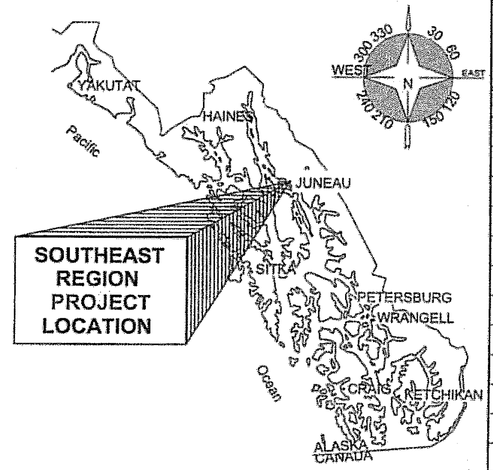
State of Alaska

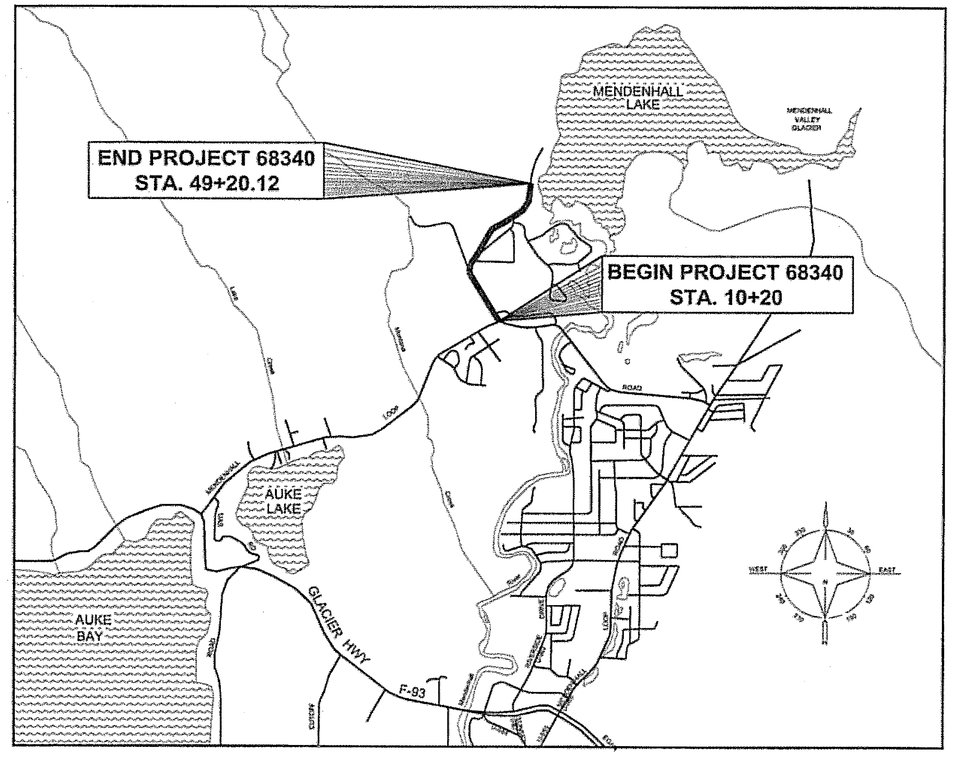
Department of Transportation and Public Facilities

Design and Engineering Services Division

JUNEAU, ALASKA

UPGRADE MONTANA CREEK & SKATERS CABIN ROADS MGS-000S(409) ~ 68340





VICINITY MAP

DESIGN DESIGNATION

B.O.P. (BACK LOOP ROAD) TO E.O.P.

	2006	2026
AVERAGE DAILY TRAFFIC	1900	2320
DESIGN HOURLY VOLUME (10%)	280	340
DESIGN SPEED (MPH)	35	35
PEAK HOURLY FACTOR	0.9	0.9
DIRECTIONAL DISTRIBUTION (ENTERING/LEAVING)	55/45	55/45
PERCENT TRUCK TRAFFIC	5.1%	5.1%
EQUIVALENT AXLE LOAD		400,000
TURNING VEHICLE: WB-50		
VEHICLE LOADING: HS25		

PROJECT SUMMARY

LENGTH OF PAVING	=	3,900 ft. (0.74 mi.)
WIDTH OF ROADWAY PAVING	=	22'-24'
WIDTH OF PATH PAVING	=	8'
LENGTH OF PROJECT	=	3,900 ft. (0.74 mi.)

THE FOLLOWING STANDARD DRAWINGS APPLY TO THIS PROJECT:

A-1	D-04.21	I-20.13	M-23.12	S-20.10	T-22.03
C-04.12	E-00.00	L-03.10	S-00.10	S-31.00	
C-05.10	E-09.00	L-23.01	S-01.00	T-20.02	
D-01.02	E-13.00	M-20.12	S-05.01	T-21.02	

INDEX

SHEET NO.	DESCRIPTION
A1	TITLE SHEET
B1	TYPICAL SECTION
D1-D2	SUMMARIES
F1-F8	PLAN & PROFILE SHEETS
J1-J3	MISCELLANEOUS DETAILS
S1-S2	TRAFFIC CONTROL PLANS
P1	EROSION & SEDIMENT CONTROL PLAN DETAILS

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE_____ Date_____

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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

STATE OF ALASKA 49TH REGISTERED PROFESSIONAL ENGINEER Russell P. Kraemer CE-10478 2/9/06

APPROVED: 2/9/06
REGIONAL PRE-CONSTRUCTION ENGINEER DATE
PATRICK J. KEMP, P.E.

APPROVED: 2/9/06
REGIONAL DIRECTOR DATE
MALCOLM A. MENZIES

CERTIFIED TRUE & CORRECT AS-BUILT OF ACTUAL FIELD CONDITION:

CONSTRUCTION PROJECT MANAGER DATE

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	MGS-000S(409)/68340	2006	A1	43

State of Alaska

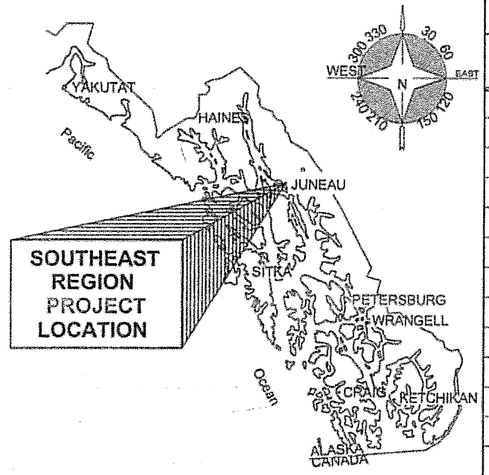
Department of Transportation and Public Facilities

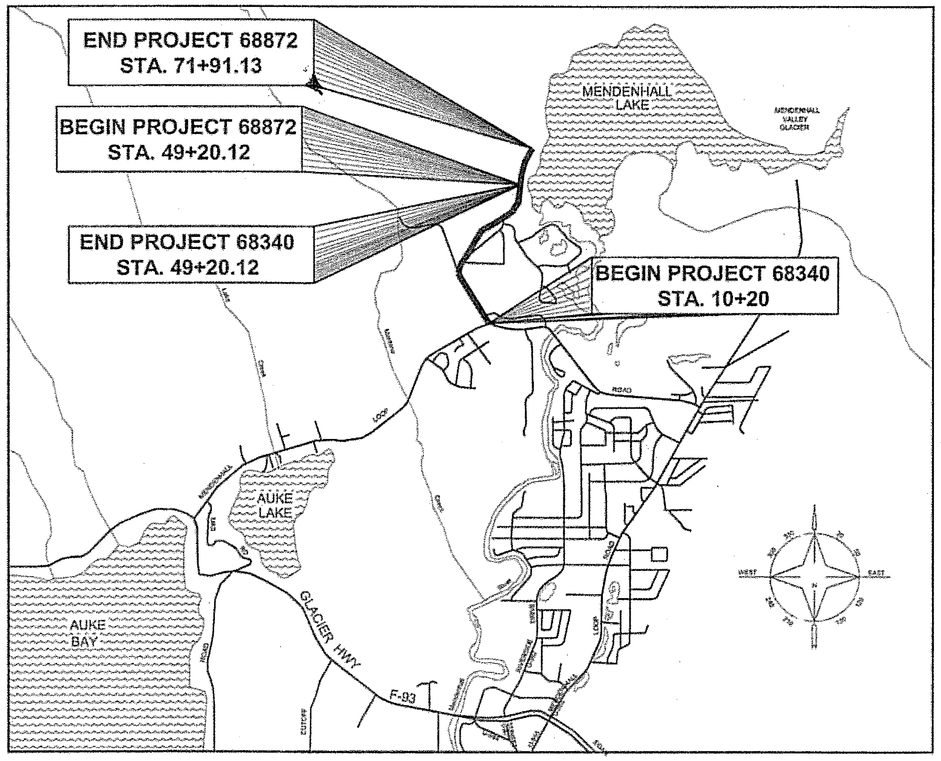
Design and Engineering Services Division

JUNEAU, ALASKA

UPGRADE MONTANA CREEK & SKATERS CABIN ROADS
MGS-000S(409) ~ 68340

WEST GLACIER TRAIL PARKING LOT - STAGE I & U.S. FOREST SERVICE ROAD 8453 - STAGE II
68872





VICINITY MAP

As-Built Plans

Contractor: Miller Construction Co., Ltd.
Project Engineer: Steve Mielke
Begin Date: May 1, 2006
End Date: November 7, 2006

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE [signature] Date 6/09

INDEX

SHEET NO.	DESCRIPTION
AA1	COMBINED TITLE SHEET
AA2	COMBINED CONTROL DIAGRAM
AA3	COMBINED MONUMENT TABLES
CC1	COMBINED ESTIMATE OF QUANTITIES
UPGRADE MONTANA CK & SKATERS CABIN ROADS	
A1	TITLE SHEET
B1	TYPICAL SECTION
D1-D2	SUMMARIES
F1-F8	PLAN & PROFILE SHEETS
J1-J5	MISCELLANEOUS DETAILS
P1	EROSION & SEDIMENT CONTROL PLAN
S1-S2	TRAFFIC CONTROL PLANS
WEST GLACIER TRAIL PARKING LOT - STAGE I	
Q1	TITLE SHEET
R1	TYPICAL SECTION
S1	SUMMARIES
T1-T3	PLAN SHEETS
U1-U2	PARKING LOT GRADING PLAN
V1-V2	PARKING LOT SIGNING & STRIPING PLAN
W1	PARKING LOT PROFILES AND SECTIONS
X1-X2	MISCELLANEOUS DETAILS
U.S. FOREST SERVICE ROAD 8453 - STAGE II	
QQ1	TITLE SHEET
RR1	TYPICAL SECTION
SS1	SUMMARIES
TT1-TT3	PLAN & PROFILE SHEETS

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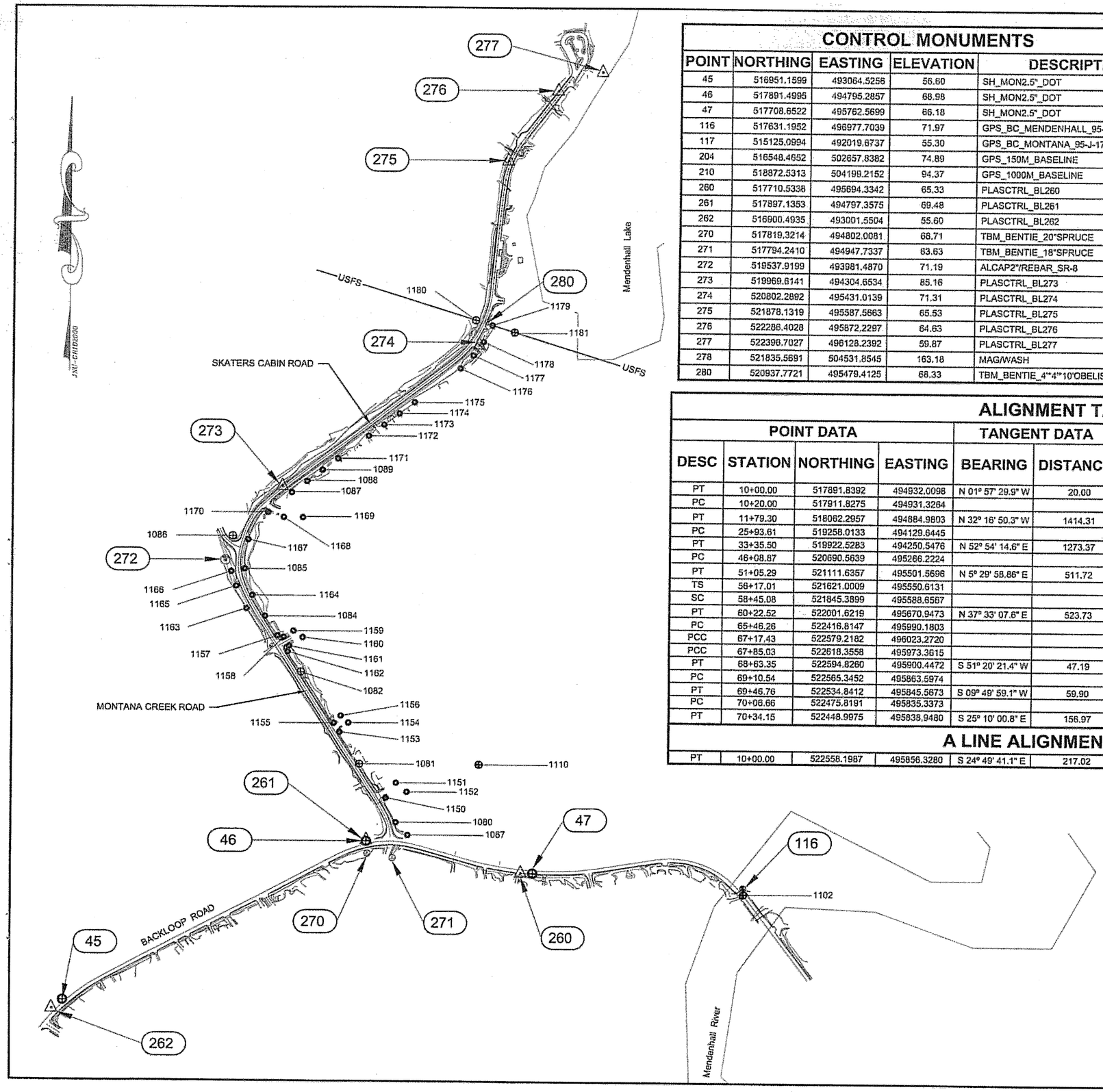
ALASKA	MGS-000S(409)/68340			
ALASKA	68872	2006	AA1	43



CONTROL MONUMENTS

POINT	NORTHING	EASTING	ELEVATION	DESCRIPTION
45	516951.1599	493064.5256	56.60	SH_MON2.5"_DOT
46	517891.4995	494795.2857	68.98	SH_MON2.5"_DOT
47	517708.6522	495762.5699	66.18	SH_MON2.5"_DOT
116	517631.1952	496977.7039	71.97	GPS_BC_MENDENHALL_95-J-16
117	515125.0994	492019.6737	55.30	GPS_BC_MONTANA_95-J-17
204	516548.4652	502657.8382	74.89	GPS_150M_BASELINE
210	518872.5313	504199.2152	94.37	GPS_1000M_BASELINE
260	517710.5338	495694.3342	65.33	PLASCTRL_BL260
261	517897.1353	494797.3575	69.48	PLASCTRL_BL261
262	516900.4935	493001.5504	55.60	PLASCTRL_BL262
270	517819.3214	494802.0081	68.71	TBM_BENTIE_20"SPRUCE
271	517794.2410	494947.7337	63.63	TBM_BENTIE_18"SPRUCE
272	519537.9199	493981.4870	71.19	ALCAP2"/REBAR_SR-8
273	519969.6141	494304.6534	85.16	PLASCTRL_BL273
274	520802.2892	495431.0139	71.31	PLASCTRL_BL274
275	521878.1319	495587.5663	65.53	PLASCTRL_BL275
276	522286.4028	495872.2297	64.63	PLASCTRL_BL276
277	522398.7027	496128.2392	59.87	PLASCTRL_BL277
278	521835.5691	504531.8545	163.18	MAG/WASH
280	520937.7721	495479.4125	68.33	TBM_BENTIE_4"4"10'OBELISK

ALIGNMENT TABLE

POINT DATA				TANGENT DATA		CURVE DATA				
DESC	STATION	NORTHING	EASTING	BEARING	DISTANCE	NORTHING CENTER	EASTING CENTER	RADIUS	LENGTH	Δ
PT	10+00.00	517891.8392	494932.0098	N 01° 57' 29.9" W	20.00					
PC	10+20.00	517911.8275	494931.3264			517901.5416	494630.5022	301.00	159.29	30° 19' 20.3"
PT	11+79.30	518062.2957	494884.9803	N 32° 16' 50.3" W	1414.31					
PC	25+93.61	519258.0133	494129.6445			519524.5125	494551.5202	499.00	741.89	85° 11' 04.9"
PT	33+35.50	519922.5283	494250.5476	N 52° 54' 14.6" E	1273.37					
PC	46+08.87	520690.5639	495266.2224			521169.1399	494904.3316	600.00	496.42	47° 24' 15.7"
PT	51+05.29	521111.6357	495501.5696	N 5° 29' 58.86" E	511.72					
TS	56+17.01	521621.0009	495550.6131							
SC	58+45.08	521845.3899	495588.6567			521684.6907	496083.2028	520.00	177.44	19° 33' 03.4"
PT	60+22.52	522001.6219	495670.9473	N 37° 33' 07.6" E	523.73					
PC	65+46.26	522416.8147	495990.1803			522533.2958	495833.5867	195.16	171.17	50° 15' 10.0"
PCC	67+17.43	522579.2182	496023.2720			522563.4258	495970.5881	55.00	67.60	70° 25' 23.0"
PCC	67+85.03	522618.3558	495973.3615			522510.4932	495967.9156	108.00	78.32	41° 33' 03.9"
PT	68+63.35	522594.8260	495900.4472	S 51° 20' 21.4" W	47.19					
PC	69+10.54	522565.3452	495863.5974			522526.3023	495894.8328	50.00	36.22	41° 30' 22.2"
PT	69+46.76	522534.8412	495845.5673	S 09° 49' 59.1" W	59.90					
PC	70+06.66	522475.8191	495835.3373			522468.1341	495879.6762	45.00	27.49	34° 59' 60.0"
PT	70+34.15	522448.9975	495838.9480	S 25° 10' 00.8" E	156.97					

A LINE ALIGNMENT TABLE

PT	10+00.00	522558.1987	495856.3280	S 24° 49' 41.1" E	217.02					

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ADDENDUM NUMBER

ATTACHMENT NUMBER

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PE _____ Date 6/09

JNU-MONTANA CK/SKATERS CABIN ROAD IMPROVEMENTS
STP-000S(520) ~ 68340 &
WEST GLACIER TRAIL PARKING LOT - STAGE I
U.S. FORST SERVICE ROAD 8453 - STAGE II
PROJECT NO. 68872

Control Diagram

STATE OF ALASKA 49TH Timothy Reed No. 10613 REGISTERED PROFESSIONAL LAND SURVEYOR
2/14/06

DESIGNED BY: T. REED
DRAWN BY: OSBURN/BENNETT

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

JNU-MONTANA CK/SKATERS CABIN ROAD IMPROVEMENTS

Control Diagram

PROJECT DESIGNATION NUMBER
MGS-000S(409)~68340 / 68872

STATE	YEAR
ALASKA	2006
SHEET NUMBER	TOTAL SHEETS
AA2	43

PROPERTY MONUMENTS

POINT	NORTHING	EASTING	DESCRIPTION
1067	517927.8372	495036.3985	PLASCAP_BEAN
1080	518001.8756	494965.9035	PLASCAP_BEAN
1081	518343.3534	494751.6877	ALCAP3.25"_1"IP_BEAN_L-6LA_ROW
1082	518883.1780	494414.1978	ALCAP3.25"_DIGGER_TONER/NORDLING_S2170C3
1084	519209.0430	494208.2670	PLASCAP_MENZIES
1085	519486.2539	494091.4217	PLASCAP_MENZIES
1086	519678.0811	494022.7566	ALCAP3.25"_DIGGER_NO_MARKINGS
1087	519932.7628	494356.9321	REBAR
1088	519998.8233	494444.4288	PLASCAP_BEAN
1089	520064.7535	494532.1943	PLASCAP_RWB_3088
1102	517593.3098	496979.0347	BLM_BC3"_NO-MARKING
1110	518344.1408	495446.2432	GLO_BC2.5"_C1-S1796/C4-S2091
1150	518145.3987	494906.5132	PLASCAP_BEAN
1151	518233.8393	494965.7948	PLASCAP/REBAR#4_BROWN
1152	518180.6945	495028.6963	PLASCAP_BEAN
1153	518530.3248	494636.9909	REBAR
1154	518585.2764	494688.0234	PLASCAP_BEAN
1155	518582.7292	494604.2003	ALCAP1.5"_PUNCH
1156	518626.0299	494644.0980	PLASCAP_BEAN
1157	519094.6974	494280.3992	PLASCAP_1410S
1158	519086.7827	494314.9181	PLASCAP_1410S
1159	519122.8427	494372.1853	PLASCAP_1410S
1160	519085.4316	494425.2343	PLASCAP_1410S
1161	519036.1912	494346.7365	PLASCAP_1410S
1162	519001.6078	494339.0041	PLASCAP_1410S
1163	519253.4244	494102.2410	PLASCAP_KIRCHNER
1164	519330.9268	494134.4836	PLASCAP_1410S
1165	519384.8203	494043.3233	REBAR_BENT_SHOT-AT-BASE
1166	519470.2407	494014.7511	REBAR
1167	519656.9273	494110.0910	PLASCAP_1410S
1168	519787.9748	494312.0824	PLASCAP_BEAN
1169	519787.7738	494422.0800	PLASCAP_BEAN
1170	519816.8236	494223.4634	PLASCAP_BEAN
1171	520131.4284	494619.9585	PLASCAP
1172	520264.3722	494795.3728	PLASCAP
1173	520330.4135	494883.1850	PLASCAP_BROWN
1174	520396.8151	494971.0771	PLASCAP_BROWN
1175	520463.1839	495058.5023	PLASCAP_BROWN
1176	520663.5759	495321.4420	PLASCAP_BEAN
1177	520740.2842	495396.5217	PLASCAP_BEAN
1178	520820.2020	495453.6611	PLASCAP_BEAN
1179	520917.7349	495504.1362	PLASCAP_BEAN
1180	520947.6421	495408.2520	ALCAP3.5"_C8_S2079/BRIGADOON/TONGASS_UNI
1181	520877.5992	495632.8528	GLO_BC2.5"_C3_S2079/C12_S2385

HORIZONTAL CONTROL

HORIZONTAL CONTROL FOR THIS PROJECT IS BASED ON THE DOT/PF 2000 JUNEAU GRID

THE DOT/PF JUNEAU GRID-2000 SYSTEM IS A LOCAL GROUND COORDINATE SYSTEM BASED AT USC&GS FIRST ORDER CONTROL STATION EDDIE. IT RELATES TO AKSPC ZONE 1 NAD83 THROUGH THE FOLLOWING PARAMETERS:
ZONE = NAD83 AKSPC ZONE 1
GRID SCALE = 0.999928875
CONVERGENCE = -0°45'27.26"
TRANSLATION ABOUT USC&GS POINT EDDIE AS FOLLOWS:
AKSPC NORTHING = 2383469.17310 FT US (726482.8570M)
AKSPC EASTING = 2512570.06318 FT US (765832.8870M)
LOCAL NORTHING = 500000.0000 FT US (152400.3048M)
LOCAL EASTING = 500000.0000 FT US (152400.3048M)

PROJECT CONTROL WAS ESTABLISHED WITH LEICA 530 GPS UNITS AND LEICA 1101 TOTAL STATIONS. SKI PRO STATIC GPS PROCESSING PROVIDED THE VECTORS AND STARNET LEAST SQUARES ADJUSTMENT WAS USED TO TIE CONVENTIONAL MEASUREMENTS TOGETHER WITH GPS MEASUREMENTS. PAIRS OF GPS POINTS WERE ESTABLISHED ALONG THE PROJECT AND CONVENTIONAL TRAVERSE ADJUSTED BETWEEN. ALL UNITS ARE US SURVEY FEET.

PROJECT SPECIFIC BASIS OF HORIZONTAL CONTROL

95-J-16 : DOT 2" BRASS CAP LOCATED IN THE NORTHWEST CORNER OF THE MENDENHALL RIVER BRIDGE ABUTMENT.

NAD83(1992) LAT 58°24'16.2318"N LON 134°35'05.9897"W

JNU-GRID N 517631.1952' E 496977.7039'
AKSPC N 2401137.5304' E 2509781.3448'

95-J-17 : DOT 2" BRASS CAP LOCATED IN THE NORTHEAST CORNER OF THE MONTANA CREEK BRIDGE ABUTMENT.
NAD83 (1992) LAT 58°23'51.5231"N LON 134°36'39.0147"W
JNU-GRID N 515125.0994' E 492019.6737'
AKSPC N 2398697.3810' E 2504790.9679'

VERTICAL CONTROL

THE VERTICAL DATUM FOR JNU GRID-2000 IS MLLW GASTINEAU CHANNEL TIDAL DATUM BASED ON THIRD ORDER LEVELS AND SUPPLEMENTED WITH GEOID '99 MODELED HEIGHTS. LEVELS WERE RUN FROM THE NOS BENCHMARK 2210C LOCATED DOWNTOWN, HAVING A PUBLISHED ELEVATION OF 29.40 FEET ABOVE MLLW TO USC&GS FIRST ORDER HORIZONTAL CONTROL STATION EDDIE AND ON TO AUKE BAY AND AROUND LOOP/BACKLOOP ROAD. THE TIDAL EPOCH IS 1960-1978, BUT THIS EPOCH HAS BEEN UPDATED WITH A 5 YEAR OBSERVATION PERIOD FROM JAN '94 TO DEC '98 PUBLISHED NOV '99. EDDIE HAS AN OBSERVED ELEVATION OF 26.52FT ABOVE MLLW. ELLIPSOID ELEVATION OF EDDIE MODIFIED TO 40.64FT TO ADJUST GEOID'99 TO OUR LOCAL TIDAL DATUM OF MLLW. GEOID'99 MODELED HEIGHTS HAVE PROVEN BETTER THAT 0.1' ABSOLUTE ACCURACY COMPARED WITH LEVELED VALUES IN THE JUNEAU AREA.

THE PROJECT SPECIFIC BASIS OF VERTICAL CONTROL IS 95-J-16 HAVING A LEVEL OBSERVED ELEVATION OF 71.97 FEET ABOVE MLLW.

NOTE:
WHETHER LISTED OR NOT, ALL MONUMENTS OR PROPERTY MARKERS OR ACCESSORIES WHICH WILL BE DISTURBED OR BURIED SHALL BE REFERENCED PRIOR TO BEING DISTURBED AND RE-ESTABLISHED IN THEIR ORIGINAL POSITION AND A RECORD OF MONUMENT FORM IN ACCORDANCE WITH A.S. 34.65.040 SHALL BE SUBMITTED TO THE CONSTRUCTION ENGINEER FOR REVIEW PRIOR TO RECORDING.
COORDINATE VALUES LISTED ARE FOR INFORMATIONAL PURPOSES AND SHOULD BE USED TO RESET MONUMENTS ONLY AS A LAST RESORT.

IF ANY PAIR OF CONTROL POINTS DISAGREES FROM PUBLISHED VALUE BY MORE THAN 1;10,000 HORIZONTALLY OR VERTICALLY THEN A THIRD NETWORK POINT MUST BE TIED TO ASCERTAIN WHICH POINT IS IN ERROR OR HAS BEEN DISTURBED.

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STP-000S(520) ~ 68340 &
WEST GLACIER TRAIL PARKING LOT - STAGE I
U.S. FORST SERVICE ROAD 8453 - STAGE II
PROJECT NO. 68872

Monument Tables

STATE OF ALASKA
49 TH
Timothy Reed
No. 10613
REGISTERED PROFESSIONAL LAND SURVEYOR
2/14/06

DESIGNED BY: T. REED
DRAWN BY: OSBURN/BENNETT

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

JNU-MONTANA CK/SKATERS CABIN ROAD IMPROVEMENTS

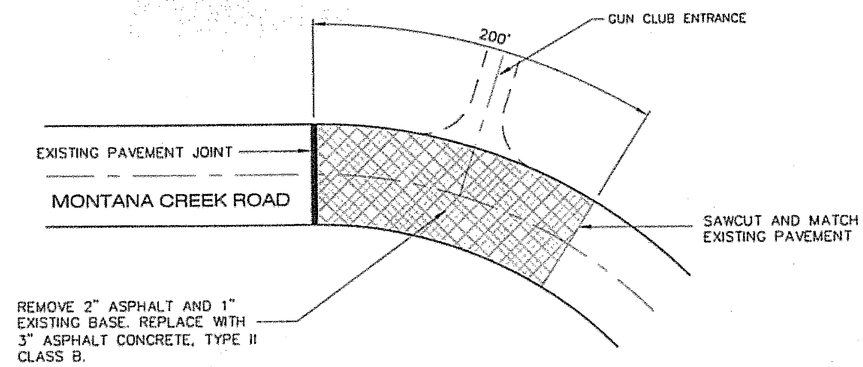
Monument Tables

PROJECT DESIGNATION NUMBER
MGS-000S(409)~68340 / 68872

STATE	YEAR
ALASKA	2006
SHEET NUMBER	TOTAL SHEETS
AA3	43

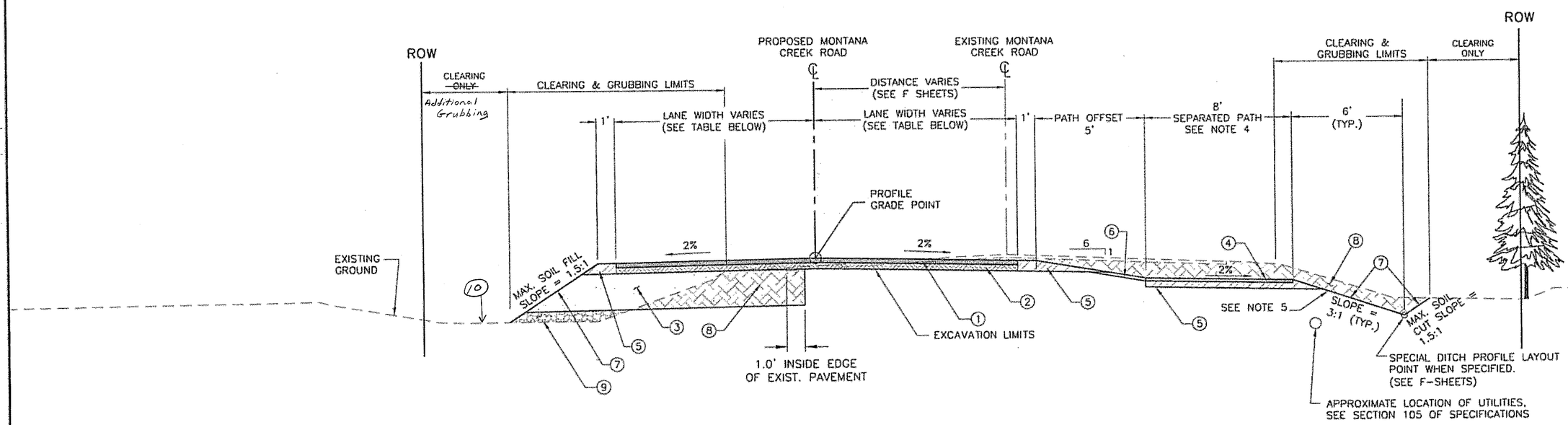
TYPICAL SECTION NOTES:

1. EXISTING ROAD IS COMPOSED OF ¾-INCH BITUMINOUS SURFACE TREATMENT ("CHIP SEAL") OVERLAYING A 4"-6" SUBBASE OF RECYCLED ASPHALT PAVEMENT (R.A.P.).
2. SEED ALL SOIL SLOPES. MULCH 2:1 OR FLATTER, MATTING MAY BE REQUIRED FOR SLOPES STEEPER THAN 2:1.
3. THE EXISTING CHIP SEAL AND A PORTION OF THE EXISTING SUBBASE MATERIAL SHALL BE GROUND UP AND MIXED WITH ADDITIONAL AGGREGATE BASE COURSE, AS APPROVED, AND SPREAD UNIFORMLY FULL WIDTH OVER THE ROADWAY. OIL EMULSION, WATER AND CEMENT WILL BE ADDED DURING THE MIXING PROCESS AND COMPACTED, ALL IN ACCORDANCE WITH SECTION 308.
4. GRADE OF SEPARATED PATH WILL TAPER TO MATCH EXISTING ELEVATIONS AT INTERSECTIONS AND DRIVEWAYS. MAXIMUM LONGITUDINAL GRADE OF THE SEPARATED PATH SHALL BE 5%.
5. ADJUST CUT AND FILL SLOPES TO STAY WITHIN RIGHT-OF-WAY.



Spot Repair Detail

PAVING LIMITS ARE APPROXIMATELY 100' BEYOND THE ENTRANCE TO THE JUNEAU GUN CLUB. TOTAL LENGTH OF PAVING IS 200'.



Montana Creek Road Typical Section

Legend

1. 3" ASPHALT CONCRETE, TYPE II, CLASS B
2. 4" CRUSHED ASPHALT BASE COURSE
3. 24" BORROW, TYPE A
4. 2" ASPHALT SIDEWALK
5. 4" AGGREGATE BASE COURSE, GRADING D-1
6. 2" AGGREGATE BASE COURSE, GRADING D-1
7. SEEDING (SEE NOTE 2)
8. UNCLASSIFIED EXCAVATION
9. USEABLE EXCAVATION, SELECTED MATERIAL TYPE C.
10. Grade/Ditch as Required to Drain, CO 1

LANE WIDTH TABLE

FROM STATION	TO STATION	WIDTH (FT)
B.O.P	29+75	12
29+75	30+00	TRANSITION
30+00	E.O.P	11

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TAB: TYPICALS

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE ____ Date 6/07

JNU-MONTANA CK/SKATERS CABIN ROAD IMPROVEMENTS
STP-000S(520) ~ 68340

Typical Section

STATE OF ALASKA 49th Russell P. Kroemer CE-10478 REGISTERED PROFESSIONAL ENGINEER
2/16/06

DESIGNED BY: J. O. / C.I.
DRAWN BY: B.B./D.S./L.R./R.G.

