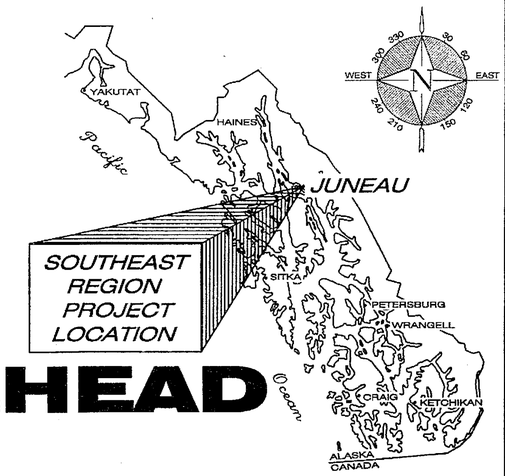
State of Alaska

Department of Transportation and Public Facilities

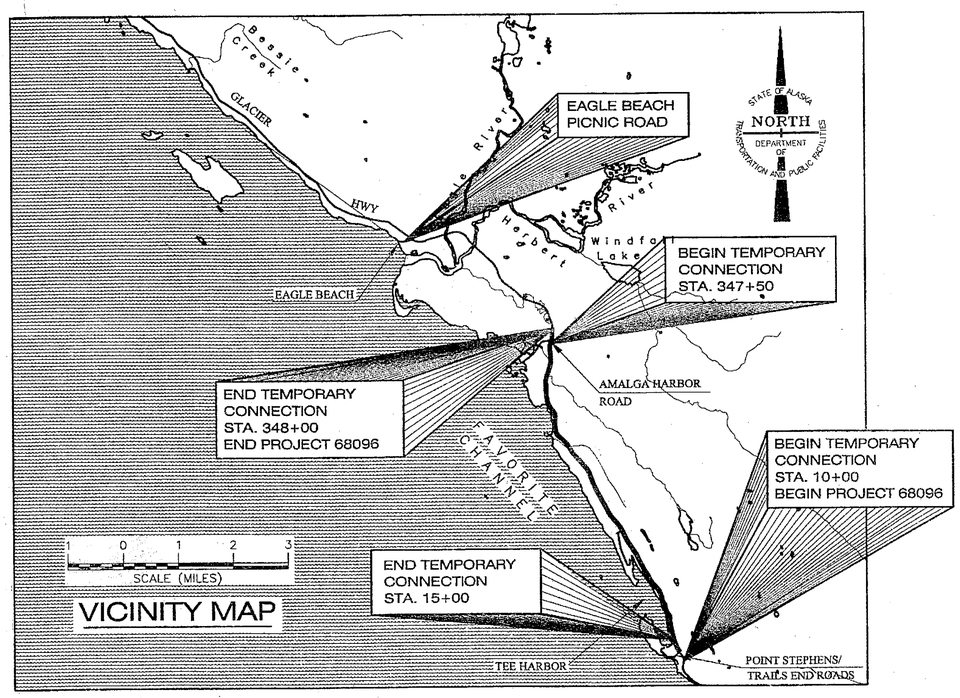
Design and Engineering Services Division

JUNEAU, ALASKA



GLACIER HIGHWAY & TRAILHEAD IM-093-3(24) ~ 68097 & AK PFH 2-1(1) ~ 68096 & CBJ NORTH TEE HARBOR WATERLINE EXTENSION RSA 67562

STAGE ONE: PT. STEPHENS RD. TO AMALGA HARBOR RD.



DESIGN DESIGNATION

B.O.P. (TEE HARBOR) TO E.O.P. (AMALGA HARBOR ROAD)

	2004	2024
AVERAGE DAILY TRAFFIC	860	1,280
DESIGN HOURLY VOLUME (10%)	130	200
DESIGN SPEED (MPH)	55	55
PEAK HOURLY FACTOR	0.9	0.9
DIRECTIONAL DISTRIBUTION (ENTERING/LEAVING)	55/45	55/45
PERCENT TRUCK TRAFFIC	7.0%	7.0%
EQUIVALENT AXLE LOAD	150,000	250,000
TURNING VEHICLE: WB50		
VEHICLE LOADING: HS25		

PROJECT SUMMARY

LENGTH OF TEMPORARY CONNECTIONS	=	1,100 ft.
LENGTH OF GRADING	=	33,800 ft. (6.4 mi.)
LENGTH OF PAVING	=	33,800 ft. (6.4 mi.)
WIDTH OF PAVING	=	34'
LENGTH OF PROJECT	=	33,800 ft. (6.4 mi.)

THE FOLLOWING STANDARD DRAWINGS APPLY TO THIS PROJECT:

A-1	D-07.00	G-00.01	I-22.00	S-01.00	T-05.10
C-04.12	D-22.01	G-04.06S	I-81.00	S-05.01	T-06.00
C-05.10	D-23.01	G-10.01	M-16.01	S-20.10	T-20.02
D-01.02	D-26.02	G-20.10	M-20.12	S-22.00	T-21.02
D-04.21	E-00.00	G-25.20W	M-23.12	S-30.03	T-22.03
D-06.10	E-13.00	I-20.13	S-00.10	S-31.00	

THE FOLLOWING CBJ STANDARD DRAWINGS APPLY TO THIS PROJECT:

205	206A	303	403	405	406
407	409	410	412	414A	414B
419					

INDEX

SHEET NO.	DESCRIPTION
A1	TITLE SHEET
A2	SURVEY DATA SHEET
A3-A4	ALIGNMENT DATA SHEETS
B1-B7	TYPICAL SECTION SHEETS
C1	ESTIMATE OF QUANTITIES
D1-D5	SUMMARY SHEETS
E1	CONSTRUCTION PHASING PLAN
F1-F41	PLAN AND PROFILE SHEETS
G1-G11	INTERSECTION & TRAILHEAD SHEETS
H1-H10	FISH STREAM CULVERT SHEETS
J1-J11	MISCELLANEOUS DETAILS
K1-K2	ROCKERY WALL SHEETS
L1	BRIDGE OVERLAY SHEET
M1-M2	MINING PLAN SHEETS
S1-S2	TRAFFIC CONTROL SHEETS
T1-T27	EROSION SEDIMENT CONTROL PLANS
	SUPPLEMENTAL SHEETS
W1-W21	WATERLINE SHEETS

ROUTE: – MILEPOINT: –

PATH: Q:\Jnu\68096\Planset\Stage1\A-C-D_Tsht&Sums.dwg
Thu, 09/Dec/04 11:20AM bwbennett
PLOT: PSPACE OR MSPACE: TAB: TSHT

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

"AS-Builts"
Project Engineer: Al Colbreath
Start Date: March 15th, 2005
End Date: June 12th, 2007
Contractor: Secon Inc

STATE OF ALASKA 49TH
Joel D. Osburn CE-11014
REGISTERED PROFESSIONAL ENGINEER
12-13-04

APPROVED: 12/13/04
REGIONAL PRE-CONSTRUCTION ENGINEER DATE
PATRICK J. KEMP, P.E.

APPROVED: 12/13/04
REGIONAL DIRECTOR DATE
GARY L. PAXTON

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

CONSTRUCTION PROJECT MANAGER DATE

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	IM-093-3(24) ~ 68097	2004	A1	146

SURVEY CONTROL DATA

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 2003&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.

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. 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.

In addition to geoid modeled heights and trig leveling, simultaneous tide observations were made at 4 stations and compared to the NOAA tide gauge 9452210. These tidal observations helped confirm the GPS elevations.

Project Specific Basis of Horizontal Control

EDDIE : USC&GS 3.5" Brass cap located at Juneau Airport on a dike near the east end of the main runway.
NAD83(1992) Lat 58°21'22.54504"N Lon 134°34'09.26728"W
JNU-Grid N 500000.0000' E 500000.0000'
AKSPC N 2383469.17310' E 2512570.06318'

95-J-21 : DOT 2" Brass cap located atop a 2'x6' boulder at the Eagle Beach recreation area near the shelter.
NAD83 (1992) Lat 58°31'50.80984"N Lon 134°49'43.23656"W
JNU-Grid N 563870.2462' E 450414.1843'
AKSPC N 2447984.8583' E 2463836.5243'

The Project Specific Basis of Vertical Control is 95-J-21 having an accepted elevation of 25.43 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.

Coordinate values for all points were established between 11/30/00 and 6/15/02 during control network survey. 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.

PRIMARY CONTROL MONUMENTS

Point #	NORTH	EAST	ELEV.	STATION	OFFSET	DESCRIPTION
117	518697.2789	464241.1725	85.14	11+47.64	12.45_LT	GPS_CL_MON_GH-117
98	518961.6627	463816.7946	22.10	15+20.14	327.16_LT	TBM_THARB_Z-ONLY
118	519200.7586	464076.8293	75.90	16+75.90	15.52_LT	GPS_CL_MON_GH-118
1	520459.7811	463911.5575	74.50	29+45.04	18.99_LT	ALCAP2"_TB-1
2	521714.6261	463968.6761	72.52	41+99.82	21.99_LT	ALCAP2"_TB-2
3	522709.8709	464161.0439	74.83	52+11.28	19.24_RT	ALCAP2"_TB-3
4	523460.7116	463980.0229	81.41	59+77.11	28.21_LT	ALCAP2"_TB-4
5	524166.9294	463968.0415	101.98	66+94.02	29.02_LT	ALCAP2"_TB-5
6	525276.0312	463947.4693	99.76	78+01.09	13.18_RT	ALCAP2"_TB-6
7	526403.5680	463492.5497	87.26	90+17.11	18.20_RT	GPS_ALCAP2"_TB-7
8	527630.2763	463212.8767	124.21	102+80.72	17.48_RT	ALCAP2"_TB-8
9	529192.4223	462901.8667	142.37	118+75.37	18.42_LT	ALCAP2"_TB-9
10	531217.8765	462355.0722	184.37	139+75.93	12.35_LT	ALCAP2"_TB-10
11	532322.3725	462150.5777	228.15	150+97.29	29.60_RT	ALCAP2"_TB-11
12	533233.1390	461712.2203	256.40	161+05.51	17.18_LT	ALCAP2"_TB-12
13	534200.1627	461493.8728	238.51	170+95.98	11.79_RT	GPS_ALCAP2"_TB-13
14	536377.9425	460996.1234	191.62	193+29.46	11.73_LT	GPS_ALCAP2"_TB-14
15	537979.4045	460858.0730	171.11	209+34.95	22.27_RT	ALCAP2"_TB-15
16	539465.0726	460402.5075	167.10	224+90.4	19.11_LT	ALCAP2"_TB-16
17	540181.7971	460074.0472	135.92	232+79.28	12.24_LT	ALCAP2"_TB-17
18	541053.5732	459862.1975	123.44	241+75.11	21.60_RT	ALCAP2"_TB-18
19	542266.5795	459151.1708	89.68	255+62.56	71.20_LT	ALCAP2"_TB-19
20	543407.2824	459353.6418	83.12	267+01.99	26.10_LT	ALCAP2"_TB-20
21	544039.7473	459585.3957	82.97	273+72.61	21.00_RT	ALCAP2"_TB-21
22	544595.6460	459463.8829	74.30	279+40.39	9.42_RT	ALCAP2"_TB-22
23	545171.3497	459245.2782	57.16	285+54.85	25.85_LT	ALCAP2"_TB-23
24	545728.4189	459237.7781	41.08	291+08.28	19.17_LT	ALCAP2"_TB-24
25	547747.4709	460116.7461	28.85	313+06.12	20.93_LT	ALCAP2"_TB-25
26	548858.7155	460840.6158	29.18	326+31.64	15.38_RT	ALCAP2"_TB-26
27	549833.6632	461028.7867	28.16	336+22.94	14.81_LT	ALCAP2"_TB-27

PRIMARY CONTROL MONUMENTS (cont'd.)

Point #	NORTH	EAST	ELEV.	STATION	OFFSET	DESCRIPTION
102	550537.9330	458409.8948	22.15	337+74.96	2722.48_LT	GPS_BC2"_AH-2
99	550334.2824	459896.2757	20.62	338+80.57	1225.93_LT	TBM_AMALGA_Z-ONLY
101	550800.9901	460075.6715	25.71	341+96.05	1174.95_LT	GPS_ALCAP/DIGGER_AH-1
28	550597.5982	461257.9976	29.64	344+20.42	15.42_LT	ALCAP2"_TB-28
29	551585.2532	461746.7739	29.32	355+22.95	22.90_RT	ALCAP2"_TB-29
30	552595.5697	461924.6292	31.46	365+48.01	20.70_RT	ALCAP2"_TB-30
31	553925.8286	461777.8979	31.88	378+85.22	23.24_RT	ALCAP2"_TB-31
32	554597.0008	461295.0692	32.67	387+10.34	18.45_RT	ALCAP2"_TB-32
33	555516.8874	459884.1271	32.90	403+90.25	26.59_LT	ALCAP2"_TB-33
34	556632.6721	459168.4317	39.48	417+17.47	13.37_LT	ALCAP2"_TB-34
35	557483.8886	458472.0446	44.05	428+17.26	13.70_LT	ALCAP2"_TB-35
36	558247.2144	458095.8009	53.99	436+70.16	9.97_LT	ALCAP2"_TB-36
37	559489.4840	457931.8776	32.89	449+22.66	16.57_RT	GPS_ALCAP2"_HR-2
38	560922.2100	457106.5347	32.45	465+74.78	26.92_RT	GPS_ALCAP2"_HR-1
39	561930.8539	456466.8314	34.97	477+69.11	14.62_RT	ALCAP2"_TB-39
40	562637.9650	455985.7768	34.50	486+22.63	16.41_RT	ALCAP2"_TB-40
41	562935.5373	455421.2226	38.04	492+59.61	17.58_RT	ALCAP2"_TB-41
42	562892.6803	454635.6933	38.59	500+45.19	21.85_LT	ALCAP2"_EB-1
43	562793.0355	452541.9656	29.67	521+38.43	29.54_LT	ALCAP2"_EB-2
44	563050.4535	451215.4032	36.90	534+40.84	142.22_LT	H&T_SET_TB-44
45	563472.5422	450990.0872	29.83	538+74.83	47.95_LT	ALCAP2"_TB-45
48	563847.6178	450876.3071	31.49	542+56.59	29.64_RT	ALCTRL2"_TB-48
46	563870.2462	450414.1843	25.43	546+28.43	285.30_LT	GPS_BC2"_95-J-21
49	564443.0560	450195.2344	37.84	551+44.7	57.39_LT	ALCTRL2"_TB-49
50	565597.5217	449824.4985	59.51	563+52.62	35.57_RT	ALCTRL2"_TB-50
51	565868.7697	449321.2317	73.41	569+17.54	16.63_RT	ALCTRL2"_TB-51
52	566083.4152	448578.6007	62.25	576+89.82	10.26_LT	ALCTRL2"_TB-52
47	566529.3149	447541.2644	21.15	588+16.19	61.68_LT	GPS_BC2"_EB-20
53	567176.7287	446499.7669	61.97	600+38.57	18.88_LT	GPS_ALCTRL2"_TB-53

UPDATED 12/13/2004

PATH:
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Mon, 13/Dec/04 09:39AM
PLOT:
PSPACE 1=1(F) OR MSPACE 1=1(F)
TAB: TYPICALS

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - TEE HARBOR TO AMALGA HARBOR ROAD
IM-093-3(24) ~ 68097

Survey Data Sheet

STATE OF ALASKA 49TH
Timothy Reed
No. 10613
REGISTERED PROFESSIONAL LAND SURVEYOR

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

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

JNU-GLACIER HIGHWAY & TRAILHEAD

Survey Data Sheet

PROJECT DESIGNATION NUMBER	
IM-093-3(24)/68097	
STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
A2	146

GLACIER HIGHWAY & TRAILHEAD - STAGE 1

POINT DATA				TANGENT DATA		CURVE DATA				
DESC.	STATION	NORTHING	EASTING	DISTANCE	BEARING	NORTHING CENTER	EASTING CENTER	LENGTH	RADIUS	DELTA
POC	10+00.00	518558.87	464290.38			518414.88	463452.66	150.11	-850	10° 7' 5.5"
PT	11+50.11	518703.80	464252.05	216.24	N 19° 52' 17.3" W					
PC	13+66.35	518907.16	464178.55			519739.95	466482.67	403.34	2450	9° 25' 57.2"
PT	17+69.69	519296.04	464073.22	600.80	N 10° 26' 20.1" W					
PC	23+70.49	519886.89	463964.36			520303.62	466226.30	505.96	2300	12° 36' 15"
PT	28+76.45	520390.52	463927.94	986.34	N 2° 9' 54.8" E					
PC	38+62.79	521376.16	463965.20			521206.14	468461.99	763.01	4500	9° 42' 53.8"
PT	46+25.80 = 46+26.94	522132.54	464058.38	302.93	N 11° 52' 48.7" E					
PC	49+29.87	522428.98	464120.74			522648.23	463078.55	495.00	-1065	26° 37' 49.4"
PT	54+24.87	522919.38	464108.46	256.67	N 14° 45' 1" W					
PC	56+81.54	523167.59	464043.11			523438.75	465073.01	402.15	1065	21° 38' 6.2"
PT	60+83.68	523566.41	464015.69	140.77	N 6° 53' 5.3" E					
PC	62+24.45	523706.16	464032.57			523833.83	462975.24	316.74	-1065	17° 2' 25.6"
PT	65+41.19	524021.61	464023.56	254.63	N 10° 9' 20.2" W					
PC	67+95.82	524272.25	463978.66			524460.03	465026.98	267.15	1065	14° 22' 20.1"
PT	70+62.97	524538.34	463964.86	163.71	N 4° 12' 59.9" E					
PC	72+26.68	524701.61	463976.90			524779.91	462914.78	174.75	-1065	9° 24' 5.2"
PT	74+01.43	524876.15	463975.42	298.23	N 5° 11' 5.2" W					
PC	76+99.66	525173.17	463948.47			525076.92	462887.83	345.48	-1065	18° 35' 11.5"
PT	80+45.14	525506.21	463862.48	849.01	N 23° 46' 16.7" W					
PC	88+94.15	526283.20	463520.25			526887.83	464892.99	476.12	1500	18° 11' 10.9"
PT	93+70.27	526741.84	463400.11	160.05	N 5° 35' 5.8" W					
PC	95+30.32	526901.13	463384.54			526735.69	461692.61	360.77	-1700	12° 9' 33.5"
PT	98+91.10	527253.79	463311.73	264.50	N 17° 44' 39.3" W					
PC	101+55.60	527505.71	463231.12			528267.63	465612.19	358.18	2500	8° 12' 31.8"
PT	105+13.77	527853.49	463146.73	1282.23	N 9° 32' 7.6" W					
PC	117+96.00	529118.00	462934.32			528703.86	460468.86	357.91	-2500	8° 12' 9.9"
PT	121+53.92	529465.53	462850.01	222.89	N 17° 44' 17.2" W					
PC	123+76.81	529677.82	462782.10			532724.49	472306.69	116.26	10000	0° 39' 58"
PT	124+93.07	529788.76	462747.32	856.65	N 17° 4' 19.2" W					
PC	133+49.71	530607.66	462495.83			531341.59	464885.68	298.58	2500	6° 50' 34.6"
PT	136+48.29	530897.63	462425.41	764.50	N 10° 13' 44.6" W					
PC	144+12.79	531649.98	462289.65			530762.06	457369.12	1331.22	-5000	15° 15' 16.8"
PT	157+44.01	532913.33	461882.66	302.70	N 25° 29' 1.4" W					
PC	160+46.71	533186.58	461752.42			534004.07	463467.57	442.15	1900	13° 20' 0.3"
PT	164+88.86	533604.16	461610.13	1811.56	N 12° 9' 1.1" W					
ANGLE PT.	183+00.42	535375.14	461228.84	819.28	N 12° 37' 38.6" W					
PC	191+19.70	536174.60	461049.73			537420.68	466611.86	842.49	5700	8° 28' 7"
PT	199+62.19	537007.31	460926.87	618.29	N 4° 9' 31.7" W					
PC	205+80.49	537623.97	460882.03			537399.16	457790.19	610.42	-3100	11° 16' 55.4"
PT	211+90.90	538224.52	460778.30	1132.49	N 15° 26' 27.1" W					
PC	223+23.39	539316.13	460476.78			539032.58	459450.23	255.24	-1065	13° 43' 54.2"
PT	225+78.63	539551.70	460380.14	280.15	N 29° 10' 21.5" W					
PC	228+58.78	539796.32	460243.58			540624.97	461727.94	527.51	1700	17° 46' 43.6"
PT	233+86.29	540289.13	460061.44	187.91	N 11° 23' 38" W					
PC	235+74.20	540473.33	460024.32			539930.07	457328.52	917.14	-2750	19° 6' 30.1"
PT	244+91.33	541325.89	459697.94	675.43	N 30° 30' 8.1" W					
PC	251+66.76	541907.85	459355.12			542448.41	460272.73	738.09	1065	39° 42' 30.8"
PT	259+04.86	542618.80	459221.45	385.81	N 9° 12' 22.7" E					
PC	262+90.66	542999.63	459283.17			542551.66	462047.11	519.32	2800	10° 37' 36.3"
PT	268+09.98	543501.65	459413.19	266.99	N 19° 49' 59" E					
PC	270+76.98	543752.81	459503.77			544114.14	458501.94	810.58	-1065	43° 36' 29.8"
PT	278+87.56	544543.49	459476.56	233.65	N 23° 46' 31" W					
PC	281+21.21	544757.31	459382.36			545321.72	460663.55	401.14	1400	16° 25' 1.5"
PT	285+22.35	545142.42	459275.08	228.63	N 7° 21' 29.3" W					
PC	287+50.98	545369.17	459245.80			545513.25	460361.54	609.79	1125	31° 3' 23"
PT	293+60.77	545965.41	459331.40	1670.35	N 23° 41' 53.5" E					
PC	310+75.13	547535.21	460020.44			547107.16	460995.63	174.81	1065	9° 24' 17.3"
PT	312+49.94 = 312+49.74	547688.81	460103.49	1061.78	N 33° 6' 10.8" E					
PC	323+11.52	548578.25	460683.38			549342.86	459510.61	519.59	-1400	21° 15' 52.1"
PT	328+31.11	549055.64	460880.83	1166.25	N 11° 50' 18.5" E					
PC	339+97.36	550197.08	461120.09			549930.38	462392.44	380.57	1300	16° 46' 23"
PT	343+77.93	550552.91	461251.19	453.39	N 28° 36' 41.7" E					
PC	348+31.32	550950.94	461468.30			552339.66	458922.43	639.66	-2900	12° 38' 16"
PT	354+70.98	551541.59	461710.46	446.29	N 15° 58' 25.7" E					

UPDATED 12/9/2004

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TAB: TYPICALS

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - TEE HARBOR TO AMALGA HARBOR ROAD
IM-093-3(24) ~ 68097

Alignment Data Sheet

STATE OF ALASKA
49 TH
Joel D. Osburn
CE-11014
12-13-04
REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: J. OSBURN
DRAWN BY: BENNETT/STEVENS

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

JNU-GLACIER HIGHWAY & TRAILHEAD

Survey Data Sheet

PROJECT DESIGNATION NUMBER
IM-093-3(24)/68097

STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
A3	146

GLACIER HIGHWAY & TRAILHEAD - STAGE 1 (cont'd.)

POINT DATA				TANGENT DATA		CURVE DATA				
DESC.	STATION	NORTHING	EASTING	DISTANCE	BEARING	NORTHING CENTER	EASTING CENTER	LENGTH	RADIUS	DELTA
PC	359+17.27	551970.64	461833.28			552493.52	460006.64	627.73	-1900	18° 55' 46.2"
PT	365+45.00	552591.49	461904.11	829.52	N 2° 57' 20.5" W					
PC	373+74.52	553419.91	461861.34			553335.86	460233.51	1546.01	-1630	54° 20' 36"
PT	389+20.52	554707.51	461114.12	1066.71	N 57° 17' 56.5" W					
PC	399+87.24	555283.80	460216.48			556882.66	461242.96	997.44	1900	30° 4' 42.4"
PT	409+84.68	556013.56	459553.38	313.15	N 27° 13' 14.1" W					
PC	412+97.83	556292.03	459410.14			555422.94	457720.56	399.57	-1900	12° 2' 57.3"
PT	416+97.40	556625.59	459191.49	1122.31	N 39° 16' 11.4" W					
PC	428+19.71	557494.45	458481.10			558697.10	459952.03	1145.80	1900	34° 33' 8.2"
PT	439+65.50	558540.84	458058.47	461.76	N 4° 43' 3.4" W					
PC	444+27.26	559001.03	458020.49			558844.61	456124.93	898.82	-1902	27° 4' 33.9"
PT	453+26.09	559846.70	457741.54	3001.51	N 31° 47' 37.3" W					
PC	483+27.60	562397.83	456160.16			561790.89	455181.02	1233.79	-1152	61° 21' 49.2"
PT	495+61.39	562941.14	455117.57	2215.76	S 86° 50' 33.5" W					
PC	517+77.15	562819.10	452905.17			565614.85	452750.95	629.59	2800	12° 52' 59.1"
PT	524+06.74	562855.09	452277.94	487.98	N 80° 16' 27.2" W					
PC	528+94.71	562937.53	451796.97			563987.22	451976.89	1000.41	1065	53° 49' 14.8"
PT	538+95.12	563512.79	451023.40	202.47	N 26° 27' 12.4" W					
PC	540+97.59	563694.07	450933.20			563219.64	449979.71	466.67	-1065	25° 6' 21.9"
PT	545+64.26	564053.81	450641.82	164.22	N 51° 33' 34.5" W					
PC	547+28.48	564155.90	450513.20			564990.07	451175.31	782.60	1065	42° 6' 11.2"
PT	555+11.08	564815.09	450124.78	183.95	N 9° 27' 23.3" W					
PC	556+95.03	564996.54	450094.56			564821.56	449044.03	1162.81	-1065	62° 33' 28.6"
PT	568+57.84	565834.52	449372.88	731.92	N 72° 0' 51.9" W					
PC	575+89.76	566060.52	448676.72			568818.81	449572.18	455.16	2900	8° 59' 33.5"
PT	580+44.92	566234.39	448256.59	1579.31	N 63° 1' 18.6" W					
PC	596+24.23	566950.85	446849.14			568198.50	447484.25	652.77	1400	26° 42' 54.3"
PT	602+77.01	567369.55	446356.05	254.07	N 36° 18' 24.2" W					

STN. EQN. 46+25.80 = 46+26.94

UPDATED 10/20/2004

OTHER ALIGNMENTS

POINT DATA				TANGENT DATA		CURVE DATA				
DESC.	STATION	NORTHING	EASTING	DISTANCE	BEARING	NORTHING CENTER	EASTING CENTER	LENGTH	RADIUS	DELTA
Fire Station Driveway										
PT	1+00.00	519033.77	464135.77	62.90	N 71° 45' 6.3" E					
POT	1+62.90	519053.75	464196.3797							
Pt Stephens Rd										
PT	1+00.00	519034.06	464136.6437	108.09	S 71° 15' 7.4" W					
POT	2+08.09	518998.86	464034.43							
Chilkat Rd										
PT	1+00.00	519013.55	464076.217	46.34	N 14° 39' 44.7" W					
POT	1+46.34	519058.38	464064.49							
Randall Rd										
PT	1+00.00	525376.19	463909.92	12.17	N 73° 7' 44.5" E					
PC	1+12.17	525379.73	463921.56			525413.22	463911.41	50.80	-35	83° 9' 38.1"
PT	1+62.97	525419.32	463945.87	57.03	N 10° 1' 53.4" W					
POT	2+20.00	525475.47	463935.94							
Cohen Dr										
PT	1+00.00	531793.30	462261.6193	58.36	S 79° 14' 24.6" W					
POT	1+58.36	531782.40	462204.28							
Amalga Harbor Rd										
PT	1+00.00	550822.58	461400.4886	63.45	N 61° 53' 11.9" W					
POT	1+63.45	550861.82	461327.0448							

UPDATED 12/6/2004

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TAB: TYPICALS

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - TEE HARBOR TO AMALGA HARBOR ROAD
IM-093-3(24) ~ 68097

Alignment Data Sheet

STATE OF ALASKA 49 TH
Mel D. Osburn
OE-11014
12-15-04
REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: J. OSBURN
DRAWN BY: BENNETT/STEVENS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION
JNU-GLACIER HIGHWAY & TRAILHEAD

Survey Data Sheet

PROJECT DESIGNATION NUMBER	
IM-093-3(24)/68097	
STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
A4	146

TYPICAL SECTION NOTES:

1. IN AREAS OF GRADE RAISE AND/OR REALIGNMENT, CONSTRUCT 18" OF SELECTED MATERIAL, TYPE A FULL WIDTH.
2. THE AVERAGE THICKNESS OF EXISTING PAVEMENT IS: 4"–TEE HARBOR TO THE SHRINE. 2"–THE SHRINE TO AMALGA HARBOR ROAD
3. ALL SOIL CONSTRUCTION SLOPES THAT ARE 2:1(H:V) OR FLATTER SHALL BE SEEDED AND MULCHED. MATTING MAY BE REQUIRED FOR SOIL SLOPES STEEPER THAN 2:1, AS DIRECTED BY THE ENGINEER. ALL SOIL SLOPES 2:1(H:V) OR STEEPER WILL BE EVALUATED BY THE ENGINEER FOR SLOPE STABILIZATION MEASURES.
4. THE CONTRACTOR SHALL USE WASTE MATERIAL AS SUBGRADE MATERIAL IN WASTE FILL SECTIONS AS SHOWN ON THE TYPICAL SECTIONS, OR SHALL HAUL WASTE MATERIAL TO THE WASTE AREA WHICH IS APPROVED BY THE ENGINEER. THIS WORK IS CONSIDERED SUBSIDIARY TO OTHER ITEMS OF WORK AND NO SEPARATE MEASUREMENT OR PAYMENT WILL BE MADE.
5. ROADWAY CROSS SLOPE IS 2.5% FROM STA. 29+50 TO 40+00 AND STA. 314+50 TO 348+00.
6. DELETE THE 1–FOOT GRAVEL SHOULDER BETWEEN STA. 16+50 AND 40+00, LT. AND RT.
7. SUPERELEVATIONS ROTATE ABOUT THE CENTERLINE. THE RATES OF SUPERELEVATION AND THE SUPERELEVATION TRANSITION REGIONS ARE GIVEN ON THE PLAN AND PROFILE SHEETS. REFER TO CASE 1 OF STANDARD DRAWING I–81.00 FOR TRANSITION DETAILS.
8. REFER TO DITCH MODIFICATION AND CLEARING EXCEPTION TABLES.
9. REFER TO SHEET W3 FOR CBJ WATERLINE TYPICAL SECTION.
10. INVASIVE PLANT LOCATIONS, DELINEATED IN 2002, ARE SHOWN ON THE PLAN SHEETS. SPECIAL HANDLING AND DISPOSAL REQUIREMENTS ARE SET FORTH IN SECTION 203 OF THE SPECIFICATIONS. THOSE PLANTS SHOWN OUTSIDE OF THE CONSTRUCTION LIMITS ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
11. FOR THE AREAS LISTED IN THE RECLAIM STATIONS TABLE, THE 4" CRUSHED ASPHALT BASE COURSE SHALL INCORPORATE THE EXISTING PAVEMENT PER SECTION 308. FOR STATIONS NOT LISTED IN THE TABLE, THE EXISTING PAVEMENT SHALL BE INCORPORATED UNDER SECTION 304 OR 308 AT THE CONTRACTORS OPTION.

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TAB: TYPICALS

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

RECLAIM STATIONS

FROM STATION	TO STATION
15+00	47+00
72+00	97+50
102+50	150+00
166+50	186+00
194+00	206+00
216+50	241+00
265+00	288+50
315+00	348+00

DITCH MODIFICATION TABLE

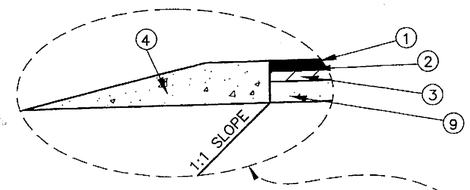
From Station	To Station	Offset	Ditch Width	Remarks
12+50	14+75	RT	-	SPECIAL DITCH (see F-Sheets for Plan/Profile)
15+25	19+00	RT	6'	Match Existing Ditch Flowline
19+50	47+00	RT	6'	Match Existing Ditch Flowline
57+50	58+00	RT	15'	Rockfall Ditch (linear transition for half station)
69+00	70+00	RT	10'	Keep Cut Limit within R.O.W.
77+50	79+00	RT	-	SPECIAL DITCH (see F-Sheets for Plan/Profile)
79+50	83+00	RT	8'	Match Existing Ditch Flowline
94+00	95+00	RT	6'	Match Existing Ditch Flowline
97+50	100+00	RT	6'	Match Existing Ditch Flowline
97+50	103+50	LT	-	1.5:1 Foreslope
103+00	104+00	RT	8'	Avoid Soil Cut Uphill
116+00	125+00	RT	6'	Avoid Soil Cut Uphill
121+00	125+00	LT	-	1.5:1 Foreslope
130+00	142+50	RT	6' - 8'	Match Existing Ditch Flowline
161+50	166+00	LT	8'	Avoid Soil Cut Uphill
182+00	193+00	RT	-	1.5:1 Foreslope
298+00	312+00	RT	-	1.5:1 Foreslope
314+50	348+00	LT & RT	-	1.5:1 Foreslope

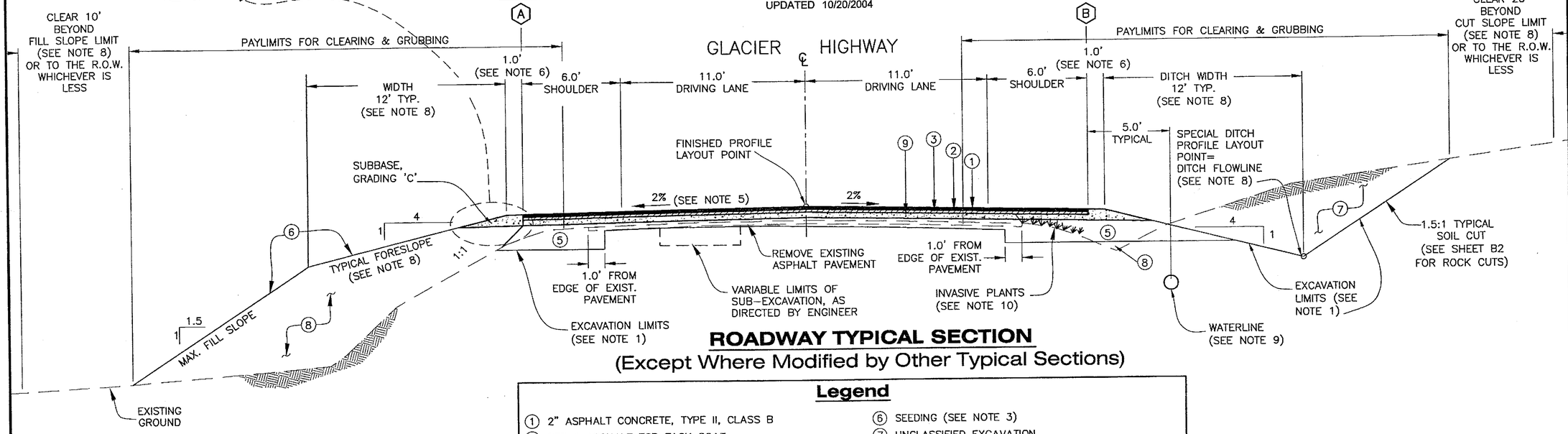
UPDATED 10/20/2004

CLEARING EXCEPTION TABLE

From Station	To Station	Offset	Remarks
15+50	124+50	LT	NO CLEARING BEYOND SLOPE LIMITS.
78+00	97+00	LT	CLEAR 20' BEYOND SLOPE LIMITS
80+00	83+00	RT	NO CLEARING BEYOND SLOPE LIMITS.
100+50	103+50	RT	NO CLEARING BEYOND SLOPE LIMITS.
104+00	133+00	LT	CLEAR 20' BEYOND SLOPE LIMITS
121+00	150+00	RT	NO CLEARING BEYOND SLOPE LIMITS.
181+00	187+50	RT	NO CLEARING BEYOND SLOPE LIMITS.
185+00	191+50	LT	CLEAR 20' BEYOND SLOPE LIMITS
218+00	227+50	LT	CLEAR 10' BEYOND POWERLINE
268+00	272+00	LT	NO CLEARING BEYOND SLOPE LIMITS.
283+00	289+00	LT	NO CLEARING BEYOND SLOPE LIMITS.
297+00	301+50	RT	NO CLEARING BEYOND SLOPE LIMITS.
311+50	315+00	BOTH	NO CLEARING BEYOND SLOPE LIMITS.

UPDATED 12/8/2004





ROADWAY TYPICAL SECTION
(Except Where Modified by Other Typical Sections)

Legend

1. 2" ASPHALT CONCRETE, TYPE II, CLASS B
2. STE–1 ASPHALT FOR TACK COAT
3. 1 1/2" ASPHALT TREATED BASE COURSE
4. 4" SUBBASE, GRADING C
5. 18" SELECTED MATERIAL, TYPE A
6. SEEDING (SEE NOTE 3)
7. UNCLASSIFIED EXCAVATION
8. USEABLE EXCAVATION*
9. 4" CRUSHED ASPHALT BASE COURSE (SEE NOTE 11)
- (X) REFERENCE POINT FOR PARTIAL CROSS SECTIONS.

* USABLE EXCAVATION MUST MEET GRADING REQUIREMENTS OF SELECTED MATERIAL, TYPE B.

JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - TEE HARBOR TO AMALGA HARBOR ROAD
IM-093-3(24) ~ 68097

Typical Sections

STATE OF ALASKA 49TH
Joel D. Osburn CE-11014 12-19-04
REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: J. OSBURN
DRAWN BY: BENNETT/STEVENS

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

JNU-GLACIER HIGHWAY & TRAILHEAD

Typical Sections

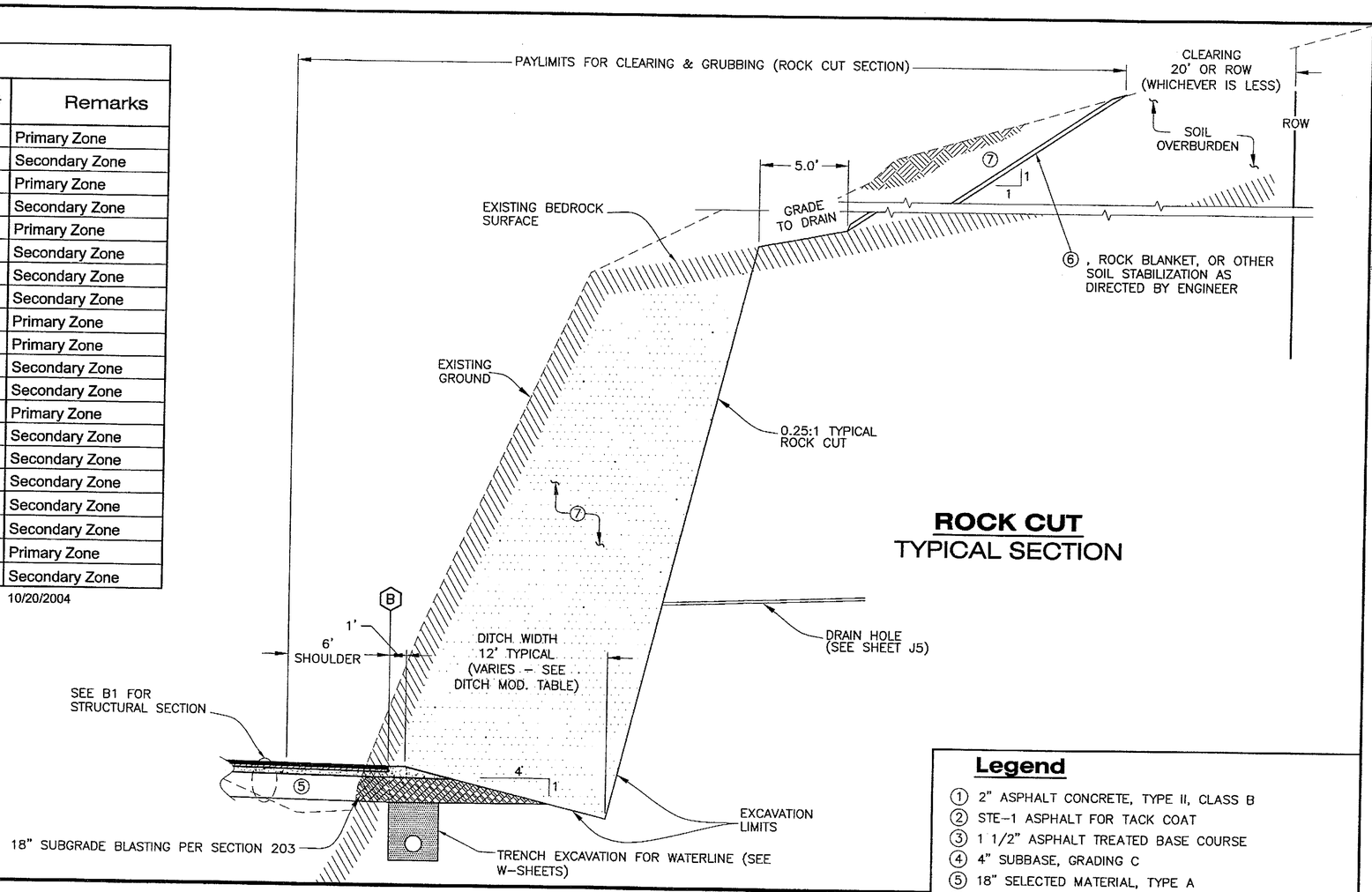
PROJECT DESIGNATION NUMBER	
IM-093-3(24)/68097	
STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
B1	146

EAGLE TREE TABLE

Station	Offset	Eagle Tree Nest Designation	USFWS #	Remarks
30+54	82 RT	H 786		Primary Zone
31+86	496 RT	-	191	Secondary Zone
34+98	118 RT	B 175	181	Primary Zone
40+99	2600 LT	-	-	Secondary Zone
57+03	64 RT	H 787	104	Primary Zone
57+92	2317 LT	-	192	Secondary Zone
58+76	1960 LT	-	167	Secondary Zone
62+21	371 RT	-	-	Secondary Zone
75+11	195 LT	H 789	190	Primary Zone
77+51	114 RT	H 788	149	Primary Zone
94+24	1430 LT	-	-	Secondary Zone
96+78	1431 LT	-	148	Secondary Zone
103+09	82 RT	H 790	209	Primary Zone
104+27	1400 LT	-	129	Secondary Zone
148+72	1320 LT	-	59	Secondary Zone
155+98	1156 LT	-	60	Secondary Zone
191+85	941 LT	-	61	Secondary Zone
252+30	742 LT	-	64	Secondary Zone
267+73	167 RT	H 720	207	Primary Zone
288+70	1124 LT	-	65	Secondary Zone

UPDATED 10/20/2004

NOTE: SEE ITEM NUMBERS 11 & 12 OF THE ENVIRONMENTAL COMMITMENTS (APPENDIX 'B' OF THE SPECIFICATIONS) FOR EAGLE TREE REGULATIONS.

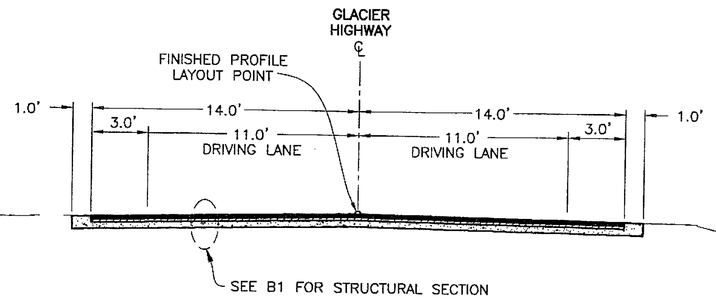


ROCK CUT
TYPICAL SECTION

Legend

1. 2" ASPHALT CONCRETE, TYPE II, CLASS B
2. STE-1 ASPHALT FOR TACK COAT
3. 1 1/2" ASPHALT TREATED BASE COURSE
4. 4" SUBBASE, GRADING C
5. 18" SELECTED MATERIAL, TYPE A
6. SEEDING (SEE NOTE 3, SHEET B1)
7. UNCLASSIFIED EXCAVATION
8. USEABLE EXCAVATION
9. 4" CRUSHED ASPHALT BASE COURSE

X REFERENCE POINT FOR PARTIAL CROSS SECTIONS.



STA. 10+00(B.O.P.)-15+00
(SEE G1 FOR TRANSITIONS 11+00-15+00)

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ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - TEE HARBOR TO AMALGA HARBOR ROAD
IM-093-3(24) ~ 68097

Typical Sections

STATE OF ALASKA 49TH
Joel D. Osburn
CE-11014
12-13-04
REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: J. OSBURN
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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

JNU-GLACIER HIGHWAY & TRAILHEAD

Typical Sections

PROJECT DESIGNATION NUMBER	
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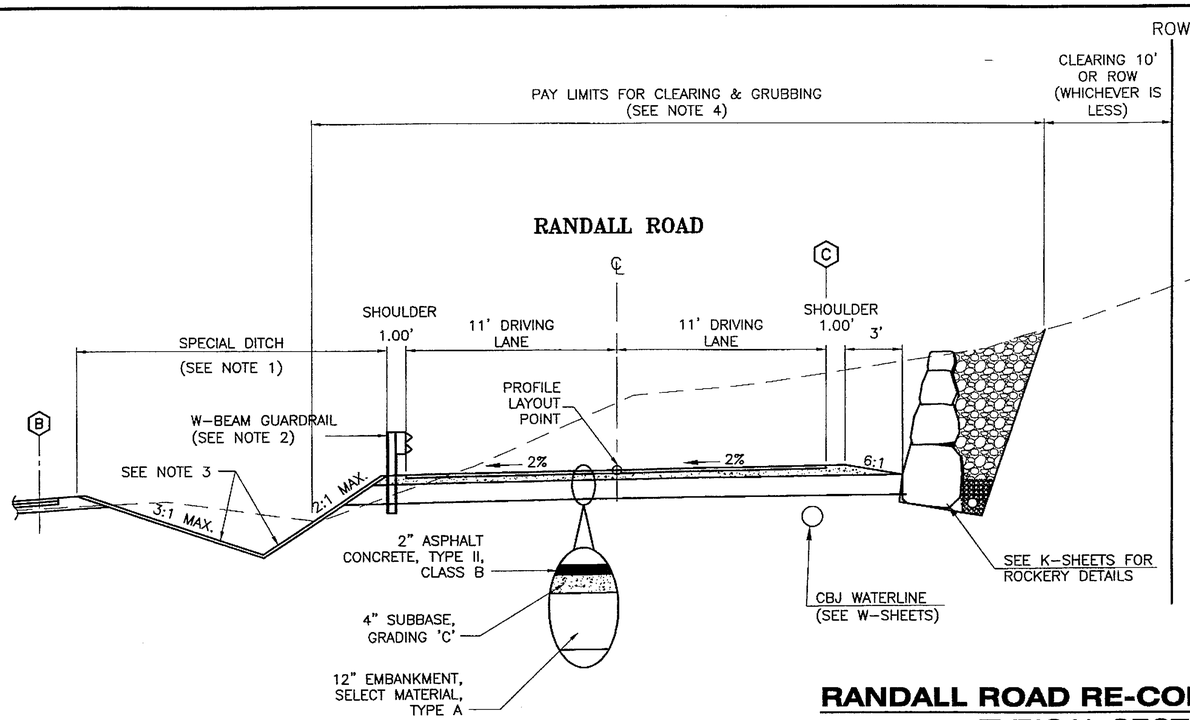
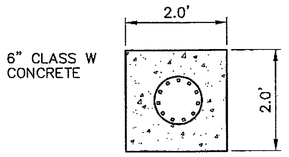
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
B2	146



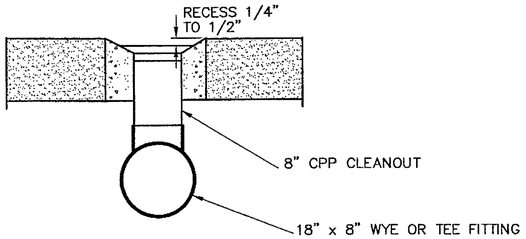
RANDALL ROAD RE-CONSTRUCTION
TYPICAL SECTION
(SEE G-SHEETS FOR LAYOUT DETAILS)

Notes:

1. CONSTRUCT SPECIAL DITCH TO DRAIN BETWEEN RANDALL ROAD AND GLACIER HIGHWAY, AS DIRECTED BY THE ENGINEER.
2. INSTALL GUARDRAIL RT. STATIONS: "R" 1+60 TO "R" 2+20. BACK OF GUARDRAIL POST WILL MATCH THE EDGE OF THE SHOULDER, I.E. THE HINGE POINT OF THE ROAD.
3. SEEDING ACCORDING TO THE SPECIAL PROVISIONS.
4. NO PAYMENT WILL BE MADE FOR CLEARING & GRUBBING THE EXISTING PAVED ROADWAY.



Plan View

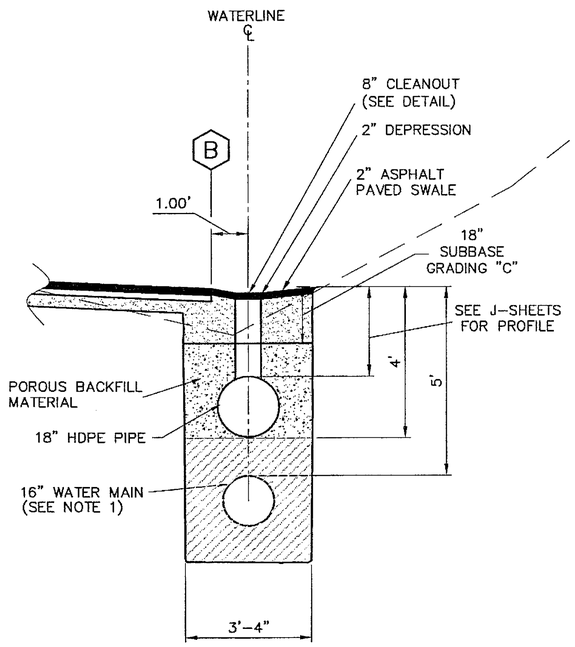


Section View

THROUGH DRAIN CLEANOUT DETAIL

NOTES:

1. SEE WATERLINE SHEETS FOR PLAN LAYOUT AND DETAILS FOR WATERLINE INSTALLATION.



THROUGH DRAIN
"O" STA. 83+00 TO STA. 85+20
(SEE J-SHEETS FOR LAYOUT DETAILS)

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JNU-GLACIER HIGHWAY & TRAILHEAD
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Misc. Typical Sections

STATE OF ALASKA 49 TH
Joel D. Osburn
CE-11014
12-13-04
REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY:	J. OSBURN
DRAWN BY:	BENNETT/STEVENS

STATE OF ALASKA
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STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

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Misc. Typical Sections

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IM-093-3(24)/68097	
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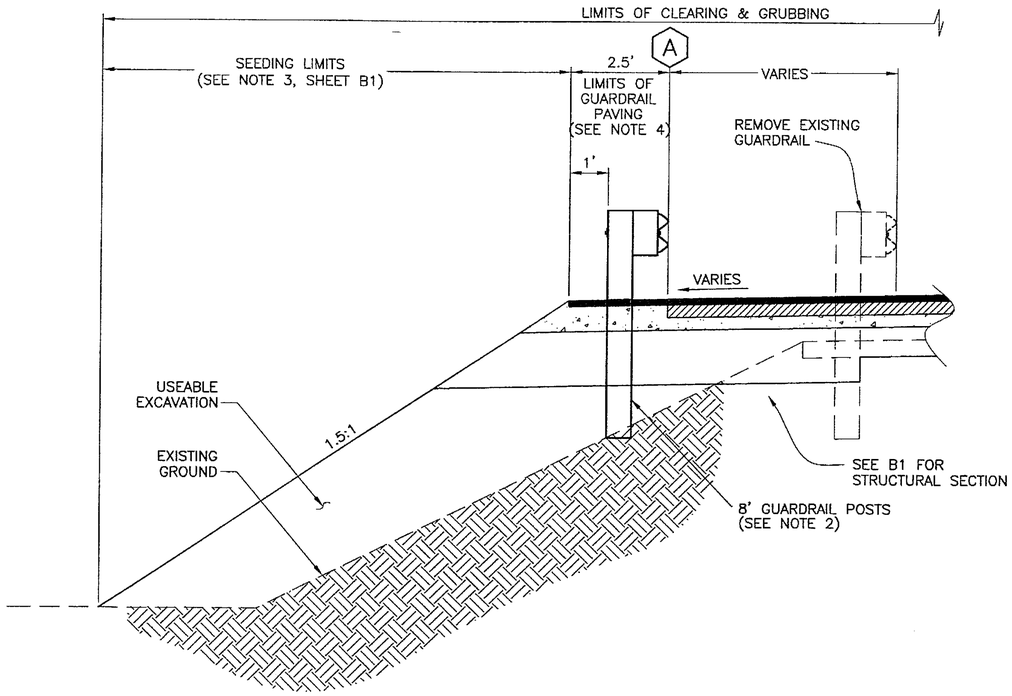
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
B3	146

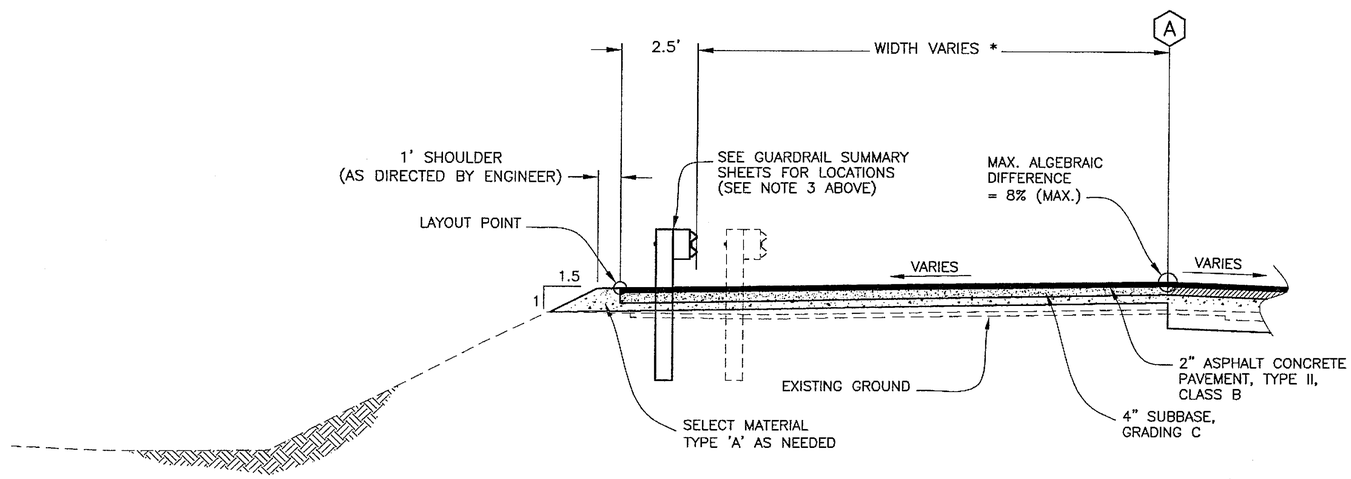
NOTES:

1. REFER TO G–SERIES STANDARD DRAWINGS FOR GUARDRAIL DETAILS.
2. GUARDRAIL POSTS SHALL BE PLACED IN ACCORDANCE WITH THE SPECIFICATIONS.
3. SEED ALL DISTURBED SOIL SLOPES.
4. NEW GUARDRAIL INSTALLATION SHALL BE CONSTRUCTED AFTER ROADWAY PAVING IS COMPLETED. GUARDRAIL PAVING SHALL BE DONE FOLLOWING GUARDRAIL INSTALLATION.
4. THE TIMELINE FOR GUARDRAIL REMOVAL & INSTALLATION SHALL FOLLOW THE CONSTRUCTION PHASING PLAN (SHEET E–1).



GUARDRAIL TYPICAL

(SEE GUARDRAIL SUMMARY FOR GUARDRAIL LOCATIONS)



ROADSIDE TURN-OUT

TYPICAL SECTION

* (SEE G-SHEETS FOR LAYOUT DETAILS)

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TAB: TYPICALS

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - TEE HARBOR TO AMALGA HARBOR ROAD
IM-093-3(24) ~ 68097

Misc. Typical Sections

STATE OF ALASKA 49TH
Joel D. Osburn
CE-11014
12-13-04
REGISTERED PROFESSIONAL ENGINEER

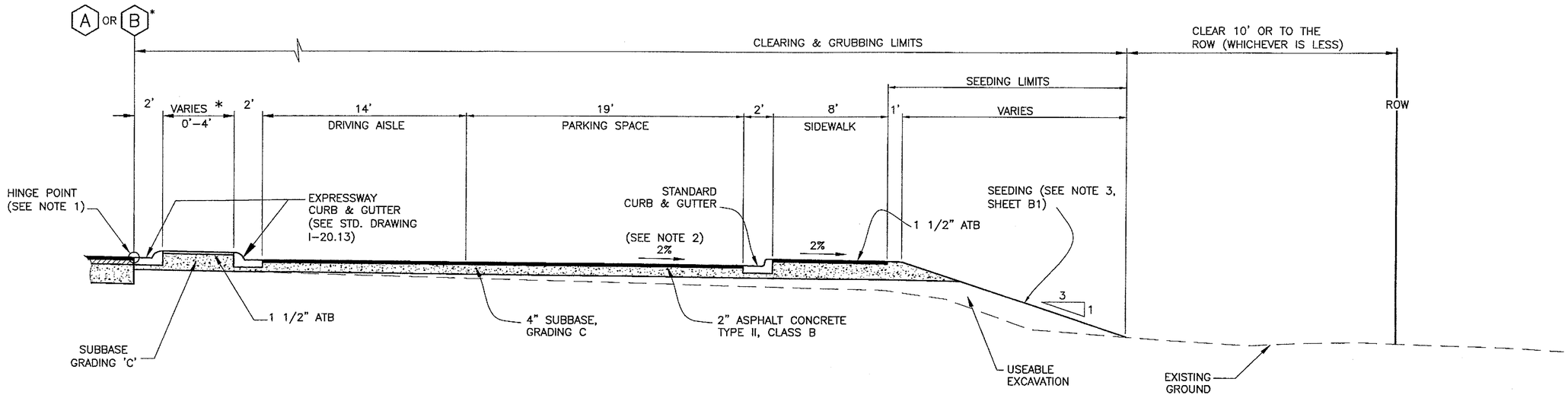
DESIGNED BY:	J. OSBURN
DRAWN BY:	BENNETT/STEVENS

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

JNU-GLACIER HIGHWAY & TRAILHEAD

Misc. Typical Sections

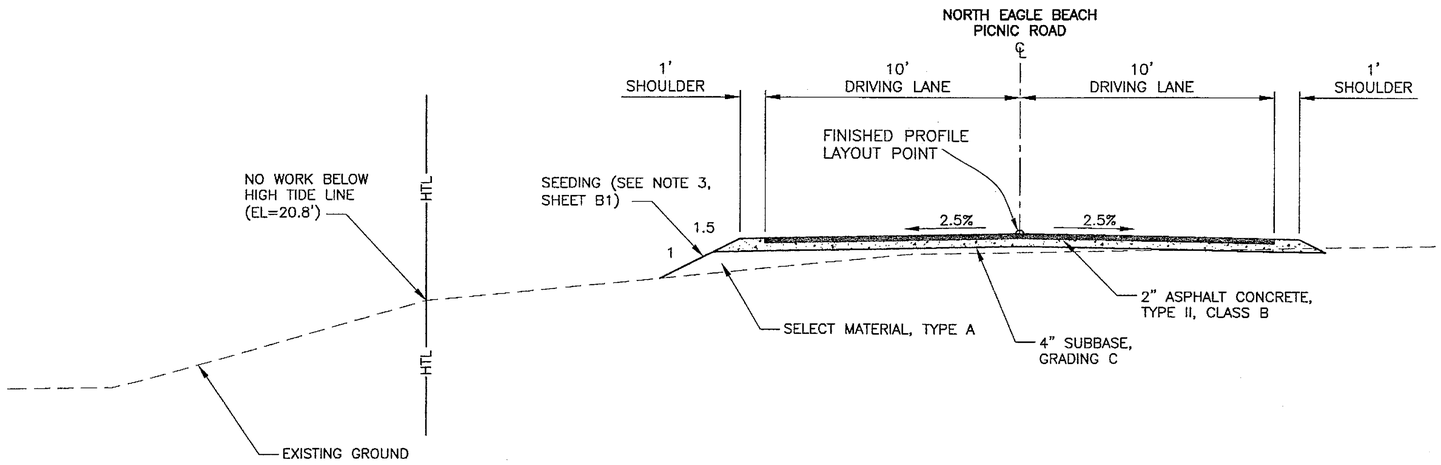
PROJECT DESIGNATION NUMBER	
IM-093-3(24)/68097	
STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
B4	146



TRAILHEAD PARKING
TYPICAL SECTION
* (SEE G-SHEETS FOR LAYOUT DETAILS)

NOTES:

1. MAXIMUM ALGEBRAIC DIFFERENCE = 8% (MAX.)
2. EVERYWHERE EXCEPT FOR BREADLINE BLUFF TRAILHEAD PARKING, WHERE GRADE = 5.5%.



NORTH EAGLE BEACH STATE RECREATIONAL AREA PICNIC ROAD
TYPICAL SECTION
(SEE G-SHEETS FOR LAYOUT DETAILS)

NOTES:

1. FILL BELOW THE HIGH TIDE LINE IS NOT PERMITTED.
2. ALASKA DEPARTMENT OF NATURAL RESOURCES WILL CLEAR AND GRUB PRIOR TO CONTRACTOR'S SCHEDULE FOR WORK IN THIS AREA.

PATH: Q:\Jnu\68096\Planset\Stage1\B_Typs.dwg
Mon, 06/Dec/04 09:26AM
PLOT:
PSPACE 1=1(F) OR MSPACE 1=1(F)
TAB: TYPICALS

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - TEE HARBOR TO AMALGA HARBOR ROAD
IM-093-3(24) ~ 68097

Misc. Typical Sections

STATE OF ALASKA 49TH
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STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

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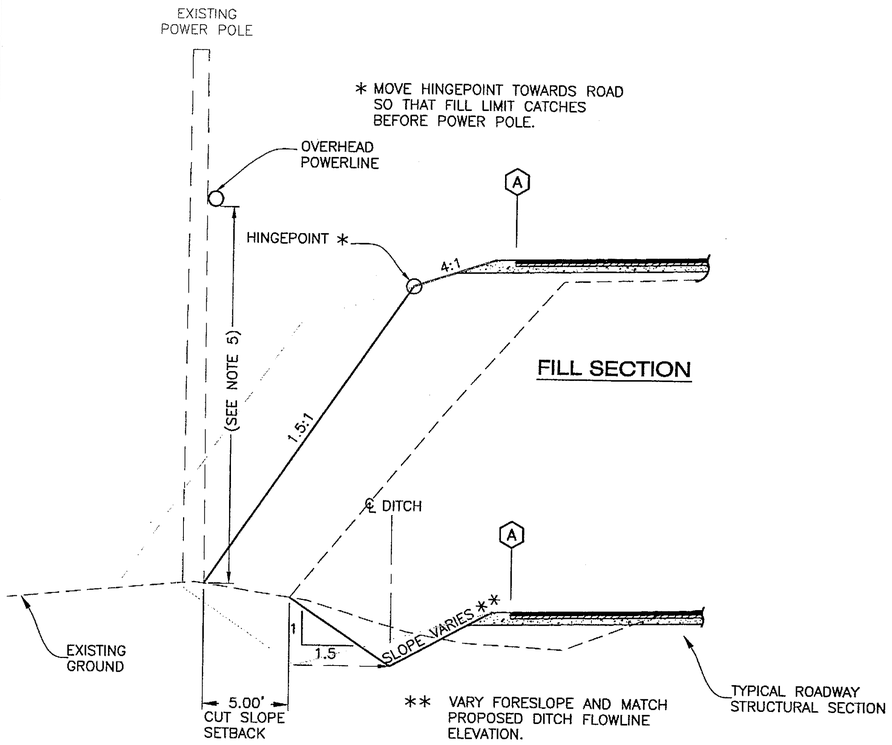
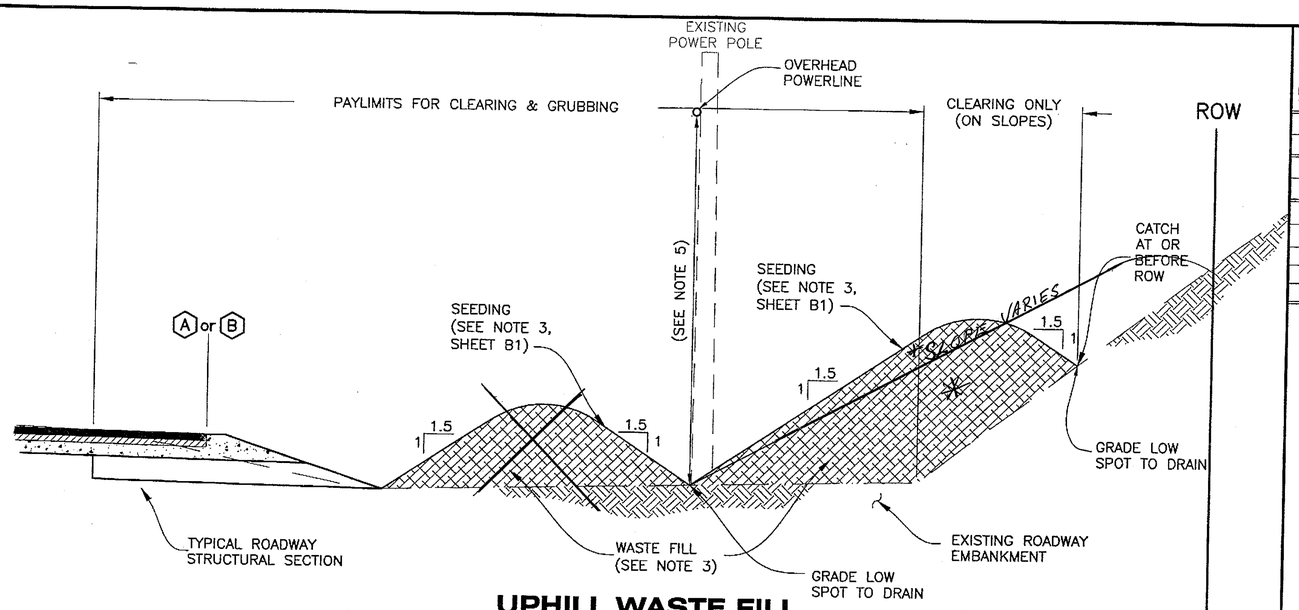
Misc. Typical Sections

PROJECT DESIGNATION NUMBER	
IM-093-3(24)/68097	
STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
B5	146



FILL SECTION

SLOPE WARPING AT POWER POLES
TYPICAL SECTION

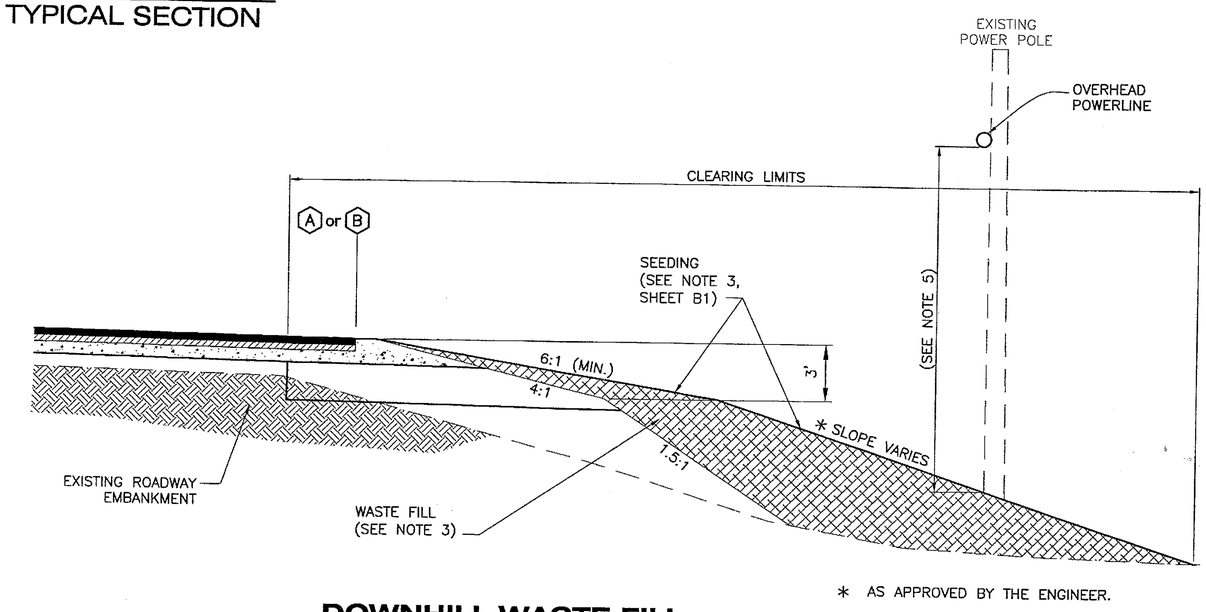


UPHILL WASTE FILL
TYPICAL SECTION

LOCATIONS AND APPROXIMATE VOLUMES ARE GIVEN IN THE TABLE BELOW:

FROM STA.	TO STA.	VOLUME (YDS)
* 88+50	92+50	1500
* 106+50	109+00	2000
* 114+00	116+00	1500
	TOTAL	5000

CUT SECTION



* AS APPROVED BY THE ENGINEER.

DOWNHILL WASTE FILL
TYPICAL SECTION

NOTES:

1. OPTIONAL DOWNHILL WASTE DISPOSAL AREAS SHALL BE BETWEEN "0" STA. 134+00 LT. AND STA. 144+00 LT.; "0" STA. 226+00 LT. AND STA 246+00 LT.; "0" STA. 473+00 AND 495+00 RT & LT; OR AS DIRECTED BY THE ENGINEER. WASTE MATERIALS MAY ALSO BE PLACED OVER SHOT ROCK FILLS WHEN APPROVED BY THE ENGINEER.
2. WOODY DEBRIS NOT USED ON THE PROJECT SHALL BE BURNED IN APPROVED SITES WITHIN THE RIGHT-OF-WAY OR HAULED OFF-SITE AT THE CONTRACTORS EXPENSE.
3. THE CONTRACTOR SHALL NOT FILL ON WETLANDS OUTSIDE OF THE PROPOSED SLOPE LIMITS.
4. LEAVE AN UNDISTURBED BUFFER OF 50 FEET FROM THE TOP BANK OF ANY STREAM CHANNELS TO THE TOE OF THE WASTE SLOPE. DO NOT EXCEED 2:1 ON THE SLOPES THAT ABUT THE STREAM BUFFER.
5. MAINTAIN EXISTING POWERLINE CLEARANCE WHERE ENCOUNTERED. MINIMUM VERTICAL CLEARANCE IS 18'-0".

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TAB: TYPICALS

ADDENDUM NUMBER
ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - TEE HARBOR TO AMALGA HARBOR ROAD
IM-093-3(24) ~ 68097

Misc. Typical Sections

STATE OF ALASKA 49TH
Joel D. Osburn
CE-11014
12-13-04
REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: J. OSBURN
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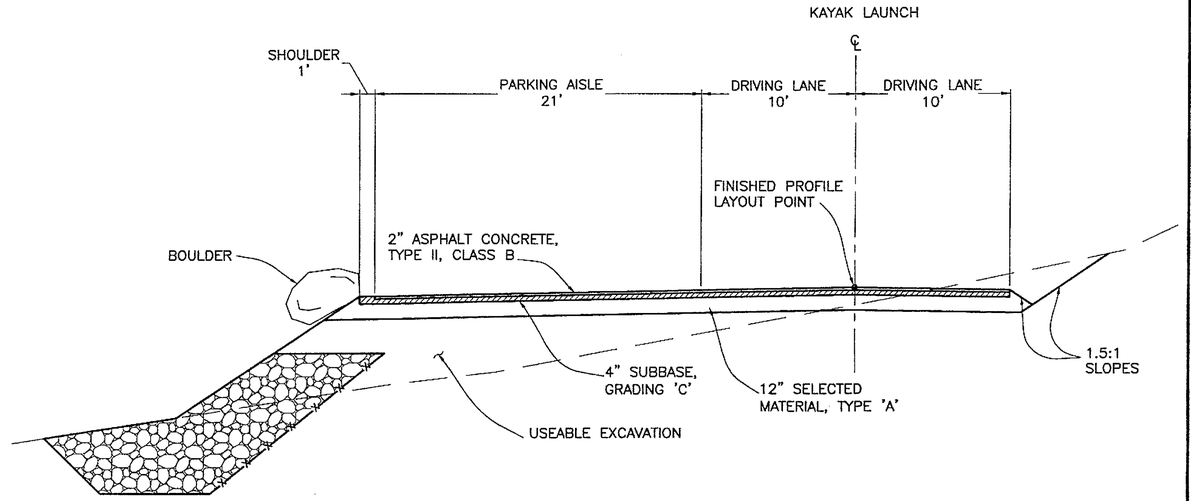
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

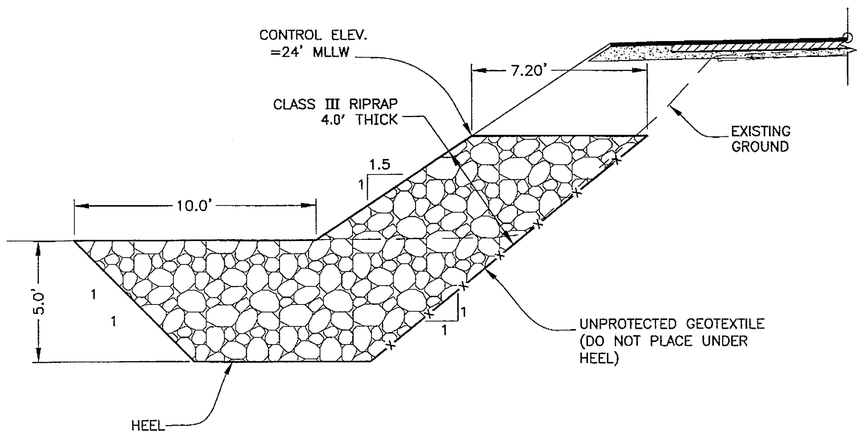
JNU-GLACIER HIGHWAY & TRAILHEAD

Misc. Typical Sections

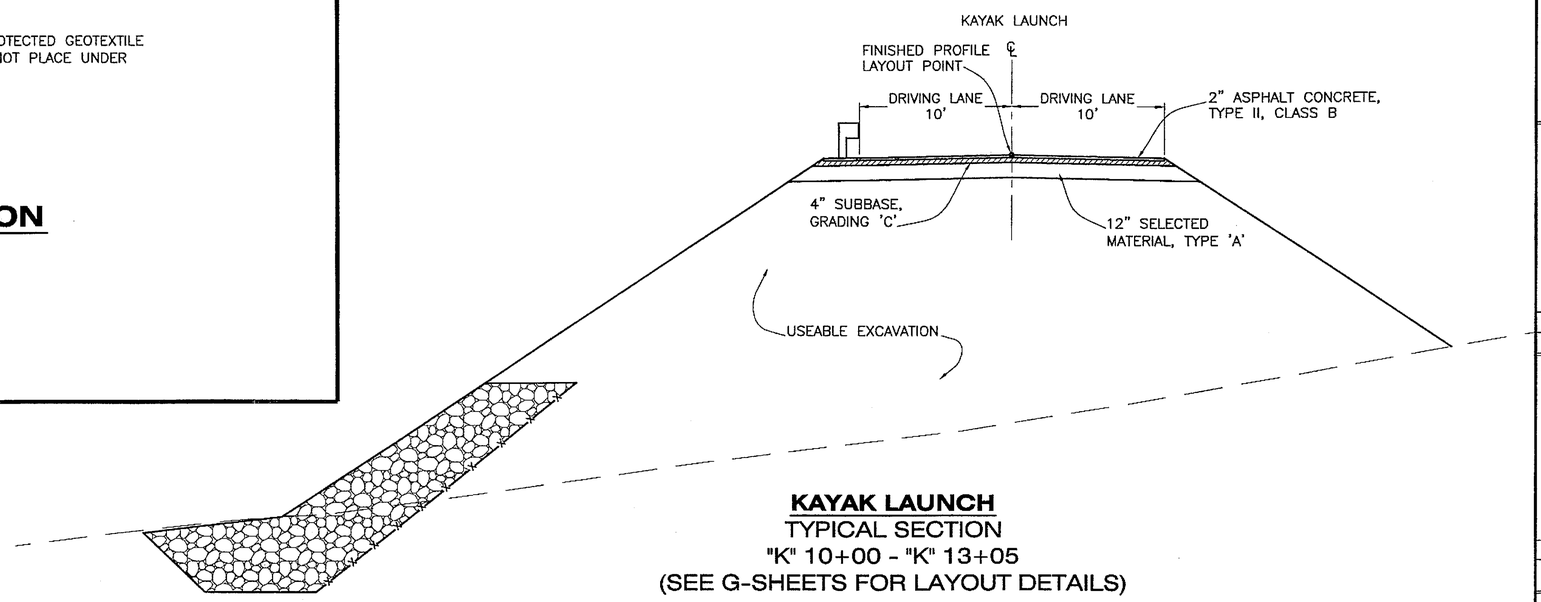
PROJECT DESIGNATION NUMBER	
IM-093-3(24)/68097	
STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
B6	146



KAYAK LAUNCH
TYPICAL SECTION
"K" 13+05 - "K" 15+40



TYPICAL RIPRAP SECTION



KAYAK LAUNCH
TYPICAL SECTION
"K" 10+00 - "K" 13+05
(SEE G-SHEETS FOR LAYOUT DETAILS)

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PLOT:
PSPACE 1=1(F) OR MSPACE 1=1(F)
TAB: TYPICALS

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - TEE HARBOR TO AMALGA HARBOR ROAD
IM-093-3(24) ~ 68097

Misc. Typical Sections

STATE OF ALASKA 49 TH
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
12-13-04

DESIGNED BY: J. OSBURN
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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

JNU-GLACIER HIGHWAY & TRAILHEAD

Misc. Typical Sections

PROJECT DESIGNATION NUMBER	
IM-093-3(24)/68097	
STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
B7	146

ESTIMATE OF QUANTITIES

Item No.	Item	Pay Unit	68096/ 68097 QTY.	RSA #67562 QTY.	TOTAL QTY.
201 (1B)	Clearing	Lump Sum	All Req'd.		All Req'd.
201 (3B)	Clearing And Grubbing	Lump Sum	All Req'd.		All Req'd.
202 (1)	Removal of Structures and Obstructions	Lump Sum	All Req'd.		All Req'd.
202(10)	Single Mail Box Installation	Each	14 9		14 9
203 (3)	Unclassified Excavation	Cubic Yard	88000		88000
203(10)	Controlled Blasting	Linear Foot	54,840		54,840 ~~53000~~
203(12)	Drain Holes	Linear Foot	1480		1480 ~~1250~~
203(13)	Stabilization, Rock Bolts	Each	~~10~~		~~10~~
203(19)	Control of Invasive Plants	Lump Sum	All Req'd.		All Req'd.
203(20)	Overburden Exploration	Contingent Sum	All Req'd.		All Req'd.
207 (1)	Sheeting, Shoring and Bracing	Lump Sum		All Req'd.	All Req'd.
207 (2)	Trench Blasting	Linear Foot		4002	4002 ~~5300~~
207 (3)	Imported Backfill	Cubic Yard		140 ~~500~~	140 ~~500~~
207 (4)	Trench Plug	Each		~~30~~	~~30~~
303 (3)	Ditch Reconditioning	Linear Foot	8670		8670 ~~8500~~
304 (2)	Subbase, Grading C	Ton	20,564.72	90	20,564.72 ~~10100~~
306 (1)	ATB	Ton	12,654.72		12,654.72 ~~11500~~
308 (1)	Crushed Asphalt Base Course	Square Yard	129,140 11		129,140 ~~138000~~
308 (2)	CSS-1 Asphalt for Base Course	Ton	949.24		949.24 ~~970~~
308 (3)	Portland Cement	Ton	283.13 ~~315~~		283.13 ~~315~~
401 (1)	Asphalt Concrete, Type II, Class B	Ton	17,680.45		17,680.45 ~~15300~~
401 (2)	Asphalt Cement, Grade PG 58-28	Ton	1582.34		1582.34 ~~1440~~
401 (6)	Asphalt Price Adjustment	Contingent Sum	All Req'd.		All Req'd
402 (1)	STE-1 Asphalt For Tack Coat	Ton	26.25 ~~27~~		26.25 ~~27~~
514 (1)	Rockery Wall	Square Foot	1965.50 ~~800~~		1965.50 ~~800~~
603 (1-1)	12 Inch CSP	Linear Foot	15 ~~10~~		15 ~~10~~
603 (1-2)	24 Inch CSP	Linear Foot	134 ~~80~~		134 ~~80~~
603 (1-3)	30 Inch CSP	Linear Foot	90 ~~20~~		90 ~~20~~
603 (9-1)	48 Inch Corrugated Aluminum Pipe	Linear Foot	118.8 ~~34~~		118.8 ~~34~~
603 (9-2)	60 Inch Corrugated Aluminum Pipe	Linear Foot	154.2 ~~153~~		154.2 ~~153~~
603 (9-3)	72 Inch Corrugated Aluminum Pipe	Linear Foot	62.7 ~~82~~		62.7 ~~82~~
603 (9-4)	84 Inch Corrugated Aluminum Pipe	Linear Foot	187.4 ~~190~~		187.4 ~~190~~
603 (9-5)	120 Inch Corrugated Aluminum Pipe	Linear Foot	256.90 ~~225~~		256.90 ~~225~~
603(10-1)	142 x 91 Inch Corrugated Aluminum Pipe Arch	Linear Foot	111		111
603(21-1)	18 inch Corrugated Polyethylene Pipe	Linear Foot	786.90 ~~480~~		786.90 ~~480~~
603(21-2)	24 Inch Corrugated Polyethylene Pipe	Linear Foot	4537.30 ~~4350~~		4537.30 ~~4350~~
603(21-4)	36 Inch Corrugated Polyethylene Pipe	Linear Foot	267.60 ~~350~~		267.60 ~~350~~
603(22)	Streambed Material, Type I	Each	6 ~~8~~		6 ~~8~~
603(23)	Streambed Material, Type II	Each	2 ~~4~~		2 ~~4~~
604 (5C)	Inlet, Type C	Each	~~1~~		~~1~~
605 (6)	8 Inch Perforated Corrugated Polyethylene Pipe for Underdrain	Linear Foot	~~100~~		~~100~~
606 (1)	W-Beam Guardrail	Linear Foot	5985.50 ~~5430~~		5985.50 ~~5430~~
606 (6)	Removing and Disposing of Guardrail	Linear Foot	5267.30 ~~5100~~		5267.30 ~~5100~~
606(11)	Extruder Terminal (ET-2000)	Each	16 ~~14~~		16 ~~14~~
609 (2)	Curb And Gutter, Type 1	Linear Foot	1572.50 ~~1450~~		1572.50 ~~1450~~
611 (1)	Riprap, Class I	Cubic Yard	828.60 ~~2600~~		828.60 ~~2600~~
611 (2)	Riprap, Class III	Cubic Yard	2592.38 ~~1600~~		2592.38 ~~1600~~
615 (1)	Standard Sign	Square Foot	342.2 ~~340~~		342.2 ~~340~~
615 (5)	Delineator, Flexible	Each	215 ~~240~~		215 ~~240~~

ESTIMATE OF QUANTITIES

Item No.	Item	Pay Unit	68096/ 68097 QTY.	RSA #67562 QTY.	TOTAL QTY.
615 (7)	Interpretive Sign	Each	4		4
618 (1)	Seeding	Acre	16.80 ~~18~~		16.80 ~~18~~
619 (2)	Matting	Square Yard	~~3000~~		~~3000~~
627 (6)	Fire Hydrant Relocation	Each	3		3
627(11)	Reconnection of Private Water Crossings	Each	5 ~~8~~		5 ~~8~~
628 (1-8)	8-Inch Ductile Iron Water Pipe	Linear Foot		51.5 65	51.5 65
628 (1-12)	12-Inch Ductile Iron Water Pipe	Linear Foot		177.9 ~~190~~	177.9 ~~190~~
628 (1-16)	16-Inch Ductile Iron Water Pipe	Linear Foot		11,098.2	11,098.2 ~~11100~~
628 (2- 8)	8-Inch Gate Valve	Each		2	2
628 (2-12)	12-Inch Gate Valve	Each		2	2
628 (2-16)	16-Inch Butterfly Valve	Each		13	13
628 (3)	Fire Hydrant Assembly	Each		16	16
628 (4)	Hydrant Access Pad	Each		16	16
628 (5-1)	Single 1-Inch Water Service	Each		5 ~~8~~	5 ~~8~~
628 (5-2)	Double 1-Inch Water Service	Each		11	11
628 (6-1)	Single Arctic Service	Each		7 ~~8~~	7 ~~8~~
628 (6-2)	Double Arctic Service	Each		4	4
628 (7)	Air Release Valve	Each		2	2
628 (8)	Pipe Insulation	Board		370 ~~100~~	370 ~~100~~
629 (1)	Guardrail Paving	Linear Foot	6919 ~~7000~~		6919 ~~7000~~
630 (1)	Geotextile, Separation	Square Yard	2123 ~~5000~~		2123 ~~5000~~
633 (1)	Silt Fence	Linear Foot	5133.50		5133.50 ~~28500~~
639 (3)	Driveways	Each	37		37
640 (1)	Mobilization and Demobilization	Lump Sum	All Req'd.	All Req'd.	All Req'd.
641 (1)	Erosion and Pollution Control Administration	Lump Sum	All Req'd.		All Req'd.
641 (2)	Erosion and Pollution Control	Contingent Sum	All Req'd.	~~All Req'd.~~	All Req'd
641 (6)	Sediment Filter	Each	~~10~~		~~10~~
641 (7)	Preliminary Seeding	Acre	4.34 ~~12~~		4.34 ~~12~~
641 (8)	Temporary Check Dam	Each	129 ~~160~~		129 ~~160~~
641 (9)	Erosion and Pollution Control Price Adjustment	Contingent Sum	~~All Req'd.~~		~~All Req'd.~~
641(10)	Maintaining Flow at Fish Streams	Each	7 ~~10~~		7 ~~10~~
642 (1)	Construction Surveying	Lump Sum	All Req'd.	All Req'd.	All Req'd.
642 (3)	Three Person Survey Party	Hour	~~100~~		~~100~~
642 (4)	Set Primary Monument	Each	29 ~~27~~		29 ~~27~~
642(10)	Monument Case	Each	29 ~~27~~		29 ~~27~~
642(12)	Final Traverse	Lump Sum	All Req'd.		All Req'd.
643 (2)	Traffic Maintenance	Lump Sum	All Req'd.	All Req'd.	All Req'd.
643 (3)	Permanent Construction Signs	Lump Sum	All Req'd.		All Req'd.
~~643(14)~~	~~Interim Pavement Marking~~	~~Station~~	~~350~~		~~350~~
643(15)	Flagging	Contingent Sum	All Req'd.	All Req'd.	All Req'd.
643(25)	Traffic Control	Contingent Sum	All Req'd.	All Req'd.	All Req'd.
645 (1)	Training Program, 1 Trainees/Apprentices	Labor Hour	~~560~~		~~560~~
646 (1)	CPM Scheduling	Lump Sum	All Req'd.		All Req'd.
651 (1)	Eagle Monitoring	Hour	1306.50 ~~500~~		1306.50 ~~500~~
660 (3)	Highway Lighting System Complete	Lump Sum	All Req'd.		All Req'd.
670 (8)	Recessed Pavement Marker	Each	460 ~~670~~		460 ~~670~~
670(10)	Methyl Methacrylate Pavement Markings	Lump Sum	All Req'd.		All Req'd.
680 (1)	Environmental Monitor	Lump Sum	All Req'd.		All Req'd.

UPDATED 12/6/2004

NOTE:

REFER TO SHEET D1 FOR THE BASIS OF ESTIMATE TABLE.

PATH:
Q:\Jnu\68096\Planset\Stage1\A-C-D_Tsht&Su
Fri, 10/Dec/04 09:09AM
PLOT:
PSPACE 1=1(F) OR MSPACE 1=1(F)
TAB: TYPICALS

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - TEE HARBOR TO AMALGA HARBOR ROAD
IM-093-3(24) ~ 68097

Estimate of Quantities

STATE OF ALASKA 49 TH
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
12-13-04

DESIGNED BY: J. OSBURN
DRAWN BY: BENNETT/STEVENS

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

JNU-GLACIER HIGHWAY & TRAILHEAD

Estimate of Quantities

PROJECT DESIGNATION NUMBER
IM-093-3(24)/68097

STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
C1	146

BASIS OF ESTIMATE

Item No.	Item	Estimating Factor
201 (1B)	Clearing	15 Acres
201 (3B)	Clearing & Grubbing	30 Acres
203(3)	*Unclassified Excavation*	
	Rock Excavation	39,000 C.Y.
	Other Excavation	49,000 C.Y.
203 (19)	Control of Invasive Plants	2500 S.Y.
304 (2)	Subbase, Grading C	1.95 ton/cy
306 (1)	ATB	117 lb/sy/in
308 (2)	CSS-1 Asphalt for Base Course	1.7 gal/sy
308 (2)	CSS-1 Asphalt for Base Course	243 gal/ton
308 (3)	Portland Cement	4.5 lbs/sy
401 (1)	Asphalt Concrete, Type II, Class B	117 lb/sy/in
401 (2)	Asphalt Cement, Grade PG 58-28	4.5% of Item 306 (1)
401 (2)	Asphalt Cement, Grade PG 58-28	6.0% of Item 401 (1)
401 (2)	Asphalt Cement, Grade PG 58-28	237 gal/ton
402 (1)	STE-1 Asphalt for Tack Coat	0.05 gal/s.y.
402 (1)	STE-1 Asphalt for Tack Coat	243 gal/ton

UPDATED 10/20/2004

202(1) REMOVAL OF STRUCTURES AND OBSTRUCTIONS

ITEM	ESTIMATED QUANTITY	UNIT
CULVERT PIPE	5600	LINEAR FOOT
PAVEMENT	92000	SQUARE YARD

UPDATED 10/20/2004

NOTE: Pavement removed shall be incorporated into the work under Section 304 or 308 at the Contractor's option.

660 - ELECTROLIER SUMMARY

Num.	Sta.	Off.	Mast Arm Length	Comments
1	14+43	LT	15'	Run conduit from AEL&P Pole
2	15+79	RT	15'	Run conduit from AEL&P Pole
3	79+33	RT	15'	Run conduit from AEL&P Pole #314
4	145+38	LT	15'	Install luminaire on new AEL&P Pole #222 (Work done by Others)
5	145+95	RT	15'	Run conduit from AEL&P Pole #222
6	346+29	LT	15'	Run conduit from AEL&P Pole #82
7	347+11	RT	15'	Run conduit from AEL&P Pole #82

NOTES
1. AEL&P will provide power to all luminaires.
2. Unless other wise specified, luminaires will be a 250 volt, 250 watt high pressure sodium,medium distribution, cut-off, ies type III. They shall have a magnetic regulator ballast and the HPS lamp shall be rated to 24,000 hours.
3. Conduit shall be 2" RMC

202(10) SINGLE MAILBOX INSTALLATION

"O" Station	Offset	Remarks	QTY.
32+63	LT	~~19005~~ 18125 Lt	1
77+44	LT	19005 Lt	1
83+47	LT	19051 Lt	1
~~94+15~~ 93+05	LT	19323 Lt	1
102+~~30~~	LT	19415 & 19345	2
109+62	LT	19555 Lt	1
132+23	LT	20003 Lt	1
139+71	LT	20123 Lt	1
~~287+72~~ 276+65	LT	22795 Lt	1
80 +~~40~~	Lt	19009 TOTAL	~~81~~
82+35	Lt	19017 UPDATED 10/15/2004	1
106+65	Rt	Houton	1
122+95	Lt	19661	1
		Total	14

303(3) DITCH RECONDITIONING TABLE

From Station	To Station	Offset	Length (Feet)	Remarks Sta	Sta	Offset	Lf.
89+00	91+50	RT	250	341+50 to	343+69	Lt	220
100+50	102+50	RT	200	345+20 to	347+20	Lt	200
~~145+00~~ 121+50	154+00	RT	~~900~~ 3250				
~~272~~+50	~~180+00~~ 276+00	RT	750 350				
235+50	251+50	RT	~~1900~~ 1600				
		RT	~~1200~~				
236+20	251+50	RT	1150 1530				
292+00	298+70	RT	~~500~~ 670				
307+00	311+00	LT	650 400				
		TOTAL=	8250				

Total 8670

514(1) - ROCKERY WALL

"O" "R" Station - Station	Off.	Length	Area (s.f.)	Remarks	S.F.
~~1+41 - 2+30~~	~~15' RT~~	~~98~~	~~800~~	F/H 30+62	113
292+42 - 296+93	Lt	451 LF	1369.25	F/H 35+09	135
P-108 & P-106	Lt & Rt	161.5 Lf.			

