

**STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND
PUBLIC FACILITIES
SOUTHEASTERN REGION
DESIGN AND CONSTRUCTION DIVISION**



**HARRIS RIVER
TO
CLARK BAY**

**FH 6-1(5)
69868**

INDEX OF SHEETS	
SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	TYPICAL SECTIONS
3-4	SUMMARIES
5	MISCELLANEOUS DETAILS
6	MATERIAL SITES
7-29	PLAN & PROFILE SHEETS
30-31	INTERSECTION DETAILS
FT1-FT6	FERRY TERMINAL PAVING PROJECT

THE FOLLOWING STANDARD DRAWINGS ARE INCLUDED IN THESE PLANS:
A-1, C-01.01, C-02.00, C-03.01, D-01.01, D-04.10, D-06.01, G-04.03S, G-04.03W, G-12.00, G-12.01, I-40.00, I-41.00, T-21.01

"As-Built" Plans
Begin Construction: 5/29/89
Complete Construction: 11/8/89
Project Engineer: Brian Belt
Contractor: Associated Sand & Gravel, Inc.

DESIGN DESIGNATION

V	50 MPH
ADT (88)	165
ADT (2009)	298
DHV (14%)	42
% T	7
E. A. L.	27,650

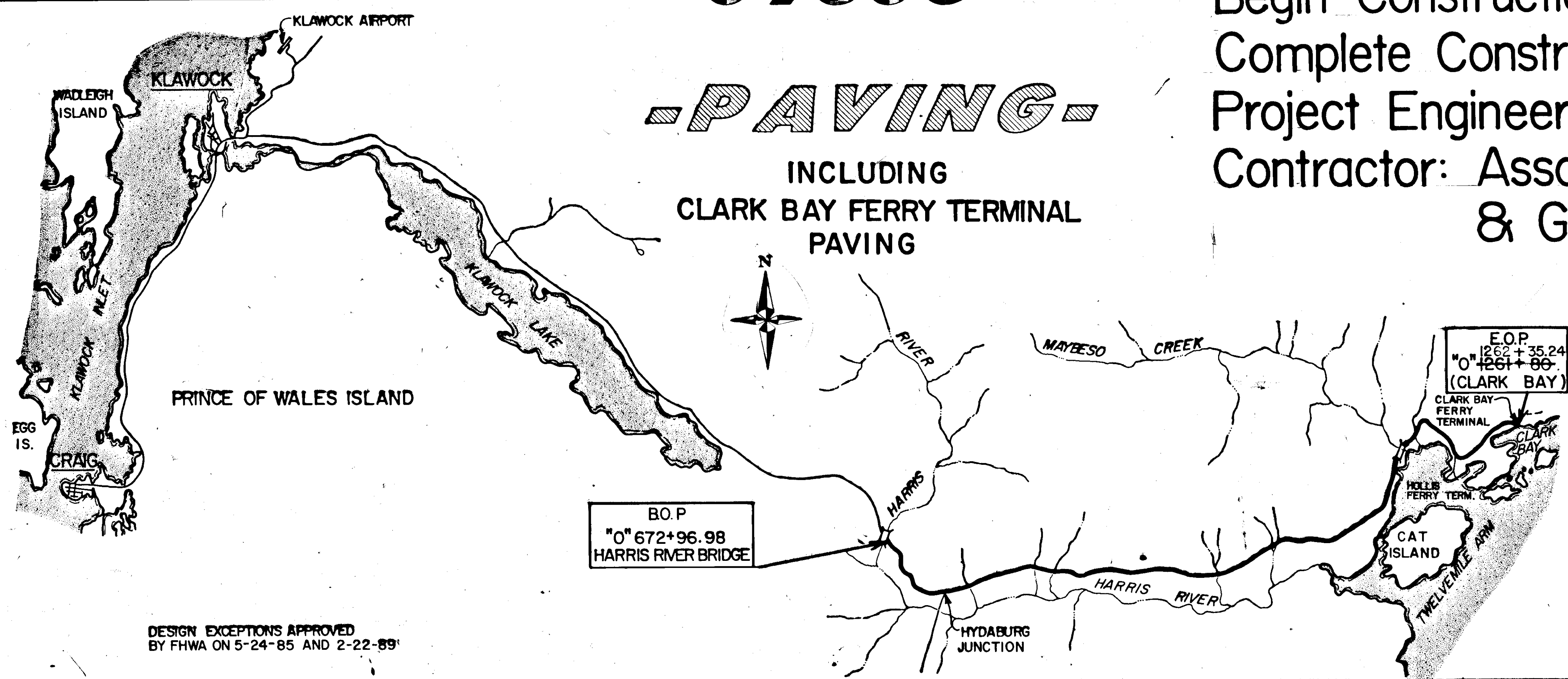
EQUATIONS

BACK	 	 	AHEAD
672+98.00	*	672+96.98	
901+10.87	*	901+11.76	
967+34.33	*	967+63.75	
1034+74.01	*	1034+80.48	
1146+50.57	*	1146+36.46	

PROJECT SUMMARY

PAVEMENT WIDTH 28 FEET
PAVEMENT LENGTH 58,621.26 FEET
PROJECT LENGTH 11.16 MILES

FUNCTION CLASSIFICATION
RURAL MAJOR COLLECTOR



-PAVING-
INCLUDING
CLARK BAY FERRY TERMINAL
PAVING

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND
PUBLIC FACILITIES
SOUTHEASTERN REGION DESIGN SECTION

APPROVED *[Signature]* Date 3-2-89
S.E. Region Design Chief

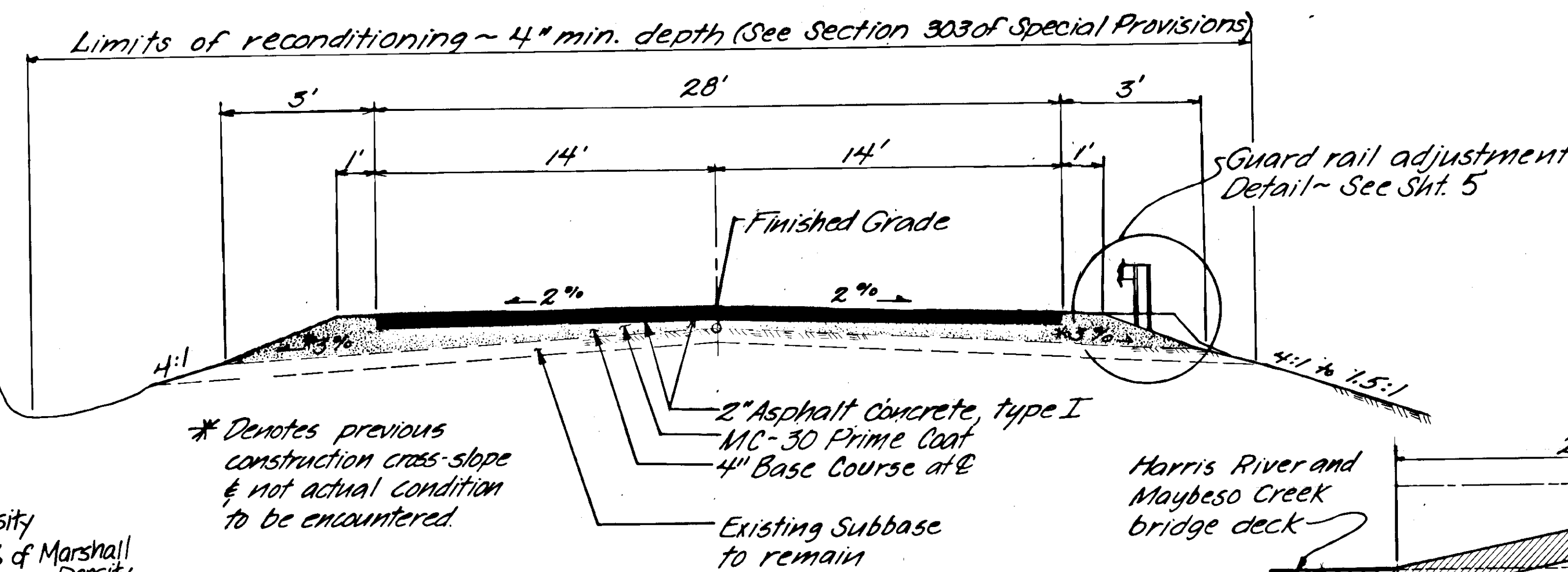
APPROVED *[Signature]* Date 5-2-89
Director, S.E. Region Design & Construction

PROJECT NUMBER: FH6-1(5) - 69868	ENGINEER'S STAMP
DATE:	
SHEET 1 OF 31	

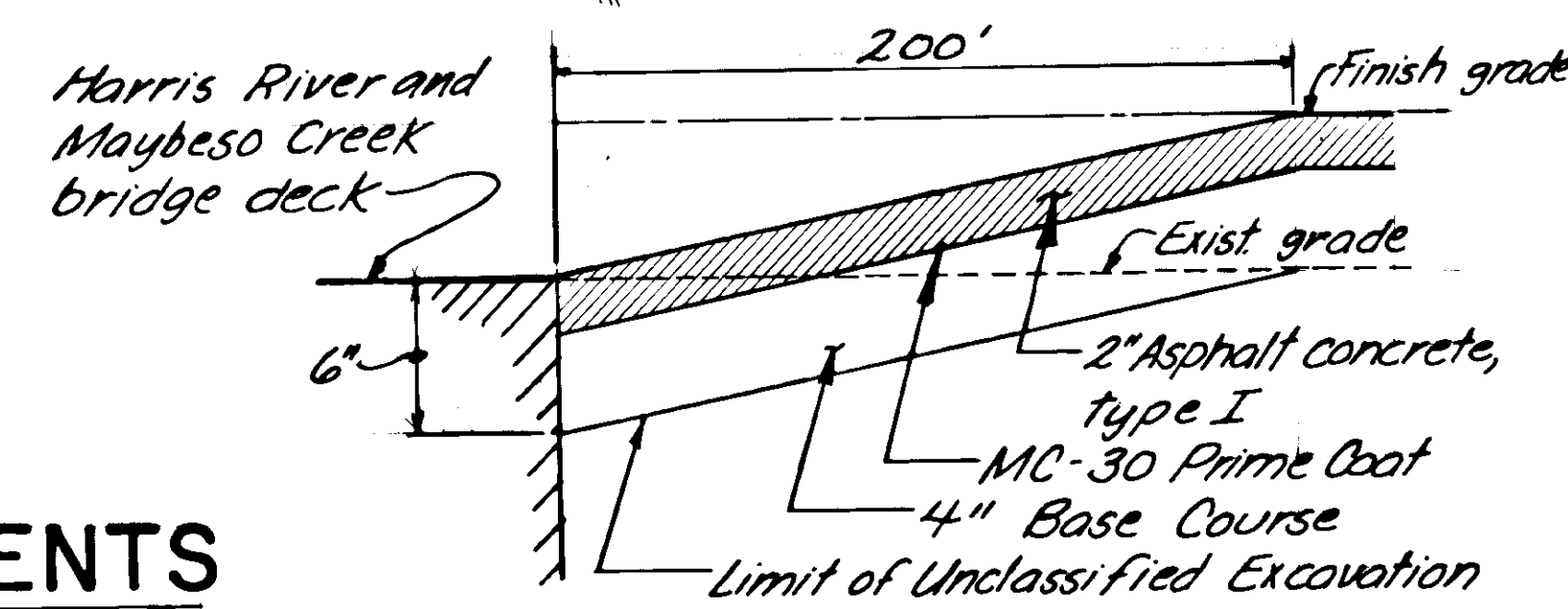
DESIGN EXCEPTIONS APPROVED
BY FHWA ON 5-24-85 AND 2-22-89

GENERAL NOTES

1. Grades & alignments shown on the plans may be subject to minor revisions by the Engineer.
2. Pipe conduit locations & lengths may be subject to minor revisions as approved by the Engineer.
3. Superelevation transition lengths shall be 150 feet with the point of rotation on centerline. Two-thirds of the transitions length shall be outside the horizontal curve. Except when the degree of curve is 6°00' or greater, the entire transition shall be outside the curve.
4. Hay bales and/or filters may be required on the stream(s) below the construction site to entrap sediment being washed downstream. This work, if required, will be paid for under temporary erosion & pollution control.
5. In areas of guard rail, the contractor shall smoothly grade the base from the edge of pavement & adjust the guard rail as necessary to provide required 27" distance from finish ground to top rails.
6. Unclassified excavation removed under this project shall only be disposed at approved locations.
7. Traffic Control Plan will be in accordance with Standard Drawing C-03.0, and Section 643 of the specifications.
8. Waste sites within the Right-of-Way will be controlled by the Engineer. Waste placed outside the Right-of-Way will require necessary approvals from the controlling agencies and will be requested by the contractor and obtained by the department.
9. The Maybeso & Harris River bridge decks are not to be paved, however, they are required to be cleaned & striped.
10. The quantity of Base Course includes approximately 5,000 tons for leveling purposes.



* Denotes previous construction cross-slope & not actual condition to be encountered.



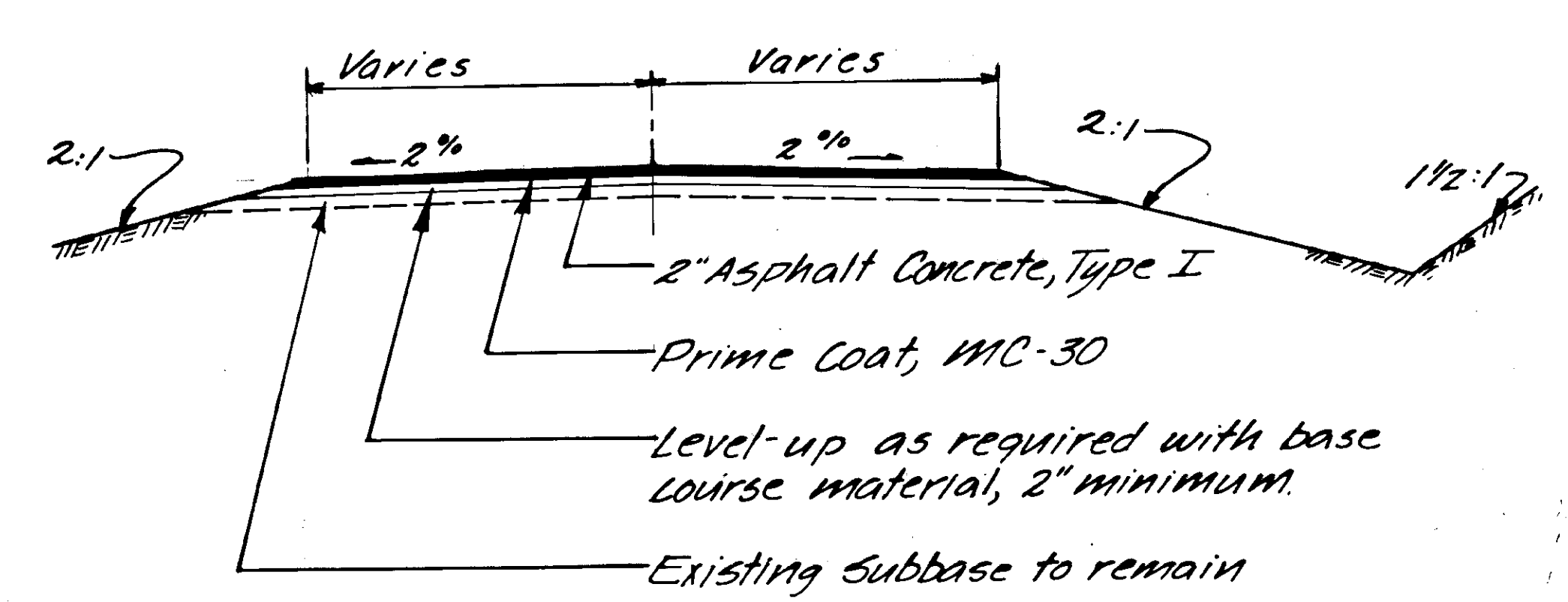
BRIDGE APPROACH TRANSITIONS
NOTE: Guardrail adjustment transition shall be as directed by the Engineer

BASIS OF ESTIMATE	
ITEM NO	ESTIMATING FACTOR
301(1) 1.78	1.98 TONS/cu. yd @ 98% Proctor Density
401(1) 106.6	46 lbs./sq. yd./inch depth @ 95% of Marshall Density
401(2)	6.0% of item 401(1)
403(2) 12	0.2 gal./sq. yd. - 253 gal./ton @ 60°F

TYPICAL SECTION OF IMPROVEMENTS

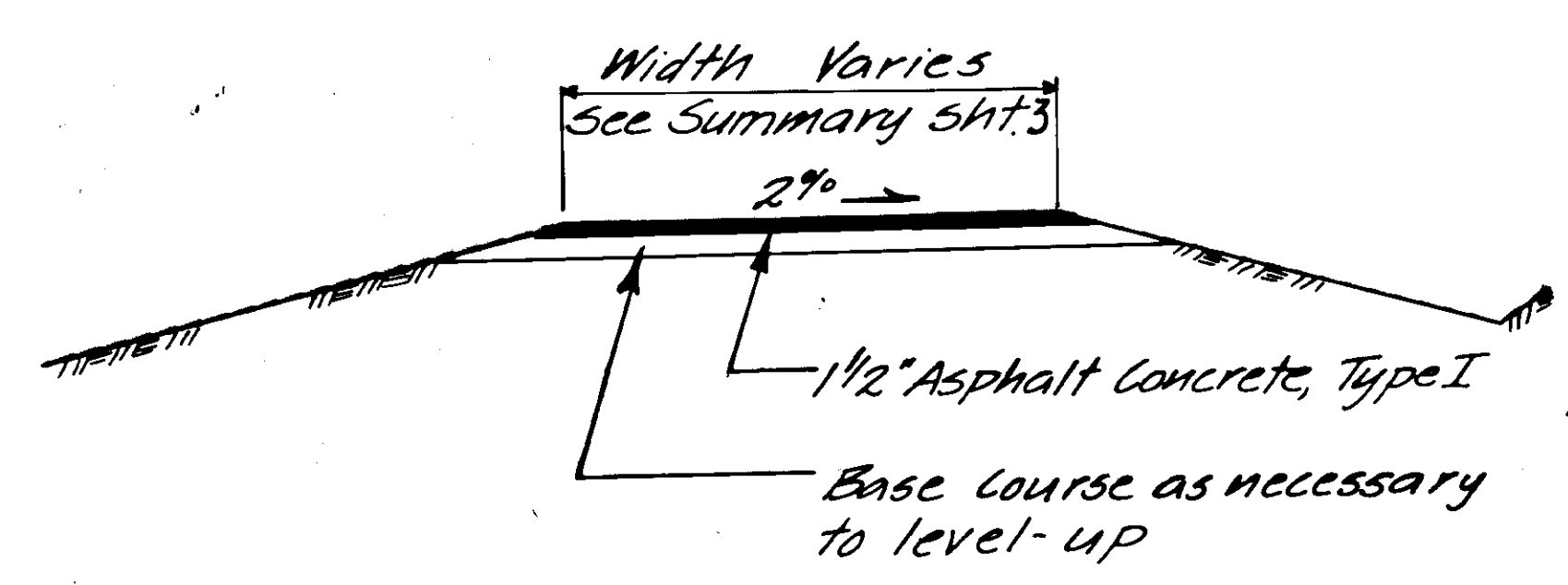
NOT TO SCALE

STA. 672+96.98 TO STA. 1261+80-1262+35.24



APPROACH ROAD TYPICAL

NOTE
Paving limits to be as shown on the detail sheets or as directed by the engineer.



RESIDENTIAL DRIVEWAY TYPICAL

1. Paving limits to be 25' from the shoulder or to the R/W line, whichever is less.

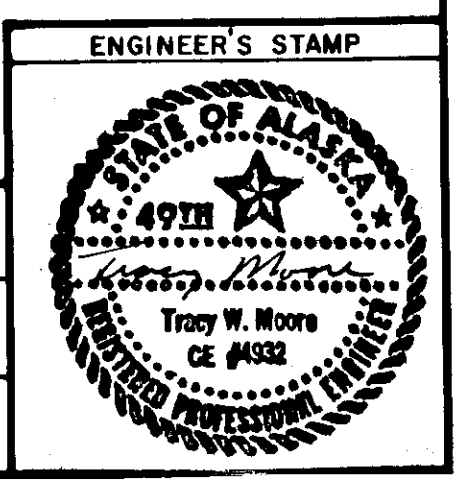
BY	DATE	DESCRIPTION OF CHANGE
RECORD OF REVISIONS		

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

HARRIS RIVER TO CLARK BAY - PAVING TYPICAL SECTIONS

APPROVED BY: *John W. Henry* DESIGN CHIEF 2-28-89 DATE
RECOMMENDED BY: _____ DATE
PREPARED BY: *Tracy W. Moore* PROJECT MANAGER *J.M. Stal* LEAD DESIGNER

DESIGNED BY: T.W. MOORE
DRAWN BY: CSA
CHECKED BY: _____
SCALE: NONE
DATE: _____
SHEET 2 OF 31



ESTIMATE OF QUANTITIES

ITEM NO.	ITEM	UNIT	QUANT.
109 (2)	DBE Adjustments	C.S.	All Reg'd
201 (1B)	Clearing	L.S.	All Reg'd
203 (3)	Unclassified Excavation	C.Y.	18,000 3715
203 (11)	Ferry Terminal Grading	L.S.	All Reg'd
203 (12)	Special Ditching	Station	33.3 4785
203 (13)	Foreslope Repair	S.Y.	220 23531
203 (14)	Stream Channel Repair	L.S.	All Reg'd
301 (1)	Crushed Aggregate Base Course	Ton	70,000 1346.7
303 (2)	Reconditioning	mile	11.5 11.09
401 (1)	Asphalt Concrete, Type I	Ton	24,000 420
401 (1)	Asphalt Price Adjustment	Ton	(-1840.25
401 (2)	AC-5 Asphalt Cement	Ton	1440 15175
403 (1)	MC-30 Liquid Asphalt for Prime Coat	Ton	145 8379
603 (1-2A)	24 inch Corrugated Steel Pipe	L.F.	453 466
603 (1-30)	30 inch Corrugated Steel Pipe	L.F.	12
603 (1-36)	36 inch Corrugated Steel Pipe	L.F.	132
603 (3A)	End Section for 24" Corrugated Steel Pipe	Ea.	2
603 (3B)	End Section for 30" Corrugated Steel Pipe	Ea.	5
603 (3C)	End Section for 36" Corrugated Steel Pipe	Ea.	1
603 (3D)	End Section for 42" Corrugated Steel Pipe	Ea.	1
603 (22)	Conduit cleaning	Ea.	18 19
605 (3)	8 inch perforated pipe underdrain Deleted	L.F.	250
606 (6)	End Anchorage	Ea.	7 6
606 (8)	Adjustment of existing guardrail	L.F.	3362 3362.5
618 (1)	Seeding	Acre	2
639 (1)	Residence Driveways	Ea.	10 15
640 (1)	Mobilization & Demobilization	L.S.	All Reg'd
641 (1)	Temporary erosion & pollution control	C.S.	All Reg'd (not used)
642 (1)	Construction surveying	L.S.	All Reg'd
642 (1A)	Construction Surveying for ferry terminal	L.S.	All Reg'd
643 (1)	Traffic Maintenance	L.S.	All Reg'd
643 (3)	Permanent Construction Signing	Ea/day	600 1560
643 (4)	Construction Sign	Ea/day	200 1526
643 (5)	Type II Barricade	Ea/day	200 952
643 (7)	Traffic Cone	Ea/day	600 2547
643 (8)	Drum	Ea/day	100 871
643 (13)	Temporary Traffic Marking	Sta.	588 58566
643 (15)	Flagging	man hour	1200 3728.5
643 (18)	Watering	M gal	500 481.5
644 (1)	Field Office	L.S.	All Reg'd
644 (2)	Field Laboratory	L.S.	All Reg'd
644 (6)	Engineering Transportation	L.S.	All Reg'd
645 (1)	Training Program	M.H.	100 713
670 (1)	Painted Traffic Markings	L.S.	All Reg'd
670 (1A)	Painted Traffic Markings for ferry term.	L.S.	All Reg'd
605 (2)	Curvert Embankment Repair (C.O.2)	L.S.	All Reg'd
605 (3)	Modified Underdrain (C.O.3)	L.S.	All Reg'd
606 (1)	W-Beam Guardrail, Wood Post (C.O.4)	L.F.	2,100 100
606 (4)	Removal and Reconstruction of Guardrail (C.O.4)	L.F.	62.50
606 (9)	Buried End Anchorage (C.O.4)	Each	300
614 (5)	Right-of-Way Monumentation (C.O.6)	L.S.	All Reg'd

APPROACH ROAD SUMMARY

STATION	LT	RT	RADIUS	WIDTH	REMARKS
"0" 691+60	X		25'	20'	20 Mile Spur
"0" 713+23		X	30'	28'	Hydaburg Rd.
"0" 926+70		X	25'	14'	Upper Harris Rv. Rd.
"0" 1013+50		X	25'	16'	Lower Harris Rv. Rd.
"0" 1075+00		X	25'	18'	Subdivision Road
"0" 1115+95	X		25'	14'	Maybess Crk. Road
"0" 1115+95		X	25'	18'	Old Hollis Road
"0" 1164+40	X		25'	20'	Forest Service
"0" 1191+97		X	25'	28'	Hollis Spur
"0" 1216+70	X		25'	20'	Subdivision Road
"0" 1252+27		X	25'	20'	Subdivision Road

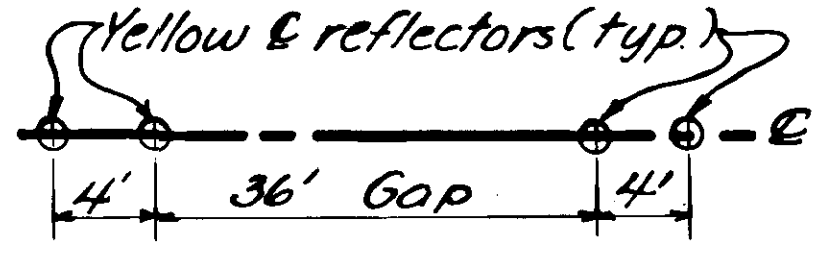
* See Detail Sheets 29 & 30

DITCH BASIN SUMMARY

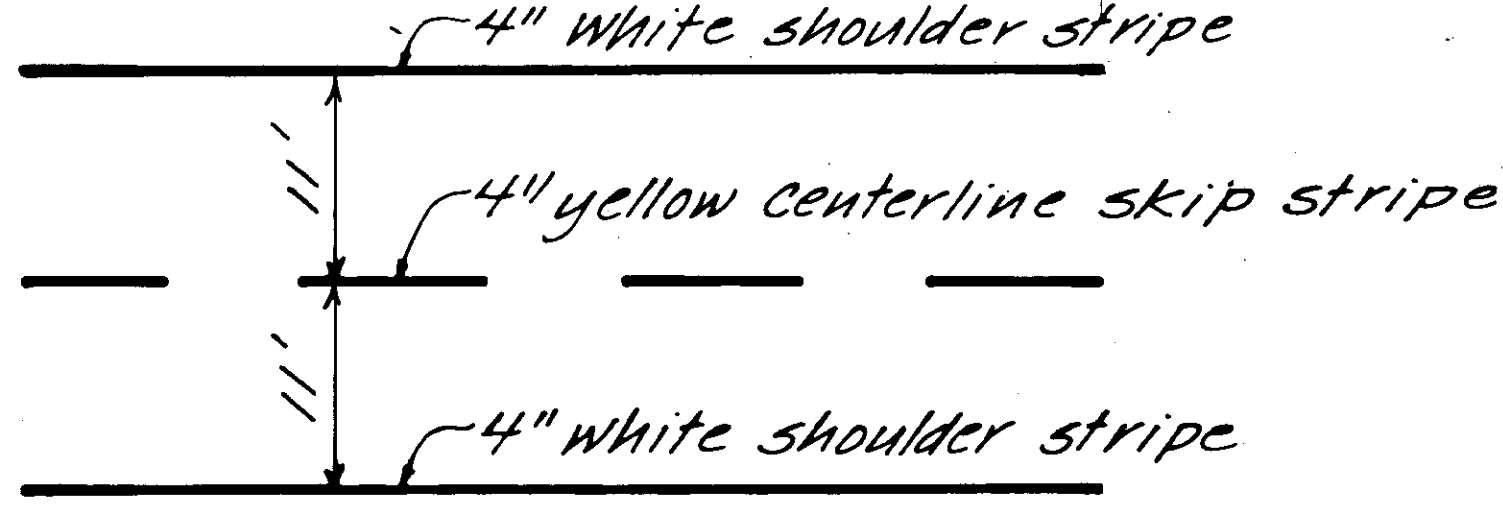
STATION	"A" DISTANCE	"B"	ENERGY DISAPATOR	EXCAVATION DISPOSAL AREA*
762+00	25'	20'	Yes	Sta 829 to 835
798+20	25'	20'	NO	" " " "
801+30	30'	15'	NO	" " " "
859+40	15'	10'	NO	" " " "
867+80	15'	10'	NO	" " " "
885+15	15'	8'	Yes	Sta 829 to 835
885+95	20'	15'	Yes	" " " "
896+30	15'	10'	NO	" " " "
899+00	15'	10'	NO	" " " "
904+80	15'	10'	NO	" " " "
920+75	15'	10'	NO	" " " "
926+75	15'	10'	NO	Sta 1042+50
928+35	15'	10'	NO	" " " "
990+50	15'	10'	Yes	" " " "
1036+25	15'	10'	NO	" " " "
1049+00	15'	10'	NO	" " " "
1100+00	15'	10'	NO	Sta 1042+50

Total Unclassified Excavation 1,100 C.Y. (Estimated)

* Note: Waste excavation may be disposed of on existing fill slopes between sta. 829 & 835, Rt, or any slope where R/W and fill heights permit.



