

WIND COVERAGE				
RUNWAY	ALL WEATHER	13 KNOTS	10.5 KNOTS	13 KNOTS
18/36	86.47	92.36	88.70	93.75
11/29	83.59	92.88	90.05	93.04
COMBINED	97.74	99.40	97.14	98.60

2.1% OF ALL-WEATHER READINGS WERE IFR CONDITIONS

MAGNETIC VARIANCE - 10° 57' E (2005)  
ANNUAL CHANGE - 8" W  
NOTE: ALL DATUM NAD83

RUNWAY	RUNWAY END COORDINATES		
	EXISTING	EXISTING	ULTIMATE
RUNWAY 11	LATITUDE	42°44'35.133"N	42°44'35.133"N
	LONGITUDE	92°30'46.455"W	92°30'46.455"W
RUNWAY 29	LATITUDE	42°44'28.978"N	42°44'25.812"N
	LONGITUDE	92°30'10.598"W	92°30'05.476"W
RUNWAY 18	LATITUDE	-	42°45'00.509"N
	LONGITUDE	-	92°30'24.414"W
RUNWAY 36	LATITUDE	-	42°44'20.997"N
	LONGITUDE	-	92°30'24.151"W

ITEM	RUNWAY 11/29			RUNWAY 18/36		
	EXISTING	EXISTING	ULTIMATE	EXISTING	EXISTING	ULTIMATE
APPROACH CATEGORY / DESIGN GROUP	B-I	B-I	B-I	B-I	B-I	B-I
RUNWAY LENGTH/WIDTH	2,800' x 50'	3,200' x 60'	4,000' x 75'	4,000' x 75'	4,000' x 75'	4,000' x 75'
RUNWAY MARKINGS	NON-PRECISION	NON-PRECISION	NON-PRECISION	NON-PRECISION	NON-PRECISION	NON-PRECISION
RUNWAY LIGHTING	MIRL	MIRL	MIRL	MIRL	MIRL	MIRL
PAVEMENT MATERIAL	PCC/ACC	PCC/ACC	PCC	PCC	PCC	PCC
PAVEMENT DESIGN STRENGTH	12,500 SWL	12,500 SWL	30,000 SWL	30,000 SWL	30,000 SWL	30,000 SWL
RUNWAY SAFETY AREA (RSA) LENGTH/WIDTH	3,280' x 120'	3,880' x 120'	4,800' x 150'	4,800' x 150'	4,800' x 150'	4,800' x 150'
OBJECT FREE AREA (OFA) LENGTH/WIDTH	3,280' x 400'	3,880' x 400'	4,800' x 500'	4,800' x 500'	4,800' x 500'	4,800' x 500'
OBSTACLE FREE ZONE (OFZ) LENGTH/WIDTH	3,200' x 400'	3,800' x 400'	4,400' x 400'	4,400' x 400'	4,400' x 400'	4,400' x 400'
TAXIWAY WIDTH	-	35'	35'	35'	35'	35'
TAXIWAY LIGHTING	-	MTL	MTL	MTL	MTL	MTL
APPROACH SURFACE SLOPE	20:1	20:1	20:1	20:1	34:1	34:1
ELECTRONIC AIDS	NDB	NDB	NDB	NDB	NDB	NDB
VISUAL APPROACH AIDS	VGS/REL	VGS/REL	VGS/REL	VGS/REL	VGS/REL	VGS/REL
APPROACH VISIBILITY MINIMUMS	1 mile	1 mile	1 mile	1 mile	3/4 mile	3/4 mile
TOUCHDOWN ZONE ELEVATION (TDZE)	991.4	983.9	991.4	981.8	995.0	982.0
TAKEOFF RUN AVAILABLE (TORA)	2,800'	2,800'	3,200'	3,200'	4,000'	4,000'
TAKEOFF DISTANCE AVAILABLE (TODA)	2,800'	2,800'	3,200'	3,200'	4,000'	4,000'
ACCELERATED STOP DISTANCE AVAILABLE (ASDA)	2,800'	2,800'	3,200'	3,200'	4,000'	4,000'
LANDING DISTANCE AVAILABLE (LDA)	2,800'	2,800'	3,200'	3,200'	4,000'	4,000'

AIRPORT DATA TABLE		
ITEM	EXISTING	ULTIMATE
AIRPORT ELEVATION (MSL)	992.0	995.0
AIRPORT REFERENCE POINT COORDINATES (ARP)	LAT=42°44'31.029"N LONG=92°30'28.567"W	LAT=42°44'36.184"N LONG=92°30'25.030"W
AIRPORT ELECTRONIC AIDS	NDB, ROTATING BEACON	NDB, ROTATING BEACON
MEAN MAXIMUM TEMPERATURE	87°F	87°F
AIRPORT REFERENCE CODE (ARC)	B-I	B-II
NPAS SERVICE LEVEL	GA	GA

NOTES:  
THERE ARE NO OFZ OBJECT PENETRATIONS.  
THERE ARE NO THRESHOLD SITING SURFACE OBJECT PENETRATIONS.  
THERE ARE NO MODIFICATIONS TO DESIGN STANDARDS.

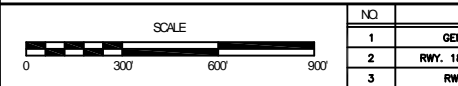
EXISTING	ULTIMATE	ITEM
950	NOT SHOWN	GROUND CONTOURS
---	---	AIRPORT FENCING
---	---	AIRPORT PROPERTY LINE
---	---	EASEMENTS
---	---	BUILDING RESTRICTION LINE
---	---	RUNWAY VISIBILITY ZONE
---	---	OBJECT FREE AREA
---	---	RUNWAY PROTECTION ZONE
---	---	RUNWAY SAFETY AREA
---	---	FACILITIES PAVEMENT & BUILDINGS
---	---	THRESHOLD LIGHTS
---	---	RUNWAY END IDENTIFICATION LIGHTS
---	---	PRECISION APPROACH PATH INDICATOR
---	---	VISUAL APPROACH SLOPE INDICATOR
---	---	MEDIUM INTENSITY APPROACH LIGHT SYSTEM
---	---	POWER LINE
---	---	TELEPHONE LINE
---	---	TILE LINE & INTAKE

**CONDITIONAL APPROVAL**

The approval indicated by my signature is given subject to the condition that the items identified in our approval letter dated March 20, 2007, 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.

*Todd M. Madison* 3/20/07  
Date  
Todd M. Madison, P.E.  
FAA Central Region

APPROVED:  
*Don J. Becker* 2-16-07  
DATE



NO	REVISION	BY	DATE	NO	REVISION	BY	DATE
1	GENERAL UPDATE	WHKS & CO.	11/05				
2	RWY. 18/36 APPROACHES	WHKS & CO.	7/06				
3	RWY. 18/36 BRL	WHKS & CO.	11/06				

**CGA** CONSULTANTS  
Cassadle-Garber Associates, Inc  
16 East Main Street  
Marshalltown, Iowa 50158  
Ph 641 752-6701  
www.cgaconsultants.com

DESIGNED: \_\_\_\_\_ DATE: \_\_\_\_\_  
DRAWN: \_\_\_\_\_ DATE: \_\_\_\_\_  
CHECKED: \_\_\_\_\_ DATE: \_\_\_\_\_  
APPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_

**WAVERLY MUNICIPAL AIRPORT**  
WAVERLY, IOWA

**AIRPORT LAYOUT DRAWING**  
PROJECT NO. 4169.03  
SHEET NO. 2 of 11