CARROLL COUNTY REGIONAL AIRPORT

WESTMINSTER, MARYLAND

AIRPORT LAYOUT PLAN

AIP PROJECT NO. 3-24-0028-028

MAA PROJECT NO. MAA-GR-14-018

DELTA PROJECT NO. 13063

FOR THE

CARROLL COUNTY BOARD OF COMISSIONERS

MARCH 2015

U. S. Department of Transportation

Federal Aviation Administration

WASHINGTON AIRPORTS DISTRICT OFFICE
23723 Air Freight Lane, Suite 210
Dulles, Virginia 20166
Telephone: 703/661-1354
Fax: 703/661-1370

July 28, 2015

RECEIVED AUG 01 2015 By

Mr. Joseph D. McKelvey
Airport Manager
Carroll County Regional Airport
200 Airport Drive – Box 8
Westminster, Maryland 21157

Re: Airport Layout Plan (ALP) Revision
Carroll County Regional Airport
Westminster, Maryland

Dear Mr. McKelvey:

Our office is in receipt of the proposed ALP for the Carroll County Regional Airport, Westminster, Maryland. The revision, dated March 2015, identifies the following changes to the previously approved ALP dated June 2008. Those primary changes include the addition of phasing for the new runway, miscellaneous reconfiguration of proposed hangar and apron areas, and reconfiguration of various connector taxiways to comply with recent changes in Advisory Circular 150/5300-13A. This ALP is being considered an interim revision to the current ALP and is hereby approved with the following conditions

The contents of the ALP revision do not necessarily reflect the official views or policies of the FAA. Approval of the ALP by the FAA does not in any way constitute a commitment on the part of the United States to participate in any development depicted therein. No additional modifications to FAA design standards are noted on the revised ALP.

All proposed development identified on the ALP requires environmental review and shall not be undertaken without prior written environmental approval by the FAA. Approval of the ALP revision does not relieve any sponsor responsibilities for ensuring compatible use of land adjacent to or in the vicinity of the airport.

This determination does not relieve the sponsor of any compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local governing body.

You are reminded of your continuing responsibility to keep your ALP current at all times. Each revision must be submitted to this office for review and approval prior to the start of construction. Your ALP should be reviewed at regular intervals and updated as necessary.

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

If you should have any questions in regards to this letter, please do not hesitate to contact me at (703) 661-1359.

Sincerely,

Original Signed By
Thomas A. Priscilla

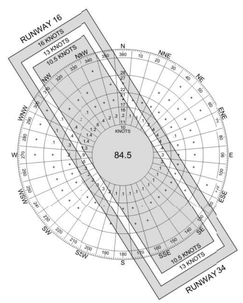
Thomas A. Priscilla, Jr.
Washington Airports District Office

cc: Ashish Solanki, MAA
Roy Lewis, Delta

MARYLAND AVIATION ADMINISTRATION	
ASHISH SOLANKI, DIRECTOR	JULY 28, 2015
APPROVED	DATE

CARROLL COUNTY	
JOSEPH D. MCKELVEY, AIRPORT MANAGER	JULY 28, 2015
APPROVED	DATE

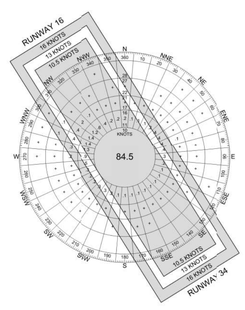
ALL WEATHER WINDROSE



RUNWAY	10.5 KNOTS	13 KNOTS	16 KNOTS
RUNWAY 16-34	93.32%	96.68%	99.26%

WIND DATA PERIOD: 1995-2004
SOURCE: NATIONAL CLIMATIC DATA CENTER (NCDC)
STATION: BALTIMORE, MARYLAND

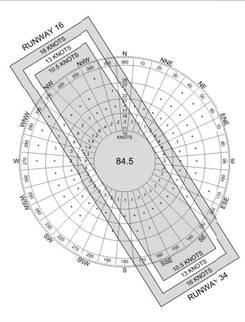
VFR WINDROSE



RUNWAY	10.5 KNOTS	13 KNOTS	16 KNOTS
RUNWAY 16-34	93.64%	96.94%	99.34%

WIND DATA PERIOD: 1995-2004
SOURCE: NATIONAL CLIMATIC DATA CENTER (NCDC)
STATION: BALTIMORE, MARYLAND

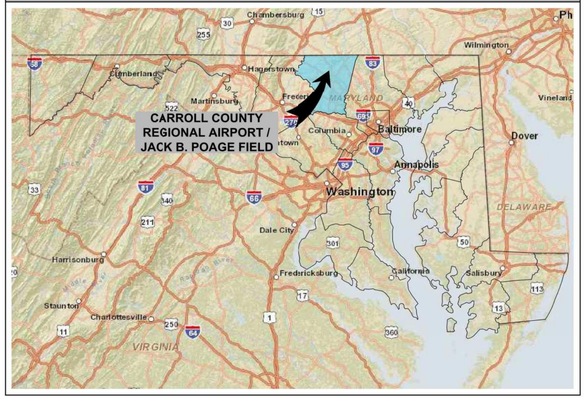
IFR WINDROSE



RUNWAY	10.5 KNOTS	13 KNOTS	16 KNOTS
RUNWAY 16-34	89.22%	93.52%	98.38%

WIND DATA PERIOD: 1995-2004
SOURCE: NATIONAL CLIMATIC DATA CENTER (NCDC)
STATION: BALTIMORE, MARYLAND

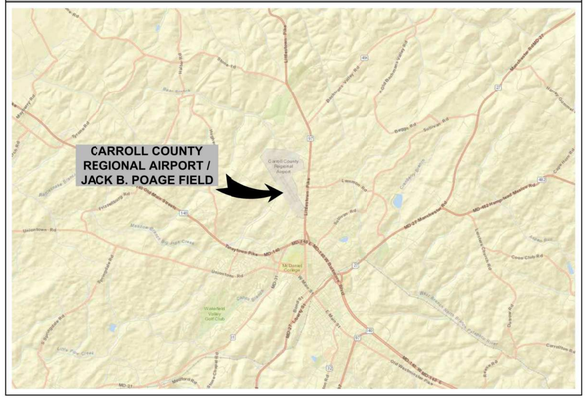
LOCATION MAP



INDEX

SHEET NO.	TITLE
1	COVER SHEET
2	EXISTING AIRPORT LAYOUT
3	AIRPORT LAYOUT PLAN
4	TERMINAL AREA PLAN
5	AIRPORT AIRSPACE DRAWING
6	AIRPORT AIRSPACE DRAWING
7	RUNWAY 16 INNER APPROACH (EXISTING)
8	RUNWAY 34 INNER APPROACH (EXISTING)
9	RUNWAY 16 INNER APPROACH (FUTURE)
10	RUNWAY 34 INNER APPROACH (FUTURE)
11	RUNWAY DEPARTURE SURFACE (EXISTING)
12	RUNWAY DEPARTURE SURFACE (FUTURE)
13	OBSTRUCTION CHARTS (EXISTING)
14	OBSTRUCTION CHARTS (FUTURE)
15	OBSTRUCTION CHARTS - RUNWAY DEPART, HORIZ, CONICAL (FUTURE)
16	LAND USE
17	AIRPORT PROPERTY MAP

VICINITY MAP



Carroll County Regional Airport · Jack B. Poage Field ·

CARROLL COUNTY REGIONAL AIRPORT / JACK B. POAGE FIELD
200 AIRPORT DRIVE
WESTMINSTER, MARYLAND 21157

COVER SHEET

CARROLL COUNTY REGIONAL AIRPORT
WESTMINSTER, MARYLAND

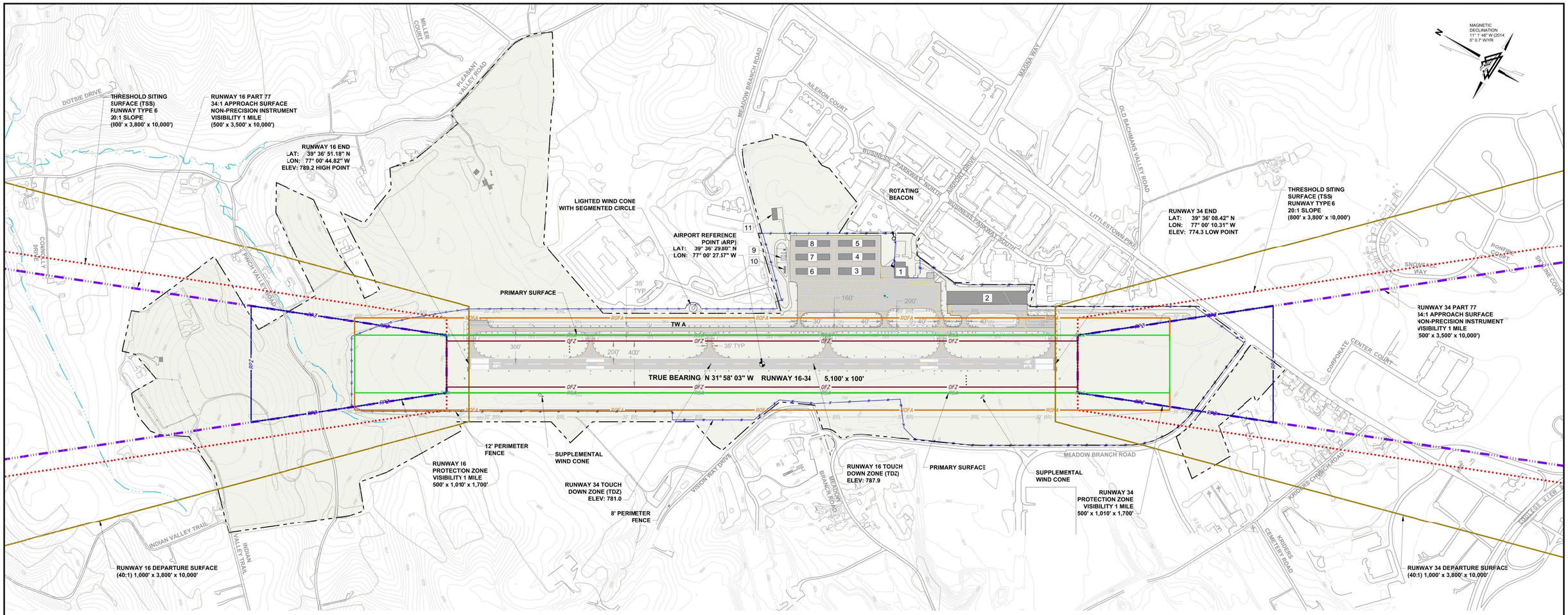
DELTA AIRPORT CONSULTANTS, INC.
www.deltaairport.com

DRAWN BY:	RWW	SCALE:	NONE
CHECKED BY:	RGL	DATE:	MARCH 2015

SHEET 1 OF 17

N:\13063\04 CAD\13063-cov.dwg, L1, 10/19/2016 7:45:52 AM, rww

DRAWING: 13063-cov.dwg LAYOUT: L1
USER: Michael L. Hodges DMW JET Print FAA approval of ALP 07-28-2015-1.jpg; DMW Location Map Image.PNG; DMW Vicinity Map Image.PNG; DMW-bw.tif;



RUNWAY DATA TABLE

DESCRIPTION		RUNWAY 16	RUNWAY 34
RUNWAY DESIGN CODE (RDC)		C - II, 5,000	C - II, 5,000
RUNWAY REFERENCE CODE (RRC)		C - II, 1 MILE	C - II, 1 MILE
PAVEMENT STRENGTH/ MATERIAL TYPE	STRENGTH	SINGLE WHEEL 22,000 LBS (PCN DATA NOT AVAILABLE)	
	SURFACE	ASPHALT (GROOVED)	
EFFECTIVE GRADIENT (%)		0.29	0.29
WIND COVERAGE (%)		IFR: (16 KNOTS) 98.38%	IFR: (16 KNOTS) 98.38%
		ALL WEATHER: (16 KNOTS) 99.26%	ALL WEATHER: (16 KNOTS) 99.26%
RUNWAY LENGTH		5,100'	
RUNWAY WIDTH		100'	
RUNWAY SAFETY AREA (RSA)		500' (W) x 1,000' (L) BEYOND RW END	500' (W) x 1,000' (L) BEYOND RW END
RUNWAY END COORDINATES (NAD 83/ NAVD 88)	LATITUDE	39° 36' 51.18" N	39° 36' 08.42" N
	LONGITUDE	77° 00' 44.82" W	77° 00' 10.31" W
RUNWAY LIGHTING		MIRL	
RUNWAY PROTECTION ZONE		500' x 1,010' x 1,700'	500' x 1,010' x 1,700'
RUNWAY MARKING		NON-PRECISION	NON-PRECISION
14 CFR PART 77 APPROACH SLOPE		34:1	34:1
PART 77 APPROACH TYPE		NON-PRECISION	NON-PRECISION
VISIBILITY MINIMUMS		1 MILE	1 MILE
AERONAUTICAL SURVEY TYPE		VERTICALLY GUIDED	VERTICALLY GUIDED
RUNWAY DEPARTURE SURFACE		40:1	40:1
RUNWAY OBJECT FREE AREA (ROFA)		800' (W) x 1,000' (L) BEYOND RW END	800' (W) x 1,000' (L) BEYOND RW END
OBSTACLE FREE ZONE (OFZ)		400' (W) x 200' (L) BEYOND RW END	400' (W) x 200' (L) BEYOND RW END
THRESHOLD SITING SURFACE (TSS)		800' x 3,800' x 10,000'	800' x 3,800' x 10,000'
VISUAL APPROACH AIDS		REIL, PAPI (4L)	REIL, PAPI (4L)
INSTRUMENT APPROACH AIDS		RNAV (GPS)	RNAV (GPS), VOR
TOUCHDOWN ZONE (TDZ) ELEVATION		787.9	781.0
TAXIWAY WIDTH		35'	
TAXIWAY SAFETY AREA (TSA) WIDTH		79'	
TAXIWAY OBJECT FREE AREA (TOFA) WIDTH		131'	
TAXIWAY CENTERLINE TO TAXILANE CENTERLINE WIDTH		160', 200' (APRON)	
TAXIWAY LIGHTING		MITL	