TEMPORARY TRAFFIC MARKING PLAN
(SEE SPEC. PROV. 643-3.04)



TYPICAL STRIPING PLAN

- NOTES:
- The contractor shall apply edge & centerline striping in accordance with the Alaska Traffic Manual & Standard Drawing T-21.01.
 - The Engineer will mark the beginning & ending of all passing zones.
 - Gaps in the striping at major intersections shall be determined by the Engineer. See Intersection Detail Sheets 29-30.
 - Temporary markings shall consist of centerline reflectors spaced at 40' intervals. (See Section 643 for more information.)
 - The estimated striping quantities are as follows:
 Solid yellow - 14.5 miles
 Solid white - 22.5 miles
 Stop bars - 2 Each
 Skip Yellow - 3.4 miles

RESIDENTIAL DRIVEWAY SUMMARY

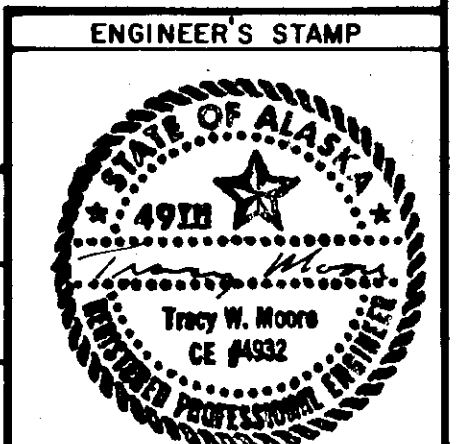
STATION	LT	RT	WIDTH	RADIUS
939+2050		✓	14'	25'
943+40		✓	14'	25'
949+00		✓	14'	25'
952+80		✓	14'	25'
966+80		✓	14'	25'
971+0020		✓	14'	25'
989+50		✓	14'	25'
1149+80		✓	14'	25'
1219+50		✓	14'	25'
1225+50		✓	14'	25'

Station	LT	RT	Width	Radius
936+60		✓	14'	25'
951+20		✓	14'	25'
1083+20		✓	14'	25'
1158+90		✓	18'	25'
1216+70		✓	24'	25'

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

HARRIS RIVER TO CLARK BAY - PAVING
SUMMARIES

APPROVED BY: *John W. Henry* DESIGN CHIEF 2-28-89
 RECOMMENDED BY: _____ DATE _____
 PREPARED BY: *T.W. Moore* PROJECT MANAGER
 DESIGNED BY: T.W. MOORE
 DRAWN BY: C.S.A.
 CHECKED BY: _____
 SCALE: NONE
 DATE: _____
 SHEET 3 OF 31



BY	DATE	DESCRIPTION OF CHANGE

CONDUIT SUMMARY

STATION	LENGTH OF NEW PIPE			END SECT. DIA.	COND. CLEARING	REMARKS
	24"	30"	36"			
882+90		8' Rt.				Extension necessary due to line shift
691+00						Remove exist. approach road Conduit
691+00	46'	46'				
724+48					X	Includes ditch basin cleaning
757+80			64'			
773+00				30" Lt.	X	Includes ditch basin cleaning
788+68	56'					
788+72				36" Lt.		
791+38	9' Lt.					Extension
798+10				60" Lt.		Overflow conduit
798+20					X	
801+30					X	Includes ditch basin cleaning
815+62				36" Lt.		
839+62		4' Lt.		30" Lt.		Extension
841+50				24" Lt.		
847+10	60'					
859+40		4' Lt.		30" Lt.	X	Extension
881+90					X	
885+15					X	
895+95				42" Lt.	X	
896+30		4' Lt.		30" Lt.		Extension
899+00					X	
901+00					X	
904+80				24" Lt.	X	
926+80	70' Lt.					Skew ahead of road intersection, right
928+35					X	
935+30	60' Lt.					Outlet to match flow line of old c.m.p.
961+50-87	69' Lt.					
1013+80						Remove exist. approach road culvert
1026+25					X	
1036+25					X	
1049+00					X	
1067+70					X	Includes ditch basin cleaning
1082+65					X	Includes ditch basin cleaning
1085+30					X	Includes ditch basin cleaning
1252+27	80' Lt.	90'				Across approach road
1290+30	8' Rt.					Extend as required due to line shift
TOTALS	466' Lt.	12'	132'	9ea.	1ea.	
896+20					X	
1033+20		8' Rt.				Extension necessary to fit road prism

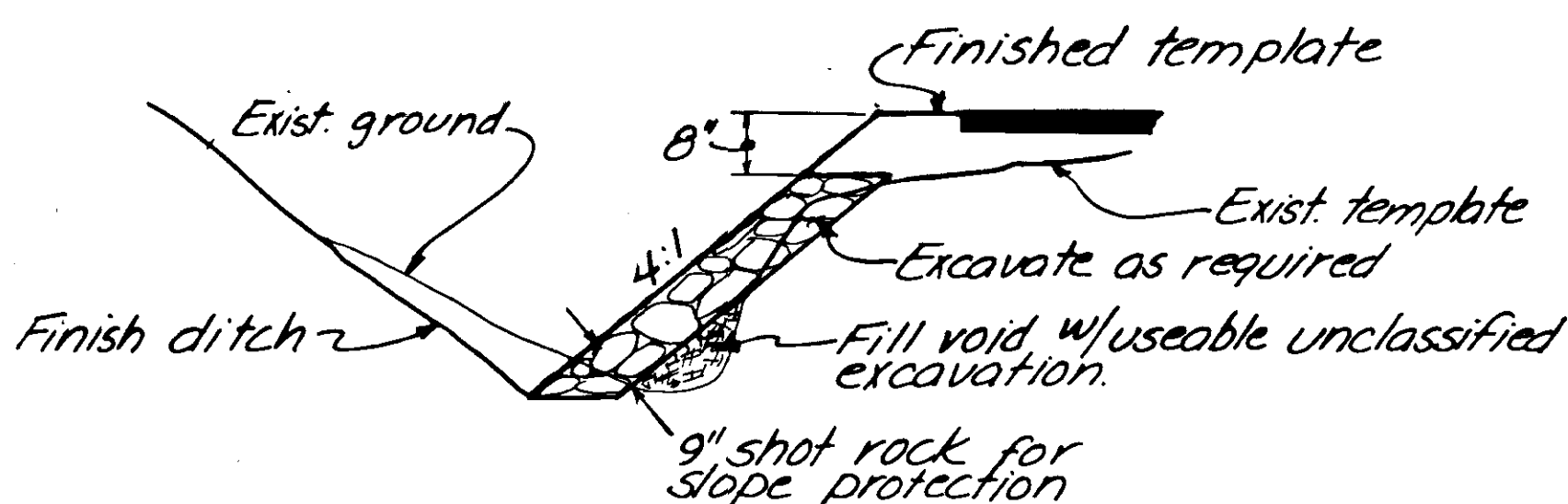
SPECIAL DITCH SUMMARY

STATION TO STATION	LT.	RT.	QUANTITY	REMARKS
"A" 10+30 "A" 10+80	X	X	1.0	Sheet R9 for details
"D" 691+70 "D" 693+30	X		1.6	
"D" 734+40 "D" 734+60	X		0.2	
"D" 739+50 "D" 743+00	X		3.5	Remove & dispose driveway c.m.p.
"D" 765+50 "D" 766+50	X		1.0	
"D" 782+60 "D" 783+80	X		1.2	Flow to c.m.p. 783+80
"D" 787+25 "D" 788+65	X		1.4	Flow to c.m.p. 788+68
"D" 863+90 "D" 866+00	X		2.1	864+15 is grade break
"D" 867+80 "D" 868+90	X		1.1	
"D" 885+00 "D" 890+00	X		5.0	
"D" 902+00 "D" 903+00	X		1.0	
"D" 918+00 "D" 919+50	X		1.5	
"D" 923+00 "D" 925+00	X		2.0	
"D" 928+10 "D" 928+60	X		0.5	
"D" 938+65 "D" 938+85	X		0.2	
"D" 944+00 "D" 944+60	X		0.6	Place rock shoulder
"D" 961+50 "D" 964+90		X	0.4	Ditch through old road bed
"D" 1013+00 "D" 1015+60	X		2.6	
"D" 1025+20 "D" 1026+00	X		0.8	Const. 10' wide flat bottom ditch
"D" 1061+00 "D" 1061+80	X		0.8	Place rock shoulder
"D" 1065+80 "D" 1066+00	X		0.2	Const. 10' wide flat bottom ditch
"D" 1097+50 "D" 1100+00	X		2.5	
"D" 1181+00 "D" 1181+30		X	0.3	
"D" 1216+00 "D" 1216+80	X		0.8	
* 874+00 875+00	X		1.0	* Out of Sequence
Total			33.3	

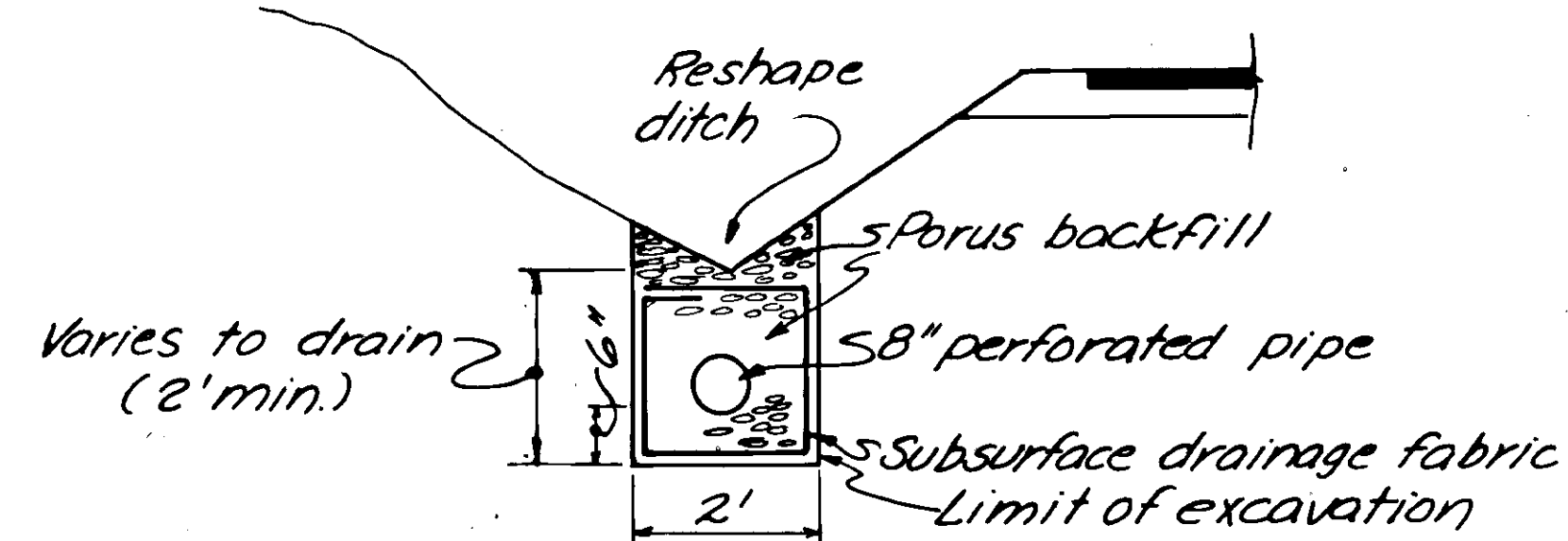
FORESLOPE REPAIR SUMMARY

STATION	APPROX. QUANT. *	REMARKS
724+50 Lt.	10	
733+20 Lt.	15	Also repair backslope to 4:1
766+00 Lt.	25	
773+00 Lt.	15	
801+30 Lt.	25	
841+50 Lt.	15	
874+50 Lt.	30	
919+30 Lt.	15	
938+75 Lt.	10	Around C.M.P. inlet
970+00 Lt.	15	
1065+90 Lt.	10	
1067+70 Lt.	10	Around C.M.P. inlet
1192+00 Lt.	15	
1207+90 Lt.	10	Around C.M.P. inlet
Total	220	S.M.

* NOTE: Quantities shown may vary as the engineer will determine exact limits of foreslope repair in the field.



FORESLOPE REPAIR DETAIL



NOTES:
 1. Begin underdrain Sta. 691+50 Lt. End underdrain @ Sta. 694+00 ahead
 2. Slope to drain back to outfall @ Sta. 690+50, 50' Lt., 8" CMP
 3. Depth of underdrain may vary from 2' min. to 6'

UNDERDRAIN DETAIL

Underdrain modified, See C.D.3

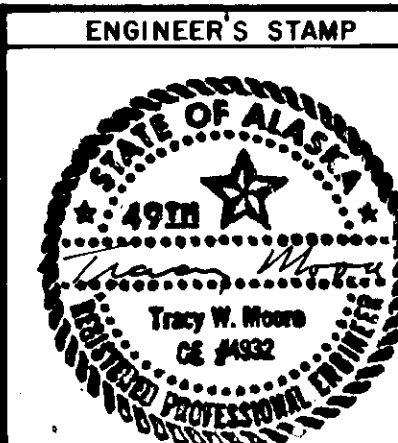
ADJUST GUARD RAIL SUMMARY

BEGIN	END	LGTH.	LT.	RT.
954+80 to	959+55.45	54.65'		X
1037+60 to	1040+10	250'		X
1044+00 to	1048+37.10	43.75'		X
1069+50.45 to	1074+00	45.0'		X
1099+80 to	1106+50.10	75.0'		X
1152+25 to	1154+00	175'		X
1153+00 to	1154+75	175'	X	
1178+75 to	1181+00	225'		X
1225+75 to	1230+00	425'		X
1133+20 to	1134+00	100'		X
1133+00 to	1134+00	25'	X	

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 & PUBLIC FACILITIES
 SOUTHEAST REGION DESIGN & CONSTRUCTION

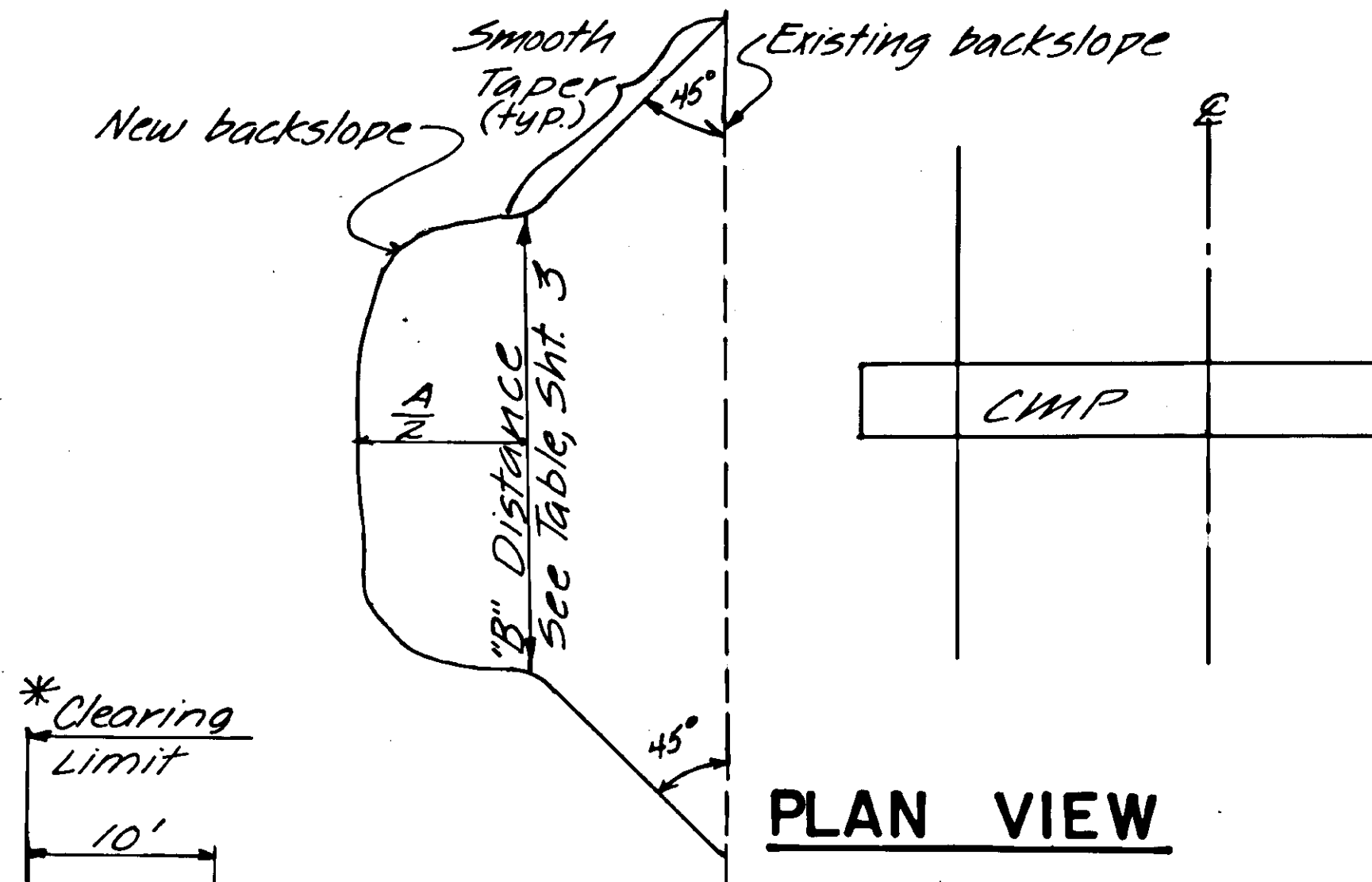
HARRIS RIVER TO CLARK BAY - PAVING SUMMARIES

APPROVED BY: <i>John W. Henry</i> DESIGN CHIEF 2-28-89 DATE	DESIGNED BY:	SCALE:
RECOMMENDED BY:	DRAWN BY:	DATE:
PREPARED BY: <i>Tracy W. Moore</i> PROJECT MANAGER	CHECKED BY: <i>Tracy W. Moore</i> LEAD DESIGNER	SHEET 4 OF 31

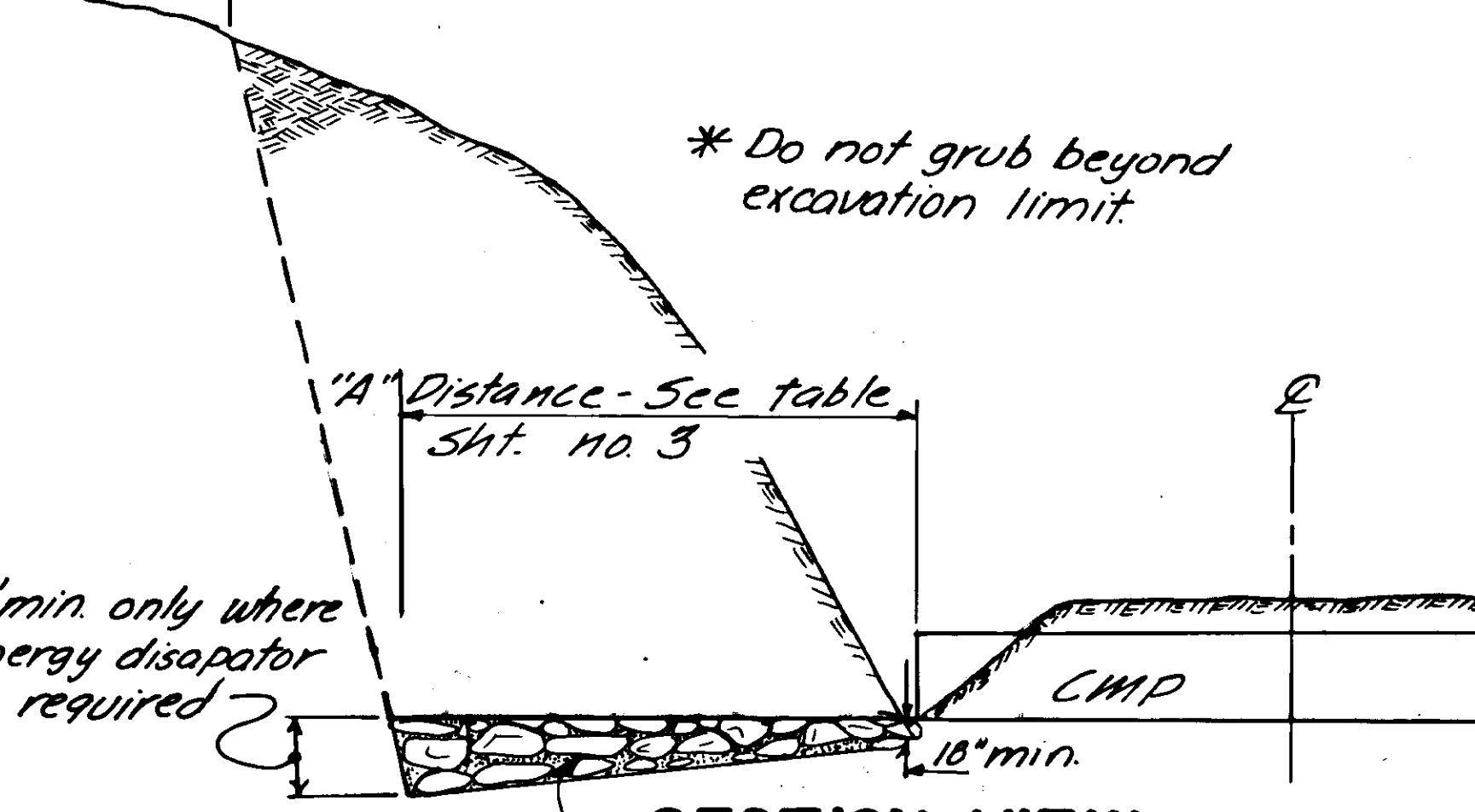


DITCH BASIN NOTES

DITCH BASIN CONSTRUCTION DETAILS

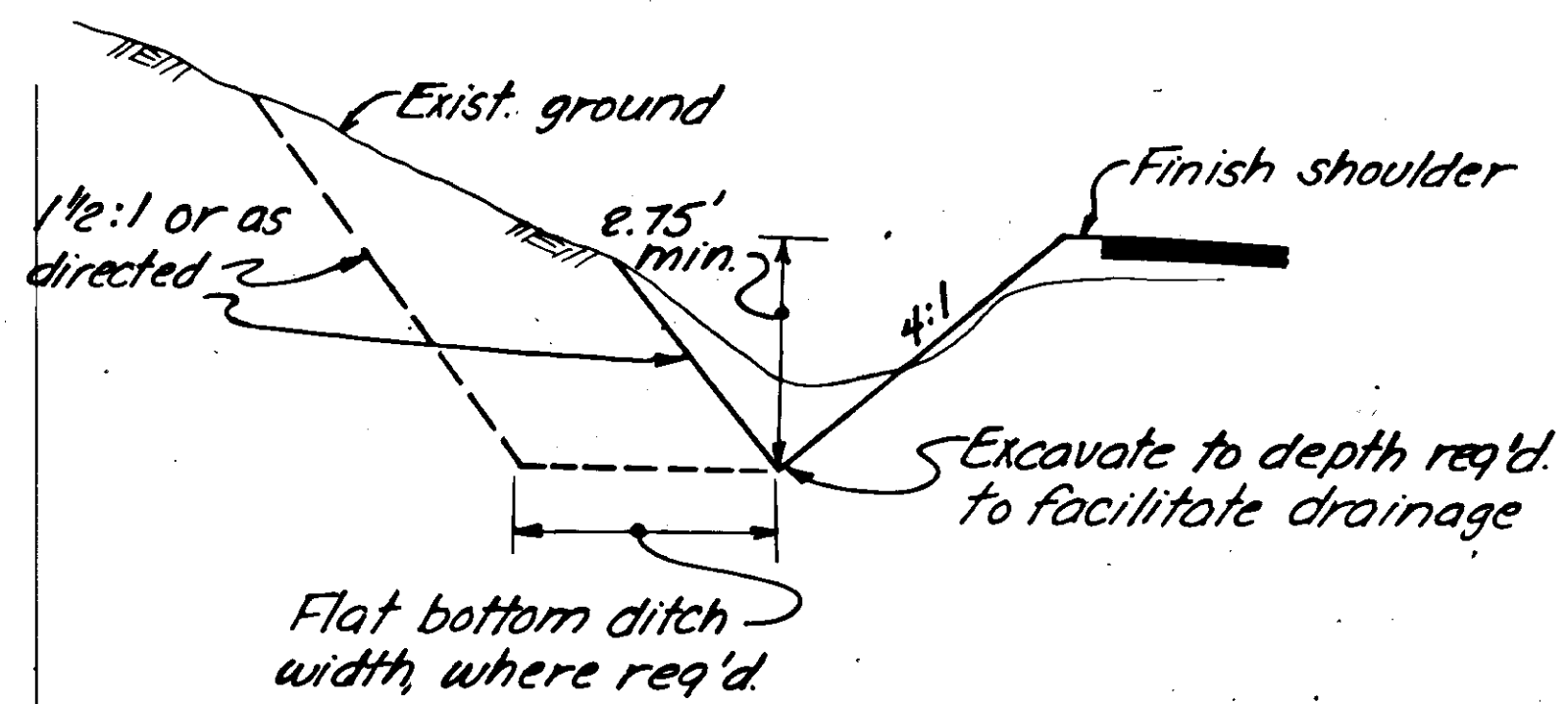


PLAN VIEW



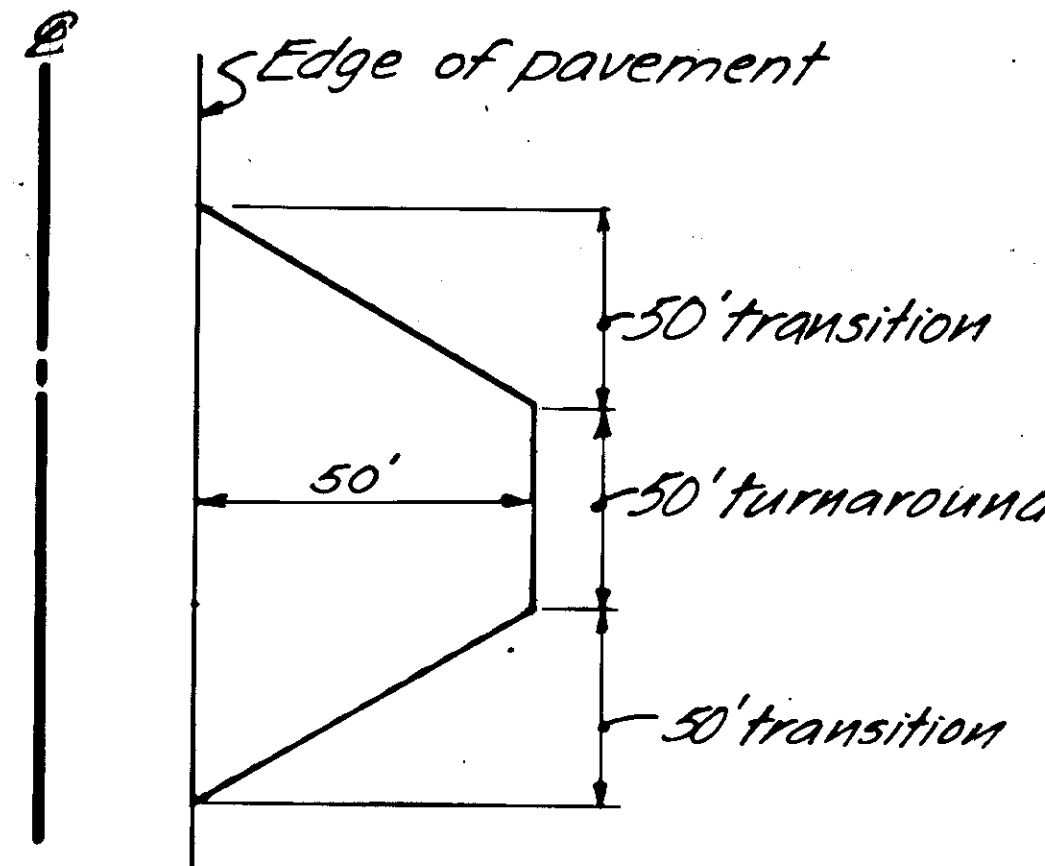
SECTION VIEW

Class I riprap for energy dissipator. See Sht. 3 for location summary.



SPECIAL DITCHING DETAILS (See Summary on Sht. 4)

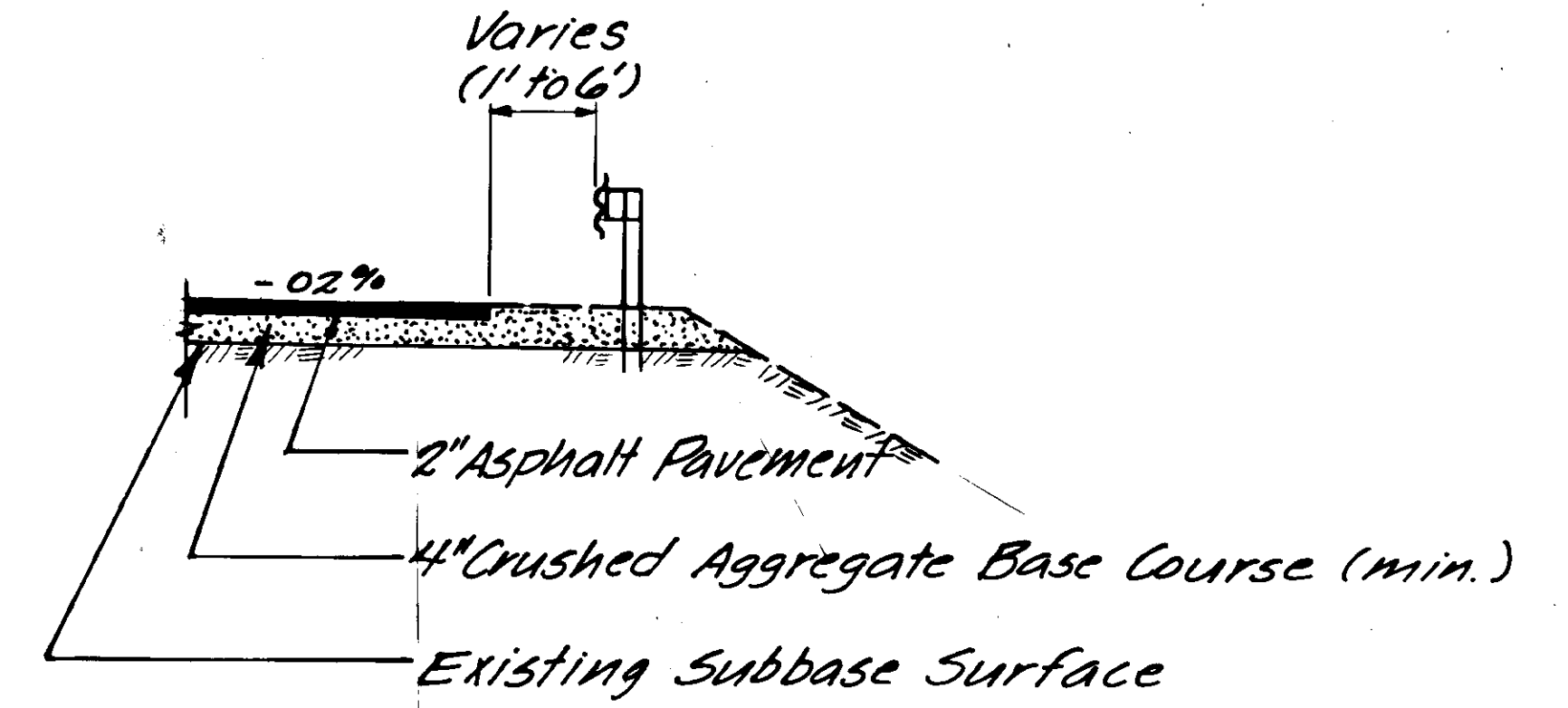
1. Riprap required for energy dissipator may come from unclassified excavation or other quarry rock.
2. Engineer may require that the ditch basin be offset slightly from the centerline of the culvert to facilitate maintenance of the basin.
3. Ditch basin invert shall be 1 foot lower than inlet of culvert unless otherwise indicated on the plan sheets.
4. Contractor shall protect the culvert ends & repair damage by his forces at his expense.
5. "A" and "B" distances shown are approximate only and are subject to change.
6. Backslope shall be 1/4:1 in rock, 1/2:1 in other soils, or as directed by the Engineer.



SCHOOL BUS TURNAROUND PAVING DETAIL

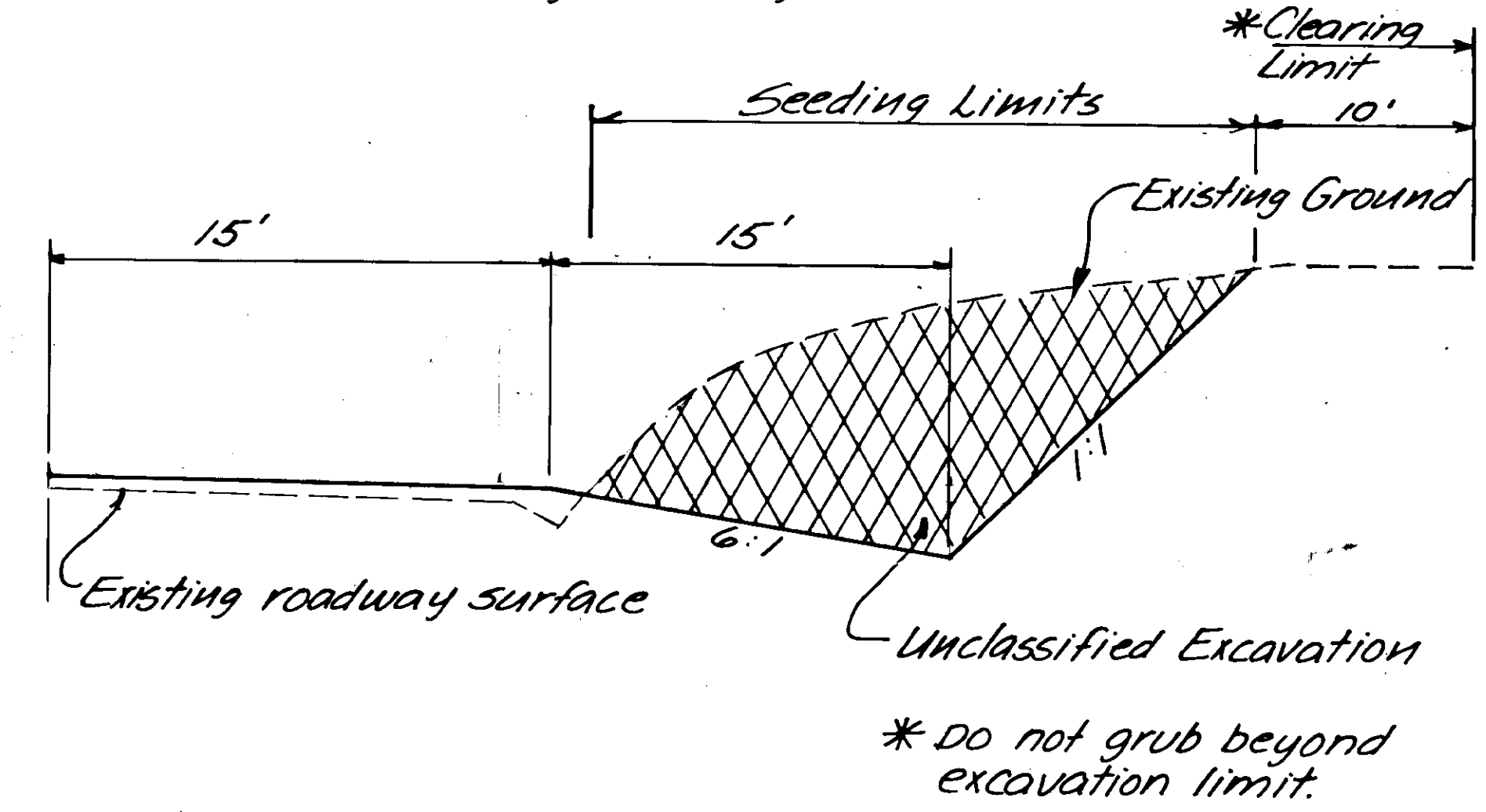
STATIONS 919+75 AND 1250+65

1. Place 1 1/2" of pavement and Base Course as necessary to maintain a 3% grade from the edge of roadway.
2. School bus "Turnouts" are not to be paved.



