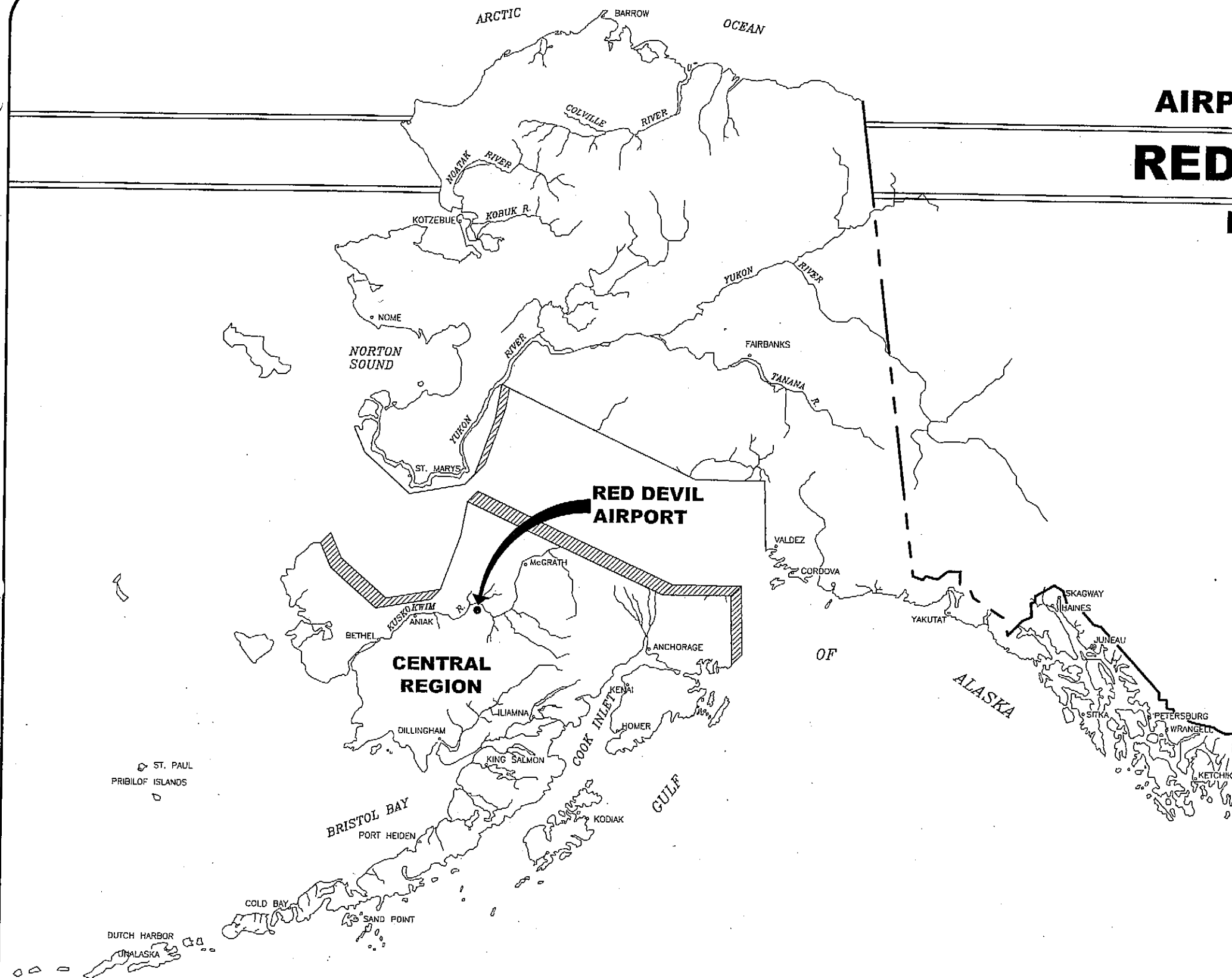
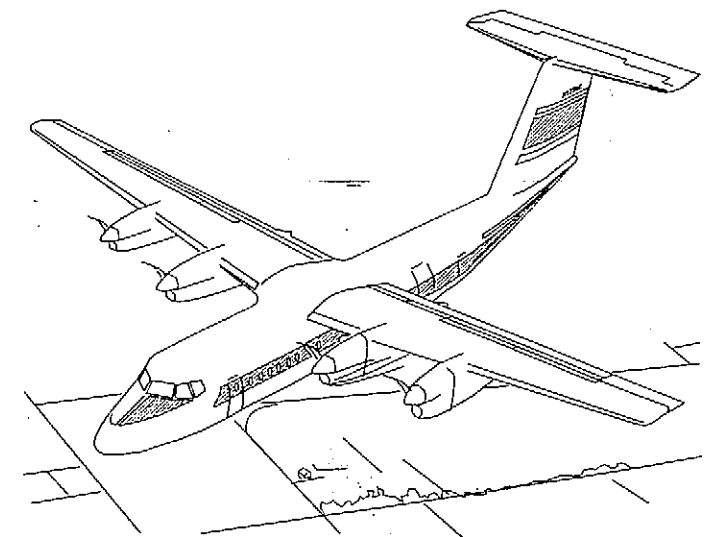


# AIRPORT LAYOUT PLAN FOR RED DEVIL AIRPORT RED DEVIL, ALASKA 2004

## DRAWING INDEX

- 1 - COVER SHEET AND INDEX
- 2 - VICINITY MAP AND DATA TABLES
- 3 - PLAN AND PROFILE
- 4 - INNER PORTION OF THE APPROACH SURFACES  
PLAN AND PROFILE
- 5 - AIRPORT AIRSPACE
- 6 - PROPERTY PLAN
- 7 - PROPERTY PLAN
- 8 - NARRATIVE REPORT

