STATE	ROUTE DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	F - 095 - 4 (1) & S.- 0943 (7)	1967	1	34

AS-BUILT PLANS

STATE OF ALASKA
DEPARTMENT OF HIGHWAYS

PLAN AND PROFILE
PROPOSED HIGHWAY PROJECT

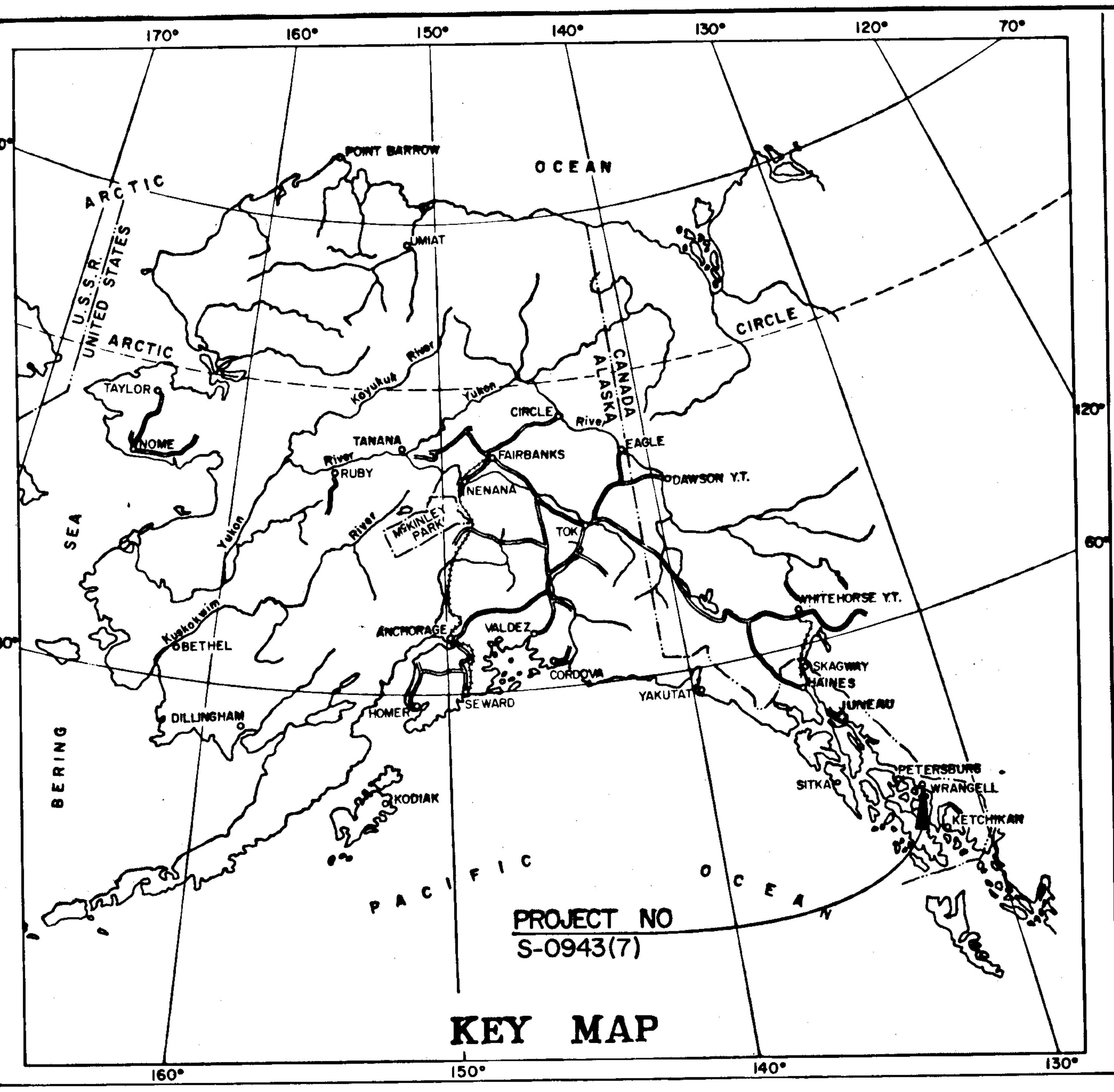
F-095-4(1) & S-0943(7)

WRANGELL - CHURCH ST. TO FERRY TERMINAL

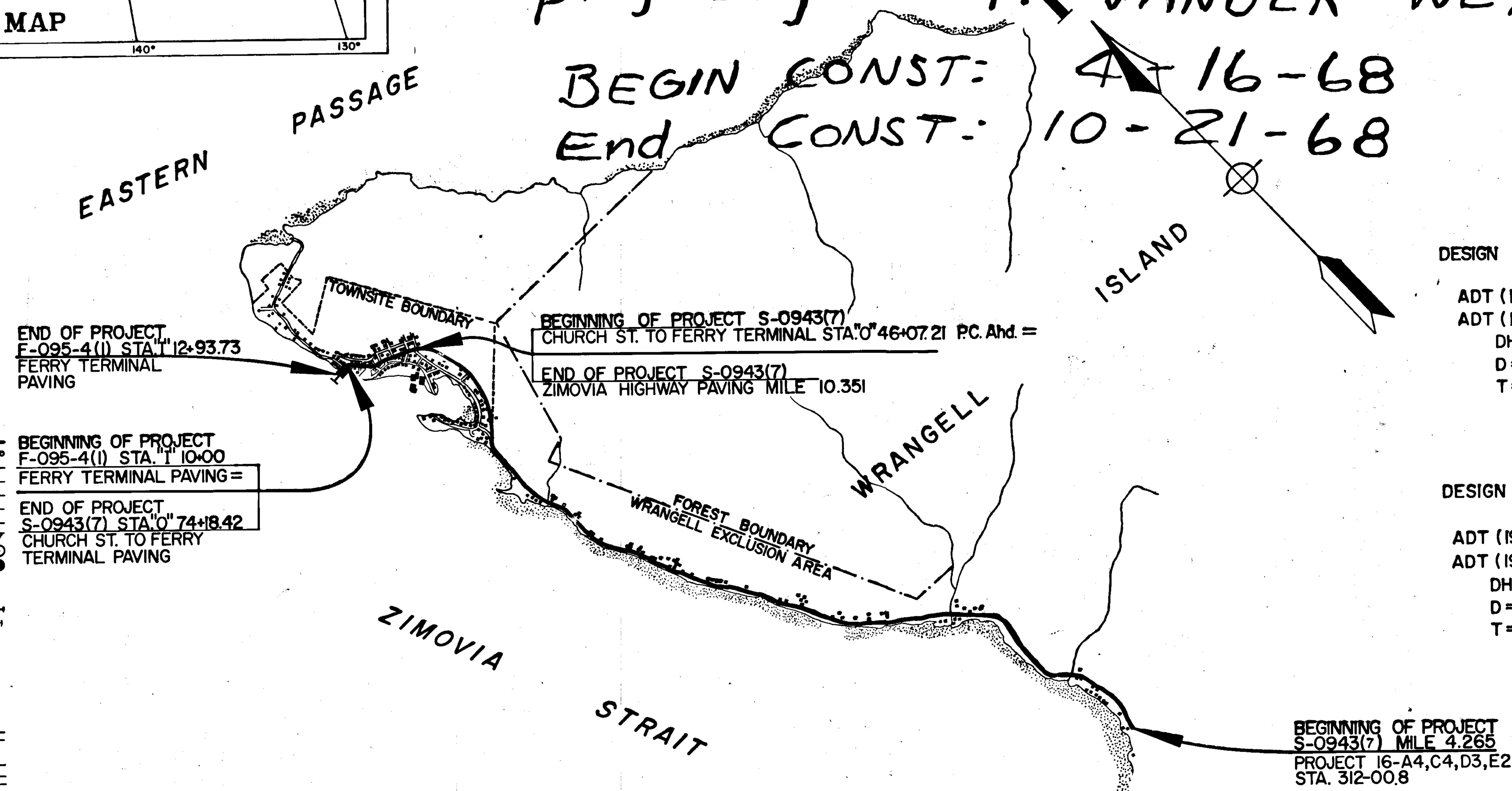
GRADING, DRAINAGE, & PAVING
FERRY TERMINAL PAVING
ZIMOVIA HIGHWAY PAVING

contractor: GREEN CONST. CO.
proj. eng. : T. VANDER WEYST

BEGIN CONST: 4-16-68
End CONST: 10-21-68



KEY MAP



INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	Typical Section of Improvement
3	Estimate of Quantities
4	Summary Tables
5-9	Plan and Profile Sheets
10	Drainage Structure Details
11-13	Retaining Wall Details
14	Concrete Stairway Detail
15	Timber Stairway Detail
1	Misc. Detail
17-20	Intersection Details
20-21	Outfall Detail
22	Typical Section of Improvement F-095-4(1)
23	Plan and Profile F-095-4(1)
24	Zimovia Highway Paving Details
25	Summary of Standard Signs

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

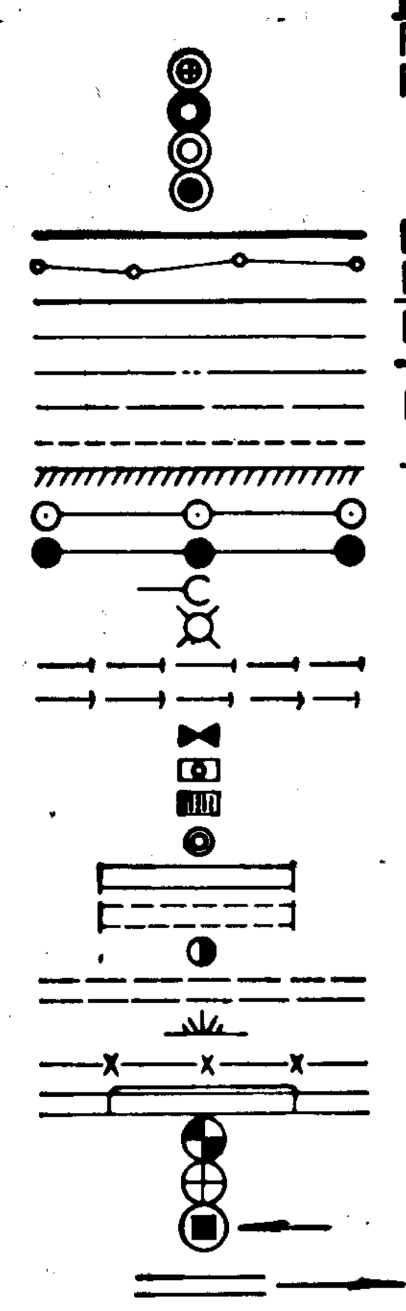
CHURCH ST. TO FERRY TERMINAL

DESIGN DESIGNATION	PROJECT SUMMARY
ADT (1967) = 500	WIDTH OF GRADING = 59.0'
ADT (1987) = 1000	WIDTH OF PAVING = 39.0'
DHV = 120	LENGTH OF GRADING = 2861.21' 0.542 Mi
D = 45-55%	LENGTH OF PAVING = 2811.21' 0.532 Mi.
T = 5%	LENGTH OF PROJECT = 2861.21' 0.542 Mi.

ZIMOVIA HIGHWAY PAVING

DESIGN DESIGNATION	PROJECT SUMMARY
ADT (1967) = 400	WIDTH OF GRADING = VARIES
ADT (1987) = 1000	WIDTH OF PAVING = 24.0'
DHV = 150	LENGTH OF GRADING = 32,134.08' ~~6.068~~ 6.08 Mi.
D = 40-60%	LENGTH OF PAVING = 32,134.08' ~~6.068~~ Mi.
T = 5%	LENGTH OF PROJECT = 2,134.08' ~~6.068~~ Mi.

CONVENTIONAL SIGNS



MANHOLE (EXISTING)
INSTALL MANHOLE
ADJUST EXISTING MANHOLE
RECONSTUCT EXISTING MANHOLE
PROPOSED CONSTRUCTION CENTERLINE
PRELIMINARY SURVEY LINE
TOWNSHIP LINE
SECTION LINE
PROPERTY LINE
RIGHT-OF-WAY LINE
EASEMENT LINE
CORPORATED OR CITY LIMITS
POWER LINE
TELEPHONE OR TELEGRAPH LINE
POLE ANCHOR
LIGHT POLE
WATER LINE
SEWER LINE
VALVE BOX
CATCH BASIN
DROP INLET
MANHOLE
CULVERT PROPOSED
CULVERT EXISTING
FIRE HYDRANT
TRAVELED WAY
SWAMP
FENCE
CURB CUT
LAND MONUMENT
RIGHT-OF-WAY MONUMENT
DIRECTION OF SIDE INTAKE
DROP INLET (WOOD)
PIPE OUTLET

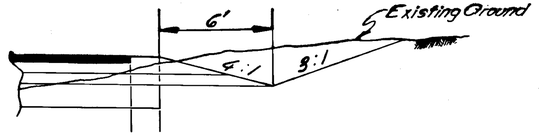
STATE OF ALASKA
DEPARTMENT OF HIGHWAYS

APPROVED
[signature] Date 12/5/67
COMMISSIONER OF HIGHWAYS

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	S-094(7)	1967	2	34

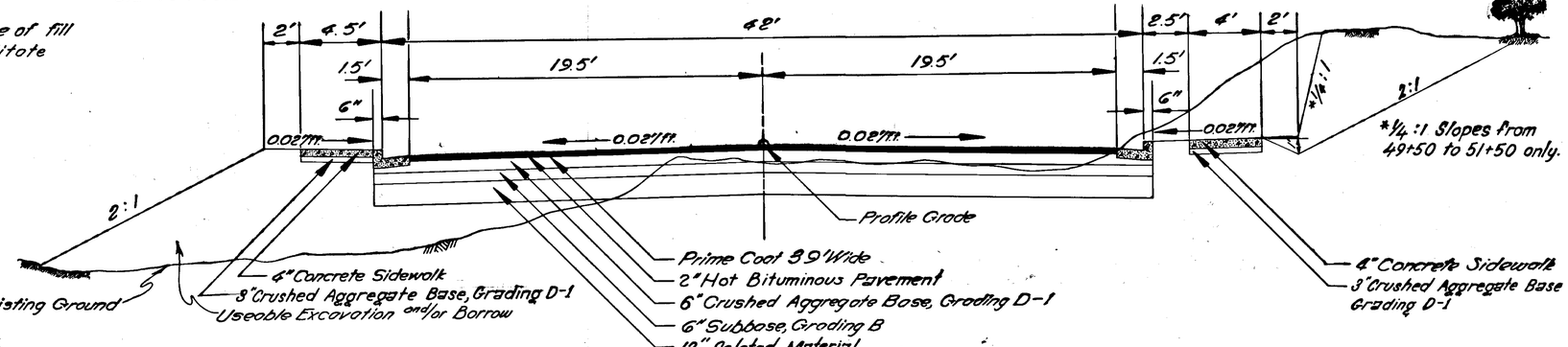
AS-BUILT

Sta. 46+05.29 to Sta. 47+10.00 LT.



Sta. 46+05.29 to Sta. 46+70.00 RT

NOTE: Minor grading at the toe of fill slopes may be required to facilitate drainage.



*1/4 :1 Slopes from 49+50 to 51+50 only.

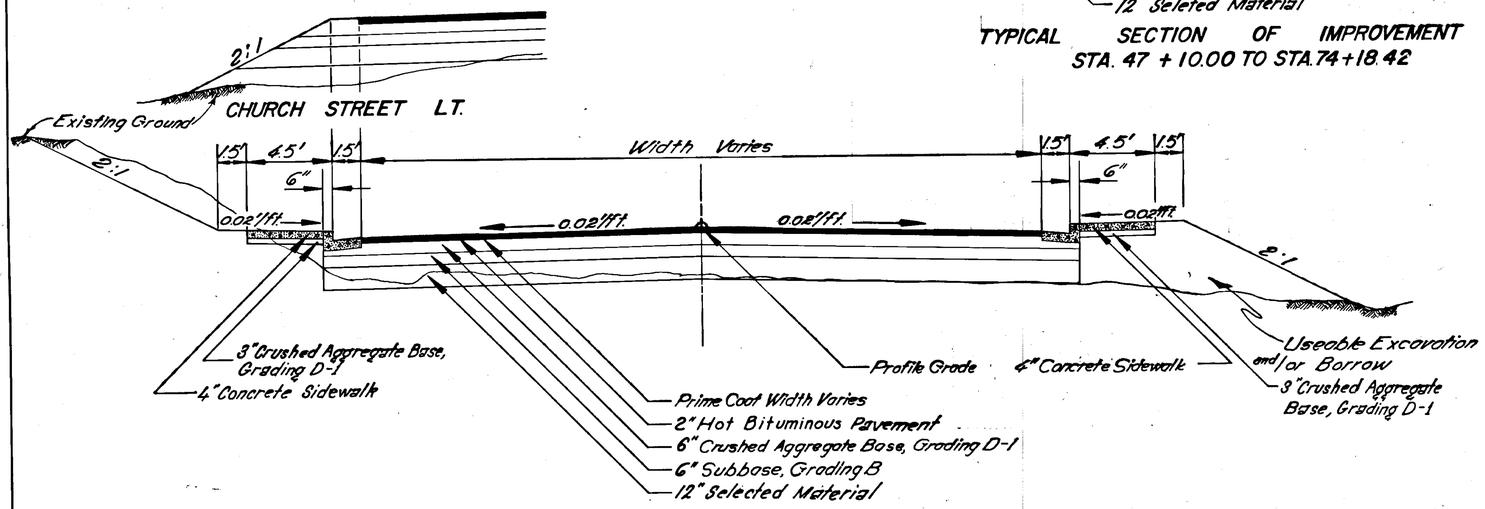
NOTE: For detail of special drainage ditch in cut sections see detail on sheet No. 10

NOTE: Clearing and grubbing limits shall be 5' outside of slope limits or to the Right-of-Way or Easement Line, Whichever is the Lesser.

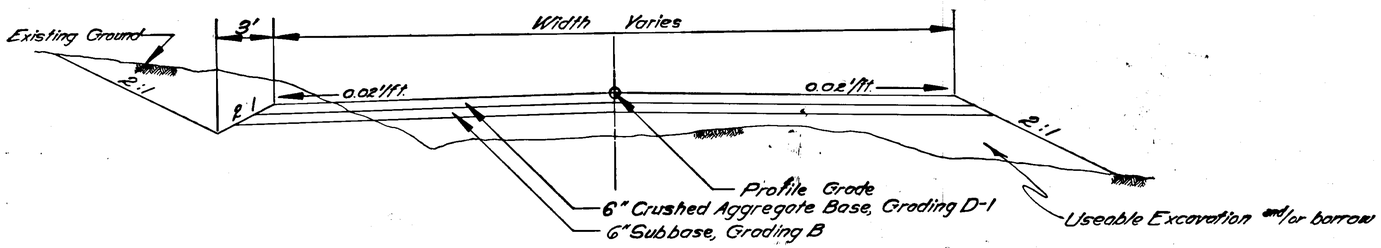
TYPICAL SECTION OF IMPROVEMENT
STA. 47 + 10.00 TO STA. 74+18.42

BASIS OF ESTIMATE

Item	Estimating Factor
203(5)	1.86 Tons per cu.yd.
304(1)	1.95 Tons per cu.yd.
307(1)	1.87 Tons per cu.yd.
403(1)	149.33 Lbs. per cu. ft.
403(2)	6% of Item 403(1)
408(2)	7.8 Lbs. per gal. @ 60°F.