GUARD RAIL ADJUSTMENT DETAILS

- NOTES:
1. Post block & rail to be raised uniformly to provide smooth continuous appearance, in accordance with the Standard Drawings.
 2. All end sections to be disconnected prior to adjustment.
 3. Base course material placed beneath and behind the rail shall be compacted to proper density according to SECTION 301.



EXCAVATION DETAIL STA. 1140+50 to 1145+50 see Plan sheet 24

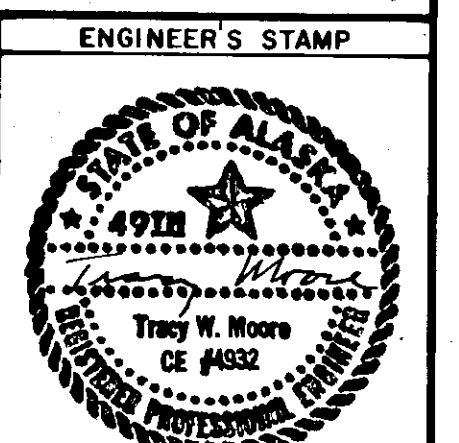
- NOTES:
1. Excavation material shall be disposed of at an approved source as determined by the engineer.
 2. Excavation area shall be seeded in accordance with SECTION 618.

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

HARRIS RIVER TO CLARK BAY - PAVING MISCELLANEOUS DETAILS

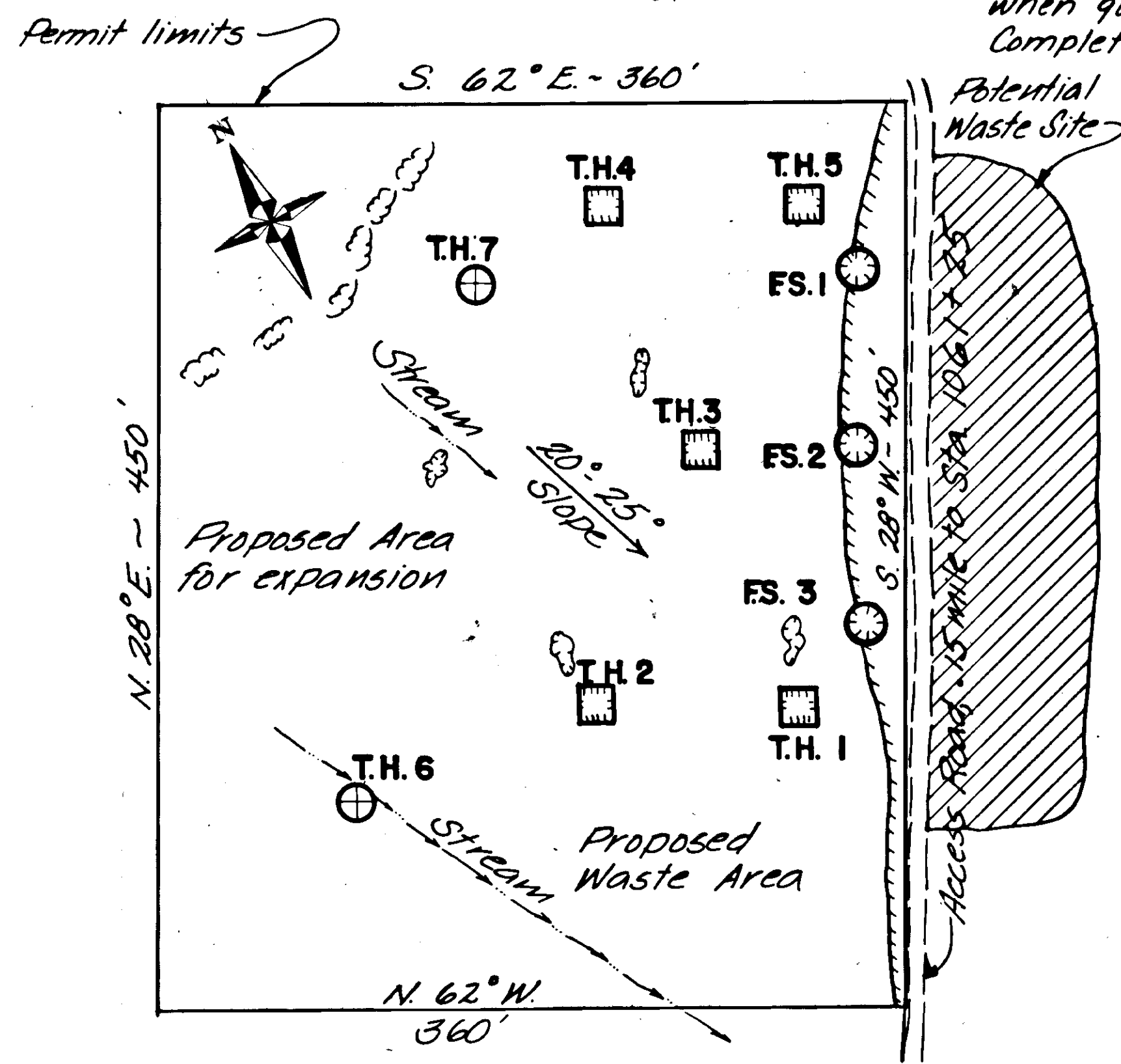
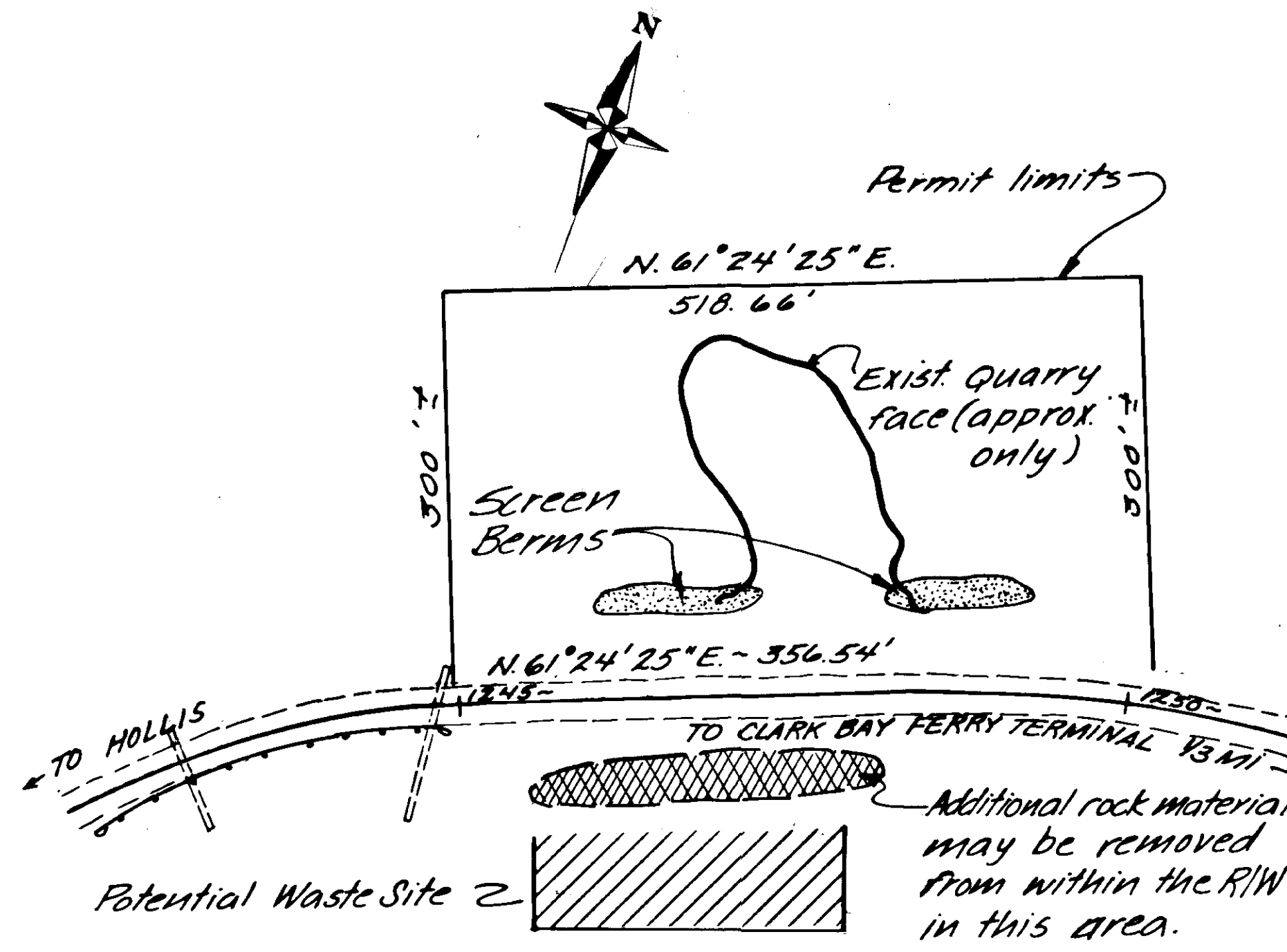
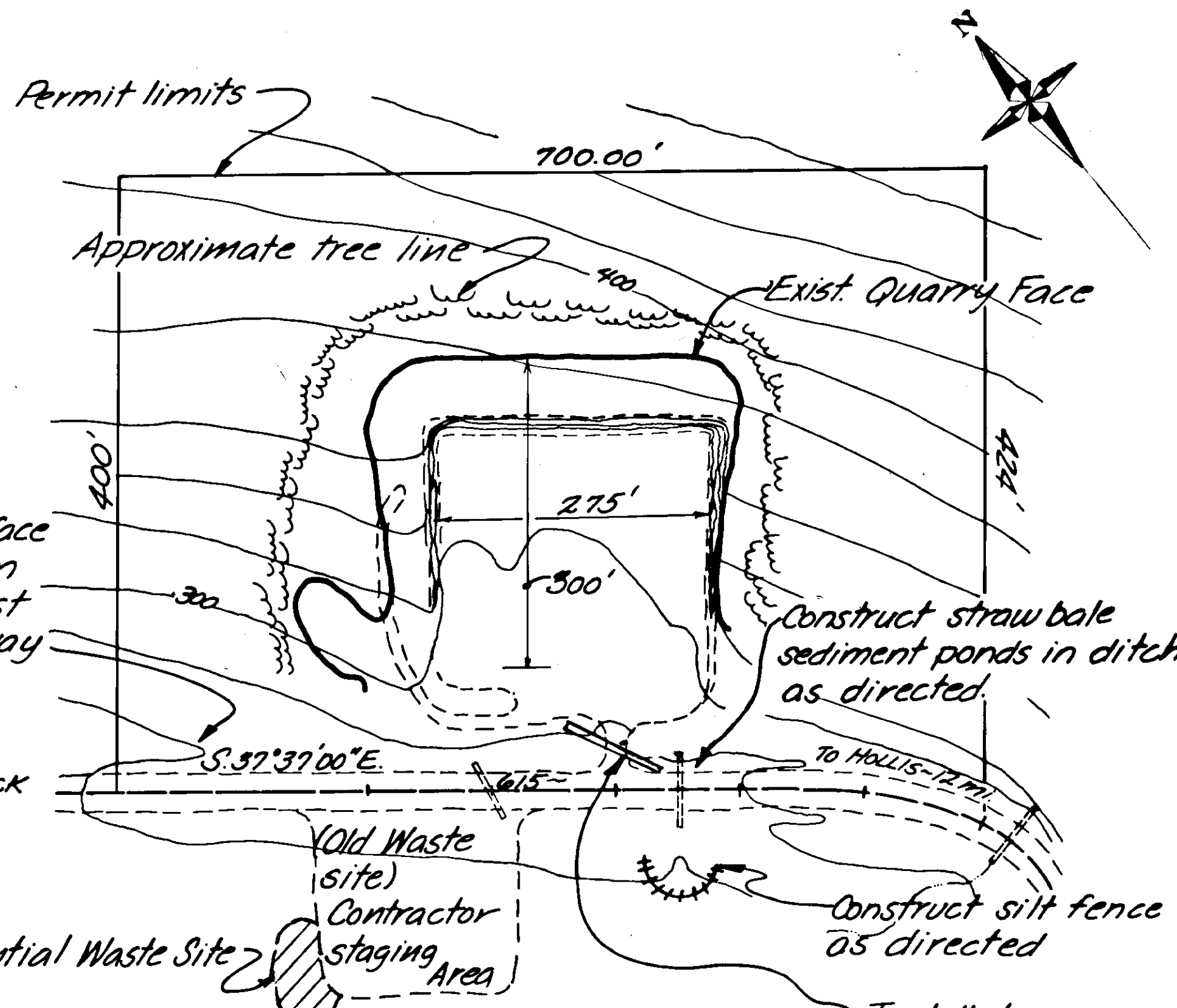
APPROVED BY: *John W. Henry* DESIGN CHIEF 2-25-89 DATE
RECOMMENDED BY: _____ DATE
PREPARED BY: *Tom Moore* PROJECT MANAGER DATE

DESIGNED BY: *T. Moore* SCALE: None
DRAWN BY: *Ada* DATE:
CHECKED BY: _____ SHEET 5 OF 31



DEVELOPMENT NOTES

1. The Department of Transportation & Public Facilities has secured a permit from the Forest Service to extract 75,000 cubic yards of material from the quarry M.S. 924-009-3.
2. The D.O.T./P.F. has received agency approval from the Department of Natural Resources to extract 75,000 c.y. of material from quarry M.S. 924-018-3, & M.S.F.H. 6-001-3.
3. Quarries M.S. 924-009-3, F.H. 6-001-3, & M.S. 924-018-3 are suitable as sources for aggregate base & asphalt aggregate; however, blending with sand may be required depending on the contractor's operation.
4. A mining plan shall be submitted by the contractor for approval by the engineer prior to commencement of quarry operation.
5. Maximum bench height shall be 30'. Minimum bench width shall be 20'. All benches shall be accessible from the quarry floor.
6. Clearing of trees shall be performed so that a 50' zone is maintained at all times between a working face and the edge of trees. At completion of mining, this 50' zone shall exist: in-situ tree stumps may be left which are no higher than 4' above the surrounding ground level. Pit clearing shall be considered incidental to other items of work. Merchantable timber (min. dia. of 8") shall be cold decked in areas selected by the contractor & approved by the Engineer.
7. Quarry activity shall be limited to the work associated with drilling & shooting of rock, crushing aggregate & storing of materials for incorporation into the project. Activities such as personnel camp operations shall not be allowed unless the contractor makes an agreement with the appropriate agency. A copy of such agreement must be provided to the Engineer before such a camp is set up.
8. Stream flows, steady or intermittent, shall be diverted outside of the quarry work sites before beginning operations. The working floor of the quarry shall drain freely at all times. This work if required, will be paid for under Item 641(1). Temporary erosion & pollution control. Any surface water within the quarry work area shall be filtered by approved methods & be directed away from anadromous streams as directed by the Engineer.



Test Hole	Date	Soil Profile
TH.1	9-30-66	0.5' Organic mat 0.5' Bedrock
TH.2	9-30-66	0.5' Organic mat 0.5' Bedrock
TH.3	9-30-66	1.0' Organic mat 1.0' Bedrock
TH.4	9-30-66	0-1.5' Organic mat and muck 1.5' Bedrock
TH.5	9-30-66	0-2.0' Organic mat and muck 2.0' Bedrock
TH.6	9-19-85	0.5' Organic mat 0.5'-1.5' Gravelly Silt 1.5' Bedrock
TH.7	9-19-85	0.5' Organic mat 0.5'-1.5' Gravelly Silt 1.5' Bedrock

RECLAMATION NOTES

1. The quarry floor shall be well drained & leveled to the approval of the Engineer. The floor shall be cleared of loose material & all oversized boulders.
2. Overburden shall be placed over the waste sites & shall be seeded in accordance with SECTION 618. The berms depicted in the schematic on this sheet shall be seeded & visually free of large debris. There shall be a minimum of 20' wide & 8' high. Berms shall be constructed in such a manner as to provide only one access into & out of the quarry. Seeding shall be paid for under Item 618.
3. All work involved with quarry reclamation shall be considered incidental to other contract work unless otherwise stated.

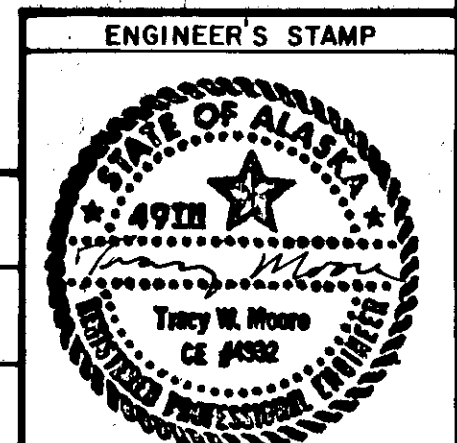
BY	DATE	DESCRIPTION OF CHANGE
RECORD OF REVISIONS		

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

HARRIS RIVER TO CLARK BAY-PAVING
MATERIAL SITES

APPROVED BY: *John W. Moore* DESIGN CHIEF 2-28-89
RECOMMENDED BY: _____ DATE _____
DESIGNED BY: T. Moore
DRAWN BY: *Ch*
PREPARED BY: *T. Moore* PROJECT MANAGER
CHECKED BY: *John W. Moore* LEAD DESIGNER

SCALE: None
DATE: 12/30/88
SHEET 6 OF 31



HORIZONTAL CONTROL

Basis of Horizontal Control is the accepted centerline bearing of $S.51^{\circ}12'00'' E.$ between station $678+76.45$ P.T. & station $686+66.76$ P.C. of project $RS-0924(9)$ Klawock to Hollis, Stage I, as established by the existing Right-of-Way monuments of Project $RS-0924(9)$.

VERTICAL CONTROL

Basis of Vertical Control is Bench Mark #55 D, with an elevation of 263.92 & located $40'$ Rt. of station $715+00$. It is described as an $8''$ spike in a $10''$ diameter Spruce tree. It was established from bench marks set in 1958 from tidal observations.

Vertical alignment was constructed during the original subgrade construction project completed prior to this project. No surveying was performed on this job to establish vertical control of the finished surface. The surface was established by placing base aggregate on grade to yield and filling low spots as required to achieve a smooth and uniform longitudinal surface. Cross slopes were controlled by automatic slope control equipment in the grader placing base course.

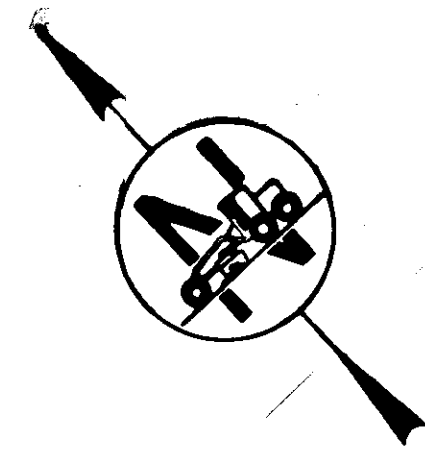
LEGEND

(NOTE: TYPICAL ON EACH SHEET)

⊠ INDICATES RIGHT OF WAY MONUMENT TO BE TIED INTO DURING HORIZONTAL CONTROL WORK. SEE SECTION 642 FOR MORE INFORMATION.

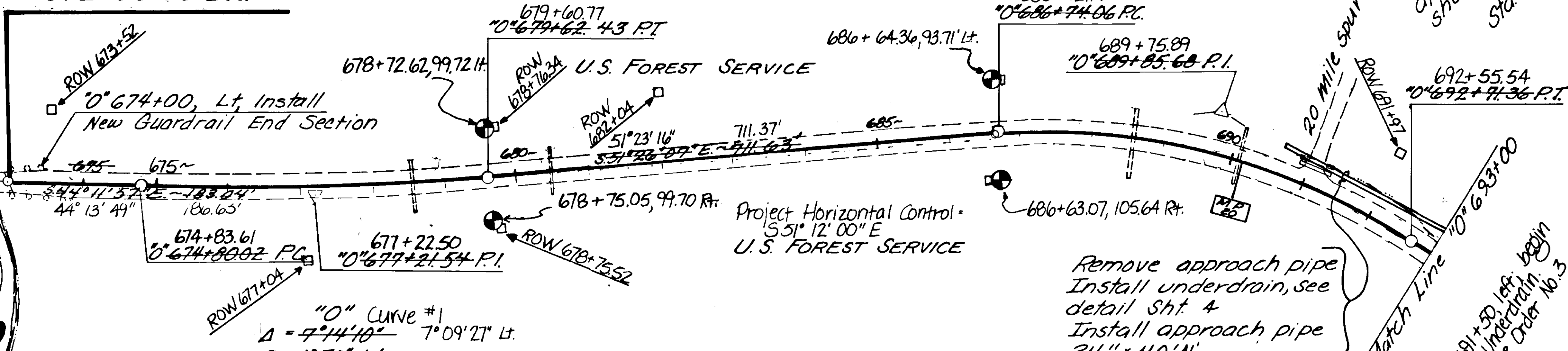
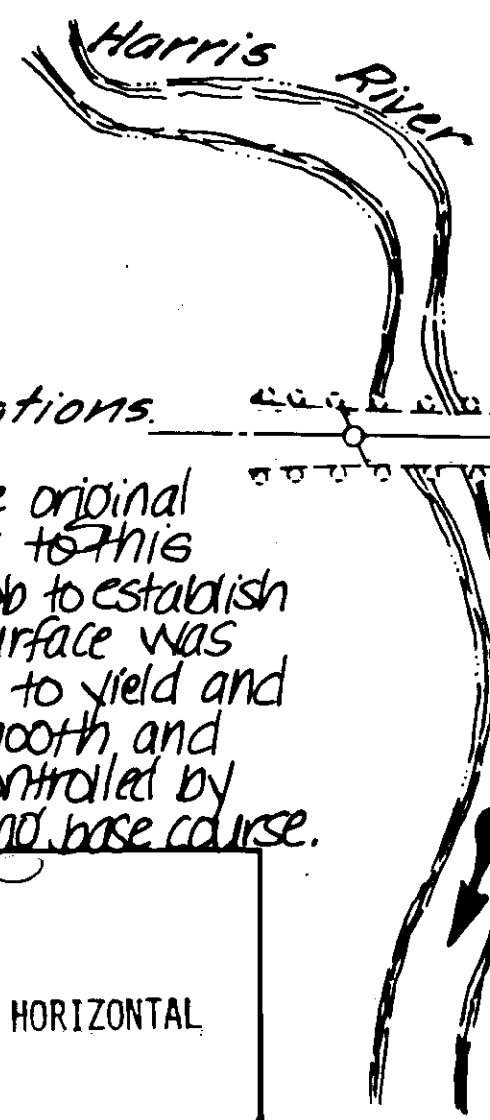
- ⊙ → Existing concrete ROW monuments tied into for Basis of Bearing
- → 6' Carborite ROW markers installed this Project @ U.S.F.S. Boundary. Typical Offset for markers = $100.00'$ left or right of \pm .

BEGIN PROJECT
 "0" $672+96.98$ AHD.=
 "0" $672+98.00$ BK.



"0" CURVE #2
 $\Delta = 48^{\circ}19'04''$ Rt. $39^{\circ}22'47''$ Rt.
 $D = 6^{\circ}45'$
 $T = 341.62'$ $303.75'$
 $L = 597.30'$ $583.40'$
 $R = 848.83'$
 $S = 6.0\%$
 $BST = 685+24.06$
 $EST = 693+10.28$

Sta. $691+00$ construct special ditch along approach road. (See sheet 29 for details.)
 Sta. $691+70$ Begin special ditch
 Sta. $693+30$ End Special ditch

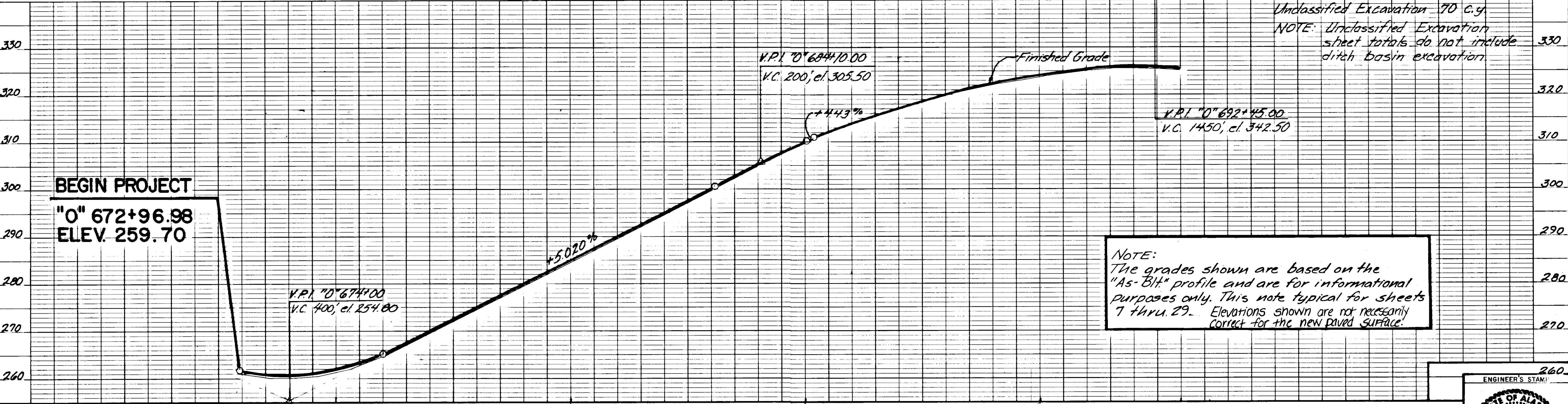


"0" CURVE #1
 $\Delta = 7^{\circ}14'10''$ $7^{\circ}09'21''$ Lt.
 $D = 1^{\circ}30'$ Lt.
 $T = 244.52'$ $238.89'$
 $L = 482.41'$ $477.16'$
 $R = 3819.72'$
 $S = 3.0\%$
 $BST = 673+00.02$
 $EST = 680+62.43$

NOTE ON "AS-BUILT" STATIONING:
 A field survey was performed by contractor forces upon completion of roadway construction. All "As-Built" stationing recorded is based upon that survey, except for ROW markers at $100'$ offsets which are tied to the stationing of the Right-of-Way plans for this project.

Remove approach pipe
 Install underdrain, see detail Sht. 4
 Install approach pipe $24'' \times 40' A6$

Match Line "0" $693+00$
 Sta. "0" $691+30$ left, begin Modified Underdrain. See Change Order No. 3.



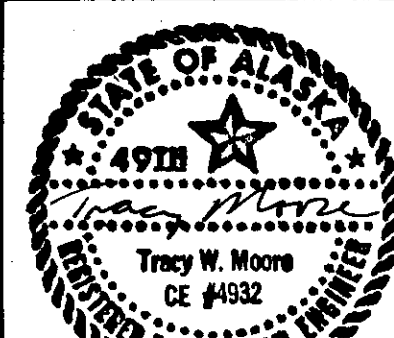
Unclassified Excavation 70 C.Y.
 NOTE: Unclassified Excavation sheet totals do not include ditch basin excavation

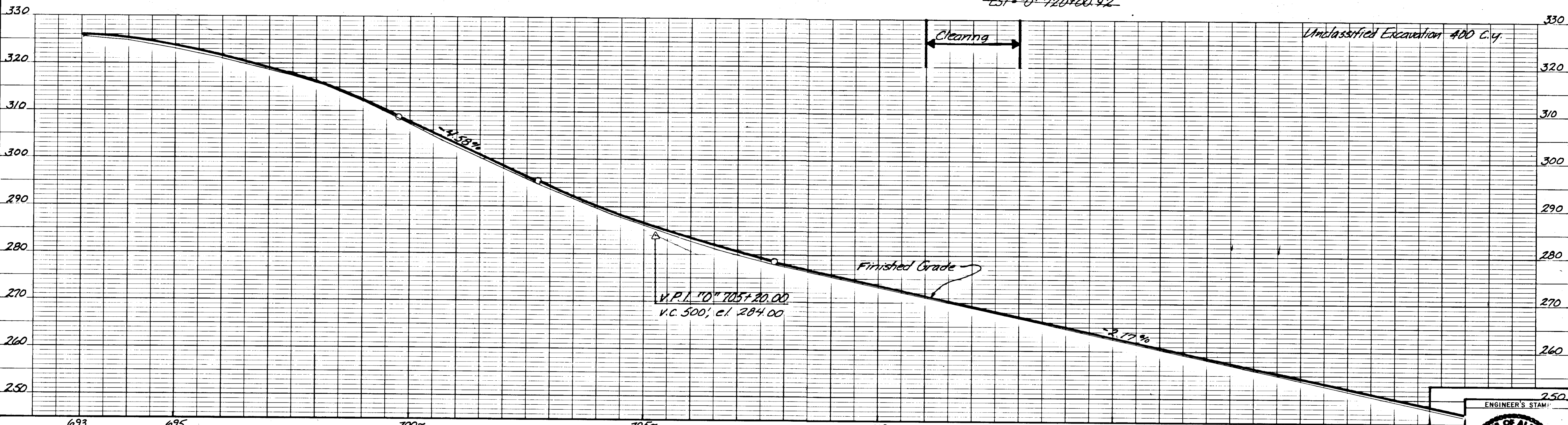
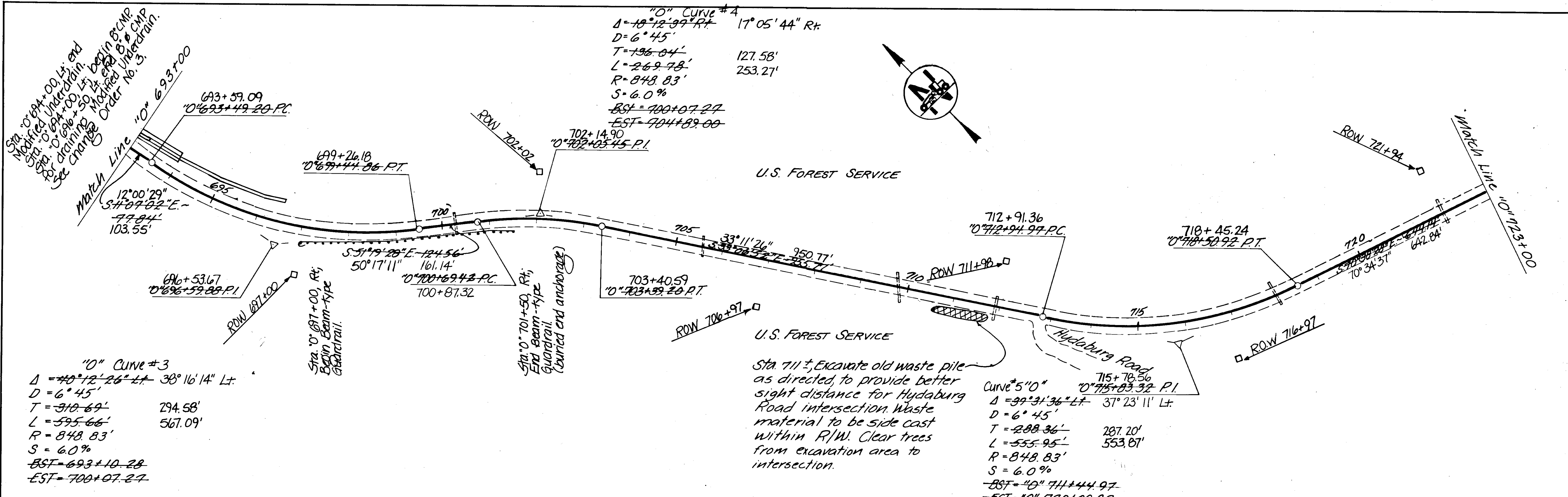
NOTE:
 The grades shown are based on the "As-Built" profile and are for informational purposes only. This note typical for sheets 7 thru 29. Elevations shown are not necessarily correct for the new paved surface.