UPDATED 10/15/2004

606 - GUARDRAIL SUMMARY

"O" Station - Station	Off.	Len.	ET-2000	Remarks
16+35 - 29+50	LT	-	2	Existing to remain; Install end treatments
36+20 - 71+~~82~~	LT	~~3450~~ 3525	2	
"R" 1+63 - "R" 2+21	LT	~~58.75~~	-	Re-use existing end treatment @ "R" 1+63
251+00 - 25~~3~~+50	LT	~~350~~ 250	2	Windfall & Lake Northentrance
260+00 - 267+~~90~~ 25	LT	750 675	2	
282+30 - 286+~~50~~ 42.5	LT	420 362.5	2	
312+00 - 315+70	BOTH	-	4	Existing Bridgerail to remain; Install end treatments
595+35 - 598+05	LT	~~330~~ 548	-	Sheet G-11
TOTAL (approx.)		5430	14	94+52 to 100+52.5 (600Lf)

Total 5960.5 UPDATED 12/06/2004

642(4) - TRAVERSE MONUMENTS

Station	Off.	Station	Off.
21+54	LT	232+09	LT
31+38	LT	241+75	RT
45+77	LT	255+04	LT
78+74	RT	265+10	LT
92+99	LT	273+73	RT
99+03	RT	278+91	RT
105+99	LT	279+20	LT
121+84	RT	288+74	LT
137+15	LT	295+60	LT
151+43	RT	314+89	LT
165+85	LT	326+19	RT
198+31	LT	343+18	LT
212+01	RT	352+50	RT
226+41	RT		

UPDATED 7/25/2004

627(6) FIRE HYDRANT RELOCATION

"O" Station	Offset	Remarks	QTY.
25+83	RT		1
30+62	RT		1
35+09	RT		1
		TOTAL	3

UPDATED 10/22/2004

627(11) - PRIVATE WATERLINE TABLE

CROSSING STATION	TYPE	DIA. (in)	REMARKS
26+90	PVC	1.5	10" PVC Sleeve
31+40	PVC	1.5	10" PVC Sleeve
33+75	PVC	1.5	10" PVC Sleeve
272+85	PVC	1.5	
274+30	PVC	1.5	
280+75	-	-	Exact location / size unknown

UPDATED 7/25/2004

PATH: Q:\Jnu\68096\Planset\Stage1\A-C-D_Tsht&Su
Fri 10/Dec/04 04:27PM
PLOT:
PSPACE 1=1(F) OR MSPACE 1=1(F)
TAB: TYPICALS

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - TEE HARBOR TO AMALGA HARBOR ROAD
IM-093-3(24) ~ 68097

Miscellaneous Summaries

STATE OF ALASKA 49TH Joel D. Osburn CE-11014 REGISTERED PROFESSIONAL ENGINEER
12-13-04

DESIGNED BY: J. OSBURN
DRAWN BY: BENNETT/STEVENS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION
JNU-GLACIER HIGHWAY & TRAILHEAD

Miscellaneous Summaries

PROJECT DESIGNATION NUMBER
IM-093-3(24)/68097

STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
D1	146

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	ROCK FLUME
P-1	CPP	36	~~94~~ 92.6	14+75	33 RT	72.0	14+60	60 LT	67.0	5.4%		
P-5	CPP	24	~~52~~ 53.6	20+90	22 RT	~~71.0~~ *	20+85	30 LT	67.~~8~~ .66	6.3%	* 70.77	
P-6	CPP	24	58	25+08	23 RT	68.7	25+09	35 LT	64.8	6.7%		
P-10	CPP	24	~~60~~ 60.7	35+28	23 RT	70.4	35+29	37 LT	63.8	10.9%		
P-11	CPP	24	~~61~~ 61.7	37+18	23 RT	70.2	37+23	39 LT	64.8	8.9%		
P-12	CPP	24	74	41+47	29 RT	68.3	41+55	44 LT	65.5	3.8%		
P-13	CPP	24	62	45+22	29 RT	66.1	45+25	33 LT	64.1	3.3%		
P-15	CPP	24	~~59~~ 59.8	47+63	29 RT	67.0	47+68	29 LT	63.9	5.3%		
P-16	CPP	24	~~53~~ 66.8	51+57	29 RT	71.1	51+56	25 LT	67.9	6.0%		
P-18	CPP	24	60	53+43	29 RT	73.4	53+41	31 LT	67.3	10.2%		
P-19	CPP	24	~~58~~ 63.0	53+85	30 RT	73.0	53+82	28 LT	69.7	5.7%		
P-21	CPP	24	~~68~~ 65.8	55+83	29 RT	72.9	55+84	35 LT	70.8	3.2%		
P-24	CSP	EXISTING TO REMAIN										
P-25	CPP	24	~~80~~ 81.9	70+34	27 RT	101.3	70+35	52 LT	99.4	2.3%		
P-27	CPP	24	~~62~~ 76.5	74+66	30 RT	97.9	74+58	32 LT	95.9	3.2%		
P-28	CPP	24	~~64~~ 61.4	77+33	30 RT	96.9	77+35	34 LT	93.4	5.5%		
P-30	CPP	24	60	86+91	30 RT	86.9	86+89	30 LT	85.2	2.9%		
P-31	CPP	24	60	89+00	30 RT	84.9	89+01	30 LT	83.1	3.0%		
P-32	CPP	24	~~55~~ 59.0	93+64	22 RT	93.~~8~~ .15	93+63	33 LT	88.~~2~~ .10	~~8.6%~~ 9.1%		
P-33	CPP	24	~~57~~ 58.2	96+46	29 RT	99.~~2~~ .10	96+47	28 LT	96.~~8~~ .55	4.4%		
P-36	CPP	24	~~56~~ 55.1	101+39	26 RT	116.3	101+50	29 LT	114.4	~~3.5%~~ 3.4%		TYPE 2
P-37	CPP	24	~~58~~ 59.7	103+99	24 RT	120.8	103+90	34 LT	119.8	1.9%		
P-38	CPP	36	85	105+20	31 RT	121.~~0~~ .37	105+13	55 LT	112.~~4~~ 28	~~10.2%~~ 10.0%		
P-40	CPP	24	~~63~~ 64.0	107+08	28 RT	122.~~7~~ 99	107+09	35 LT	120.95	~~2.9%~~ 3.1%		TYPE 2
P-41	CPP	24	54	109+64	23 RT	124.5~~6~~	109+62	31 LT	123.7	~~1.5%~~ 1.6%		
P-42	CPP	24	~~58~~ 56.0	111+72	28 RT	127.9	111+74	30 LT	125.7	3.8%		TYPE 3
P-43	CPP	24	54	116+63	27 RT	~~136.2~~ *	116+65	26 LT	133.3	~~5.5%~~ 4.6%	* 135.90	TYPE 3
P-44	CPP	24	~~58~~ 61.8	120+36	30 RT	142.2	120+40	29 LT	~~141.0~~ *	~~1.9%~~ 2.0%	* 140.92	
P-45	CPP	24	~~53~~ 54.3	123+12	24 RT	145.~~1~~ 25	123+16	29 LT	143.6	~~2.8%~~ 3.2%		
P-46	CPP	24	~~56~~ 59.3	125+17	29 RT	147.5	125+06	25 LT	145.~~6~~ 53	~~3.5%~~ 3.6%		
P-47	CPP	24	~~57~~ 61.8	127+85	28 RT	~~152.0~~ *	127+89	28 LT	148.8	~~5.5%~~ 5.4%	* 151.92	
P-48	CPP	24	~~58~~ 65.5	131+53	27 RT	160.7	131+63	30 LT	156.4	7.4%		
P-49	CPP	24	~~62~~ 64.2	133+33	23 RT	164.3	133+30	38 LT	161.3	4.9%		TYPE 3
P-50	CPP	24	~~61~~ 66.3	136+25	25 RT	172.1	136+24	36 LT	170.9	1.9%		TYPE 1
P-51	CPP	24	~~68~~ 65.7	142+83	31 RT	189.~~2~~ .07	142+86	34 LT	188.~~1~~ .03	~~1.7%~~ 1.6%		TYPE 1
P-52a	CPP	24	~~70~~ 72.0	144+32	33 RT	193.~~3~~ .20	144+37	37 LT	192.~~6~~ .54	1.0%		TYPE 1
P-52B	SEE TABLE ON SHEET D4											
P-53	CPP	24	~~74~~ 75.3	147+12	32 RT	212.~~8~~ .74	146+87	37 LT	205.7	~~9.7%~~ 9.5%		
P-54	CPP	24	~~70~~ 67.6	149+83	34 RT	221.4	149+87	33 LT	~~220.0~~ *	~~2.1%~~ 2.0%	* 219.96	
P-55	CPP	24	~~66~~ 68.8	154+31	31 RT	234.~~7~~ 58	154+34	35 LT	232.~~5~~ .44	~~3.3%~~ 3.2%		
P-56	CPP	24	~~56~~ 59.5	157+28	30 RT	245.~~8~~ 99	157+26	26 LT	244.~~3~~ 76	~~2.6%~~ 2.1%		
P-57	CPP	24	~~74~~ 74.7	160+19	32 LT	248.~~6~~ 54	160+45	37 RT	246.~~4~~ .29	3.0%		
P-58	CPP	24	~~66~~ 67.0	168+58	31 LT	240.~~5~~ .41	168+57	34 RT	239.2	2.0%		
P-59	CPP	24	~~64~~ 64.6	180+00	28 LT	198.~~5~~ .40	179+94	36 RT	196.~~6~~ .50	3.0%		TYPE 1
P-60	CPP	24	~~58~~ 54.8	182+30	27 LT	195.8	182+31	26 RT	194.~~5~~ .32	2.4%		
P-62	CPP	24	59	186+03	24 LT	193.9	186+04	34 RT	191.6	3.9%		
P-63	SEE TABLE ON SHEET D4										Shrine Ck. (catalogued)	
P-64	CPP	24	~~72~~ 73.5	199+49	30 RT	180.8	199+84	33 LT	179.7	1.6%		
P-65	CPP	24	~~70~~ 68.8	204+00	32 RT	173.3	203+81	36 LT	172.8	0.8%		
P-66	CPP	24	~~64~~ 62.3	205+89	29 RT	173.2	205+78	33 LT	171.3	2.9%		
P-67	CPP	24	~~61~~ 60.2	207+23	27 RT	170.9	207+12	33 LT	170.3	1.1%		
P-68	CPP	24	58	208+32	26 RT	169.9	208+38	31 LT	167.6	3.9%		
P-69	CPP	24	~~64~~ 65.5	209+25	29 RT	166.6	209+25	35 LT	164.3	3.6%		
P-70	CPP	24	~~61~~ 62.0	211+13	26 RT	166.4	211+15	35 LT	162.4	6.5%		
P-71	CPP	24	~~64~~ 65.3	212+55	25 RT	165.5	212+46	39 LT	160.5	7.7%		

UPDATED 10/20/2004

PATH:
Q:\Jnu\68096\Planset\Stage1\A-C-D_Tsht&Su
Sun, 05/Dec/04 02:40PM
PLOT:
PSPACE 1=1(F) OR MSPACE 1=1(F)
TAB: TYPICALS

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

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IM-093-3(24) ~ 68097

Miscellaneous Summaries

STATE OF ALASKA 49TH
Joel D. Osburn CE-11014 REGISTERED PROFESSIONAL ENGINEER
12-13-04

DESIGNED BY: J. OSBURN
DRAWN BY: BENNETT/STEVENS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
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JNU-GLACIER HIGHWAY & TRAILHEAD

Miscellaneous Summaries

PROJECT DESIGNATION NUMBER
IM-093-3(24)/68097

STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
D2	146

603 CULVERT PIPE SUMMARY (CONT'D.)

PIPE NO.	TYPE	DIAMETER (in)	LENGTH (ft)	INLET STA.	INLET OFF.	INLET INV.	OUTLET STA.	OUTLET OFF.	OUTLET INV.	SLOPE	REMARKS	ROCK FLUME
P-72	CPP	24	~~54~~ 54.8	216+14	29 RT	168.1	216+15	25 LT	167.0	1.9%		TYPE 3
P-73	CPP	24	~~58~~ 56.3	219+06	29 RT	168.1	219+09	27 LT	167.9	0.4%		
P-74	CPP	24	~~62~~ 62.5	221+78	29 RT	167.3	221+79	33 LT	165.6	2.7%		TYPE 3
P-75	CPP	24	~~54~~ 67.4	223+44	30 RT	168.6	223+45	23 LT	164.2	8.2%		
P-76	CPP	24	~~64~~ 65.0	229+97	26 RT	142.8	230+04	37 LT	141.9	1.4%		TYPE 1
P-77	CPP	24	~~64~~ 64.8	233+67	26 RT	127.1	233+65	36 LT	126.5	1.0%		TYPE 1
P-78	SEE TABLE ON SHEET D4										Shrine Ck. (tributary)	
P-79	CPP	24	58	238+66	24 RT	124.7	238+73	33 LT	122.0	4.7%		
P-80	CPP	24	~~60~~ 58.3	239+15	24 RT	123.7	239+30	33 LT	121.7	3.2%		
P-81	CPP	24	~~58~~ 53.9	239+98	24 RT	122.6	239+97	30 LT	119.8	4.9%		
P-82	CPP	24	~~57~~ 53.9	241+17	24 RT	121.4	241+21	33 LT	119.1	4.2%		
P-83	CPP	24	66	246+06	32 RT	105.7	246+03	34 LT	103.9	2.7%		
P-84	CPP	24	60	249+19	23 RT	96.4	249+36	34 LT	95.2	2.1%		
P-85	CPP	36	80	253+66	30 RT	88.4	253+55	47 LT	74.3	17.7%		
P-86	CMP	24	20	257+50	30 RT	79.8	257+53	11 RT	79.3	2.6%	Add 20-foot extension at inlet.	
P-87	CMP	24	15	259+02	28 RT	78.4	259+01	13 RT	77.1	8.5%	Add 15-foot extension at inlet.	
P-88	CMP	24	17	260+47	28 RT	76.4	260+45	11 RT	75.1	7.8%	Add 17-foot extension at inlet.	
P-89	CMP	24	5	267+12	31 RT	73.3	267+13	26 RT	72.8	10.5%	Add 5-foot extension at inlet.	
P-90	CMP	24	15	268+82	28 RT	81.1	268+80	14 RT	79.7	9.6%	Add 15-foot extension at inlet.	
P-91	CMP	30	~~1~~ 20	272+92	34 LT	69.0	272+91	41 LT	67.9	16.0%	Add 7-foot extension at outlet.	
P-92	CMP	30	3	272+98	27 RT	79.0	272+98	24 RT	78.5	16.0%	Add 3-foot extension at inlet.	
P-93	CMP	30	8	274+34	36 LT	65.4	274+35	44 LT	64.3	14.7%	Add 8-foot extension at outlet.	TYPE 1
P-94	CMP	12	~~4~~ 15	274+40	40 LT	65.2	274+41	43 LT	64.6	15.0%	Add 4-foot extension at outlet.	TYPE 1
P-95	CMP	24	6	276+00	34 RT	66.1	276+00	39 LT	65.4	11.8%	Add 6-foot extension at outlet.	TYPE 1
P-96	CMP	24	2	277+44	23 RT	76.9	277+44	20 LT	76.7	9.6%	Add 3-foot extension at inlet.	
P-97	CPP	36	84	284+67	30 RT	56.0	284+73	52 LT	39.8	19.3%		
P-98	CPP	24	75	287+73	30 RT	46.4	287+76	44 LT	39.1	9.8%		
P-99a	CPP	24	62	293+19	28 RT	28.9	293+21	34 LT	25.3	5.8%		
P-99b	CPP	24	61	295+43	29 RT	25.2	295+68	26 LT	23.6	2.5%		
P-100	SEE TABLE ON SHEET D4											
P-101	SEE TABLE ON SHEET D4											
P-102	CPP	24	50	305+22	25 LT	26.0	305+22	25 RT	25.8	0.3%		
P-103	CPP	24	~~52~~ 51.3	308+22	27 LT	27.1	308+23	25 RT	26.2	1.7%		
P-105	CPP	24	~~51~~ 50.4	320+52	26 RT	23.2	320+52	25 LT	21.9	2.6%		
P-106	SEE TABLE ON SHEET D4											
P-107	CPP	24	~~51~~ 51.5	327+17	26 RT	24.4	327+22	25 LT	23.7	1.4%		
P-108	SEE TABLE ON SHEET D4											
P-109	SEE TABLE ON SHEET D4											
P-110	SEE TABLE ON SHEET D4											
P-111	CPP	24	~~67~~ 73.4	343+69	33 RT	23.8	343+61	34 LT	23.6	0.4%		
P-112	SEE TABLE ON SHEET D4											

UPDATED 10/20/2004

603 - DRIVEWAY CULVERT PIPE SUMMARY

TYPE	DIAMETER (in)	LENGTH (ft)	INLET STA.	INLET OFF.	INLET INV.	OUTLET STA.	OUTLET OFF.	OUTLET INV.	SLOPE
CPP	18	50	15+28	33 RT	72.5	14+78	34 RT	72.1	0.8%
CPP	18	42	19+32	22 RT	71.6	18+90	23 RT	70.8	1.9%
CPP	18	30	78+14	30 RT	96.1	77+85	30 RT	95.8	0.8%
CPP	18	51	100+37	24 RT	115.4	99+86	24 RT	115.2	0.4%
CPP	18	35	106+30	29 RT	122.8	105+94	29 RT	122.7	0.3%
CPP	18	21	309+59	30 RT	25.2	309+38	30 RT	24.9	1.5%

UPDATED 10/15/2004

NOTE:

CROSS CULVERT LOCATIONS GIVEN IN THIS TABLE ARE APPROXIMATE. FINAL CROSS CULVERT POSITIONS WILL BE DETERMINED BY THE ENGINEER AFTER CLEARING AND CENTERLINE STAKING IS COMPLETED. THE LOCATIONS OF CROSS CULVERTS AND OTHER PROPOSED IMPROVEMENTS ARE SUBJECT TO MINOR FIELD REVISIONS BY THE ENGINEER. THIS NOTE DOES NOT APPLY TO CULVERT LOCATIONS GIVEN IN THE H-SHEETS.

PATH:
Q:\Jnu\68096\Planset\Stage1\A-C-D_Tsht&Su
Thu, 09/Dec/04 02:12PM
PLOTS:
PSPACE 1=1(F) OR MSPACE 1=1(F)
TAB: TYPICALS

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

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IM-093-3(24) ~ 68097

Miscellaneous Summaries

STATE OF ALASKA 49TH
Joel D. Osburn CE-11014
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12-13-04

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Miscellaneous Summaries

PROJECT DESIGNATION NUMBER
IM-093-3(24)/68097

STATE	YEAR
ALASKA	2004

SHEET NUMBER	TOTAL SHEETS
D3	146

FISH STREAM CULVERT SUMMARY TABLE (SEE H-SHEETS FOR DETAILS)

PIPE NO.	TYPE	DIAMETER (in)	LENGTH (ft)	INLET STA.	INLET OFF.	INLET INV.	OUTLET STA.	OUTLET OFF.	OUTLET INV.	SLOPE	BURIAL DEPTH	WORK WINDOW	STREAMBED MATERIAL	RECOMMENDED THICKNESS	STEP BEVEL
P-52B	CMP	48	34.8	142+74	479 LT	172.5	142+56	450 LT	169.5	9.5%	-	7/15-9/15	-	14 GAUGE	NO
P-63	CMP	84	115	192+86	46 RT	178.2	192+19	50 LT	177.5	0.6%	2'	6/15-7/31	Type I	12 GAUGE	YES
P-78	CAPA	87 x 71	111	235+91	44 RT	116.3	236+21	61 LT	104.1	10.9%	-	-	-	8 GAUGE	YES
P-100	CMP	60	83.4	296+76	32 LT	21.6	297+34	27 RT	21.5	0.2%	2'	6/15-9/15	Type II	14 GAUGE	NO
P-101	CMP	60	70.8	302+51	34 RT	21.2	302+69	33 LT	20.9	0.5%	2'	6/15-9/15	Type II	14 GAUGE	NO
P-106	CMP	84	~~78~~ 72.4	324+79	36 RT	15.1	324+90	36 LT	14.4	1.0%	2'	6/15-9/15	Type II	12 GAUGE	YES
P-108	CMP	72	62.7	329+39	30 RT	18.5	329+50	30 LT	18.5	0.1%	2'	6/15-7/31	Type I	14 GAUGE	YES
P-109	CMP	120	~~87~~ 78.9	334+64	36 RT	14.4	334+51	30 LT	14.3	0.1%	3'	6/15-7/31	Type I	8 GAUGE	YES
P-110	CMP	120	~~78~~ 88.8	340+08	35 RT	15.1	340+47	33 LT	14.9	0.3%	3'	6/15-7/31	Type I	8 GAUGE	YES
P-112	CMP	120	~~78~~ 89.2	347+17	40 RT	16.7	347+46	34 LT	16.7	0.0%	3'	6/15-7/31	Type I	8 GAUGE	YES

UPDATED 12/7/2004

615(1) - STANDARD SIGN SUMMARY

Number	"O" Station	Off.	Desc.	ASDS Code	Dim. (HxW)	Area (sf)	Post	Remarks
1	10+50	RT	FIRE TRUCK SYMBOL	W11-8	36x36	9.0	2.5 PST	
2	11+84	RT	<=== TEE HARBOR	D1-1	24x72	12.0	2 -4x6 WOOD	TWO POSTS
3	12+78	LT	SPEED LIMIT 50	R2-1	36x30	7.5	2.5 PST	
4	14+07	RT	MILEPOST 18	D10-102	12x6	1.0	2.5 PST	DOUBLE SIGN
5	14+55	LT	STOP	R1-1	30x30	6.2	2.5 PST	SAME POST AS STOP SIGN
6	14+55	LT	PT. STEPHENS RD	D3-1	8x48	2.6		
7	15+20	RT	CAPITAL CITY FIRE & RESCUE (LYNN CANAL F.S.)	CITY/PRIVATE	-	-	-	RELOCATE PRIOR TO CONSTRUCTION
8	15+70	RT	ADOPT A HIGHWAY....	I-150	36x30	7.5	2.5 PST	BAHA'I FAITH
9	16+34	LT	ADOPT A HIGHWAY....	I-150	36x30	-	-	REMOVE
10	17+18	LT	TEE HARBOR ===>	D1-1	24x72	12.0	2 -4x6 WOOD	TWO POSTS
10A	17+18	RT	AMALGA HARBOR 6 ECHO COVE 22	D2-2	36x90	22.5	2-4x6 WOOD	TWO POSTS
11	19+50	RT	SPEED LIMIT 55	R2-1	48x36	12.0	2.5 PST	
12	19+10	RT	STATE PROPERTY NO TRESPASSING	-	24x48	-	-	NO ACTION
13	46+55	RT	SPEED LIMIT 40	W13-1	24x24	-	-	REMOVE
14	46+55	RT	WINDING ROAD	W1-5L	36x36	-	-	REMOVE
15	67+92	RT	MILEPOST 19	D10-102	12x6	1.0	2.5 PST	DOUBLE SIGN
16	75+13	LT	40 MPH	W13-1	24x24	-	-	REMOVE
17	75+13	LT	WINDING ROAD	W1-5L	36x36	-	-	REMOVE
18	79+38	RT	RANDALL ROAD	D3-1	8x42	1.2	2.5 PST	SAME POST AS STOP SIGN
19	79+38	RT	STOP	R1-1	30x30	6.2		
20	80+12	RT	NO OUTLET	W14-2	36x36	9.0	2.5 PST	MOUNT ON RANDALL ROAD
21	102+07	LT	(HOUSE #) 19415	PRIVATE	6x6	-	5' PST	RELOCATE OFF ROW
22	118+83	RT	MILEPOST 20	D10-102	12x6	1.0	2.5 PST	DOUBLE SIGN
23	120+85	RT	ROCKS	W16-105	36x36	-	-	REMOVE
24	137+87	RT	ROCKS	W16-105	36x36	-	-	REMOVE
25	140+00	RT	SIDE ROAD LEFT	W2-2L	36x36	9.0	2.5 PST	ENTERING ROAD
25A	143+00	LT	SPEED LIMIT 55	R2-1	48x36	12.0	2.5 PST	
26	144+50	LT	ADOPT A HIGHWAY....	I-150	36x30	7.5	2.5 PST	BAHA'I FAITH
27	144+93	RT	ADOPT A HIGHWAY....	I-150	36x30	7.5	2.5 PST	JUNEAU RETIRED TEACHERS ASSN.
28	145+42	LT	STOP	R1-1	30x30	6.2	2.5 PST	SAME POST AS STOP SIGN
29	145+42	LT	COHEN DR	D3-1	8x36	2.0		
30	145+78	LT	NO OUTLET	W14-2	36x36	9.0	2.5 PST	MOUNT ON COHEN DRIVE
31	150+00	LT	SIDE ROAD RIGHT	W2-2R	36x36	9.0	2.5 PST	
32	169+40	RT	MILEPOST 21	D10-102	12 x 6	1.0	2.5 PST	DOUBLE SIGN
33	212+00	RT	HIKER (SYMBOL) TRAIL	RS-68	18x18	2.2	2.5 PST	SAME POST AS HIKER SYMBOL
34	212+00	RT	ARROW LEFT	RS-13L	6x18	0.8		
35	222+50	LT	HIKER (SYMBOL) TRAIL	RS-68	18x18	2.2	2.5 PST	SAME POST AS HIKER SYMBOL
36	222+50	LT	ARROW RIGHT	RS-13R	6x18	0.8		
37	223+00	RT	MILEPOST 22	D10-102	12x6	1.0	2.5 PST	DOUBLE SIGN
38	242+95	RT	SHRINE OF ST. THERESE	D1-2	-	-	-	REMOVE
39	243+75	RT	<=== SHRINE OF ST. THERESE	D1-2	24x60	10.0	2-4x6 WOOD	SIGN SHOULD BE BROWN AND WHITE
40	247+93	LT	SHRINE OF ST. THERESE	PRIVATE	-	-	-	REMOVE AND GIVE TO SHRINE
41	248+00	LT	STOP	R1-1	30x30	6.2	2.5 PST	
42	252+75	RT	SHRINE OF ST. THERESE ===>	D1-2	24x60	10.0	2-4x6 WOOD	SIGN SHOULD BE BROWN AND WHITE
43	256+50	LT	NO CAMPING	D9-3B	30x24	-	-	NO ACTION

PATH:
Q:\Jnu\68096\Planset\Stage1\A-C-D_Tsht&Su
Thu, 09/Dec/04 11:29AM
PLOT:
PSPACE 1=1(F) OR MSPACE 1=1(F)
TAB: TYPICALS

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - TEE HARBOR TO AMALGA HARBOR ROAD
IM-093-3(24) ~ 68097

Miscellaneous Summaries

STATE OF ALASKA 49TH
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
12-13-04

DESIGNED BY: J. OSBURN
DRAWN BY: BENNETT/STEVENS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION
JNU-GLACIER HIGHWAY & TRAILHEAD

Miscellaneous Summaries

PROJECT DESIGNATION NUMBER
IM-093-3(24)/68097

STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
D4	146

615(1) - STANDARD SIGN SUMMARY (cont'd.)

Number	"O" Station	Off.	Desc.	ASDS Code	Dim. (HxW)	Area (sf)	Post	Remarks
44	275+45	RT	MILEPOST 23	D10-102	12x6	1.0	2.5 PST	DOUBLE SIGN
45	280+57	RT	ADOPT A HIGHWAY....	I-150	36x30	7.5	2.5 PST	DISABLED AMERICAN VETERANS
46	280+57	LT	ADOPT A HIGHWAY....	I-150	36x30	7.5	2.5 PST	JUNEAU RETIRED TEACHERS ASSN.
47	291+50	RT	HIKER (SYMBOL) TRAIL	RS-68	18x18	2.2	2.5 PST	SIGN SHOULD BE BROWN AND WHITE - SAME POST AS HIKER SYMBOL
48	291+50	RT	ARROW RIGHT	RS-13R	6x18	0.8		
49	293+50	RT	SEEKER SIGN	-	-	-	-	REMOVE
50	297+45	LT	HIKER (SYMBOL) TRAIL	D7-5	18x12	-	-	REMOVE
51	301+50	LT	HIKER (SYMBOL) TRAIL	RS-68	18x18	2.2	2.5 PST	SIGN SHOULD BE BROWN AND WHITE - SAME POST AS HIKER SYMBOL
52	301+50	LT	ARROW LEFT	RS-13l	6x18	0.8		
53	313+15	RT	PETERSON CREEK	I-3	24x72	12.0	2-4 x 6 WOOD	
53A	313+15	RT	OBJECT MARKER - RIGHT	OM-3R	12x36	3.0	-	
53B	313+15	LT	OBJECT MARKER - LEFT	OM-3L	12x36	3.0	-	
54	314+55	LT	PETERSON CREEK	I-3	24x72	12.0	2-4 x 6 WOOD	
54A	314+55	RT	OBJECT MARKER - RIGHT	OM-3R	12x36	3.0	-	
54B	314+55	LT	OBJECT MARKER - LEFT	OM-3L	12x36	3.0	-	
55	327+72	RT	MILEPOST 24	D10-102	12x6	1.0	2.5 PST	DOUBLE SIGN
56	333+00	RT	TRUCK CROSSING (ORANGE)	CW8-6	-	-	-	REMOVE
57	341+50	RT	<=== AMALGA HARBOR	D1-2	24x66	11.0	2-4x6 WOOD	
58	342+00	LT	SPEED LIMIT 55	R2-1	48x36	12.0	2.5 PST	
59	342+50	RT	BOAT LAUNCH	RW080	18x18	2.2	2.5 PST	SIGN SHOULD BE BROWN AND WHITE - SAME POST AS BOAT LAUNCH SIGN
60	342+50	RT	ARROW LEFT	RS -13L	6x18	0.8		
60A	343+45	RT	SIDE ROAD LEFT	W2-2L	36x36	9.0	2.5 PST	ENTERING ROAD
61	345+12	RT	STOP	R1-1	30x30	6.2	2.5 PST	
62	346+13	LT	ADOPT A HIGHWAY....	I-150	36x30	7.5	2.5 PST	DISABLED AMERICAN VETERANS
63	346+65	LT	STOP	R1-1	30x30	6.2	2.5 PST	
64	347+11	LT	ADOPT A HIGHWAY....	I-150	12x36	3.0	2.5 PST	SAGA - MOUNT ON AMALGA HARBOR ROAD
65	461+98	RT	ARROW RIGHT	RS-13R	6x18	0.8	2.5 PST	SIGN SHOULD BE BROWN AND WHITE - SAME POST AS HIKER SYMBOL
66	461+98	RT	HIKER (SYMBOL) TRAIL	RS-68	18x18	2.2		
67	473+62	LT	ARROW LEFT	RS-13L	6x18	0.8	2.5 PST	SIGN SHOULD BE BROWN AND WHITE - SAME POST AS HIKER SYMBOL
68	473+62	LT	HIKER (SYMBOL) TRAIL	RS-68	18x18	2.2		
69	475+37	RT	ARROW RIGHT	RS-13R	6x18	0.8	2.5 PST	SIGN SHOULD BE BROWN AND WHITE - SAME POST AS HIKER SYMBOL
70	475+37	RT	HIKER (SYMBOL) TRAIL	RS-68	18x18	2.2		
71	484+76	LT	ARROW LEFT	RS-13L	6x18	0.8	2.5 PST	SIGN SHOULD BE BROWN AND WHITE - SAME POST AS HIKER SYMBOL
72	484+76	LT	HIKER (SYMBOL) TRAIL	RS-68	18x18	2.2		
					SUM=	340		

639(3) - APPROACH SUMMARY

"O" Station	OFF.	R1	R2	Width	Address	Remarks
10+65	LT	20	20	15	17755	
15+00	RT	20	20	30	-	*Fire Station*
19+10	RT	20	20	15	17900	
30+10	LT	15	15	20	18055	
31+65	LT	15	15	20	18125	
77+85	LT	5	20	10	19005	
80+60	LT	See Plan Sheets			19009	
80+95	LT	See Plan Sheets			19013	
82+30	LT	3	20	7	19017	
83+35	LT	10	15	12	19051	
85+55	LT	10	10	15	19101	
90+85	LT	75	4	9	19155	
93+95	LT	2	25	13	19315	
100+00	RT	See Plan Sheets			19416	
102+20	LT	2	4	17	19415	
102+50	LT	2	2	25	19435	
104+65	LT	4	40	15	19485	
106+10	RT	20	5	10	19430	
110+10	LT	3	30	13	19555	

639(3) - APPROACH SUMMARY

"O" Station	OFF.	R1	R2	Width	Address	Remarks
122+65	LT	20	5	10	19661	
131+45	LT	20	15	15	19951	
132+90	LT	10	10	15	20003	
137+45	LT	5	20	13.3	20115	
139+90	LT	10	10	20	20123	
141+25	LT	10	10	15	N/A	
143+30	LT	10	10	15	N/A	
248+25	LT	15	15	30	Shrine	
267+95	LT	5	20	12	22675	
276+55	LT	20	10	15	22795	
278+35	LT	20	20	15	22811	
279+70	LT	20	20	15	22891	
280+95	LT	20	20	15	23001	
289+65	LT	20	20	15	23035	
309+50	RT	20	20	12	23500	
344+95	RT	20	20	14	-	
						Forest Service - woodcutting road

UPDATED 10/20/2004

NOTE: SEE DRIVEWAY PERMITS FOR EXTRA CONSTRUCTION DETAILS.

PATH:
Q:\Jnu\68096\Planset\Stage1\A-C-D_Tsht&Su
Fri, 10/Dec/04 09:17AM
PLOT:
PSPACE 1=1(F) OR MSPACE 1=1(F)
TAB: TYPICALS

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

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STAGE I - TEE HARBOR TO AMALGA HARBOR ROAD
IM-093-3(24) ~ 68097

Miscellaneous Summaries

STATE OF ALASKA 49TH
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DESIGNED BY: J. OSBURN
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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

JNU-GLACIER HIGHWAY & TRAILHEAD

Miscellaneous Summaries

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STATE	YEAR
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SHEET NUMBER	TOTAL SHEETS
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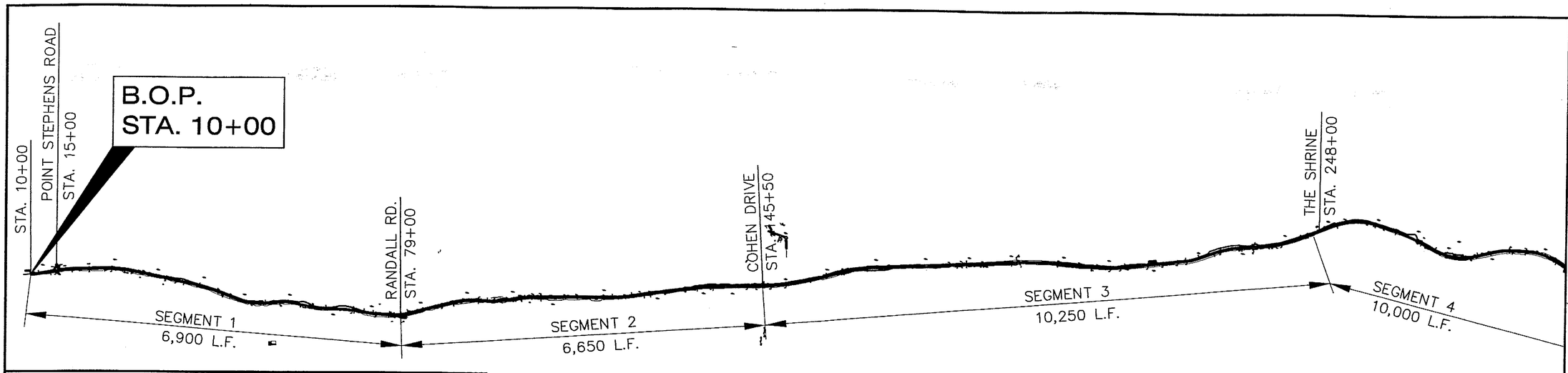
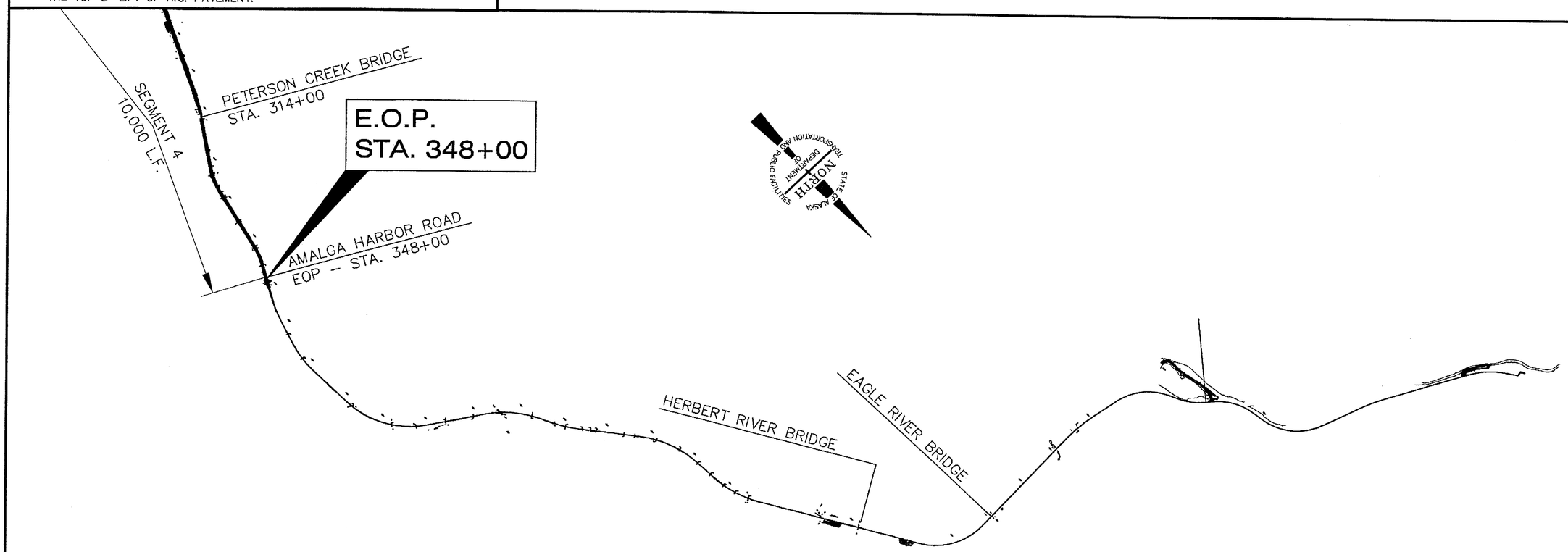


General Notes:

1. THE PROJECT HAS BEEN BROKEN INTO 4 SEGMENTS AS SHOWN ON THIS PLAN FOR PHASING PAVEMENT & GUARDRAIL REMOVAL AND PLACEMENT ONLY.
2. ALL CRUSHED ASPHALT BASE COURSE (C.A.B.C.) AND ASPHALT TREATED BASE (A.T.B.) WORK SHALL BE COMPLETED ON A GIVEN SEGMENT PRIOR TO BEGINNING C.A.B.C. OR A.T.B. WORK ON ANOTHER SEGMENT.
3. MAXIMUM TIME LIMIT BETWEEN PAVEMENT REMOVAL AND A.T.B. LIFT IS 21 DAYS PER SEGMENT.
4. A.T.B. WORK SHALL COMPLETE ON ALL 4 SEGMENTS PRIOR TO STARTING THE TOP 2" LIFT OF A.C. PAVEMENT.



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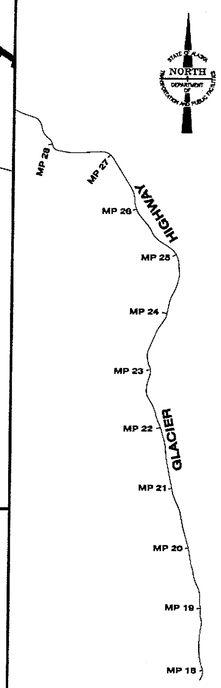
TAB: TYPICALS

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION



Construction Phasing Plan

STATE OF ALASKA
49 TH
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
12-13-04

DESIGNED BY:	J. OSBURN
DRAWN BY:	BENNETT/STEVENS

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

JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - PT. STEPHENS RD. TO AMALGA HARBOR RD.
Construction Phasing Plan

PROJECT DESIGNATION NUMBER	
IM-093-3(24)/68097	
STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
E1	146

PE AFC 11/14/04

UNCLASSIFIED EXCAVATION = 990 C.Y.

EMBANKMENT = 60 C.Y.

WASTE EXCAVATION = 300 C.Y.

WITHROW
17725

GITKOV
17755

WRIGHT
17875 PT. STEPHENS

DONOHUE
17850 PT. STEPHENS

B.O.P.
STA. "0" 10+00
MATCH EXISTING

"0"–LINE

BEGIN TEMPORARY CONNECTION STA. 10+00

"P"–LINE
(SEE G–SHEETS FOR INTERSECTION LAYOUTS)

"B"–LINE
Power Disconnect

"F"–LINE

2" RMC

INSTALL NEW LUMINAIRE #1

INSTALL NEW LUMINAIRE #2 (MOUNTED ON NEW PP)

EXISTING GUARDRAIL (TO REMAIN)

END TEMPORARY CONNECTION STA. 17+50

CBJ WATER STATION

CAPITAL CITY FIRE & RESCUE LYNN CANAL FIRE STATION

FIRE STA.

CITY/PRIVATE

CBJ

CBJ

POINT STEPHENS ROAD

CHILKAT ROAD

GLACIER HIGHWAY

Tee Harbor D1–1

Amalga Harbor Echo Cove 22 6 D2–2

BMHA FAIR

ADOPT A HIGHWAY

FIRE STATION W11–8

SPEED LIMIT 50 R2–1

STOP R1–1

PT STEPHENS RD D3–1

D10–102

P–1

PT = 11+50.11

PC = 13+66.35

N19°52'17"W

10+00 11+00 12+00 13+00 14+00 15+00 16+00 17+00

△ = 10°07'06"
R = 850.00'
L = 150.11'
T = 75.25'
e = 0.06
EFS=10+96.21
FLAT=12+76.00

△ = 9°25'57"
R = 2450.00'
L = 403.34'
T = 202.13'
e = 0.043
FLAT=12+76.00
BFS=14+05.05
EFS=17+39.39
EST=18+87.17

LEGEND:

- = RIPRAP
- = PRIMARY MONUMENT (TO BE SET)
- = INVASIVE PLANTS (APPROX.)
- —E——E— = BURIED LINES
- —W——W— ELECTRICAL/WATER
- ——HTL—— = HIGH TIDE LINE
- ——MHW—— = MEAN HIGH WATER
- –TD—TD– = THROUGHDRAIN
- = POLE WORK (TO BE DONE BY OTHERS)

SIGNING NOTE:

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

GENERAL NOTES:

1. SEE SHEET B1 FOR EXCEPTIONS TO TYPICAL SECTIONS.
2. FOR STRIPING DETAILS AT INTERSECTIONS AND TRAILHEAD PARKING AREAS, SEE G–SHEETS.
3. SEE SHEET A3 AND A4 FOR DESIGN CENTERLINE ALIGNMENT DATA.

PVI STA = 13+94.84
PVI ELEV = 76.40
A.D. = 3.59
K = 111.40
400.00' VC

PVCS: 11+94.84
PVCE: 84.11

PVTS: 15+94.84
PVTE: 75.87

-3.85%

-0.26%

EXISTING GROUND

PROFILE GRADE

90.6	89.8	87.9	85.9	84.0	82.3	80.7	79.5	78.2	77.4	76.7	78.2	75.9	75.7	75.5	75.4
91.62	89.69	87.76	85.84	83.91	82.12	80.55	79.21	78.09	77.20	76.53	76.08	75.86	75.73	75.59	75.46
10+00		11+00		12+00		13+00		14+00		15+00		16+00		17+00	

100 80

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Thu, 09/Dec/04 03:54PM
PLOT:
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TAB: TYPICALS

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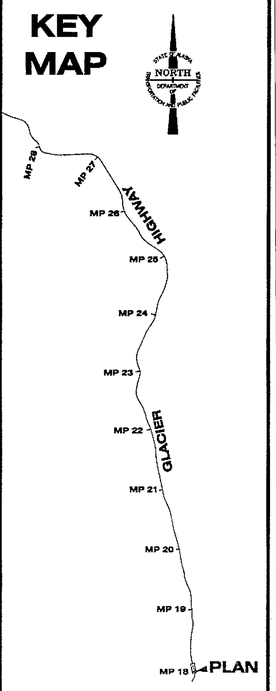
KEY MAP



STATE OF ALASKA
49TH
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JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - PT. STEPHENS RD. TO AMALGA HARBOR RD.

PLAN & PROFILE SHEET

PROJECT DESIGNATION NUMBER
IM-093-3(24)/68097

STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
F1	146

PE NJC Date 11/14/07

AKIYAMA
17855 CHILKAT ROAD

McKEOWN
17985 CHILKAT ROAD

CHILKAT ROAD

STATE OF ALASKA

EXISTING GUARDRAIL TO REMAIN

G L A C I E R H I G H W A Y

N10°11'34"W

18+00 19+00 20+00 21+00 22+00 23+00 24+00 25+00 26+

PT = 17+69.69

PC = 23+70.49

ROW

(11) R2-1 SPEED LIMIT 55

(12)

P-5

P-6

MENTAL HEALTH TRUST
17900

UNCLASSIFIED
EXCAVATION = 2120 C.Y.
EMBANKMENT = 80 C.Y.
WASTE EXCAVATION = 530 C.Y.

PROFILE GRADE

EXISTING GROUND

-0.26%

PVCS: 25+51.20
PVCE: 73.35

100
80

	75.4 75.46	75.2 75.33	75.0 75.20	74.7 75.07	74.5 74.93	74.4 74.80	74.3 74.67	74.2 74.54	74.1 74.41	74.0 74.27	73.8 74.14	73.8 74.01	73.8 73.88	73.7 73.75	73.6 73.61	73.3 73.48	73.2 73.35
	18+00			19+00		20+00		21+00		22+00		23+00		24+00		25+00	

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TAB: TYPICALS

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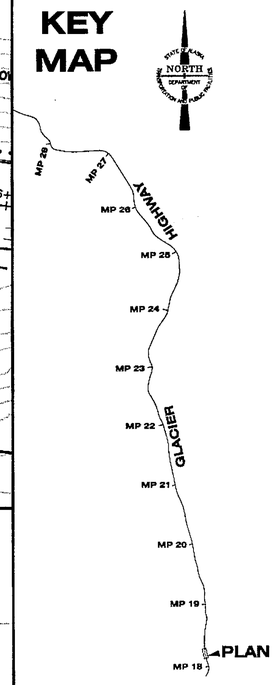
KEY MAP



STATE OF ALASKA
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F2	146

△ = 12°36'15"
R = 2300.00'
L = 505.96'
T = 254.01'
e=0.045
BST=22+44.65
BFS=24+03.49
EFS=28+43.45
EST=30+02.29

UNCLASSIFIED EXCAVATION = 1160 C.Y.

EMBANKMENT = 100 C.Y.

WASTE EXCAVATION = 580 C.Y.

STATE OF ALASKA

HOUSE

BLDG.

SHED

DEAKINS 18025

GEHRING 18045

KNULL 18055

PATTERSON 18125

COPE 18155

ROSENBERGER 18175

ROW

EXISTING GUARDRAIL TO REMAIN

PARKING PAD

PARKING PAD

PARKING DECK

G L A C I E R H I G H W A Y

26+00 27+00 28+00 29+00 30+00 31+00 32+00 33+00 34+00

N02°09'49"E

PT = 28+76.45

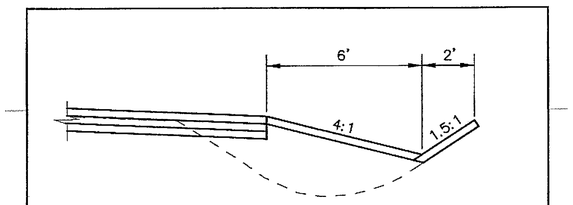
PRIVATE WATERLINE CROSSINGS (SEE J-SHEETS FOR DETAILS)

EAGLE NEST H 786

RADIUS = 330'
EAGLE NEST PRIMARY ZONE

GENERAL NOTES:

1. PAVE THE DITCH FROM STATION 30+00 TO 35+25.



PAVED SWALE SECTION VIEW
N.T.S.

BEGIN 2.5% NC

LOW POINT ELEV = 73.27
LOW POINT STA = 26+12.78
PVI STA = 26+33.70
PVI ELEV = 73.13
A.D. = 0.71
K = 233.31
165.00' VC

HIGH POINT ELEV = 74.42
HIGH POINT STA = 29+89.92
PVI STA = 29+43.74
PVI ELEV = 74.50
A.D. = -0.57
K = 290.28
165.00' VC

PVTS: 27+16.20
PVTE: 73.50

PVCS: 28+61.24
PVCE: 74.14

PVTS: 30+26.24
PVTE: 74.40

0.44%

-0.13%

100
80

73.1	73.1	73.2	73.5	73.7	74.0	74.1	74.2	74.4	74.4	74.3	74.3	74.2	74.2	74.2	74.1	73.9
73.27	73.30	73.43	73.65	73.87	74.09	74.28	74.40	74.42	74.37	74.31	74.25	74.18	74.12	74.06	74.00	73.93

26+00 27+00 28+00 29+00 30+00 31+00 32+00 33+00 34+00

PATH:
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Mon, 06/Dec/04 08:01AM
PLOT:
PSPACE 1=1(F) OR MSPACE 1=1(F)
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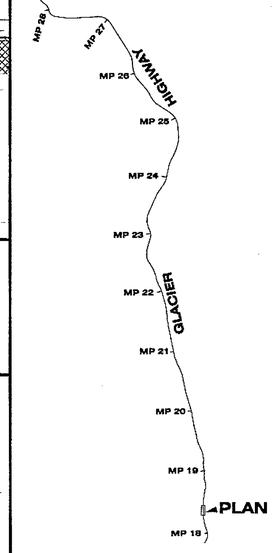

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SHEET NUMBER	TOTAL SHEETS
F3	146

As-builts Reviewed by PE OL Albertson 11/05/07

UNCLASSIFIED
EXCAVATION = 1620 C.Y.

EMBANKMENT = 560 C.Y.

WASTE EXCAVATION = 810 C.Y.

ROSENBERGER
18175

ROW

GLACIER HIGHWAY

35+00 36+00 37+00 38+00 39+00 40+00 41+00 42+00

P-10 P-11 P-12

PC = 38+62.79

RADIUS = 330'
EAGLE NEST PRIMARY ZONE

EAGLE NEST
B 175

△ = 9°42'54"
R = 4500.00'
L = 763.01'
T = 382.42'
e=0.031
BST=37+60.79
BFS=38+85.59
EFS=46+03.00
EST=47+23.60

END 2.5% NC

PVI STA = 40+04.43
PVI ELEV = 73.18
A.D. = -0.39
K = 423.85
165.00' VC

PVCS: 39+21.93
PVCE: 73.28
PVTS: 40+86.93
PVTE: 72.75

-0.13%
-0.51%

100
80

| | | |

UNCLASSIFIED
EXCAVATION = 3540 C.Y.

EMBANKMENT = 400 C.Y.

WASTE EXCAVATION = 880 C.Y.

ROW ROW ROW ROW ROW ROW ROW ROW

P-13 P-15

GLACIER HIGHWAY

43+00 44+00 45+00 46+00 47+00 48+00 49+00 50+00 51+00

N11°52'49"E

PT = 46+26.80 BACK
46+26.94 AHEAD

PC = 49+29.87

13 14

ROW ROW ROW ROW ROW ROW ROW ROW ROW

100

80

LOW POINT ELEV = 70.13
LOW POINT STA = 46+31.29
PVI STA = 46+46.53
PVI ELEV = 69.88
A.D. = 1.26
K = 130.76
165.00' VC

PVCS: 45+62.89
PVCE: 70.30

PVTS: 47+29.03
PVTE: 70.50

-0.51%

0.75%

STA BACK: 46+25.80
STA AHD: 46+26.94

	43+00	44+00	45+00	46+00	47+00	48+00	49+00	50+00	51+00
	72.1	71.8	71.4	71.0	70.6	70.3	70.1	70.0	70.0	70.1	70.2	70.6	71.3	72.0	72.5	73.0	73.3
	71.66	71.40	71.14	70.89	70.63	70.37	70.17	70.14	70.31	70.65	71.03	71.40	71.77	72.15	72.52	72.90	73.27

P-13 P-15

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TAB: TYPICALS

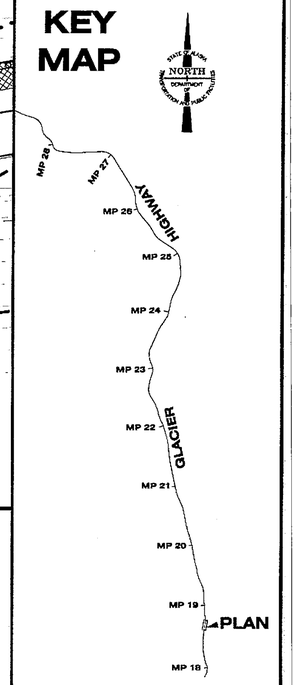
ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

KEY MAP



STATE OF ALASKA
49 TH
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
12-13-04

DESIGNED BY: J. OSBURN
DRAWN BY: BENNETT/STEVENS

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

JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - PT. STEPHENS RD. TO AMALGA HARBOR RD.

PLAN & PROFILE SHEET

PROJECT DESIGNATION NUMBER	
IM-093-3(24)/68097	
STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
F5	146

Asbuilts Reviewed by PE
11/05/07

UNCLASSIFIED
EXCAVATION = 12000 C.Y.

EMBANKMENT = 250 C.Y.

WASTE EXCAVATION = 1190 C.Y.

ROW

P-16 P-18 P-19 P-21

PT = 54+24.87

52+00 53+00 54+00 55+00 56+00 57+00 58+00 59+00

N14°45'01"W

GLACIER HIGHWAY

PC = 56+81.54

△ = 19°34'07"
R = 1065.00'
L = 402.15'
T = 203.50'
e=0.060
FLAT=55+53.21
BFS=57+36.44
EFS=60+13.38
FLAT=61+54.00

△ = 26°37'49"
R = 1065.00'
L = 495.00'
T = 252.05'
e=0.060
BST=47+84.50
BFS=49+72.07
EFS=53+82.67
FLAT=55+53.21

RADIUS = 330'
EAGLE NEST PRIMARY ZONE

EAGLE NEST
H 787

NO CONSTRUCTION WITHIN 30'

EAGLE TREE NOTE:
NOTIFY THE ENGINEER AFTER THE SLOPE STAKES ARE ESTABLISHED BETWEEN STATIONS 55+00 AND 59+00. THE ENGINEER WILL HAVE A MINIMUM OF SEVEN DAYS TO INSPECT THE STAKES AND MAKE ADJUSTMENTS IF NECESSARY. DO NOT CLEAR AND GRUB BETWEEN THESE STATIONS UNTIL THE ENGINEER HAS GIVEN APPROVAL.

100
80

0.75%

	52+00	53+00	54+00	55+00	56+00	57+00	58+00	59+00
	73.6	73.9	74.2	74.5	75.0	75.2	75.4	75.7
	73.64	74.02	74.39	74.76	75.14	75.51	75.89	76.26
	75.9	76.4	77.0	77.7	78.2	78.7	79.0	79.3	79.7
	76.63	77.01	77.38	77.75	78.13	78.50	78.88	79.25	79.62

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ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

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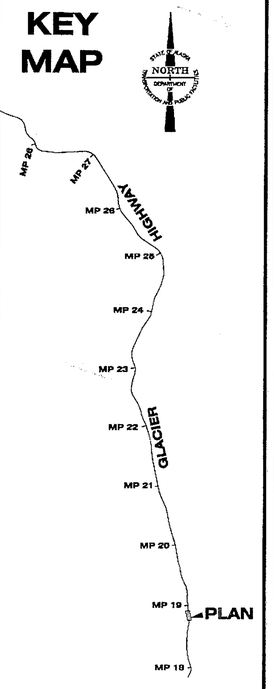


STATE OF ALASKA
49TH
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
12-13-04

DESIGNED BY: J. OSBURN
DRAWN BY: BENNETT/STEVENS

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

JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - PT. STEPHENS RD. TO AMALGA HARBOR RD.

PLAN & PROFILE SHEET

PROJECT DESIGNATION NUMBER
IM-093-3(24)/68097

STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
F6	146

As-Builts Reviewed by PE
11/05/09

UNCLASSIFIED
EXCAVATION = 9600 C.Y.

EMBANKMENT = 90 C.Y.

WASTE EXCAVATION = 1420 C.Y.

ROW

P-24

PC = 62+24.45

PT = 60+83.68

N06°53'05"E

PT = 65+41.19

PC = 67+95.82

N10°09'20"W

60+00 61+00 62+00 63+00 64+00 65+00 66+00 67+00 68+00

G L A C I E R H I G H W A Y

PLUNGE POOL

△ = 17°02'26"
R = 1065.00'
L = 316.74'
T = 159.55'
e=0.060
FLAT=61+54.00
BFS=62+94.75
EFS=64+86.69
FLAT=66+68.51

D10-102

PVI STA = 62+27.52
PVI ELEV = 81.70
A.D. = 3.81
K = 115.00
438.65' VC

PVI STA = 65+68.46
PVI ELEV = 97.25
A.D. = -1.40
K = 118.16
165.00' VC

PVCS: 60+08.20
PVCE: 80.06

PVTS: 64+46.85
PVTE: 91.70

PVCS: 64+85.96
PVCE: 93.49

PVTS: 66+50.96
PVTE: 99.86

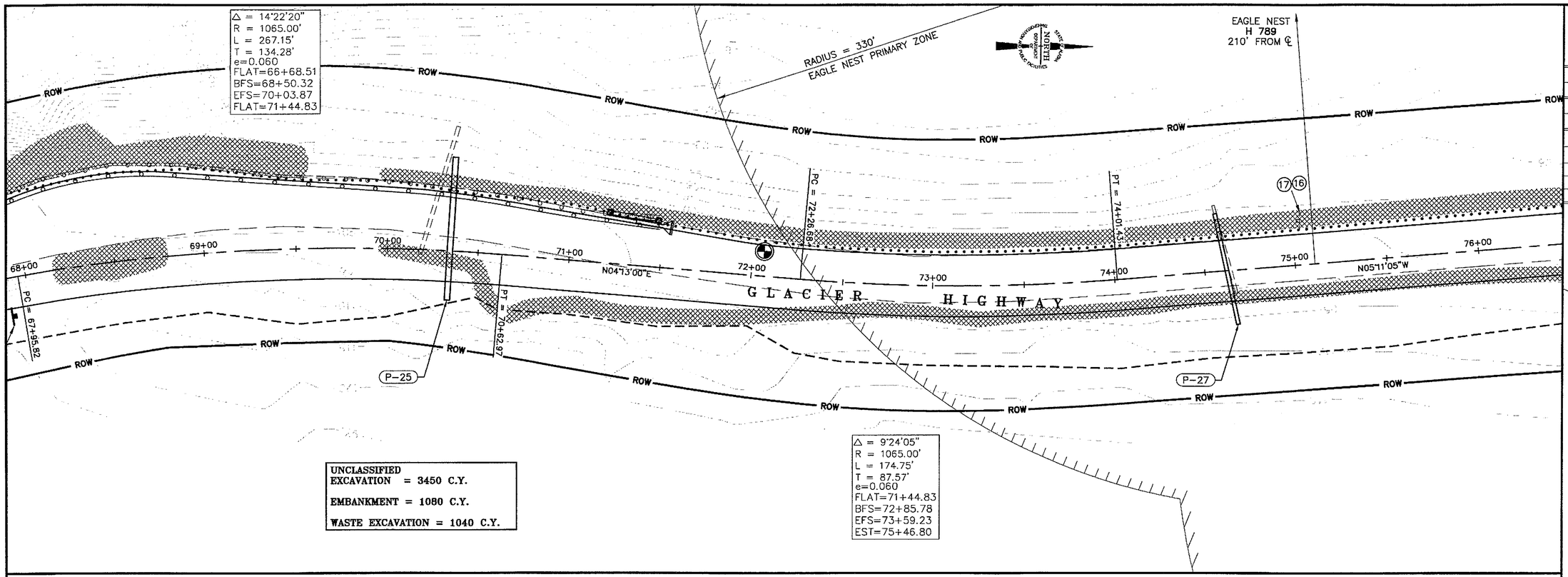
PVCS: 66+62.67
PVCE: 100.23

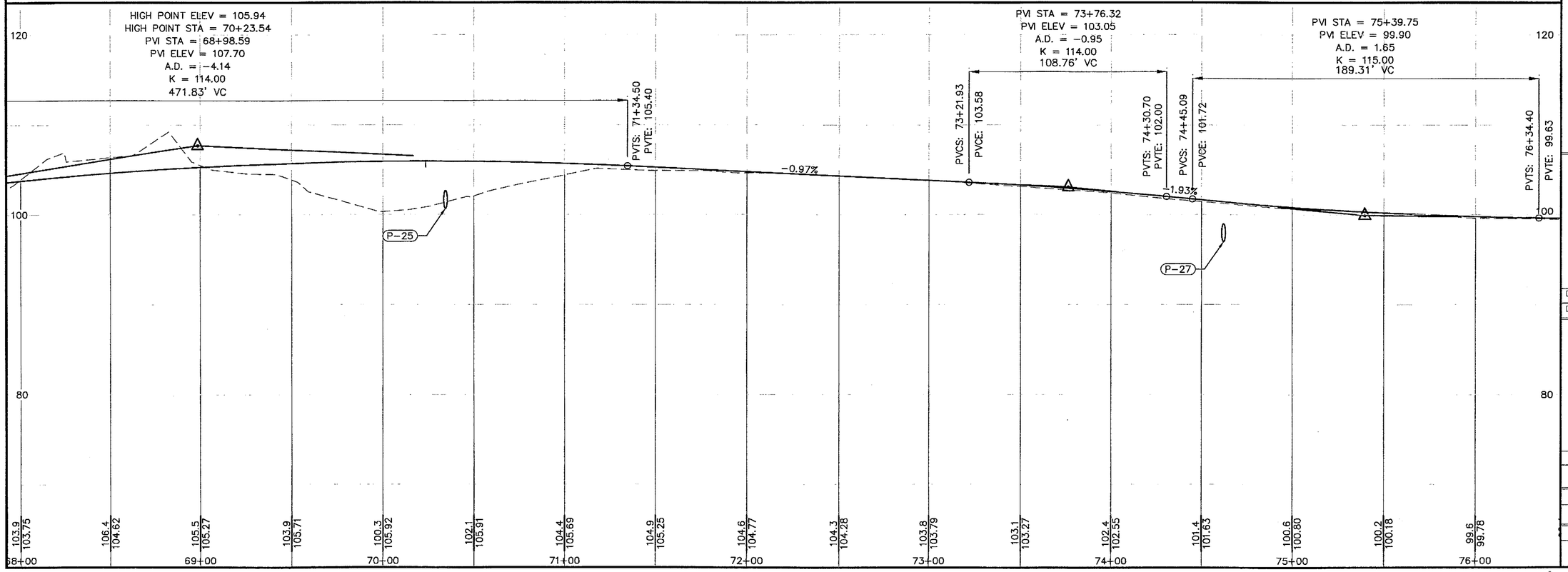
4.56%

3.17%

120 100 80

| | | |





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RECORD OF REVISIONS

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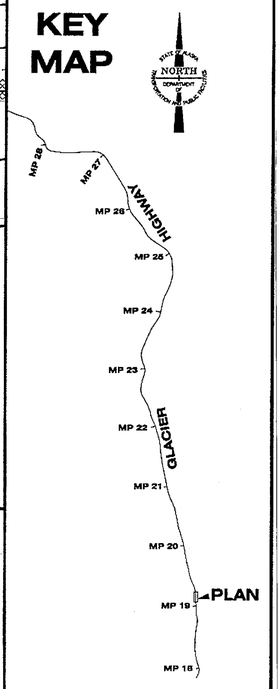


STATE OF ALASKA
49 TH
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
12-13-04

DESIGNED BY: J. OSBURN
DRAWN BY: BENNETT/STEVENS

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

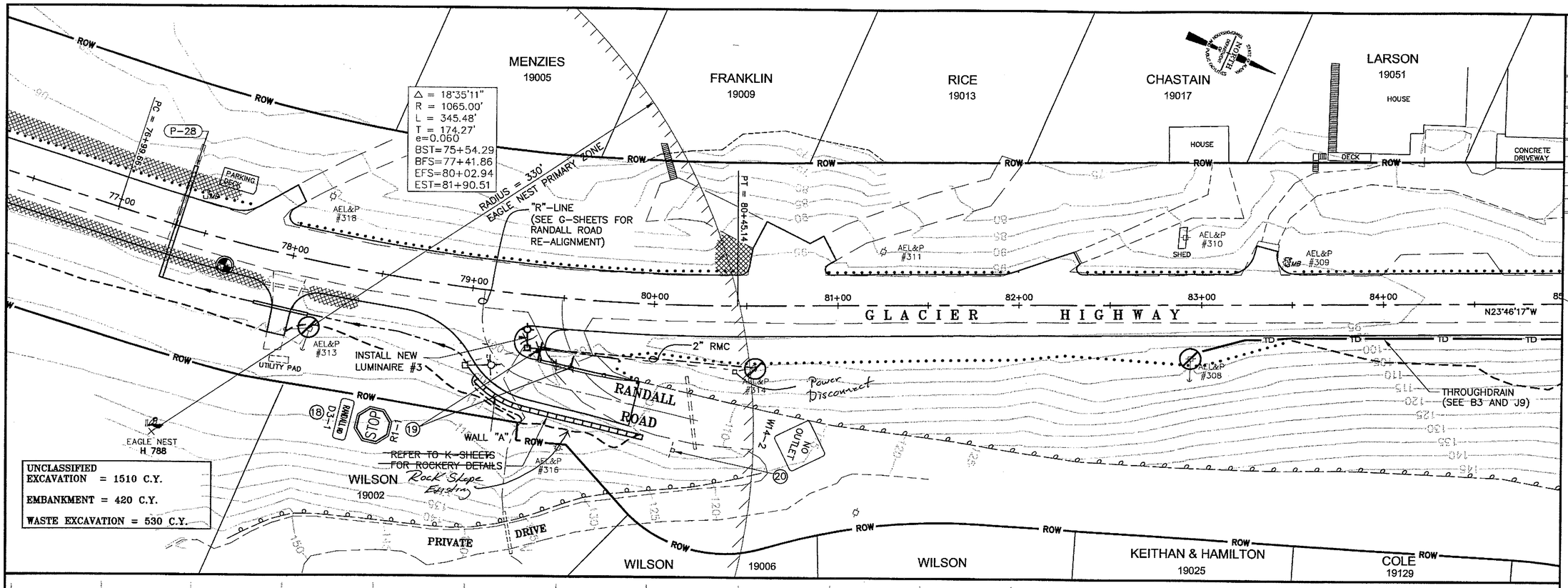
JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - PT. STEPHENS RD. TO AMALGA HARBOR RD.

PLAN & PROFILE SHEET

PROJECT DESIGNATION NUMBER
IM-093-3(24)/68097

STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
F8	146

As-Builts Reviewed by PE
11/08/07



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ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

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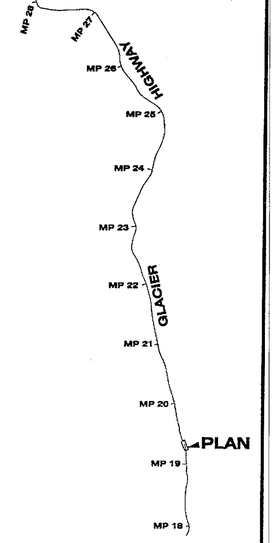


STATE OF ALASKA
49 TH
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
12-13-04

DESIGNED BY: J. OSBURN
DRAWN BY: BENNETT/STEVENS

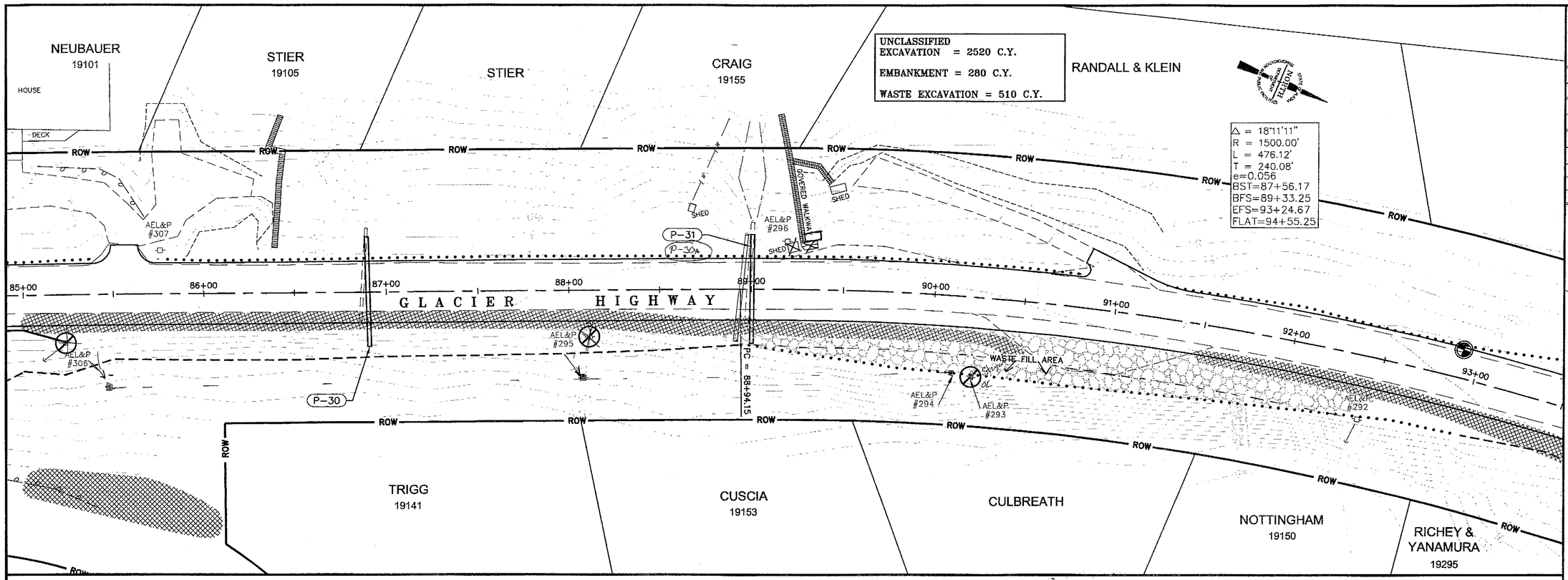
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

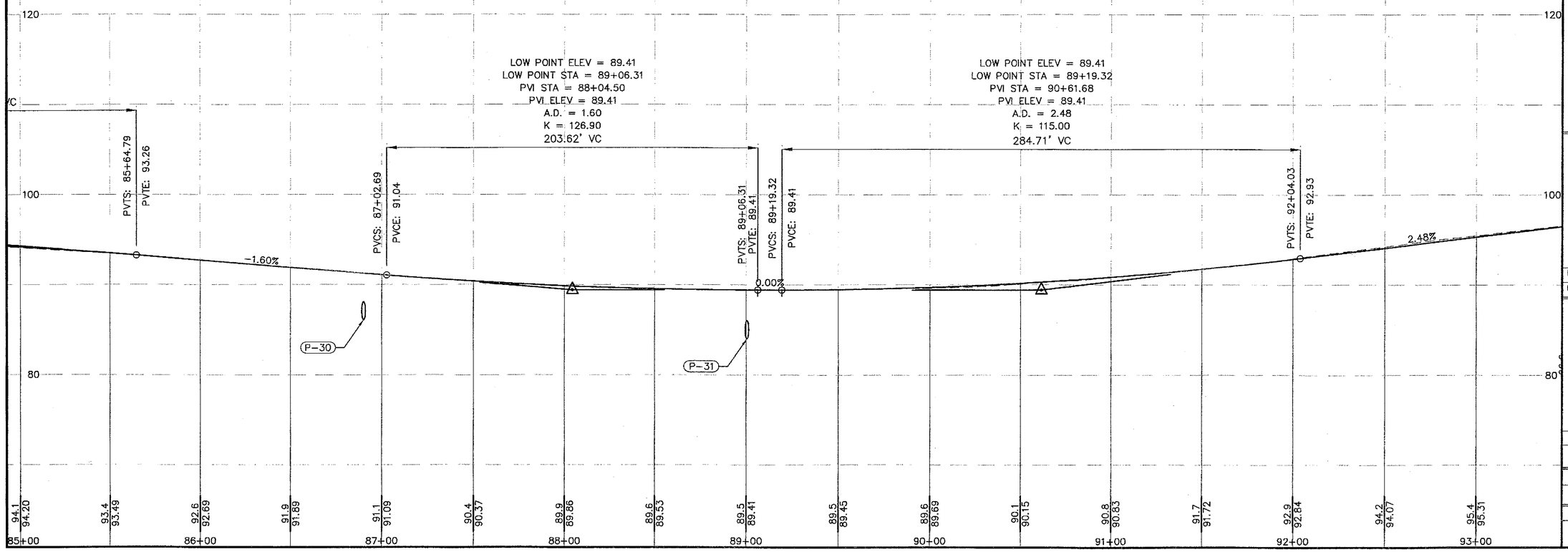
JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - PT. STEPHENS RD. TO AMALGA HARBOR RD.

PLAN & PROFILE SHEET

PROJECT DESIGNATION NUMBER	
IM-093-3(24)/68097	
STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
F9	146

As-Builts Reviewed by PE
1/05/07





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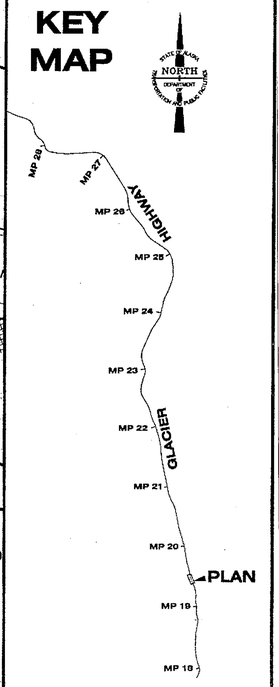
ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

KEY MAP



STATE OF ALASKA
49 TH
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
12-13-04

DESIGNED BY: J. OSBURN
DRAWN BY: BENNETT/STEVENS

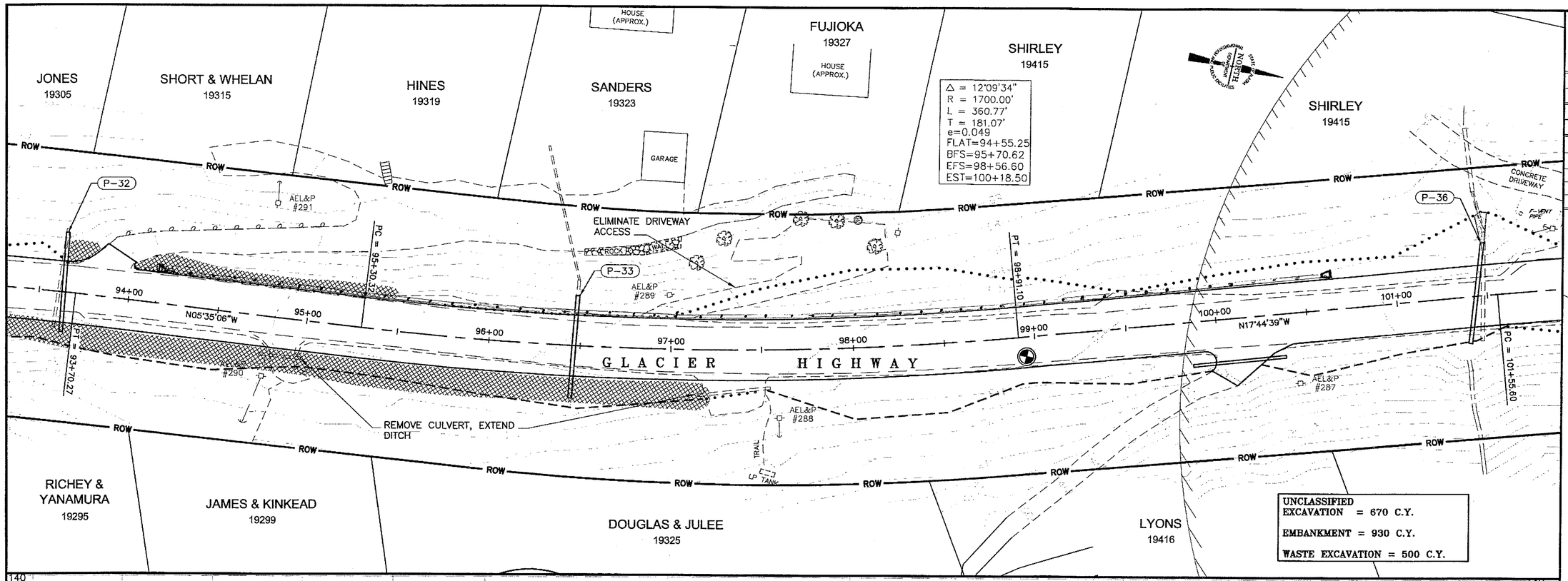
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - PT. STEPHENS RD. TO AMALGA HARBOR RD.

PLAN & PROFILE SHEET

PROJECT DESIGNATION NUMBER	
IM-093-3(24)/68097	
STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
F10	146

As-Built Drawings Reviewed by CA Gilbertson
11/05/07



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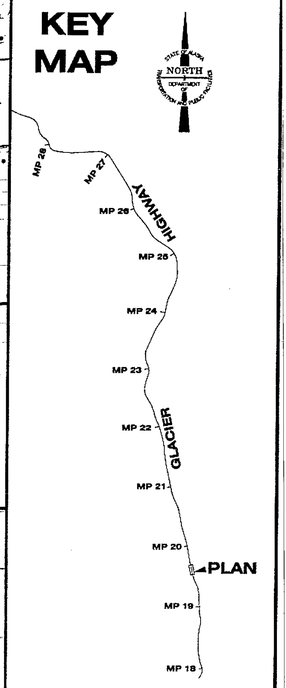
ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

KEY MAP



STATE OF ALASKA
49 TH
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
12-13-04

DESIGNED BY:	J. OSBURN
DRAWN BY:	BENNETT/STEVENS

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

JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - PT. STEPHENS RD. TO AMALGA HARBOR RD.

PLAN & PROFILE SHEET

PROJECT DESIGNATION NUMBER	
IM-093-3(24)/68097	
STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
F11	146

As-Built Drawings Reviewed
by PE
11/15/07

PELLA
19435

PELLA
19475

DAVIS FAMILY TRUST
19485

HOOTON
19501

HOOTON

DOYLE

20 FT. EASEMENT

△ = 8°12'32"
R = 2500.00'
L = 358.18'
T = 179.40'
e=0.043
BST=100+38.12
BFS=101+85.90
EFS=104+83.47
EST=106+31.25

ROW

CATCH BASIN

P-37

P-38

P-40

P-41

AEL&P #286

AEL&P #286A

AEL&P #284

AEL&P #283

AEL&P #281A

AEL&P #282

SHED

21

G L A C I E R H I G H W A Y

102+00 103+00 104+00 105+00 106+00 107+00 108+00 109+00 110+00

NO CONSTRUCTION WITHIN 55'

EAGLE NEST H 790

RADIUS = 330' EAGLE NEST PRIMARY ZONE

ENGEN
19430

WASTE FILL AREA

Waste fill Area

UNCLASSIFIED EXCAVATION = 1780 C.Y.

EMBANKMENT = 390 C.Y.

WASTE EXCAVATION = 890 C.Y.

PVI STA = 102+16.08
PVI ELEV = 125.55
A.D. = -3.26
K = 153.41
500.00' VC

PVTS: 104+66.08
PVTE: 126.29

PVI STA = 109+12.65
PVI ELEV = 127.62
A.D. = 1.35
K = 295.41
400.00' VC

PVCS: 107+12.65
PVCE: 127.03

0.30%

140
120
100

123.0	124.0	125.0	125.8	126.2	126.4	126.5	126.6	126.7	126.8	127.0	127.2	127.5	127.9	128.3	128.9	129.5
123.19	124.13	124.90	125.51	125.95	126.24	126.39	126.54	126.69	126.84	126.99	127.16	127.41	127.75	128.18	128.68	129.28

102+00 103+00 104+00 105+00 106+00 107+00 108+00 109+00 110+00

P-37 P-38 P-41

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TAB: TYPICALS

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

KEY MAP

NORTH

MP 28 MP 27 HIGHWAY MP 26 MP 25 MP 24 MP 23 MP 22 GLACIER MP 21 MP 20 PLAN MP 19 MP 18

STATE OF ALASKA 49TH
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
12-13-04

DESIGNED BY: J. OSBURN
DRAWN BY: BENNETT/STEVENS

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

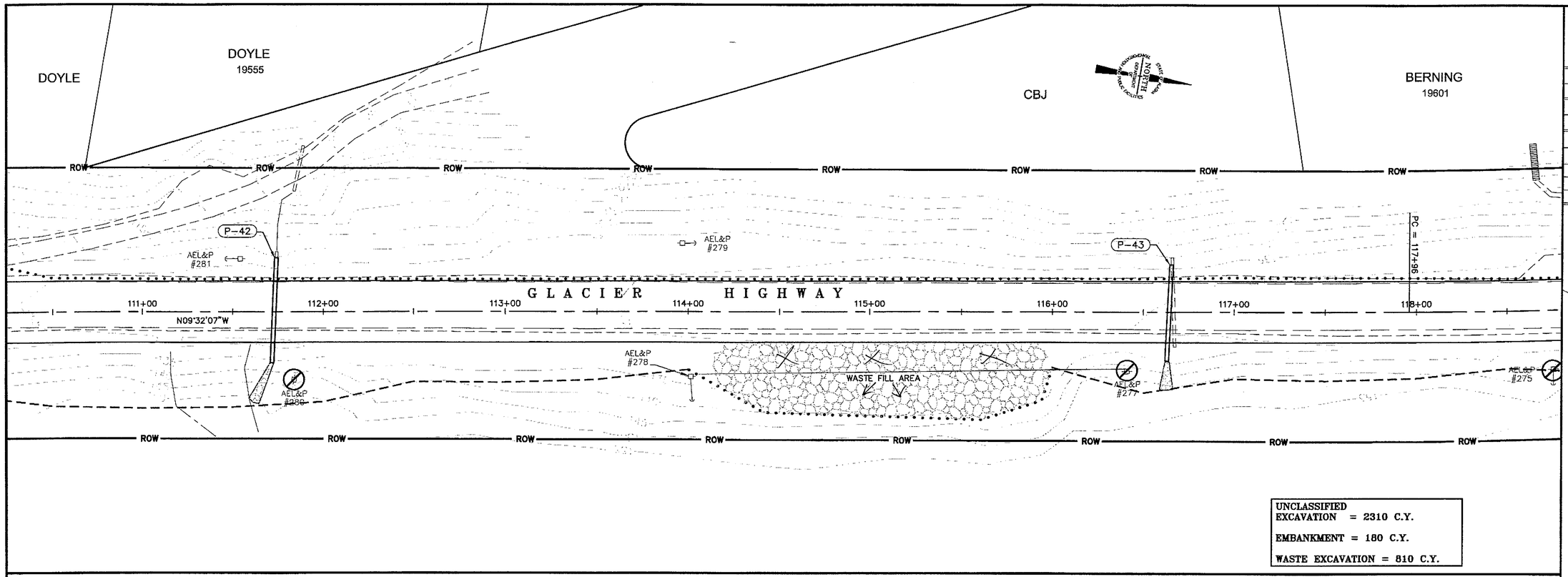
JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - PT. STEPHENS RD. TO AMALGA HARBOR RD.

PLAN & PROFILE SHEET

PROJECT DESIGNATION NUMBER
IM-093-3(24)/68097

STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
F12	146

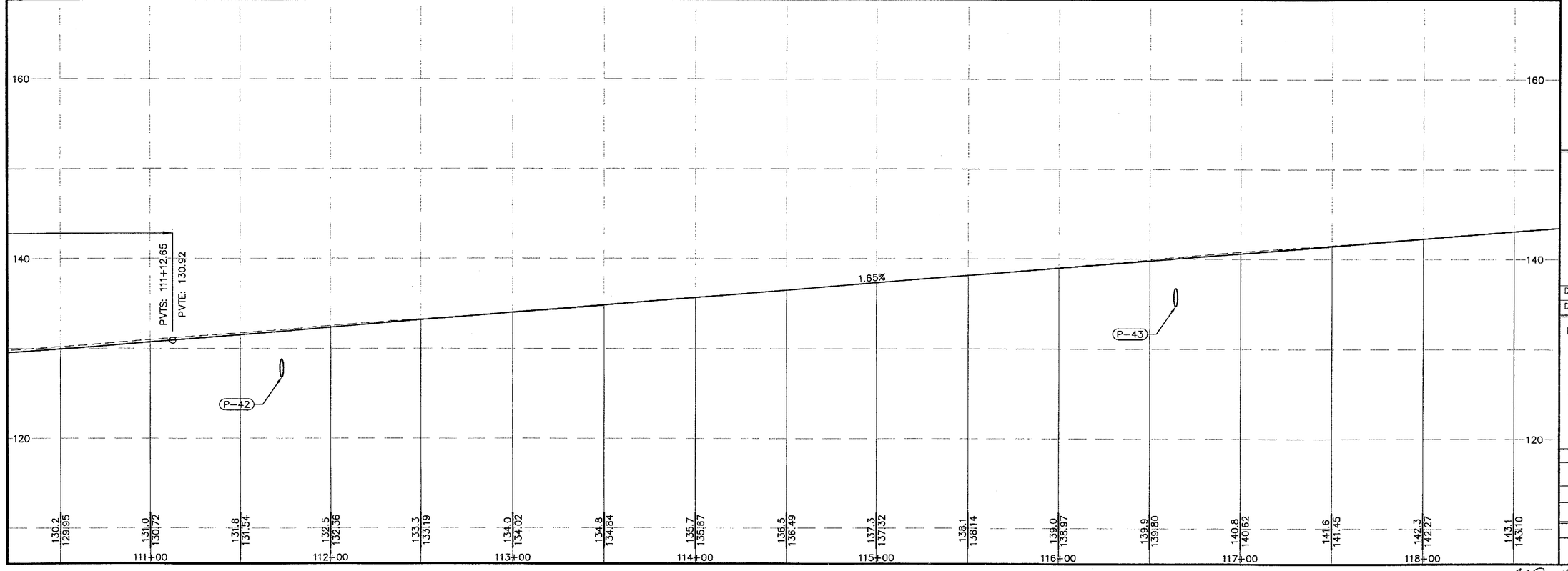
As-Built Drawing Reviewed by:
11/05/07



UNCLASSIFIED
EXCAVATION = 2310 C.Y.

EMBANKMENT = 180 C.Y.

WASTE EXCAVATION = 810 C.Y.



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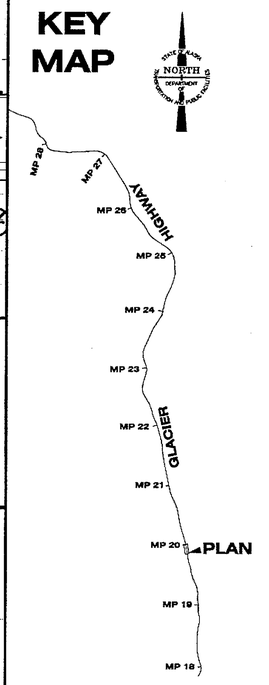
ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

KEY MAP



STATE OF ALASKA
49 TH
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
12-13-04

DESIGNED BY: J. OSBURN

DRAWN BY: BENNETT/STEVENS

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

JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - PT. STEPHENS RD. TO AMALGA HARBOR RD.

PLAN & PROFILE SHEET

PROJECT DESIGNATION NUMBER

IM-093-3(24)/68097

STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
F13	146

As-Built Drawings Reviewed by: [signature]
11/05/07

BERNING
19601

HALL
19653

SOLANO & TILLEY
19661

HENNICK

MARTIN

△ = 8°12'10"
R = 2500.00'
L = 357.91'
T = 179.26'
e=0.043
BST=116+78.52
BFS=118+26.30
EFS=121+23.62
EST=122+71.40

△ = 0°39'58"
R = 10,000.00'
L = 116.26'
T = 58.13'
e=0.000

ROW ROW ROW ROW ROW ROW ROW ROW ROW ROW

AEL&P #276

P-44

PT = 121+53.92

SHED

PATH

PATH

PARKING PAD

P-45

AEL&P #274

P-46

AEL&P #270

119+00 120+00 121+00 122+00 123+00 124+00 125+00 126+00 127+00

N17°44'17"W

GLACIER HIGHWAY

AEL&P #275

D10-102

22

23

AEL&P #273

AEL&P #272

PT = 124+93.07

AEL&P #271

ROW ROW ROW ROW ROW ROW ROW ROW ROW ROW

UNCLASSIFIED
EXCAVATION = 730 C.Y.

EMBANKMENT = 320 C.Y.

WASTE EXCAVATION = 550 C.Y.

NORTH

PVI STA = 120+32.78
PVI ELEV = 146.12
A.D. = −0.53
K = 567.84
300.00' VC

PVCS: 118+82.78
PVCE: 143.64

PVTS: 121+82.78
PVTE: 147.80

PVCS: 124+86.53
PVCE: 151.21

1.12%

180 160 140

P-44 P-45 P-46

119+00	120+00	121+00	122+00	123+00	124+00	125+00	126+00	127+00
143.9 / 143.92	144.6 / 144.71	145.4 / 145.45	146.1 / 146.15	146.8 / 146.81	147.4 / 147.42	148.0 / 147.99	148.5 / 148.56	148.9 / 149.12	149.4 / 149.68	150.0 / 150.24	150.7 / 150.80	151.4 / 151.36	152.2 / 151.98	152.9 / 152.65	153.6 / 153.39	154.4 / 154.19

PATH:
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Mon, 06/Dec/04 08:07AM
PLOT:
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TAB: TYPICALS

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

KEY MAP

NORTH

MP 28 MP 27 HIGHWAY MP 26 MP 25 MP 24 MP 23 GLACIER MP 22 MP 21 MP 20 PLAN MP 19 MP 18

STATE OF ALASKA 49TH
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
12-13-04

DESIGNED BY: J. OSBURN

DRAWN BY: BENNETT/STEVENS

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

JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - PT. STEPHENS RD. TO AMALGA HARBOR RD.

PLAN & PROFILE SHEET

PROJECT DESIGNATION NUMBER

IM-093-3(24)/68097

STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
F14	146

As-Built Drawings Reviewed by AD Gilbreath 1/05/05

MARTIN | MARTIN | TESENEER 19951 | STONE & SKINAS 20003 | HUNT | ESCOLA 20025

SHUT-DOWN CATCH BASIN DURING LOCAL CONSTRUCTION ACTIVITIES

UTILITY VAULT/ CATCH BASIN

AEL&P #269 | AEL&P #268 | AEL&P #267 | AEL&P #266

ROW

128+00 | 129+00 | 130+00 | 131+00 | 132+00 | 133+00 | 134+00 | 135+00

N17°04'19"W

GLACIER HIGHWAY

P-47 | P-48 | P-49

PC = 133+49.71

UNCLASSIFIED EXCAVATION = 510 C.Y.

EMBANKMENT = 760 C.Y.

WASTE EXCAVATION = 380 C.Y.

PVI STA = 128+36.53
PVI ELEV = 155.14
A.D. = 1.78
K = 392.88
700.00' VC

PVI STA = 135+12.95
PVI ELEV = 174.79
A.D. = -0.69
K = 239.62
165.00' VC

PVTS: 131+86.53
PVTE: 165.31

PVCS: 134+30.45
PVCE: 172.39

2.90%

	128+00	129+00	130+00	131+00	132+00	133+00	134+00	135+00
P-47	155.2 / 155.05	156.0 / 155.98	156.9 / 156.97	157.9 / 158.03	159.0 / 159.15	160.0 / 160.33	161.3 / 161.58	162.6 / 162.89
P-48	163.9 / 164.26	165.2 / 165.70	166.7 / 167.15					
P-49	168.3 / 168.60	170.0 / 170.06	171.5 / 171.51	172.9 / 172.95	174.1 / 174.31	175.4 / 175.57		

200 | 180 | 160 | 140

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Mon, 06/Dec/04 08:08AM
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TAB: TYPICALS

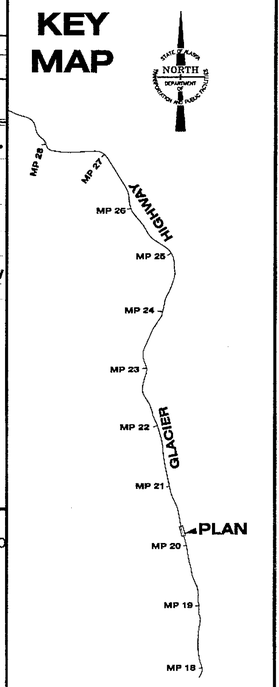
ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

KEY MAP



STATE OF ALASKA
49 TH
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
12-13-04

DESIGNED BY: J. OSBURN

DRAWN BY: BENNETT/STEVENS

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

JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - PT. STEPHENS RD. TO AMALGA HARBOR RD.

PLAN & PROFILE SHEET

PROJECT DESIGNATION NUMBER
IM-093-3(24)/68097

STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
F15	146

AS-Builts Reviewed by: JC Gilbreath
11/05/07

ESCOLA 20025 | ESCOLA 20025 | PERENSOVICH | STEWART 20123 | HANSEN | MILLER CONST. CO. LTD.

ROW ROW ROW ROW ROW ROW ROW ROW ROW

AEL&P #265 | DECK | CONC. PAD | AEL&P #263 | AEL&P #261 | SPEED LIMIT 55 | R2-1 | 25A

136+00 137+00 138+00 139+00 140+00 141+00 142+00 143+00 144+00

N10°13'45"W

GLACIER HIGHWAY

P-50 | PT = 136+48.29 | 24 | 25 | W2-2L | P-51

ROW ROW ROW ROW ROW ROW ROW ROW ROW ROW

△ = 6°50'35"
R = 2500.00'
L = 298.58'
T = 149.47'
e=0.043
BST=132+32.23
BFS=133+80.01
EFS=136+17.99
EST=137+65.77

UNCLASSIFIED
EXCAVATION = 400 C.Y.
EMBANKMENT = 2440 C.Y.
WASTE EXCAVATION = 300 C.Y.

PVI STA = 142+75.68
PVI ELEV = 191.69
A.D. = 3.21
K = 155.69
500.00' VC

PVCS: 140+25.68
PVCE: 186.15

PVTS: 135+95.45
PVTE: 176.62

2.22%

220 200 180 160

	136+00	137+00	138+00	139+00	140+00	141+00	142+00	143+00	144+00
	176.4	177.3	178.2	179.3	180.4	181.6	182.7	183.9	185.2
	176.72	177.83	178.93	180.04	181.15	182.26	183.37	184.47	185.58
	186.6	188.0	189.4	190.9	192.6	194.5	196.6	198.8	
	186.71	187.98	189.40	190.99	192.74	194.65	196.72	198.95	

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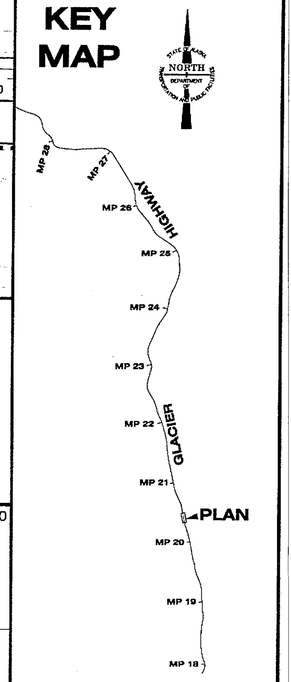
ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

KEY MAP



STATE OF ALASKA
49 TH
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
12-13-04

DESIGNED BY: J. OSBURN
DRAWN BY: BENNETT/STEVENS

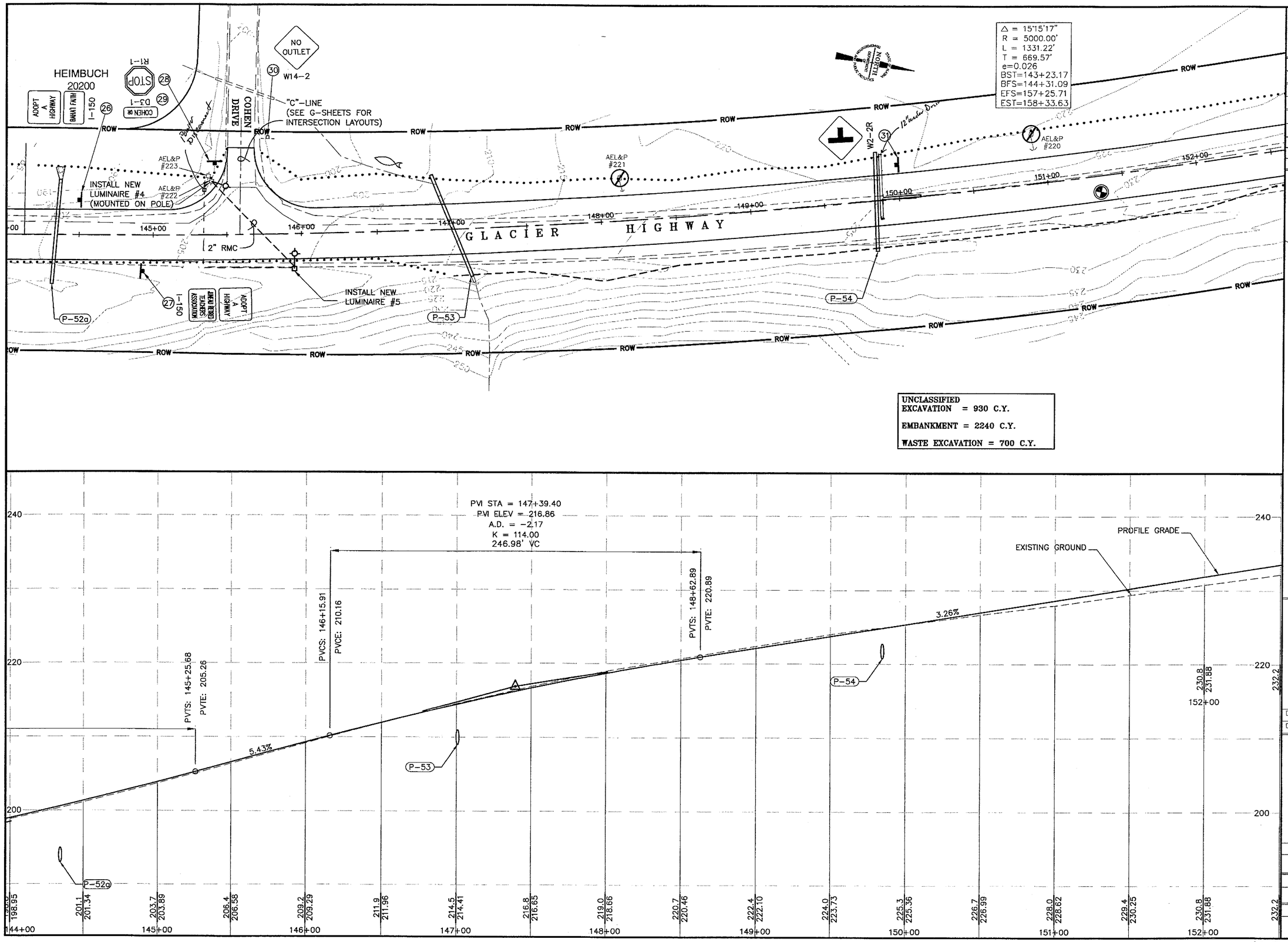
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - PT. STEPHENS RD. TO AMALGA HARBOR RD.

