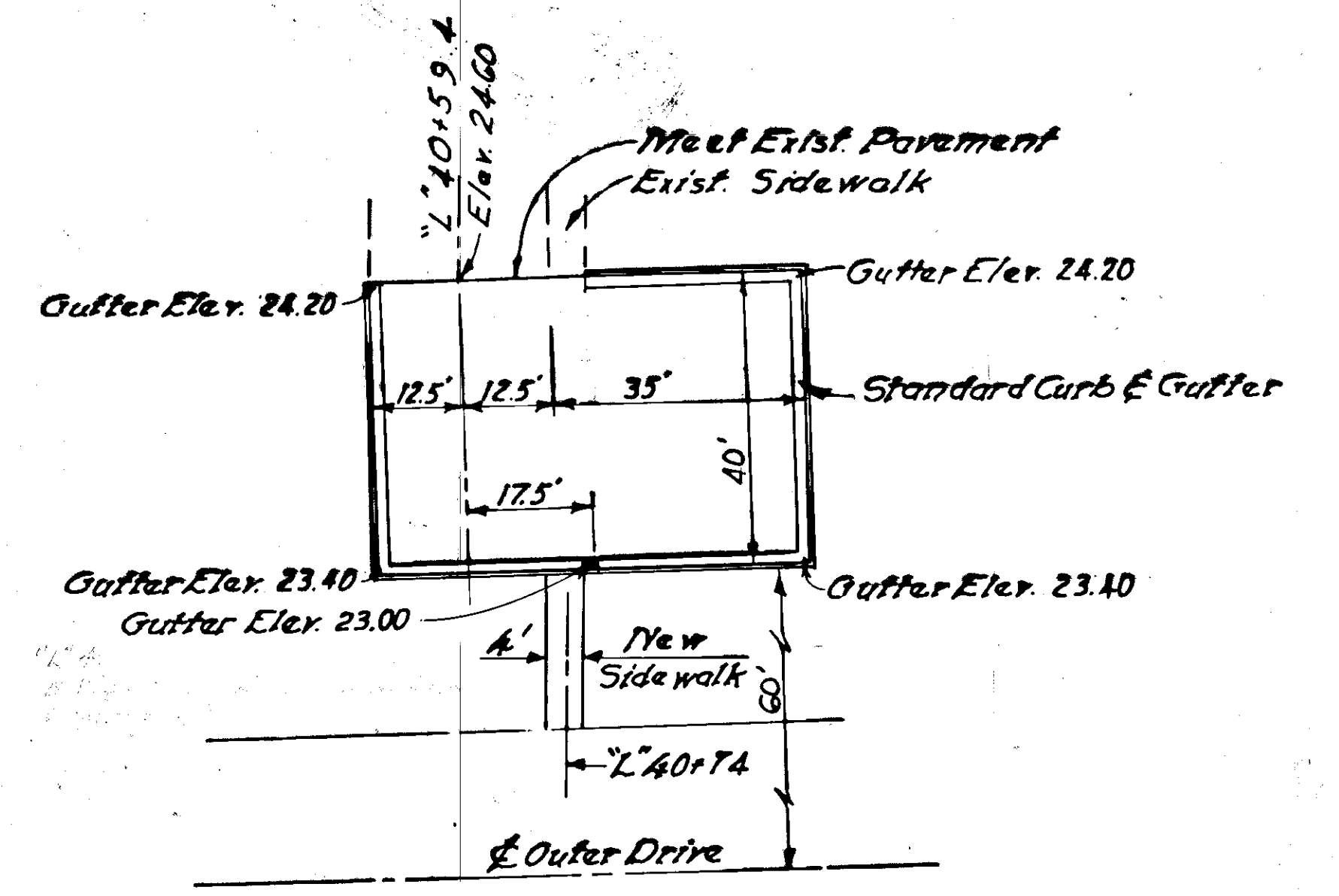
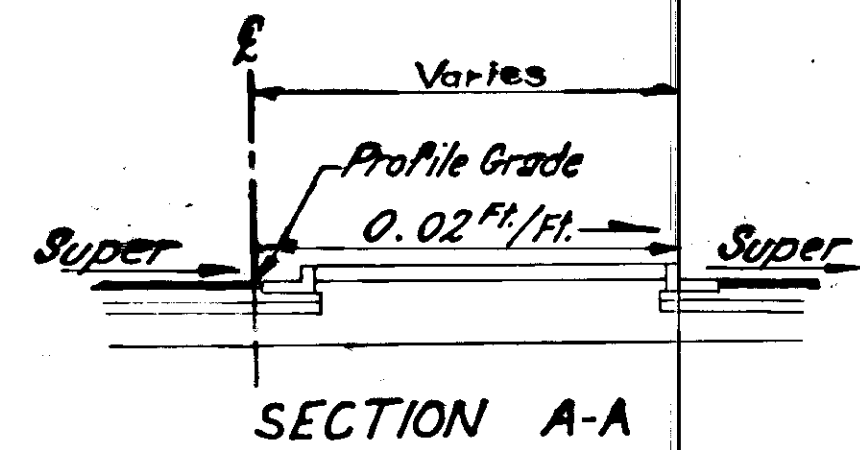
CONSTRUCTION PLANS
(MISCELLANEOUS DETAIL)



Curve Data
 $\Delta = 27^\circ 10' 49''$
 $D = 10^\circ \text{ Lt.}$
 $T = 138.51'$
 $L = 271.80'$
 $R = 572.46'$

Median Curve Data (Pt. Curb Line)
 $\Delta = 27^\circ 10' 49''$
 $D = 6^\circ 15' \text{ Lt.}$
 $T = 221.62'$
 $L = 434.88'$
 $R = 916.73'$

MEDIAN CONTROL DETAILS
Sta. "0" 21+90.79 to "0" 26+30.30



Median Curve Data
 $\Delta = 10^\circ 43' 15''$
 $D = 20^\circ$
 $T = 26.76'$
 $R = 286.43'$

2' 27+78 to 28+70
Pave Median with 1 1/2" Hot Bituminous Pavement over 4" Crushed Aggregate Base.

Note: All Median areas where width is 6' or less shall receive 1 1/2" Hot Bituminous pavement over 4 1/2" Crushed Aggregate Base Course.

STATE of ALASKA
Department of Highways
JUNEAU OUTER DRIVE-PHASE I
Project No. F-095-8(13)

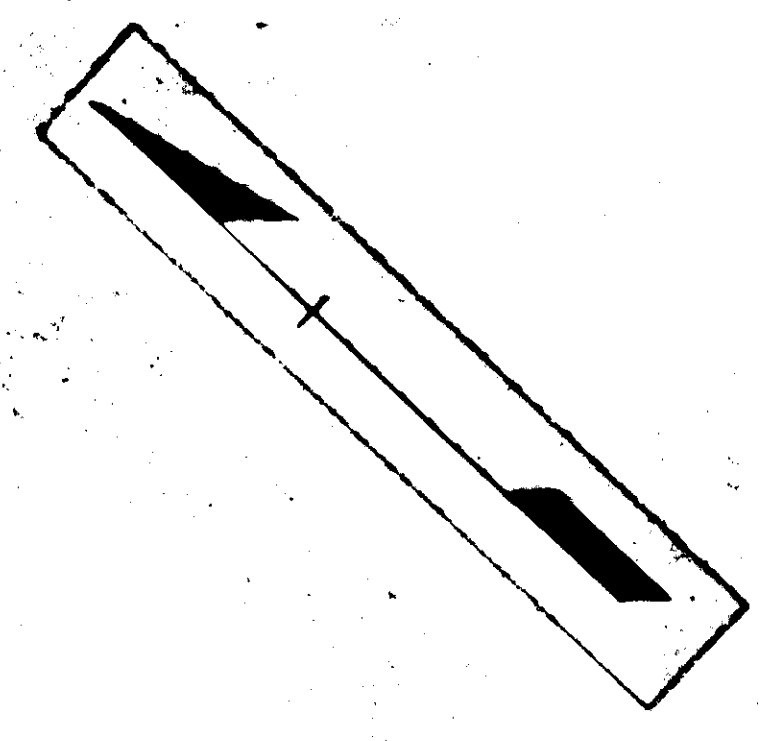
MISCELLANEOUS DETAIL

Approved: _____ Date: _____

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOT. SHEETS
ALASKA	F-095-8(13)	1967	12	73

CONSTRUCTION PLANS

BEGIN TEMPORARY CONNECTION
STATION 0+00



0+0+21
Construct Type 2 Approach Rt.
See Sheet 15

0+0+87
Construct Type 2 Approach Rt.
See Sheet 15

0+2+25-50 L.A.
Install 25' Beam
Type Guardrail

Obliterate Old Road

0+PI 2+8590

0+1+92.5 to 3+30
Install 137.5' Beam
Type Guardrail.

0+1+20 to 1+10
Install 400' C
Beam Type Guardrail
at 1/2 mile

Slope Limits

Slope Limits

0+1+171 Begin
Type 3" Curb

0+PI 2+2598
Δ = 21° 07' 41"
D = 10° Rt.
T = 106.86'
L = 211.28'
Super = 0.04'/ft

0+3+30.40 RT

0+4+24.04 P.O.T. BE
L 3+150.00 POTAN

2+14-Const Joint

Slope Limits

Elev 59.44
-1.04%

Elev 57.96
400' VC

Ground Profile

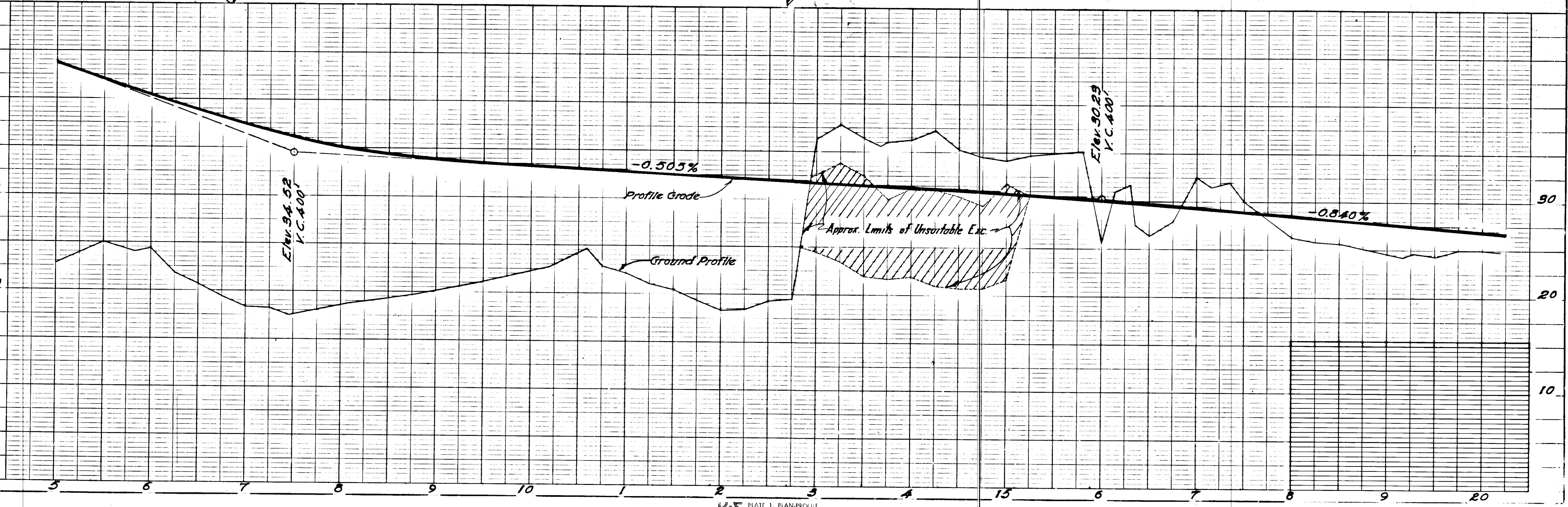
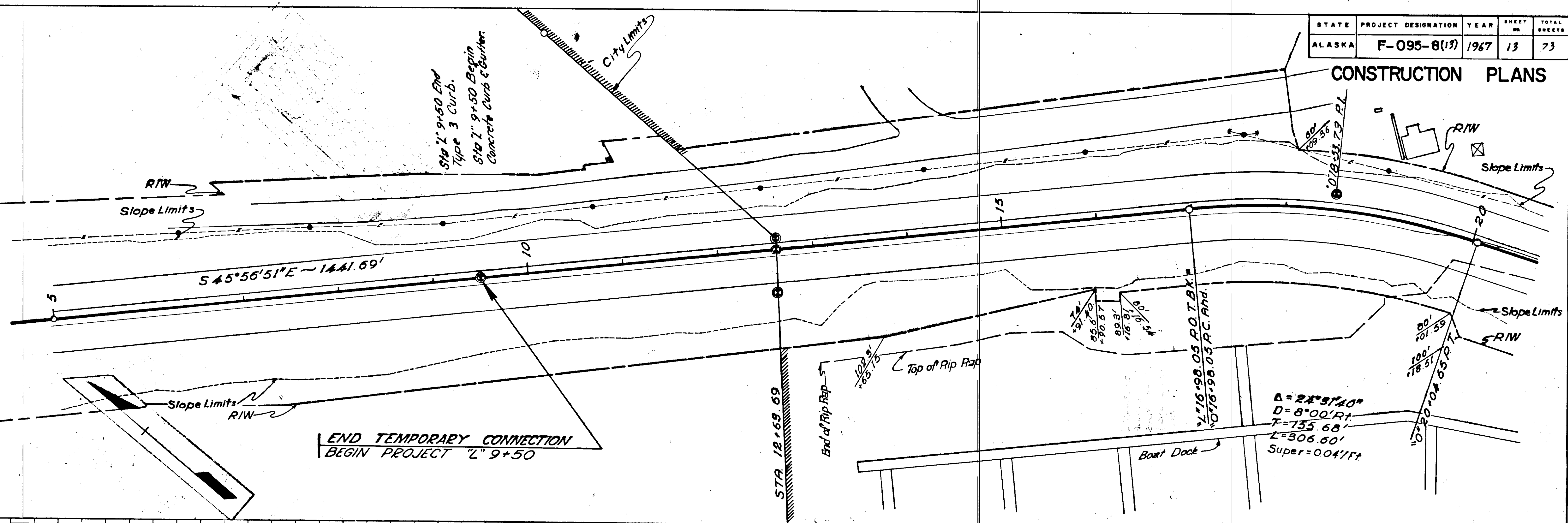
Profile Grade
+3.85%

EQUATION

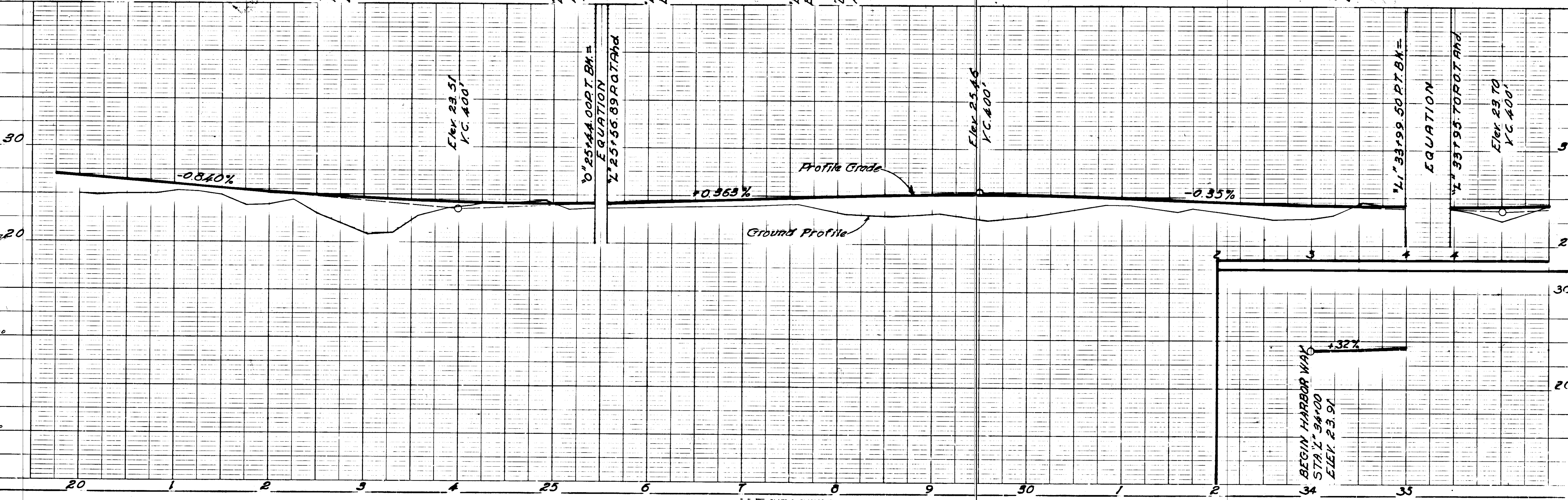
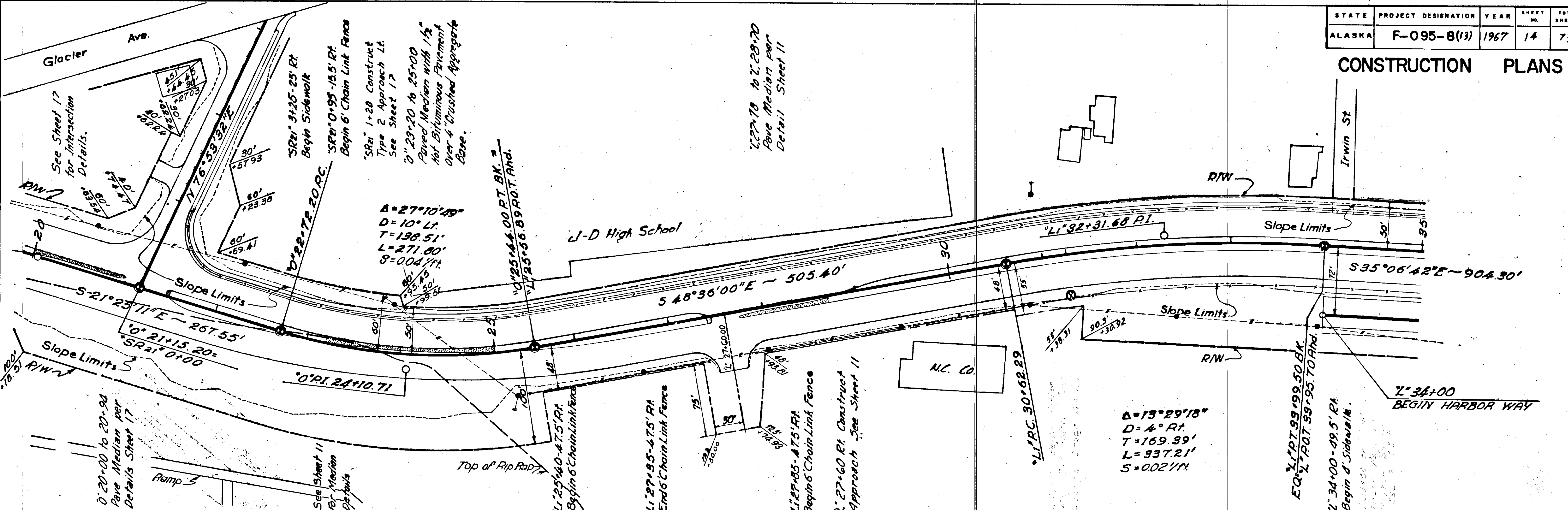
0+00 1+00 2+00 3+00 4+00 4+00 5+00

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	F-095-8(13)	1967	13	73

CONSTRUCTION PLANS

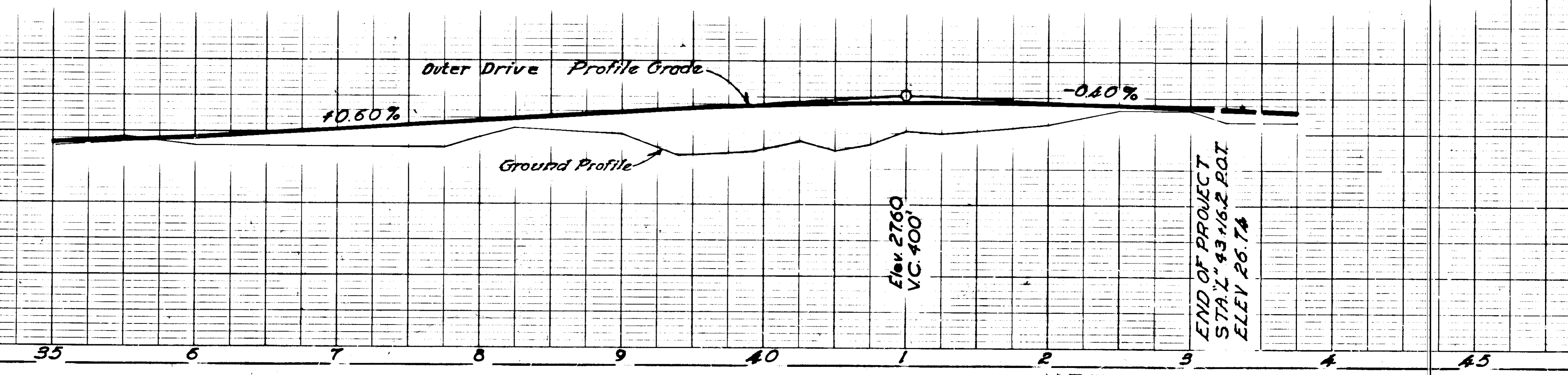
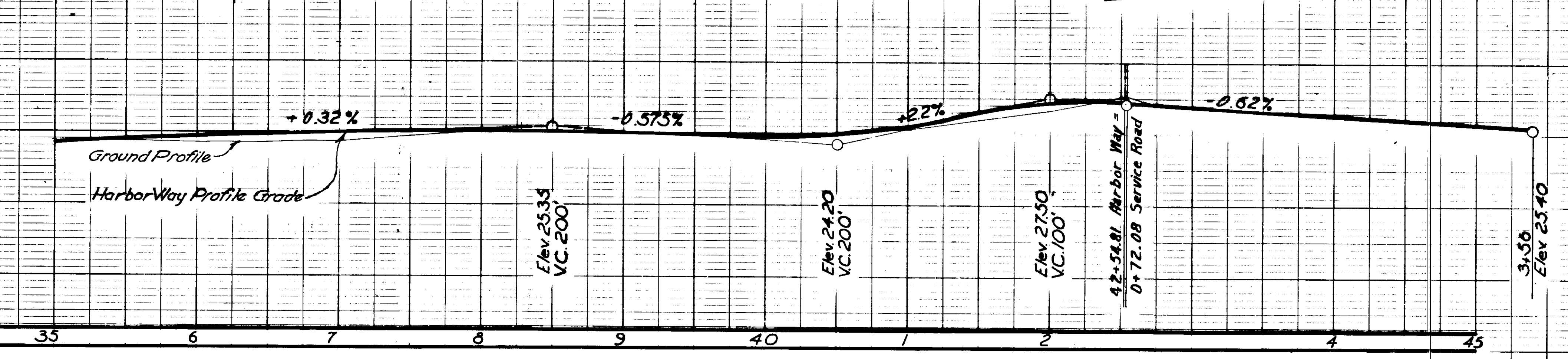
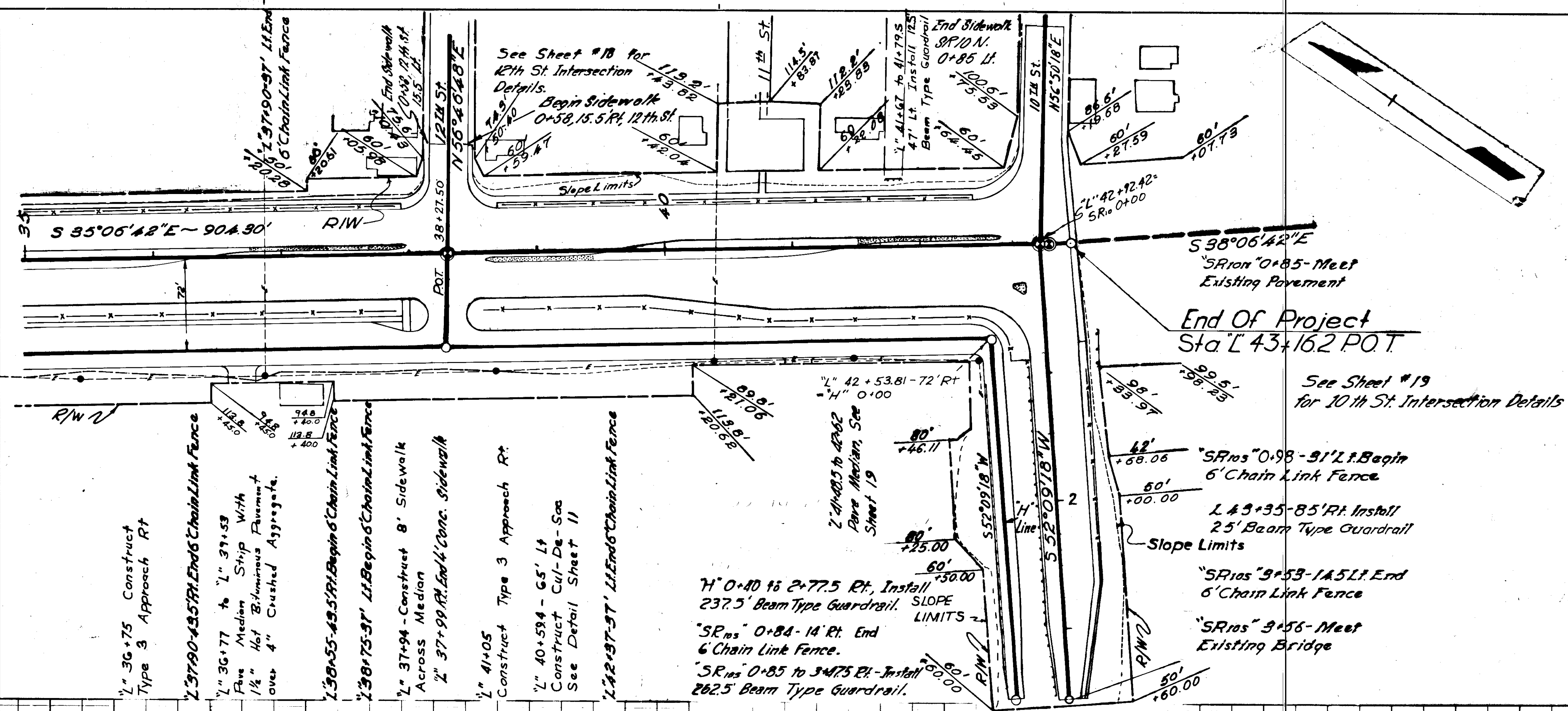


CONSTRUCTION PLANS



STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	F-095-8(13)	1967	15	73

CONSTRUCTION PLAN



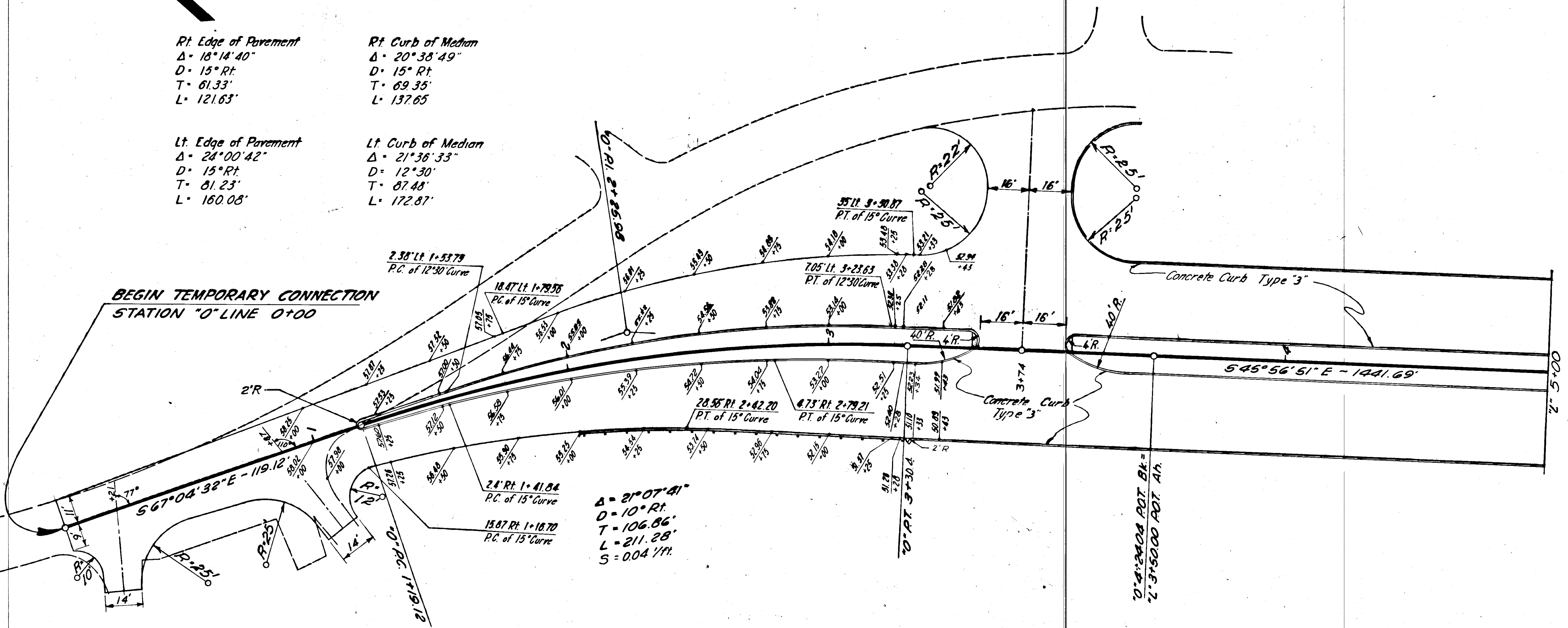
CONSTRUCTION PLANS
(INTERSECTION DETAIL)

Rt. Edge of Pavement
 $\Delta = 13^{\circ}14'40''$
 $D = 15^{\circ}Rt.$
 $T = 61.33'$
 $L = 121.63'$

Rt. Curb of Median
 $\Delta = 20^{\circ}38'49''$
 $D = 15^{\circ}Rt.$
 $T = 69.35'$
 $L = 137.65'$

Lt. Edge of Pavement
 $\Delta = 24^{\circ}00'42''$
 $D = 15^{\circ}Rt.$
 $T = 81.23'$
 $L = 160.08'$

Lt. Curb of Median
 $\Delta = 21^{\circ}36'33''$
 $D = 12^{\circ}30'$
 $T = 87.48'$
 $L = 172.87'$



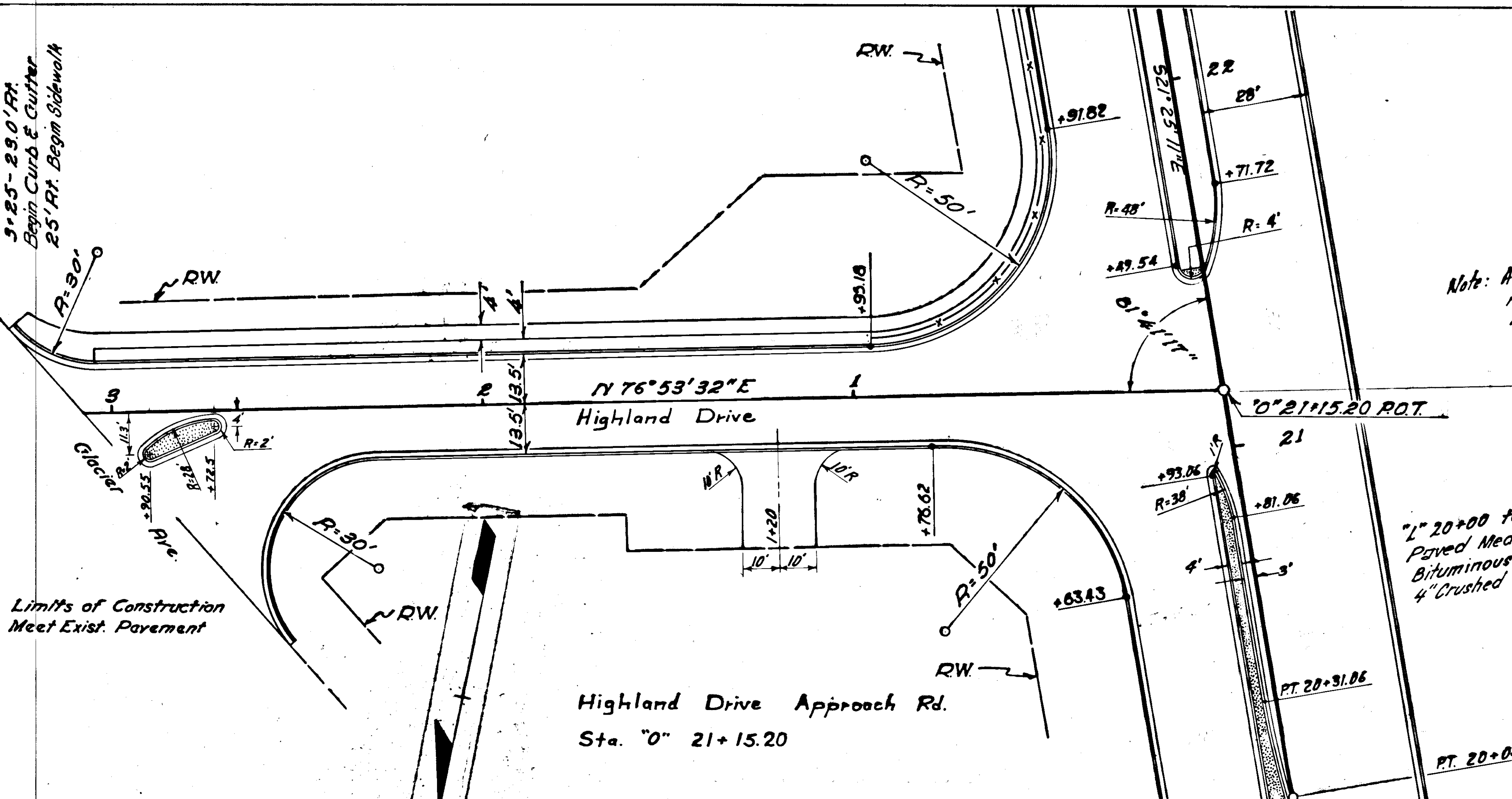
Note: All Median areas where width is 6' or less shall receive 1 1/2" Hot Bituminous Pavement over 4 1/2" Crushed Aggregate Base Course.

TEMPORARY TRANSITION

STATE of ALASKA Department of Highways
JUNEAU OUTER DRIVE Project No. F-095-8(13)
TEMPORARY CONNECTION

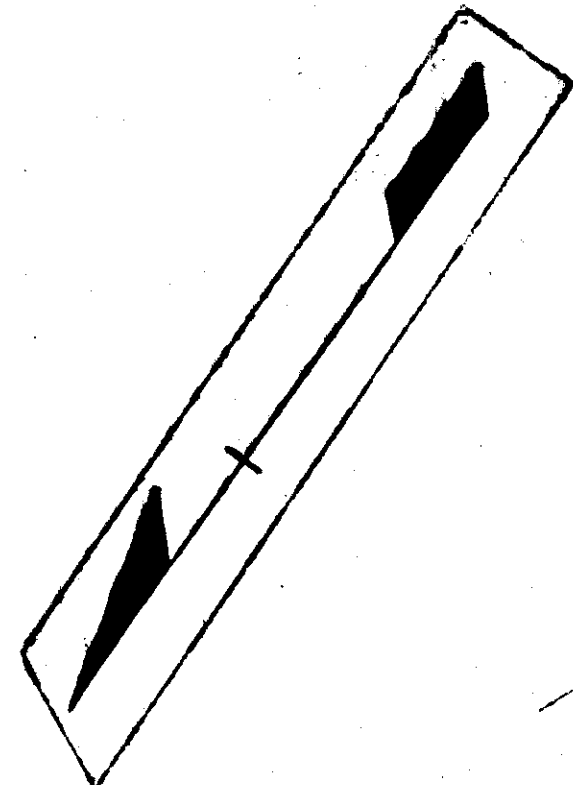
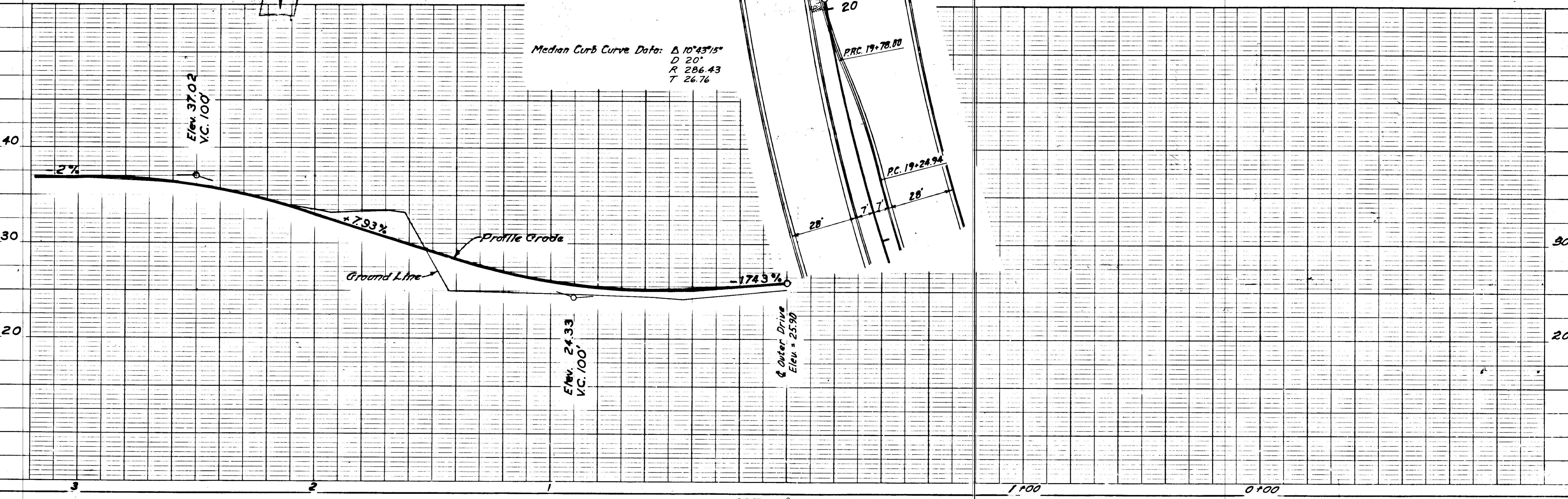
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	F-095-8(13)	1967	17	73

CONSTRUCTION PLANS
(INTERSECTION DETAIL)



Note: All Median areas where width is 6' or less shall receive 1 1/2" Hot Bituminous pavement over 4" Crushed Aggregate Base Course.

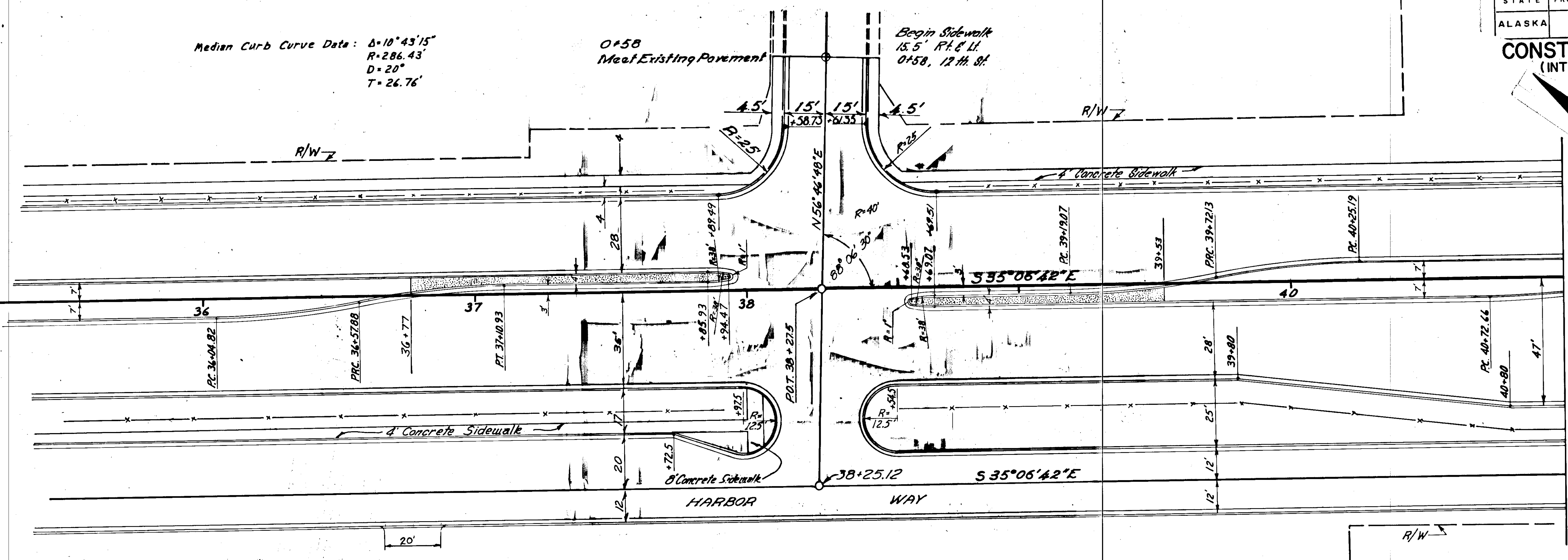
1" 20+00 to 20+94 Paved Median with 1 1/2" Hot Bituminous Pavement over 4" Crushed Aggregate Base



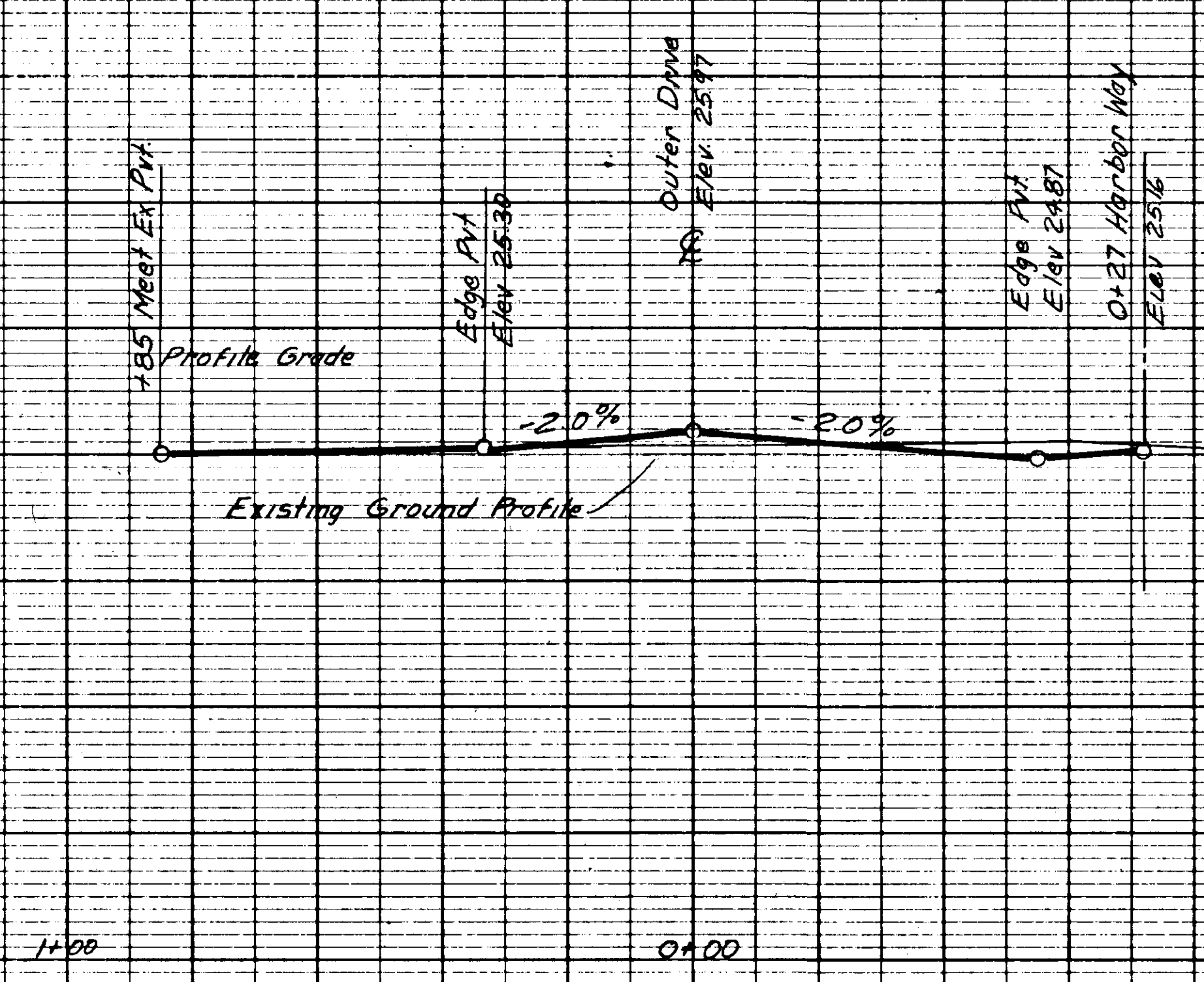
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	F-095-8(13)	1967	18	73

CONSTRUCTION PLANS
(INTERSECTION DETAIL)

Median Curb Curve Data: $\Delta = 10^\circ 43' 15''$
 $R = 286.43'$
 $D = 20'$
 $T = 26.76'$

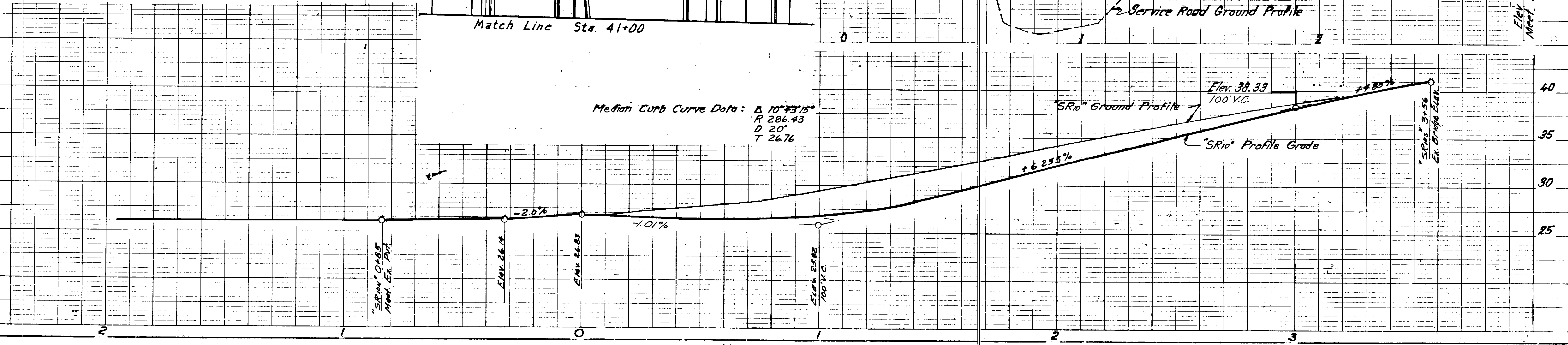
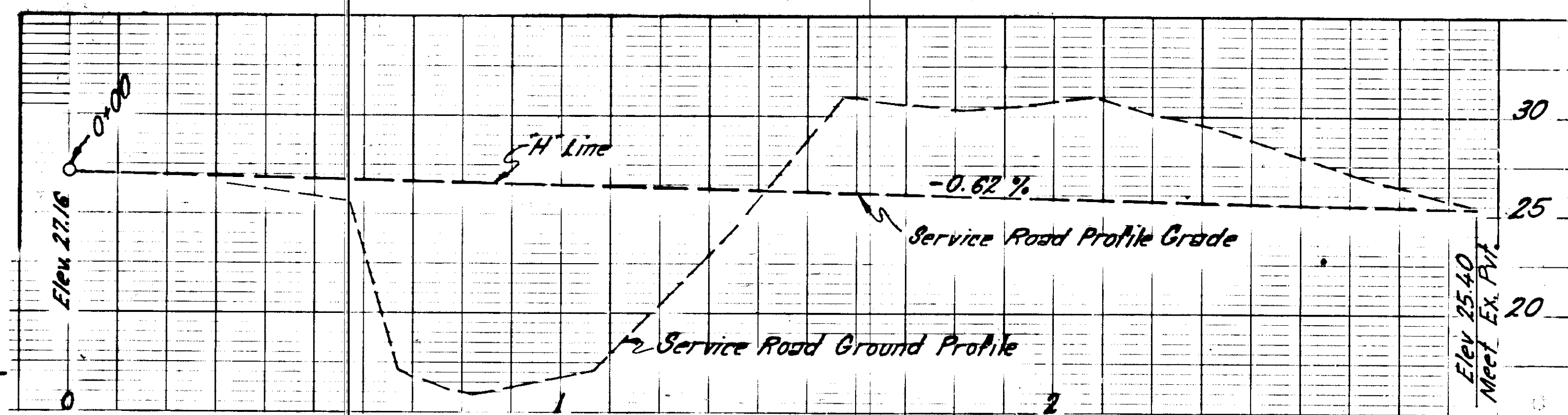
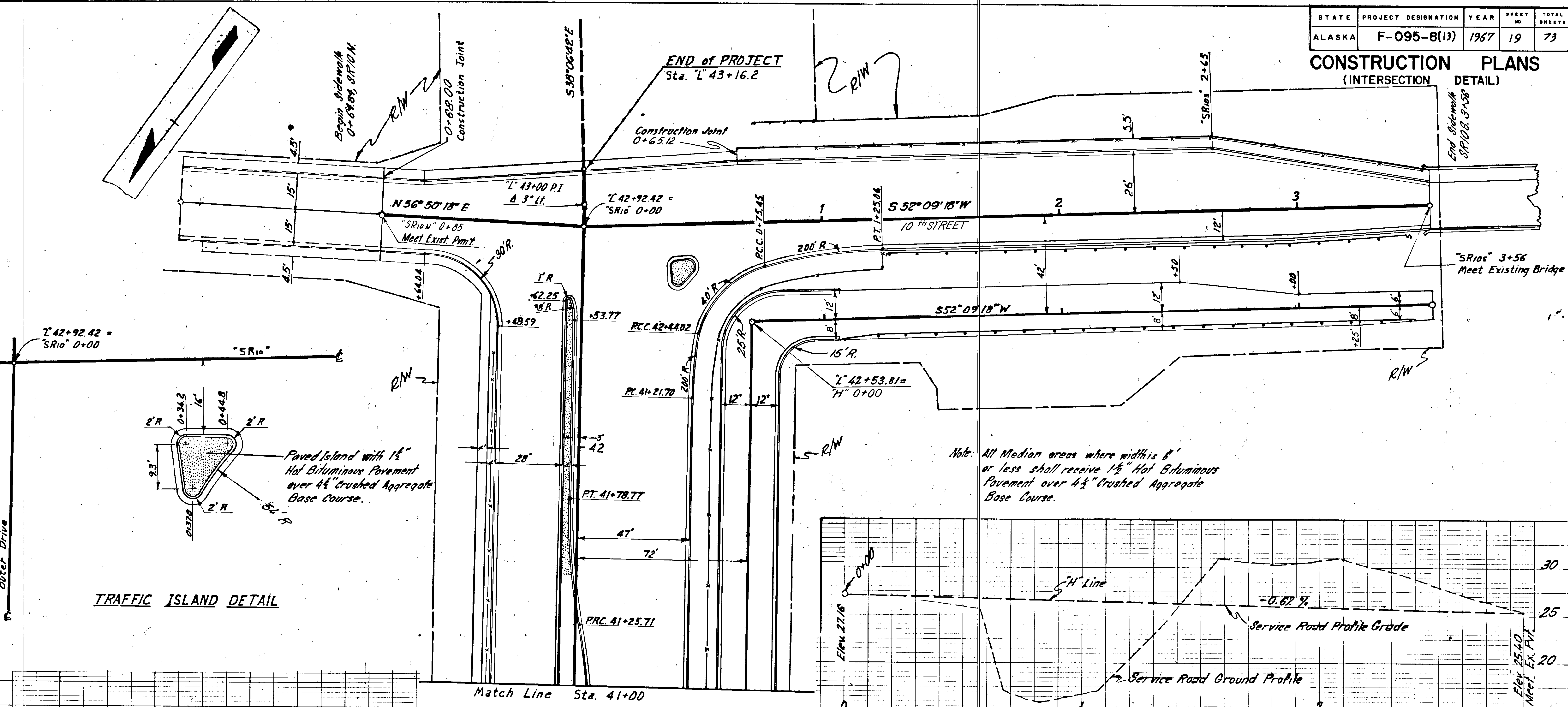


