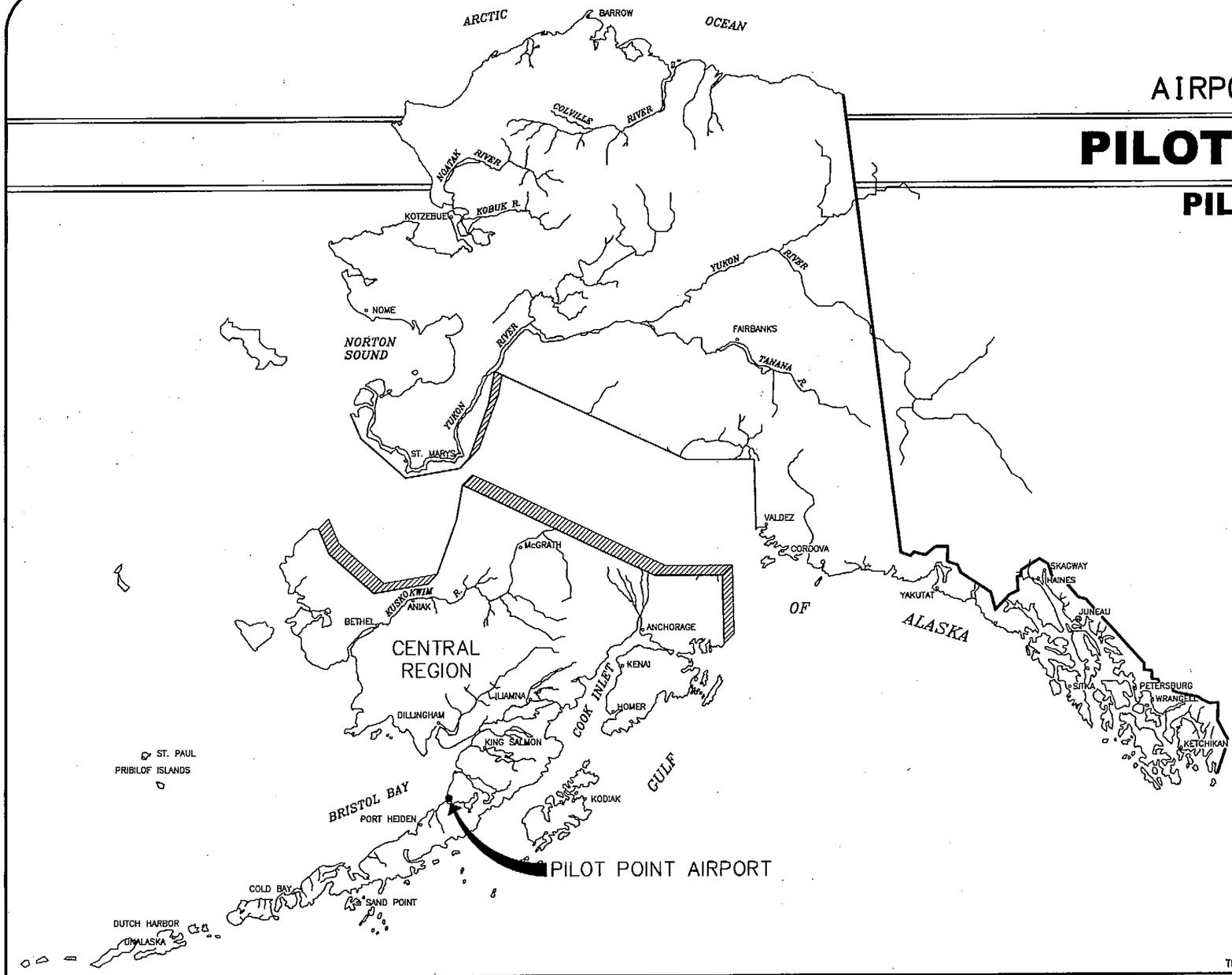


AIRPORT LAYOUT PLAN FOR

PILOT POINT AIRPORT

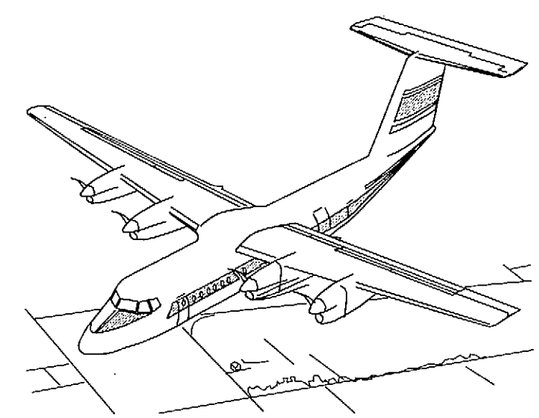
PILOT POINT, ALASKA

2002

DRAWING INDEX

1 – COVER SHEET AND INDEX
2 – VICINITY MAP AND DATA TABLES
3 – PLAN AND PROFILE
4 – F.A.R. PART 77 SURFACES
5 – PROPERTY PLAN (Sheet 1 of 2)
6 – PROPERTY PLAN (Sheet 2 of 2)
7 – NARRATIVE REPORT

METRIC



THIS PLAN SET SUPERCEDES AIRPORT LAYOUT PLAN SET (TITLED "NEW PILOT POINT AIRPORT") DATED 9/15/98

SPONSORED BY
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
CENTRAL REGION