NOTES

1. THERE ARE NO KNOWN OBSTACLE FREE ZONE (OFZ) OBJECTS THAT ARE PENETRATIONS.
2. THERE ARE NO KNOWN THRESHOLD SITING SURFACE (TSS) PENETRATIONS.
3. ALL ELEVATIONS ARE IN FEET ABOVE MEAN SEA LEVEL (MSL).
4. ALL ELEVATIONS ARE IN ACCORDANCE WITH NATIONAL MAP ACCURACY STANDARDS. SPOT ELEVATIONS AND GROUND CONTOURS ARE DERIVED FROM AERIAL PHOTOGRAMMETRY AND ARE APPROXIMATE. GROUND SURVEYS ARE RECOMMENDED TO VERIFY ACCURACY.
5. ALL LATITUDE AND LONGITUDE COORDINATES ARE NAD 83/ NAVD88.
6. TOPOGRAPHY AND PLANIMETRICS OBTAINED FROM PREVIOUS AIRPORT LAYOUT PLAN AERIAL SURVEYS FROM HARFORD AERIALS SURVEYS, INC., DATED OCTOBER 2004.
7. LEGEND ELEMENTS REPRESENT DEPICTIONS ON DRAWING BUT MAY VARY IN SIZE DUE TO SCALING ON DRAWING.

MODIFICATIONS OF DESIGN STANDARDS

NO.	STANDARD MODIFIED	FAA STANDARDS	EXISTING CONDITION	FUTURE ACTION	DATE APPROVED
--	NONE	NONE	NONE	NONE	NONE

AIRPORT DATA TABLE

AIRPORT REFERENCE CODE (ARC)		C - II
MEAN MAX. TEMPERATURE HOTTEST MONTH		85° F (JULY)
AIRPORT ELEVATION		789.2
AIRPORT NAVIGATIONAL AIDS (COUNTY OWNED)		MIRL, REIL, PAPI, ROTATING BEACON, LIGHTED WIND INDICATOR, RNAV (GPS), VOR
AIRPORT REFERENCE POINT (NAD 83/ NAVD 88)	LATITUDE	39° 36' 29.80" N
	LONGITUDE	77° 00' 27.57" W
CRITICAL AIRCRAFT		GRUMMAN (G-III)
AIRPORT MAGNETIC DECLINATION		11° 1' 46" (2014), 0° 0.7' W/ YR
NPIAS SERVICE LEVEL		REGIONAL
STATE SERVICE LEVEL		RELIEVER

FACILITIES TABLE

#	FACILITY NAME	TOP ELEV
1	ADMINISTRATION BUILDING/ FBO	810
2	CORPORATE HANGARS (7 UNITS)	808
3	T-HANGARS (14 UNITS)	806
4	T-HANGARS (14 UNITS)	804
5	T-HANGARS (14 UNITS)	801
6	T-HANGARS (14 UNITS)	804
7	T-HANGARS (14 UNITS)	803
8	T-HANGARS (14 UNITS)	802
9	FUEL FARM	790
10	CIVIL AIR CONTROL BUILDING	800
11	AIRPORT OPERATIONS CENTER	800

LEGEND

DESCRIPTION	EXISTING
AIRPORT BUILDINGS	
AIRPORT PROPERTY	
PAVEMENT	
RUNWAY CENTERLINE	
TAXIWAY/ TAXILANE MARKING	
BUILDING RESTRICTION LINE (BRL)	BRL
FENCE	
FENCE (8 FT PERIMETER)	
FENCE (12 FT PERIMETER)	
GROUND ELEVATION CONTOURS	
OBSTACLE FREE ZONE (OFZ)	OFZ
PART 77 APPROACH SURFACE	
RUNWAY DEPARTURE SURFACE	
RUNWAY OBJECT FREE AREA (ROFA)	ROFA
RUNWAY PROTECTION ZONE (RPZ)	RPZ
RUNWAY SAFETY AREA (RSA)	RSA
STREAM	
TAXIWAY OBJECT FREE AREA (TOFA)	TOFA
TAXIWAY SAFETY AREA (TSA)	TSA
THRESHOLD SITING SURFACE (TSS)	
TREE LINE	
AIRPORT REFERENCE POINT (ARP)	
ROTATING BEACON	
VISUAL APPROACH SLOPE INDICATOR (PAPI)	
WIND CONE/ WINDSOCK	

400 0 400 800
SCALE: 1"=400' FEET

NO.	REVISIONS	BY	APP.	DATE

EXISTING AIRPORT LAYOUT

CARROLL COUNTY REGIONAL AIRPORT
WESTMINSTER, MARYLAND

DELTA AIRPORT CONSULTANTS, INC.
www.deltaairport.com

DRAWN BY: RWW	SCALE: 1" = 400'	SHEET 2 OF 17
CHECKED BY: RGL	DATE: MARCH 2015	

DRAWING: 13063-alp-ex.dwg LAYOUT: L1
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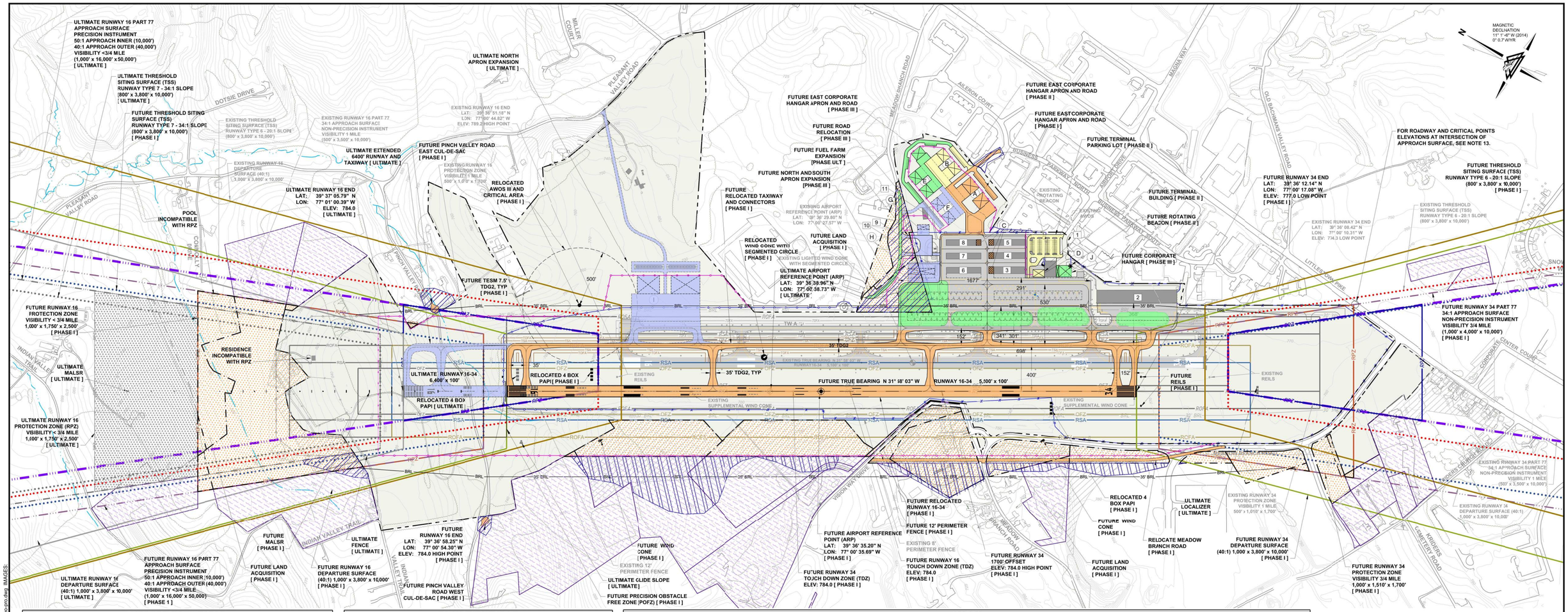

AIRPORT DATA TABLE

DATA		EXISTING	FUTURE	ULTIMATE
AIRPORT REFERENCE CODE (ARC)		C - II	C - II	C - II
MEAN MAX. TEMPERATURE HOTTEST MONTH		85° F (JULY)	85° F (JULY)	85 F (JULY)
AIRPORT ELEVATION		789	784	784
AIRPORT NAVIGATIONAL AIDS		MIRL, REIL, PAPI, ROTATING BEACON, LIGHTED WIND INDICATOR, RNAV (GPS), VOR	MIRL, REIL, PAPI, ROTATING BEACON, LIGHTED WIND INDICATOR, RNAV (GPS), VOR, MALSR	MIRL, REIL, PAPI, ROTATING BEACON, LIGHTED WIND INDICATOR, RNAV (GPS), VOR, MALSR, GLIDE SLOPE, LCCALIZER
AIRPORT REFERENCE POINT (NAD 83/ NAVD 88)	LATITUDE	39° 36' 29.80" N	39° 36' 35.20" N	39° 36' 38.96" N
	LONGITUDE	77° 00' 27.57" W	77° 00' 35.69" W	77° 00' 38.73" W
CRITICAL AIRCRAFT		GRUMMAN (G-III)	CHALLENGER 605	CHAL.ENGER 605
AIRPORT MAGNETIC DECLINATION		11° 1'-46" (2014) CHANGE 0° 0.7 W/ YR	CHANGE 0° 0.7 W/ YR	CHANGE 0° 0.7 W/ YR
NFIAS SERVICE LEVEL		REGIONAL	REGIONAL	REGIONAL
STATE SERVICE LEVEL		RELIEVER	RELIEVER	RELIEVER

FACILITIES TABLE

EXISTING			FUTURE			
REF	FACILITY NAME	TOP ELEV	REF	FACILITY NAME	TOP ELEV (APPROX)	
1	ADMINISTRATION BUILDING/ FBO	813	A	CORPORATE HANGARS [I]	808	±
2	CORPORATE HANGARS (7 UNITS)	808	B	BOX HANGARS [III]	808	±
3	T-HANGARS (14 UNITS)	805	C	T- HANGARS DEMOLITION [I]	806	±
4	T-HANGARS (14 UNITS)	804	D	TERMINAL BUILDING [II]	810	±
5	T-HANGARS (14 UNITS)	801	E	BOX HANGARS [III]	806	±
6	T-HANGARS (14 UNITS)	804	F	BOX HANGARS [ULT]	806	±
7	T-HANGARS (14 UNITS)	803	G	RELOCATED MAINTENANCE EQUIPMENT STORAGE (MES) BUILDING [ULT]	806	±
8	T-HANGARS (14 UNITS)	802	H	T- HANGARS [ULT]	806	±
9	FUEL FARM	790	I	CORPORATE HANGARS [ULT]	824	±
10	CIVIL AIR CONTROL BUILDING	800	J	CORPORATE HANGARS [III]	808	±
11	AIRPORT OPERATION CENTER	800				

