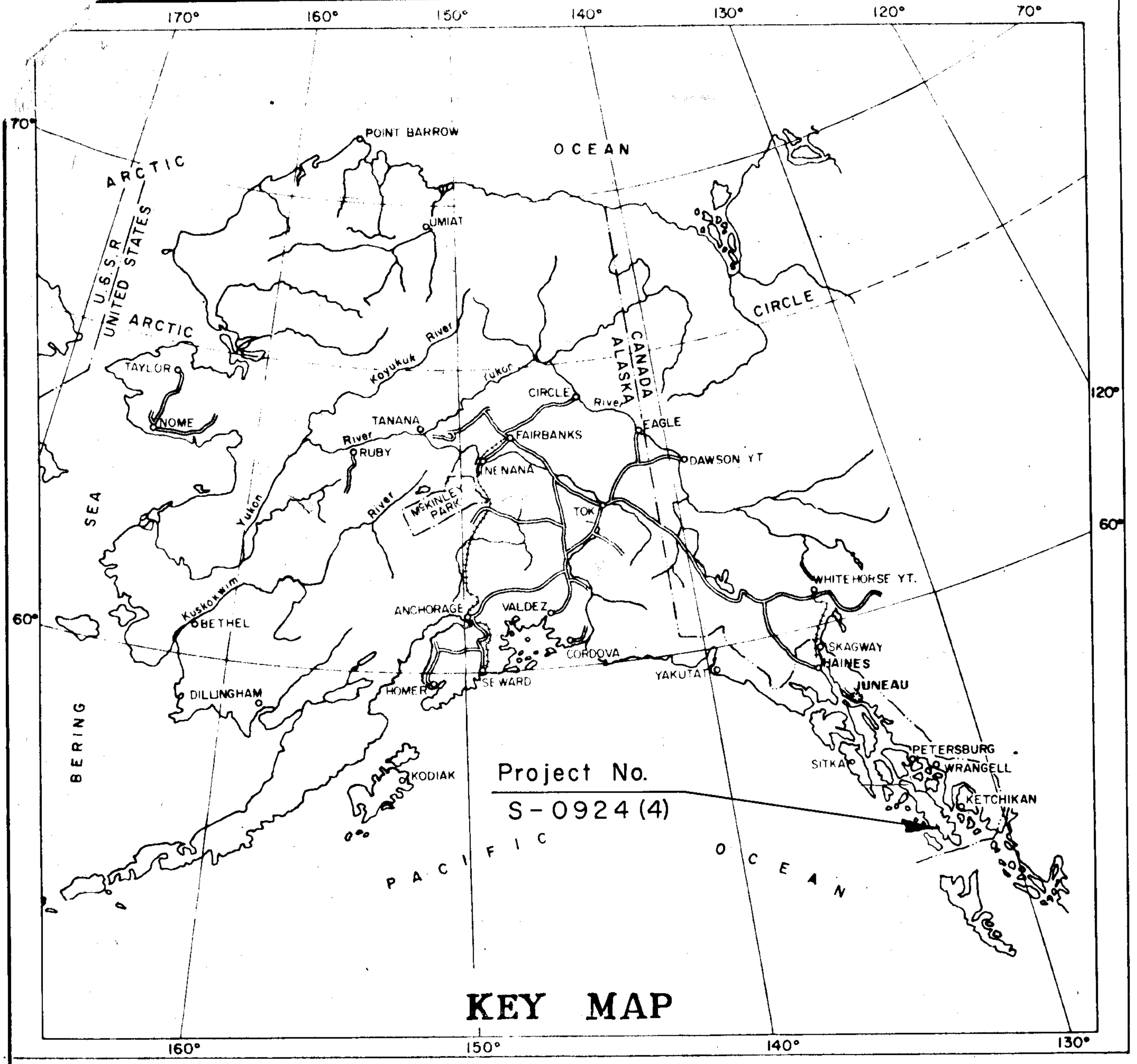
STATE	ROUTE DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	S-0924(4)	1967	1	50



STATE OF ALASKA
DEPARTMENT OF HIGHWAYS

PLAN AND PROFILE
~~PROPOSED~~ HIGHWAY PROJECT

"As Built"

S-0924 (4)

HALFMILE CREEK TO HARRIS RIVER
GRADING, DRAINAGE, AND BRIDGE

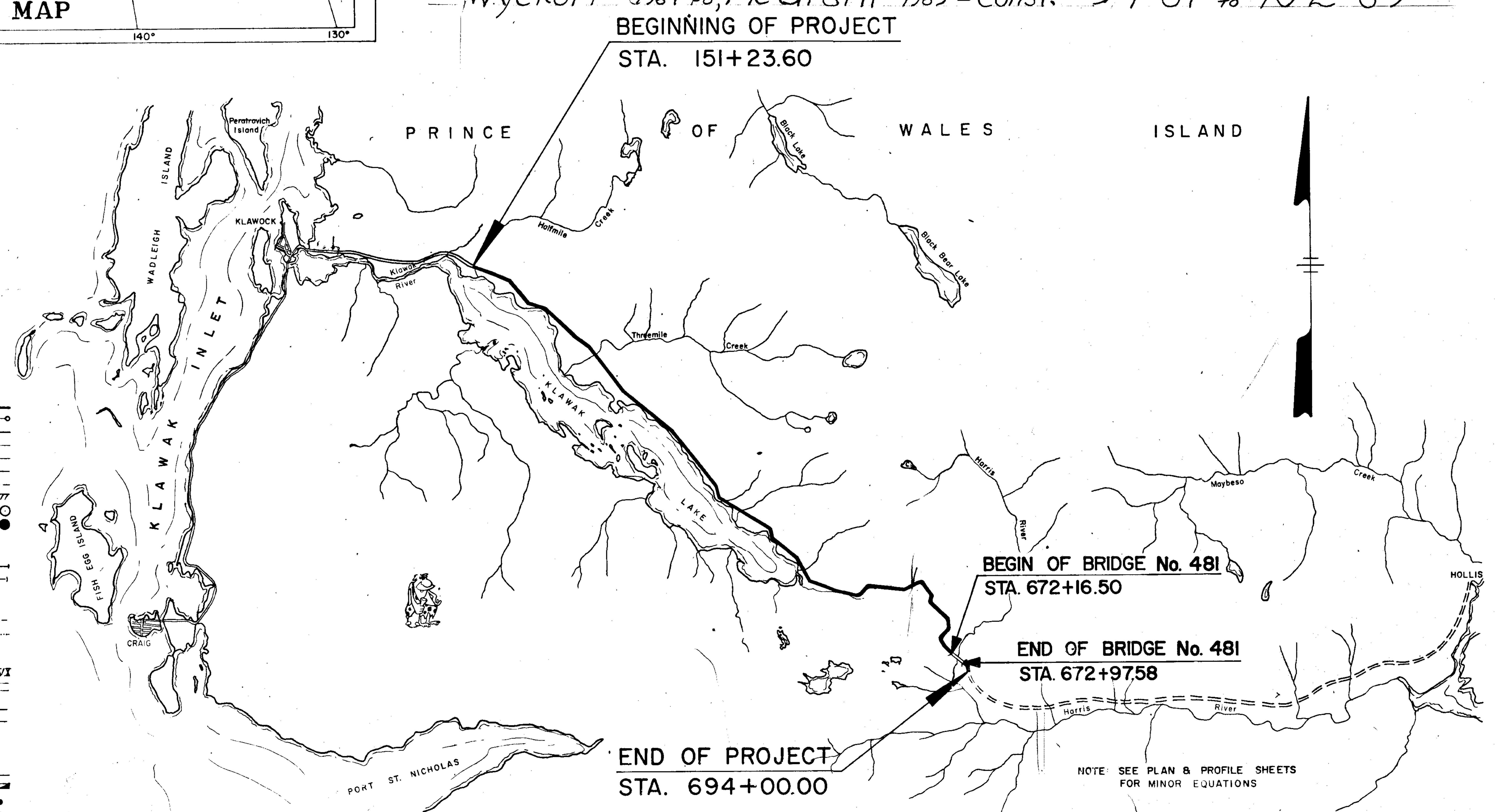
BURGESS CONST. CO.

Wyckoff 1967 & 8, McGrath 1969 – const. 9-1-67 to 10-2-69

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	Title Sheet
2	Typical Section & Misc. Tables
3	Estimate of quantities
4	General Notes & Details
5-6	Culvert Summary
7	Right-of-Way Monument Summary
8	Materials Site Sheet
9-27	Plan & Profile Sheets
28-29	Drainage Details
30	Tourist Turnout Details
31-40	Bridge Sheets

The following standard drawings apply to this project.
D-1, M-1, M-3, R-1, R-3, R-8, T-1, T-11, T-15 and T-20



CONVENTIONAL SIGNS

- 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
- SLOPE LIMITS, CUT
- SLOPE LIMITS, FILL
- CULVERT PROPOSED
- CULVERT EXISTING
- OBLITERATION OF ROADWAY
- TRAVELED WAY
- MUSKEG
- GUARDRAIL PROPOSED
- GUARDRAIL EXISTING
- LAND MONUMENT
- RIGHT-OF-WAY MONUMENT
- RIPRAP
- GUIDEPOST PROPOSED
- GUIDEPOST EXISTING

DESIGN DESIGNATION

ADT (1961) = 15
ADT (1981) = 30
DHV = 5
D = 35 %
T = 5 %
V = 35 M.P.H.

PROJECT SUMMARY

WIDTH OF SUBGRADE	24'
LENGTH OF GRADING	54,214.94' = 10.268 Mi. ✓
LENGTH OF BRIDGE	81.08' = 0.015 Mi. ✓
LENGTH OF PROJECT	54,296.02' = 10.283 Mi. ✓

AS ADVERTISED

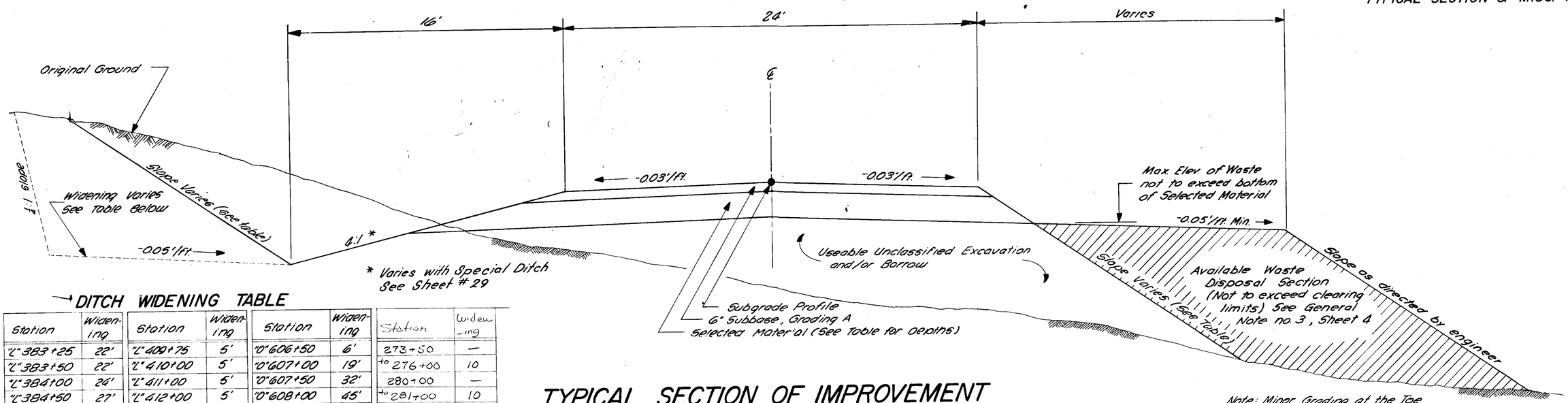
STATE OF ALASKA
DEPARTMENT OF HIGHWAYS

APPROVED [illegible] Date 4/21/67
COMMISSIONER OF HIGHWAYS

K&E HERCULENE

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	S-0324(4)	1967	2	50

TYPICAL SECTION & MISC. TABLES



* Varies with Special Ditch See Sheet # 29

TYPICAL SECTION OF IMPROVEMENT

Sta. "L" 151+93.60 to Sta. "L" 694+00

Note: Minor Grading at the Toe of Fill Slopes may be required to facilitate Drainage

DITCH WIDENING TABLE

Station	Widening
"L" 383+25	22'
"L" 383+50	22'
"L" 384+00	24'
"L" 384+50	27'
"L" 385+00	29'
"L" 385+50	30'
"L" 386+00	30'
"L" 386+50	28'
"L" 387+00	28'
"L" 387+50	27'

Station	Widening
"L" 409+75	5'
"L" 410+00	5'
"L" 411+00	5'
"L" 412+00	5'
"L" 413+00	5'
"L" 414+00	5'
"L" 415+00	5'
"L" 416+00	5'
"L" 417+00	5'
"L" 418+00	5'

Station	Widening
"0" 606+50	6'
"0" 607+00	19'
"0" 607+50	32'
"0" 608+00	45'
"0" 608+50	52'
"0" 609+00	49'
"L" 609+50	39'
"L" 610+00	28'
"L" 610+50	18'
"L" 611+00	8'

Station	Widening
273+50	—
to 276+00	10
280+00	—
to 281+00	10
281+50	—
to 283+50	15
457+00	5
457+50	8
458+00	8
458+50	10
459+00	14
459+50	18

460+00	20
460+50	13
461+00	8

SLOPE TABLE

Station	Height of Fill		
	Under 5	5-10	Over 10
"0" 151+93.60			
	3:1	2:1	1½:1
"L" 694+00			

Station	Height of Cut			
	Under 5	5-10	Over 10	
"0" 151+23.60				
	2:1	2:1	1½:1	
"L" 322+00				
	2:1	¾:1	½:1	*
"L" 330+00				
	2:1	2:1	1½:1	**
"L" 408+50				
	2:1	¾:1	½:1	*
"L" 418+50				
	2:1	2:1	1½:1	
"L" 467+00				
	2:1	¾:1	½:1	
"L" 500+00				
	2:1	2:1	1½:1	**
"L" 611+00				
	2:1	¾:1	½:1	
"L" 627+00				
	2:1	2:1	1½:1	
"L" 694+00				

* Daylight At Cut From:
"L" 322+00 to "L" 330+00
"L" 410+00 to "L" 414+50

** Widened Areas "L" 383+25 to "L" 387+50 and "0" 606+50 to "L" 611+00 shall have ½:1 slope Lt.

SELECT MATERIAL DEPTHS

Station	Depth
"0" 151+23.60	
	12"
"0" 156+90	
	18"
"L" 215+00	
	~~12"~~ 6"
"L" 238+50	
	18"
"L" 300+50	
	12"
"L" 327+00	
	6"
"L" 360+25	
	18"
"L" 368+20	
	6"
"L" 379+80	

Station	Depth
"L" 379+80	
	12"
"L" 417+20	
	6"
"L" 442+50	
	18"
"L" 462+00	
	12"
"L" 508+25	
	6"
"L" 542+00	
	12"
"L" 567+50	
	6"
"0" 603+25	
	12"
"L" 665+00	
	6"*
"L" 694+00	

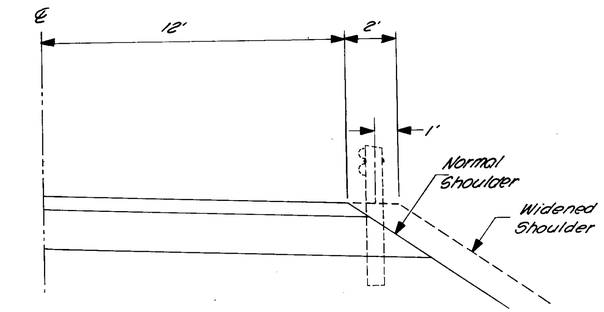
* Note Backfill in peat excavation area Sta. "L" 668+00 to Sta. "L" 672+25 shall consist entirely of selected material.

GUARDRAIL TABLE

Station	Lt/Rt.	Length Lin. Ft.
"L" 412 + ~~500~~ 75		~~462.5~~
	Rt	~~300.0~~
"L" ~~415+305~~ 417+62		
"L" 470 +50 ✓		262.5
	Rt	362.5
"L" ~~471+076~~ 473+12		
"L" 558 + ~~42.1~~ 50		275.0
	Lt	~~125.0~~
"L" ~~559+65.7~~ 561+25		
"L" 579 + 25 ✓		~~137.5~~
	Lt	~~150.0~~
"L" 580 +75 X		
"L" ~~601+359.4~~ 602+25		
	Lt	~~87.5~~ 0
"0" 603 + ~~07.1~~ 58		
"L" ~~625+00~~ 624+50		~~112.5~~
	Rt.	~~100.0~~
"L" 625 + ~~96.7~~ 65		

Station	Lt/Rt.	Length Lin. Ft.
"L" ~~640+25~~		
	Rt	~~160.0~~
"L" ~~641+75.7~~		
"L" ~~648+61.3~~ 647+00		~~350~~
	Lt	~~200.0~~
"L" 650 + ~~56.9~~ 50		
"L" 652 + ~~84.1~~ 50		
	Lt.	125.0 ✓
"L" 654 + ~~06.3~~ 54.75		
"L" 656 + ~~40~~ 8		~~125~~
	Lt	~~150.0~~
"L" 657 + ~~92.1~~ 54.10		
"L" 667+00 ✓		~~137.5~~
	Rt.	~~187.5~~
"L" 668 + ~~05.1~~ 37		
Total = 2,~~025~~ lin ft.		

60



TYPICAL WIDENING FOR GUARDRAIL

AS ADVERTISED

STANDARD SIGNS

	Sign No.	Station	Dist. to ℄ Lt.	Dist. to ℄ Rt.	Type	Hgt.	Legend	
	1	"L" 606+16		20'	W1-22	5'		✓
49+80	2	"L" 620+77	20'		W1-2R	5'		✓
152+50	3	~~"L" 689+50~~		20'	R2-1	5'	Speed Limit 35	
303+00	4	"L" 696+00	20'	20	R2-1	5'	Speed Limit 35	
	5	"L" 612+00		20'	W1-4R	5'		✓
	6	"L" 632+73	20'		W1-4R	5'		✓
	7	"L" 620+00	20'		W7-7	5'	Hill	✓
	8	"L" 686+00	20'		R2-1	5'	Speed Limit 35	✓

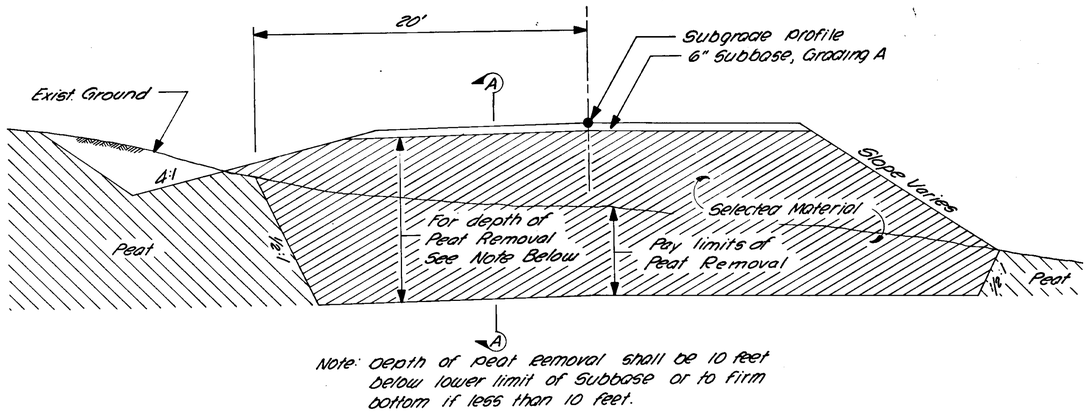
ESTIMATE OF QUANTITIES

	S-0924(4)	1966	3 · 50

ITEM NO.	ITEM	UNIT	SHEET NUMBER 9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	31 40	TOTAL
1	Furnishing & Maintaining Engineering Facilities	Lump Sum																					All Req'd
2A	Meals	Each																					12, 960
2B	Lodging	Each																					4, 320
201(3)	Clearing and Grubbing	Acre	3.3	5.5	6.2	6.1	6.6	6.3	8.0	7.3	6.9	6.6	9.1	6.1	5.8	7.0	5.6	5.9	5.8	6.6	3.5		118.2
201(7)	Selective Tree Removal	Each																					216
203(3)	Unclassified Excavation	Cu. Yd.	13, 287		38, 230		17, 708		152, 273			40, 129		48, 135		39, 310	25, 685		87, 504		7, 159		469, 420
203(5)	Borrow	Ton	76, 144		40, 289														61, 911		27, 573		205, 917
203(10)	Stripping Designated Material Sources	Cu. Yd.	10, 517				2, 222											7, 333					20, 072
203(14)	Selected Material	Ton	19, 024		13, 950		5, 550		19, 950			4, 801		7, 199		5, 249	3, 900		13, 800		1, 800		95, 223
205(2)	Overhaul	Ton-Mi.	4, 528		11, 907														4, 770		26, 834		48, 039
206(1)	Structure Excavation	Cu. Yd.	122	178	83	96	98	157	117	129	178	25	3	56	345	201	163	149	163	98	35		2, 397
207(1)	Class 1 Excavation for Structures	Cu. Yd.																				120	120
307(1)	Subbase, Grading A	Ton	4, 494		6, 348		2, 162		12, 580			4, 064		3, 776	4, 508		2, 248		9, 752		2, 030		51, 998
601(1)	Class A Concrete	Lump Sum																				All Req'd	All Req'd
602(1)	Reinforcing Steel	Lump Sum																				All Req'd	All Req'd
603(26G)	24" Pipe Conduit	Lin. Ft.	172	508	527	376	230	482	462	540	420	122	132	268	218	456	546	386	442	372	320		6, 979
603(26H)	30" Pipe Conduit	Lin. Ft.		60	202			120			62												444
603(26I)	36" Pipe Conduit	Lin. Ft.			0	186				50	72								54	104	68		534
603(26J)	42" Pipe Conduit	Lin. Ft.				60		56					62					48					226
603(26K)	48" Pipe Conduit	Lin. Ft.				64					58			56				72					250
603(26M)	60" Pipe Conduit	Lin. Ft.										70			56								126
603(31)	65" x 40" Corrugated Metal Pipe Arch 8 Ga.	Lin. Ft.							62	58						58							178
603(31)	73" x 44" Corrugated Metal Pipe Arch 10 Ga.	Lin. Ft.								60													60
605(18)	6" Perforated Pipe Underdrain	Lin. Ft.																				95	95
606(1)	Beam Type Guardrail, Type 1 Post	Lin. Ft.										300		362.5			275.0	175.0	250.0	662.5			2, 025
610(1)	96" Diameter Structural Plate Pipe 10 Ga.	Lin. Ft.											88		80								168
610(2L)	9'-6" x6'-5" Structural Plate Pipe Arch 8 Ga.	Lin. Ft.	212																				212
610(2CX)	15'-4" x 9'-3" Structural Plate Pipe Arch 5 Ga.	Lin. Ft.					132									84							216
611(1)	Riprap, Class 11	Cu. Yd.	198		5	26	104	15	5	64	5	21	143		21	208	10	5	75	15			920
613(1)	Right-of-Way Monuments	Each	10	10	9	8	6	8	11	6	8	6	6	8	6	8	8	8	12	14	8		160
613(2)	Culvert Marker Posts	Each	6	20	20	18	8	20	12	18	18	4	4	8	8	16	16	12	16	14	12		250
613(3)	Guide Posts	Each	10																				10
615(1)	Standard Signs	Each									1	1		2				1	2		1		8
633(1)	Structural Steel, Furnished, Fabricated, and Erected	Lump Sum																				All Req'd	All Req'd
634(1)	Steel Beam Bridge Railing	Lin. Ft.																				345	345
205(1)	Overhaul	C.Y. - Mi.	482		9, 117		66		45, 163			8, 836		8, 540	7, 139		1, 727		9, 610		5, 386		96, 066