CONCUR Gorden C. Keith DATE 9/30/02
GORDEN C. KEITH, P.E. CONSTRUCTION AND OPERATIONS DIRECTOR

APPROVED Steven R. Horn DATE 9/30/02
STEVEN R. HORN, P.E. REGIONAL PRECONSTRUCTION ENGINEER

AIRPORT LAYOUT PLAN CONDITIONAL APPROVAL
By: [signature]
FAA AIRPORTS DIVISION
ALASKAN REGION, AAL-600
DATE: 11/6/02

FAA AIRSPACE REVIEW NUMBER
98-AAL-094-NRA

PILOT POINT AIRPORT
PILOT POINT, ALASKA
AIRPORT LAYOUT PLAN

SHEET 1 OF 7

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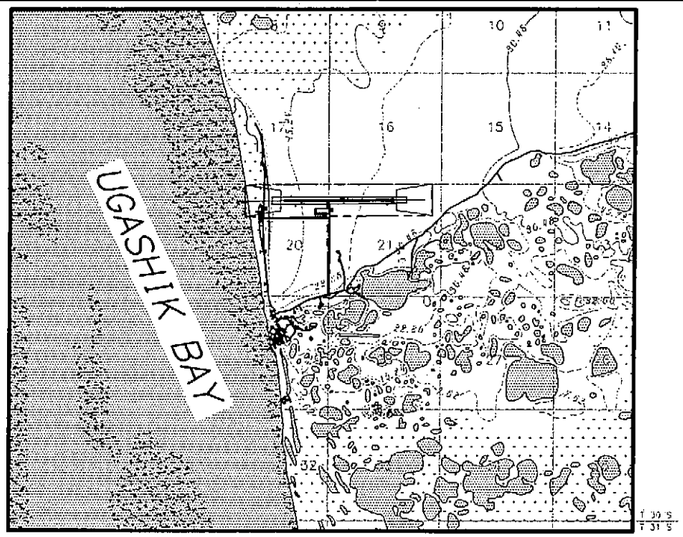
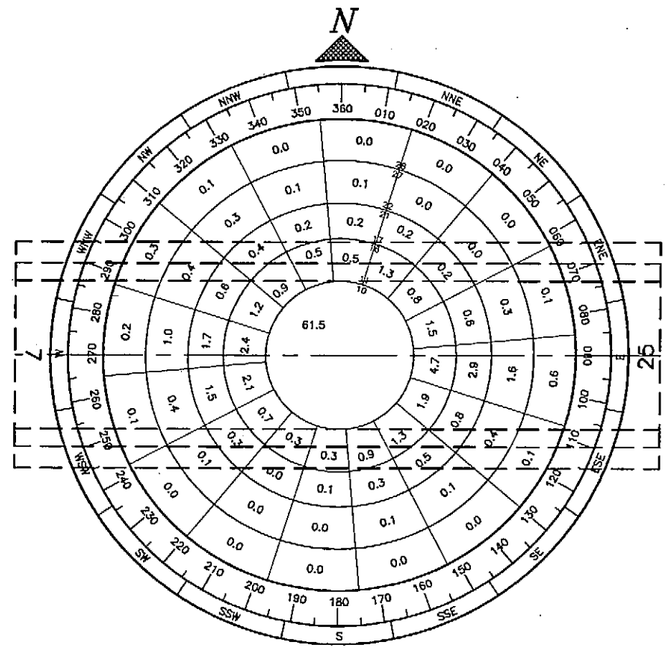


VICINITY MAP

1:40,000
T 30 S, R 51 W, SEC. 20 & 21
SEWARD MERIDIAN
U.S.G.S. UGASHIK (C-5), ALASKA

500 0 500 1000 1500



WIND DATA

WIND COVERAGE: 10.5 KNOTS 90%
13 KNOTS 94.7%
16 KNOTS 98%

SOURCE: CITY OF PILOT POINT AWOS

PERIOD: DEC. 11, 1992 TO SEPT. 6, 1995

RUNWAY DATA TABLE

ITEM		EXISTING 07/25 EXISTING	EXISTING 07/25 FUTURE	RUNWAY / EXISTING	RUNWAY / FUTURE
INSTRUMENT RUNWAY		NONE	NONE		
RUNWAY SURFACE		GRAVEL	GRAVEL		
PAVEMENT STRENGTH (LBS.)		N/A	N/A		
APPROACH SURFACES		34:1	34:1		
VISIBILITY MINIMUM		> 1200m	> 1200m		
		[> 3/4 MILE]	[> 3/4 MILE]		
RUNWAY LIGHTING		M.I.	M.I.		
RUNWAY MARKING		NONE	NONE		
NAVIGATION AIDS		PAPI (25)	PAPI		
RUNWAY SAFETY AREA DIMENSION		45m x 1180m	90m x 1900m		
		[147.6'x3871.4']	[295.3'x6233.6']		
RUNWAY DIMENSION		23m x 1000m	30m x 1540m		
		[75.5'x3280.8']	[98.4'x5052.5']		
RUNWAY OBJECT FREE AREA DIMENSION		240m x 1180m	240m x 1900m		
		[787.4'x3871.4']	[787.4'x6233.6']		
RUNWAY OBSTACLE FREE ZONE DIMENSION		120m x 1120m	120m x 1660m		
		[787.4'x3674.5']	[393.7'x5446.2']		
GEODETIC POSITIONS (N.A.D. 83)					
THRESHOLD 07	LAT.	57°34'49.37"N	57°34'49.37"N		
	LONG.	157°34'49.13"W	157°34'49.13"W		
THRESHOLD 25	LAT.	57°34'49.37"N	57°34'49.36"N		
	LONG.	157°33'48.96"W	157°33'16.46"W		

AIRPORT DATA TABLE

ITEM		EXISTING	FUTURE
AIRPORT ELEVATION (M.S.L.)		17.4m [57.0']	20.82m [68.3]
AIRPORT REFERENCE POINT (A.R.P.)	LAT.	57°34'49.37"N	
	LONG.	157°34'02.80"W	
TAXIWAY LIGHTING		M.I.	M.I.
RAMP LIGHTING		NONE	FLOOD
MEAN MAX. TEMPERATURE, HOTTEST MONTH (JULY)		16°C [60°F]	16°C [60°F]
MAGNETIC DECLINATION, YEAR		18°35'E,1995	18°35'E,1995
AIRPORT CATAGORY		B-II	B-II
AIRPORT AND TERMINAL NAVIGATION AIDS		NONE	NONE

CONVERSION FACTORS FROM SI UNITS

TO CONVERT FROM	TO	MULTIPLY BY
STATION (1000 METERS)	FEET	3280.84
KILOMETER (km)	MILE	0.6214
METER (m)	MILE	0.00062137
METER (m)	FOOT	3.28084
MILLIMETER (mm)	FOOT	0.00328084
MILLIMETER (mm)	INCH	0.3937008
SQUARE METER (m^2)	SQUARE FOOT	10.76391042
SQUARE METER (m^2)	SQUARE YARD	1.19599
HECTARE	ACRE	2.4711
CUBIC METER (m^3)	CUBIC FOOT	35.3146667
CUBIC METER (m^3)	CUBIC YARD	1.3079506
CUBIC METER (m^3)	GALLON (US LIQUID)	264.17204
CUBIC METER (m^3)	M. GAL.	0.26417204
KILOGRAM (kg)	POUND-MASS (LBM)	2.2046225
MEGAGRAM (Mg)	TON (SHORT)	1.10231
NEWTON (n)	POUND-FORCE (LBF)	0.2248089
LUX (lx)	FOOTCANDLE	0.092903
DEGREE CELSIUS (°C)	DEGREE FAHRENHEIT (°F)	T°F=(1.8 x T°C)+32

NONSTANDARD CONDITIONS

ITEM	EXISTING	STANDARD	FUTURE
NONE			

LEGEND

ITEM	EXISTING	FUTURE
PROPERTY LINE		
BUILDING RESTRICTION LINE		
AIRPORT REFERENCE POINT (A.R.P.)		
WIND CONE AND SEGMENTED CIRCLE		
CONTOURS		
ROADWAYS		
BUILDINGS		
ROTATING BEACON		
SHORELINE		
OVERHEAD ELECTRIC	OHE	
PAPI		
THRESHOLD LIGHTS		

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AIRPORT LAYOUT PLAN CONDITIONAL APPROVAL 11/6/02
SUBJECT TO ALP APPROVAL LETTER DATED
By: DATE: 11/6/02
FAA AIRPORTS DIVISION
ALASKAN REGION, AAL-600

FAA AIRSPACE REVIEW NUMBER: 98-AAL-094-NRA

BY	DATE	REVISIONS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
CENTRAL REGION