12th St. INTERSECTION DETAIL



STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	F-095-8(13)	1967	19	73

CONSTRUCTION PLANS
(INTERSECTION DETAIL)



DRAINAGE SUMMARY

STORM SYSTEM PIPE SUMMARY

LOCATION	STATION	PIPE INVERT ELEV.		603(26) PIPE CONDUIT								Structural Excavation 206 (1) Cu. Yd.	Max. Height of Fill	
		INLET	OUTLET	8"	12"	18"	24"	30"	36"	42"	603(26) Cu. Yd.			
Inlet ①	M.H. 4	"0" 3+28	49.00	45.00		62							3	7
M.H. 4	Inlet ②	"0" 3+00	43.00	41.68						43			55	10
M.H. 3	M.H. 2	"L" 3+50	38.80	23.00						145			9	21
M.H. 2	M.H. 1	"L" 3+50	22.10	15.10								238	140	5
M.H. 1	End of Outfall	"0L" 2+38.3	15.00	0.00								372	310	3
Inlet ②	M.H. 3	"L" 3+40	41.68	39.00						87			110	10
Inlet ③	M.H. 2	"L" 3+82	43.73	26.50		45							0	7
Inlet ④	M.H. 6	"L" 5+48	30.80	30.00			60						190	14
M.H. 6	M.H. 5	"L" 6+25	27.30	26.50							106		4	9
M.H. 5	M.H. 2	"L" 6+25	26.30	22.20							270		0	9
Inlet ⑤	Inlet ⑥	"L" 7+47	35.50	28.75		50							25	5
Inlet ⑥	M.H. 6	"L" 7+00	28.55	27.50		74							45	14
Inlet ⑦	Inlet ⑧	"L" 8+00	31.61	30.31		70							0	4
Inlet ⑧	M.H. 5	"L" 8+00	30.21	28.00		174							0	8
Cleanout	Inlet ⑫	"L" 7+40	26.90	25.00	510						370		435	12
Inlet ⑩	Exist. M.H. "L" 12+72 Lt.	"L" 11+10	35.50	22.50			166						86	5
Inlet ⑪	M.H. 10	"L" 16+10	27.25	24.25		10							49	5
Inlet ⑫	Exist. M.H. "L" 12+72 Lt.	"L" 12+50	24.75	24.25		24							16	5
Inlet ⑬	M.H. 7	"L" 13+81	36.30	35.00		60							71	9
M.H. 7	M.H. 8	"L" 14+42	31.90	24.00			156						370	15
M.H. 8	M.H. 10	"L" 15+95	23.90	21.90			87						95	7
Inlet ⑭	Exist. M.H. "L" 12+82 Rt.	"L" 12+74	27.72	23.00		24							0	5
Inlet ⑮	Inlet ⑫	"L" 12+00	28.55	26.50		50							17	5
Inlet ⑯	M.H. *8	"L" 15+00	27.00	25.00		98							102	12
Inlet ⑰	Inlet ⑱	"L" 33+55	16.00	15.40		80							77	7
Inlet ⑲	Inlet ⑳	"0" 20+15	23.35	19.35		64							50	5
Inlet ⑳	Exist. M.H. "0" 21+08 Lt.	"0" 20+80	19.25	14.58			32						48	10
Inlet ㉑	Exist. M.H. "0" 21+08 Lt.	"0" 21+03	22.23	20.00		74							22	10
Inlet ㉒	Exist. M.H. "SR21" 0+60	"SR21" 0+60	22.40	21.40		45							10	4
Inlet ㉓	Exist. M.H. "SR21" 0+60	"SR21" 0+60	21.30	20.00		20							16	6
Inlet ㉔	Exist. M.H. "L" 38+17 Rt.	"L" 38+12	19.50	18.50		11							2	4
Inlet ㉕	Inlet ㉖	"L" 34+22	15.30	14.90		40							50	9
Inlet ㉖	M.H. 9	"L" 34+22	14.80	14.30		51							72	10
Inlet ㉗	Inlet ㉘	"L" 34+00	20.80	20.00		32							14	3
Inlet ㉘	M.H. 9	"L" 34+00	19.90	18.50		16							11	5
Inlet ㉙	Inlet ㉚	"L" 35+75	21.70	20.00		153							79	4
Inlet ㉛	Inlet ㉜	"L" 38+72	22.28	21.45		70							16	4
Inlet ㉝	Exist. M.H. "L" 38+17 Rt.	"L" 38+72	21.35	18.50		64							29	6
Inlet ㉞	Exist. M.H. "L" 40+54 Rt.	"L" 40+82.63	21.00	19.00		136							71	5
Inlet ㉟	Exist. M.H. "SR21" 0+59 Lt.	"SR21" 0+59	23.04	21.50		50							22	8
Inlet ㊱	Exist. M.H. "SR21" 0+59 Lt.	"SR21" 0+59	22.33	21.50		44							24	8
Inlet ㊲	M.H. 40+54	"L" 39+90	21.73	19.00		64							24	6
Inlet ㊳	Inlet ㊴	"L" 39+90	22.03	21.73		21							3	3
Inlet ㊵	Inlet ㊶	"0" 24+79.25	20.80	19.20		44							10	3
Inlet ㊷	EX. M.H. ⑩ "0" 24+79.25	"0" 24+79.25	19.10	18.00		25							10	4
Inlet ㊸	EX. M.H. ⑩ "L" 27+80	"L" 27+80	22.00	20.10		100							12	4
M.H. *10	Exist. M.H. "L" 16+00 Rt.	"L" 16+00	21.50	12.00			85						44	7
				Totals		510	1817	346	408	275	376	610	370	2,843

MANHOLE ADJUSTMENTS

STATION	LOCATION	TYPE OF STRUCTURE	COVER ELEV.		ADJUST. HEIGHT FEET
			EXIST. ELEV.	PROP. ELEV.	
"L" 12+72	33' Lt.	C.M.P.	30.00	31.22	+1.22
"0" 21+04	42' Lt.	C.M.P.	24.50	25.50	+1.00
"0" 25+08	34' Lt.	C.M.P.	24.04	22.76	-1.28
"L" 31+28	28' Rt.	Concrete	21.88	24.28	+2.40
"L" 38+17	65' Rt.	Concrete	25.16	25.00	-0.16
"L" 40+54	70' Rt.	Concrete	24.84	24.88	+0.04
"SR21" 0+98	5' Lt.	Concrete	29.13	26.61	-2.52

EXISTING WATER SYSTEM REVISIONS

STATION	DISTANCE		ADJUST. METER	REMOVE HYDRANT	ADJUST. VALVES	REMARKS
	LEFT	RIGHT				
"L" 40+83	85'		1			
"L" 42+75		43'		1		Relocate
"L" 32+45		49'		1		Relocate
"L" 42+78		46'			1	
"L" 42+78		62'			1	
"L" 43+15		110'	1			
"L" 38+71		57'				Adjust Hyd.
"L" 32+45		42'				Adjust Hyd.
Totals			2	1	2	

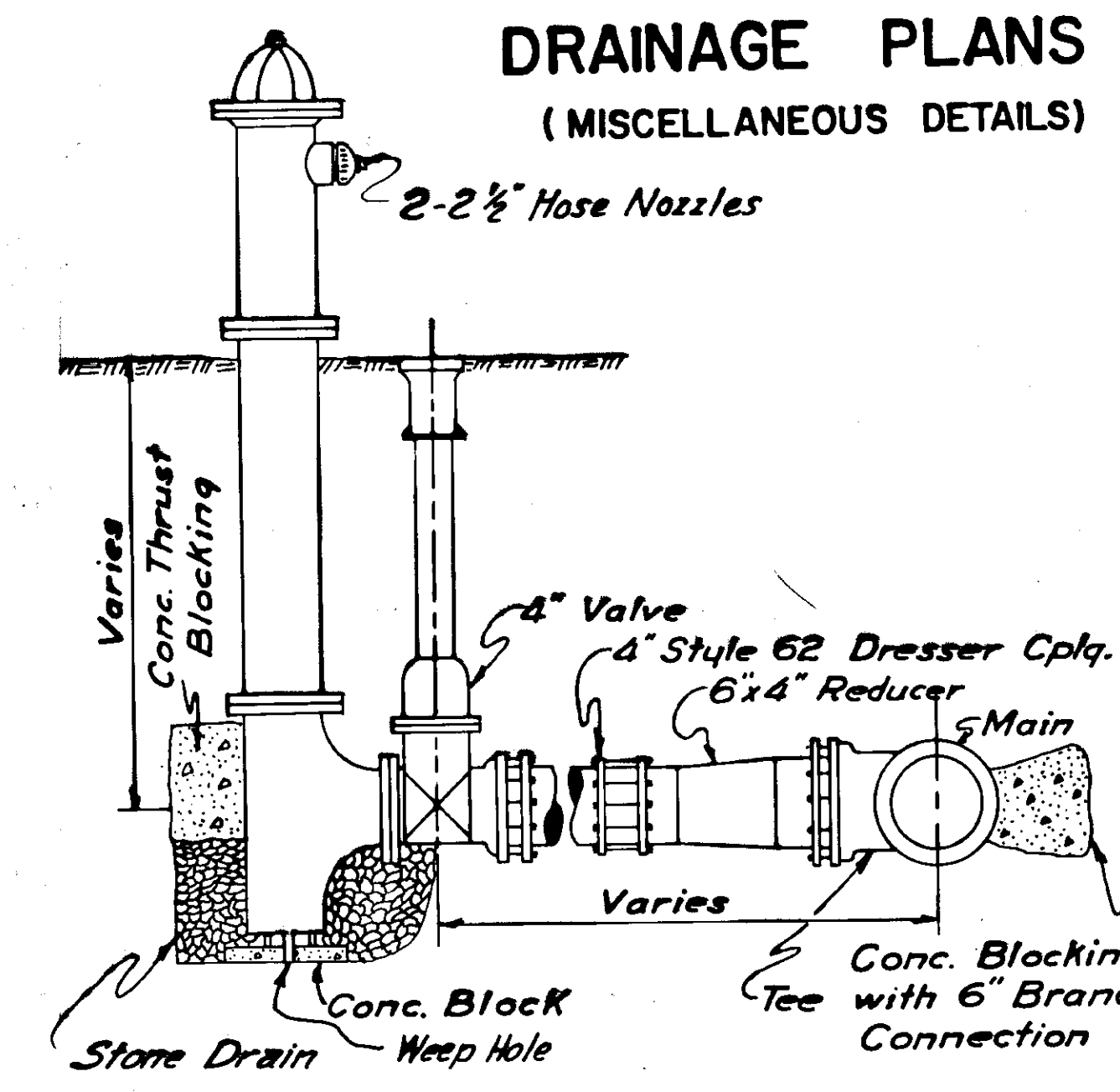
BITUMINOUS COATED C.M.P. 603(6)

STATION	LEFT	INVERT	RIGHT	INVERT	REMARKS
"L" 30+62	52'	15.8	78'	16.8	Install 21" x 130"
"L" 37+00	50'	17.0	100'	18.0	Install 21" x 150"
"L" 41+12	61'	19.0	93'	20.0	Install 21" x 154"

STORM SYSTEM STRUCTURE SUMMARY

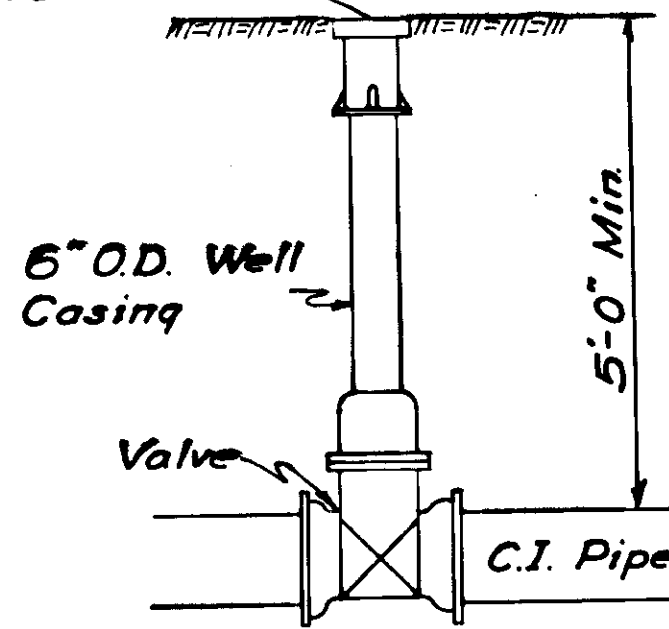
STATION	LOCATION	STRUCTURE	604(1)		604(2)		604(3)		STRUCTURE ELEVATION	
			MANHOLE	INLET TYPE 'A'	INLET TYPE 'C'	CLEANOUT	COVER	INVERT		
"0L" 2+38.3	6	M.H. 1	1					25.00	15.00	
"0" 3+00	60' Lt.	M.H. 4	1					52.00	43.00	
"0" 3+28	7' Lt.	Inlet ①		1				52.37	48.99	
"0" 3+40	67' Lt.	Inlet ②			1			46.00	41.65	
"L" 3+50	82' Lt.	M.H. 3	1					48.80	38.80	
"L" 3+50	63' Rt.	M.H. 2	1					34.10	22.10	
"L" 3+82	35' Rt.	Inlet ③		1				46.73	43.73	
"L" 5+48	80' Lt.	Inlet ⑤			1			35.00	30.80	
"L" 6+25	59' Lt.	M.H. 6	1					38.00	27.30	
"L" 6+25	47' Rt.	M.H. 5	1					35.30	26.30	
"L" 7+00	51' Lt.	Inlet ⑥			1			32.00	28.55	
"L" 7+40	46.5' Lt.	Cleanout				1		32.00	26.90	
"L" 7+47	63' Lt.	Inlet ⑦			1			41.00	35.50	
"L" 8+00	35' Lt.	Inlet ⑧		1				34.45	31.61	
"L" 8+00	35' Rt.	Inlet ⑨		1				34.44	30.21	
"L" 11+10	58' Lt.	Inlet ⑩*			1			41.00	35.50	
"L" 12+50	46.5' Lt.	Inlet ⑫			1			30.10	24.75	
"L" 12+74	35' Rt.	Inlet ⑬		1				31.18	27.72	
"L" 13+81	66' Lt.	Inlet ⑭*			1			42.50	36.30	
"L" 14+42	72' Lt.	M.H. 7	1					43.00	31.90	
"L" 12+00	35' Lt.	Inlet ⑮			1			31.55	28.55	
"L" 15+00	35' Lt.	Inlet ⑯		1				30.04	27.00	
"L" 15+95	50' Lt.	M.H. 8	1					36.00	23.90	
"L" 16+10	35' Rt.	Inlet ⑰		1				29.50	27.25	
"0" 20+15	7' Lt.	Inlet ⑱		1				26.60	23.35	
"0" 20+80	62' Lt.	Inlet ⑳			1			23.50	19.25	
"0" 21+03	35' Rt.	Inlet ㉑		1				25.55	22.23	
"SR21" 0+60	16' Lt.	Inlet ㉒		1				24.55	21.30	
"SR21" 0+60	27' Rt.	Inlet ㉓		1				24.24	22.40	
"0" 24+79.25	2' Lt.	Inlet ㉔		1				23.80	20.80	
"L" 33+91	59' Rt.	M.H. 9	1					24.20	13.50	
"L" 33+97	7' Lt.	Inlet ㉕		1				24.00	19.90	
"L" 33+97	35' Rt.	Inlet ㉖		1				23.44	19.10	
"L" 34+00	52' Rt.	Inlet ㉗		1				23.47	19.90	
"L" 34+00	84' Rt.	Inlet ㉘		1				23.67	20.60	
"L" 35+75	35' Lt.	Inlet ㉙		1				23.98	21.70	
"L" 38+72	35' Lt.	Inlet ㉚		1				25.52	22.28	
"L" 38+72	35' Rt.	Inlet ㉛		1				25.52	21.35	
"L" 40+76.9	65.5' Lt.	Inlet ㉜		1				23.23	21.00	
"SR21" 0+59	28' Lt.	Inlet ㉝		1				25.77	22.33	
"SR21" 0+59	272' Rt.	Inlet ㉞		1				25.86	23.04	
"L" 39+90	60' Rt.	Inlet ㉟		1				24.41	22.03	
"L" 39+90	84' Rt.	Inlet ㊱								

DRAINAGE PLANS (MISCELLANEOUS DETAILS)

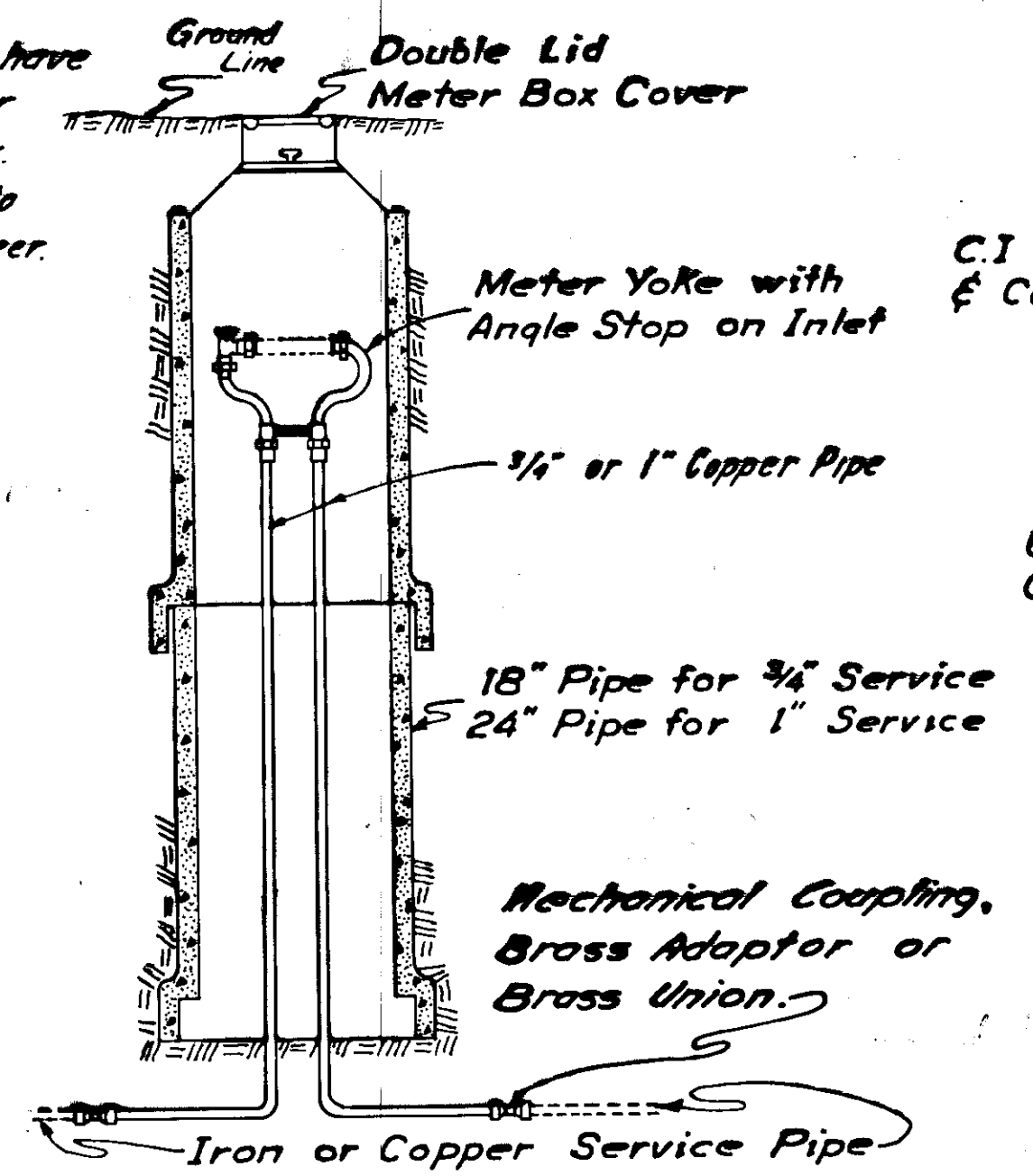


TYPICAL EXISTING HYDRANT

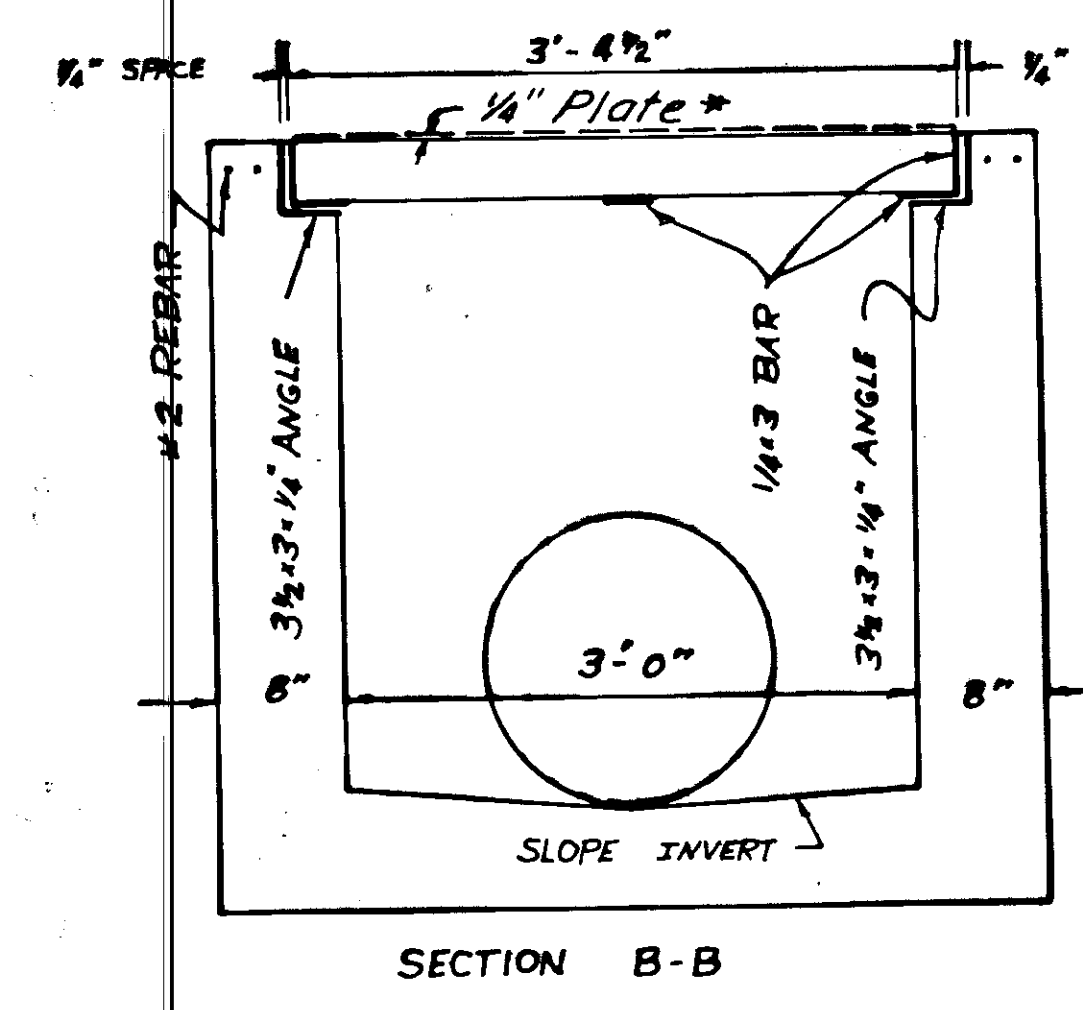
C.I. Valve Box & Cover



TYPICAL EXISTING VALVE



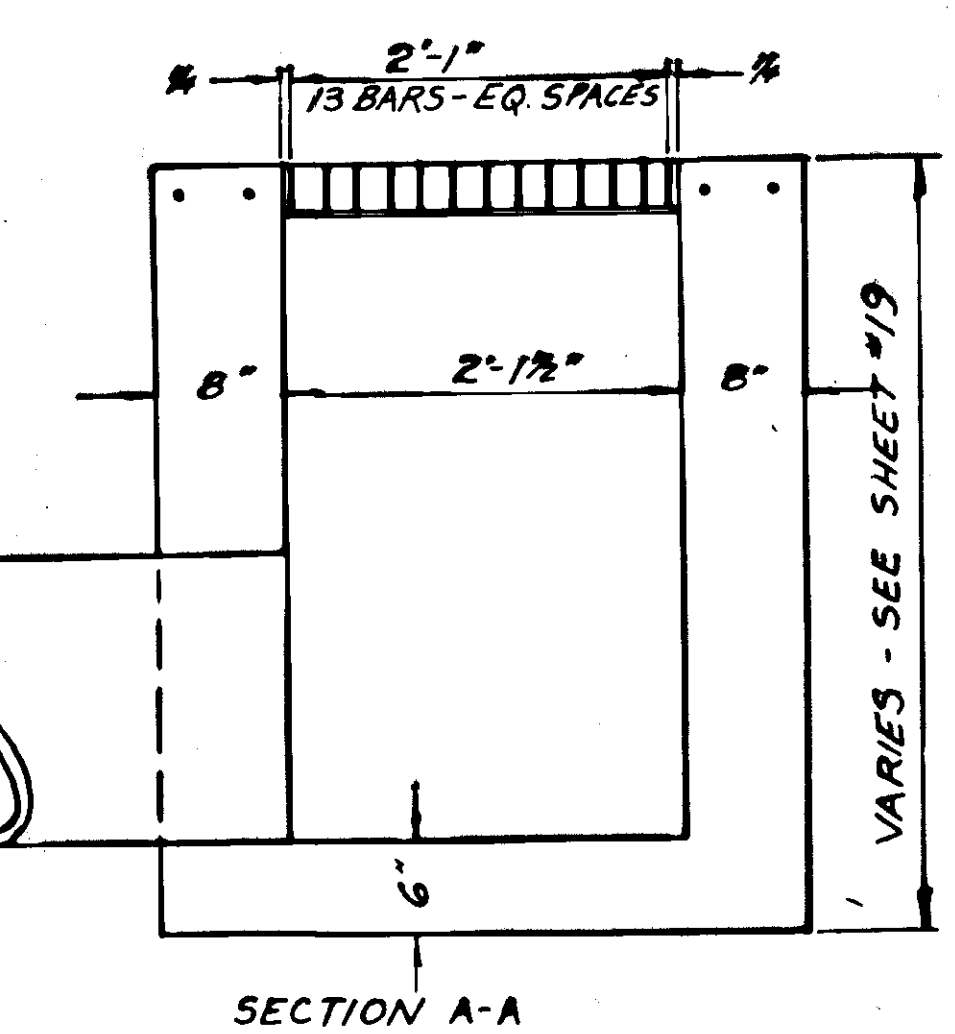
TYPICAL EXISTING METER SERVICE



SECTION B-B

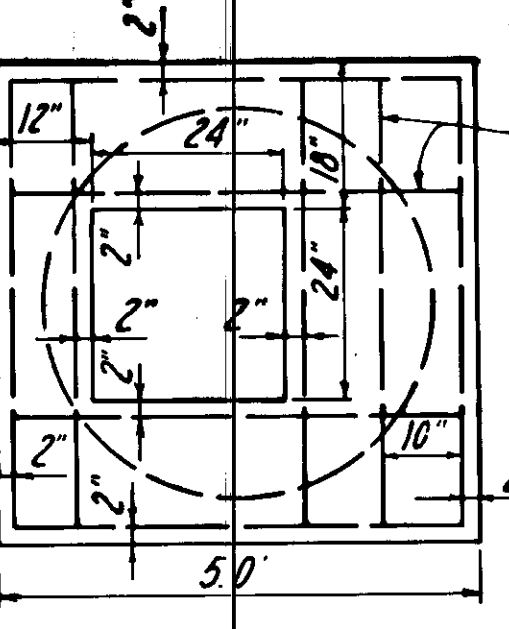
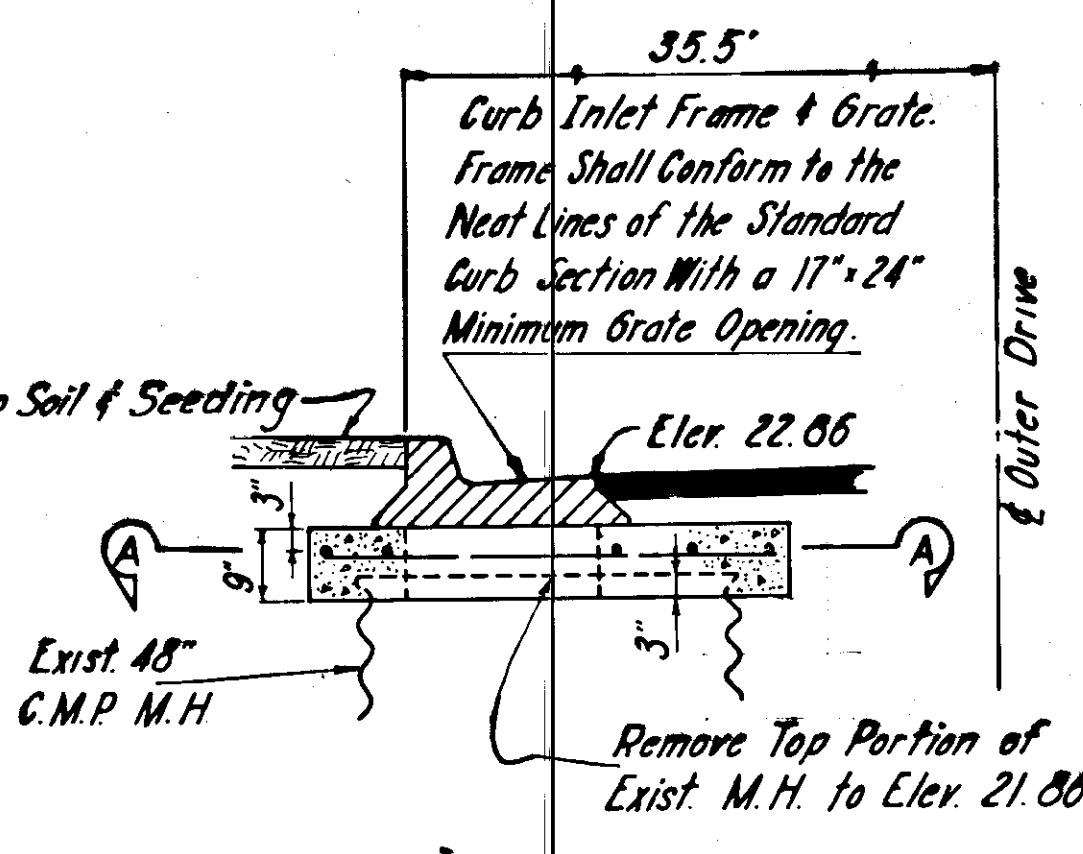
- MATERIALS:**
- (13) 3 x 1/2 x 3-4" BARS
 - (5) 3 x 1/4 x 2-1" Bars
 - (1) 3-4 1/2 x 2-1" x 1/4" Plate*
 - (2) 3/4 x 3" x 1/4" Angles
 - (4) 2 phi x 2'-0" Rebars
 - (4) 2 phi x 4'-0" Rebars

Note:
A cast iron grate may be used in lieu of the steel grate shown.
*Inlets 10 and 14 shall have a solid cover of steel or cast iron with an approx. weight of 200#, subject to the Approval of the Engineer.



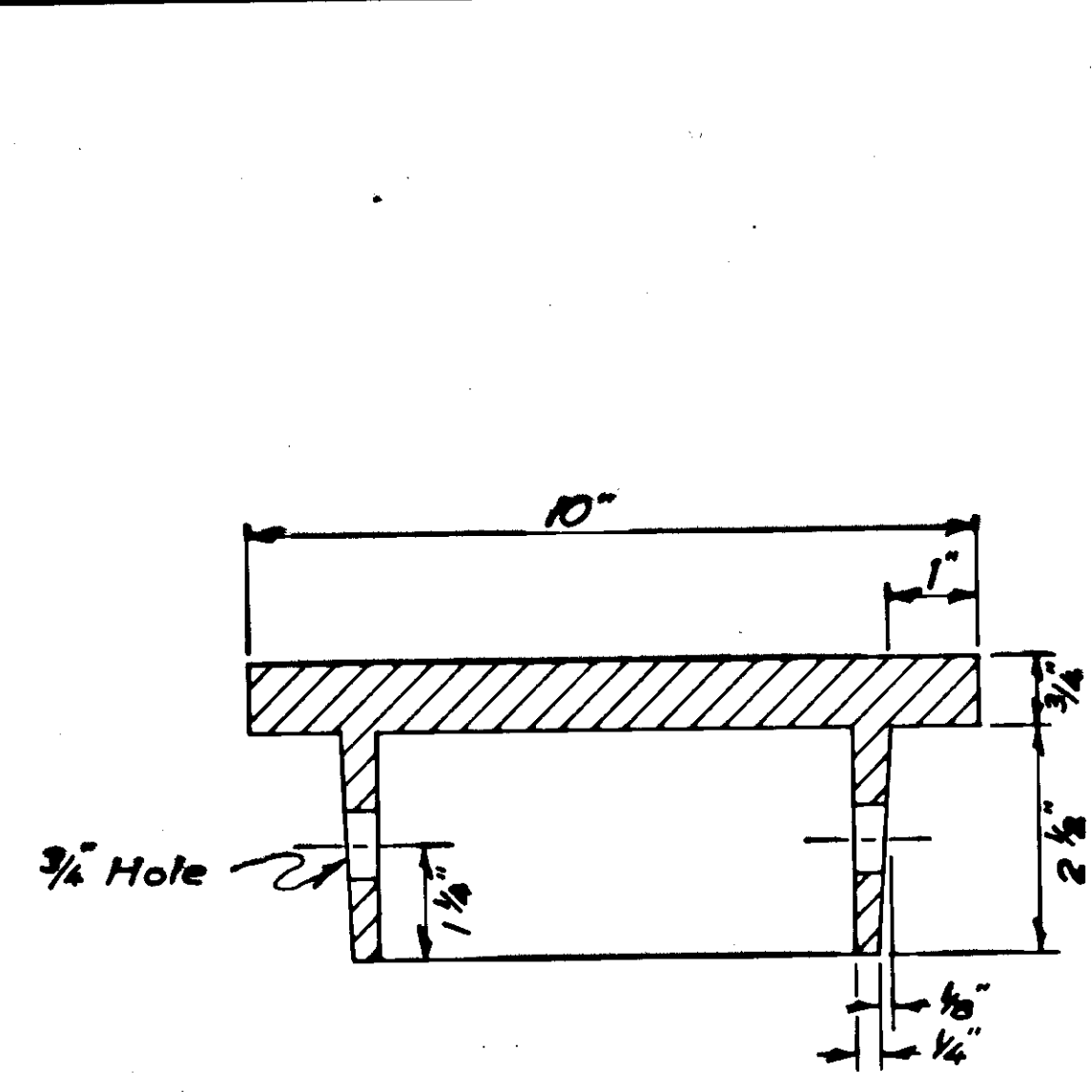
SECTION A-A

TYPE 'C' INLET DETAIL



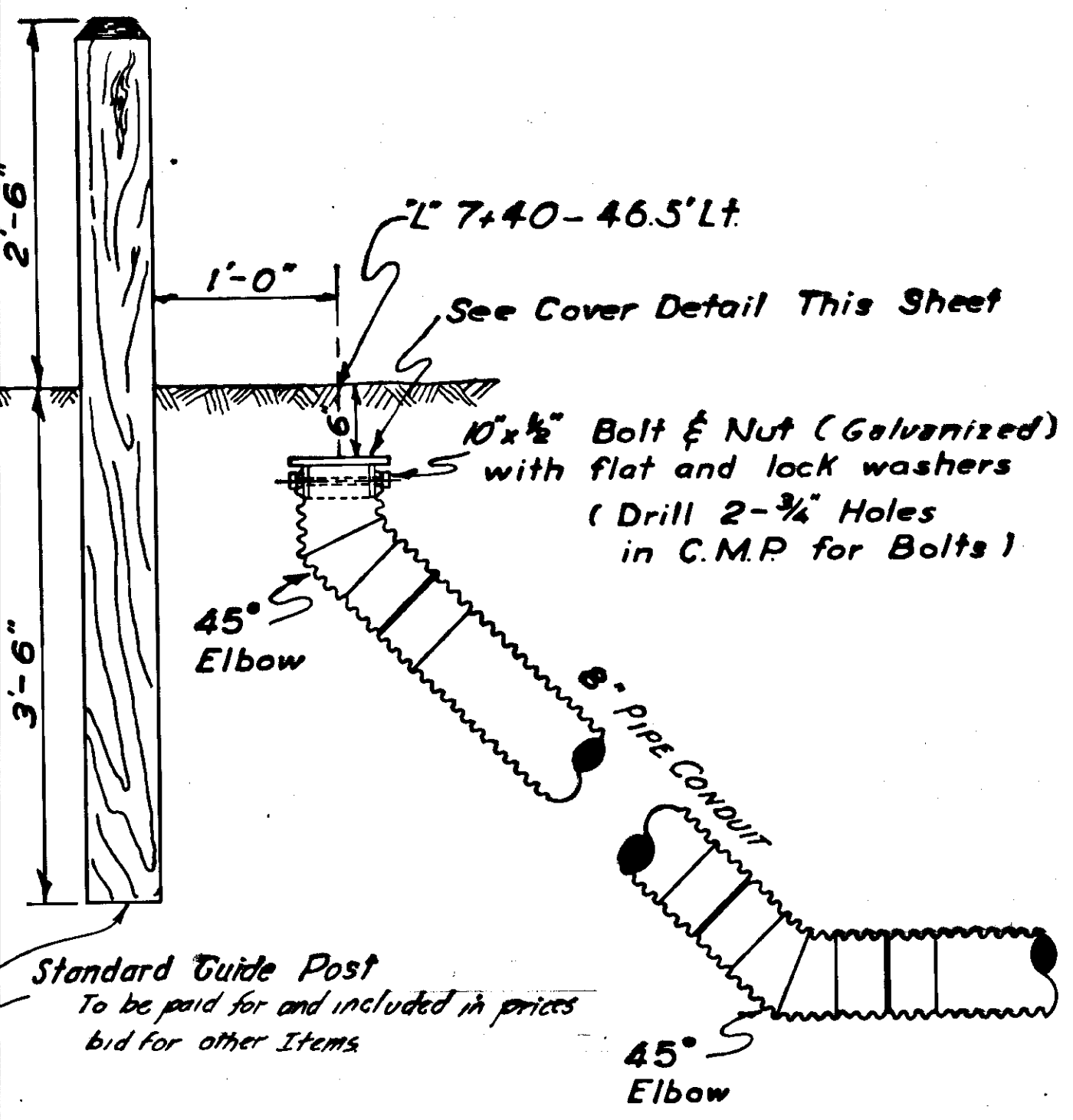
SECTION A-A

EXIST. MANHOLE 'O' 25'-08" LT.



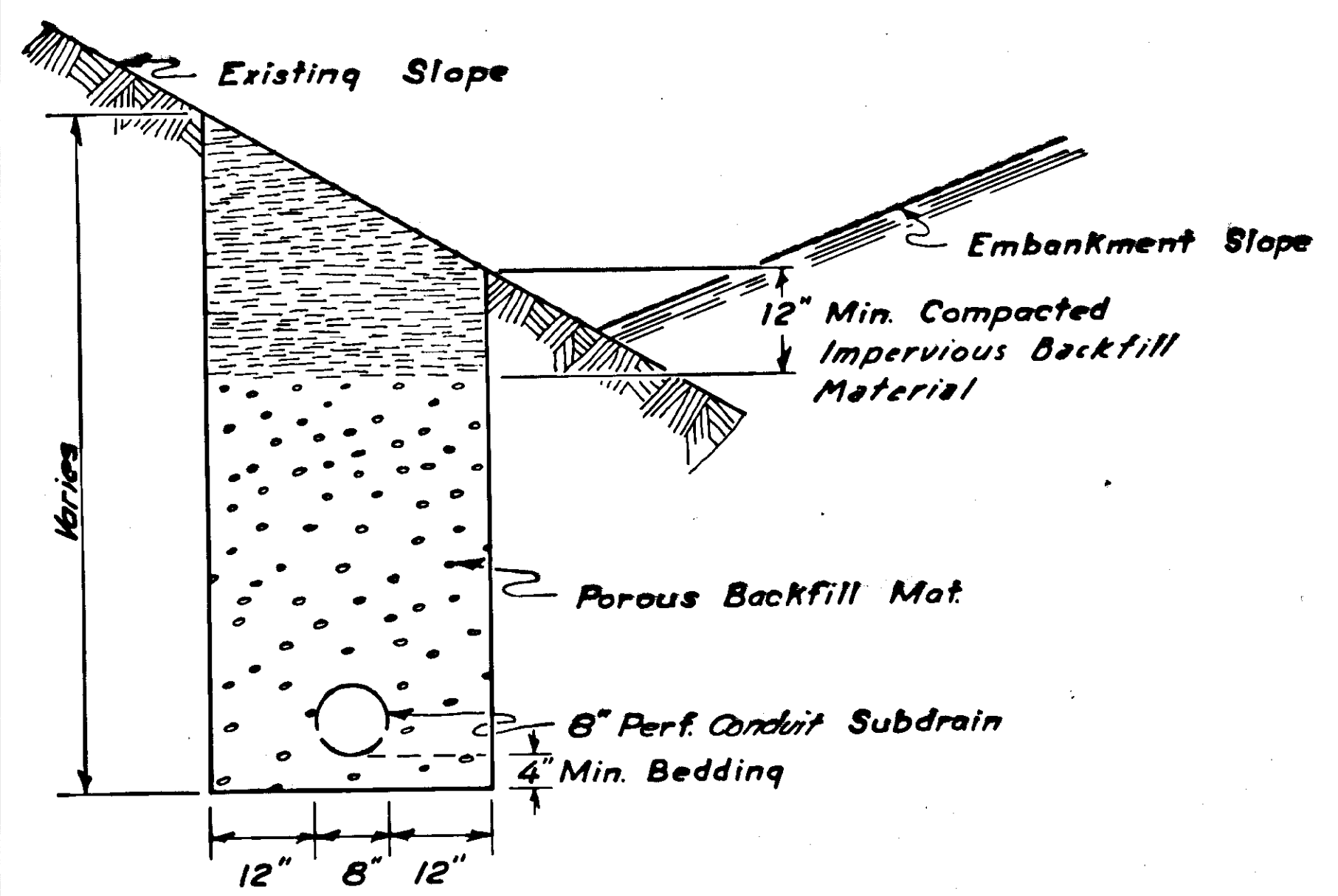
Cast iron cover material shall meet the requirements of AASHO M105-57, Class 30

Cast Iron Cover Section

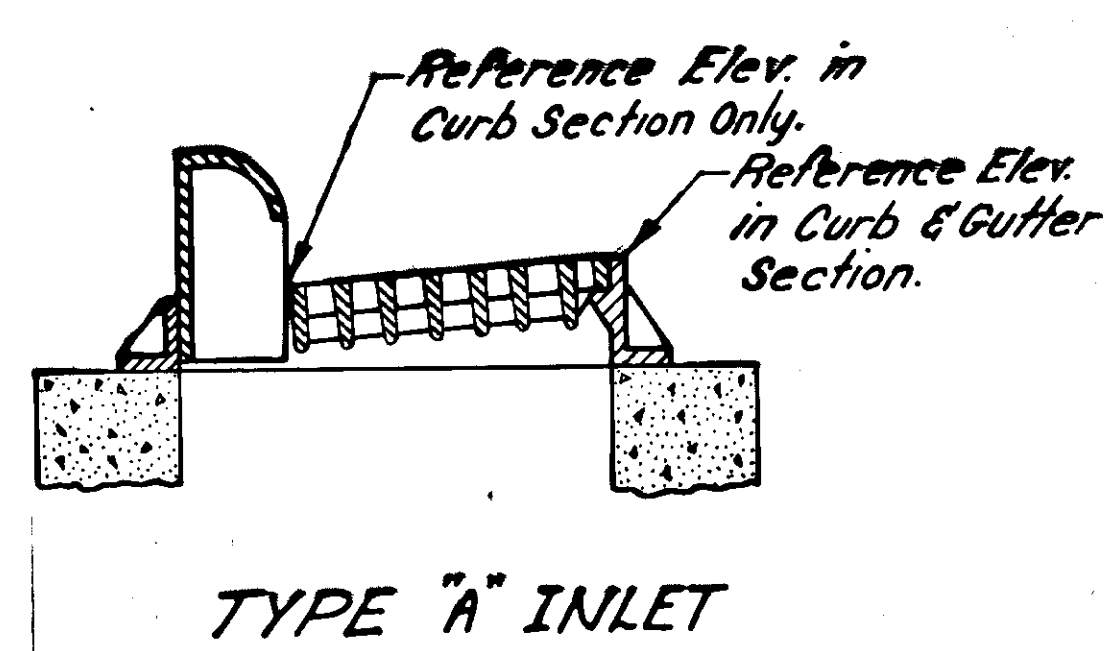


Cleanout Connection

CLEANOUT DETAILS



TYPICAL SUBDRAIN TRENCH SECTION



TYPE 'A' INLET

STATE of ALASKA
Department of Highways
JUNEAU OUTER DRIVE-PHASE
Project No. F-095-8 (13)

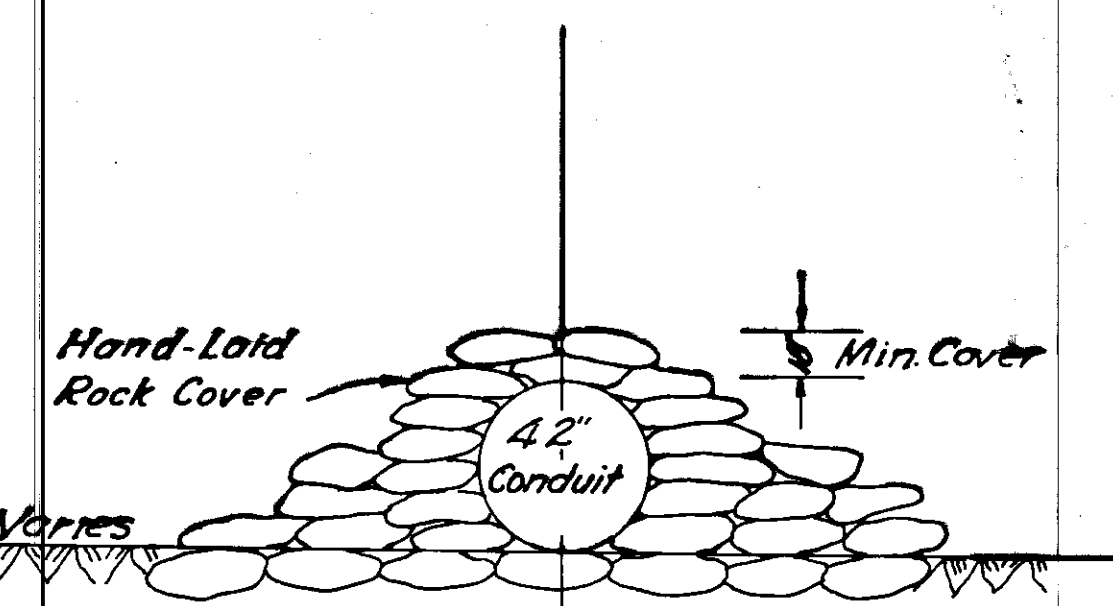
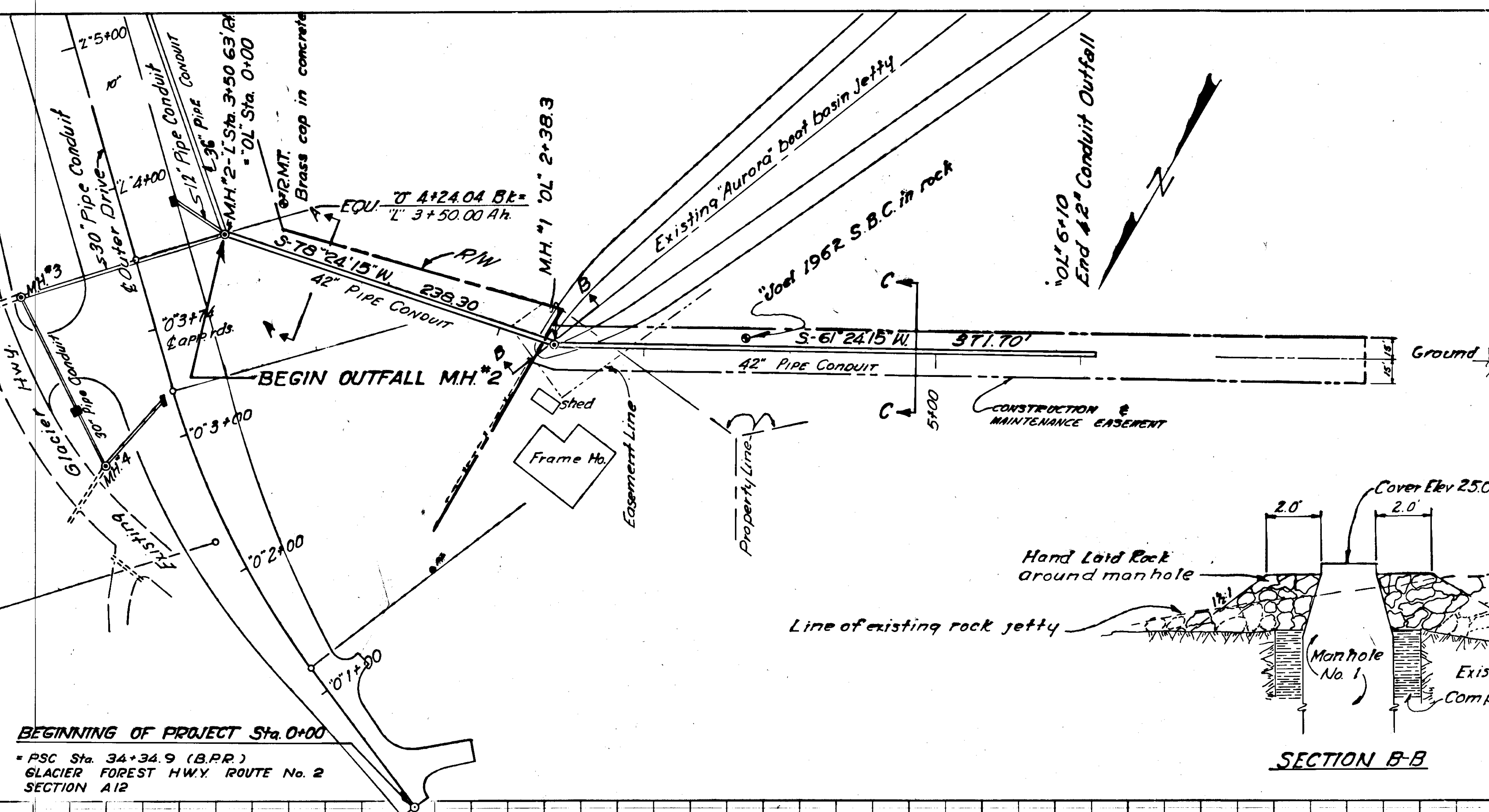
**WATER & STORM SYSTEM
MISCELLANEOUS DETAILS**

