

LEGEND		
DESCRIPTION	EXISTING	ULTIMATE
AIRPORT PROPERTY LINE	---	---
AIRPORT EASEMENT LINE	---	---
BUILDING RESTRICTION LINE	---	---
RUNWAY VISIBILITY ZONE / LINE OF SIGHT	---	---
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	---	---
TIEDOWN	---	---

NOTES
 THERE ARE NO OBSTACLE FREE ZONE (OFZ) PENETRATIONS
 THERE ARE NO THRESHOLD SITING SURFACE OBJECT PENETRATIONS
 THERE ARE NO MODIFICATIONS TO DESIGN STANDARDS

	RUNWAY END COORDINATES - NAD 83								
	RUNWAY 2		RUNWAY 20		RUNWAY 12		RUNWAY 30		
EXISTING	ULTIMATE	EXISTING	ULTIMATE	EXISTING	DISPLACED	ULT. RELOCATED	PAVEMENT	EXISTING	ULTIMATE
LATITUDE	41° 23' 42.57" N	41° 23' 37.98" N	41° 24' 28.44" N	41° 24' 28.44" N	41° 24' 35.41" N	41° 24' 33.85" N	41° 24' 35.4177" N	41° 24' 18.54" N	41° 24' 18.54" N
LONGITUDE	95° 03' 14.70" W	95° 03' 17.14" W	95° 02' 50.36" W	95° 02' 50.36" W	95° 03' 01.53" W	95° 02' 58.34" W	95° 02' 57.32" W	95° 03' 01.52878" W	95° 02' 27.08" W

