RUNWAY END COORDINATES – NAD 83

	RUNWAY 13		RUNWAY 31		RUNWAY 18		RUNWAY 36	
	EXISTING END	ULTIMATE	EXISTING END	ULTIMATE	EXISTING END	ULTIMATE	EXISTING END	ULTIMATE
LATITUDE	41°16'45.90" N	41°16'51.12" N	41°16'22.26" N	41°16'27.48" N	41°16'46.55" N	41°16'46.55" N	41°16'07.06" N	41°15'52.2874" N
LONGITUDE	91°40'40.26" W	91°40'47.23" W	91°40'08.63" W	91°40'15.61" W	91°40'34.62" W	91°40'34.62" W	91°40'37.43" W	91°40'38.483" W

AIRPORT DATA

	EXISTING	ULTIMATE
AIRPORT ELEVATION	753.5' (MSL)	753.5' (MSL)
AIRPORT REFERENCE POINT (ARP)	41° 16' 30.06" N 91° 40' 37.00" W	41°16' 27" N 91° 40' 35" W
MEAN MAX TEMP.	86.3°	86.3°
AIRPORT NAVAIDS	NDB	NDB
ROTATING BEACON	YES	YES
SEGMENTED CIRCLE	NO	YES
LIGHTED WIND INDICATOR	YES	YES
AIRPORT REFERENCE CODE	ARC B-I	ARC B-II

THRESHOLD SITING CRITERIA

RUNWAY	CRITERIA
RW 31	THRESHOLD SITING CRITERIA - RW 31 * INSTRUMENT APPROACH - NIGHT TIME INSTRUMENT APPROACH * VISIBILITY > ONE STATUTE MILE * PROPOSED RELOCATION OF RW 31 THRESHOLD TO ACCOMMODATE STRAIGHT - IN NIGHT INSTRUMENT OPERATIONS AS PER FAA AC 5300-13 CHG 7 APPENDIX 2, PARAGRAPH "e".