REVISIONS		
No.	Date	Description

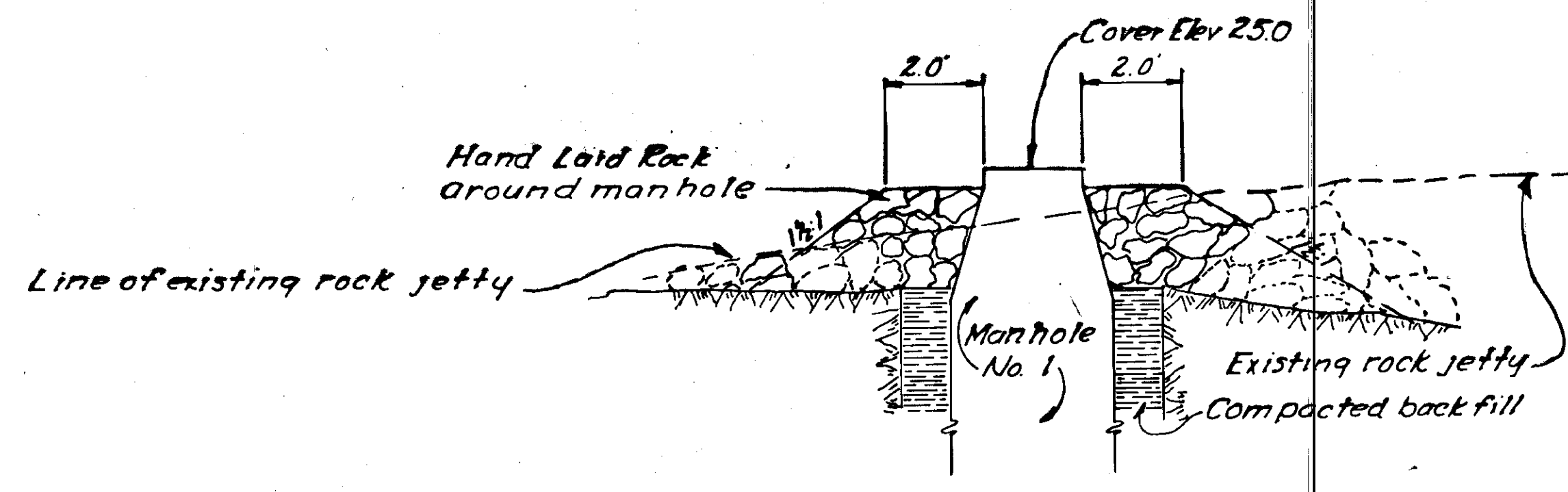
Approved: _____ Date: _____

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	F-095-8(13)	1967	22	73

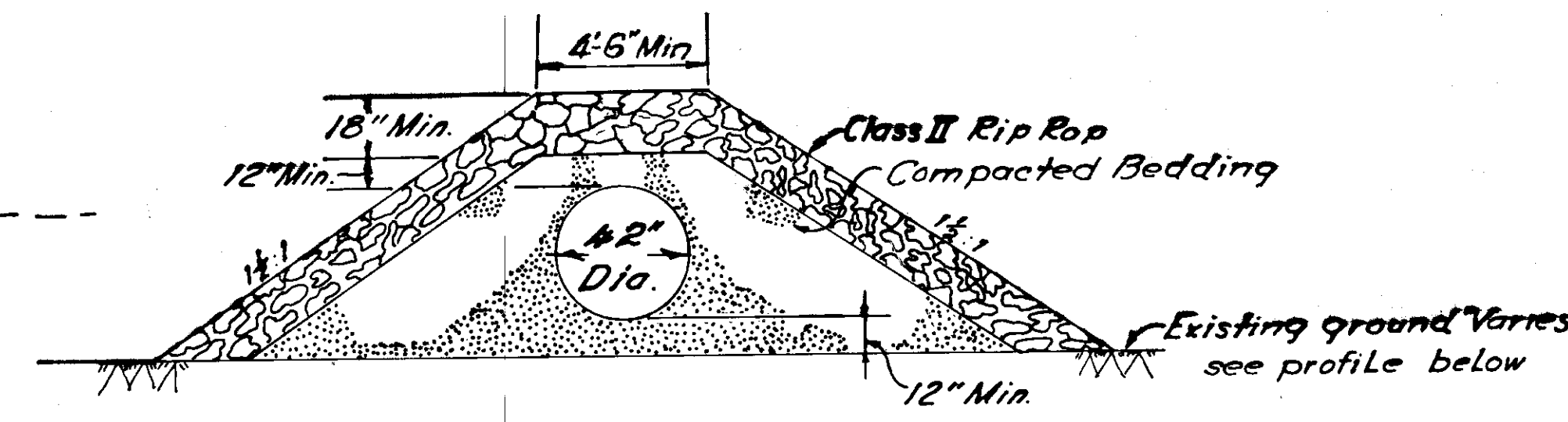
DRAINAGE DETAILS
(OUTFALL DETAILS)



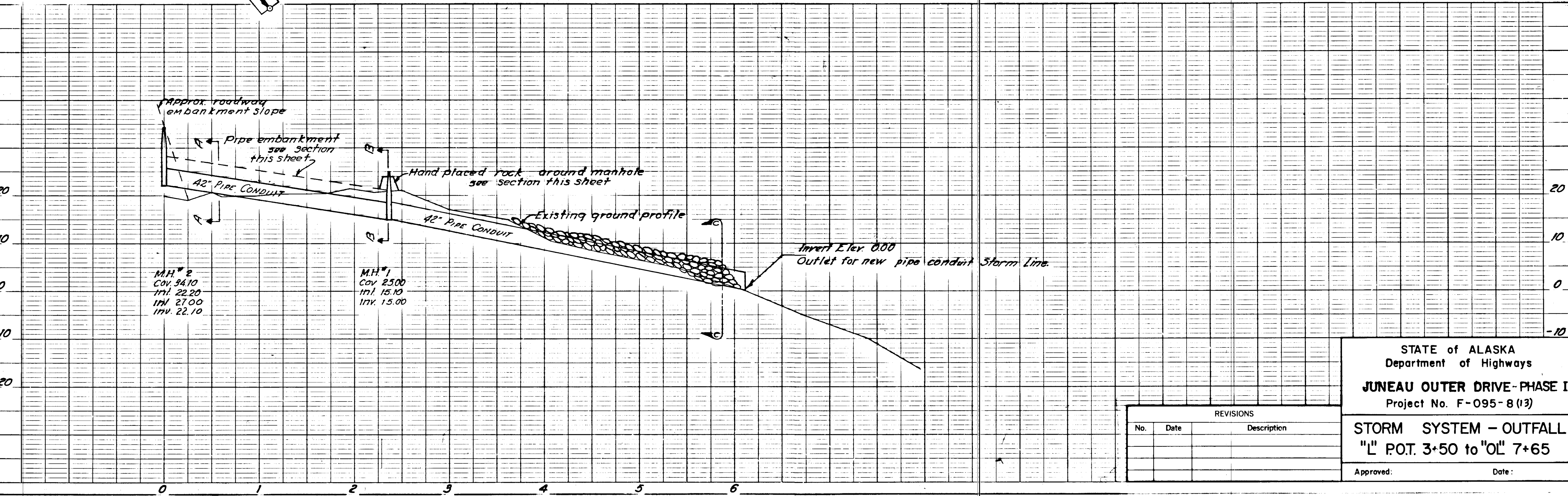
SECTION C-C
"OL" Sta. 2+38 to 6+70 **OUTFALL PROTECTION DETAILS**



SECTION B-B



SECTION A-A
TYPICAL EMBANKMENT FOR 42" PIPE CONDUIT
"OL" Sta. 0+00 to 2+38



STATE of ALASKA
Department of Highways
JUNEAU OUTER DRIVE - PHASE I
Project No. F-095-8(13)

STORM SYSTEM - OUTFALL
"L" P.O.T. 3+50 to "OL" 7+65

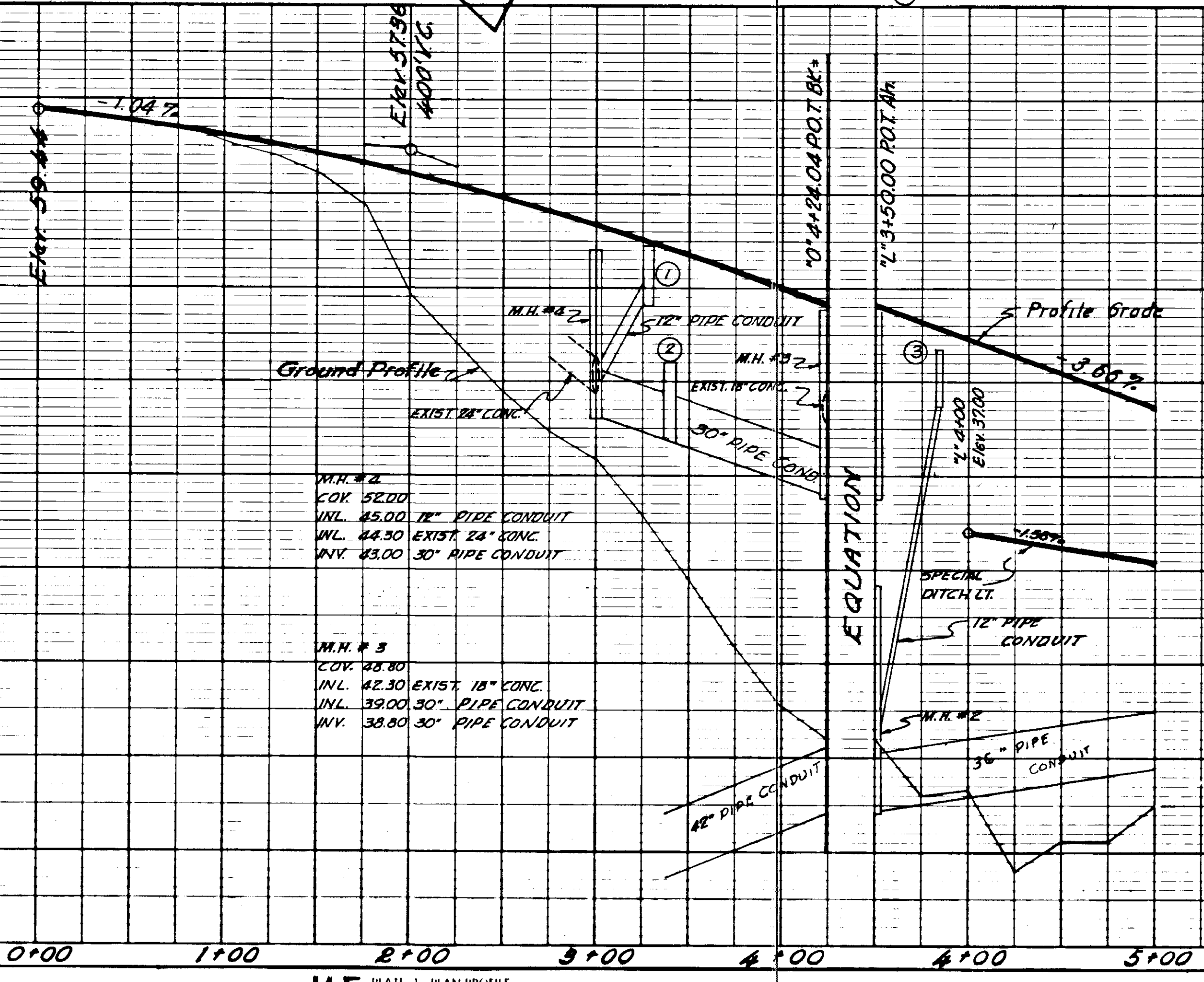
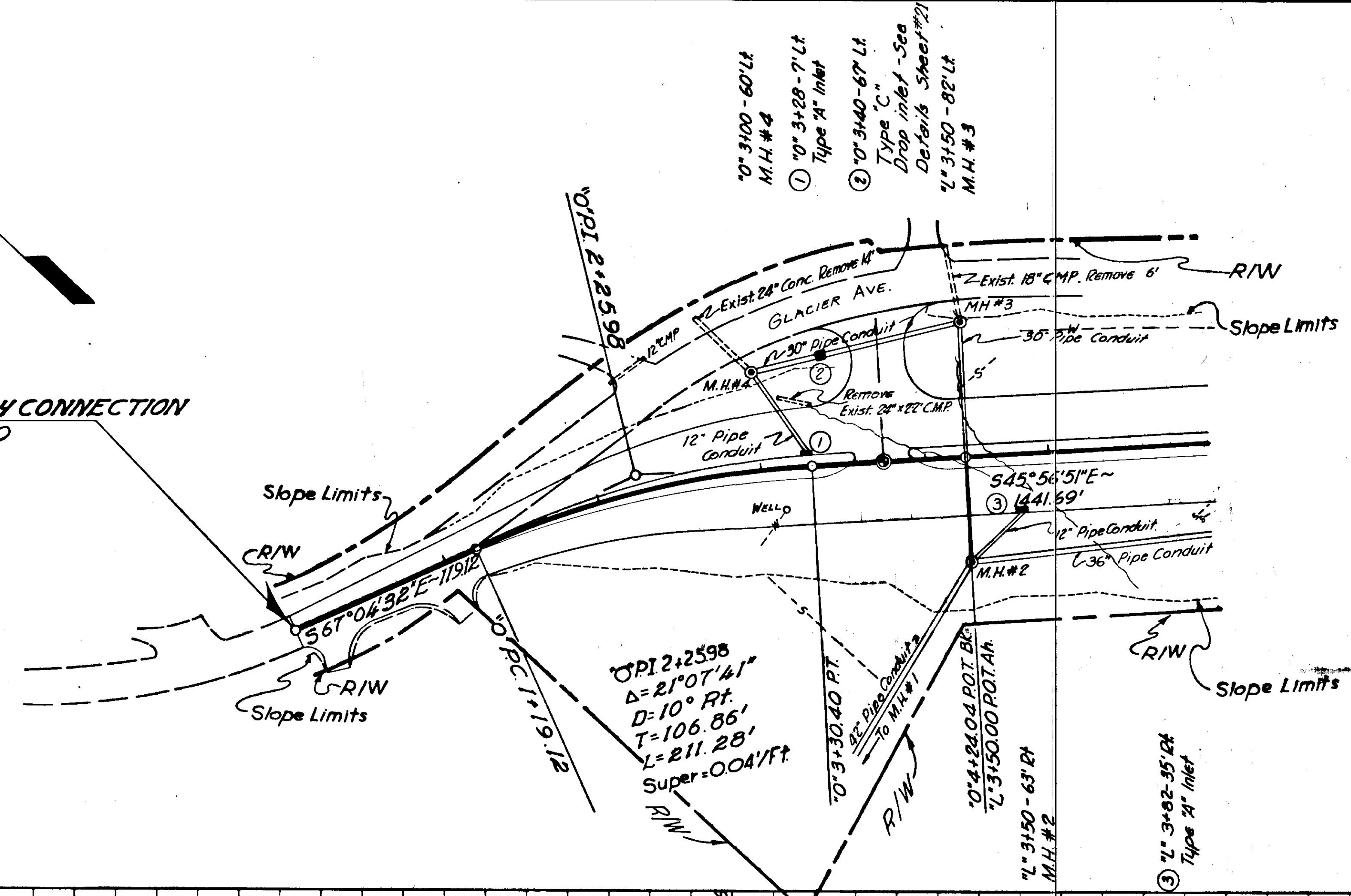
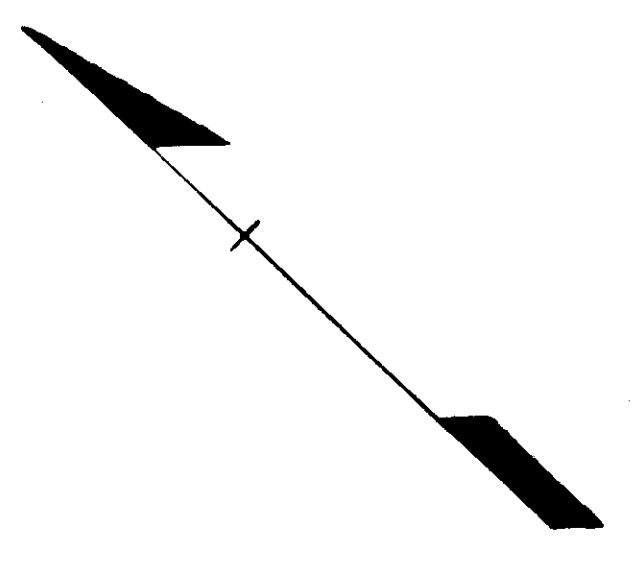
REVISIONS		
No.	Date	Description

Approved: _____ Date: _____

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	F-095-8(13)	1967	23	73

DRAINAGE PLANS

BEGIN TEMPORARY CONNECTION
STATION "0" 0+00



M.H. #2
 COK. 52.00
 INL. 45.00 12" PIPE CONDUIT
 INL. 44.50 EXIST. 24" CONC.
 INV. 43.00 30" PIPE CONDUIT

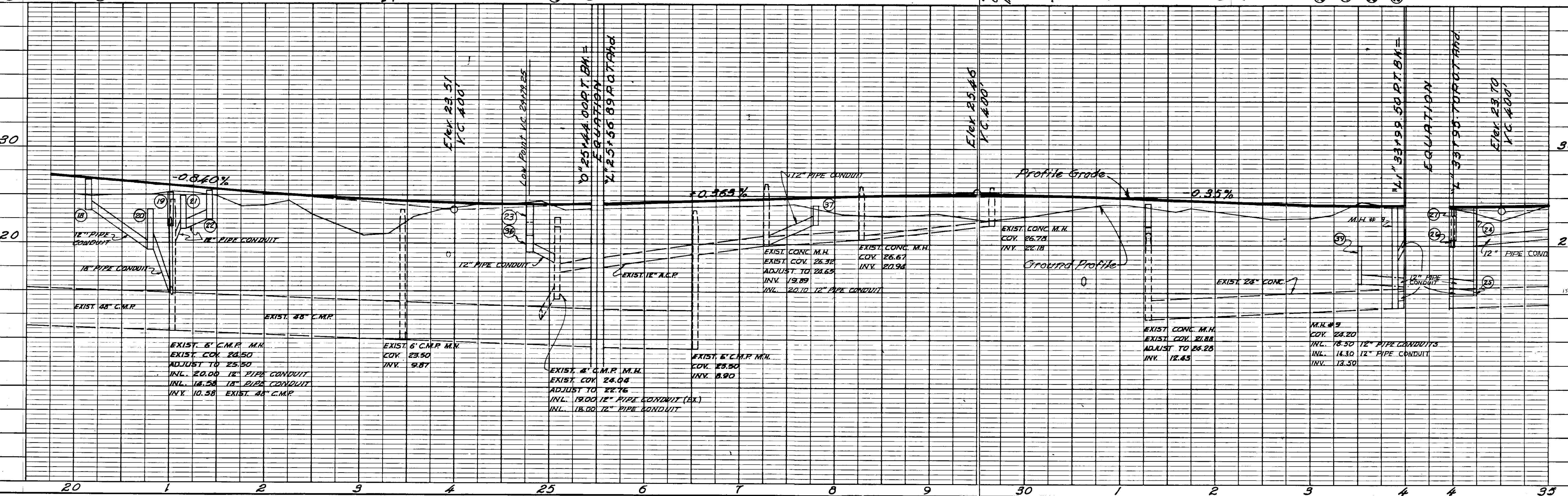
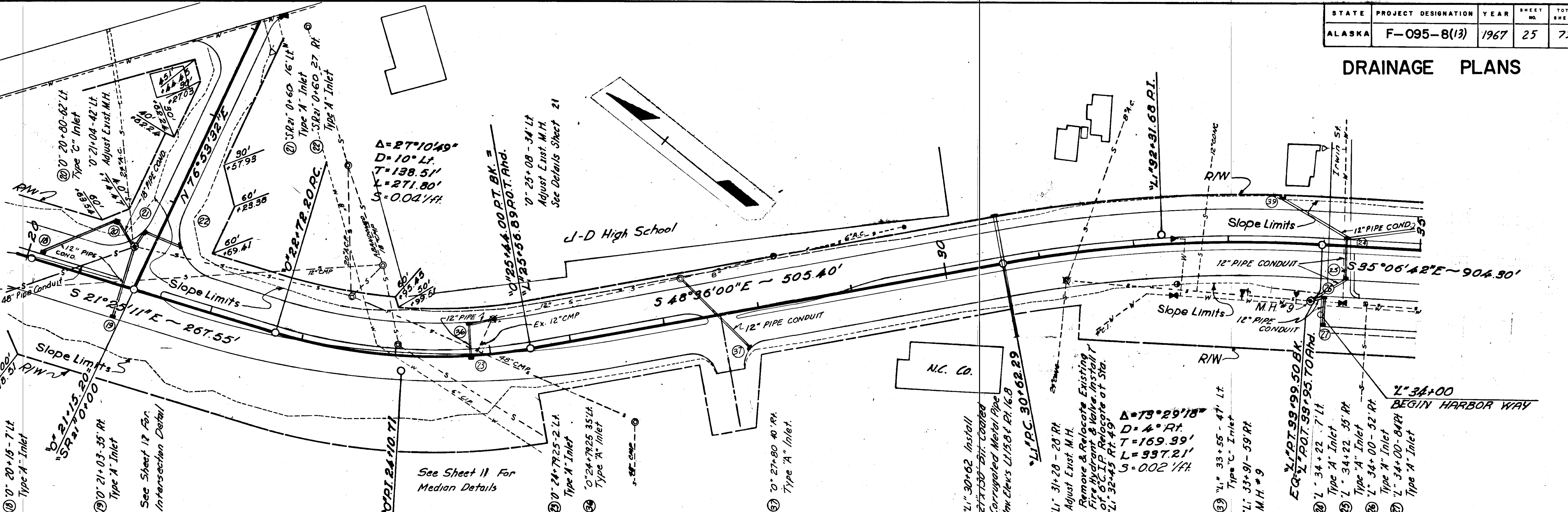
M.H. #3
 COK. 48.80
 INL. 42.30 EXIST. 18" CONC.
 INL. 39.00 30" PIPE CONDUIT
 INV. 38.80 30" PIPE CONDUIT

M.H. #2
 COK. 34.10
 INV. 22.10 36" PIPE CONDUIT
 INV. 23.00 42" PIPE CONDUIT
 INV. 26.50 12" PIPE CONDUIT

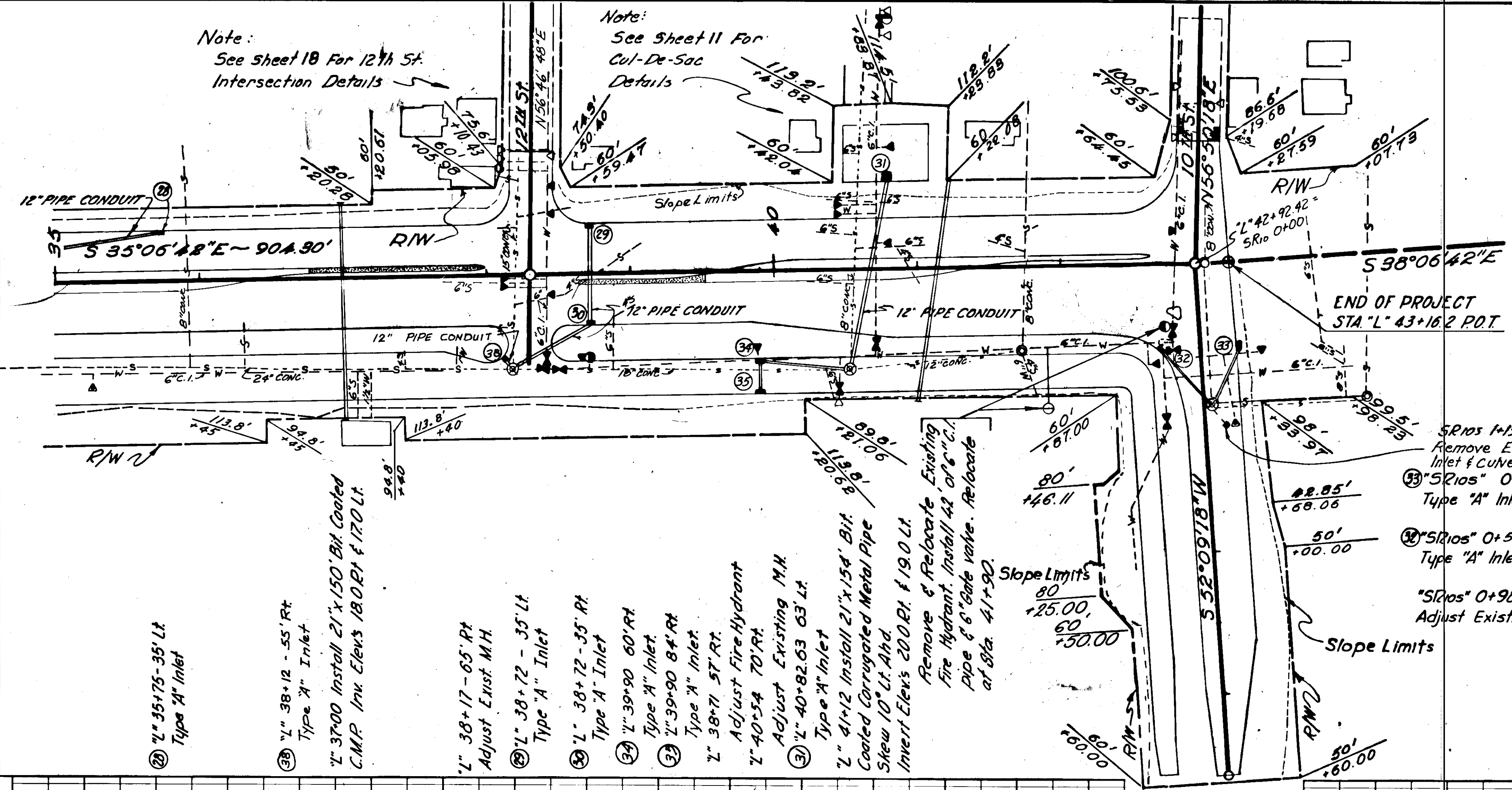
0+00 1+00 2+00 3+00 4+00 4+00 5+00

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	F-095-8(13)	1967	25	73

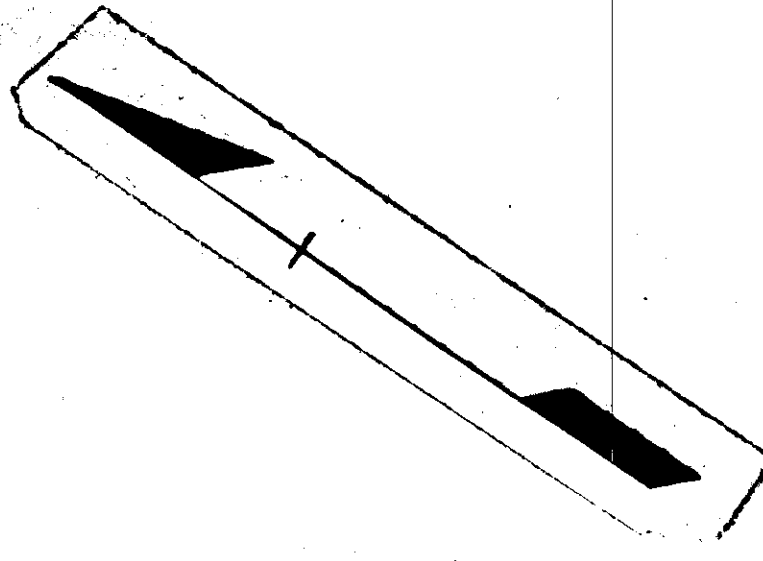
DRAINAGE PLANS



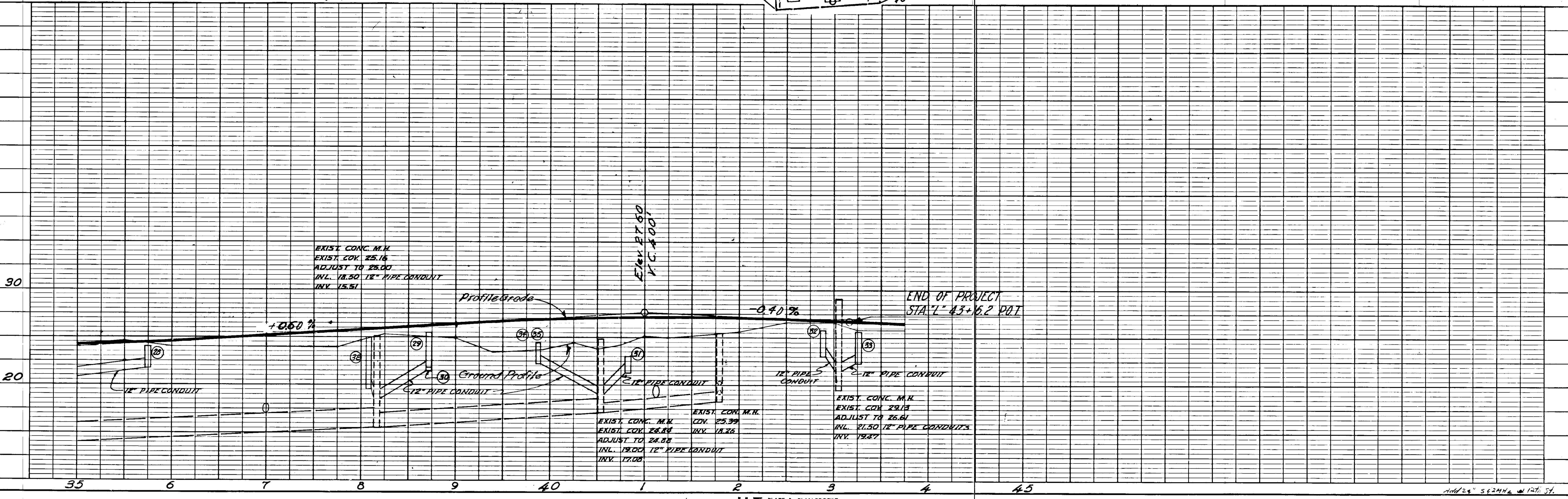
DRAINAGE PLANS



Note:
See Sheet 19 For 10th St.
Intersection Detail

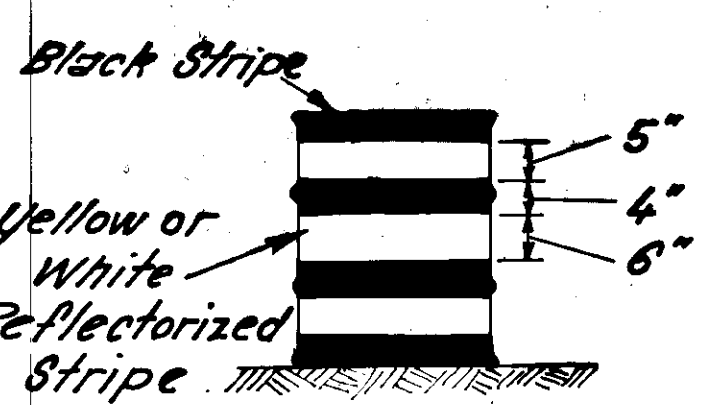


- ② 2" 35+75 - 35' Lt. Type "A" Inlet
- ③ 1" 38+12 - 55' Rt. Type "A" Inlet
- ④ 1" 37+00 Install 21" x 150' Bit Cooled C.M.P. Inv. Elev's 18.01 & 17.01 Lt.
- ⑤ 1" 38+17 - 65' Rt. Adjust Exist. M.H.
- ⑥ 1" 38+72 - 35' Lt. Type "A" Inlet
- ⑦ 1" 38+72 - 35' Rt. Type "A" Inlet
- ⑧ 1" 39+90 60' Rt. Type "A" Inlet
- ⑨ 1" 39+90 84' Rt. Type "A" Inlet
- ⑩ 1" 38+71 57' Rt. Adjust Fire Hydrant
- ⑪ 1" 40+54 70' Rt. Adjust Existing M.H.
- ⑫ 1" 40+82.63 63' Lt. Type "A" Inlet
- ⑬ 1" 41+12 Install 21" x 154' Bit Cooled Corrugated Metal Pipe Skew 10° Lt. And Invert Elev's 20.01 & 19.01 Lt. Remove & Relocate Existing Fire Hydrant. Install 42" of 6" C.I. Pipe & 6" Gate Valve. Relocate at Sta. 41+90.
- S.R.105 1+15 Remove Existing Inlet & Culvert 15' Lt.
- ⑭ S.R.105 0+59 - 28' Lt. Type "A" Inlet
- ⑮ S.R.105 0+59 272' Rt. Type "A" Inlet
- "S.R.105" 0+98 - 5' Lt. Adjust Exist. M.H.

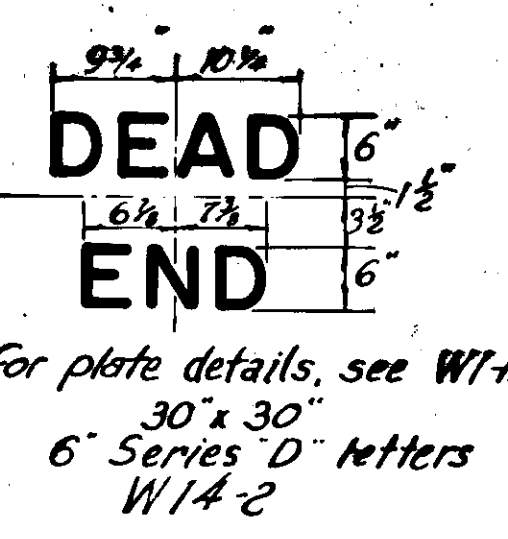


ADD 24" S&S 24" x 12" ST.

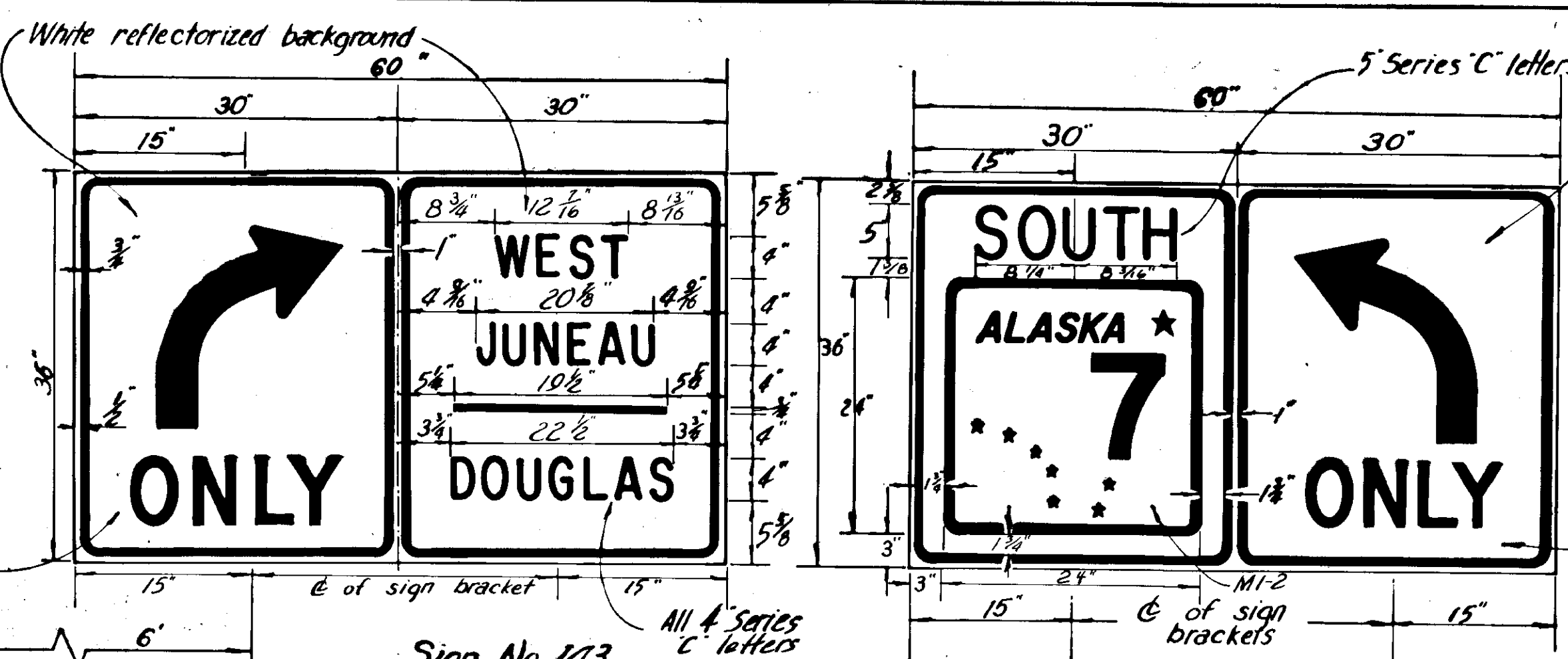
SIGN DETAILS



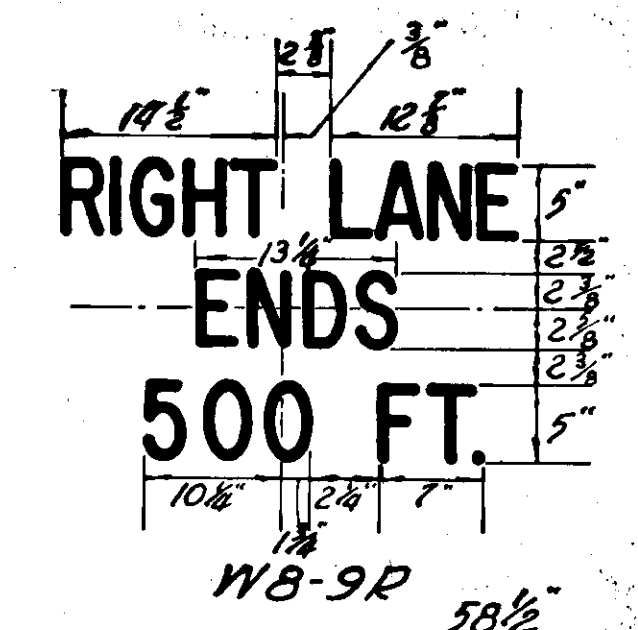
55 GAL. DRUM
 Stripe Adjustment to be made in upper & lower stripes. Drums to be filled within 6" of the top with dirt.



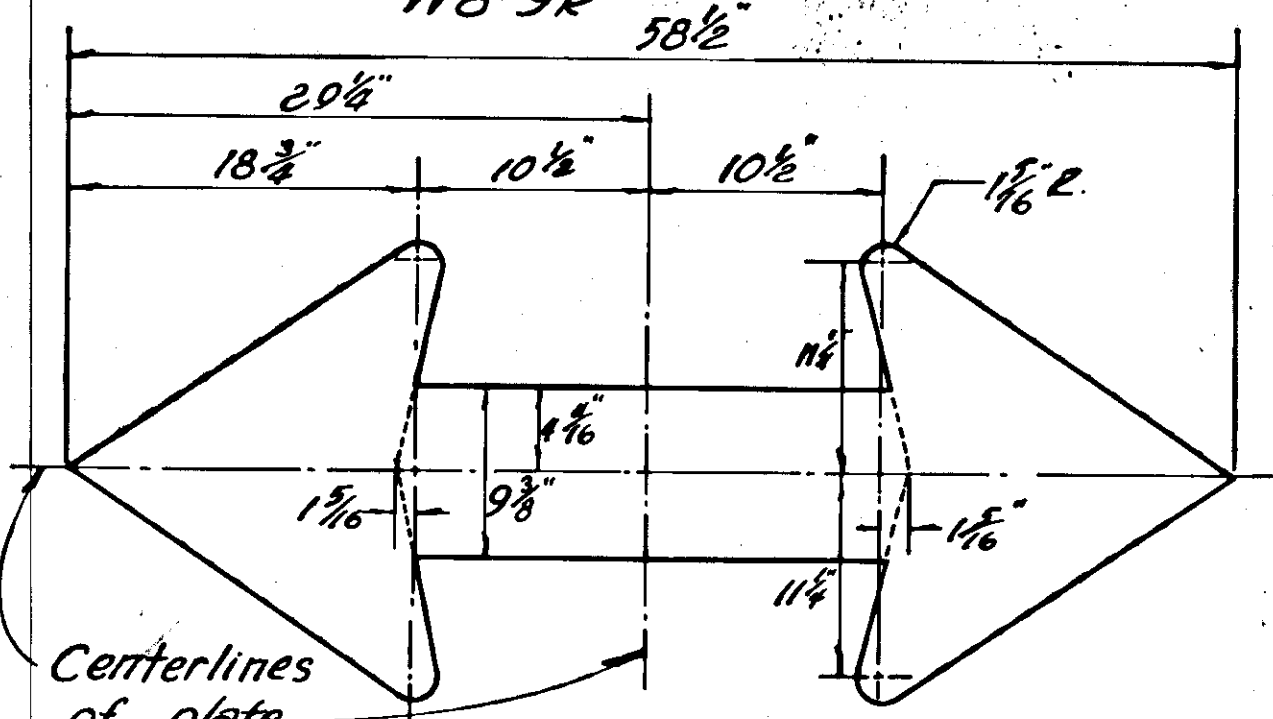
For plate details, see W1-12
 30" x 30"
 6 Series 'D' letters
 W14-2



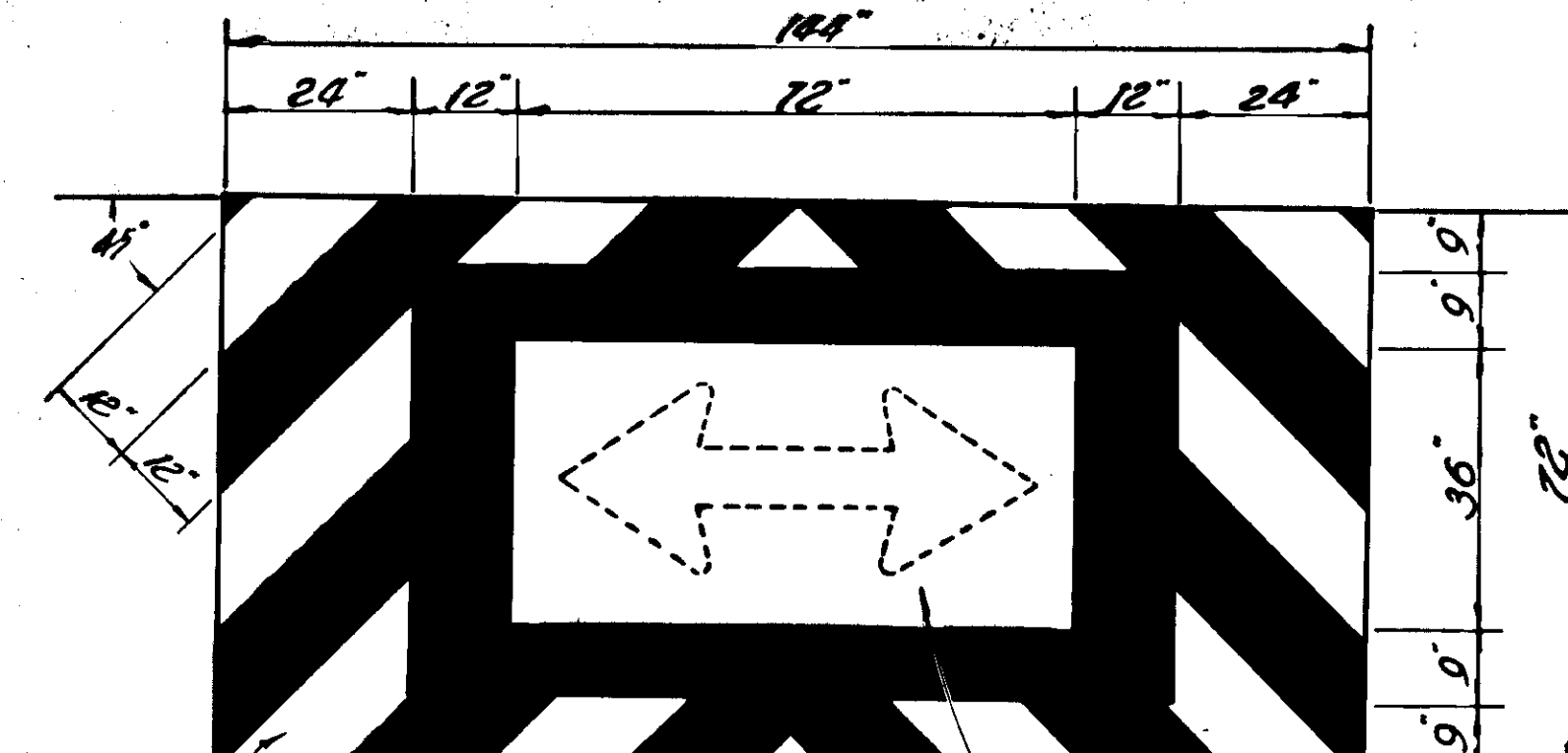
White reflectorized background
 60"
 30" 30"
 15" 15"
 5 Series 'C' letters
 Same as R3-5L
 Sign No. 143
 Sign No. 151
 Left lane line (auxiliary lane)
 Right lane line (auxiliary lane)
 All 4 Series 'C' letters
 M1-2
 Same as R3-5L
 White reflectorized background
 All Letters Series 'C'
 D-5
 36" x 18"



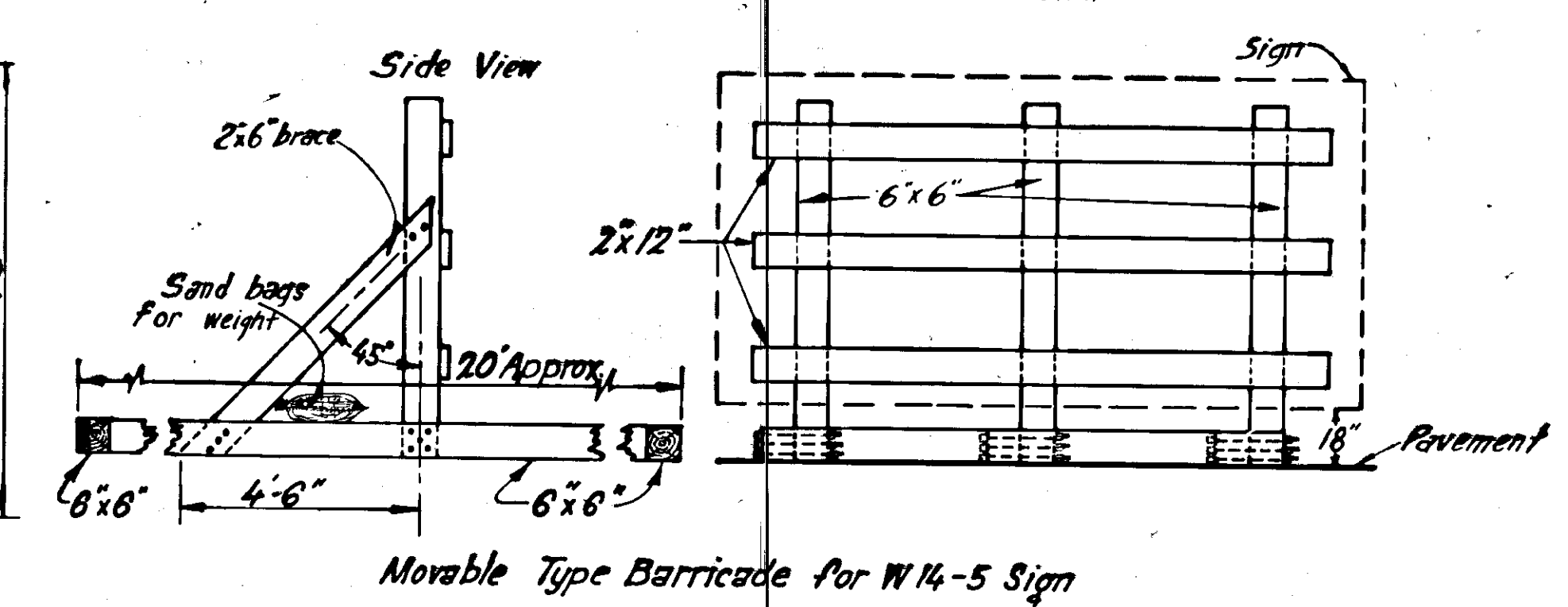
For plate details, see W1-1
 36" x 36"
 All letters & numerals 5 Series 'C'
 WB-9P
 58 1/2"



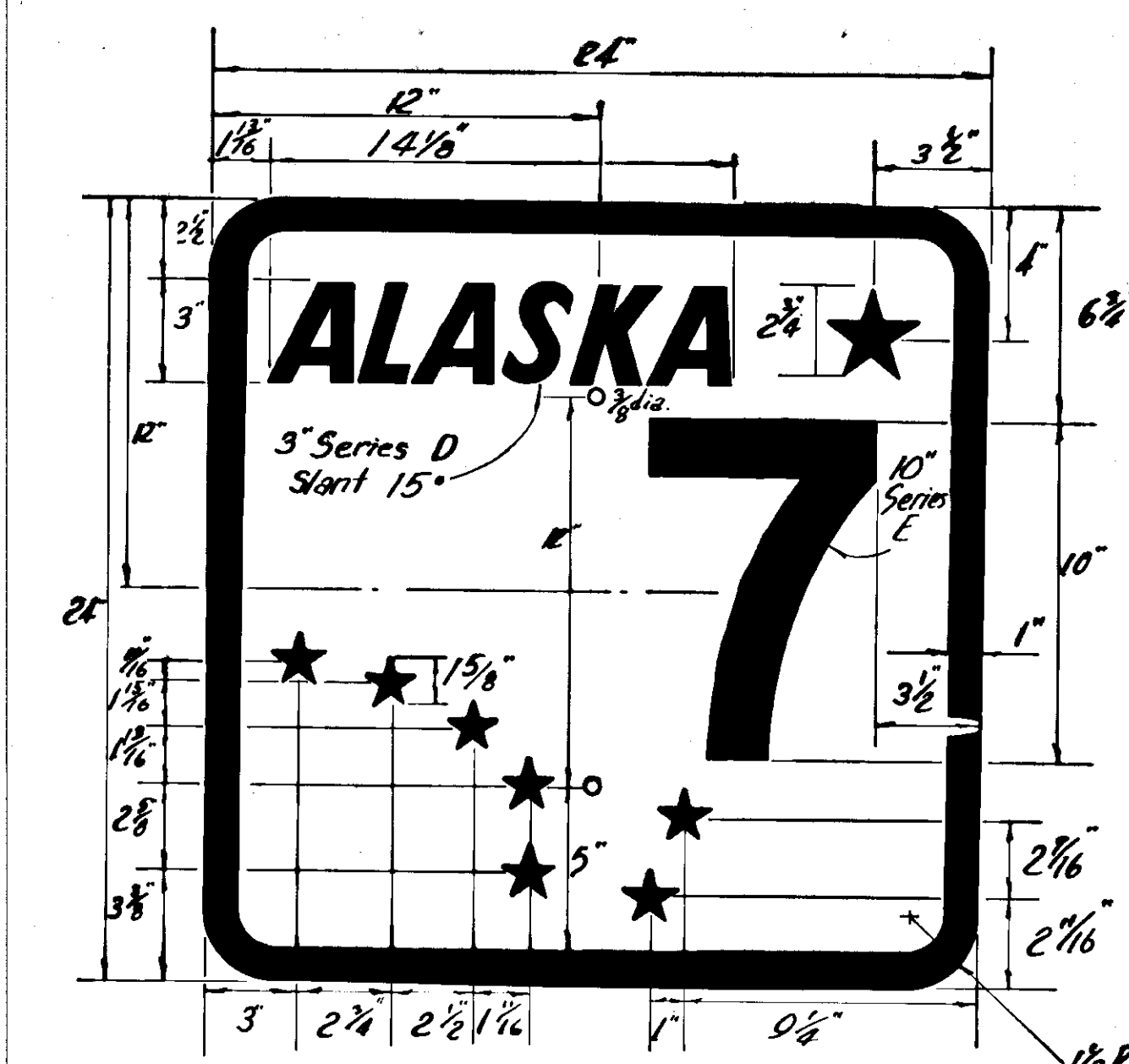
Centerlines of plate
 For plate details, see W1-6A
 72" x 36"
 W1-7B