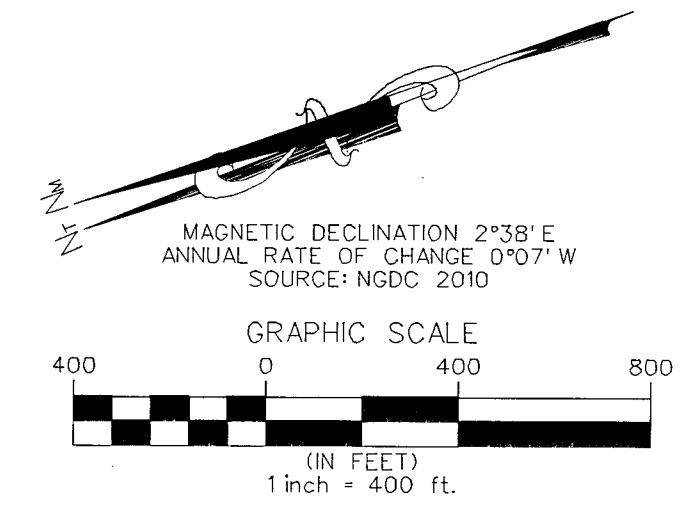
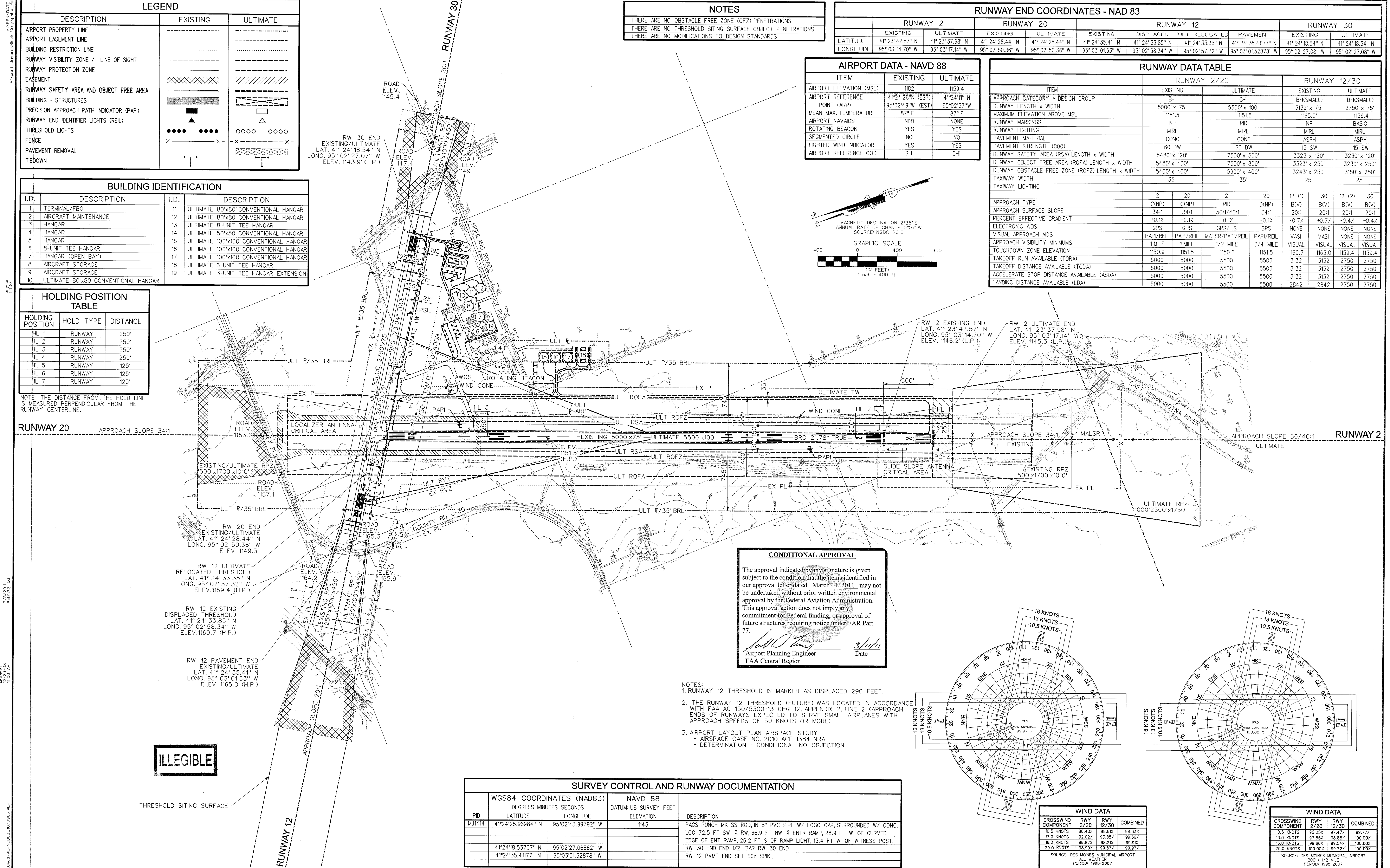
AIRPORT DATA - NAVD 88		
ITEM	EXISTING	ULTIMATE
AIRPORT ELEVATION (MSL)	1182	1159.4
AIRPORT REFERENCE POINT (ARP)	41°24'26" (EST) 95°02'49" (EST)	41°24'11" 95°02'57" W
MEAN MAX. TEMPERATURE	87°F	87°F
AIRPORT NAVAIDS	NDB	NONE
ROTATING BEACON	YES	YES
SEGMENTED CIRCLE	NO	NO
LIGHTED WIND INDICATOR	YES	YES
AIRPORT REFERENCE CODE	B-1	C-II

ITEM	RUNWAY 2/20		RUNWAY 12/30	
	EXISTING	ULTIMATE	EXISTING	ULTIMATE
APPROACH CATEGORY - DESIGN GROUP	B-1	C-II	B-(SMALL)	B-(SMALL)
RUNWAY LENGTH x WIDTH	5000' x 75'	5500' x 100'	3132' x 75'	2750' x 75'
MAXIMUM ELEVATION ABOVE MSL	1151.5	1151.5	1165.0'	1159.4
RUNWAY MARKINGS	NP	PIR	NP	BASIC
RUNWAY LIGHTING	MIRL	MIRL	MIRL	MIRL
PAVEMENT MATERIAL	CONC	CONC	ASPH	ASPH
PAVEMENT STRENGTH (000)	60 DW	60 DW	15 SW	15 SW
RUNWAY SAFETY AREA (RSA) LENGTH x WIDTH	5480' x 120'	7500' x 500'	3323' x 120'	3230' x 120'
RUNWAY OBJECT FREE AREA (ROFA) LENGTH x WIDTH	5480' x 400'	7500' x 800'	3323' x 250'	3230' x 250'
RUNWAY OBSTACLE FREE ZONE (ROFZ) LENGTH x WIDTH	5400' x 400'	5900' x 400'	3243' x 250'	3150' x 250'
TAXIWAY WIDTH	35'	35'	25'	25'
TAXIWAY LIGHTING	2	20	12 (2)	30
APPROACH TYPE	C(NP)	C(NP)	PIR	D(NP)
APPROACH SURFACE SLOPE	34:1	34:1	50:1/40:1	34:1
PERCENT EFFECTIVE GRADIENT	+0.1%	-0.1%	+0.1%	-0.1%
ELECTRONIC AIDS	GPS	GPS	GPS/ILS	NONE
VISUAL APPROACH AIDS	PAPI/REIL	PAPI/REIL	MALSR/PAPI/REIL	PAPI/REIL
APPROACH VISIBILITY MINIMUMS	1 MILE	1 MILE	1/2 MILE	3/4 MILE
TOUCHDOWN ZONE ELEVATION	1150.9	1151.5	1151.5	1163.0
TAKEOFF RUN AVAILABLE (TORA)	5000	5000	5500	5500
TAKEOFF DISTANCE AVAILABLE (TODA)	5000	5000	5500	5500
ACCELERATE STOP DISTANCE AVAILABLE (ASDA)	5000	5000	5500	5500
LANDING DISTANCE AVAILABLE (LDA)	5000	5000	5500	5500