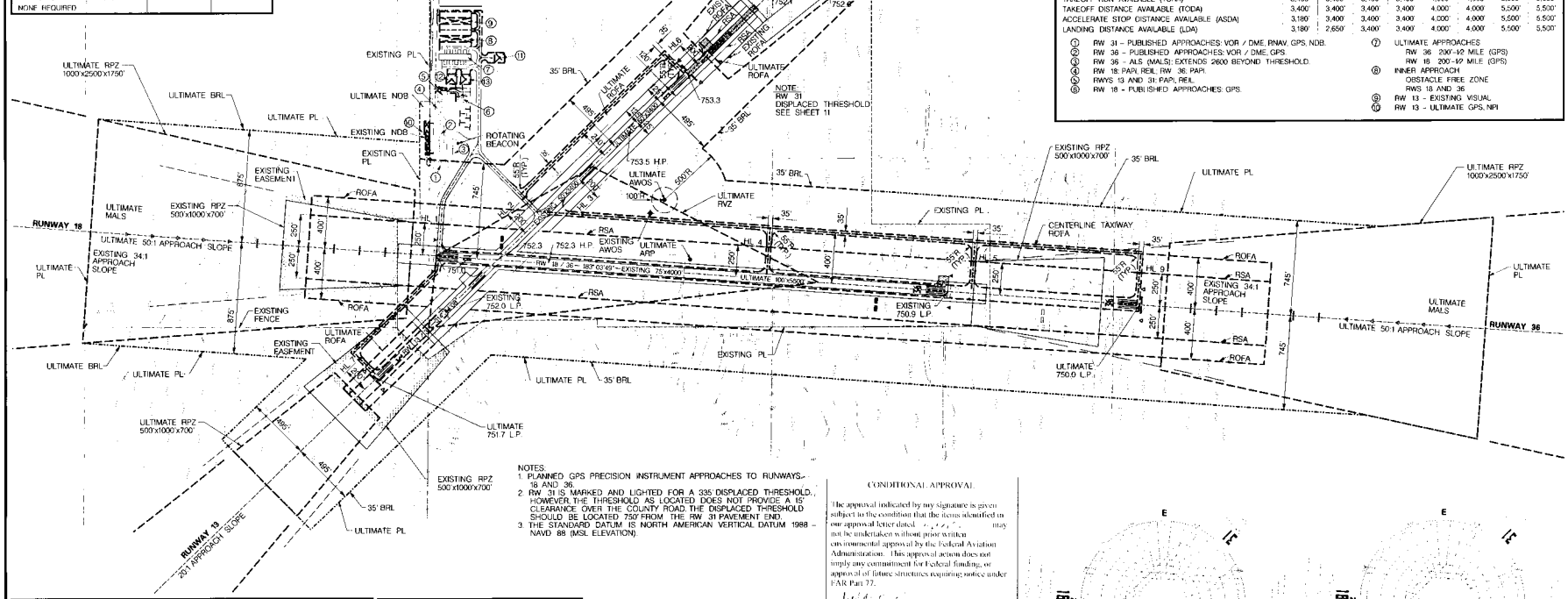
MODIFICATIONS TO AIRPORT DESIGN STANDARDS

APPROVAL DATE	AIRSPACE CASE NO.	STANDARD MODIFIED	DESCRIPTION
NONE REQUIRED			

RUNWAY DATA TABLE

ITEM	RUNWAY 13 /31 EXISTING		RUNWAY 13 /31 ULTIMATE		RUNWAY 18 /36 EXISTING		RUNWAY 18 /36 ULTIMATE	
APPROACH CATEGORY /DESIGN GROUP	B I		B I		B I		C II	
RUNWAY LENGTH /WIDTH	3,400 /50'		3,400 /60'		4,000 /75'		5,500' /100'	
RUNWAY MARKINGS	NPI		NPI		NPI		PPI	
RUNWAY LIGHTING	MIRL		MIRL		MIRL		MIRL	
PAVEMENT MATERIAL	PCC		PCC		PCC		PCC	
PAVEMENT STRENGTH (000)	12.5 SWL-30.0 DWL		12.5 SWL-30.0 DWL		28		30	
RUNWAY SAFETY AREA (RSA) LENGTH	3,545'		3,880'		4,600'		7,500'	
RUNWAY SAFETY AREA (RSA) WIDTH	120'		120'		150'		500'	
OBJECT FREE AREA (OFA) LENGTH	3,545'		3,880'		4,600'		7,500'	
OBJECT FREE AREA (OFA) WIDTH	250'		250'		500'		800'	
OBSTACLE FREE ZONE (OFZ) LENGTH ⑥	3,465'		3,800'		4,400'		5,900'	
OBSTACLE FREE ZONE (OFZ) WIDTH ⑥	250'		250'		400'		400'	
TAXIWAY WIDTH	–		35'		–		35'	
TAXIWAY LIGHTING			MITL		–		MITL	
	13	31	13	31	18	36	18	36
APPROACH SURFACE SLOPE	20:1	20:1	20:1	20:1	34:1	34:1	50:1	50:1
ELECTRONIC AIDS	–	①	–	①	⑥	②	⑦	⑦
VISUAL APPROACH AIDS	–	–	⑤	⑤	④	④	③	③
APPROACH VISIBILITY MINIMUMS	V ⑨	NPI ①	NPI ⑩	NPI ①	NPI ⑥	NPI ②	P ⑦	P ⑦
TOUCHDOWN ZONE ELEVATION (TDZE)	753.5'	753.5'	753.5'	753.5	752.3'	752.3'	752.3'	752.3'
TAKEOFF RUN AVAILABLE (TORA)	3,400'	3,400'	3,400'	3,400'	4,000'	4,000'	5,500'	5,500'
TAKEOFF DISTANCE AVAILABLE (TODA)	3,400'	3,400'	3,400'	3,400'	4,000'	4,000'	5,500'	5,500'
ACCELERATE STOP DISTANCE AVAILABLE (ASDA)	3,180'	3,400'	3,400'	3,400'	4,000'	4,000'	5,500'	5,500'
LANDING DISTANCE AVAILABLE (LDA)	3,180'	2,650'	3,400'	3,400'	4,000'	4,000'	5,500'	5,500'

① RW 31 – PUBLISHED APPROACHES: VOR / DME, RNAV, GPS, NDB.
② RW 36 – PUBLISHED APPROACHES: VOR / DME, GPS.
③ RW 36 – ALS (MALS): EXTENDS 2600 BEYOND THRESHOLD.
④ RW 18: PAPI, REIL; RW 36: PAPI.
⑤ RWYS 13 AND 31: PAPI, REIL.
⑥ RW 18 – PUBLISHED APPROACHES: GPS.
⑦ ULTIMATE APPROACHES
RW 36 200'-½ MILE (GPS)
RW 18 200'-½ MILE (GPS)
⑧ INNER APPROACH OBSTACLE FREE ZONE
RWS 18 AND 36
⑨ RW 13 – EXISTING VISUAL
⑩ RW 13 – ULTIMATE GPS, NPI



NOTES:
1. PLANNED GPS PRECISION INSTRUMENT APPROACHES TO RUNWAYS-18 AND 36.
2. RW 31 IS MARKED AND LIGHTED FOR A 335' DISPLACED THRESHOLD, HOWEVER THE THRESHOLD AS LOCATED DOES NOT PROVIDE A 15' CLEARANCE OVER THE COUNTY ROAD. THE DISPLACED THRESHOLD SHOULD BE LOCATED 750' FROM THE RW 31 PAVEMENT END.
3. THE STANDARD DATUM IS NORTH AMERICAN VERTICAL DATUM 1988 – NAVD 88 (MSL ELEVATION).

