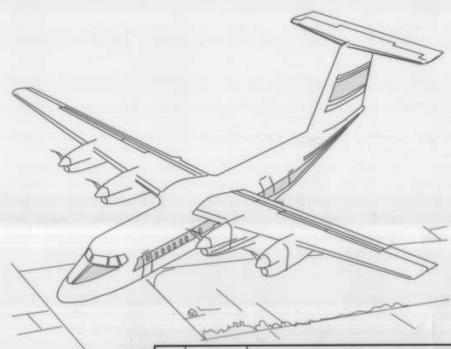
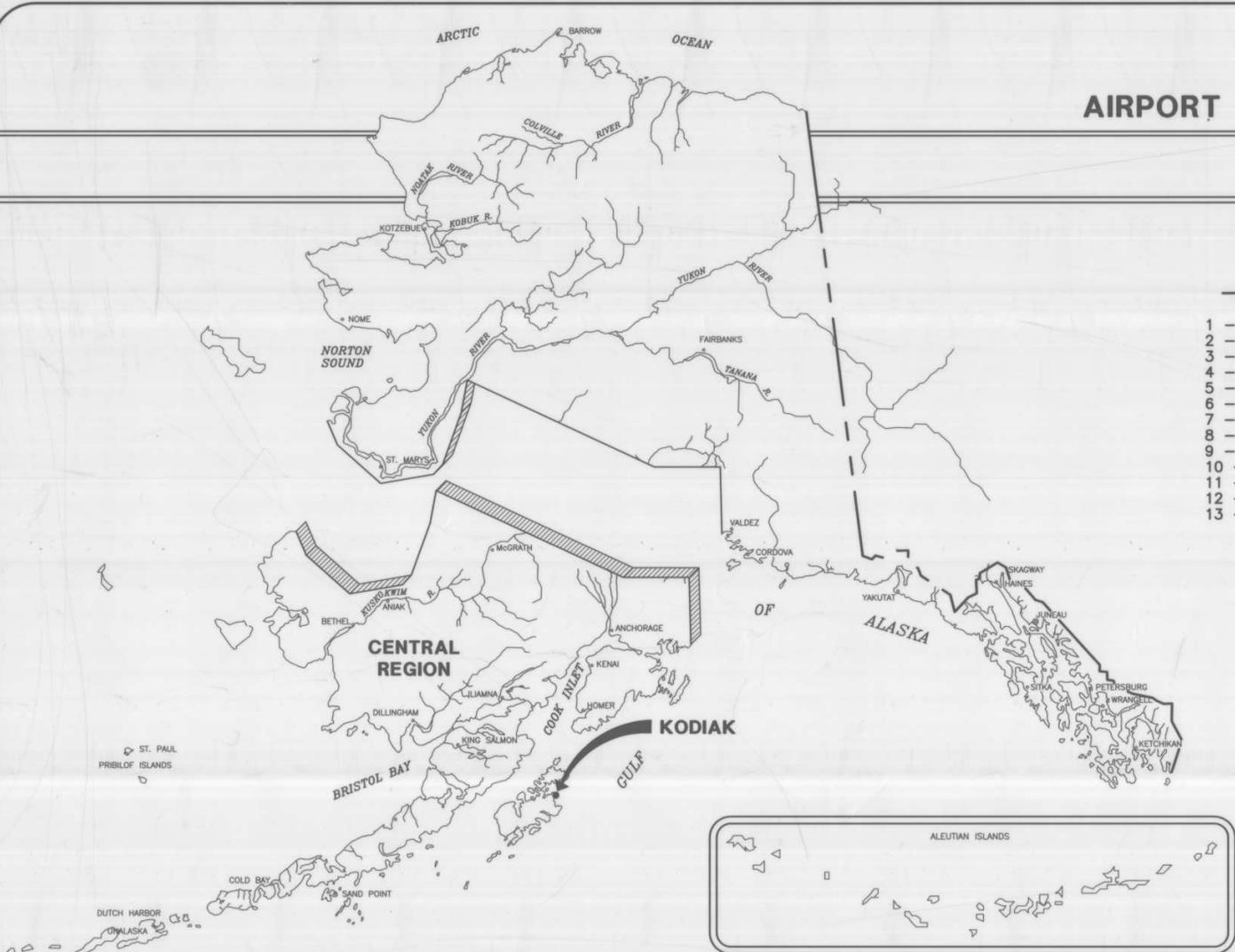


# AIRPORT LAYOUT PLAN FOR KODIAK 2004

## DRAWING INDEX

- 1 - COVER SHEET AND INDEX
- 2 - VICINITY MAP AND DATA TABLES
- 3 - AIRPORT LAYOUT PLAN - EXISTING
- 4 - AIRPORT LAYOUT PLAN - FUTURE
- 5 - TERMINAL AREA PLAN
- 6 - RUNWAY PROFILES
- 7 - RUNWAY 7/25 APPROACH SURFACES PLAN AND PROFILE
- 8 - RUNWAY 11/29 APPROACH SURFACES PLAN AND PROFILE
- 9 - RUNWAY 18/36 APPROACH SURFACES PLAN AND PROFILE
- 10 - AIRPORT AIRSPACE DRAWING
- 11 - PROPERTY PLAN
- 12 - NARRATIVE REPORT
- 13 - NARRATIVE REPORT



PL	DATE	REVISION
PL	03/15/11	REV TWB DISPOSITION TO SHEETS 3,4,9,12-13
JTC	05/14/10	ALP UPDATE SHEETS 2-3
BY	DATE	REVISION

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

**CONCUR** *Gordon C. Keith*  
GORDON C. KEITH, P.E.  
**CONSTRUCTION AND OPERATIONS DIRECTOR**

**APPROVED** *Robert A. Campbell*  
ROBERT A. CAMPBELL, P.E.  
**PRECONSTRUCTION ENGINEER**

**DATE** 5/22/04

**DATE** 7/21/04

AIRPORT LAYOUT PLAN CONDITIONAL APPROVAL  
SUBJECT TO ALP APPROVAL LETTER DATED 6/18/04

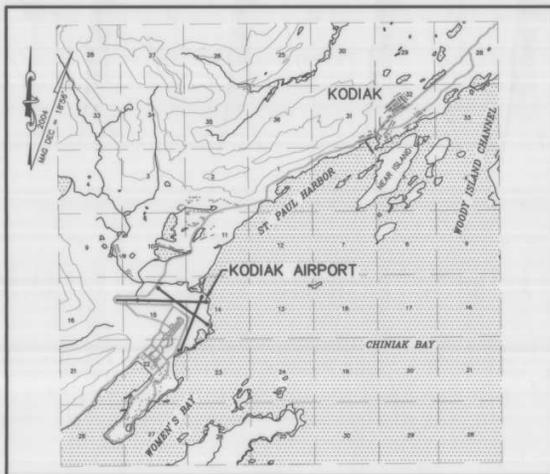
FAA AIRSPACE REVIEW NUMBER  
03-AAL-20

By: *Gordon C. Keith* DATE: 6/18/04

FAA AIRPORTS DIVISION  
ALASKAN REGION

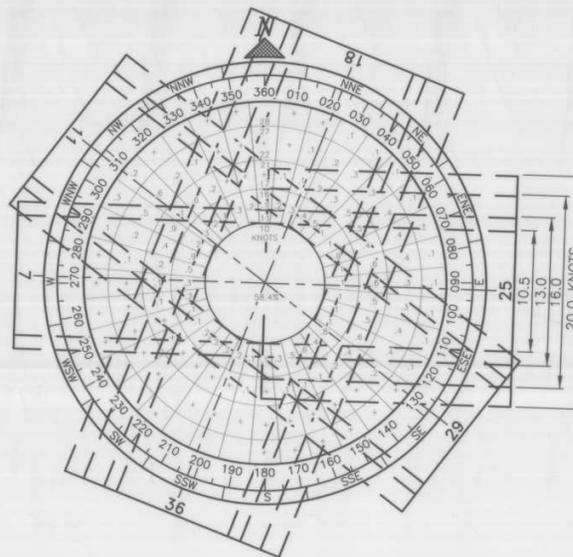
**KODIAK  
AIRPORT LAYOUT PLAN**

**SHEET 1 OF 13**



**VICINITY MAP**

1:63,360  
T 28 S, R 20 W, SEC. 14, 15, 16, 22, 23  
SEWARD MERIDIAN  
U.S.G.S. KODIAK (C-2, D-2), ALASKA



**WIND DATA**

WIND COVERAGE:	SPEED	R/W 7/25	R/W 18/36	R/W 11/29	TOTAL
	10.5 KNOTS	85.34%	89.43%	86.98%	88.71%
	13 KNOTS	92.28%	78.38%	91.25%	99.59%
	16 KNOTS	96.91%	87.82%	95.18%	99.93%
	20 KNOTS	98.99%	94.13%	N/A	99.99%

SOURCE: U.S. DEPARTMENT OF COMMERCE, NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, NATIONAL CLIMATIC DATA CENTER  
JUNE 24, 1999

PERIOD: 12/1991-5/1999

**LEGEND**

ITEM	EXISTING	FUTURE
PROPERTY LINE	-----	-----
BUILDING RESTRICTION LINE	BRL	BRL
AIRPORT REFERENCE POINT (A.R.P.)		
WIND CONE AND SEGMENTED CIRCLE		
CONTOURS	100	100
ROADWAYS		
BUILDINGS		
ROTATING BEACON		
SHORELINE		
ANTENNA		
VASI OR PAPI		
FENCE		
MALSF		
REIL		

**NON-STANDARD CONDITIONS**

ITEM	EXISTING	STANDARD	FUTURE
R/W 7-25 SAFETY AREA LENGTH RW/25	0	1,000'	1,000'
R/W 18-36 SAFETY AREA LENGTH RW/18	0	1,000'	1,000'
R/W 18-36 SAFETY AREA LENGTH RW/36	0	1,000'	1,000'
R/W 7-25 CL & T/W DELTA CL	335'	400'	400'
R/W 18-36 CL & T/W BRAVO CL	335'	400'	400'
PROPOSED LONGITUDINAL GRADE CONNECTING T/W TO R/W 7/25	N/A	1.5%	1.7%
R/W 7 APPROACH FAR PART 77 OBSTRUCTIONS	N/A	NO-OBST.	OBSTRUCTIONS
OBSTRUCTED LINE OF SIGHT BETWEEN R/W 7-25 & R/W 18-36	OBSTRUCTED	NO-OBST.	OBSTRUCTED
T/W F FILLET RADIUS ACCESS TO R/W 7	25'	85'	25'
T/W F RADIUS OF TAXIWAY TURN	75'	150'	75'
RVZ R/W 7-25 & R/W 18-36 PARALLEL WITH T/W C	OBSTRUCTIONS	NO-OBST.	OBSTRUCTIONS

