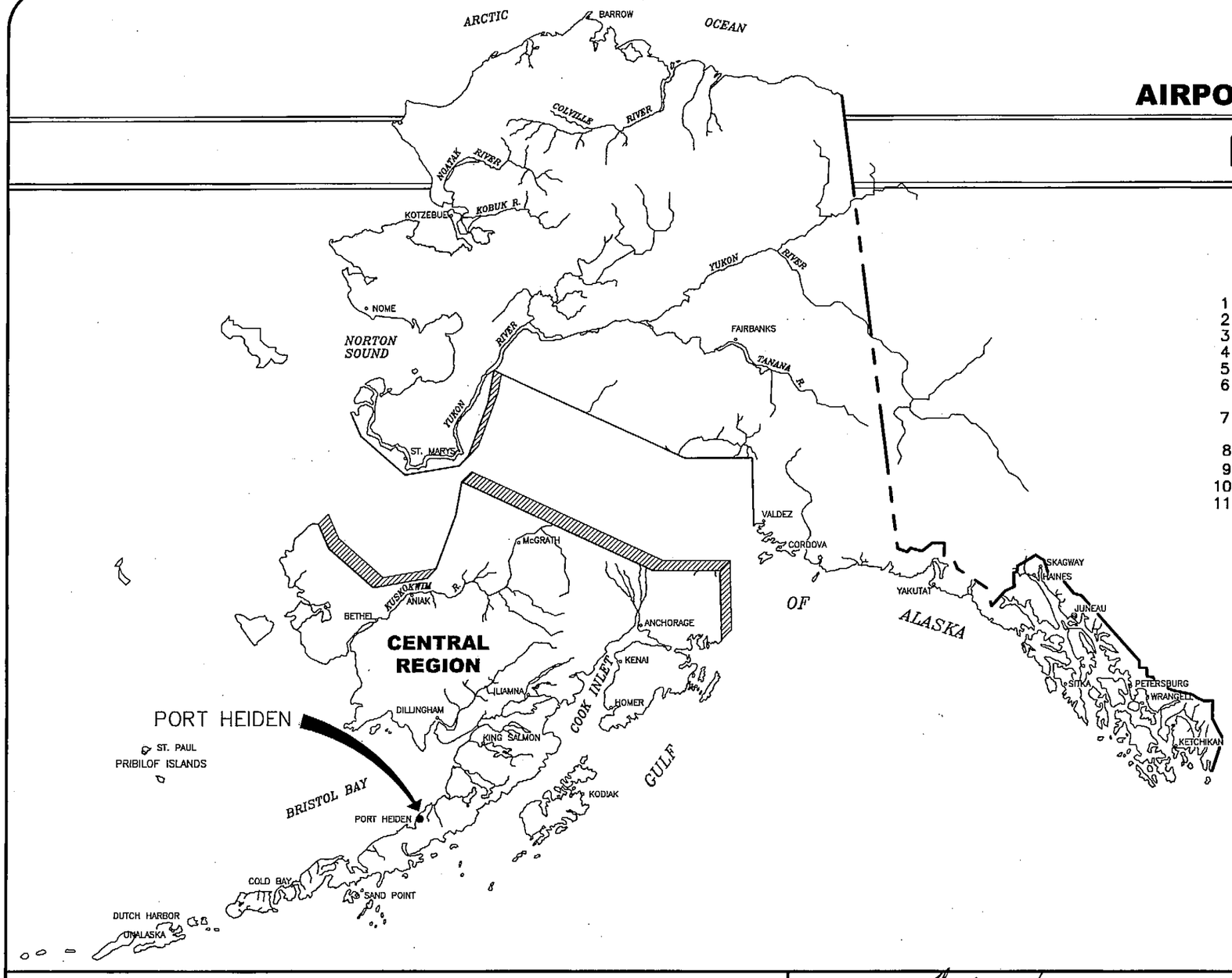
AIRPORT LAYOUT PLAN FOR

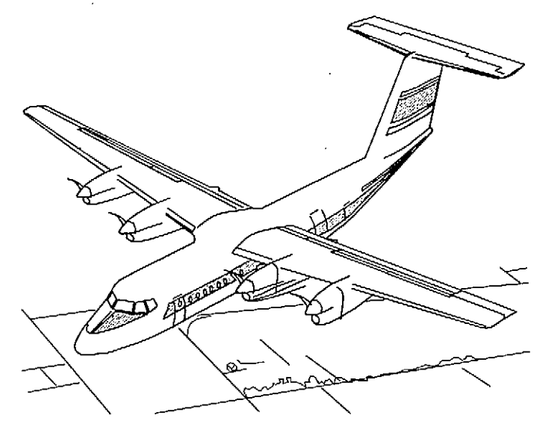
PORT HEIDEN

2002



DRAWING INDEX

1 – COVER SHEET AND INDEX
2 – VICINITY MAP, WIND ROSE, AND DATA TABLES
3 – EXISTING LAYOUT PLAN
4 – R/W 5/23 PLAN & PROFILE
5 – R/W 13/31 PLAN & PROFILE
6 – RUNWAY 5/23
INNER PORTION OF THE APPROACH SURFACE
7 – RUNWAY 13/31
INNER PORTION OF THE APPROACH SURFACE
8 – AIRPORT AIRSPACE
9 – TERMINAL AREA PLAN
10 – PROPERTY PLAN
11 – NARRATIVE REPORT



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

CONCUR DATE 8/5/02
GORDON C. KEITH — CONSTRUCTION & OPERATIONS DIRECTOR

APPROVED DATE 8-5-02
STEVEN R. HORN, P.E. — REGIONAL PRECONSTRUCTION ENGINEER

AIRPORT LAYOUT PLAN CONDITIONAL APPROVAL SUBJECT TO ALP APPROVAL LETTER DATED 9-16-02
By: _____ DATE: 9-16-02
FAA, AIRPORTS DIVISION
ALASKAN REGION, AAL-601

F.A.A. AIRSPACE REVIEW NUMBER: 02-AAL-007-NRA

PORT HEIDEN
AIRPORT LAYOUT PLAN

SHEET 1 OF 11

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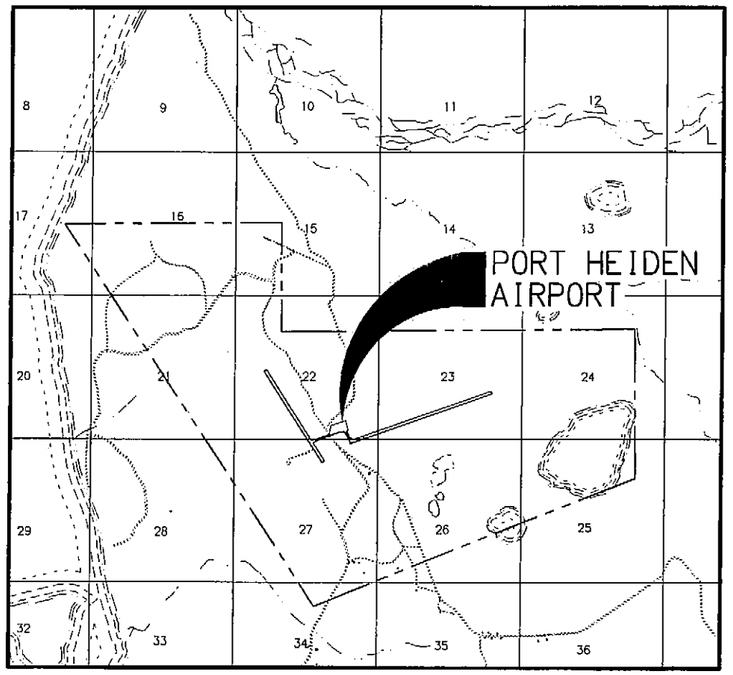
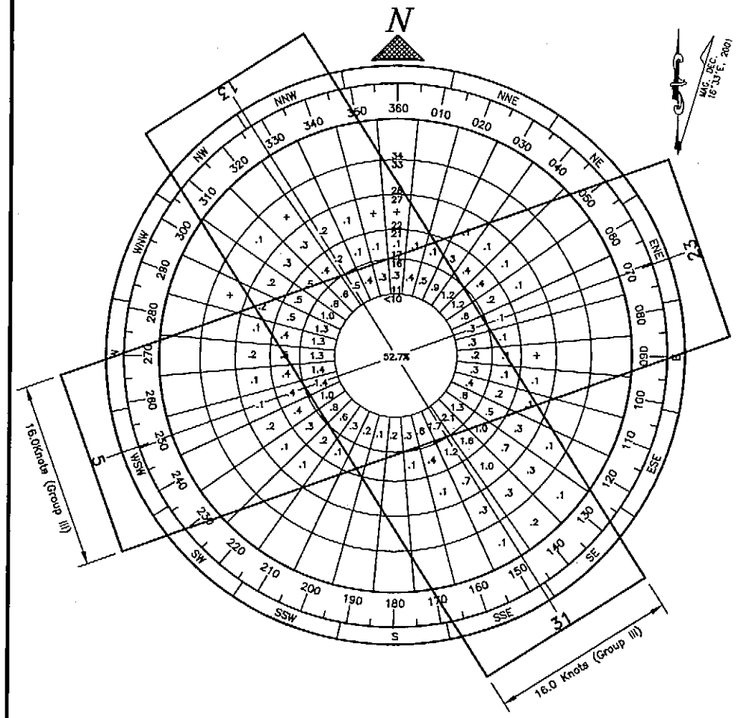


