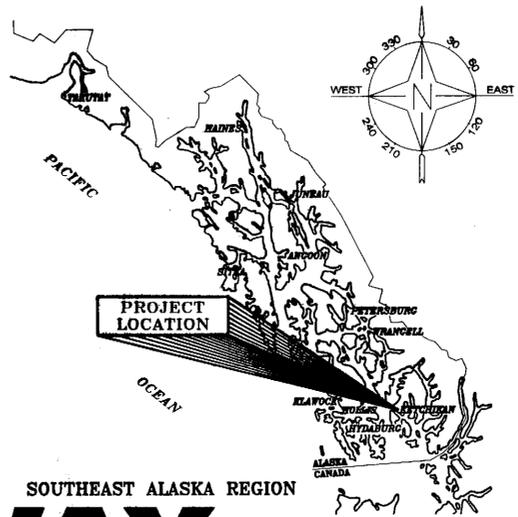


State of Alaska

Department of Transportation
and Public Facilities

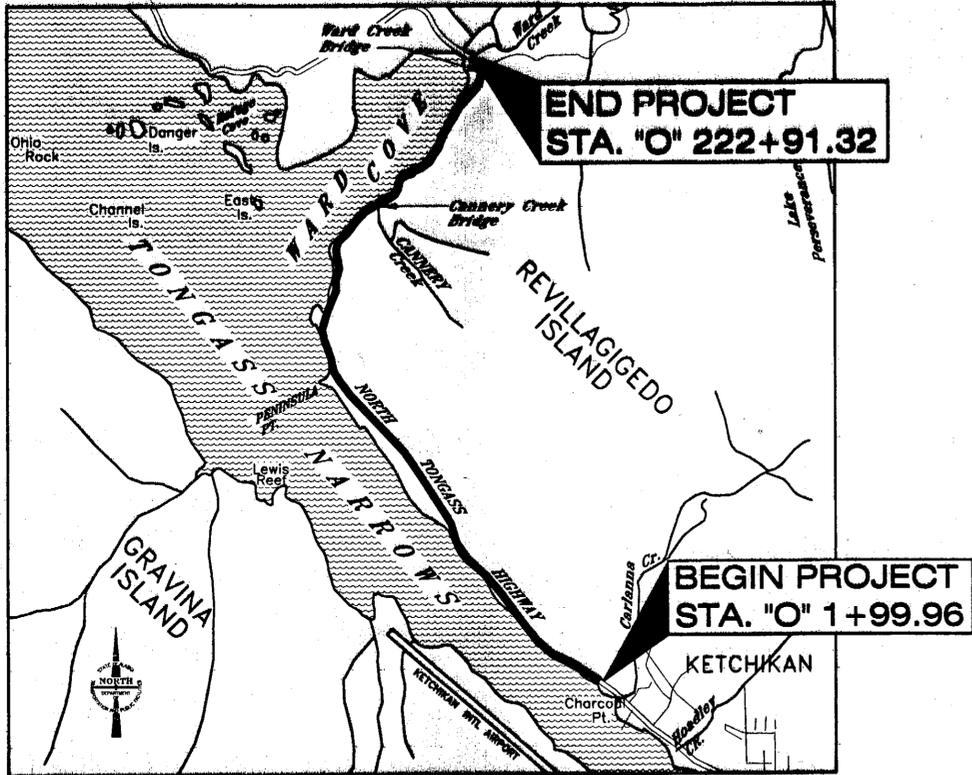
Statewide Design and Engineering Services Division



KETCHIKAN ALASKA NORTH TONGASS HIGHWAY

PAVEMENT RESTORATION PROJECT No. STP-0920(22)-(68229)

INDEX	
SHEET NO.	DESCRIPTION
A1	TITLE
B1-B2	TYPICAL SECTIONS
C1	ESTIMATE OF QUANTITIES
D1-D2	SUMMARY SHEETS
E1-E2	DETAIL SHEET
F1-F11	PLAN SHEETS & SIGNING
G1	STRIPING PLAN
H1-H2	PTR/PIEZO SHEETS
J1-J2	TRAFFIC CONTROL SHEETS
P1	EROSION & SEDIMENT CONTROL PLAN
	As-Builts
	Project Engineer: Mark Figley
	Contractor: SECON
	Start: June 11, 2003
	End: April 2, 2003



VICINITY MAP

DESIGN DESIGNATION

A.D.T. 2002	=	8,000
A.D.T. 2022	=	9,770
D.H.V.	=	1,070
% T	=	7.7%
V	=	55 mph
E.A.L.	=	1,300,000

PROJECT SUMMARY

LENGTH OF PROJECT	=	4.184 miles
LENGTH OF GRADING	=	0.00
LENGTH OF OVERLAY	=	4.184 miles
WIDTH OF OVERLAY	=	20.666 feet

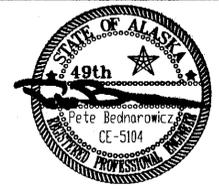
THE FOLLOWING STANDARD DRAWINGS APPLY TO THIS PROJECT:

- A-1
- C-03.10
- C-04.11
- G-04.06S
- G-04.07W
- G-20.00

PATH: Q:\Ktn\68229\Planset\Title&Summaries.dwg
Wed, 10/Apr/02 11:49AM

PLOT: PSPACE OR MSPACE: 1000mm=1m(F)

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



RECOMMENDED FOR APPROVAL:

PATRICK J. KEMP, P.E.
REGIONAL PRECONSTRUCTION ENGINEER

DATE

APPROVED:

ROBERT DOLL
REGIONAL S.E. DIRECTOR

DATE

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

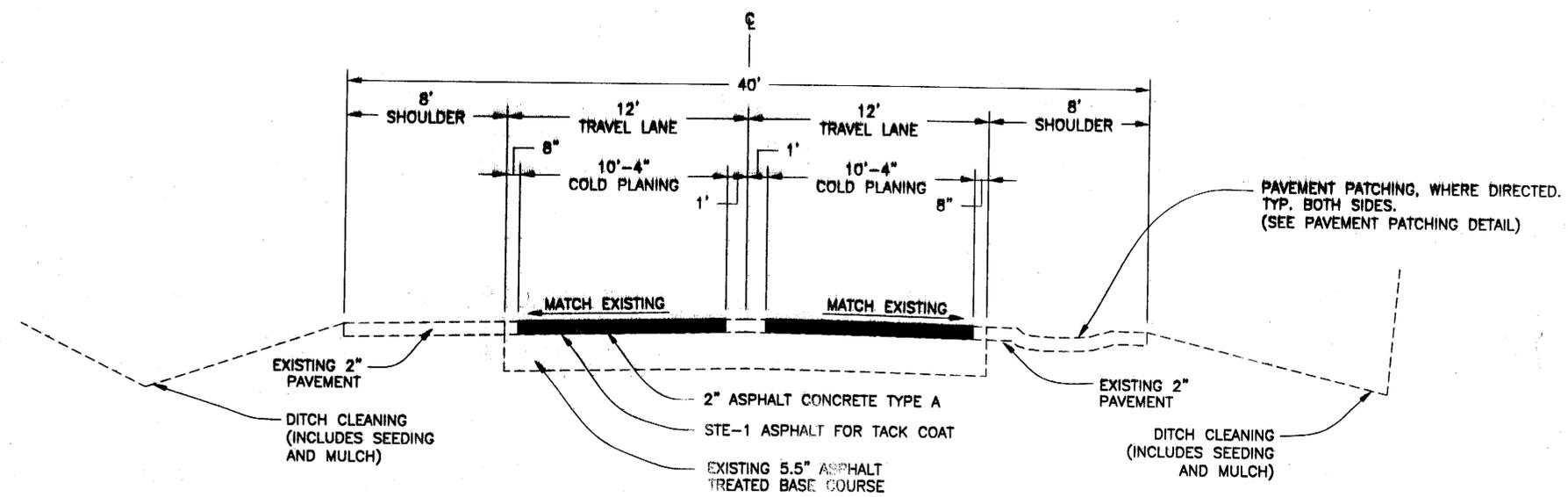
CONSTRUCTION PROJECT MANAGER

DATE

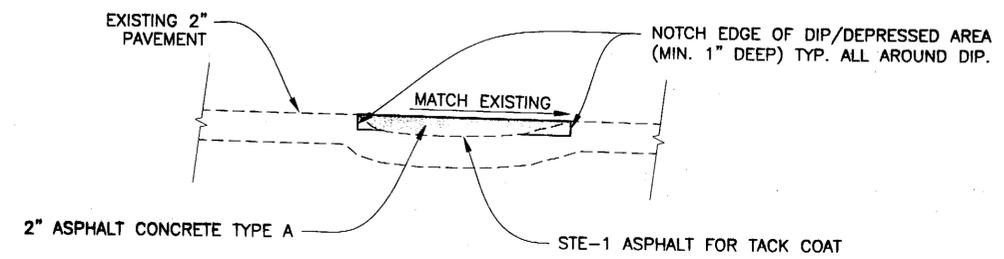
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	STP-0920(22) - (68229)	2002	A1	25

PAVEMENT PATCHING

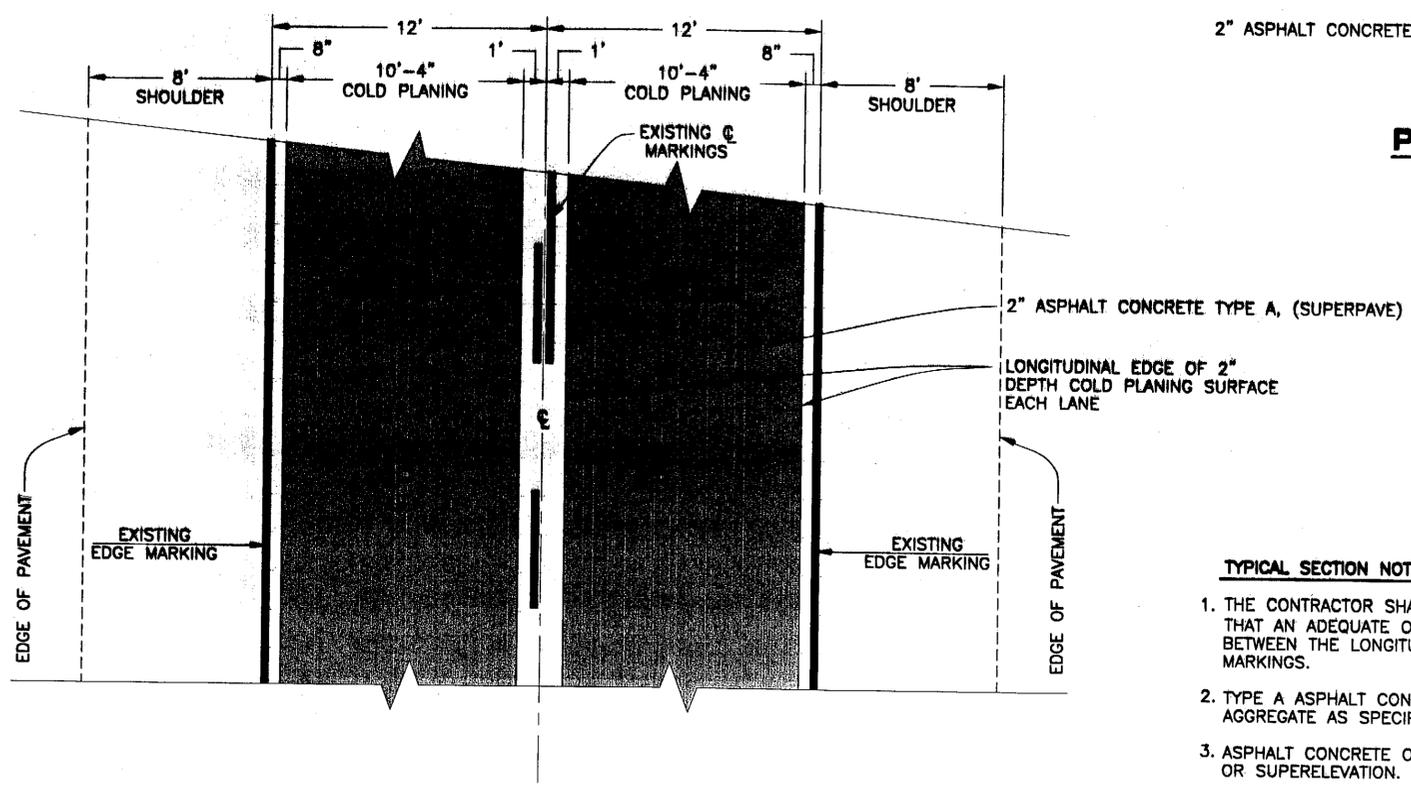
STATION	OFFSET	
	LT.	RT.
"O" 13+00		X
"O" 26+50	X	
"O" 88+50		X
"O" 123+80		X
"O" 221+25	X	



Typical Section Cold Planing and Overlay
 Station "O" 12+55.00 to E.O.P. Station "O" 222+91.32
 (Except Where Modified by Other Typical)



PAVEMENT PATCHING DETAIL



Partial Cold Planing & Overlay Plan
 B.O.P To E.O.P.

- TYPICAL SECTION NOTES:**
1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT AN ADEQUATE OFFSET OF AT LEAST 6" IS PROVIDED BETWEEN THE LONGITUDINAL EDGE AND THE PAVEMENT MARKINGS.
 2. TYPE A ASPHALT CONCRETE REQUIRES IMPORTED HARD AGGREGATE AS SPECIFIED IN SECTION 703.
 3. ASPHALT CONCRETE OVERLAY SHALL MATCH EXISTING CROSS SLOPE OR SUPERELEVATION.
 4. DITCH CLEANING SHALL BE AS SPECIFIED IN SECTION 203. THE WORK INCLUDES THE REMOVAL OF WEED GROWTH, DEAD PLANT MATERIAL, BUSHES, AND SEDIMENT. THE DITCH SHALL BE V-SHAPED FOR DRAINAGE TO FREE FLOW. SEED AND MULCH ALL DISTURBED DITCHES AFTER CLEANING.

KTN-NORTH TONGASS
 HIGHWAY
 PAVEMENT RESTORATION
 PROJECT NO. 68229

Typical Section

DESIGNED BY: D. WILLIAMS



CHECKED BY: P. BEDNAROWICZ
 DRAWN BY: D.W./M.L.

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

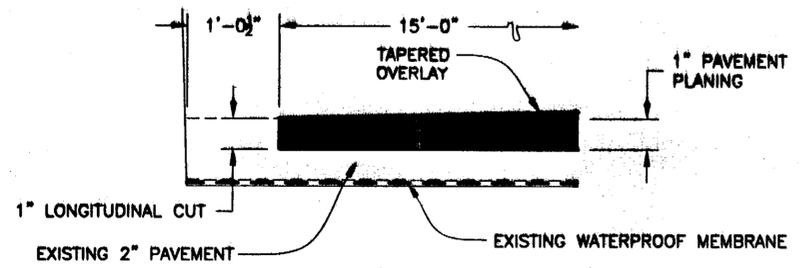
**KTN-NORTH TONGASS
 HIGHWAY
 PAVEMENT RESTORATION**

Typical Section

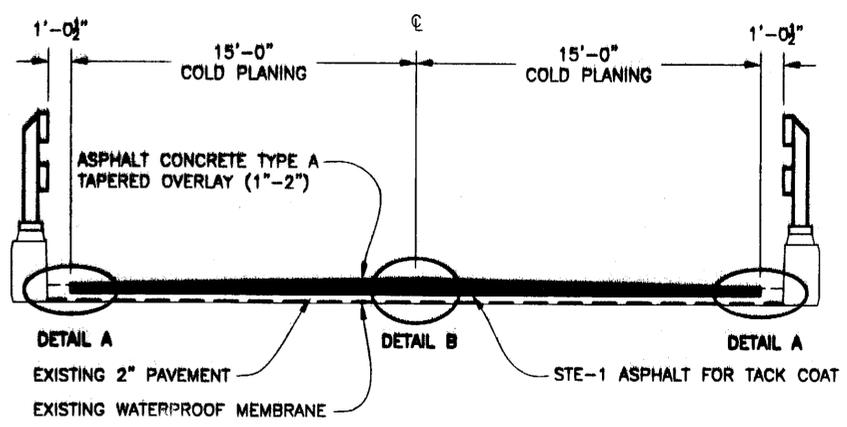
PROJECT DESIGNATION NUMBER
STP-0920(22) ~ 68229

STATE	YEAR
ALASKA	2002
SHEET NUMBER	TOTAL SHEETS
B1	25

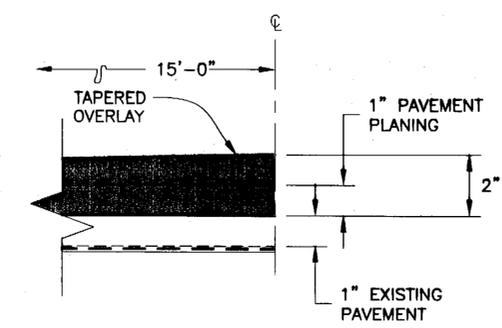
ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION



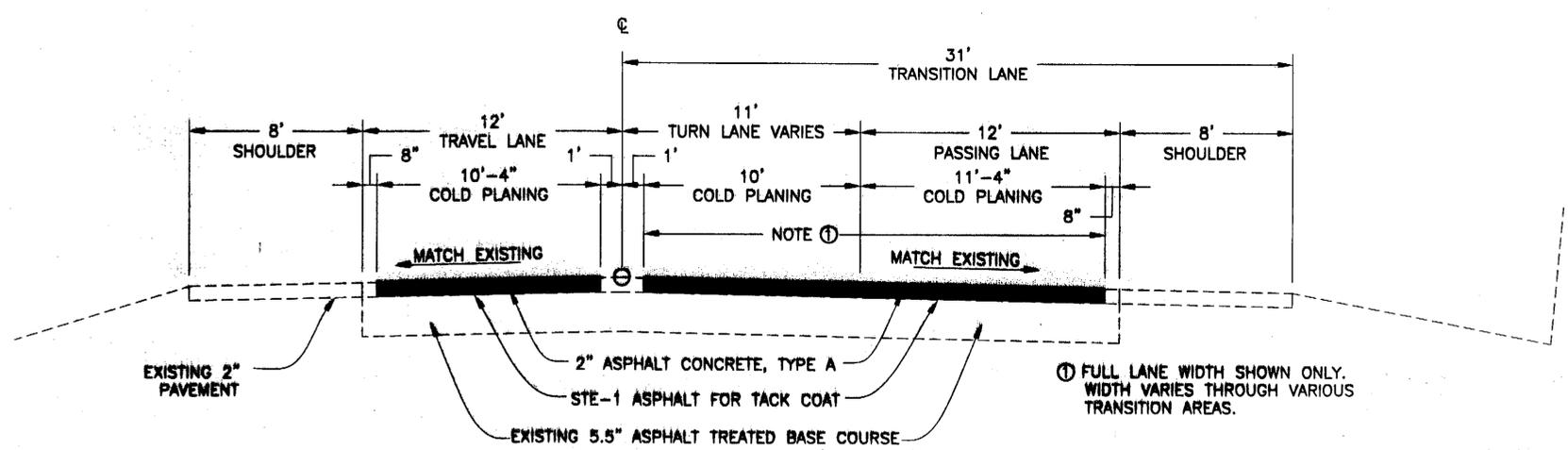
Detail A



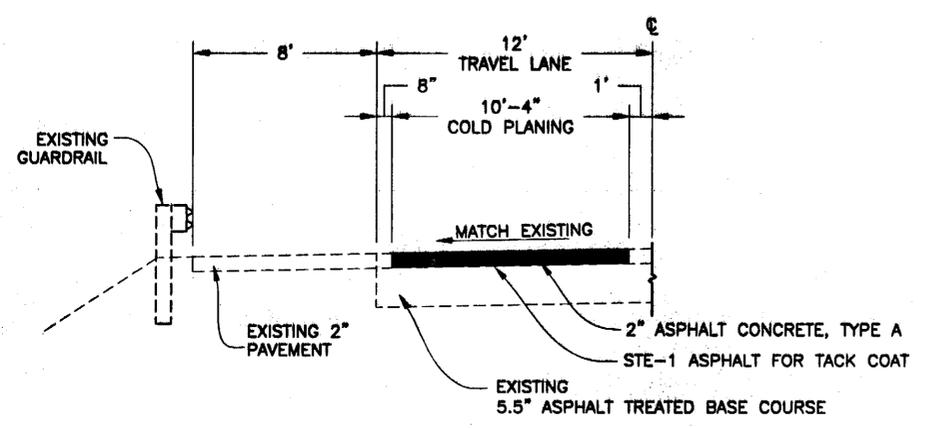
Ward Creek Bridge Cross Section
 B.O.B. "O" 221+04.85 To E.O.B. "O" 222+94.56



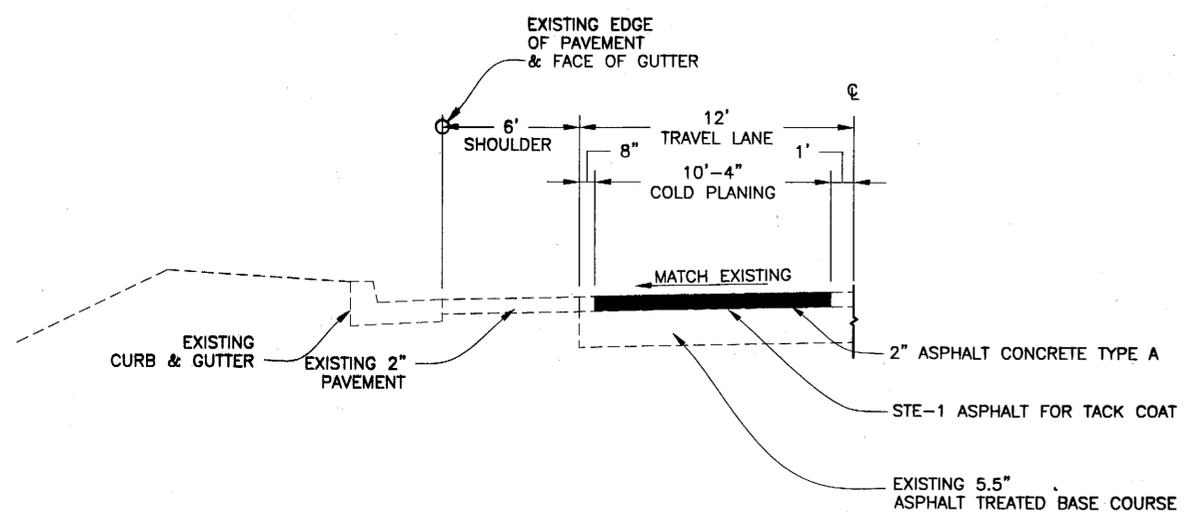
Detail B



Section At Transition Lane Cold Planing and Overlay
 Station "O" 56+73.00 To Station "O" 77+42.00



Typical Section at Guardrail Cold Planing and Overlay

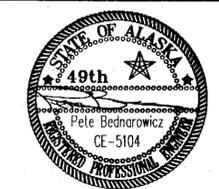


Typical Section at Curb & Gutter Cold Planing and Overlay
 Station "O" B.O.P. 1+99.96 To Station "O" 12+65.00

**KTN-NORTH TONGASS
 HIGHWAY
 PAVEMENT RESTORATION
 PROJECT NO. 68229**

Typical Sections

DESIGNED BY: D. WILLIAMS



CHECKED BY: P. BEDNAROWICZ
 DRAWN BY: D.W./M.L.