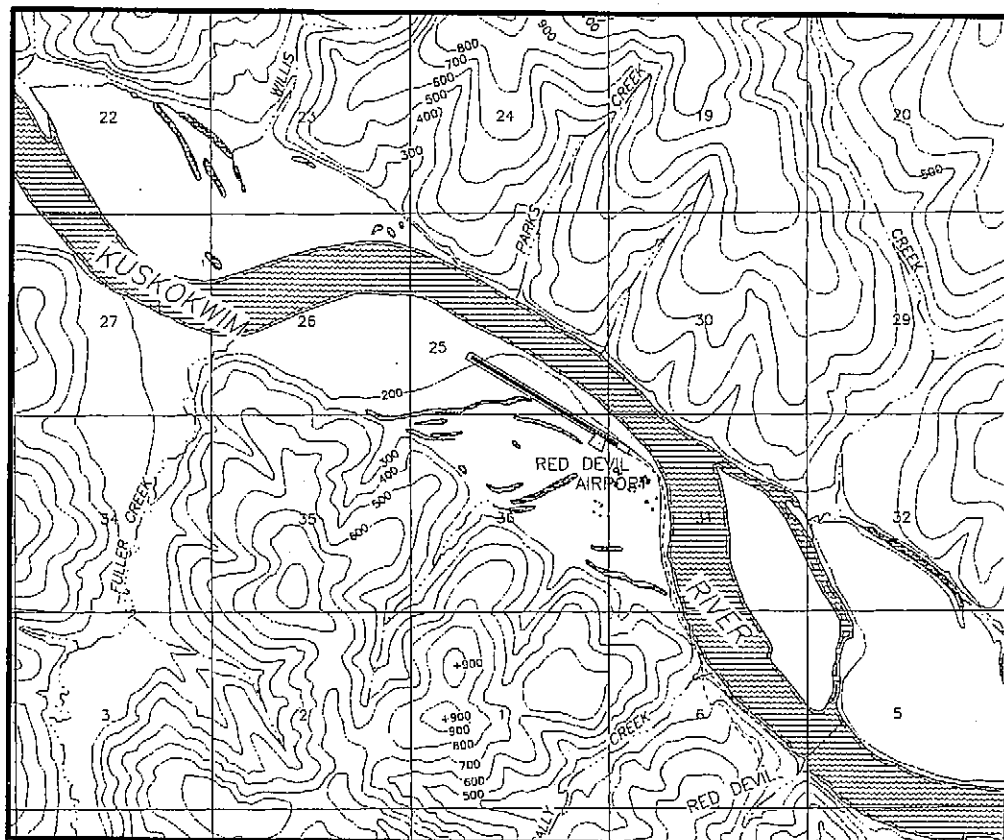


**SPONSORED BY  
STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
CENTRAL REGION**

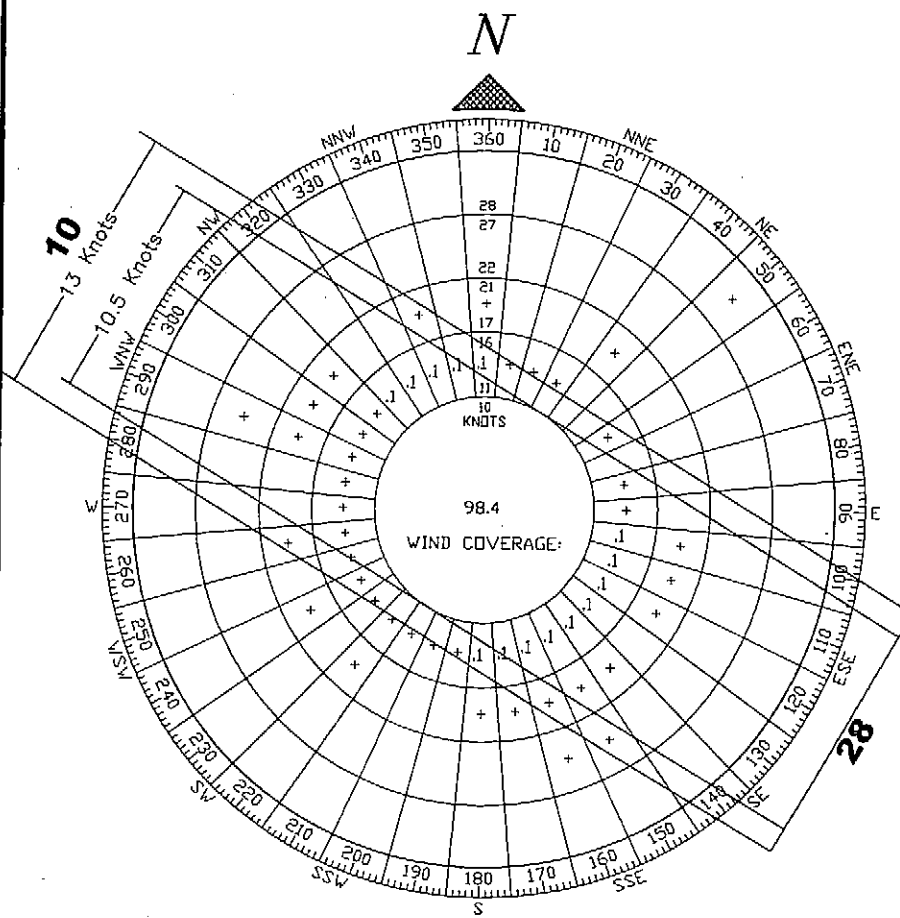
**CONCUR** *Gordon C. Keith* **DATE** 3/18/04  
**GORDON C. KEITH, P.E.** **DIRECTOR OF CONSTRUCTION AND OPERATIONS**  
**APPROVED** *[Signature]* **DATE** 3-18-04  
**ROBERT A. CAMPBELL, P.E.** **REGIONAL PRECONSTRUCTION ENGINEER**  
 AIRPORT LAYOUT PLAN CONDITIONAL APPROVAL  
 SUBJECT TO ALP APPROVAL LETTER DATED 5/3/04  
 By: *[Signature]* DATE: 5/3/04  
 FAA AIRSPACE REVIEW NUMBER  
 02-AAL-158-NRA  
 FAA AIRPORTS DIVISION  
 ALASKAN REGION, AAL-801

**RED DEVIL AIRPORT  
RED DEVIL, ALASKA  
AIRPORT LAYOUT PLAN**

**SHEET 1 OF 8**



**VICINITY MAP**  
 T 20 N, R 45 W, SEC. 25, 30  
 T 20 N, R 44 W, SEC. 31, 36  
 SEWARD MERIDIAN  
 U.S.G.S. SLEETMUTE (D-4), ALASKA



**WIND DATA**

WIND COVERAGE:	SPEED	R/W 10/28
	10.5 KNOTS	99.52%
	13 KNOTS	99.82%

SOURCE: ALASKA STATE CLIMATE CENTER, ENVIRONMENT AND RESOURCES INSTITUTE, UNIVERSITY OF ALASKA ANCHORAGE

PERIOD: 4/1994 - 11/1999

NOTE: WIND DATA IS NOT AVAILABLE FOR RED DEVIL. SLEETMUTE WIND DATA WAS USED TO CALCULATE THE WIND COVERAGE. RED DEVIL IS LOCATED 5.9 STATUTE MILES NW OF SLEETMUTE

**NON-STANDARD CONDITIONS**

ITEM	EXISTING	STANDARD	ULTIMATE
RUNWAY SAFETY AREA LENGTH BEYOND RUNWAY END	~200'	300'	300'
APRON SETBACK	200'	250'	300'