PLAN & PROFILE SHEET

PROJECT DESIGNATION NUMBER	
IM-093-3(24)/68097	
STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
F16	146

As-Built Drawing: Reviewed by: Ed Gilbertson 1/05/07



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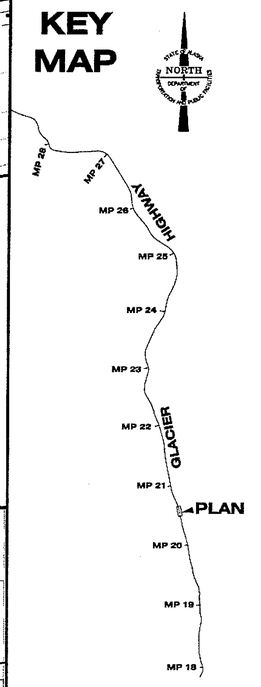
ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

KEY MAP



STATE OF ALASKA
49 TH
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
12-13-04

DESIGNED BY: J. OSBURN
DRAWN BY: BENNETT/STEVENS

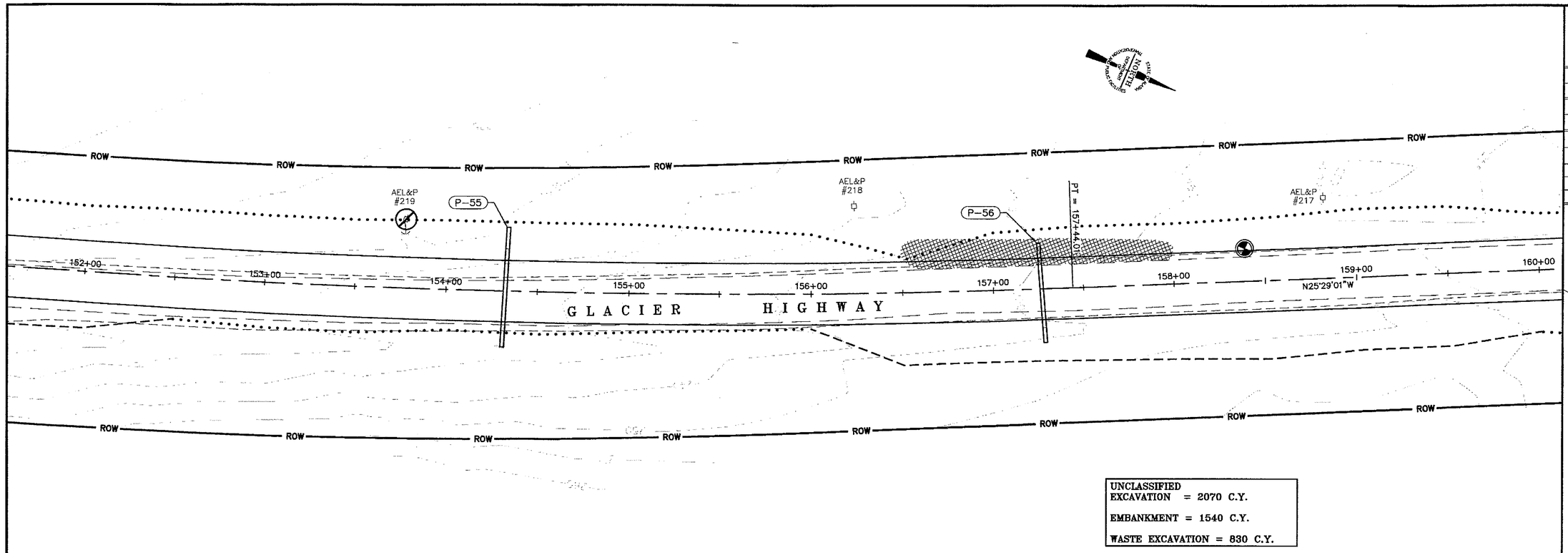
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - PT. STEPHENS RD. TO AMALGA HARBOR RD.

PLAN & PROFILE SHEET

PROJECT DESIGNATION NUMBER	
IM-093-3(24)/68097	
STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
F17	146

As-Built Drawings Reviewed by Al Gilbertson 1/18/05



UNCLASSIFIED
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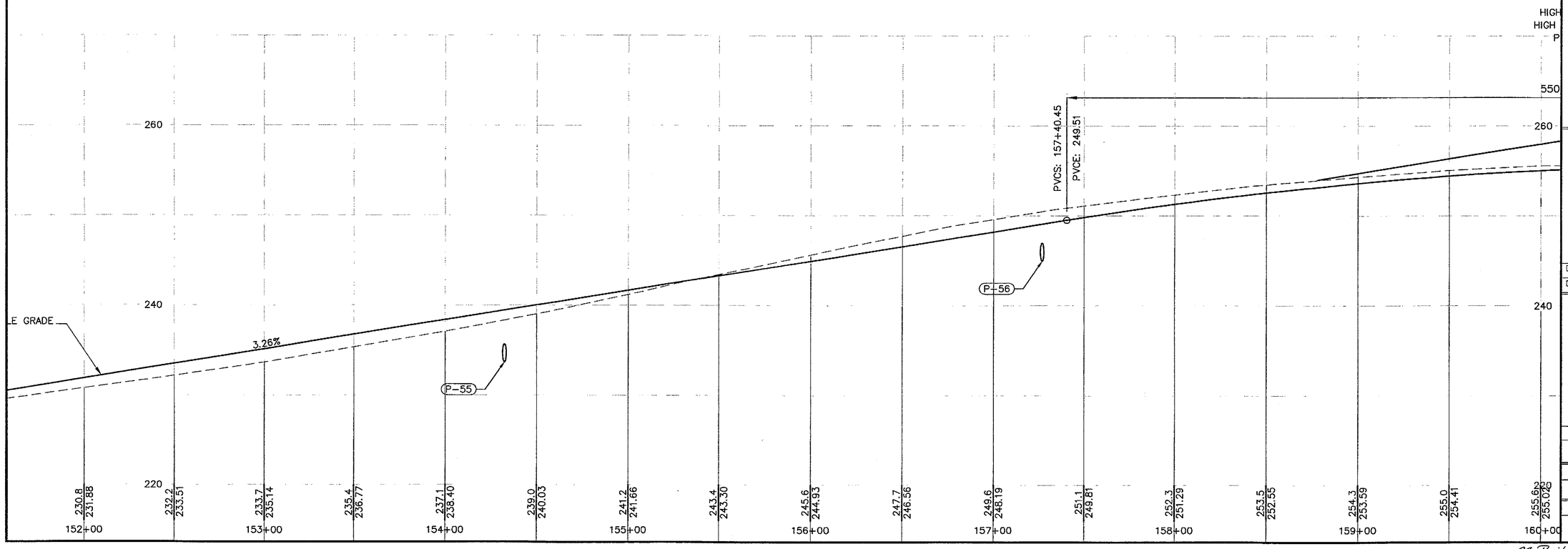
EMBANKMENT = 1540 C.Y.

WASTE EXCAVATION = 830 C.Y.



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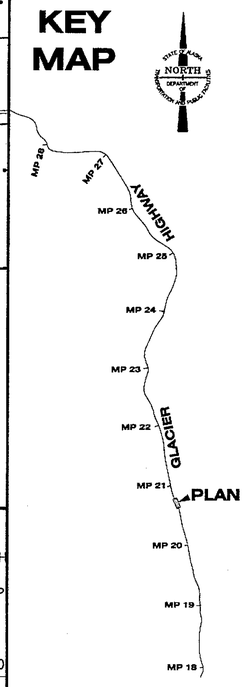
ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

KEY MAP



STATE OF ALASKA
49 TH
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
12-13-04

DESIGNED BY: J. OSBURN

DRAWN BY: BENNETT/STEVENS

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

JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - PT. STEPHENS RD. TO AMALGA HARBOR RD.

PLAN & PROFILE SHEET

PROJECT DESIGNATION NUMBER

IM-093-3(24)/68097

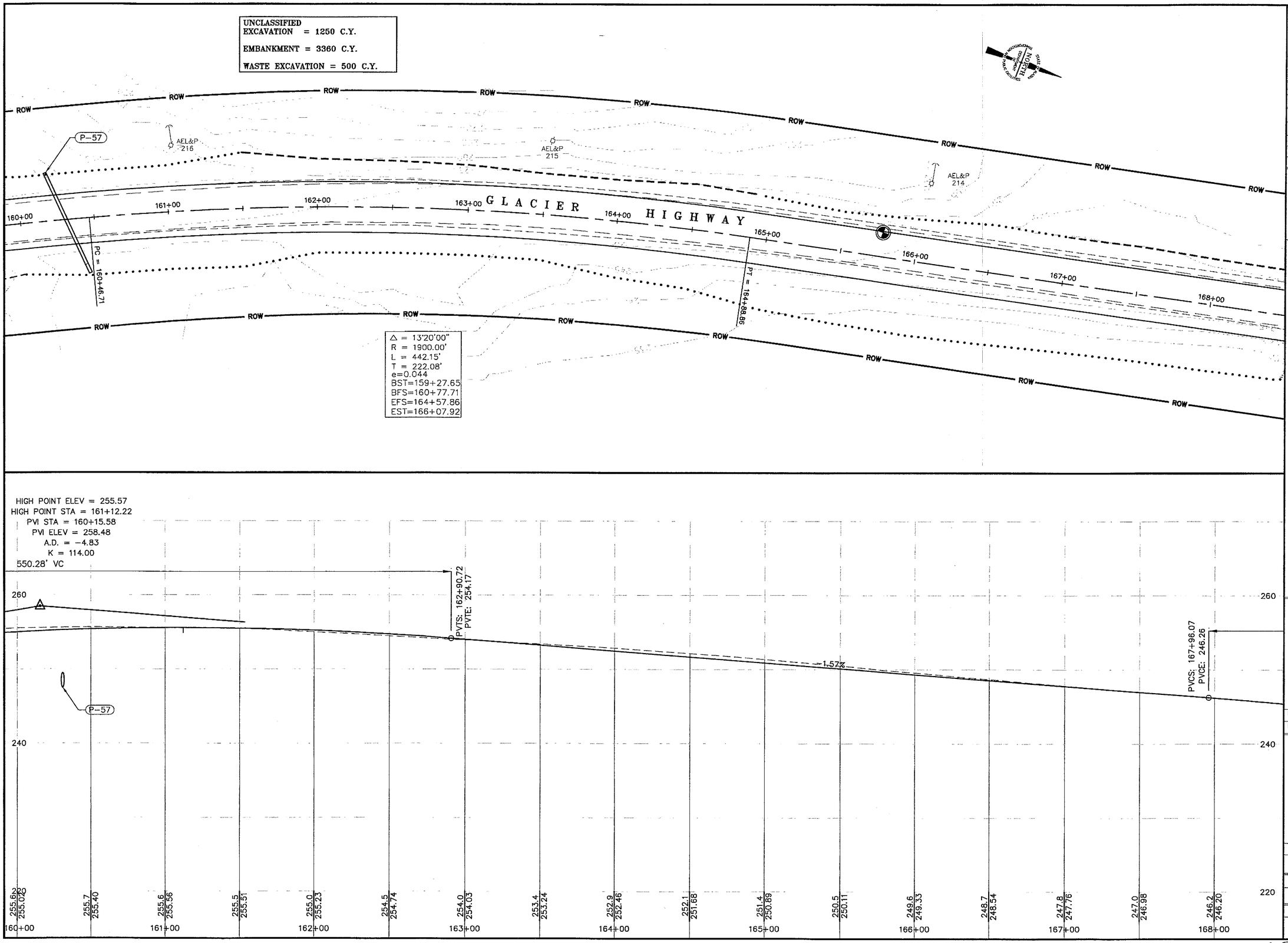
STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
F18	146

As-Builts Reviewed by: [signature]
11/05/07

UNCLASSIFIED
EXCAVATION = 1250 C.Y.

EMBANKMENT = 3360 C.Y.

WASTE EXCAVATION = 500 C.Y.



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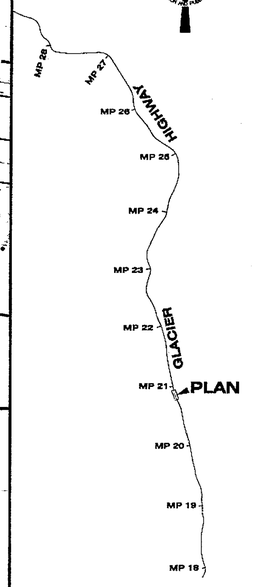
ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

KEY MAP



STATE OF ALASKA
49 TH
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
12-13-04

DESIGNED BY: J. OSBURN
DRAWN BY: BENNETT/STEVENS

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

JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - PT. STEPHENS RD. TO AMALGA HARBOR RD.

PLAN & PROFILE SHEET

PROJECT DESIGNATION NUMBER
IM-093-3(24)/68097

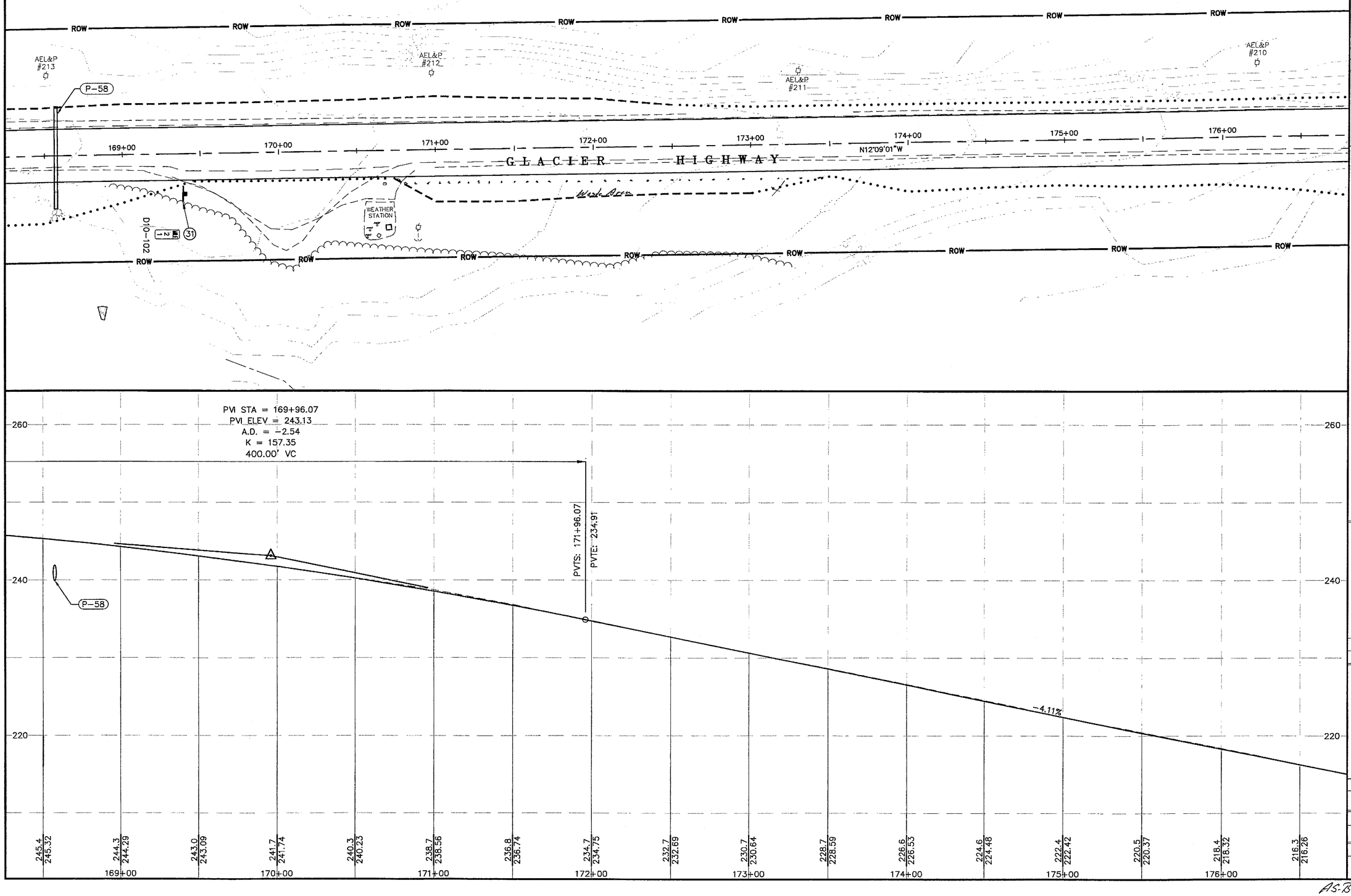
STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
F19	146

As-Builts Reviewed by: [signature]
11/15/07

UNCLASSIFIED
EXCAVATION = 1050 C.Y.

EMBANKMENT = 410 C.Y.

WASTE EXCAVATION = 530 C.Y.



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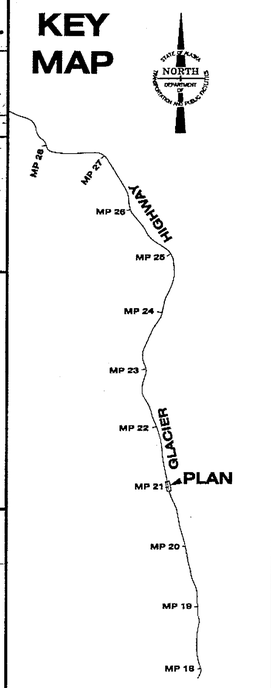
ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

KEY MAP



STATE OF ALASKA
49 TH
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
12-13-04

DESIGNED BY: J. OSBURN
DRAWN BY: BENNETT/STEVENS

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

JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - PT. STEPHENS RD. TO AMALGA HARBOR RD.

PLAN & PROFILE SHEET

PROJECT DESIGNATION NUMBER
IM-093-3(24)/68097

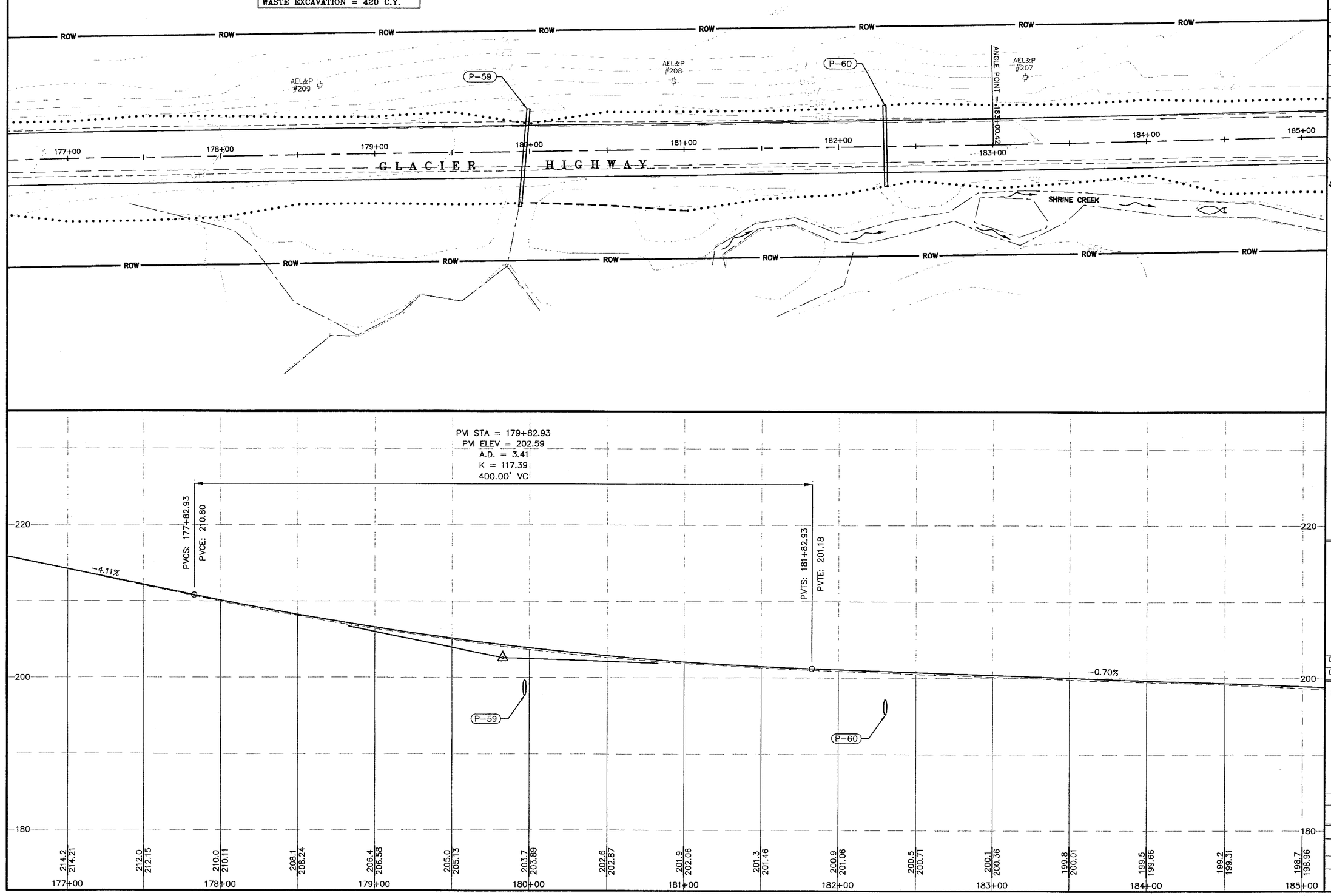
STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
F20	146

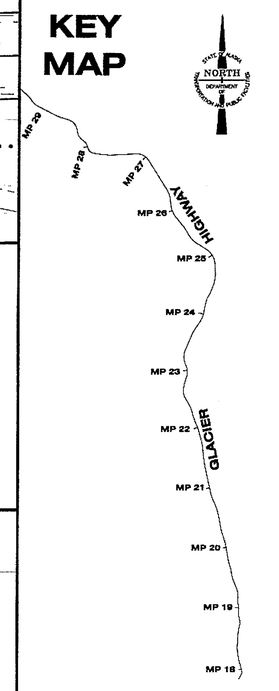
As-Built Drawings Reviewed by JC Calhoun
11/06/07

UNCLASSIFIED
EXCAVATION = 700 C.Y.

EMBANKMENT = 1140 C.Y.

WASTE EXCAVATION = 420 C.Y.





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TAB: TYPICALS

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

STATE OF ALASKA
49TH
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
12-13-04

DESIGNED BY: J. OSBURN
DRAWN BY: BENNETT/STEVENS

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

JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - PT. STEPHENS RD. TO AMALGA HARBOR RD.

PLAN & PROFILE SHEET

PROJECT DESIGNATION NUMBER
IM-093-3(24)/68097

STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
F21	146

As-Builts Reviewed
by [signature]
11/22/07

UNCLASSIFIED
EXCAVATION = 170 C.Y.

EMBANKMENT = 3330 C.Y.

WASTE EXCAVATION = 110 C.Y.

ROW ROW ROW ROW ROW ROW ROW ROW

AEL&P #206 P-62 AEL&P #205 AEL&P #204 P-63

SHRINE CREEK TRIB.

185+00 186+00 187+00 188+00 189+00 190+00 191+00 192+00 193+00

N12°37'39"W

G L A C I E R H I G H W A Y

PC = 191+19.70

SHRINE CREEK

ROW ROW ROW ROW ROW ROW ROW ROW

PVCS: 193+40.37
PVCE: 193.08

-0.70%

P-62 P-63

185+00	186+00	187+00	188+00	189+00	190+00	191+00	192+00	193+00
198.7 / 198.96	198.4 / 198.61	198.0 / 198.26	197.6 / 197.91	197.2 / 197.56	196.9 / 197.21	196.5 / 196.86	196.0 / 196.51	195.5 / 196.16	195.0 / 195.81	194.3 / 195.46	193.7 / 195.11	193.1 / 194.76	192.7 / 194.41	192.8 / 194.06	192.6 / 193.71	192.6 / 193.36	192.5

220 200 180

198.7 198.96 5+00

PATH:
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Mon, 06/Dec/04 08:11AM
PLOT:
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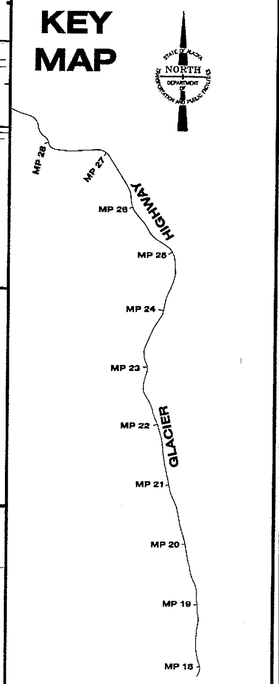
TAB: TYPICALS

ADDENDUM NUMBER
ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

KEY MAP



STATE OF ALASKA
49 TH
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
12-17-04

DESIGNED BY: J. OSBURN

DRAWN BY: BENNETT/STEVENS

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

JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - PT. STEPHENS RD. TO AMALGA HARBOR RD.

PLAN & PROFILE SHEET

PROJECT DESIGNATION NUMBER	
IM-093-3(24)/68097	
STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
F22	146

As-Builts Reviewed
By:
11/06/07

△ = 8°28'07"
R = 5700.00'
L = 842.49'
T = 422.01'
e=0.023
BST=190+35.03
BFS=191+35.90
EFS=199+45.99
EST=200+46.86

ROW ROW ROW ROW ROW ROW ROW ROW ROW

AEL&P #203
AEL&P #202
AEL&P #201
AEL&P #200
P-64

194+00 195+00 196+00 197+00 198+00 199+00 200+00 201+00

GLACIER HIGHWAY

PT = 199+62.19

ROW ROW ROW ROW ROW ROW ROW ROW ROW

UNCLASSIFIED
EXCAVATION = 1240 C.Y.
EMBANKMENT = 890 C.Y.
WASTE EXCAVATION = 620 C.Y.

PVI STA = 195+65.37
PVI ELEV = 191.50
A.D. = −0.77
K = 587.24
450.00' VC

PVCS: 193+40.37
PVCE: 193.08

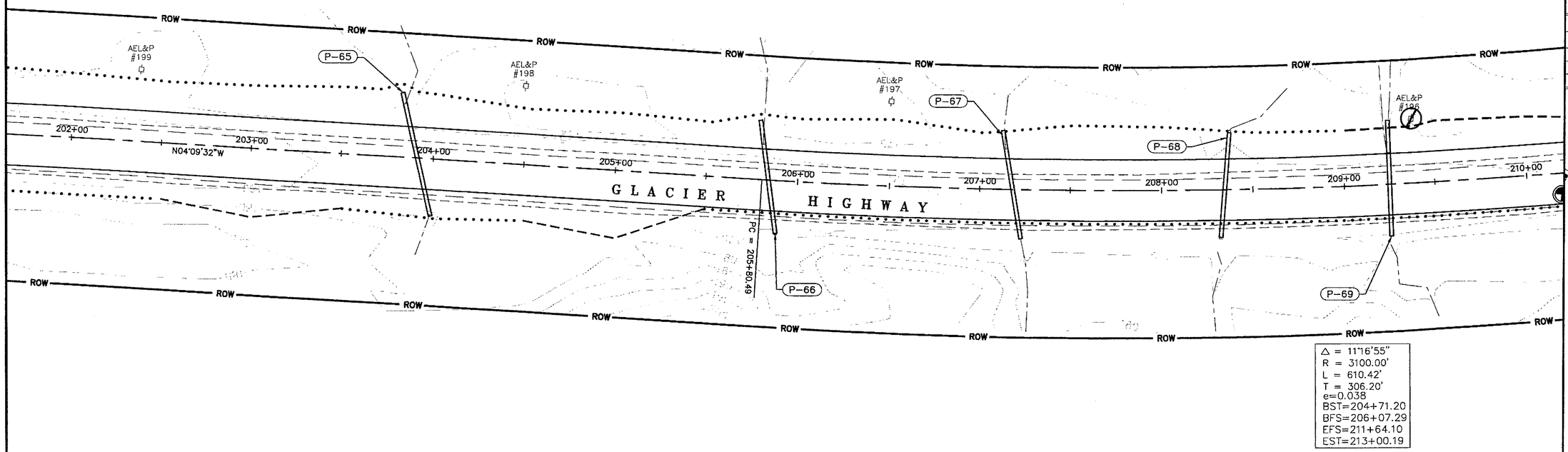
PVTS: 197+90.37
PVTE: 188.20

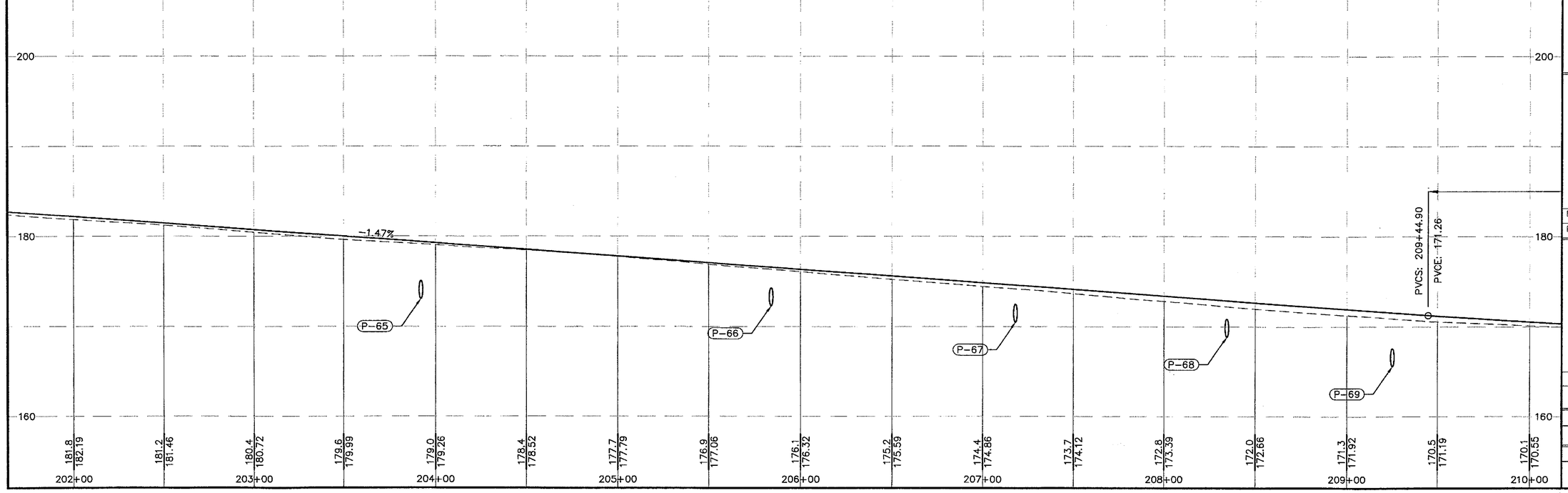
−1.47%

220
200
180

| | | |

UNCLASSIFIED
EXCAVATION = 730 C.Y.
EMBANKMENT = 1180 C.Y.
WASTE EXCAVATION = 550 C.Y.





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PLOT:
PSPACE 1=1(F) OR MSPACE 1=1(F)
TAB: TYPICALS

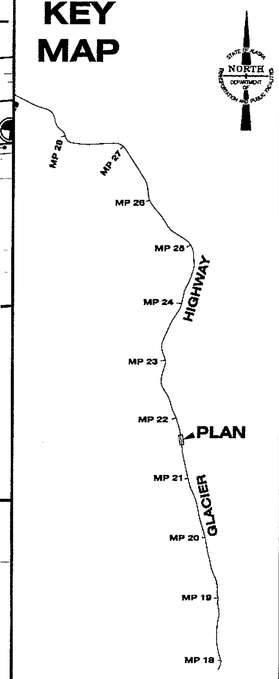
ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

KEY MAP



STATE OF ALASKA
49 TH
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
12-13-04

DESIGNED BY: J. OSBURN
DRAWN BY: BENNETT/STEVENS

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

JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - PT. STEPHENS RD. TO AMALGA HARBOR RD.

PLAN & PROFILE SHEET

PROJECT DESIGNATION NUMBER
IM-093-3(24)/68097

STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
F24	146

As-Builts Reviewed
By. [signature]
11/4/05

UNCLASSIFIED
EXCAVATION = 2100 C.Y.
EMBANKMENT = 1070 C.Y.
WASTE EXCAVATION = 630 C.Y.

ROW ROW ROW

UNCLASSIFIED
EXCAVATION = 2100 C.Y.

EMBANKMENT = 290 C.Y.

WASTE EXCAVATION = 420 C.Y.

△ = 13°43'54"
R = 1065.00'
L = 255.24'
T = 128.24'
e=0.060
BST=221+78.02
BFS=223+65.59
EFS=225+36.43
EST=227+25.00

ROW

AEL&P #192

AEL&P #191

AEL&P #190

RS-68 (35)

TRAIL

RS-13R (36)

PC = 223+23.39

PT = 225+78.63

219+00 220+00 221+00 222+00 223+00 224+00 225+00 226+00

G L A C I E R H I G H W A Y

P-73

P-74

P-75

D10-102 (37)

PVI STA = 224+80.69
PVI ELEV = 170.51
A.D. = -3.70
K = 114.00
422.27' VC

PVTS: 219+33.63
PVTE: 172.36

PVCS: 222+69.56
PVCE: 171.23

-0.34%

200
180
160

219+00	220+00	221+00	222+00	223+00	224+00	225+00	226+00
172.5 / 172.56	172.1 / 172.31	171.5 / 171.97	171.0 / 171.46	171.1 / 171.08	170.5 / 170.04	168.3 / 168.12	165.3 / 165.32
172.4 / 172.46	171.8 / 172.14	171.3 / 171.80	171.0 / 171.63	171.0 / 171.29	170.9 / 170.67	169.6 / 169.19	167.0 / 166.83	163.4 / 163.59

PATH:
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Mon, 06/Dec/04 08:13AM
PLOT:
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TAB: TYPICALS

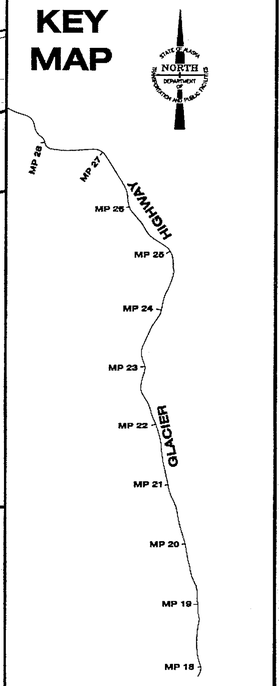
ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

KEY MAP



STATE OF ALASKA
49 TH
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER

12-13-04

DESIGNED BY: J. OSBURN
DRAWN BY: BENNETT/STEVENS

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

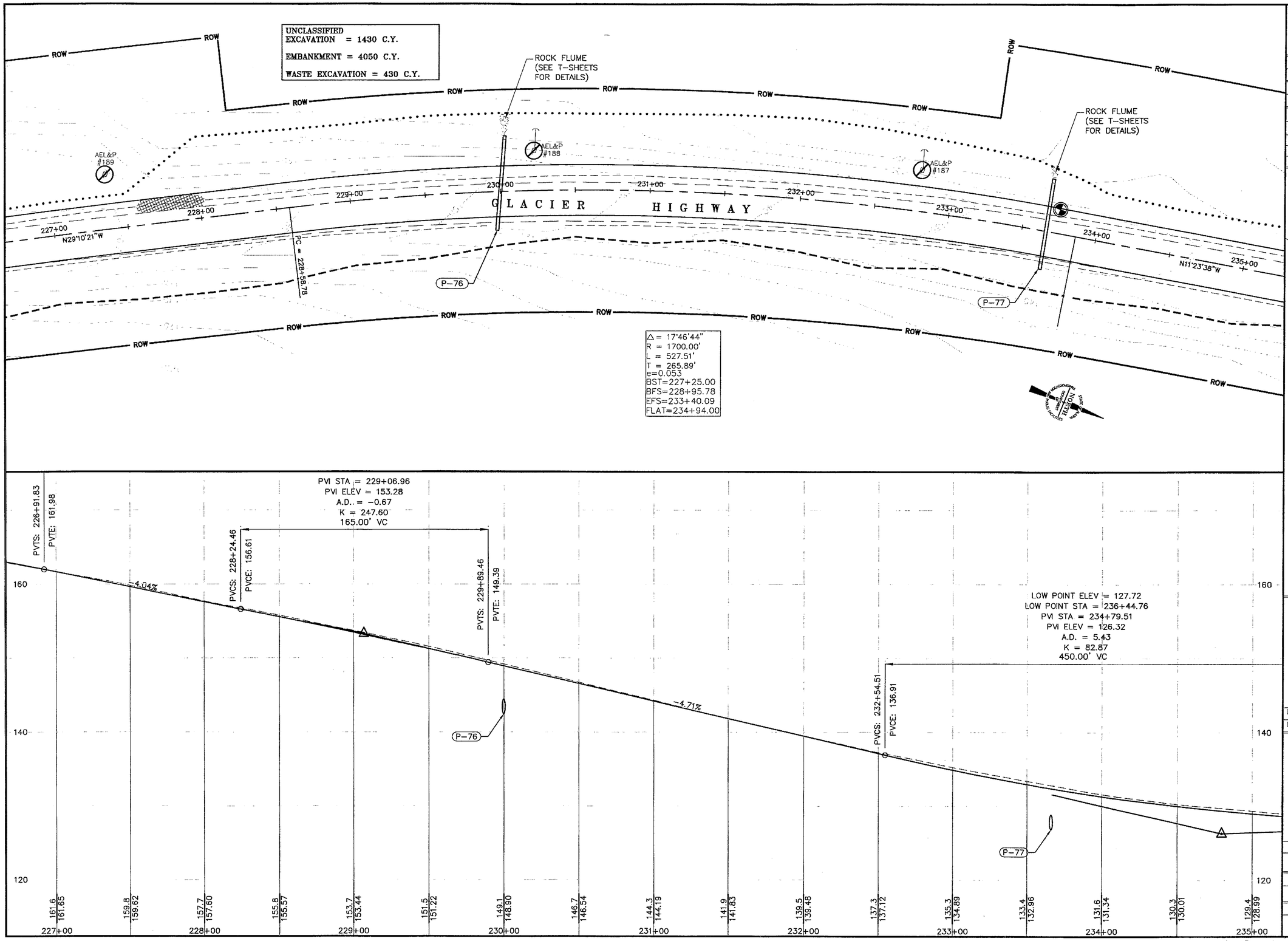
JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - PT. STEPHENS RD. TO AMALGA HARBOR RD.

PLAN & PROFILE SHEET

PROJECT DESIGNATION NUMBER
IM-093-3(24)/68097

STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
F26	146

As-Builts Reviewed By CO Gilbertson 11/06/07



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ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

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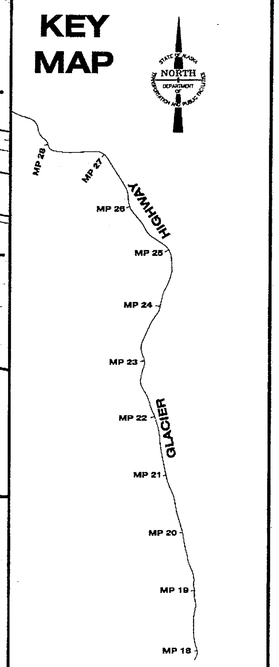

STATE OF ALASKA
49 TH
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
12-13-04

DESIGNED BY: J. OSBURN
DRAWN BY: BENNETT/STEVENS

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

JNU-GLACIER HIGHWAY & TRAILHEAD
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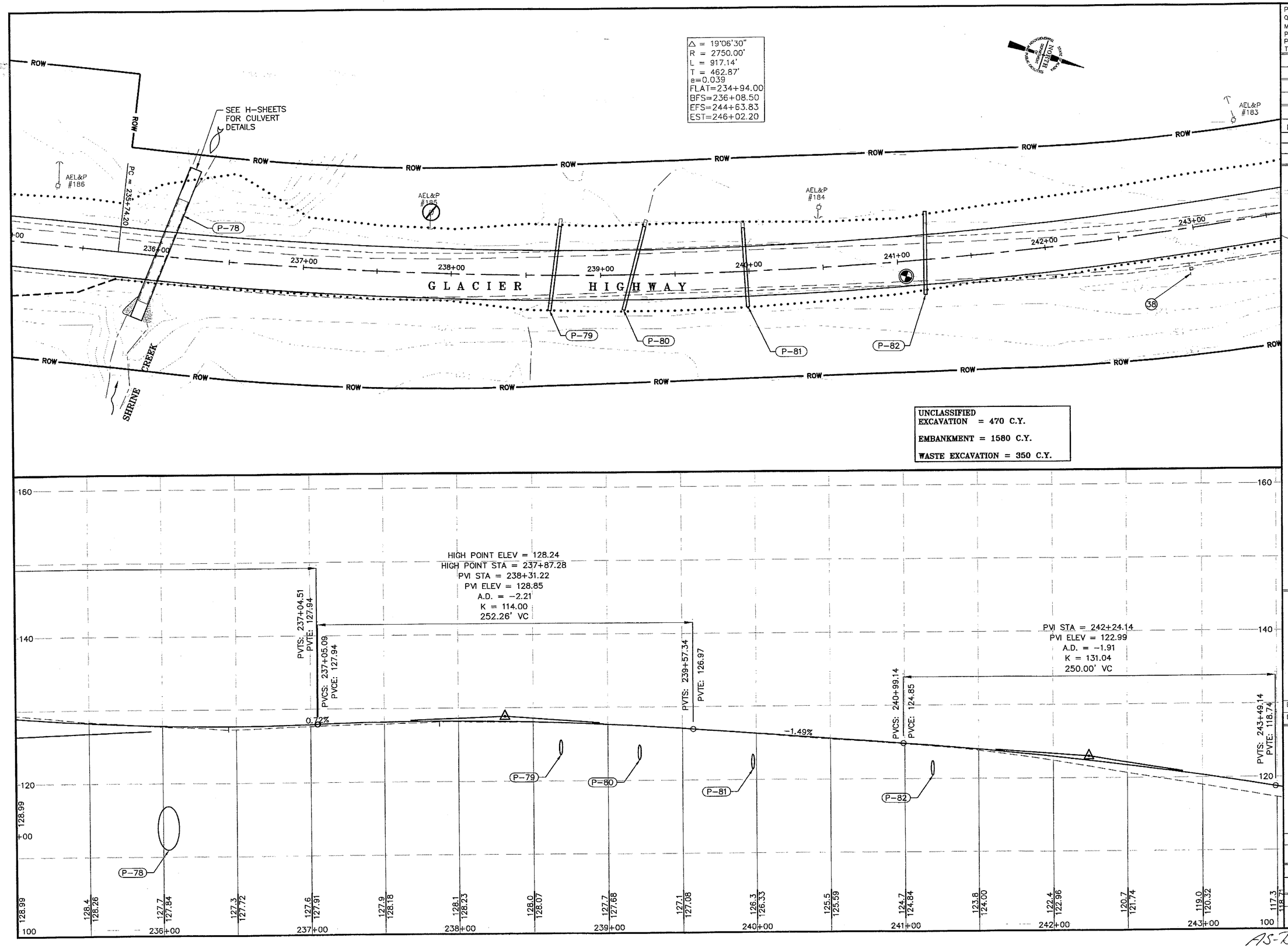
PROJECT DESIGNATION NUMBER	
IM-093-3(24)/68097	
STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
F27	146

AS-Builts Reviewed
By
11/06/07



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ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

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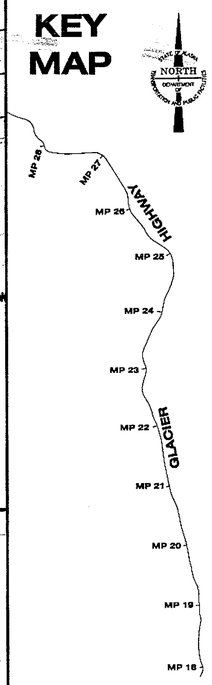

STATE OF ALASKA
49TH
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
12-13-04

DESIGNED BY: J. OSBURN
DRAWN BY: BENNETT/STEVENS

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

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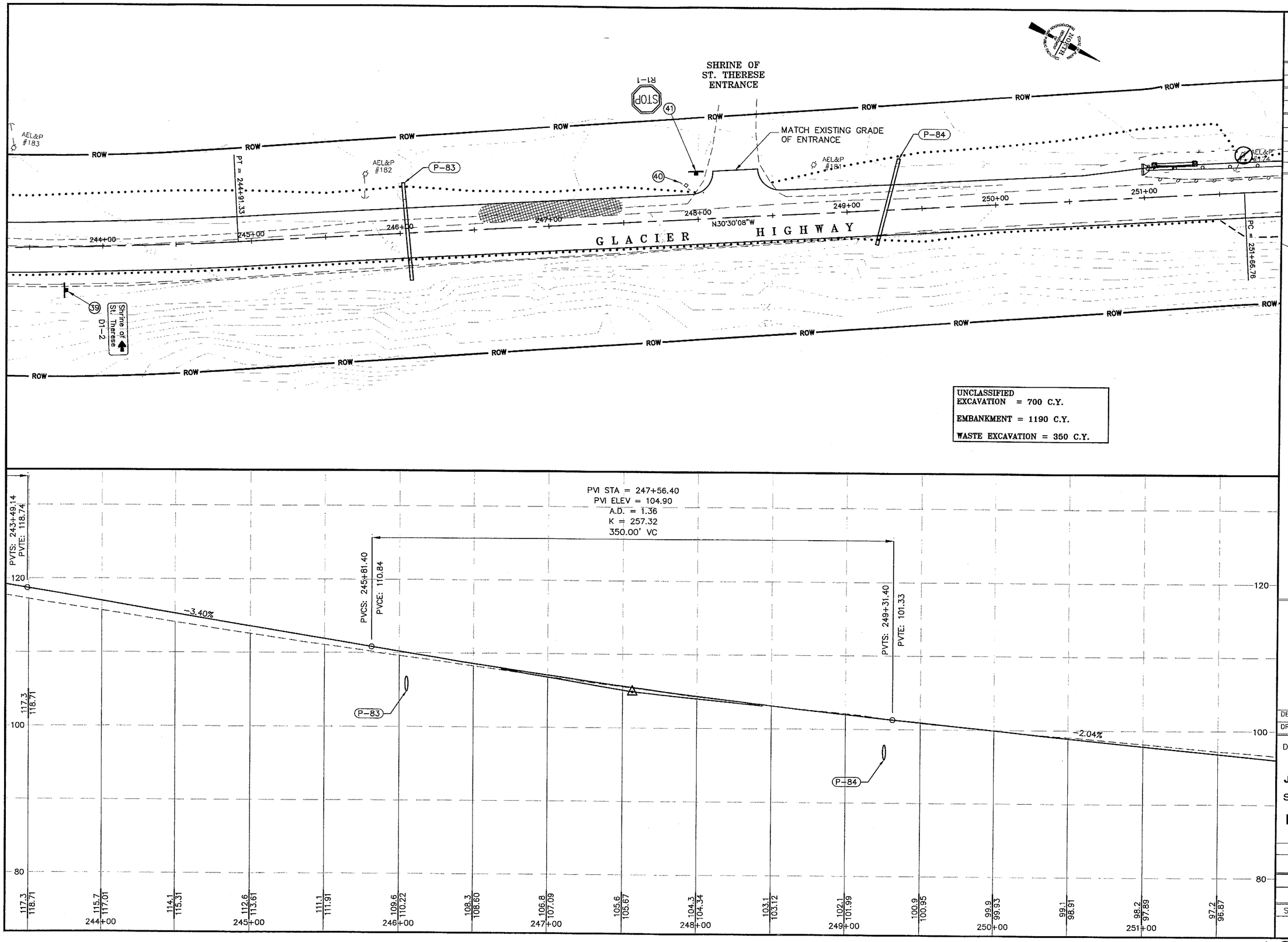
PLAN & PROFILE SHEET

PROJECT DESIGNATION NUMBER	
IM-093-3(24)/68097	
STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
F28	146

As-Builts Reviewed By: [illegible]



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TAB: TYPICALS

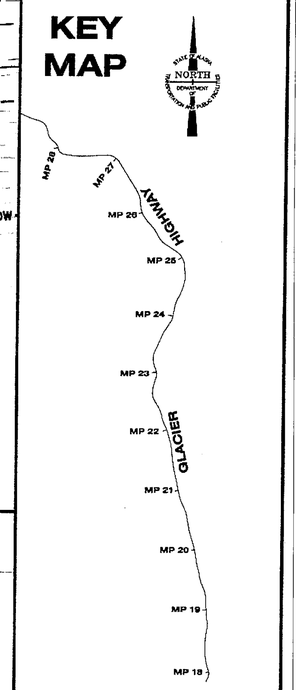
ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

KEY MAP



STATE OF ALASKA
49 TH
Joel D. Osburn
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REGISTERED PROFESSIONAL ENGINEER
12-13-04

DESIGNED BY: J. OSBURN
DRAWN BY: BENNETT/STEVENS

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

JNU-GLACIER HIGHWAY & TRAILHEAD
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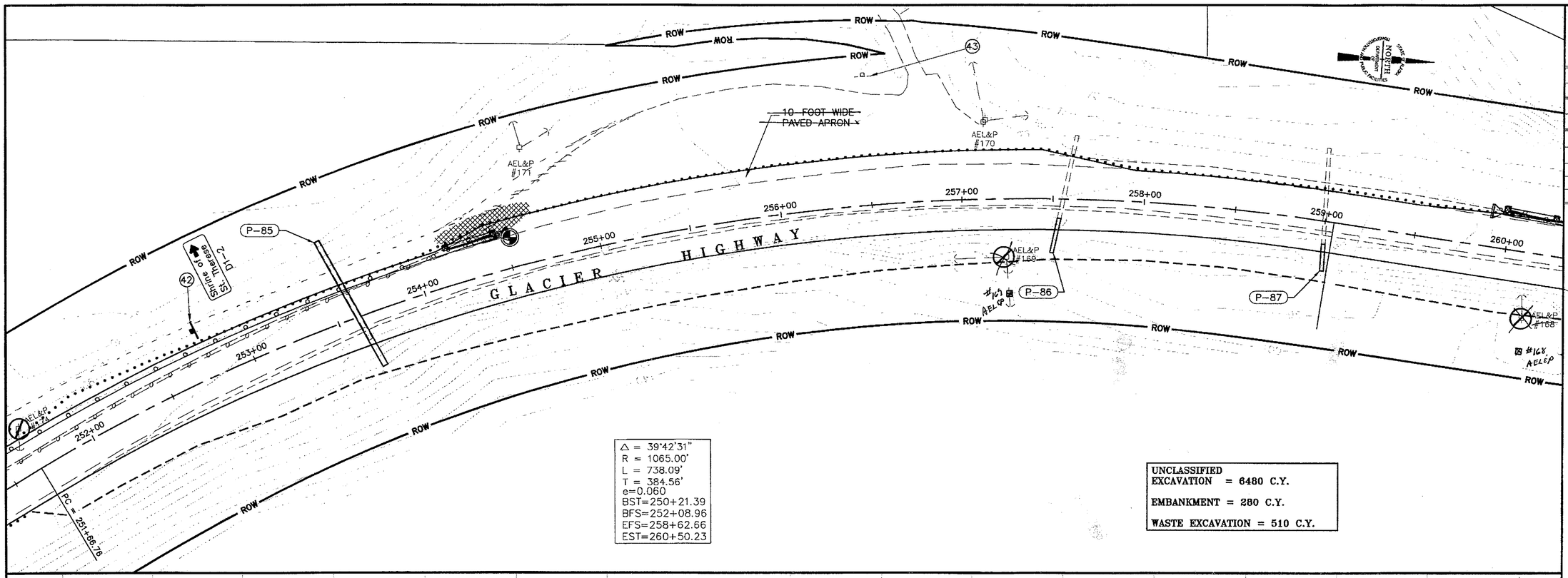
PLAN & PROFILE SHEET

PROJECT DESIGNATION NUMBER	
IM-093-3(24)/68097	
STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
F29	146

As-Builts Reviewed
By
11/24/07



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ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

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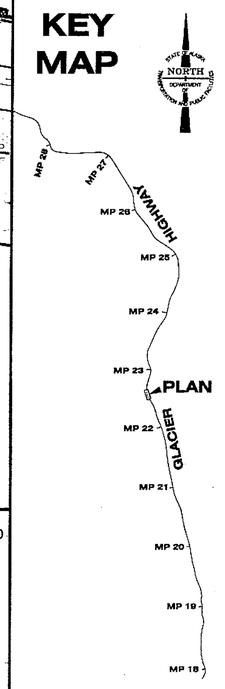

STATE OF ALASKA
49 TH
Joel D. Osburn
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12-13-04

DESIGNED BY: J. OSBURN
DRAWN BY: BENNETT/STEVENS

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

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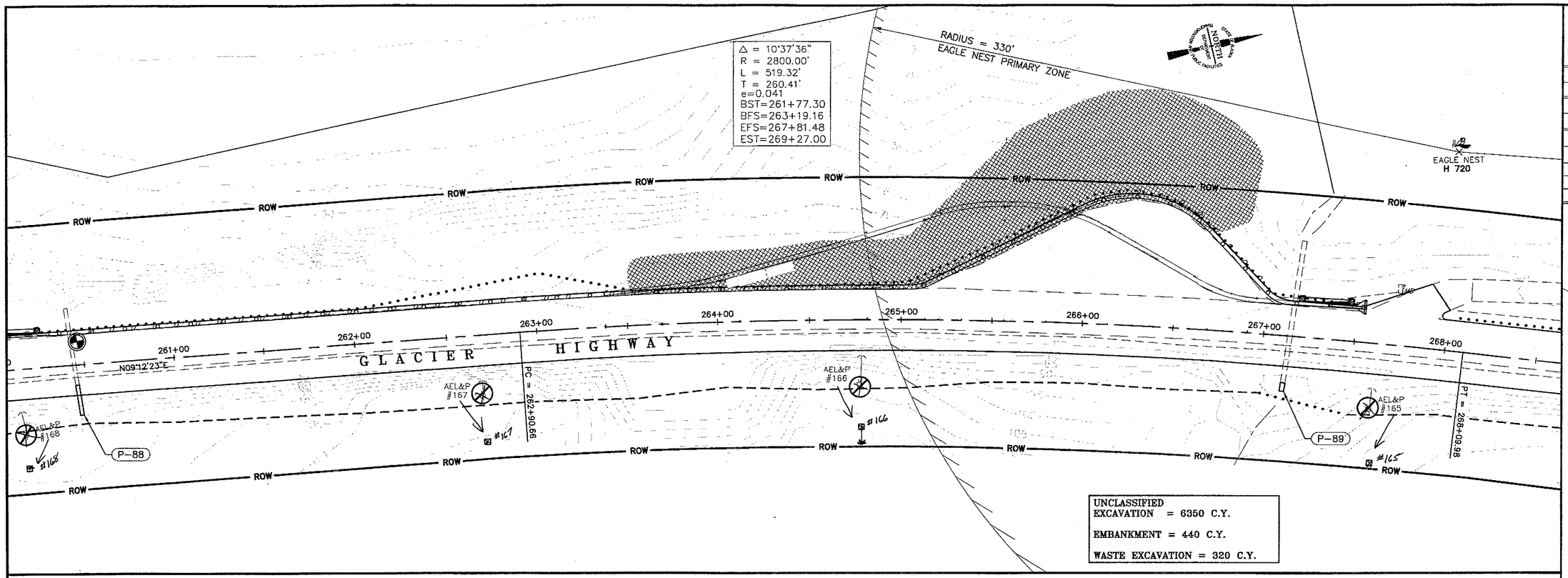
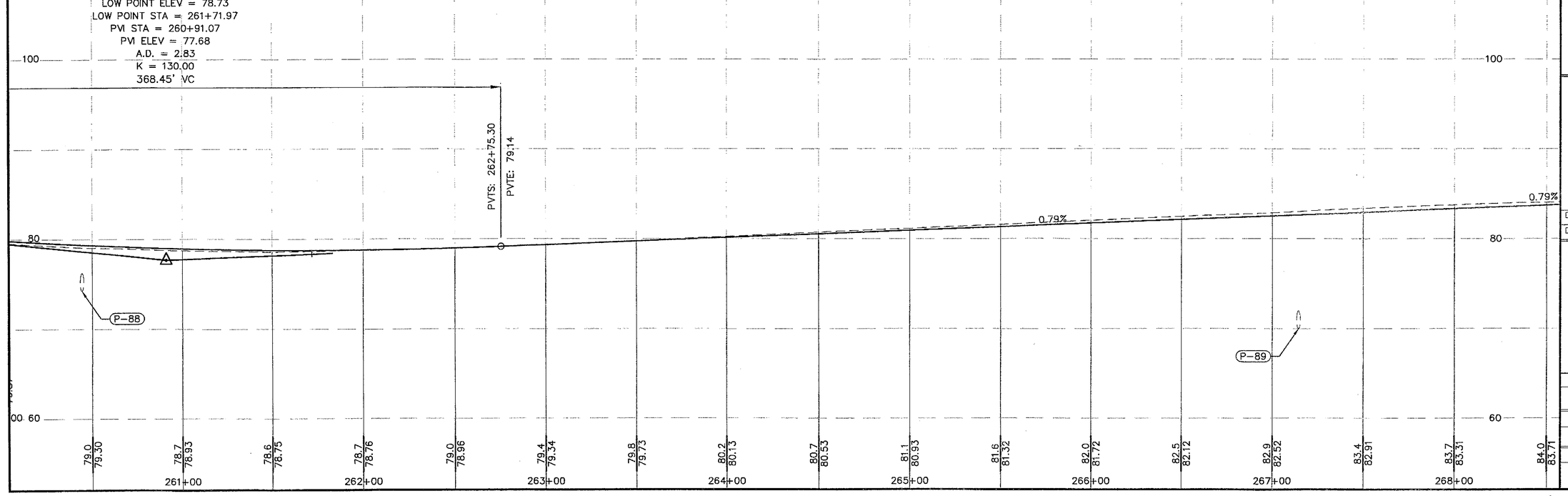
PLAN & PROFILE SHEET

PROJECT DESIGNATION NUMBER	
IM-093-3(24)/68097	
STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
F30	146

As-Builts Reviewed
By Al Gilbreath
1/26/07





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ATTACHMENT NUMBER

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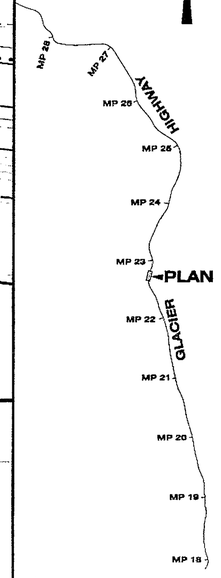
No.	DATE	DESCRIPTION

KEY MAP



STATE OF ALASKA
49 TH
Joel D. Osburn
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REGISTERED PROFESSIONAL ENGINEER
12-13-04

DESIGNED BY: J. OSBURN
DRAWN BY: BENNETT/STEVENS

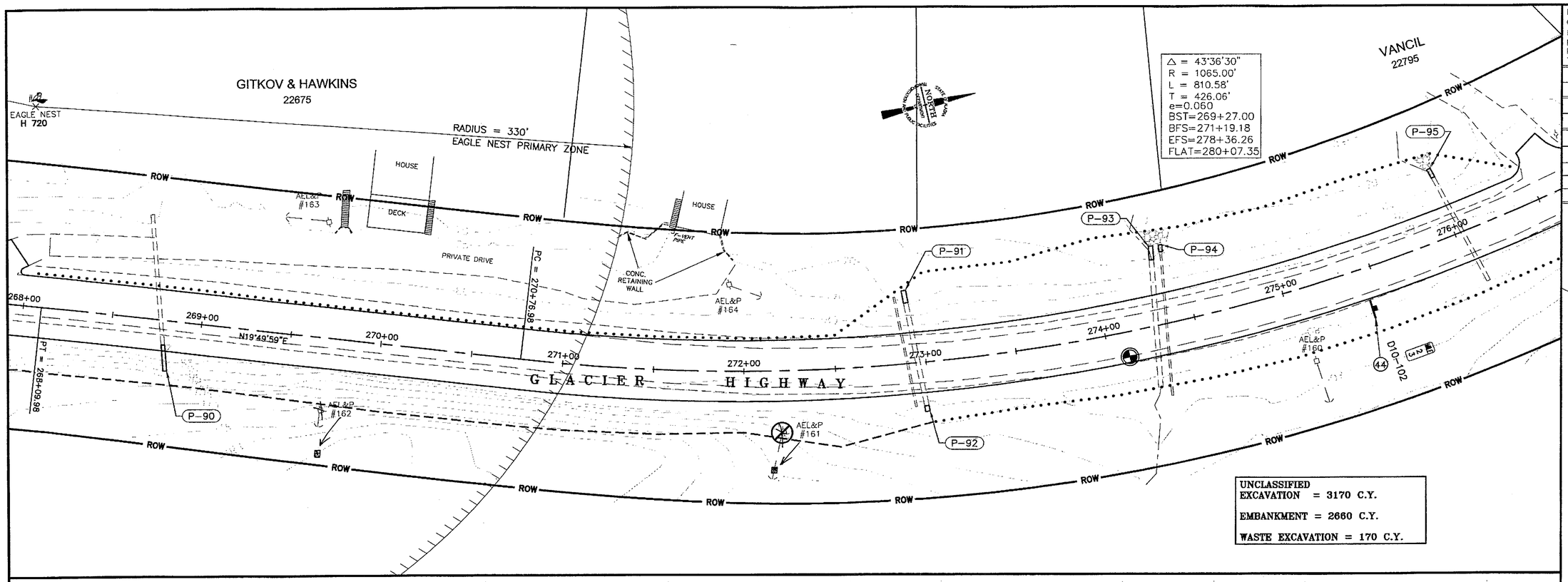
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - PT. STEPHENS RD. TO AMALGA HARBOR RD.

PLAN & PROFILE SHEET

PROJECT DESIGNATION NUMBER	
IM-093-3(24)/68097	
STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
F31	146

As-Builts Reviewed
By AL Gilbreath



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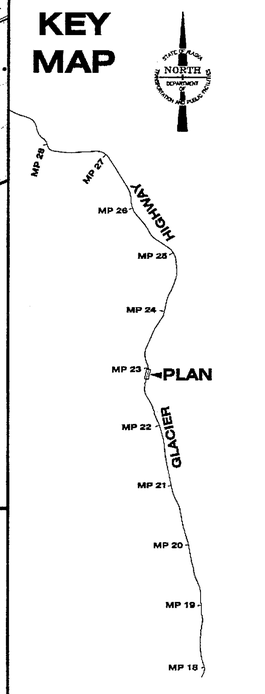
ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

KEY MAP



STATE OF ALASKA
49 TH
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
12-13-04

DESIGNED BY: J. OSBURN
DRAWN BY: BENNETT/STEVENS

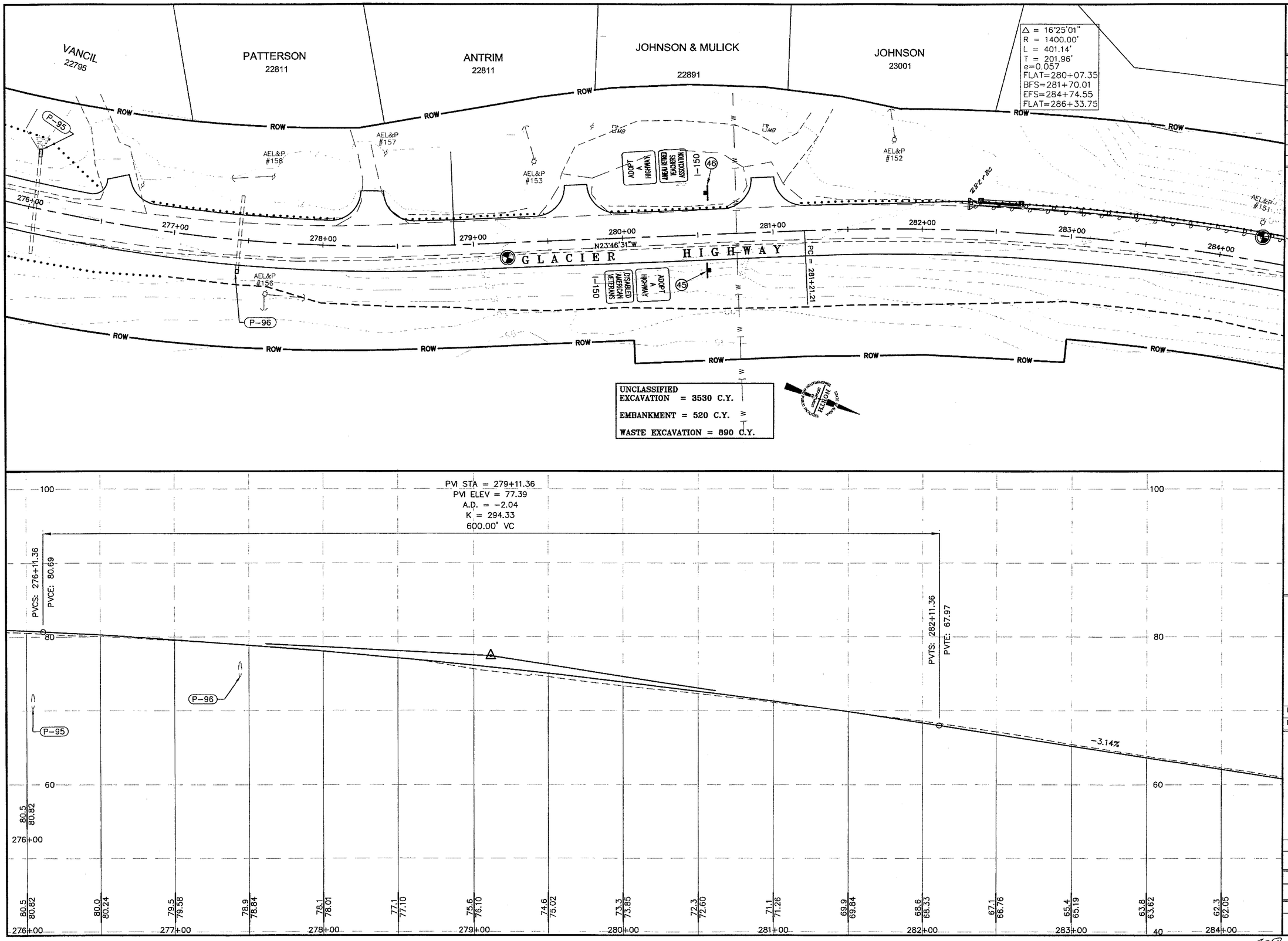
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - PT. STEPHENS RD. TO AMALGA HARBOR RD.

PLAN & PROFILE SHEET

PROJECT DESIGNATION NUMBER	
IM-093-3(24)/68097	
STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
F32	146

As-Builts Reviewed
By [illegible]
1/14/07



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No.	DATE	DESCRIPTION

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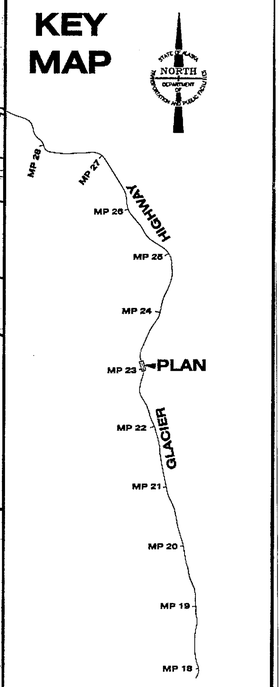

STATE OF ALASKA
49 TH
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
12-13-04

DESIGNED BY: J. OSBURN
DRAWN BY: BENNETT/STEVENS

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

JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - PT. STEPHENS RD. TO AMALGA HARBOR RD.

PLAN & PROFILE SHEET

PROJECT DESIGNATION NUMBER
IM-093-3(24)/68097

STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
F33	146

As-Builts Reviewed
By
11/4/09

UNCLASSIFIED
EXCAVATION = 5720 C.Y.

EMBANKMENT = 220 C.Y.

WASTE EXCAVATION = 1700 C.Y.

JENSEN TRUSTEE
23035

ROW

P-97

P-98

AEL&P #151

AEL&P #150

AEL&P #148

AEL&P #147

Fnd 1/2" I 286+92.5

CMB

284+00

285+00

286+00

287+00

288+00

289+00

290+00

291+00

292+00

G L A C I E R H I G H W A Y

N07°21'29"W

PT = 285+22.35

PC = 287+50.98

△ = 31°03'23"
R = 1125.00'
L = 609.79'
T = 312.59'
e=0.060
FLAT=286+33.75
BFS=288+01.38
EFS=293+18.57
EST=295+06.14

RS-13R

RS-9B

48

47

80
60
40

-3.14%

63.8 63.62
62.3 62.05
60.7 60.48
59.0 58.91
57.3 57.34
55.6 55.77
54.2 54.21
52.5 52.64
50.9 51.07
49.6 49.50
48.0 47.93
46.5 46.36
45.0 44.79
43.5 43.22
41.9 41.85
40.4 40.08

284+00
285+00
286+00
287+00
288+00
289+00
290+00
291+00

PATH:
Q:\Jnu\68096\Planset\Stage1\F_Plan.dwg
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ATTACHMENT NUMBER

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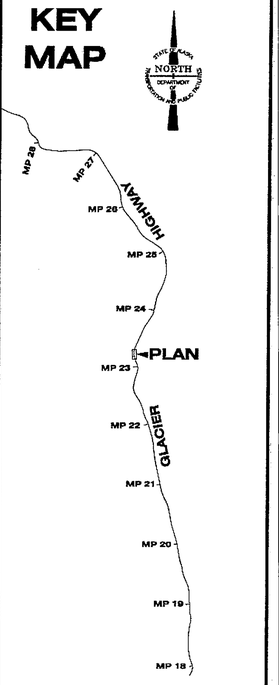

STATE OF ALASKA
49 TH
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER

12-13-04

DESIGNED BY: J. OSBURN

DRAWN BY: BENNETT/STEVENS

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

JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - PT. STEPHENS RD. TO AMALGA HARBOR RD.

PLAN & PROFILE SHEET

PROJECT DESIGNATION NUMBER	
IM-093-3(24)/68097	
STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
F34	146

As-Builts Reviewed
By

UNCLASSIFIED
EXCAVATION = 280 C.Y.

EMBANKMENT = 1380 C.Y.

WASTE EXCAVATION = 120 C.Y.

ROW

AEL&P #147

AEL&P #146

AEL&P #145

AEL&P #144

P-99a

P-99b

P-100

Rock Wall

292+00 293+00 294+00 295+00 296+00 297+00 298+00 299+00 300

GLACIER HIGHWAY

PT = 293+60.77

SEE G-SHEETS FOR TRAILHEAD LAYOUT DETAILS

PETERSON LAKE TRAIL PARKING AREA

REMOVE GUARDRAIL

REMOVE SIGN, SALVAGE SIGN LEGEND

48 RS-13R TRAIL RS-68 47 49 50

LOW POINT ELEV = 28.52
LOW POINT STA = 296+97.05
PVI STA = 294+89.68
PVI ELEV = 27.85
A.D. = 3.43
K = 145.72
500.00' VC

BEGIN 2.5% NC
(END AT E.O.P.)

PVCS: 292+39.68
PVCE: 35.70

PVTS: 297+39.68
PVTE: 28.58

40 -3.14% 0.29% 20

39.0	37.6	36.2	34.8	33.3	31.5	29.9	29.1	28.6	28.1	27.6	27.3	27.4	27.2	27.6	28.2	28.3
38.51	36.94	35.38	33.93	32.65	31.55	30.61	29.85	29.26	28.84	28.59	28.52	28.61	28.76	28.90	29.05	29.20

292+00 293+00 294+00 295+00 296+00 297+00 298+00 299+00 30

PATH:
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Mon, 06/Dec/04 08:17AM
PLOT:
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ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

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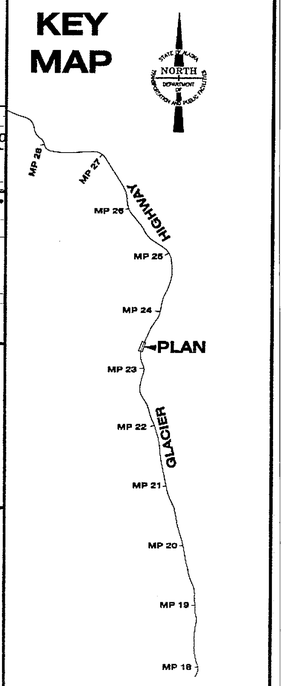

STATE OF ALASKA 49TH
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
12-13-04

DESIGNED BY: J. OSBURN
DRAWN BY: BENNETT/STEVENS

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

JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - PT. STEPHENS RD. TO AMALGA HARBOR RD.

PLAN & PROFILE SHEET

PROJECT DESIGNATION NUMBER
IM-093-3(24)/68097

STATE	YEAR
ALASKA	2004

SHEET NUMBER	TOTAL SHEETS
F35	146

As-Builts Reviewed by
11/29/07

UNCLASSIFIED
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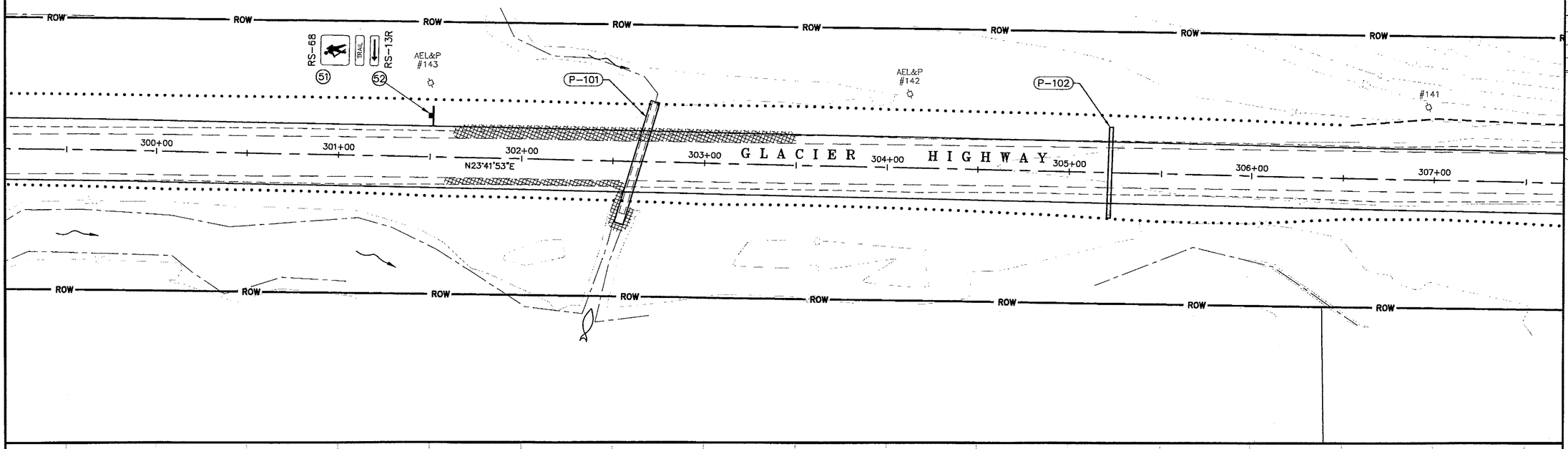
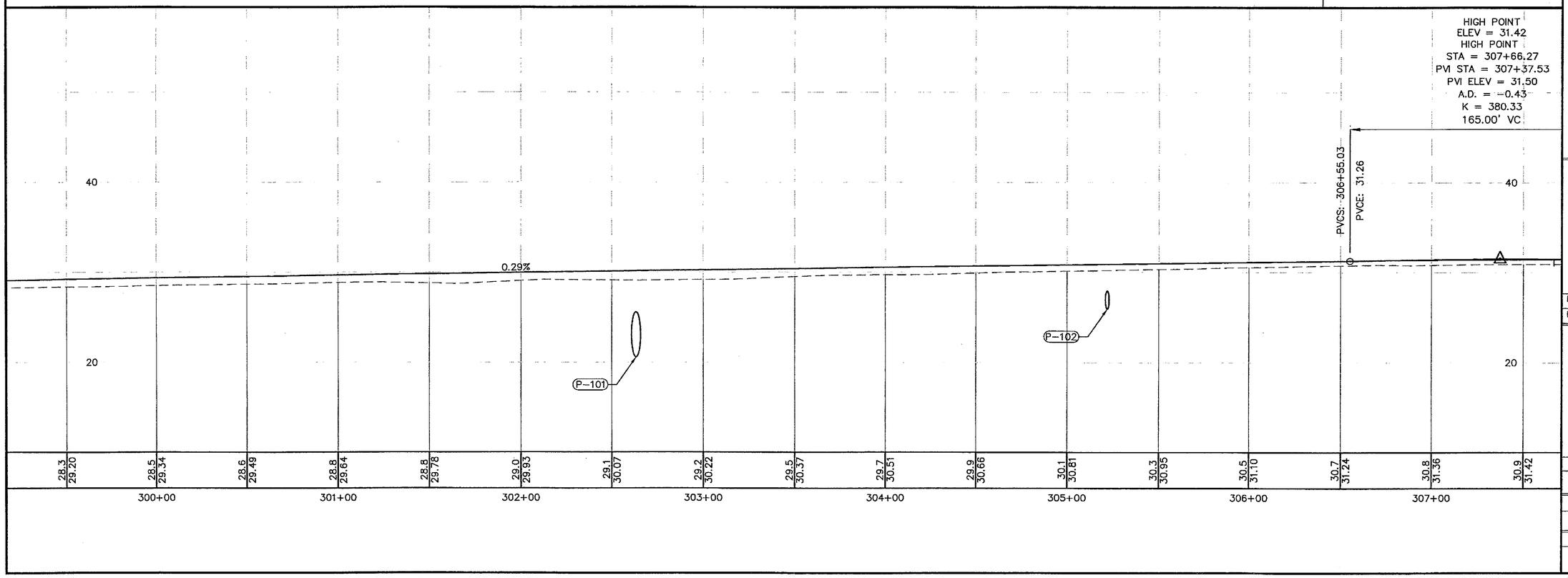
EMBANKMENT = 820 C.Y.

WASTE EXCAVATION = 60 C.Y.





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Mon, 06/Dec/04 08:17AM
PLOT:
PSPACE 1=1(F) OR MSPACE 1=1(F)
TAB: TYPICALS

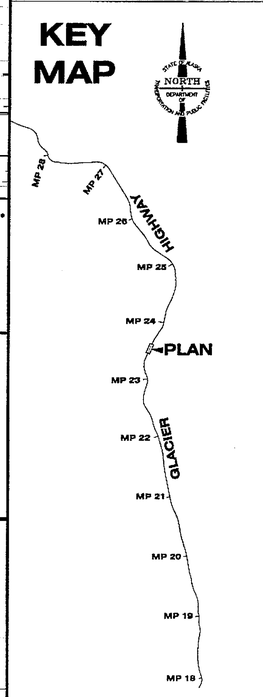
ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

KEY MAP



STATE OF ALASKA
49 TH
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
12-13-04

DESIGNED BY: J. OSBURN
DRAWN BY: BENNETT/STEVENS

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

JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - PT. STEPHENS RD. TO AMALGA HARBOR RD.

PLAN & PROFILE SHEET

PROJECT DESIGNATION NUMBER
IM-093-3(24)/68097

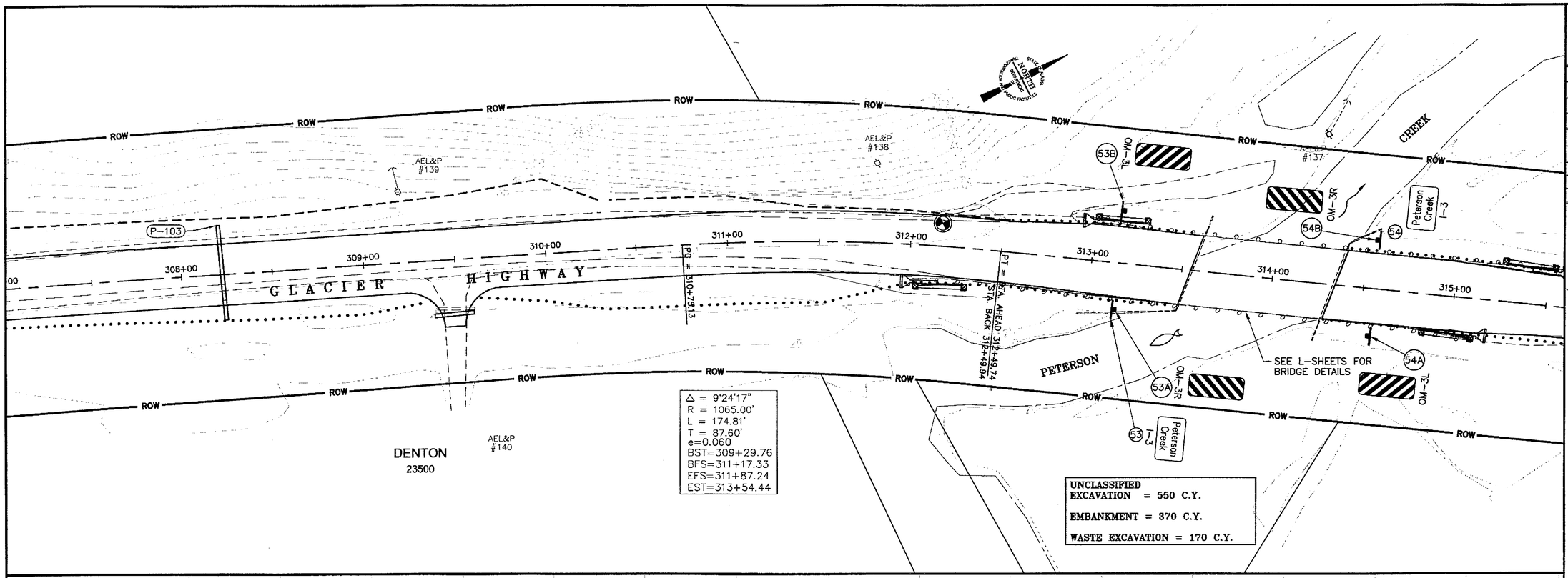
STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
F36	146

As-Builts Reviewed
By
1/06/07

PATH:
Q:\jnu\68096\Planset\Stage1\F_Plan.dwg
Thu, 09/Dec/04 11:14AM
PLOT:
PSPACE 1=1(F) OR MSPACE 1=1(F)
TAB: TYPICALS

ADDENDUM NUMBER
ATTACHMENT NUMBER
RECORD OF REVISIONS

No.	DATE	DESCRIPTION



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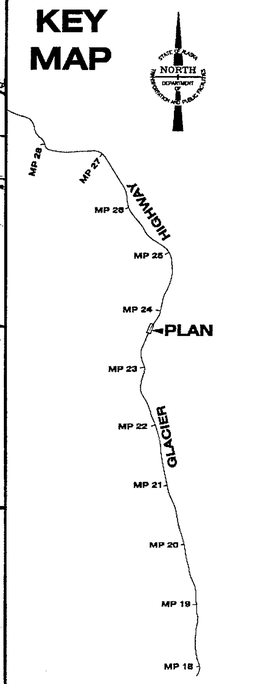
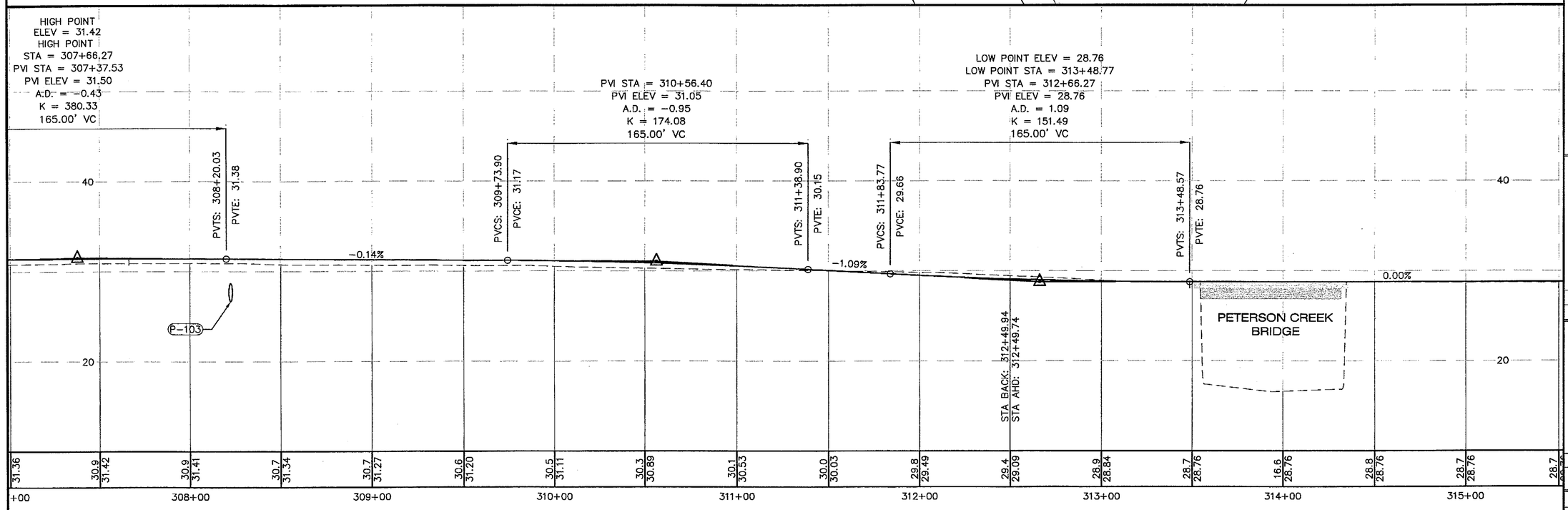




DESIGNED BY:	J. OSBURN
DRAWN BY:	BENNETT/STEVENS

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

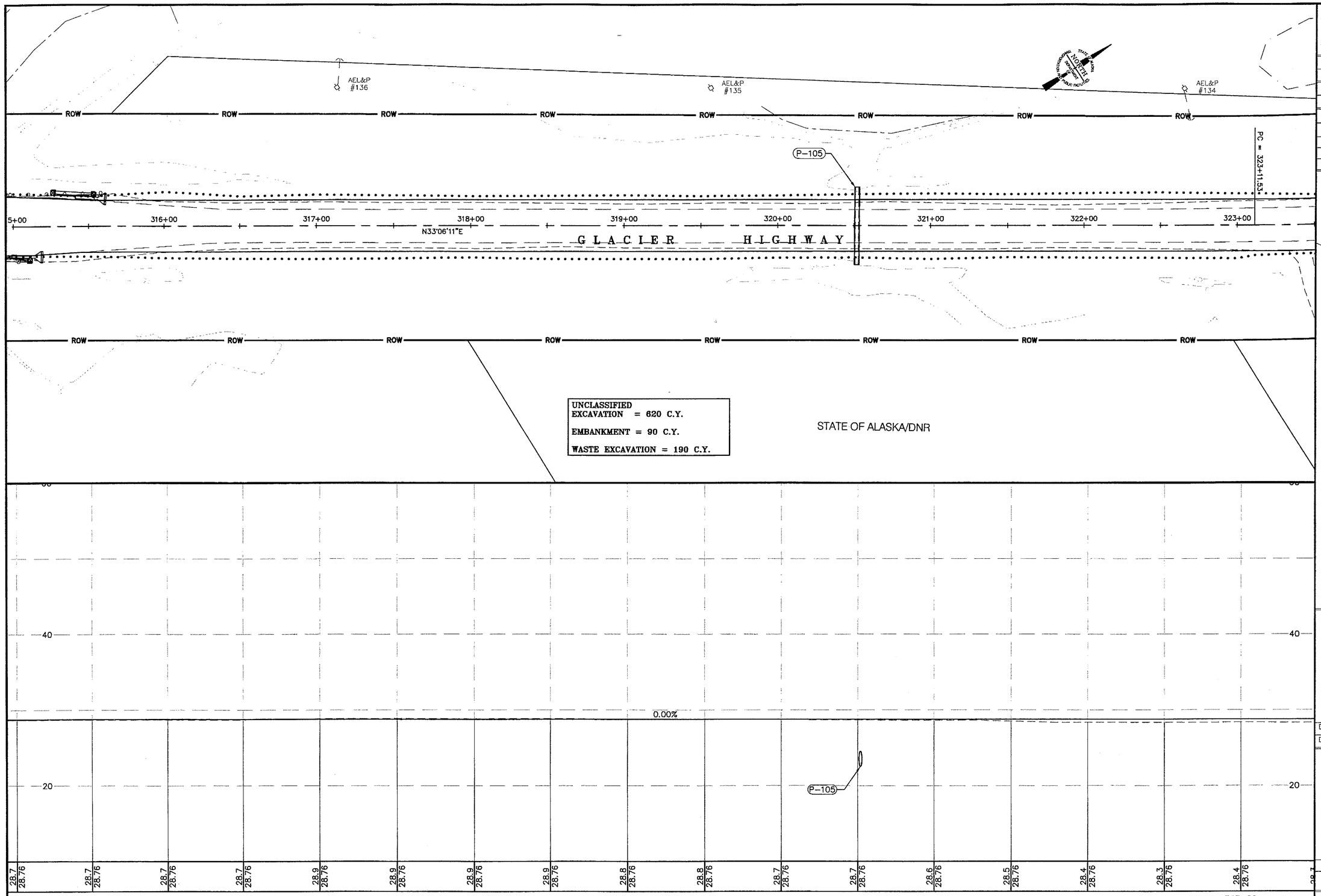
JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - PT. STEPHENS RD. TO AMALGA HARBOR RD.

PLAN & PROFILE SHEET

PROJECT DESIGNATION NUMBER
IM-093-3(24)/68097

STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
F37	146

As-Builts Reviewed By CA Bennett 11/22/07



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TAB: TYPICALS

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

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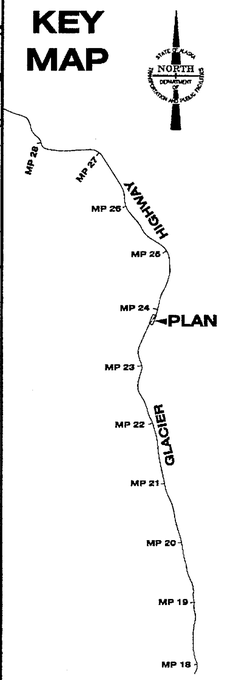


STATE OF ALASKA
49 TH
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
12-13-04

DESIGNED BY: J. OSBURN
DRAWN BY: BENNETT/STEVENS

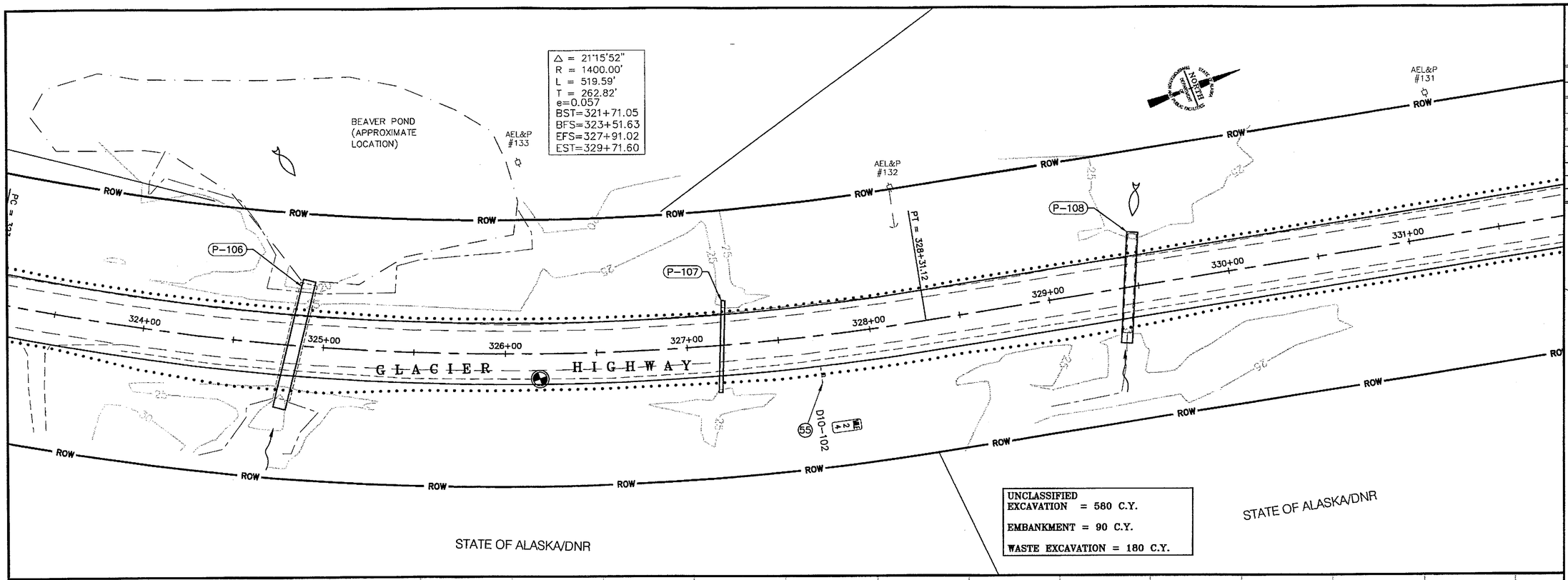
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - PT. STEPHENS RD. TO AMALGA HARBOR RD.

PLAN & PROFILE SHEET

PROJECT DESIGNATION NUMBER	
IM-093-3(24)/68097	
STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
F38	146

As-Builts Reviewed
By CM Gilbreath
4/26/07



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ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

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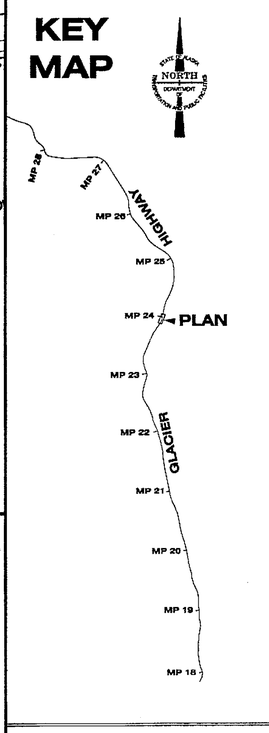


STATE OF ALASKA
49 TH
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
12-13-04

DESIGNED BY: J. OSBURN
DRAWN BY: BENNETT/STEVENS

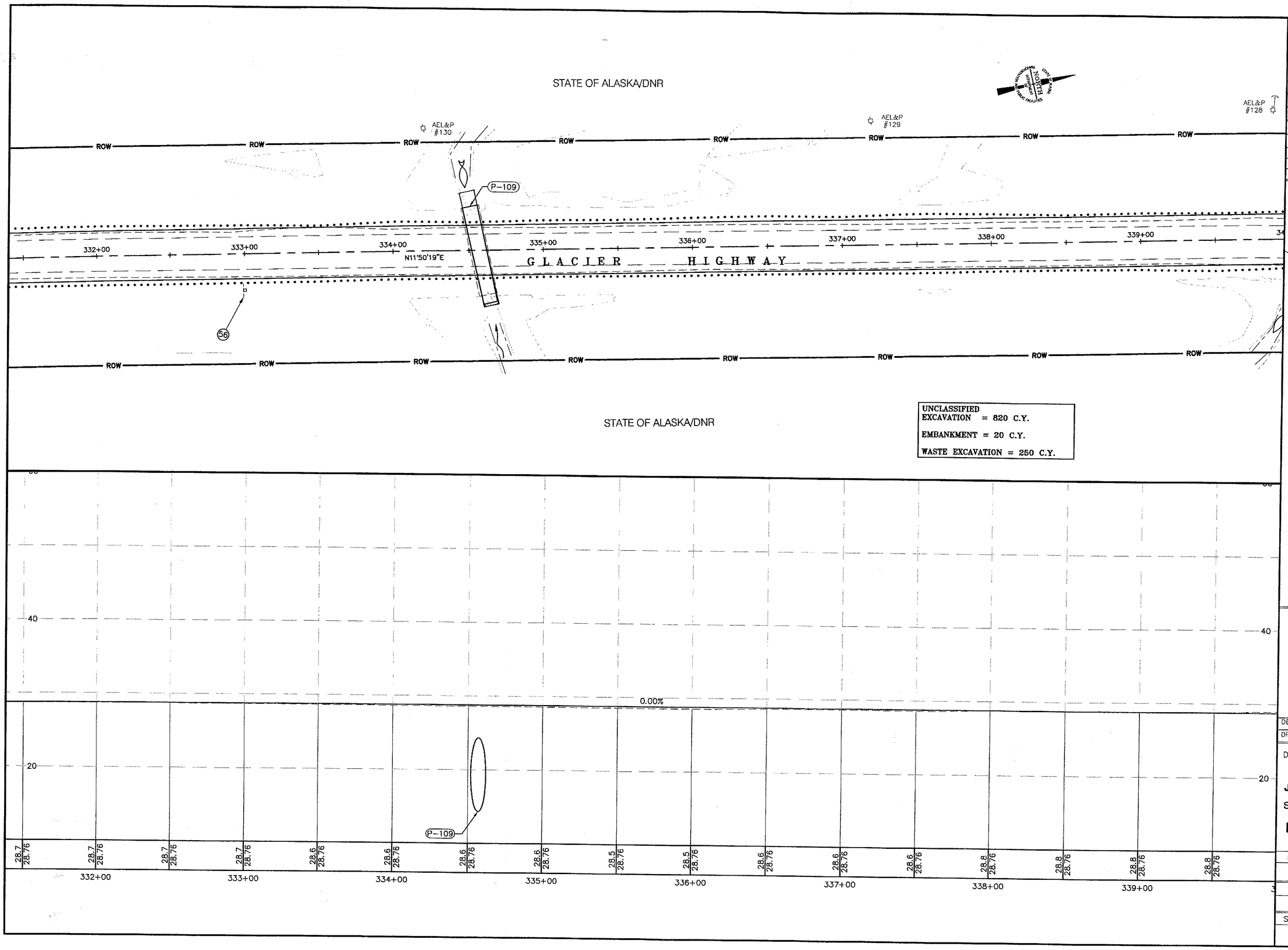
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING
SERVICES DIVISION

JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - PT. STEPHENS RD. TO AMALGA HARBOR RD.

PLAN & PROFILE SHEET

PROJECT DESIGNATION NUMBER	
IM-093-3(24)/68097	
STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
F39	146

As-Builts Reviewed
By Al Gilbreath
4/4/07



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ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

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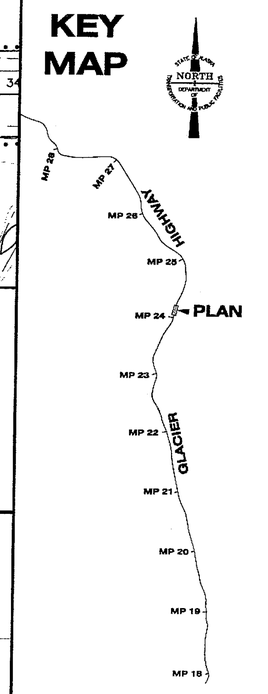

STATE OF ALASKA
49 TH
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
12-13-04

DESIGNED BY: J. OSBURN
DRAWN BY: BENNETT/STEVENS

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

JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - PT. STEPHENS RD. TO AMALGA HARBOR RD.