VICINITY MAP

1:100,000
2" = 1 MILE
T 37 S, R 59 W, SECTIONS 22, 23, 24, 26, 27
SEWARD MERIDIAN
U.S.G.S. CHIGNIK (D-2, D-3), ALASKA



WIND DATA

	SPEED	R/W 5/23	R/W 13/31	TOTAL
WIND COVERAGE:	16 KNOTS	89.43%	95.17%	99.87%

SOURCE: ALASKA STATE CLIMATE CENTER
E.N.R.I. UNIVERSITY OF ALASKA, ANCHORAGE
29 SEPTEMBER 1999

PERIOD: 31 DEC 1991 TO 14 SEP 1999

NON-STANDARD CONDITIONS

ITEM	EXISTING	STANDARD	FUTURE
RUNWAY 5/23 SAFETY AREA	200' x 7050'	300' x 6200'	300' x 6200'
RUNWAY 13/31 SAFETY AREA	200' x 5400'	300' x 5200'	300' x 5200'

RUNWAY DATA

ITEM		RUNWAY 5/23 EXISTING	RUNWAY 5/23 FUTURE	RUNWAY 13/31 EXISTING	RUNWAY 13/31 FUTURE
% WIND COVERAGE	16 KNOTS	89.43	89.43	95.17	95.17
INSTRUMENT RUNWAY		NPI (5)	NPI	NPI (13)	NPI
RUNWAY SURFACE		GRAVEL	GRAVEL	GRAVEL	GRAVEL
PAVEMENT STRENGTH	[lb.]	N/A	N/A	N/A	N/A
APPROACH SURFACES		34:1(5), 20:1(23)	34:1	34:1(13), 20:1(31)	34:1
VISIBILITY MINIMUM		1 MILE	1 MILE	1 MILE	1 MILE
RUNWAY LIGHTING		M.I.	M.I.	M.I.	M.I.
RUNWAY MARKING		NONE	NONE	NONE	NONE
RUNWAY NAVIGATION AIDS		VASI, REIL	VASI, REIL	PAPI, REIL	PAPI, REIL
AIRCRAFT APPROACH CATAGORY		C	B	C	B
AIRCRAFT DESIGN GROUP		III	III	III	III
RUNWAY DIMENSION		100'x 6,250'	100'x 5,000'	100'x 4,600'	100' X 4000'
RUNWAY SAFETY AREA DIMENSION		200'x 7,050'	300'x 6,200'	200'x 5,400'	300'x 5200'
RUNWAY OBJECT FREE AREA DIMENSION		800'x 8,250'	800'x 6,200'	800'x 6,600'	800'x 5200'
RUNWAY OBSTACLE FREE ZONE DIMENSION		400'x 6,650'	400'x 5,400'	400'x 5,000'	400'x 4,400'
RUNWAY PROTECTION ZONE		500'x 1,010'x 1,700' (05)	500'x 1,010'x 1,700' (05)	500'x 1,010'x 1,700' (13)	500'x 1,010'x 1,700' (13)
		500'x 700'x 1,000' (23)	500'x 1,010'x 1,700' (23)	500'x 700'x 1,000' (31)	500'x 1,010'x 1,700' (31)
GEODETIC POSITIONS (N.A.D. 83)					
THRESHOLD R/W 5	LAT.	56°57'24.12"N	56°57'24.78"N		
	LONG.	158°38'06.65"W	158°38'03.25"W		
THRESHOLD R/W 23	LAT.	56°57'44.82"N	56°57'41.34"N		
	LONG.	158°38'20.47"W	158°38'38.31"W		
THRESHOLD R/W 13	LAT.			56°57'52.33"N	56°57'49.01"N
	LONG.			158°39'12.54"W	158°39'08.66"W
THRESHOLD R/W 31	LAT.			56°57'14.11"N	56°57'15.78"N
	LONG.			158°38'27.92"W	158°38'29.86"W

AIRPORT DATA

ITEM		EXISTING	FUTURE
AIRPORT ELEVATION (M.S.L.)*		96.95'	95.31'
AIRPORT REFERENCE POINT (A.R.P.) (NAD 83)	LAT.	56°57'33.95"N	56°57'32.77"N
	LONG.	158°37'54.55"W	158°38'00.11"W
TAXIWAY LIGHTING		M.I.	M.I.
RAMP LIGHTING		NONE	NONE
MEAN MAX. TEMPERATURE, HOTTEST MONTH (JULY)		14°C (57°F)	SAME
MAGNETIC DECLINATION, YEAR		19°2'E,1985	16°33'E,2001
AIRPORT REFERENCE CODE		C-III, OTHER	B-III, OTHER
AIRPORT TERMINAL NAVIGATION AIDS		ROT. BEACON	ROT. BEACON
AIRPORT NAVIGATION AIDS		NDB, DME	NDB, DME

*ELEVATIONS ARE REFERENCED TO THE ADOT&PF PUBLISHED ELEVATION OF NGS CONTROL STATION "HEIDEN SE BASE" AS REPORTED IN THE PORT HEIDEN AIRPORT, PHOTO CONTROL PROJECT REPORT PREPARED BY DOWL ENGINEERS. ELEVATION = 118.75'.

LEGEND

ITEM	EXISTING	FUTURE
PROPERTY LINE		
BUILDING RESTRICTION LINE		
AIRPORT REFERENCE POINT (A.R.P.)		
WIND CONE AND SEGMENTED CIRCLE		
CONTOURS	100	100
ROADWAYS		
BUILDINGS		
ROTATING BEACON		ROB
SHORELINE		
ANTENNA		
VASI		
PAPI		
FENCE		
THRESHOLD LIGHTS		
REIL		
OBJECT FREE AREA	OFA	OFA
OBSTRUCTION FREE ZONE	OFZ	OFZ

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FILE:
DATE:

AIRPORT LAYOUT PLAN CONDITIONAL APPROVAL
By: [signature]
FAA, AIRPORTS DIVISION
ALASKAN REGION, AAL-601
DATE: 9-16-02
F.A.A. AIRSPACE REVIEW NUMBER: 02-AAL-007-NRA

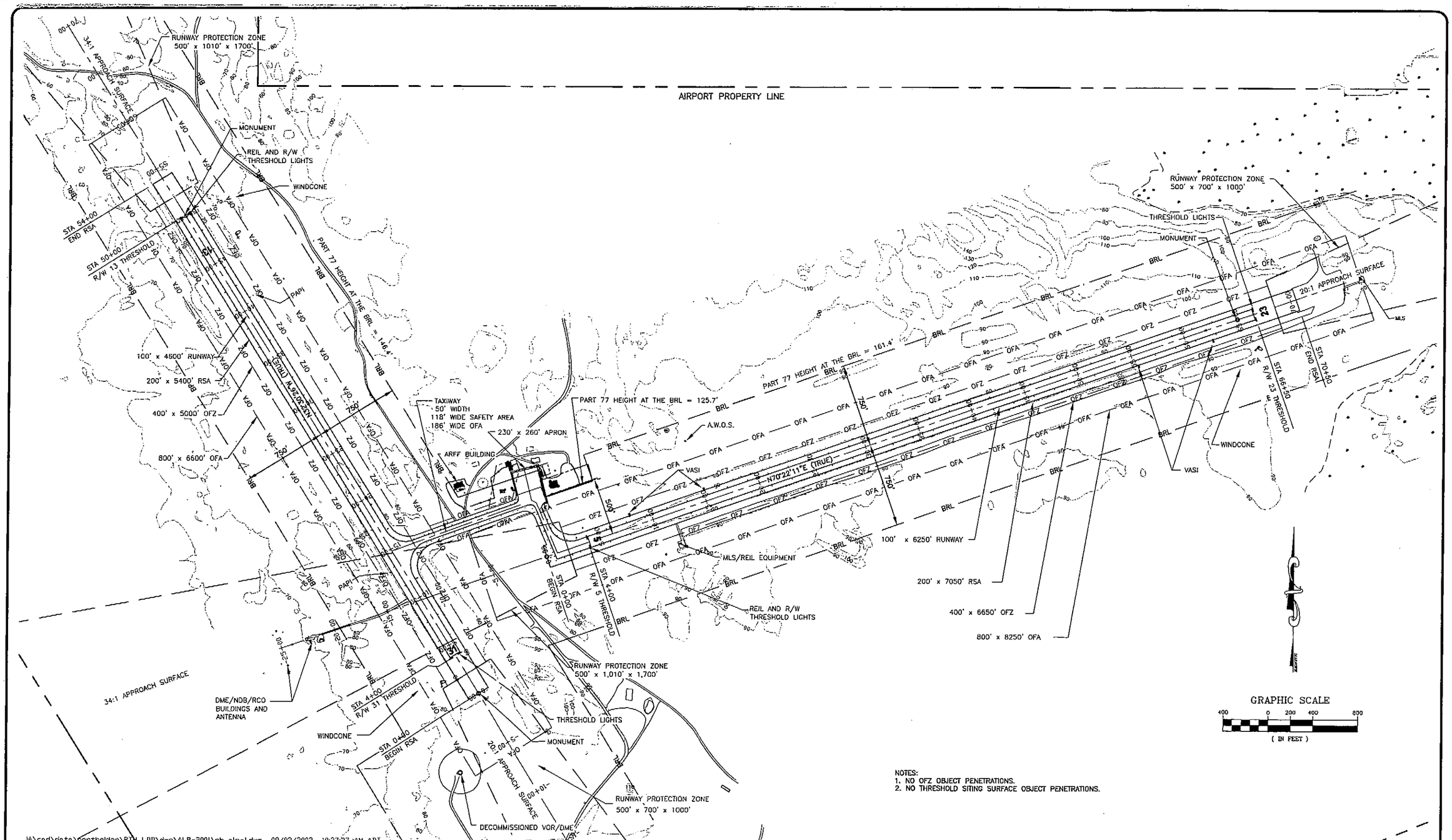
BY	DATE	REVISIONS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION
APPROVED: [signature] STEPHEN M. RYAN, P.E. — DESIGN SECTION CHIEF
APPROVED: [signature] HARVEY M DOUTHIT, P.E. — PROJECT MANAGER

