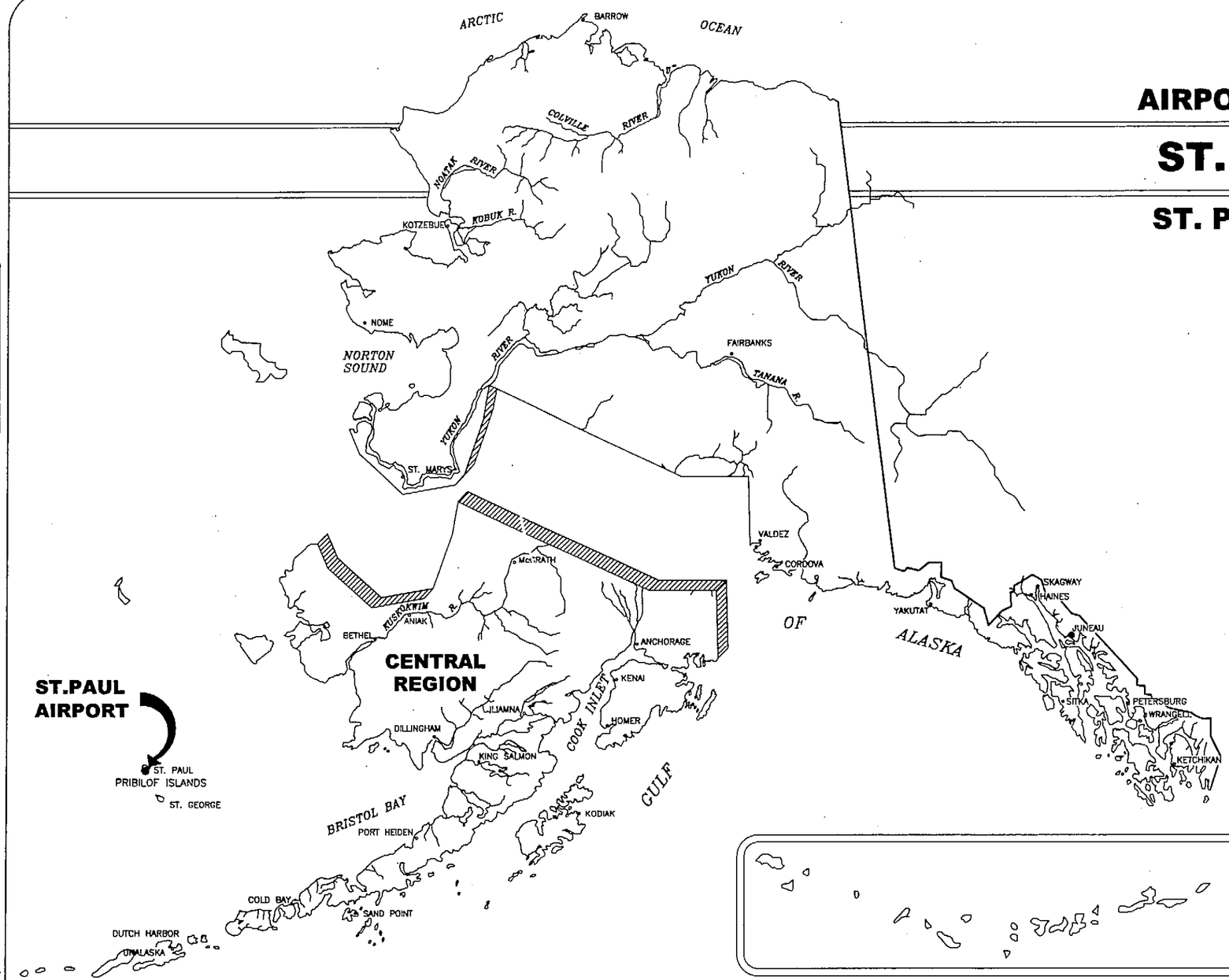
AIRPORT LAYOUT PLAN FOR

ST. PAUL AIRPORT

ST. PAUL ISLAND, ALASKA

2004



DRAWING INDEX

1 – COVER SHEET AND INDEX
2 – VICINITY MAP AND DATA TABLES
3 – EXISTING PLAN AND PROFILE
4 – ULTIMATE PLAN AND PROFILE
5 – RUNWAY 18–36 INNER PORTION OF APPROACH SURFACES
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7 – PROPERTY PLAN (Sheet 1 of 2)
8 – PROPERTY PLAN (Sheet 2 of 2)
9 – NARRATIVE REPORT

Date Plotted: 04/13/04
Plot Ratio and Layout: 1=1, layout=cover
File: P:\Projects\135182\Design\ALP\dn-SP-ALP.dwg

Designed By: WPH
Checked By: SCO
Drawn By: GLB

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

CONCUR Gordon C. Keith **DATE** 4/28/04
GORDON C. KEITH, P.E. — **CONSTRUCTION & OPERATIONS DIRECTOR**

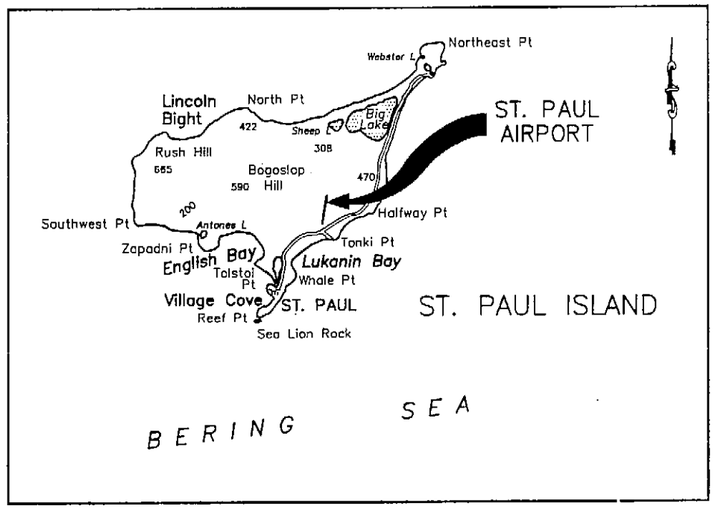
APPROVED **DATE** 4.28.04
ROBERT A. CAMPBELL, P.E. — **REGIONAL PRECONSTRUCTION ENGINEER**

AIRPORT LAYOUT PLAN CONDITIONAL APPROVAL SUBJECT TO ALP APPROVAL LETTER DATED 5/3/04
By: _____ DATE: 5/3/04
FAA AIRPORTS DIVISION
ALASKAN REGION, AAL-601

F.A.A. AIRSPACE REVIEW NUMBER: 03-AAL-174-NRA

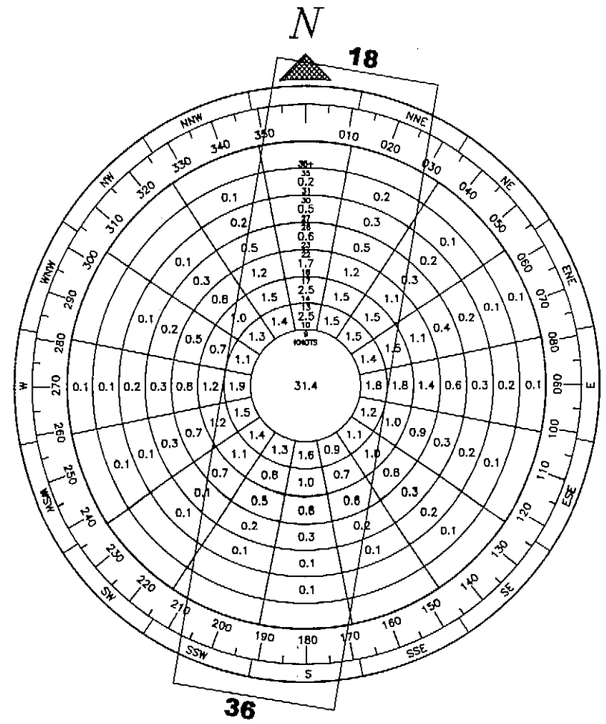
ST. PAUL AIRPORT
AIRPORT LAYOUT PLAN

SHEET 1 OF 9



VICINITY MAP

T 35 S, R 131 W, SEC 8 & 17,
SEWARD MERIDIAN, ALASKA
U.S.G.S. PRIBILOF ISLANDS, AK.