CONDITIONAL APPROVAL

The approval indicated by my signature is given subject to the condition that the items identified in our approval letter dated _____ may not be undertaken without prior written environmental approval by the Federal Aviation Administration. This approval action does not imply any commitment for Federal funding, or approval of future structures requiring notice under FAR Part 77.

Planning Engineer
FAA Central Region

Date

LEGEND

DESCRIPTION	EXISTING	ULTIMATE
AIRPORT PROPERTY LINE		
BUILDING RESTRICTION LINE		
RUNWAY VISIBILITY ZONE /LINE OF SIGHT		
RUNWAY PROTECTION ZONE		
RUNWAY PROTECTION ZONE EASEMENT		
RUNWAY SAFETY AREA AND OBJECT FREE AREA		
BUILDING STRUCTURES		
PRECISION APPROACH PATH INDICATOR (PAPI)		
RUNWAY END IDENTIFIER LIGHTS (REIL)		
THRESHOLD LIGHTS		
FENCE		
PAVEMENT REMOVAL		

BUILDING IDENTIFICATION

1	CONVENTIONAL STORAGE HANGAR
2	TEE HANGAR
3	HANGAR
4	SERVICE HANGAR
5	HANGAR
6	TERMINAL BUILDING
7	HANGAR
8	FUTURE 10 UNIT TEE HANGAR
9	FUTURE 10 UNIT TEE HANGAR
10	FUTURE 6 COMMUNITY HANGAR UNITS
11	FUTURE 80'x80' COMMUNITY HANGAR
12	FUTURE 80'x80' COMMUNITY HANGAR
13	FUTURE 80'x80' COMMUNITY HANGAR

NOTE: REFER TO SHEET 8, TERMINAL AREA PLAN FOR BUILDING IDENTIFICATION, ELEVATION AND CLEARANCE AS PER FAR PART 77

HOLDING POSITION TABLE

HOLDING POSITION	HOLD TYPE	DISTANCE
HL 1	RUNWAY	250'
HL 2	RUNWAY	200'
HL 3	RUNWAY	200'
HL 4	RUNWAY	250'
HL 5	RUNWAY	250'
HL 6	RUNWAY	200'
HL 7	RUNWAY	200'
HL 8	RUNWAY	250'
HL 9	RUNWAY	250'

NOTE: THE DISTANCE FROM THE HOLD LINE IS MEASURED PERPENDICULAR FROM THE RUNWAY CENTERLINE

MAGNETIC DECLINATION: 1 W E
ANNUAL RATE OF CHANGE: 0 3' E W
SOURCE: 1/2/02
PAPI

APPROVAL

WASHINGTON AIRPORT COMMISSION — DATE

WIND DATA

CROSSWINDS	RWY 13 /31	RWY 18 /36	COMBINED
10.5 KNOTS	88.76%	78.46%	94.42%
13.0 KNOTS	94.42%	84.38%	97.70%
16.0 KNOTS	98.55%	92.03%	99.32%

SOURCE: CEDAR RAPIDS MUNICIPAL AIRPORT
ALL WEATHER PERIOD: 1989 1998

WIND DATA

CROSSWINDS	RWY 13 /31	RWY 18 /36	COMBINED
10.5 KNOTS	94.04%	93.16%	97.98%
13.0 KNOTS	97.23%	96.10%	98.79%
16.0 KNOTS	99.34%	98.41%	99.42%

SOURCE: CEDAR RAPIDS MUNICIPAL AIRPORT
200' - ½' MILE PERIOD: 1989 1998

FRENCH-REVEKER-ASSOCIATES, Inc.
Consulting Engineers
Fairfield, Iowa

WASHINGTON MUNICIPAL AIRPORT 1999
WASHINGTON, IOWA

DESIGNED BY
DRAWN BY
CHECKED BY
REVIEWED BY

AIRPORT LAYOUT PLAN

PROJECT NO 97-54

SHEET 2