DATE 08/01/02
DESIGN JEG
DRAWN MGT
CHECKED TJS

PORT HEIDEN AIRPORT
VICINITY MAP, WIND ROSE,
AIRPORT LAYOUT PLAN
DATA TABLES

SHEET 2 OF 11



NOTES:
1. NO OFZ OBJECT PENETRATIONS.
2. NO THRESHOLD SITING SURFACE OBJECT PENETRATIONS.

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AIRPORT LAYOUT PLAN CONDITIONAL APPROVAL

By: _____
FAA, AIRPORTS DIVISION
ALASKAN REGION, AAL-601

DATE: 9-16-02

F.A.A. AIRSPACE REVIEW NUMBER: 02-AAL-007-NRA

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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

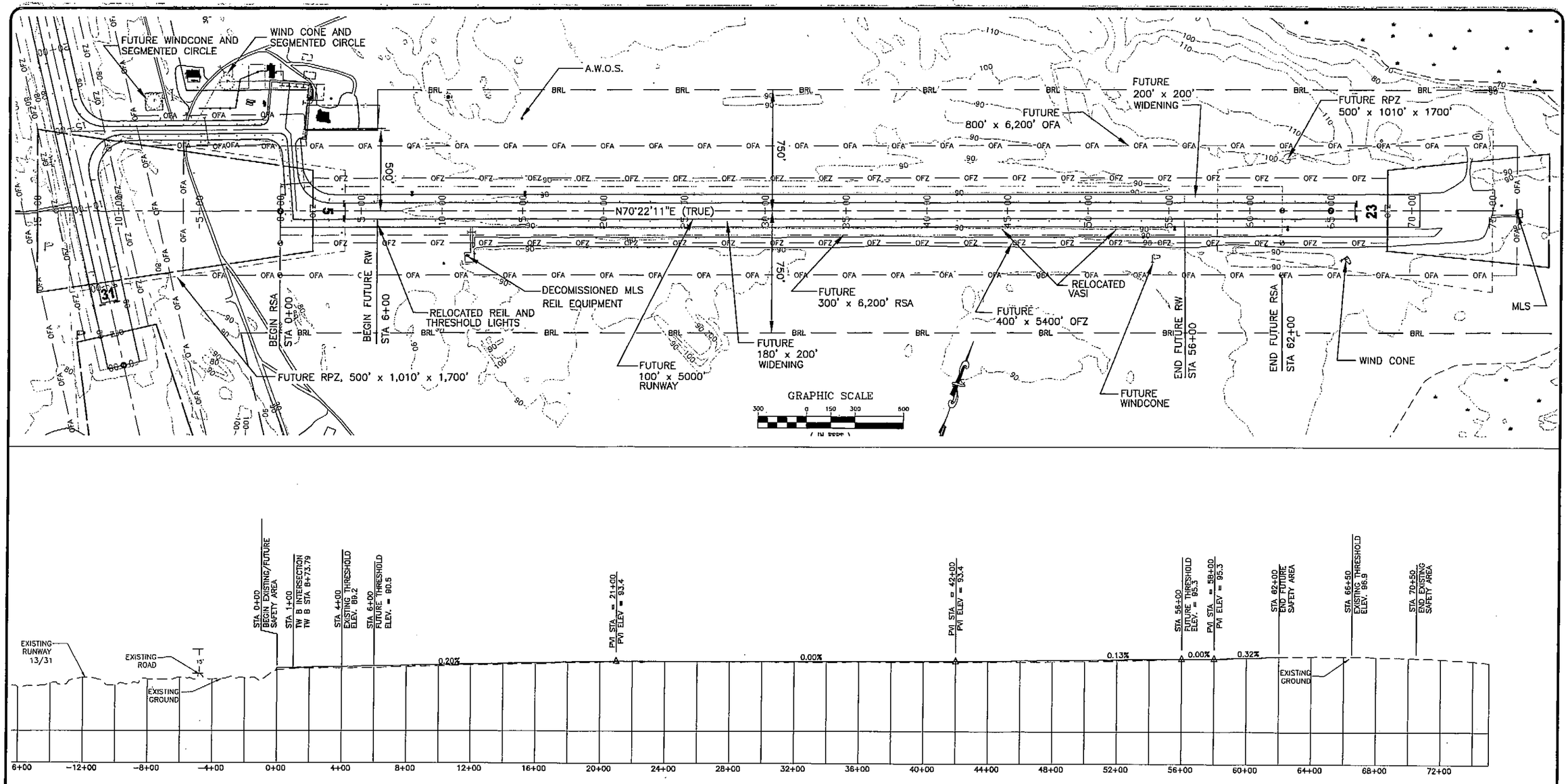
APPROVED: _____
STEPHEN M. RYAN, P.E. — DESIGN SECTION CHIEF

APPROVED: _____
HARVEY M DOUTHIT, P.E. — PROJECT MANAGER

DATE 08/01/02
DESIGN JEG
DRAWN MGT
CHECKED TJS

PORT HEIDEN AIRPORT
AIRPORT LAYOUT PLAN
EXISTING LAYOUT PLAN

SHEET 3 OF 11



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FILE:
DATE:

AIRPORT LAYOUT PLAN CONDITIONAL APPROVAL

By: [signature]
FAA, AIRPORTS DIVISION
ALASKAN REGION, AAL-601

DATE: 9-16-02

F.A.A. AIRSPACE REVIEW NUMBER: 02-AAL-007-NRA

BY	DATE	REVISIONS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

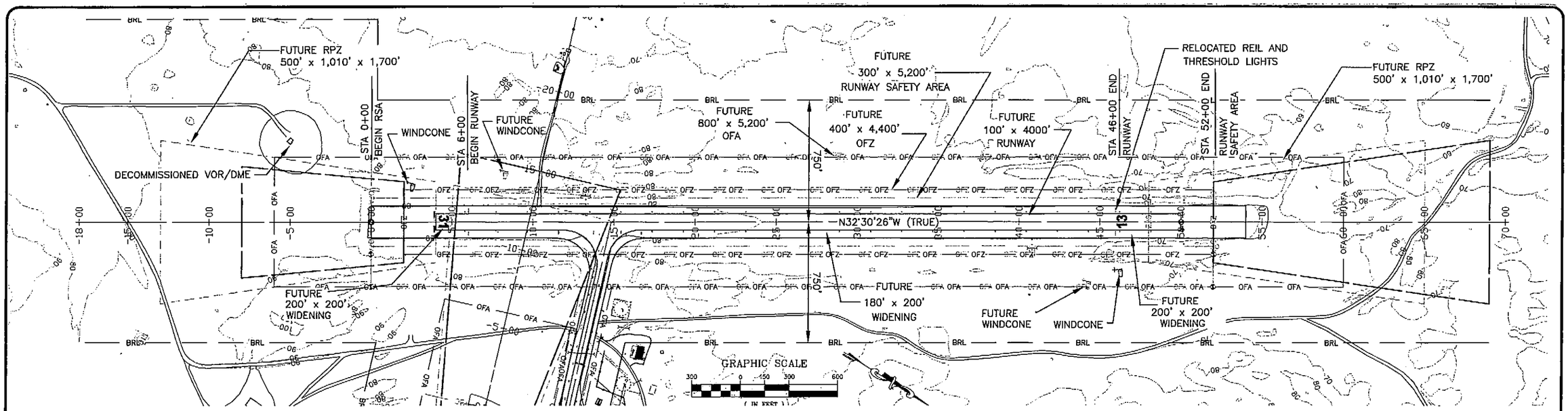
APPROVED: [signature]
STEPHEN M. RYAN, P.E. — DESIGN SECTION CHIEF

