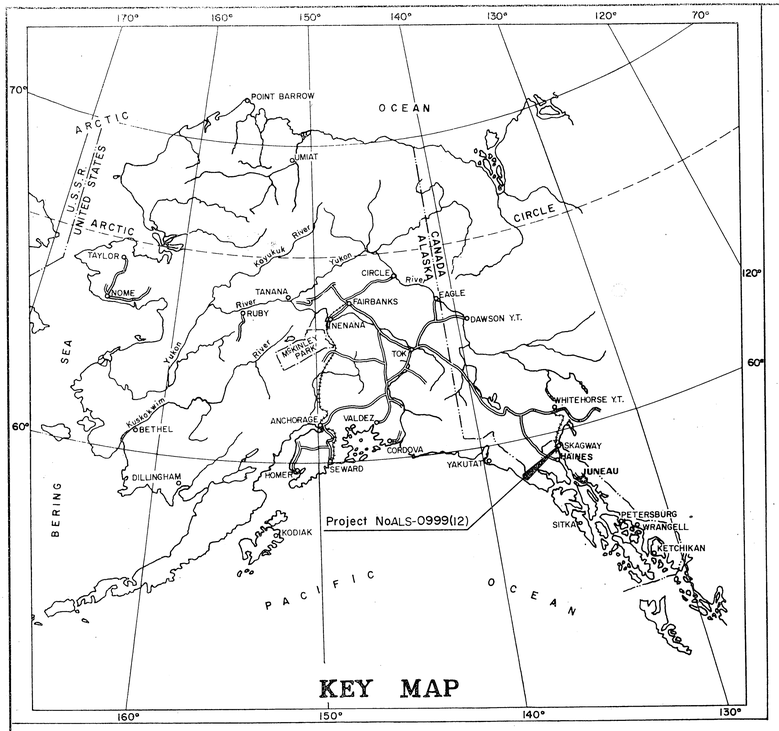
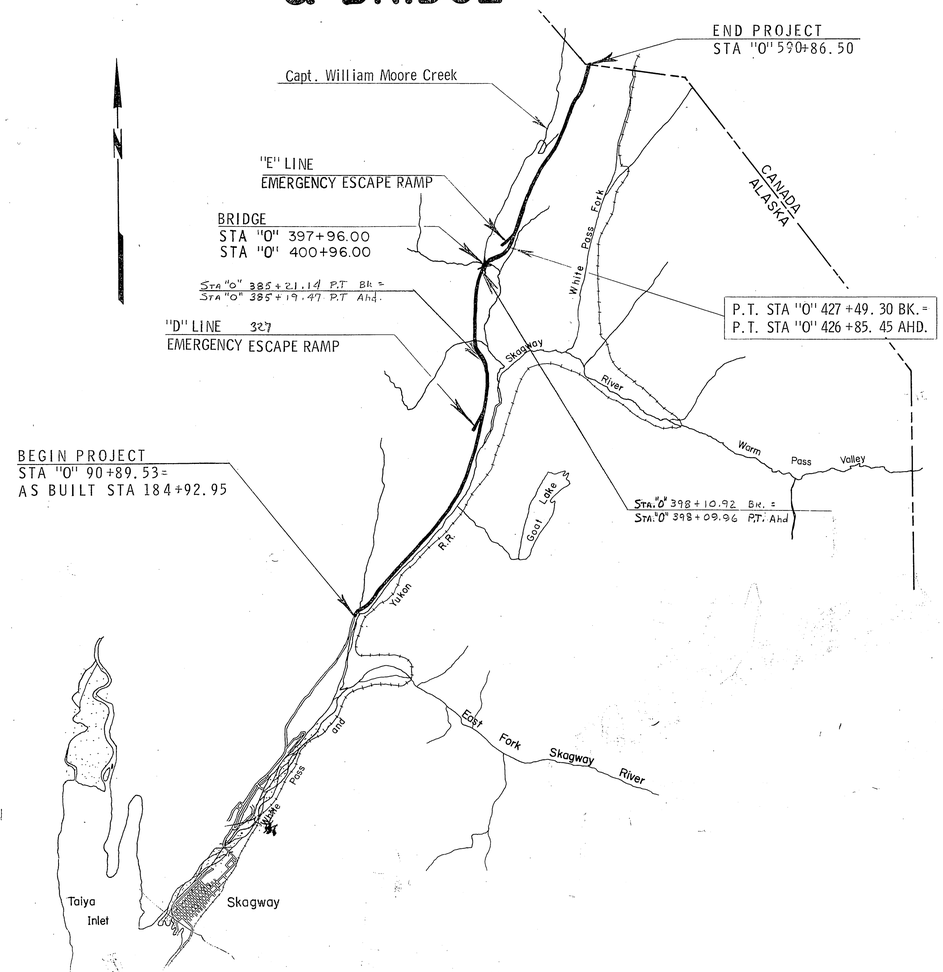
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOT. SHEET
ALASKA	ALS-0999(12)	1974	1	~~47~~ 48

STATE OF ALASKA
DEPARTMENT OF HIGHWAYS

PLAN AND PROFILE
PROPOSED HIGHWAY PROJECT
ALS-0999(12)
SKAGWAY TO BORDER
GRADING , DRAINAGE
& BRIDGE





INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	TYPICAL SECTION
3	ESTIMATE OF QUANTITIES
4-5	SUMMARY TABLES
6-25	PLAN & PROFILE SHEETS
26-29	RAMP TYPICAL SECTION & PLAN AND PROFILE SHEETS
30	GABION DETAILS
31-32	MISCELLANEOUS DETAILS
33-34	DRAINAGE DETAILS
35	SIGNING SCHEDULE & DETAILS
36-~~47~~ 48	BRIDGE PLANS & Enclosure Details

The following Standard Drawings apply to this project:
A-1, C-00.01, C-11.01, D-02.01, D-09.00, G-04.10, G-10.01, G-30.10, I-80.00, M-16.01, S-00.00, S-05.00, S-20.00, S-30.00, S-34.00. G-04.00, G-30.00

PROJECT SUMMARY

Width of Subgrade	=	28 Feet	9.425
Length of Grading	=	~~49,763.45~~ 49,721.82 Feet	= ~~9.424~~ Miles
Length of Bridge	=	300 Feet	= .057 Miles
Length of Project	=	~~50,060.82~~ 50,063.45 Feet	= ~~9.481~~ Miles 9.482

DESIGN DESIGNATION

A D T (1972) = 70
A D T (1995) = 300
D H V (25%) = 75
D = 30-70
T = 15%

AS BUILT PLANS

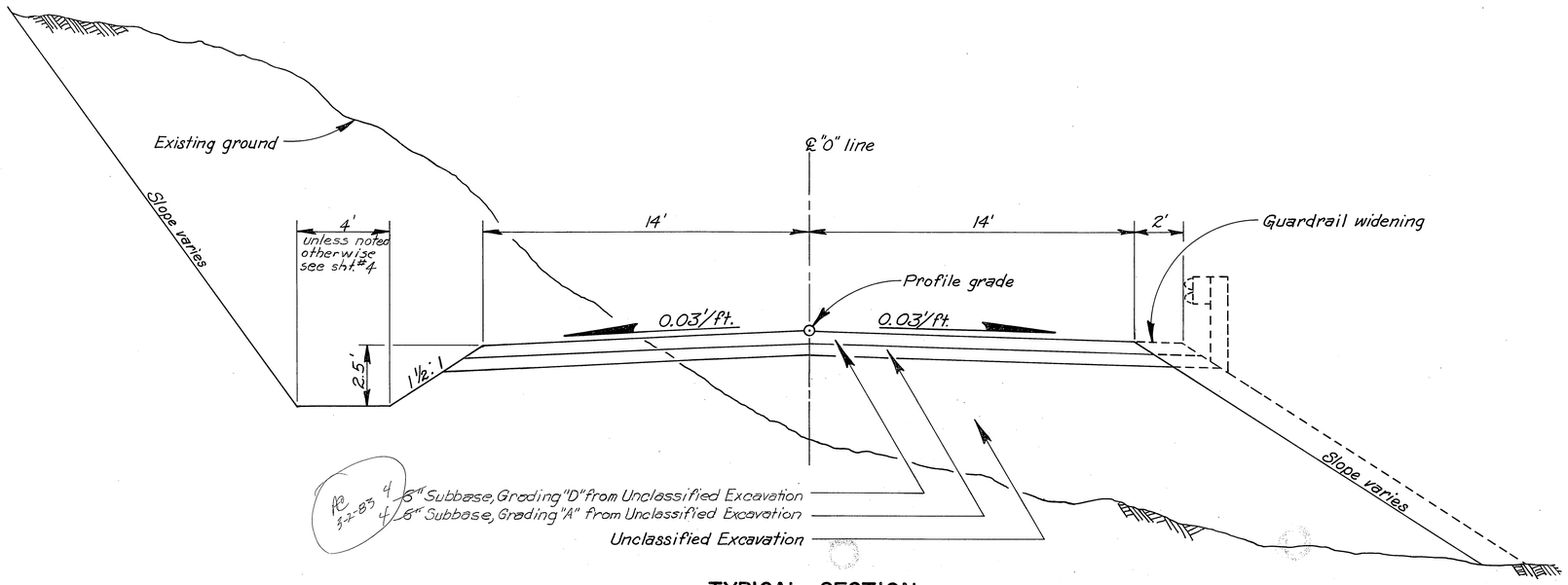
CONTRACTOR: CENTRAL CONSTRUCTION CO.
2112 THIRD AVENUE
SEATTLE, WASHINGTON 98121

DATE BEGIN: NOVEMBER 11, 1974
DATE END: OCTOBER 10, 1978

PROJECT ENGINEER: VERN V. HIRSCH P.E.
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHEASTERN REGION
JUNEAU, ALASKA 99811

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	ALS-0999 (12)	1974	2	~~47~~ 48

TYPICAL SECTION

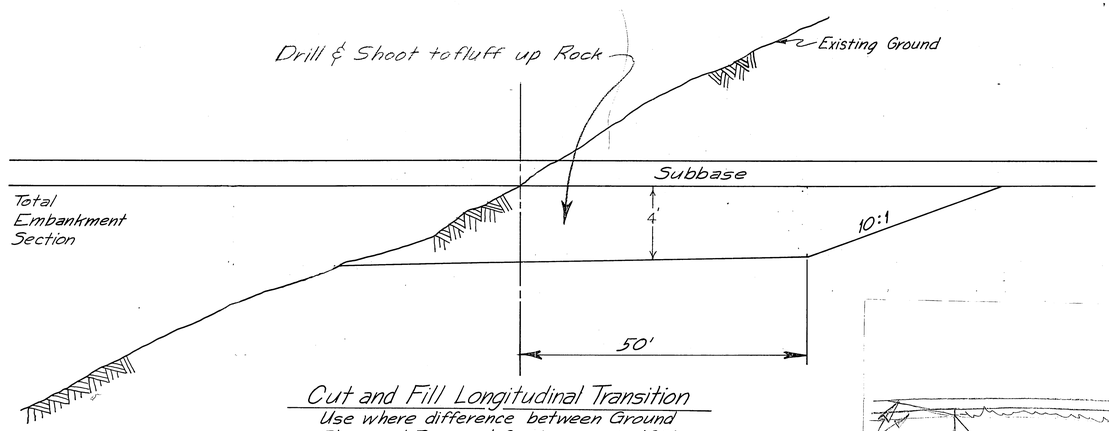


TYPICAL SECTION

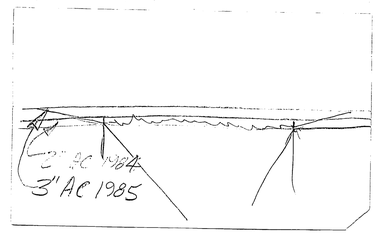
B.O.P. STA."0" 90+89.53 to E.O.P. STA."0" 590+86.50

General Notes:

1. Grades and alignment on these plans are subject to minor revisions.
2. Culvert lengths and locations are approximate only and are subject to minor revisions.
3. Cut and fill slopes shown on the plans are subject to change by the engineer upon review of actual field conditions.
4. Guardrail used for turnouts will not be reflectorized.



Cut and Fill Longitudinal Transition
Use where difference between Ground Slope and Proposed Grade exceeds 10%.



ESTIMATE OF QUANTITIES

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	ALS-0999(12)	1974	3	45

ITEM No	ITEM	UNIT	SHEET NUMBERS 6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	Bridge Subtotal	Roadway Subtotal	Grand Total
1	Furnishing and Maintaining Engineering Facilities	L.S.																						All Req'd.	All Req'd.
2(A)	Meals	Ea.																						16,200	16,200
2(B)	Lodging	Ea.																						5,400	5,400
110(1)	Mobilization	L.S.																						All Req'd.	All Req'd.
111(1)	Temporary Erosion and Polution Control	C.S.																						All Req'd.	All Req'd.
112(1)	Training Program IAW, FHWA Order Interim 7-2(2)	C.S.																						All Req'd.	All Req'd.
201(3B)	Clearing and Grubbing	L.S.																						All Req'd.	All Req'd.
203(3)	Unclassified Excavation	C.Y.	39,512	62,234	18,418	15,161	47,661	23,117	28,069	57,626	62,193	91,685	33,412	39,886	13,785	61,878	39,313	33,094	52526	46,686	27,890	22,053		816,199	816,199
203(11)	Control Blasted Surface	S.Y.	6,580	6,962	3,234	1,385	7,491	5,036	4,341	9,123	7,540	11,945	6,297	4,466	1,487	3,511	3,053	5,021	7,456	6,342	4,235	2,950		109,351	109,351
206(1)	Class 1 Excavation for Structures	C.Y.	1,211		67	212	356							466					12					2,324	2,324
304(2A)	Subbase, Grading "A"	C.Y.	1,758	1,764	1,353	1,496	1,712	1,441	1,746	1,706	1,783	2,117	1,696	1,189	1,116	2,033	2,426	1,565	1,696	1,409	1,263	1,221		32,490	32,490
304(2B)	Subbase, Grading "D"	C.Y.	1,459	1,313	1,274	1,467	1,368	1,355	1,430	1,406	1,278	1,756	1,590	1,115	768	1,523	2,012	1,462	1,580	1,317	1,207	1,033		28,713	28,713
306(1)	Emergency Ramp Coarse Aggregate	C.Y.										2,586					1,677							4,263	4,263
512(1)	Gabions	C.Y.	3,038	298	140	335	887					214		775					36					5,723	5,723
602(1A)	Structural Plate Pipe 96" dia.	L.F.	100																					100	100
602(1B)	Structural Plate Pipe 108" dia.	L.F.										66												66	66
602(1C)	Structural Plate Pipe 132" dia.	L.F.		68																				68	68
603(22G)	24" Pipe Conduit	L.F.		178						42'		192	90			316	149	170	126	184	188			1,635	1,635
603(22I)	36" Pipe Conduit	L.F.	144	128	228	180	242	210					58	90	44	184		42	42	50	108	304		2,054	2,054
603(22K)	48" Pipe Conduit	L.F.			150	142	132	216	336	354	178	140	182				335		305	160				2,630	2,630
603(22M)	60" Pipe Conduit	L.F.	146					112	54	96	94	94		134			120							850	850
606(1)	Beam Type Guardrail, Type 1 Post	L.F.	1959.92	1,602.58	1,946.48	2,532.43	2,573.80	2899.93	2,824.43	2,544.24	2,403.46	2,894.83	2,875.38	1,614.46	1,515.56	2,300.00	1,175.00	1,767.96	2,317.91	2,485.41	1,603.72	675.00		42,512.5	42,512.5
606(3)	Removal and Reconstruction of Guardrail	L.F.	862.5																					862.5	862.5
613(2)	Culvert Marker Posts	Ea.	6	5	7	6	6	8	6	7	5	9	7	4	1	7	5	5	6	5	6	4		115	115
614(1)	Survey Monuments	Ea.	13	6	3	6	4	7	4	6	5	9	6	8	6	12	13	8	8	10	9	4		147	147
614(2)	Monument Cases	Ea.	4	4	3	4	3	5	4	3	3	6	3	4	5	7	8	4	6	3	5	3		87	87
615(1)	Standard Signs	S.F.	28.00	35.00		27.00			15.00	28.00	28.00	160.00	143.00	26.00	26.00	26.00	257.50	84.50	13.00		36.00	32.00		96	
627(1)	Watering	M.Gal.																						50	50

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	ALS-0999(12)	1974	4	48 ~~47~~

SUMMARY TABLES

"O" LINE SLOPE SUMMARY TABLE

CUT SLOPES

Station	Lt.	Rt.
90+89.53		
	1/2 : 1	1/4 : 1
95+00		
		50 : 1
100+15		
	1/2 : 1	1/4 : 1
102+00		
	1/5 : 1	
102+29		
		50 : 1
104+20		
		1/4 : 1
105+32		
		50 : 1
106+13		
	1/2 : 1	1/4 : 1
107+00		
	1/4 : 1	
109+00		
	1/6 : 1	50 : 1
110+75		
		1/4 : 1
113+00		
		50 : 1
114+64		
	1/6 : 1	1/4 : 1
115+00		
	1/4 : 1	
117+00		
	1/3 : 1	
119+00		
	1/6 : 1	
122+00		
	1/4 : 1	
125+00		
	1/12 : 1	1/4 : 1
125+60		
	1/12 : 1	50 : 1
128+00		
	1/4 : 1	1/4 : 1
134+16		
		50 : 1
138+13		
	1/4 : 1	1/4 : 1
146+00		
	1/3 : 1	
154+00		
	1/4 : 1	
159+00		
	1/12 : 1	
162+00		
	1/4 : 1	
164+00		
	1/12 : 1	1/4 : 1
164+96		
		50 : 1
166+09		
	1/12 : 1	1/4 : 1
168+00		
	1/4 : 1	
170+00		
	1/12 : 1	1/4 : 1
171+71		
	1/12 : 1	50 : 1
173+00		
	1/4 : 1	1/4 : 1
177+00		
	1/12 : 1	
181+00		
	1/4 : 1	1/4 : 1
184+00		
	1/3 : 1	50 : 1
185+29		
		1/4 : 1
202+90		
		50 : 1
207+64		

Station	Lt.	Rt.
207+64		
	1/3 : 1	1/4 : 1
208+47		
		50 : 1
211+40		
		1/4 : 1
229+18		
	1/3 : 1	50 : 1
233+00		
	1/4 : 1	1/4 : 1
241+00		
	1/12 : 1	1/4 : 1
242+83		
		50 : 1
246+91		
	1/12 : 1	1/4 : 1
249+00		
	1/6 : 1	
255+00		
	1/4 : 1	
260+00		
	1/6 : 1	
261+00		
	1/4 : 1	1/4 : 1
265+50		
	1/3 : 1	50 : 1
268+03		
		1/4 : 1
272+74		
		50 : 1
275+94		
	1/3 : 1	1/4 : 1
278+00		
	1/4 : 1	50 : 1
281+16		
		1/4 : 1
285+60		
		50 : 1
287+20		
		1/4 : 1
291+85		
	1/4 : 1	50 : 1
293+00		
	1/3 : 1	50 : 1
300+00		
	1/4 : 1	1/4 : 1
301+50		
	1/12 : 1	1/4 : 1
310+00		
	1/4 : 1	50 : 1
324+00		
	1/12 : 1	50 : 1
325+94		
	1/12 : 1	1/4 : 1
327+00		
	1/4 : 1	
329+00		
	1/12 : 1	
330+00		
	1/4 : 1	1/4 : 1
332+00		
	1/12 : 1	50 : 1
333+72		
	1/12 : 1	1/4 : 1
335+00		
	1/4 : 1	
338+00		
	1/12 : 1	
341+00		
	1/4 : 1	1/4 : 1
348+07		
		50 : 1
349+64		
		1/4 : 1
351+85		
		50 : 1
353+35		

Station	Lt.	Rt.
353+35		
	1/4 : 1	1/4 : 1
367+80		
		50 : 1
368+41		
		1/4 : 1
384+40		
	1/4 : 1	1/6 : 1
386+50		
	1/12 : 1	1/4 : 1
388+75		
		1/12 : 1
389+50		
		1/4 : 1
390+40		
		1/12 : 1
391+80		
	1/12 : 1	1/4 : 1
394+00		
	1/4 : 1	
404+00		
		50 : 1
407+00		
	1/4 : 1	1/4 : 1
408+00		
		50 : 1
408+97		
	1/4 : 1	1/4 : 1
410+81		
	1/6 : 1	
416+60		
	1/4 : 1	1/4 : 1
419+83		
		50 : 1
428+00		
		1/4 : 1
450+22		
		50 : 1
454+70		
	1/4 : 1	1/12 : 1
456+25		
	50 : 1	
458+00		
	1/4 : 1	1/12 : 1
459+00		
		1/4 : 1
473+53		
	1/4 : 1	50 : 1
477+00		
	1/3 : 1	1/4 : 1
482+00		
		50 : 1
487+00		
	1/3 : 1	1/4 : 1
488+00		
	1/4 : 1	1/4 : 1
491+80		
	1/4 : 1	1/6 : 1
509+10		
	50 : 1	
511+12		
	1/4 : 1	
515+40		
	50 : 1	1/6 : 1
516+00		
	50 : 1	1/4 : 1
516+80		
	1/4 : 1	1/4 : 1
518+00		
	1/4 : 1	1/3 : 1
519+23		
	50 : 1	
523+63		
	1/4 : 1	1/3 : 1
525+00		
	1/4 : 1	1/4 : 1
526+27		

Station	Lt.	Rt.
526+27		
	50 : 1	1/4 : 1
527+63		
	1/4 : 1	1/4 : 1
536+50		
	1/4 : 1	1/3 : 1
538+25		
	1/3 : 1	
541+00		
	1/4 : 1	1/3 : 1
553+75		
	1/4 : 1	1/4 : 1
554+70		
	1/3 : 1	1/12 : 1
556+50		
	1/12 : 1	
558+25		
	1/4 : 1	1/12 : 1
560+50		
		1/3 : 1
563+30		
	1/4 : 1	1/4 : 1
567+30		
	50 : 1	
568+50		
	1/4 : 1	1/4 : 1
578+00		
	50 : 1	1/6 : 1
579+64		
	1/4 : 1	1/6 : 1
582+75		
	1/4 : 1	1/4 : 1
590+86.50		

FILL SLOPES

Station	Lt.	Rt.
90+89.53		
	1 1/2 : 1	1 1/2 : 1
104+20		
		1 1/4 : 1
104+32		
		1 1/2 : 1
110+75		
		1 1/4 : 1
113+00		
		1 1/2 : 1
117+39		
		1 1/4 : 1
123+00		
		1 1/2 : 1
145+80		
		1 1/2 : 1
146+40		
		1 1/2 : 1
175+00		
		1 1/4 : 1
176+50		
		1 1/2 : 1
186+00		
		1 1/2 : 1
189+50		
		1 1/2 : 1
198+00		
		1 1/4 : 1
201+50		
		1 1/2 : 1
207+64		
		1 1/2 : 1
208+47		
		1 1/2 : 1
212+03		
		1 1/4 : 1
219+75		
		1 1/2 : 1
233+14		
		1 1/4 : 1
242+83		
		1 1/2 : 1
260+00		
		1 1/4 : 1
263+33		
		1 1/2 : 1
268+03		
		1 1/4 : 1
271+00		
		1 1/2 : 1
281+16		
		1 1/4 : 1
286+60		
		1 1/2 : 1
289+00		
		1 1/4 : 1
291+85		
		1 1/2 : 1
306+00		
		1 1/4 : 1
312+67		
		1 1/2 : 1
365+00		
		1 1/2 : 1
367+80		
		1 1/2 : 1
392+34		
		1 1/2 : 1
393+46		
		1 1/2 : 1
478+00		
		1 1/4 : 1
480+15		
	1 1/2 : 1	1 1/2 : 1
493+00		
	1 1/2 : 1	
496+20		

Station	Lt.	Rt.
496+20		
	1 1/2 : 1	1 1/2 : 1
500+75		
	1 1/2 : 1	
501+30		
	1 1/2 : 1	
505+32		
	1 1/2 : 1	
506+50		
	1 1/2 : 1	
513+00		
	1 1/2 : 1	
515+40		
	1 1/2 : 1	
535+15		
	1 1/2 : 1	
538+25		
	1 1/2 : 1	
542+00		
	1 1/2 : 1	
543+75		
	1 1/2 : 1	
547+75		
	1 1/2 : 1	
548+27		
	1 1/2 : 1	
550+00		
	1 1/2 : 1	
550+50		
	1 1/2 : 1	
552+00		
	1 1/2 : 1	
556+50		
	1 1/2 : 1	
558+25		
	1 1/2 : 1	
564+20		
	1 1/2 : 1	1 1/2 : 1
590+86.50		

GUARDRAIL SUMMARY

From Station	To Station	Lt. / Rt.	Remarks
"O" 91+00	"O" 94+03.25	Right	
"O" 94+00	"O 98+00	Right	Turnout Guardrail, See Detail Sheet #32
"O" 98+00	"O" 125+69.93	Right	
"O" 107+05.00	"O" 108+25	Left	
"O" 125+69.93	"O" 128+04.13	Right	Turnout Guardrail, See Detail Sheet #32
"O" 128+04.13	"O" 131+00	Right	
"O" 128+50	"O" 130+52.79	Left	
"O" 133+50	"O" 134+26	Right	
"O" 142+50	"O" 156+54.76	Right	
"O" 161+50	"O" 203+21.83	Right	
"O" 161+50	"O" 163+50	Left	
"O" 203+21.83	"O" 207+60	Right	Turnout Guardrail, See Detail Sheet #32
"O" 207+60	"O" 243+07.07	Right	
"O" 236+00	"O" 241+41.95	Left	
"O" 243+07.07	"O" 247+00	Right	Turnout Guardrail, See Detail Sheet #32
"O" 247+00	"O" 277+96.71	Right	
"O" 277+96.71	"O" 281+00	Right	Turnout Guardrail, See Detail Sheet #32
"O" 281+00	"O" 292+27.77	Right	
"O" 292+27.77	"O" 298+00	Right	Park Turnout, See Detail Sheet #32
"O" 298+00	"O" 373+78.85	Right	
"O" 378+12.71	"O" 398+30.50	Right	Begin Bridge
"O" 393+94.41	"O" 398+30.50	Left	
"O" 400+94.50	"O" 401+44.50	Right	
"O" 400+94.50	"O" 405+12.52	Left	End Bridge
"O" 405+12.52	"O" 407+00	Left	Turnout Guardrail, See Detail Sheet #32
"O" 415+04.60	"O" 419+75	Right	
"O" 416+90	"O" 419+53.22	Left	
"O" 419+75	"O" 422+75	Right	Turnout Guardrail, See Detail Sheet #32
"O" 422+75	"O" 430+13.63	Right	
"O" 433+80	"O" 437+49.45	Right	
"O" 447+48.97	"O" 449+50	Right	
"O" 452+90	"O" 453+63.65	Left	
"O" 460+50	"O" 462+46.92	Left	
"O" 462+00	"O" 469+07.70	Right	
"O" 474 +89	"O" 484+10.96	Right	
"O" 487+74.62	"O" 503+80	Left	
"O" 509+65.10	"O" 531+65	Left	
"O" 528+59.87	"O" 531+80	Right	
"O" 534+52	"O" 565+97.27	Left	
"O" 579+50	"O" 584+25	Left	
"O" 588+66.67	"O" 590+80	Left	

DITCH WIDTH

Station to Station		Width Left	Width Right
Normal		4'	4'
"O" 102+04.06	"O" 104+96.86	8'	
"O" 110+58.37	"O" 113+83.68	12'	
"O" 130+15	"O" 133+50	10'	10'
"O" 247+50	"O" 256+00	10'	
"O" 301+00	"O" 306+00	10'	
"O" 344+98.02	"O" 349+52.29	8'	
"O" 381+85.59	"O" 385+21.14	12'	
"O" 403+06	"O" 408+00	8'	
"O" 421+00.75	"O" 422+95	12'	
"O" 423+39	"O" 427+49.30	12'	
"O" 434+04.26	"O" 437+35.69	8'	
"O" 442+59.20	"O" 444+10		8'
"O" 454+46.71	"O" 455+00	12'	
"O" 478+74.31	"O" 481+75.54	8'	
"O" 495+50	"O" 499+00		10'
"O" 500+66.20	"O" 503+60.42		8'
"O" 532+68.86	"O" 535+99.13		8'
"O" 585+75	"O" 590+63.56		8'

Gen. Recommendations:
Ditch check (1/2 D) below culv.
Allows for ponding.

Addendum No. 8

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	AlS-0999(12)	1974	5	16 ~~17~~

MONUMENTS

Station	Mon.	Case	Point
"0" 90+89.53	X		BOP
"0" 92+95.89	X	X	PI
"0" 98+23.59	X		PC
"0" 99+34.33	X		PI
"0" 102+04.06	X		PC
"0" 104+96.86	X	X	PT
"0" 105+79.93	X		PC
"0" 109+55.22	X		PT
"0" 110+58.37	X	X	PC
"0" 112+28.84	X		POC
"0" 113+83.68	X		PT
"0" 115+18.96	X		PC
"0" 115+95.04	X	X	PI
"0" 121+37.69	X	X	PC
"0" 125+51.71	X	X	PT
"0" 127+66.81	X	X	PC
"0" 131+00.00	X		POC
"0" 135+00.00	X		POC
"0" 138+52.97	X	X	PT
"0" 150+89.76	X	X	PC
"0" 155+15.67	X	X	PT
"0" 164+96.48	X	X	PC
"0" 166+72.58	X	X	PI
"0" 170+05.01	X		PC
"0" 171+45.48	X	X	PI
"0" 183+97.33	X	X	PC
"0" 184+83.95	X		PI
"0" 190+27.49	X	X	PC
"0" 194+35.47	X	X	PI
"0" 203+11.92	X	X	PC
"0" 210+00.00	X		MOC
"0" 215+85.56	X	X	PT
"0" 216+15.77	X		PC
"0" 217+68.29	X	X	PI
"0" 220+19.39	X		PC
"0" 221+43.29	X	X	PI
"0" 229+15.52	X	X	PC
~~"0" 232+07.54~~	~~X~~	~~X~~	~~PI~~
"0" 240+41.81	X	X	PC
"0" 241+19.41	X	X	PI
"0" 249+00.00	X	X	POT
"0" 257+09.36	X	X	PC
"0" 265+00.00	X	X	POC
"0" 272+49.70	X	X	PT
"0" 279+52.97	X		PC
"0" 281+34.35	X	X	PI
"0" 286+08.38	X		PC
"0" 287+63.82	X	X	PI
"0" 292+24.08	X		PC
"0" 294+63.19	X	X	PI
"0" 303+61.19	X	X	PC
"0" 304+53.71	X	X	PI
"0" 310+63.76	X		PC
"0" 311+32.54	X		PI
"0" 318+76.06	X		PC
"0" 320+94.16	X	X	PI
"0" 327+35.22 ▲	X	X	PI
"0" 336+00.00	X		POT
"D" 0+00	X		BOR
"D" 9+98.67	X	X	PI
"D" 13+28.61	X	X	PT
"D" 16+75	X	X	EOR
"0" 344+98.37	X	X	PC
"0" 347+00.00	X	X	POC
"0" 349+52.64	X		PT
"0" 350+17.38	X	X	PC
"0" 354+39.32	X	X	PT
"0" 365+00	X		POT
"0" 373+74.89	X		PC
"0" 375+75.93	X		PI
"0" 381+83.92	X	X	PC
"0" 388+65.00 ▼	X	X	POC
"0" 385+21.14 BK ≈ "0" 385+19.47 Ahd.	X	X	PT
"0" 385+82.30 Rot. BK ≈ "0" 382+82.30 PC. Ahd	X		PC
"0" 388+36.20	X		PT

Station	Mon.	Case	Point
"0" 391+61.55	X		PC
"0" 393+82.27 ▼	X	X	PT
"0" 394+94.16	X	X	PC
~~"0" 397+35.39 Ahd.~~	~~X~~	~~X~~	~~POST~~
"0" 401+13.61	X	X	PC
"0" 405+00.00	X		POC
"0" 409+00.00	X	X	POC
"0" 412+32.84	X	X	PT
"0" 415+18.75	X	X	PC
"0" 420+35.67	X	X	PT
"0" 421+00.45	X	X	PC
"0" 423+00.00	X	X	POC
"0" 425+00.00	X		POC
"0" 427+49.30 BK ≈ "0" 426+85.45 AH	X	X	PT
"0" 434+04.26	X	X	PC
"0" 435+71.66	X	X	PI
"0" 437+35.67	X		PT
"0" 442+59.20	X		PC
"0" 443+55.70	X	X	PI
"0" 446+38.59	X	X	PC
"0" 447+25.20	X	X	PI
"0" 449+07.19	X	X	POT
"E" 2+74.78	X	X	PI
"E" 5+47.57	X		AP
"E" 10+65.92	X		PI
"E" 12+83.57	X		PT
"E" 15+43.00	X		EOR
"0" 450+42.29	X	X	PC
"0" 453+98.69	X		PT
"0" 454+46.71	X		PC
"0" 459+52.59	X	X	PT
"0" 461+49.54	X	X	PC
"0" 464+50.13	X	X	PI
"0" 472+38.82	X	X	PC
"0" 476+48.31	X		PT
"0" 478+74.31	X		PC
"0" 480+26.19	X	X	PI
"0" 484+43.03	X		PC
"0" 487+13.66	X		PI
"0" 492+70.58	X	X	PI
"0" 497+85.26	X	X	PC
"0" 499+01.49	X	X	PI
"0" 500+66.20	X		PC
"0" 503+60.42	X	X	PC
"0" 509+69.38	X		PC
"0" 511+53.82	X	X	PI
"0" 519+00.00	X	X	POT
"0" 525+36.83	X	X	PC
"0" 528+87.03	X		PI
"0" 532+68.86	X		PC
"0" 535+99.13	X	X	PT
"0" 537+45.99	X	X	PC
"0" 539+53.93	X	X	PI
"0" 542+34.27	X		PC
"0" 544+09.39	X		PI
"0" 546+70.40	X		PC
"0" 547+84.15	X	X	PI
"0" 549+88.86	X		PC
"0" 550+61.92	X		PI
"0" 552+11.49	X		PC
"0" 553+31.64	X	X	PI
"0" 555+01.42	X		PC
"0" 555+70.81	X	X	PI
"0" 561+70.92	X	X	PC
"0" 563+02.76	X	X	PI
"0" 567+30.00	X		POT
"0" 571+55.22	X	X	PC
"0" 577+83.74	X	X	PT
"0" 585+53.57	X	X	PC
"0" 588+14.81	X		PI
"0" 590+86.50	X	X	EOP