**APPENDIX 2 OBSTRUCTION TABLE**

RUNWAY	OBSTRUCTION	SURFACE ELEVATION	OBSTRUCTION ELEVATION	DISPOSITION
28	TREES	206'	246'	TO BE REMOVED

**RUNWAY DATA**

ITEM	RUNWAY 10/28	
	EXISTING	ULTIMATE
EFFECTIVE GRADE	0.02%	0.00%
% WIND COVERAGE	10.5 KNOTS	99.52%
	13 KNOTS	99.82%
INSTRUMENT RUNWAY	NONE	NONE
RUNWAY SURFACE	GRAVEL	GRAVEL
PAVEMENT STRENGTH	N/A	N/A
APPROACH SURFACES	20:1	20:1
VISIBILITY MINIMUM	VISUAL	1 S.M.
RUNWAY LIGHTING	NONE	MIRL
RUNWAY MARKING	NONE	NONE
RUNWAY NAVIGATION AIDS	NONE	PAPI
AIRCRAFT APPROACH CATEGORY	B	B
AIRCRAFT DESIGN GROUP	II	II
RUNWAY TYPE	UTILITY	UTILITY
RUNWAY SAFETY AREA DIMENSION	180'x5200'	150'x5100'
RUNWAY DIMENSION	75'x4800'	75'x4500'
RUNWAY OBJECT FREE AREA DIMENSION	500'x5400'	500'x5100'
RUNWAY OBSTACLE FREE ZONE DIMENSION	250'x5200'	250'x4900'
RUNWAY PROTECTION ZONE DIMENSIONS		
	INNER	500'
	OUTER	700'
	LENGTH	1000'
GEODETIC POSITIONS (N.A.D. 83)		
THRESHOLD 10	LAT. 61°47'29.19"N	61°47'28.79"N
	LONG. 157°21'43.97"W	157°21'41.96"W
THRESHOLD 28	LAT. 61°47'04.96"N	61°47'05.75"N
	LONG. 157°20'18.25"W	157°20'22.03"W

NOTE: THE EXISTING RUNWAY COORDINATES, THRESHOLD LOCATIONS AND AIRPORT REFERENCE POINT ARE BASED ON A REPORT DATED AUGUST 4, 1998. THE REPORT WAS PRODUCED BY LCMF INCORPORATED FOR FAA.

**TAXIWAY DATA**

ITEM	TAXIWAY A	TAXIWAY B
	EXISTING	ULTIMATE
TAXIWAY WIDTH	50'	50'
TAXIWAY SAFETY AREA WIDTH	80'	80'
TAXIWAY OBJECT FREE AREA WIDTH	131'	131'

**AIRPORT DATA**

ITEM	LAT.	EXISTING	ULTIMATE
AIRPORT ELEVATION (M.S.L.)	LONG.	205.4'	205.0'
AIRPORT REFERENCE POINT (A.R.P.)		61°47'17.08"N	61°47'17.27"N
		157°21'01.11"W	157°21'01.99"W
TAXIWAY LIGHTING		NONE	M.I.
RAMP LIGHTING		NONE	NONE
MEAN MAX. TEMPERATURE, HOTTEST MONTH (JULY)			BFF
MAGNETIC DECLINATION, YEAR		18°09'E, 2003	NOAA
AIRPORT REFERENCE CODE		B-II	B-II
TERMINAL NAVIGATION AIDS		NONE	NONE
AIRPORT NAVIGATION AIDS		NONE	ROT. BEACON

**LEGEND**

ITEM	EXISTING	ULTIMATE
PROPERTY LINE		
BUILDING RESTRICTION LINE		
AIRPORT REFERENCE POINT (A.R.P.)		
WIND CONE AND SEGMENTED CIRCLE		
CONTOURS		
ROADWAYS		
BUILDINGS		
ROTATING BEACON		
SHORELINE		
PAPI		
THRESHOLD		
TREES		
MONUMENTS		

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AIRPORT LAYOUT PLAN CONDITIONAL APPROVAL  
 SUBJECT TO ALP APPROVAL LETTER DATED 5/2/04  
 By: [Signature] DATE: 5/2/04  
 FAA AIRPORTS DIVISION  
 ALASKAN REGION, AAL-601  
 FAA AIRSPACE REVIEW NUMBER: 02-AAL-158-NRA