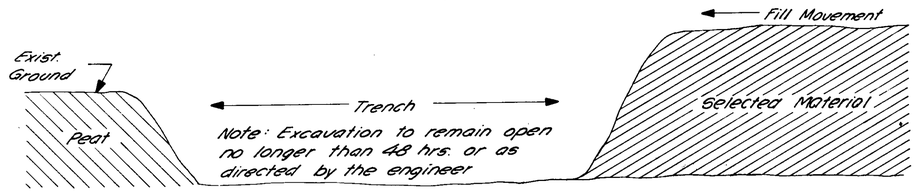
AS ADVERTISED

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	S 0924(4)	1957	4	50



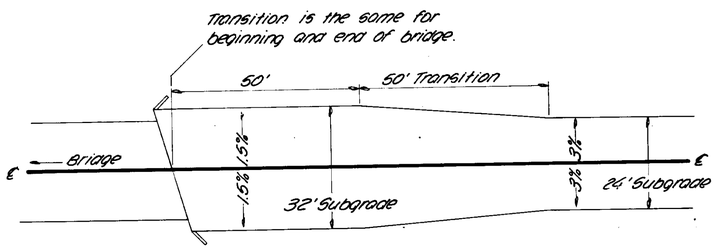
Note: Depth of peat removal shall be 10 feet below lower limit of subbase or to firm bottom if less than 10 feet.

TRANSVERSE SECTION

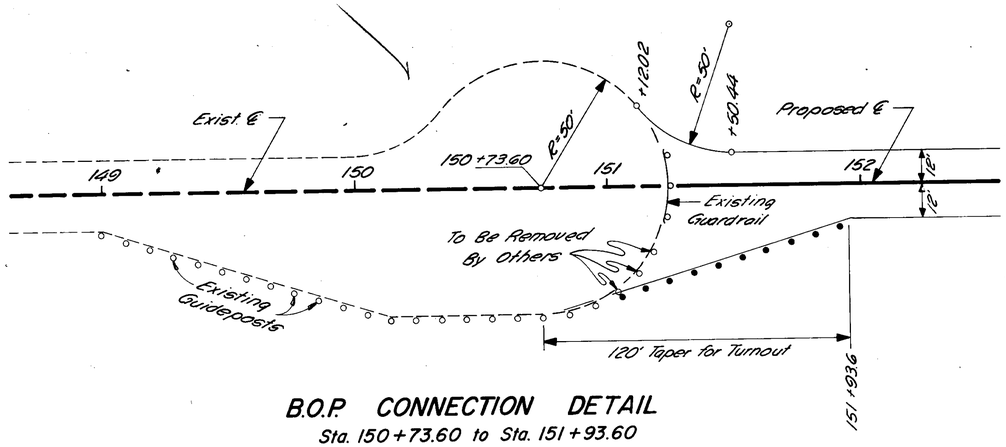


LONGITUDINAL SECTION A-A

PEAT REMOVAL DETAILS
Sta. 668+00 to Sta. 672+25



ROADWAY TRANSITION AT BRIDGE

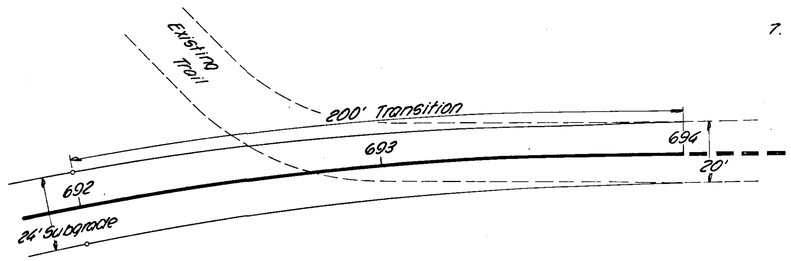


B.O.P. CONNECTION DETAIL
Sta. 150+73.60 to Sta. 151+93.60

GENERAL NOTES

1. Grades and alignment shown on these plans are subject to minor revisions.
2. Culvert lengths and locations are approximate only and are subject to minor revisions.
3. All material removed from pit No. 1 shall be replaced to the original ground line with waste and/or surplus material. All other waste and/or surplus material encountered on this project will not be disposed of within one hundred(100)feet of Klawak Lake. There is no payment for overhaul of unclassified excavation designated as waste and/or surplus material by the engineer.
4. The clearing limits shall be a neat orderly line approximately ten (10) feet beyond the slope limits or to the right-of-way line whichever is the lesser of the two.
5. Where directed the excavation for culverts to be placed in embankment fill shall be made after the embankment has been completed to a minimum height of twelve (12) inches above the top of the culvert. The uppermost level of computation for structure excavation for these culverts will be twelve (12) inches above the top of the culvert.
6. Corrugated Galvanized Metal Pipe or Corrugated Aluminum Pipe may be furnished for pay item 603(26), Pipe Conduit, at the option of the Contractor.
7. Rock may be encountered in the unclassified excavation.

AS ADVERTISED



E.O.P. CONNECTION DETAIL

STATE	PROJECT NO.	YEAR	SHEET NO.	NO. OF SHEETS
ALASKA	S-0924(4)	1967	5	50

CULVERT SUMMARY

See plan & profile sheets for changes.

Station	206(1) Structure Excavation C.Y.	603(28A) 24" Pipe Conduit L.F.	603(28B) 30" Pipe Conduit L.F.	603(28C) 36" Pipe Conduit L.F.	603(28D) 42" Pipe Conduit L.F.	603(28E) 48" Pipe Conduit L.F.	603(28F) 60" Pipe Conduit L.F.	603(31) 65"Span 40" Pipe C.M.P. Arch L.F.	603(31) 72" Span 44" Pipe C.M.P. Arch L.F.	610(1) Structural Plate Pipe 96"Dia. L.F.	610(12A) Structural Plate Pipe-Arch 9'-8"Span 6'-5"Rise 8 Ga. L.F.	610(12B) Structural Plate Pipe-Arch 15'-4"Span 9'-3"Rise 5 Ga. L.F.	613(2) Culvert Marker Posts EA.	Design Fill Height FT.	Remarks
"O" 151+87	24	56											2	2	Ditch Out
"O" 153+34	73										52			2	Ditch In & Out, Skew 5° Lt. Ahd.
"O" 153+34											52			2	Install at Max. Slope of 2%
"O" 154+41	0										54			2	Ditch Out, Skew 7° Rt. Ahd.
"O" 154+41											54			2	Install at Max. Slope of 2%
"O" 156+62	0	64											2	10	Ditch Out Skew 20° Rt. Ahd.
"L" 166+00	25	52											2	4	Skew 8° Lt. Ahd.
"L" 168+50	28	56											2	6	
"L" 170+45	29	62											2	5	Skew 10° Lt. Ahd.
"L" 171+95	29	62											2	4	Skew 25° Lt. Ahd.
"L" 175+45	26	52											2	5	
"L" 177+70	29	58											2	6	
"L" 179+70	28	58											2	5	Ditch Out, Skew 20° Lt. Ahd.
"L" 182+65	0		60										2	6	
"L" 185+65	0	50											2	4	
"L" 187+70	0	54											2	4	Ditch In. Skew 10° Lt. Ahd.
"L" 191+95	9	56											2	2	
"L" 201+33	0		64										2	6	Skew 5° Rt. Ahd.
"L" 203+04	27	54											2	8	
"L" 206+63	33	66											2	9	Ditch In & Out.
"L" 208+50	6	93											2	7	Skew 48° Lt. Ahd
"L" 215+43	0		74										2	4	Skew 30° Rt. Ahd.
"L" 216+75	0	68											2	9	
"L" 218+00	0	66											2	9	
"L" 220+50	0	78											2	12	Skew 10° Rt. Ahd.
"L" 221+40	0	102		0									2	12	Constr. Ditch Block at Inlet. Skew 45° Lt. Ahd.
"L" 223+00	17		64										2	3	Skew 30° Lt. Ahd.
"L" 228+95	0	62											2	6	
"L" 230+10	2			58									2	5	Ditch In. Constr. Ditch Block at Inlet. Skew 5° Lt. Ahd.
"L" 234+80	6			56									2	3	Constr. Ditch Block at Inlet
"L" 236+90	5					66								1	
"L" 237+90	20				60									2	Ditch In. Skew 20° Lt. Ahd.
"L" 240+00	16	80											2	2	Ditch Out. Skew 45° Lt. Ahd.
"L" 243+00	12	60											2	2	Skew 15° Lt. Ahd.
"L" 248+80	14	56											2	2	Ditch Out
"L" 251+60	0	62											2	6	Skew 25° Rt. Ahd.
"L" 254+80	8			72									2	2	Ditch Out
"L" 257+50	13	56											2	4	Ditch Out

Station	206(1) Structure Excavation C.Y.	603(28A) 24" Pipe Conduit L.F.	603(28B) 30" Pipe Conduit L.F.	603(28C) 36" Pipe Conduit L.F.	603(28D) 42" Pipe Conduit L.F.	603(28E) 48" Pipe Conduit L.F.	603(28F) 60" Pipe Conduit L.F.	603(31) 65"Span 40" Pipe C.M.P. Arch L.F.	603(31) 72"Span 44" Pipe C.M.P. Arch L.F.	610(1) Structural Plate Pipe 96"Dia. L.F.	610(12A) Structural Plate Pipe-Arch 9'-8"Span 6'-5"Rise 8 Ga. L.F.	610(12B) Structural Plate Pipe-Arch 15'-4"Span 9'-3"Rise 5 Ga. L.F.	613(2) Culvert Marker Posts EA.	Design Fill Height FT.	Remarks
"L" 262+00	26	58											2	2	Ditch Out
"L" 271+07	44											66		3	Ditch Out. Skew 17°30' Lt. Ahd.
"L" 271+07												66		3	Install at Max. Slope of 0.5%
"L" 272+25	0	60											2	7	Ditch Out
"L" 273+00	0	56											2	8	
"L" 278+00	28	56											2	8	
"L" 289+85	0		60										2	8	Ditch In. Constr. Ditch Block at Inlet
"L" 293+05	14	56											2	5	Skew 25° Rt. Ahd.
"L" 294+90	0	58											2	6	Skew 20° Rt. Ahd.
"L" 299+26	30				56									5	Constr. Ditch Block at Inlet
"L" 301+35	0	60											2	8	
"L" 303+50	16	56											2	5	
"L" 310+30	32	74											2	2	Skew 40° Rt. Ahd.
"L" 311+00	22		60										2	5	Constr. Ditch Block at Inlet
"L" 312+10	19	62											2	6	
"L" 314+50	11	58											2	5	Skew 10° Lt.
"L" 316+50	13	58											2	5	
"L" 320+03	0	76											2	13	Ditch In
"L" 331+50	0	96											2	21	
"L" 333+40	40						62							1	Ditch In & Out. Constr. Ditch Block at Inlet. Skew 20° Rt. Ahd.
"L" 336+00	0	80											2	15	
"L" 339+50	67	82											2	13	
"L" 342+50	30	58											2	6	
"L" 346+91	0	70											2	12	
"L" 347+60	15	76											2	12	Skew 15° Lt. Ahd.
"L" 351+20	30	66											2	10	
"L" 352+30	10	58											2	7	
"L" 355+35	6				50								2	4	Skew 15° Rt. Ahd.
"L" 356+00	3	60											2	5	Skew 15° Rt. Ahd.
"L" 358+05	0	86											2	14	Skew 25° Lt. Ahd.
"L" 359+93	5	58											2	6	Skew 20° Lt. Ahd.
"L" 361+58	11	62											2	6	Skew 10° Rt. Ahd.
"L" 368+90	3							60						2.5	Constr. Ditch Block at Inlet
"L" 374+05	0	74											2	10	Skew 35° Lt. Ahd.
"L" 375+75	46								58					1	Constr. Ditch Block at Inlet

AS ADVERTISED

STATE	PROJECT NO.	YEAR	SHEET	TOTAL SHEETS
ALASKA	S-0924(4)	1967	6	50

CULVERT SUMMARY

See plan & profile sheets for changes

Station	206(1) Structure Excavation C.Y.	603(2a) 24" Pipe Conduit L.F.	603(2b) 30" Pipe Conduit L.F.	603(2c) 36" Pipe Conduit L.F.	603(2d) 42" Pipe Conduit L.F.	603(2e) 48" Pipe Conduit L.F.	603(2f) 60" Pipe Conduit L.F.	603(3) 65"Span 40"Rise Pipe C.M.P. Arch L.F.	603(3) 72"Span 44"Rise Pipe C.M.P. Arch L.F.	611(1) Structural Plate Pipe 96" Dia. 10 Ga. L.F.	610(21) Structural Plate Pipe-Arch 9'-8"Span 6'-5"Rise 8 Ga. L.F.	610(28) Structural Plate Pipe-Arch 15'-4"Span 9'-3"Rise 5 Ga. L.F.	613(2) Culvert Marker Posts EA.	Design Fill Height FT.	Remarks
"L" 379+50	25	60											2	8	Skew 10° Lt. Ahd.
"L" 380+80	15	62											2	3	Ditch Out. Skew 20° Lt. Ahd.
"L" 384+50	21	56											2	3	Ditch Out.
"L" 388+85	29	64											2	2	Skew 30° Rt. Ahd.
"L" 389+95	0			72									2	13	
"L" 392+81	0		62										2	9	Ditch In
"L" 395+30	32					58								2	Ditch Out. Constr. Ditch Block at Inlet. Skew 10° Lt. Ahd
"L" 401+90	9	52											2	4	
"L" 403+40	23	56											2	2	Ditch Out. Skew 5° Lt. Ahd.
"L" 406+90	24	70											2	11	
"L" 419+00	0						70							4	Skew 40° Lt. Ahd. Install at Max. Slope of 2.5%
"L" 423+71	20	68											2	10	
"L" 433+00	5	54											2	4	Ditch In
"L" 437+60	0									88				2	Skew 48° Lt. Ahd. Install at Max. Slope of 1.5%
"L" 446+45	3	62											2	6	Ditch In
"L" 450+34	0				62									9	Install at Max. Slope of 3%
"L" 463+50	0	70											2	13	
"L" 466+25	10					56								2	Skew 20° Rt. Ahd.
"L" 467+65	0	72											2	9	Skew 25° Rt. Ahd.
"L" 470+00	46	80											2	12	
"L" 483+50	0	68											2	9	
"L" 486+50	0	48											2	4	
"L" 497+40	234									80				5	Ditch In. Skew 35° Lt. Ahd. Install at Max. Slope 1.5%
"L" 501+25	24	50											2	5	Ditch Out
"L" 502+65	24	50											2	4	Ditch Out
"L" 506+00	3						56							3	Ditch In & Out
"L" 513+60	29	56											2	8	
"L" 517+50	32	62											2	10	
"L" 527+63	0											84		3	Ditch In To Max. Pipe Slope of 1.0%. Skew 39° Lt. Ahd.
"L" 529+75	0	50											2	3	Skew 10° Lt. Ahd.
"L" 534+00	46							58						1	Constr. Ditch Block at Inlet. Ditch Out.
"L" 541+00	22	56											2	2	Ditch Out
"L" 545+10	27	62											2	2	Ditch Out. Skew 25° Rt. Ahd.
"L" 550+15	27	60											2	7	Skew 10° Rt. Ahd.
"L" 552+60	20	56											2	3	
"L" 553+30	20	56											2	2	Ditch Out. Constr. Ditch Block at Inlet
"L" 553+80	20	58											2	3	Ditch Out. Constr. Ditch Block at Inlet
"L" 555+70	19	58											2	2	Constr. Ditch Block at Inlet

Station	206(1) Structure Excavation C.Y.	603(2a) 24" Pipe Conduit L.F.	603(2b) 30" Pipe Conduit L.F.	603(2c) 36" Pipe Conduit L.F.	603(2d) 42" Pipe Conduit L.F.	603(2e) 48" Pipe Conduit L.F.	603(2f) 60" Pipe Conduit L.F.	603(3) 65"Span 40"Rise Pipe C.M.P. Arch L.F.	603(3) 72" Span 44" Rise Pipe C.M.P. Arch L.F.	611(1) Structural Plate Pipe 96" Dia. 10 Ga. L.F.	610(21) Structural Plate Pipe-Arch 9'-8"Span 6'-5"Rise 8 Ga. L.F.	610(28) Structural Plate Pipe-Arch 15'-4"Span 9'-3"Rise 5 Ga. L.F.	613(2) Culvert Marker Posts EA.	Design Fill Height FT.	Remarks
"L" 556+40		56											2	3	Constr. Ditch Block at Inlet
"L" 557+80	0	86											2	19	Constr. Ditch Block at Inlet
"L" 560+60	0	78											2	15	
"L" 567+75	32	64											2	12	
"L" 569+75	38	76											2	8	Skew 40° Rt. Ahd.
"L" 572+50	28	58											2	6	
"L" 578+50	33	64											2	11	
"L" 584+20	32	64											2	6	Skew 30° Rt. Ahd.
"L" 588+80	26	60											2	3	Skew 20° Rt. Ahd.
"L" 591+40	0				48									3	
"L" 593+35	9						72							9	Ditch In. Skew 25° Rt. Ahd. Install at Max. Slope 1.5%
"L" 595+00	46	84											2	7	Skew 45° Rt. Ahd.
"L" 598+80	28	62											2	2	Ditch Out. Skew 25° Rt. Ahd.
"L" 603+60	27	56											2	3	Constr. Ditch Block at Inlet
"L" 611+35	0	60											2	10	
"L" 615+50	22	64											2	3	Ditch Out. Skew 25° Rt. Ahd.
"L" 616+12	7	58											2	7	
"L" 619+25	71								54				2	5	Constr. Ditch Block at Inlet
"L" 625+70	0	84											2	10	Skew 40° Lt. Ahd.
"L" 627+05	0	70											2	14	Skew 10° Rt. Ahd.
"L" 628+75	0	60											2	8	Ditch Out
"L" 633+75	24	54											2	2	Ditch Out
"L" 636+30	30	60											2	8	
"L" 639+80	31	56											2	9	
"L" 647+40	28	56											2	8	
"L" 653+37	0								104				2	25	
"L" 657+90	1	66											2	10	Constr. Ditch Block at Inlet
"L" 659+50	20	54											2	2	Constr. Ditch Block at Inlet
"L" 661+75	23	60											2	3	Ditch Out. Constr. Ditch Block at Inlet. Skew 20° Rt. Ahd.
"L" 664+60	26	56											2	3	Ditch Out
"L" 667+75	0	80											2	17	
"L" 678+55	0								68				2	13	
"L" 680+50	0	58											2	6	
"L" 685+75	18	54											2	3	
"L" 688+50	17	98											2	22	
"L" 690+00	0	60											2	10	
"L" 691+00	0	50											2	6	Under Approach Road 28' Lt.
GRAND TOTAL	2,997	6,979	444	534	226	250	126	178	60	188	212	216	248		GRAND TOTAL

AS ADVERTISED

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	S-0924(4)	1967	7	5

SUMMARY OF STANDARD CONCRETE RIGHT-OF-WAY MONUMENTS

STATION	DIST FROM ℄ IN FT. LEFT	DIST FROM ℄ IN FT. RIGHT	NO.	REMARKS
"O"153+75.51	100	100	2	P.C.
"O"155+51.30	100	100	2	P.T
"O"158+39.99	100	100	2	P.C
"L"177+28.13	100	100	2	P.C.
"L"184+02.71	100	100	2	P.T.
"L"190+00.00	100	100	2	P.O.T.
"L"197+62.43	100	100	2	P.C.
"L"207+36.87	100	100	2	P.T.
"L"220+00.00	100	100	2	P.O.T.
"L"220+00.00	150		1	R/W Offset
"L"223+73.29	150	100	2	P.C.
"L"225+00.00	150		1	P.O.C.
"L"225+00.00	100		1	R/W Offset
"L"235+38.29	100	100	2	P.T.
"L"245+00.00	100	100	2	P.O.T.
"L"253+74.92	100	100	2	P.C.
"L"256+24.92	100	100	2	P.T.
"L"266+60.46	100	100	2	P.C.
"L"269+97.96 Bk=	269+97° Ah			
"L"[illegible] Ah.	100	100	2	P.T.
"L"280+00.00	100	100	2	P.O.T.
"L"290+00.00	100	100	2	P.O.T.
"L"300+00.00	100	100	2	P.O.T.
"L"310+00.00	100	100	2	P.O.T.
"L"314+39.36	100	100	2	P.C.
"L"319+39.36	100	100	2	P.T.
"L"328+31.18	100	100	2	P.C.
"L"330+68.68	100	100	2	P.T.
"L"337+00.00	100	100	2	P.O.T.
"L"337+00.00	150		1	R/W Offset
"L"347+00.00	150		1	P.O.T.
"L"347+00.00	100		1	R/W Offset
"L"349+97.79	100	100	2	P.C.
"L"361+97.79	100	100	2	P.T.
"L"370+[illegible]	100	100	2	P.O.T.
"L"380+00.00	100	100	2	⊄ Point
"L"[illegible]	100	100	2	P.O.T.
"L"396+35.29	100	100	2	P.C.
"L"403+[illegible]	100	100	2	P.T.
"L"411+65.10	100	100	2	P.C.
"L"415+32.87 Bk=				
"L"415+27.19 Ah.	100		1	P.T
"L"425+42.51	100		1	P.C.
"L"428+90.29	100	100	2	P.T.
"L"440+00.00	100	100	2	P.O.T.
"L"450+00.00	100	100	2	P.O.T.
"L"458+71.28	100	100	2	P.C.

