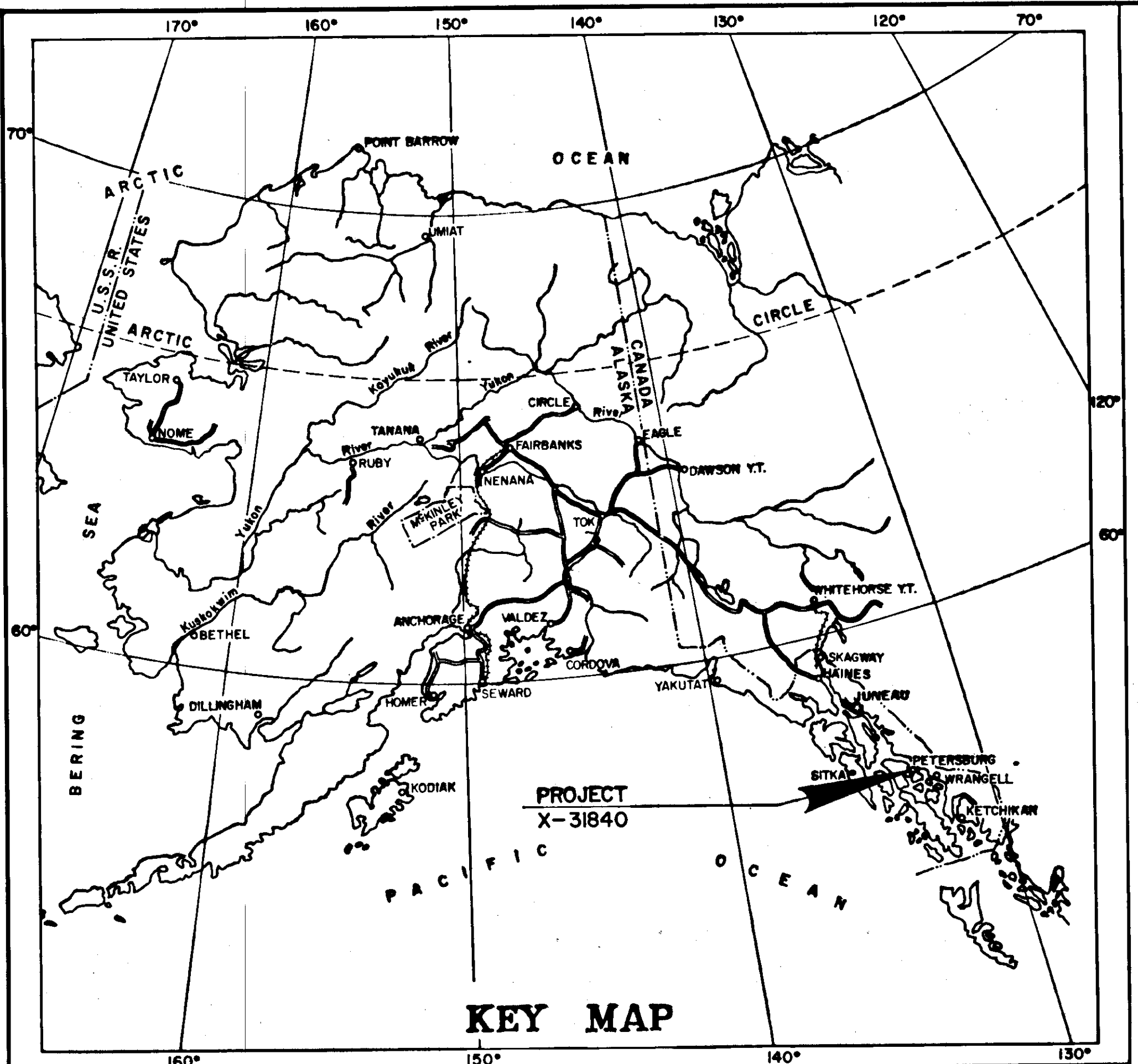


STATE	PROJECT	SHEET NO.	TOTAL SHEETS
ALASKA	X-31840	1	



**STATE OF ALASKA
DEPARTMENT OF HIGHWAYS**

**PLAN AND PROFILE
PROPOSED HIGHWAY PROJECT**

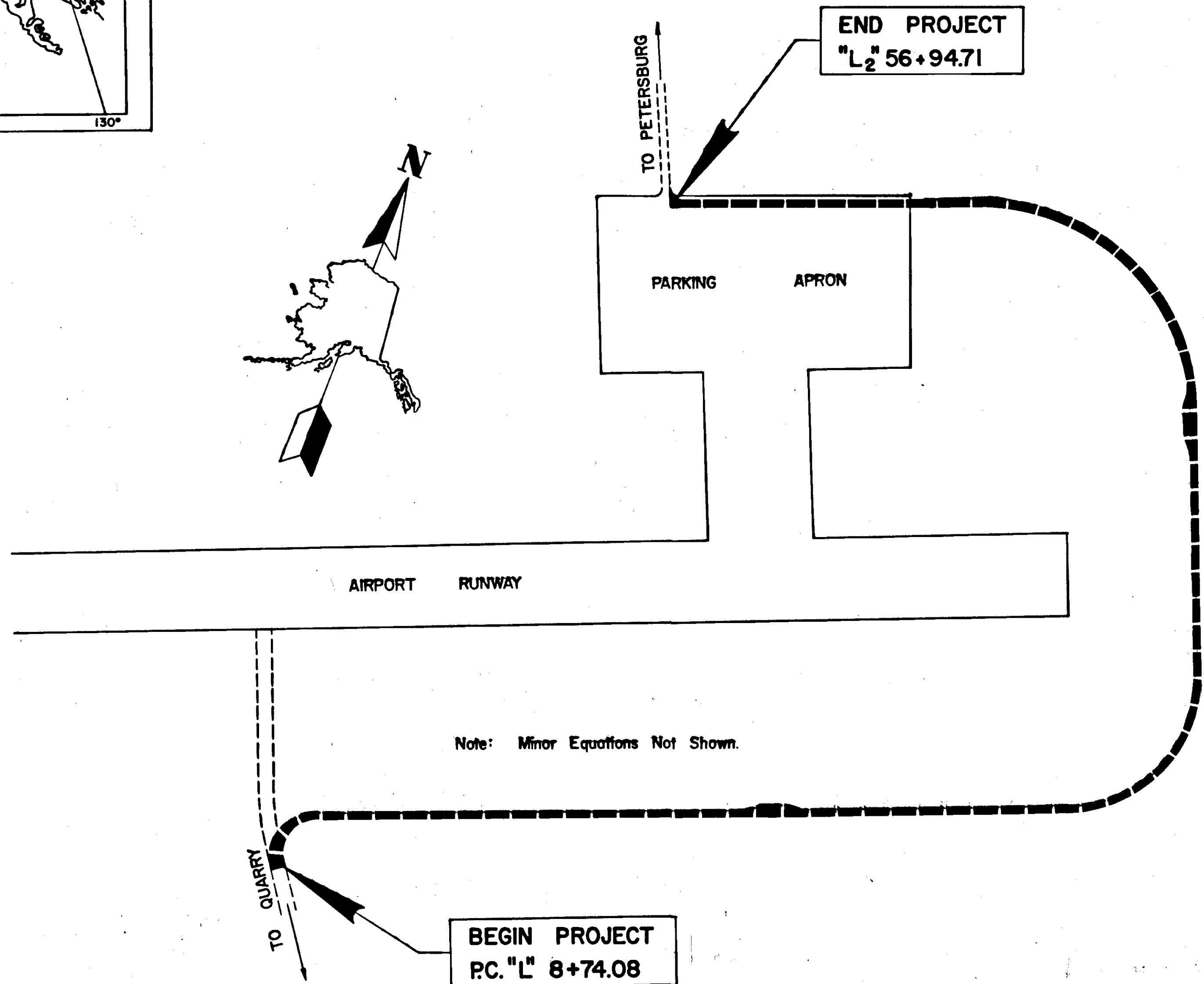
X-31840

**PETERSBURG AIRPORT QUARRY ROAD
GRADING & DRAINAGE**

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	TYPICAL SECTION & DETAILS
