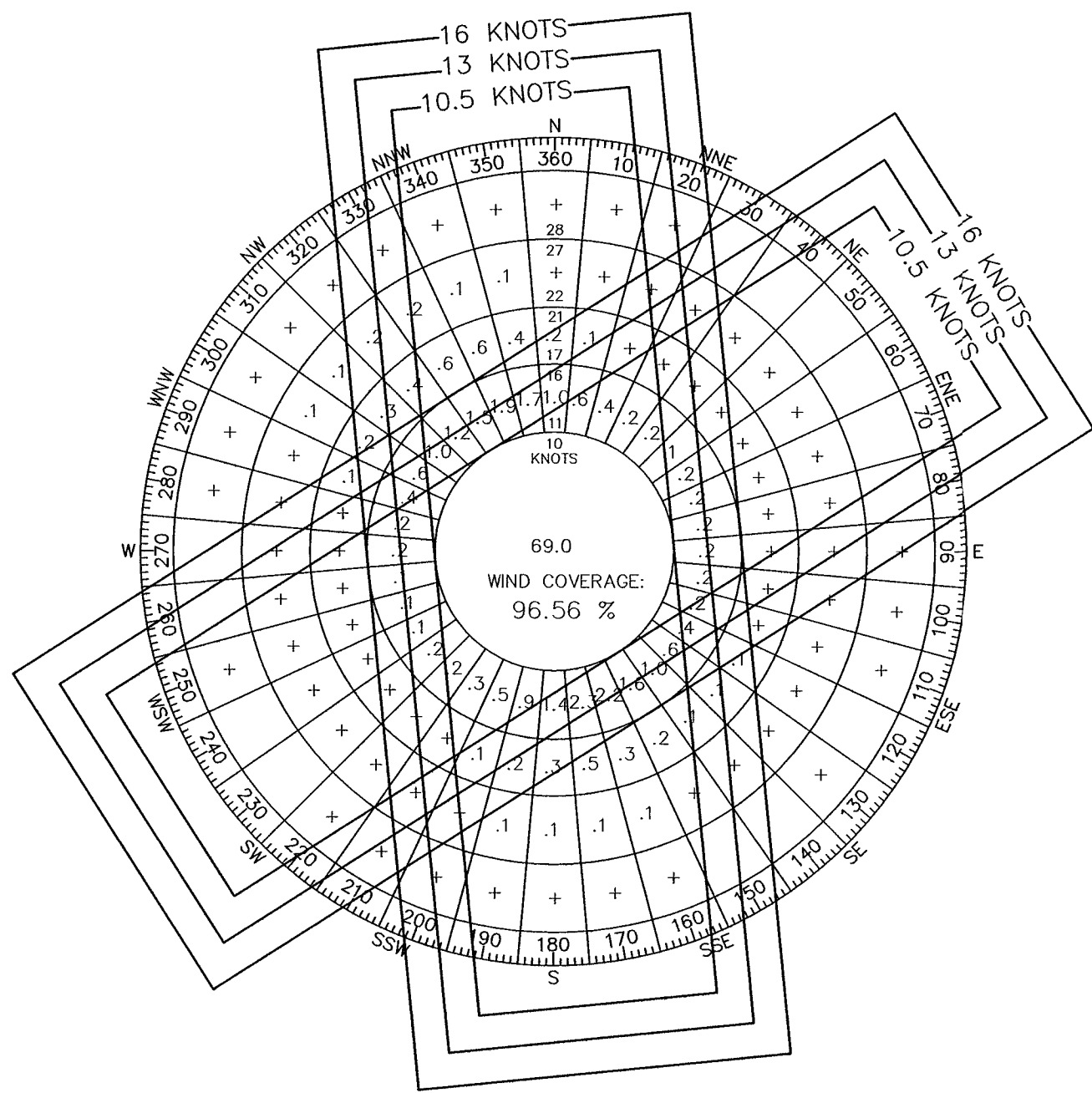




ALL WEATHER WIND COVERAGE			
Runway	10.5 Knots	13 Knots	16 Knots
Runway 5/23	75.7	84.6	94.2
Runway 17/35	94.3	97.2	99.2
Runways Combined	96.6	98.7	99.6