**RUNWAY DATA**

ITEM	RUNWAY 7/25		RUNWAY 18/36		RUNWAY 11/29	
	EXISTING	FUTURE	EXISTING	FUTURE	EXISTING	FUTURE
EFFECTIVE GRADE	0.77%	SAME	0.30%	SAME	0.19%	SAME
% WIND COVERAGE	10.5 KNOTS 13 KNOTS 16 KNOTS 20 KNOTS	85.34% 92.28% 96.91% 98.99%	SAME SAME SAME SAME	69.43% 78.38% 87.82% 94.13%	SAME SAME SAME SAME	86.98% 91.25% 95.18% N/A
INSTRUMENT RUNWAY	PRECISION	SAME	NON-PRECISION	SAME	NON-PRECISION	SAME
RUNWAY SURFACE	ASPH CONC	SAME	ASPH CONC	SAME	ASPH CONC	SAME
PAVEMENT STRENGTH (max)*	150,000	SAME	150,000	SAME	150,000	SAME
APPROACH SURFACES	50:1	SAME	20:1	SAME	20:1	SAME
VISIBILITY MINIMUM	2 MILE (25) 1 MILE (07)	2 MILE (25) 1 MILE (07)	1 MILE (36) 1 MILE (18)	1 MILE (36) 1 MILE (18)	1 MILE (29) 1 MILE (11)	1 MILE (29) 1 MILE (11)
RUNWAY LIGHTING	H.I.R.L.	SAME	H.I.R.L.	SAME	H.I.R.L.	SAME
RUNWAY MARKING	PRECISION	SAME	NON-PRECISION	SAME	NON-PRECISION	SAME
RUNWAY NAVIGATION AIDS **	ILS/VASI, VOR LOC/DME, GS REIL (25)	ILS/VASI, VOR LOC/DME, GS REIL (25), PAPI	VASI, REIL (36) PAPI	VASI, REIL (36) PAPI	VASI	PAPI
AIRCRAFT APPROACH CATEGORY	C	SAME	C	SAME	B	SAME
AIRCRAFT DESIGN GROUP	SAME	SAME	N	SAME	III	SAME
RUNWAY SAFETY AREA DIMENSION	500'x7,542'	500'x6,395'	500'x5,013'	500'x7,013'	500'x5,802'	SAME
RUNWAY SAFETY AREA LENGTH	1,129' (07) 0' (25)	1,000' (07) 1,000' (25)	0' (18) 0' (36)	1,000' (18) 1,000' (36)	600' (11) 800' (29)	SAME SAME
RUNWAY DIMENSION (PAVEMENT END TO END)	150'x7,542'	SAME	150'x5,013'	SAME	150'x5,400'	SAME
RUNWAY OBJECT FREE AREA DIMENSION	800'x9,542'	SAME	800'x7,013'	SAME	800'x6,600'	SAME
RUNWAY OBSTACLE FREE ZONE DIMENSION	400'x7,942'	SAME	400'x5,413'	SAME	400'x5,800'	SAME
RUNWAY END COORDINATES (NAD 83, NAVD 88)						
7 (ELEV. 78.3')	LAT. 57°45'07.88"N LONG. 152°31'08.38"W	SAME				
7 (DISPLACED THRESHOLD ELEV. 69.0')	LAT. 57°45'07.49"N LONG. 152°30'47.59"W	57°45'07.55"N 152°30'50.43"W				
25 (ELEV. 20.8')	LAT. 57°45'05.27"N LONG. 152°28'49.48"W	SAME				
25 (DISPLACED THRESHOLD)	LAT. N/A LONG. N/A	N/A				
18 (ELEV. 20.0')	LAT. N/A LONG. N/A		57°45'10.60"N 152°28'58.19"W	SAME		
36 (ELEV. 35.8')	LAT. N/A LONG. N/A		57°44'24.92"N 152°29'33.30"W	SAME		
11 (ELEV. 36.7')	LAT. N/A LONG. N/A				57°45'17.71"N 152°30'08.18"W	SAME
11 (DISPLACED THRESHOLD ELEV. 34.2')	LAT. N/A LONG. N/A				57°45'15.10"N 152°30'01.68"W	SAME
29 (ELEV. 21.1')	LAT. N/A LONG. N/A				57°44'45.68"N 152°28'48.74"W	SAME
29 (DISPLACED THRESHOLD ELEV. 27.0')	LAT. N/A LONG. N/A				57°44'48.97"N 152°28'56.91"W	SAME

\* PAVEMENT STRENGTHS - SINGLE WHEEL: 53,000 lbs., TWIN WHEEL: 110,000 lbs., TWIN TANDEM: 150,000 lbs.  
\*\* R/W 7/25 NAVDAS ARE FOR R/W 25 ONLY

**AIRPORT DATA**

ITEM	EXISTING	FUTURE
AIRPORT ELEVATION (M.S.L.)	73.0'	SAME
AIRPORT REFERENCE POINT (A.R.P.) (NAD 83)	LAT. 57°44'59.85"N LONG. 152°29'37.71"W	SAME
TAXIWAY LIGHTING	MITL	SAME
RAMP LIGHTING	FLOOD	SAME
MEAN MAX. TEMPERATURE, HOTTEST MONTH (JULY)	17°C (63°F)	SAME
MAGNETIC DECLINATION, YEAR	19°13'E, 2002	SAME
AIRPORT REFERENCE CODE	C-IV	SAME
AIRPORT AND TERMINAL NAVIGATION AIDS	VORTAC, NDB DF, RCO-RCAG	SAME

**RUNWAY DECLARED DISTANCES**

RUNWAY	EXISTING				FUTURE			
	TORA	TODA	ASDA	LDA	TORA	TODA	ASDA	LDA
07-25	7,542' (07) 7,542' (25)	7,542' (07) 7,542' (25)	7,542' (07) 6,542' (25)	6,413' (07) 7,542' (25)	TBD	TBD	TBD	TBD
11-29	5,399' (11) 5,399' (29)	5,399' (11) 5,399' (29)	4,843' (11) 4,859' (29)	4,403' (11) 4,403' (29)	SAME	SAME	SAME	SAME

NOTE: DECLARED DISTANCES WERE CALCULATED FROM THE COORDINATES LOCATED IN THE DATA TABLE. THE COORDINATES HAVE BEEN UPDATED BASED ON THE 2005 R&M SURVEY. THE DECLARED DISTANCES FOR RUNWAY 7/25 DO NOT PROVIDE ADDITIONAL RUNWAY SAFETY AREA. DATA UPDATED ON 5/23/2006 ON THIS SHEET SUPERCEDES DATA ON SUBSEQUENT SHEETS.

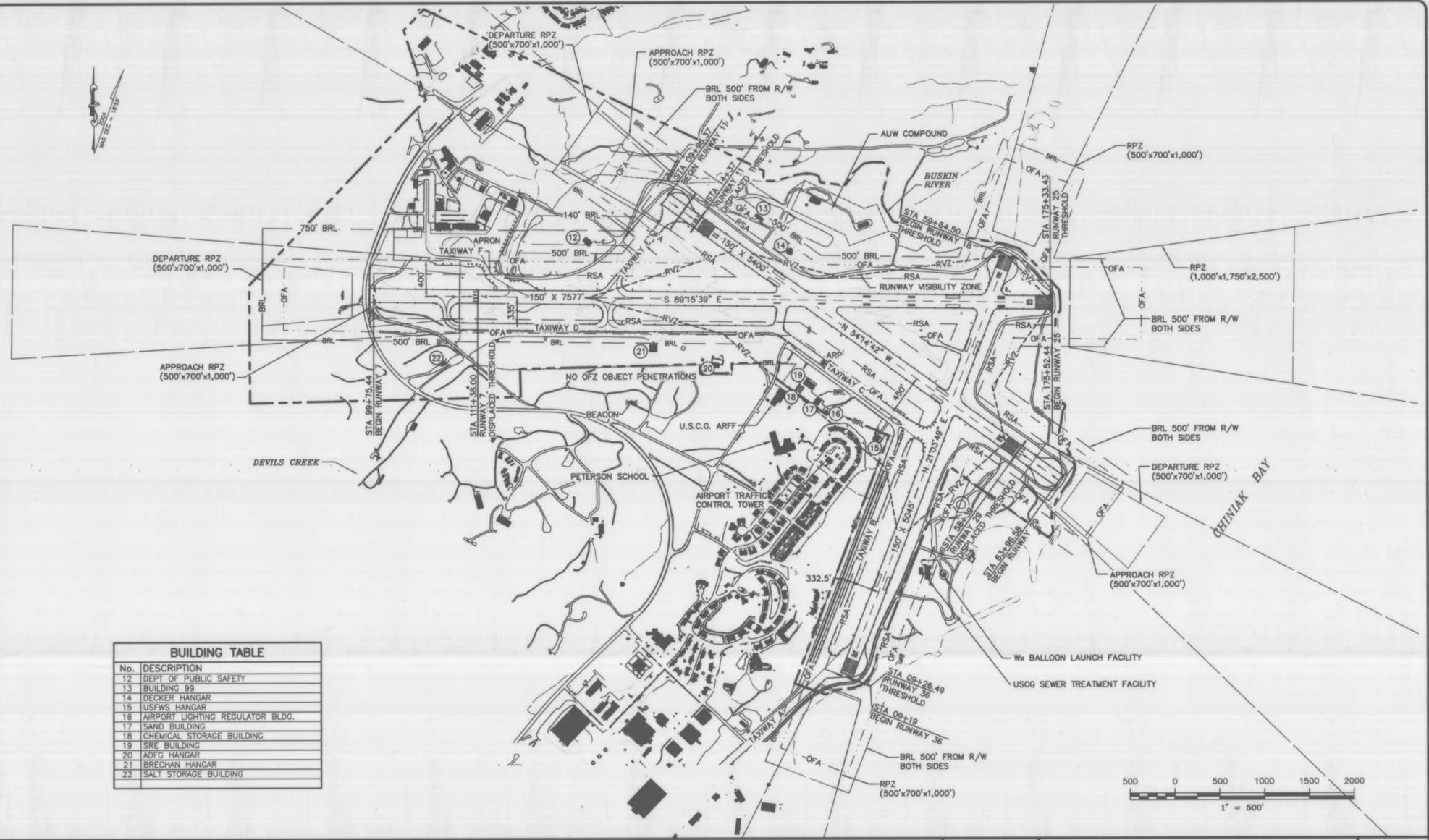
STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
CENTRAL REGION

KODIAK AIRPORT  
AIRPORT LAYOUT PLAN  
VICINITY MAP AND DATA TABLES

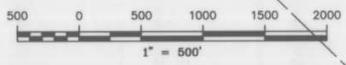
SHEET  
2  
OF  
13

FILE: Z:\07072 DOT&P\124 Kodiak Airport\CAD  
DATE: 03/17/04 1=1

BY	DATE	REVISIONS
VLC	5/12/10	ADDED RVZ OBSTRUCTIONS ALONG TW C TO NON STANDARD CONDITIONS TABLE
BCJ	5/23/06	UPDATED THRESHOLD COORDINATES, APP. ELEVATIONS, DECLARED DISTANCES AND ALL RW, ISA, OF, AND OFA LINES BASED ON 2005 R&M SURVEY



BUILDING TABLE	
No.	DESCRIPTION
12	DEPT OF PUBLIC SAFETY
13	BUILDING 99
14	DECKER HANGAR
15	USFWS HANGAR
16	AIRPORT LIGHTING REGULATOR BLDG.
17	SAND BUILDING
18	CHEMICAL STORAGE BUILDING
19	SRE BUILDING
20	ADFG HANGAR
21	BRECHAN HANGAR
22	SALT STORAGE BUILDING



