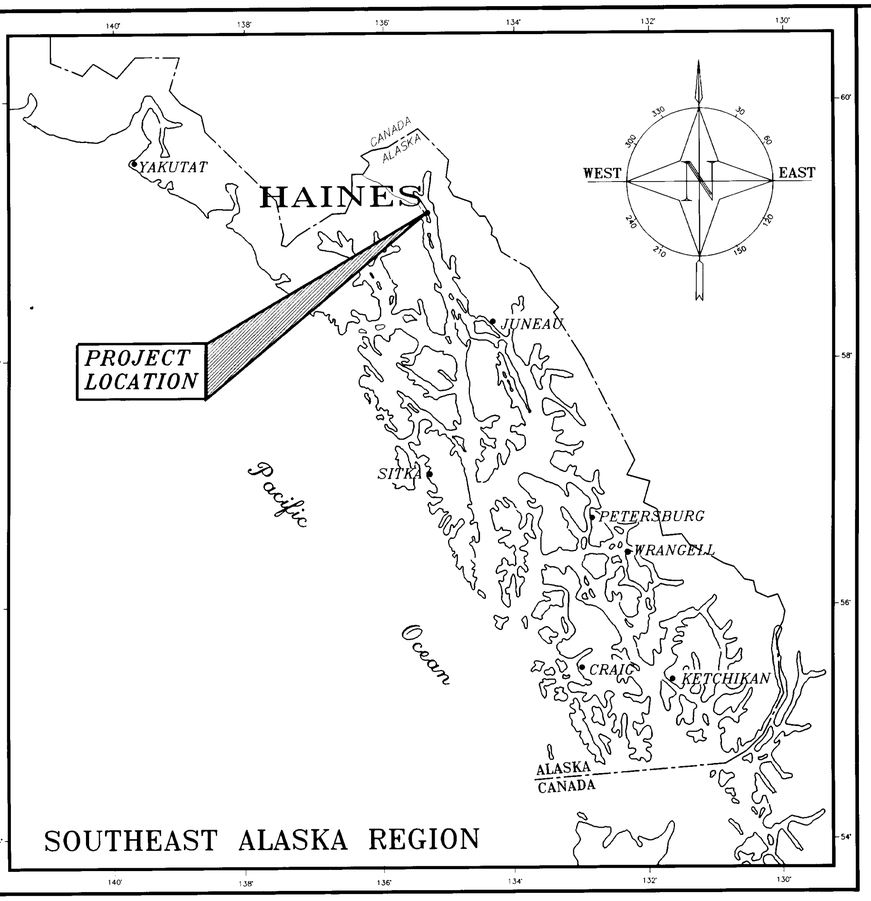


PROJECT SUMMARY

LITTLE BOULDER CREEK TO BIG BOULDER CREEK

PAVEMENT WIDTH	=	36 FEET	
LENGTH OF GRADING	=	11,806.08'=	2.236 MILES
LENGTH OF PAVING	=	11,806.08'=	2.236 MILES
LENGTH OF PROJECT	=	11,806.08'=	2.236 MILES

MP 30 EMERGENCY PAVING

PAVEMENT WIDTH	=	26 – 36 FEET
LENGTH OF GRADING	=	4750.00' = 0.900 MILES
LENGTH OF PAVEMENT	=	4750.00' = 0.900 MILES
LENGTH OF PROJECT	=	2900.00' = 0.549 MILES
LENGTH OF TEMPORARY CONNECTIONS	=	1850.00' = 0.350 MILES

DESIGN DESIGNATION

ADT 1993	=	250
ADT 2013	=	380
DHV (14%)	=	53
V	=	55 M.P.H.
%T	=	10
E.A.L.'S		52,500

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

HAINES HIGHWAY

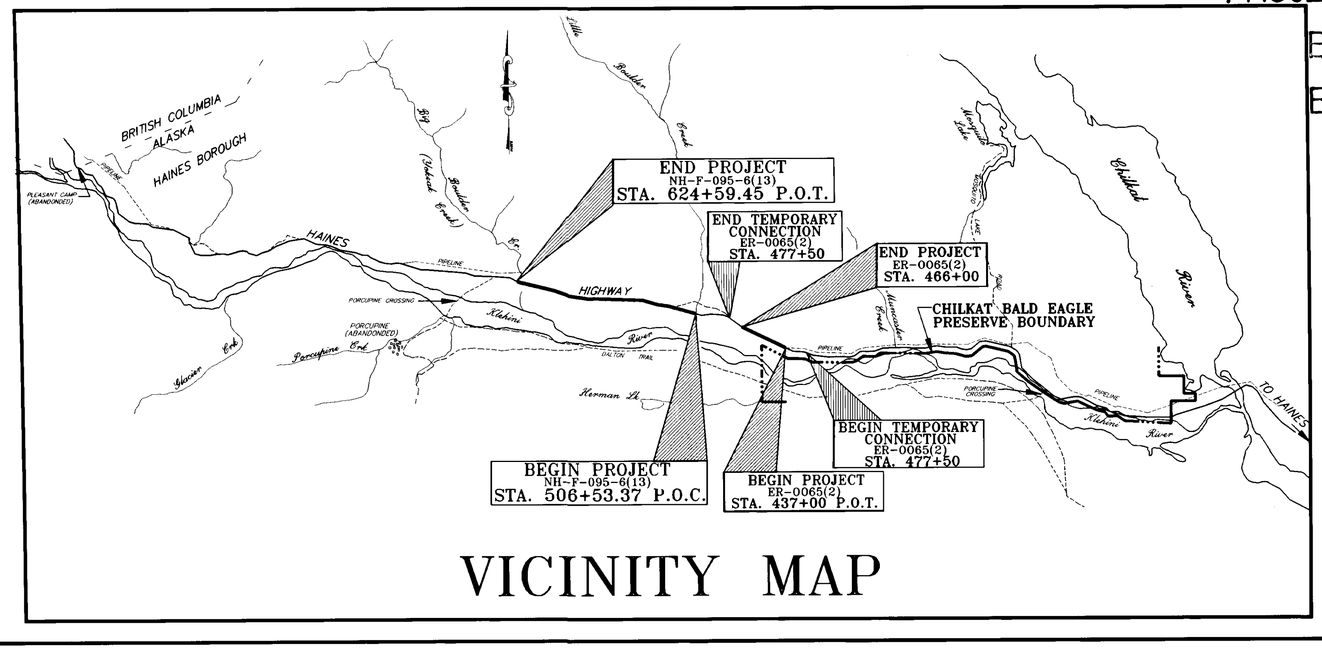
LITTLE BOULDER CREEK TO BIG BOULDER CREEK (31.6 MILE TO 33.8 MILE) GRADING, DRAINAGE AND PAVING

PROJECT NO. NH-F-095-6(13)
71070

AND

HAINES HIGHWAY MP 30 EMERGENCY PAVING GRADING AND PAVING

PROJECT NO. ER-0065(2)
71198



VICINITY MAP

INDEX OF SHEETS

The following Standard Drawings apply to this project :
A–1, C–01.03, C–02.01, C–04.00, D–04.10, D–05.10, D–06.01, D–24.00, D–27.01, G–04.03S, G–04.04W, G–14.04S, G–14.04W, G–18.00S, G–18.00W, M–16.01 S–00.00, S–05.00, S–20.00, S–30.01 AND T–21.01

"AS-BUILT" PLANS

CONTRACTOR: Northern Timber Corp.
PROJECT ENGINEER: Soc Kreuzenstein
BEGIN DATE: May 10, 1993
END DATE: June 27, 1994

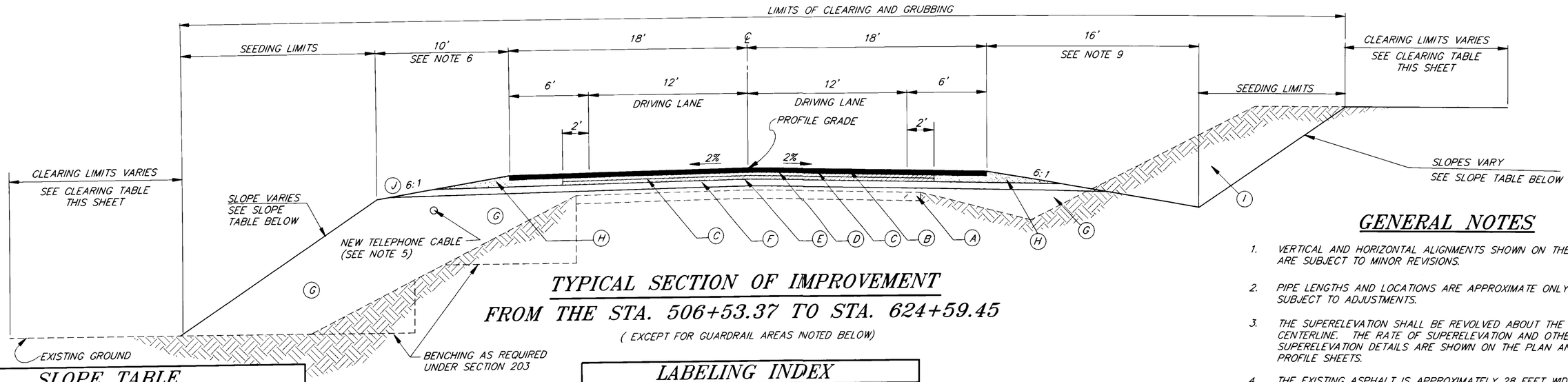
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND
PUBLIC FACILITIES
SOUTHEAST REGION DESIGN SECTION

APPROVED
_____ Date _____
S.E. Region Engineering Manager

APPROVED
_____ Date _____
Director, S.E. Region Design & Construction

PROJECT NUMBER:	ENGINEER'S SEAL
71070	STATE OF ALASKA 49th T.W. Moore T.W. MOORE CE-4932 REGISTERED PROFESSIONAL ENGINEER
DATE: SEPTEMBER, 1992	
SHEET 1 OF 18	

P:\HNSBCK\DR\BCTSHEET 1=



TYPICAL SECTION OF IMPROVEMENT

FROM THE STA. 506+53.37 TO STA. 624+59.45

(EXCEPT FOR GUARDRAIL AREAS NOTED BELOW)

SLOPE TABLE

LEFT			RIGHT	
BACKSLOPE	FILL	STATION TO STATION	FILL	BACKSLOPE
	2:1	506+53.37 TO 508+00		2:1
	2:1	508+00 TO 519+00	3:1	
2:1		519+00 TO 523+00		1.5:1
	1.5:1	523+00 TO 528+35	6:1	
	WALL I	528+35 TO 528+85	6:1	
	1.5:1	528+85 TO 529+45	6:1	
	WALL II	529+45 TO 529+85	6:1	
	2:1	529+85 TO 542+50		1:1
	2:1	543+00 TO 543+50	6:1	
DAYLIGHT @-5%		544+00 TO 545+50	6:1	
	2:1	546+00 TO 547+50	6:1	
	2:1	548+00 TO 549+50		2:1
2:1		550+00 TO 557+30		2:1
2:1		557+30 TO 559+50		ROCKERY WALL
2:1		559+50 TO 561+50		1.5:1
2:1		562+00 TO 562+50	6:1	
	6:1	563+00 TO 569+50	6:1	
	6:1	570+00 TO 580+00		DAYLIGHT @-5%
	2:1	581+00 TO 583+50		DAYLIGHT @-5%
	2:1	584+00 TO 589+50	6:1	
	2:1	590+00 TO 593+50		2:1
	2:1	594+00 TO 599+50	6:1	
	2:1	600+00 TO 603+50		2:1
	6:1	604+00 TO 608+50		2:1
	3:1	609+00 TO 621+50	3:1	
	3:1	622+00 TO 62+59.45		2:1

CLEARING TABLE

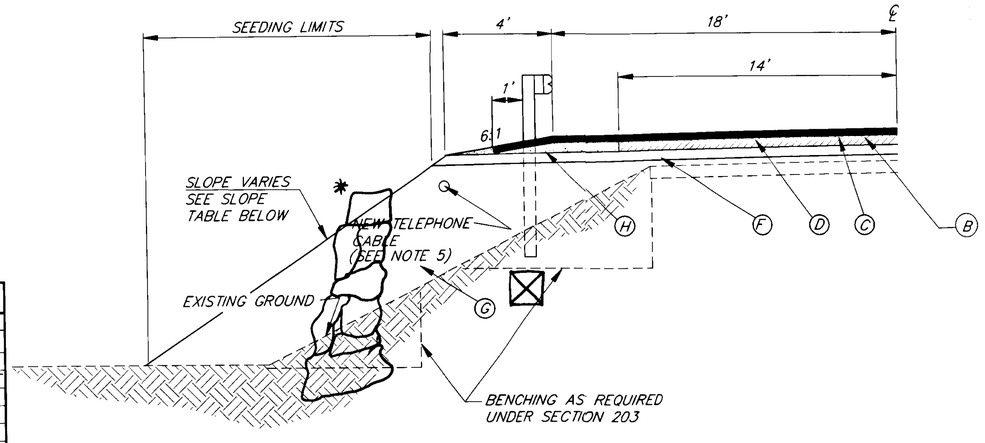
LEFT	STATION TO STATION	RIGHT
SLOPE LIMIT +25 FT,	B.O.P. TO 525+00	R/W EASEMENT OR PERMIT LINE
SLOPE LIMIT/FACE OF WALL (Varies 0-20 Ft.)	526+00 TO 549+00	SLOPE LIMIT +25 FT.
SLOPE LIMIT +25 FT.	550+00 TO 556+00	SLOPE LIMIT +25 FT.
	555+00 TO 557+00	TRANSITION LIMIT AS DIRECTED
SLOPE LIMIT +25 FT.	557+00 TO 561+00	SLOPE LIMIT
	561+00 TO 563+00	TRANSITION LIMIT AS DIRECTED
SLOPE LIMIT +25 FT.	563+00 TO 587+00	SLOPE LIMIT +25 FT.
SLOPE LIMIT +25 FT.	588+00 TO 595+00	SLOPE LIMIT
SLOPE LIMIT +25 FT.	596+00 TO E.O.P.	SLOPE LIMIT +25 FT.

LABELING INDEX

A	EXISTING PAVEMENT TO BE REMOVED. SEE NOTE 4.
B	2" ASPHALT CONCRETE, TYPE II, CLASS "B".
C	STE-1 ASPHALT FOR TACK COAT
D	4" ASPHALT TREATED BASE COURSE, 2- 2" LIFTS.
E	MC-250 LIQUID ASPHALT FOR PRIME COAT
F	12" SUBBASE GRADING "C"
G	USEABLE UNCLASSIFIED EXCAVATION OR EMBANKMENT
H	CRUSHED AGGREGATE BASE COURSE
I	UNCLASSIFIED EXCAVATION
J	FROM STA. 591+50 TO 595+00 LT. FLATTEN THE 6:1 SLOPE TO -5% CROSS SLOPE WITH CRUSHED AGGREGATE BASE COURSE.

GENERAL NOTES

1. VERTICAL AND HORIZONTAL ALIGNMENTS SHOWN ON THESE PLANS ARE SUBJECT TO MINOR REVISIONS.
2. PIPE LENGTHS AND LOCATIONS ARE APPROXIMATE ONLY AND SUBJECT TO ADJUSTMENTS.
3. THE SUPERELEVATION SHALL BE REVOLVED ABOUT THE CENTERLINE. THE RATE OF SUPERELEVATION AND OTHER SUPERELEVATION DETAILS ARE SHOWN ON THE PLAN AND PROFILE SHEETS.
4. THE EXISTING ASPHALT IS APPROXIMATELY 28 FEET WIDE AND IS AN AVERAGE OF 5 INCHES THICK. ALL REMOVED PAVEMENT SHALL BE STOCKPILED AT THE APPROVED STOCKPILE AREA NORTH OF BIG BOULDER CREEK.
5. A NEW 50 PAIR TELEPHONE CABLE SHALL BE INSTALLED ALONG THE ENTIRE PROJECT @ 23' LT. SEE SHEETS T1 THRU T6 AND THE SPECIAL PROVISIONS SECTION 680 FOR ADDITIONAL INFORMATION.
6. BETWEEN STA. 532+80,LT. AND STA. 537+40, LT. WIDEN TO 16 FEET. SEE SHEET 8 FOR DETAILS.
7. SEE SHEET 18 AND SUBSECTIONS 107-1.11 AND SECTION 641 FOR MITIGATION DETAILS, PLUS IN-WATER WORK DATES AND WATER QUALITY REQUIREMENTS.
8. SAWCUT EXISTING PAVEMENT AT THE B.O.P. AND E.O.P. TO PROVIDE A SMOOTH MATCH JOINT AS DIRECTED.
9. BETWEEN STA. 539+50 RT., AND STA. 543+00 RT., WIDEN DITCH TO 19'.

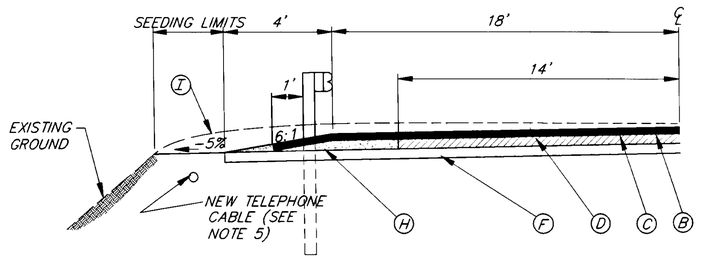


GUARDRAIL TYPICAL SECTION IN FILL AREAS

STA. 524+12.5 LT., TO STA. 531+25, LT.

*STA. 541+20, LT. TO STA. 543+00 LT.

Rockery Constructed to prevent embankment from encroaching into a Fish stream.



GUARDRAIL TYPICAL SECTION IN CUT AREAS

STA. 543+50 LT., TO STA. 547+75 LT.