3-6	PLAN AND PROFILE

THE FOLLOWING STANDARDS APPLY TO THIS PROJECT: A-1; D-1A, T-16(2 SHEETS), T-21



Note: Minor Elevation Not Shown.

PROJECT SUMMARY

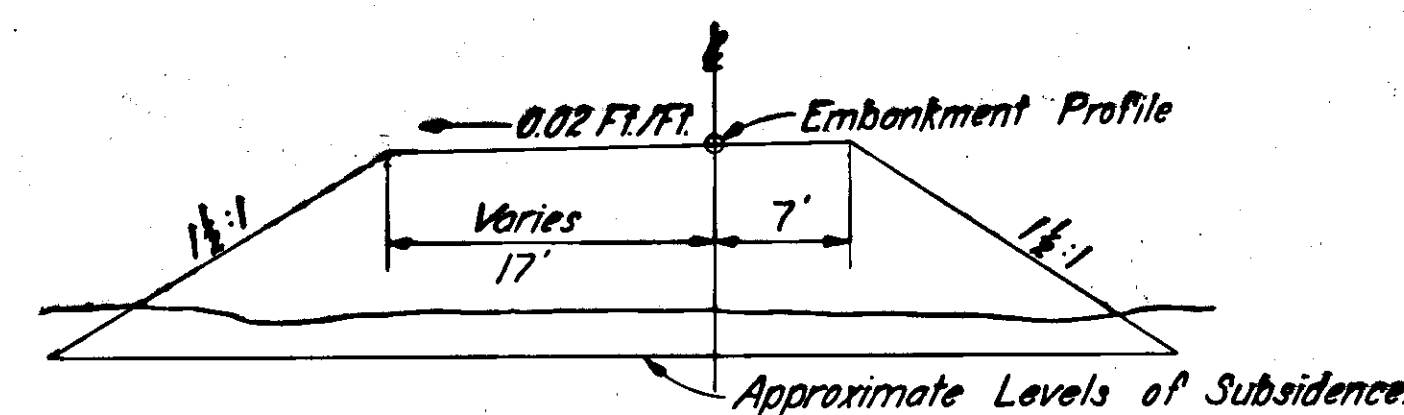
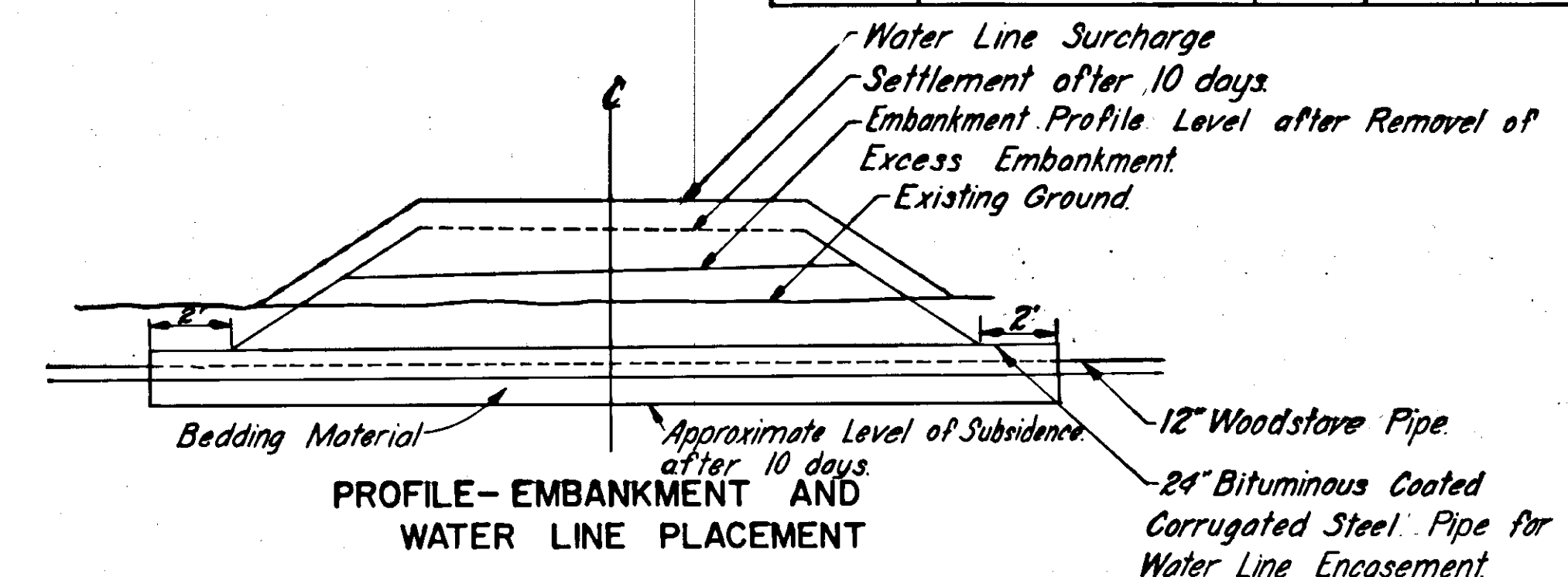
LENGTH of GRADING = 4608.22' = 0.8728 MILES
LENGTH of PROJECT = 4618.63' = 0.8747 MILES