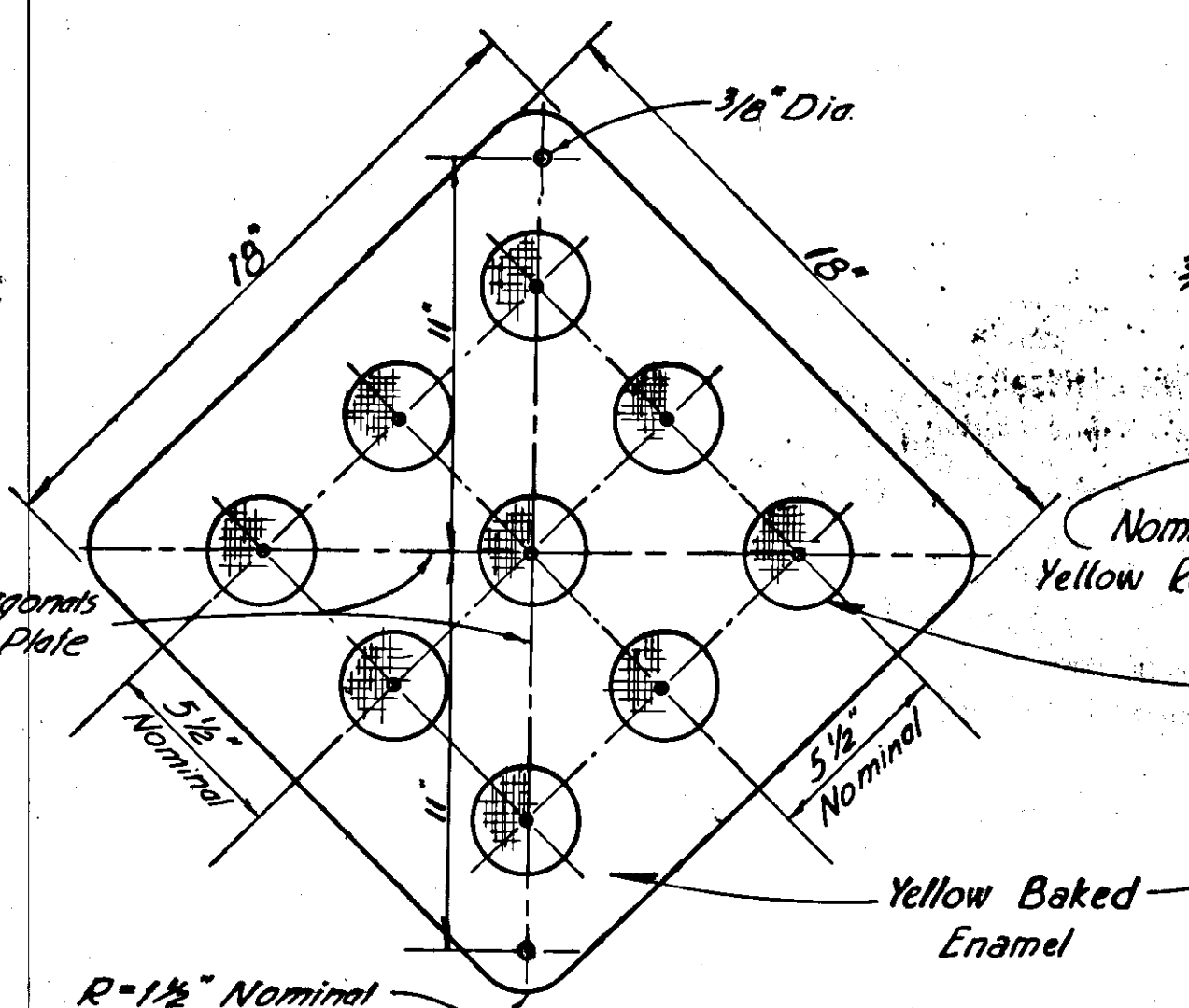
Reflectorized White
 Black Paint
 W14-5
 Barricade Board
 Sply. 3/4" High Density Plywood
 W1-7B Sign



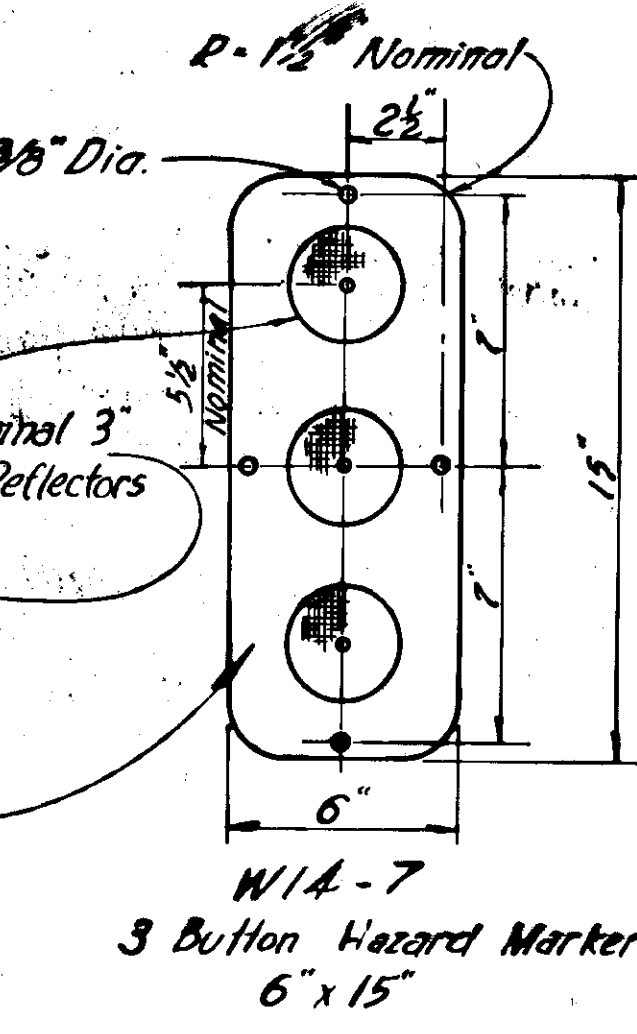
Movable Type Barricade for W14-5 Sign
 2x6 brace
 Sand bags for weight
 2x12
 6x6
 6x6
 6x6
 4-6"
 20' Approx.
 Pavement



Silk Screen process, black legend on white reflectorized background
 M1-2 Route Marker



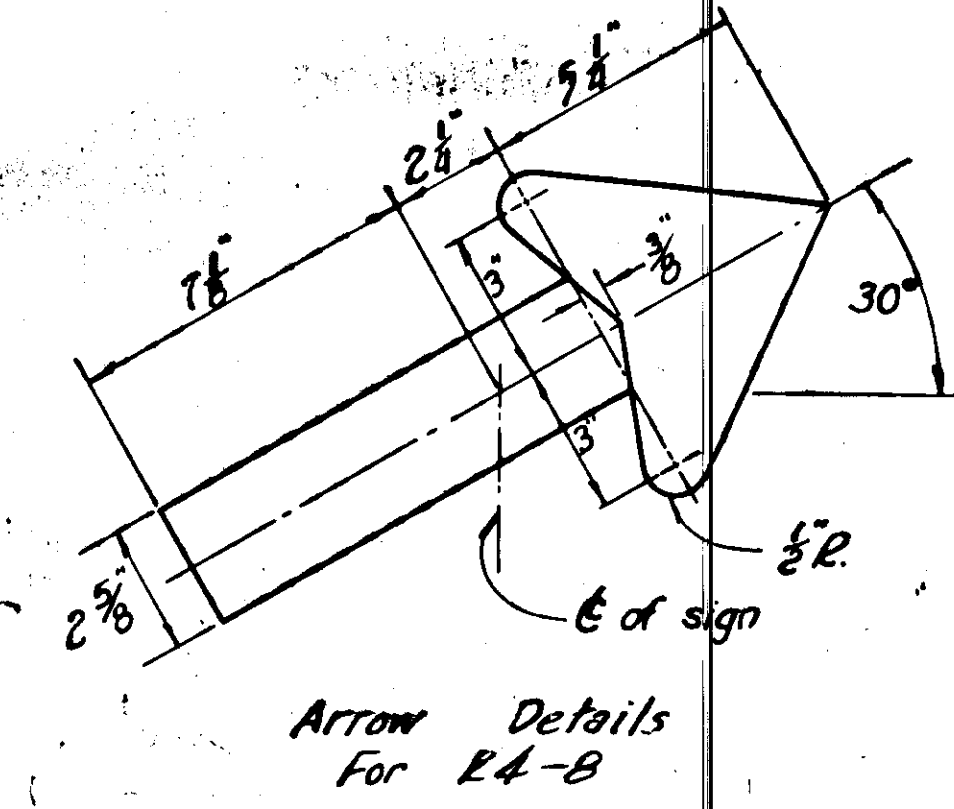
Diagonals of Plate
 R=1 1/2" Nominal
 W14-6
 3 Button Hazard Marker
 18" x 18"
 (See Standard Drawing T-1 for Mounting Details)



W14-7
 3 Button Hazard Marker
 6" x 15"



R4-8
 24" x 30"



Arrow Details For R4-8
 2 5/8"
 2 1/2"
 9/8"
 3/8"
 30"

- NOTES:
- All holes in signs to be 3/8" for 5/16" bolts.
 - All supports on Frontage Roads and cross streets to be steel channels.
 - All posts on islands to be 4" x 4" timber.
 - All signs indicated to be strapped to signal and light standards are to be strapped with stainless steel straps using flared leg sign brackets, or equal.

REVISIONS		
No.	Date	Description

SIGN DETAILS

4 INCH, SERIES C CAPITALS; 1/4 INCH LOWER CASE (3 INCHES, SERIES C, CAPITALS)

Letter	O	U	T	E	R	D	R
Letter Width	2.31	2.19	2.00	2.00	2.19	1.65	1.65
Space Width	0.84	0.67	0.67	0.67	0.67	6.00	1.65
Cumulative Width	2.31	3.15	5.34	6.01	8.01	8.68	10.68

4 INCH, SERIES C CAPITALS; 1/4 INCH LOWER CASE (3 INCHES, SERIES C, CAPITALS)

Letter	T	E	N	T	H	S	T
Letter Width	2.00	2.00	2.19	2.00	2.19	1.65	1.50
Space Width	0.67	0.67	0.67	0.67	0.67	6.00	0.50
Cumulative Width	2.00	2.67	4.67	5.34	7.53	8.20	10.20

4 INCH, SERIES C CAPITALS; 1/4 INCH LOWER CASE (3 INCHES, SERIES C, CAPITALS)

Letter	T	W	E	L	F	T	H	S	T
Letter Width	2.00	3.00	2.00	2.00	2.00	2.00	2.19	1.65	1.50
Space Width	0.22	0.67	0.67	0.67	0.67	0.45	0.67	4.00	0.50
Cumulative Width	2.00	2.22	5.22	5.89	7.89	8.56	10.56	11.23	13.23

4 INCH, SERIES C CAPITALS; 1/4 INCH LOWER CASE (3 INCHES, SERIES C, CAPITALS)

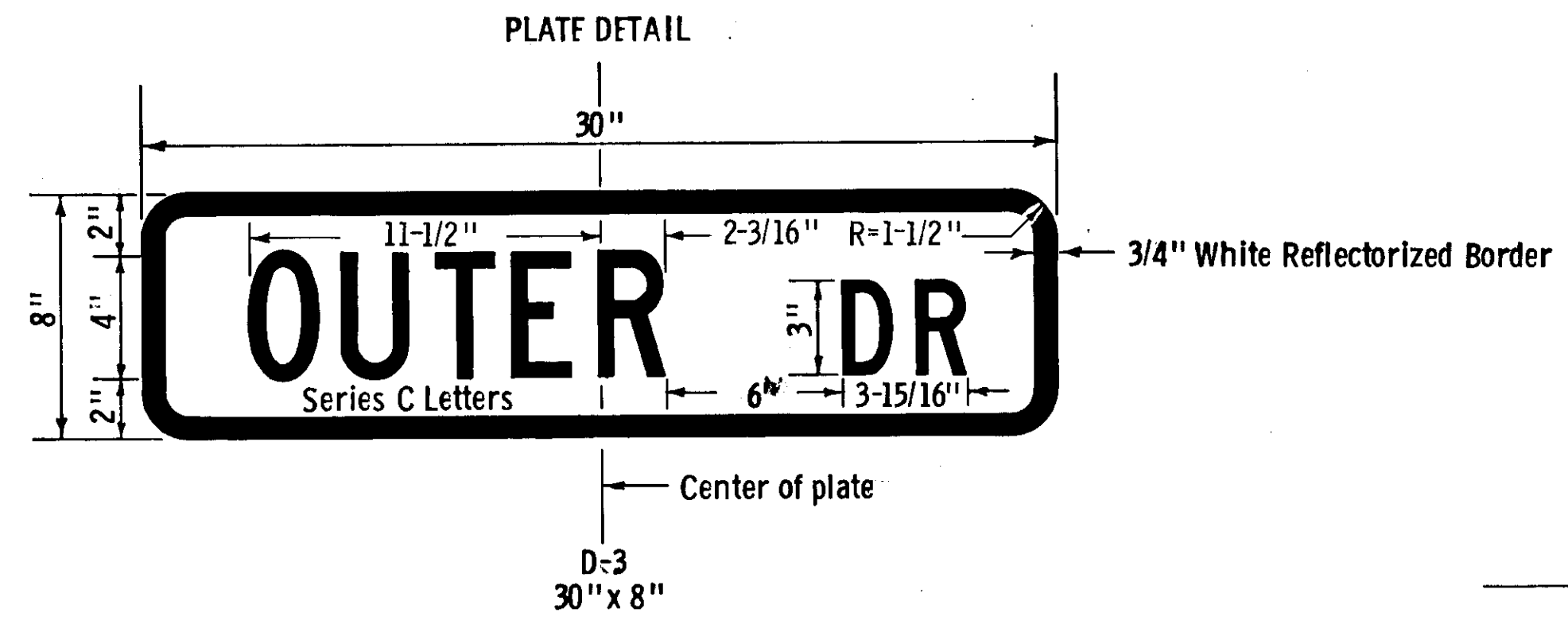
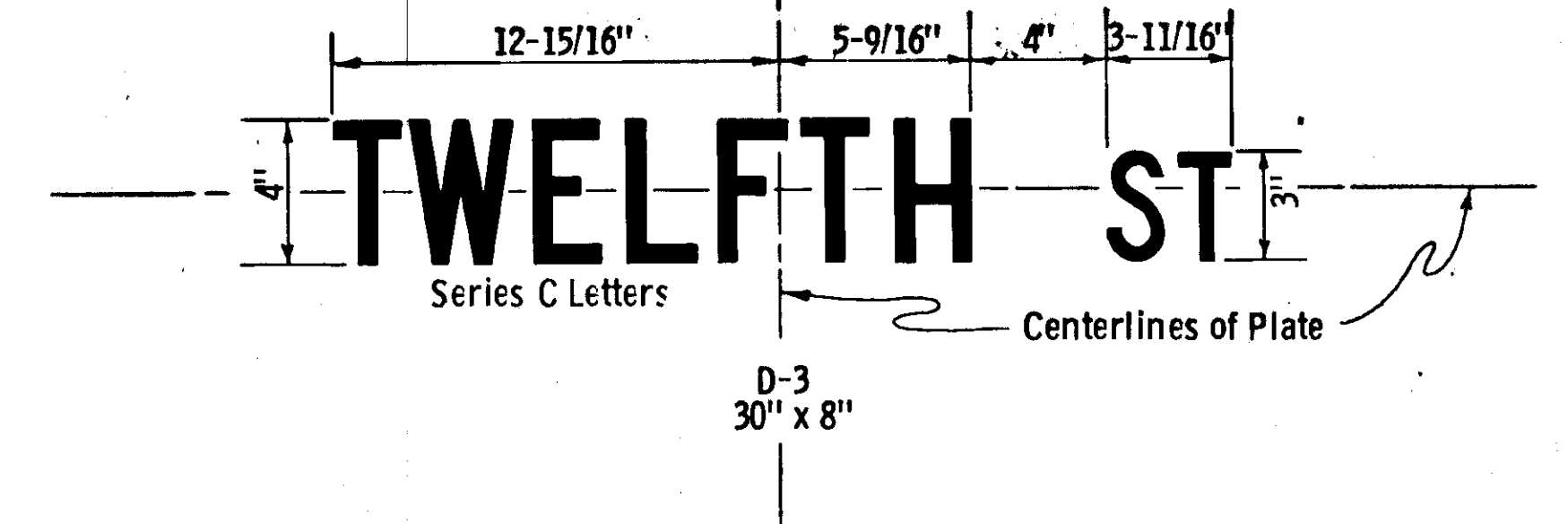
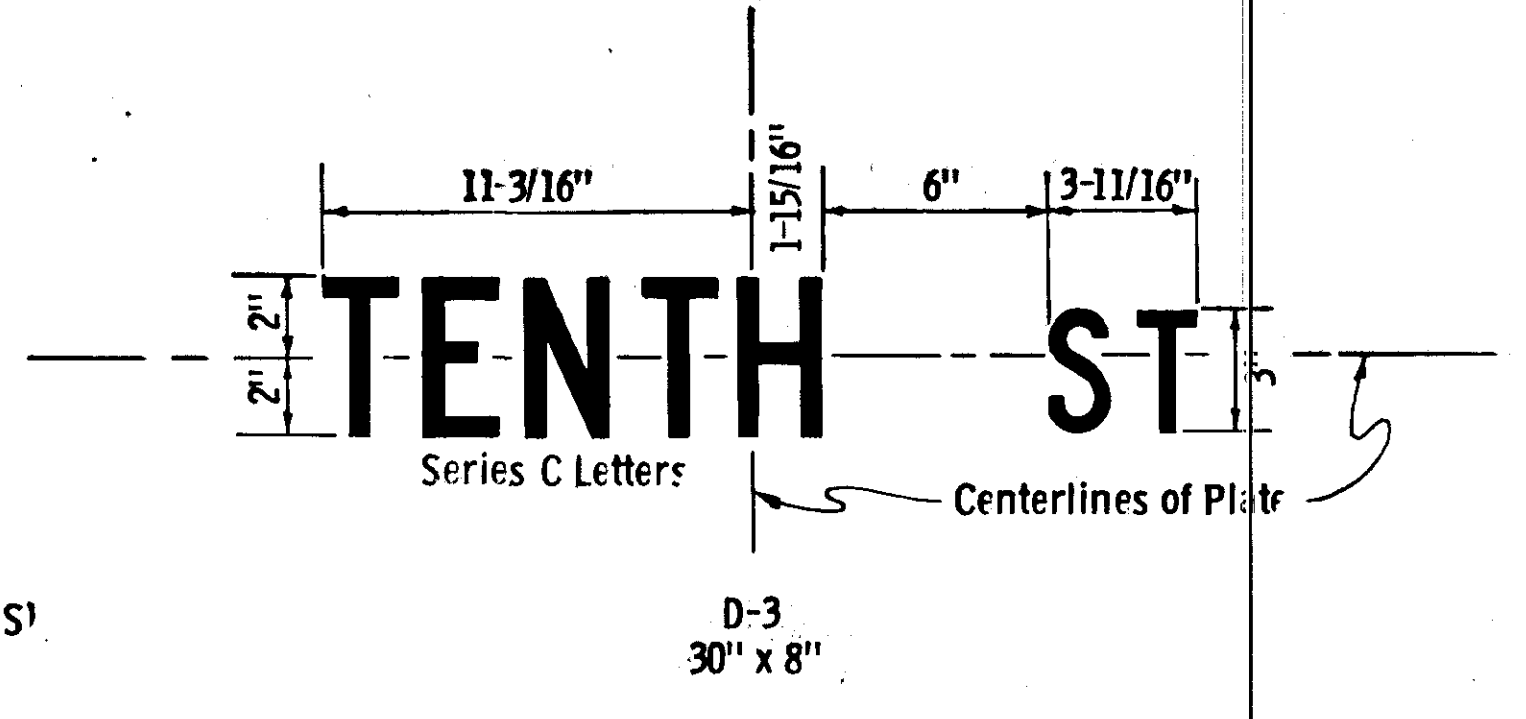
Letter	H	A	R	B	O	R	W	A	Y
Letter Width	2.19	2.50	2.19	2.19	2.31	2.19	2.25	1.85	1.88
Space Width	0.67	0.67	0.67	0.84	0.67	0.84	4.00	0.18	0.18
Cumulative Width	2.19	2.86	5.36	6.03	8.22	9.06	11.25	11.92	14.23

4 INCH, SERIES C CAPITALS; 1/4 INCH LOWER CASE (3 INCHES, SERIES C, CAPITALS)

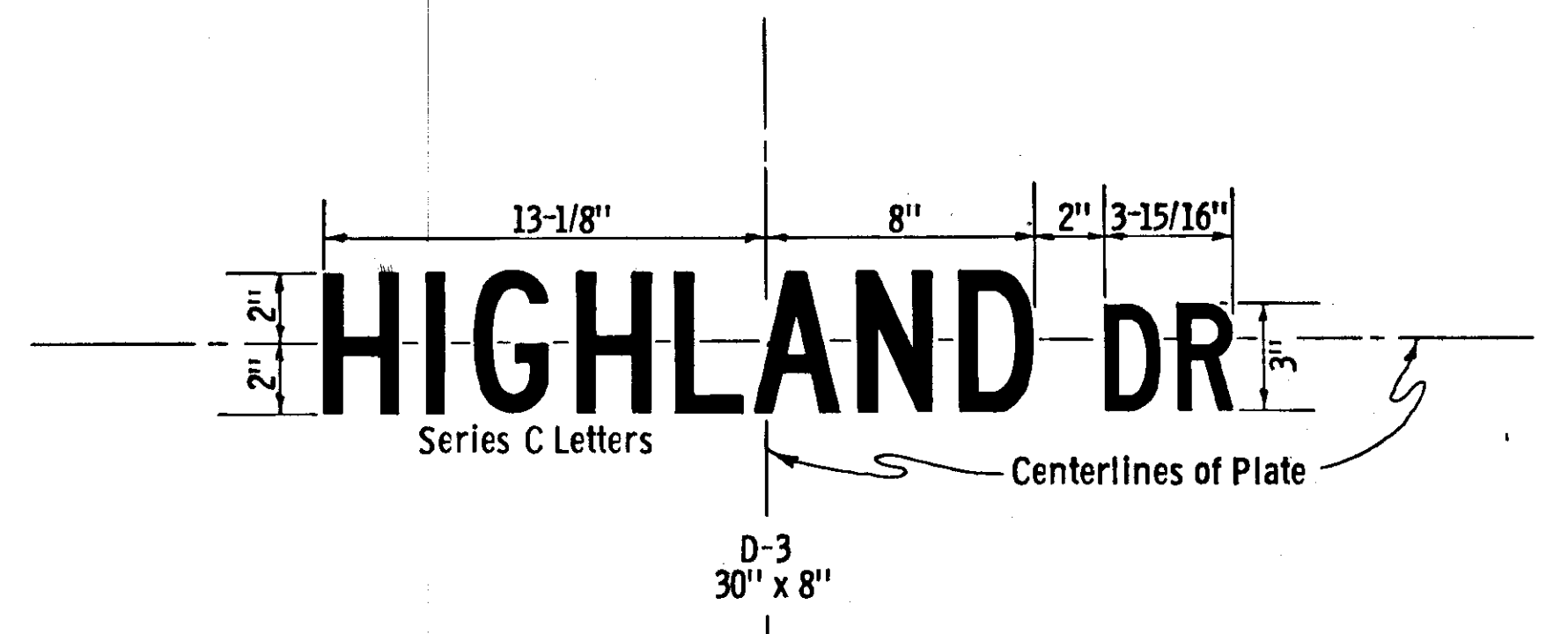
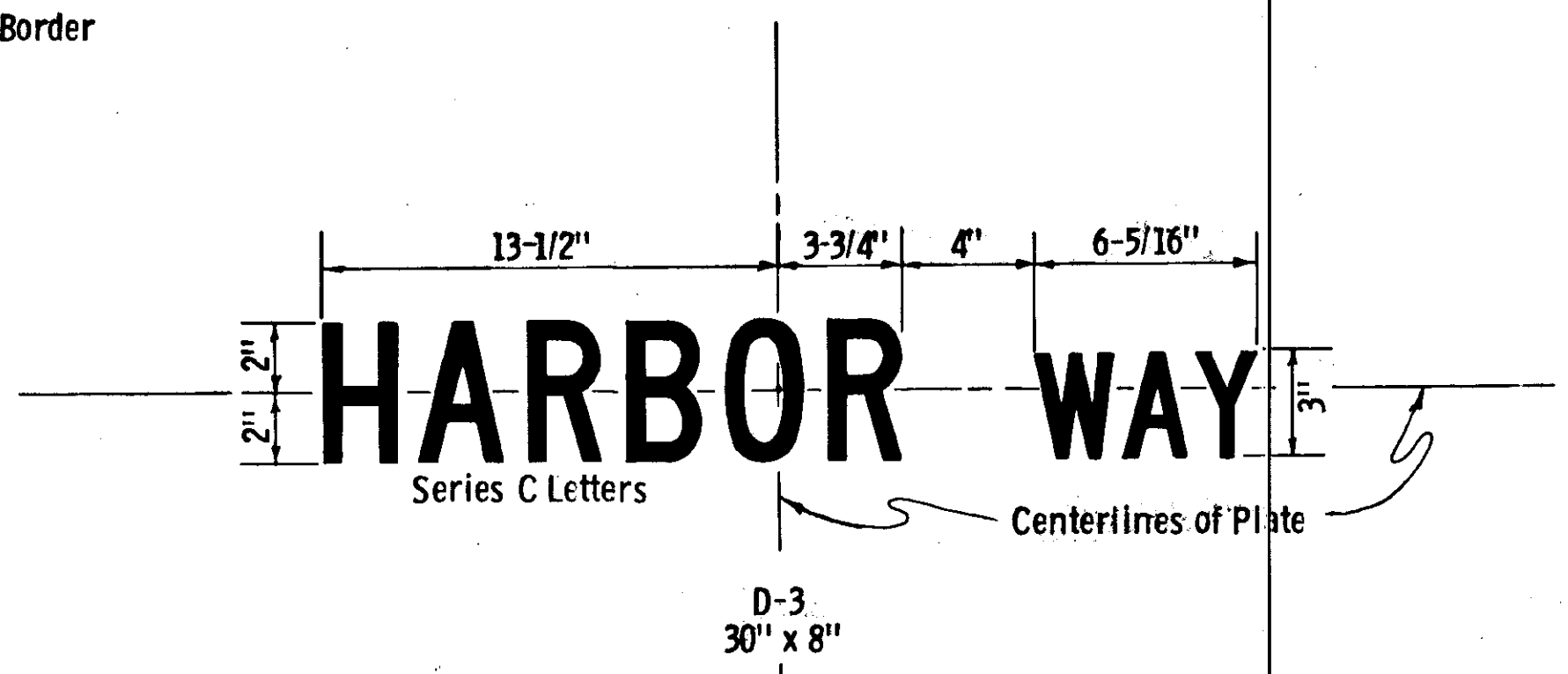
Letter	H	I	G	H	L	A	N	D	D	R
Letter Width	2.19	0.56	2.19	2.19	2.00	2.50	2.19	2.19	1.65	1.65
Space Width	0.84	0.84	0.84	0.84	0.22	0.67	0.84	2.00	0.63	0.63
Cumulative Width	2.19	3.03	3.59	4.43	6.62	7.46	9.65	10.4	12.49	12.71

4 INCH, SERIES C CAPITALS; 1/4 INCH LOWER CASE

Letter									
Letter Width									
Space Width									
Cumulative Width									

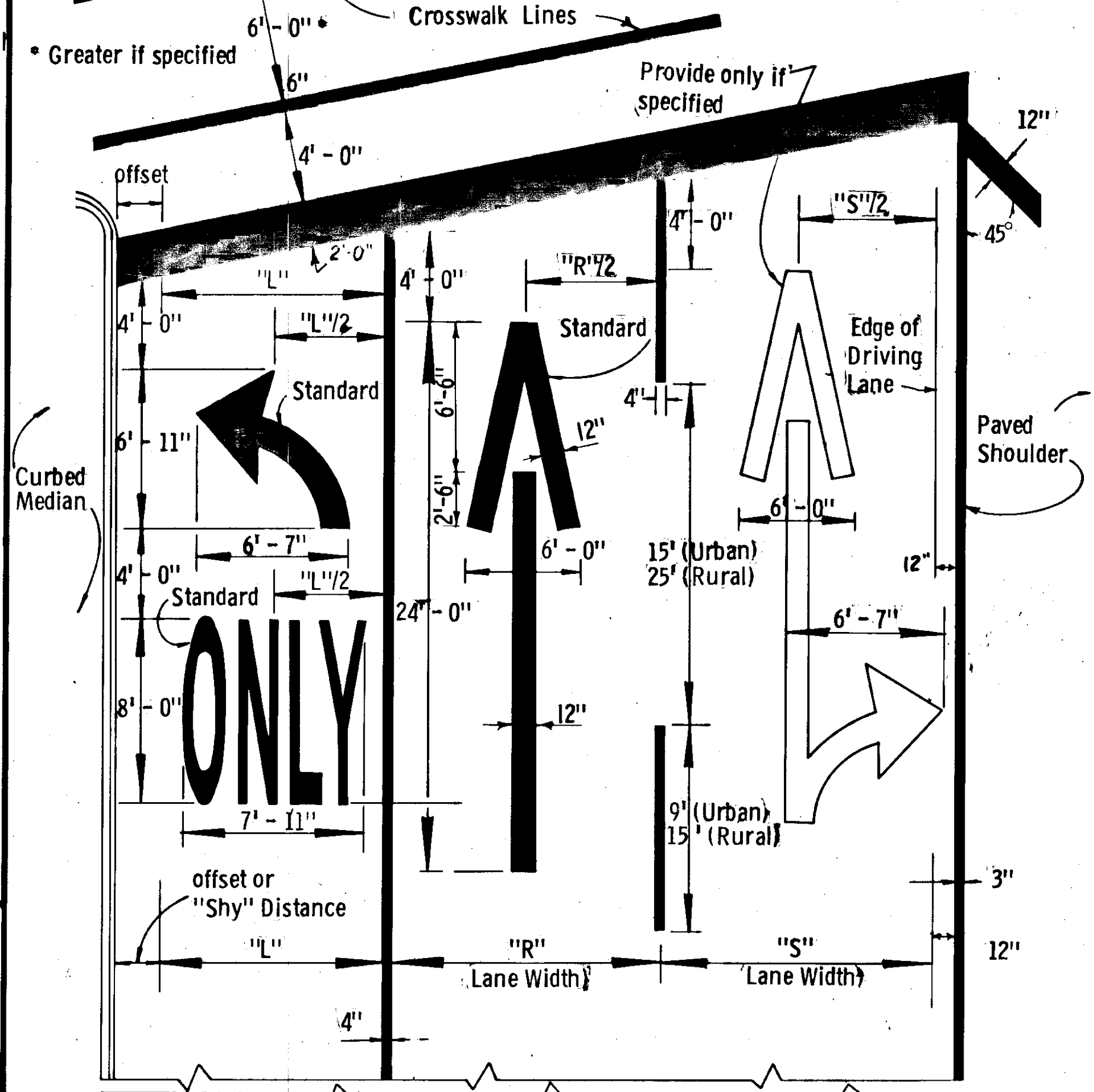


- NOTES:
1. ReflectORIZED White Legend and Border on ReflectORIZED Green Background.
 2. Drill no holes. For mounting bracket and bracket detail see standard sheet T-2.
 3. Each plate shall be furnished with sign legend on both sides of plate.



SPECIAL
STANDARD
SIGN DETAIL

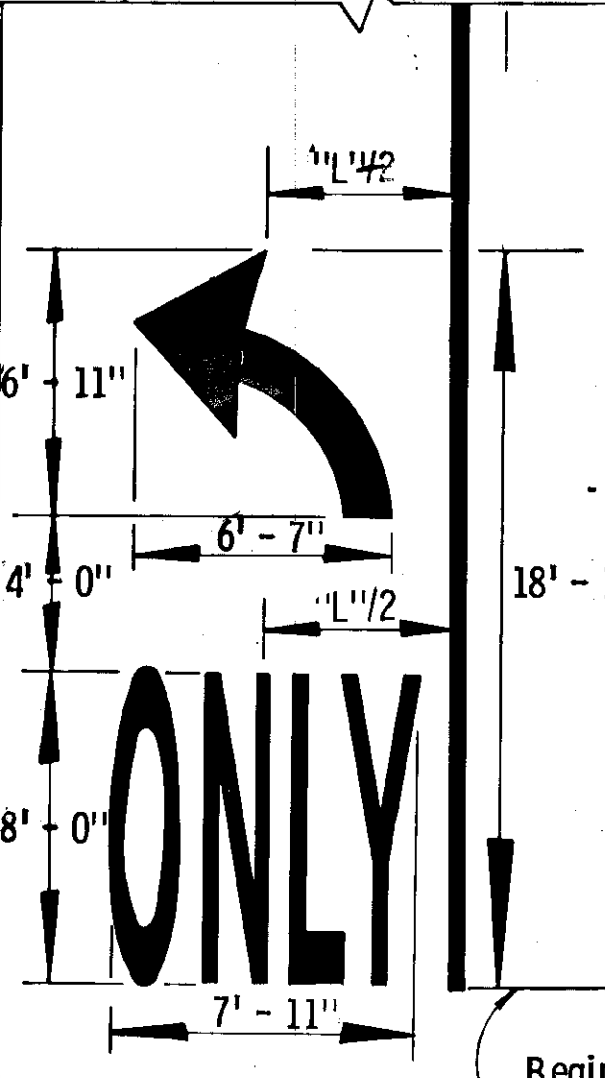
PAVEMENT MARKING DETAILS



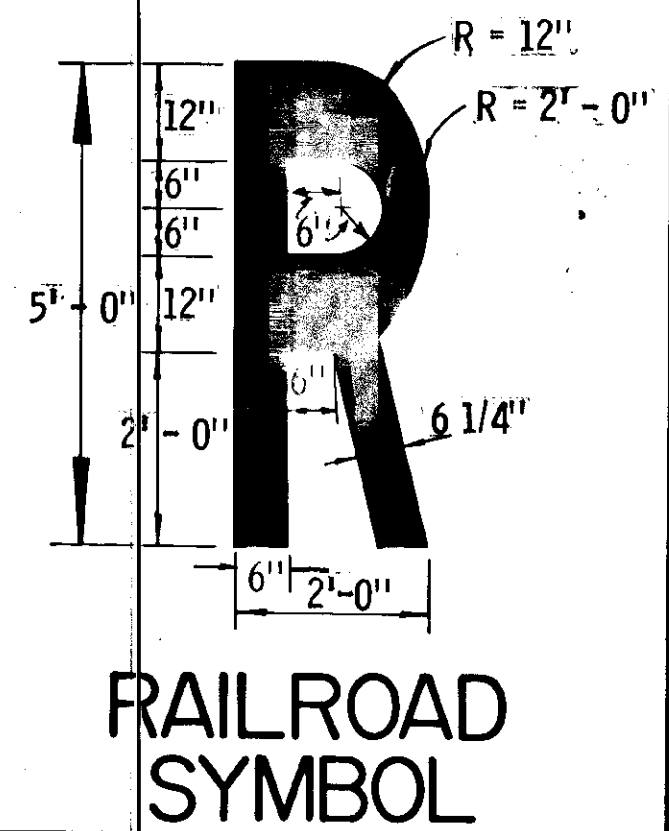
Diagonal Paved Shoulder Markings are spaced:

Speed Limit	Spacing
30	20'
35	40'
40	60'
45	80'
50	100'

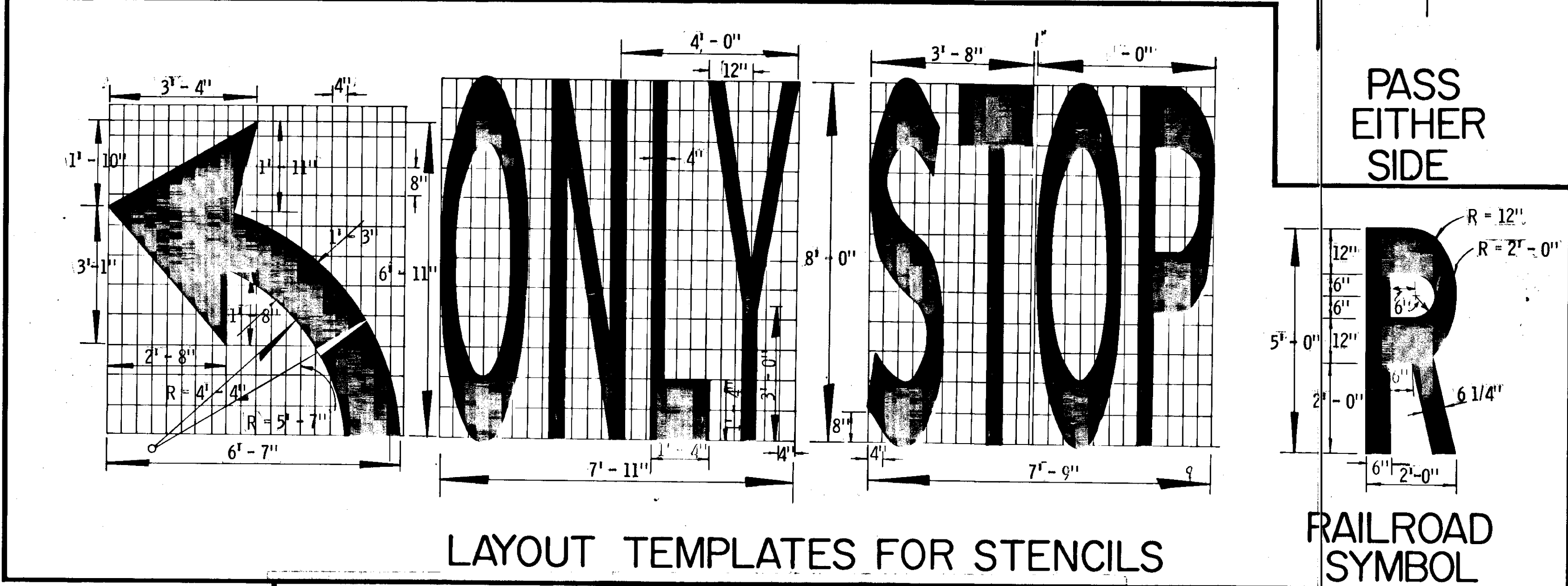
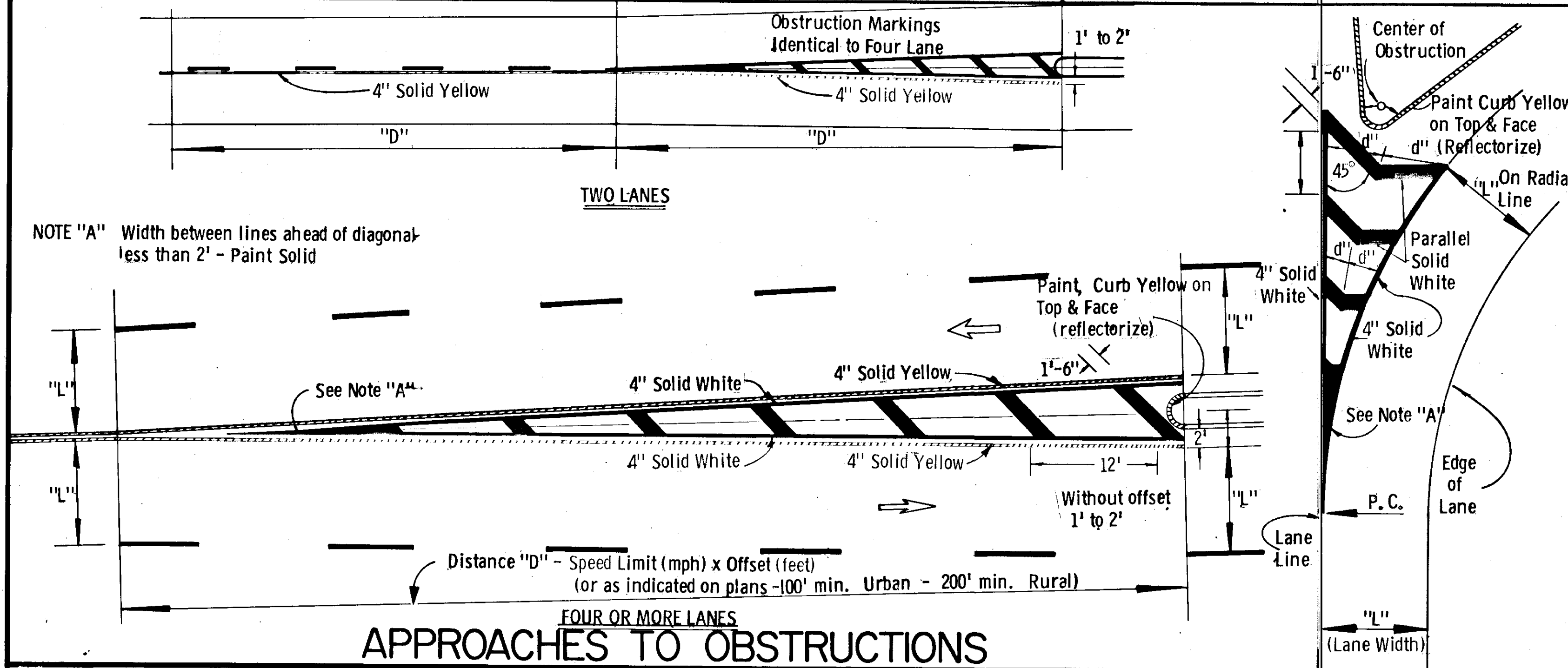
Note:
Right turn auxiliary lane usage markings identical except arrow symbol is reversed. Additional arrow symbol and "ONLY" marking not required unless specified, or unless full width auxiliary lane length exceeds 250 feet. An intermediate lane usage marking shall be centered between end markings indicated.



PASS EITHER SIDE



APPROACH TO INTERSECTION



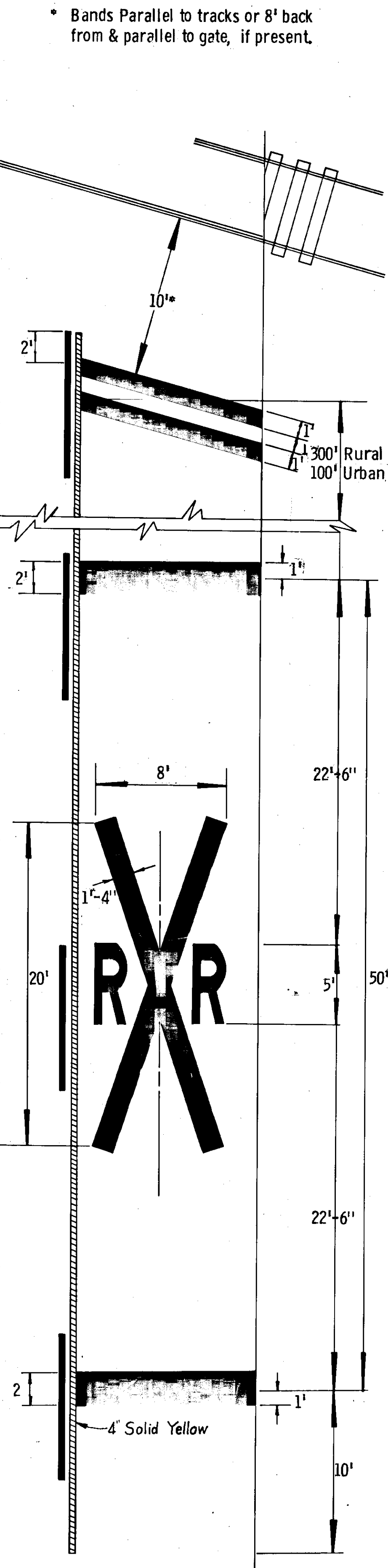
APPLICATION DETAILS

MARKING	COLOR	WIDTH	TYPE	MISC. DATA
Line, center -- 2 lane -- Rural	White	4"	Broken	Urban or Mountain 15' Other 25'
Line, center -- 2 lane -- Urban	White	4"	Solid	
Line, center -- 4 lane -- Undivided	2-Yellow	12" Overall	2-Solid	
Line, lane -- through lanes	White	4"	Broken	Urban or Mountain 15' Other 25'
Line, lane -- auxiliary lanes & obstr.	White	4"	Solid	
Line, edge	White	3"	Solid	
Line, barrier & no passing	Yellow	4"	Solid	
Line, combination - center & barrier	White & Yellow	12" to 20" Overall	Broken & Solid	
Line, combination - lane & barrier	White & Yellow	12" Overall	2-Solid	
Line, stop	White	24"	Solid	4' in back of crosswalk or if none, 4' to 30' from pavement edge
Line, crosswalk	White	6"	Solid	Space 6' apart, or as spec.
Line, parking space limit	White	4"	As Spec	See plans
Line, paved shouldered diagonal	White	12"	Solid	Spacing - See Chart
Line, obstruction approach diagonal	White	18"	Solid	Spaced 7' or 12' -- See Dwgs.
Words & Symbols	White	Varies	Solid	See Dwgs.
Curb, face & top - in line of traffic	Yellow	Varies	Solid	All curbs of channelizing islands
Curb, face & top - parking prohibition	Yellow	Varies	Solid	See plans for locations

REVISIONS	
No.	Description

APPROACH TO RAILROAD CROSSING

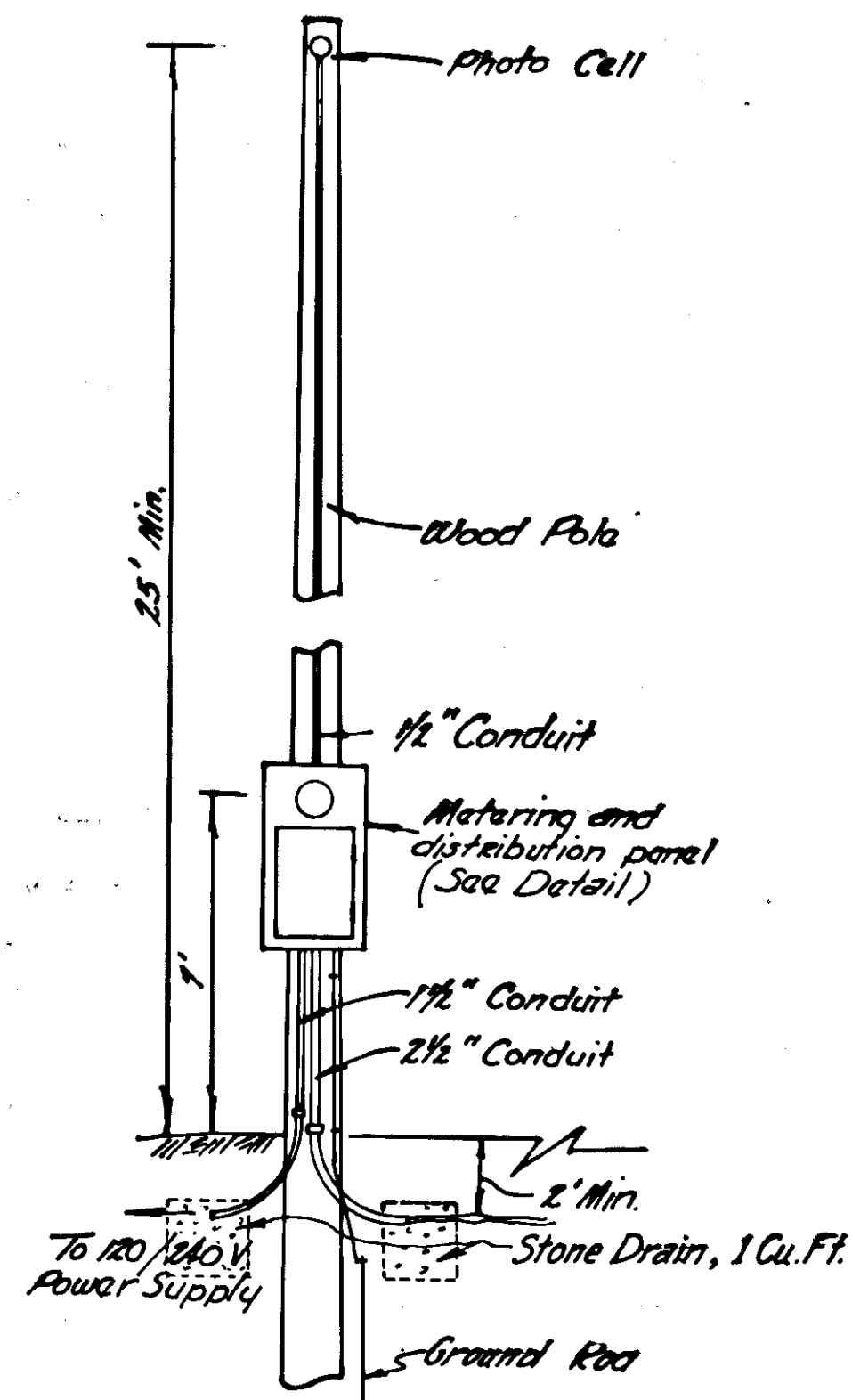
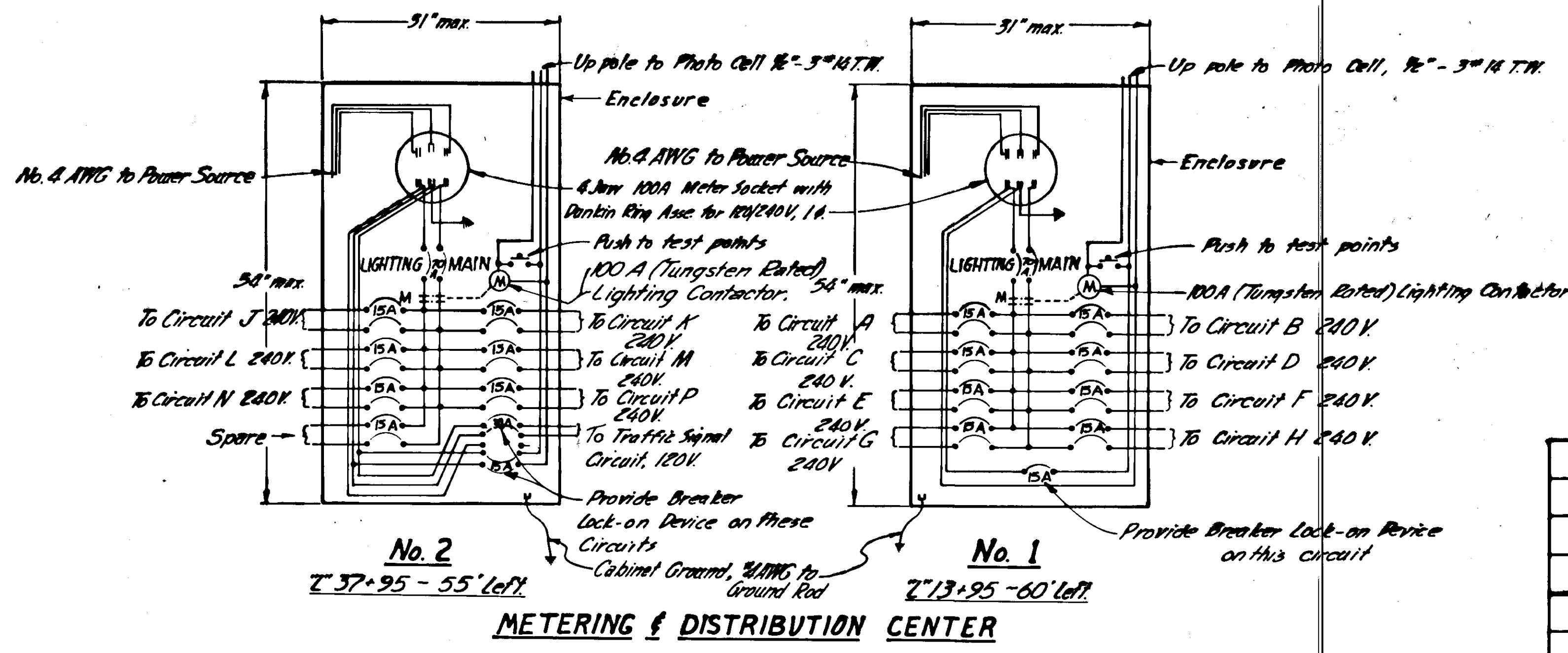
Note:
On 4 Lane Roadways "X" shall be 10 ft. 0 in. wide centered on lane line. Roadways in one direction wider than 30 feet shall have symmetrical "X's" placed side by side in each lane or 15 ft. width.