PLAN & PROFILE SHEET

PROJECT DESIGNATION NUMBER	
IM-093-3(24)/68097	
STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
F40	146

As-Builts Reviewed by
7/14/07

STATE OF ALASKA/DNR

AEL&P #127

AEL&P #92

AEL&P #85

BYFORD
24325

56" Bevelled End

ROW

SPEED LIMIT 55 R2-1 (58)

P-111

P-110

P-112

341+00 342+00 343+00 344+00 345+00 346+00 347+00 348+00 340+00

G L A C I E R H I G H W A Y

PT = 343+27.94

△ = 16°46'23"
R = 1300.00'
L = 380.57'
T = 191.66'
e=0.058
BST=338+55.31
BFS=340+38.17
EFS=343+37.14
EST=345+20.00

(57) D1-2 Amalga Harbor

(60) RS-13R RW-080

(59)

"A"-LINE
(SEE G-SHEETS FOR INTERSECTION LAYOUTS)

INSTALL NEW LUMINAIRE #6

ADOPT A HIGHWAY

DISABLED AMERICAN VETERANS

I-150 (62)

R1-1 STOP (63)

ADOPT A HIGHWAY SAGA I-150 (64)

END TEMPORARY CONNECTION STA. 348+00

AMALGA HARBOR RD.

N28°36'42"E

2" RMC

INSTALL NEW LUMINAIRE #7

(61) STOP R1-1

CL&P #82

Power Disconnect

BEGIN TEMPORARY CONNECTION STA. 347+50

**E.O.P.
STA. "0" 348+00
MATCH EXISTING**

UNCLASSIFIED EXCAVATION = 940 C.Y.

EMBANKMENT = 10 C.Y.

WASTE EXCAVATION = 290 C.Y.

LOW POINT ELEV = 28.76
LOW POINT STA = 342+89.46
PVI STA = 343+64.46
PVI ELEV = 28.76
A.D. = 0.24
K = 634.99
150.00' VC

PVCS: 342+89.46
PVCE: 28.76
PVTS: 344+39.46
PVTE: 28.94

END 2.5% NC TRANSITION TO EXISTING CROSSLOPE

0.00% 0.24%

40 20

P-110 P-111 P-112

340+00	341+00	342+00	343+00	344+00	345+00	346+00	347+00	348+00
29.0 28.76	29.0 28.76	29.0 28.76	29.1 28.76	29.2 28.76	29.2 28.76	29.1 28.76	29.0 28.79	29.0 28.86
29.1 28.97	29.1 29.08	29.3 29.20	29.6 29.32	29.6 29.44	29.8 29.56	29.8 29.67	29.8 29.79	

PATH:
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TAB: TYPICALS

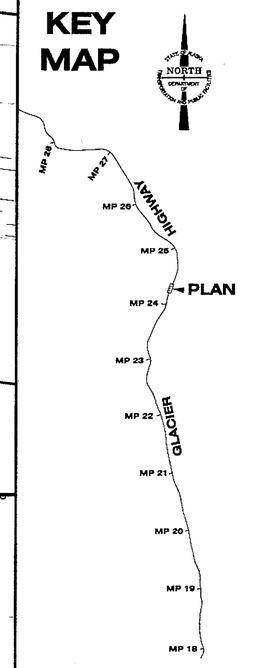
ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

KEY MAP



STATE OF ALASKA
49 TH
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
12-15-04

DESIGNED BY: J. OSBURN
DRAWN BY: BENNETT/STEVENS

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

JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - PT. STEPHENS RD. TO AMALGA HARBOR RD.

PLAN & PROFILE SHEET

PROJECT DESIGNATION NUMBER
IM-093-3(24)/68097

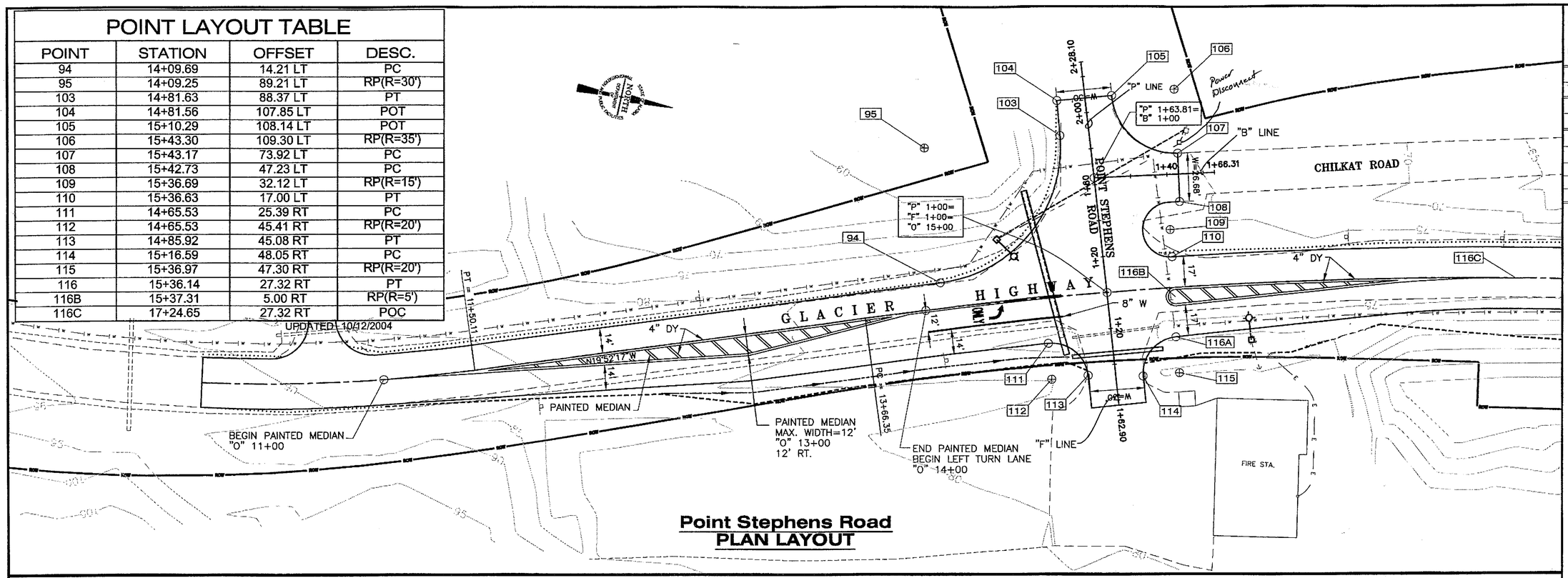
STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
F41	146

AS-Builts Reviewed by AWilliams 11/04/09

POINT LAYOUT TABLE

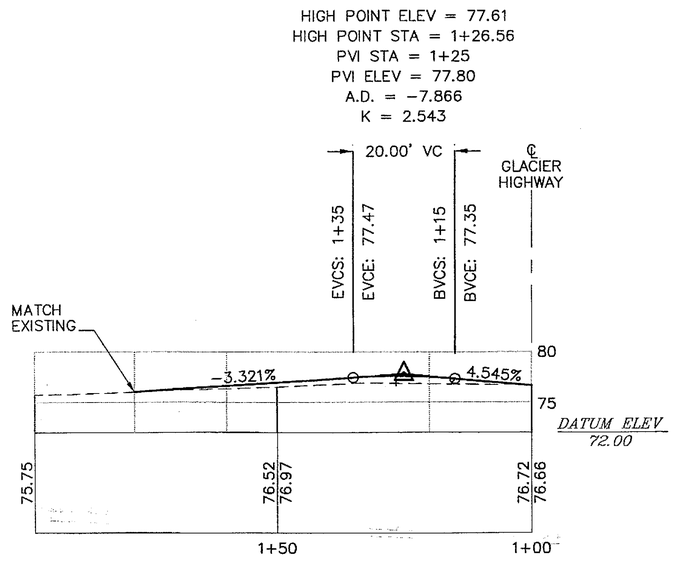
POINT	STATION	OFFSET	DESC.
94	14+09.69	14.21 LT	PC
95	14+09.25	89.21 LT	RP(R=30')
103	14+81.63	88.37 LT	PT
104	14+81.56	107.85 LT	POT
105	15+10.29	108.14 LT	POT
106	15+43.30	109.30 LT	RP(R=35')
107	15+43.17	73.92 LT	PC
108	15+42.73	47.23 LT	PC
109	15+36.69	32.12 LT	RP(R=15')
110	15+36.63	17.00 LT	PT
111	14+65.53	25.39 RT	PC
112	14+65.53	45.41 RT	RP(R=20')
113	14+85.92	45.08 RT	PT
114	15+16.59	48.05 RT	PC
115	15+36.97	47.30 RT	RP(R=20')
116	15+36.14	27.32 RT	PT
116B	15+37.31	5.00 RT	RP(R=5')
116C	17+24.65	27.32 RT	POC

UPDATED 10/12/2004

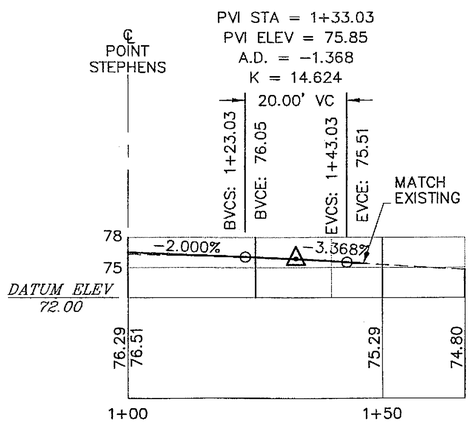


Point Stephens Road
PLAN LAYOUT

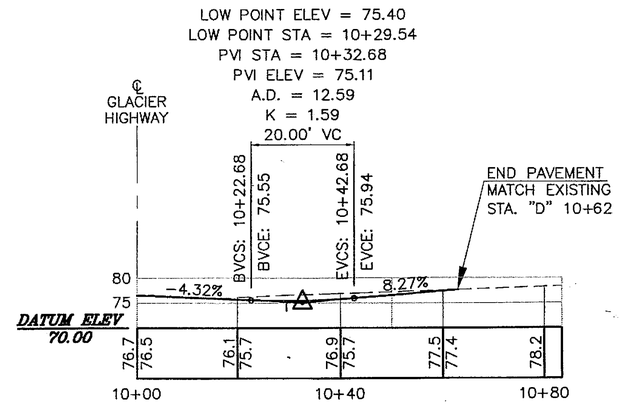
NOTE: SEE A–SHEETS FOR ALIGNMENT DATA.



Pt. Stephens Road
("P"-Line) Profile



Chilkat Road
("B"-Line) Profile



Fire Station Driveway
("F"-Line) Profile

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TAB: TYPICALS

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - TEE HARBOR TO AMALGA HARBOR ROAD
IM-093-3(24) ~ 68097

Intersection Sheets

STATE OF ALASKA
49 TH
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
12-15-04

DESIGNED BY: J. OSBURN
DRAWN BY: BENNETT/STEVENS

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

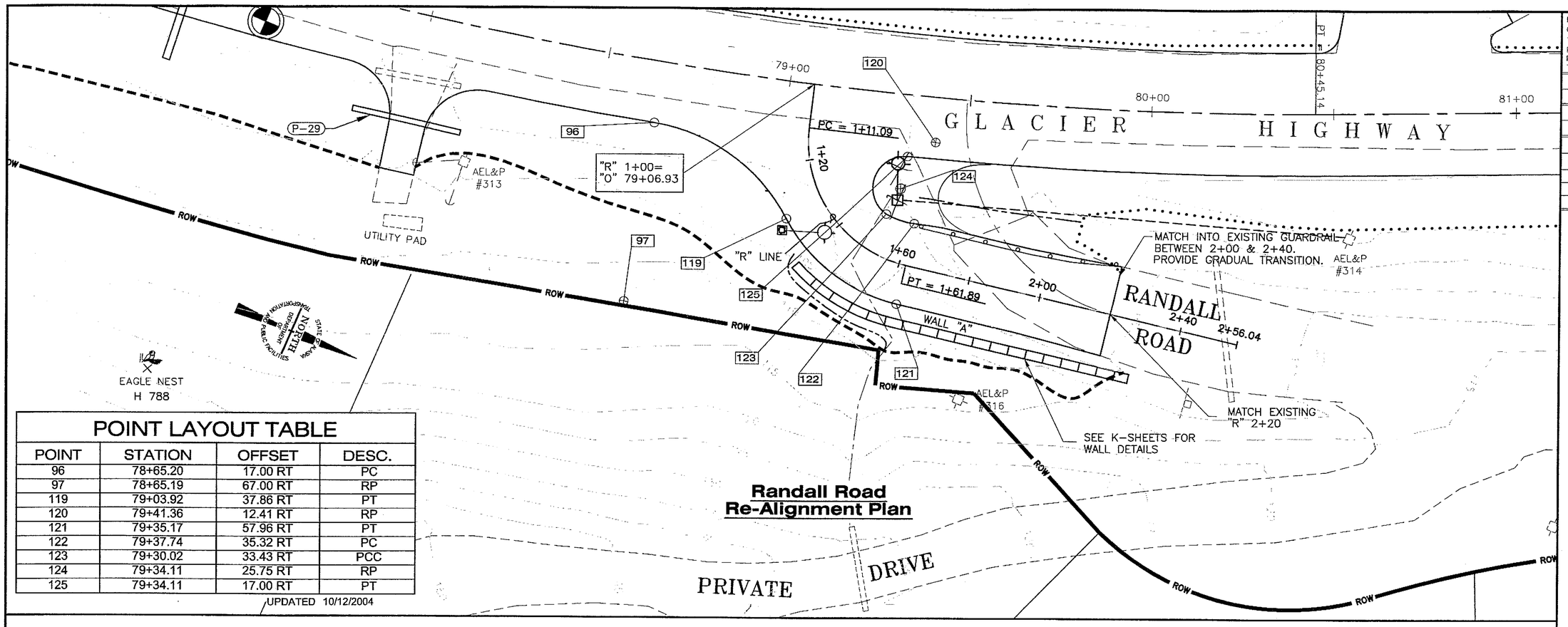
JNU-GLACIER HIGHWAY & TRAILHEAD

Intersection Sheets

PROJECT DESIGNATION NUMBER
IM-093-3(24)/68097

STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
G1	146

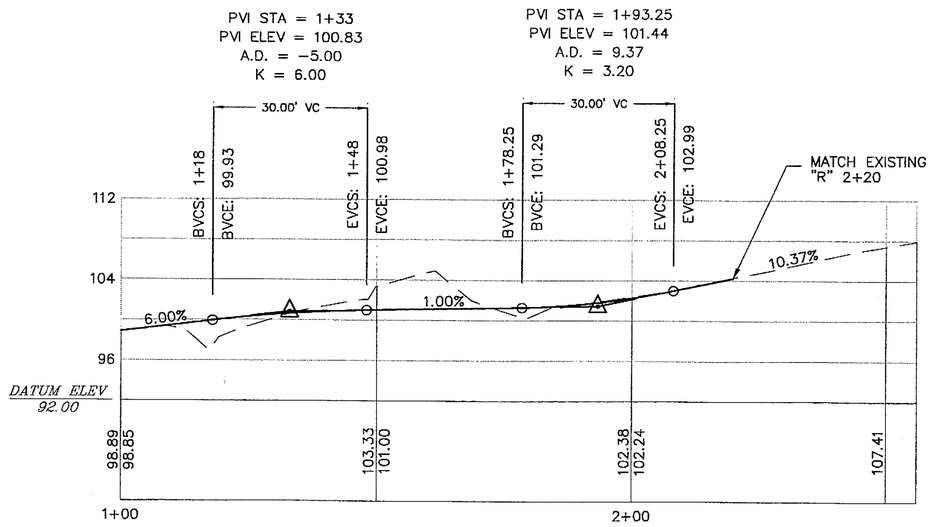
Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE _____ Date 1/14/07



POINT LAYOUT TABLE			
POINT	STATION	OFFSET	DESC.
96	78+65.20	17.00 RT	PC
97	78+65.19	67.00 RT	RP
119	79+03.92	37.86 RT	PT
120	79+41.36	12.41 RT	RP
121	79+35.17	57.96 RT	PT
122	79+37.74	35.32 RT	PC
123	79+30.02	33.43 RT	PCC
124	79+34.11	25.75 RT	RP
125	79+34.11	17.00 RT	PT

UPDATED 10/12/2004

Randall Road
Re-Alignment Plan



Randall Road
Re-Alignment Profile

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TAB: TYPICALS

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - TEE HARBOR TO AMALGA HARBOR ROAD
IM-093-3(24) ~ 68097

Randall Road
Re-Alignment Sheet

STATE OF ALASKA 49TH
Joel D. Osburn CE-11014
REGISTERED PROFESSIONAL ENGINEER
12-13-04

DESIGNED BY: J. OSBURN
DRAWN BY: BENNETT/STEVENS

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

JNU-GLACIER HIGHWAY & TRAILHEAD

Randall Road Re-Alignment Sheet

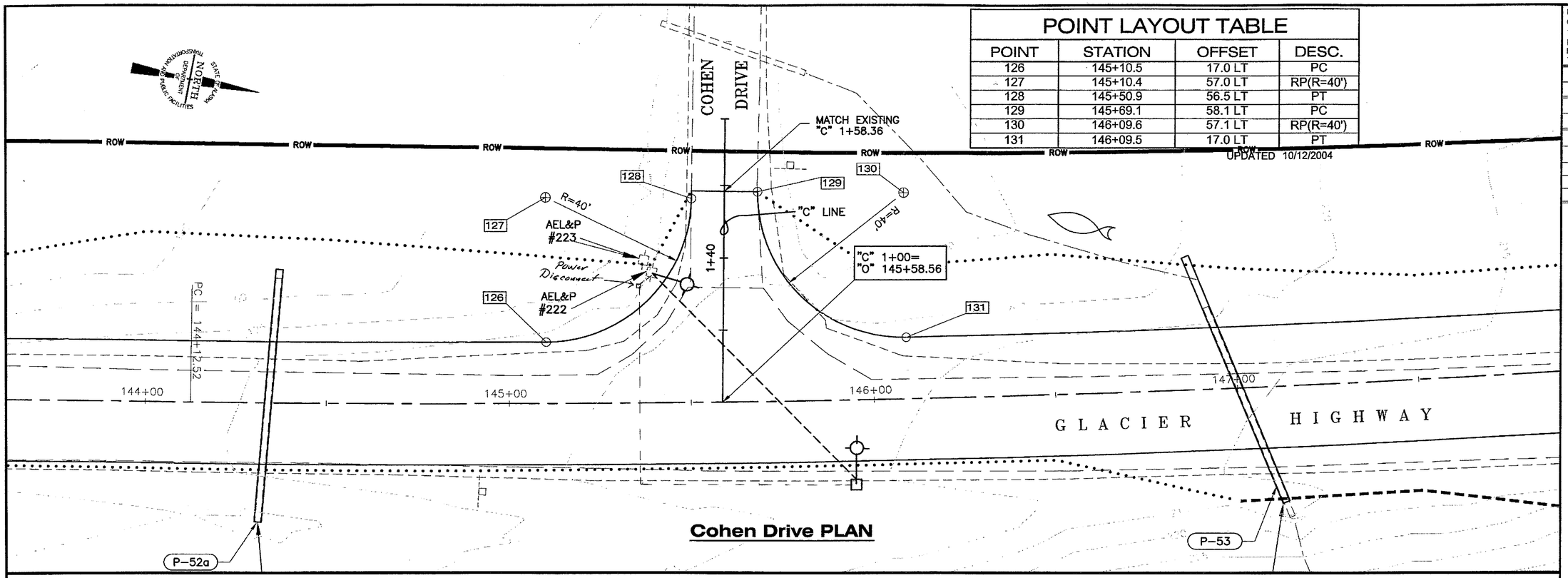
PROJECT DESIGNATION NUMBER	
IM-093-3(24)/68097	
STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
G2	146

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 7/19/07

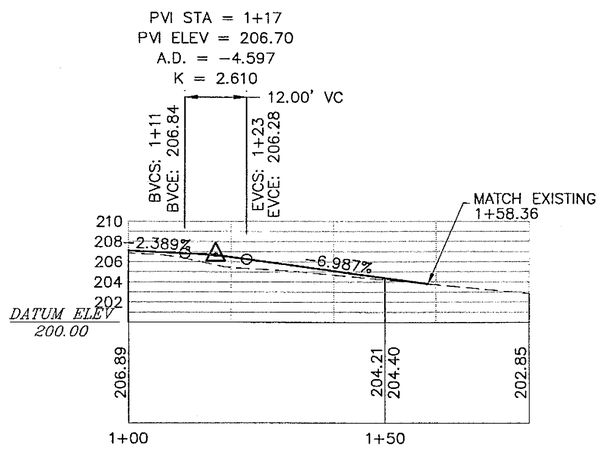
POINT LAYOUT TABLE

POINT	STATION	OFFSET	DESC.
126	145+10.5	17.0 LT	PC
127	145+10.4	57.0 LT	RP(R=40')
128	145+50.9	56.5 LT	PT
129	145+69.1	58.1 LT	PC
130	146+09.6	57.1 LT	RP(R=40')
131	146+09.5	17.0 LT	PT

UPDATED 10/12/2004



Cohen Drive PLAN



Cohen Drive PROFILE

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TAB: TYPICALS

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - TEE HARBOR TO AMALGA HARBOR ROAD
IM-093-3(24) ~ 68097

Intersection Sheets

STATE OF ALASKA 49 TH
Joel D. Osburn CE-11014
REGISTERED PROFESSIONAL ENGINEER
12-13-04

DESIGNED BY: J. OSBURN
DRAWN BY: BENNETT/STEVENS

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

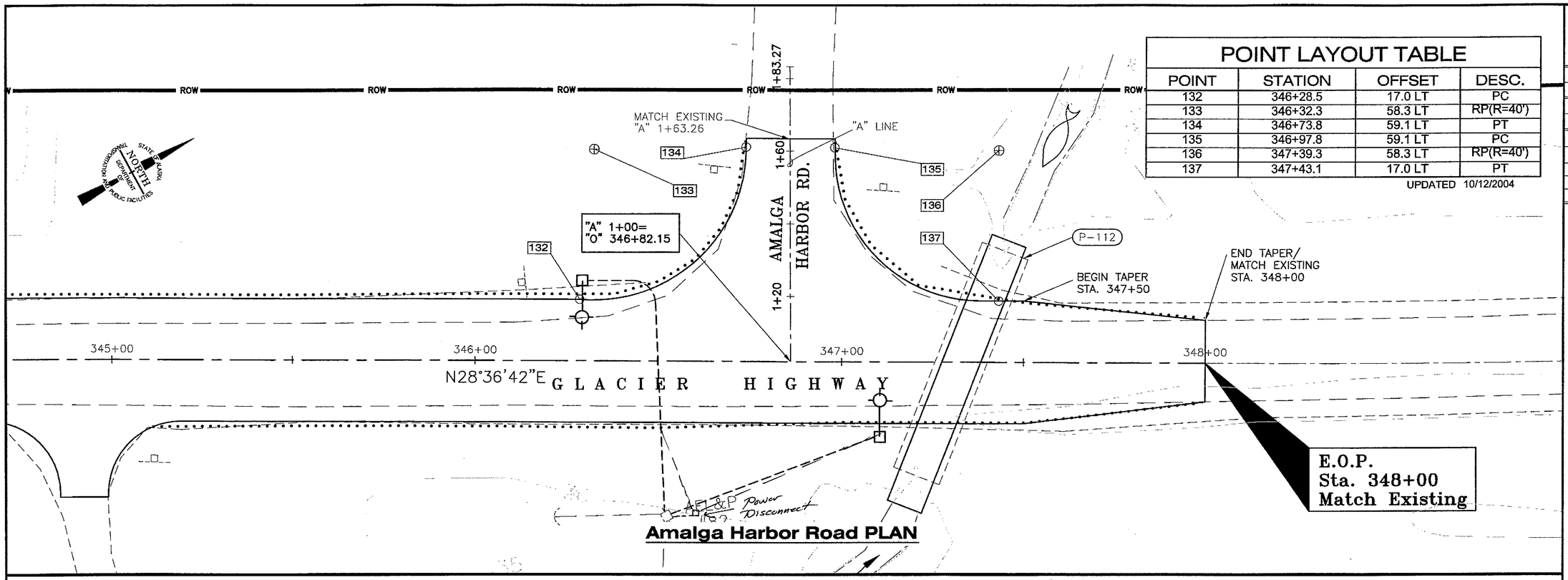
JNU-GLACIER HIGHWAY & TRAILHEAD

Intersection Sheets

PROJECT DESIGNATION NUMBER
IM-093-3(24)/68097

STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
G3	146

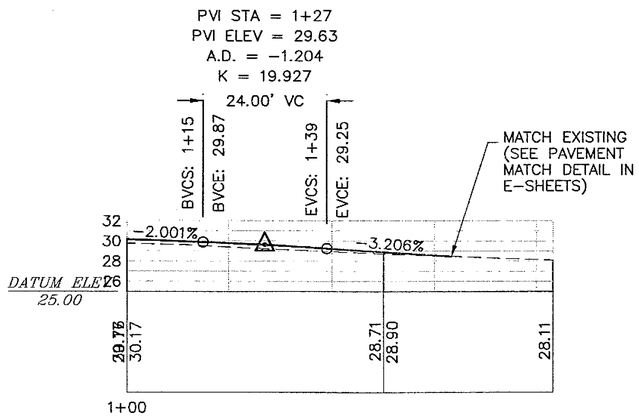
Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE _____ Date 1/19/05



Amalga Harbor Road PLAN

POINT LAYOUT TABLE			
POINT	STATION	OFFSET	DESC.
132	346+28.5	17.0 LT	PC
133	346+32.3	58.3 LT	RP(R=40')
134	346+73.8	59.1 LT	PT
135	346+97.8	59.1 LT	PC
136	347+39.3	58.3 LT	RP(R=40')
137	347+43.1	17.0 LT	PT

UPDATED 10/12/2004



Amalga Harbor Road
PROFILE

PATH:
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Tue, 07/Dec/04 10:53AM
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TAB: TYPICALS

ADDENDUM NUMBER
ATTACHMENT NUMBER

RECORD OF REVISIONS		
No.	DATE	DESCRIPTION

JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - TEE HARBOR TO AMALGA HARBOR ROAD
IM-093-3(24) ~ 68097

Intersection Sheets

STATE OF ALASKA 49 TH
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
12-13-04

DESIGNED BY: J. OSBURN
DRAWN BY: BENNETT/STEVENS

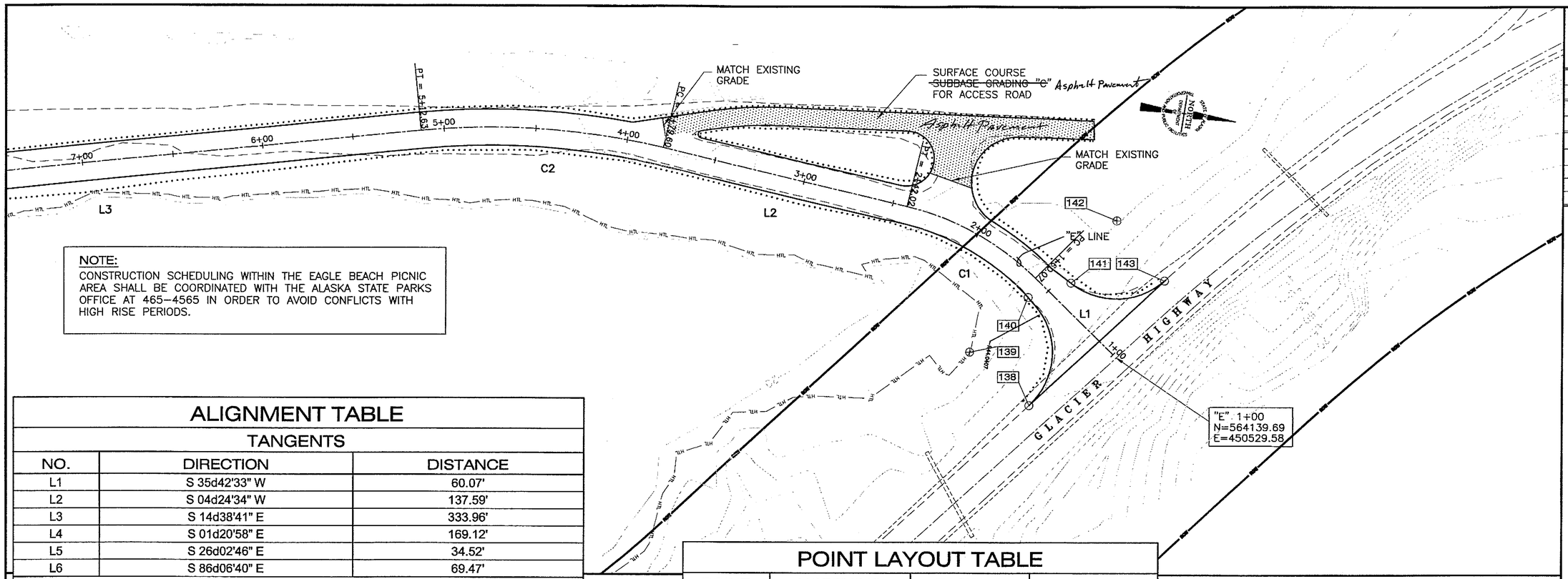
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

JNU-GLACIER HIGHWAY & TRAILHEAD

Intersection Sheets

PROJECT DESIGNATION NUMBER	
IM-093-3(24)/68097	
STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
G4	146

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 5/16/07



NOTE:
CONSTRUCTION SCHEDULING WITHIN THE EAGLE BEACH PICNIC AREA SHALL BE COORDINATED WITH THE ALASKA STATE PARKS OFFICE AT 465-4565 IN ORDER TO AVOID CONFLICTS WITH HIGH RISE PERIODS.

ALIGNMENT TABLE

TANGENTS

NO.	DIRECTION	DISTANCE
L1	S 35d42'33" W	60.07'
L2	S 04d24'34" W	137.59'
L3	S 14d38'41" E	333.96'
L4	S 01d20'58" E	169.12'
L5	S 26d02'46" E	34.52'
L6	S 86d06'40" E	69.47'

CURVES

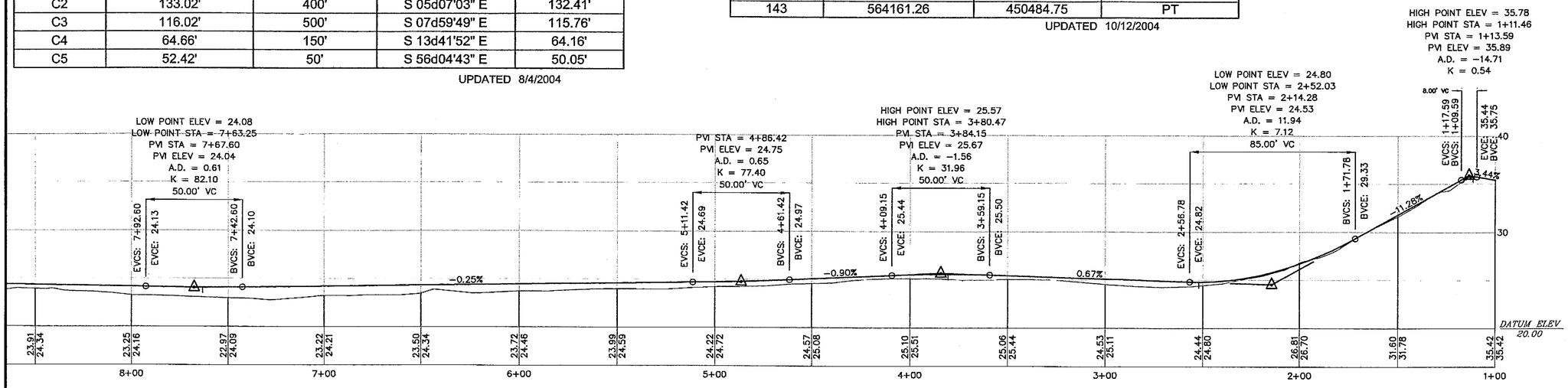
NO.	LENGTH	RADIUS	CHORD DIRECTION	CHORD LENGTH
C1	81.94'	150'	S 20d03'34" W	80.93'
C2	133.02'	400'	S 05d07'03" E	132.41'
C3	116.02'	500'	S 07d59'49" E	115.76'
C4	64.66'	150'	S 13d41'52" E	64.16'
C5	52.42'	50'	S 56d04'43" E	50.05'

UPDATED 8/4/2004

POINT LAYOUT TABLE

POINT	NORTHING	EASTING	DESC.
138	564099.10	450564.41	PC
139	564061.93	450540.71	RP(R=40')
140	564088.68	450505.73	PT
141	564110.55	450494.12	PC
142	564129.76	450456.15	RP(R=40')
143	564161.26	450484.75	PT

UPDATED 10/12/2004



NOTE:
SEE G-6.

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ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - TEE HARBOR TO AMALGA HARBOR ROAD
IM-093-3(24) ~ 68097

North Eagle Beach Picnic Area Road Layout Sheet

STATE OF ALASKA 49 TH
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
12-13-04

DESIGNED BY: J. OSBURN
DRAWN BY: BENNETT/STEVENS

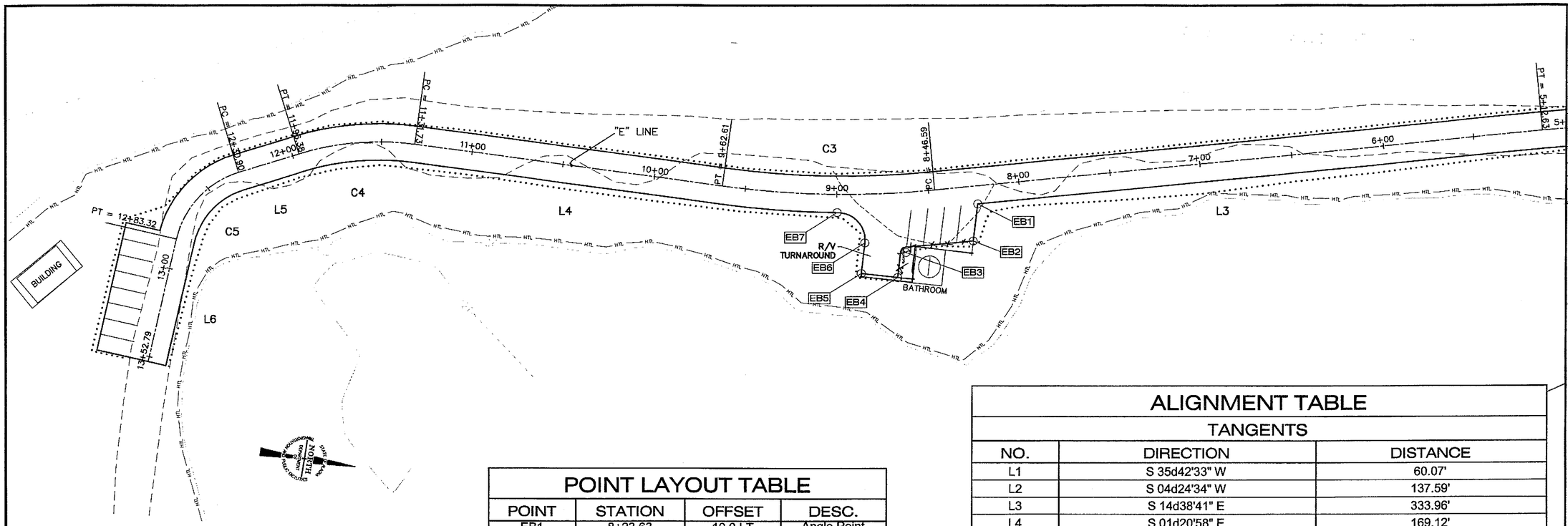
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

JNU-GLACIER HIGHWAY & TRAILHEAD

North Eagle Beach Picnic Area Road Layout Sheet

PROJECT DESIGNATION NUMBER	
IM-093-3(24)/68097	
STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
G5	146

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 1/4/05



POINT LAYOUT TABLE

POINT	STATION	OFFSET	DESC.
EB1	8+23.63	10.0 LT	Angle Point
EB2	8+28.01	30.0 LT	Angle Point
EB3	8+64.26	30.0 LT	Angle Point
EB4	8+69.20	46.5 LT	Angle Point
EB5	8+87.35	43.6 LT	Angle Point
EB6	8+85.31	26.8 LT	Angle Point
EB7	8+99.74	10.0 LT	Angle Point

UPDATED 12/2/2004

NOTE:
CONSTRUCTION SCHEDULING WITHIN THE EAGLE BEACH PICNIC AREA SHALL BE COORDINATED WITH THE ALASKA STATE PARKS OFFICE AT 465-4565 IN ORDER TO AVOID CONFLICTS WITH HIGH USE PERIODS. SEE SECTION 107-1.02.

ALIGNMENT TABLE

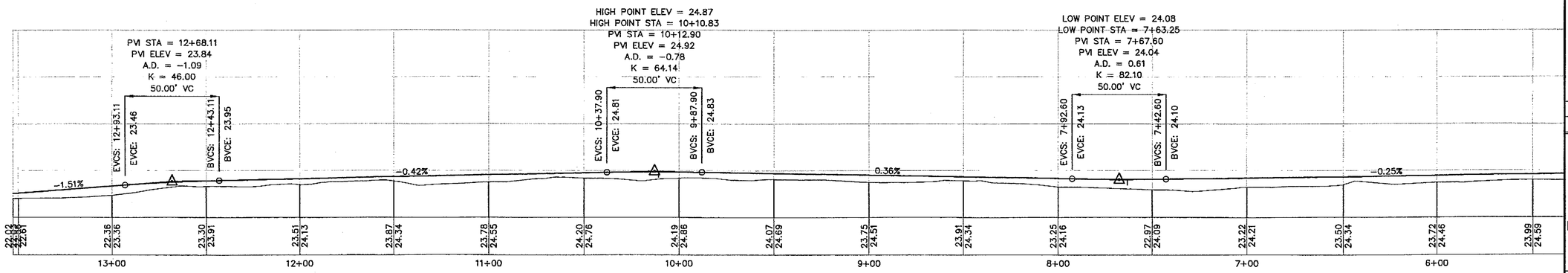
TANGENTS

NO.	DIRECTION	DISTANCE
L1	S 35d42'33" W	60.07'
L2	S 04d24'34" W	137.59'
L3	S 14d38'41" E	333.96'
L4	S 01d20'58" E	169.12'
L5	S 26d02'46" E	34.52'
L6	S 86d06'40" E	69.47'

CURVES

NO.	LENGTH	RADIUS	CHORD DIRECTION	CHORD LENGTH
C1	81.94'	150'	S 20d03'34" W	80.93'
C2	133.02'	400'	S 05d07'03" E	132.41'
C3	116.02'	500'	S 07d59'49" E	115.76'
C4	64.66'	150'	S 13d41'52" E	64.16'
C5	52.42'	50'	S 56d04'43" E	50.05'

UPDATED 8/4/2004



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ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - TEE HARBOR TO AMALGA HARBOR ROAD
IM-093-3(24) ~ 68097

North Eagle Beach Picnic Area Road Layout Sheet (Cont'd.)

STATE OF ALASKA
49TH
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
12-13-04

DESIGNED BY: J. OSBURN
DRAWN BY: BENNETT/STEVENS

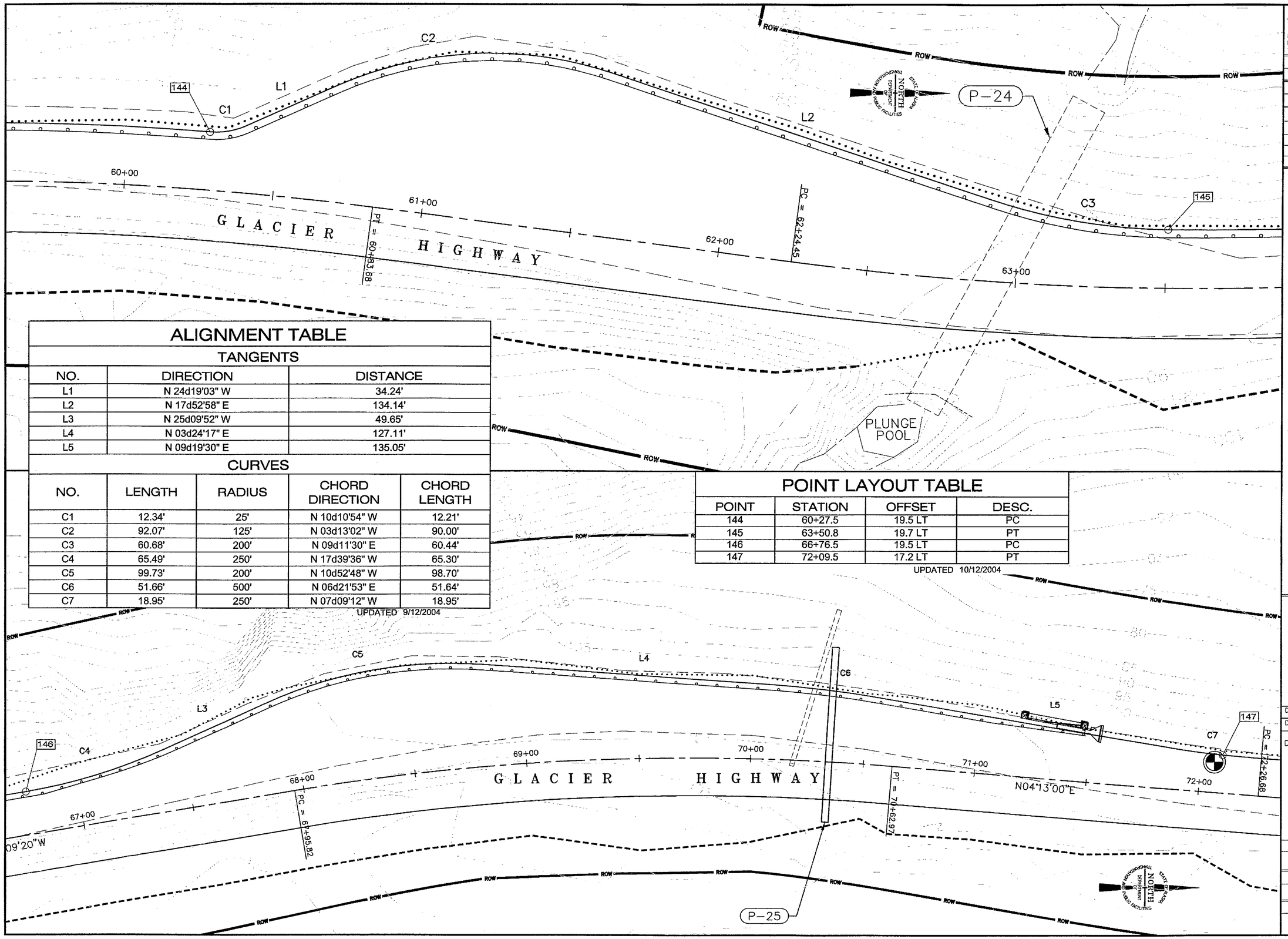
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

JNU-GLACIER HIGHWAY & TRAILHEAD

North Eagle Beach Picnic Area Road Layout Sheet (Cont'd.)

PROJECT DESIGNATION NUMBER	
IM-093-3(24)/68097	
STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
G6	146

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. 11/16/07



ALIGNMENT TABLE

TANGENTS

NO.	DIRECTION	DISTANCE
L1	N 24d19'03" W	34.24'
L2	N 17d52'58" E	134.14'
L3	N 25d09'52" W	49.65'
L4	N 03d24'17" E	127.11'
L5	N 09d19'30" E	135.05'

CURVES

NO.	LENGTH	RADIUS	CHORD DIRECTION	CHORD LENGTH
C1	12.34'	25'	N 10d10'54" W	12.21'
C2	92.07'	125'	N 03d13'02" W	90.00'
C3	60.68'	200'	N 09d11'30" E	60.44'
C4	65.49'	250'	N 17d39'36" W	65.30'
C5	99.73'	200'	N 10d52'48" W	98.70'
C6	51.66'	500'	N 06d21'53" E	51.64'
C7	18.95'	250'	N 07d09'12" W	18.95'

UPDATED 9/12/2004

POINT LAYOUT TABLE

POINT	STATION	OFFSET	DESC.
144	60+27.5	19.5 LT	PC
145	63+50.8	19.7 LT	PT
146	66+76.5	19.5 LT	PC
147	72+09.5	17.2 LT	PT

UPDATED 10/12/2004

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ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - TEE HARBOR TO AMALGA HARBOR ROAD
IM-093-3(24) ~ 68097

Roadside Turnouts

STATE OF ALASKA 49TH
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
12-13-04

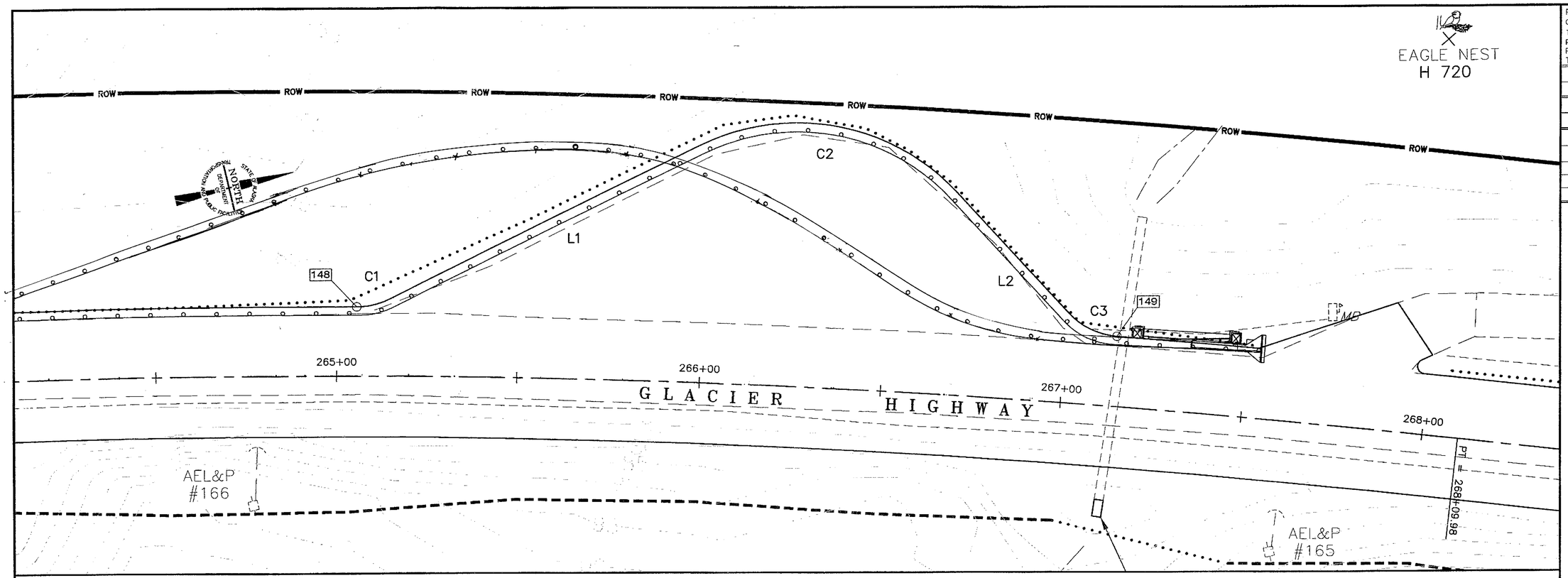
DESIGNED BY: J. OSBURN
DRAWN BY: BENNETT/STEVENS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION
JNU-GLACIER HIGHWAY & TRAILHEAD

Roadside Turnouts

PROJECT DESIGNATION NUMBER	
IM-093-3(24)/68097	
STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
G7	146

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 11/07/07



POINT LAYOUT TABLE			
POINT	STATION	OFFSET	DESC.
~~148~~	~~265+05.6~~	~~19.3 LT~~	~~PC~~
149	267+14.1	19.6 LT	PT

UPDATED 12/3/2004

ALIGNMENT TABLE				
TANGENTS				
NO.	DIRECTION		DISTANCE	
~~L1~~	~~N 13d04'57" W~~		~~100.28'~~	
~~L2~~	~~N 60d32'23" E~~		~~54.79'~~	
CURVES				
NO.	LENGTH	RADIUS	CHORD DIRECTION	CHORD LENGTH
~~C1~~	~~9.32'~~	~~20'~~	~~N 00d15'38" E~~	~~9.23'~~
~~C2~~	~~77.48'~~	~~60.3'~~	~~N 23d43'43" E~~	~~72.26'~~
C3	14.89'	20'	N 39d12'17" E	14.55'

UPDATED 12/3/2004

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ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - TEE HARBOR TO AMALGA HARBOR ROAD
IM-093-3(24) ~ 68097

Roadside Turnouts

STATE OF ALASKA
49 TH
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
12-13-04

DESIGNED BY: J. OSBURN
DRAWN BY: BENNETT/STEVENS

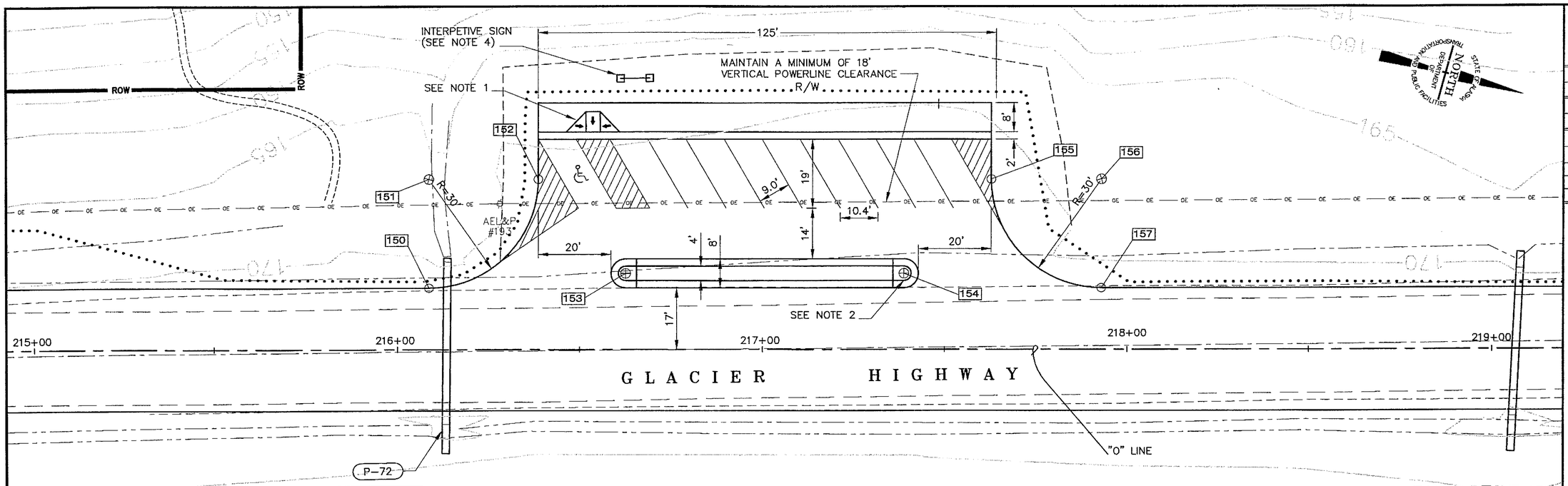
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

JNU-GLACIER HIGHWAY & TRAILHEAD

Roadside Turnouts

PROJECT DESIGNATION NUMBER	
IM-093-3(24)/68097	
STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
G8	146

Project As-Built Drawings have been reviewed by the Project Engineer and represents, to the best of my knowledge, the project as constructed.
PE _____ Date 1/19/05



POINT LAYOUT TABLE

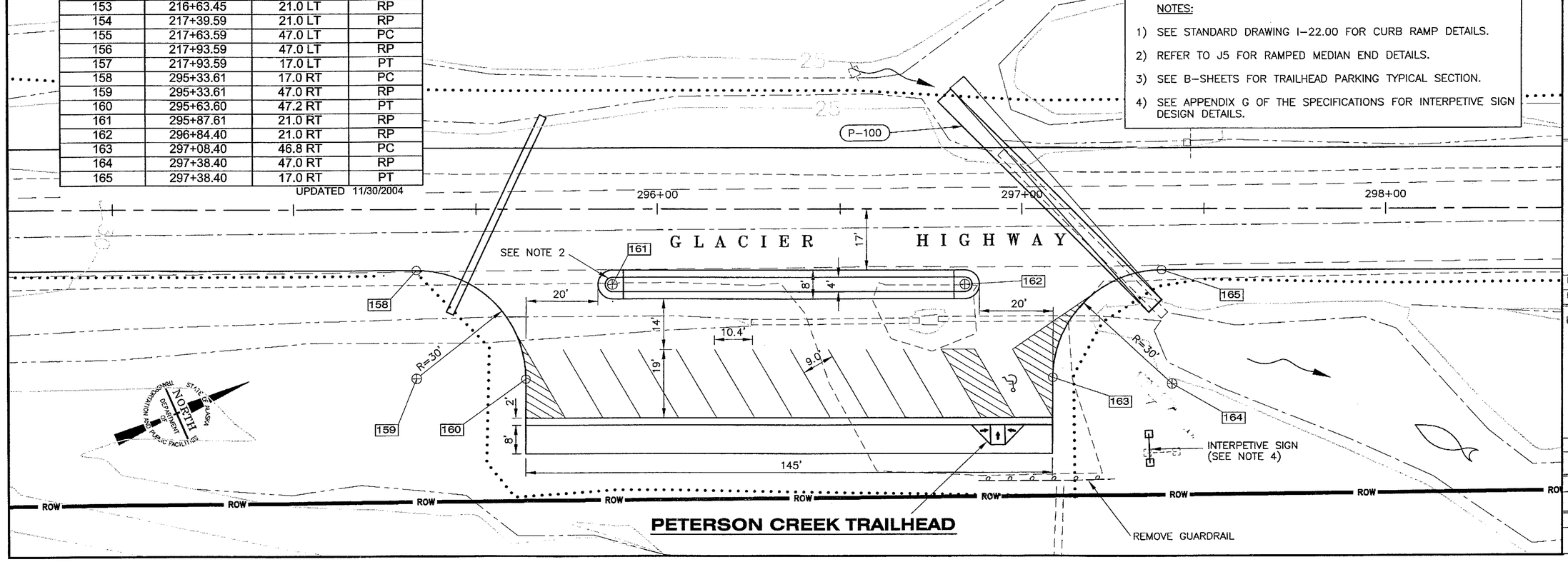
POINT	STATION	OFFSET	DESC.
150	216+09.45	17.0 LT	PC
151	216+09.45	47.0 LT	RP
152	216+39.45	47.0 LT	PT
153	216+63.45	21.0 LT	RP
154	217+39.59	21.0 LT	RP
155	217+63.59	47.0 LT	PC
156	217+93.59	47.0 LT	RP
157	217+93.59	17.0 LT	PT
158	295+33.61	17.0 RT	PC
159	295+33.61	47.0 RT	RP
160	295+63.60	47.2 RT	PT
161	295+87.61	21.0 RT	RP
162	296+84.40	21.0 RT	RP
163	297+08.40	46.8 RT	PC
164	297+38.40	47.0 RT	RP
165	297+38.40	17.0 RT	PT

UPDATED 11/30/2004

BREADLINE BLUFF TRAILHEAD

NOTES:

1) SEE STANDARD DRAWING I-22.00 FOR CURB RAMP DETAILS.
2) REFER TO J5 FOR RAMPED MEDIAN END DETAILS.
3) SEE B-SHEETS FOR TRAILHEAD PARKING TYPICAL SECTION.
4) SEE APPENDIX G OF THE SPECIFICATIONS FOR INTERPETIVE SIGN DESIGN DETAILS.



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TAB: TYPICALS

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - TEE HARBOR TO AMALGA HARBOR ROAD
IM-093-3(24) ~ 68097

Trailhead Parking Layout Sheet

STATE OF ALASKA 49TH
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
12-13-04

DESIGNED BY: J. OSBURN
DRAWN BY: BENNETT/STEVENS

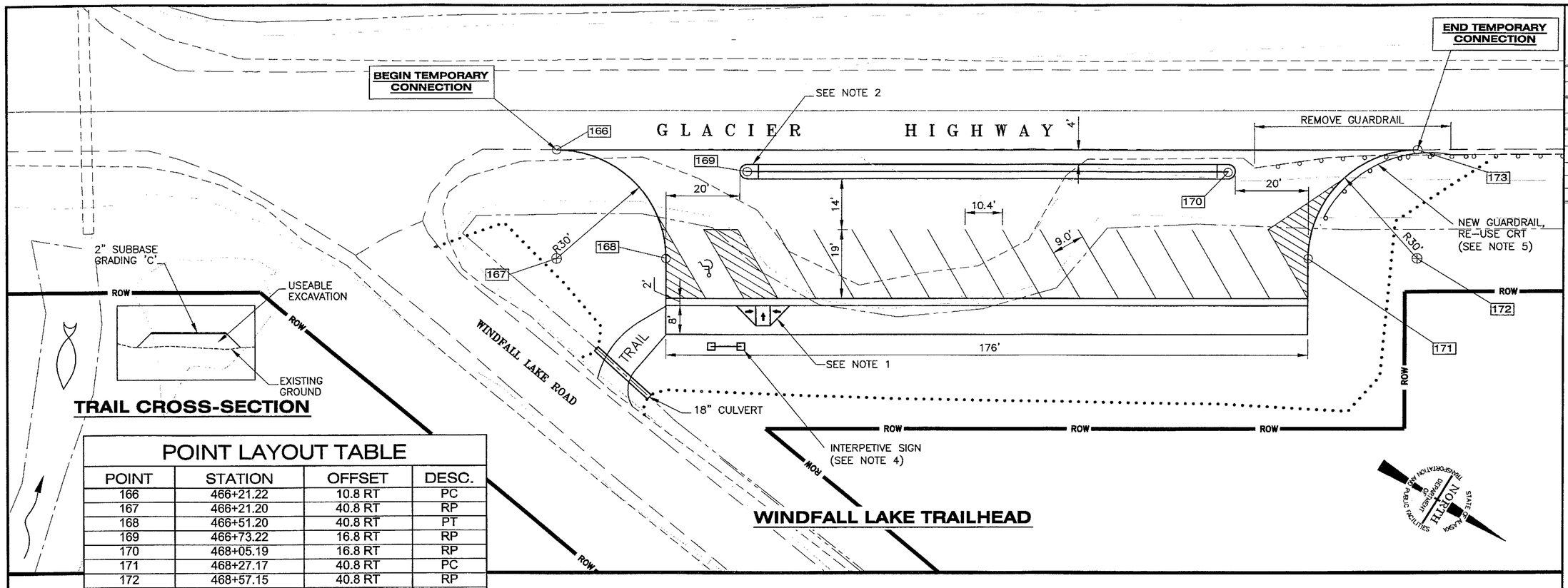
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

JNU-GLACIER HIGHWAY & TRAILHEAD

Trailhead Parking Layout Sheet

PROJECT DESIGNATION NUMBER	
IM-093-3(24)/68097	
STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
G9	146

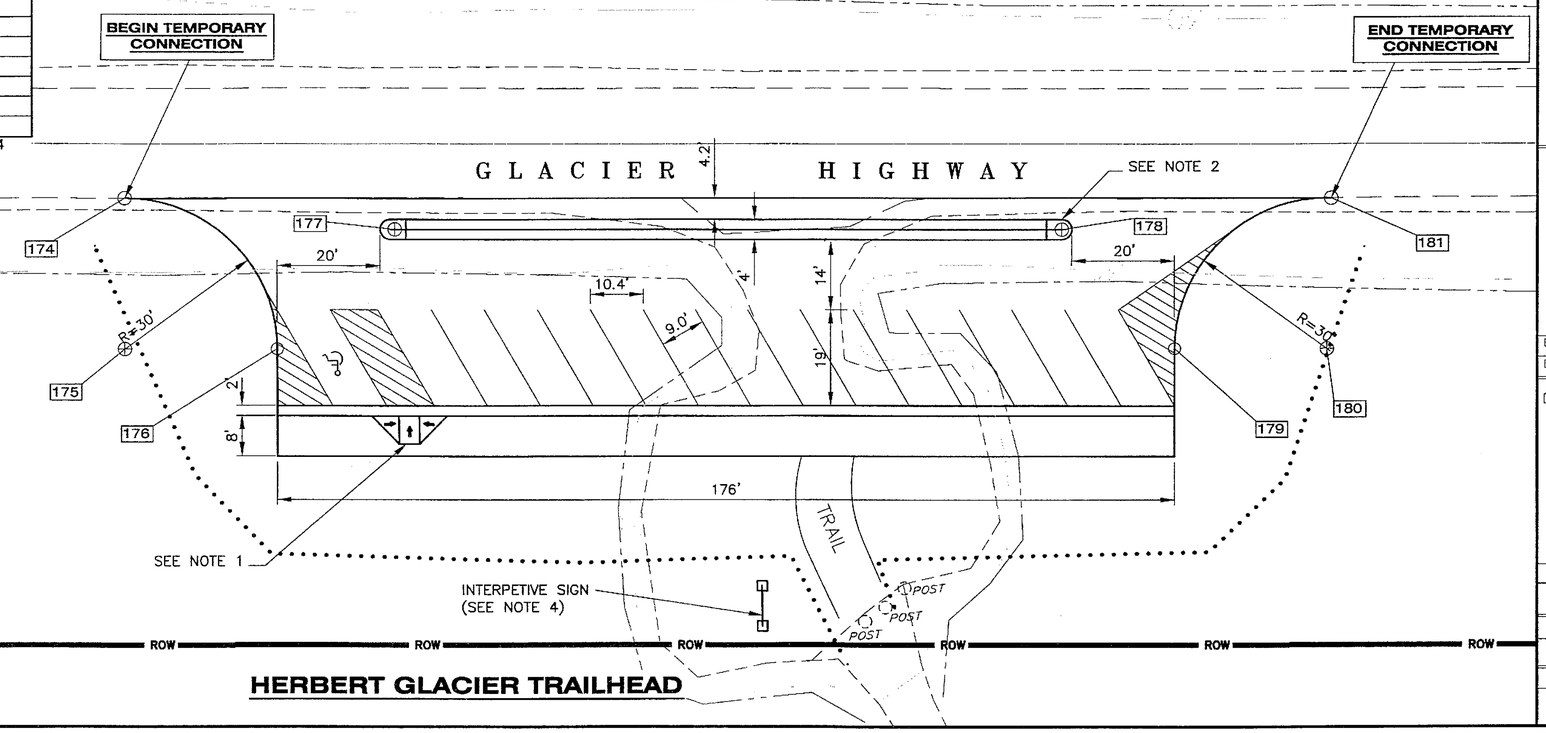
Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE _____ Date 11/16/07



POINT LAYOUT TABLE

POINT	STATION	OFFSET	DESC.
166	466+21.22	10.8 RT	PC
167	466+21.20	40.8 RT	RP
168	466+51.20	40.8 RT	PT
169	466+73.22	16.8 RT	RP
170	468+05.19	16.8 RT	RP
171	468+27.17	40.8 RT	PC
172	468+57.15	40.8 RT	RP
173	468+57.15	10.8 RT	PT
174	479+64.73	10.8 RT	PC
175	479+63.93	40.8 RT	RP
176	479+93.93	40.8 RT	PT
177	480+15.87	17.0 RT	RP
178	481+47.91	17.0 RT	RP
179	481+69.91	40.7 RT	PC
180	481+99.91	40.7 RT	RP
181	481+99.91	10.7 RT	PT

UPDATED 11/30/2004



NOTES:

1) SEE STANDARD DRAWING I-22.00 FOR CURB RAMP DETAILS.
2) REFER TO J5 FOR RAMPED MEDIAN END DETAILS.
3) SEE B-SHEETS FOR TRAILHEAD PARKING TYPICAL SECTION.
4) SEE APPENDIX G OF THE SPECIFICATIONS FOR INTERPETIVE SIGN DESIGN DETAILS.
5) SEE STANDARD DRAWING G-25.20W FOR GUARDRAIL RETURN RADIUS WITH CONTROLLED RELEASE TERMINAL DETAILS.

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ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - TEE HARBOR TO AMALGA HARBOR ROAD
IM-093-3(24) ~ 68097

Trailhead Parking Layout Sheet

STATE OF ALASKA 49TH
Joel D. Osburn CE-11014
REGISTERED PROFESSIONAL ENGINEER
12-7-04

DESIGNED BY: J. OSBURN
DRAWN BY: BENNETT/STEVENS

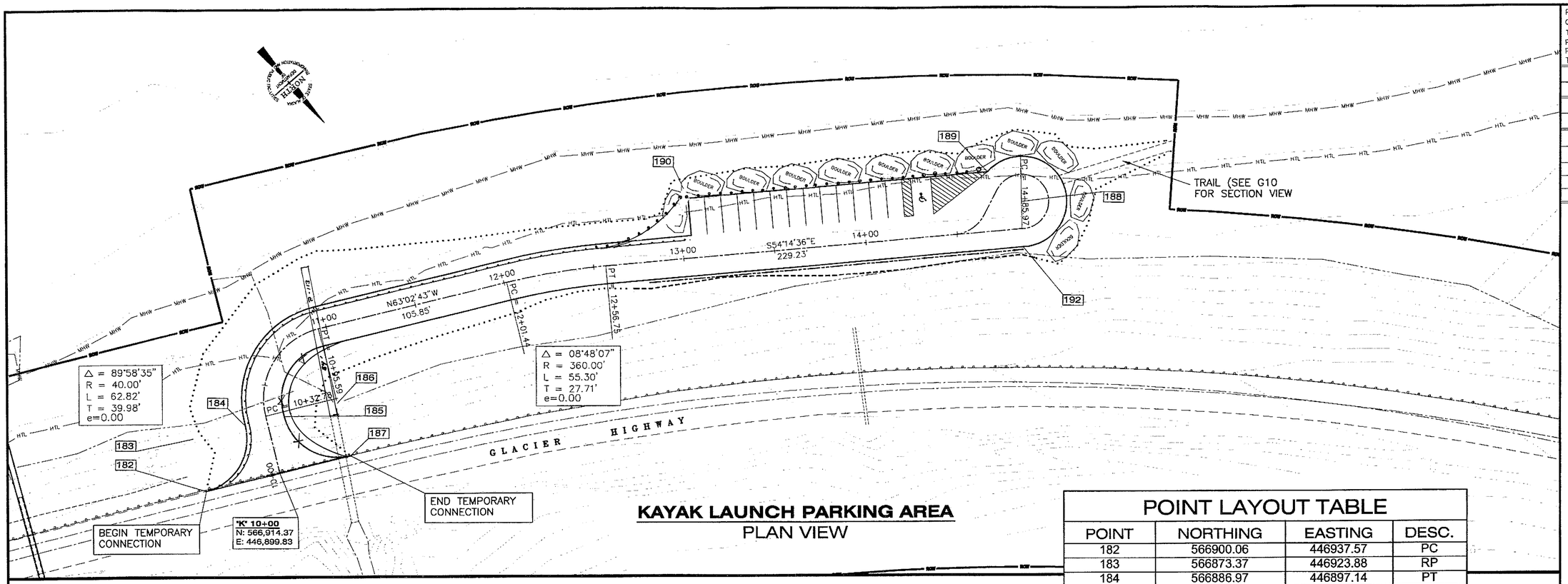
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

JNU-GLACIER HIGHWAY & TRAILHEAD

Trailhead Parking Layout Sheet

PROJECT DESIGNATION NUMBER	
IM-093-3(24)/68097	
STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
G10	146

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 1/07/05

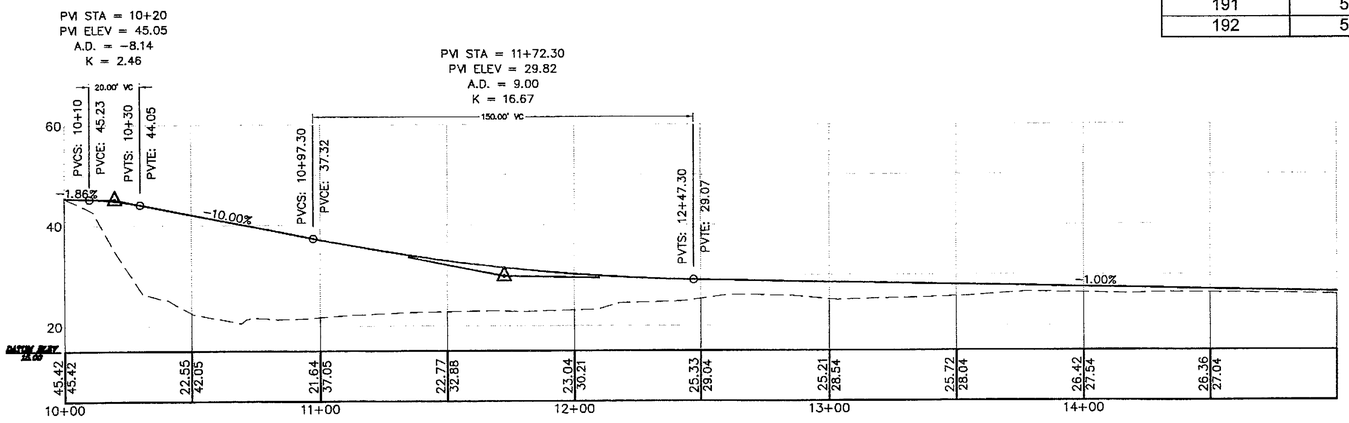


KAYAK LAUNCH PARKING AREA
PLAN VIEW

POINT LAYOUT TABLE

POINT	NORTHING	EASTING	DESC.
182	566900.06	446937.57	PC
183	566873.37	446923.88	RP
184	566886.97	446897.14	PT
185	566897.15	446877.30	PC
186	566910.76	446850.56	RP
187	566937.50	446864.15	PT
188	567071.77	446494.07	RP
189	567047.02	446497.60	PT
190	566950.93	446631.04	PT
191	566967.72	446643.13	PT
192	567091.28	446509.70	PC

UPDATED 10/18/2004



KAYAK LAUNCH PARKING AREA
PROFILE VIEW

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ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - TEE HARBOR TO AMALGA HARBOR ROAD
IM-093-3(24) ~ 68097

Kayak Launch Parking Area Plan & Profile

STATE OF ALASKA 49TH
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
12-13-04

DESIGNED BY: J. OSBURN
DRAWN BY: BENNETT/STEVENS

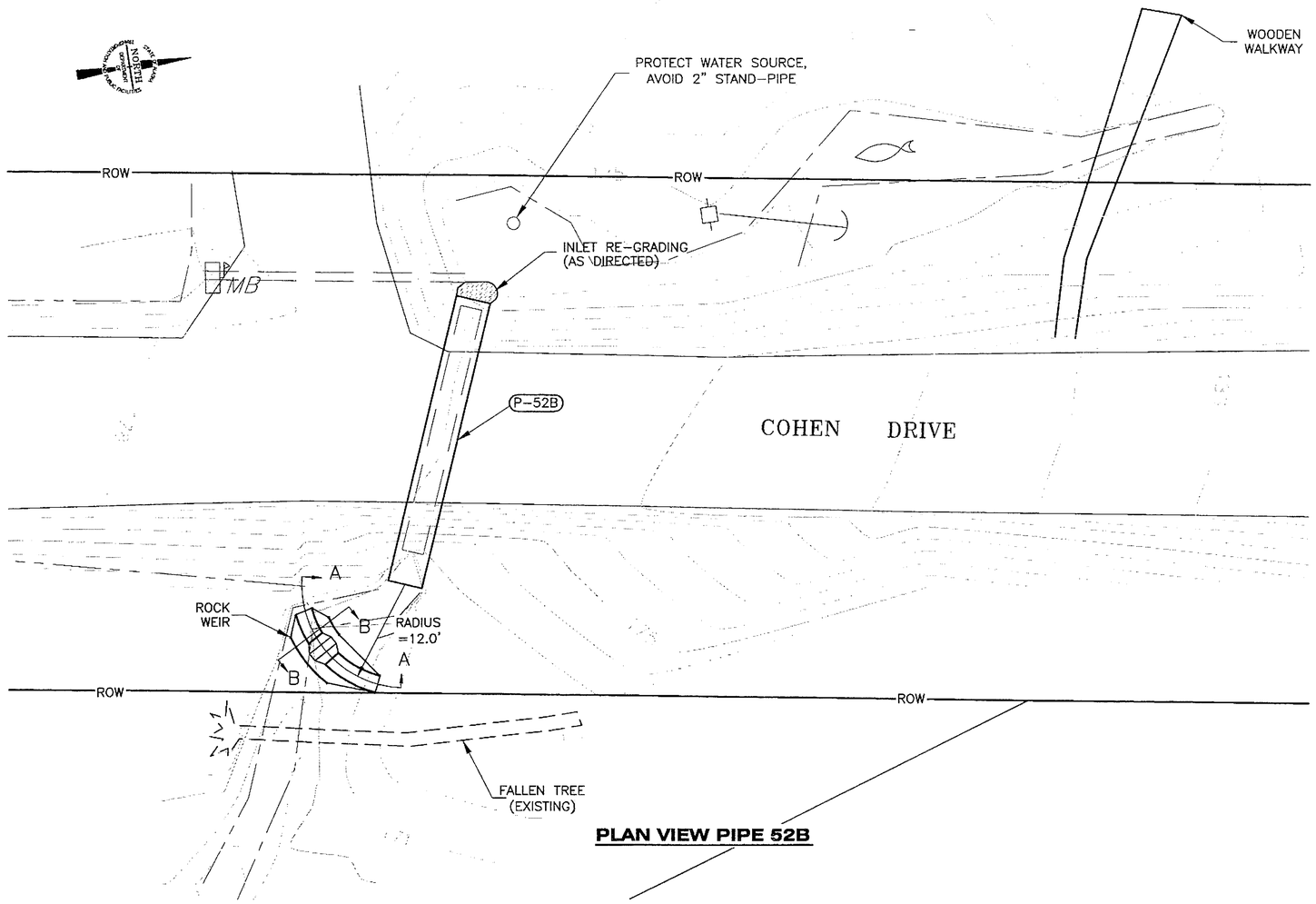
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

JNU-GLACIER HIGHWAY & TRAILHEAD

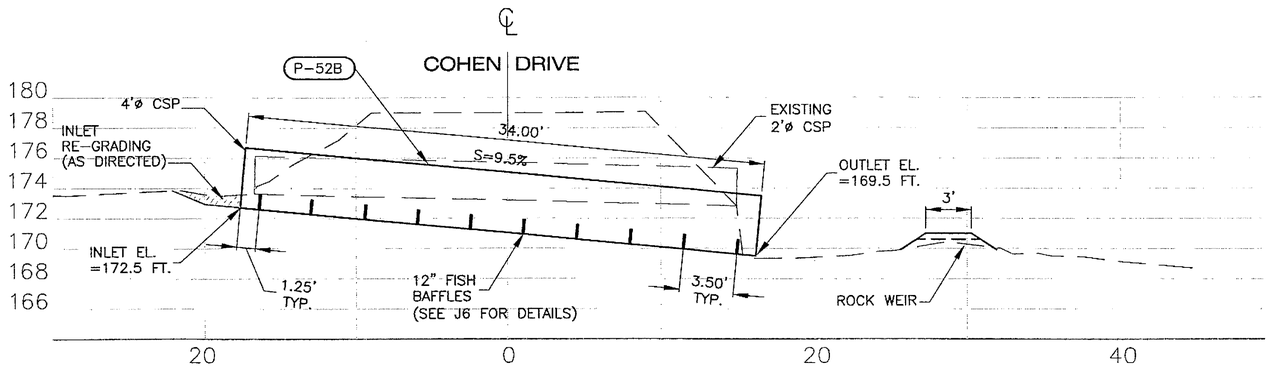
Kayak Launch Parking Area Plan & Profile

PROJECT DESIGNATION NUMBER	
IM-093-3(24)/68097	
STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
G11	146

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 _____



PLAN VIEW PIPE 52B



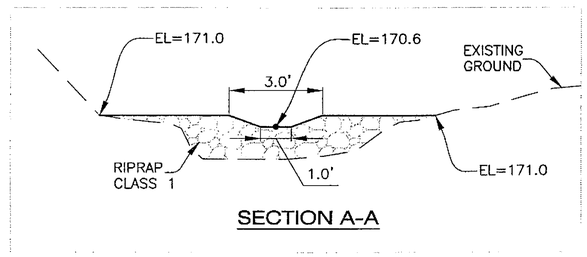
PROFILE PIPE 52B

ABBREVIATIONS:

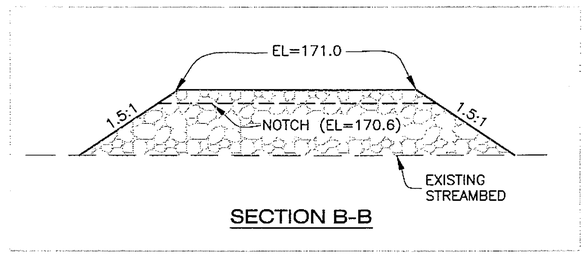
ICAP = IMBEDDED CORRUGATED ALUMINUM PIPE
CMPA = CORRUGATED METAL PIPE ARCH
CMP = CORRUGATED METAL PIPE

SEE D-SHEETS FOR CULVERT LOCATION SUMMARY TABLE.

HYDRAULIC SUMMARY		
CULVERT SIZE - 48" CMP (14 ga. thickness) Annular Corrugations (3" x 1" preferred)		
DRAINAGE AREA = 0.04 SQUARE MILES		
LENGTH	34.0 ft	
INVERT ELEVATIONS	172.7 ft (INLET)	
	169.5 ft (OUTLET)	
DESIGN FREQUENCY	DESIGN FLOWS [CFS]	DESIGN HIGHWATER ELEVATION
Q_{25}	26	175.9 ft
Q_{50}	30	175.9 ft
CAPACITY @ Hw/D=1.0	45.0 CFS	
PURPOSE: STREAM CHANNEL CROSSING WITH FISH PASSAGE PROVISIONS.		
WORK WINDOW	7/15 TO 9/15	



SECTION A-A



SECTION B-B

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ADDENDUM NUMBER
ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - TEE HARBOR TO AMALGA HARBOR ROAD
IM-093-3(24) ~ 68097

Fish Stream Culvert Plan & Profile

STATE OF ALASKA 49 TH
Joel D. Osburn CE-11014
REGISTERED PROFESSIONAL ENGINEER
12-13-04

DESIGNED BY: J. OSBURN
DRAWN BY: BENNETT/STEVENS

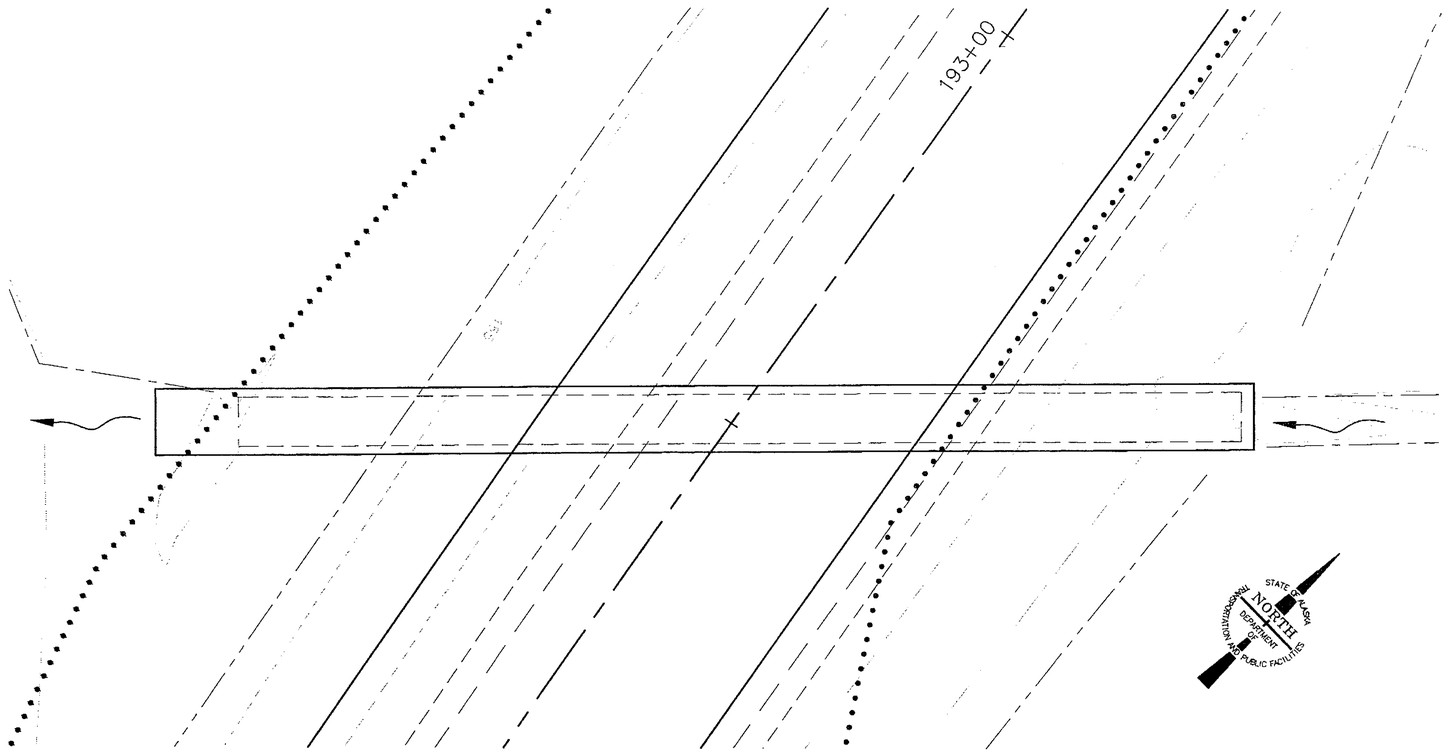
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

JNU-GLACIER HIGHWAY & TRAILHEAD

Fish Stream Culvert Plan & Profile

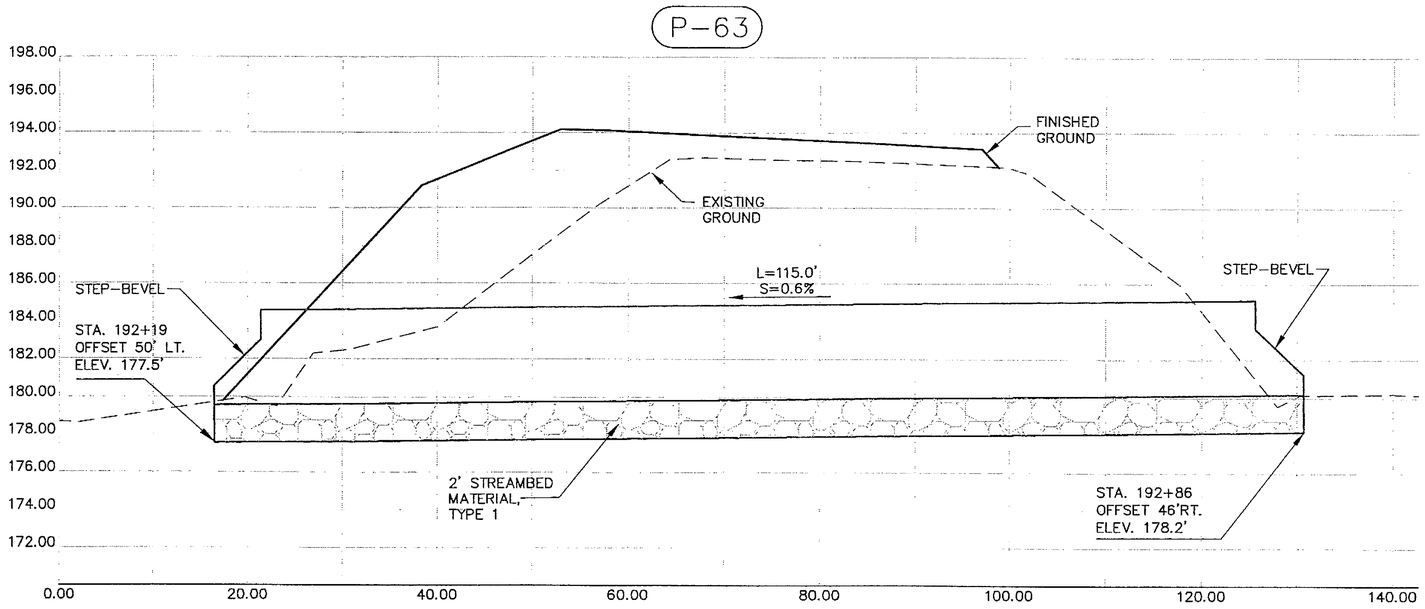
PROJECT DESIGNATION NUMBER	
IM-093-3(24)/68097	
STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
H1	146

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 11/19/07



PLAN VIEW PIPE 63

HYDRAULIC SUMMARY		
CULVERT SIZE - 84" ICAP (12 ga. thickness) WITH 2' IMBEDDED DEPTH Annular Corrugations (3" X 1" preferred)		
DRAINAGE AREA = 0.84 SQUARE MILES		
LENGTH	115.0 ft	
INVERT ELEVATIONS	178.2 ft (INLET)	
	177.5 ft (OUTLET)	
DESIGN FREQUENCY	DESIGN FLOWS [CFS]	DESIGN HIGHWATER ELEVATION
Q_{50}	126	184.5 ft
Q_{100}	144	185.0 ft
CAPACITY @ Hw/D=1.0	>144 CFS	
PURPOSE: STREAM CHANNEL CROSSING WITH FISH PASSAGE PROVISIONS.		
WORK WINDOW	6/15 TO 7/31	



PROFILE PIPE 63

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TAB: TYPICALS

ADDENDUM NUMBER
ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - TEE HARBOR TO AMALGA HARBOR ROAD
IM-093-3(24) ~ 68097

Fish Stream Culvert Plan & Profile

STATE OF ALASKA 49 TH
Joel D. Osburn CE-11014
REGISTERED PROFESSIONAL ENGINEER
12-13-04

DESIGNED BY:	J. OSBURN
DRAWN BY:	BENNETT/STEVENS

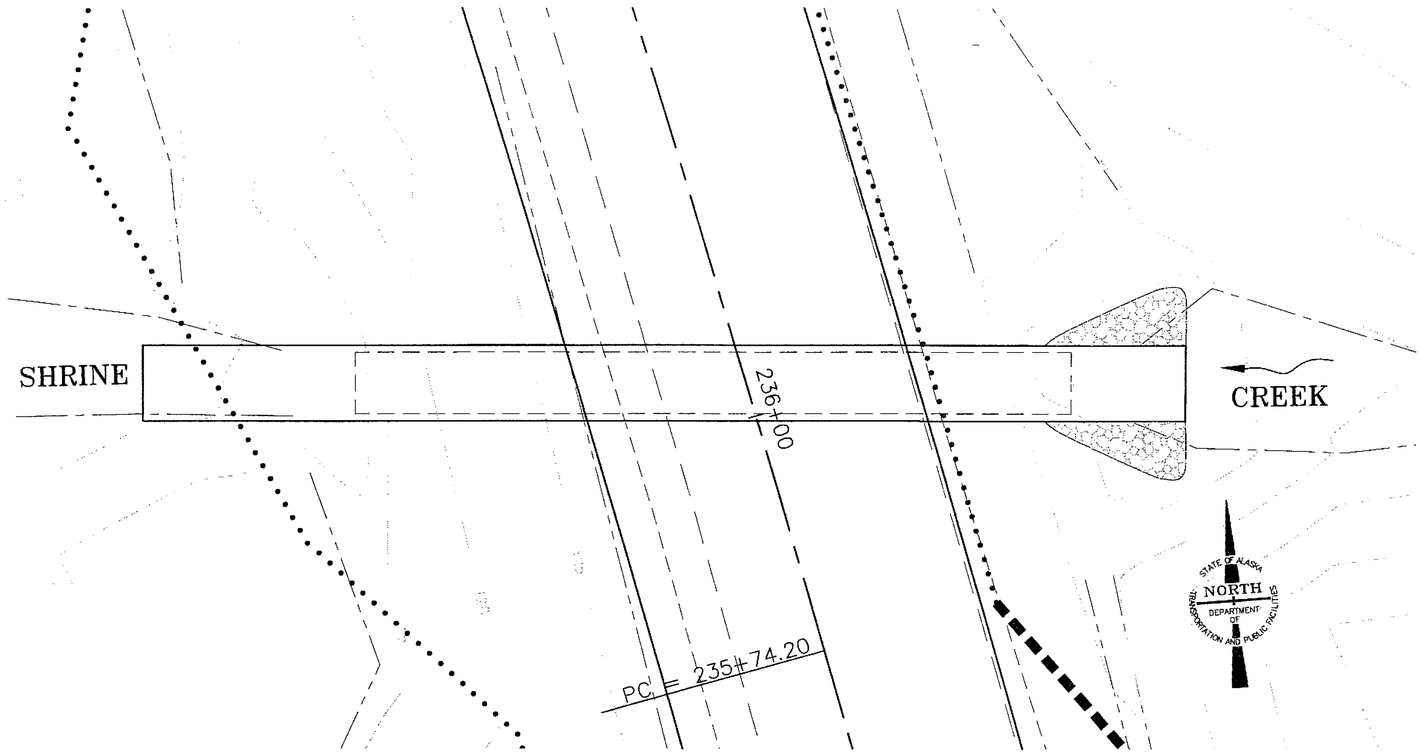
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

JNU-GLACIER HIGHWAY & TRAILHEAD

Fish Stream Culvert Plan & Profile

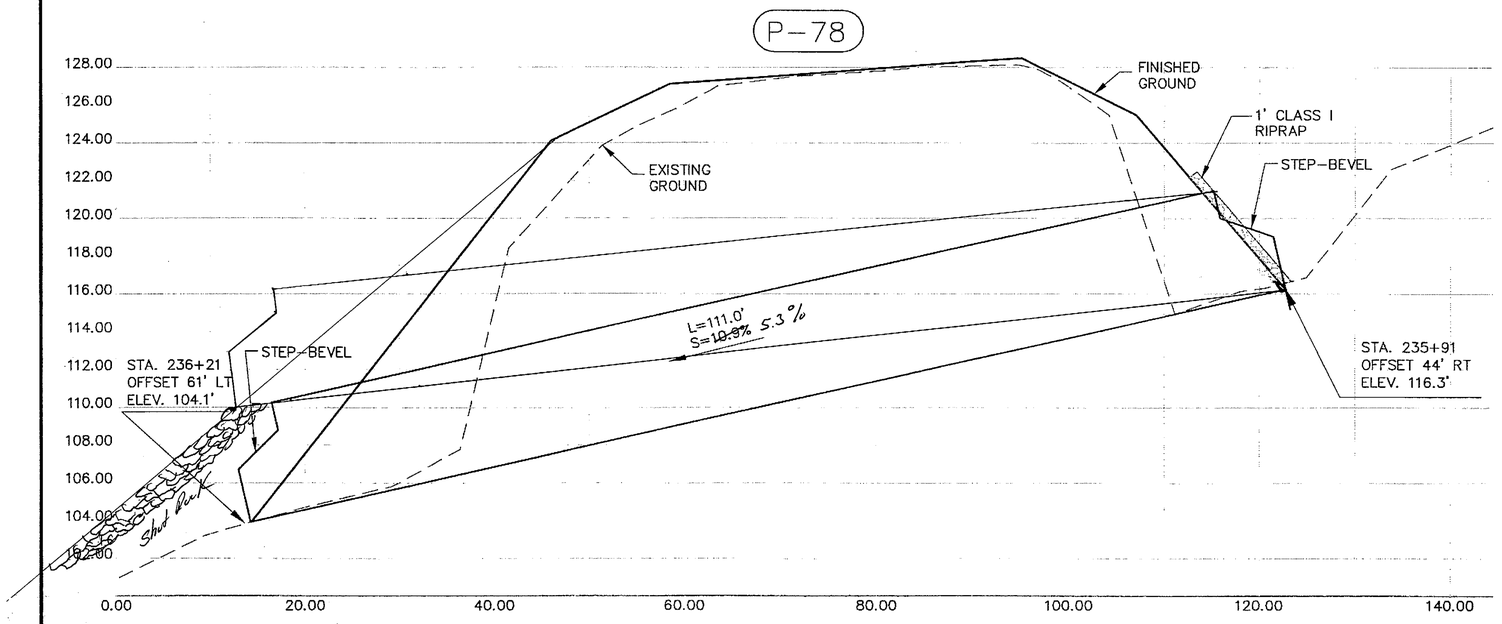
PROJECT DESIGNATION NUMBER	
IM-093-3(24)/68097	
STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
H2	146

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 _____



PLAN VIEW PIPE 78

HYDRAULIC SUMMARY		
CULVERT SIZE - 7.25'x5.92' CAPA (8 ga. thickness) Annular Corrugations (3" x 1" preferred)		
DRAINAGE AREA = 0.42 SQUARE MILES		
LENGTH	111.0 ft	
INVERT ELEVATIONS	116.3 ft (INLET)	
	104.1 ft (OUTLET)	
DESIGN FREQUENCY	DESIGN FLOWS [CFS]	DESIGN HIGHWATER ELEVATION
Q_{50}	140	120.5 ft
Q_{100}	160	120.9 ft
CAPACITY @ Hw/D=1.0	>160 CFS	
PURPOSE: STREAM CHANNEL CROSSING WITH FISH HABITAT AT THE OUTLET.		
WORK WINDOW	6/15 TO 7/31	



PROFILE PIPE 78

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ADDENDUM NUMBER

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No.	DATE	DESCRIPTION

JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - TEE HARBOR TO AMALGA HARBOR ROAD
IM-093-3(24) ~ 68097

Fish Stream Culvert Plan & Profile

STATE OF ALASKA 49TH
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER

12-13-04

DESIGNED BY: J. OSBURN
DRAWN BY: BENNETT/STEVENS

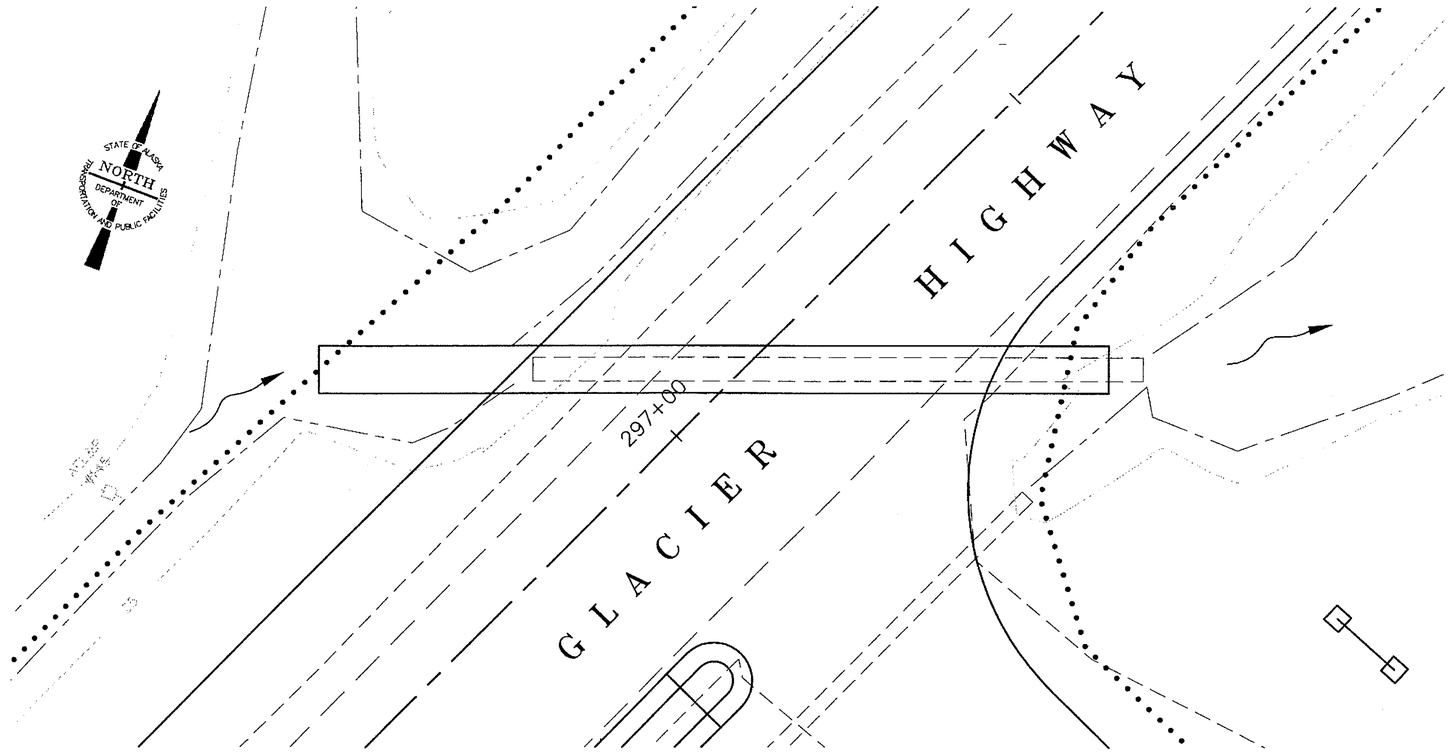
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

JNU-GLACIER HIGHWAY & TRAILHEAD

Fish Stream Culvert Plan & Profile

PROJECT DESIGNATION NUMBER	
IM-093-3(24)/68097	
STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
H3	146

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 11/07/07



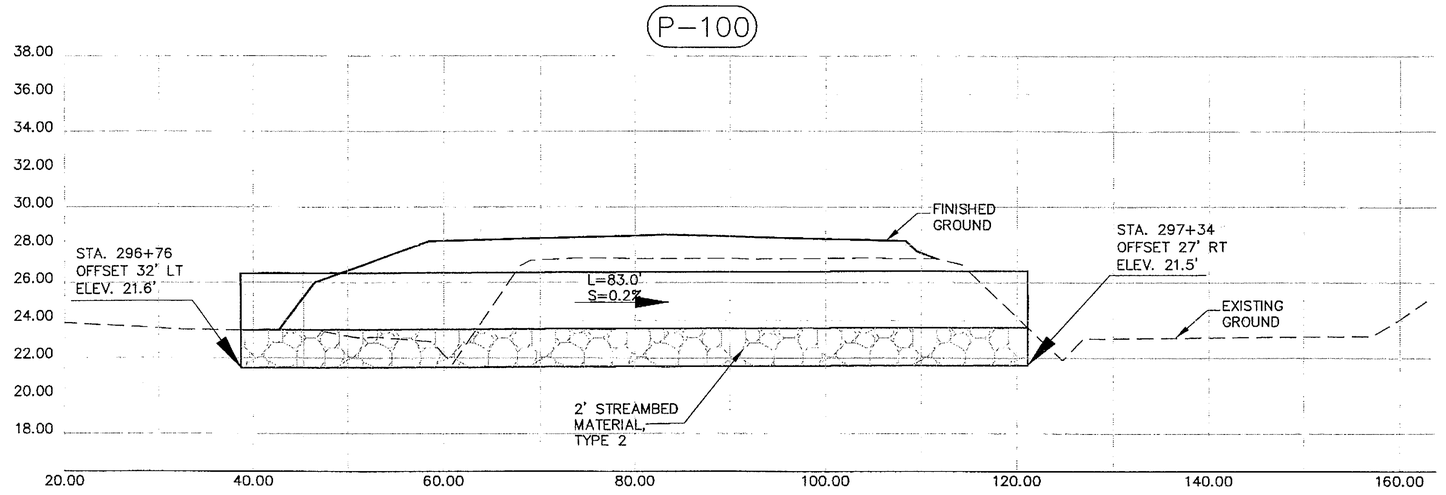
PLAN VIEW PIPE 100

HYDRAULIC SUMMARY		
CULVERT SIZE - 60" ICAP (14 ga. thickness) WITH 2' IMBEDDED DEPTH Annular Corrugations (3" x 1" preferred)		
DRAINAGE AREA = (SEE NOTE 1)		
LENGTH	83.0 ft	
INVERT ELEVATIONS	21.6 ft (INLET)	
	21.5 ft (OUTLET)	
DESIGN FREQUENCY	DESIGN FLOWS [CFS]	DESIGN HIGHWATER ELEVATION
Q_{50}	11	24.9 ft
Q_{100}	13	25.0 ft
CAPACITY @ Hw/D=1.0	>13 CFS	
PURPOSE: STREAM CHANNEL CROSSING WITH FISH PASSAGE PROVISIONS.		
WORK WINDOW	6/15 TO 9/15	

NOTES:

1.) HYDROLOGIC INFORMATION PROVIDED IN THIS MEMORANDUM, INCLUDING DRAINAGE AREA AND DESIGN FLOWS, IS BASED UPON INFORMATION IN THE HYDRAULICS FILE (COMPILED BY OTHERS). WHERE NO BASIN AREA IS PROVIDED, THE ESTIMATED FLOW IS BASED UPON A MANNING'S FORMULA HISTOGRAM.