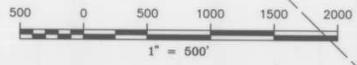
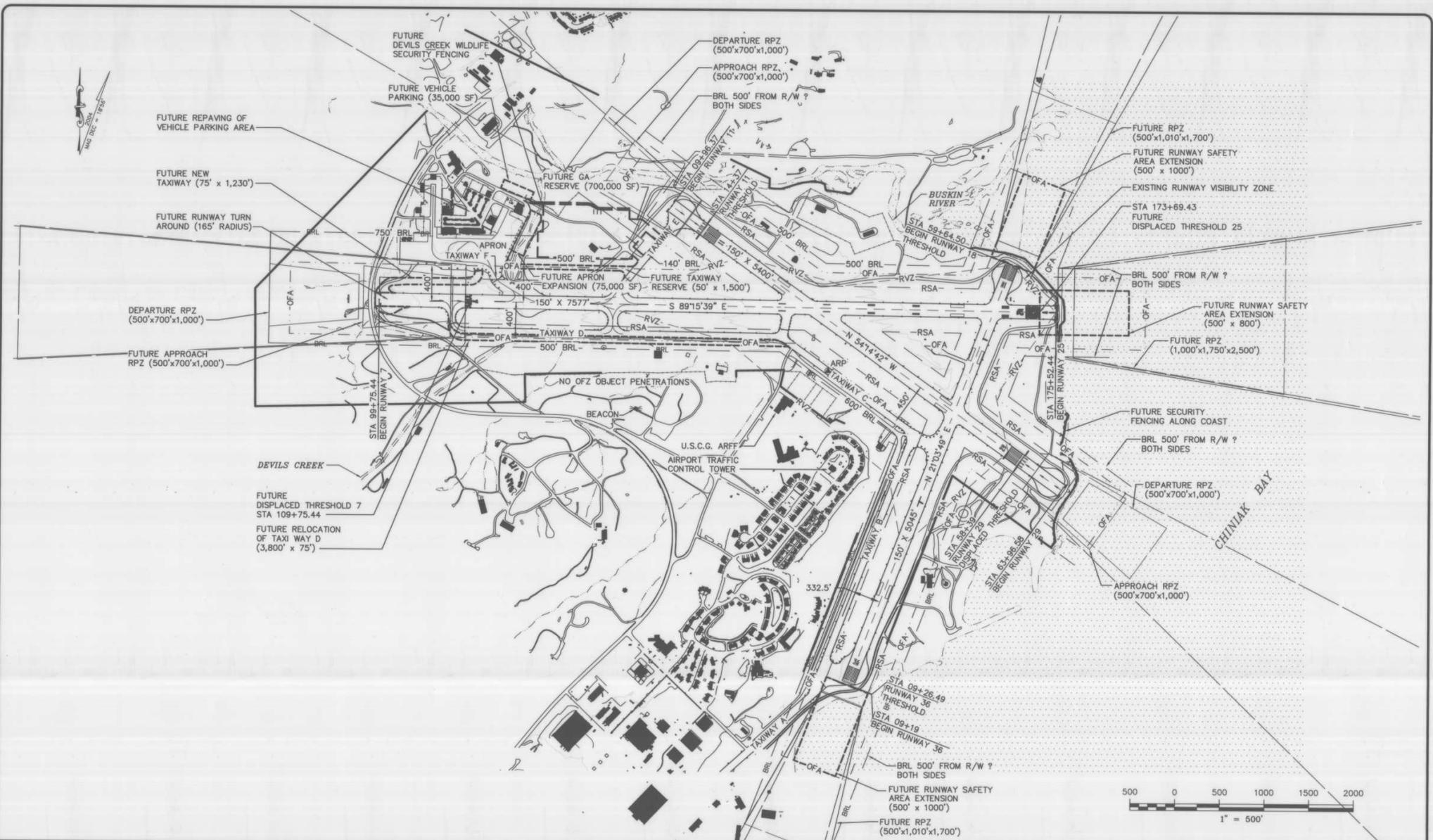
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 DATE: 3/15/2011 1:1

BY	DATE	REVISIONS
VLC	3/15/11	REVISED TAXIWAY B DISPOSITION
VLC	5/14/10	MOVED BRL ALONG TW C TO RVZ/EXISTING BUILDING LIMIT

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 AND PUBLIC FACILITIES  
 CENTRAL REGION

KODIAK AIRPORT  
 AIRPORT LAYOUT PLAN  
 AIRPORT LAYOUT PLAN - EXISTING

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FILE: W:\Projects\Kodiak\ALP\ALP 2011 update  
 DATE: 3/15/2011 1:1

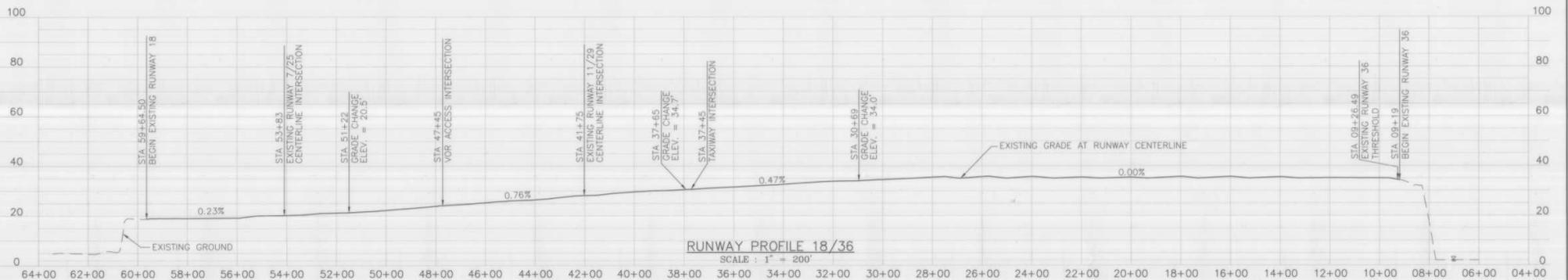
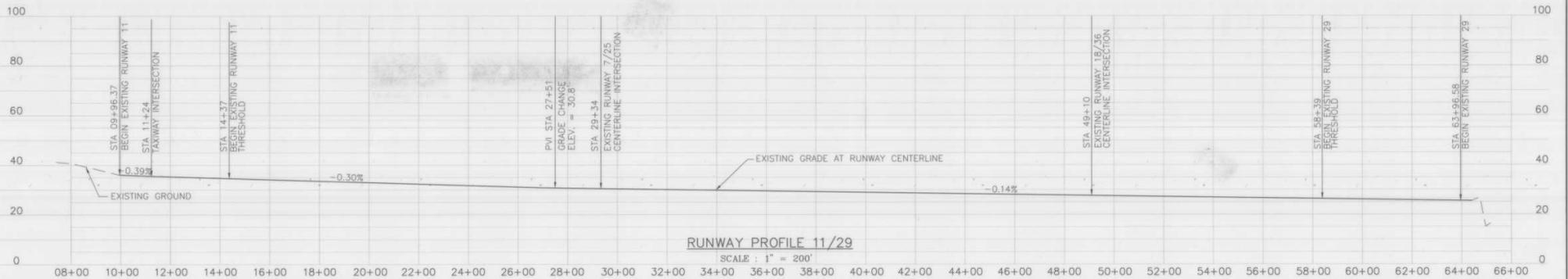
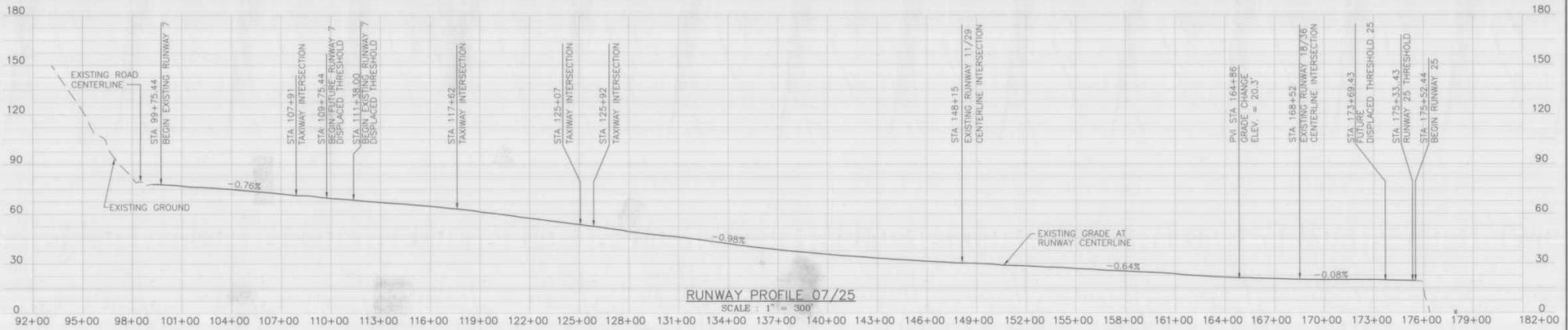
BY	DATE	REVISIONS
VLC	3/15/11	REVISED TAXIWAY B DISPOSITION

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 AND PUBLIC FACILITIES  
 CENTRAL REGION

KODIAK AIRPORT  
 AIRPORT LAYOUT PLAN  
 AIRPORT LAYOUT PLAN - FUTURE IMPROVEMENTS

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 OF  
 13





AIRPORT LAYOUT PLAN CONDITIONAL APPROVAL  
SUBJECT TO ALP APPROVAL LETTER DATED 2/16/04  
BY: *[Signature]* DATE: 2/16/04  
FAA AIRPORTS DIVISION  
ALASKAN REGION  
FAA AIRSPACE REVIEW NUMBER: 03-AAL-20

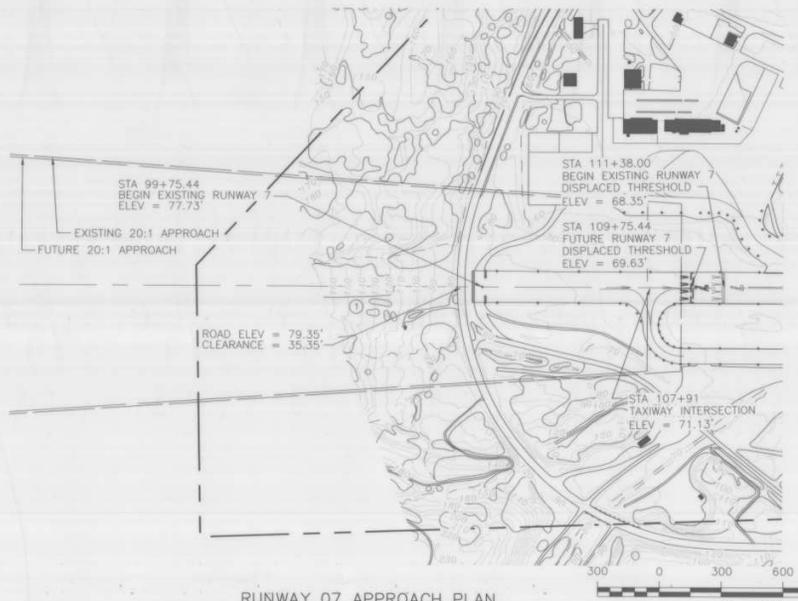
BY	DATE	REVISIONS

STATE OF ALASKA  
**DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES**  
CENTRAL REGION  
APPROVED: *[Signature]*  
STEPHEN M. WYATT  
APPROVED: *[Signature]*  
GARY E. LINCOLN, JR.  
DESIGN SECTION CHIEF  
PROJECT MANAGER