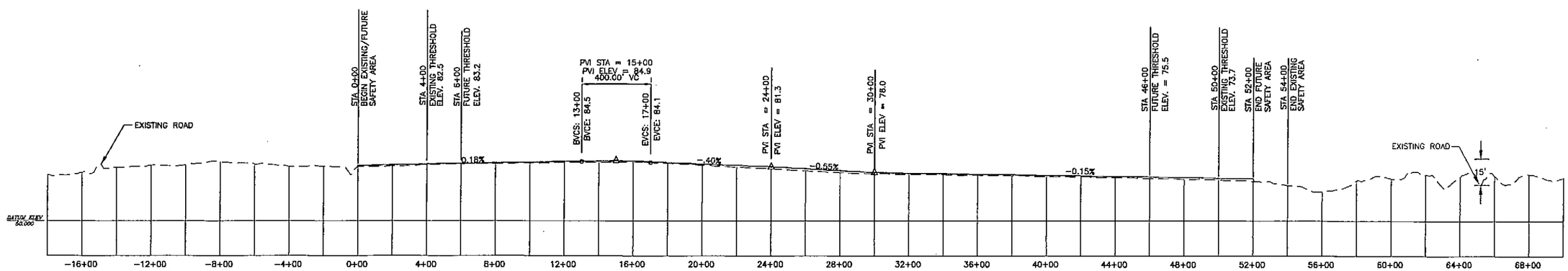
APPROVED: [signature]
HARVEY M. DOUTHIT, P.E. — PROJECT MANAGER

DATE 08/01/02
DESIGN JEG
DRAWN MGT
CHECKED TJS

PORT HEIDEN AIRPORT
AIRPORT LAYOUT PLAN
RUNWAY 5/23
PLAN AND PROFILE

SHEET 4 OF 11





NOTE:
1. NO OFZ OBJECT PENETRATIONS.

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FILE:
DATE:

AIRPORT LAYOUT PLAN CONDITIONAL APPROVAL

By: Dale Pratt
FAA, AIRPORTS DIVISION
ALASKAN REGION, AAL-601

DATE: 9-16-02

F.A.A. AIRSPACE REVIEW NUMBER: 02-AAL-007-NRA

BY	DATE	REVISIONS

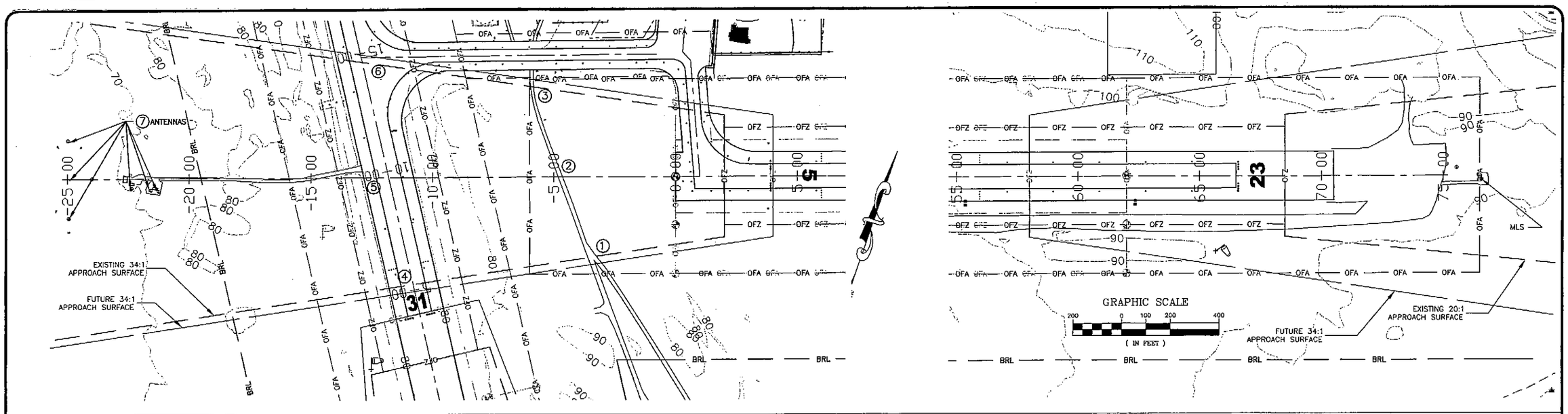
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
CENTRAL REGION

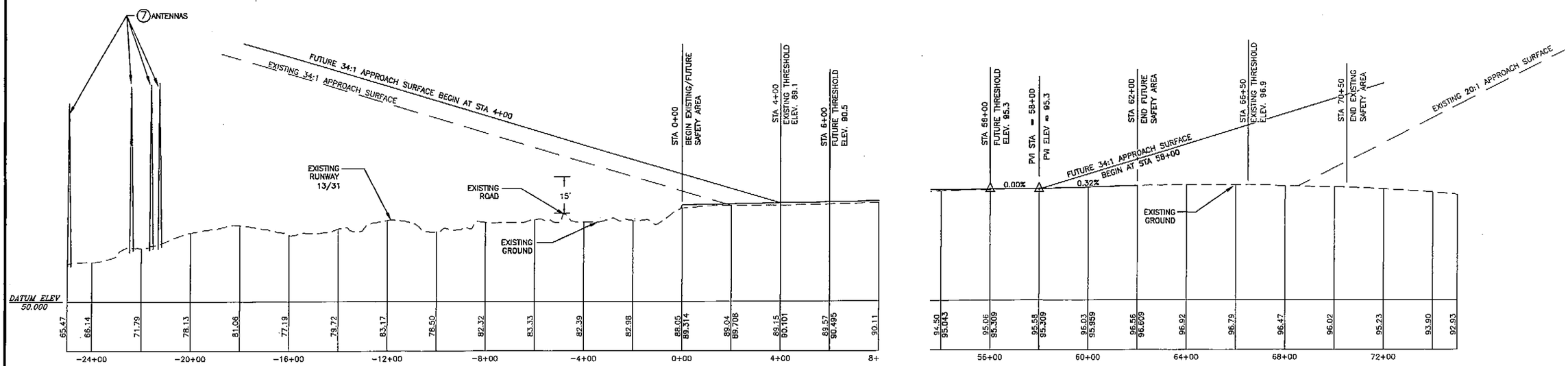
APPROVED: STEPHEN M. RYAN, P.E. — DESIGN SECTION CHIEF
APPROVED: HARVEY M. DOUTHIT, P.E. — PROJECT MANAGER

DATE 08/01/02
DESIGN JEG
DRAWN MGT
CHECKED TJS

PORT HEIDEN AIRPORT
AIRPORT LAYOUT PLAN
RUNWAY 13/31
PLAN AND PROFILE

SHEET 5 OF 11





OBSTRUCTION TABLE RUNWAY 5/23 APPROACHES				
NUMBER	OBJECT	ELEV.	AMOUNT OF PENETRATION	DISPOSITION OF OBSTRUCTION
1	EXISTING ROAD	86.31	0	NONE
2	EXISTING ROAD	84.80	0	NONE
3	EXISTING ROAD	83.84	0	NONE
4	RW 13/31	82.75	0	NONE
5	RW 13/31	83.36	0	NONE
6	RW 13/31	83.78	0	NONE
7	ANTENNAS	153.7 (HIGHEST)	0	NONE

NOTES:

1. NO THRESHOLD SITTING SURFACE OBJECT PENETRATIONS.
2. OBSTRUCTION CLEARANCE SLOPE IS 47:1 FOR R/W 05 AND IS > 50:1 FOR R/W 23.

