AIRPORT DATA

AIRPORT DATA		EXISTING	ULTIMATE
FUNCTIONAL ROLE (NPIAS)		RELIEVER	SAME
MAA EQUIVALENT SERVICE ROLE		PRIMARY	SAME
AIRPORT REFERENCE CODE (ARC)		C–II	C–III
AIRPORT ELEVATION (MSL, NAVD88)		306.0	309.0'
MEAN MAXIMUM DAILY TEMPERATURE DURING HOTTEST MONTH		86.6°F	SAME
ALL WEATHER WIND COVERAGE		COMBINED IFR: 99.99% COMBINED VFR: 99.75%	SAME SAME
AIRPORT REFERENCE POINT (ARP)(NAD83)	LAT. (N)	39° 25' 03.25"	39° 24' 59.47"
	LONG. (W)	77° 22' 27.47"	77° 22' 26.30"
MAGNETIC DECLINATION		10° 36' W (AUGUST 2006)	ANNUAL CHANGE OF 0.007° W
AIRPORT AND TERMINAL NAVIGATIONAL AIDS		ILS, GPS, VOR, AWOS–3 ROTATING BEACON	SAME
TAXIWAY LIGHTING		MITL	MITL

RUNWAY END DATA

RUNWAY	EXISTING LATITUDE (N)	EXISTING LONGITUDE (W)	EXISTING ELEV	FUTURE LATITUDE (N)	FUTURE LONGITUDE (W)	FUTURE ELEV	COMMENT
5	39°24'34.57"	77°22'49.56"	306.00	39°24'30.06"	77°22'54.53"	309.00	EXIST. & FUT. HIGH POINT
23	39°25'13.80"	77°22'06.38"	282.65	39°25'15.16"	77°22'04.90"	281.75	EXIST. & FUT. LOW POINT
12	39°25'24.18"	77°22'47.36"	293.95	SAME	SAME	293.95	EXIST. & FUT. HIGH POINT
30	39°25'08.60"	77°22'06.12"	280.63	39°25'08.03"	77°22'04.63"	283.69	EXIST. & FUT. LOW POINT
5R	N/A	N/A	N/A	39°24'41.74"	77°22'28.19"	290.9±	FUTURE HIGH POINT
23L	N/A	N/A	N/A	39°24'59.78"	77°22'08.33"	289.5±	FUTURE LOW POINT

* SEE NOTE 10

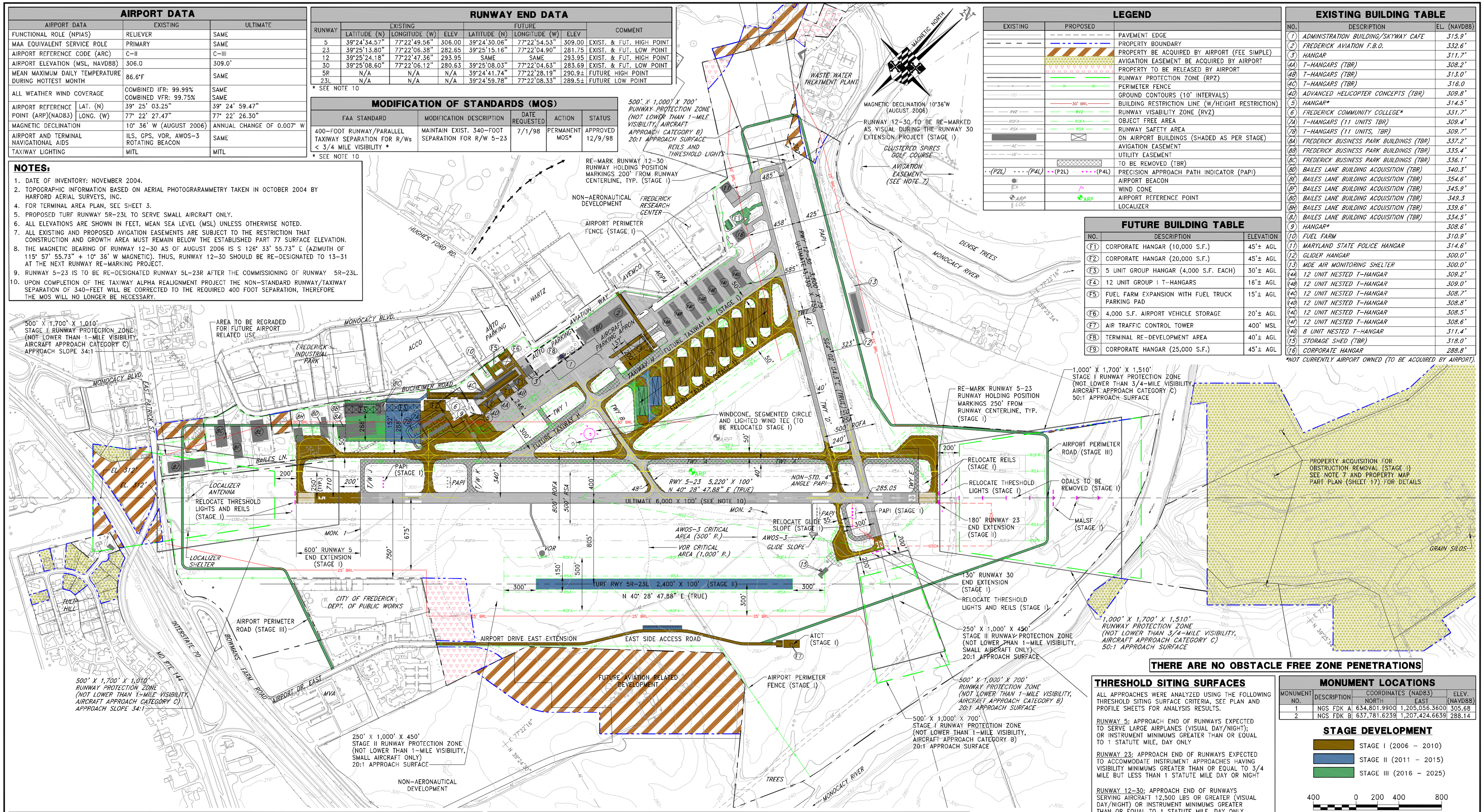
MODIFICATION OF STANDARDS (MOS)