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 & PUBLIC FACILITIES
 STATEWIDE DESIGN & ENGINEERING
 SERVICES DIVISION
**KTN-NORTH TONGASS
 HIGHWAY
 PAVEMENT RESTORATION**

**Typical
 Sections**

PROJECT DESIGNATION NUMBER
STP-0920(22) ~ 68229

STATE	YEAR
ALASKA	2002
SHEET NUMBER	TOTAL SHEETS
B2	25

Estimate of Quantities

ITEM	PAY ITEM	UNIT	QTY.
203 (12)	DITCH CLEANING	FOOT	21,418
			24,600
401 (1)	ASPHALT CONCRETE, TYPE A	TON	6,699.90
401 (2)	ASPHALT CEMENT, PG 64-28	TON	355.09
			7010
402 (1)	STE-1 ASPHALT FOR TACK COAT	TON	25.06
408 (1)	PAVEMENT COLD PLANING	SQ. YARD	53,840.30
408 (2)	PAVEMENT PATCHES	SQ. YARD	609.10
606 (5)	REMOVAL AND DISPOSAL OF GUARDRAIL	FOOT	50
606 (11)	EXTRUDER TERMINAL (ET-2000)	EACH	2
615 (1)	STANDARD SIGNS	SQ. FOOT	519.25
615 (5)	DELINEATOR FLEXIBLE	EACH	2
615 (8)	SALVAGE SIGN	EACH	112
640 (1)	MOBILIZATION AND DEMOBILIZATION	LUMP SUM	ALL REQ'D
641 (2)	EROSION AND POLLUTION CONTROL	CONT. SUM	ALL REQ'D
643 (2)	TRAFFIC MAINTENANCE	LUMP SUM	ALL REQ'D
643 (3)	PERMANENT CONSTRUCTION SIGNS	LUMP SUM	ALL REQ'D
643 (15)	FLAGGING	CONT. SUM	ALL REQ'D
644 (6)	VEHICLES	LUMP SUM	ALL REQ'D
643 (25)	TRAFFIC CONTROL	LUMP SUM	ALL REQ'D
669 (3)	NEW PIEZO AXLE SENSOR SYSTEM COMPLETE	LUMP SUM	ALL REQ'D
670 (10)	METHYL METHACRYLATE PAVEMENT MARKINGS	LUMP SUM	ALL REQ'D

CHANGE ORDER ITEMS:

401(3)	ASPHALT PRICE ADJUSTMENT	LUMP SUM	ALL REQ'D
501(7)	RETAINING WALL'S SLOPE STABILIZATION	LUMP SUM	ALL REQ'D
670 (8)	RECESSED PAVEMENT MARKERS	EACH	80

Basis Of Estimate

ITEM NO.	PAY ITEM	ESTIMATING FACTOR
401 (1)	ASPHALT CONCRETE, TYPE A	120lbs/sq. yd./inch depth
401 (2)	ASPHALT CEMENT, PG 58-28	6% of ITEM 401 (1) quantity
402 (2)	STE 1 ASPHALT FOR TACK COAT	0.1 Gal./sq. yd.-240 Gal./Ton

GENERAL NOTES:

1. COLD PLANING AND OVERLAY WORK SHALL BE CONTINUOUS THROUGH CANNERY CREEK BRIDGE AND WARD CREEK BRIDGE.
2. ALL COLD PLANED MATERIAL SHALL BE STOCKPILED AT MILEPOST 15, NORTH TONGASS HIGHWAY TURNOUT.
3. EXISTING TRAFFIC MARKINGS DAMAGED BY OVERPLANING OR BLOTTED OUT BY OVERLAY OPERATIONS SHALL BE RESTORED IN ACCORDANCE WITH THE SPECIFICATIONS. SETTING CONTROL POINTS FOR RE-INSTALLING TRAFFIC MARKINGS SHALL BE COORDINATED WITH THE ENGINEER.
4. PLANED MATERIAL AND OVERLAY OPERATIONS MUST BE CONTAINED SO THAT THE DEBRIS WILL NOT CONTAMINATE FISH STREAMS OR OTHER WATER BODIES.
5. COLD PLANING EQUIPMENT SHALL BE OPERATED IN SUCH A MANNER AS TO PREVENT DAMAGE TO MANHOLES, WATER VALVES, MONUMENTS, AND OTHER OBSTRUCTIONS.
6. PRIOR TO PLANING OPERATIONS, INLETS OR CATCH BASINS THAT MIGHT BE AFFECTED SHALL BE SUFFICIENTLY BARRICADED SO AS TO PREVENT SILT OR RUNOFF FROM PLUGGING THE DRAINAGE SYSTEM.
7. REGARDING STD. DWG G-20.00, CHANGE THE OFFSET OF THE END TERMINAL AT SECTION A-A FROM VARIES 1.0'-2.25' TO ONE FOOT.

PATH: Q:\Ktn\68229\Planset\Title&Summaries.dwg
 Wed, 10/Apr/02 11:49AM Michael Limbaugh
 PLOT:
 PSPACE 1=1(F) OR MSPACE 1=1(F)
 LAYOUT TAB: C1-Est. of Quan.

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

Estimate of Quantities

DESIGNED BY: D. WILLIAMS



CHECKED BY: P. BEDNAROWICZ

DRAWN BY: D.W./M.L.

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

**KTN-NORTH TONGASS
 HIGHWAY
 PAVEMENT RESTORATION**

**Estimate of
 Quantities**

PROJECT DESIGNATION NUMBER

STP-0920(22) ~ 68229

STATE	YEAR
ALASKA	2002
SHEET NUMBER	TOTAL SHEETS
C1	25

SIGNING SUMMARY											
SIGN #	STATION	OFFSET		CODE NUMBER	FACING	LEGEND	SIZE		AREA SQ. FEET	POST SIZE	REMARKS
		LEFT	RIGHT				WIDTH	HEIGHT			
1	2+40	X		I-5	SB	Airport (Symbol)	24	24	4.00	2.5	
2	2+40	X		I-5	SB	Airport	24	6	1.00		Mount on same post as 1
3	2+40	X		I-5	SB	====>	24	6	1.00		Mount on same post as 1
4	2+88	X		R1-1	EB	Stop	30	30	6.25	2.5	
5	2+88	X		R5-1	WB	Do Not Enter	30	30	6.25	2.5	Mount back to back with 4
6	3+40	X		R1-1	EB	Stop	30	30	6.25	2.5	
7	3+40	X		R6-1L	NB	One Way	36	12	3.00		Mount on top of 6
8	3+40	X		R6-1R	SB	One Way	36	12	3.00		Mount on top of 6
9	5+50	X		R3-17	SB	Right Lane Bike Only	24	30	5.00		
10	5+50	X		SPECIAL	SB	Ends	24	6	1.00		Mount below 9
11	5+50		X	R3-17	NB	Right Lane Bike Only	24	30	5.00	2.5	
12	8+00	X		I-5	SB	Airport (Symbol)	24	24	4.00	2.5	
13	8+00	X		I-5	SB	Airport	24	6	1.00		Mount below 12
14	8+00	X		I-5	SB	500'	24	6	1.00		Mount below 12
15	10+00	X		R8-1	SB	No Parking on Pavement	24	30	5.00	2.5	
16	12+00		X	R12-7	NB	No Studded Tires	84	66	38.50	2 x 2.5	
17	19+90	X		R1-1	EB	Stop	30	30	6.25	2.5	Mount on same post as 16
18	21+00	X		R2-1	SB	Speed Limit 35	30	36	7.50	2.5	
19	21+00		X	R2-1	NB	Speed Limit 50	30	36	7.50	2.5	
20	37+00		X	SPECIAL	NB	State Troopers 1 Mile	-	-	-	-	Remove
21	47+00		X	R3-17	NB	Right Lane Bike Only	24	30	5.00	2.5	
22	53+80		X	R1-1	WB	Stop	30	30	6.25	2.5	
23	53+80		X	D3-1	NB/SB	Baker St	48	8	2.67		Mount on top of 22
24	53+80		X	D3-1	WB/EB	N. Tongass	36	8	1.78	2.5	Mount on top of 22
25	58+00		X	D3-2L	NB	<== Shoreline Drive	78	12	6.50	2 x 2.5	
26	60+00	X		R2-1	SB	Speed Limit 50	30	36	7.50	2.5	
27	62+30	X		R1-1	EB	Stop	30	30	6.25	2.5	
28	62+30	X		D3-1	NB/SB	Shoreline Drive	32	8	1.78	2.5	Mount on top of 27
29	62+30	X		D3-1	WB/EB	N. Tongass	36	8	1.78	2.5	Mount on top of 27
30	62+80		X	NB	NB	Buckle Up for Safety	-	-	-	-	Existing Leave in Place
31	65+30		X	W3-3	NB	Signal Ahead (Symbol)	-	-	-	-	Existing Leave in Place
32	66+50		X	R3-17	NB	Right Lane Bike Only	24	30	5.00	2.5	
33	67+24		X	R1-1	WB	Stop	30	30	6.25	2.5	
34	67+24		X	D3-1	WB/EB	N. Tongass	36	8	1.78		Mount on top of 33
35	67+24		X	D3-1	NB/SB	Signal Rd	32	8	1.78		Mount on top of 33
36	68+00	X		D3-1	NB/SB	Kings Ct.	36	8	1.78	2.5	
37	68+00	X		D3-1	WB/EB	N. Tongass	36	8	1.78		Mount below 36
38	68+50		X	R2-1	NB	Speed Limit 50	-	-	-	-	Remove
39	69+00		X	M10-2	NB	Milepost 4	6	8	0.33	2.5	
40	69+50	X		Special	SB	Adopt a Highway	36	18	4.5	2.5	
41	69+50	X		Special	SB	Rotary 2000	-	-	-	-	Existing Leave in Place
42	72+50		X	Special	NB	Adopt a Highway	36	18	4.5	2.5	
43	72+50		X	Special	NB	xi alpha beta sigma phi	-	-	-	-	Existing Leave in Place
44	73+00		X	R8-1	NB	No Parking on Pavement	24	30	5.00	2.5	
45	74+00		X	R2-1	NB	Speed Limit 50	30	36	7.50	2.5	
46	79+50	X		W3-3	SB	Signal Ahead (Symbol)	-	-	-	-	Existing Leave in Place
47	80+00		X	R1-1	WB	Stop	30	30	6.25	2.5	
48	84+00		X	NB	NB	State Troopers ====>	-	-	-	-	Existing Leave in Place
49	87+55		X	R1-1	WB	Stop	30	30	6.25	2.5	
50	88+90		X	R1-1	WB	Stop	30	30	6.25	2.5	
51	88+90		X	D3-1	WB/EB	N. Tongass	36	8	1.78	2.5	Mount on top of 50
52	88+90		X	D3-1	NB/SB	Eichner Av	54	8	3.00		Mount on top of 50
53	90+90	X		SB	SB	<==== State Troopers	-	-	-	-	Existing Leave in Place
54	91+20	X		R1-1	WB	Stop	30	30	6.25	2.5	
55	91+20	X		D3-1	WB/EB	N. Tongass	36	8	1.78		Mount on top of 54
56	91+20	X		D3-1	WB/EB	Spaeth Av	54	8	3.00		Mount on top of 54
57	94+00	X		R3-17	SB	Right Lane Bike Only	24	30	5.00	2.5	
58	99+40		X	D3-1	NB/SB	Spruce Shadows	42	8	2.33	2.5	
59	99+40		X	D3-1	WB/EB	N. Tongass	36	8	1.78		Mount below 58

- NOTE:**
1. ALL EXISTING SIGNS SHALL BE REMOVED AND REPLACED UNLESS OTHERWISE NOTED IN THE PLANS.
 2. CONTACT THE M&O FOREMAN AT 225-2513 TO DETERMINE WHICH SIGNS CAN BE SALVAGED. SIGNS WHICH ARE NOT SALVAGED SHALL BE DISPOSED OF BY THE CONTRACTOR.
 3. DELIVER ALL SALVAGED SIGNS TO THE KETCHIKAN DOT/PF MAINTENANCE STATION AT 5148 NORTH TONGASS HIGHWAY.

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

**KTN-NORTH TONGASS
 HIGHWAY
 PAVEMENT RESTORATION
 PROJECT NO. 68229**

Signing Schedule

DESIGNED BY: R. PURVES



CHECKED BY: M. Lukshin
 DRAWN BY: D.W./M.L.

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 & PUBLIC FACILITIES
 STATEWIDE DESIGN & ENGINEERING
 SERVICES DIVISION
**KTN-NORTH TONGASS
 HIGHWAY
 PAVEMENT RESTORATION**

**Signing
 Schedule**

PROJECT DESIGNATION NUMBER
STP-0920(22) ~ 68229

STATE	YEAR
ALASKA	2002
SHEET NUMBER	TOTAL SHEETS
D1	25

SIGNING SUMMARY (CONTINUED)

SIGN #	STATION	OFFSET		CODE NUMBER	FACING	LEGEND	SIZE		AREA SQ. FEET	POST SIZE	REMARKS
		LEFT	RIGHT				WIDTH	HEIGHT			
60	104+00	X		R3-17	SB	Right Lane Bike Only	24	30	5.00	2.5	
61	106+00		X	R2-1	NB	Speed Limit 50	30	36	7.50	2.5	
62	108+40	X		R1-1	EB	Stop	30	30	6.25	2.5	
63	108+40	X		D3-1	WB/EB	N. Tongass	36	8	1.78	2.5	Mount on top of 62
64	108+40	X		D3-1	NB/SB	Shoreline Dr	60	8	3.33		Mount on top of 62
65	111+00		X	R3-17	NB	Right Lane Bike Only	24	30	5.00	2.5	
66	112+50	X		D3-2R	SB	Shoreline Dr =====>	78	12	6.50	2 x 2.5	
67	112+80		X	R1-1	WB	Stop	30	30	6.25	2.5	
68	112+80		X	D3-1	WB/EB	N. Tongass	36	8	1.78		Mount on top of 67
69	112+80		X	D3-1	NB/SB	Dowsley	42	8	2.33		Mount on top of 67
70	113+75	X		R1-1	WB	Stop	30	30	6.25	2.5	
71	114+25		X	R2-1	NB	Speed Limit 50	30	36	7.50	2.5	
72	116+90		X	R1-1	WB	Stop	30	30	6.25	2.5	
73	116+90		X	D3-1	NB/SB	Ridge Rd	42	8	2.33		Mount on top of 72
74	116+90		X	D3-1	WB/EB	N. Tongass	36	8	1.78		Mount on top of 72
75	118+00 121+00		X	M10-2	NB	Milepost 5	6	8	0.33	2.5	
76	118+00 121+00		X	M10-2	SB	Milepost 5	6	8	0.33	2.5	Mount on back of 75
77	121+50		X	Special	NB	Adopt a Highway	36	18	4.5	2.5	
78	121+50		X	Special	NB	Boy Scouts of America	-	-	-	-	Leave existing in place
79	121+50	X		Special	SB	Adopt a Highway	36	18	4.5	2.5	
80	121+50	X		Special	SB	xi alpha beta sigma phi	-	-	-	-	Leave existing in place
81	125+90	X		R8-1	SB	No Parking on Pavement	24	30	5.00	2.5	
82	128+40	X		R1-1	EB	Stop	30	30	6.25	2.5	
83	128+40	X		D3-1	WB/EB	N. Tongass	36	8	2.00		Mount above 82
84	128+40	X		D3-1	NB/SB	Narrows Ln	36	8	2.00		Mount above 82
85	129+00		X	R8-1	NB	No Parking on Pavement	24	30	5.00	2.5	
86	140+90	X		SB		<==== State Troopers	-	-	-	-	Remove
87	148+30	X		R3-17	SB	Right Lane Bike Only	24	30	5.00	2.5	
88	148+30		X	R3-17	NB	Right Lane Bike Only	24	30	5.00	2.5	
89	165+00	X		R8-1	SB	No Parking on Pavement	24	30	5.00	2.5	
90	165+00		X	R8-1	NB	No Parking on Pavement	24	30	5.00	2.5	
91	169+12		X	I-3	NB	Cannery Creek	54	24	9.00	2 x 2.5	
92	170+34	X		I-3	SB	Cannery Creek	54	24	9.00	2 x 2.5	
93	173+45	X		Special	SB	Adopt a Highway	36	18	4.5	2.5	
94	173+45	X		Special	SB	Boy Scouts of America	-	-	-	-	Leave existing in place
95	173+82		X	M10-2	NB	Milepost 6	6	8	0.33	2.5	
96	173+82		X	M10-2	SB	Milepost 6	6	8	0.33	2.5	Mount on back of 95
97	174+50 175+50	X		R2-1	SB	Speed Limit 50	30	36	7.50	2.5	
98	174+50		X	Special	NB	Adopt a Highway	36	18	4.5	2.5	
99	174+50		X	Special	NB	Ktn. Chapter Soc. Of Amer. Foresters	-	-	-	-	Leave existing in place
100	187+00		X	R2-1	SB	Speed Limit 50	30	36	7.50	2.5	
101	209+50 206+35	X		R8-1	SB	No Parking on Pavement	24	30	5.00	2.5	
102	209+50 208+75		X	W1-2L	NB	Turn Left (Symbol)	36	36	9.00	2.5	
103	209+50 208+75		X	W13-1	NB	40 MPH	24	24	4.00		Mount below 102
104	211+00 211+30		X	R3-17	NB	Right Lane Bike Only	24	30	5.00	2.5	
105	211+00 211+30		X	Special	NB	Ends	24	6	1.00		Mount below 104
106	211+00	X		R3-17	SB	Right Lane Bike Only	24	30	5.00	2.5	
107	213+00		X	NB		Various Recreation Signs (Arrow Right)	-	-	-	-	Remove
108	214+00	X		R2-1	SB	Speed Limit 50	30	36	7.50	2.5	
109	215+00		X	R1-1	EB	Stop	30	30	6.25	2.5	
110	215+00		X	D3-1	NB/SB	Ward Lk. Rd.	42	8	2.33		Mount above 109
111	215+00		X	D3-1	WB/EB	N. Tongass	36	8	2.00		Mount above 109
112	220+50		X	I-3	NB	Ward Creek	42	24	7.00	2 x 2.5	
113	220+85		X	OM-3R	NB	Object Marker Right	12	36	3.00	2.5	
114	220+85	X		OM-3L	SB	Object Marker Left	12	36	3.00	2.5	
115	223+10	X		OM-3R	SB	Object Marker Right	12	36	3.00	2.5	
116	223+10		X	OM-3L	NB	Object Marker Left	12	36	3.00	2.5	
117	223+50	X		I-3	SB	Ward Creek	42	24	7.00	2.5	
118	223+75	X		W1-2R	NB	Turn Right (Symbol)	36	36	9.00	2.5	
119	223+75	X		W13-1	NB	40 MPH	24	24	4.00		Mount below 118
120	10+00		X	R8-1	NB	No Parking on Pavement	24	30	5.00	2.5	
121	26+00	X		R2-5A	SB	Reduced Speed Ahead	24	30	5.00	2.5	
122	47+00	X		R3-17	SB	Right Lane Bike Only	24	30	5.00	2.5	
123	66+50	X		R3-17	SB	Right Lane Bike Only	24	30	5.00	2.5	
124	69+00	X		M10-2	SB	Milepost 4	6	8	0.33		Mount on back of 39
125	73+00	X		R8-1	SB	No Parking on Pavement	24	30	5.00	2.5	
126	94+00		X	R3-17	NB	Right Lane Bike Only	24	30	5.00	2.5	
127	106+00	X		R2-1	SB	Speed Limit 50	30	36	7.50	2.5	

TOTAL NEW SIGNS:

522.19

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

**KTN-NORTH TONGASS
 HIGHWAY
 PAVEMENT RESTORATION
 PROJECT NO. 68229**
Signing Schedule

DESIGNED BY: R. PURVES



CHECKED BY: M. Lukshin

DRAWN BY: D.W./M.L.

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

**KTN-NORTH TONGASS
 HIGHWAY
 PAVEMENT RESTORATION**

**Signing
 Schedule**

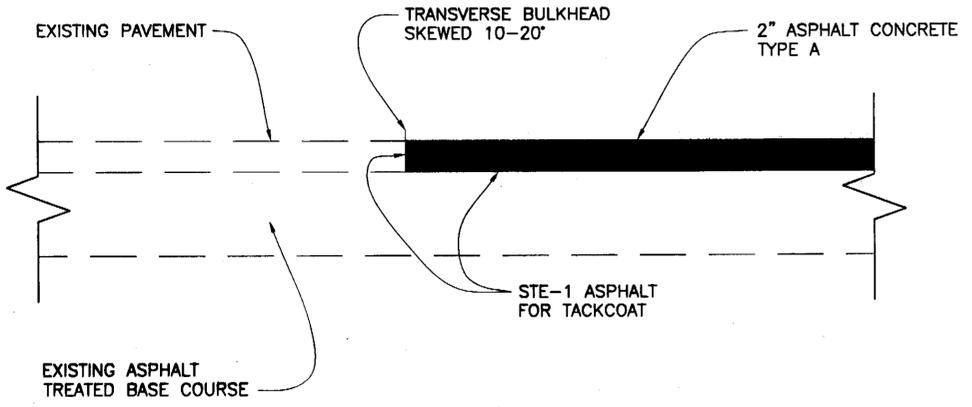
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STP-0920(22) ~ 68229

STATE	YEAR
ALASKA	2002

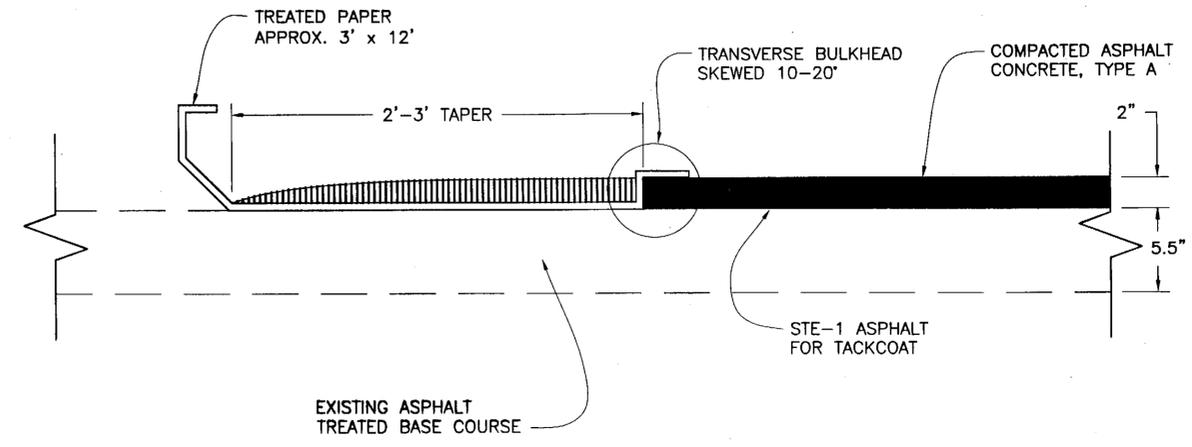
SHEET NUMBER	TOTAL SHEETS
D2	25

ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION



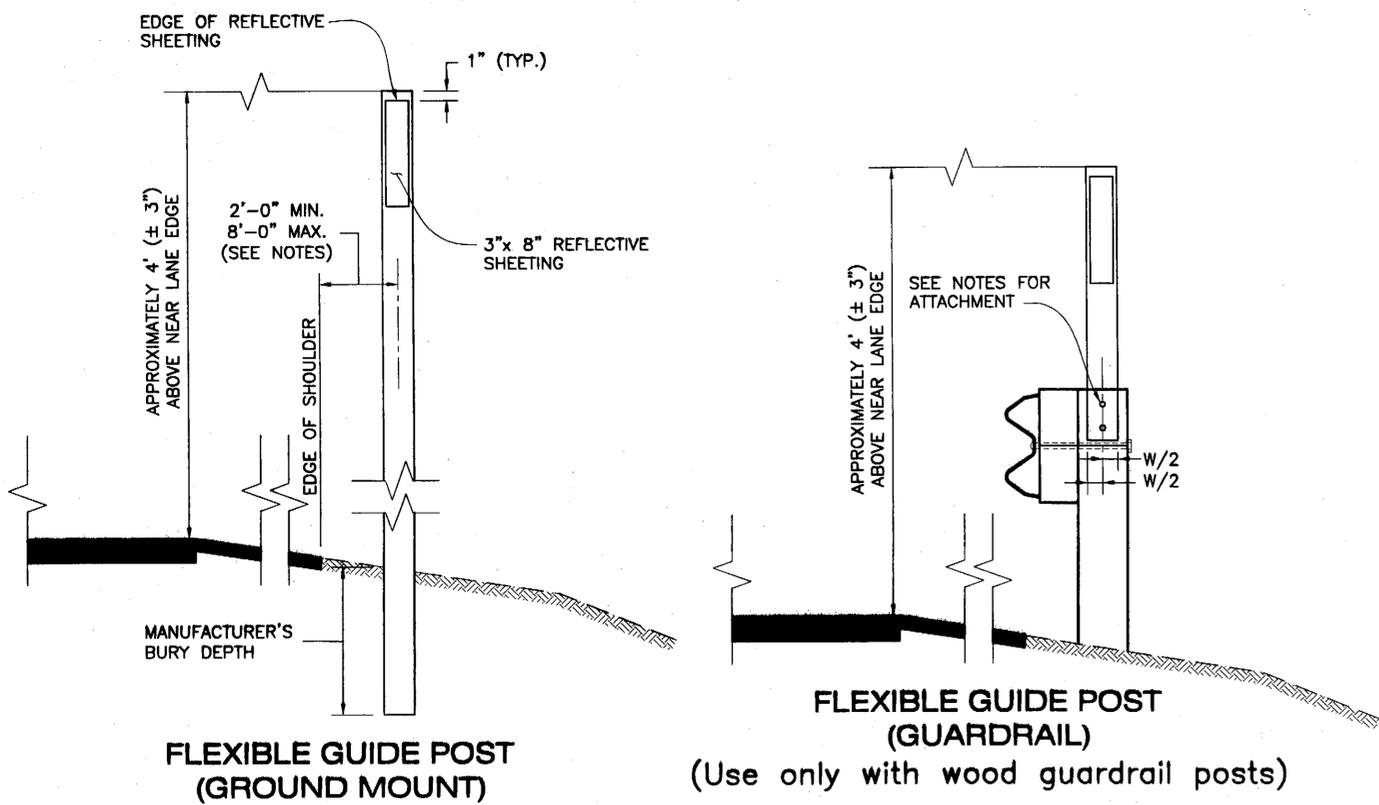
NOTE:
 PAVEMENT TO BE COLD PLANED NO MORE THAN 48 HOURS PRIOR TO OVERLAY OPERATIONS.