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FILE:

DATE:

AIRPORT LAYOUT PLAN CONDITIONAL APPROVAL

By: [signature]
FAA, AIRPORTS DIVISION
ALASKAN REGION, AAL-601

DATE: 9-16-02

F.A.A. AIRSPACE REVIEW NUMBER: 02-AAL-007-NRA

BY	DATE	REVISIONS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

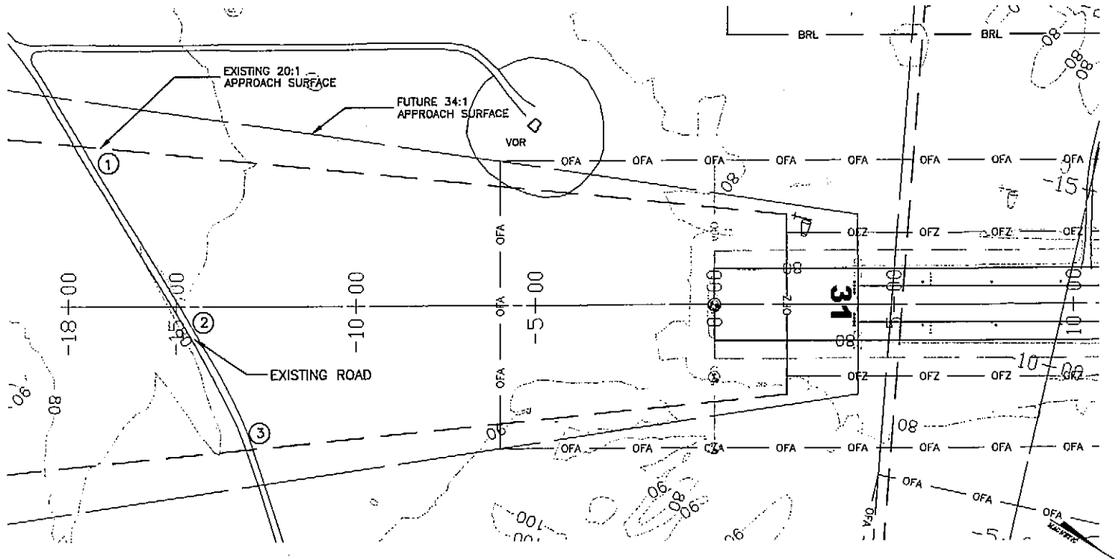
APPROVED: [signature]
STEPHEN M. RYAN, P.E. — DESIGN SECTION CHIEF

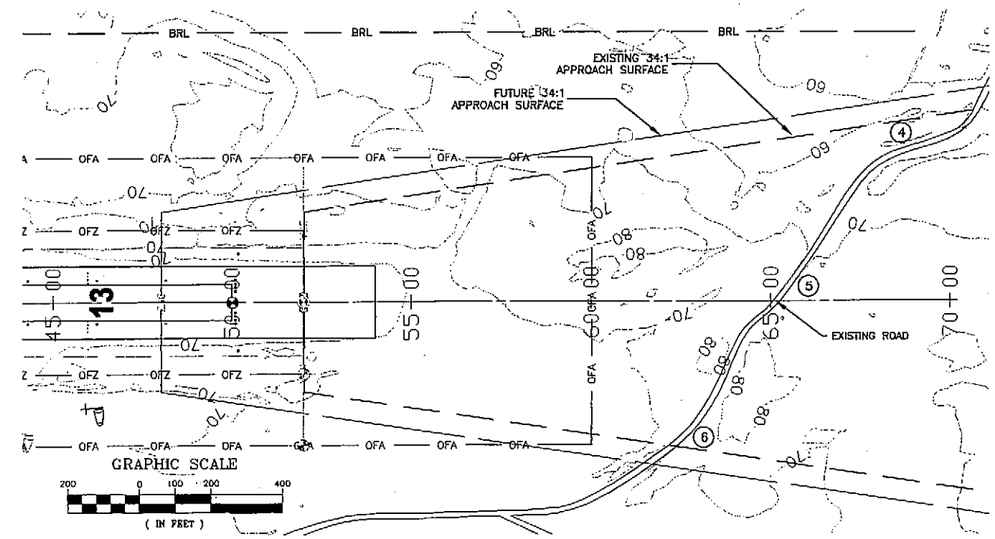
APPROVED: [signature]
HARVEY M. DOUTHIT, P.E. — PROJECT MANAGER

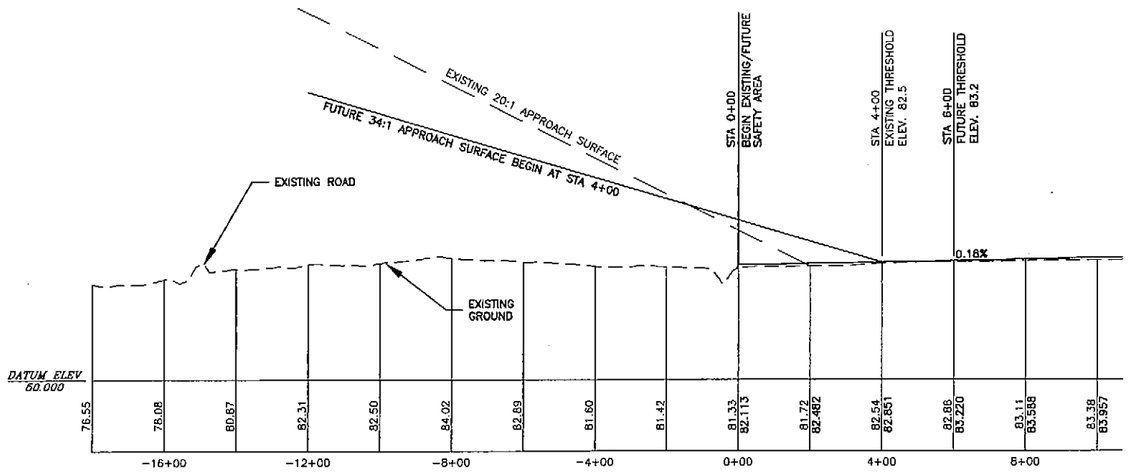
DATE 08/01/02
DESIGN JEG
DRAWN MGT
CHECKED TJS

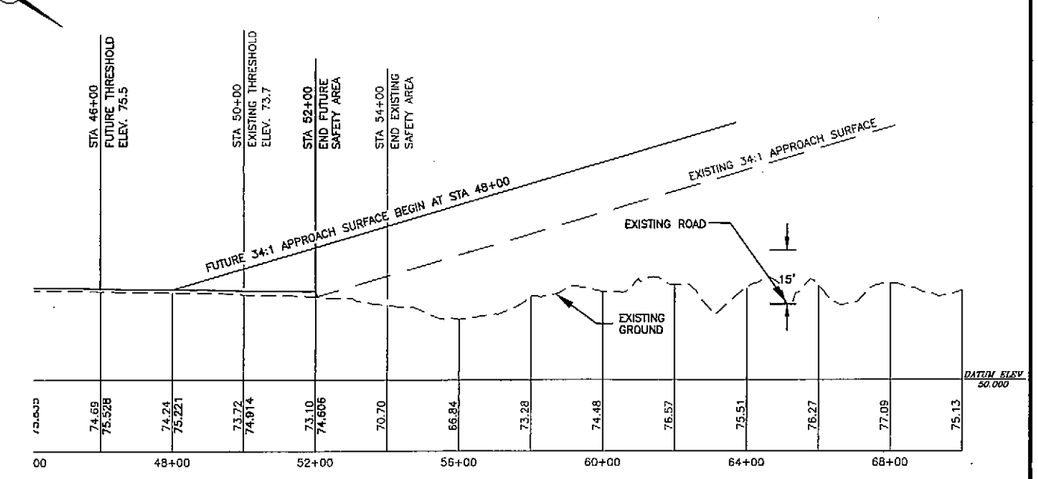
PORT HEIDEN AIRPORT
AIRPORT LAYOUT PLAN
RUNWAY 5/23
INNER PORTION OF THE
APPROACH SURFACES

SHEET 6 OF 11









OBSTRUCTION TABLE RUNWAY 5/23 APPROACHES				
NUMBER	OBJECT	ELEV.	AMOUNT OF PENETRATION	DISPOSITION OF OBSTRUCTION
1	EXISTING ROAD	76.85	0	NONE
2	EXISTING ROAD	82.19	0	NONE
3	EXISTING ROAD	86.39	0	NONE
4	EXISTING ROAD	58.69	0	NONE
5	EXISTING ROAD	71.31	0	NONE
6	EXISTING ROAD	69.73	0	NONE

NOTES:
1. NO THRESHOLD SITTING SURFACE OBJECT PENETRATIONS.
2. OBSTRUCTION CLEARANCE SLOPE > 50:1 FOR R/W 13 AND R/W 31.