FAA STANDARD	MODIFICATION DESCRIPTION	DATE REQUESTED	ACTION	STATUS
400–FOOT RUNWAY/PARALLEL TAXIWAY SEPARATION FOR R/Ws < 3/4 MILE VISIBILITY *	MAINTAIN EXIST. 340–FOOT SEPARATION FOR R/W 5–23	7/1/98	PERMANENT MOS*	APPROVED 12/9/98

* SEE NOTE 10

NOTES:

1. DATE OF INVENTORY: NOVEMBER 2004.
2. TOPOGRAPHIC INFORMATION BASED ON AERIAL PHOTOGRARAMMETRY TAKEN IN OCTOBER 2004 BY HARFORD AERIAL SURVEYS, INC.
4. FOR TERMINAL AREA PLAN, SEE SHEET 3.
5. PROPOSED TURF RUNWAY 5R–23L TO SERVE SMALL AIRCRAFT ONLY.
6. ALL ELEVATIONS ARE SHOWN IN FEET, MEAN SEA LEVEL (MSL) UNLESS OTHERWISE NOTED.
7. ALL EXISTING AND PROPOSED AVIGATION EASEMENTS ARE SUBJECT TO THE RESTRICTION THAT CONSTRUCTION AND GROWTH AREA MUST REMAIN BELOW THE ESTABLISHED PART 77 SURFACE ELEVATION.
8. THE MAGNETIC BEARING OF RUNWAY 12–30 AS OF AUGUST 2006 IS S 126° 33' 55.73" E (AZIMUTH OF 115° 57' 55.73" + 10° 35' W MAGNETIC). THUS, RUNWAY 12–30 SHOULD BE RE–DESIGNATED TO 13–31 AT THE NEXT RUNWAY RE–MARKING PROJECT.
9. RUNWAY 5–23 IS TO BE RE–DESIGNATED RUNWAY 5L–23R AFTER THE COMMISSIONING OF RUNWAY 5R–23L.
10. UPON COMPLETION OF THE TAXIWAY ALPHA REALIGNMENT PROJECT THE NON–STANDARD RUNWAY/TAXIWAY SEPARATION OF 340–FEET WILL BE CORRECTED TO THE REQUIRED 400 FOOT SEPARATION, THEREFORE THE MOS WILL NO LONGER BE NECESSARY.