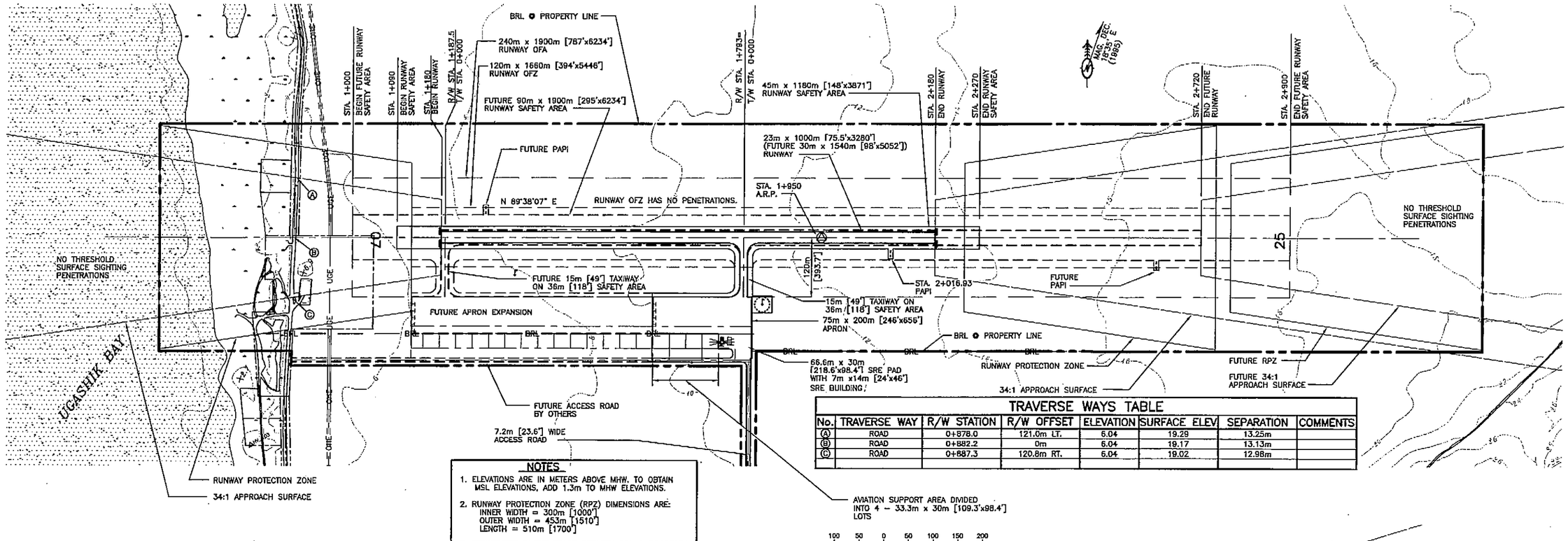
APPROVED: STEPHEN M. RYAN, P.E. — DESIGN SECTION CHIEF
APPROVED: JOHN G. WAHL, P.E. — PROJECT MANAGER

DATE 9/30/02
DESIGN
DRAWN
CHECKED

PILOT POINT AIRPORT
PILOT POINT, ALASKA

AIRPORT LAYOUT PLAN
VICINITY MAP AND DATA TABLES

SHEET 2 OF 7

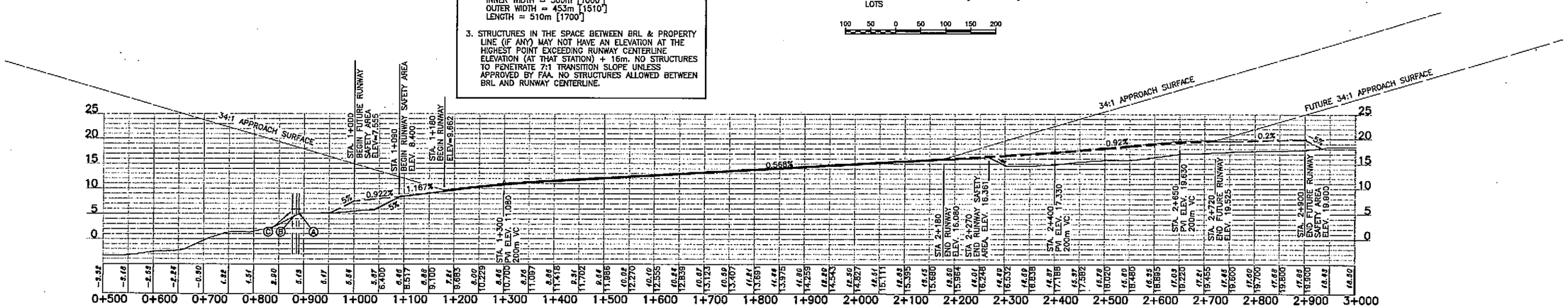


NOTES

1. ELEVATIONS ARE IN METERS ABOVE MHW. TO OBTAIN MSL ELEVATIONS, ADD 1.3m TO MHW ELEVATIONS.
2. RUNWAY PROTECTION ZONE (RPZ) DIMENSIONS ARE:
   INNER WIDTH = 300m [1000']
   OUTER WIDTH = 453m [1510']
   LENGTH = 510m [1700']
3. STRUCTURES IN THE SPACE BETWEEN BRL & PROPERTY LINE (IF ANY) MAY NOT HAVE AN ELEVATION AT THE HIGHEST POINT EXCEEDING RUNWAY CENTERLINE ELEVATION (AT THAT STATION) + 16m. NO STRUCTURES TO PENETRATE 7:1 TRANSITION SLOPE UNLESS APPROVED BY FAA. NO STRUCTURES ALLOWED BETWEEN BRL AND RUNWAY CENTERLINE.

TRAVERSE WAYS TABLE

No.	TRAVERSE WAY	R/W STATION	R/W OFFSET	ELEVATION	SURFACE ELEV	SEPARATION	COMMENTS
Ⓐ	ROAD	0+878.0	121.0m LT.	6.04	19.29	13.25m	
Ⓑ	ROAD	0+882.2	0m	6.04	19.17	13.13m	
Ⓒ	ROAD	0+887.3	120.8m RT.	6.04	19.02	12.98m	



Ⓐ APPROXIMATE EXISTING CENTERLINE OF EXISTING ROAD AT INTERSECTION OF EDGE OF APPROACH SURFACE.

Ⓑ APPROXIMATE EXISTING CENTERLINE OF EXISTING ROAD AT INTERSECTION WITH RUNWAY CENTERLINE.

Ⓒ APPROXIMATE EXISTING CENTERLINE OF EXISTING ROAD AT INTERSECTION OF EDGE OF APPROACH SURFACE.