STATE OF ALASKA
DEPARTMENT OF HIGHWAYS
APPROVED
Harold E. Mill, P.E. Date 6/9/71
SOUTHEASTERN DISTRICT ENGINEER

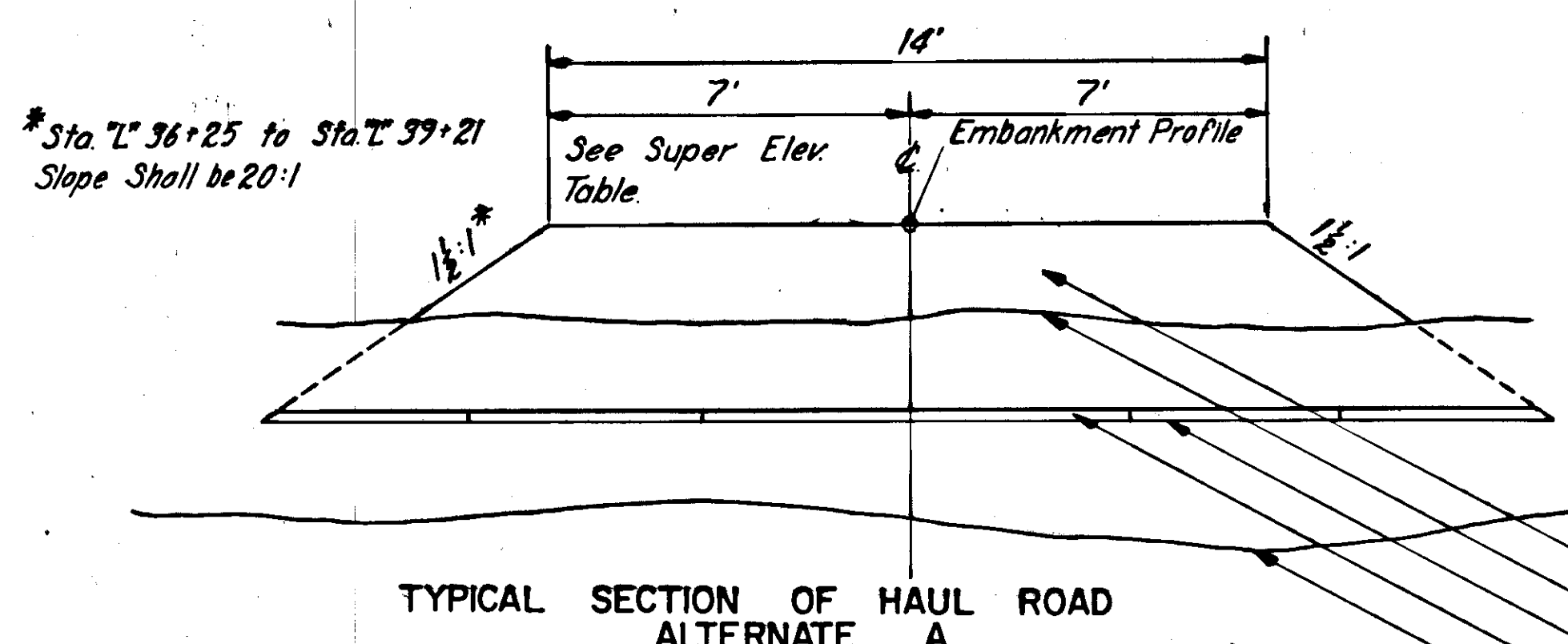
ESTIMATE OF QUANTITIES ALTERNATE A							
Item	Description	Unit	Sheet Number				Total
			3	4	5	6	
110 (1)	Mobilization	L.S.	All req'd	All req'd	All req'd	All req'd	All req'd
201 (4)	Hand Clearing	Acres	.830	.179	0	0	1.009
203 (3)	Unclassified Excavation	Cu. Yds.	0	483	257	0	740
203 (5)	Borrow	Ton	7692	8432	13975	2482	32581
603 (61)	36" Bituminous Coated Corrugated Steel Pipe	L.F.	0	74	94	0	168
646 (1)	Wood Slab	Sq. Yds.	3396	4836	4289	730	13251

ESTIMATE OF QUANTITIES ALTERNATE B							
Item	Description	Unit	Sheet Number				Total
			3	4	5	6	
110 (1)	Mobilization	L.S.	All req'd	All req'd	All req'd	All req'd	All req'd
201 (4)	Hand Clearing	Acres	.830	.179	0	0	1.009
203 (3)	Unclassified Excavation	Cu. Yds.	0	483	257	0	740
203 (5)	Borrow	Ton	5245	4559	9145	1877	20826
315 (1)	Sand Blanket	Ton	2297	3635	4594	568	11034
603 (61)	36" Bituminous Coated Corrugated Steel Pipe	L.F.	0	74	94	0	168

BASIS OF ESTIMATE	
Item	Estimating Factor
203 (5)	1.80 tons per cu. yds.
315 (1)	1.69 tons per cu. yds.