RUNWAY DATA TABLE

DESCRIPTION		EXISTING		FUTURE		ULTIMATE	
		RUNWAY 16	RUNWAY 34	RUNWAY 16	RUNWAY 34	RUNWAY 16	RUNWAY 34
RUNWAY DESIGN CODE (RDC)		C - II, 5,000	C - II, 5,000	C - II - 2,400	C - II - 4,000	C - II - 2,400	C - II - 4,000
RUNWAY REFERENCE CODE (RRC)		C - II, 1 MILE	C - II, 1 MILE	C - II, <3/4 MILE	C - II, 3/4 MILE	C - II, <3/4 MILE	C - II, 3/4 MILE
PAVEMENT STRENGTH/ MATERIAL TYPE	STRENGTH	SINGLE WHEEL 22,000 LBS	SINGLE WHEEL 22,000 LBS	DUAL WHEEL 91,000 LBS	DUAL WHEEL 91,000 LBS	DUAL WHEEL 91,000 LBS	DUAL WHEEL 91,000 LBS
	SURFACE	ASPHALT (GROOVED)	ASPHALT (GROOVED)	ASPHALT (GROOVED)	ASPHALT (GROOVED)	ASPHALT (GROOVED)	ASPHALT (GROOVED)
EFFECTIVE GRADIENT (%)		0.29	0.29	0.39	0.39	0.39	0.39
WIND COVERAGE (%)		IFR: (16 KNOTS) 98.38%	IFR: (16 KNOTS) 98.38%	IFR: (16 KNOTS) 98.38%	IFR: (16 KNOTS) 98.38%	IFR: (16 KNOTS) 98.38%	IFR: (16 KNOTS) 98.38%
		ALL WEATHER: (16 KNOTS) 99.26%	ALL WEATHER: (16 KNOTS) 99.26%	ALL WEATHER: (16 KNOTS) 99.26%	ALL WEATHER: (16 KNOTS) 99.26%	ALL WEATHER: (16 KNOTS) 99.26%	ALL WEATHER: (16 KNOTS) 99.26%
RUNWAY LENGTH		5,100'		5,500'		6,400'	
RUNWAY WIDTH		100'		100'		100'	
RUNWAY SAFETY AREA (RSA)		500' (W) x 1,000' (L) BEYOND RW END	500' (W) x 1,000' (L) BEYOND RW END	300' (W) x 1,000' (L) BEYOND RW END	500' (W) x 1,000' (L) BEYOND RW END	500' (W) x 1,000' (L) BEYOND RW END	500' (W) x 1,000' (L) BEYOND RW END
RUNWAY END COORDINATES (NAD 83/ NAVD 88)	LATITUDE	39° 36' 51.18" N	39° 36' 08.42" N	39° 36' 58.25" N	39° 36' 12.14" N	39° 37' 05.79" N	39° 36' 12.14" N
	LONGITUDE	77° 00' 44.82" W	77° 00' 10.31" W	77° 00' 54.30" W	77° 00' 17.08" W	77° 01' 00.39" W	77° 00' 17.08" W
RUNWAY LIGHTING		MIRL		MIRL		MIRL	
RUNWAY PROTECTION ZONE		500' x 1,010' x 1,700'	500' x 1,010' x 1,700'	1,000' x 1,750' x 2,500'	1,000' x 1,510' x 1,700'	1,000' x 1,750' x 2,500'	1,000' x 1,510' x 1,700'
RUNWAY MARKING		NON-PRECISION	NON-PRECISION	PRECISION	NON-PRECISION	PRECISION	NON-PRECISION
14 CFR PART 77 APPROACH SLOPE		34:1	34:1	50:1	34:1	50:1	34:1
PART 77 APPROACH TYPE		NON-PRECISION	NON-PRECISION	PRECISION	NON-PRECISION	PRECISION	NON-PRECISION
VISIBILITY MINIMUMS		1 MILE	1 MILE	<3/4 MILE	3/4 MILE	<3/4 MILE	3/4 MILE
AERONAUTICAL SURVEY TYPE		VERTICALLY GUIDED	VERTICALLY GUIDED	VERTICALLY GUIDED	VERTICALLY GUIDED	VERTICALLY GUIDED	VERTICALLY GUIDED
RUNWAY DEPARTURE SURFACE		40:1	40:1	40:1	40:1	40:1	40:1
RUNWAY OBJECT FREE AREA (ROFA)		800' (W) x 1,000' (L) BEYOND RW END	800' (W) x 1,000' (L) BEYOND RW END	800' (W) x 1,000' (L) BEYOND RW END	800' (W) x 1,000' (L) BEYOND RW END	800' (W) x 1,000' (L) BEYOND RW END	800' (W) x 1,000' (L) BEYOND RW END
OBSTACLE FREE ZONE (OFZ)		400' (W) x 200' (L) BEYOND RW END	400' (W) x 200' (L) BEYOND RW END	400' (W) x 200' (L) BEYOND RW END	400' (W) x 200' (L) BEYOND RW END	400' (W) x 200' (L) BEYOND RW END	400' (W) x 200' (L) BEYOND RW END
THRESHOLD SITING SURFACE (TSS)		800' x 3,800' x 10,000'	800' x 3,800' x 10,000'	800' x 3,800' x 10,000'	800' x 3,800' x 10,000'	800' x 3,800' x 10,000'	800' x 3,800' x 10,000'
VISUAL APPROACH AIDS		REIL, PAPI (4L)	REIL, PAPI (4L)	MALSR, PAPI (4L)	REIL, PAPI (4L)	MALSR, PAPI (4L)	REIL, PAPI (4L)
INSTRUMENT APPROACH AIDS		RNAV (GPS)	RNAV (GPS), VOR	RNAV (GPS)	RNAV (GPS), VOR	RNAV (GPS), GLIDE SLOPE LOCALIZER	RNAV (GPS), VOR
TOUCHDOWN ZONE (TDZ) ELEVATION		787.9	781.0	784.0	784.0	784.0	784.0
TAXIWAY WIDTH		35'		35'		35'	
TAXIWAY SAFETY AREA (TSA) WIDTH		79'		79'		79'	
TAXIWAY OBJECT FREE AREA (TOFA) WIDTH		131'		131'		131'	
TAXIWAY CENTERLINE TO TAXILANE CENTERLINE WIDTH		160', 200' (APRON)		152', 341', 531' (APRON)		152', 341', 531' (APRON)	
TAXIWAY LIGHTING		EDGE, MITL		EDGE, MITL		EDGE, MITL	

NOTES

1. FAA'S APPROVAL OF THIS AIRPORT LAYOUT PLAN (ALP) REPRESENTS ACCEPTANCE OF THE GENERAL LOCATION OF THE ULTIMATE FACILITIES DEPICTED. DURING THE PRELIMINARY DESIGN PHASE, THE AIRPORT OWNER IS REQUIRED TO SUBMIT FOR APPROVAL THE FINAL LOCATIONS, HEIGHTS AND EXTERIOR FINISHES OF STRUCTURES. FAA'S CONCERNS ARE OBSTRUCTIONS, IMPACT ON ELECTRONIC AIDS AND ADVERSE EFFECT ON CONTROLLER VIEW OF AIRCRAFT APPROACHES AND GROUND MOVEMENTS, WHICH COULD ADVERSELY AFFECT THE SAFETY, EFFICIENCY OR UTILITY OF THE AIRPORT.
2. ALP APPROVAL BY THE FAA IS CONDITIONED ON ACKNOWLEDGEMENT THAT ANY DEVELOPMENT ON AIRPORT PROPERTY REQUIRING FEDERAL ENVIRONMENTAL APPROVAL MUST RECEIVE SUCH WRITTEN APPROVAL FROM FAA PRIOR TO COMMENCEMENT OF THE SUBJECT DEVELOPMENT. THIS ALP APPROVAL IS ALSO CONDITIONED ON ACCEPTANCE OF THE PLAN UNDER LOCAL LAND USE LAWS.
3. ALL ELEVATIONS ARE IN FEET ABOVE MEAN SEA LEVEL.
4. ALL ELEVATIONS ARE IN ACCORDANCE WITH NATIONAL MAP ACCURACY STANDARDS. SPOT ELEVATIONS AND GROUND CONTOURS ARE DERIVED FROM AERIAL PHOTOGRAMMETRY AND ARE APPROXIMATE. GROUND SURVEYS ARE RECOMMENDED TO VERIFY ACCURACY.
5. ALL LATITUDE AND LONGITUDE COORDINATES ARE NAD 83/ NAVD 88.
6. THERE ARE NO KNOWN OBJECTS THAT PENETRATE THE THRESHOLD SITING SURFACE.
7. TOPOGRAPHY AND PLANIMETRICS OBTAINED FROM AERIAL SURVEYS FROM WOOLPERT INC., DATED FEBRUARY 7, 2014.
8. ALL ULTIMATE DEVELOPMENT MUST MEET THE FULL DESIGN STANDARDS LISTED IN FAA AC 150/300-13A.
9. THE BUILDING RESTRICTION LINE (BRL) SHOULD BE LOCATED ON AN AIRPORT LAYOUT PLAN TO IDENTIFY SUITABLE LOCATIONS FOR BUILDING AREAS ON AIRPORT PROPERTY. THE BRL IS DEPICTED BASED ON FAR PART 77 SURFACE FOR A GIVEN DISTANCE FROM THE RUNWAY CENTERLINE. SPECIFIC SITE DEVELOPMENT MUST BE FURTHER EVALUATED BASED ON TOP ELEVATION OF FUTURE STRUCTURE. IT IS RECOMMENDED THAT THE BRL ENCOMPASS THE RUNWAY PROTECTION ZONES, THE RUNWAY VISIBILITY ZONE, AND AREAS REQUIRED FOR AIRPORT TRAFFIC CONTROL TOWER CLEAR LINES OF SIGHT.
10. THE TOP ELEVATIONS FOR FUTURE FACILITIES ARE APPROXIMATE.
11. THERE ARE NO KNOWN OBSTACLE FREE ZONE (OFZ) OBJECTS THAT ARE PENETRATIONS.
12. ULTIMATE FACILITY DEVELOPMENT CONCEPTS ARE DEPICTED FOR PLANNING PURPOSES ONLY. IT SHOULD BE NOTED THAT TERRAIN CONDITIONS (ELEVATION OR DENSITY) MAY IMPACT FINANCIAL FEASIBILITY OF FACILITES AS DEPICTED. IN ADDITION, THE BUILDING HEIGHTS ARE TO BE REASSESSED AT THE TIME OF FACILITY DEVELOPMENT TO ENSURE THERE ARE NO PENETRATIONS TO THE CURRENT 14 CFR PART 77 SURFACE.
13. ROADWAYS ELEVATIONS WHERE THEY INTERSECT APPROACH SURFACES, EXTENDED RUNWAY CENTERLINE AND AT THE MOST CRITICAL POINTS ARE DEPICTED ON THE INNER APPROACH PLAN AND PROFILE SHEETS.
14. LEGEND ELEMENTS REPRESENT DEPICTIONS ON DRAWING BUT MAY VARY IN SIZE DUE TO SCALING ON DRAWING.
15. FUTURE RUNWAY MEETS 30TH FAA AND MAA LINE OF SIGHT REQUIREMENTS.

LEGEND

DESCRIPTION	EXISTING	FUTURE	ULTIMATE
AIRPORT BUILDINGS			
AIRPORT PROPERTY			
AVIGATIONAL EASEMENTS			SAME
DEMOLITION	NA		NA
PAVEMENT			
RUNWAY CENTERLINE			
TAXIWAY/ TAXILANE MARKING			
BUILDING RESTRICTION LINE (BRL)	30' BRL	35' BRL	35' BRL
FENCE		NA	NA
FENCE (8 FT PERIMETER)		NA	NA
FENCE (12 FT PERIMETER)			
GROUND ELEVATION CONTOURS		NA	NA
OBSTACLE FREE ZONE (OFZ)	OFZ	OFZ	OFZ
PART 77 APPROACH SURFACE			
PRECISION OBSTACLE FREE ZONE (POFZ)	NA		
RUNWAY DEPARTURE SURFACE			
RUNWAY OBJECT FREE AREA (ROFA)	ROFA	ROFA	ROFA
RUNWAY PROTECTION ZONE (RPZ)	RPZ	RPZ	RPZ
RUNWAY SAFETY AREA (RSA)	RSA	RSA	RSA
STREAM		NA	NA
TAXIWAY OBJECT FREE AREA (TOFA)	TOFA	TOFA	TOFA
TAXIWAY SAFETY AREA (TSA)	TSA	TSA	TSA
THRESHOLD SITING SURFACE (TSS)			
TREE LINE		NA	NA
AIRPORT REFERENCE POINT (ARP)			
AUTOMATED WEATHER OBSERVING SYSTEM (AWOS)			SAME
ROTATING BEACON			SAME
VISUAL APPROACH SLOPE INDICATOR (PAPI)			SAME
WIND CONE			SAME
WIND CONE WITH SEGMENTED CIRCLE			SAME