STATION	DIST FROM ℄ IN FT. LEFT	DIST FROM ℄ IN FT. RIGHT	NO.	REMARKS
"L"468+68.11	100	100	2	P.T.
"L"471+34.83	100		1	P.C.
"L"477+53.58	100	100	2	P.T.
"L"485+00.00	100	100	2	P.O.T.
"L"491+44.89	100		1	P.C.
"L"496+84.89	100	100	2	P.T.
"L"506+67.77	100	100	2	P.C.
"L"516+42.77	100	100	2	P.T.
"L"526+00.00	100	~~100~~	~~2~~ 1	P.O.T.
"L"536+06.69	100	100	2	P.C.
"L"539+06.69	100	100	2	P.T.
"L"550+39.50	100	100	2	P.C.
"L"556+49.50	100	100	2	P.T.
"L"558+45.10	100	100	2	P.C.
"L"569+52.10	100	100	2	P.T.
"L"580+00.00	100	100	2	P.O.T.
"L"588+23.19	100	100	2	P.C.
"L"593+81.77	100	100	2	P.T.
"L"601+35.94	100	100	2	P.C.
"L"60[illegible]+24.62	100	100	2	P.T.
"L"617+49.16	100	100	2	P.C.
"L"621+15.83	100	100	2	P.T.
"L"623+16.15	100	100	2	P.C.
"L"627+23.15	100	100	2	P.T.
"L"635+00.00	100	100	2	P.O.T.
"L"642+22.68	100	100	2	P.C.
"L"646+71.01	100	100	2	P.T.
"L"648+61.32	100	100	2	P.C.
"L"654+06.32	100	100	2	P.T.
"L"656+98.87	100	100	2	P.C.
"L"664+38.20	100	100	2	P.T.
"L"665+96.33	100	100	2	P.C.
"L"668+79.11	100	100	2	P.T.
"L"676+43.12	100	100	2	P.C.
"L"678+76.45	100	100	2	P.T.
"L"686+66.67	100	100	2	P.C.
"L"693+66.21	100	100	2	P.T.

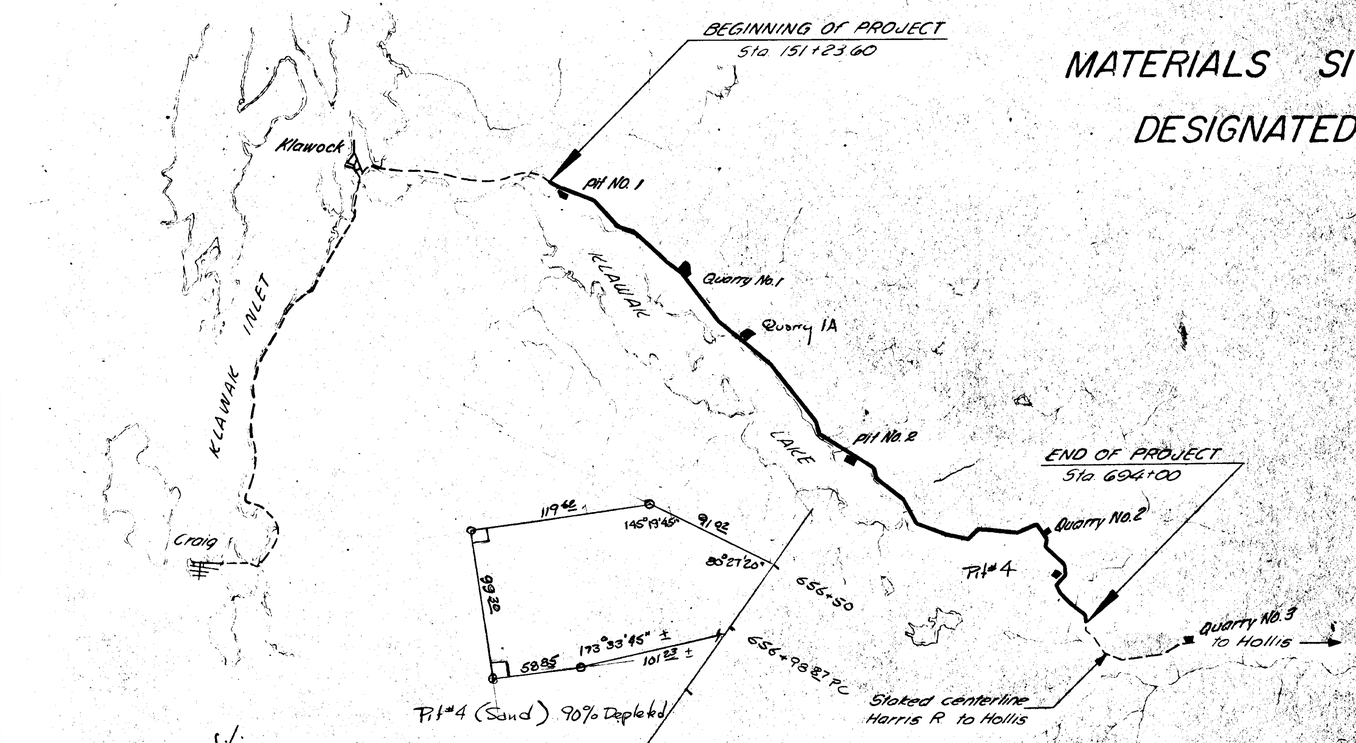
STATION	DIST FROM ℄ IN FT. LEFT	DIST FROM ℄ IN FT. RIGHT	NO.	REMARKS
"O"160+65.47	100	100	2	P.T.
"O"165+84.57	100	100	2	P.C.
"O"169+57.90 Bk=				
"L"169+57.90 Ah.	100	100	2	P.T.
Total			159 ~~160~~	

AS ADVERTISED

ALASKA	S-0924(4)	1967	3	50

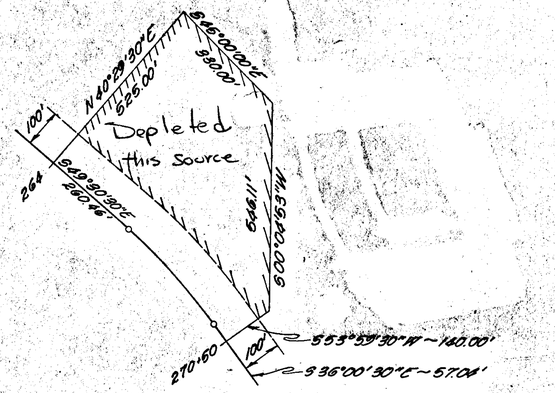
MATERIALS SITE LOCATIONS

MATERIALS SITE LOCATIONS
DESIGNATED SOURCES

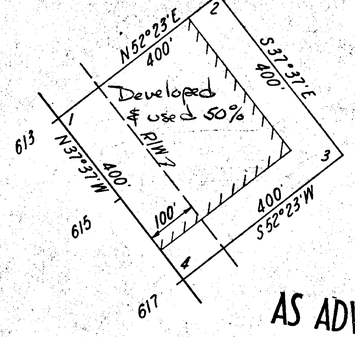


NOTE:
~~A 50' min. natural vegetation screen shall be left between the edge of roadway clearing and grubbing and the edge of pit clearing and grubbing.~~

PIT NO. 1
Code No. 924-003-3

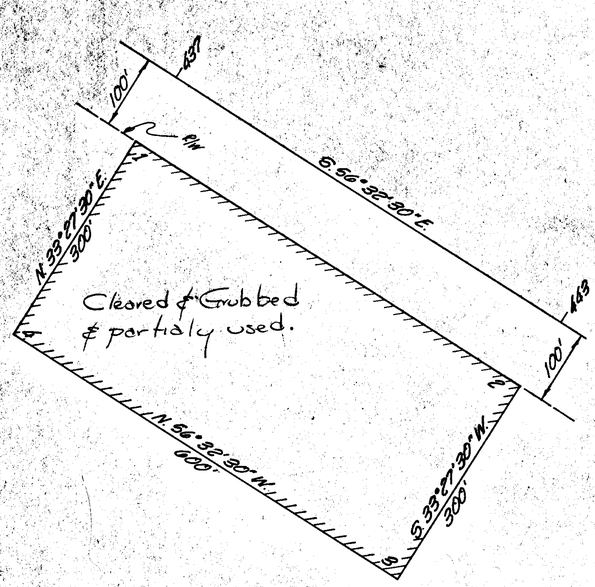


QUARRY SITE NO. 1
Code No. 924-011-3



AS ADVERTISED

QUARRY SITE NO. 2
Code No. 924-009-3



PIT NO. 2
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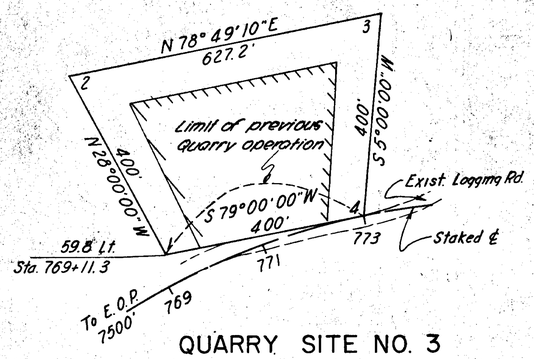


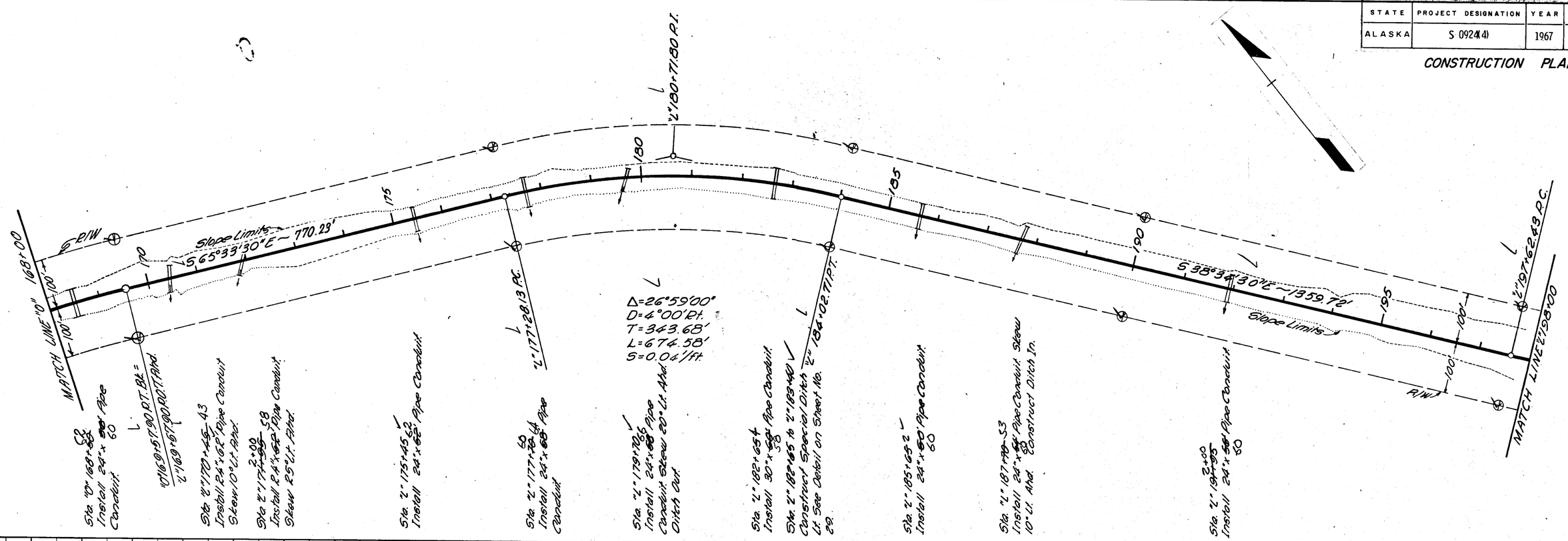
QUARRY SITE NO. 3
Code No. 924-010-3

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	S 0924(4)	1967	9	50

CONSTRUCTION PLAN

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	S-0924(4)	1967	10	50

CONSTRUCTION PLAN



Balance No. 1

Unclassified Excavation ①	13,287 C.Y.
Borrow ②	76,144 Ton
Select Material ②	19,024 Ton
Subbase, Grading A	4,494 Ton
Overhaul (2,000 ft. Free Haul)	4,528 Ton/M
Overhaul (2,000 ft. Free Haul)	482 C.Y./M.

Clearing & Grubbing Acre 5.5

① Includes 11,302 Cu. Yds. Waste.
② From Pit No. 1 - Code No. 924-003-3

K&E PLATE 1, PLAN-PROFILE

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	S-0924(4)	1967	11	50

CONSTRUCTION PLAN

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	S-0924(4)	1967	12	50

CONSTRUCTION PLAN

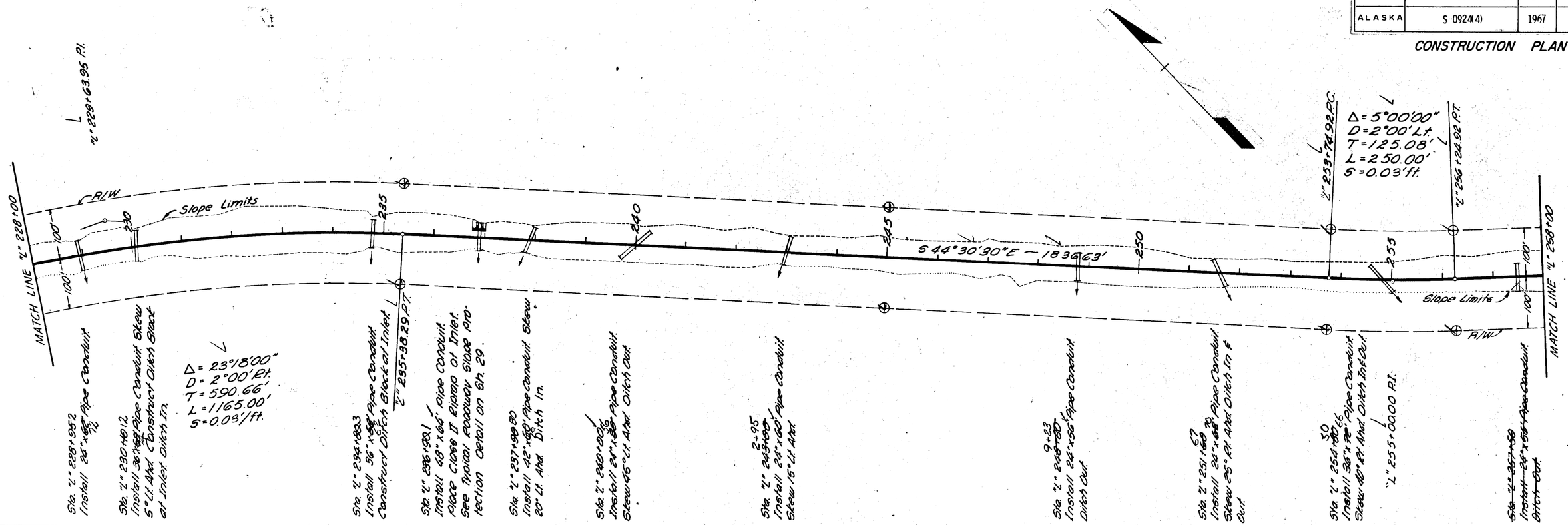


PLATE 3 PLAN PROFILE

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	S-0924(4)	1967	13	50

CONSTRUCTION PLAN

Balance No. 2

Unclassified Excavation ①	38,230 C.Y.
Borrow ②	40,289 Ton
Select Material ②	13,950 Ton
Subbase, Grading A	6,348 Ton
Overhaul (2,000 ft. Free Haul)	11,907 Ton/M
Overhaul (2,000 ft. Free Haul)	9,117 C.Y./M.

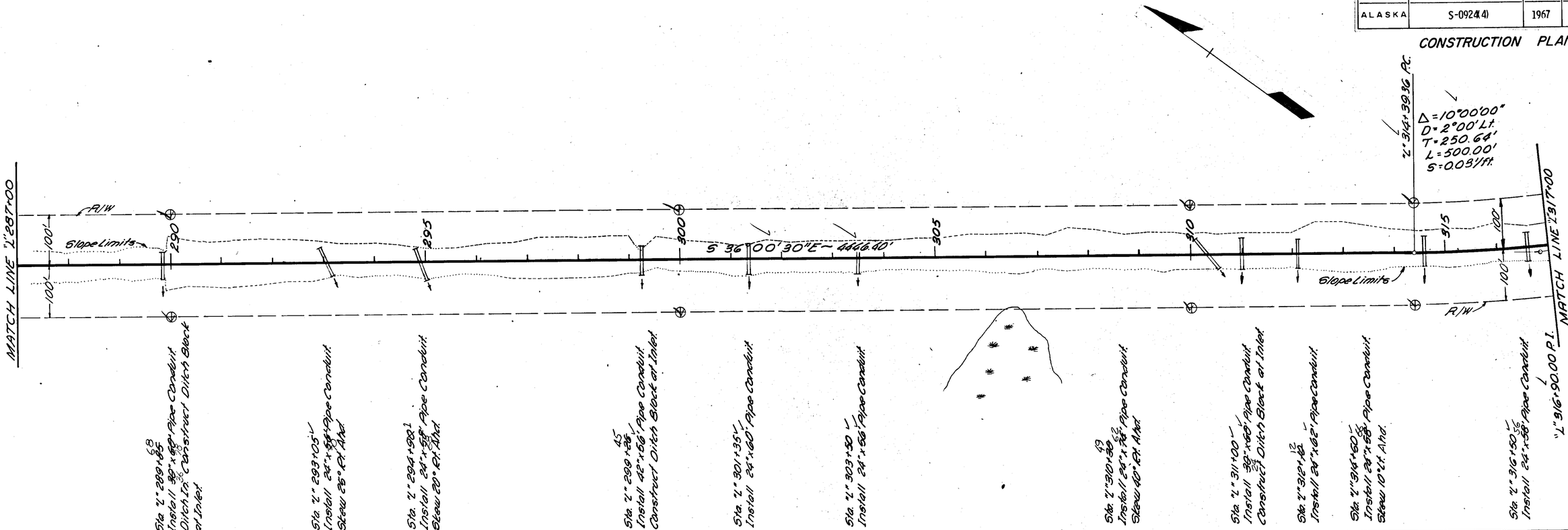
Balance No. 3

Unclassified Excavation ①	17,708 C.Y.
Borrow	0 Ton
Select Material ②	5,550 Ton
Subbase, Grading A	2,162 Ton
Overhaul (2,000 ft. Free Haul)	0 Ton/M.
Overhaul (2,000 ft. Free Haul)	66 C.Y./M.