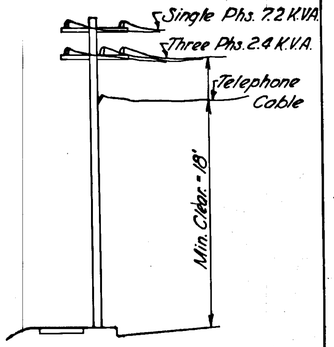
TYPICAL SECTION SIDE STREET PAVED APPROACH



TYPICAL SECTION SIDE STREET (BEYOND PAVING LIMITS)

GENERAL NOTES

1. Culvert lengths and locations are approximate only and are subject to minor revisions.
2. Grades and alignment shown on these plans are subject to minor revisions.
3. Right-of-way encroachments--such as fences, abandoned foundations, and stairs, shall be removed by the contractor if inside the right-of-way at the time of construction. This work will be considered incidental to other items of work performed under this contract. This is not a pay item.
4. 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 haul or overhaul of unclassified excavation designated as waste and/or surplus material by the engineer.
5. All concrete shall be Class A, unless otherwise noted.
6. Where any portion of a new pipe is placed in an embankment section the excavation shall be performed after the embankment has been constructed to a height of twelve (12) inches above the top of the pipe and a distance of five (5) diameters on each side of the pipe. See detail sheet no. 16.
7. The contractor shall take adequate precautions to insure that application of prime coat will not discolor or damage private property or any highway appurtenance such as curb and gutter or other installation.
8. The removal and disposal of the wood stave water line from stations "O" 65+93 to "O" 74+06 will be considered incidental to item 640(2), six inch cast iron water main, class 150.
9. The removal and disposal of the existing wood inlet rt of station "O" 55+71 as well as the three existing wood drop inlets at the intersection of McKinnon street will be paid for under item no. 202(1) Removal of Structures and Obstructions.
10. 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.
11. All buildings within the R/W will be removed by others prior to the begining of construction



TYPICAL UTILITY INSTALLATION & CROSSING

ESTIMATE OF QUANTITIES

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	SHEETS
ALASKA	S-0943(7) F-095-4(11)	1967	3	34

ITEM Nº	ITEM	UNIT	SHEET NUMBER 5	6	7	8	9	20-21	22-23	PROJECT S-0943(7)	PROJECT F-095-4(11)	Zimovia Highway Paving 24	CONTRACT TOTAL AS-BUILT
201(3)	Clearing and Grubbing	Lump Sum								All Required			All Required
202(1)	Removal of Structures and Obstructions	Lump Sum								All Required			All Required
202(4)	Removal and Disposal of Culvert Pipe	Lin. Ft.	146	48	0	65	96'			355		146	501
203(3)	Unclassified Excavation	Cu. Yd.	2,568	3,369	2,422	2,069	1,365			11,793		18,350	30,143
203(5)	Borrow	Ton	539		491	4,285	1,298			6,613			6,613
206(1)	Structure Excavation	Cu. Yd.	187	71	469	282	140	1,717		2,866		129	2,995
207(1)	Class I, Excavation for Structures	Cu. Yd.	227	230	157	61	187	59		921			921
304(1)	Crushed Aggregate Base Course, Grading D-1	Ton	955	933	942	980	895		75	4,780		48,536	53,316
306(1)	Reconditioning	Mile									.05	6.09	6.14
307(1)	Subbase, Grading B	Ton	760	915	933	947	886			4,441		35,833	40,274
310(1)	Stockpiled Material, Grading A	Ton								1,000			1,000
403(1)	Hot Bituminous Pavement	Ton	239	293	298	309	284		300.0	1,423	300	9,944	11,667
403(2)	Asphalt Cement, 120-150 Penetration	Ton	14.3	17.6	17.9	18.5	17.0		18.0	85.3	18.0	596.7	700.0
408(2)	M. C. 30 Liquid Asphalt for Prime Coat	Ton	2.5	3.0	3.1	3.2	3.0		2.9	14.8	2.9	104.4	122.1
601(1)	Class "A" Concrete	Lump Sum								All Required			All Required
602(1)	Reinforcing Steel	Lump Sum								All Required			All Required
603(26A)	8" Pipe Conduit	Lin. Ft.				20				20			20
603(26C)	12" Pipe Conduit	Lin. Ft.	64		124	34	56			278			278
603(26E)	18" Pipe Conduit	Lin. Ft.	384	223	48	90	314			1,059			1,059
603(26G)	24" Pipe Conduit	Lin. Ft.	432		454	158		852		1,896		110	2,006
604(1)	Manholes	Each						5		5			5
604(2A)	Type "A" Inlet	Each	2	2	2		4			10			10
604(2B)	Type "B" Inlet	Each	2		2	1	1			6			6
604(2C)	Corrugated Metal Pipe Inlet Box	Each	4	2	4	3	1			14			14
604(5)	Adjustment of Existing Manholes	Each	1		1	1				3			3
604(4)	Reconstruct Existing Manhole	Each	2	1	1	3	3			10			10
605(1)	8" Perforated C.M.P. for Underdrains	Lin. Ft.	54			30				84			84
608(1)	4" Concrete Sidewalk	Sq. Yd.	390	509	478	487	424			2,288			2,288
608(4)	6" Concrete Sidewalk	Sq. Yd.	6	25	19	28	66			144			144
609(3)	Curb and Gutter, Type 2	Lin. Ft.	915	1,200	1,183	1,186	1,105		198	5,589	198		5,787
614(1)	Survey Monuments	Each	0	3	1	3	3			10			10
614(2)	Monument Cases	Each	0	3	1	3	3			10			10
614(3)	Adjust Existing Monument & Cases	Each	1	2	1	2	2		2	8	2	10	20
615(1)	Standard Signs	Each	7	3	5	10	7			32	1		33
635(2)	Treated Timber	M. B. M.	0.57	1.54	0.35	0.58	0.60			3.64			3.64
640(2)	6" Cast Iron Water Conduit	Lin. Ft.				280	618			898			898
640(7)	Fire Hydrant Relocation	Each	1	2	1	1	1			6			6
640(9)	Water Service Connection	Each	2	1	2	4	6			15			15
640(10)	6" Gate Valve & Service Box	Each				1	1			2			2
640(11)	Adjust or Relocate Water Valve Boxes	Each	2	5	5	8	4			24			24
641(1)	Hand Railing	Lin. Ft.	245.7	424.1	250.8	96.4	196.0			1213.0			1213.0
645(1)	Construct Sewer Laterals	Each	2		1	1	2			6			6
645(3)	Adjust or Relocate Sewer Laterals	Each	2			2	3			7			7
603(261)	36" Pipe Conduit	Lin. Ft.										56	56
606(2)	Beam Type Guardrail, Type II Posts	Lin. Ft.										875	875

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	S-0943(7) & F-095-4(1)	1967	4	34

AS-BUILT

SUMMARY TABLES

STAIRWAYS

Station	Location	Type	Cu Yd Conc.	Re-Steel	Lin. Ft Rail	M.B.M. Lumber
47+89 95	Lt.	Wood	0.15			0250.161
48+35	Rt.	Wood	0.15			0.140.110
48+73	Lt.	Wood	0.15			0.180.114
"A"&"B" Lines						
"B" 9+68	Rt.	Concrete	2.1	188	28'8"	
"A" 10+70	Lt.	Concrete	1.8	164	24'2"	
"51+00	Rt.	Wood	0.15			0.400.648
51+95 92	Lt.	Wood	0.15			0.290.015
52+76	Lt.	Concrete	1.3	118	17'2"	
53+45	Lt.	Concrete	1.0	90	12'6"	
54+19 17	Lt.	Wood	0.15	138	130	0.270
55+35	Lt.	Wood	0.15	0		0290.845
55+65 67	Lt.	Wood	0.15	0		0290.343
55+67	Rt.	Concrete	1.0	90	12'6"	DELETED
59+80 17	Lt.	Wood	0.15			0.170 .155
60+10	Lt.	Wood	0.15	54	51	0.180
60+60	Lt.	Concrete	0.6	47	50	
61+80	Lt.	Concrete	0.6	44	50	
62+28	Lt.	Concrete	0.7	48	64	
"E" Line						
"E" 10+25	Lt.	Concrete	1.5	104	72	
65+65	Rt.	Concrete	0.6	32	50	
66+80	Lt.	Wood	0.15			0.180
67+15	Lt.	Wood	0.15			0.220
67+40	Lt.	Wood	0.15	007		0.180
69+45 25	Lt.	Wood	0.15	0	3	0.220 .127
70+15	Lt.	Concrete	0.6	41	50	
70+80	Lt.	Wood	0.15			0.380 .045
Total			13.4	986	950'	3.640

* The excavation required to construct this stairway will be paid for under Item "207(1), Class I Excavation for structures.

ADJUST SEWER LATERALS

Station L/R	Station L/R	Station L/R
47+45 Rt	65+56 Rt	48+00 Lt.
44+25 Rt	67+70 Lt	48+89 Lt.
49+10 Rt.	68+75 Rt	66+33 Rt.
58+70 Rt	71+00 Rt	66+69 Rt.
61+42 Rt	71+25 Lt.	69+57 Lt.
62+00 Rt.	71+68 Rt.	70+28 Lt.
64+70 Rt.	72+25 Rt	70+70 - Lt.
64+95 Rt.	"A" 9+00 Rt	
65+35 Rt.		

ADJUST MAIN VALVES

Station
47+26
47+45
49+63
58+60
58+75
60+40
63+12
58+69
66+00

ADJUST OR RELOCATE WATER VALVE BOXES

Station	Location	Station	Location	Station
48+18	9' Rt.	62+83	4' Lt.	70+70 Lt.
49+25	20' Lt.	62+84	4' Rt.	70+28 Lt.
52+01	28' Lt.	63+83 65	5' Lt.	52+00 Lt.
52+79	26' Lt.	65+58	11' Rt.	52+81 Lt.
53+80 61	24' Lt.	*65+92	2' Rt.	54+35 Lt.
54+39	27' Lt.	66+00	20' Lt.	49+10 Rt.
55+53	16' Rt.	66+43	30' Lt.	56+75 Lt.
58+75	9' Rt.	68+49	11' Rt.	57+20 Lt.
60+28 5	2	71+82	20' Lt.	
60+29	28' Lt.	71+87	15' Rt.	
61+42	1' Lt	171+88	19' Rt.	
61+48 56	28' Lt.	*73+00	16' Rt.	

* To be relocated to new main at same location and adjusted to grade.

CULVERT REMOVAL

Station	Location	Length	Station	Location	Length
46+77	Rt.	28'	47+70	X-ing	54'
47+30	X-ing	62'	134+43	X-ing	182
49+57	X-ing	30'	185+31	X-ing	306
49+86	X-ing	30'	289+	X-ing	38'
55+67	X-ing	48'			
McKinnon St. intersect		65'			
69+90	Rt.	20'			
71+75	Rt.	20'			
72+35	Rt.	17'			
72+48	Rt.	22'			
72+90	Rt.	17'			
Total		355'			

PAY QUANTITIES FOR ITEM 601(1)

Class A Concrete	Cu Yds.
Stairways	13.4
Retaining Walls	307.4
Total	320.8

STAIRWAYS (WOOD)

Station L/R	Concr. Cu Yds.	Misc. M Lumber
57+10 Lt	0	0.336
59+25 Rt.	0	0.346
64+27 Lt.	0	0.269
71+80 Lt.	0	0.244
72+26 Lt.	0	0.409

ADJUST MANHOLE

Station	Finished Grade el.	Location
46+61	63.63	11' Rt.
60+54 0	60.27 —	8.5 Lt.
67+31 —	51.10	4' Lt.

RECONSTRUCT EXIST. MANHOLE

Station	Finished Grade el.	Location
47+34	61.70	1' Rt.
49+73	63+58	4.5' Rt.
55+65	62.46	23' Lt.
58+43	48.38	2' Lt.
62+95	39.04	8.5' Lt.
63+87.5	41.18	18' Lt.
68+19	50.20	9' Lt.
70+79	43.82	10' Lt.
73+23	34.21	14' Rt.
74+16.5	29.52	13' Rt.
Front St.		Rt
46+61		Rt.
60+54		Rt.
67+31		Rt.

CURB CUTS

Station	Location	Type
47+70	Lt.	II
51+03	Rt.	II
51+45	Lt.	II
53+45	Rt.	II
54+40	Rt.	II
56+80	Lt.	II
57+40	Rt.	II
57+55	Lt.	II
63+90	Lt.	*

* Special 50' Wide

Station	Location	Type
64+15	Rt.	II
68+60	Rt.	II
69+90	Rt.	II
71+00	Rt.	II
71+45	Lt.	*
71+80	Rt.	II
72+30	Rt.	II
72+90	Rt.	II
73+10	Rt.	II

MONUMENTS & CASES

Station	Location	Station	Location
47+47.05	Adjust	45+67 54	
50+76.12 P.C.	Install	36+07 48	
51+15.40	Adjust	32+99 96	
52+64.69 P.T.	Install	22+50 94	
53+23.28	Adjust	16+11 48	
56+02.11 P.C.	Install	9+66 42	
58+44.55	Adjust	7+41 81	
60+86.69 P.T.	Install	2+14 75	
63+26.68 P.C.	Install	0+09 75	
64+12.12	Adjust		
64+96.95 P.T.	Install		
67+04.86 P.C.	Install		
68+04.89	Adjust		
68+79.19 P.T.	Install		
72+25.92 P.C.	Install		
73+39.11 P.T.	Install		
73+44.32	Adjust		
74+76.73	Adjust		
Ferry Terminal	Adjust (2)		

INSTALL OR RELOCATE WATER SERVICE

Existing	New	Existing 47+47 Rt	Existing 65+58 Rt	Existing 70+70 Lt
66+44 Lt.	47+93 Rt.	47+51 Rt.	66+42 Lt	76+90 Rt
67+59 Lt.	50+30 Lt.	47+30 Rt.	66+42 Rt.	48+18 Lt
68+03 Lt.	55+90 Lt.	"B" 9+33 Lt.	60+47 Lt.	48+58 Lt
69+48 Lt.	58+40 Lt.	48+18 Rt.	67+61 Lt.	48+80 Lt
71+84 Lt.	60+80 Rt.	48+82 Rt.	69+17 Rt.	49+25 Lt
71+88 Rt.	62+70 Rt.	58+75 Rt.	68+49 Rt.	49+25 Lt
71+90 Rt.	68+55 Lt.	61+42 Rt.	70+22 Lt	63+75 Rt
72+22	73+40 Lt.	64+95 Rt.	65+00 Rt.	47+31 Rt

REMOVAL OF STRUCTURES

Station	Location	Type
62+87	Lt. 6'	Catch Basin
63+07	Lt. 27'	Catch Basin "
63+16	Lt. 5'	Catch Basin
55+71	Rt. 29.5'	Wood Inlet

* Price paid for removal of this structure includes plugging this structure's outfall pipe in a secure manner as approved by the engineer.

RELOCATE FIRE HYDRANTS

Station	Lin. ft.
50+00 Rt.	19'
53+78 Rt.	25'
55+82 Rt.	28'
60+75 Rt.	25'
62+75 Rt.	27'
72+95 Rt.	10'
Total	134'

INSTALL SEWER SERVICE

Station	Lin. ft.
47+93 Rt.	37'
"B" 10+77 Rt.	11'
60+80 Rt.	40'
62+70 Rt.	38'
68+55 Lt.	18'
73+ Lt.	50'
Total	194

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	S-0943(7)	1967	5	34

CONSTRUCTION PLAN AS-BUILT

NOTE: For details of Intersections see Intersection sheets #17 to #20

NOTE
Bearing and coordinates for this project are based on the Wrangell Tidelands Survey, dated October 12, 1964.

BEGINNING OF PROJECT S-0943(7)
STA. "AS BUILT" 46+05.29 P.C. BK.=
STA. "0" 46+07.21 P.C. AH.

TBM #1 Elev. 69.62
8" spike in power pole
35' Right @ Sta. 45+00

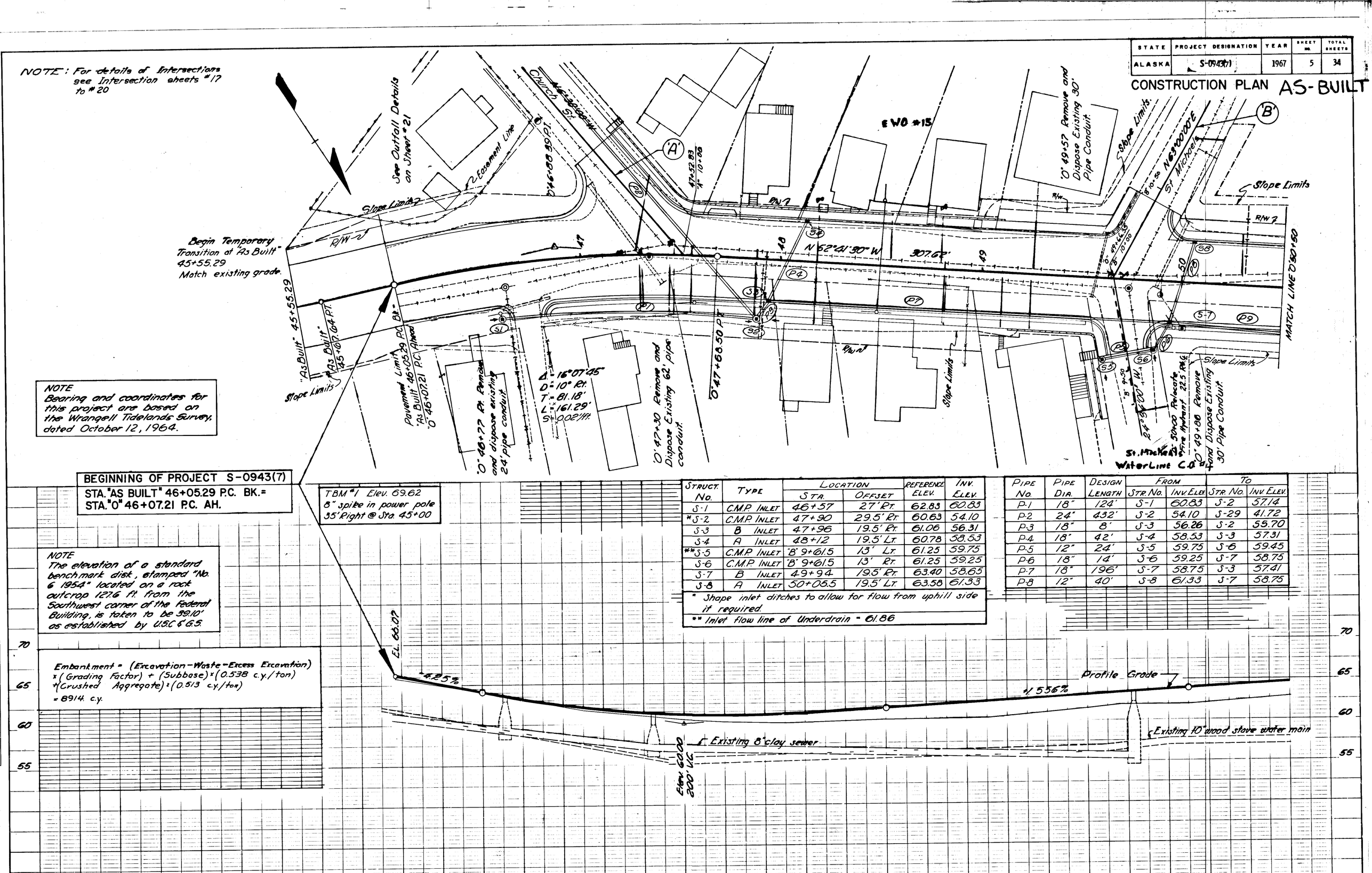
NOTE
The elevation of a standard benchmark disk, stamped "No. 6 1954" located on a rock outcrop 127.6 ft. from the Southwest corner of the Federal Building, is taken to be 39.10' as established by U.S.C. & G.S.

Embankment = (Excavation - Waste - Excess Excavation) x (Grading Factor) + (Subbase) x (0.538 c.y./ton) + (Crushed Aggregate) x (0.513 c.y./ton)
= 8914 c.y.

Struct. No.	Type	Location Sta.	Location Offset	Reference Elev.	Inv. Elev.
S-1	C.M.P. Inlet	46+57	27' Rt.	62.83	60.83
*S-2	C.M.P. Inlet	47+90	29.5' Rt.	60.63	54.10
S-3	B Inlet	47+96	19.5' Rt.	61.06	56.31
S-4	A Inlet	48+12	19.5' Lt.	60.78	58.53
**S-5	C.M.P. Inlet	'B' 9+61.5	13' Lt.	61.25	59.75
S-6	C.M.P. Inlet	'B' 9+61.5	13' Rt.	61.25	59.25
S-7	B Inlet	49+94	19.5' Rt.	63.40	58.65
S-8	A Inlet	50+05.5	19.5' Lt.	63.58	61.33

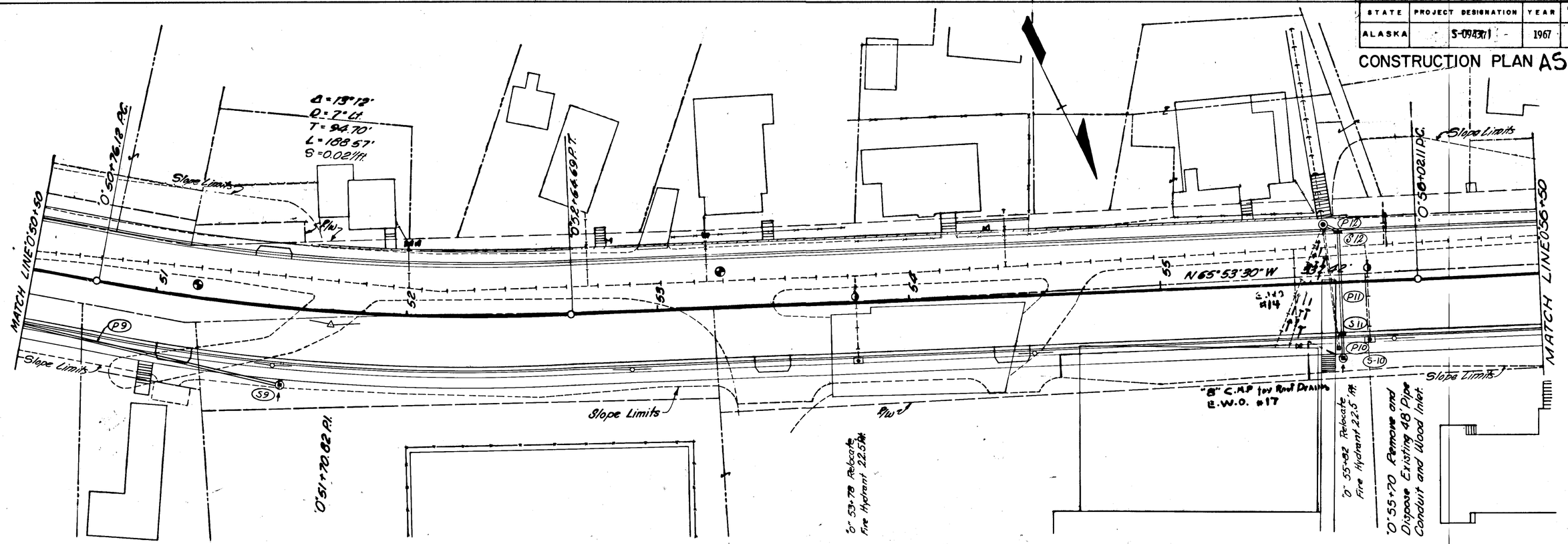
* Shape inlet ditches to allow for flow from uphill side if required.
** Inlet flow line of Underdrain = 61.86