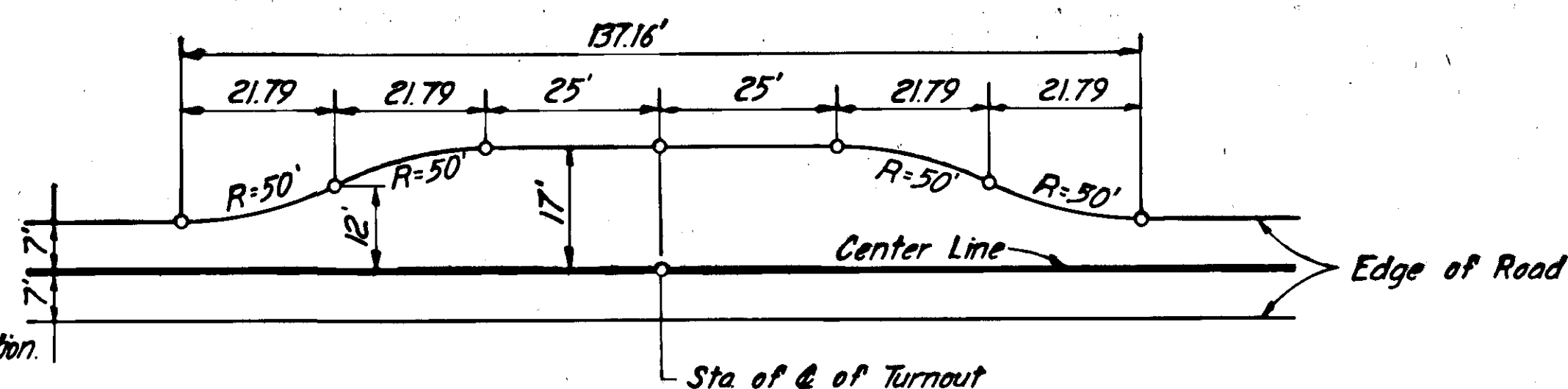
TYPICAL SECTION OF TURNOUTS



TYPICAL SECTION OF HAUL ROAD ALTERNATE A

Note: Wood Slabs shall be Hand placed to Prevent Damage to the Muskeg Mat from the Embankment Surcharge Placement or as Directed by the Engineer.

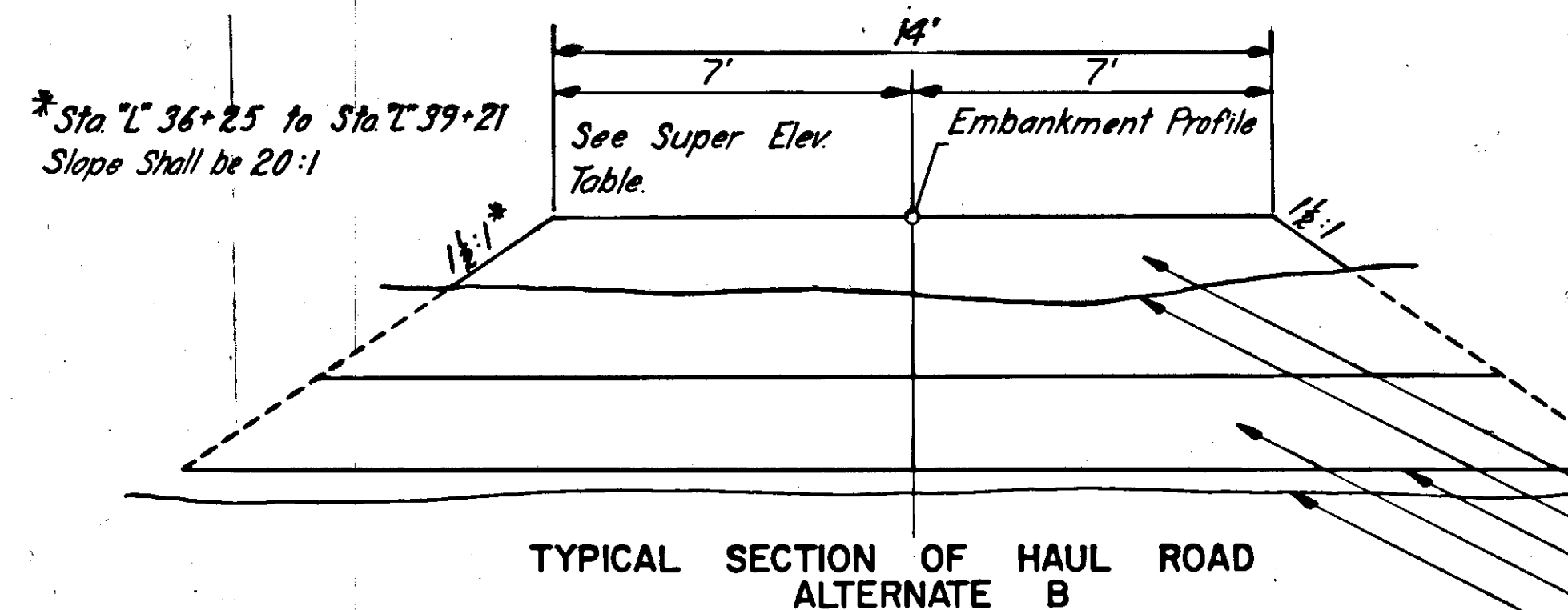
- Borrow and/or Usable Excavation.
- Existing Ground
- Approximate Limits of Subsidence
- Min. 2" Wood Slab Mat
- Approximate Limits of Muskeg



PLAN VIEW OF TURNOUT

"L" & "L"2 LINE SUPERELEVATION			
From	To	Rate	Dir.
"L" 8+74.08	"L" 10+54.01 BK.	2' / ft.	Rt.
"L" 11+25.92 Ahd.	"L" 31+03	2' / ft.	Lt.
"L" 51+03	"L" 56+84.30	2' / ft.	Rt.

STATIONS OF TURNOUT
Turnout @ Sta. "L" 22+00 Lt.
Turnout @ Sta. "L" 39+90 Lt.