SUPERELEVATION TABLE

Begin Transition	Begin Full Super	End Full Super	End Transition	Rate-%	Dir.
"0" 90+89.53	"0" 92+39.53	"0" 93+51.52	"0" 95+01.52	5.8	R
"0" 97+23.59	"0" 98+73.59	"0" 99+93.74	"0" 101+23.90*	6.0	R
"0" 101+23.90*	"0" 102+54.06	"0" 104+46.86	"0" 105+38.40*	6.0	L
"0" 105+38.40*	"0" 106+29.93	"0" 109+05.22	"0" 110+06.80*	6.0	R
"0" 110+06.80*	"0" 111+08.37	"0" 113+33.68	"0" 114+51.32*	6.0	L
"0" 114+51.32*	"0" 115+68.96	"0" 116+20.80	"0" 117+70.80	5.9	R
"0" 120+37.69	"0" 121+87.69	"0" 125+01.71	"0" 126+51.71	6.0	R
"0" 126+66.81	"0" 128+16.81	"0" 138+02.97	"0" 139+52.97	5.6	L
"0" 149+89.76	"0" 151+29.76	"0" 154+65.67	"0" 156+15.67	5.1	R
"0" 163+96.48	"0" 165+46.48	"0" 167+98.56	"0" 169+26.78*	3.0	R
"0" 169+26.78*	"0" 170+55.01	"0" 172+35.06	"0" 173+85.06	5.1	L
"0" 182+97.33	"0" 184+47.33	"0" 185+20.55	"0" 186+70.55	3.0	R
"0" 189+27.49	"0" 190+77.49	"0" 197+92.67	"0" 199+42.67	3.0	L
"0" 202+11.92	"0" 203+61.92	"0" 215+35.56	"0" 216+00.66*	3.0	L
"0" 216+00.66*	"0" 216+65.77	"0" 218+68.47	"0" 219+68.93*	5.9	R
"0" 219+68.93*	"0" 220+69.39	"0" 222+16.41	"0" 223+66.41	5.4	L
"0" 228+15.52	"0" 229+65.52	"0" 234+47.02	"0" 235.97.02	3.8	L
"0" 239+41.81	"0" 240+91.81	"0" 241+46.96	"0" 242+96.96	4.0	R
"0" 256+09.36	"0" 257+59.36	"0" 271+99.70	"0" 273+49.70	3.0	L
"0" 278+52.97	Normal Crown	Normal Crown	"0" 284+15.69		L
"0" 285+06.38	"0" 286+56.38	"0" 288+70.30	"0" 290+20.30	4.8	R
"0" 291+24.08	"0" 292+74.08	"0" 296+45.54	"0" 297+95.54	5.6	L
"0" 302+61.19	"0" 304+11.19	"0" 304+95.98	"0" 306+45.98	5.1	L
"0" 309+63.76	"0" 311+13.76	"0" 311+51.08	"0" 313+01.08	5.9	R
"0" 317+86.66	"0" 319+36.66	"0" 322+71.56	"0" 324+21.56	4.0	R
"0" 326+07.37	Normal Crown	Normal Crown	"0" 328+63.44		R
"0" 343+98.02	"0" 345+48.02	"0" 349+02.29	"0" 349+84.72*	6.0	L
"0" 349+84.72*	"0" 350+57.15	"0" 353+89.32	"0" 355+39.32	6.0	R
"0" 372+75.16	"0" 374+25.16	"0" 377+27.08	"0" 378+77.08	3.0	L
"0" 380+85.59	"0" 382+35.59	"0" 384+71.14	"0" 485+57.41*	6.0	L
"0" 385+57.41*	"0" 386+43.68	"0" 388+16.17	"0" 389+66.17	6.0	R
"0" 390+50.84	"0" 392+00.84	"0" 393+60.22	"0" 394+51.20*	6.0	R
"0" 394+51.20*	"0" 395+42.19	"0" 397+59.96	See Note #3	6.0	L
See Note # 4	"0" 401+53.61	"0" 411+82.84	"0" 413+32.84	6.0	R
"0" 414+18.75	"0" 415+68.75	"0" 419+85.67	"0" 421+35.67	6.0	R
"0" 420+00.45	"0" 421+50.45	"0" 426+99.30	"0" 428+49.30	6.0	L
"0" 433+04.26	"0" 434+54.26	"0" 436+85.69	"0" 438+35.69	5.9	L
"0" 441+59.20	"0" 443+09.20	"0" 444+01.55	"0" 445+45.07*	5.9	R
"0" 445+45.07*	"0" 446+88.59	"0" 447+61.34	"0" 449+11.34	5.9	L
"0" 449+42.29	"0" 450+92.29	"0" 453+48.69	"0" 454+22.70*	5.9	R
"0" 454+22.70*	"0" 454+96.71	"0" 459+02.59	"0" 460+51.06*	6.0	L
"0" 460+51.06*	"0" 461+99.54	"0" 464+00.13	"0" 465+50.13	6.0	R
"0" 471+38.82	"0" 472+88.82	"0" 475+98.31	"0" 477+48.31	5.4	R
"0" 477+74.31	"0" 479+24.31	"0" 481+25.54	"0" 482+75.54	5.9	L
"0" 483+43.03	"0" 484+93.03	"0" 489+10.53	"0" 490+60.53	6.0	R
"0" 490+61.83	"0" 492+11.83	"0" 493+28.24	"0" 494+78.24	6.0	L
"0" 496+85.26	"0" 498+35.26	"0" 499+62.92	"0" 500+39.56*	6.0	L
"0" 500+39.56*	"0" 501+16.20	"0" 503+10.42	"0" 504+60.42	6.0	R
"0" 508+69.38	"0" 510+19.38	"0" 512+87.61	"0" 514+37.61	3.8	L
"0" 524+36.83	"0" 525+86.83	"0" 531+38.26	"0" 532+28.56*	6.0	L
"0" 532+28.56*	"0" 533+18.86	"0" 535+49.13	"0" 536+99.13‡	6.0	R
"0" 536+45.99‡	"0" 537+95.99	"0" 541+09.33	"0" 542+12.43‡	5.0	R
"0" 542+12.43‡	"0" 542+84.27	"0" 545+34.27	"0" 546+27.34*	3.0	R
"0" 546+27.34*	"0" 547+20.40	"0" 548+47.67	"0" 549+43.26*	4.2	L
"0" 549+43.26*	"0" 550+38.86	"0" 550+84.69	"0" 551+73.09*	5.9	R
"0" 551+73.09*	"0" 552+16.49	"0" 553+98.35	"0" 554+74.88*	6.0	L
"0" 554+74.88*	"0" 555+51.42	"0" 555+89.53	"0" 557+39.53	6.0	R
"0" 560+70.92	"0" 562+20.92	"0" 563+82.94	"0" 565+32.94	5.9	L
"0" 570+55.22	"0" 572+05.22	"0" 577+33.74	"0" 578+83.74	3.5	L
"0" 584+53.57	"0" 586+03.57	"0" 590+13.56	"0" 591+63.56	5.9	R

NOTES:
1. * Flat Section.
2. ≈ Normal Crown is Not Attained.
3. Transition from 6% Left Super at EFS to 3% Left Super at Begin Bridge; Sta. "0" 397+60.00
4. Transition from 3% Right Super at End Bridge; Sta. "0" 400+96.00 to 6% Right Super at BFS.

CULVERT SUMMARY

Station	Size (inches) 24	36	48	60	other	Length Each	N° of Pipes	Slope	Skew Angle	✳ Height of Fill ‡‡
"0" 99+25				X		~~96~~ 62'	1	2%	~~52° Lt. Ahd.~~	2'
~~"0" 105+00~~				~~X~~		~~50'~~	~~1~~	~~2%~~		~~4'~~
"0" 107+63					8'ϕ	100'	1	4%		† 16'
~~"0" 112+50~~		~~X~~				~~52'~~	~~1~~	~~2%~~		~~3'~~
~~"0" 116+00~~		~~X~~				~~52'~~	~~1~~	~~5%~~		~~3'~~
"0" 115+85		~~X~~				~~50~~ 52'	1	6%		2'
"0" 116+60			X			50'	1	6%		
~~"0" 122+49~~		~~X~~				~~42'~~	~~1~~	~~2%~~		~~3'~~
"0" 124+58					11'	~~98~~ 86'	1	2%		† 8'
~~"0" 127+16~~		~~X~~				~~86'~~	~~1~~	~~2%~~		~~2'~~
~~"0" 129+06~~	~~X~~					~~136'~~	~~1~~	~~2%~~	~~45° Lt. Ahd.~~	~~35'~~
~~"0" 134+10~~	~~X~~					~~42'~~	~~1~~	~~2%~~		~~3'~~
"0" 143+69		~~X~~	X			~~44~~ 50'	1	2%		2'
~~"0" 148+00~~		~~X~~				~~44'~~	~~1~~	~~2%~~		~~2'~~
~~"0" 149+90~~			~~X~~			~~100'~~	~~1~~	~~2%~~		~~6'~~
"0" 154+00		X				~~44~~ 46'	1	~~2%~~ 4%		4'
~~"0" 156+50~~			~~X~~			~~50'~~	~~1~~	~~8%~~		~~6'~~
~~"0" 159+00~~		~~X~~				~~40'~~	~~1~~	~~2%~~		~~2'~~
"0" 162+50		X				~~36~~ 66'	1	~~2%~~ 6%		5'
"0" 165+75			X			66'	1	2%		
~~"0" 166+64~~		~~X~~				~~44'~~	~~1~~	~~2%~~		~~6'~~
"0" 168+95			X			~~30~~ 58'	1	2%		6'
~~"0" 173+60~~		~~X~~				~~48'~~	~~1~~	~~2%~~		~~3'~~
"0" 178+10		X				~~44~~ 50'	1	~~2%~~ 3.6%		3'
~~"0" 182+10~~		~~X~~				~~44'~~	~~1~~	~~2%~~		~~5'~~
"0" 186+50			X			~~62~~ 52'	1	2%		7'
"0" 202+47.22			X			60'	1	2%		
"0" 191+00		X				~~44~~ 52'	1	2%		5'
~~"0" 194+61~~		~~X~~				~~56'~~	~~1~~	~~2%~~		~~5'~~
"0" 199+00			X			~~44~~ 56'	~~X~~ 1	2%		4'
~~"0" 203+13~~		~~X~~				~~44'~~	~~1~~	~~2%~~		~~3'~~
"0" 209+10		X				~~44~~ 52'	1	2%		3'
~~"0" 211+46~~		~~X~~				~~54'~~	~~1~~	~~10%~~		~~5'~~
"0" 217+50			X			50'	1	6%		
"0" 219+00			~~X~~	X		~~42~~ 54'	~~X~~ 1	6%		2'
~~"0" 219+60~~		~~X~~				~~42'~~	~~1~~	~~3%~~		~~2'~~
~~"0" 223+91~~		~~X~~				~~42'~~	~~1~~	~~2%~~		~~2'~~
~~"0" 226+94~~		~~X~~				~~42'~~	~~1~~	~~2%~~		~~2'~~
"0" 228+00		X				~~42~~ 58'	1	2%		3'
~~"0" 233+42~~		~~X~~				~~42'~~	~~1~~	~~2%~~		~~3'~~
"0" 236+77				X		~~56~~ 62'	~~X~~ 1	2%		4'
~~"0" 240+04~~			~~X~~			~~90'~~	~~1~~	~~4%~~	~~40° Rt. Ahd.~~	~~16'~~
"0" 237+00				X		60'	1	2%		
"0" 248+00			X			~~54~~ 50'	1	2%	~~30° Lt. Ahd.~~	3'
~~"0" 249+80~~			~~X~~			~~100'~~	~~1~~	~~2%~~	~~58° Rt. Ahd.~~	~~3'~~
"0" 252+91				X		~~54~~ 60'	1	~~24%~~ 2%		4'
~~"0" 253+61~~			~~X~~			~~62'~~	~~1~~	~~18%~~		~~6'~~
"0" 254+06			X			~~52~~ 54'	1	2%		2'
"0" 255+39		~~X~~	~~X~~			~~68~~ 50'	1	~~3%~~ 2%	~~40° Rt. Ahd.~~	2'
"0" 262+00			X			46'	1	2%		
"0" 267+25				X		~~48~~ 52'	2	2%		2'
"0" 273+00			X			~~44~~ 50'	1	2%		2'
"0" 281+10			X			~~36~~ 60'	1	2%		4'
~~"0" 281+38~~			~~X~~			~~42'~~	~~1~~	~~2%~~		~~2'~~
"0" 283+55			X			~~66~~ 46'	~~X~~ 1	2%		4'
~~"0" 289+20~~	~~X~~					~~42'~~	~~1~~	~~3%~~		~~2'~~
"0" 184+10			X			~~42~~ 50'	1	2%		2'
"0" 294+00		X	~~X~~			~~58~~ 72'	1	2%		3'
"0" 299+50			X			~~48~~ 50'	1	2%	~~24° Lt. Ahd.~~	2'
"0" 305+60		~~X~~	~~X~~			~~52~~ 48'	1	~~11%~~ 2%		6'
"0" 310+35				X		~~54~~ 52'	1	2%		2'
"0" 314+55		X		~~X~~		~~58~~ 48'	1	2%		4'
"0" 316+00			X			50'	1	2%		
~~"0" 318+38~~				~~X~~		~~48'~~	~~1~~	~~2%~~		~~3'~~
"0" 323+10				X		~~56~~ 52'	1	2%		2'
~~"0" 326+38~~	~~X~~					~~40'~~	~~1~~	~~2%~~		~~2'~~
"D" 9+15 / "0" 330+02.22		X	X			~~58~~ 100'	1	2%		5'
~~"0" 335+10~~	~~X~~					~~60'~~	~~1~~	~~2%~~		~~4'~~
"D" 2+00 / "0" 337+60.50			X			~~62~~ 70	1	2%		3'
~~"0" 338+94~~	~~X~~					~~46'~~	~~1~~	~~2%~~		~~2'~~
"0" 338+95	X					~~38~~ 46	1	2%		2'
"0" 342+65					9'	~~66~~ 76	1	2%	~~40 Rt. Ahd.~~	† 9'

† See Sheet # 33
† See Sheet # 34

✳ Height of Fill for Determination of Gage of Culvert

CULVERT SUMMARY

Station	Size (inches) 24	36	48	60	other	Length Each	N° of Pipes	Slope	Skew Angle	✳ Height of Fill ‡‡
"0" 350+13		X	~~X~~			~~54~~ 48'	1	2%		2'
~~"0" 354+81~~			~~X~~			~~46'~~	~~1~~	~~2%~~		~~3'~~
~~"0" 357+12~~	~~X~~					~~42'~~	~~1~~	~~2%~~		~~2'~~
"0" 361+50			X			~~46~~ 52'	1	2%		2'
~~"0" 363+95~~	~~X~~					~~48'~~	~~1~~	~~2%~~		~~2'~~
"0" 368+61			X			46'	1	2%		3'
~~"0" 371+28~~		~~X~~				~~58'~~	~~1~~	~~2%~~		~~6'~~
"0" 379+50		X				~~44~~ 48'	1	2%		2'
~~"0" 383+61~~		~~X~~				~~46'~~	~~1~~	~~2%~~		~~3'~~
"0" 386+				X		~~48~~ 52'	2	2%		2'
"0" 393+40			X	~~X~~		~~38~~ 54'	1	2%		2'
"0" 409+50	X	~~X~~				44'	1	6%		3'
"0" 414+75	X	~~X~~				~~42~~ 44'	1	2%		3'
"0" 417+60		X				~~142~~ 144	1	5%		32'
~~"0" 419+37~~	~~X~~					~~62'~~	~~1~~	~~5%~~		~~7'~~
"0" 423+10	X					~~78~~ 60	1	2%		15'
~~"0" 425+28~~	~~X~~					~~82'~~	~~1~~	~~2%~~		~~3'~~
"0" 429+63	X					~~52~~ 50	1	2%		5'
"0" 436+73	X					~~42~~ 46'	1	2%		2'
"E" 8+84 / "0" 440+42	X					~~108~~ 108'	1	2%		2'
~~"0" 444+62~~		~~X~~				~~80'~~	~~1~~	~~2%~~	~~16° Rt. Ahd.~~	~~2'~~
~~"0" 448+70~~		~~X~~				~~52'~~	~~1~~	~~2%~~	~~37° Lt. Ahd~~	~~6'~~
"0" 461+19				X		~~126~~ 116	1	~~8%~~ 1.1%	25° Rt. Ahd.	22'
"0" 464+50.18	X					~~42~~ 46'	1	4%		2'
"0" 470+50	X					~~48~~ 46'	1	2%		11'
~~"0" 476+23~~	~~X~~					~~42'~~	~~1~~	~~6%~~		~~2'~~
"0" 480+00	X					~~44~~ 46'	1	2%		3'
~~"0" 485+50~~	~~X~~					~~42'~~	~~1~~	~~6%~~		~~2'~~
"0" 494+50		X				~~42~~ 50'	1	6%		2'
"0" 497+42.50		~~X~~	X			~~38~~ 48'	1	2%		2'
"0" 500+12.12	X					~~42~~ 44'	1	6%		2'
"0" 506+50	X					~~42~~ 44'	1	2%		3'
"0" 511+50	X					~~42~~ 44'	1	2%		3'
"0" 515+66			X			~~58~~ 60'	3	2%	~~26° Rt. Ahd.~~	4'
"0" 525+50			X			~~140~~ 62'	1	5%	~~40° Lt. Ahd.~~	4'
"0" 530+46			X			160'	1	2%	32° Rt. Ahd.	40'
"0" 535+19.13	X					~~98~~ 94'	1	2%	28°54' Rt. Ahd.	12'
"0" 541+59.33	X					~~44~~ 46	1	2%		4'
~~"0" 544+50~~	~~X~~					~~50'~~	~~1~~	~~2%~~		~~4'~~
"0" 547+80		X				~~58~~ 48'	1	2%	~~22° Rt. Ahd.~~	3'
"0" 552+11.49	X					~~38~~ 46'	1	6%		2'
"0" 554+00	X					46'	1	4%		4'
"0" 556+00	X					~~60~~ 52'	1	6%	~~7° Rt. Ahd.~~	3'
"0" 560+00	X	~~X~~				~~58~~ 46	1	2%		3'
"0" 564+32.94	X	~~X~~				50'	1	6%		2'
"0" 569+50	X					~~32~~ 46'	1	2%		4'
"0" 573+75	X	~~X~~				~~38~~ 44	1	6%	~~15° Rt. Ahd.~~	2'
"0" 577+50		~~X~~	X			~~56~~ 70'	1	~~8%~~ 4%	~~15° Lt. Ahd.~~	2'
~~"0" 582+35~~		~~X~~				~~62'~~	~~1~~	~~2%~~	~~27° Rt. Ahd.~~	~~2'~~
"0" 584+00		X				~~140~~ 104'	1	~~5%~~ 4%	51° Rt. Ahd.	9'
"0" 93+50	X					8'	1	ADDED TO EXISTING PIPE		

Install one Culvert Marker Post at the inlet of each culvert or group of culverts.

‡‡ Minimum Cover on all culvert pipes shall be 18 inches.

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	ALS-0999(12)	1974	6	~~18~~ 47

PLAN	DATE	BY
SURVEYED		
PLOTTED		
ALIGNMENT CHECKED		
NOTE BOOK	P.I. STA. CHECKED	
NO.		

BEGIN PROJECT

S-0999(8)

STA. "0" 90+89.53

N

"0" 92+95.89 P.I.

"0" 91+89.53 P.C.

"0" 94+01.52 P.T.

"0" 99+34.33 P.I.

"0" 98+23.59 P.C.

"0" 100+63.74 P.T.

"0" 102+04.06 P.C.

"0" 103+53.73 P.I.

"0" 104+96.86 P.T.

"0" 105+79.93 P.C.

"0" 107+84.28 P.I.

"0" 109+55.22 P.T.

"0" 110+58.37 P.C.

"0" 112+28.84 P.I.

"0" 113+83.68 P.T.

"0" 115+18.96 P.C.

"0" 115+95.04 P.I.

"0" 116+70.80 P.T.

"0" 118+00.00

Match Line

R/W

N 3°23'24" E ~100'

N 15°02'59" E ~422.07'

N 30°27'35" E ~160.32'

N 1°10'47" E ~83.07'

N 57°28'25" E ~103.15'

N 15°10'58" E ~135.28'

N 24°17'37" E ~466.89'

"0"
Δ = 11°39'35" Rt.
D = 5°30'
T = 106.36'
L = 211.99'
R = 1041.741'
S = 0.0058'/ft.

"0"
Δ = 15°24'36" Rt.
D = 7° Rt.
T = 110.74'
L = 220.14'
R = 818.511'
S = 0.06'/ft.

"0"
Δ = 29°16'48" Lt.
D = 10° Lt.
T = 149.67'
L = 292.80'
R = 572.958'
S = 0.06'/ft.

"0"
Δ = 56°17'38" Rt.
D = 15° Rt.
T = 204.36'
L = 375.29'
R = 381.972'
S = 0.06'/ft.

"0"
Δ = 42°17'27" Lt.
D = 13° Lt.
T = 170.47'
L = 325.31'
R = 440.737'
S = 0.06'/ft.

"0"
Δ = 9°06'39"
D = 6° Rt.
T = 76.08'
L = 151.86'
R = 954.930'
S = 0.059'/ft.

Note:
For Gabion details see sht. # 30

Embankment = 51,299 Cu. Yds.

Unclassified Excavation = 39,512 Cu. Yds.

Vertical Control: Boundary Point 117, a cross on the west side of the monument, located at the summit of White Pass. Elevation is 2916.58 feet Mean Sea Level. (U.S.C. & G.S., 1950 value)

Horizontal Control: Bearing base is taken as S 89°18'07" W between U.S.C. & G.S. monuments "A" and "West" located at White Pass and on a ridge parallel to and west of Dead Horse Gulch, respectively.

Earthwork Equation:

Embankment = Excavation X Grading Factor

PROFILE	SURVEYED	DATE
	PLOTTED	
	GRADES CHECKED	
NOTE BOOK	R.P. STA. CHECKED	BY
NO.	STRUCTURE NOTATNS CHKD.	

700
680
660
640
620

+8.033 %

-5.478 %

Elev. 1200.82

1200' VC

Elev. 1220.82

Profile Grade

Existing Ground

90 95 100 105 110 115

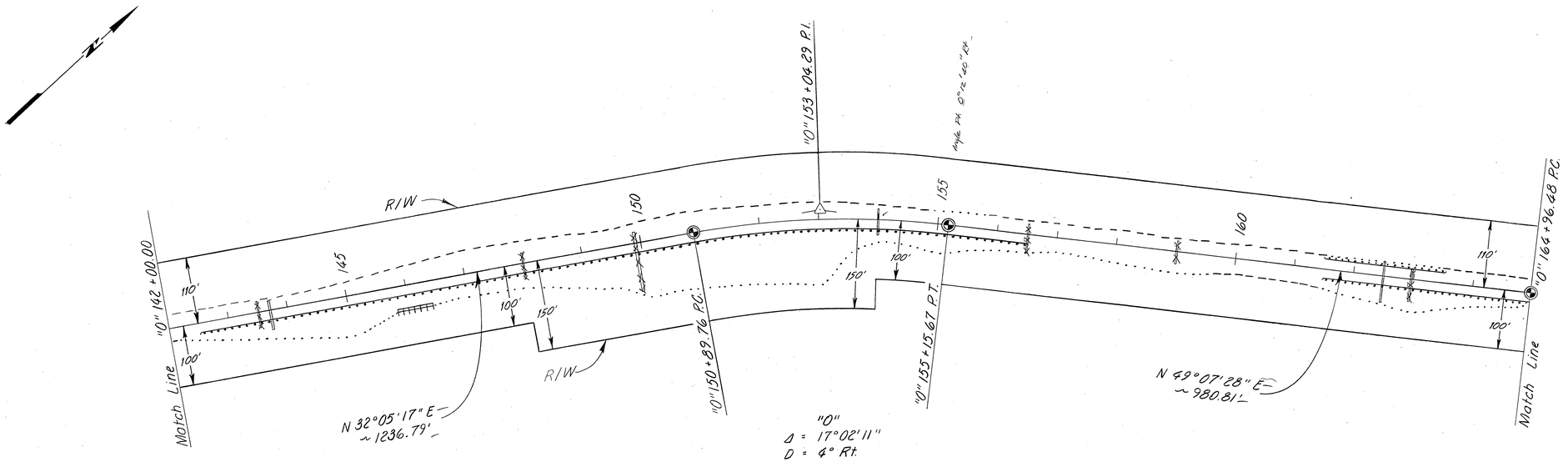
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	ALS-0999(12)	1974	7	48

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

PROFILE — SURVEYED, PLOTTED, GRADES CHECKED, B. Ms. NOTED, STRUCTURE NOTA'NS CH'KD., NOTE BOOK, NO. — BY — DATE

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	ALS-0999(12)	1974	8	~~18~~ 37

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



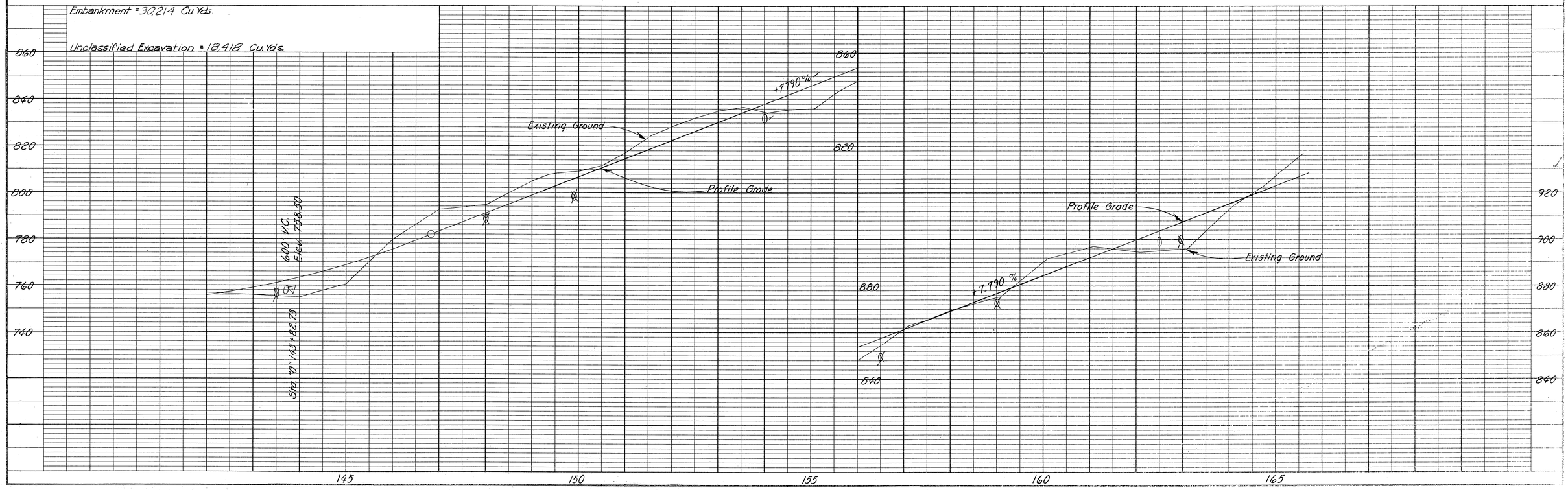
"0"
Δ = 17°02'11"
D = 4° Rt.
T = 214.54'
L = 425.91'
R = 1432.394'
S = 0.051'/ft.

Note:
For Gabion details
see sht. # 30

PROFILE
SURVEYED
PLOTTED
NOTE BOOK
NO.
GRADES CHECKED
B. Ms. NOTED
STRUCTURE NOTATNS CHKD.
BY
DATE

Embankment = 30,214 Cu Yds.

Unclassified Excavation = 18,418 Cu Yds.



STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	ALS-0999(12)	1974	9	~~47~~ 43

Note:
For Gobion details
see sht. # 30

"0"
Δ = 11°12'06"
D = 4° Lt.
T = 140.47'
L = 280.05'
R = 1432.396'
S = 0.051'/ft.

"0" 164+96.48 PC.
"0" 166+72.58 P.I.
"0" 168+48.56 P.T.
"0" 170+05.01 P.C.
"0" 171+45.48 P.I.
"0" 172+85.06 P.T.
"0" 183+97.33 P.C.
"0" 184+83.95 P.I.
"0" 185+70.55 P.T.
"0" 190+27.49 P.C.
164+50
Match Line
Match Line
New Bridge Location
80'
R/W
R/W
110'
100'
110'
100'
175
180
185
190
9
10
11
12
N 52°38'43" E
~156.45'
N 41°26'37" E
~1112.27'
N 44°02'31" E
~456.94'

"0"
Δ = 3°31'15"
D = 1° Rt.
T = 176.10'
L = 352.08'
R = 5729.578'
S = 0.03'/ft.

"0"
Δ = 2°35'54"
D = 1°30' Rt.
T = 86.63'
L = 173.22'
R = 3819.719'
S = 0.030'/ft.

Embankment = 22,521 Cu. Yds.

Unclassified Excavation = 15,161 Cu. Yds.

1000
980
960
940
920

Sta. "0" 169+68.00
800' V.C.
Elev. 959.50
+1.79%
+0.675%
Existing Ground
Profile Grade
800' V.C.
Elev. 963.50
Sta. "0" 184+19.87
+3.667%

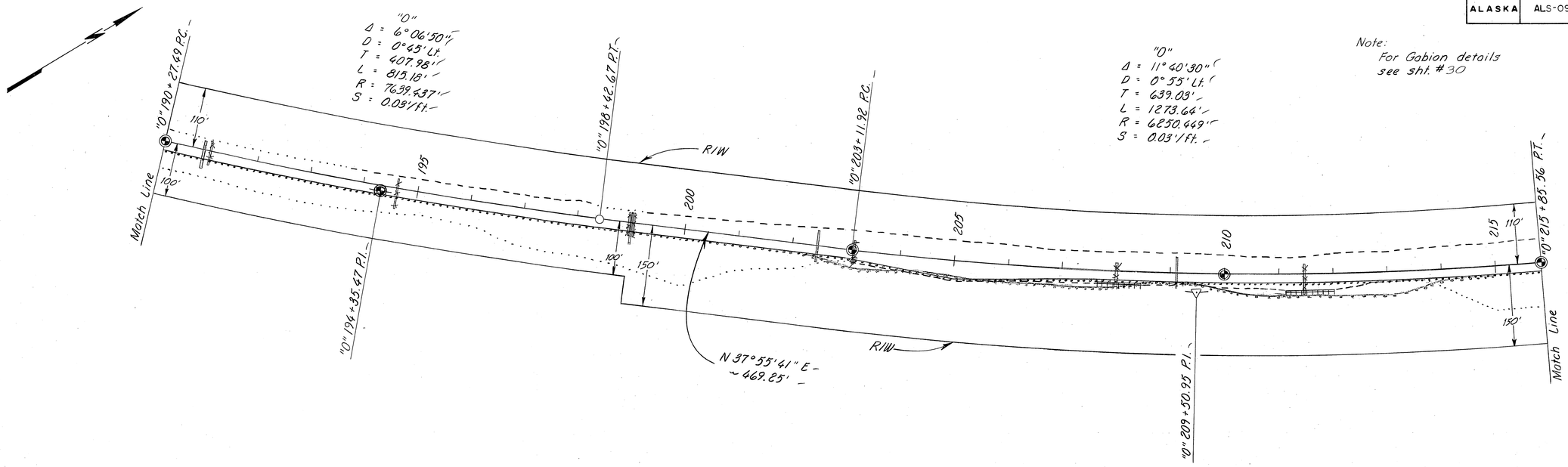
165
170
175
180
185
190

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

PROFILE
SURVEYED
PLOTTED
GRADES CHECKED
B. M.s NOTED
STRUCTURE NOTE NOS. DWGS.
NOTE BOOK
NO.
BY
DATE

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	ALS-0999(12)	1974	10	~~47~~ 48

PLAN
NOTE BOOK
NO.
SURVEYED
PLOTTED
ALIGNMENT CHECKED
R/W DIV. CHECKED
BY
DATE

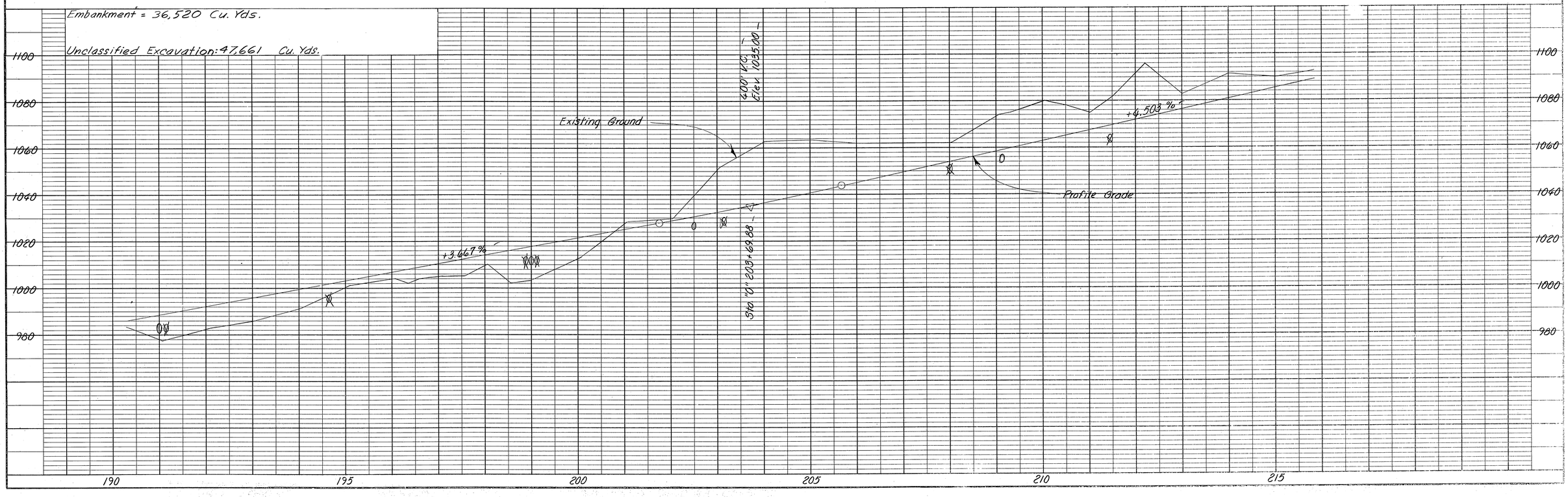


Note:
For Gabion details
see sht. #30

PROFILE
NOTE BOOK
NO.:
SURVEYED
PLOTTED
PROFILE CHECKED
B. Ms. NOTED
STRUCTURE NOTA-NS CH-YDS.
BY
DATE

Embankment = 36,520 Cu. Yds.

Unclassified Excavation: 47,661 Cu. Yds.



STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	ALS-0999(12)	1974	11	~~47~~ 38

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

"0"
Δ = 11°06'56"
D = 4°30" Lt.
T = 123.90'
L = 247.02'
R = 1273.240'
S = 0.054'/ft.

"0"
Δ = 13°05'02"
D = 2°15' Lt.
T = 292.02'
L = 581.50'
R = 2546.479'
S = 0.038'/ft.

"0" 215+85.56 P.T.
"0" 217+68.29 P.I.
"0" 220+19.39 P.C.
"0" 222+66.41 P.T.
"0" 229+15.52 P.C.
"0" 234+97.02 P.T.
"0" 240+41.81 P.C.
"0" 216+15.77 P.C.
"0" 219+18.67 P.T.
"0" 221+43.29 P.I.
"0" 232+07.54 P.I.
Match Line
R/W
110'
150'
180'
220
225
230
240
N 26°15'11"E ~30.21'
N 49°39'28"E ~100.92'
N 32°32'32"E ~649.11'
N 19°27'30"E ~544.79'

"0"
Δ = 17°26'17"
D = 5°45' Rt.
T = 152.32'
L = 302.70'
R = 996.448'
S = 0.059'/ft.

Embankment = 46,193 Cu. Yds.

Unclassified Excavation = 23,117 Cu. Yds.

PROFILE — SURVEYED, PLOTTED, NOTE BOOK, NO., GRADES CHECKED, BY, DATE, STRUCTURE NOTATING CH'KD.

1180
1160
1140
1120
1100
1080

+4.503%
+6.296%
+2.449%
200' VC
Elev. 112.00
600' VC
Elev. 172.00
Sta. 0+221.79.88
Sta. 0+230+89.90
Profile Grade
Existing Ground

215
220
225
230
235
240

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	ALS-0999(12)	1974	12	~~47~~ 48

PLAN — SURVEYED — PLOTTED — ALIGNMENT CHECKED — R/W CHECKED — NOTE BOOK — NO. — DATE — BY

"0" 241+19.41 P.I.

"0" 240+41.81 P.C.

"0" 241+96.96 P.T.

"0" 237+09.36 P.C.

"0" 264+82.15 P.T.

"0" 267+00.00

"0"
Δ = 3°52'43"
D = 2°30' Rt.
T = 77.60'
L = 155.15'
R = 2291.831'
S = 0.06'/ft.

"0"
Δ = 11°33'09"
D = 0°45' Lt.
T = 772.79'
L = 1540.34'
R = 7639.437'
S = 0.03'/ft.

110'

180'

Match Line

R/W

245

250

255

260

265

14

13

180'

250'

200'

N 23°20'13" E
~1512.40'

110'

200'

Match Line

R/W

PROFILE — SURVEYED — PLOTTED — PROFILE CHECKED — B. Ms. NOTED — STRUCTURE NOTATNS CH'KD. — NOTE BOOK — NO. — DATE — BY

Embankment = 67,243 Cu. Yds.