DEVELOPMENT PROGRAM

PHASE I DEVELOPMENT	I
PHASE II DEVELOPMENT	II
PHASE III DEVELOPMENT	III
ULTIMATE DEVELOPMENT	U

CARROLL COUNTY	
JOSEPH D. MCKELVEY, AIRPORT MANAGER	JULY 28, 2015
NAME AND TITLE APPROVAL	DATE

MARYLAND AVIATION ADMINISTRATION	
ASHISH SOLANKI, DIRECTOR	JULY 28, 2015
NAME AND TITLE APPROVAL	DATE

FEDERAL AVIATION ADMINISTRATION	
THOMAS A. PRISCILLA JR., METRO ENGINEER	JULY 28, 2015
NAME AND TITLE APPROVAL	DATE

400 0 400 800
SCALE: 1"=400' FEET

NO.	REVISIONS	BY	APP.	DATE

AIRPORT LAYOUT PLAN

CARROLL COUNTY REGIONAL AIRPORT
WESTMINSTER, MARYLAND

DELTA AIRPORT CONSULTANTS, INC.
www.deltaairport.com

DRAWN BY: RWW	SCALE: 1" = 400'	SHEET 3	OF 17
CHECKED BY: RGL	DATE: MARCH 2015		

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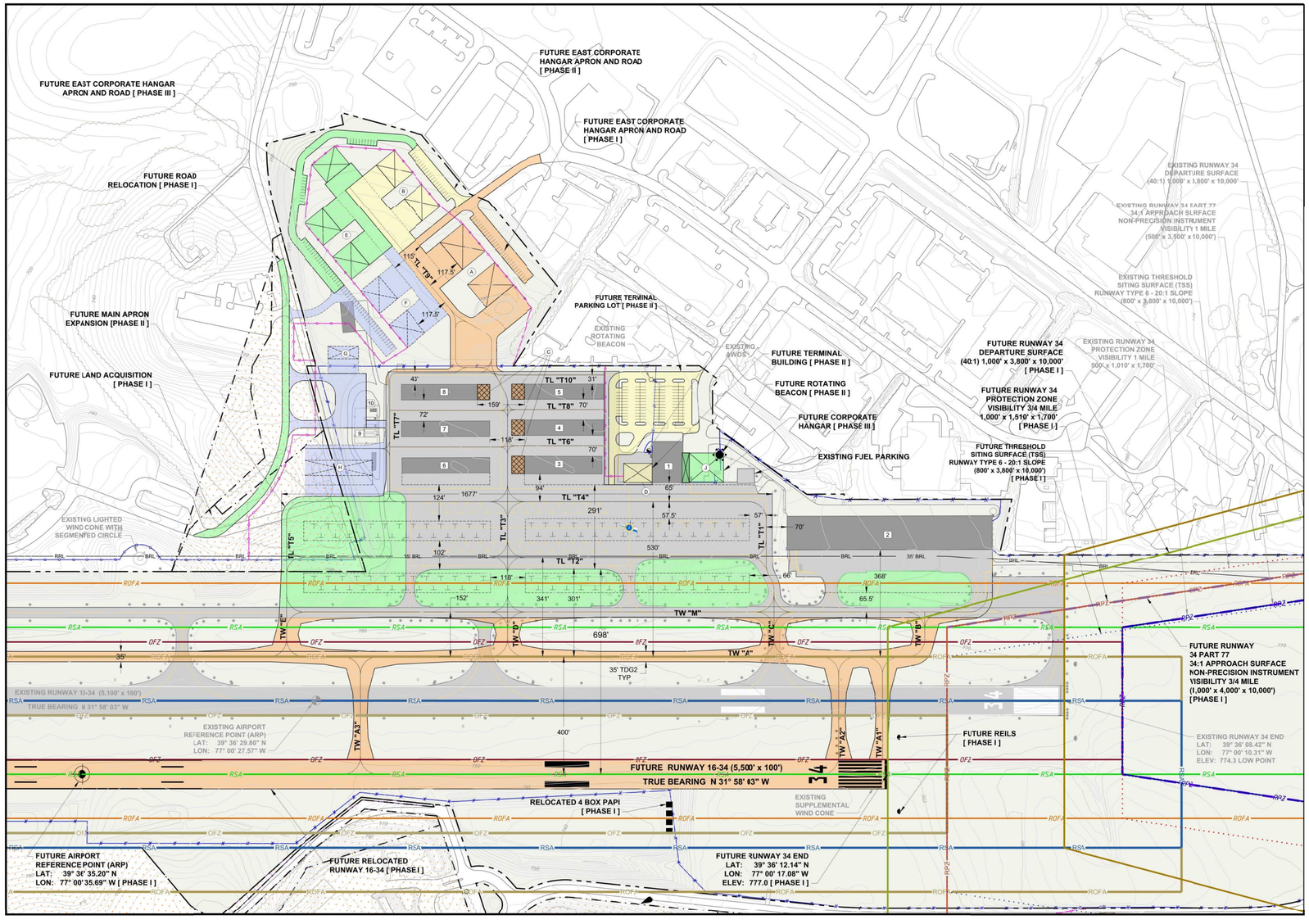

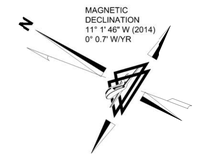

LEGEND

DESCRIPTION	EXISTING	FUTURE	ULTIMATE
AIRPORT BUILDINGS			
AIRPORT PROPERTY			NA
AVIGATIONAL EASEMENTS			NA
DEMOLITION	NA		NA
PAVEMENT			NA
RUNWAY CENTERLINE			NA
TAXIWAY/ TAXILANE MARKING			NA
BUILDING RESTRICTION LINE (BRL)	30' BRL	35' BRL	NA
FENCE		NA	NA
FENCE (PERIMETER)			NA
GROUND ELEVATION CONTOURS		NA	NA
OBSTACLE FREE ZONE (OFZ)	OFZ	OFZ	NA
PART 77 APPROACH SURFACE			NA
PRECISION OBSTACLE FREE ZONE (POFZ)	NA		NA
RUNWAY DEPARTURE SURFACE			NA
RUNWAY OBJECT FREE AREA (ROFA)	ROFA	ROFA	NA
RUNWAY PROTECTION ZONE (RPZ)	RPZ	RPZ	NA
RUNWAY SAFETY AREA (RSA)	RSA	RSA	NA
STREAM		NA	NA
TAXIWAY OBJECT FREE AREA (TOFA)	TOFA	TOFA	NA
TAXIWAY SAFETY AREA (TSA)	TSA	TSA	NA
THRESHOLD SITING SURFACE (TSS)			NA
TREE LINE		NA	NA
AIRPORT REFERENCE POINT (ARP)			NA
AUTOMATED WEATHER OBSERVING SYSTEM (AWOS)			NA
ROTATING BEACON			NA
VISUAL APPROACH SLOPE INDICATOR (PAPI)			NA
WIND CONE		NA	NA
WIND CONE WITH SEGMENTED CIRCLE		NA	NA

DEVELOPMENT PROGRAM

PHASE I DEVELOPMENT	[I]
PHASE II DEVELOPMENT	[II]
PHASE III DEVELOPMENT	[III]
ULTIMATE DEVELOPMENT	[U]

200 0 200 400
SCALE: 1"=200' FEET

FACILITIES TABLE

EXISTING			FUTURE		
REF	FACILITY NAME	TOP ELEV	REF	FACILITY NAME	TOP ELEV (APPROX)
1	ADMINISTRATION BUILDING/ FBO	810	A	CORPORATE HANGARS [I]	808
2	CORPORATE HANGARS (7 UNITS)	808	B	BOX HANGARS [II]	808
3	T-HANGARS (14 UNITS)	806	C	T- HANGARS DEMOLITION [I]	806
4	T-HANGARS (14 UNITS)	804	D	TERMINAL BJILDING [II]	810
5	T-HANGARS (14 UNITS)	801	E	BOX HANGARS [III]	806
6	T-HANGARS (14 UNITS)	804	F	BOX HANGARS [ULT]	806
7	T-HANGARS (14 UNITS)	803	G	RELOCATED MAINTENANCE EQUIPMENT STORAGE (MES) BUILDING [ULT]	806
8	T-HANGARS (14 UNITS)	802	H	T- HANGARS[ULT]	806
9	FUEL FARM	790	I	CORPORATE HANGARS [ULT]	824
10	CIVIL AIR CONTROL BUILDING	800	J	CORPORATE HANGARS [III]	808
11	AIRPORT OPERATIONS CENTER	800			

NOTES

1. THERE ARE NO KNOWN OBSTACLE FREE ZONE (OFZ) OBJECTS THAT ARE PENETRATIONS.
2. THERE ARE NO KNOWN THRESHOLD SITING SURFACE (TSS) PENETRATIONS.
3. FUTURE DEVELOPMENT IS TO SUPPORT ACCESS AND CIRCULATION BY ARC GROUP II AIRCRAFT THROUGHOUT THE TERMINAL AREA.
4. ALL ELEVATIONS ARE IN FEET ABOVE MEAN SEA LEVEL (MSL).
5. ALL ELEVATIONS ARE IN ACCORDANCE WITH NATIONAL MAP ACCURACY STANDARDS. SPOT ELEVATIONS AND GROUND CONTOURS ARE DERIVED FROM AERIAL PHOTOGRAMMETRY AND ARE APPROXIMATE. GROUND SURVEYS ARE RECOMMENDED TO VERIFY ACCURACY.
6. ALL LATITUDE AND LONGITUDE COORDINATES ARE NAD 83/ NAVD 88.
7. TOPOGRAPHY AND PLANIMETRICS FROM AERIAL SURVEYS OBTAINED FROM WOOLPERT, INC., SURVEY DATE: JANUARY 10, 2014.
8. LEGEND ELEMENTS REPRESENT DEPICTIONS ON DRAWING BUT MAY VARY IN SIZE DUE TO SCALING ON DRAWING.

NO.	REVISIONS	BY	APP.	DATE

TERMINAL AREA PLAN

CARROLL COUNTY REGIONAL AIRPORT
WESTMINSTER, MARYLAND

DELTA AIRPORT CONSULTANTS, INC.
www.deltaairport.com

DRAWN BY: RWW
CHECKED BY: RGL
SCALE: 1" = 200'
DATE: MARCH 2015

SHEET 4 OF 17

DRAWING: 13063-tap.dwg LAYOUT: TERMINAL AREA PLAN
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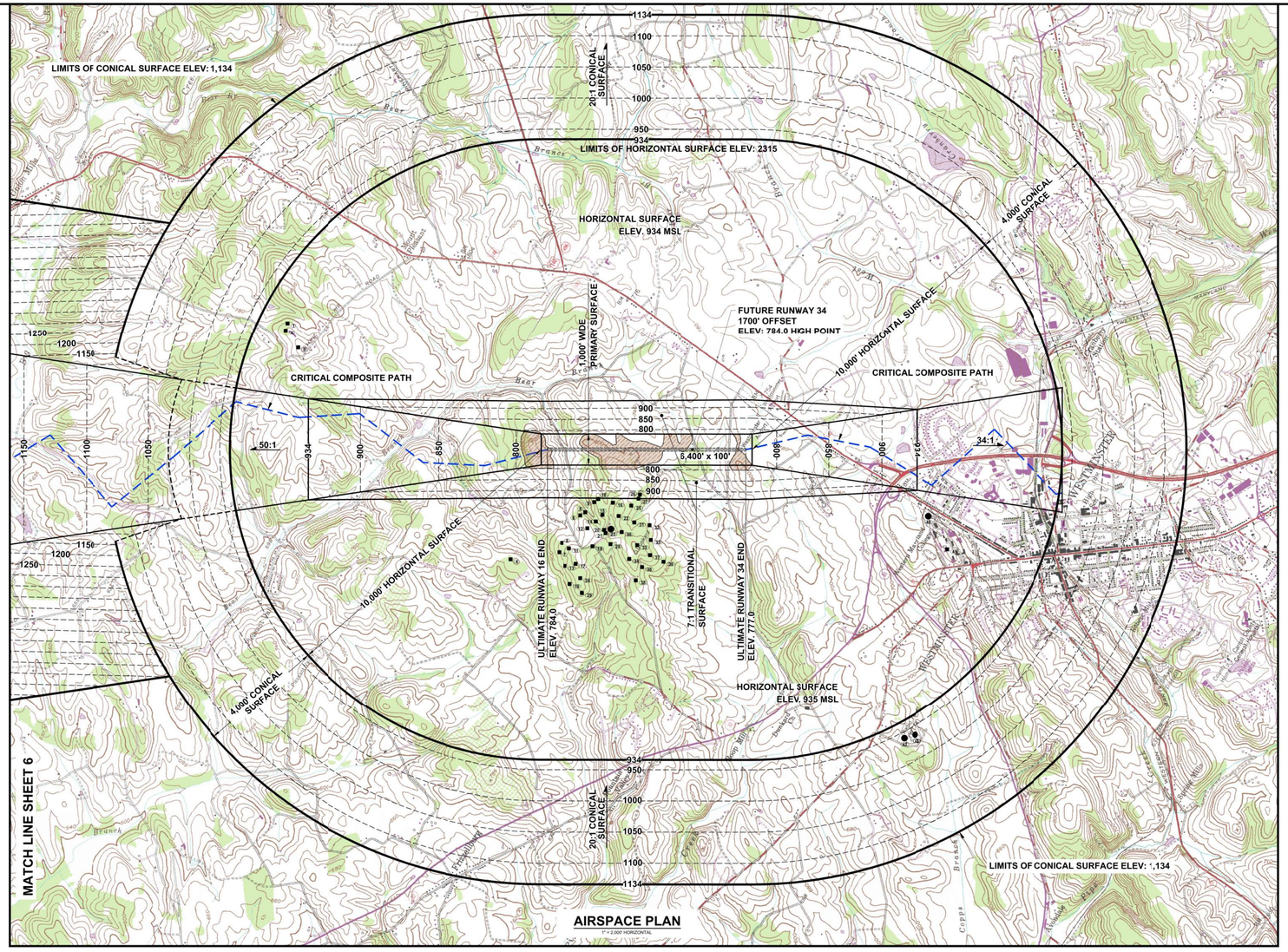
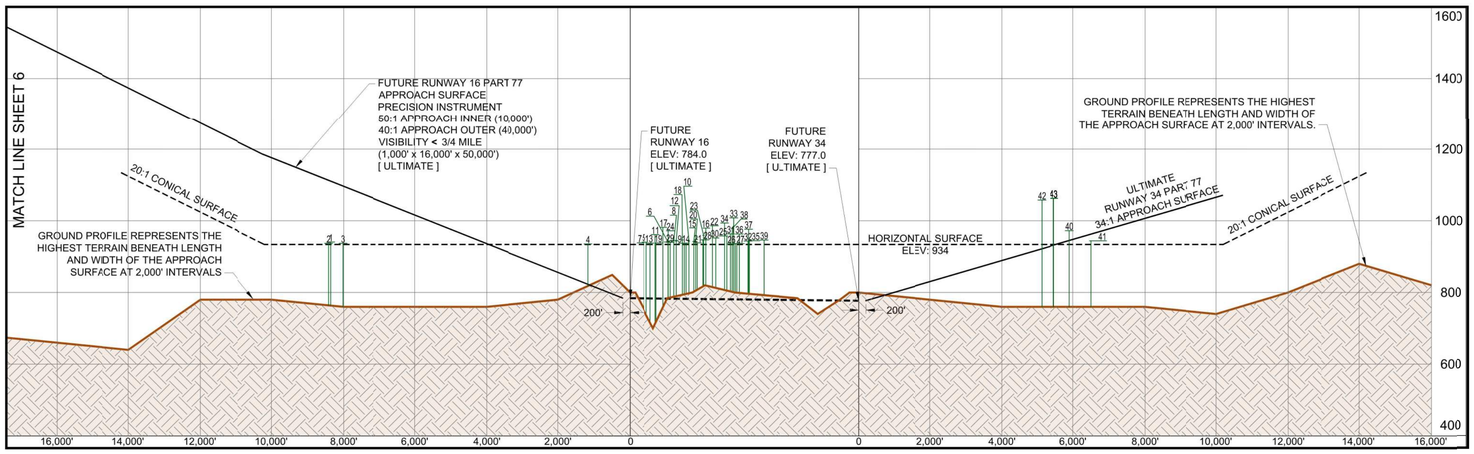