Pipe No.	Pipe Dia.	Design Length	From Str. No.	From Inv. Elev.	To Str. No.	To Inv. Elev.
P-1	18"	124'	S-1	60.83	S-2	57.14
P-2	24"	432'	S-2	54.10	S-29	41.72
P-3	18"	8'	S-3	56.26	S-2	55.70
P-4	18"	42'	S-4	58.53	S-3	57.31
P-5	12"	24'	S-5	59.75	S-6	59.45
P-6	18"	14'	S-6	59.25	S-7	58.75
P-7	18"	196'	S-7	58.75	S-3	57.41
P-8	12"	40'	S-8	61.33	S-7	58.75



STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	S-094371	1967	6	34

CONSTRUCTION PLAN AS-BUILT



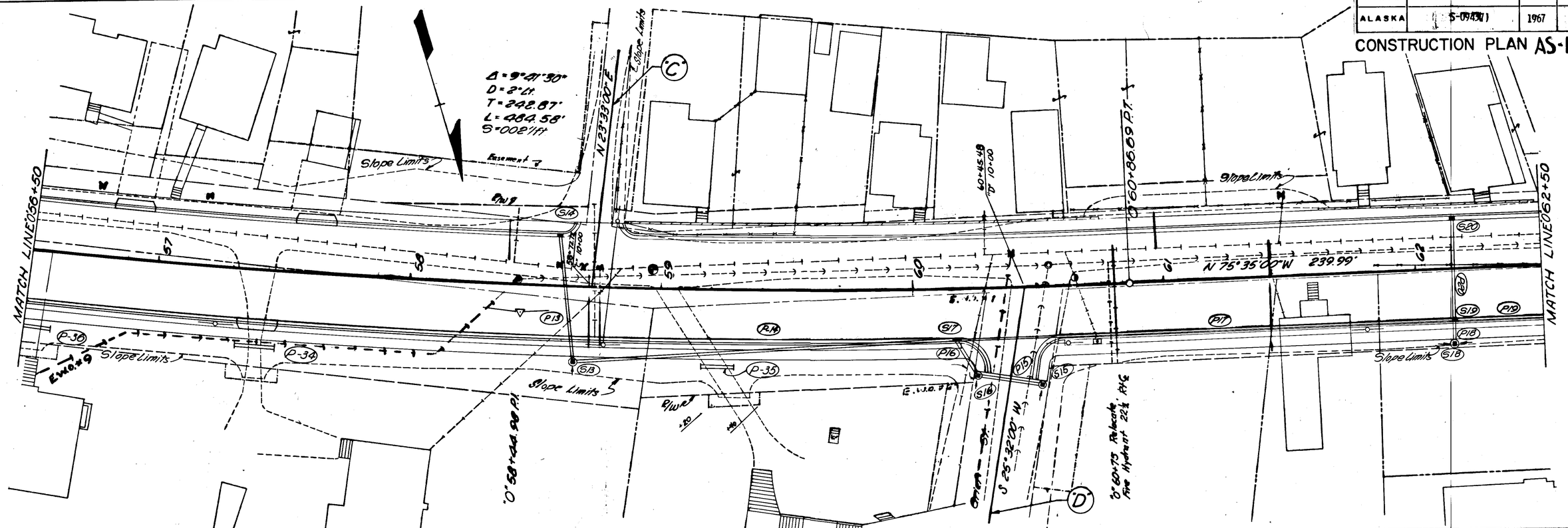
Struct. No.	Type	Location Sta.	Location Offset	Reference Elev.	Inv. Elev.
*S-9	C.M.P. Inlet	51+52.5	29.5' Rt.	64.67	63.27
*S-10	C.M.P. Inlet	55+71	29.5' Rt.	61.14	58.65
S-11	A Inlet	55+70	29.5' Lt.	61.21	57.81
S-12	AB Inlet	55+70	19.5' Lt.	61.61	57.81

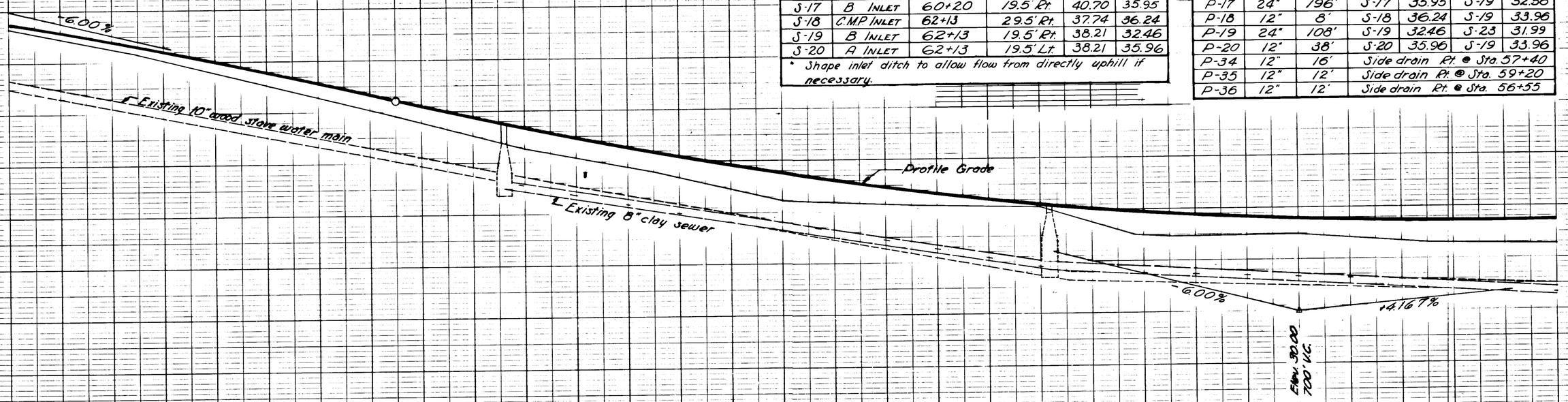
* Shape inlet ditch to allow for flow from Side ditch, if required.

Pipe No.	Pipe Dia.	Design Length	From Str. No.	From Inv. Elev.	To Str. No.	To Inv. Elev.
P-9	18"	168'	S-9	63.27	S-7	58.75
P-10	18"	8'	S-10	58.65	S-11	57.91
P-11	18"	40'	S-11	57.81	S-12	57.00
P-12	18"	7'	S-12	57.15	Exist. M.H.	57.00

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	S-0943(1)	1967	7	34

CONSTRUCTION PLAN AS-BUILT





Struct. No.	Type	Location Sta.	Location Offset	Reference Elev.	Inv. Elev.
* S-13	C.M.P. Inlet	58+66	29.5' Rt.	47.29	43.29
S-14	A Inlet	58+59	19.5' Lt.	47.32	45.07
S-15	C.M.P. Inlet	'D' 9+63	13' Lt.	40.64	39.14
S-16	C.M.P. Inlet	'D' 9+63	13' Rt.	40.64	38.64
S-17	B Inlet	60+20	19.5 Rt.	40.70	35.95
S-18	C.M.P. Inlet	62+13	29.5' Rt.	37.74	36.24
S-19	B Inlet	62+13	19.5' Rt.	38.21	32.46
S-20	A Inlet	62+13	19.5' Lt.	38.21	35.96

* Shape inlet ditch to allow flow from directly uphill if necessary.

Pipe No.	Pipe Dia.	Design Length	From Str. No.	From Inv. Elev.	To Str. No.	To Inv. Elev.
P-13	18"	48'	S-14	45.02	S-12	43.34
P-14	24"	150'	S-12	43.29	S-17	36.05
P-15	12"	24'	S-15	39.14	S-16	38.64
P-16	12"	14'	S-16	38.64	S-17	37.45
P-17	24"	196'	S-17	35.95	S-19	32.56
P-18	12"	8'	S-18	36.24	S-19	33.96
P-19	24"	108'	S-19	32.46	S-23	31.99
P-20	12"	38'	S-20	35.96	S-19	33.96
P-34	12"	16'	Side drain Rt. @ Sta. 57+40			
P-35	12"	12'	Side drain Rt. @ Sta. 59+20			
P-36	12"	12'	Side drain Rt. @ Sta. 56+55			

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	S-0943(7)	1967	8	34

CONSTRUCTION PLAN AS-BUILT

See Outfall Details on Sheet #21
"O" 62+87, 63+07 & 63+16 Lt. Remove and Dispose Existing Wood Drop Inlets and Connecting Pipes.
"O" 64+15.96 P.I.
Sta. 66+00 31' Lt. - Match Existing concrete pavement & curb.
Slope Limits
Sta. 65+93 to Sta. 74+00 Remove & dispose of existing 6" wood stave watermain & install 6" cast iron watermain.
"O" 67+04.86 P.C.
Δ = 8°43'
D = 5° Lt.
T = 87.34'
L = 174.33'
S = .002'/ft.
Crittenden St.
"G" 10+00 = "O" 68+79.19 PT.
N 56°46'30"E
N 10°03'00"W
"E"
"E" 10+00 = "O" 63+11.56
N 33°01'00"W
207.91'
"F" 10+00 = "O" 67+30.39 POST
R/W
Δ = 42°34'
D = 25° Rt.
T = 89.28'
L = 170.27'
S = 0.02'/ft.
"O" 64+96.95 P.T.
"O" 63+26.68 P.C.
N 75°35'00"W
239.99'
MATCH LINE "O" 62+50
McKinnon St.
S 15°16'00"W
Meet existing sidewalk
Bevier St.
S 52°28'00"W
"F"
"O" 67+92.20 P.I.
School Playground
MATCH LINE "O" 68+50
See Change Order #6
Sta 62+75 E.W.O. #12
"O" 62+75 Relocate Fire Hydrant 22½' Rt.
62+90 EWO #8

TBM # 9 Elev. 41.22
8" spike in power pole
30' Left @ Sta. 64+30
Elev. 55.00
400' V.C.
3.25%
+4.167%
Profile Grade
Proposed Water Main #2
Existing 6" wood stave water main
Existing 8" clay sewer
Existing 10" wood stave water main
* Minimum cover - 2'-0" below original ground.
55
50
45
40
35
30

STRUCT. No.	TYPE	LOCATION STA.	LOCATION OFFSET	REFERENCE ELEV.	INV. ELEV.
S-21	C.M.P. INLET	"E" 9+67.5	13' Rt.	36.93	35.43
S-22	C.M.P. INLET	"E" 9+67.5	13' Lt.	36.93	34.93
S-23	B INLET	63+26	19.5' Rt.	39.14	31.89
S-24	C.M.P. INLET	68+43	34.5' Rt.	49.45	47.95

PIPE No.	PIPE DIA.	DESIGN LENGTH	FROM STR. No.	FROM INV. ELEV.	TO STR. No.	TO INV. ELEV.
P-21	12"	24'	S-21	35.43	S-22	35.03
P-22	18"	18'	S-22	34.93	S-23	32.89
P-23	24"	158'	S-23	31.89	S-31	22.22
P-24	18"	72'	S-24	47.95	OUTLET	47.00
P-37	12"	10'	Side drain Rt. @ Sta. 65+65			

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	S-0943(7)	1967	9	34

CONSTRUCTION PLAN AS-BUILT

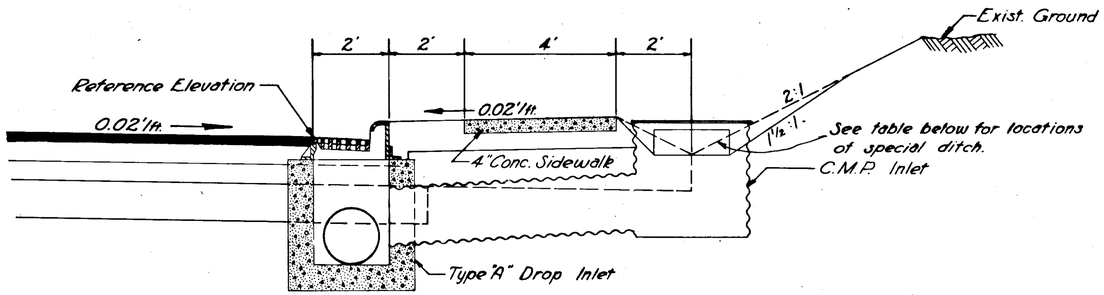
MATCH LINE "O" 68+50
"O" 68+79.19 Rt.
Slope Limits
N 21°44'00" W 396.75'
"O" 71+75 Rt. Remove and Dispose Existing 20" Pipe Conduit.
"O" 72+35 Rt. Remove and Dispose Existing 17" Pipe Conduit.
"O" 72+48 Rt. Connect existing Storm drain to S-25. Remove & Dispose 22' of pipe conduit.
"O" 72+90 Rt. Remove and Dispose Existing 17" pipe conduit.
Δ = 56°52'
D = 90° Lt
T = 34.47'
L = 63.19'
S = N.C.
"O" 74+00 37' Lt. Connect to Existing Water Main.
73+39.13 P.T.
"O" 72+75.94 P.C.
R/W
S 81°24'00" W 79.29'
S 57°08'00" W
N 16°34'30" W
See Outfall Details on Sheet #20
"O" 69+90 Rt. Remove and Dispose Existing 20" Pipe Conduit.
72+34 40' Rt. Match existing concrete curb & drive with 4" concrete pavement - 11' wide. 1.6 cu. yd. class "A" concrete.
Existing Roof Drains Cut off at top of slope
"O" 72+95 Relocate Fire Hydrant 22.5' Rt.
"O" 73+10 59' Rt.
72+84 42' Rt. Match existing concrete drive with 4" concrete pavement 8' wide. 1.5 cu. yd. class "A" concrete.
END OF PROJECT S-0943(7)
STA. "O" 74+18.42
BEGINNING OF PROJECT F-0954(1)
STA. "I" 10+00

STRUCT. No.	TYPE	LOCATION STA.	LOCATION OFFSET	REFERENCE ELEV.	INV. ELEV.
S-25	C.M.P. Inlet	72+48	29.5' Rt.	36.41	34.41
S-26	A Inlet	72+49	19.5' Rt.	36.83	34.08
S-27	A Inlet	72+49	19.5' Lt.	36.83	33.58
S-28	B Inlet	73+90	19.5' Rt.	30.40	25.65
S-29	A Inlet	74+02	28.5 Rt.	29.05	25.85
S-30	A Inlet	73+83	19.5 Lt.	30.78	28.75

PIPE No.	PIPE DIA.	DESIGN LENGTH	FROM STR. No.	FROM INV. ELEV.	TO STR. No.	TO INV. ELEV.
P-25	18"	8'	S-25	34.41	S-26	34.18
P-26	18"	40'	S-26	34.08	S-27	33.68
P-27	18"	130'	S-27	33.58	S-28	25.75
P-28	18"	136'	S-28	25.65	OUTFALL	18.50
P-29	12"	16'	S-29	25.85	S-28	25.70
P-30	12"	40'	S-30	28.75	S-28	25.70

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	S-0943(7)	1967	10	34

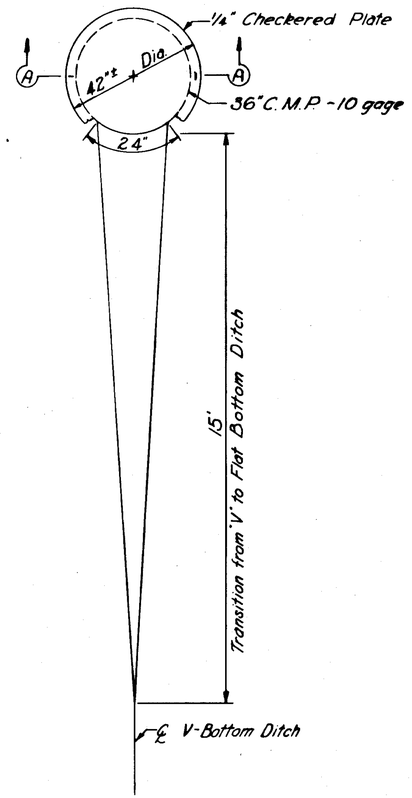
DRAINAGE STRUCTURES
AS-BUILT



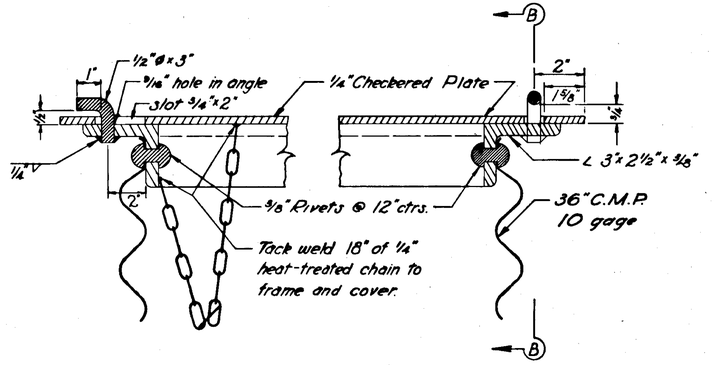
TYPICAL STORM SEWER INSTALLATION

SPECIAL DITCH AND C.M.P. INLET LOCATIONS

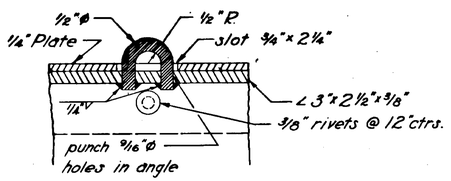
Drains to Inlet No.	From Sta.	To Sta.
S-2	47+85	49+10
S-9	51+45	52+40
S-12	56+00	58+70
S-16	58+70	60+20
S-18	60+65	62+80
S-22	63+10	67+00
S-24	67+50	68+50



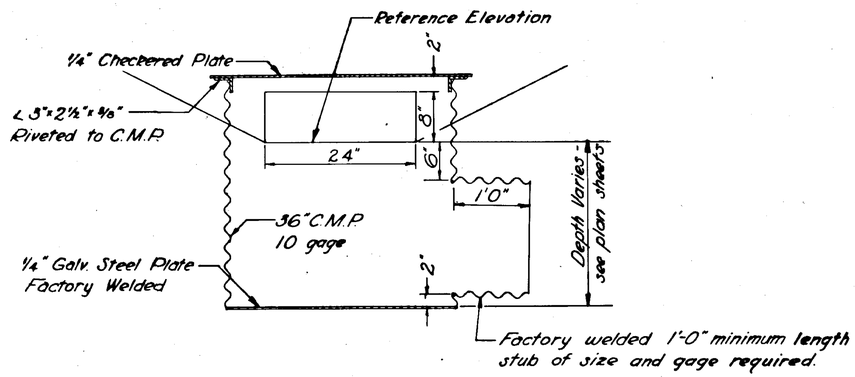
TRANSITION FROM V-BOTTOM DITCH TO FLAT BOTTOM DITCH



SECTION A-A



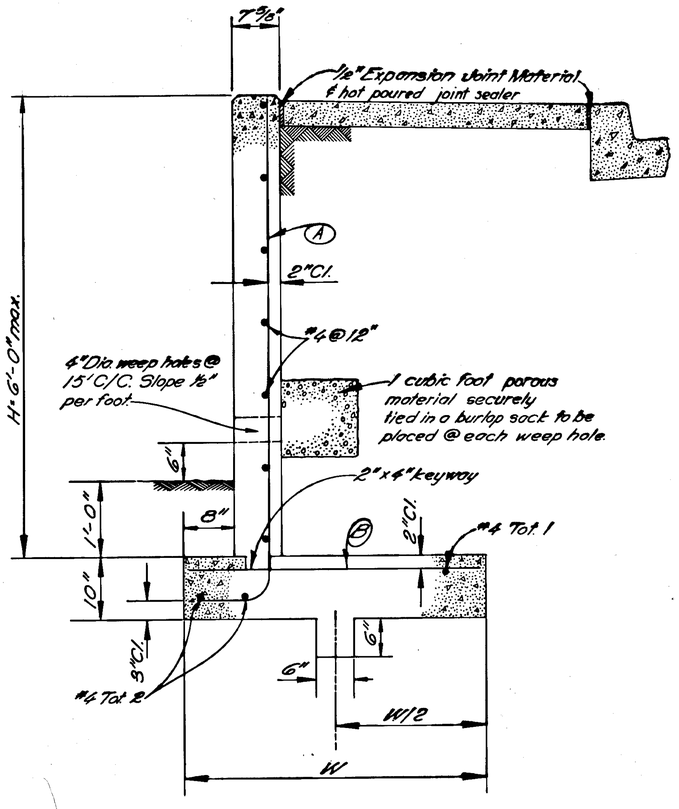
SECTION B-B



TYPICAL C. M. P. INLET

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	S-0943(1)	1967	11	34

AS-BUILT

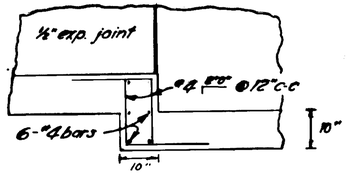


TYPICAL SECTION TYPE A
RETAINING WALL
WALL NOS 1, 4, 5, 6, 7, 8, & 9

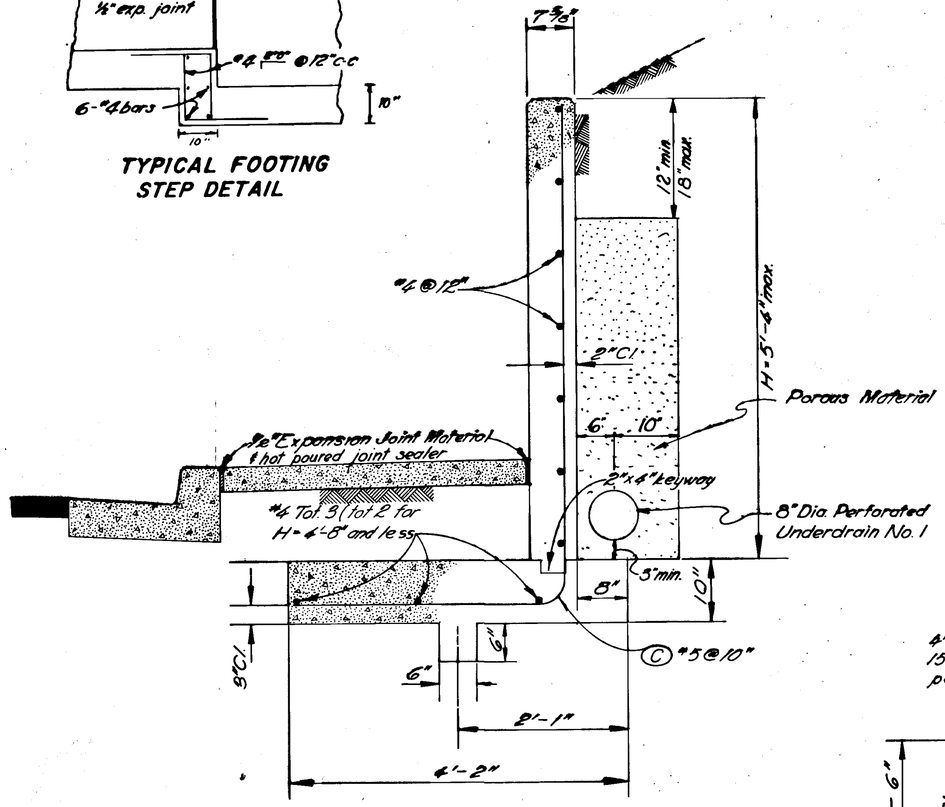
Design H'	5'-4"	4'-0"	4'-8"	5'-4"	6'-0"
W	2'-8"	3'-0"	3'-4"	3' 8"	4'-0"
A	#4@16"	#4@12"	#4@8"	#5@10"	#5@8"
B	#4@16"	#4@16"	#4@8"	#4@10"	#4@8"