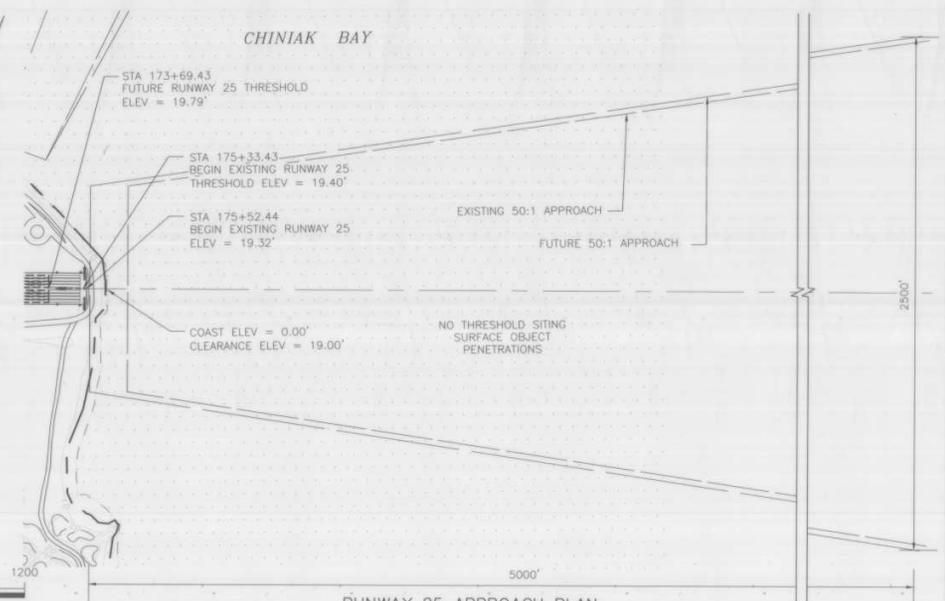
DATE: 3-17-04  
DESIGN: JSW  
DRAWN: LSH  
CHECKED: DAN

**KODIAK AIRPORT**  
AIRPORT LAYOUT PLAN  
RUNWAY PROFILES

FILE: Z:\07072 DOT&P\124 Kodiak Airport\CAD  
DATE: 03/17/04 1=1



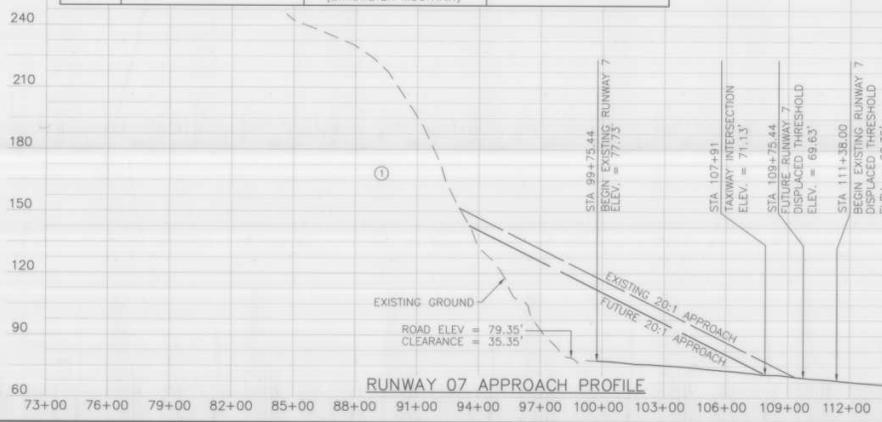
RUNWAY 07 APPROACH PLAN



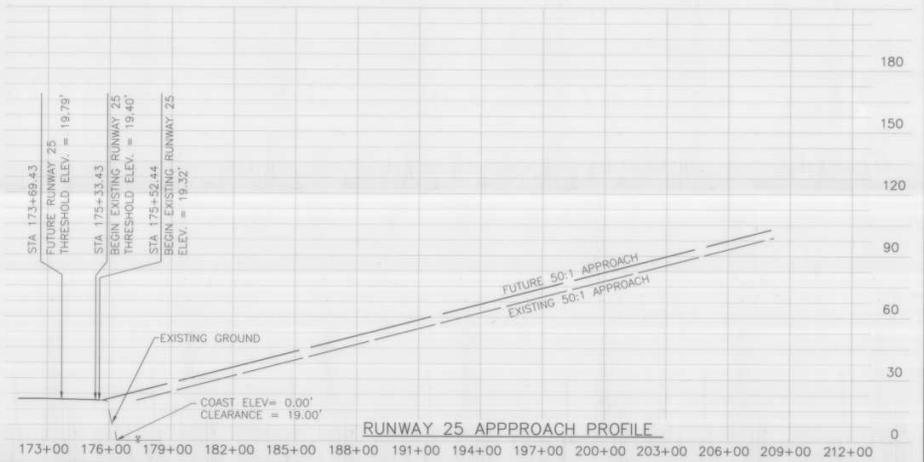
RUNWAY 25 APPROACH PLAN

**OBSTRUCTION DATA TABLE**

NUMBER	PENETRATION DISTANCE [FEET]	DESCRIPTION	DISPOSITION
①	1250'	TOPOGRAPHY (BAROMETER MOUNTAIN)	-



RUNWAY 07 APPROACH PROFILE



RUNWAY 25 APPROACH PROFILE

FILE: Z:\97072 DOT\APP\124 Kodiak Airport\CAD  
 SHEET: 03/17/04 1=1

AIRPORT LAYOUT PLAN CONDITIONAL APPROVAL  
 SUBJECT TO AIP APPROVAL LETTER DATED: *2/16/04*  
 By: *J.M. Smith* DATE: *2/16/04*  
 FAA, AIRPORTS DIVISION  
 ALASKAN REGION  
 FAA AIRSPACE REVIEW NUMBER: 03-AAL-20

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]*  
 GARY E. LINCOLN, P.E. PROJECT MANAGER

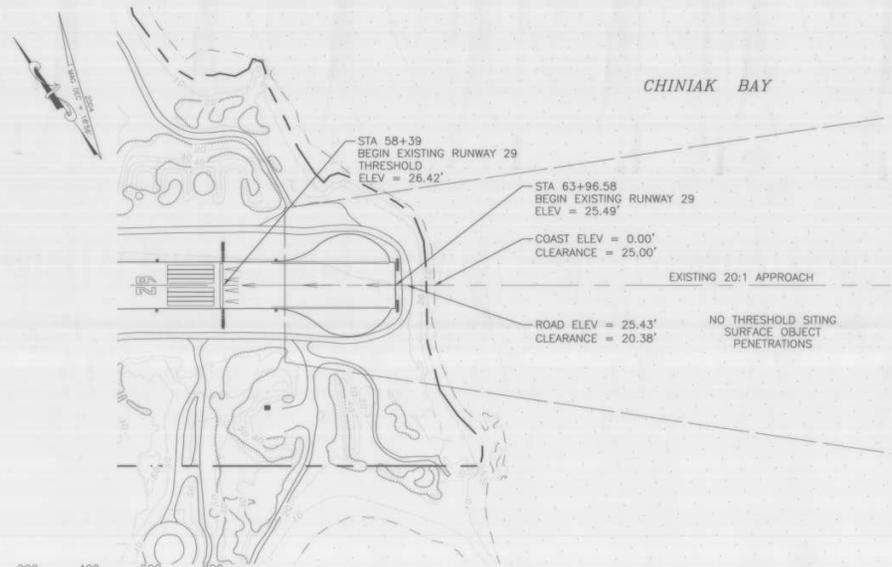
DATE: *3-17-04*  
 DESIGN: *JZW*  
 DRAWN: *LTH*  
 CHECKED: *DAH*

**KODIAK AIRPORT**  
 AIRPORT LAYOUT PLAN  
 RUNWAY 07/25 APPROACH SURFACES PLAN & PROFILE

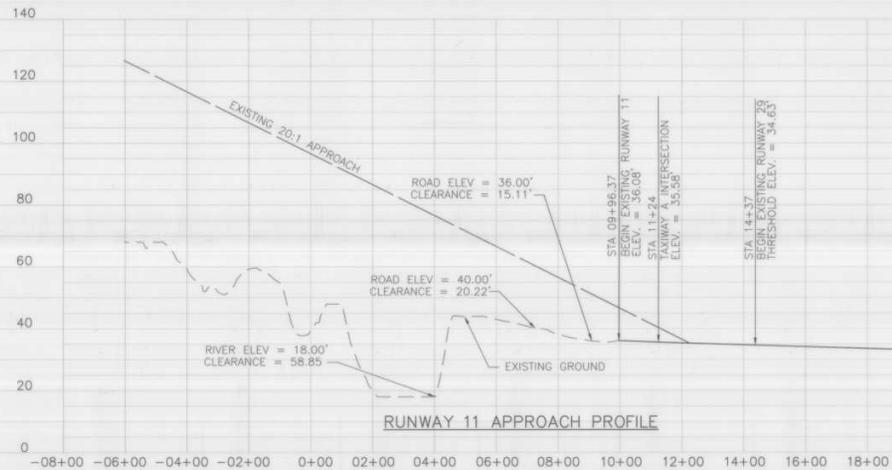
SHEET  
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 OF  
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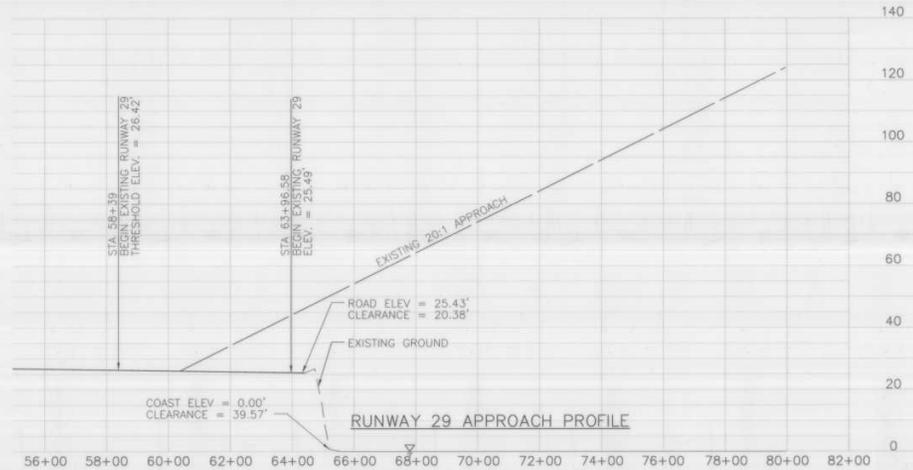
RUNWAY 11 APPROACH PLAN



RUNWAY 29 APPROACH PLAN



RUNWAY 11 APPROACH PROFILE



RUNWAY 29 APPROACH PROFILE

AIRPORT LAYOUT PLAN CONDITIONAL APPROVAL  
 SUBJECT TO ALP APPROVAL LETTER DATED 6/16/04  
 By: [Signature] DATE: 6/16/04  
 FAA AIRPORTS DIVISION  
 ALASKAN REGION  
 FAA AIRSPACE REVIEW NUMBER: 03-AAL-20