WIND DATA

WIND COVERAGE:

SPEED	R/W 18/36
10.5 KNOTS	67.69%
13 KNOTS	78.15%
16 KNOTS	87.13%
20 KNOTS	93.95%

SOURCE: U.S. DEPARTMENT OF COMMERCE, NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, WESTERN REGIONAL CLIMATE CENTER FEBRUARY 13, 2003

PERIOD: JULY 1, 1996 – DECEMBER 31, 2002

NON-STANDARD CONDITIONS

ITEM	EXISTING	STANDARD	FUTURE
APRON SETBACK	410'	500'	500'
WIND COVERAGE (16 KNOTS)	87.13%	95%	N/A
RUNWAY PROFILE	SEE NOTE	CATEGORY C	CATEGORY C
MLS BUILDING	IN ROFA	REMOVED	REMOVED

NOTE: EXISTING GROUND SURFACE PROFILE DOES NOT MEET CURRENT DESIGN STANDARDS FOR CATEGORY C AIRCRAFT.

BASIC DATA TABLE

RUNWAY DATA

ITEM	RUNWAY 18 EXISTING	RUNWAY 18 ULTIMATE	RUNWAY 36 EXISTING	RUNWAY 36 ULTIMATE
EFFECTIVE GRADIENT	−0.41%	−0.42%	+0.41%	+0.42%
% WIND COVERAGE (16 KNOTS)	87.13%	SAME	87.13%	SAME
INSTRUMENT RUNWAY	NPI	NPI	YES	YES
PAVEMENT SURFACE	GRAVEL	ASPHALT PVMT.	GRAVEL	ASPHALT PVMT.
PAVEMENT STRENGTH (LBS.)	N/A	169,000(T)	N/A	169,000(T)
APPROACH SURFACES	34:1	34:1	50:1	50:1
VISIBILITY MINIMUMS	1 MILE	SAME	3/4 MILE	1/2 MILE
RUNWAY LIGHTING	HIRL	HIRL	HIRL	HIRL
RUNWAY MARKING	NONE	PRECISION INST	NONE	PRECISION INST
NAVIGATION AIDS			ILS	ILS
	NDB,DME,GPS	NDB,DME,GPS	NDB,DME,GPS	NDB,DME,GPS
VISUAL AIDS	MALS, VASI	MALSR, PAPI	MALS, VASI	MALSR, PAPI
RUNWAY DIMENSION	150'x 6500	SAME	150'x 6500	SAME
RUNWAY SAFETY AREA DIMENSION	500'x 8500'	SAME	500'x 8500'	SAME
RUNWAY OBJECT FREE AREA DIMENSION	800'x 8500'	SAME	800'x 8500'	SAME
PRECISION R/W OBJECT FREE AREA DIMENSION	200'x 800'	SAME	200'x 800'	SAME
RUNWAY OBSTACLE FREE ZONE DIMENSION	400'x 6900'	SAME	400'x 6900'	SAME
RUNWAY 18 RPZ & RUNWAY 36 RPZ	1000' x 2500' x 1750'		1000' x 2500' x 1750'	
AIRCRAFT DESIGN GROUP	III	SAME	III	SAME
AIRCRAFT APPROACH CATEGORY	C	SAME	C	SAME

AIRPORT DATA

ITEM		EXISTING	ULTIMATE
AIRPORT ELEVATION (M.S.L.)		63.4'	64.8'
AIRPORT REFERENCE POINT (A.R.P.) (NAD 1983)	LAT.	57° 09' 58.99"	
	LONG.	170° 13' 21.80"	
TAXIWAY LIGHTING		MITL	SAME
RAMP LIGHTING		FLOOD	SAME
MEAN MAX. TEMPERATURE, HOTTEST MONTH (°F)		51°	SAME
RUNWAY 18 THRESHOLD STA. 92+00 (NAD 1983)	LAT.	57° 10' 30.59" N	
	LONG.	170° 13' 12.30" W	
	TOUCHDOWN ELEV.	63.4	64.05
RUNWAY 36 THRESHOLD STA. 27+00 (NAD 1983)	LAT.	57° 09' 27.36" N	
	LONG.	170° 13' 31.29" W	
	TOUCHDOWN ELEV.	43.0	44.14
AIRPORT REFERENCE CODE		C–III	
MAGNETIC DECLINATION, YEAR	IGRF 2000	*10°30' E 2002 (NOAA)	
		10°20' E 2003	
ICAO & NATIONAL AIRPORT IDENTIFIERS		PASN	SNP

*APPROACH PROCEDURES FOR THIS AIRPORT ARE BASED ON A MAGNETIC DECLINATION OF 13°E

PIR-SURVEY DATA FROM A GROUND-BASED TOPOGRAPHIC SURVEY BY DOWL ENGINEERS IN 2002/2003

LEGEND

ITEM	EXISTING	UTIMATE
PROPERTY LINE		
BUILDING RESTRICTION LINE (B.R.L.)	BRL	BRL
INTERIOR TRACT LINE		
RUNWAY CENTERLINE		
EASEMENT LINE		
THRESHOLD LIGHTS		
AIRPORT REFERENCE POINT		
WIND CONE & SEGMENTED CIRCLE		
CONTOURS	5 5	SAME
BUILDINGS		
ROTATING BEACON		
METAL ANTENNA MASTS		
WOOD ANTENNA MAST		
VASI		
SERVICE ROADS		
FENCE		
SET ALUMINUM CAP SURVEY MONUMENT		
FOUND OTHER SURVEY MONUMENT		
FOUND BENCH MARK		
FOUND BLM MONUMENT		
FOUND REBAR		
RUNWAY SAFETY AREA	RSA	RSA
RUNWAY OBJECT FREE AREA	ROFA	ROFA
TAXIWAY OBJECT FREE AREA	TOFA	TOFA
OBSTACLE FREE ZONE	OFZ	OFZ
GLIDE SLOPE CRITICAL AREA	GSCA	GSCA
LOCALIZER CRITICAL AREA	LCA	LCA
PAVED SURFACE – NEAR TERM DEVELOPMENT		
PAVED SURFACE – LONG TERM DEVELOPMENT		
GRAVEL SURFACE		
MALSR/MALSF		

Date Printed:	04/13/04
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Designed By:	WPH
Checked By:	SGD
Drawn By:	GLB

AIRPORT LAYOUT PLAN CONDITIONAL APPROVAL
SUBJECT TO ALP APPROVAL LETTER DATED 4/9/04

By: [signature] DATE: 5/3/04
FAA, AIRPORTS DIVISION
ALASKAN REGION, AAL-600

F.A.A. AIRSPACE REVIEW NUMBER: 03-AAL-174-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 04/13/04
DESIGN WPH
DRAWN GLB
CHECKED [signature]