LEGEND

EXISTING	PROPOSED	
		PAVEMENT EDGE
		PROPERTY BOUNDARY
		PROPERTY BE ACQUIRED BY AIRPORT (FEE SIMPLE)
		AVIGATION EASEMENT BE ACQUIRED BY AIRPORT
		PROPERTY TO BE RELEASED BY AIRPORT
		RUNWAY PROTECTION ZONE (RPZ)
		PERIMETER FENCE
120		GROUND CONTOURS (10' INTERVALS)
30' BRL		BUILDING RESTRICTION LINE (W/HEIGHT RESTRICTION)
RVZ	RVZ	RUNWAY VISABILITY ZONE (RVZ)
ROFA	ROFA	OBJECT FREE AREA
RSA	RSA	RUNWAY SAFETY AREA
		ON AIRPORT BUILDINGS (SHADED AS PER STAGE)
AE		AVIGATION EASEMENT
UE		UTILITY EASEMENT
		TO BE REMOVED (TBR)
(P2L) (P4L)	(P2L) (P4L)	PRECISION APPROACH PATH INDICATOR (PAPI)
		AIRPORT BEACON
		WIND CONE
ARP	ARP	AIRPORT REFERENCE POINT
LOC		LOCALIZER

EXISTING BUILDING TABLE

NO.	DESCRIPTION	EL. (NAVD88)
(1)	ADMINISTRATION BUILDING/SKYWAY CAFE	315.9'
(2)	FREDERICK AVIATION F.B.O.	332.6'
(3)	HANGAR	311.7'
(4A)	T–HANGARS (TBR)	308.2'
(4B)	T–HANGARS (TBR)	313.0'
(4C)	T–HANGARS (TBR)	316.0
(4D)	ADVANCED HELICOPTER CONCEPTS (TBR)	309.8'
(5)	HANGAR*	314.5'
(6)	FREDERICK COMMUNITY COLLEGE*	331.7'
(7A)	T–HANGARS (11 UNITS TBR)	309.4'
(7B)	T–HANGARS (11 UNITS, TBR)	309.7'
(8A)	FREDERICK BUSINESS PARK BUILDINGS (TBR)	337.2'
(8B)	FREDERICK BUSINESS PARK BUILDINGS (TBR)	335.4'
(8C)	FREDERICK BUSINESS PARK BUILDINGS (TBR)	336.1'
(8D)	BAILES LANE BUILDING ACQUISITION (TBR)	340.3'
(8E)	BAILES LANE BUILDING ACQUISITION (TBR)	354.6'
(8F)	BAILES LANE BUILDING ACQUISITION (TBR)	345.9'
(8G)	BAILES LANE BUILDING ACQUISITION (TBR)	349.3
(8H)	BAILES LANE BUILDING ACQUISITION (TBR)	339.6'
(8I)	BAILES LANE BUILDING ACQUISITION (TBR)	334.5'
(9)	HANGAR*	308.6'
(10)	FUEL FARM	310.9'
(11)	MARYLAND STATE POLICE HANGAR	314.6'
(12)	GLIDER HANGAR	300.0'
(13)	MDE AIR MONITORING SHELTER	300.0'
(14A)	12 UNIT NESTED T–HANGAR	309.2'
(14B)	12 UNIT NESTED T–HANGAR	309.0'
(14C)	12 UNIT NESTED T–HANGAR	308.7'
(14D)	12 UNIT NESTED T–HANGAR	308.8'
(14E)	12 UNIT NESTED T–HANGAR	308.5'
(14F)	12 UNIT NESTED T–HANGAR	308.6'
(14G)	8 UNIT NESTED T–HANGAR	311.4'
(15)	STORAGE SHED (TBR)	318.0'
(16)	CORPORATE HANGAR	288.8'

*NOT CURRENTLY AIRPORT OWNED (TO BE ACQUIRED BY AIRPORT).