BY	DATE	REVISIONS

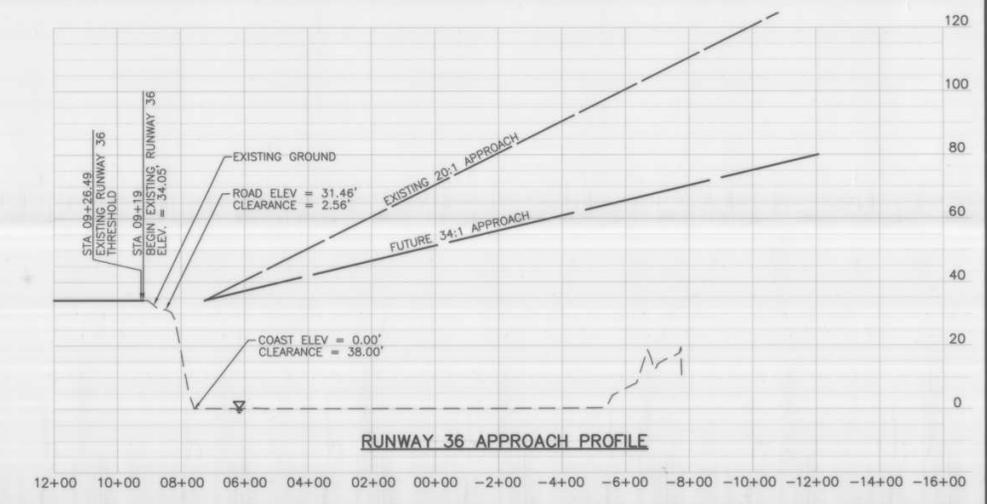
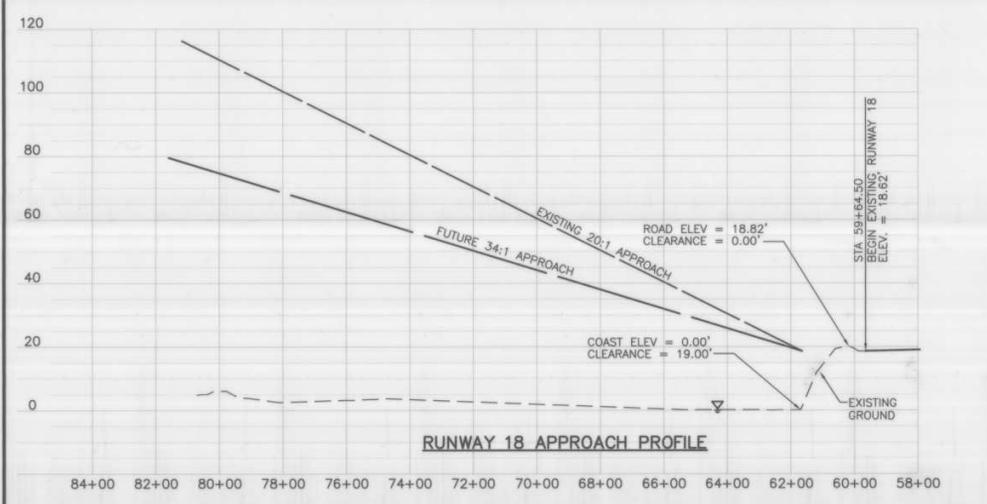
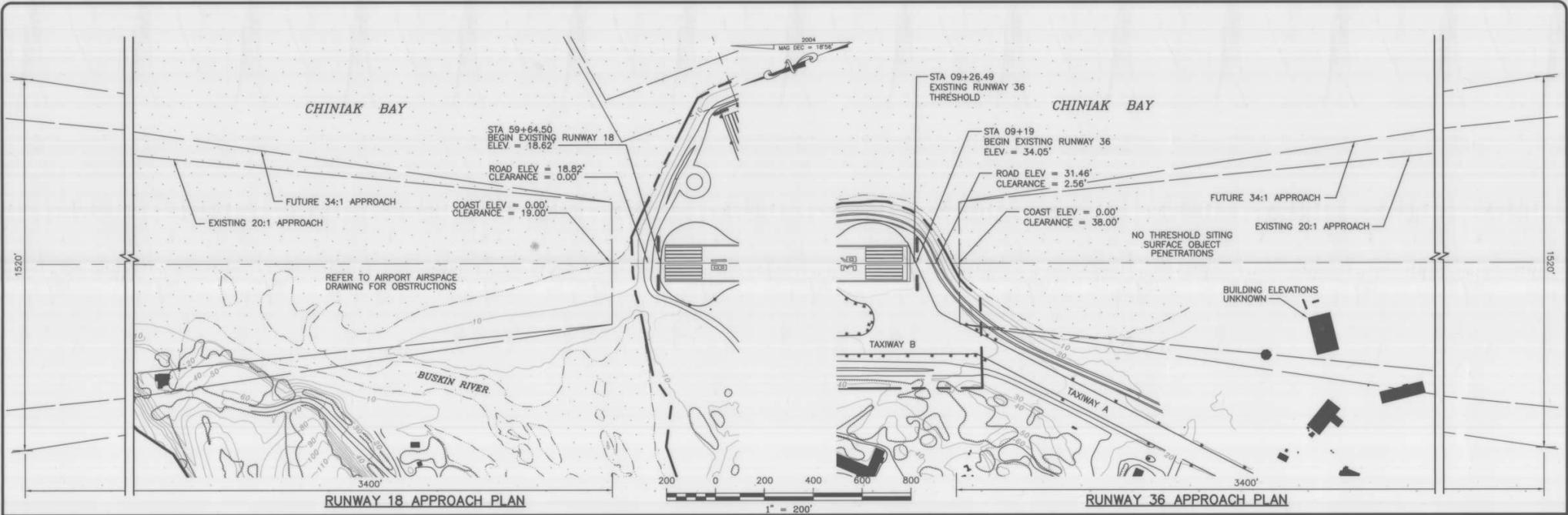
STATE OF ALASKA  
**DEPARTMENT OF TRANSPORTATION  
 AND PUBLIC FACILITIES**  
 CENTRAL REGION  
 APPROVED: [Signature] DESIGN SECTION CHIEF  
 STEPHEN W. ROSEN  
 APPROVED: [Signature] PROJECT MANAGER  
 GARY E. LINCOLN, A.E.

DATE 7-17-04  
 DESIGN JEW  
 DRAWN LJA  
 CHECKED DAB

**KODIAK AIRPORT**  
 AIRPORT LAYOUT PLAN  
 RUNWAY 11/29 APPROACH SURFACES PLAN & PROFILE

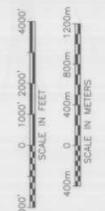
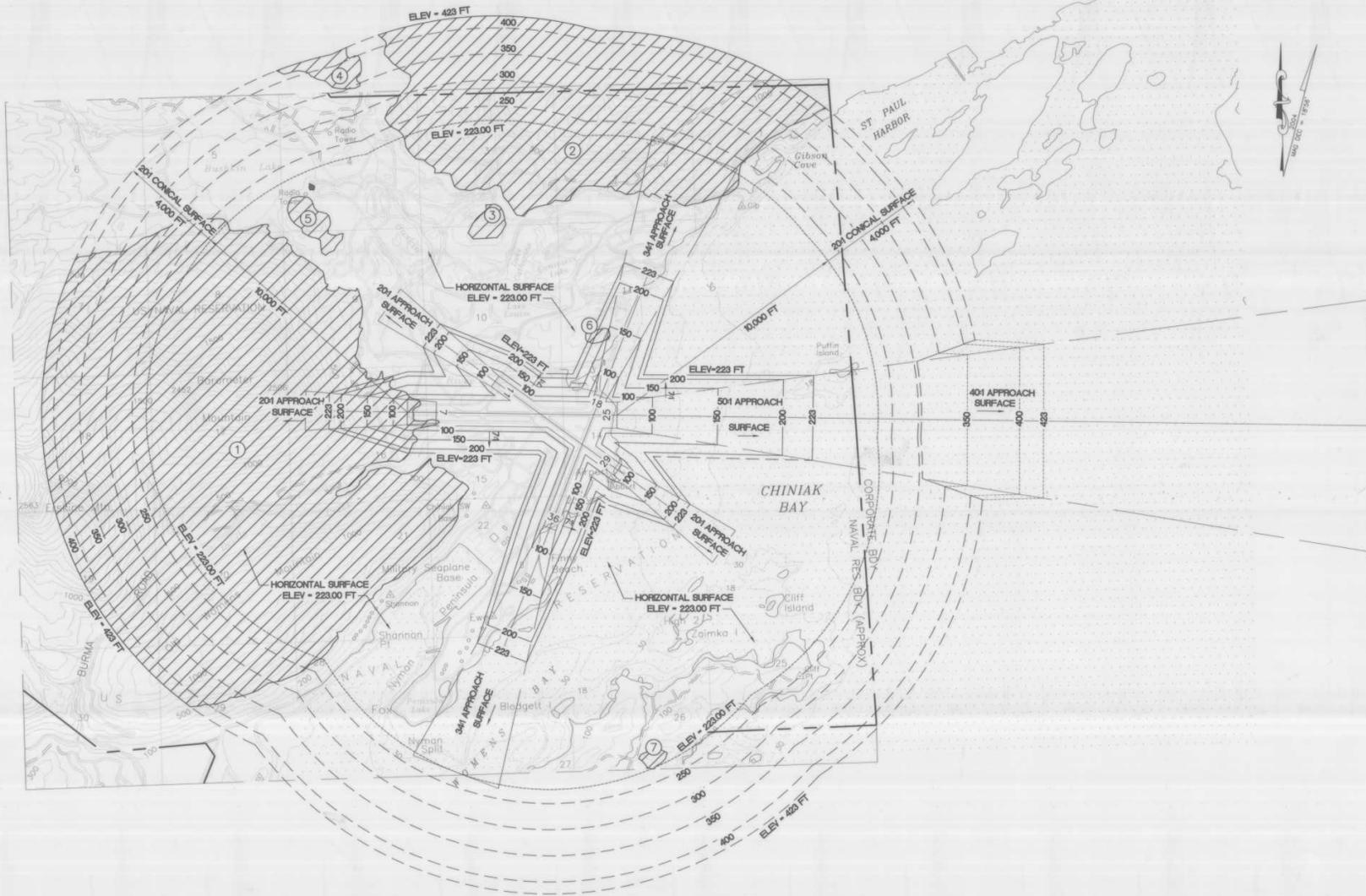
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 OF  
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FILE 2\07072 DOT\AP\124 Kodiak Airport\CAD  
 DATE 03/17/04 1=1 v=pljn



FILE: W:\Projects\Kodiak\ALP\ALP 2011 update DATE: 3/15/2011 1:1	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES CENTRAL REGION	KODIAK AIRPORT AIRPORT LAYOUT PLAN RUNWAY 18/36 APPROACH SURFACES PLAN & PROFILE	SHEET <b>9</b> OF <b>13</b>						
<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:5%;">BY</th> <th style="width:15%;">DATE</th> <th style="width:80%;">REVISIONS</th> </tr> </thead> <tbody> <tr> <td>VLC</td> <td>3/15/11</td> <td>REVISED TAXIWAY B DISPOSITION</td> </tr> </tbody> </table>		BY	DATE	REVISIONS	VLC	3/15/11	REVISED TAXIWAY B DISPOSITION		
BY	DATE	REVISIONS							
VLC	3/15/11	REVISED TAXIWAY B DISPOSITION							

ALL DIMENSIONS ARE IN ENGLISH UNITS.



**LEGEND**

- WATER SURFACE
- x (Meters) SPOT ELEVATIONS

**NOTES**

1. AIRPORT ELEVATION IS 73.00' (22.3m).
2. ALL CONTOURS ARE LESS THAN 2500' (760m) IN ELEVATION.

**OBSTRUCTION DATA TABLE**

NUMBER	PENETRATION DISTANCE (FEET) (METERS)	DESCRIPTION	DISPOSITION
1	2280 (700m)	TOPOGRAPHY	TO REMAIN
2	200 (60m)	TOPOGRAPHY	TO REMAIN
3	200 (60m)	TOPOGRAPHY	TO REMAIN
4	50' (15m)	TOPOGRAPHY	TO REMAIN
5	20' (6m)	TOPOGRAPHY	TO REMAIN
6	70' (21m)	TOPOGRAPHY	TO REMAIN