2.) FIELD VERIFY THE OUTLET STREAMBED ELEVATION PRIOR TO CONSTRUCTION DISTURBANCE. PLACE FILL IN THE PIPE TO MATCH THE EXISTING STREAMBED ELEVATION.



PROFILE PIPE 100

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TAB: TYPICALS

ADDENDUM NUMBER
ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - TEE HARBOR TO AMALGA HARBOR ROAD
IM-093-3(24) ~ 68097

Fish Stream Culvert Plan & Profile

STATE OF ALASKA 49 TH
Joel D. Osburn CE-11014
REGISTERED PROFESSIONAL ENGINEER
12-13-04

DESIGNED BY: J. OSBURN
DRAWN BY: BENNETT/STEVENS

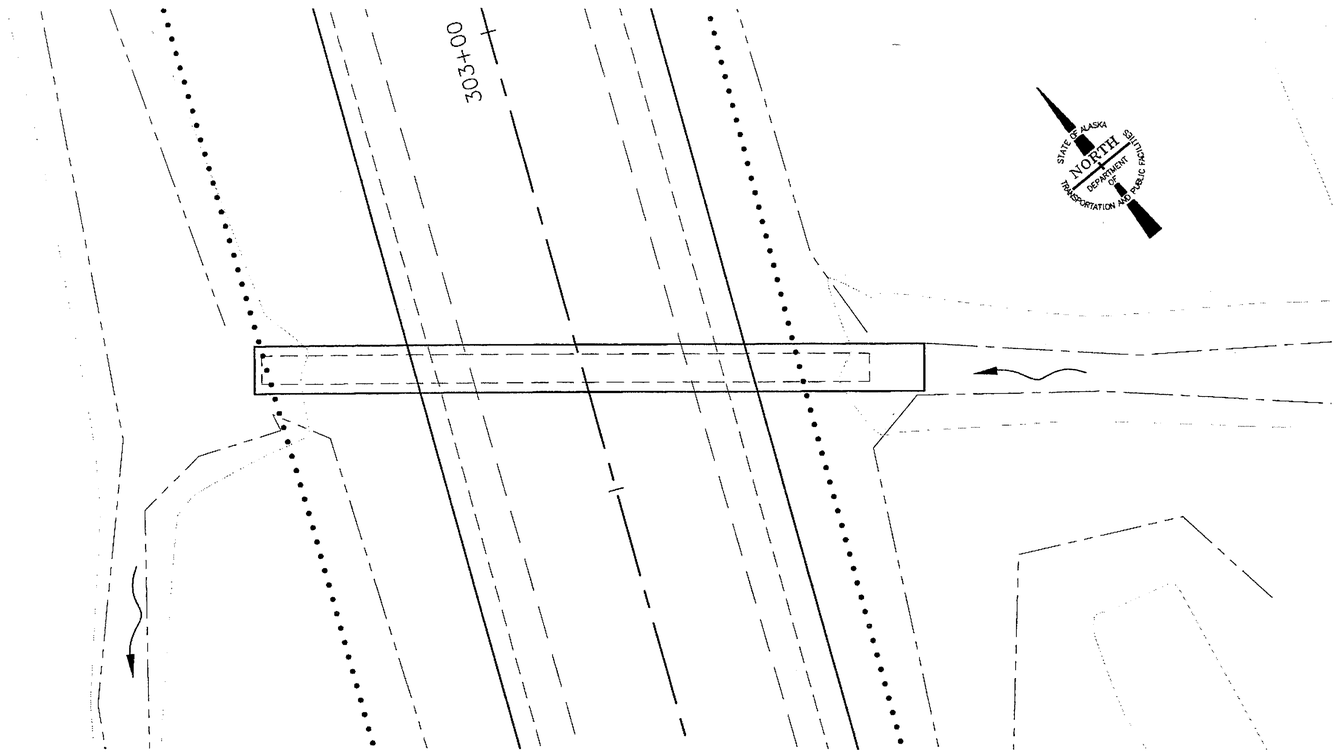
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

JNU-GLACIER HIGHWAY & TRAILHEAD

Fish Stream Culvert Plan & Profile

PROJECT DESIGNATION NUMBER	
IM-093-3(24)/68097	
STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
H4	146

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 11/04/07

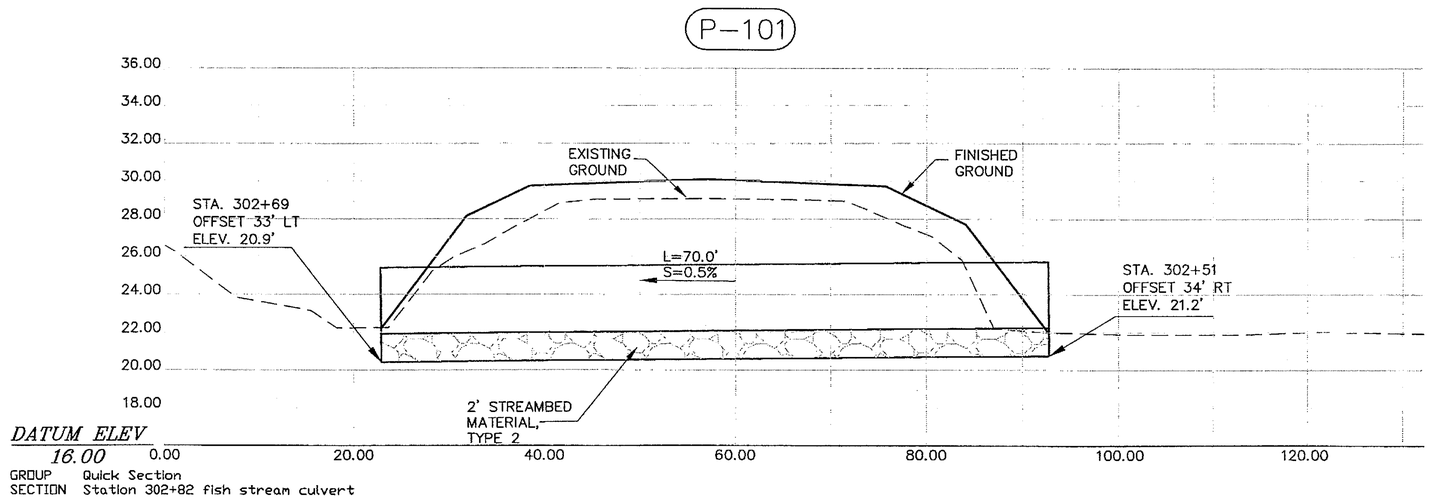


PLAN VIEW PIPE 101

HYDRAULIC SUMMARY		
CULVERT SIZE - 60" ICAP (14 ga. thickness) WITH 2' IMBEDDED DEPTH Annular Corrugations (3" x 1" preferred)		
DRAINAGE AREA = (SEE NOTE 1)		
LENGTH	70.00 ft	
INVERT ELEVATIONS	21.2 ft (INLET)	
	20.9 ft (OUTLET)	
DESIGN FREQUENCY	DESIGN FLOWS [CFS]	DESIGN HIGHWATER ELEVATION
Q_{50}	11	24.3 ft
Q_{100}	13	24.5 ft
CAPACITY @ Hw/D=1.0	>13 CFS	
PURPOSE: STREAM CHANNEL CROSSING WITH FISH PASSAGE PROVISIONS.		
WORK WINDOW	6/15 TO 9/15	

NOTES:

1. HYDROLOGIC INFORMATION PROVIDED IN THIS MEMORANDUM, INCLUDING DRAINAGE AREA AND DESIGN FLOWS, IS BASED UPON INFORMATION IN THE HYDRAULICS FILE (COMPILED BY OTHERS). WHERE NO BASIN AREA IS PROVIDED, THE ESTIMATED FLOW IS BASED UPON A MANNING'S FORMULA HISTOGRAM.



PROFILE PIPE 101

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TAB: TYPICALS

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - TEE HARBOR TO AMALGA HARBOR ROAD
IM-093-3(24) ~ 68097

Fish Stream Culvert Plan & Profile

STATE OF ALASKA
49TH
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
12-13-04

DESIGNED BY: J. OSBURN
DRAWN BY: BENNETT/STEVENS

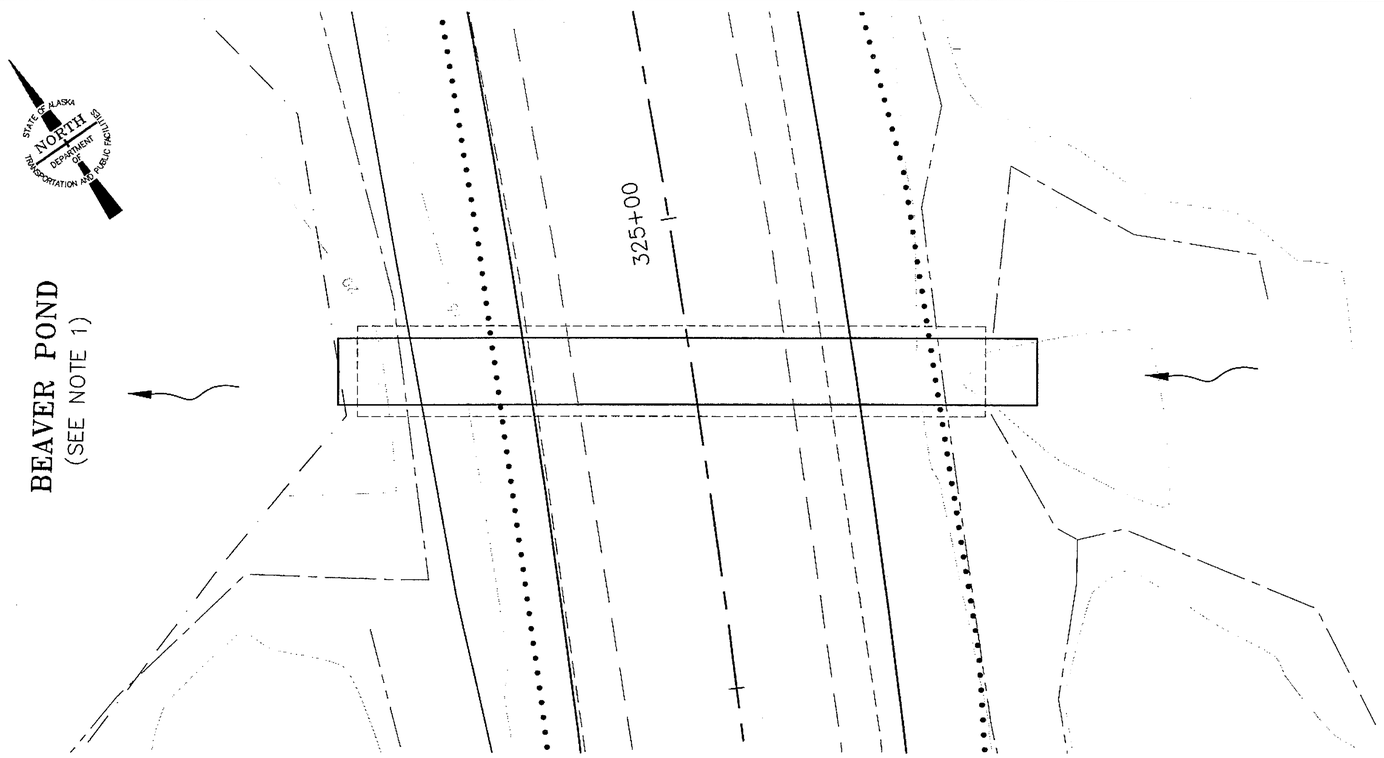
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

JNU-GLACIER HIGHWAY & TRAILHEAD

Fish Stream Culvert Plan & Profile

PROJECT DESIGNATION NUMBER	
IM-093-3(24)/68097	
STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
H5	146

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 11/07/07

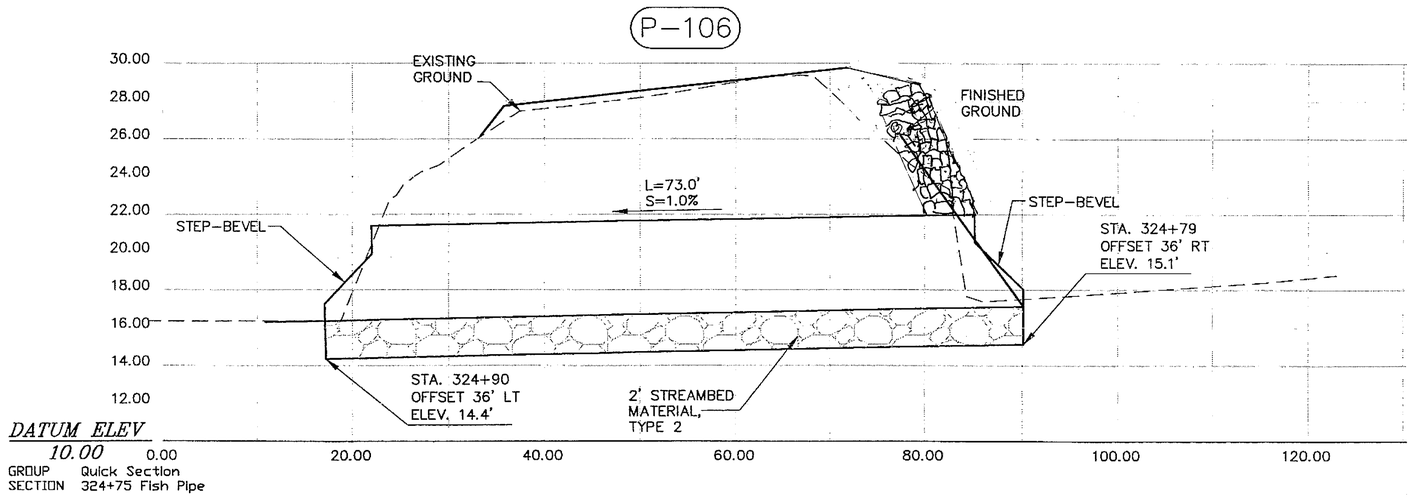


PLAN VIEW PIPE 106

HYDRAULIC SUMMARY		
CULVERT SIZE - 84" ICAP (12 ga. thickness) WITH 2' IMBEDDED DEPTH Annular Corrugations (3" x 1" preferred)		
DRAINAGE AREA = 0.34 SQUARE MILES		
LENGTH	~~73.0~~ ft 72.4ft	
INVERT ELEVATIONS	15.1 ft (INLET)	
	14.4 ft (OUTLET)	
DESIGN FREQUENCY	DESIGN FLOWS [CFS]	DESIGN HIGHWATER ELEVATION
Q_{50}	113	21.1 ft
Q_{100}	129	21.4 ft
CAPACITY @ Hw/D=1.0	>129 CFS	
PURPOSE: STREAM CHANNEL CROSSING WITH FISH PASSAGE PROVISIONS.		
WORK WINDOW	6/15 TO 9/15	

NOTE:

1. CONTRACTOR IS REQUIRED TO SUBMIT A CULVERT INSTALLATION PLAN AT LEAST TWO MONTHS PRIOR TO ANTICIPATED INSTALLATION DATE AND THE PLAN MUST BE APPROVED BY THE ENGINEER BEFORE CONSTRUCTION MAY BEGIN AT THIS CULVERT. THE PLAN SHALL INCLUDE HOW THE STREAM FLOW WILL BE MAINTAINED, HOW THE WORK AREA WILL BE DEWATERED AND WHAT ACTIVITIES THE CONTRACTOR EXPECTS TO DO WITHIN THE BEAVER POND AND DOWNSTREAM REACH.



PROFILE PIPE 106

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TAB: TYPICALS

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - TEE HARBOR TO AMALGA HARBOR ROAD
IM-093-3(24) ~ 68097

Fish Stream Culvert Plan & Profile

STATE OF ALASKA 49TH
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
12-13-04

DESIGNED BY: J. OSBURN
DRAWN BY: BENNETT/STEVENS

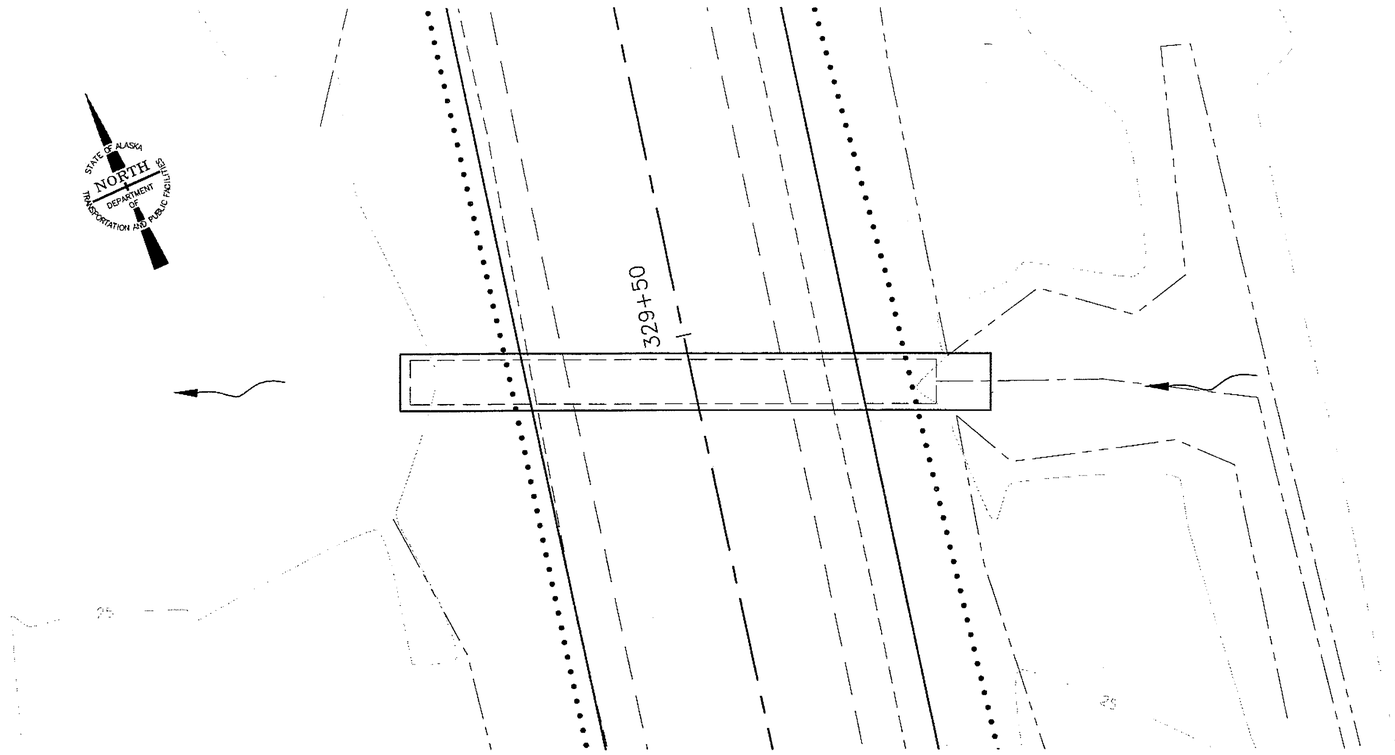
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

JNU-GLACIER HIGHWAY & TRAILHEAD

Fish Stream Culvert Plan & Profile

PROJECT DESIGNATION NUMBER	
IM-093-3(24)/68097	
STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
H6	146

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 11/09/09

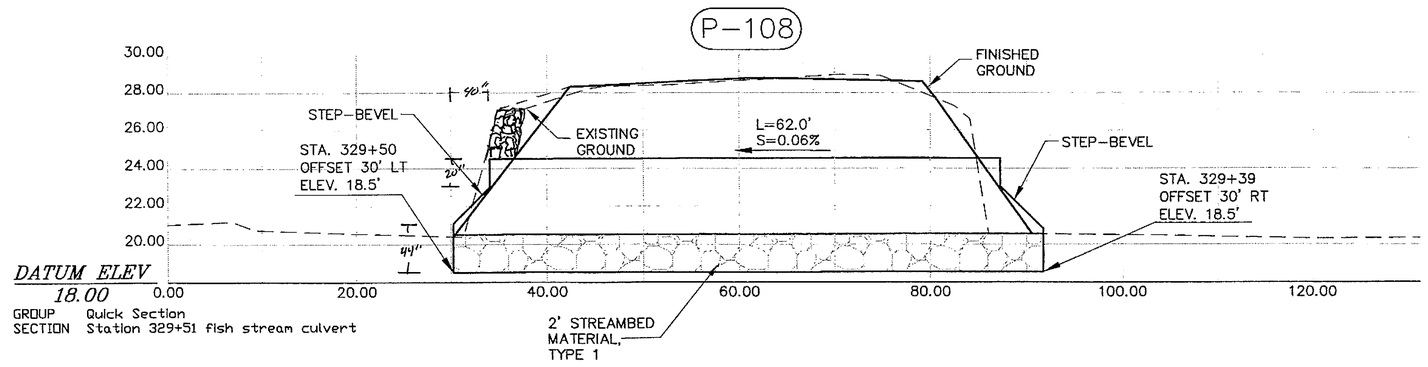


PLAN VIEW PIPE 108

HYDRAULIC SUMMARY		
CULVERT SIZE - 72" ICAP (14 ga. thickness) WITH 2' IMBEDDED DEPTH Annular Corrugations (3" x 1" preferred)		
DRAINAGE AREA = (SEE NOTE 1)		
LENGTH	~~62.0~~ ft 62.7 ft	
INVERT ELEVATIONS	18.5 ft (INLET)	
	18.5 ft (OUTLET)	
DESIGN FREQUENCY	DESIGN FLOWS [CFS]	DESIGN HIGHWATER ELEVATION
Q_{50}	80	24.5 ft
Q_{100}	93	24.9 ft
CAPACITY @ Hw/D=1.0	>93 CFS, APPROX.	
PURPOSE: STREAM CHANNEL CROSSING WITH FISH PASSAGE PROVISIONS.		
WORK WINDOW	6/15 TO 7/31	

NOTES:

1. HYDROLOGIC INFORMATION PROVIDED IN THIS MEMORANDUM, INCLUDING DRAINAGE AREA AND DESIGN FLOWS, IS BASED UPON INFORMATION IN THE HYDRAULICS FILE (COMPILED BY OTHERS). WHERE NO BASIN AREA IS PROVIDED, THE ESTIMATED FLOW IS BASED UPON A MANNING'S FORMULA HISTOGRAM.



PROFILE PIPE 108

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ADDENDUM NUMBER
ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - TEE HARBOR TO AMALGA HARBOR ROAD
IM-093-3(24) ~ 68097

Fish Stream
Culvert Plan & Profile

STATE OF ALASKA 49TH
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
12-13-04

DESIGNED BY: J. OSBURN
DRAWN BY: BENNETT/STEVENS

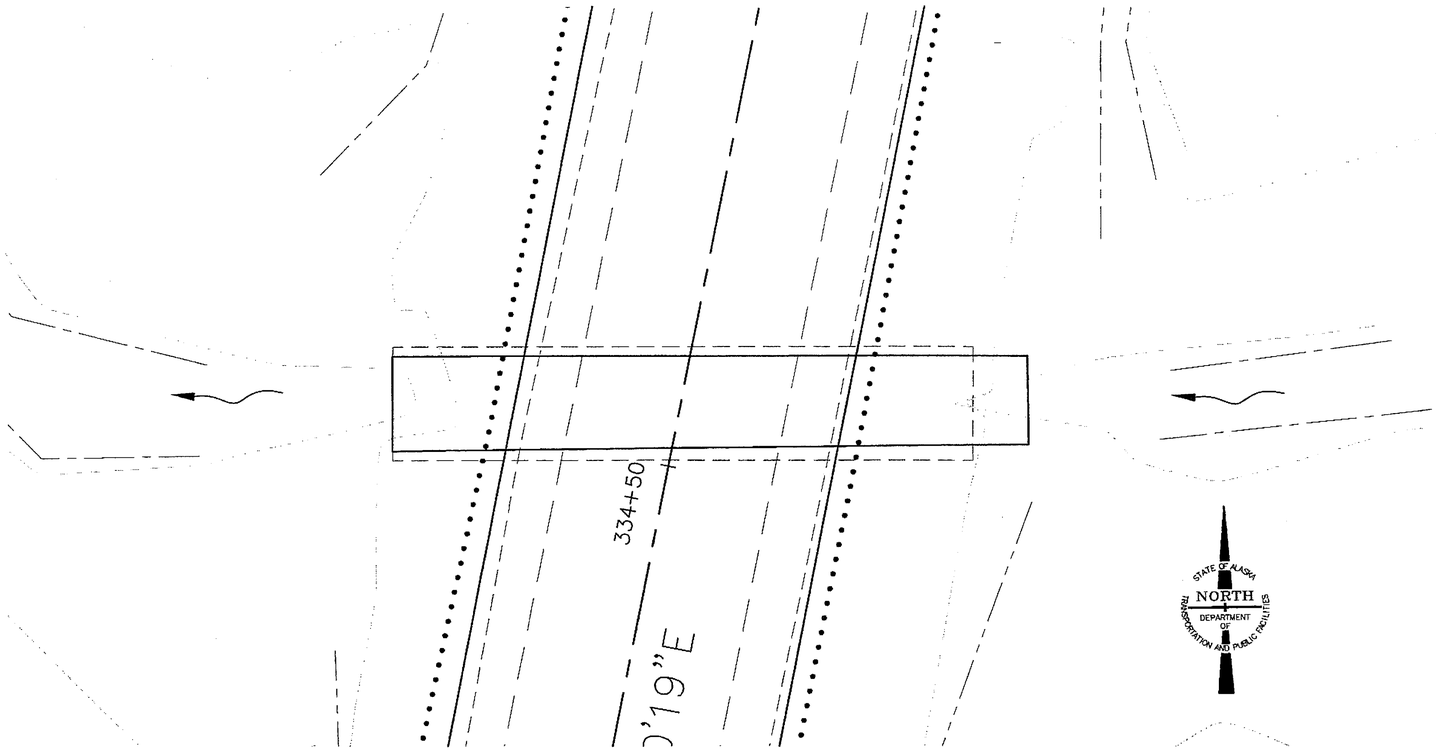
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

JNU-GLACIER HIGHWAY & TRAILHEAD

Fish Stream Culvert Plan & Profile

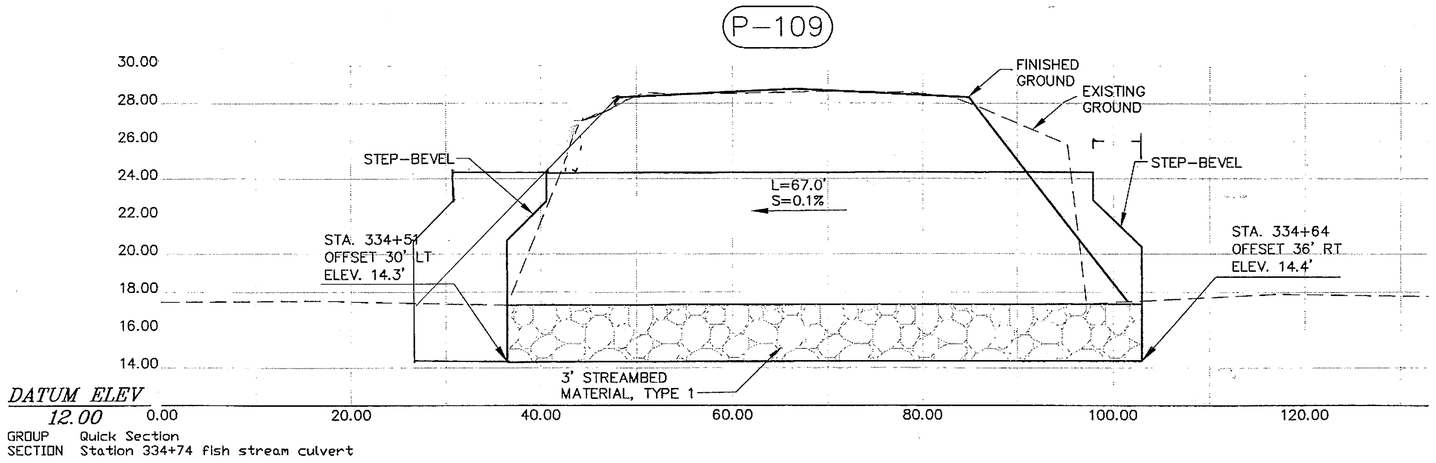
PROJECT DESIGNATION NUMBER	
IM-093-3(24)/68097	
STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
H7	146

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 11/09/07



PLAN VIEW PIPE 109

HYDRAULIC SUMMARY		
CULVERT SIZE - 120" ICAP (8 ga. thickness) WITH 3' IMBEDDED DEPTH Annular Corrugations (3" x 1" preferred)		
DRAINAGE AREA = 1.07 SQUARE MILES		
LENGTH	67.0 ft 78.9 ft	
INVERT ELEVATIONS	14.4 ft (INLET)	
	14.3 ft (OUTLET)	
DESIGN FREQUENCY	DESIGN FLOWS [CFS]	DESIGN HIGHWATER ELEVATION
Q_{50}	355	24.1 ft
Q_{100}	405	24.8 ft
CAPACITY @ Hw/D=1.0	>380 CFS	
PURPOSE: STREAM CHANNEL CROSSING WITH FISH PASSAGE PROVISIONS.		
WORK WINDOW	6/15 TO 7/31	



PROFILE PIPE 109

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ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - TEE HARBOR TO AMALGA HARBOR ROAD
IM-093-3(24) ~ 68097

Fish Stream
Culvert Plan & Profile

STATE OF ALASKA
49TH
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
12-13-04

DESIGNED BY: J. OSBURN
DRAWN BY: BENNETT/STEVENS

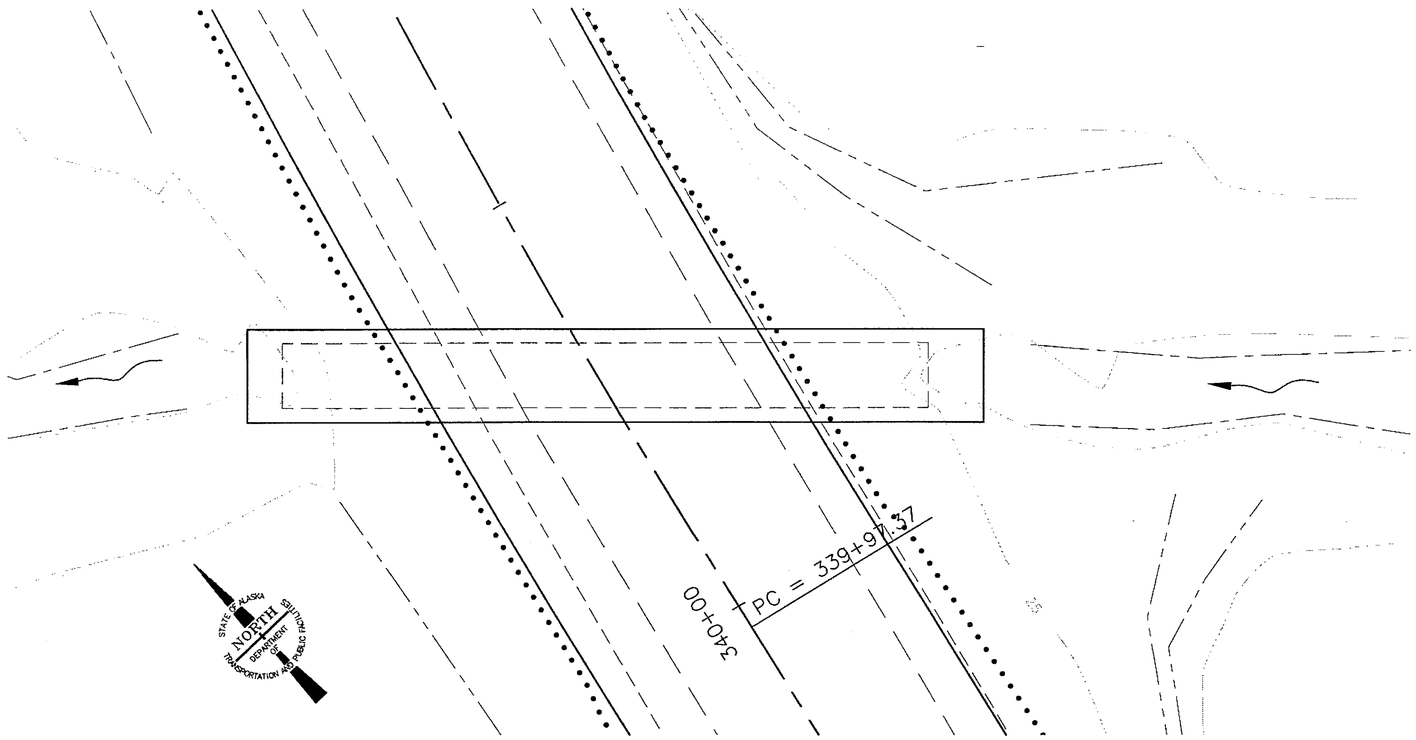
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

JNU-GLACIER HIGHWAY & TRAILHEAD

Fish Stream Culvert Plan & Profile

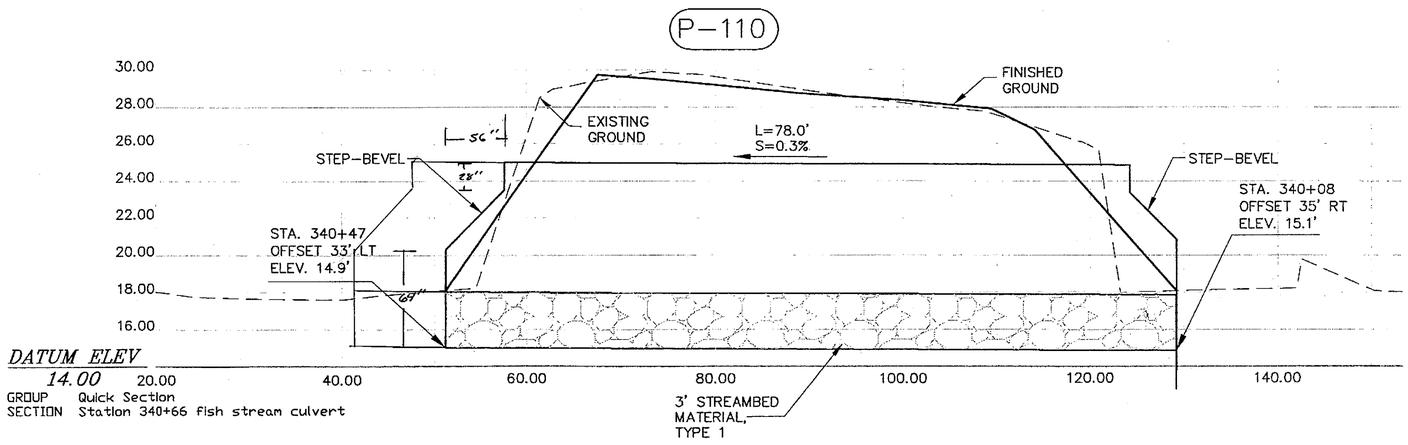
PROJECT DESIGNATION NUMBER	
IM-093-3(24)/68097	
STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
H8	146

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 11/09/05



PLAN VIEW PIPE 110

HYDRAULIC SUMMARY		
CULVERT SIZE - 120" ICAP (8 ga. thickness) WITH 3' IMBEDDED DEPTH Annular Corrugations (3" x 1" preferred)		
DRAINAGE AREA = 1.07 SQUARE MILES		
LENGTH	~~78.0~~ ft 88.8 ft	
INVERT ELEVATIONS	15.0 ft (INLET)	
	14.9 ft (OUTLET)	
DESIGN FREQUENCY	DESIGN FLOWS [CFS]	DESIGN HIGHWATER ELEVATION
Q_{50}	355	24.1 ft
Q_{100}	405	24.8 ft
CAPACITY @ Hw/D=1.0	>300 CFS	
PURPOSE: STREAM CHANNEL CROSSING WITH FISH PASSAGE PROVISIONS.		
WORK WINDOW	6/15 TO 7/31	



PROFILE PIPE 110

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ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS		
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IM-093-3(24) ~ 68097

Fish Stream Culvert Plan & Profile

STATE OF ALASKA 49 TH
Joel D. Osburn CE-11014
REGISTERED PROFESSIONAL ENGINEER
12-13-04

DESIGNED BY: J. OSBURN
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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

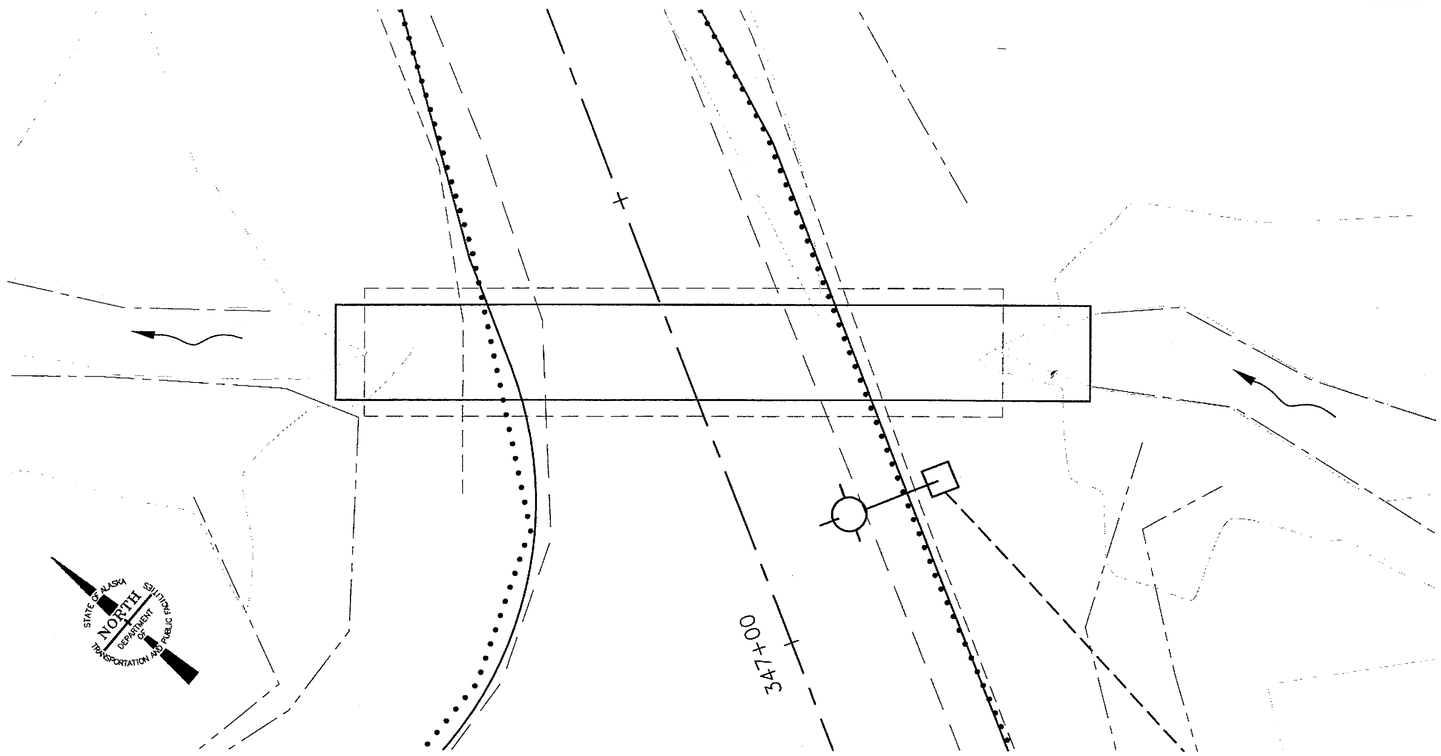
JNU-GLACIER HIGHWAY & TRAILHEAD

Fish Stream Culvert Plan & Profile

PROJECT DESIGNATION NUMBER
IM-093-3(24)/68097

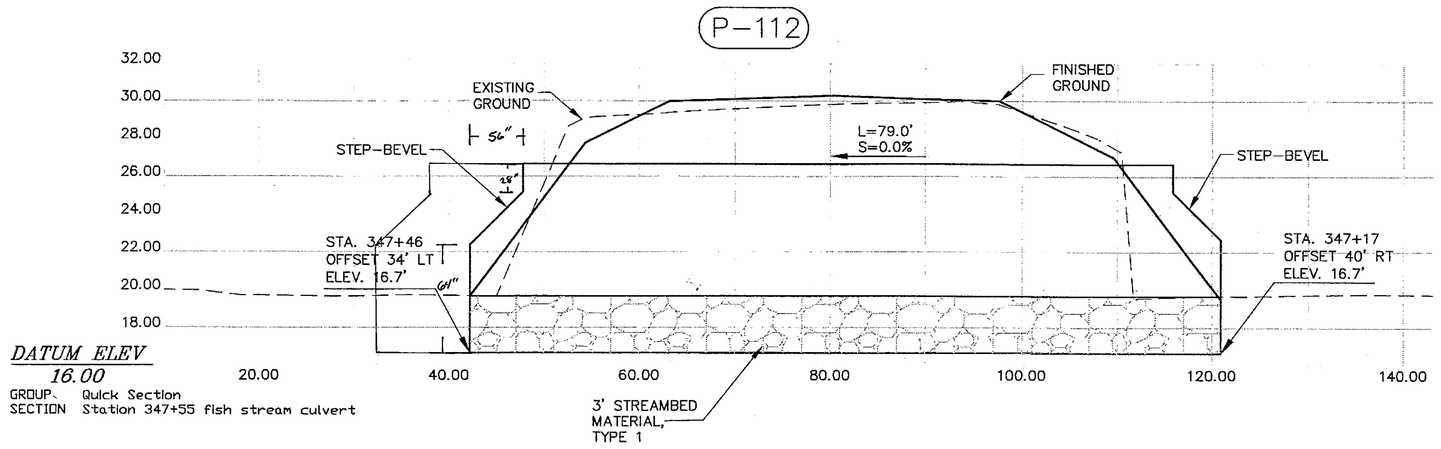
STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
H9	146

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 11/17/04



PLAN VIEW PIPE 112

HYDRAULIC SUMMARY		
CULVERT SIZE - 120" ICAP (8 ga. thickness) WITH 3' IMBEDDED DEPTH Annular Corrugations (3" x 1" preferred)		
DRAINAGE AREA = 1.07 SQUARE MILES		
LENGTH	79.0 ft 89.2 ft.	
INVERT ELEVATIONS	16.7 ft (INLET)	
	16.7 ft (OUTLET)	
DESIGN FREQUENCY	DESIGN FLOWS [CFS]	DESIGN HIGHWATER ELEVATION
Q_{50}	355	27.4 ft
Q_{100}	405	28.3 ft
CAPACITY @ Hw/D=1.0	>315 CFS	
PURPOSE: STREAM CHANNEL CROSSING WITH FISH PASSAGE PROVISIONS.		
WORK WINDOW	6/15 TO 7/31	



PROFILE PIPE 112

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TAB: TYPICALS

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - TEE HARBOR TO AMALGA HARBOR ROAD
IM-093-3(24) ~ 68097

Fish Stream Culvert Plan & Profile

STATE OF ALASKA 49 TH
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
12-13-04

DESIGNED BY: J. OSBURN
DRAWN BY: BENNETT/STEVENS

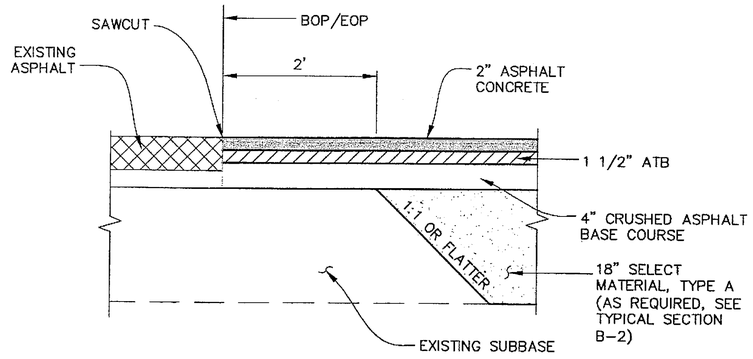
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

JNU-GLACIER HIGHWAY & TRAILHEAD

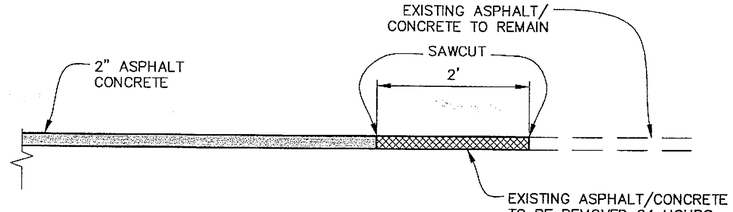
Fish Stream Culvert Plan & Profile

PROJECT DESIGNATION NUMBER	
IM-093-3(24)/68097	
STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
H10	146

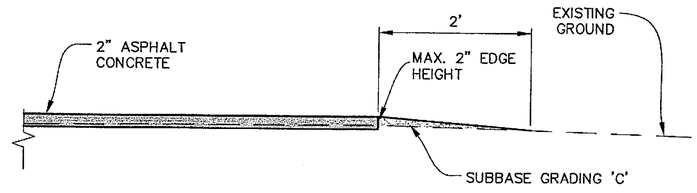
Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE _____ Date 11/09/09



PAVEMENT MATCH JOINT DETAIL
BEGIN/END OF PROJECT



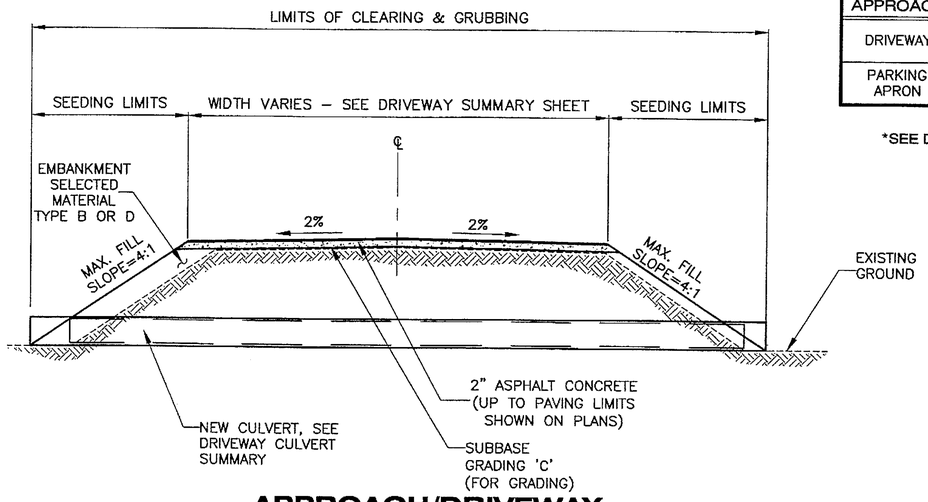
PAVEMENT MATCH JOINT DETAIL
EXISTING PAVED APPROACHES



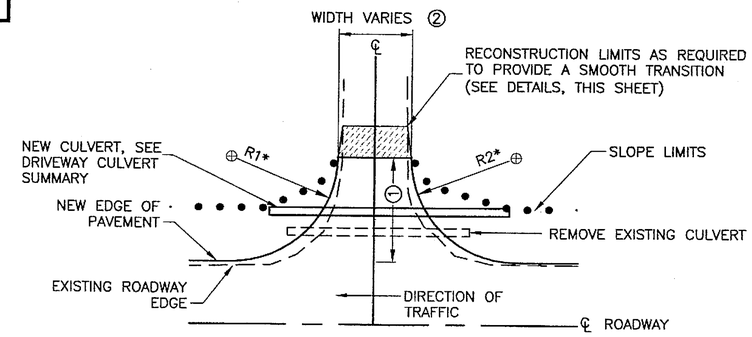
PAVEMENT MATCH JOINT DETAIL
EXISTING UN-PAVED APPROACHES

TYPICAL DIMENSIONS*		
TYPE OF APPROACH	LENGTH ①	WIDTH ②
DRIVEWAY	20'	15'
PARKING APRON	15'	20'

*SEE DRIVEWAY SUMMARY TABLE FOR EXCEPTIONS

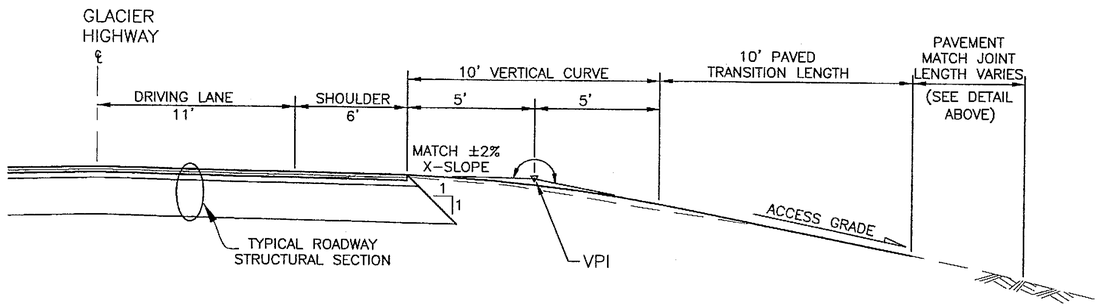


APPROACH/DRIVEWAY
TYPICAL SECTION



*RADIUS VARIES, SEE DRIVEWAY SUMMARY TABLE

APPROACH / DRIVEWAY / APRON
PLAN VIEW



DRIVEWAY/APPROACH
TYPICAL PROFILE

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TAB: TYPICALS

ADDENDUM NUMBER
ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

Q:\Jn

JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - TEE HARBOR TO AMALGA HARBOR ROAD
IM-093-3(24) ~ 68097

Approach/Driveway/Parking Apron Typical Details

STATE OF ALASKA 49TH
Joel D. Osburn CE-11014
REGISTERED PROFESSIONAL ENGINEER
12-13-04

DESIGNED BY: J. OSBURN
DRAWN BY: BENNETT/STEVENS

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

JNU-GLACIER HIGHWAY & TRAILHEAD

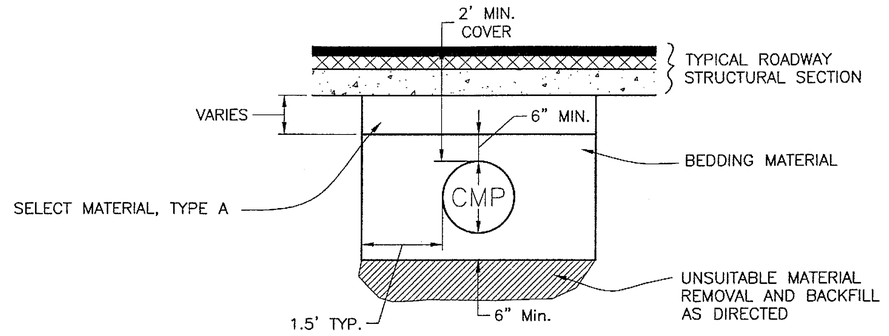
Approach/ Driveway Details

PROJECT DESIGNATION NUMBER	
IM-093-3(24)/68097	
STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
J1	146

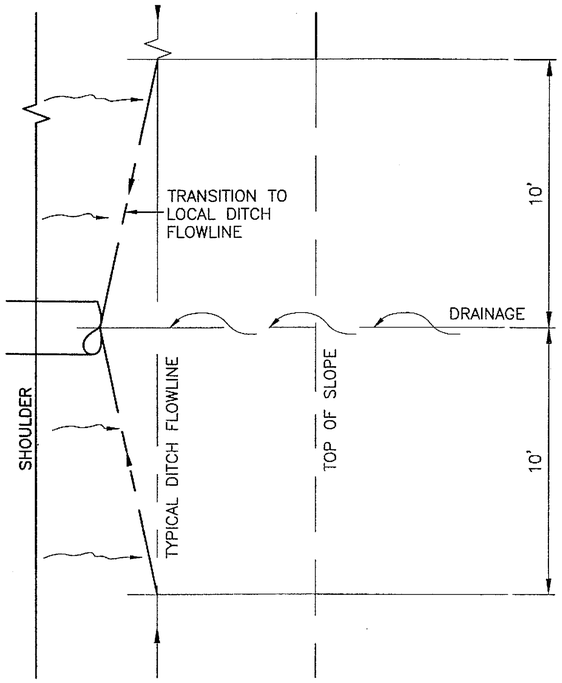
Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE _____ Date 1/07/05

DITCH TRANSITION NOTES:

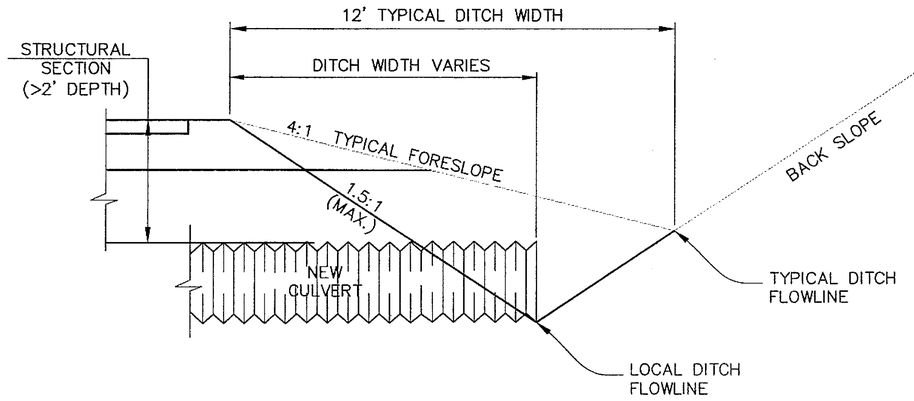
1. SEE STANDARD DRAWING D-07.00 FOR CULVERT BEVELLING DIMENSIONS ON PIPES 5' IN DIAMETER OR LARGER.
2. LINE DITCHES WITH CLASS I RIPRAP AS REQUIRED TO CONTROL EROSION AND STABILIZE CHANNEL.
3. TRANSITION NEW DITCH SMOOTHLY TO MATCH EXISTING PROPOSED CONDITIONS AS DIRECTED BY THE ENGINEER.



TYPICAL PIPE TRENCHING & BEDDING DETAIL



PLAN VIEW
CREEK CROSSING
IN CUT SECTION



DITCH TRANSITION DETAIL
NTS

NOTE:
THE INTENT OF THIS DETAIL IS TO PROVIDE 2' COVER CLEARANCE BETWEEN TOP OF PIPE AND PAVEMENT SURFACE AND TO AVOID EXTENDING SLOPE LIMITS AT PIPE LOCATIONS BY VARYING THE DITCH FORESLOPE.

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TAB: TYPICALS

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - TEE HARBOR TO AMALGA HARBOR ROAD
IM-093-3(24) ~ 68097

Ditch Transition & Typical Pipe Trenching/ Bedding Details

STATE OF ALASKA
49 TH
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
12-13-04

DESIGNED BY: J. OSBURN
DRAWN BY: BENNETT/STEVENS

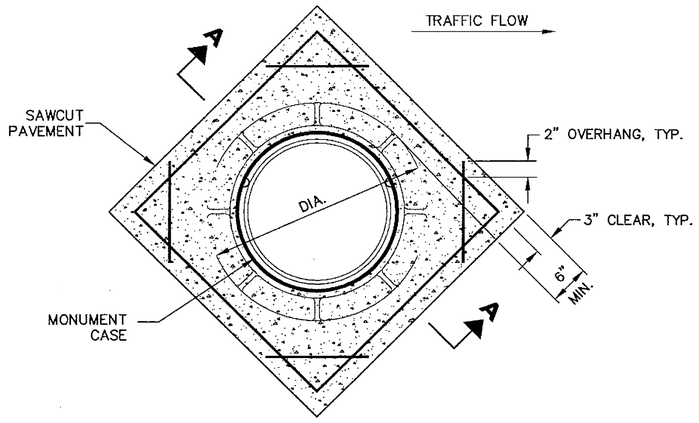
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

JNU-GLACIER HIGHWAY & TRAILHEAD

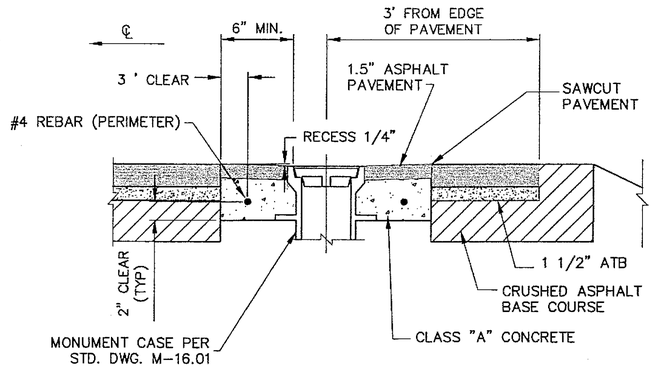
Ditch Transition & Pipe Trenching Details

PROJECT DESIGNATION NUMBER	
IM-093-3(24)/68097	
STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
J2	146

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, how it was constructed.
PE _____ Date 11/19/09



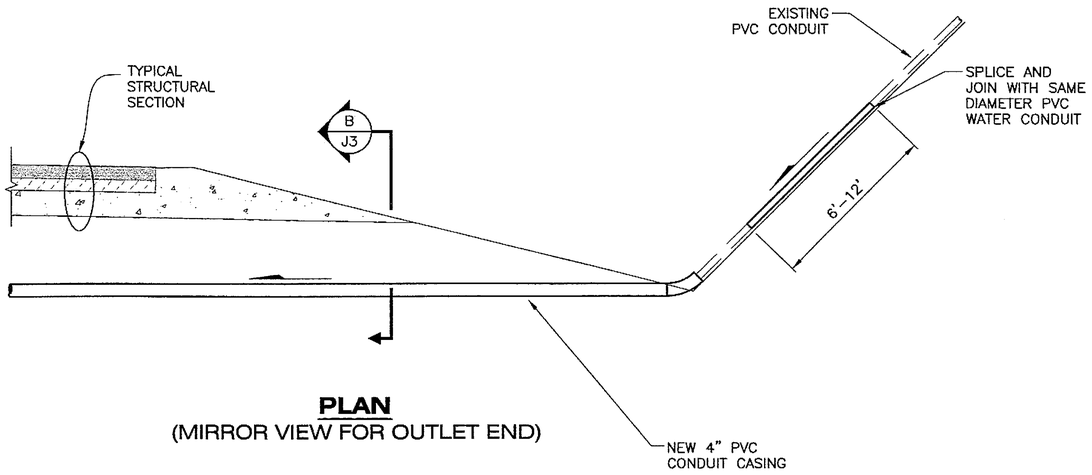
Plan



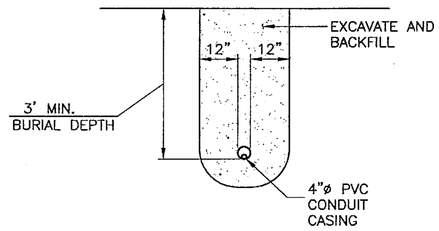
Section A-A

MONUMENT ENCASEMENT DETAIL

REFER TO PLAN SHEETS / SUMMARY TABLES
FOR APPROXIMATE LOCATIONS.



PLAN
(MIRROR VIEW FOR OUTLET END)



SECTION B-B

TYPICAL PRIVATE WATERLINE DETAIL

NOTES:

1. INSTALL 4" PVC WATER CONDUIT CASING. SEE TYPICAL PRIVATE WATERLINE DETAIL, THIS SHEET.
2. CLEAN OUT AND DISINFECT WATERLINE UPON COMPLETION.
3. WHERE PRACTICAL, INSTALL WATER CONDUIT IN SAME TRENCH AS CROSS-CULVERT.
4. NOTIFY RESIDENCES AT LEAST 48 HOURS PRIOR TO DISTURBING PRIVATE WATER SERVICES.

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TAB: TYPICALS

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - TEE HARBOR TO AMALGA HARBOR ROAD
IM-093-3(24) ~ 68097

Miscellaneous Details

STATE OF ALASKA 49TH
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
12-13-04

DESIGNED BY:	J. OSBURN
DRAWN BY:	BENNETT/STEVENS

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

JNU-GLACIER HIGHWAY & TRAILHEAD

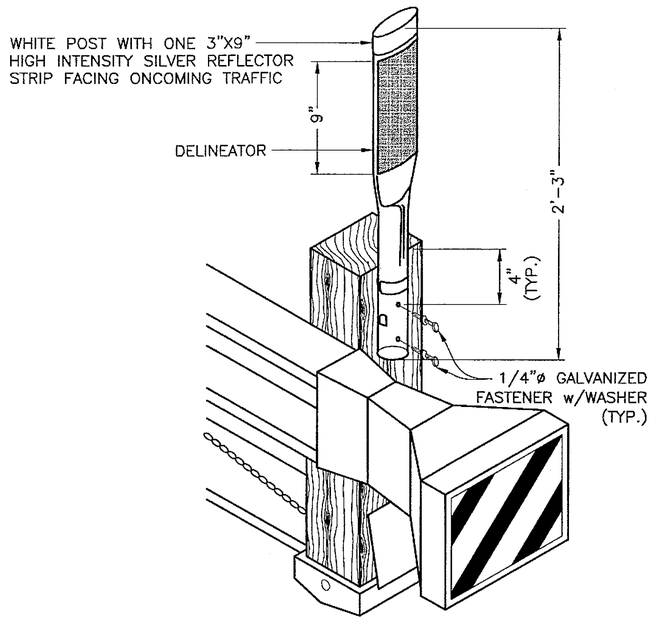
Miscellaneous Details

PROJECT DESIGNATION NUMBER	
IM-093-3(24)/68097	
STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
J3	146

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 11/01/07

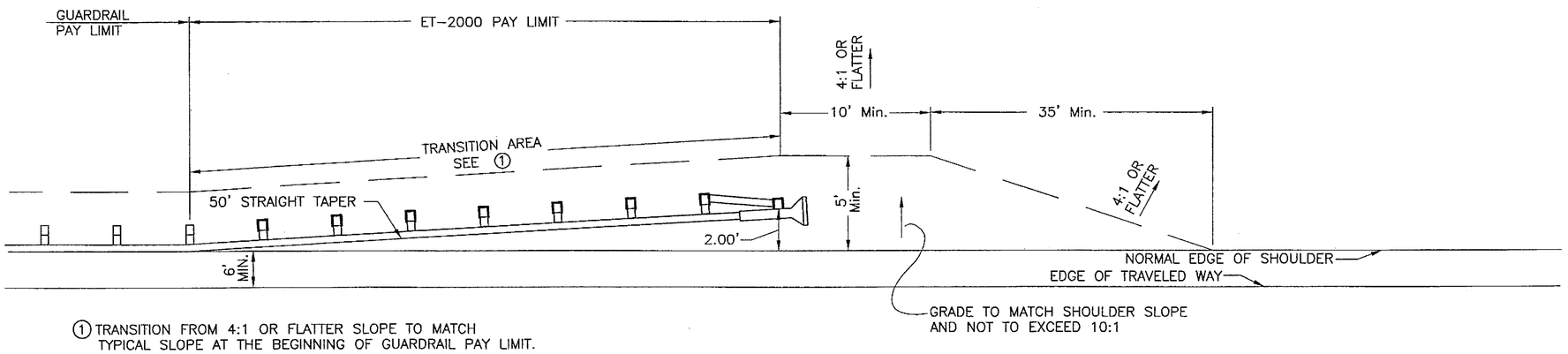
Delineator Notes:

1. EACH ET–2000 GUARDRAIL END SHALL HAVE ONE DELINEATOR.
2. DELINEATORS SHALL HAVE WHITE REFLECTIVE SHEETING.
3. STEEL POST GUARDRAIL SHALL BE PRE–DRILLED PRIOR TO SECURING DELINEATOR WITH SELF–TAPPING SCREWS.
4. DELINEATOR SHALL BE INCIDENTAL TO ITEM 606(11).



Flexible Guardrail Delineator

No Scale



① TRANSITION FROM 4:1 OR FLATTER SLOPE TO MATCH TYPICAL SLOPE AT THE BEGINNING OF GUARDRAIL PAY LIMIT.

ET-2000 Installation Widening Details

No Scale

NOTES:

1. SUITABLE MATERIAL, AS DETERMINED BY THE ENGINEER, FOR WIDENING SHALL BE INCIDENTAL TO ITEM 606 (11).

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TAB: TYPICALS

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - TEE HARBOR TO AMALGA HARBOR ROAD
IM-093-3(24) ~ 68097

ET-2000 Details

STATE OF ALASKA 49 TH
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
12-13-04

DESIGNED BY: J. OSBURN
DRAWN BY: BENNETT/STEVENS

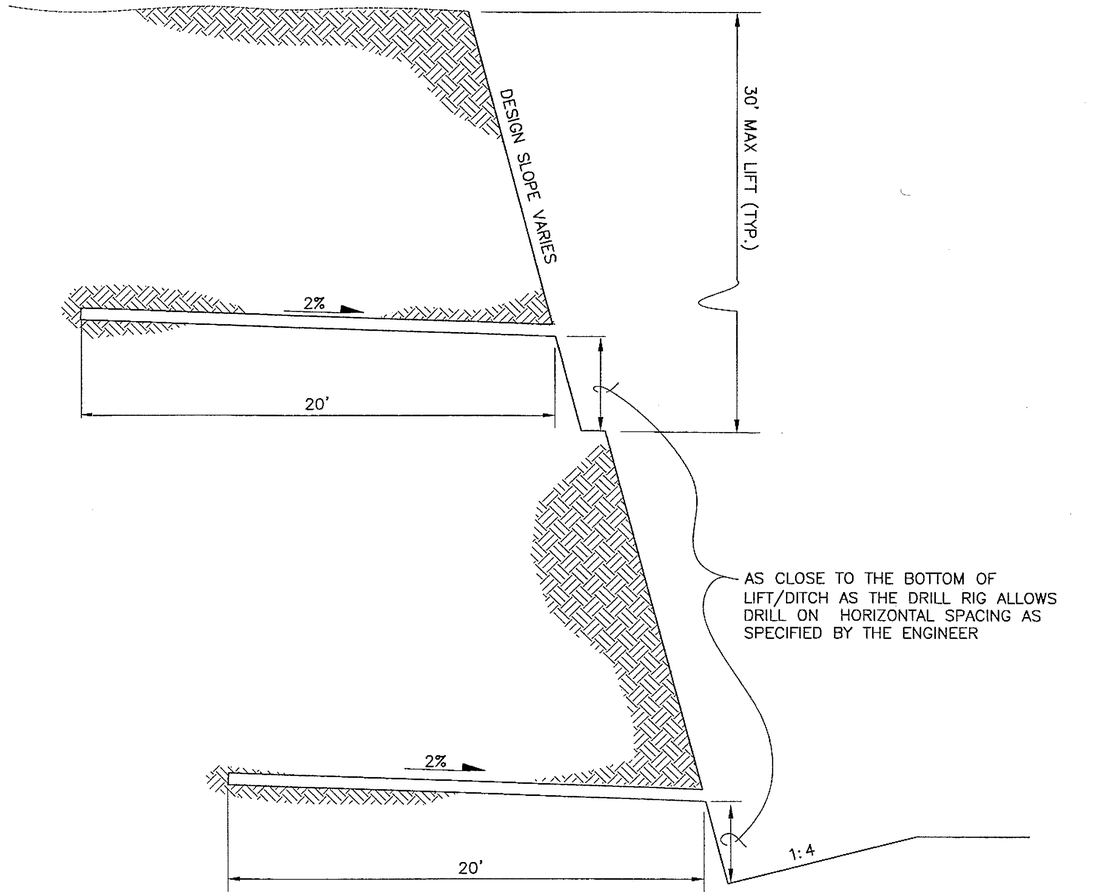
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

JNU-GLACIER HIGHWAY & TRAILHEAD

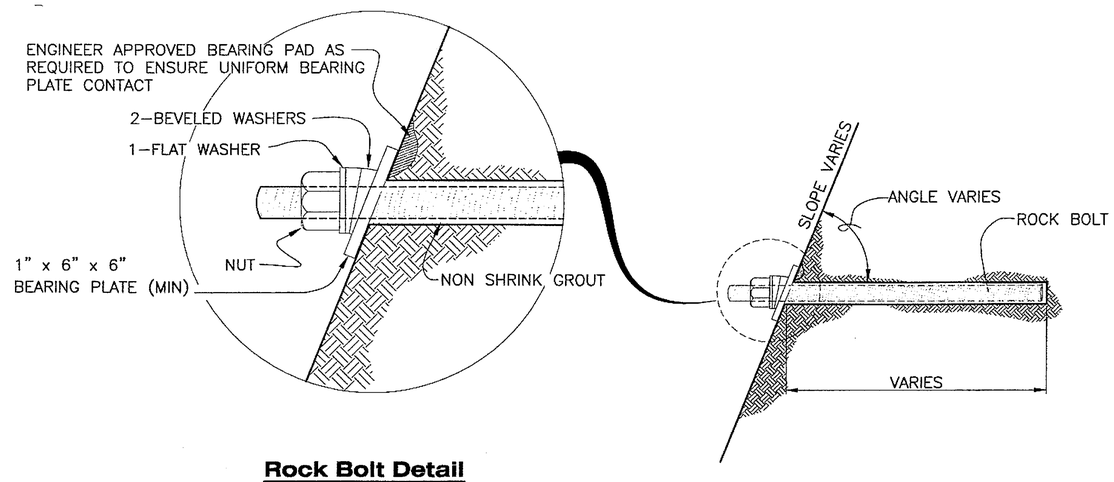
ET-2000 Details

PROJECT DESIGNATION NUMBER	
IM-093-3(24)/68097	
STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
J4.	146

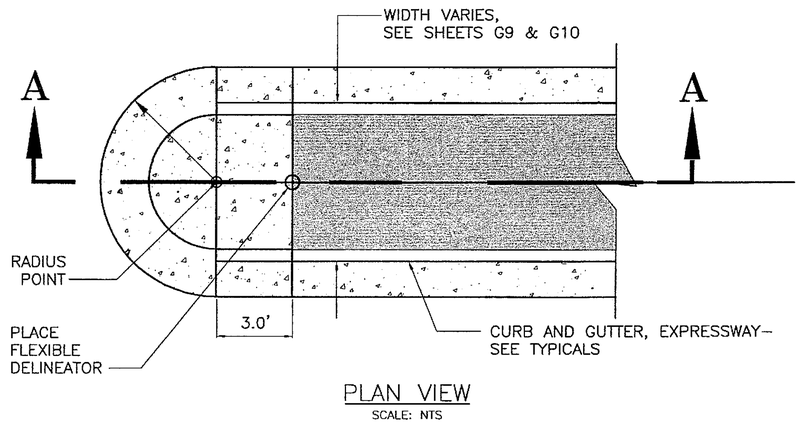
Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE [signature] Date 1/10/07



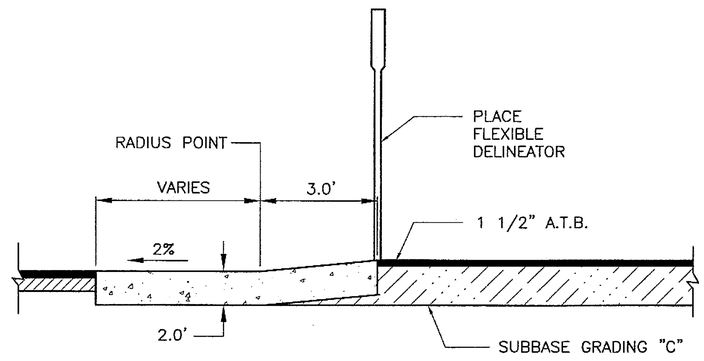
Rock Slope Drain Hole Detail



Rock Bolt Detail



PLAN VIEW
SCALE: NTS



SECTION A–A
SCALE: NTS

Ramped Median End Detail
(SEE SHEETS G9 & G10 FOR TRAILHEAD LAYOUT DETAILS)

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ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - TEE HARBOR TO AMALGA HARBOR ROAD
IM-093-3(24) ~ 68097

Miscellaneous Details

STATE OF ALASKA 49 TH
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
12-13-04

DESIGNED BY: J. OSBURN
DRAWN BY: BENNETT/STEVENS

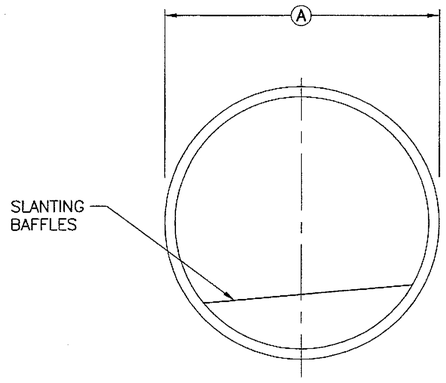
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

JNU-GLACIER HIGHWAY & TRAILHEAD

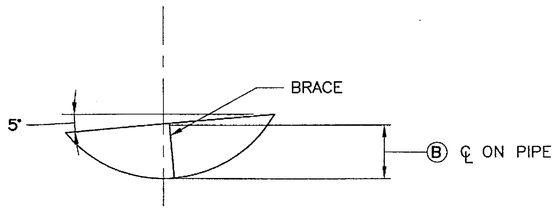
Miscellaneous Details

PROJECT DESIGNATION NUMBER	
IM-093-3(24)/68097	
STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
J5	146

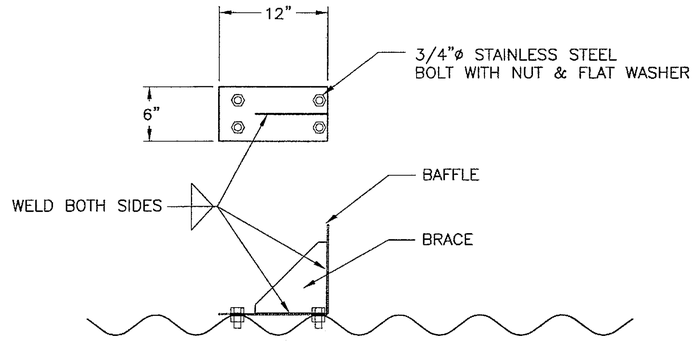
Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE _____ Date 1/27/09



BAFFLE & PIPE DETAIL



BAFFLE DETAIL

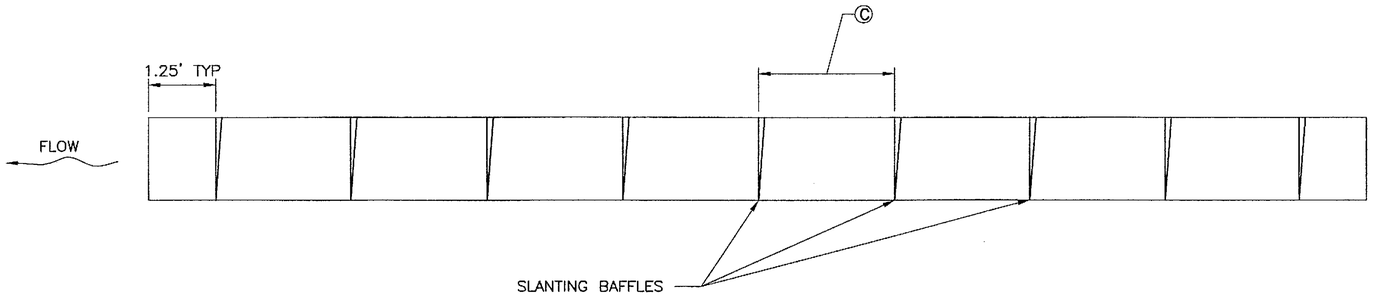


BRACE DETAIL

NOTE:

1. TOP EDGE OF BAFFLE SHALL BE CANTED 5 DEGREES FROM HORIZONTAL. SEE TABLE FOR HEIGHT OF BAFFLE ON CENTERLINE OF PIPE
2. ALL BAFFLES AND BRACES SHALL BE MANUFACTURED FROM ¼" SHEET MATERIAL (SAME AS PIPE).
3. EACH BAFFLE SHALL HAVE A MINIMUM OF 3 BRACES WITH A MAXIMUM SPACING OF 15".
4. ALL DIMENSIONS ON THIS SHEET ARE NOMINAL– BAFFLES SHALL BE MANUFACTURED TO FIT PARTICULAR PIPE.

PIPE NO.	Ⓐ	Ⓑ	Ⓒ	REQ'D NO. OF BAFFLES
P-52B	4.00'	12"	3.5'	10



TYPICAL BAFFLE PLAN LAYOUT

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TAB: TYPICALS

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - TEE HARBOR TO AMALGA HARBOR ROAD
IM-093-3(24) ~ 68097

Fish Baffle Details

STATE OF ALASKA 49TH
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
12-13-04

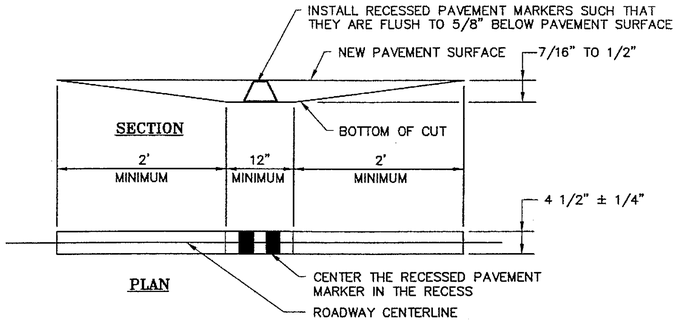
DESIGNED BY: J. OSBURN
DRAWN BY: BENNETT/STEVENS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION
JNU-GLACIER HIGHWAY & TRAILHEAD

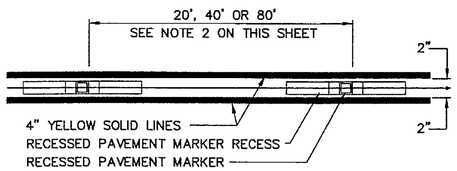
Fish Baffle Details

PROJECT DESIGNATION NUMBER	
IM-093-3(24)/68097	
STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
J6.	146

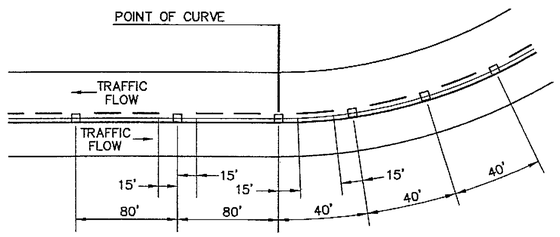
Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE [signature] Date 1/6/09



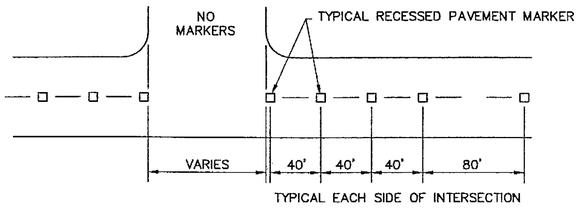
RECESSED PAVEMENT MARKER DETAIL



RECESSED PAVEMENT MARKER INSTALLATION DETAILS



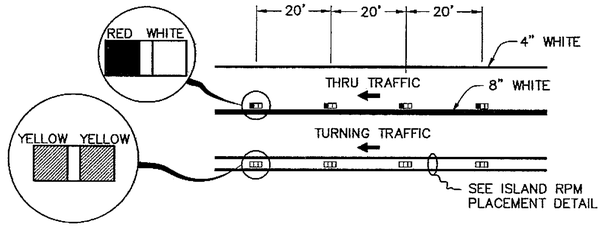
RECESSED PAVEMENT MARKER PLAN LAYOUT DETAIL



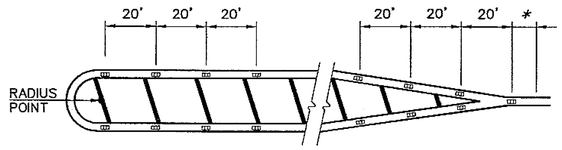
RECESSED PAVEMENT MARKER DETAIL FOR INTERSECTION APPROACHES

RECESSED PAVEMENT MARKER NOTES

1. RECESSED PAVEMENT MARKERS (R.P.M.'s) SHALL BE INSTALLED BETWEEN THE B.O.P. AND THE E.O.P. RPM'S SHALL NOT BE PLACED IN INTERSECTIONS WITH PUBLIC ROADWAYS.
2. R.P.M.'s SHALL BE SPACED AT 80' ON TANGENT SECTIONS OF ROADWAY; ON CURVES THE R.P.M.'s SHALL BE SPACED AT EVERY 40'. TURN BAYS REQUIRE SPECIAL SPACING SEE DETAILS ON THIS SHEET.
3. ON ALL ROADWAY SECTIONS WITH DOUBLE LINES (EITHER BROKEN OR SOLID) R.P.M.'s SHALL BE PLACED BETWEEN THE LINES. ON SECTIONS OF ROADWAY WITH SINGLE BROKEN LINES THE R.P.M.'s SHALL BE PLACED ON THE CENTERLINE BETWEEN THE STRIPES.
4. THE LOCATIONS OF ALL PASSING AND NO-PASSING ZONES SHALL BE DETERMINED AND LOCATED IN THE FIELD BY THE ADOT&PF TRAFFIC ENGINEER PRIOR TO FINAL PAVEMENT STRIPING.
5. RPM SPACING SHALL START OVER AT INTERSECTION BOUNDARY.
6. REFLECTIVE PAVEMENT MARKERS SHALL HAVE DUAL YELLOW REFLECTIVE SURFACES FOR TWO-LANE ROADWAY AREAS.

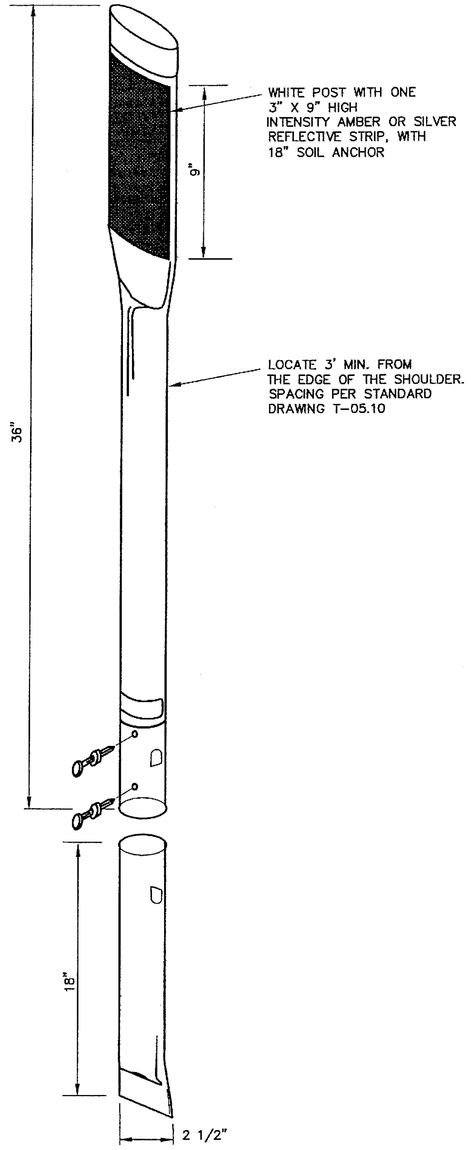


TURN BAY RPM PLACEMENT DETAIL



* CONTINUE 20' SPACING IN TURN BAYS FOR SPACING IN OTHER SECTIONS, SEE R.P.M. SUMMARY TABLE.

PAINTED ISLAND RPM REPLACEMENT DETAIL



FLEXIBLE DELINEATOR DETAILS

FLEXIBLE DELINEATORS NOTES:

1. DELINEATORS SHALL BE INSTALLED EVERY 500' ON TANGENT SECTIONS OF ROADWAY, AND EVERY 250' ON CURVES AT BOTH SIDES OF THE ROAD.
2. DELINEATORS SHALL BE WHITE IN COLOR. DELINATORS INSTALLED ON OUTSIDE SHOULDERS SHALL HAVE WHITE REFLECTIVE SHEETING (APPROX. QUANTITY). DELINEATORS INSTALLED ON MEDIAN SHOULDERS SHALL HAVE YELLOW REFLECTIVE SHEETING.

PATH: Q:\Jnu\68096\Planset\Stage1\J1-10_MiscDet.dgn
Sun, 05/Dec/04 02:32PM
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TAB: TYPICALS

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - TEE HARBOR TO AMALGA HARBOR ROAD
IM-093-3(24) ~ 68097

Recessed Pavement Marker & Flexible Delineator Details

STATE OF ALASKA 49 TH
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
12-13-04

DESIGNED BY: J. OSBURN
DRAWN BY: BENNETT/STEVENS

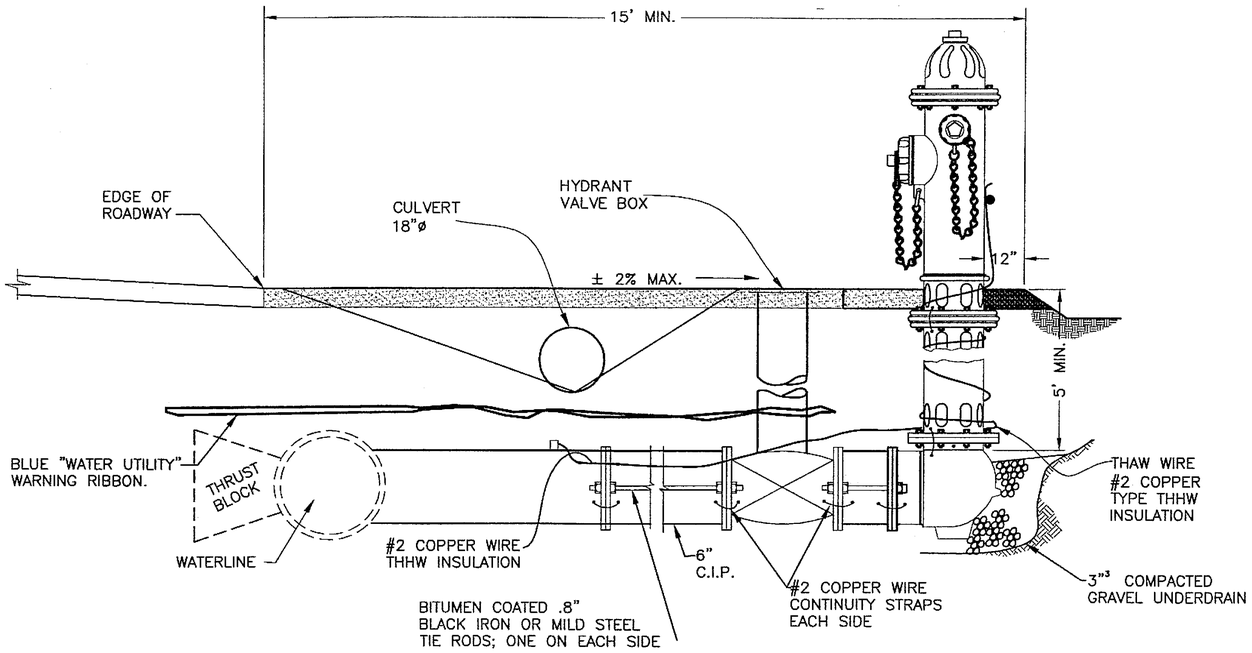
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

JNU-GLACIER HIGHWAY & TRAILHEAD

Recessed Pavement Marker & Flexible Delineator Details

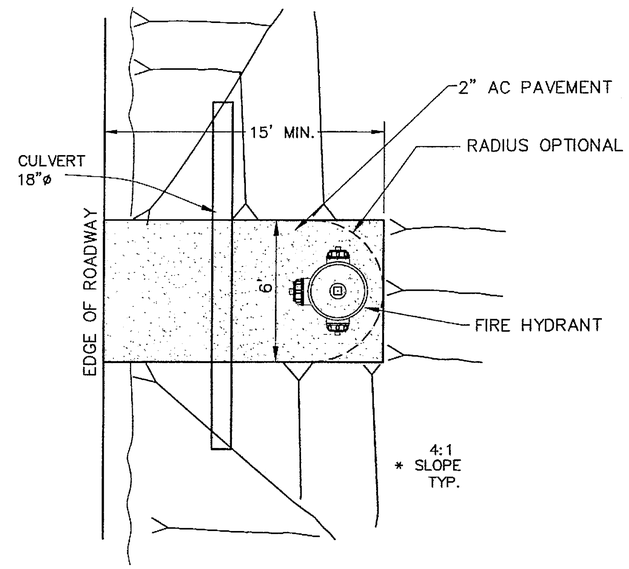
PROJECT DESIGNATION NUMBER	
IM-093-3(24)/68097	
STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
J7	146

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 11/29/07



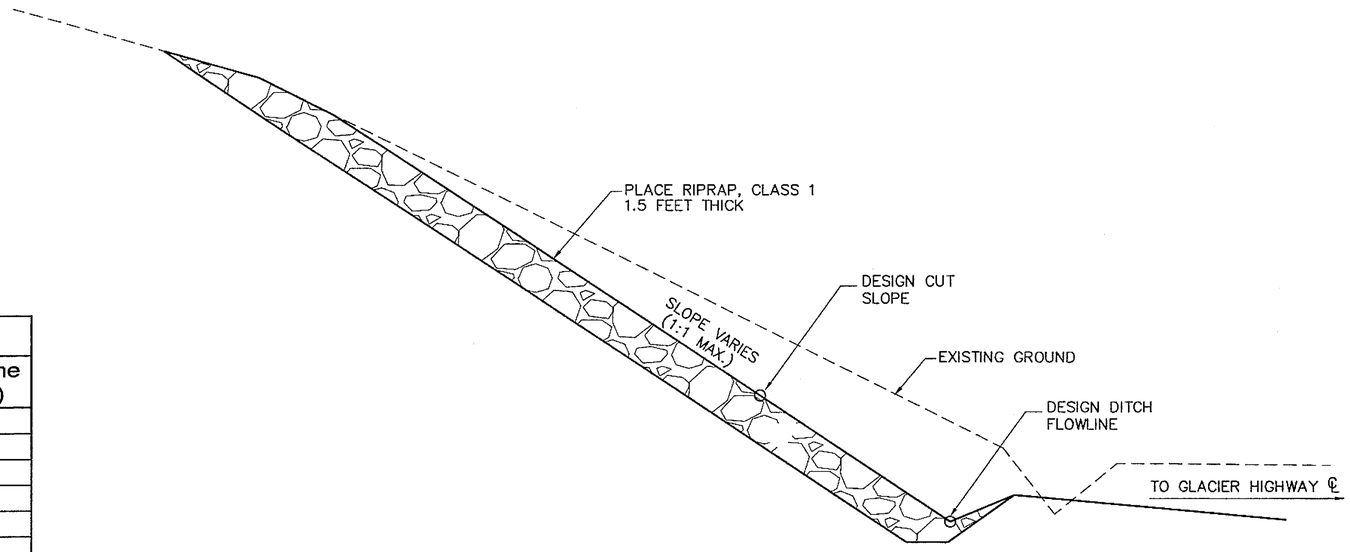
Fire Hydrant Relocation Detail

No Scale



SEED SIDE SLOPES OF ACCESS PAD IN ACCORDANCE WITH SPECIFICATIONS.

PLAN VIEW



Rock Blanket Detail

No Scale

ROCK BLANKET TABLE				
From Station	To Station	Offset	Slope Length	Volume (c.y.)
19+20	25+00	RT	15	490
28+50	41+00	RT	8	570
46+00	47+50	RT	15	130
52+50	54+50	RT	15	180
85+00	85+50	RT	30	90
97+75	98+75	RT	10	60
110+00	112+00	RT	20	230
116+50	118+00	RT	10	90
UPDATED 11/16/2004			TOTAL=	1840

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ADDENDUM NUMBER

ATTACHMENT NUMBER

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No.	DATE	DESCRIPTION

JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - TEE HARBOR TO AMALGA HARBOR ROAD
IM-093-3(24) ~ 68097

Miscellaneous Details

STATE OF ALASKA 49TH
Joel D. Osburn CE-11014
REGISTERED PROFESSIONAL ENGINEER
12-13-04

DESIGNED BY: J. OSBURN
DRAWN BY: BENNETT/STEVENS

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

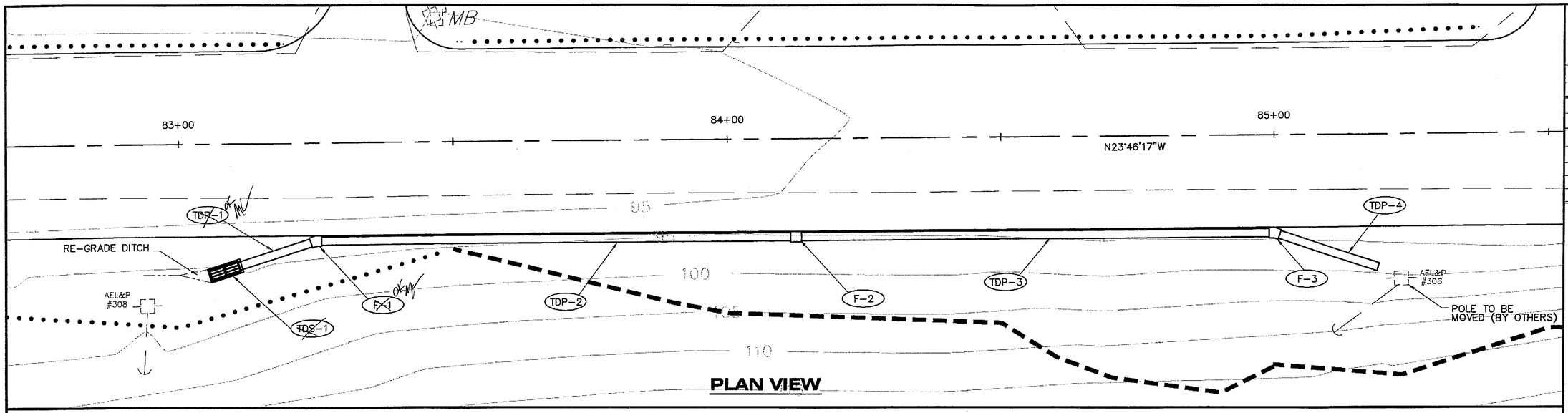
JNU-GLACIER HIGHWAY & TRAILHEAD

Miscellaneous Details

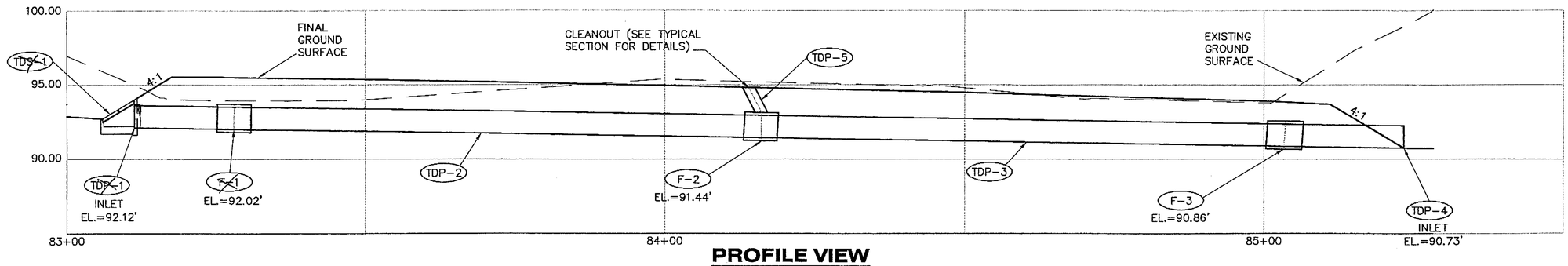
PROJECT DESIGNATION NUMBER
IM-093-3(24)/68097

STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
J8	146

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 _____



PLAN VIEW



PROFILE VIEW

THROUGH DRAIN LAYOUT TABLES

NO.	DESC.	DIAMETER (in)	LENGTH (ft)	INLET			OUTLET			SLOPE	REMARKS
				STA.	OFF.	INV.	STA.	OFF.	INV.		
TDP-1	CPP	18	17 20	83+11.5	22.3 RT	92.12	83+25.0	18.0 RT	92.02	0.7%	
TDP-2	CPP	18	88	83+25.0	18.0 RT	92.00	84+12.5	18.0 RT	91.44	0.7%	
TDP-3	CPP	18	88	84+12.5	18.0 RT	91.44	85+00.0	18.0 RT	90.86	0.7%	
TDP-4	CPP	18	20	85+00.0	18.0 RT	90.86	85+18.9	24.4 RT	90.73	0.7%	
TDP-5	PLASTIC	8	3	84+00.0	18.0 RT	94.82	84+12.5	18.0 RT	92.94	-	FOR CLEANOUT

UPDATED 12/1/2004

NOTE:

SEE STANDARD DRAWING D-42.10 FOR TYPE 'C' INLET BOX DETAILS.