PLATE 1. PLAN-PROFILE

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	S-0924(4)	1967	14	50

CONSTRUCTION PLAN



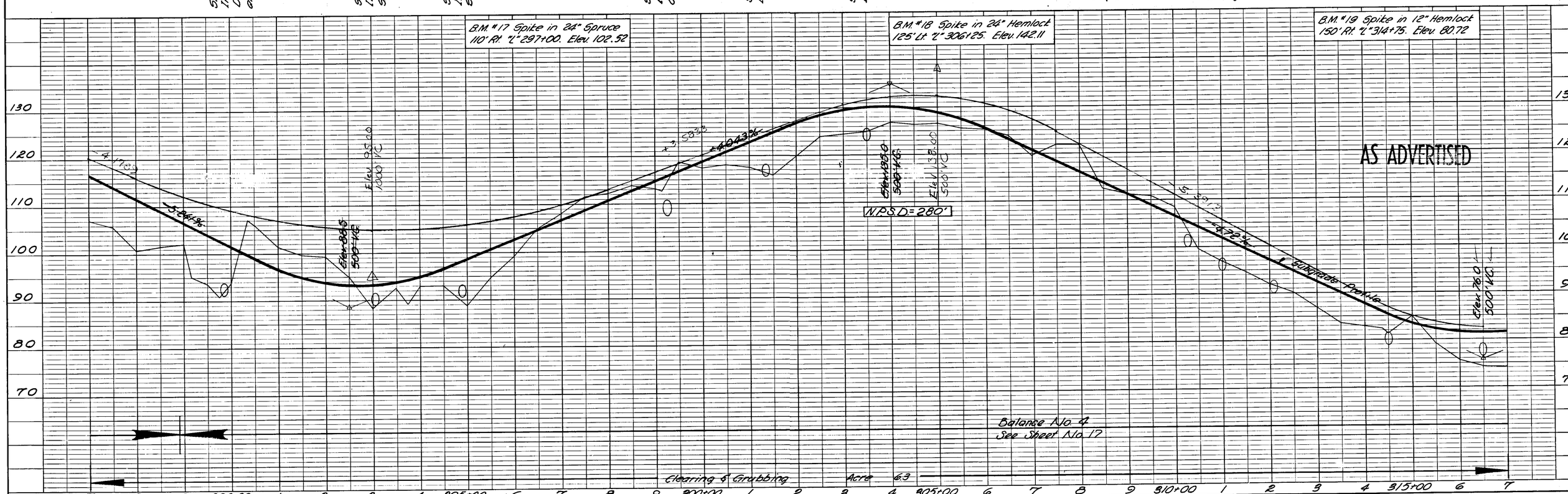


PLATE 1, PLAN-PROFILE

RT. OF WAY CHECKED
NO. E. M.S. NOTED
STRUCTURE NOTATIONS CHECKED

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	S 0924(4)	1967	15	50

CONSTRUCTION PLAN

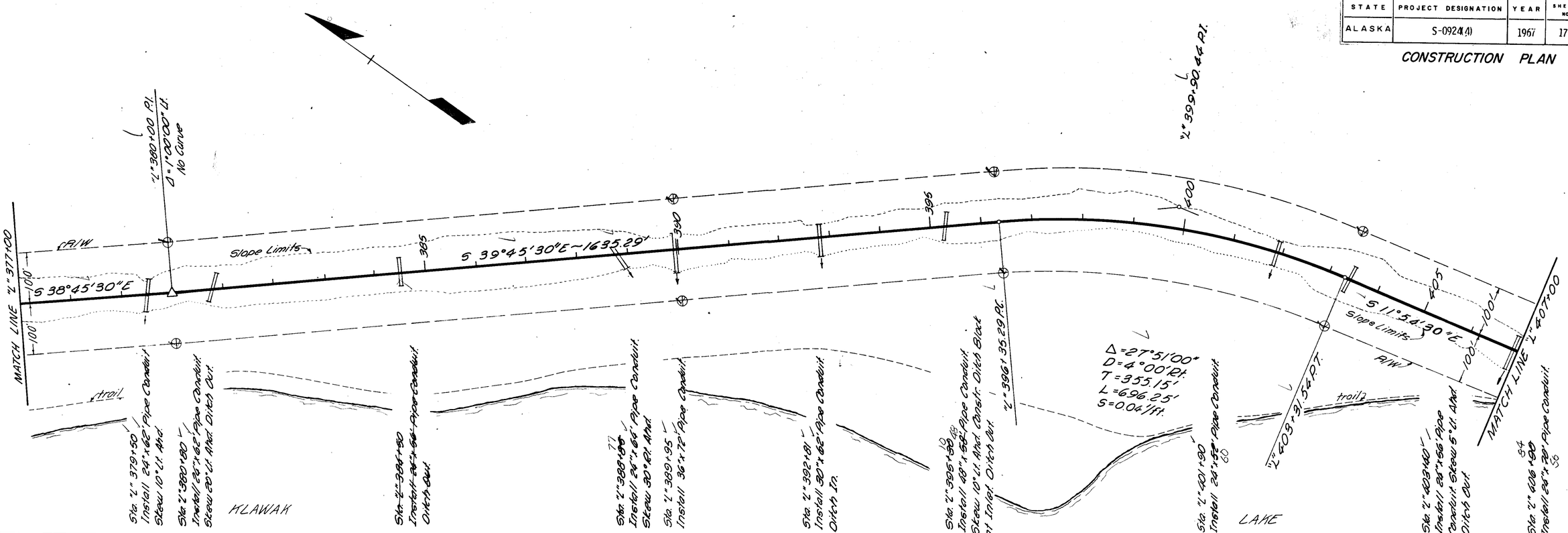
PLATE 1. PLAN-PROFILE

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	S-0924(4)	1967	16	50

CONSTRUCTION PLAN

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	S-0924(4)	1967	17	50

CONSTRUCTION PLAN

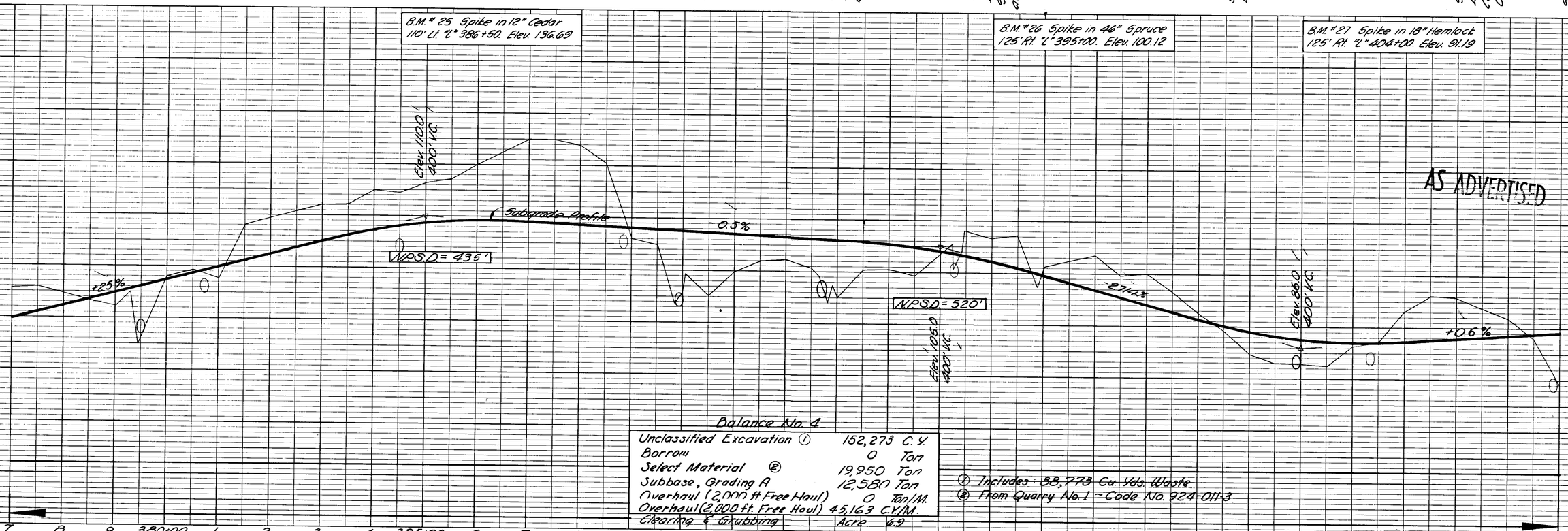


B.M. # 25 Spike in 12" Cedar
110' Lt. "L" 386+50. Elev. 136.69

B.M. # 26 Spike in 46" Spruce
125' Rt. "L" 395+00. Elev. 100.12

B.M. # 27 Spike in 18" Hemlock
125' Rt. "L" 404+00 Elev. 91.19

AS ADVERTISED



Balance No. 4

Unclassified Excavation ①	152,273	C.Y.
Borrow	0	Ton
Select Material ②	19,950	Ton
Subbase, Grading A	12,580	Ton
Overhaul (2,000 ft. Free Haul)	0	Ton/M.
Overhaul (2,000 ft. Free Haul)	45,163	C.Y./M.
Clearing & Grubbing	Acre	6.9

① Includes 38,773 Cu. Yds. Waste
② From Quarry No. 1 ~ Code No. 924-0113

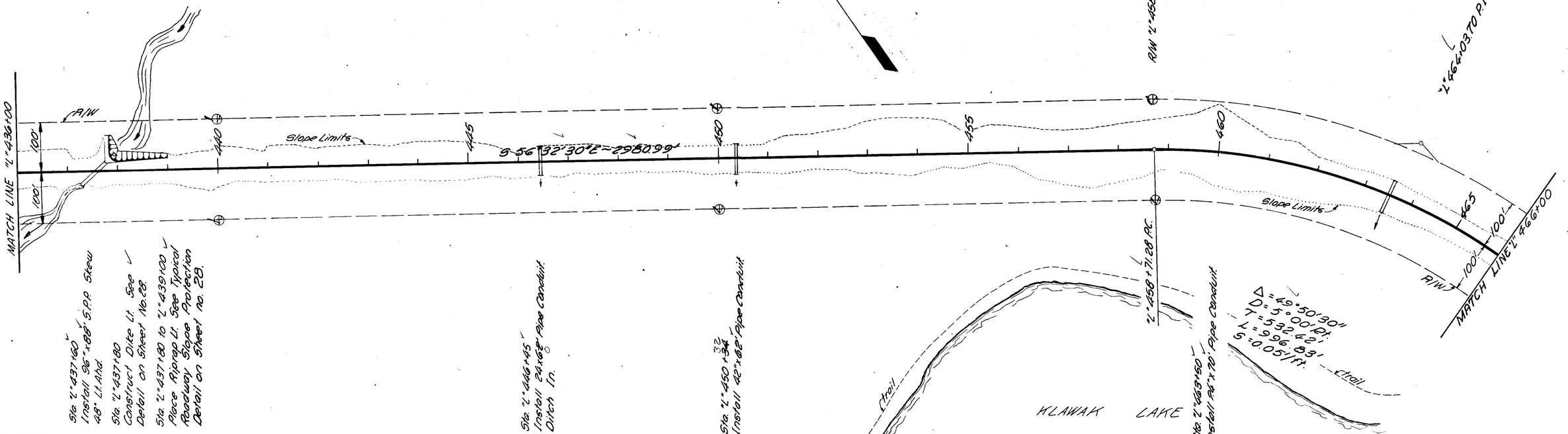
"M" PLATE 1 PLAN PROFILE

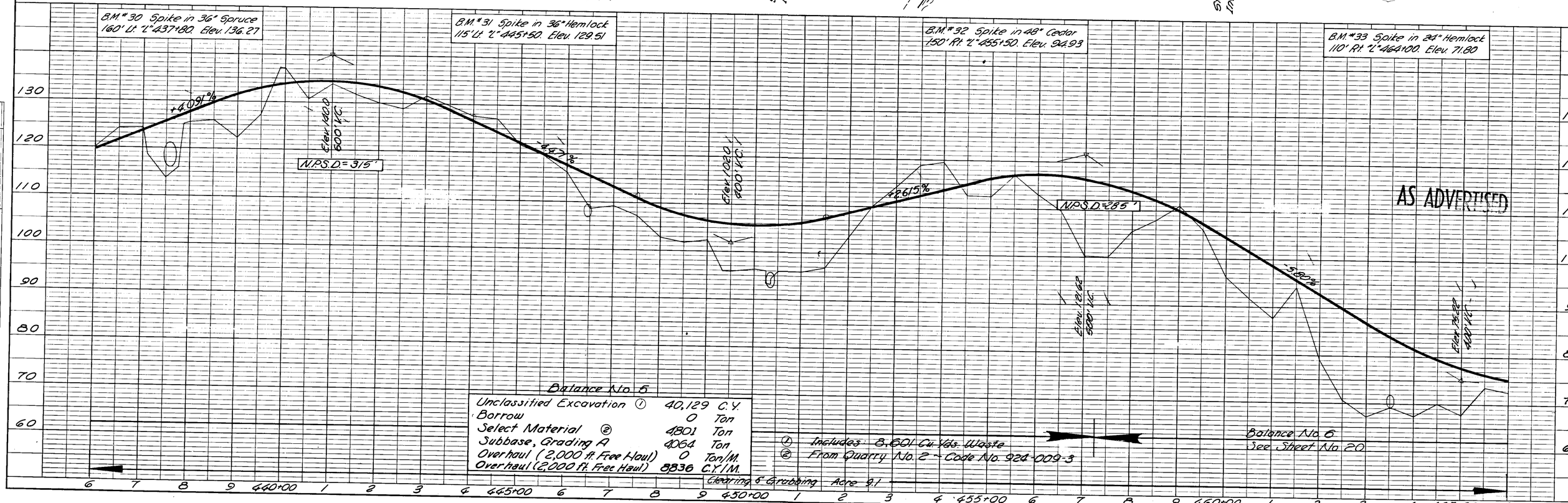
STATE	PROJECT DESIGNAT	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	S-0924(4)	1967	18	50

CONSTRUCTION PLAN

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	S-0924(4)	1967	19	52

CONSTRUCTION PLAN





Balance No. 5

Unclassified Excavation ①	40,129	C.Y.
Borrow	0	Ton
Select Material ②	4801	Ton
Subbase, Grading A	4064	Ton
Overhaul (2,000 ft. Free Haul)	0	Ton/M.
Overhaul (2,000 ft. Free Haul)	8836	C.Y./M.

Clearing & Grubbing Acre 9.1

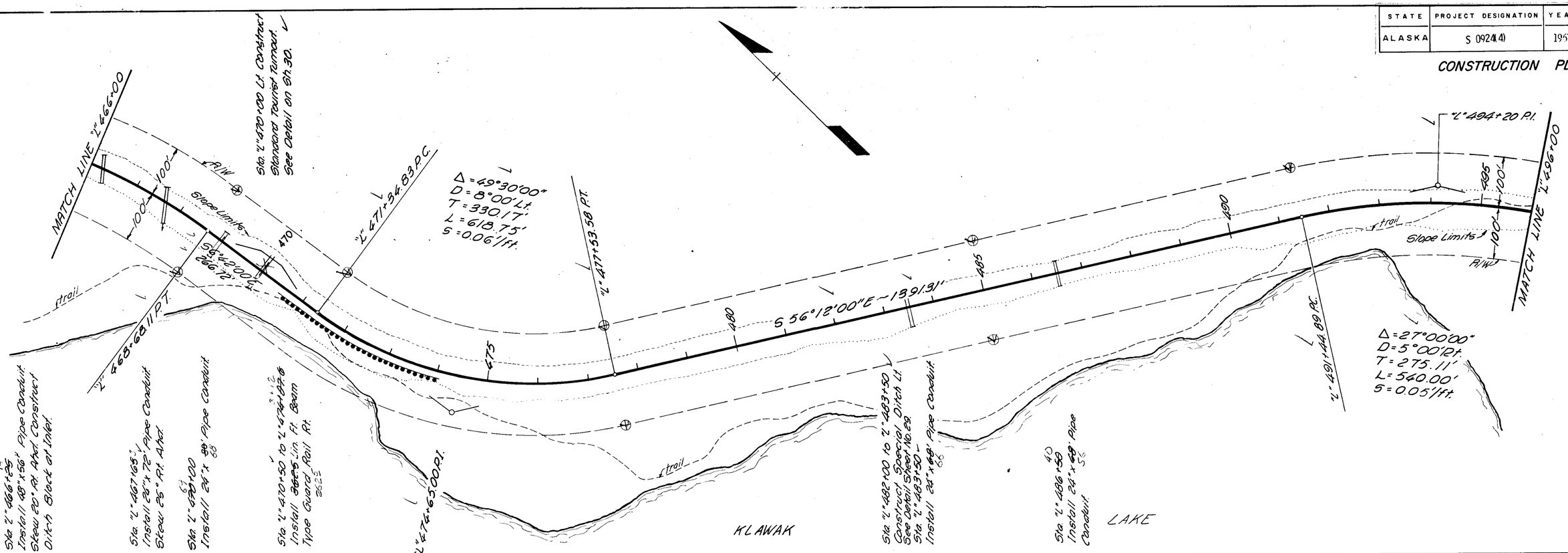
① Includes: 8,601 Cu. Yds. Waste
② From Quarry No. 2 - Code No. 924-009-3

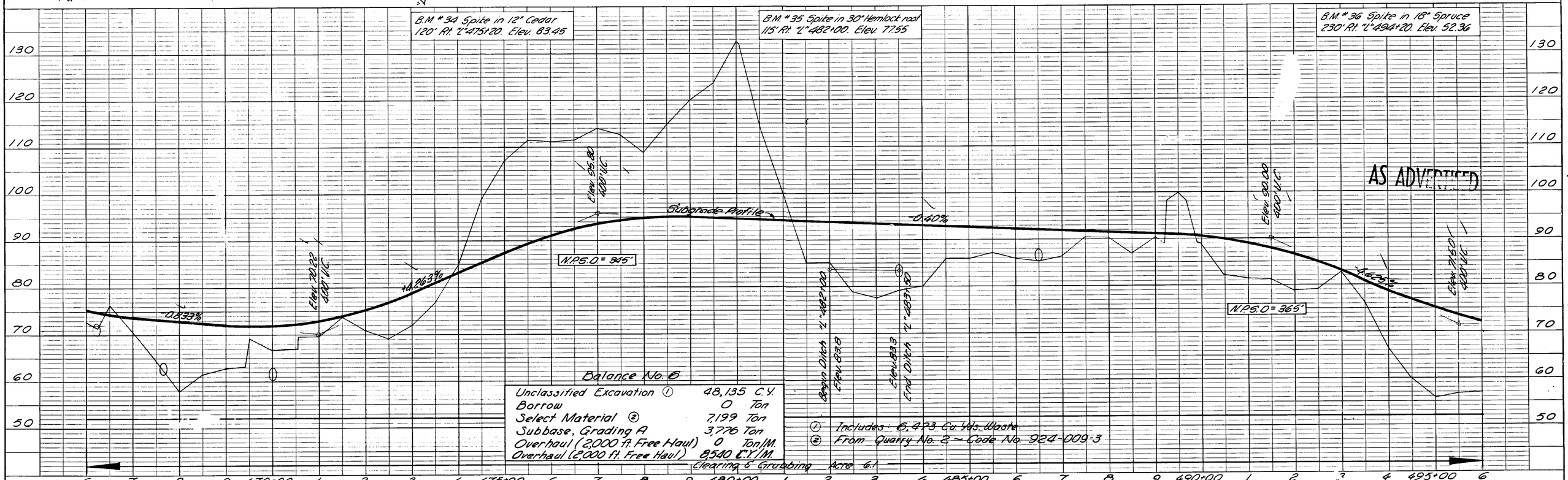
Balance No. 6
See Sheet No. 20

NOTE BOOK
NO.
PLOTTED
ALIGNMENT CHECKED
RT. OF WAY CHECKED.
GRADES CHECKED
B. M.'S NOTED
STRUCTURE NOTATIONS CHKD.

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	S 0924(4)	1967	20	50

CONSTRUCTION PLAN





Balance No. 6

Unclassified Excavation ①	48,135 C.Y.
Borrow	0 Ton
Select Material ②	7,199 Ton
Subbase, Grading A	3,776 Ton
Overhaul (2,000 ft. Free Haul)	0 Ton/M.
Overhaul (2,000 ft. Free Haul)	8,540 C.Y./M.
Clearing & Grubbing	Acre 6.1

① Includes 6,473 Cu. Yds. Waste
② From Quarry No. 2 ~ Code No. 924-009-3

K&E PLATE 1, PLAN-PROFILE

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	S-0924(4)	1967	21	50

CONSTRUCTION PLAN

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	S-0924(4)	1967	22	50

CONSTRUCTION PLAN

PLATE 1, PLAN-PROFILE

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	S 0924(4)	1967	23	50

CONSTRUCTION PLAN

PLATE 1, PLAN-PROFILE

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	S 0924(4)	1967	24	50

CONSTRUCTION PLAN

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

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	S 0924(4)	1967	25	50

CONSTRUCTION PLAN

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	S-0924(4)	1967	26	50

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	S-0924(4)	1957	27	50

CONSTRUCTION PLAN

MATCH LINE "L" 676+00

"L" 676+43.12 P.C.

Δ = 7°00'00"
D = 3°00' Lt.
T = 116.81'
L = 233.33'
S = 0.04'/ft.

"L" 678+76.45 P.T.

R/W

Slope Limits

100'

680

685

S. 51°12'00" E. ~ 799.31'

"L" 690+33.00 P.I.

Construction Easement

150

50

150

90°

Sta. "L" 691+39
Construct Type 3 Approach.
25' Radius.

Sta. "L" 691+60
28' Lt.
Install 24" x 56' Pipe Conduit.
46

Existing Forest Road

Slope Limits

100'

S. 9°14'00" E. ~ 337.9'

R/W

100'

"L" 677+59.93 P.I.

Sta. "L" 678+55
Install 36" x 88' Pipe Conduit.
88

Sta. "L" 680+59.45
Install 24" x 56' Pipe Conduit.
58

Sta. "L" 683+95.82
Install 24" x 56' Pipe Conduit.
58

"L" 685+66.76 P.C.

Δ = 41°58'00"
D = 6°00'12"
T = 366.24'
L = 699.45'
S = 0.06'/ft.