Transverse Joint Detail
 B.O.P To E.O.P



NOTE:
 THE TAPERED JOINT SHALL BE A MINIMUM RATIO OF 12:1 FOR THE LENGTH OF THE TAPER TO THE THICKNESS OF THE ASPHALT MATERIAL.
 DISCARD TAPERED ASPHALT MATERIAL.

Temporary Tapered Transverse Joint
 B.O.P To E.O.P



KEY	
	REFLECTIVE SHEETING FACING ONCOMING TRAFFIC.

- DELINEATOR NOTES:**
- THE CONTRACTOR SHALL EITHER:
 a: DRIVE THE FLEXIBLE GUIDE POST IN LINE WITH THE GUARDRAIL POSTS, OR
 b: INSTALL THE SHORTER FLEXIBLE GUIDE POST ON THE GUARDRAIL POST.
 - GUARDRAIL-MOUNTED GUIDE POSTS SHALL BE FASTENED TO THE GUARDRAIL POST WITH TWO 2" x 1/4" LAG SCREWS WITH WASHERS, AS NEAR TO THE CENTERLINE OF THE POST AS POSSIBLE. ALSO ACCEPTABLE IS ANY APPROVED METHOD SUBMITTED BY THE GUIDE POST MANUFACTURER.
 - GUIDE POSTS SHALL BE 2' FROM THE EDGE OF SHOULDER UNLESS OTHERWISE SPECIFIED.
 - FLEXIBLE TUBULAR POSTS SHALL HAVE A BAND OF REFLECTIVE SHEETING NEAR THE TOPS OF THE POST, AT LEAST 8" WIDE, AROUND THE ENTIRE POST.
 - EACH TERMINAL END SHALL HAVE ONE DELINEATOR.
 - DELINEATORS SHALL HAVE WHITE REFLECTIVE SHEETING.
 - GUARDRAIL POSTS SHALL BE PRE-DRILLED PRIOR TO SECURING DELINEATOR WITH SELF-TAPPING SCREWS.

KTN-NORTH TONGASS
 HIGHWAY
 PAVEMENT RESTORATION
 PROJECT NO. 68229

Miscellaneous Details

DESIGNED BY: D. WILLIAMS



CHECKED BY: P. BEDNAROWICZ
 DRAWN BY: D.W./M.L.

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 & PUBLIC FACILITIES
 STATEWIDE DESIGN & ENGINEERING
 SERVICES DIVISION
 KTN-NORTH TONGASS
 HIGHWAY
 PAVEMENT RESTORATION

**Miscellaneous
 Details**

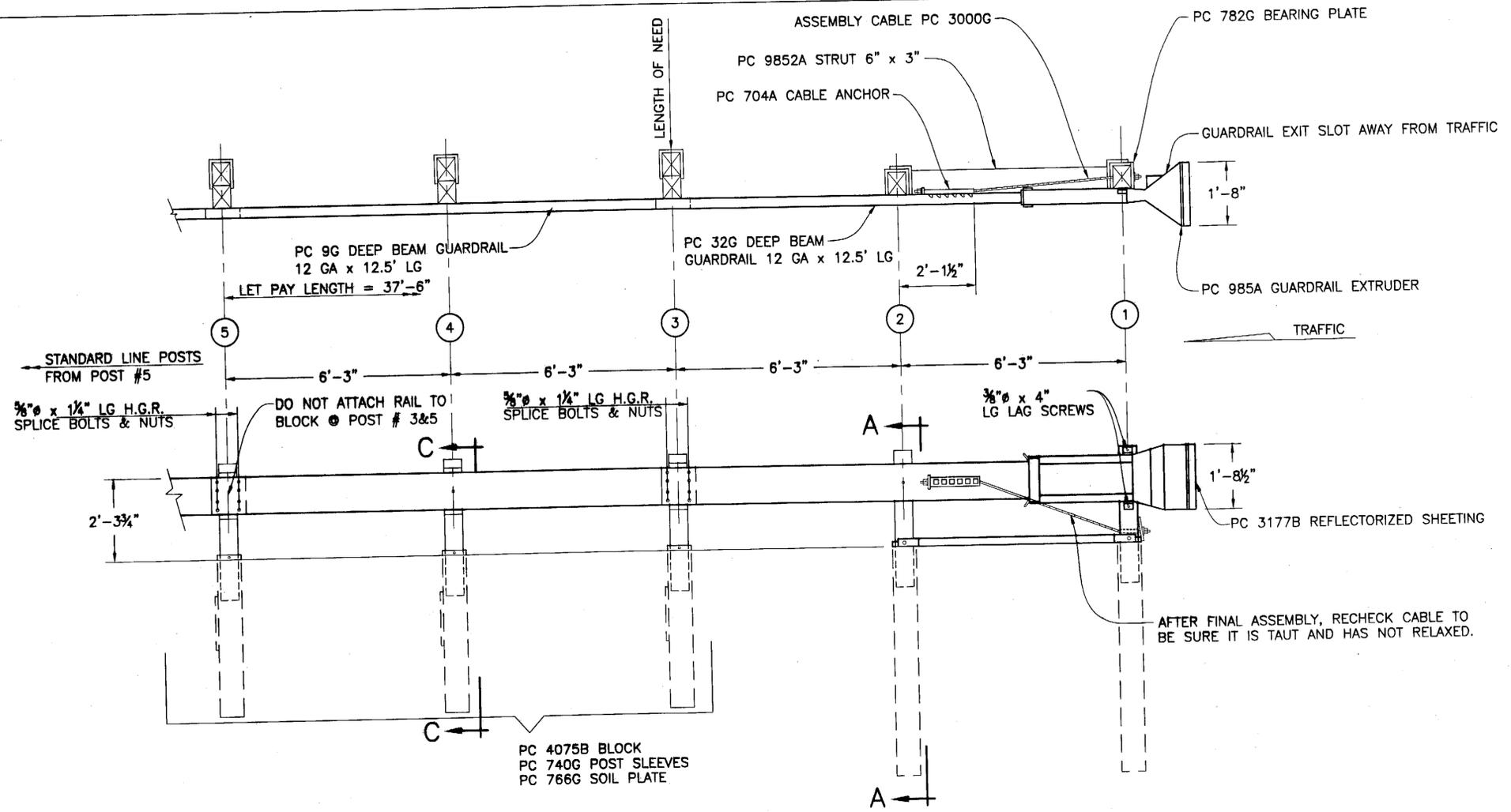
PROJECT DESIGNATION NUMBER
 STP-0920(22) ~ 68229

STATE	YEAR
ALASKA	2002
SHEET NUMBER	TOTAL SHEETS
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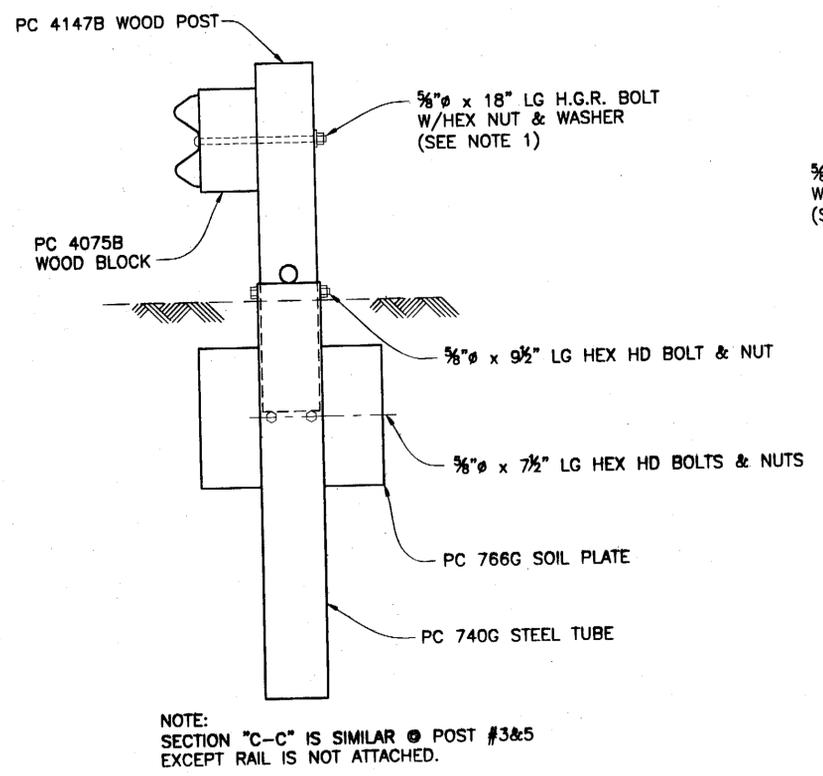
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ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION

ET-2000
GUARDRAIL TERMINAL SECTION END DETAIL

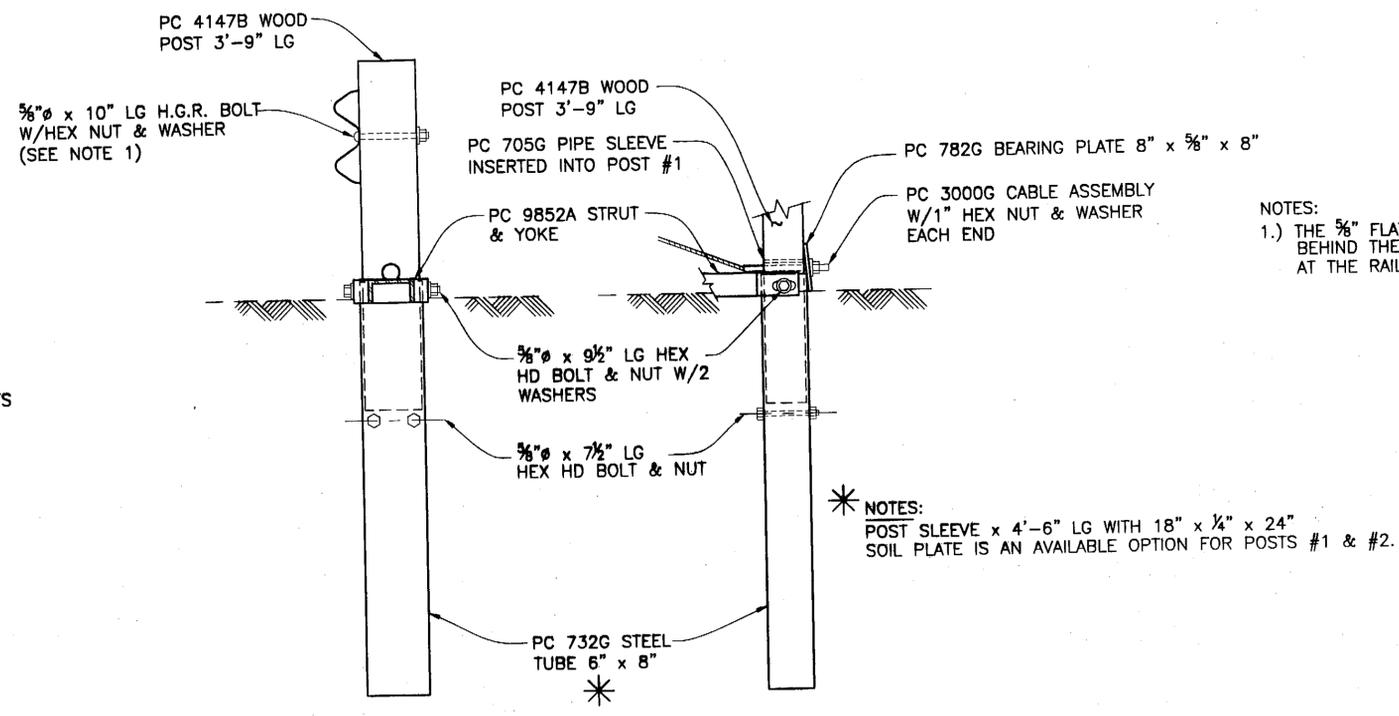
KTN-NORTH TONGASS
 HIGHWAY
 PAVEMENT RESTORATION
 PROJECT NO. 68229



PLAN & PROFILE VIEW



SECTION "C-C"
 (@ POST #4)



SECTION "A-A"
 (@ POST #2)

PARTIAL VIEW @ POST #1

NOTES:
 1.) THE 5/8" FLAT WASHER IS USED UNDER THE NUT, BEHIND THE POST ONLY. NO WASHER IS USED AT THE RAIL.

DESIGNED BY: D. WILLIAMS



CHECKED BY: P. BEDNAROWICZ
 DRAWN BY: D.W./M.L.

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

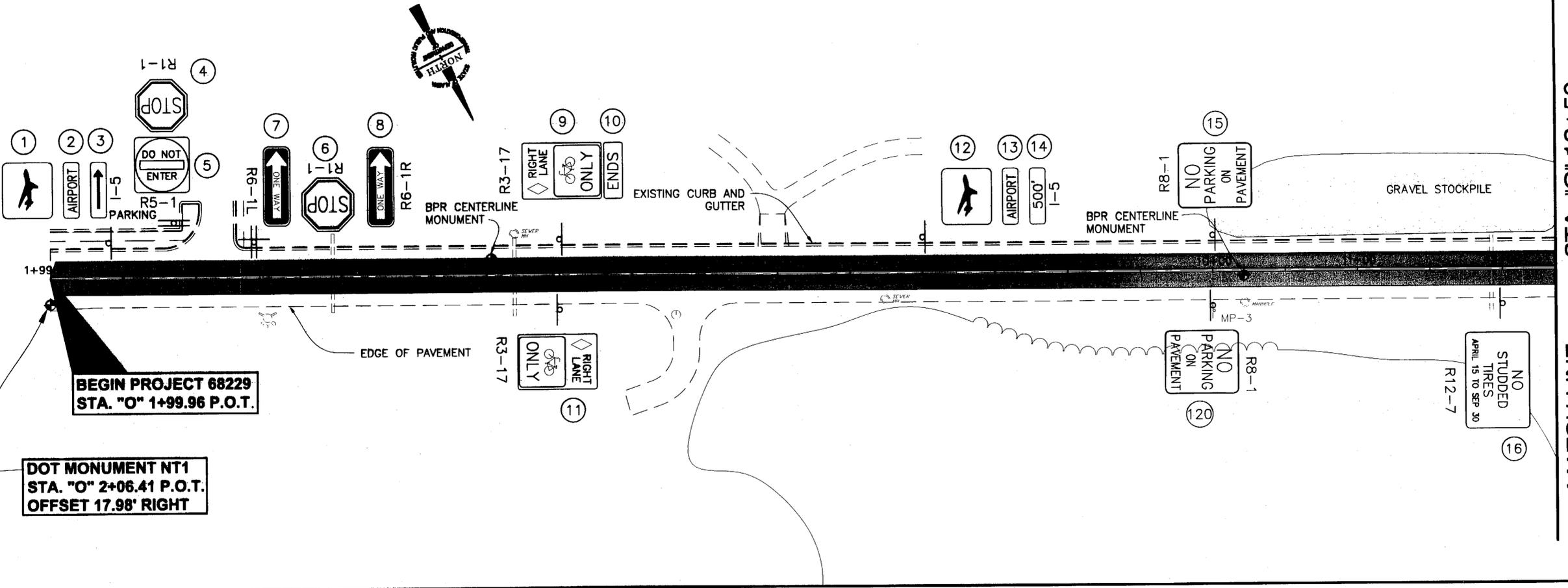
**KTN-NORTH TONGASS
 HIGHWAY
 PAVEMENT RESTORATION
 GUARDRAIL
 TERMINAL SECTION
 END DETAIL**

PROJECT DESIGNATION NUMBER
STP-0920(22) ~ 68229

STATE	YEAR
ALASKA	2002
SHEET NUMBER	TOTAL SHEETS
E2	25

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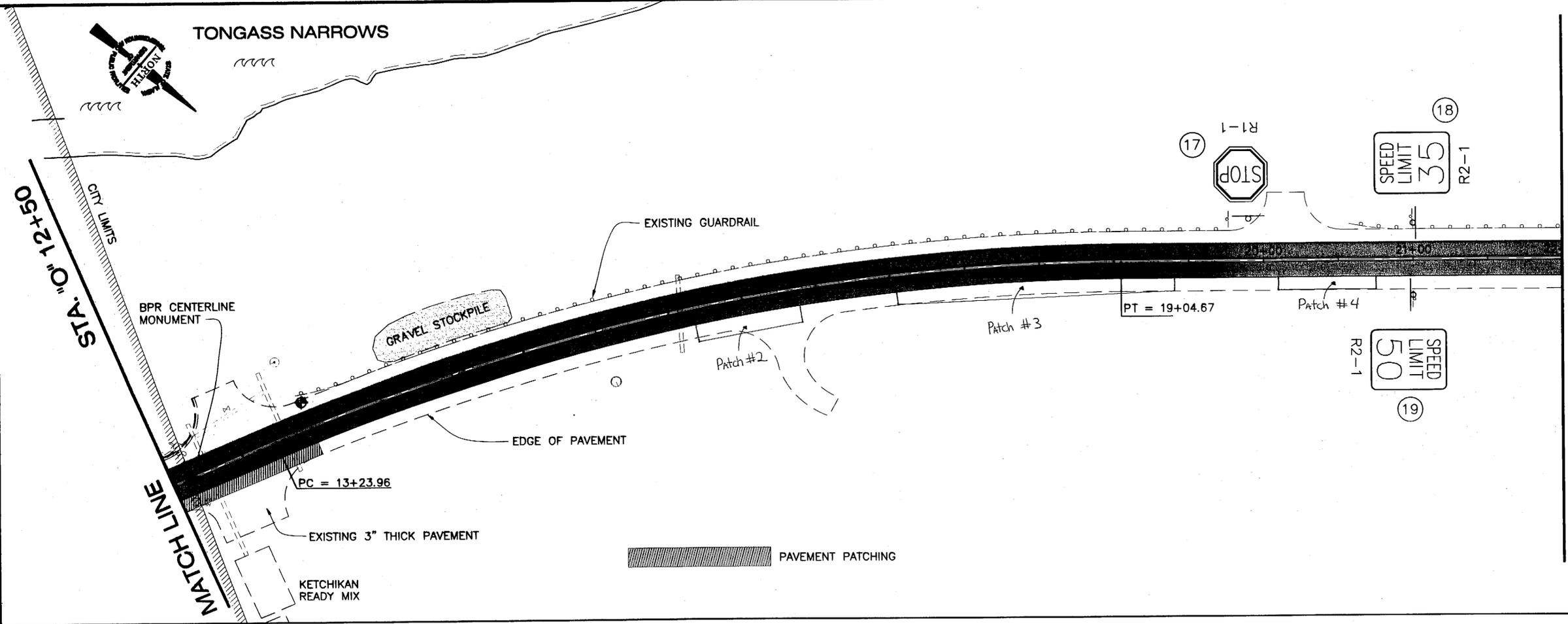
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RECORD OF REVISIONS		
No.	DATE	DESCRIPTION



MATCH LINE STA. "O" 12+50

KTN-NORTH TONGASS
 HIGHWAY
 PAVEMENT RESTORATION
 PROJECT NO. 68229

Highway Plans & Signing



MATCH LINE STA. "O" 22+00

DESIGNED BY: D. WILLIAMS



CHECKED BY: P. BEDNAROWICZ
 DRAWN BY: D.W./M.L.