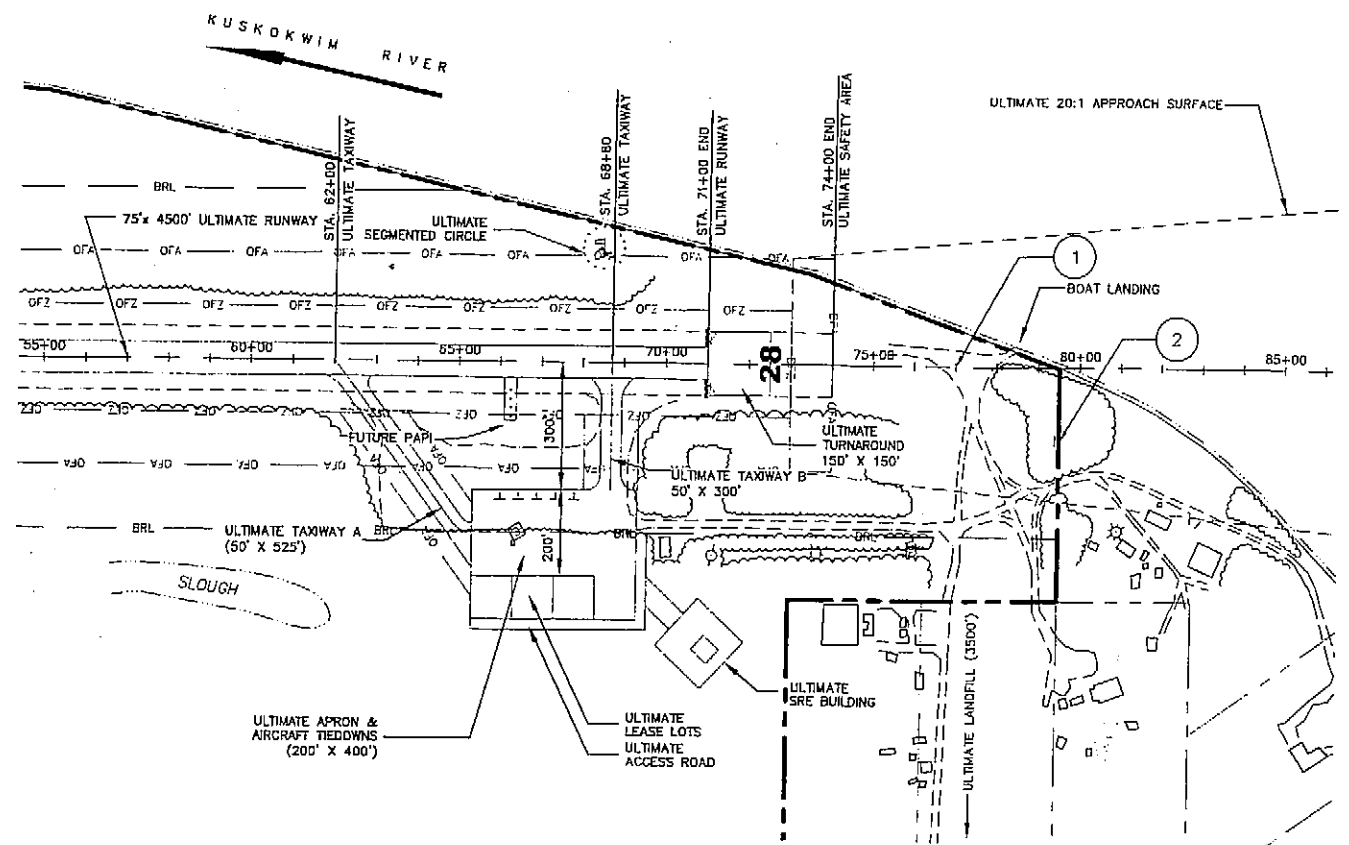
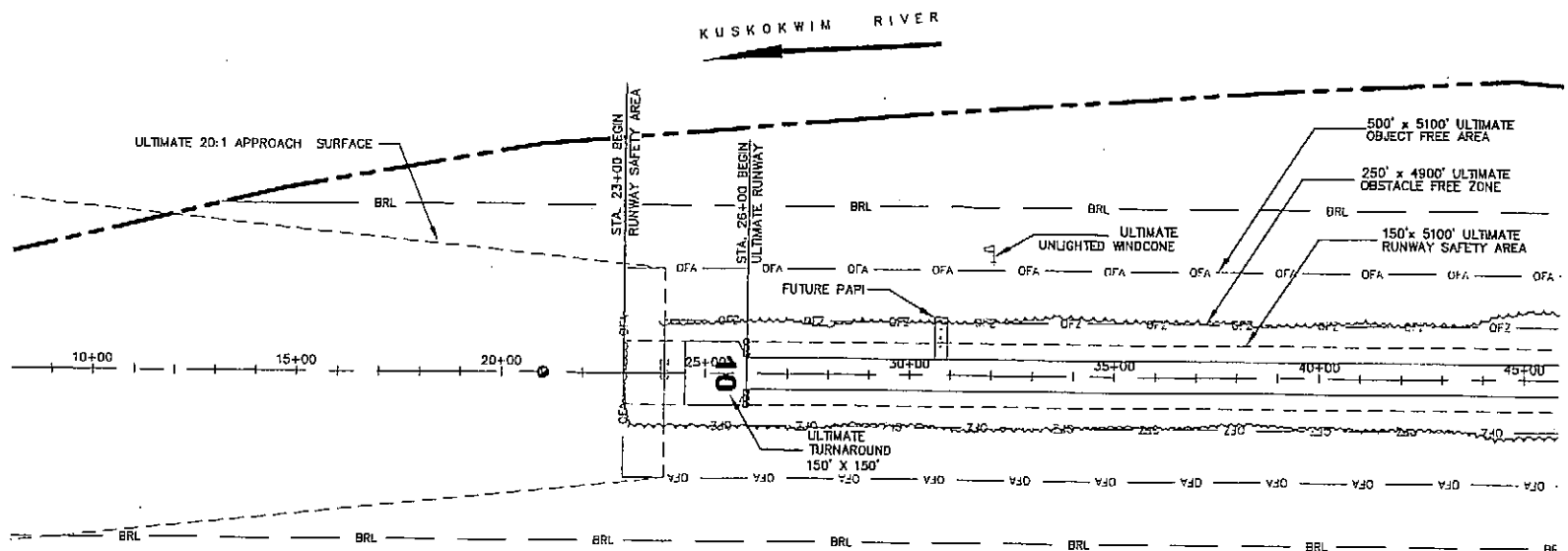
BY	DATE	REVISIONS