REVISIONS	DATE	BY

DATE: **3-17-64**  
 DESIGN: **JRW**  
 DRAWN: **LJM**  
 CHECKED: **DAN**

**DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES**  
 CENTRAL REGION

APPROVED: *[Signature]*  
 STEPHEN W. RYAN, JR.  
 PROJECT MANAGER

**KODIAK AIRPORT**  
 AIRPORT LAYOUT PLAN  
 AIRPORT AIRSPACE DRAWING

SHEET **10** OF **13**

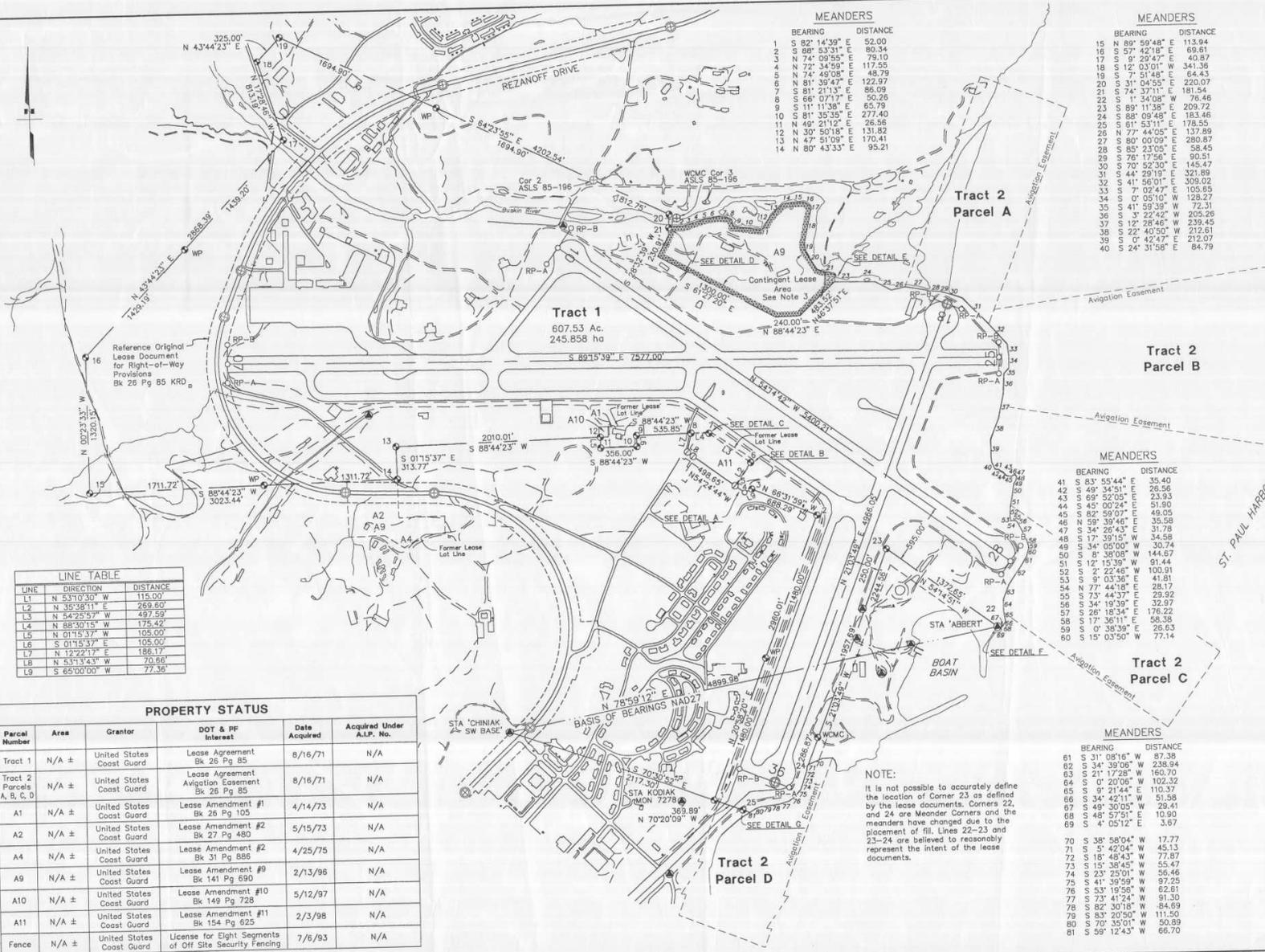
FAA AIRSPACE REVIEW NUMBER: 03-AAL-20

AIRPORT LAYOUT PLAN CONDITIONAL APPROVAL SUBJECT TO ALP APPROVAL LETTER DATED **6/18/64**

By: *[Signature]* DATE: **6/18/64**

FAA AIRPORTS DIVISION ALASKAN REGION

FILE: Z:\07072 DOT\APP\124 Kodiak\Airport\CAD\Civil  
 DATE: 03/19/04 1:1



LINE	DIRECTION	DISTANCE
L1	N 53°10'30" W	115.00'
L2	N 35°38'11" E	269.60'
L3	N 54°25'57" W	497.59'
L4	N 88°30'15" W	175.42'
L5	N 01°15'37" W	105.00'
L6	S 01°15'37" E	105.00'
L7	N 12°22'17" E	186.17'
L8	N 53°13'43" W	70.66'
L9	S 65°00'00" W	77.36'

**PROPERTY STATUS**

Parcel Number	Area	Grantor	DOT & PF Interest	Date Acquired	Acquired Under A.L.P. No.
Tract 1	N/A ±	United States Coast Guard	Lease Agreement Bk 26 Pg 85	8/16/71	N/A
Tract 2 Parcels A, B, C, D	N/A ±	United States Coast Guard	Lease Agreement Avigation Easement Bk 26 Pg 85	8/16/71	N/A
A1	N/A ±	United States Coast Guard	Lease Amendment #1 Bk 26 Pg 105	4/14/73	N/A
A2	N/A ±	United States Coast Guard	Lease Amendment #2 Bk 27 Pg 480	5/15/73	N/A
A4	N/A ±	United States Coast Guard	Lease Amendment #2 Bk 31 Pg 886	4/25/75	N/A
A9	N/A ±	United States Coast Guard	Lease Amendment #9 Bk 141 Pg 690	2/13/98	N/A
A10	N/A ±	United States Coast Guard	Lease Amendment #10 Bk 149 Pg 728	5/12/97	N/A
A11	N/A ±	United States Coast Guard	Lease Amendment #11 Bk 154 Pg 625	2/3/98	N/A
Fence	N/A ±	United States Coast Guard	License for Eight Segments of Off Site Security Fencing	7/6/93	N/A

**MEANDERS**

BEARING	DISTANCE
1 S 82° 14' 39" E	52.00
2 S 68° 53' 31" E	80.34
3 N 74° 09' 55" E	75.10
4 N 72° 34' 59" E	117.55
5 N 74° 49' 08" E	48.79
6 S 11° 11' 38" E	122.97
7 S 81° 21' 13" E	86.09
8 S 66° 07' 17" E	50.25
9 S 11° 11' 38" E	65.79
10 S 81° 35' 35" E	277.40
11 N 49° 21' 12" E	26.56
12 N 30° 50' 18" E	131.83
13 N 47° 51' 09" E	170.41
14 N 80° 43' 33" E	95.21

**MEANDERS**

BEARING	DISTANCE
15 N 80° 59' 48" E	113.94
16 S 57° 42' 18" E	69.61
17 S 6° 29' 47" E	40.89
18 S 12° 03' 01" W	341.36
19 S 7° 51' 48" E	64.43
20 S 11° 04' 55" E	220.07
21 S 74° 37' 11" E	181.54
22 S 11° 34' 08" W	76.48
23 S 89° 11' 38" E	209.72
24 S 88° 09' 48" E	183.46
25 S 81° 53' 11" E	178.55
26 S 77° 44' 05" E	137.89
27 S 80° 00' 09" E	280.87
28 S 85° 23' 05" E	58.45
29 S 85° 17' 56" E	90.51
30 S 70° 52' 30" E	145.47
31 S 44° 29' 19" E	321.86
32 S 41° 58' 01" E	309.02
33 S 7° 02' 47" E	103.85
34 S 0° 05' 10" W	123.27
35 S 41° 59' 39" W	72.31
36 S 3° 22' 42" W	205.26
37 S 12° 28' 45" W	239.45
38 S 22° 40' 50" W	212.61
39 S 0° 42' 47" E	212.07
40 S 24° 31' 58" E	84.79

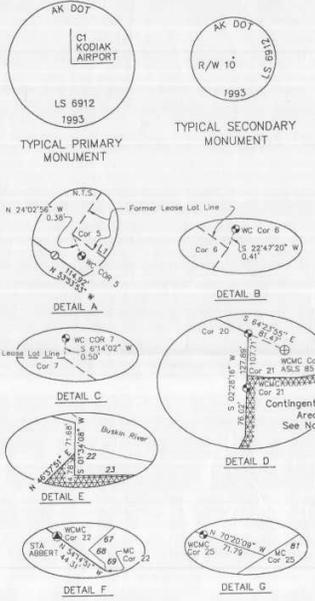
**MEANDERS**

BEARING	DISTANCE
41 S 83° 55' 44" E	35.40
42 S 49° 34' 01" E	26.56
43 S 69° 52' 05" E	23.93
44 S 48° 02' 24" E	91.90
45 S 82° 59' 07" E	49.05
46 N 59° 39' 46" E	35.58
47 S 34° 28' 43" E	31.78
48 S 17° 39' 15" W	34.58
49 S 34° 05' 00" W	30.74
50 S 8° 38' 08" W	144.67
51 S 12° 15' 39" W	91.44
52 S 2° 22' 48" W	100.91
53 S 9° 03' 36" E	41.61
54 N 77° 44' 18" E	28.17
55 S 73° 44' 37" E	30.92
56 S 34° 18' 39" E	32.97
57 S 26° 18' 34" E	176.22
58 S 17° 36' 11" E	65.38
59 S 0° 38' 39" E	26.63
60 S 15° 03' 50" W	77.14

**MEANDERS**

BEARING	DISTANCE
61 S 31° 08' 16" W	87.38
62 S 34° 39' 06" W	238.94
63 S 21° 17' 28" W	160.70
64 S 0° 20' 05" W	102.32
65 S 9° 21' 44" E	110.37
66 S 34° 42' 11" W	51.58
67 S 49° 30' 05" W	29.41
68 S 48° 57' 51" E	10.90
69 S 4° 05' 12" E	3.67
70 S 38° 58' 04" W	17.77
71 S 5° 42' 04" W	45.13
72 S 18° 48' 43" W	77.87
73 S 15° 38' 45" W	55.47
74 S 23° 23' 01" W	56.46
75 S 41° 39' 59" W	97.25
76 S 53° 19' 58" W	62.61
77 S 73° 41' 24" W	91.30
78 S 82° 30' 18" W	84.69
79 S 83° 20' 50" W	111.50
80 S 70° 35' 01" W	50.89
81 S 59° 12' 43" W	66.70

**NOTE:**  
It is not possible to accurately define the location of Corner 23 as defined by the lease documents. Corners 22, and 24 are Meander Corners and the meanders have changed due to the placement of fill. Lines 22-23 and 23-24 are believed to reasonably represent the intent of the lease documents.



**GENERAL NOTES**

- The Basis of Bearing for this survey is the NAD27 Alaska State Plane Zone 5 bearing between USCGAS triangulation stations Chiniak SW Base 1907/1967, and Abbott 1939. Bearings are also State Plane Zone 5. The dimensions noted hereon are horizontal ground distances.
- This is a survey of the property described in the Kodiak Airport Lease number NF(R)-13130, and amendments 1 through 11 of said lease, between the State of Alaska and the United States of America, all as recorded in the Kodiak Recording District.
- The State's lease of the lands within the "Contingent Lease Area" is contingent upon final closure of the site as a solid waste management unit. Reference Bk 141 Pg 690 KR0.
- This survey does not constitute a subdivision as defined by Alaska Statute 40.15.290(D).
- The natural meanders of the ordinary high water line or the mean high tide line where appropriate, shown hereon are for area computations only. Meander lines 1 through 29 are based upon field measurements obtained as part of this survey. Meander lines 30 through 81 were derived from controlled aerial photography.

**LEGEND**

- US GLO or BLM Monument Recovered
  - Government Control Monument Recovered
  - Centline Monument Recovered
  - Secondary Monument Recovered (ASLS 85-196)
  - Primary Monument Set this survey
  - Occasional Monument Set this survey
- Scale: 1" = 500 Feet

This Property Plan supersedes 10/12/70 Property Plan.

FILE: ZA\07072 DOT&PF\124 Kodiak Airport\CO2 DATE: 02/28/03 1=1	AIRPORT LAYOUT PLAN CONDITIONAL APPROVAL SUBJECT TO ALP APPROVAL LETTER DATED _____	STATE OF ALASKA <b>DEPARTMENT OF TRANSPORTATION          AND PUBLIC FACILITIES</b> CENTRAL REGION	DATE <u>02/28/03</u> DESIGN <u>JSW</u> DRAWN <u>JSW</u> CHECKED <u>DAH</u>	<b>KODIAK AIRPORT</b>  AIRPORT LAYOUT PLAN  AIRPORT PROPERTY PLAN	SHEET 11 OF 13
	By: <u>FAA AIRPORTS DIVISION</u> ALASKAN REGION DATE: _____ FAA AIRSPACE REVIEW NUMBER: 00-AAL-_____	APPROVED: <u>STEPHEN M. RYAN, P.E.</u> DESIGN SECTION CHIEF APPROVED: <u>JOHN G. WAHL, P.E.</u> PROJECT MANAGER	BY _____ DATE _____ REVISIONS _____	APPROVED: _____ DESIGN SECTION CHIEF APPROVED: _____ PROJECT MANAGER	APPROVED: _____ DESIGN SECTION CHIEF APPROVED: _____ PROJECT MANAGER

**A. Purpose**

This Narrative Report is included with the Airport Layout Plan (ALP) for Kodiak, Alaska, in accordance with Federal Aviation Administration (FAA) Airport Design Advisory Circular (AC) 150/5300-13, Change (CHG) 6, Appendix 7. All construction items are in accordance with FAA AC 150/5300-13CHG6. The rationale for improvements to the Kodiak Airport is outlined in this narrative report.

**B. Introduction**

Kodiak, population 6,750, is located on the eastern tip of Kodiak Island in the Gulf of Alaska. Kodiak is linked by road to other villages on the island, but has no surface connection to the continental roadway network. The community serves as a regional aviation and marine hub, providing access to villages located on Kodiak Island and the eastern Alaska Peninsula. Food, fuel, medical care, and other services for these villages are provided from Kodiak.