NOTES

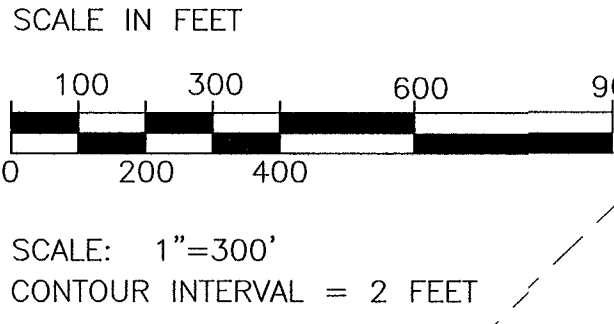
THERE ARE NO MODIFICATIONS TO AIRPORT DESIGN STANDARDS

THERE ARE NO OFZ OBJECT PENETRATIONS

THERE ARE NO THRESHOLD SITING SURFACE PENETRATIONS

HARN COORDINATES	
NAD 83 COORDS	NAVD 88 ELEVATION
41 00 37.95 W	1038.61 FT
95 15 35.50 W	

DATUM REFERENCE	
NAD 83 - HORIZONTAL COORDINATES	
NAVD 88 - MSL ELEVATIONS	



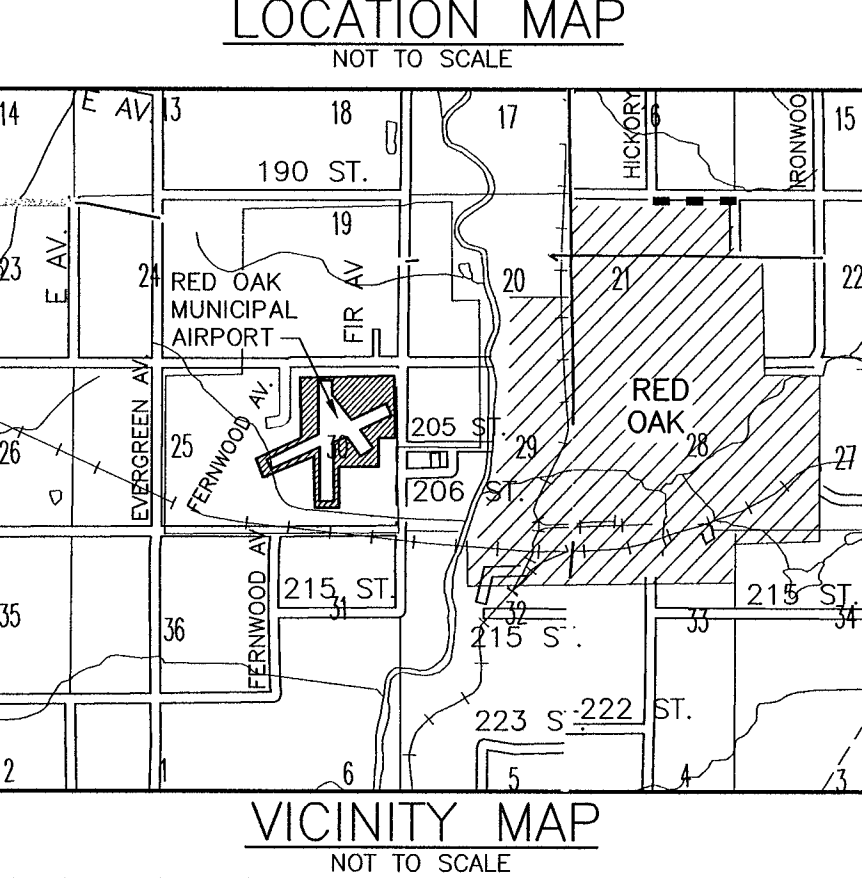
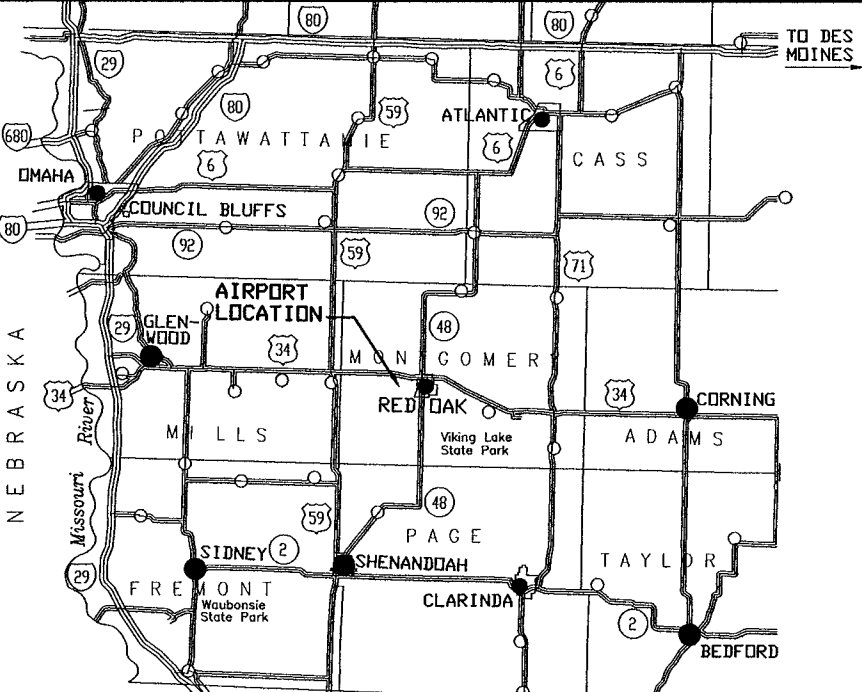
MAGNETIC DECLINATION: 3.4°
2005 VALUES