BUILDING IDENTIFICATION			
I.D.	DESCRIPTION	I.D.	DESCRIPTION
1	TERMINAL/FBO	11	ULTIMATE 80'x80' CONVENTIONAL HANGAR
2	AIRCRAFT MAINTENANCE	12	ULTIMATE 80'x80' CONVENTIONAL HANGAR
3	HANGAR	13	ULTIMATE 8-UNIT TEE HANGAR
4	HANGAR	14	ULTIMATE 50'x50' CONVENTIONAL HANGAR
5	HANGAR	15	ULTIMATE 100'x100' CONVENTIONAL HANGAR
6	8-UNIT TEE HANGAR	16	ULTIMATE 100'x100' CONVENTIONAL HANGAR
7	HANGAR (OPEN BAY)	17	ULTIMATE 100'x100' CONVENTIONAL HANGAR
8	AIRCRAFT STORAGE	18	ULTIMATE 6-UNIT TEE HANGAR
9	AIRCRAFT STORAGE	19	ULTIMATE 3-UNIT TEE HANGAR EXTENSION
10	ULTIMATE 80'x80' CONVENTIONAL HANGAR		

HOLDING POSITION TABLE		
HOLDING POSITION	HOLD TYPE	DISTANCE
HL 1	RUNWAY	250'
HL 2	RUNWAY	250'
HL 3	RUNWAY	250'
HL 4	RUNWAY	250'
HL 5	RUNWAY	125'
HL 6	RUNWAY	125'
HL 7	RUNWAY	125'