NO.	DESC.	DIAMETER (in)	DEGREE BEND	CENTER			REMARKS
				STA.	OFF.	INV.	
F-1	FITTING	18	11.25	83+25.0	18.0 RT	92.02	
F-2	TEE	8 X 18	-	84+12.5	18.0 RT	91.44	FOR CLEANOUT
F-3	FITTING	18	11.25	85+00.0	18.0 RT	90.86	

UPDATED 12/1/2004

NO.	DESC.	DIAMETER (in)	LAYOUT PT.			REMARKS
			STA.	OFF.	EL.	
TDS-1	TYPE 'C' INLET BOX	18	83+05.6	24.4 RT	92.7	

UPDATED 12/1/2004

TDP = THROUGH DRAIN PIPE
F = FITTING
TDS = THROUGH DRAIN STRUCTURE

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ADDENDUM NUMBER

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No.	DATE	DESCRIPTION

JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - TEE HARBOR TO AMALGA HARBOR ROAD
IM-093-3(24) ~ 68097

Through Drain Layout Details

STATE OF ALASKA 49 TH
Joel D. Osburn CE-11014
REGISTERED PROFESSIONAL ENGINEER
12-13-04

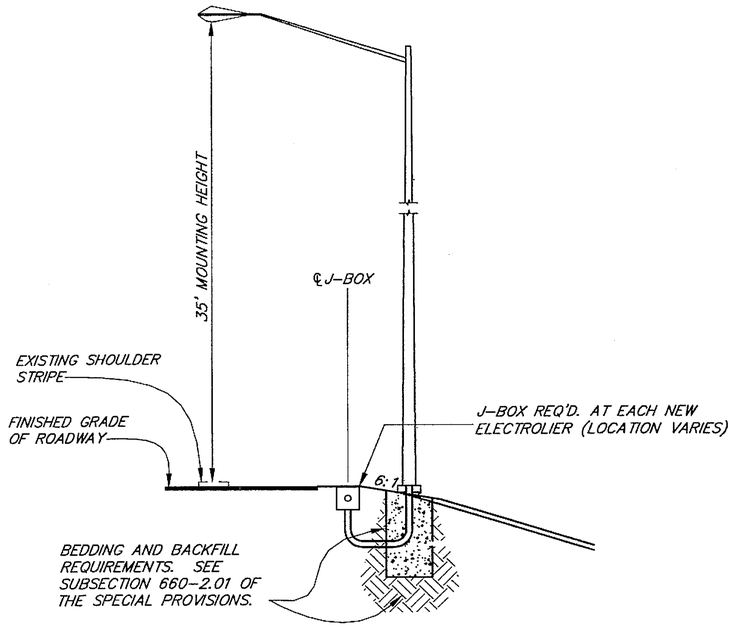
DESIGNED BY: J. OSBURN
DRAWN BY: BENNETT/STEVENS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION
JNU-GLACIER HIGHWAY & TRAILHEAD

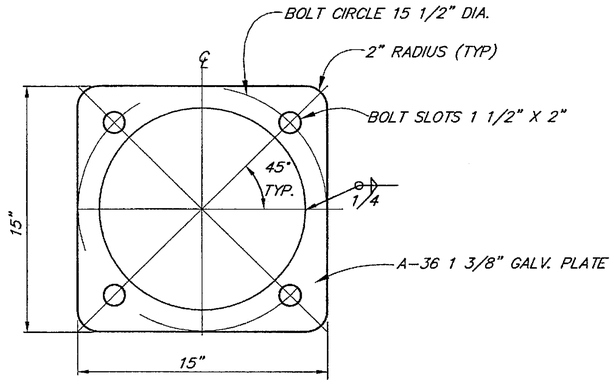
Through Drain Layout Details

PROJECT DESIGNATION NUMBER	
IM-093-3(24)/68097	
STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
J9	146

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 11/01/05



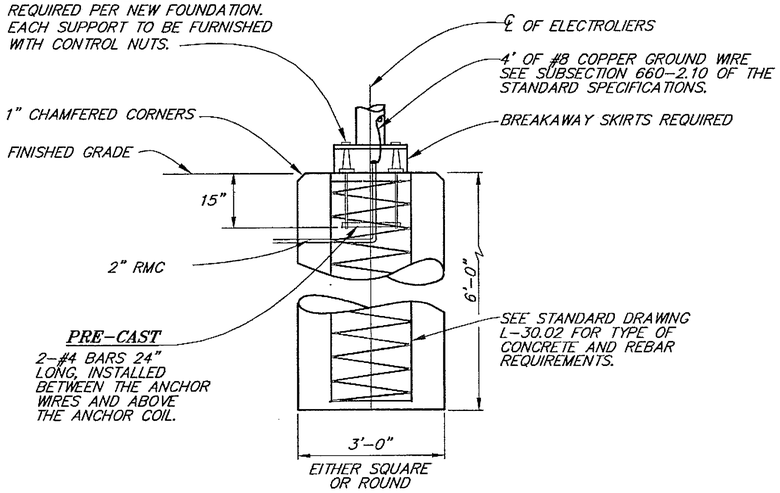
TYPICAL SECTION FOR ELECTROLIER



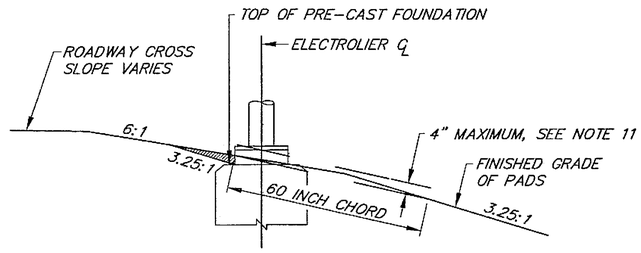
ANCHOR BASE DETAIL

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 NEAREST ELECTROLIER POLE.
7. ILLUMINATION CIRCUIT WIRES SHALL BE NO. 6 AWG. 3-CONDUCTOR CABLE AS SPECIFIED IN STANDARD SPECIFICATION 660-2.08.
8. LUMINAIRES SHALL BE 480 VOLT, 250 WATT, HIGH PRESSURE SODIUM, MEDIUM DISTRIBUTION, CUT-OFF, IES TYPE III AND SHALL HAVE MAGNETIC REGULATOR BALLASTS AND HPS LAMPS WITH A 24,000 HOUR RATED LIFE.
9. INSTALL ONE WHITE FLEXIBLE DELINEATOR POST AT EACH J-BOX TO MARK IT'S LOCATION. DELINEATOR POSTS SHALL BE OF 3.75" WIDE COMPOSITE MATERIAL (CARSONITE ROADMARKER OR APPROVED EQUAL) AND SHALL BE EMBEDDED TO STAND 48" ABOVE GROUND LEVEL.
10. INSTALL ONE SPARE TWO INCH RIGID METAL CONDUITS FROM THE LOAD CENTER TO THE FIRST JUNCTION BOX.
11. 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.
12. LUMINAIRE MASTARMS SHALL BE 15' LONG UNLESS NOTED ELSEWHERE.
13. THE CONTRACTOR SHOULD ANTICIPATE THAT MOST OF THE ELECTROLIER BASES WILL NEED TO BE INSTALLED IN ROCK OR LARGE SHOT ROCK FILL. BLASTING MAY BE REQUIRED. ALL DRILLING AND BLASTING COSTS SHALL BE INCIDENTAL TO THE HIGHWAY LIGHTING SYSTEM COMPLETE PAY ITEM.



FOUNDATION WITH BREAKAWAY COUPLINGS



FOUNDATION INSTALLATION DETAIL

INDICATES EMBANKMENT MATERIAL TO BE REMOVED FROM AROUND BREAKAWAY SKIRTS

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TAB: TYPICALS

ADDENDUM NUMBER

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No.	DATE	DESCRIPTION

JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - TEE HARBOR TO AMALGA HARBOR ROAD
IM-093-3(24) ~ 68097

Electrolier Details

STATE OF ALASKA 49TH
Michael Lukshin
CE-8737
12-13-04
REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: M. LUKSHIN
DRAWN BY: STEVENS/BENNETT

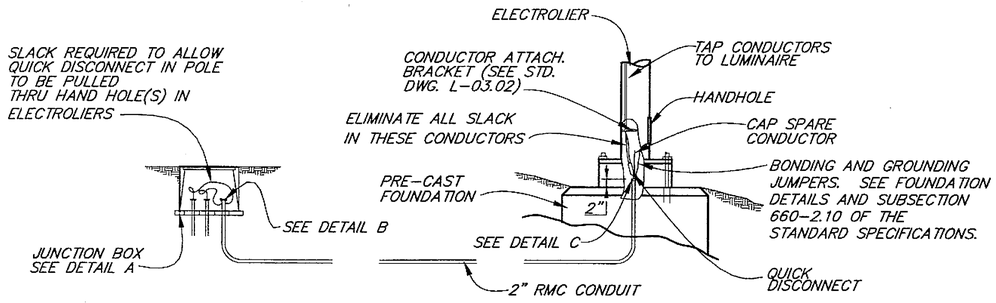
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

JNU-GLACIER HIGHWAY & TRAILHEAD

Electrolier Details

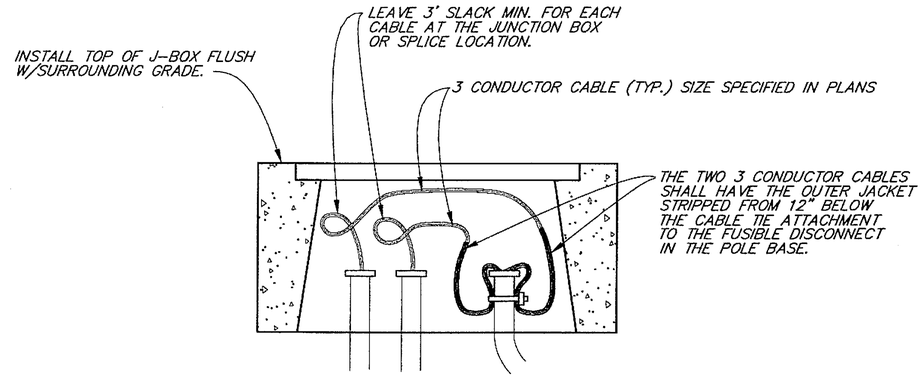
PROJECT DESIGNATION NUMBER	
IM-093-3(24)/68097	
STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
J10	146

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 1/19/05



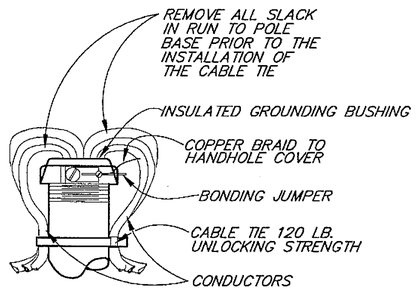
LIGHTING SYSTEM POLE AND J-BOX WIRING DETAILS

(BREAKAWAY COUPLINGS)



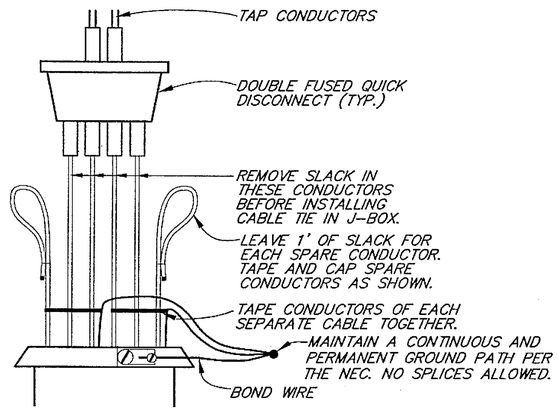
DETAIL A

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)

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ADDENDUM NUMBER

ATTACHMENT NUMBER

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JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - TEE HARBOR TO AMALGA HARBOR ROAD
IM-093-3(24) ~ 68097

Electrolier Details

STATE OF ALASKA 49TH
Michael Lukshin CE-8737
REGISTERED PROFESSIONAL ENGINEER
12-13-04

DESIGNED BY: M. LUKSHIN
DRAWN BY: STEVENS/BENNETT

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION
JNU-GLACIER HIGHWAY & TRAILHEAD

Electrolier Details

PROJECT DESIGNATION NUMBER	
IM-093-3(24)/68097	
STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
J11	146

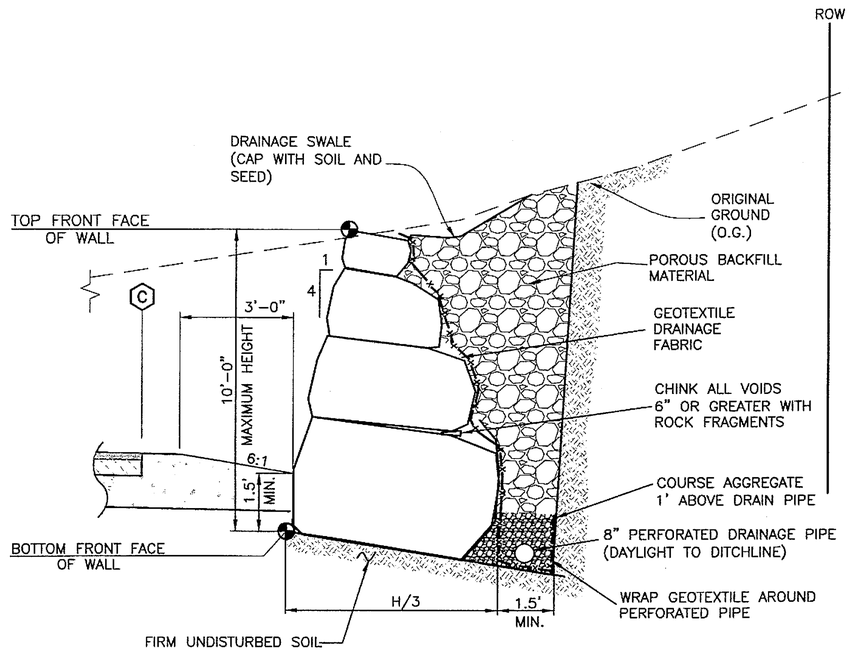
Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE Date 4/05/07

GENERAL NOTES:

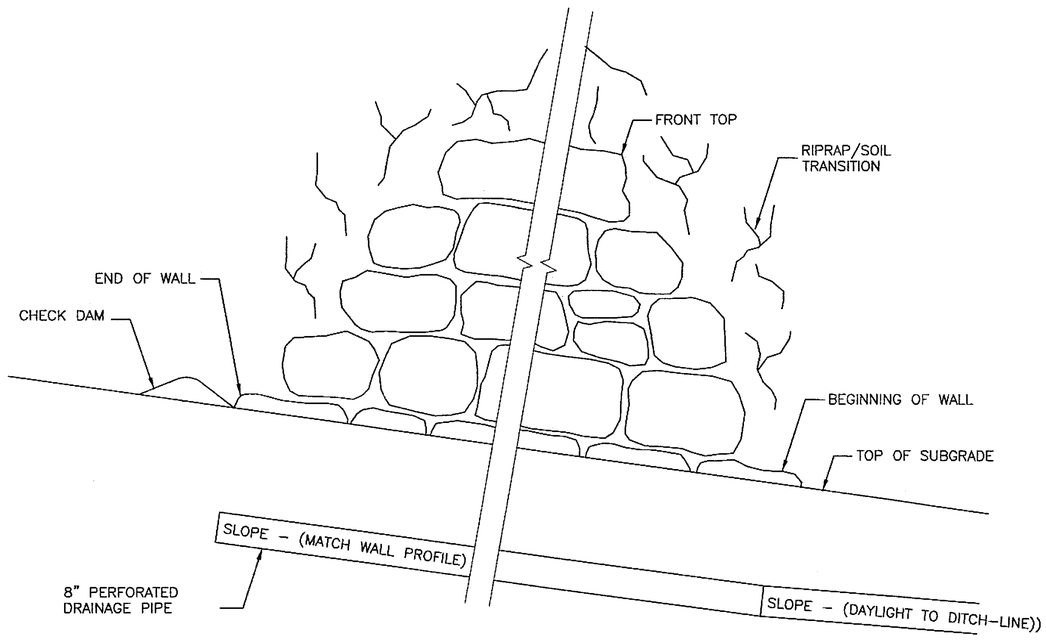
1. ROCK WALL LOCATION AND LAYOUT TO BE CONSTRUCTED AS SHOWN, OR AS DIRECTED BY THE PROJECT ENGINEER.
2. PLACE LONG AXIS OF EACH COURSE PERPENDICULAR TO WALL.
3. ROCK COURSES SHALL BE INTERLOCKED INTO TWO ROCKS AND BEARING INTO EACH SURFACE.
4. THE ROCKERY SHALL BE CONSTRUCTED OF ROCKS WHICH CONFORM TO THE FOLLOWING TABLE:

	*AVERAGE DIMENSION	MINIMUM WEIGHT
TOP 3 FT. OF WALL	30" TO 36"	1000 LBS.
3 TO 6 FT. FROM TOP OF WALL	36" TO 42"	2500 LBS.
6 TO 10 FT. FROM TOP OF WALL	42" TO 48"	4000 LBS.

* ROCKS SHALL BE FLAT, LEDGER TYPE SHAPE FOR MAXIMUM STABILITY.



ROCKERY END VIEW DETAIL
NOT TO SCALE



ROCK RETAINING WALL
END TRANSITION DETAIL
NOT TO SCALE

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ADDENDUM NUMBER

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JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - TEE HARBOR TO AMALGA HARBOR ROAD
IM-093-3(24) ~ 68097

Rockery Wall Typical Section/Detail

STATE OF ALASKA 49TH
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
12-13-04

DESIGNED BY: J. OSBURN
DRAWN BY: BENNETT/STEVENS

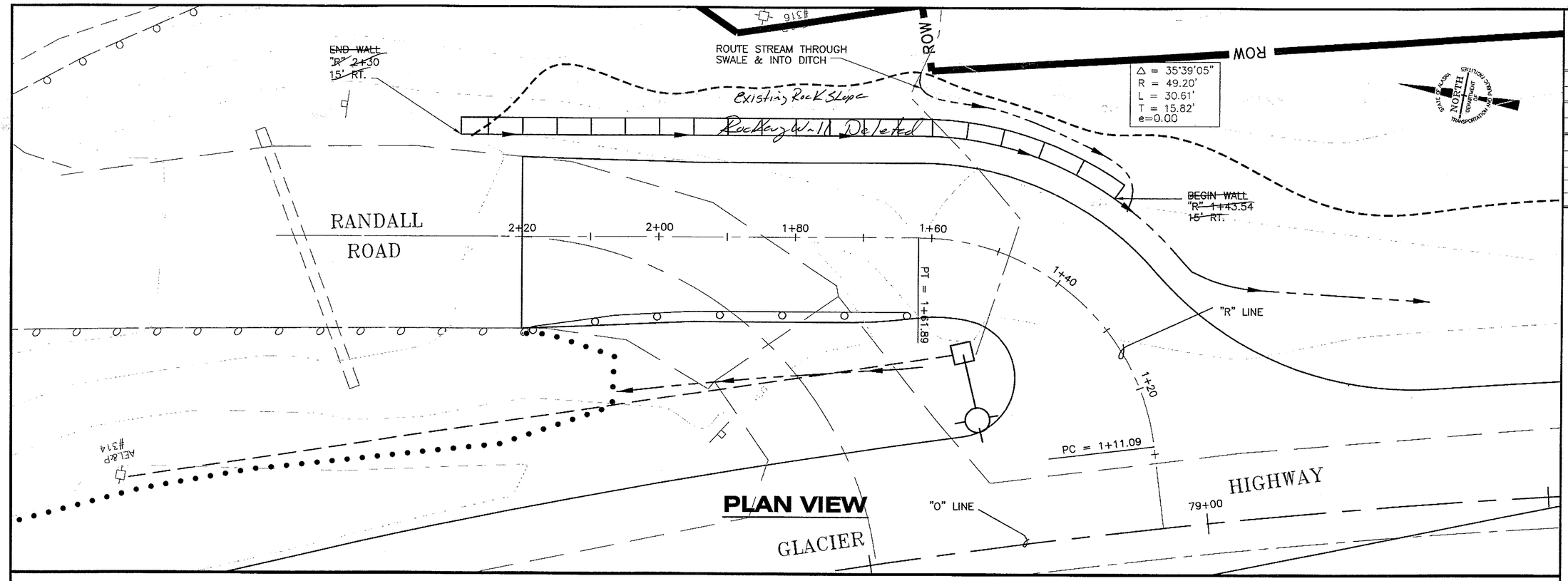
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

JNU-GLACIER HIGHWAY & TRAILHEAD

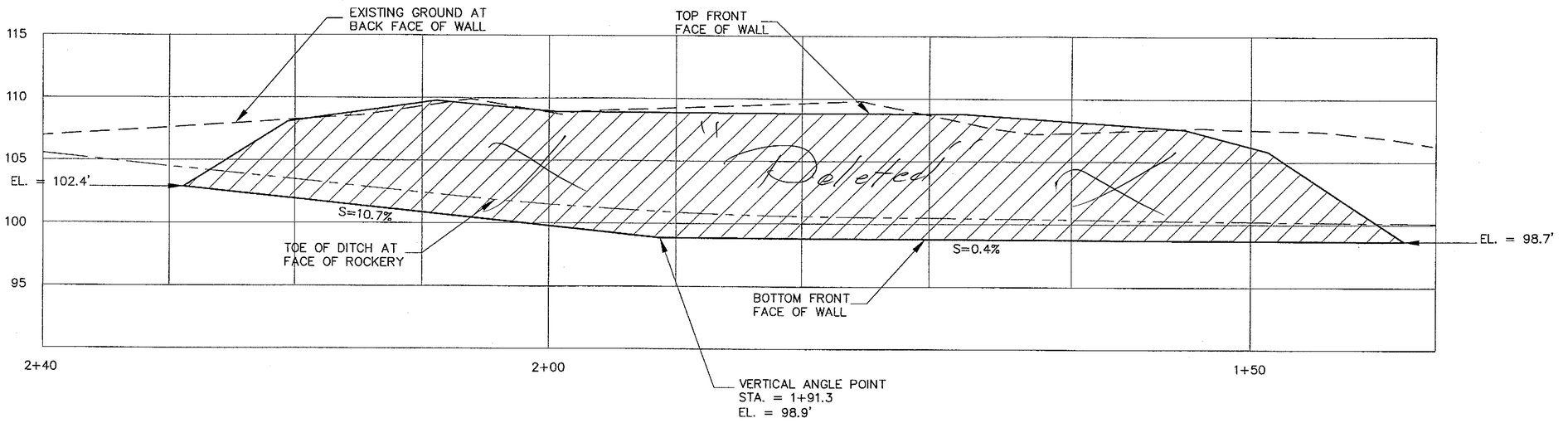
Rockery Wall Typical Section

PROJECT DESIGNATION NUMBER	
IM-093-3(24)/68097	
STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
K1	146

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 11/18/07



PLAN VIEW



APPROX. WALL AREA = 800 S.F.

PROFILE VIEW

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JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - TEE HARBOR TO AMALGA HARBOR ROAD
IM-093-3(24) ~ 68097

Rockery Wall Layout Sheet

STATE OF ALASKA
49TH
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
12-13-04

DESIGNED BY:	J. OSBURN
DRAWN BY:	BENNETT/STEVENS

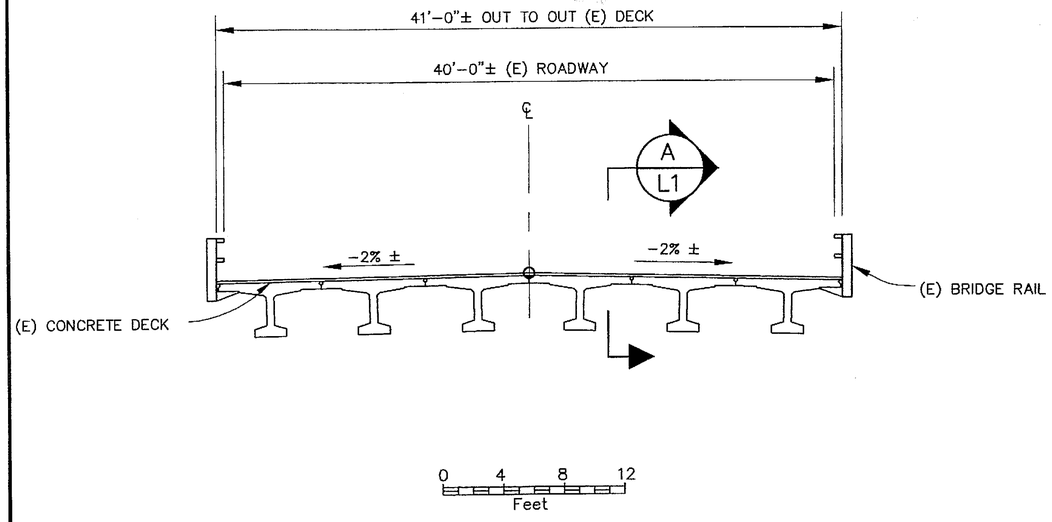
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

JNU-GLACIER HIGHWAY & TRAILHEAD

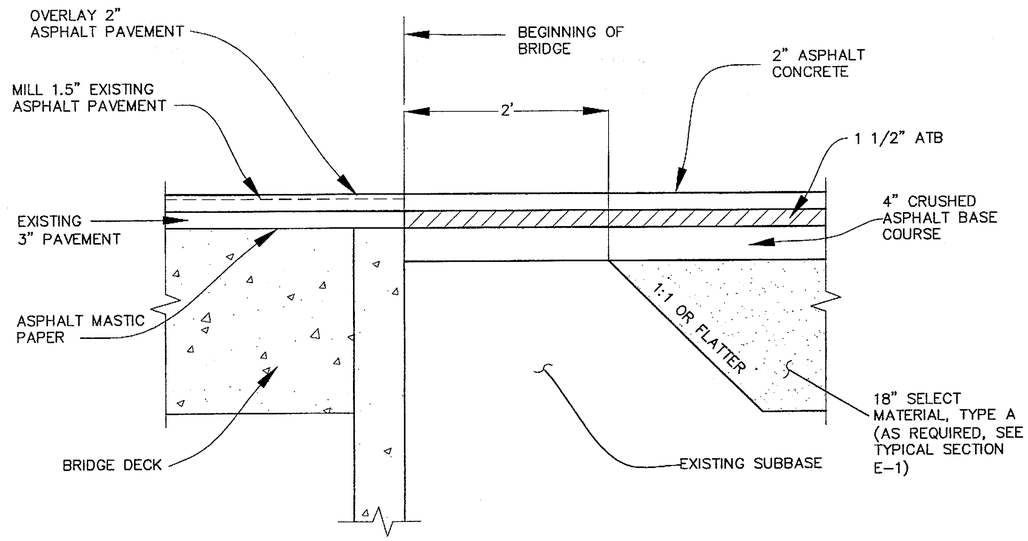
Rockery Wall Layout Sheet

PROJECT DESIGNATION NUMBER	
IM-093-3(24)/68097	
STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
K2	146

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 1/26/09

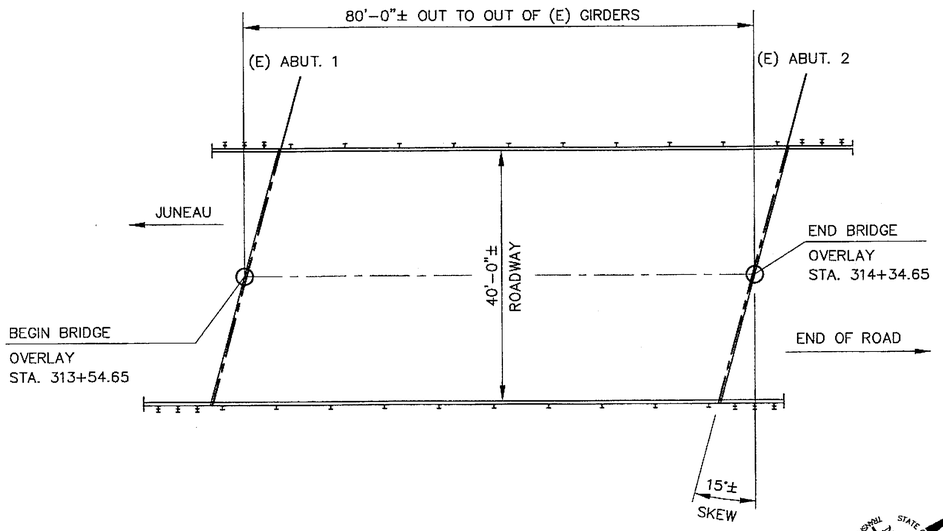


Peterson Creek Bridge
Section View



Section A

NOTE: (E) = EXISTING



Peterson Creek Bridge
Plan View
Bridge No. 734

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TAB: TYPICALS

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JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - TEE HARBOR TO AMALGA HARBOR ROAD
IM-093-3(24) ~ 68097

Bridge Work Plans

STATE OF ALASKA
49 TH
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
12-13-04

DESIGNED BY: J. OSBURN
DRAWN BY: BENNETT/STEVENS

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

JNU-GLACIER HIGHWAY & TRAILHEAD

Bridge Work Plans

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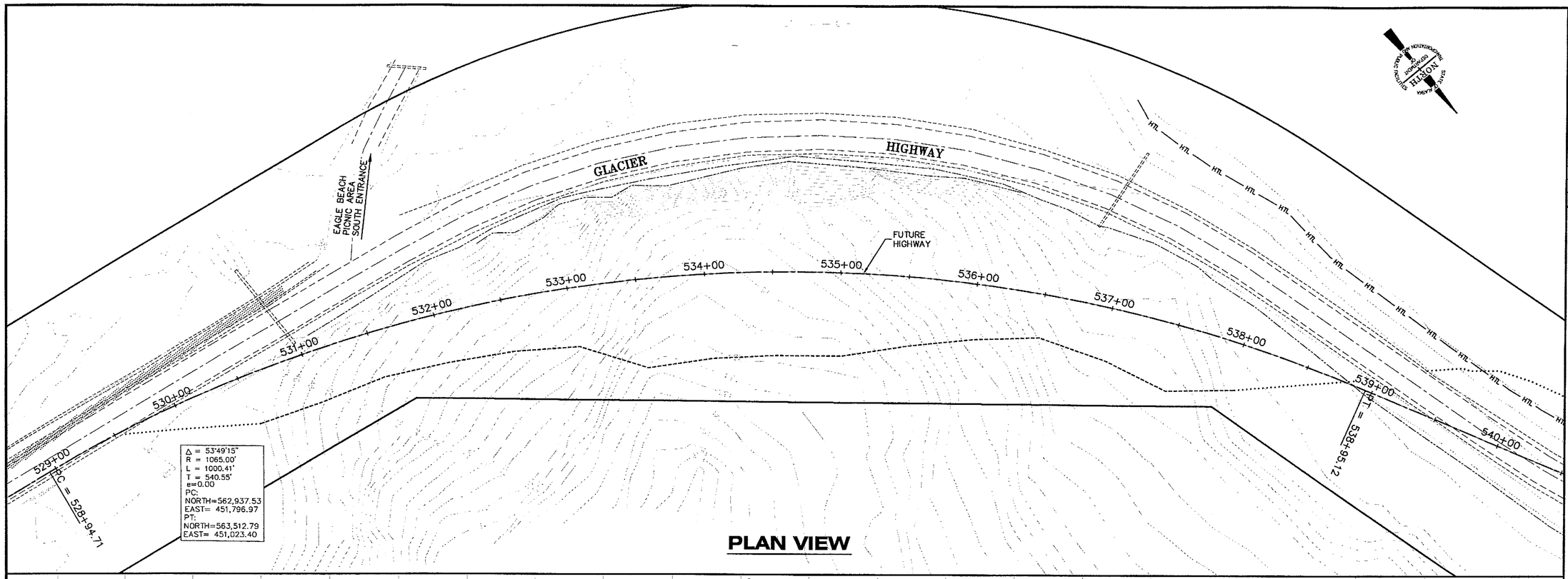
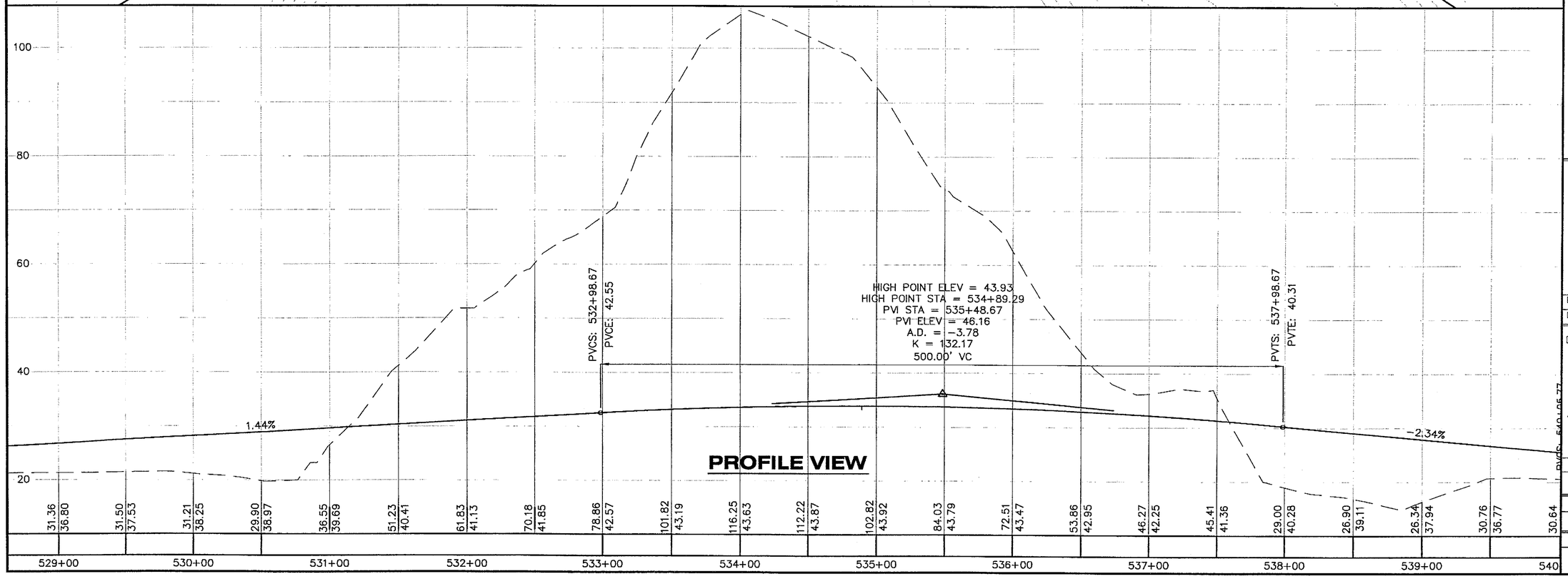
STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
L1	146

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the work as constructed.
PE [signature] Date 12/15/05





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ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - TEE HARBOR TO AMALGA HARBOR ROAD
IM-093-3(24) ~ 68097

Available Material Source Site Plan

STATE OF ALASKA 49TH
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
12-13-04

DESIGNED BY: J. OSBURN
DRAWN BY: BENNETT/STEVENS

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

JNU-GLACIER HIGHWAY & TRAILHEAD

Available Material Source Site Plan

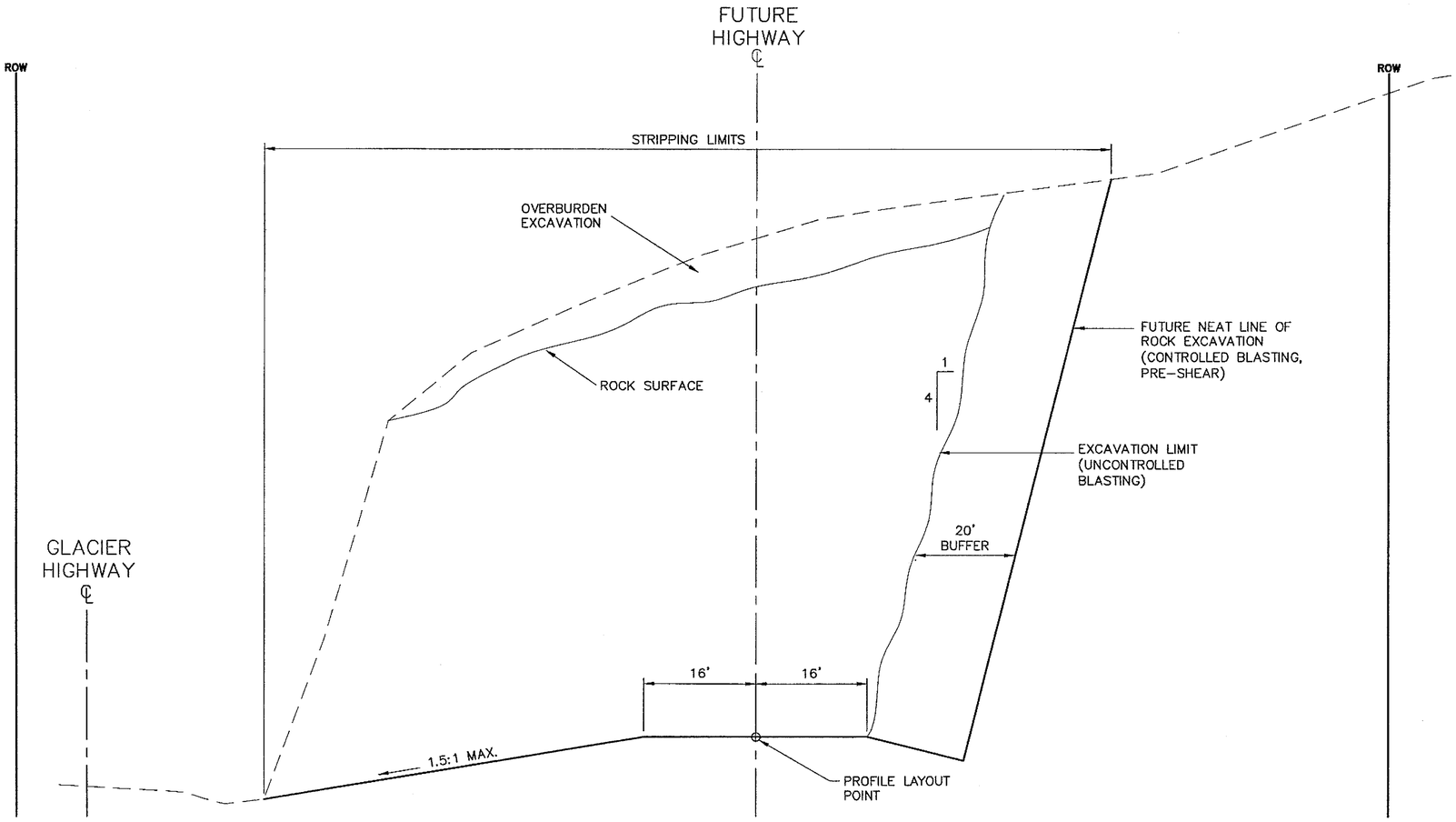
PROJECT DESIGNATION NUMBER
IM-093-3(24)/68097

STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
M1	146

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 _____

MINING PLAN NOTES:

1. THE CONTRACTOR SHALL PREPARE A MINING AND STAGING PLAN FOR THE USE OF THIS SITE.
2. ROCK EX. IS SUITABLE FOR ALL PROCESSED MATERIAL ON THIS PROJECT.
3. ALL WORK WITHIN THE MINING AREA LIMITS IS CONSIDERED SUBSIDIARY TO THE CONTRACT.



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JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - TEE HARBOR TO AMALGA HARBOR ROAD
IM-093-3(24) ~ 68097

Available Material Source Typical Section

STATE OF ALASKA
49 TH
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
12-13-04

DESIGNED BY: J. OSBURN
DRAWN BY: BENNETT/STEVENS

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

JNU-GLACIER HIGHWAY & TRAILHEAD

Available Material Source Typical Section

PROJECT DESIGNATION NUMBER
IM-093-3(24)/68097

STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
M2	146

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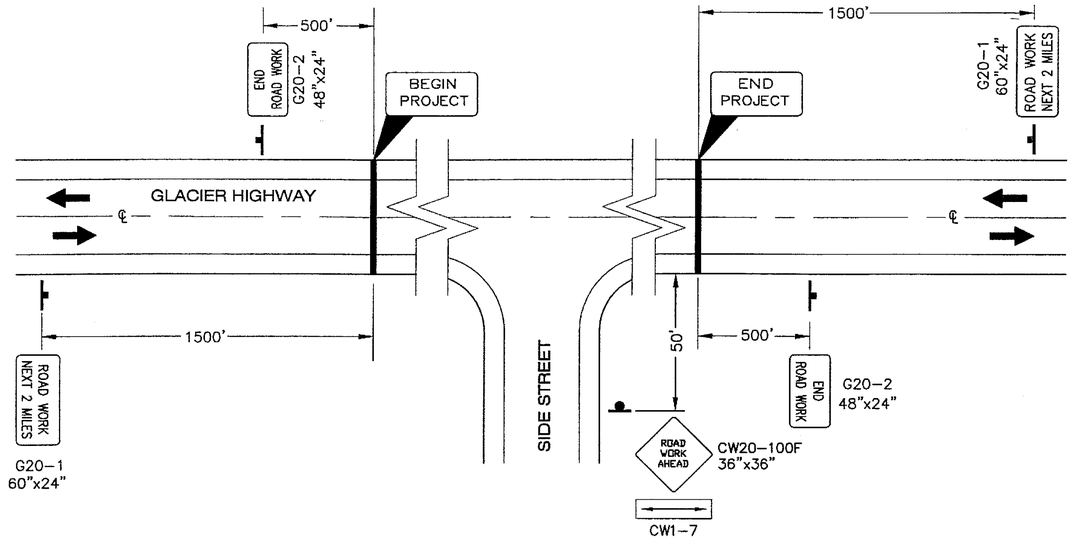
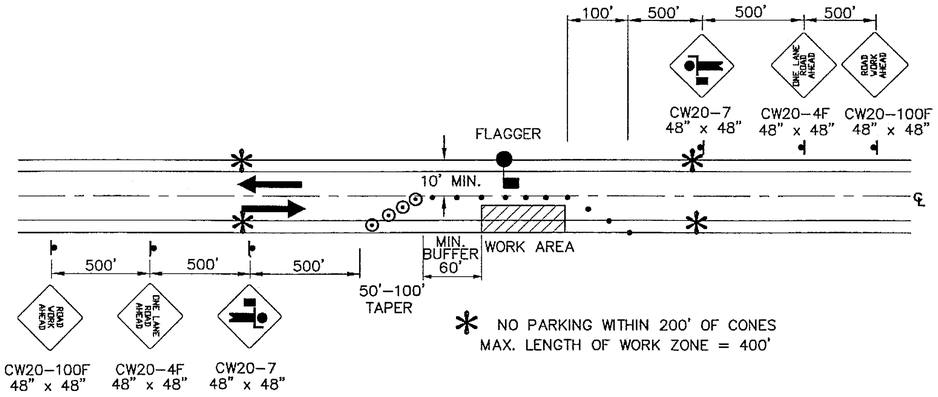
PE _____ Date _____



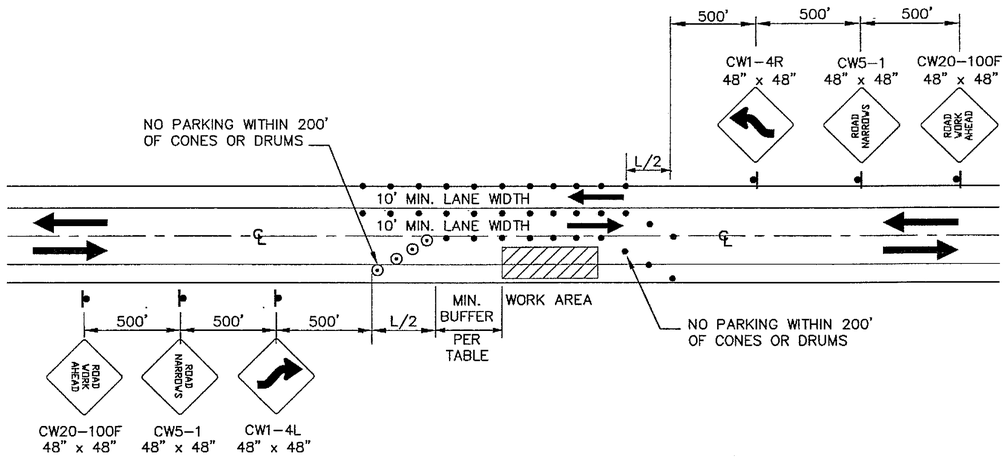
PERMANENT CONSTRUCTION SIGNING

Notes:

THIS DETAIL APPLIES TO SIDE STREETS PT. STEPHENS ROAD, RANDALL ROAD, COHEN DR., AMALGA HARBOR RD. AND AS DIRECTED BY THE ENGINEER.



TWO LANE ROAD - SINGLE LANE CLOSURE
Single Flagger



TWO-WAY TRAFFIC

* SEE NOTE 6, THIS SHEET.

Legend

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

FORMULAS FOR L (TAPER LENGTH)

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

45 MPH OR GREATER $L = WxS$

WHERE W= WIDTH OF OFFSET
S= POSTED SPEED LIMIT

DRUM OR CONE SPACING = S (IN FEET)

MIN. BUFFER	
S	LENGTH
20	35
25	55
30	85
35	120
40	170
45	220
50	280
55	335
60	415
65	485

Traffic Control Notes:

1. A MINIMUM OF ONE LANE SHALL BE MAINTANED AT ALL TIMES, THROUGH ALL WORK AREAS.
2. 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.
3. TEMPORARY DRIVING LANES SHALL HAVE A MINIMUM WIDTH OF 10'-0".
4. 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.
5. WORK ZONE DOUBLE TRAFFIC FINES SIGNS SHALL BE USED AS DIRECTED BY THE ENGINEER AND PER STANDARD DRAWING C-04.12.
6. WARNING LIGHTS SHALL BE USED ON ALL CHANNELIZING DEVICES PLACED ALONG OR AROUND ROADWAY HAZARDS AS DIRECTED BY THE ENGINEER.
7. IT IS THE INTENT OF THIS TRAFFIC CONTROL PLAN (TCP) TO ILLUSTRATE SOME, NOT ALL, OF THE TRAFFIC CONTROL SETUPS WHICH WILL BE REQUIRED ON THIS PROJECT. PLANS FOR CONFIGURATIONS NOT COVERED BY THE TCP SHALL BE CREATED BY THE CONTRACTOR AND SUBMITTED TO THE ENGINEER FOR APPROVAL. WHERE APPROPRIATE, THEY SHALL INCORPORATE APPLICABLE PORTIONS OF DETAILS ON THESE SHEETS.
8. MAXIMUM LENGTH OF CONSTRUCTION WITH ONE-LANE ROAD CLOSURE IS 1000'.

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ADDENDUM NUMBER

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STAGE I - TEE HARBOR TO AMALGA HARBOR ROAD
IM-093-3(24) ~ 68097

Traffic Control Plans

STATE OF ALASKA 49TH
Michael Lukshin
CE-8737
REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: M. LUKSHIN
DRAWN BY: STEVENS/BENNETT

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION
JNU-GLACIER HIGHWAY & TRAILHEAD

Traffic Control Plans

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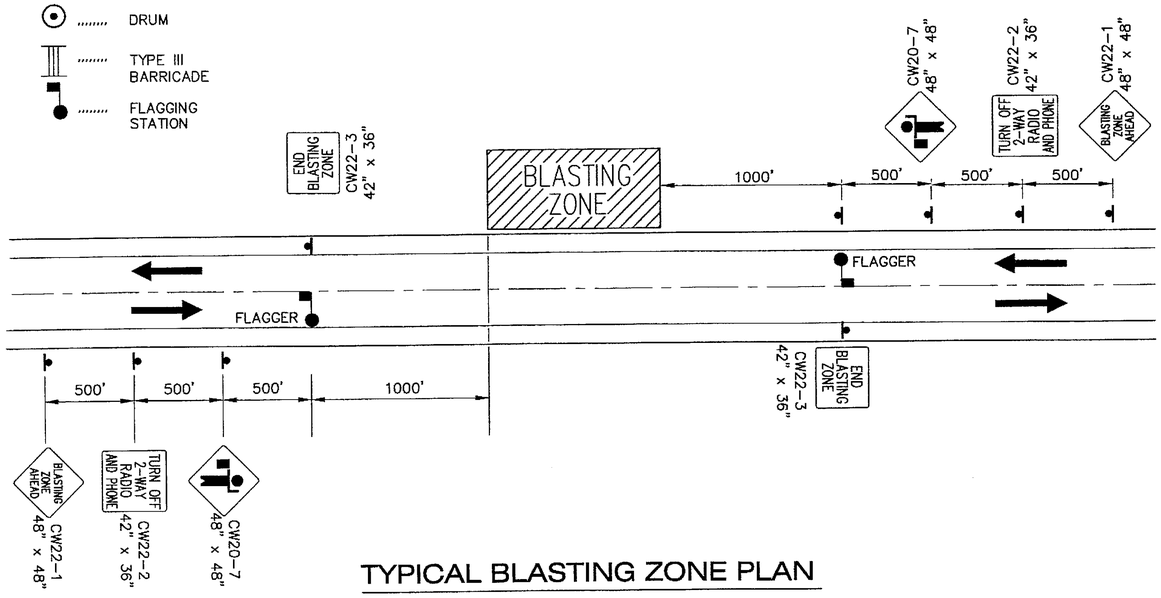
IM-093-3(24)/68097	
STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
S1	146

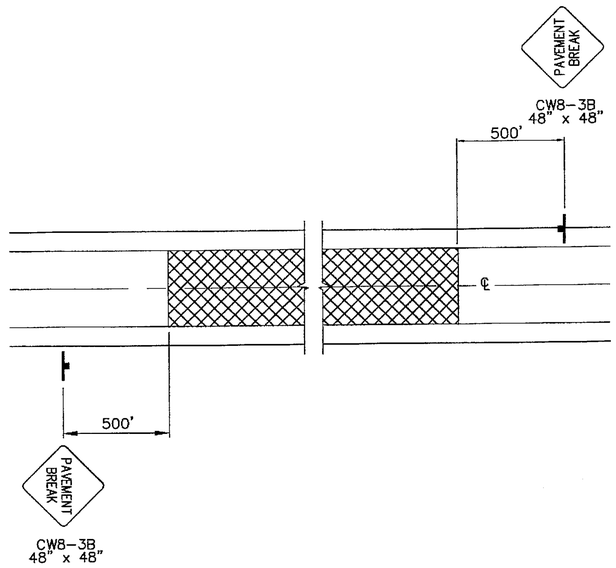
Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE _____ Date 1/08/09

Legend

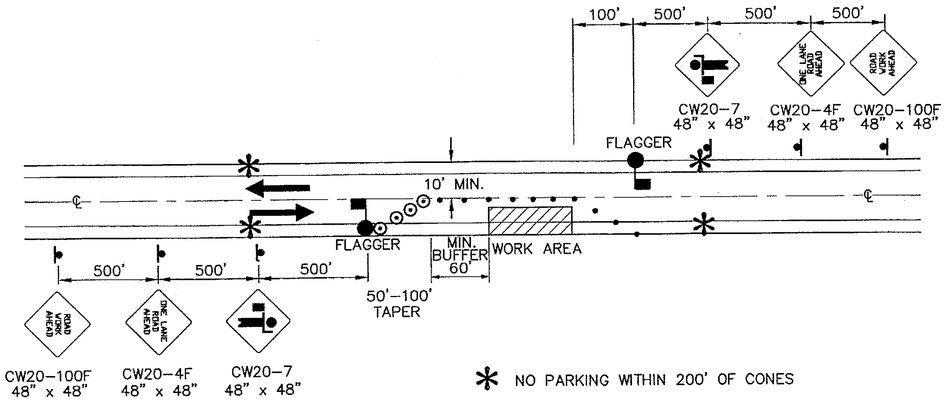
- SIGN
- CONE
- DRUM
- TYPE III BARRICADE
- FLAGGING STATION



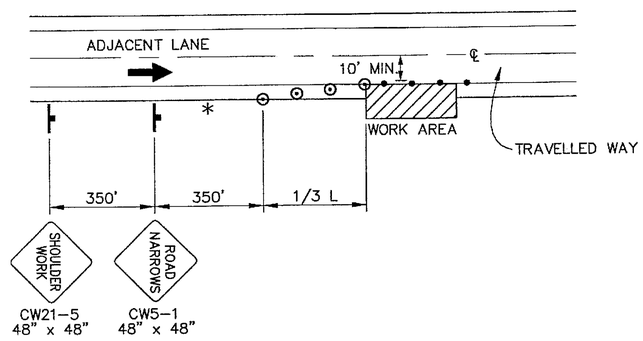
TYPICAL BLASTING ZONE PLAN



SIGNING FOR UNPAVED AREA



TWO LANE ROAD - SINGLE LANE CLOSURE
Double Flagger



SHOULDER WORK

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STAGE I - TEE HARBOR TO AMALGA HARBOR ROAD
IM-093-3(24) ~ 68097

Traffic Control Plans

STATE OF ALASKA 49TH
Michael Lukshin CE-8737
PROFESSIONAL ENGINEER

DESIGNED BY: M. LUKSHIN
DRAWN BY: STEVENS/BENNETT

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

JNU-GLACIER HIGHWAY & TRAILHEAD

Traffic Control Plans

PROJECT DESIGNATION NUMBER	
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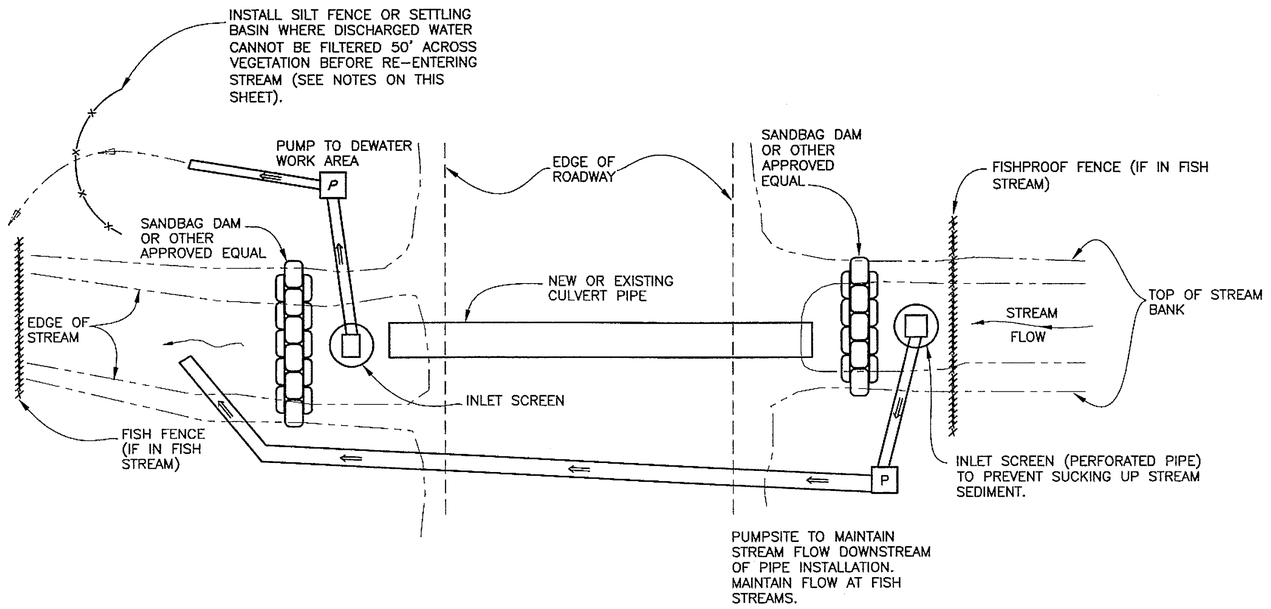
PE Date 11/04/07



MAINTAINING FLOW AT FISH STREAMS

(UNLESS DIVERTED WITH BYPASS CULVERT/CHANNEL, SEE SHEET T2)

Notes:

1. FISH SHALL BE EXCLUDED FROM WORK AREAS PRIOR TO BEGINNING WORK OPERATIONS IN A DESIGNATED FISH STREAM. THE ENVIRONMENTAL MONITOR (SEE SECTION 680 OF THE SPECIFICATIONS) WILL ACCOMPLISH FISH TRAPPING AND FISH PROOF FENCING INSTALLATION. THE CONTRACTOR SHALL PROVIDE A SCHEDULE OF CULVERT INSTALLATION IN FISH STREAMS TO THE ENGINEER EIGHT DAYS PRIOR TO BEGINNING WORK AT EACH PIPE SO THAT 1) THE ENVIRONMENTAL MONITOR HAS ADVANCE NOTICE IN ORDER TO RELOCATE THE FISH AND, 2) THE ENGINEER CAN COMPLY WITH AGENCY NOTIFICATION REQUIREMENTS. THE CONTRACTOR SHALL PROVIDE THE FISH PROOF FENCING.
2. WHEN INSTREAM WORK AREAS REQUIRE DEWATERING, THE PUMP DISCHARGE SHALL BE PLACED SO THAT THERE IS A MINIMUM OF 50 FEET OF VEGETATED AREAS BETWEEN THE DISCHARGE POINT AND THE STREAM BANK SUCH THAT NO SILT-LADEN WATER ENTERS THE STREAM. THIS MAY REQUIRE FREQUENT REPOSITIONING OF THE DISCHARGE LOCATION AND/OR ADDITIONAL DISCHARGE TREATMENT METHODS (SEE DEWATERING PERMIT, APPENDIX B).
3. MULTIPLE PUMPS MAYBE NECESSARY TO DEWATER WORK AREAS AND/OR MAINTAIN STREAM BYPASS FLOW. THE CONTRACTOR SHALL PROVIDE ADEQUATE QUANTITIES AND SIZES OF PUMPS.

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No.	DATE	DESCRIPTION

JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - TEE HARBOR TO AMALGA HARBOR ROAD
IM-093-3(24) ~ 68097

Environmental Details

STATE OF ALASKA 49 TH
Joel D. Osburn CE-11014
REGISTERED PROFESSIONAL ENGINEER
12-14-04

DESIGNED BY: J. OSBURN
DRAWN BY: BENNETT/STEVENS

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

JNU-GLACIER HIGHWAY & TRAILHEAD

Environmental Details

PROJECT DESIGNATION NUMBER
IM-093-3(24)/68097

STATE	YEAR
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T1	146

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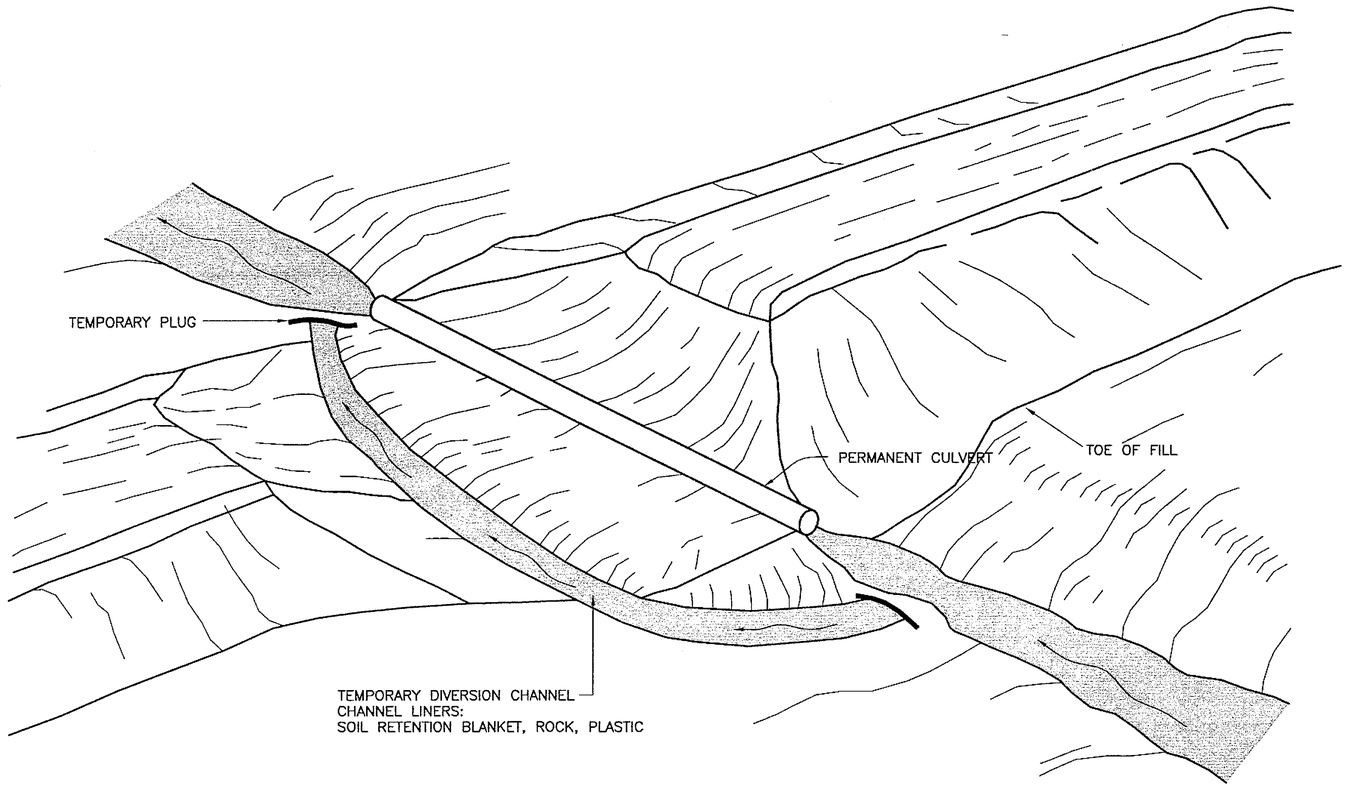
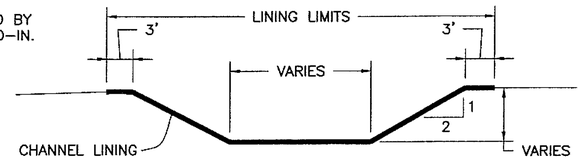
PE _____ Date 11/08/07

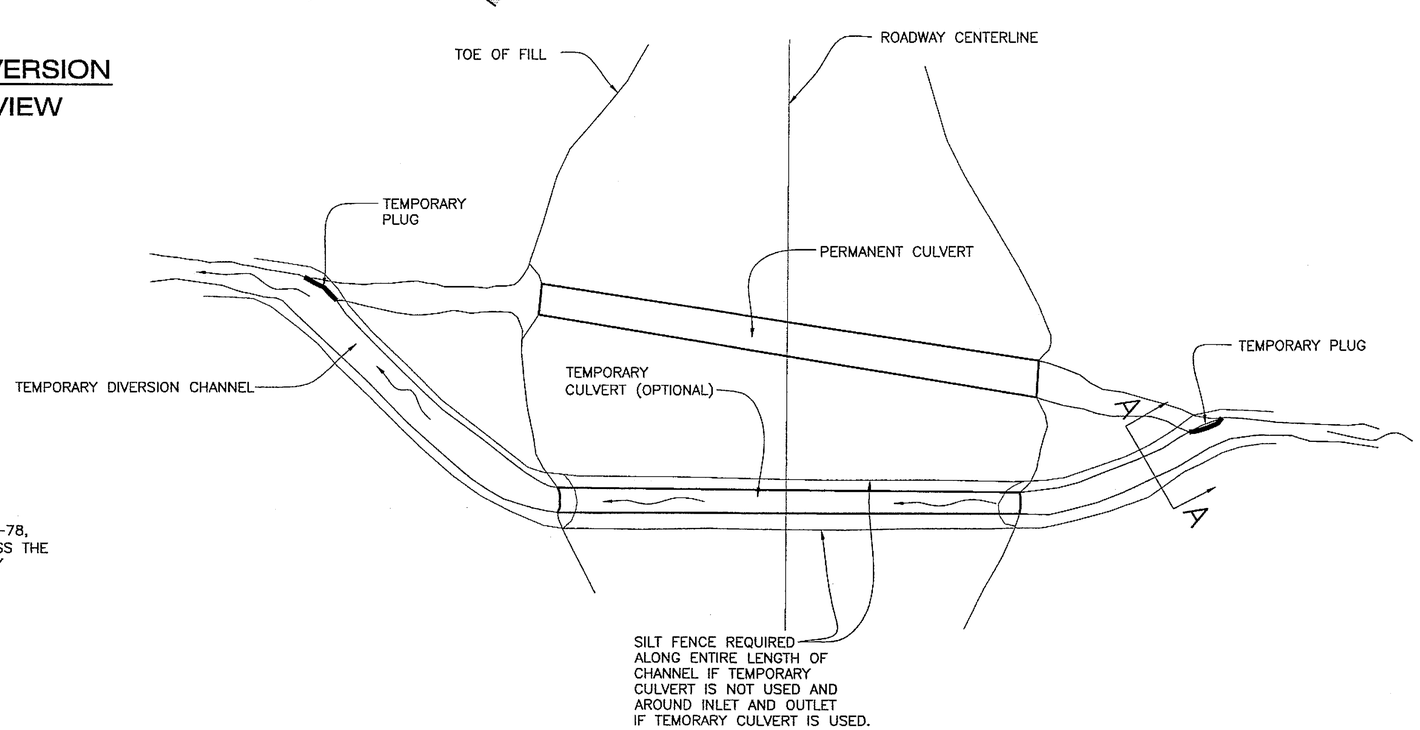


TEMPORARY DIVERSION
ISOMETRIC VIEW

LINING EDGES TO BE BURIED BY EARTH MOUND OR TRENCHED–IN.



SECTION A-A



DIVERSION FOR CULVERT INSTALLATION

Note:

THE FISH HABITAT PERMITS CONTAIN COMMITTMENTS TO SPECIFIC DIVERSION METHODS AT EACH FISH PIPE. FISH PIPES PERMITTED FOR DIVERSION ARE: P–78, P–106, P–109, P–110 AND P–112. THE CONTRACTOR'S SWPPP WILL ADDRESS THE SPECIFIC PLANS FOR CONSTRUCTION AT EACH FISH PIPE AND ANY NECESSARY CHANGES TO THE PERMITS WILL BE MADE AS SOON AS POSSIBLE.

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JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - TEE HARBOR TO AMALGA HARBOR ROAD
IM-093-3(24) ~ 68097

Culvert Diversion Details

STATE OF ALASKA 49TH
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
12-14-04

DESIGNED BY: J. OSBURN
DRAWN BY: BENNETT/STEVENS

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

JNU-GLACIER HIGHWAY & TRAILHEAD

Culvert Diversion Details

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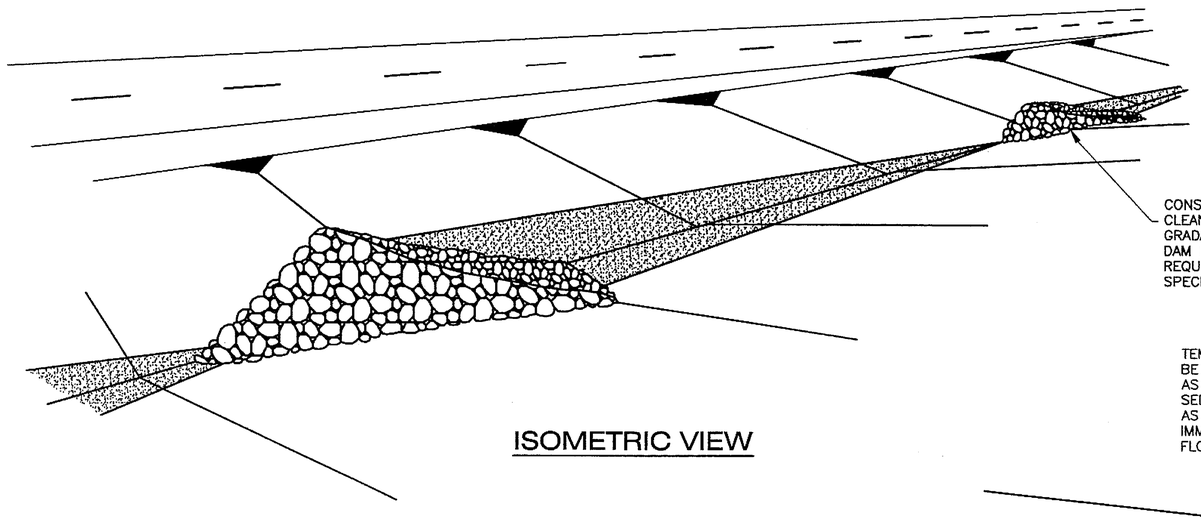
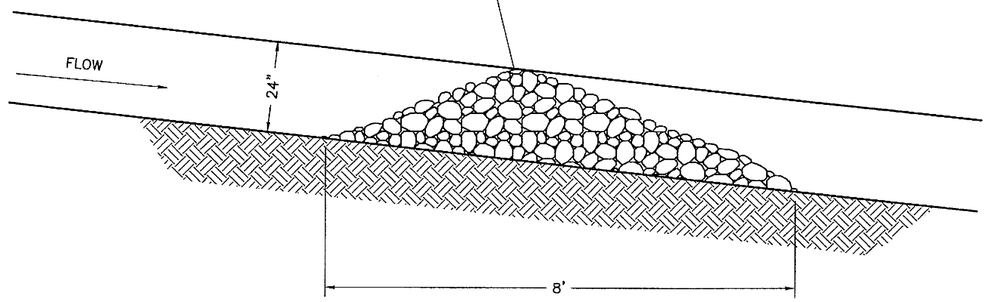
PE _____ Date 11/26/07



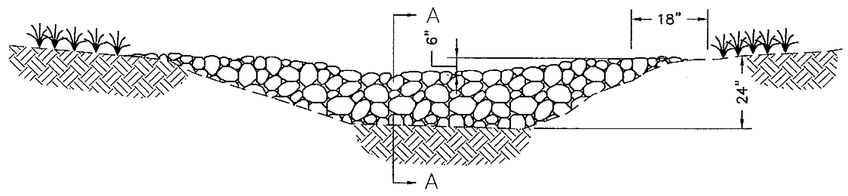
CONSTRUCT TEMPORARY CHECK DAMS WITH CLEAN SHOT ROCK OF SUFFICIENT SIZE AND GRADATION TO WORK EFFECTIVELY AS CHECK DAM MATERIAL ACCORDING TO MATERIAL REQUIREMENTS IN SECTION 641 OF THE SPECIFICATIONS, AND AS APPROVED.

ISOMETRIC VIEW

TEMPORARY CHECK DAMS SHALL BE CONSTRUCTED AT LOCATIONS AS INDICATED ON THE EROSION & SEDIMENT CONTROL PLANS OR AS DIRECTED BY THE ENGINEER IMMEDIATELY AFTER THE DITCH FLOW LINE IS ESTABLISHED

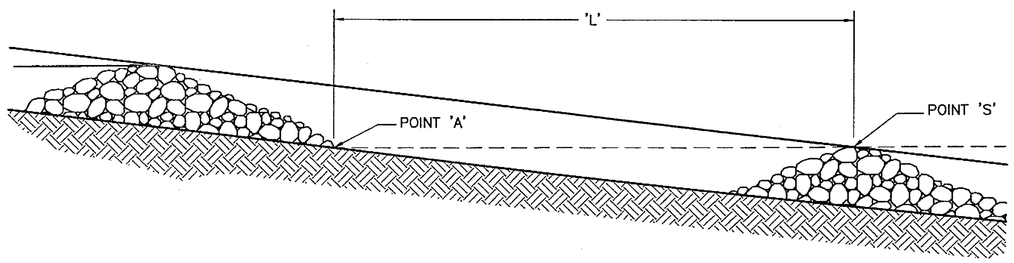


SECTION A-A



VIEW LOOKING UPSTREAM

"L" = THE DISTANCE SUCH THAT POINTS 'A' AND 'S' ARE OF EQUAL ELEVATION



SPACING BETWEEN CHECK DAMS

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JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - TEE HARBOR TO AMALGA HARBOR ROAD
IM-093-3(24) ~ 68097

Temporary Check Dam Details

STATE OF ALASKA 49 TH
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
12-14-04

DESIGNED BY: J. OSBURN
DRAWN BY: BENNETT/STEVENS

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

JNU-GLACIER HIGHWAY & TRAILHEAD

Temporary Check Dam Details

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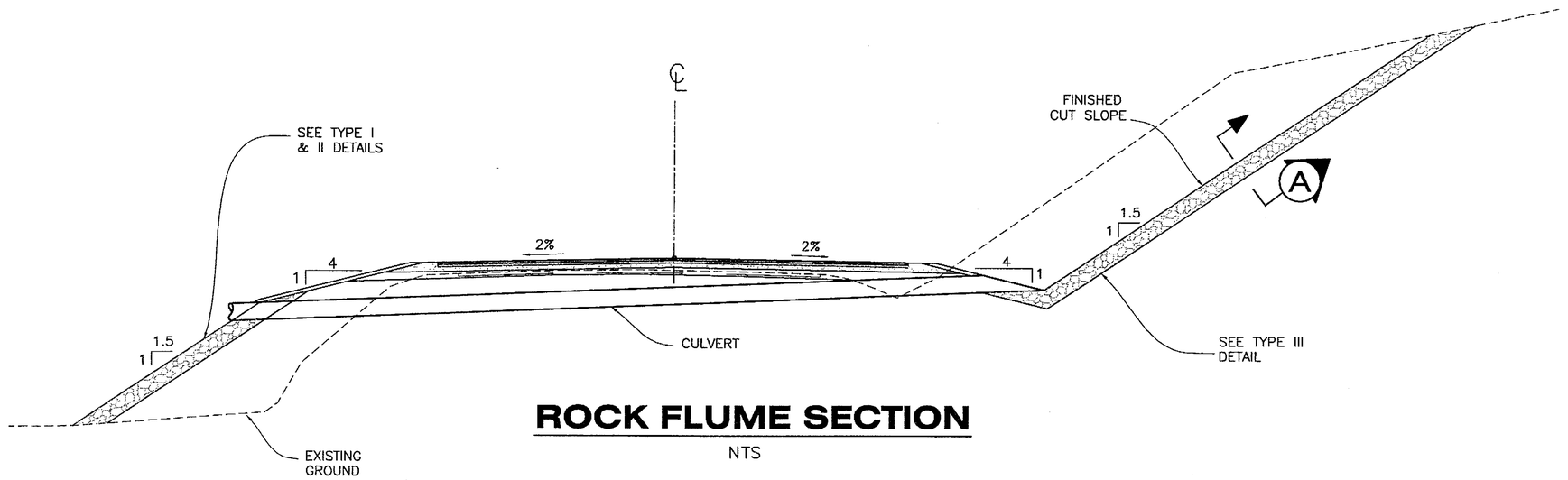
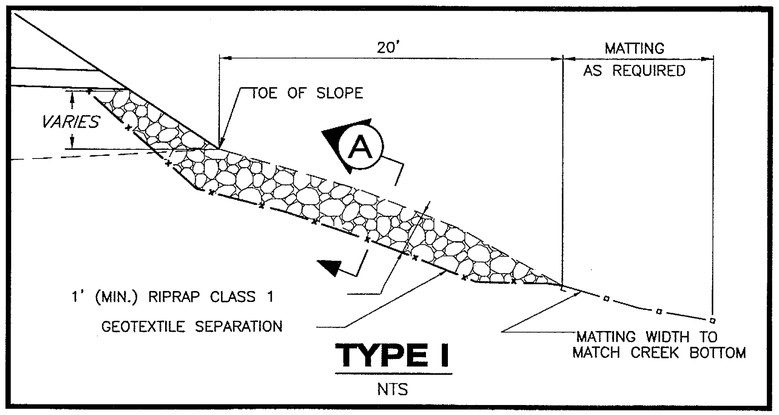


ROCK FLUME SECTION

NTS



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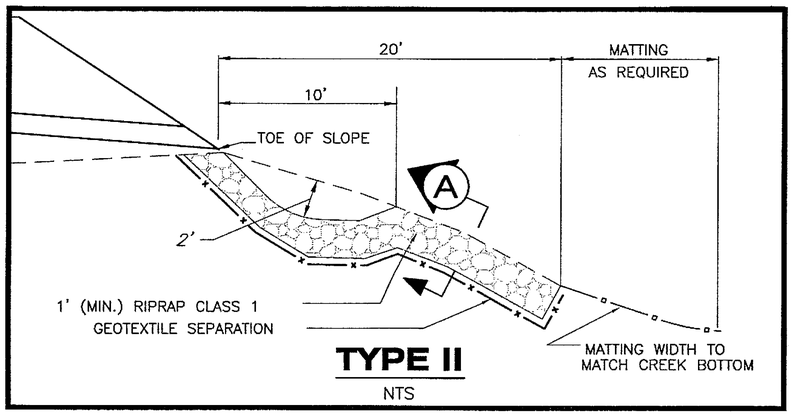

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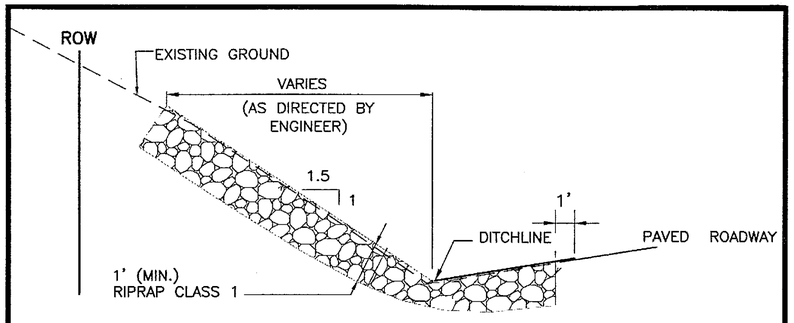

TYPE III

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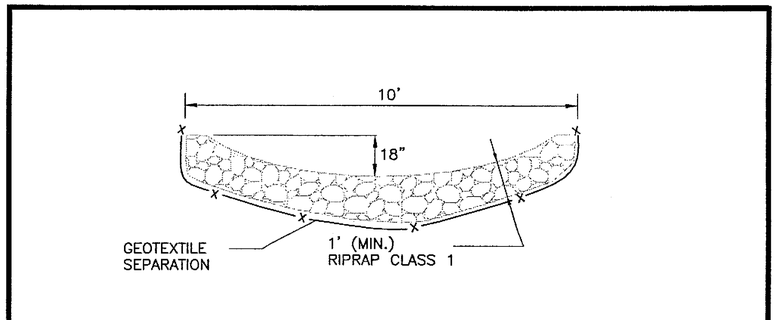

SECTION A

NTS

ROCK FLUME DETAILS

NTS

(SEE PIPE SUMMARY FOR LOCATIONS)

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Tue, 14/Dec/04 02:31PM
PLOT:
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IM-093-3(24) ~ 68097

Rock Flume Details

STATE OF ALASKA 49 TH
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
12-14-04

DESIGNED BY:	J. OSBURN
DRAWN BY:	BENNETT/STEVENS

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

JNU-GLACIER HIGHWAY &
TRAILHEAD

Rock Flume Details

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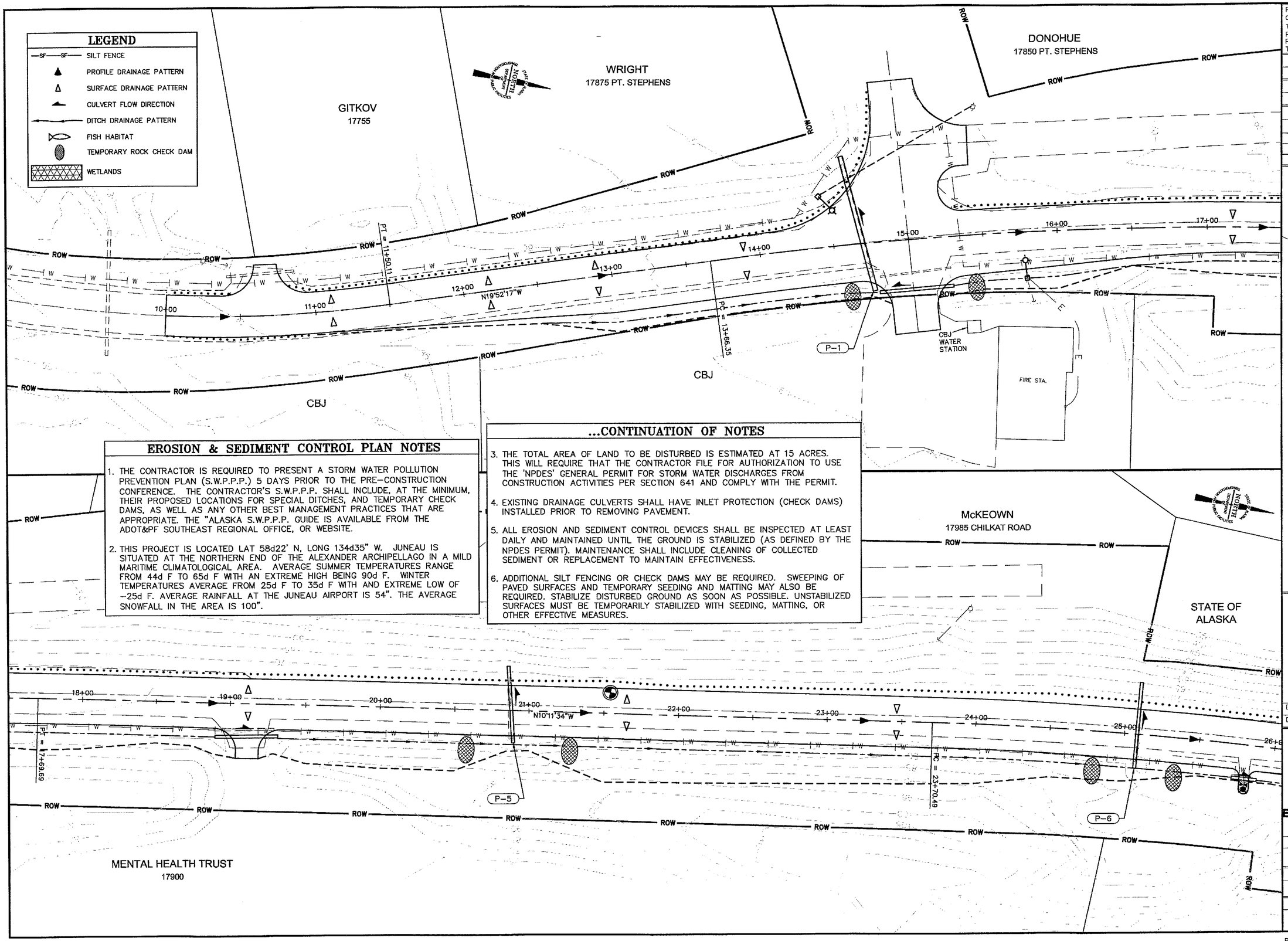

EROSION & SEDIMENT CONTROL PLAN NOTES

1. THE CONTRACTOR IS REQUIRED TO PRESENT A STORM WATER POLLUTION PREVENTION PLAN (S.W.P.P.P.) 5 DAYS PRIOR TO THE PRE-CONSTRUCTION CONFERENCE. THE CONTRACTOR'S S.W.P.P.P. SHALL INCLUDE, AT THE MINIMUM, THEIR PROPOSED LOCATIONS FOR SPECIAL DITCHES, AND TEMPORARY CHECK DAMS, AS WELL AS ANY OTHER BEST MANAGEMENT PRACTICES THAT ARE APPROPRIATE. THE "ALASKA S.W.P.P.P. GUIDE IS AVAILABLE FROM THE ADOT&PF SOUTHEAST REGIONAL OFFICE, OR WEBSITE.

2. THIS PROJECT IS LOCATED LAT 58d22' N, LONG 134d35" W. JUNEAU IS SITUATED AT THE NORTHERN END OF THE ALEXANDER ARCHIPELLAGO IN A MILD MARITIME CLIMATOLOGICAL AREA. AVERAGE SUMMER TEMPERATURES RANGE FROM 44d F TO 65d F WITH AN EXTREME HIGH BEING 90d F. WINTER TEMPERATURES AVERAGE FROM 25d F TO 35d F WITH AND EXTREME LOW OF -25d F. AVERAGE RAINFALL AT THE JUNEAU AIRPORT IS 54". THE AVERAGE SNOWFALL IN THE AREA IS 100".

...CONTINUATION OF NOTES

3. THE TOTAL AREA OF LAND TO BE DISTURBED IS ESTIMATED AT 15 ACRES. THIS WILL REQUIRE THAT THE CONTRACTOR FILE FOR AUTHORIZATION TO USE THE 'NPDES' GENERAL PERMIT FOR STORM WATER DISCHARGES FROM CONSTRUCTION ACTIVITIES PER SECTION 641 AND COMPLY WITH THE PERMIT.

4. EXISTING DRAINAGE CULVERTS SHALL HAVE INLET PROTECTION (CHECK DAMS) INSTALLED PRIOR TO REMOVING PAVEMENT.

5. ALL EROSION AND SEDIMENT CONTROL DEVICES SHALL BE INSPECTED AT LEAST DAILY AND MAINTAINED UNTIL THE GROUND IS STABILIZED (AS DEFINED BY THE NPDES PERMIT). MAINTENANCE SHALL INCLUDE CLEANING OF COLLECTED SEDIMENT OR REPLACEMENT TO MAINTAIN EFFECTIVENESS.

6. ADDITIONAL SILT FENCING OR CHECK DAMS MAY BE REQUIRED. SWEEPING OF PAVED SURFACES AND TEMPORARY SEEDING AND MATTING MAY ALSO BE REQUIRED. STABILIZE DISTURBED GROUND AS SOON AS POSSIBLE. UNSTABILIZED SURFACES MUST BE TEMPORARILY STABILIZED WITH SEEDING, MATTING, OR OTHER EFFECTIVE MEASURES.

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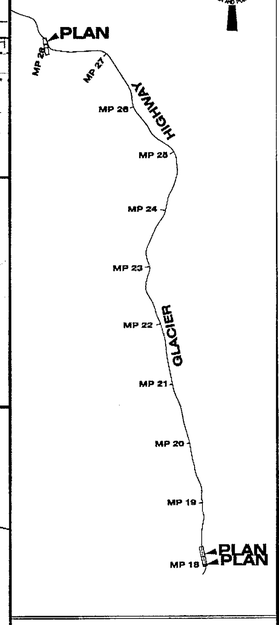

STATE OF ALASKA
49 TH
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
12-14-04

DESIGNED BY: J. OSBURN
DRAWN BY: BENNETT/STEVENS

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

JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - PT. STEPHENS RD. TO AMALGA HARBOR RD.