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FILE:
DATE:

AIRPORT LAYOUT PLAN CONDITIONAL APPROVAL
By: [signature]
FAA, AIRPORTS DIVISION
ALASKAN REGION, AAL-601
DATE: 9-16-02
F.A.A. AIRSPACE REVIEW NUMBER: 02-AAL-007-NRA

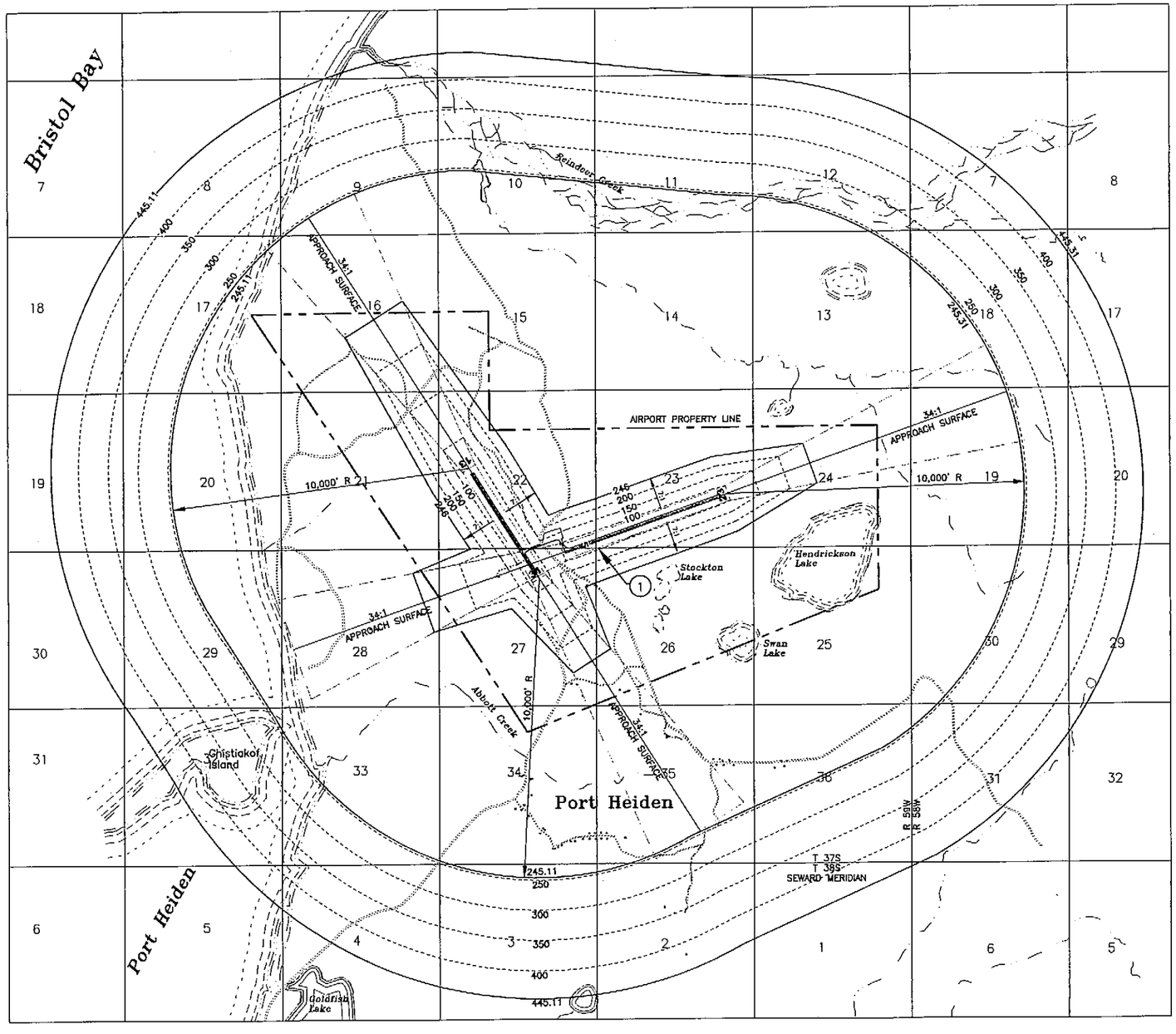
BY	DATE	REVISIONS

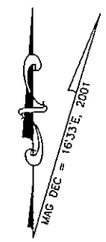
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION
APPROVED: [signature] STEPHEN M. RYAN, P.E. — DESIGN SECTION CHIEF
APPROVED: [signature] HARVEY M DOUTHIT, P.E. — PROJECT MANAGER

DATE 08/01/02
DESIGN JEG
DRAWN MGT
CHECKED TJS

PORT HEIDEN AIRPORT
AIRPORT LAYOUT PLAN
RUNWAY 13/31
INNER PORTION OF THE
APPROACH SURFACES

SHEET 7 OF 11





GRAPHIC SCALE

2000 0 1000 2000 4000

(IN FEET)
1 INCH = 2000

NOTES

1. AIRPORT ELEVATION IS 95.31 FT.
2. THIS DRAWING IS BASED ON USGS QUADS CHIGNIK (D-2, D-3) AND BRISTOL BAY (A-2), ALASKA.
3. SURFACES SHOWN REFLECT FUTURE CONDITIONS.

ALL DIMENSIONS ARE IN ENGLISH UNITS.

OBSTRUCTION DATA TABLE

NUMBER	PENETRATION DISTANCE (FEET)	DESCRIPTION
1	7.9	MLS BUILDING

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FILE:
DATE:

AIRPORT LAYOUT PLAN CONDITIONAL APPROVAL

By: Deb Read
FAA, AIRPORTS DIVISION
ALASKAN REGION, AAL-601

DATE: 9-16-02

F.A.A. AIRSPACE REVIEW NUMBER: 02-AAL-007-NRA

BY	DATE	REVISIONS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

APPROVED: Bob Mat
STEPHEN M. RYAN, P.E. — DESIGN SECTION CHIEF

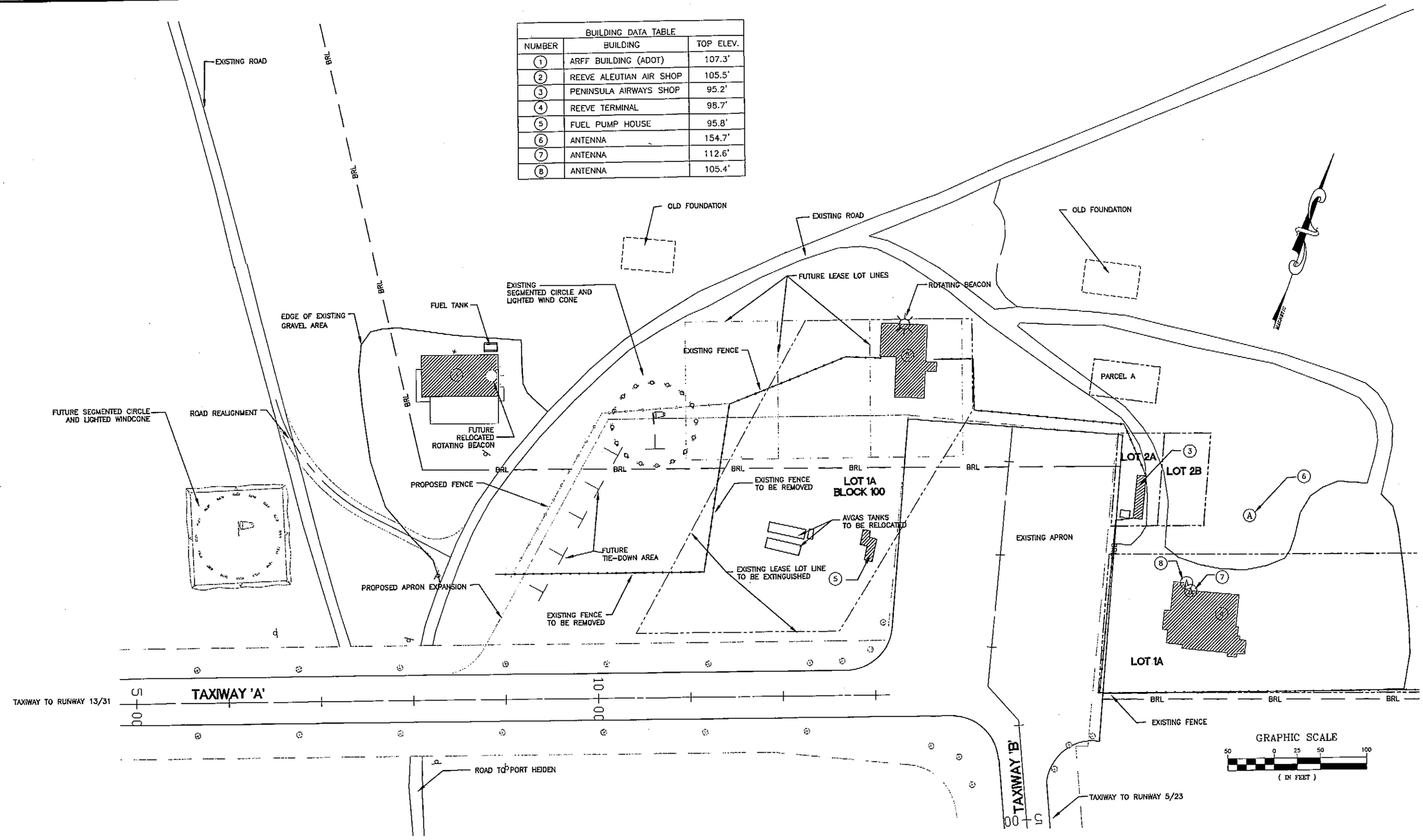
APPROVED: H. O. Det
HARVEY M DOUTHIT, P.E. — PROJECT MANAGER

DATE 08/01/02
DESIGN JEG
DRAWN MGT
CHECKED TJS

PORT HEIDEN AIRPORT
AIRPORT LAYOUT PLAN
AIRPORT AIRSPACE DRAWING

SHEET 8 OF 11

BUILDING DATA TABLE		
NUMBER	BUILDING	TOP ELEV.
1	ARFF BUILDING (ADOT)	107.3'
2	REEVE ALEUTIAN AIR SHOP	105.5'
3	PENINSULA AIRWAYS SHOP	95.2'
4	REEVE TERMINAL	98.7'
5	FUEL PUMP HOUSE	95.8'
6	ANTENNA	154.7'
7	ANTENNA	112.6'
8	ANTENNA	105.4'