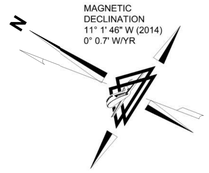
AIRSPACE PLAN

1" = 2,000' HORIZONTAL



ULTIMATE RUNWAY 16 - 34 AIRSPACE PROFILE

1" = 2,000' HORIZONTAL / 1" = 200' VERTICAL



LEGEND

	TOWER/ ANTENNA LOCATION (APPROX.)
1	OBSTRUCTION
	PART 77 SURFACE (MOST DEMANDING)
	PART 77 SURFACE (NON-DEMANDING)
	PART 77 SURFACE ELEVATIONS
	CRITICAL COMPOSITE PATH
	EXISTING TERRAIN (PROFILE VIEW)
	EXISTING TERRAIN OBSTRUCTION

NOTES

1. ALL ELEVATIONS ARE IN FEET ABOVE MEAN SEA LEVEL (MSL).
2. THIS EXHIBIT DEPICTS AIRPORT IMAGINARY SURFACES AS DEFINED IN FEDERAL REGULATION 14 CFR PART 77 SECTION 25.
3. PLEASE REFER TO INNER PORTION OF THE APPROACH SURFACE DRAWINGS FOR DETAILS ON ANY CLOSE-IN OBSTRUCTIONS TO THE RUNWAY APPROACH, PRIMARY, AND TRANSITIONAL SURFACES AS WELL AS RUNWAY DATA AND PENETRATIONS TO OTHER CRITICAL SURFACES.
4. ALL OBSTRUCTIONS SHOULD BE EITHER LIGHTED OR REMOVED.
5. CFR TITLE 14, PART 77 REQUIRES THAT A FAA 7460-1 FORM BE SUBMITTED FOR ANY CONSTRUCTION OR ALTERATION WITHIN 20,000 FEET OF THE CLOSEST POINT OF THE RUNWAY WHICH PENETRATES A SLOPE OF 100' (H):1' (V).
6. BASE MAPS TAKEN FROM USGS 7.5 MINUTE SERIES QUADS:

USGS MAP	DATE
FINKSBURG, MD	1979
LIBERTYTOWN, MD	1993
LITTLESTOWN, MD/PA	1984
MANCHESTER, MD/PA	1971
NEW WINDSOR, MD	1971
TANEYTOWN, MD/PA	1971
UNION BRIDGE, MD	1971
WESTMINSTER, MD	1979
WINFIELD, MD	1979

7. ALL 14 CFR PART 77 SURFACES DEPICTED REPRESENT THE EXISTING DEVELOPMENT PLAN.
8. CARROLL COUNTY ZONING ORDINANCE (§158.054) PROTECTS 14 CFR PART 77 SURFACES SURROUNDING THE AIRPORT FROM COMMUNICATIONS TOWERS WHICH MAY PENETRATE THESE SURFACES.
9. LEGEND ELEMENTS REPRESENT DEPICTIONS ON DRAWING, BUT MAY VARY IN SIZE DUE TO SCALING ON DRAWING.
10. OBSTRUCTION DATA INFORMATION TABLE IS SHOWN ON SHEET 15.

2000 0 2000 4000

SCALE: 1"=2000' FEET

NO.	REVISIONS	BY	APP.	DATE

AIRPORT AIRSPACE DRAWING

CARROLL COUNTY REGIONAL AIRPORT
WESTMINSTER, MARYLAND

DELTA AIRPORT CONSULTANTS, INC.
www.deltaairport.com

DRAWN BY:	RWW	SCALE: H: 1"=2000'; V: 1"=200'	
CHECKED BY:	RGL	DATE:	MARCH 2015

SHEET 5 OF 17

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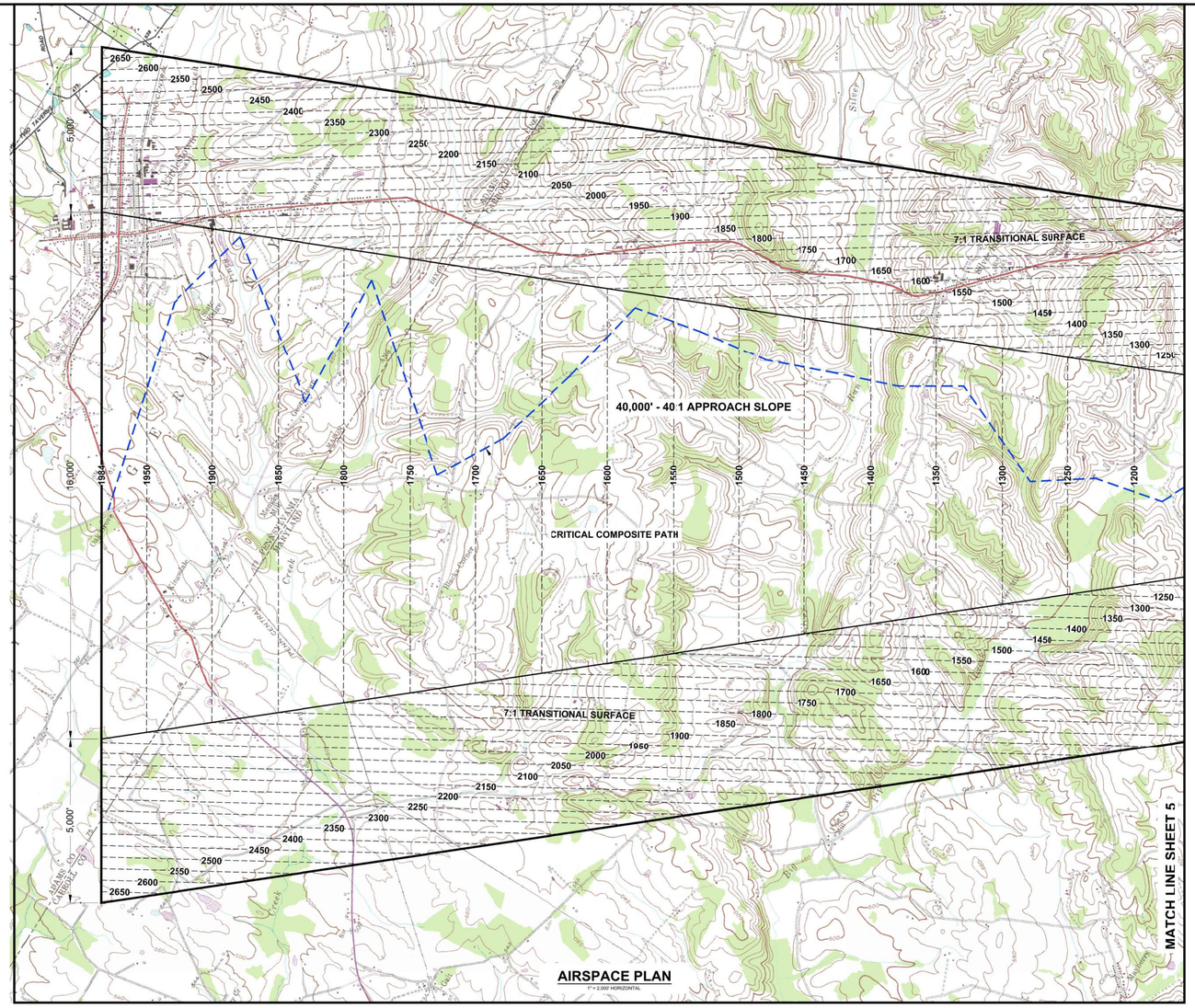
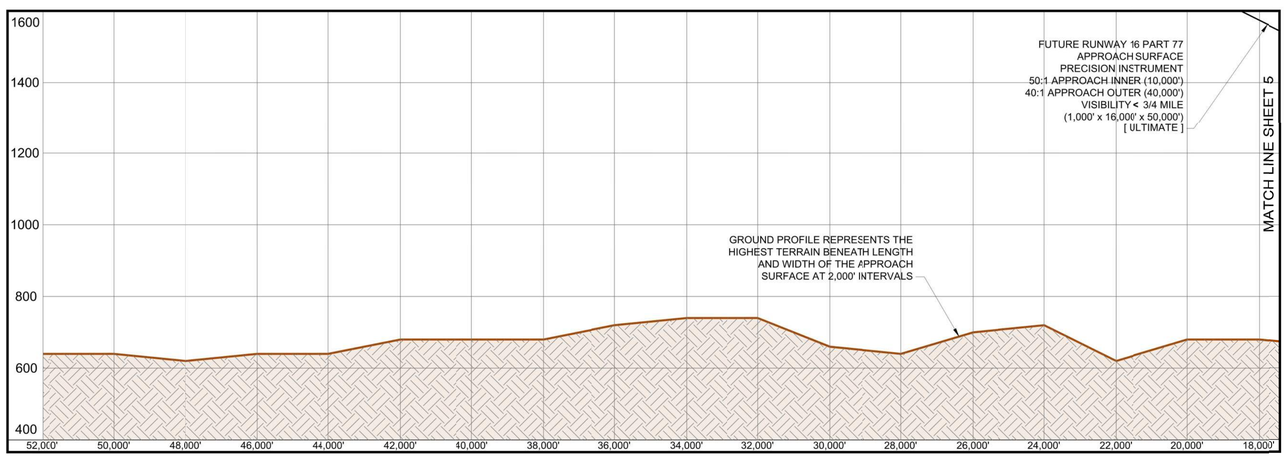


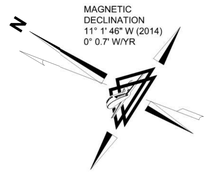
AIRSPACE PLAN

1" = 2,000' HORIZONTAL



ULTIMATE RUNWAY 16 OUTER APPROACH AIRSPACE PROFILE

1" = 2,000' HORIZONTAL / 1" = 200' VERTICAL



LEGEND

	TOWER/ ANTENNA LOCATION (APPROX.)
1	OBSTRUCTION
	PART 77 SURFACE (MOST DEMANDING)
	PART 77 SURFACE (NON-DEMANDING)
	PART 77 SURFACE ELEVATIONS
	CRITICAL COMPOSITE PATH
	EXISTING TERRAIN (PROFILE VIEW)
	EXISTING TERRAIN OBSTRUCTION

NOTES

1. ALL ELEVATIONS ARE IN FEET ABOVE MEAN SEA LEVEL (MSL).
2. THIS EXHIBIT DEPICTS AIRPORT IMAGINARY SURFACES AS DEFINED IN FEDERAL REGULATION 14 CFR PART 77 SECTION 25.
3. PLEASE REFER TO INNER PORTION OF THE APPROACH SURFACE DRAWINGS FOR DETAILS ON ANY CLOSE-IN OBSTRUCTIONS TO THE RUNWAY APPROACH, PRIMARY, AND TRANSITIONAL SURFACES AS WELL AS RUNWAY DATA AND PENETRATIONS TO OTHER CRITICAL SURFACES.
4. ALL OBSTRUCTIONS SHOULD BE EITHER LIGHTED OR REMOVED.
5. CFR TITLE 14, PART 77 REQUIRES THAT A FAA 7460-1 FORM BE SUBMITTED FOR ANY CONSTRUCTION OR ALTERATION WITHIN 20,000 FEET OF THE CLOSEST POINT OF THE RUNWAY WHICH PENETRATES A SLOPE OF 100' (H):1' (V).
6. BASE MAPS TAKEN FROM USGS 7.5 MINUTE SERIES QUADS:

USGS MAP	DATE
FINKSBURG, MD	1979
LIBERTYTOWN, MD	1993
LITTLESTOWN, MD/PA	1984
MANCHESTER, MD/PA	1971
NEW WINDSOR, MD	1971
TANEYTOWN, MD/PA	1971
UNION BRIDGE, MD	1971
WESTMINSTER, MD	1979
WINFIELD, MD	1979

7. ALL 14 CFR PART 77 SURFACES DEPICTED REPRESENT THE EXISTING DEVELOPMENT PLAN.
8. CARROLL COUNTY ZONING ORDINANCE (§158.054) PROTECTS 14 CFR PART 77 SURFACES SURROUNDING THE AIRPORT FROM COMMUNICATIONS TOWERS WHICH MAY PENETRATE THESE SURFACES.
9. LEGEND ELEMENTS REPRESENT DEPICTIONS ON DRAWING, BUT MAY VARY IN SIZE DUE TO SCALING ON DRAWING.
10. OBSTRUCTION DATA INFORMATION TABLE IS SHOWN ON SHEET 15.