Erosion and Sediment Control Plan

PROJECT DESIGNATION NUMBER
IM-093-3(24)/68097

STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
T5	146

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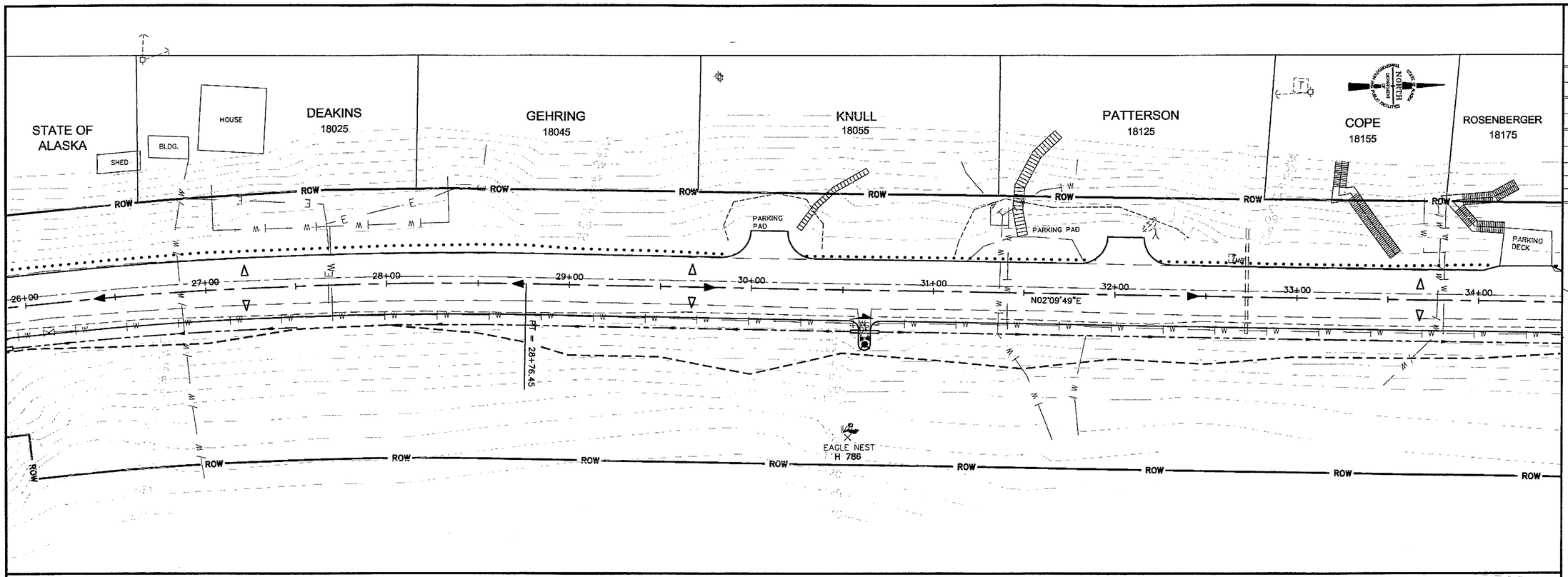
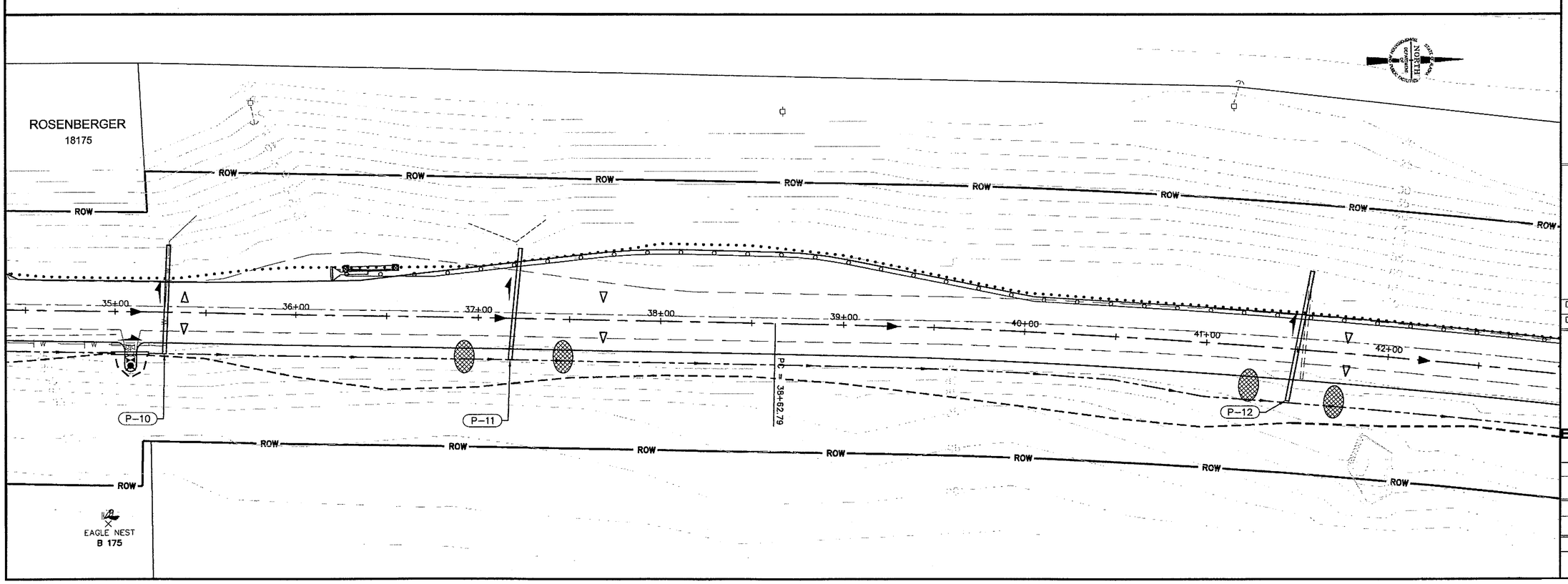
PE Joel Osburn Date 12/06/07





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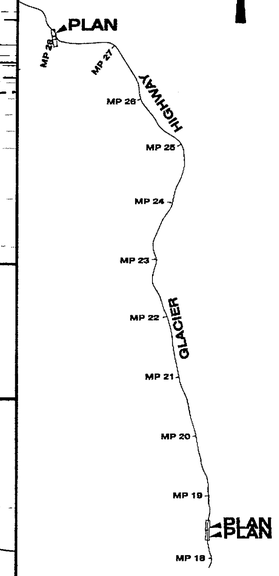

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12-14-04

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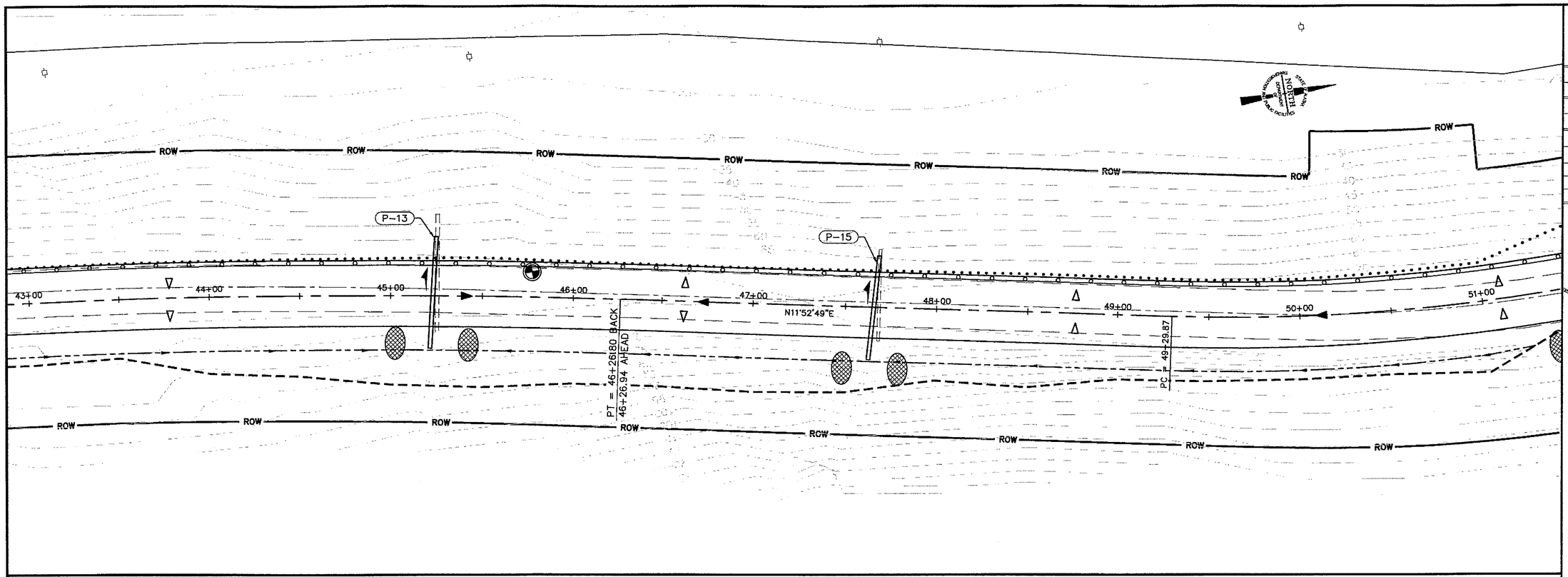

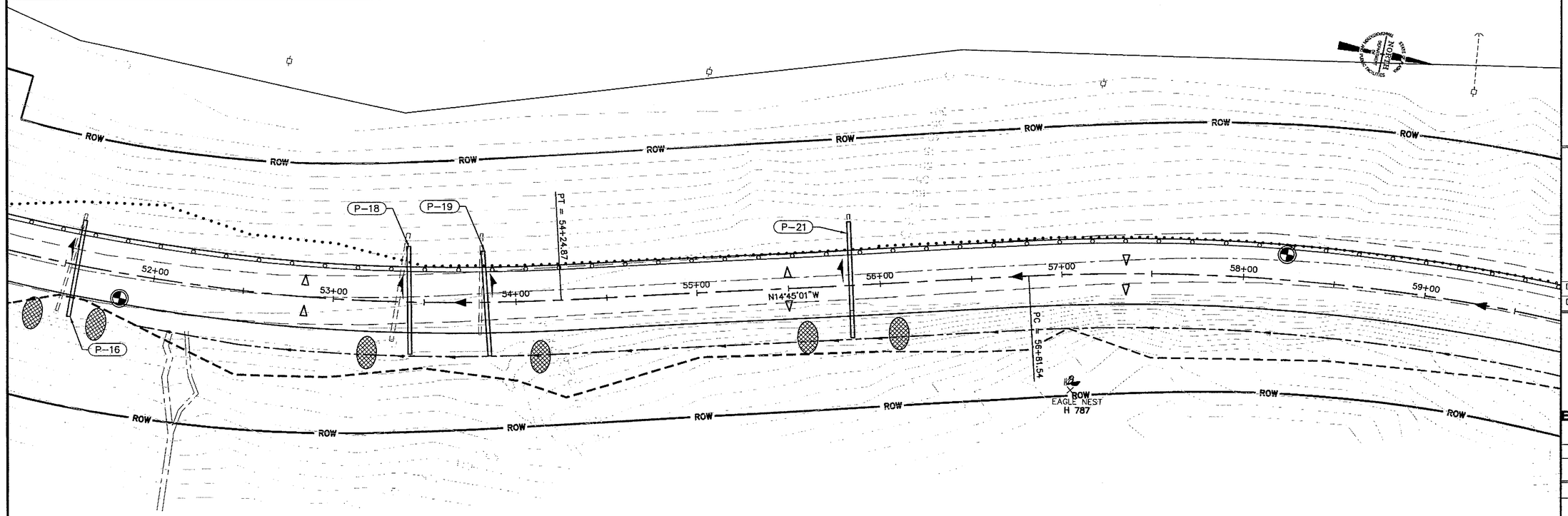

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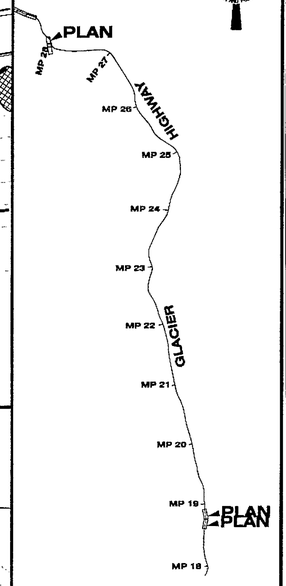

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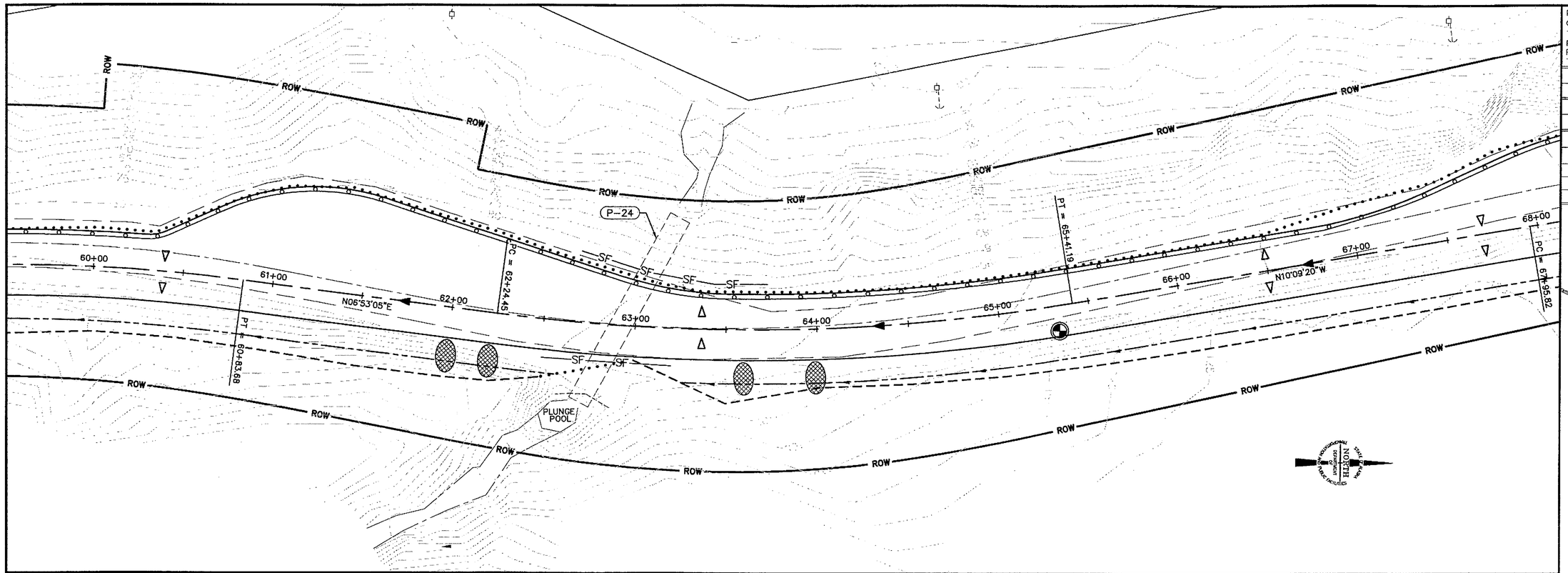

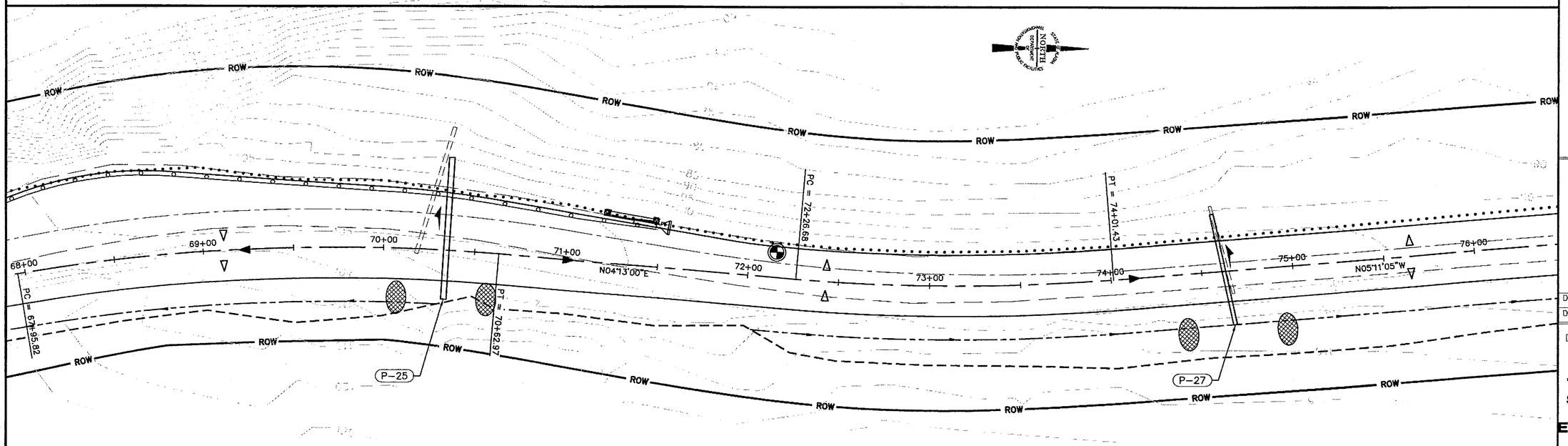

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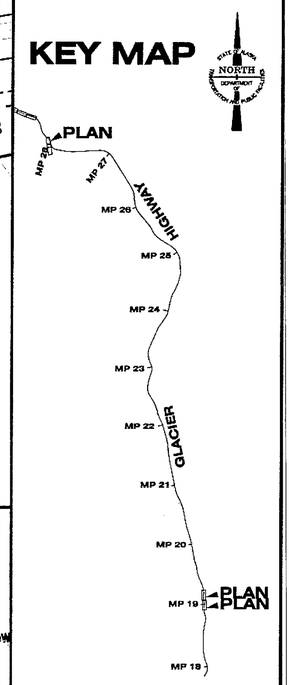

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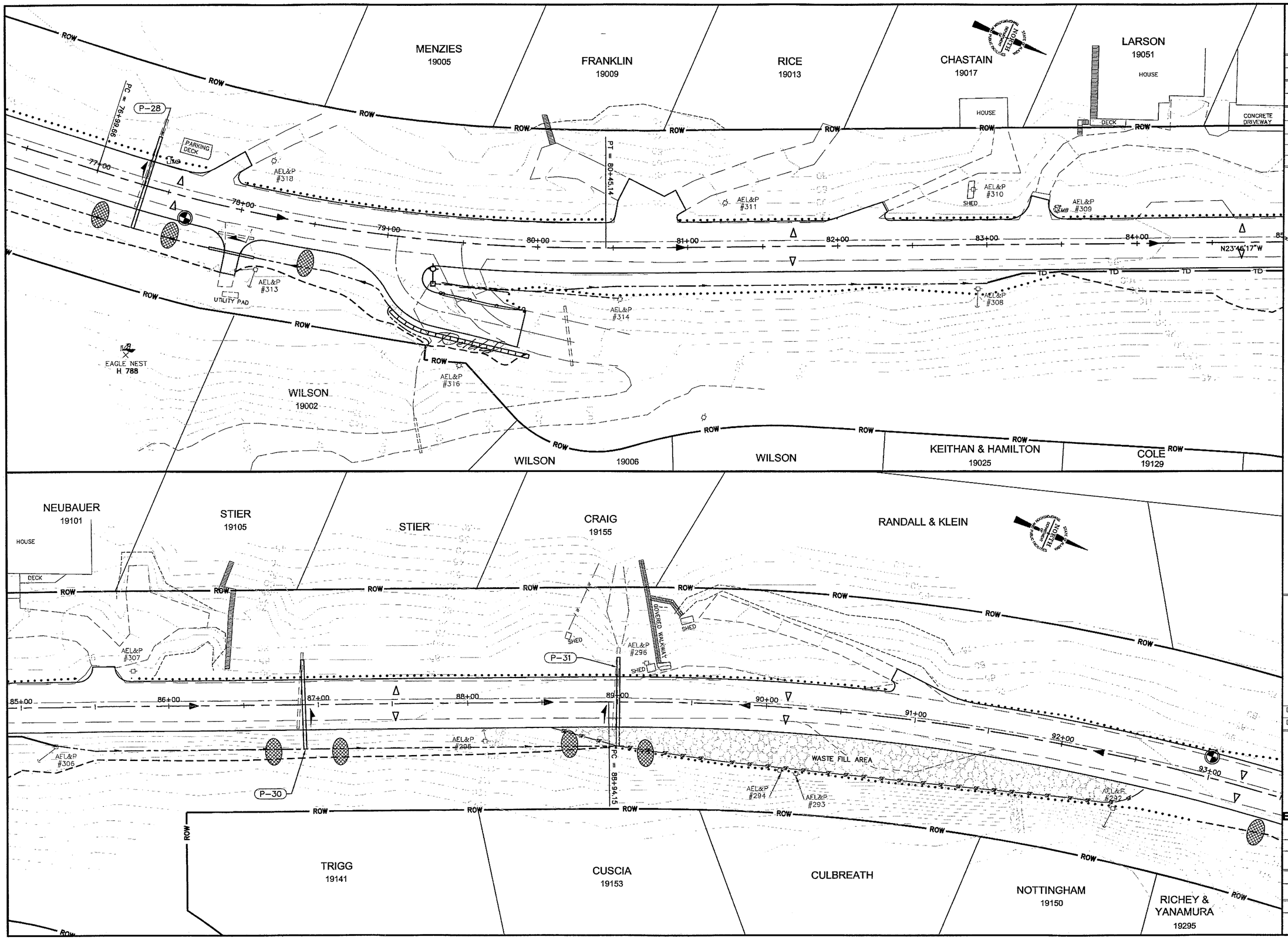

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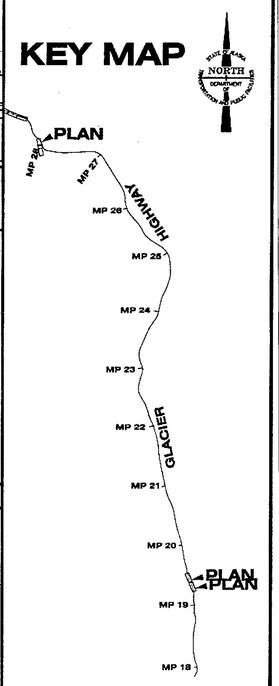

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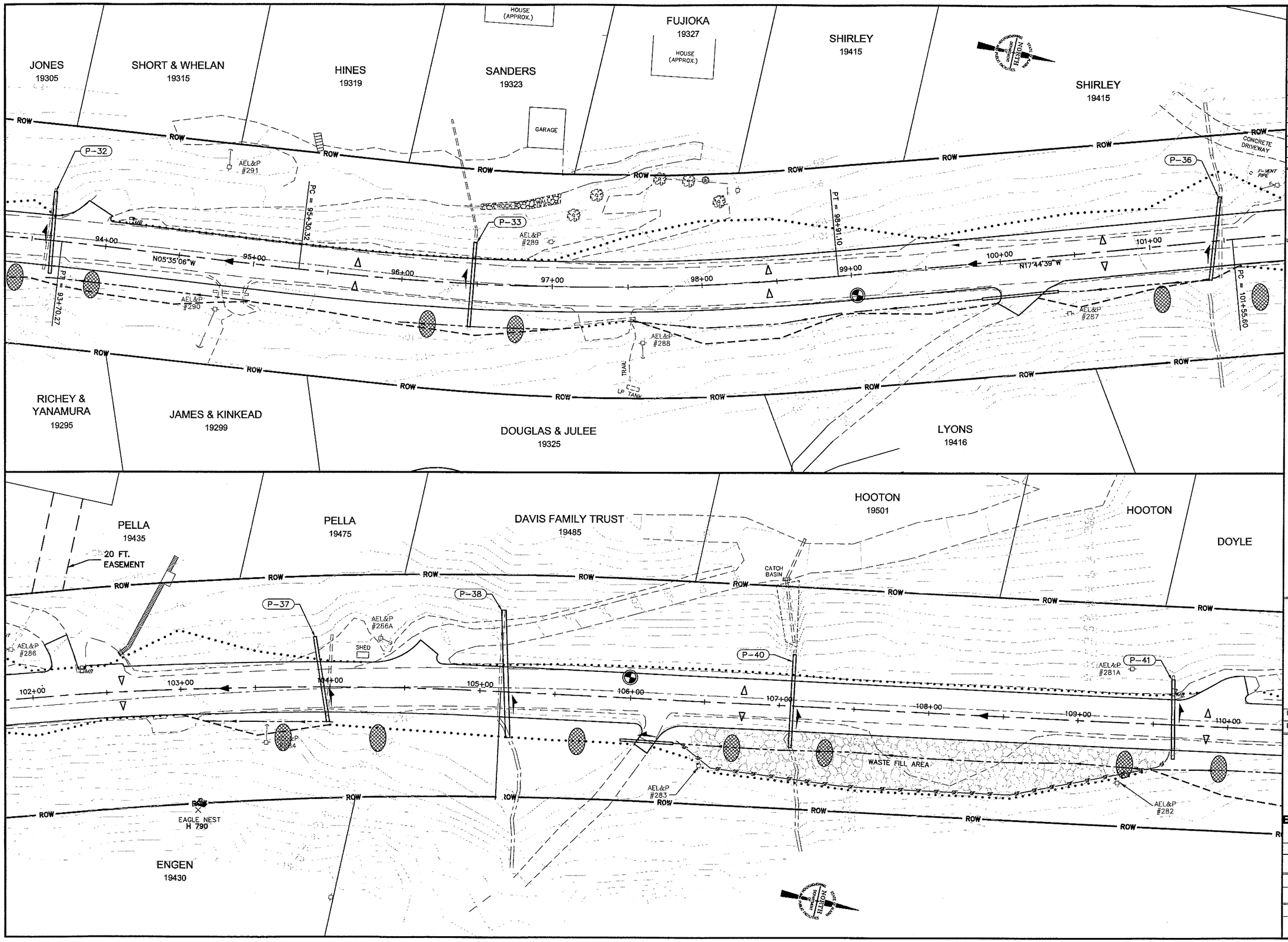

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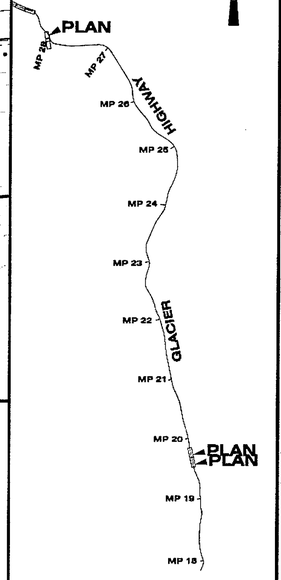

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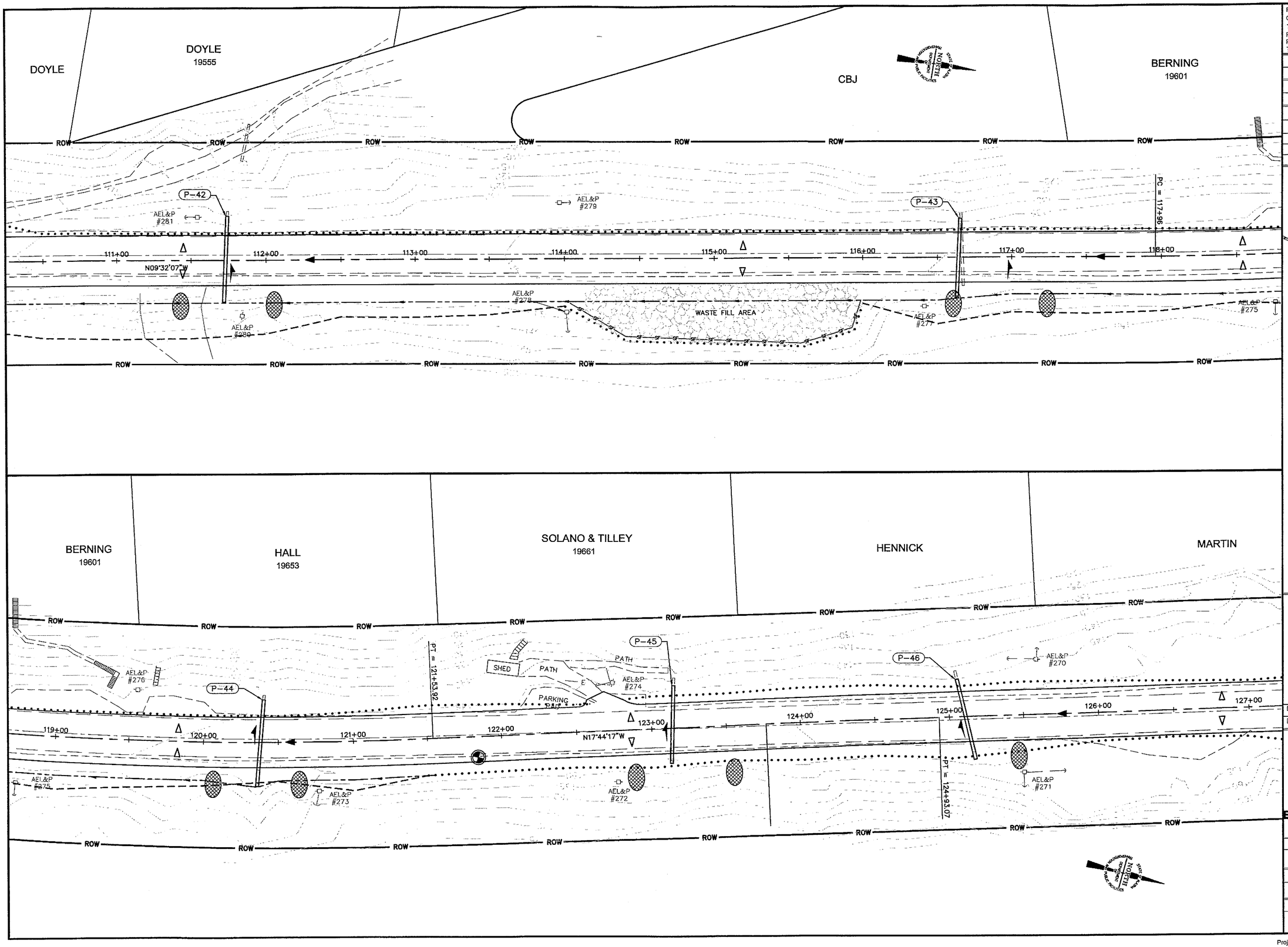

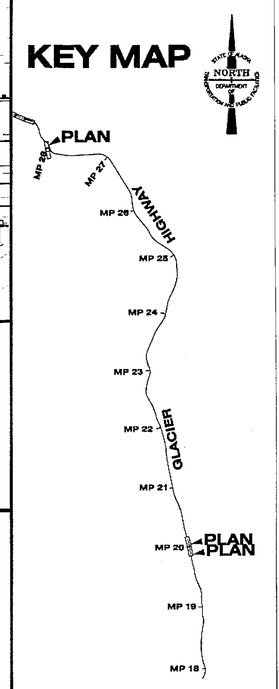

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STATE OF ALASKA
49 TH
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CE-11014
REGISTERED PROFESSIONAL ENGINEER
12-14-04

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STATE OF ALASKA
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T1.1	146

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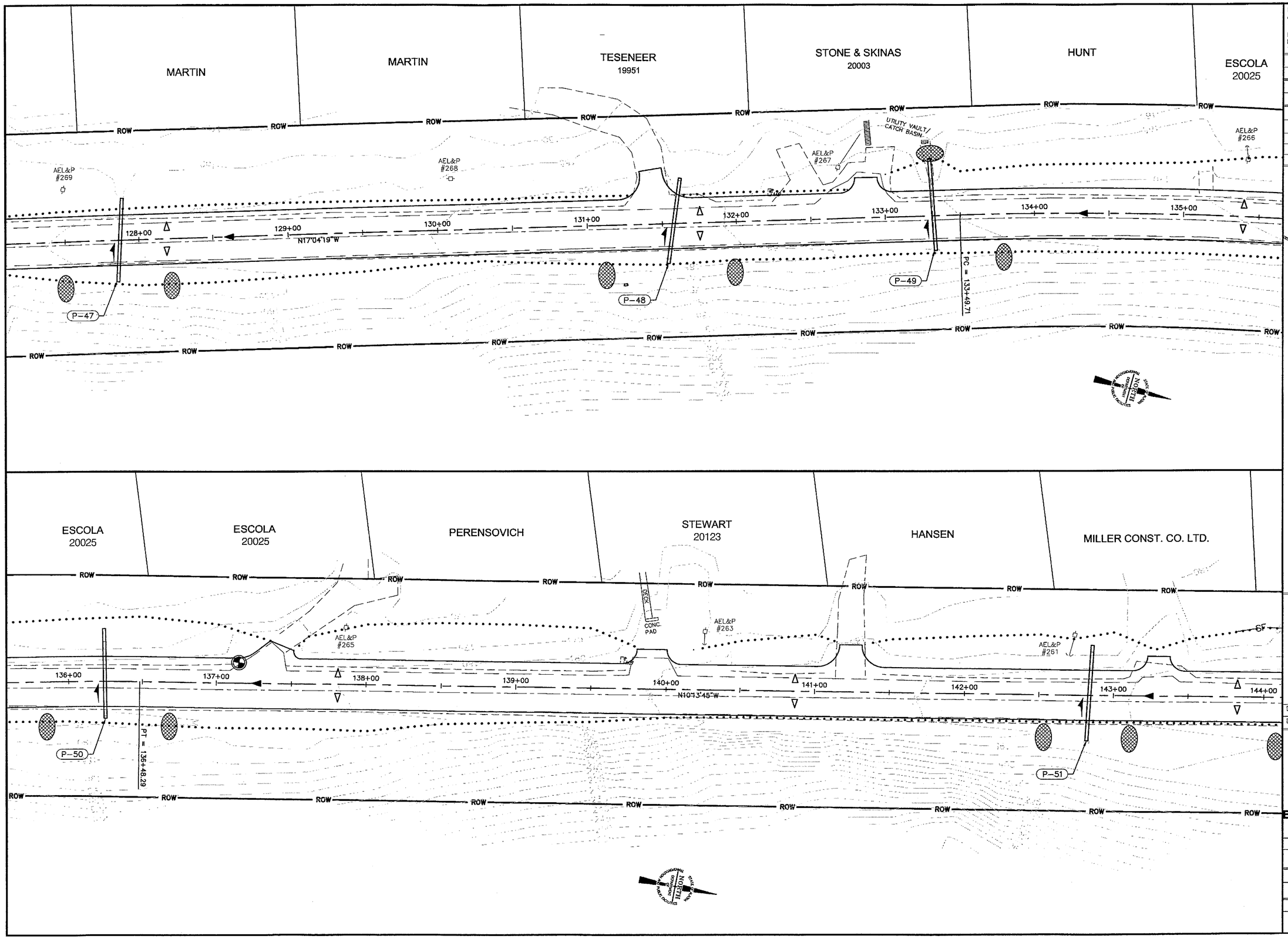

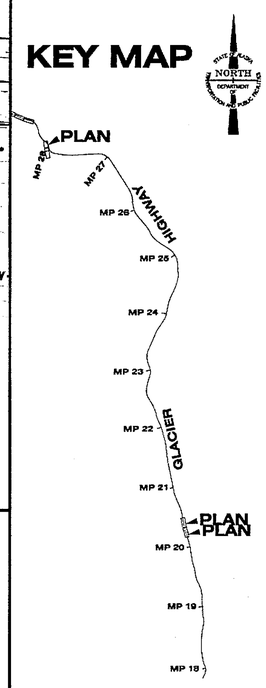

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Joel D. Osburn
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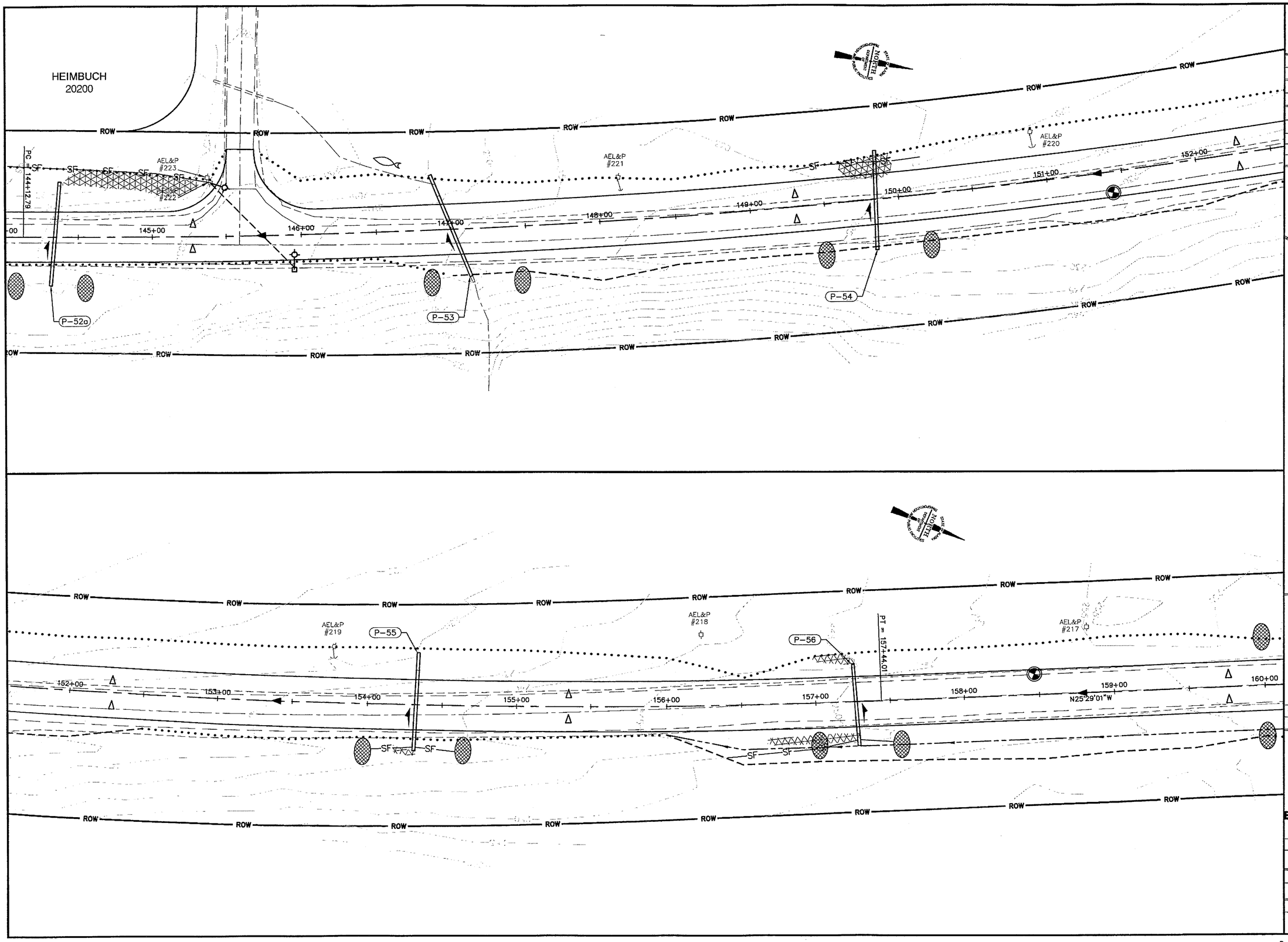

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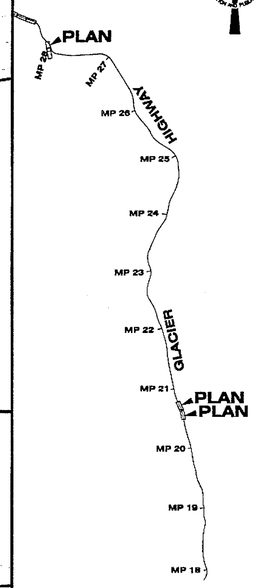

STATE OF ALASKA
49 TH
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12-14-09

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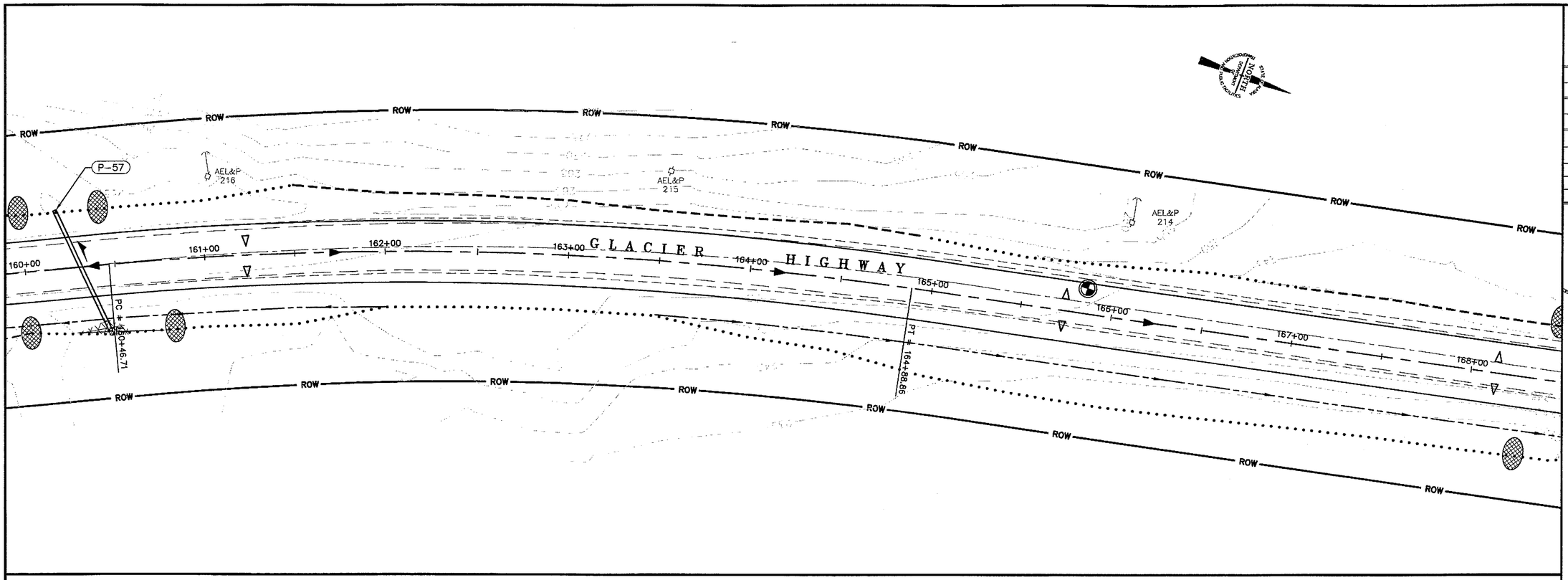

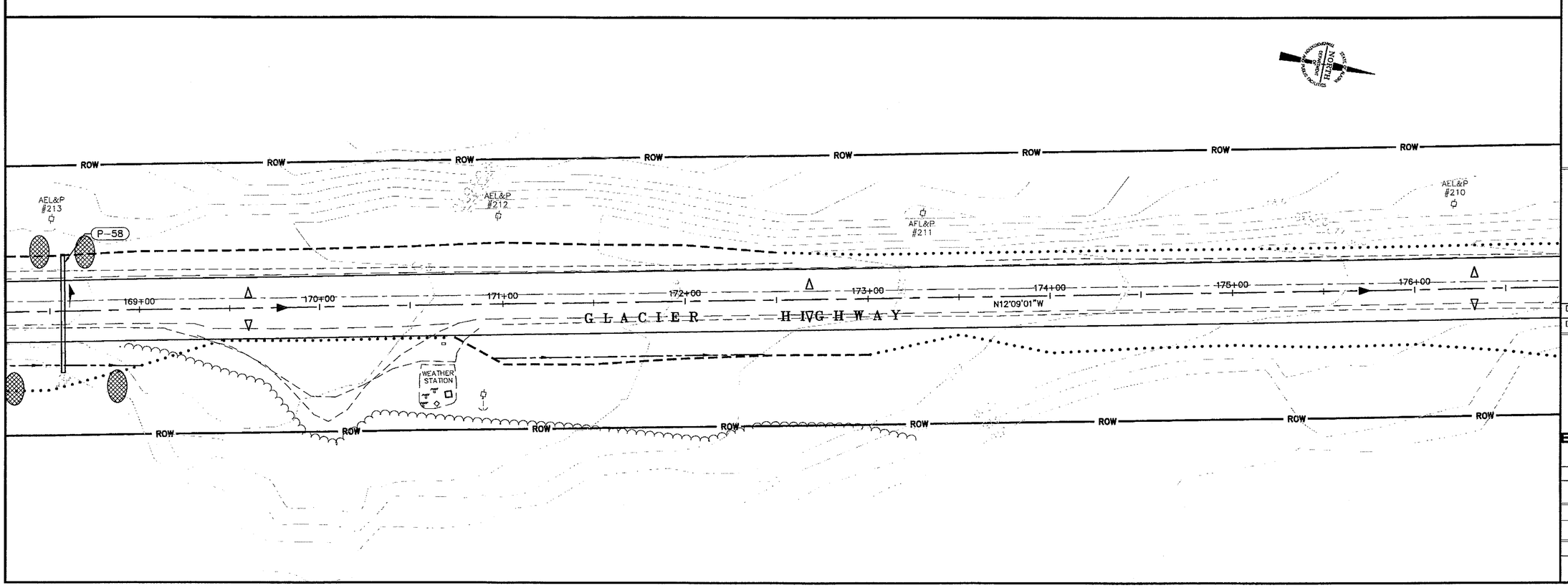

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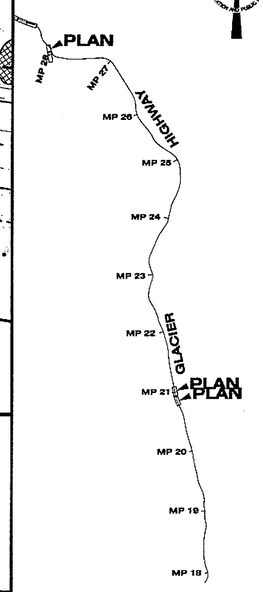

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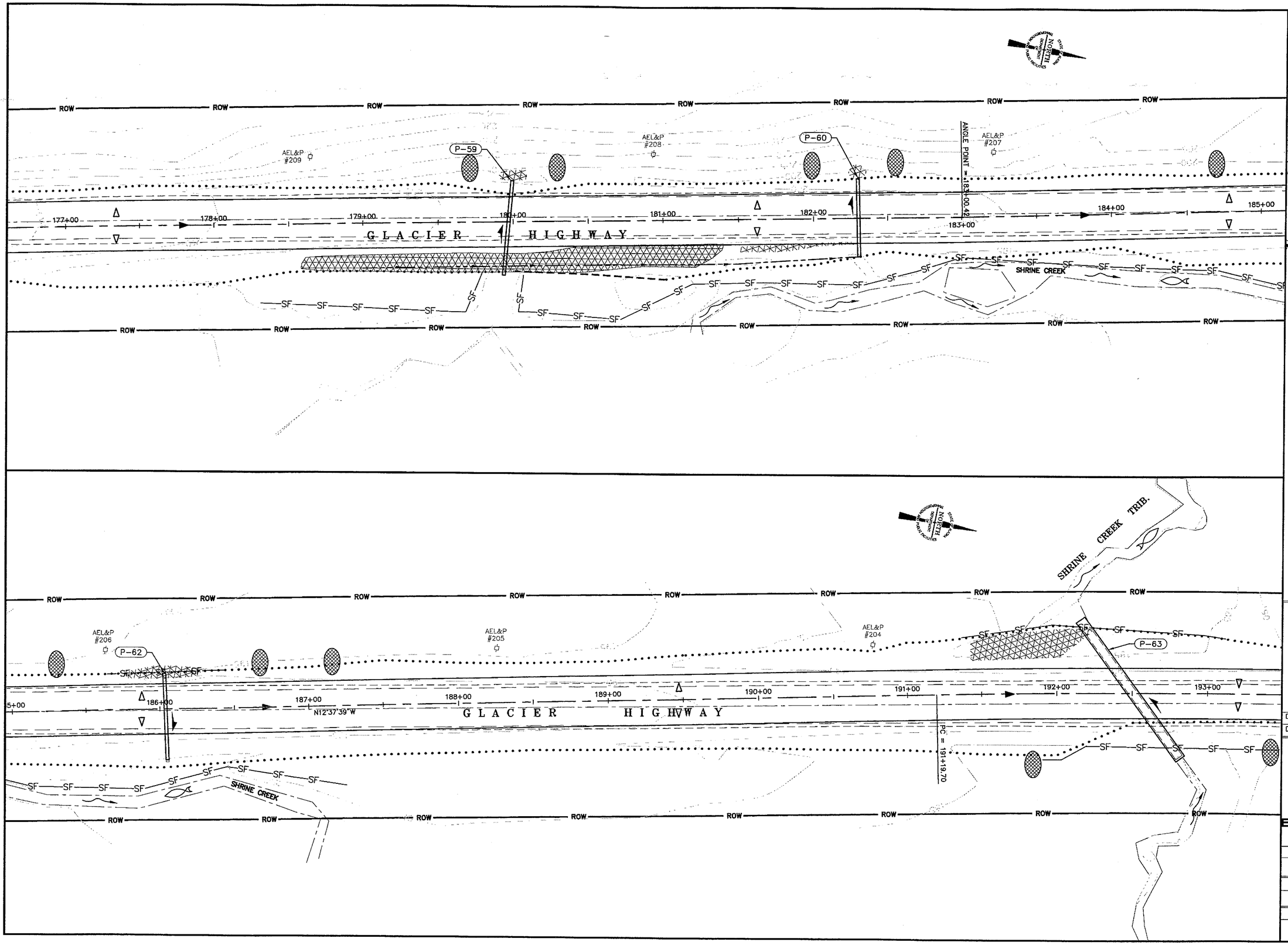

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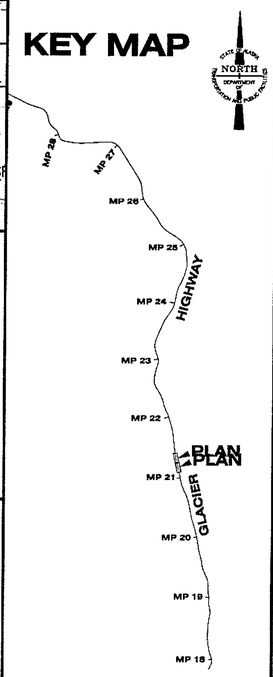

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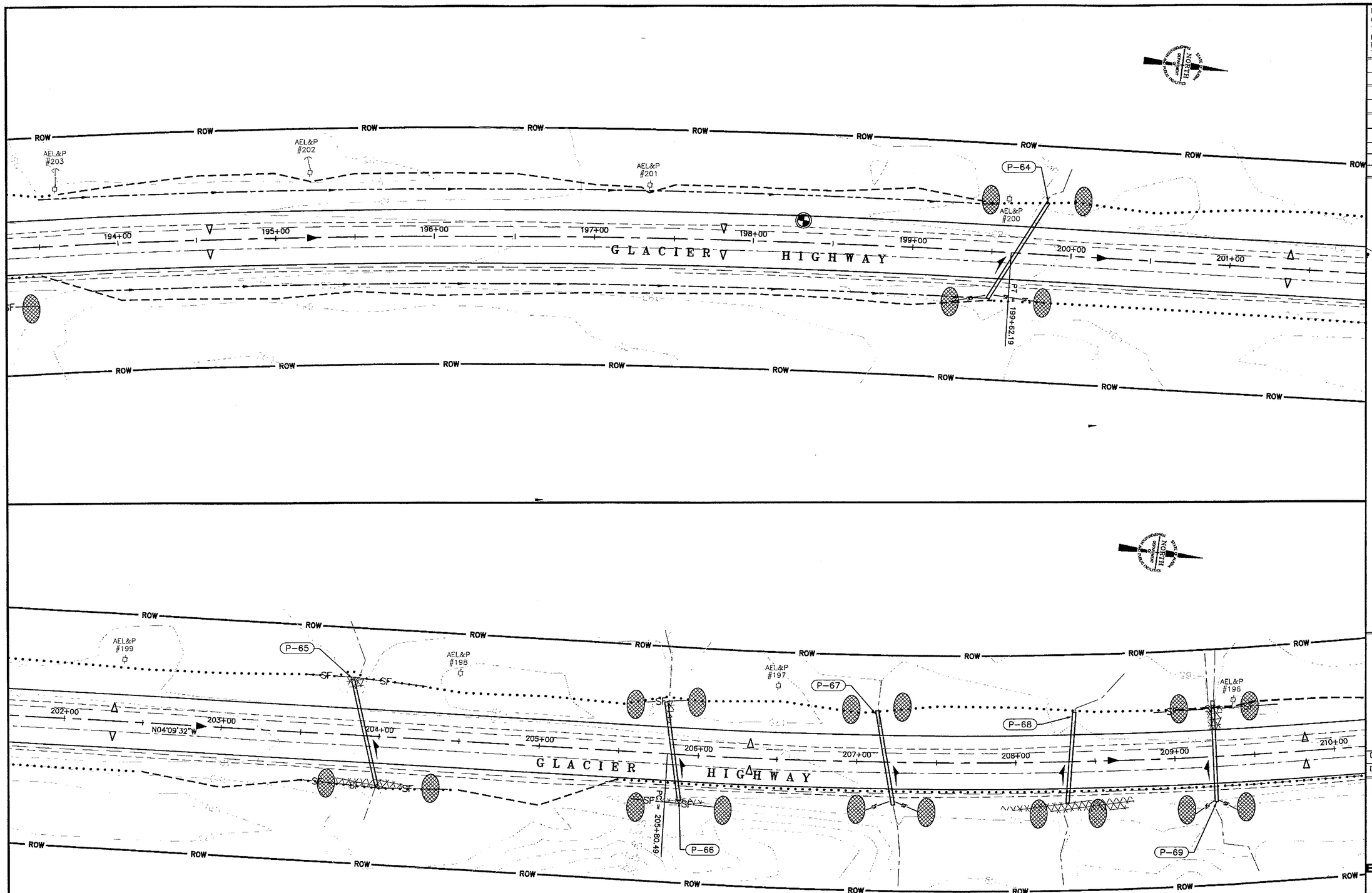
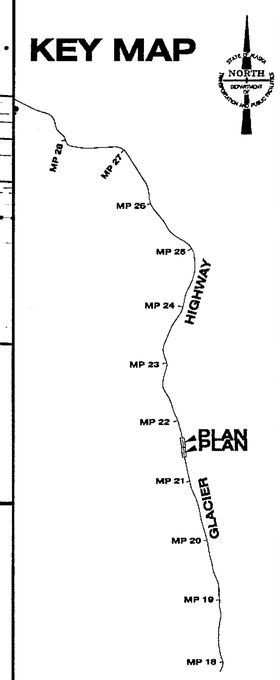
Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, Inspector as constructed.
PE _____ Date 1/18/07





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ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

STATE OF ALASKA
49 TH
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
12-14-04

DESIGNED BY: J. OSBURN
DRAWN BY: BENNETT/STEVENS

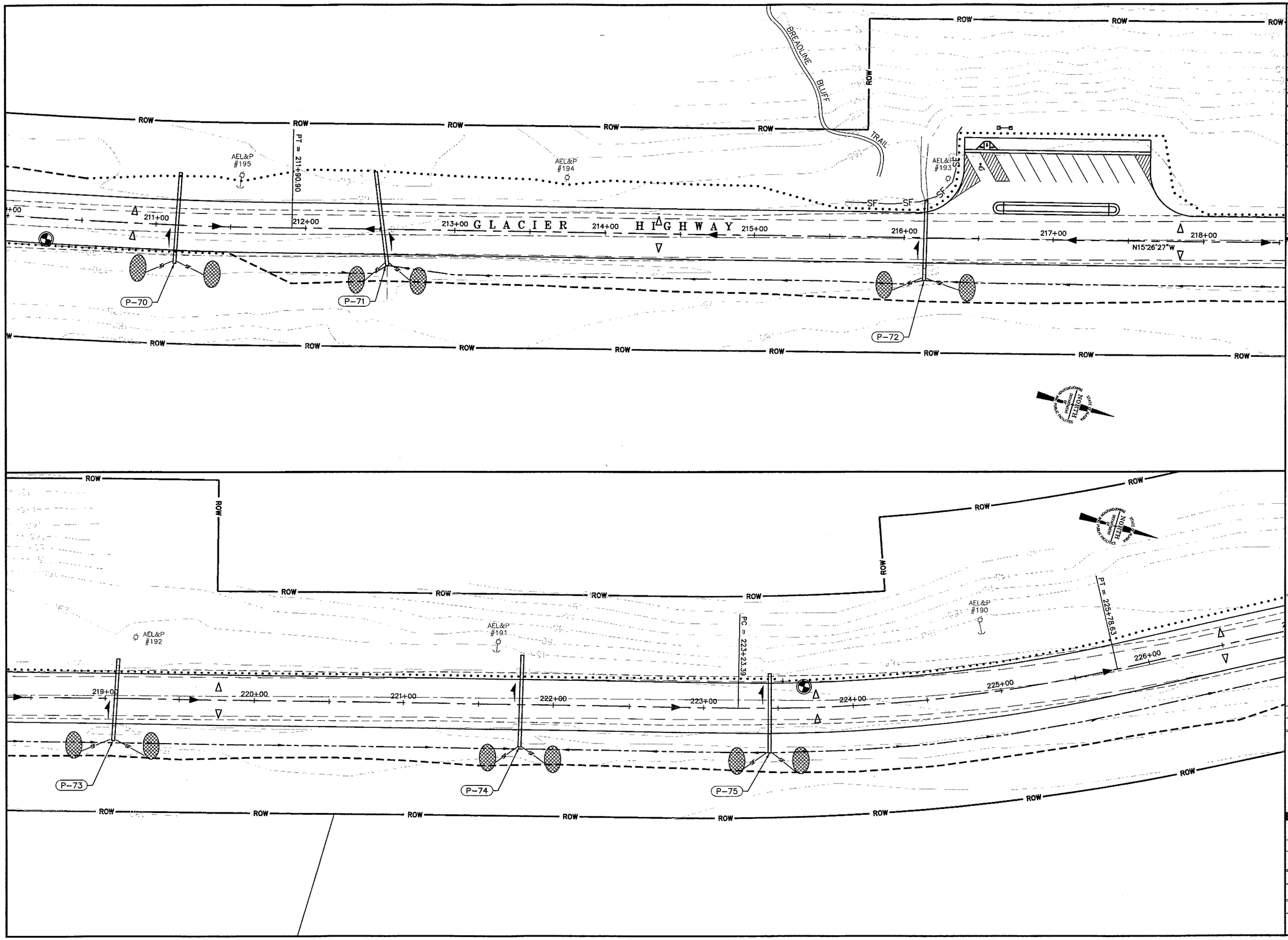
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - PT. STEPHENS RD. TO AMALGA HARBOR RD.

Erosion and Sediment Control Plan

PROJECT DESIGNATION NUMBER	
IM-093-3(24)/68097	
STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
T16	146

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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ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

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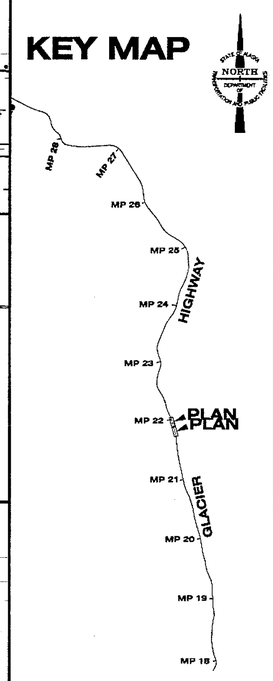

STATE OF ALASKA
49 TH
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
12-14-04

DESIGNED BY: J. OSBURN
DRAWN BY: BENNETT/STEVENS

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

JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - PT. STEPHENS RD. TO AMALGA HARBOR RD.

Erosion and Sediment Control Plan

PROJECT DESIGNATION NUMBER
IM-093-3(24)/68097

STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
T17	146

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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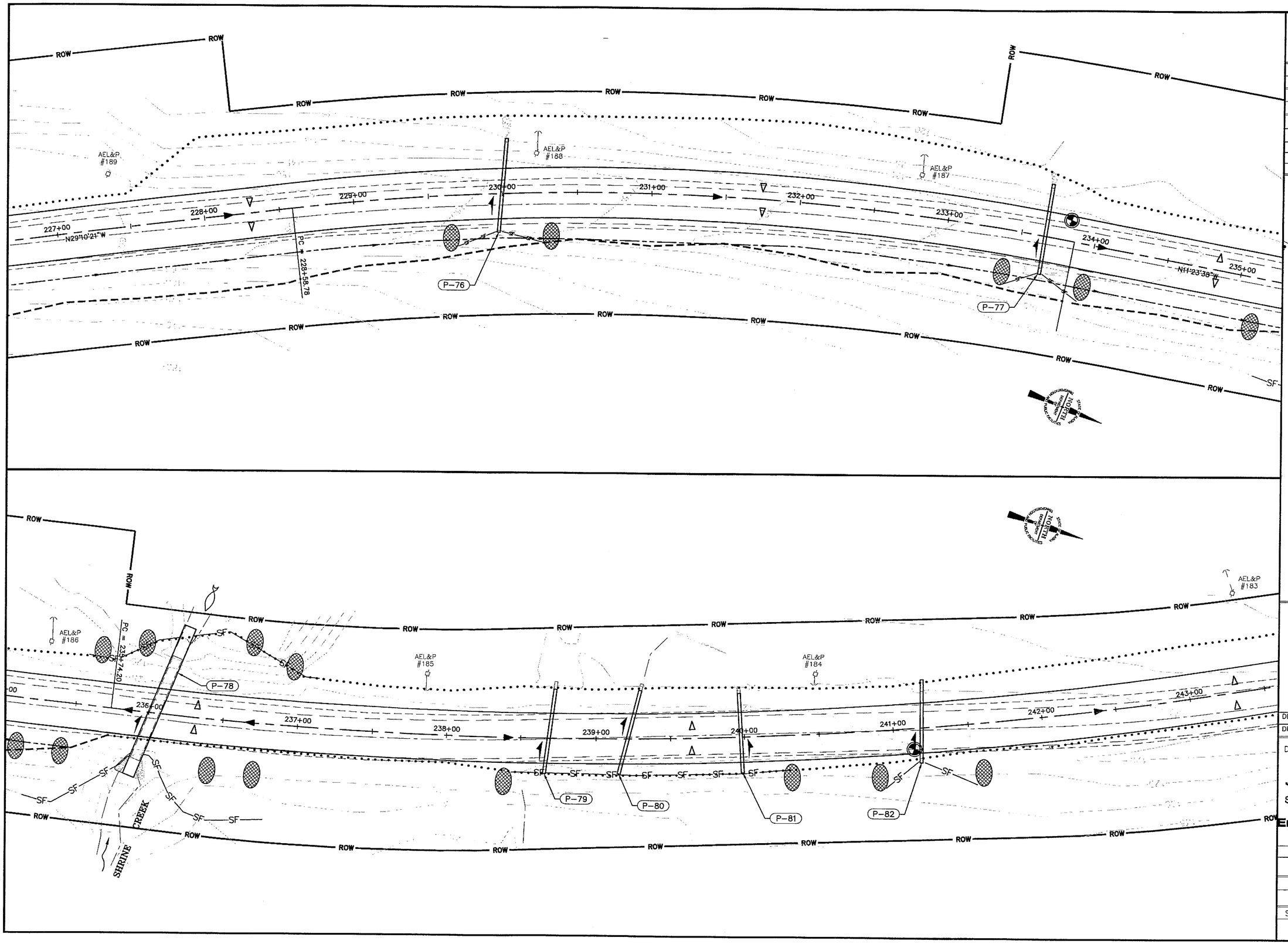
RECORD OF REVISIONS

No.	DATE	DESCRIPTION



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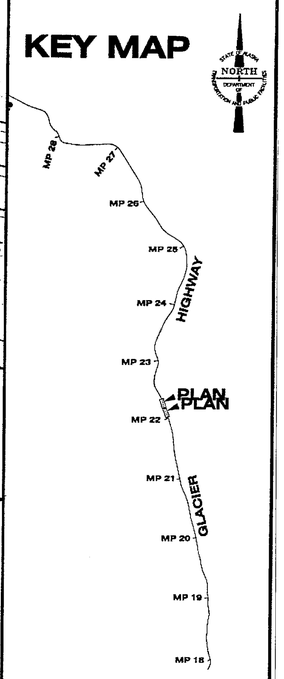

STATE OF ALASKA
49 TH
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
12-14-04

DESIGNED BY: J. OSBURN
DRAWN BY: BENNETT/STEVENS

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

JNU-GLACIER HIGHWAY & TRAILHEAD
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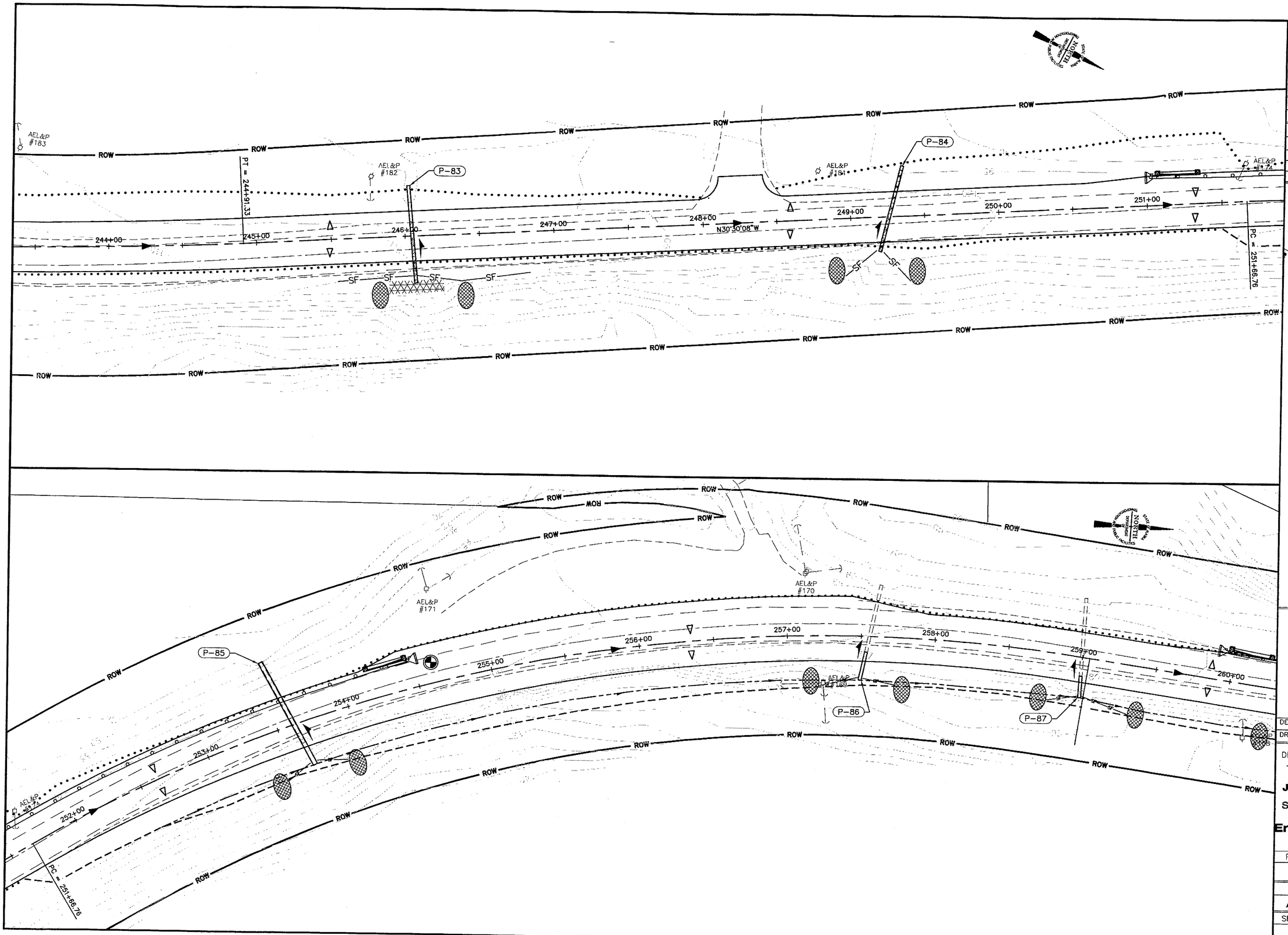
Erosion and Sediment Control Plan

PROJECT DESIGNATION NUMBER	
IM-093-3(24)/68097	
STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
T18	146

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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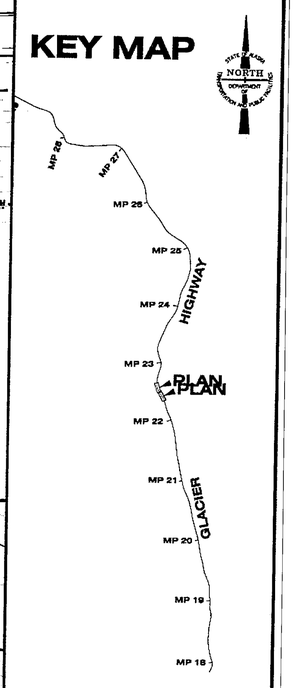

STATE OF ALASKA
49 TH
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
12-14-04

DESIGNED BY:	J. OSBURN
DRAWN BY:	BENNETT/STEVENS

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

JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - PT. STEPHENS RD. TO AMALGA HARBOR RD.

Erosion and Sediment Control Plan

PROJECT DESIGNATION NUMBER	
IM-093-3(24)/68097	
STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
T19	146

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, information and belief, construction.
PE _____ Date _____

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ATTACHMENT NUMBER

RECORD OF REVISIONS

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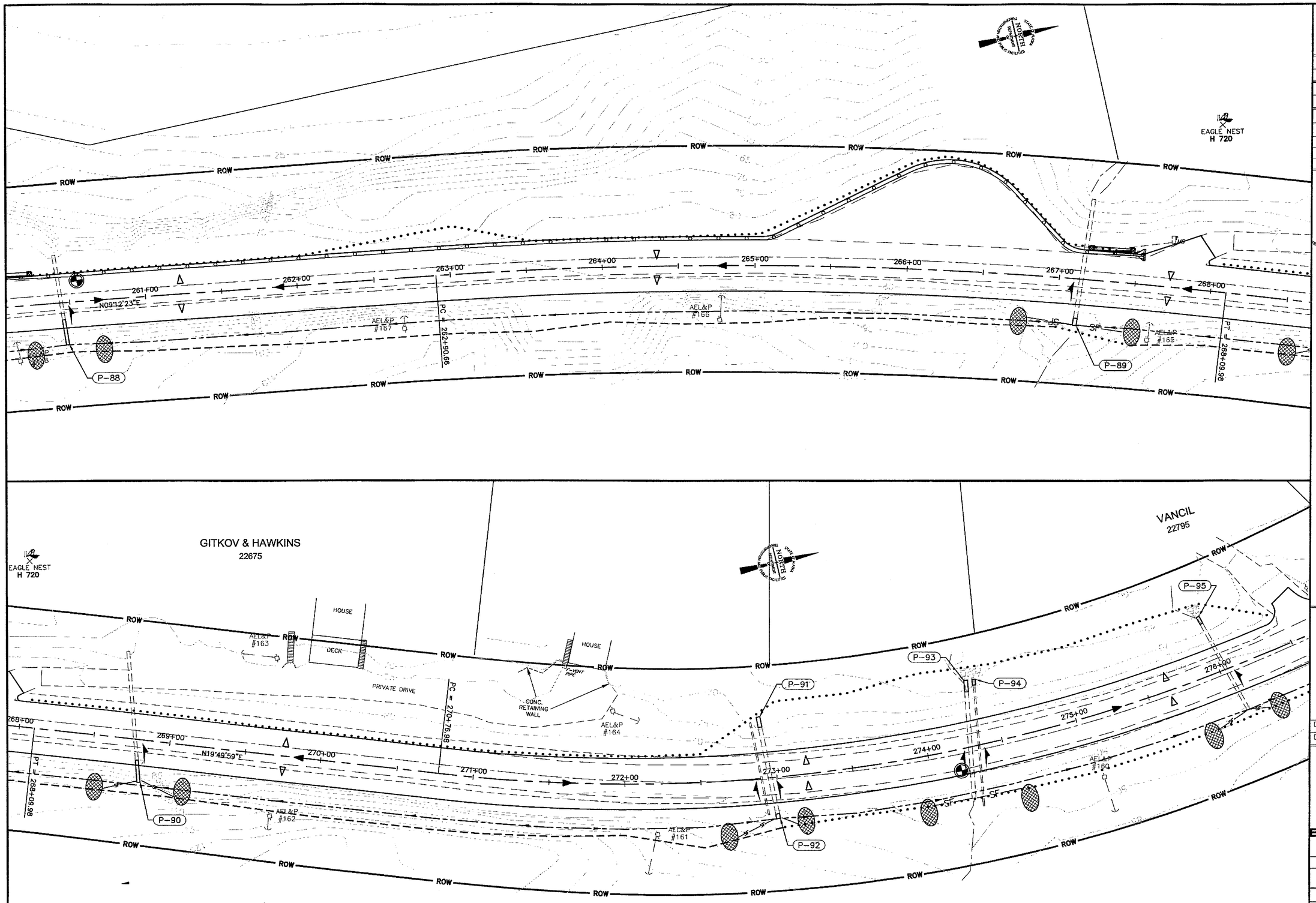

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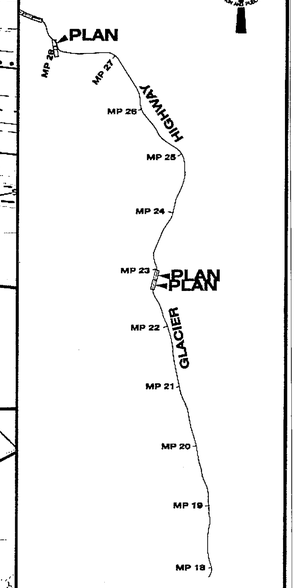

STATE OF ALASKA
49 TH
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
12-14-04

DESIGNED BY: J. OSBURN
DRAWN BY: BENNETT/STEVENS

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

JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - PT. STEPHENS RD. TO AMALGA HARBOR RD.

Erosion and Sediment Control Plan

PROJECT DESIGNATION NUMBER	
IM-093-3(24)/68097	
STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
T20	146

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 _____

VANCIL
22795

PATTERSON
22811

ANTRIM
22811

JOHNSON & MULICK
22891

JOHNSON
23001

JENSEN TRUSTEE
23035

ROW

P-95

P-96

P-97

P-98

AEL&P #158

AEL&P #157

AEL&P #153

AEL&P #152

AEL&P #151

AEL&P #156

AEL&P #150

AEL&P #148

MB

276+00

277+00

278+00

279+00

280+00

281+00

282+00

283+00

284+00

285+00

286+00

287+00

288+00

289+00

290+00

291+00

292+00

N23°46'31"W

N07°21'29"W

PC = 281+21.21

PT = 285+22.35

PC = 287+50.98

NORTH

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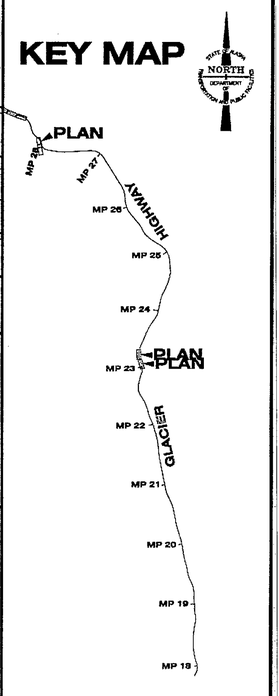

STATE OF ALASKA
49 TH
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
12-14-04

DESIGNED BY: J. OSBURN

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

JNU-GLACIER HIGHWAY & TRAILHEAD

STAGE I - PT. STEPHENS RD. TO AMALGA HARBOR RD.

Erosion and Sediment Control Plan

PROJECT DESIGNATION NUMBER
IM-093-3(24)/68097

STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
T21	146

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 1/19/07

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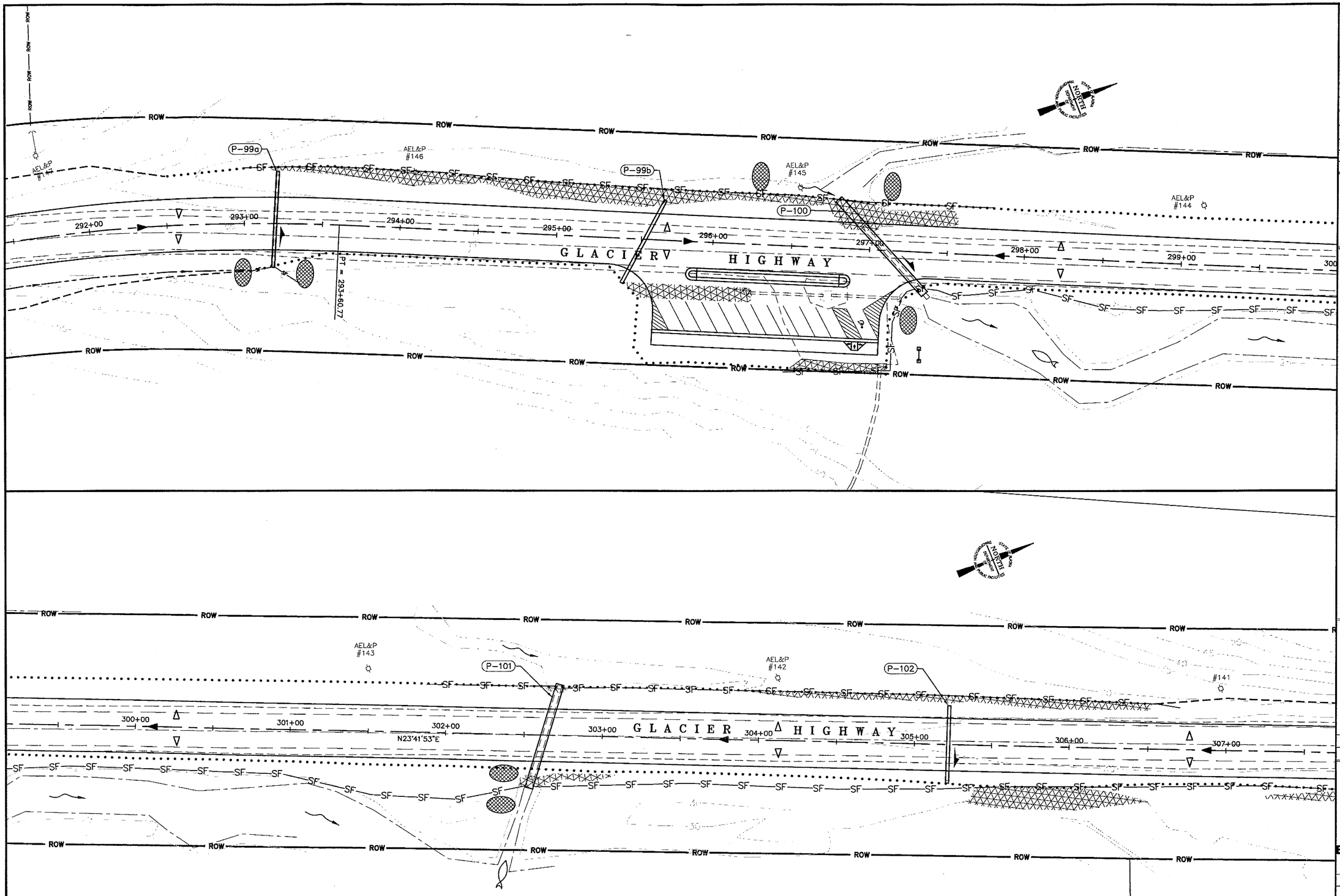

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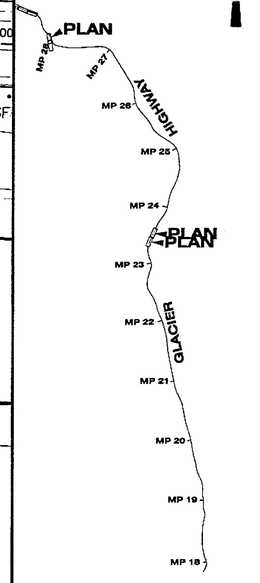


STATE OF ALASKA
49 TH
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
12-14-04

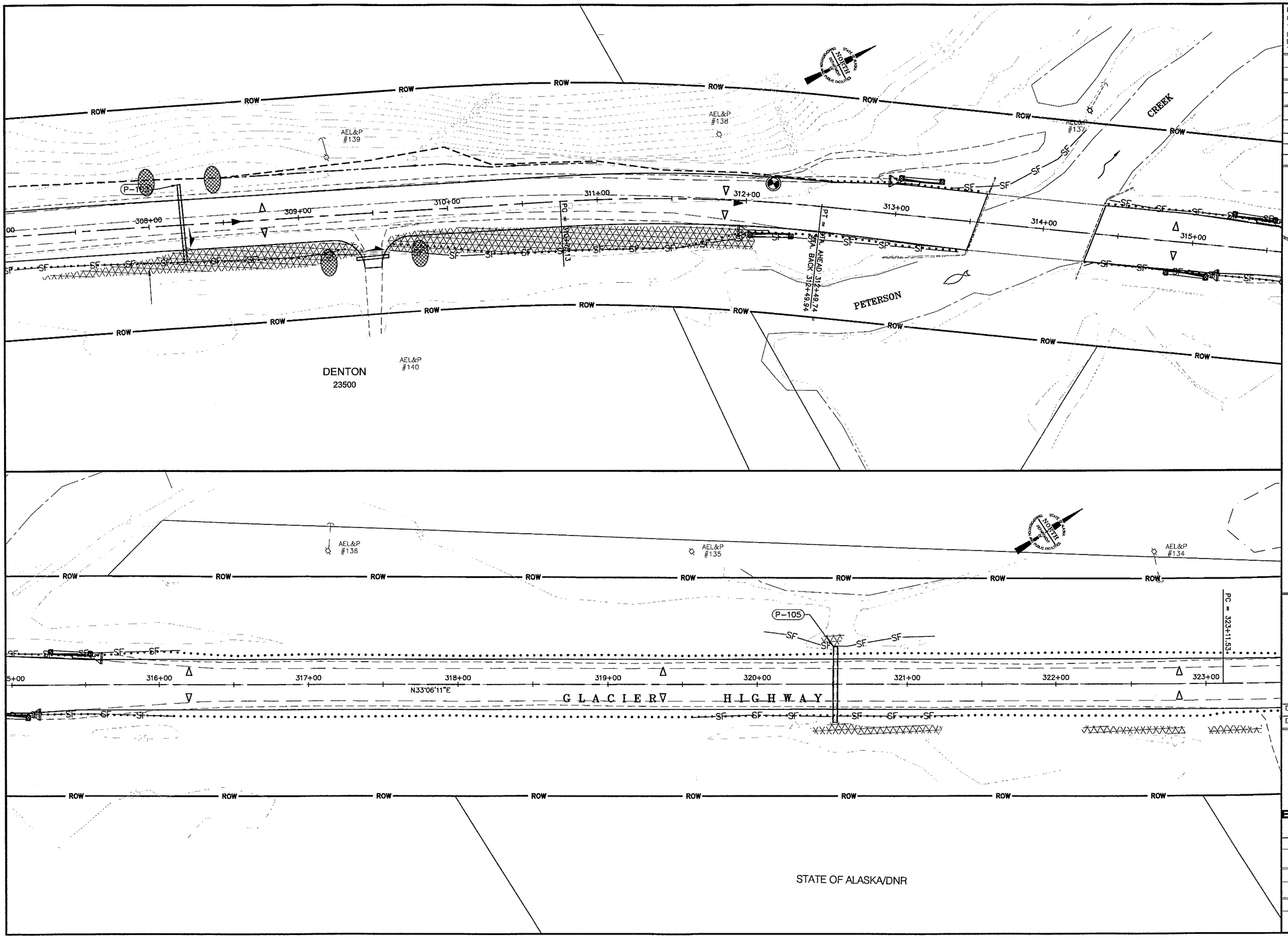
DESIGNED BY: J. OSBURN
DRAWN BY: BENNETT/STEVENS

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

JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - PT. STEPHENS RD. TO AMALGA HARBOR RD.
Erosion and Sediment Control Plan

PROJECT DESIGNATION NUMBER	
IM-093-3(24)/68097	
STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
T22	146

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 11/04/05



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No.	DATE	DESCRIPTION

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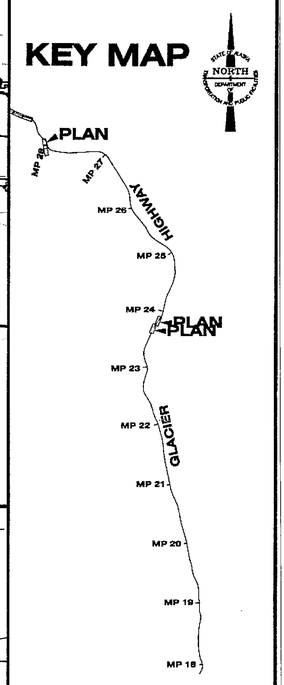


STATE OF ALASKA
49 TH
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
12-14-04

DESIGNED BY: J. OSBURN
DRAWN BY: BENNETT/STEVENS

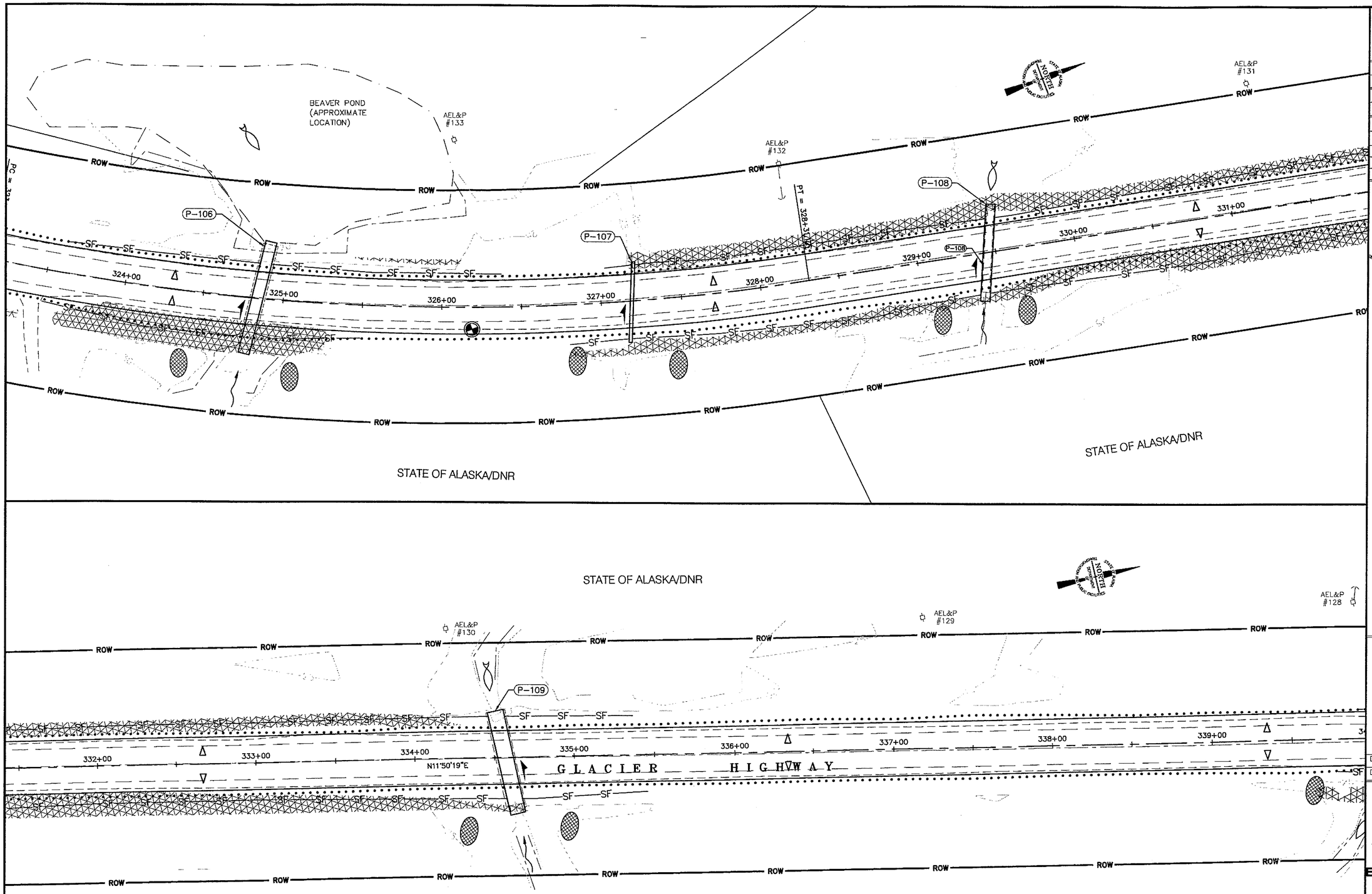
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - PT. STEPHENS RD. TO AMALGA HARBOR RD.

Erosion and Sediment Control Plan

PROJECT DESIGNATION NUMBER	
IM-093-3(24)/68097	
STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
T23	146

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 11/08/05



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No.	DATE	DESCRIPTION

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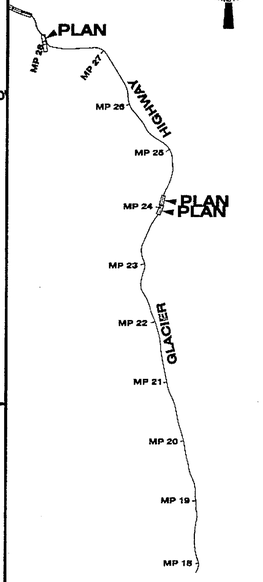

STATE OF ALASKA
49 TH
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
12-14-04

DESIGNED BY: J. OSBURN
DRAWN BY: BENNETT/STEVENS

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

JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - PT. STEPHENS RD. TO AMALGA HARBOR RD.

Erosion and Sediment Control Plan

PROJECT DESIGNATION NUMBER
IM-093-3(24)/68097

STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
T24	146

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 4/18/07

STATE OF ALASKA/DNR

BYFORD
24325

AEL&P #127

AEL&P #92

AEL&P #85

AEL&P #82

P-110

P-111

P-112

340+00

341+00

342+00

343+00

343+77.94

344+00

345+00

346+00

N28°36'42"E

347+00

348+00

AMALGA HARBOR RD.

ROW

SF

GLACIER HIGHWAY

WINDFALL LAKE TRAILHEAD PARKING AREA

PATH:
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Tue, 14/Dec/04 02:42PM
PLOT:
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ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

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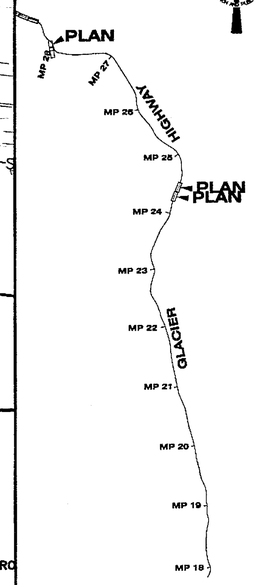

STATE OF ALASKA
49 TH
Joel D. Osburn
CE-11014
REGISTERED Professional ENGINEER

12-14-04

DESIGNED BY: J. OSBURN

DRAWN BY: BENNETT/STEVENS

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

JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - PT. STEPHENS RD. TO AMALGA HARBOR RD.

Erosion and Sediment Control Plan

PROJECT DESIGNATION NUMBER	
IM-093-3(24)/68097	
STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
T25	146

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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ATTACHMENT NUMBER

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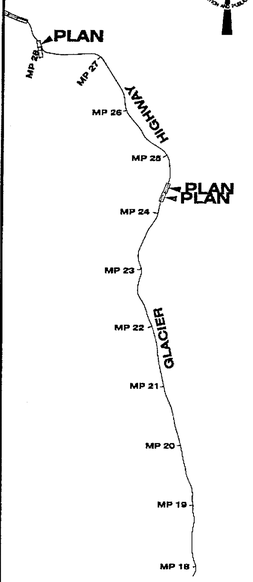


STATE OF ALASKA
49 TH
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
12-14-04

DESIGNED BY: J. OSBURN
DRAWN BY: BENNETT/STEVENS

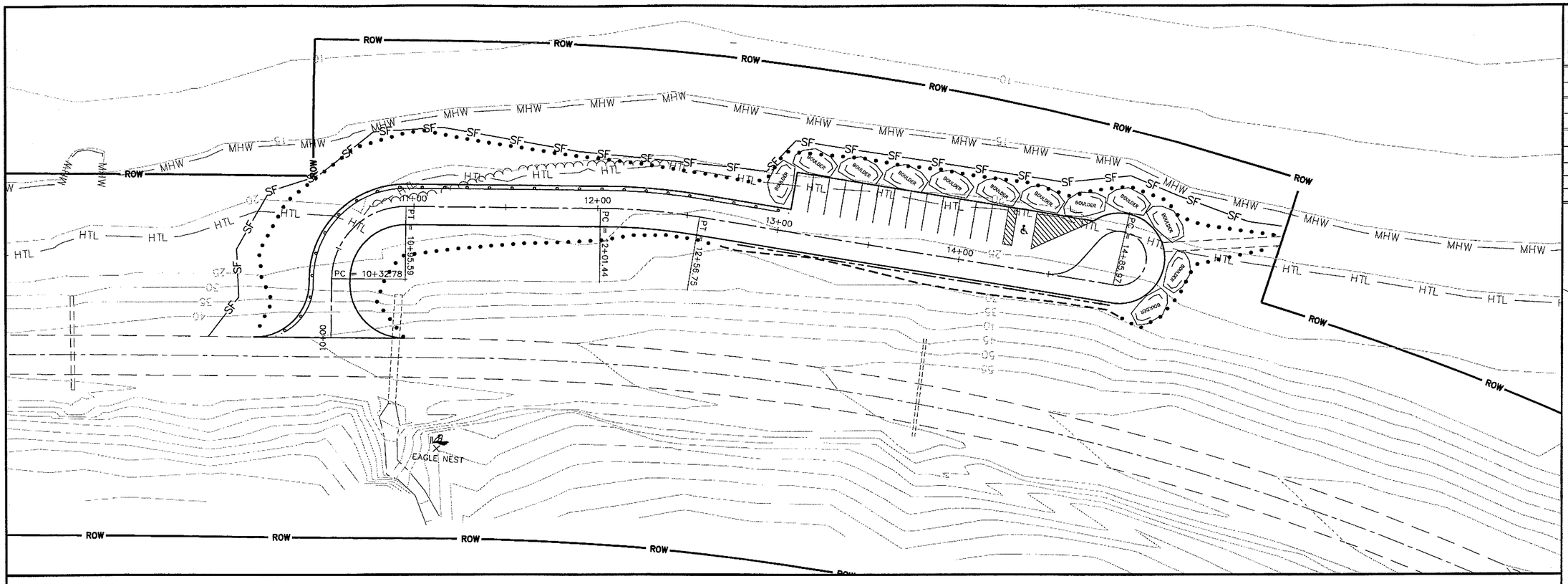
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - PT. STEPHENS RD. TO AMALGA HARBOR RD.

Erosion and Sediment Control Plan

PROJECT DESIGNATION NUMBER	
IM-093-3(24)/68097	
STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
T26	146

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 11/18/07



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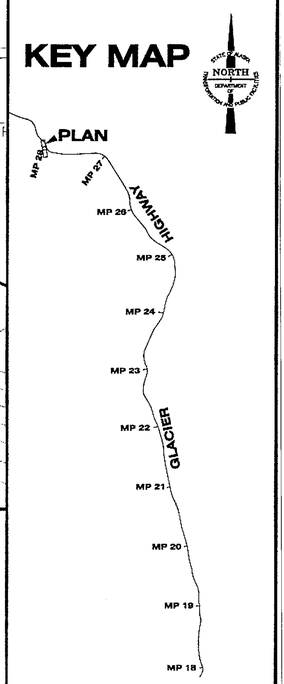


STATE OF ALASKA
49 TH
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
12-15-04

DESIGNED BY: J. OSBURN
DRAWN BY: BENNETT/STEVENS

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

JNU-GLACIER HIGHWAY & TRAILHEAD
STAGE I - PT. STEPHENS RD. TO AMALGA HARBOR RD.

Erosion and Sediment Control Plan

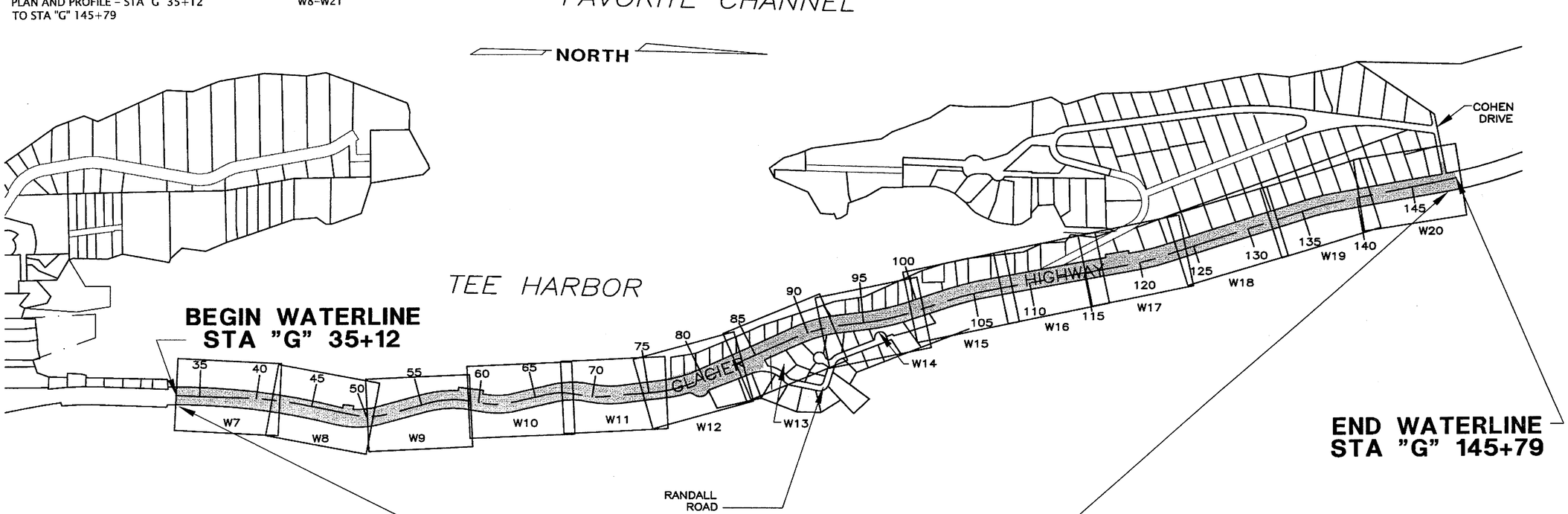
PROJECT DESIGNATION NUMBER	
IM-093-3(24)/68097	
STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
T27	146

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 1/05/07

NORTH TEE HARBOR WATERLINE EXTENSION: GLACIER HIGHWAY–PT. STEPHENS TO COHEN DRIVE

INDEX

DESCRIPTION	SHEET NO.
KEY MAP	W1
LEGEND, ABBREVIATIONS, AND GENERAL NOTES	W2
TYPICAL SECTION AND DETAILS	W3–W6
ESTIMATE OF QUANTITIES AND SUMMARY TABLES	W7
PLAN AND PROFILE – STA "G" 35+12 TO STA "G" 145+79	W8–W21



WATERLINE EXTENSION LIMITS

KEY MAP
NTS

CITY/BOROUGH OF JUNEAU
ALASKA'S CAPITAL CITY

Toner Nordling & ASSOCIATES, INC.
CONSULTING ENGINEERS
LAND SURVEYORS
CONSTRUCTION ADMINISTRATION

PATH: S:\LIB\03-3845\3845CR01.DWG

PLOT:
PSPACE 1=1(F) OR MSPACE 1=1(F)
TAB: TYPICALS

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

CITY/BOROUGH OF JUNEAU
ALASKA'S CAPITAL CITY
DEPARTMENT OF ENGINEERING

Toner Nordling & ASSOCIATES, INC.
5368 Commercial Boulevard
Juneau, AK 99801
(907) 780-3533 Fax (907) 780-3535

DESIGNED BY: G. JENKINS

STATE OF ALASKA
10th
Gary G. Jenkins II
No. CE9962
REGISTERED PROFESSIONAL ENGINEER
10-15-04

CHECKED BY: P. HILDRE

DRAWN BY: STAFF

NORTH TEE HARBOR WATERLINE EXTENSION GLACIER HIGHWAY: PT. STEPHENS TO COHEN DRIVE

WATERMAIN KEYMAP

PROJECT DESIGNATION NUMBER	
AK PFH 2-1(1)/68096	
STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
W1	21

LEGEND

DESCRIPTION	EXISTING	REMOVE	PROPOSED
BUILDING NO	2204		
DOT FILL LIMIT			
DOT CUT LIMIT			
EDGE OF ROADWAY/PAVEMENT			
FENCE			
FIRE HYDRANT			
GUARDRAIL			
PLUG/CAP			
PROJECT CENTERLINE			
PROPERTY LINE			
TBM or SURVEY PIN			
TREE CONIFER			
TREE DECIDUOUS			
WATER LINE			
WATER SERVICE			
WATER VALVE			

ABBREVIATIONS (ABBREVIATIONS TO BE USED WITHOUT PERIODS)

AC	ASPHALT PAVING	INV	INVERT
BV	BUTTERFLY VALVE	LT	LEFT
CBJ	CITY AND BOROUGH OF JUNEAU	MTE	MATCH TO EXISTING
CPP	CORRUGATED POLYETHYLENE PIPE	NO	NUMBER
CONC	CONCRETE	NTS	NOT TO SCALE
CTE	CONNECT TO EXISTING	PVC	POLYVINYL CHLORIDE PIPE
CU	COPPER	ROW	RIGHT-OF-WAY
DI	DUCTILE IRON	RP	RADIUS POINT
DIA	DIAMETER	RT	RIGHT
DTL	DETAIL	SHT	SHEET
FH	FIRE HYDRANT	STA	STATION
FG	FINISHED GRADE	STD	STANDARD
GV	GATE VALVE	TP	TOP OF PAVEMENT

GENERAL NOTES

1. All utility locates shall be the responsibility of the Contractor. Call DIAL BEFORE YOU DIG at 586-1333 for locates of all underground utilities within the WORK limits prior to any work.
2. Private water systems exist throughout this project. The contractor shall protect and maintain these private water systems and the quality of water at the source. Any damage shall be repaired immediately. The costs for repairing damage for private water systems shall be incidental to other items of this contract.
3. The Contractor shall protect overhead utilities and power poles adjacent to the trench.
4. Plan water pipe elevations and grades are subject to field adjustments to maintain a five-foot minimum cover over the water pipe.
5. Property disturbed by construction shall be restored to its pre-construction condition or better. Unpaved roads and drives shall be restored with materials similar or better than adjacent materials and all banks and slopes shall be reconstructed to match adjacent banks and slopes.
6. Stations and angles of the pipe bends are shown on the Plans for the contractor's material take-off. If field adjustments require other stations and alignments, the Contractor shall be responsible for furnishing and installing the necessary bends at no additional cost to the Owner.
7. Thrust blocks shall be installed on all fittings, including those fittings installed and intended for future use. Megalug, field-lok gaskets, and other pipe-attached thrust restraints may not take the place of concrete thrust blocks.
8. Contractor shall ensure uninterrupted garbage pickup and daily mail delivery service to all residences affected by this project.
9. The Contractor shall notify CBJ Water Utilities at 780-6808 of proposed water service interruption, and submit the "Water System Special Use Permit" (co-signed by the Engineer) at least 48 HOURS PRIOR to shutdown or flushing of mainline water pipe.
10. Property line locations used in these Plans are derived from record plats and deeds. The property lines shown on these plans are a best fit of record information and do not represent a boundary survey.
11. All items designated to be removed shall be disposed of at an approved disposal site.
12. Any survey monument or monument accessory which will be disturbed or destroyed during construction shall be referenced prior to disturbance and restored or replaced by a Land Surveyor registered in the State of Alaska. The Land Surveyor must file a Monument Record in accordance with AS 34.65.040. All monument records shall be reviewed by the Department of Transportation and Public Facilities Right of Way Section prior to filing with the District Recorder.
13. Water services shall extend to 1-foot from right-of-way.
14. Vertical bends are not shown on the plan drawings.
15. A five foot clear zone free of boulders or bedrock shall be confirmed or created at the end of each standard water service, to the depth of the service.
16. Large boulders, bed rock, stumps, logs, organics and ground water may be encountered at various depths during trenching.
17. The current edition of the CBJ Engineering Standard Details book is made a part of this contract. Copies of pertinent details are included in the Special Provisions.
18. "JUMPING JACK", or similar type compactors, as approved, shall be used for compaction within 18 inches of the outside surface of all water valve boxes and manholes within the street and shoulder limits.
19. Slope and terrain vary significantly at each service. Contractor shall use the topographic contours as an indication of the terrain at each service.
20. Insulate all water pipe and culvert crossings in accordance with the Plans.