ST. PAUL AIRPORT

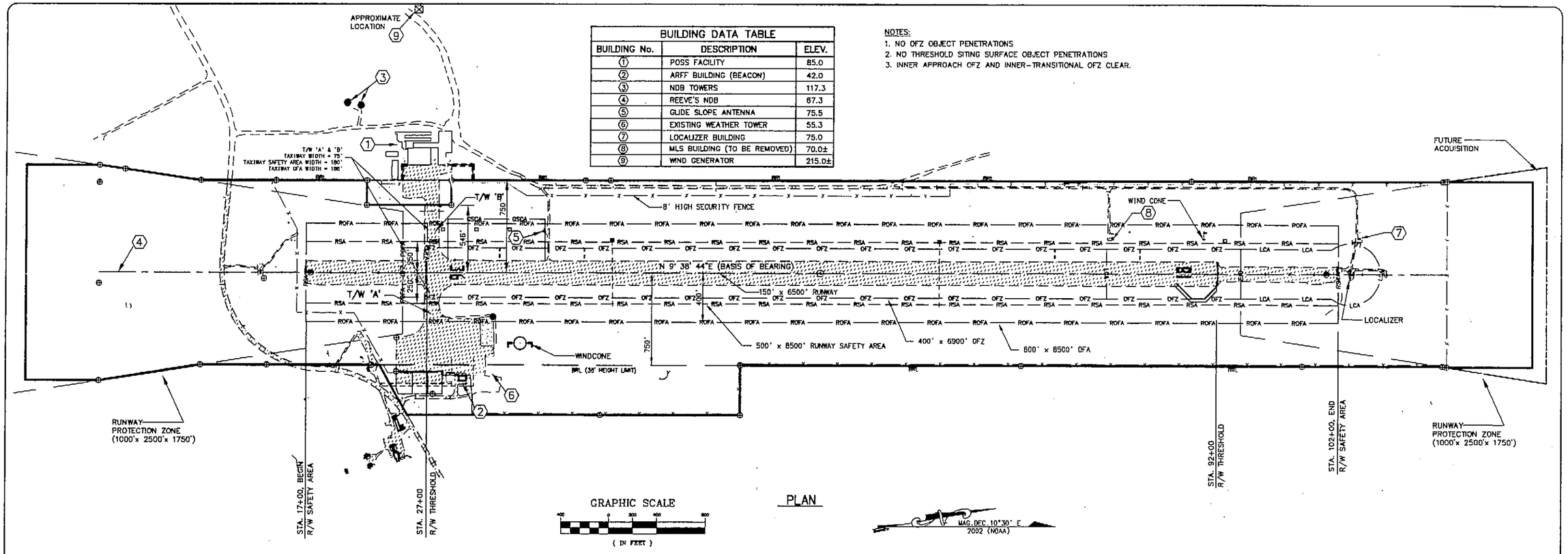
AIRPORT LAYOUT PLAN

VICINITY MAP AND DATA TABLES

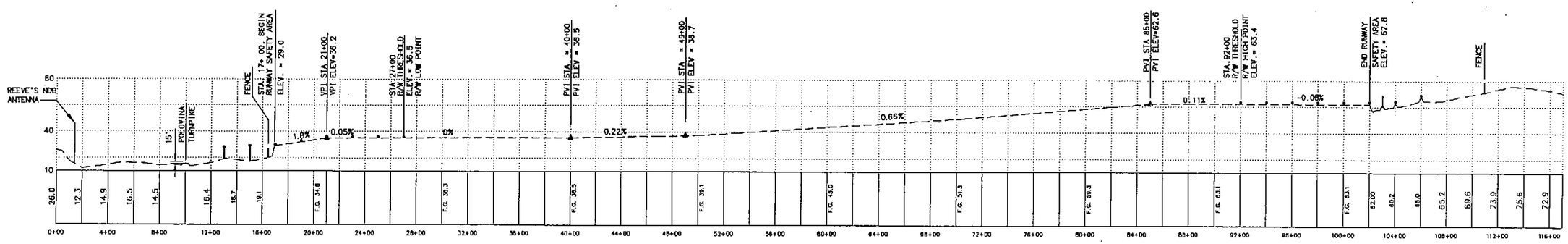
SHEET 2 OF 9

BUILDING DATA TABLE		
BUILDING No.	DESCRIPTION	ELEV.
1	POSS FACILITY	85.0
2	ARFF BUILDING (BEACON)	42.0
3	NDB TOWERS	117.3
4	REEVE'S NDB	67.3
5	GLIDE SLOPE ANTENNA	75.5
6	EXISTING WEATHER TOWER	55.3
7	LOCALIZER BUILDING	75.0
8	MLS BUILDING (TO BE REMOVED)	70.0±
9	WIND GENERATOR	215.0±

NOTES:
1. NO OFZ OBJECT PENETRATIONS
2. NO THRESHOLD SITING SURFACE OBJECT PENETRATIONS
3. INNER APPROACH OFZ AND INNER-TRANSITIONAL OFZ CLEAR.



PLAN



PROFILE

AIRPORT LAYOUT PLAN CONDITIONAL APPROVAL SUBJECT TO ALP APPROVAL LETTER DATED 5/3/04
By: [signature] DATE: 5/3/04
FAA, AIRPORTS DIVISION
ALASKAN REGION, AAL-600

F.A.A. AIRSPACE REVIEW NUMBER: 03-AAL-174-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 04/13/04
DESIGN WPH
DRAWN GLB
CHECKED [signature]

ST. PAUL AIRPORT

AIRPORT LAYOUT PLAN
RUNWAY 18-36
EXISTING PLAN AND PROFILE

SHEET 3 OF 9

Designed By: WPH
Checked By: SCG
Drawn By: GLB

Date Plotted: 04/13/04
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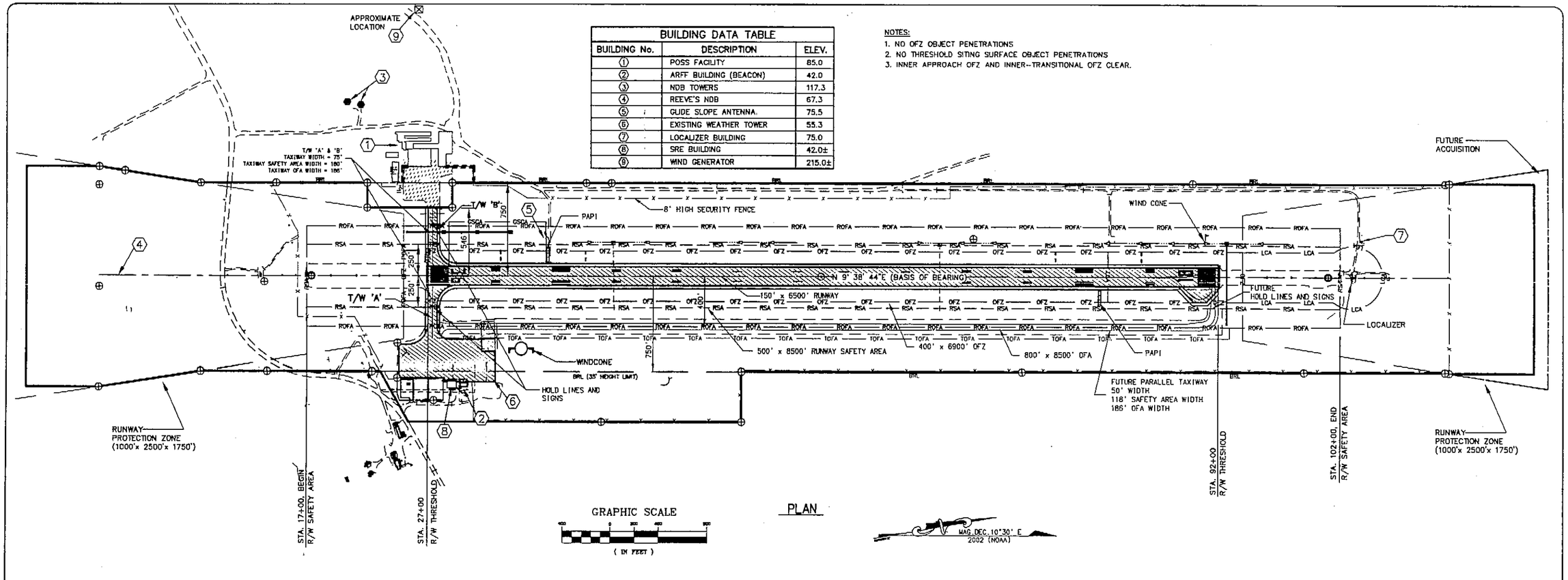
BUILDING DATA TABLE		
BUILDING No.	DESCRIPTION	ELEV.
1	POSS FACILITY	85.0
2	ARFF BUILDING (BEACON)	42.0
3	NDB TOWERS	117.3
4	REEVE'S NDB	67.3
5	GLIDE SLOPE ANTENNA	75.5
6	EXISTING WEATHER TOWER	55.3
7	LOCALIZER BUILDING	75.0
8	SRE BUILDING	42.0±
9	WIND GENERATOR	215.0±

NOTES:
1. NO OFZ OBJECT PENETRATIONS
2. NO THRESHOLD SITING SURFACE OBJECT PENETRATIONS
3. INNER APPROACH OFZ AND INNER-TRANSITIONAL OFZ CLEAR.