Unclassified Excavation = 28,069 Cu. Yds.

1260
1240
1220
1200
1180

+2.449 %

Sta. "0" 240+41.81 P.C.
600' V.C.
Elev. 1218.00

Profile Grade

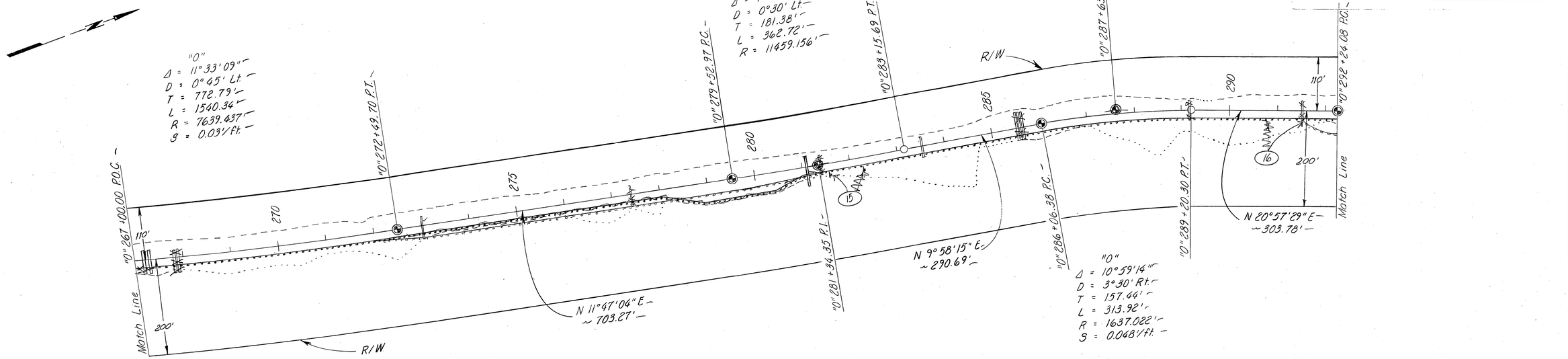
+0.799 %

Existing Ground

Sta. "0" 264+82.15 P.T.
600' V.C.
Elev. 1238.00

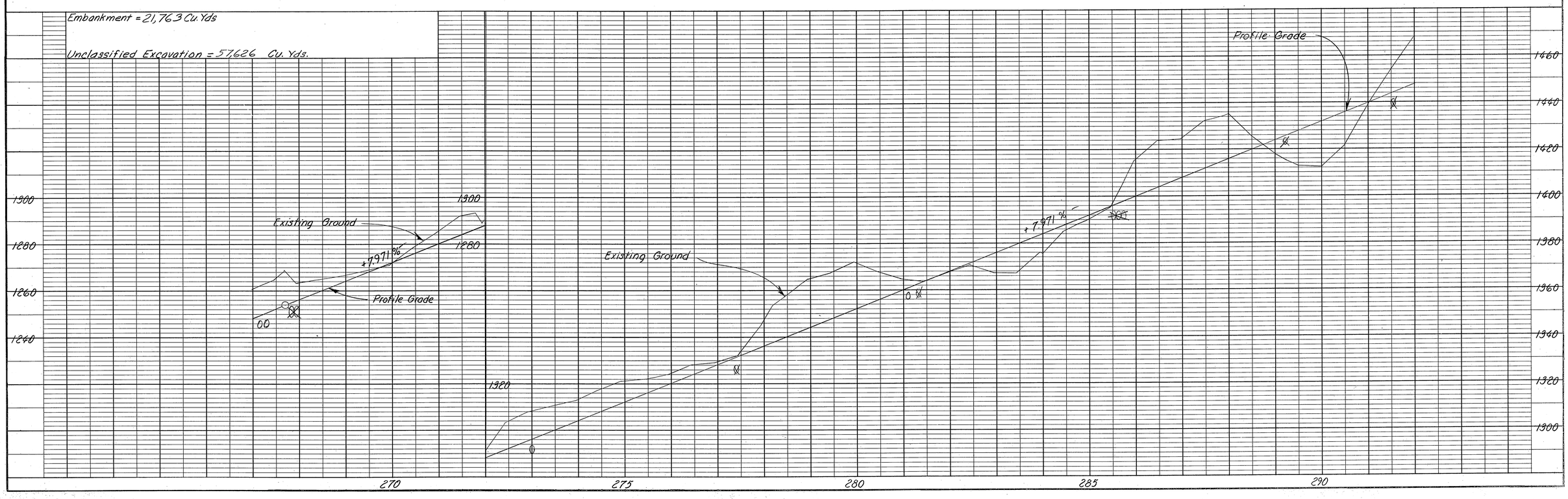
240
245
250
255
260
265

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	ALS-0999(12)	1974	13	~~47~~ 48



Embankment = 21,763 Cu. Yds

Unclassified Excavation = 57,626 Cu. Yds.



PLAN
SURVEYED
PLOTTED
ALIGNMENT CHECKED
AS-BUILT REVISED
NOTE BOOK
NO.
BY
DATE

PROFILE
SURVEYED
PLOTTED
GRADES CHECKED
AS-BUILT REVISED
NOTE BOOK
NO.
STRUCTURE NOTATNS CHKD.
BY
DATE

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	ALS-0999(12)	1974	14	~~47~~ 48

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

"O"
Δ = 23°34'23"
D = 5° Lt.
T = 239.11'
L = 471.46'
R = 1145.916'
S = 0.056'/ft.

"O"
Δ = 7°23'30"
D = 4° Lt.
T = 92.52'
L = 184.79'
R = 1432.394'
S = 0.051'/ft.

"O" 292+24.08 PC
"O" 296+95.54 P.T.
"O" 303+61.19 P.C.
"O" 305+43.98 P.T.
"O" 311+32.54 P.T.
"O" 316+00.00
Match Line
110'
200'
295
300
305
310
315
17
18
R/W
"O" 296+63.19 P.I.
"O" 304+53.71 P.I.
"O" 310+63.76 P.C.
"O" 312+01.08 P.T.
N 2°36'54" W ~665.65'
R/W N 10°00'24" W ~517.78'
N 1°46'04" W ~685.58'

"O"
Δ = 8°16'20"
D = 6° Rt.
T = 68.78'
L = 137.32'
R = 954.930'
S = 0.059'/ft.

PROFILE	DATE	BY
SURVEYED		
PLOTTED		
NOTE BOOK GRADES CHECKED		
NO. STRUCTURE NOTATNS CH'KD.		

Embankment = 26,575 Cu. Yds.

Unclassified Excavation = 62,193 Cu. Yds.

Existing Ground
Profile Grade
+1.91 %
+7.99 %
1560
1540
1500
1640
1620
1600
1580
1560
1540
1520
1500
1480
1460
1440
295
300
305
310
315

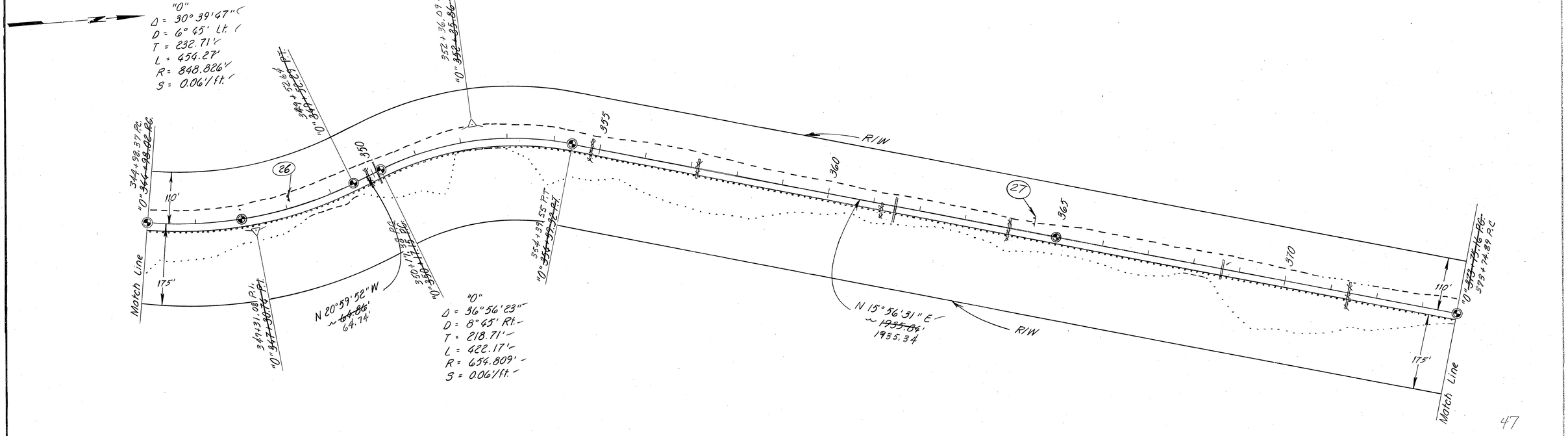
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	ALS-0999(12)	1974	15	~~47~~ 48

For Plan, Profile, and Details of "D" line, see sheet # 26 + 27

318+00
534.61'
110'
"0" 316+00.00
Match Line
200'
N 1°46'04" W
~685.58'
"0" ~~318+86.66~~ 318+76.06 P.C.
320
320+94.16 P.I.
"0" ~~321+04.76~~ P.I.
"0"
Δ = 10°52'21"
D = 2°30' Rt.
T = 218.10'
L = 434.90'
R = 2291.831'
S = 0.04'/Ft.
"0" ~~323+21.56~~ 323+10.96 P.T.
325
N 9°06'17" E
~~385.83'~~
396.23'
50'
15
10
5
327+07.19 P.C.
"0" ~~327+17.79~~ P.C.
327+35.22 P.I.
"0" ~~327+45.46~~ P.I.
327+63.25 P.T.
"0" ~~327+63.84~~ P.T.
"0"
Δ = 0°33'38"
D = 1° Rt.
T = 28.03'
L = 56.05'
R = 5729.578'
330
19
20
21
200'
175'
R/W
110'
22
335
N 9°39'55" E
~~1734.58'~~
1735.12'
23
24
25
340
"0" 339+60.41 =
"D" 0+00.00, 14' Lt.
175'
110'
"0" ~~344+98.82~~ 344+78.37 P.C.
Match Line
PLAN
SURVEYED
PLOTTED
ALIGNMENT CHECKED
RT. OF WAY CHECKED
NOTE BOOK
NO.
BY
DATE
Embankment = 56,995 Cu. Yds
Unclassified Excavation = 91,685 Cu. Yds.
1780
1760
1740
1720
1700
1680
1660
1640
Existing Ground
Profile Grade
+7.971 %
1880
1860
1840
1820
1800
1780
1760
315
320
325
330
335
340
345
PROFILE
SURVEYED
PLOTTED
GRADES CHECKED
B. Ms. NOTED
STRUCTURE NOTATN'S CH'KD.
NOTE BOOK
NO.

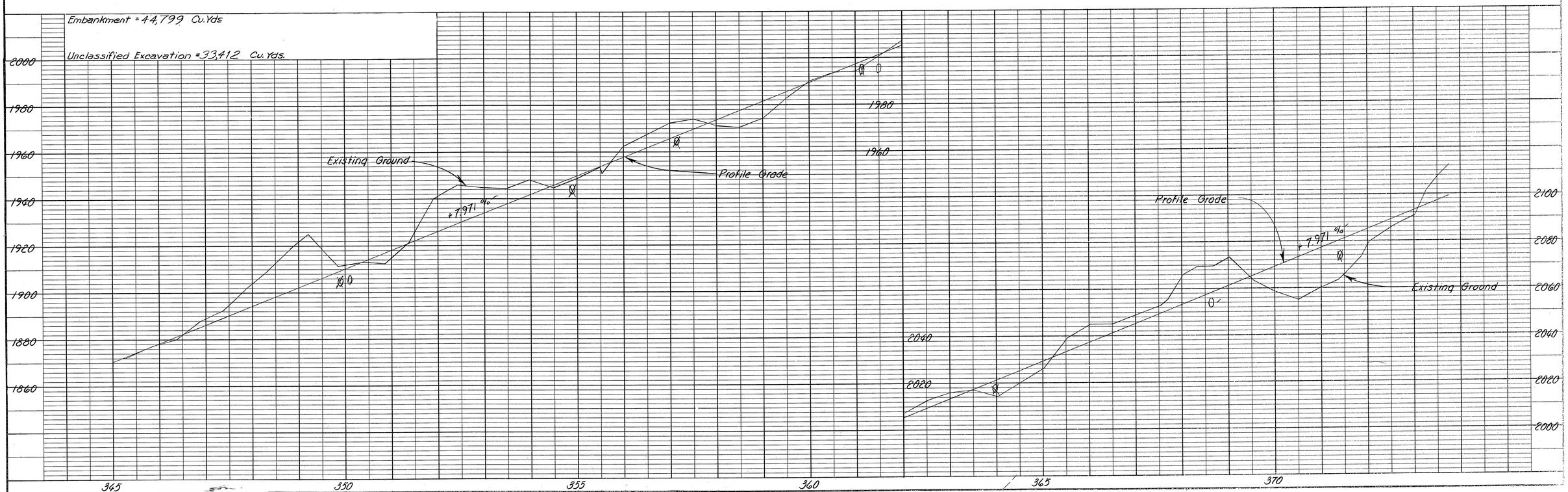
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	ALS-0999(12)	1974	16	~~47~~ 48

PLAN — SURVEYED, PLOTTED, ALIGNMENT CHECKED, R/W NOTED, STRUCTURE NOTATNS CH'KD, NOTE BOOK, NO., BY, DATE



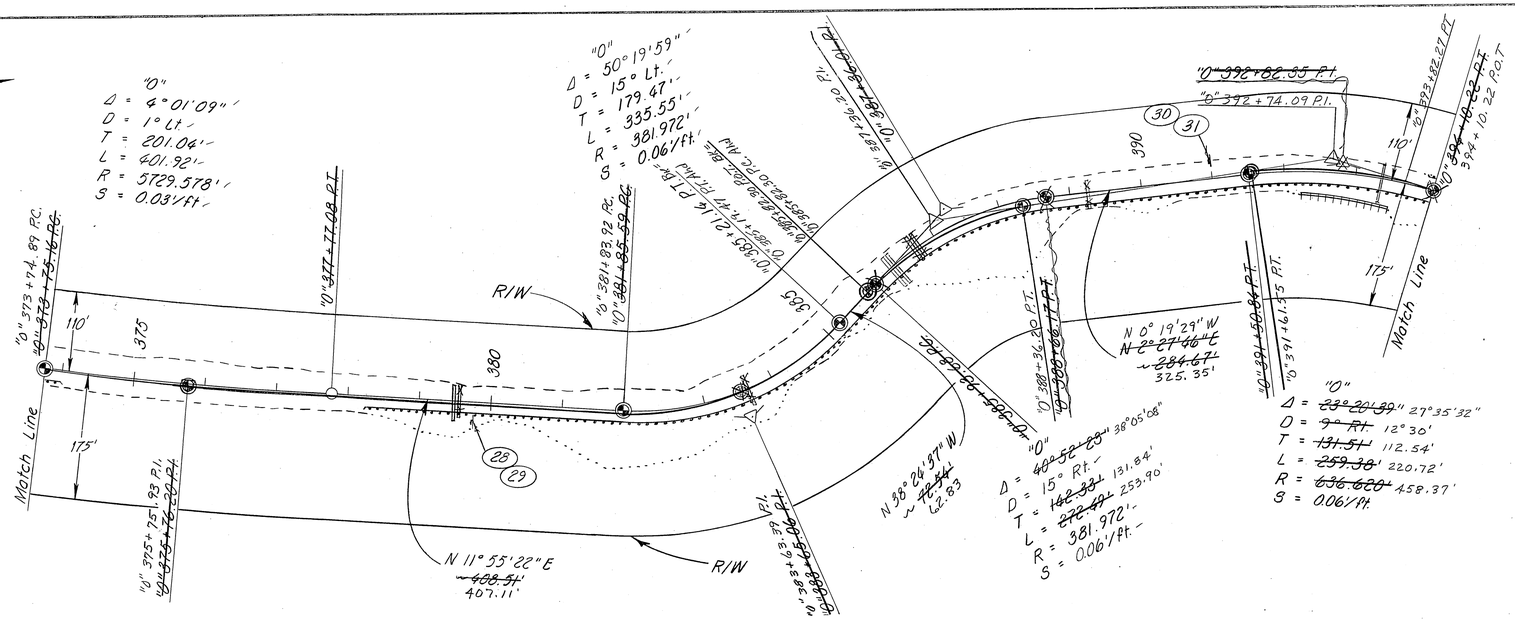
47

PROFILE — SURVEYED, PLOTTED, GRADES CHECKED, R/W NOTED, STRUCTURE NOTATNS CH'KD, NOTE BOOK, NO., BY, DATE



STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	ALS-0999 (12)	1974	17	~~47~~ 48

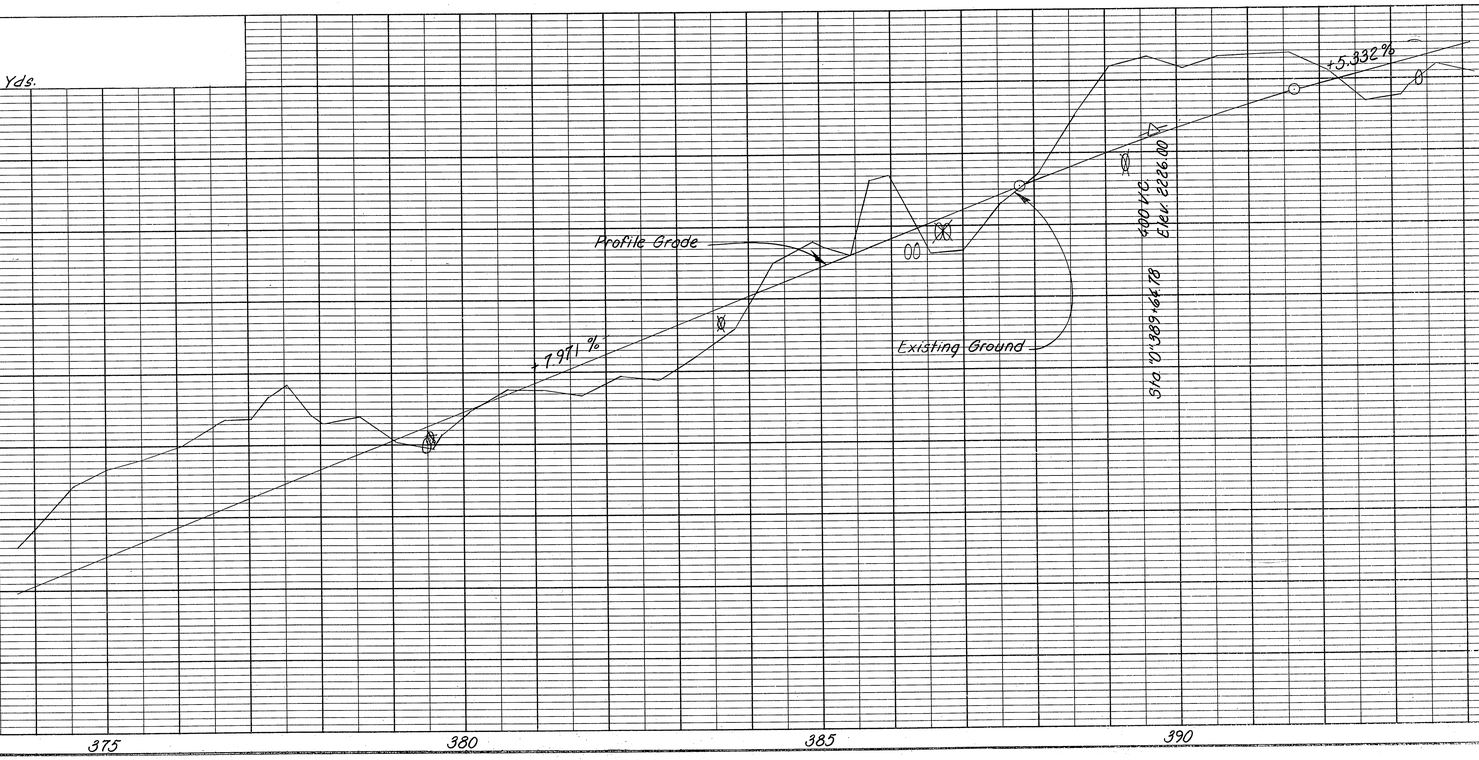
Note:
For Gabion details
see sht. # 30



PLAN
SURVEYED
PLOTTED
ALIGNMENT CHECKED
AC. OF MAS CHECKED
NOTE BOOK
NO.
BY
DATE

Embankment = 21,519 Cu. Yds.

Unclassified Excavation = 39,886 Cu. Yds.



PROFILE
SURVEYED
PLOTTED
GRADES CHECKED
B. MS. NOTED
STRUCTURES SOTYKNE CH'KD.
NOTE BOOK
NO.
BY
DATE

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	ALS-0999(12)	1974	18	~~47~~ 48

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

BY | DATE

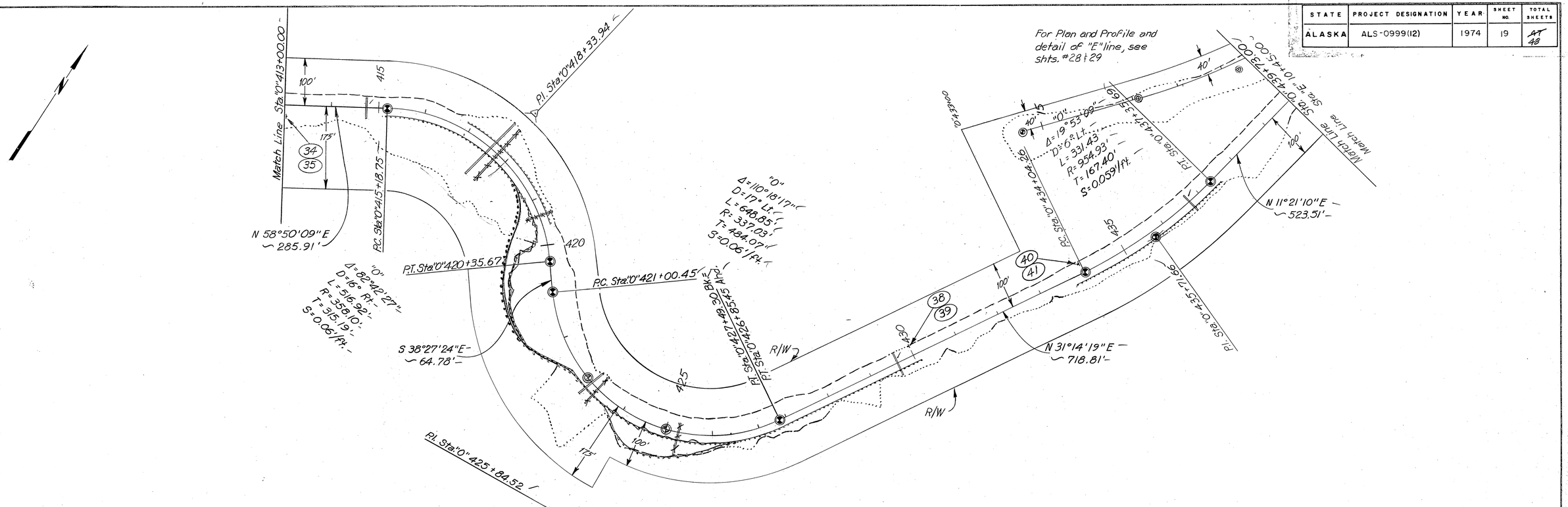
PROFILE	
NOTE BOOK	SURVEYED
NO.	PLOTTED
	GRADES CHECKED
	B. Ms. NOTED
	STRUCTURE NOTA'NS CH'KD.

BY | DATE

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	ALS-0999(12)	1974	19	~~47~~ 48

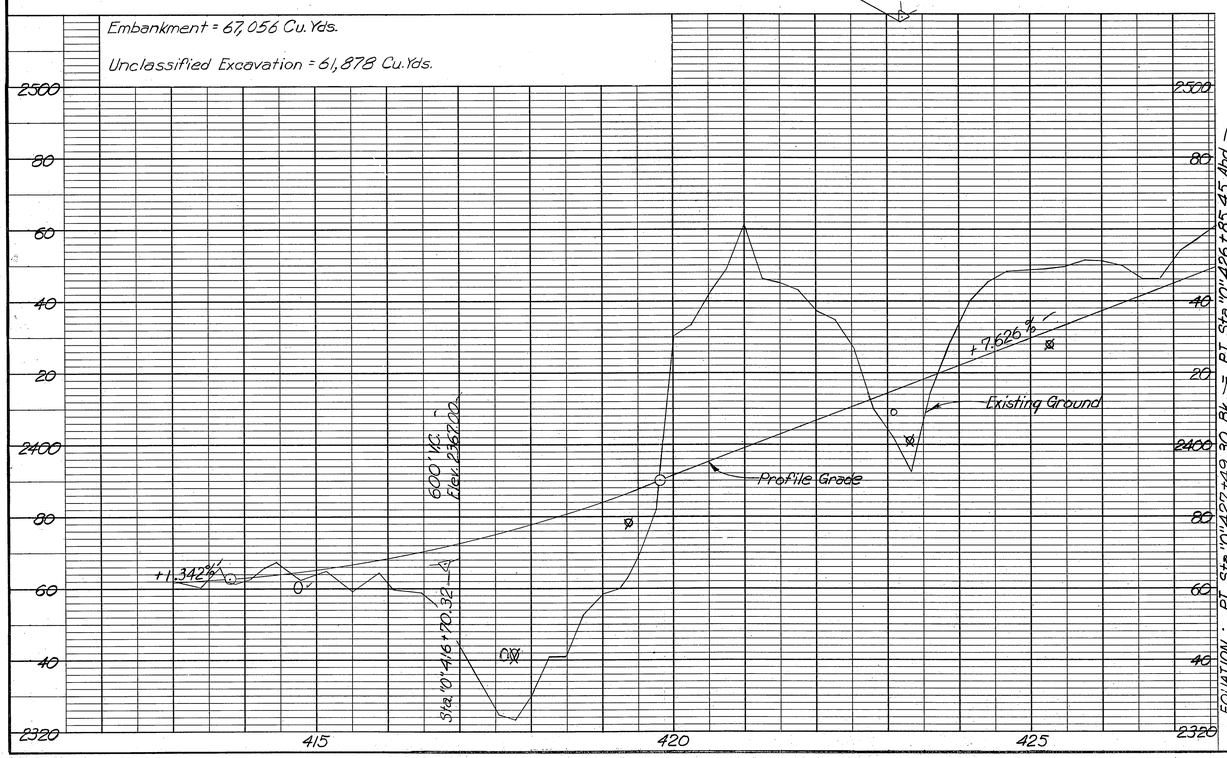
PLAN — SURVEYED. PLOTTED. DRAWN. CHECKED. QUANTITIES CHECKED. R/W. OF WAY CHECKED. NOTE BOOK NO. BY DATE

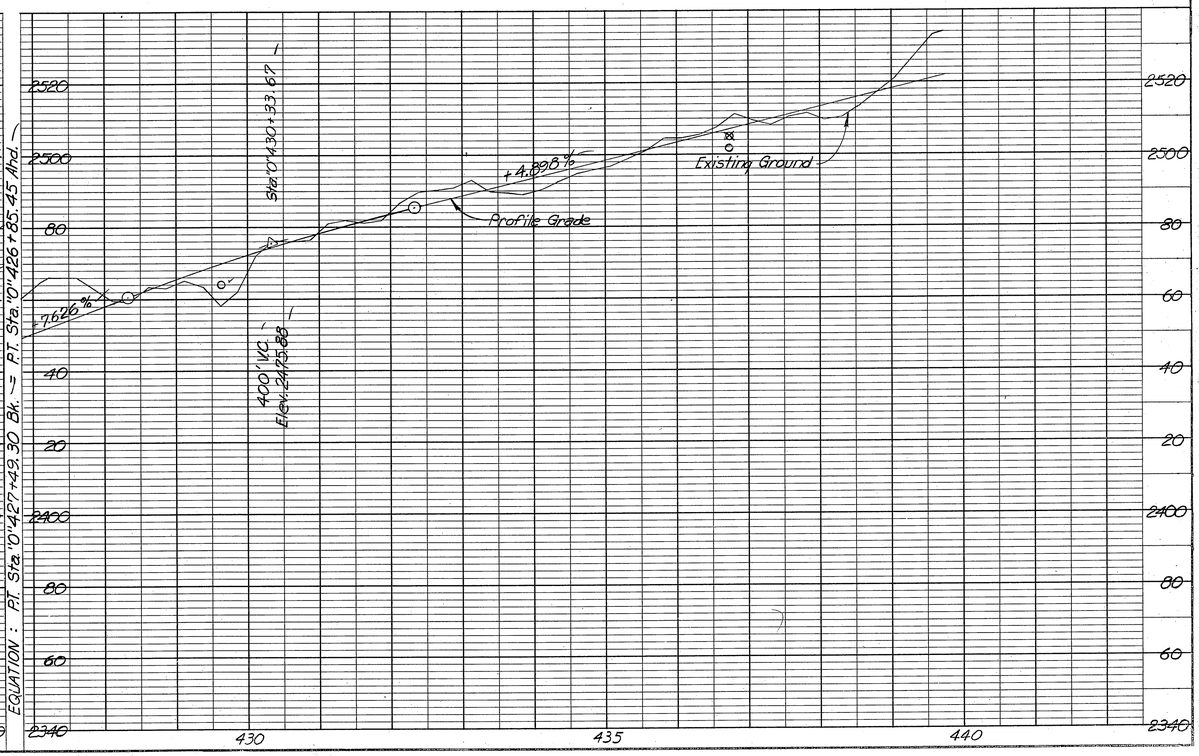
PROFILE — SURVEYED. PLOTTED. DRAWN. CHECKED. QUANTITIES CHECKED. STRUCTURE NOTANS CHKD. NOTE BOOK NO. BY DATE



Embankment = 67,056 Cu. Yds.

Unclassified Excavation = 61,878 Cu. Yds.





STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	ALS-0999(12)	1974	20	47 48

PLAN — SURVEYED / PLOTTED / GRADES CHECKED / R/W STAKED / RT. OF WAY CHECKED / NOTE BOOK / NO. — DATE / BY

PROFILE — SURVEYED / PLOTTED / GRADES CHECKED / R/W STAKED / STRUCTURE NOTATNS CHKD. / NOTE BOOK / NO.

For Plan and Profile and details of "E" line, see shts. #28 & 29

Sta "E" 10+45.00 ~
Sta "0" 439+73.00 ~
Match Line
Match Line

N 11°21'10" E ~ 523.51' ~

P.C. Sta "0" 442+59.20 ~

"0"
Δ = 11°32'28" ~
D = 6° Rt. ~
L = 192.35' ~
R = 954.93' ~
T = 96.50' ~
S = 0.059'/ft. ~

P.T. Sta "0" 444+51.55 ~

N 22°53'38" E ~ 187.04' ~

P.C. Sta "0" 446+32.59 ~

P.I. Sta "0" 447+25.20 ~

"0"
Δ = 10°21'54" ~
D = 6° Lt. ~
L = 172.75' ~
R = 954.93' ~
T = 86.61' ~
S = 0.059'/ft. ~

P.T. Sta "0" 448+11.34 ~

"E" 0+96.00 P.C. 1370' Lt. ~
"0" 449+07.19 ~

N 12°31'44" E ~ 230.95' ~

P.C. Sta "0" 450+42.29 ~

"0"
Δ = 21°23'01" ~
D = 6° Rt. ~
L = 356.40' ~
R = 954.93' ~
T = 180.29' ~
S = 0.059'/ft. ~

P.I. Sta "0" 452+22.59 ~

P.T. Sta "0" 453+56.69 ~

N 33° 54'45" E ~ 48.02' ~

P.C. Sta "0" 454+46.71 ~

P.I. Sta "0" 457+18.46 ~

"0"
Δ = 51°51'12" ~
D = 10° 15' Lt. ~
L = 505.88' ~
R = 558.98' ~
T = 271.75' ~
S = 0.06'/ft. ~

P.T. Sta "0" 459+50.59 ~

N 17°56'27" W ~ 196.95' ~

P.C. Sta "0" 461+94.54 ~

P.I. Sta "0" 463+04.15 ~

"0"
Δ = 33°03'53" ~
D = 11° Rt. ~
L = 300.59' ~
R = 520.87' ~
T = 154.61' ~
S = 0.06'/ft. ~

P.T. Sta "0" 464+50.13 ~

N 15°07'26" E ~ 788.69' ~

Match Line Sta "0" 469+50.00 ~

Embankment = 38,346 Cu.Yds.

Unclassified Excavation = 39,313 Cu.Yds.