Sta. "L" 688+50
Install 24" x 56' Pipe Conduit.
50 x 88

699.94

Sta. "L" 690+00
Install 24" x 60' Pipe Conduit.
30 x 90

"L" 693+66.21 P.T.

END OF PROJECT
S-0924(4)
STA. "L" 694+00.00

Note: Match Existing Alignment & Grade at Sta. "L" 694+00.00

B.M. "55 Spike in 12" Cedar
110' Rt. "L" 683+00. Elev. 290.12

Subgrade profile

+3.81%

N.P.S.D. = 310'

Elev. 304.0
400' V.C.

Elev. 334.5
400' V.C.

Elev. 330.80

-2.13%

+50%

N.P.S.D. = 775

AS ADVERTISED

270

260

Balance No. 10

Unclassified Excavation ①	7,159	C.Y.
Borrow ②	27,573	Ton
Select Material ②	1,800	Ton
Subbase, Grading A	2,030	Ton
Overhaul (2,000 ft. Free Haul)	26,834	Ton/M
Overhaul (2,000 ft. Free Haul)	5,386	C.Y./M.
Clearing & Grubbing	Acre	3.5

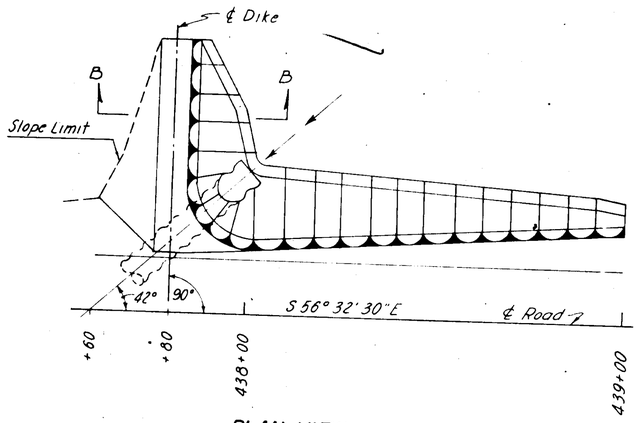
① Includes 5,960 Cu. Yds. Waste.
② From Quarry No. 3 ~ Code No. 924-010-3

6 7 8 9 680+00 1 2 3 4 685+00 6 7 8 9 690+00 1 2 3 694+00

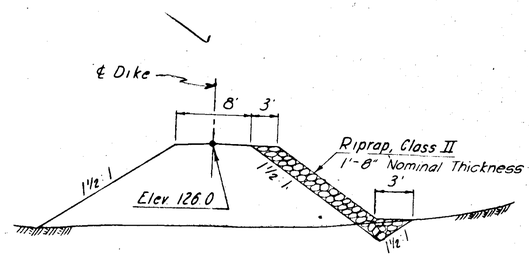
U.S. PLATE 1 PLAN PROFILE

STATE	PROJECT NO	YEAR	SHEET NO	TOTAL SHEETS
ALASKA	S-0924(4)	1967	28	50

DRAINAGE DETAILS



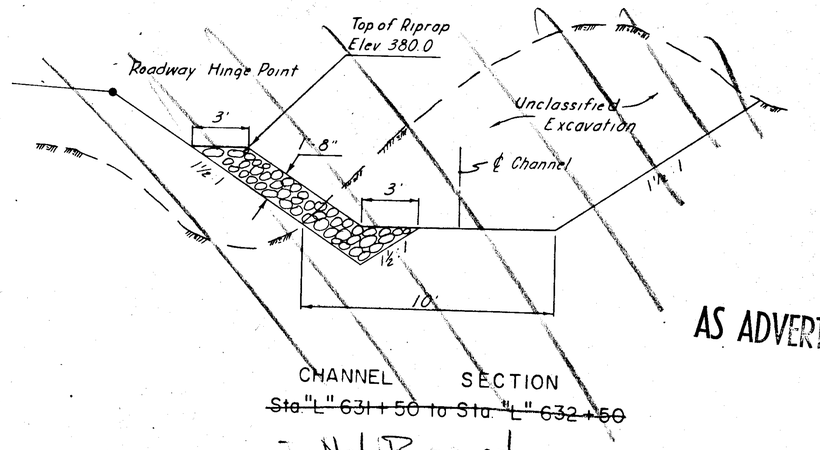
PLAN VIEW



SECTION B-B

DIKE & SLOPE PROTECTION

Sta. "L" 437+80 to Sta. "L" 439+00



CHANNEL SECTION

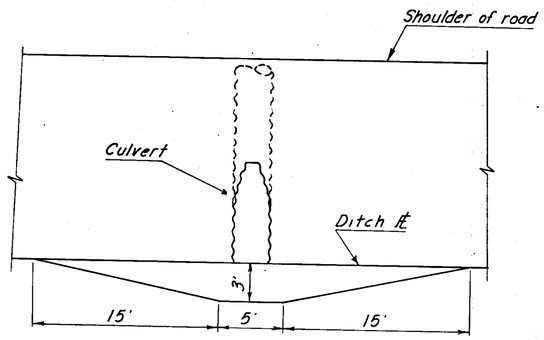
~~Sta "L" 631+50 to Sta. "L" 632+50~~

- Not Required.

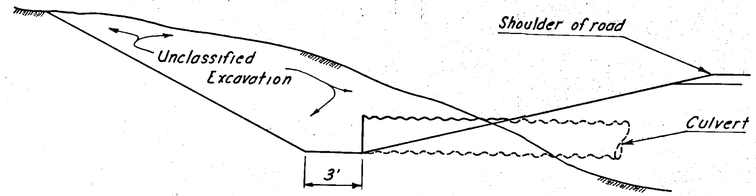
AS ADVERTISED

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	S-0924(4)	1967	29	50

DRAINAGE DETAILS

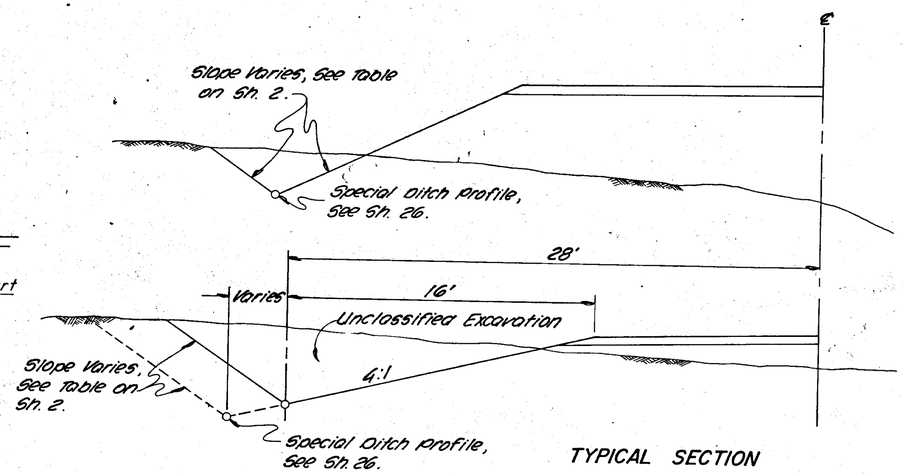


PLAN VIEW



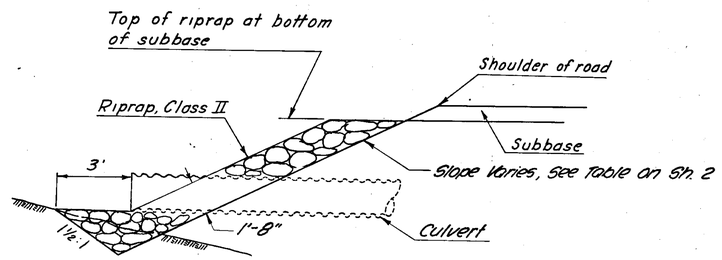
TYPICAL SECTION

CULVERT INLET DETAIL



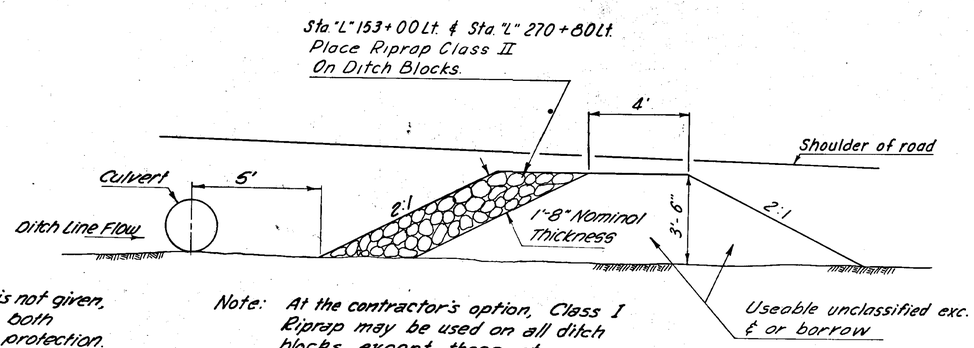
TYPICAL SECTION

SPECIAL DITCH DETAIL



Note: Where length of Riprap is not given, extend Riprap 10 feet on both sides of Culvert for Inlet protection.

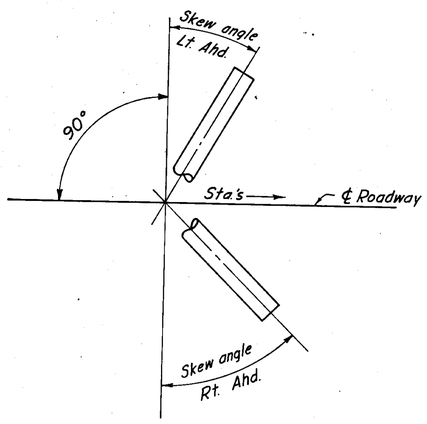
TYPICAL ROADWAY SLOPE PROTECTION DETAIL



Note: At the contractor's option, Class I Riprap may be used on all ditch blocks except those at Sta "L" 153+00 Lt & "L" 270+80 Lt.

DITCH BLOCK DETAIL

AS ADVERTISED

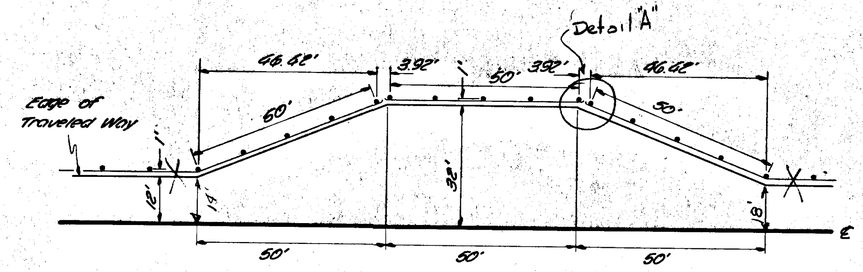


CULVERT SKEW ANGLE

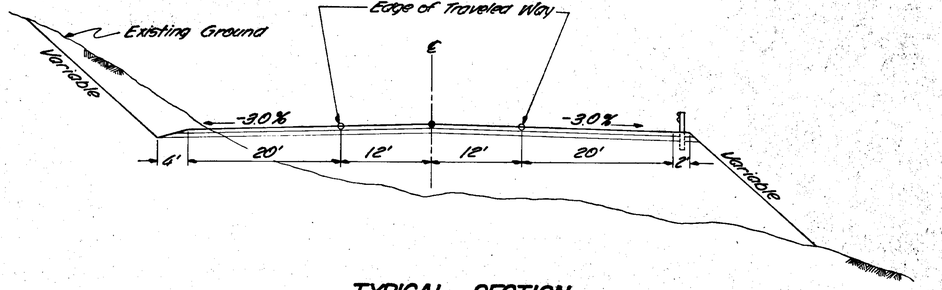
STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	S-0924(4)	1967	30	50

TOURIST TURNOUTS

STATION	GUARDRAIL Lin. Ft.
"L" 267+00 Rt.	—
"L" 275+00 Lt.	—
"L" 621+00 Lt.	—
"L" 670+00 Lt.	—
"L" 531+00 Lt.	—
	137.5
"L" 580+00 Lt.	~~150'~~
"L" 641+00 Rt.	~~150'~~



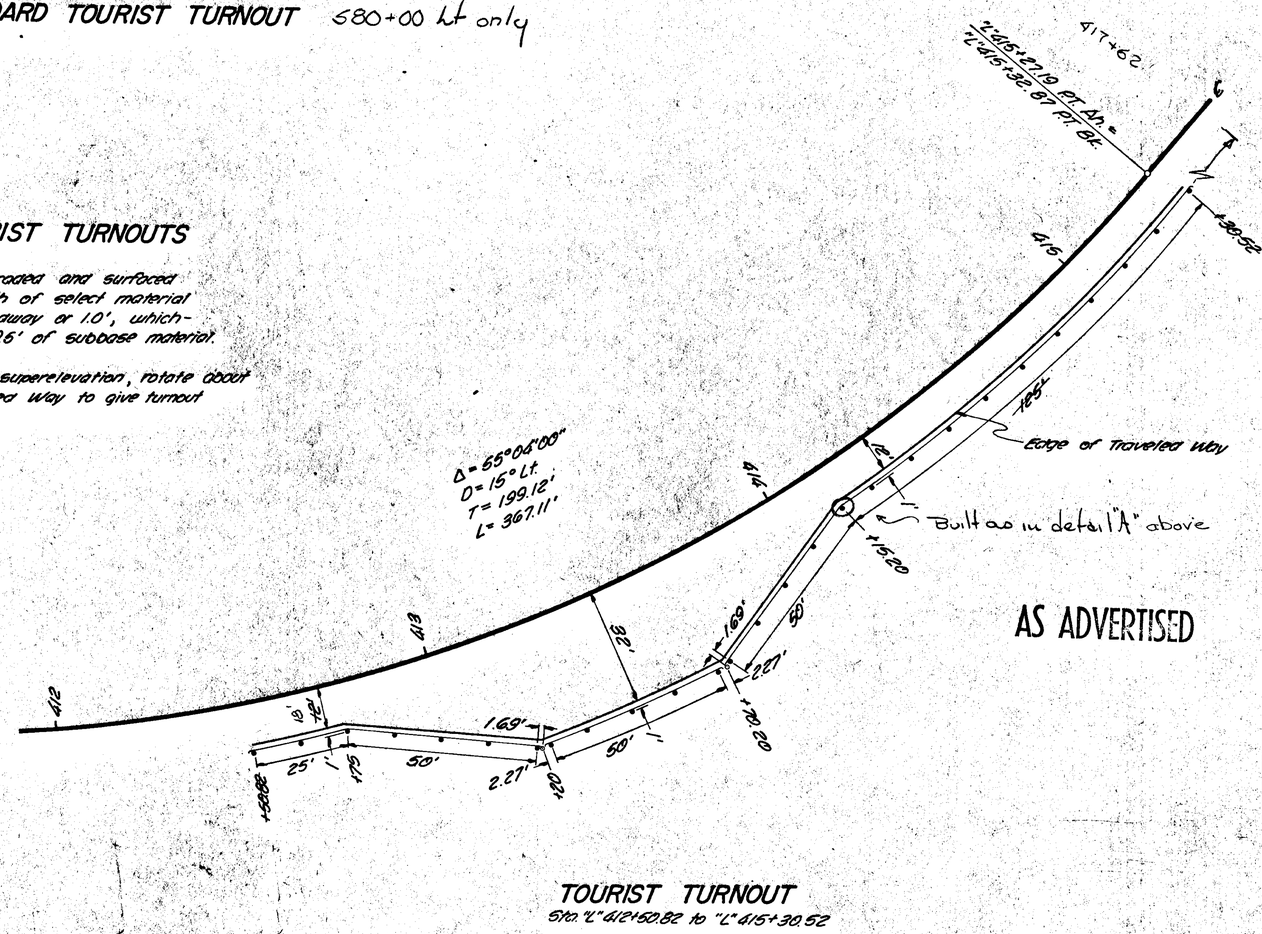
STANDARD TOURIST TURNOUT 580+00 Lt only



TYPICAL SECTION
TOURIST TURNOUT

NOTES FOR TOURIST TURNOUTS

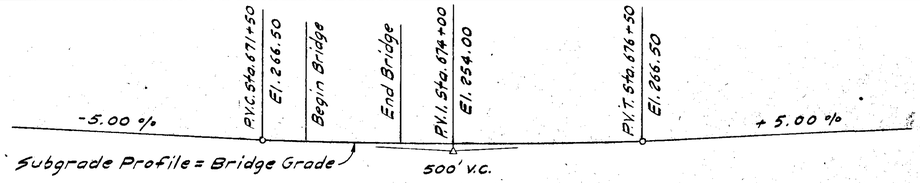
1. Turnouts shall be graded and surfaced with the same depth of select material as the adjacent roadway or 1.0', whichever is less, and 0.5' of subbase material.
2. When roadway has superelevation, rotate about inside Edge of Traveled Way to give turnout 0.03'/ft. slope.



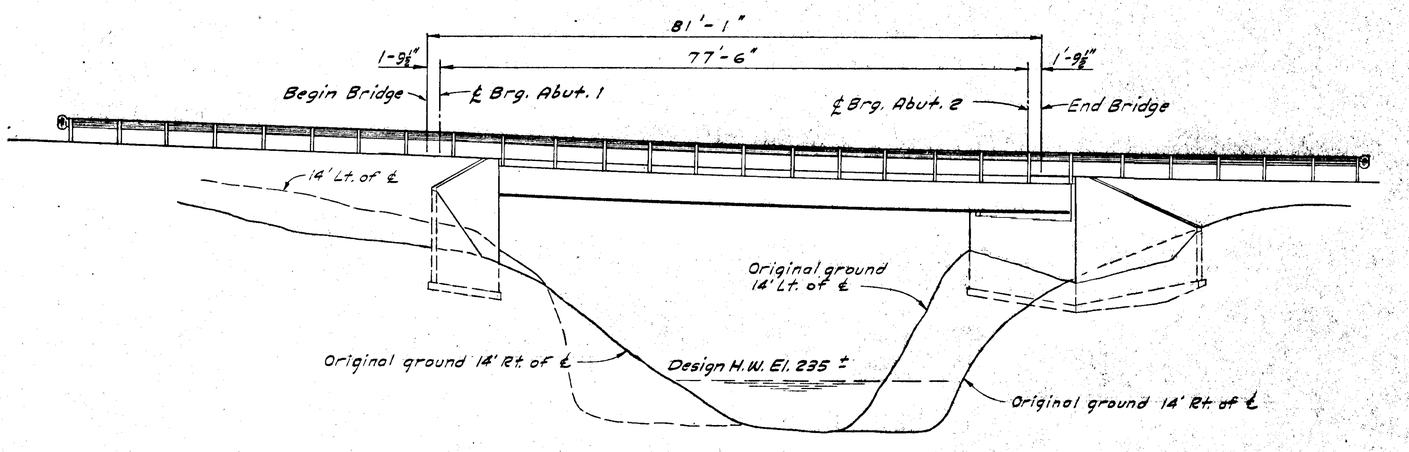
AS ADVERTISED

TOURIST TURNOUT
Sta. "L" 412+50.82 to "L" 415+30.52

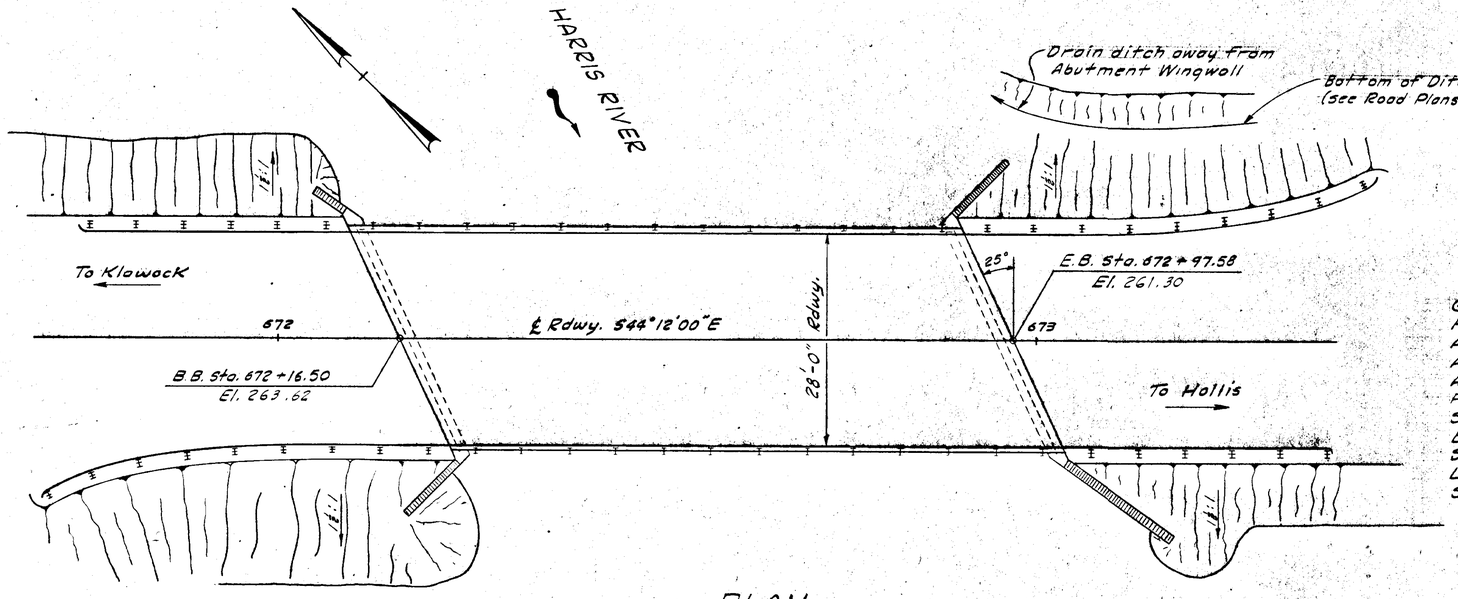
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	S-0924(4)	1967	31	50



GRADE DATA
No Scale

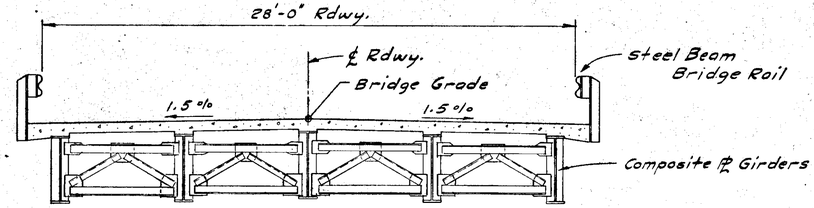


ELEVATION
10 0 10 20
Feet



PLAN
10 0 10
Feet

BENCH MARK
B.M. #54, Spike in 16" Cedar 105' Rt. of Sta. "L" 674+00 Elev. 259.88



TYPICAL SECTION
12 0 5
In. Feet

GENERAL NOTES:

Design Specifications: A.A.S.H.O. Standard Specifications for Highway Bridges, 1961 with latest interim specifications

Construction Specifications: State of Alaska Standard Specifications for Highway Construction July 1965 and Special Provisions of this contract.