The U.S. Navy constructed Kodiak Station, which includes what is now known as the Kodiak Airport, in 1940. The runways, taxiways, and terminal area were leased to the State of Alaska in 1972. The Alaska Department of Transportation and Public Facilities (DOT&PF) continues to be responsible for the improvement, operation, and maintenance of most of the airport. Today, Kodiak Station is the largest operational U.S. Coast Guard (USCG) base in the United States. The station serves as a focal point for rescue operations and the enforcement of maritime laws in the North Pacific and the Bering Sea. The airport supports a local economy that is based mainly on fishing, seafood processing, and government industries. Kodiak is the nation's second largest port in seafood volume and third in value. The Kodiak Airport receives scheduled jet services, has an air traffic control tower, and is the site of approximately 46,000 aircraft operations of all types annually.

**C. Airport Usage and Fleet Mix**

The Kodiak Airport is located at 57°44'57" north latitude and 152°29'46" west longitude on Kodiak Island. Located 3 miles southwest from the City of Kodiak, the airport is approximately 248 air miles southwest of Anchorage. Originally constructed by the U.S. Navy in 1940, the runways, taxiways, and terminal area were leased to the State of Alaska in 1972. DOT&PF currently operates and maintains the airport under a lease agreement with the USCG.

The most demanding military aircraft is the Lockheed Martin C-130 (ARC C-IV), while the most demanding civilian aircraft is the Boeing 737-400. Based on the aircraft fleet mix, available operational data, communication with local air carriers and airport personnel, and the forecast of future fleet mix and stage lengths, runways 7/25 and 18/36 should be planned for aircraft with an ARC of C-IV. Runway 11/29 should be planned for aircraft in the ARC B-III.

The Current Fleet Mix at the Kodiak Airport is listed in Table 1 with their associated airport reference code, approach speeds, dimensional and performance characteristics. The FAA categorizes five types of operations: air taxi, commuter, general aviation (local or itinerant), air carrier, and military. Several air taxi, commuter, air carrier operators are based at Kodiak. Additionally, Kodiak Airport serves as a base for many GA and military aircraft, as referenced in table 2.

Table 1

Current Fleet Mix					
Aircraft	ARC	Approach Speed (knots)	Length (ft)	Wingspan (ft)	MTOW (lbs)
Cessna 150-208	A-I	<91	23-27	32-35	1,600-3,600
Brit-Norman Islander	A-I	<91	35	49	6,600
DHC-8	A-III	90	84	85	36,300
Convair 580	B-III	107	81	105	58,143
Douglas DC-6	B-III	108	105	117	104,000
Boeing 737-400	C-III	139	109	94	140,000
Boeing 737-200	C-III	137	96	93	115,500
Lockheed C-130H	C-IV	137	97	132	155,000

**D. Aviation Demand Forecasts**

By estimating the elements of demand, compared over time, in relation to the capacity of the airport facilities, the timing of new or expanded airport facility development can be identified. To prepare the forecasts for the Kodiak Airport, available historic and current aviation activity information, including number of operations, passenger enplanements, fleet mix, cargo, and mail volumes have been assembled. The aviation forecasts have been prepared to reflect expected changes and socioeconomic characteristics in the region. Table 2 presents values projected under the moderate scenario for operations, passenger enplanements, and freight and mail enplanements. Deviation from the TAF occurs as a result of the potential five-year phased GA relocation from Kodiak Municipal Airport to the Kodiak Airport and the development of the Kodiak Launch Complex. Lilly Lake Seaplane GA would need to be relocated around Near Island as the Kodiak Airport does not have float plane facilities. Additional deviation from the TAF occurs as a result of the moderately positive socioeconomic climate in the Borough as presented in Chapter 2 of the Airport Master Plan. Based aircraft forecasts have been projected under the moderate scenario for aircraft operations and passenger enplanements. The large jump in based aircraft from the base year to 2005 is presented to accommodate the potential phased relocation of GA from the Kodiak Municipal over the first 5-years of the projected forecast. Conversely, a large jump in instrument operations is not shown since the relocation of GA aircraft would not significantly influence the number of ILS operations performed.

Table 2				
Kodiak Airport 20-Year Air Traffic Forecast	Base Year 1997	2005	2010	2020
<b>Aircraft Operations</b>				
Air Carrier	1,822	1,621	1,728	1,962
Commuter/Air Taxi	16,498	21,614	23,040	26,154
<b>General Aviation</b>				
Itinerant	5,911	7,025	7,488	8,500
Local	3,770	7,565	8,064	9,154
<b>Military</b>				
Itinerant	4,474	5,404	5,760	6,539
Local	8,432	10,807	11,520	13,077
<b>Total Aircraft Operations</b>	<b>40,907</b>	<b>54,036</b>	<b>57,600</b>	<b>65,386</b>
<b>Annual Instrument Operations</b>	<b>6,902</b>	<b>7,563</b>	<b>7,964</b>	<b>8,779</b>
<b>Total Enplaned Passengers</b>	<b>71,560</b>	<b>96,330</b>	<b>105,119</b>	<b>122,697</b>
<b>Based Aircraft</b>				
Single Engine	9	62	70	85
Multi-Engine (Propeller)	5	6	7	8
Single Engine	0	0	0	0
Multi-Engine (Propeller)	2	2	3	3
<b>Total Based Aircraft</b>	<b>16</b>	<b>70</b>	<b>80</b>	<b>96</b>
<b>Air Cargo/Mail (tons)</b>				
Enplaned Freight (tons)	1,334	1,593	1,755	2,080
Enplaned Mail (tons)	315	568	711	998

**E. Airport Design Criteria**

Kodiak Airport is classified as a Regional Center Airport in the AASP. The role of a Regional Center Airport is to serve as a primary intrastate access to a region of Alaska and to a regional population center with a population greater than 1,000 people. Based on the forecast demand the Kodiak Airport should remain classified as a Regional Center.

Federal and state authorities prescribe airside standards to which runways, safety areas, taxiways, aprons, lighting, object free areas, obstacle free zones, and runway protection zones should be developed. The FAA standards are based largely on airport classification. The following is a summary of findings and recommendations based on identified existing conditions at Kodiak Airport.

Runway 7/25: Runway 7/25 should be retained and planned for ARC C-IV design standards. The existing 7,577-ft length should be retained to maximize aircraft use of the runway and to accommodate the critical aircraft for runway length (Boeing 737-400). The minimum required runway width is 150 ft for ARC C-IV aircraft. It is recommended that the existing 150-ft width be retained to maximize the runway usefulness and accommodate the critical aircraft for runway width (Lockheed Martin C-130 Hercules).

Runway 11/29: Runway 11/29 should be retained and planned for ARC B-III design standards. The runway should be maintained at a minimum length of 5,400 ft. The minimum required runway width is 100 ft for ARC B-III aircraft. However, it is recommended that the existing 150-ft width be retained to maximize the runway's usefulness. If GA aircraft are relocated from Kodiak Municipal Airport, the demand on this runway will increase. Therefore, this runway should be retained to accommodate the future potential demand for increased GA activity.

Runway 18/36: Runway 18/36 should be retained and planned for ARC C-IV design standards. The existing 5,045-ft length should be retained to maximize aircraft use and specifically to accommodate regular and emergency operations performed by the USCG and the critical aircraft for runway length (Boeing 737-400).

**Runway Safety Area:**

Runway Safety Area (RSA) lengths for Runways 18, 36, and 25 are deficient by 1,000 ft. in length and 500 ft. in width. These runways have no RSA length as they end at the extent of useable land before terminating into St. Paul Harbor and Womens Bay.

In an effort to identify practicable means by which RSA could be created at Kodiak Airport, a Runway Safety Area Practicability Evaluation was completed. Based on the analysis, 1,000-ft by 500-ft of RSA beyond the approach ends of Runways 25, 18, 36 should be constructed. This would provide the greatest enhancement for aircraft operation and passenger safety.

Taxiways: Taxiways B, C, D, E, and F dimensions should be maintained to accommodate ARC C-IV design standards. Taxiway D would be relocated to provide 400 ft. from Runway 7/25 centerline. While Taxiway B is too close to Runway 18/36 for ARC C-IV operation on both, it meets standards for ARC B-III and also preserves access to other taxiways when Runway 18/36 is occasionally closed for snow removal or other surface maintenance. Taxiway shoulders should be paved. An additional taxiway developed to ARC C-IV standards should be constructed between the terminal apron and the approach end of Runway 7. Separation distances between runways and aircraft parking areas should be maintained at 500 ft. Identify and reserve sufficient space for the future development of an ARC B-II taxiway from the west edge of the apron to Taxiway E. Another connecting taxiway from the terminal apron to Runway 7/25 is currently needed to relieve congestion at peak hours of operation.

Aircraft Parking Aprons: Existing apron space is currently sufficient. An additional 75,000 sq. ft. of apron space will be needed for commuter/air taxi aircraft by 2020. Two 45-ft. diameter helipads will be needed by 2020 to accommodate forecast helicopter activities.

Airfield Pavement: Airfield pavement load bearing capacities should be maintained as follows:

- Single Wheel 53,000 lbs.
- Twin Wheel 110,000 lbs.
- Twin Tandem 150,000 lbs.

Wheel Loading weight limits should be identified in the next pavement condition report and reported in the Alaska Supplement. Sections of Runway 18/36 are in need of repair. The recommendations and pavement conditions index estimations of the 2000 Alaska Airport Pavement Condition report should be incorporated into future airport maintenance projects.

Airfield Capacity: The current airfield configuration is sufficient to sustain the forecast hourly and annual operational demand through the 20-year planning period.

Airspace and Air Traffic Control: Continue to provide video coverage of the west third of Runway 7, Taxiway D and the terminal apron ramp. Provide video coverage for the south 1/4 of Runway 36. Update video coverage equipment as technology improves. Operators of Boeing 747 and Lockheed Martin C-5A aircraft should not attempt to operate at the Kodiak Airport at times of peak activity. Air traffic control personnel should maintain proper control of the airfield so that no other aircraft are permitted on taxiways and runways while either the Boeing 747 or Lockheed Martin C-5A aircraft are actively moving on the airfield.

Special discussion is required for the infrequent operation of aircraft larger than the Boeing 737 or C-130 Hercules at Kodiak Airport. The Lockheed Martin C-5A provides logistical support services in conjunction with military launch missions at the Kodiak Launch Complex. At its maximum allowable landing weight (635,850 lbs.) this aircraft requires at least 3,200 ft. of runway for landing. The distance for takeoff at maximum allowable weights (797,000 lbs.) is significantly greater (9,800 ft.). This aircraft can be accommodated at Kodiak Airport on Runway 7/25 at 100 percent of its landing weight and 87 percent of its takeoff weight.

Similarly, Polar Air Cargo provides logistical support in connection with civilian launch missions at the Kodiak Launch Complex. Polar Air Cargo's fleet consists of several Boeing 747s. This aircraft can be accommodated at 85 percent of its maximum takeoff weight and 80 percent of its maximum landing weight on Runway 7/25.

The Boeing 747 and Lockheed Martin C-5A aircraft are expected to be infrequent yet continued users of the Kodiak Airport.

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
CENTRAL REGION

KODIAK AIRPORT  
AIRPORT LAYOUT PLAN  
NARRATIVE REPORT

SHEET  
12  
OF  
13

FILE: W:\Projects\Kodiak\ALP\ALP 2011 update  
DATE: 4/15/2011 1:11

VLC 3/15/11 REVISED TAXIWAY B DISPOSITION

BY: DATE REVISIONS

**Approach Area and Obstructions:** Existing approach and departure patterns are effective in minimizing the potential hazards presented by Part 77 obstructions and should be retained through the planning horizon. Obstruction lighting should be installed on radio towers adjacent to Buskin Lake. A detailed survey of close-in obstructions should be conducted and obstructions should be removed or lighted.