Sta "0" 447+10.00 ~
600 VC. ~
Elev. 2558.00 ~

+4.898 % ~

+8.825 % ~

Sta "0" 453+40.00 ~
600 VC. ~
Elev. 2564.69 ~

+1.895 % ~

Profile Grade

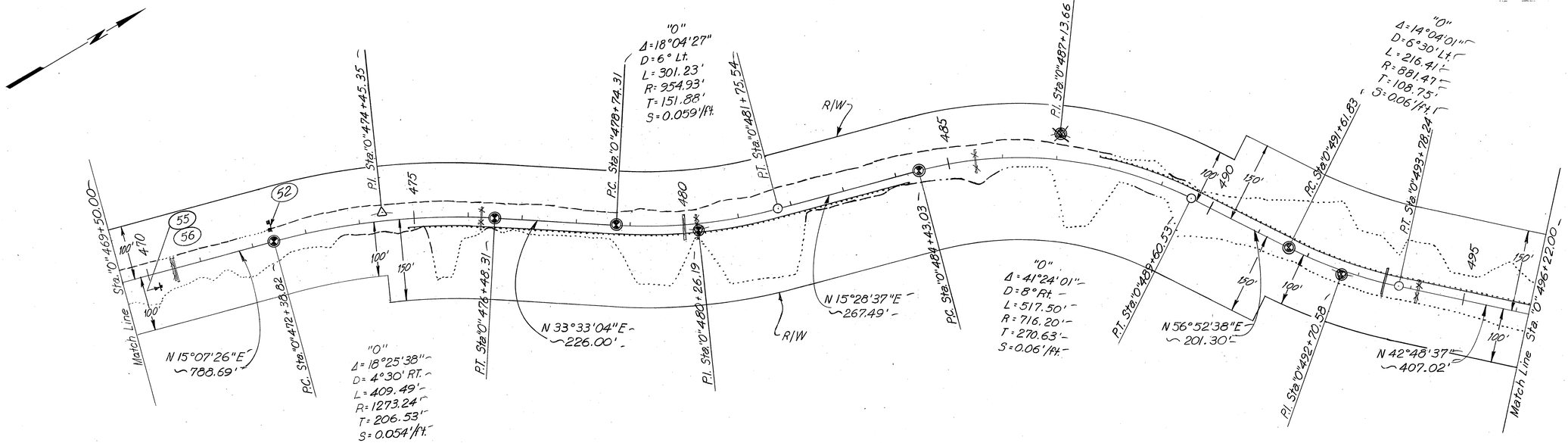
Existing Ground

Sta "0" 462+90.00 ~
600 VC. ~
Elev. 2619.00 ~

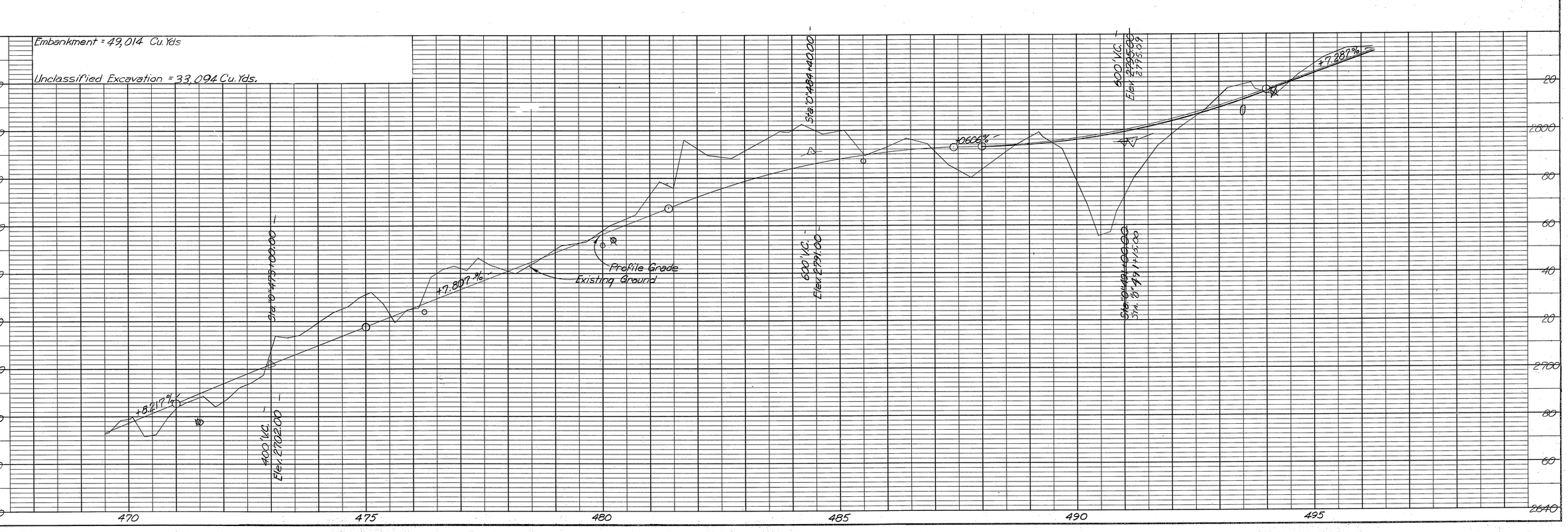
+8.217 % ~

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	ALS-0999(12)	1974	21	47 48

PLAN — SURVEYED, PLOTTED, ALIGNMENT CHECKED, P.I. OR MAT CHECKED, NOTE BOOK, NO., BY, DATE



PROFILE — SURVEYED, PLOTTED, GRADES CHECKED, BY, NOTE BOOK, NO., STRUCTURE NOTATIONS CH'KD., DATE



STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	ALS-0999(12)	1974	22	48

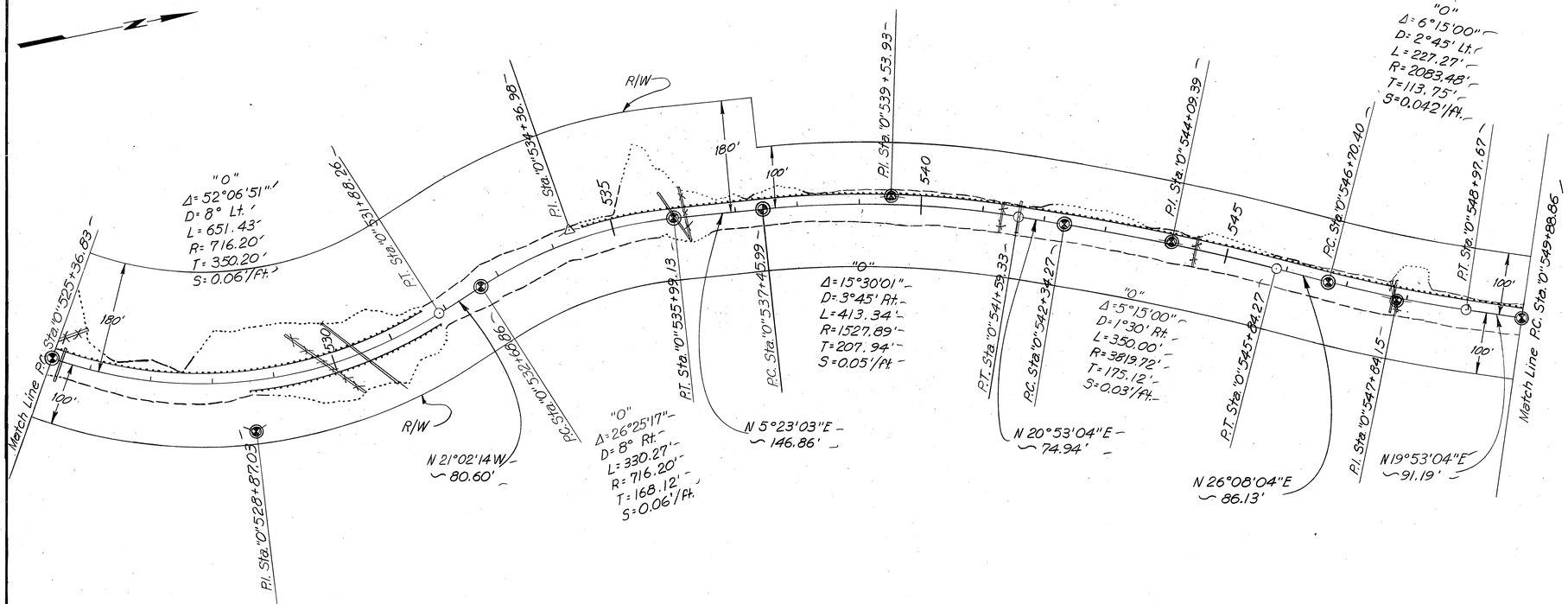
Note: For Gabion details see sht. #30

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

PROFILE
NOTE BOOK
NO.
SURVEYED
PLOTTED
GRADES CHECKED
B.M. NOTES
STRUCTURE NOTATIONS CH'KD.
BY
DATE

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	ALS-0999(12)	1974	23	~~47~~ 48

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

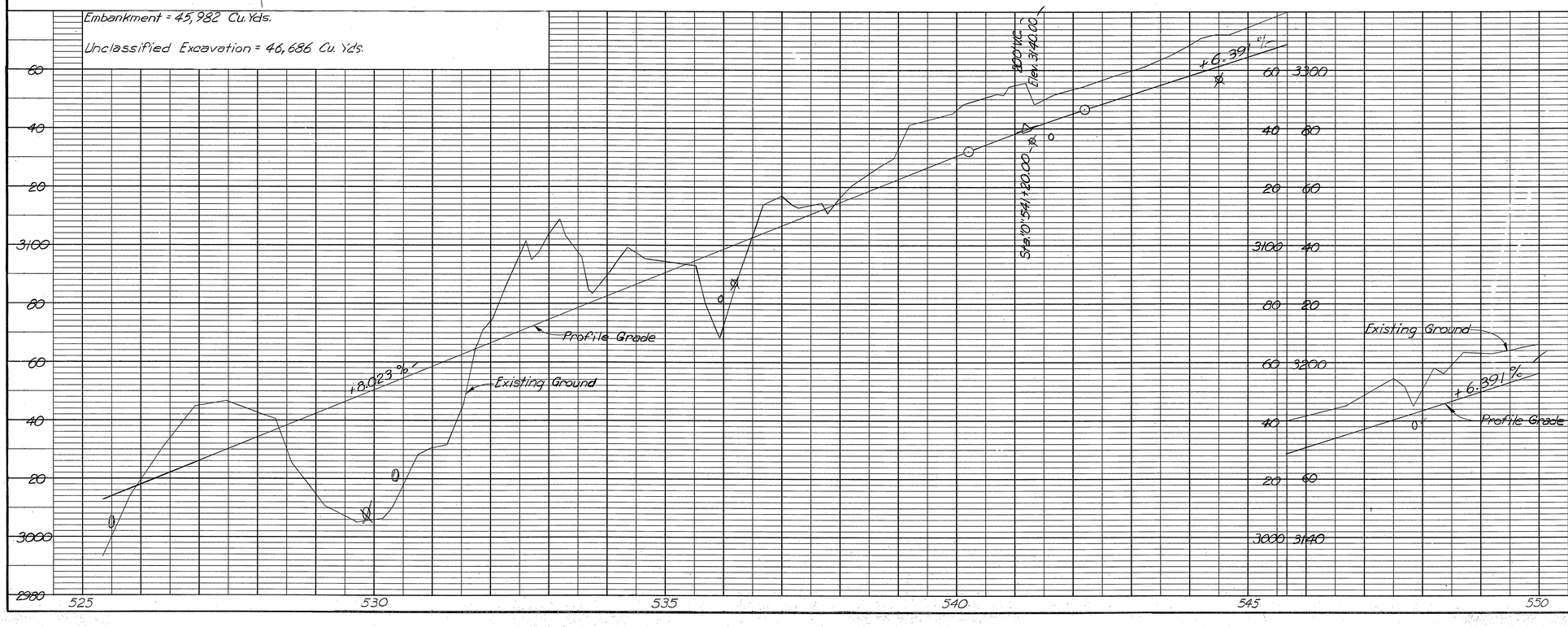


73

PROFILE — SURVEYED ___ PLOTTED ___ GRADES CHECKED ___ B. Ms. NOTED ___ STRUCTURE NOTATNS CHKD. ___ NOTE BOOK ___ NO. ___ DATE ___ BY ___

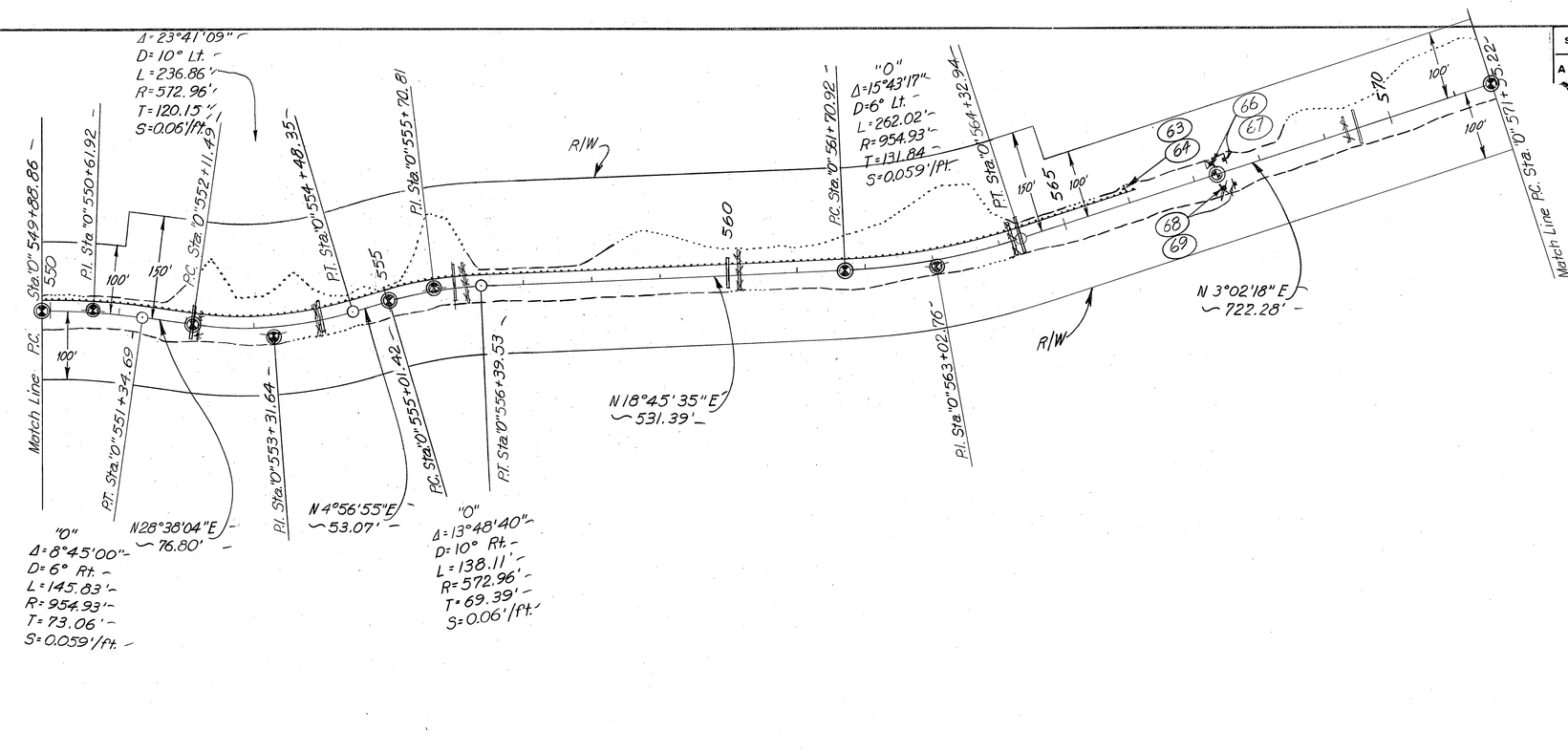
Embankment = 45,982 Cu. Yds.

Unclassified Excavation = 46,686 Cu. Yds.

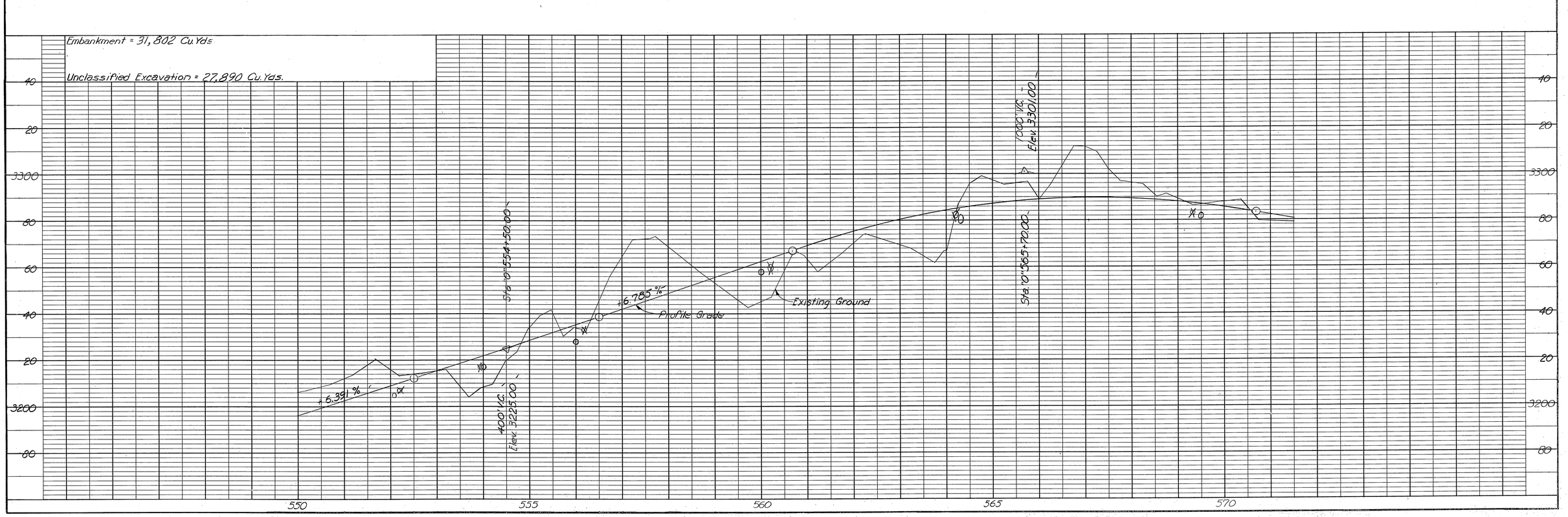


STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	ALS-0999(12)	1974	24	47 48

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



PROFILE
NOTE BOOK
NO.
SURVEYED
PLOTTED
DRAWN BY
E. M.L. NOTED
STRUCTURE NOTATIONS CHKD.
BY
DATE



STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	S-0999(8)	1974	25	~~47~~ 48

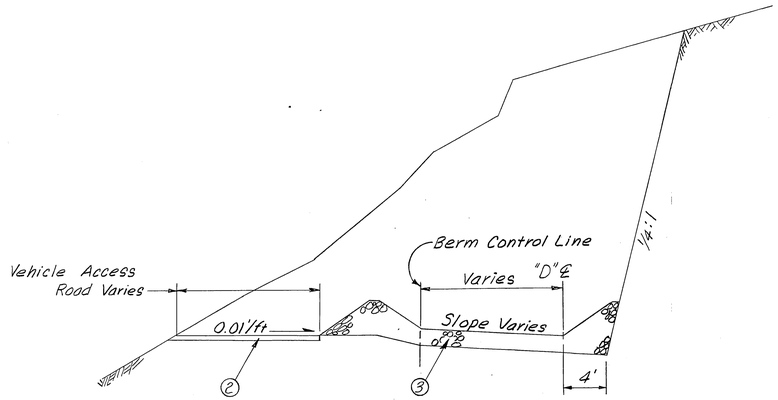
"O"
Δ= 12°34'13.8"
D= 2° Lt.
L= 628.52'
R= 2864.79'
T= 315.53'
S= 0.035'/ft.
Sta. "O" 571+53.22
P.C.
Match Line
P.I. Sta. "O" 574+70.75
P.T. Sta. "O" 577+83.74
575
580
585
590
R/W
100'
N 9° 31' 55.8" W
769.83'
P.C. Sta. "O" 585+53.57
P.C. Sta. "O" 585+56.41
P.I. Sta. "O" 588+14.81
Δ= 30°35'58.6"
D= 6° Rt.
L= 509.99'
R= 954.93'
T= 261.24'
S= 0.059'/ft.
P.T. Sta. "O" 589+69.21
P.T. Sta. "O" 590+63.36
P.I. Sta. "O" 587+34.9
Δ= 21°10'06"
D= 6° Rt.
T= 178.5
L= 352.8
N 21°04'02.8 E
22.94'
Red = Canadian Realignment
B.C. 2002+36.88
E.C. 2003+13.07
P.I. 2002+75.00
B.C. 2007+82.23
UNITED STATES
CANADA
N 39°06'26.9"W
Δ= 21°31'00"
Dc= 5° Rt
Lc= 430.0
TL= 217.61
Δ= 05°20'00"
Dc 17° Lt.
Lc= 76.19
TL= 38.14
65
70
71
END OF PROJECT
S-0999(8)
STA."O"590+86.50
Embankment = 23,440 Cu. Yds.
Unclassified Excavation = 22,053 Cu. Yds.
-3.496%
Existing Ground
Profile Grade
200' V.C.
Elev. 3258.00
Sta. "O" 578+00.00
-6.632%
Sta. "O" 583+16.29
600' V.C.
Elev. 3223.76
+6.201%
200' V.C.
Elev. 3252.99
Sta. "O" 587+87.70
-1.790%
Elev. 3247.64
20
3300
80
60
40
20
3200
80
60
570
575
580
585
590

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

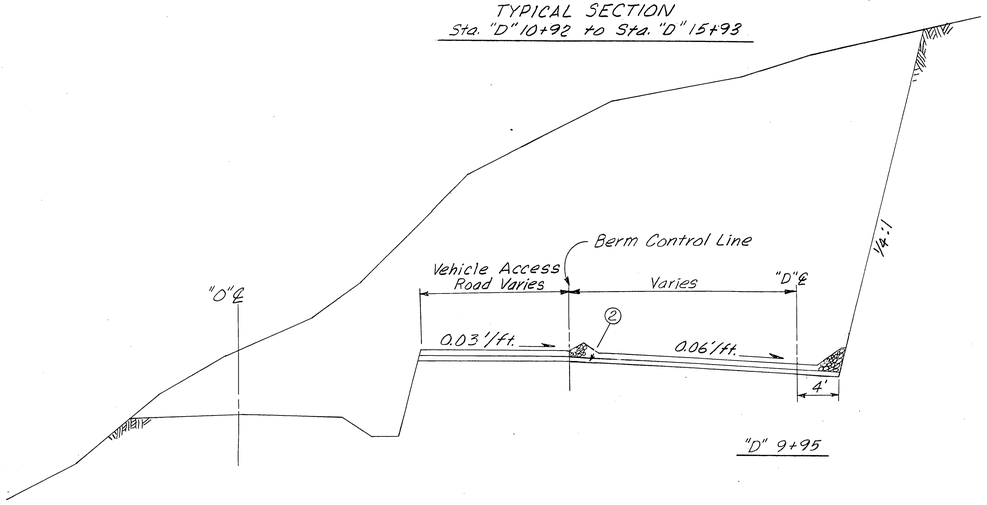
PROFILE — NOTE BOOK — NO. — SURVEYED — PLOTTED — GRADES CHECKED — B. Ms. NOTED — STRUCTURE NOTA'NS CH'K'D — BY — DATE

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	ALS-0999(12)	1974	26	~~47~~ 48

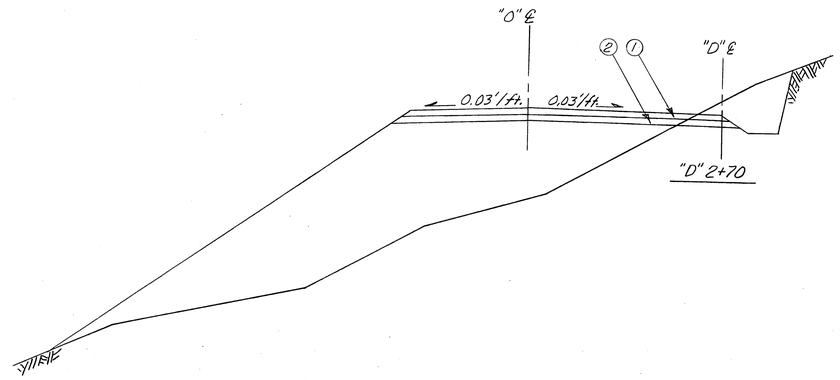
EMERGENCY ESCAPE RAMP DETAILS STA. "O" 335 ±



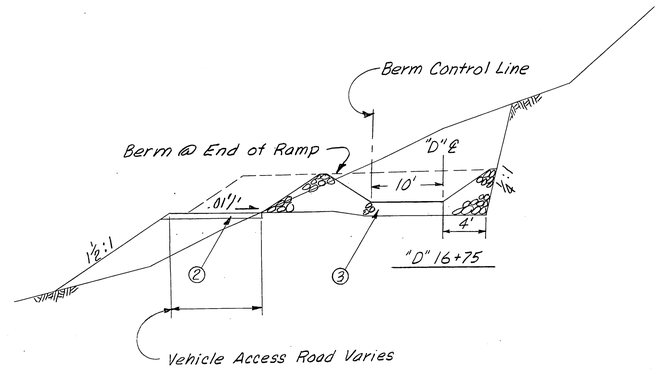
TYPICAL SECTION
Sta. "D" 10+92 to Sta. "D" 15+93

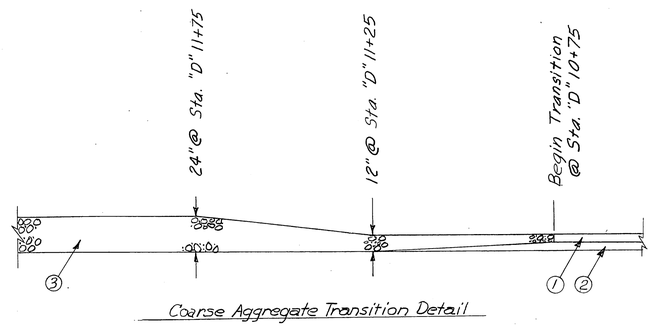


"D" 9+95

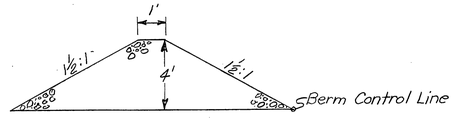


"D" 2+70





Coarse Aggregate Transition Detail



Berm Detail

Begin Berm @ "D" 9+50 & Transition to full berm @ "D" 10+75

LABEL INDEX

① 6" Subbase Grading "D"
② 6" Subbase Grading "A"
③ 24" Coarse Aggregate

Note: Transition uniformly the access road surfacing from ① and ② at "D" Sta. 9+92 to ② at "D" Sta. 11+00

K&E 19 1252 5-71 45995•

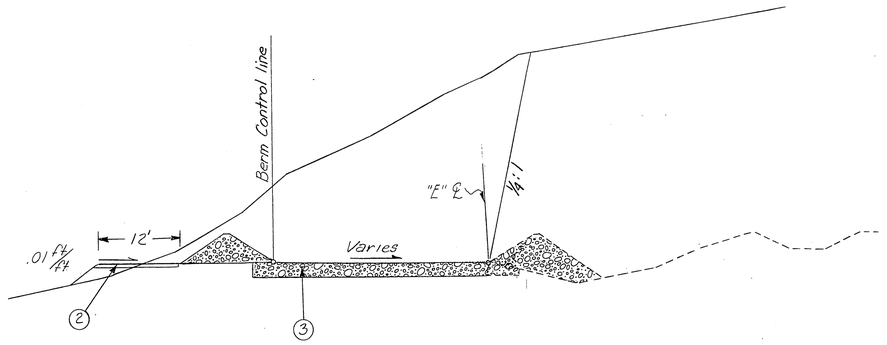
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	ALS-0999(12)	1974	27	~~47~~ 48

EMERGENCY ESCAPE RAMP DETAILS "D" LINE

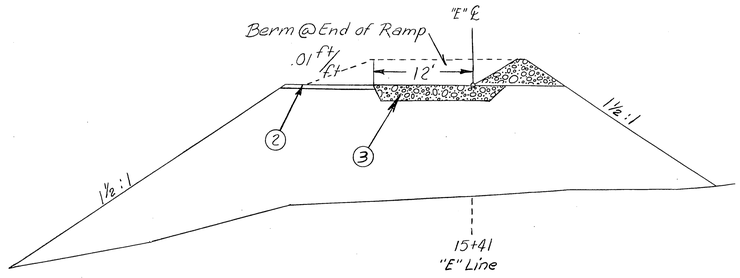
See Sheet 15 for Geometrics
S 64°47'08"E ~ 10.00'
End of 'D' Line Sta. "D" 16+75.00
S 25°12'47"W ~ 346.39'
Sta. "D" 13+28.61 P.T.
"D" Line
Δ = 13°15'25.4"
D = 2° Rt.
R = 2864.79'
T = 332.91'
L = 662.85'
S = 0.06'/ft.
Sta. "D" 10+75 Begin 24" Course Aggregate & berm transition. See Course Aggregate Detail sht. #26
Sta. "D" 9+55 Begin Berm
Sta. "D" 6+65.76 P.C.
Sta. "O" 339+60.41 P.O.T. = Sta. "D" 0+00 - 14.00' Lt.
N 26°04'38"E ~ 598.59'
See Berm typical, sht. #26
R/W
End Berm Control line
Vehicle Access Road
N 16°37'44"E ~ 99.52'
Begin Berm Control Line
Note: Use excess material to construct vehicle access road as directed by the engineer.
Sta. "O" 327+35.42 P.I.
Berm Angle Point Δ = 9°26'54" Lt.
S 11°57'21"W ~ 665.76'
Edge of traveled way
Sta. "D" 9+98.67 P.I.
N 9°06'17"E ~ 385.83'
"O" Line
Δ = 0°33'38"
D = 1° Rt
T = 28.03'
L = 56.06'
R = 5729.578'
N 9°39'55"E ~ 1734.58'
N 80°20'05"W ~ 14.00'
Sta. "O" 327+07.39 P.C.
Sta. "O" 327+63.44 P.T.
325
330
335
340
R/W
PLAN
PROFILE
1880
1860
1840
1820
1800
1780
+5.00%
Sta. "D" 14+50
+17.00%
100' V.C. Elev. 1820.45
453' Unsymmetrical V.C. (100'+353') Elev. 1743.10
Profile Grade
-8.30%
Sta. "D" 9+95
15+00
10+00
5+00
1+00
0+00

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	AL S-0999(12)	1974	28	~~47~~ 48

EMERGENCY ESCAPE RAMP DETAILS STA. "O" 445 ±



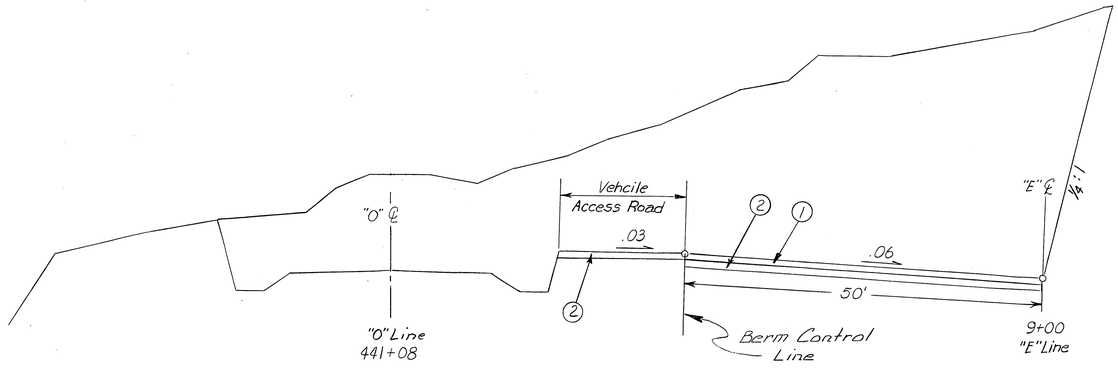
TYPICAL SECTION
"E" STA. 10+46 to "E" STA. 14+42

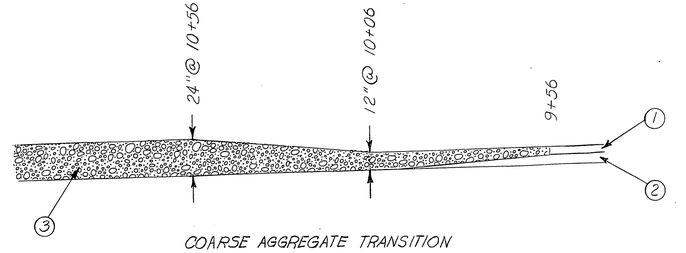


LABEL INDEX

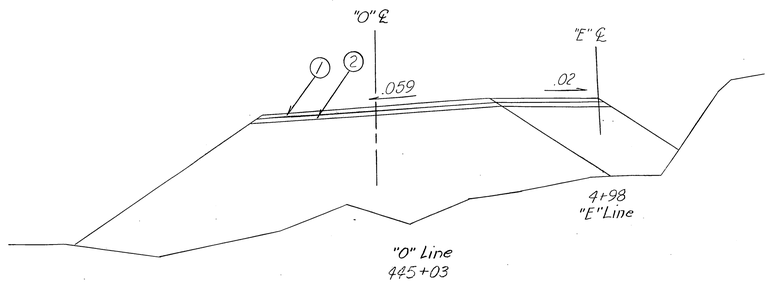
① 6" Subbase Grading "D"
② 6" Subbase Grading "A"
③ 2' Coarse Aggregate

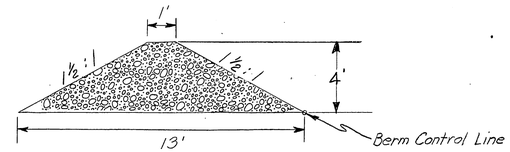
Notes: Transition uniformly the Vehicle Access Road Surfacing from ① and ② At "E" Sta. 8+45 to ② At "E" Sta. 9+00





COARSE AGGREGATE TRANSITION DETAIL





Berm Detail

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	ALS-0999(12)	1974	29	AT A8

EMERGENCY ESCAPE RAMP DETAILS "E" LINE

S 41° 06' 52.2" W ~ 259.43'

R/W

See Berm typical sht. #28

P.T. Sta."E" 12+83.57

"E" Line
Δ = 17° 33' 03.10"
D = 4° Rt.
L = 438.77'
R = 1,432.39'
T = 221.12
S = 0.06'/ft.

Sta."E" 9+50 Begin 6" Course Aggregate for berm transition. See Course Aggregate Detail sht. #28

P.C. Sta."E" 8+44.80

S 23° 33' 49.1" W ~ 297.23

Angle Point Sta."E" 5+47.57
Δ = 3° 26' 39" Lt.

S 27° 00' 28.1" W ~ 93.91

P.T. Sta."E" 4+53.66

"E" Line
Δ = 14° 23' 11.10"
D = 4° Rt.
L = 359.66'
R = 1,432.39'
T = 180.78'
S = 0.06'/ft.

P.I. Sta."E" 2+74.78

P.O.T. Sta."O" 449+07.19
P.C. Sta."E" 0+94.00, 13.70' Lt.

N 77° 28' 15.9" W ~ 13.70'

R/W

End of "E" Line Sta."E" 15+43.00

Note: Use excess material to construct vehicle access road as Directed by the Engineer.

Vehicle Access Road

S 40° 39' 12.4" W ~ 343.48

P.I. Sta."E" 10+65.92

P.C. Sta."O" 434+04.26

P.T. Sta."O" 437+35.69

Edge of Traveled Way

435

440

445

450

P.I. Sta."O" 435+71.66

N 11° 21' 10" E ~ 523.51'

R/W

P.C. Sta."O" 442+59.20

P.I. Sta."O" 443+55.70

P.T. Sta."O" 444+51.55

P.C. Sta."O" 446+38.59

P.I. Sta."O" 447+25.20

N 22° 53' 38" W ~ 187.05'

N 12° 31' 44" E ~ 239.95'

P.T. Sta."O" 448+11.34

R/W

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

PROFILE
SURVEYED
PLOTTED
BRIDGES CHECKED
ALIGNMENT CHECKED
STRUCTURE NOTATNS CHKD.
NOTE BOOK
NO.