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AIRPORT LAYOUT PLAN CONDITIONAL APPROVAL 11/6/02
SUBJECT TO ALP APPROVAL LETTER DATED
By: [signature] DATE: 11/6/02
FAA AIRPORTS DIVISION
ALASKAN REGION, AAL-600

FAA AIRSPACE REVIEW NUMBER: 98-AAL-094-NRA

BY	DATE	REVISIONS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

APPROVED: [signature]
STEPHEN M. RYAN, P.E. — DESIGN SECTION CHIEF
APPROVED: [signature]
JOHN G. WAHL, P.E. — PROJECT MANAGER

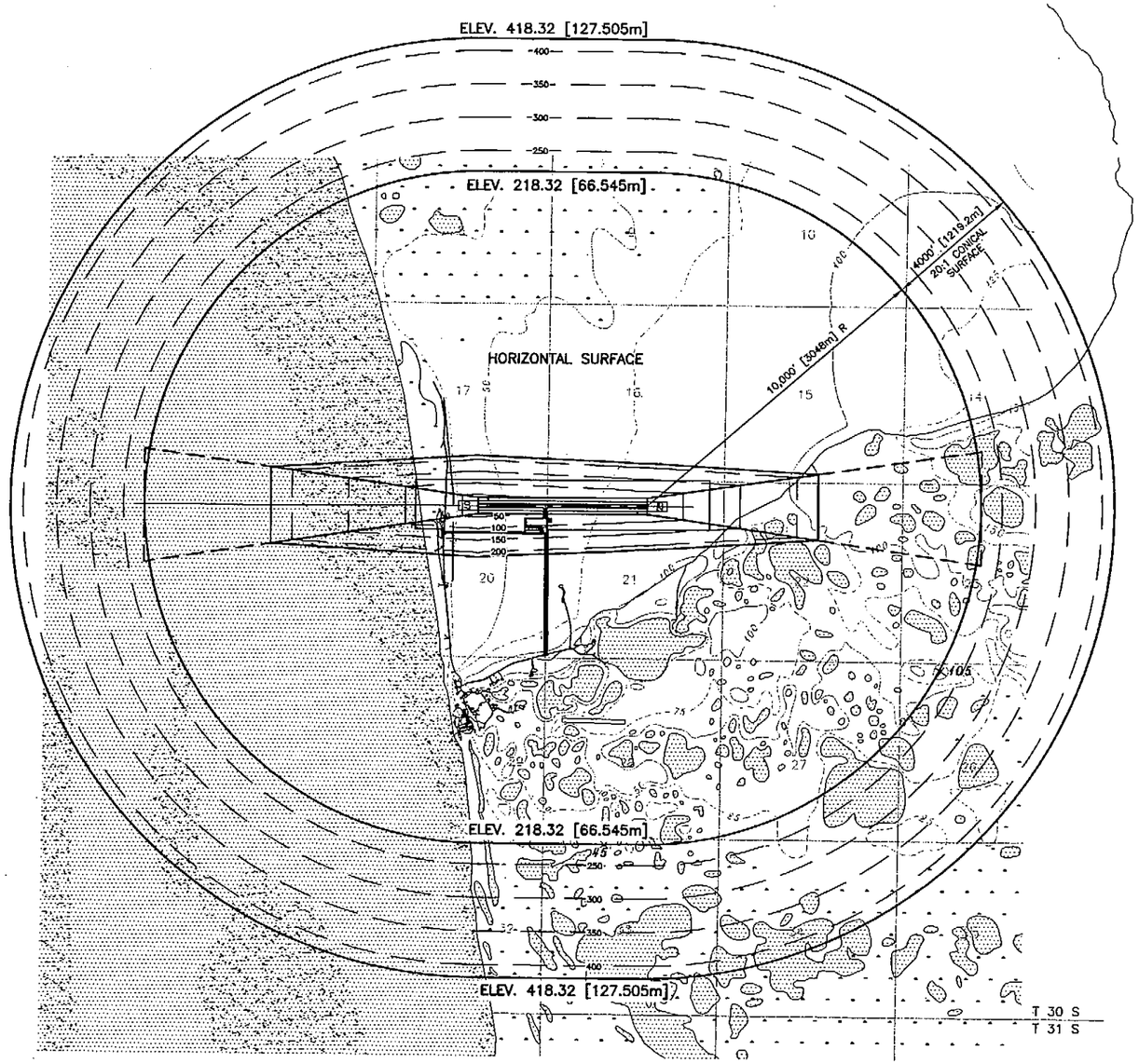
DATE 9/30/02
DESIGN
DRAWN
CHECKED

PILOT POINT AIRPORT

PILOT POINT, ALASKA

AIRPORT LAYOUT PLAN
PLAN AND PROFILE

SHEET 3 OF 7



2000' 1000' 0' 1000' 2000' 3000' 4000'
SCALE IN FEET
500m 0m 500m 1000m
SCALE IN METERS

LEGEND

- WATER SURFACE
- SWAMP
- MUD FLATS
- × SPOT ELEVATIONS

NOTES

1. AIRPORT AND RUNWAY ELEVATIONS ARE 68.32' [20.825m].
2. ELEVATIONS AND CONTOURS ARE IN FEET ABOVE MSL.
3. THE TOPO SOURCE IS U.S.G.S. UGASHIK (C-5), ALASKA.

OBSTRUCTION DATA TABLE			
NUMBER	PENETRATION DISTANCE (FEET (METERS))	DESCRIPTION	DISPOSITION

F.A.A. AIRSPACE REVIEW NUMBER: 98-AAL-094-NRA

AIRPORT LAYOUT PLAN CONDITIONAL APPROVAL SUBJECT TO ALP APPROVAL LETTER DATED 11/6/02

By: [signature] DATE: 11/6/02
FAA, AIRPORTS DIVISION
ALASKAN REGION, AAL-600

BY	DATE	REVISIONS

DATE 9/30/02
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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

DESIGN SECTION CHIEF
PROJECT MANAGER

APPROVED: STEPHEN M. RYAN, P.E.
APPROVED: JOHN G. WAHL, P.E.