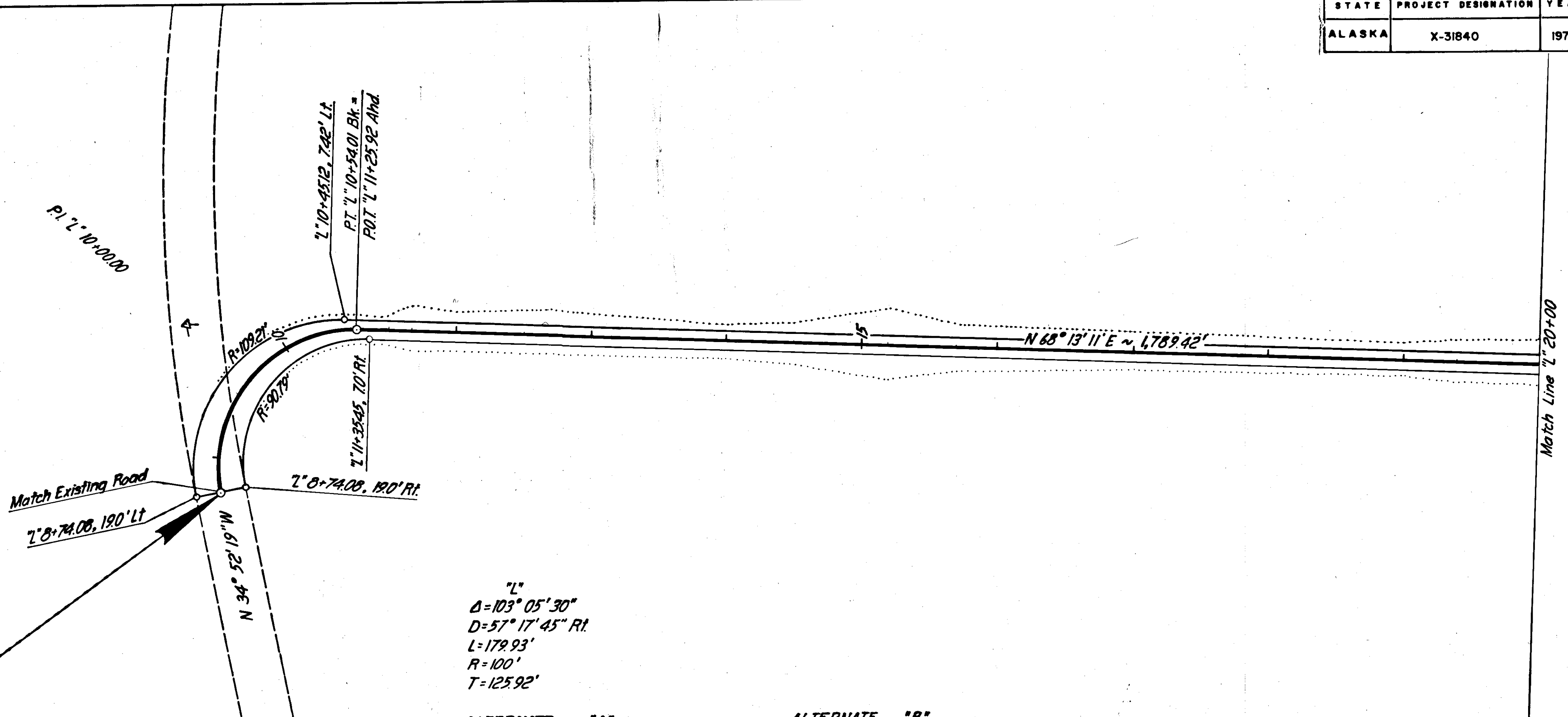
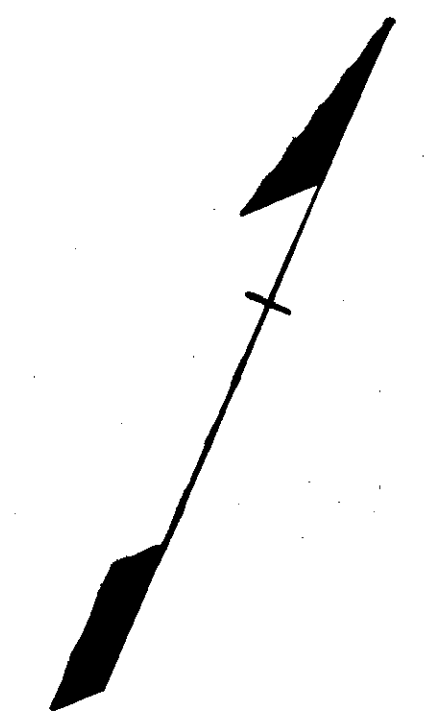
TYPICAL SECTION OF HAUL ROAD ALTERNATE B

- Borrow and/or Usable Excavation
- Existing Ground
- Approximate Limits of Subsidence
- Min. 18" Sand blanket.
- Approximate Limits of Muskeg

GENERAL NOTES

1. Grades and alignment shown on these plans are subject to minor revisions.
2. Culvert lengths and locations are approximate only and are subject to minor revisions.
3. In areas of muskeg prior to placement of slab or sand mat and embankment, the existing ground shall be left in an undisturbed state.
4. Embankment surcharge to be graded to embankment profile after a 90 day subsidence period.
5. Water line crossing installations and temporary connections to be done by others.
6. Location & depth of existing water line is approximate only.
7. From sta. "L" 10+00 to sta. "L" 25+00 area shall be hand cleared within slope limits of roadway.

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	X-31840	1971	3	6



"L"
 $\Delta = 103^\circ 05' 30''$
 $D = 57^\circ 17' 45''$ RI
 $L = 179.93'$
 $R = 100'$
 $T = 125.92'$

**BEGIN PROJECT
 X-31840
 STA. "L" 8+74.08**

Note: Sta. "L" 12+00 to "L" 50+00
 Embankment Surcharge Shall be
 Constructed 2.5' above
 Embankment Profile