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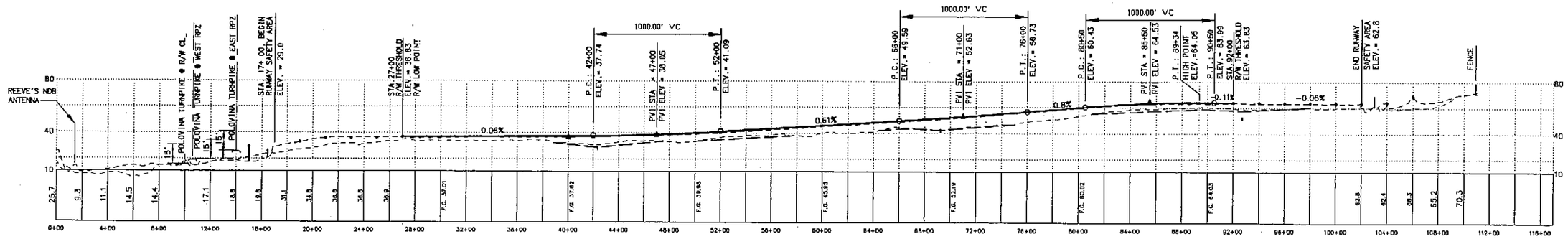

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Designed By:	WPH
Checked By:	SGD
Drawn By:	GLB

AIRPORT LAYOUT PLAN CONDITIONAL APPROVAL SUBJECT TO ALP APPROVAL LETTER DATED 5/3/04

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ALASKAN REGION, AAL-600

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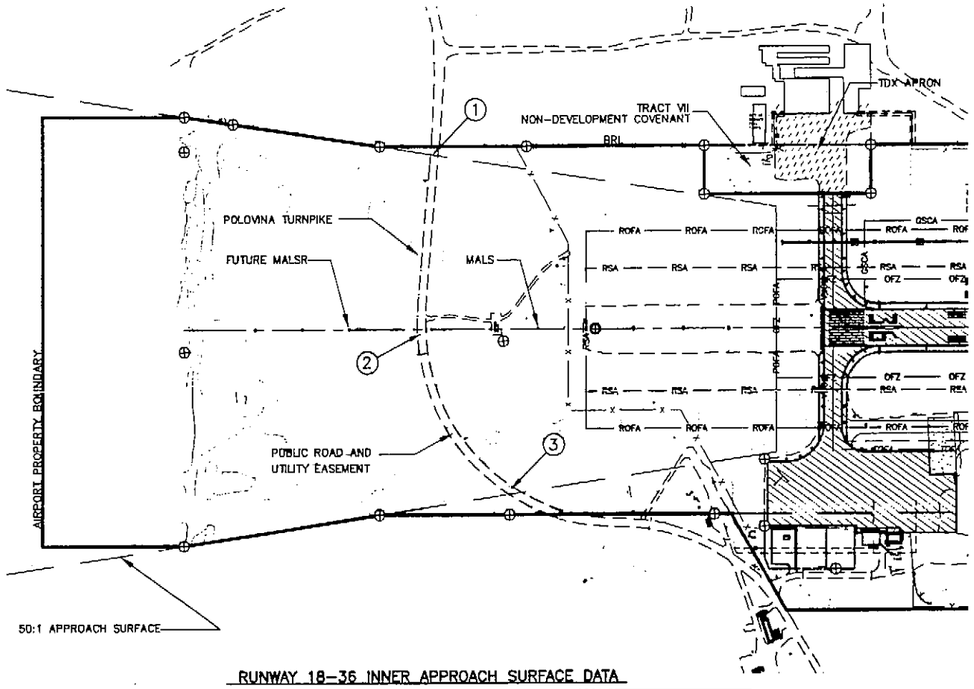
APPROVED: [signature] HARVEY M. DOUTHIT, P.E. — PROJECT MANAGER

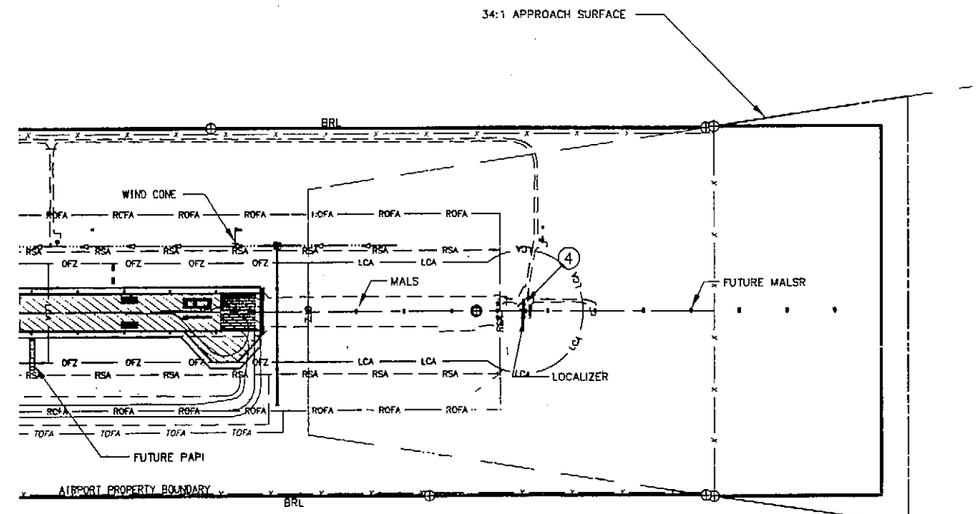
DATE 04/13/04
DESIGN WPH
DRAWN GLB
CHECKED [signature]

ST. PAUL AIRPORT

AIRPORT LAYOUT PLAN
RUNWAY 18-36
ULTIMATE PLAN AND PROFILE

SHEET 4 OF 9





RUNWAY 18–36 INNER APPROACH SURFACE DATA

No.	STATION	OFFSET	OBJECT	OBJECT ELEVATION	PART 77 ELEVATION	VERTICAL CLEARANCE	AMOUNT OF PENETRATION
1	10+61	746' L	ROAD	34'	65'	31'	NONE
2	10+00	0	ROAD	32'	66'	34'	NONE
3	14+42	689' R	ROAD	40'	57'	17'	NONE

NOTE:
OBSTRUCTION CLEARANCE SLOPE IS 50:1

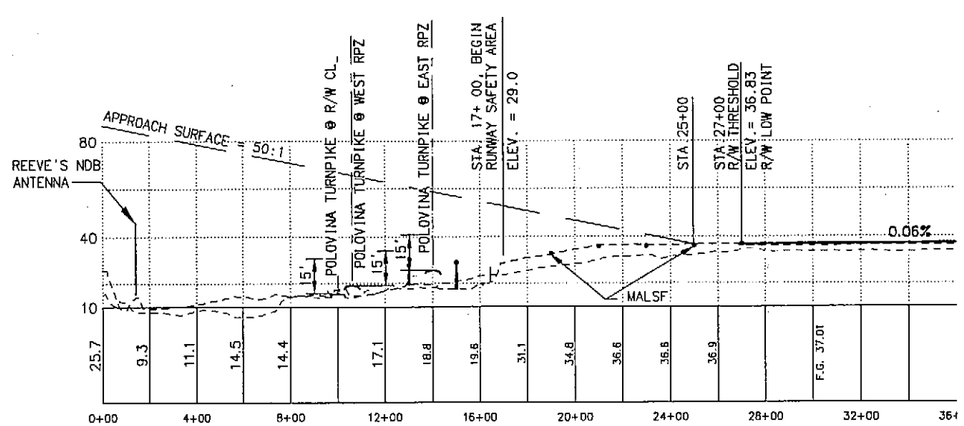
RUNWAY 18–36 INNER APPROACH SURFACE DATA

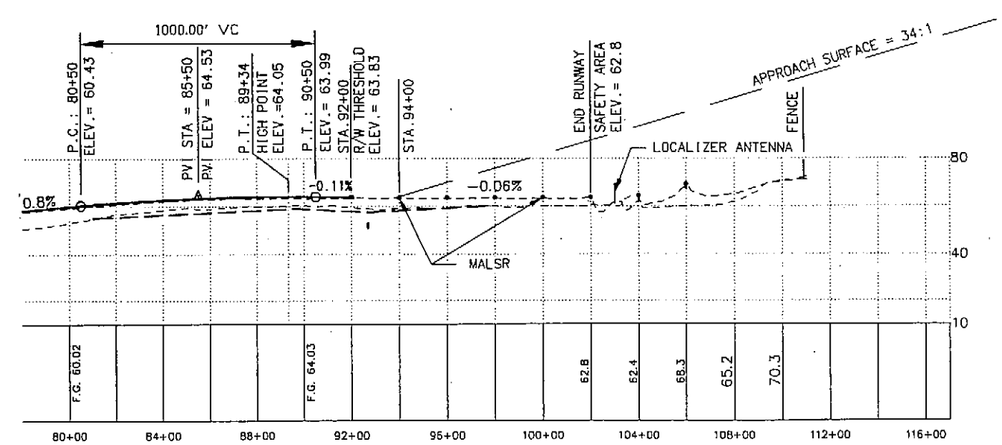
No.	STATION	OFFSET	OBJECT	OBJECT ELEVATION	PART 77 ELEVATION	VERTICAL CLEARANCE	AMOUNT OF PENETRATION
4	103+00	0	ANTENNA	68.5'	89'	20.5'	NONE

NOTE:
OBSTRUCTION CLEARANCE SLOPE IS 50:1

MAG. DEC. 10°30' E
2002 (NOAA)

GRAPHIC SCALE
(IN FEET)