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FILE:

DATE:

AIRPORT LAYOUT PLAN CONDITIONAL APPROVAL SUBJECT TO ALP APPROVAL LETTER DATED 9-16-02

By: [signature] DATE: 9-16-02

FAA, AIRPORTS DIVISION
ALASKAN REGION, AAL-601

F.A.A. AIRSPACE REVIEW NUMBER: 02-AAL-007-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] HARVEY M. DOUTHIT, P.E. — PROJECT MANAGER

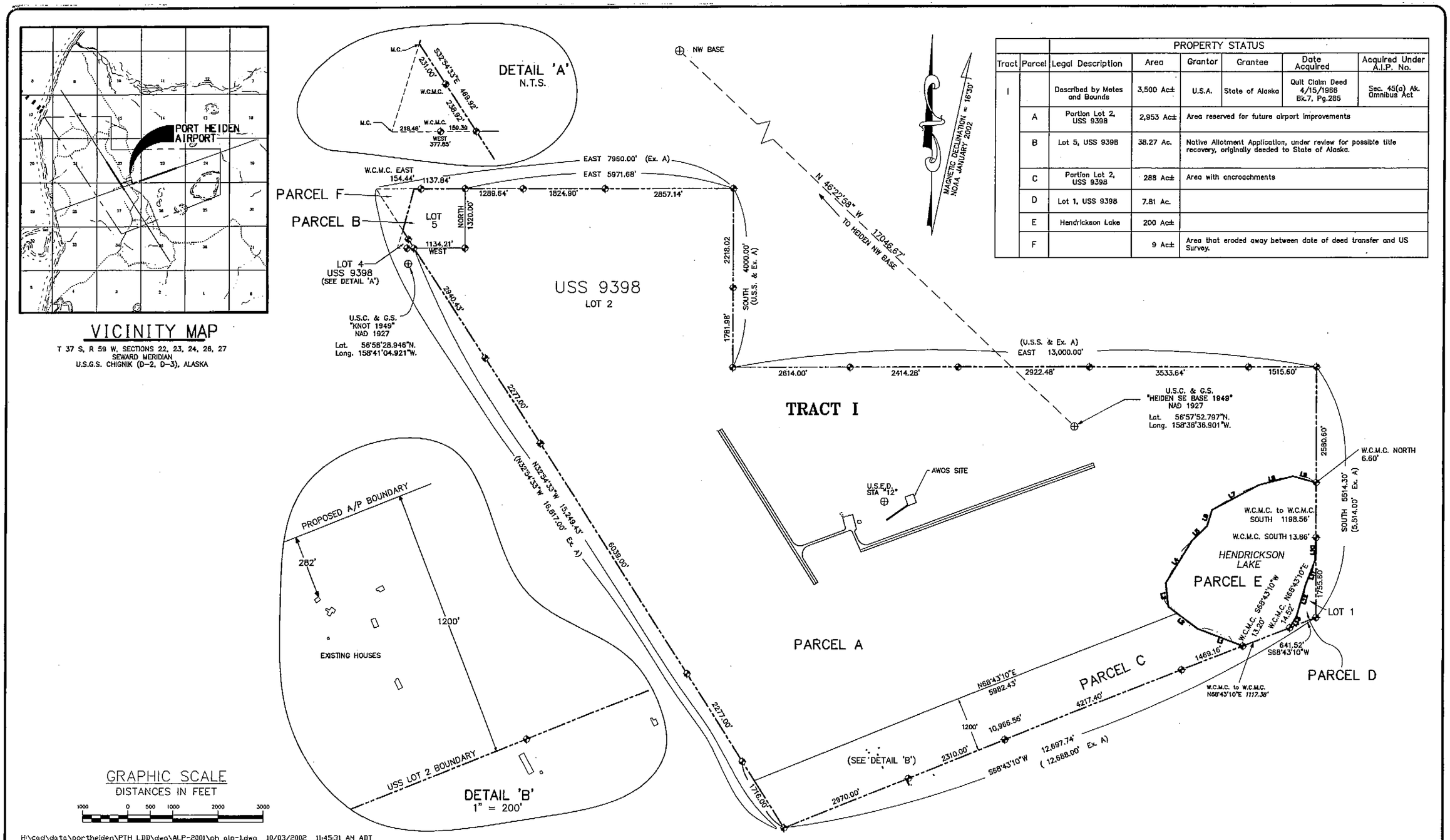
DATE 08/01/02
DESIGN JEG
DRAWN MGT
CHECKED TJS

PORT HEIDEN AIRPORT
AIRPORT LAYOUT PLAN
TERMINAL AREA PLAN
MID-TERM DEVELOPMENT

SHEET 9 OF 11

VICINITY MAP

T 37 S, R 59 W, SECTIONS 22, 23, 24, 26, 27
SEWARD MERIDIAN
U.S.G.S. CHIGNIK (D-2, D-3), ALASKA



		PROPERTY STATUS					
Tract	Parcel	Legal Description	Area	Grantor	Grantee	Date Acquired	Acquired Under A.I.P. No.
I		Described by Metes and Bounds	3,500 Ac±	U.S.A.	State of Alaska	Quit Claim Deed 4/15/1956 Bk.7, Pg.285	Sec. 45(a) Ak. Omnibus Act
	A	Portion Lot 2, USS 9398	2,953 Ac±	Area reserved for future airport improvements			
	B	Lot 5, USS 9398	38.27 Ac.	Native Allotment Application, under review for possible title recovery, originally deeded to State of Alaska.			
	C	Portion Lot 2, USS 9398	288 Ac±	Area with encroachments			
	D	Lot 1, USS 9398	7.81 Ac.				
	E	Hendrickson Lake	200 Ac±				
	F		9 Ac±	Area that eroded away between date of deed transfer and US Survey.			

GRAPHIC SCALE
DISTANCES IN FEET
1000 0 500 1000 2000 3000

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FILE:
DATE:

AIRPORT LAYOUT PLAN CONDITIONAL APPROVAL
By: [signature]
FAA AIRPORTS DIVISION
ALASKAN REGION, AAL-601
DATE: 9/16/02
F.A.A. AIRSPACE REVIEW NUMBER: 02-AAL-007-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] HARVEY M. DOUTHIT, P.E. — PROJECT MANAGER

DATE 10/03/02
DESIGN JEG
DRAWN MGT, PLH
CHECKED TJS

PORT HEIDEN AIRPORT
AIRPORT LAYOUT PLAN
PROPERTY PLAN

SHEET 10 OF 11

PORT HEIDEN AIRPORT

NARRATIVE REPORT

A. Purpose

This narrative report is included with the Airport Layout Plan (ALP) for Port Heiden in accordance with Federal Aviation Administration (FAA) Airport Design Advisory Circular (AC) 150/5300-13, Change 6, Appendix 7. The rationale for improvements to the Port Heiden Airport is outlined in this narrative report.

B. Introduction

This Airport Layout Plan supercedes the Port Heiden ALP approved by the FAA on April 6, 1992.

Port Heiden is located at the mouth of the Meshik River on the north side of the Alaska Peninsula, 424 miles southwest of Anchorage and 125 air miles southwest of King Salmon. It lies at approximately 56° 55' N latitude, 158° 41' W Longitude (Sec. 27, T037S, R059W, Seward Meridian). The community is incorporated as a second class city with a mayor-council form of government.

The 2000 U.S. census documents a population of 119 persons at Port Heiden. Population records indicate a slow growing or stable community.

Population History:
1960 74
1970 66
1980 92
1990 119
2000 119

Port Heiden is largely a traditional Aleut community with commercial fishing and subsistence lifestyles. Commercial fishing and government jobs provide most cash income although guided hunts and eco-tourism are small but growing industries. The community harvests an average of 109 pounds per person of subsistence salmon, other fish and marine mammals. The community diet also depends on gathering other land game, birds, plants and berries.

C. Airport Usage and Forecasts

The Alaska Aviation System Plan (AASP) has designated this airport as a Community Class Airport, which is defined as the primary access to a small rural community of at least 25 permanent year-round residents without reliable alternate year-round access.

See Table 1 for operators and aircraft using the Port Heiden Airport.