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

DATE 10/15/03  
 DESIGN JMR  
 DRAWN MGT  
 CHECKED TJS

**RED DEVIL AIRPORT**  
 RED DEVIL, ALASKA  
 AIRPORT LAYOUT PLAN  
 AIRPORT DATA TABLES  
 VICINITY MAP

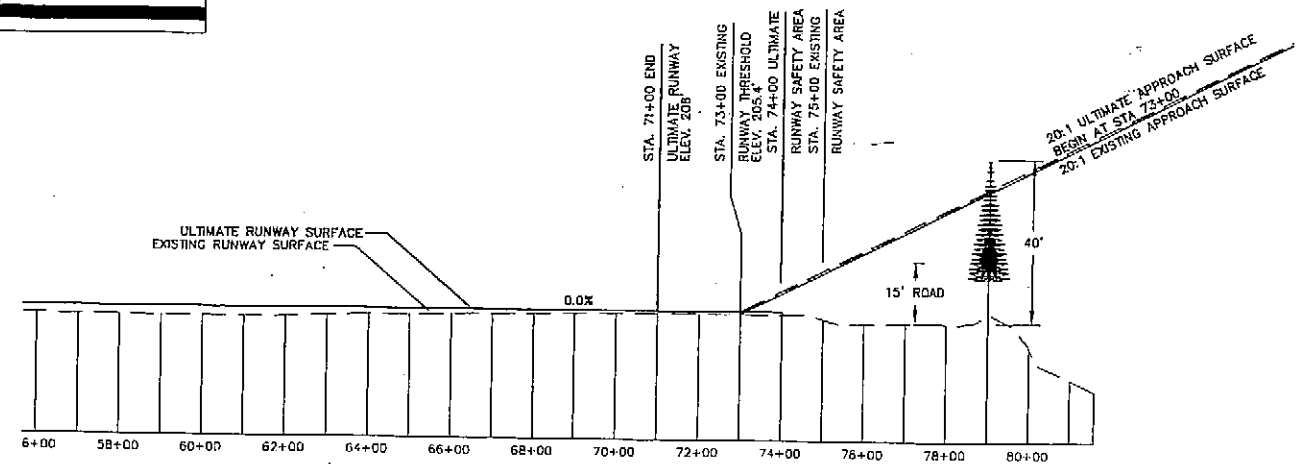
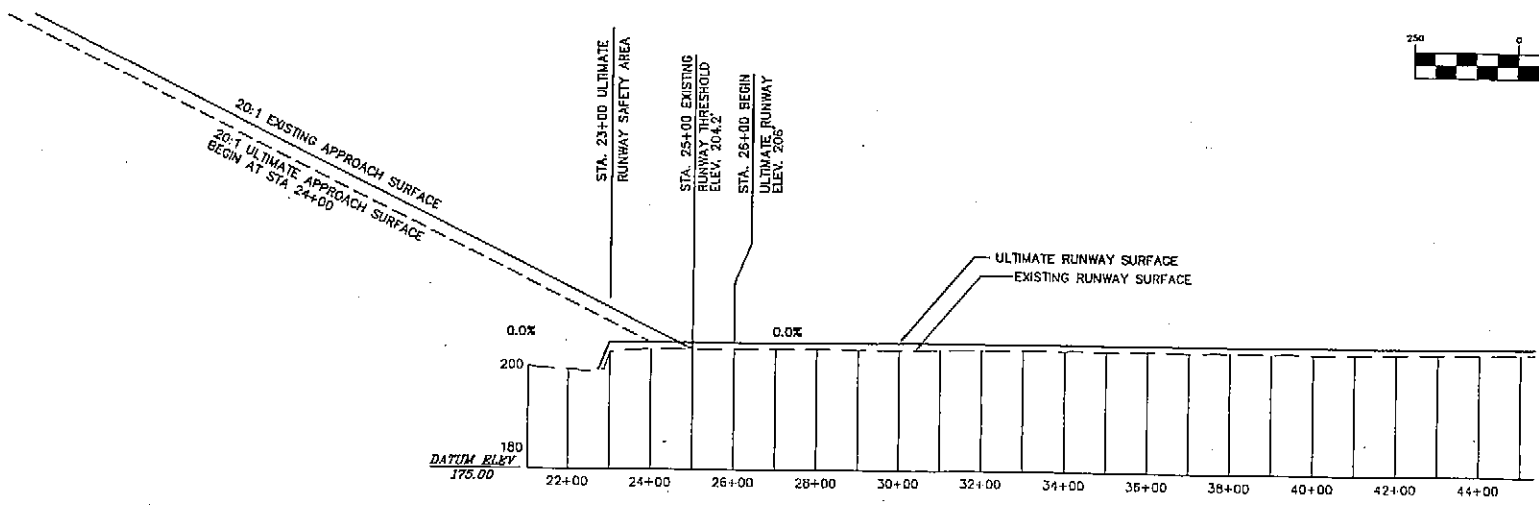
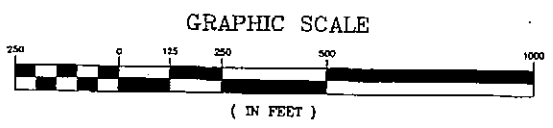




**OBSTRUCTION TABLE FOR RUNWAY 10/28 APPROACHES**

NUMBER	OBJECT	OBJECT ELEV.	PART 77 ELEV.	VERTICAL CLEARANCE	PENETRATION	DISPOSITION
1	EXISTING ROAD	215'	224'	9'	NONE	NONE
2	TREES	246'	236'	NONE	10'	REMOVAL

- NOTE:**
- NO THRESHOLD SIGHTING SURFACE PENETRATIONS, PER APPENDIX 2, SECTION E OF PARAGRAPH 5.
  - OBSTRUCTION CLEARANCE SLOPE > 50:1 FOR RUNWAY 10/28.



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FILE:  
DATE:

AIRPORT LAYOUT PLAN CONDITIONAL APPROVAL SUBJECT TO AIP APPROVAL LETTER DATED <u>5/12/04</u>	
By: <u>[Signature]</u> FAA AIRPORTS DIVISION ALASKAN REGION, AAL-801	DATE: <u>5/12/04</u>
FAA AIRSPACE REVIEW NUMBER: 02-AAL-15B-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

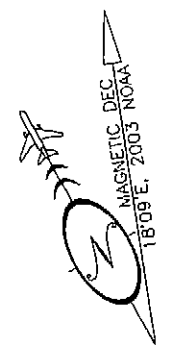
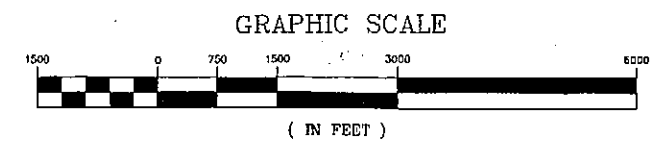
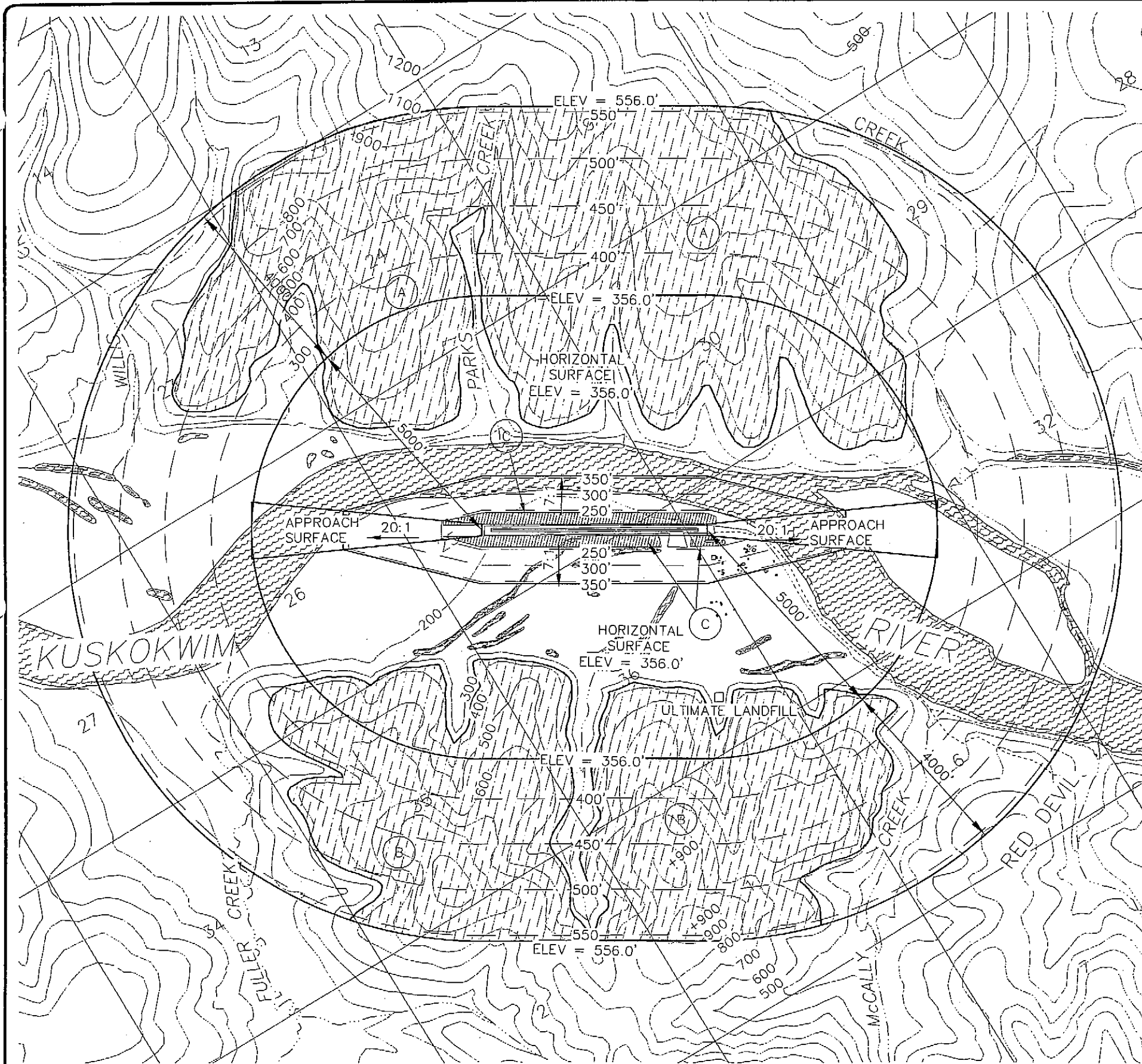
APPROVED: [Signature]  
HARVEY M. DOUTHETT, P.E. PROJECT MANAGER