As-Built
B.A. 2-8-96

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

ENGINEER'S SEAL

STATE OF ALASKA 49th T.W. MOORE CE-4932 REGISTERED PROFESSIONAL ENGINEER

BY:	DATE:	DESCRIPTION OF CHANGE:

RECORD OF REVISIONS

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

HAINES — ALASKA

HAINES HIGHWAY-LITTLE BOULDER CREEK TO BIG BOULDER CREEK
(31.6 MILE TO 33.8 MILE)
PROJECT NO. NH-F-095-6(13) 71070

TYPICAL SECTION OF IMPROVEMENT

DESIGNED BY: E. CAVAGNARO	PROJECT NO. 71070
DRAWN BY: C. ANDERSON	DATE: SEPT. 1992
CHECKED BY: T.W. MOORE	SHEET 2 OF 18

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ESTIMATE OF QUANTITIES

ITEM NO	PAY ITEM		UNIT	QUANTITY
120 (1)	DBE ADJUSTMENT		CS	ALL REQ'D.
201 (1A)	CLEARING		ACRE	~~12~~ 11.5
201 (3A)	CLEARING AND GRUBBING		ACRE	13.8
202 (2)	REMOVAL OF PAVEMENT		SY	~~32,000~~ 35,4[illegible]
202 (4)	REMOVAL OF CULVERT PIPE		LF	~~589~~ 529
202 (10)	SINGLE MAIL BOX INSTALLATION		EA	2
203 (3)	UNCLASSIFIED EXCAVATION	40,163	CY	~~50,000~~
203 (11)	EMBANKMENT	79,469	CY	~~85,000~~
301 (1)	CRUSHED AGGREGATE BASE COURSE	1,867.4	CY ~~TON~~	~~3,600~~
304 (2)	SUBBASE, GRADING "C"	21,391	CY	~~24,000~~
306 (1)	ASPHALT TREATED BASE COURSE	8,848.5	TON	~~9,700~~
306 (2)	ASPHALT MATERIAL, TYPE PBA-2	380.72	TON	~~390~~
401 (1)	ASPHALT CONCRETE, TYPE II, CLASS B	0	TON	~~6,500~~
401 (2)	PBA-2 ASPHALT CEMENT	358.2	TON	~~400~~
401 (6)	ASPHALT PRICE ADJUSTMENT		CS	ALL REQ'D.
402 (2)	STE-1 ASPHALT FOR TACK COAT	26.04	TON	~~30~~
403 (3)	MC-250 LIQUID ASPHALT FOR PRIME COAT	17.17	TON	~~50~~
505 (9)	STRUCTURAL STEEL SHEET PILES, FURNISHED AND DRIVEN	3,018.8	SF	~~3,000~~
509(1)	ROCKERY WALL	1,588.3	SF	~~1,100~~
603(17-24)	24 INCH PIPE	536.4	LF	~~600~~
603 (17-36)	36 INCH PIPE	:06	LF	~~120~~
603 (17-48)	48 INCH PIPE		LF	140
603 (19-21)	21 X 15 INCH PIPE ARCH	370	LF	~~320~~
603 (19-42)	42 X29 INCH PIPE ARCH		LF	100
603(20-21)	END SECTION FOR 21X15 INCH PIPE ARCH	18	EA	~~18~~
603(20-24)	END SECTION FOR 24 INCH PIPE ARCH	10	EA	~~11~~
603 (20-36)	END SECTION FOR 36 INCH PIPE		EA	1
603 (20-42)	END SECTION FOR 42X29 INCH PIPE ARCH		EA	2
603 (20-48)	END SECTION FOR 48 INCH PIPE		EA	4
603(22)	4 INCH PVC CONDUIT	280	LF	~~300~~
604 (5)	INLET, TYPE B		EA	1
606 (1)	W-BEAM GUARDRAIL		LF	1,287.5
606 (5)	REMOVAL AND DISPOSAL OF GUARDRAIL		LF	325
606 (6)	END ANCHORAGES		EA	6
611 (1)	RIPRAP, CLASS I	289.5	CY	~~500~~
614 (1)	SURVEY MONUMENTS		EA	12
614 (2)	MONUMENT CASES		EA	12
615 (1)	STANDARD SIGNS		SF	32
618 (1)	SEEDING	15.43	ACRE	~~10~~
630 (2)	GEOTEXTILE, REINFORCEMENT	0	S.Y.	~~5,000~~
639 (1)	RESIDENCE DRIVEWAYS	26	EA	~~25~~
640 (1)	MOBILIZATION AND DEMOBILIZATION		LS	ALL REQ'D.
641 (1)	EROSION AND POLLUTION CONTROL		CS	ALL REQ'D.
642 (1)	CONSTRUCTION SURVEYING		LS	ALL REQ'D.
642 (2)	THREE PERSON SURVEY PARTY	0	HOUR	~~50~~
642 (5)	LAND BOUNDARY MONUMENT		EA	1
643 (2)	TRAFFIC MAINTENANCE		LS	ALL REQ'D.
643 (3)	PERMANENT CONSTRUCTION SIGNING	175	CALENDAR/DAY	~~800~~
643 (4)	CONSTRUCTION SIGN	1,477	EACH PER DAY	~~3,100~~
643 (5)	TYPE II BARRICADE		EACH/DAY	~~3,000~~ (C)
643 (6)	TYPE III BARRICADE	0	EACH/DAY	~~100~~
643 (7)	TRAFFIC CONE	9,586	EACH/DAY	~~6,000~~
643 (13)	TEMPORARY PAVEMENT MARKING	353	STA.	~~360~~
643 (15)	FLAGGING	3,206.5	HOUR	~~4,000~~
643 (18)	WATERING	1,091.2	M-GAL	~~500~~

SEE SHEET FR2 FOR FLOOD REPAIR PAVING ESTIMATE OF QUANTITIES.

ESTIMATE OF QUANTITIES

ITEM NO	PAY ITEM	UNIT	QUANTITY
644 (1)	FIELD OFFICE	LS	ALL REQ'D.
644 (2)	FIELD LABORATORY	LS	ALL REQ'D.
644 (6)	ENGINEERING TRANSPORTATION	LS	ALL REQ'D.
645 (1)	TRAINING PROGRAM, 2 TRAINEES/APPRENTICES	HOUR	~~1,000~~ 893
650 (1)	STRUCTURE RELOCATION	LS	ALL REQ'D.
670 (1)	PAINTED TRAFFIC MARKINGS	LS	ALL REQ'D.
670 (8)	RECESSED PAVEMENT MARKERS	EACH	~~150~~ 155
680 (1)	TELEPHONE CABLE RELOCATION	LS	ALL REQ'D.

PVC CONDUIT SUMMARY

STATION	LINEAR FT.	REMARKS
522+10	120	CONDUIT FOR WATERLINE, SEE SHT. 4 FOR DETAILS (A)
545+80	80	CONDUIT FOR WATERLINE, SEE SHT. 4 FOR DETAILS (A)
591+90	100	CONDUIT FOR WATERLINE, SEE SHT. 4 FOR DETAILS (A)
TOTAL	300	
509+10	60	CONDUIT FOR TELEPHONE CROSSING, SEE SHT T5 FOR DETAILS (B)
520+50	60	CONDUIT FOR TELEPHONE CROSSING, SEE SHT T5 FOR DETAILS (B)
557+25	80	CONDUIT FOR TELEPHONE CROSSING, SEE SHT T5 FOR DETAILS (B)
591+00	80	CONDUIT FOR TELEPHONE CROSSING, SEE SHT T5 FOR DETAILS (B)
603+75	80	CONDUIT FOR TELEPHONE CROSSING, SEE SHT T5 FOR DETAILS (B)
613+25	80	CONDUIT FOR TELEPHONE CROSSING, SEE SHT T5 FOR DETAILS (B)
APPROX. TOTAL	440	

(A) RECONNECTION OF THE PRIVATE WATERLINES ARE NOT INCLUDED IN THIS WORK.

(B) INSTALLATION OF THESE CONDUITS SHALL BE PAID FOR UNDER ITEM 680(1).

CENTERLINE MONUMENT SUMMARY

STATION	MONUMENT & CASES	REMARKS
506+53.37 PT.	X	
510+96.62 PC.	X	
515+53.96 PT.	X	
522+54.23 PC	X	
529+29.13 PT.	X	
534+07.65 PC	X	
538+78.43 PT	X	
543+26.70 PC	X	
555+50.05 PT.	X	
589+32.03 PC.	X	
600+00.10 PT.	X	
624+00.00 P.O.T.	X	
TOTAL	12	

1. MONUMENTS AND CASES ARE DETAILED ON STD. DWG M-16.01.
2. TOPS OF THE MONUMENT CASES SHALL BE SET IN CONCRETE AS DETAILED ON SHT. 5.

BASIS OF ESTIMATE

ITEM	ITEM NO.	ESTIMATING FACTOR
ASPHALT TREATED BASE COURSE	306(1)	120 LBS./ SQ. YD / IN. OF DEPTH
ASPHALT MATERIAL, TYPE PBA-2	306(2)	4% OF ITEM NO. 306(1)
ASPHALT CONCRETE, TYPE II, CLASS B	401(1)	120 LBS./SQ. YD./ IN. OF DEPTH
PBA 2, ASPHALT CEMENT	401(2)	6% OF ITEM NO. 401(1)
STE-1 ASPHALT FOR TACK COAT	402(2)	0.10 GAL PER SQ. YD; 240 GAL./TON @ 60° F.
MC-250 LIQUID ASPHALT FOR PRIME COAT	403(3)	0.25 GAL. PER SQ. YD.; 253 GAL./TON @ 60° F.

GUARDRAIL REMOVAL SUMMARY

STATION TO STATION	OFFSET LT	OFFSET RT	QUANTITY
534+25 TO 536+00	X		175 L.F.
554+00 TO 555+50	X		150 L.F.

GUARDRAIL INSTALLATION SUMMARY

STATION TO STATION	OFFSET LT	OFFSET RT	QUANTITY	REMARKS (7)
524+12.5 531+25	X		712.5'	SEE GUARDRAIL TYPICAL, SHT. 2
541+50 543+00	X		150'	SEE GUARDRAIL TYPICAL, SHT. 2
543+50 547+75	X		425'	SEE GUARDRAIL TYPICAL, SHT. 2
TOTAL			1,287.5'	

(7) REINSTALL SALVAGED END MARKER AS DIRECTED, NO MARKERS REQUIRED AT 543+00 & 543+50.

REMOVAL OF STRUCTURES AND OBSTRUCTIONS

STATION	OFFSET LT	OFFSET RT	DESCRIPTION	REMARKS
558+00		X	MOVE EXISTING CABIN	SEE SECTION 650 OF THE SPECIAL PROVISIONS.
534+00	X		EXIST. GUARDRAIL END MARKER	REMOVE AND SALVAGE
536+00	X		EXIST. GUARDRAIL END MARKER	REMOVE AND SALVAGE
554+00	X		EXIST. GUARDRAIL END MARKER	REMOVE AND SALVAGE
556+00	X		EXIST. GUARDRAIL END MARKER	REMOVE AND SALVAGE

MAILBOX SUMMARY

STATION	OFFSET LT.	OFFSET RT.
508+33		X
520+61	X	

CULVERT REMOVAL SUMMARY

STATION	LENGTH
522+10 ℄	72'
531+20 ℄	50'
537+60,15'RT.	45'
545+70 ℄	47'
557+10 ℄	65'
559+05 ℄	60'
563+50 ℄	60'
577+60 ℄	58'
591+90 ℄	84'
597+12 ℄	48'

LAND BOUNDARY MONUMENT SUMMARY

STATION	OFFSET	REMARKS
601+81.63	24.04' LEFT	

AS-BUILT
BA. 2-5-96

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

BY:	DATE:	DESCRIPTION OF CHANGE:

RECORD OF REVISIONS

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

HAINES HIGHWAY - LITTLE BOULDER CREEK TO BIG BOULDER CREEK
(31.6 MILE TO 33.8 MILE)
PROJECT NO. NH-F-095-6(13) 71070

ESTIMATE OF QUANTITIES & SUMMARY TABLES

HAINES ALASKA

DESIGNED BY: C. HAKARI	SCALE 71070
DRAWN BY:	DATE: SEPT. 1992
CHECKED BY: T.W. MOORE	SHEET 3 OF 18

STATE OF ALASKA 49th
TRACY W. MOORE
CE-4932
REGISTERED PROFESSIONAL ENGINEER

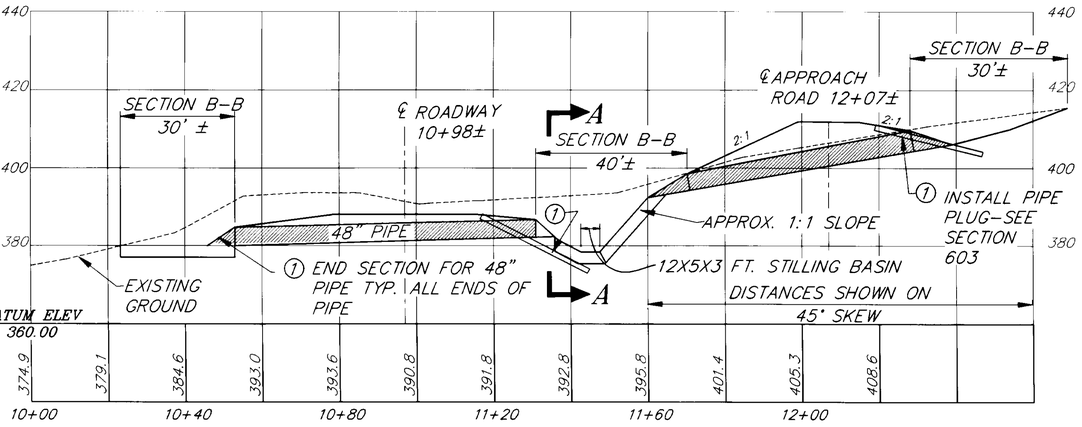
P:\HNSBCK\DR\BCEST

CULVERT SUMMARY

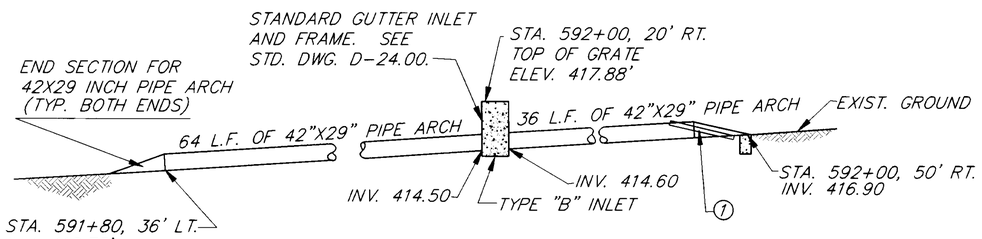
STATION	OFFSET ℄	OFFSET DRIVEWAY LT	OFFSET DRIVEWAY RT	PIPE SIZE & LENGTH 21"X15"	24"	36"	42"X29"	48"	PIPE GAGE	INSTALL END SECTION LT	INSTALL END SECTION RT	APPROX. INLET INVERT	APPROX. OUTLET INVERT	INSTALL DITCH BASIN, SEE DETAIL BELOW	WIDTH OF DITCH BASIN	PIPE PLUG ①	REMARKS
517+37			34'	40'					0.064	X	X	℄ DITCH	℄ DITCH				℄ =FLOWLINE OF DITCH OR TOE OF SLOPE
520+16			34'	40'					0.064	X	X	℄ DITCH	℄ DITCH				
520+76		34'		40'					0.064	X	X	℄ DITCH	℄ DITCH				
522+10	X					120'			0.064	X		372.0	363.0	X	10'	1@12'X20'	SKEW 35° RT. AHD INSTALL 27X2 FT. CLASS I RIPRAP PAD AT OUTLET AS DIRECTED
527+50	X				100'				0.064	X		353.0	347.0	X	10'		
531+20	X				80'				0.064	X		351.5	350.0	X	2'		
537+60	X				100'				0.064	X		351.0	350.0	X	7'		SKEW 30° LT. BK.
545+80	X				80'				0.064	X		368.0	360.0	X	7'		
557+07	X							80'	0.064	X	X	382.0	380.0	X	5'	1@12'X20'	SKEW 5° LT. BK; INSTALL 27X2 FT. CLASS I RIPRAP AT OUTLET SEE DET. BELOW
"C"12+00	X							60'	0.064	X	X	401.0	408.0	X	10'	1@12'X20'	SKEW 45° LT. BK., SEE DETAIL A THIS SHEET
562+00	X				80'				0.064	X	X	390.0	389.0				
577+60	X				80'				0.064	X	X	397.0	396.5				
586+10			40'	40'					0.064	X	X	℄ DITCH	℄ DITCH				
591+90	X						100'		0.064	X	X	416.90	412.90			1@12'X20'	SEE DETAIL B THIS SHEET–DESIGNATED FISH STREAM
597+70	X				80'				0.064	X	X	416.90	414.0				
601+22			34'	40'					0.064	X	X	℄ DITCH	℄ DITCH				
603+49			34'	40'					0.064	X	X	℄ DITCH	℄ DITCH				
605+14			34'	40'					0.064	X	X	℄ DITCH	℄ DITCH				
"H"10+45				40'					0.064	X	X	℄ DITCH	℄ DITCH				
TOTALS				320'	600'	120'	100'	140'									

TOTALS– END SECTIONS: 21'X15'= 16; 24"= 11; 36"= 1; 42"X29"= 2; 48"=4

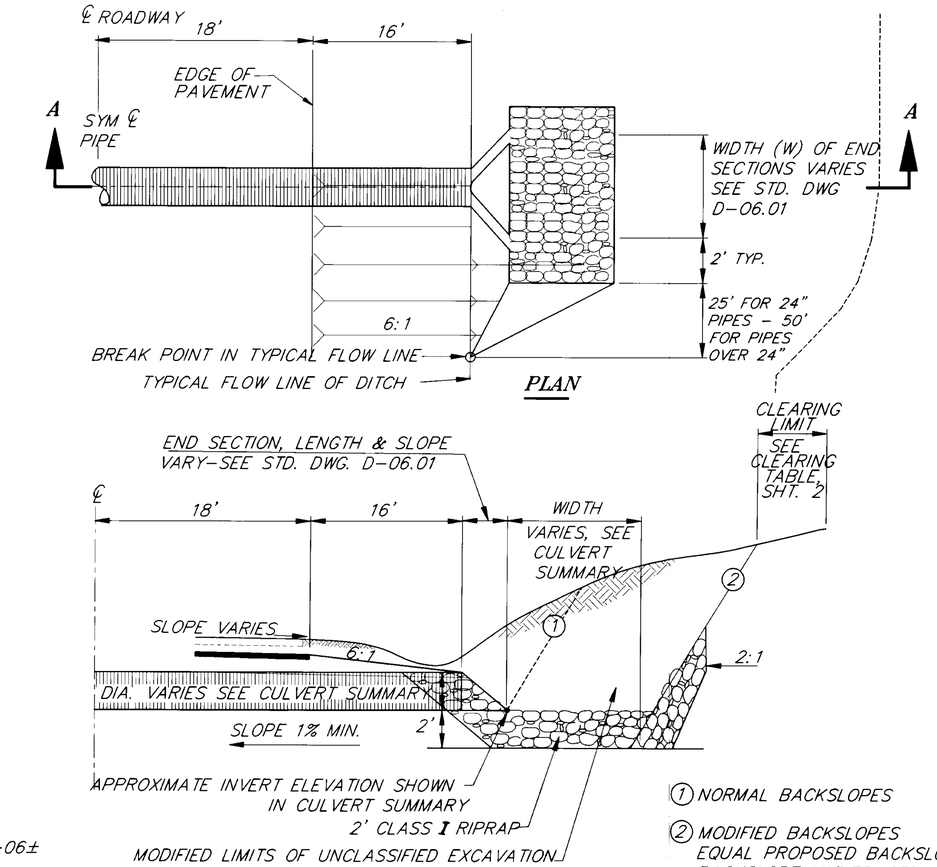
① SEE SECTION 603 OF THE SPECIFICATIONS FOR DETAILS OF PIPE PLUG.