**Navigation and Landing Aids:** A precision GPS approach to Runway 25 using localizer precision with vertical guidance (LPV) and a low altitude alert system (LAAS) should be implemented. The existing runway lighting system should be evaluated for replacement or refurbishing. Unstable light cans should be replaced or sufficiently stabilized to prevent failure. Medium Intensity Taxiway Lights (MITL) should be planned for all taxiways. Electrical power to the VASI should be sufficiently protected to prevent damage by wildlife. Concrete pads for the VASI lighting system should be evaluated and sufficiently stabilized to prevent further degradation of the sub-base. Vegetation surrounding the NDB should be cleared to allow continued uninterrupted use.

**Airport Security:** Security fencing should be installed along the coast to enclose the airport entirely. A remotely operated gate or cattle guard should be installed across or on Taxiway A to reduce the potential for unauthorized incursions. Bridges and culverts along Devil's Creek should be gated or barred. Update the current Kodiak Airport Wildlife Hazard Management Plan based on the WHA.

**Passenger Terminal Buildings:** A total of 23,345 sq. ft. of passenger terminal space will be required if a public joint use terminal facility is to be constructed at Kodiak Airport. The development of a joint use public terminal is recommended to ensure public access and utilize apron space more efficiently. A joint use public terminal should be developed at the Kodiak Airport.

**General Aviation Facilities:** Should local GA operations be relocated to Kodiak Airport, a total of 700,000 sq. ft. of apron space for based GA aircraft will be required to meet the potential future demand.

**Airport Access and Parking:** Parking will need to be addressed in the intermediate-term. An additional 35,000 sq. ft. is needed to meet future vehicle parking demand at Kodiak Airport. The existing parking area should be repaved and re-striped within the near-term. Short-term parking will require an additional 6,500 sq. ft. Long-term parking will require an additional 28,500 sq. ft.

**Airport Utilities:** The continued maintenance and operation of airport utilities should be a priority for the safe operation of the airport and its users. Responsibility for the maintenance and operation of airport utilities should be determined at the resolution of the divestiture process. Utility corridors should be mapped.

**Airport Firefighting and Rescue:** The continued operation of ARFF services should be a priority for the safe operation of the airport and its users. Responsibility for ARFF services should be determined at the resolution of the divestiture process.

#### F. Airport Improvement Recommendations

Assuming the following improvements are implemented, Kodiak Airport will be adequate to accommodate the existing aviation demand and maintain service as a Regional Center Airport. The alternatives presented, except the "No Action" alternative, include the necessary measures to bring the existing facilities into compliance with standards for the existing fleet mix and demand and recommend improvements necessary to meet future aviation demands. The following is a description of the recommended improvements for Kodiak Airport.

**Runway 7/25:** Runway 7/25 should serve as the primary runway and be maintained to accommodate the critical aircraft for runway width; the Lockheed Martin C-130 Hercules (ARC C-IV), and the critical aircraft for runway length; the Boeing 737-400 (ARC C-III). The resulting ARC applicable to Runway 7/25 is C-IV. The existing 7,577-ft. length and 150-ft. width should be retained. The RSA beyond the approach end of Runway 7 should be reduced from 1,164 ft. to the recommended ARC C-IV standard of 1,000 ft. Runway 7/25 should be shifted 164 ft. to the west. The approach plates should be revised to reflect the shift. The usable takeoff length should remain 7,562 ft. and the usable landing length should remain 6,424 ft. A 330-ft. diameter elephant ear should be constructed at the approach end of Runway 7 to accommodate turning movements by occasional large aircraft such as the Boeing 747-400 and the Lockheed Martin C5-A. RSA beyond the approach end of Runway 25 should be increased to 200 ft. by 500 ft. Work should also begin to acquire environmental clearance and essential permits for the construction of additional RSA beyond the approach end of Runway 25. Future RSA beyond the approach end of Runway 25 should be constructed to meet the ARC C-IV standard of 1,000 ft. by 500 ft. Runway shoulders should be paved.

**Runway 11/29:** Runway 11/29 should serve as the primary small aircraft runway. A runway landing length of 4,402 ft. and a runway width of 150 ft. should be maintained to design standards specified for an ARC of B-III. The existing RSA width should be reduced to 300 ft. to minimize maintenance efforts. Runway shoulders should be paved.

**Runway 18/36:** Runway 18/36 should be retained to serve as the crosswind runway for the critical aircraft and be maintained to design standards specified for an ARC of C-IV. The existing 5,045-ft length and 150-ft width should be retained. RPZ should be increased by 700 ft. in length and 310 ft. in outer width. Runway shoulders should be paved.

**Runway Safety Area:** The RSA beyond the approach end of Runway 7 should be reduced from 1,164 ft. to the recommended ARC C-IV standard of 1,000 ft. Runway 7/25 should be shifted 164 ft. to the west. The approach plates should be revised to reflect the shift. The usable takeoff length should remain 7,562 ft. and the usable landing length should remain 6,424 ft. FAA personnel indicate that the 1,164 ft. RSA length was originally established to accommodate 20 to 1 approaches to Runway 7 by GA aircraft. Reducing the RSA to 1,000 ft. permits Runway 7/25 to be shifted 164 ft. to the west and allows the development of approximately 200 ft. of RSA (164 ft. plus an additional 36 ft. beyond Runway 25) that would not enter tidelands or the marine environment and would not require permitting or environmental clearance. This shift will still accommodate 20 to 1 approaches as visual aircraft using runway 7 typically over shoot the threshold to avoid topography obstructions present beyond the runway end. Further discussion of these alternatives is provided in the Runway Safety Area Practicability Evaluation.

**Taxiways:** All new and existing Taxiways B, C, D, E, and F should be retained and maintained at 75-ft width and design standards specified for ARC C-IV. A new 75-ft-wide, 1,230-ft long paved surface taxiway should be constructed from the terminal apron to Runway 7/25. All new taxiways should be lighted with MITL and all taxiway shoulders should be paved. Taxiways B, C, D, E, and F should be resurfaced.

**Airfield Pavement:** Aircraft operators should strive to operate within the load-bearing capacity of the airfield pavement. Airfield pavement load-bearing capacities should be maintained as follows:

Single Wheel 53,000 lbs.  
Twin Wheel 110,000 lbs.  
Twin Tandem 150,000 lbs.

Wheel loading weight limits should be identified in the next pavement condition report and reported in the Alaska Supplement. Taxiway D would be relocated to provide 400 ft. from Runway 7/25 centerline. Taxiway B would be resurfaced to accommodate movement between USCG base and Runways 7/25 and 11/29. Damaged sections of Runway 18/36 should be repaired. The recommendations and PCI estimations of the 2000 Alaska Airport Pavement Condition Report should be incorporated into future airport maintenance projects.

Runway 7/25 should receive a pavement overlay within the next five years and be re-striped to reflect the shift of 164 ft. to the west.

**Separation Standards:** Taxiway D would be relocated to provide 400 ft. from Runway 7/25 centerline. Centerline separation standards between Runways 7/25 and 18/36 and aircraft parking areas should be maintained at 500 ft.

**Airspace and Air Traffic Control:** Video coverage of the west third of Runway 7 and Taxiway D and the terminal apron should be retained. A long-range plan to implement video coverage for the south quarter of Runway 36. Video coverage should be updated with new equipment as improved technology becomes available. Air traffic control personnel should maintain operational control of the airfield so that no other aircraft are permitted on taxiways and runways while either the Boeing 747 or Lockheed Martin C-5A aircraft are actively moving on the airfield. Operators of Boeing 747-400 and Lockheed Martin C-5A aircraft should not attempt to operate at the Kodiak Airport during peak times of activity.

**Lighting and Navigational Aids:** A precision GPS approach to Runway 25 using localizer precision with vertical guidance (LPV) and a low altitude alert system (LAAS) should be implemented. MITL should be installed on all taxiways. The existing runway lighting system should be evaluated for replacement or refurbishing. Unstable light cans should be replaced or sufficiently stabilized to prevent failure. Electrical power lines to the VASI should be sufficiently protected to prevent damage by wildlife. Concrete pads for the VASI lighting system should be evaluated and sufficiently stabilized to prevent further degradation of the sub-base.

Runway lights for Runway 7/25 should be relocated to reflect the shift of 164 ft. Navigation aids to Runway 7/25 should re-aligned as necessary and approach plates should be revised.

**Airport Security:** Security fencing should be installed along the coast of Chiniak Bay to enclose the active airfield entirely. A remotely operated gate or cattle guard should be installed across or on Taxiway A to reduce the potential for unauthorized incursions on the active airfield. Bridges and culverts along Devil's Creek should also be gated or barred. The current Kodiak Airport WHMP should be updated based on the recent WHA.

#### Terminal Area Improvements

This section describes the recommended terminal area improvements and other associated apron/lease area improvements that have been incorporated into the Terminal Area Plan.

**Aprons:** The recommended terminal area configuration retains and expands the existing terminal apron and identifies a 700,000 sq. ft. GA reserve north of Runway 7/25 for a consolidated GA apron and associated facilities. The terminal apron should be expanded to the southeast by a total of 75,000 sq. ft.

**Passenger Terminals:** A 23,345 sq. ft. joint use public terminal should be developed on the lease lot currently occupied by the AIDEA-owned Mark Air Terminal. A thorough analysis, which is beyond the scope of this document, should be completed to determine if the old Mark Air/AIDEA building should be utilized or a new passenger terminal constructed on the existing lot.

Airport tenants should utilize existing available and future public terminal space. Additional apron space on the terminal Apron should be expanded off of the terminal apron in the intermediate-term. The recommended terminal apron expansion will create 200,000 sq. ft. of apron frontage lease lot space. This space could be configured to accommodate one additional air carrier terminal or two additional commuter terminals.

**Airport Access and Circulation Plan:** The existing airport access road should be re-aligned into two one-way loop roads with a through lane and passenger pick-up and drop-off lane near the terminals. Traffic entering the main terminal area should be diverted west on a new one lane one way road running between the aircraft service area parking and the "old" Peninsula Air maintenance hangar. This traffic would continue down and around the west side of the existing short-term parking and drop off lane and through lane. Drivers could then either turn back towards the Chiniak Highway with access to long-term parking or continue on to the east terminal area and more long-term parking. Approximately 500 ft. of the existing Airport Access Road would provide two one-way lanes until just before the intersection with Devil's Creek Road, where it would merge back into a two-way two-lane road.

An additional 35,000 sq. ft. of automobile parking (6,500 sq. ft. for short-term and 28,500 sq. ft. for long-term) should be constructed to meet future vehicle parking demand at Kodiak Airport. The existing parking area should be repaved and re-striped in the near term.

**Land Acquisition:** The recommended 1,000-ft. length and 500-ft. width of RSA beyond the approach end of Runway 25 should be developed. RPZ dimensions for Runway 18/36 should be enlarged by 700 ft. in length and 310 ft. in outer width. An additional 55 ft. on each side of the existing aviation easement should be acquired to develop the recommended RPZ dimensions for Runway 18/36. An additional 110 ft. of total aviation easement width will be needed to accommodate the new outer width (310 ft.).

**Approach and Clear Zone:** Potential obstructions, either man-made or natural, to air navigation are a major consideration. The technical standards used to identify obstructions are contained in FAA Regulation, Part 77 Objects Affecting Navigable Airspace.

The following recommendations resulted from evaluation of the ALP relative to the corresponding FAR Part 77 Imaginary Surfaces. These recommendations should be considered and implemented.

Existing RPZs should be cleared of all trees, structures, or other incompatible objects, if possible. Future RPZs should be owned by the airport or protected through aviation easements. A detailed survey of the close-in and on-airport obstructions should be conducted in order to update the Obstruction Chart. Identified obstructions should be evaluated and removed or lighted as appropriate. Measures should be taken to prevent future man-made or natural objects from penetrating the imaginary surfaces. All obstructions to air navigation that cannot be removed should be obstruction lighted unless an airspace review by the FAA establishes that an unlighted obstruction would not be hazardous. Obstruction lighting should be installed on unlighted radio towers adjacent to Buskin Lake.

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
CENTRAL REGION

KODIAK AIRPORT  
AIRPORT LAYOUT PLAN  
NARRATIVE REPORT

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VLC	3/15/11	REVISED TAXIWAY B DISPOSITION
BY	DATE	REVISIONS