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

JNU-MONTANA CK/SKATERS CABIN ROAD IMPROVEMENTS

Typical Section

PROJECT DESIGNATION NUMBER
MGS-000S(409)~68340

STATE	YEAR
ALASKA	2006
SHEET NUMBER	TOTAL SHEETS
B1	43

ESTIMATE OF QUANTITIES - BASIC BID
MONTANA CREEK & SCATERS CABIN ROADS

Item No	Pay Item	Pay Unit	Quantity	
201(3B)	Clearing and Grubbing	Lump Sum	ALL REQ'D	
202(10)	Single Mail Box Installation	Each	3	
203(3)	Unclassified Excavation	Cubic Yard	~~3390~~	3,379.70
203(6)	Borrow, Type A	Ton	~~4190~~	9,184.27
301(1)	Aggregate Base Course, Grading D-1	Ton	~~3550~~	4,277.18
308(1)	Crushed Asphalt Base Course	Square Yard	~~10260~~	10,739.40
308(2)	CSS-1 Asphalt for Base Course	Ton	~~80~~	79.80
308(3)	Portland Cement	Ton	~~25~~	23.33
401 (1)	Asphalt Concrete, Type II, Class B	Ton	~~2070~~	2134.37
401 (2)	Asphalt Cement, Grade PG 58-28	Ton	~~124~~	116.16
401(6)	Asphalt Price Adjustment	Contingent Sum	ALL REQ'D	-$28,157.70
401(11)	Asphalt Fire Hydrant Pad	Each	~~4~~	5
402 (1)	STE-1 Asphalt For Tack Coat	Ton	~~2~~	2.14
603(1)	18 Inch CSP	Linear Foot	~~37~~	254.50
603(2-1)	28 x 20 Inch CSP Arch	Linear Foot	~~318~~	322
603(2-2)	35 x 24 Inch CSP Arch	Linear Foot	~~140~~	126
603(2-3)	42 x 29 Inch CSP Arch	Linear Foot	~~36~~	40
604(4)	Adjust Existing Manhole	Each	~~2~~	3
608 (3)	Asphalt Sidewalk	Square Yard	~~3470~~	3,638.80
609 (7)	Curb Extension	Lump Sum	ALL REQ'D	Ø
615 (1)	Standard Sign	Square Foot	165	169.90
618 (1)	Seeding	Acre	~~2~~	2.185
619(2)	Matting	Square Yard	~~650~~	904
627(10)	Adjustment of Valve Box	Each	~~14~~	20
633 (1)	Silt Fence	Linear Foot	~~590~~	306
635 (2)	Insulation Board	Sheet	~~6~~	3
639(1)	Residence Driveway	Each	2	
639(2)	Commercial Driveway	Each	2	
640 (1)	Mobilization & Demobilization	Lump Sum	ALL REQ'D	
641 (1)	Erosion and Pollution Control Administration	Lump Sum	ALL REQ'D	
641 (2)	Temporary Erosion & Pollution Control	Contingent Sum	ALL REQ'D	Ø
641 (5)	Temporary Check Dam	Each	~~20~~	6
642 (1)	Construction Surveying	Lump Sum	ALL REQ'D	
642 (3)	Three Person Survey Party	Hour	~~48~~	60.75
643 (2)	Traffic Maintenance	Lump Sum	ALL REQ'D	
643 (3)	Permanent Construction Signing	Lump Sum	ALL REQ'D	
643 (15)	Flagging	Contingent Sum	ALL REQ'D	$40,242.00
643 (25)	Traffic Control	Contingent Sum	ALL REQ'D	$10,043.10
660(3)	Highway Lighting System Complete	Lump Sum	ALL REQ'D	
670 (1)	Painted Traffic Markings	Lump Sum	ALL REQ'D	

New Items Established by Change Order

201(2A)	~~6~~	~~450~~	Additional Grubbing, CO 1	Acre	$16,500.00	0.42	$6,930.00
203(19)	↓	↓	Special Ditching, CO 1	L.S.	6,087.45	All Req'd.	$6,087.45
608(3)			Asphalt Sidewalk Realignment, CO 1	L.S.	6,050.00	All Req'd.	$6,050.00
609(8)			Modified Curb Extension, CO 1	L.S.	2,300.00	All Req'd.	$2,300.00
660(14)	~~6~~	~~450~~	Relocate & Replace Existing J-Box, CO 1	L.S.	3,272.00	All Req'd.	$3,272.00

BASIS OF ESTIMATE

ITEM NO.	ITEM	ESTIMATING FACTOR
201 (3B)	CLEARING & GRUBBING	3 ACRES
201 (3B-A)	CLEARING & GRUBBING	1 ACRE
201 (3B-B)	CLEARING & GRUBBING	0.5 ACRES
202 (1)	REMOVAL OF STRUCTURES & OBSTRUCTIONS	SEE SUMMARY SHEET D1
203 (6)	BORROW, TYPE A	1.85 TON/C.Y.
301 (1)	AGGREGATE BASE COURSE, GRADING D-1	1.95 TON/C.Y.
308(2)	CSS-1 ASPHALT FOR BASE COURSE	1.7 GAL/S.Y. & 243 GAL/TON
308(3)	PORTLAND CEMENT	4.5 LBS/S.Y.
401 (1)	ASPHALT CONCRETE, TYPE II, CLASS B	117 LBS/S.Y./IN
401 (2)	ASPHALT CEMENT, GRADE PG 58-28	6.0% OF ITEM 401 (1) & 243 GAL/TON
402 (1)	STE-1 ASPHALT FOR TACK COAT	0.05 GAL/S.Y. & 243 GAL/TON
670 (1)	PAINTED TRAFFIC MARKINGS	SEE STRIPING NOTE SHEET F1
692 (1A)	USFS PATHWAY	SEE SHEET R7 OF 43

EST. OF QUANTITIES - ADDITIVE ALTERNATE A
WEST GLACIER TRAIL PARKING LOT - STAGE I

Item No	Pay Item	Pay Unit	Quantity	
201(3B-A)	Clearing and Grubbing	Lump Sum	ALL REQ'D	
203(3A)	Unclassified Excavation	Cubic Yard	~~1090~~	997.60
203(6A)	Borrow, Type A	Ton	~~4440~~	4,647.17
301(1A)	Aggregate Base Course, Grading D-1	Ton	~~1270~~	1,340.85
401 (1A)	Asphalt Concrete, Type II, Class B	Ton	~~620~~	664.55
401 (2A)	Asphalt Cement, Grade PG 58-28	Ton	~~37~~	36.55
401(10A)	Asphalt Speed Bump	Each	2	
603(1-24A)	24 Inch CSP	Linear Foot	~~43~~	Ø
603(1-48A)	48 Inch CSP	Linear Foot	~~6~~	Ø
603(21-18A)	18 Inch Corrugated Polyethylene Pipe	Linear Foot	~~168~~	221.90
615 (1A)	Standard Sign	Square Foot	~~86~~	92.50
618 (1A)	Seeding	Acre	~~0.5~~	0.770
620 (1A)	Topsoil	Squard Yard	~~2590~~	3,007
633 (1A)	Silt Fence	Linear Foot	~~300~~	605
640 (1A)	Mobilization & Demobilization	Lump Sum	ALL REQ'D	
641 (1A)	Erosion and Pollution Control Administration	Lump Sum	ALL REQ'D	
641 (2A)	Temporary Erosion & Pollution Control	Contingent Sum	ALL REQ'D	Ø
641 (5A)	Temporary Check Dam	Each	~~11~~	8
642 (1A)	Construction Surveying	Lump Sum	ALL REQ'D	
643 (2A)	Traffic Maintenance	Lump Sum	ALL REQ'D	
643 (3A)	Permanent Construction Signing	Lump Sum	ALL REQ'D	
643 (15A)	Flagging	Contingent Sum	ALL REQ'D	$2,166.00
643 (25A)	Traffic Control	Contingent Sum	ALL REQ'D	$2,630.00
670 (1A)	Painted Traffic Markings	Lump Sum	ALL REQ'D	
660 (1A)	Boulder Relocation	Each	~~100~~	254
692 (1A)	USFS Pathway	Linear Foot	~~235~~	240

New Items Established by Change Order

670(13A)			Additional Painted Traffic Markings	L.S.	2,050.00	All Req'd	$2,050.00

EST. OF QUANTITIES - ADDITIVE ALTERNATE B
U.S. FOREST SERVICE ROAD 8453 - STAGE II

Item No	Pay Item	Pay Unit	Quantity
201(3B-B)	Clearing and Grubbing	Lump Sum	ALL REQ'D
203(3B)	Unclassified Excavation	Cubic Yard	350
203(6B)	Borrow, Type A	Ton	2270
301(1B)	Aggregate Base Course, Grading D-1	Ton	900
401 (1B)	Asphalt Concrete, Type II, Class B	Ton	680
401 (2B)	Asphalt Cement, Grade PG 58-28	Ton	41
401(6B)	Asphalt Price Adjustment	Contingent Sum	ALL REQ'D
603(1-24B)	24 Inch CSP	Linear Foot	44
603(2-4B)	41 x 31 Inch CSP Arch	Linear Foot	6
603(21-12B)	12 Inch Corrugated Polyethylene Pipe	Linear Foot	35
604(3B)	Reconstruct Existing Manhole	Each	2
618 (1B)	Seeding	Acre	0.5
627(10B)	Adjustment of Valve Box	Each	4
633 (1B)	Silt Fence	Linear Foot	1000
640 (1B)	Mobilization & Demobilization	Lump Sum	ALL REQ'D
641 (1B)	Erosion and Pollution Control Administration	Lump Sum	ALL REQ'D
641 (2B)	Temporary Erosion & Pollution Control	Contingent Sum	ALL REQ'D
641 (5B)	Temporary Check Dam	Each	12
642 (1B)	Construction Surveying	Lump Sum	ALL REQ'D
643 (2B)	Traffic Maintenance	Lump Sum	ALL REQ'D
643 (3B)	Permanent Construction Signing	Lump Sum	ALL REQ'D
643 (15B)	Flagging	Contingent Sum	ALL REQ'D
643(25B)	Traffic Control	Contingent Sum	ALL REQ'D
670(1B)	Painted Traffic Markings	Lump Sum	ALL REQ'D

Additive Alternate "B" Not Awarded

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JNU-MONTANA CK/SKATERS CABIN ROAD IMPROVEMENTS
STP-000S(520) ~ 68340 &
WEST GLACIER TRAIL PARKING LOT - STAGE I
U.S. FORST SERVICE ROAD 8453 - STAGE II
PROJECT NO. 68872

Estimate of Quantities

STATE OF ALASKA 49th Russell P. Kroemer CE-10478 REGISTERED PROFESSIONAL ENGINEER
2/14/06

DESIGNED BY: J. O. / C.I.
DRAWN BY: B.B./D.S./L.R./R.G.

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

JNU-MONTANA CK/SKATERS CABIN ROAD IMPROVEMENTS

Estimate of Quantities

PROJECT DESIGNATION NUMBER
MGS-000S(409)~68340 / 68872

STATE	YEAR
ALASKA	2006
SHEET NUMBER	TOTAL SHEETS
CC1	43

202(10) SINGLE MAILBOX INSTALLATION

"O" STATION	OFFSET	REMARKS	QUANTITY
~~15+66~~	~~RT~~	Relocate to Troppers LN.	1
28+65	LT		1
28+~~70~~ 95	LT		1
		TOTAL	1

660(3) - HIGHWAY LIGHTING SYSTEM COMPLETE SUMMARY

NUMBER	STATION	OFFSET	MAST ARM LENGTH	POLE HEIGHT	VOLTAGE	COMMENTS
1	10+33	LT	15'	35'	480	REPLACE EXISTING WOOD POLE AND LUMINAIRE WITH ELECTROLIER
2	13+10	RT	15'	35'	120	NEW ELECTROLIER
3	17+74	RT	15'	35'	120	NEW ELECTROLIER
4	23+66	RT	15'	35'	120	NEW ELECTROLIER
5	33+15	RT	15'	35'	120	NEW ELECTROLIER

639(1) - RESIDENCE DRIVEWAY

STATION	OFFSET	R1	R2	WIDTH	LENGTH
13+75	LT	10	10	20	10
15+41	RT	20	20	20	20

639(2) - COMMERCIAL DRIVEWAY

STATION	OFFSET	R1	R2	WIDTH	LENGTH
23+20	LT	20	12	34	12
48+21	LT	20	20	15	15

604(4) ADJUST EXISTING MANHOLE

STATION	OFFSET	DESCRIPTION	REMARKS	QUANTITY
23+51	15 LT	Sanitary Sewer		1
48+19	2 RT	Sanitary Sewer		1
15+07	18.5 LT	Sanitary Sewer	To be adjusted by others	
17+57	20 LT	Sanitary Sewer	To be adjusted by others	
20+53	17 LT	Sanitary Sewer	To be adjusted by others	
32+51	18 LT	Sanitary Sewer	To be adjusted by others	
36+32	25' Rt.	Water Relief Valve Manhole ~~TOTAL~~		~~2~~ 1

Total = 3

627(10) ADJUSTMENT OF VALVE BOX

STATION	OFFSET	DESCRIPTION	QTY.
12+~~78~~ 85	36 RT	WATER VALVE	1
17+~~48~~ 49	26 RT	WATER VALVE	1
17+~~52~~ 51	22 RT	WATER VALVE	1
23+~~27~~ 22	31 RT	WATER VALVE	1
23+~~28~~ 24	28 RT	WATER VALVE	1
28+~~39~~ 37	23 RT	WATER VALVE	1
28+~~47~~ 45	26 ~~27~~ RT	WATER VALVE	1
32+~~92~~ 96	25 ~~26~~ RT	WATER VALVE	1
~~36+31.88~~	~~23 RT~~	~~WATER VALVE~~	~~1~~
~~36+40~~	~~25 RT~~	~~WATER VALVE~~	~~1~~
47+~~69.83~~ 71	27 RT	WATER VALVE	1
47+72.67	23 RT	WATER VALVE	1
49+12.92	22 ~~23~~ RT	WATER VALVE	1
49+14.07	20 RT	WATER VALVE	1
		TOTAL	~~14~~

401(11) ASPHALT FIRE HYDRANT PAD

STATION	OFFSET	REMARKS	QTY.
28+18.93	34' RT		1
33+23.74	32' RT		1
40+31.29	35' RT		1
48+95.44	29' RT		1
17+20	34' Rt.	~~TOTAL =~~	~~1~~ 1

Total 5

Additional Adjustment of Valve Box

13+90, 28' Rt.	Water Valve		1
28+18, 32' Rt.	"	"	1
32+95, 25 Rt.	"	"	1
32+96, 30' Rt.	"	"	1
33+26, 34' Rt.	"	"	1
40+25, 31' Rt.	"	"	1
47+25, 23' Rt.	"	"	1
48+96, 27' Rt.	"	"	1

Total 20

603 CULVERT PIPE SUMMARY

PIPE NO.	TYPE	SIZE (WxH)	LENGTH (FT)	INLET STATION	INLET OFFSET	INLET INV.	OUTLET STATION	OUTLET OFFSET	OUTLET INV.	SLOPE	REMARKS
C-1	CSPA	35 x 24	~~53~~ 35	12+34.6	16 ~~18.0~~ LT	59.6	12+~~31.3~~ 32.0	32.9 RT	58.1	2.8%	
C-2	CSPA	35 x 24	~~41~~ 42	12+88.4	36 ~~45.1~~ RT	59.2	12+~~48.0~~ 89.0	36 ~~41.2~~ RT	58.7	1.0%	
C-3	CSPA	42 x 29	~~36~~ 40	13+~~94.7~~ 99.0	17.8 LT	58.7	13+~~58.4~~ 59.0	17 ~~18.8~~ LT	58.4	0.8%	
C-4A	CSP~~A~~	~~28 x 20~~ 18"	~~45~~ 40	15+~~63.7~~ 58.0	30 ~~32.0~~ RT	60.6	15+~~19.1~~ 18.0	32.0 RT	60.4	0.7%	C-4 NOT USED. SUBSTITUTE C-4A.
C-5	CSPA	35 x 24	~~46~~ 49	17+~~78.3~~ 75.0	32 ~~30.5~~ RT	62.7	17+~~78.3~~ 75.0	17 ~~18.9~~ LT	62.3	0.7%	
C-6	CSPA	28 x 20	~~79~~ 83	23+62.2	34 ~~32.9~~ RT	66.3	22+~~83.1~~ 82.0	32 ~~33.1~~ RT	65.8	0.7%	
C-7	CSP	18	~~12~~ 16.5	28+~~23.5~~ 27.0	32 ~~31.5~~ RT	71.9	28+~~13.0~~ 12.0	33 ~~31.3~~ RT	71.3	4.7%	Insulation Board Required
C-8	CSPA	28 x 20	~~65~~ 64	33+~~22.32+96.49~~	30 ~~31.0~~ RT	79.0	32+~~29.32~~ 32.0	30 ~~28.91~~ RT	78.1	1.4%	
C-9	CSPA	18	~~12~~ 19	33+31.4	32 ~~30.9~~ RT	79.4	33+~~18.6~~ 30.0	33 ~~31.3~~ RT	79.3	0.8%	Insulation Board Required
C-10	CSPA	18	~~12~~ 19	40+~~26.1~~ 23.0	29 ~~32.0~~ RT	77.2	40+~~39.2~~ 41.0	29 ~~32.0~~ RT	76.9	2.3%	Insulation Board Required
C-11	CSPA	28 x 20	~~46~~ 49	44+00.0	19 ~~15.8~~ LT	73.6	44+00.0	30 ~~32.0~~ RT	71.5	4.6%	
C-12	CSPA	28 x 20	~~41~~ 45	47+~~68.33~~ 67.0	30.66 RT	68.4	48+~~09.22~~ 07.0	31 ~~29.11~~ RT	67.2	2.7%	
C-13	CSPA	28 x 20	~~39~~ 40	48+~~01.85~~ 0.0	18 ~~16.76~~ LT	67.2	48+42	18 ~~15.38~~ LT	66.9	0.7%	
Total Length (FT)		C-14 18" CSP	40	30+56	31.0 RT		30+17	31.0 RT			
18 Inch CSP =	~~37~~	C-14A 28x20 CSPA	41	17+67	35.0 RT		17+15	35.0 RT			
28 x 20 CSPA =	~~318~~	C-16 24" CPP	80	23+70	16.0 LT		22+90	16.0 LT			
35 x 24 CSPA =	~~140~~										
42 x 29 CSPA =	~~36~~										

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JNU-MONTANA CK/SKATERS CABIN ROAD IMPROVEMENTS
STP-000S(520) ~ 68340

Miscellaneous Summaries

STATE OF ALASKA 49th Russell P. Kroemer CE-10478 REGISTERED PROFESSIONAL ENGINEER
2/16/06

DESIGNED BY: J. O. / C.I.
DRAWN BY: B.B./D.S./L.R./R.G.

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

JNU-MONTANA CK/SKATERS CABIN ROAD IMPROVEMENTS
Miscellaneous Summaries

PROJECT DESIGNATION NUMBER
MGS-000S(409)~68340

STATE	YEAR
ALASKA	2006

SHEET NUMBER	TOTAL SHEETS
D1	43

615(1) - STANDARD SIGN SUMMARY

NUMBER	"O" STATION	OFFSET	DESCRIPTION.	ASDS CODE	DIM. (HXW)	AREA (SF)	REMARKS
1	10+53	LT	MONTANA CREEK RD	D3-1	8"X36"	2.0	
2	10+53	LT	MENDENHALL LOOP RD	D3-1	8"X~~36~~ 36"	~~2.1~~ 2.0	MOUNT BELOW SIGN 1
3	10+53	LT	STOP	R1-1	30"X30"	6.2	MOUNT BELOW SIGN 2
4	10+97	RT	ADOPT A HIGHWAY...	I-150	(2)12"X36"	6.0	SIGN 4A MOUNT BELOW SIGN 4
5	11+35	RT	SPEED LIMIT 35	R2-1	36"X30"	7.5	
6	12+89	RT	MONTANA CREEK RD	D3-1	8"X36"	2.0	
7	12+89	RT	MORAINE WAY	D3-1	8"X26"	1.5	MOUNT BELOW SIGN 6
8	12+89	RT	STOP	R1-1	30"X30"	6.2	MOUNT BELOW SIGN 7
9	17+67	RT	MONTANA CREEK RD	D3-1	8"X36"	2.0	
10	17+67	RT	TRAPPERS LN	D3-1	8"X~~36~~ 36	~~1.7~~ 2.0	MOUNT BELOW SIGN 9
11	17+67	RT	STOP	R1-1	30"X30"	6.2	MOUNT BELOW SIGN 10
12	23+53	RT	MONTANA CREEK RD	D3-1	8"X36"	2.0	
13	23+53	RT	NINNIS DR	D3-1	8"X20"	1.1	MOUNT BELOW SIGN 12
14	23+53	RT	STOP	R1-1	30"X30"	6.2	MOUNT BELOW SIGN 13
15	25+06	LT	SPEED LIMIT 35	R2-1	36"X30"	7.5	
16	25+06	RT	SPEED LIMIT 30	R2-1	36"X30"	7.5	
17	26+50	RT	^SKATERS CABIN	W1-8	24"X~~30~~ 72	~~5.0~~ 12.0	
	26+50	RT	< MONTANA CREEK	W1-8	~~24"X30"~~	~~5.0~~	
18	28+00	RT	CAMPGROUND	RS-38	18 ~~24"X30"~~ 90	~~5.0~~ 11.3	
	28+00	RT	~~HUNTING~~ Shooting	RL-040	~~24"X30"~~	~~5.0~~	
	28+00	RT	ARCHERY	RL-190	18 ~~24"X30"~~ 90	~~5.0~~ 11.3	
19	~~26+40~~ 27+52	21 LT	CHEVRON	W1-8	24"X30"	~~5.0~~	
20	~~26+40~~ 27+52	21 LT	CHEVRON	W1-8	24"X30"	5.0	MOUNT BEHIND SIGN 19
21	28 ~~27+60~~ 94	LT	CHEVRON	W1-8	24"X30"	5.0	
22	28 ~~27+60~~ 94	LT	CHEVRON	W1-8	24"X30"	5.0	MOUNT BEHIND SIGN 21
23	30 ~~28+80~~ 36	LT	CHEVRON	W1-8	24"X30"	5.0	
24	30 ~~28+80~~ 36	LT	CHEVRON	W1-8	24"X30"	5.0	MOUNT BEHIND SIGN 23
25	~~29+43~~	LT	STOP	R1-1	30"X30"	6.2	
26	31 ~~29+57~~ 78	LT	CHEVRON	W1-8	24"X30"	5.0	
27	31 ~~29+57~~ 78	LT	CHEVRON	W1-8	24"X30"	5.0	MOUNT BEHIND SIGN 26
28	32+90	RT	SKATERS CABIN RD	D3-1	8"X38"	2.1	
29	32+90	RT	ARCTIC CIRCLE	D3-1	8"X26"	1.5	MOUNT BELOW SIGN 28
30	32+90	RT	STOP	R1-1	30"X30"	6.2	MOUNT BELOW SIGN 29
31	48+07	RT	SKATERS CABIN RD	D3-1	8"X38"	2.1	
32	48+07	RT	ARCTIC CIRCLE	D3-1	8"X26"	1.5	MOUNT BELOW SIGN 32
33	48+07	RT	STOP	R1-1	30"X30"	6.2	MOUNT BELOW SIGN 33
					TOTAL =	165	

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STP-000S(520) ~ 68340

Miscellaneous Summaries

STATE OF ALASKA
49th
Russell P. Kroemer
CE-10478
REGISTERED PROFESSIONAL ENGINEER
2/16/06

DESIGNED BY: J. O. / C.I.
DRAWN BY: B.B./D.S./L.R./R.G.

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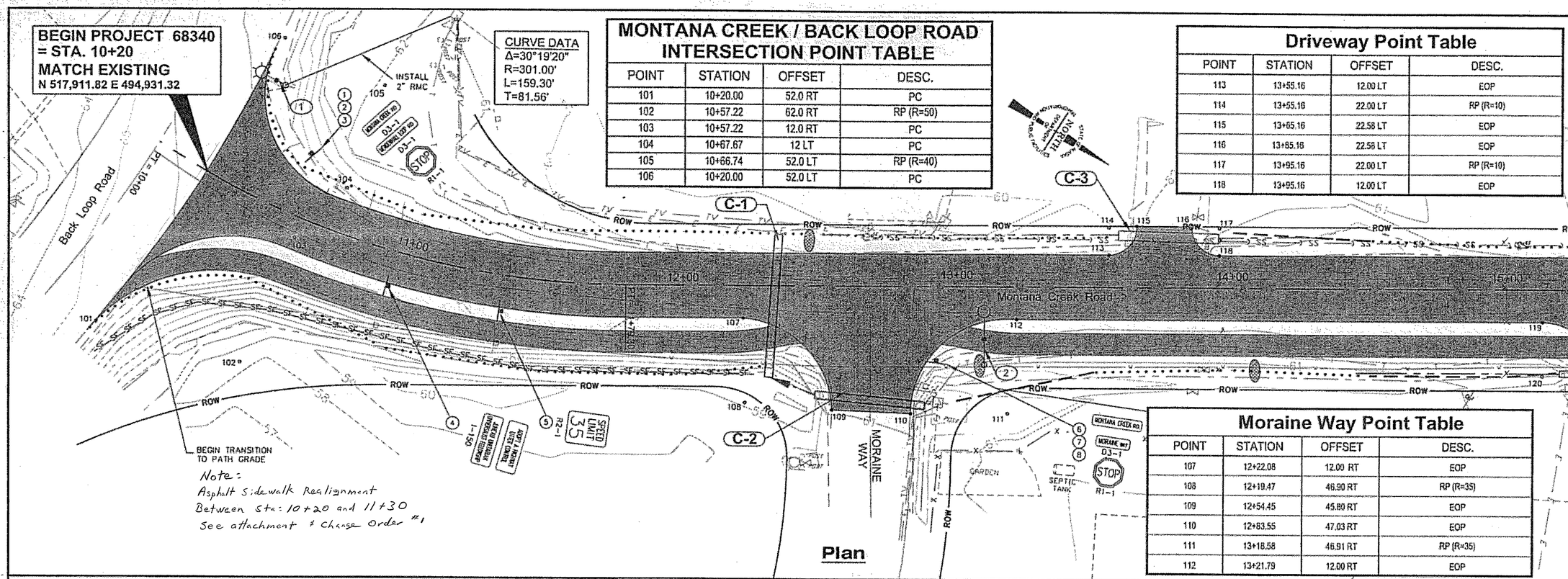
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

JNU-MONTANA CK/SKATERS CABIN ROAD IMPROVEMENTS

Miscellaneous Summaries

PROJECT DESIGNATION NUMBER
MGS-000S(409)~68340

STATE	YEAR
ALASKA	2006
SHEET NUMBER	TOTAL SHEETS
D2	43



Note:
Asphalt Sidewalk Realignment
Between Sta: 10+20 and 11+30
See attachment & Change Order #1

MONTANA CREEK / BACK LOOP ROAD INTERSECTION POINT TABLE

POINT	STATION	OFFSET	DESC.
101	10+20.00	52.0 RT	PC
102	10+57.22	62.0 RT	RP (R=50)
103	10+57.22	12.0 RT	PC
104	10+67.67	12 LT	PC
105	10+66.74	52.0 LT	RP (R=40)
106	10+20.00	52.0 LT	PC

Driveway Point Table

POINT	STATION	OFFSET	DESC.
113	13+55.16	12.00 LT	EOP
114	13+55.16	22.00 LT	RP (R=10)
115	13+65.16	22.58 LT	EOP
116	13+85.16	22.58 LT	EOP
117	13+95.16	22.00 LT	RP (R=10)
118	13+95.16	12.00 LT	EOP

Moraine Way Point Table

POINT	STATION	OFFSET	DESC.
107	12+22.08	12.00 RT	EOP
108	12+19.47	46.90 RT	RP (R=35)
109	12+54.45	45.80 RT	EOP
110	12+83.55	47.03 RT	EOP
111	13+18.58	46.91 RT	RP (R=35)
112	13+21.79	12.00 RT	EOP

LEGEND:

- = PRIMARY MONUMENT (TO BE SET)
- —TV—TV— = TELEVISION
- —W— = WATER
- —T—T— = CABLE/TELEPHONE
- —OE— = OVERHEAD ELECTRIC
- —PL— = PROPERTY LINE
- —SF—SF— = SILT FENCE
- —SS— = SANITARY SEWER
- = CHECK DAM
- (2) = LIGHT NUMBER
- (2) = SIGN NUMBER
- (P-3) = PIPE NUMBER
- ■ = J-BOX

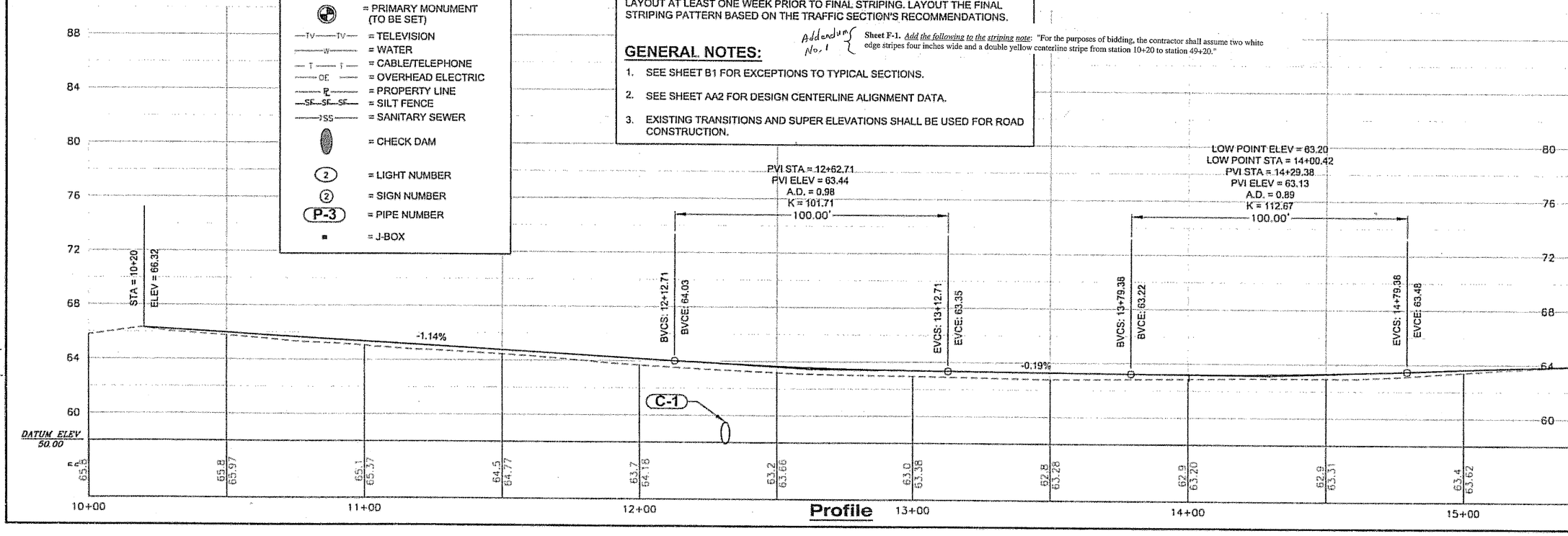
STRIPING NOTE:

NOTIFY THE ADOT&PF TRAFFIC & SAFETY SECTION TO PROVIDE THE MARKING LAYOUT AT LEAST ONE WEEK PRIOR TO FINAL STRIPING. LAYOUT THE FINAL STRIPING PATTERN BASED ON THE TRAFFIC SECTION'S RECOMMENDATIONS.

Addendum No. 1 — Sheet F-1. *Add the following to the striping note*: "For the purposes of bidding, the contractor shall assume two white edge stripes four inches wide and a double yellow centerline stripe from station 10+20 to station 49+20."

GENERAL NOTES:

1. SEE SHEET B1 FOR EXCEPTIONS TO TYPICAL SECTIONS.
2. SEE SHEET AA2 FOR DESIGN CENTERLINE ALIGNMENT DATA.
3. EXISTING TRANSITIONS AND SUPER ELEVATIONS SHALL BE USED FOR ROAD CONSTRUCTION.



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TAB: TYPICALS

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

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PE _____ Date 6/09

JNU-MONTANA CK/SKATERS CABIN ROAD IMPROVEMENTS
STP-000S(520) ~ 68340

Plan & Profile

STATE OF ALASKA 49th Russell P. Kroemer CE-10478 REGISTERED PROFESSIONAL ENGINEER
2/16/06

DESIGNED BY: J. O. / C.I.
DRAWN BY: B.B./D.S./L.R./R.G.