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 DEPARTMENT OF TRANSPORTATION
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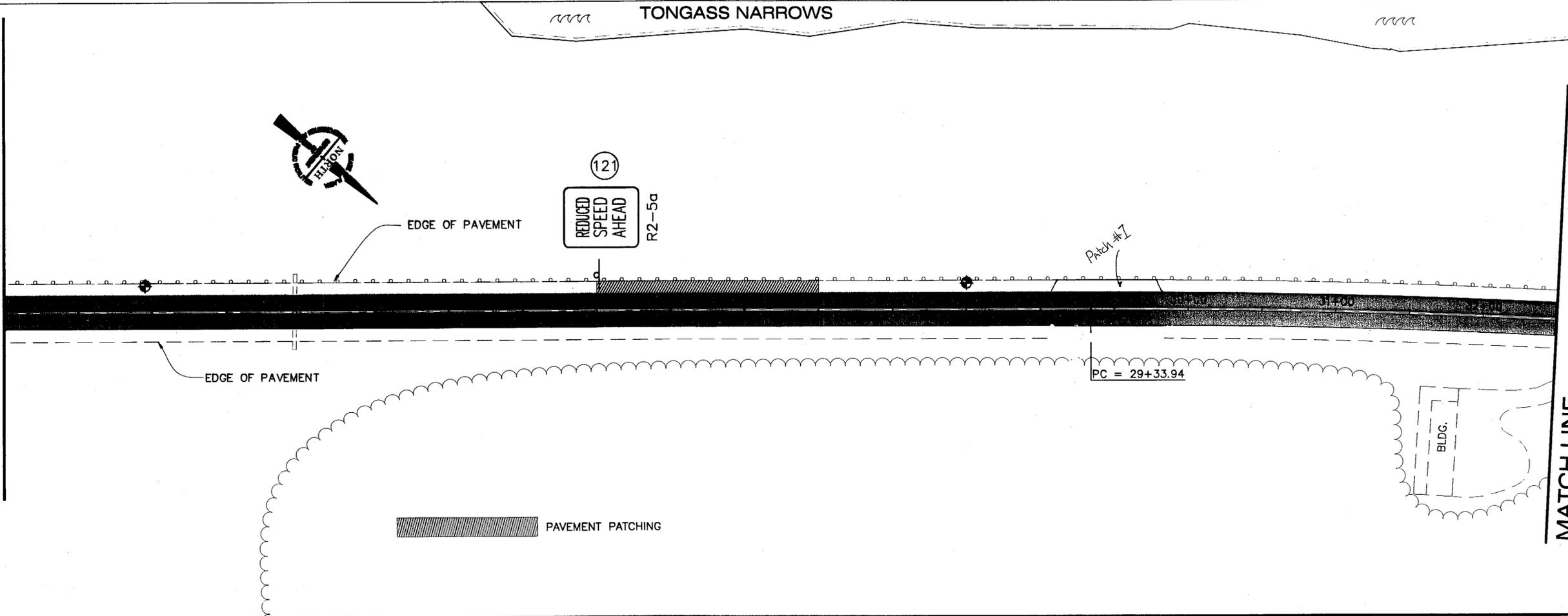
**KTN-NORTH TONGASS
 HIGHWAY
 PAVEMENT RESTORATION
 Highway
 Plans &
 Signing**

PROJECT DESIGNATION NUMBER
STP-0920(22) ~ 68229

STATE	YEAR
ALASKA	2002
SHEET NUMBER	TOTAL SHEETS
F1	25

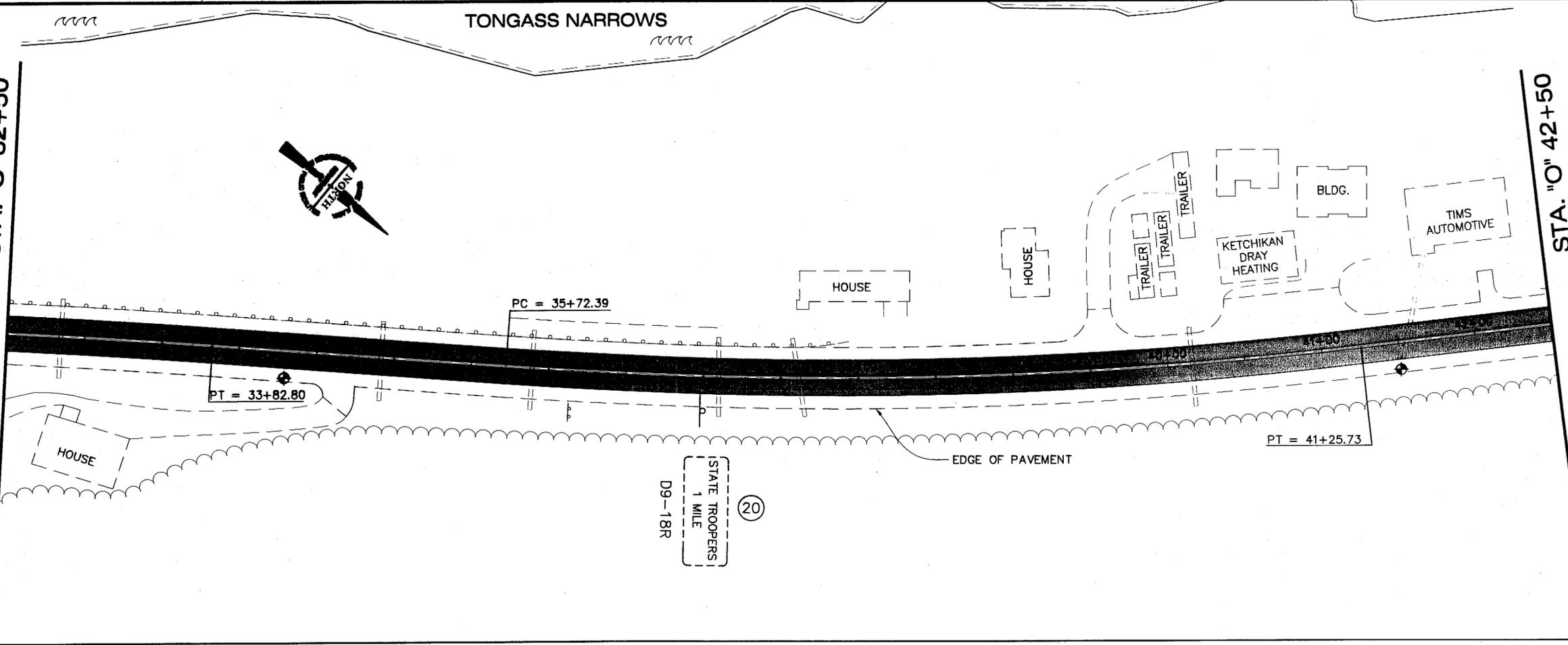
STA. "O" 22+00

MATCH LINE



STA. "O" 32+50

MATCH LINE



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ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION

KTN-NORTH TONGASS
 HIGHWAY
 PAVEMENT RESTORATION
 PROJECT NO. 68229

Highway Plans & Signing

DESIGNED BY: D. WILLIAMS



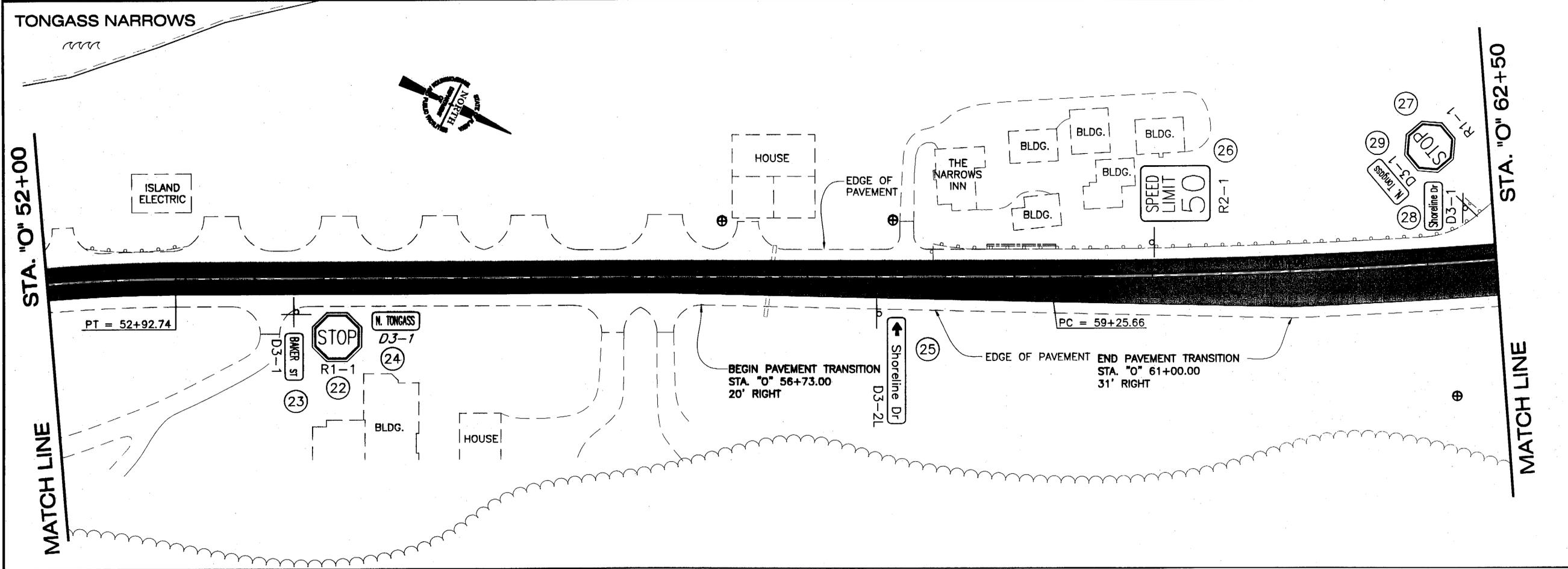
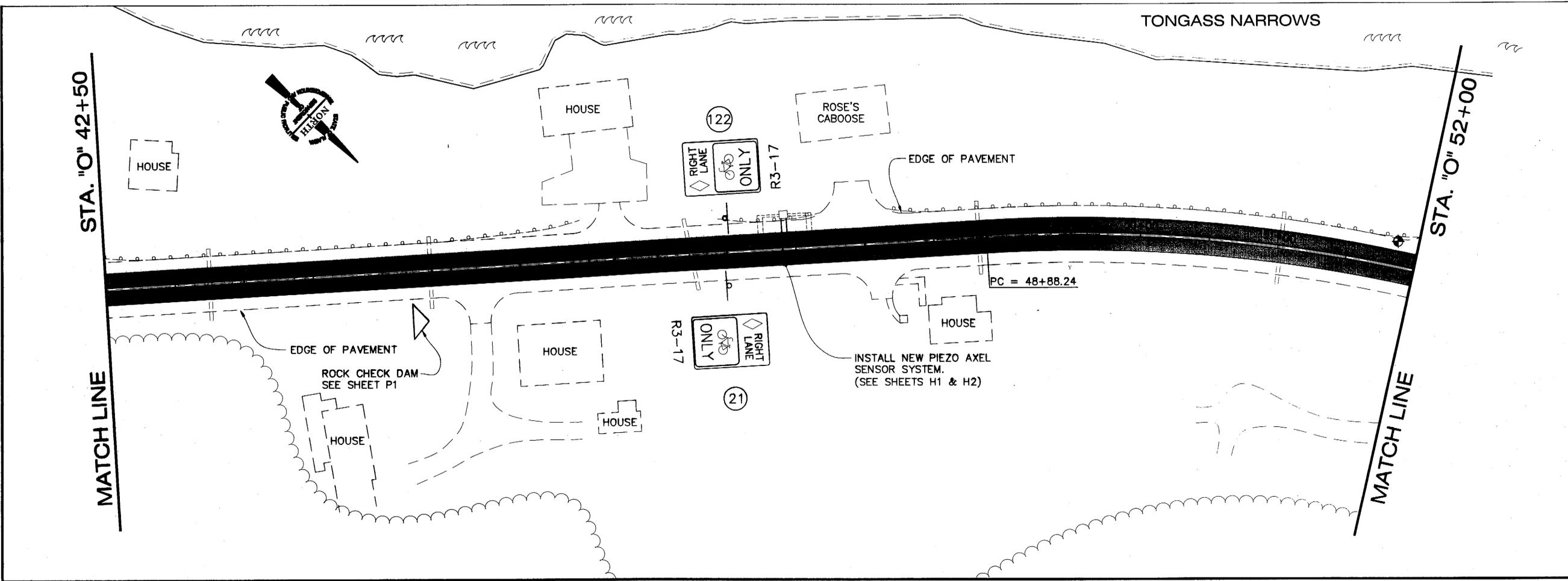
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 DRAWN BY: D.W./M.L.

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**KTN-NORTH TONGASS
 HIGHWAY
 PAVEMENT RESTORATION
 Highway
 Plans &
 Signing**

PROJECT DESIGNATION NUMBER
STP-0920(22) ~ 68229

STATE	YEAR
ALASKA	2002
SHEET NUMBER	TOTAL SHEETS
F2	25



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ADDENDUM NUMBER
 ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

**KTN-NORTH TONGASS
 HIGHWAY
 PAVEMENT RESTORATION
 PROJECT NO. 68229**

Highway Plans & Signing

DESIGNED BY: D. WILLIAMS



CHECKED BY: P. BEDNAROWICZ
 DRAWN BY: D.W./M.L.

STATE OF ALASKA
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**KTN-NORTH TONGASS
 HIGHWAY
 PAVEMENT RESTORATION
 Highway
 Plans &
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PROJECT DESIGNATION NUMBER
STP-0920(22) ~ 68229

STATE	YEAR
ALASKA	2002
SHEET NUMBER	TOTAL SHEETS
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ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION

KTN-NORTH TONGASS
 HIGHWAY
 PAVEMENT RESTORATION
 PROJECT NO. 68229

Highway Plans & Signing

DESIGNED BY: D. WILLIAMS



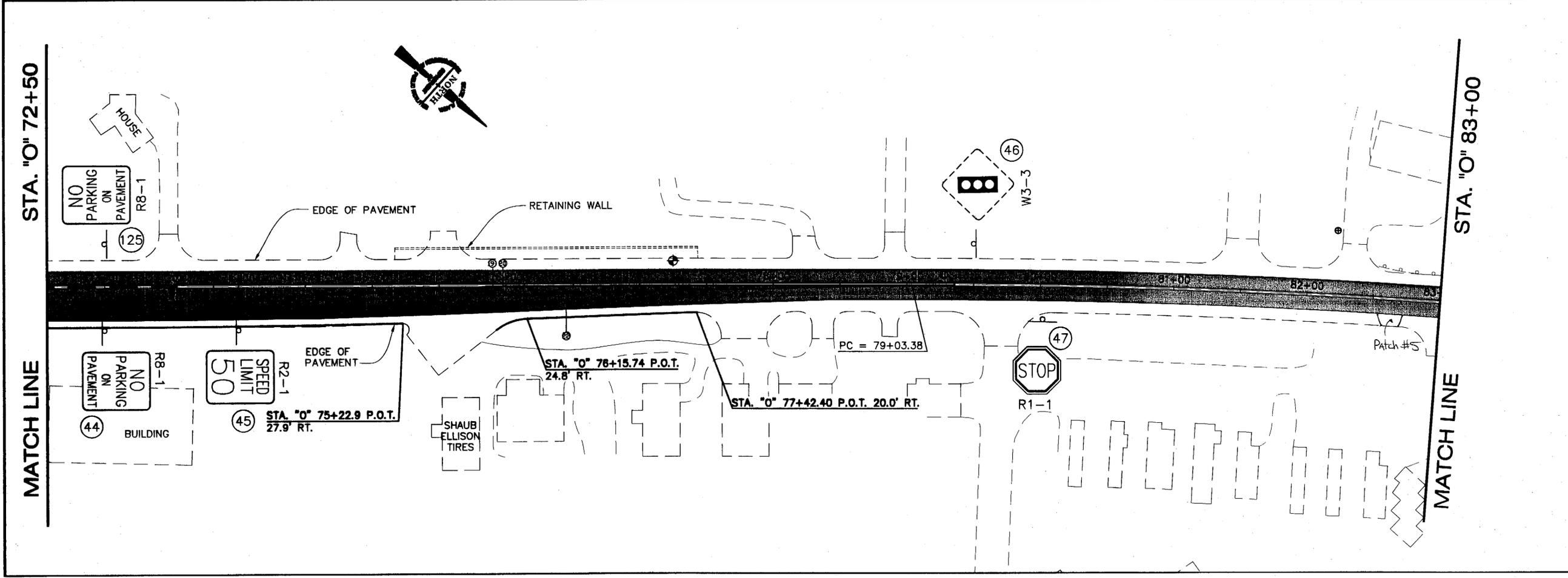
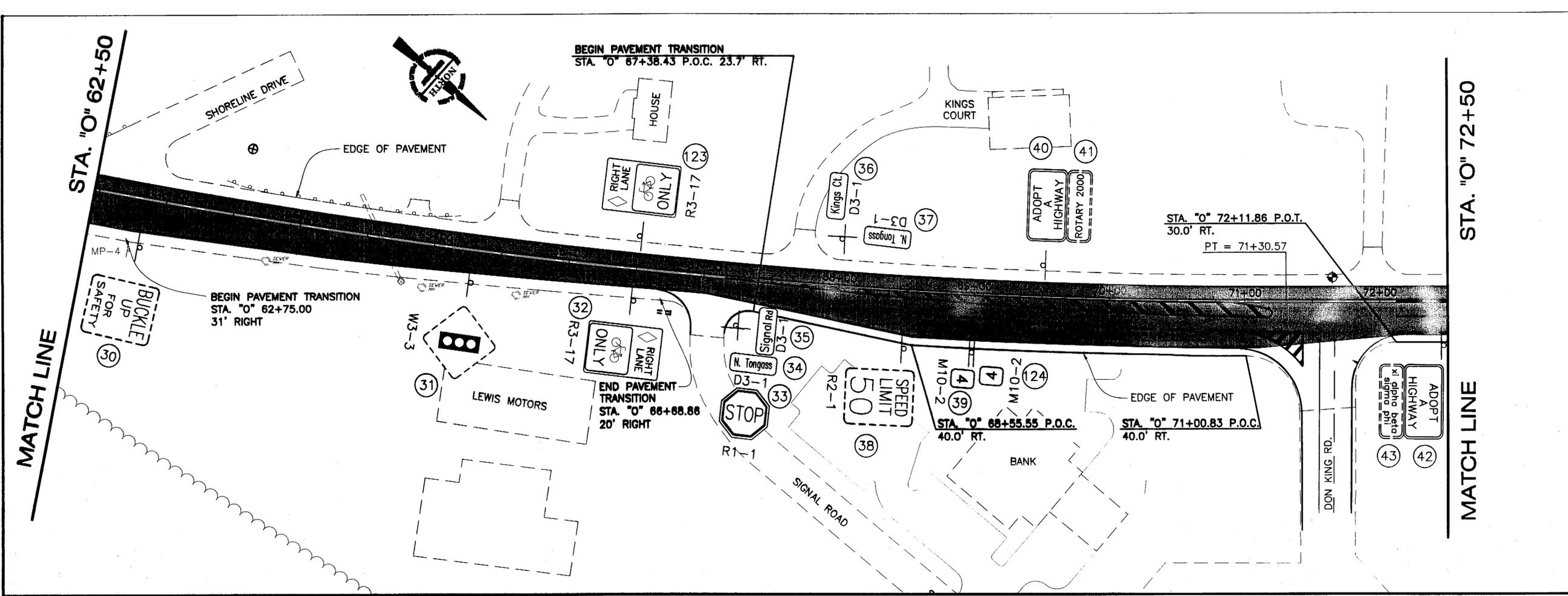
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**KTN-NORTH TONGASS
 HIGHWAY
 PAVEMENT RESTORATION
 Highway
 Plans &
 Signing**

PROJECT DESIGNATION NUMBER
STP-0920(22) ~ 68229

STATE	YEAR
ALASKA	2002
SHEET NUMBER	TOTAL SHEETS
F4	25



ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION

KTN-NORTH TONGASS
 HIGHWAY
 PAVEMENT RESTORATION
 PROJECT NO. 68229

DESIGNED BY: D. WILLIAMS



CHECKED BY: P. BEDNAROWICZ
 DRAWN BY: D.W./M.L.

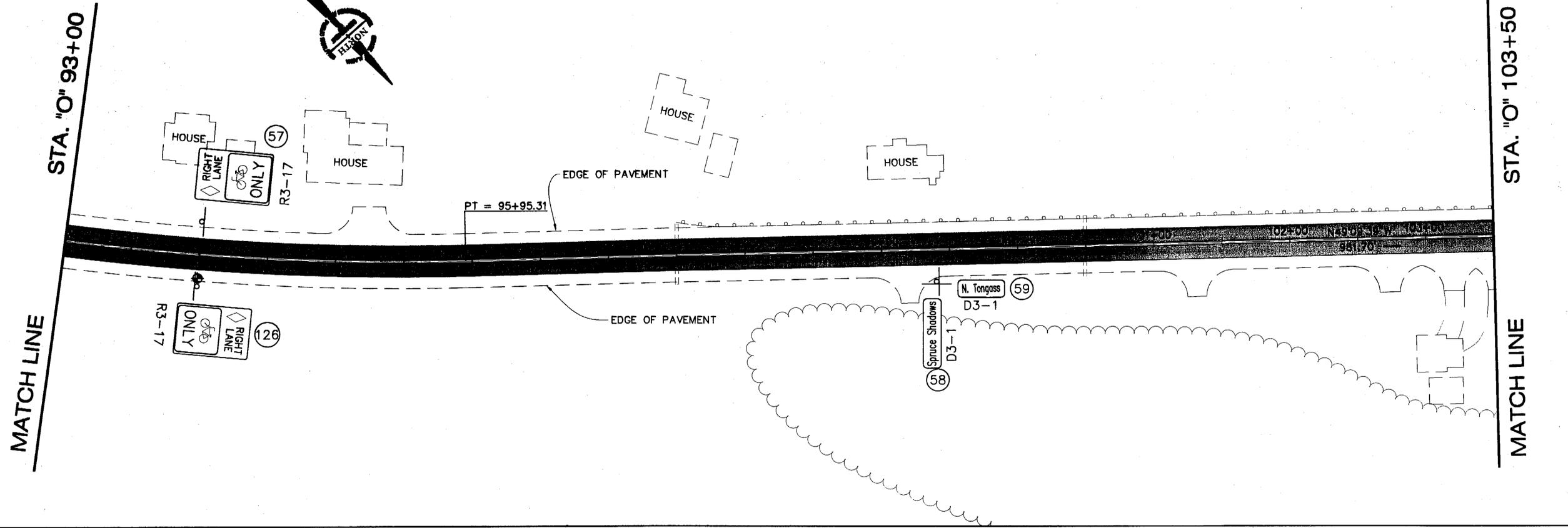
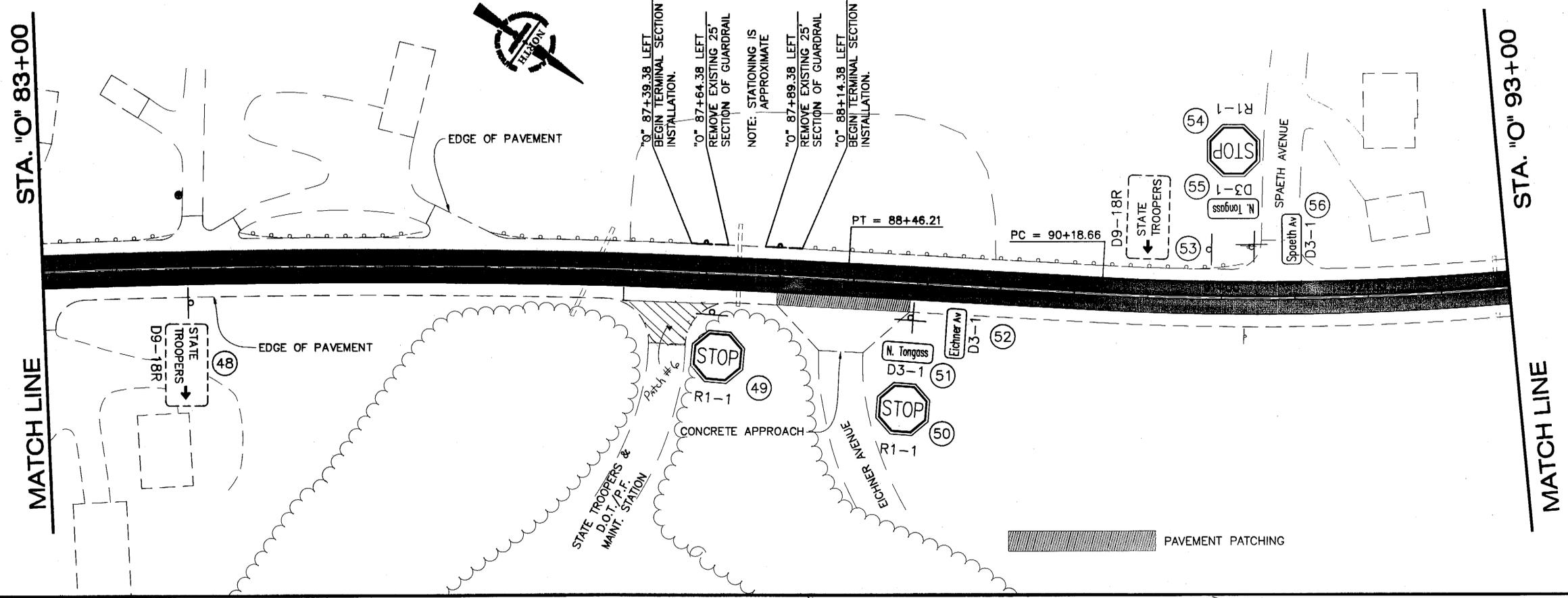
STATE OF ALASKA
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 SERVICES DIVISION