"E" 15+00
"E" 10+00
"E" 5+00
"E" 1+00

2600
80
60
40
20
2500

+7.939 %

Sta."E" 11+89.00

Unsymmetrical 9° V.C.
Elev. 2561.25

-8.807 %

345' Unsymmetrical V.C.
Elev. 2520.24

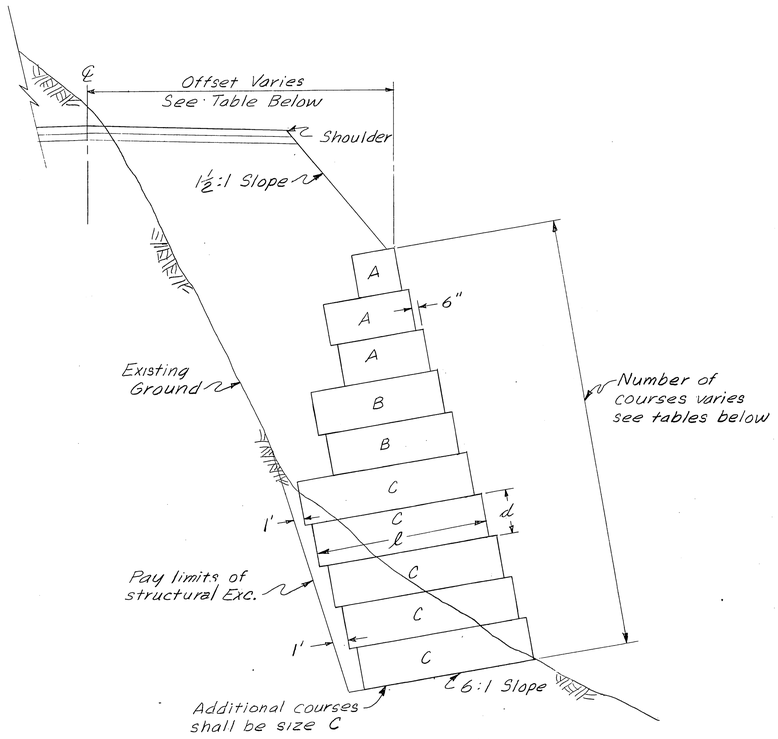
-6.890 %

Sta."E" 9+43.00

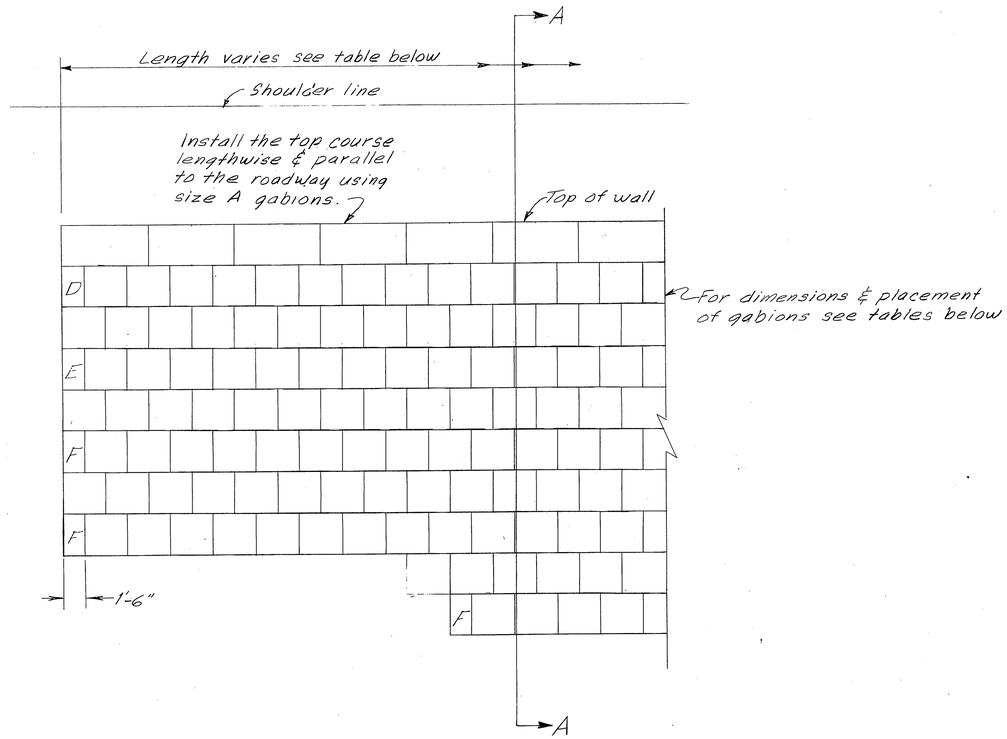
435
440
445

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	ALS-0999(12)	1974	30	~~47~~ 48

GABION WALL DETAILS



SECTION A-A



ELEVATION

GABION WALLS

STATION From	Lt/Rt	STATION To	Lt/Rt	No. Courses	Structural Exc. C.Y.	Gabion C.Y.	Length Gabions
"0" 114+54	22'Rt	"0" 114+81	22'Rt	4	↑	↑	↑
"0" 114+81	22'Rt	"0" 115+01	22'Rt	5			
"0" 115+01	22'Rt	"0" 115+18	22'Rt	6			
"0" 115+18	22'Rt	"0" 115+37	22'Rt	7			
"0" 115+37	22'Rt	"0" 115+60	22'Rt	8			
"0" 115+60	22'Rt	"0" 115+80	22'Rt	9			
"0" 115+80	22'Rt	"0" 116+00	22'Rt	10	1211	2792	285
"0" 116+00	22'Rt	"0" 116+31	22'Rt	11	↓	↓	↓
"0" 116+31	22'Rt	"0" 116+69	22'Rt	12			
"0" 116+69	22'Rt	"0" 116+97	22'Rt	13			
"0" 116+97	22'Rt	"0" 117+11	22'Rt	14			
"0" 117+11	22'Rt	"0" 117+22	22'Rt	15			
"0" 117+22	22'Rt	"0" 117+39	22'Rt	16			
"0" 145+80	43'Rt	"0" 146+40	43'Rt	4	67	140	60
"0" 175+25	31'Rt	"0" 176+15	31'Rt	3	87	120	90
"0" 186+80	40'Rt	"0" 187+45	40'Rt	5	125	215	65
"0" 207+65	24'Rt	"0" 208+46	24'Rt	3	77	108	81
"0" 211+12	34'Rt	"0" 212+02	34'Rt	9	279	779	90
"0" 392+24	32'Rt	"0" 393+53	40'Rt	7	466	775	129
"0" 514+44	30'Lt	"0" 514+56	30'Lt	2	12	36	33
"0" 514+56	30'Lt	"0" 514+77	30'Lt	3			
			Total		2324	4965	

NOMINAL GABION SIZES	
SIZE	Nominal Dim. ℓ' x w' x d'
A	6'x 3'x 3'
B	9'x 3'x 3'
C	12'x 3'x 3'
D	6'x 1.5'x 3'
E	9'x 1.5'x 3
F	12'x 1.5'x 3'

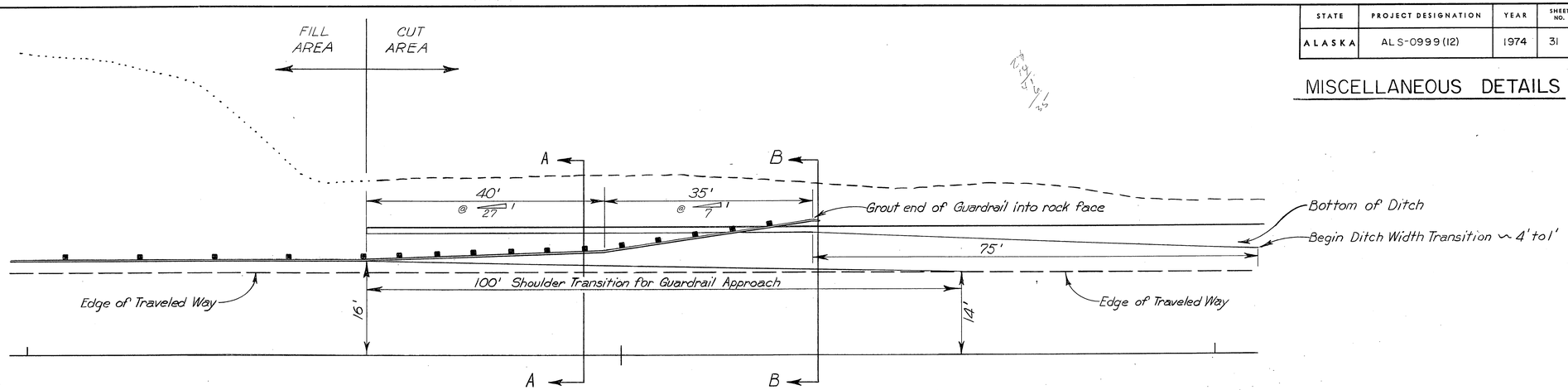
NOTE

1. The elevation at the bottom of the Gabion Walls shall be considered approximate. In the event the project engineer deems it necessary to secure a more satisfactory foundation, he may change the dimensions and/or elevations of the gabion walls.

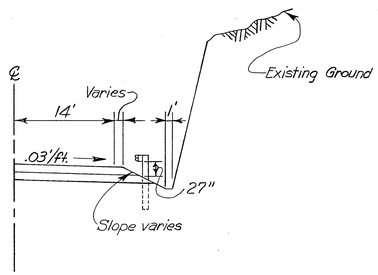
2. Field slopes through Gabion areas will be 1½:1.

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	ALS-0999(12)	1974	31	47 48

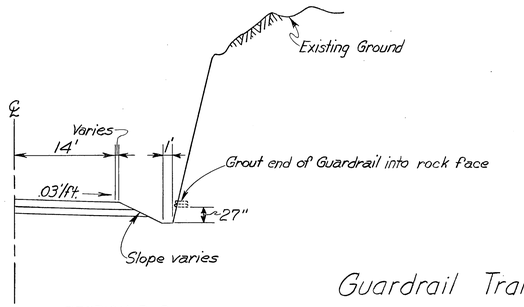
MISCELLANEOUS DETAILS



PLAN



SECTION A-A

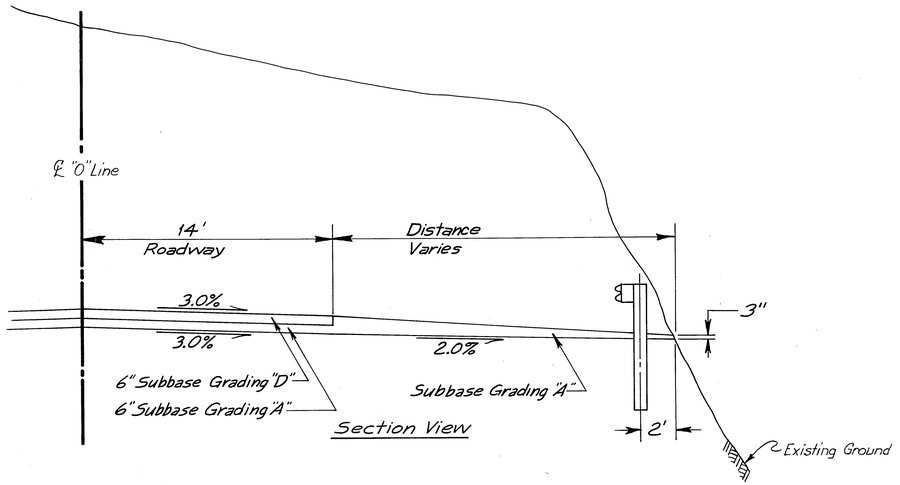


SECTION B-B

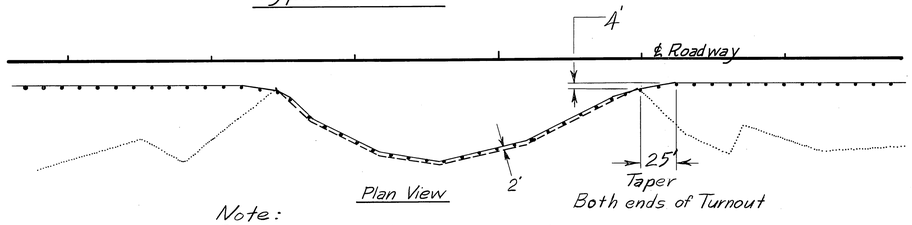
Guardrail Transition & Guardrail End Burial Details
Cut to Fill Sections

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	ALS-0999(12)	1974	32	47/48

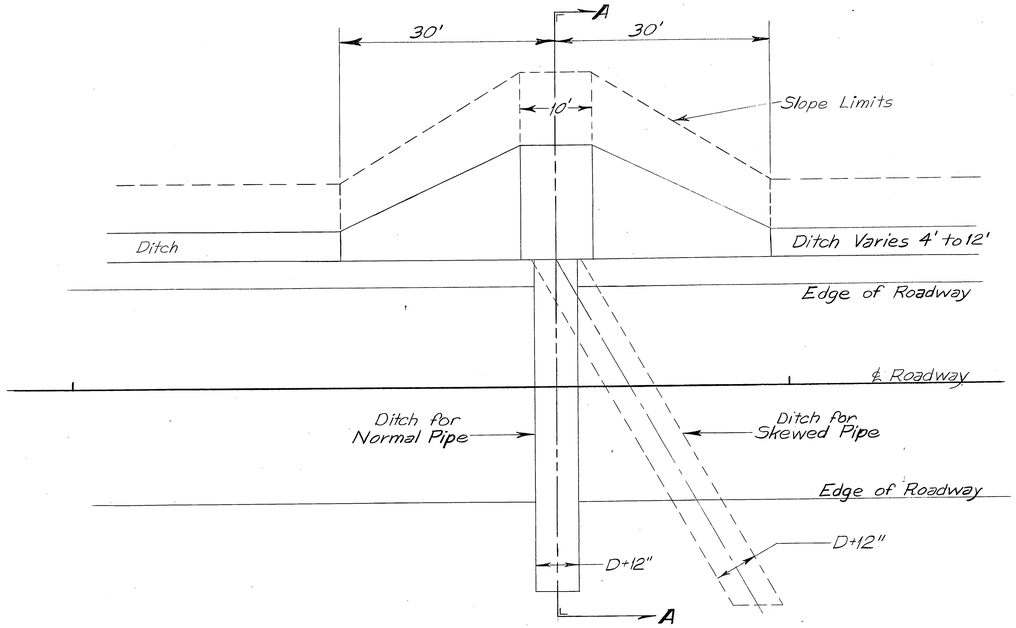
MISCELLANEOUS DETAILS



Typical Turnout

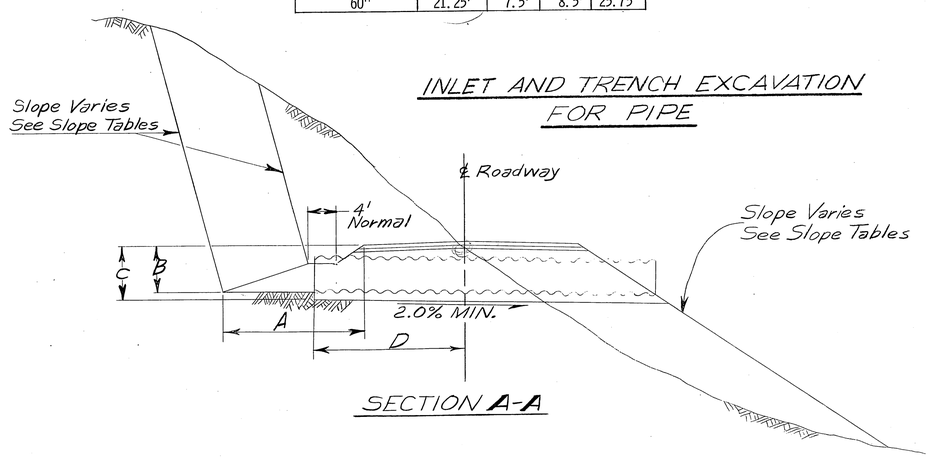


Note:
Subbase Grading "A" will be required:
a. At specified turnouts. (See Guardrail Summary)
b. At daylite sections where no guardrail is specified



Pipe Size "D"	"A"	"B"	"C"	"D"
24"	16.75'	4.5'	5.5'	20.75'
36"	18.25'	5.5'	6.5'	22.25'
48"	19.75'	6.5'	7.5'	23.75'
60"	21.25'	7.5'	8.5'	25.75'

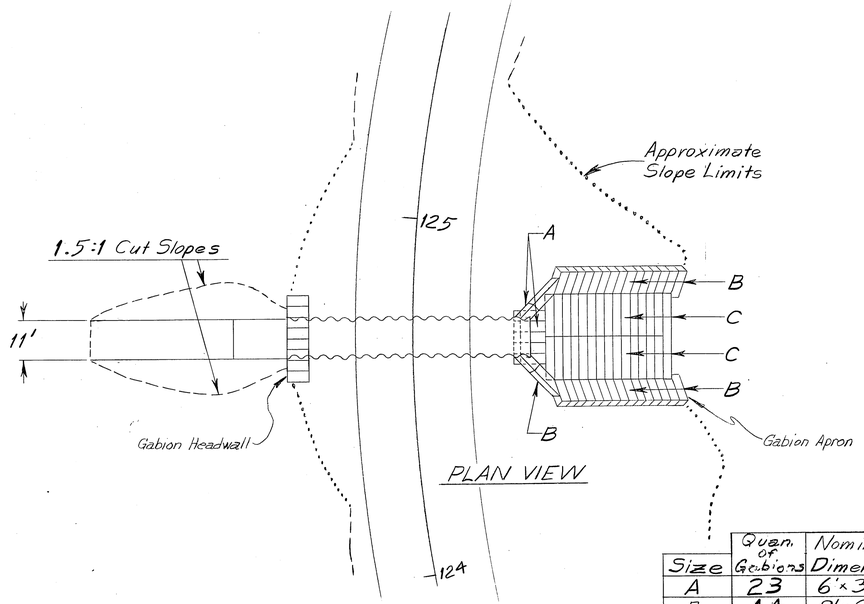
INLET AND TRENCH EXCAVATION FOR PIPE



SECTION A-A

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	ALS-0999(12)	1974	33	AT 48

DRAINAGE DETAILS



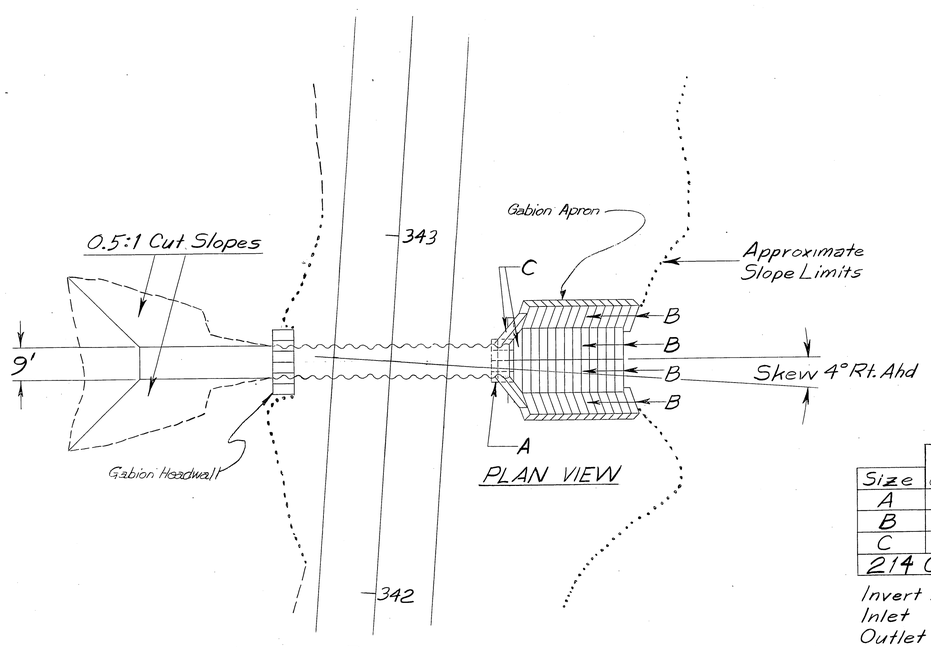
PLAN VIEW

Size	Quan. of Gabions	Nominal Dimensions
A	23	6'×3'×3'
B	44	9'×3'×3'
C	30	12'×3'×3'
298 Cu. Yds. Total		

Installation Detail
11' Dia. × 68' S.P.P.
Sta. "0" 124+66.50

Invert Elevations
Inlet 639.00
Outlet 637.64

Design Data
D.A. = 3.3 Mi²
Q_{50} = 900 CFS
D.H.W. = 650.0
V_{MAX} = 18 fps



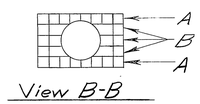
PLAN VIEW

Size	Quan. of Gabions	Nominal Dimensions
A	24	6'×3'×3'
B	50	9'×3'×3'
C	4	12'×3'×3'
214 Cu. Yds. Total		

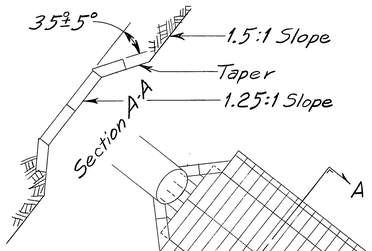
Installation Detail
9' Dia × 66' S.P.P.
Sta. "0" 342+65
Skew 4° Rt. Ahd.

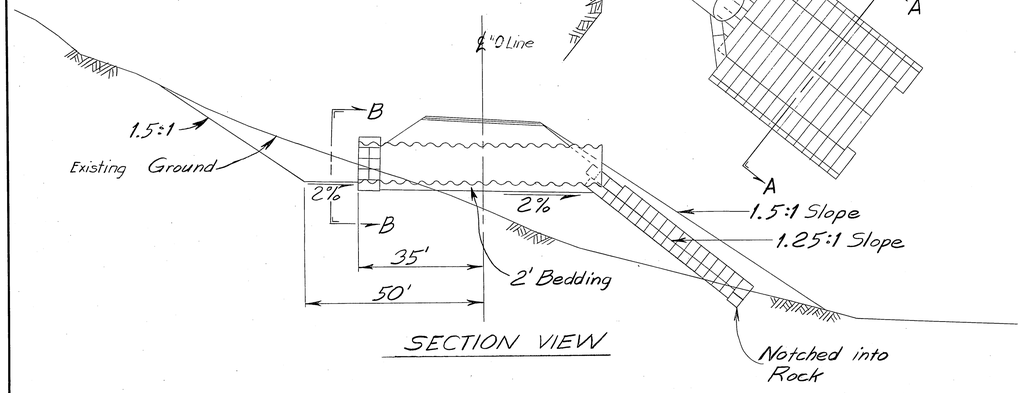
Invert Elevations
Inlet 1834.00
Outlet 1832.68

Design Data:
D.A. = 1.6 Mi²
Q_{50} = 500 C.F.S.
D.H.W. = 1843.0
V_{MAX} = 16 fps

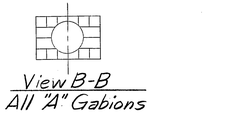


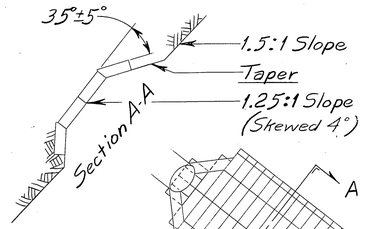
View B-B

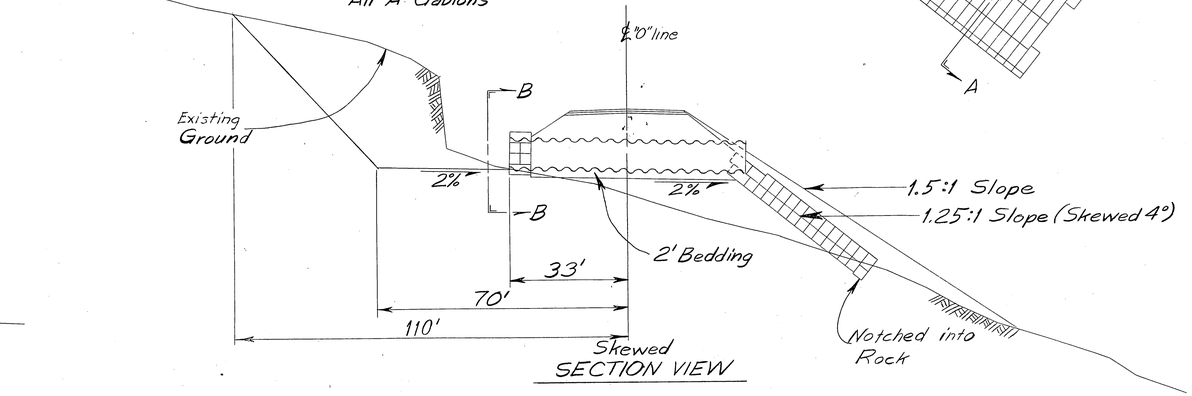




SECTION VIEW



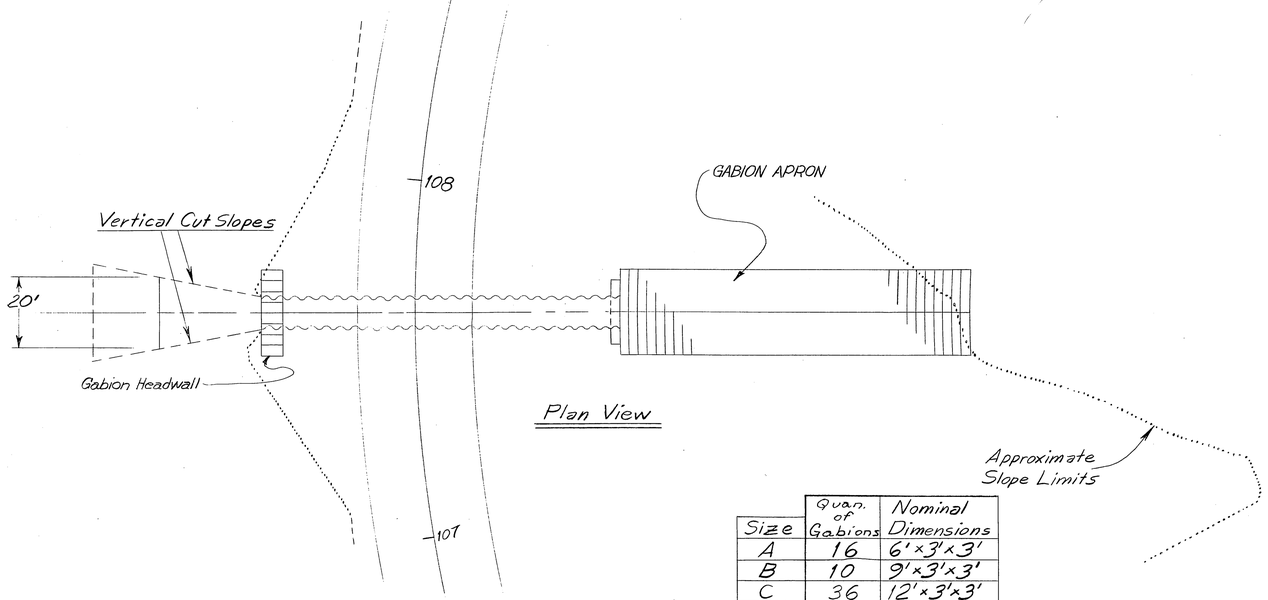




Skewed
SECTION VIEW

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	ALS-0999(12)	1974	34	~~47~~ 48

DRAINAGE DETAILS

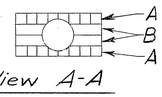


Plan View

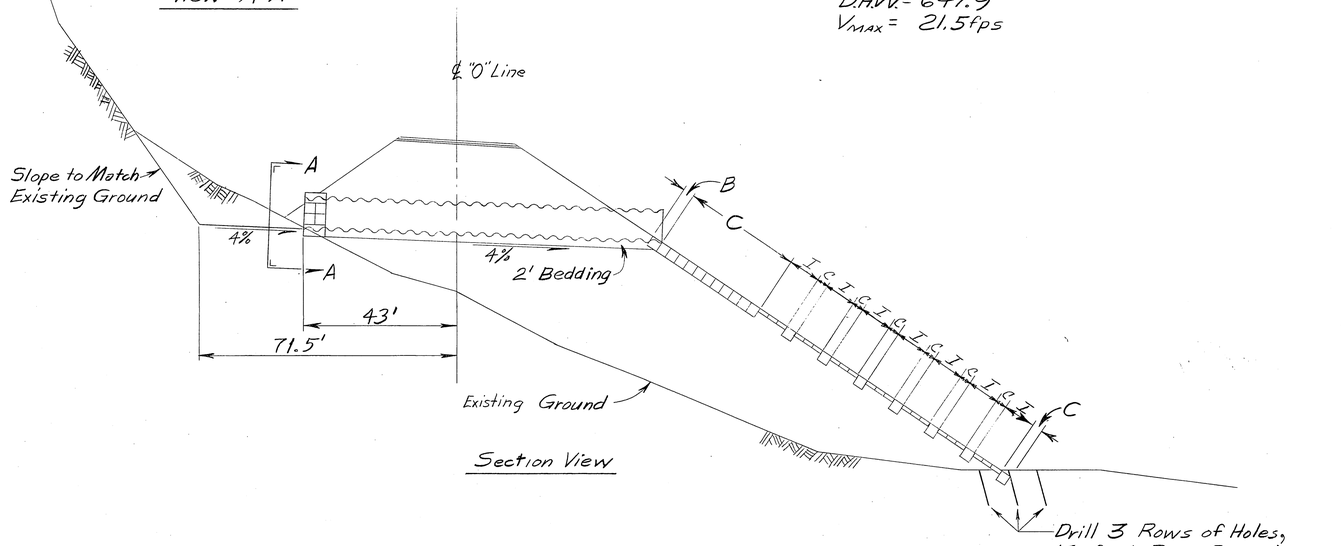
Size	Quan. of Gabions	Nominal Dimensions
A	16	6'×3'×3'
B	10	9'×3'×3'
C	36	12'×3'×3'
I	42	12'×3'×1'
246 Cu. Yds. Total		

Installation Detail
8' Dia ×100' S.P.P.
Sta. "0" 107+63

Invert Elevations
Inlet 642.5
Outlet 638.5
Design Data:
D.A. = 0.6 Mi²
Q_{50} = 230 CFS
D.H.W. = 647.9
V_{MAX} = 21.5 fps



View A-A



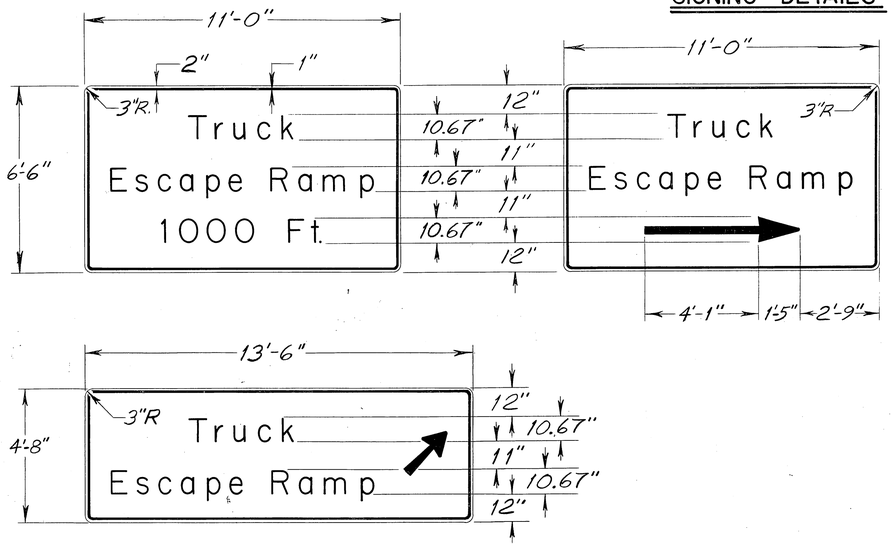
Section View

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	ALS-0999(12)	1974	35	48

SIGNING SCHEDULE

No.	Station	Dist. from ℄ Lt.	Dist. from ℄ Rt.	Code Number	Legend	Sign Panel Thickness Size	Unframed	Framed	S. F.	Post No. of Posts	Type	Size	Length	Embedment	Facing Traffic	Remarks
1	"0" ~~93+00~~ 92+90		19	R2-1	Speed Limit 40	30"x36"	.063		7.5	1	Tube	2"	14.0	3.0	NB	
2	"0" 93+00	19		R2-1	Speed Limit 40	30"x36"	.063		7.5	1			14.0	3.0	SB	
3	"0" 99+50		19	W1-5R	Winding Road	36"x36"	.063		9.0	1			14.0	3.0	NB	
4	"0" 99+50			W13-1	30 MPH	24"x24"	.063		4.0						NB	Mount Under W1-5R
5	"0" 119+00	16		W1-5L	Winding Road	36"x36"	.063		9.0	1			14.0	3.0	SB	
6	"0" 119+00			W13-1	30 MPH	24"x24"	.063		4.0						SB	Mount Under W1-5L
7	"0" 128+00	16		W1-1L	Curve Sign	36"x36"	.063		9.0	1			14.0	3.0	SB	
8	"0" 128+00			W13-1	30 MPH	24"x24"	.063		4.0						SB	Mount Under W1-1L
9	"0" 173+50		19	R2-1	Speed Limit 40	30"x36"	.063		7.5	1			14.0	3.0	NB	
10	"0" 173+~~50~~ 60	19		R2-1	Speed Limit 40	30"x36"	.063		7.5	1			14.0	3.0	SB	
11	"0" 176+00	16		W7-1	Hill Sign	36"x36"	.063		9.0	1			14.0	3.0	SB	
12	"0" 176+00			W7-1A	Use Low Gear	24"x18"	.063		3.0						SB	Mount Under W7-1
13	"0" 262+~~00~~ 10		19	R2-1	Speed Limit 40	30"x36"	.063		7.5	1			15.0	3.0	NB	
14	"0" 262+00	16		R2-1	Speed Limit 40	30"x36"	.063		7.5	1			14.0	3.0	SB	
15	"0" ~~282+25~~ 281+50		19	H1-1B	Trail of '98 1,000 Ft.	48"x42"	.063		14.0	1			15.0	3.0	NB	
16	"0" ~~290+75~~ 291+50		19	H1-1AR	Trail of '98 →	48"x42"	.063		14.0	1			16.0	3.0	NB	
17	"0" ~~299+50~~ 300+00	16		H1-1AL	Trail of '98 ←	48"x42"	.063		14.0	1			15.0	3.0	SB	
18	"0" 308+00	16		H1-1B	Trail of '98 1,000 Ft.	48"x42"	.063		14.0	1			15.0	3.0	SB	
19	"0" 329+90	18		Special	Truck Escape Ramp →	Special		.125	71.5	2	Pipe	5"	*	5.5	SB	*Post Lengths
20	"0" 329+90			R8-3	No Parking	24"x30"	.063		5.0						SB	Mount Under Sign No. 19
21	"0" 329+90			R8-3	No Parking	24"x30"	.063		5.0						NB	Mount Under Sign No. 19
22	"0" 334+30	31		R8-3	No Parking	24"x30	.063		5.0	1	Tube	2"			WB	
23	"0" 338+10	26		Special	Truck Escape Ramp ←	Special		.125	63.5	3	Pipe	5"	*	5.5	SB	*Post Lengths 19', 20', 18'
24	"0" 338+10			R8-3	No Parking	24"x30"	.063		5.0						SB	Mount Under Sign No. 23
25	"0" 338+10			R8-3	No Parking	24"x30"	.063		5.0						NB	Mount Under Sign No. 23
26	"0" 348+10	16		Special	Truck Escape Ramp 1000 ft.	Special		.125	71.5	2	Pipe	5"	*	5.5	SB	*Post Lengths 20', 20'
27	"0" 364+50	16		Special	Truck Escape Ramp ½ Mile	Special		.125	71.5	2	Pipe	5"	*	5.5	SB	*Post Lengths 16', 18'
28	"0" 379+75		19	W1-4L	Reversed Curve	36"x36"	.063		9.0	1	Tube	2"	14.0	3.0	NB	
29	"0" 379+75			W13-1	35 MPH	24"x24"	.063		4.0						NB	Mount Under W1-4L
30	"0" 391+00	18		W1-4L	Reversed Curve	36"x36"	.063		9.0	1			14.0	3.0	SB	
31	"0" 391+00			W13-1	30 MPH	24"x24"	.063		4.0						SB	Mount Under W1-4L
32	"0" 398+20		19	T1-1	Moore Creek	39"x24"	.063		6.5	1			15.0	3.0	NB	6" U.C. & 4½" L.C. Letters
33	"0" 401+14	19		T1-1	Moore Creek	39"x24"	.063		6.5	1			15.0	3.0	SB	6" U.C. & 4½" L.C. Letters
34	"0" 413+00		20	W1-4R	Reversed Curve	36"x36"	.063		9.0	1			15.0	3.0	NB	
35	"0" 413+00			W13-1	30 MPH	24"x24"	.063		4.0						NB	Mount Under W1-4R
36																
37																
38	"0" 430+00	17		W1-4R	Reversed Curve	36"x36"	.063		9.00				15.0	3.0	SB	
39	"0" 430+00			W13-1	25 MPH	24"x24"	.063		4.00						SB	Mount Under W1-4R
40	"0" 434+00	16		W7-1	Hill Sign	36"x36"	.063		9.0				14.0	3.0	SB	
41	"0" 434+00			W7-1A	Use Low Gear	24"x24"	.063		4.0						SB	Mount Under W7-1
42	"0" 440+70	78		Special	Truck Escape Ramp →	Special		.125	71.5	2	Pipe	5"	*	5.6	SB	*Post Lengths 18', 18'
43	"0" 440+70			R8-3	No Parking	24"x30"	.063		5						SB	Mount Under Sign No. 42
44	"0" 440+70			R8-3	No Parking	24"x30"	.063		5						NB	Mount Under Sign No. 42
45	"0" 444+80	35		R8-3	No Parking	24"x30"	.063		5	1	Tube	2"	15.0	3.0	WB	
46	"0" 448+50	16		Special	Truck Escape Ramp ↗	Special		.125	63.5	3	Pipe	5"	*	5.5	SB	*Post Length 17', 20', 23
47	"0" 448+50			R8-3	No Parking	24"x30"	.063		5						SB	Mount Under Sign No. 46
48	"0" 448+50			R8-3	No Parking	24"x30"	.063		5						NB	Mount Under Sign No. 46
49	"0" 452+50		18	W1-4L	Reversed Curve	36"x36"	.063		9.0	1	Tube	2"	15.0	3.0	NB	
50	"0" 452+50			W13-1	35 MPH	24"x24"	.063		4.0						NB	Mount Under W1-4L
51	"0" 458+50	16		Special	Truck Escape Ramp 1000 ft.	Special		.125	71.5	2	Pipe	5"	*	5.5	SB	*Post Lengths 18', 20'
52	"0" 472+40	16		Special	Truck Escape Ramp ½ Mile	Special		.125	71.5	2	Pipe	5"	*	5.5	SB	*Post Lengths 16', 18'
53	"0" 466+75	16		W1-4L	Reversed Curve	36"x36"	.063		9.0	1	Tube	2"	14.0	3.0	SB	
54	"0" 466+75			W13-1	35 MPH	24"x24"	.063		4.0						SB	Mount Under W1-4L
55	"0" 470+15		18	W1-5R	Winding Road	36"x36"	.063		9.0	1			15.0	3.0	NB	
56	"0" 470+15			W13-1	35 MPH	24"x24"	.063		4.0						NB	Mount Under W1-5R
57	"0" 505+85	18		W1-5L	Winding Road	36"x36"	.063		9.0	1			15.0	3.0	SB	
58	"0" 505+85			W13-1	30 MPH	24"x24"	.063		4.0						SB	Mount Under W1-5L
59																
60	"0" 118+90		19	W1-1R	Curve Sign	36"x36"	.063		9.0	1			14.0	3.0	NB	
61	"0" 118+90			W13-1	30 MPH	24"x24"	.063		4.0						NB	Mount Under W1-2R
62																
63	"0" 566+00	18		W7-1	Hill Sign	36"x36"	.063		9.0	1			15.0	3.0	SB	
64	"0" 566+00			W7-1A	Use Low Gear	24"x18"	.063		3.0						SB	Mount Under W7-1
65	"0" 585+00	19		R2-1	Speed Limit 40	24"x30"	.063		5.00	1			14.0	3.0	SB	
66	"0" 567+30 50	16		T1-2	White Pass	30"x36"	.063		7.5	1			14.0	3.0	SB	6" U.C. & 4½" L.C. Letters
67	"0" 567+30 50			T1-3	Elev 3290	14"x36"	.063		4.5						SB	4" U.C. & 3" L.C. Letters Mount Under T1-2
68	"0" 567+30 50		18	T1-2	White Pass	30"x36"	.063		7.5	1			14.0	3.0	NB	6" U.C. & 4½" L.C. Letters
69	"0" 567+30 50			T1-3	Elev 3290	14"x36"	.063		4.5						NB	4" U.C. & 3" L.C. Letters Mount Under T1-2
70	"0"590+75.61		19	T1-2	U.S.A.- CANADA BORDER	54"x36"	.063		13.5	1			16.0	3.0	SB	6" UC. & 4 1/2" L.C. Letters
71	"0"590+97.39	19		T1-2	U.S.A.- CANDA BORDER	54"x36"	.063		13.5	1			16.0	3.0	NB	6" U.C. & 4 1/2" L.C. Letters
	"0"395+42.00		19	W8-5	SLIPPERY WHEN WET + PAVEMENT				12.0					3.0	NB	
	"0"403+42.00	19		W8-5	SLIPPERY WHEN WET + PAVEMENT				12.0					3.0	SB	

SIGNING DETAILS

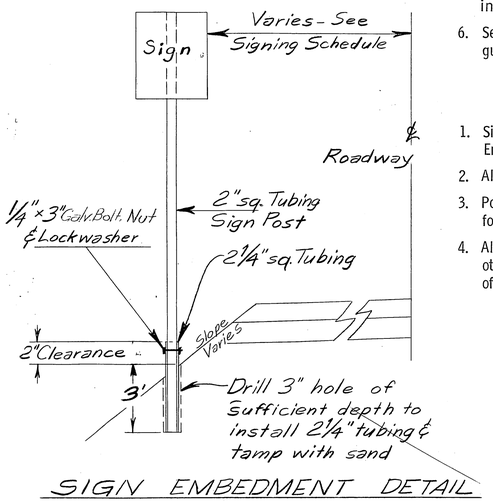


RAMP SIGNING NOTES

1. All escape ramp guide signs shall be 0.125" thickness aluminum.
2. All escape ramp guide signs shall be wind-braced as shown on Standard Drawing S-00.00.
3. All escape ramp guide signs shall have white letters, symbols, and borders on a green background.
4. All escape ramp guide sign lettering and arrows shall be Series D- 10.67" U.C., and 8" L.C.
5. All escape ramp guide sign posts shall be 5" pipe, with a concrete foundation and slip bases. Foundation and slip bases shall be installed in accordance with Standard Drawing S-30.00.
6. See Standard Drawing S-00.00 for post spacing on escape ramp guide signs.