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

JNU-MONTANA CK/SKATERS CABIN ROAD IMPROVEMENTS

Plan & Profile

PROJECT DESIGNATION NUMBER
MGS-000S(409)-68340

STATE	YEAR
ALASKA	2006
SHEET NUMBER	TOTAL SHEETS
F1	43

608(3)
Asphalt Sidewalk
Realignment
C.O. 41

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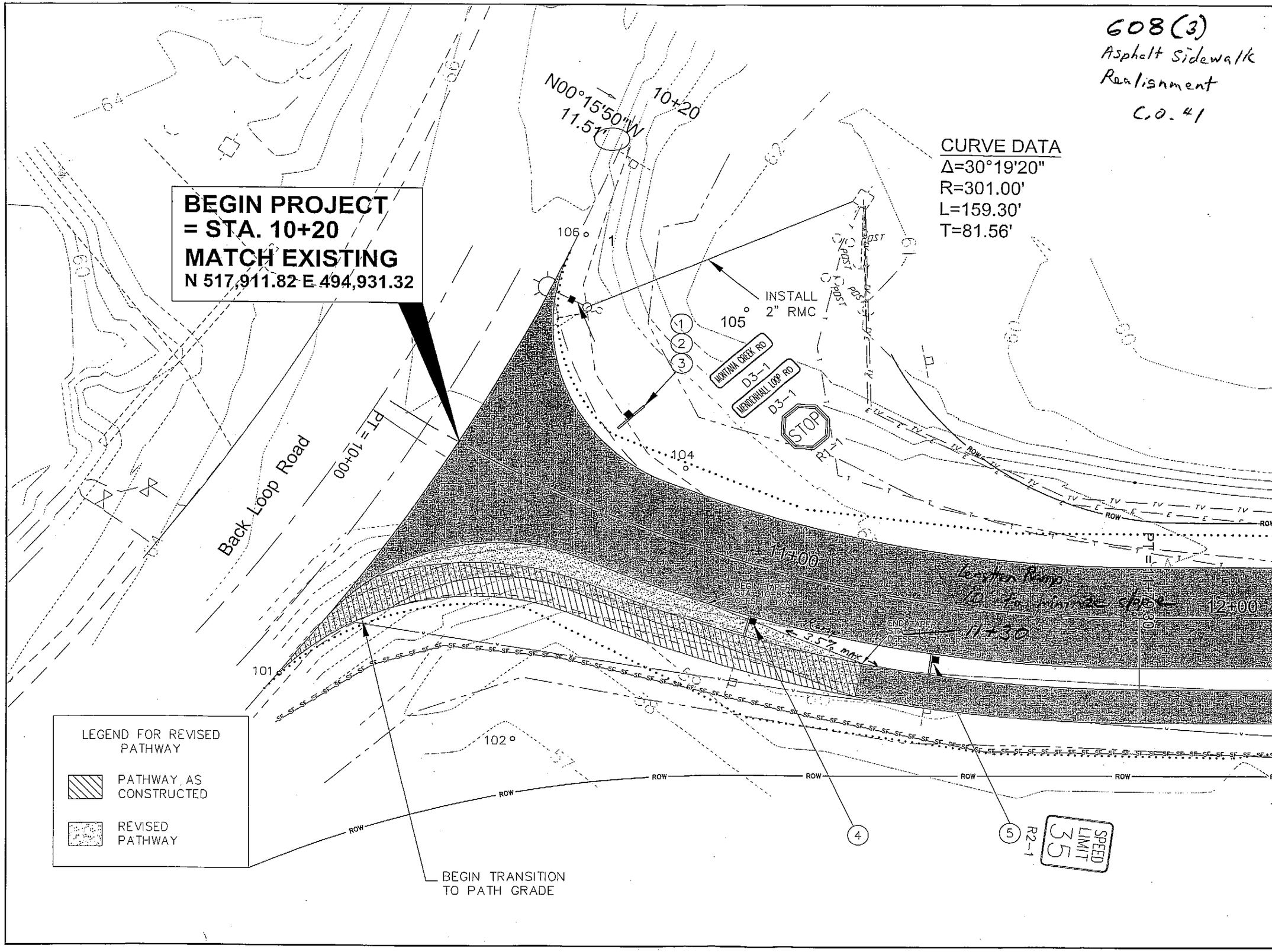

JNU-MONTANA CK/SKATERS CABIN ROAD IMPROVEMENTS
STP-0005(520) ~ 68340 &
WEST GLACIER TRAIL PARKING LOT - STAGE I
U.S. FOREST SERVICE ROAD 8453 - STAGE II
PROJECT NO. 68872

Plan & Profile

STATE OF ALASKA
49th
Russell P. Kroemer
CE-10478
REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: J. O. / C.I.
DRAWN BY: B.B./D.S./L.R./R.G.

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

JNU-MONTANA CK/SKATERS CABIN ROAD IMPROVEMENTS

Plan & Profile

PROJECT DESIGNATION NUMBER
MGS-0005(409)~68340 / 68872

STATE	YEAR
ALASKA	2005
SHEET NUMBER	TOTAL SHEETS
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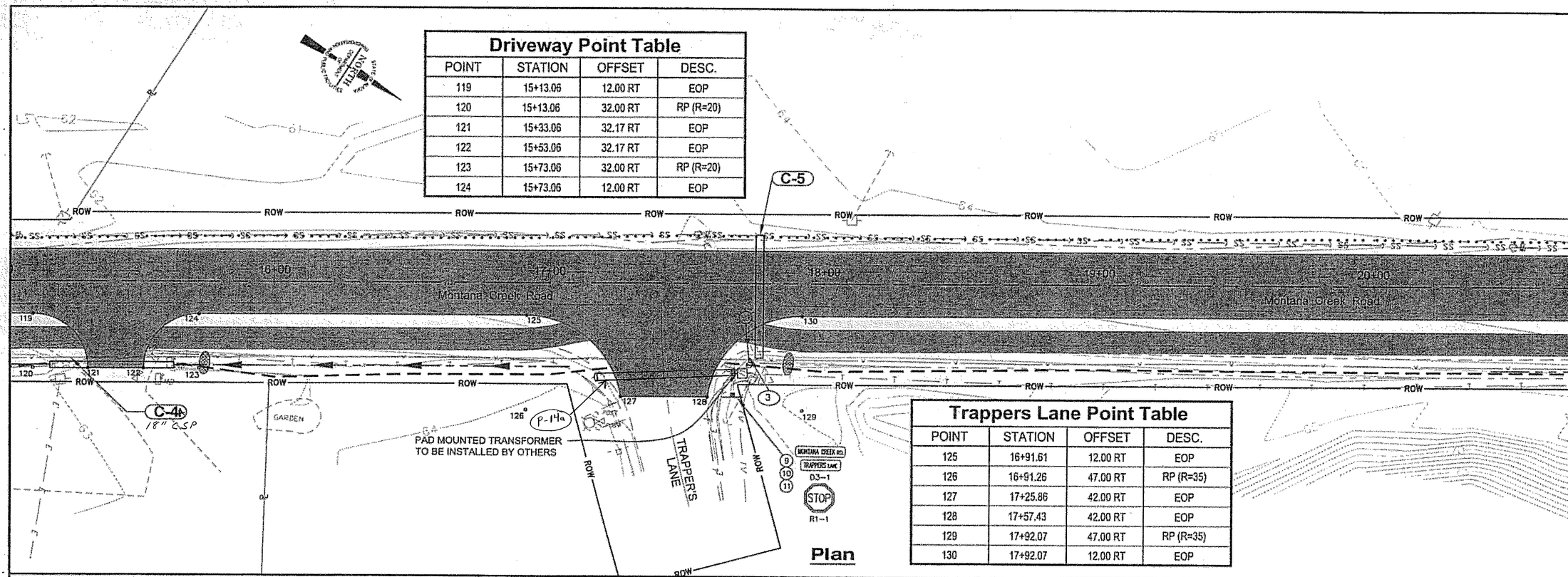
TAB: TYPICALS

Driveway Point Table

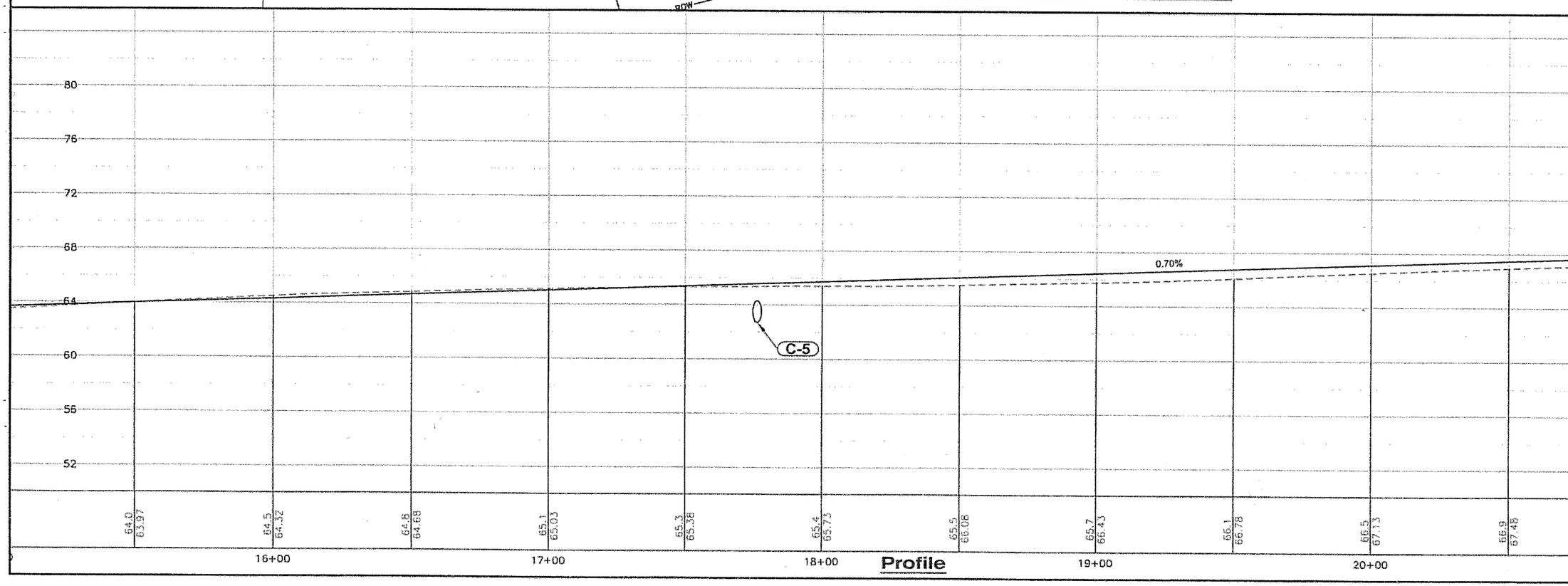
POINT	STATION	OFFSET	DESC.
119	15+13.06	12.00 RT	EOP
120	15+13.06	32.00 RT	RP (R=20)
121	15+33.06	32.17 RT	EOP
122	15+53.06	32.17 RT	EOP
123	15+73.06	32.00 RT	RP (R=20)
124	15+73.06	12.00 RT	EOP



Plan

Trappers Lane Point Table

POINT	STATION	OFFSET	DESC.
125	16+91.61	12.00 RT	EOP
126	16+91.26	47.00 RT	RP (R=35)
127	17+25.86	42.00 RT	EOP
128	17+57.43	42.00 RT	EOP
129	17+92.07	47.00 RT	RP (R=35)
130	17+92.07	12.00 RT	EOP



Profile

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JNU-MONTANA CK/SKATERS CABIN ROAD IMPROVEMENTS
STP-000S(520) ~ 68340

Plan & Profile

STATE OF ALASKA
49th
Russell P. Kroemer
CE-10478
REGISTERED PROFESSIONAL ENGINEER
2/16/06

DESIGNED BY: J. O. / C.I.
DRAWN BY: B.B./D.S./L.R./R.G.

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

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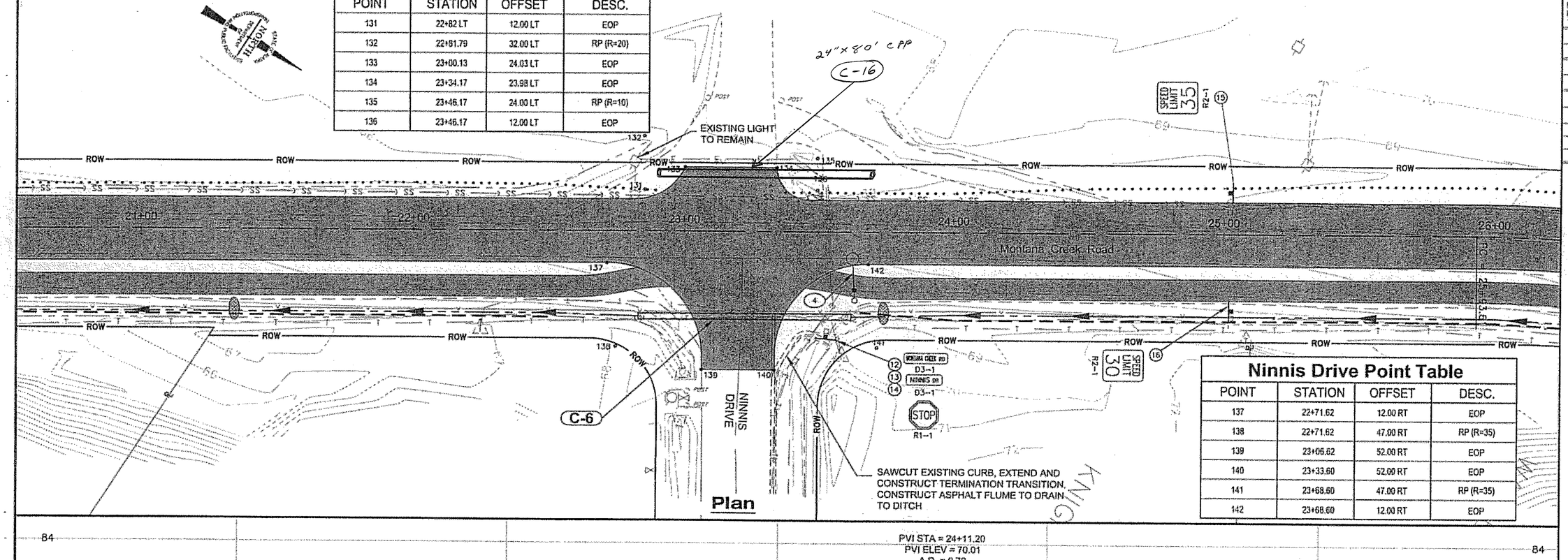
Plan & Profile

PROJECT DESIGNATION NUMBER
MGS-000S(409)-68340

STATE	YEAR
ALASKA	2006
SHEET NUMBER	TOTAL SHEETS
F2	43

Commercial Driveway Point Table

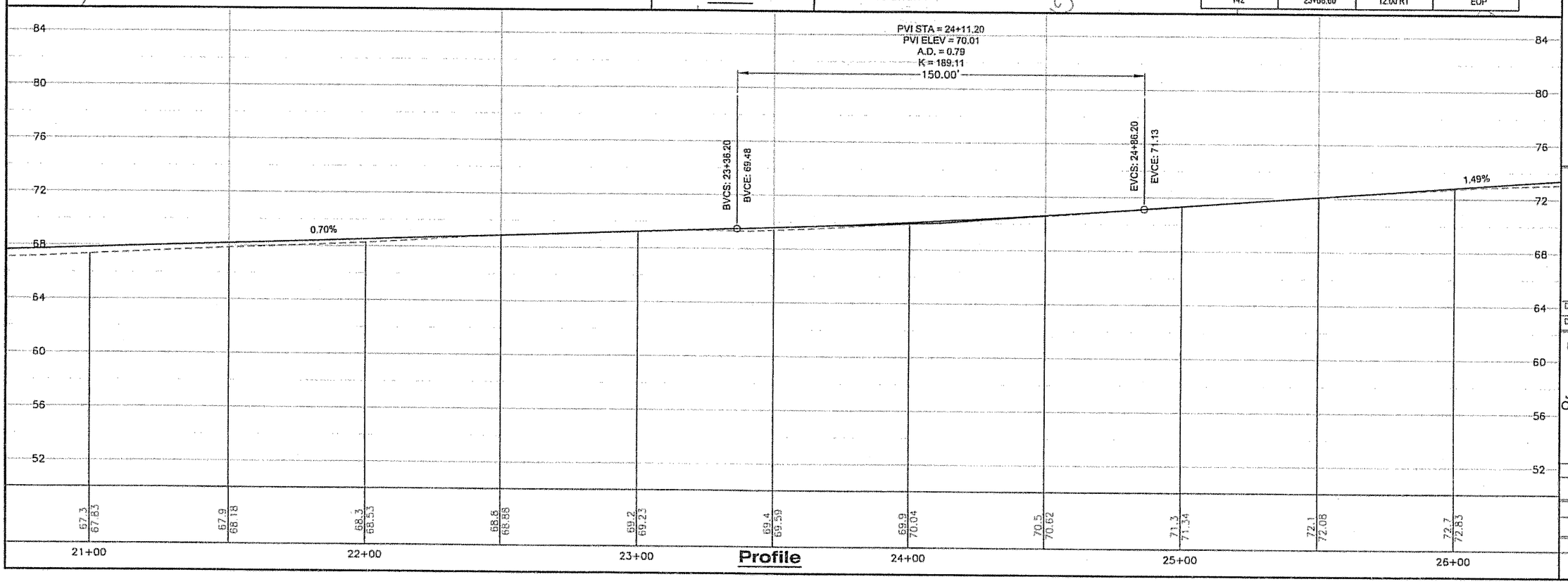
POINT	STATION	OFFSET	DESC.
131	22+82 LT	12.00 LT	EOP
132	22+81.79	32.00 LT	RP (R=20)
133	23+00.13	24.03 LT	EOP
134	23+34.17	23.98 LT	EOP
135	23+46.17	24.00 LT	RP (R=10)
136	23+46.17	12.00 LT	EOP



Plan

Ninnis Drive Point Table

POINT	STATION	OFFSET	DESC.
137	22+71.62	12.00 RT	EOP
138	22+71.62	47.00 RT	RP (R=35)
139	23+06.62	52.00 RT	EOP
140	23+33.60	52.00 RT	EOP
141	23+68.60	47.00 RT	RP (R=35)
142	23+68.60	12.00 RT	EOP



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JNU-MONTANA CK/SKATERS CABIN ROAD IMPROVEMENTS
STP-000S(520) ~ 68340

STATE OF ALASKA
49th
Russell P. Kroemer
CE-10478
REGISTERED PROFESSIONAL ENGINEER
2/16/06

DESIGNED BY: J. O. / C.L.
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STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

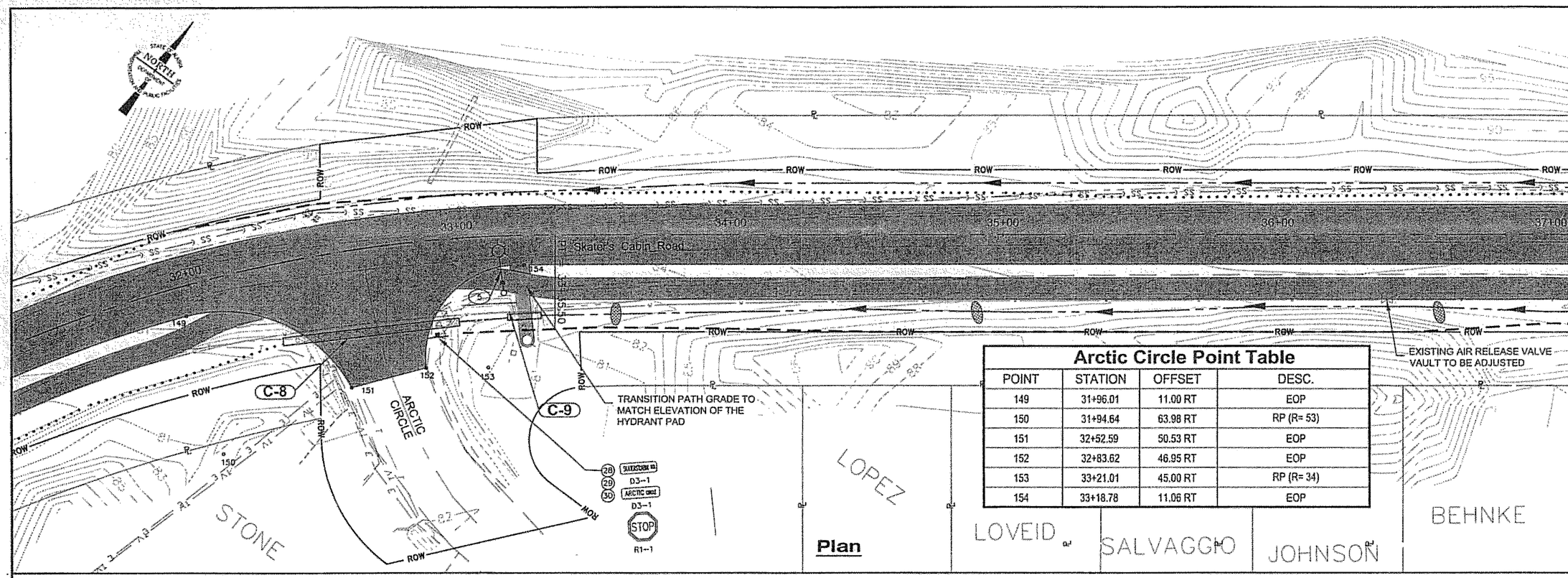
JNU-MONTANA CK/SKATERS CABIN ROAD IMPROVEMENTS

Plan & Profile

PROJECT DESIGNATION NUMBER
MGS-000S(409)~68340

STATE	YEAR
ALASKA	2006

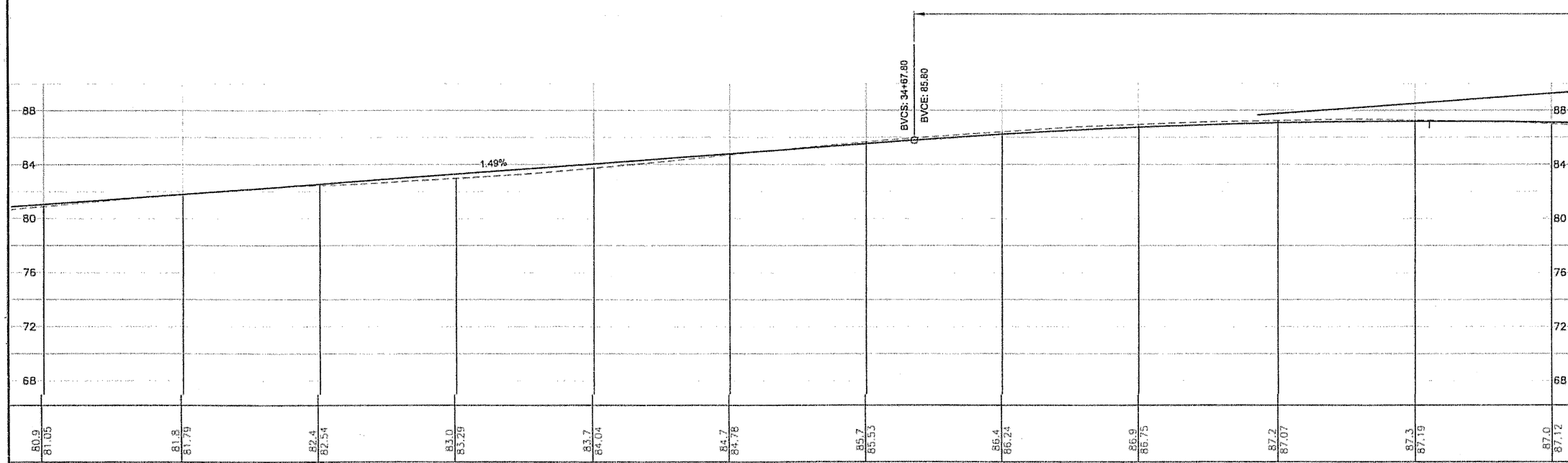
SHEET NUMBER	TOTAL SHEETS
F3	43



Plan

Arctic Circle Point Table

POINT	STATION	OFFSET	DESC.
149	31+96.01	11.00 RT	EOP
150	31+94.64	63.98 RT	RP (R= 53)
151	32+52.59	50.53 RT	EOP
152	32+83.62	46.95 RT	EOP
153	33+21.01	45.00 RT	RP (R= 34)
154	33+18.78	11.06 RT	EOP



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JNU-MONTANA CK/SKATERS CABIN ROAD IMPROVEMENTS
STP-000S(520) ~ 68340

Plan & Profile

STATE OF ALASKA 49th Russell P. Kroemer CE-10478 REGISTERED PROFESSIONAL ENGINEER
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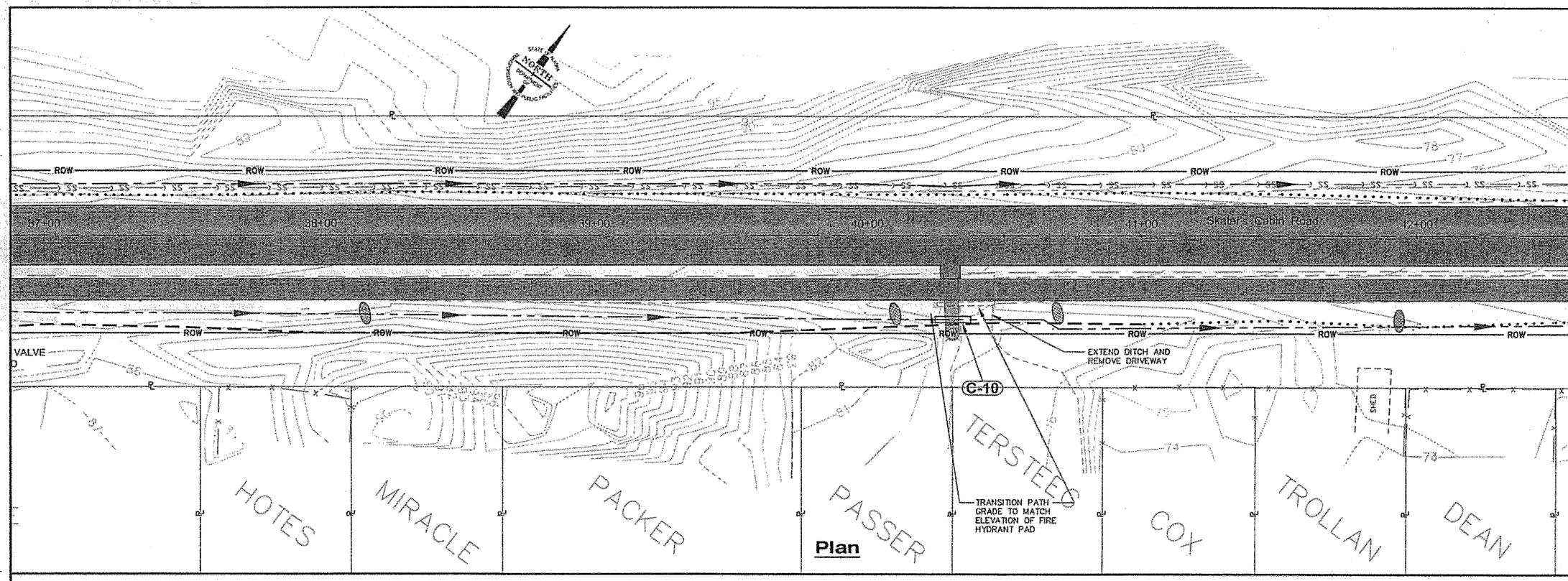
JNU-MONTANA CK/SKATERS CABIN ROAD IMPROVEMENTS

Plan & Profile

PROJECT DESIGNATION NUMBER
MGS-000S(409)-68340

STATE	YEAR
ALASKA	2006

SHEET NUMBER	TOTAL SHEETS
F5	43



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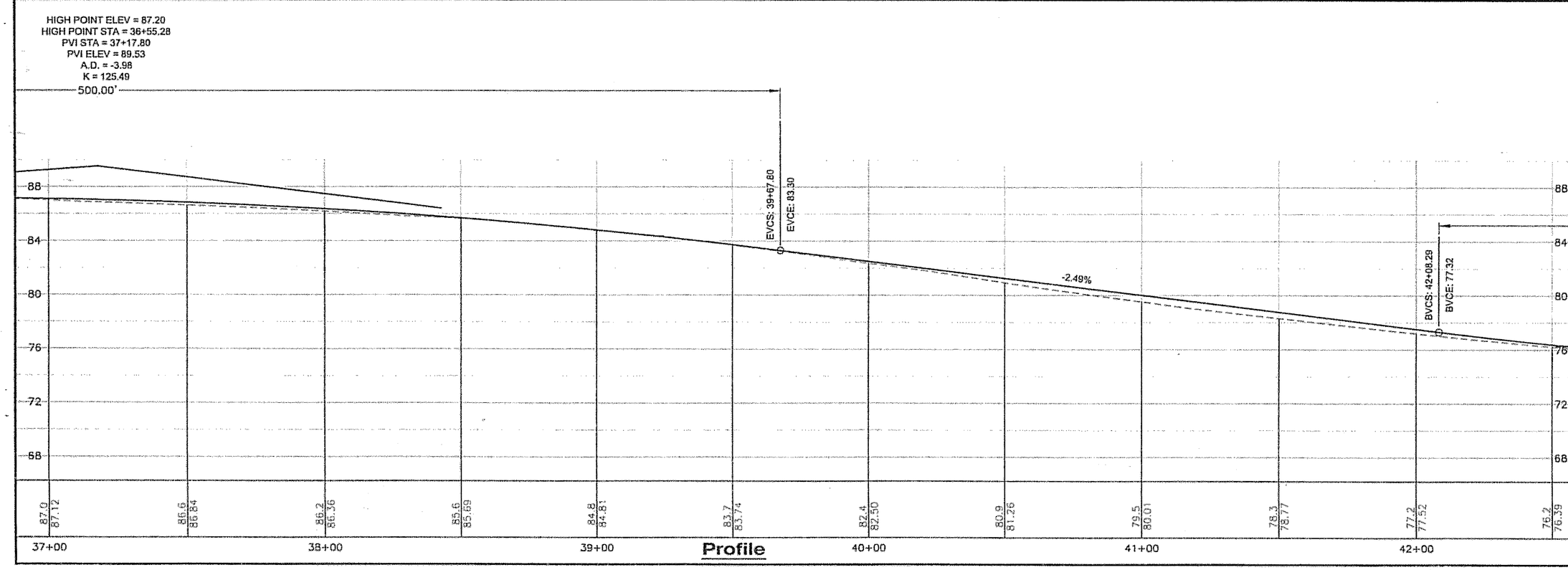

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JNU-MONTANA CK/SKATERS CABIN ROAD IMPROVEMENTS
STP-000S(520) ~ 68340

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
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Plan & Profile

STATE OF ALASKA 49th Russell P. Kroemer CE-10478 REGISTERED PROFESSIONAL ENGINEER
2/14/06

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JNU-MONTANA CK/SKATERS CABIN ROAD IMPROVEMENTS

Plan & Profile

PROJECT DESIGNATION NUMBER
MGS-000S(409)~68340

STATE	YEAR
ALASKA	2006

SHEET NUMBER	TOTAL SHEETS
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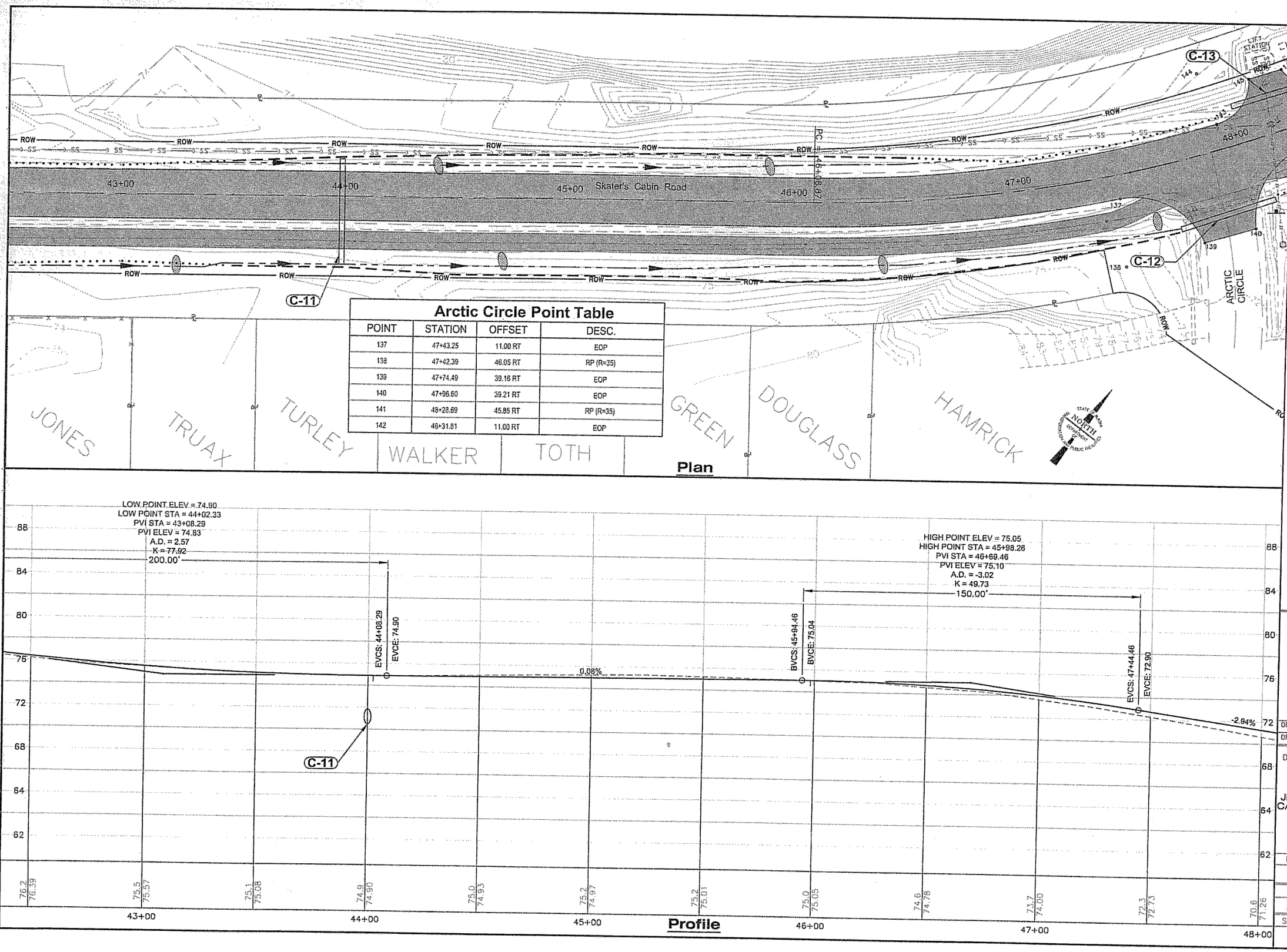
No.	DATE	DESCRIPTION



Arctic Circle Point Table

POINT	STATION	OFFSET	DESC.
137	47+43.25	11.00 RT	EOP
138	47+42.39	46.05 RT	RP (R=35)
139	47+74.49	39.16 RT	EOP
140	47+96.60	39.21 RT	EOP
141	48+28.69	45.85 RT	RP (R=35)
142	48+31.81	11.00 RT	EOP

JNU-MONTANA CK/SKATERS CABIN ROAD IMPROVEMENTS
STP-000S(520) ~ 68340

Plan & Profile

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
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STATE OF ALASKA
49th
Russell P. Kroemer
CE-10478
REGISTERED PROFESSIONAL ENGINEER
2/14/06

DESIGNED BY: J. O. / C.I.
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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