AIRPORT DATA			
RED OAK MUNICIPAL AIRPORT			
CITY: RED OAK, IOWA	COUNTY: MONTGOMERY		
RANGE: R-38W	TOWNSHIP: T-72N	CIVIL TOWNSHIP: RED OAK	
AIRPORT ELEVATION (MSL)	EXISTING	ULTIMATE	
AIRPORT REFERENCE CODE	B-II	B-II	
MEAN MAXIMUM TEMP. OF HOTTEST MONTH (°F)	89°	89°	
AIRPORT REFERENCE POINT	LATITUDE	41°00'39.15"	41°00'39.15"
(A.R.P.) COORDINATES	LONGITUDE	95°15'31.91"	95°15'31.91"
AIRPORT AND TERMINAL NAVIGATIONAL AIDS	NDB, GPS	NDB, GPS	
CRITICAL AIRCRAFT	KING AIR	KING AIR	

① CONSIDERED AS A GROUP OR FAMILY OF AIRCRAFT

BUILDING/FACILITIES			
EXISTING	ULTIMATE	DESCRIPTION	ELEV.
1	1	ADMINISTRATION/TERMINAL BUILDING	1060.0
2	2	AIRCRAFT MAINTENANCE	1060.0
3A-3D	3A-3D	T-HANGAR (6-UNIT)	1056.4
4	4	HANGAR OPEN BAY (1-UNIT)	-----
5	5	NDB	1087.8
6	6	FUEL TERMINAL	-----
7	7	SEGMENTED CIRCLE/WIND TEE	1043.0
8	8	AWOS-III	-----
9	9	T-HANGARS	1042.0
10	10	NON-AVIATION (STORAGE)	-----
11	11	CORPORATE HANGAR AREA	1077.0