FUTURE BUILDING TABLE

NO.	DESCRIPTION	ELEVATION
(F1)	CORPORATE HANGAR (10,000 S.F.)	45'± AGL
(F2)	CORPORATE HANGAR (20,000 S.F.)	45'± AGL
(F3)	5 UNIT GROUP HANGAR (4,000 S.F. EACH)	30'± AGL
(F4)	12 UNIT GROUP I T–HANGARS	16'± AGL
(F5)	FUEL FARM EXPANSION WITH FUEL TRUCK PARKING PAD	15'± AGL
(F6)	4,000 S.F. AIRPORT VEHICLE STORAGE	20'± AGL
(F7)	AIR TRAFFIC CONTROL TOWER	400' MSL
(F8)	TERMINAL RE–DEVELOPMENT AREA	40'± AGL
(F9)	CORPORATE HANGAR (25,000 S.F.)	45'± AGL

THERE ARE NO OBSTACLE FREE ZONE PENETRATIONS

THRESHOLD SITING SURFACES

ALL APPROACHES WERE ANALYZED USING THE FOLLOWING THRESHOLD SITING SURFACE CRITERIA, SEE PLAN AND PROFILE SHEETS FOR ANALYSIS RESULTS.

RUNWAY 5: APPROACH END OF RUNWAYS EXPECTED TO SERVE LARGE AIRPLANES (VISUAL DAY/NIGHT); OR INSTRUMENT MINIMUMS GREATER THAN OR EQUAL TO 1 STATUTE MILE, DAY ONLY

RUNWAY 23: APPROACH END OF RUNWAYS EXPECTED TO ACCOMMODATE INSTRUMENT APPROACHES HAVING VISIBILITY MINIMUMS GREATER THAN OR EQUAL TO 3/4 MILE BUT LESS THAN 1 STATUTE MILE DAY OR NIGHT

RUNWAY 12–30: APPROACH END OF RUNWAYS SERVING AIRCRAFT 12,500 LBS OR GREATER (VISUAL DAY/NIGHT) OR INSTRUMENT MINIMUMS GREATER THAN OR EQUAL TO 1 STATUTE MILE, DAY ONLY

MONUMENT LOCATIONS

MONUMENT NO.	DESCRIPTION	COORDINATES (NAD83) NORTH	COORDINATES (NAD83) EAST	ELEV. (NAVD88)
1	NGS FDK A	634,801.9900	1,205,056.3600	305.68
2	NGS FDK B	637,781.6239	1,207,424.6639	288.14

STAGE DEVELOPMENT

- STAGE I (2006 – 2010)
- STAGE II (2011 – 2015)
- STAGE III (2016 – 2025)

400 0 200 400 800
SCALE IN FEET

RUNWAY DATA TABLE

RUNWAY DATA	RUNWAY 5–23 (FUTURE RUNWAY 5L–23R) EXISTING	RUNWAY 5–23 ULTIMATE	RUNWAY 12–30 EXISTING	RUNWAY 12–30 ULTIMATE	RUNWAY 5R–23L ULTIMATE
EFFECTIVE GRADIENT (%)	0.4% UP SW	0.45% UP SW	0.37% UP NW	0.27% UP NW	0.06% UP SW
MAXIMUM GRADE CHANGE	0.53% UP SW	0.8% UP SW	1.3% UP NW	1.07% UP SE	1.25% UP SW
ALL WEATHER WIND COVERAGE (%)	16 KNOT: 99.75%	SAME	13 KNOT: 98.58%	SAME	13 KNOT: 93.47%
MAX. ELEVATION (MSL)	306.0' (5 END)	309.0' (5 END)	293.95' (12 END)	293.95' (12 END)	290.9' (5R END)
RUNWAY LENGTH	5,220'	6,000	3,600'	3,730'	2,400
EFFECTIVE RUNWAY LENGTH	5,220'	6,000	3,600'	3,730'	2,400
RUNWAY WIDTH	100'	100'	75'	75'	100'
DISPLACED THRESHOLD	NONE/NONE	NONE/NONE	NONE/NONE	NONE/NONE	NONE/NONE
USABLE RUNWAY LENGTH	5,220'	6,000'	3,600'	3,730'	2,400'
SURFACE TYPE	ASPHALT	ASPHALT	ASPHALT	ASPHALT	TURF
PAVEMENT STRENGTH					
SINGLE WHEEL	60,000 LBS	60,000 LBS	30,000 LBS.	30,000 LBS.	N/A
PART 77 APPROACH SURFACE SLOPE	34:1/50:1	34:1/50:1	20:1/20:1	20:1/20:1	20:1/20:1
APPROACH MINIMUMS	1–MILE / 3/4–MILE	1–MILE / 3/4–MILE	VISUAL	VISUAL	VISUAL
VISUAL APPROACH AIDS	PAPI (P4L), REIL/ PAPI (P4L) REIL, ODALS	PAPI (P4L), REIL/ PAPI (P4L), REIL, MALSF	PAPI (P2L), REIL/ PAPI (P2L), REIL	PAPI (P2L), REIL/ PAPI (P2L), REIL	NONE
INSTRUMENT APPROACH AIDS	NONE/ILS	NONE/ILS	NONE/NONE	NONE/NONE	NONE/NONE