JNU-MONTANA CK/SKATERS CABIN ROAD IMPROVEMENTS

Plan & Profile

PROJECT DESIGNATION NUMBER
MGS-000S(409)~68340

STATE	YEAR
ALASKA	2006
SHEET NUMBER	TOTAL SHEETS
F7	43

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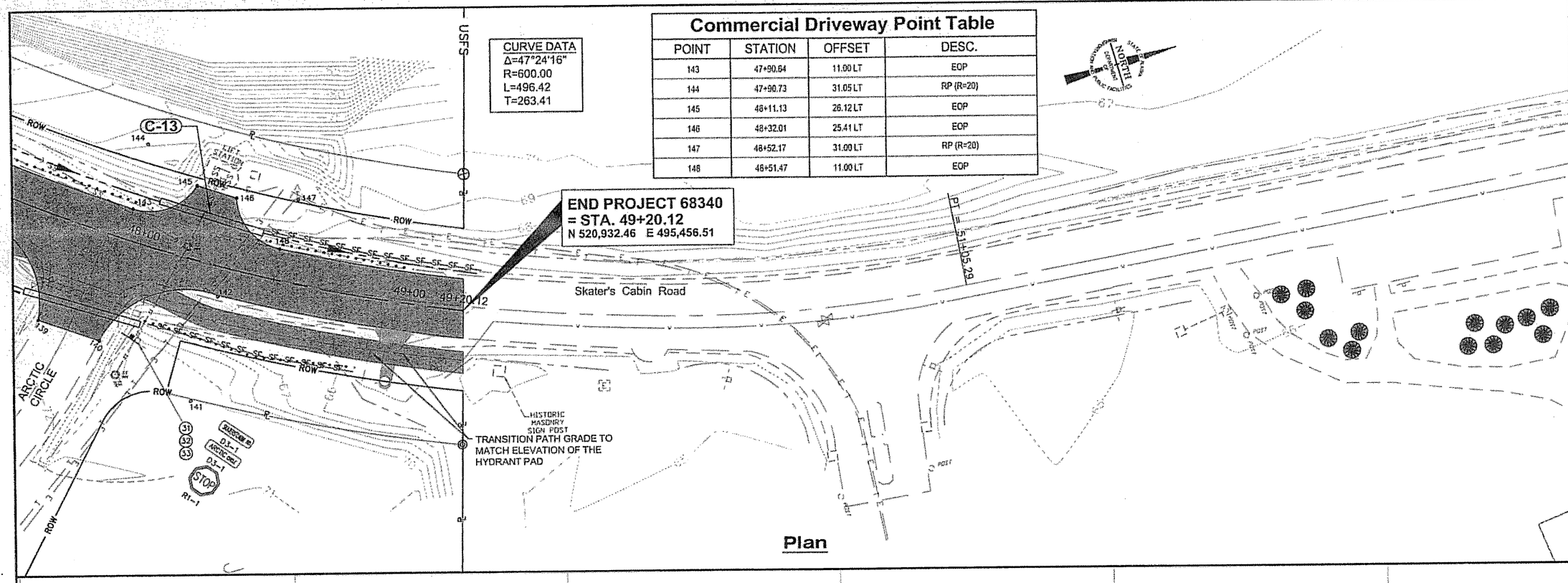
ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION



Plan

Commercial Driveway Point Table			
POINT	STATION	OFFSET	DESC.
143	47+90.64	11.00 LT	EOP
144	47+90.73	31.05 LT	RP (R=20)
145	48+11.13	26.12 LT	EOP
146	48+32.01	25.41 LT	EOP
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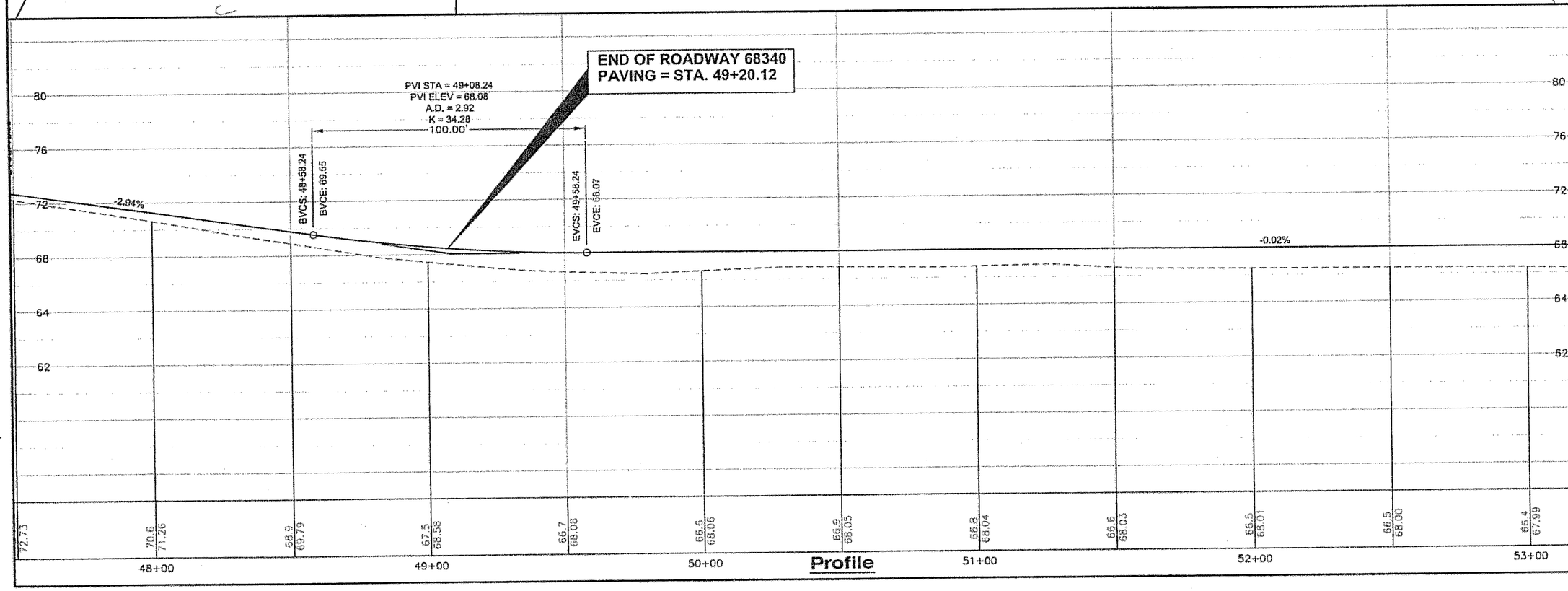
148	48+51.47	11.00 LT	EOP



Profile

JNU-MONTANA CK/SKATERS CABIN ROAD IMPROVEMENTS
STP-000S(520) ~ 68340

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
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Plan & Profile

STATE OF ALASKA
49th
Russell P. Kraemer
CE-10478
REGISTERED PROFESSIONAL ENGINEER
2/16/06

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DRAWN BY: B.B./D.S./L.R./R.G.

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

JNU-MONTANA CK/SKATERS CABIN ROAD IMPROVEMENTS

Plan & Profile

PROJECT DESIGNATION NUMBER	
MGS-000S(409)~68340	
STATE	YEAR
ALASKA	2006
SHEET NUMBER	TOTAL SHEETS
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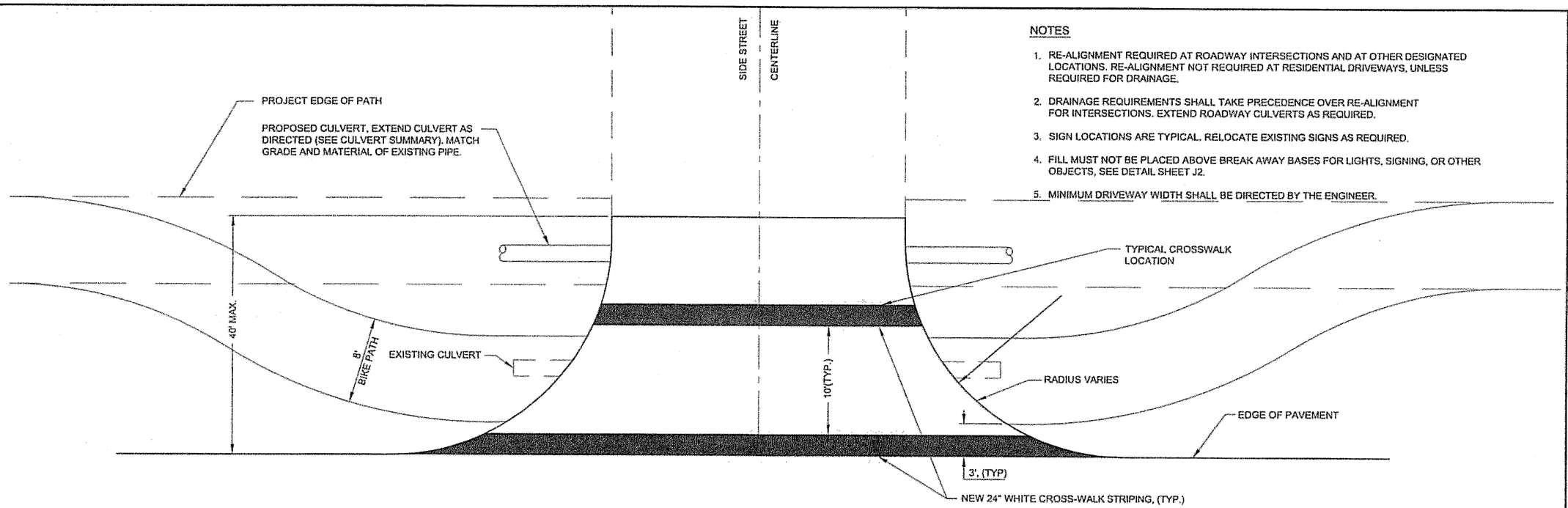
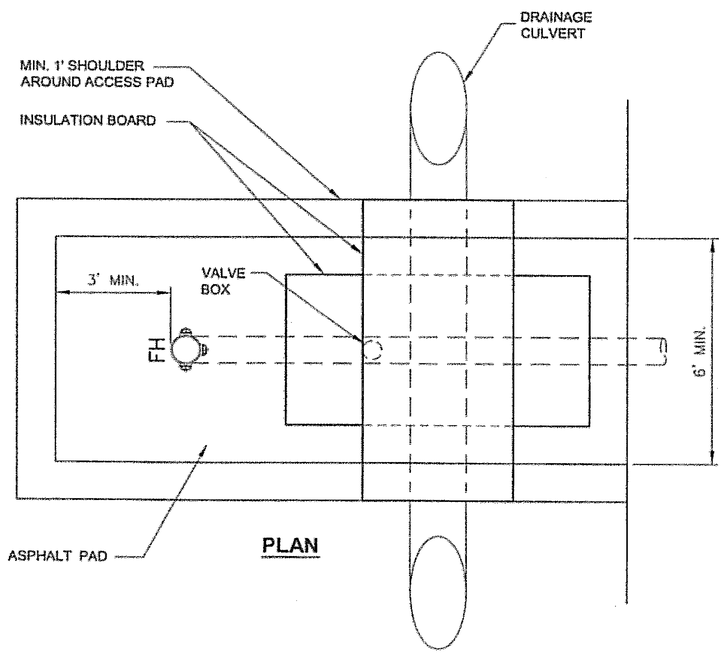


MONTANA CREEK ROAD

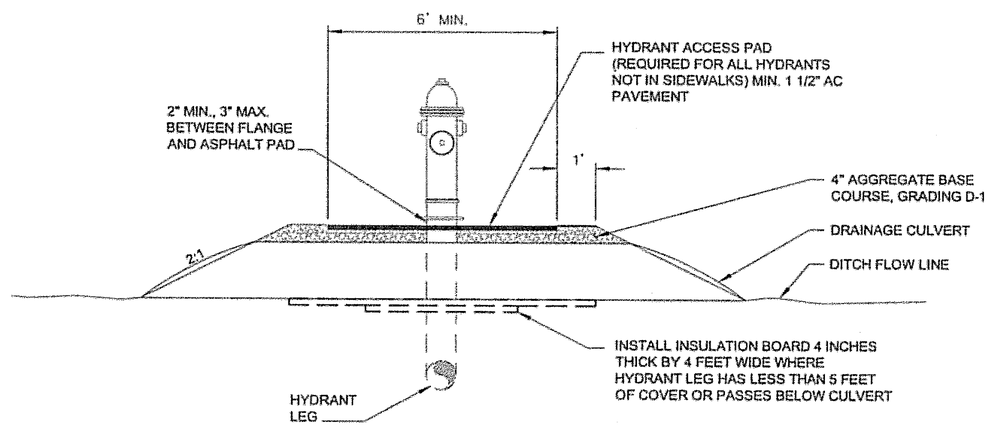
DETAIL OF PATH RE-ALIGNMENT AT INTERSECTION

NOTES

1. RE-ALIGNMENT REQUIRED AT ROADWAY INTERSECTIONS AND AT OTHER DESIGNATED LOCATIONS. RE-ALIGNMENT NOT REQUIRED AT RESIDENTIAL DRIVEWAYS, UNLESS REQUIRED FOR DRAINAGE.
2. DRAINAGE REQUIREMENTS SHALL TAKE PRECEDENCE OVER RE-ALIGNMENT FOR INTERSECTIONS. EXTEND ROADWAY CULVERTS AS REQUIRED.
3. SIGN LOCATIONS ARE TYPICAL. RELOCATE EXISTING SIGNS AS REQUIRED.
4. FILL MUST NOT BE PLACED ABOVE BREAK AWAY BASES FOR LIGHTS, SIGNING, OR OTHER OBJECTS, SEE DETAIL SHEET J2.
5. MINIMUM DRIVEWAY WIDTH SHALL BE DIRECTED BY THE ENGINEER.



PLAN



ELEVATION

NOTES:

1. GRADE HYDRANT PADS TO DRAIN.
2. SEED SIDE SLOPES IN ACCORDANCE WITH SECTION 618 & 641.

FIRE HYDRANT PAD DETAIL

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TAB: TYPICALS

ADDENDUM NUMBER

ATTACHMENT NUMBER

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JNU-MONTANA CK/SKATERS CABIN ROAD IMPROVEMENTS
STP-000S(520) ~ 68340

Miscellaneous Details

STATE OF ALASKA 49th Russell P. Kroemer CE-10478 REGISTERED PROFESSIONAL ENGINEER 2/16/06

DESIGNED BY: J. O. / C.I.
DRAWN BY: B.B./D.S./L.R./R.C.

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

JNU-MONTANA CK/SKATERS CABIN ROAD IMPROVEMENTS

Miscellaneous Details

PROJECT DESIGNATION NUMBER
MGS-000S(409)~68340

STATE	YEAR
ALASKA	2006
SHEET NUMBER	TOTAL SHEETS
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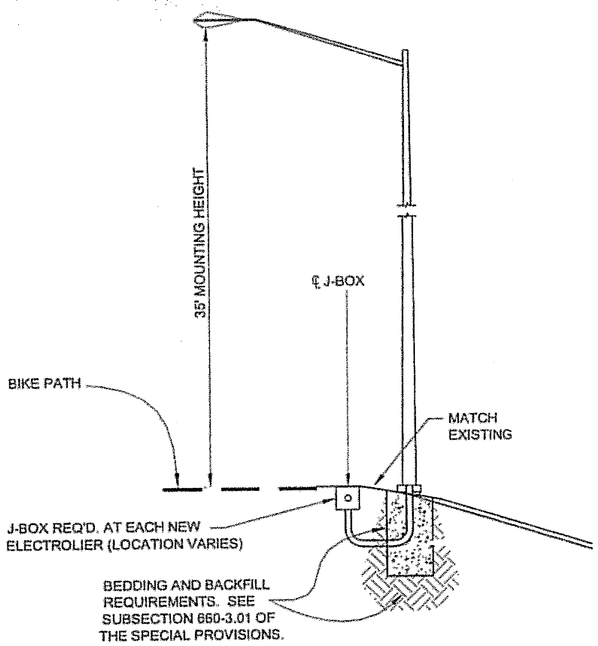
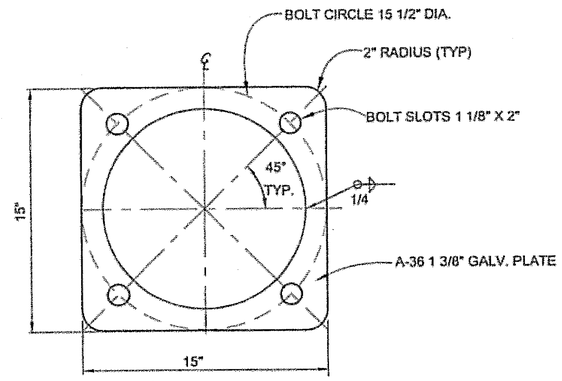


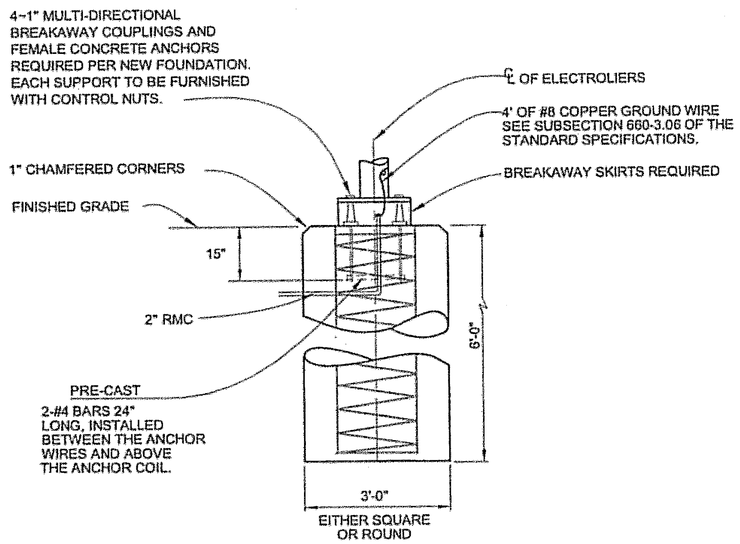
TYPICAL SECTION FOR ELECTROLIER



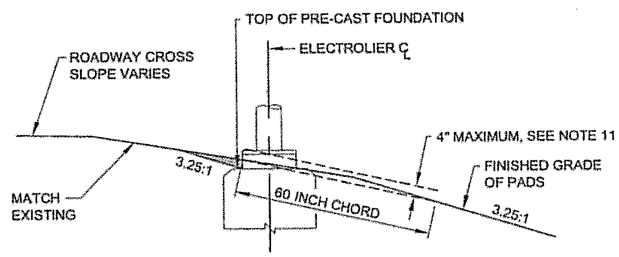
ANCHOR BASE DETAIL

ILLUMINATION GENERAL NOTES

1. ALL WIRING SHALL BE ENCASED IN 2" DIA. RIGID METAL CONDUIT.
2. EACH ELECTROLIER SHALL HAVE A J-BOX INSTALLED ADJACENT TO THE FOUNDATION AS SHOWN IN THE POLE AND J-BOX WIRING DETAIL.
3. ALL JUNCTION BOXES SHALL BE TYPE IA, EXCEPT AT LOAD CENTERS, SEE STANDARD DRAWING L-23.01.
4. A BARE STRANDED GROUND CONDUCTOR SHALL BE INSTALLED THROUGH ALL CONDUITS. THE GROUND CONDUCTOR SHALL BE ATTACHED TO ALL CONDUIT END BUSHINGS AND POLES.
5. NEW ELECTROLIER FOUNDATIONS MAY BE PRE-CAST. PRE-CAST FOUNDATIONS SHALL BE TRANSPORTED USING A DEVICE THAT SPREADS THE LOAD EVENLY BETWEEN THE ANCHOR BOLTS.
6. INSTALL THE PHOTOELECTRIC CELL ON TOP OF THE ELECTROLIER POLE, NEAREST THE LOAD CENTER.
7. ILLUMINATION CIRCUIT WIRES SHALL BE NO. 8 AWG. 3-CONDUCTOR CABLE AS SPECIFIED IN STANDARD SPECIFICATION 740-2.05.
8. LUMINAIRE 1 SHALL BE 480 VOLT, LUMINAIRES 2 THRU 5 SHALL BE 120 VOLT, WITH 250 WATT, HIGH PRESSURE SODIUM, MEDIUM DISTRIBUTION, ALT-OFF, IES TYPE III. LUMINIAIRES SHALL HAVE MAGNETIC REGULATIOR BALLASTS AND HPS LAMPS WITH A 24,000 HOUR RATED LIFE.
9. INSTALL ONE SPARE TWO INCH RIGID METAL CONDUITS FROM THE LOAD CENTER TO THE FIRST JUNCTION BOX.
10. NON-BREAKAWAY PORTIONS OF FOUNDATIONS SHALL NOT PROTRUDE MORE THAN FOUR INCHES ABOVE ANY 60 INCH CHORD STARTING AND ENDING ON THE FINISHED GRADE OF THE ELECTROLIER PADS.
11. LUMINAIRE MASTARMS SHALL BE 15' LONG UNLESS NOTED ELSEWHERE.
12. IT IS ANTICIPATED THAT MOST OF THE ELECTROLIER BASES WILL NEED TO BE INSTALLED IN ROCK OR LARGE SHOT ROCK FILL. BLASTING MAY BE REQUIRED.



FOUNDATION WITH BREAKAWAY COUPLINGS



FOUNDATION INSTALLATION DETAIL

INDICATES EMBANKMENT MATERIAL TO BE REMOVED FROM AROUND BREAKAWAY SKIRTS

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ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE ____ Date 6/09

JNU-MONTANA CK/SKATERS CABIN ROAD IMPROVEMENTS
STP-000S(520) ~ 68340

Electrolier Details

STATE OF ALASKA 49th REGISTERED PROFESSIONAL ENGINEER Carolyn Morehouse CE-10691

DESIGNED BY: J. O. / C.I.
DRAWN BY: B.B./D.S./L.R./R.G.

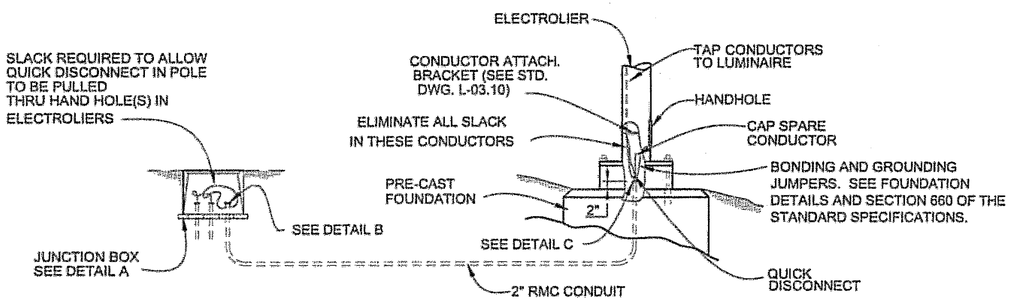
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

JNU-MONTANA CK/SKATERS CABIN ROAD IMPROVEMENTS

Electrolier Details

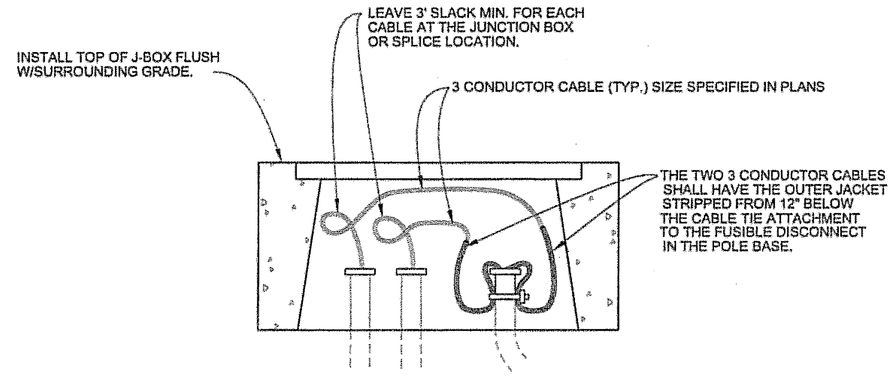
PROJECT DESIGNATION NUMBER
MGS-000S(409)--68340

STATE	YEAR
ALASKA	2006
SHEET NUMBER	TOTAL SHEETS
J2	43



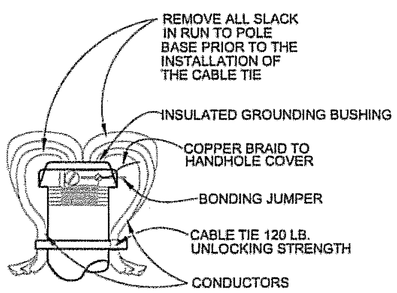
LIGHTING SYSTEM POLE AND J-BOX WIRING DETAILS

(BREAKAWAY COUPLINGS)



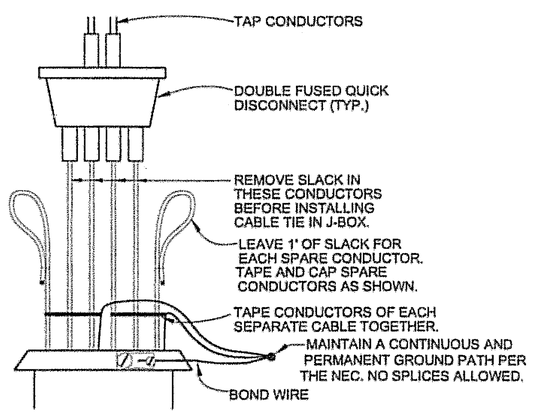
DETAIL A

NOTE:
INSTALL A 3/4"x10' COPPER CLAD STEEL GROUND ROD IN EACH J-BOX AND CONNECT TO ALL GROUNDING CONDUCTORS. USE A SPLIT BOLT TO CLAMP ALL GROUNDING CONDUCTORS TOGETHER.



DETAIL B

(IN J-BOX)



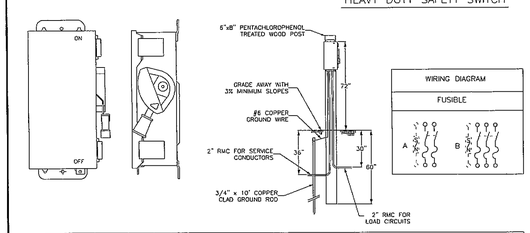
DETAIL C

(IN POLE BASE)

Addendum #1

Sheet J-3. *Add the detail identified as Attachment No. 2 to this addendum.*

HEAVY DUTY SAFETY SWITCH



VOLTAGE RATINGS	AMPERAGE RATINGS	WIRING DIAG	HORSEPOWER RATINGS															
			240VAC						480VAC						250 VDC		600 VDC	
			STD			MAX			STD			MAX						
			1Ø	2Ø	3Ø	1Ø	2Ø	3Ø	1Ø	2Ø	3Ø	1Ø	2Ø	3Ø	STD	MAX	STD	MAX
240VAC,250VDC	30	A	1 1/2*	–	3♦	3*	–	7 1/2♦	–	–	–	–	–	–	5*	–	–	–

NOTES:
1. SAFETY SWITCH SHALL BE INSTALLED AT STA 10+82, 85' OFFSET LEFT
2. USE NEMA TYPE 4X ENCLOSURE
3. FINISH – TYPE 304 STAINLESS STEEL
4. UL LISTED – TYPE 1
5. ALL RATINGS ARE INDICATED
6. SHORT CIRCUIT CURRENT RATINGS:
10,000 RMS SYMMETRICAL AMPERES WHEN USED IN CONJUNCTION WITH CLASS H OR K FUSES
200,000 RMS SYMMETRICAL AMPERES WHEN USED IN CONJUNCTION WITH CLASS R, J, OR T FUSES
7. ALL HARDWARE SHALL BE 316 STAINLESS STEEL. ATTACH PARTS USING TWO HOLE RIGID METAL CONDUIT.
8. STRAPS ADJACENT ON 24 INCH MAXIMUM CENTERS.
9. ATTACH ALL GROUND CONDUCTORS TO THE POSTS AND POLES USING CABLE STAPLES LOCATED ON 12 INCH CENTERS.
10. LABEL ALL CIRCUIT BREAKERS AS TO FUNCTION AND POSITION.

* USE BOTH OUTER SWITCHING POLES.
♦ FOR CORNER GROUNDED DELTA, INSTALL NEUTRAL AND USE OUTER SWITCHING POLES FOR UNGROUNDED CONDUCTORS.
‡ LUGS SUITABLE FOR 60°C OR 75°C CONDUCTORS ONLY.

TERMINAL LUG DATA ‡			
AMPERES	MAX WIRE	MIN WIRE	TYPE
30	#6 AWG	#12 AWG	AL
30	#6 AWG	#14 AWG	CU

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES DIVISION/SOUTHEAST REGION

UPGRADE MONTANA CREEK AND SCATERS CABINS ROADS/USFS
STAGE I & II
PROJECT #68340 & #68872

ADDENDUM 1

CHECKED BY: R. KRAEMER
DESIGNED BY: D. FAGNANT
DRAWN BY: D. FAGNANT
PATH: O:\JNU\68340\DG-07-09.dwg
Time: 1 Wed, 08/Aug/06 07:44AM cybrowder

PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
MGS-000S(409)	2006	J3	

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

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ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE ____ Date 6/09

JNU-MONTANA CK/SKATERS CABIN ROAD IMPROVEMENTS
STP-000S(520) ~ 68340

Electrolier Details

STATE OF ALASKA 49th Carolyn Morehouse CE-10691 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: J. O. / C.I.
DRAWN BY: B.B./D.S./L.R./R.G.

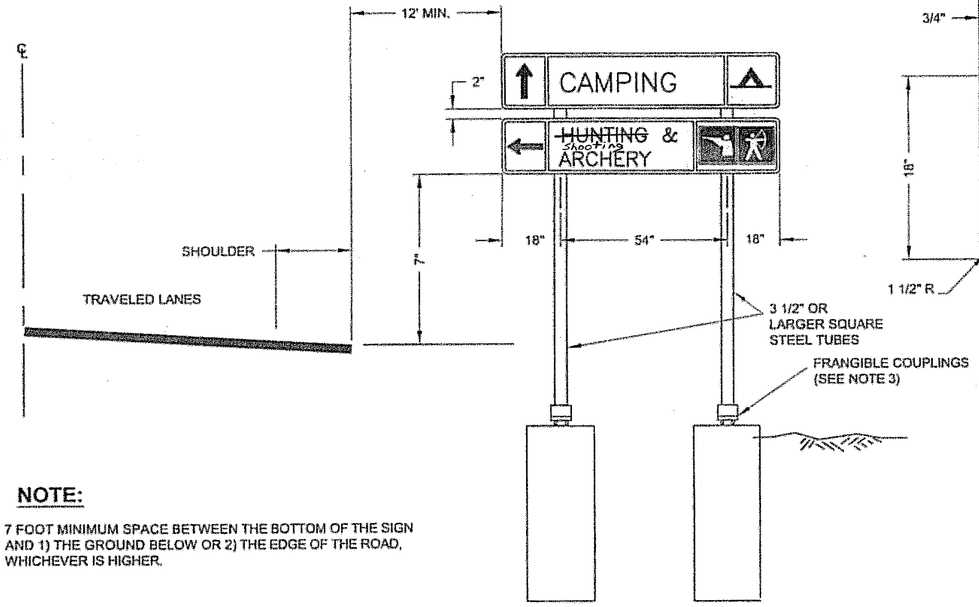
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

JNU-MONTANA CK/SKATERS CABIN ROAD IMPROVEMENTS

Electrolier Details

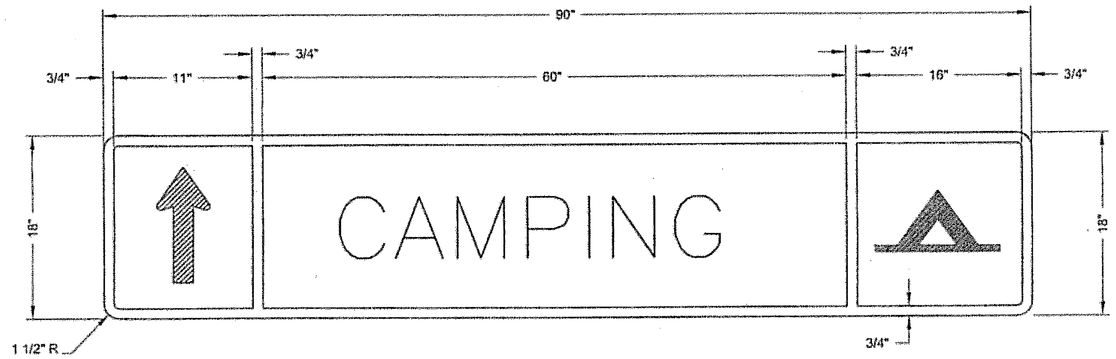
PROJECT DESIGNATION NUMBER
MGS-000S(409)~68340

STATE	YEAR
ALASKA	2006
SHEET NUMBER	TOTAL SHEETS
J3	43



NOTE:

7 FOOT MINIMUM SPACE BETWEEN THE BOTTOM OF THE SIGN AND 1) THE GROUND BELOW OR 2) THE EDGE OF THE ROAD, WHICHEVER IS HIGHER.

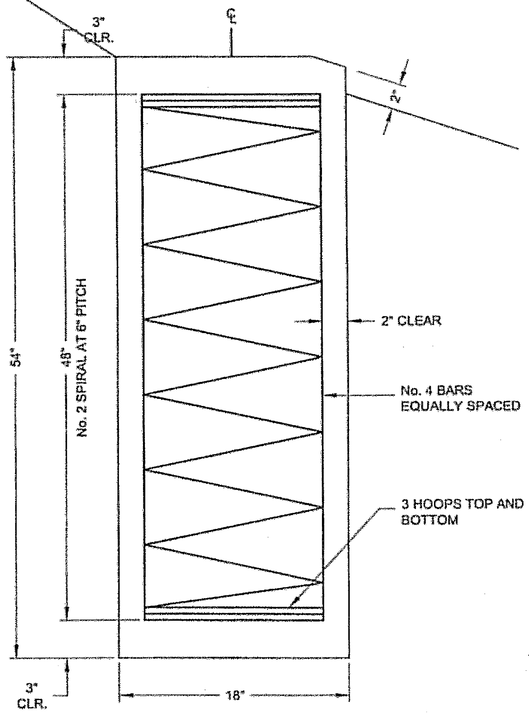


TODS SIGN

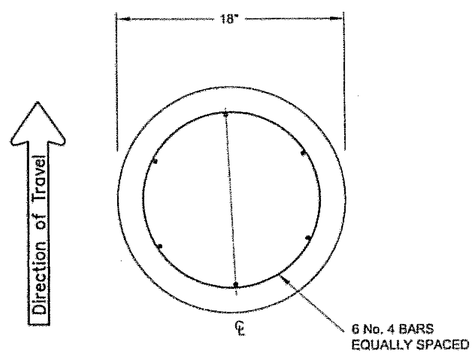
1. COLORS: BLUE BACKGROUND (ENGINEER GRADE REFLECTORIZATION) WHITE LEGEND AND BBORDERS (HI-INTENSITY REFLECTORIZATION)
2. LETTERS: 6" UPPER CASE, SERIES D.