DATE 10/15/03  
DESIGN JMR  
DRAWN MGT  
CHECKED TJS

**RED DEVIL AIRPORT**  
RED DEVIL, ALASKA

AIRPORT LAYOUT PLAN  
INNER PORTION OF THE APPROACH SURFACES  
PLAN AND PROFILE

SHEET  
4  
OF  
8



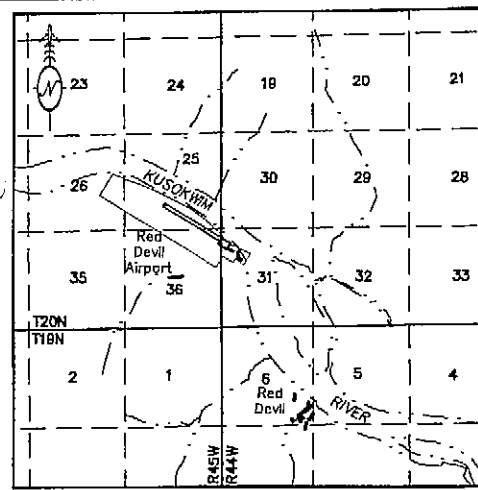
F.A.R. PART 77 IMAGINARY SURFACE OBSTRUCTION TABLE

Obstruction ID	Description	Obstruction Elevation	Surface Penetrated	Part 77 Surface Elevation	Max. Amount of Penetration	Disposition	Stage
A	TERRAIN	356' - 1000'	HORIZONTAL-COMPA	356' - 556'	500'	NONE	EXISTING
B	TERRAIN	356' - 900'	HORIZONTAL-COMPA	356' - 556'	400'	NONE	EXISTING
C	TREES	240'	TRANSITIONAL	VARIES	35'	REMOVAL	LONG-TERM

- NOTES:
1. OBSTRUCTION ELEVATIONS ARE ESTIMATED FROM USGS MAPS, AERIAL PHOTOGRAPHY AND SITE VISITS.
  2. ULTIMATE AIRPORT ELEVATION IS 206.0'
  3. USGS QUADRANGLE MAP SLEETMUTE D-4, (1954), WERE USED FOR THE BASE MAP.

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FILE: DATE:	AIRPORT LAYOUT PLAN CONDITIONAL APPROVAL SUBJECT TO ALP APPROVAL LETTER DATED <u>5/2/04</u> By: <u>[Signature]</u> DATE: <u>5/2/04</u> FAA, AIRPORTS DIVISION ALASKAN REGION, AAL-001	BY: _____ DATE: _____ REVISIONS: _____	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES CENTRAL REGION APPROVED: <u>[Signature]</u> DESIGN SECTION CHIEF STEPHEN M. RYAN, P.E. APPROVED: <u>[Signature]</u> PROJECT MANAGER HARVEY M. DOUTHETT, P.E.	DATE <u>10/15/03</u> DESIGN <u>JMR</u> DRAWN <u>MGT</u> CHECKED <u>TJS</u>	<b>RED DEVIL AIRPORT</b> RED DEVIL, ALASKA AIRPORT LAYOUT PLAN AIRPORT AIRSPACE	SHEET 5 OF 8
	FAA AIRSPACE REVIEW NUMBER: 02-AAL-158-NRA					



**VICINITY MAP**

1" = 1 MILE  
 Surveyed T 20 N, R 44 W, SEC. 31  
 Surveyed T 20 N, R 45 W, SEC. 25, 26 & 36  
 Seward Meridian  
 U.S.G.S. SLEETMUTE (D-4), ALASKA  
 Kuskokwim Recording District

Section 25, T20N, R45W

RIVER

KUSKOKWIM

**TRACT I**  
 310.606 Ac.  
 Patent #1235920

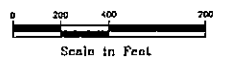
USS 3771  
 Lot 2

Corner 1, U.S. Survey 9628, Alaska  
 NAD27 Latitude: 61°47'13.40" North  
 Longitude: 157°21'21.47" West  
 NAD83 Latitude: 61°47'10.92" North  
 Longitude: 157°21'30.03" West

**LEGEND**

- Runway Centerline
- Property Line
- Protracted Section Line
- Edge Of Gravel
- Edge Of Vegetation
- ⊕ BC Monument
- 2" Alcap on 5/8"x30" Rebar
- ⊙ 1-1/2" Alcap on 5/8"x30" Rebar (Note 4)
- 5/8" Rebar (Note 4)
- (C) Computed (See Note 9)
- (R) Record per U.S.S. 3771

LINE TABLE		
Line	Direction	Distance
L1(R)	S 79°11' E	390.06'
L1(C)	S 79°10'20" E	390.06'
L2(R)	S 70°05' E	301.62'
L2(C)	S 70°04'20" E	301.62'
L3(R)	S 49°28' E	108.57'
L3(C)	S 49°27'20" E	108.57'



AIRPORT LAYOUT PLAN APPROVED  
 By: *[Signature]*  
 FAA, AIRPORTS DIVISION  
 ALASKAN REGION, AAL-801  
 DATE: *5/2/04*

STATE OF ALASKA  
**DEPARTMENT OF TRANSPORTATION  
 AND PUBLIC FACILITIES**  
 CENTRAL REGION-DESIGN AND CONSTRUCTION-AVIATION  
 APPROVED: *[Signature]* DESIGN SECTION CHIEF  
 STEPHEN M. RYAN, P.E.  
 APPROVED: *[Signature]* PROJECT MANAGER  
 HARVEY N. BOUTHIT, P.E.