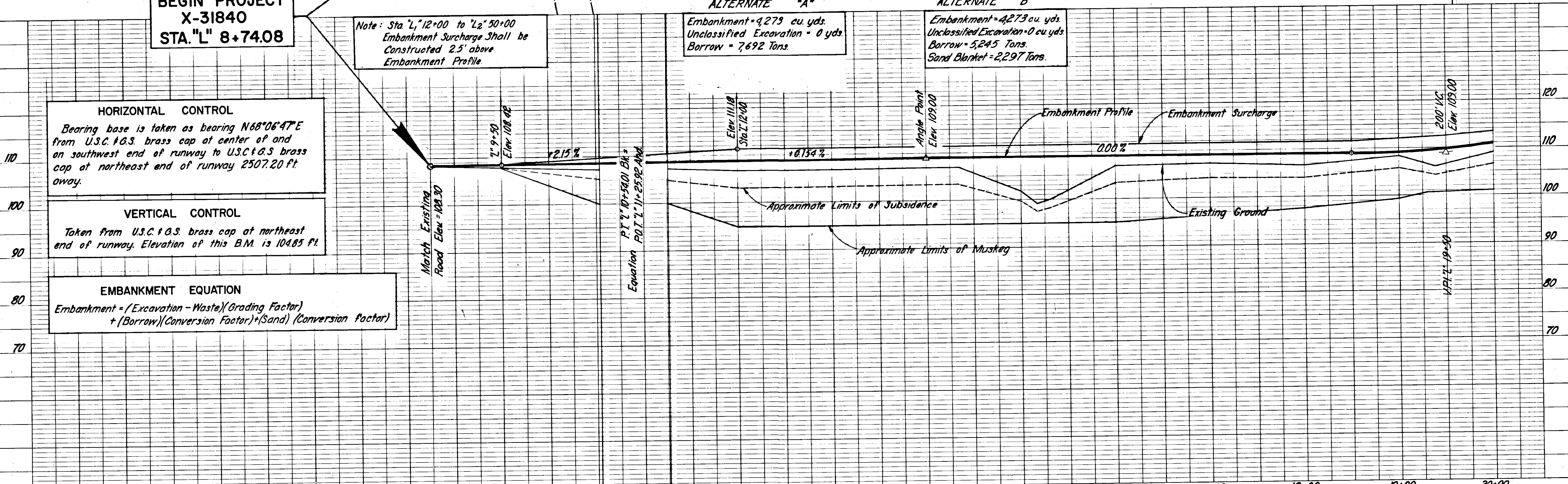
ALTERNATE "A"
 Embankment = 4,273 cu. yds.
 Unclassified Excavation = 0 yds.
 Borrow = 7,692 Tons.

ALTERNATE "B"
 Embankment = 4,273 cu. yds.
 Unclassified Excavation = 0 cu. yds.
 Borrow = 5,245 Tons.
 Sand Blanket = 2,297 Tons.

HORIZONTAL CONTROL
 Bearing base is taken as bearing $N68^\circ 06' 47'' E$
 from U.S.C. & G.S. brass cap at center of and
 on southwest end of runway to U.S.C. & G.S. brass
 cap at northeast end of runway 2507.20 ft.
 away.

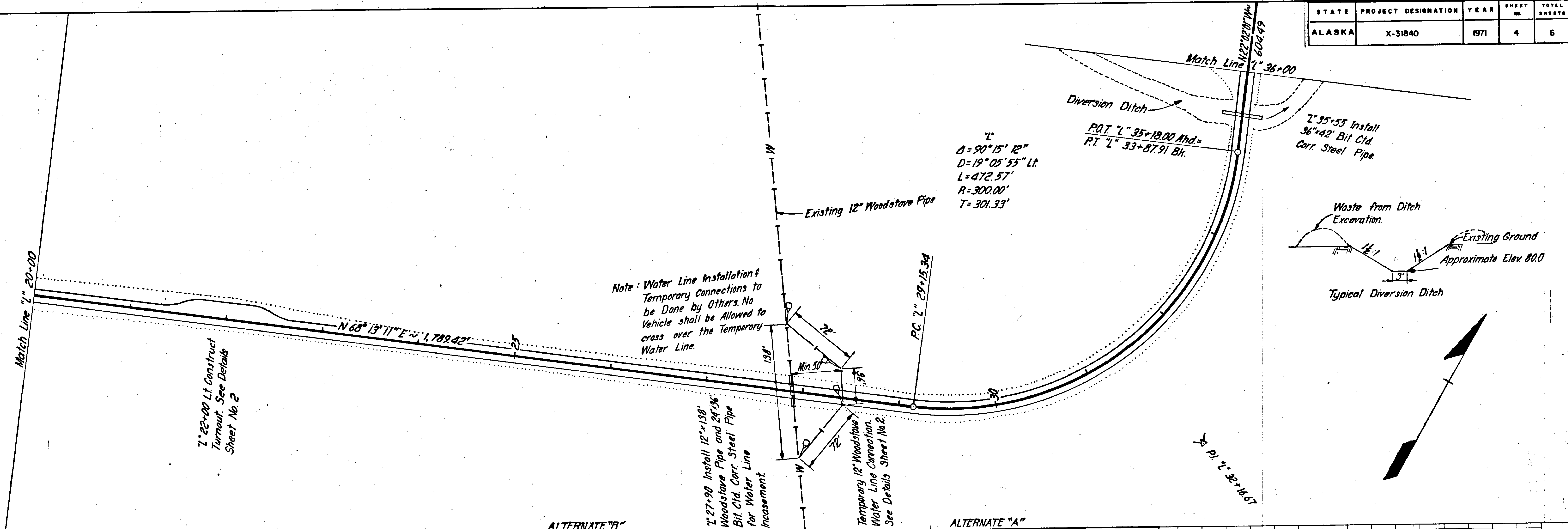
VERTICAL CONTROL
 Taken from U.S.C. & G.S. brass cap at northeast
 end of runway. Elevation of this B.M. is 104.85 ft.