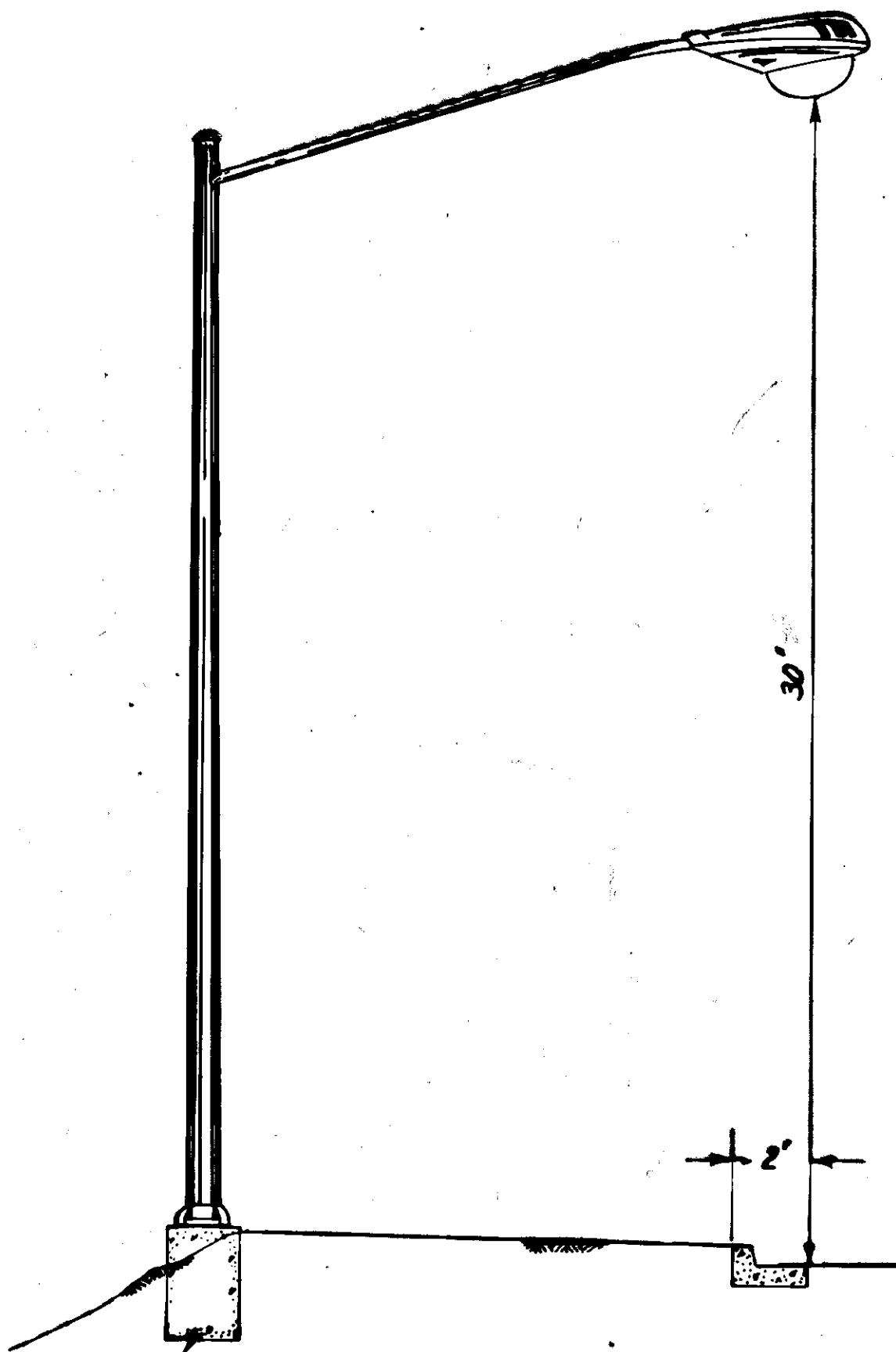
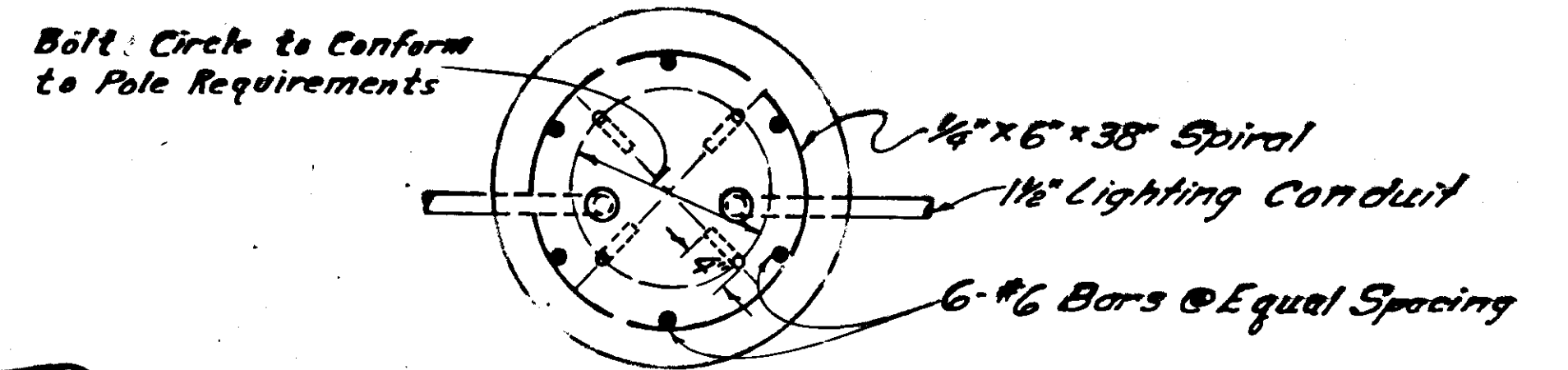
ILLUMINATION DETAILS

NOTE: ALL CONDUCTORS TO BE #8 AWG EXCEPT, LEADS FROM POWER SOURCE TO DISTRIBUTION CENTER & FROM DISTRIBUTION CENTER TO TRAFFIC SIGNALS SHALL BE #4 AWG.

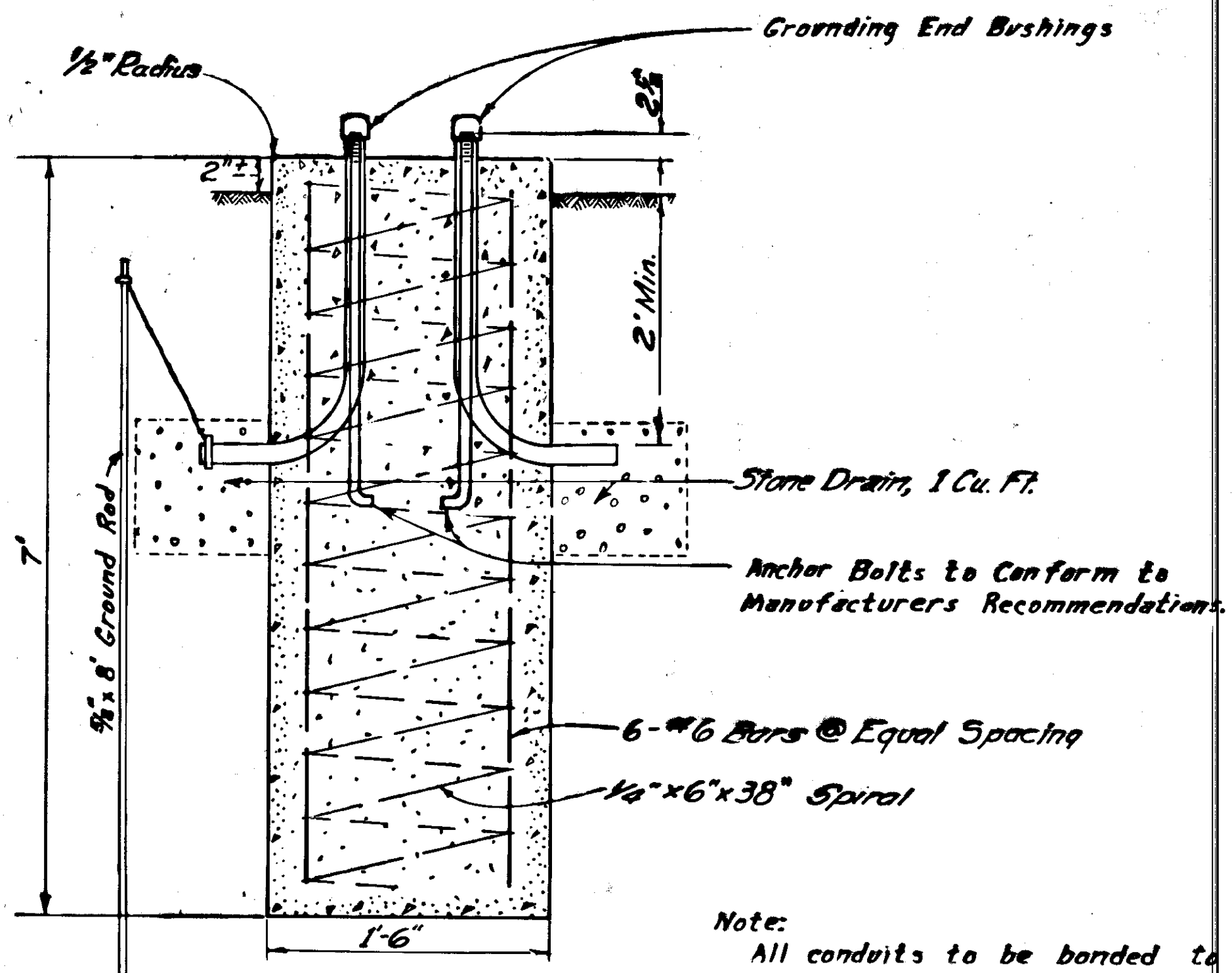
120/240 1 ϕ Panel With 120A Main AC Breaker — All Breakers 2 Pole								
Panel ① Circuits	A	B	C	D	E	F	G	H
M.V. Lamps	1810	1810	1810	1810	2260	1810	1960	1810
Panel ② Circuits	J	K	L	M	N	P	SPARE	Traffic Signal
M.V. Lamps	1810	1810	1810	1960	1810	2710		
Traffic Signals								2600
Total Panel ① = 14,480 Watts or 61 Amp./Line @ 240 V.								
Total Panel ② = 13,910 Watts or 58 Amp./Line @ 240 V. (120V for T.S.)								



METERING & DISTRIBUTION CENTER MOUNTING DETAIL



LIGHTING STANDARD INSTALLATION



LIGHTING STANDARD BASE DETAIL

- NOTES:
1. See sheet #42 for junction box details.
 2. All lighting system junction boxes shall be Type I.
 3. All luminaires to be I.E.S. Type III, Short, Cut Off, 400 Watt, H-33 Mercury Vapor.

Note: All conduits to be bonded to pole ground terminal by No. 8 bare copper wire from grounding end bushings.

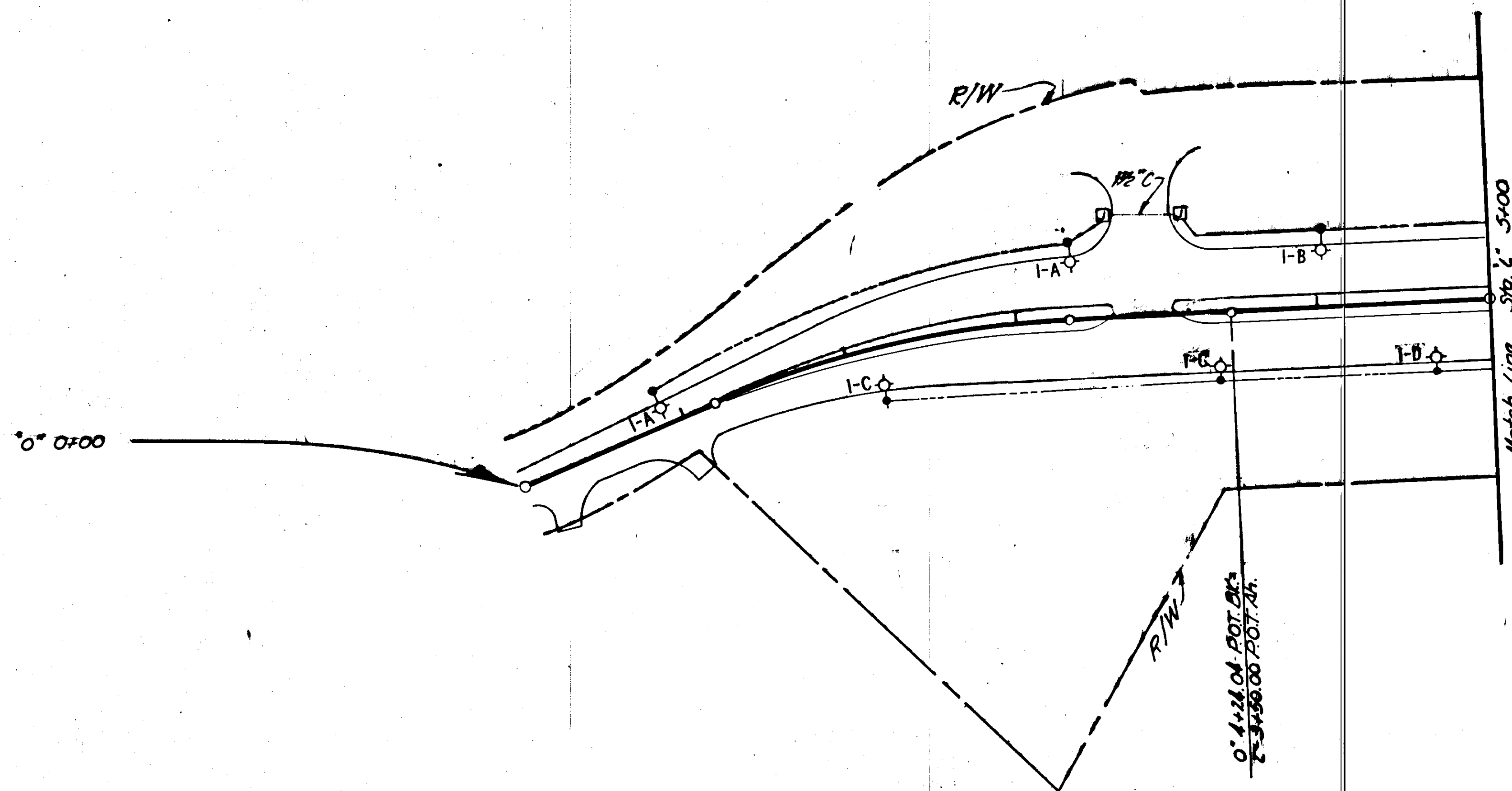
No.	Date	Description

STATE of ALASKA
Department of Highways
JUNEAU OUTER DRIVE-PHASE I
Project No. F-095-8 (13)

LIGHTING SYSTEM SUMMARY AND DETAILS

Approved: _____ Date: _____

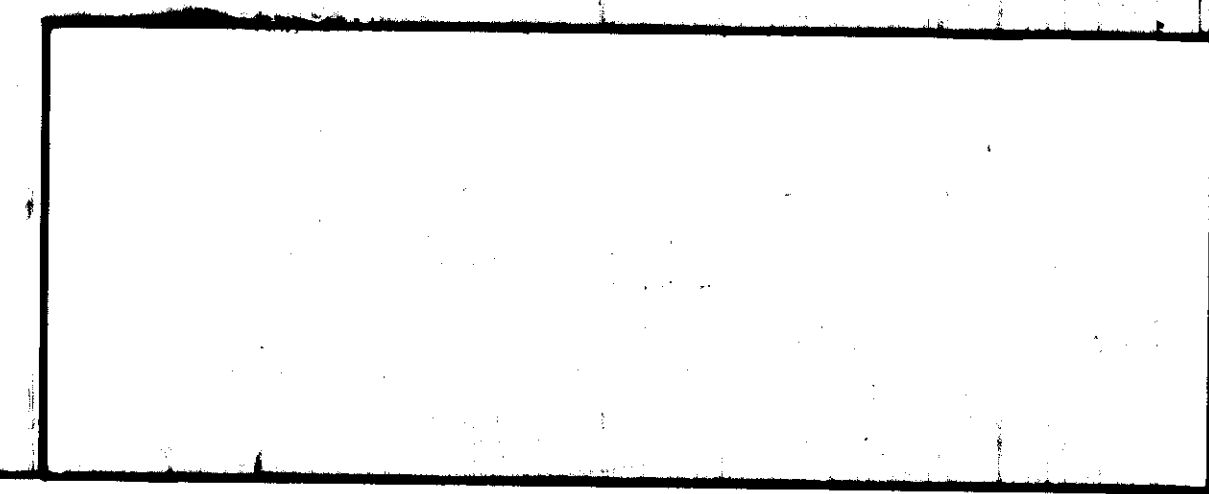
ILLUMINATION, SIGNING &
PAVEMENT MARKINGS



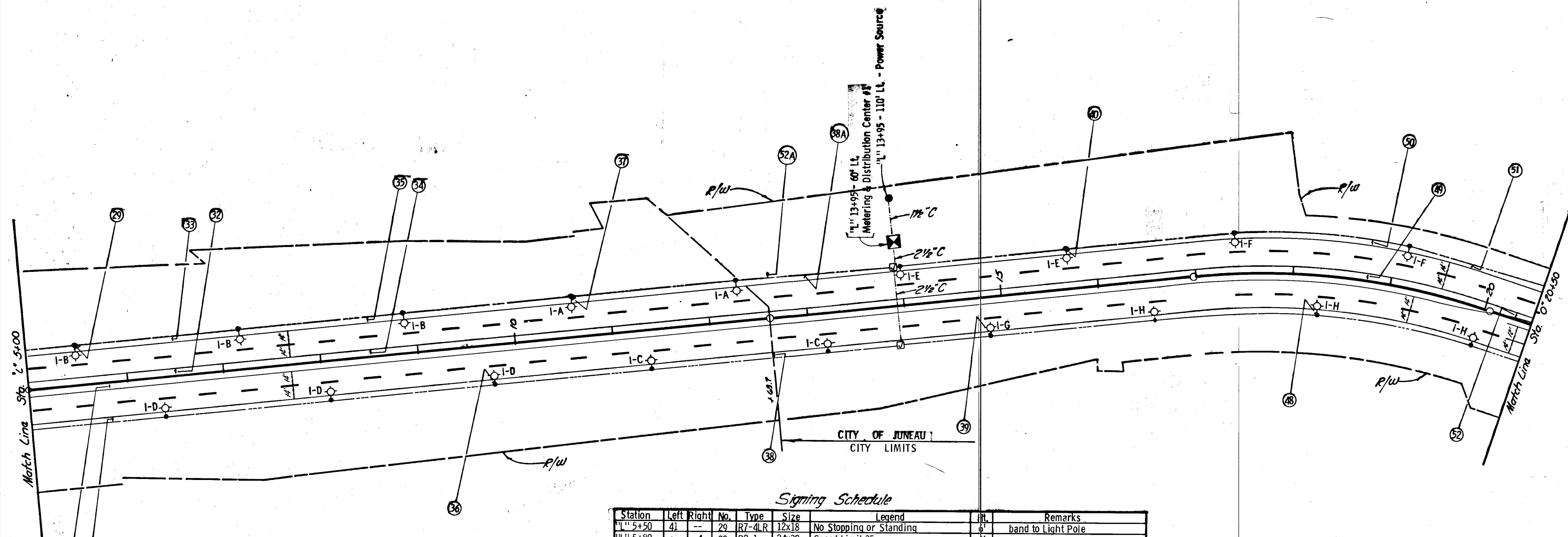
NOTE: SEE SHEET #36 FOR SIGNING & PAVEMENT MARKING PLANS.

Illumination Schedule

Station/Location	Mast Arm	Circuit	Junction Box Location
"0" 0+90-20' Lt.	6'	1 - A	
"0" 2+19-32' Rt.	6'	1 - C	
"0" 3+33-41' Lt.	6'	1 - A	
"0" 3+52			55' Lt.
"0" 3+97			55' Lt.
"0" 4+14-41' Rt.	6'	1 - C	
"L" 4+03-41' Lt.	6'	1 - B	
"L" 4+65-41' Rt.	6'	1 - D	



ILLUMINATION, SIGNING & PAVEMENT MARKINGS



Illumination Schedule

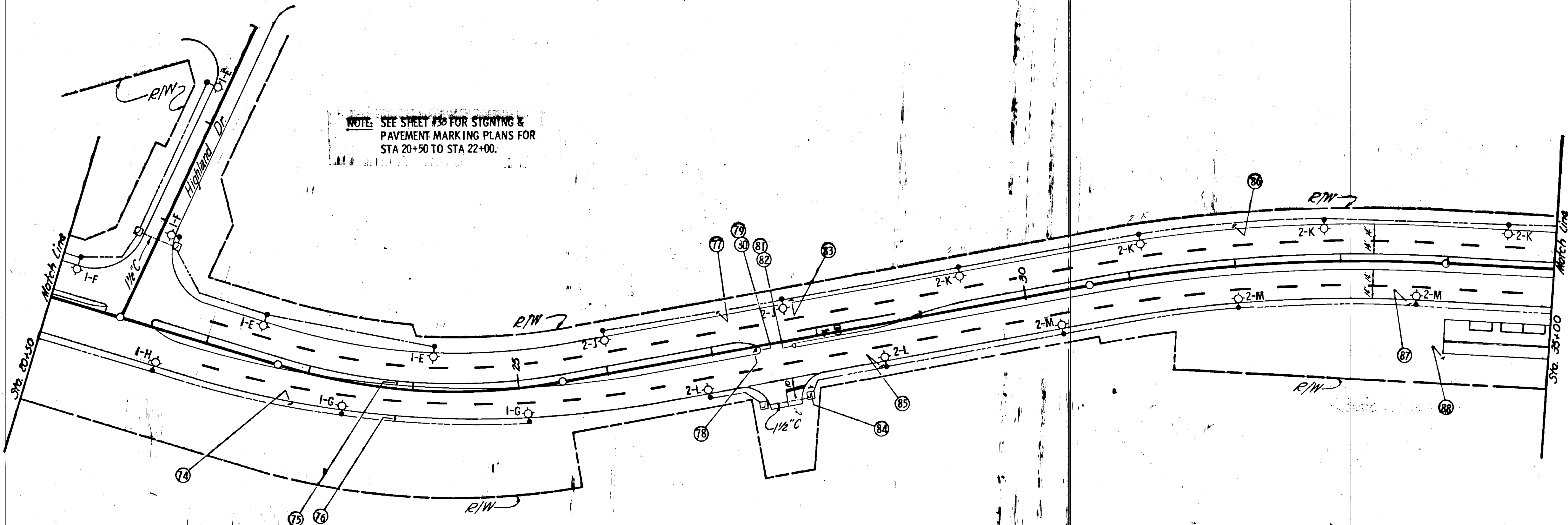
Station/Location	Mast Arm	Circuit	Junction Box Location
"L" 5+50-41' Lt.	6'	1 - B	
"L" 6+35-41' Rt.	6'	1 - D	
"L" 7+20-41' Lt.	6'	1 - B	
"L" 8+05-41' Rt.	6'	1 - D	
"L" 8+90-41' Lt.	6'	1 - B	
"L" 9+75-41' Rt.	6'	1 - D	
"L" 10+60-41' Lt.	6'	1 - A	
"L" 11+45-41' Rt.	6'	1 - C	
"L" 12+30-41' Lt.	6'	1 - A	
"L" 13+15-41' Rt.	6'	1 - C	
"L" 14+00-41' Lt.	6'	1 - E	
"L" 14+85-41' Rt.	6'	1 - G	
"L" 15+70-41' Lt.	6'	1 - E	
"L" 16+55-41' Rt.	6'	1 - H	
"O" 17+40-41' Lt.	6'	1 - F	
"O" 18+25-41' Rt.	6'	1 - H	
"O" 19+10-41' Lt.	6'	1 - F	
"O" 19+95-41' Rt.	6'	1 - H	
"L" 13+93			38' Rt. & Lt.

Signing Schedule

Station	Left	Right	No.	Type	Size	Legend	IRL	Remarks
"L" 5+50	41	--	29	R7-4LR	12x18	No Stopping or Standing	6'	band to Light Pole
"L" 5+80	--	4	30	R2-1	24x30	Speed Limit 35	6'	
"L" 5+80	--	38	31	R2-1	24x30	Speed Limit 35	6'	
"L" 6+50	3	--	32	W4-2	30x30		6'	
"L" 6+50	39	--	33	W4-2	30x30		6'	
"L" 8+50	3'	--	34	W8-9R	36x36	Right Lane Ends 600 Feet	6'	
"L" 8+50	39	--	35	W8-9R	36x36	Right Lane Ends 600 Feet	6'	
"L" 9+75	--	41	36	R7-4LR	12x18	No Stopping or Standing	6'	band to Light Pole
"L" 10+60	41	--	37	R7-4LR	12x18	No Stopping or Standing	6'	band to Light Pole
"L" 12+63		38.5	38	D-5	36x18	Juneau City Limit	6'	
"L" 13+00	39	--	38A	D-6	--	Mile Post 1	6'	By Others
"L" 14+85	41	39	39	R7-4LR	12x18	No Stopping or Standing	6'	band to light pole
"L" 15+70	41	--	40	R7-4LR	12x18	No Stopping or Standing	6'	band to light pole
"O" 18+25	--	41	48	R7-4LR	12x18	No Stopping or Standing	6'	band to light pole
"O" 18+75	4'	--	49	R2-1	24x30	Speed Limit 35	6'	
"O" 18+75	38'	--	50	R2-1	24x30	Speed Limit 35	6'	
"O" 19+75	38	--	51	R7-4LR	12x18	No Stopping or Standing	6'	
"O" 20+31	5'	--	52	R3-7L	30x30	Left Lane Must Turn Left	6'	
"L" 12+65	40'	--	52A	D-2	72x36	AIRPORT, AUKE BAY, TEE HARBOR	6'	By Others

ILLUMINATION, SIGNING & PAVEMENT MARKINGS

NOTE: SEE SHEET #33 FOR SIGNING & PAVEMENT MARKING PLANS FOR STA 20+50 TO STA 22+00.



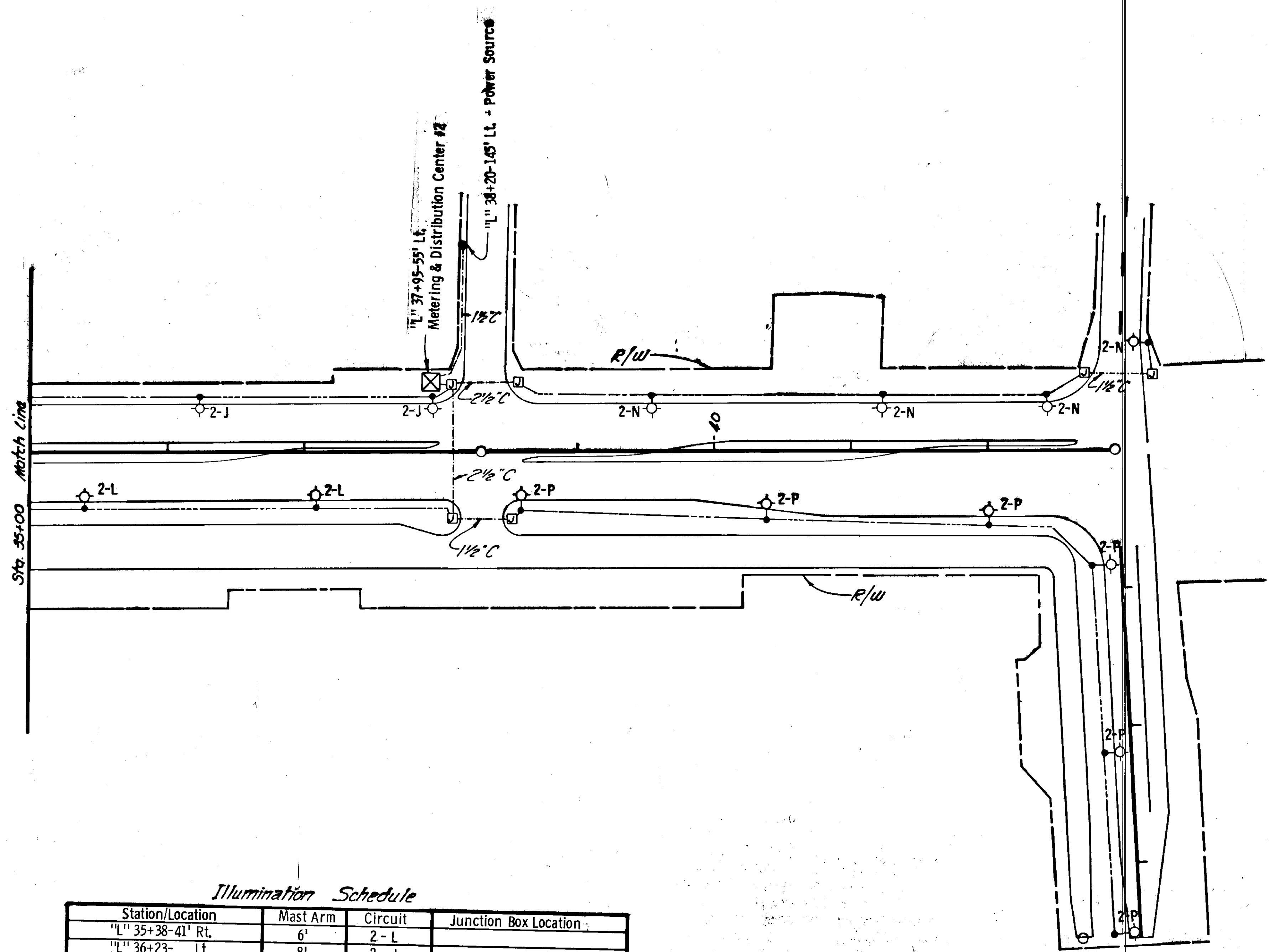
illumination Schedule

Station/ Location	Mast Arm	Circu.
"O" 20+65 - 41' Lt.	6'	1 - F
"O" 21+65-41' Rt.	6'	1 - H
"O" 22+50-44' Lt.	8'	1 - E
"O" 23+35-33' Rt.	6'	1 - G
"O" 24+20-44' Lt.	8'	1 - E
"O" 25+05-35' Rt.	6'	1 - G
"L" 26+03-44' Lt.	8'	2 - J
"L" 26+88-41' Rt.	6'	2 - L
"L" 27+38		55' Rt.
"L" 27+73-44' Lt.	8'	2 - J
"L" 27+84		55' Rt.
"L" 28+58-41' Rt.	6'	2 - L
"L" 29+43-44' Lt.	8'	2 - K
"L" 30+28-41' Rt.	6'	2 - M
"L" 31+13-44' Lt.	8'	2 - K
"L" 31+98-41' Rt.	6'	2 - M
"L" 32+83-44' Lt.	8'	2 - K
"L" 33+68-41' Rt.	6'	2 - M
"L" 34+53-44' Lt.	8'	2 - K
"SR21" 0+80		
"SR21" 0+90 - 22' Rt.	8'	1 - F
"SR21" 2+32-71"	6'	1 - E

Signing Schedule

Station	Left	Right	No.	Type	Size	Legend	Ht.	Remarks
"O" 22+90	--	33	74	R7-4LR	12x18	No Stopping or Standing	6'	
"O" 23+85	5'	--	75	R2-1	24x30	Speed Limit 35	6'	
"O" 23+85	--	29'	76	R2-1	24x30	Speed Limit 35	6'	
"L" 27+10	38.5	--	77	R7-4LR	12x18	No Stopping or Standing	6'	
"L" 27+39	3'	--	78	R6-1R	36x12	One Way	--	Above R4-8R
"L" 27+39	3'	--	79	R4-8R	24x30	Keep Right	--	Above W14-6
"L" 27+81	--	4	80	W14-6	18x18	9 Button	4'	
"L" 27+81	--		81	R4-8R	24x30	Keep Right	--	Above W14-6
"L" 27+81	38.5	--	82	W14-6	18x18	9 Button	4'	
"L" 27+81	38.5	--	83	R6-1L	36x12	One Way	6'	
"L" 27+85	--	45	84	R1-1	30x30	Stop	7'	
"L" 28+58		41	85	R7-4LR	12x18	No Stopping or Standing	6'	band to light pole
"L" 32+00	38.5	--	86	R7-4LR	12x18	No Stopping or Standing	6'	
"L" 33+68		41	87	R7-4LR	12x18	No Stopping or Standing	6'	band to light pole
"L" 34+01		87	88	R7-4L	12x18	No Stopping or Standing	7'	

ILLUMINATION, & PAVEMENT MARKINGS SIGNING

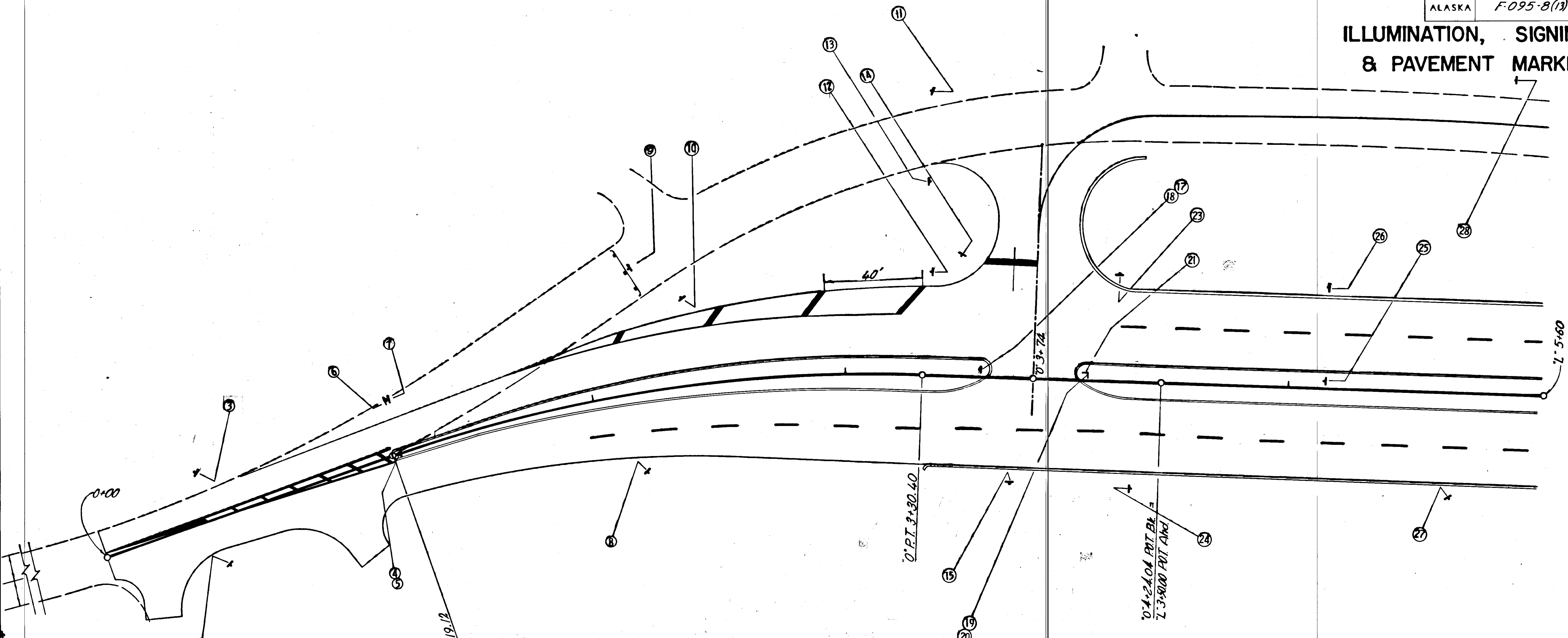


NOTE: SEE SHEETS #30 & #33 FOR SIGNING & PAVEMENT MARKING PLANS.

Illumination Schedule

Station/Location	Mast Arm	Circuit	Junction Box Location
"L" 35+38-41' Rt.	6'	2-L	
"L" 36+23- Lt.	8'	2-J	
"L" 37+08-41' Rt.	6'	2-L	
"L" 37+93-44' Lt.	8'	2-J	
"L" 38+08			45' Lt. & 45' Rt.
"L" 38+48			45' Lt. & 45' Rt.
"L" 38+58-41' Rt.	6'	2-P	
"L" 39+53-44' Lt.	8'	2-N	
"L" 40+39-47' Rt.	6'	2-P	
"L" 41+24-44' Lt.	8'	2-N	
"L" 42+02-53' Rt.	6'	2-P	
"L" 42+42-44' Lt.	6'	2-N	
"SR10N" 0+55			21' Lt. & 21' Rt.
"SR10S" 0+80-21.5' Rt.	6'	2-N	
"SR10S" 0+25-20' Rt.	6'	2-P	
"SR10S" 2+18-16' Rt.	4'	2-P	
"SR10S" 3+46-14' Rt.	4'	2-P	

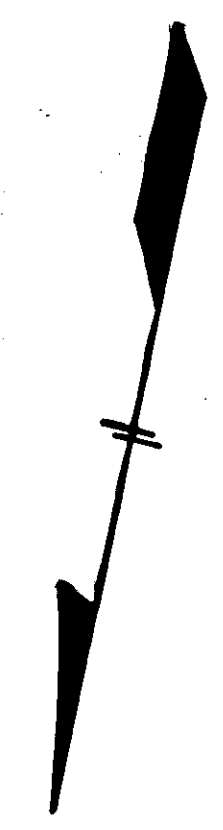
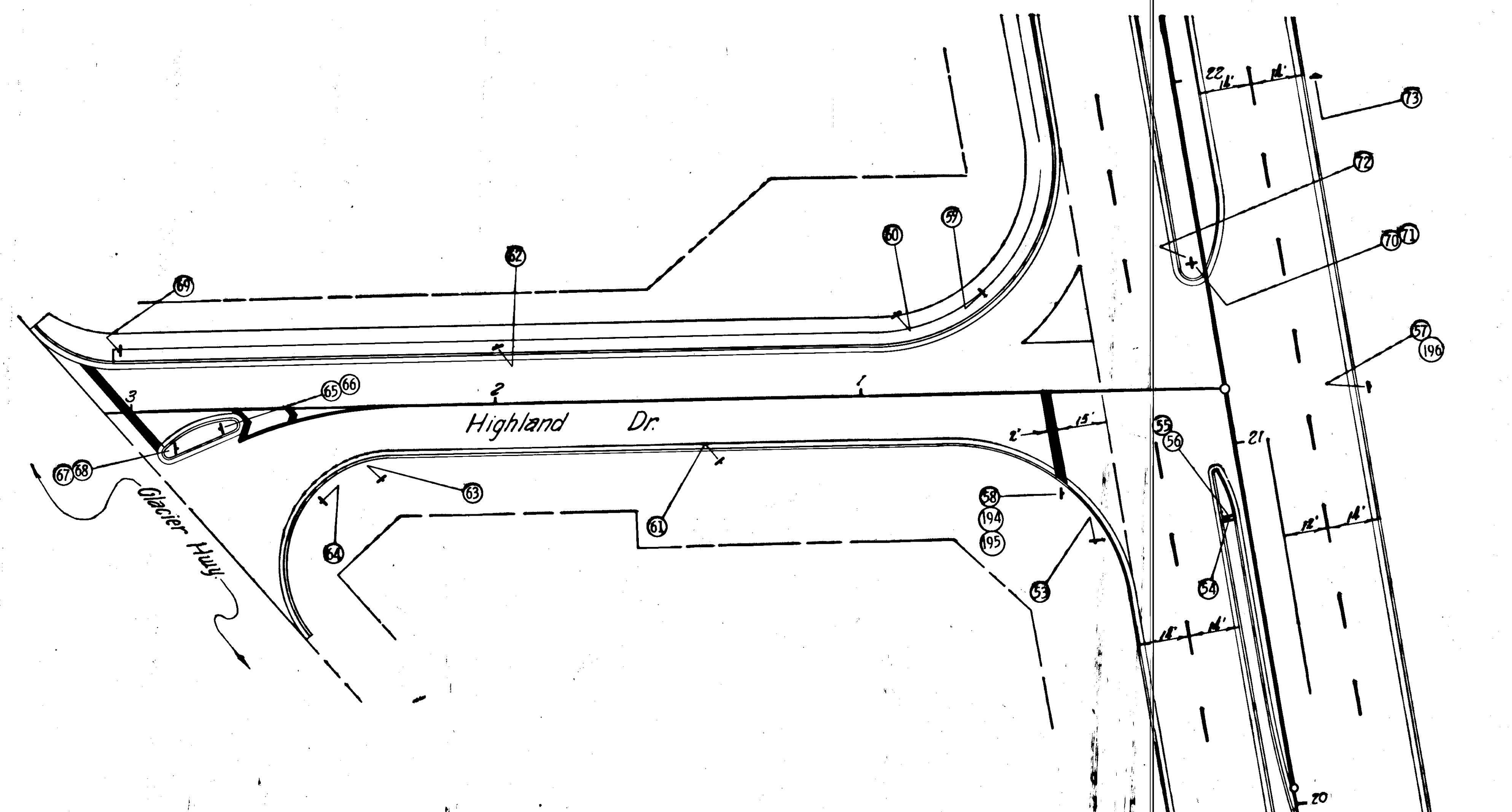
ILLUMINATION, SIGNING & PAVEMENT MARKINGS



Signing Schedule

Station	Left	Right	No.	Type	Size	Legend	Ht.	Remarks
(-)-1270'			1	W6-1	36x36	Divided Highway	7'	Above W14-6
"0" 0+45	--	19	2	R7-4	12x18	No Stopping or Standing	7'	
"0" 0+45	19	--	3	R7-4R	12x18	No Stopping or Standing	7'	
"0" 1+22	--	--	4	R4-8R	24x30	Keep Right	--	b. to b. 1 No. 6
			5	W14-6	18x18	9 Button	4'	band to Light Pole
"0" 1+22	21'	--	6	R5-1	24x24	Do Not Enter	--	
			7	R6-3	24x30	Two Way Traffic Ahead	6'	
"0" 2+19	--	32	8	R7-4LR	12x18	No Stopping or Standing	6'	band to light pole
"0" 2+24	48	--	9	W14-6	18x18	9 Button	4'	
"0" 2+40	35	--	10	R7-4LR	12x18	No Stopping or Standing	6'	
"0" 3+30	112	--	11	W14-2	30x30	Dead End	7'	
"0" 3+33	41	--	12	M1-2	24x24	Alaska 7	6'	
"0" 3+34	74'	--	13	R1-1	30x30	Stop	7'	Above R4-8R
"0" 3+45	47	--	14	R1-1	30x30	Stop	6'	Above W14-6
"0" 3+66	--	45	15	R6-1L	36x12	One Way	6'	
"0" 3+53	3'	--	17	R4-8R	24x30	Keep Right	--	
"0" 3+95	3'	--	18	W14-6	18x18	9 Button	4'	Above R4-8R
"0" 3+95	3'	--	19	R4-8R	24x30	Keep Right	--	
			20	W14-6	18x18	9 Button	4'	
			21	R6-1R	36x12	One Way	--	band to Light Pole
"0" 4+06	41	--	23	R6-1L	36x12	One Way	6'	
"0" 4+14	--	41	24	M1-2	24x24	Alaska 7	6'	band to Light Pole
"L" 4+15	3'	--	25	W6-2	36x36	Divided Highway Ends	6'	
"L" 4+15	39	--	26	W6-2	36x36	Divided Highway Ends	6'	
"L" 4+65	--	41	27	R7-4LR	12x18	No Stopping or Standing	6'	
"L" 4+90	123'	--	28	W3-1	30x30	Stop Ahead	7'	

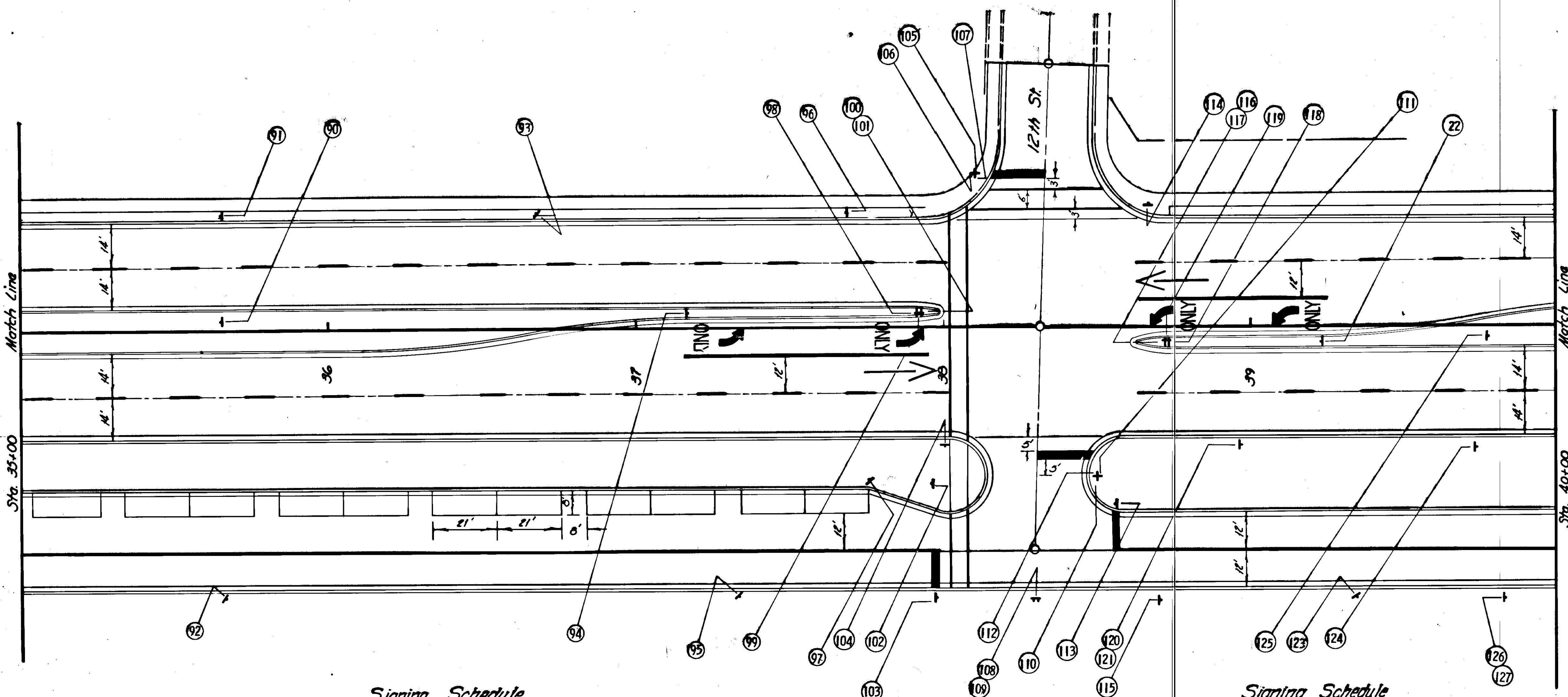
ILLUMINATION, SIGNING & PAVEMENT MARKINGS



Signing Schedule

Station	Left	Right	No.	Type	Size	Legend	Ht.	Remarks
"0" 20+80	43'	--	53	M1-2	24x24	Alaska 7	6'	band to Light Pole
"0" 20+81	5'	--	54	R3-7L	30x30	Left Lane Must Turn Left	--	b. to b./ R4, 8 Rt.
			55	R4-84	24x30	Keep Right	--	Above W14-6
			56	W14-6	18x18	9 Button	4'	
"0" 21+10	--	38	57	R6-1L	36x12	One Way	6'	
SR21 0+45	27	--	58	R1-1	30x30	Stop	7'	
SR21 0+65	--	27	59	R5-1	24x24	Do not Enter	7'	
SR21 0+90	--	22'	60	R7-4LR	12x18	No Stopping or Standing	7'	
SR21 1+40	17'	--	61	R7-4LR	12x18	No Stopping or Standing	7'	
SR21 2+00	--	17'	62	R7-4LR	12x18	No Stopping or Standing	7'	
SR21 2+32	20'	--	63	R7-4LR	12x18	No Stopping or Standing	7'	band to light pole
SR21 2+49	26'	--	64	R5-1	24x24	Do not enter	7'	
SR21 2+77	5'	--	65	R4-8R	24x30	Keep Right	--	Above W14-6
			66	W14-6	18x18	9 Button	4'	
SR21 2+88	10'	--	67	R4-8R	24x30	Keep Right	--	Above W14-6
			68	W14-6	18x18	9 Button	4'	
SR21 3+04	--	17'	69	R1-1	30x30	Stop	7'	
"0" 21+50	3'	--	70	R4-8R	24x30	Keep Right	--	Above W14-6
			71	W14-6	18x18	9 Button	4'	
			72	R6-1R	36x12	One Way	--	Above R4-8R
"0" 21+95	--	38	73	M1-2	24x24	Alaska 7	6'	
SR21 0+05	27		194	D-3	30x8	Outer Drive		Above R1-1 Detailed
	27		195	D-3	30x8	Highland Drive		Above R1-1 Detailed
"0" 21+10		38	196	D-3	30x8	Highland Drive		Above R6-1L Detailed

ILLUMINATION, SIGNING & PAVEMENT MARKINGS



Signing Schedule

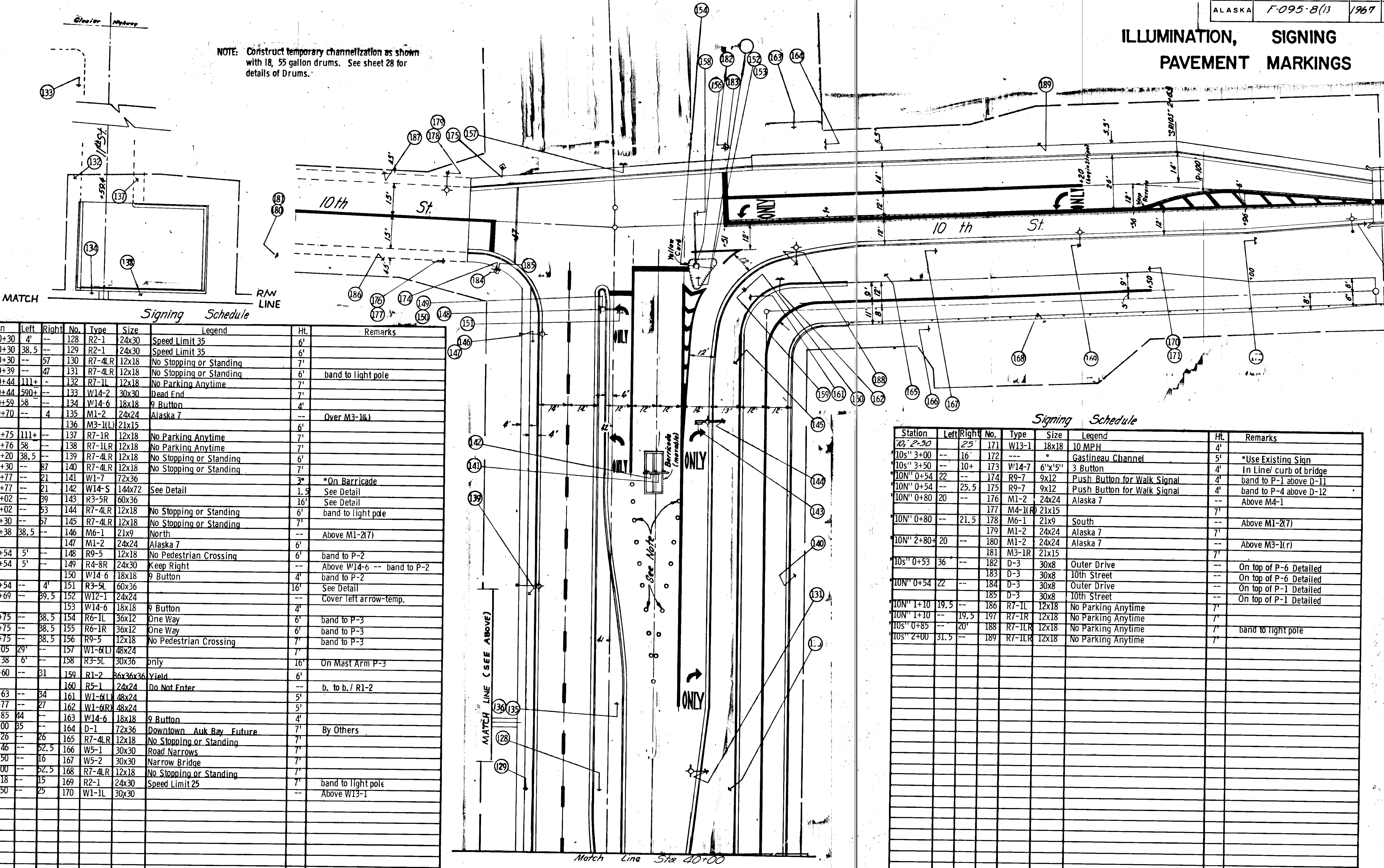
Station	Left	Right	No.	Type	Size	Legend	Ht.	Remarks
"L" 35+65	4	--	90	R2-1	24x30	Speed Limit 35	6'	
"L" 35+65	38.5	--	91	R2-1	24x30	Speed Limit 35	6'	
"L" 35+70	--	87	92	R7-4LR	12x18	No Stopping or Standing	7'	
"L" 36+65	38.5	--	93	R7-4LR	12x18	No Stopping or Standing	6'	
"L" 37+14	5'	--	94	R3-7L	30x30	Left Lane Must Turn Left	6'	
"L" 37+30	--	87	95	R7-4LR	12x18	No Stopping or Standing	7'	
"L" 37+65	38.5	--	96	M1-2	24x24	Alaska 7	6'	
"L" 37+72	--	50	97	R7-1R	12x18	No Parking Anytime	7'	
"L" 37+89	5'	--	98	R3-7L	30x30	Left Lane Must Turn Left	--	b. to b. / R4-8R
			99	R6-1R	36x12	One Way	--	Above R4-8R
			100	R4-8R	24x30	Keep Right	--	Above W14-6
			101	W14-6	18x18	9 Button	4'	
"L" 37+92	--	50	102	W14-2	30x30	Dead End	6'	
"L" 37+93	--	87	103	R1-1	30x30	Stop	7'	
"L" 37+07	--	38	104	R6-1L	36x12	One Way	6'	
"L" 38+08	50	--	105	R1-1	30x30	Stop	7'	
			106	D-3	30x8	Outer Drive	--	Above R1-1 Detailed
			107	D-3	30x8	12th St.	--	Above R1-1 Detailed
"L" 38+26	--	87	108	W1-7	48x24		6'	
			109	D-3	30x8	Harbor Way	--	Above W1-7 Detailed

Signing Schedule

Station	Left	Right	No.	Type	Size	Legend	Ht.	Remarks
"L" 38+46	--	47	110	R1-1	30x30	Stop	6'	
			111	D-3	30x8	Outer Drive	--	Above R1-1 Detailed
			112	D-3	30x8	12th St.	--	Above R1-1 Detailed
"L" 38+52	--	57	113	R1-1	30x30	Stop	7'	
"L" 38+62	39	--	114	R6-1L	36x12	One Way	6'	
"L" 38+65	--	87.5	115	W14-2	30x30	Dead End	7'	Above W14-6
"L" 38+69	5'	--	116	R4-8R	24x30	Keep Right	--	
			117	W14-6	18x18	9 Button	4'	b. to b. / R4-8R
			118	R3-7L	30x30	Left Lane Must Turn Left	--	Above R4-8R
			119	R6-1R	36x12	One Way	--	Above M3-1
"L" 38+91	--	38	120	M1-2	24x24	Alaska 7	--	
			121	M3-1L	21x15		6'	
"L" 39+18	5'	--	122	R3-7L	30x30	Left Lane Must Turn Left	6'	
"L" 39+30	--	87	123	R7-4LR	12x18	No Stopping or Standing	7'	
"L" 39+67	--	39	124	W6-2	36x36	Divided Highway Ends	6'	
"L" 39+71	--	3'	125	W6-2	36x36	Divided Highway Ends	6'	
"L" 39+85	--	88	126	W1-1R	30x30		--	
			127	W13-1	18x18	5 MPH	4'	Above W1-1R

ILLUMINATION, SIGNING PAVEMENT MARKINGS

NOTE: Construct temporary channelization as shown with 18, 55 gallon drums. See sheet 28 for details of Drums.