AIRPORT LAYOUT PLAN CONDITIONAL APPROVAL
SUBJECT TO ALP APPROVAL LETTER DATED 5/3/04
By: [signature] DATE: 5/3/04
FAA AIRPORTS DIVISION
ALASKAN REGION, AAL-600

F.A.A. AIRSPACE REVIEW NUMBER: 03-AAL-174-NRA

BY	DATE	REVISIONS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

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

DATE 04/13/04
DESIGN WPH
DRAWN GLB
CHECKED [signature]

ST. PAUL AIRPORT
AIRPORT LAYOUT PLAN
RUNWAY 18–36
INNER PORTION OF THE
APPROACH SURFACES

SHEET 5 OF 9

Date Plotted: 04/13/04
Plot Ratio and Layout: 1=1, layout=
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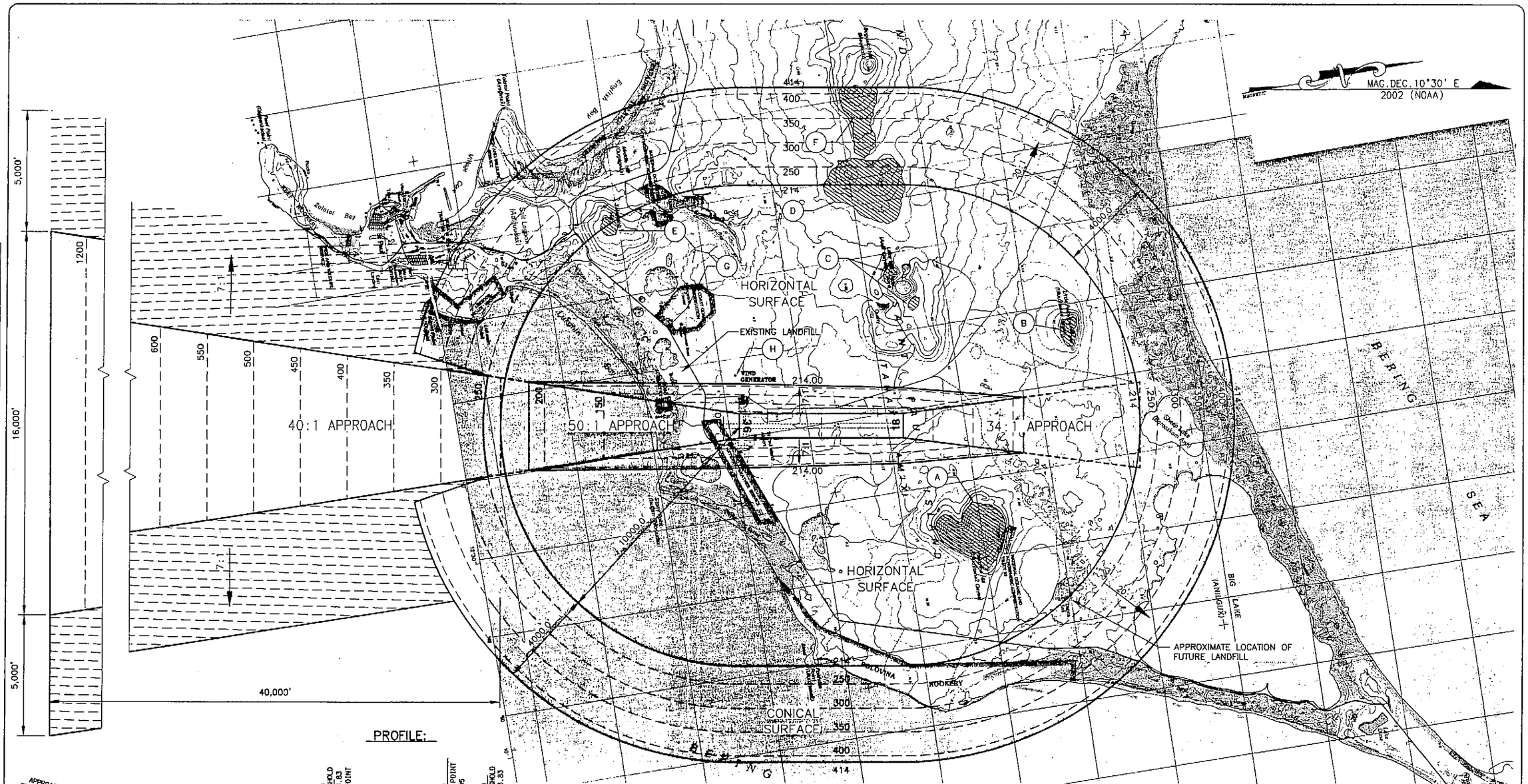
Drawn By: GLB



NOTES:

1. OBSTRUCTION ELEVATIONS ARE ESTIMATED FROM MOST RECENT USGS MAPS, WHICH GIVE ELEVATIONS IN METERS.
2. VERTICAL DATUM IS MEAN SEA LEVEL, MEASURED IN FEET.
3. POSITION AND ELEVATION OF WIND GENERATOR SHOULD BE ACCURATELY DETERMINED BY SURVEY. TWO MORE GENERATORS ARE PLANNED.

F.A.R. PART 77 IMAGINARY SURFACE OBSTRUCTION TABLE

Obstruction ID	Description	Obstruction Elevation	Surface Penetrated	Part 77 Surface Elevation	Max. Amount of Penetration	Disposition	Stage
A	TERRAIN	463'	HORIZONTAL	214'	250'	NONE	NA
B	TERRAIN	312'	HORIZONTAL	214'	99'	NONE	NA
C	TERRAIN	263'	HORIZONTAL	214'	50'	NONE	NA
D	TERRAIN	329	HORIZONTAL-CONICAL	214'-268'	104'	NONE	NA
E	TERRAIN	230'	HORIZONTAL-CONICAL	214'-230'	17'	NONE	NA
F	TERRAIN	493'	CONICAL	268'-414'	99'	NONE	NA
G	NAV. TOWER	662'	HORIZONTAL	214'	449'	NONE	NA
H	WIND GENERATOR	215'±	HORIZONTAL	214'	0-10'	NOTE 3	NA

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Designed By:	WPH
Checked By:	SKD
Drawn By:	CLB

AIRPORT LAYOUT PLAN CONDITIONAL APPROVAL SUBJECT TO ALP APPROVAL LETTER DATED 5/3/04

By: [signature] DATE: 5/3/04

FAA, AIRPORTS DIVISION
ALASKAN REGION, AAL-600

F.A.A. AIRSPACE REVIEW NUMBER: 03-AAL-174-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 04/13/04
DESIGN WPH
DRAWN CLB
CHECKED [signature]

ST. PAUL AIRPORT

AIRPORT LAYOUT PLAN

AIRPORT AIRSPACE

SHEET 6 OF 9

NOTES:

1. QUITCLAIM DEED FOR THE SURFACE ESTATE FOR TRACT II PARCEL B AND C FROM TANADGUSIX CORP ON 10/25/90. QUITCLAIM DEED FOR SUBSURFACE ESTATE FOR TRACT II PARCEL B FROM ALEUT CORP. ON 10/03/90.

2. WARRANTY DEED FOR SURFACE ESTATE FOR TRACT II PARCEL A, AVIGATION & HAZARD EASEMENT FOR SURFACE ESTATE FOR TRACT VI, AND NON-DEVELOPMENT COVENANT FOR SURFACE ESTATE FOR TRACT VII, RECEIVED FROM TANADGUSIX CORP. 2/4/92. WARRANTY DEED FOR SUBSURFACE ESTATE FOR TRACT II PARCEL A, AVIGATION & HAZARD EASEMENT FOR SUBSURFACE ESTATE FOR TRACT VI, AND NON-DEVELOPMENT COVENANT FOR SUBSURFACE ESTATE FOR TRACT VII RECEIVED FROM THE ALEUT CORPORATION 1/31/92.

3. WARRANTY DEED FOR SURFACE ESTATE FOR TRACT IX RECEIVED FROM TANADGUSIX CORPORATION 8/6/93. WARRANTY DEED FOR SUBSURFACE ESTATE FOR TRACT IX RECEIVED FROM THE ALEUT CORPORATION 8/8/93.

4. SEE ASLS 89-101 (Plat #95-40, Aleutian Island Recording District) FOR ADDITIONAL INFORMATION RELATING TO THIS AIRPORT SURVEY.

5. ALL BEARINGS SHOWN ARE LOCAL PLANE BEARINGS, BASED ON THE MEAN GEODETIC BEARING BETWEEN RUNWAY CENTERLINE MONUMENTS SET THIS SURVEY. THE BEARING WAS COMPUTED USING GLOBAL POSITIONING SYSTEM (GPS) TECHNOLOGY, HOLDING STATION "SOUTHWEST BASE RESET".