PILOT POINT AIRPORT
PILOT POINT, ALASKA

AIRPORT LAYOUT PLAN
F.A.R. PART 77 SURFACES

SHEET 4 OF 7

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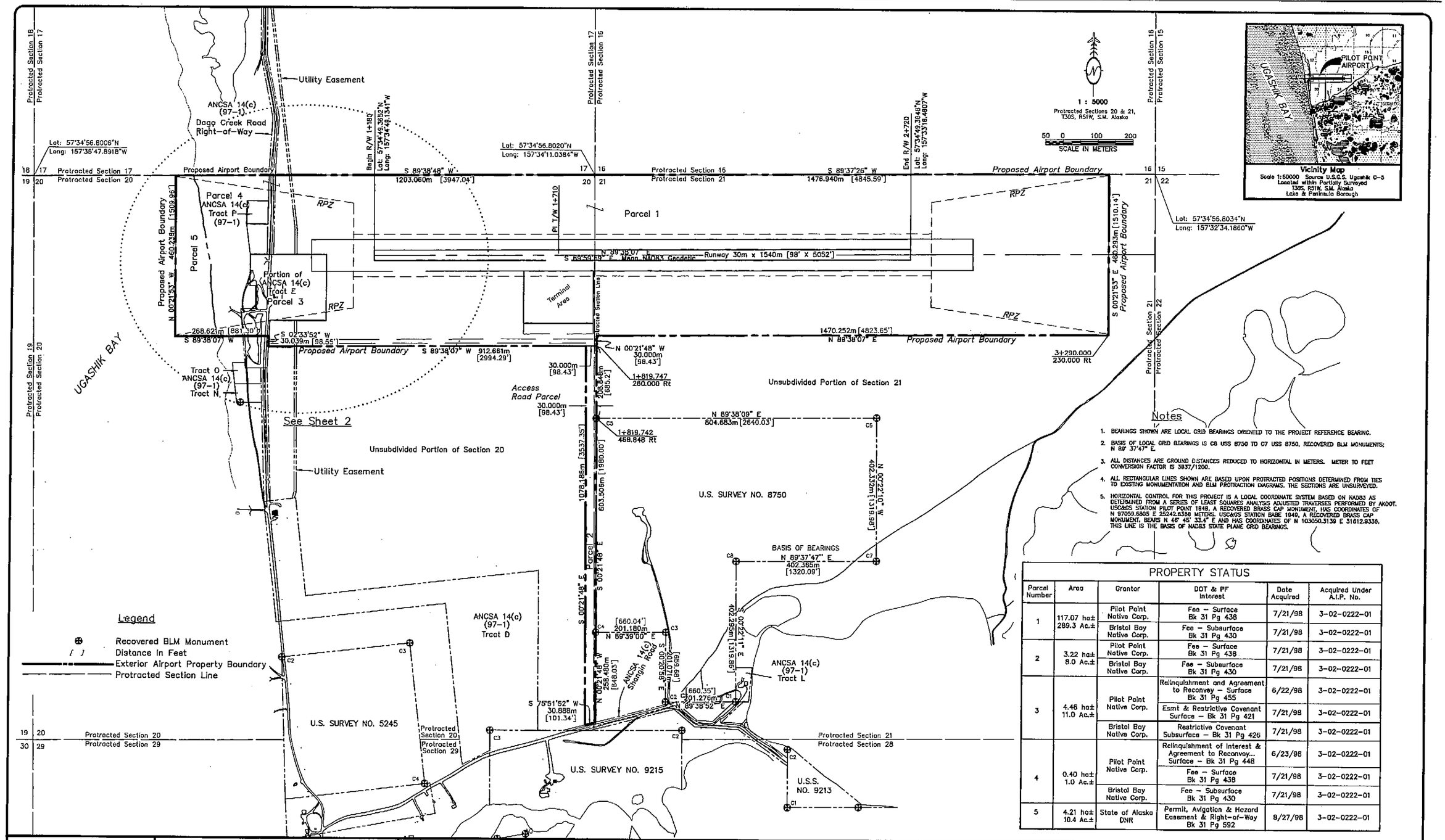
DATE: 9/25/02



Notes

1. BEARINGS SHOWN ARE LOCAL GRID BEARINGS ORIENTED TO THE PROJECT REFERENCE BEARING.
2. BASIS OF LOCAL GRID BEARINGS IS C8 USS 8750 TO C7 USS 8750, RECOVERED BLM MONUMENTS; N 89° 37'47" E.
3. ALL DISTANCES ARE GROUND DISTANCES REDUCED TO HORIZONTAL IN METERS. METER TO FEET CONVERSION FACTOR IS 3937/1200.
4. ALL RECTANGULAR LINES SHOWN ARE BASED UPON PROTRACTED POSITIONS DETERMINED FROM TIES TO EXISTING MONUMENTATION AND BLM PROTRACTION DIAGRAMS. THE SECTIONS ARE UNSURVEYED.
5. HORIZONTAL CONTROL FOR THIS PROJECT IS A LOCAL COORDINATE SYSTEM BASED ON NAD83 AS DETERMINED FROM A SERIES OF LEAST SQUARES ANALYSIS ADJUSTED TRAVERSES PERFORMED BY AKDOT. USC&GS STATION PILOT POINT 1848, A RECOVERED BRASS CAP MONUMENT, HAS COORDINATES OF N 97059.5805 E 25242.6388 METERS. USC&GS STATION BABE 1940, A RECOVERED BRASS CAP MONUMENT, BEARS N 46° 45' 33.4" E AND HAS COORDINATES OF N 103050.3139 E 31612.9336. THIS LINE IS THE BASIS OF NAD83 STATE PLANE GRID BEARINGS.

PROPERTY STATUS

Parcel Number	Area	Grantor	DOT & PF Interest	Date Acquired	Acquired Under A.I.P. No.
1	117.07 ha± 289.3 Ac.±	Pilot Point Native Corp.	Fee – Surface Bk 31 Pg 438	7/21/98	3-02-0222-01
		Bristol Bay Native Corp.	Fee – Subsurface Bk 31 Pg 430	7/21/98	3-02-0222-01
2	3.22 ha± 8.0 Ac.±	Pilot Point Native Corp.	Fee – Surface Bk 31 Pg 438	7/21/98	3-02-0222-01
		Bristol Bay Native Corp.	Fee – Subsurface Bk 31 Pg 430	7/21/98	3-02-0222-01
3	4.46 ha± 11.0 Ac.±	Pilot Point Native Corp.	Relinquishment and Agreement to Reconvey – Surface Bk 31 Pg 455	6/22/98	3-02-0222-01
			Esmt & Restrictive Covenant Surface – Bk 31 Pg 421	7/21/98	3-02-0222-01
		Bristol Bay Native Corp.	Restrictive Covenant Subsurface – Bk 31 Pg 426	7/21/98	3-02-0222-01
4	0.40 ha± 1.0 Ac.±	Pilot Point Native Corp.	Relinquishment of Interest & Agreement to Reconvey... Surface – Bk 31 Pg 448	6/23/98	3-02-0222-01
			Fee – Surface Bk 31 Pg 438	7/21/98	3-02-0222-01
		Bristol Bay Native Corp.	Fee – Subsurface Bk 31 Pg 430	7/21/98	3-02-0222-01
5	4.21 ha± 10.4 Ac.±	State of Alaska DNR	Permit, Avigation & Hazard Easement & Right-of-Way Bk 31 Pg 592	8/27/98	3-02-0222-01

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DATE: 9/25/02

AIRPORT LAYOUT PLAN CONDITIONAL APPROVAL SUBJECT TO ALP APPROVAL LETTER DATED 11/6/02
By: [signature] FOR DATE: 11/6/02
FAA AIRPORTS DIVISION ALASKAN REGION, AAL-600

FAA AIRSPACE REVIEW NUMBER: 98-AAL-094-NRA

BY	DATE	REVISIONS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

APPROVED: [signature]
STEPHEN M. RYAN, P.E. — DESIGN SECTION CHIEF
APPROVED: [signature]
JOHN G. WAHL, P.E. — PROJECT MANAGER