2000 0 2000 4000

SCALE: 1"=2000' FEET

NO.	REVISIONS	BY	APP.	DATE

AIRPORT AIRSPACE DRAWING

CARROLL COUNTY REGIONAL AIRPORT
WESTMINSTER, MARYLAND

DELTA AIRPORT CONSULTANTS, INC.
www.deltaairport.com

SHEET 6 OF 17

DRAWN BY:	RWW	SCALE: H: 1"=2000'; V: 1"=200'	
CHECKED BY:	RGL	DATE:	MARCH 2015

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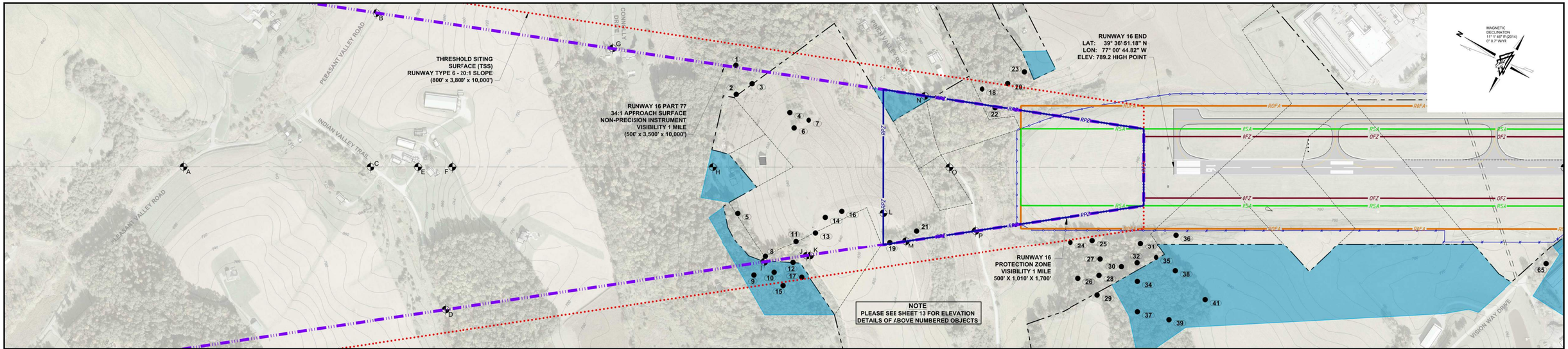
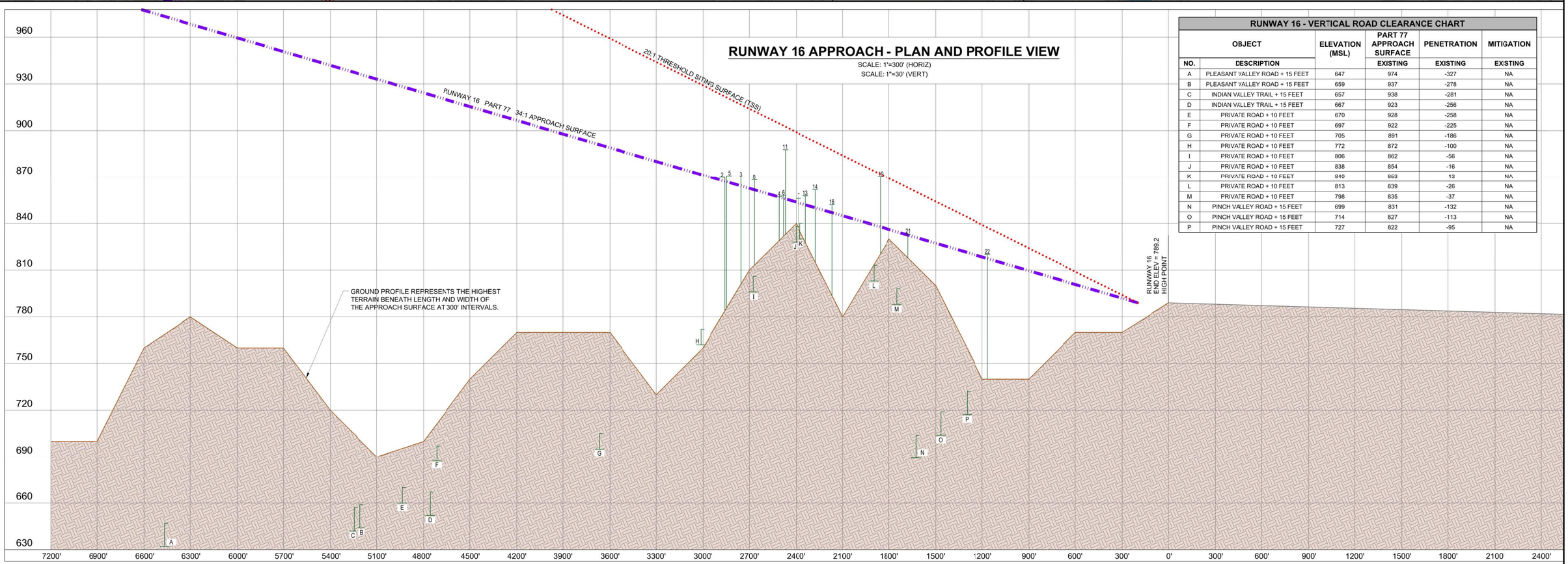


RUNWAY 16 APPROACH - PLAN AND PROFILE VIEW

SCALE: 1"=300' (HORIZ)
SCALE: 1"=30' (VERT)



RUNWAY 16 - VERTICAL ROAD CLEARANCE CHART

OBJECT		ELEVATION (MSL)	PART 77 APPROACH SURFACE	PENETRATION	MITIGATION
NO.	DESCRIPTION		EXISTING	EXISTING	EXISTING
A	PLEASANT VALLEY ROAD + 15 FEET	647	974	-327	NA
B	PLEASANT VALLEY ROAD + 15 FEET	659	937	-278	NA
C	INDIAN VALLEY TRAIL + 15 FEET	657	938	-281	NA
D	INDIAN VALLEY TRAIL + 15 FEET	667	923	-256	NA
E	PRIVATE ROAD + 10 FEET	670	928	-258	NA
F	PRIVATE ROAD + 10 FEET	697	922	-225	NA
G	PRIVATE ROAD + 10 FEET	705	891	-186	NA
H	PRIVATE ROAD + 10 FEET	772	872	-100	NA
I	PRIVATE ROAD + 10 FEET	806	862	-56	NA
J	PRIVATE ROAD + 10 FEET	838	854	-16	NA
K	PRIVATE ROAD + 10 FEET	840	863	-13	NA
L	PRIVATE ROAD + 10 FEET	813	839	-26	NA
M	PRIVATE ROAD + 10 FEET	798	835	-37	NA
N	PINCH VALLEY ROAD + 15 FEET	699	831	-132	NA
O	PINCH VALLEY ROAD + 15 FEET	714	827	-113	NA
P	PINCH VALLEY ROAD + 15 FEET	727	822	-95	NA

NOTES

1. IDENTIFIED OBJECT LOCATIONS AND ELEVATIONS ARE BASED ON AERIAL SURVEYS CONDUCTED BY WOOLPERT, INC., DECEMBER 18, 2013.
2. ALL ELEVATIONS ARE IN FEET ABOVE MEAN SEA LEVEL.
3. NATURAL GROWTH OBJECTS WITHIN 10 FEET OF THE PART 77 SURFACE ARE DEPICTED AS OBSTRUCTIONS.
4. GROUND SURVEYS ARE RECOMMENDED TO VERIFY ACCURACY OF ELEVATION DATA PRIOR TO OBSTRUCTION REMOVAL.
5. 14 CFR PART 77 REQUIRES THE FOLLOWING CLEARANCES:
   - 10 FEET ABOVE PRIVATE ROADS
   - 15 FEET ABOVE PUBLIC ROADS
   - 17 FEET ABOVE INTERSTATE HIGHWAYS
   - 23 FEET ABOVE RAILROADS

   ELEVATION = ACTUAL ROADWAY ELEVATION + PART 77 CLEARANCE.
6. ONLY OBJECTS PENETRATING PART 77 APPROACH SURFACES ARE DEPICTED ON THE APPROACH PROFILE VIEW.
7. PROFILE INDICATES TALLEST OBSTRUCTIONS LOCATED FOR EACH SPECIFIED GROUP WITHIN LATERAL LIMITS OF APPROACH SURFACES.
8. EXISTING OBSTRUCTION ANALYSIS DATA TABLE WAS COMPILED BY INFORMATION PROVIDED BY WOOLPERT, INC., DECEMBER 18, 2013.
9. LEGEND ELEMENTS REPRESENT DEPICTIONS ON DRAWING, BUT MAY VARY IN SIZE DUE TO SCALING ON DRAWING.
10. SURVEY DATA PREPARED BY WOOLPERT, INC., JANUARY 9, 2014 AND THE AERIAL IMAGERY PREPARED BY WOOLPERT, INC., FEBRUARY 6, 2014.
11. OBSTRUCTION DATA INFORMATION TABLE SHOWN ON SHEET 13.

LEGEND

DESCRIPTION	EXISTING
OBSTRUCTION	1
VERTICAL ROAD/ RAILROAD CLEARANCE	A
AIRPORT PROPERTY LINE	
14 CFR PART 77 APPROACH SURFACE	
GROUND ELEVATION CONTOURS	
EASEMENT/ ENCUMBERANCE	
OBJECT FREE ZONE (OFZ)	OFZ
RUNWAY OBJECT FREE AREA (ROFA)	ROFA
RUNWAY PROTECTION ZONE (RPZ)	RPZ
RUNWAY SAFETY AREA (RSA)	RSA

LEGEND

DESCRIPTION	EXISTING
THRESHOLD SITING SURFACE (TSS)	
AVIGATION EASEMENT	
TERRAIN (PROFILE VIEW)	

300 0 300 600
SCALE: 1"=300' FEET

NO.	REVISIONS	BY	APP.	DATE

RUNWAY 16 INNER APPROACH (EXISTING)

CARROLL COUNTY REGIONAL AIRPORT
WESTMINSTER, MARYLAND

DELTA AIRPORT CONSULTANTS, INC.
www.deltaairport.com

DRAWN BY: RWW
CHECKED BY: RGL
SCALE: H: 1" = 300'; V: 1"=30'
DATE: MARCH 2015

SHEET 7 OF 17

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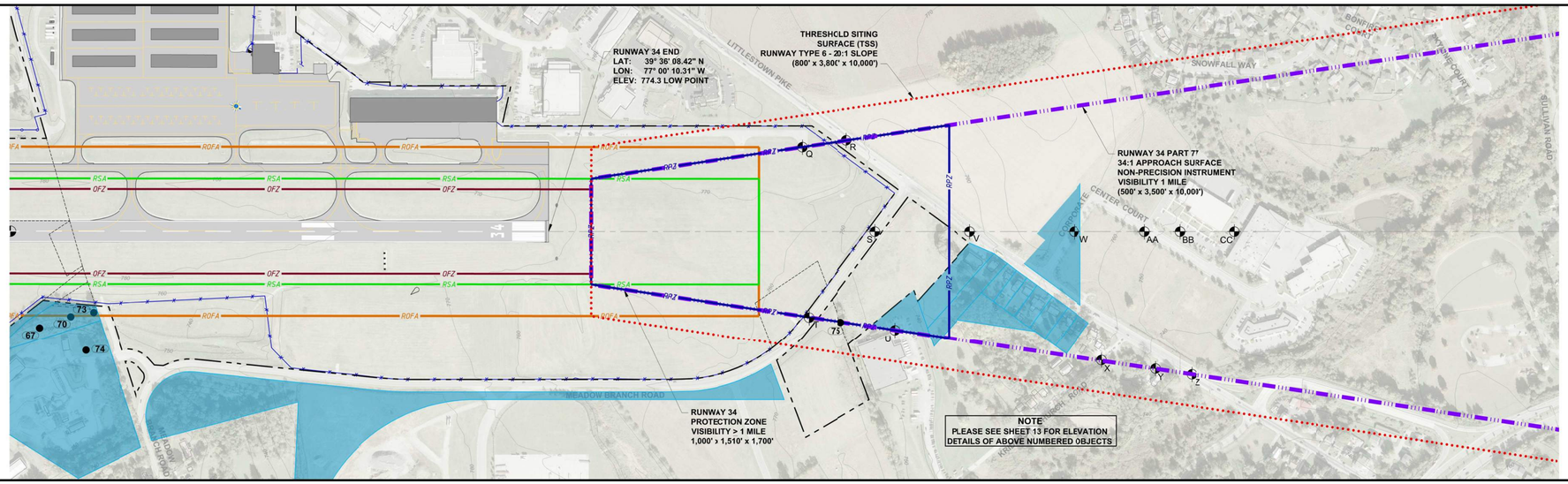
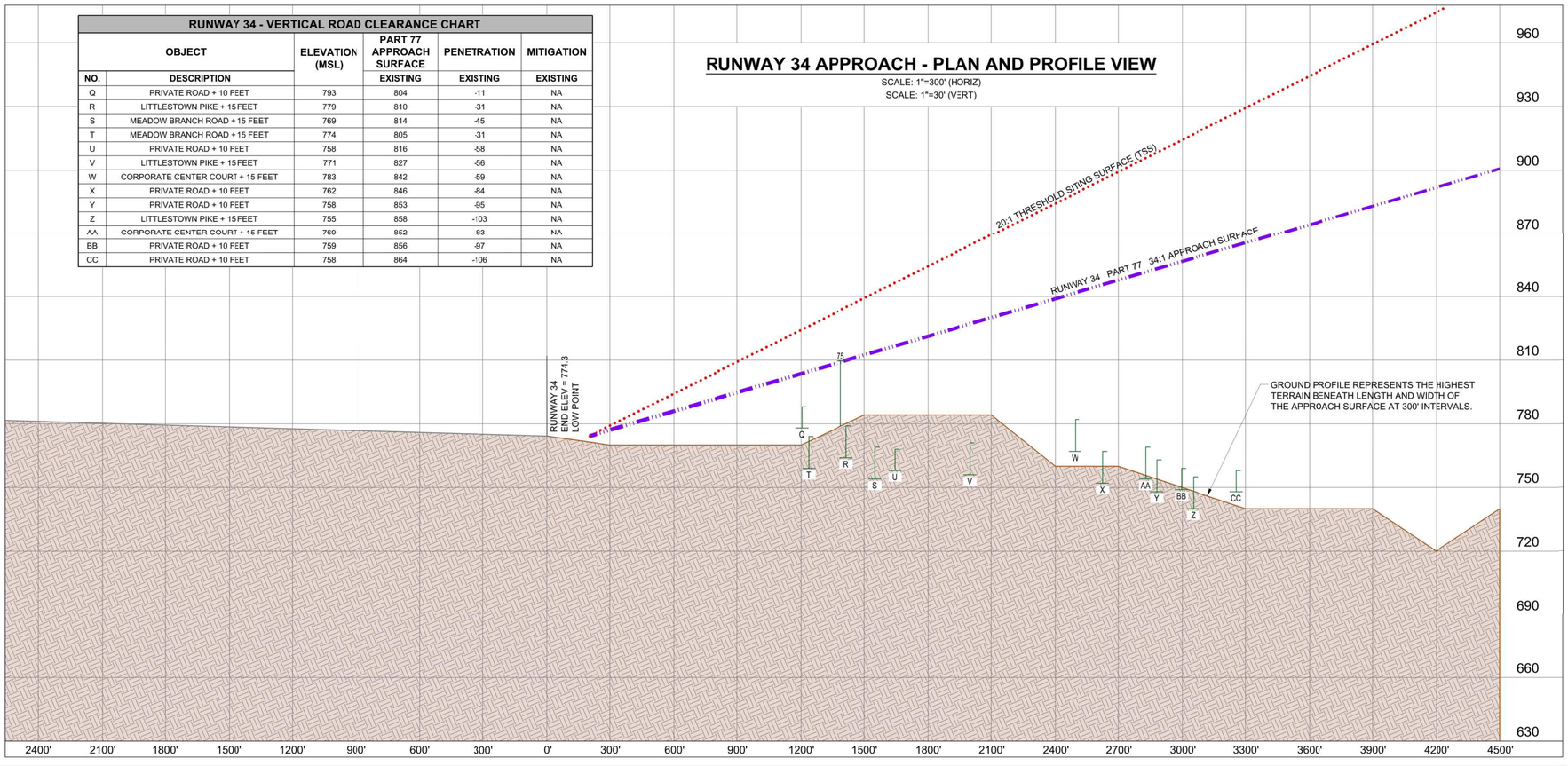