DETAIL "A"

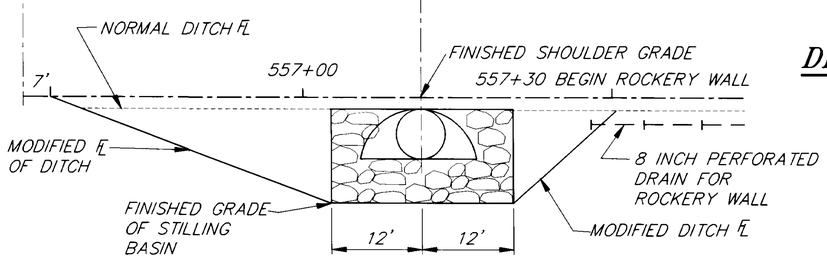


DETAIL "B"

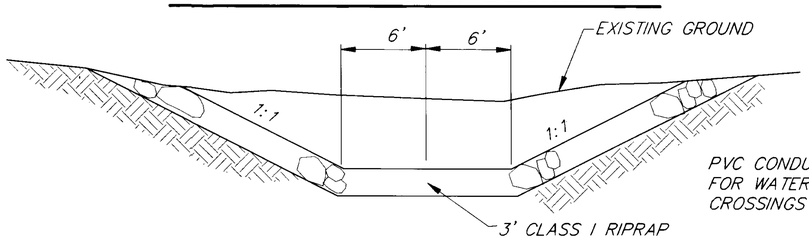


SECTION A–A

DITCH BASIN DETAILS



SECTION A–A FOR DETAIL "A"



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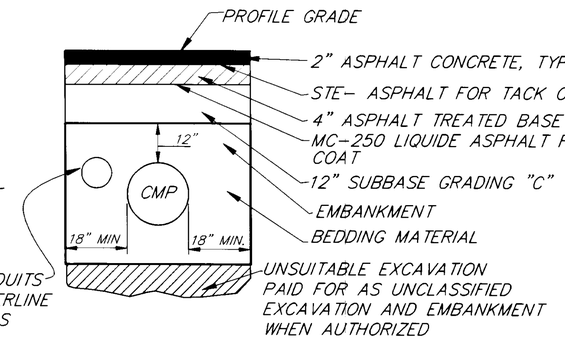

TYPICAL PIPE BEDDING DETAIL

AS BUILT
B.A. 2-8-96

NOTE: DO NOT SCALE FROM THESE PLANS–USE DIMENSIONS

ENGINEER'S SEAL
STATE OF ALASKA 49th
TRACY W. MOORE CE–4932
REGISTERED PROFESSIONAL ENGINEER

:	DATE:	DESCRIPTION OF CHANGE:
RECORD OF REVISIONS		

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

HAINES — ALASKA

HAINES HIGHWAY – LITTLE BOULDER CREEK TO BIG BOULDER CREEK
(31.6 MILE TO 33.8 MILE)
PROJECT NO. NH–F–095–6(13) 71070

SUMMARY TABLES AND DRAINAGE DETAILS

DESIGNED BY: C. HAKARI	PROJECT NO. 71070
DRAWN BY: CSA	DATE: AUGUST 1992
CHECKED BY: T.W. MOORE	SHEET 4 OF 18

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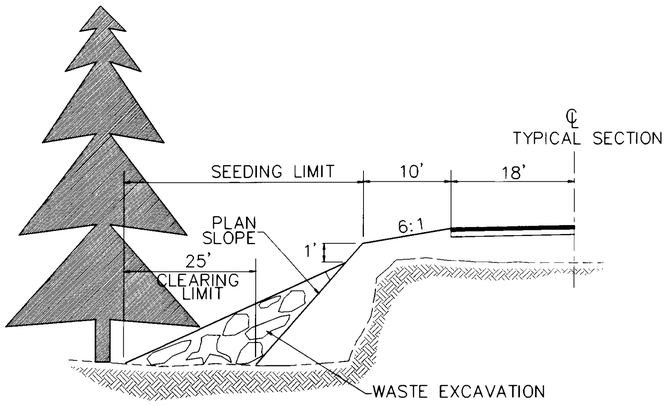
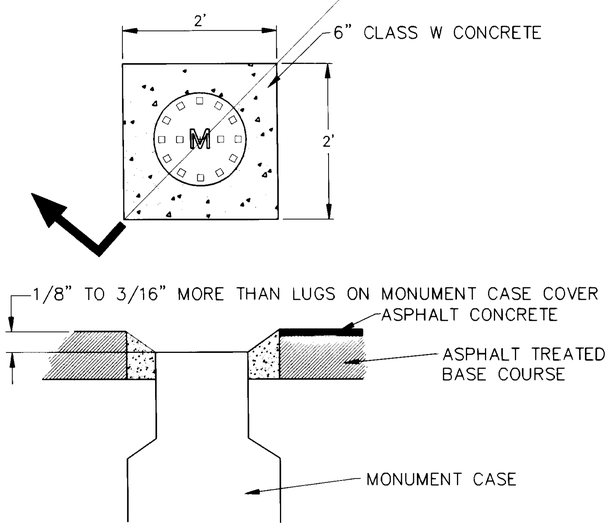


WASTE DISPOSAL DETAIL

NOTES:

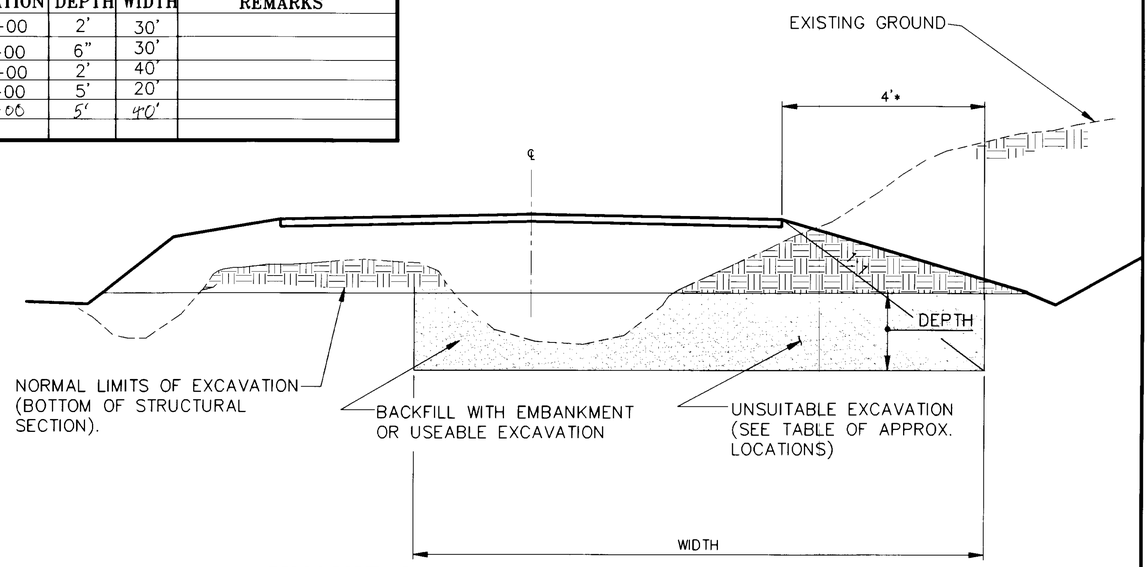
1. WASTE DISPOSAL AREAS SHALL BE AT LOCATIONS SHOWN IN SUMMARY OR AS APPROVED BY THE ENGINEER.
2. CLEARING OUTSIDE THE NORMAL CLEARING LIMITS MUST BE APPROVED BY THE ENGINEER.
3. A MAJORITY OF THE WOODY DEBRIS SHALL BE BURNED IN APPROVED SITES WITHIN THE RIGHT-OF-WAY.
4. TREES REMOVED ON EASEMENTS AND PERMIT AREAS OUTSIDE OF THE RIGHT OF WAY, SHALL BE STOCKPILED FOR USE BY THE OWNER OF THE PROPERTY WHO GRANTED THE PERMIT/EASEMENT.

WASTE DISPOSAL SUMMARY			
STATION TO STATION	RT.	LT.	REMARKS
526+00 TO 529+00	X		
563+00 TO 580+00		X	
563+00 TO 570+00	X		
610+00 TO 622+00		X	
610+00 TO 621+00	X		



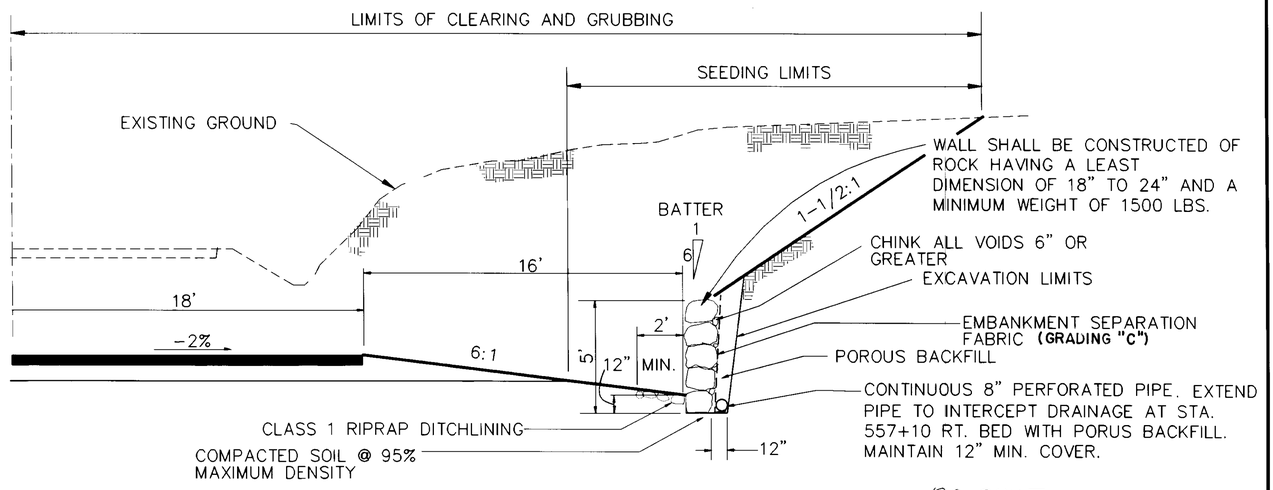
MONUMENT ENCASEMENT DETAIL

UNSUITABLE EXCAVATION SUMMARY			
STATION TO STATION	DEPTH	WIDTH	REMARKS
537+00 TO 539+00	2'	30'	
551+00 TO 552+00	6"	30'	
556+00 TO 562+00	2'	40'	
589+00 TO 591+00	5'	20'	
552+00 TO 556+00	5'	40'	



UNSUITABLE EXCAVATION DETAIL

1. PRIOR TO UNSUITABLE EXCAVATION, THE SUBGRADE SHALL BE COMPACTED IN ACCORDANCE WITH SECTION 203.
2. ALL UNSUITABLE EXCAVATIONS SHALL BE AUTHORIZED BY THE ENGINEER PRIOR TO BEGINING WORK.
3. AT THE OPTION OF THE ENGINEER, A REINFORCEMENT FABRIC MAY BE USED. IN LIEU OF ADDITIONAL EXCAVATION. ALSO IT MAY BE USED AS A SEPARATOR.
4. THE WIDTH AND DEPTH OF THE UNSUITABLE EXCAVATION AREA IS APPROXIMATE AND SUBJECT TO FIELD REVISIONS.



ROCKERY WALL

557+30,RT TO 559+50,RT

AS-BUILT
B.A. 2-8-96

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

BY:	DATE:	DESCRIPTION OF CHANGE:

RECORD OF REVISIONS

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

HAINES *ALASKA*
HAINES HIGHWAY - LITTLE BOULDER CREEK TO BIG BOULDER CREEK
(31.6 MILE TO 33.8 MILE)
PROJECT NO. NH-F-095-6(13) 71070
MISCELLANEOUS DETAILS

DESIGNED BY: C. HAKARI	PROJECT NO. 71070
DRAWN BY:	DATE: SEPT. 1992
CHECKED BY: T. W. MOORE	SHEET 5 OF 18

ENGINEER'S SEAL
STATE OF ALASKA 49th
TRACY W. MOORE
CE-4932
REGISTERED PROFESSIONAL ENGINEER

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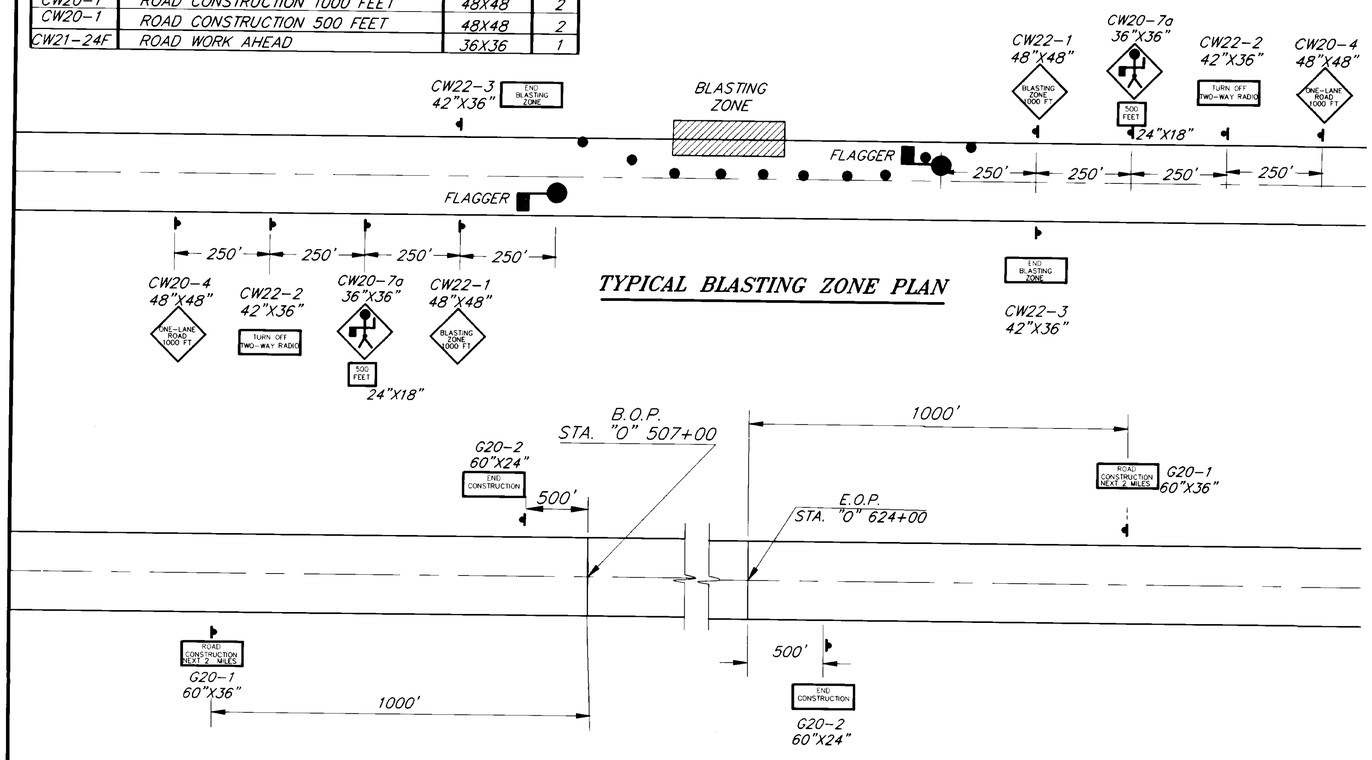
CONSTRUCTION SIGNS

CODE	LEGEND	SIZE	QUANT.
CW5-1	ROAD NARROWS	36X36	2
CW8-3	PAVEMENT ENDS	36X36	4
CW20-1E	ROAD CONSTRUCTION 1500 FEET	48X48	4
CW20-1B	ROAD CONSTRUCTION 1000 FEET	48X48	2
CW20-1F	ROAD CONSTRUCTION AHEAD	48X48	2
CW20-4B	ONE LANE ROAD 1000 FEET	48X48	4
CW20-7a	FLAGGER SYMBOL WITH SUPPLEMENTAL PLATE-500 FEET	36X36 24X18	4 4
CW21-5	SHOULDER WORK	36X36	2
CW22-1	BLASTING ZONE - 1000 FEET	48X48	2
CW22-2	TURNOFF TWO-WAY RADIO	42X36	2
CW22-3	END BLASTING ZONE	42X36	2
CW20-1	ROAD CONSTRUCTION 1500 FEET	48X48	2
CW20-1	ROAD CONSTRUCTION 1000 FEET	48X48	2
CW20-1	ROAD CONSTRUCTION 500 FEET	48X48	2
CW21-24F	ROAD WORK AHEAD	36X36	1