LEGEND		
EXISTING	ULTIMATE	DESCRIPTION
---	---	AIRPORT PROPERTY LINE
---	---	FENCE LINE & PROPERTY LINE
○	○	AIRPORT REFERENCE POINT (ARP)
○	○	AIRPORT ROTATING BEACON
---	---	AVIGATION EASEMENT (IF APPLICABLE)
---	---	BUILDING CONSTRUCTION
---	---	BUILDING RESTRICTION LINE (BRL)
---	---	RUNWAY SAFETY AREA (RSA)
---	---	RUNWAY OBJECT FREE AREA (OFA)
---	---	BUILDING RESTRICTION LINE (BRL)
---	---	RUNWAY VISIBILITY ZONE (RVZ)
---	---	SECTION CORNER
---	---	GROUND CONTOURS
---	---	DRAINAGE
---	---	AIRFIELD PAYMENT
---	---	FENCING
---	---	VISUAL LANDING AID (PLASI)
---	---	RUNWAY END IDENT. LIGHTS (REIL)
---	---	RUNWAY THRESHOLD LIGHTS
---	---	TOPOGRAPHY (SOURCE)
---	---	2-BOX SAVASI
---	---	SANITARY SEWER
---	---	UNUSUAL RUNWAY MARKING
---	---	WATER MAIN
---	---	DRAINAGE STRUCTURES
---	---	AREA LIGHTS
---	---	BEACON LIGHT
---	---	FUEL PUMPS
---	---	POWER POLE



RUNWAY END COORDINATES ①		
RUNWAY	EXISTING	FUTURE
R/W 5	41°00'25.33"N 95°15'00.17"W	SAME
R/W 5 DISP. THRES.	NONE	95°15'49.12"W
R/W 23	41°00'52.12"N 95°15'03.82"W	SAME
R/W 17	41°00'51.47"N 95°15'38.05"W	SAME
R/W 35	41°00'22.95"N 95°15'34.36"W	SAME
R/W 13	41°00'51.00"N 95°15'34.61"W	SAME
R/W 31	41°00'33.64"N 95°15'16.06"W	41°00'34.64"N 95°15'17.13"W