NOTES:

1. FRAME SIGNS IN ACCORDANCE WITH STANDARD DRAWING S-00.10.
2. PROVIDE MATERIALS THAT CONFORM TO THE CURRENT EDITIION OF THE ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.
3. PROVIDE FRANGIBLE COUPLINGS THAT HAVE PASSED NCHRP 350 TEST LEVEL 3 CRASHWORTHINESS TESTS AND HAVE NO SPECIFIC BOLT TORQUE REQUIREMENTS.
4. PROVIDE SIGN SUPPORTS BE OF SUFFICIENT LENGTH TO ACCOMODATE TWO TODS SIGN PANELS. PLACE THE FIRST SIGN PANEL IN THE UPPERMOST POSITION WITH THE SECOND PANEL LOCATED IMMEDIATELY BELOW AS SHOWN.
5. PROVIDE SIGN PANELS THAT ARE 0.125 INCH THICK ALUMINUM.
6. ARRANGE SIGNS ON MULIPLE SIGN INSTALLATIIONS ACCORDING TO ARROW DIRECTION. INSTALL SIGNS WITH UP-ARROWS ABOVE THOSE WITH LEFT ARROWS AND THOSE WITH LEFT ARROWS ABOVE THOSE WITH RIGHT ARROWS.



CONCRETE SIGN SUPPORT FOUNDATION



DIRECTIONAL SIGN INSTALLATION DETAILS

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PE _____ Date 6/07

JNU-MONTANA CK/SKATERS CABIN ROAD IMPROVEMENTS
STP-000S(520) ~ 68340

Sign Installation Details

STATE OF ALASKA 49th Carolyn Morehouse CE-10691 REGISTERED PROFESSIONAL ENGINEER

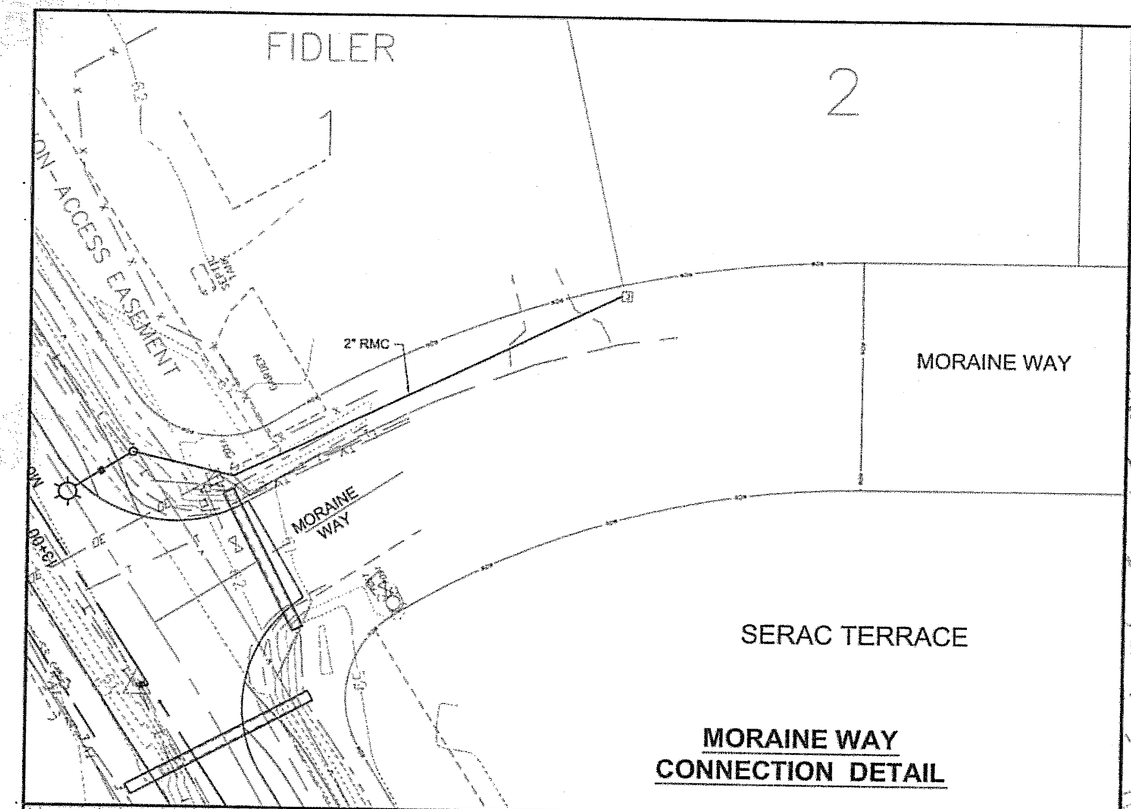
DESIGNED BY: J. O. / C.I.
DRAWN BY: B.B./D.S./L.R./R.G.

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

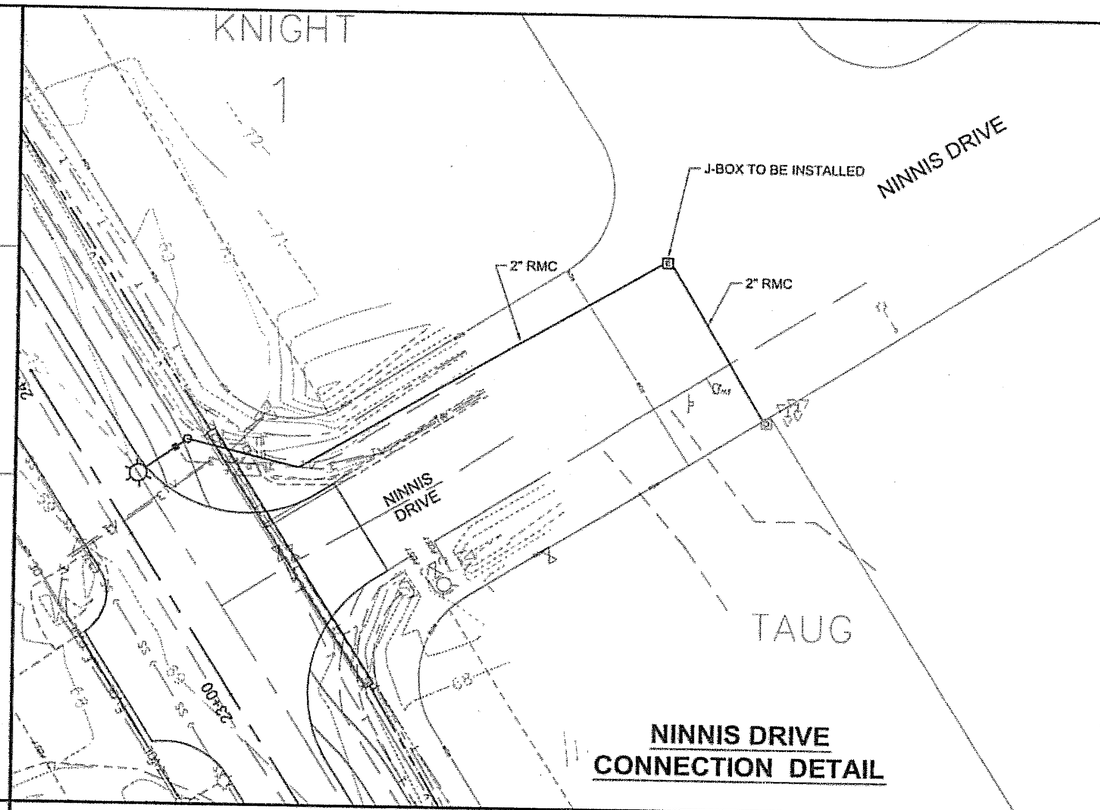
JNU-MONTANA CK/SKATERS CABIN ROAD IMPROVEMENTS

Sign Installation Details

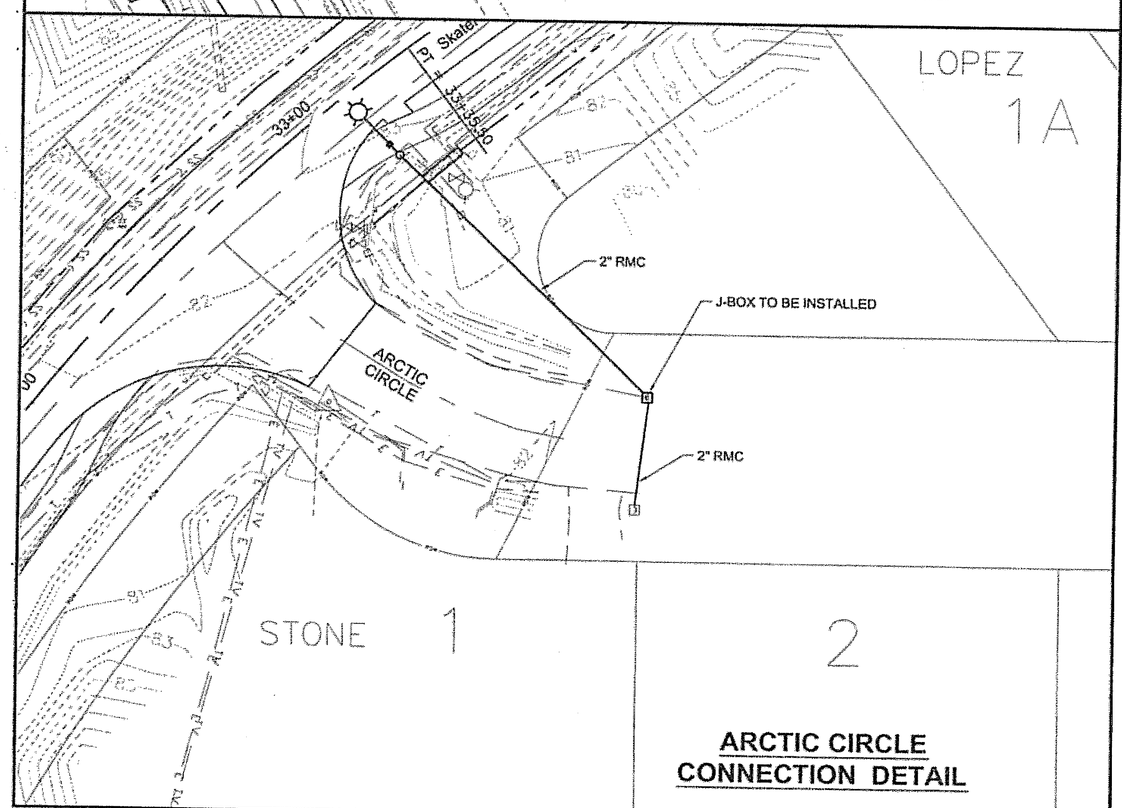
PROJECT DESIGNATION NUMBER	
MGS-000S(409)--68340	
STATE	YEAR
ALASKA	2006
SHEET NUMBER	TOTAL SHEETS
J4	43



MORAINE WAY CONNECTION DETAIL



NINNIS DRIVE CONNECTION DETAIL



ARCTIC CIRCLE CONNECTION DETAIL

Addendum #1

Sheet J-5. *Add the following*: "Note 1. Estimated total length of 2" RMC for the work shown on this sheet is 460 ft."

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ADDENDUM NUMBER

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Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE _____ Date 6-09

JNU-MONTANA CK/SKATERS CABIN ROAD IMPROVEMENTS
STP-000S(520) ~ 68340

Luminare Transformer Connections

STATE OF ALASKA
49th
Carolyn Morehouse
CE-10691
REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: J. O. / C.I.
DRAWN BY: B.B./D.S./L.R./R.G.

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

JNU-MONTANA CK/SKATERS CABIN ROAD IMPROVEMENTS
Luminare Transformer Connections

PROJECT DESIGNATION NUMBER	
MGS-000S(409)~68340	
STATE	YEAR
ALASKA	2006
SHEET NUMBER	TOTAL SHEETS
J5	43

Notes:

1. THE PROJECT IS LOCATED NEAR BOTH THE MENDENHALL RIVER AND MONTANA CREEK; SURFACE RUNOFF DRAINS FROM THE PROJECT WORK LIMITS AND DISCHARGES TOWARDS THESE WATERBODIES.
2. INSTALL EROSION AND SEDIMENT CONTROL DEVICES BEFORE EARTH DISTURBING ACTIVITIES.
3. MAINTAIN DEVICES. MONITOR DAILY. EXCAVATE CHECK DAMS WHEN 4" OF SEDIMENT ACCUMULATES. ENSURE SILT FENCE IS TIGHT AGAINST GROUND.
4. IF INSPECTION REVEALS DIRTY CONSTRUCTION WATER IS DISCHARGING BEYOND THE PROJECT WORK LIMITS, IMMEDIATLY IMPLEMENT CORRECTIVE ACTION. ADDITIONAL SILT FENCING OR CHECK DAMS MAY BE REQUIRED. SWEEPING OF PAVED SURFACES AND TEMPORARY SEEDING AND MATTING MAY ALSO BE REQUIRED.
5. STABILIZE DISTURBED GROUND AS SOON AS POSSIBLE. UNSTABILIZED SURFACES MUST BE TEMPORARILY STABILIZED WITH SEEDING, MATTING, OR OTHER EFFECTIVE MEASURES. YOU ARE RESPONSIBLE FOR MAINTAINING EROSION AND SEDIMENT CONTROL UNTIL PROJECT WORK AREAS ARE PAVED ,SEEDED AND STABILIZED.
6. SEE F-SHEETS FOR LOCATION OF EROSION & SEDIMENT CONTROL DEVICES AND SEDIMENT CONTROL PLAN.
7. SEE STANDARD DRAWING E-13.00 FOR SILT FENCE INSTALLATION DETAIL.

Site Charactistics:

PHYSICAL LOCATION

JUNEAU IS SITUATED AT THE NORTHERN END OF THE ALEXANDER ARCHIPELLAGO.
58°21'38.24" N. LATITUDE
134°34'02.14" W. LONGITUDE
HORIZONTAL DATUM: NAD-83
SECTIONS 30 & 31, TOWNSHIP 040 SOUTH, RANGE 066 EAST, COPPER RIVER MERIDIAN

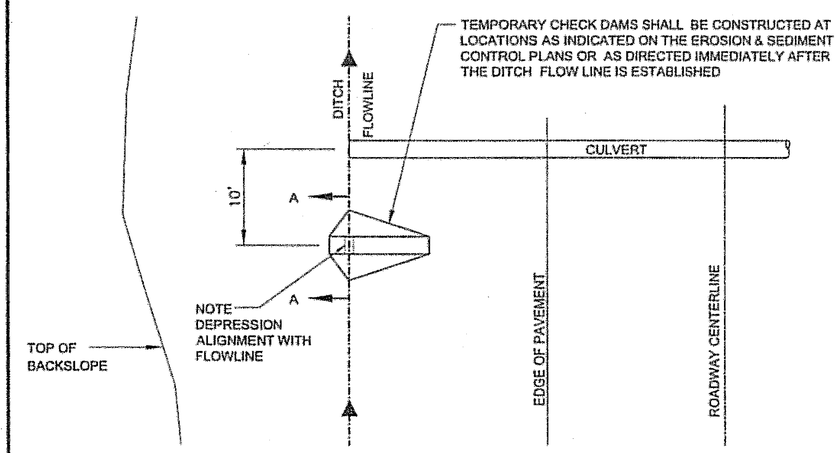
PRECIPITATION AND HYDROLOGY INFORMATION

JUNEAU AVERAGES 54" INCHES OF PRECIPITATION PER YEAR AND 100 INCHES OF SNOW.
ESTIMATED PRE-CONSTRUCTION RUNOFF COEFFICIENT: C=0.40
ESTIMATED POST-CONSTRUCTION RUNOFF COEFFICIENT: C=0.40
RECEIVING WATERS AREMENDENHALL RIVER AND MONTANA CREEK.
AREA OF PROJECT = 3.2 ACRES.

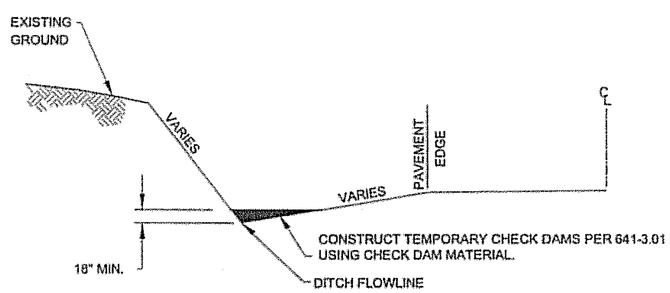
Description of Construction Activity:

ROADWAY & PATH CONSTRUCTION

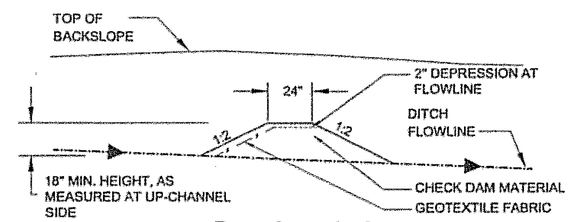
THE PLANS CALL FOR THE RECONSTRUCTION OF THE MONTANA CREEK/SKATERS CABIN ROAD AND NEW CONSTRUCTION OF A SEPERATED PAVED MULTI-USE PATH. CONSTRUCTION WILL BEGIN AT ONE END OF THE PROJECT AND PROGRESS TOWARDS THE OTHER END. WORK ON THE ROAD WILL CONSIST OF EARTHWORK FOR RE-ALIGNMENT PATH CONSTRUCTION, CULVERT REPLACEMENT, UTILITY ADJUSTMENTS/ RELOCATIONS, GRADING/SUBBASE CONSTRUCTION, AND FINAL PAVING.



Plan



Elevation



Section A-A

Temporary Check Dam Details

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ADDENDUM NUMBER

ATTACHMENT NUMBER

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PE ____ Date 6/09

JNU-MONTANA CK/SKATERS CABIN ROAD IMPROVEMENTS
STP-000S(520) ~ 68340

Erosion & Sediment Control Plan

STATE OF ALASKA 49th Russell P. Kroemer CE-10478 REGISTERED PROFESSIONAL ENGINEER
2/16/06

DESIGNED BY: J. O. / C.I.
DRAWN BY: B.B./D.S./L.R./R.G.

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

JNU-MONTANA CK/SKATERS CABIN ROAD IMPROVEMENTS
Erosion & Sediment Control Plan

PROJECT DESIGNATION NUMBER
MGS-000S(409)~68340

STATE	YEAR
ALASKA	2006
SHEET NUMBER	TOTAL SHEETS
P1	43

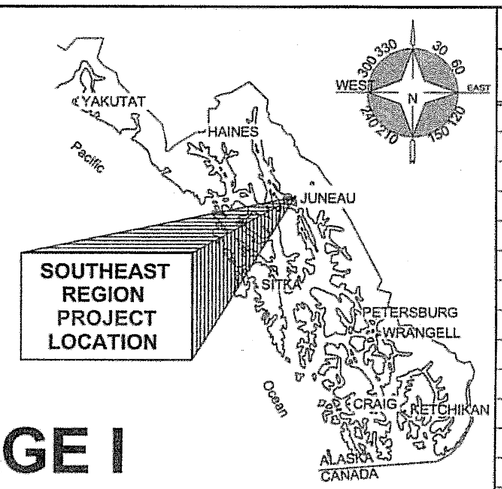
State of Alaska

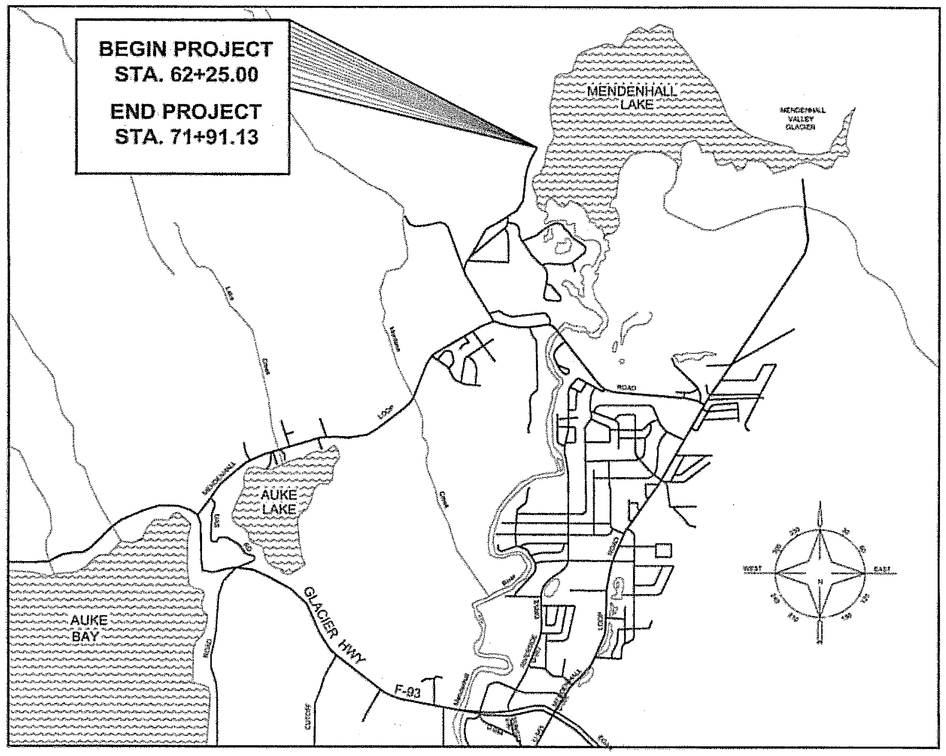
Department of Transportation and Public Facilities

Design and Engineering Services Division

JUNEAU, ALASKA

WEST GLACIER TRAIL PARKING LOT - STAGE I
PROJECT No. 68872





VICINITY MAP

DESIGN DESIGNATION

B.O.P. TO E.O.P.

	2006
AVERAGE DAILY TRAFFIC	400
DESIGN HOURLY VOLUME (10%)	50
DESIGN SPEED (MPH)	20
PEAK HOURLY FACTOR	0.9
DIRECTIONAL DISTRIBUTION (ENTERING/LEAVING)	55/45
EQUIVALENT AXLE LOAD	50,000
TURNING VEHICLE: BUS-40	

PROJECT SUMMARY

LENGTH OF PAVING = 898 ft. (0.17 mi.)
LENGTH OF PROJECT = 898 ft. (0.17 mi.)

THE FOLLOWING STANDARD DRAWINGS APPLY TO THIS PROJECT:

A-1	C-04.12	C-05.12	D-01.02	D-04.21	E-09.00
I-30.10	S-05.01	S-20.10	S-31.00		

INDEX

SHEET NO.	DESCRIPTION
Q1	TITLE SHEET
R1	TYPICAL SECTION
S1	SUMMARIES
T1-T3	PLAN SHEETS
U1-U2	PARKING LOT GRADING PLAN
V1-V2	PARKING LOT SIGNING & STRIPING PLAN
W1	PARKING LOT PROFILES AND SECTIONS
X1-X2	MISCELLANEOUS DETAILS

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE _____ Date 6/09

ROUTE: - MILEPOINT: -

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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

STATE OF ALASKA 49TH Russell P. Kraemer CE-10478 REGISTERED PROFESSIONAL ENGINEER 2/9/06

APPROVED: 2/9/06
REGIONAL PRE-CONSTRUCTION ENGINEER DATE
PATRICK J. KEMP, P.E.

APPROVED: 2/9/06
REGIONAL DIRECTOR DATE
MALCOLM A. MENZIES

CERTIFIED TRUE & CORRECT AS-BUILT OF ACTUAL FIELD CONDITION:

CONSTRUCTION PROJECT MANAGER DATE

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	68872	2006	Q1	43

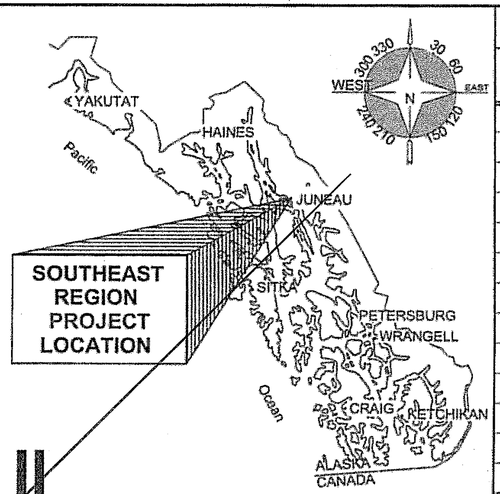
State of Alaska

Department of Transportation and Public Facilities

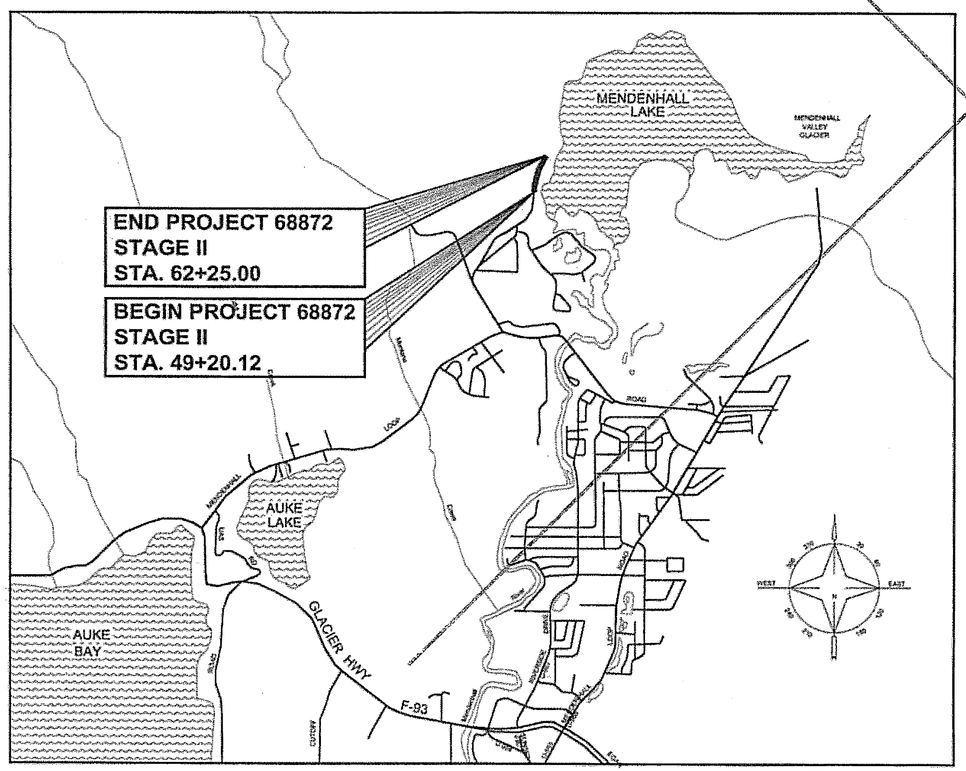
Design and Engineering Services Division

JUNEAU, ALASKA

U.S. FOREST SERVICE ROAD 8453 - STAGE II
PROJECT No. 68872



Add. Alt. B
Not
Awarded



VICINITY MAP

DESIGN DESIGNATION

B.O.P. TO E.O.P.

	2006
AVERAGE DAILY TRAFFIC	400
DESIGN HOURLY VOLUME (10%)	50
DESIGN SPEED (MPH)	20
PEAK HOURLY FACTOR	0.9
DIRECTIONAL DISTRIBUTION (ENTERING/LEAVING)	55/45
EQUIVALENT AXLE LOAD	50,000
TURNING VEHICLE: BUS-40	

PROJECT SUMMARY

LENGTH OF PAVING	=	1304 ft. (0.24 mi.)
WIDTH OF ROADWAY PAVING	=	22'
LENGTH OF PROJECT	=	1304 ft. (0.24 mi.)

THE FOLLOWING STANDARD DRAWINGS APPLY TO THIS PROJECT:

A-1	C-04.12	C-05.12	D-01.02	D-04.21	I-30.10
S-05.01	S-20.10	S-31.00			

INDEX

SHEET NO.	DESCRIPTION
QQ1	TITLE SHEET
RR1	TYPICAL SECTION
SS1	SUMMARIES
TT1-TT3	PLAN & PROFILE SHEETS

ROUTE: - MILEPOINT: -

PATH: Q:\Jnu\68872\Planset\Phase II\P2_A1_TSHT.dwg
Thu, 09/Feb/06 01:33PM caivaniszek
PLOT: PSPACE OR MSPACE: TAB: TSHT

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE Date 6/03

STATE OF ALASKA 49TH Russell P. Kraemer CE-10478 REGISTERED PROFESSIONAL ENGINEER 2/9/06

APPROVED: 2/9/06
REGIONAL PRE-CONSTRUCTION ENGINEER DATE
PATRICK J. KEMP, P.E.

APPROVED: 2/9/06
REGIONAL DIRECTOR DATE
MALCOLM A. MENZIES

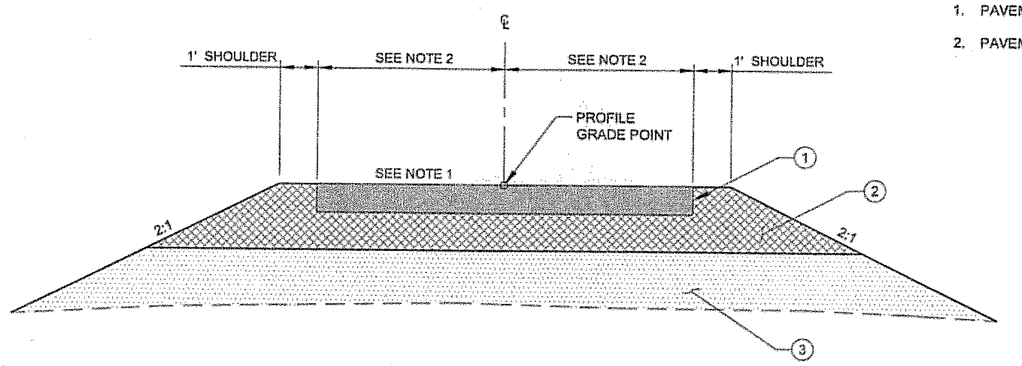
CERTIFIED TRUE & CORRECT AS-BUILT OF ACTUAL FIELD CONDITION:

CONSTRUCTION PROJECT MANAGER DATE

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	68872	2006	QQ1	43

LEGEND

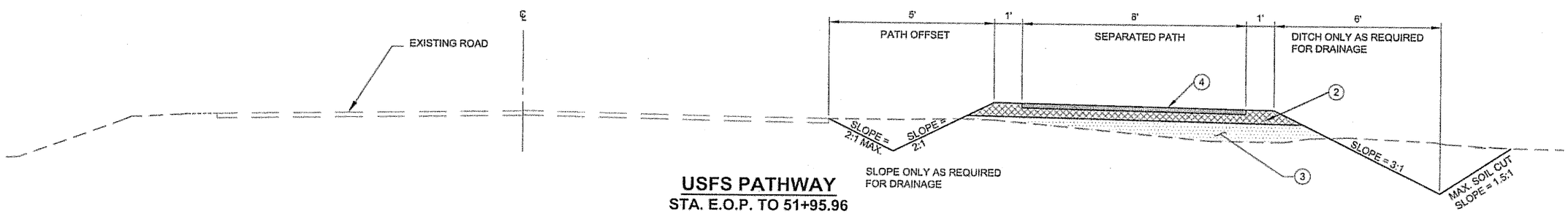
1. 2" ASPHALT CONCRETE, TYPE II, CLASS B
2. 4" AGGREGATE BASE COURSE, GRADING D -1
3. BORROW , TYPE A
4. 2" ASPHALT SIDEWALK



PARKING LOT PAVEMENT SECTION

NOTES:

1. PAVEMENT CROSS SLOPE VARIES. SEE LAYOUT SHEETS FOR TRANSITION DETAILS.
2. PAVEMENT WIDTH VARIES. SEE LAYOUT SHEETS.



USFS PATHWAY

STA. E.O.P. TO 51+95.96

BASIS OF ESTIMATE FOR USFS PATHWAY		
ITME NO.	ITEM	ESTIMATING FACTOR
203(3A)	UNCLASSIFIED EXCAVATION	100 C.Y.
203(6A)	BORROW, TYPE A	140 TONS
301(1A)	AGGREGATE BASE COURSE, GRADING D-1	47 TONS
603(21-12A)	12 INCH CORRUGATED POLYETHYLENE PIPE	70 FEET
608(3A)	ASPHALT SIDEWALK	210 S.Y.