EMBANKMENT EQUATION
 $Embankment = (Excavation - Waste) / (Grading Factor)$
 $+ (Borrow) / (Conversion Factor) + (Sand) / (Conversion Factor)$

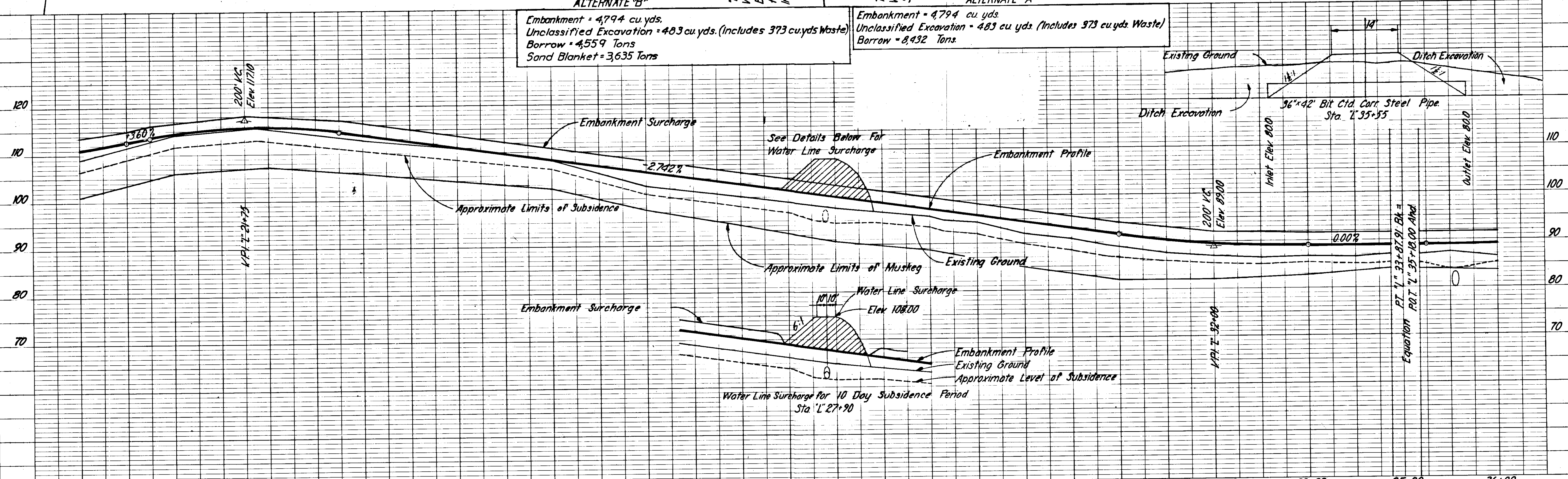


NOTE BOOK GRADES CHECKED. E.M. NOTED. STRUCTURE RATINGS CHKD. NO.

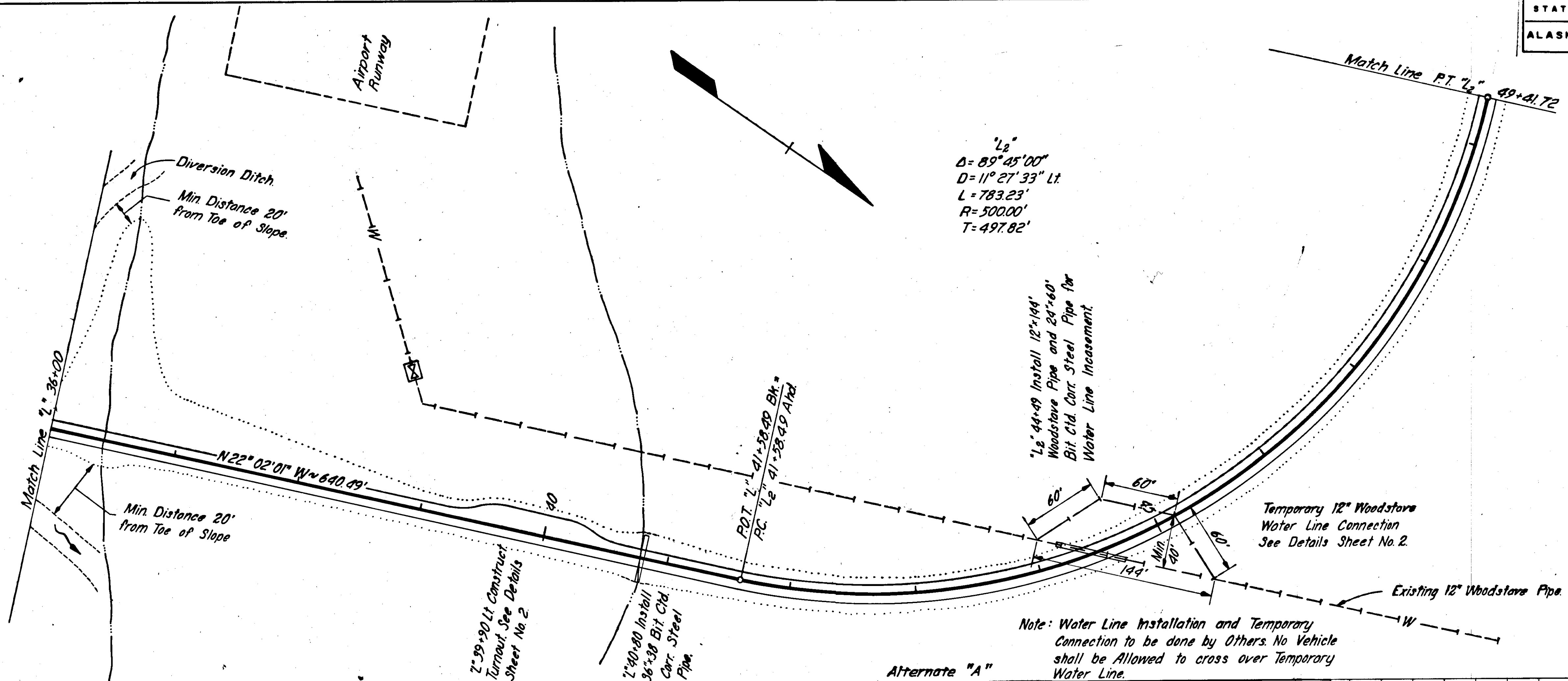
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	X-31840	1971	4	6



ALTERNATE "B"	ALTERNATE "A"
Embankment = 4,794 cu. yds.	Embankment = 4,794 cu. yds.
Unclassified Excavation = 403 cu. yds. (Includes 373 cu. yds. Waste)	Unclassified Excavation = 483 cu. yds. (Includes 373 cu. yds. Waste)
Borrow = 4,559 Tons	Borrow = 4,432 Tons
Sand Blanket = 3,635 Tons	