RUNWAY DATA TABLE (CONT'D)

RUNWAY DATA	RUNWAY 5–23 (FUTURE RUNWAY 5L–23R) EXISTING	RUNWAY 5–23 ULTIMATE	RUNWAY 12–30 EXISTING	RUNWAY 12–30 ULTIMATE	RUNWAY 5R–23L ULTIMATE
RUNWAY LIGHTING	HIRL	HIRL	MIRL	MIRL	NONE
RUNWAY MARKING	NON P/P	NON P/P	NON P/NON P	VISUAL/VISUAL	N/A
AIRPORT REFERENCE CODE (ARC)	C–II	C–III	B–II	B–II	A–II (SM A/C)
CRITICAL AIRCRAFT BY WINGSPAN:	GULFSTREAM III	GLOBAL EXPRESS	CESSNA CITATION II	CESSNA CITATION II	SCHWEIZER 2–33
CRITICAL AIRCRAFT BY WEIGHT:	GULFSTREAM III	GLOBAL EXPRESS	CESSNA CITATION II	CESSNA CITATION II	PIPER PAWNE
CRITICAL AIRCRAFT BY APP. SPEED:	GULFSTREAM III	GULFSTREAM V	CESSNA CITATION II	CESSNA CITATION II	PIPER PAWNE
STAGE LENGTH	1,000 NM	1,000 NM	500 NM	500 NM	N/A
RUNWAY OBJECT FREE AREA (ROFA)					
LENGTH BEYOND RUNWAY	1,000'	1,000'	300'	300'	300'
WIDTH	800'	800'	500'	500'	500'
RUNWAY SAFETY AREA (RSA)					
LENGTH BEYOND RUNWAY	1'000'	1'000'	300'	300'	300'
WIDTH	500'	500'	150'	150'	150'
OBJECT FREE ZONE (OFZ)	NO OFZ PENETRATIONS	NO OFZ PENETRATIONS	NO OFZ PENETRATIONS	NO OFZ PENETRATIONS	NO OFZ PENETRATIONS
FAR PART 77 CATEGORY	NP/ CAT I P	NP/CAT I P	VISUAL	VISUAL	VISUAL
TDZ ELEVATION (MSL)	303.0' / 287.4'	304.9' / 285.7'	288.4' / 285.3'	288.4' / 285.3'	N/A
RUNWAY GLIDE PATH ANGLE	3°/3°	3°/3°	3°/4°	3°/3°	N/A
LINE OF SIGHT VIOLATIONS	NONE	NONE	NONE	NONE	NONE

FAA's approval of this airport layout plan (ALP) represents acceptance of the general location of the future facilities depicted. During the preliminary design phase, the airport owner is required to resubmit for approval the final locations, height and exterior finishes of structures. FAA's concerns are obstructions and impact on electronic aids, which could adversely affect the safety, efficiency or utility of the airport.

SPONSORS APPROVAL
CITY OF FREDERICK

NAME DATE

FEDERAL AVIATION ADMINISTRATION (FAA)

NAME DATE

MARYLAND AVIATION ADMINISTRATION (MAA)

NAME DATE

REVISIONS	DATE	DESCRIPTION	BY	APP.

FREDERICK MUNICIPAL AIRPORT
FREDERICK, MARYLAND

AIRPORT LAYOUT PLANS

AIRPORT LAYOUT PLAN

DESIGNED	DRAWN	CHECKED	APPROVED
K.E.B.	K.E.B.	M.J.W.	M.J.W.
SCALE: AS SHOWN		A.I.P. NO. 3–24–0017–021	
DATE: AUGUST 2007		SHEET 2 OF 15	

URS
CONSULTING ENGINEERING AND PLANNING
4 NORTH PARK DRIVE
HUNT VALLEY, MD 21030
PH: 410–785–7220

FILE NAME: P:\D100001065\15\CAD\ALP UPDATE\C–LP–01–COLOR–03–19–07.dwg LAYOUT NAME: 24x36 USER: kenneth_brazeau PLOTTED: Wednesday, September 26, 2007 – 8:04am