GENERAL SIGNING NOTES

1. Sign locations are approximate only and shall be located by the Engineer.
2. All posts shall be 2" perforated galvanized tubing, 12 ga.
3. Posts shall be installed using the details on this sheet, except for those noted in the sign schedule as 5" pipe.
4. All sign blanks shall be 0.063" aluminum, unless indicated otherwise in the signing schedule, as indicated in Section 615 of the Standard Spec.

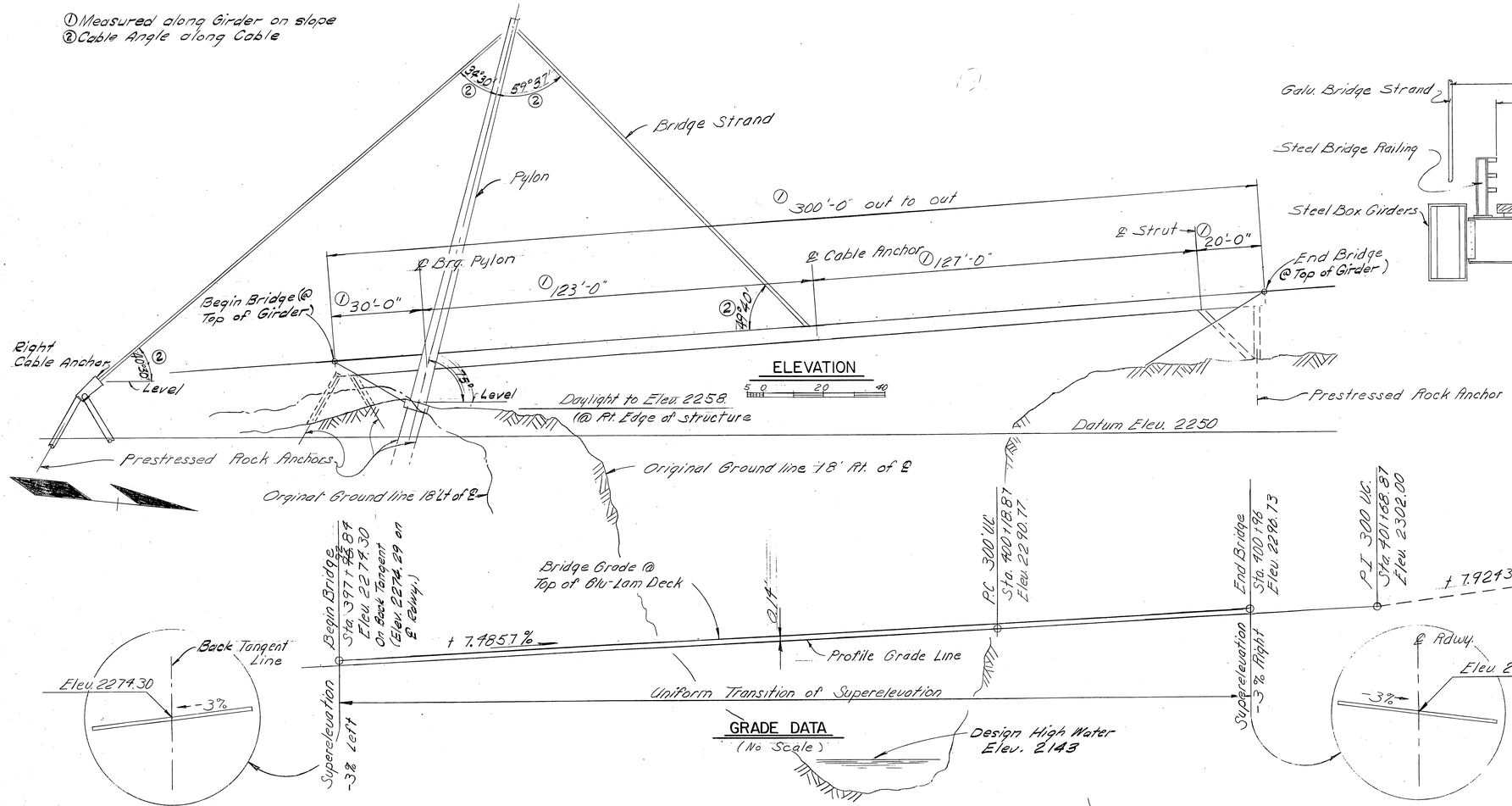


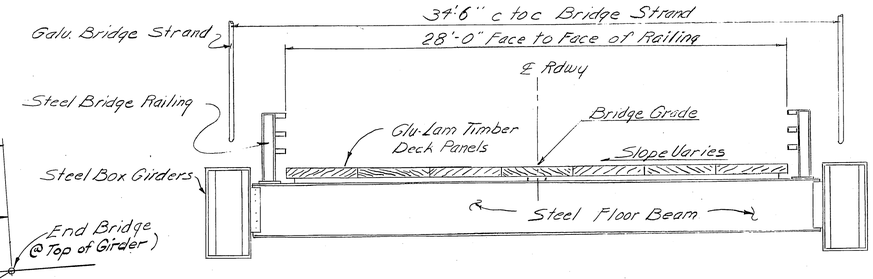
SIGN EMBEDMENT DETAIL

K&E 19 1252 5-71 45998-

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	ALS-0999(12)	1974	36	~~47~~ 48

① Measured along Girder on slope
② Cable Angle along Cable





TYPICAL SECTION

1 0 4 8 12

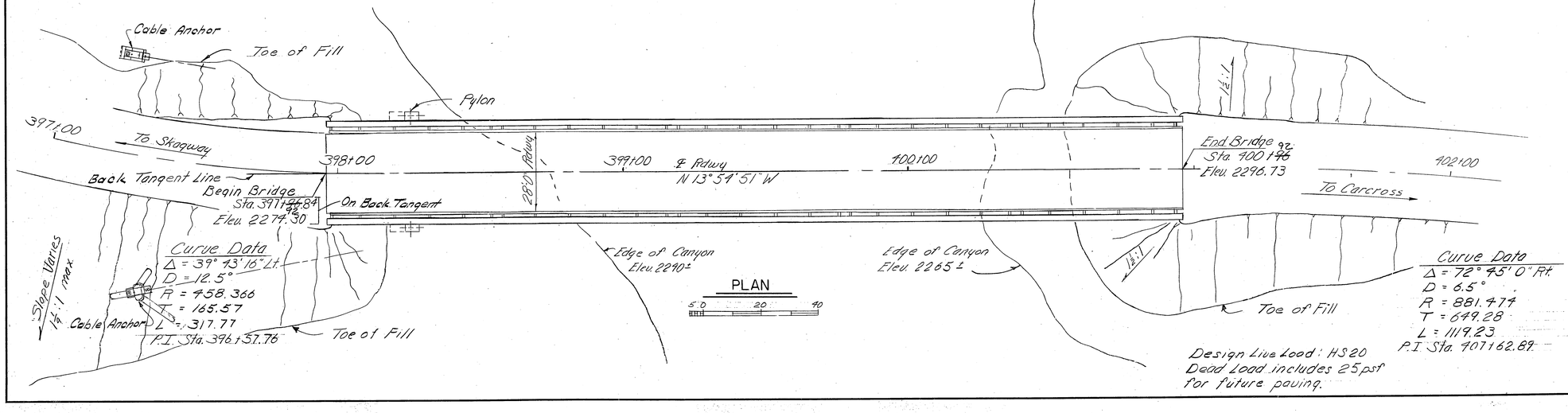
GEOMETRIC CONTROL

Bridge Stations, Elevations & Dimensions are based on the following four control points. Begin Bridge @ top of girder flanges. (17'3 Left & Right of back tangent line, Sta. 397+96.84, Elevation 2274.20) & End Bridge @ top of girder flanges (17'3 Left & Right of ℄ Roadway, Sta. 400+96.00, Elevation 2296.59.

?

Sheet Index

The following standard drawings apply to this Bridge 6"-04.00, 6"-10.00 & 6"-30.00



Design Live Load: HS20
Dead Load includes 25 psf for future paving.

CAPT. WILLIAM MOORE CREEK

ROUTE NO. S-999

GENERAL LAYOUT

State of Alaska
DEPARTMENT OF HIGHWAYS
Juneau, Alaska

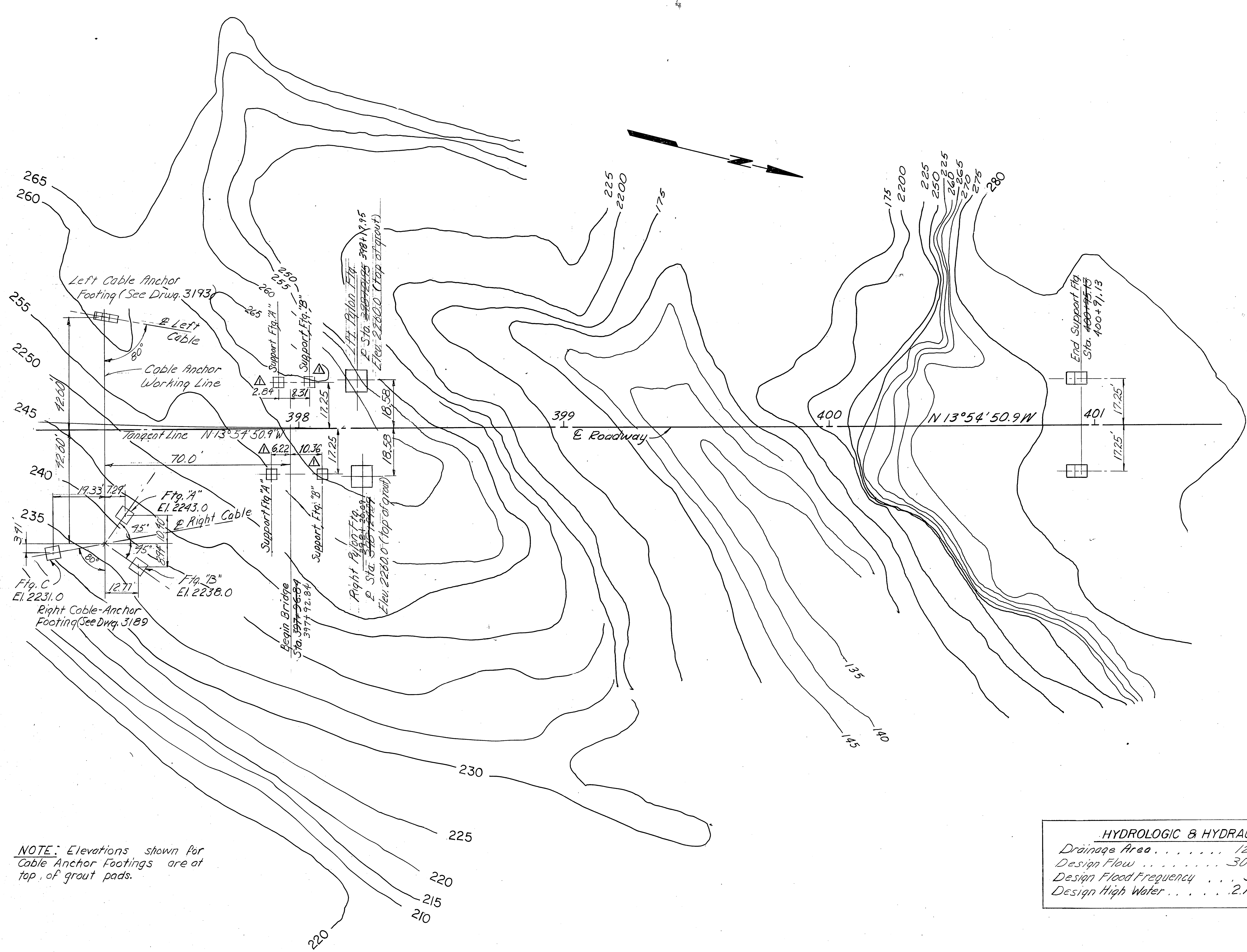
Date 7-18-74
Approved

BRIDGE NO. 1304
DWNG. NO. 3187

Designed By: [illegible] Date: 6-74
Detailed By: [illegible] Date: 6-74
Drawn By: [illegible] Date: 7-74
Checked By: RL Date: 7-74
Traced By: Date:

Addendum No 4

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	ALS-0999(12)	1974	37A	~~47~~ 48



NOTE: Elevations shown for Cable Anchor Footings are at top of grout pads.

SITE PLAN

10 0 20 40
Feet

GENERAL NOTES

Specifications

Design: A.A.S.H.O. Standard Specifications for Highway Bridges, 1969 Edition with latest interim specifications, except wheel load distributed in accordance with Forest Products Laboratory recommendations.

Construction: State of Alaska Standard Specifications for Highway Construction 1972 and Special Provisions.

Live Load: HS 20-44

Dead Load: Includes 25 psf allowance for future wearing surface.

Unit Stresses:

Reinforced Concrete f_c = 1200 psi f_s = 20,000 psi, n = 10

Structural Steel f_b = 27,000 psi

Timber Deck f_b = 1100 psi

Concrete: All concrete shall be Class "AX."

Reinforcing Steel: All reinforcing steel shall conform to ASTM A615 Grade 40 or 60.

Structural Steel: Unless shown otherwise, all structural steel shall be weathering steel conforming to ASTM A588
High strength bolts and electrodes used with weathering steel shall have similar weathering properties.

Timber: Deck panels shall be Glued-Laminated Douglas Fir, Combination 2. Other timber shall be #1 Douglas Fir. Deck panels and other timber shall be pressure treated with penta chlorophenal after fabrication (penta HST-0.50 pcf)

Design Footing Pressure: 18 tons / sq. ft.

ESTIMATED QUANTITIES

Item	As Built Quantity	Quantity	Unit
Extra End Bridge Footing Excavation			
Class I Excavation for Structure	314.6	100	Cu. Yd.
Prestressed Rock Anchors (90K)	599.5	480	Lin. Ft.
Prestressed Rock Anchors (550 to 710K)	295.0	295	Lin. Ft.
Class AX Concrete		70	Cu. Yd.
Structural Steel, Furnished, Fabricated & erected		452,000	Lbs.
Galvanized Bridge Strand		25,500	Lbs.
Treated Timber		90.9	MBM
Bridge Railing	600.0	600	Lin. Ft.

REVISIONS

△	7-1-74	Dimensions to Begin Bridge Support Col.	GJW

HYDROLOGIC & HYDRAULIC SUMMARY

Drainage Area . . . . 12 mi.²
Design Flow . . . . 3000 c.f.s.
Design Flood Frequency . . . 50 yrs.
Design High Water . . . . . . 2,193'

CAPT. WILLIAM MOORE CREEK
ROUTE NO. S-999
SITE PLAN

State of Alaska
DEPARTMENT OF HIGHWAYS
Juneau, Alaska

Date 7-18-74
Approved [signature]

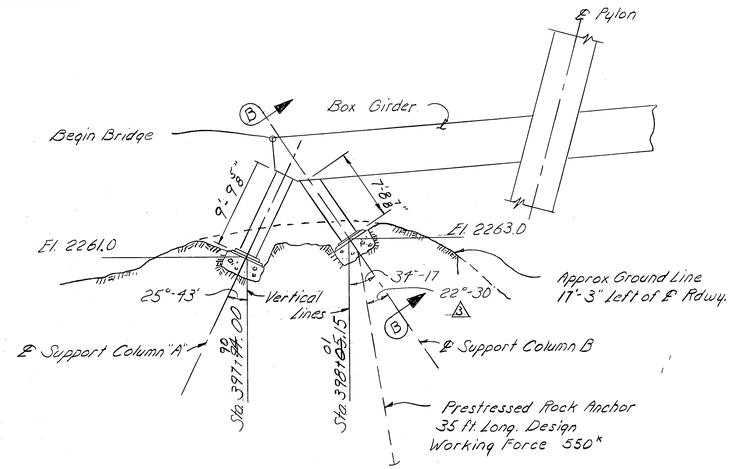
BRIDGE NO. 1304
DWNG. NO. 3188A

Designed By "GOD" Date
Checked By Date
Drawn By Date
Checked By Date
Traced By Date

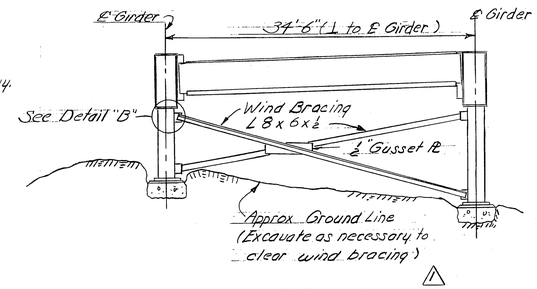
K&E 19 1153 4-73 MC 646+

Addendum No. 4

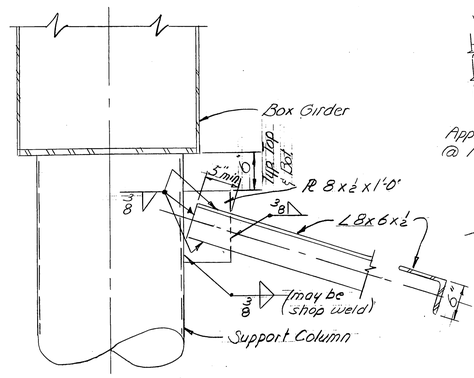
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	ALS-0999(12)	1974	38A	~~47~~ 48



ELEVATION-LEFT GIRDER SUPPORTS
(Begin Bridge)



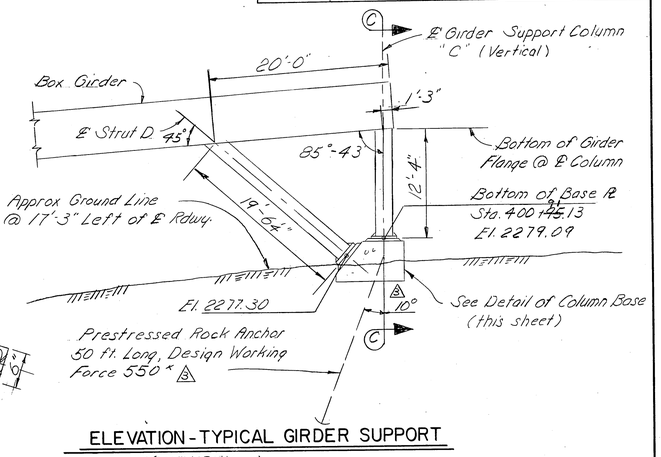
SECTION B-B



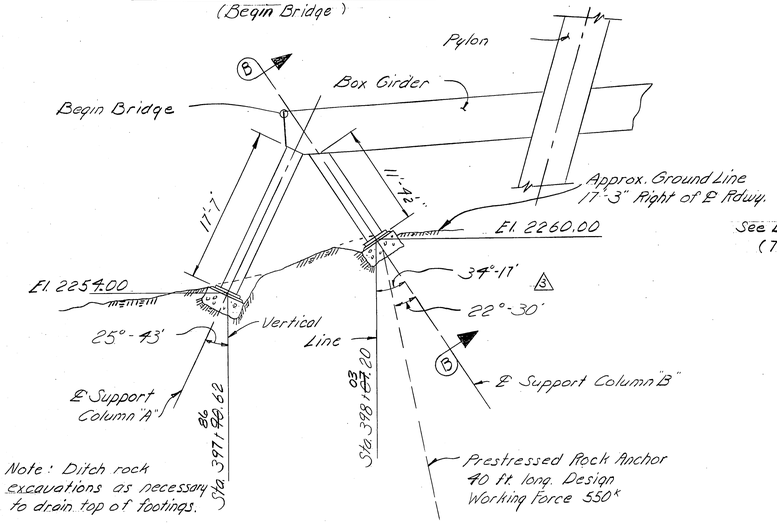
DETAIL B

Note: Wind Bracing is required at Support Columns B & C only

12 6 0 1
In. Feet



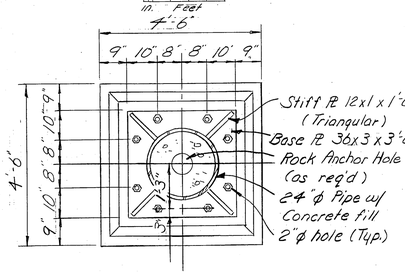
ELEVATION-TYPICAL GIRDER SUPPORT
(End Bridge)



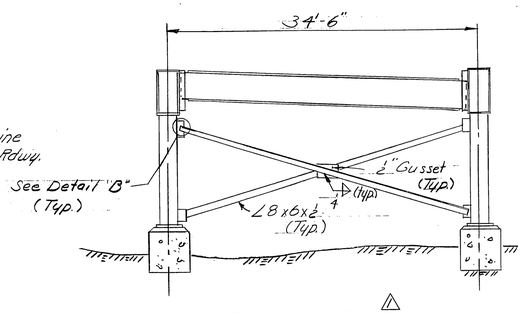
Note: Ditch rock excavations as necessary to drain top of footings.

ELEVATION - RIGHT GIRDER SUPPORTS
(Begin Bridge)

12 0 4 8
In. Feet

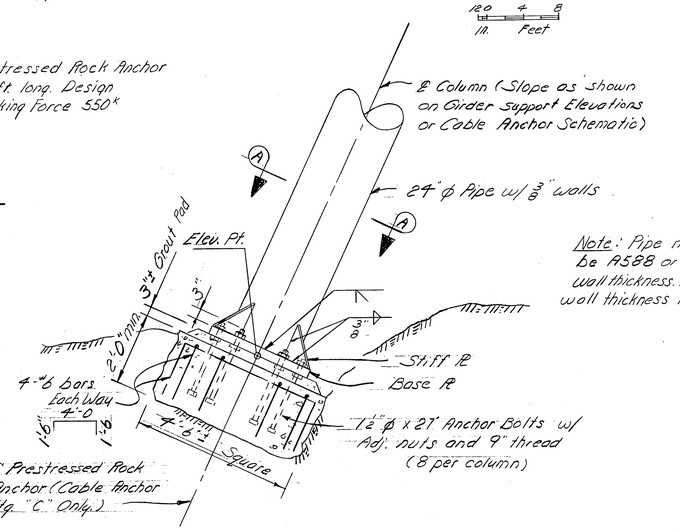


SECTION A-A



SECTION C-C

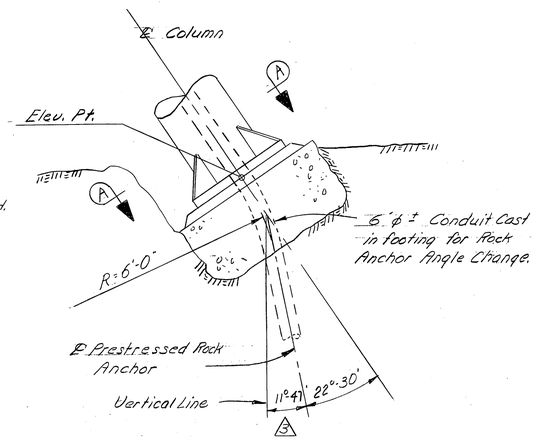
12 0 4 8
In. Feet



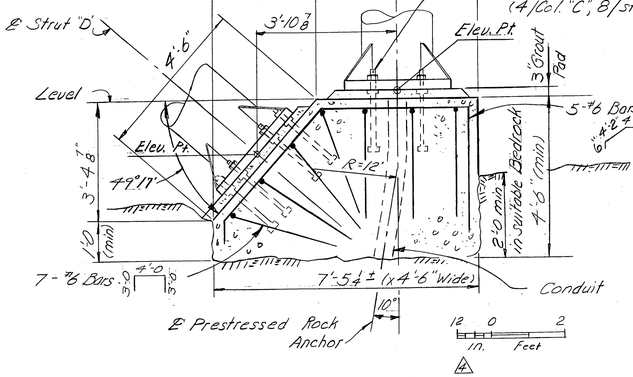
Note: Pipe material shall be A588 or A242 of ⅜" wall thickness. A36 pipe of ½" wall thickness may be substituted.

COLUMN A BASE
(Note: Right Cable Anchor Bases Similar)

12 0 1 2
In. Feet



COLUMN B BASE
(See Column "A" Base for Details Not Shown)



COLUMN BASE AT END BRIDGE
(See Column "A" Base for Details Not Shown)

REVISIONS	
8-1-74	⚠ Wind Bracing
8-1-74	⚠ Column Lengths
8-1-74	⚠ Rock Anchor Force & Angle
8-1-74	⚠ Column Base

CAPT. WILLIAM MOORE CREEK
ROUTE NO. S-999

GIRDER SUPPORTS

State of Alaska
DEPARTMENT OF HIGHWAYS
Juneau, Alaska

Date 8-8-74
Approved

BRIDGE NO. 1304
DWNG. NO. 3189 A

Designed By: RL Date: 8-74
Checked By: JJC Date: 8-74
Drawn By: Date:
Checked By: Date:
Traced By: Date:

K&E 19 1153 4-73 MC 646•

Addendum No 2

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	ALS-0999(12)	1974	39A	47 48

Procedure:

(1) Fill pipe piles & girder ends with concrete to the post-tensioning line.

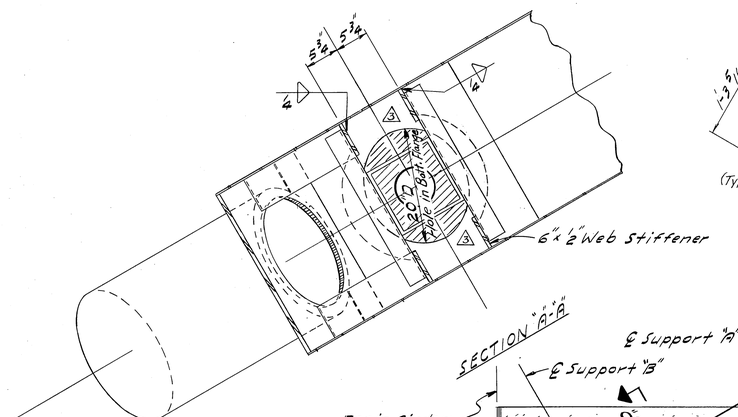
(2) After concrete has cured post-tension rock anchors to design loads.

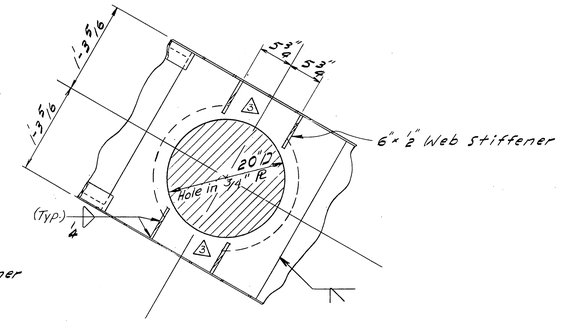
(3) Cover rock anchors with concrete to the finish line indicated

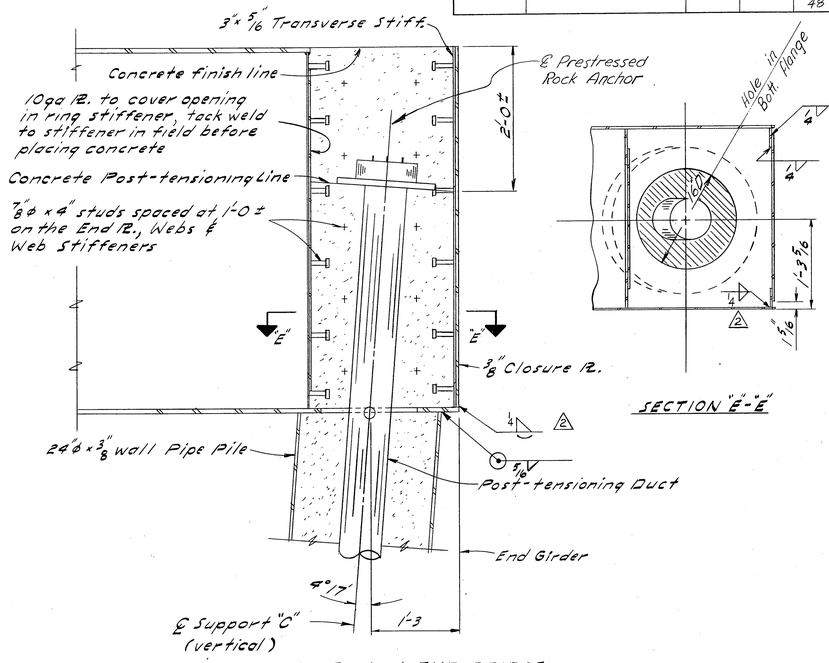
Note:

Prior to placement of concrete to the post-tensioning line, rock anchors at Support "B" may be post-tensioned to a maximum of 270ᵏ to assist in the erection of the superstructure

⚠1 If Rock Anchors are not tensioned until concrete is in place to post tensioning line, these (✳) structural steel members may be omitted.

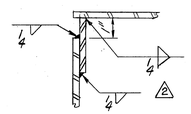


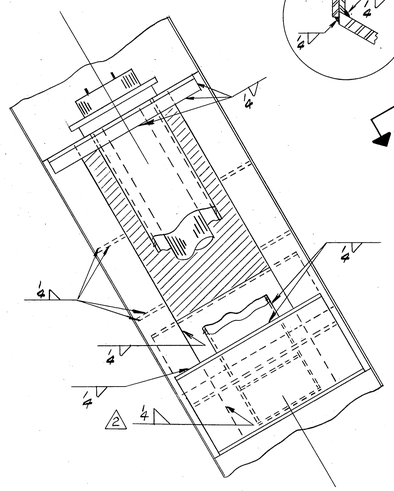


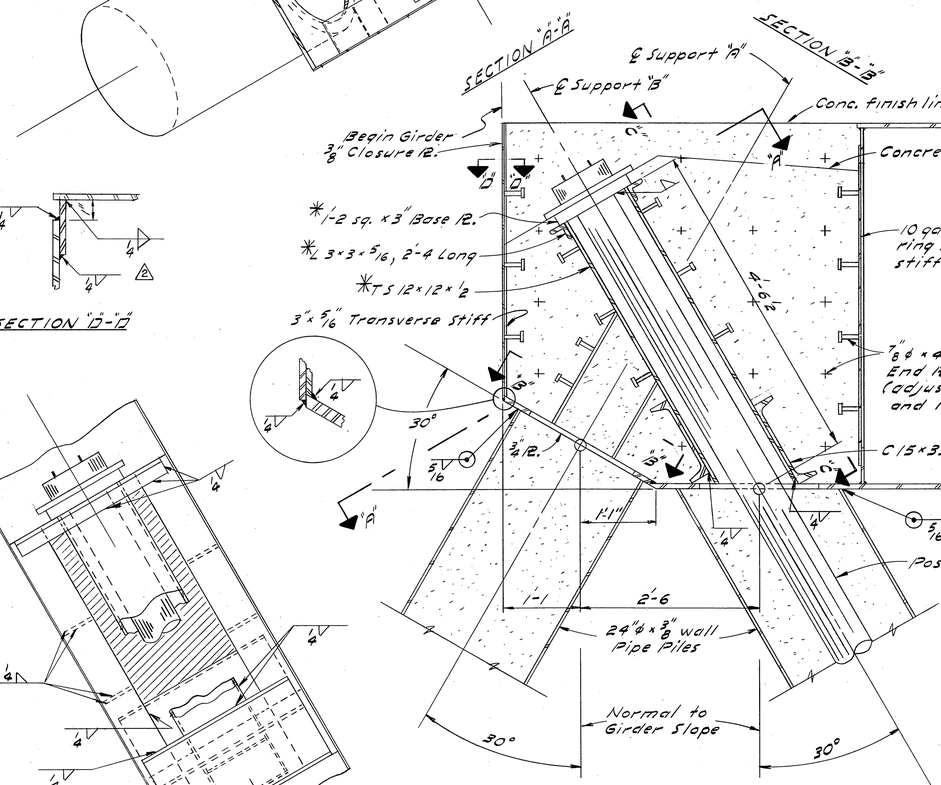


ELEVATION at END BRIDGE

12 6 0 1
In. Ft.
Scale

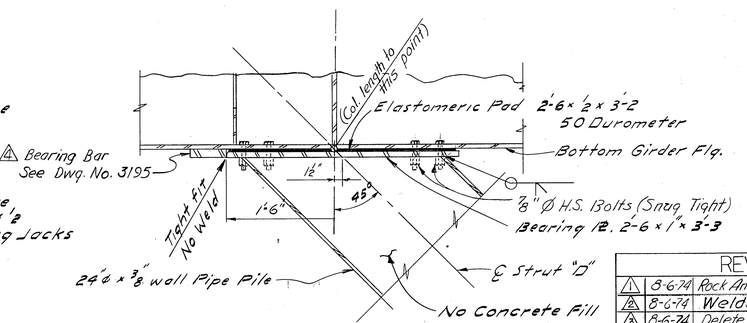




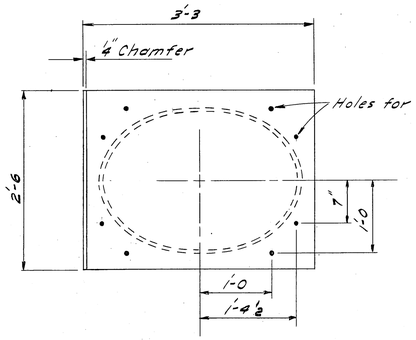


ELEVATION at BEGIN BRIDGE

Pipe Pile material shall be A588 or A242 of 3/8" wall thickness. A36 pipe of 1/2" wall thickness may be substituted for the above



ELEVATION at STRUT "D"



PLAN of STRUT BEARING Pl.