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE _____ Date 6/07

STATE OF ALASKA 49th Russell P. Kraemer CE-10478 REGISTERED PROFESSIONAL ENGINEER 2/16/06

TONGASS ENGINEERING & RECREATION	DESIGNED: R.K. / C.I. DATE:	DATE:	REVISION:	BY:	FOREST SERVICE U.S. DEPARTMENT OF AGRICULTURE	WEST GLACIER TRAIL PARKING LOT - STAGE I	TYPICAL SECTION
	DRAWN: B.B./D.S./L.R./R.C. DATE:	XX/XX/XX	XXXXXXXXXX	X. XXXXXX		USDA FOREST SERVICE - TONGASS NATIONAL FOREST R-10 - JUNEAU RANGER DISTRICT	Q:\Jnu\68872\Planset\Phase I\P1_B_Typs.dwg
	REVIEWED: X. XXXXXXXXXX DATE:	XX/XX/XX	XXXXXXXXXXXXX	X.XXXXXX			SH. R1 of 43
	TNFTYP:09/04	XX/XX/XX	XXXXXXXXXXXXX	X. XXXXXX			

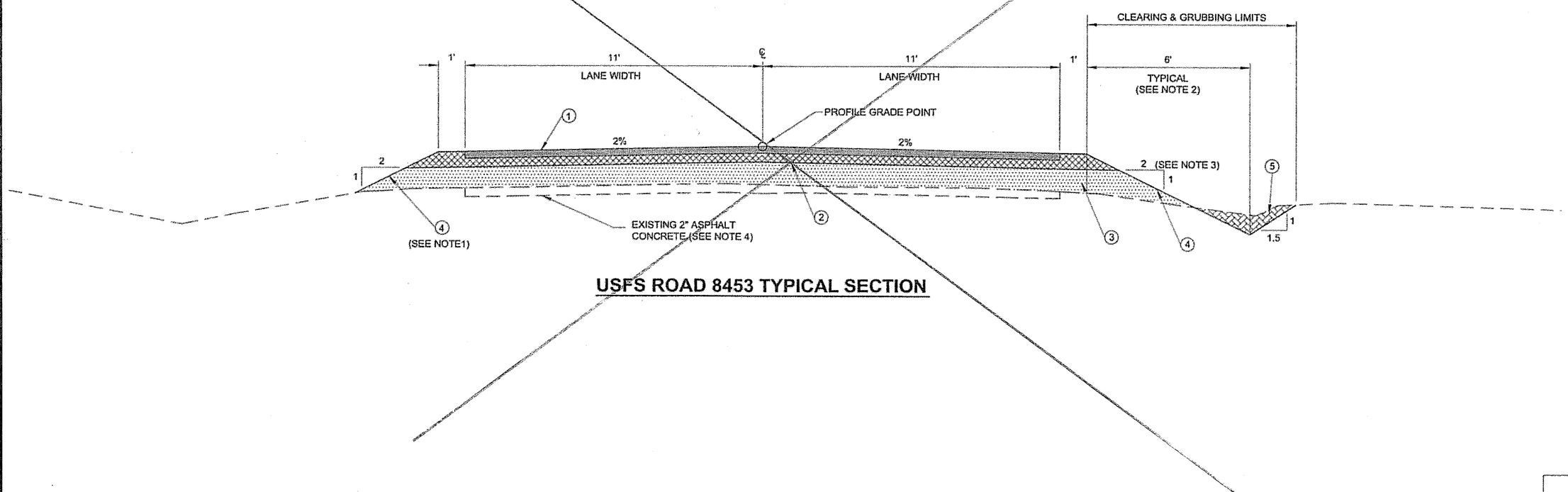
NOTES:

1. ALL SOIL SLOPES 2:1 OR STEEPER SHALL BE SEEDED PER SECTION 618.
2. DITCHES TO BE CONSTRUCTED TO MAINTAIN EXISTING DRAINAGE ALONG ROADWAY.
3. 2:1 MAXIMUM SLOPE OR FLATTER TO MATCH TERRAIN.
4. EXISTING PAVEMENT TO BE RECYCLED WITHIN THE PROPOSED STRUCTURAL SECTION AS BASE COURSE.

LEGEND

1. 3" ASPHALT CONCRETE, TYPE II, CLASS B
2. 4" AGGREGATE BASE COURSE, GRADING D-1
3. BORROW, TYPE A
4. SEEDING (SEE NOTE 1)
5. UNCLASSIFIED EXCAVATION
6. 4" TOPSOIL

Add. Alt. B
Not Awarded



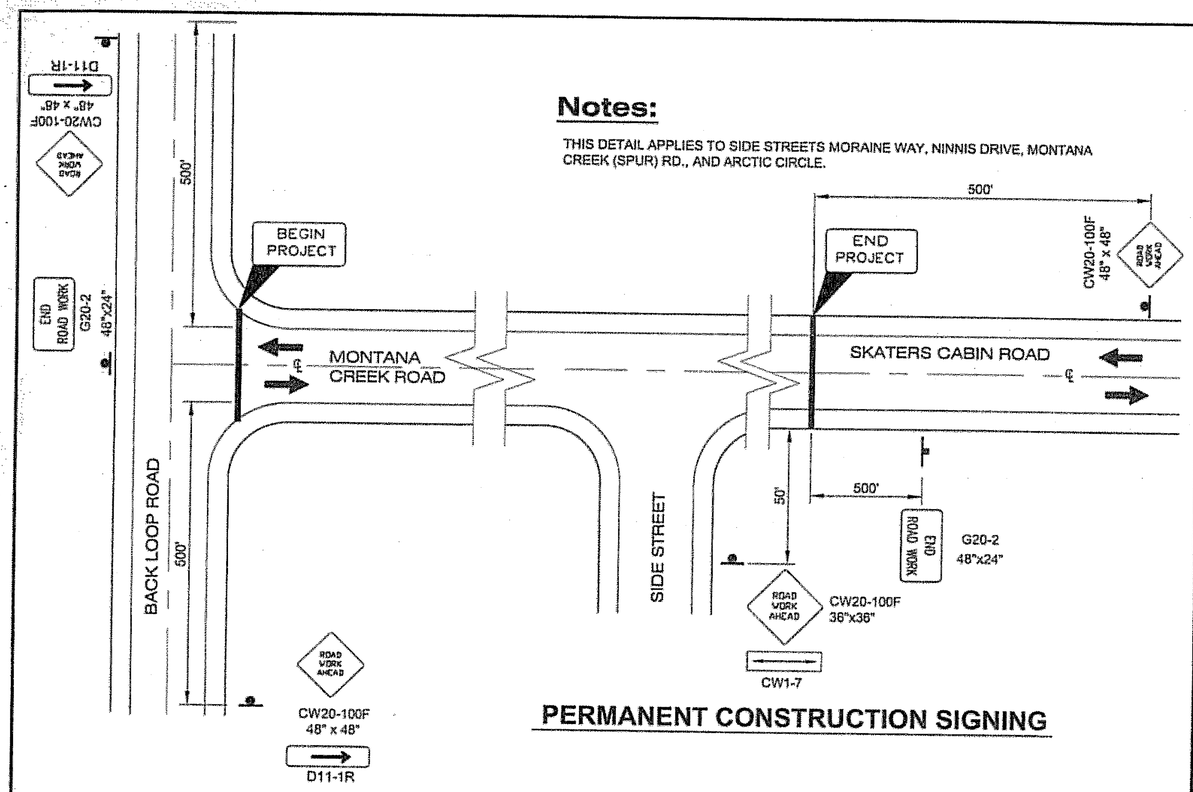
USFS ROAD 8453 TYPICAL SECTION

STATE OF ALASKA 49th Russell P. Kraemer CE-10478 REGISTERED PROFESSIONAL ENGINEER 2/16/06

TONGASS ENGINEERING & RECREATION	DESIGNED: R.K. / C.I. DATE:	DATE:	REVISION:	BY:	U.S. FOREST SERVICE ROAD 8453 - STAGE II	TYPICAL SECTION	
	DRAWN: B.B./D.S./L.R./R.C. DATE:	XX/XX/XX	XXXXXXXXXX	X. XXXXXX	USDA FOREST SERVICE - TONGASS NATIONAL FOREST R-10 - JUNEAU RANGER DISTRICT	Q:\Jnu\68872\Planset\Phase II\P2_B_Typs.dwg	SHRR1of 43
	REVIEWED: X. XXXXXXXXXX DATE:	XX/XX/XX	XXXXXXXXXXXX	X.XXXXXX			
	TNFTYP:09/04	XX/XX/XX	XXXXXXXXXXXX	X. XXXXXX			

Notes:

THIS DETAIL APPLIES TO SIDE STREETS MORAINE WAY, NINNIS DRIVE, MONTANA CREEK (SPUR) RD., AND ARCTIC CIRCLE.



PERMANENT CONSTRUCTION SIGNING

Legend

- SIGN
- CONE
- DRUM
- TYPE III BARRICADE
- FLAGGING STATION

FORMULAS FOR L (TAPER LENGTH)

40 MPH OR LESS $L = \frac{WxS^2}{60}$

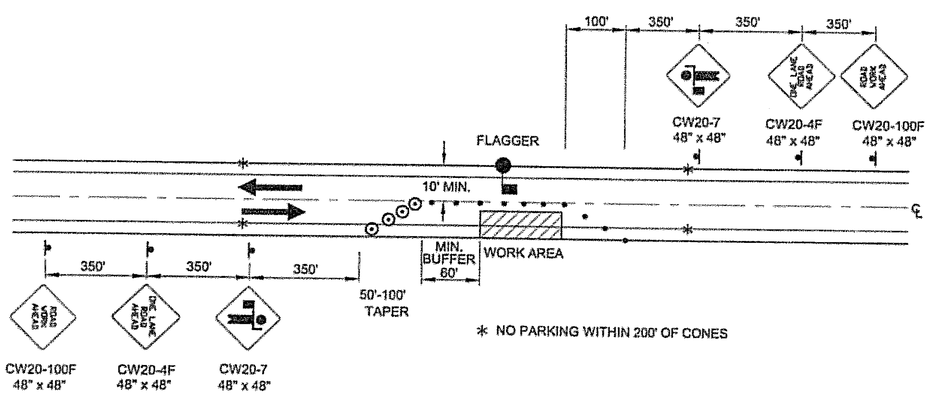
WHERE W= WIDTH OF OFFSET
S= POSTED SPEED LIMIT

DRUM OR CONE SPACING = S (IN FEET)

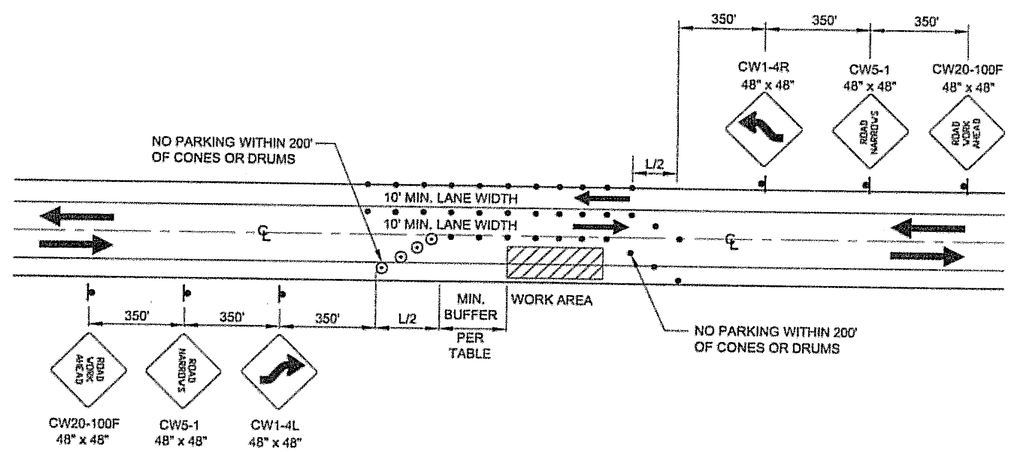
MIN. BUFFER	
S	LENGTH
25	155
30	200
35	250

Traffic Control Notes:

1. IT IS THE INTENT OF THIS TRAFFIC CONTROL PLAN (TCP) TO ILLUSTRATE SOME, BUT NOT ALL, OF THE TRAFFIC CONTROL SETUPS WHICH WILL BE REQUIRED ON THIS PROJECT. DEVELOPE PLANS FOR CONFIGURATIONS NOT COVERED BY THESE TCP AND SUBMITTED FOR APPROVAL. YOUR TCP SHOULD INCORPORATE APPLICABLE PORTIONS OF DETAILS ON THESE SHEETS.
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-WORK HOURS. UNLESS AN APPROVED TRAFFIC CONTROL SIGNAL HAS BEEN INSTALLED.
4. TEMPORARY DRIVING LANES SHALL HAVE A MINIMUM WIDTH OF 10'-0".
5. CONSTRUCTION SIGNING SHALL BE IN PLACE ONLY WHEN THE CONDITIONS EXIST FOR WHICH THE SIGNS ARE INTENDED. CONSTRUCTION SIGNS SHALL BE PLACED SUCH THAT THEY DO NOT OBSCURE EXISTING TRAFFIC SIGNS.
6. WORK ZONE DOUBLE TRAFFIC FINES SIGNS SHALL BE USED AS DIRECTED AND PER STANDARD DRAWING C-04.12.
7. WARNING LIGHTS SHALL BE USED ON ALL CHANNELIZING DEVICES PLACED ALONG OR AROUND ROADWAY HAZARDS AS DIRECTED.
8. ALL ROADS WITHIN THE PROJECT LIMITS SHALL REMAIN OPEN TO TRAFFIC. SHORT-TERM SINGLE LANE CLOSURES ARE ALLOWED FOR CULVERT PLACEMENT AND OTHER MISC. WORK, AS APPROVED. ACCESS TO BUSINESSES AND HOMES WILL BE OPENED AT THE END OF THE DAILY WORK SHIFT.
9. A FLAGGER SHALL BE USED TO DIRECT TRUCKS AND CONSTRUCTION EQUIPMENT WHEN THEY ENTER OR CROSS THE TRAVELED WAY.
10. KEEP THE PUBLIC INFORMED OF CONSTRUCTION ACTIVITIES THROUGH THE USE OF THE LOCAL NEWS MEDIA. NEWS RELEASES WILL BE REQUIRED BUT NOT LIMITED TO, THE ONSET OF WORK, GRINDING, PAVING, AND CHANGES IN THE LANE CONFIGURATIONS.



TWO LANE ROAD - SINGLE LANE CLOSURE
Single Flagger



TWO-WAY TRAFFIC

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TAB: TYPICALS

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE ____ Date 6/05

JNU-MONTANA CK/SKATERS CABIN ROAD IMPROVEMENTS
STP-000S(520) ~ 68340

Traffic Control Plans

STATE OF ALASKA 49th Carolyn Morehouse CE-10691 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: J. O. / C.I.
DRAWN BY: B.B./D.S./L.R./R.G.

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

JNU-MONTANA CK/SKATERS CABIN ROAD IMPROVEMENTS

Traffic Control Plans

PROJECT DESIGNATION NUMBER	
MGS-000S(409)~68340	
STATE	YEAR
ALASKA	2006
SHEET NUMBER	TOTAL SHEETS
S1	43

603 CULVERT PIPE SUMMARY

PIPE NO.	TYPE	DIAMETER (in)	LENGTH (ft)	INLET STA.	INLET OFF.	INLET INV.	OUTLET STA.	OUTLET OFF.	OUTLET INV.	SLOPE	REMARKS
P-1	CPP	12	16	49+70.22	13.29 RT	64.55	49+70.56	28.91 RT	64.47	0.5%	See Note 1
P-2	CPP	12	~~14~~ 20	50+~~19.49~~ 20.0	17 ~~15.17~~ RT	64.81	50+~~19.49~~ 20.0	27 ~~28.81~~ RT	64.74	0.5%	See Note 1
P-3	CPP	12	~~15~~ 20	50+01 ~~51+19.14~~	17 ~~14.12~~ RT	64.76	51+~~19.11~~ 02	17 ~~29.75~~ RT	64.69	0.4%	See Note 1
P-4	CPP	12	16	51+69.0	13.80 RT	64.73	51+69.0	29.43 RT	64.65	0.5%	See Note 1
~~P-8~~	~~CSP~~	~~24~~	~~43~~	~~54+97.31~~	~~20.69 LT~~	~~63.73~~	~~55+07.75~~	~~21.11 RT~~	~~63.73~~	~~0.8%~~	~~See Notes 1 & 3~~
~~P-11~~	~~CSP~~	~~48~~	~~6~~	~~62+86.32~~	~~24.1 LT~~	~~59.74~~	~~62+78.51~~	~~25.4 RT~~	~~59.37~~	~~0.89%~~	~~See Notes 2 & 3~~
P-12	CPP	18	~~18~~ 50.8	63+~~79.26~~ 04.0	31 ~~30.42~~ RT	61.51	63+~~84.14~~ 00.0	31 ~~30.51~~ RT	61.42	0.6%	See Note 1
P-13	CPP	18	~~54~~ 64.6	64+~~53.85~~ 04.0	27 ~~28.48~~ LT	62.24	04+07 ~~71+70.88~~	27 ~~18.63~~ LT	61.43	1.5%	See Note 1
P-14	CPP	18	~~25~~ 36.6	64+~~98.84~~ 00.0	30.45 RT	62.02	64+~~28.31~~ 00.0	30.11 RT	61.8	0.9%	See Note 1
P-15	CPP	18	~~23~~ 43.3	65+~~08.32~~ 10.0	26.48 LT	63.02	64+73.32	26.48 LT	62.53	1.5%	See Note 1
P-16	CPP	18	~~38~~ 26.6	65+~~80.35~~ 07.5	24 ~~28.81~~ RT	62.74	65+~~57.60~~ 00.0	24 ~~28.06~~ RT	62.59	0.4%	See Note 1

TOTAL LENGTH	
12' CPP =	~~82~~
18" CPP =	~~165~~
24" CSP =	~~43~~
48" CSP =	~~6~~

NOTES:

1. INSTALL NEW CULVERT.
2. EXTEND EACH END OF EXISTING CULVERT
3. FISHPASSAGE REQUIRED. INSTREAM CONSTRUCTION WORK ALLOWED DURING FISH TIMING WINDOW JUNE 1 TO AUGUST 1. ADDITIONAL REQUIREMENTS LISTED IN APPENDIX B OF SPECIFICATIONS.

615(1) - STANDARD SIGN SUMMARY

NUMBER	STATION	OFFSET	DESCRIPTION	ASDS CODE	DIM. (HxW)	AREA (sf)	REMARKS
1	51+38	RT	BUMP	W8-1	36 x 36	9.0	SEE NOTE 2
2	51+38	RT	DIAGONAL ARROW LEFT	W16-7PL	30 x 18	3.8	MOUNT BELOW SIGN 1. SEE NOTE 2.
3	51+62	LT	BUMP	W8-1	36 x 36	9.0	SEE NOTE 2
4	51+62	LT	DIAGONAL ARROW LEFT	W16-7PL	30 x 18	3.8	MOUNT BELOW SIGN 3. SEE NOTE 2.
5	54+38	RT	BUMP	W8-1	36 x 36	9.0	SEE NOTE 2
6	54+38	RT	DIAGONAL ARROW LEFT	W16-7PL	30 x 18	3.8	MOUNT BELOW SIGN 5. SEE NOTE 2.
7	54+62	LT	BUMP	W8-1	36 x 36	9.0	SEE NOTE 2
8	54+62	LT	DIAGONAL ARROW LEFT	W16-7PL	30 x 18	3.8	MOUNT BELOW SIGN 7. SEE NOTE 2.
9	71+75	RT	DO NOT ENTER	R5-1	36 x 36	9.0	SEE NOTE 2
10	71+75	RT	YIELD	R1-2	36 x 36	4.5	SEE NOTE 2
11	12+00	LT	DO NOT ENTER	R5-1	36 x 36	9.0	SEE NOTE 2
12	12+00	RT	STOP	R1-1	30 x 30	~~6.2~~ 6.3	SEE NOTE 2
13	65+20	RT	BUS UNLOADING ONLY		12 x 18	1.5	SEE NOTES 1 & 2.
14	65+43	LT	HANDICAP PARKING	R7-8	12 x 18	1.5	SEE NOTE 2
15	65+68	LT	HANDICAP PARKING	R7-8	12 x 18	1.5	SEE NOTE 2
16	65+96	RT	BUS UNLOADING ONLY		12 x 18	1.5	SEE NOTES 1 & 2.
					TOTAL =	86.0	

NOTES:

1. USE ASDS CODE R7P WITH "BUS LOADING ONLY" TEXT.
2. FINISHED WOODEN POSTS, SHALL BE USED PER SECTIONS 615-2.01 AND 730-2.04.
3. EXISTING SIGNS TO REMAIN UNLESS DIRECTED.

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE ____ Date 6/08

STATE OF ALASKA 49th Russell P. Kraemer CE-10476 REGISTERED PROFESSIONAL ENGINEER
2/16/06

TONGASS ENGINEERING & RECREATION

DESIGNED: R.K. / C.I.	DATE:	DATE:	REVISION:	BY:
DRAWN: B.B./D.S./L.R./R.C.	DATE:	XX/XX/XX	XXXXXXXXX	X. XXXXXX
REVIEWED: X. XXXXXXXXXX	DATE:	XX/XX/XX	XXXXXXXXXXXX	X.XXXXXX
TNFTYP:09/04		XX/XX/XX	XXXXXXXXXXXX	X. XXXXXX

WEST GLACIER TRAIL PARKING LOT - STAGE I

USDA FOREST SERVICE - TONGASS NATIONAL FOREST
R-10 - JUNEAU RANGER DISTRICT

SUMMARY TABLES

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SH. S1 of 43

O:\Jnu\68872\Planset\Phase I\P1_D_Sums.dwg

603 CULVERT PIPE SUMMARY

PIPE NO.	TYPE	DIAMETER (in)	LENGTH (ft)	INLET STA.	INLET OFF.	INLET INV.	OUTLET STA.	OUTLET OFF.	OUTLET INV.	SLOPE	REMARKS
P-5	CPP	12	13	52+21.51	41.64 RT	61.69	52+11.01	49.31 RT	61.57	0.9%	SEE NOTE 1
P-6	CPP	12	12	52+59.88	33.75 RT	62.07	52+47.89	33.82 RT	61.96	0.9%	SEE NOTE 1
P-7	CPP	12	10	53+70.96	34.03 RT	63.12	53+60.95	34.10 RT	63.03	0.9%	SEE NOTE 1
P-9	CSP	24	44	57+43.11	18.4 LT	62.85	57+22.21	20.1 RT	62.75	0.2%	SEE NOTES 1 & 3
P-10	CSPA	41 x 31	6	59+30.31	19.55 LT	61.05	59+32.83	19.87 RT	60.51	1.4%	SEE NOTES 2 & 3

TOTAL LENGTH	
12" CPP =	35
24" CSP =	44
41 X 31 CSPA =	6

NOTES:

1. INSTALL NEW CULVERT.
2. EXTEND EACH END OF EXISTING CULVERT.
3. FISHPASSAGE REQUIRED. IN STREAM CONSTRUCTION WORK ALLOWED DURING FISH TIMING WINDOW JUNE 1 PT AUGUST 1. ADDITIONAL REQUIREMENTS LISTED IN APPENDIX B. OF SPECIFICATIONS.

627(10) ADJUSTMENT OF VALVE BOX

STATION	OFFSET	DESCRIPTION	QUANTITY
50+51.59	5.82	WATER VALVE	1
50+53.15	3.95	WATER VALVE	1
53+40.54	11.71	WATER VALVE	1
53+40.69	11.63	WATER VALVE	1
		TOTAL	4

Add. Alt. B
Not Awarded

604(4) ADJUST EXISTING MANHOLE

STATION	OFFSET	DESCRIPTION	QUANTITY
49+90	7.2 RT	Water Manhole	1
49+74	5.0 RT	Water Manhole	1
		TOTAL	2

615(1) - STANDARD SIGN SUMMARY

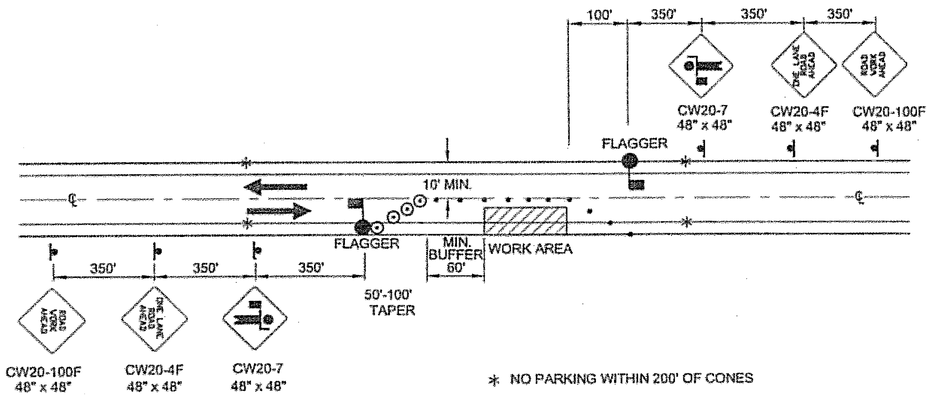
NUMBER	STATION	OFFSET	DESCRIPTION	ASDS CODE	DIM. (HxW)	AREA (sf)	REMARKS
1	60+01.72	32.00 LT	HANDICAP PARKING	R7-8	12 x 18	1.5	SEE NOTE 2
					TOTAL =	1.5	

NOTES:

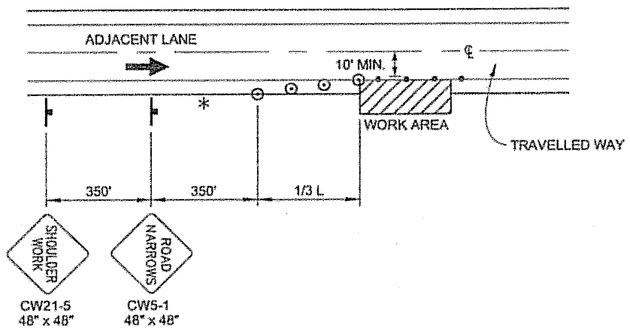
1. EXISTING SIGNS TO REMAIN UNLESS DIRECTED.

STATE OF ALASKA 49th Russell P. Kraemer CE-10478 REGISTERED PROFESSIONAL ENGINEER 2/16/06

TONGASS ENGINEERING & RECREATION	DESIGNED: R.K. / C.I. DATE:	DATE:	REVISION:	BY:	U.S. FOREST SERVICE ROAD 8453 - STAGE II	SUMMARIES	
	DRAWN: B.B./D.S./L.R./R.C. DATE:	XX/XX/XX	XXXXXXXXXX	X. XXXXXX			
	REVIEWED: X. XXXXXXXXXX DATE:	XX/XX/XX	XXXXXXXXXXXX	X.XXXXXX	USDA FOREST SERVICE - TONGASS NATIONAL FOREST R-10 - JUNEAU RANGER DISTRICT	Q:\Jnu\68872\Planset\Phase II\P2_D_Sums.dwg	SH.SS1of 43
	TNFTYP:09/04	XX/XX/XX	XXXXXXXXXXXX	X. XXXXXX			



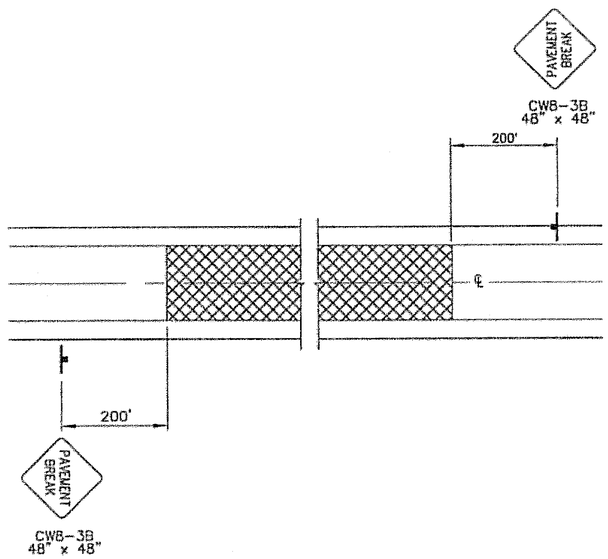
TWO LANE ROAD - SINGLE LANE CLOSURE
Double Flagger



SHOULDER WORK

Legend

- SIGN
- CONE
- DRUM
- TYPE III BARRICADE
- FLAGGING STATION



SIGNING FOR UNPAVED AREA

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Thu, 09/Feb/06 02:34PM
PLOT:
PSPACE 1=1(F) OR MSPACE 1=1(F)
TAB: TYPICALS

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE _____ Date 4/07

JNU-MONTANA CK/SKATERS CABIN ROAD IMPROVEMENTS
STP-000S(520) ~ 68340

Traffic Control Plans

STATE OF ALASKA
19th
Carolyn Morehouse
CE-10691
REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: J. O. / C.I.
DRAWN BY: B.B./D.S./L.R./R.G.

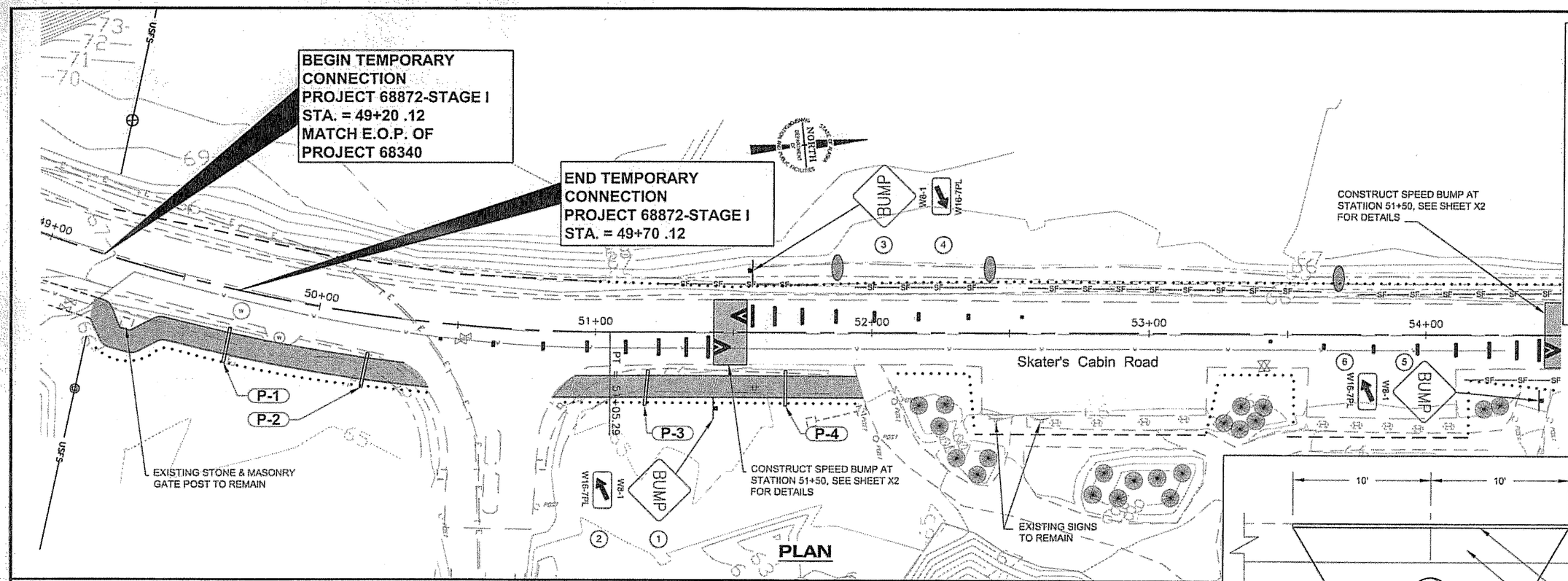
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

JNU-MONTANA CK/SKATERS CABIN ROAD IMPROVEMENTS

Traffic Control Plans

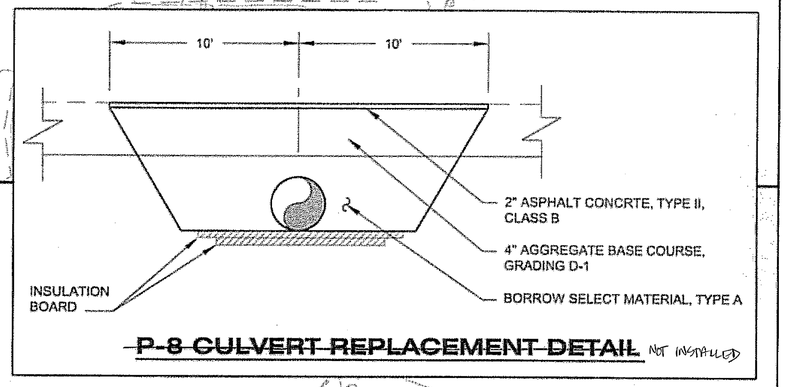
PROJECT DESIGNATION NUMBER
MGS-000S(409)~68340

STATE	YEAR
ALASKA	2006
SHEET NUMBER	TOTAL SHEETS
S2	43

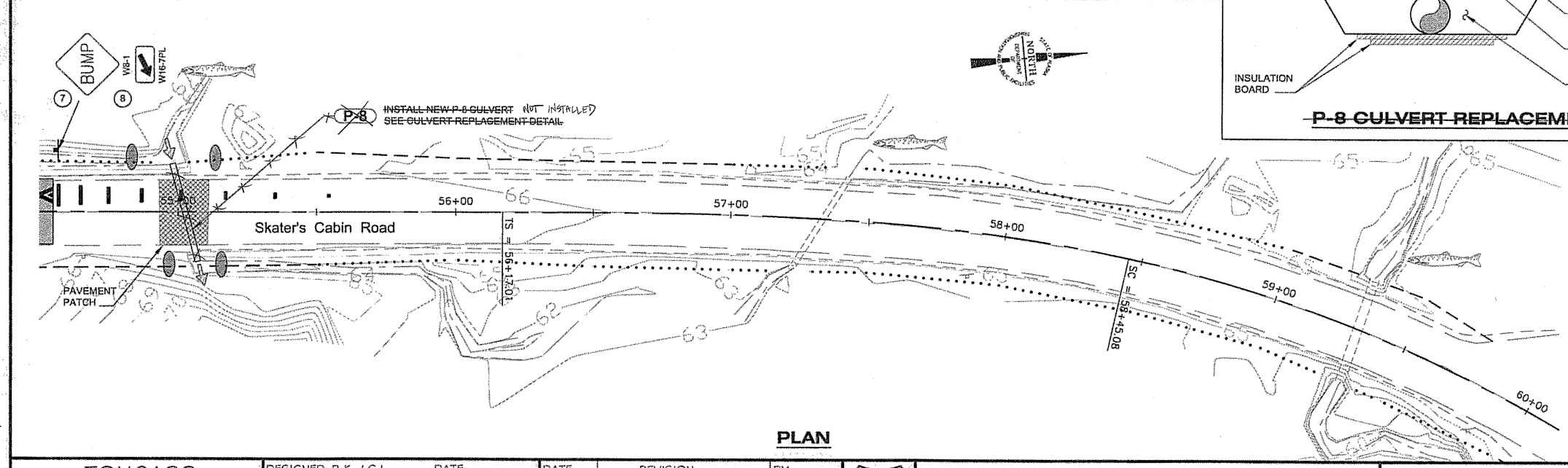


LEGEND:

- = WATER
- = CABLE/TELEPHONE
- = OVERHEAD ELECTRIC
- = SILT FENCE
- = SANITARY SEWER
- = CHECK DAM
- P-1 = PIPE NUMBER
- = PROPOSED BOULDER LOCATION
- = SPEED BUMP
- = STREAM FLOW DIRECTION
- = FISH STREAM