QUANTITIES

Wall No.	Concrete (Cu. Yds)	Steel (lbs)
1	41.5	2745
2	11.6	756
3	15.8	807
4	91.4	6498
5	41.5	2994
6	18.4	1228
7	19.2	1491
8	7.7	312
9	60.3	4269
Stairs	13.4	936



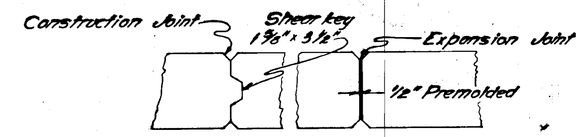
TYPICAL FOOTING STEP DETAIL



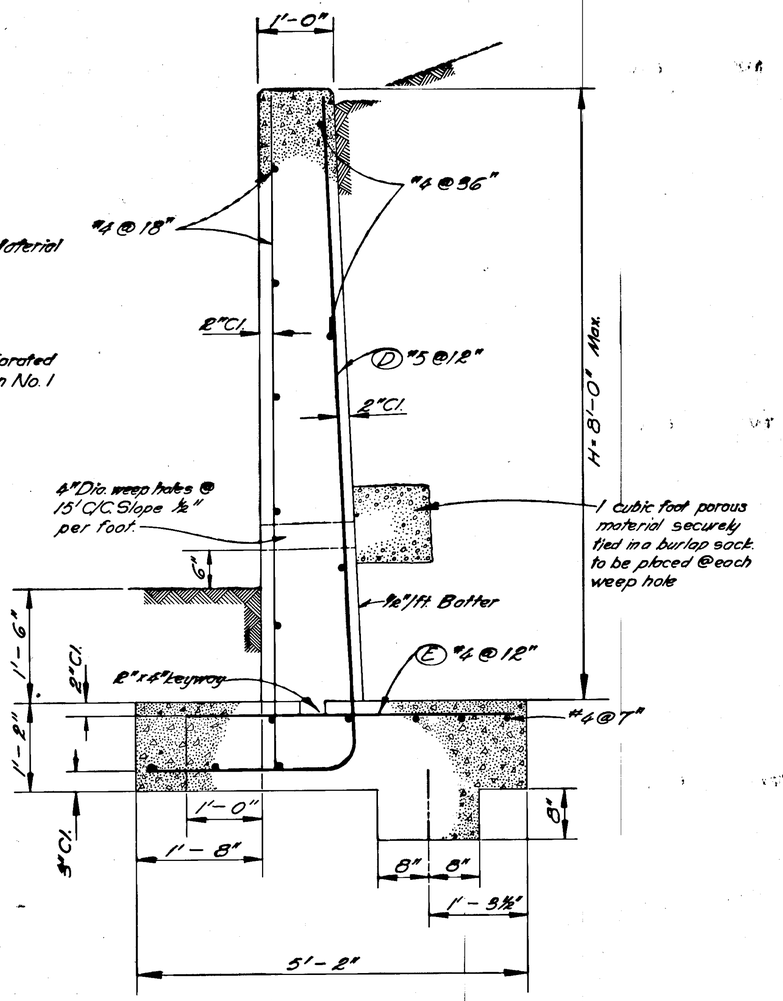
TYPICAL SECTION TYPE B
RETAINING WALL
WALL NO 2

GENERAL NOTES:

1. Expansion joints shall have a maximum spacing of 90 feet.
2. Contraction joints shall have a maximum spacing of 30 feet.
3. Construction joints shall be at every footing step.
4. All exposed joint corners shall have a 3/4" chamfer.
5. All reinforcing bars shall have a 2 inch minimum clear distance to face of concrete except where shown.
6. Porous material shall conform to the requirements established in the special provisions.
7. Footing step detail to be used wherever there is a change in footing elevation.



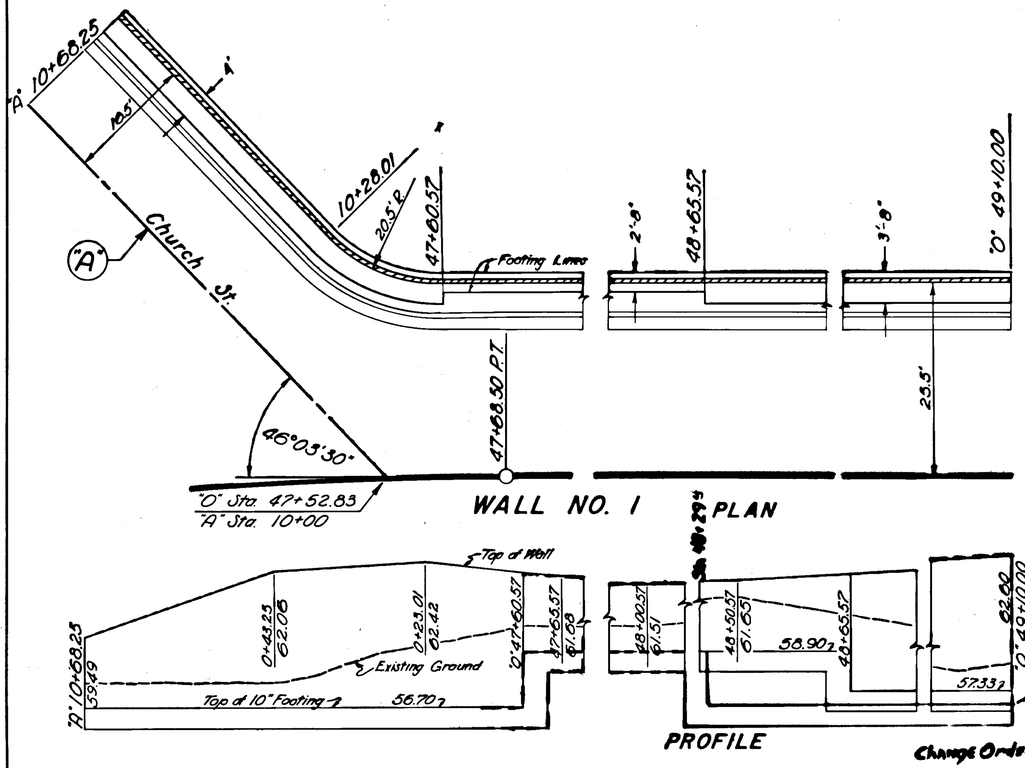
TYPICAL JOINT DETAILS

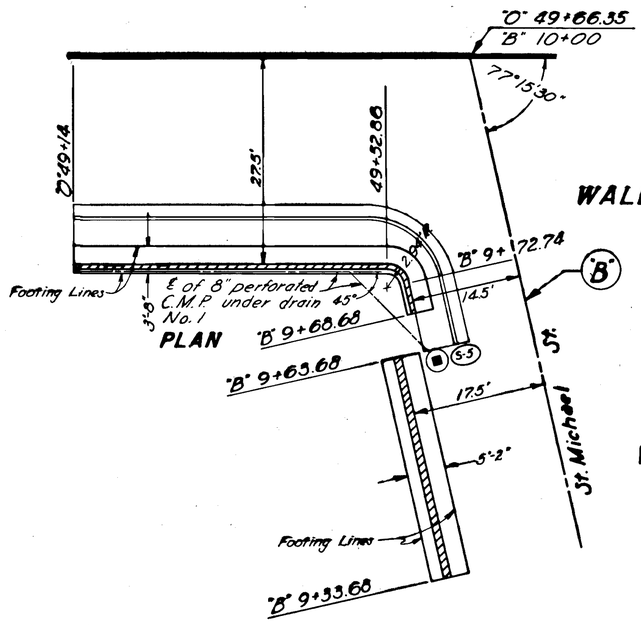


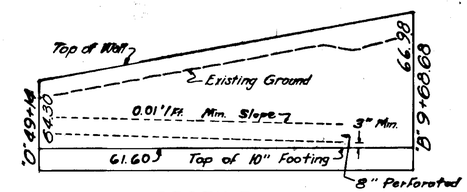
TYPICAL SECTION TYPE C
RETAINING WALL
WALL NO. 3

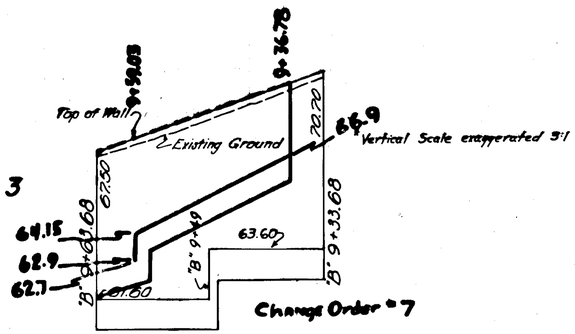
STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	S-0943(1)	1967	12	34

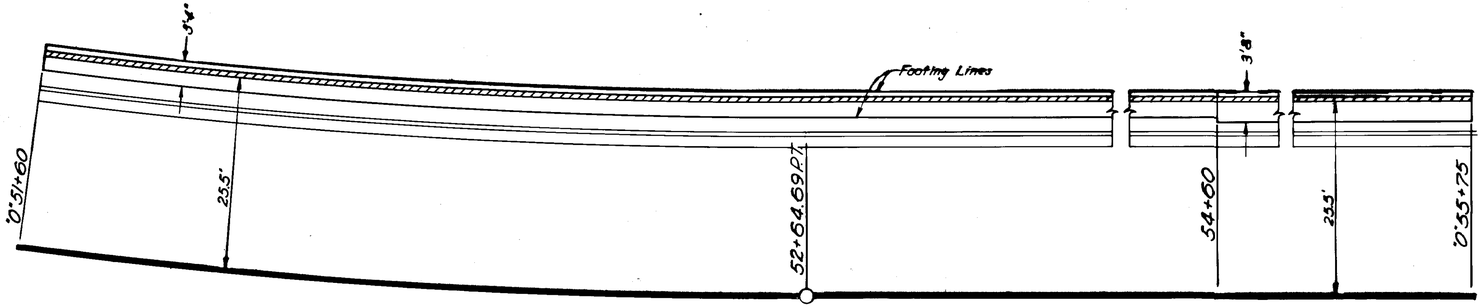
RETAINING WALLS AS-BUILT

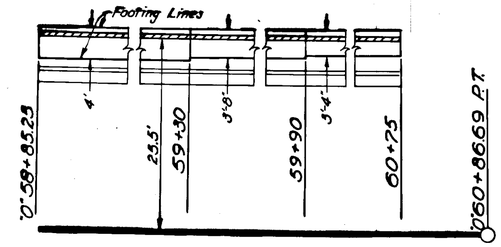




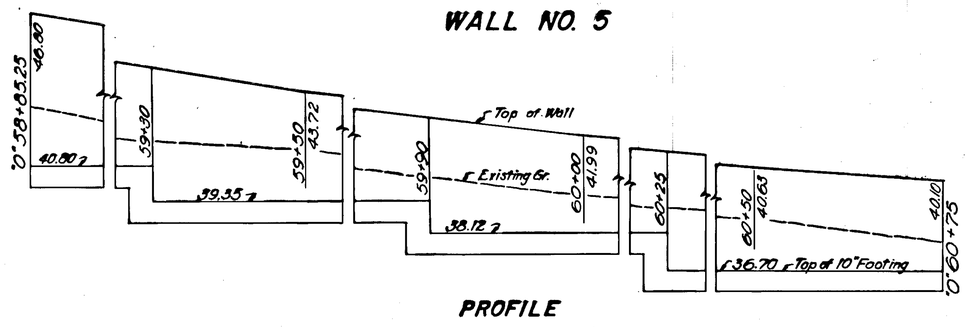






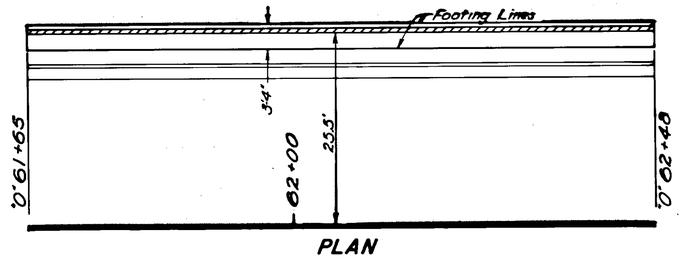


WALL NO. 5

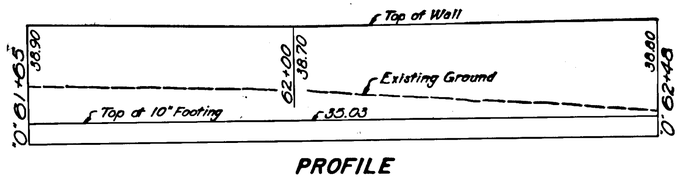


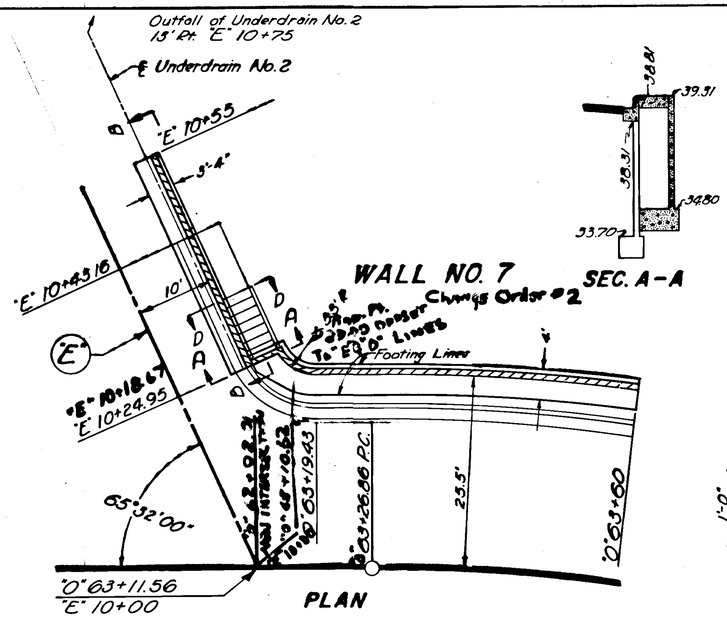
STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	S-0943(1)	1967	13	34

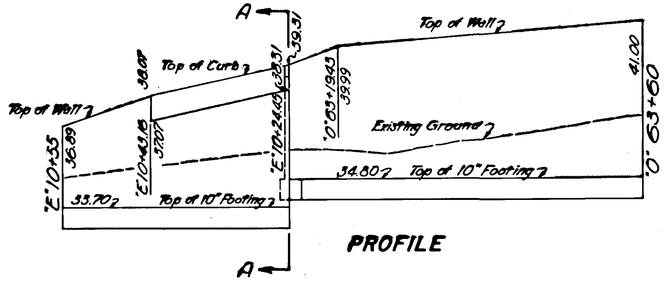
RETAINING WALLS AS-BUILT

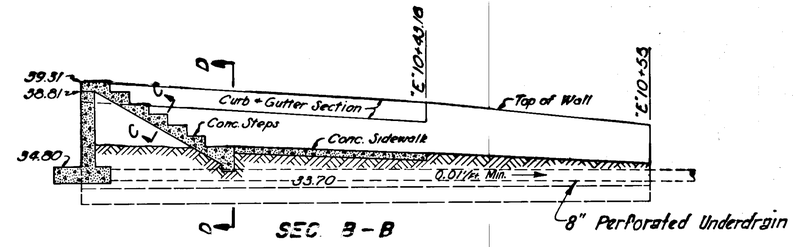


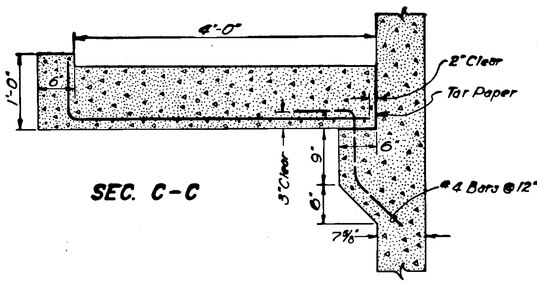
WALL NO. 6

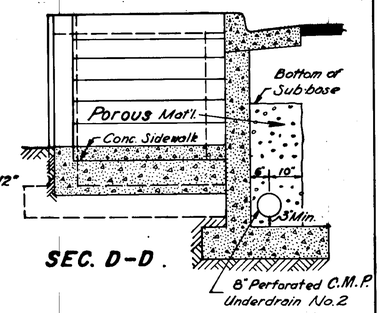






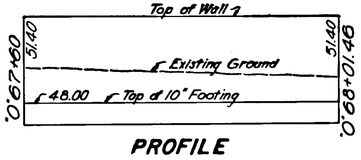


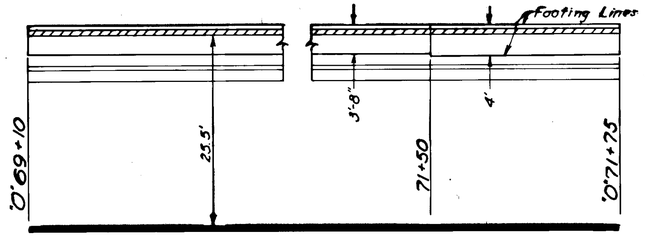




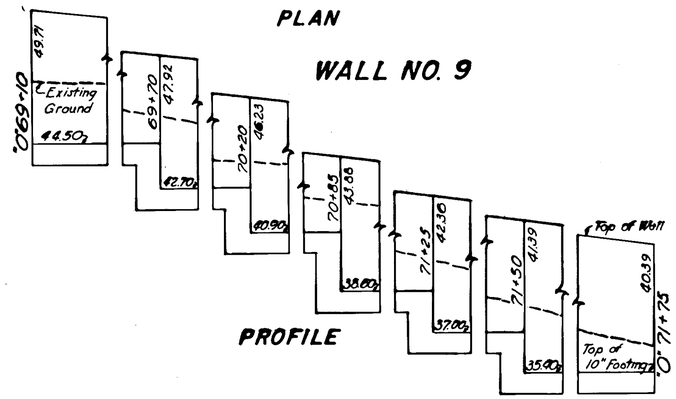
See Sheet No. 14 for Standard Stair Details.