DATE 9/30/02
DESIGN
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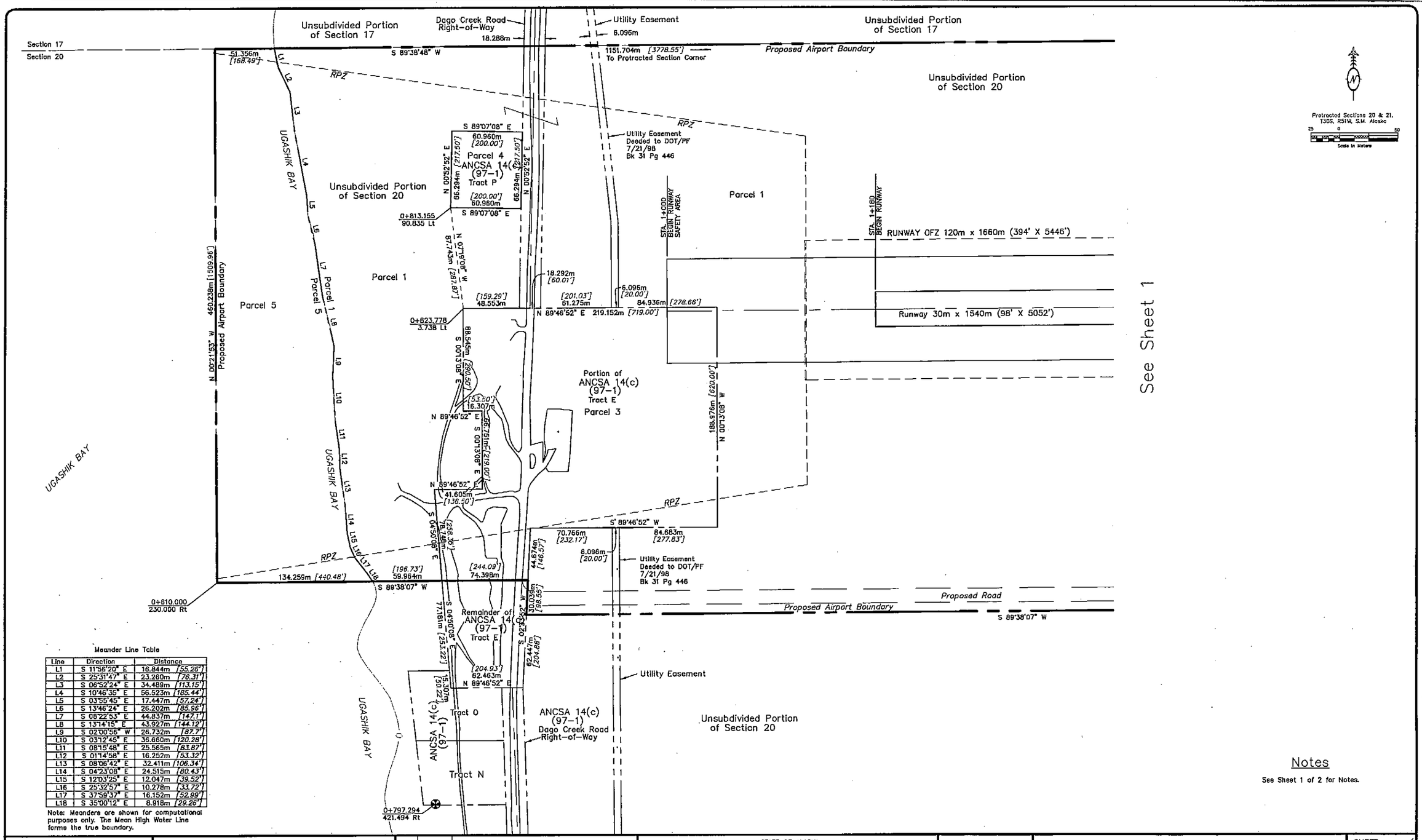
PILOT POINT AIRPORT

PILOT POINT, ALASKA

AIRPORT LAYOUT PLAN
PROPERTY PLAN (SHEET 1 OF 2)

SHEET 5 OF 7



Meander Line Table

Line	Direction	Distance
L1	S 11°56'20" E	16.844m [55.26']
L2	S 25°31'47" E	23.260m [76.31']
L3	S 06°52'24" E	34.489m [113.15']
L4	S 10°46'35" E	56.523m [185.44']
L5	S 03°55'45" E	17.447m [57.24']
L6	S 13°46'24" E	26.202m [85.96']
L7	S 08°22'53" E	44.837m [147.1']
L8	S 13°14'15" E	43.927m [144.12']
L9	S 02°00'56" W	26.732m [87.7']
L10	S 03°12'45" E	36.660m [120.28']
L11	S 08°15'48" E	25.565m [83.87']
L12	S 01°14'58" E	16.252m [53.32']
L13	S 08°06'42" E	32.411m [106.34']
L14	S 04°23'08" E	24.515m [80.43']
L15	S 12°03'25" E	12.047m [39.52']
L16	S 25°32'57" E	10.278m [33.72']
L17	S 37°59'37" E	16.152m [52.99']
L18	S 35°00'12" E	8.918m [29.26']

Note: Meanders are shown for computational purposes only. The Mean High Water Line forms the true boundary.

Notes

See Sheet 1 of 2 for Notes.

AIRPORT LAYOUT PLAN CONDITIONAL APPROVAL SUBJECT TO ALP APPROVAL LETTER DATED 11/6/02

By: [signature] FAA DATE: 11/6/02
FAA AIRPORTS DIVISION
ALASKAN REGION, AAL-600

FAA AIRSPACE REVIEW NUMBER: 98-AAL-094-NRA

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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

APPROVED: [signature] STEPHEN M. RYAN, P.E. — DESIGN SECTION CHIEF
APPROVED: [signature] JOHN C. WAHL, P.E. — PROJECT MANAGER

DATE 9/30/02
DESIGN
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PILOT POINT AIRPORT
PILOT POINT, ALASKA

AIRPORT LAYOUT PLAN
PROPERTY PLAN (SHEET 2 OF 2)
PROPERTY PLAN DETAILS

SHEET 6 OF 7

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NARRATIVE REPORT

PILOT POINT AIRPORT

I. Purpose

This Airport Layout Plan Narrative Report is included with the Airport Layout Plan according to Federal Aviation Administration (FAA) Airport Design Advisory Circular 150/5300-13, Appendix 7. Dimensions for future construction items are according to FAA AC 150/5300-13, Change 5. This report describes the design rationale for the proposed new Pilot Point Airport.

II. Introduction

This Airport Layout Plan (ALP) supersedes a previous airport layout plan approved by the FAA on November 1, 1978. This ALP represents a new airport located about 1 mile north of the village in accordance with requests from the city and local villagers.

Pilot Point is located near the middle of the Alaskan Peninsula, where the Ugashik River enters Bristol Bay. Pilot Point lies 73 nautical miles south of King Salmon and 50 nautical miles northeast of Port Heiden. Aircraft provide the only year-round public transportation service to Pilot Point. Barge service from Seattle is seasonably available. Modes of local transportation include ATVs, snow machines and trucks. There are no road links to other communities. The runway at the previous airport entered service about 1957. It was realigned and lengthened in 1973. The surfacing width was originally 28 meters (90 feet) wide with a 150 millimeter (6-inch) gravel surface. A recent maintenance project added surfacing due to the loss and degradation of the original material. A runway safety area was never constructed.