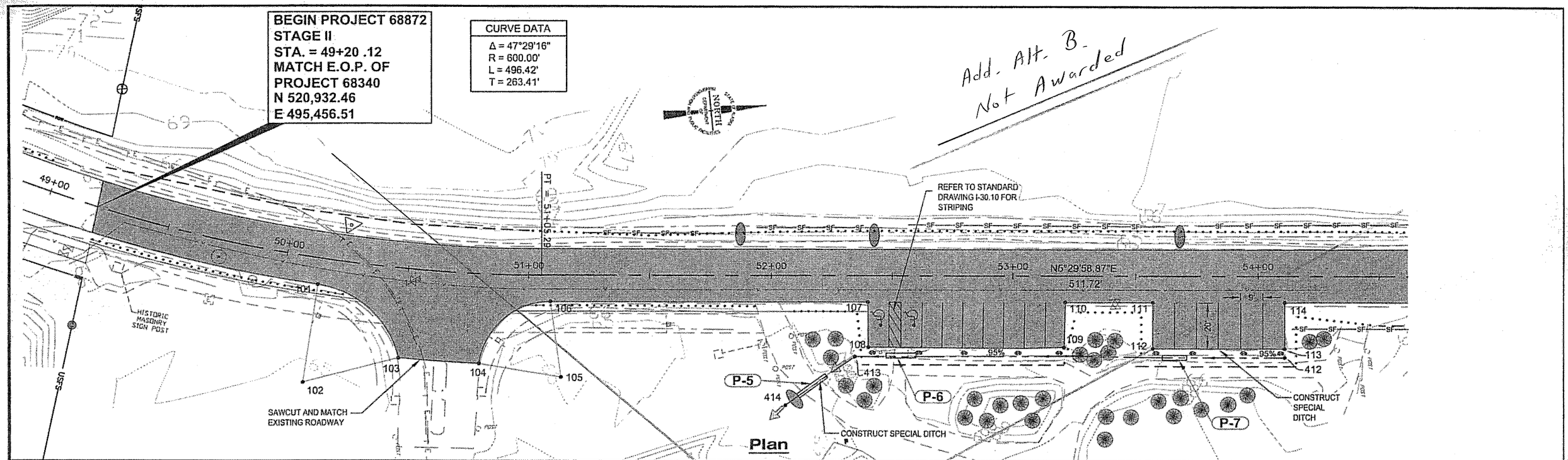
~~P-8 CULVERT REPLACEMENT DETAIL~~ NOT INSTALLED



Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE _____ Date 6/09

STATE OF ALASKA 49th Russell P. Kraemer CE-10478 REGISTERED PROFESSIONAL ENGINEER
2/16/06

TONGASS ENGINEERING & RECREATION	DESIGNED: R.K. / C.I. DATE:	DATE:	REVISION:	BY:	FOREST SERVICE U.S. DEPARTMENT OF AGRICULTURE	WEST GLACIER TRAIL PARKING LOT - STAGE I	PLAN AND PROFILE
	DRAWN: B.B./D.S./L.R./R.C. DATE:	XX/XX/XX	XXXXXXXXXX	X. XXXXXX		USDA FOREST SERVICE - TONGASS NATIONAL FOREST R-10 - JUNEAU RANGER DISTRICT	Q:\Jnu\68872\Planset\Phase I\P1_F1-Plan_R.dwg
	REVIEWED: X. XXXXXXXXXX DATE:	XX/XX/XX	XXXXXXXXXXXX	X.XXXXXX			SH. T1 of 43
	TNFTYP:09/04	XX/XX/XX	XXXXXXXXXXXX	X. XXXXXX			



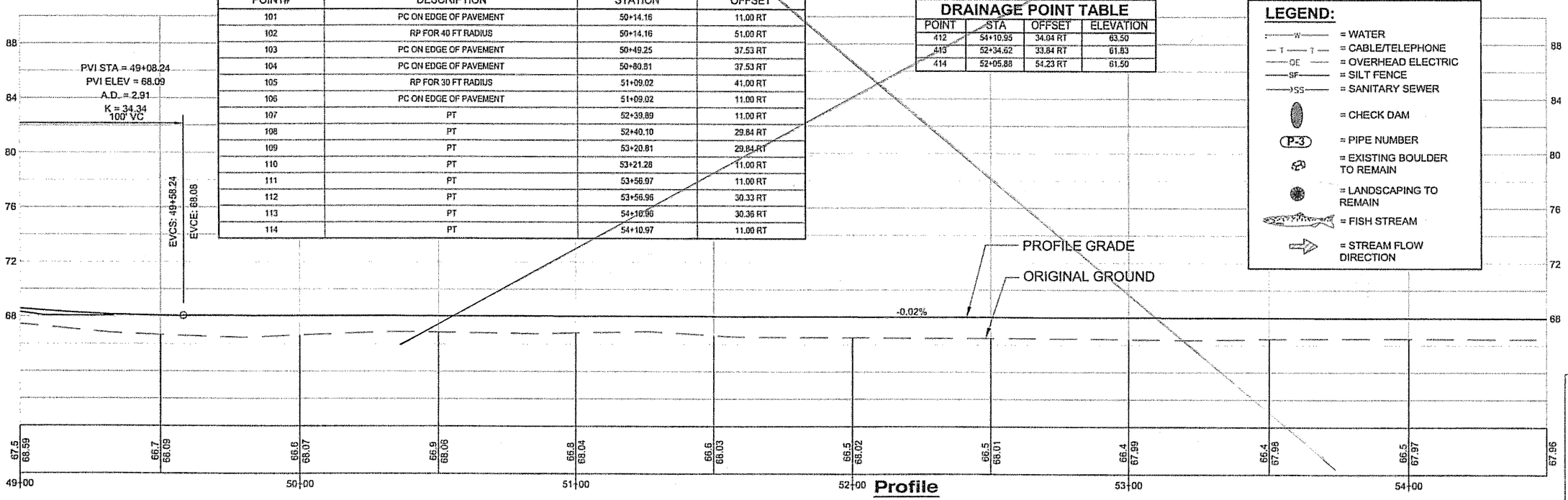
POINT#	DESCRIPTION	STATION	OFFSET
101	PC ON EDGE OF PAVEMENT	50+14.16	11.00 RT
102	RP FOR 40 FT RADIUS	50+14.16	51.00 RT
103	PC ON EDGE OF PAVEMENT	50+49.25	37.53 RT
104	PC ON EDGE OF PAVEMENT	50+80.81	37.53 RT
105	RP FOR 30 FT RADIUS	51+09.02	41.00 RT
106	PC ON EDGE OF PAVEMENT	51+09.02	11.00 RT
107	PT	52+39.89	11.00 RT
108	PT	52+40.10	29.84 RT
109	PT	53+20.81	29.84 RT
110	PT	53+21.28	11.00 RT
111	PT	53+56.97	11.00 RT
112	PT	53+56.96	30.33 RT
113	PT	54+10.96	30.36 RT
114	PT	54+10.97	11.00 RT

DRAINAGE POINT TABLE

POINT	STA	OFFSET	ELEVATION
412	54+10.95	34.04 RT	63.50
413	52+34.62	33.84 RT	61.83
414	52+05.88	54.23 RT	61.50

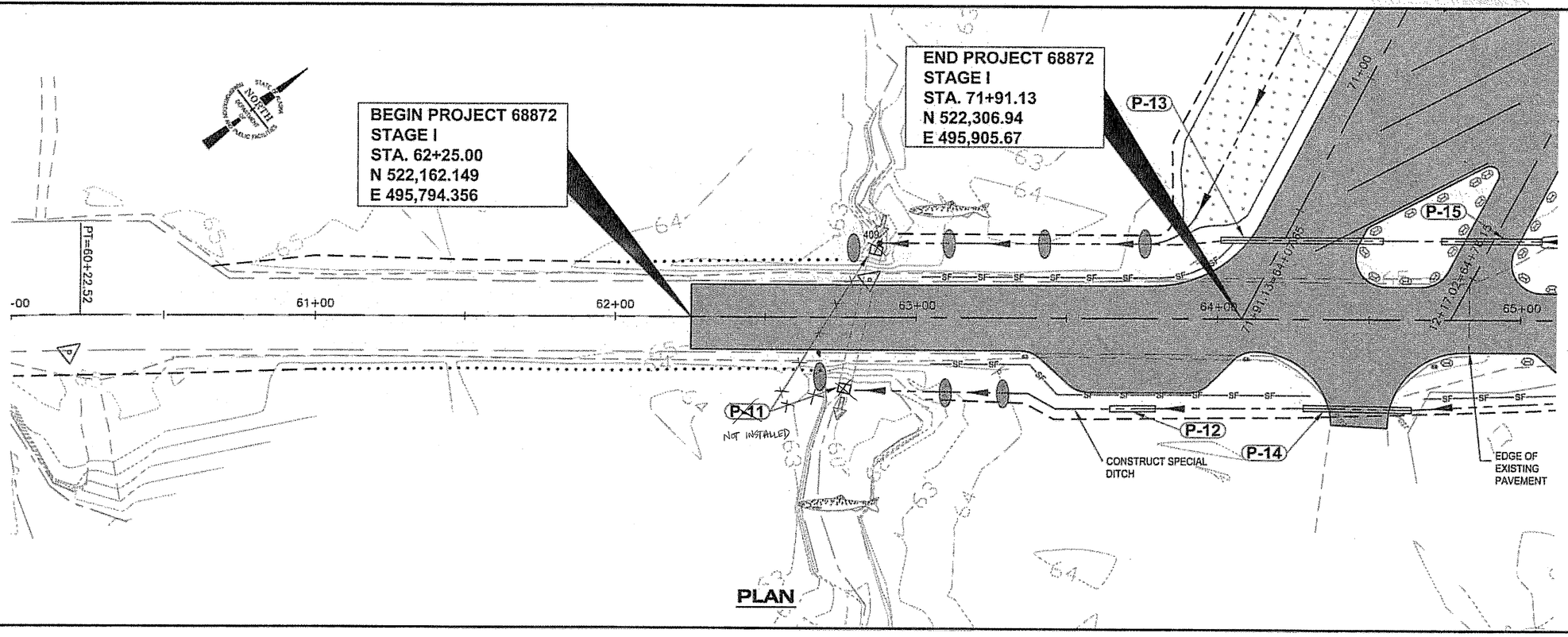
LEGEND:

- = WATER
- = CABLE/TELEPHONE
- = OVERHEAD ELECTRIC
- = SILT FENCE
- = SANITARY SEWER
- = CHECK DAM
- (P-3) = PIPE NUMBER
- = EXISTING BOULDER TO REMAIN
- = LANDSCAPING TO REMAIN
- = FISH STREAM
- = STREAM FLOW DIRECTION

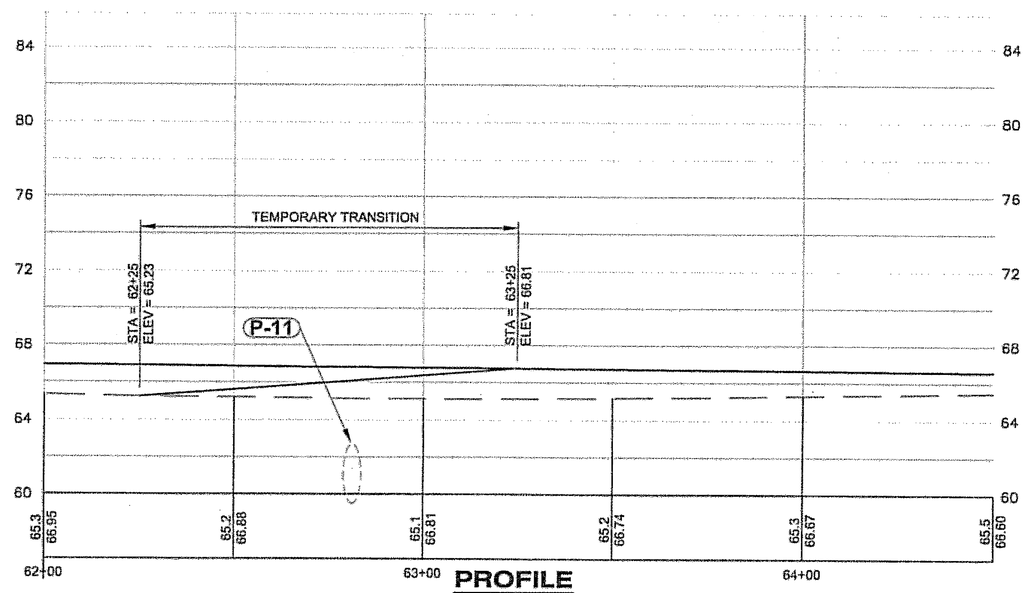


STATE OF ALASKA 49th Russell P. Kraemer CE-10478 REGISTERED PROFESSIONAL ENGINEER 2/16/06

TONGASS ENGINEERING & RECREATION	DESIGNED: R.K. / C.I. DATE:	DATE:	REVISION:	BY:	U.S. FOREST SERVICE ROAD 8453 - STAGE II	PLAN & PROFILE
	DRAWN: B.B./D.S./L.R./R.C. DATE:	XX/XX/XX	XXXXXXXXXX	X. XXXXXX	USDA FOREST SERVICE - TONGASS NATIONAL FOREST R-10 - JUNEAU RANGER DISTRICT	O:\Jnu\68872\Planset\Phase II\P2_F-Plan.dwg
	REVIEWED: X. XXXXXXXXXX DATE:	XX/XX/XX	XXXXXXXXXXXX	X.XXXXXX		SH.TT1of 43
	TNFTYP:09/04	XX/XX/XX	XXXXXXXXXXXX	X. XXXXXX		



PLAN



PROFILE

LEGEND:

- = CHECK DAM
- P-1 = PIPE NUMBER
- = PROPOSED BOULDER LOCATION
- = SPEED BUMP
- = STREAM FLOW DIRECTION
- = FISH STREAM

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE _____ Date 6/07

STATE OF ALASKA 49th Russell P. Kraemer CE-10478 PROFESSIONAL ENGINEER 2/16/06

TONGASS ENGINEERING & RECREATION	DESIGNED: R.K. / C.I. DATE:	DATE:	REVISION:	BY:	WEST GLACIER TRAIL PARKING LOT - STAGE I
	DRAWN: B.B./D.S./L.R./R.C. DATE:	XX/XX/XX	XXXXXXXXXX	X. XXXXXX	USDA FOREST SERVICE - TONGASS NATIONAL FOREST
	REVIEWED: X. XXXXXXXXXX DATE:	XX/XX/XX	XXXXXXXXXXXXX	X.XXXXXX	R-10 - JUNEAU RANGER DISTRICT
	TNFTYP:09/04	XX/XX/XX	XXXXXXXXXXXXX	X. XXXXXX	

PLAN AND PROFILE

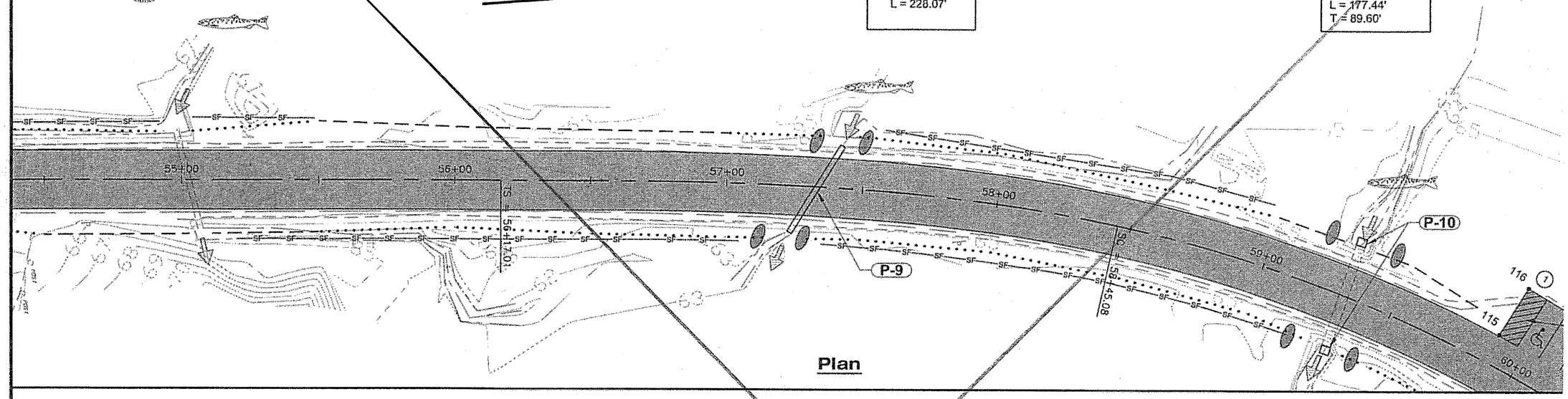
Q:\Jnu\68872\Planset\Phase I\P1_F1-Plan_R.dwg

SH. T2 of 43

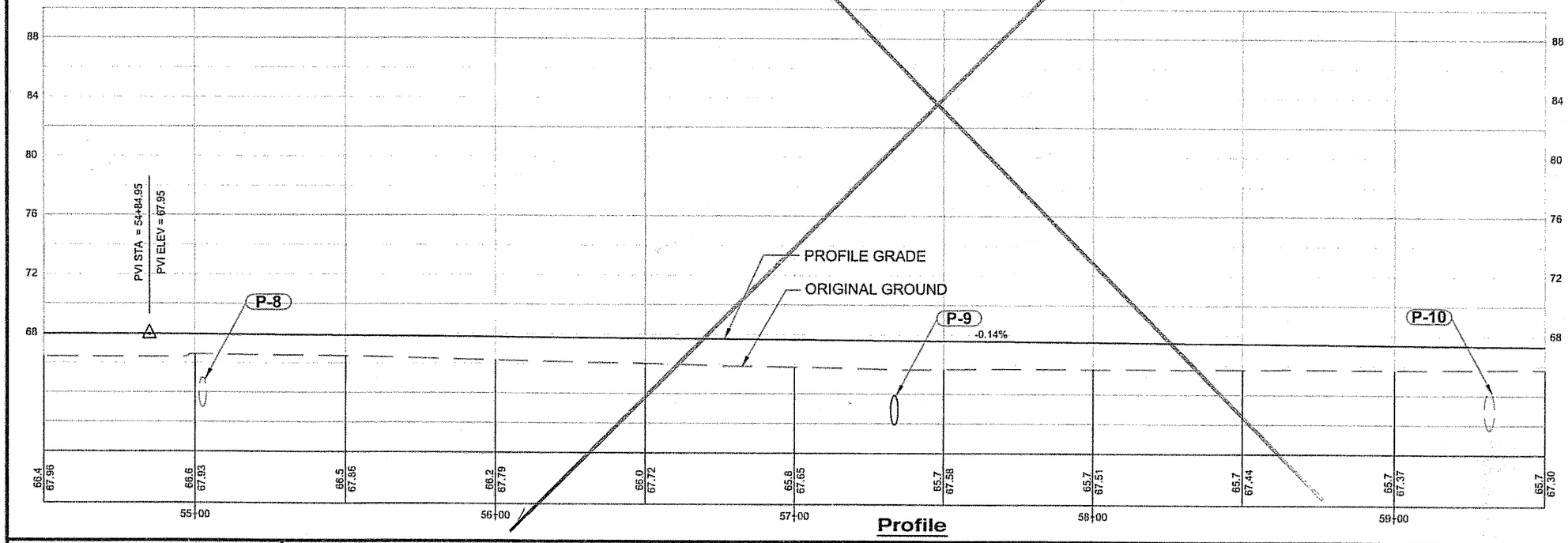
Add. Alt. B
Not Awarded

SPIRAL DATA
R = 520.00'
L = 228.07'

CURVE DATA
Δ = 19°33'03.40"
R = 520.00'
L = 177.44'
T = 89.60'



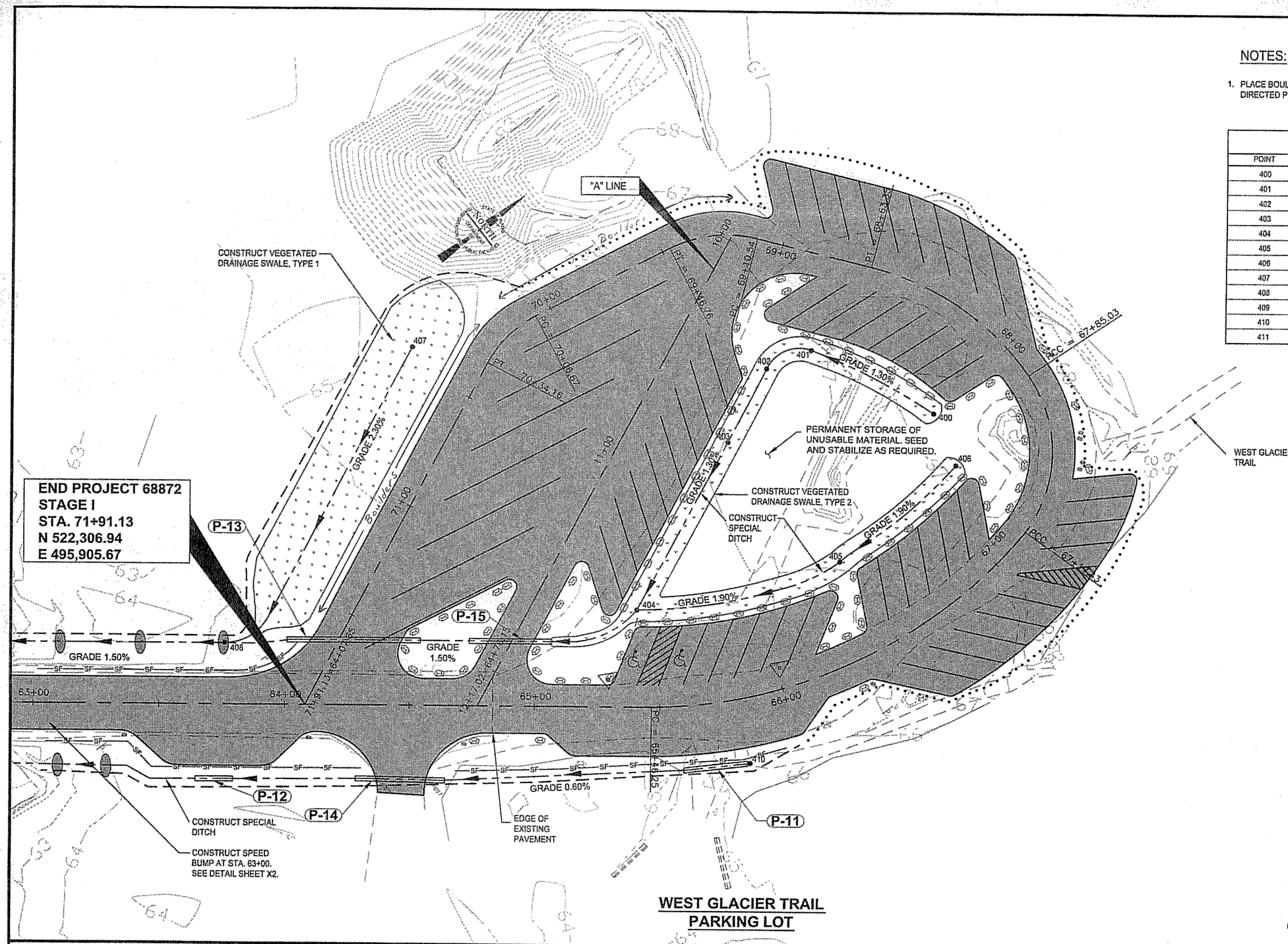
Plan



Profile

STATE OF ALASKA 49th
Russell P. Kraemer
CE-10476
REGISTERED PROFESSIONAL ENGINEER
2/16/06

TONGASS ENGINEERING & RECREATION	DESIGNED: R.K. / C.I.	DATE:	DATE:	REVISION:	BY:	U.S. FOREST SERVICE ROAD 8453 - STAGE II	PLAN & PROFILE
	DRAWN: B.B./D.S./L.R./R.C.	DATE:	XX/XX/XX	XXXXXXXXXX	X. XXXXXX	USDA FOREST SERVICE - TONGASS NATIONAL FOREST	O:\Jnu\68872\Planset\Phase II\P2_F-Plan.dwg
	REVIEWED: X. XXXXXXXXXX	DATE:	XX/XX/XX	XXXXXXXXXXXX	X.XXXXXX	R-10 - JUNEAU RANGER DISTRICT	SH.TT2of 43
	TNFTYP:09/04		XX/XX/XX	XXXXXXXXXXXX	X. XXXXXX		



NOTES:

1. PLACE BOULDERS AS SHOWN ON PLANS WITH MAXIMUM SEPARATION 5 FEET, OR AS DIRECTED PER SECTION 680.

DRAINAGE POINT TABLE

POINT	STA	OFFSET	ELEVATION
400	67+86.22	39.43 LT	66.08
401	68+70.00	38.98 LT	65.42
402	10+50.00	38.10 LT	64.98
403	11+00.00	38.48 LT	64.78
404	65+40.25	39.63 LT	63.59
405	66+50.00	39.60 LT	65.28
406	67+34.20	37.53 LT	66.35
407	70+32.57	29.46 RT	64.62
408	63+85.47	26.48 LT	61.21
409	62+86.84	23.00 LT	59.72
410	65+81.28	26.58 RT	62.75
411	62+79.46	24.60 LT	60.96

LEGEND:

- = CHECK DAM
- P-1 = PIPE NUMBER
- = PROPOSED BOULDER LOCATION
- = VEGETATED DRAINAGE SWALE
- SF = SILT FENCE
- = SPEED BUMP

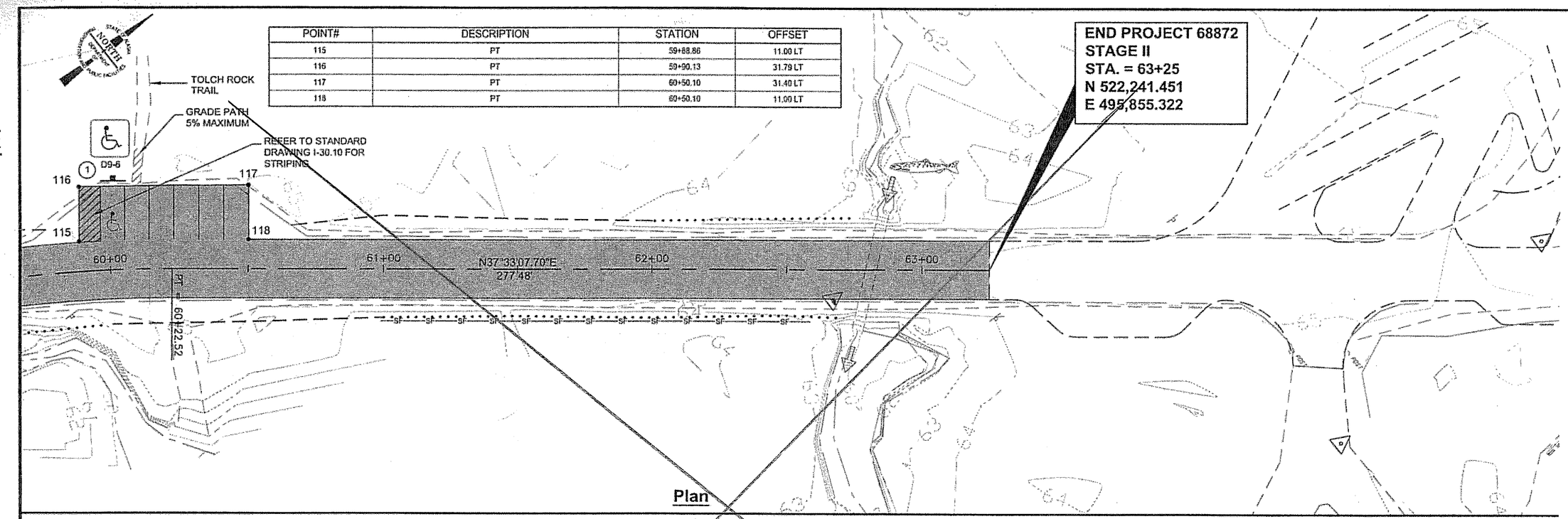
WEST GLACIER TRAIL PARKING LOT

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE _____ Date 6/9

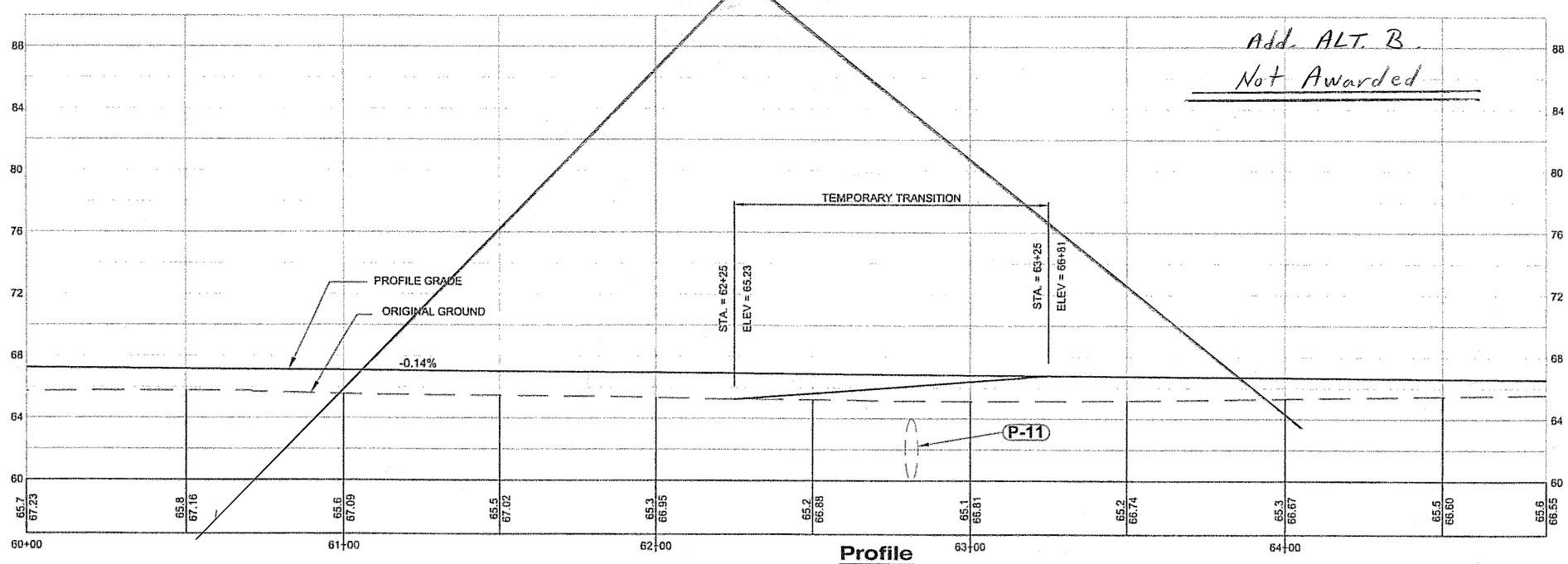
STATE OF ALASKA 49th Russell P. Kraemer CE-10478 REGISTERED PROFESSIONAL ENGINEER 2/8/06

TONGASS ENGINEERING & RECREATION	DESIGNED: R.K. / C.I. DATE:	DATE:	REVISION:	BY:	WEST GLACIER TRAIL PARKING LOT - STAGE I	PLAN
	DRAWN: B.B./D.S./L.R./R.C. DATE:	XX/XX/XX	XXXXXXXXXX	X. XXXXXX	USDA FOREST SERVICE - TONGASS NATIONAL FOREST R-10 - JUNEAU RANGER DISTRICT	Q:\Jnu\68872\Planset\Phase I\P1_F1-Plan_R.dwg
	REVIEWED: X. XXXXXXXXX DATE:	XX/XX/XX	XXXXXXXXXXXX	X.XXXXXX		SH.T3 of 43
	TNFTYP:09/04	XX/XX/XX	XXXXXXXXXXXX	X. XXXXXX		

POINT#	DESCRIPTION	STATION	OFFSET
115	PT	59+88.86	11.00 LT
116	PT	59+90.13	31.79 LT
117	PT	60+50.10	31.40 LT
118	PT	60+50.10	11.00 LT



Plan



Profile

STATE OF ALASKA 49th Russell P. Kraemer CE-10475 REGISTERED PROFESSIONAL ENGINEER 2/16/06

TONGASS ENGINEERING & RECREATION	DESIGNED: R.K. / C.I. DATE:	DATE:	REVISION:	BY:	U.S. FOREST SERVICE ROAD 8453 - STAGE II	PLAN & PROFILE
	DRAWN: B.B./D.S./L.R./R.C. DATE:	XX/XX/XX	XXXXXXXXXX	X. XXXXXX	USDA FOREST SERVICE - TONGASS NATIONAL FOREST R-10 - JUNEAU RANGER DISTRICT	Q:\Jnu\68872\Planset\Phase II\P2_F-Plan.dwg
	REVIEWED: X. XXXXXXXXXX DATE:	XX/XX/XX	XXXXXXXXXXXX	X.XXXXXX		SH.TT3of 43
	TNFTYP:09/04	XX/XX/XX	XXXXXXXXXXXX	X. XXXXXX		