RUNWAY 34 - VERTICAL ROAD CLEARANCE CHART

OBJECT		ELEVATION (MSL)	PART 77 APPROACH SURFACE	PENETRATION	MITIGATION
NO.	DESCRIPTION		EXISTING	EXISTING	EXISTING
Q	PRIVATE ROAD + 10 FEET	793	804	-11	NA
R	LITTLESTOWN PIKE + 15FEET	779	810	-31	NA
S	MEADOW BRANCH ROAD + 15 FEET	769	814	-45	NA
T	MEADOW BRANCH ROAD + 15 FEET	774	805	-31	NA
U	PRIVATE ROAD + 10 FEET	758	816	-58	NA
V	LITTLESTOWN PIKE + 15FEET	771	827	-56	NA
W	CORPORATE CENTER COURT + 15 FEET	783	842	-59	NA
X	PRIVATE ROAD + 10 FEET	762	846	-84	NA
Y	PRIVATE ROAD + 10 FEET	758	853	-95	NA
Z	LITTLESTOWN PIKE + 15FEET	755	858	-103	NA
AA	CORPORATE CENTER COURT + 15 FEET	760	862	-93	NA
BB	PRIVATE ROAD + 10 FEET	759	856	-97	NA
CC	PRIVATE ROAD + 10 FEET	758	864	-106	NA

RUNWAY 34 APPROACH - PLAN AND PROFILE VIEW

SCALE: 1"=300' (HORIZ)
SCALE: 1"=30' (VERT)



NOTES

1. IDENTIFIED OBJECT LOCATIONS AND ELEVATIONS ARE BASED ON AERIAL SURVEYS CONDUCTED BY WOOLPERT, INC., DECEMBER 18, 2013.
2. ALL ELEVATIONS ARE IN FEET ABOVE MEAN SEA LEVEL.
3. NATURAL GROWTH OBJECTS WITHIN 10 FEET OF THE PART 77 SURFACE ARE DEPICTED AS OBSTRUCTIONS.
4. GROUND SURVEYS ARE RECOMMENDED TO VERIFY ACCURACY OF ELEVATION DATA PRIOR TO OBSTRUCTION REMOVAL.
5. 14 CFR PART 77 REQUIRES THE FOLLOWING CLEARANCES:
   - 10 FEET ABOVE PRIVATE ROADS
   - 15 FEET ABOVE PUBLIC ROADS
   - 17 FEET ABOVE INTERSTATE HIGHWAYS
   - 23 FEET ABOVE RAILROADS

   ELEVATION = ACTUAL ROADWAY ELEVATION + PART 77 CLEARANCE.
6. ONLY OBJECTS PENETRATING PART 77 APPROACH SURFACES ARE DEPICTED ON THE APPROACH PROFILE VIEW.
7. PROFILE INDICATES TALLEST OBSTRUCTIONS LOCATED FOR EACH SPECIFIED GROUP WITHIN LATERAL LIMITS OF APPROACH SURFACES.
8. EXISTING OBSTRUCTION ANALYSIS DATA TABLE WAS COMPILED BY INFORMATION PROVIDED BY WOOLPERT, INC., DECEMBER 18, 2013.
9. LEGEND ELEMENTS REPRESENT DEPICTIONS ON DRAWING, BUT MAY VARY IN SIZE DUE TO SCALING ON DRAWING.
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11. OBSTRUCTION DATA INFORMATION TABLE SHOWN ON SHEET 13.

LEGEND

DESCRIPTION	EXISTING
OBSTRUCTION	1
VERTICAL ROAD/ RAILROAD CLEARANCE	A
AIRPORT PROPERTY LINE	
14 CFR PART 77 APPROACH SURFACE	
GROUND ELEVATION CONTOURS	
EASEMENT/ ENCUMBERANCE	
OBJECT FREE ZONE (OFZ)	OFZ
RUNWAY OBJECT FREE AREA (ROFA)	ROFA
RUNWAY PROTECTION ZONE (RPZ)	RPZ
RUNWAY SAFETY AREA (RSA)	RSA

LEGEND

DESCRIPTION	EXISTING
THRESHOLD SITING SURFACE (TSS)	
AVIGATION EASEMENT	
TERRAIN (PROFILE VIEW)	

300 0 300 600
SCALE: 1"=300' FEET

NO.	REVISIONS	BY	APP.	DATE

RUNWAY 34 INNER APPROACH (EXISTING)

CARROLL COUNTY REGIONAL AIRPORT
WESTMINSTER, MARYLAND

DELTA AIRPORT CONSULTANTS, INC.
www.deltaairport.com

DRAWN BY: RWW
CHECKED BY: RGL
SCALE: H: 1" = 300'; V: 1"=30'
DATE: MARCH 2015

SHEET 8 OF 17

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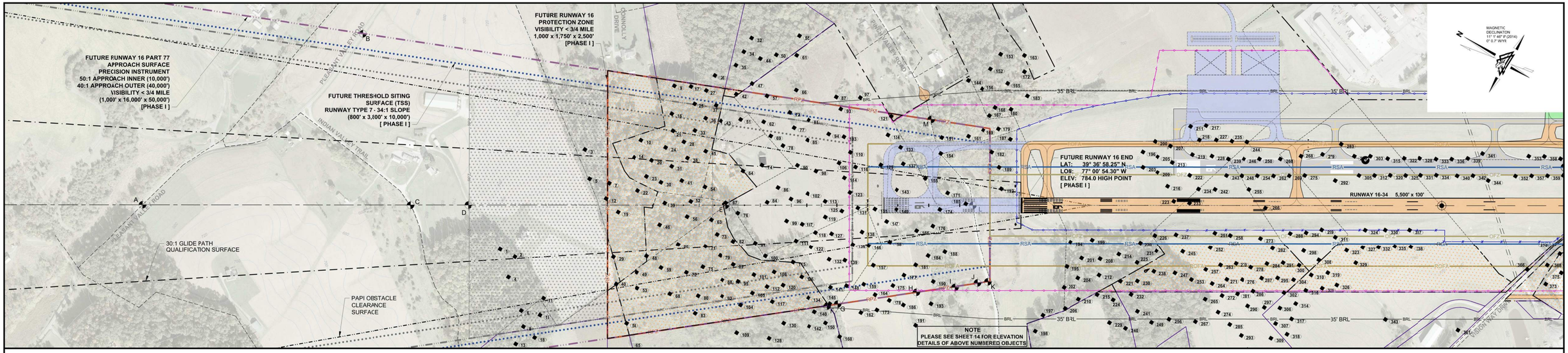
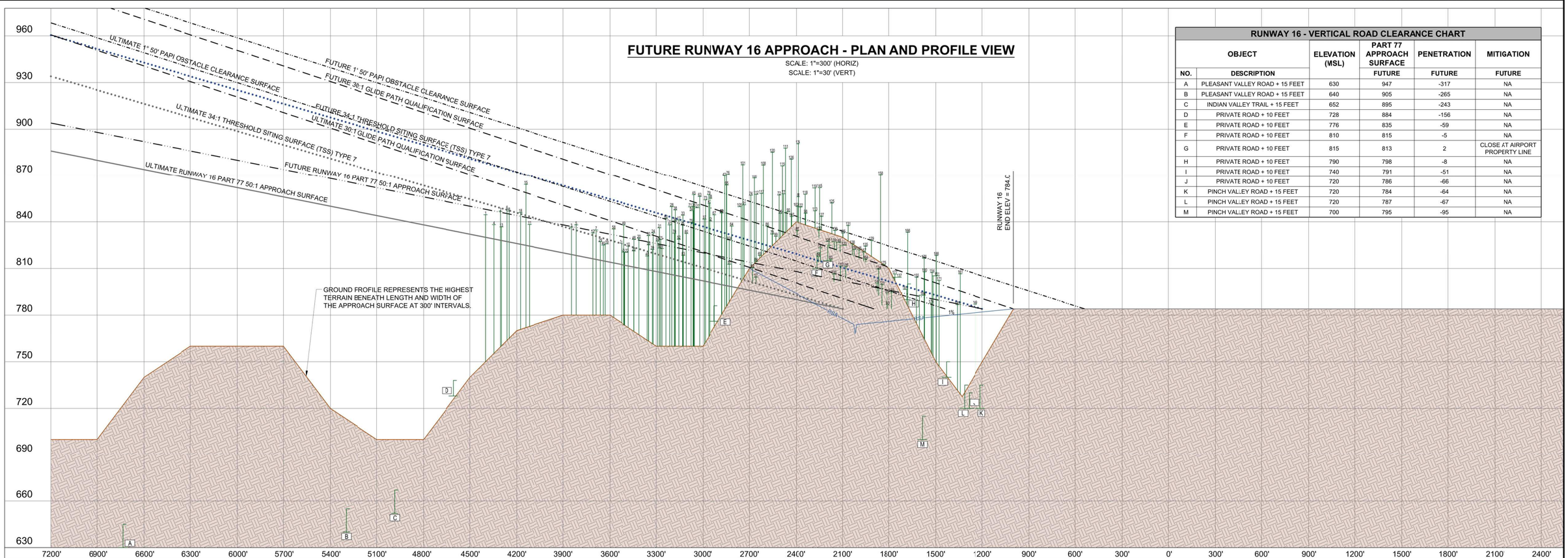


FUTURE RUNWAY 16 APPROACH - PLAN AND PROFILE VIEW

SCALE: 1"=300' (HORIZ)
SCALE: 1"=30' (VERT)



RUNWAY 16 - VERTICAL ROAD CLEARANCE CHART

OBJECT		ELEVATION (MSL)	PART 77 APPROACH SURFACE	PENETRATION	MITIGATION
NO.	DESCRIPTION		FUTURE	FUTURE	FUTURE
A	PLEASANT VALLEY ROAD + 15 FEET	630	947	-317	NA
B	PLEASANT VALLEY ROAD + 15 FEET	640	905	-265	NA
C	INDIAN VALLEY TRAIL + 15 FEET	652	895	-243	NA
D	PRIVATE ROAD + 10 FEET	728	884	-156	NA
E	PRIVATE ROAD + 10 FEET	776	835	-59	NA
F	PRIVATE ROAD + 10 FEET	810	815	-5	NA
G	PRIVATE ROAD + 10 FEET	815	813	2	CLOSE AT AIRPORT PROPERTY LINE
H	PRIVATE ROAD + 10 FEET	790	798	-8	NA
I	PRIVATE ROAD + 10 FEET	740	791	-51	NA
J	PRIVATE ROAD + 10 FEET	720	786	-66	NA
K	PINCH VALLEY ROAD + 15 FEET	720	784	-64	NA
L	PINCH VALLEY ROAD + 15 FEET	720	787	-67	NA
M	PINCH VALLEY ROAD + 15 FEET	700	795	-95	NA

NOTES

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5. 14 CFR PART 77 REQUIRES THE FOLLOWING CLEARANCES:
   - 10 FEET ABOVE PRIVATE ROADS
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   - 17 FEET ABOVE INTERSTATE HIGHWAYS
   - 23 FEET ABOVE RAILROADS

   ELEVATION = ACTUAL ROADWAY ELEVATION + PART 77 CLEARANCE.
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11. OBSTRUCTION DATA INFORMATION TABLE IS SHOWN ON SHEET 14.