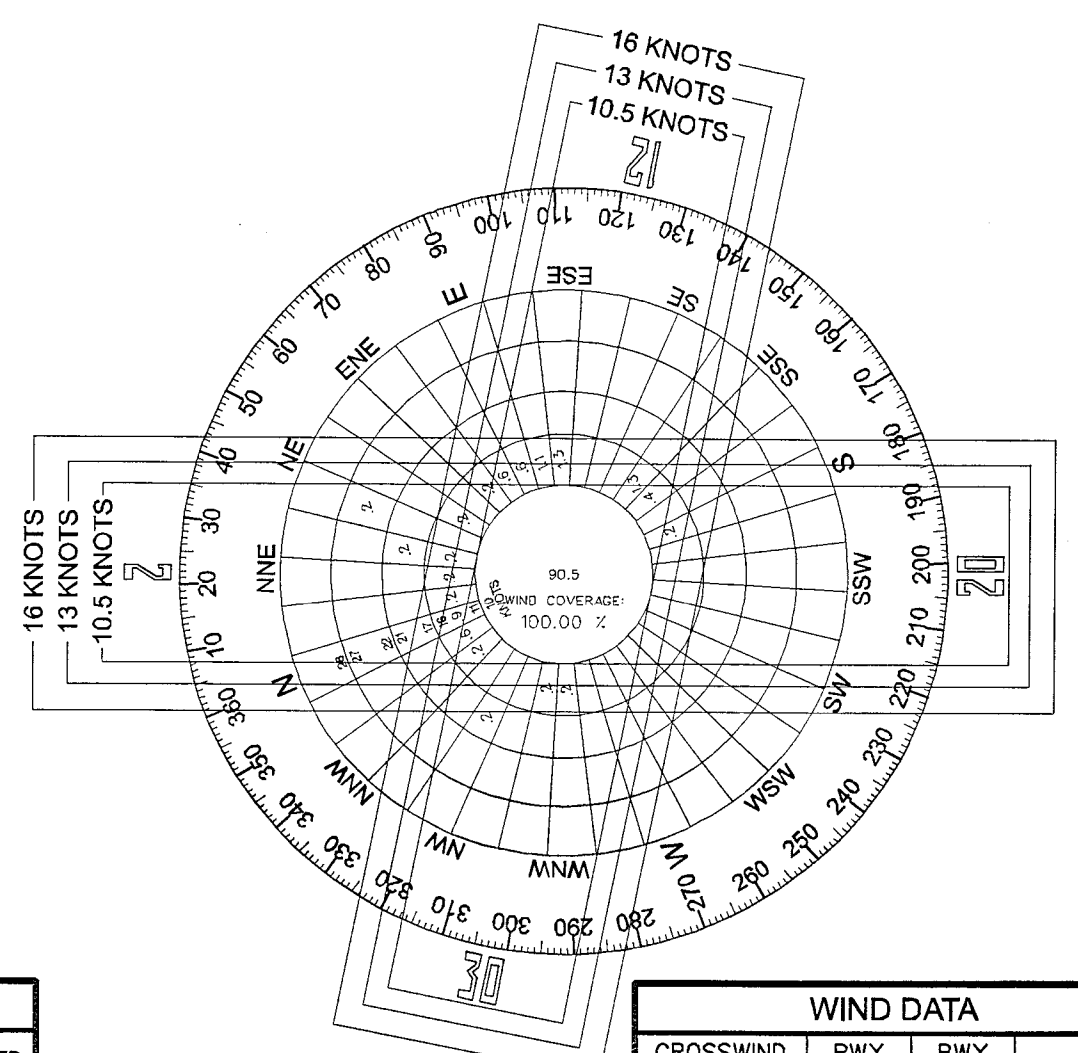
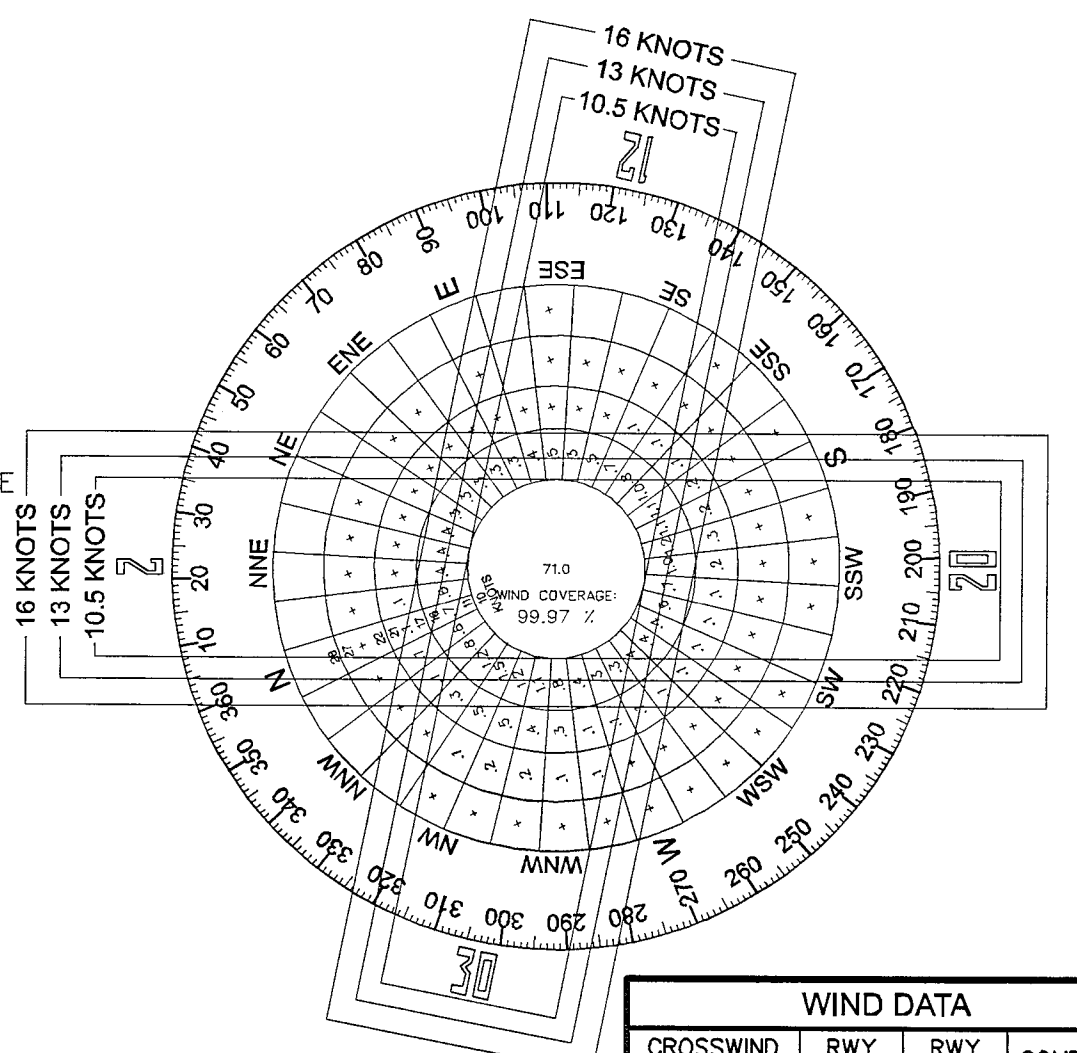
NOTE: THE DISTANCE FROM THE HOLD LINE IS MEASURED PERPENDICULAR FROM THE RUNWAY CENTERLINE.