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 & PUBLIC FACILITIES

**HARRIS RIVER TO CLARK BAY - PAVING
 PLAN AND PROFILE**

APPROVED BY: *John W. Henry* CHIEF 2-28-89
 RECOMMENDED BY:
 DESIGNED BY: T. MOORE
 DRAWN BY: Ba
 CHECKED BY:
 SHEET 7 OF 31



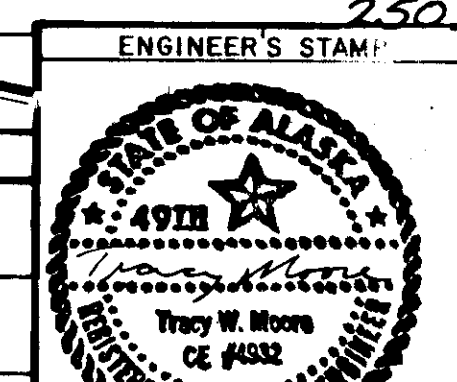


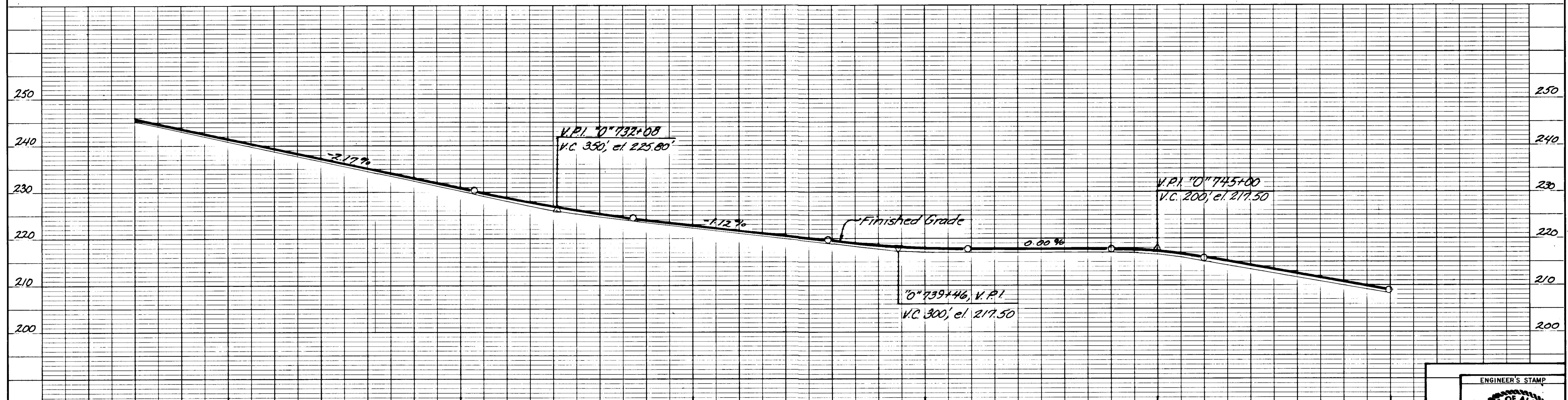
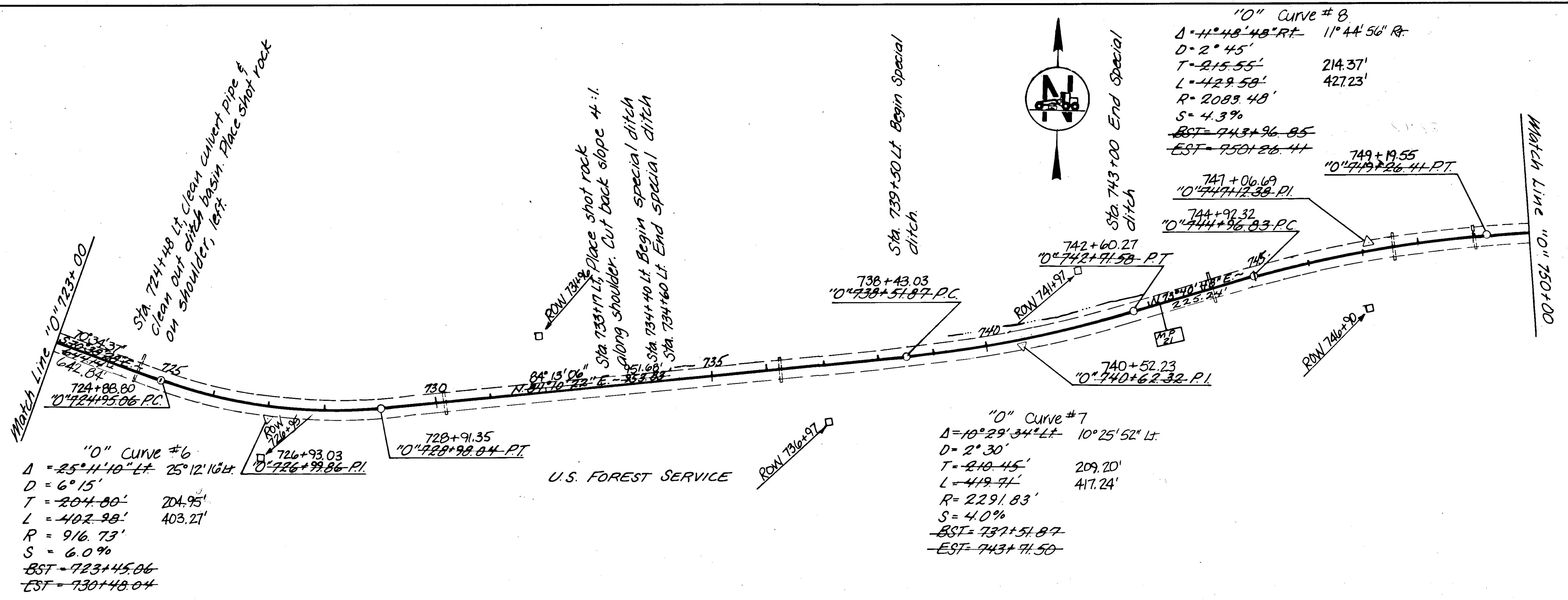
BY	DATE	DESCRIPTION OF CHANGE

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 & PUBLIC FACILITIES

HARRIS RIVER TO CLARK BAY - PAVING PLAN AND PROFILE

APPROVED BY: *John W. Henry* CHIEF 2-28-89
 RECOMMENDED BY: T. Moore
 DESIGNED BY: T. Moore
 DRAWN BY: *W. A.*
 DESIGN ENGINEER, GROUP "A" DATE: 2-28-89





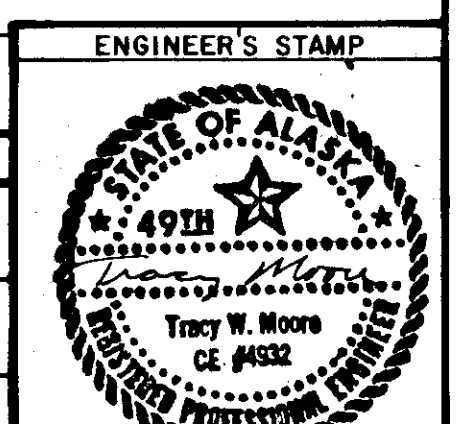
STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 & PUBLIC FACILITIES

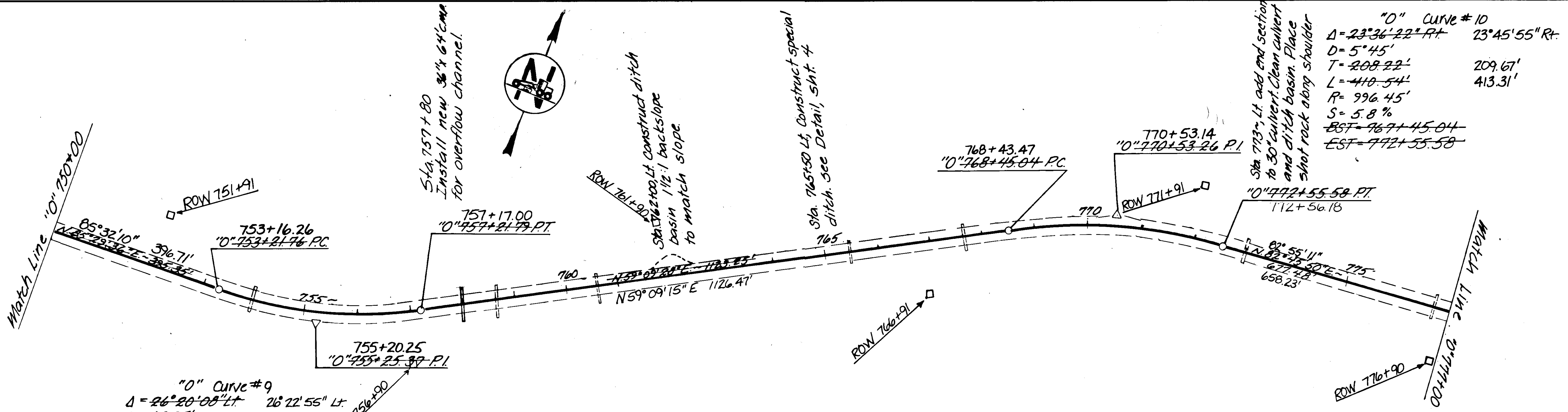
HARRIS RIVER TO CLARK BAY - PAVING
 PLAN AND PROFILE

APPROVED BY: *John W. Henry* CHIEF 2-28-59
 RECOMMENDED BY: _____
 PREPARED BY: _____

DESIGNED BY: T. Moore
 DRAWN BY: *BM*
 CHECKED BY: _____

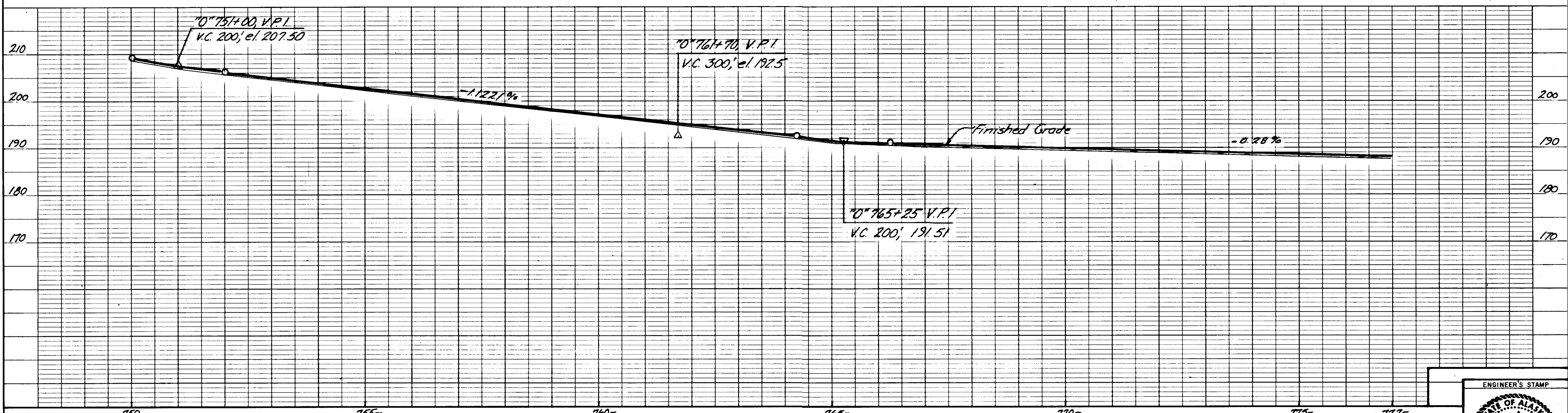
HORIZ. SCALE:
 VERT. SCALE:
 DATE:
 SHEET 2 OF 3





"0" Curve #9
 $\Delta = 26^{\circ}20'08" Lt \quad 26^{\circ}22'55" Lt$
 $D = 6^{\circ}35'$
 $T = 203.61'$
 $L = 400.03'$
 $R = 870.32'$
 $S = 6.0\%$
~~BSI = 751+71.76~~
~~EST = 758+71.79~~

"0" Curve #10
 $\Delta = 23^{\circ}36'22" Rt \quad 23^{\circ}45'55" Rt$
 $D = 5^{\circ}45'$
 $T = 208.22'$
 $L = 410.54'$
 $R = 996.45'$
 $S = 5.8\%$
~~BSI = 767+45.04~~
~~EST = 772+55.58~~

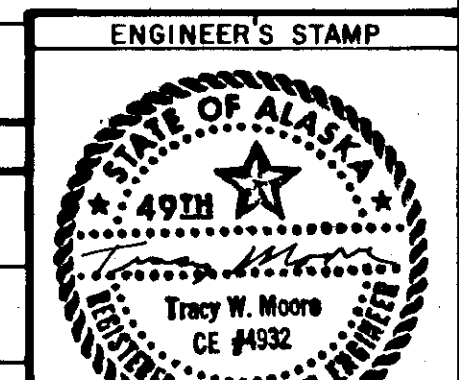


STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 & PUBLIC FACILITIES

HARRIS RIVER TO CLARK BAY - PAVING
 PLAN AND PROFILE

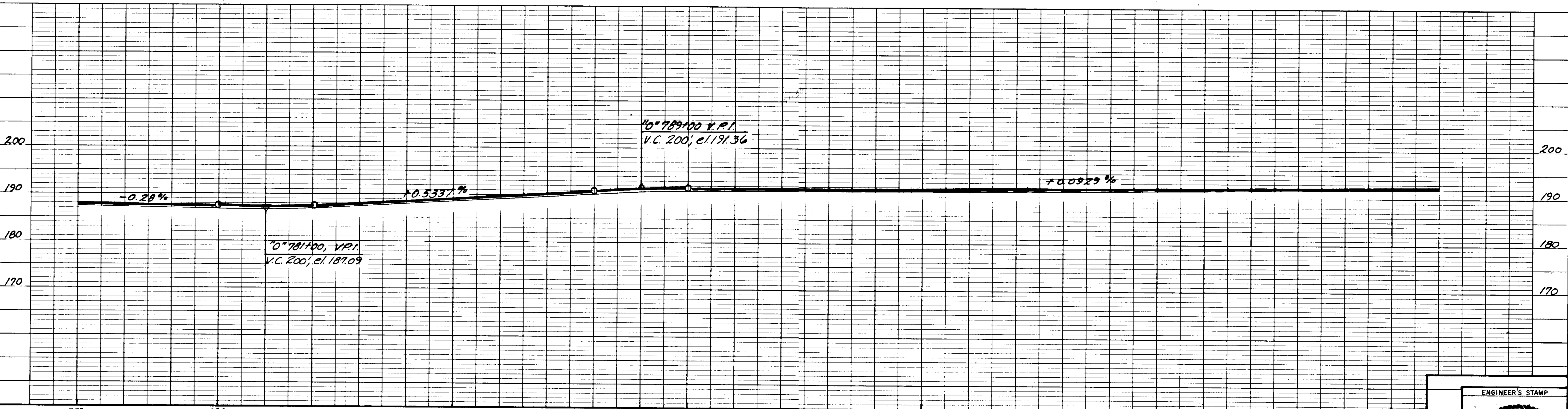
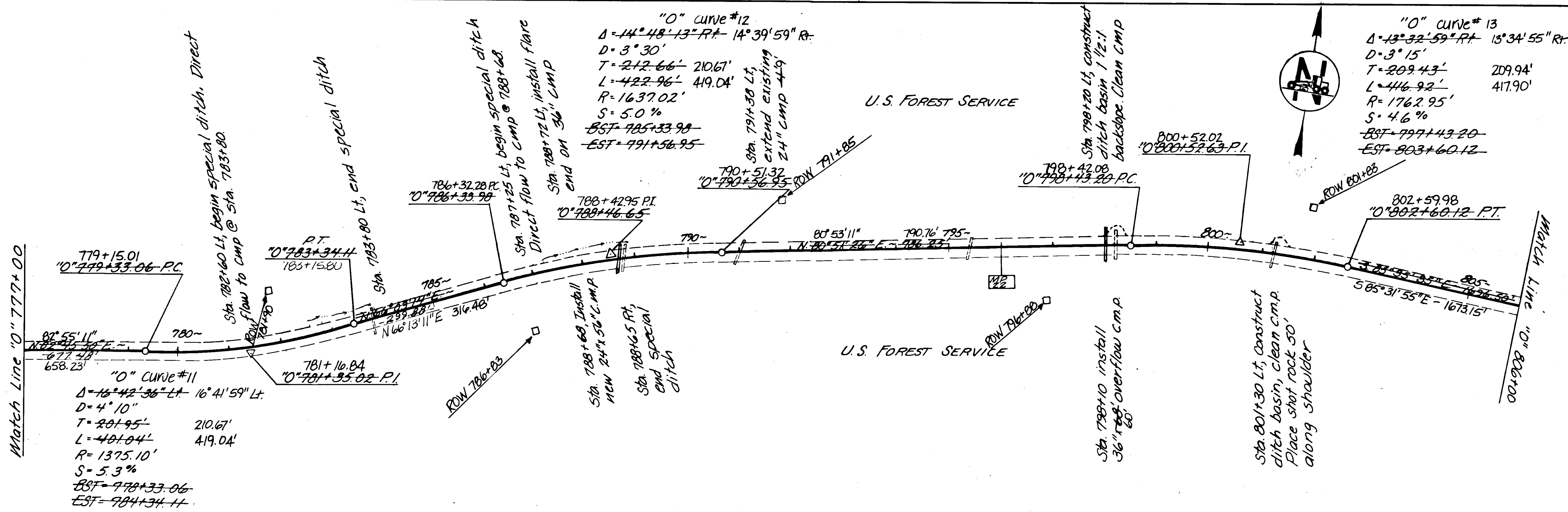
APPROVED BY: *John W. Henry*
 RECOMMENDED BY:
 PREPARED BY:
 DATE: 2-28-89

DESIGNED BY: *T. Moore*
 DRAWN BY: *Ja*
 CHECKED BY:
 DATE:



BY	DATE	DESCRIPTION OF CHANGE

SHEET 12 OF 14



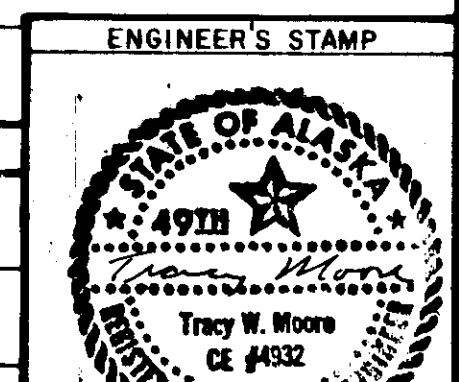
BY	DATE	DESCRIPTION OF CHANGE

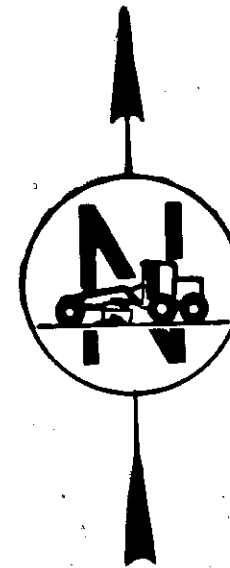
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES

HARRIS RIVER TO CLARK BAY - PAVING PLAN AND PROFILE

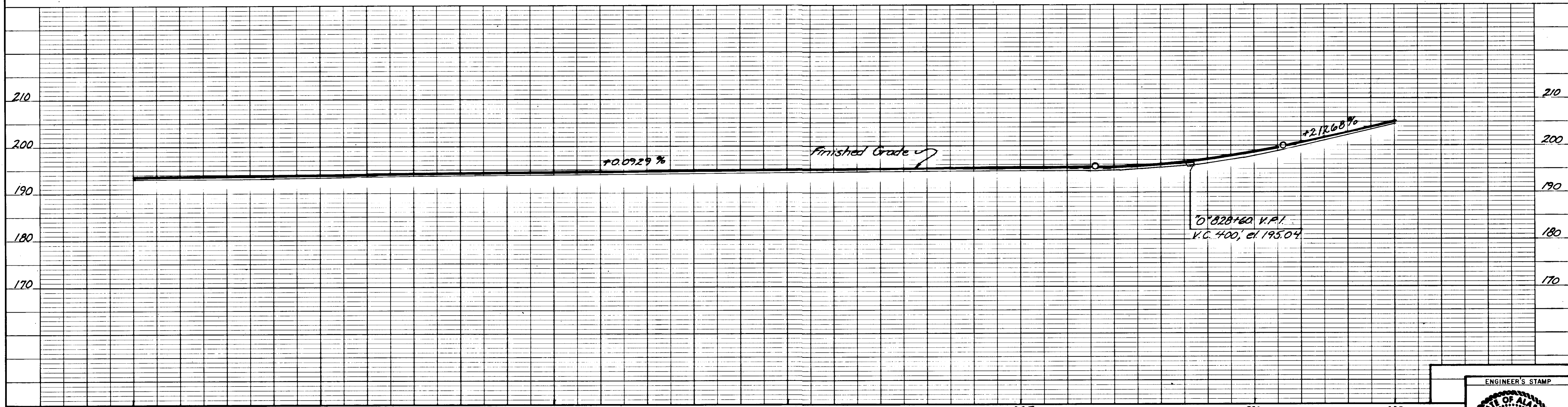
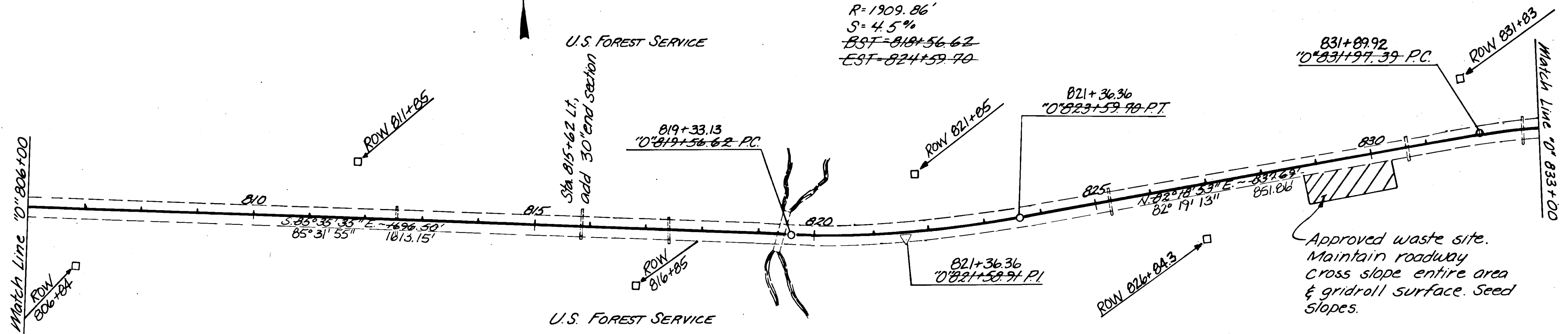
APPROVED BY: *John W. Henry* CHIEF 2-28-59
RECOMMENDED BY: _____
DESIGNED BY: *T. Moore*
DRAWN BY: *Ca*
PREPARED BY: _____
DATE: _____

HORIZ. SCALE: _____
VERT. SCALE: _____
DATE: _____





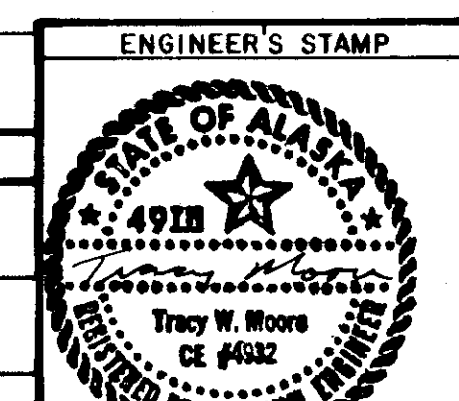
"D" CURVE #14
 $\Delta = 12^{\circ}05'32" \text{ L} + 12^{\circ}08'52" \text{ L} +$
 $D = 3^{\circ}00'$
 $T = 202.29'$ $203.20'$
 $L = 403.08'$ $404.93'$
 $R = 1909.86'$
 $S = 4.5\%$
 $BST = 819+56.62$
 $EST = 824+59.70$



STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 & PUBLIC FACILITIES

HARRIS RIVER TO CLARK BAY - PAVING
 PLAN AND PROFILE

APPROVED BY: <i>John W. Henry</i>	DATE: 2-28-89	DESIGNED BY: T. Moore	HORIZ. SCALE:
RECOMMENDED BY:	DATE:	DRAWN BY: Cba	VERT. SCALE:
PREPARED BY:	DATE:	CHECKED BY:	DATE:

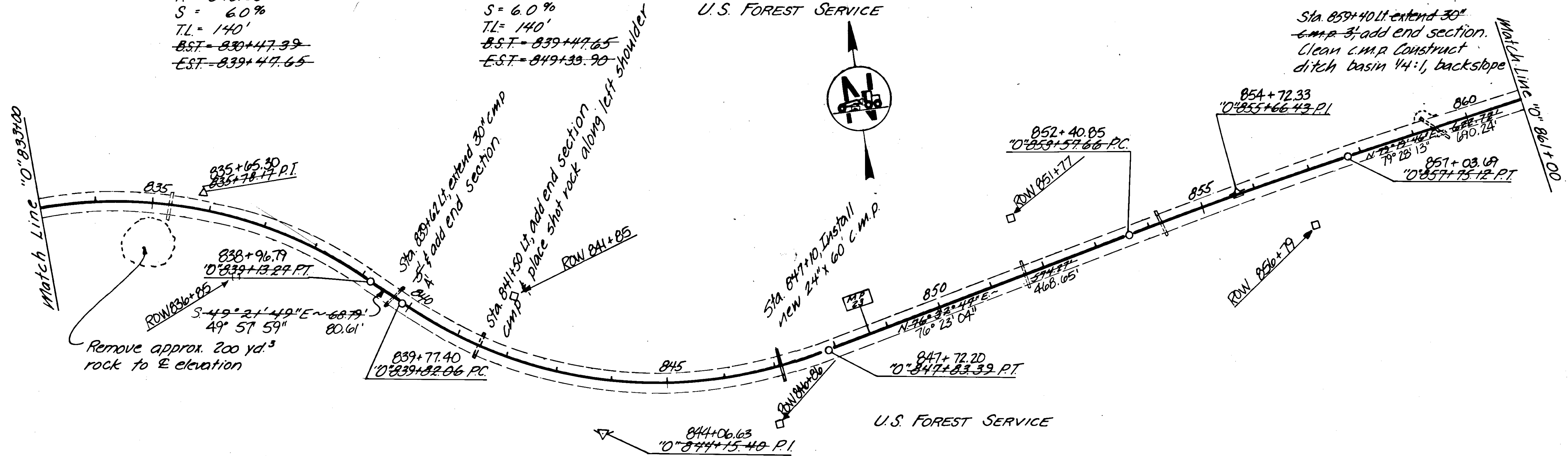


"O" Curve #15
 $\Delta = 48^{\circ}19'18''$ Rt. $47^{\circ}42'49''$ Rt.
 $D = 6^{\circ}45'$
 $T = 380.78'$ 375.38'
 $L = 715.88'$ 706.87'
 $R = 848.83'$
 $S = 6.0\%$
 $TL = 140'$
~~BSF = 830+47.39~~
~~EST = 839+47.65~~

"O" Curve #16
 $\Delta = 54^{\circ}05'24''$ Lt. $53^{\circ}38'57''$ Lt.
 $D = 6^{\circ}45'$
 $T = 433.34'$ 429.23'
 $L = 801.33'$ 794.80'
 $R = 848.83'$
 $S = 6.0\%$
 $TL = 140'$
~~BSF = 839+47.65~~
~~EST = 849+33.90~~

"O" Curve #17
 $\Delta = 2^{\circ}46'59''$ Rt. $3^{\circ}05'08''$ Rt.
 $D = 0^{\circ}40'00''$
 $T = 208.77'$ 231.48'
 $L = 417.45'$ 462.84'
 $R = 8594.37'$

Sta. 859+40 Lt. extend 30'
 C.M.P. & add end section.
 Clean C.M.P. Construct
 ditch basin 1/4:1, backslope

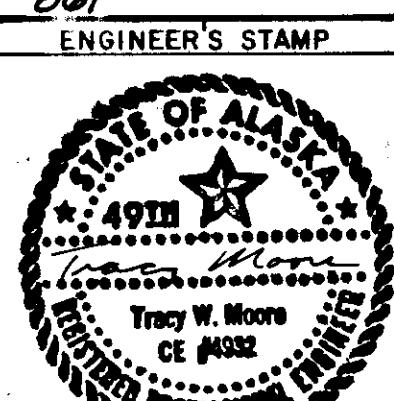


STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 & PUBLIC FACILITIES

HARRIS RIVER TO CLARK BAY - PAVING
 PLAN AND PROFILE

APPROVED BY: *John W. Henry* CHIEF 2-28-89 DATE
 RECOMMENDED BY: _____ DATE
 PREPARED BY: _____ DATE

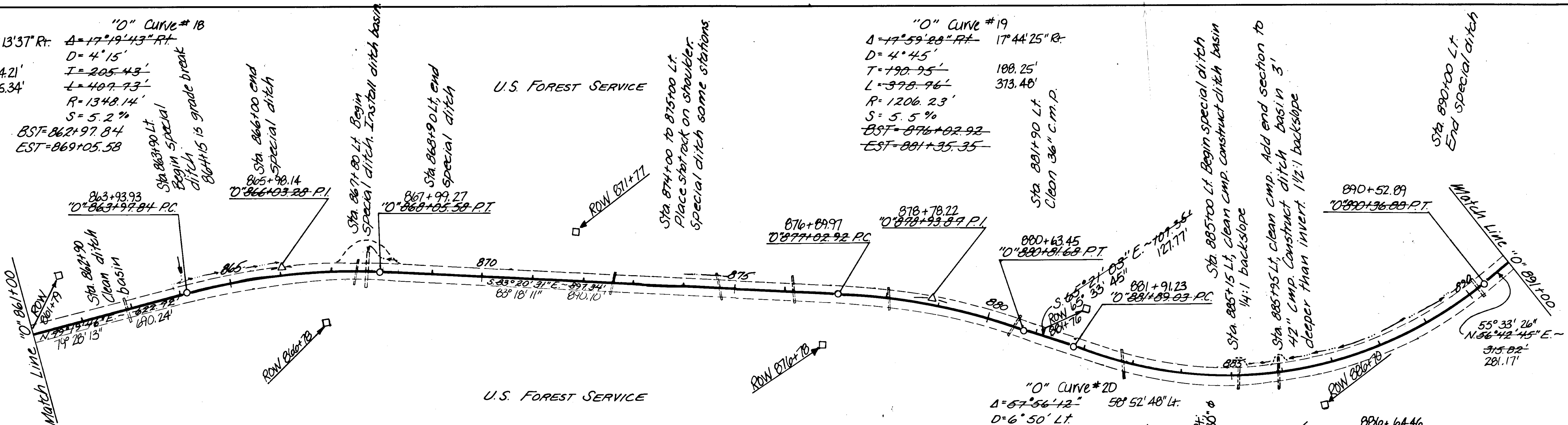
DESIGNED BY: T. Moore
 DRAWN BY: *ca*
 CHECKED BY: _____
 SHEET 13 OF 31



"O" Curve #18
 $\Delta = 17^\circ 13' 37''$ Rt. $\Delta = 17^\circ 19' 43''$ Rt.
 $D = 4' 15'$
 $T = 204.21'$ $T = 205.43'$
 $L = 405.34'$ $L = 407.73'$
 $R = 1348.14'$
 $S = 5.2\%$
 $BST = 862+97.84$
 $EST = 869+05.58$

"O" Curve #19
 $\Delta = 17^\circ 59' 28''$ Rt. $\Delta = 17^\circ 44' 25''$ Rt.
 $D = 4' 45'$
 $T = 190.95'$ $T = 108.25'$
 $L = 378.96'$ $L = 373.48'$
 $R = 1206.23'$
 $S = 5.5\%$
 $BST = 876+02.92$
 $EST = 881+35.35$

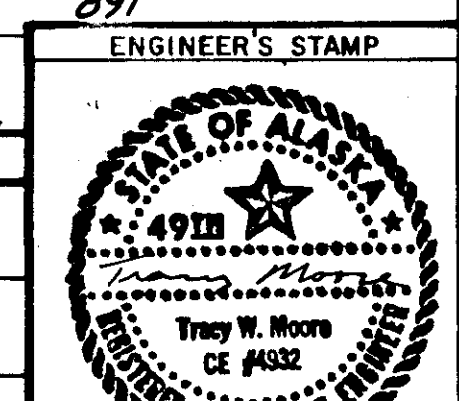
"O" Curve #20
 $\Delta = 57^\circ 56' 12''$ $58^\circ 52' 48''$ Lt.
 $D = 6' 50'$ Lt.
 $T = 464.17'$ $T = 473.23'$
 $L = 847.85'$ $L = 861.66'$
 $R = 838.47'$
 $S = 6.0\%$
 $BST = 881+35.35$
 $EST = 891+86.88$