MATCH RAW LINE
Signing Schedule



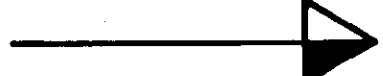














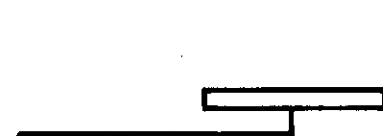
Station	Left	Right	No.	Type	Size	Legend	Ht.	Remarks
"L" 40+30	4'	--	128	R2-1	24x30	Speed Limit 35	6'	
"L" 40+30	38.5	--	129	R2-1	24x30	Speed Limit 35	6'	
"L" 40+30	--	57	130	R7-4LR	12x18	No Stopping or Standing	7'	
"L" 40+39	--	47	131	R7-4LR	12x18	No Stopping or Standing	6'	band to light pole
"L" 40+44	111+	--	132	R7-1L	12x18	No Parking Anytime	7'	
"L" 40+44	590+	--	133	W14-2	30x30	Dead End	7'	
"L" 40+59	58	--	134	W14-6	18x18	9 Button	4'	
"L" 40+70	--	4	135	M1-2	24x24	Alaska 7	--	Over M3-1(L)
"L" 40+75	111+	--	136	M3-1(L)	21x15		6'	
"L" 40+75	--	137	R7-1R	12x18	No Parking Anytime	7'		
"L" 40+76	58	--	138	R7-1LR	12x18	No Parking Anytime	7'	
"L" 41+20	38.5	--	139	R7-4LR	12x18	No Stopping or Standing	6'	
"L" 41+30	--	87	140	R7-4LR	12x18	No Stopping or Standing	7'	
"L" 41+77	--	21	141	W1-7	72x36		3"	*On Barricade
"L" 41+77	--	21	142	W14-S	144x72	See Detail	1.5'	See Detail
"L" 42+02	--	39	143	R3-5R	60x36		16'	See Detail
"L" 42+02	--	53	144	R7-4LR	12x18	No Stopping or Standing	6'	band to light pole
"L" 42+30	--	57	145	R7-4LR	12x18	No Stopping or Standing	7'	
"L" 42+38	38.5	--	146	M6-1	21x9	North	--	Above M1-2(7)
"L" 42+54	5'	--	147	M1-2	24x24	Alaska 7	6'	
"L" 42+54	5'	--	148	R9-5	12x18	No Pedestrian Crossing	6'	band to P-2
"L" 42+54	--	4	149	R4-8R	24x30	Keep Right	--	Above W14-6 -- band to P-2
"L" 42+54	--	4	150	W14-6	18x18	9 Button	4'	band to P-2
"L" 42+69	--	39.5	151	R3-5L	60x36		16'	See Detail
"L" 42+69	--	39.5	152	W12-1	24x24		--	Cover left arrow-temp.
"L" 42+75	--	38.5	153	W14-6	18x18	9 Button	4'	
"L" 42+75	--	38.5	154	R6-1L	36x12	One Way	6'	band to P-3
"L" 42+75	--	38.5	155	R6-1R	36x12	One Way	6'	band to P-3
"L" 42+75	--	38.5	156	R9-5	12x18	No Pedestrian Crossing	7'	band to P-3
"S" 0+05	29'	--	157	W1-6(L)	48x24		7'	
"S" 0+38	6'	--	158	R3-5L	30x36	only	16'	On Mast Arm P-3
"S" 0+60	--	31	159	R1-2	36x36x36	Yield	6'	
"S" 0+63	--	34	160	R5-1	24x24	Do Not Enter	--	b. to b. / R1-2
"S" 0+77	--	27	161	W1-6(L)	48x24		5'	
"S" 0+85	44	--	162	W1-6(R)	48x24		5'	
"S" 1+00	35	--	163	W14-6	18x18	9 Button	4'	
"S" 1+00	--	26	164	D-1	72x36	Downtown Auk Bay Future	7'	By Others
"S" 1+26	--	26	165	R7-4LR	12x18	No Stopping or Standing	7'	
"S" 1+46	--	52.5	166	W5-1	30x30	Road Narrows	7'	
"S" 1+50	--	16	167	W5-2	30x30	Narrow Bridge	7'	
"S" 2+00	--	52.5	168	R7-4LR	12x18	No Stopping or Standing	7'	
"S" 2+18	--	15	169	R2-1	24x30	Speed Limit 25	7'	band to light pole
"S" 2+50	--	25	170	W1-1L	30x30		--	Above W13-1

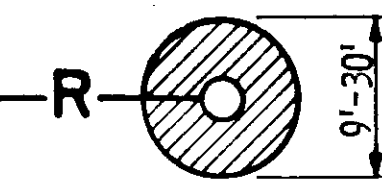
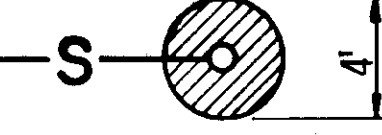
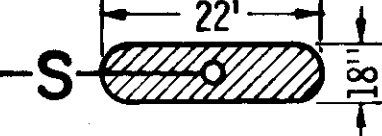
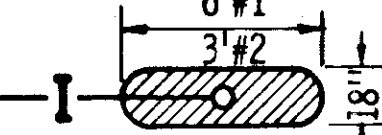
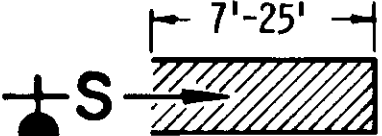

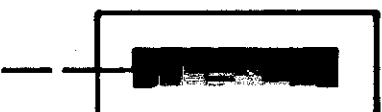
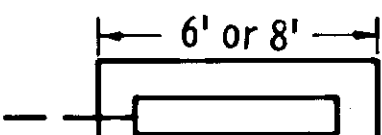
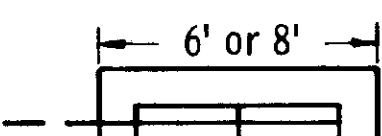




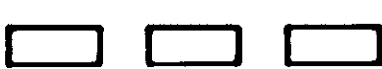
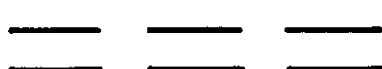

Signing Schedule







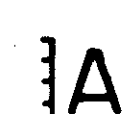
Station	Left	Right	No.	Type	Size	Legend	Ht.	Remarks
10s" 2+50	--	25'	171	W13-1	18x18	10 MPH	4'	
10s" 3+00	--	16'	172	---	*	Gastineau Channel	5'	*Use Existing Sign
10s" 3+50	--	10+	173	W14-7	6'x'5"	3 Button	4'	In Line/ curb of bridge
10N" 0+54	22	--	174	R9-7	9x12	Push Button for Walk Signal	4'	band to P-1 above D-11
10N" 0+54	--	25.5	175	R9-7	9x12	Push Button for Walk Signal	4'	band to P-4 above D-12
10N" 0+80	20	--	176	M1-2	24x24	Alaska 7	--	Above M4-1
10N" 0+80	--	21.5	177	M4-1(R)	21x15		7'	
10N" 0+80	--	179	178	M6-1	21x9	South	--	Above M1-2(7)
10N" 2+80+	20	--	180	M1-2	24x24	Alaska 7	7'	
10s" 0+53	36	--	181	M3-1R	21x15		7'	Above M3-1(r)
10N" 0+54	22	--	182	D-3	30x8	Outer Drive	--	On top of P-6 Detailed
10N" 0+54	22	--	183	D-3	30x8	10th Street	--	On top of P-6 Detailed
10N" 0+54	22	--	184	D-3	30x8	Outer Drive	--	On top of P-1 Detailed
10N" 0+54	22	--	185	D-3	30x8	10th Street	--	On top of P-1 Detailed
10N" 1+10	19.5	--	186	R7-1L	12x18	No Parking Anytime	7'	
10N" 1+10	--	19.5	197	R7-1R	12x18	No Parking Anytime	7'	
10S" 0+85	--	20'	188	R7-1LR	12x18	No Parking Anytime	7'	band to light pole
10S" 2+00	31.5	--	189	R7-1LR	12x18	No Parking Anytime	7'	

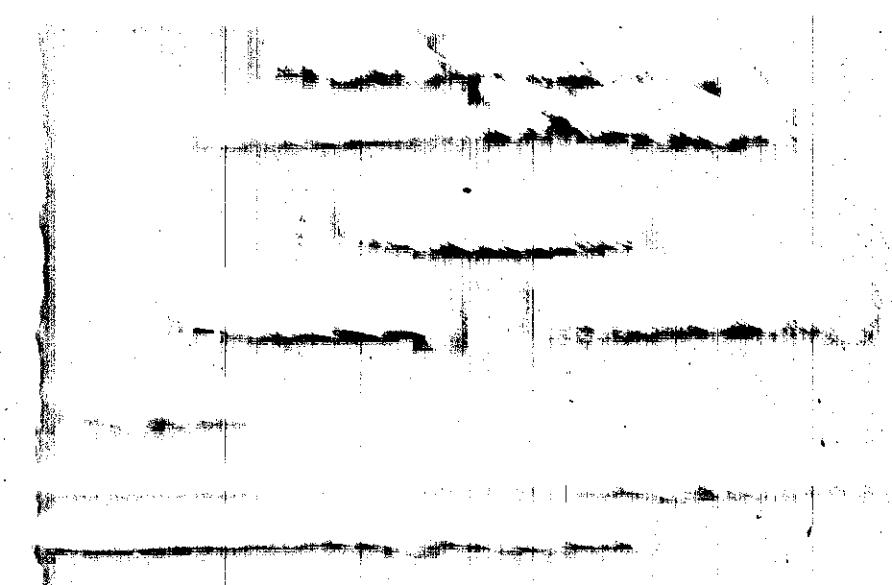
Match Line Sta 40+00

TRAFFIC SIGNAL SYMBOLS

-  SIGNAL FACE (VEHICULAR)
-  SIGNAL FACE WITH BACKPLATE
-  SIGNAL FACE (PEDES. "WALK" - "DON'T WALK")
-  POST MOUNTED SIGNAL HEAD WITH SIGN
-  STOP LINE
-  LANE USE
-  TYPE A BASE
-  TYPE B BASE
-  TYPE C BASE
-  TYPE D BASE
-  CONTROLLER (TYPE C OR D CONCRETE BASE)
-  CONCRETE HANDHOLE
-  JUNCTION BOX
-  CONCRETE HAND HOLE (SEWER PIPE DRAIN)
-  SPAN WIRE WITH SIGNAL HEAD
-  MAST ARM WITH SIGNAL HEAD
-  MAST ARM WITH SIGNAL HEADS
-  MAST ARM WITH OVERHEAD SIGN

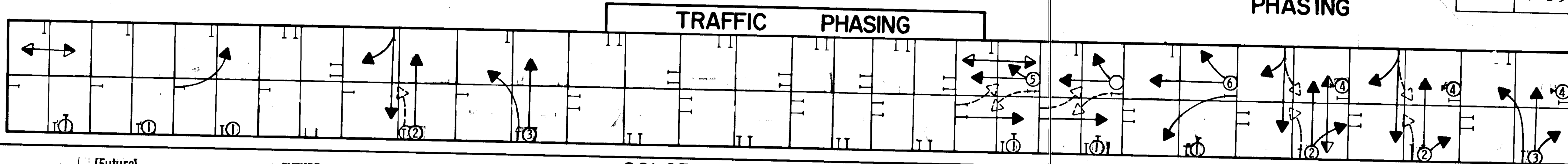
-  -R MAST ARM WITH RADAR DETECTOR
-  -S MAST ARM WITH ULTRA-SONIC DETECTOR (NARROW)
-  -S MAST ARM WITH ULTRA-SONIC DETECTOR (EXTENDED)
-  -I MAST ARM WITH INFRA-RED DETECTOR NO'S. 1 & 2
-  +S SIDE FIRE ULTRA-SONIC DETECTOR
- +I SIDE FIRE INFRA-RED DETECTOR NO'S. 1 & 2
-  NON-COMP MAG. DET. (IN ALUMINUM COND.)
-  COMP. MAG. DETECTOR (IN CONCRETE BASE)
-  PRES.-SENS. DET. DIR. (IN CONCRETE BASE)
-  PRES.-SENS. DET. NON-DIR. (IN CONCRETE BASE)
-  INDUCTION LOOP DETECTOR
-  PUSH BUTTON DETECTOR
-  SERVICE POLE AND POWER SUPPLY
-  RIGID STEEL CONDUIT (IN TRENCH)
-  RIGID STEEL CONDUIT (PUSHED)
-  ALUMINUM CONDUIT (IN TRENCH)
-  ALUMINUM CONDUIT (PUSHED)
- 3" - Cond.** SIZE OF CONDUIT

- 3-2c. #12** NUMBER AND SIZE OF CABLE
-  SIGNAL FACE NUMBER
-  POST NUMBER
-  DETECTOR NUMBER
-  HANDHOLE NUMBER
- R** RED
- A** AMBER
- G** CIRCULAR GREEN
- S** GREEN STRAIGHT AHEAD ARROW
- L** GREEN LEFT ARROW
- RT.** GREEN RIGHT ARROW
- D.L.** DOWN LIGHT
-  12 INCH LENS
-  TUNNEL VISOR (___" FOR 8" LENS) (___" FOR 12" LENS)
-  TUNNEL VISOR WITH LOUVERS (TYPE...)
- |R-A-G|** ALL INDICATIONS - TUNNEL VISORS
- }R-A{-L}** SPECIFIC INDICATIONS SHIELDED



SIGNALIZATION PHASING

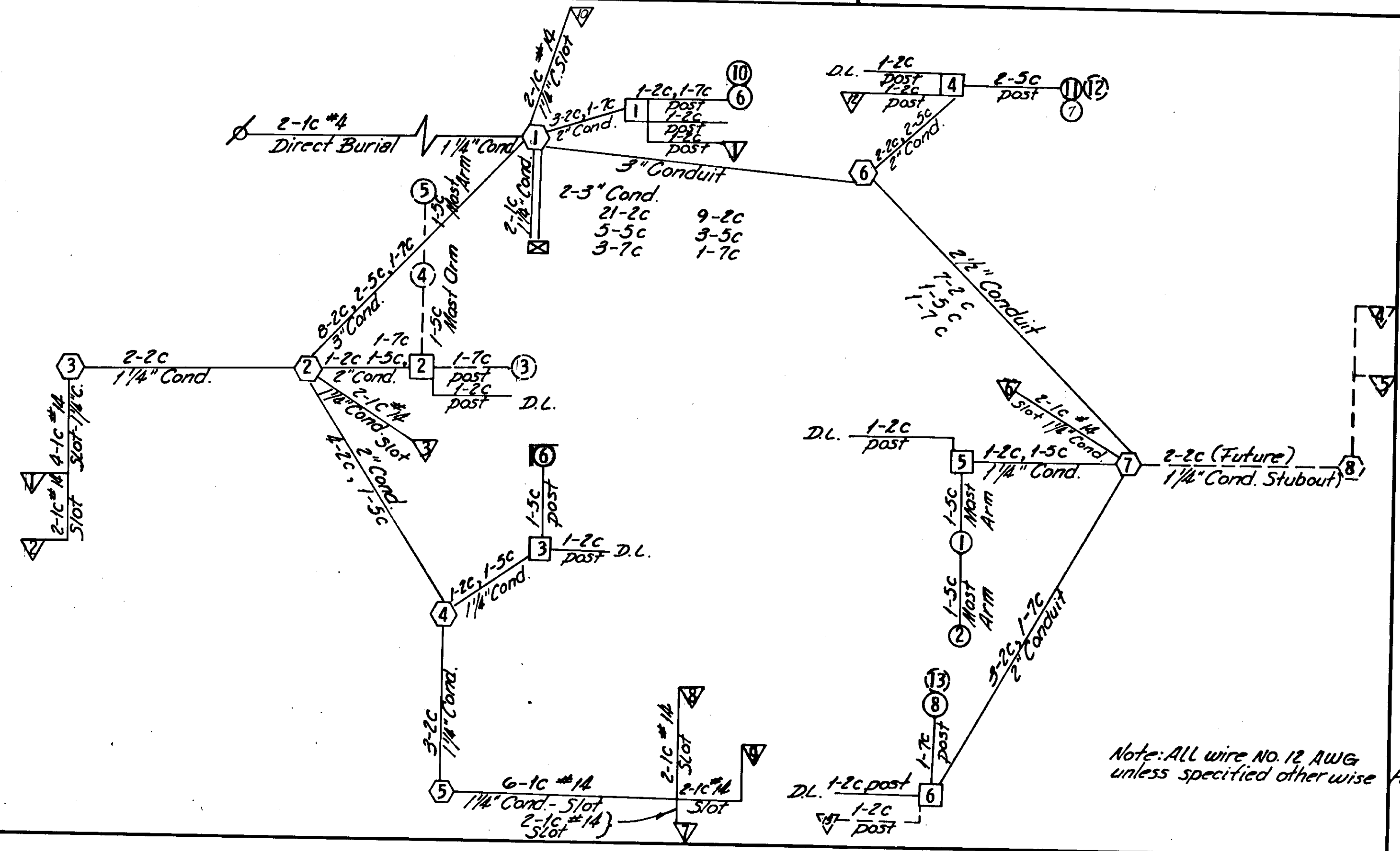
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	F-095-8(13)	1967	43	73



COLOR SEQUENCE

APPROACH	PHASE	FACE NO.	FUTURE												COLOR SEQUENCE												
			φ A PEDES.		φ A		φ B		φ C PEDES.		φ C		φ D		φ A (PEDEST)		φ A		φ B		φ C (PEDEST)		φ C		φ D		
			R/W	CLEAR TO	R/W	CLEAR TO	R/W	CLEAR TO	R/W	CLEAR TO	R/W	CLEAR TO	R/W	CLEAR TO	R/W	CLEAR TO	R/W	CLEAR TO	R/W	CLEAR TO	R/W	CLEAR TO	R/W	CLEAR TO	R/W	CLEAR TO	Face No.
SOUTHEAST BOUND OUTER DRIVE	Ap	12	R	R			L	Y					R	R	R	R	R	R	R	R	R	R	R	R	R	R	12
Pedestrians	Ap	11	W	FWD			DW	DW					DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	11
NORTHWEST BOUND OUTER DRIVE	Fut	3																									3
Pedestrians	Fut	10	W	FWD			DW	DW					DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	10
NORTHEAST BOUND TENTH ST.	Cv	6	R	R			R	R					G	G	Y	GL	G	Y									6
Pedestrians	Fut	12																									12
SOUTHWEST BOUND TENTH ST.	Cv	8	R	R			R	R					G	Y	Y	R	R	R									8
Pedestrians	Fut	13																									13

WIRING DIAGRAM

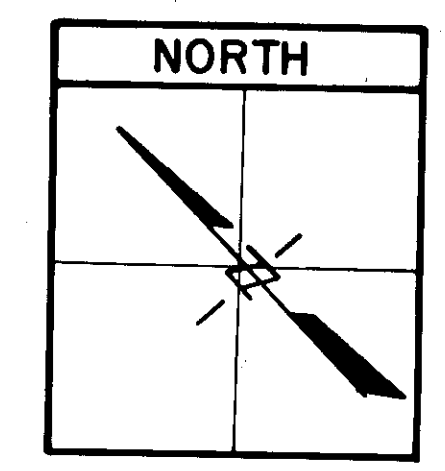


Note: ALL wire NO. 12 AWG unless specified otherwise

NOTE: φ B Association changes from initial to ultimate operation signal indication

LEGEND

- ▶ Actuated Vehicular Movement
- ▶ Partially Restricted Vehicular Movement
- ▶ Actuated Pedestrian Movement
- ⊙ Detector Switched (Function No. T)
- ⊖ Right of Way Interval
- ⊘ Traffic Phase
- R Red
- Y Yellow
- G Circular Green
- L Green Left Arrow



φ	Initial Portion			Unit Exp. Poss. Time	Reduction Time	Min. Gap	Exten. Limit Max.	Clearance
	Min	No. Act.	Var					
A ped.	7	-	-	-	-	-	-	7
A	12*	16	20	4.5*	40.0*	2.0	60.0	4.0*
B	7	-	0	-	-	-	30.0	3.0
C ped.	7*	-	-	-	-	-	-	17*
C	9	-	0	-	-	-	30.0	4.0
D	7	-	0	-	-	-	30.0	3.0

* For Initial Operation - Set to Zero

FLASHING OPERATIONS

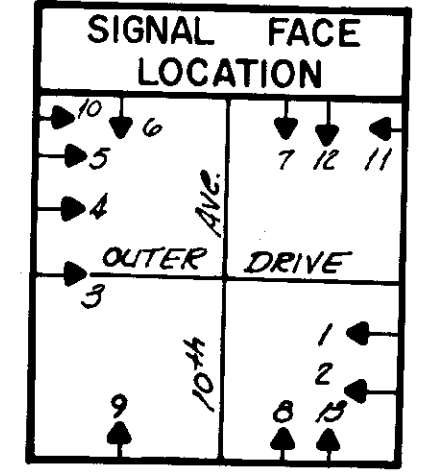
All Approaches FR

CONTROLLER TYPE

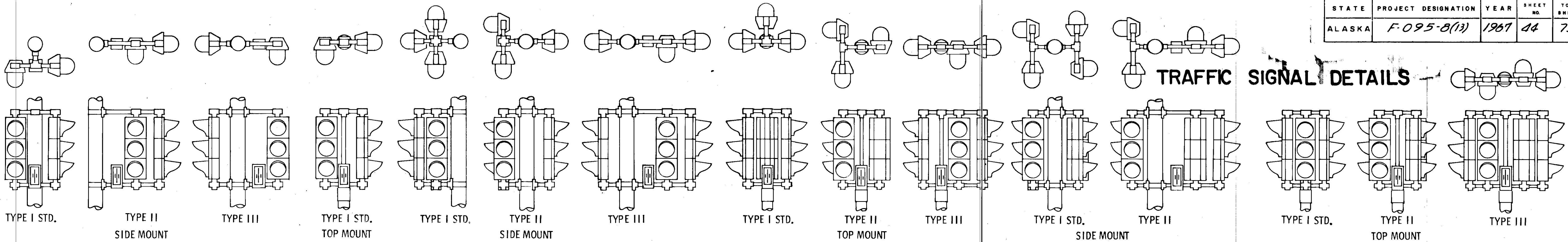
F-4M

DETECTOR SWITCHING

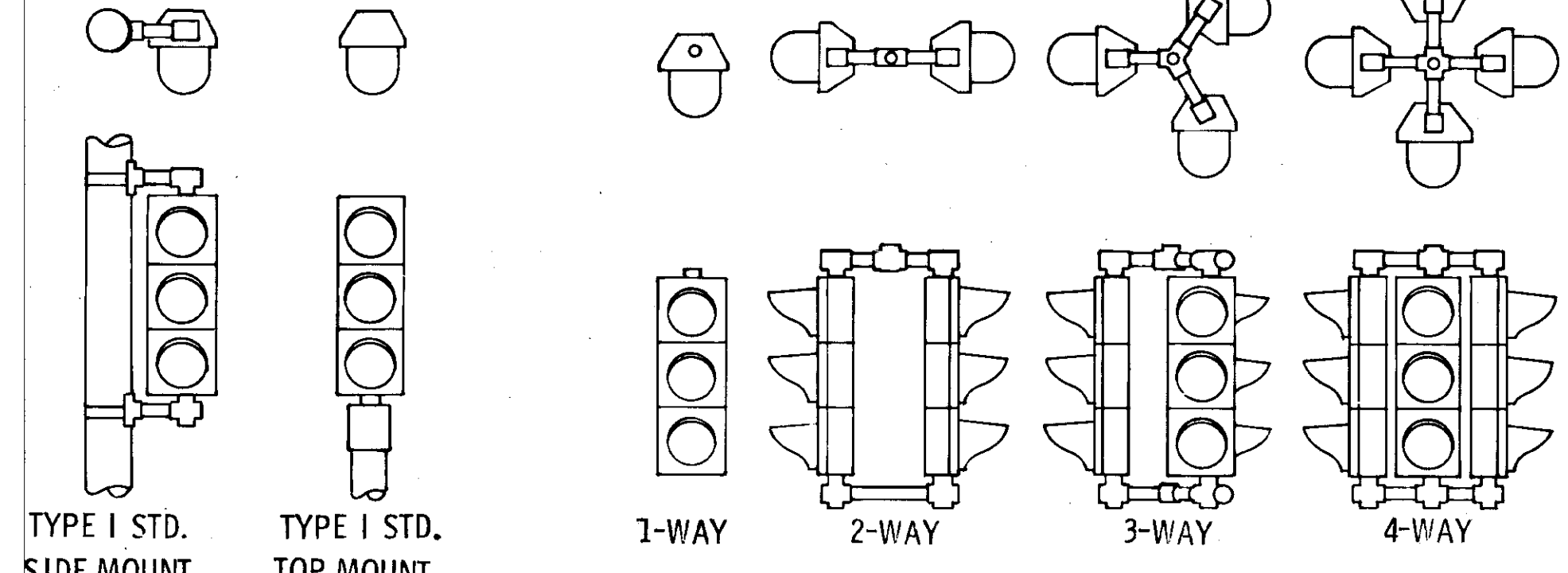
- 1 Calls for φ C
- 2 Extends φ C, disconnects on φ D actuation
- 3 Extends φ D, disconnects on φ C actuation
- 4 Calls for φ A
- 5 Extends φ A, disconnects on φ B actuation
- 6 Extends φ B, disconnects on φ A actuation



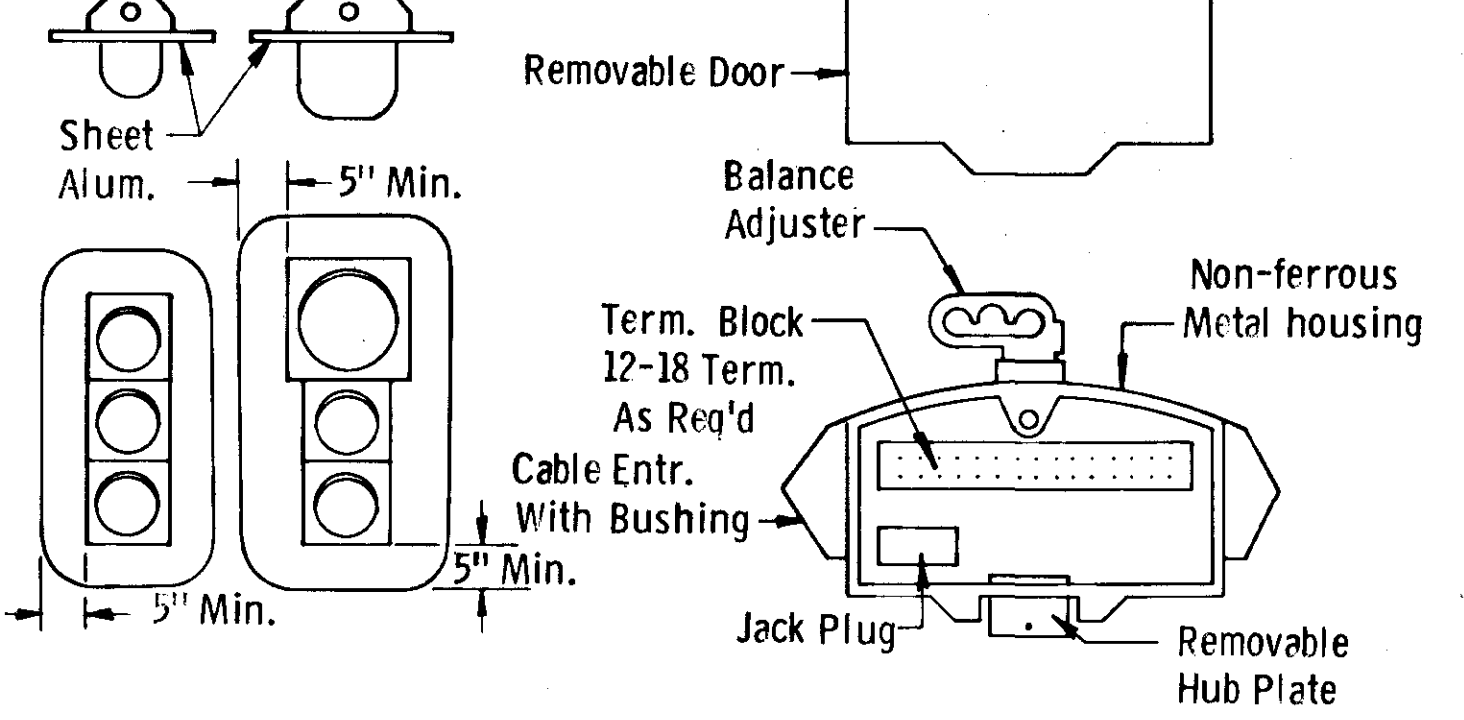
TRAFFIC SIGNAL DETAILS



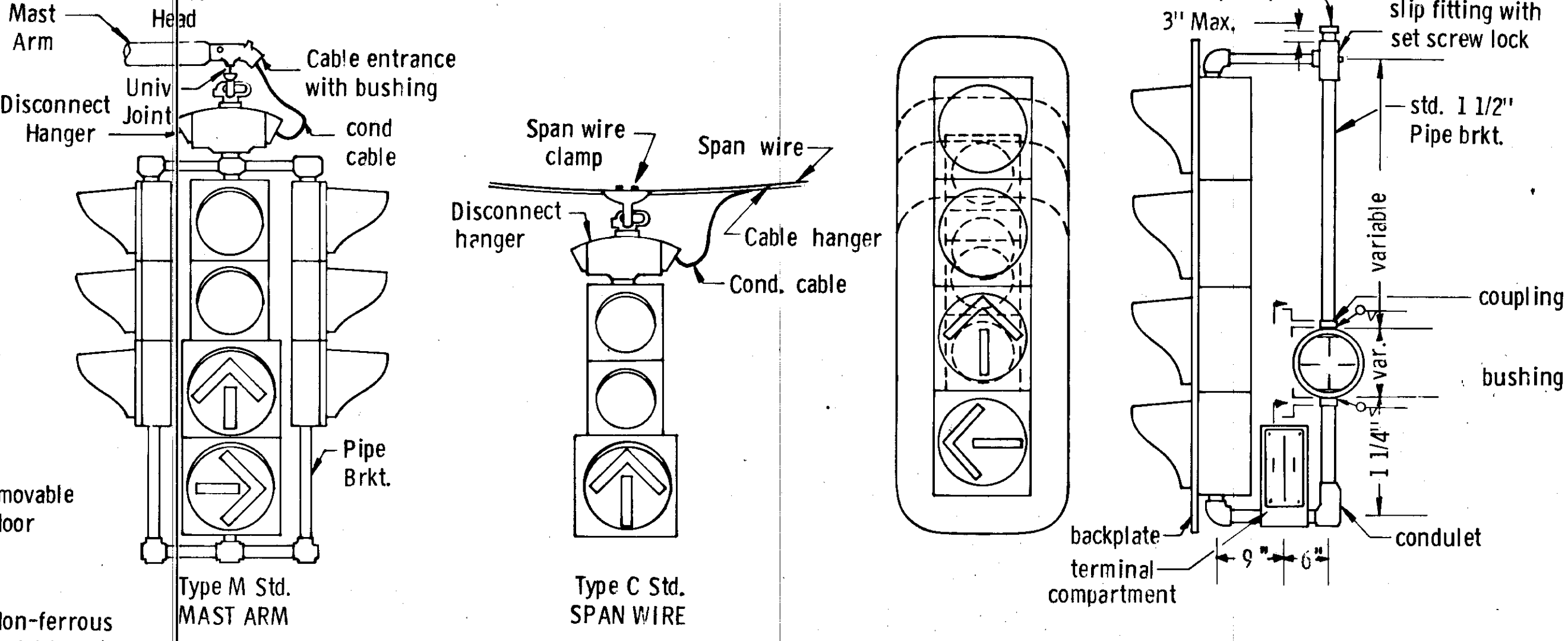
TWO WAY BRACKETS



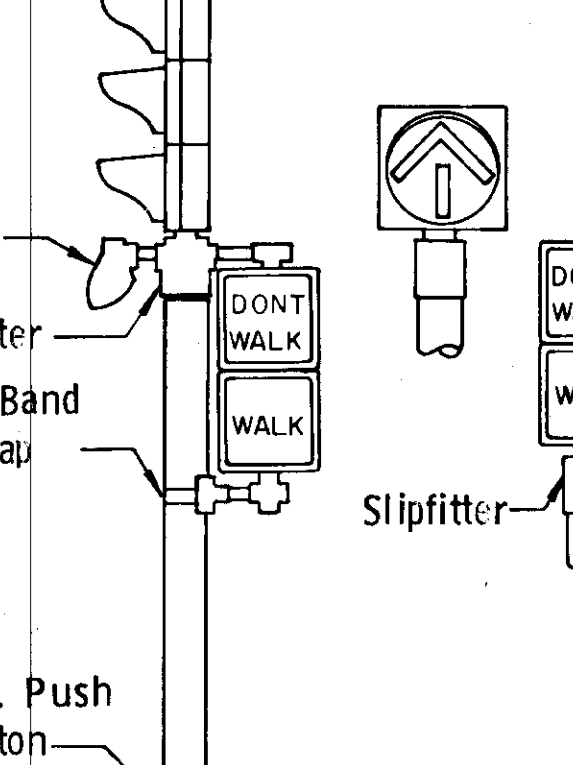
THREE WAY BRACKETS



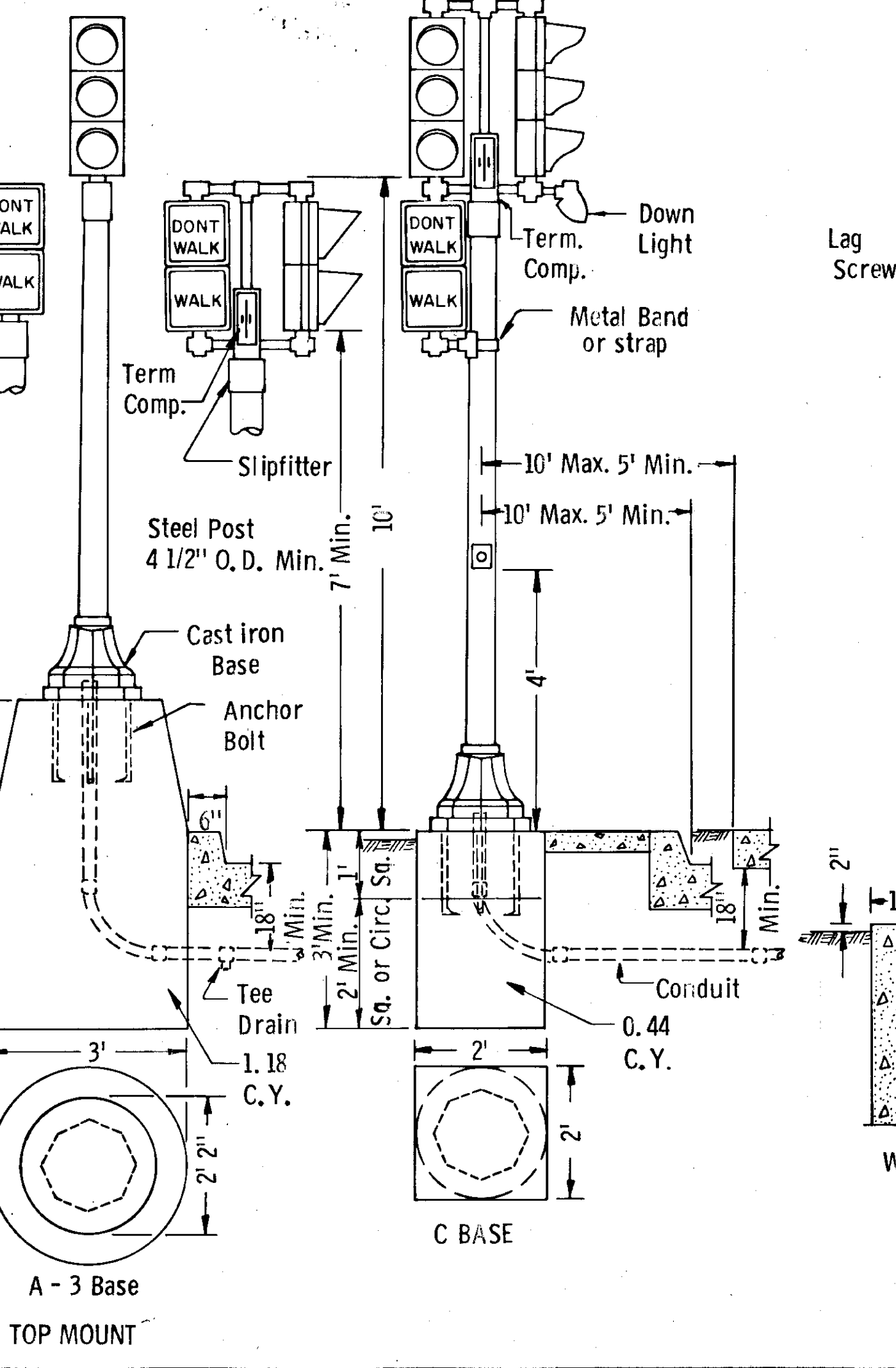
FOUR WAY BRACKETS



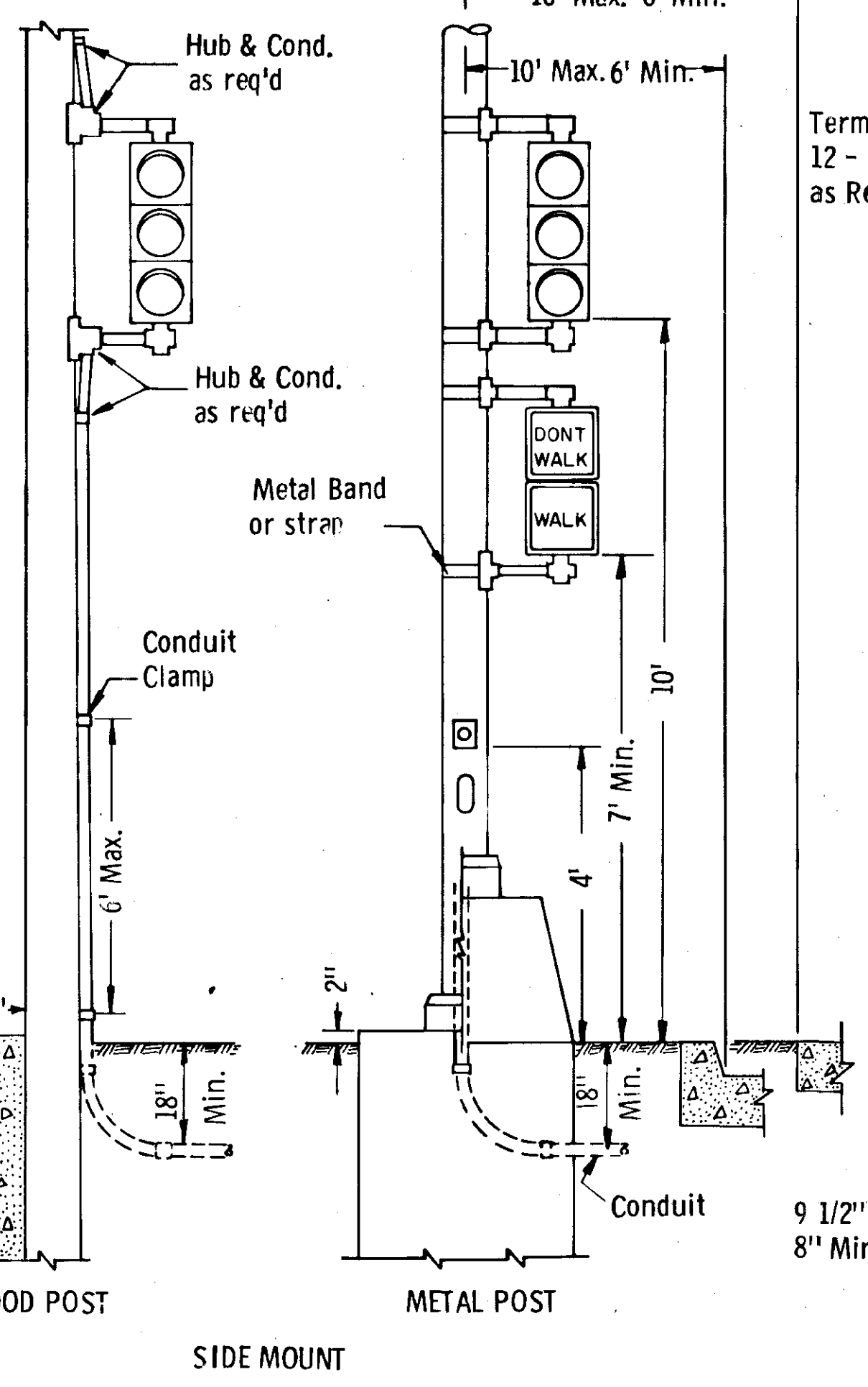
ONE WAY BRACKETS



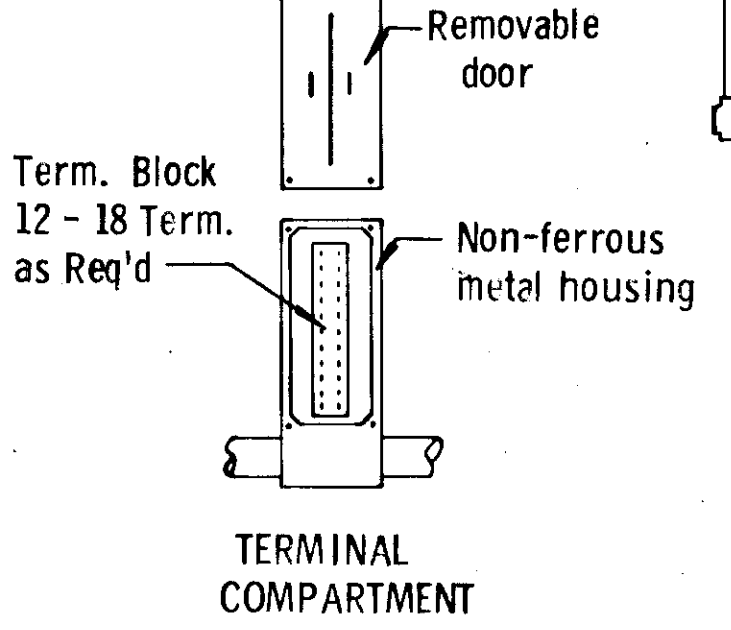
OVERHEAD BRACKETS



BACKPLATES



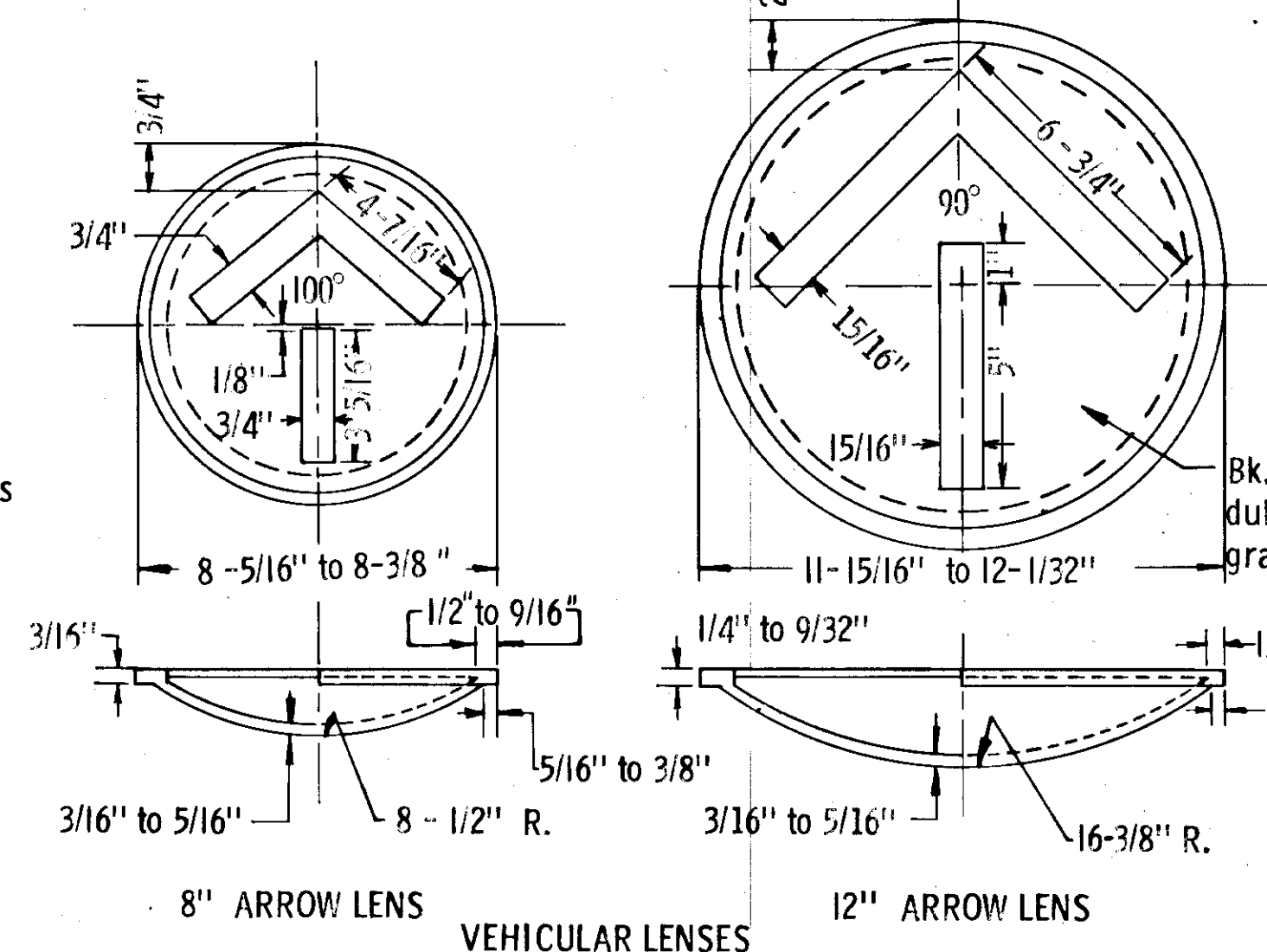
DISCONNECT HANGER



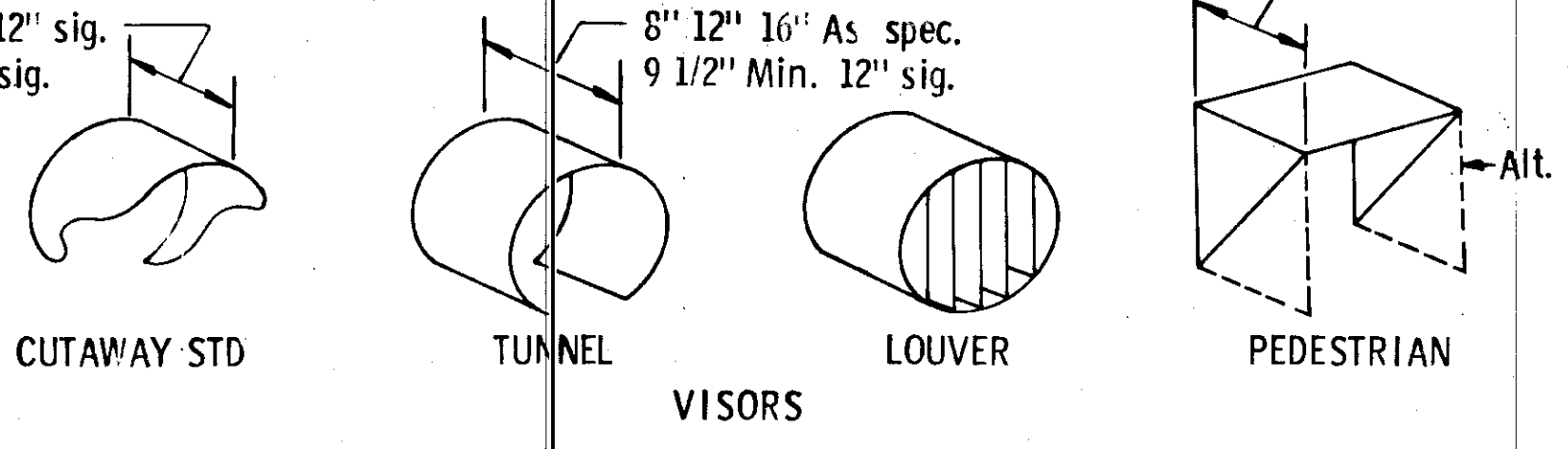
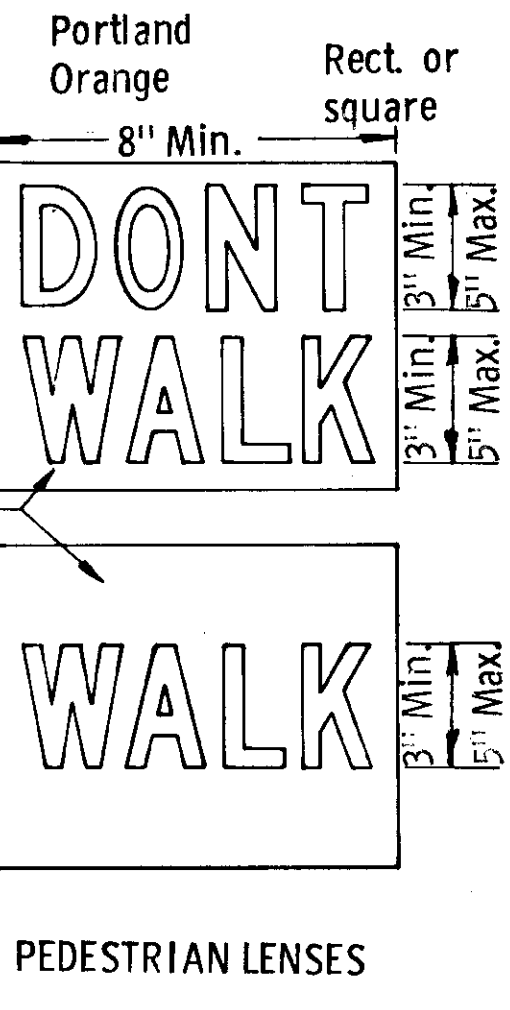
NOTES:

- One-half inch pre-moulded bituminous joints are required between concrete bases and adjacent concrete paved surfaces.
- All post wire outlets to be equipped with bushings.
- Post and base to be grounded with No. 6 A.W.G. bare copper wire from conduit with clamp to anchor bolt with a single wrap below anchor nuts.
- Leads from pedestrian signal lamps are connected to the signal head terminal compartment.
- One way mounted signals will not have external terminal compartment.