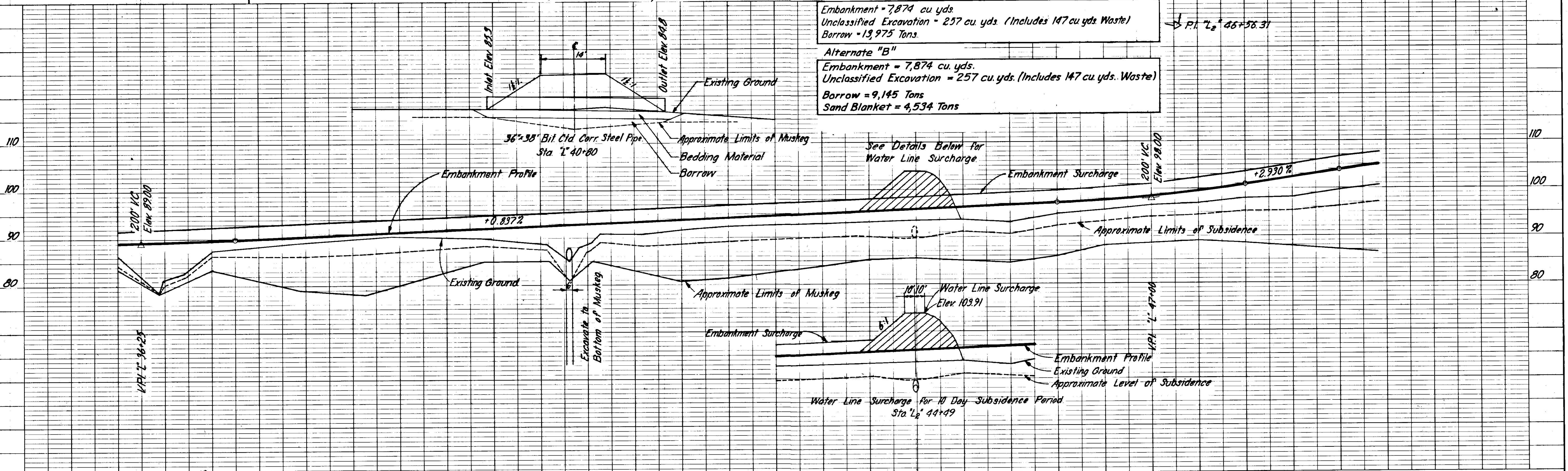


STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	X-31840	1971	5	6



Alternate "A"
 Embankment = 7,874 cu yds.
 Unclassified Excavation = 257 cu yds. (Includes 147 cu yds. Waste)
 Borrow = 19,975 Tons

Alternate "B"
 Embankment = 7,874 cu yds.
 Unclassified Excavation = 257 cu yds. (Includes 147 cu yds. Waste)
 Borrow = 9,145 Tons
 Sand Blanket = 4,534 Tons



STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	X-31840	1971	6	6

Airport Parking Apron

Match Line PT 'L₂' 49+41.72

S 68° 12' 59" W ~ 52.45'

Sta 'L₂' 56+84.90 Match Existing Edge of Roadway

L₂ 56+26.10 7' Rt
L₂ 56+86.00 61.66 Rt

To Petersburg N 23° 20' 46" W

Note: Sta 'L₂' 51+03 to Sta 'L₂' 56+84.90
Grade Existing Ground to Embankment Profile.

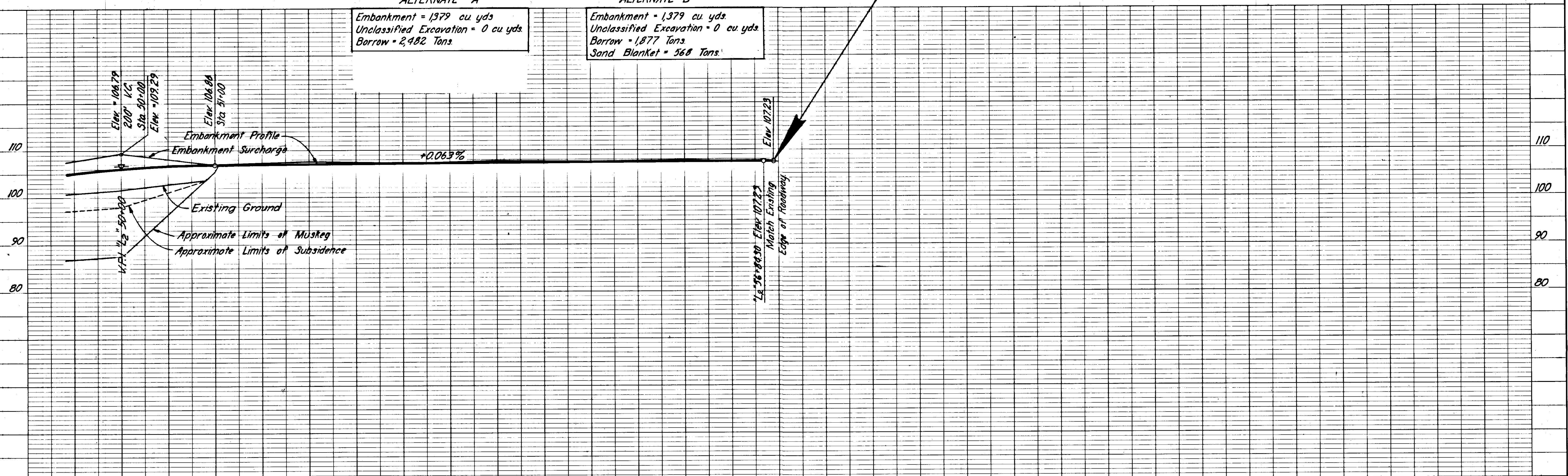
END OF PROJECT
X-31840
STA. "L₂" 56+94.71

ALTERNATE "A"

Embankment = 1,379 cu. yds
Unclassified Excavation = 0 cu. yds
Borrow = 2,482 Tons

ALTERNATE "B"

Embankment = 1,379 cu. yds
Unclassified Excavation = 0 cu. yds
Borrow = 1,877 Tons
Sand Blanket = 568 Tons



NO. 1000

STRUCTURE NOTATION OFFICE