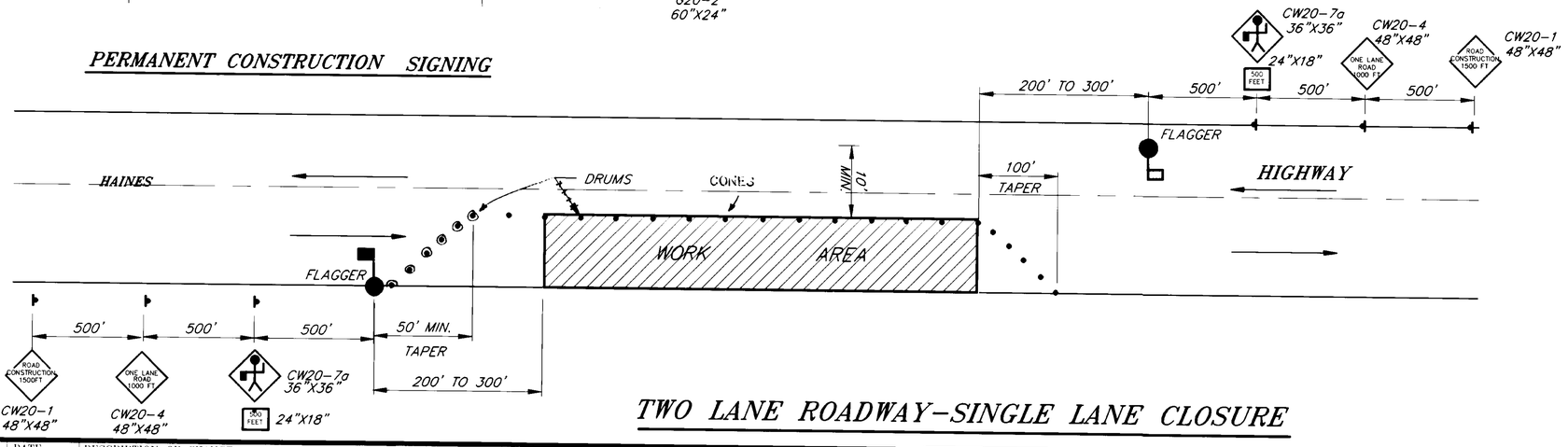
PERMANENT CONSTRUCTION SIGNS

CODE	LEGEND	SIZE	QUANT.
G20-1	ROAD CONSTRUCTION NEXT 2 MILES	60X36	2
G20-2	END CONSTRUCTION	60X24	2



TYPICAL BLASTING ZONE PLAN

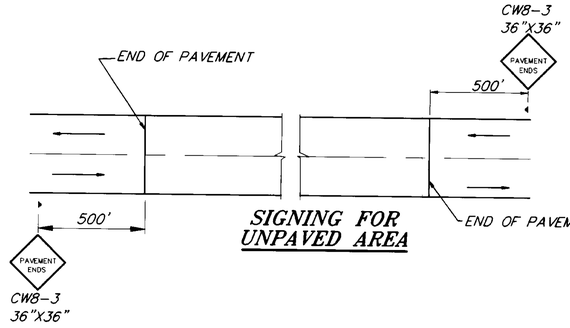
PERMANENT CONSTRUCTION SIGNING



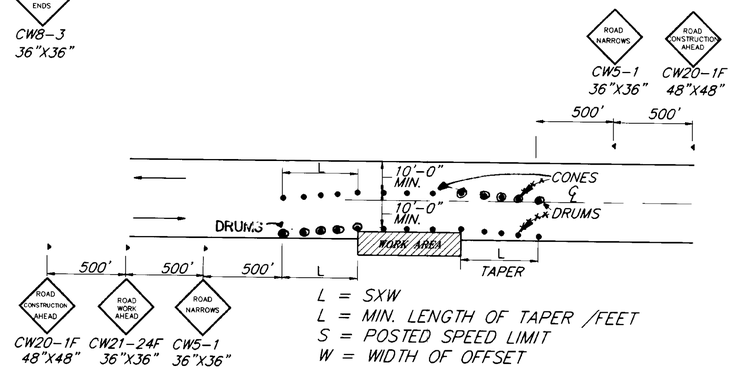
TWO LANE ROADWAY-SINGLE LANE CLOSURE

TRAFFIC CONTROL NOTES

1. CONSTRUCTION SIGNING, FLAGGING, DETOURS AND GENERAL TRAFFIC CONTROL FEATURES SHALL CONFORM TO THE GUIDELINES SET FORTH IN TH "C" SERIES STANDARD DRAWINGS AND THE APPLICABLE PORTIONS OF SECTION 115 AND 643 OF THE SPECIFICATIONS, THE ALASKA TRAFFIC MANUAL AND THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
2. A MINIMUM OF ONE LANE SHALL BE MAINTAINED AT ALL TIMES, THROUGH ALL WORK AREAS.
3. TWO LANES SHALL BE MAINTAINED AT ALL TIMES IN NON-WORK AREAS AND DURING NON-WORKING HOURS.
4. TEMPORARY DRIVING LANES SHALL HAVE A MINIMUM WIDTH OF 10'-0".
5. DRIVEWAYS MAY BE CLOSED DURING ACTUAL WORK ON A GIVEN DRIVEWAY, PROVIDED THAT THE CLOSURE DOES NOT EXCEED 8 HOURS AND TH AFFECTED RESIDENTS HAVE BEEN GIVEN 24 HOURS NOTICE OF THE CLOSURE.
6. MAXIMUM SPACING BETWEEN CHANNELIZING DEVICES SHALL BE EQUAL TO THE SPEED LIMIT IN FEET.
7. THE MAXIMUM LENGTH OF A ONE LANE, TWO-WAY WORK AREA SHALL BE 2500 FT. THE MINIMUM SEPARATION BETWEEN ONE LANE WORK AREA SHALL BE 2000 FT.
8. TEMPORARY PAVEMENT MARKINGS WILL BE REQUIRED AS DESCRIBED IN SECTION 643-3.04 OF THE SPECIFICATIONS.
9. FLOOD LIGHTS SHALL BE PROVIDED FOR FLAGGER STATIONS DURING NIGHT OPERATIONS.
10. A SINGLE FLAGGER MAY BE APPROVED BY THE ENGINEER IF THE ENTIRE WORK AREA IS VISIBLE FROM THE FLAGGER STATION.
11. THE CONSTRUCTION SIGN SUMMARY SHOWN IN THESE PLANS IS TO BE USED FOR COST ESTIMATING ONLY. ADDED SIGNS MAY BE REQUIRED BY THE ENGINEER.
12. CONSTRUCTION SIGNING SHALL BE IN PLACE ONLY WHEN THE CONDITIONS EXIST FOR WHICH THE SIGNS ARE INTENDED.
13. THE CONTRACTOR SHOULD BE AWARE OF AND ACCOUNT FOR, IN HIS CONSTRUCTION PLAN, THE HIGHER TRAFFIC VOLUMES ASSOCIATED WITH THE ARRIVAL AND DEPARTURE OF FERRIES AT THE ALASKA MARINE HIGHWAY TERMINAL IN HAINES.
14. TYPE "C" STEADY BURN WARNING LIGHTS SHALL BE USED TO MARK CHANNELIZING DEVICES AT NIGHT.
15. CHANNELIZING DEVICES ARE TO BE EXTENDED TO A POINT WHERE THEY ARE VISIBLE TO APPROACHING TRAFFIC.



SIGNING FOR UNPAVED AREA



ROADWAY ENCROACHMENT

NOTE: IF ONLY ONE LANE IS EFFECTED BY ROAD WORK (THAT IS, THE DRUMS ALONG THE WORK AREA ARE NO CLOSER THAN 10' TO CENTERLINE) THE CENTERLINE CONES FOR THE OPPOSING LANE MAY BE DELETED.

AS-BUILT
B.A. 2-8-96

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

BY:	DATE:	DESCRIPTION OF CHANGE:

RECORD OF REVISIONS

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

HAINES — HAINES HIGHWAY-LITTLE BOULDER CREEK TO BIG BOULDER CREEK — ALASKA
(31.6 MILE TO 33.8 MILE)
PROJECT NO. NH-F-095-6(13) 71070
TRAFFIC CONTROL PLAN

DESIGNED BY: C. HAKARI	PROJECT NO. 71070
DRAWN BY: C. ANDERSON	DATE: SEPT. 1992
CHECKED BY: K. SMITH	SHEET 6 OF 18

STATE OF ALASKA
9-9-92
49th
Kurtis J. Smith
KURTIS J. SMITH
CE-7347
REGISTERED PROFESSIONAL ENGINEER

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HORIZONTAL CONTROL

THE BASIS OF HORIZONTAL CONTROL FOR THIS PROJECT WAS A SERIES OF USC & GS CONTROL MONUMENTS ESTABLISHED IN 1970 BETWEEN HAINES AND THE U.S./ CANADIAN BORDER. THE LOCAL CONTROL FOR THIS CONSTRUCTION PROJECT IS THE D.O.T. & P.F. CONTROL MONUMENT HH-45A WITH PROJECT COORDINATES OF N. 691754.928, E. 544829.880.

THE PROJECT BASIS OF BEARING IS THE BEARING OF S. 55° 10" 47" E. BETWEEN HH-45A AND HH-46A.

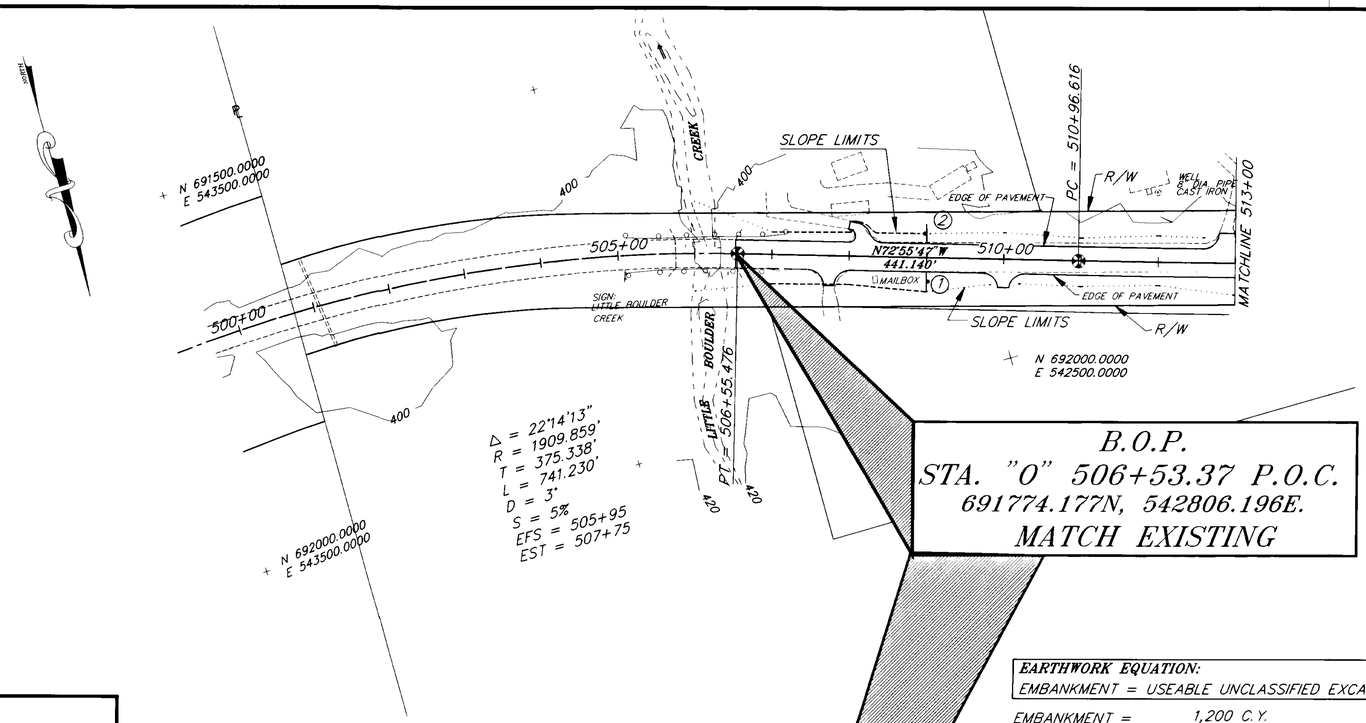
VERTICAL CONTROL

THE BASIS OF VERTICAL CONTROL WAS A SERIES OF BENCHMARKS ESTABLISHED IN 1948 BY THE GEODETIC SURVEY OF CANADA AND ADJUSTED IN 1970. ELEVATIONS ARE MEAN SEA LEVEL.

THE PROJECT BASIS OF VERTICAL CONTROL IS HH-45A WITH AN ACCEPTED ELEVATION OF 365.39 FEET.

ADDITIONAL HH-POINTS

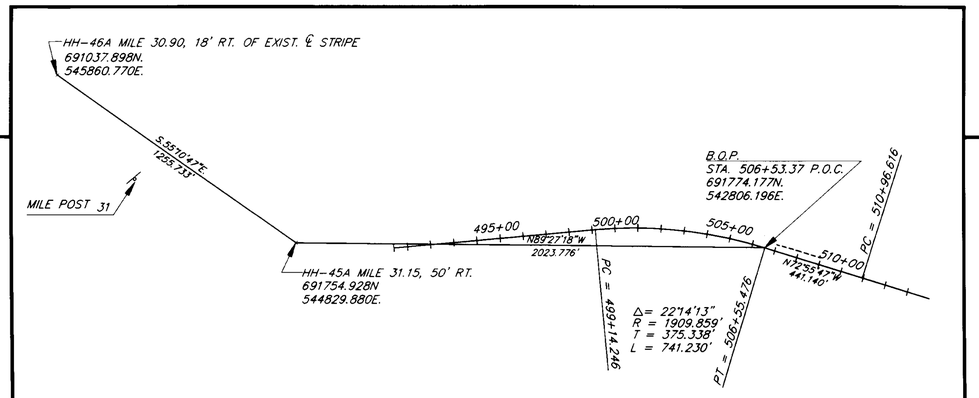
HH-POINT	STATION	OFFSET	NORTH	EAST
42A	523+13.57	8.75' RT.	692250.492,	541215.581
41A	535+17.19	32.78' RT.	692395.383,	540022.495
40A	549+92.32	0.86' RT.	692790.268,	538610.907
39A	559+37.02	10.19' LT.	692823.895,	537668.654
38A	590+25.24	24.38' RT.	692850.653,	534580.950



B.O.P.
STA. "0" 506+53.37 P.O.C.
691774.177N, 542806.196E.
MATCH EXISTING

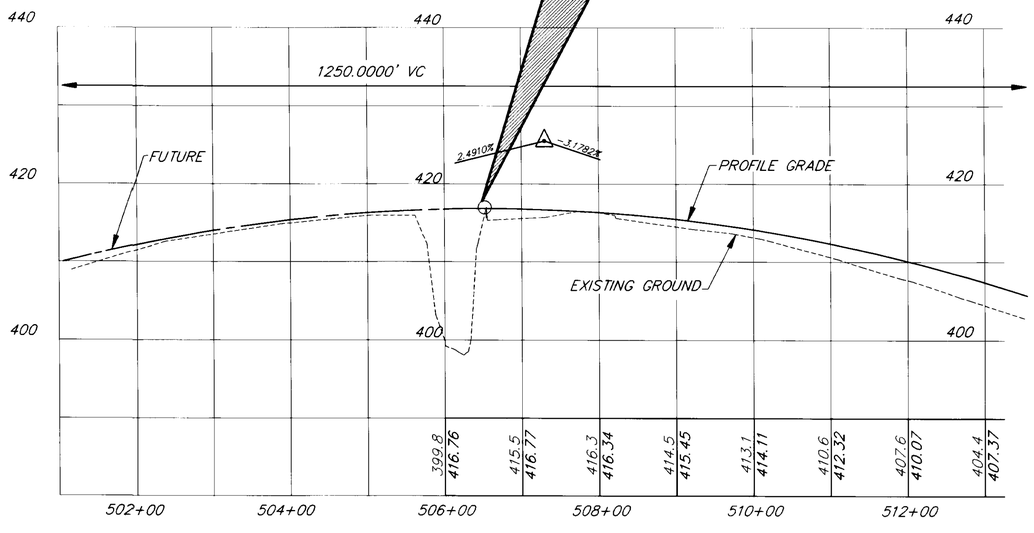
EARTHWORK EQUATION:
EMBANKMENT = USEABLE UNCLASSIFIED EXCAVATION + IMPORT.

EMBANKMENT = 1,200 C.Y.
UNCLASSIFIED EXC. = 950 C.Y. (INCLUDES 50 C.Y. OF WASTE)



TIE FROM BASIS OF HORIZONTAL CONTROL AND BEGINNING OF PROJECT

HIGH POINT ELEV = 416.82
HIGH POINT STA = 506+54.2474
PVI STA = 507+30
PVI ELEV = 425.55
A.D. = 5.6692
K = 220.4900



LEGEND

- HH-XXA = DOT/PF CONTROL MONUMENT
- T = EXISTING 50 PAIR TELEPHONE CABLE
- ⊗ = NEW SIGN TO BE INSTALLED THIS CONTRACT

AS-BUILT
B.A. 2-8-96

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

ENGINEER'S SEAL
STATE OF ALASKA
49th
TRACY W. MOORE
CE-4932
REGISTERED PROFESSIONAL ENGINEER

:	DATE:	DESCRIPTION OF CHANGE:

RECORD OF REVISIONS

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

HAINES ALASKA

HAINES HIGHWAY - LITTLE BOULDER CREEK TO BIG BOULDER CREEK
(31.6 MILE TO 33.8 MILE)
PROJECT NO. NH-F-095-6(13) 71070
STA. 492+00.00 TO STA. 512+00.00

DESIGNED BY: C. HAKARI	PROJECT NO. 71070
DRAWN BY: C. ANDERSON	DATE: SEPT. 1992
CHECKED BY: TRACY W. MOORE	SHEET 7 OF 18

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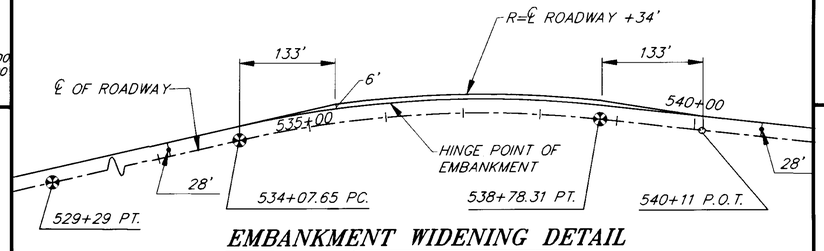


AS BUILT
B.A. 2-8-96

NOTE: DO NOT SCALE FROM THESE PLANS–USE DIMENSIONS

BY:	DATE:	DESCRIPTION OF CHANGE:

RECORD OF REVISIONS

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

HAINES

HAINES HIGHWAY–LITTLE BOULDER CREEK TO BIG BOULDER CREEK
(31.6 MILE TO 33.8 MILE)
PROJECT NO. NH-F-095-6(13) 71070

ALASKA

STA. 513+00.00 TO STA. 544+00.00

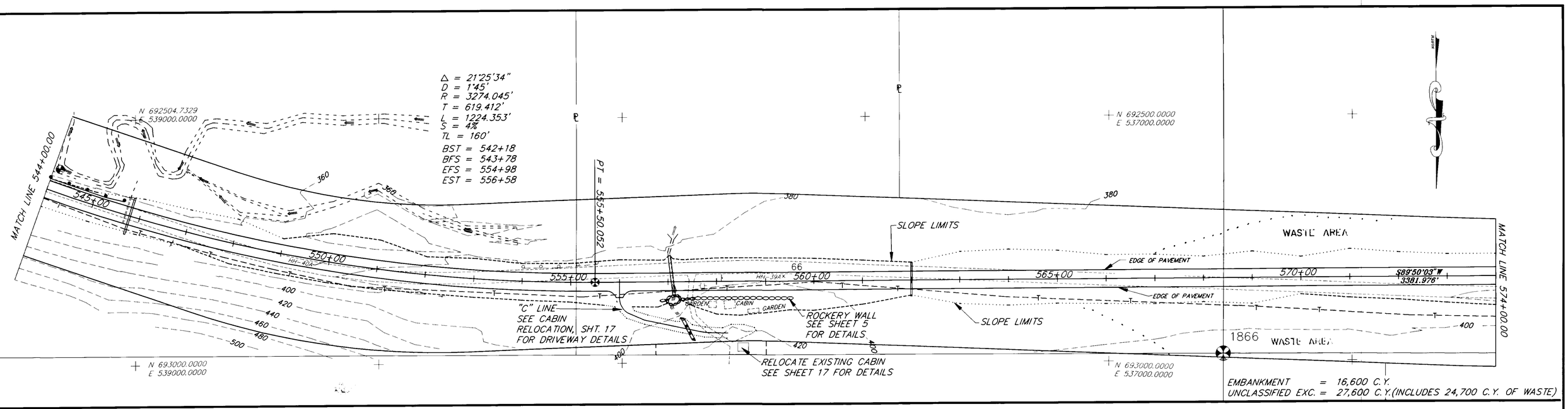
DESIGNED BY: C. HAKARI
DRAWN BY: C. ANDERSON
CHECKED BY: T.W. MOORE

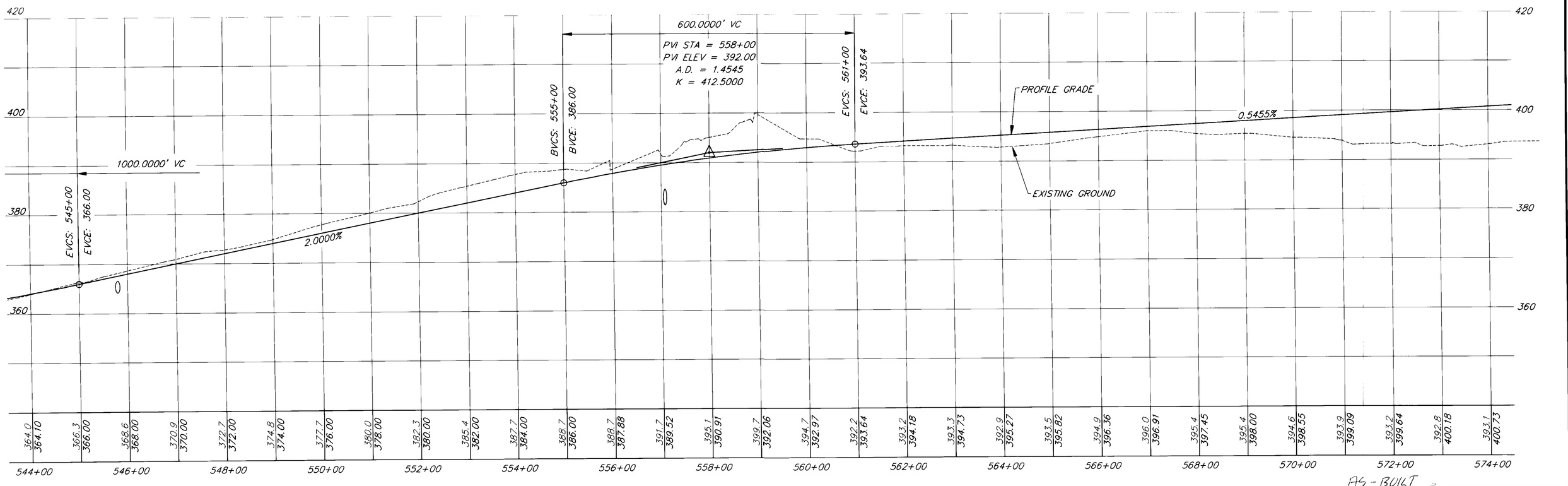
PROJECT NO. 71070
DATE: SEPT. 1992
SHEET 8 OF 18