REVISIONS			
⚠1	8-6-74	Rock Anchor Housing	GJW
⚠2	8-6-74	Welds	GJW
⚠3	8-6-74	Delete Stiffener Pl	GJW
⚠4	8-6-74	Delete Bearing Bar Detail	GJW

CAPT. WILLIAM MOORE CREEK

ROUTE NO. S-999

GIRDER SUPPORT CONNECTIONS

State of Alaska
DEPARTMENT OF HIGHWAYS
Juneau, Alaska

Date 7-18-74
Approved [signature]

BRIDGE NO. 1304
DWNG. NO. 3190A

Designed By: [signature] Date: 7-74
Checked By: Date:
Drawn By: [signature] Date: 7-74
Checked By: Date:
Traced By: Date:

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	ALS-0999(12)	1974	40A	~~47~~ 48

30'-0" (Measured on girder slope)
end of girder
Girder
℄ Pylon Splice
19°17'
Normal to Girder
℄ Bearing @ Bot. of Bott. Flange.
Note: See Girder Details Dwg. No. 3195
6"x⅜" Transverse Stiff. all around. (typ.)
℄ Pylon Base
℄ Hatch with 1'-4" x 4'-0" opening. Fasten 5/16" ℄ Cover with 16-¾" ϕ Machine bolts. Typical at inside face of both Pylons.
Existing Ground Line at 18'-7" left of ℄ Roadway.
Bott. of Base ℄ El. 2252.00'
Slope: ¼"/ft.
For Girder Supports See Dwg. No. 3189.
Vertical Line
Note: Place 6" min. concrete cover over top of Rock Anchors, typ @ both Pylons.
12 Prestressed Rock Anchors 20 ft. long. Design Working Force = 90 Kips/anchor.
Sta. 398+17.95
ELEVATION OF PYLON BASE AT LEFT GIRDER
Feet
℄ Bearing @ Bott. of Bott. Flange.
℄ Pylon
See Detail "A"
15"x1"x2'-6" Elastomeric Pad. *
℄ 15"x1½"x2'-6"
1" Stiff. ℄
¾" ℄
℄ 18"x1"x2'-6"
Note: See Bearing Support Detail this sheet.
½" Stiff ℄
1" TFE Coated Curved ℄ (½"x4" bar w/no TFE coating may be substituted if girder is not launched.)
See Detail "C"
See Det. "B"
¾" Ring Stiff. (A-36)
6x⅜ Stiff. (A-36) Delete at hatch.
5'-0½"
Note: Details shown are for Pylon Base at Left Girder, Pylon Base at Right Girder is a mirror image.
PYLON BASE DETAIL AT GIRDER
* 50 Durometer. Bond pad to bearing assembly with epoxy in shop. Bond pad to girder sole ℄ with epoxy during erection.
DETAIL "A"
DETAIL "B"
DETAIL "C"
39'-11" c to c
34'-6" c to c
℄ Girder
℄ Pylon
℄ Pylon Splice See Dwg. 3192
6x⅜" Transverse Stiff. all around. (A-36)
4x1" TFE coated curved ℄ (A-36)
5x1" TFE coated curved ℄. (A36)
℄ 5x½"
℄ 4x½"
Ring Stiff.
6"x⅜" Ring Stiff. (A-36)
5'-4" out to out
37'-2" c to c
℄ Pylon Base
SECTION D-D
5'-0½" out to out
Ring Stiff. Spc.
¾" Horz. Stiff. (A-36)
1'-4" x 4'-0" oblong opening.
℄ Pylon
℄ Pylon Base
Typ. stiff. to Base ℄.
1'-4" x 4'-0" oblong Hatch.
4-6x⅜" Vert. Stiff. as shown
5'-4" out to out
6x¾" Horz. Stiff. at front & back of Pylon, 1'-9" from top of Base ℄. (A-36)
SECTION F-F
3-⅞"ϕ H.S. bolts ea. side
15/16"ϕ Holes for ⅞"ϕ H.S. Bolts as shown
Tack nuts in place. (typ.)
9 spc's @ 3" = 2'-3" Tack nuts in place
SECTION E-E
BEARING SUPPORT
Add Hatch
Welds
Revisions 8-7-74
℄ Pylon Splice
6x⅜" Transv. Stiff. all around.
℄ Pylon Base
Existing Ground Line @ 18'-7" Right of ℄ Rdwy.
Vertical Line
Slope: ¼"/ft to drain ftg. area.
Bott. Base ℄ El. 2260.00'
For Girder Supports See Dwg. No. 3189.
12 Prestressed Rock Anchors 20 ft. long. Design Working Force = 90K/anchor. (typ.)
Sta. 398+21.09
ELEVATION OF PYLON BASE AT RIGHT GIRDER
10'-6" Square Footing
Normal to ℄ Pylon.
5'-3"
1½" ℄
3" Base ℄
3" Grout
10-#6 bars x 11'-0" lg. place as shown.
ELEVATION
10,#6 x 11'-0" lg. as shown.
SECTION G-G
No Scale
9'-0 x 9'-0 x 3" Base ℄
open
1½" stiff. ℄, (typ.)
Holes for Prestressed Rock Anchors. (typ.)
Note: Interior stiff's. not shown.
PLAN AT PYLON BASE

CAPT. WILLIAM MOORE CREEK

ROUTE NO. S-999

PYLON BASE

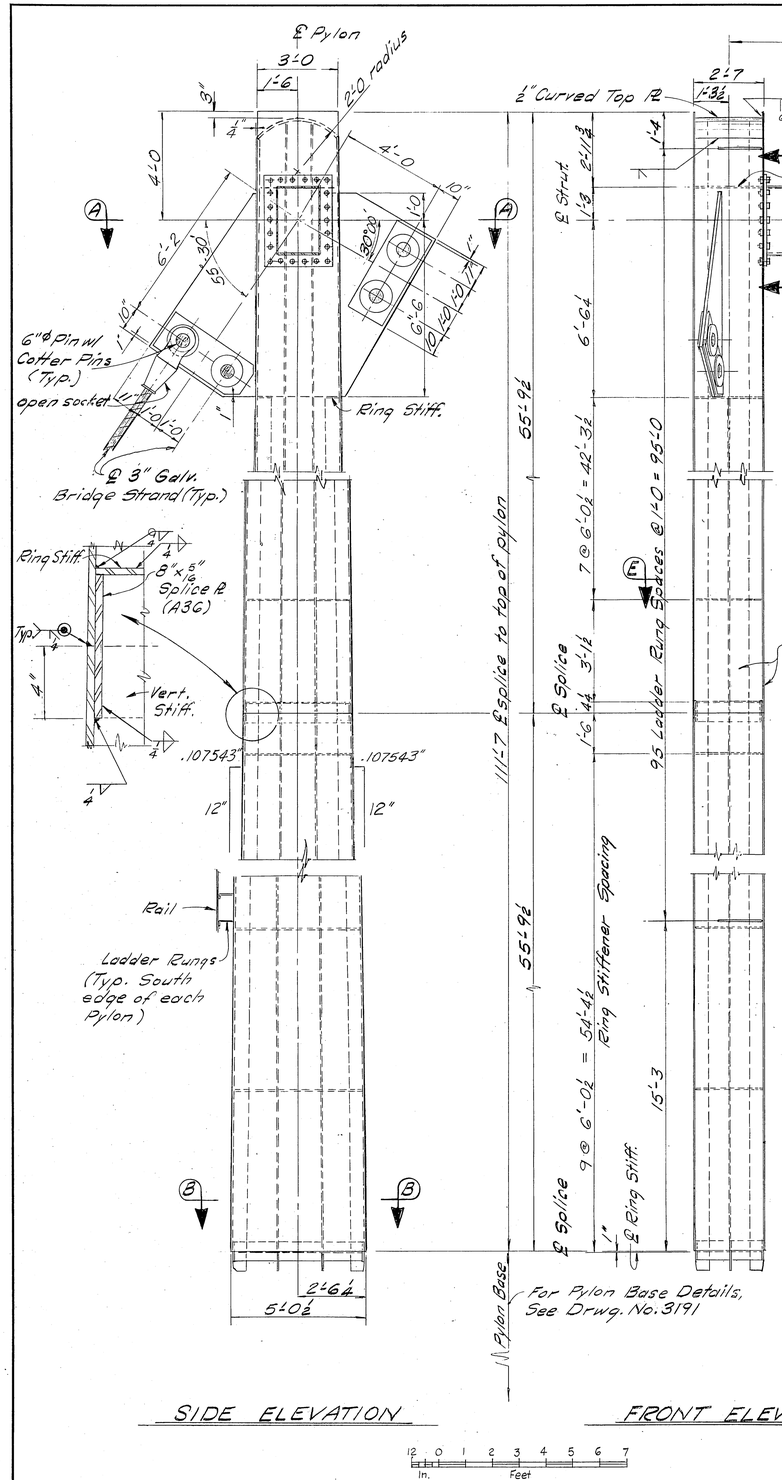
State of Alaska
DEPARTMENT OF HIGHWAYS
Juneau, Alaska

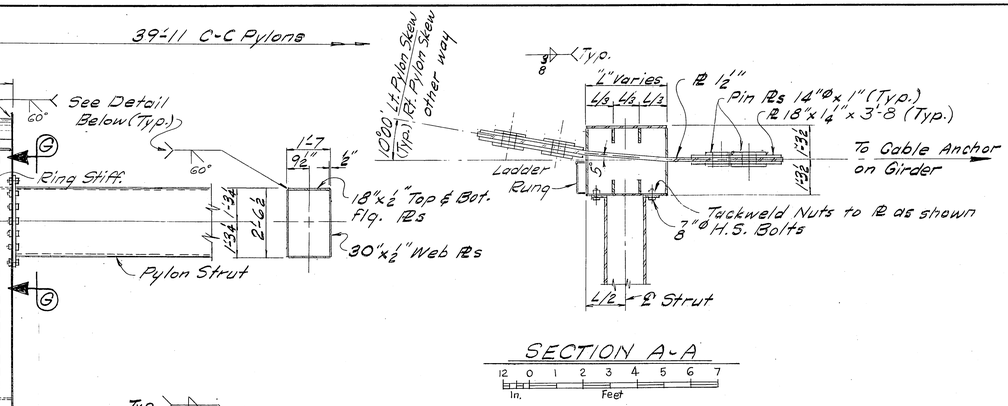
Date 7-18-74
Approved

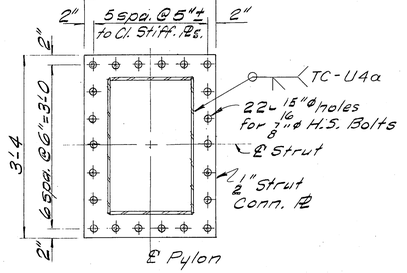
BRIDGE NO. 1304
DWNG. NO. 3191A

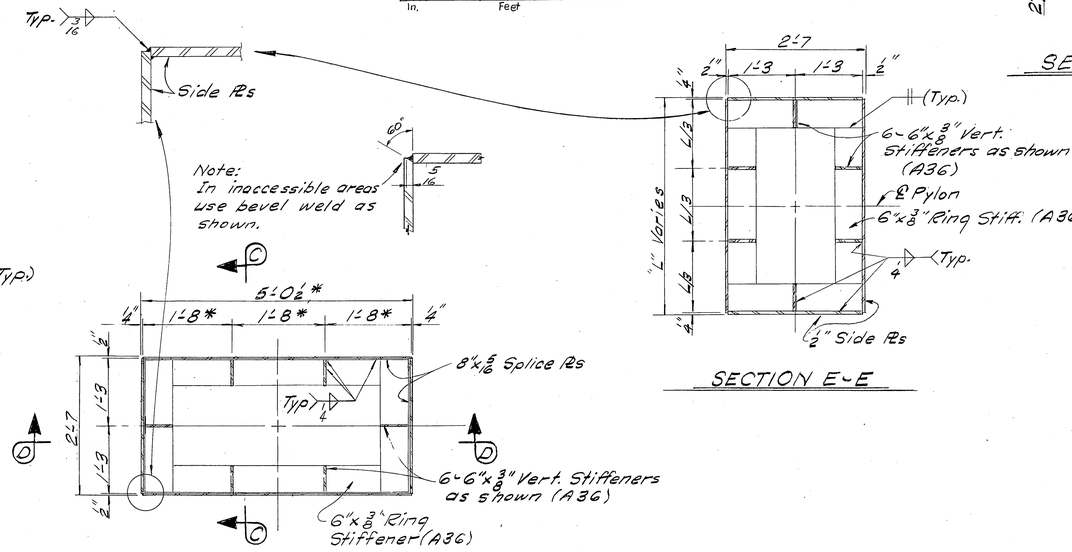
K&E 19 1153 4-73 MC 646•

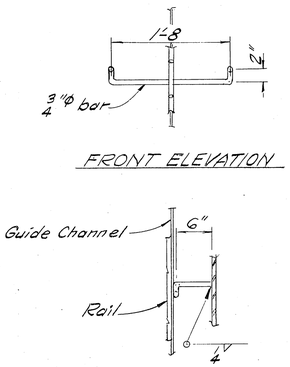
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	ALS-0999(12)	1974	41	47 48

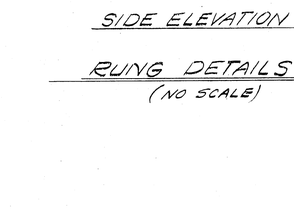




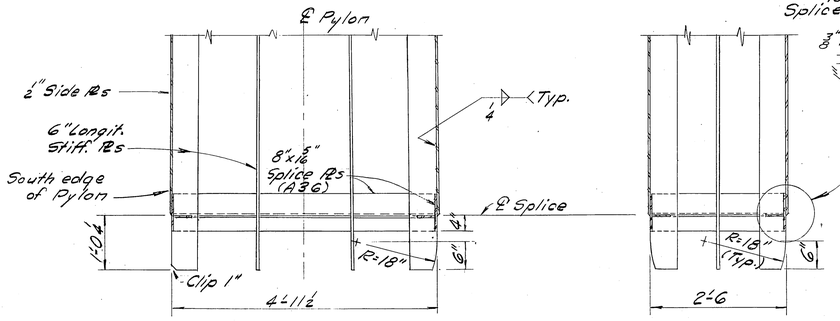


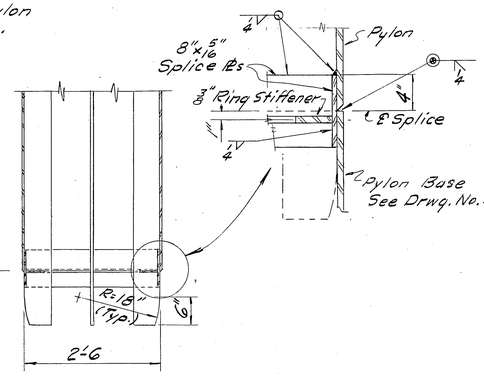






RUNG DETAILS
(NO SCALE)





12 6 0 1 2 3 4
Inches Feet

CAPT. WILLIAM MOORE CREEK

ROUTE NO. S-999

PYLONS

State of Alaska
DEPARTMENT OF HIGHWAYS
Juneau, Alaska

Date 7-18-74
Approved

BRIDGE NO. 1304
DWNG. NO. 3192

Designed By: [illegible] Date 6-74
Checked By: [illegible] Date 6-74
Drawn By: [illegible] Date 6-74
Checked By: [illegible] Date 7-74
Revised

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	ALS-0999 (12)	1974	42A	47 48

℄ Cable
℄ Columns
Vertical Line
Level Lines
COLUMN SCHEMATIC (RIGHT CABLE ANCHOR)
2'-6
1'-3
1'-3
1" Side Pℓs
℄ Cable Anchor
Prestressed Rock Anchor*
30"x 2"x 2'-6 Base Pℓ
SECTION A-A
1'-0 Length of 1" wall thickness pipe I.D. ½" larger than Cable Socket
Side Pℓ
12"x 1" Stiff. Pℓs ea. side
Pℓ 22"x 1"x 4'-0
SECTION B-B
See Cable Lengths
Cover Pℓ 13"x 5/16" x 1'-11 ea. end
Btn. Stiff.
END VIEW (Showing Top Pℓ Welds)
℄ 6" pin w/ Cotter pin
Open Strand Socket (Typical)
℄ 6" Pins
℄ 6" Pins
132.04' (Under 110,000 Lbs. Tension @ 40°F)
3" Galv. Bridge Strand
130.43' (Under 110,000 Lbs. Tension @ 40°F)
160.50' (Under 160,000 Lbs. Tension per cable) - @ 40° F
3" Galv. Bridge Strand
Pylon, See Drwg. No 3192
Girders
Anchor Sockets
Spanner Nut Centered on threads (Typ.)
Anchor Sockets
CABLE LENGTHS (No Scale)
℄ Cable Anchor
PLAN
Typical Anchor Socket w/ internal Thds.
℄ Cable Anchor Working Line (See Site Plan Drwg. No. 3188 for Location)
5/16" Cover Pℓ
Top Pℓ 24"x 1"x 4'-0
Fill annular space w/ Liquid Polymer Sealer after adjusting cables. (Typical)
5/16" Cover PL.
1" Side Pℓs
40°30'
El. 2265.0
Fill to this level w/ concrete after adjusting Cable tension
Pℓ 22"x 1"x 0'-6
Triangular Stiff. Pℓ 8"x ½"x 0'-8 (Typ. Rt. Cable Anchor)
3/8" Curved Pℓ or Pc. of 24"φ pipe ea. side cut to fit (Right Cable Anchor only)
Pℓ 30"x 1"x 4'-0 w/ 12"φ hole (Rt. Cable Anchor only)
Pℓ 30"x 1"x 2'-0 (Lt. Cable Anchor only)
36'-7 to Top of Grout Pad (See Details, Drwg. No. 3189)
28'-11½ East Column
23'-2½ West Column
Top of Grout Pad (See Details, Drwg. No. 3189)
30°
22°12'30" Rt. Cable Anchor only (See Schematic View)
24"φ Pipe w/ 3/8" walls, as Shown, (Right Cable Anchor only) Fill w/ Conc. after installation
Prestressed Rock Anchor* 6¾"φ I.D. sleeve (Pressure grout after tensioning)
24"φ Pipe w/ 3/8" walls. Fill w/ conc. prior to tensioning (Rt. Cable Anchor only)
SIDE ELEVATION (NORMAL TO BACKSTAY)
*@ Left Cable Anchor = 40' Long, Design Working Force = 710ᵏ
@ Rt. Cable Anchor = 80' Long, Design Working Force = 710ᵏ
Note: Pipe Material shall be A588 or A242 of 3/8" wall thickness. A36 pipe of ½" wall thickness may be substituted for the above.
℄ Cable Anchor
2'-0
1" Side Pℓs
El. 2265.0
East Column
West Column
Trim off Pℓ, as shown, to within 1" of curved Pℓ after welding Curved Pℓ in place. (Typ. ea. side)
FRONT VIEW (RT. CABLE ANCHOR ALONG CABLE)
Cable Anchor Working Line
Fill to this level w/ concrete after adjusting cable tension
El. 2265
4-#6 @ 12"
4-#6 @ 12"
El. 2260
Top of Rock
El. 2259.5 ±
Prestressed Rock Anchor
30°
12-#6 3'-6 as shown
ELEVATION (LEFT CABLE ANCHOR FOOTING) (No Scale)
Inches Feet

REVISIONS			
1	8-7-74	Cover Pℓ	GJW
2	8-7-74	Welds	GJW

CAPT. WILLIAM MOORE CREEK

ROUTE NO. S-999

CABLE ANCHORS

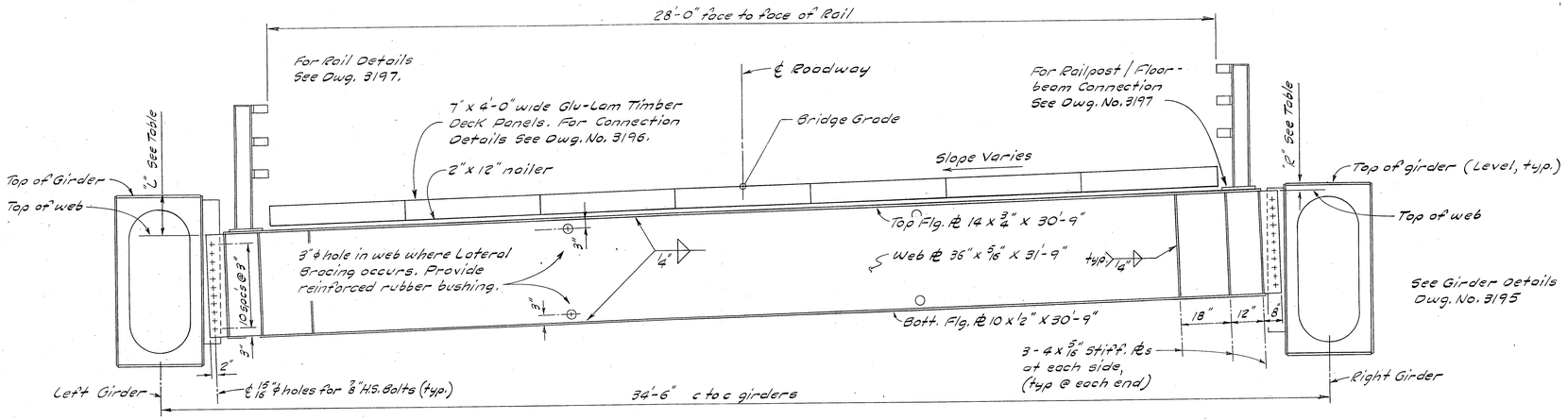
State of Alaska
DEPARTMENT OF HIGHWAYS
Juneau, Alaska

Date 7-18-74
Approved [signature]

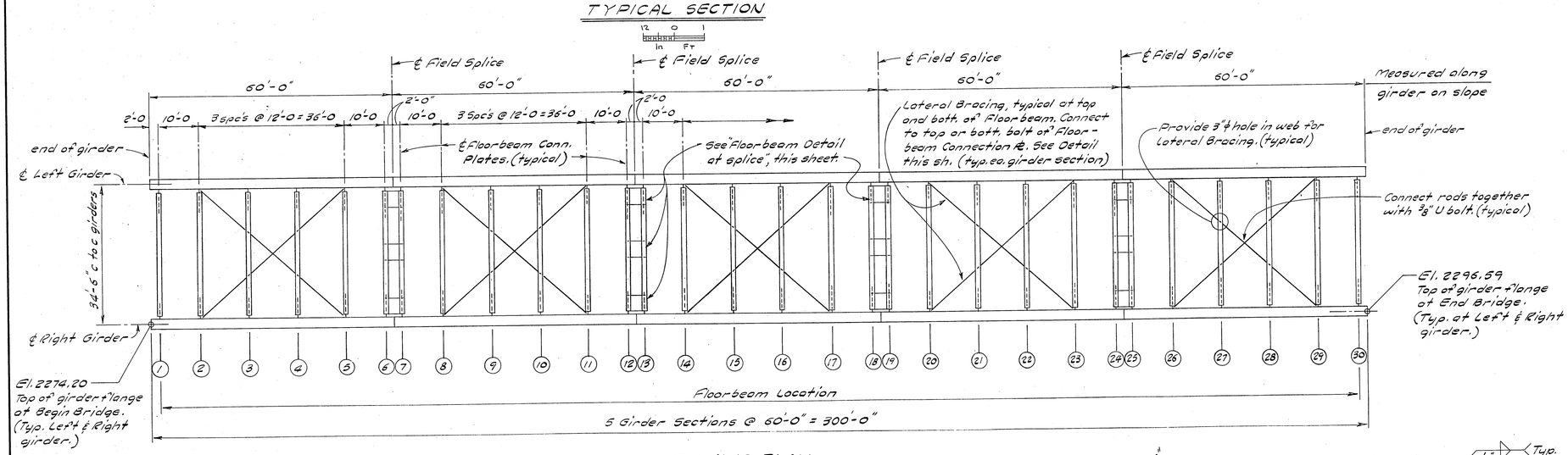
BRIDGE NO. 1304
DWNG. NO. 3193A

K&E 19 1153 4-73 MC 646

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	ALS-0999(12)	1974	43	47 / 48



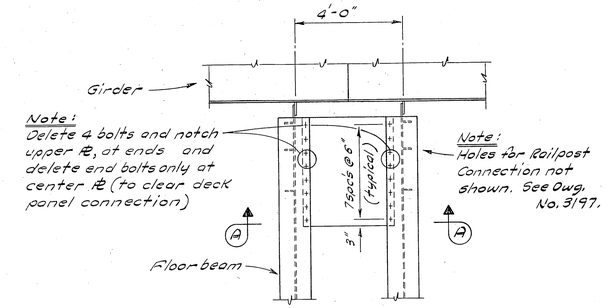
TYPICAL SECTION



FRAMING PLAN

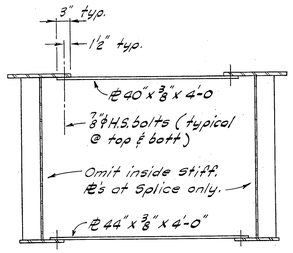
0 15 Ft.

FLOORBEAM LOCATION	LEFT GIRDER DIMENSION "L"	RIGHT GIRDER DIMENSION "R"
1	13 3/4"	2 3/8"
2	13 1/4"	2 3/4"
3	12 7/8"	3 1/4"
4	12 3/8"	3 3/4"
5	11 7/8"	4 1/8"
6	11 1/2"	4 5/8"
7	11 1/2"	4 5/8"
8	11 1/4"	5 1/4"
9	11 1/8"	6"
10	11"	6 7/8"
11	11"	7 7/8"
12	11 1/8"	8 7/8"
13	11 1/8"	8 7/8"
14	11 1/4"	9 7/8"
15	11 1/8"	10 5/8"
16	10 7/8"	11"
17	9 7/8"	11 1/8"
18	8 7/8"	11 1/4"
19	8 7/8"	11 1/4"
20	7 7/8"	11 1/8"
21	6 3/4"	10 7/8"
22	5 5/8"	10 5/8"
23	4 5/8"	10 1/2"
24	3 7/8"	10 5/8"
25	3 7/8"	10 5/8"
26	3 1/4"	11"
27	2 3/4"	11 1/2"
28	2 1/2"	12 1/8"
29	2 1/4"	12 3/4"
30	1 7/8"	13 1/4"



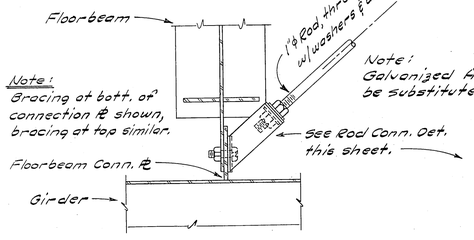
FLOORBEAM DETAIL AT SPLICE

12 0 1 In Ft



SECTION A-A

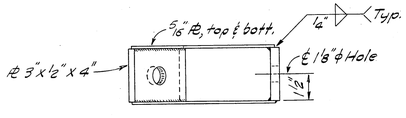
0 6 12 In.



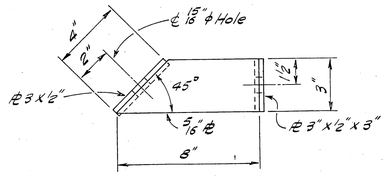
Note: Galvanized A-36 may be substituted for A 588 rods.

LATERAL BRACING CONNECTION DETAIL

0 6 12 In.



ELEVATION



PLAN

ROD CONNECTOR DETAIL

0 6 12 Inch

CAPT. WILLIAM MOORE CREEK

ROUTE NO. S-999

TYPICAL SECTION

State of Alaska
DEPARTMENT OF HIGHWAYS
Juneau, Alaska

Date 7-18-74
Approved

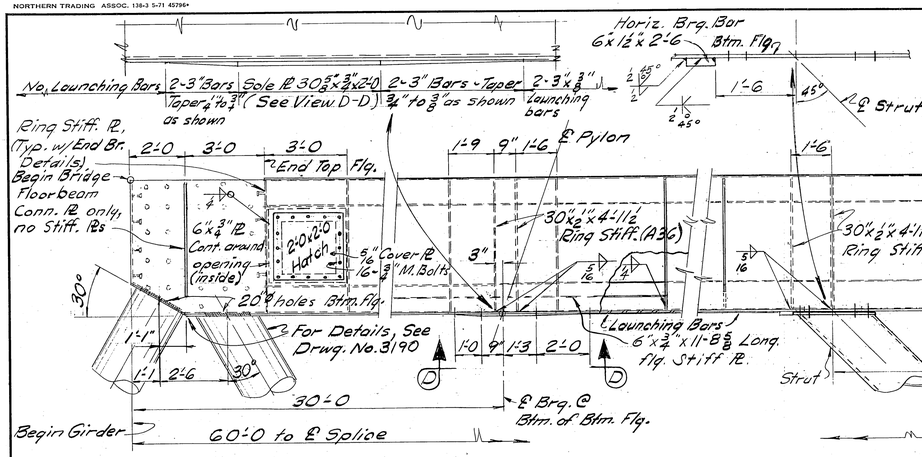
BRIDGE NO. 1304
DWNG. NO. 3194

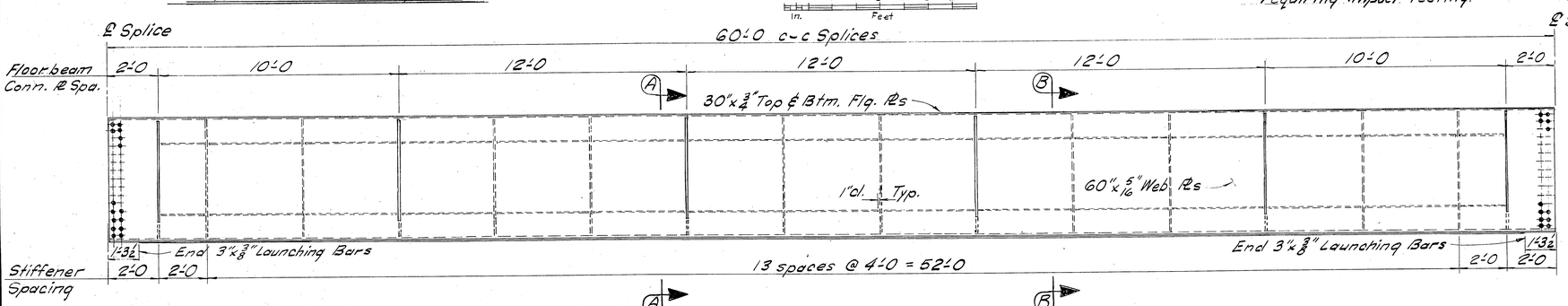
Designed By: RL Date: 6/74
Checked By: T.M. Date: 7/74
Drawn By: M.M. Date: 6/74
Checked By: R.S. Date: 6/74
Traced By: Date:

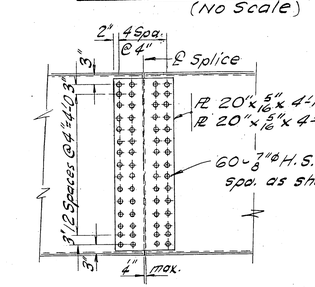
NORTHERN TRADING ASSOC. 138-3 5-71 45796*

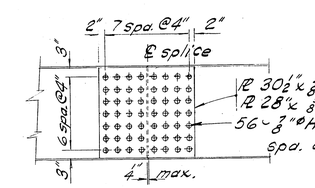
Alaska Lm. No. 4

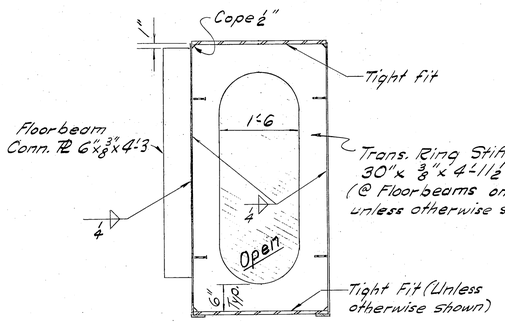
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	ALS-0999(12)	1974	44A	47/48

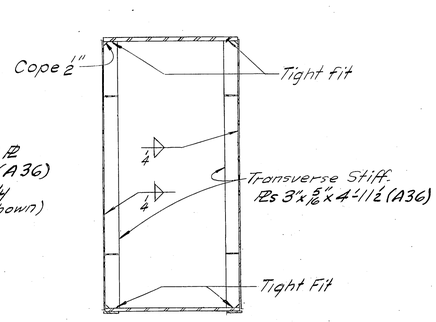


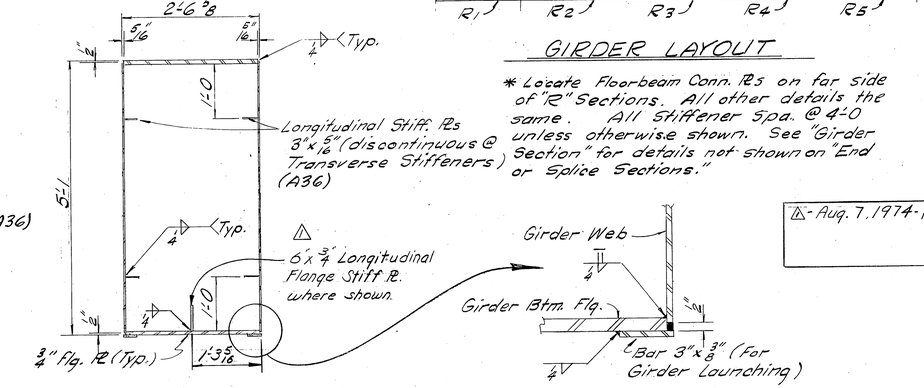


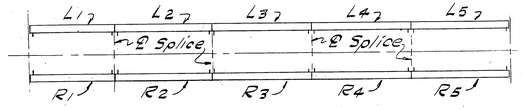












* Locate Floorbeam Conn. Pls on far side of "R" Sections. All other details the same. All Stiffener Spa. @ 4'-0 unless otherwise shown. See "Girder Section" for details not shown on "End or Splice Sections."

Note: Bars 3" x 3/8" for girder launching may be eliminated if girders are erected over the Canyon.

△ - Aug. 7, 1974 - Flange Stiff.