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PLOT:
PSPACE 1=1(F) DR MSPACE 1=1(F)
TAB: TYPICALS

ADDENDUM NUMBER

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ALASKA'S CAPITAL CITY
DEPARTMENT OF ENGINEERING

Toner Lordling & ASSOCIATES, INC.
5368 Commercial Boulevard
Juneau, AK 99801
Fax (907) 780-3535
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DESIGNED BY: G. JENKINS

STATE OF ALASKA
49th
Gary L. Jenkins II, PE
No. AK ES9962
PROFESSIONAL ENGINEER
10-15-04

CHECKED BY: P. HILDRE

DRAWN BY: STAFF

NORTH TEE HARBOR
WATERLINE EXTENSION
GLACIER HIGHWAY:
PT. STEPHENS
TO COHEN DRIVE

LEGEND, ABBREVIATIONS AND GENERAL NOTES

PROJECT DESIGNATION NUMBER	
AK PFH 2-1(1)/68096	
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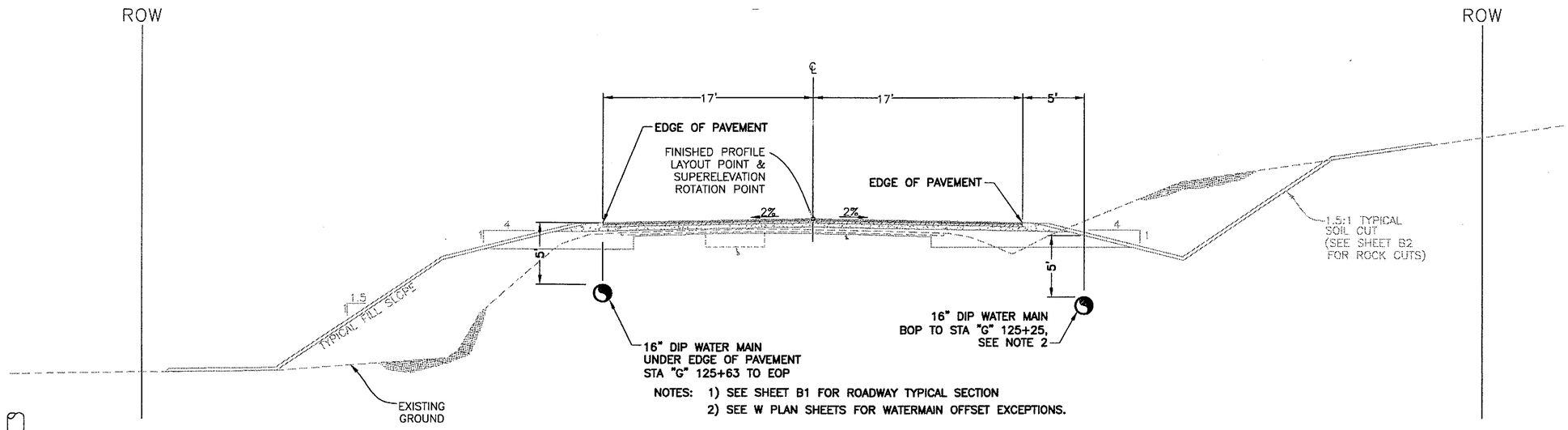
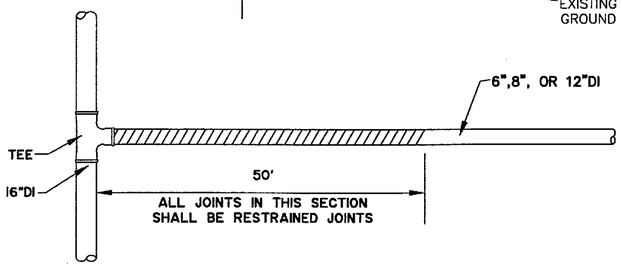
W2	21



NOTES: 1) SEE SHEET B1 FOR ROADWAY TYPICAL SECTION
2) SEE W PLAN SHEETS FOR WATERMAIN OFFSET EXCEPTIONS.

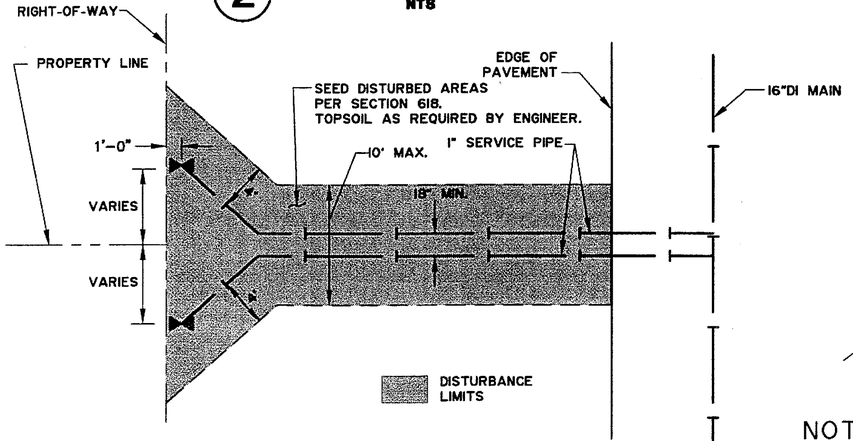
WATERMAIN TYPICAL SECTION

NTS



2 RESTRAINED JOINTS

NTS

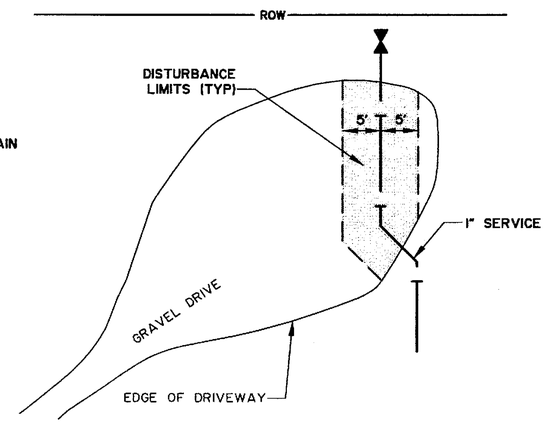


1 DOUBLE SERVICE

NTS

NOTES:

1. TYPICAL DOUBLE SERVICE EXCEPT AS SHOWN ON PLANS.
2. DISTURBANCE LIMIT DIMENSIONS ARE THE SAME FOR A SINGLE SERVICE
3. DOUBLE ARCTIC SERVICE SHALL BE THE SAME EXCEPT AS MODIFIED BY THE ARCTIC SERVICE DETAIL ON SHT. W4.
4. NO TREE GREATER THAN 6-INCHES IN DIAMETER SHALL BE REMOVED FOR AN ARCTIC SERVICE INSTALLATION, UNLESS DESIGNATED ON THE PLANS.

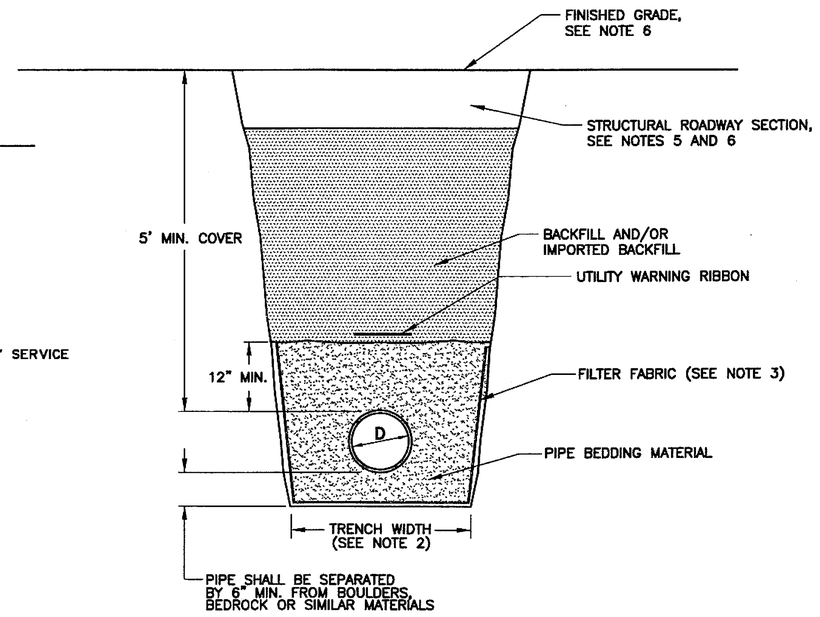


NOTES:

1. DRIVEWAY DISTRUBANCE SHALL BE LIMITED TO 5' EITHER SIDE OF THE SERVICE LINE.
2. TRENCH WITHIN DRIVEWAY LIMITS SHALL BE BACKFILLED AND RESUFACED PER THE TRENCH DETAIL, THIS SHEET.
3. NO SUBBASE WILL BE MEASURED FOR PAMENT BEYOND THE LIMITS SHOWN. RESTORATION OF DISTURBED AREAS BEYOND THE LIMITS WILL BE AT THE CONTRACTOR'S EXPENSE.

3 TYPICAL DRIVEWAY RESTORATION

NTS



NOTES:

1. TRENCHES SHALL BE WITHIN 20° OF PERPENDICULAR TO CENTER-LINE OF ROADWAY UNLESS APPROVED BY THE ENGINEER.
2. MINIMUM TRENCH WIDTH SHALL BE NOMINAL PIPE DIAMETER ("D") PLUS 2'.
3. FILTER FABRIC SHALL BE USED AS DIRECTED BY THE ENGINEER. ATTACH TO TRENCH SIDEWALL A MIN OF 12" ABOVE TOP OF PIPE.
4. BEDDING & BACKFILL SHALL BE COMPACTED TO 95% OF MAXIMUM PROCTOR DENSITY WITHIN THE RIGHT-OF-WAY AND THROUGHOUT THE DEPTH OF EACH LIFT. LIFT DEPTH SHALL BE 12" MAX, OR AS APPROVED BY THE ENGINEER.
5. RESURFACE UNPAVED DRIVEWAYS OR PARKING AREAS WITH 6" MIN. SUBBASE, GRADING C.
6. OUTSIDE THE ROADWAY AND DRIVEWAYS, RESURFACE WITH 3" TOPSIOL AND SEED.

4 TRENCH DETAIL

NTS

PATH: S:\LIB\03-3845\3845de01.DWG

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CHECKED BY: P. HILDRE

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GLACIER HIGHWAY:
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TYPICAL SECTION AND DETAILS

PROJECT DESIGNATION NUMBER	
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W3	21

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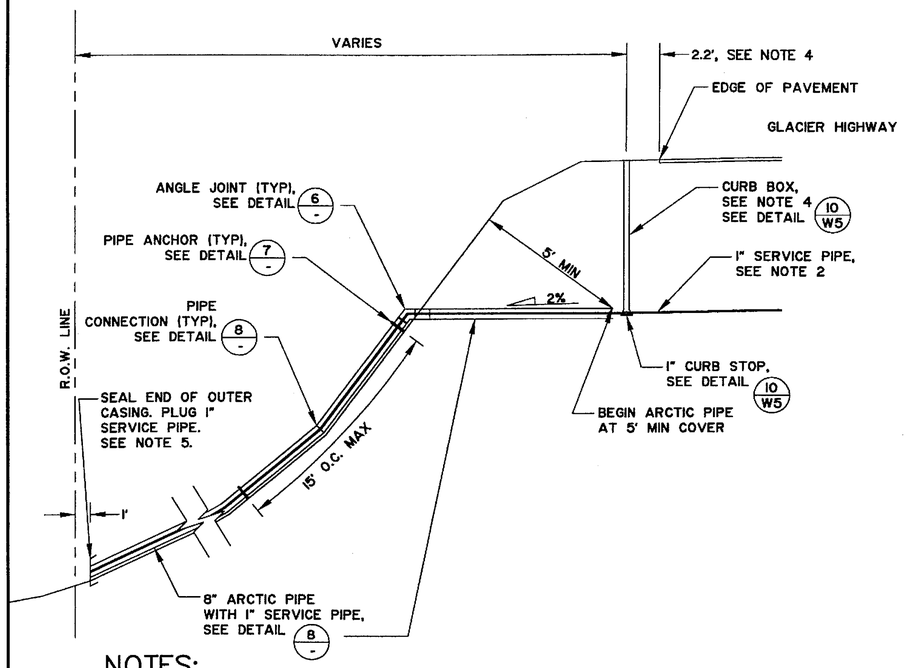
PE _____ Date _____



NOTES:

1) PRE-INSULATED PIPE ENDS SHALL BE FACTORY SEALED TO BLOCK MOISTURE ENTRY.

2) FROM THE MAIN TO THE CURB STOP, THE ARCTIC WATER SERVICE SHALL CONFORM TO CBJ STD DETAIL 406, EXCEPT AS MODIFIED HEREIN BY THIS DETAIL, AND THOSE WHICH IT REFERENCES.

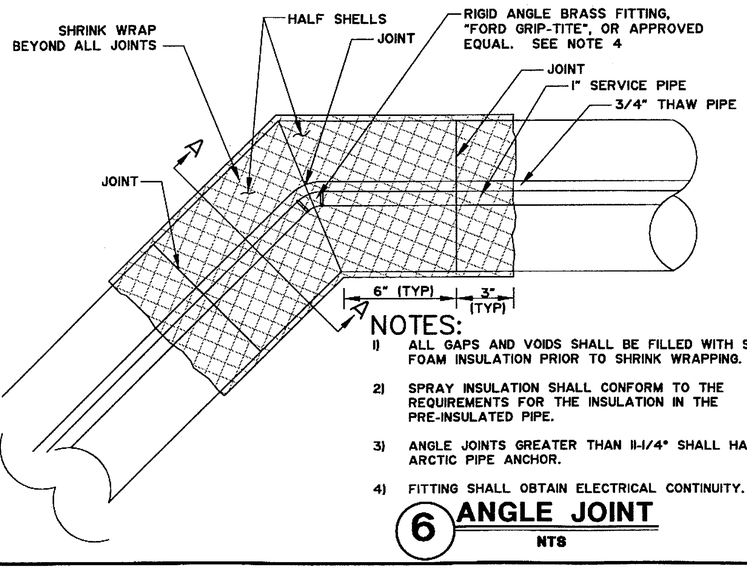
3) ALL ANGLE JOINTS SHALL BE FIELD FABRICATED USING PRE-INSULATED HALF SHELLS WITH CHANNELS FOR SERVICE AND THAW PIPES.

4) CURB BOX SHALL BE LOCATED AS SHOWN, EXCEPT WHERE NOTED OTHERWISE ON PLANS.

5) SERVICE PIPE PLUG SHALL HAVE A 1/8" DIAMETER DRAIN HOLE, ORIENTED SO HOLE IS AT THE LOW POINT OF THE SERVICE PIPE.

6) THIS DETAIL APPLIES TO SINGLE AND DOUBLE ARCTIC SERVICES.

5 ARCTIC SERVICE
NTS



NOTES:

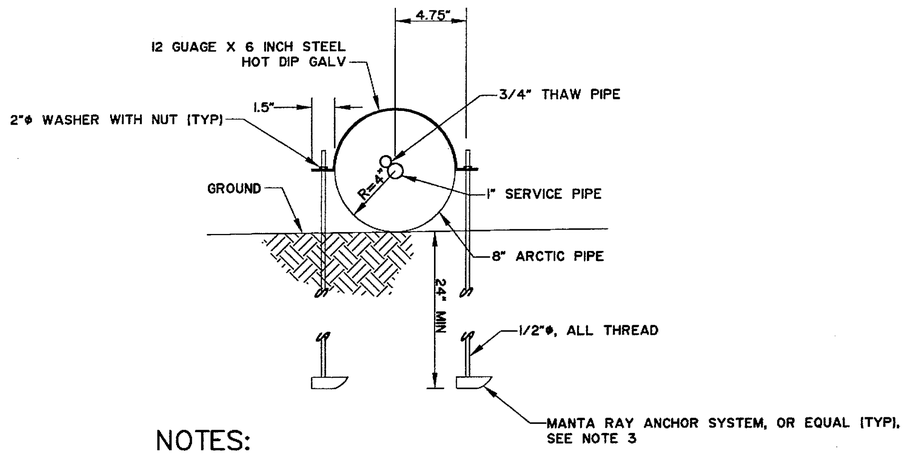
1) ALL GAPS AND VOIDS SHALL BE FILLED WITH SPRAY FOAM INSULATION PRIOR TO SHRINK WRAPPING.

2) SPRAY INSULATION SHALL CONFORM TO THE REQUIREMENTS FOR THE INSULATION IN THE PRE-INSULATED PIPE.

3) ANGLE JOINTS GREATER THAN 11-1/4° SHALL HAVE AN ARCTIC PIPE ANCHOR.

4) FITTING SHALL OBTAIN ELECTRICAL CONTINUITY.

6 ANGLE JOINT
NTS



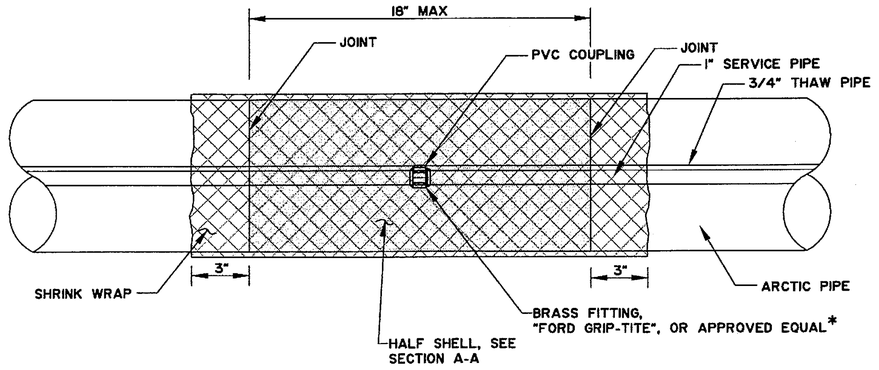
NOTES:

1) ALL ARCTIC PIPE ANCHOR PARTS AND FITTINGS SHALL BE HOT-DIPPED GALVANIZED.

2) ANCHOR SYSTEM SHALL ACHIEVE A MINIMUM PULLOUT LOAD OF 250 POUNDS PER SIDE FOR A TOTAL OF 500 POUNDS, MINIMUM.

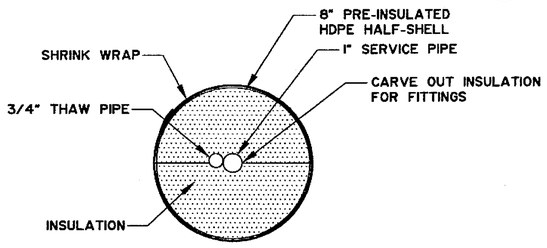
3) IF MANTA RAY ANCHOR SYSTEM ENCONTERS ROCK BEFORE ACHIEVING THE PULLOUT LOAD, ROCK SHALL BE DRILLED AND ALL THREAD EPOXY GOUTED. EPOXY GOUTING SHALL ACHIEVE THE PULLOUT LOAD.

7 ARCTIC PIPE ANCHOR
NTS

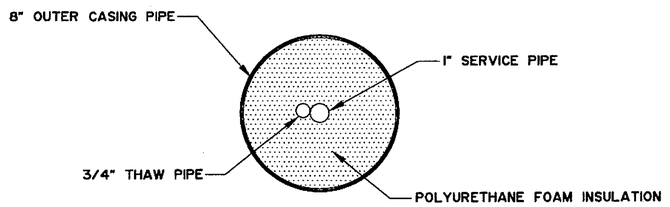


*FITTING SHALL OBTAIN ELECTRICAL CONTIUITY.

8 PRE-INSULATED PIPE CONNECTION
NTS



SECTION A-A
NTS



8 ARCTIC PIPE SECTION
NTS

* NOTE: PIPE SECTION SHALL BE PRE-INSULATED BY A MANUFACTURER. ENDS OF PIPE SECTION SHALL BE FACTORY SEALED TO PREVENT MOISTURE INTRUSION.

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PLOT:
PSPACE 1=1(F) OR MSPACE 1=1(F)
TAB: TYPICALS

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RECORD OF REVISIONS

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CITY/BOROUGH OF JUNEAU
ALASKA'S CAPITAL CITY
DEPARTMENT OF ENGINEERING

Toner Cordiling & ASSOCIATES, INC.
5388 Commercial Boulevard
Juneau, AK 99801
(907) 780-3535
Fax (907) 780-3539

DESIGNED BY: G. JENKINS

STATE OF ALASKA — 49th — Gary L. Jenkins II — No. CE9962 — REGISTERED PROFESSIONAL ENGINEER — 10/15/04

CHECKED BY: P. HILDRE

DRAWN BY: STAFF

NORTH TEE HARBOR
WATERLINE EXTENSION
GLACIER HIGHWAY:
PT. STEPHENS
TO COHEN DRIVE

DETAILS

PROJECT DESIGNATION NUMBER	
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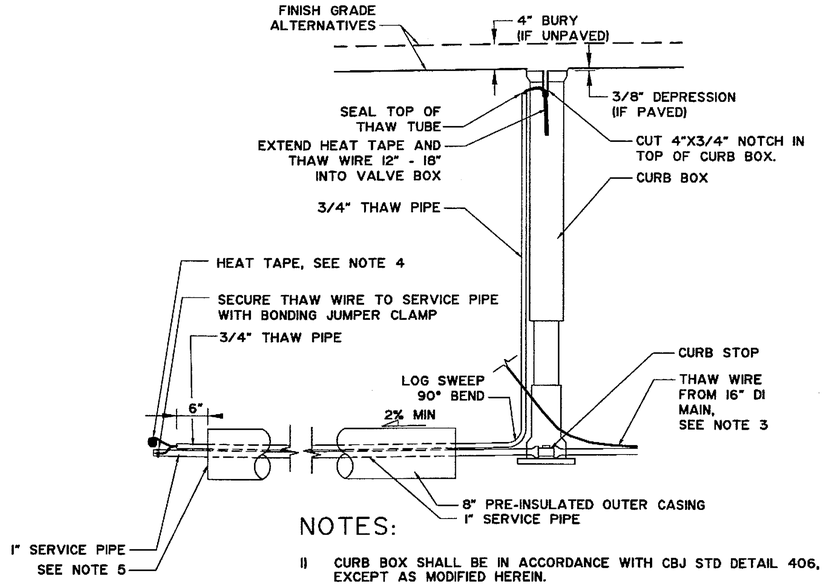
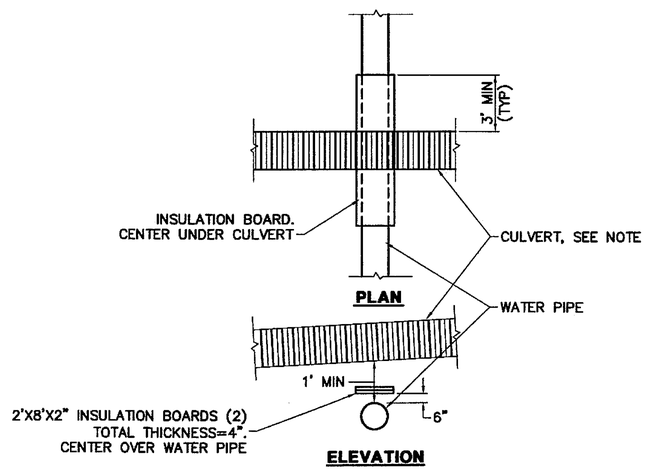


NOTES:

1) CURB BOX SHALL BE IN ACCORDANCE WITH CBJ STD DETAIL 406, EXCEPT AS MODIFIED HEREIN.
2) LOCATE CURB BOX AS SHOWN, EXCEPT WHERE NOTED OTHERWISE ON THE PLANS.
3) THAW WIRE SHALL EXTEND TO SURFACE IN ACCORDANCE WITH CBJ STD DETAIL 406.
4) HEAT TAPE SHALL BE TERMINATED IN A NEAT, BUNDLED FASHION, WITH A MINIMUM OF 12" FOR FUTURE CONNECTION.
5) SEAL END OF PRE-INSULATED OUTER CASING WITH WATERPROOF MEMBRANE OR SEALER, AS APPROVED BY THE ENGINEER.

10 ARCTIC SERVICE CURB STOP

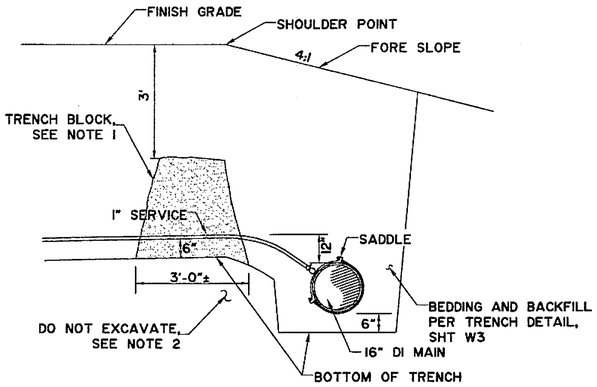
NTS



NOTE: IF CULVERT RUNS AT AN ACUTE ANGLE (OR PARALLEL) TO WATER PIPE, INSULATION BOARD SHALL BE PLACED 3 FEET BEYOND ANY POINT OF THE CULVERT CLOSER THAN 5 FEET TO THE WATER PIPE.

13 WATER PIPE INSULATION

NTS

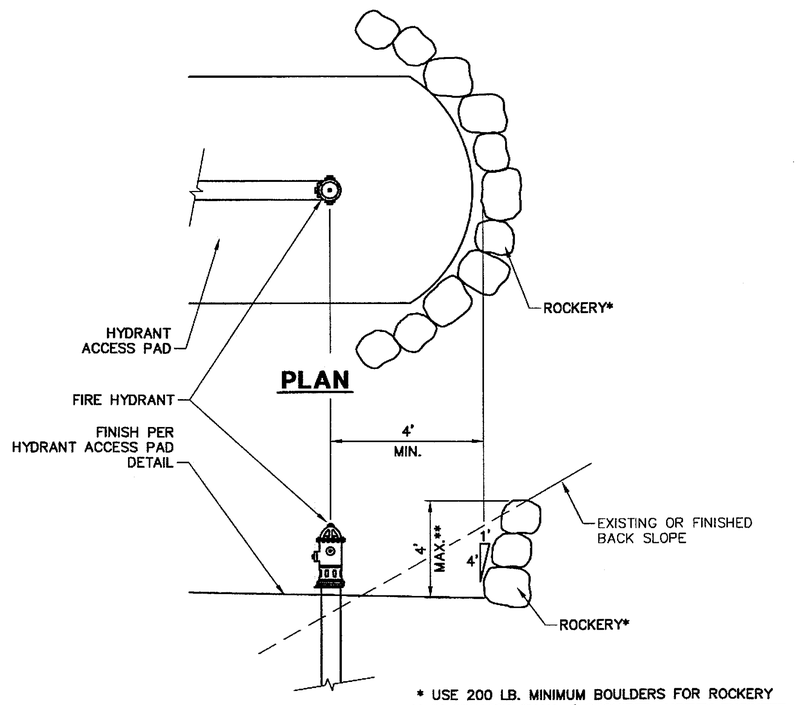


NOTES:

1) TRENCH BLOCK SHALL FILL THE ENTIRE WIDTH OF THE EXCAVATED TRENCH, AND SHALL BE WITHIN 5' OF THE 16" DI MAIN
2) THIS MATERIAL SHALL NOT BE EXCAVATED FOR SERVICE INSTALLATION. IT SHALL BE LEFT IN PLACE TO ACT AS A BARRIER TO KEEP WATER IN THE MAINLINE TRENCH.
3) CONSTRUCTION OF WATER SERVICE SHALL BE IN ACCORDANCE WITH CBJ STD DETAIL 406, EXCEPT AS MODIFIED HEREIN.
4) THIS DETAIL APPLIES TO HIGHWAY CROSSINGS FROM STATION 79+00 TO 126+00.

11 TRENCH BLOCK

NTS



* USE 200 LB. MINIMUM BOULDERS FOR ROCKERY
** IF GREATER THAN 4' REQUIRED, NOTIFY ENGINEER.

ELEVATION

12 FIRE HYDRANT ROCKERY

NTS

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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 11/15/05

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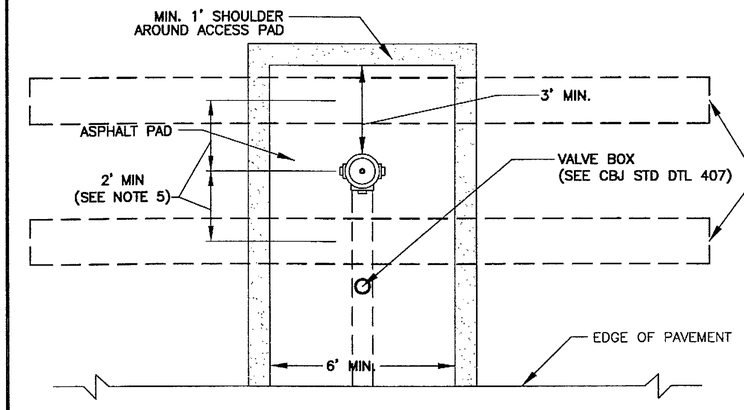
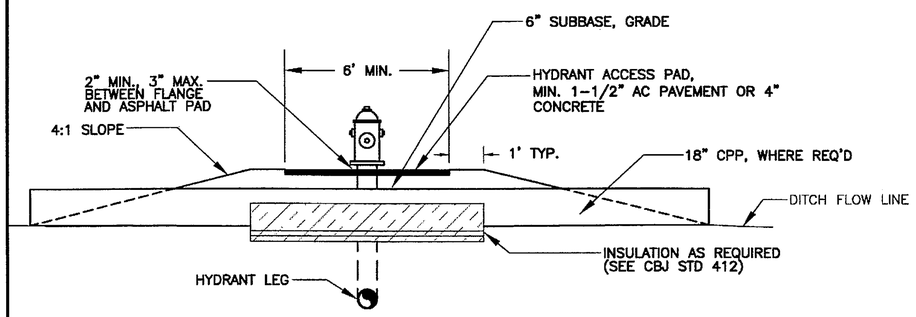


PLAN VIEW



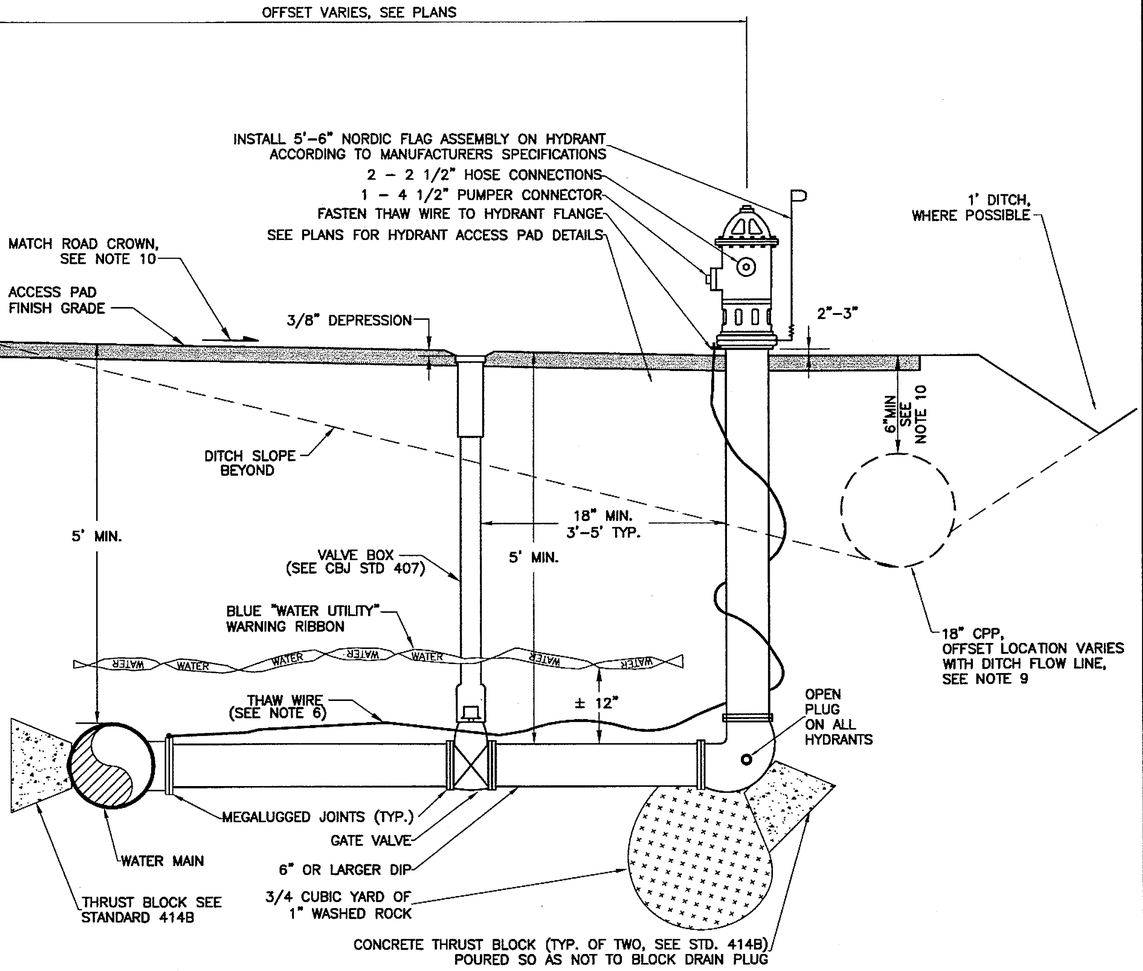
ELEVATION VIEW

NOTES:

1. FROM EDGE OF ROAD TO DITCH LINE, SLOPE SURFACE OF HYDRANT PAD TO MATCH EXTENSION OF ROADWAY CROWN.
2. SEED SIDE SLOPES UNLESS ROCK.
3. ACCESS PAD MATERIALS AND COMPACTION SHALL CONFORM AS FOLLOWS: EMBANKMENT TO SECTION 203, SUBBASE TO SECTION 304 AND ASPHALT PAVING TO SPECIAL PROVISION 629.
4. EXTEND SUBBASE TO EDGE OF PAD SHOULDER.
5. CULVERT SHALL BE INSTALLED IN DITCH FLOWLINE. ADJUST AS NECESSARY WITH REGARD TO HYDRANT.

14 HYDRANT ACCESS PAD

NTS



NOTES:

1. HYDRANT BARREL SHALL BE PLUMB.
2. GROUND COVER SHALL BE 5' MINIMUM.
3. WATER PIPE SHALL BE 6" MIN. D.I.P. AND ALL CONNECTIONS SHALL BE MEGALUGED OR CONNECTED WITH LOCKING FIELD GASKETS.
4. BENDS BETWEEN THE HYDRANT AND THE MAIN SHALL NOT EXCEED 11 1/4° UNLESS APPROVED BY ENGINEER.
5. ALL HYDRANTS SHALL BE PAINTED CATERPILLAR YELLOW, AND SHALL HAVE OPEN PLUGS. THE NUMBER OF FEET TO VALVE SHALL BE PRINTED IN BLACK 1/2" BLOCK LETTERS JUST BELOW TOP BONNET.
6. THAW WIRE SHALL BE #2 COPPER WITH TYPE THW INSULATION. THAW WIRE SHALL BE BOLTED OR CAD WELDED TO THE TEE AT THE MAIN.
7. INSTALL A PAVED HYDRANT ACCESS PAD PER THE PLANS.
8. HYDRANT SHALL BE MUELLER CENTURION, WATEROUS PACER WB-67-250, OR DRESSER M&H. CLOW F2500 SERIES HYDRANTS ARE NO LONGER ACCEPTED BY CBJ.
9. IF CULVERT IS LOCATED IN FRONT OF HYDRANT, RIGID INSULATION SHALL BE INSTALLED IN ACCORDANCE WITH CBJ STD 412.
10. ADJUST PAD SLOPE TO MAINTAIN 6"MIN COVER OVER CULVERT.

15 FIRE HYDRANT

NTS

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TYPICAL SECTION AND DETAILS

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PE [signature] Date 4/8/07

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FIRE HYDRANT ASSEMBLY SUMMARY		
FIRE HYDRANT STATION	OFFSET	REMARKS
50+00	27.0 RT	INSTALL HYDRANT PAD
65+00	27.0 RT	INSTALL HYDRANT PAD
80+40.5	28.0 RT	INSTALL HYDRANT PAD
85+50 06	27.0 RT	INSTALL HYDRANT PAD
89+08 6	28.0 RT	INSTALL HYDRANT PAD
94+00	28.0 RT	INSTALL HYDRANT PAD AND ROCKERY
99+00	28.0 RT	INSTALL HYDRANT PAD AND ROCKERY
104+10	28.0 RT	INSTALL HYDRANT PAD
109+00	28.0 RT	INSTALL HYDRANT PAD
113+90 ~~114+00~~	28.0 RT	INSTALL HYDRANT PAD
119+00	27.0 RT	INSTALL HYDRANT PAD AND ROCKERY
124+00	28.0 RT	INSTALL HYDRANT PAD AND ROCKERY
129+00	28.0 RT	INSTALL HYDRANT PAD
134+00	27.0 RT	INSTALL HYDRANT PAD AND ROCKERY
139+00	27.0 RT	INSTALL HYDRANT PAD AND ROCK EXCAVATION
144+00	28.0 RT	INSTALL HYDRANT PAD

NOTES:
1. FIELD ADJUSTMENTS MAY BE MADE BY THE ENGINEER.
2. INSTALL ROCKERY BEHIND HYDRANT AS REQUIRED TO ACHIEVE THE CLEARANCE AROUND THE HYDRANTS AS SHOWN ON THE PLANS.

WATER SERVICE SUMMARY (SEE NOTE 1)	
SERVICE TERMINATION (SEE NOTE 2) STATION	REMARKS
79+58 LT	DOUBLE 1-INCH WATER SERVICE
79+70 LT	
81+95 81+99 LT	SINGLE ~~1-INCH WATER~~ SERVICE (Arctic)
83+21 LT	SINGLE 1-INCH WATER SERVICE
84+40 LT	DOUBLE 1-INCH WATER SERVICE
84+49 LT	
86+59 LT	SINGLE ARCTIC SERVICE
88+02 LT	DOUBLE ARCTIC SERVICE
88+12 LT	
92+10 LT	SINGLE ARCTIC SERVICE
93+62 LT	DOUBLE 1-INCH WATER SERVICE
93+76 LT	
94+80 LT	SINGLE 1-INCH WATER SERVICE
93+62 96+04 LT	SINGLE 1-INCH WATER SERVICE
98+28 LT	DOUBLE 1-INCH WATER SERVICE
98+35 LT	
99+45 LT	SINGLE 1-INCH WATER SERVICE
99+29 RT	SINGLE ARCTIC SERVICE
103+36 LT	DOUBLE 1-INCH WATER SERVICE
103+42 LT	
104+13 RT	SINGLE 1-INCH WATER SERVICE
105+37 LT	SINGLE ARCTIC SERVICE
108+39 LT	DOUBLE ARCTIC SERVICE
108+51 LT	
110+62 LT	DOUBLE ARCTIC SERVICE
110+69 LT	
118+65 LT	SINGLE ARCTIC SERVICE
119+58 LT	SINGLE ARCTIC SERVICE
123+55 LT	DOUBLE ARCTIC SERVICE
123+66 LT	
127+59 LT	DOUBLE 1-INCH WATER SERVICE
127+66 LT	
130+55 LT	DOUBLE 1-INCH WATER SERVICE
130+66 LT	
133+52 LT	DOUBLE 1-INCH WATER SERVICE
133+66 LT	
136+43 LT	DOUBLE 1-INCH WATER SERVICE
136+58 LT	
139+50 LT	DOUBLE 1-INCH WATER SERVICE
139+63 LT	
142+52 LT	DOUBLE 1-INCH WATER SERVICE
142+66 LT	

WATER SERVICE SUMMARY NOTES:

1. PROPERTY LINES SHOWN ON THE PLANS ARE BASED ON DEPARTMENT OF TRANSPORTION MAPPING AND HAVE NOT BEEN FIELD SURVEYED. THE CONTRACTOR SHALL CONFIRM THAT EACH SERVICE TERMINATES WITHIN THE LIMITS, ALONG THE ROW, OF THE PROPERTY BEING SERVED. IF A PROPERTY LINE IS INCORRECT AS SHOWN ON THE PLANS AND INSTALLATION OF THE SERVICE AS CALLED FOR ON THE PLANS WOULD RESULT IN THE SERVICE NOT TERMINATING AS DESCRIBED HEREIN, THE ENGINEER SHALL BE NOTIFIED BEFORE THE SERVICE IS INSTALLED.

2. THE STATION PROVIDED IS PERPENDICULAR TO THE SERVICE TERMINATION POINT. THE OFFSET SHALL BE SUCH THAT THE SERVICE IS 1-FOOT FROM THE ROW LINE.

ESTIMATE OF QUANTITIES FOR CBJ WATER SYSTEM ONLY (RSA #67562)			
ITEM	PAY ITEM	UNIT	QTY
207 (1)	SHEETING, SHORING AND BRACING	LUMP SUM	ALL REQ'D
207 (2)	TRENCH BLASTING	LF	~~5,300~~ 4002
207 (3)	IMPORTED BACKFILL	CY	~~500~~ 140
207 (4)	TRENCH BLOCK	EACH	~~30~~
304 (2)	SUBBASE, GRADING C	TON	~~90~~ 335.12
~~611 (1)~~	~~RIPRAP, CLASS I~~	~~CY~~	~~6~~
618 (1)	SEEDING	ACRE	0.2
628 (1-8)	8-INCH D.I. WATER PIPE	LF	~~65~~ 51.50
628 (1-12)	12-INCH D.I. WATER PIPE	LF	~~190~~ 177.90
628 (1-16)	16-INCH D.I. WATER PIPE	LF	~~11,100~~ 11,098.70
628 (2-8)	8-INCH GATE VALVE	EACH	2
628 (2-12)	12-INCH GATE VALVE	EACH	2
628 (2-16)	16-INCH BUTTERFLY VALVE	EACH	13
628 (3)	FIRE HYDRANT ASSEMBLY	EACH	16
628 (4)	HYDRANT ACCESS PAD	EACH	16
628 (5-1)	SINGLE 1-INCH WATER SERVICE	EACH	~~85~~
628 (5-2)	DOUBLE 1-INCH WATER SERVICE	EACH	11
628 (6-1)	SINGLE ARCTIC SERVICE	EACH	~~87~~
628 (6-2)	DOUBLE ARCTIC SERVICE	EACH	4
628 (7)	AIR RELEASE VALVE	EACH	2
628 (8)	PIPE INSULATION	BOARD	~~100~~ 370

MAINLINE VALVE SUMMARY			
STATION	OFFSET	SIZE	REMARKS
35+13	21 RT	16"	BV
44+95	22 RT	16"	BV
54+95	22 RT	16"	BV
64+95	22 RT	16"	BV
74+95	22 RT	16"	BV
79+00	25 RT	12"	GV, 12"DI TO RANDALL ROAD
79+03	22 RT	16"	BV
89+05	22 RT	16"	BV
99+05	22 RT	16"	BV
104+12	24 RT	8"	GV, 8"DI TO LOT 19916
104+16	22 RT	16"	BV
110+05	20 RT	8"	GV, 8"DI TO COHEN DRIVE R.O.W.
110+10	22 RT	16"	BV
120+00	22 RT	16"	BV
130+00	17 LT	16"	BV
140+00	17 LT	16"	BV
145+73	19 LT	12"	GV, 12"DI TO COHEN DRIVE

WATER PIPE SUMMARY						
FROM		TO				
STATION	OFFSET	STATION	OFFSET	LENGTH	PIPE SIZE	COMMENT
35+12	22 RT	145+79	17 LT	11,091'	16"	
79+01	22 RT	79+95	65 RT	117'	12"	
104+12	22 RT	104+12	35 RT	13'	8"	
110+05	22 RT	110+05	30 LT	52'	8"	
145+73	17 LT	145+73	89 LT	72'	12"	

AIR RELEASE VAULT SUMMARY		
FROM		REMARKS
STATION	OFFSET	
70+22	22.0 RT	CBJ STD DETAIL 409
145+50	35.0 RT	CBJ STD DETAIL 410

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PLOT:
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TAB: TYPICALS

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No.	DATE	DESCRIPTION

CITY/BOROUGH OF JUNEAU
ALASKA'S CAPITAL CITY
DEPARTMENT OF ENGINEERING

Toner Cordin & ASSOCIATES, INC.
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STATE OF ALASKA 48th
Gary L. Jenkins II
No. CE9962
REGISTERED PROFESSIONAL ENGINEER
12-13-04

CHECKED BY: P. HILDRE

DRAWN BY: STAFF

NORTH TEE HARBOR
WATERLINE EXTENSION
GLACIER HIGHWAY:
PT. STEPHENS
TO COHEN DRIVE

ESTIMATE OF QUANTITIES AND SUMMARY TABLES

PROJECT DESIGNATION NUMBER

AK PFH 2-1(1)/68096

STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
W7	21

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 11/8/07

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NORTH

ROW

REMOVE PLASTIC BLEEDER LINE

REMOVE 2" CORP STOP AND PLUG WITH 2" BRASS PLUG

16"BV STA "G" 35+13

SEE NOTE 1

REMOVE 2" CURB STOP

DEFLECT WATERMAIN TO TYPICAL OFFSET

BEGIN 16" DI WATERLINE
CONNECT TO EXISTING 16" DI PIPE
STA "G" 35+12, 17.7' RT

GLACIER HIGHWAY

35+00 36+00 37+00 38+00 39+00 40+00 41+00 42+00

P-10 P-11 P-12

e=0.035
BST=36+58.54
BFS=39+93.54
EFS=44+94.14
EST=46+29.14

PC = 38+43.79

BOULDER

MATCHLINE STA "G" 42+85

CONSTRUCTION NOTES:

1) BLEEDER LINE CONSISTS OF 2" COPPER, CONVERTED TO PLASTIC. LINE COMES TO THE SURFACE AND RUNS THROUGH CULVERTS ACROSS THE HIGHWAY. REMOVE ENTIRE LINE AND PLUG AS DESCRIBED.

30 15 0 30 60 90
SCALE IN FEET

100
80
60

-0.13%

SHOULDER RT

16"BV

BEGIN 16"DI WATERLINE
CTE, STA "G" 35+12

EXISTING 16"DI

16"DI

PVI STA = 40+04.43
PVI ELEV = 73.18
A.D. = -0.39
K = 423.85

185.00' VC

PVCS: 39+21.93
PVCE: 73.28
PVTS: 40+85.93
PVTE: 72.95

35+00 36+00 37+00 38+00 39+00 40+00 41+00 42+00

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10th
Carry J. Jenkins II
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10/15/04

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DRAWN BY: STAFF

NORTH TEE HARBOR
WATERLINE EXTENSION
GLACIER HIGHWAY:
PT. STEPHENS
TO COHEN DRIVE

PLAN AND PROFILE STA "G" 35+00 TO STA "G" 42+85

PROJECT DESIGNATION NUMBER	
AK PFH 2-1(1)/68096	
STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
W8	21

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 11/9/04

MATCHLINE STA "G" 42+85

MATCHLINE STA "G" 50+96

NORTH

ROW

ROW

ROW

ROW

ROW

P-13

P-15

43+00

44+00

45+00

46+00

47+00

48+00

49+00

50+00

GLACIER HIGHWAY

16" BV
STA "G" 44+95

PT = STA 46+26.80
R = 826.94
Δ = 4°37'40"

PC = STA 48+29.87

FH
STA "G" 50+00,
27.0 RT

ROW

ROW

ROW

ROW

ROW

ROW

30 15 0 30 60 90

SCALE IN FEET

LOW POINT ELEV = 70.13
LOW POINT STA = 46+31.29
PVI STA = 46+46.53
PVI ELEV = 69.88
A.D. = 1.26
K = 130.76

185.00' VC

PVCS: 45+62.89
PVCE: 70.30

PVTS: 47+29.05
PVTE: 70.50

-0.51%

SHOULDER RT

16"BV

P-13

P-15

16"DI

FH LEG

100

80

60

43+00

44+00

45+00

46+00

47+00

48+00

49+00

50+00

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Gary J. Jenkins II
No. 129962
REGISTERED PROFESSIONAL ENGINEER
10/15/04

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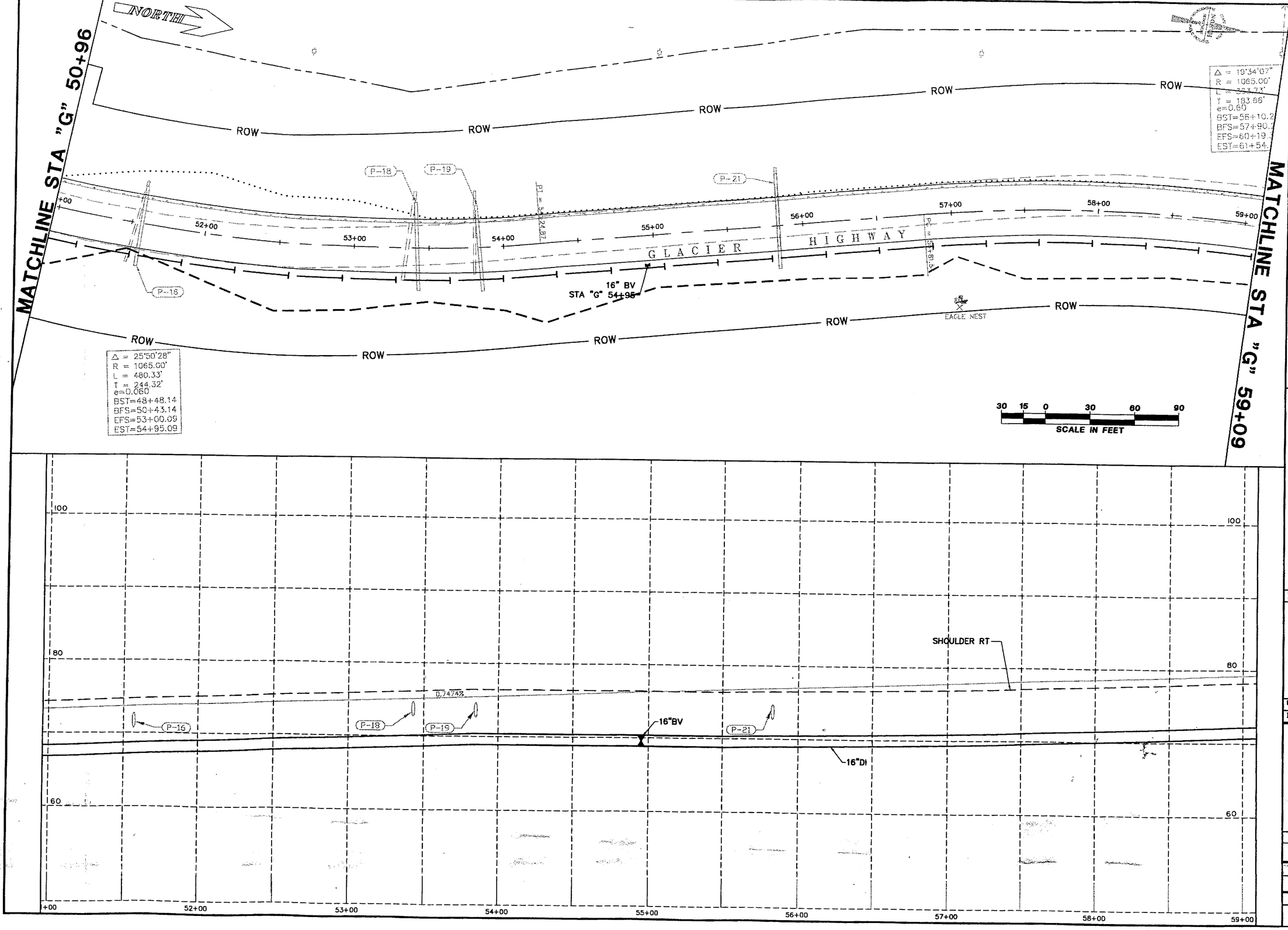
NORTH TEE HARBOR
WATERLINE EXTENSION
GLACIER HIGHWAY:
PT. STEPHENS
TO COHEN DRIVE

PLAN AND PROFILE STA "G" 42+85 TO STA "G" 52+96

PROJECT DESIGNATION NUMBER	
AK PFH 2-1(1)/68096	
STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
W9	21

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 11/05/07



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DEPARTMENT OF ENGINEERING

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10/15/04

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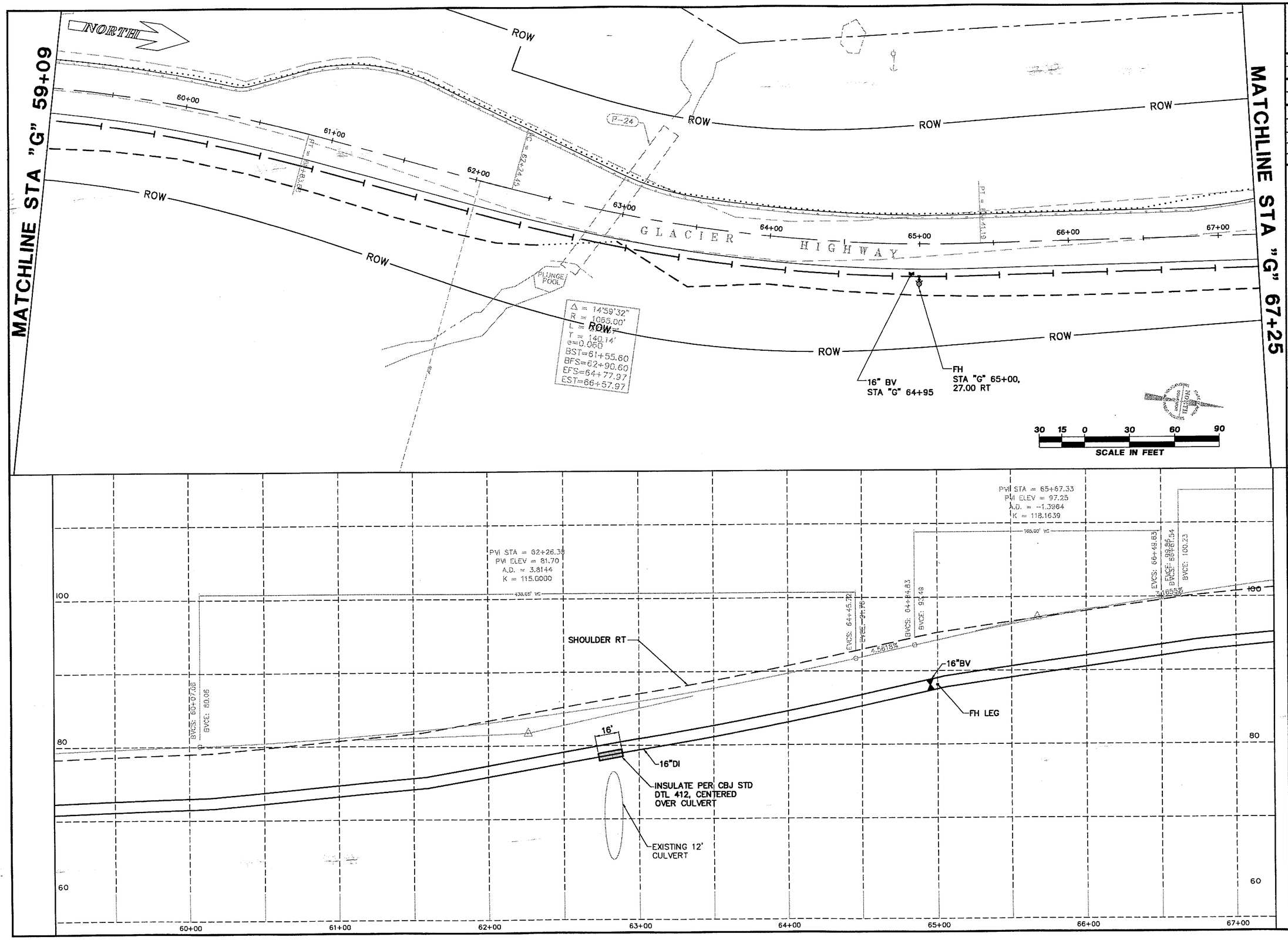
NORTH TEE HARBOR WATERLINE EXTENSION GLACIER HIGHWAY: PT. STEPHENS TO COHEN DRIVE

PLAN AND PROFILE STA "G" 50+96 TO STA "G" 59+09

PROJECT DESIGNATION NUMBER
AK PFH 2-1(1)/68096

STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
W10	21

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 12/15/05



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10/15/04

CHECKED BY: P. HILDRE

DRAWN BY: STAFF

NORTH TEE HARBOR
WATERLINE EXTENSION
GLACIER HIGHWAY:
PT. STEPHENS
TO COHEN DRIVE

PLAN AND PROFILE STA "G" 59+09 TO STA "G" 67+25

PROJECT DESIGNATION NUMBER

AK PFH 2-1(1)/68096

STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
W11	21

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 11/08/04

MATCHLINE STA "G" 67+25

MATCHLINE STA "G" 75+38

NORTH

W

ROW

Δ = 14°22'20"
R = 1065.00'
L = 267.15'
T = 134.28'
e=0.060
BST=66+62.78
BFS=68+42.78
EFS=69+97.08
EST=71+32.08

68+00 PC = 67+95.82

69+00

70+00

71+00

72+00

73+00

74+00

75+00

PT = 71+62.97

PC = 72+34.88

PT = 74+82.93

GLACIER HIGHWAY

P-25

AIR RELEASE VALVE
STA "G" 70+22, 22 RT
SEE CBJ STD DETAIL 409
AND CMP SOIL RETAINER
DETAIL ON SHT W21

USS 3765

30 15 0 30 60 90
SCALE IN FEET

16" BV
STA "G" 74+95

P-27

Δ = 9°48'38"
R = 1065.00'

HIGH POINT ELEV = 105.94
HIGH POINT STA = 70+22.40
PVI STA = 68+97.45
PVI ELEV = 107.70
A.D. = 14.1386
K = 11.0000

471.63' VC

EVCS: 71+33.36
EVCE: 105.40

SHOULDER RT

EVCS: 73+20.80
EVCE: 103.56

PVI STA = 73+79.19
PVI ELEV = 103.05
A.D. = -0.9541
K = 114.0000

168.78' VC

EVCS: 74+29.56
EVCE: 102.66
BVCS: 74+43.35
BVCE: 102.79

PVI STA =
PVI ELEV
A.D. =
K = 1

16"DI

16"BV

120
100
80

68+00 69+00 70+00 71+00 72+00 73+00 74+00 75+00

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TAB: TYPICALS

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STATE OF ALASKA
Gary F. Jenkins II
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10/15/04

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DRAWN BY: STAFF

NORTH TEE HARBOR
WATERLINE EXTENSION
GLACIER HIGHWAY:
PT. STEPHENS
TO COHEN DRIVE

PLAN AND PROFILE STA "G" 67+25 TO STA "G" 75+38

PROJECT DESIGNATION NUMBER	
AK PFH 2-1(1)/68096	
STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
W12	21

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 11/04/04

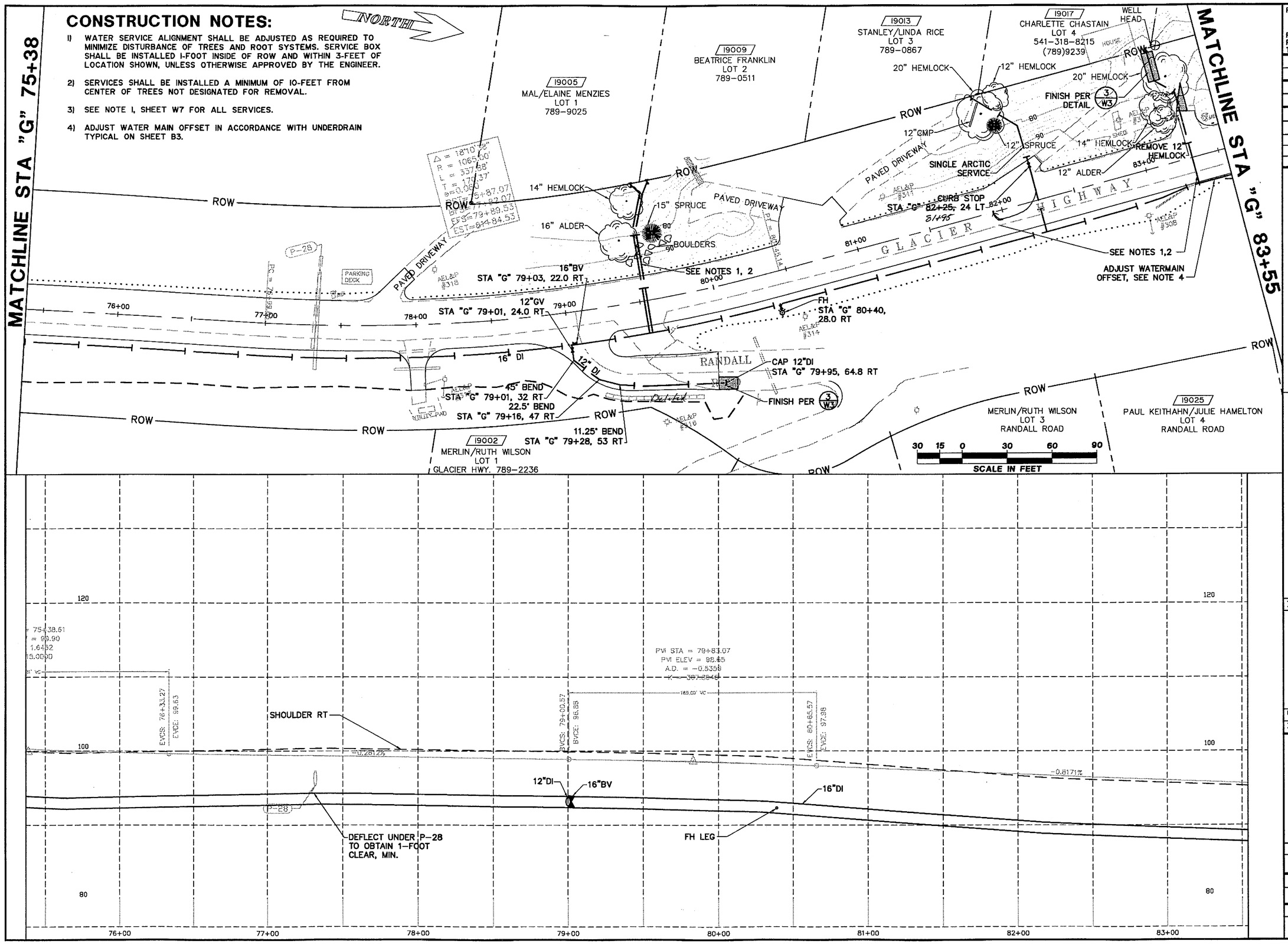
CONSTRUCTION NOTES:

1) WATER SERVICE ALIGNMENT SHALL BE ADJUSTED AS REQUIRED TO MINIMIZE DISTURBANCE OF TREES AND ROOT SYSTEMS. SERVICE BOX SHALL BE INSTALLED 1-FOOT INSIDE OF ROW AND WITHIN 3-FEET OF LOCATION SHOWN, UNLESS OTHERWISE APPROVED BY THE ENGINEER.

2) SERVICES SHALL BE INSTALLED A MINIMUM OF 10-FEET FROM CENTER OF TREES NOT DESIGNATED FOR REMOVAL.

3) SEE NOTE 1, SHEET W7 FOR ALL SERVICES.

4) ADJUST WATER MAIN OFFSET IN ACCORDANCE WITH UNDERDRAIN TYPICAL ON SHEET B3.



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TAB: TYPICALS

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CITY/BOROUGH OF JUNEAU
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46th
Gary Jenkins II
No. CE9962
REGISTERED PROFESSIONAL ENGINEER
10/15/04

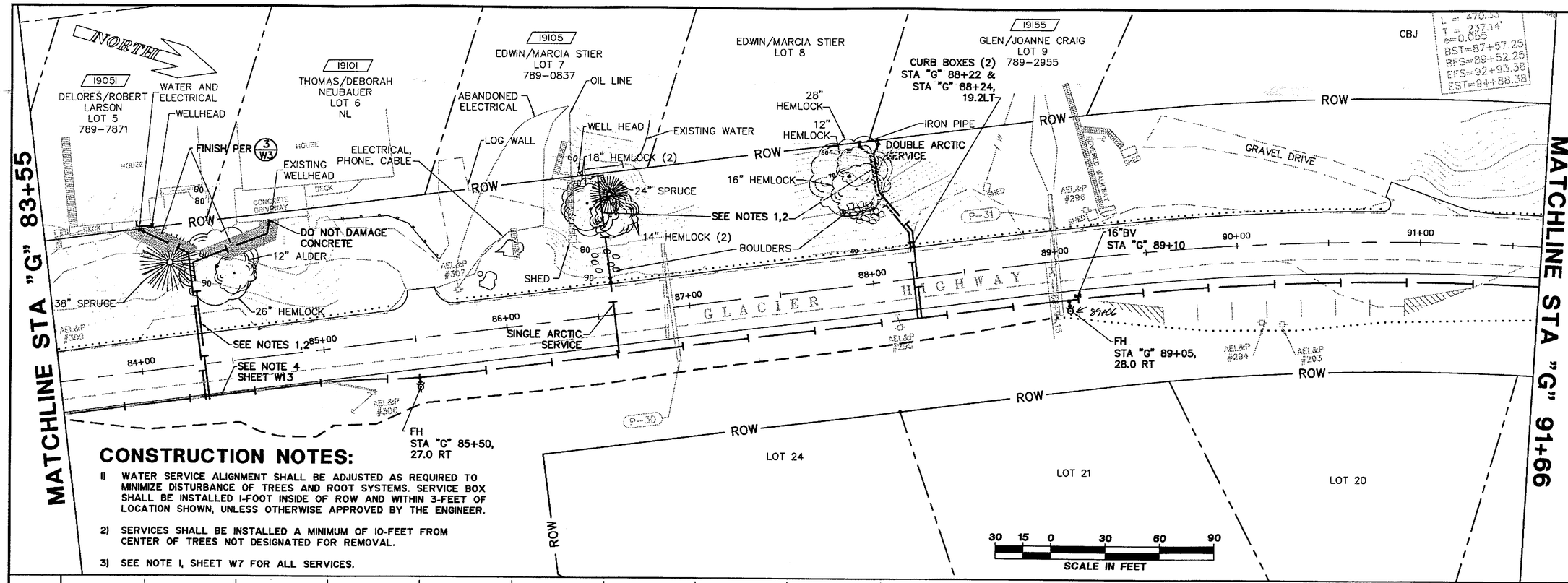
CHECKED BY: P. HILDRE
DRAWN BY: STAFF

NORTH TEE HARBOR WATERLINE EXTENSION GLACIER HIGHWAY: PT. STEPHENS TO COHEN DRIVE

PLAN AND PROFILE STA "G" 75+38 TO STA "G" 83+55

PROJECT DESIGNATION NUMBER	
AK PFH 2-1(1)/68096	
STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
W13	21

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 11/05/04



CONSTRUCTION NOTES:

1) WATER SERVICE ALIGNMENT SHALL BE ADJUSTED AS REQUIRED TO MINIMIZE DISTURBANCE OF TREES AND ROOT SYSTEMS. SERVICE BOX SHALL BE INSTALLED 1-FOOT INSIDE OF ROW AND WITHIN 3-FEET OF LOCATION SHOWN, UNLESS OTHERWISE APPROVED BY THE ENGINEER.

2) SERVICES SHALL BE INSTALLED A MINIMUM OF 10-FEET FROM CENTER OF TREES NOT DESIGNATED FOR REMOVAL.

3) SEE NOTE 1, SHEET W7 FOR ALL SERVICES.

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PLOT:
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TAB: TYPICALS

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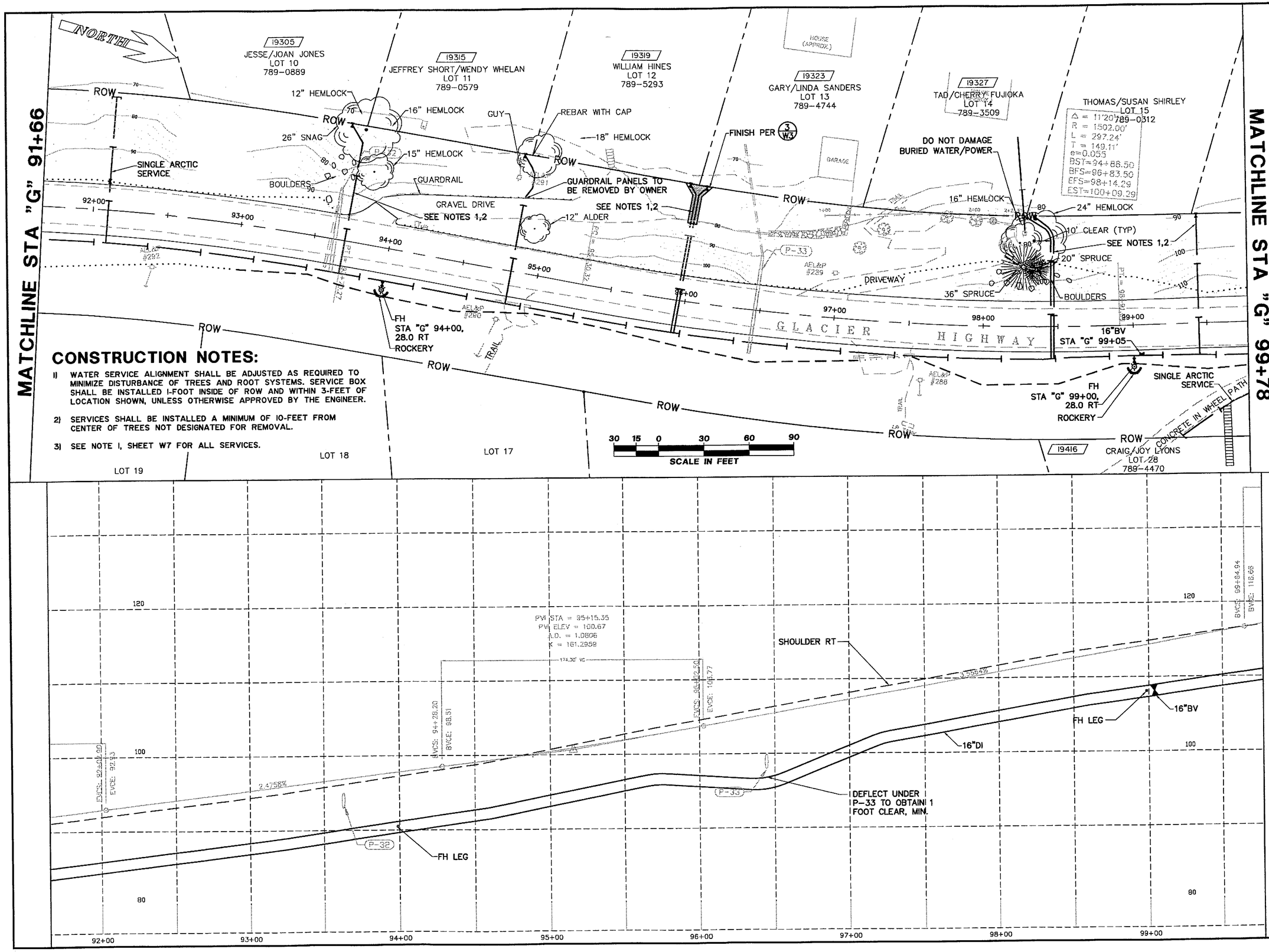
CHECKED BY: P. HILDRE
DRAWN BY: STAFF

NORTH TEE HARBOR
WATERLINE EXTENSION
GLACIER HIGHWAY:
PT. STEPHENS
TO COHEN DRIVE

PLAN AND PROFILE STA "G" 83+55 TO STA "G" 91+66

PROJECT DESIGNATION NUMBER	
AK PFH 2-1(1)/68096	
STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
W14	21

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 11/04/04



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PLOT: PSPACE 1=1(F) OR MSPACE 1=1(F)
TAB: TYPICALS

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Gary Jenkins II
CE9962
REGISTERED PROFESSIONAL ENGINEER
12-13-04

CHECKED BY: P. HILDRE
DRAWN BY: STAFF

NORTH TEE HARBOR
WATERLINE EXTENSION
GLACIER HIGHWAY:
PT. STEPHENS
TO COHEN DRIVE

PLAN AND PROFILE STA "G" 91+66 TO STA "G" 99+78

PROJECT DESIGNATION NUMBER	
AK PFH 2-1(1)/68096	
STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
W15	21

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 11/08/07

S:\LIB\03-3845\3845PL02.DWG, 12/13/2004 8:13:13 AM

CONSTRUCTION NOTES:

1) WATER SERVICE ALIGNMENT SHALL BE ADJUSTED AS REQUIRED TO MINIMIZE DISTURBANCE OF TREES AND ROOT SYSTEMS. SERVICE BOX SHALL BE INSTALLED 1-FOOT INSIDE OF ROW AND WITHIN 3-FEET OF LOCATION SHOWN, UNLESS OTHERWISE APPROVED BY THE ENGINEER.

2) SERVICES SHALL BE INSTALLED A MINIMUM OF 10-FEET FROM CENTER OF TREES NOT DESIGNATED FOR REMOVAL.

3) SEE NOTE 1, SHEET W7 FOR ALL SERVICES.

NORTH

MATCHLINE STA "G" 99+78

MATCHLINE STA "G" 107+89

19145 THOMAS/SUSAN SHIRLEY LOT 16 789-0312

19435 JEROME/JUDITH PELLA LOT 17 789-7895

19475 JEROME/JUDITH PELLA LOT 18 789-7895

19485 DAVIS FAMILY TRUST LOT 1

SALLY HOOTON LOT 2 NL

19430 ROGER ENGEN DBA BEE-PLUS BUILDERS LOT 29A

PARKING PAD

CONCRETE DRIVEWAY

SEE NOTES 1,2

24" HEMLOCK

18" HEMLOCK

12" HEMLOCK

36" HEMLOCK

Δ = 7°31'20"
R = 2398.00'
L = 314.83'
T = 157.64'
Le=0.045
BST=101+69.95
BFS=103+34.95
EFS=105+32.77
EST=106+97.77

FUEL TANK BOAT

PLACE 3 CY RIPRAP, CLASS I ON SHOULDER

CURB STOP STA "G" 105+31, 44 LT

12" ALDER

18" HEMLOCK
24" SPRUCE

FINISH PER 3/W3

CATCH BASIN

P-36 P-37 P-38 P-40

AEL&P #286 AEL&P #287 AEL&P #284 AEL&P #283

100+00 101+00 102+00 103+00 104+00 105+00 106+00 107+00

GLACIER HIGHWAY

16"BV STA "G" 104+16

SINGLE ARCTIC SERVICE

8"GV STA "G" 104+21

FH STA "G" 104+10 28.0 RT

SINGLE 1-INCH WATER SERVICE

CAP 8"DIP STA "G" 104+21, 35.2 RT

CURB STOP STA "G" 100+09, 34 RT

BEGIN SINGLE ARCTIC SERVICE

ROW

30 15 0 30 60 90 150
SCALE IN FEET

PVI STA = 102+14.94
PVI ELEV = 125.03
A/D, = -3.2592
K = 163.4120
500.00' VC

EVCS: 104+64.94 EVCE: 128.29

BVCS: 107+11.51 BVCE: 127.03

SHOULDER RT

0.2972%

8"DI
16"BV

FH LEG

16"DI

DEFLECT BELOW P-38 TO OBTAIN 1-FOOT CLEAR, MIN.

DEFLECT IF NECESSARY TO HAVE 1-FOOT CLEAR BELOW P-36

140 120 100

124.03 124.15 124.99 124.92 125.84 125.82 126.17 125.96 126.40 126.44 126.51 126.40 126.56 126.55 126.67 126.69 126.73 126.84 126.97 126.99 127.12 127.17

100+00 101+00 102+00 103+00 104+00 105+00 106+00 107+00

PATH: S:\LIB\03-3845\3845PL02.DWG

PLOT: PSPACE 1=1(F) OR MSPACE 1=1(F)
TAB: TYPICALS

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

CITY/BOROUGH OF JUNEAU ALASKA'S CAPITAL CITY
DEPARTMENT OF ENGINEERING

Toner Yordling & ASSOCIATES, INC.
5368 Commercial Boulevard
Juneau, AK 99801
(907) 780-3533 Fax (907) 780-3535

DESIGNED BY: G. JENKINS

STATE OF ALASKA 48th Gary L. Jenkins II, PE No. CE9962 PROFESSIONAL ENGINEER 12-13-04

CHECKED BY: P. HILDRE

DRAWN BY: STAFF

NORTH TEE HARBOR WATERLINE EXTENSION GLACIER HIGHWAY: PT. STEPHENS TO COHEN DRIVE

PLAN AND PROFILE STA "G" 99+78 TO STA "G" 107+89

PROJECT DESIGNATION NUMBER	
AK PFH 2-1(1)/68096	
STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
W16	21

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 11/05/09

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MATCHLINE STA "G" 107+89

MATCHLINE STA "G" 115+99

NORTH

SALLY HOOTON
LOT 3 TRACT A
NL

TERRY/BEVERLY DOYLE
LOT 3 TRACT B
789-5145

19555
TERRY/BEVERLY DOYLE
LOT 4
789-5145

COHEN DRIVE RIGHT-OF-WAY

CONSTRUCTION NOTES:

1) WATER SERVICE ALIGNMENT SHALL BE ADJUSTED AS REQUIRED TO MINIMIZE DISTURBANCE OF TREES AND ROOT SYSTEMS. SERVICE BOX SHALL BE INSTALLED 1-FOOT INSIDE OF ROW AND WITHIN 3-FEET OF LOCATION SHOWN, UNLESS OTHERWISE APPROVED BY THE ENGINEER.

2) SERVICES SHALL BE INSTALLED A MINIMUM OF 10-FEET FROM CENTER OF TREES NOT DESIGNATED FOR REMOVAL.

3) SEE NOTE 1, SHT. W7 FOR ALL SERVICES.

12" HEMLOCK
15" HEMLOCK
18" HEMLOCK
12" ALDER
DOUBLE ARCTIC SERVICE
14" ALDER
SEE NOTES 1,2
CURB STOPS (2) 16' LT
PLACE 3 CY RIPRAP, CLASS 1 ON SHOULDER
DO NOT DISTURB MONUMENT
CURB STOP (2)
STA "G" 110+66, 37' LT
STA "G" 110+69, 36' LT
DOUBLE ARCTIC SERVICE
STA "G" 110+05, 30.0 LT
CAP 8"DI
FINISH PER (3/W3)
8" DI
12" ALDER
15" ALDER
12" ALDER
16"DIP
16"BV
STA "G" 110+10
8"GV
STA "G" 110+05, 20' RT
FH
STA "G" 109+00, 28.0 RT
FH
STA "G" 114+00, 28.0 RT
ROW
P-41
P-42
AEL&P #281A
AEL&P #281
AEL&P #279
AEL&P #282
AEL&P #280
G L A C I E R H I G H W A Y
108+00
109+00
110+00
111+00
112+00
113+00
114+00
115+00
30 15 0 30 60 90
SCALE IN FEET

PVI STA = 109+11.51
PVI ELEV = 127.62
A.D. = 1.3541
K = 295.4072
EVCS: 111+11.01
EVCE: 130.62
SHOULDER RT
1.651%
8"DI
16"BV
16"DI
FH LEG
FH LEG
140
120
100

108+00	109+00	110+00	111+00	112+00	113+00	114+00	115+00
127.48 / 127.42	127.87 / 127.76	128.33 / 128.19	128.87 / 128.76	129.52 / 129.29	130.22 / 129.97	131.00 / 130.73	131.77 / 131.58
132.55 / 132.38	133.29 / 133.21	133.98 / 134.03	134.79 / 134.86	135.70 / 135.69	136.51 / 136.51	137.32 / 137.34	138.16 / 138.16

PATH: S:\LIB\03-3845\3845PL02.DWG

PLOT:
PSPACE 1=1(F) OR MSPACE 1=1(F)
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ALASKA'S CAPITAL CITY
DEPARTMENT OF ENGINEERING

Toner Yordling & ASSOCIATES, INC.
5368 Commercial Boulevard
Juneau, AK 99801
(907) 780-3533 Fax (907) 780-3535

DESIGNED BY: G. JENKINS

STATE OF ALASKA
16th
Gary L. Jenkins II
No. EE9962
REGISTERED PROFESSIONAL ENGINEER
10/15/04

CHECKED BY: P. HILDRE

DRAWN BY: STAFF

NORTH TEE HARBOR
WATERLINE EXTENSION
GLACIER HIGHWAY:
PT. STEPHENS
TO COHEN DRIVE

PLAN AND PROFILE STA "G" 107+89 TO STA "G" 115+99

PROJECT DESIGNATION NUMBER	
AK PFH 2-1(1)/68096	
STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
W17	21

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 11/04/09

NORTH

MATCHLINE STA "G" 115+99

MATCHLINE STA "G" 124+10

CONSTRUCTION NOTES:

1) WATER SERVICE ALIGNMENT SHALL BE ADJUSTED AS REQUIRED TO MINIMIZE DISTURBANCE OF TREES AND ROOT SYSTEMS. SERVICE BOX SHALL BE INSTALLED 1-FOOT INSIDE OF ROW AND WITHIN 3-FEET OF LOCATION SHOWN, UNLESS OTHERWISE APPROVED BY THE ENGINEER.

2) SERVICES SHALL BE INSTALLED A MINIMUM OF 10-FEET FROM CENTER OF TREES NOT DESIGNATED FOR REMOVAL.

3) SEE NOTE 1, SHEET W7 FOR ALL SERVICES.

19601
RICHARD/SHARLYN BERNING
LOT 2
789-3595

19653
RICHARD HALL
LOT 3
NL

19661
JOSEPH SOLANO/DENICE TILLEY
LOT 4
790-4652

Δ = 7°30'38"
R = 2500.00'
L = 327.71'
T = 164.09'
e=0.045
BST=117+10.01
BFS=118+75.01
EFS=120+77.29
EST=122+42.29

BURIED ELECTRICAL

BOULDERS

PRIVATE WATER SERVICE

16" HEMLOCK

18" SPRUCE

12" SPRUCE

18" HEMLOCK

15" SPRUCE

14" SPRUCE

REMOVE 10", 8", AND 6" ALDER CLUMP

REMOVE AND REPLACE BOAT AS NECESSARY

SINGLE ARCTIC SERVICE

12" ALDER

POWER POLE

SEE NOTES 1, 2

CURB STOP (2) 16' LT

12' CLEAR

CURB STOP 118+62

SINGLE ARCTIC SERVICE

DOUBLE ARCTIC SERVICE

FH STA "G" 124+00 28.0 RT

ROCKERY

FH STA "G" 119+00, 27.0 RT

ROCKERY

16"BV STA "G" 120+00

SHED

PATH

PARKING

GLACIER

ROW

P-43

P-45

AEL&P #274

AEL&P #272

AEL&P #275

AEL&P #277

30 15 0 30 60 90
SCALE IN FEET

PVI STA = 120+31.65
PVI ELEV = 146.12
AD = -0.5282
K = 567.8437

BVCS: 118+81.65
BVCE: 148.84

EVCS: 121+81.65
EVCE: 147.80

SHOULDER RT

16"BV

DEFLECT MAIN IF NECESSARY TO OBTAIN 1-FOOT CLEAR BELOW P-44.

16"DI

FH LEG

P-44

P-43

P-45

FH LEG

STA	
116+00	138.99
117+00	139.95 / 139.81
118+00	140.63 / 140.84
119+00	141.56 / 141.47
120+00	142.26 / 142.29
121+00	143.11 / 143.12
122+00	143.87 / 143.94
123+00	144.63 / 144.73
124+00	145.40 / 145.47
	146.12 / 146.17
	146.85 / 146.82
	147.44 / 147.44
	147.98 / 148.01
	148.51 / 148.57
	148.94 / 149.13
	149.38 / 149.69
	150.03 / 150.25

PATH: S:\LIB\03-3845\3845PL03.DWG

PLOT:
PSPACE 1=1(F) OR MSPACE 1=1(F)
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CITY/BOROUGH OF JUNEAU
ALASKA'S CAPITAL CITY
DEPARTMENT OF ENGINEERING

Toner Nordling & ASSOCIATES, INC.
5368 Commercial Boulevard
Juneau, AK 99801
(907) 780-3533
Fax (907) 780-3535

DESIGNED BY: G. JENKINS

STATE OF ALASKA
Gary J. Jenkins II
LIC. CE9962
REGISTERED PROFESSIONAL ENGINEER
12-13-04

CHECKED BY: P. HILDRE

DRAWN BY: STAFF

NORTH TEE HARBOR
WATERLINE EXTENSION
GLACIER HIGHWAY:
PT. STEPHENS
TO COHEN DRIVE

PLAN AND PROFILE STA "G" 115+99 TO STA "G" 124+10

PROJECT DESIGNATION NUMBER	
AK PFH 2-1(1)/68096	
STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
W18	21

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 11/8/07

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MATCHLINE STA "G" 124+10

MATCHLINE STA "G" 132+20

NORTH

CONSTRUCTION NOTES:

1) WATER SERVICE ALIGNMENT SHALL BE ADJUSTED AS REQUIRED TO MINIMIZE DISTURBANCE OF TREES AND ROOT SYSTEMS. SERVICE BOX SHALL BE INSTALLED 1-FOOT INSIDE OF ROW AND WITHIN 3-FEET OF LOCATION SHOWN, UNLESS OTHERWISE APPROVED BY THE ENGINEER.
2) SERVICES SHALL BE INSTALLED A MINIMUM OF 10-FEET FROM CENTER OF TREES NOT DESIGNATED FOR REMOVAL.
3) SEE NOTE 1, SHEET W7 FOR ALL SERVICES.

MARK HENNICK
LOT 5
NL

CARROL/JOANNE MARTIN
LOT 6
796-2034

CARROL/JOANNE MARTIN
LOT 7

CARROL/JOANNE MARTIN
LOT 8

19951
GARY TESENEER
LOT 9
NL

ROW

24" HEMLOCK
REMOVE 18" SNAG
10"
150
24" SPRUCE
BOULDERS
SEE NOTES 1,2
AEL&P #266

28" HEMLOCK
BOULDERS
24" HEMLOCK
150
SEE NOTES 1,2
AEL&P #266
10"
18" HEMLOCK
160

45° BEND
STA "G" 125+63,
17 LT
P-46
AEL&P #270

16"BV
STA "G" 130+00

125+00 126+00 127+00 128+00 129+00 130+00 131+00 132+00

GLACIER HIGHWAY

PI L 124+93.07

45° BEND
STA "G" 125+25,
22 RT

AEL&P #271

P-47

FH
STA "G" 129+00
28.0 RT

P-48

30 15 0 30 60 90
SCALE IN FEET

PVI STA = 126+15.39
PVI ELEV = 159.14
A.D. = 1.781%
K = 392.883
700.00' VC

EVCS: 124+65.39
EVCE: 151.21

EVCS: 131+65.39
EVCE: 165.31

SHOULDER RT

SHOULDER LT

16"BV

P-45

P-47

16"DI

FH LEG

DEFLECT UNDER P-49 TO OBTAIN 1-FOOT CLEAR, MIN.

DEFLECT UNDER P-47 TO OBTAIN 1-FOOT CLEAR, MIN.

45° BENDS (2)

180
160
140

150.73 150.81
151.44 151.36
152.19 151.99
152.92 152.67
153.64 153.48
154.36 154.21
155.17 155.07
156.03 156.00
156.94 157.00
157.98 158.05
159.01 159.18
160.06 160.36

125+00 126+00 127+00 128+00 129+00 130+00 131+00 132+00

PATH: S:\LIB\03-3845\3845PL03.DWG

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ALASKA'S CAPITAL CITY
DEPARTMENT OF ENGINEERING

Toner Nordling & ASSOCIATES, INC.
5368 Commercial Boulevard
Juneau, AK 99801
(907) 780-3533 Fax (907) 780-3535

DESIGNED BY: G. JENKINS

STATE OF ALASKA
Gary Jenkins II
No. CE9982
REGISTERED PROFESSIONAL ENGINEER
10/15/04

CHECKED BY: P. HILDRE

DRAWN BY: STAFF

NORTH TEE HARBOR
WATERLINE EXTENSION
GLACIER HIGHWAY:
PT. STEPHENS
TO COHEN DRIVE

PLAN AND PROFILE STA "G" 124+10 TO STA "G" 132+20

PROJECT DESIGNATION NUMBER	
AK PFH 2-1(1)/68096	
STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
W19	21

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the Work as constructed.
PE _____ Date 1/05/07

CONSTRUCTION NOTES:

1) WATER SERVICE ALIGNMENT SHALL BE ADJUSTED AS REQUIRED TO MINIMIZE DISTURBANCE OF TREES AND ROOT SYSTEMS. SERVICE BOX SHALL BE INSTALLED 1-FOOT INSIDE OF ROW AND WITHIN 3-FEET OF LOCATION SHOWN, UNLESS OTHERWISE APPROVED BY THE ENGINEER.

2) SERVICES SHALL BE INSTALLED A MINIMUM OF 10-FEET FROM CENTER OF TREES NOT DESIGNATED FOR REMOVAL.

3) SEE NOTE 1, SHEET W7 FOR ALL SERVICES.

4) BLAST AND EXCAVATE ROCK FOR INSTALLATION OF FIRE HYDRANT. EXCAVATE ROCK AS NECESSARY TO OBTAIN CLEARANCES AS SPECIFIED ON THE PLANS.

NORTH

MATCHLINE STA "G" 132+20

MATCHLINE STA "G" 140+31

20003
DALE STONE/DEMETRA SKINAS
LOT 10
NL

BROWNIE/CLARA HUNT
LOT 11
789-9071

20025
LYNN ESCOLA
LOT 12
364-3903

20115
JACEK MASELKO
LOT 13
789-1960

MIKE/LOIS PERENSOVICH
LOT 14
907-747-3429
(SITKA)

20123
JACQUELINE/PHILIP STEWART
LOT 15
789-5044

12" ALDER
28" HEMLOCK
REBAR
REMOVE 12" ALDER
SEE NOTES 1,2
18" HEMLOCK
20" HEMLOCK
REMOVE 28" HEMLOCK
SEE NOTES 1,2
DRIVEWAY
BOAT ON BLOCKS
TREE ROOTS
1" IRON PIPE
REMOVE 18" HEMLOCK
SEE NOTES 1,2
12" ALDER
16"BV
STA "G" 140+00
FH
STA "G" 134+00,
28.0 RT
ROCKERY
FH
STA "G" 139+00,
27.0 RT
SEE NOTE 4

ROW — ROW — ROW

133+00 134+00 135+00 136+00 137+00 138+00 139+00 140+00

P-49 P-50

PC = 133+49.71
PT = 136+15.29

GLACIER HIG

30 15 0 30 60 90
SCALE IN FEET

200 180 160

PVI STA = 135+11.62
PVI ELEV = 127.79
A.D. = -0.6886
K = 239.6191
165.00' VC

BVCS: 134+25.32
BVCE: 172.38
EVCS: 135+84.32
EVCE: 176.80
BVCS: 140+24.54
BVCE: 186.16

2.90437
2.21603

SHOULDER LT
16"BV
FH LEG
16"DI
FH LEG

DEFLECT UNDER P-49 TO OBTAIN 1-FOOT CLEAR, MIN.

DEFLECT UNDER P-50 TO OBTAIN 1-FOOT CLEAR, MIN.

PATH: S:\LIB\03-3845\3845PL03.DWG

PLOT:
PSPACE 1=1(F) OR MSPACE 1=1(F)
TAB: TYPICALS

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ALASKA'S CAPITAL CITY
DEPARTMENT OF ENGINEERING

Toner Nordling & ASSOCIATES, INC.
5368 Commercial Boulevard
Juneau, AK 99801
Fax (907) 780-3535
(907) 780-3533

DESIGNED BY: G. JENKINS

STATE OF ALASKA
James K. Jenkins II
No. 009962
PROFESSIONAL ENGINEER
12-13-04

CHECKED BY: P. HILDRE

DRAWN BY: STAFF

NORTH TEE HARBOR
WATERLINE EXTENSION
GLACIER HIGHWAY:
PT. STEPHENS
TO COHEN DRIVE

PLAN AND PROFILE
STA "G" 132+20 TO
STA "G" 140+31

PROJECT DESIGNATION NUMBER	
AK PFH 2-1(1)/68096	
STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
W20	21

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 1/6/07

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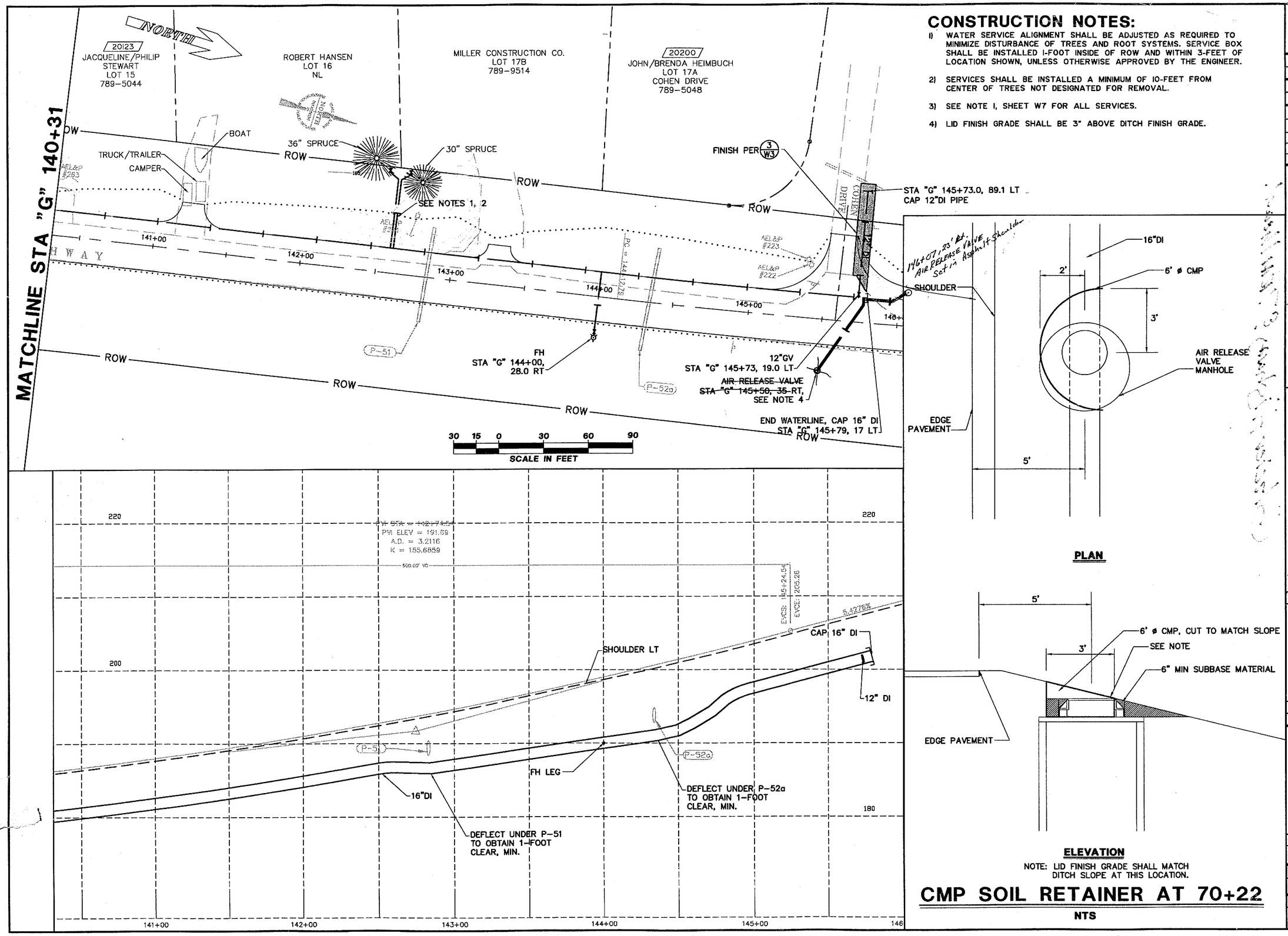

CONSTRUCTION NOTES:

1) WATER SERVICE ALIGNMENT SHALL BE ADJUSTED AS REQUIRED TO MINIMIZE DISTURBANCE OF TREES AND ROOT SYSTEMS. SERVICE BOX SHALL BE INSTALLED 1-FOOT INSIDE OF ROW AND WITHIN 3-FEET OF LOCATION SHOWN, UNLESS OTHERWISE APPROVED BY THE ENGINEER.
2) SERVICES SHALL BE INSTALLED A MINIMUM OF 10-FEET FROM CENTER OF TREES NOT DESIGNATED FOR REMOVAL.
3) SEE NOTE 1, SHEET W7 FOR ALL SERVICES.
4) LID FINISH GRADE SHALL BE 3" ABOVE DITCH FINISH GRADE.

CMP SOIL RETAINER AT 70+22

NTS

PATH: S:\LIB\03-3845\3845PL03.DWG

PLOT:
PSPACE 1=1(F) OR MSPACE 1=1(F)
TAB: TYPICALS

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RECORD OF REVISIONS

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ALASKA'S CAPITAL CITY
DEPARTMENT OF ENGINEERING

Toner Nordling & ASSOCIATES, INC.
5388 Commercial Boulevard
Juneau, AK 99801
(907) 780-3533 Fax (907) 780-3535

DESIGNED BY: G. JENKINS

STATE OF ALASKA
Gary K. Jenkins II
No. CE9962
REGISTERED PROFESSIONAL ENGINEER
10/15/04

CHECKED BY: P. HILDRE
DRAWN BY: STAFF

NORTH TEE HARBOR
WATERLINE EXTENSION
GLACIER HIGHWAY:
PT. STEPHENS
TO COHEN DRIVE

PLAN AND PROFILE STA "G" 140+31 TO STA "G" 145+79

PROJECT DESIGNATION NUMBER	
AK PFH 2-1(1)/68096	
STATE	YEAR
ALASKA	2004
SHEET NUMBER	TOTAL SHEETS
W21	21

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 11/06/07