ENGINEER'S SEAL

TRACY W. MOORE
CE-4932

P:\HNS24\DR\BCP513 PLOT VIEW:BCP513 1=100





AS-BUILT
B.A. 2-8-96

NOTE: DO NOT SCALE FROM THESE PLANS–USE DIMENSIONS

ENGINEER'S SEAL
STATE OF ALASKA
49th
TRACY W. MOORE
CE-4932
REGISTERED PROFESSIONAL ENGINEER

BY:	DATE:	DESCRIPTION OF CHANGE:

RECORD OF REVISIONS

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

HAINES — HAINES HIGHWAY–LITTLE BOULDER CREEK TO BIG BOULDER CREEK — ALASKA
(31.6 MILE TO 33.8 MILE)
PROJECT NO. NH-F-095-6(13) 71070
STA. 544+00.00 TO STA. 574+00.00

DESIGNED BY: C. HAKARI	PROJECT NO. 71070
DRAWN BY: C. ANDERSON	DATE: SEPT. 1992
CHECKED BY: TRACY W. MOORE	SHEET 9 OF 18

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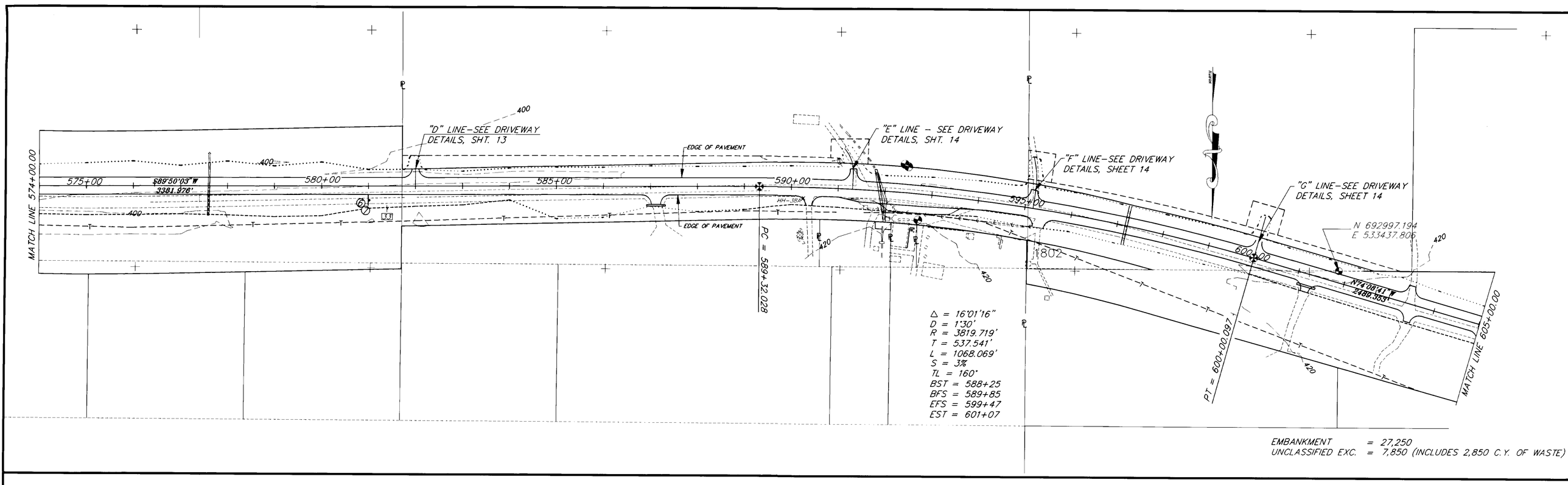

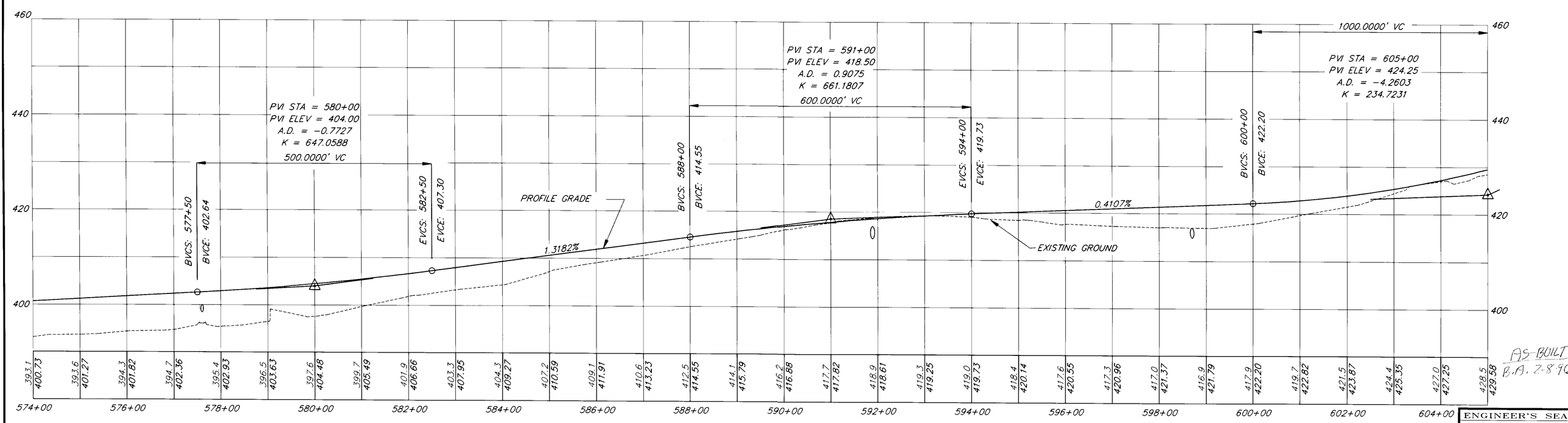

AS-BUILT
B.A. 2-8-96

NOTE: DO NOT SCALE FROM THESE PLANS–USE DIMENSIONS

BY:	DATE:	DESCRIPTION OF CHANGE:

RECORD OF REVISIONS

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

HAINES — HAINES HIGHWAY–LITTLE BOULDER CREEK TO BIG BOULDER CREEK — ALASKA
(31.6 MILE TO 33.8 MILE)
PROJECT NO. NH–F–095–6(13) 71070

STA. 574+00.00 TO STA. 605+00.00

DESIGNED BY: C. HAKARI	PROJECT NO. 70170
DRAWN BY: C. ANDERSON	DATE: SEPT. 1992
CHECKED BY: TRACY W. MOORE	SHEET 10 OF 18

ENGINEER'S SEAL
STATE OF ALASKA
49th
TRACY W. MOORE
CE–4932
REGISTERED PROFESSIONAL ENGINEER

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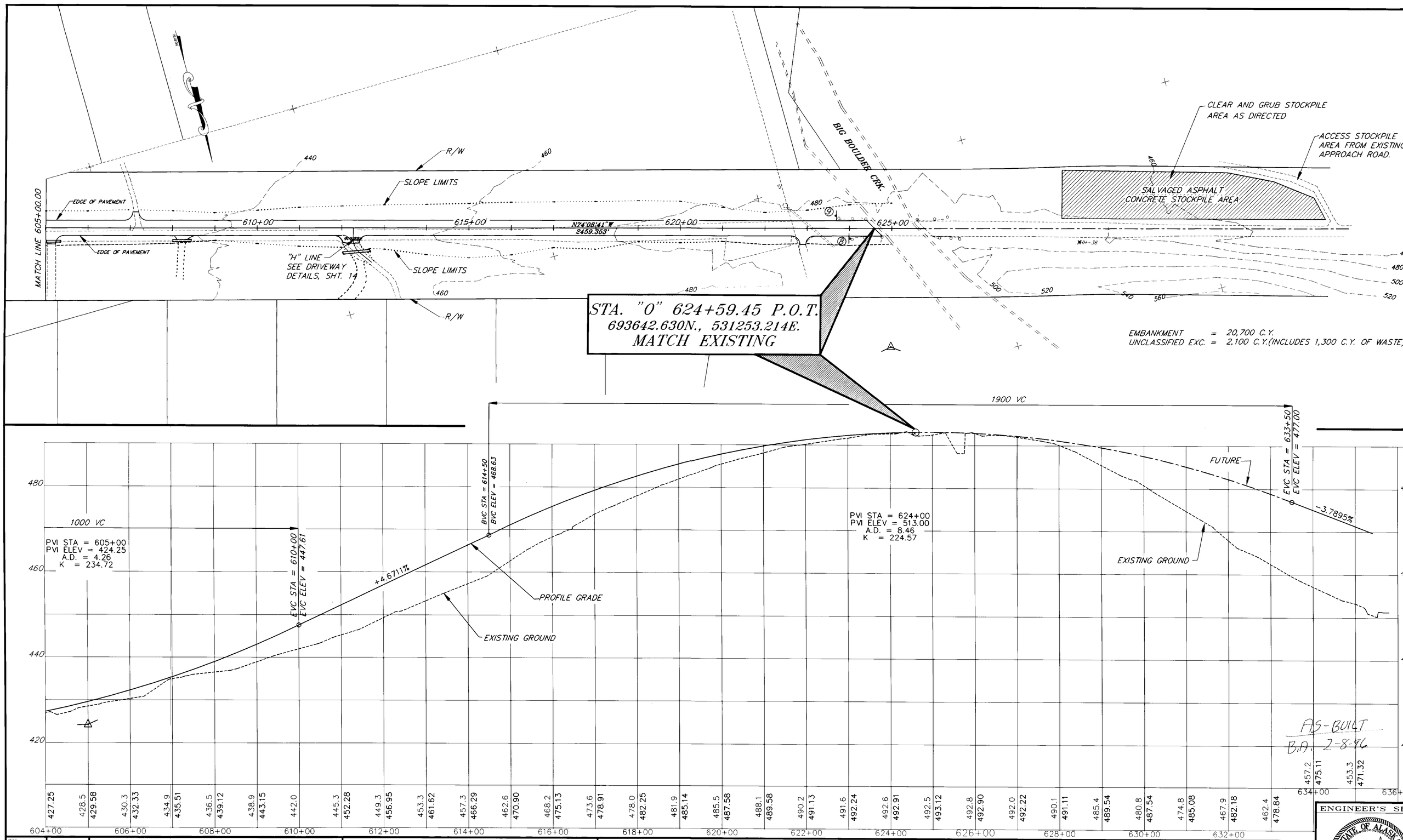

BY:	DATE:	DESCRIPTION OF CHANGE:

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

HAINES — *HAINES HIGHWAY–LITTLE BOULDER CREEK TO BIG BOULDER CREEK* — ALASKA
(31.6 MILE TO 33.8 MILE)
PROJECT NO. NH-F-095-6(13) 71070

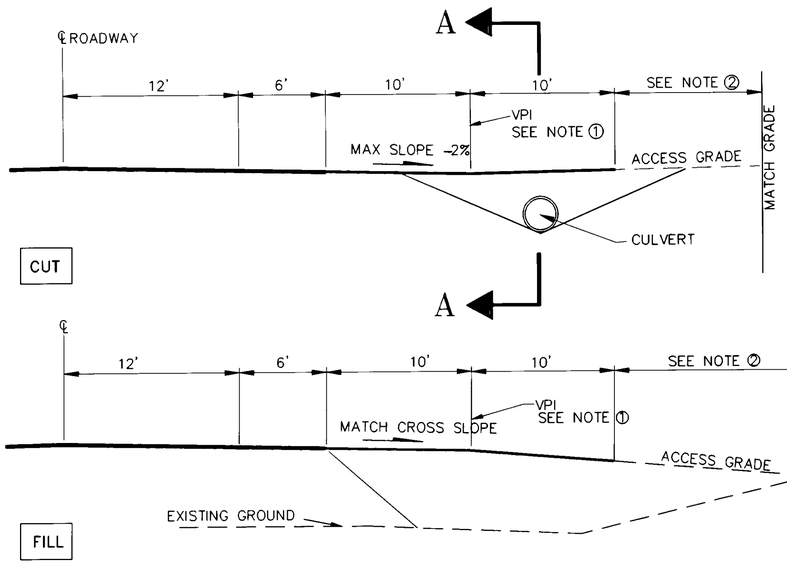
STA. 605+00.00 TO STA. 635+00.00

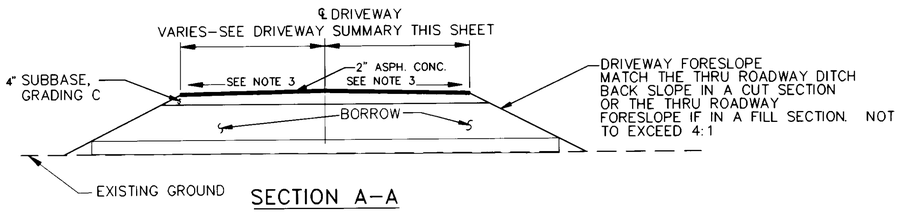
DESIGNED BY: C. HAKARI	PROJECT NO. 71070
DRAWN BY: C. ANDERSON	DATE: SEPT. 1992
CHECKED BY: TRACY W. MOORE	SHEET 11 OF 18

ENGINEER'S SE

STATE OF ALASKA 49th TRACY W. MOORE CE-4932 REGISTERED PROFESSIONAL ENGINEER

NOTE: DO NOT SCALE FROM THESE PLANS–USE DIMENSIONS P:\HNS24\DR\BCP605

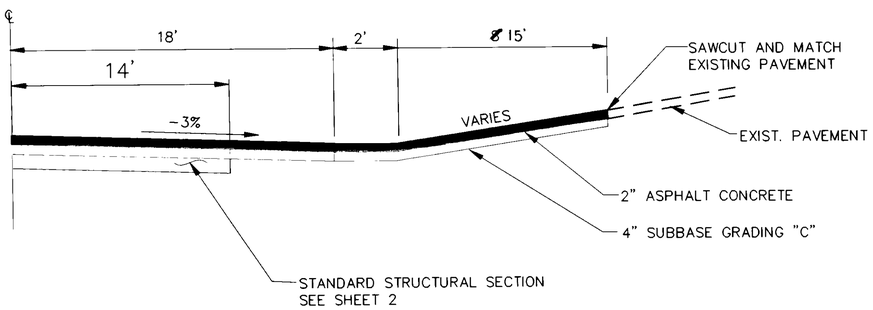




SECTION A-A

DRIVEWAY PROFILES

1. THE MAXIMUM ALGEBRAIC DIFFERENCE IS 15%. FOR SPECIAL DRIVEWAY DESIGN LINE, SEE SHEETS 13 AND 14.
2. FEATHER AT CRUSHED AGGREGATE BASE COURSE TO MATCH EXISTING BEYOND THE PAVING LIMITS. DISTANCE TO MATCH EXISTING VARIES.
3. SLOPE DRIVEWAY TO DRAIN (3% MAX.)



DRIVEWAY DETAIL-STA. 592+00,RT.

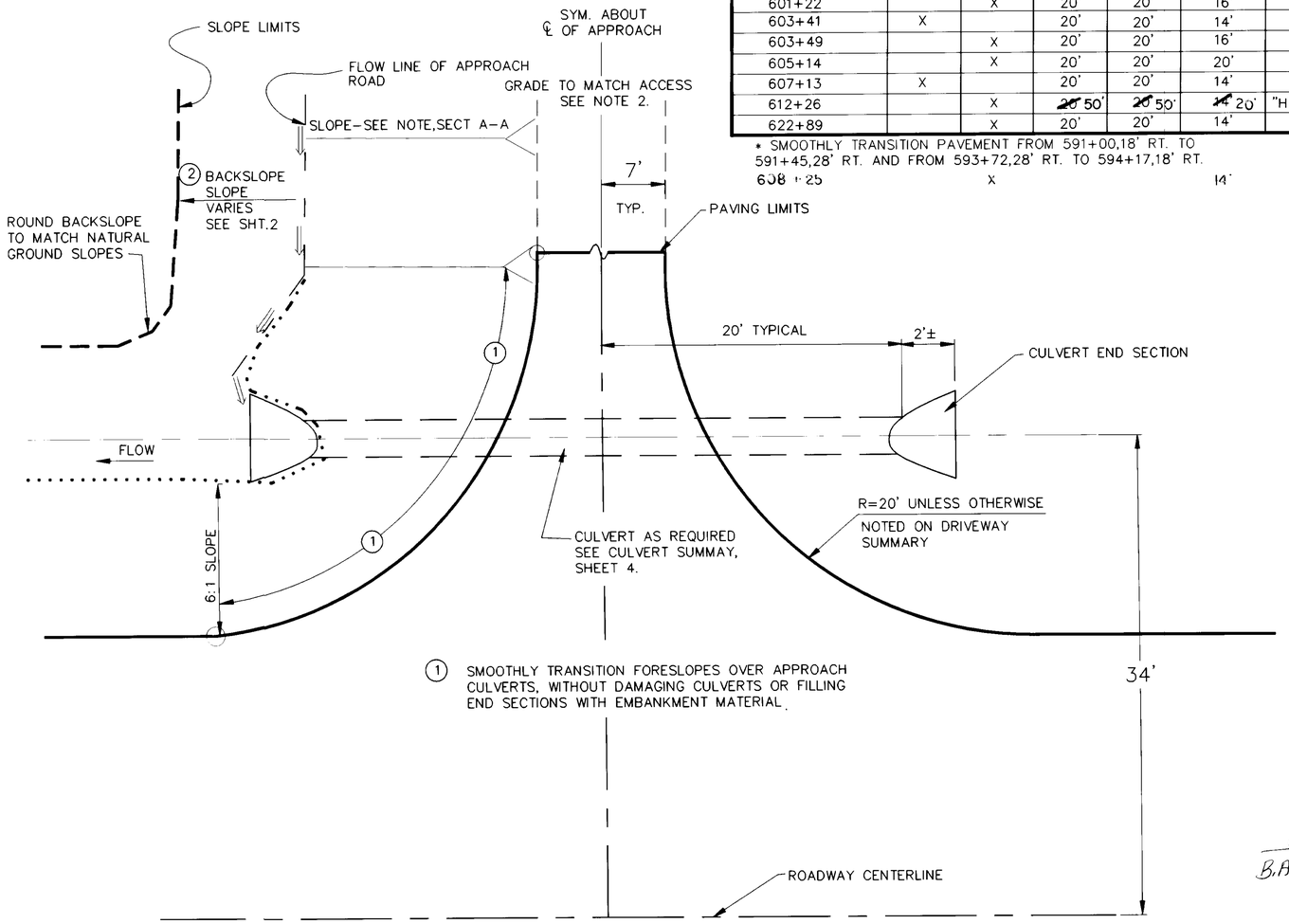
STA. 591+45,RT. TO STA. 593+72,RT.