CAPT. WILLIAM MOORE CREEK

ROUTE NO. S-999

GIRDERS

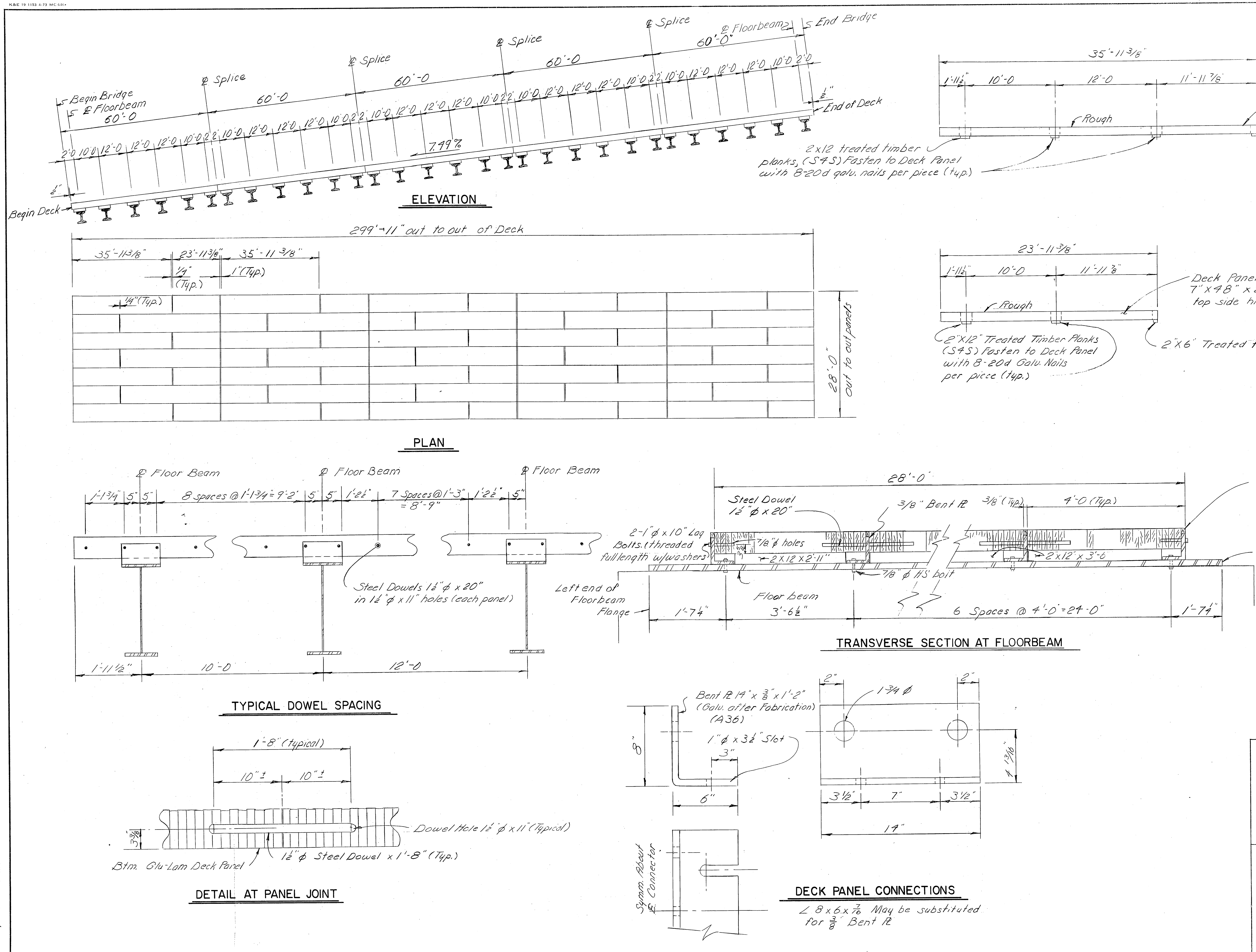
State of Alaska
DEPARTMENT OF HIGHWAYS
Juneau, Alaska

Date 7-18-74
Approved [signature]

BRIDGE NO. 1304
DWNG. NO. 3195 A

Designed By EL Date 6-74
Checked By [illegible] Date [illegible]
Drawn By DHR Date 6-74
Checked By [illegible] Date [illegible]
Traced By [illegible] Date [illegible]

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	ALS-0999(12)	1974	45	48



ELEVATION
Begin Bridge
℄ Floorbeam
℄ Splice
End Bridge
End of Deck
Begin Deck
7.49%
60'-0
35'-11 3/8"
Deck Panel 7"x48"x35'-11 3/8" (S1S2E surface top side hit or miss to 7" depth)
2x6 treated timber plank (S4S)
2x12 treated timber planks, (S4S) Fasten to Deck Panel with 8-20d galv. nails per piece (typ.)
Rough
23'-11 3/8"
Deck Panel 7"x48"x23'-11 3/8" (S1S2E surface top side hit or miss to 7" depth)
2"x12" Treated Timber Planks (S4S) Fasten to Deck Panel with 8-20d Galv. Nails per piece (typ.)
2"x6" Treated timber plank (S4S)
299'-11" out to out of Deck
28'-0" out to out panels
PLAN
℄ Floor Beam
8 spaces @ 1'-1 3/4 = 9'-2"
7 Spaces @ 1'-3" = 8'-9"
Steel Dowels 1 1/2" ϕ x 20" in 1 1/2" ϕ x 11" holes (each panel)
TYPICAL DOWEL SPACING
28'-0"
Steel Dowel 1 1/2" ϕ x 20"
3/8" Bent ℄
Rout 3/8" x 16" x panel depth @ each floorbeam (Typical each panel)
2-1" ϕ x 10" Lag Bolts (threaded full length w/washers)
7/8" ϕ holes
2x12x2'-11"
2x12x3'-6
7/8" ϕ HS bolt
Right End of Floorbeam Flange
Left end of Floorbeam Flange
Floor beam 3'-6 1/2"
6 Spaces @ 4'-0" = 24'-0"
TRANSVERSE SECTION AT FLOORBEAM
1'-8" (typical)
Dowel Hole 1 1/2" ϕ x 11" (Typical)
Btm. Glu-Lam Deck Panel
1 1/2" ϕ Steel Dowel x 1'-8" (Typ.)
DETAIL AT PANEL JOINT
Bent ℄ 14" x 3/8" x 1'-2" (Galv. after Fabrication) (A36)
1" ϕ x 3 1/2" Slot
1 3/4 ϕ
Symm. About ℄ Connector
DECK PANEL CONNECTIONS
∠ 8x6x7/16 May be substituted for 3/8" Bent ℄

CAPT. WILLIAM MOORE CREEK

ROUTE NO. S-999

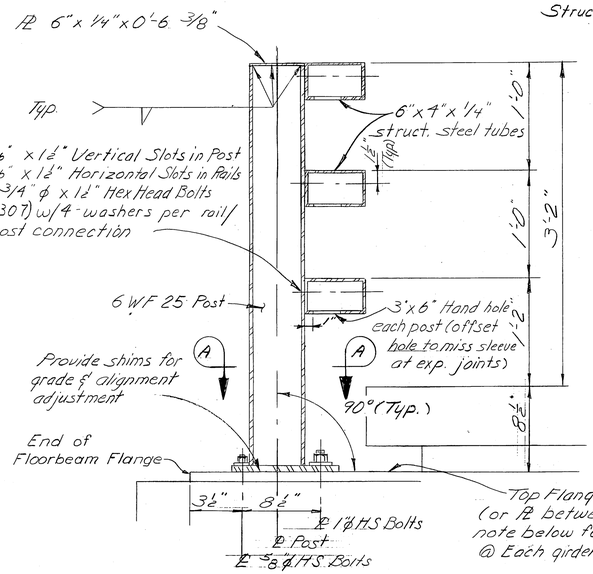
DECK PANELS

State of Alaska
DEPARTMENT OF HIGHWAYS
Juneau, Alaska

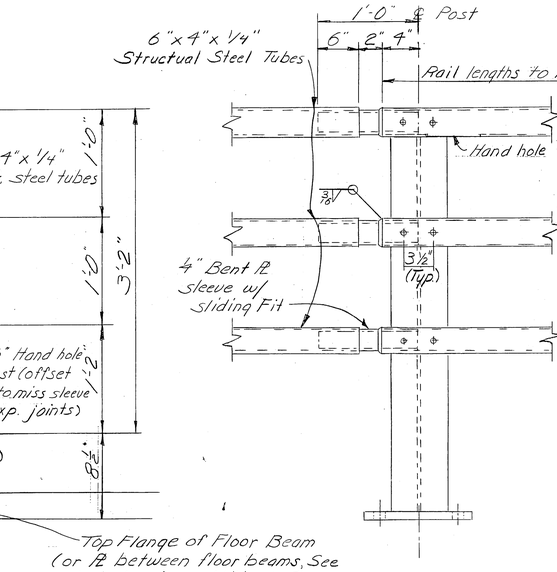
Date 7-18-74
Approved [signature]

BRIDGE NO. 1304
DWNG. NO. 3196

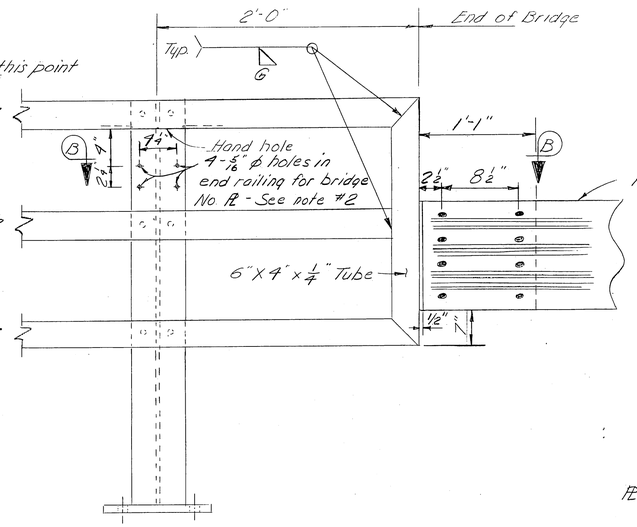
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	ALS-0999(12)	1974	46	~~47~~ 48



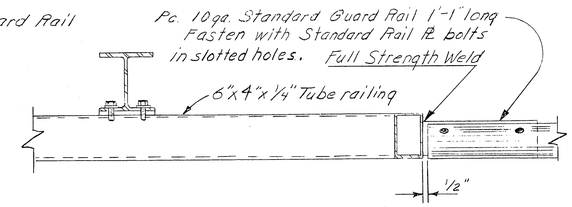
TYPICAL SECTION THRU RAILPOST



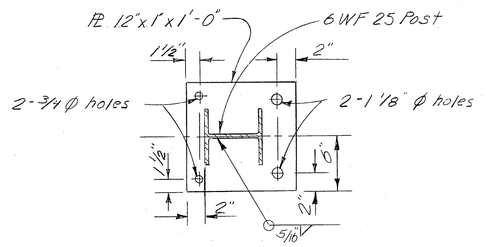
EXPANSION JOINT



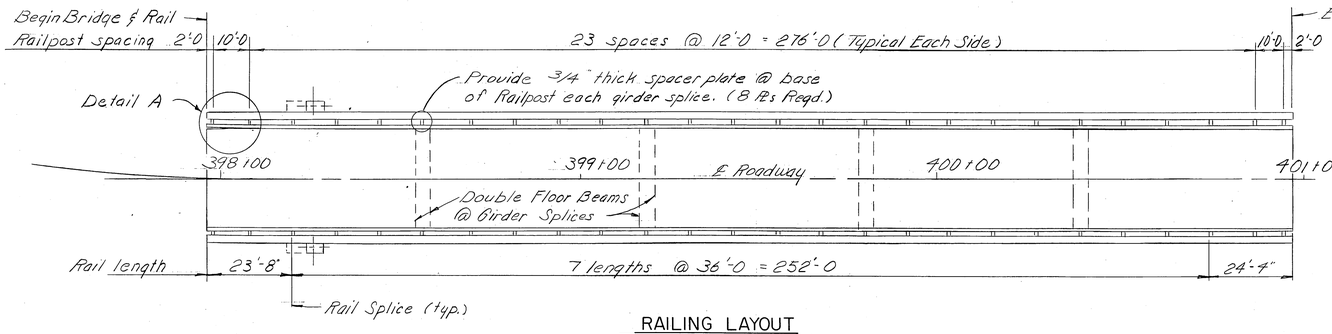
TYPICAL END TREATMENT



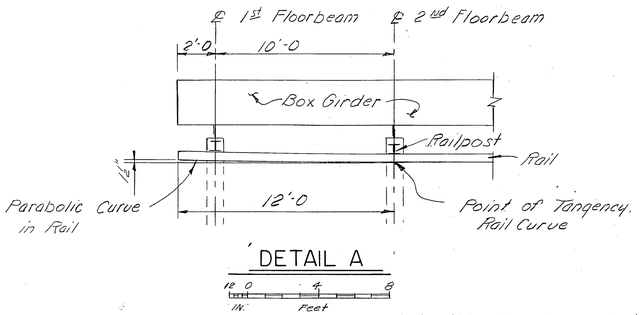
SECTION B-B



SECTION A-A



RAILING LAYOUT



DETAIL A

Left Side Begin Bridge Only. All other rails tangent.

Notes

(1) All railing, post, anchor assemblies and other steel components shall be fabricated from ASTM A588 (Weathering) Steel, or A36 Steel galv. after fabrication.

(2) Locate State-Furnished bridge number to the right of approaching traffic on first railpost.

CAPT. WILLIAM MOORE CREEK

ROUTE NO. S-999

RAILING

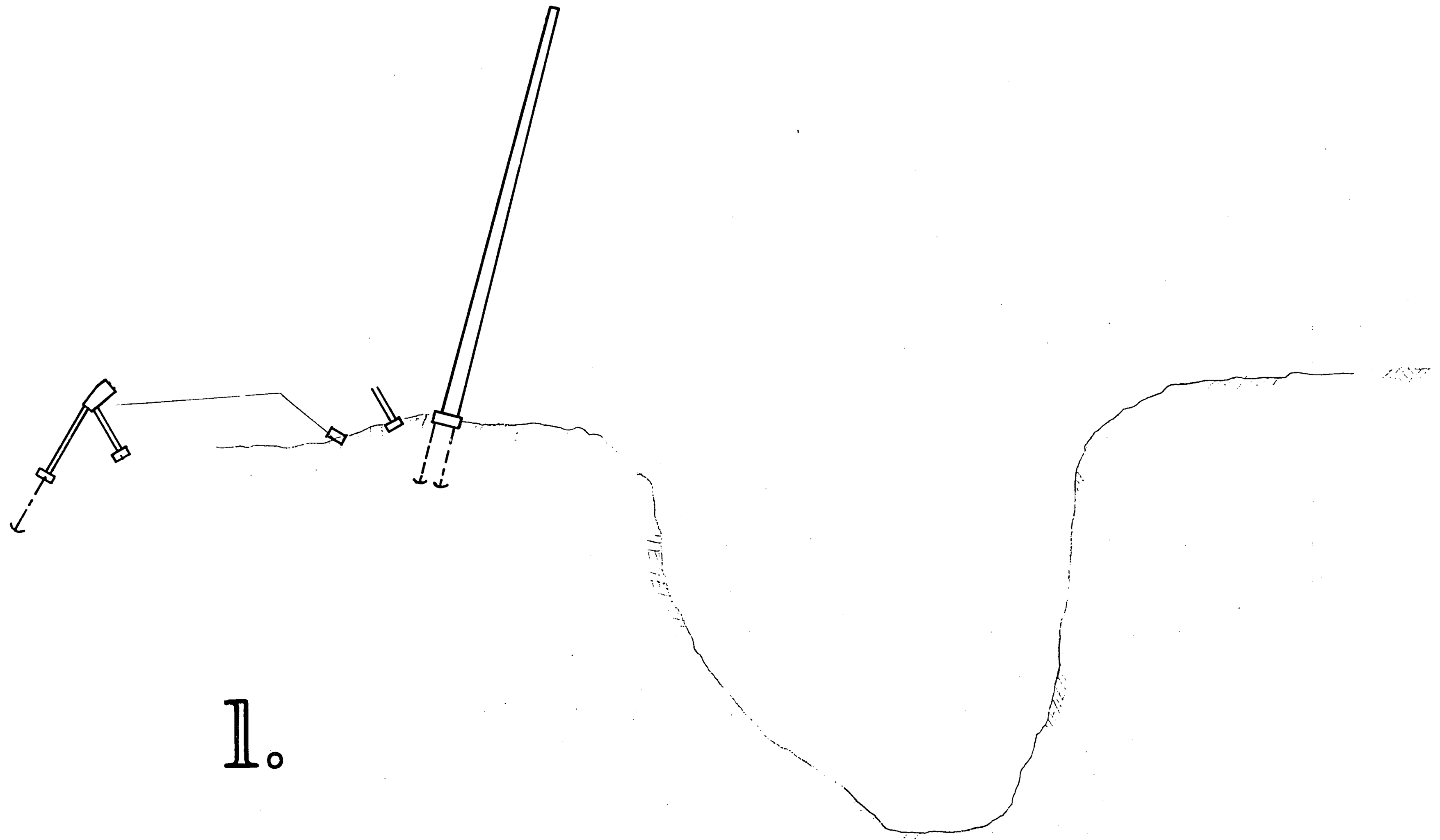
State of Alaska
DEPARTMENT OF HIGHWAYS
Juneau, Alaska

Date 7-18-74
Approved [signature]

BRIDGE NO. 1304
DWNG. NO. 3197

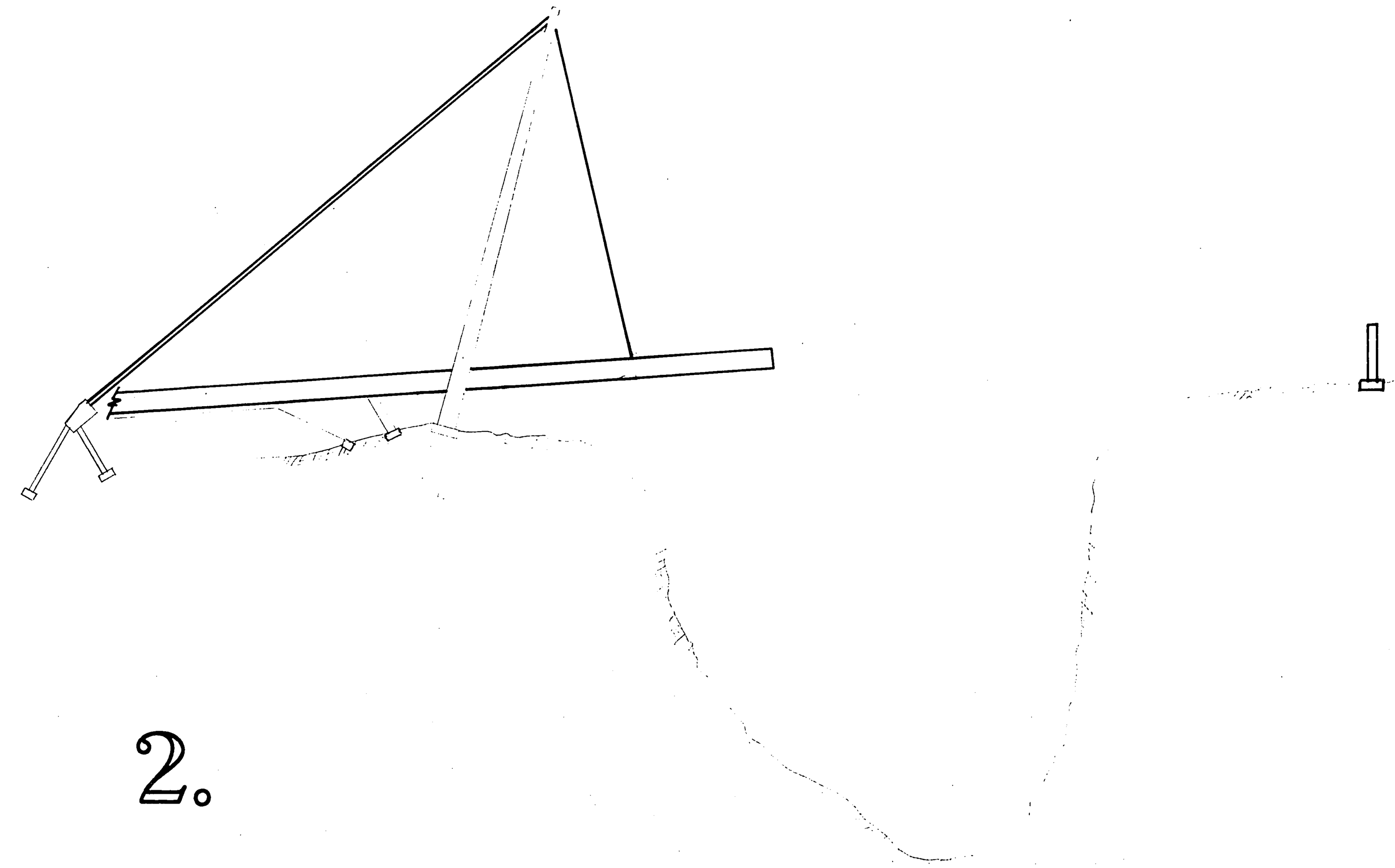
Designed By [signature] Date 7-12-74
Checked By [signature] Date 7-12-74
Drawn By [signature] Date 7-12-74
Checked By ..... Date .....
Traced By ..... Date .....

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	ALS-0999(12)	1974	47	~~47~~ 48



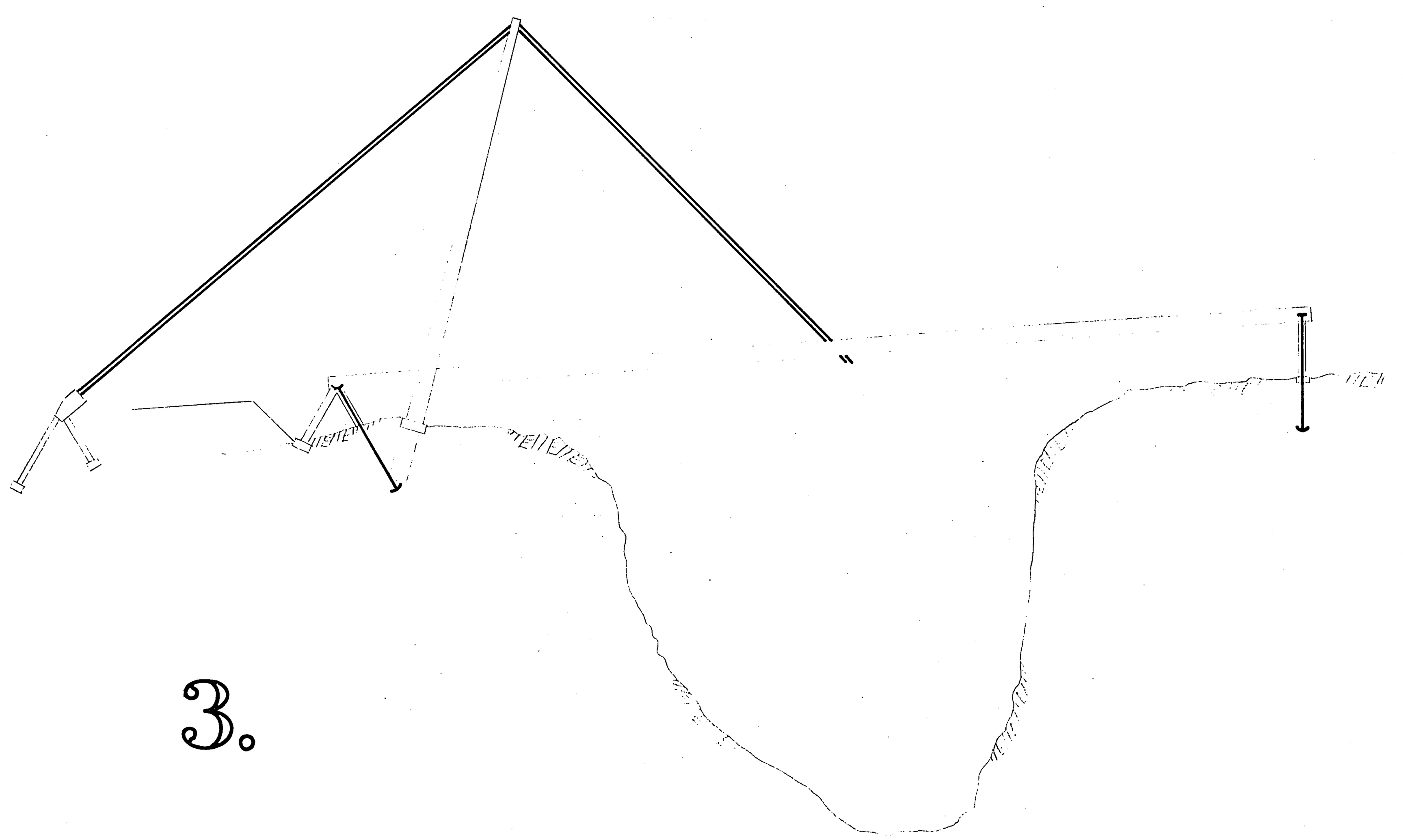
1.

1. Construct Cable Anchors, Pylon bases & Girder supports (South Side).
2. Erect pylons and prestress rock anchors for pylons and cable anchors.
3. Install temporary cables (or highline) necessary for superstructure erection.



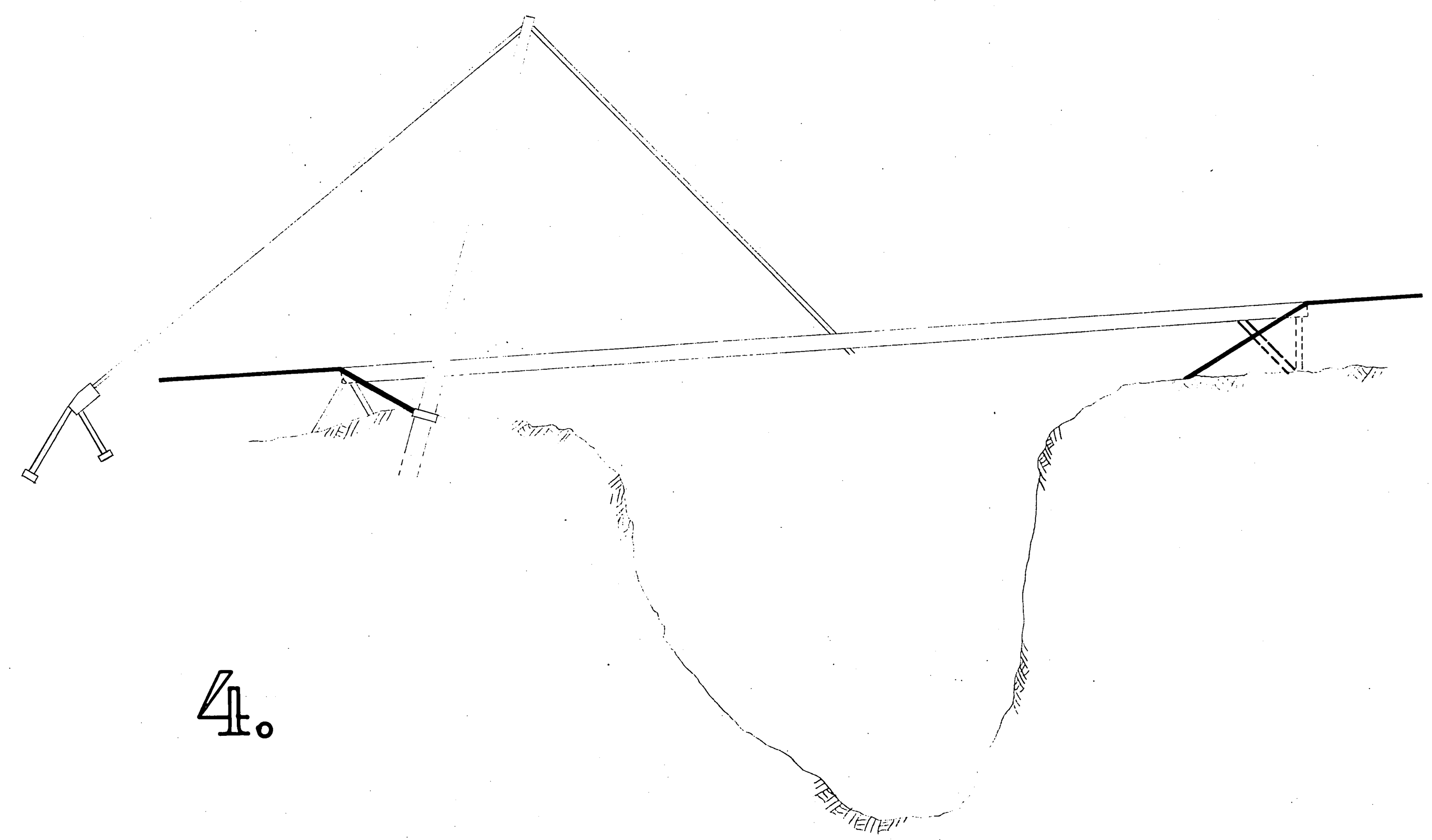
2.

4. Assemble Superstructure on grade.
5. Launch complete superstructure (or erect girders and install floorbeams, deck and rail over canyon). Install permanent cables.
6. Construct girder supports (North Side)



3.

7. Complete girder supports (except Struts at End Bridge) and prestress rock anchors at girder ends.
8. Adjust Cable Tension:
   a) 160^k tension/cable in backstays
   b) $110^k \pm$ tension/cable in forestays
   c) Check: Top of girder at cable anchorage should be 4 inches above a straight line connecting top of girders at bridge ends.



4.

9. Install struts at End Bridge.
10. Grout and place concrete necessary to protect rock anchors.
11. Complete approach fills.

NOTE: A detailed erection scheme shall be submitted by the contractor for review and approval by the Engineer.

CAPT. WILLIAM MOORE CREEK

ROUTE NO. S-999

SUGGESTED ERECTION SEQUENCE

State of Alaska

DEPARTMENT OF HIGHWAYS

Juneau, Alaska

Date 7-18-74

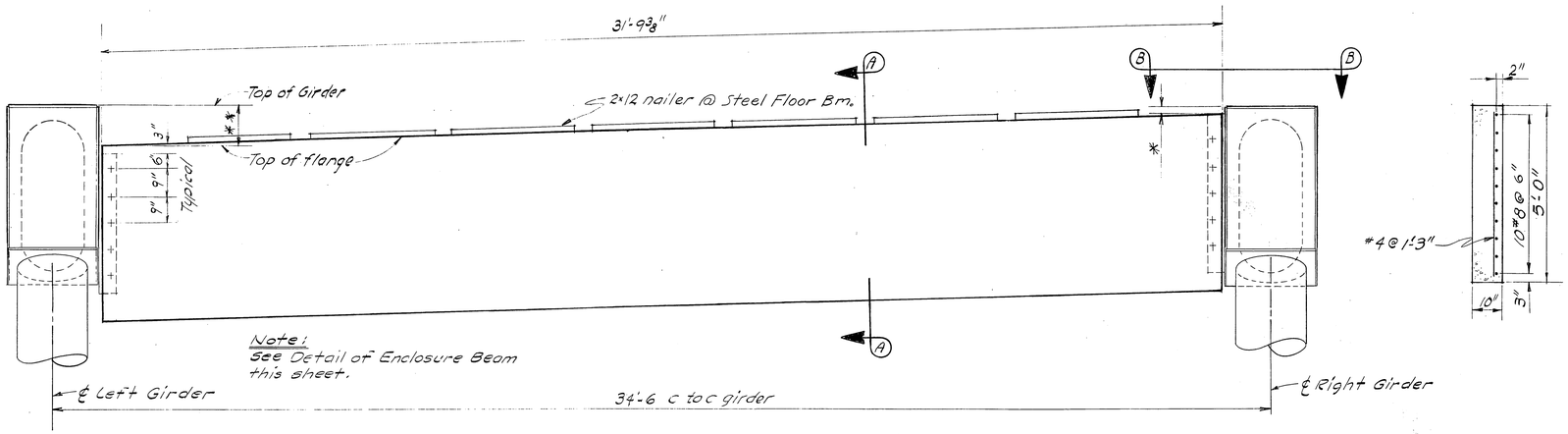
Approved [signature]

BRIDGE NO. 1304

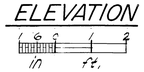
DWNG. NO. 3198

Designed By ...... Date ......
Checked By ...... Date ......
Drawn By G.J.K. Date ......
Checked By ...... Date ......
Traced By ...... Date ......

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	ALS - 0999(12)	1974 1977	48	48

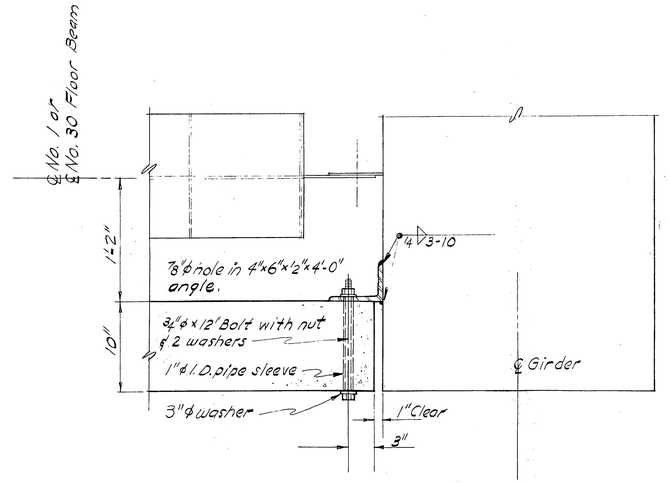


ELEVATION



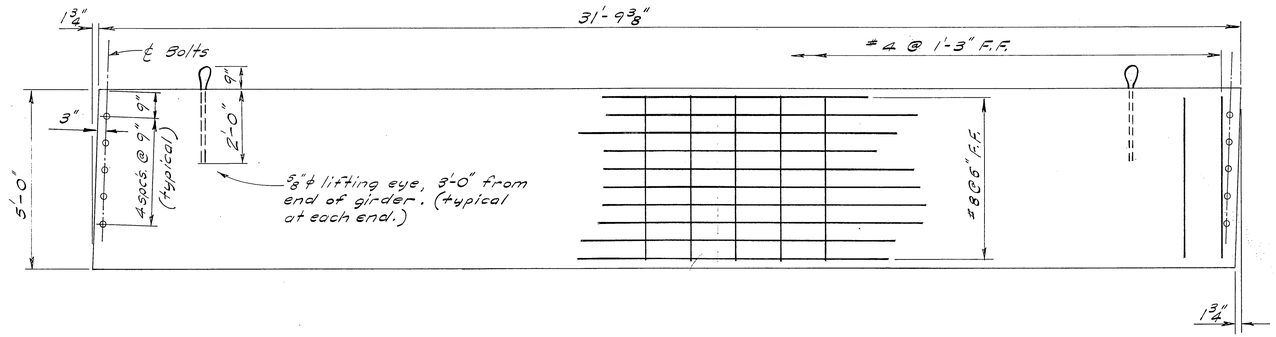
Note:
Elevation shown looking ahead on station. Floorbeam #1 shown, at Floorbeam #30 place re-steel in opposite face.

SECTION A-A



PLAN VIEW B

* Floor Beam #1 = 1'-5 8", #30 = 12 1/2"
** Floor Beam #1 = 13", #30 = 1'-6"



DETAIL OF ENCLOSURE BEAM

Note:
Contractor may at his option substitute a 10 3/4" x 60" x 31'-9 3/8" lg. Glu-Lam Timber Girder for enclosure. Connection details same as shown for concrete enclosure except drill 7/8" ϕ holes in glu-lam for 3/4" ϕ bolts.
Unit Stress:
Glu-Lam Timber Girder = 1100 psi.
Grade = L2

ESTIMATE OF QUANTITIES		
ITEM	Unit	Total
Class "A" Concrete	C.Y.	10.0
Structural Steel, furnished, fabricated and erected.	Lb.	400
Reinforcing Steel	Lb.	1900
Alternate Timber Girder	MBM	5.1

JUL 12 1976

CAPT. WILLIAM MOORE CREEK

ROUTE NO. S-999

ENCLOSURE DETAIL

State of Alaska
DEPARTMENT OF HIGHWAYS
Juneau, Alaska

Date 7-12-76
Approved

BRIDGE NO.
DWNG. NO.

Designed By..... Date.....
Checked By..... Date.....
Drawn By..... Date.....
Checked By..... Date.....
Traced By..... Date.....