Currently, Pen Air operates daily service from Port Heiden to King Salmon in aircraft such as the Piper Navajo, Cessna Caravan, and Piper Saratoga. In June of 2001, Air Cargo Express began operating a DC-6 into Port Heiden once a week. Pen Air (Metroliner III) and/or Air Cargo Express (Curtiss-Wright C-46 Commando, or DC-6) will provide mail service to Port Heiden three times per week. Island Air distributes the mail to the Chignike and Perryville three days per week, 4-8 flights per day. Alaska Central Express, Evergreen Helicopters, Iliamna Air Taxi, and the U.S. Coast Guard all utilize the Port Heiden airport on a limited basis. On average each of these carriers flies into Port Heiden between 6 to 12 times per year. ERA Aviation, Northern Air Cargo, Lynden Air Cargo, and Evergreen International do not currently conduct any operations at the Port Heiden airport nor do any of these operators plan to in the future.

There are no aircraft based at Port Heiden at this time.

Port Heiden is a U.S. Postal Service hub serving the communities of Chignik, Chignik Lake, Chignik Lagoon, and Perryville. Mail volume between 1988 and 1995 (inclusive) averaged 20 short tons per year. The average between 1986 and 1992 (inclusive) was 22 short tons; between 1993 and 1995 (inclusive), 16 short tons. At present trends, which are downward or at best flat, mail volume will be between 6 and 20 short tons in 20 years.

Cargo volume between 1988 and 1995 (inclusive) averaged 94 short tons per year. The average between 1988 and 1992 (inclusive) was 98 short tons; between 1993 and 1995 (inclusive), 86 short tons. At present trends, cargo volume will be between 38 and 82 short tons in 20 years. Annual cargo volumes vary depending on success of the local economy. Barge service to Port Heiden is extremely limited. The community cannot be accessed by a full service barge because of the shallow bay. There are no docks at Port Heiden. Because of the limited barge access, the community is highly dependent on the airport for cargo shipments.

See Table 2, for the historical and forecasted number of enplanements at the Port Heiden airport according to the Air Carrier Activity Information System (ACAIS). Passenger enplanements at Port Heiden appear to be trending downward or at best flat. Passenger enplanements jumped to 1,694 in 1999 and fell to 1,200 in 2000. This spike in enplanements during 1999 can be contributed to the construction of the Health Clinic and Healthy Family/Cultural Center by the Alaska Department of Community and Economic Development (DCED). The enplanement activity for that year was considered an anomaly and was not used as a means of predicting future enplanements at the Port Heiden airport.

There are approximately 10 flights per day at the Port Heiden airport during the summer and 5 to 10 flights per day in the winter.

D. Staged Development

Near-Term Development (0-5) years

The primary objective of Near-Term development is to rehabilitate existing airport features and add safety, maintenance, and convenience features. Development will include repairing and resurfacing the runways, taxiways, and apron, expanding the runway safety areas, and replacing the lighting systems. Both runways will be shortened and developed to category B-III standards.

Mid-Term Development (6-10 years)

Mid-term development will include expanding the apron and moving the lighted windsock and segmented circle.

Long-Term Development (11-20 years)

The need for paving the airport will be evaluated in the future.

E. Design Rationale

1. Airport Reference Code

The airport reference code for Port Heiden is currently C-III. The future code will be B-III.

Reeve Aleutian Airways had regularly served the community with three flights per week on the Lockheed Electra. In December of 2000, Reeve went out of business, discontinuing all service to Port Heiden. Prior to Reeve's demise, the critical aircraft had been the Electra, a design group C-III aircraft. Since Reeve ceased service to Port Heiden the most demanding aircraft to use the airport on a regular basis is the C-46 Commando and the DC-6. The C-46 Commando, a design group A-III aircraft has an approach speed of 86 knots, a wingspan of 108 feet, and a maximum takeoff weight of 45,000 lbs. The DC-6 is a design group B-III aircraft with an approach speed of 108 knots, a wingspan equal to 117.5, and a maximum takeoff weight of 104,000 pounds. Air Cargo Express operates scheduled service to PTH 3 days per week using either the C-46 Commando or the DC-6.

2. Wind Coverage

Wind coverage at the Port Heiden Airport is currently 99.9% at 16 knots based on recent wind data. At 16 knots, the wind coverage for Runway 5/23 alone is 89.4% and 95.2% for Runway 13/31 alone. Development of the airport will not affect the wind coverage.

3. Runways

Runway 5/23, except for deficient Runway Safety Area, is currently built to handle C-III aircraft making Non-Precision Instrument approaches (Runway 5 only) or visual approaches. This runway will be developed to handle B-III aircraft making Non-Precision Instrument approaches on both runway ends.

There are currently no aircraft utilizing the Port Heiden airport that demand the current 6250 ft main runway length. The Metroliner and the DC-6 require 4500 ft runway lengths. The C-130 Hercules, used by the U.S. Coast Guard requires a 5000 ft minimum runway. Runway 5/23 will be shortened to this length so as to not limit any current operations at the Port Heiden airport. The runway shortening will reduce maintenance and operations costs. The runway will be modified from 100 ft x 6250 ft to 100 ft x 5000 ft. The safety area width of Runway 5/23 will be expanded to meet the minimum recommendations for the B-III standard. The safety area will be modified from 200 ft x 7050 ft to 300 ft x 6200 ft. PenAir, Air Cargo Express, and the Coast Guard have all indicated that a 5000 ft main runway length would be adequate for their operations. Runway 13/31, except for deficient Runway Safety Area, is currently built to handle C-III aircraft making Non-Precision Instrument approaches (Runway 13 only) or visual approaches. This runway will be shortened to the recommended 80% length of the main runway. Runway 13/31 will be modified from 100' x 4600' to 100' x 4000'. The safety area will be modified from 200' x 5400' to 300' x 5200'. This runway will be developed to handle B-III aircraft making Non-Precision Instrument approaches on both runway ends.

4. Taxiways

Existing taxiways are designed to accommodate Group III aircraft. Some dimensions at turns are large enough to accommodate the occasional Group IV aircraft that visit Port Heiden, primarily the Hercules cargo aircraft. Taxiway turns will be developed to handle the critical design Group III aircraft.

5. Aprons

The current apron, with dimensions of approximately 230' x 260', is too small to accommodate the aircraft that use it. There is no tie down area that is safe from the prop wash of larger planes. Mid-term development will include enlarging the apron by more than 100% to permit maneuvering and to provide tie-down spaces. The expanded apron will have dimensions of approximately 260'x 560'. The expansion of the apron will require the relocation of two gas tanks currently located west of the existing apron. It may be necessary to remediate contaminated soils located in this area.

6. Local Roads

Two community access roads currently cross taxiway 'A'. To increase safety, the western road will be realigned to connect with the eastern road north of the taxiway. The remaining single taxiway crossing will be well signed and has good visibility. Traffic, both land and air, is so slight that it is not deemed economical to move this road or the taxiway-apron to avoid a conflict.

F. Property Status

All proposed development will take place on lands currently owned by the State of Alaska, Department of Transportation and Public Facilities. Lot 5 in the northwest corner of the airport property is currently being reviewed by BLM for possible title recovery of a Native allotment claim. There are several private residences that fall within the southern property boundary of the airport. This area is outside of airport interests. The land conflict will be resolved at a later date.

G. Hazards to Navigation

No solid waste disposal or sanitary treatment areas are within 5,000 feet of the runways. The community landfill is located approximately 2.5 miles southeast of the airport.

H. Community Involvement

Public meetings were held in Port Heiden with airport users, local residents, agencies, and governments in March 2000 and also in October 2001 to address concerns related to airport development.

I. Modifications to Standards

Proposed development is intended to fully conform to FAA standards.

J. Encroachments in Part 77 Surfaces

The MLS/REIL equipment building located along Runway 5/23 at STA 11+54, offset 270' RT penetrates the Part 77 transitional surface. The amount of penetration is 7.93'.

K. Future Land Development

Proposed airport development will be entirely on airport property.

Table 1
Operators and Aircraft Using Port Heiden

OPERATOR	AIRCRAFT	DESIGN GROUP
Peninsula Airways, Inc.	Piper Navajo	B-I
	Piper Saratoga	B-I
	Cessna Caravan	A-II
	Metroliner III	B-I
Iliamna Air Taxi	Piper Navajo	B-I
	Cessna 207	A-I
	Beech Baron	B-I
	Pilatus PC-12	A-II
Air Cargo Express	DC-6	B-III
	C46 Commando	A-III
Evergreen Helicopters	Cessna 206	A-I
Alaska Central Express	Cessna 207	A-I
US Coast Guard	C-130 Hercules	C-IV
Island Air	Cherokee-6	A-I
	Islander	A-II

Table 2
Enplanement Data and Forecasts

Year	Enplanements
1993	1,297
1994	1,102
1995	1,332
1996	1,366
1997	1,225
1998	1,087
1999	1,694
2000	1,200
2005	1,114
2010	1,049
2020	917

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AIRPORT LAYOUT PLAN CONDITIONAL APPROVAL SUBJECT TO ALP APPROVAL LETTER DATED 9-16-02
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