Date Drawn: 10/06/03  
 Designer: \_\_\_\_\_  
 Drawn by: VJS/PLH  
 Checked by: SEP/MES

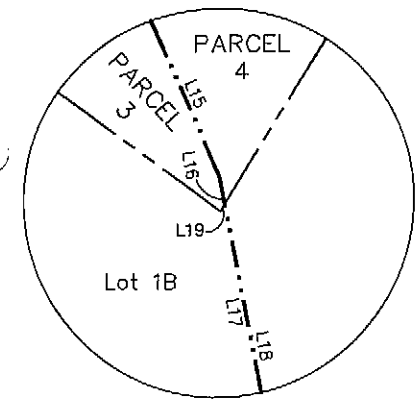
SEE SHEET 2 OF 2 FOR NOTES AND PROPERTY STATUS

**RED DEVIL AIRPORT**  
 AIRPORT LAYOUT PLAN  
 PROPERTY PLAN

SHEET  
 1 OF  
 2

Drawing File: G:\data\RedDevil\row\alp-red\_rev  
 Date: converted to feet 9/23/03. plh  
 Plot View & Scale: 1/23/02 1=1 v-1

BY	DATE	REVISIONS



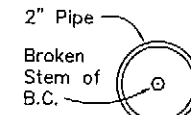
**DETAIL "B"**  
Not To Scale

PROPERTY STATUS							
Tract/ Parcel Number	Larger Parcel	Take	Remainder	Grantor	Grantee / DOT&PF Interest	Date Acquired Book / Page	Acquired Under A.I.P. No.
1 *	N/A	310.61 Ac.	N/A	United States of America	State of Alaska / Fee - Patent #1235920	4/25/64 1 / 296	
2 **	3.53 Ac.	1.75 Ac.	3.53 Ac.	State of Alaska / Div. of Bldgs	State of Alaska / Div. of Bldgs Avigation & Hazard Esmt.	To Be Acquired	
3	3.46 Ac.	0.37 Ac.	3.46 Ac.	State of Alaska / Div. of Bldgs	State of Alaska / Div. of Bldgs Avigation & Hazard Esmt.	To Be Acquired	
4	N/A	7.85 Ac.	N/A	State of Alaska DNR	State of Alaska / ILMA-Avigation & Hazard Esmt.	To Be Acquired	

\* Tract 1, USS 3771 - Letter of non-objection from the State of Alaska DOT&PF dated March 15, 1985 to the Red Devil Corp. (Corporation). This non-objection is to the Corporation for repairing and maintaining that portion of the existing road within Tract 1. The non-objection continues indefinitely, but can be terminated upon ninety days written notice.

\*\* Lot 1A USS 3771 - Letter of non-objection from the State of Alaska DOT&PF dated April 15, 1985 to the Red Devil Corp. (Corporation). This non-objection is to the Corporation for repairing and maintaining that portion of the existing road within Lot 1A. The non-objection continues indefinitely, but can be terminated upon ninety days written notice.

Lot 1A USS 3771 - Letter of non-objection from the State of Alaska DOT&PF dated May 2, 1985 to the Red Devil Corp. This non-objection states that the State has no objection to the Corporation installing a bulk fuel storage facility and fuel line maintaining that portion of the existing road within Lot 1A of US Survey No. 3771. The non-objection continues indefinitely, but can be terminated upon ninety days written notice.



2" Pipe  
Broken  
Stem of  
B.C.

**LEGEND**

- Runway Centerline
- - - Property Line
- - - Protracted Section Line
- - - Edge Of Gravel
- - - Edge Of Vegetation
- ⊕ BC Monument
- ⊙ 2" Alcap on 5/8"x30" Rebar
- ⊙ 1-1/2" Alcap on 5/8"x30" Rebar (Note 4)
- 5/8" Rebar (Note 4)
- (C) Computed (See Note 9)
- (R) Record per U.S.S. 3771
- [ ] Distance in Feet

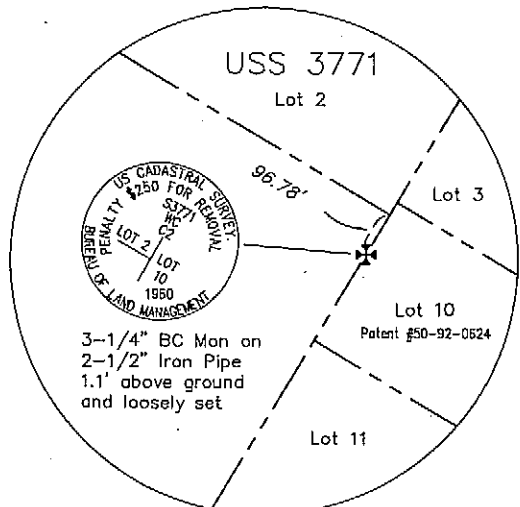
**LINE TABLE**

Found / Computed		Record (BLM)			
Line	Direction	Distance	Line	Direction	Distance
L4(C)	S 39°47'12" E	644.75'	L4(R)	S 39°44' E	644.75'
L5(C)	S 30°39'01" W	561.56'	L5(R)	S 30°46' W	563.90'
L6	S 30°39'01" W	482.57'			
L7	N 59°24'19" W	650.84'	L7(R)	N 59°14' W	649.97'
L8	N 39°47'12" W	182.29'			
L9	N 39°47'12" W	462.47'			
L10	N 32°56'12" W	15.41'	L10	N 32°53' W	14.26'
L11	N 32°56'12" W	172.03'	L11	N 32°53' W	173.18'
L12	N 32°56'12" W	187.44'	L12	N 32°53' W	187.44'
L13	N 23°32'12" W	212.08'			
L14	N 23°32'12" W	270.58'			
L15	N 23°32'12" W	482.66'	L15	N 23°29' W	482.66'
L16	N 11°29'12" W	5.80'			
L17	N 11°29'12" W	290.61'			
L18	N 11°29'12" W	296.41'	L18	N 11°26' W	296.41'
L19	N 30°46'00" E	1.68'			
L20	N 30°49'12" E	219.15'			
L21	N 30°49'12" E	141.48'			
L22	N 30°49'12" E	360.63'	L22	N 30°46' E	365.24'
L23	N 30°46'00" E	75.39'			
L24	N 53°31'22" W	327.34'			
L25	N 53°31'25" W	224.87'			
L26	S 30°39'01" W	308.87'			