CONDITIONAL APPROVAL
 The approval indicated by my signature is given subject to the condition that the items identified in our approval letter dated March 11, 2011, 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] 3/11/11
 Airport Planning Engineer Date
 FAA Central Region

- NOTES:
 1. RUNWAY 12 THRESHOLD IS MARKED AS DISPLACED 290 FEET.
 2. THE RUNWAY 12 THRESHOLD (FUTURE) WAS LOCATED IN ACCORDANCE WITH FAA AC 150/5300-13 CHG 12, APPENDIX 2, LINE 2 (APPROACH ENDS OF RUNWAYS EXPECTED TO SERVE SMALL AIRPLANES WITH APPROACH SPEEDS OF 50 KNOTS OR MORE).
 3. AIRPORT LAYOUT PLAN AIRSPACE STUDY
 - AIRSPACE CASE NO. 2010-ACE-1384-NRA.
 - DETERMINATION - CONDITIONAL, NO OBJECTION



WIND DATA			
CROSSWIND COMPONENT	RWY 2/20	RWY 12/30	COMBINED
10.5 KNOTS	85.40%	88.61%	98.63%
15.0 KNOTS	92.02%	93.85%	99.66%
16.0 KNOTS	96.87%	98.21%	99.91%
20.0 KNOTS	98.90%	99.57%	99.97%

SOURCE: DES MOINES MUNICIPAL AIRPORT ALL WEATHER PERIOD: 1998-2007

WIND DATA			
CROSSWIND COMPONENT	RWY 2/20	RWY 12/30	COMBINED
10.5 KNOTS	95.05%	97.47%	98.77%
15.0 KNOTS	97.56%	98.88%	100.00%
16.0 KNOTS	99.66%	99.24%	100.00%
20.0 KNOTS	100.00%	99.72%	100.00%

SOURCE: DES MOINES MUNICIPAL AIRPORT 200' x 1/2 MILE PERIOD: 1998-2007

SURVEY CONTROL AND RUNWAY DOCUMENTATION				
PID	WGS84 COORDINATES (NAD83)	NAVD 88 DATUM: US SURVEY FEET ELEVATION	DESCRIPTION	
MJ1414	41°24'25.96984" N 95°02'43.99792" W	1143	PACS PUNCH MK SS ROD, IN 5" PVC PIPE W/ LOGO CAP, SURROUNDED W/ CONC. LOC 72.5 FT SW & RW, 66.9 FT NW & ENTR RAMP, 28.9 FT W OF CURVED EDGE OF ENT RAMP, 26.2 FT S OF RAMP LIGHT, 15.4 FT W OF WITNESS POST.	
	41°24'18.53707" N 95°02'27.06862" W		RW 30 END END 1/2" BAR RW 30 END	
	41°24'35.41177" N 95°03'01.52878" W		RW 12 PVMT END SET 60d SPIKE	