Live Load: H S20-44.

Unit Stresses:
Reinforced Concrete: Fc = 1200 psi, Fs. = 20,000 psi, n = 10
Structural Steel: Bending stress in extreme fiber

Type of Steel	Thickness	Allowable Stress
A-36	All	20,000 psi
A-441	¾" & under	27,000 psi
	over ¾" to 1½"	25,000 psi

Concrete: All concrete shall be Class "A" with a minimum compressive strength of 3,000 psi at 28 days.

Reinforcing Steel: All reinforcing steel shall be intermediate grade.

Structural Steel: All structural steel shall conform to the requirements of A.S.T.M. A-441 except as otherwise noted. All field connections shall be made with ⅞" ø High Strength steel bolts except as noted.

Foundation Pressure: Design Maximum = 3.6 Tons/sq. ft.

DRAWING INDEX

No Change

AS ADVERTISED

HARRIS RIVER BRIDGE

ROUTE No. S-924

GENERAL PLAN

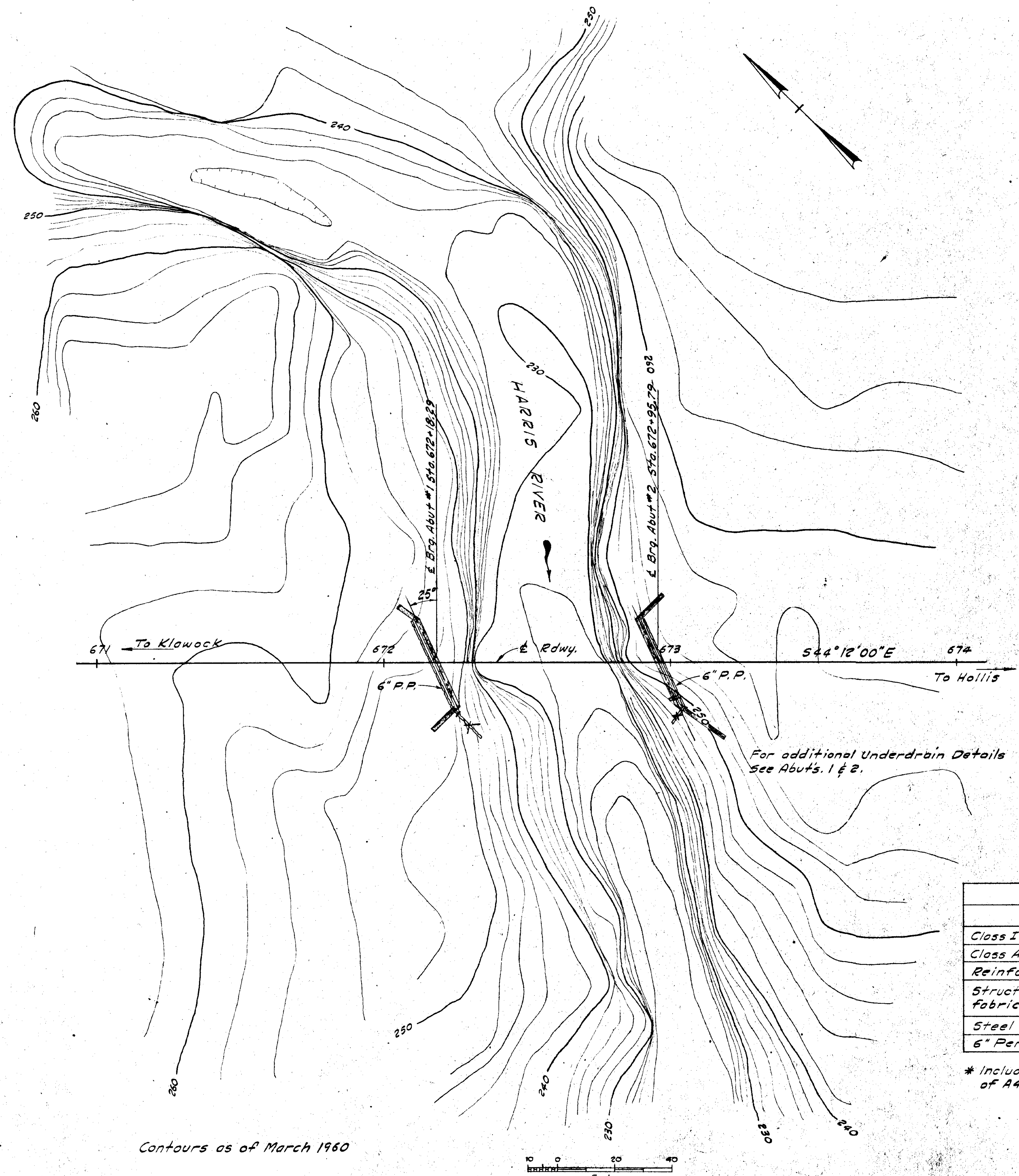
State of Alaska
DEPARTMENT OF HIGHWAYS
Juneau, Alaska

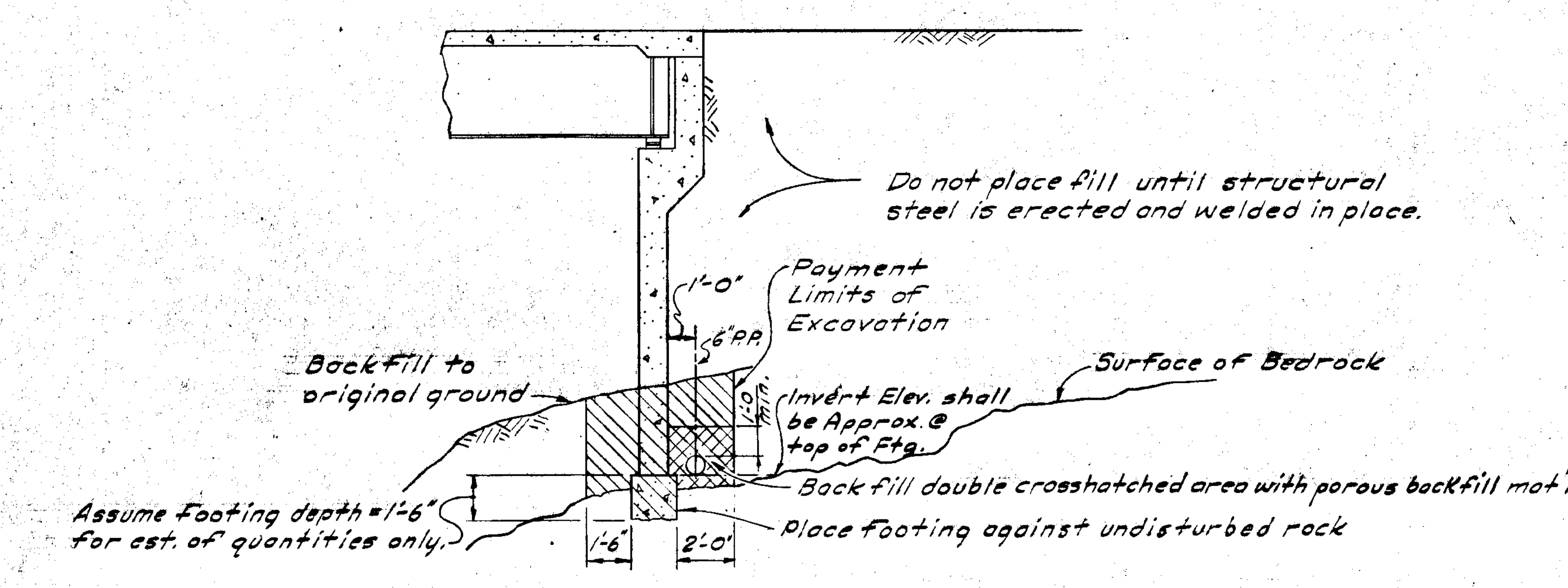
Date 3-2-67
Approved C.S. Walbrek

BRIDGE NO. 481
DWNG. NO. 1771

Checked By W.C.S. Date 11-66
Traced By Date

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	S-0924(4)	1967	32	50





BACKFILL DETAIL

Note: P.P. indicates Perforated Pipe Underdrain, See Special Provisions.
Enclose Pipe outlets with ¼" mesh Galvanized Hardware Cloth. Tie in place with heavy Gage Galvanized wire.

AS ADVERTISED

ESTIMATE OF QUANTITIES

ITEM	UNIT	Super	Substr	Total
Class I Excavation for Structures	Cu.Yd.	—	120	120
Class A Concrete	Cu.Yd.	54.8	72.8	127.6
Reinforcing Steel	Lb.	15,200	12,250	27,450
Structural Steel, Furnished, fabricated & erected.	Lb.	52,100*	—	52,100*
Steel Beam Bridge Rail	L.F.	345	—	345
6" Perforated Pipe Underdrain	L.F.		95	95

* Includes approximately 7,360 Lbs of A-36 and 44,470 Lbs of A441 steel.

HARRIS RIVER BRIDGE

ROUTE No. S-924

FOUNDATION PLAN

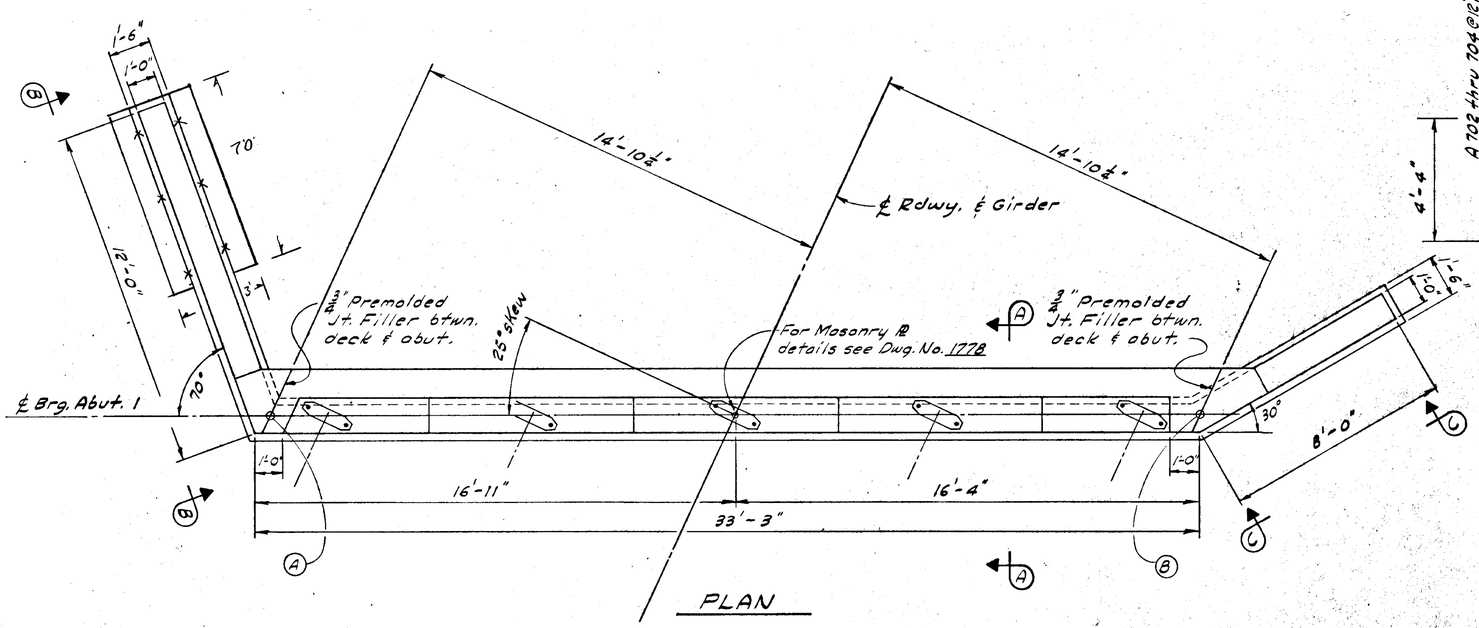
State of Alaska
DEPARTMENT OF HIGHWAYS
Juneau, Alaska

Date 3-2-67
Approved [signature]

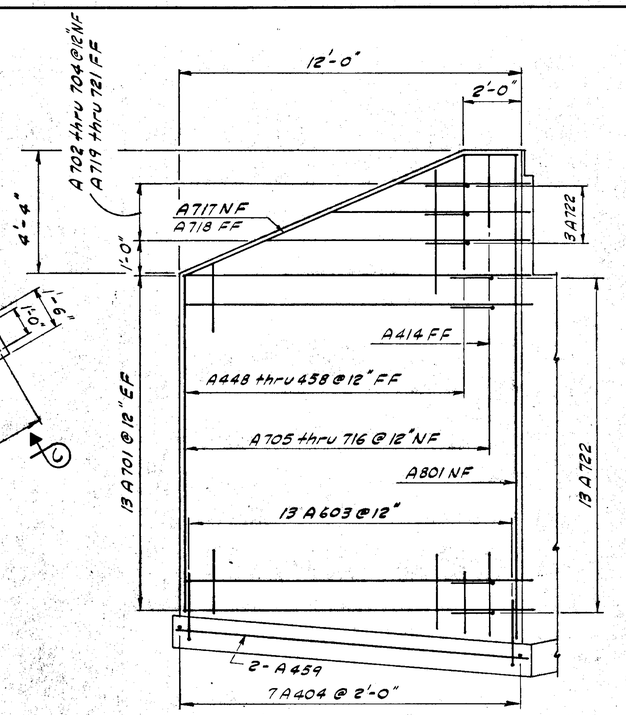
BRIDGE NO. 481
DWNG. NO. 1772

Checked By W.G. Date 1-1-66
Traced By ____ Date ____

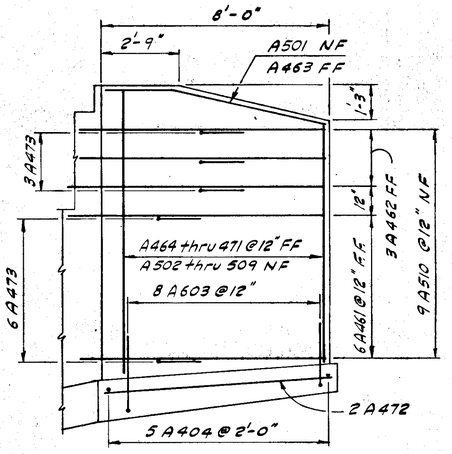
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	S-0924(4)	1967	33	50



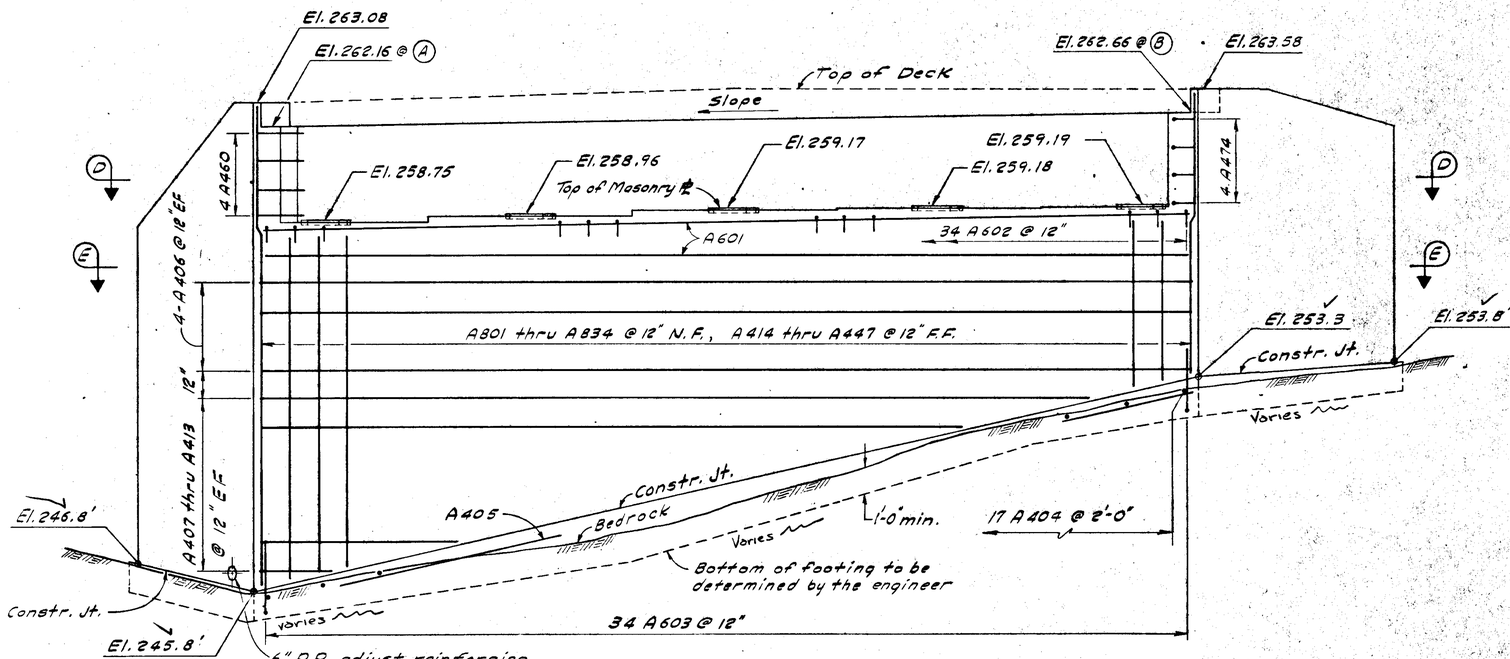
PLAN



VIEW B-B



VIEW C-C

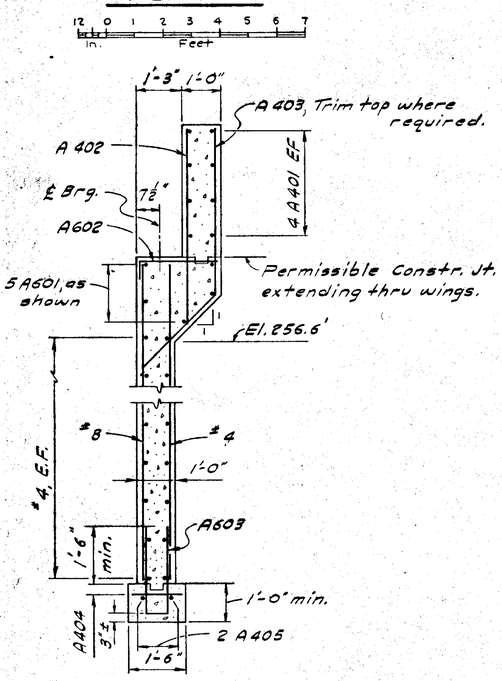


ELEVATION

Datum El. 240.0'

N.F. = Near Face
F.F. = For Face

Note:
For additional Sections see Dwg. No. 1775



SECTION A-A

See C.O. #4 & 14

AS ADVERTISED

HARRIS RIVER BRIDGE

ROUTE No. S-924

ABUTMENT No. 1

State of Alaska
DEPARTMENT OF HIGHWAYS
Juneau, Alaska

Date 3-2-67
Approved C.E. Woodard

BRIDGE NO. 481
DWNG. NO. 1773

Traced By..... Date.....