WALL NO. 8



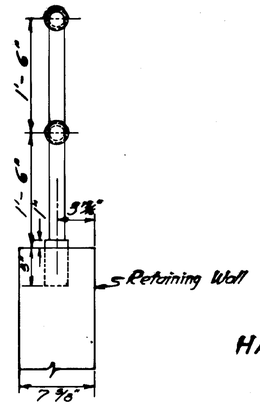


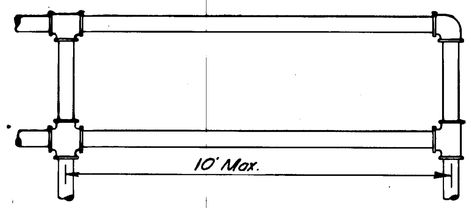
WALL NO. 9



HAND RAIL LOCATIONS

Wall No.	From Station	To Station	Lineal Feet of Rail
1	"A" 10+68.25	"0" 49+10	192.9
4	"0" 5,1+60	"0" 55+75	373.0
5	"0" 58+85.25	"0" 60+75	177.0
6	"0" 61+65	"0" 62+48	74.0
7	"E" 10+24.95	"0" 63+60	45.6
8	"0" 67+60	"0" 68+01.46	40.5
9	"0" 69+10	"0" 71+15	196.0





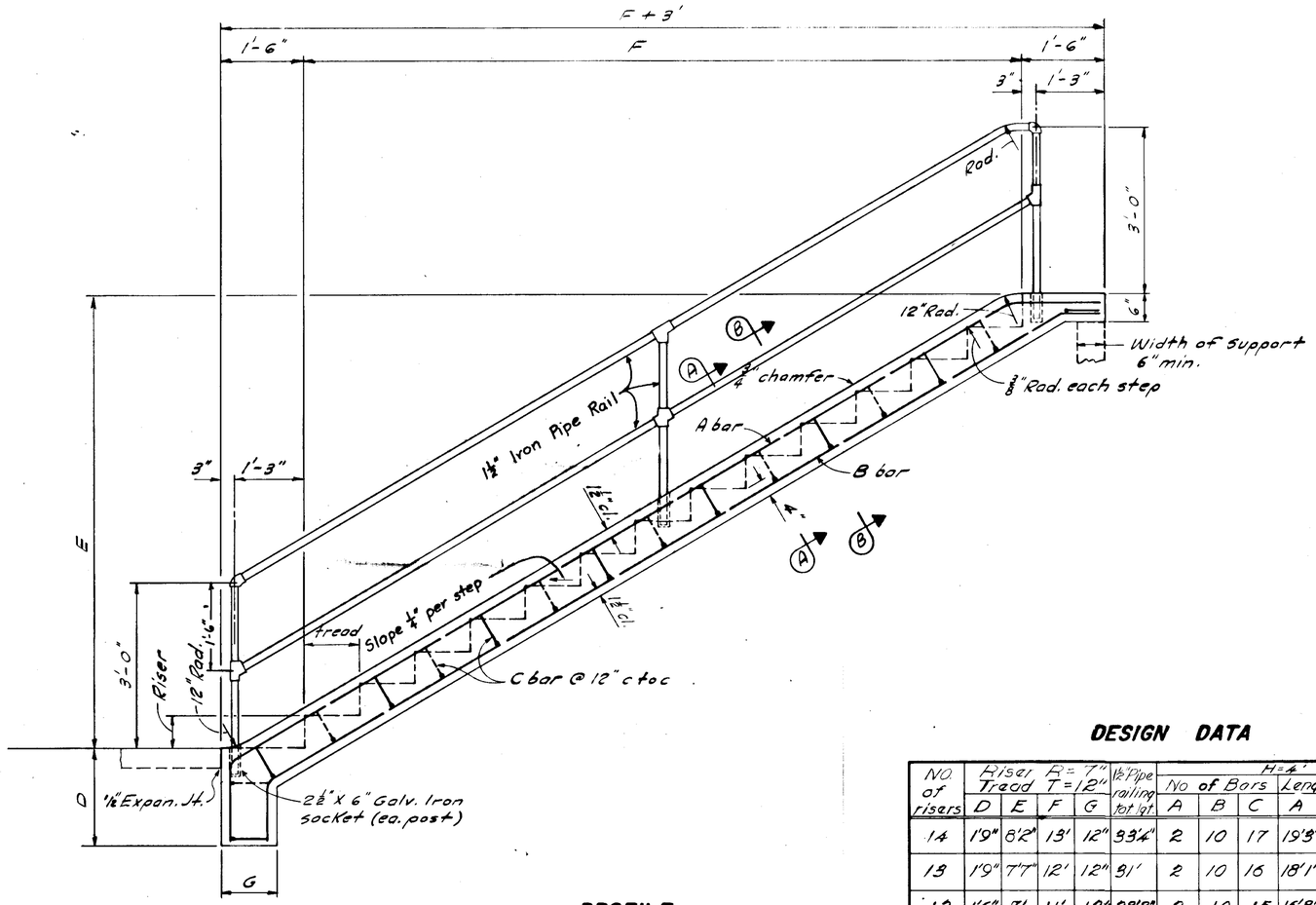
HAND RAIL DETAILS

GENERAL NOTES:

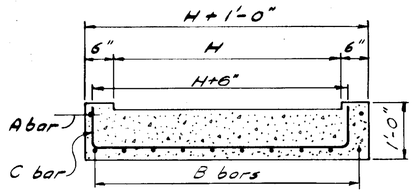
1. One and one half inch diameter Galvanized Steel Pipe shall be used for railing and posts.
2. Adjustable type galvanized fittings may be substituted for the welded joints.
3. Posts shall be set in 2½" galvanized iron pipe sockets and calked or poured with lead.

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	S-0943(7)	1967	14	34

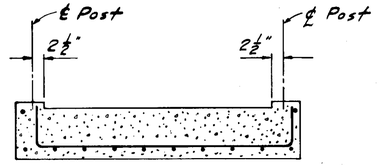
CONCRETE STAIRWAYS AS-BUILT



PROFILE



SECTION A-A



SECTION B-B

DESIGN DATA

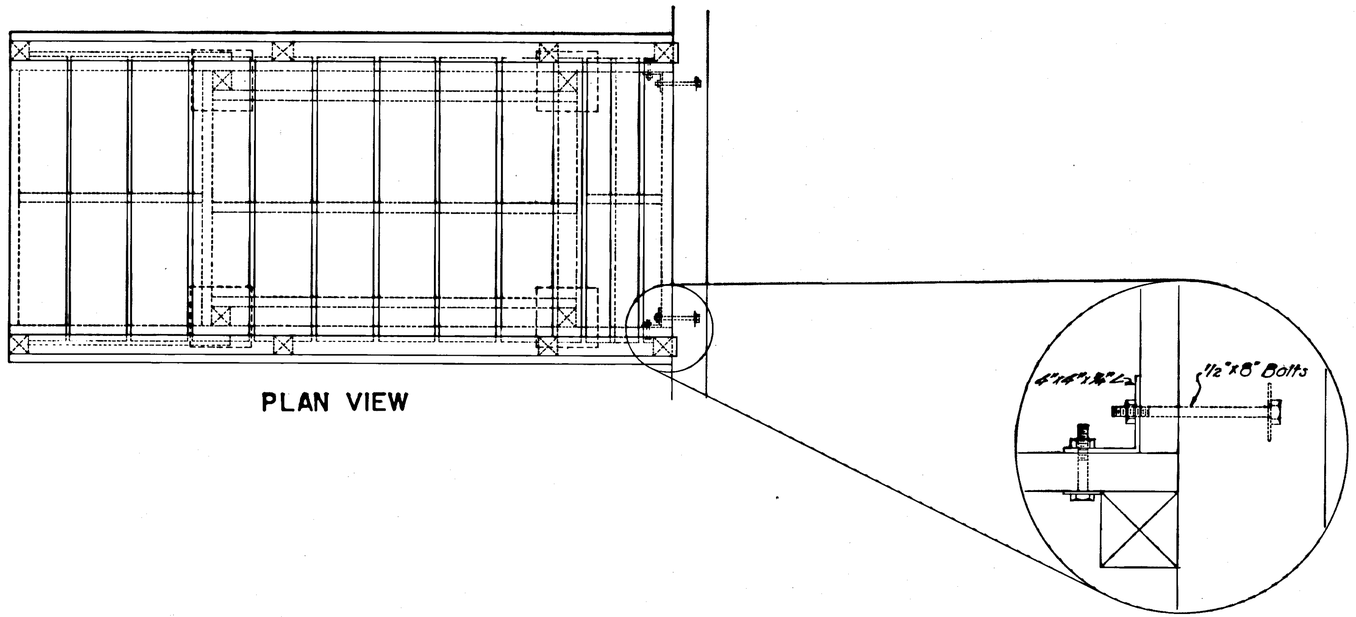
No. of risers	Riser R = 7" Tread T = 12" D	E	F	G	1½" Pipe railing tot lgt.	H=4' No of Bars A	B	C	Length of Bars A	B	C	Total steel pounds	Total conc cu yds.
14	1'9"	8'2"	13'	12"	93'4"	2	10	17	19'3"	18'3"	6'	216	2.4
13	1'9"	7'7"	12'	12"	91'	2	10	16	18'1"	17'2"	6'	208	2.3
12	1'6"	7'	11'	12"	28'8"	2	10	15	16'8"	15'9"	6'	188	2.1
11	1'6"	6'5"	10'	12"	26'6"	2	10	14	15'6"	14'7"	6'	174	2.0
10	1'6"	5'10"	9'	10"	24'2"	2	10	13	14'4"	13'6"	6'	161	1.8
9	1'6"	5'3"	8'	10"	21'10"	2	10	12	13'2"	12'4"	6'	148	1.6
8	1'3"	4'8"	7'	10"	19'6"	2	10	10	11'9"	10'11"	6'	129	1.5
7	1'3"	4'1"	6'	8"	17'2"	2	10	9	10'7"	9'11"	6'	116	1.3
6	1'3"	3'6"	5'	8"	14'10"	2	10	8	9'6"	8'9"	6'	103	1.2
5	1'3"	2'11"	4'	8"	12'6"	2	10	7	8'4"	7'7"	6'	90	1.0
4	1'3"	2'4"	3	6"	10'4"	2	10	6	7'2"	6'6"	6'	77	.9
3	1'3"	1'9"	2	6"	—	2	10	5	6'	5'4"	6'	64	.7
2	1'3"	1'2"	1	6"	—	2	10	4	4'10"	4'2"	6'	50	.6

NOTES:

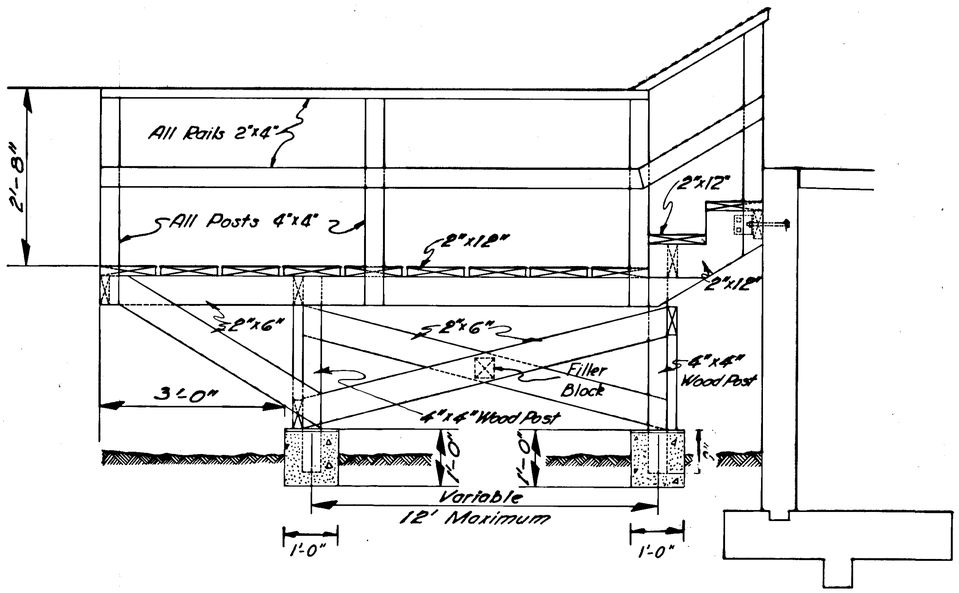
1. All edges shall be chamfered ¾".
2. ½ inch expansion joint shall be placed at the end of the steps where steps abut proposed or existing concrete sidewalk.
3. All steel reinforcement shall be #4 Deformed Bars. Splices in reinforcing steel shall overlap a minimum length of 40 diameters.
4. Railings and posts shall be of the same type as used on retaining walls.
5. All steel shall have a minimum clear distance of 1½" to face of concrete.
6. All expansion joints shall be sealed with a hot poured elastic type joint seal conforming with AASHO Designation M 173-60.

STATE		PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA		S-0943(7)	1967	15	34

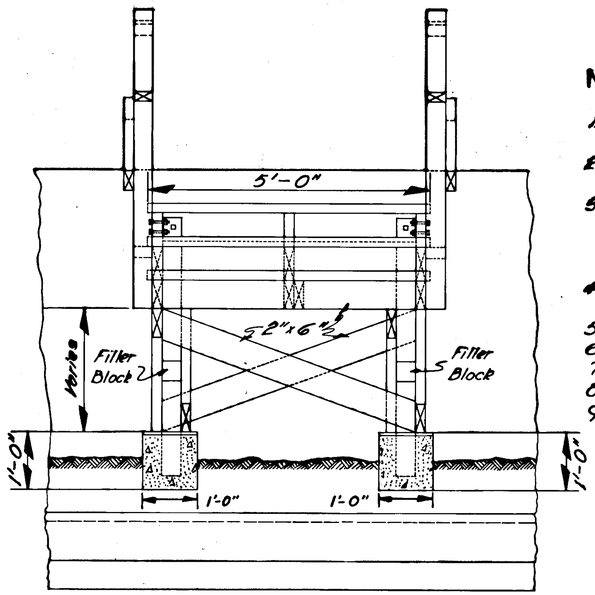
TREATED TIMBER STAIRWAY & WALKWAY
AS-BUILT



PLAN VIEW



SIDE VIEW



FRONT VIEW

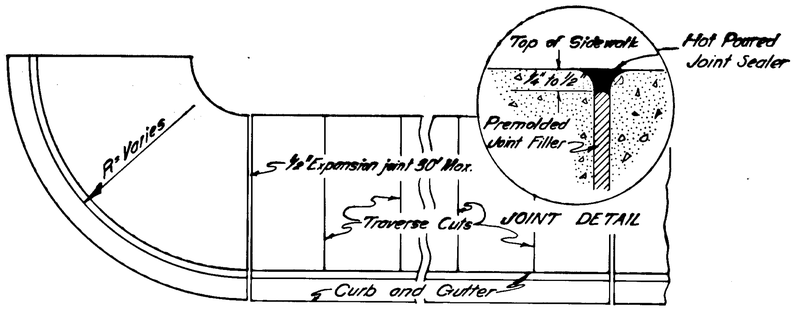
NOTES:

1. All Bolts, washers, nails and other hardware shall be galvanized.
2. All Wood except railing, railing posts, and treads shall be of creosoted, pressure treated lumber.
3. All Railing, railing posts, and treads shall be No. 1 common Sitka Spruce or Douglas Fir, and shall be treated in accordance with 615.02(f) of the Special Provisions.
4. Locations of wood stairways is approximate only and is subject to change by the project engineer.
5. All wood shall be surfaced on four sides.
6. Footings shall have a 3/4" chamfer on all edges.
7. Nailing shall be as directed by the engineer.
8. Deck member spacing shall be one nail width.
9. Footings shall be class "A" concrete. Payment will be under item 601(1).

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	S-0943(1)	1967	16	34

AS-BUILT

TYPICAL EXPANSION & CONTRACTION JOINT DETAILS

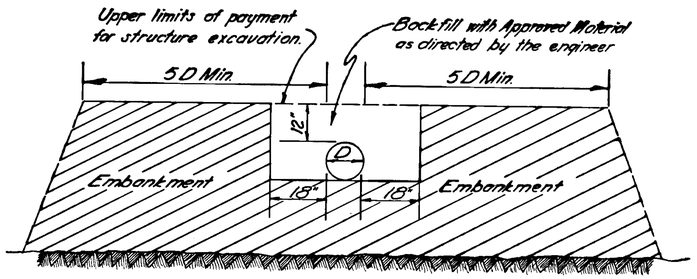


Expansion Joint: Premolded expansion joint filler ½" thick complying with AASHO designation M153, type I shall be used at all expansion joints. Joints shall be located as follows:

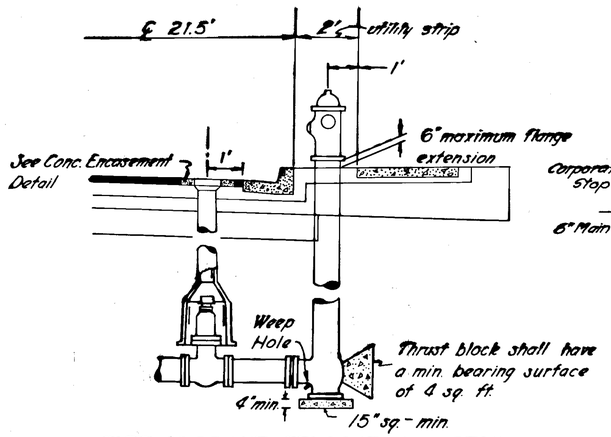
Curb and Gutter: Expansion joints shall be at the end of the curb return and immediately following and preceding curb cuts. Thereafter expansion joints shall be spaced intermediately at intervals of 30' except where shorter sections are needed for closure.

Sidewalks: Expansion joints shall be opposite expansion joints in adjoining curb and gutter. Traverse plane weakness joints shall be at uniform intervals of 6' except where shorter sections are necessary for closures.

All expansion joints shall be sealed with a hot-poured elastic type joint seal conforming with AASHO designation M173-60. This joint seal material will be considered incidental to Item 608(1), Concrete Sidewalk, and no separate payment will be made therefore.

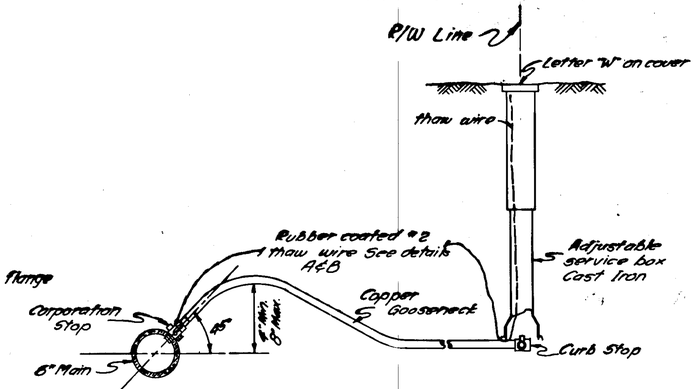


STRUCTURE EXCAVATION DETAIL

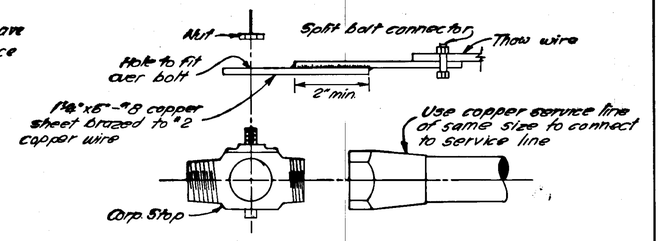


FIRE HYDRANT RELOCATION DETAIL

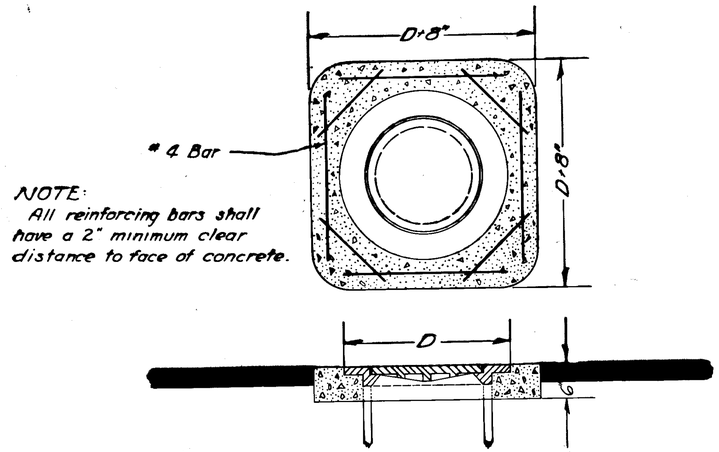
See Sheet No. 4 For Locations



WATER SERVICE CONNECTION DETAIL



THAW WIRE CONNECTION - DETAIL 'A'



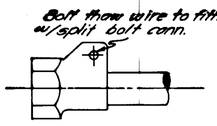
NOTE:
All reinforcing bars shall have a 2" minimum clear distance to face of concrete.

CONCRETE ENCASEMENT DETAIL

All valve box and cleanout covers falling within the pavement limits shall be adjusted to grade and encased in class "A" concrete as directed by the engineer.

Concrete Encasements are incidental to the particular structure and item involved.

See Sheet No. 4 for Locations.