RESIDENTIAL DRIVEWAY SUMMARY

STATION	OFFSET LT	OFFSET RT	RADIUS LT	RADIUS RT	WIDTH	REMARKS
507+74		X	20'	20'	14'	
508+14	X		8'	20'	14'	
510+00		X	20'	20'	14'	NEW CONSTRUCTION TO 20' RT. END CONSTRUCTION WITH A 2:1 SLOPE
512+88	X		20'	20'	14'	
517+37		X	20'	20'	14'	
517+80	X		20'	20'	14'	"A"LINE-SEE SHEET 13
520+16		X	20'	20'	14'	
520+76	X		20'	20'	14'	
543+17	X		20'	20'	14'	"B"LINE-SEE SHEET 13
556+00		X	15'	20'	12'	"C"LINE-SEE SHEET 17
582+00	X		20'	20'	14'	"D"LINE_SEE SHEET 13
587+11		X	20'	20'	20'	
590+37		X	20'	20'	14'	
591+30	X		20'	20'	14'	"E"LINE-SEE SHEET 14
592+00		X	*	*	227'	SEE THIS SHEET FOR TYPICAL
595+17	X		20'	20'	14'	"F"LINE-SEE SHEET 14
595+30		X	20'	20'	24	
600+00	X		20'	20'	14'	"G"LINE-SEE SHEET 14
601+22		X	20'	20'	16'	
603+41	X		20'	20'	14'	
603+49		X	20'	20'	16'	
605+14		X	20'	20'	20'	
607+13	X		20'	20'	14'	
612+26		X	~~20~~ 50'	~~20~~ 50'	~~14~~ 20'	"H"LINE-SEE SHEET 14
622+89		X	20'	20'	14'	

* SMOOTHLY TRANSITION PAVEMENT FROM 591+00,18' RT. TO 591+45,28' RT. AND FROM 593+72,28' RT. TO 594+17,18' RT.

608 +25 X 14'



APPROACH CULVERT DETAIL

AS-BUILT
B.A. 2-8-96

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

ENGINEER'S SEAL
STATE OF ALASKA
49th
TRACY W. MOORE
CE-4932
REGISTERED PROFESSIONAL ENGINEER

BY:	DATE:	DESCRIPTION OF CHANGE:

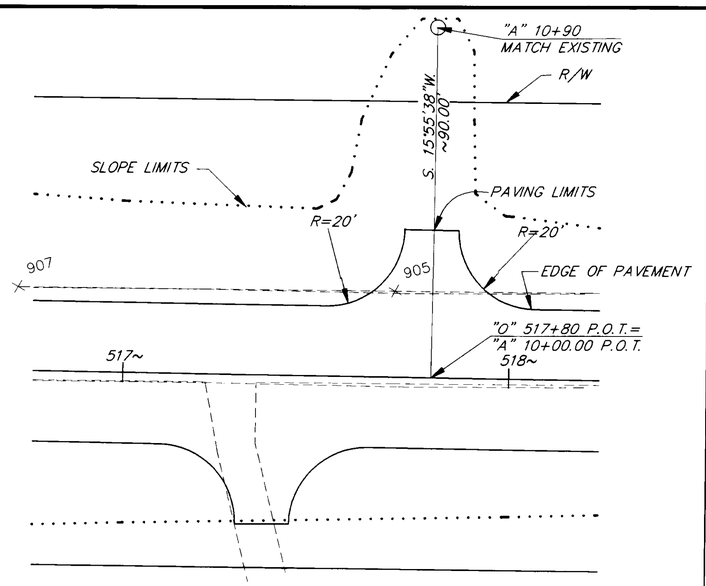
RECORD OF REVISIONS

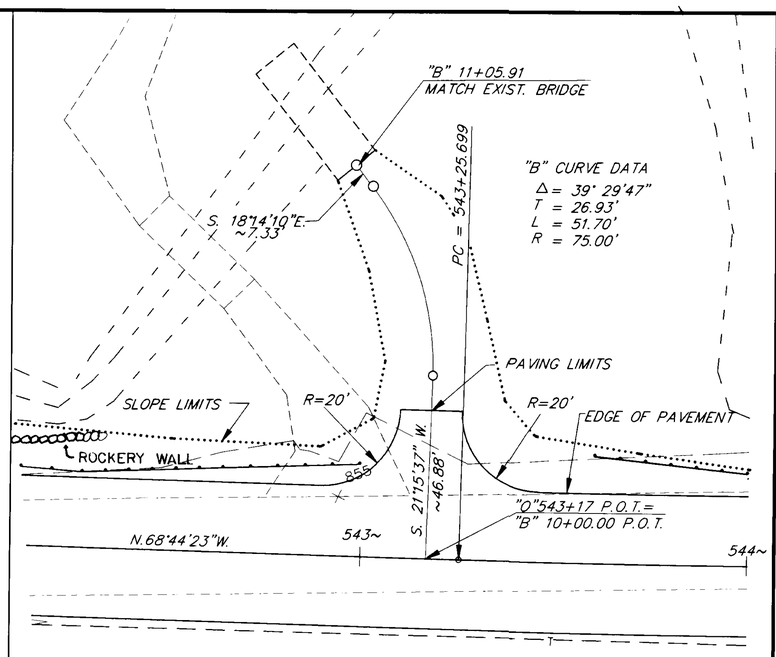
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

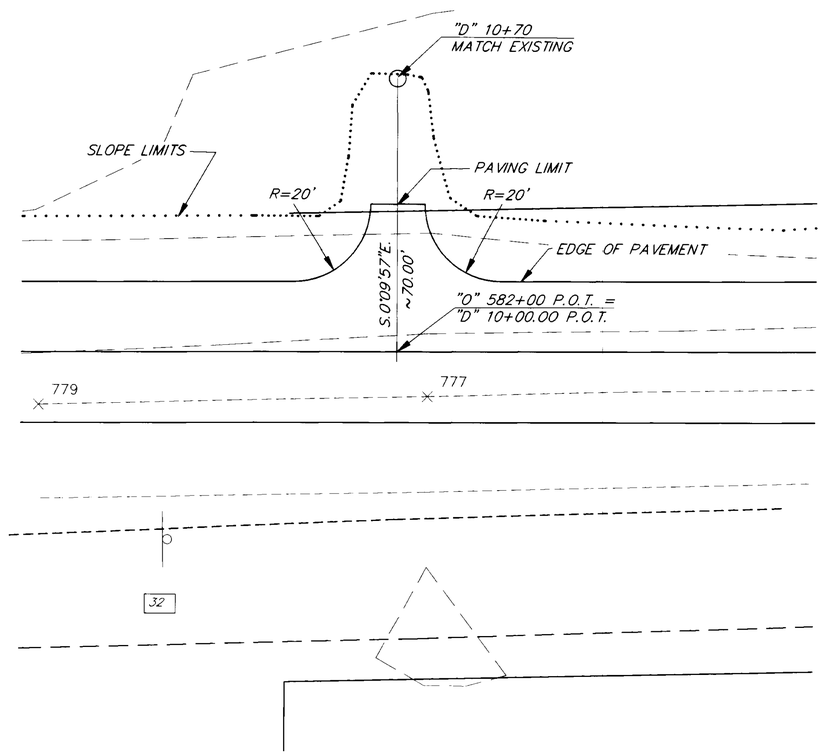
HAINES *ALASKA*
HAINES HIGHWAY - LITTLE BOULDER CREEK TO BIG BOULDER CREEK
(31.6 MILE TO 33.8 MILE)
PROJECT NO. NH-F-095-6(13) 71070
DRIVEWAY TYPICALS AND SUMMARY TABLE

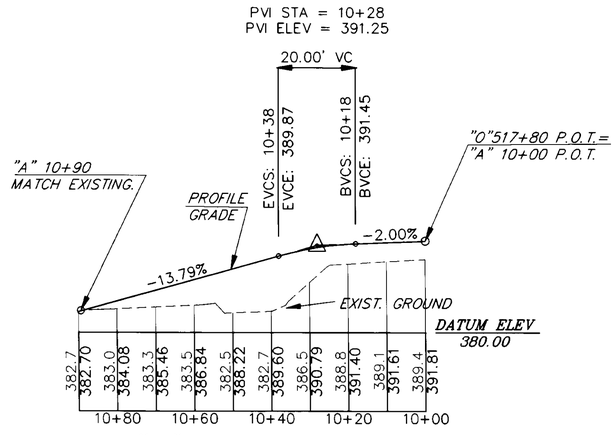
DESIGNED BY: C. HAKARI	PROJECT NO. 71070
DRAWN BY: AUTOCADD	DATE: SEPT. 1992
CHECKED BY: T.W. MOORE	SHEET 12 OF 18

P:\HNSBCK\DR\BCPROFS 1-



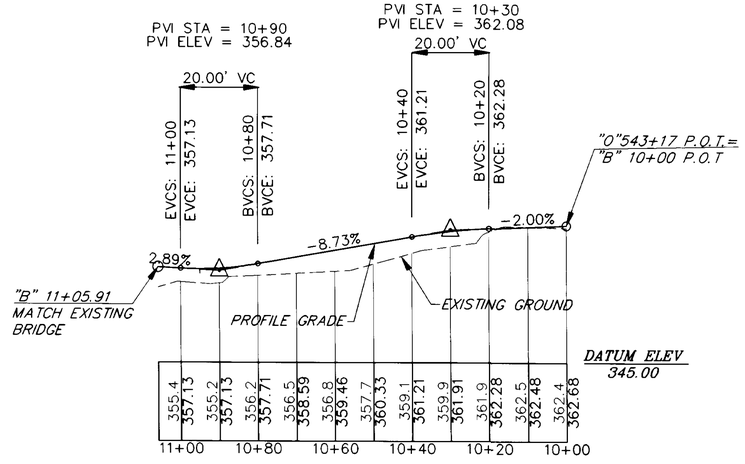






"O" 517+08 P.O.T.=
"A" 10+00 P.O.T.

"A" LINE



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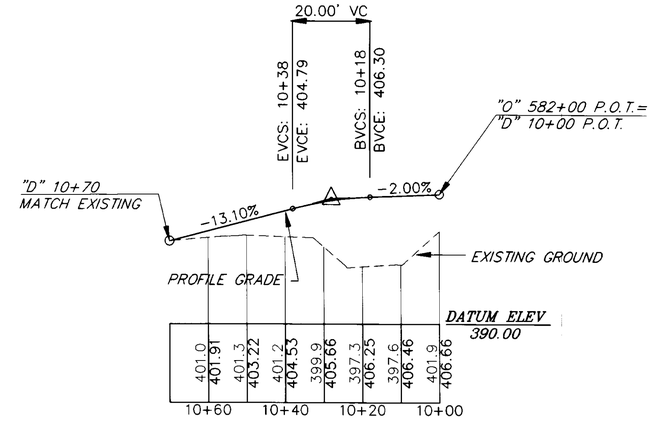
"B" LINE



"O" 582+00 P.O.T.=
"D" 10+00 P.O.T.

"D" LINE

AS-BUILT
BA. 2-8-96

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

ENGINEER'S SEAL
STATE OF ALASKA
49th
TRACY W. MOORE
CE-4932
REGISTERED PROFESSIONAL ENGINEER

BY:	DATE:	DESCRIPTION OF CHANGE:

RECORD OF REVISIONS

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

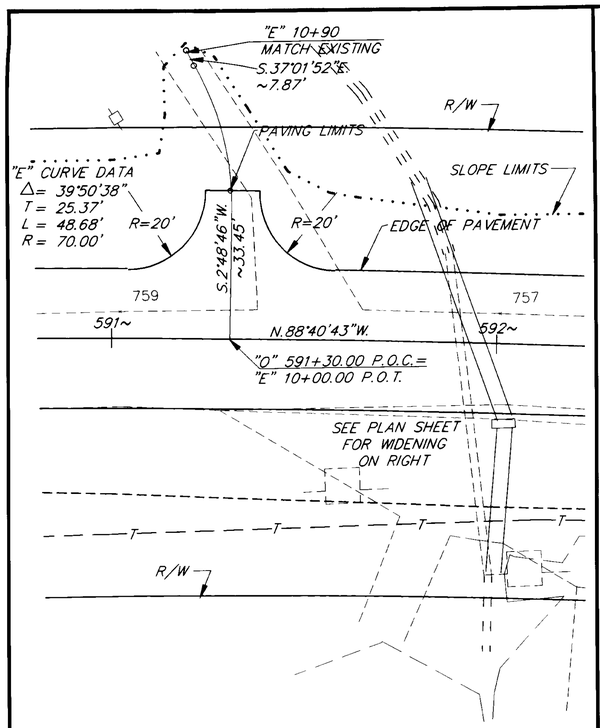
HAINES — ALASKA

HAINES HIGHWAY - LITTLE BOULDER CREEK TO BIG BOULDER CREEK
(31.6 MILE TO 33.8 MILE)
PROJECT NO. NH-F-095-6(13) 71070

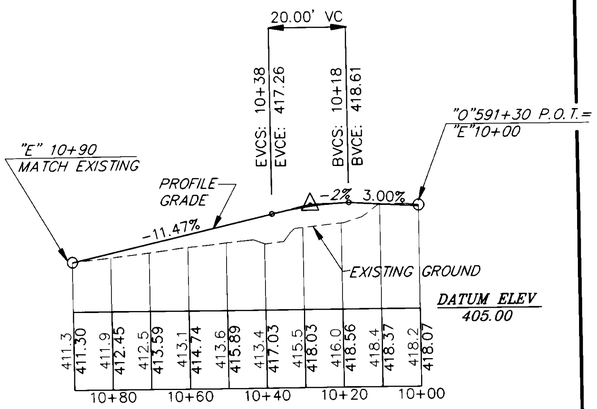
DRIVEWAY APPROACH DETAILS

DESIGNED BY: C. HAKARI	PROJECT NO. 71070
DRAWN BY: C. ANDERSON	DATE: SEPT. 1992
CHECKED BY: TRACY W. MOORE	SHEET 13 OF 18

P:\HNS24\DR\DRIVE1 T=20

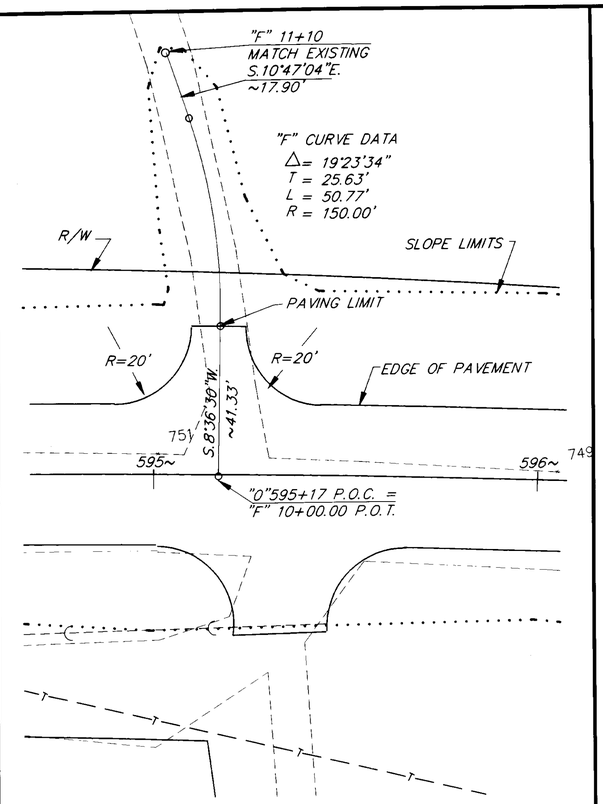


PVI STA = 10+28
PVI ELEV = 418.41



"O"591+31 P.O.C.= "E" 10+00 P.O.T.

"E" LINE



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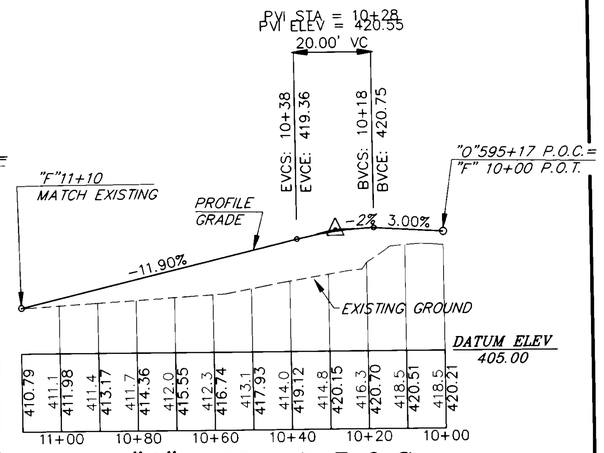
PVI ELEV = 420.55



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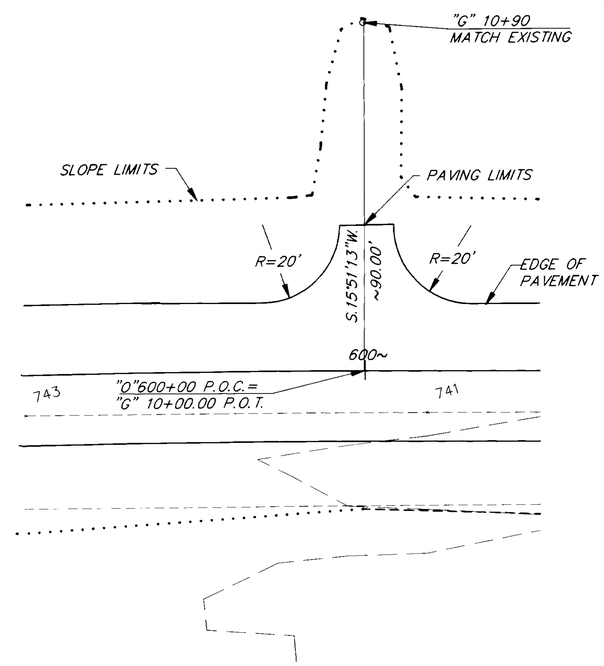
"F" LINE



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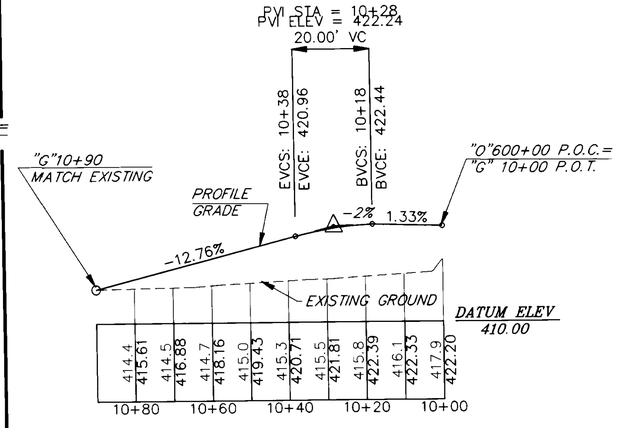
PVI ELEV = 422.24



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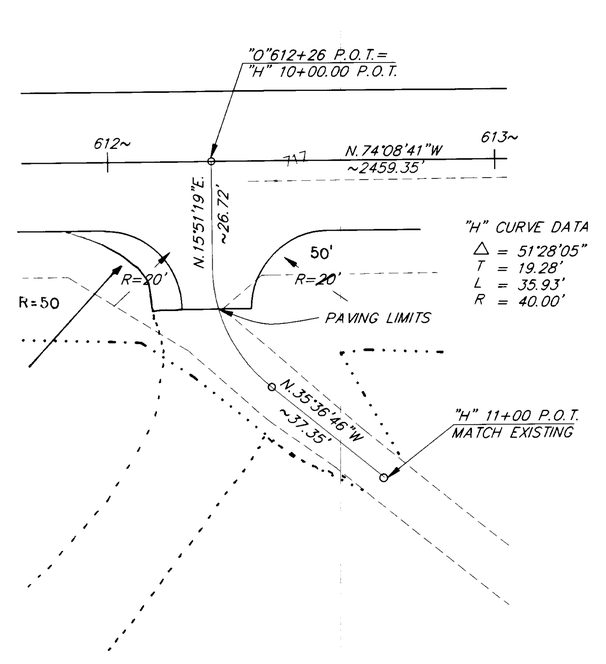
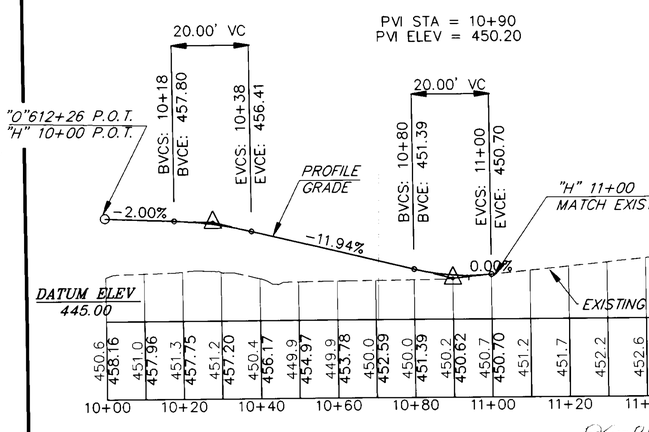
"G" LINE



PVI STA = 10+28
PVI ELEV = 457.60

PVI STA = 10+90
PVI ELEV = 450.20



"O" 612+26 P.O.T. = "H" 10+00.00 P.O.T.