OVERHEAD SUSPENSION



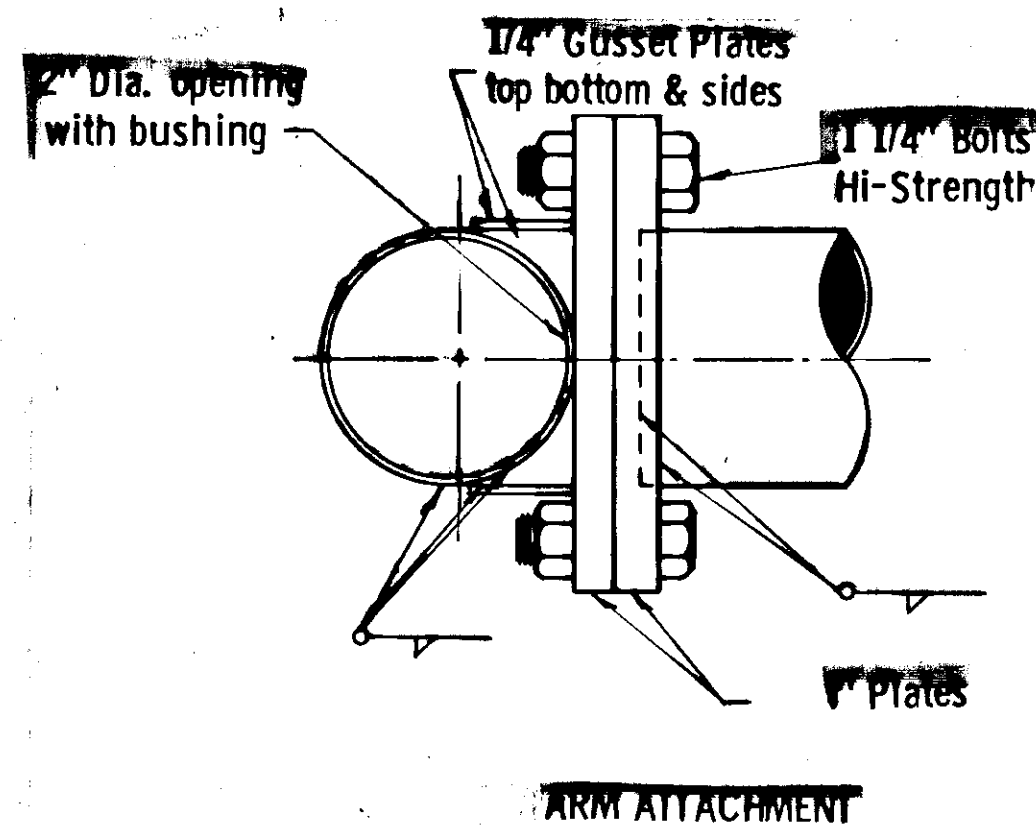
VEHICULAR LENSES



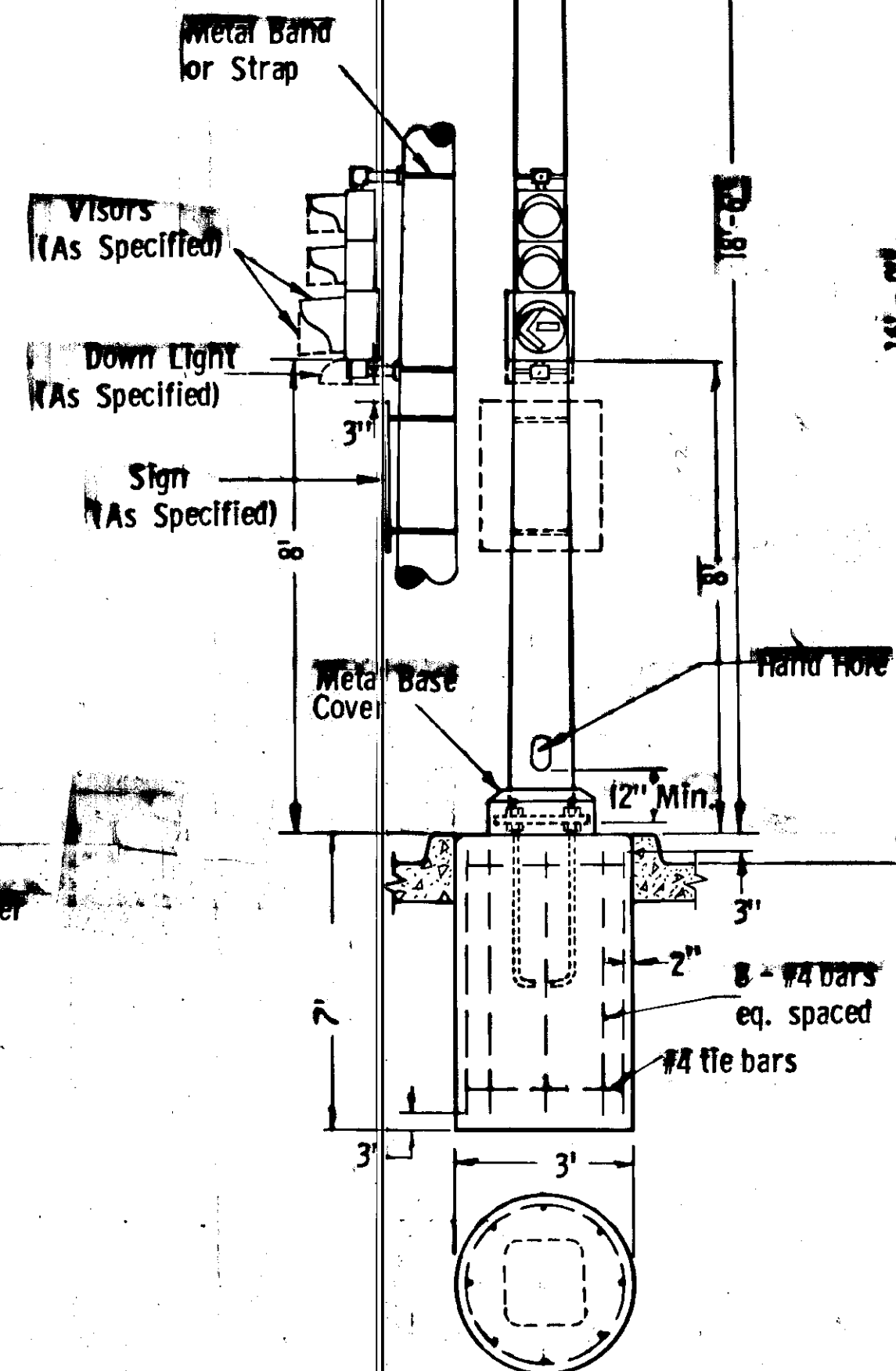
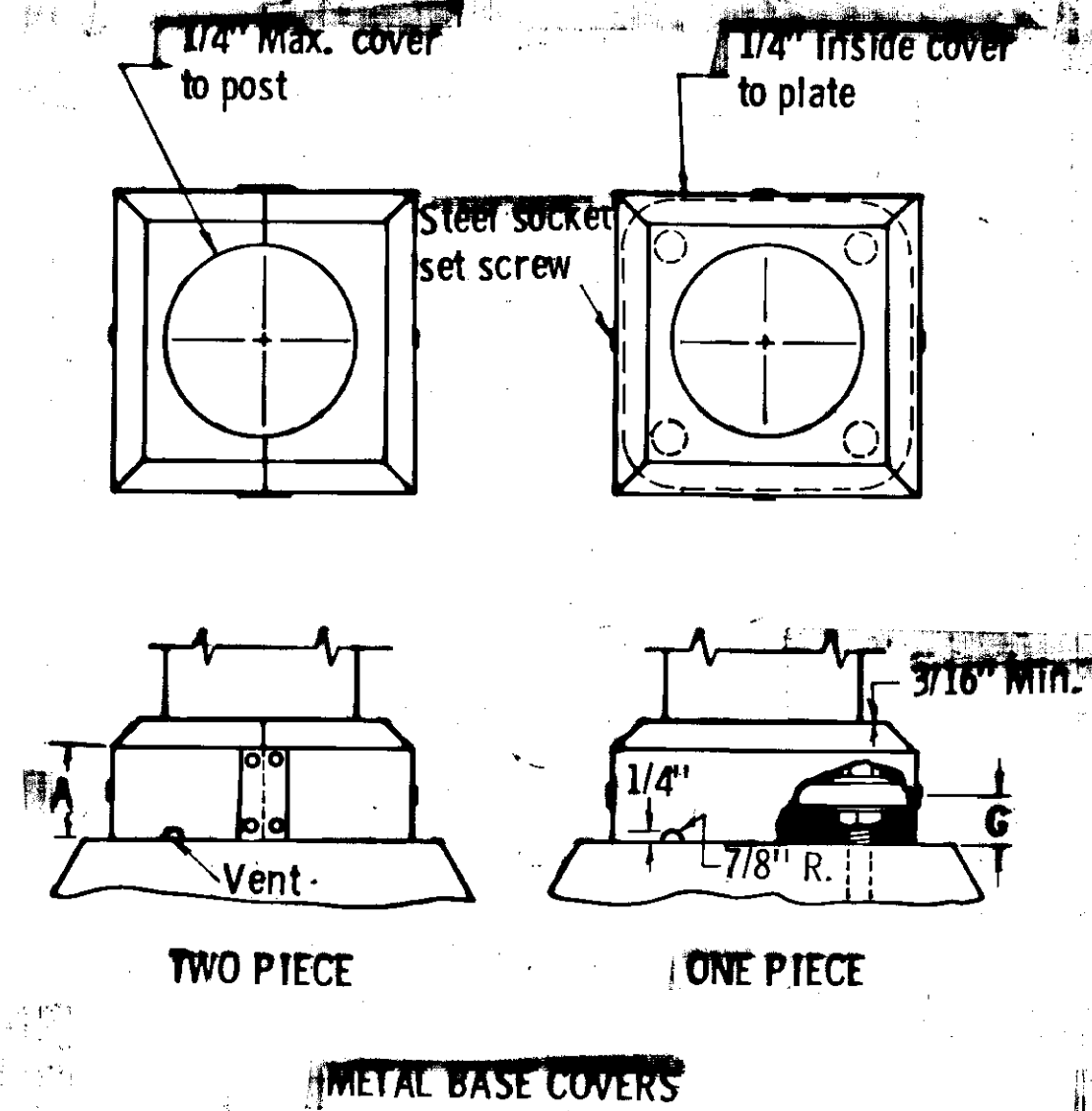
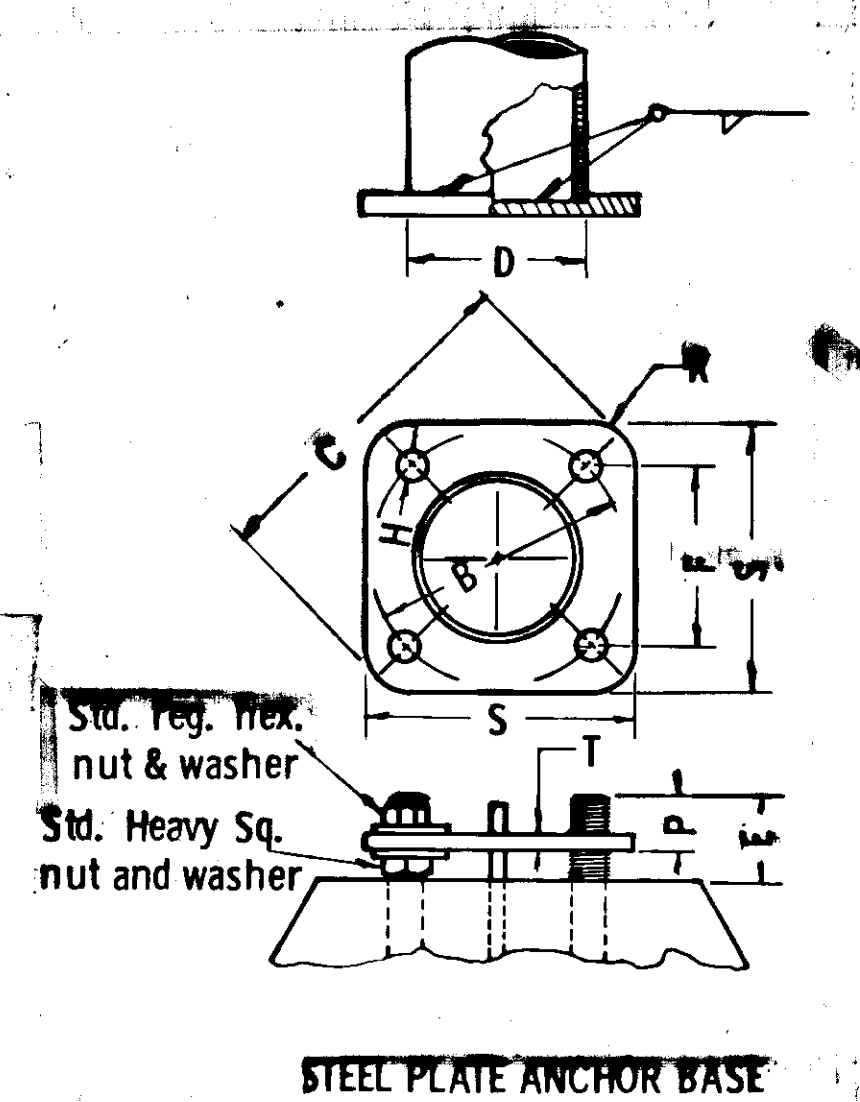
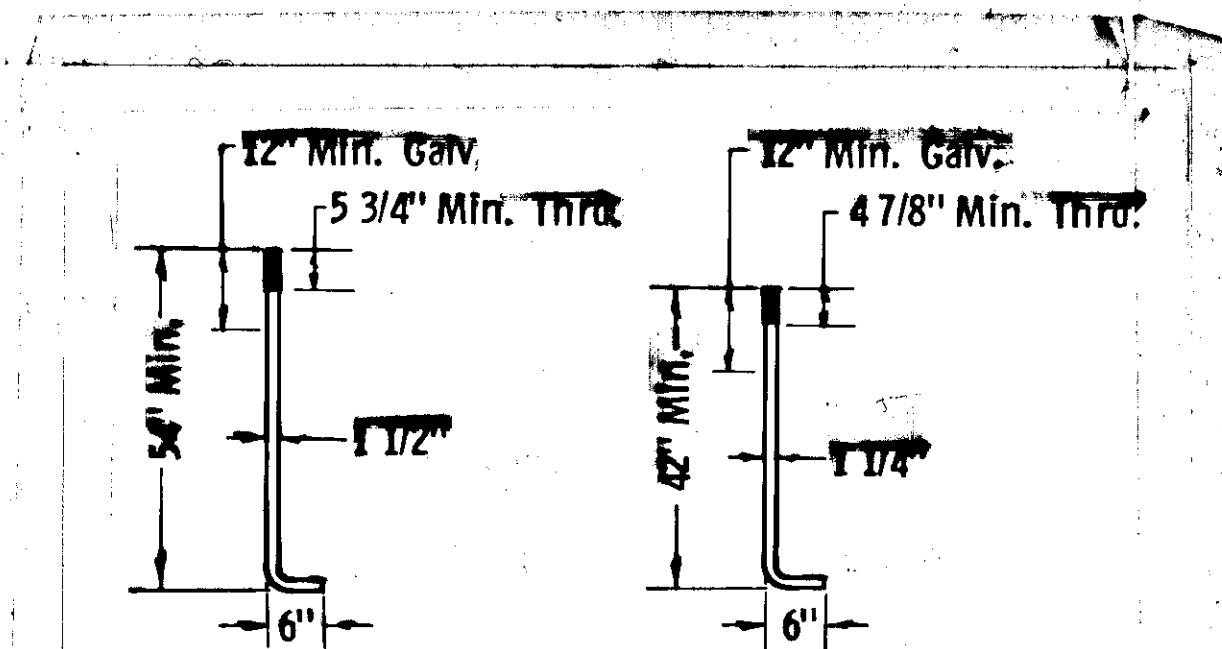
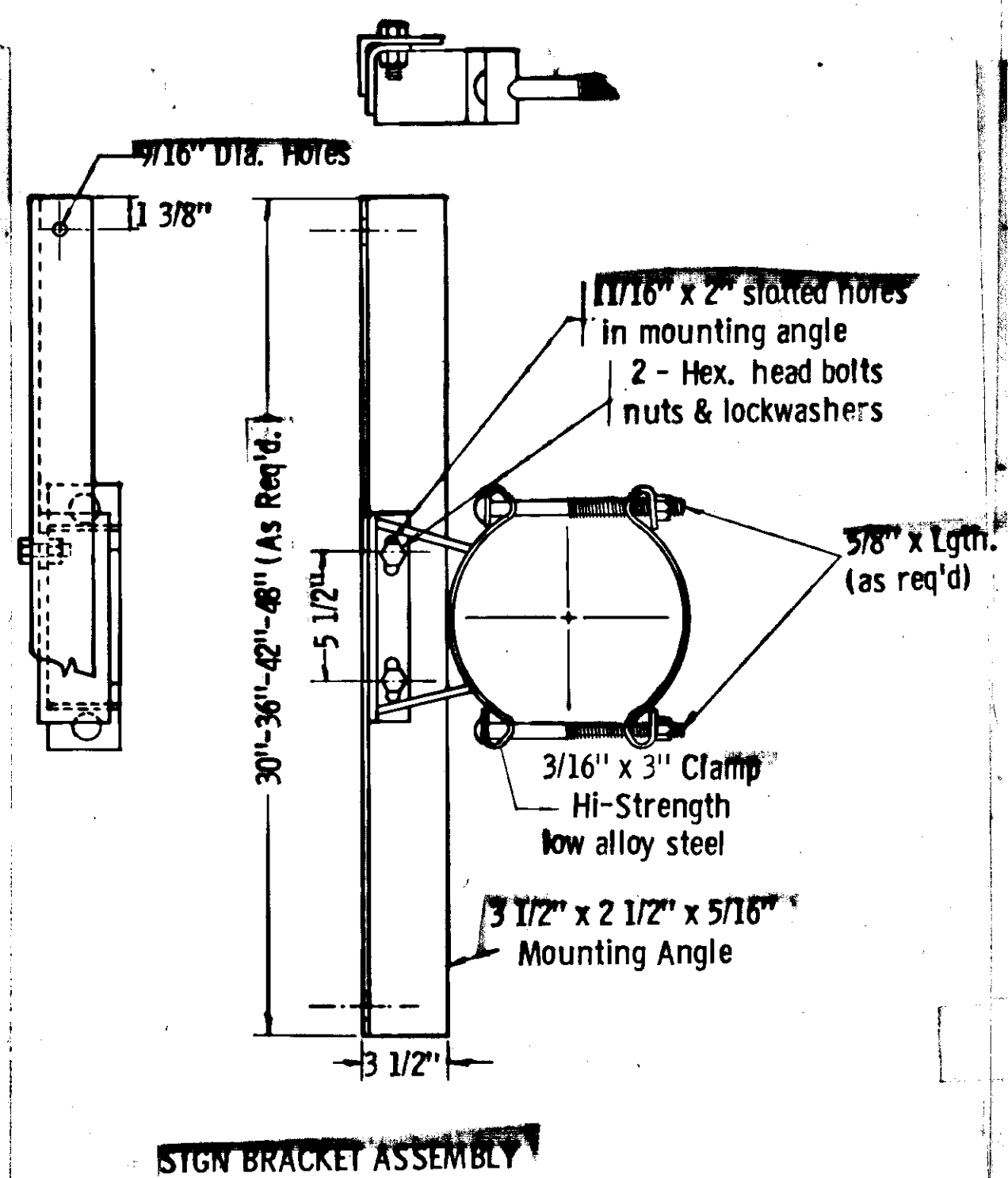
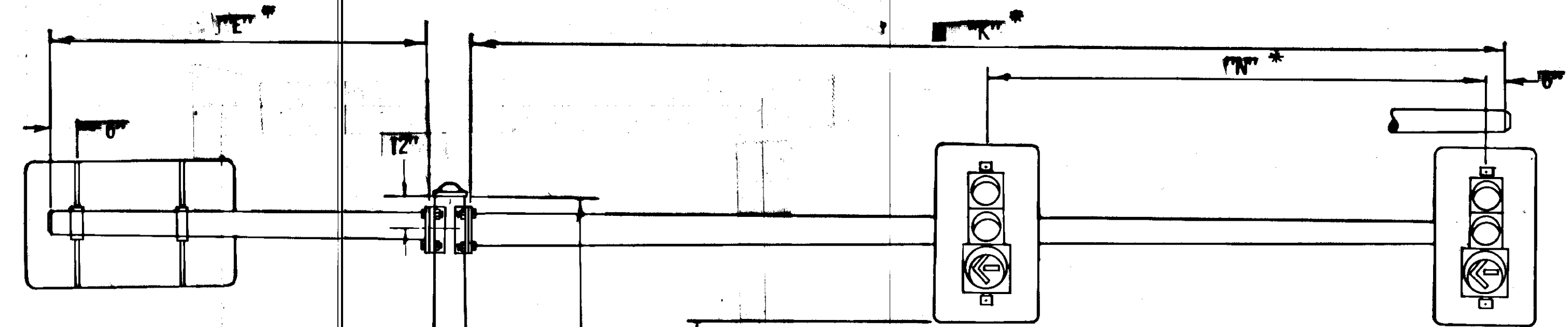
TRAFFIC SIGNAL DETAILS

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	F-095-813	1987	45	73

REVISIONS		
No.	Date	Description



* SEE SHEET #41 FOR THESE DIMENSIONS

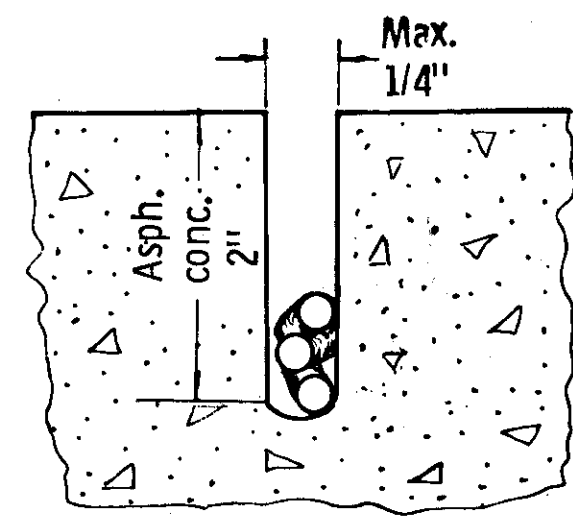
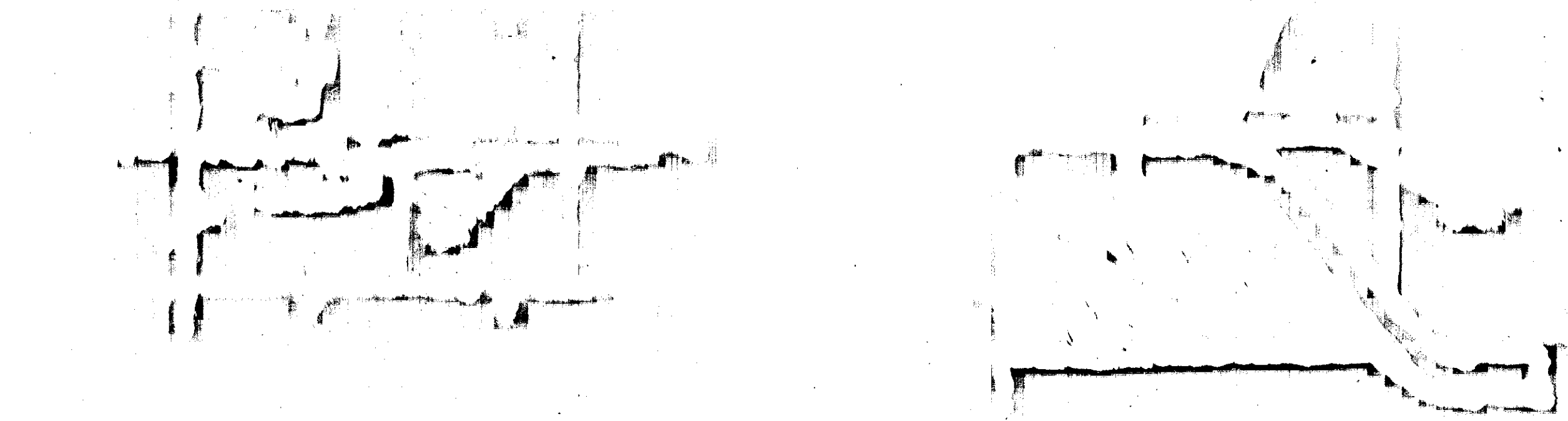


- NOTES:**
1. Post shall have removable top and arms to be equipped with end plates.
 2. Arms to be raked up 0.25° per foot.
 3. When post is to be equipped with two arms, both arms shall be of the size required for the longer arm.
 4. Handhole to be approximately 4" x 6.5" with reinforced frame and cover.
 5. 0" to 6" variation in base height is for obtaining 16' - 0" clearance 0.13 c. y. conc. and 3 lbs. reinforcing steel per 6".
 6. Base quantity is 1.70 c. y. conc. and 47 lbs. reinforcing steel.
 7. When a sign exceeds 48" in length two (2) sign brackets are required.

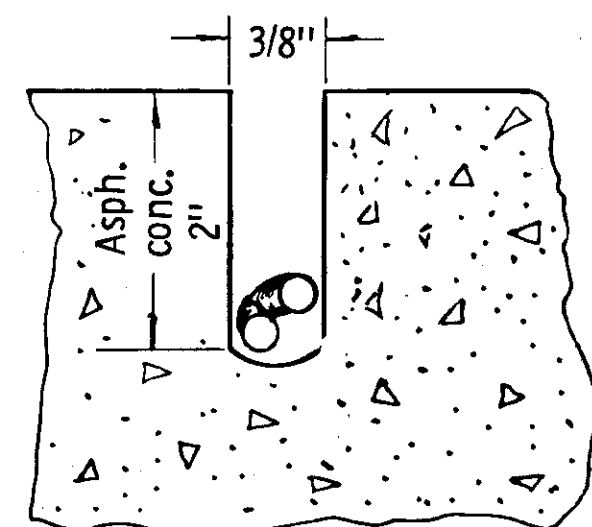
ARM LENGTH	ARM SIZE	POST SIZE
6' - 10'	4" STANDARD PIPE	7 GA. 9" X 6.69" X 16' - 6"
11' - 12'	6" STANDARD PIPE	7 GA. 9" X 6.69" X 16' - 6"
13' - 20'	7 GA. 7.5" X 0.14" TAPER PER FOOT	7 GA. 10" X 7.69" X 16' - 6"
21' - 23'	7 GA. 8.3" X 0.14" TAPER PER FOOT	7 GA. 11" X 8.69" X 16' - 6"
24' - 25'	7 GA. 9.0" X 0.14" TAPER PER FOOT	7 GA. 12" X 9.69" X 16' - 6"

POST GA.	D	POST BASE PLATE										ANCHOR BOLTS		BASE COVER	
		B	C	H	F	P	R	S	T	E	DIA.	LGTH.	A	G	
7	9"	12 1/2"	15 3/4"	1 1/2"	8 7/8"	3"	2 3/4"	12 3/4"	1 1/4"	4 7/8"	1 1/4"	48"	4 7/8"	2 1/2"	
7	10"	13 1/2"	17 1/2"	1 3/4"	9 9/16"	3 1/2"	3 1/8"	14 1/8"	1 1/2"	5 3/4"	1 1/2"	60"	5 3/4"	3"	
7	11"	15"	19 1/8"	1 3/4"	10 5/8"	3 1/2"	3 1/2"	15 5/8"	1 1/2"	5 3/4"	1 1/2"	60"	5 3/4"	3"	
7	12"	16"	21"	1 3/4"	11 5/16"	3 1/2"	3 3/4"	17"	1 1/2"	5 3/4"	1 1/2"	60"	5 3/4"	3"	

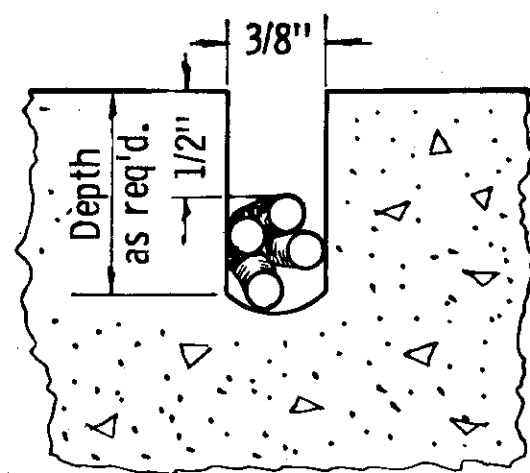
TRAFFIC SIGNAL DETAILS



Section A-A
LOOP SLOT



Section B-B
LEAD SLOT



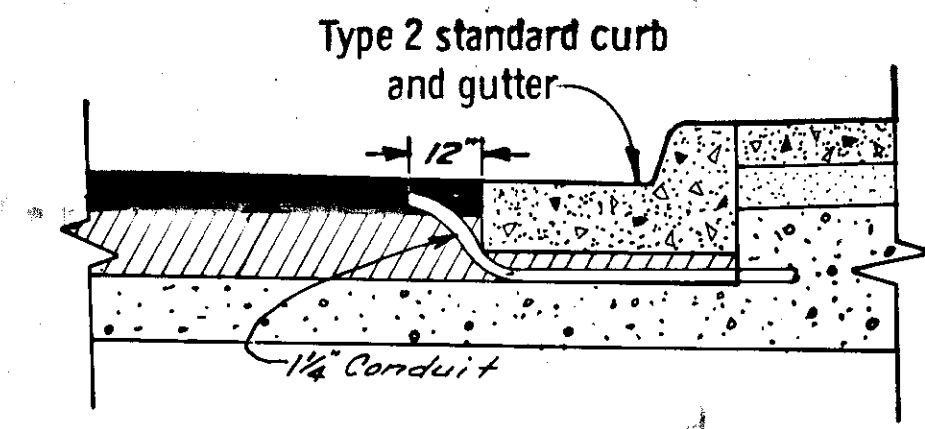
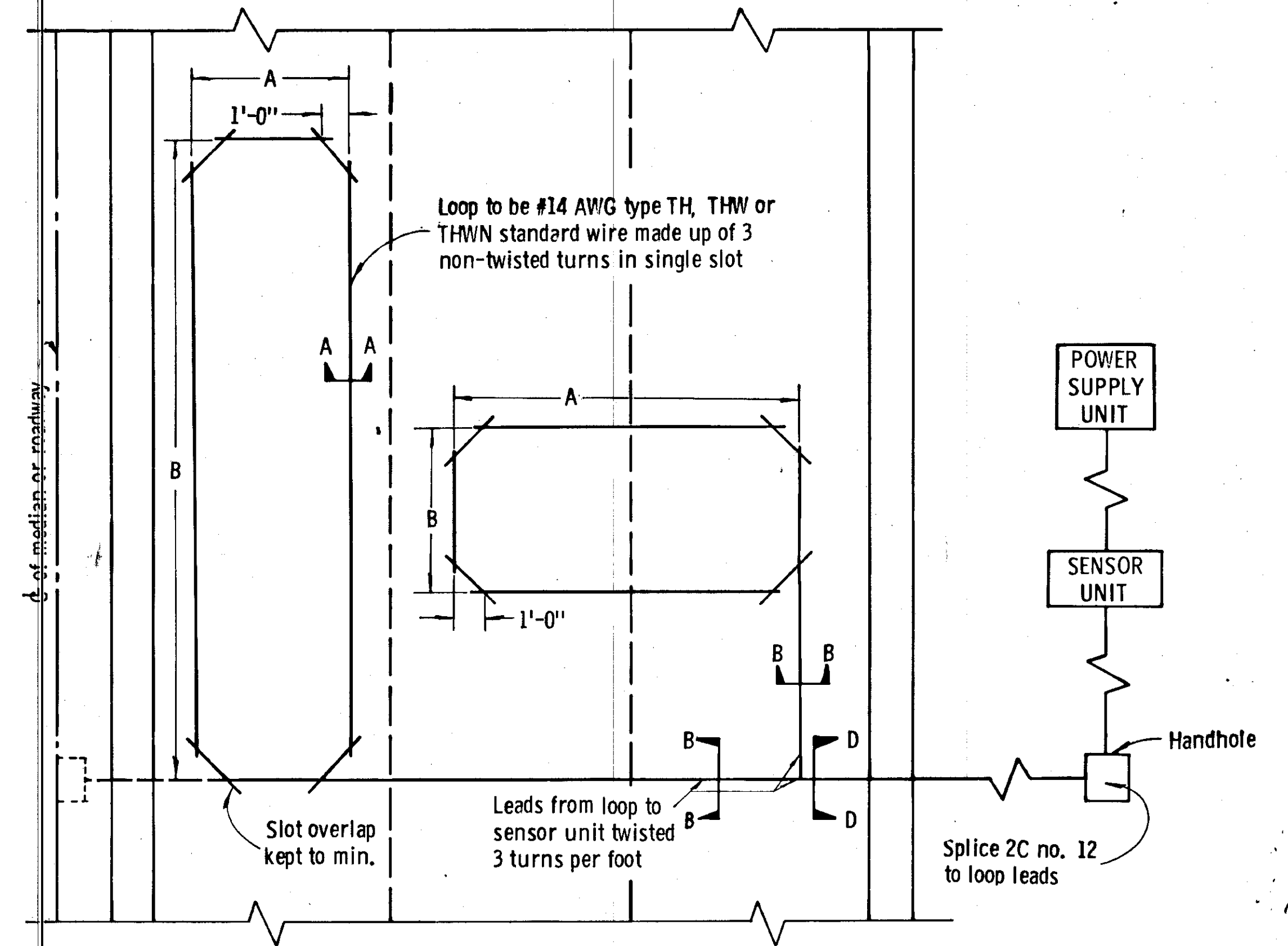
Section D-D
LEAD SLOT

INDUCTION LOOP NOTES:

1. Power supply & sensor unit to be housed in controller cabinet unless otherwise specified.
2. All loop & lead slots to be cut with power saw.
3. Slots in bituminous pavement to be filled with asphalt crack filler. See table below.

CAUTION:
Wire to be placed in loop with wooden device or any other such device which will not damage the wire insulation.

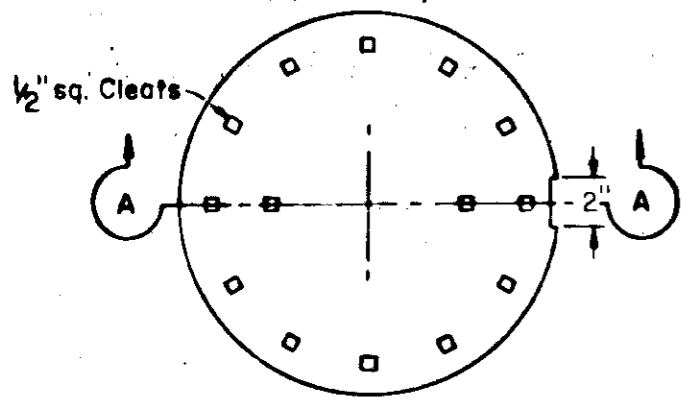
ASPHALT CRACK FILLER			
SAND	LIME DUST	CEMENT	MC-4 ASPHALT
20 Parts	5 Parts	1 Part	1.6 Parts
Part(s) shall be of volume measurement. Mix all dry ingredients thoroughly before adding asphalt type and grade of asphalt other than MC-4 may be substituted with approval of the engineer.			



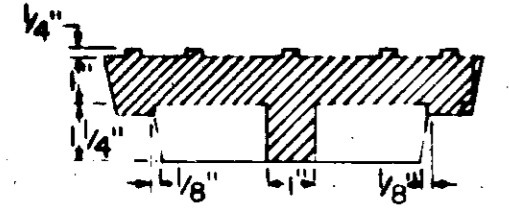
LOOP SLOT DETAIL FOR NEW HOT BITUMINOUS PAVEMENT CONSTRUCTION

STANDARD BRASS CAP MONUMENT & MONUMENT CASE

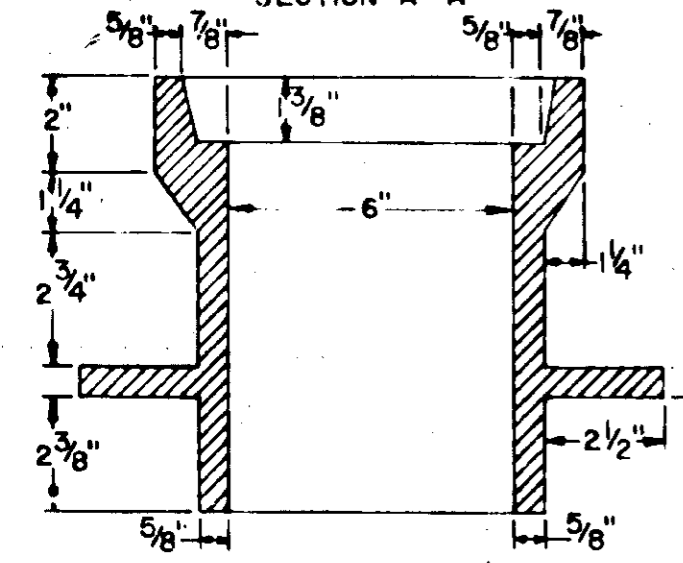
STATE	PROJECT DESIGNATION	SHEET NO	TOTAL SHEETS
ALASKA	F-095-8(5)	47	73



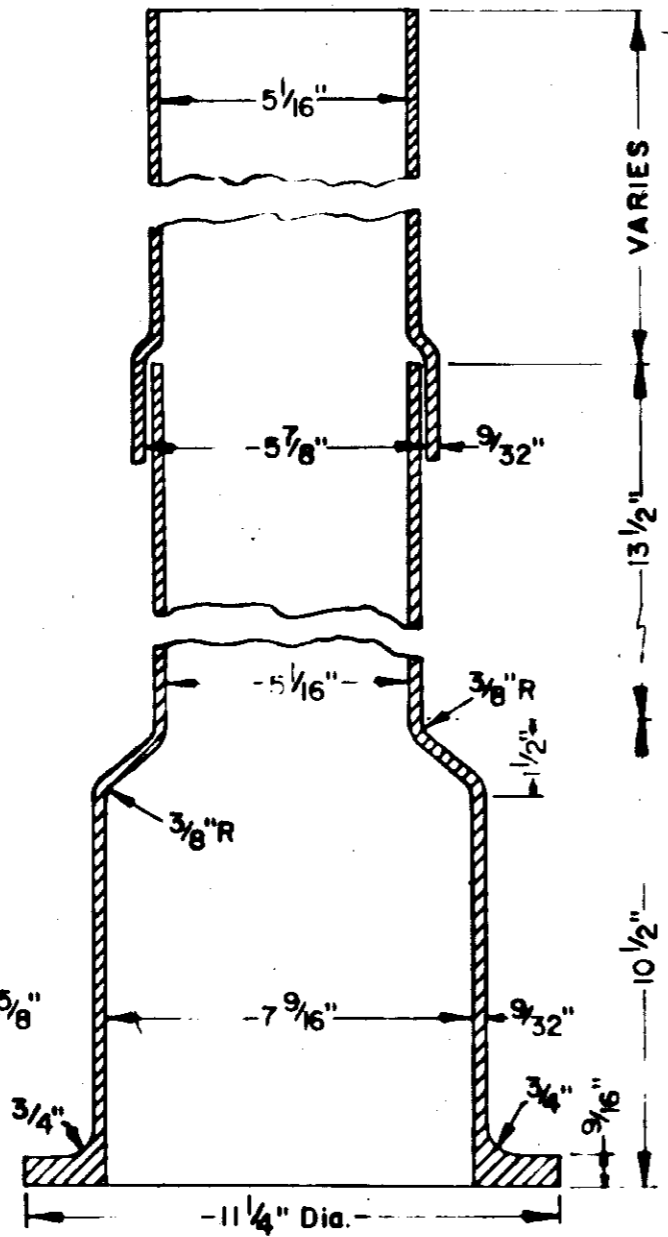
PLAN VIEW—COVER



SECTION A-A

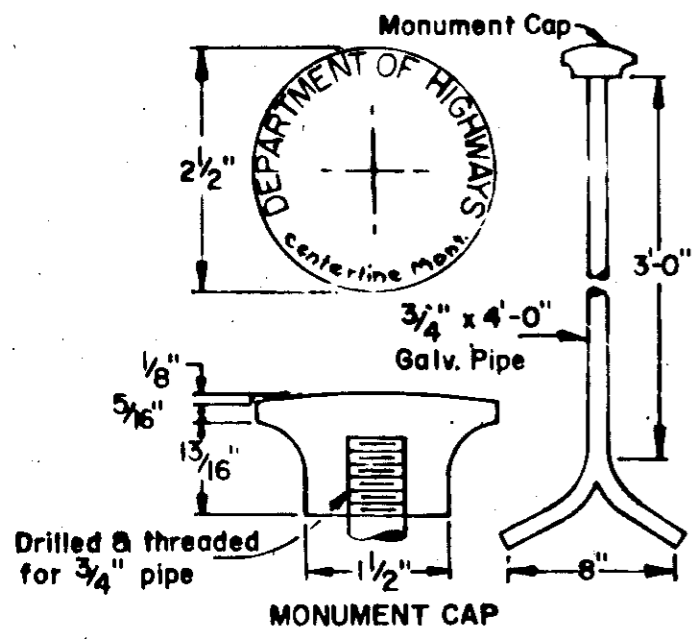


MONUMENT CASE



EXTENSION PIPES

VARIES
13 1/2"
10 1/2"



MONUMENT CAP

NOTE:

Where monument cases are to be placed in a bituminous paved or surfaced road, the top of the case shall be the same elevation as the top of the roadway.

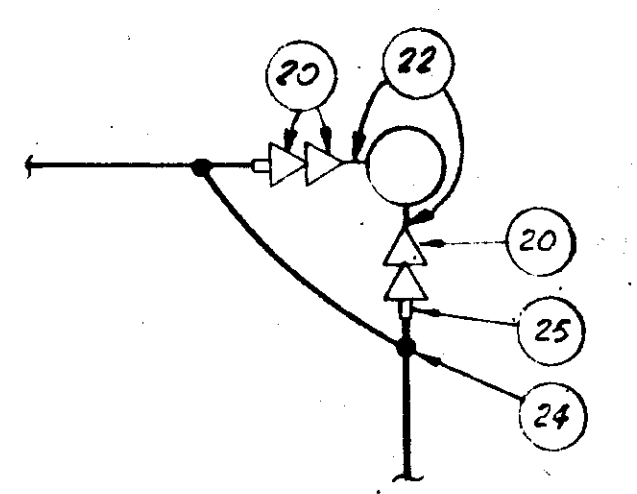
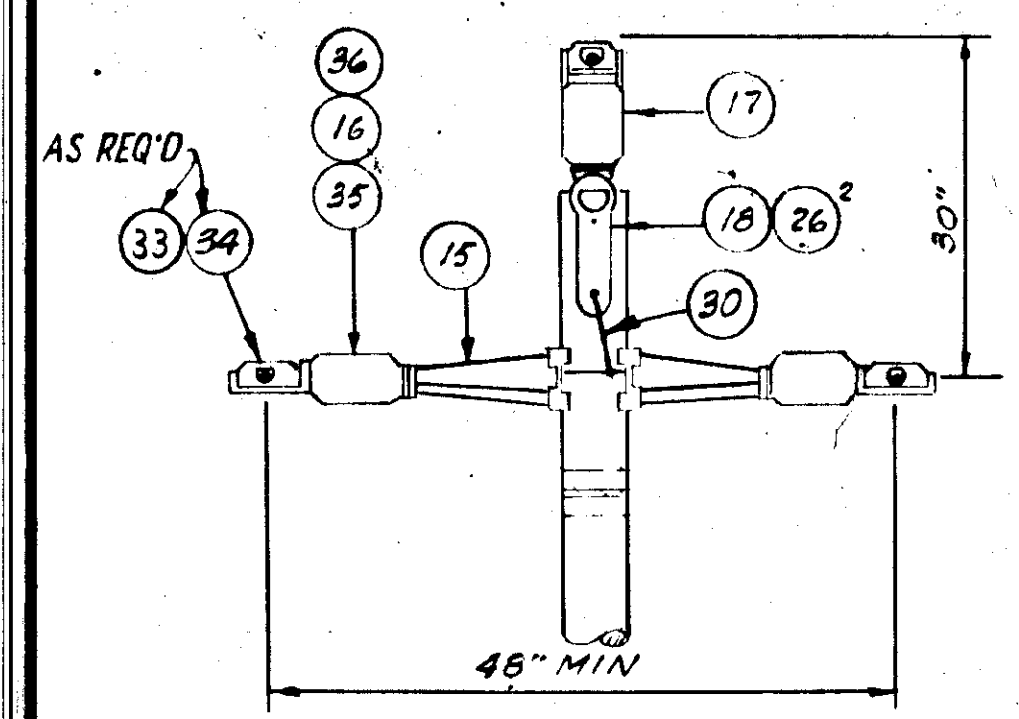
Where monument cases are to be placed in a gravel surfaced roadway the top of the case shall be placed 1'-0" below the top of the surface of the roadway.

In solid rock, drill 2" hole a minimum of 1'-0", fill with mortar and set cap. 3/4" x 9" galv. pipe, designated length when set in mortar. The top of the monument shall be the same elevation as the bottom of the monument case.

SUMMARY OF BRASS CAP MONUMENTS & MONUMENT CASES

STATION	MON	MON CASE	EXTEN PIPE	REMARKS	STATION	MON	MON CASE	EXTEN PIPE	REMARKS
"L" 9+50.00	1	1		@ €					
"O" 12+60.32	1	1		RMC 35-46.73' Rt.					
"O" 12+63.69	1	1		City Limits @ €					
"O" 12+64.45	1	1		C 35-10.53' Lt.					
"O" 18+53.73	1	1		P.I.					
"O" 21+15.20	1	1		@ €					
"O" 22+72.20	1	1		P.C. @ €					
"O" 25+44.00	1	1		P.T. @ €					
"L" 30+62.29	1	1		P.C. @ €					
"L" 31+25.67		1	1	RMC 31-42.84' Rt.					
"L" 33+99.50	1	1		P.T. @ €					
"L" 38+27.50	1	1		@ €					
"L" 42+92.42	1	1		@ €					
"L" 43+00.00	1	1		P.I.					
TOTAL	13	14	1						

UTILITY PLANS



ELEVATION
(POLE #1A*, 1C, 24, 25, 26, 27, 28, 29, 32, 32A, 33.)

PLAN
(POLE #30)

* ITEM (33) REQUIRED. ALL OTHER POLES REQUIRE ITEM (34)

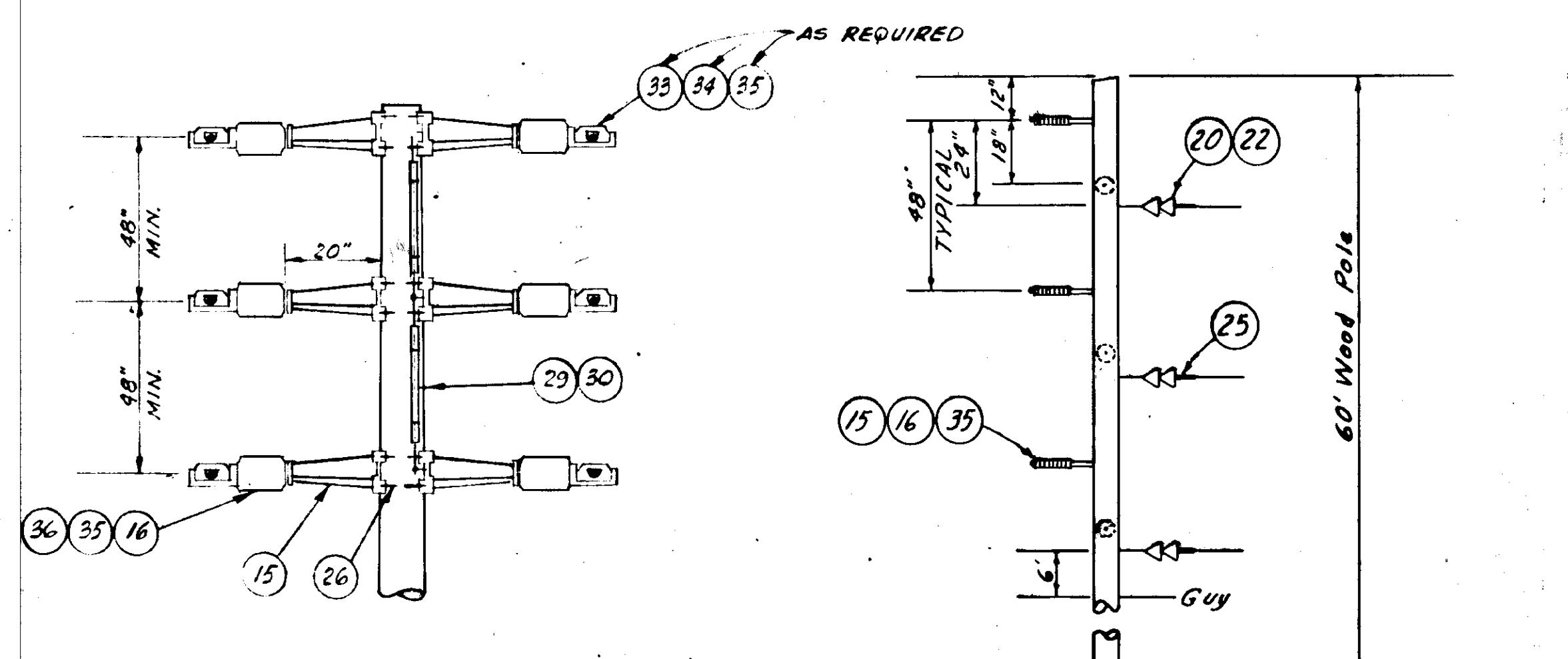
- NOTES**
- FOR POLE FOOTING SEE DWG. TYP #8
 - FOR POLE DESCRIPTION SEE SPEC'S.