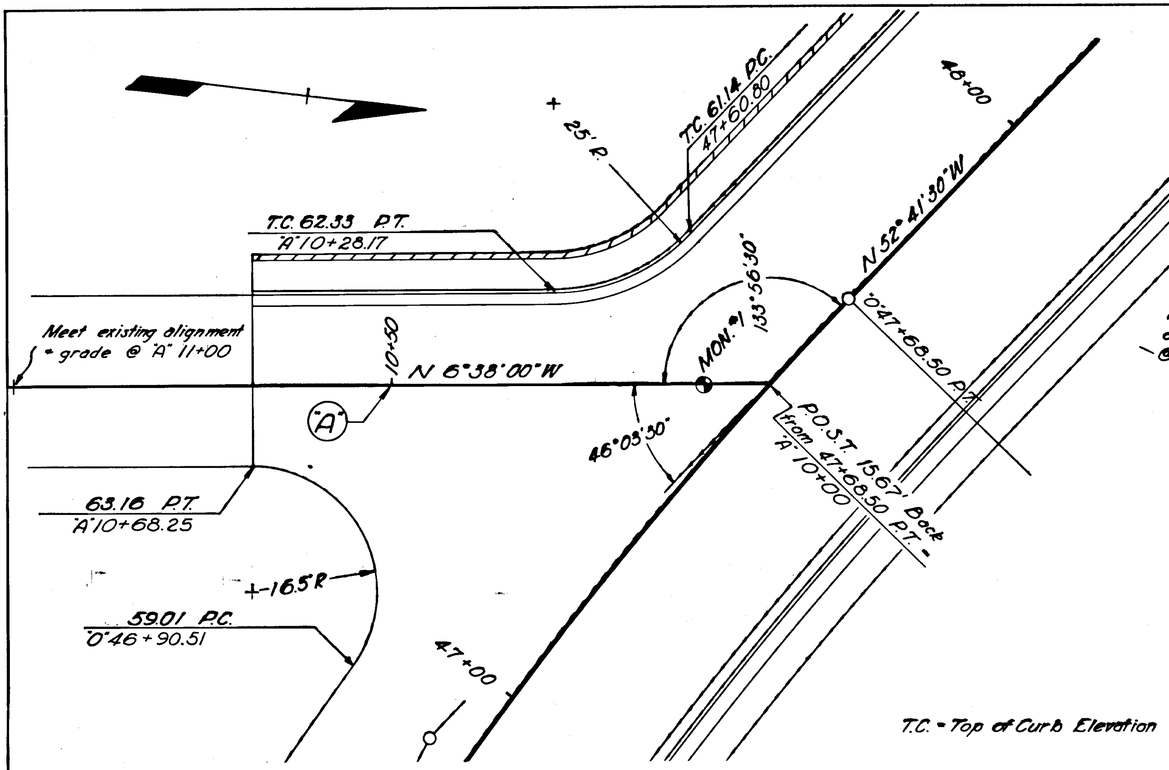
ALT. THAW WIRE CONNECTION DETAIL 'B'

UTILITY NOTES:

1. All new water services to be installed will be ¾" type 'K' copper service pipe, soft drawn, conforming to the requirements outlined in the special provisions. The attachment to the main will consist of a double strap iron pipe thread service clamp and a No. H 15035 Mueller corporation stop, ¾", or the equivilent. At the Right-Of-Way line the service shall terminate with a No. H 15210 Mueller ¾" stop and drain in a No. H 10306 extension type arch pattern base curb box or the equivilents.
2. All new water services are to be placed at a min. depth of 4 feet.
3. All water services shall have a thaw wire as shown.
4. Sewer service lines shall be four (4) inch asbestos cement sewer pipe conforming to the requirements in the special provisions, and placed and connected as specified in the special provisions and as directed by the engineer.

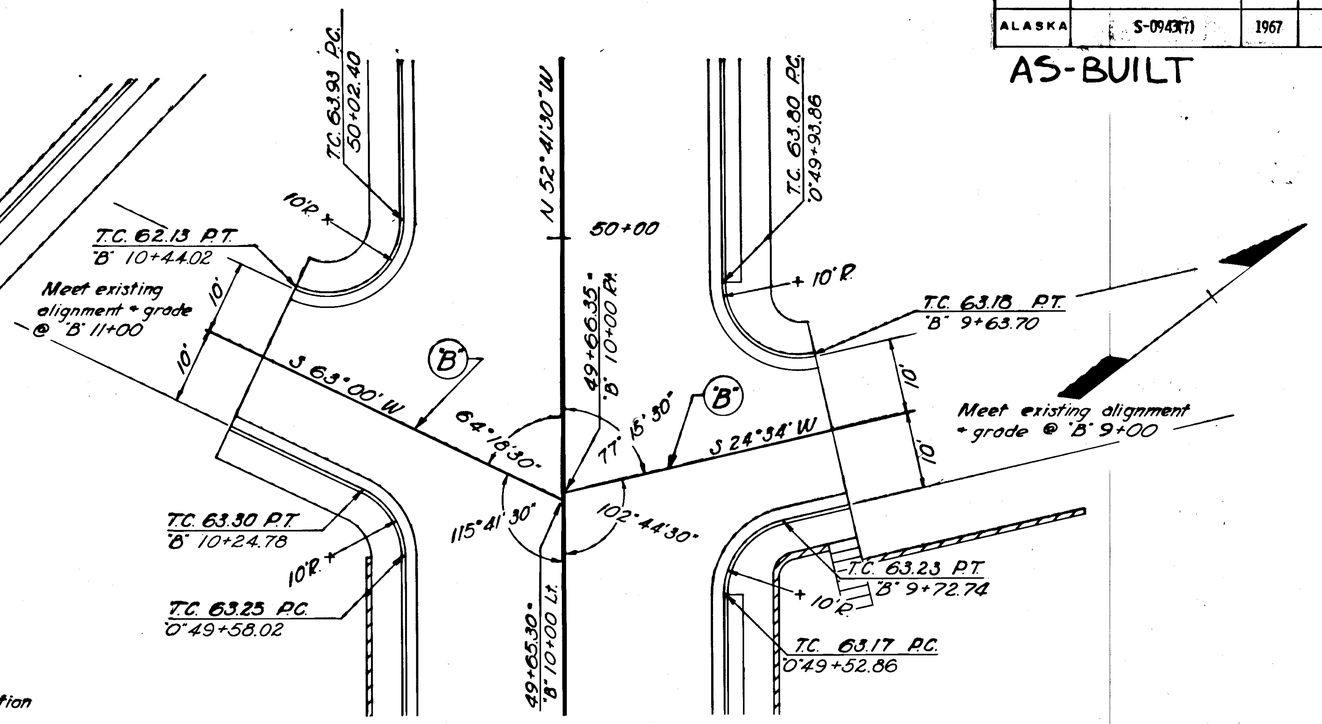
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	S-0943(7)	1967	17	34

AS-BUILT



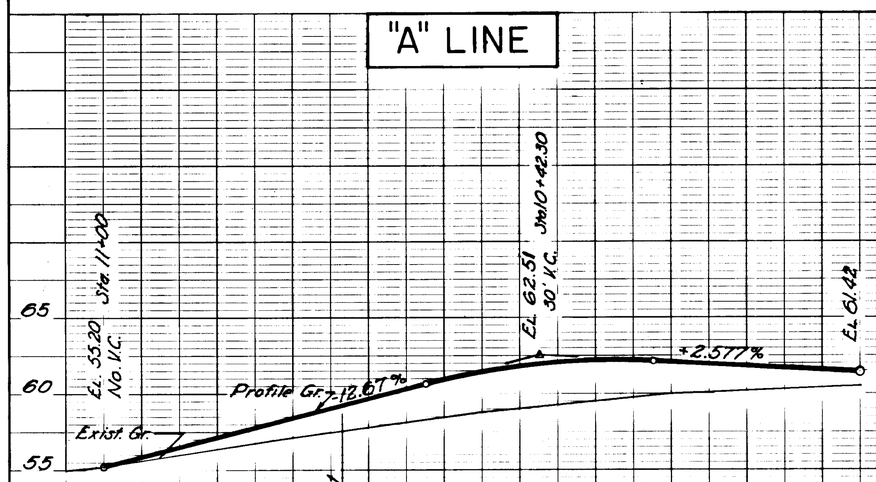
T.C. = Top of Curb Elevation

INTERSECTION CHURCH STREET

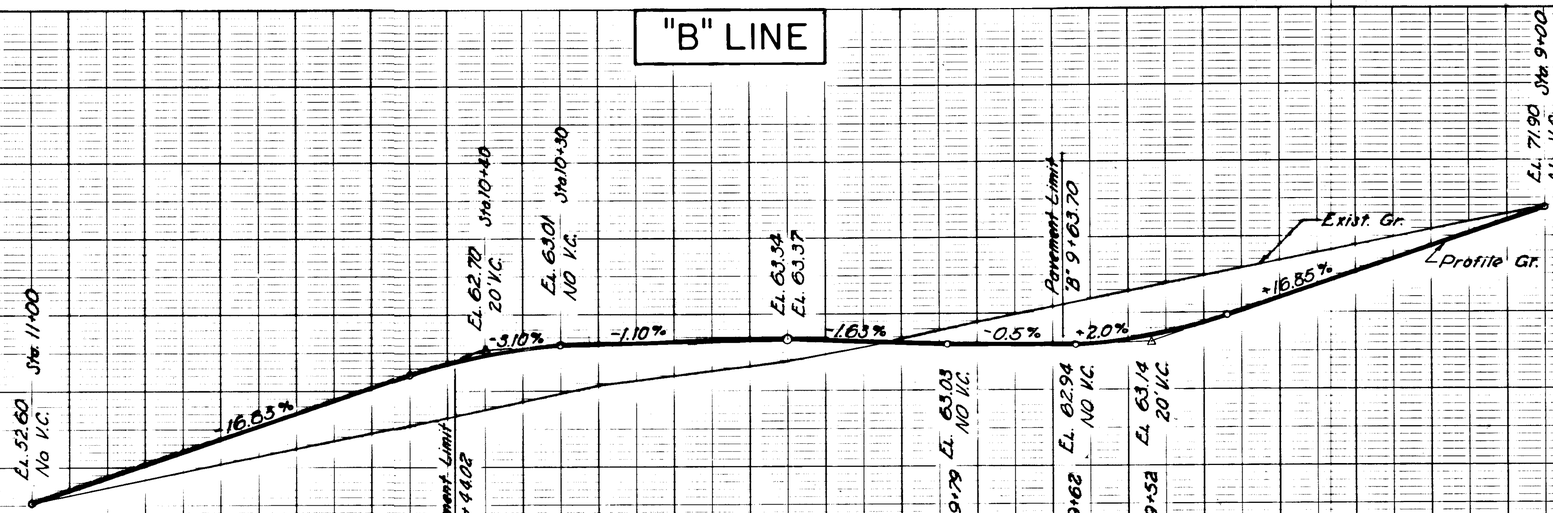


INTERSECTION ST. MICHAEL STREET

"A" LINE

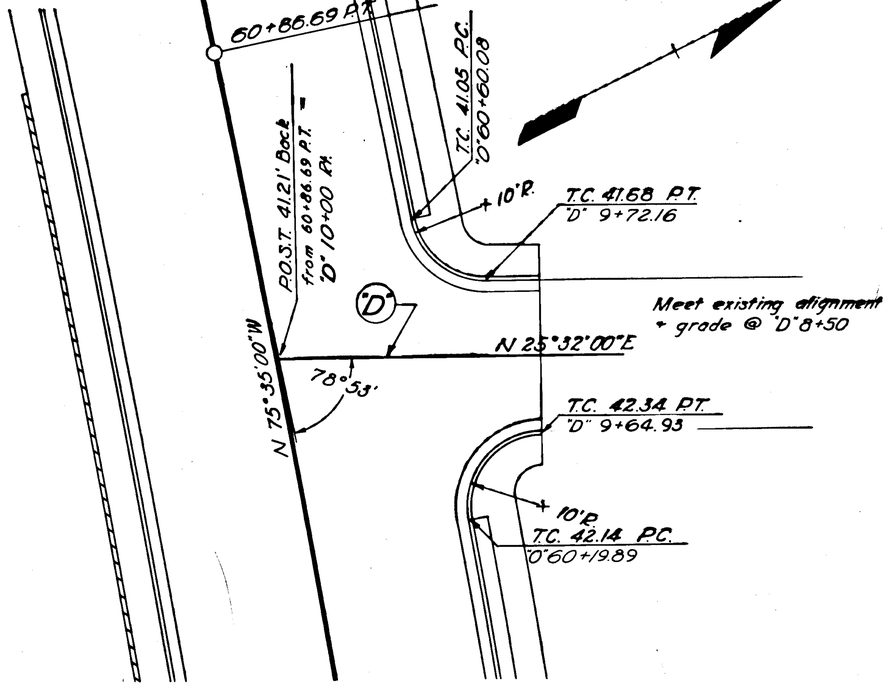


"B" LINE



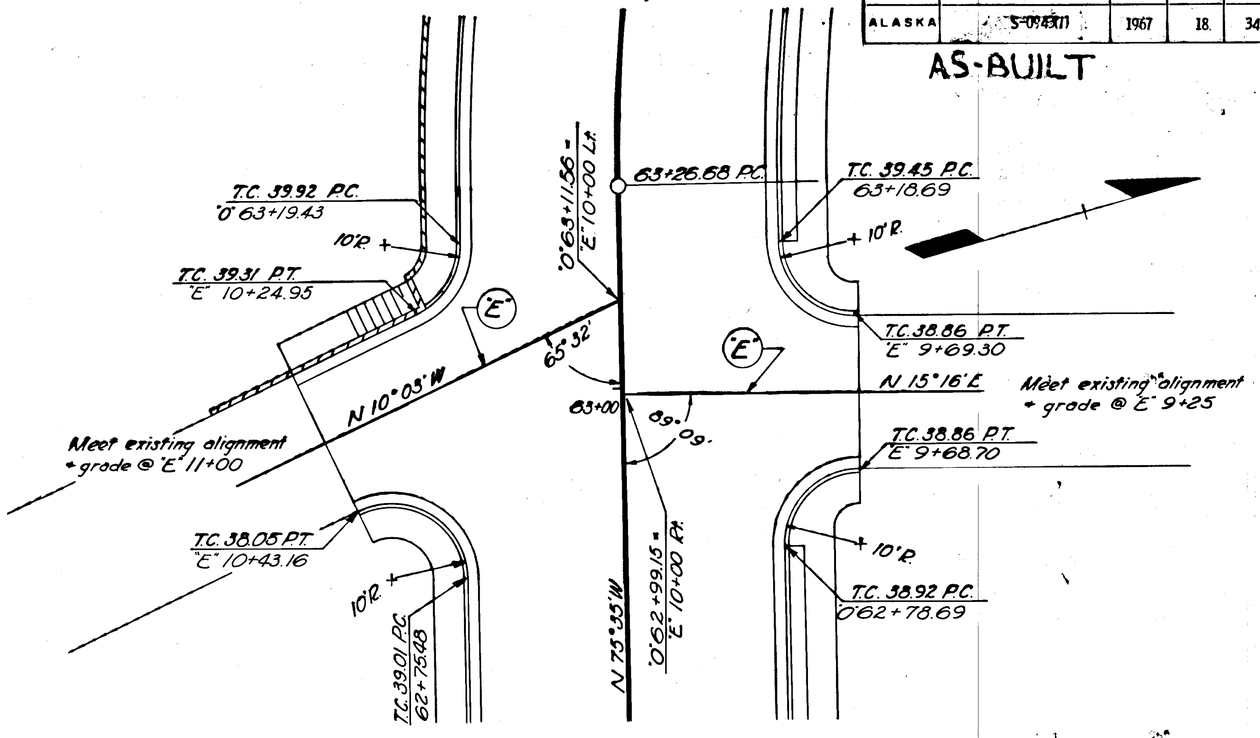
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	S-094(1)	1967	18.	34