**KTN-NORTH TONGASS
 HIGHWAY
 PAVEMENT RESTORATION
 Highway
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PROJECT DESIGNATION NUMBER
STP-0920(22) ~ 68229

STATE	YEAR
ALASKA	2002
SHEET NUMBER	TOTAL SHEETS
F5	25

Highway Plans & Signing



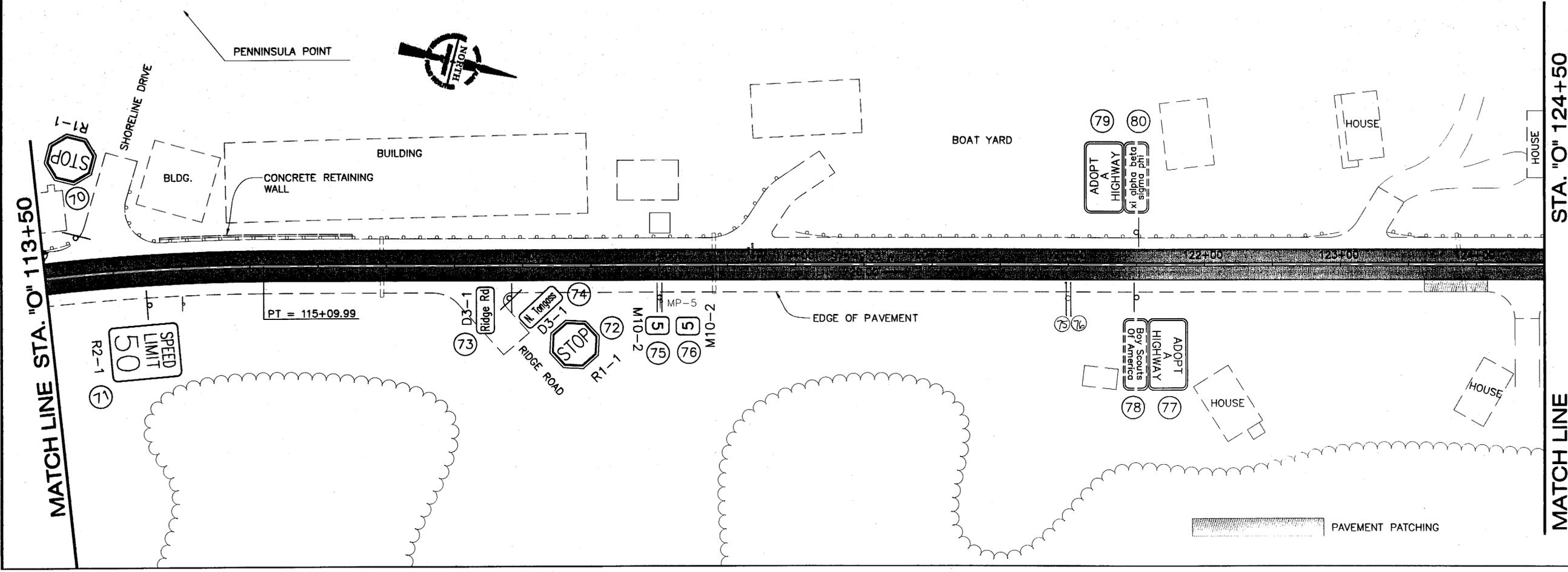
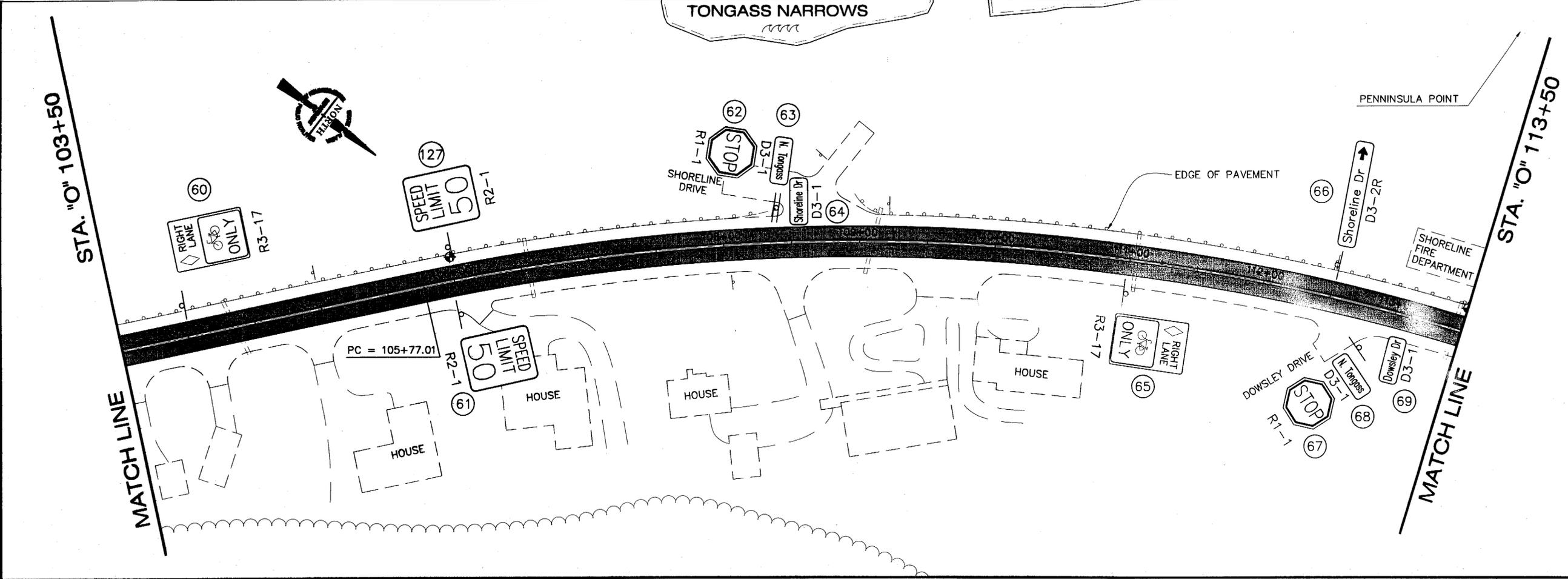
TONGASS NARROWS

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ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION

KTN-NORTH TONGASS
HIGHWAY
PAVEMENT RESTORATION
PROJECT NO. 68229

Highway Plans & Signing



DESIGNED BY: D. WILLIAMS

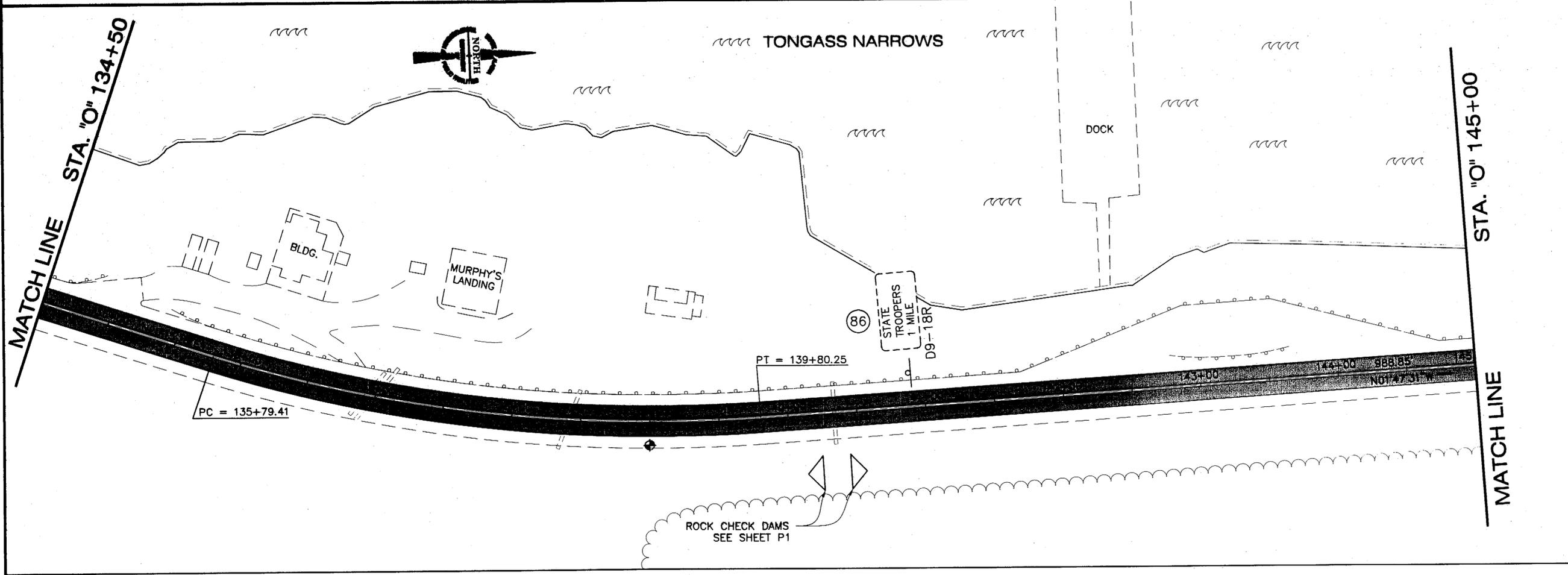
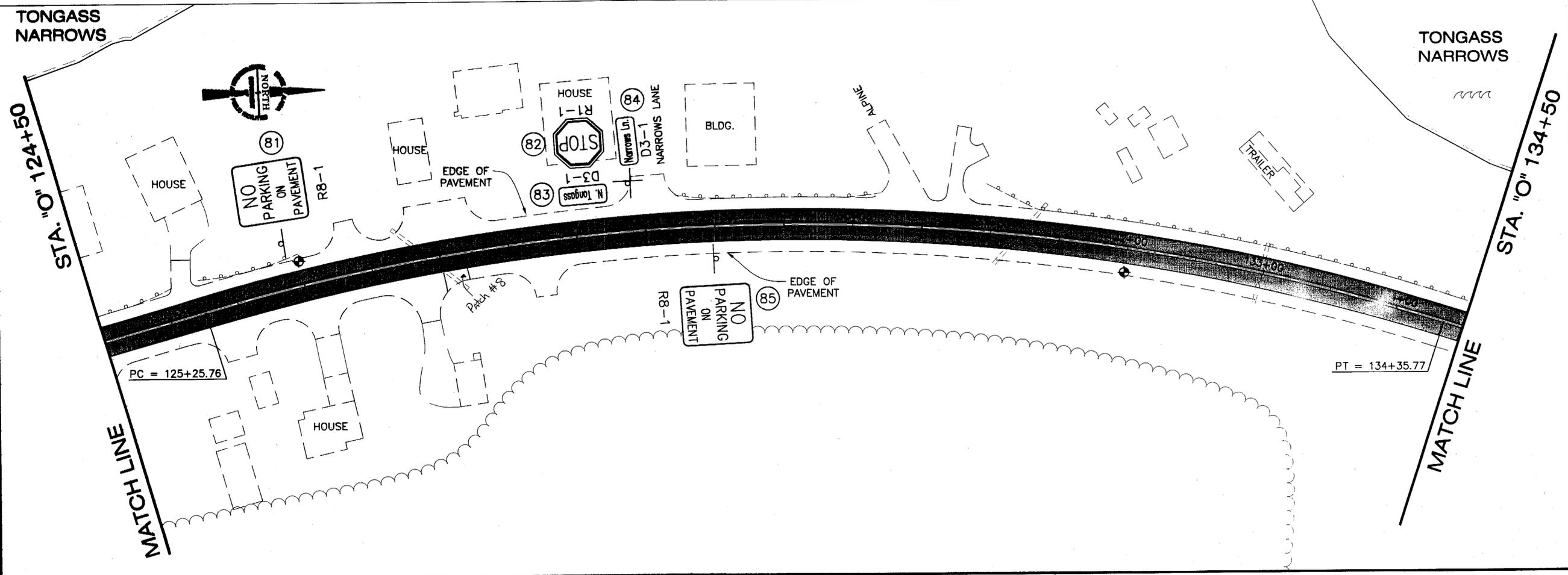


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DEPARTMENT OF TRANSPORTATION
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STATEWIDE DESIGN & ENGINEERING
SERVICES DIVISION
**KTN-NORTH TONGASS
HIGHWAY
PAVEMENT RESTORATION
Highway
Plans &
Signing**

PROJECT DESIGNATION NUMBER
STP-0920(22) ~ 68229

STATE	YEAR
ALASKA	2002
SHEET NUMBER	TOTAL SHEETS
F6	25



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ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION

KTN-NORTH TONGASS
 HIGHWAY
 PAVEMENT RESTORATION
 PROJECT NO. 68229

Highway Plans & Signing

DESIGNED BY: D. WILLIAMS

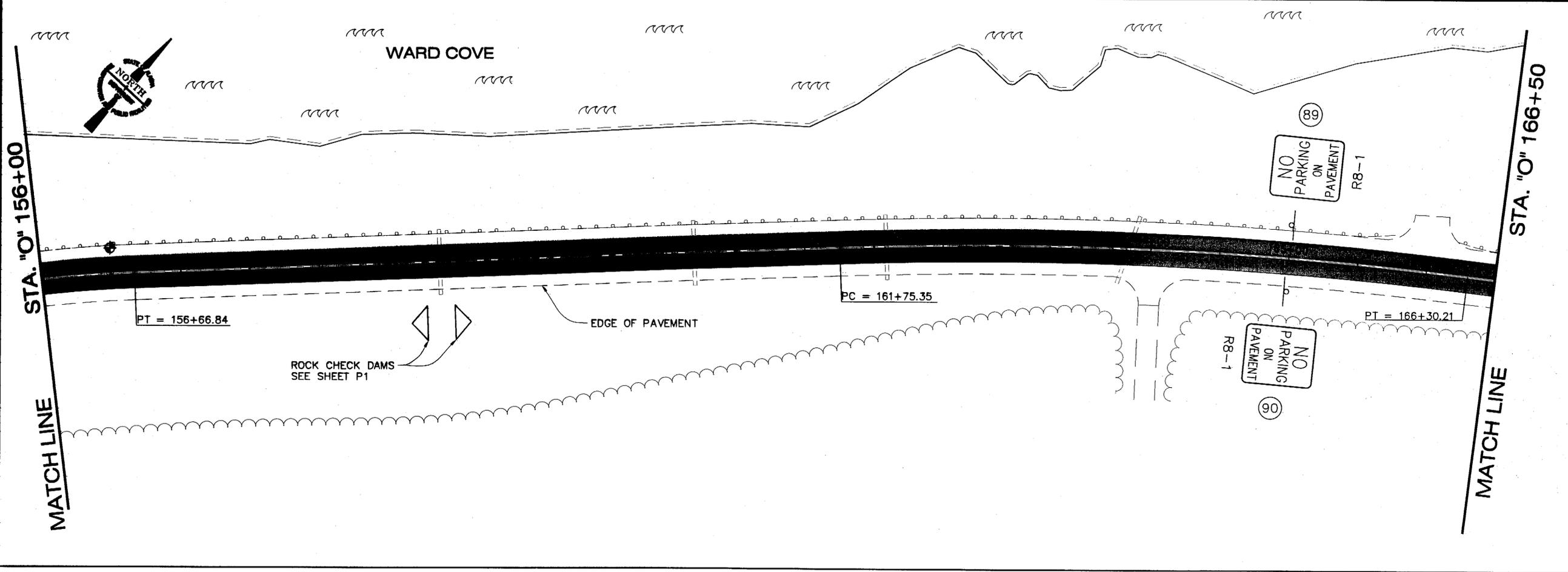
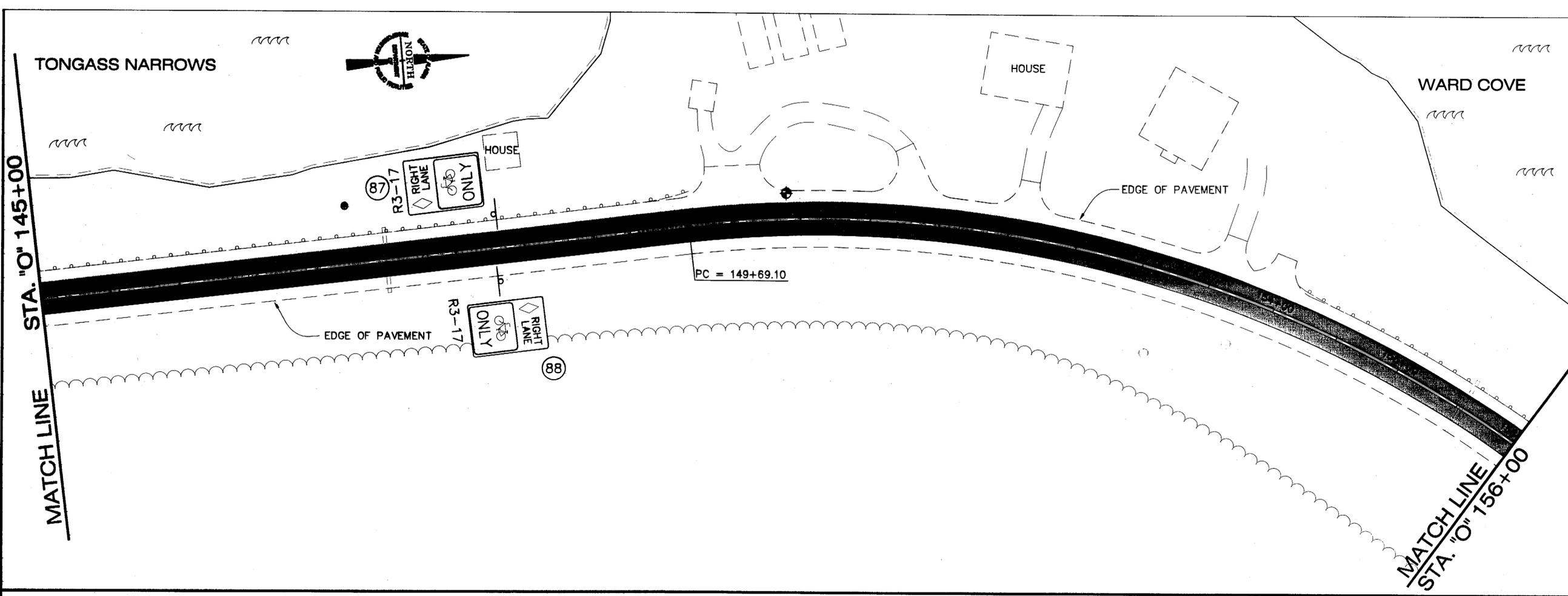


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 DRAWN BY: D.W./M.L.

STATE OF ALASKA
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**KTN-NORTH TONGASS
 HIGHWAY
 PAVEMENT RESTORATION
 Highway
 Plans &
 Signing**

PROJECT DESIGNATION NUMBER	
STP-0920(22) ~ 68229	
STATE	YEAR
ALASKA	2002
SHEET NUMBER	TOTAL SHEETS
F7	25



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ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION

KTN-NORTH TONGASS
 HIGHWAY
 PAVEMENT RESTORATION
 PROJECT NO. 68229

Highway Plans & Signing

DESIGNED BY: D. WILLIAMS

CHECKED BY: P. BEDNAROWICZ
 DRAWN BY: D.W./M.L.

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

**KTN-NORTH TONGASS
 HIGHWAY
 PAVEMENT RESTORATION
 Highway
 Plans &
 Signing**

PROJECT DESIGNATION NUMBER
STP-0920(22) ~ 68229

STATE	YEAR
ALASKA	2002
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ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION

KTN-NORTH TONGASS
 HIGHWAY
 PAVEMENT RESTORATION
 PROJECT NO. 68229

Highway Plans & Signing

DESIGNED BY: D. WILLIAMS

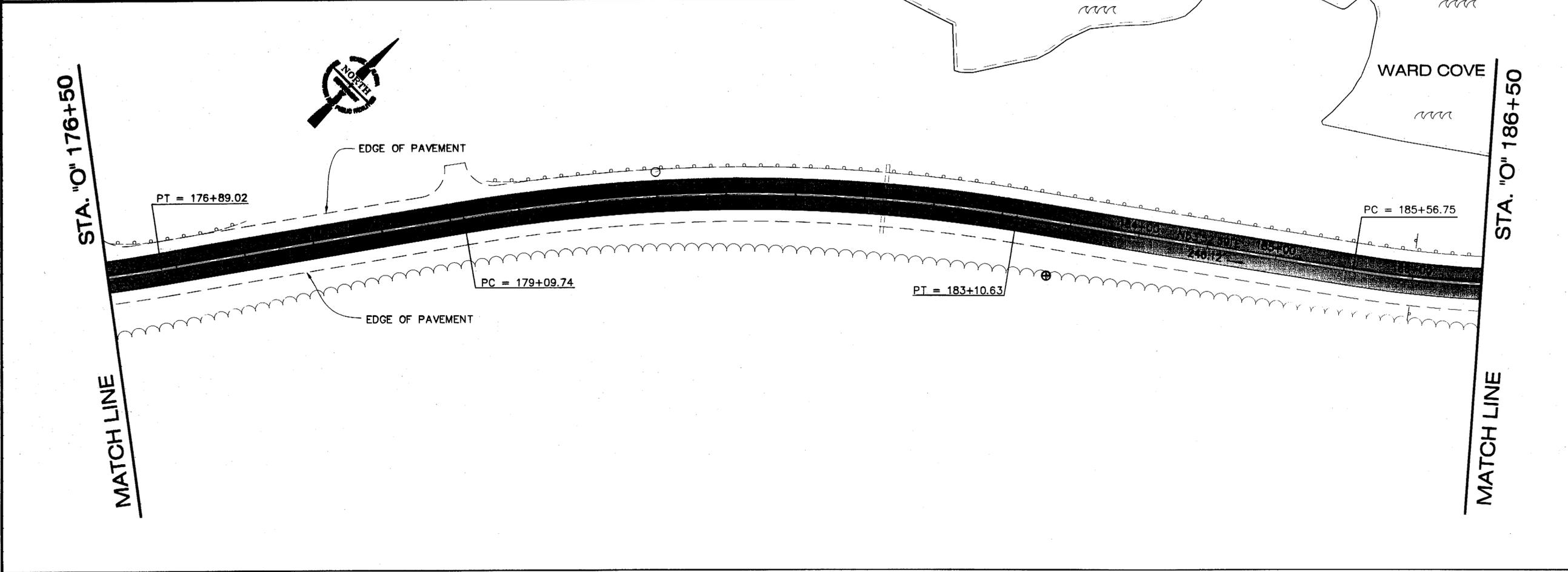
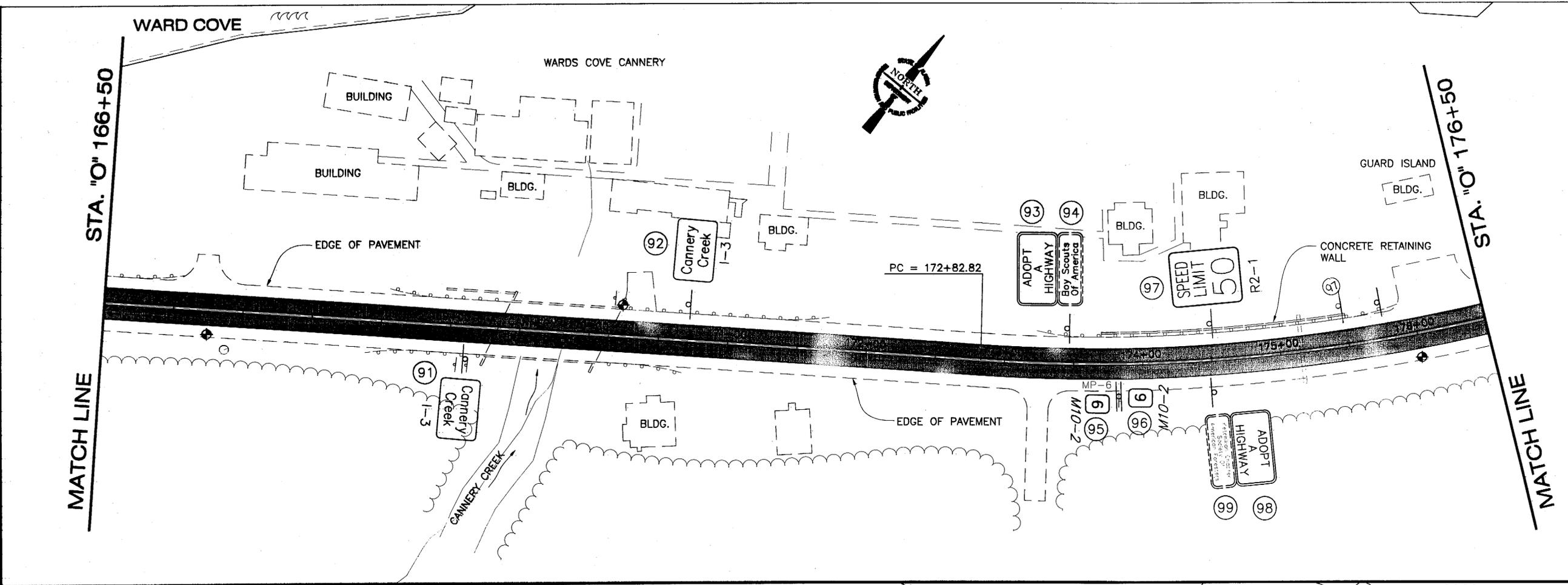


CHECKED BY: P. BEDNAROWICZ
 DRAWN BY: D.W./M.L.