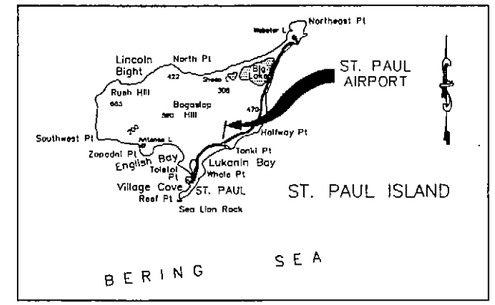
6. ELEVATION OF BENCHMARK SHOWN WAS DETERMINED TO BE 29.25 BY A LEVEL SURVEY TIE TO OTHER BENCH MARKS NEAR TOWN. DATUM IS MEAN SEA LEVEL. THIS MONUMENT WILL BE REMOVED, ALONG WITH CONCRETE SLAB, AS PART OF A 2004 CONSTRUCTION PROJECT.

7. A NEW BENCH MARK, No. 406, WAS ESTABLISHED IN 2003. IT IS A BRASS CAP SET IN CONCRETE, LABELED ST. PAUL 1. ITS' ELEVATION IS 61.77 FT. ABOVE MEAN SEA LEVEL. REFER TO THE SURVEY CONTROL DIAGRAM IN AKSAS PROJECT No. 55768 FOR INFORMATION REGARDING ST. PAUL 1.

PROPERTY STATUS

TRACT	PARCEL	ACREAGE TAKE	ACREAGE REMAINING	GRANTOR/GRANTEE	INTEREST	ACQUIRED UNDER A.I.P. #	DATE ACQUIRED
I		87.29 A	LARGE	STATE OF ALASKA	FEE SIMPLE (QCD)	3-02-0277-01	1/03/89
II	A	300.30	LARGE	TDX/ALEUT	FEE SIMPLE	3-02-0277-01	SEE NOTE 2
	B	0.89	LARGE	TDX/ALEUT	FEE SIMPLE	3-02-0277-02	SEE NOTE 1
	C	0.27	LARGE	TDX/ALEUT	FEE SIMPLE	3-02-0277-03	SEE NOTE 1
III		19.30	19.30	U.S.A. (NOAA)	A & H EASEMENT	3-02-0277-01	3/05/95
V		0	2.40	TDX/ALEUT			N/A
VI		23.12	LARGE	TDX/ALEUT	A & H EASEMENT	3-02-0277-01	SEE NOTE 2
VII		3.21	LARGE	ALEUT	NON-DEVELOPMENT COVENANT	3-02-0277-01	SEE NOTE 2
VIII		0.99	0.99	U.S.A. (NOAA)	A & H EASEMENT	3-02-0277-01	1/03/89
IX		24.27	LARGE	TDX/ALEUT	FEE SIMPLE	3-02-0277-01	SEE NOTE 3
X	A	1.31	300.30	DOT/PF TO CITY OF ST.PAUL	PUBLIC ROAD & UTILITY EASEMENT		3/07/95
	B	1.13	300.30	DOT/PF TO CITY OF ST.PAUL	PUBLIC ROAD & UTILITY EASEMENT		3/07/95
XI		1.72	19.30	U.S.A. (NOAA) TO CITY OF ST.PAUL	ROAD EASEMENT		3/07/95
XII		6.16	LARGE	TDX/ALEUT	FEE SIMPLE	TO BE ACQUIRED	N/A
E-1		0.24	LARGE	TDX	EASEMENT	3-02-0277-05	8/09/02

* EASEMENT REALIGNING VILLAGE ROAD (POLOVINA TURNPIKE) GRANTED TO CITY OF ST. PAUL BY TDX CORPORATION AND NOAA.

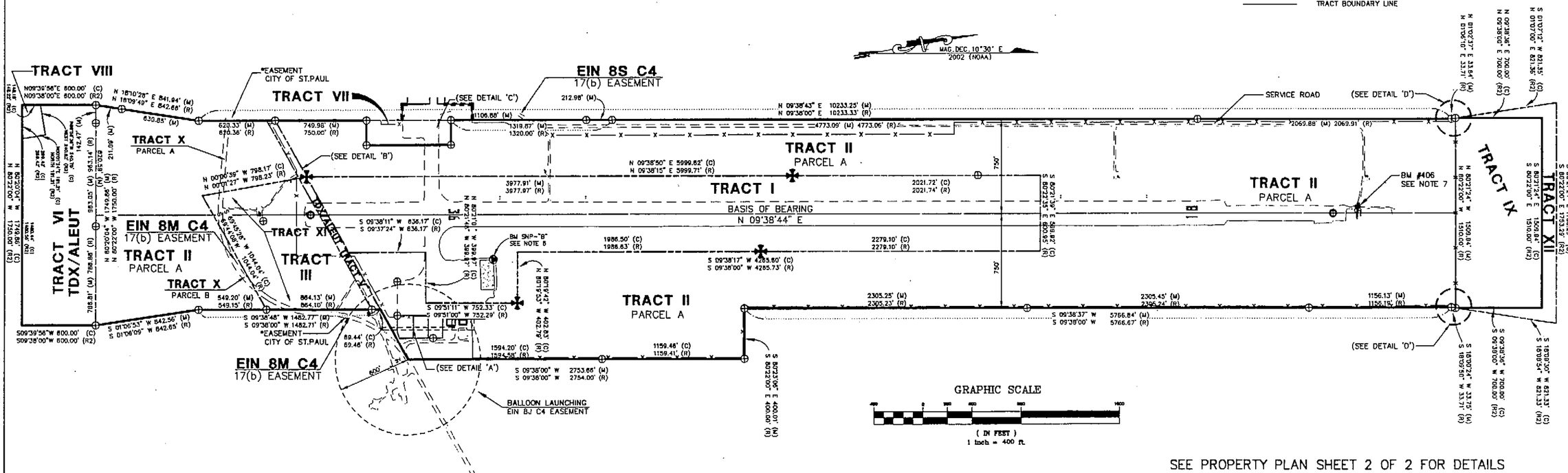


VICINITY MAP

Airport located within
T 35 S, R 131 W
SECTIONS 8 & 17
SEWARD MERIDIAN, ALASKA
U.S.G.S. PRIBILOF ISLANDS, AK

LEGEND

- FOUND GOVERNMENT MONUMENT
- NGS CONTROL STATION
- FOUND PRIMARY MONUMENT
- FOUND SECONDARY MONUMENT
- SET 2" ALCAP ON 5/8" X 30" REBAR, MARKED AS SHOWN
- SET CENTERLINE MONUMENT
- SET SECONDARY CORNER
- PROPERTY BOUNDARY
- EASEMENT LINE
- RUNWAY CENTERLINE
- TRACT BOUNDARY LINE



SEE PROPERTY PLAN SHEET 2 OF 2 FOR DETAILS

AIRPORT LAYOUT PLAN CONDITIONAL APPROVAL 6/3/04
SUBJECT TO ALP APPROVAL LETTER DATED 6/3/04
By: DATE: 6/3/04
FAA AIRPORTS DIVISION
ALASKAN REGION, AAL-600

F.A.A. AIRSPACE REVIEW NUMBER: 03-AAL-174-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 04/13/04
DESIGN DCH
DRAWN GLB
CHECKED

ST. PAUL AIRPORT
AIRPORT LAYOUT PLAN
PROPERTY PLAN

PROPERTY PLAN SHEET 1 OF 2

SHEET 7 OF 9

Designed By: WPH
Checked By: SGO
Drawn By: GLB
Date Plotted: 04/13/04
Plot Ratio and Layout: 1=1, layout*
File: P:\Projects\056182\Dwgs\ALP\SUP-PropPlan.dwg

NOTES:

1. QUITCLAIM DEED FOR THE SURFACE ESTATE FOR TRACT II PARCEL B AND C FROM TANADGUSIX CORP ON 10/25/90. QUITCLAIM DEED FOR SUBSURFACE ESTATE FOR TRACT II PARCEL B FROM ALEUT CORP. ON 10/03/90.

2. WARRANTY DEED FOR SURFACE ESTATE FOR TRACT II PARCEL A, AVIGATION & HAZARD EASEMENT FOR SURFACE ESTATE FOR TRACT VI, AND NON-DEVELOPMENT COVENANT FOR SURFACE ESTATE FOR TRACT VII, RECEIVED FROM TANADGUSIX CORP. 2/4/92. WARRANTY DEED FOR SUBSURFACE ESTATE FOR TRACT II PARCEL A, AVIGATION & HAZARD EASEMENT FOR SUBSURFACE ESTATE FOR TRACT VI, AND NON-DEVELOPMENT COVENANT FOR SUBSURFACE ESTATE FOR TRACT VII RECEIVED FROM THE ALEUT CORPORATION 1/31/92.