Pilot Point had a permanent population of 115 persons in 1997. Population records indicate an average annual growth rate of 0% to 1% between 1950 and 1980. Between 1980 and 1997, the growth rate reached 3%. In this report the future population growth rate is projected to be 2%. In the summer months, Pilot Point operates as a base for part of the Bristol Bay fishing industry. This activity adds seasonal workers to the permanent population base.

The Alaska Aviation System Plan (AASP) designates this airport as a "Community" class facility. The airports in this class provide primary access to a small rural community of at least 25 permanent residents without reliable alternative year round access.

III. Airport Usage and Forecasts

The Airport Master Record (FAA Form 5010-1, last revised 5/04/98) reports the following data for annual aircraft operations: 1800 air taxi, 3000 general aviation itinerant and 500 general aviation local. These traffic segments total 5300 operations for the preceding 12 months. Voluntary reports from air carriers list enplanements as follows:

Table 1: REPORTED ANNUAL ENPLANEMENTS

Year	Enplanements
1993	1304
1994	1288
1995	1482
1996	1146

Such voluntary reports usually indicate fewer flights than are actually flown. In responding to a recent survey, air taxi operators stated they fly approximately seven scheduled flights per week. Summer season charters range from as low as 21 flights per week to as high as 95 flights per week, depending on demand. Demand increases as the local fishing community hires personnel for the commercial fishing season. There are four aircraft currently based at Pilot Point. Base-year (1995) operations are estimated from these data. Projections of future aircraft operations (Table 2) are based on the observed 1% per year population growth rate.

Table 2: FORECAST OF FUTURE OPERATIONS

	1995	2000	2005	2015
Total Annual Operations	5300	5852	6461	7878
Annual Local Operations	500	552	609	743
Annual Itinerant Operations	3000	3312	3657	4458
Annual Enplanements	1482	1636	1807	2202
Annual Instrument Approaches	0	0	0	0
Annual Operations (current critical aircraft)*	4240	4681	5169	6300
Annual Operations (future critical aircraft)**	53	94	152	435

* Assume: current critical aircraft=80% of total operations
** Assume: Future critical aircraft = 1% of total operations, increasing at about 10% per year

IV. Design Rationale

This section discusses the design aircraft, the airport reference code and runway length for effective service by this airplane. Additional subsections discuss and summarize the proposed differences in primary feature dimensions (Table 3).

A. Design Aircraft

To determine the design aircraft, air carriers with scheduled flights were asked about their current fleet and what airplanes would be serving this area within the planning interval. Their responses indicate that the current strip can acceptably serve only small aircraft and predicted that passenger service at a new airport would be accomplished by aircraft of design group I and II for the foreseeable future. Penair currently flies Navajo Chieftain (PA-31-350), Cherokee Six (PA-32) and Caravan (Cessna 208) among others. Penair has expressed interest in using Fairchild Metro III for passenger service.

Community interests report that the short runway at the existing airport has frustrated attempts to serve them with moderately sized cargo aircraft. Regional cargo carriers (including Northern Air Cargo and Lynden Air Cargo) employ Lockheed Electra II (L-188), Hercules (L-100), Douglas DC-3, DC-6, and Curtis Commando (C-47). Local government and commercial interests enthusiastically support a runway that can accommodate these aircraft.

According to FAA Advisory Circular 150/5325-4A, Section 1.2.a, a family or group of airplanes should be selected for design aircraft when considering airports of this size. The pertinent circumstances in the discussion above supports airplane design group B-II as the near-term design aircraft. To accommodate the potential for growth to match the interest expressed by the airline companies, design group B-III should be the ultimate design aircraft. The following sections apply these choices to the standards proposed for the airport.

B. Airport Reference Code

The near-term design aircraft is the B-II family of aircraft. Features of the near term development match the requirements of this design group. Modernization of the regional carriers' aircraft fleet is one factor that suggests that "other than utility" should apply to the primary surface.

Since Pilot Point is a base of operations for the Ugashik segment of the Bristol Bay fishing industry, there is a potential for future increases in cargo flights. To accommodate the potential for this airport to serve the area's needs for fish export and fleet support, the ultimate features in this plan will conform to a B-III airport reference code. Separation standards for the ultimate airport were included in the near-term development to minimize future costs.

If an airport were available to serve B-III aircraft, the current use by this design group would be about 3 to 4 flights per month in the winter and 10 to 15 flights per month in the summer. Annual demand probably falls within the range of 50 to 150 flights per year. To warrant beginning the improvement to B-III standards, the annual demand for such aircraft should exceed 150 flights or 300 operations per year with projections for demand growth to a level exceeding 500 operations per year.

C. Wind Coverage

The City of Pilot Point supplied 2.5 years of wind data from their automated weather observation system. These data included wind velocity and direction observations at 1/2 hour intervals between December 11, 1992 and September 6, 1995. Wind analyses according to AC 150/5300-13, Appendix 1 were performed for runway orientations using this data.

Allowing a 10.5-knot crosswind component, the best coverage is 90% between north azimuth 86 and 110 degrees. Allowing a 13-knot crosswind component, the best wind coverage improves to 95% between north azimuths 88 and 114 degrees. Allowing a 16-knot crosswind component improves coverage to 95 to 98% over this range of orientations.

D. Preferred Location Selection

The preferred location and orientation for the runway was chosen after consideration of several factors including wind coverage and terrain constraints. The orientation lies close to the azimuth suggested by the best wind coverage. Although the terrain has mild slopes at the selected location, it begins to rise significantly just south of the west end of the runway and rises more steeply closer to the ridge. The ridge trends east from the bluff that overlooks the mouth of the Ugashik River. It forms a bowl-shaped plain by turning gradually to the north with increasing distances from Ugashik Bay. Other location constraints include Ugashik Bay to the west and the Pilot Point Critical Habitat Area to the north. An existing overhead electrical distribution circuit parallels the beach road about 220 meters (722') west of the runway 7 threshold.

E. Runway

According to common practices for rural Alaska airports, runway construction will consist of a sand and gravel embankment capped with crushed aggregate surfacing. The ultimate runway length of 1540 meters (5052.5') was suggested by the design program from Chapter 2 of AC 150/5325-4A, Runway Length Requirements. The existing runway length of 1000 meters (3280') matches this program's recommendation for 100% of small aircraft of less than 10 passengers.

Runway surfacing is 20 meters (75') wide by 1000 meters (3280') long. Safety area dimensions are 45 meters (147.6') wide by 1400 meters (4593') long. The near-term safety area will extend 90 meters (295') beyond each runway end.