DETAIL 1 **DETAIL 2**
NO SCALE

MATERIAL LIST

- | ITEM | DESCRIPTION |
|------|---|
| 1 | - WASHER, SQUARE, STEEL GALV. 2-1/2" X 13/16" DIA. HOLE. |
| 2 | - 1/2" X 14" MACHINE BOLT AND NUT, HUBBARD #9714 OR EQUAL. |
| 3 | - 3-BOLT GUY CLAMP, HEAVY TYPE, HUBBARD #7461 OR EQUAL. |
| 4 | - GUY WIRE, 26,900 LBS. RATED EXTRA HIGH STRENGTH, 7 STRAND 1/2", 0.165. |
| 5 | - SERVISLEEVE FOR 1/2 GUY WIRE, HUBBARD #7456 OR EQUAL. |
| 6 | - GUY GUARD, HALF ROUND, 8'-0" LONG, HUBBARD #7558B OR EQUAL. |
| 7 | - 1" X 10'-0" LONG, COPPERWELD ANCHOR ROD, HUBBARD #8440 OR EQUAL. |
| 8 | - ANCHOR, 4 WAY EXPANDING, JOSLYN J2856 OR EQUAL. |
| 9 | - SQUARE WASHER FOR 1" BOLT, 6" X 6" X 3/8", HUBBARD #7827 OR EQUAL. |
| 10 | - WASHERHEAD NUT SIZE AS REQUIRED FOR BOLT. |
| 11 | - ANGLE EYE BOLT FORGED STEEL, GALV. SHOULDER TYPE THIMBLE EYE 3/4" DIA. X LENGTH REQUIRED. |
| 12 | - LOAD PLATE, STEEL, GALV. CURVED, 2 1/2 X 7" X 1/4", 11/16" DIA. BOLT HOLE. |
| 13 | - LAG SCREW, STEEL, GALV., FETTER DRIVE, 1/2" DIA. X 5" LONG. |
| 14 | - STRAIN INSULATOR MECHANICAL STRENGTH 27,000 LBS. |
| 15 | - SQUIREL CAGE EXTENSION ARM SIDE BRACKET, LINDSEY #730 OR EQUAL. |
| 16 | - CLAMP TOP LINE POST 35 KV (FOR HORIZONTAL MOUNTING) LAPP #4635 OR EQUAL. |
| 17 | - CLAMP TOP LINE POST 35 KV (TOP OF POLE MOUNTING) LAPP #4235 OR EQUAL. |
| 18 | - BRACKET BOLT MOUNTED LAPP #10765 OR EQUAL. |
| 19 | - AIR BREAK SWITCH 400A - 3 POLE 34.5 KV, KPF ELECTRIC CO. #W-203 OR EQUAL WITH OPERATING CONTROL ASSEMBLY CONSISTING OF 3/4" PIPE OPERATING ARM, LENGTH AS REQUIRED, & PUSH-PULL HANDLE. |
| 20 | - INSULATOR 35 KV SUSPENSION TYPE. |
| 21 | - 5/8" DOUBLE ARMING BOLT, LENGTH AS REQUIRED, 5/8" PALNUT, WASHERHEAD NUT, SQUARE NUT. |
| 22 | - TOWER FITTING, FORGED STEEL 27,000 LBS. STRENGTH. |
| 23 | - EYE NUT, FORGED STEEL FOR 5/8" BOLT. |
| 24 | - CABLE CONNECTOR, 4/0 TO 4/0 HEAVY DUTY ALUMINUM, 2 BOLT TYPE (OR COPPER TO ALUMINUM WHERE CONNECTED TO EXISTING LINES). |
| 25 | - DISTRIBUTION STRAIN CLAMP FOR 4/0 WIRE. |
| 26 | - 5/8" BOLT, WASHERHEAD TYPE, LENGTH AS REQUIRED, 5/8" LOCKNUT & WASHERHEAD NUT. |
| 27 | - CROSSARM 3-3/4" X 4-3/4" X 8'-0" DOUGLAS FIR CREOSOTE TREATED. |
| 28 | - ANGLE BRACE 1-1/2" X 1-1/2" X 3/16", 60" SPAN, 18" DROP. |
| 29 | - WOOD BOLTING. |
| 30 | - BONDING WIRE #8 B.C. MEDIUM SOFT DRAWN. |
| 31 | - GROUND WIRE #4 B.C. HARD DRAWN. |
| 32 | - GROUND ROD 3/4" X 10'-0" WITH GROUND CLAMP. |
| 33 | - HORIZONTAL DEAD END ATTACHMENT GALV. DUCTILE IRON, LINDSEY #213 OR EQUAL FOR ATTACHMENT OF LINES EXCEEDING 15° ANGLES. |
| 34 | - CLAMP HEAT TREATED ALUMINUM ALLOY FOR STRAIGHT THRU LINES, LAPP #47112 OR EQUAL. |
| 35 | - CLAMP HEAT TREATED ALUMINUM ALLOY FOR 1 DEGREE TO 15 DEGREE LINES, LAPP #N80482 OR EQUAL. |
| 36 | - LINE POST STUD (FOR STEEL BRACKET) LAPP #10186 OR EQUAL. |
| 37 | - 35 KV PIN TYPE INSULATOR WITH PIN. |
| 38 | - EYE BOLT FORGED STEEL, GALV. SHOULDER TYPE THIMBLE EYE 3/4" DIA. X LENGTH REQUIRED. |

NOTE:
ALL DETAILS THIS SHEET NOT TO SCALE.
⚠️ REVISED POLE NUMBERS & INDICATED GUY ANGLES. 4/23/67
⚠️ REVISED PER DEPT. OF HIGHWAYS REVIEW 2/1/67



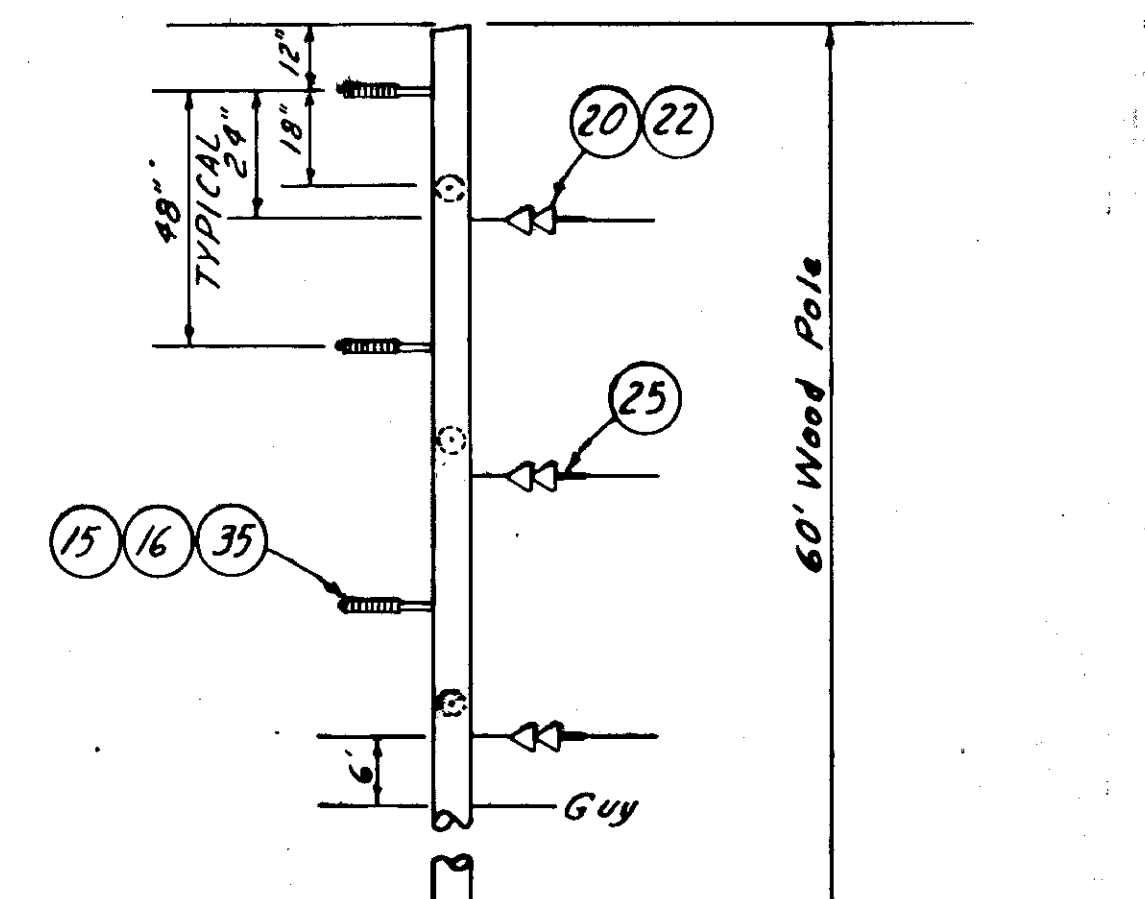
ELEVATION

POLE # 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15*, 16, 17, 17A, 18, 19*, 20, 21, 22

* ITEM (33) REQUIRED

ALL OTHER POLES REQUIRE ITEM (34)

Type 2



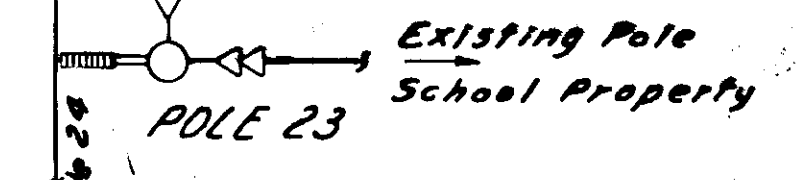
ELEVATION

POLE # 1A*, 1C, 24, 25, 26, 27, 28, 29, 32, 32A, 33.

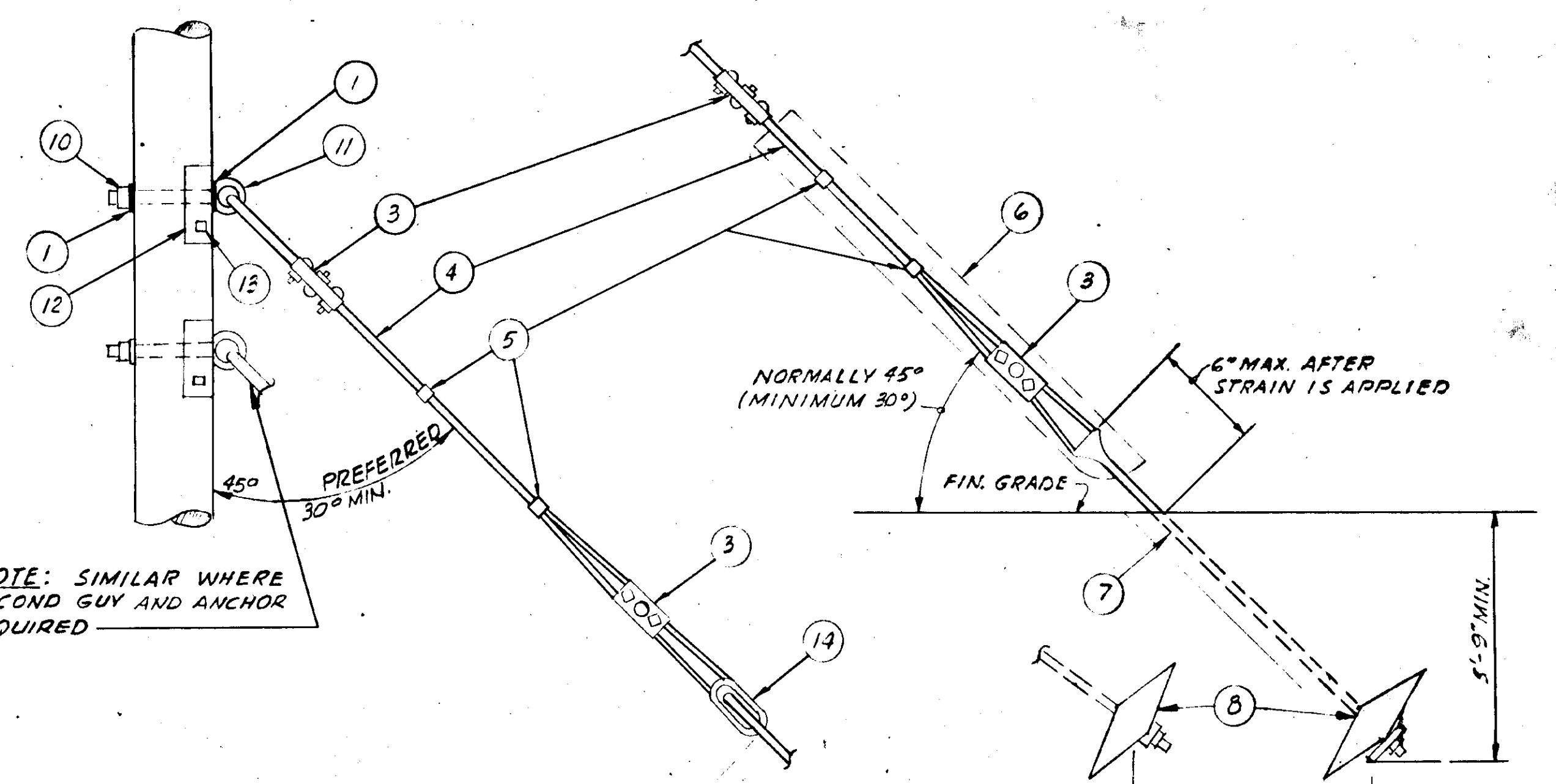
* ITEM (33) REQUIRED

ALL OTHER POLES REQUIRE ITEM (34)

Type 3



PLAN



NOTE: SIMILAR WHERE SECOND GUY AND ANCHOR REQUIRED

NORMALLY 45° (MINIMUM 30°)

FIN. GRADE

6" MAX. AFTER STRAIN IS APPLIED

5'-9" MIN.

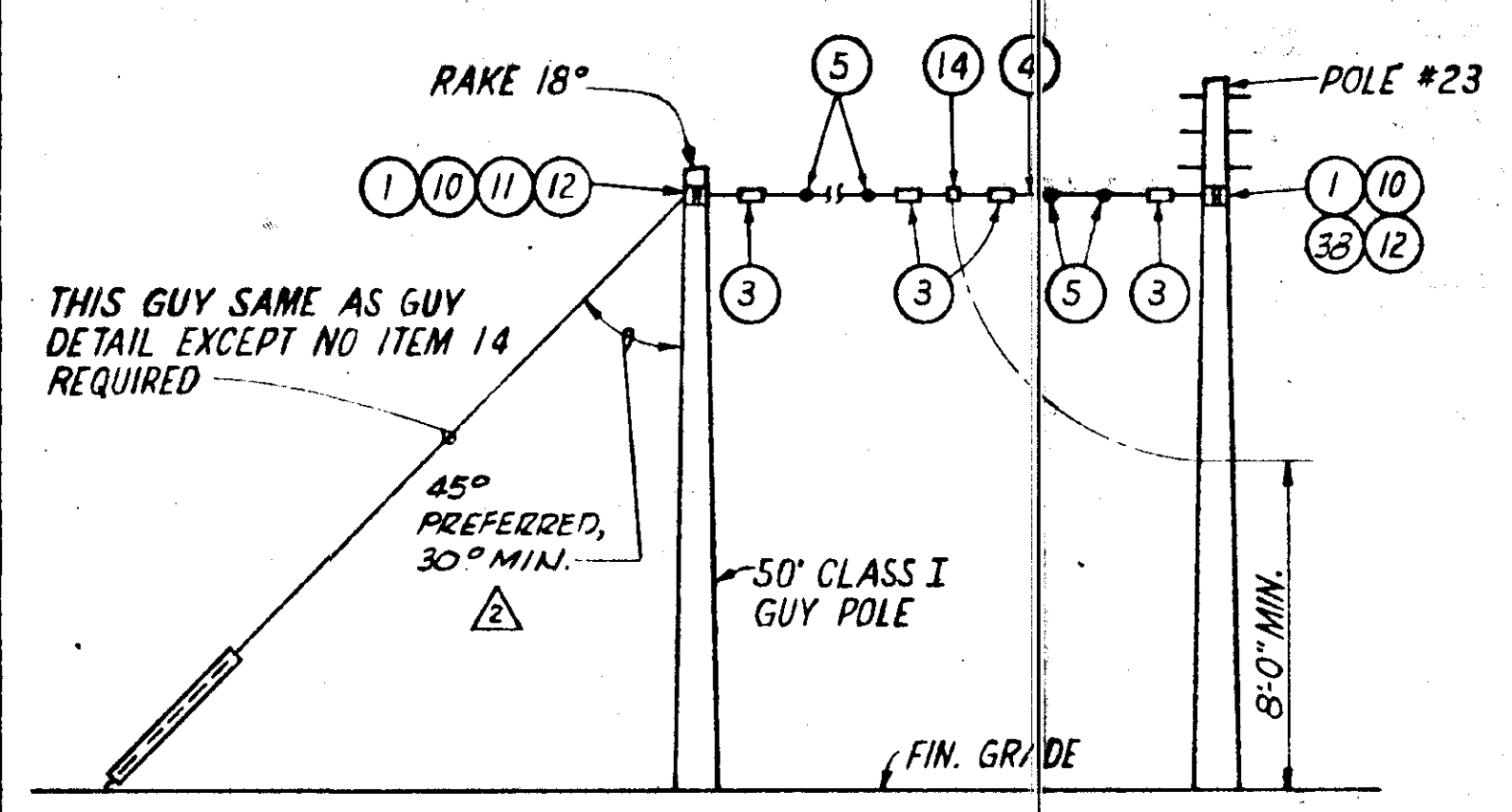
6'-0" WHERE 2 ANCHORS REQ'D.

5'-0" MIN. TO FIN. GRADE

ELEVATION

Type 0

TYPICAL GUY DETAIL



THIS GUY SAME AS GUY DETAIL EXCEPT NO ITEM 14 REQUIRED

RAKE 18°

45° PREFERRED, 30° MIN.

50' CLASS I GUY POLE

FIN. GRADE

8'-0" MIN.

SINGLE OVERHEAD GUY ASSEMBLY DETAIL

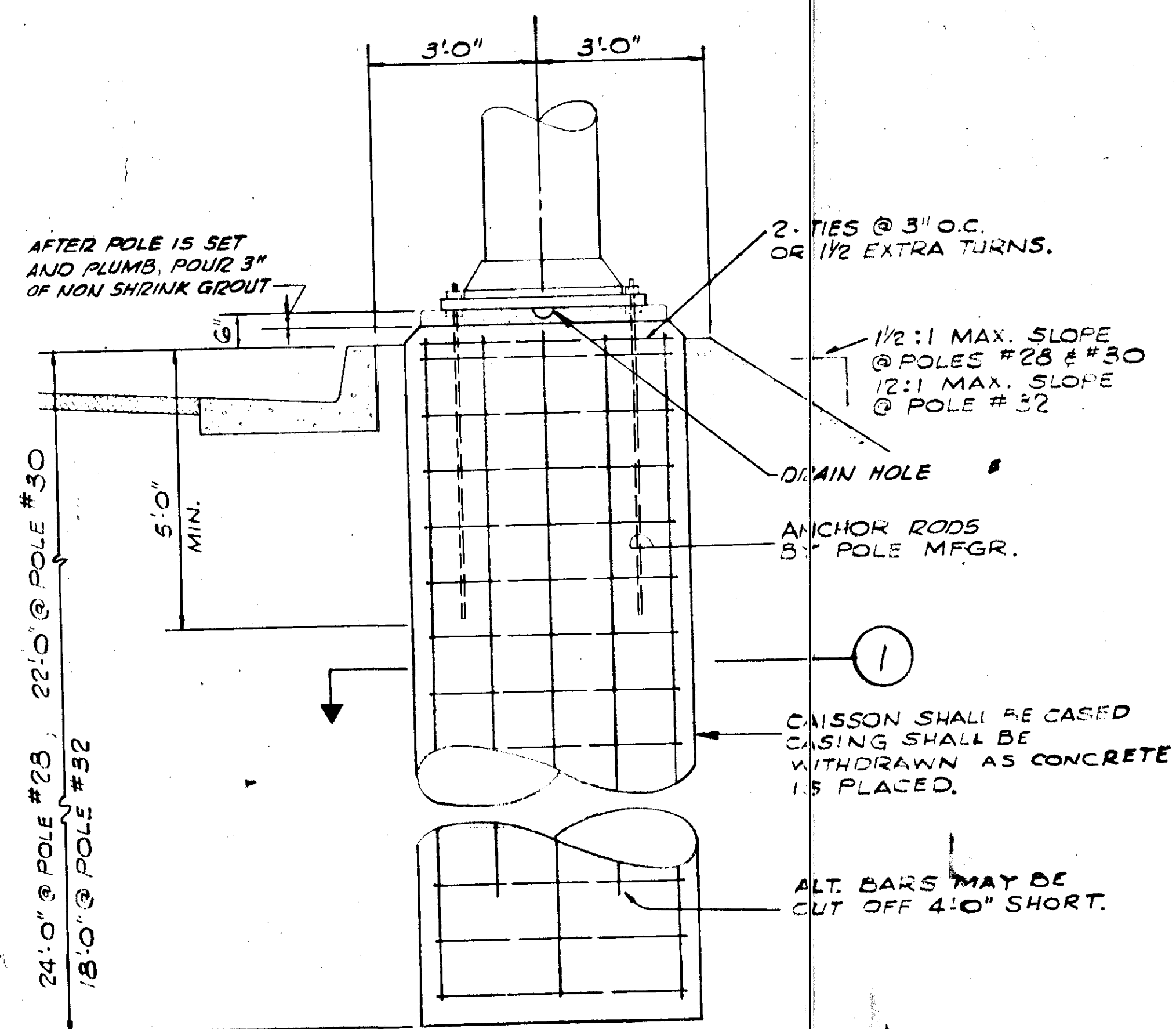
Type 7

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	F-095-8(13)	1967	50	73

UTILITY PLANS

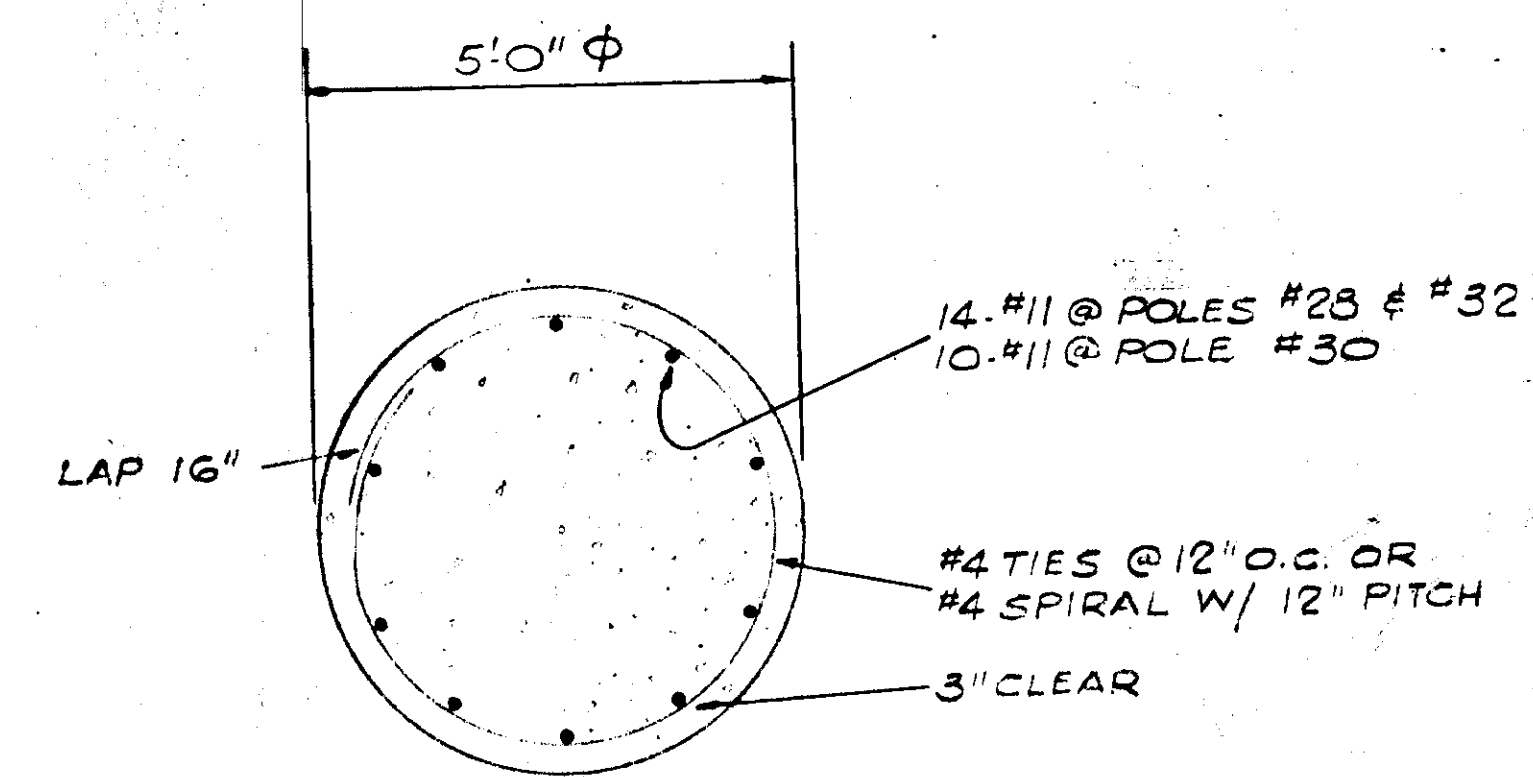
STRUCTURAL NOTES

- ① CONCRETE:
f_c = 2500 PSI @ 28 DAYS.
- ② GROUT, NON SHRINK:
f_c = 5150 PSI @ 28 DAYS
- ③ REINFORCING STEEL:
ASTM A15, INTERMEDIATE GRADE.



ELEVATION

Type 8



PLAN SECTION

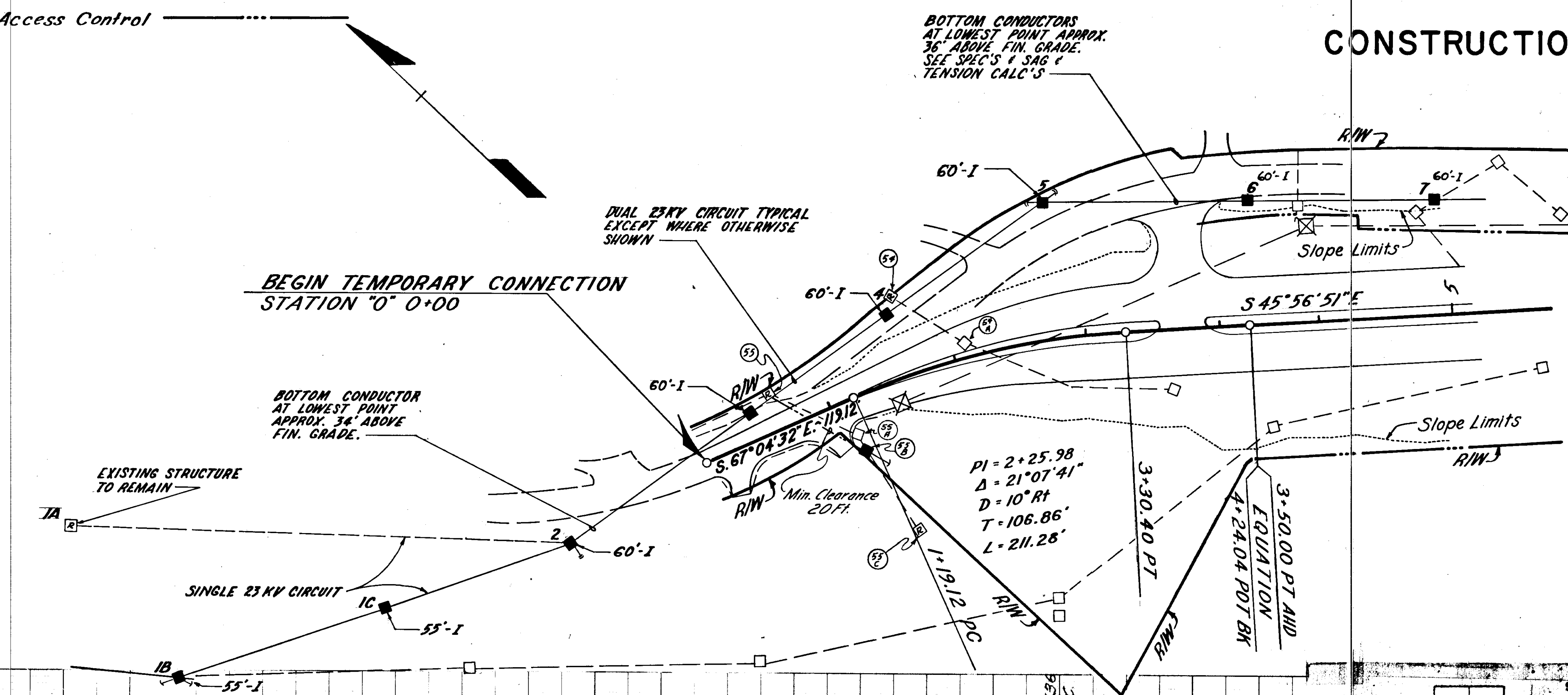
①

CONSTRUCTION UTILITY PLANS

Stationing of Pole #3 (Relative to the Outer Drive centerline) is 217 feet to the left of station 00+47, and the bearings and distances between poles are as follows:

Pole to Pole	Distances	Bearings	Pole to Pole	Distances	Bearings
1A-2	373.0'	S 41° 45' E	16-17	161.16'	S 24° 38' E
1B-10	155.0'	S 63° 21' E	17-17A	161.16'	S 24° 38' E
10-2	135.5'	S 63° 21' E	17A-18	161.16'	S 24° 38' E
2-3	168.0'	S 78° 45' E	18-19	166.03'	S 02° 43' E
3-4	126.0'	S 78° 45' E	19-20	134.0'	S 49° 15' E
4-5	143.5'	S 78° 45' E	20-21	134.0'	S 49° 15' E
5-6	153.5'	S 44° 15' E	21-22	143.0'	S 49° 15' E
6-7	139.0'	S 44° 15' E	22-23	137.0'	S 49° 15' E
7-8	144.0'	S 43° 25' E	23-24	153.3'	S 49° 15' E
8-9	137.0'	S 42° 25' E	24-25	153.4'	S 34° 31' E
9-10	139.5'	S 41° 00' E	25-26	142.6'	S 35° 34' E
10-11	159.5'	S 46° 15' E	26-27	120.0'	S 35° 34' E
11-12	178.0'	S 46° 15' E	27-28	120.0'	S 35° 34' E
12-13	173.5'	S 46° 15' E	28-29	120.0'	S 35° 34' E
13-14	169.5'	S 46° 15' E	29-30	120.0'	S 35° 34' E
14-15	169.5'	S 46° 15' E	30-31	122.4'	S 35° 34' E
15-16	157.0'	S 25° 53' E	31-32	104.9'	S 33° 35' E

- SYMBOLS**
- Proposed
 - Existing
 - ⊙ Pole Number
 - A.J. Industries
 - A.E.L. & P.
 - J.D. Telephone Co.
 - ⊠ Existing Pole to Remain



STAKING SHEET PROJECT DESIGNATION **ALASKA ELECTRIC LIGHT & POWER**

LOCATION **JUNEAU OUTER DRIVE**

TWP. RANGE SECTION

MAP REFERENCE **Ad of H F-095-8(13)**

PRI WIRES **P** SIZE **#6** KIND **HD CL** RULING SPAN **200**

SHEET OF WORK	CONTR. NO. OR W.C. NO.	POLE NO.	PRIMARY										CUT		SECONDARY				SERVICE		METER		NAME AND REMARKS
			LINE ANGLE	SPAN BACK	WIRE SIZE	POLES W/C	PRI. UNIT	R/W CLEAR	TRANS. 'A'	BROOKS	WIRE 'B'	LEAD	ANCHOR UNIT	UNIT	SPAN	NO. WIRES	UNIT	SPAN	NO. WIRES	LOOP	METER SIZE		
EXIST	55		PRIMARY POLE - No CHANGE										E-18 20 Ft-4		K13 95 #2 AL TYP				TRANSFER EXISTING TO POLE 55-C FROM 55-A		3" & WP RUNNING		
CONSTRUCTION	ADD	55-B	35/2																				
RETIREMENT	*	54A	30												K13 60 3" & WP								
RETIREMENT	*	55A	25												K13 80 3" & WP								

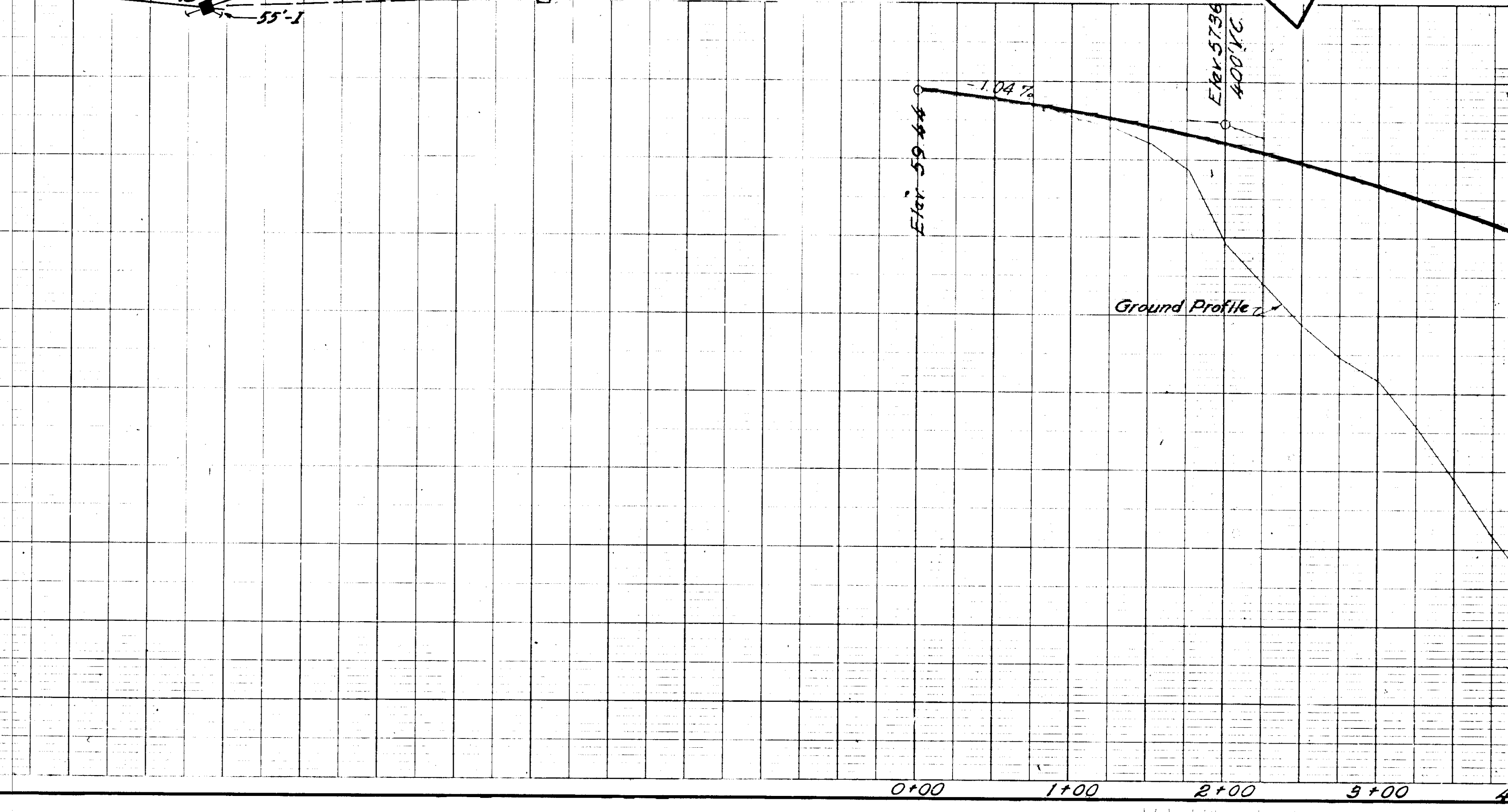
STARTED 7/5/67 BY **DR - SM - AH**

CHECKED 2/12/67 BY **DR - SM - AH**

DESIGNED FOR COST

UNIT LOAD

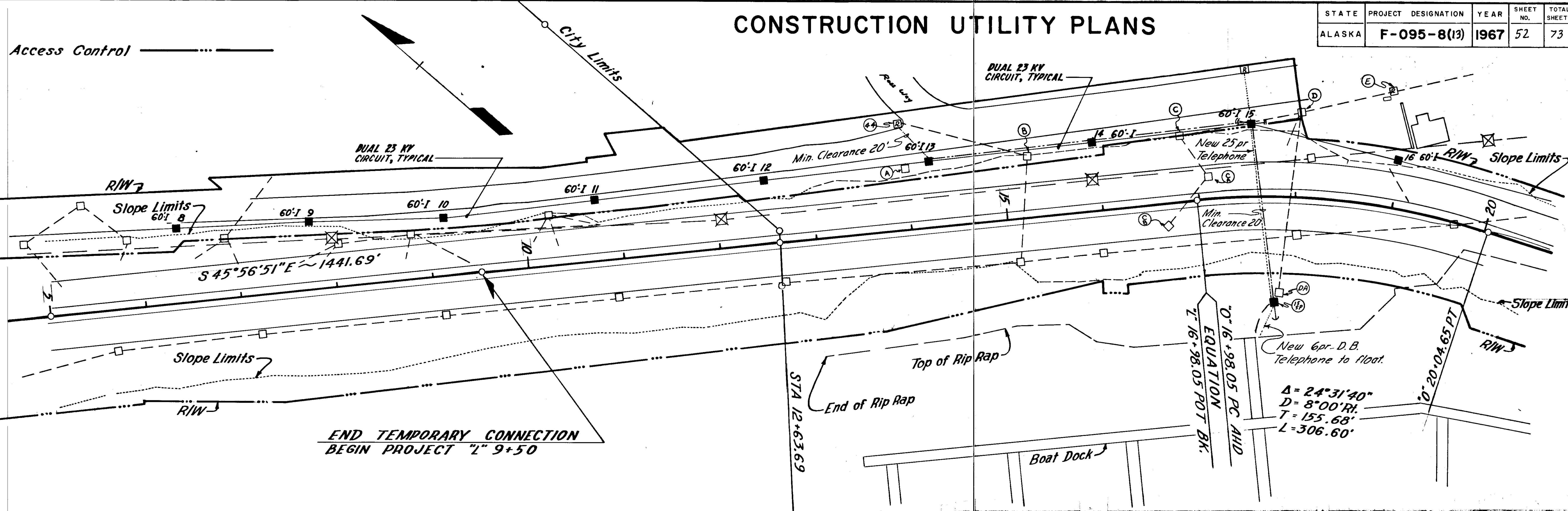
NUMBER POLES ON SKETCH AT TAPS, CROSSINGS, TRANSFORMERS AND BRANCHES. INDICATE RETIRED UNITS WITH REPLACED UNITS RESET SETTING AND TRANSFORMERS SHEET NO. **1** OF **6**



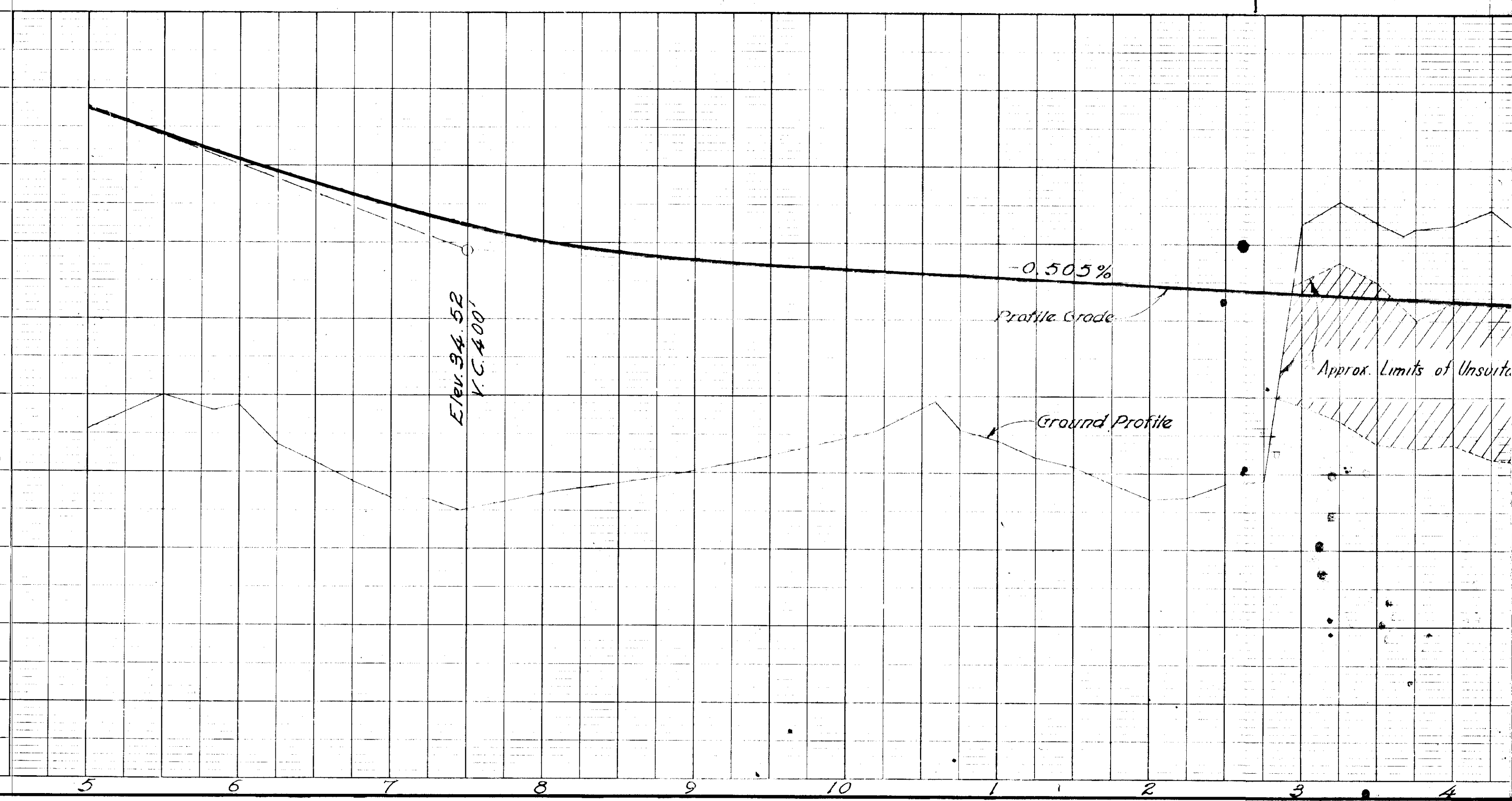
CONSTRUCTION UTILITY PLANS

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	F-095-8(13)	1967	52	73

Access Control



END TEMPORARY CONNECTION
BEGIN PROJECT "L" 9+50



STAKING SHEET SYSTEM DESIGNATION: **AEL&P**

LOCATION: **JUNEAU OUTER DRIVE**

TWP: _____ RANGE: _____ SECTION: _____

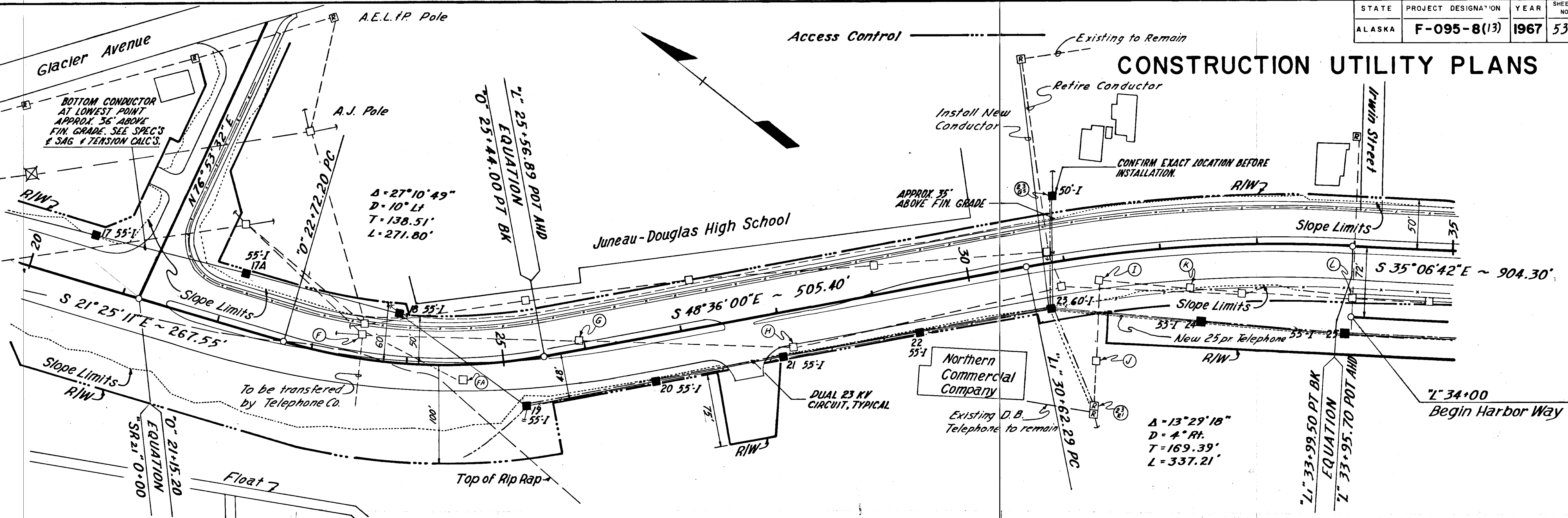
MAP REFERENCE: **F-095-8(13)**

PR. WIRES: **3** SIZE: **#4/0** KIND: **AL-WP** RULING SPAN: **200**

SHEET OF WORK	CENTER LINE NO.	SPAN	WIRE SIZE	WIRE TYPE	P.O.C.	P.O.T.	TRANS. S.	GROUND	UNIT	INCHES	PRIMARY		SECONDARY		SERVICE		METER	NAME AND REMARKS	
											NO.	TYPE	NO.	TYPE	NO.	TYPE			
CONSTRUCTION	13	60	#2	AL-WP	AJ	B-7N	C-7N		F1-3	20	F1-4	J14						TAP LT. TO ROSS AV M 26 2/M 5-9	
	14	170	#3	AL-WP	AJ	C9-1N						J10	170	#2	AL-TPX			M 26 ET. LT. CKT. TRANSFER ST. LT. RLY M 26 TRANSFER CONDUCTORS BETWEEN POLES C & D TO #15	
	15	170	#3	AL-WP	AJ	C9-1N		G-1 50 RYA	M2-12			F12	170	#2	AL-TPX			CONNECT TO EXIST METER LOOP	
	15	SP								E1-3	25	F1-4	J14	160	#1/0	AL-TPX	EXIST	65	#1/0 AL-TPX
	A	50	2	#1/0	CU	40	B-7N	C-7N		1/2	E1		K12		#2	WP			M 26'
RETIREMENT	B	130	#3	AL-WP	40	C9-1N			G1			3/K13	130	#2	WP			M 26	
	C	160	#3	AL-WP	40	C9-1N			G-3	F2		3/K13	160	#2	WP		50	#1/0 AL-TPX	ST. LT. RLY FIRE ALARM STATION
	CA				35							J14		10	#1/0 AL-TPX				
	CB				30							J14		140	#1/0 AL-TPX			TO METER LOOP	
	D				40														
	DA				40														

STARTED 7/15/67 BY DB-NM-AH
CHECKED 10/10/67 BY DB-AH
RELEASED FOR CONSTRUCTION

CONSTRUCTION UTILITY PLANS



STAKING SHEET

SYSTEM DESIGNATION: **AELP**
 LOCATION: **JUNEAU OUTER DRIVE**
 TWP: _____ RANGE: _____ SECTION: _____
 MAP REFERENCE: **F-095-8(13)**
 PRI WIRES: **3** SIZE: **#4/0** KIND: **AL-WP** RULING SPAN: **200**

CONTR. OR WIRE NO.	LINE ANGLE	SPAN	WIRE SIZE	POLES H-B-C	P.P. UNIT	R.W. CLEAR	TRANS. G	GROUND	UNIT	LEAD	ANCHOR UNIT	SECONDARY			SERVICE			METER	NAME AND REMARKS	
												UNIT	SPAN	NO. WIRES	UNIT	SPAN	NO. WIRES			LOOP
19				AJ	C-7N			G-1	E-2	M-2	E-3	30	F-4							To float
20	134	134	3#4/0 AL-WP	AJ	C9-IN															
21	134	134	3#4/0 AL-WP	AJ	C9-IN															
22	143	143	3#4/0 AL-WP	AJ	C9-IN															
23	142	137	3#4/0 AL-WP	AJ	C-8N						E-2	120								
23	63			AJ							E-1	30	F-4							
25				TRANSFER EXIST	AELP EXIST	C-9N		EXIST			E-1	20	F-4							EXIST
24	153	153	3#4/0 AL-WP	AJ	C9-IN															
25	1°R	153	3#4/0 AL-WP	AJ	C9-IN															

STARTED 7/25/71 BY DR-NM-AM
 CHECKED 8/10/71 BY DB-AP
 RELEASED FOR COUNTY
 SHEET NO. 3 OF 6

STAKING SHEET

SYSTEM DESIGNATION: **AELP**
 LOCATION: **JUNEAU OUTER DRIVE**
 TWP: _____ RANGE: _____ SECTION: _____
 MAP REFERENCE: **F-095-8(13)**
 PRI WIRES: _____ SIZE: _____ KIND: _____ RULING SPAN: _____

CONTR. OR WIRE NO.	LINE ANGLE	SPAN	WIRE SIZE	POLES H-B-C	P.P. UNIT	R.W. CLEAR	TRANS. G	GROUND	UNIT	LEAD	ANCHOR UNIT	SECONDARY			SERVICE			METER	NAME AND REMARKS		
												UNIT	SPAN	NO. WIRES	UNIT	SPAN	NO. WIRES			LOOP	METER SIZE
F				AJ	B-7N						E-1										SERVICE TO BE FROM GLACIER
FA				30							E-1										MOP
G	220	220	2#6 CU	AJ	B-7N																
H	220	220	2#6 CU	AJ	B-7N						E-1										
I	280	280	2#6 CU	30	C-8N						E-1	3/4H									M-26
J	105	105	3#6 CU	30	C-1N																
23-E1																					
K	100	100	3#6 CU	30	C-9-IN									K-13	100	2#6 CU					
L	170	170	3#6 CU	30	C-9-IN									K-13	170	2#6 CU					M-26

STARTED 7/25/71 BY DR-NM-AM
 CHECKED 8/10/71 BY DB-AP
 RELEASED FOR COUNTY
 SHEET NO. 4 OF 6