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.
ALASKA	S-0924(4)	1967	34

N.F. = Near Face
F.F. = Far Face

Note: For additional Sections see Dwg. No. 1775

See C.O. # 4 & 14

AS ADVERTISED

HARRIS RIVER BRIDGE

ROUTE No. S-924

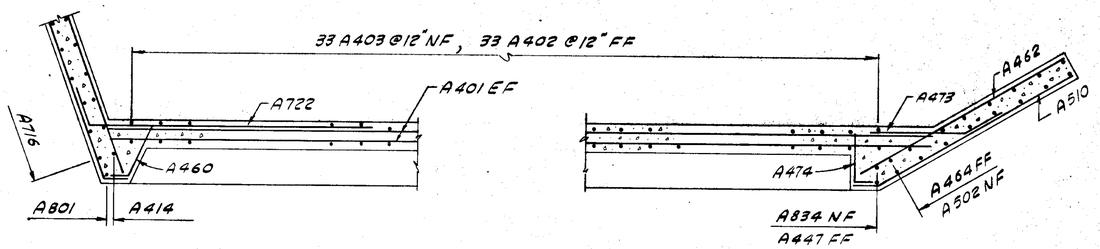
ABUTMENT No. 2

State of Alaska
DEPARTMENT OF HIGHWAYS
Juneau, Alaska

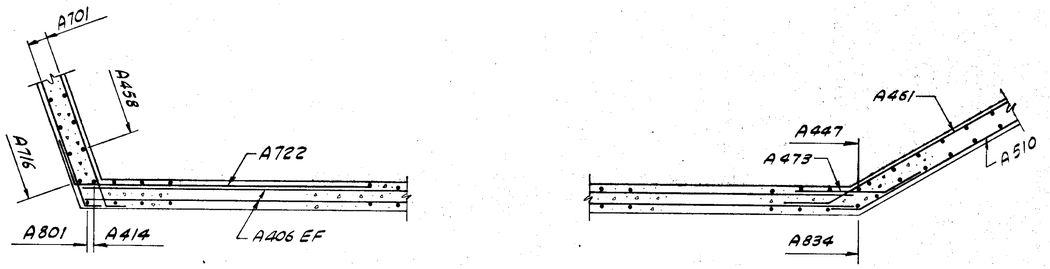
Date 3-2-67
Approved [signature]

BRIDGE NO. 481
DWNG. NO. 1774

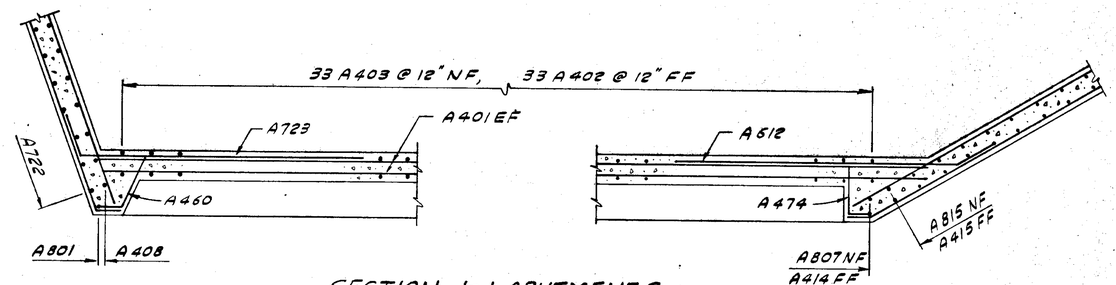
Checked By K.F.M. Date 11-66
Drawn By Date 11-66
Checked By Date 11-66
Traced By Date



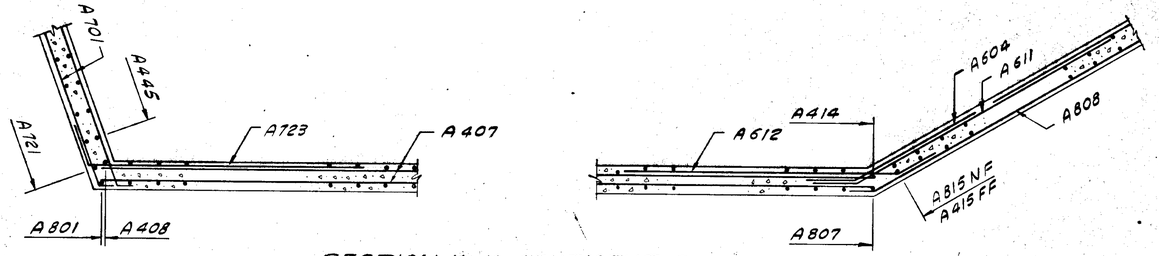
SECTION D-D ABUTMENT 1



SECTION E-E ABUTMENT 1



SECTION J-J ABUTMENT 2



SECTION K-K ABUTMENT 2

12 0 2 4
In. Feet

REBAR SCHEDULE - ABUTMENT 1

MARK	NO.	Size	LENGTH	TYPE	"A"
A401	8	4	35-0	——	
402	33		5-0	——	
403	33		6-11	Bent	
404	29		1-3	——	
405	2		34-6	——	
406	8		33-0	——	
407	2		2-6	——	
408	2		7-0	——	
409	2		11-6	——	
410	2		16-0	——	
411	2		20-3	——	
412	2		24-6	——	
413	2		29-3	——	
414	1		16-9	——	
415 To 446	32		289-4	——	
447	1		10-0	——	
448 To 458	11		156-9	——	
459	2		12-6	——	
460	4		2-9	Bent	
461	6		10-0	Bent	8'-6"
462	3		8-3	——	
463	1		8-0	Bent	1'-6"
464 To 471	8		73-0	——	
472	2		8-6	——	
473	9		4-6	Bent	3-0
A474	4	4	2-9	Bent	0-9"
A501	1	5	7-0	Bent	1-6
502 To 509	8	5	73-0	——	
A510	9	5	8-6	Bent	
A601	5	6	33-0	——	
602	34	6	2-6	Bent	0'-6"
A603	55	6	8-9	Bent	
A701	26	7	12-6	Bent	11-9
702	1		9-6	Bent	8-9
703	1		7-3	Bent	6-6
704	1		5-0	Bent	4-3
705 To 716	12		172-6	——	
717	1		12-3	Bent	1-9
718	1		11-9	Bent	1-3
719	1		9-0	——	
720	1		6-9	——	
721	1		4-6	——	
A722	16	7	11-6	Bent	
A801	1	8	16-9	——	
802 To 833	32	8	289-4	——	
A834	1	8	10-0	——	

REBAR SCHEDULE ABUTMENT 2

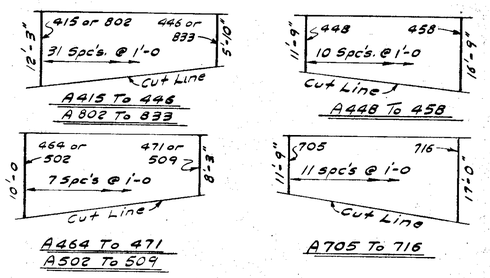
MARK	NO.	Size	LENGTH	TYPE	"A"
A 401	8	4	35'-0	——	
402	33		5-0	——	
403	33		6-11	Bent	
404	35		1-3	——	
405	2		34-6	——	
406	2		18-0	——	
407	16		33-0	——	
408	1		14-2	——	
409	6		10-0	——	
410	7		10-3	——	
411	7		10-6	——	
412	7		10-9	——	
413	5		10-7	——	
414	1		15-3	——	
415	2		15-2	——	
416 To 433	18		209-2	——	
434	2		20-6	——	
435 To 445	11		104-6	——	
446	2		13-0	——	
460	4		2-9	Bent	
A 474	4	4	2-4	Bent	0-9"
A 601	5	6	33-0	——	
602	34		2-6	Bent	0-6"
603	68		8-9	Bent	
604	9		22-0	Bent	20-6
605	1		19-6	Bent	18-0
606	1		17-0	Bent	15-6
607	1		12-9	——	
608	1		10-0	——	
609	1		7-6	——	
610	1		5-6	——	
611	10		11-6	Bent	10-0
A 612	25	6	11-6	Bent	10-0
A 701	14	7	12-6	Bent	11-9
702	1		10-3	Bent	9-6
703	1		8-3	Bent	7-6
704	1		6-0	Bent	5-3
705	1		9-6	——	
706	1		7-6	——	
707	1		5-3	——	
708	2		4-0	Bent	3-3
709	2		7-0	Bent	6-3
710	2		10-0	Bent	9-3
711 To 721	11		104-6	——	
722	1		13-9	——	
A 723	13	7	11-6	Bent	10-0
724	1	7	12-6	Bent	1-9
A 725	1	7	12-0	Bent	1-3
A 801	1	8	14-2	——	
802	6		10-0	——	
803	7		10-3	——	
804	7		10-6	——	
805	7		10-9	——	
806	5		10-11	——	
807	1		15-3	——	
808	9		21-6	Bent	20-0
809	1		19-0	Bent	17-6
810	1		16-3	Bent	14-9
811	1		13-0	Bent	12-3
812	1		10-3	Bent	9-6
813	1		7-9	Bent	7-0
814	1		5-9	Bent	5-0
815	2		15-2	——	
816 To 833	18		209-2	——	
834	1		20-9	Bent	2-6
A 835	1	8	19-9	Bent	1-6

AS ADVERTISED

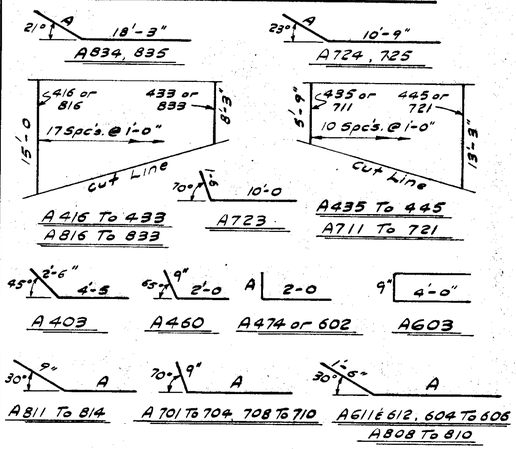
No Change

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	S-0924(4)	1967	35	50

REBAR DETAILS ABUTMENT 1



REBAR DETAILS ABUTMENT 2



HARRIS RIVER BRIDGE

ROUTE No. S-924

ABUTMENT DETAILS

State of Alaska

DEPARTMENT OF HIGHWAYS

Juneau, Alaska

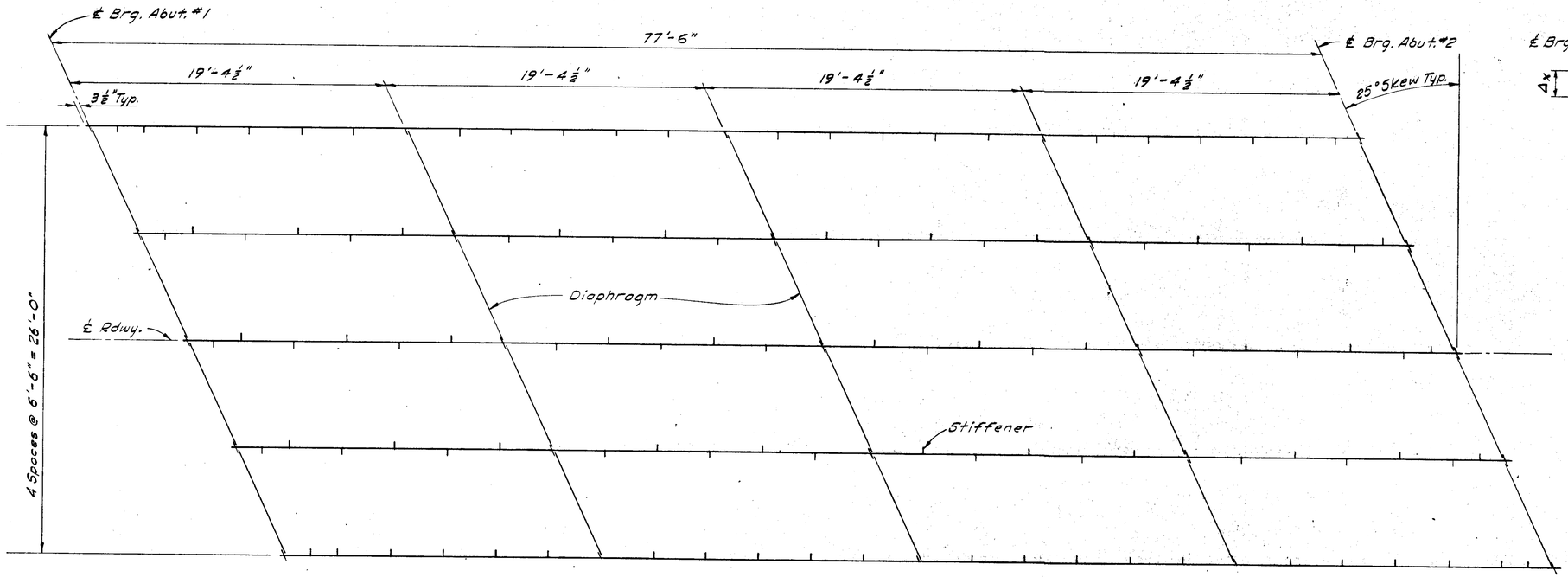
Date 3-2-67

Approved

BRIDGE NO. 481

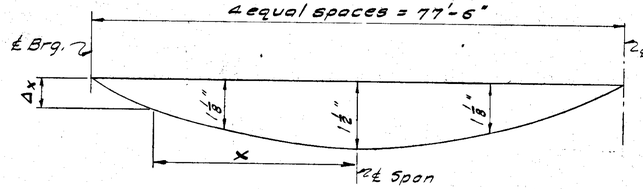
DWNG. NO. 1775

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	S-0924(4)	1967	36	50



FRAMING PLAN

12 0 5 10
In. Feet



DEAD LOAD DEFLECTION DIAGRAM FOR DECK SLAB

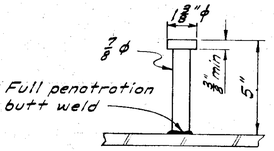
No Scale

The above corrections shall be applied in the field. For points other than those shown:

$\Delta x = 1.50" - (0.001x^2)$

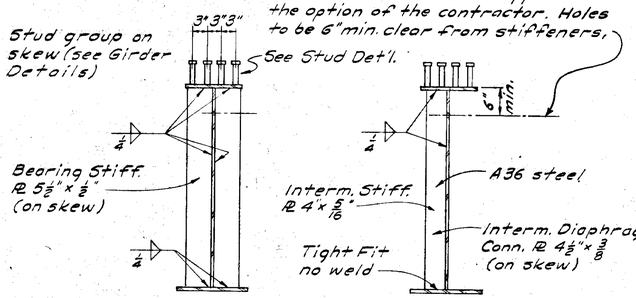
where x is in feet, Δx is in inches.

Girders may be fabricated straight without camber. (The total dead load deflection at midspan is $1\frac{13}{16}$" and the vertical sag correction is $2\frac{1}{16}$".)



STUD DETAIL

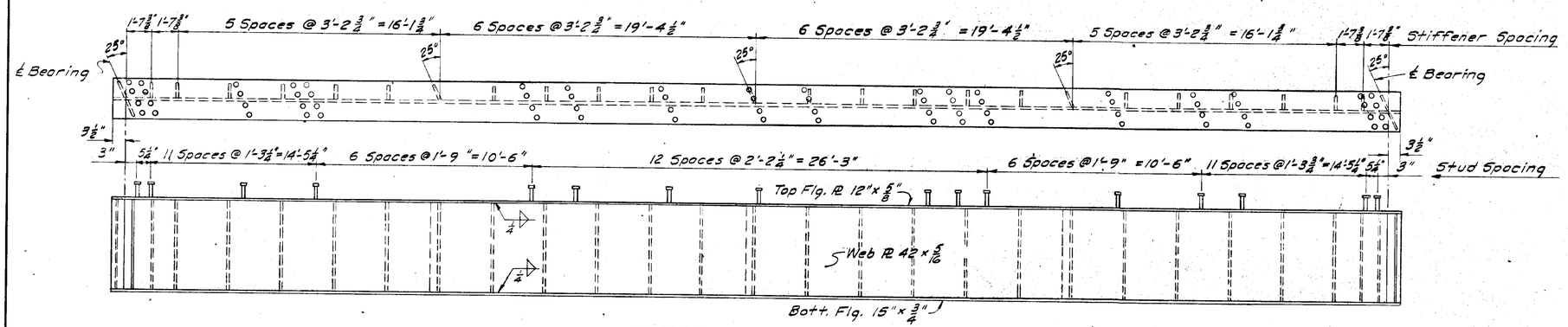
1" max. dia holes @ 4'-0" spacing may be used for falsework support at the option of the contractor. Holes to be 6" min. clear from stiffeners.



NEAR BEARINGS INTERMEDIATE

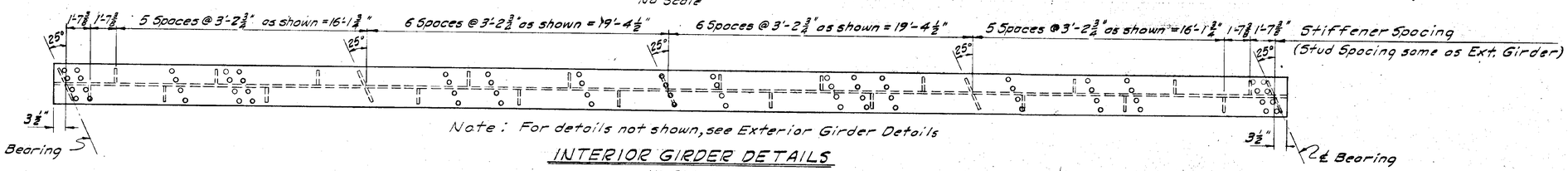
STIFFENER DETAILS

12 6 0 1 2 3 4
Inches Feet



EXTERIOR GIRDER DETAILS

No Scale



Note: For details not shown, see Exterior Girder Details

INTERIOR GIRDER DETAILS

NO SCALE

AS ADVERTISED

No Change

HARRIS RIVER BRIDGE

ROUTE No. S-924

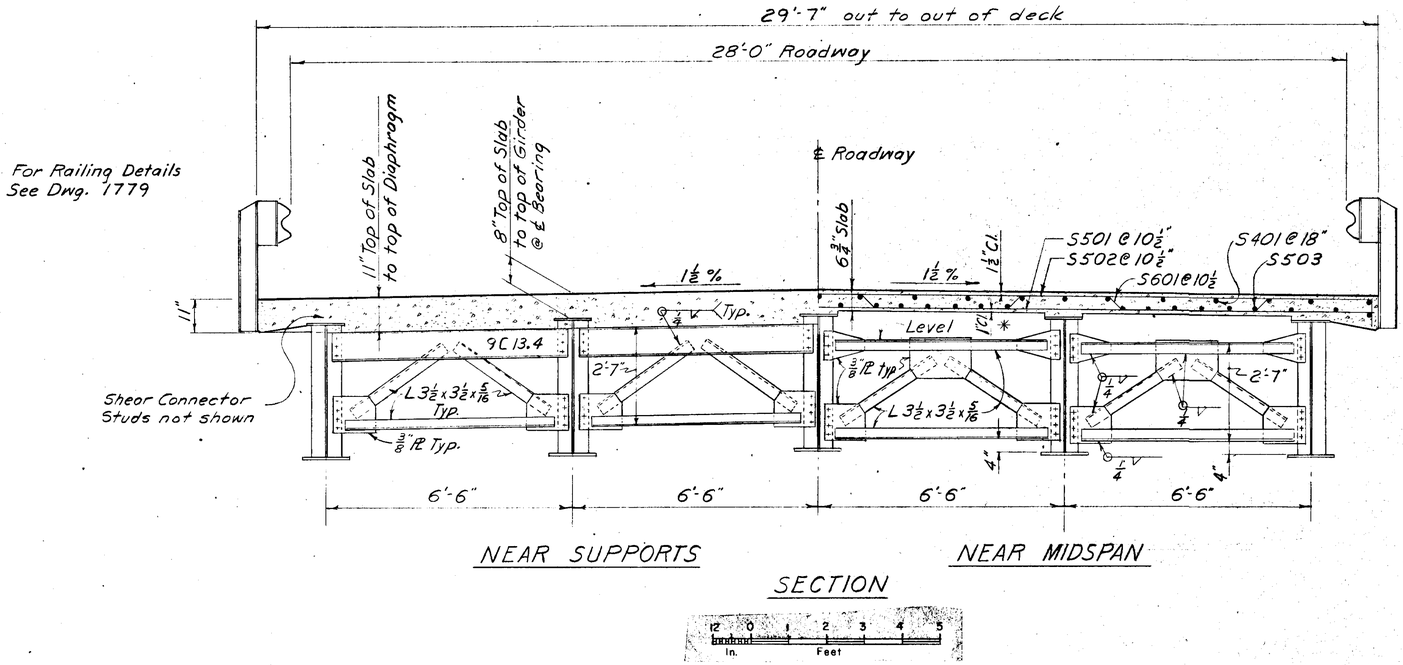
FRAMING PLAN

State of Alaska
DEPARTMENT OF HIGHWAYS
Juneau, Alaska

Date 3-2-67
Approved [signature]

BRIDGE NO. 481
DWNG. NO. 1776

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	S
ALASKA	S-0924(4)	1967	37	



SECTION

12 0 1 2 3 4 5
In. Feet

NOTES:

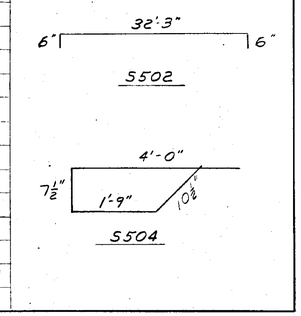
S501, S502 & S601 transverse bars are spaced at 10½" ctrs. along ℄ Rdwy., but lay parallel to diaphragms.

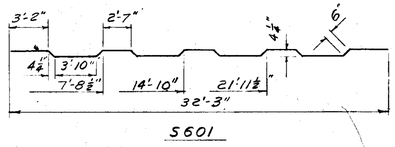
* 1" Clear distance shall be maintained for both longitudinal & transverse reinf.