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 & PUBLIC FACILITIES
 STATEWIDE DESIGN & ENGINEERING
 SERVICES DIVISION
**KTN-NORTH TONGASS
 HIGHWAY
 PAVEMENT RESTORATION
 Highway
 Plans &
 Signing**

PROJECT DESIGNATION NUMBER
STP-0920(22) ~ 68229

STATE	YEAR
ALASKA	2002
SHEET NUMBER	TOTAL SHEETS
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ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION

KTN-NORTH TONGASS
 HIGHWAY
 PAVEMENT RESTORATION
 PROJECT NO. 68229

Highway Plans & Signing

DESIGNED BY: D. WILLIAMS

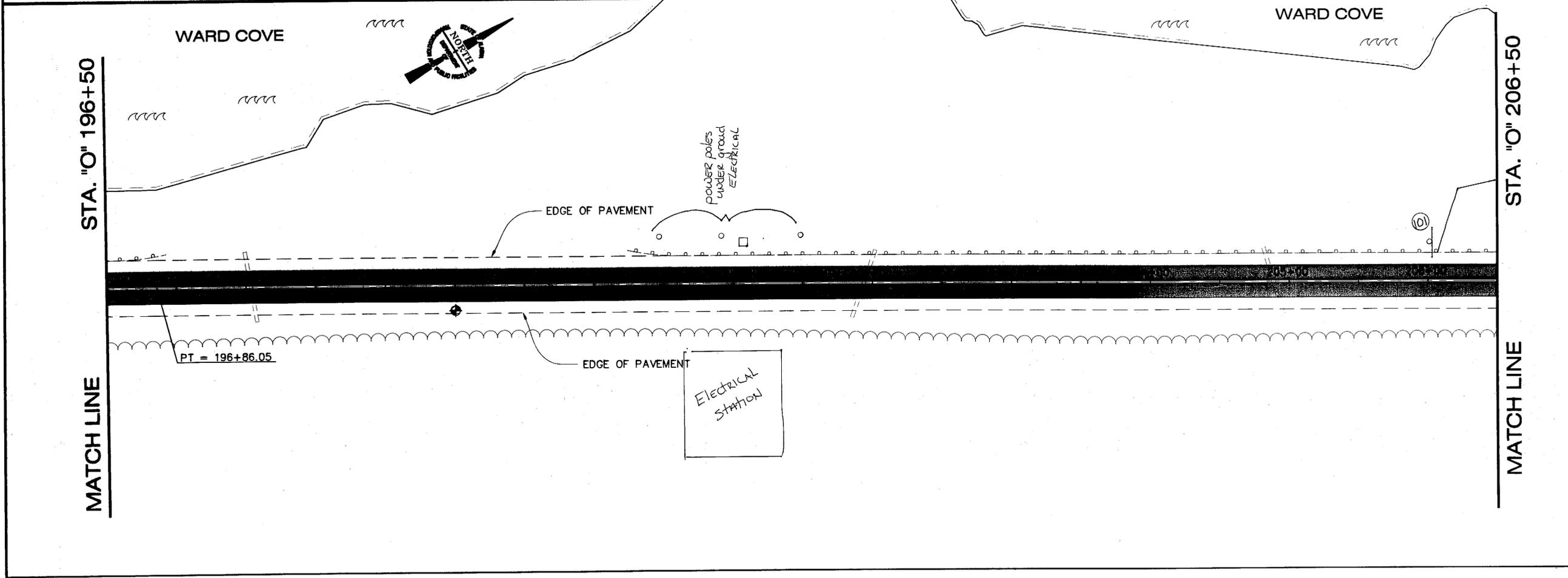
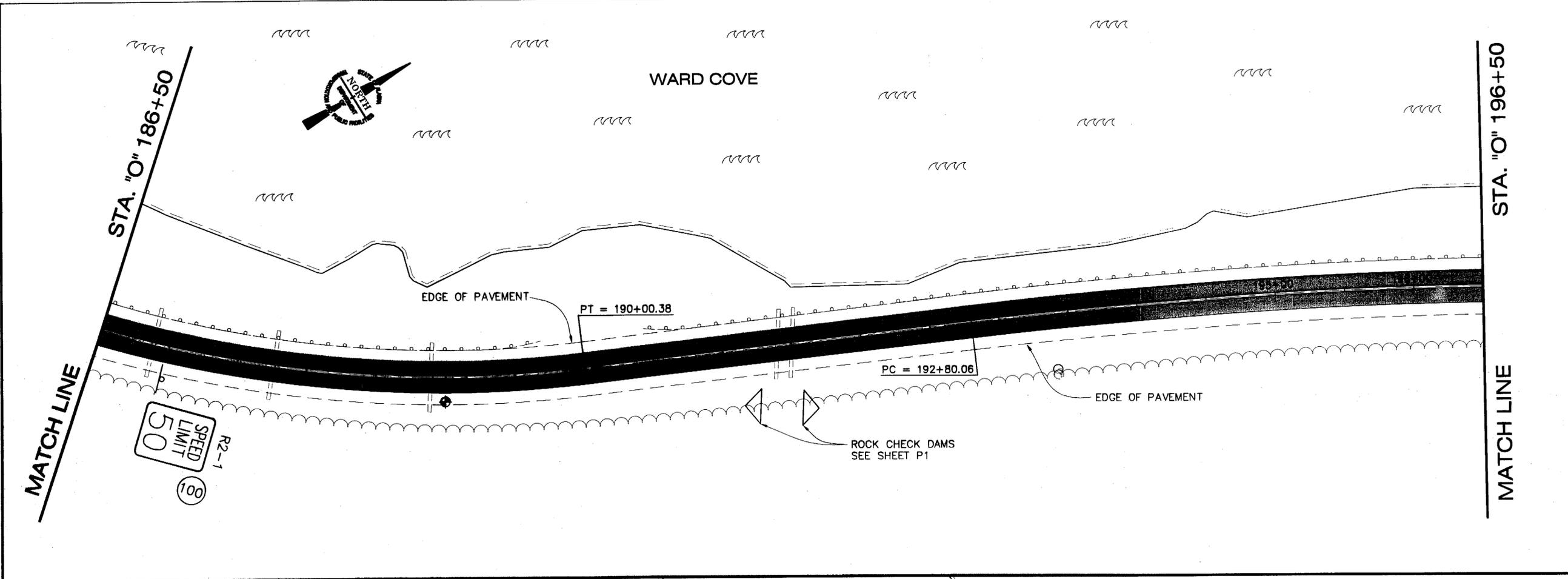


CHECKED BY: P. BEDNAROWICZ
 DRAWN BY: D.W./M.L.

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 & PUBLIC FACILITIES
 STATEWIDE DESIGN & ENGINEERING
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**KTN-NORTH TONGASS
 HIGHWAY
 PAVEMENT RESTORATION
 Highway
 Plans &
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PROJECT DESIGNATION NUMBER
STP-0920(22) ~ 68229

STATE	YEAR
ALASKA	2002
SHEET NUMBER	TOTAL SHEETS
F10	25

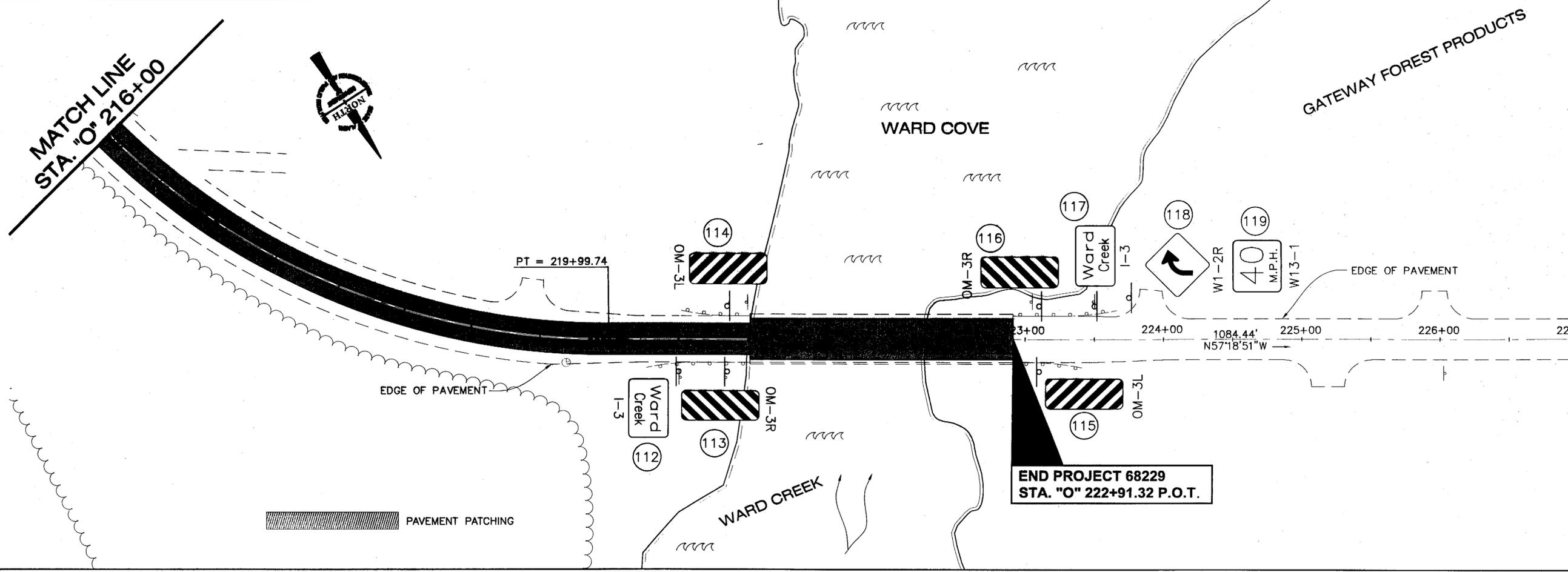
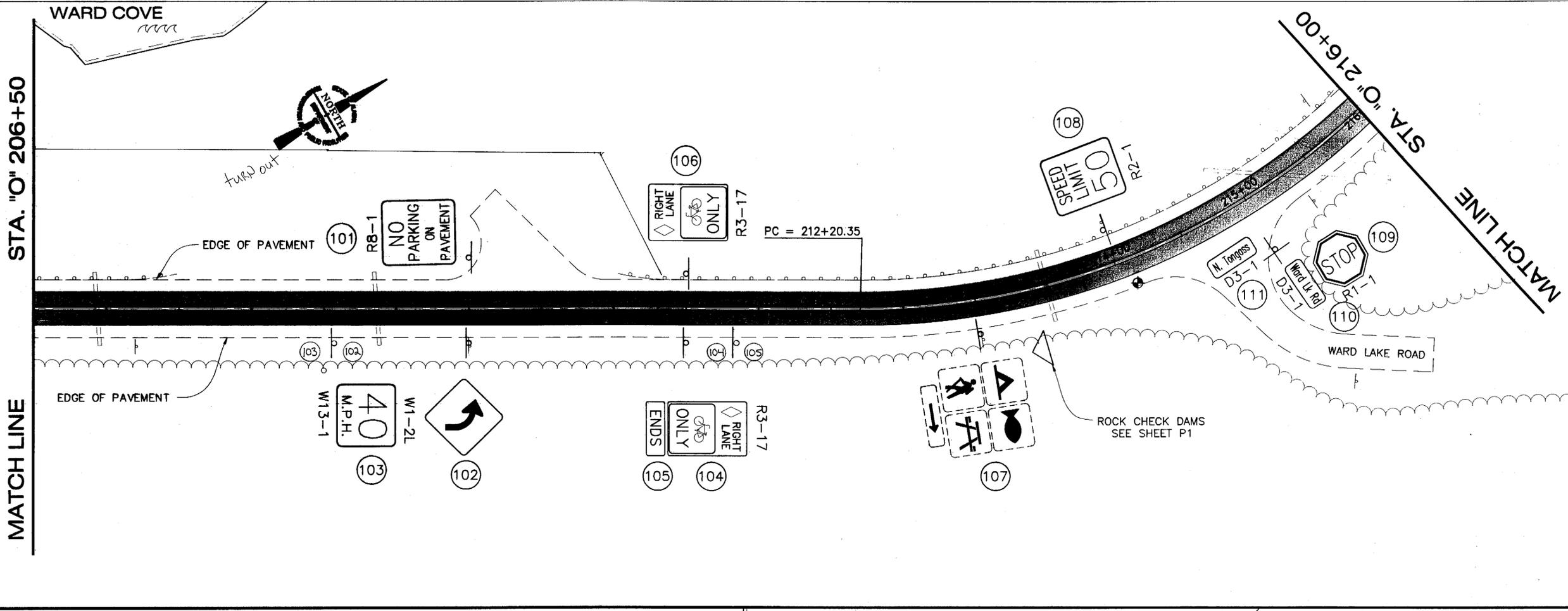


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ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION

KTN-NORTH TONGASS
 HIGHWAY
 PAVEMENT RESTORATION
 PROJECT NO. 68229

Highway Plans & Signing



DESIGNED BY: D. WILLIAMS



CHECKED BY: P. BEDNAROWICZ
 DRAWN BY: D.W./M.L.

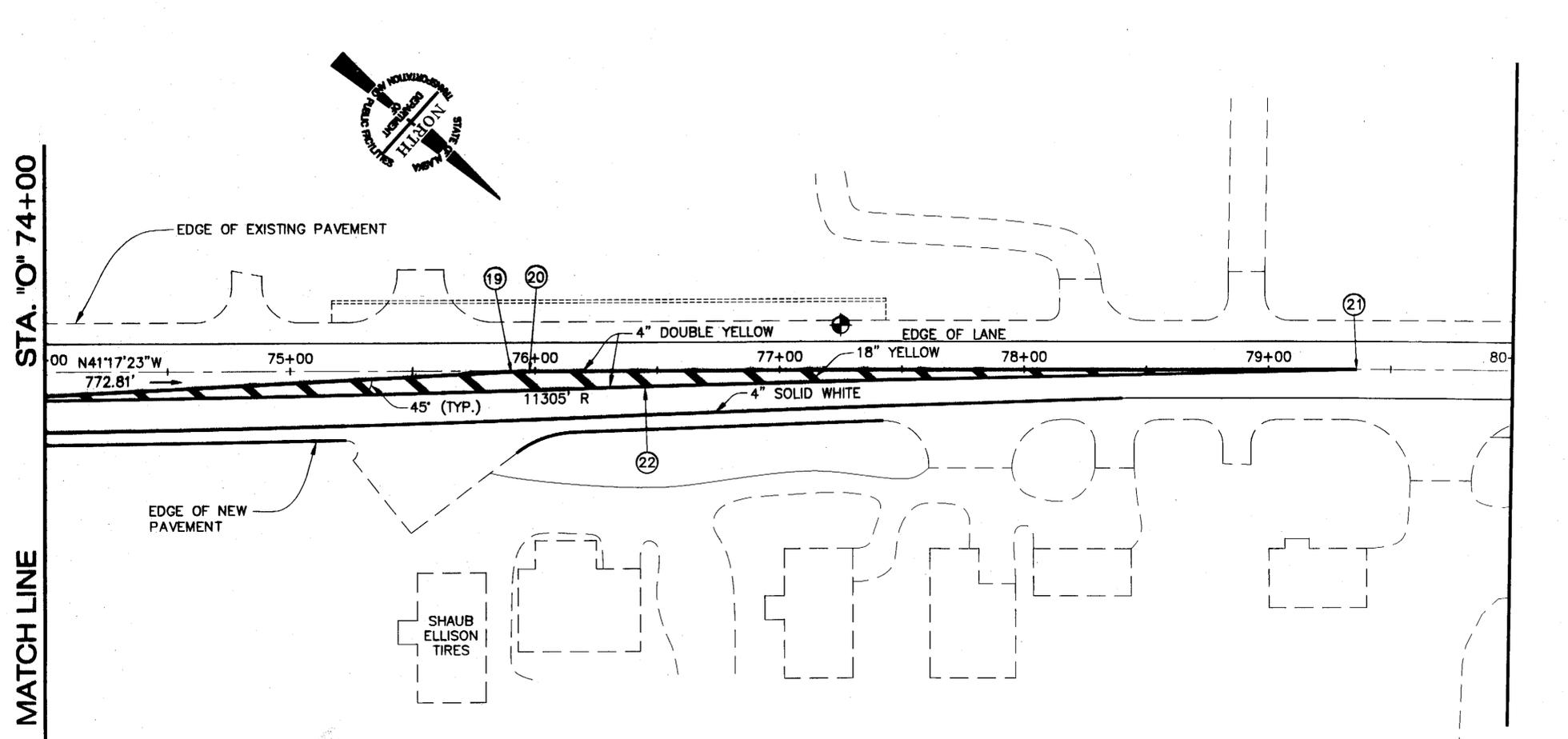
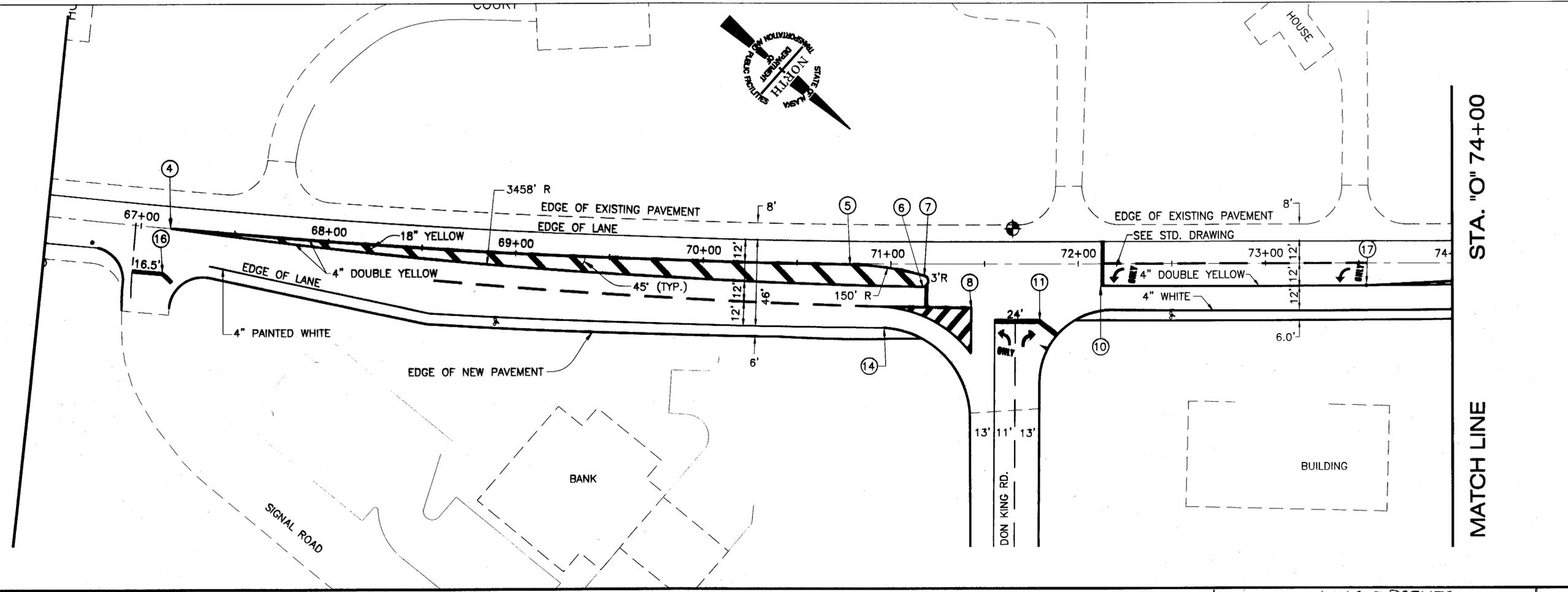
STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 & PUBLIC FACILITIES
 STATEWIDE DESIGN & ENGINEERING
 SERVICES DIVISION
**KTN-NORTH TONGASS
 HIGHWAY
 PAVEMENT RESTORATION
 Highway
 Plans &
 Signing**

PROJECT DESIGNATION NUMBER	
STP-0920(22) ~ 68229	
STATE	YEAR
ALASKA	2002
SHEET NUMBER	TOTAL SHEETS
F11	25

ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION

KTN-NORTH TONGASS
 HIGHWAY
 PAVEMENT RESTORATION
 PROJECT NO. 68229

Striping Plan



LAYOUT POINTS			
NO.	STATION	OFFSET	REMARKS
4	Sta. 67+15.9	0	START STRIPING
5	Sta. 70+78.3	.3 RT	PC
6	Sta. 71+17.1	11.8 RT	PT
7	Sta. 71+17.9	8.9 RT	PT
8	Sta. 71+42.9	24.1 RT	CORNER OF ISLAND
10	Sta. 72+12	12.4	STOP BAR
11	Sta. 71+79.4	30.2 RT	ANGLE IN STOP BAR
14	Sta. 70+95.4	35.4 RT	END CURB
16	Sta. 67+13.6	23.8 RT	ANGLE IN STOP BAR
17	Sta. 73+53.9	12.2 RT	BEGIN PAINTED ISLAND
19	Sta. 75+90.2	.5 RT	PC
20	Sta. 75+97.7	.23 RT	PT
21	Sta. 79+30.3	0	END STRIPING
22	Sta. 76+45	6.7 RT	END CURVE (?)