PARKING LOT GRADING POINT TABLE

POINT #	DESCRIPTION	STATION	OFFSET	TOP OF PAVEMENT ELEVATION
40000	CL	62+25.00	0	66.91
40001	EP	62+25.04	11.03 LT	66.77
40002	EP	67+66.37	11.00 RT	66.77
40003	PI	63+38.33	11.00 RT	66.93
40004	PI	63+53.42	25.00 RT	66.95
40005	EP	63+78.33	11.00 LT	66.99
40006	PI	63+94.06	25.00 RT	67.01
40007	PT	64+07.85	11.03 RT	67.03
40008	EP	64+12.35	11.00 RT	67.04
40009	EP	64+37.35	35.6 RT	67.07
40010	EP	64+55.76	36.65 RT	67.10
40011	EP	64+54.97	11.00 LT	67.10
40012	EP	64+66.82	11.00 LT	67.11
40013	EP	64+80.75	11.00 RT	67.13
40014	PI	65+04.15	11.00 RT	67.17
40015	EP	65+06.27	9.03 LT	67.17
40016	PI	65+14.34	20.00 RT	67.18
40017	PI	65+30.84	9.00 LT	67.20
40018	PI	65+40.04	32.76 LT	67.22
40019	PI	66+02.09	20.00 RT	67.30
40020	PT	66+15.86	9.00 RT	67.32
40021	EP	66+17.18	9.00 LT	67.32
40022	PI	66+42.07	30.22 LT	67.38
40023	PT	66+41.25	9.00 LT	67.36
40024	PT	66+33.79	9.00 RT	67.48
40025	PI	66+50.64	32.76 LT	67.37
40026	PI	66+55.69	30.79 RT	67.65
40027	EP	67+05.34	9.00 LT	67.45
40028	PT	67+37.35	29.42 LT	67.49
40029	PI	67+42.87	9.00 RT	67.77
40030	PI	67+47.14	34.65 RT	67.77
40031	PT	67+97.15	32.16 LT	67.57
40032	PT	67+93.86	9.01 LT	67.57
40033	PT	67+91.86	9.00 RT	67.83
40034	PT	68+19.26	29.36	67.85
40035	PT	69+04.70	32.05 LT	67.50
40036	EP	68+83.58	9.00 LT	67.53
40037	PI	69+05.31	8.88 RT	67.77
40038	PI	69+14.77	33.00 RT	67.85
40039	EP	69+10.23	8.88. RT	67.77
40040	EP	69+34.15	9.67 RT	67.47
40041	CL	10+00.00	0	67.61
40042	EP	10+10.00	20.22 LT	67.20
40043	RP =40	10+24.77	36.11 LT	
40044	EP	10+41.55	23.39 LT	67.40
40045	EP	10+49.35	31.22 LT	67.40
40046	PT	11+63.88	31.43 LT	67.21
40047	PI	11+40.56	8.00 LT	67.34
40048	PI	11+86.13	8.00 LT	67.17
40049	EP	11+94.64	12.76 LT	67.00
40050	EP	12+02.74	8.00 RT	67.15
40051	EP	12+06.41	8.7 RT	67.00
40052	EP	64+46.42	15.81 LT	67.00
40053	EP	71+44.79	22.46 LT	67.58
40054	PI	11+58.20	8.00 RT	67.33
40055	EP	71+59.23	9.43 RT	66.99
40056	RP =40	71+59.33	49.31 RT	
40057	EP	71+79.46	14.92 RT	66.80
40058	RP = 10	64+54.97	21.00 LT	
40059	RP = 10	64+66.82	21.00 LT	
40060	RP = 10	65+06.42	19.03 LT	

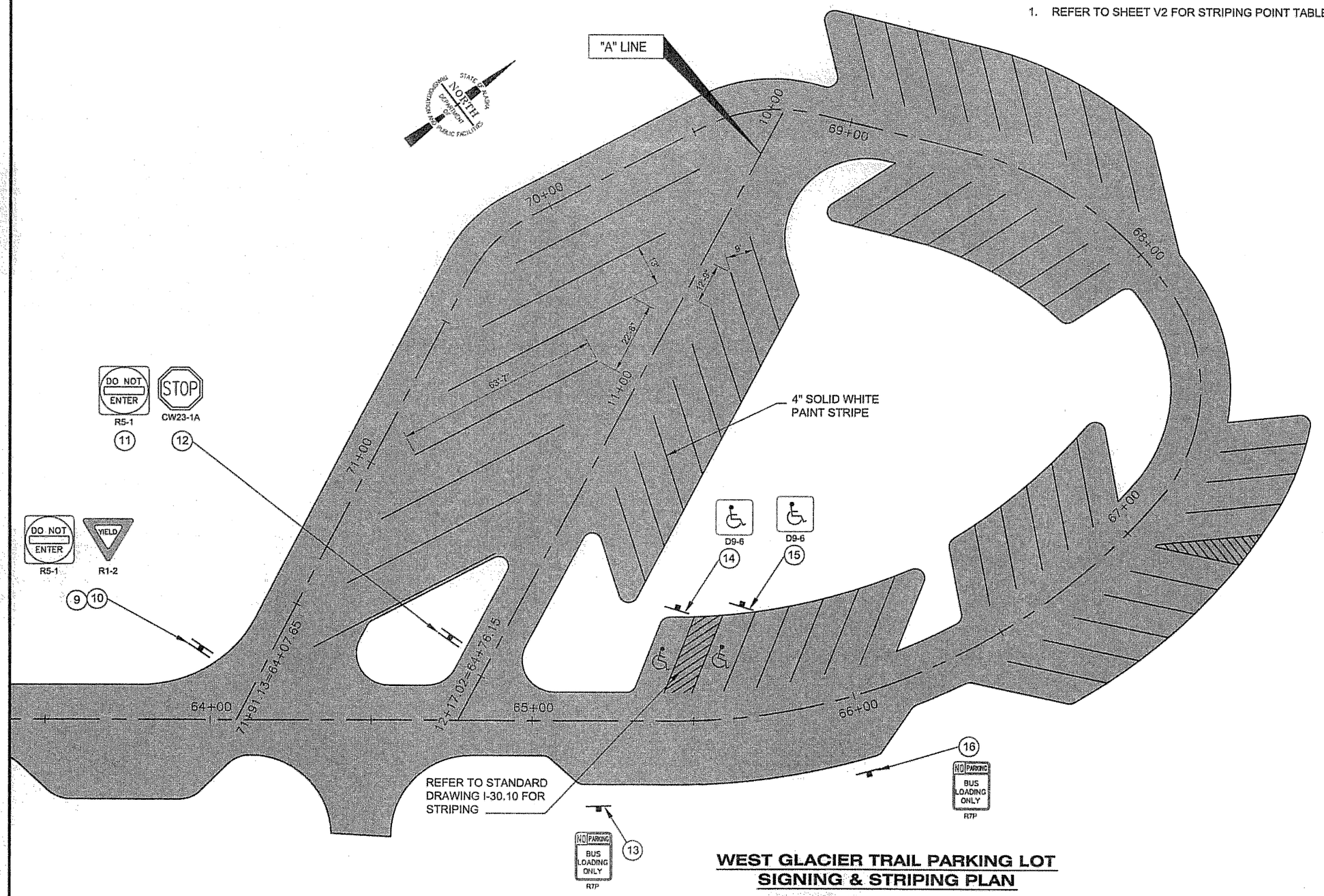
Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE ____ Date 6/09

STATE OF ALASKA
49th
Russell P. Kraemer
CE-10476
REGISTERED PROFESSIONAL ENGINEER
2/16/06

TONGASS ENGINEERING & RECREATION	DESIGNED: R.K. / C.I. DATE:	DATE:	REVISION:	BY:	FOREST SERVICE U.S. DEPARTMENT OF AGRICULTURE	WEST GLACIER TRAIL PARKING LOT - STAGE I	PARKING LOT LAYOUT POINT TABLE
	DRAWN: B.B./D.S./L.R./R.C. DATE:	XX/XX/XX	XXXXXXXXXX	X. XXXXXX		USDA FOREST SERVICE - TONGASS NATIONAL FOREST	Q:\Jnu\68872\Planset\Phase I\P1_F1-Plan_R.dwg
	REVIEWED: X. XXXXXXXXXX DATE:	XX/XX/XX	XXXXXXXXXXXX	X.XXXXXX		R-10 - JUNEAU RANGER DISTRICT	SH.U2 of 43
	TNFTYP:09/04	XX/XX/XX	XXXXXXXXXXXX	X. XXXXXX			

NOTES:

1. REFER TO SHEET V2 FOR STRIPING POINT TABLE.



WEST GLACIER TRAIL PARKING LOT
SIGNING & STRIPING PLAN

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE _____ Date 6/02

STATE OF ALASKA 49th Russell P. Kraemer CE-10478 REGISTERED PROFESSIONAL ENGINEER
2/16/06

TONGASS ENGINEERING & RECREATION	DESIGNED: R.K. / C.I. DATE:	DATE:	REVISION:	BY:	WEST GLACIER TRAIL PARKING LOT - STAGE I	PARKING LOT STRIPING PLAN
	DRAWN: B.B./D.S./L.R./R.C. DATE:	XX/XX/XX	XXXXXXXXXX	X. XXXXXX	USDA FOREST SERVICE - TONGASS NATIONAL FOREST	Q:\Jnu\68872\Planset\Phase I\P1_F1-Plan_R.dwg
	REVIEWED: X. XXXXXXXXXX DATE:	XX/XX/XX	XXXXXXXXXXXX	X.XXXXXX	R-10 - JUNEAU RANGER DISTRICT	SH. V1 of 43
	TNFTYP:09/04	XX/XX/XX	XXXXXXXXXXXX	X. XXXXXX		

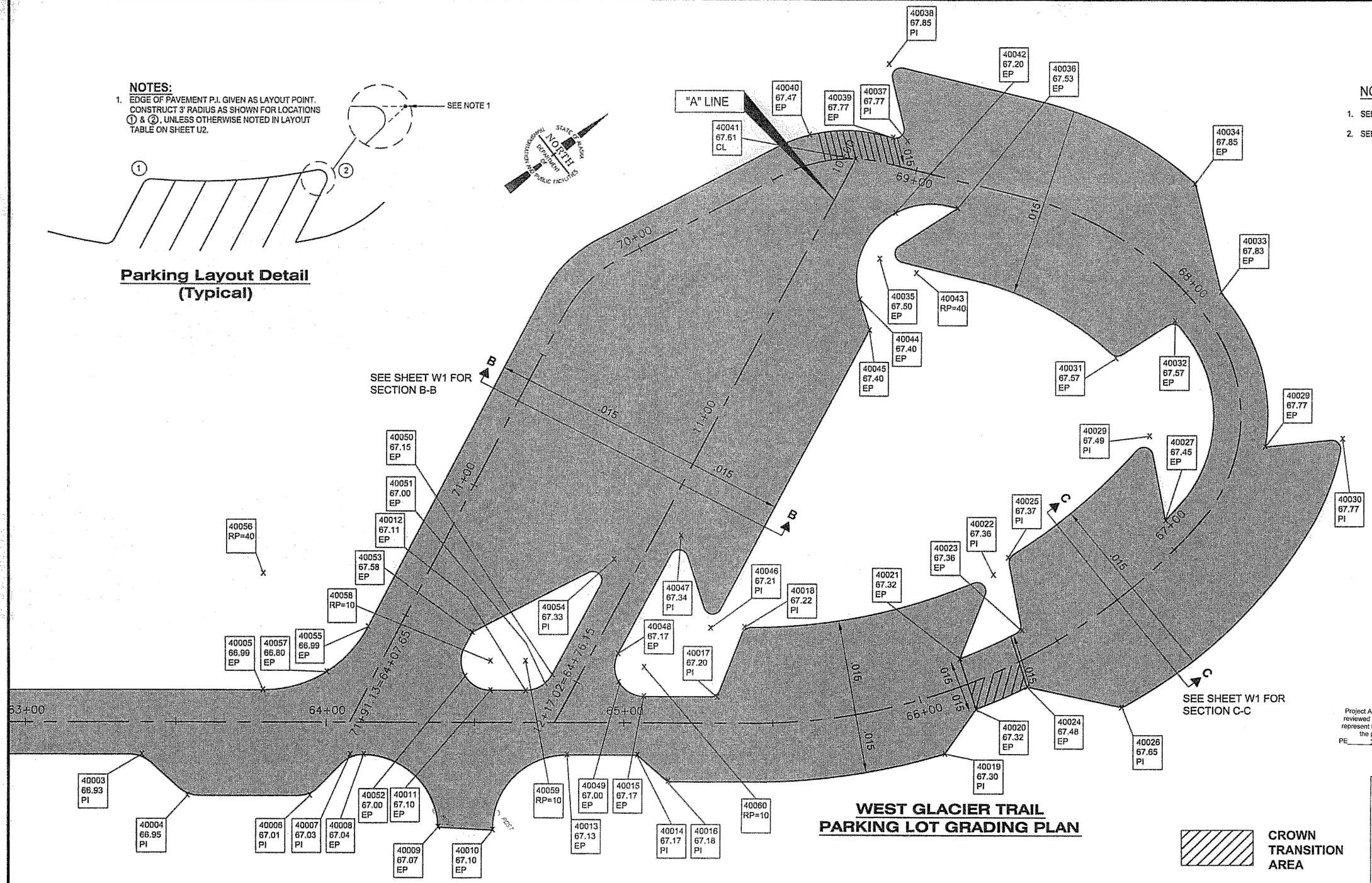
NOTES:

1. EDGE OF PAVEMENT P.I. GIVEN AS LAYOUT POINT. CONSTRUCT 3' RADIUS AS SHOWN FOR LOCATIONS ① & ②, UNLESS OTHERWISE NOTED IN LAYOUT TABLE ON SHEET U2.

Parking Layout Detail (Typical)

NOTES:

1. SEE SHEET W1 FOR PROFILES.
2. SEE SHEET U2 FOR POINT TABLE.



WEST GLACIER TRAIL PARKING LOT GRADING PLAN

CROWN TRANSITION AREA

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE ____ Date 6/09

STATE OF ALASKA 49th Russell P. Kraemer CE-10476 REGISTERED PROFESSIONAL ENGINEER 2/16/06

TONGASS ENGINEERING & RECREATION	DESIGNED: R.K. / C.I. DATE:	DATE:	REVISION:	BY:	FOREST SERVICE U.S. DEPARTMENT OF AGRICULTURE	WEST GLACIER TRAIL PARKING LOT - STAGE I	PARKING LOT PAVEMENT PLAN
	DRAWN: B.B./D.S./L.R./R.C. DATE:	XX/XX/XX	XXXXXXXXXX	X. XXXXXX		USDA FOREST SERVICE - TONGASS NATIONAL FOREST R-10 - JUNEAU RANGER DISTRICT	Q:\Jnu\68872\Planset\Phase I\P1_F1-Plan_R.dwg
	REVIEWED: X. XXXXXXXXXX DATE:	XX/XX/XX	XXXXXXXXXXXX	X.XXXXXX			SH.U1 of 43
	TNFTYP:09/04	XX/XX/XX	XXXXXXXXXXXX	X. XXXXXX			

POINT #	STATION	OFFSET
40222	65+40.49	9.00 LT
40223	65+51.06	32.77 LT
40224	65+49.36	9.00 LT
40225	65+61.64	32.71 LT
40226	65+59.75	9.00 LT
40227	65+73.83	32.57 LT
40228	65+70.40	9.00 LT
40229	65+86.40	32.34 LT
40230	65+81.38	9.00 LT
40231	65+99.41	32.03 LT
40232	65+92.78	9.00 LT
40233	66+12.97	31.6 LT
40234	66+04.67	9.00 LT
40235	66+27.19	31.06 LT
40236	66+51.26	9.00 LT
40237	66+62.35	32.76 LT
40238	66+61.47	9.00 LT
40239	66+74.33	32.67 LT
40240	66+71.93	9.00 LT
40241	66+86.64	32.5 LT
40242	66+82.66	9.00 LT
40243	66+99.35	32.25 LT
40244	66+93.79	9.00 LT
40245	67+12.50	31.66 LT
40246	65+46.97	9.00 RT
40247	66+66.90	31.51 RT
40248	66+59.24	9.00 RT
40249	66+77.31	31.95 RT
40250	66+70.77	8.93 RT
40251	66+87.12	32.16 RT
40252	66+81.84	9.00 RT
40253	66+96.47	32.19 RT
40254	66+92.41	9.00 RT
40255	67+05.45	32.04 RT
40256	67+02.61	9.00 RT
40257	67+14.15	31.75 RT
40258	67+03.60	9.00 RT
40259	67+21.46	31.68 RT
40260	67+16.24	9.00 RT
40261	67+28.65	32.46 RT
40262	67+25.84	9.00 RT
40263	67+35.22	33.29 RT

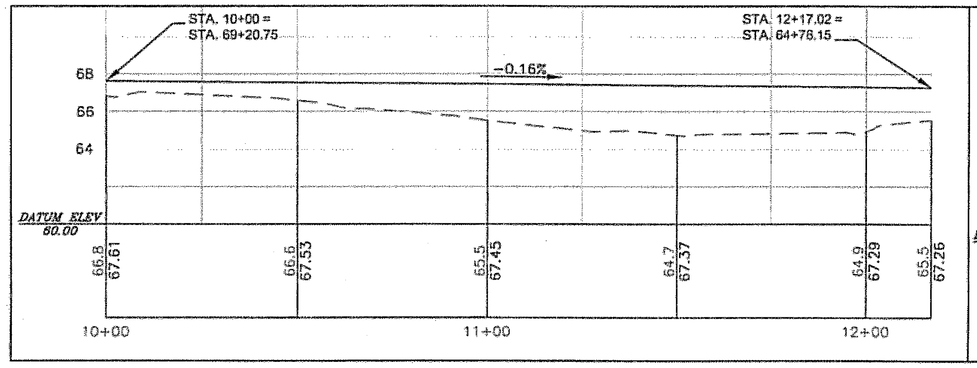
POINT #	STATION	OFFSET
40264	67+34.65	9.00 RT
40265	67+41.33	34.02 RT
40266	68+03.78	9.00 LT
40267	68+10.40	32.6 LT
40268	68+13.89	9.00 LT
40269	68+24.08	32.77 LT
40270	68+24.29	9.00 LT
40271	68+38.36	32.7 LT
40272	68+35.11	9.00 LT
40273	68+53.46	32.34 LT
40274	68+46.53	9.00 LT
40275	68+67.58	31.49 LT
40276	68+58.82	9.00 LT
40277	68+79.62	31.28 LT
40278	68+71.35	9.00 LT
40279	68+91.85	31.28 LT
40280	68+08.83	9.00 RT
40281	68+30.85	30.71 RT
40282	68+22.49	9.00 RT
40283	68+40.85	31.61 RT
40284	68+34.40	9.00 RT
40285	68+49.87	32.2 RT
40286	68+45.21	9.00 RT
40287	68+58.22	32.56 RT
40288	68+55.26	9.00 RT
40289	68+66.95	32.68 RT
40290	68+64.68	9.00 RT
40291	68+77.07	32.66 RT
40292	68+75	9.00 RT
40293	68+87.19	32.68 RT
40294	68+85.12	9.00 RT
40295	68+97.31	32.68 RT
40296	68+95.25	9.00 RT
40297	69+07.43	32.68 RT
40298	10+40.20	9.28 LT
40299	10+62.08	31.24 LT
40300	11+29.29	9.45 LT
40301	11+51.16	31.41 LT
40302	10+28.74	14.54 RT
40303	10+81.03	50.69 RT
40304	11+64.73	13.73 RT
40305	12+17.01	49.89 RT

PARKING LOT STRIPING POINT TABLE

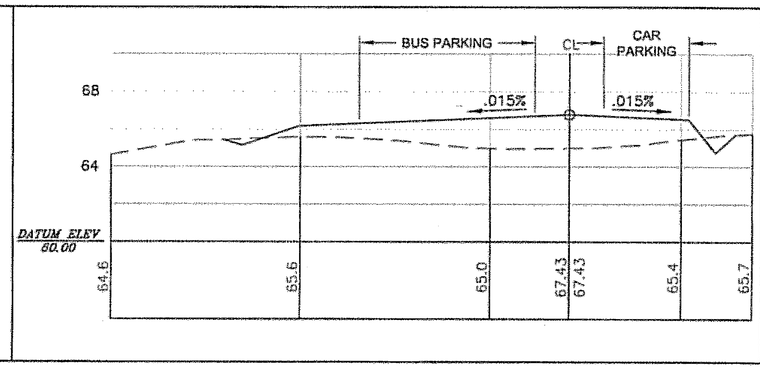
Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE_____ Date 6/03

STATE OF ALASKA 49th Russell P. Kraemer CE-10478 REGISTERED PROFESSIONAL ENGINEER
2/16/06

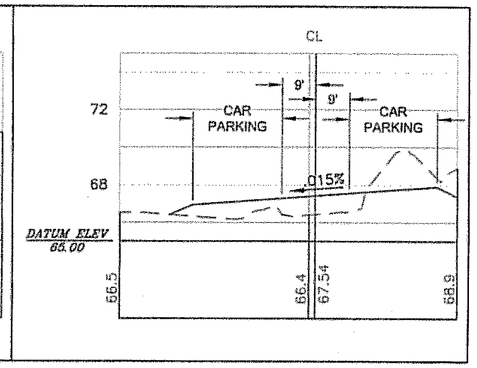
TONGASS ENGINEERING & RECREATION	DESIGNED: R.K. / C.I. DATE:	DATE:	REVISION:	BY:	FOREST SERVICE U.S. DEPARTMENT OF AGRICULTURE	WEST GLACIER TRAIL PARKING LOT - STAGE I	PARKING LOT STRIPING POINT TABLE
	DRAWN: B.B./D.S./L.R./R.C. DATE:	XX/XX/XX	XXXXXXXXXX	X. XXXXXX		USDA FOREST SERVICE - TONGASS NATIONAL FOREST R-10 - JUNEAU RANGER DISTRICT	O:\Jnu\68872\Planset\Phase 1\P1_F1-Plan_R.dwg
	REVIEWED: X. XXXXXXXXXX DATE:	XX/XX/XX	XXXXXXXXXXXX	X.XXXXXX			SH. V2 of 43
	TNFTYP:09/04	XX/XX/XX	XXXXXXXXXXXX	X. XXXXXX			



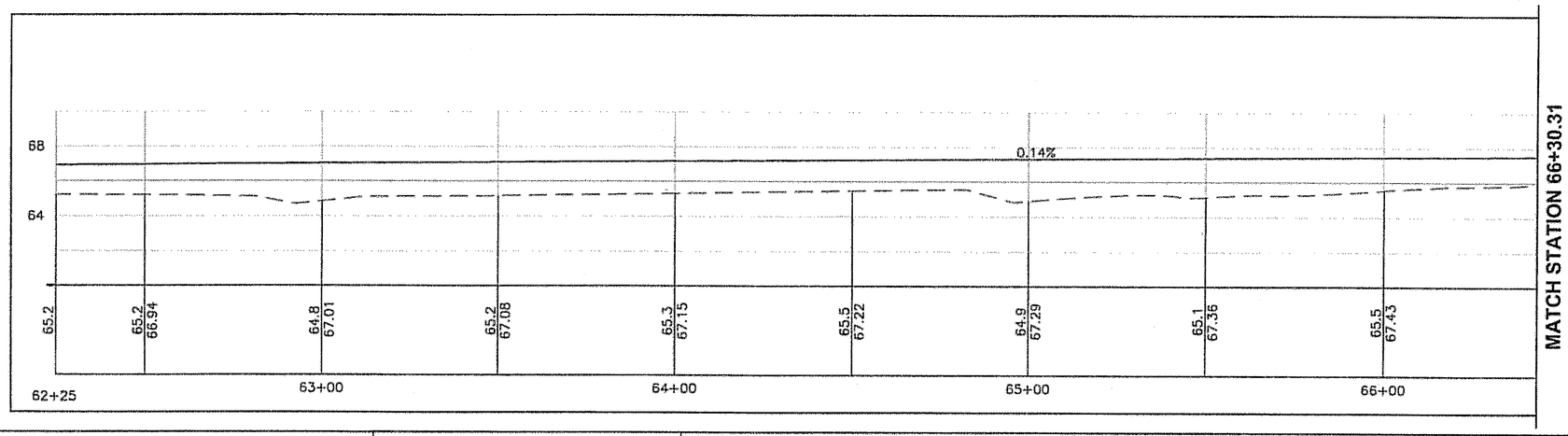
"A" LINE PROFILE

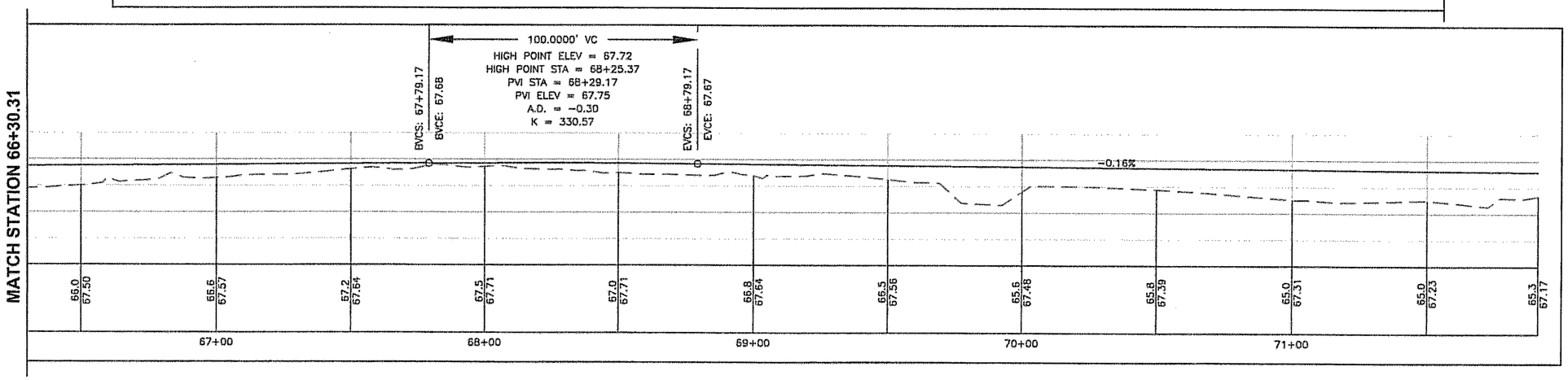


SECTION B-B



SECTION C-C



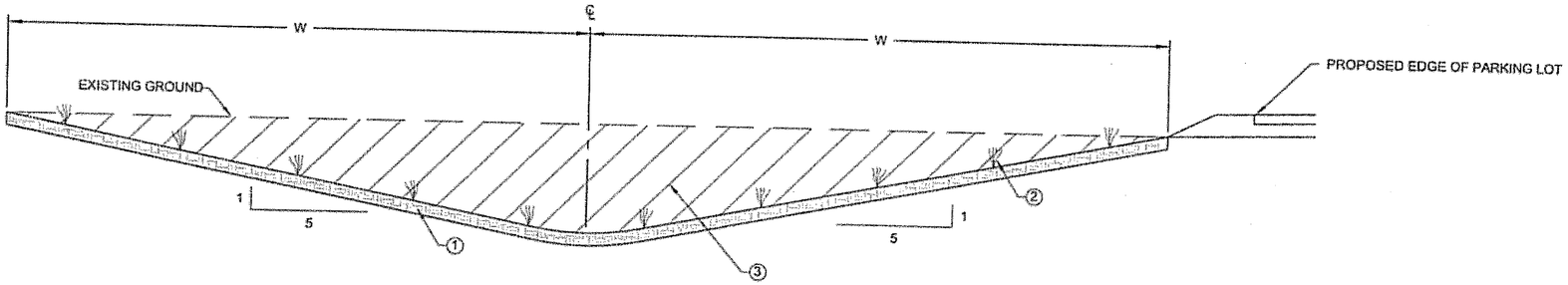


WEST GLACIER TRAIL PARKING LOT PROFILE

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE _____ Date 6/09

STATE OF ALASKA
49th
Russell P. Kraemer
CE-10478
REGISTERED PROFESSIONAL ENGINEER
2/16/06

TONGASS ENGINEERING & RECREATION	DESIGNED: R.K. / C.I.	DATE:	DATE:	REVISION:	BY:	WEST GLACIER TRAIL PARKING LOT - STAGE I	PARKING LOT PROFILES AND SECTIONS
	DRAWN: B.B./D.S./L.R./R.C.	DATE:	XX/XX/XX	XXXXXXXXXX	X. XXXXXX	USDA FOREST SERVICE - TONGASS NATIONAL FOREST	
	REVIEWED: X. XXXXXXXXXX	DATE:	XX/XX/XX	XXXXXXXXXXXXX	X.XXXXXX	R-10 - JUNEAU RANGER DISTRICT	Q:\Jnu\68872\Planset\Phase I\P1_F1-Plan_R.dwg
	TNFTYP:09/04		XX/XX/XX	XXXXXXXXXXXXX	X. XXXXXX		SH.W1 of 43

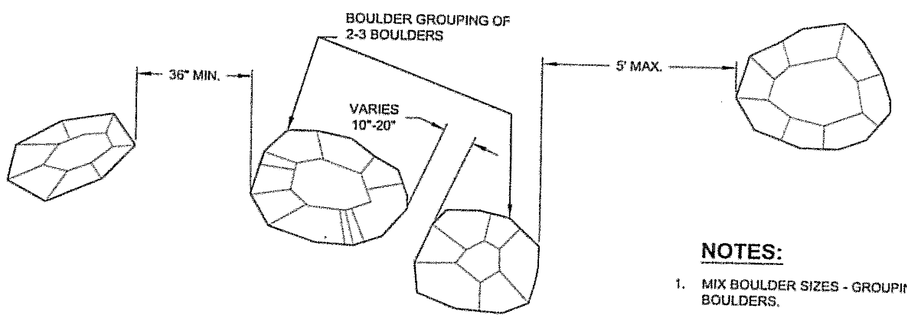


VEGETATED DRAINAGE SWALE

LEGEND

1. 4" TOPSOIL
2. SEEDING
3. UNCLASSIFIED EXCAVATION

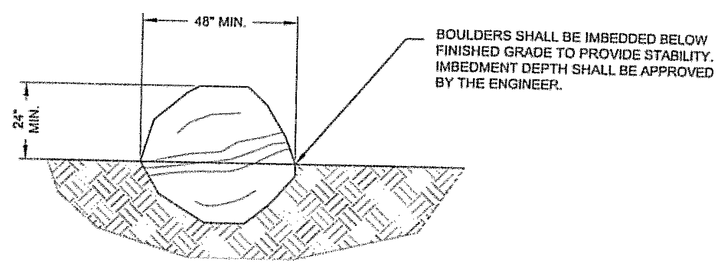
Drainage Swale	W (ft)
Type 1	15
Type 2	5



PLAN

NOTES:

1. MIX BOULDER SIZES - GROUPINGS OF 2-3 BOULDERS.
2. PROVIDE FOR PASSAGE BETWEEN BOULDERS OR BETWEEN A BOULDER AND A BOULDER GROUPING (36" - 5').



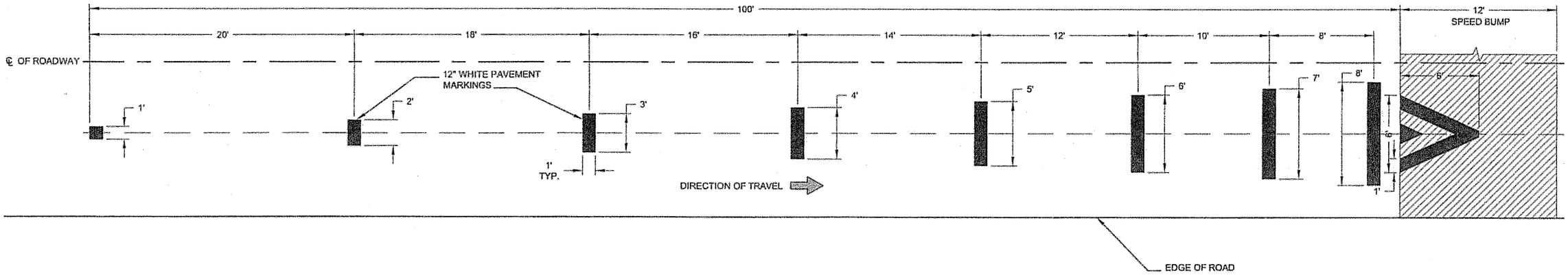
SECTION

BOULDER RELOCATION DETAIL

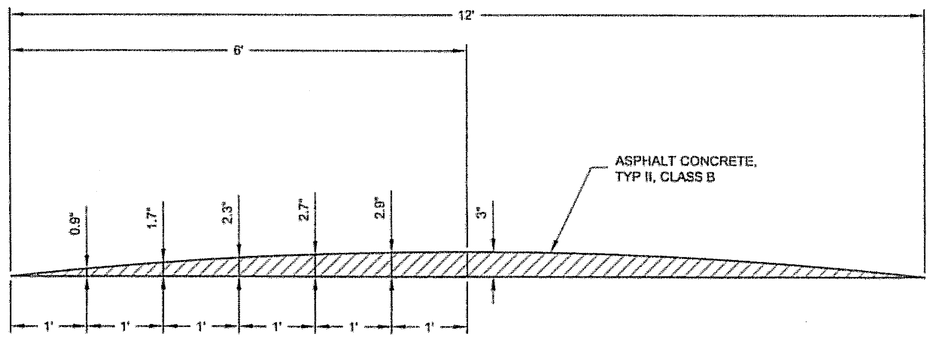
Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE_____ Date 6/09

STATE OF ALASKA 49th Russell P. Kraemer CE-10478 REGISTERED PROFESSIONAL ENGINEER
2/16/06

TONGASS ENGINEERING & RECREATION	DESIGNED: R.K. / C.I. DATE:	DATE:	REVISION:	BY:	WEST GLACIER TRAIL PARKING LOT - STAGE I	MISCELLANEOUS DETAILS
	DRAWN: B.B./D.S./L.R./R.C. DATE:	XX/XX/XX	XXXXXXXXXX	X. XXXXXX	USDA FOREST SERVICE - TONGASS NATIONAL FOREST R-10 - JUNEAU RANGER DISTRICT	Q:\Jnu\68872\Planset\Phase I\P1_X_MISC DET.dwg
	REVIEWED: X. XXXXXXXXXX DATE:	XX/XX/XX	XXXXXXXXXXXX	X.XXXXXX		SH. X1 of 43
	TNFTYP:09/04	XX/XX/XX	XXXXXXXXXXXX	X. XXXXXX		



SPEED BUMP STRIPING DETAIL



12' SPEED BUMP PROFILE

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE _____ Date 6/09

STATE OF ALASKA 49th Russell P. Kraemer CE-10476 REGISTERED PROFESSIONAL ENGINEER
2/16/06

TONGASS ENGINEERING & RECREATION	DESIGNED: R.K. / C.I.	DATE:	DATE:	REVISION:	BY:	FOREST SERVICE U.S. DEPARTMENT OF AGRICULTURE	WEST GLACIER TRAIL PARKING LOT - STAGE I	MISCELLANEOUS DETAILS
	DRAWN: B.B./D.S./L.R./R.C.	DATE:	XX/XX/XX	XXXXXXXXXX	X. XXXXXX		USDA FOREST SERVICE - TONGASS NATIONAL FOREST	
	REVIEWED: X. XXXXXXXXXX	DATE:	XX/XX/XX	XXXXXXXXXXXX	X.XXXXXX		R-10 - JUNEAU RANGER DISTRICT	Q:\Jnu\68872\Planset\Phase I\P1_X_MISC DET.dwg
	TNFTYP:09/04		XX/XX/XX	XXXXXXXXXXXX	X. XXXXXX			SH. X2 of 43