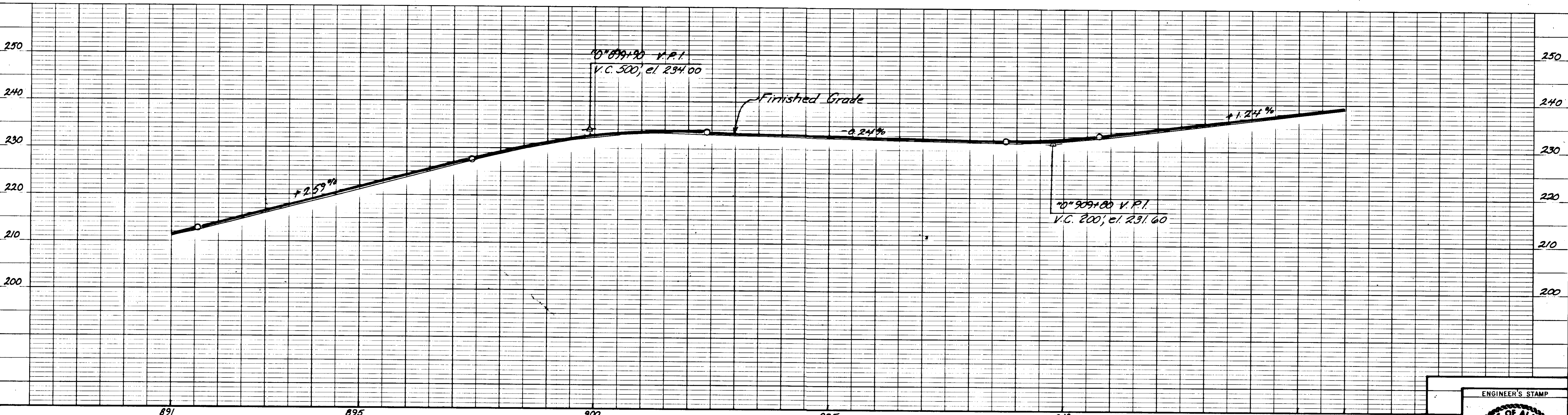
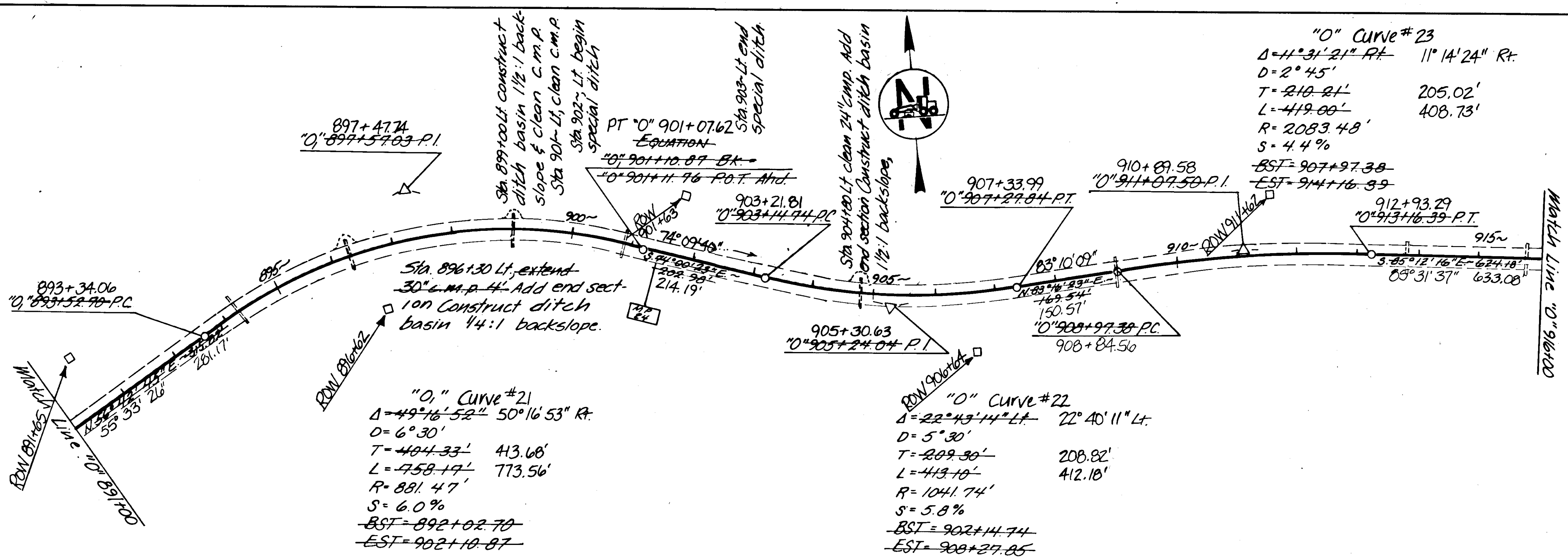


STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES		
BY	DATE	DESCRIPTION OF CHANGE

HARRIS RIVER TO CLARK BAY - PAVING PLAN AND PROFILE

APPROVED BY: <i>John W. Henry</i> DESIGN CHIEF	2-28-89 DATE	DESIGNED BY: T. MOORE	HORIZ. SCALE:
RECOMMENDED BY:		DRAWN BY: C.A.	VERT. SCALE:
PREPARED BY:		CHECKED BY:	DATE:
DESIGN ENGINEER, GROUP		DATE:	





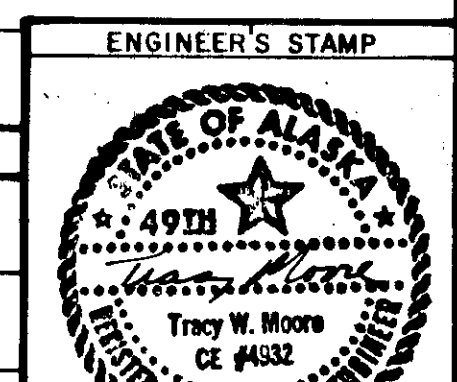
BY	DATE	DESCRIPTION OF CHANGE

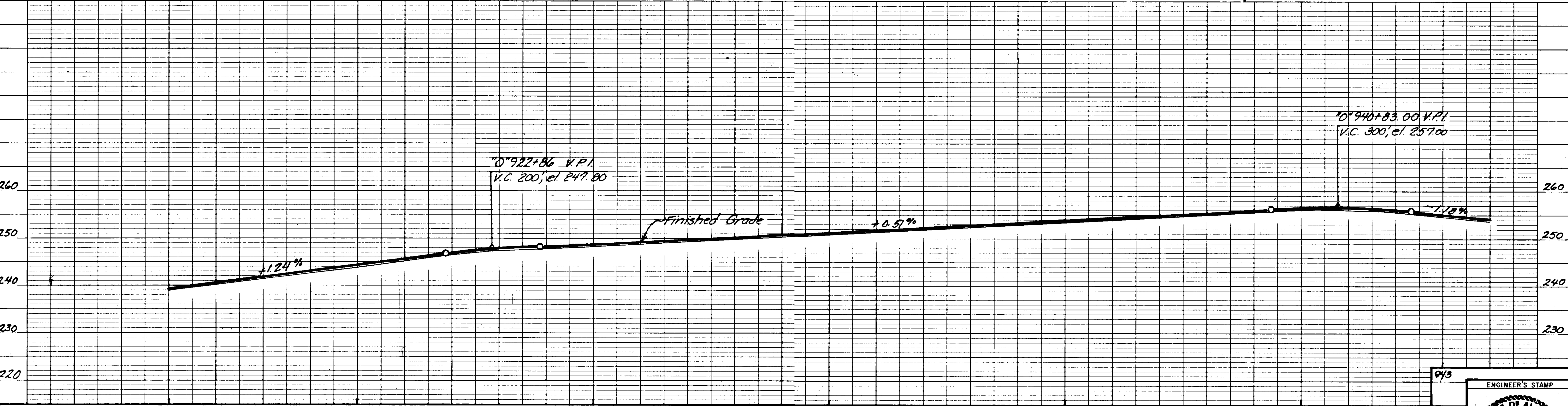
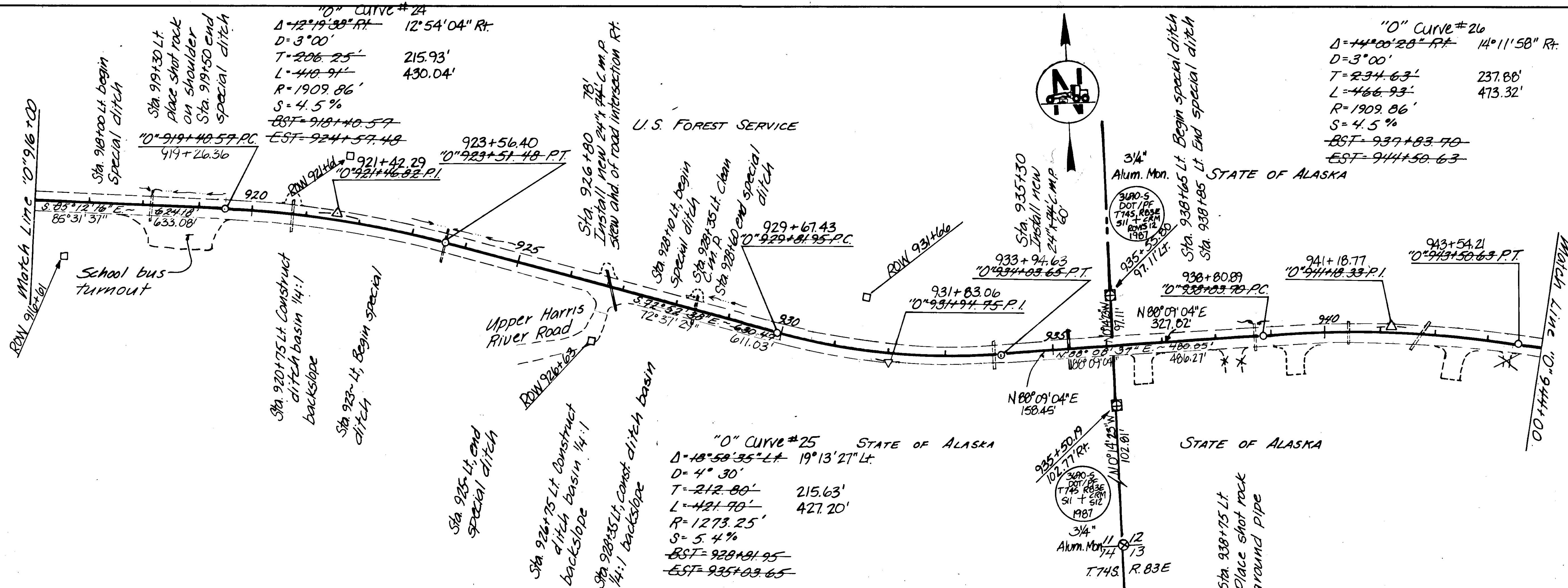
STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 & PUBLIC FACILITIES

HARRIS RIVER TO CLARK BAY - PAVING PLAN AND PROFILE

APPROVED BY: *John W. Henry* CHIEF 2-28-89 DATE
 RECOMMENDED BY: _____ DATE
 PREPARED BY: _____ DATE

DESIGNED BY: T. MOORE
 DRAWN BY: *Ca*
 CHECKED BY: _____



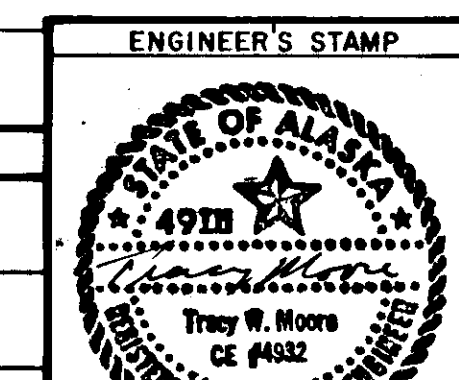


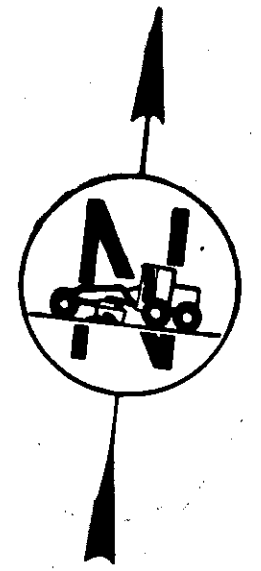
BY	DATE	DESCRIPTION OF CHANGE

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 & PUBLIC FACILITIES

HARRIS RIVER TO CLARK BAY - PAVING
 PLAN AND PROFILE

APPROVED BY: <i>John W. Berry</i> SIGN: CHIEF	DATE: 2-28-89	DESIGNED BY: T. Moore	HORIZ. SCALE:
RECOMMENDED BY:	DATE:	DRAWN BY: Sa	VERT. SCALE:
PREPARED BY:	DATE:	CHECKED BY:	DATE:





"O" CURVE #27
 $\Delta = 60^\circ 12' 25''$ $60^\circ 22' 43''$ Lt.
 $D = 3^\circ$ Lt.
 $T = 1107.26'$ $1111.09'$
 $L = 2006.90'$ $2012.62'$
 $R = 1909.86'$
 $S = 4.5\%$
 ~~$RST = 946 + 27.43$~~
 ~~$EST = 968 + 63.75$~~

EQUATION
 ~~$10'' 967 + 34.33$ P.T. BK.~~
 ~~$10'' 967 + 63.75$ P.O.T. Ahd.~~
 PT 967 + 27.17

STATE OF ALASKA
 T.R. B, A.S.L.S. 79-270

EQUATION
 $10'' 947 + 27.43$ P.O.T. BK.
 $10'' 947 + 27.43$ P.C. Ahd.
 P.C. 947 + 14.55

Sta. 956 + 60, Rt. repair 60%
 culvert embankment. Left side,
 install culvert end section.
 See Change Order No. 2.

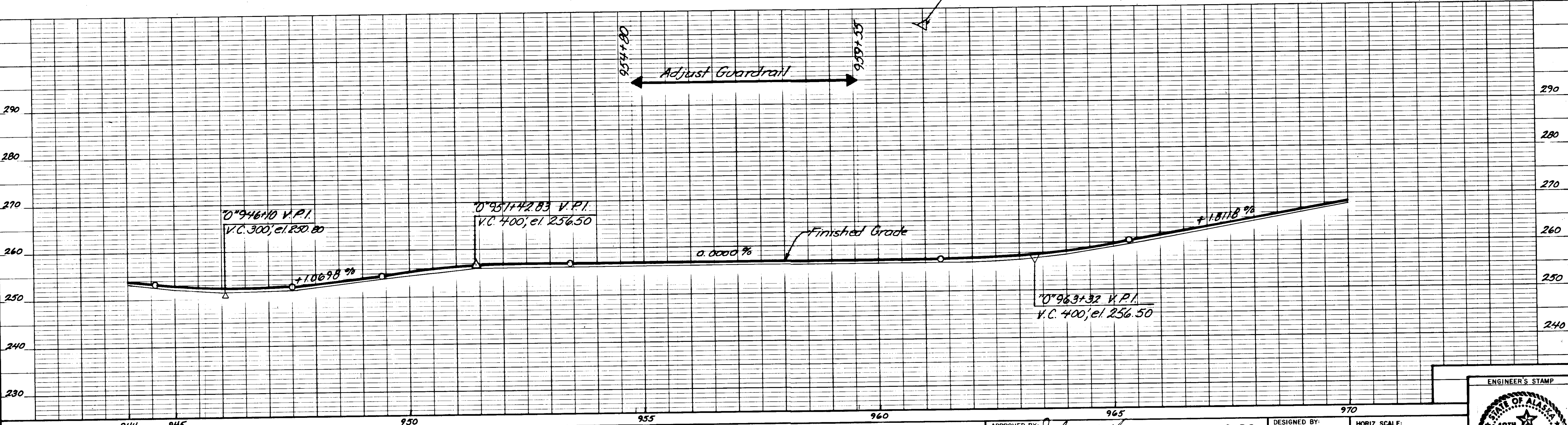
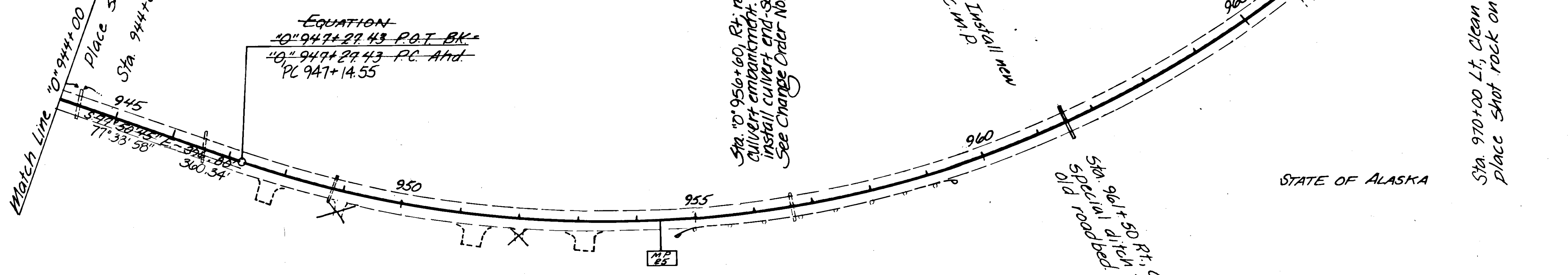
Sta. 961 + 50
 Install new
 C.M.P.

Sta. 961 + 50 Rt. construct
 special ditch
 old road bed

Sta. 970 + 00 Lt. Clean ditch &
 Place shot rock on shoulder

Match Line $10'' 944 + 00$
 Sta 944 + 00 begin special ditch
 Place shot rock on shoulder LEFT
 Sta 944 + 60 Lt. end special ditch

Match Line $10'' 970 + 00$

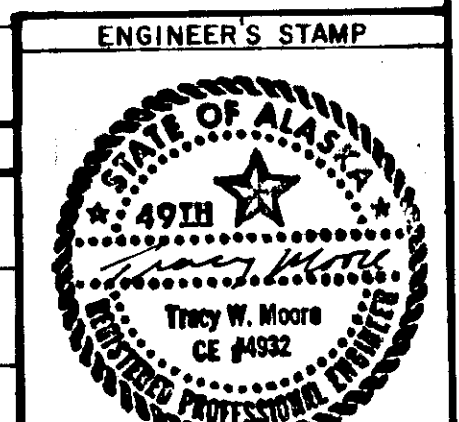


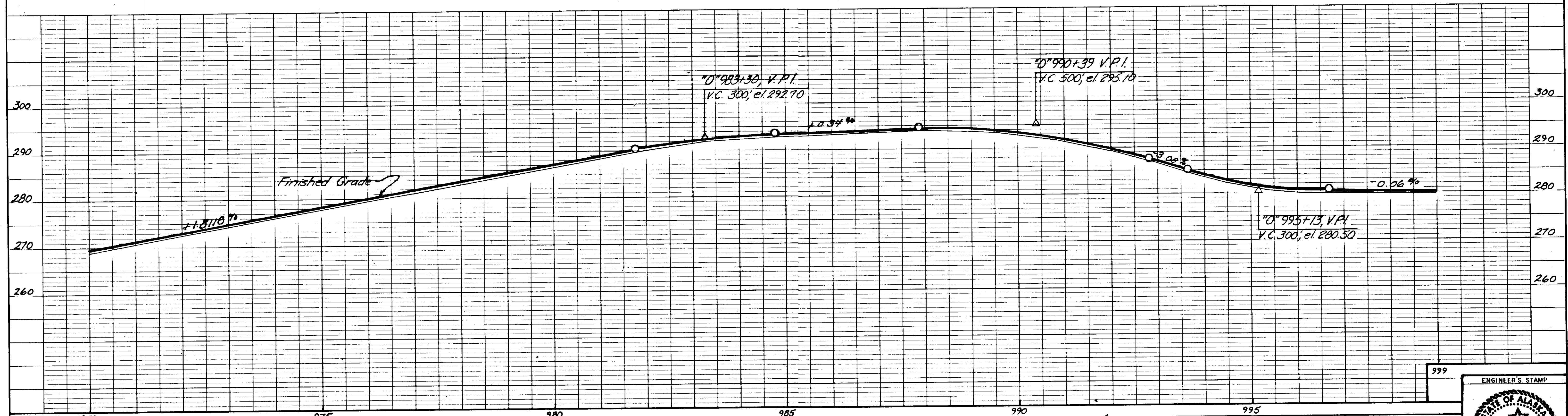
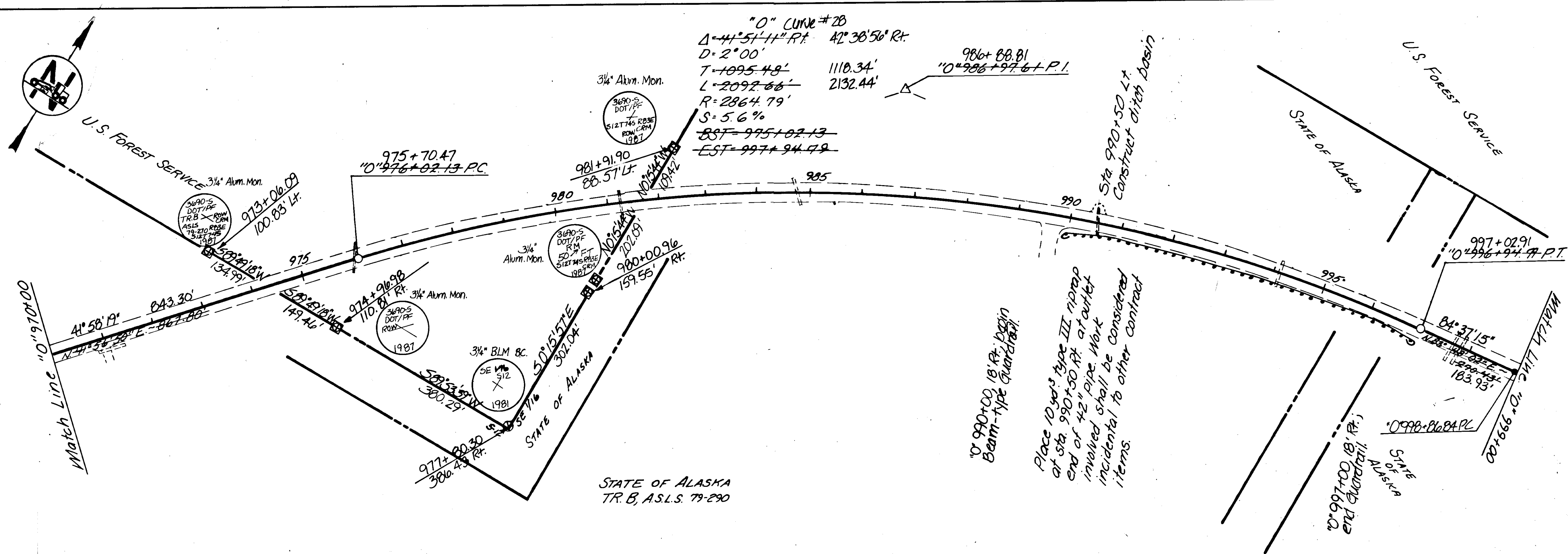
STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 & PUBLIC FACILITIES

HARRIS RIVER TO CLARK BAY - PAVING
 PLAN AND PROFILE

APPROVED BY: *John W. Henry* CHIEF 2-28-89
 RECOMMENDED BY: _____ DATE _____
 PREPARED BY: *T. Moore* DATE _____

DESIGNED BY: T. MOORE
 DRAWN BY: *Ch*
 CHECKED BY: _____
 HORIZ. SCALE: _____
 VERT. SCALE: _____
 SHEET 17 OF 31





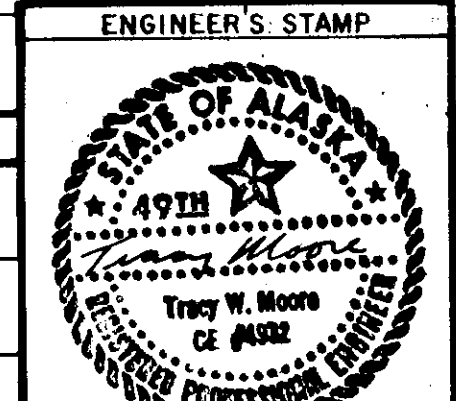
STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 & PUBLIC FACILITIES

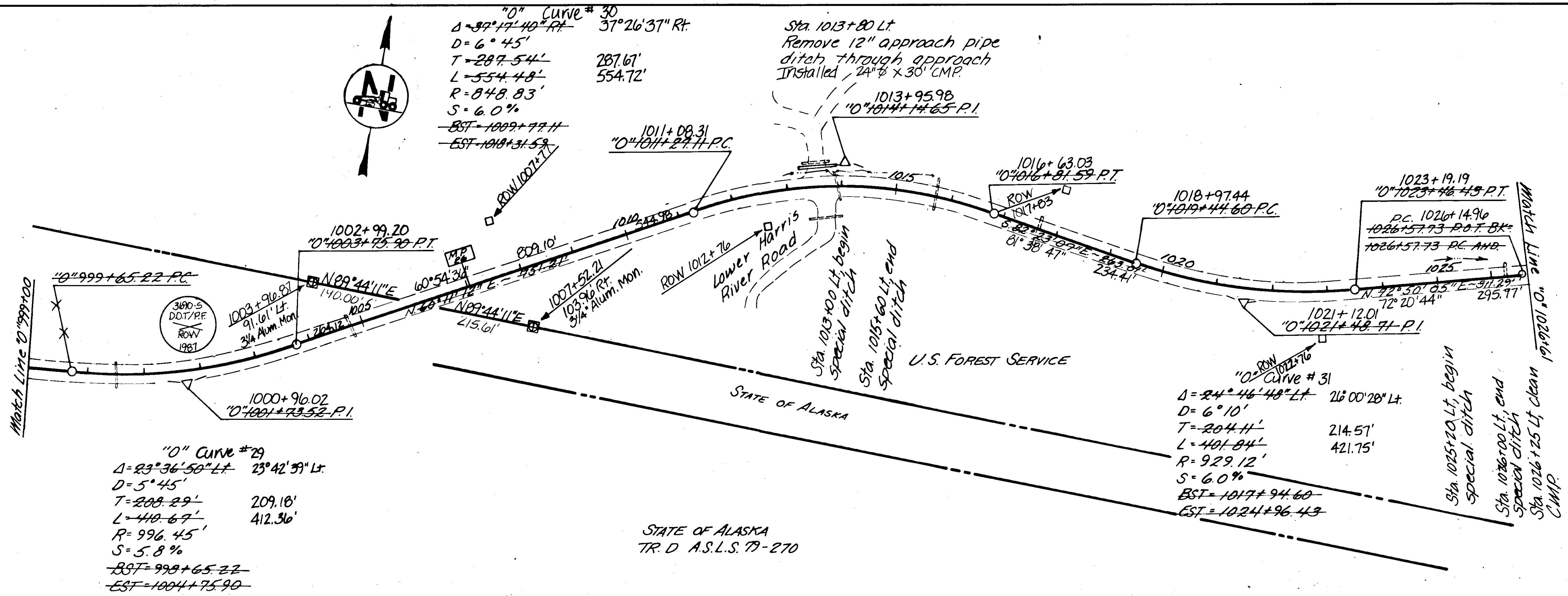
HARRIS RIVER TO CLARK BAY - PAVING
 PLAN AND PROFILE

APPROVED BY: *John W. Henry* DESIGN CHIEF 2-28-89 DATE
 RECOMMENDED BY: _____
 PREPARED BY: _____

DESIGNED BY: T. Moore
 DRAWN BY: *Ca*
 CHECKED BY: _____

HORIZ. SCALE: _____
 VERT. SCALE: _____
 DATE: _____
 SHEET 18 OF 31





BY	DATE	DESCRIPTION OF CHANGE

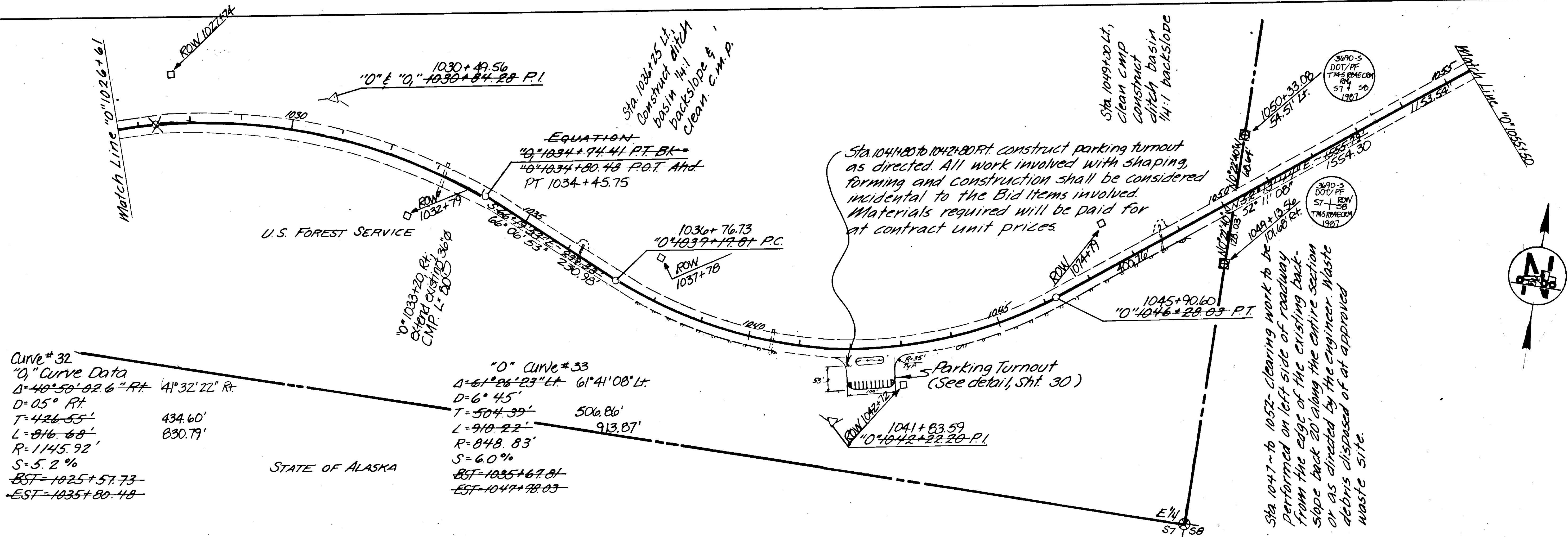
STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
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HARRIS RIVER TO CLARK BAY - PAVING PLAN AND PROFILE

APPROVED BY: <i>John W. Henry</i> CHIEF	DATE: 2-28-89	DESIGNED BY: T. Moore	HORIZ. SCALE:
RECOMMENDED BY:	DATE:	DRAWN BY: <i>CM</i>	VERT. SCALE:
PREPARED BY:	DATE:	CHECKED BY:	DATE:

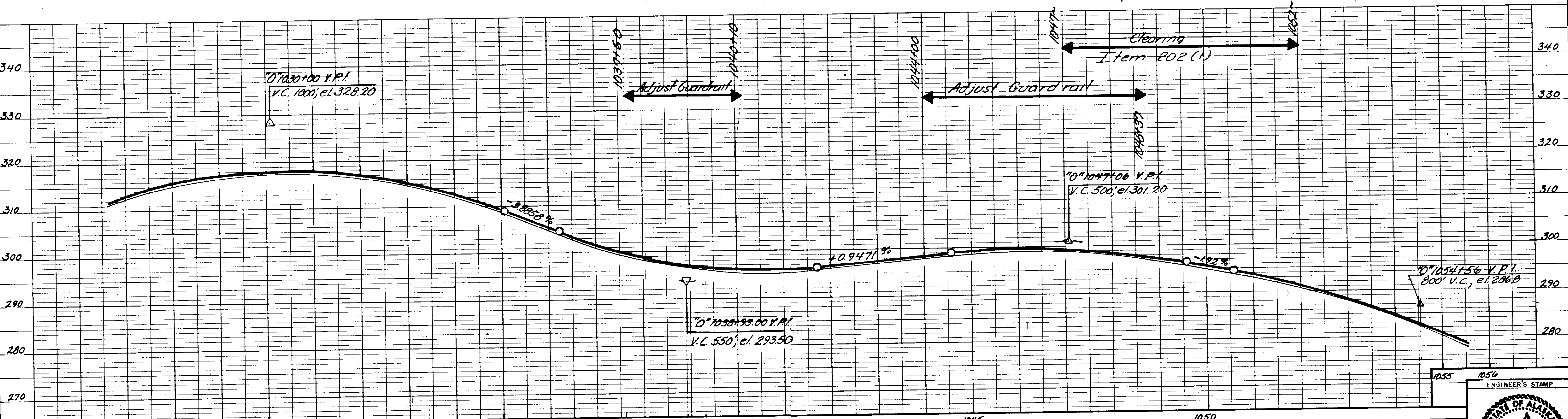
ENGINEER'S STAMP

STATE OF ALASKA
 4912
 Tracy W. Moore
 CE #432



Curve # 32
"O" Curve Data
Δ = 40° 50' 02.6" RT
D = 05° RT
T = 426.55' 434.60'
L = 816.68' 830.79'
R = 1145.92'
S = 5.2 %
BST = 1025+57.73
EST = 1035+80.48

"O" Curve # 33
Δ = 61° 26' 23" LT
D = 6° 45'
T = 504.39' 506.86'
L = 910.22' 913.87'
R = 848.83'
S = 6.0 %
BST = 1035+67.81
EST = 1047+78.03

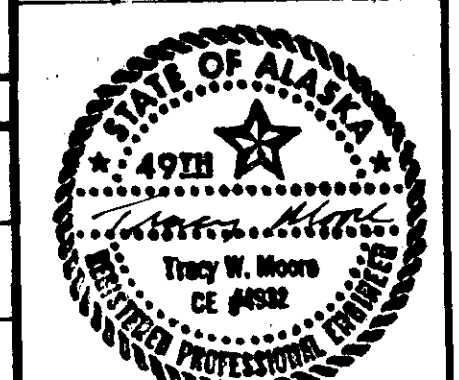


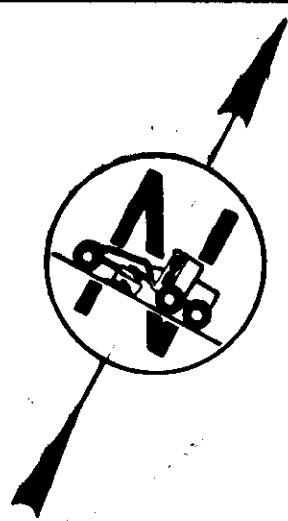
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DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES

HARRIS RIVER TO CLARK BAY - PAVING
PLAN AND PROFILE

APPROVED BY: *John W. Henry* 2-28-89
DESIGN CHIEF
RECOMMENDED BY: _____
DESIGN ENGINEER, GROUP "____"
DATE _____
PREPARED BY: *T. Moore* *D.M. Sals*

DESIGNED BY: T. MOORE
DRAWN BY: *Ca*
CHECKED BY: _____
HORIZ. SCALE: _____
VERT. SCALE: _____
DATE: _____
SHEET 20 OF 31





Match Line "0"1055+50

N 32° 13' 41" E - 1555.79 L
S 2° 11' 58" W - 1554.30'

Sta. 1061+00 Lt, begin special ditch
Sta. 1061+80 Lt, end special ditch
Special ditch move ditch line away from road shoulder.