AS-BUILT

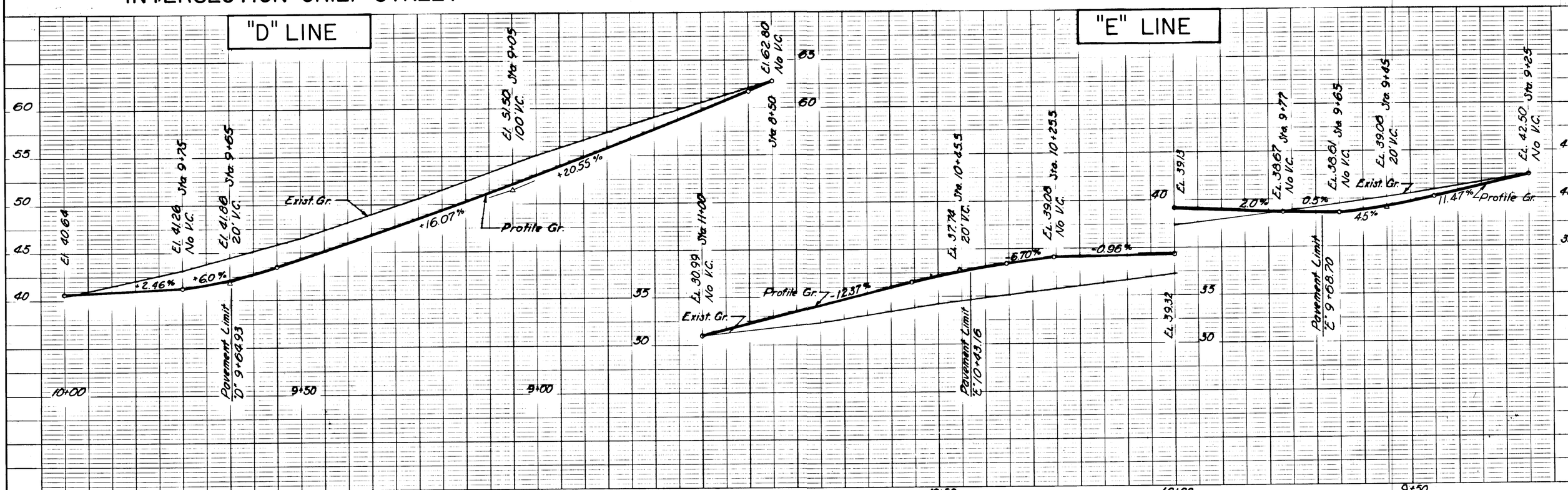


INTERSECTION GRIEF STREET

T.C. = Top of Curb Elevation

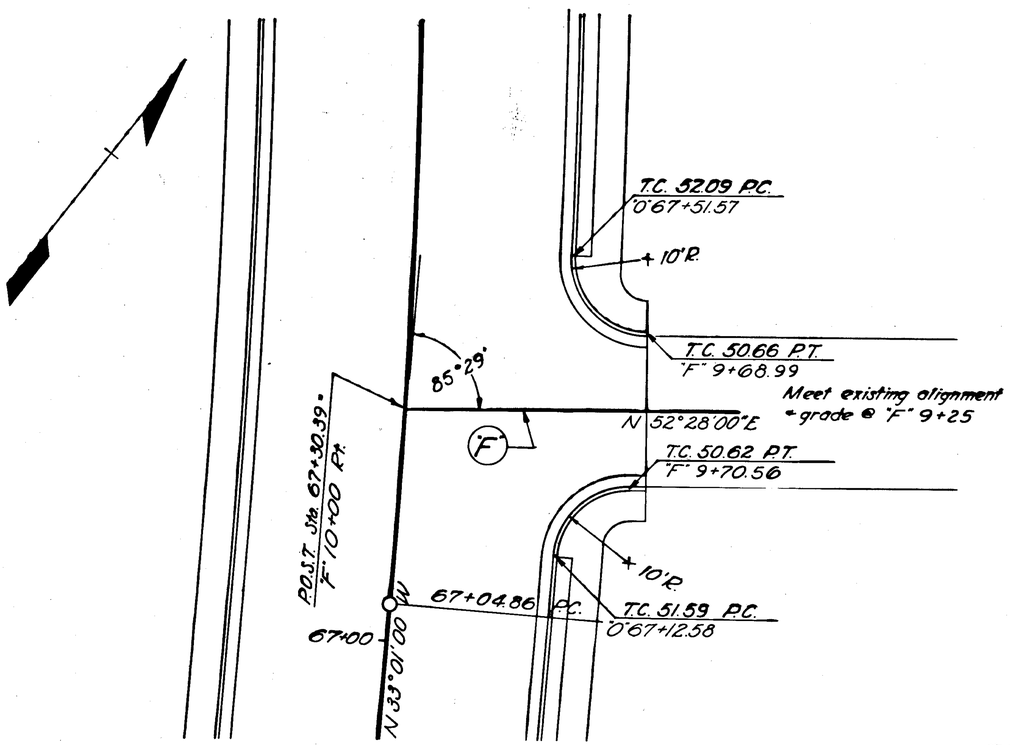


INTERSECTION MC KINNON STREET

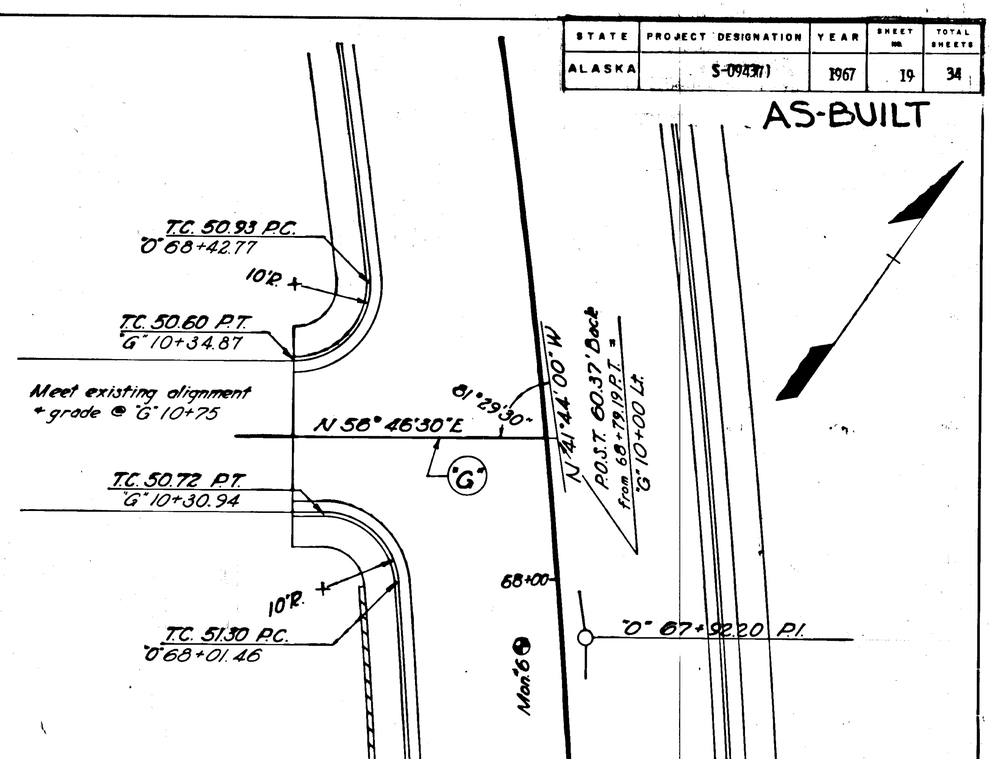


STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	S-094371	1967	19	34

AS-BUILT

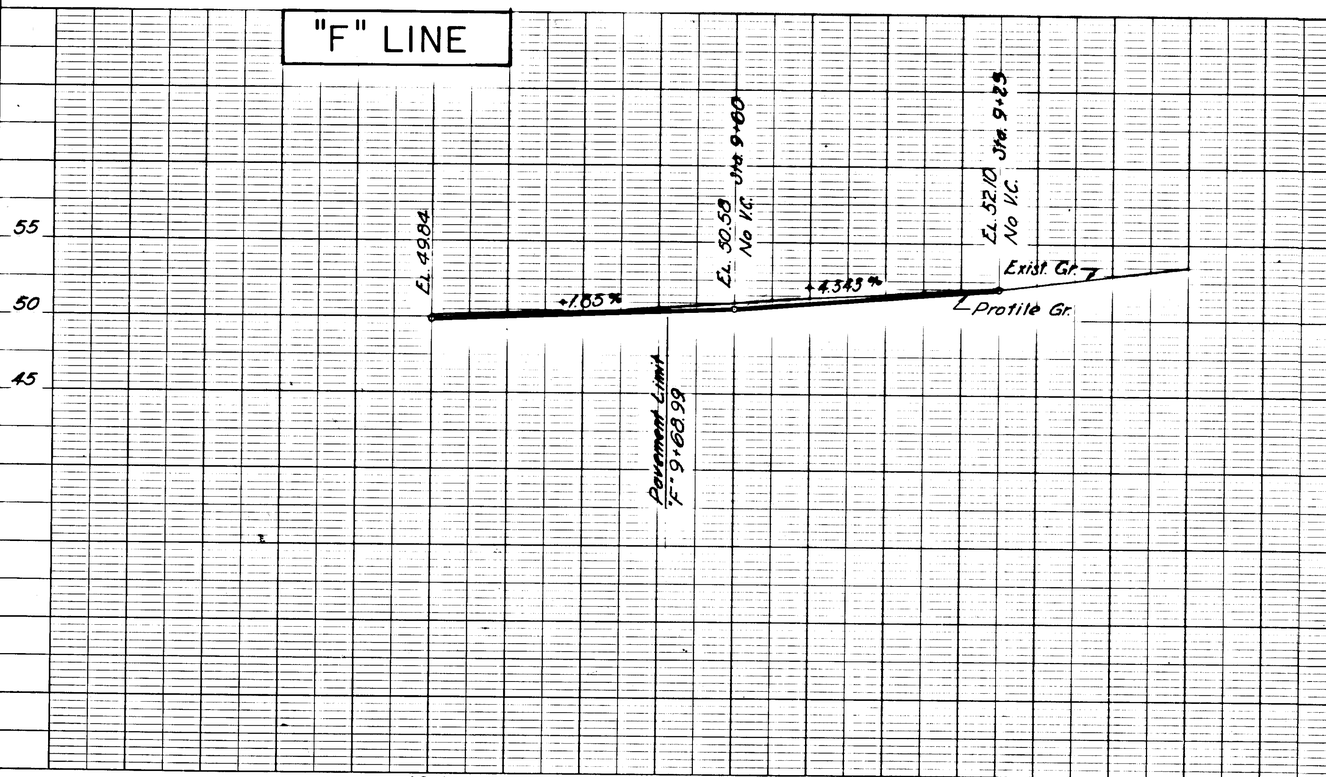


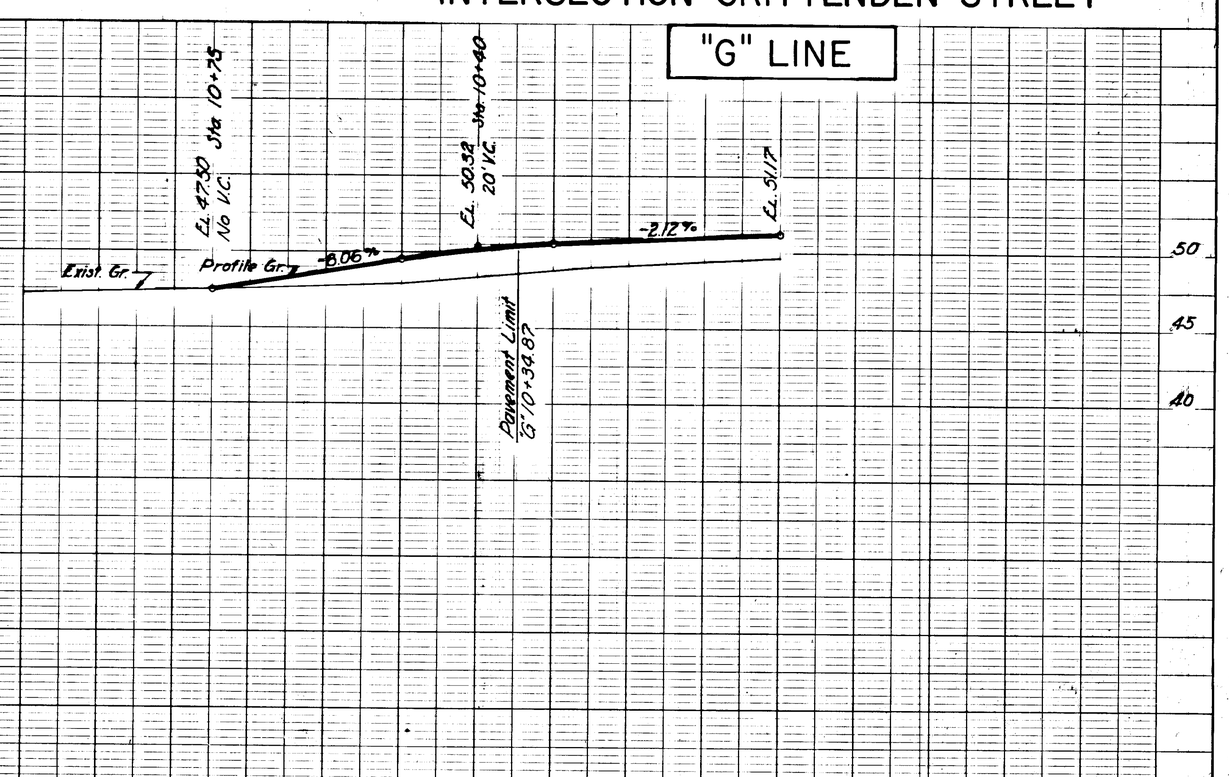
INTERSECTION BEVIER STREET



INTERSECTION CRITTENDEN STREET

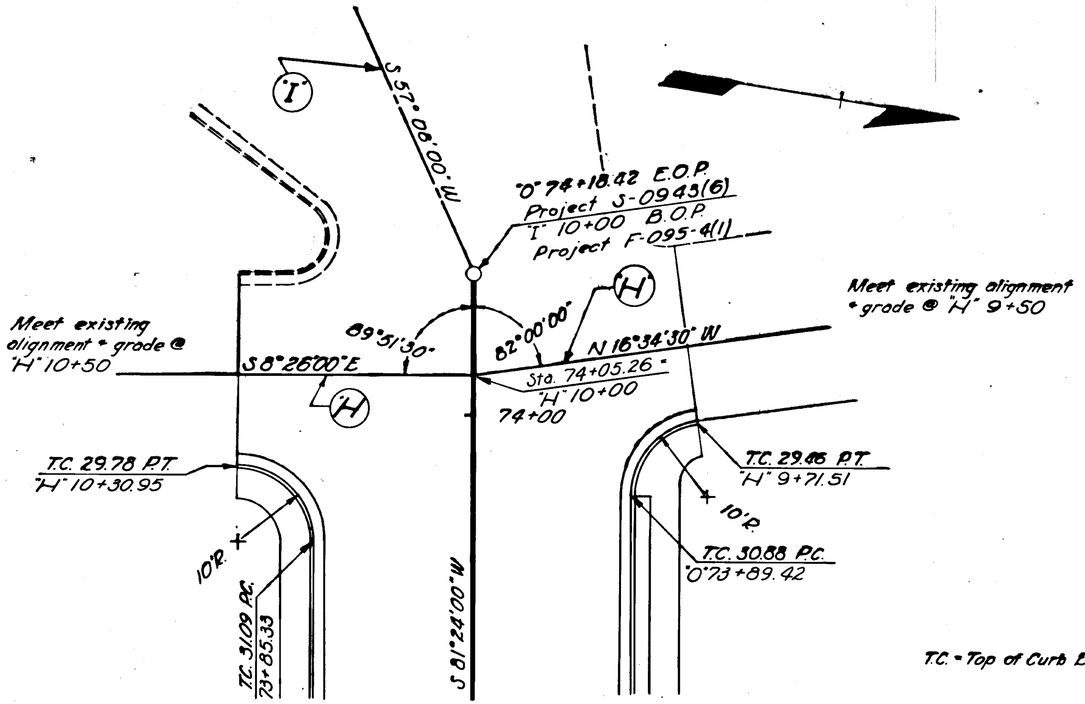
T.C. = Top of Curb Elevation



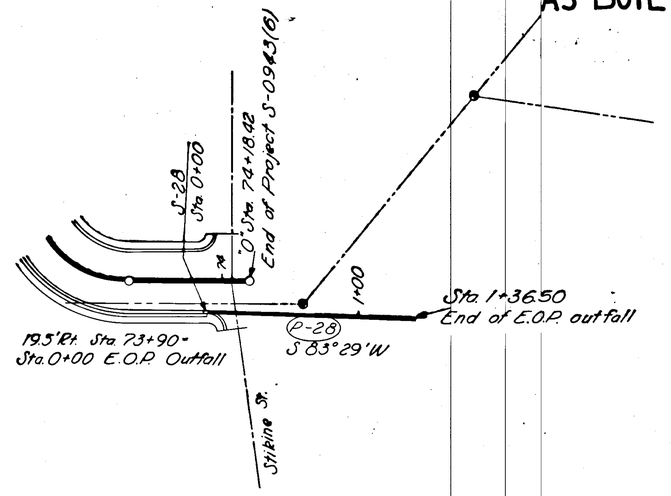


STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	S-0943(1)	1967	20	34

AS-BUILT

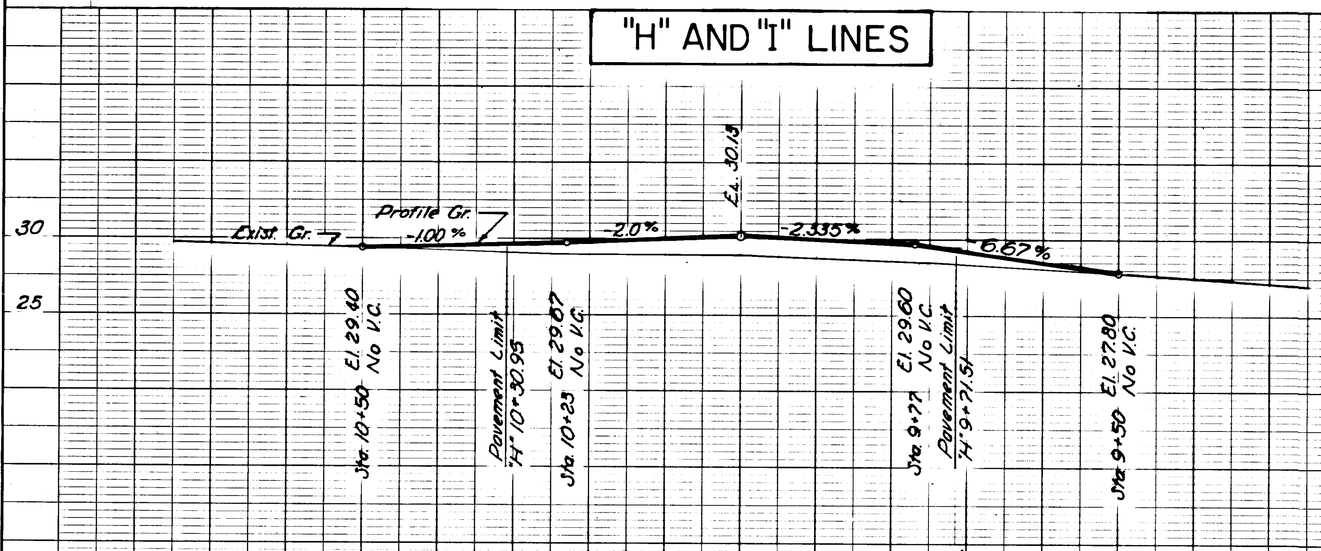


T.C. = Top of Curb Elevation

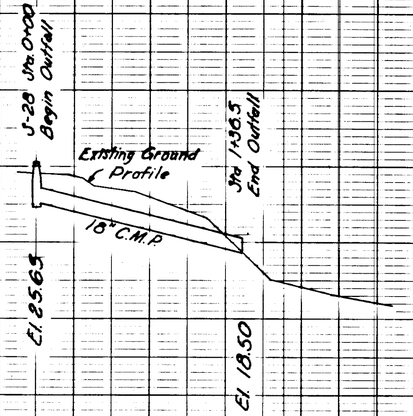


STIKINE STREET & FERRY TERMINAL

"H" AND "I" LINES



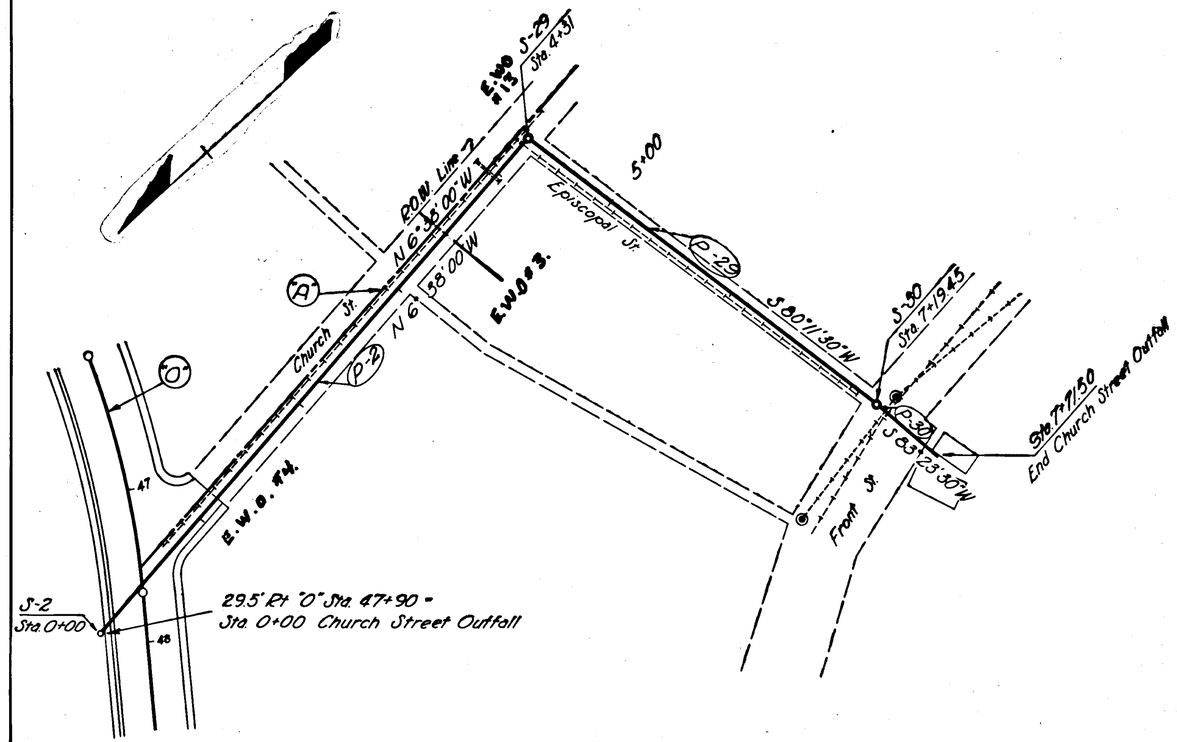
OUTFALL AT E.O.P.

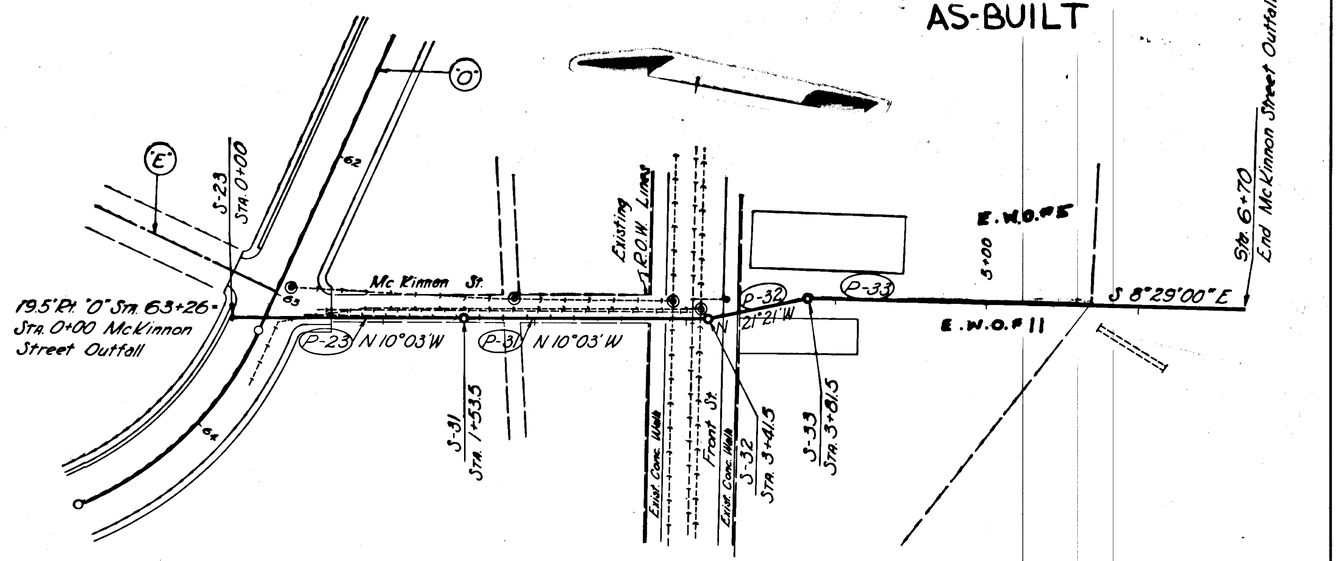


Note: For pipe P-28 see sheet no. 9
For Structure S-28 see sheet no. 9

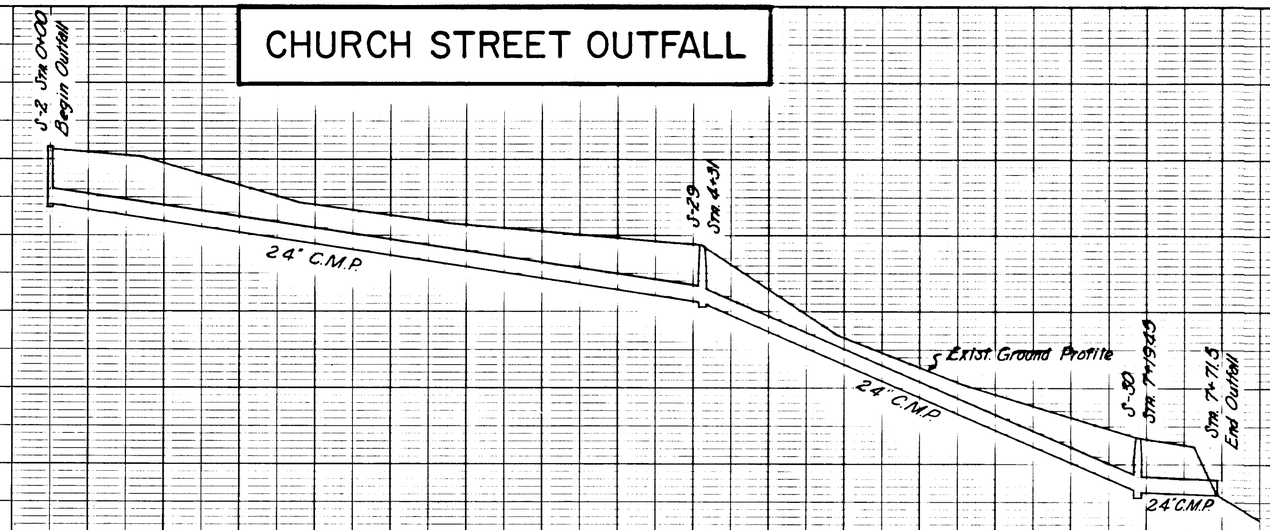
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	S-094311	1967	21	34