F. Taxiway

The ultimate airport layout includes 2 exit taxiways connecting the runway to the apron. One taxiway was constructed as part of the initial development. The other will be constructed when warranted by operational analysis. The ultimate safety area and surfacing widths match Airplane Design Group B-III standards which are 36 meters (118.1') and 15 meters (49.2') respectively. Near-term development will provide the ultimate widths to increase operational tolerance in adverse conditions such as crosswinds over icy surfaces.

G. Aircraft Parking Area

The distance from the runway centerline to the near edge of the apron will be 120 meters (393.7'). The new apron is 75 meters (246.1') wide and 200 meters (656.2') in length and will provide a parking area of 15,000 square meters (161,459 square feet). This aircraft parking area will meet the guidelines of the Alaska Aviation Systems Plan for Community Class Airports. An additional aviation support area measures 30 meters (98.4') by 90 meters (295.3'). The two areas combined will have an area of 21,000 square meters (226,042 square feet). Five aircraft tie-downs are proposed for the apron.

H. Access Road

An existing road parallels the beach past the Airport site. It connects the village to a dock facility. A 7.5m(24') by 1100m(3600') access road provides access to the community south of the Airport. A future road will provide access to the port access road witch is located off the west end of the runway.

I. Airport Lighting

The proposed development will add medium intensity lighting to both the runway and taxiway. A lighted wind cone will be installed. A rotating beacon will be placed on the new snow removal equipment (SRE) storage building.

J. Landfill Site

The community has established a new landfill east of the new airport and beyond 3048m (10,000'). a temporary landfill was established at the old airport and will be decommissioned.

K. Dimension summary

Runway 7-25 Feature	Near-Term		Standard		Future	
	METERS	FEET	METERS	FEET	METERS	FEET
Runway Length	1000	3280	1000	3280	1540	5280
Runway Width	23	75.5	23	75.5	30	98.4
Runway Safety Area Width	45	147.6	45	147.6	90	295.3
Runway Safety Area Length						
Beyond Runway Ends	90	295.3	90	295.3	180	590.6
Runway Object Free Area Width	240	787.4	150	492.1	240	787.4
Taxiway Width	15	49.2	10.5	35	15	49.2
Taxiway Safety Area Width	36	78.7	24	78.7	36	118.1
Taxiway Object Free Area Width	57	187.0	40	131.2	57	187.0
Runway Centerline to edge of Aircraft Parking	120	393.7	75	246.1	120	393.7
RPZ Length	510	1673.2	510	1673.2	510	1673.2
RPZ Inner Width	300	984.3	300	984.3	300	984.3
RPZ Outer Width	453	1486.2	453	1486.2	453	1486.2
Approach Inner Width	152.4	500	152.4	500	152.4	500
Approach Outer Width	1066.8	3500	1066.8	3500	1066.8	3500
Approach Length	3048	10,000	3048	10,000	3048	10,000
Approach Slope Angle	34:1	34:1	34:1	34:1	34:1	34:1

Standard values are from FAA AC 150/5300-13, Tables 2-4, 3-1, 4-1, group B-II and Non-Precision Approach with Visibility Minimum>3/4 Mile according to FAR Part 77C.
"Future" column matches standard values for design group B-III. Narrative section IV.E discusses the runway length standard.

V. Staged Development

Development of the Pilot Point Airport will be accomplished in near-term, mid-term, and long-term phases. Near term development will occur in 1-5 years. Mid-term development will occur in 6-10 years or with observed operations of B-III aircraft greater than 300 per year and projected to grow beyond 500 operations per year. Long-term development will occur in about 11-20 years. Each stage is discussed in more detail in the following sections.

A. Near-Term Development

Near-Term development items 1-7 were completed under AIP No. 3-02-222-0199, work completed in 2000.

Near-Term Work Elements:

1. Construct a 1000 meter (3280') long runway. Construct a 45 by 1180 meter (14' by 3870') safety area. Provide a crushed aggregate surface course.
2. Construct a 15 meter (49') wide taxiway and a 36 meter (79') taxiway safety area leading from the proposed runway to the new apron. Provide a crushed aggregate surface.
3. Construct a 15,000 square meter (161459 square feet) apron for aircraft parking and taxilanes. Construct 4050 square meters (43,600 square feet) of additional embankment for aviation support activity. Surface the apron and taxilane with crushed aggregate.
4. Connect the apron to the local surface transportation system by building an access road. The road will be about 1.1 kilometers (0.68 miles) long. Provide a crushed aggregate surface that is 7 to 10 meters (22' to 33') wide.
5. Place an existing 3-phase overhead electrical distribution circuit underground for about 500 meters (1640').
6. Other work will include the installation of medium intensity lighting along the runway and taxiway and the purchase of a new motor grader for snow removal. Construct a SRE building to house the motor grader. Funding constraints may postpone some of these features to later development phases.
7. Install PAPI, Runway 25.
8. Construct 24' x 50' heated sre building.

B. mid-term Development

Upgrade this airport to B-III design standards. This work will include expanding the existing runway and taxiway safety areas. Other work will include resurfacing the runways and taxiways and installation of a precision approach path indicating (PAPI) system. This work will cost $1 to $2 million.

Mid-Term Work Elements

1. Expand and lengthen the runway and safety area to conform to B-III design standards.
2. Add a second taxiway if warranted by operational analysis.
3. Restore crushed aggregate material to the airport surface courses as needed.
4. Install PAPI, Runway 7.

C. Long-Term Development

Long-term development will consist of resurfacing the runway, taxiway and other operational surfaces. The apron or aviation support area may be expanded according to operational needs. This work will cost $0.5 to $2 million.

VI. Property Status

Property for Airport acquired under AIP No. 3-02-0222-0197

VII. Community Involvement

The residents of the village of Pilot Point have been informed of the planned development by the Alaska DOT&PF. Meetings were held to obtain comments and input from the local residents. The completion of this project requires an Environmental Assessment that also provides opportunities for community input. Letters and comments from residents and local government officials remain filed with DOT&PF, Central Region offices. The community supports relocating the airport and the proposed development program.

VIII. Modifications to Design Standards

There are no obstacle free zone object penetrations. The design standards for the airport meet or exceed the minimum values for the design aircraft family.

IX. Encroachments into Part 77 Surface

There are no encroachments into the Part 77 surfaces.

FILE:

DATE: 9/25/2002

AIRPORT LAYOUT PLAN CONDITIONAL APPROVAL SUBJECT TO ALP APPROVAL LETTER DATED 11/6/02

By: [signature] DATE: 11/6/02
FAA, AIRPORTS DIVISION
ALASKAN REGION, 601

FAA AIRSPACE REVIEW NUMBER: 98-AAL-094-NRA

BY	DATE	REVISIONS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

APPROVED: [signature] STEPHEN M. RYAN, P.E. DESIGN SECTION CHIEF
APPROVED: [signature] JOHN G. WAHL, P.E. PROJECT MANAGER

DATE 9/30/02
DESIGN
DRAWN
CHECKED

PILOT POINT AIRPORT
PILOT POINT, ALASKA

AIRPORT LAYOUT PLAN
NARRATIVE REPORT

SHEET 7 OF 7