"0" Curve #34
Δ = 29° 48' 49" RA - 28° 47' 48" RT
D = 3° 45'
T = 406.73' 392.25'
L = 795.03' 767.92'
R = 1527.89'
S = 3.5%
BST = 1060+83.01
EST = 1070+48.07

"0" Curve #36
Δ = 21° 40' 50" RT Δ = 19° 30' 57" RA
D = 6° 45'
T = 145.98' 102.54'
L = 289.12' 321.20'
R = 848.83'
S = 6.0%
BST = 1079+63.31
EST = 1084+18.97

STATE OF ALASKA
TR.C, A.S.L.S. 79-271

3690-S
DOT/PF
RM COR. 10
TR.C.A.S.L.S. 79-270
Y
S.B.T.745R84E
CRM
1987

ASLS
79-271
COR. 9
ROW
S.B.T.745R84E CRM
4725-S
1989

1061+44.90
"0"1061+83.81 P.C.

"0"1065+90.54 P.I.
1065+37.15

1069+12.82
"0"1069+78.83 P.T.

1071+09.13
"0"1071+17.31 P.C.

1078+64.50
"0"1078+54.79 P.T.

1080+05.28
"0"1080+71.83 P.C.

1081+67.82
"0"1082+17.81 P.I.

1083+26.48
"0"1083+60.25 P.T.

Cor. 10
51° 41' 24" / 1083

1084+84.92
33.68 Lt.

STATE OF ALASKA

Sta. 1065+80 Lt, begin special ditch
Sta. 1066+00 Lt, end special ditch
Place riprap on shoulder Lt.

Sta. 1067+70 Lt, clean 30" CMP
and ditch basin. Place riprap
around inlet.

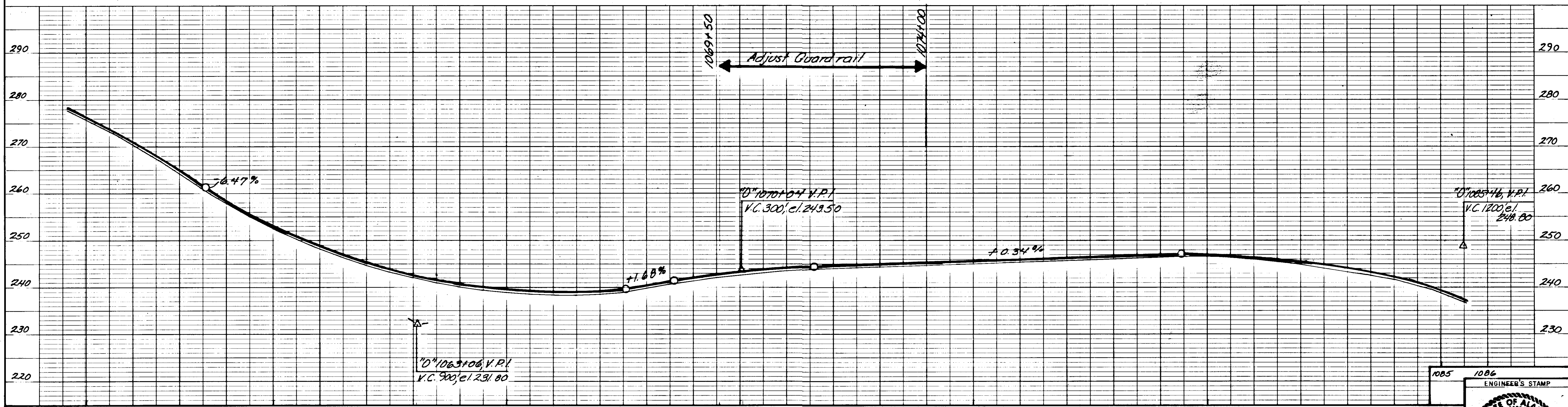
"0" Curve #35
Δ = 49° 46' 49" LA - 50° 59' 13" LT
D = 6° 45'
T = 393.83' 404.75'
L = 797.49' 755.37'
R = 848.83'
S = 5.7%
BST = 1070+48.07
EST = 1079+63.31

1075+13.86
"0"1075+11.14 P.I.

Quarry site used for this project.

Sta. 1082+65 Lt, clean out 30" CMP
and ditch basin

Sta. 1085+30 Lt, clean out 24" CMP &
ditch basin. Private water pipe
alongside & end of CMP to
remain undamaged

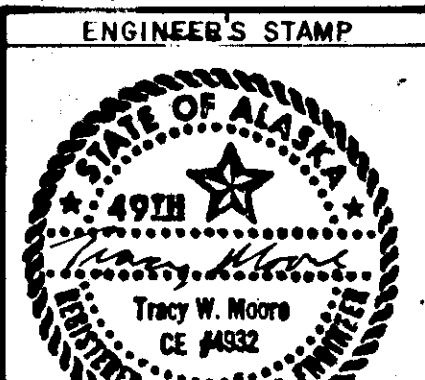


STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES

HARRIS RIVER TO CLARK BAY - PAVING
PLAN AND PROFILE

APPROVED BY: *John W. Henry* CHIEF 2-28-89
DESIGNED BY: T. MOORE
DRAWN BY: CBA
CHECKED BY: [Signature]
DATE: [Blank]

HORIZ. SCALE: [Blank]
VERT. SCALE: [Blank]
DATE: [Blank]
SHEET 21 OF 31

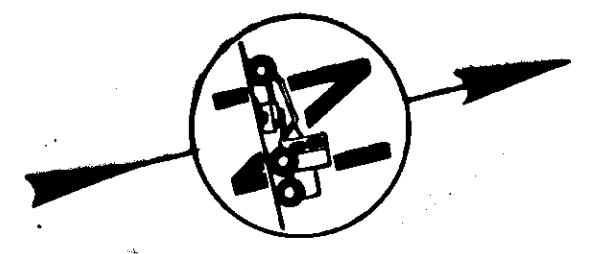


NOTE BOOK
 ALIGNMENT CHECKED
 PT. OF WAY CHECKED
 No.

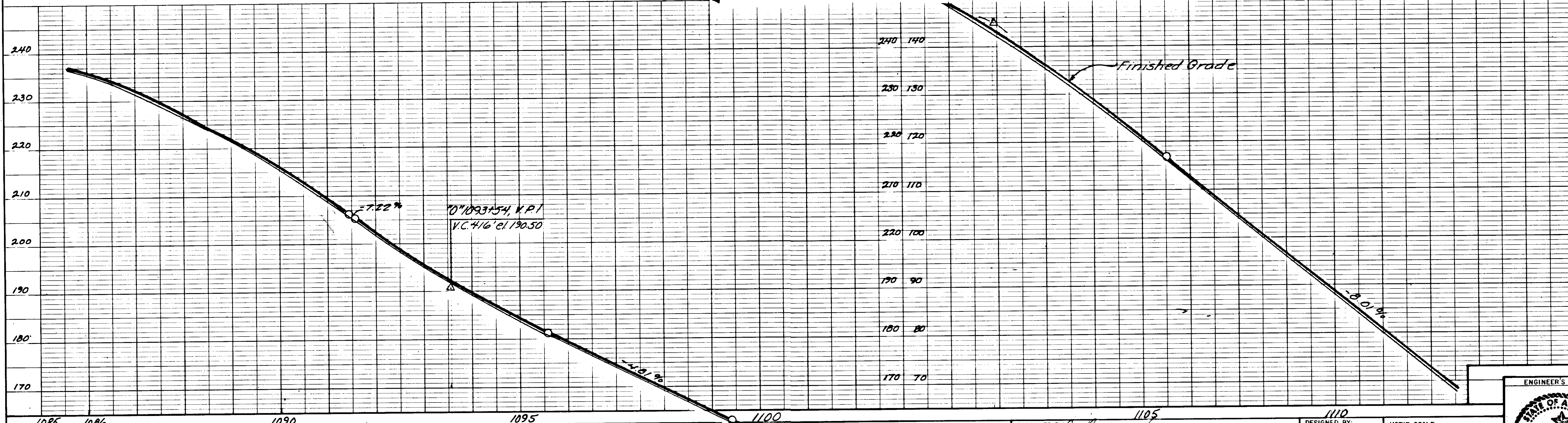
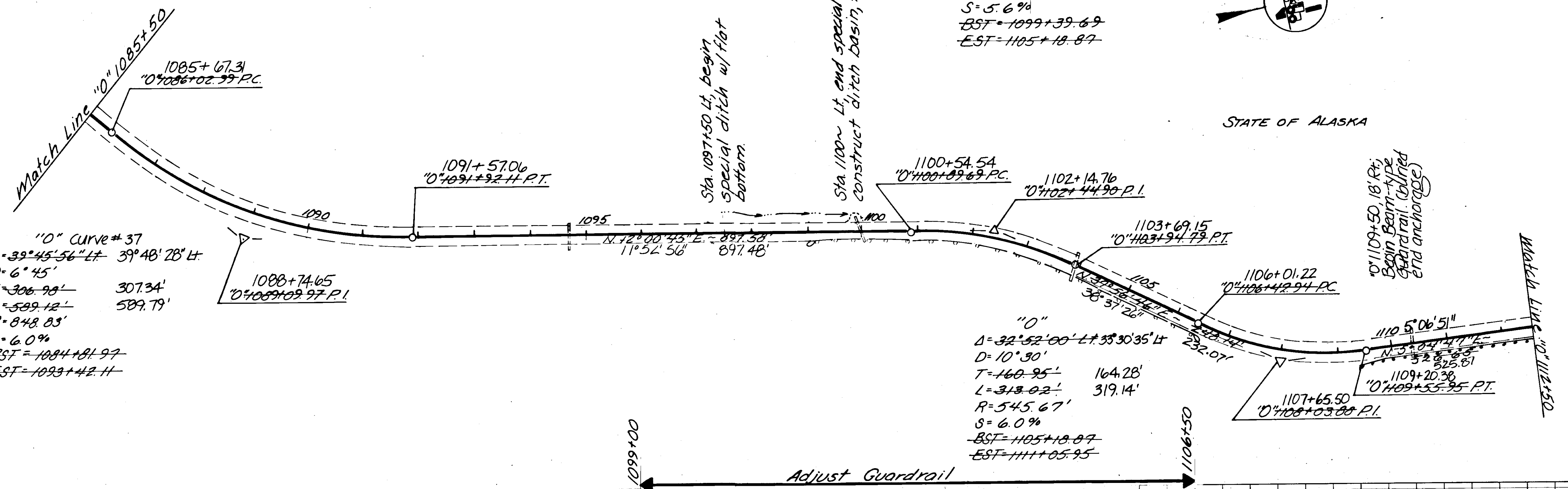
NOTE BOOK
 GRADES CHECKED
 STRUCTURE NOTATIONS CHECKED
 No.

STATE OF ALASKA
 TR. D, A.S.L.S. 79-271

"0" Curve #38
 $\Delta = 25^{\circ}56'02''$ Rt. 2644'30" Rt.
 $D = 8^{\circ}30'$
 $T = 155.21'$ 160.22'
 $L = 305.10'$ 314.61'
 $R = 674.07'$
 $S = 5.6\%$
 $EST = 1099+39.69$
 $EST = 1105+18.87$



STATE OF ALASKA

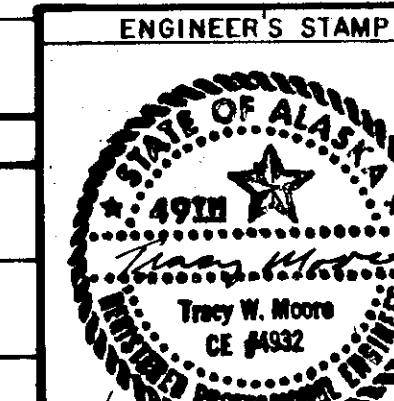


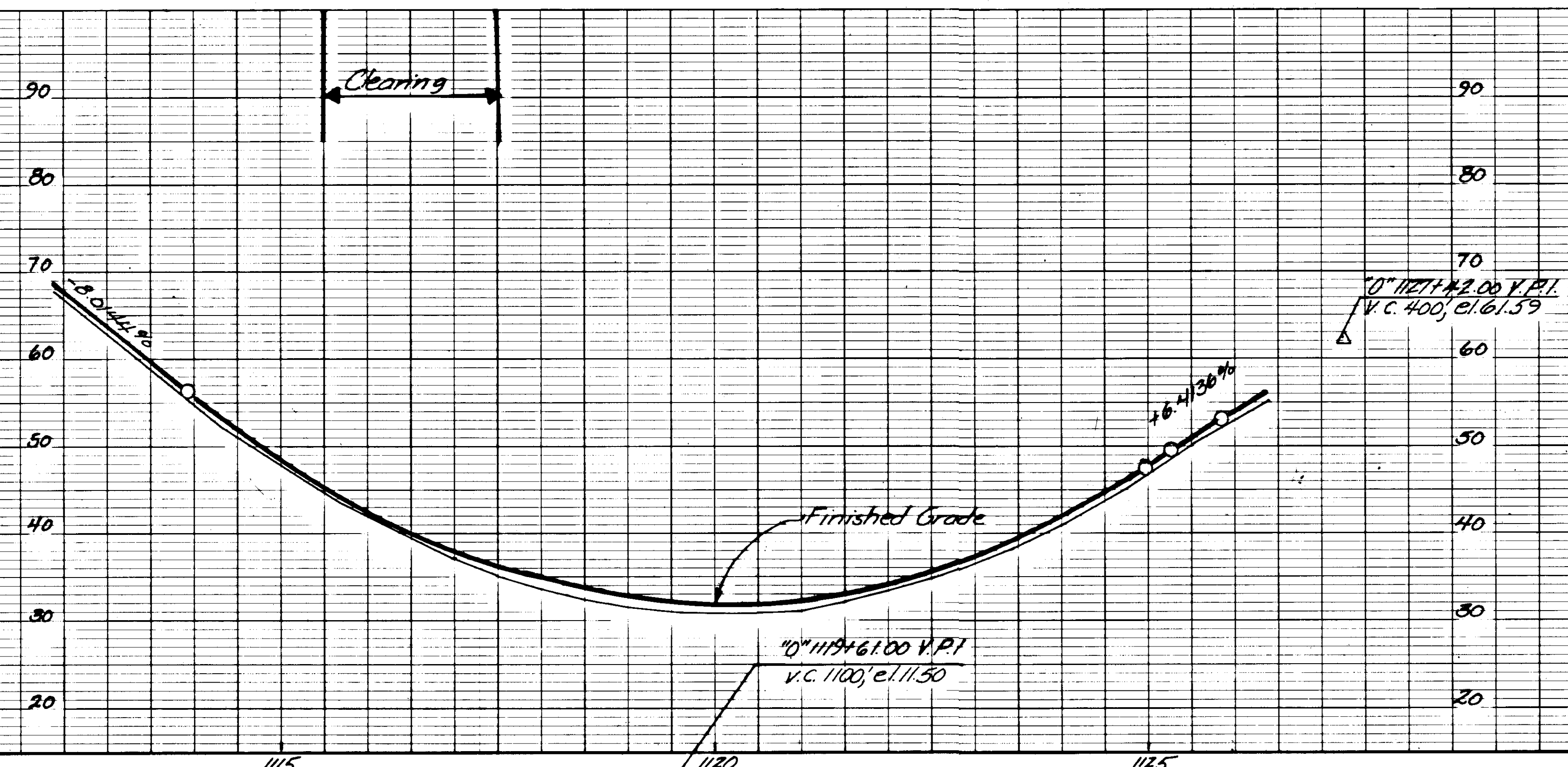
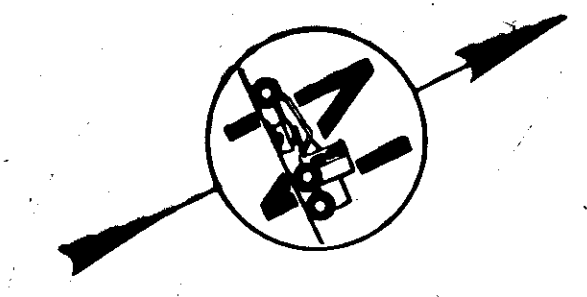
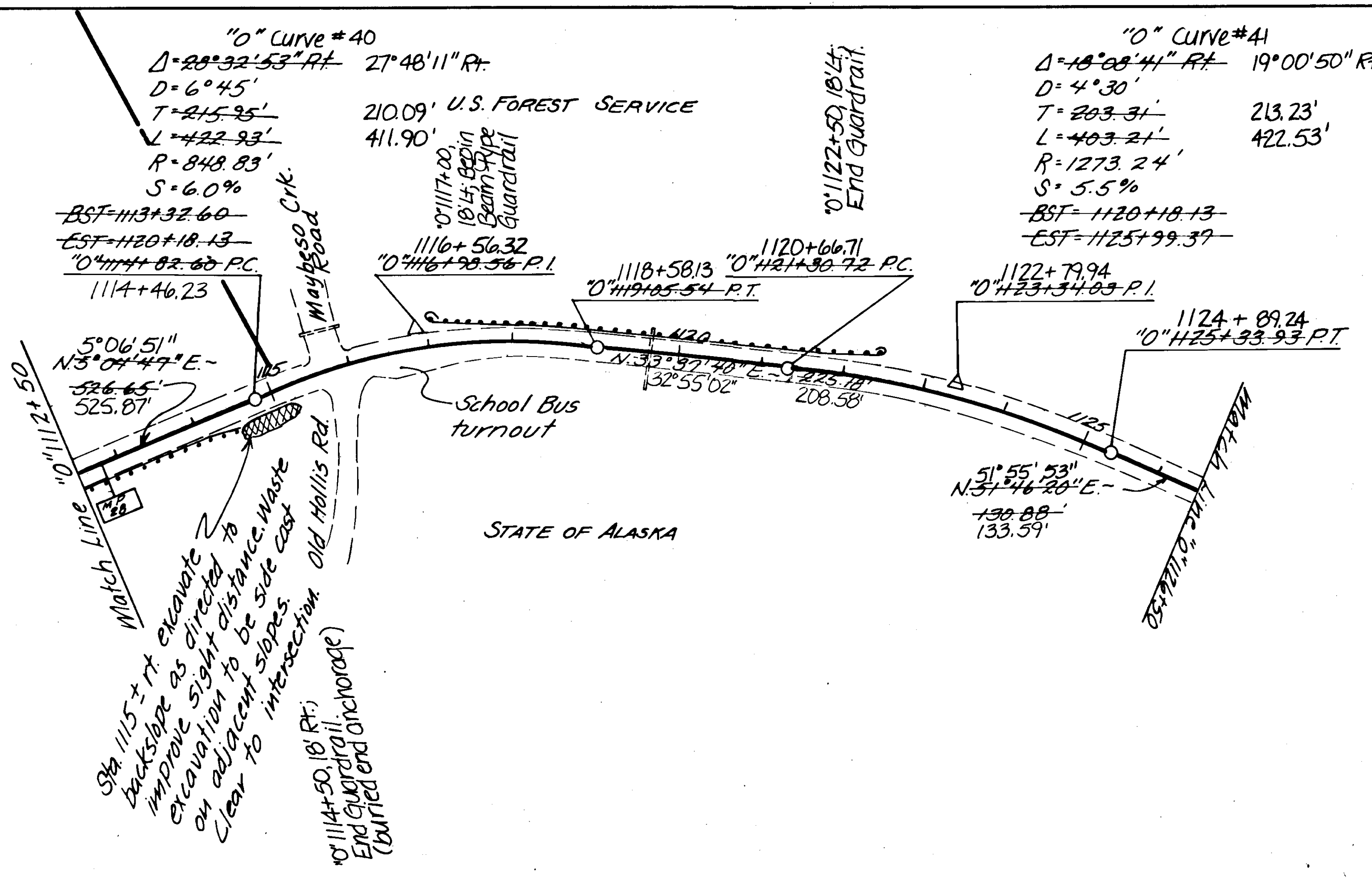
STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 & PUBLIC FACILITIES

HARRIS RIVER TO CLARK BAY - PAVING
 PLAN AND PROFILE

APPROVED BY: *John W. Henry* 2-28-89
 RECOMMENDED BY: _____
 PREPARED BY: _____

DESIGNED BY: T. Moore
 DRAWN BY: *Wa*
 CHECKED BY: _____





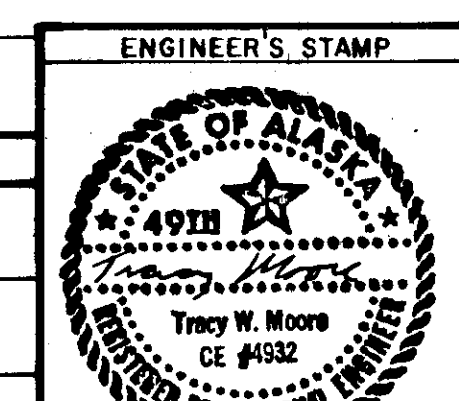
Unclassified Excavation 230 c.y.

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES

HARRIS RIVER TO CLARK BAY - PAVING
PLAN AND PROFILE

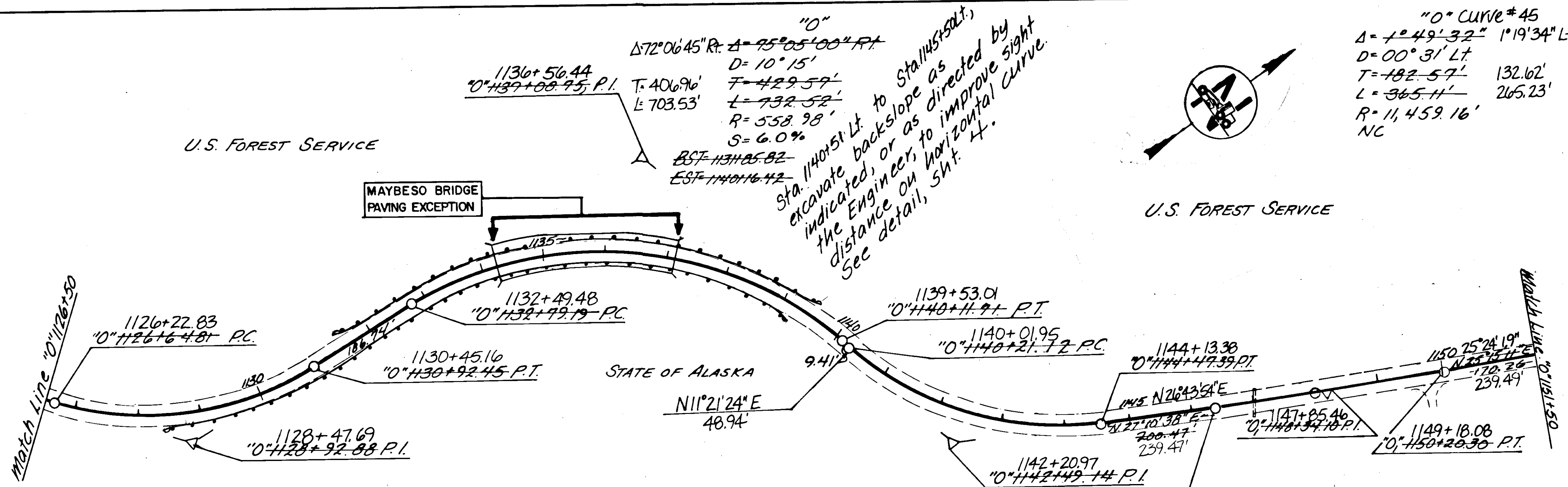
APPROVED BY: *John W. Henry* CHIEF 2-28-89
RECOMMENDED BY: _____ DATE _____
DESIGN ENGINEER, GROUP " " DATE _____
PREPARED BY: _____ DATE _____

DESIGNED BY: T. MOORE
DRAWN BY: *da*
CHECKED BY: _____
HORIZ. SCALE: _____
VERT. SCALE: _____
DATE: _____
SHEET 23 OF 31



U.S. FOREST SERVICE

U.S. FOREST SERVICE

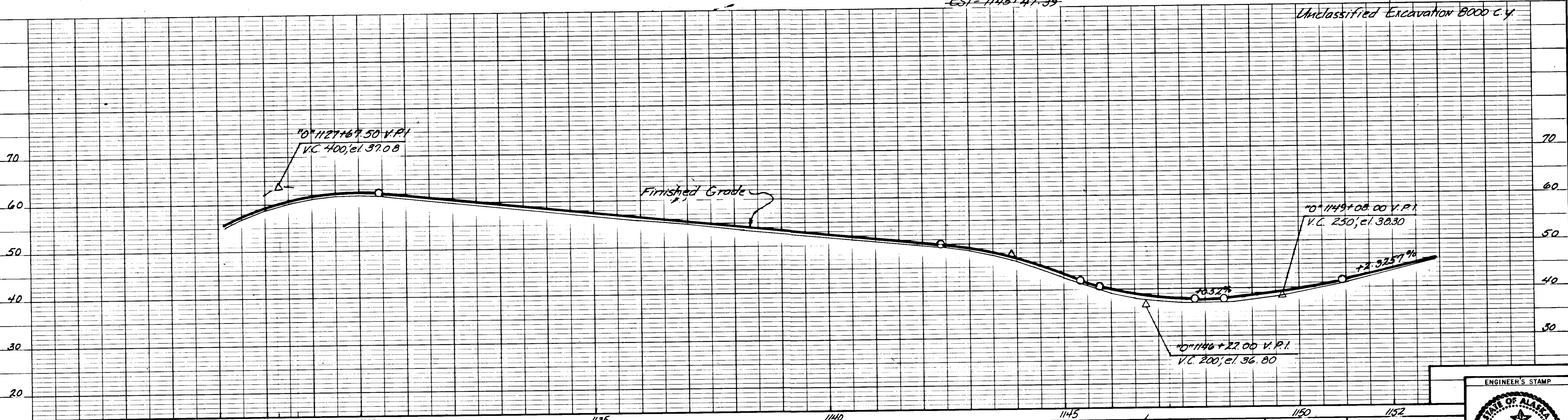


"O"
 $\Delta = 72^{\circ}06'45''$ R. $A = 95^{\circ}05'00''$ P.T.
 $D = 10^{\circ}15'$
 $T = 429.57'$
 $L = 732.52'$
 $R = 558.98'$
 $S = 6.0\%$
 BST = 1131+05.82
 EST = 1140+16.42
 Sta. 1140+51 Lt. to Sta. 1145+02 Lt.
 excavate backslope as indicated, or as directed by the Engineer, to improve sight distance on horizontal curve. See detail, Sht. 4.

"O" Curve #45
 $\Delta = 1^{\circ}49'32''$ $1^{\circ}19'34''$ Lt.
 $D = 00^{\circ}31'$ Lt.
 $T = 182.57'$ 132.62'
 $L = 365.11'$ 265.23'
 $R = 11,459.16'$
 NC

"O" Curve #42
 $\Delta = 49^{\circ}18'00''$ Lt. $40^{\circ}41'14''$ Lt.
 $D = 11^{\circ}31'42''$
 $T = 228.07'$ 224.86'
 $L = 427.64'$ 422.32'
 $R = 497.00'$
 $S = 6.0\%$
 BST = 1125+99.82
 EST = 1131+05.82

"O" Curve #44
 $\Delta = 50^{\circ}22'42''$ $48^{\circ}37'30''$ Lt.
 $D = 11^{\circ}49'06''$
 $T = 228.02'$ 219.02'
 $L = 426.29'$ 411.43'
 $R = 484.80'$
 $S = 6.0\%$
 BST = 1140+16.42
 EST = 1145+47.39

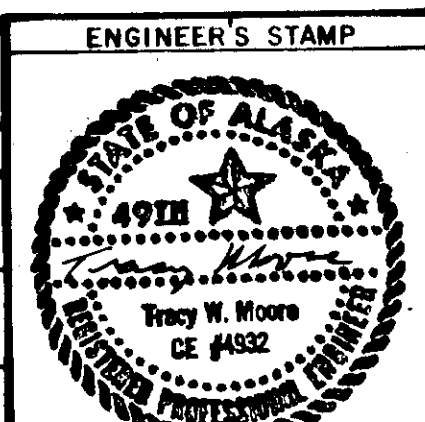


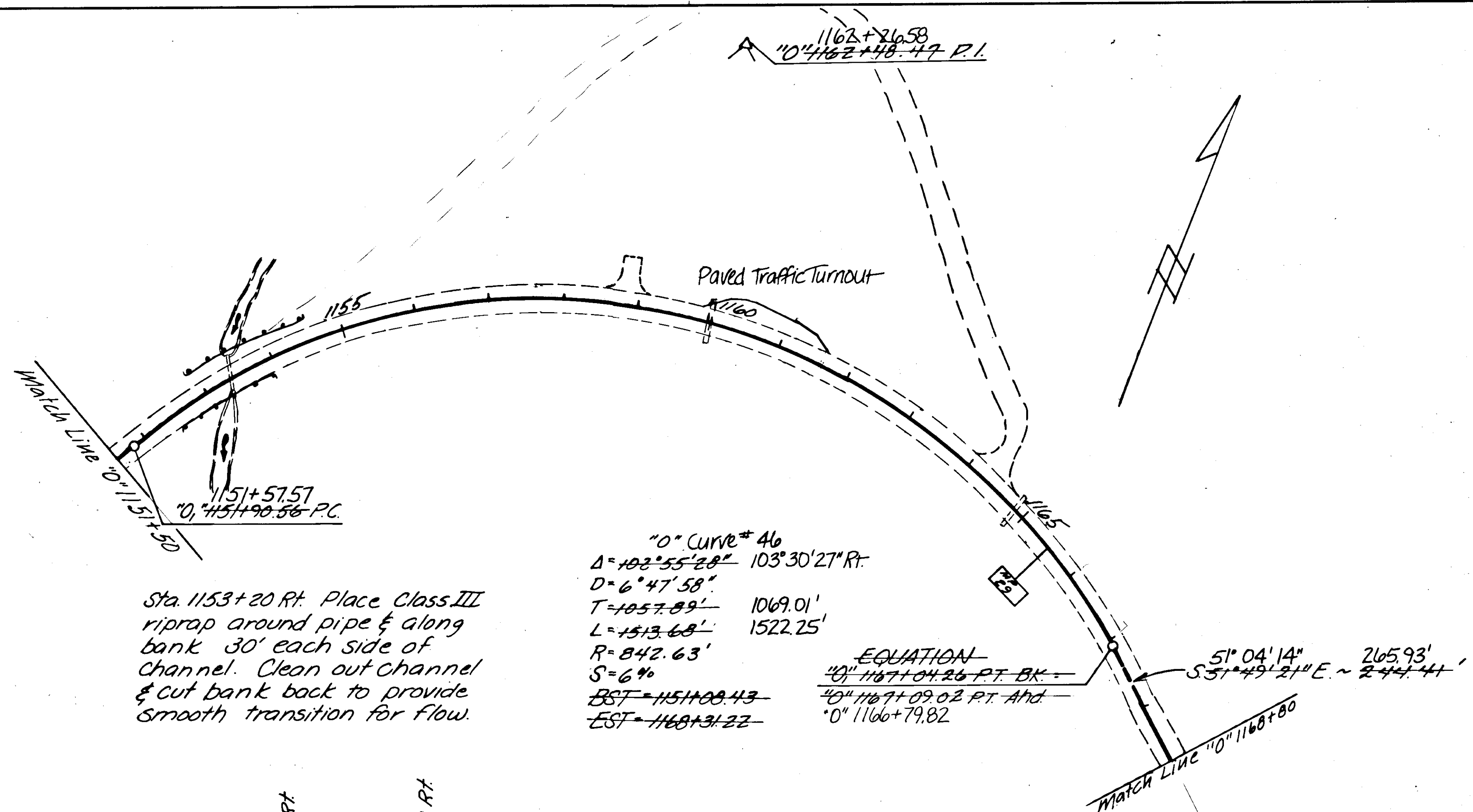
STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 & PUBLIC FACILITIES

HARRIS RIVER TO CLARK BAY - PAVING
 PLAN AND PROFILE

APPROVED BY: *John W. Henry* 2-28-89
 DESIGN CHIEF
 RECOMMENDED BY: *T. Moore*
 DESIGN ENGINEER, GROUP "A" DATE
 PREPARED BY: *Jim Dale*

DESIGNED BY: *T. Moore*
 DRAWN BY: *Co*
 CHECKED BY:
 HORIZ. SCALE:
 VERT. SCALE:
 DATE:
 SHEET 24 OF 31

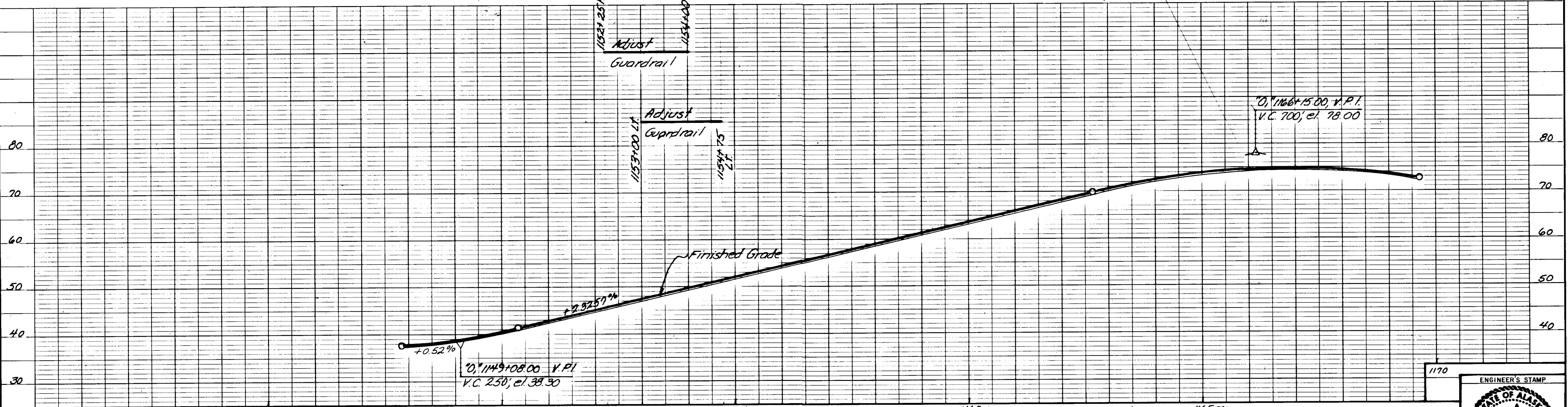




Sta. 1153+20 RT. Place Class III riprap around pipe & along bank 30' each side of channel. Clean out channel & cut bank back to provide smooth transition for flow.