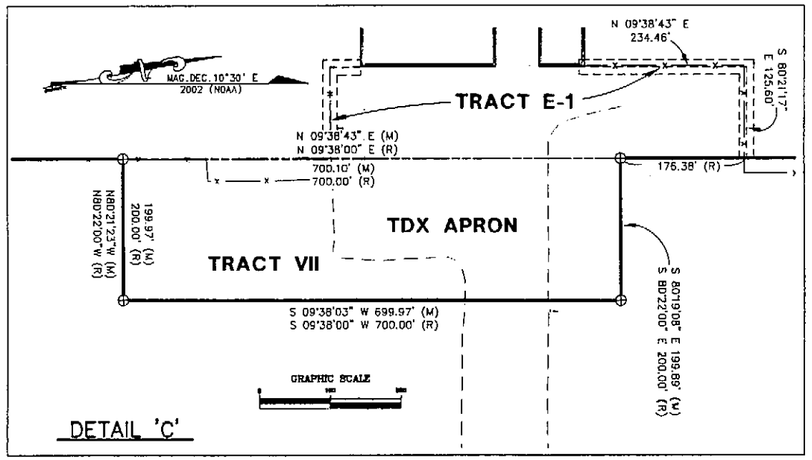
3. WARRANTY DEED FOR SURFACE ESTATE FOR TRACT IX RECEIVED FROM TANADGUSIX CORPORATION 8/6/93. WARRANTY DEED FOR SUBSURFACE ESTATE FOR TRACT IX RECEIVED FROM THE ALEUT CORPORATION 8/8/93.

4. SEE ASLS 89-101 (Plat #95-40, Aleutian Island Recording District) FOR ADDITIONAL INFORMATION RELATING TO THIS AIRPORT SURVEY.

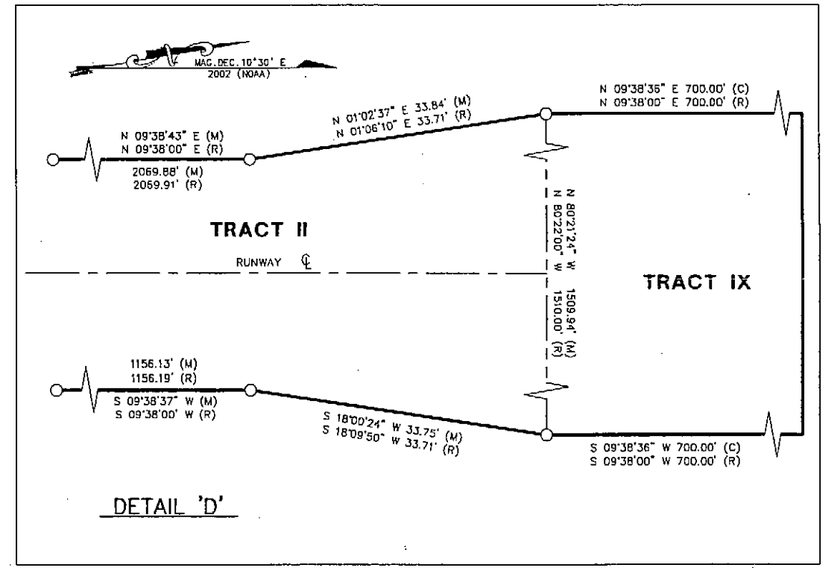
5. ALL BEARINGS SHOWN ARE LOCAL PLANE BEARINGS, BASED ON THE MEAN GEODETIC BEARING BETWEEN RUNWAY CENTERLINE MONUMENTS SET THIS SURVEY. THE BEARING WAS COMPUTED USING GLOBAL POSITIONING SYSTEM (GPS) TECHNOLOGY, HOLDING STATION "SOUTHWEST BASE RESET".

LEGEND

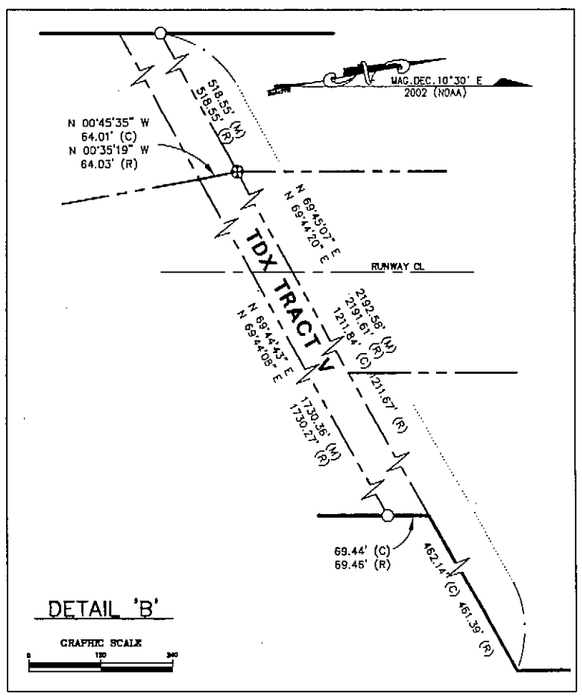
⊕	FOUND BLM MONUMENT
◉	FOUND BENCHMARK
○	FOUND OTHER
▪	FOUND REBAR
◐	SET ALCAP
———	PROPERTY BOUNDARY
- - - - -	EASEMENT LINE
— — —	RUNWAY CENTERLINE
———	INTERIOR TRACT LINE
(M)	MEASURED THIS SURVEY
(R)	RECORD PER PLAT 95-40
(R2)	ST PAUL ISLAND AIRPORT PROPERTY PLAN, DATED NOVEMBER 15, 1988
(C)	COMPUTED THIS SURVEY



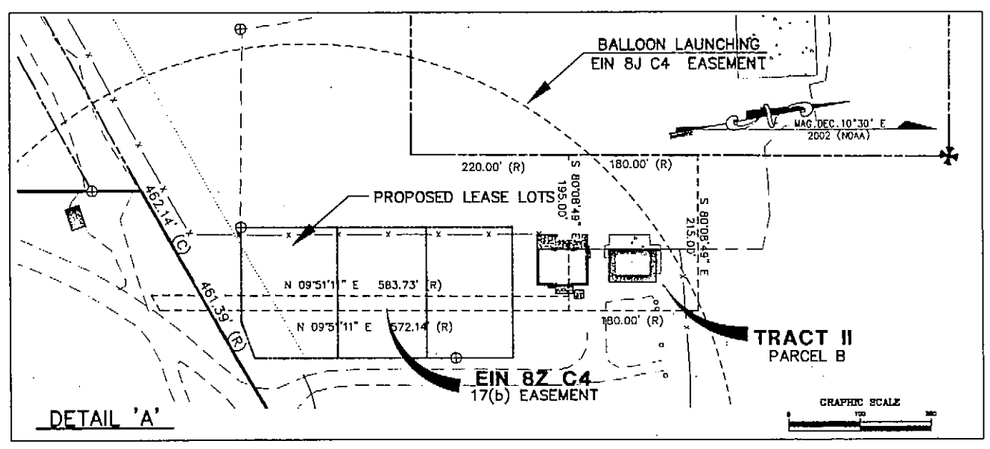
DETAIL 'C'



DETAIL 'D'



DETAIL 'B'



DETAIL 'A'

DETAILS ARE NOT TO SCALE, UNLESS SHOWN OTHERWISE

AIRPORT LAYOUT PLAN CONDITIONAL APPROVAL SUBJECT TO ALP APPROVAL LETTER DATED 5/3/04

By: [signature] DATE: 5/3/04
FAA, AIRPORTS DIVISION
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APPROVED: [signature]
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APPROVED: [signature]
HARVEY M. DOUTHIT, P.E. — PROJECT MANAGER

DATE 04/13/04
DESIGN DCH
DRAWN GLB
CHECKED [signature]

ST. PAUL AIRPORT
AIRPORT LAYOUT PLAN
PROPERTY PLAN

PROPERTY PLAN SHEET 2 OF 2

SHEET 8 OF 9

Date Plotted: 04/13/04
Plot Ratio and Layout: 1=1, layout=
File: P:\Projects\058182\Design\ALP\SIP-PropPlan.dwg

Designed By: WPM
Checked By: SPD
Drawn By: GLB

ST. PAUL AIRPORT
AIRPORT LAYOUT PLAN
NARRATIVE

A. PURPOSE

The St. Paul Airport Layout Plan Narrative Report is provided along with the Airport Layout Plan in accordance with Federal Aviation Administration (FAA) Airport Design Advisory Circular 150/5300-13, change 7, Appendix 7.