AS-BUILT
B.H. 2-8-96

"H" LINE

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

ENGINEER'S SEAL
STATE OF ALASKA
49th
TRACY W. MOORE
CE-4932
REGISTERED PROFESSIONAL ENGINEER

BY:	DATE:	DESCRIPTION OF CHANGE:

RECORD OF REVISIONS

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

HAINES ALASKA

HAINES HIGHWAY - LITTLE BOULDER CREEK TO BIG BOULDER CREEK
(31.6 MILE TO 33.8 MILE)
PROJECT NO. NH-F-095-6(13) 71070

DRIVEWAY APPROACH DETAILS

DESIGNED BY: C. HAKARI	PROJECT NO. 71070
DRAWN BY: C.S.A.	DATE: SEPT. 1992
CHECKED BY: TRACY W. MOORE	SHEET 14 OF 18

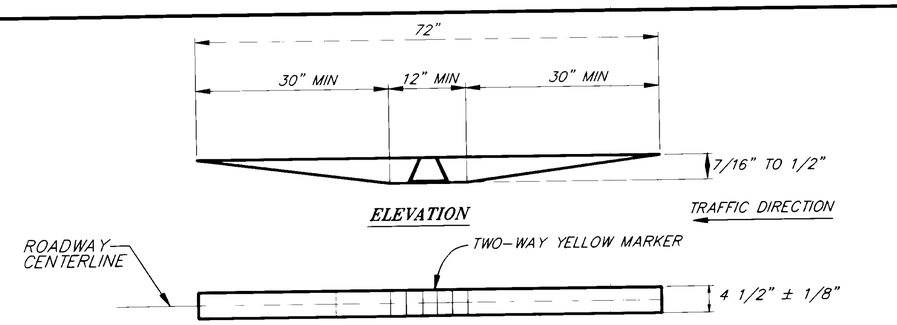
P:\HNS24\DR\DRIVE2 T=2

STANDARD SIGN SUMMARY

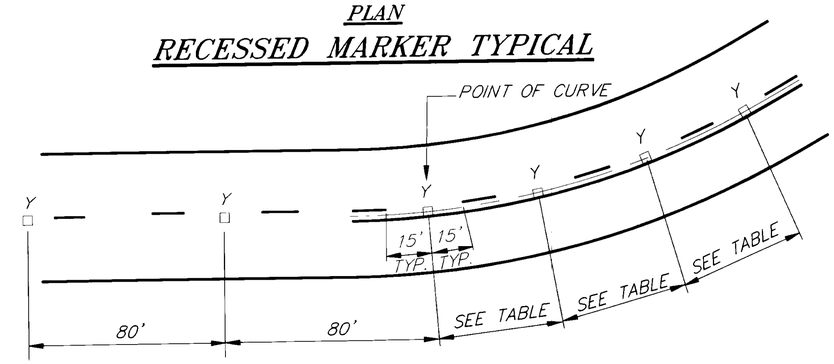
LOCATION				SIGN				POST			
SIGN NO.	LOCATION "AS BUILT"	OFFSET FT. LT.	OFFSET FT. RT.	CODE NO. (ATM)	LEGEND	SIZE	AREA S.F.	NO. OF POSTS	POST SIZE	FACING TRAFFIC	REMARKS
①	509+00		30'	R2-1	SPEED LIMIT 55	30X36	7.5	1	2.5"	WB	
②	509+00	30'		R2-1	SPEED LIMIT 55	30X36	7.5	1	2.5"	EB	
③	529+30		30'	M10-2	MILE 32	6X12	0.5	1	2.0"	WB	
④	529+30		30'	M10-2	MILE 32	6X12	0.5			EB	INSTALL BACK TO BACK WITH 3
⑥	581+50		30'	M10-2	MILE 33	6X12	0.5	1	2.0"	WB	
⑦	581+50	30'		M10-2	MILE 33	6X12	0.5			EB	INSTALL BACK TO BACK WITH 7
⑧	624+00		30'	R2-1	SPEED LIMIT 55	30X36	7.5	1	2.5"	WB	
⑨	624+00	30'		R2-1	SPEED LIMIT 55	30X36	7.5	1	2.5"	EB	
TOTAL											

SIGNING NOTES:

1. SIGNS SHALL BE INSTALLED SO THE BOTTOM OF THE SIGN PANEL IS 7 FEET ABOVE THE ROADWAY.
2. SEE STD. DWG. S-30.01 FOR POST SLEEVE TYPE SOIL EMBEDMENT.
3. ALL SIGN POSTS SHALL BE TELESCOPING PERFORATED GALVANIZED SQUARE STEEL POSTS.
4. ALL SIGNS SHALL BE .080" THICK.
5. ALL NEW SIGNS SHALL BE UNFRAMED UNLESS OTHERWISE NOTED.
6. ALL EXISTING SIGNS SHALL BE DISMANTLED BY THE CONTRACTOR AND STOCKPILED AT THE STATE OF ALASKA, D.O.T./P.F. MAINTENANCE STATION AS DIRECTED BY THE ENGINEER.



RECESSED MARKER TYPICAL



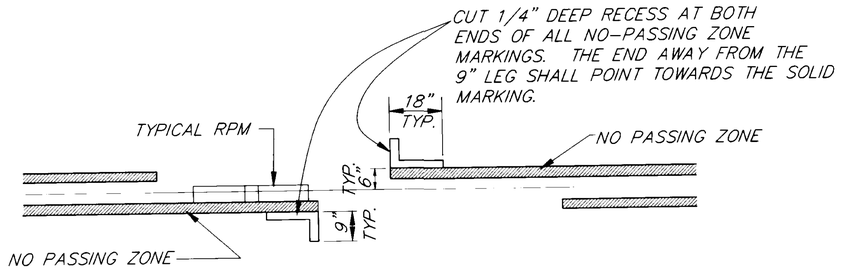
RECESSED MARKER LOCATION TYPICAL

R.P.M. SPACING TABLE

STATION TO STATION	40'	80'
506+53.37 TO 510+96		X
510+96 PC. TO 515+54 PT.		X
515+54 TO 522+54		X
522+54 PC. TO 529+29 PT.		X
529+29 TO 534+07		X
534+07 PC. TO 538+78 PT.	X	
538+78 TO 543+25		X
543+25 PC. TO 555+50 PT.		X
555+50 TO 589+32		X
589+32 PC. TO 600+00 PT.		X
600+00 TO 624+59.45		X

EXISTING SIGNS TO BE REMOVED

STATION	LT.	RT.	LEGEND
522+46		X	BURIED TELEPHONE CABLE
529+33		X	MILE POST 32
546+80		X	FOOD GAS 1 MILE. LAST GAS 100 MILES
552+38		X	BURIED TELEPHONE CABLE
558+09		X	
581+40		X	MILE POST 33



NO-PASSING GROOVES

MARKING NOTES:

1. THE BEGIN AND END OF ALL EXISTING NO PASSING ZONES SHALL BE REFERENCED BEFORE CONSTRUCTION BEGINS BY THE CONTRACTOR FOR TEMPORARY MARKING PLACEMENT. THE ENGINEER WILL DETERMINE THE BEGIN AND END OF ALL PERMANENT NO PASSING ZONES.
2. RPM QUANTITIES ARE ESTIMATED AND WILL VARY. NO RPM'S ARE TO BE PLACED ON BRIDGE DECKS.
3. LOCATIONS OF MARKERS IN SITUATIONS WITH UNUSUAL GEOMETRICS WILL BE DETERMINED BY THE PROJECT ENGINEER.
4. LATERAL PLACEMENT OF RECESSED CENTERLINE MAKERS SHALL BE BETWEEN DOUBLE YELLOW STRIPES AND ON CENTERLINE BETWEEN SKIP STRIPES.
5. STRIPED LANE WIDTH SHALL BE 12'
6. THE ROADWAY SHALL BE MARKED AS SHOWN ON STANDARD DRAWING T-21.01, "PAVED SHOULDER", EXCEPT THE 3 INCHES BETWEEN YELLOW STRIPES SHALL BE CHANGED TO 4 INCHES.
7. APPROXIMATELY 50% WILL MARKED NO-PASSING.

AS-BUILT
B.A. 2-8-96

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

BY:	DATE:	DESCRIPTION OF CHANGE:

RECORD OF REVISIONS

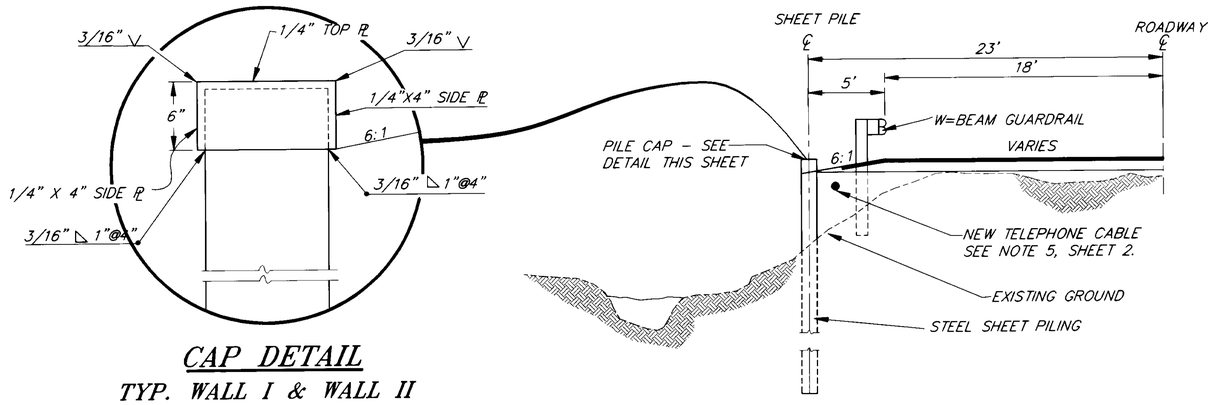
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

HAINES — HAINES HIGHWAY-LITTLE BOULDER CREEK TO BIG BOULDER CREEK — ALASKA
(31.6 MILE TO 33.8 MILE)
PROJECT NO. NH-F-095-6(13) 71070
SIGNING SUMMARY

DESIGNED BY: E. CAVAGNARO	PROJECT NO. 71070
DRAWN BY: CSA	DATE: AUGUST 1992
CHECKED BY: K. SMITH	SHEET 15 OF 18

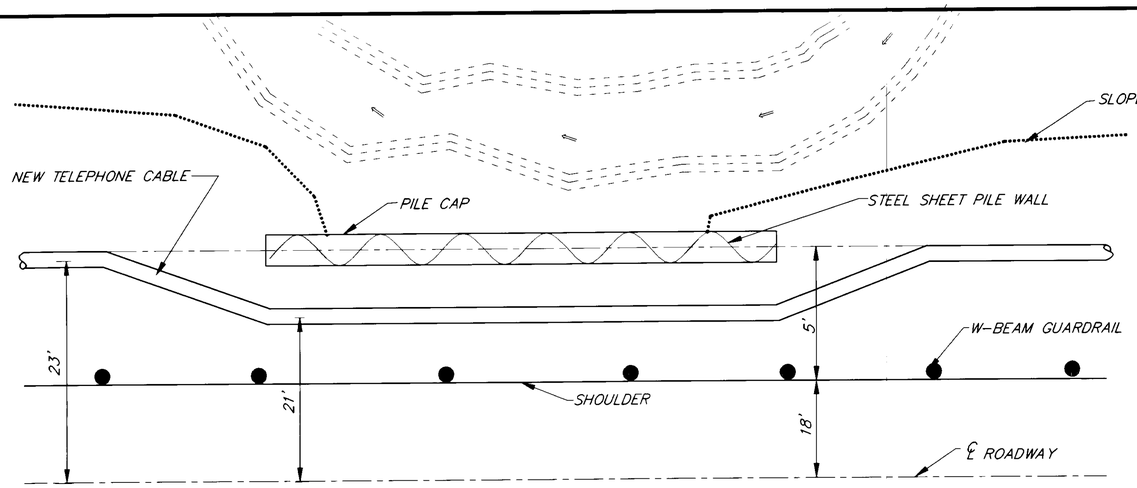
STATE OF ALASKA 4-4-92 49th KURTIS J. SMITH CE-7347 REGISTERED PROFESSIONAL ENGINEER

P:\HNS24\DR\BCSIGNS

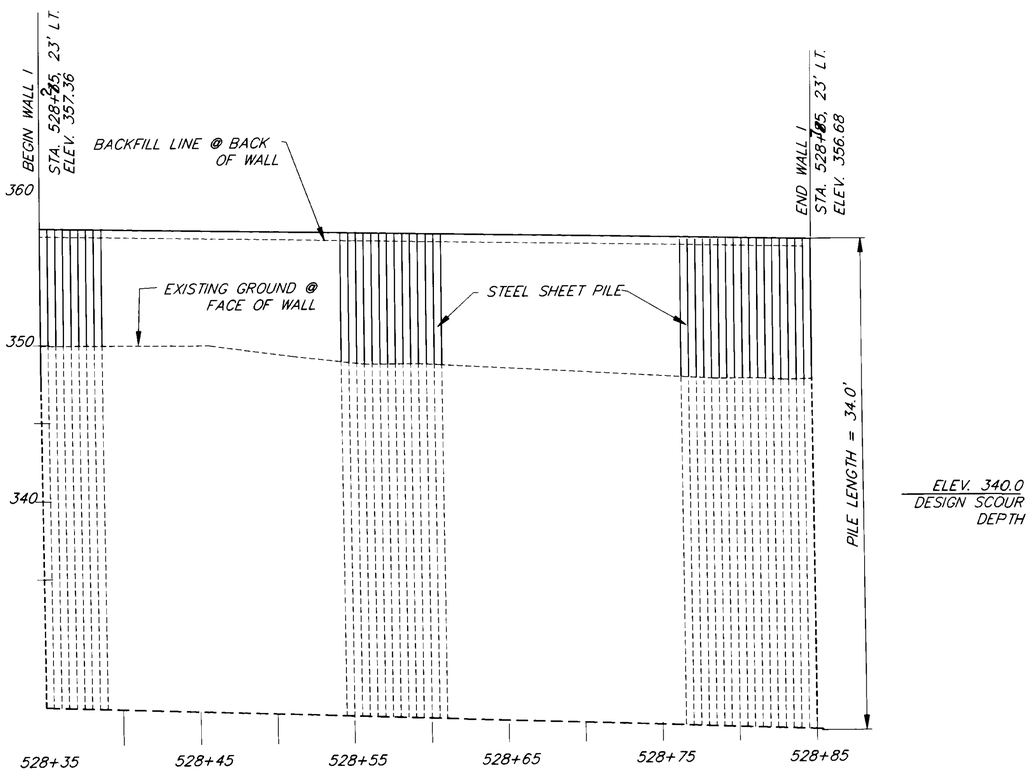


CAP DETAIL
TYP. WALL I & WALL II

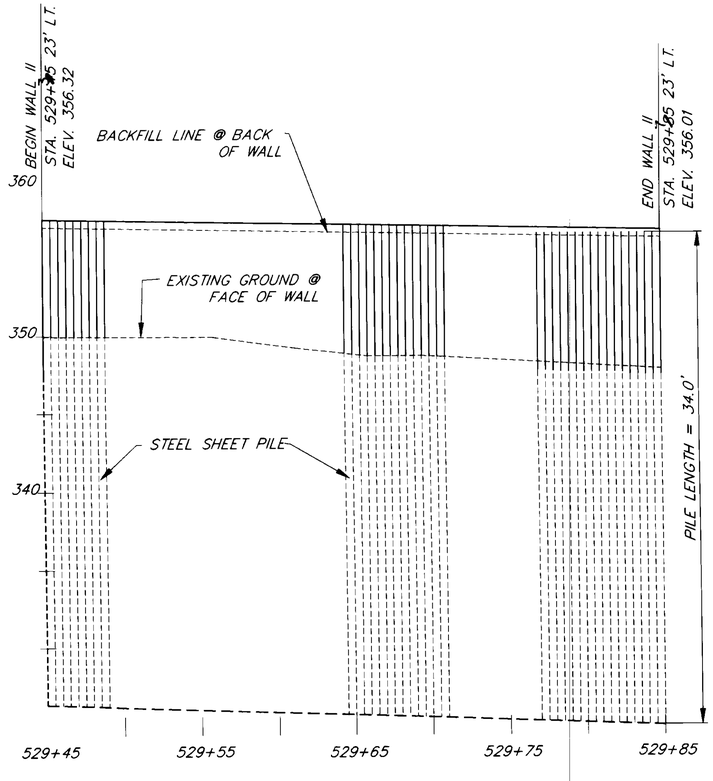
TYPICAL SECTION
SHEET PILE WALL



TYPICAL SHEET PILE WALL PLAN



WALL I PROFILE



WALL II PROFILE

AS-BUILT
B.A. 2-8-96

NOTE: DO NOT SCALE FROM THESE PLANS–USE DIMENSIONS

ENGINEER'S SEAL

STATE OF ALASKA 49th TRACY W. MOORE CE-4932 REGISTERED PROFESSIONAL ENGINEER

BY:	DATE:	DESCRIPTION OF CHANGE:

RECORD OF REVISIONS

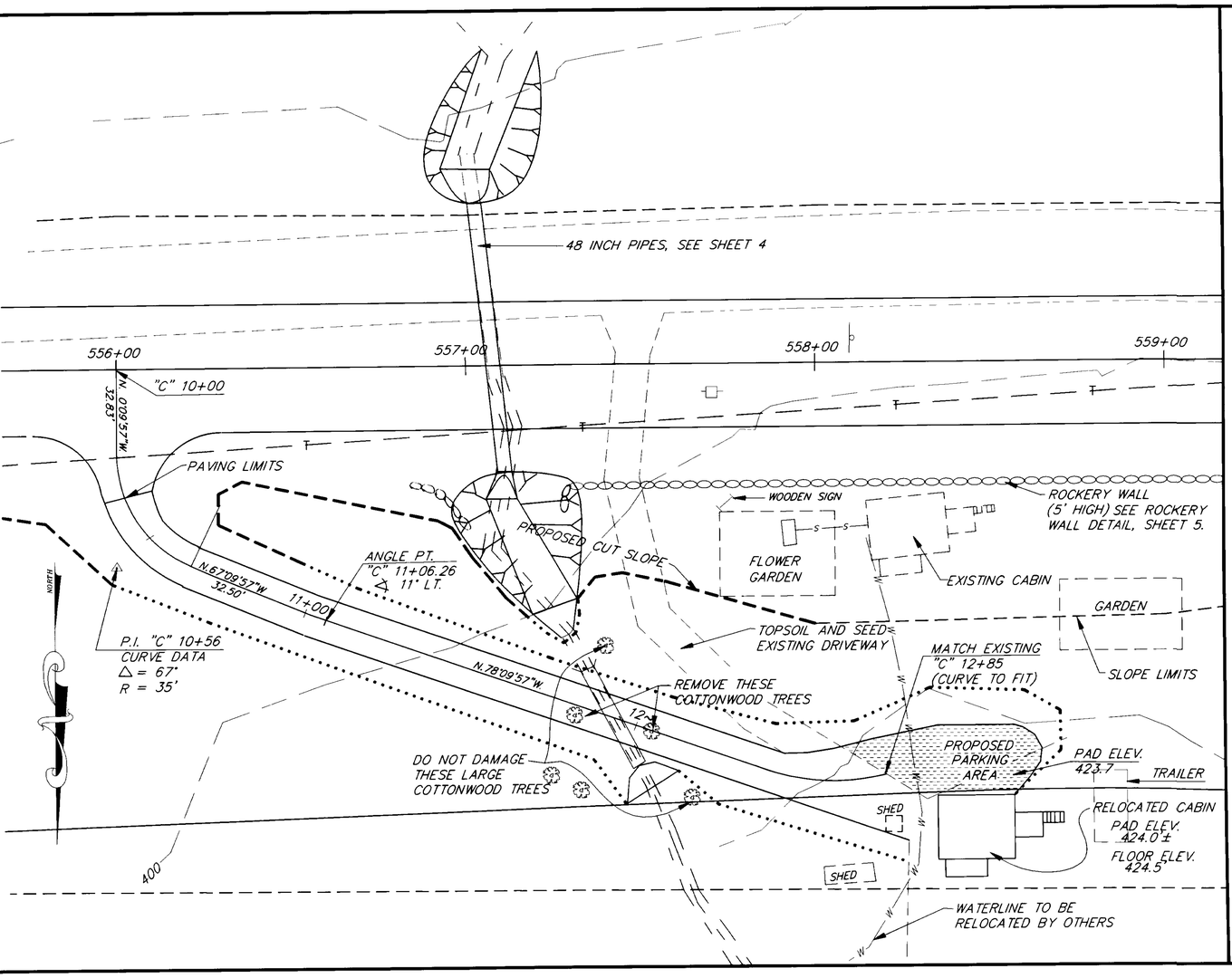
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

HAINES HIGHWAY – LITTLE BOULDER CREEK TO BIG BOULDER CREEK
(31.6 MILE TO 33.8 MILE)
PROJECT NO. NH-F-095-6(13) 71070

SHEET PILE RETAINING WALL DETAILS

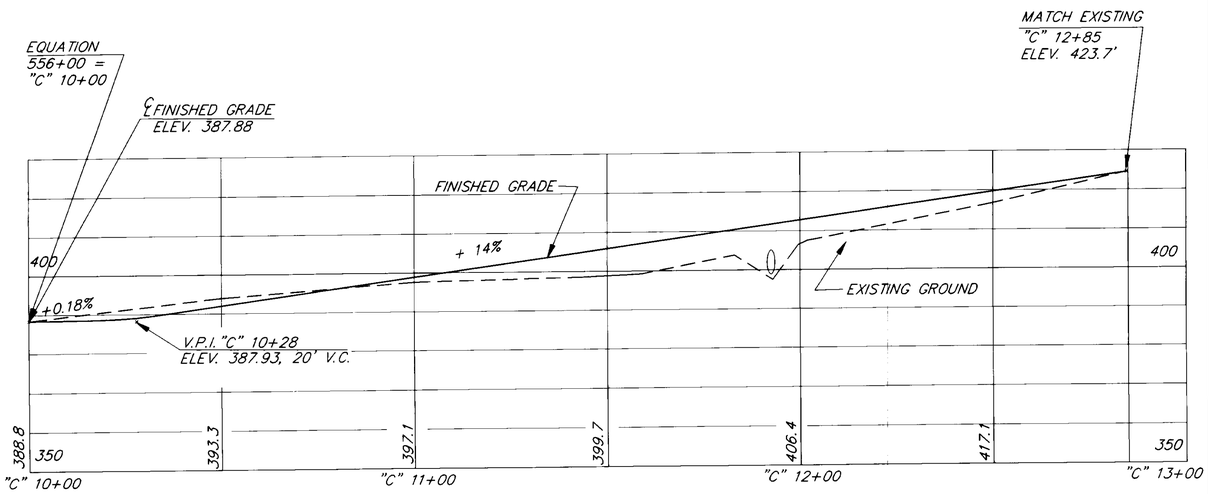
DESIGNED BY: C. HAKARI	PROJECT NO. 71070
DRAWN BY: C. ANDERSON	DATE: SEPT. 1992
CHECKED BY: TRACY W. MOORE	SHEET 16 OF 18

P:\HNS24\DR\WALLS 1=

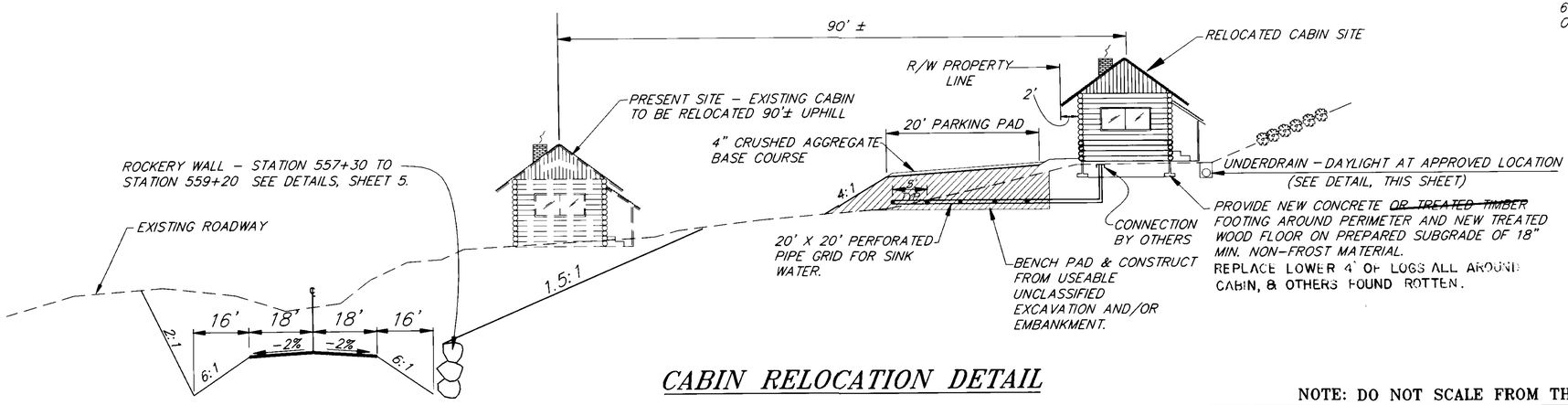


NOTES:

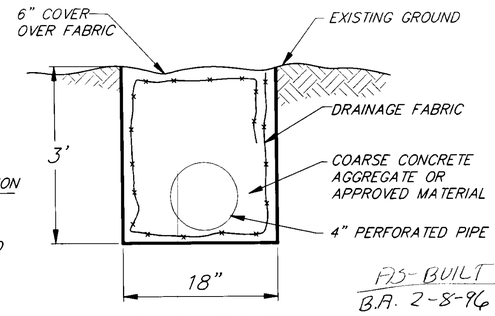
1. SEE SECTION 650 OF THE SPECIFICATIONS FOR DETAILS AND DESCRIPTION OF WORK. THIS SHEET GIVES GENERAL WORK PLAN AND MINOR CHANGES ARE ANTICIPATED.
2. EXISTING SOIL AT THE OLD FLOWER GARDEN SHALL BE STOCKPILED AT NEW AREA AS DIRECTED BY THE ENGINEER..
3. THE CONTRACTOR SHALL SPECIAL DITCH UPSTREAM OF THE CULVERT AND DEEPEN THE CHANNEL TO HELP CONTAIN THE STREAM FLOW WITHIN ITS EXISTING WATERWAY.
4. FIELD VERIFY CONTROL ELEVATIONS FOR CULVERT DESIGN (SHEET 4), INSTALLATION OF THE FOUNDATION AND PARKING PAD. MINOR ADJUSTMENTS MAY BE REQUIRED.



PROPOSED DRIVEWAY PROFILE



CABIN RELOCATION DETAIL



AS-BUILT
B.A. 2-8-96

UNDERDRAIN DETAIL

(ENTINRE LENGTH OF FOUNDATION)

NOTE: DO NOT SCALE FROM THESE PLANS–USE DIMENSIONS

ENGINEER'S SEAL

STATE OF ALASKA 49th TRACY W. MOORE CE-4932 REGISTERED PROFESSIONAL ENGINEER

BY:	DATE:	DESCRIPTION OF CHANGE:

RECORD OF REVISIONS

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

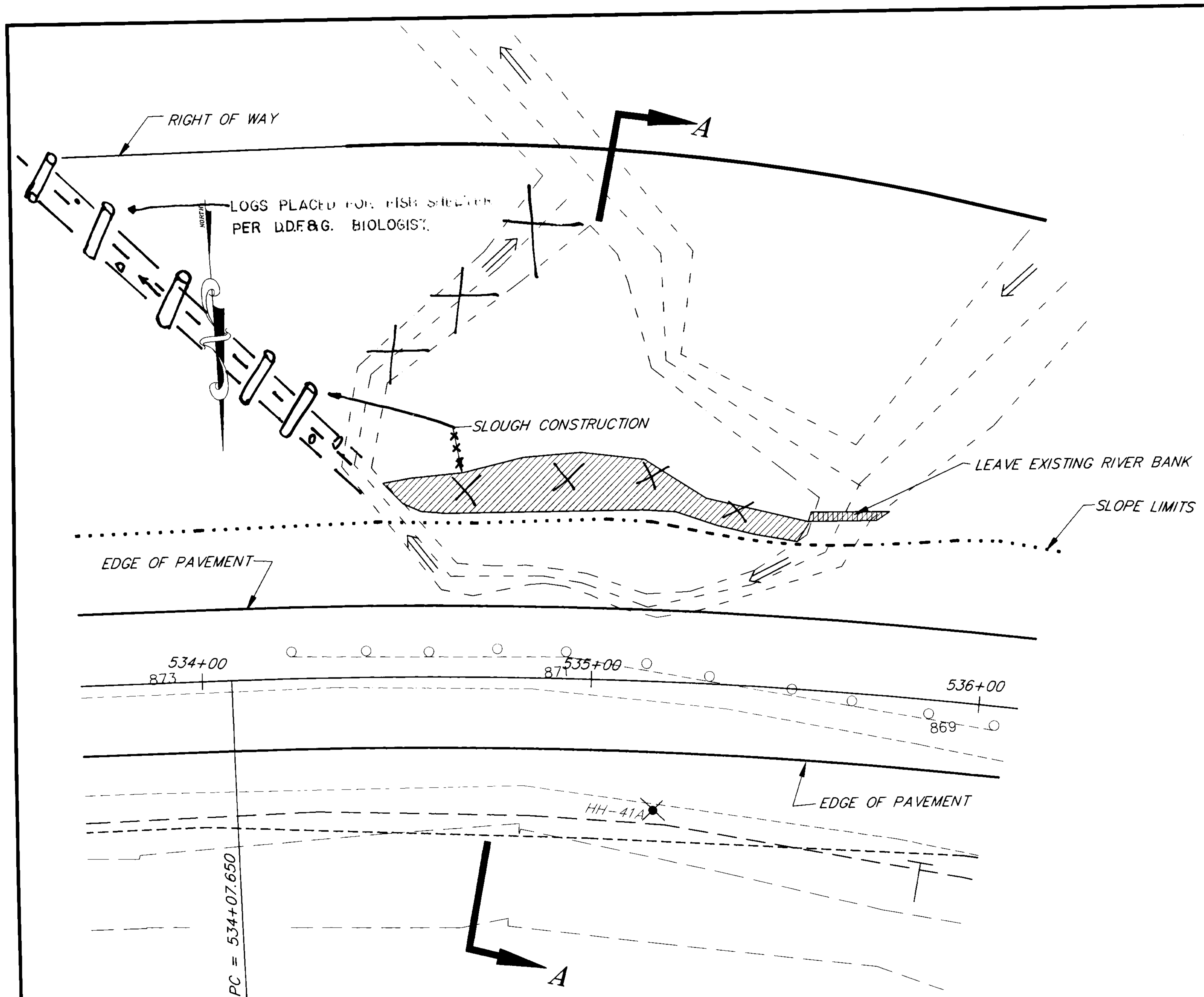
HAINES — ALASKA

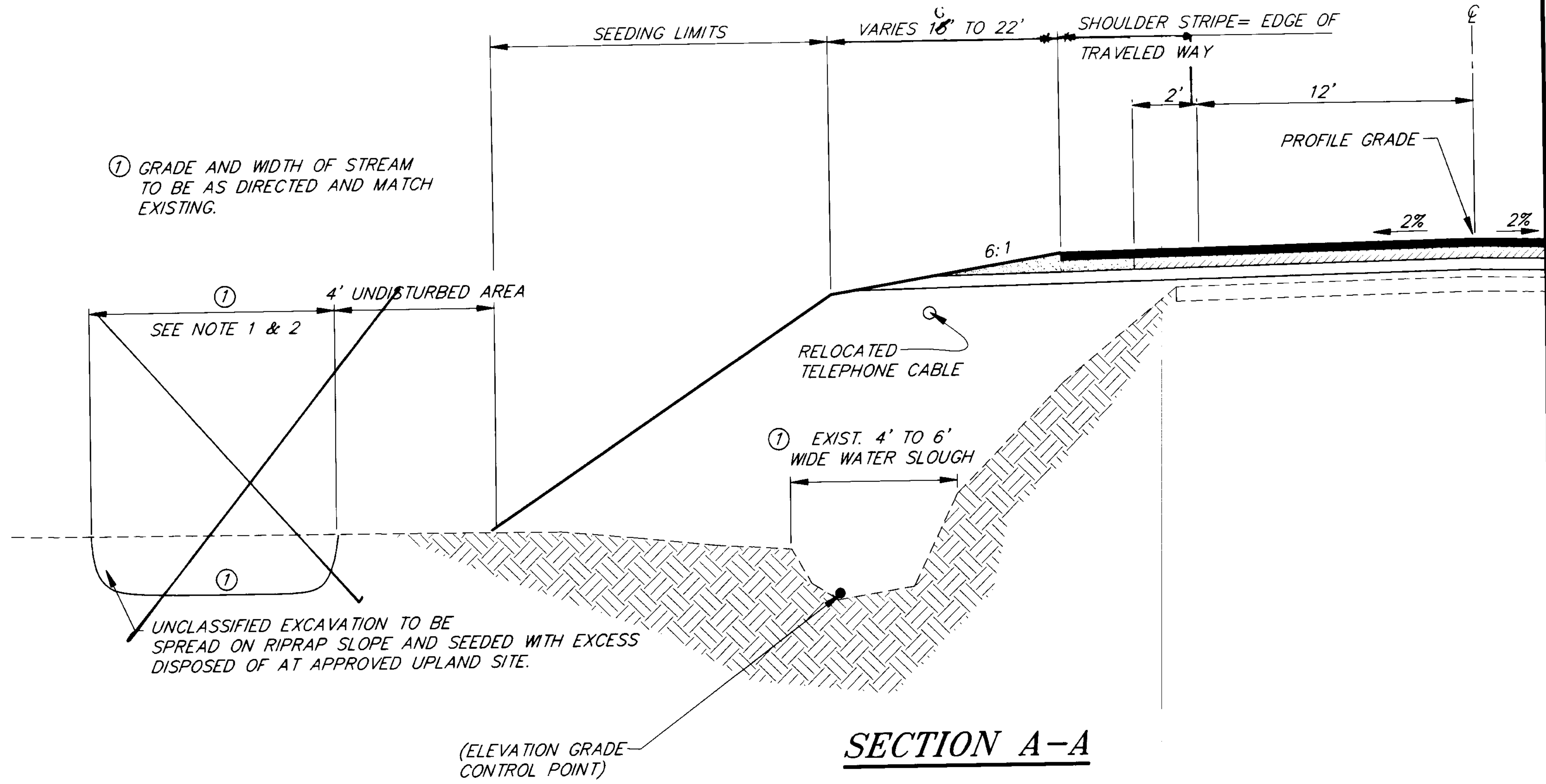
HAINES HIGHWAY – LITTLE BOULDER CREEK TO BIG BOULDER CREEK
(31.6 MILE TO 33.8 MILE)
PROJECT NO. NH-F-095-6(13) 71070

CABIN RELOCATION

DESIGNED BY: TRACY MOORE	PROJECT NO. 71070
DRAWN BY: C. ANDERSON	DATE: SEPT. 1992
CHECKED BY:	SHEET 17 OF 18

P:\HNS24\DR\CABIN 1=20





SECTION A-A

534+40 TO 535+45

NOTES:

1. SECTION A-A SHALL BE CONSTRUCTED WITH THE DOWNSTREAM END OF THE SLOUGH PLUGGED DURING CONSTRUCTION. SLOUGH SECTION RE-DESIGNED BY ADF&G FIELD BIOLOGIST.
2. THE WIDTH, DEPTH AND INSTALLATION OF ROCKS AND TREE IN THE CONSTRUCTED CHANNEL SHALL BE AS DIRECTED. THE MINIMUM SLOUGH WIDTH SHALL BE 6 FEET. THE ENGINEER SHALL STAKE THE CENTERLINE SLOUGH AND BANK LOCATION. THE CONTRACTOR SHALL CONTROL GRADES. THE ENGINEER WILL STAKE 2 ROCK LOCATIONS AND 1 TREE LOCATION FRO INSTALLATION IN THE SLOUGH AREA.
3. TWO AREAS OF THE CHANNEL CONSTRUCTION SHALL BE EXCAVATED TO A DEPTH SUFFICIENT TO PROVIDE WATER DEPTH OF 5 FEET DURING LOW WATER CONDITIONS. LOCATIONS SHALL BE AS DIRECTED.
4. ALL WORK INVOLVED IN THE SLOUGH CONSTRUCTION SHALL BE COMPLETED BETWEEN JUNE 1 AND AUGUST 31. IF NOT DEWATERED DURING THE WORK WINDOW, THE EXISTING SLOUGH SHALL BE SEINED, IF NECESSARY TO REMOVE FISH FROM THE WORK SITE. SILT FENCES SHALL BE INSTALLED TO ISOLATE THE WORK AREA.
5. FOR DETAILS, SEE SECTION 107-1.11 OF THE SPECIAL PROVISIONS FOR ADF&G FISH HABITAT PERMIT.

AS-BUILT
B.A. 2-8-96

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

BY:	DATE:	DESCRIPTION OF CHANGE:

RECORD OF REVISIONS

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

HAINES — ALASKA

HAINES HIGHWAY-LITTLE BOULDER CREEK TO BIG BOULDER CREEK
(31.6 MILE TO 33.8 MILE)
PROJECT NO. NH-F-095-6(13) 71070

MITIGATION DETAILS

DESIGNED BY:	E. CAVAGNARO	PROJECT NO.	70170
DRAWN BY:	C. ANDERSON	DATE:	SEPT. 1992
CHECKED BY:	TRACY W. MOORE	SHEET 18 OF 18	

ENGINEER'S SEAL
STATE OF ALASKA
49th
TRACY W. MOORE
CE-4932
REGISTERED PROFESSIONAL ENGINEER