"0" Curve # 46
 $\Delta = 102^{\circ}55'28''$ $103^{\circ}30'27''$ RT.
 $D = 6^{\circ}47'58''$
 $T = 1057.89'$ $1069.01'$
 $L = 1513.68'$ $1522.25'$
 $R = 842.63'$
 $S = 6\%$
 $EST = 1151+08.43$
 $EST = 1160+31.22$

EQUATION
 "0" 1167+04.26 RT. BK.
 "0" 1167+09.02 RT. Ahd.
 "0" 1166+79.82
 $51^{\circ}04'14''$ $265.93'$
 $SS = 49^{\circ}21'' E \sim 244.41'$



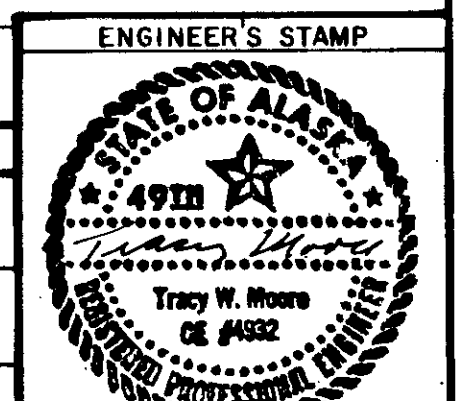
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HARRIS RIVER TO CLARK BAY - PAVING
 PLAN AND PROFILE

APPROVED BY: *John W. Henry* DESIGN CHIEF 2-28-89 DATE
 RECOMMENDED BY: _____ DATE
 PREPARED BY: _____ DATE

DESIGNED BY: T. MOORE
 DRAWN BY: *Ca*
 CHECKED BY: _____

HORIZ. SCALE: _____
 VERT. SCALE: _____
 SHEET 25 OF 31

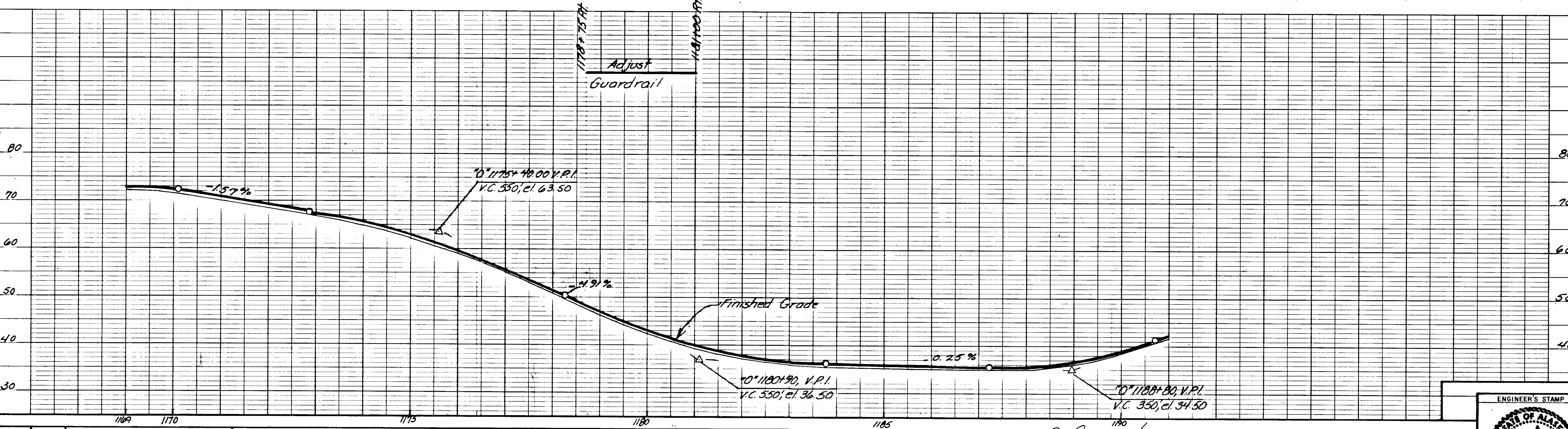
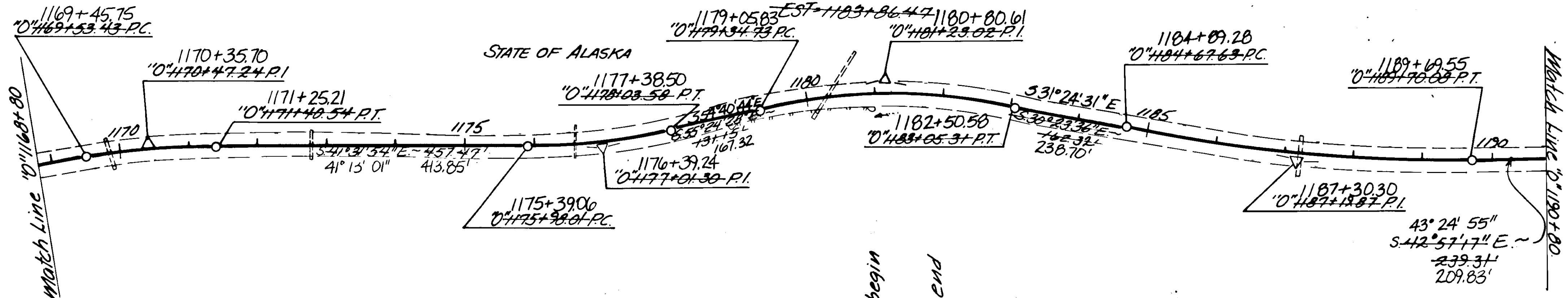
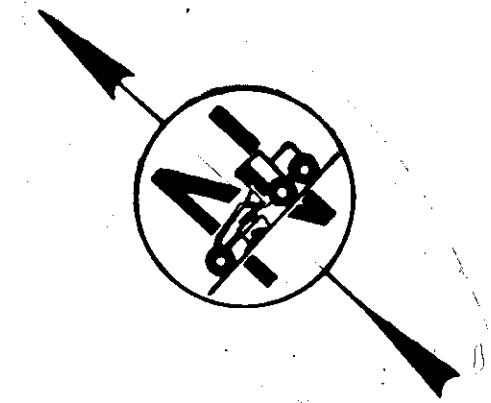


"O" Curve # 47
 $\Delta = 10^{\circ}17'27''$ RT $9^{\circ}52'13''$ RT
 $D = 5^{\circ}30'$
 $T = 93.00'$ $89.95'$ U.S. FOREST SERVICE
 $L = 187.10'$ $179.46'$
 $R = 1041.74'$
 $S = 6.0\%$
~~BSF = 1168+91.22~~
~~EST = 1172+40.54~~

"O" Curve # 49
 $\Delta = 25^{\circ}00'52''$ RT $23^{\circ}16'13''$ RT
 $D = 6^{\circ}45'$
 $T = 188.29'$ $174.78'$
 $L = 370.50'$ $344.75'$
 $R = 848.83'$
 $S = 6.0\%$
~~BSF = 1178+69.15~~
~~EST = 1183+86.47~~

"O" Curve # 48
 $\Delta = 13^{\circ}52'33''$ LT $13^{\circ}27'45''$ LT
 $D = 6^{\circ}45'$
 $T = 103.29'$ $100.18'$
 $L = 205.57'$ $199.44'$
 $R = 848.83'$
 $S = 5.8\%$
~~BSF = 1174+48.01~~
~~EST = 1178+69.15~~

"O" Curve # 50
 $\Delta = 12^{\circ}33'41''$ LT $12^{\circ}00'23''$ LT
 $D = 2^{\circ}30'$
 $T = 252.24'$ $241.02'$
 $L = 502.45'$ $480.27'$
 $R = 2291.83'$
 $S = 4.0\%$
~~BSF = 1183+86.47~~
~~EST = 1190+89.74~~



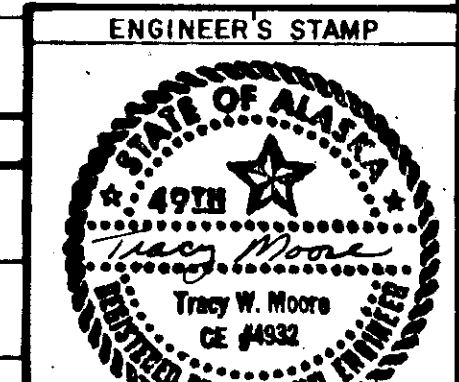
BY	DATE	DESCRIPTION OF CHANGE

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 & PUBLIC FACILITIES

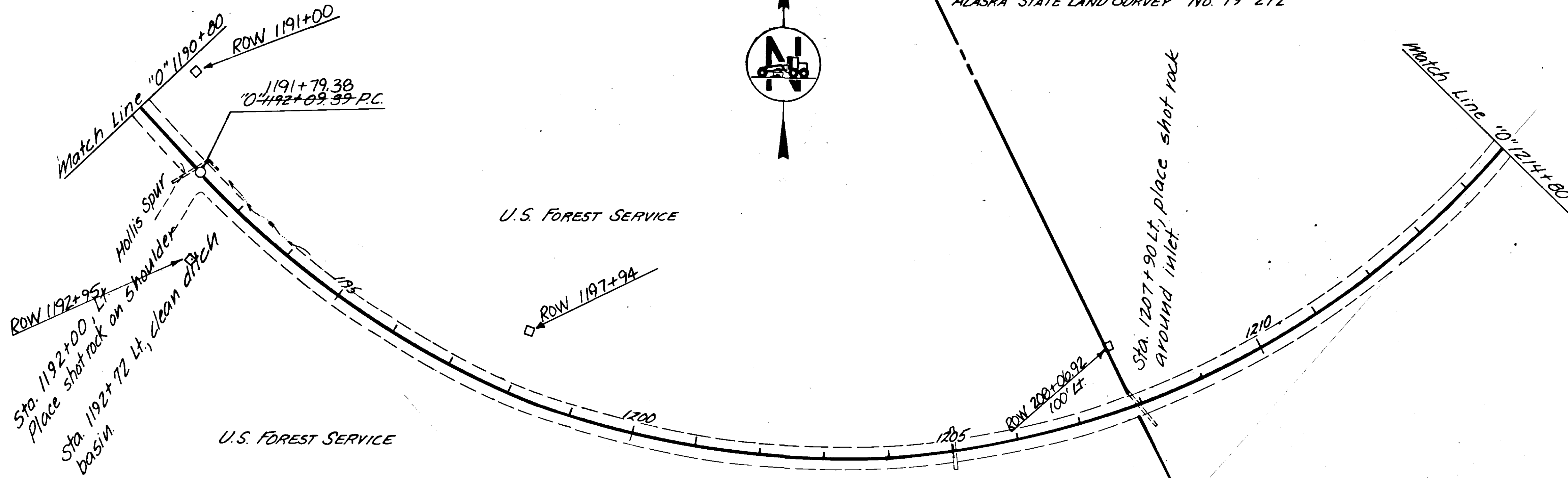
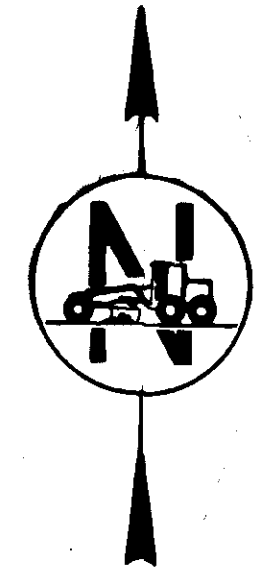
HARRIS RIVER TO CLARK BAY - PAVING PLAN AND PROFILE

APPROVED BY: *John W. Perry* CHIEF 2-28-89
 RECOMMENDED BY: _____
 PREPARED BY: _____

DESIGNED BY: T. Moore
 DRAWN BY: *Wa*
 CHECKED BY: _____

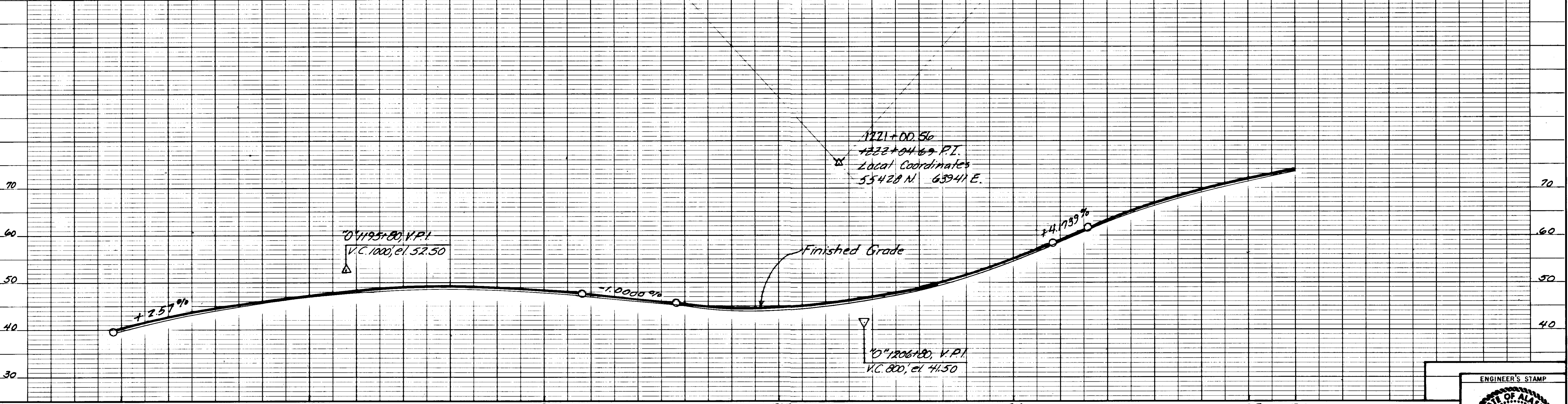


ALASKA STATE LAND SURVEY No. 79-272



"O" CURVE = 51
 $\Delta = 131^{\circ} 32' 11''$ LT. $130^{\circ} 27' 11''$ LT.
 $D = 4^{\circ} 15'$
 $T = 2995.30'$ $2921.18'$
 $L = 3094.98'$ $3069.49'$
 $R = 1348.14'$
 $S = 6.0\%$
 $BST = 1190+89.74$
 $EST = 1174+16.27$

1221+00.56
 1222+04.69 P.I.
 Local Coordinates
 55428 N. 63941 E.

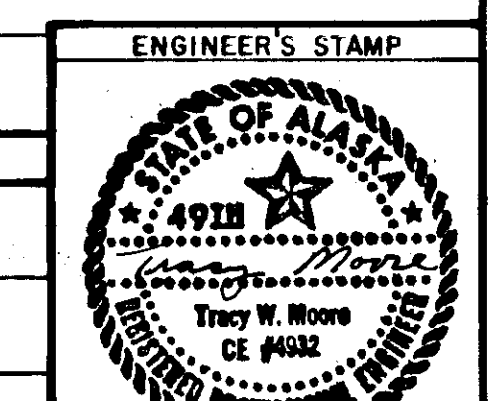


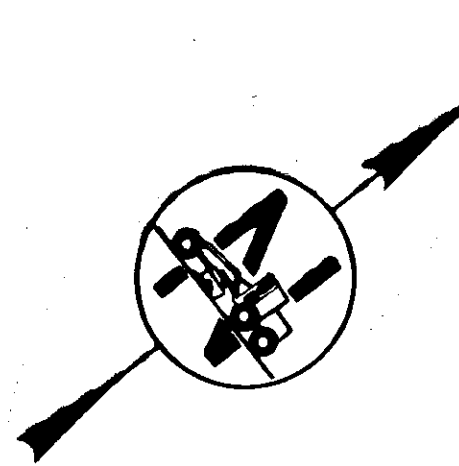
BY	DATE	DESCRIPTION OF CHANGE

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 & PUBLIC FACILITIES

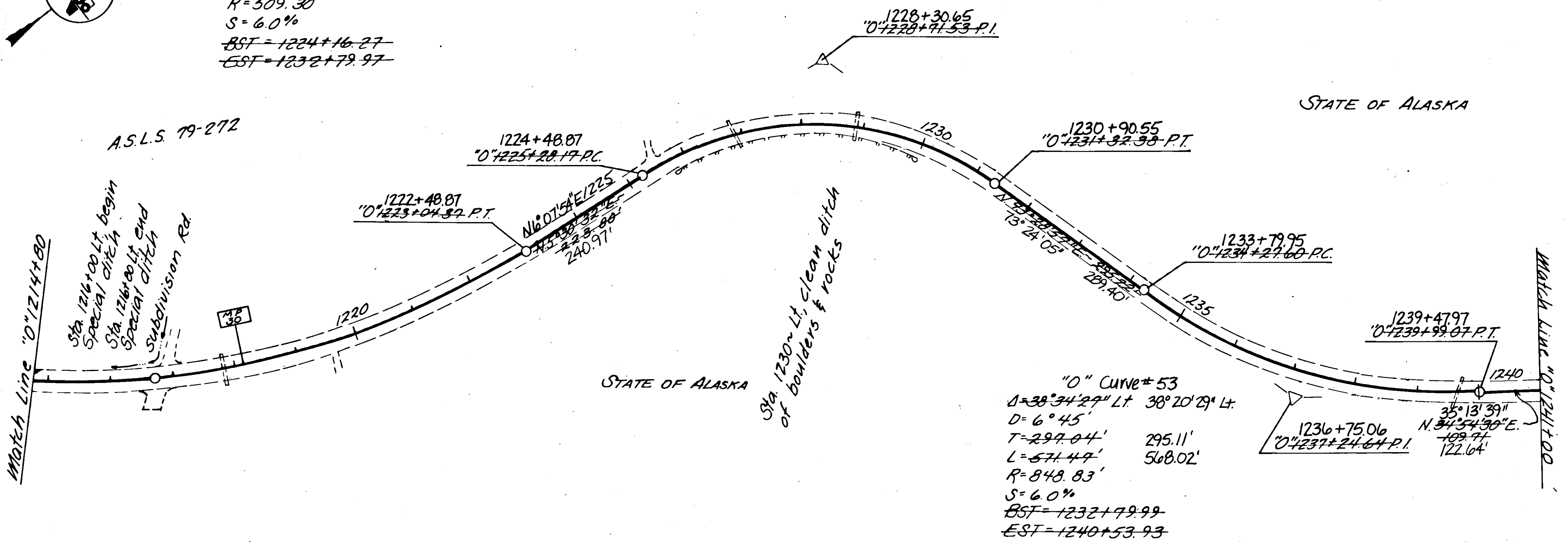
HARRIS RIVER TO CLARK BAY - PAVING
 PLAN AND PROFILE

APPROVED BY: <i>John W. Denny</i> DESIGN CHIEF	DATE: 2-28-89	DESIGNED BY: T. Moore	HORIZ. SCALE:
RECOMMENDED BY:	DATE:	DRAWN BY: <i>da</i>	VERT. SCALE:
PREPARED BY:	DATE:	CHECKED BY:	DATE:

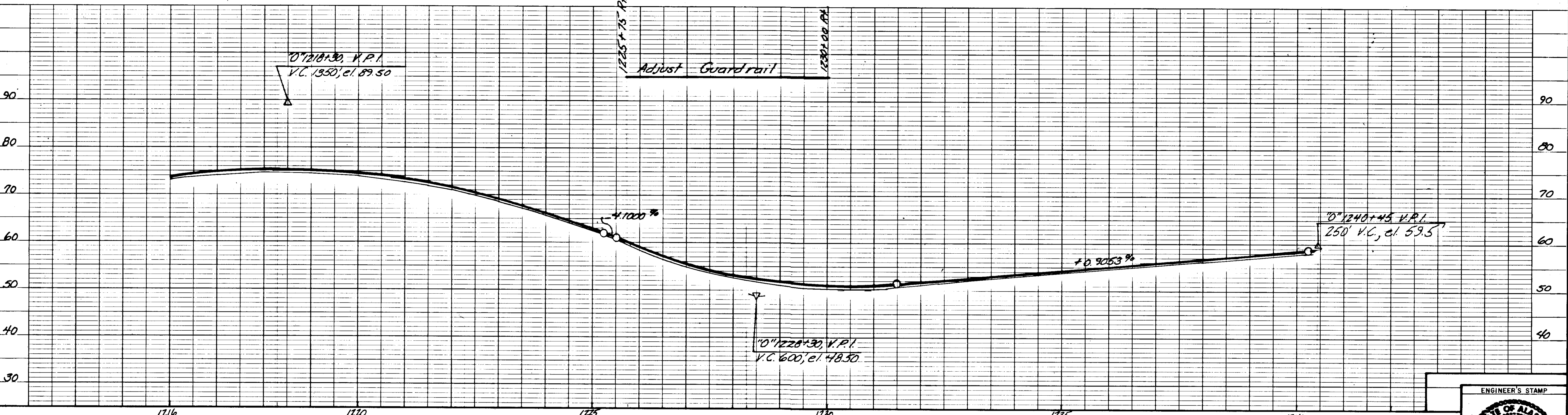




"O" CURVE # 52
 $\Delta = 67^{\circ}53'25''$ RA $67^{\circ}34'45''$ RT
 $D = 11^{\circ}15'$
 $T = 343.95'$ 340.01'
 $L = 604.21'$ 600.71'
 $R = 509.30'$
 $S = 6.0\%$
~~BSF = 1224+16.27~~
~~EST = 1232+79.97~~



"O" CURVE # 53
 $\Delta = 38^{\circ}34'29''$ Lt. $38^{\circ}20'29''$ Lt.
 $D = 6^{\circ}45'$
 $T = 297.04'$ 295.11'
 $L = 571.47'$ 568.02'
 $R = 848.83'$
 $S = 6.0\%$
~~BSF = 1232+79.99~~
~~EST = 1240+53.93~~



BY	DATE	DESCRIPTION OF CHANGE

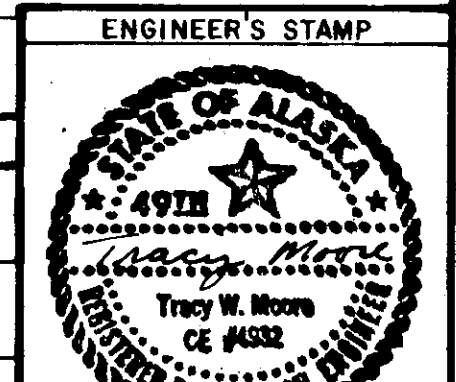
STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 & PUBLIC FACILITIES

HARRIS RIVER TO CLARK BAY - PAVING PLAN AND PROFILE

APPROVED BY: *John W. Henry* DESIGN CHIEF DATE: 2-28-89
 RECOMMENDED BY: _____
 PREPARED BY: _____

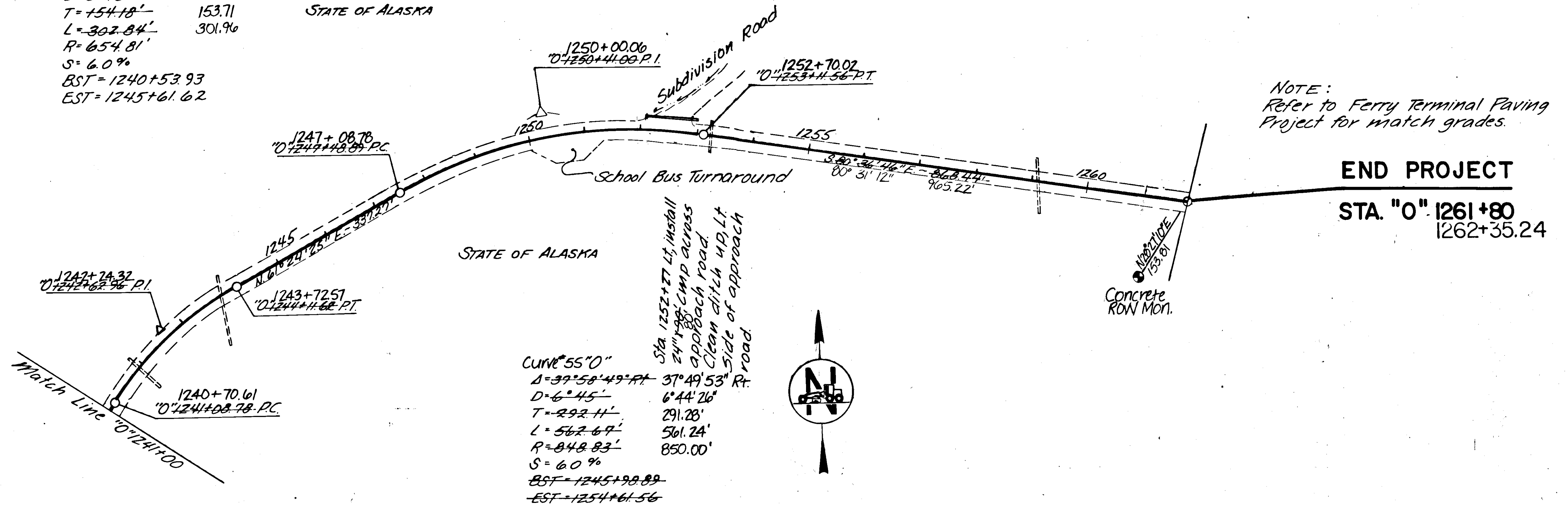
DESIGNED BY: T. Moore
 DRAWN BY: *CSA*
 CHECKED BY: _____

HORIZ. SCALE: _____
 VERT. SCALE: _____
 DATE: _____



"O" CURVE 54
 $\Delta = 26^{\circ}29'55''$ RT- $26^{\circ}25'16''$ RT
 $D = 8^{\circ}45'$
 $T = 154.18'$ 153.71
 $L = 302.84'$ 301.90
 $R = 654.81'$
 $S = 6.0\%$
 $BST = 1240+53.93$
 $EST = 1245+61.62$

STATE OF ALASKA

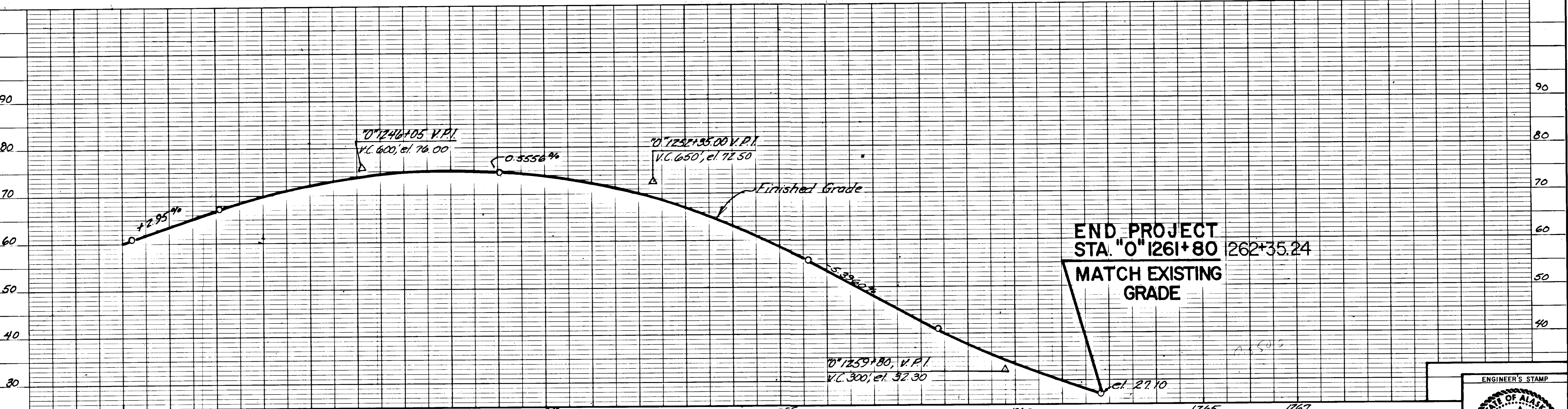
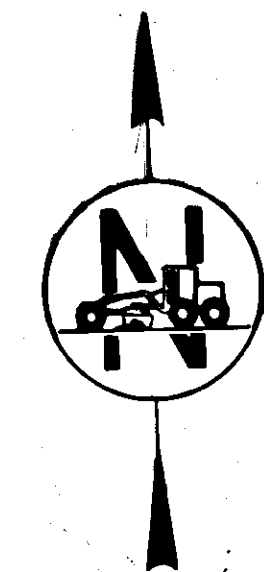


NOTE:
 Refer to Ferry Terminal Paving Project for match grades.

STATE OF ALASKA

CURVE 55 "O"
 $\Delta = 37^{\circ}58'49''$ RT- $37^{\circ}49'53''$ RT
 $D = 6^{\circ}45'$ $6^{\circ}44'26''$
 $T = 292.11'$ 291.28'
 $L = 567.67'$ 561.24'
 $R = 848.83'$ 850.00'
 $S = 6.0\%$
 $BST = 1245+98.89$
 $EST = 1254+61.56$

Sta. 1252+77 Lt. install
 24" x 98' CMP across
 approach road
 Clean ditch up Lt.
 side of approach
 road.