The rationale for development plans at St. Paul Airport is outlined in this narrative.

B. INTRODUCTION

This Airport Layout Plan (ALP) supercedes the ALP approved by FAA on 10-31-94.

St. Paul Airport is located on St. Paul Island approximately 3.5 miles northeast of the City and approximately 320 miles northwest of Cold Bay.

According to the 2000 census the City of St. Paul had a population of approximately 532 permanent residents. There are no roads to St. Paul Island; it is accessible by sea or air only. Year round barge and boat transportation is hindered by distance and seasonal sea ice. The airport is a major transportation facility for St. Paul Island.

The U.S. Coast Guard (USCG), Peninsula Airways (Pen Air), Alaska Central Express (ACE), and Northern Air Cargo (NAC) have scheduled flights to St. Paul.

C. AIRPORT USAGE AND FORECASTS

The Alaska Aviation System Plan has designated St. Paul Airport as a "community class airport." A community class airport is defined as the "primary land or water access point to a small rural community of at least 25 permanent year round residents without other reliable year round access." St. Paul is not expected to change classification.

Since there is no tower at the St. Paul Airport, estimates of aircraft operations are based on the fleet and current schedules of current users and the Airport Master Record (FAA Form 5010).

The FAA form 5010 and the Terminal Area Forecasts report the following data for annual aircraft operations:

Air Carrier	150
Commuter	300
Air Taxi	50
GA Local	50
Military	20
Total	570

A recent survey of airport users indicate the following operations:

Aircraft	Aircraft Category	Scheduled Operations per year
Metro/Saab 340/Beech 1900	B-I/B-II	900
DC-6/Boeing 727-100	B-III/C-III	250
C-130 USCG	C-IV	40
Helicopter - USCG		100
Total		1,290

Pen Air, NAC, ACE, and the USCG conduct the only scheduled operations at the St. Paul Airport. Non-scheduled operations are by charter and account for only a small percentage of total operations. There are no locally based air taxis, commuters, general aviation aircraft or air carriers at the St. Paul Airport. The USCG bases a helicopter at the St. Paul airport for approximately one month each year during fishing season.

The 2000 Regional Airport Plan reports 4,712 enplanements for St. Paul in 1999.

Northern Air Cargo flies a Boeing 727-100 (C-III) or DC 6's to St. Paul three days per week. NAC is also evaluating the use of other future aircraft smaller than the Boeing 727.

The critical design aircraft for St. Paul is the Boeing 727-100. The airplane has an approach speed of 125 knots, a wingspan of 108', and a maximum takeoff weight of 169,000 lbs.

The projected future aircraft operations are based on current conditions for 5, 10, and 20 years into the future. These estimates are based on population forecasts, forecasts of current activity levels along with surveys from the carriers. It is anticipated that air carriers will use aircraft with larger passenger and cargo capacity such as the Saab 340 and Boeing 727 rather than significantly increase the number of operations by smaller aircraft. The growth rate used for the St. Paul Airport is estimated at 1% per year (1.01^n where n equals the number of years).

FORECASTS OF FUTURE OPERATIONS:

ITEM	2002	2007	2012	2022
Annual Air Carrier				
Scheduled Operations	1,150	1,209	1,271	1,390
Non-Scheduled Operations	30	32	34	37
USCG Operations				
C-130 Hercules	40	42	45	49
Helicopter	100	105	110	122
TOTAL	1,320	1,388	1,460	1,598

D. STAGE DEVELOPMENT

Development of the St. Paul Airport will be accomplished in phases of near-term (0-5 years), mid-term (6-10 years) and long-term (11-20 years). The primary objectives of future airport developments are to increase safety to operations by installing security fencing, increasing the size of the existing SREB, and paving the runway, taxiways and apron.

Near-Term (0-5 years)

Airport fencing will be installed in 2003 to reduce the safety hazard of domesticated reindeer on the airport and runway. The existing fence on the south end of the runway will be expanded to surround the entire airfield.

The existing runway, taxiways, and aprons will be paved. A paved turnaround will be added to the end of Runway 18. Paving will strengthen the runway, eliminate periodic softness, reduce damage to aircraft, and control dust. To accomodate the maximum takeoff weight of the critical design aircraft, the pavement design strength will accomodate an aircraft weighing 169,000 pounds.

Drainage on the runway safety area will be improved by increasing slopes, upgrading the drainage ditches along the runway and adding culverts near each end of the runway, and improving drainage from the airport. Drainage around the public apron will also be improved. The public apron will be expanded to facilitate drainage and snow removal.

The runway, taxiway and apron lighting will be replaced due to corrosion. Pads for future PAPIs will be added on each runway end.

The existing SRE building will be expanded with 3 additional bays and equipment required for snow removal and maintenance of paved surfaces will be acquired. The contractor's office may remain at the Saint Paul Airport for possible use as a terminal building.

Near-Term development plans are estimated to cost $10.8 million in 2003 dollars.

Mid-Term (6-10 years)

The FAA will install PAPI units on each end of the runway.
No other proposed development is anticipated within the Mid-Term planning period for the St. Paul Airport.

Long-Term (10-20 years)

Resurface the runway, taxiways, and apron.

20+ Years
Beyond 20 years, development may include the construction of a parallel taxiway at the St. Paul Airport.

E. PROPERTY STATUS

The existing St. Paul Airport is operated by ADOT&PF and is located on approximately 413 acres of land.

F. COMMUNITY INVOLVEMENT

The residents of St. Paul have been informed by the Alaska Department of Transportation and Public Facilities (ADOT&PF) of the proposed development contained in this ALP. ADOT&PF held a public meeting in November 2002 and advertised in the Anchorage Daily News and local paper soliciting comments from the public on the proposed drainage and paving projects. Letters from interested parties regarding the St. Paul ALP will be on file at ADOT&PF, Central Region offices.

ST. PAUL AIRPORT DESIGN STANDARDS

ITEM	Standard	Existing	Ultimate
Runway Category	C-III	C-III	C-III
Runway Length		6500	6500
Runway Width	150	150	150
Runway Shoulder Width	25	25	25
Runway Safety Area Width	500	500	500
Runway Safety Area Length Beyond End of Runway	1000	1000	1000
Runway Object Free Area	800	800	800
Taxiway 'A' Width	50	75 (IV)	75
Taxiway 'B' Width	50	75 (IV)	75
Taxiway Shoulder Width	20	20	21.5
Taxiway Safety Area Width	118	118	118
Taxiway Object Free Area	186	186	186
Aircraft Parking Area Setback	500	410	500
Runway Protection Zone Length (R/W 36)	2500	2500	2500
Runway Protection Zone Length (R/W 18)	1700	1700	1700
Runway Protection Zone Inner Width	1000	1000	1000
Runway Protection Zone Outer Width (R/W 36)	1750	1750	1750
Runway Protection Zone Outer Width (R/W 18)	1510	1510	1510
Building Restriction Line	750	750	750
Approach Surface (R/W 36)		50:1	50:1
Approach Surface (R/W18)		34:1	34:1

G. NOTES

The existing Saint Paul public apron is located partially within the primary surface, with the apron edge approximately 410 feet from the runway centerline. Currently C-130 aircraft occasionally parked on the apron penetrate the primary and transitional surfaces. AC 150/5360-9, Paragraph 15d, addresses waivers for certain penetrations of Part 77 Surfaces. The ALP shows relocation of the edge of the apron to 500 feet from the runway centerline. This new apron configuration will still allow the tail of a C-130 to penetrate the transitional surface by about 10 feet. However, C-130's normally do not sit on the apron longer than several hours and the airport receives few annual operations. The FAA has determined the proposed apron configuration does not jeopardize air safety. Other alternatives would have required completely relocating the apron.

Date Plotted: 04/13/04
Plot Ratio and Layout: 1=1, layout=
File: P:\Projects\059182\Design\ALP\dev-SUP-ALP.dwg

Designed By: WPH
Checked By: SCD
Drawn By: GLB

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By: [signature] DATE: 5/12/04
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DATE 04/13/04
DESIGN WPH
DRAWN GLB
CHECKED [signature]

ST. PAUL AIRPORT

AIRPORT LAYOUT PLAN
NARRATIVE REPORT

SHEET 9 OF 9