LAYOUT POINTS			
NO.	STATION	OFFSET	REMARKS
1	Sta. 67+15.9	0.0' RT	BEGIN STRIPING
2	Sta. 67+13.6	23.8' RT	STOP BAR
3	Sta. 70+78.3	0.3' RT	PC
4	Sta. 71+17.1	11.8' RT	PT
5	Sta. 71+17.9	8.9' RT	PT
6	Sta. 70+95.4	35.4' RT	END CURB AT PC
7	Sta. 71+42.9	24.1' RT	PAINTED CHANNELIZATION
8	Sta. 71+79.4	30.2' RT	STOP BAR
9	Sta. 72+12.0	12.4' RT	STOP BAR
10	Sta. 73+53.9	12.2' RT	END PAINTED MEDIAN
11	Sta. 95+90.2	0.5' RT	PC PAINTED MEDIAN
12	Sta. 75+97.7	0.3' RT	PT PAINTED MEDIAN
13	Sta. 76+45.0	6.7' RT	BEGIN CURVE ON MEDIAN
14	Sta. 79+30.3	0.0' RT	BEGIN PAINTED MEDIAN

DESIGNED BY: R. PURVES



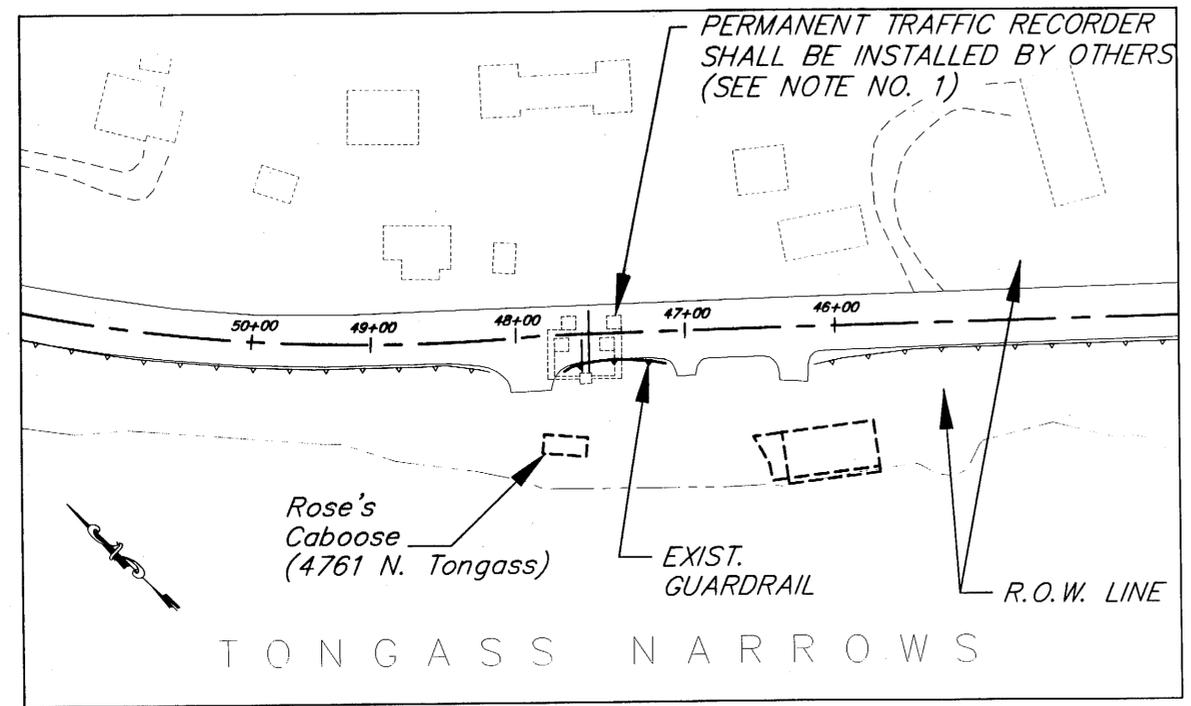
CHECKED BY: M. Lukshin
 DRAWN BY: D.W./M.L.

STATE OF ALASKA
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**KTN-NORTH TONGASS
 HIGHWAY
 PAVEMENT RESTORATION**

Striping Plan

PROJECT DESIGNATION NUMBER
STP-0920(22) ~ 68229

STATE	YEAR
ALASKA	2002
SHEET NUMBER	TOTAL SHEETS
G1	25



**SITE LAYOUT
 N. TONGASS**
 NTS

SHEET NOTES

1. SEE TYPICAL SECTIONS FOR DIMENSIONS.
2. SEE NOTE NO. 12.

KTN NORTH TONGASS

PIEZO SENSOR ASSEMBLY SCHEDULE						
CDS MILEPOST	CABINET OFFSET <1>	CABINET ASSEMBLY STYLE	INDUCTIVE LOOPS (QTY.)	AVC SENSOR & TYPE	LOAD CENTER & TYPE	ELECTRICAL & TELEPHONE SERVICE
1.33	24ft	EXISTING	EXISTING	2 PIEZO	EXISTING	EXISTING

1. SEE NOTE NO. 12.

GENERAL NOTES:

1. THE PIEZO SENSOR INSTALLATION IS THE ONLY ITEM OF WORK INCLUDED IN THIS PROJECT. THE PTR CABINET AND LOOPS ARE BEING INSTALLED UNDER PROJECT #74162. THE CONTRACTOR SHALL COORDINATE HIS ACTIVITIES WITH THE CONTRACTOR OF PROJECT #74162 PER THE SPECIFICATIONS.
2. INSTALLATION OF EQUIPMENT AND MATERIALS SHALL CONFORM TO APPLICABLE REQUIREMENTS OF THE CURRENT NESC AND NEC.
3. EVERY EFFORT HAS BEEN MADE TO MAKE THE INFORMATION CONTAINED IN THESE DOCUMENTS COMPLETE AND ACCURATE, HOWEVER THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING SITE CONDITIONS AND DIMENSIONS.
4. USE ONLY RMC CONDUIT EXCEPT FOR THE PVC LOOPS.
5. ALL CONSTRUCTION SHALL BE WITHIN STATE RIGHT-OF-WAY.
6. THE PIEZO SENSOR HOME RUN CABLE WILL NOT BE SPLICED.
7. THE CONTRACTOR SHALL UTILIZE ALL EXIST. CONDUIT AND JUNCTION BOXES SHOWN ON THE PLANS.
8. PAVEMENT SAWCUTTING AND PIEZO SENSOR INSTALLATION SHALL OCCUR DURING WEEKEND DAYS AT NON-PEEK HOURS.
9. THE PEEK MANUFACTURER'S REPRESENTATIVE SHALL BE ON SITE DURING THE SENSOR INSTALLATION AND CALIBRATION.
10. CONTRACTOR SHALL MAINTAIN SINGLE LANE TRAFFIC AT ALL TIMES.
11. THE CONTRACTOR SHALL MAINTAIN TRAFFIC CONTROL UNTIL THE EPOXY GROUT IS COMPLETELY CURED.
12. PERMANENT TRAFFIC RECORDER SHALL BE CONSTRUCTED UNDER THE SOUTHEASTERN REGION AREAWIDE PERMANENT TRAFFIC RECORDER IMPROVEMENT PROJECT NO. 74162.

ADDENDUM NUMBER
 ATTACHMENT NUMBER

RECORD OF REVISIONS		
No.	DATE	DESCRIPTION

KTN-NORTH TONGASS
 HIGHWAY
 PAVEMENT RESTORATION
 PROJECT NO. 68229

PTR / Piezo Layout

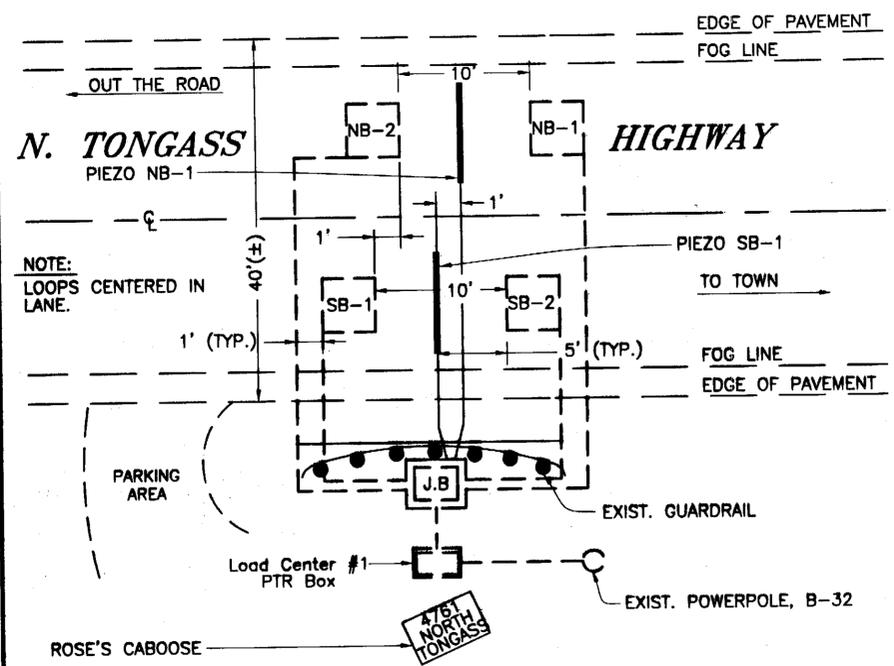
DESIGNED BY: R. PURVES



CHECKED BY: M. Lukshin
 DRAWN BY: D.W./M.L.

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 & PUBLIC FACILITIES
 STATEWIDE DESIGN & ENGINEERING
 SERVICES DIVISION
**KTN-NORTH TONGASS
 HIGHWAY
 PAVEMENT RESTORATION**
**PTR / Piezo
 Layout**

PROJECT DESIGNATION NUMBER	
STP-0920(22) ~ 68229	
STATE	YEAR
ALASKA	2002
SHEET NUMBER	TOTAL SHEETS
H1	25



PLAN

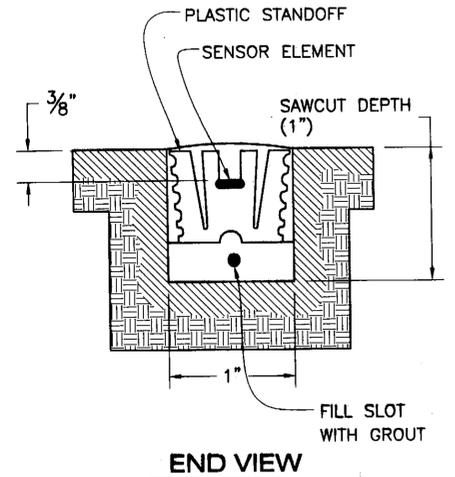
TRAFFIC COUNTER TYPICAL

N.T.S.
SEE NOTE NO. 1.

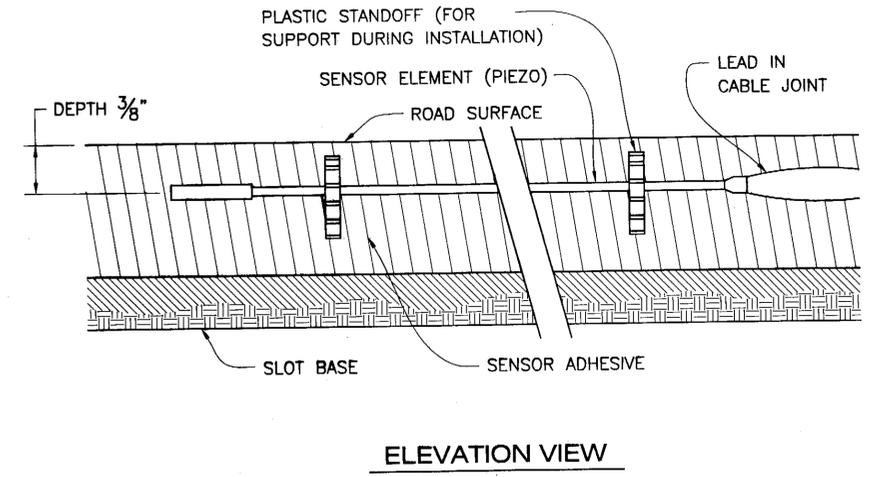
CONDUIT NO.	SIZE	FROM	TO	CABLE QTY. & TYPE
1	EXISTING 2"	EXISTING CABINET	EXISTING JB1	EXISTING (1) 6PR CABLE NEW (2) PIEZO CABLE

CONDUIT/CONDUCTOR SCHEDULE

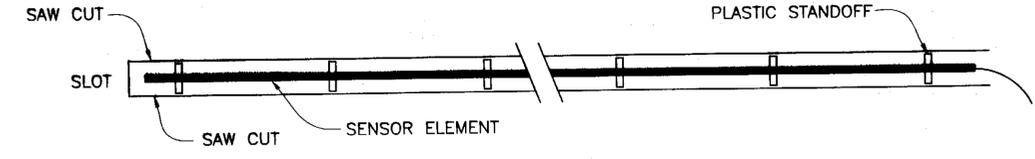
SEE NOTE NO. 1.



END VIEW



ELEVATION VIEW

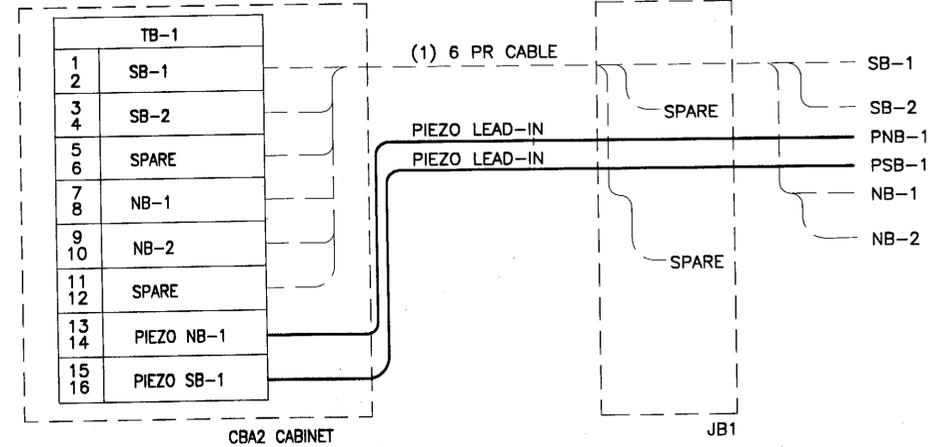


PLAN VIEW

TRAFFIC SENSOR DETAILS

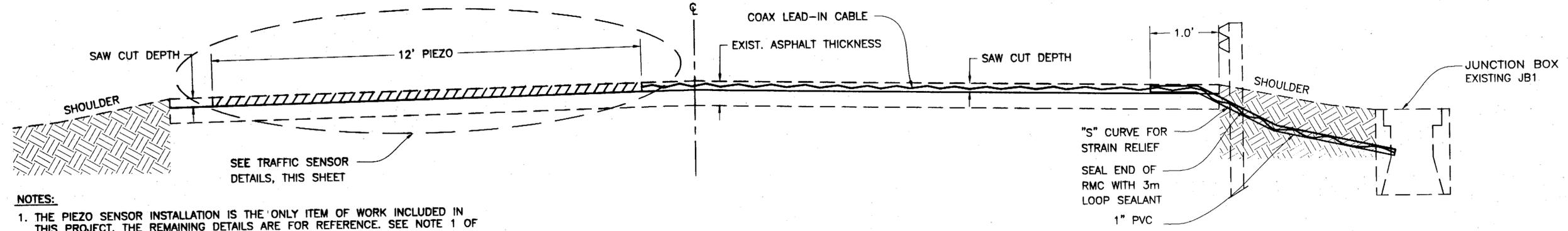
N.T.S.

NOTE:
THE TRAFFIC SENSOR (PIEZO) SHALL BE INSTALLED PER THE SPECIFICATIONS AND ONLY WHEN A PEEK MANUFACTURER'S REPRESENTATIVE IS PRESENT.



WIRING SCHEMATIC

SEE NOTE NO. 1.



TRAFFIC SENSOR INSTALLATION DETAIL

N.T.S.
SEE NOTE 1.

- NOTES:**
1. THE PIEZO SENSOR INSTALLATION IS THE ONLY ITEM OF WORK INCLUDED IN THIS PROJECT. THE REMAINING DETAILS ARE FOR REFERENCE. SEE NOTE 1 OF PLAN SHEET H1.
 2. FOR CLARITY, ONLY FAR LANE PIEZO DETAIL SHOWN. NEAR LANE PIEZO IS SIMILAR.
 3. THE SLOT FOR THE PIEZO SENSOR SHALL BE CUT USING BLADES THAT ARE GANGED TOGETHER.
 4. CLEAN THE SLOT WITH COMPRESSED AIR AND HIGH PRESSURE WATER PER THE MANUFACTURER'S INSTRUCTIONS.
 5. THE SLOT SHALL BE CLEAN AND COMPLETELY DRY BEFORE INSTALLING THE PIEZO SENSOR.
 6. AFTER INSTALLING THE PIEZO SENSOR, THE CONTRACTOR SHALL FOLLOW THE PIEZO MANUFACTURER'S RECOMMENDATIONS TO PROPERLY INSTALL THE GROUT.
 7. STANDOFF SPACERS WILL PLACED EVERY 6" ALONG THE FULL LENGTH OF THE PIEZO SENSOR ELEMENT.

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION

KTN-NORTH TONGASS
HIGHWAY
PAVEMENT RESTORATION
PROJECT NO. 68229

PTR/Piezo Details

DESIGNED BY: R. PURVES



CHECKED BY: M. Lukshin
DRAWN BY: D.W./M.L.

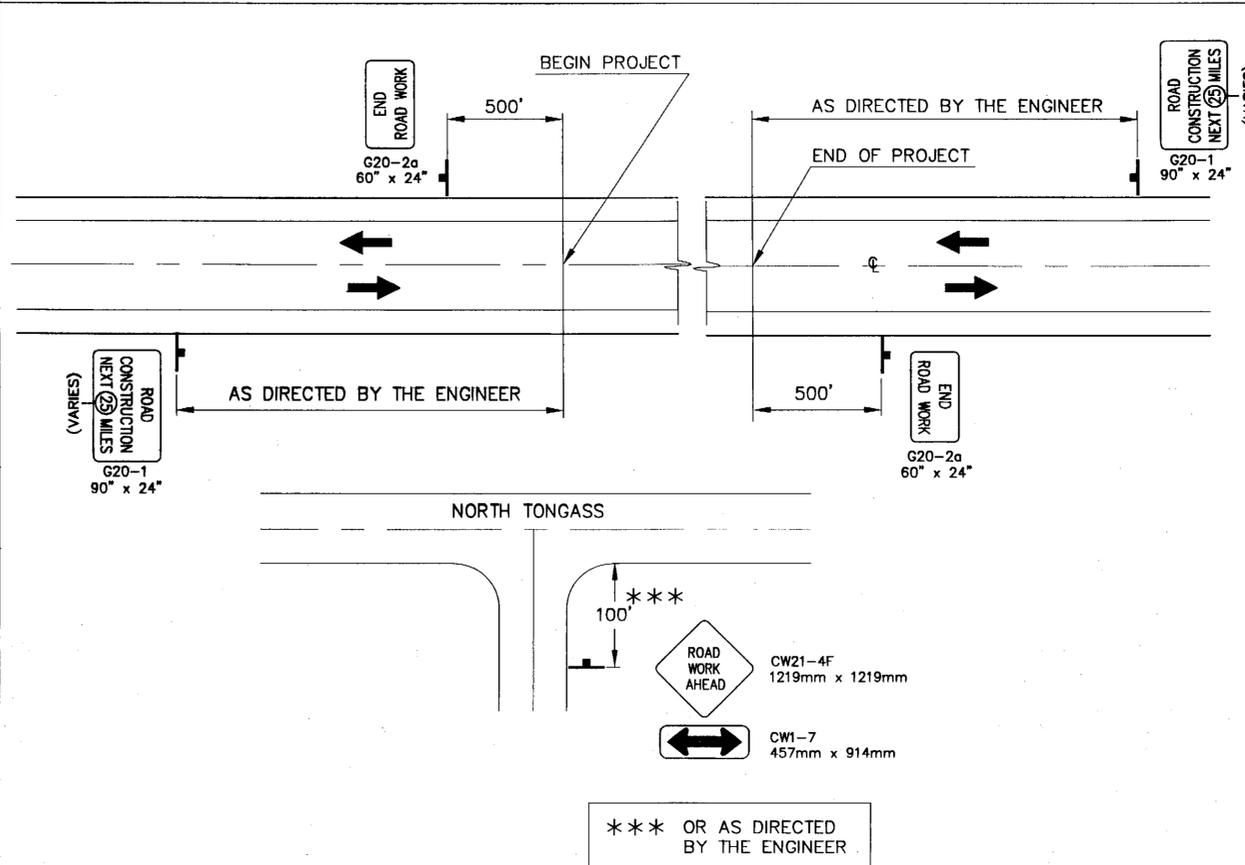
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING
SERVICES DIVISION
**KTN-NORTH TONGASS
HIGHWAY
PAVEMENT RESTORATION**

**PTR/Piezo
Details**

PROJECT DESIGNATION NUMBER	
STP-0920(22) ~ 68229	
STATE	YEAR
ALASKA	2002
SHEET NUMBER	TOTAL SHEETS
H2	25

Traffic Control Notes:

- IT IS THE INTENT OF THIS TRAFFIC CONTROL PLAN (TCP) TO ILLUSTRATE SOME BUT NOT ALL OF THE TRAFFIC CONTROL CONFIGURATIONS THAT WILL BE REQUIRED BY THIS PROJECT. TRAFFIC CONTROL PLANS FOR CONFIGURATIONS NOT COVERED BY THIS TCP SHALL BE DEVELOPED BY THE CONTRACTOR AND SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO USE.
- A MINIMUM OF ONE LANE SHALL BE MAINTAINED AT ALL TIMES, THROUGH ALL WORK AREAS.
- TWO LANES SHALL BE MAINTAINED AT ALL TIMES IN NON-WORK AREAS AND DURING NON-WORKING HOURS.
- TRAFFIC LANES SHALL BE A MINIMUM OF 10 FEET WIDE.
- CONSTRUCTION SIGNING SHALL BE IN PLACE ONLY WHEN THE CONDITIONS EXIST FOR WHICH THE SIGNS ARE INTENDED.
- TEMPORARY PAVEMENT MARKINGS WILL BE REQUIRED AS DESCRIBED IN SECTION 643-3.09 OF THE SPECIFICATIONS.
- CHANNELIZATION DEVICES WILL BE LIT IN ACCORDANCE WITH THE ALASKA TRAFFIC MANUAL IF USED AT NIGHT.
- THE CONTRACTOR SHALL GIVE 24 HOURS ADVANCE NOTICE BEFORE WORKING ON DRIVEWAYS.
- THE CONTRACTOR SHALL KEEP THE PUBLIC INFORMED OF HIS CONSTRUCTION ACTIVITIES THROUGH THE USE OF THE LOCAL NEWS MEDIA. NEWS RELEASES SHALL BE APPROVED BY THE PROJECT ENGINEER PRIOR TO THEIR RELEASE. NEWS RELEASES WILL BE REQUIRED BUT NOT LIMITED TO, THE ONSET OF WORK, GRINDING, PAVING, AND CHANGES IN THE LANE CONFIGURATIONS.
- THE MAXIMUM LENGTH OF A ONE LANE, TWO-WAY WORK ZONE (FLAGGER SETUP) SHALL BE 10,000 FEET, AND THE MINIMUM SEPARATION BETWEEN WORK ZONES SHALL BE 1000 FEET. IF VEHICLE STOP TIME EXCEEDS FIVE MINUTES, THE CONTRACTOR SHALL SHORTEN HIS WORK ZONE OR RESCHEDULE HIS WORK TO A LESS BUSY HOUR.
- FLAGGERS SHALL BE IN RADIO CONTACT WITH ONE ANOTHER.
- THE CONTRACTOR SHALL PATCH ALL BASE RECONSTRUCTION AREAS WITH CRUSHED ASPHALT IMMEDIATELY AFTER FINISHING WORK IN THESE AREAS. THE CRUSHED ASPHALT IN THESE AREAS SHALL BE MAINTAINED UNTIL THE PAVEMENT IS RECYCLED AND MIXED WITH EMULSION.
- ACCESS TO HOMES AND BUSINESSES WILL BE KEPT OPEN AT ALL TIMES. WORK ON ACCESS TO ANY HOME OR BUSINESS THAT HAS ONLY ONE ACCESS, WILL BE DONE WITH HALF WIDTH CONSTRUCTION, AND BE CONTROLLED BY A FLAGGER.
- DURING WEEKDAYS, THE CONTRACTOR SHALL MAINTAIN TWO LANES OF TRAFFIC BETWEEN 7:00 AND 8:30 A.M. AND MAINTAIN TWO LANES OF TRAFFIC BETWEEN 3:30 AND 6:00 P.M.
- THE ENGINEER SHALL APPROVE THE CONSTRUCTION PHASING PLAN FOR EACH PHASE, PER SECTION 643-1.05, BEFORE ANY WORK OCCURS.