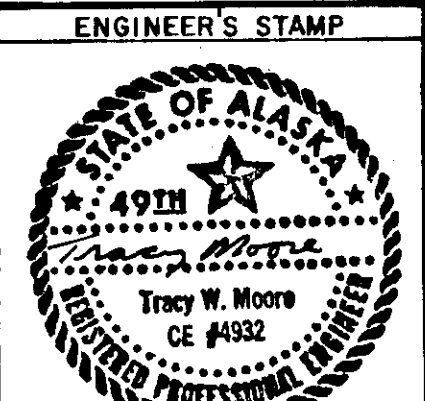
STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 & PUBLIC FACILITIES

HARRIS RIVER TO CLARK BAY - PAVING
 PLAN AND PROFILE

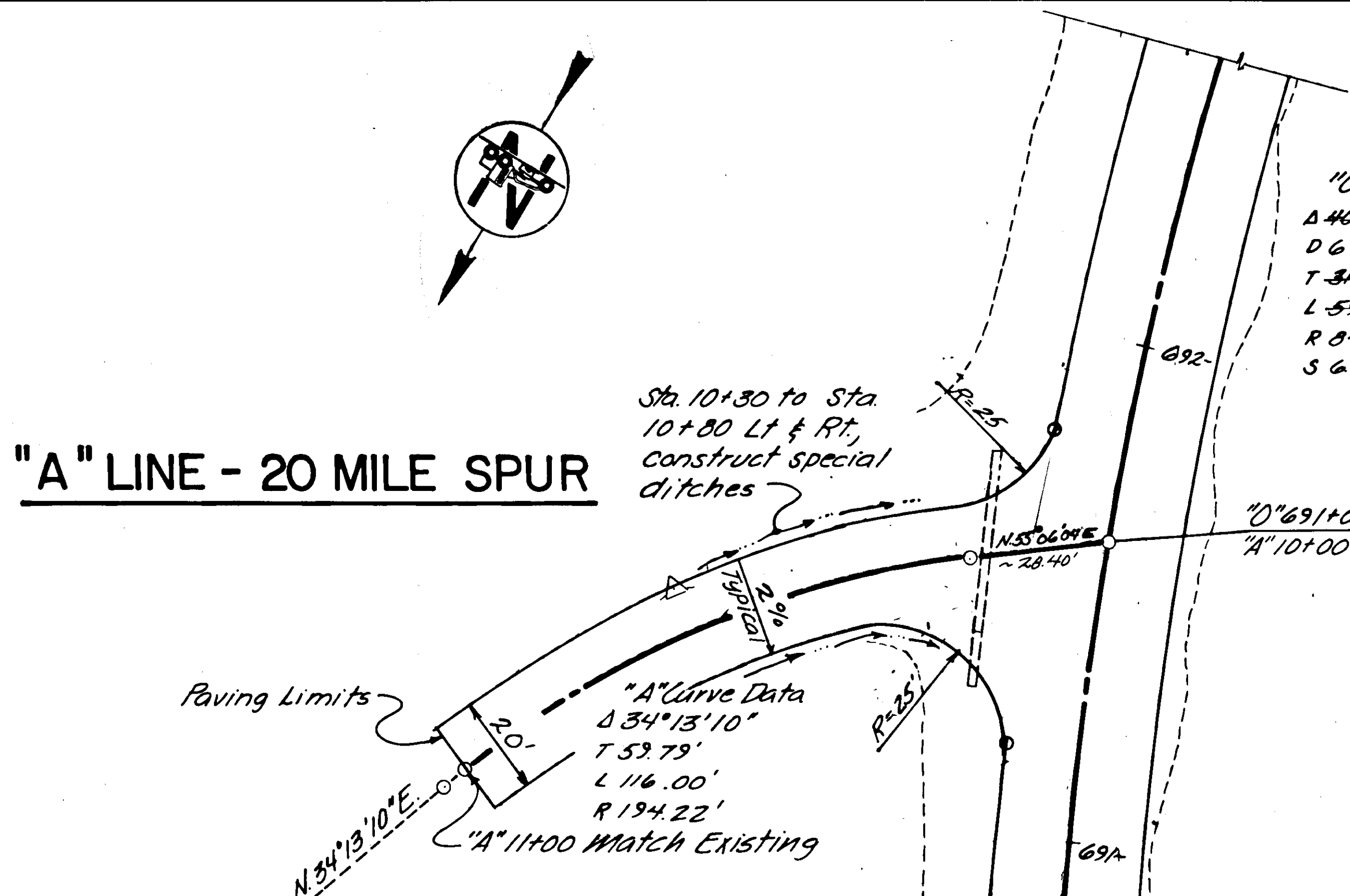
APPROVED BY: *John W. Henry* CHIEF 2-28-89
 RECOMMENDED BY: _____ DATE _____
 PREPARED BY: *Tracy W. Moore* DATE *1/18/89*

DESIGNED BY: T. Moore
 DRAWN BY: *CSA*
 CHECKED BY: _____

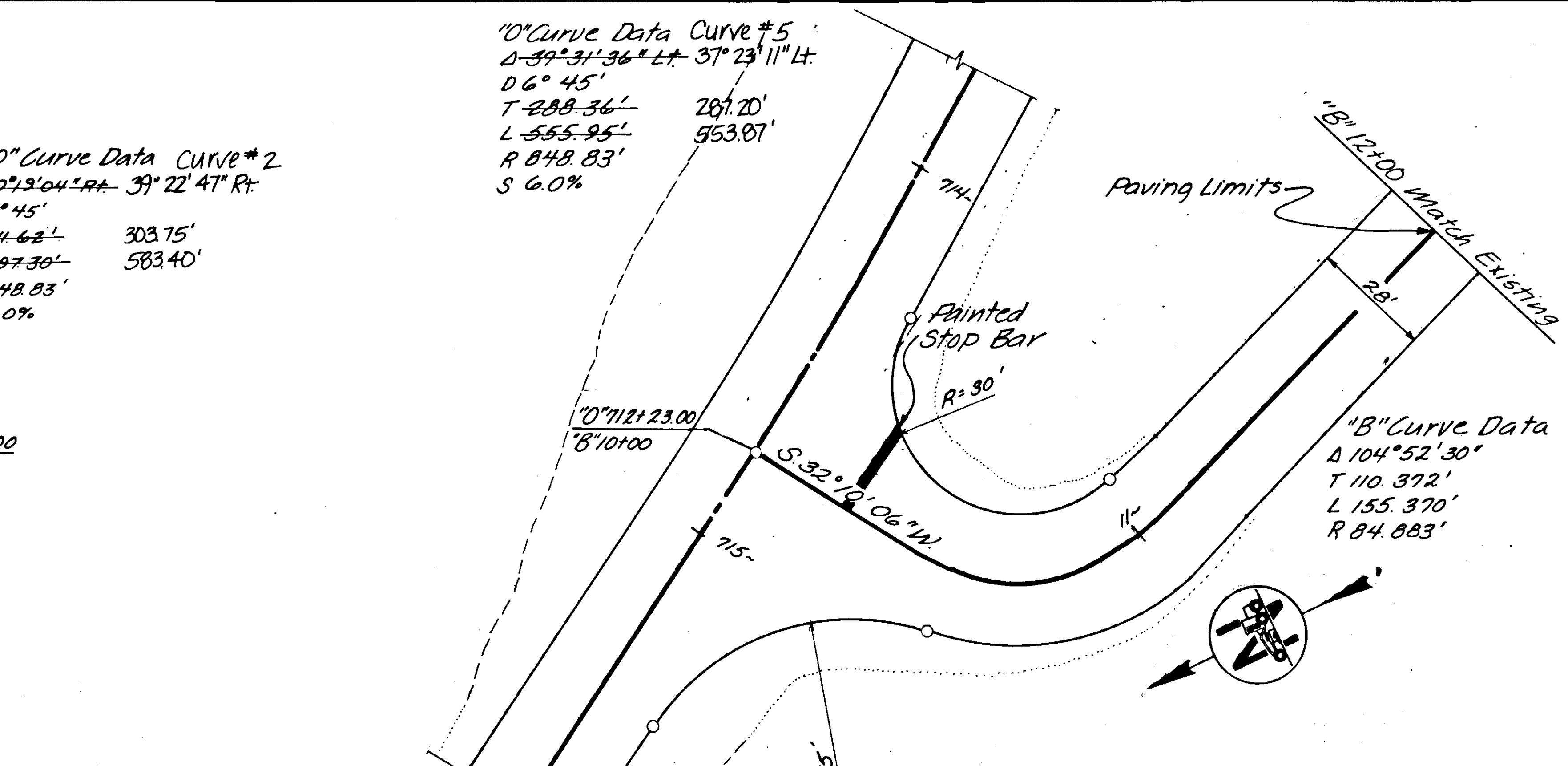
HORIZ. SCALE: _____
 VERT. SCALE: _____
 DATE: _____
 SHEET 29 OF 31



"A" LINE - 20 MILE SPUR

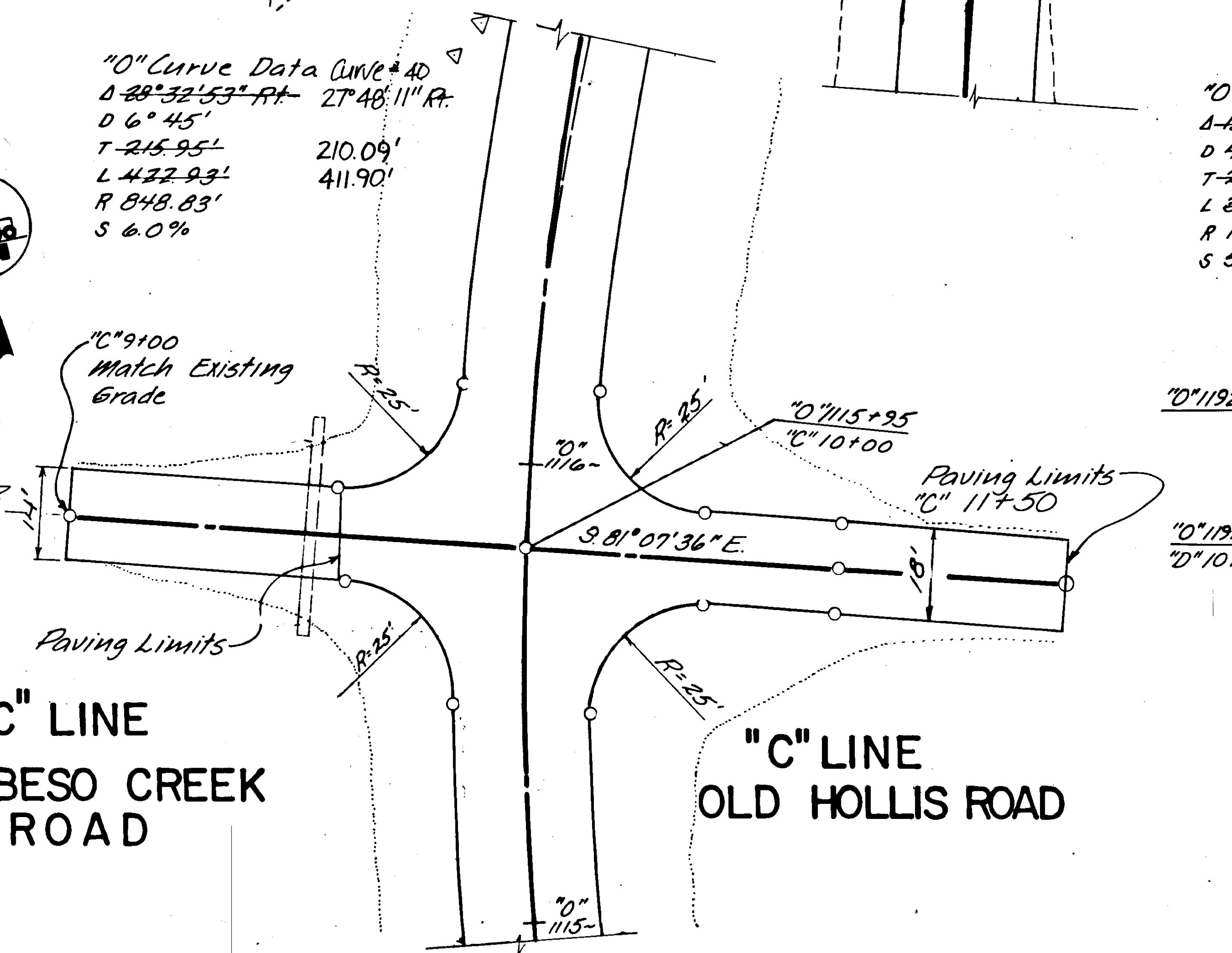


"B" LINE - HYDABURG ROAD

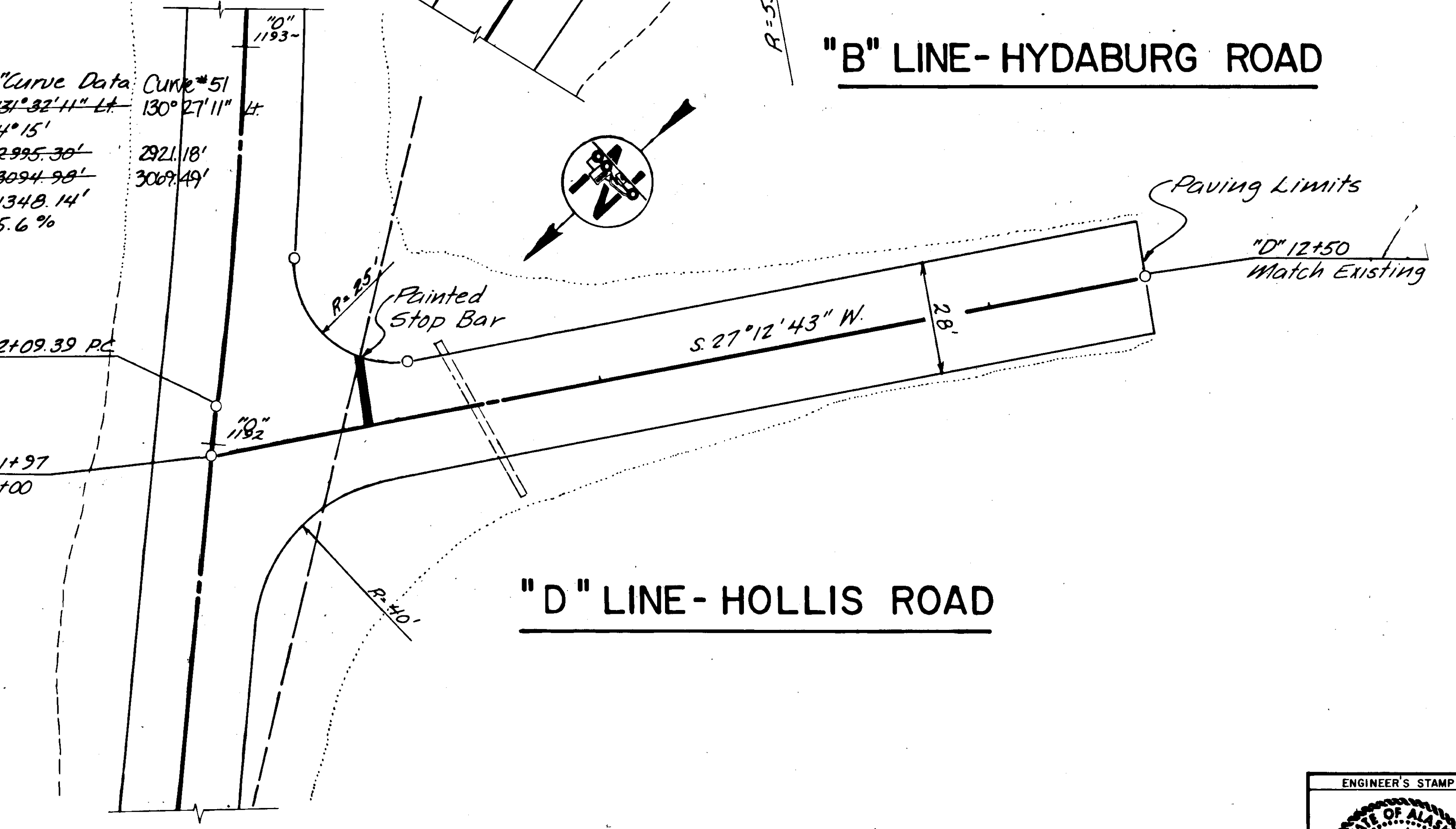


**"C" LINE
MAYBESO CREEK ROAD**

**"C" LINE
OLD HOLLIS ROAD**



"D" LINE - HOLLIS ROAD

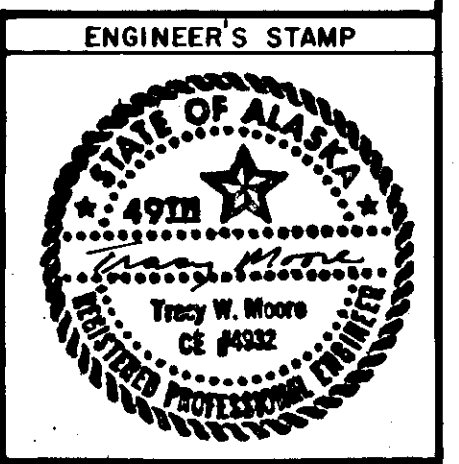


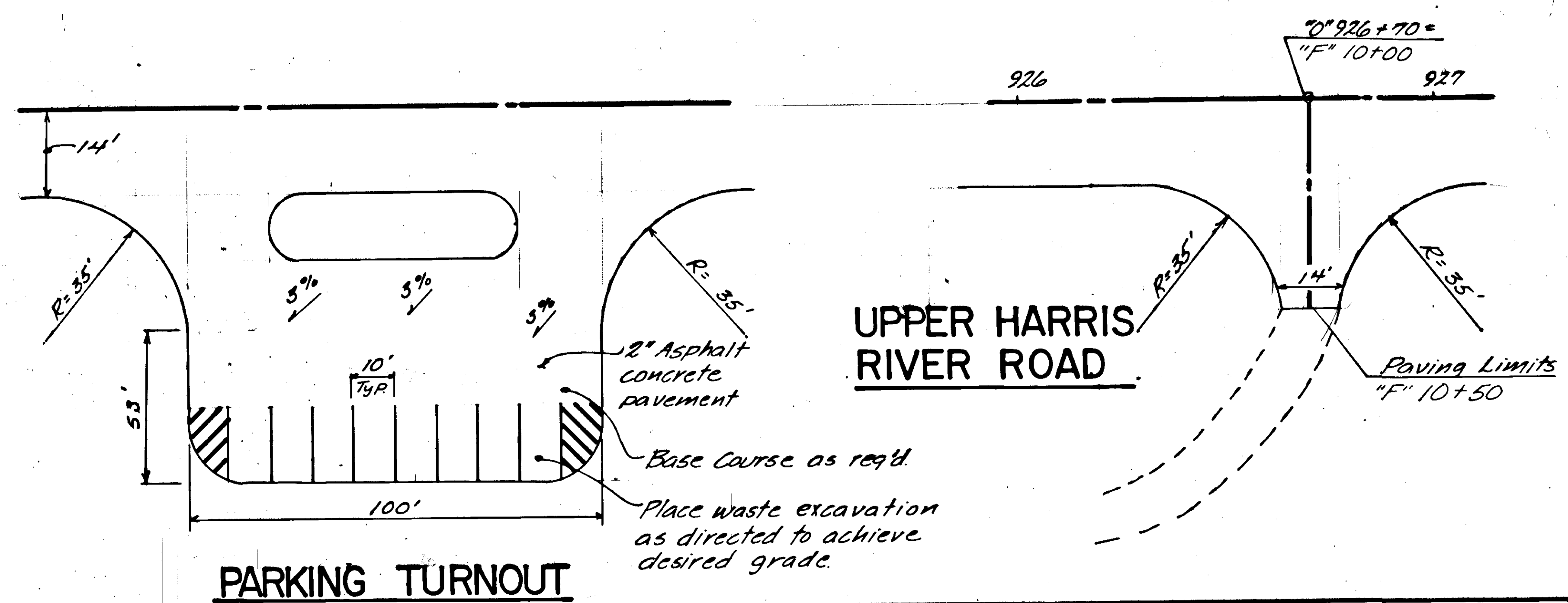
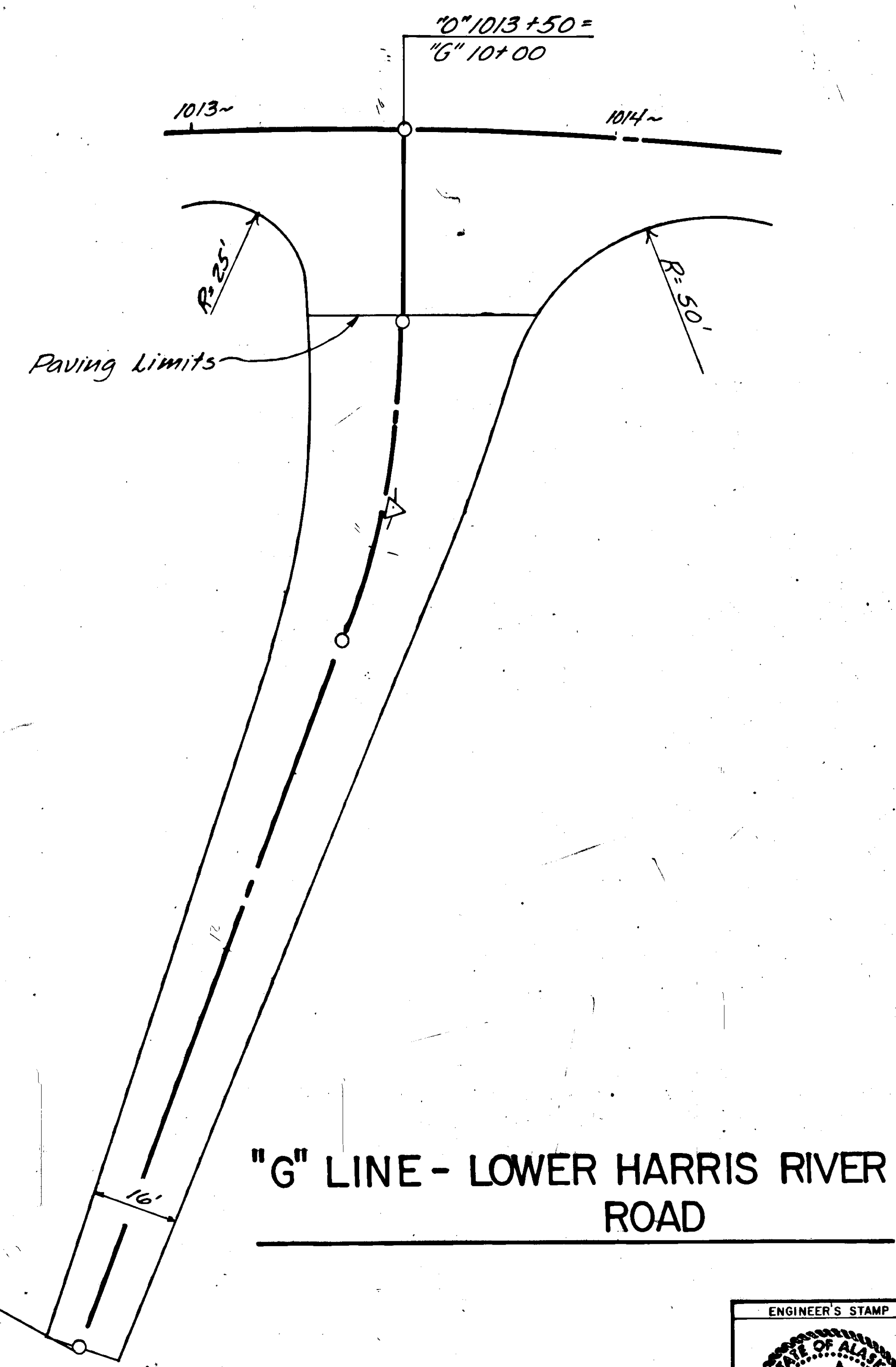
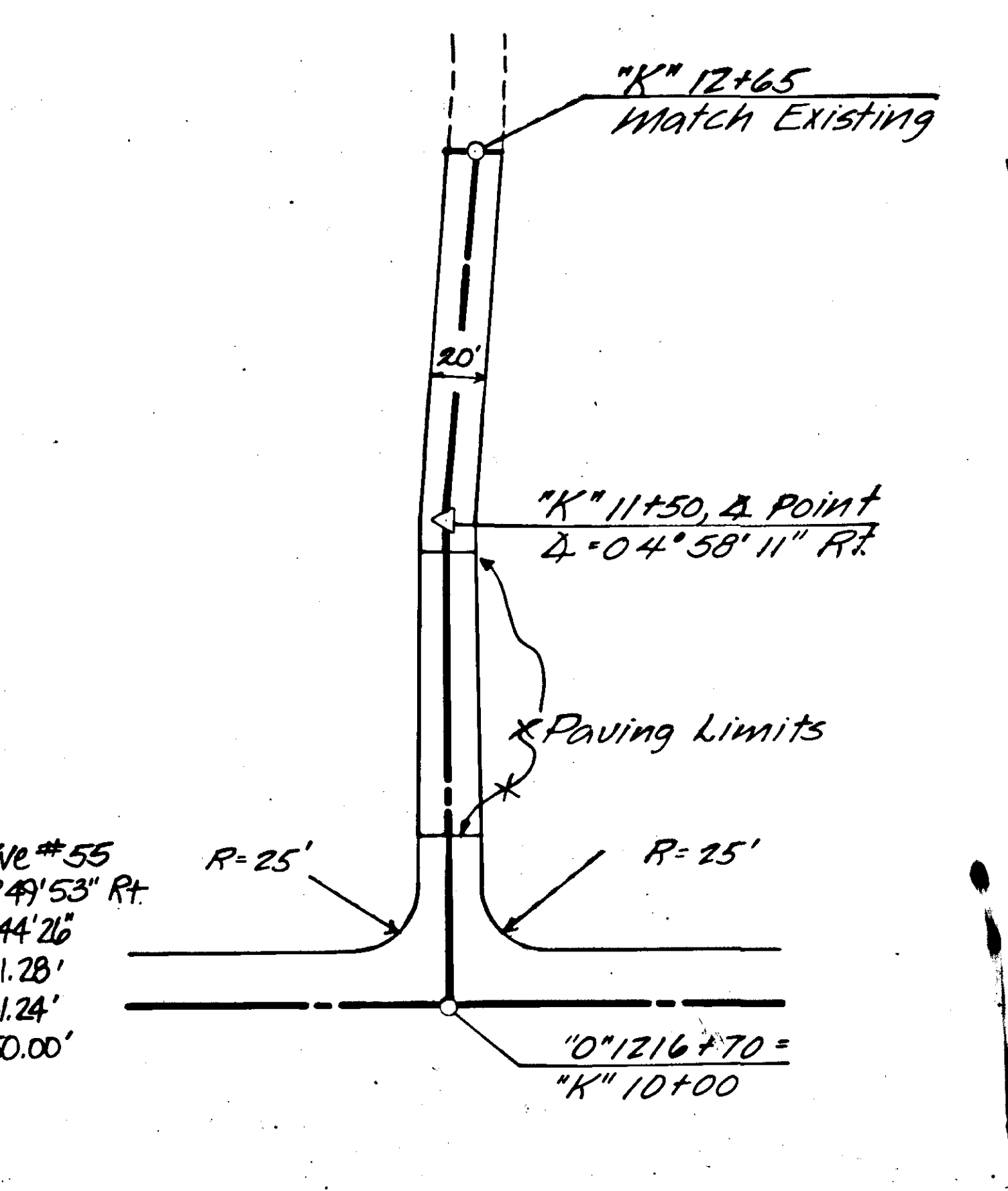
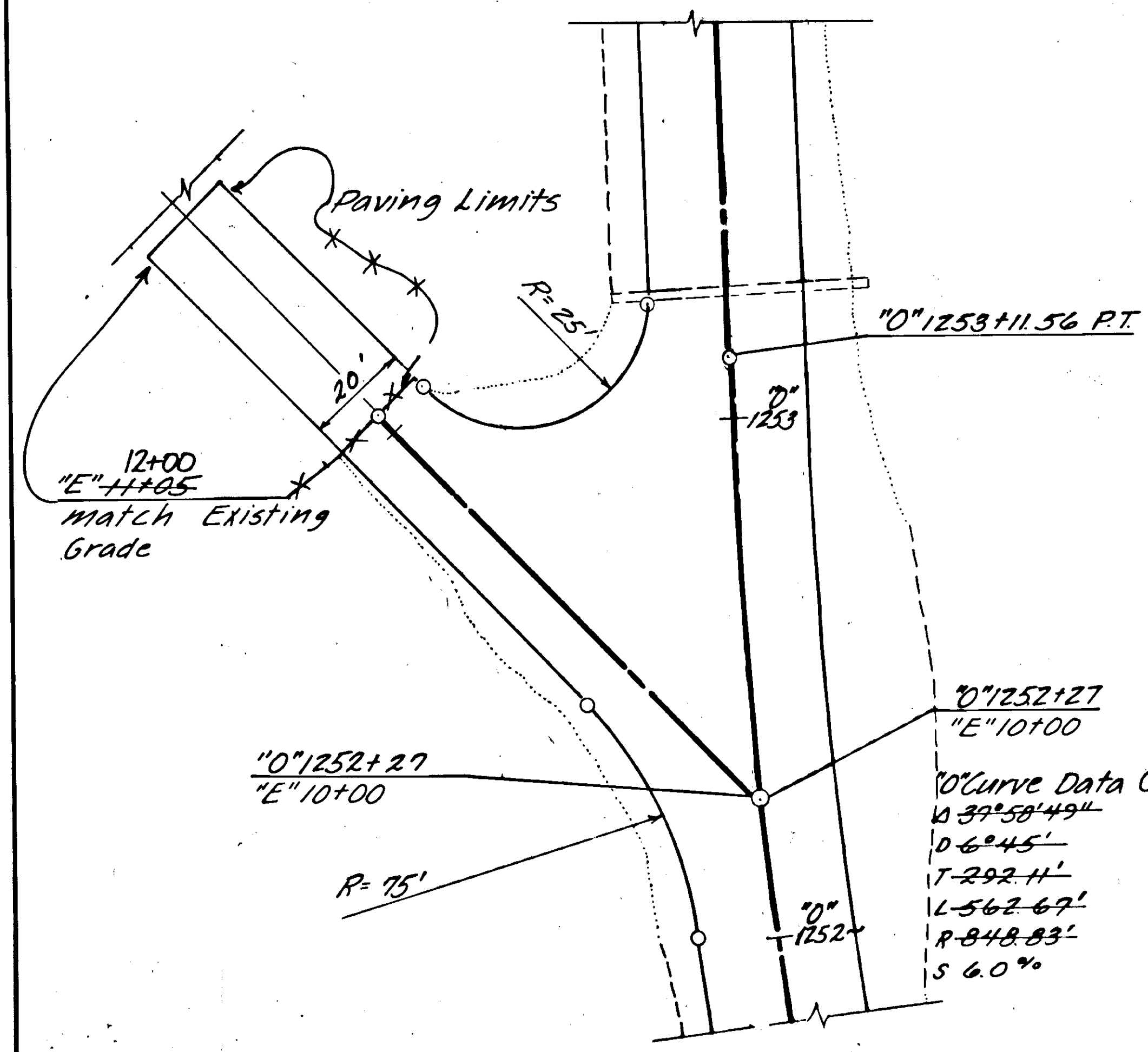
BY	DATE	DESCRIPTION OF CHANGE
RECORD OF REVISIONS		

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 & PUBLIC FACILITIES
 SOUTHEAST REGION DESIGN & CONSTRUCTION

**HARRIS RIVER TO CLARK BAY - PAVING
 INTERSECTION DETAILS**

APPROVED BY: <i>John W. Henry</i> DESIGN CHIEF 2-25-89 DATE	DESIGNED BY: T. MOORE	SCALE: NONE
RECOMMENDED BY:	DRAWN BY: <i>Eda</i>	DATE:
PREPARED BY: <i>T. Moore</i> PROJECT MANAGER	CHECKED BY: <i>J.M. Stab</i> LEAD DESIGNER	SHEET 30 OF 31





BY	DATE	DESCRIPTION OF CHANGE

RECORD OF REVISIONS

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 & PUBLIC FACILITIES
 SOUTHEAST REGION DESIGN & CONSTRUCTION

HARRIS RIVER TO CLARK BAY-PAVING INTERSECTION DETAILS

APPROVED BY: *John W. Moore* DESIGN CHIEF
 2-28-89 DATE

RECOMMENDED BY: _____ DATE

DESIGN ENGINEER, GROUP

PREPARED BY: *T. Moore* PROJECT MANAGER
J. Moore LEAD DESIGNER

DESIGNED BY: T. Moore
 DRAWN BY: *cd*
 CHECKED BY: _____

SCALE: None
 DATE: _____
 SHEET 31 OF 31