CONSTRUCTION PLAN
AS-BUILT





CHURCH STREET OUTFALL



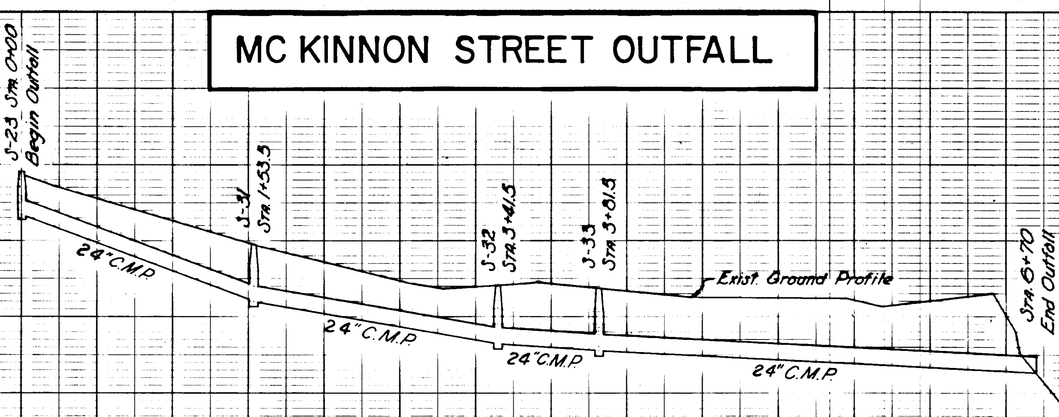
Struct. No.	Type	Outfall Station	Top Elev.	Invert Elev.
S-29	Manhole	4+31	48.60	41.52
S-30	Manhole	7+19.45	23.60	16.52

Note: For structure S-2 see sheet no. 5

Pipe No.	Pipe Dia.	Design Length	From Str. No.	From Inv. Elev.	To Str. No.	To Inv. Elev.
P-29	24"	288'	S-29	41.52	S-30	16.72
P-30	24"	52'	S-30	16.52	Outfall	16.00

Note: For pipe P-2 see sheet no. 5

MC KINNON STREET OUTFALL



Struct. No.	Type	Outfall Station	Top Elev.	Invert Elev.
S-31	Manhole	1+53.5	29.60	22.02
S-32	Manhole	3+14.5	24.10	16.52
S-33	Manhole	3+81.5	23.70	15.62

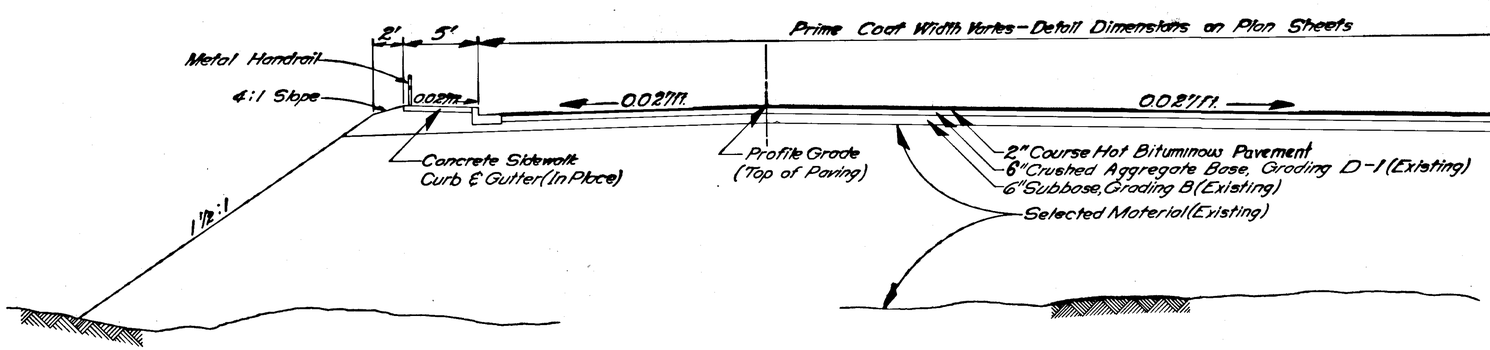
Note: For structure S-23 see sheet no. 8

Pipe No.	Pipe Dia.	Design Length	From Str. No.	From Inv. Elev.	To Str. No.	To Inv. Elev.
P-31	24"	158'	S-31	22.02	S-32	16.72
P-32	24"	66'	S-32	16.52	S-33	15.82
P-33	24"	288'	S-33	15.62	Outfall	12.60

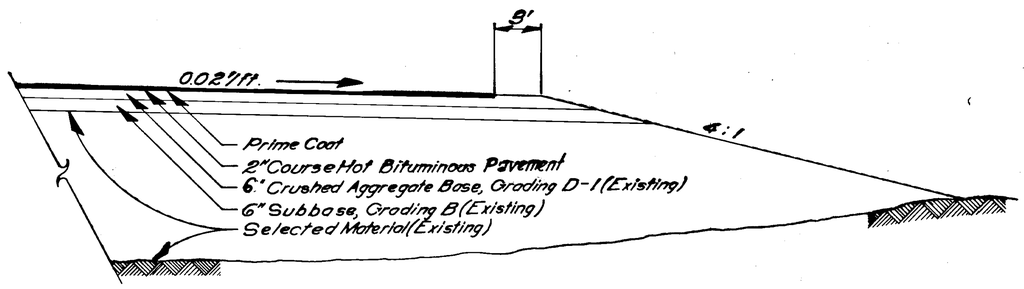
Note: For pipe P-23 see sheet no. 8

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	S-0943(7) & F-095-4(1)	1967	22	34

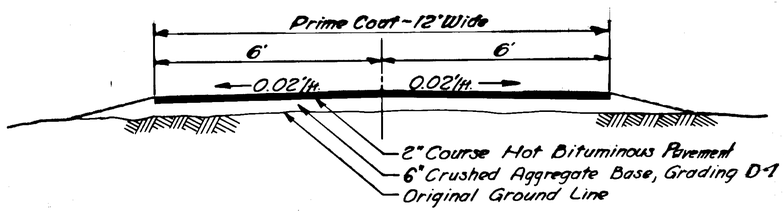
AS-BUILT



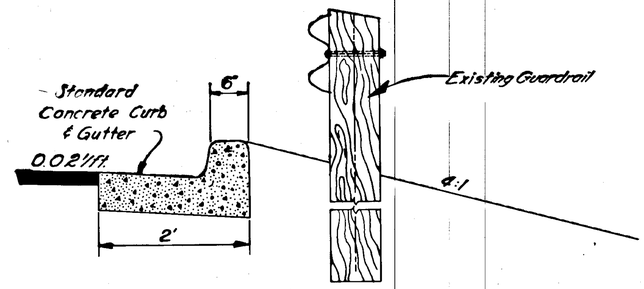
TYPICAL SECTION OF IMPROVEMENT
F-095-4(1) FERRY TERMINAL
"I" 10+00 TO "I" 12+93.73



TYPICAL SHOULDER WITHOUT SIDEWALK OR CURB
F-095-4(1) FERRY TERMINAL
"I" 10+00 TO "I" 10+79.12



TYPICAL SECTION - MUNICIPAL BOAT RAMP
S-0943(7)
"R" 0+50 TO "R" 2+00



TYPICAL CURB & GUTTER DETAIL

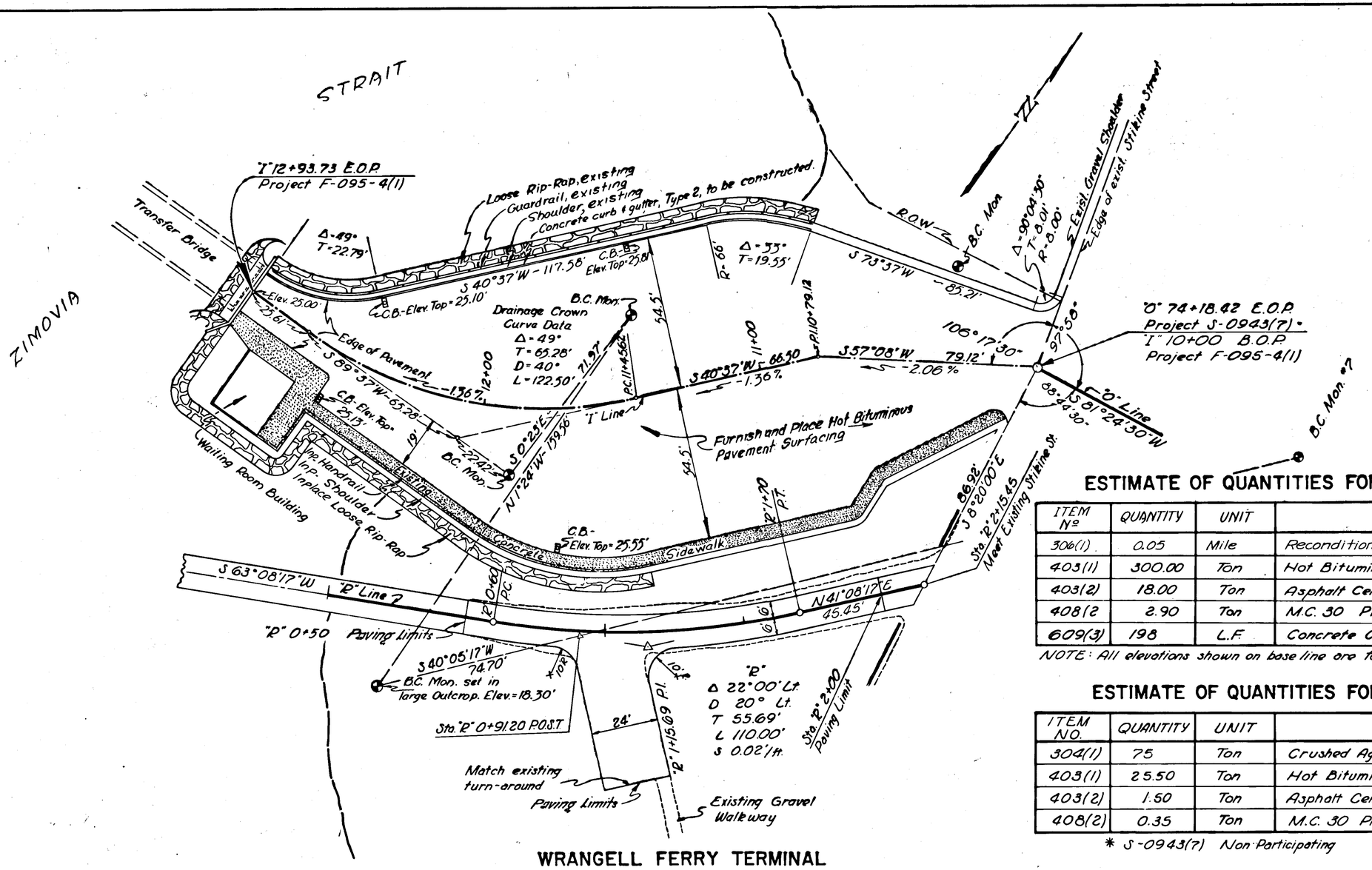
NOTE:

The contractor shall take adequate precautions to insure that none of the existing improvements, including guardrails, inlets, sidewalks and building, in the Ferry Terminal area are coated or discolored by the application of the prime coat. Existing base to be scarified 2" depth & relaid.

0-2

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	S-0943(7)& F-095-4(1)	1967	23	34

CONSTRUCTION PLAN



WRANGELL FERRY TERMINAL & BOAT RAMP PAVING PLAN

ESTIMATE OF QUANTITIES FOR F-095-4(1)

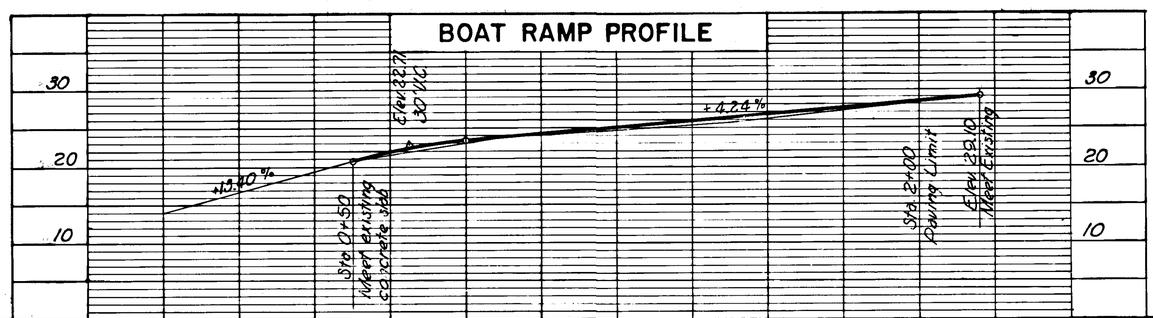
ITEM Nº	QUANTITY	UNIT	ITEM
306(1)	0.05	Mile	Reconditioning
403(1)	300.00	Ton	Hot Bituminous Pavement
403(2)	18.00	Ton	Asphalt Cement 120-150 Penetration
408(2	2.90	Ton	M.C. 30 Prime Coat
609(3)	198	L.F.	Concrete Curb & Gutter, Type 2

NOTE: All elevations shown on base line are top of Bituminous Pavement.

ESTIMATE OF QUANTITIES FOR BOAT RAMP *

ITEM NO.	QUANTITY	UNIT	ITEM
304(1)	75	Ton	Crushed Aggregate Base Grading D-1
403(1)	25.50	Ton	Hot Bituminous Pavement
403(2)	1.50	Ton	Asphalt Cement 120-150 Penetration
408(2)	0.35	Ton	M.C. 30 Prime Coat

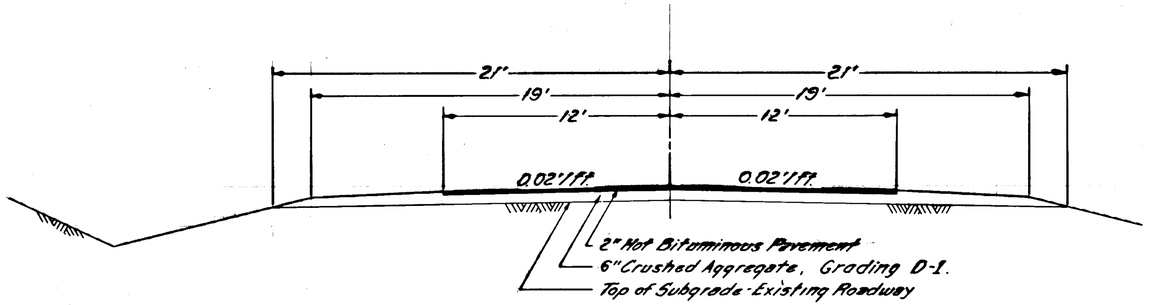
* S-0943(7) Non-Participating



STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	S-0943(7) F-095-A(1)	1967	24	34

ZIMOVIA HIGHWAY PAVING S-0943(7)

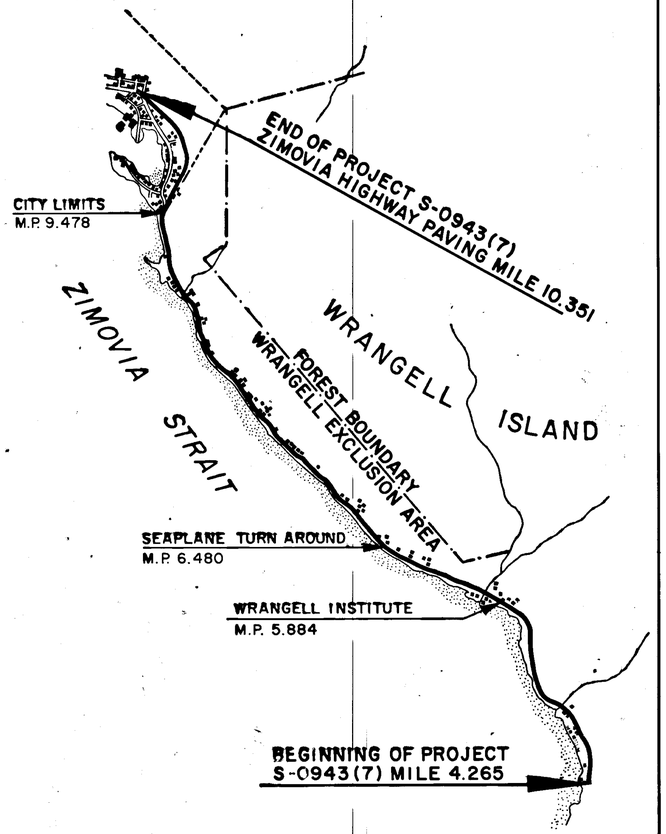
Miscellaneous Clearing and Grubbing: The Removal of Trees, Trash Piles, Lumber or Wood Piles, Abandoned or Junked Vehicles, Cutting Stumps Flush With The Ground, and Removing Stairways as Shown Below or as Directed by The Engineer.
3 Type I and 102 Type 2 approaches shall be surfaced as shown on Standard R-1(Modified). The necessary materials are included in the Estimate Of Quantities.



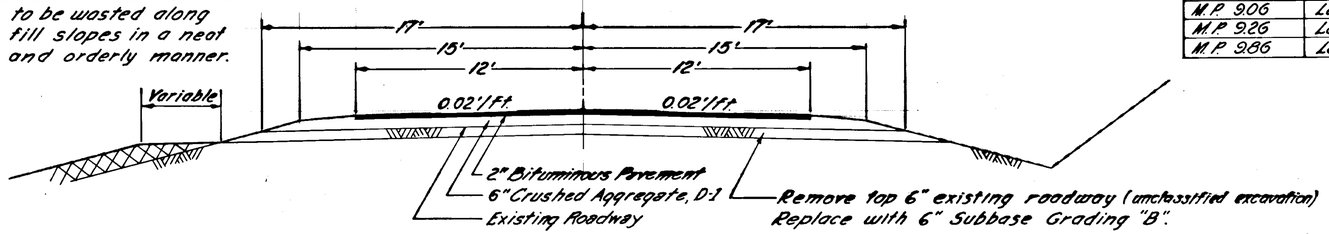
CHURCH STREET TO SOUTH CITY LIMITS
MILE POINT 10.351 TO MILE POINT 9.478

CLEARING AND GRUBBING

Station	Location	Description
M.P. 5.56	Left	Flush Cut Six Stumps
M.P. 5.61	Left	Flush Cut Stump
M.P. 6.56	Left	Remove Stump
M.P. 6.81		Remove Trash Pile
M.P. 7.21	Left	Remove Tree
M.P. 7.56	Right	Remove Lumber and Logs
M.P. 7.66	Left	Remove Lumber Pile
M.P. 7.71	Left	Remove Tree
M.P. 7.81	Left	Remove Two Trees
M.P. 7.86	Right	Remove Stairway
M.P. 8.21	Right	Remove Stump
M.P. 8.26	Left	Remove Tree
M.P. 9.01	Right	Remove Trash
M.P. 9.06	Left	Remove Lumber
M.P. 9.26	Left	Remove Stump
M.P. 9.86	Left	Remove Wood Pile



Note: Excavated Material to be wasted along fill slopes in a neat and orderly manner.



SOUTH CITY LIMITS TO SAWMILL
MILE POINT 9.478 TO MILE POINT 4.265

BEAM TYPE GUARDRAIL

Station	Left	Right
M.P. 4.795	75'	
M.P. 5.108	200'	200'
M.P. 5.998	200'	200'

MONUMENTS & CASES

Station	Location
M.P. 9.478 P.C.	Adjust
M.P. 9.517 P.T.	Adjust
M.P. 9.617 P.C.	Adjust
M.P. 9.659 P.T.	Adjust
M.P. 9.701 P.C.	Adjust
M.P. 9.902 P.T.	Adjust
M.P. 10.101 P.C.	Adjust
M.P. 10.159 P.T.	Adjust
M.P. 10.307 P.C.	Adjust
M.P. 10.343 P.T.	Adjust

CULVERT SUMMARY

Station	Structure Excavation 206(1)	24" Pipe Conduit 603(26G)	36" Pipe Conduit 603(26I)	Removal & Disposal of Culvert Pipe 202(4)
	Cu. Yds.	Lin. Ft.	Lin. Ft.	Lin. Ft.
M.P. 6.597	32.4	50		46
M.P. 7.466	57.2		56	50
M.P. 9.171	38.9	60		50
Total	128.5	110	56	146

ESTIMATE OF QUANTITIES FOR S-0943(7)

Item No.	Quantity	Unit	Item
202(4)	146	Lin. Ft.	Removal and Disposal of Culvert Pipe
206(1)	129	Cu. Yds.	Structure Excavation
304(1)	48,536	Ton	Crushed Aggregate Base Course, Grading D-1
403(1)	9,944	Ton	Hot Bituminous Pavement
403(2)	596.7	Ton	Asphalt Cement 120-150 Penetration
408(2)	104.4	Ton	M.C. 30 Liquid Asphalt for Prime Coat
603(26G)	110	Lin. Ft.	24" Pipe Conduit
603(26I)	56	Lin. Ft.	36" Pipe Conduit
606(2)	875	Lin. Ft.	Beam Type Guardrail, Type II Posts
614(3)	10	Each	Adjust Existing Monument and Cases
201(3)	All Required	Lump Sum	Clearing and Grubbing
203(3)	18,350	Cu. Yds.	Unclassified Excavation
307(1)	35,833	Ton	Subbase, Grading B
306(1)	6.09	Mile	Reconditioning

Missing pages 25-34