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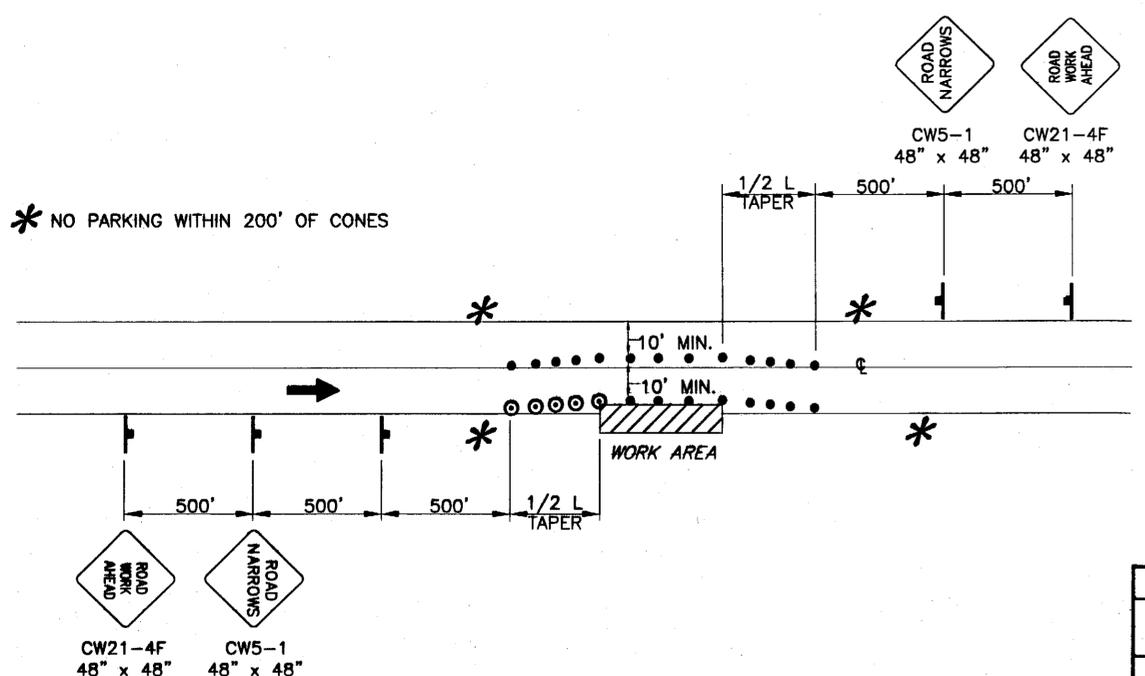
ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

KTN-NORTH TONGASS
 HIGHWAY
 PAVEMENT RESTORATION
 PROJECT NO. 68229

TRAFFIC CONTROL PLAN



Roadway Encroachment

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

LEGEND

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

WHERE
 L = LENGTH OF TAPER
 W = WIDTH OF OFFSET
 T = TAPER RATE
 L = W x T

TCP TABLE SETUP

SPEED (MPH)	BUFFER/LENGTH (ft)	CONE/DRUM SPACING (ft)	TAPER RATE (T)
20	35	20	7:1
25	55	25	10:1
30	85	30	15:1
35	120	35	20:1
40	170	40	30:1
45	220	45	45:1
50	280	50	50:1
55	335	55	55:1
60	415	60	60:1
65	485	65	65:1

NOTE: DO NOT SCALE FROM THESE PLANS--USE DIMENSIONS

DESIGNED BY: R. PURVES



CHECKED BY: M. Lukshin
 DRAWN BY: D.W./M.L.

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

**KTN-NORTH TONGASS
 HIGHWAY
 PAVEMENT RESTORATION**

Traffic Control Plan

PROJECT DESIGNATION NUMBER
STP-0920(22) ~ 68229

STATE	YEAR
ALASKA	2002
SHEET NUMBER	TOTAL SHEETS
J1	25

ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION

KTN-NORTH TONGASS
 HIGHWAY
 PAVEMENT RESTORATION
 PROJECT NO. 68229

TRAFFIC CONTROL PLAN

DESIGNED BY: R. PURVES



CHECKED BY: M. Lukshin
 DRAWN BY: D.W./M.L.

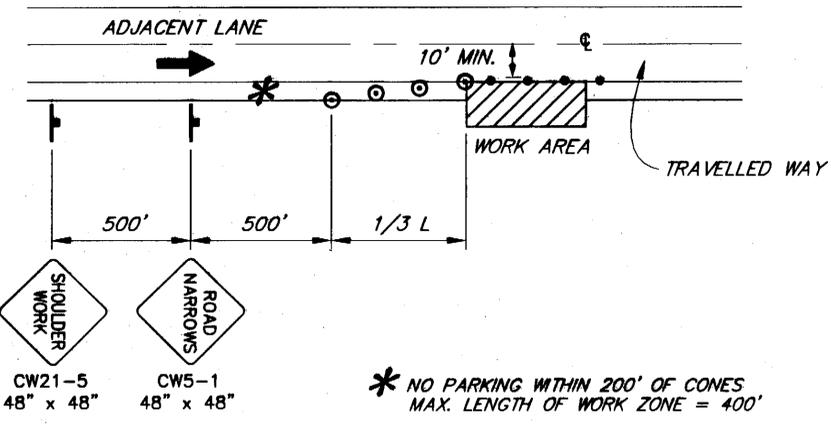
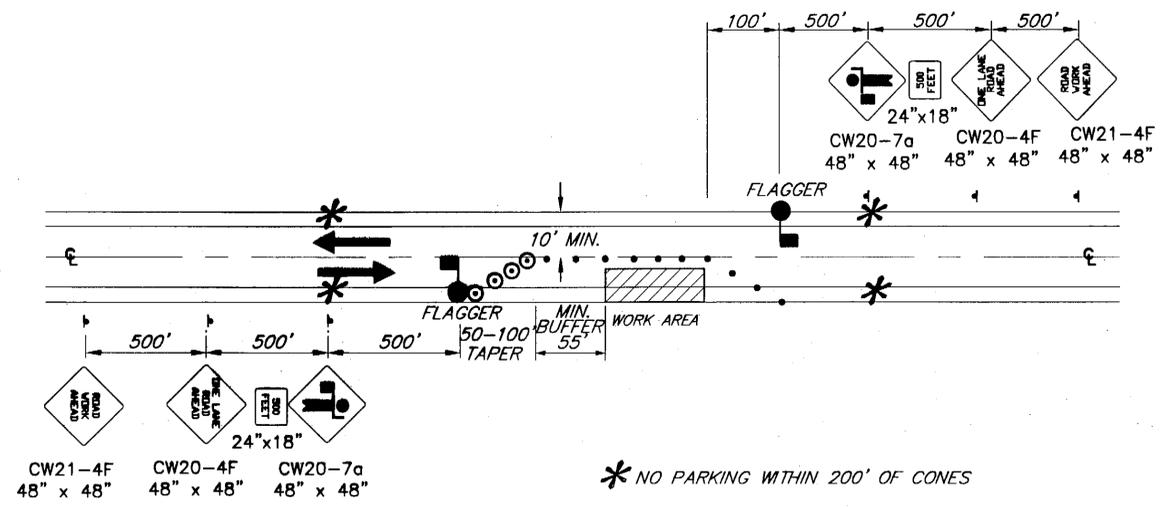
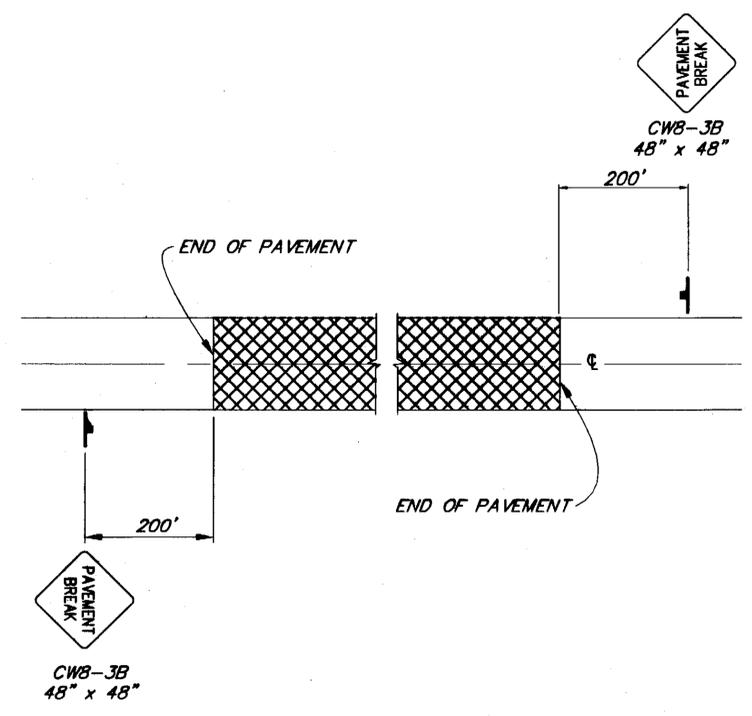
STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
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 STATEWIDE DESIGN & ENGINEERING
 SERVICES DIVISION

**KTN-NORTH TONGASS
 HIGHWAY
 PAVEMENT RESTORATION**

Traffic Control Plan

PROJECT DESIGNATION NUMBER
STP-0920(22) ~ 68229

STATE	YEAR
ALASKA	2002
SHEET NUMBER	TOTAL SHEETS
J2	25



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

WHERE

L = LENGTH OF TAPER
 W = WIDTH OF OFFSET
 T = TAPER RATE
 L = W x T

TCP TABLE SETUP			
SPEED (MPH)	BUFFER/LENGTH (ft)	CONE/DRUM SPACING (ft)	TAPER RATE (T)
20	35	20	7:1
25	55	25	10:1
30	85	30	15:1
35	120	35	20:1
40	170	40	30:1
45	220	45	45:1
50	280	50	50:1
55	335	55	55:1
60	415	60	60:1
65	485	65	65:1

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION

**KTN-NORTH TONGASS
 HIGHWAY
 PAVEMENT RESTORATION
 PROJECT NO. 68229**
**EROSION & SEDIMENT
 CONTROL PLAN (ESCP)**

DESIGNED BY: D. WILLIAMS

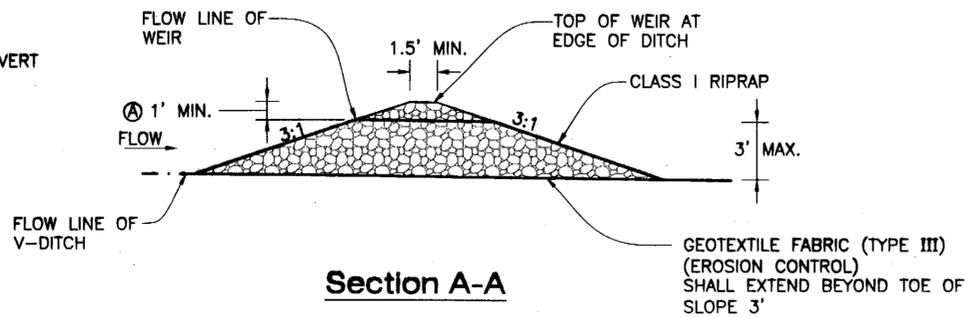
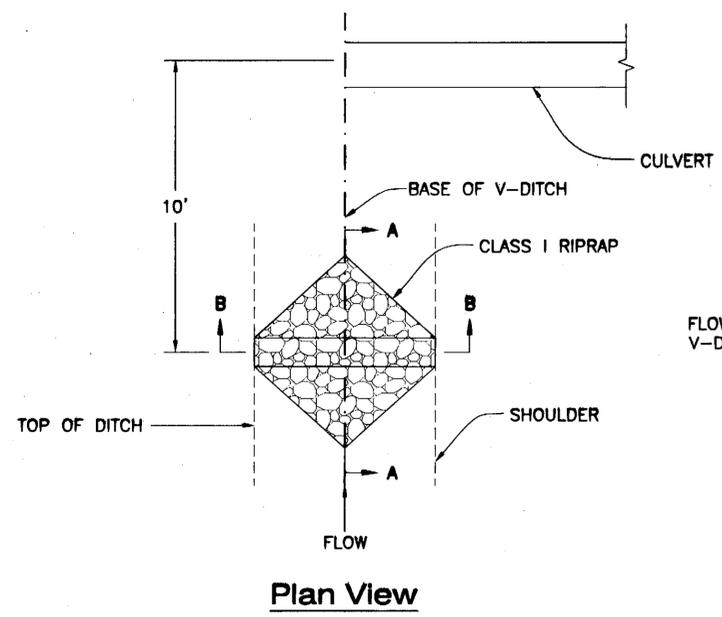


CHECKED BY: P. BEDNAROWICZ
 DRAWN BY: D.W./M.L.

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**KTN-NORTH TONGASS
 HIGHWAY
 PAVEMENT RESTORATION**

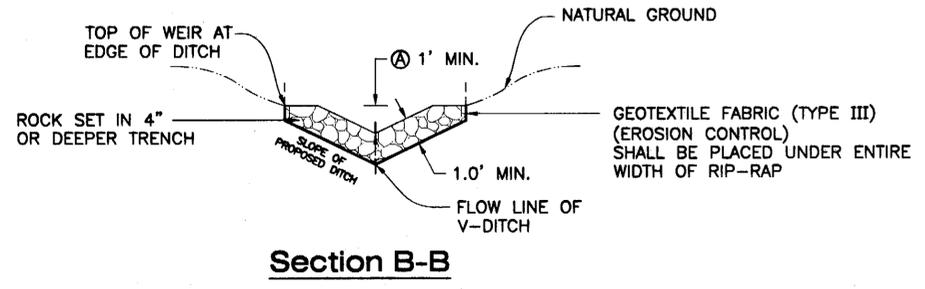
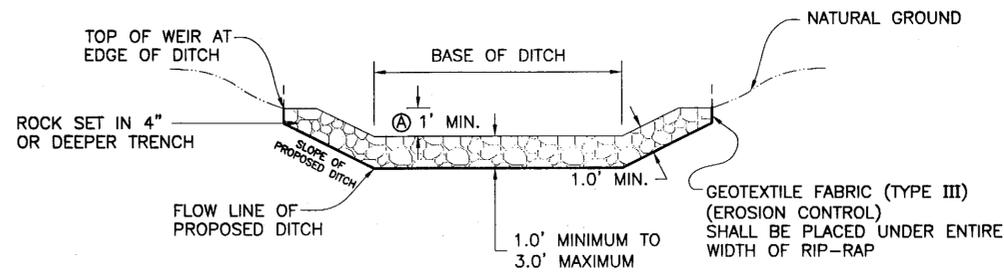
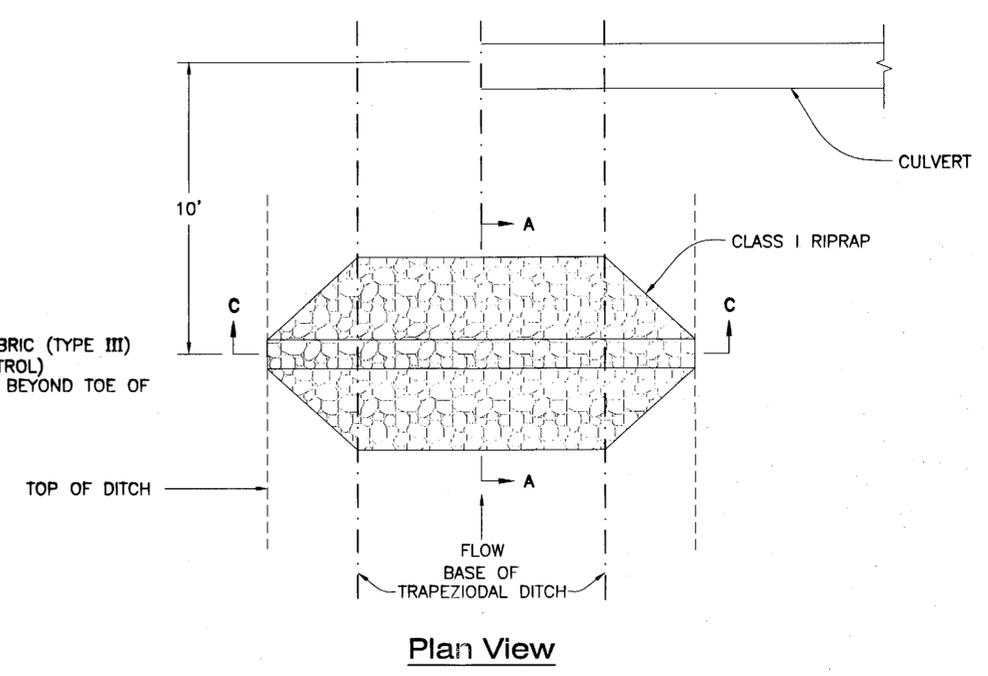
**ESCP
 PLAN**

PROJECT DESIGNATION NUMBER	
STP-0920(22) ~ 68229	
STATE	YEAR
ALASKA	2002
SHEET NUMBER	TOTAL SHEETS
P1	25



ROCK CHECK DAM SUMMARY

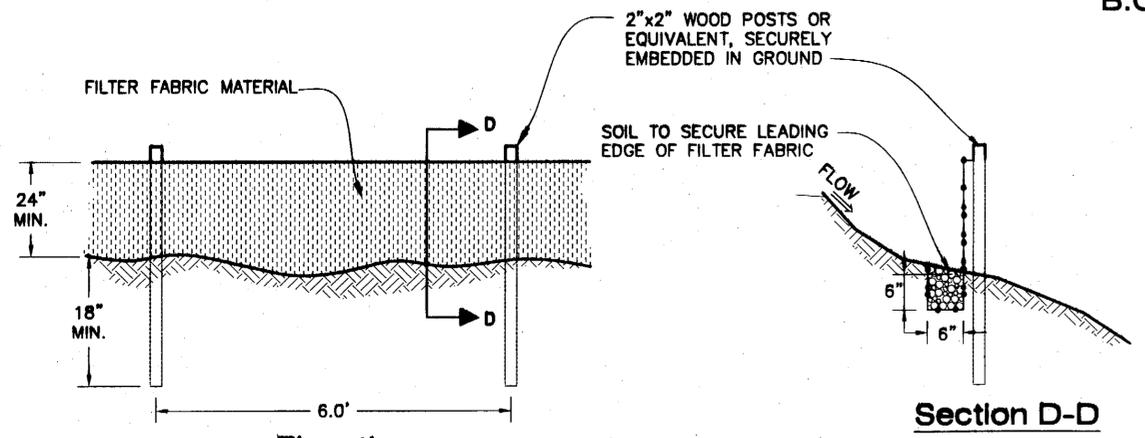
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140+41		32'
140+61		32'
158+63		32'
158+83		32'
191+15		32'
191+35		32'
214+04		32'
215+63		32'



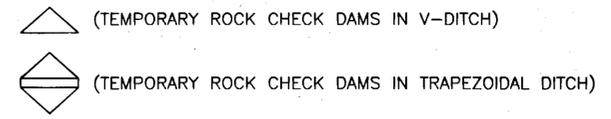
Detail For V-Ditch

**Temporary Rock Check Dams Used In Roadside Ditches
 B.O.P. To E.O.P.**

Detail For Trapezoidal Ditch



Silt Fence Details



General Notes For ESCP

- ESTIMATED AREA FOR AREA DISTURBED FROM DITCHING IS 3.4 ACRES.
- USE ADDITIONAL ROCK CHECK DAMS TO CONTROL SEDIMENT LEAVING THE HIGHWAY WHICH MAY RUN INTO ANY STREAMS OR OPEN WATERS.
- USE SILT FENCE ALONG ANY AREAS WHERE SEDIMENT RUNOFF FROM THE ROAD COULD ENTER A STREAM OR OPEN WATER DIRECTLY.
- KNOWN SURFACE WATERS INCLUDE CANNERY CREEK AND WARD CREEK. THIS PROJECT TRAVERSES ALONG TONGASS NARROWS.
- GEOTEXTILE FABRIC SHALL MEET REQUIREMENTS OF THE STANDARD SPECIFICATION FOR GEOTEXTILES AASHTO DESIGNATION M-286, EROSION CONTROL, CLASS A.

General Notes For Rock Check Dams

- THE CENTER OF THE CHECK DAM MUST BE AT LEAST ONE (1) FOOT LOWER THAN THE OUTER EDGES. THIS WILL ELIMINATE THE ROCK-SOIL FAILURE POINT WHERE THE ROCK CHECK DAM AND NATURAL GROUND MERGE.
- THE MAXIMUM SPACING BETWEEN THE DAMS SHOULD BE SUCH THAT THE TOE OF THE UPSTREAM DAM IS AT THE SAME ELEVATION AS THE FLOW LINE OF WEIR OF THE DOWNSTREAM DAM.
- SEDIMENT SHALL BE REMOVED FROM BEHIND THE ROCK CHECK DAMS WHEN IT HAS ACCUMULATED TO ONE-HALF THE ORIGINAL HEIGHT OF THE DAM.
- CHECK DAMS MAY REMAIN IN PLACE AS PERMANENT CHECK DAMS, IF SHOWN IN THE PLANS OR AS DIRECTED BY THE ENGINEER.