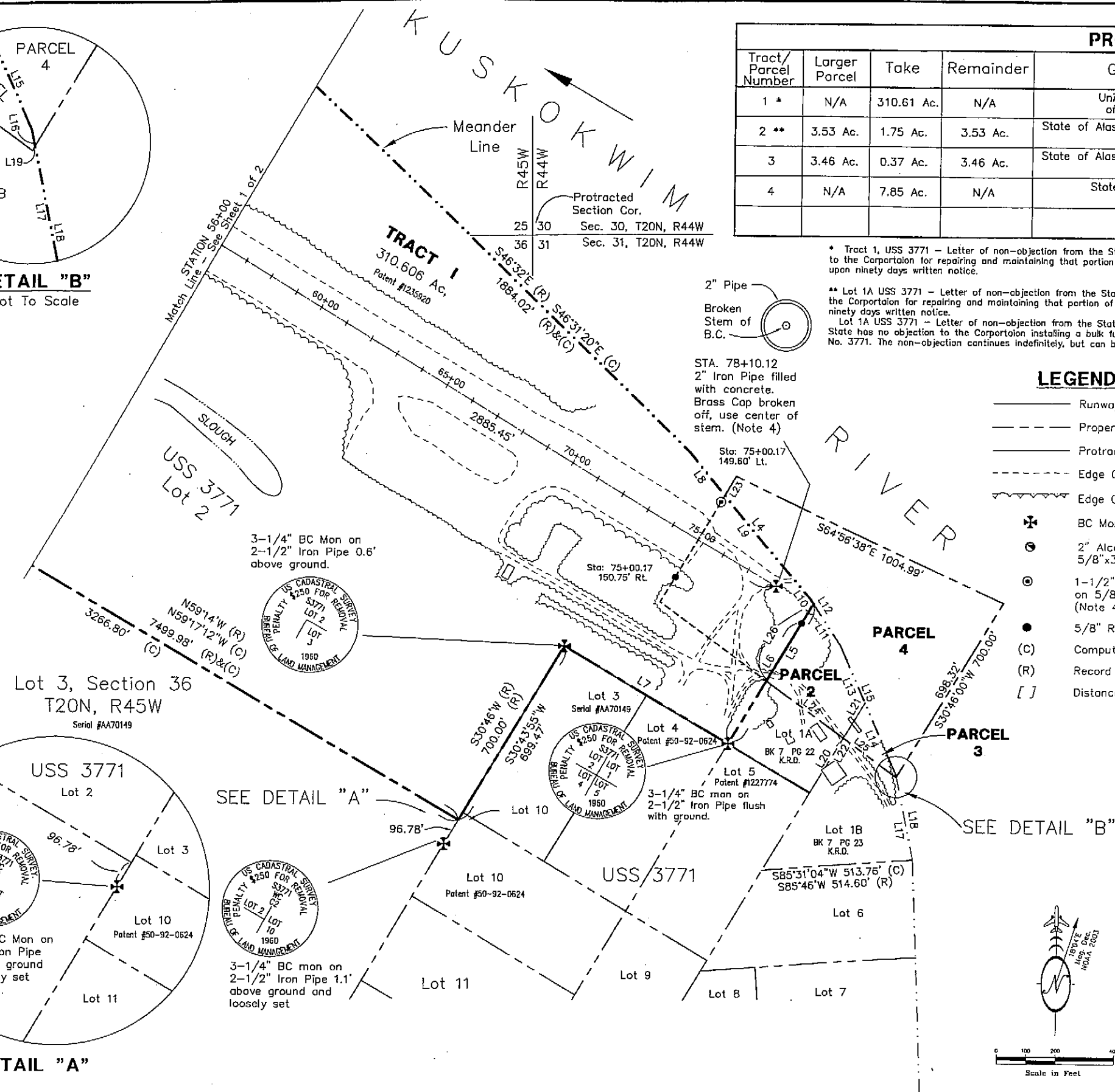
Note: all meanders are computed. See note 9 below.

**NOTES**

- Information hereon is based on an actual field survey conducted during September 1995 by DOWL Engineers.
- Geodetic positions are based on the position for Corner 1, U.S. Survey 9628 as shown hereon.
- Bearings are based on the centerline of the runway monumented as Shown on ADOT&PF survey control drawing for Red Devil Airport dated September, 1981. All other bearings are plane and are oriented to the basis of bearings.
- Monuments referencing this note appear on ADOT&PF survey control drawing for Red Devil Airport dated September, 1981.
- All monuments shown hereon were found or set in September, 1995.
- Distances are horizontal ground (US Survey) foot units.
- The minimum closure of all traverses, meets or exceeds 1:10,000.
- Geodetic positions are NAD83 unless otherwise specified.
- All dimensions shown as found / computed were computed unless there are survey monuments shown on line with the dimension.
- This drawing was rescaled to English Units from the original metric drawing prepared by DOWL, DWG. No.: 143-62C



**DETAIL "A"**



Drawing File:  
G:\data\RedDevil\row\asop-red\_rev  
Date:  
converted to feet 9/23/03, plh  
Plot View & Scale:  
1/23/02 1x1 v-1

AIRPORT LAYOUT PLAN APPROVED  
By: *[Signature]*  
FAA, AIRPORTS DIVISION  
ALASKAN REGION, AAL-001  
DATE: *8/2/04*

BY	DATE	REVISIONS

STATE OF ALASKA  
**DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES**  
CENTRAL REGION-DESIGN AND CONSTRUCTION-AVIATION

APPROVED: *[Signature]*  
STEPHEN M. RYAN, P.E. DESIGN SECTION CHIEF

APPROVED: *[Signature]*  
HARVEY M. GOUTHIT, P.E. PROJECT MANAGER

Date Drawn: 10/06/03  
Designer: \_\_\_\_\_  
Drawn by: VJS/PLH  
Checked by: SEP/MES

**RED DEVIL AIRPORT**  
AIRPORT LAYOUT PLAN  
PROPERTY PLAN

SHEET  
2  
OF  
2