RUNWAY DATA											
ITEM	RUNWAY 5/23		RUNWAY 17/35		RUNWAY 13/31		RUNWAY 31/13		RUNWAY 31/13		ITEM
	EXISTING	ULTIMATE	EXISTING	ULTIMATE	EXISTING	ULTIMATE	EXISTING	ULTIMATE	EXISTING	ULTIMATE	
APPROACH CATEGORY/DESIGN GROUP	B-II	B-II	A-I	A-I	A-I	A-I	A-I	A-I	A-I	A-I	APPROACH CATEGORY/DESIGN GROUP
RUNWAY LENGTH/WIDTH	5100'x75'	5100'x75'	2901'x60'	2901'x60'	2260'x250'	2260'x250'	2260'x250'	2260'x250'	2260'x250'	2260'x250'	RUNWAY LENGTH/WIDTH
RUNWAY MARKINGS	N-P	N-P	N-P	N-P	N/A	N/A	N/A	N/A	N/A	N/A	RUNWAY MARKINGS
RUNWAY LIGHTING	MIRL	MIRL	MIRL	MIRL	NONE	NONE	NONE	NONE	NONE	NONE	RUNWAY LIGHTING
PAVEMENT MATERIAL	CONC	CONC	CONC	CONC	TURF	TURF	TURF	TURF	TURF	TURF	PAVEMENT MATERIAL
PAVEMENT STRENGTH (000)	30	30	12.5	12.5	N/A	N/A	N/A	N/A	N/A	N/A	PAVEMENT STRENGTH (000)
RUNWAY SAFETY AREA (RSA) LENGTH	5700	5700	3501	3501	2260	2130	2260	2130	2260	2130	RUNWAY SAFETY AREA (RSA) LENGTH
RUNWAY SAFETY AREA (RSA) WIDTH	150	150	150	150	250	250	250	250	250	250	RUNWAY SAFETY AREA (RSA) WIDTH
R/W OBJECT FREE AREA (OFA) LENGTH	5700	5700	3381	3381	2260	2130	2260	2130	2260	2130	R/W OBJECT FREE AREA (OFA) LENGTH
R/W OBJECT FREE AREA (OFA) WIDTH	500	500	400	400	250	250	250	250	250	250	R/W OBJECT FREE AREA (OFA) WIDTH
OBSTACLE FREE ZONE (OFZ) LENGTH	5500	5500	3301	3301	2260	2130	2260	2130	2260	2130	OBSTACLE FREE ZONE (OFZ) LENGTH
OBSTACLE FREE ZONE (OFZ) WIDTH	400	400	250	250	250	250	250	250	250	250	OBSTACLE FREE ZONE (OFZ) WIDTH
TAXIWAY WIDTH	35'	35'	35'	35'	---	---	---	---	---	---	TAXIWAY WIDTH
TAXIWAY LIGHTING	MITL	MITL	MITL	MITL	NONE	NONE	NONE	NONE	NONE	NONE	TAXIWAY LIGHTING
EFFECTIVE GRADIENT %	0.10	0.10	0.21	0.21	---	---	---	---	---	---	EFFECTIVE GRADIENT %
APPROACH SURFACE SLOPE	5:1	23:1	5:1	23:1	17:1	35:1	13:1	31:1	13:1	31:1	APPROACH SURFACE SLOPE
ELECTRONIC NAV AIDS / GPS	34-1	20-1	34-1	20-1	20-1	20-1	20-1	20-1	20-1	20-1	ELECTRONIC NAV AIDS / GPS
VISUAL APPROACH AIDS	PLASI	PLASI	PLASI	PLASI	SAVASI	SAVASI	SAVASI	SAVASI	SAVASI	SAVASI	VISUAL APPROACH AIDS
APPROACH VISIBILITY MINIMUMS	1M	1M	1M	1M	1M	1M	1M	1M	1M	1M	APPROACH VISIBILITY MINIMUMS
TOUCHDOWN ZONE ELEVATION	1042.1	1043.0	1042.1	1043.0	1044.9	1044.9	1044.9	1044.9	1044.9	1044.9	TOUCHDOWN ZONE ELEVATION
TAKEOFF RUN AVAILABLE (TORA)	5100	5100	5100	5100	2901	2901	2901	2901	2901	2901	TAKEOFF RUN AVAILABLE (TORA)
TAKEOFF DISTANCE AVAILABLE (TODA)	5100	5100	5100	5100	2901	2901	2901	2901	2901	2901	TAKEOFF DISTANCE AVAILABLE (TODA)
ACCEL/STOP DISTANCE AVAILABLE (ASDA)	5100	5100	5100	5100	2901	2901	2901	2901	2901	2901	ACCEL/STOP DISTANCE AVAILABLE (ASDA)
LANDING DISTANCE AVAILABLE (LDA)	4100	5100	4100	5100	2901	2901	2901	2901	2901	2901	LANDING DISTANCE AVAILABLE (LDA)

**AS-BUILT
CONDITIONAL APPROVAL**

The approval indicated by my signature is given subject to the condition that the terms identified in our approval letter dated 4/3/12 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.

[Signature] 4/3/12
Airport Planning Engineer
FAA Central Region

CERTIFICATION

I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Iowa.

[Signature] 2-10-12
C. Peter Crawford, P.E.
My license renewal date is December 31, 2013
DATE

Pages or sheets covered by this seal:
SHEETS 1 - 9

APPROVAL BLOCK			
CITY OF RED OAK, IOWA		DATE 2/10/12	
NO.	REVISIONS	BY	DATE
1	AS-BUILT PROJECT 3-19-0077-05&06		1/10
2	AS-BUILT PROJECT 3-19-0077-07&08		1/11
3	AS-BUILT PROJECT 3-19-0077-09 & 10		2/11
DRWN BY	DATE	APPROVED BY	DATE
TMB		CPC	
PREPARED BY: JFSCO ENGINEERING, P.C. CONSULTING ENGINEERS			
RED OAK MUNICIPAL AIRPORT RED OAK, IOWA			
AIRPORT LAYOUT PLAN			