Diaphragm assemblies shall be A36 steel

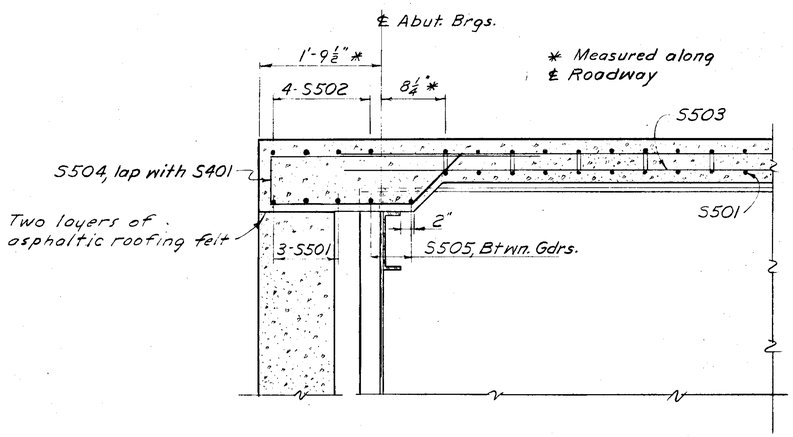
REINFORCING SCHEDULE

MARK	No.	Size	Length	Type
S401	46	4	40'-0"	——
S501	93	5	32'-3"	——
S502	95	5	33'-3"	Bent
S503	64	5	40'-0"	——
S504	46	5	7'-3"	Bent
S505	16	5	7'-0"	——
S601	88	6	33'-5"	Bent





Note:
All re-bar dimensions are out to out.



LONGITUDINAL SECTION

12 6 0 1 2 3
Inches Feet

Designed By W.L.S. Date 11/66
Checked By K.E.A. Date 1-66
Drawn By R.B.M. Date 11/66
Checked By W.L.S. Date 1-66
Traced By Date

Stay in Place Forms were used.

AS ADVERTISED

HARRIS RIVER BRIDGE

ROUTE No. S-924

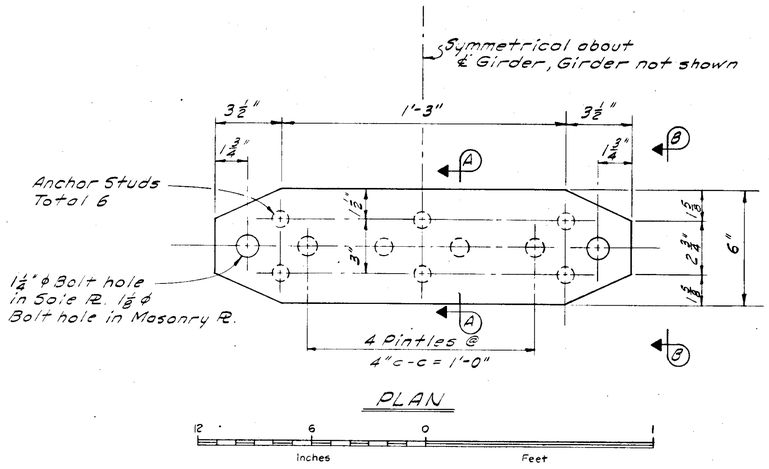
SLAB & DIAPHRAGM DETAILS

State of Alaska
DEPARTMENT OF HIGHWAYS
Juneau, Alaska

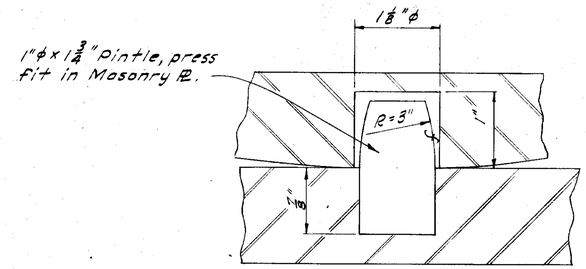
Date 3-2-67
Approved C.E. Blackburn

BRIDGE NO. 481
DWNG. NO. 1777

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	S-0924(4)	1967	38	50



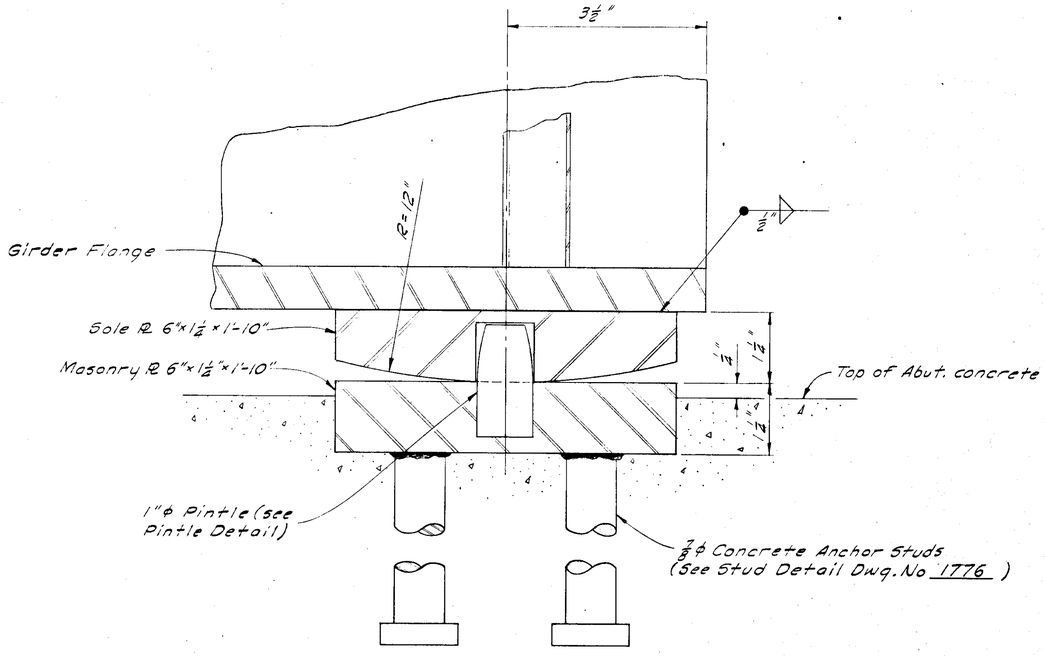
PLAN



PINTLE DETAIL

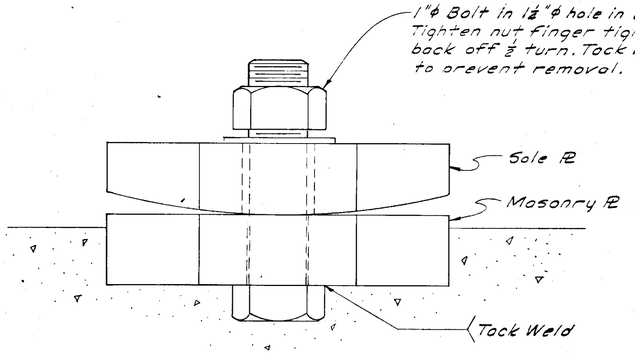
Full Scale

Note: Pintles shall be A108 Class C1030, Rockwell "B" hardness 85 with a minimum yield of 36,000 psi.
Sole plates and Masonry Plates shall be A-36 steel.



SECTION A-A

No Scale



VIEW B-B

No Scale

No Change

AS ADVERTISED

HARRIS RIVER BRIDGE

ROUTE No. S-924

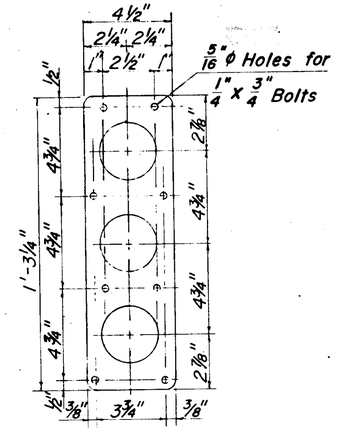
BEARING DETAILS

State of Alaska
DEPARTMENT OF HIGHWAYS
Juneau, Alaska

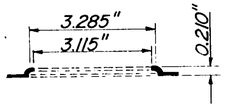
Date 3-2-67
Approved C. E. Warbeck

BRIDGE NO. 481
DWNG. NO. 1778

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
ALASKA	S-0924(4)	39	50



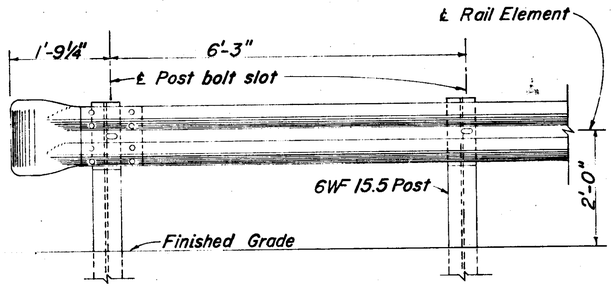
REFLECTOR FRAME



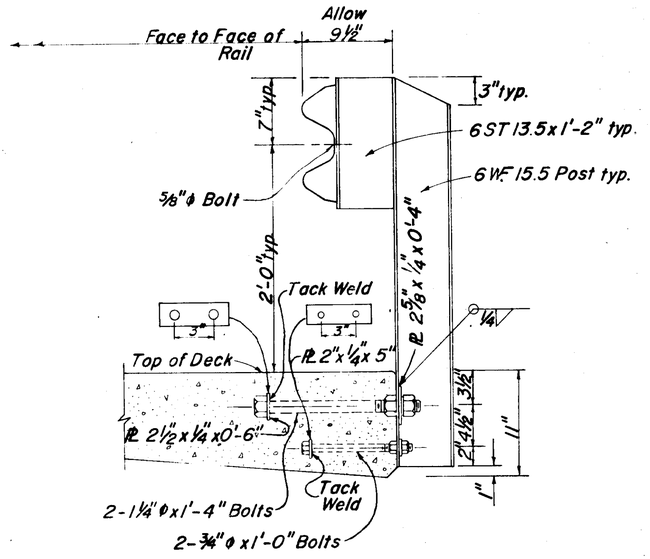
PUNCHING AND EMBOSSING DETAIL

RAIL REFLECTOR

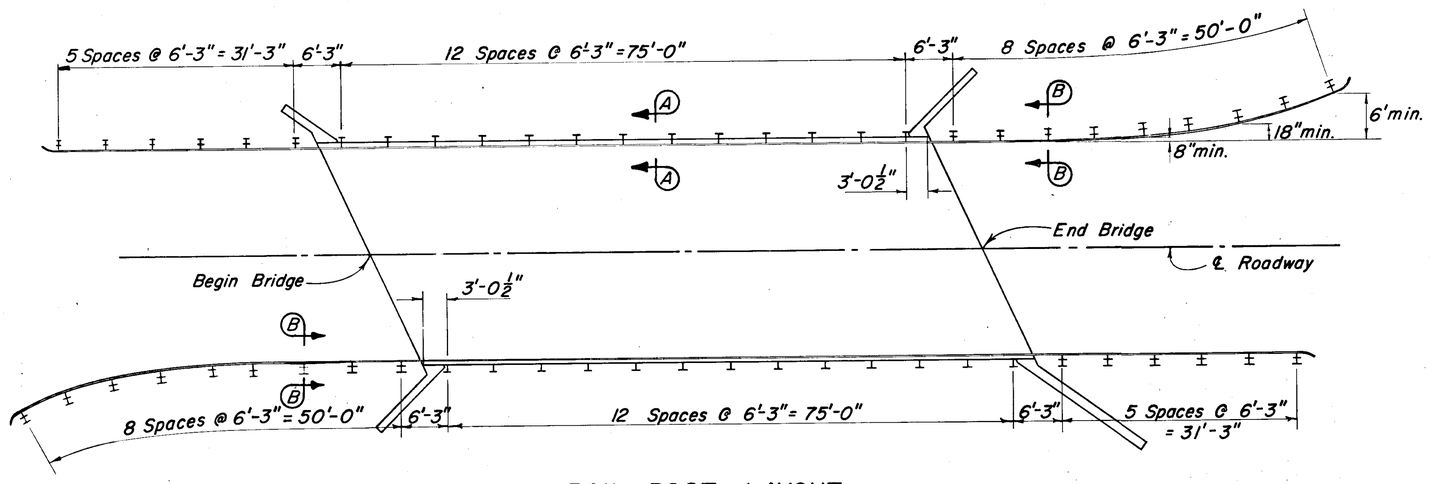
(2 Required)



RAIL ELEVATION



SECTION A-A



RAIL POST LAYOUT

Notes: At rail splice nearest expansion joint in bridge deck, slot holes in moveable section of rail to allow same amount of movement as provided in bridge deck. Place 1/16" asbestos sheet packing between rail elements. Adjust bolts to provide sliding fit and set threads.

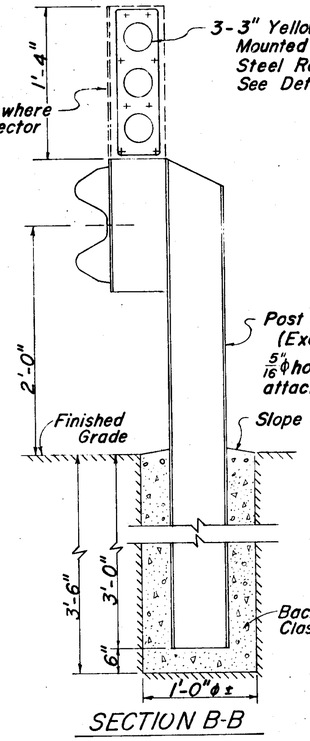
Provide lock washers for top anchor bolts & cut washers for bottom anchor bolts.

Contractor to provide metal shims to align posts.

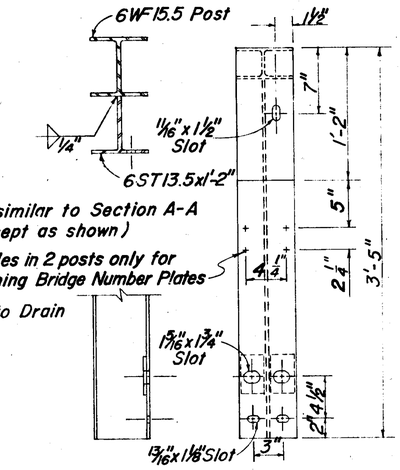
All anchor bolt assemblies are to be galvanized after fabrication.

One reflector assembly shall be placed as shown at each end of the bridge to the right of and facing approaching traffic

A State furnished Bridge Number Plate shall be placed to the right of approaching traffic at each end of the Bridge on the first rail post which is bolted to concrete.



SECTION B-B



POST SLOT DETAILS

AS ADVERTISED

HARRIS RIVER BRIDGE

ROUTE No. S-924

STEEL BEAM BRIDGE RAILING

BRIDGE NO. 481

No Change

REVISIONS		
No.	Date	Description

State of Alaska
DEPARTMENT OF HIGHWAYS
Juneau, Alaska

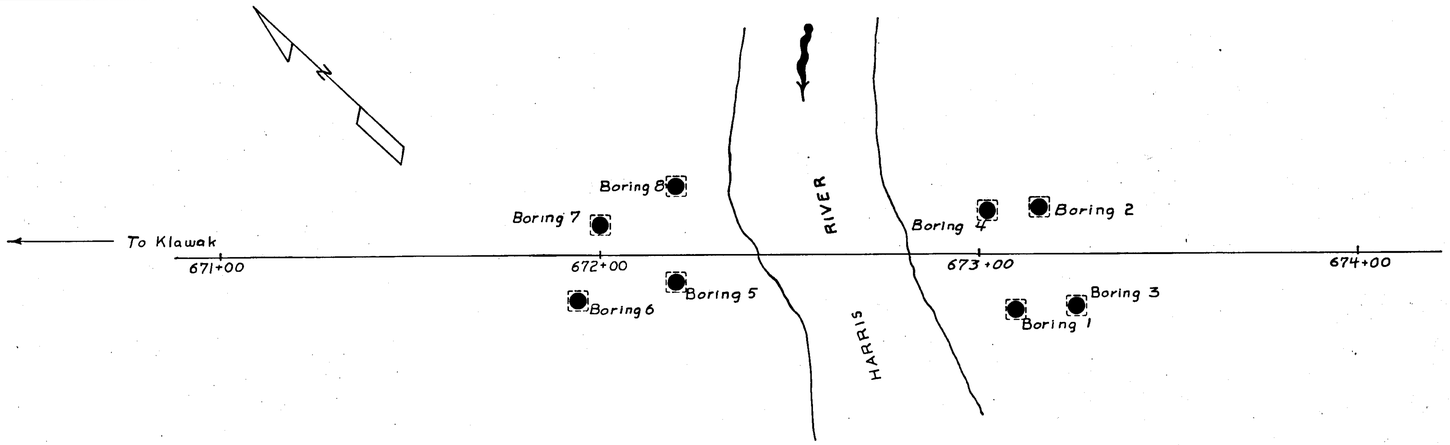
Date 3-2-67
Approved [signature]

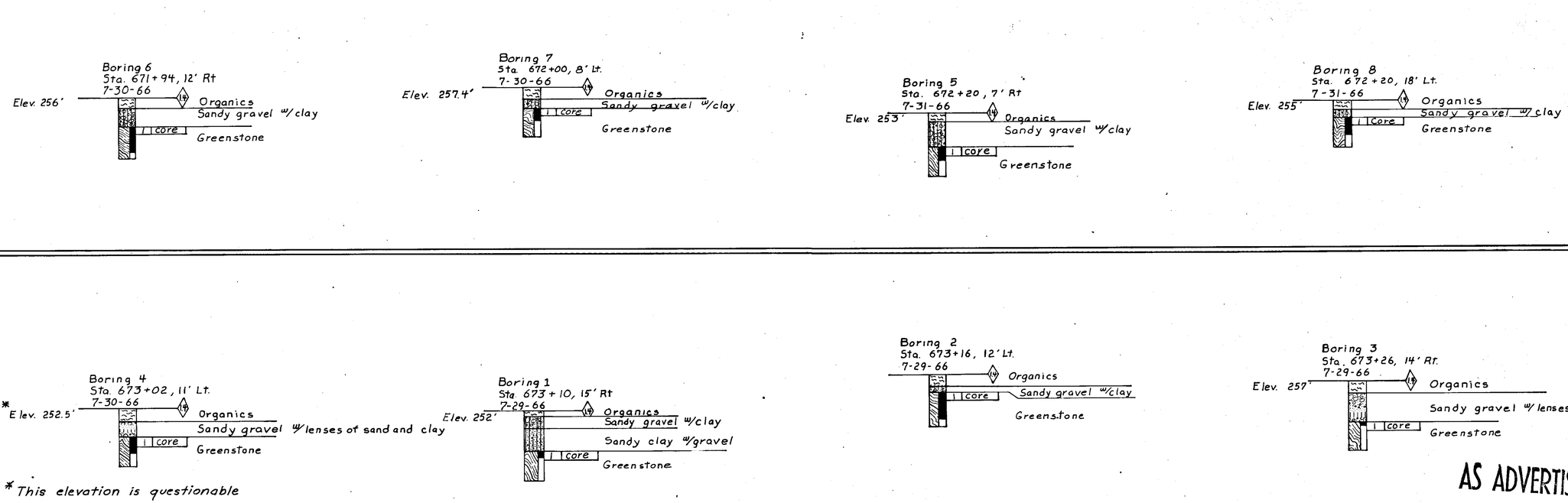
DWNG. NO. 1779

Drawn By [illegible] Date
Checked By [illegible] Date
Traced By [illegible] Date

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
ALASKA	S-0924(4)	40	50

NOTE : Logs of Borings are provided for information and represent the sub-surface conditions at the point drilled only.





* This elevation is questionable

AS ADVERTISED

Note : All holes were hand dug to bedrock.

LEGEND OF EARTH MATERIALS

MATERIAL SYMBOLS — CONSISTENCY CLASSIFICATION

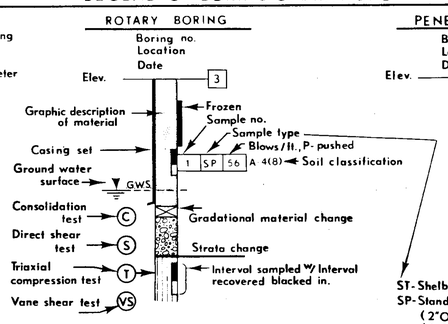
	According to the Standard Penetration Test		
	No. of blows	Granular	Cohesive
Cobbles or Boulders			
Sandy gravel	0-5	very loose	very soft
Sand	6-10	loose	soft
Silt	11-20	slightly compact	stiff
Clay	21-35	compact	very stiff
Peat and/or organic matter	36-70	dense	hard
Fill material	70 +	very dense	very hard
Sedimentary rock			
Metamorphic rock			
Igneous rock			

Checked By _____ Date _____
Traced By _____ Date _____

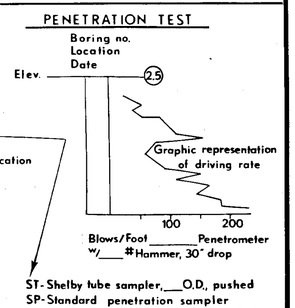
LEGEND OF BORING OPERATIONS

- Plan of any boring
- Flush penetrometer
- Bull nose penetrometer
- Rotary boring
- Auger boring
- Jet boring
- Diamond core boring
- Test pit
- Probe

ROTARY BORING



PENETRATION TEST



ST- Shelby tube sampler, ___ O.D., pushed
SP- Standard penetration sampler
(2" O.D. x 1.4" I.D. split spoon sampler)
(driven w/ 140# hammer, 30" drop)

HARRIS RIVER BRIDGE

ROUTE No. S-924

LOG OF TEST BORINGS

BRIDGE NO. 481

State of Alaska
DEPARTMENT OF HIGHWAYS
Juneau, Alaska

Date 9-13-66
Approved R.R.M.

Drawing no. 1780