LEGEND

DESCRIPTION	FUTURE
OBSTRUCTION	1
VERTICAL ROAD/ RAILROAD CLEARANCE	A
EXISTING AIRPORT PROPERTY LINE	
FUTURE AIRPORT PROPERTY LINE	
14 CFR PART 77 APPROACH SURFACE	
GROUND ELEVATION CONTOURS	
EASEMENT/ ENCUMBERANCE	
OBJECT FREE ZONE (OFZ)	OFZ
RUNWAY OBJECT FREE AREA (ROFA)	ROFA
RUNWAY PROTECTION ZONE (RPZ)	RPZ

LEGEND

DESCRIPTION	FUTURE
RUNWAY SAFETY AREA (RSA)	RSA
GLIDE PATH QUALIFICATION SURFACE	
PAPI OBSTACLE SURFACE	
THRESHOLD SITING SURFACE (TSS)	
AVIGATION EASEMENT (FUTURE)	
LAND ACQUISITION	
TERRAIN (PROFILE VIEW)	

300 0 300 600
SCALE: 1"=300' FEET

NO.	REVISIONS	BY	APP.	DATE

RUNWAY 16 INNER APPROACH (FUTURE)

CARROLL COUNTY REGIONAL AIRPORT
WESTMINSTER, MARYLAND

DELTA AIRPORT CONSULTANTS, INC.
www.deltaairport.com

DRAWN BY: RWW
CHECKED BY: RGL
SCALE: H: 1"=300'; V: 1"=30'
DATE: MARCH 2015

SHEET 9 OF 17

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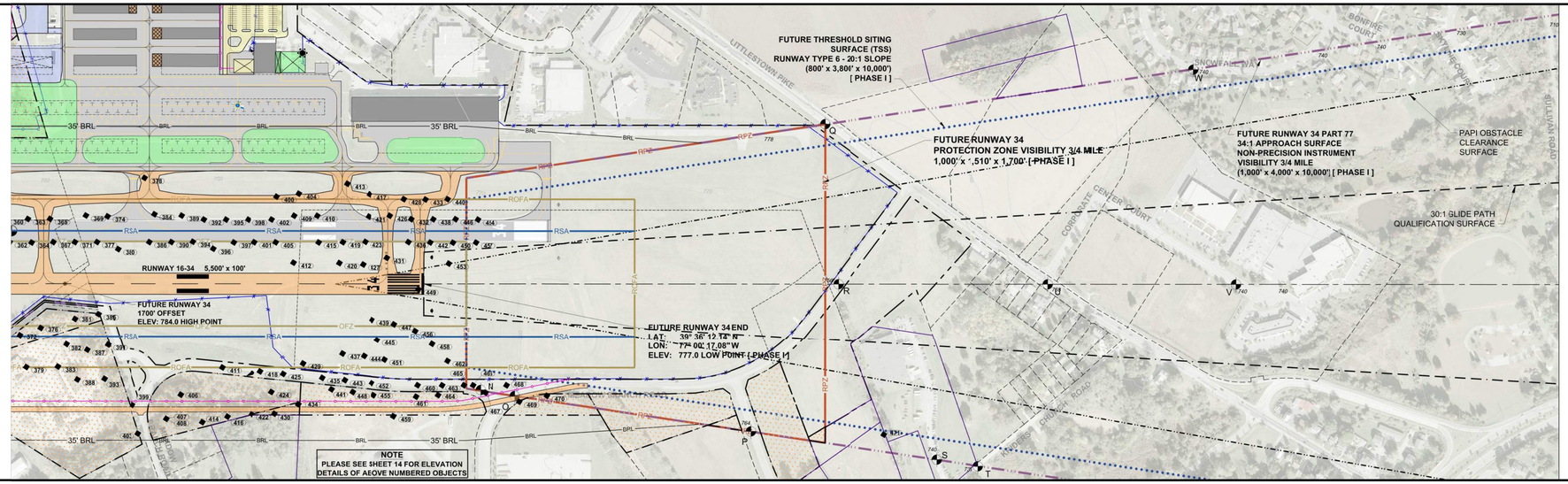
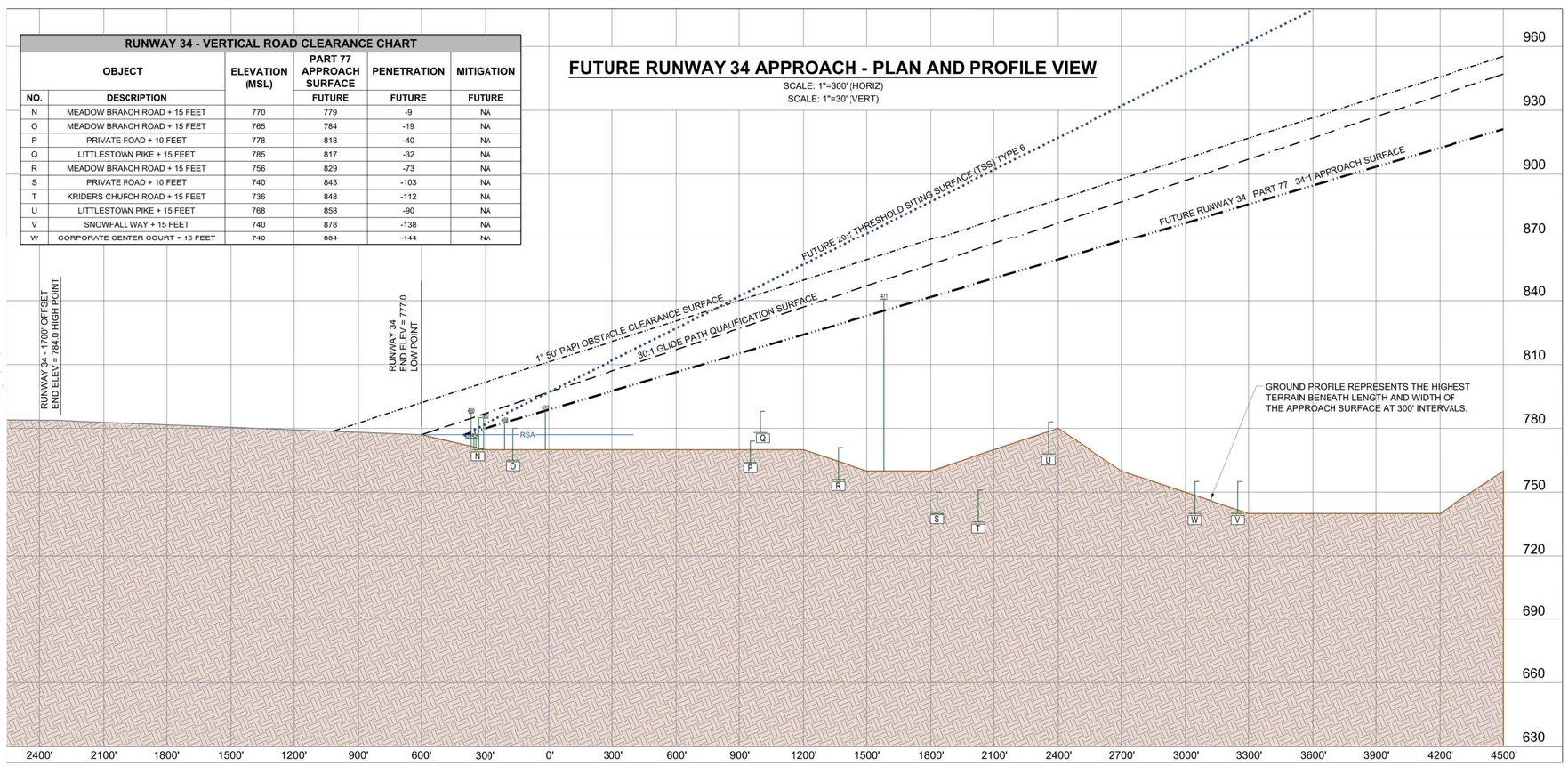


RUNWAY 34 - VERTICAL ROAD CLEARANCE CHART					
OBJECT		ELEVATION (MSL)	PART 77 APPROACH SURFACE	PENETRATION	MITIGATION
NO.	DESCRIPTION		FUTURE	FUTURE	FUTURE
N	MEADOW BRANCH ROAD + 15 FEET	770	779	-9	NA
O	MEADOW BRANCH ROAD + 15 FEET	765	784	-19	NA
P	PRIVATE ROAD + 10 FEET	778	818	-40	NA
Q	LITTLESTOWN PIKE + 15 FEET	785	817	-32	NA
R	MEADOW BRANCH ROAD + 15 FEET	756	829	-73	NA
S	PRIVATE ROAD + 10 FEET	740	843	-103	NA
T	KRIDERS CHURCH ROAD + 15 FEET	736	848	-112	NA
U	LITTLESTOWN PIKE + 15 FEET	768	858	-90	NA
V	SNOWFALL WAY + 15 FEET	740	878	-138	NA
W	CORPORATE CENTER COURT + 15 FEET	740	884	-144	NA

FUTURE RUNWAY 34 APPROACH - PLAN AND PROFILE VIEW

SCALE: 1"=300' (HORIZ)
SCALE: 1"=30' (VERT)



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   - 23 FEET ABOVE RAILROADS

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LEGEND

DESCRIPTION	FUTURE
OBSTRUCTION	1
VERTICAL ROAD/ RAILROAD CLEARANCE	A
EXISTING AIRPORT PROPERTY LINE	
FUTURE AIRPORT PROPERTY LINE	
14 CFR PART 77 APPROACH SURFACE	
GROUND ELEVATION CONTOURS	
EASEMENT/ ENCUMBERANCE	
OBJECT FREE ZONE (OFZ)	OFZ
RUNWAY OBJECT FREE AREA (ROFA)	ROFA
RUNWAY PROTECTION ZONE (RPZ)	RPZ

LEGEND

DESCRIPTION	FUTURE
RUNWAY SAFETY AREA (RSA)	RSA
GLIDE PATH QUALIFICATION SURFACE	
PAPI OBSTACLE SURFACE	
THRESHOLD SITING SURFACE (TSS)	
AVIGATION EASEMENT (FUTURE)	
LAND ACQUISITION	
TERRAIN (PROFILE VIEW)	

300 0 300 600
SCALE: 1"=300' FEET

NO.	REVISIONS	BY	APP.	DATE

RUNWAY 34 INNER APPROACH (FUTURE)

CARROLL COUNTY REGIONAL AIRPORT
WESTMINSTER, MARYLAND

DELTA AIRPORT CONSULTANTS, INC.
www.deltaairport.com

DRAWN BY:	RWW	SCALE: H: 1"=300'; V: 1"=30'	
CHECKED BY:	RGL	DATE:	MARCH 2015

SHEET 10 OF 17

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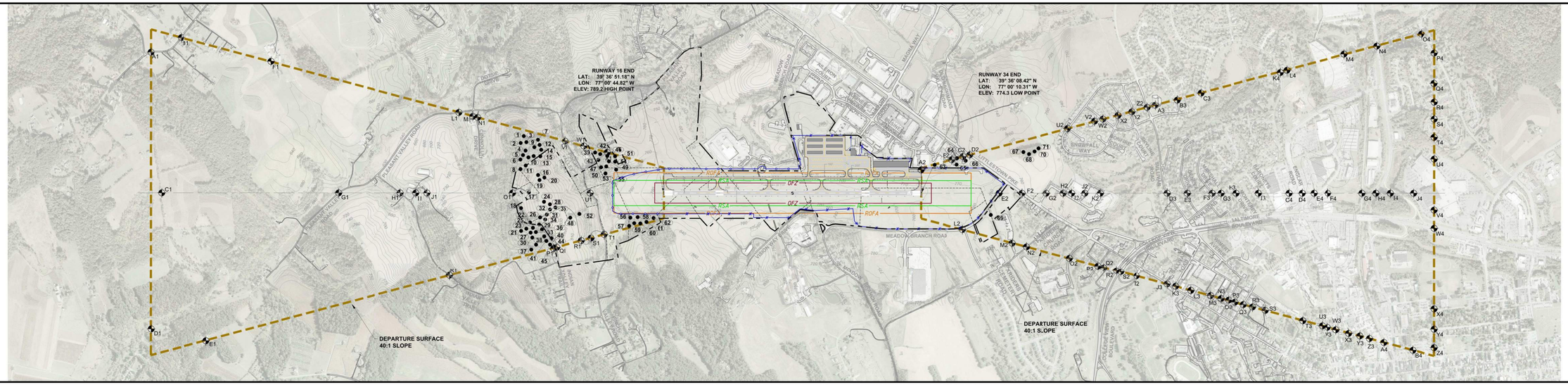
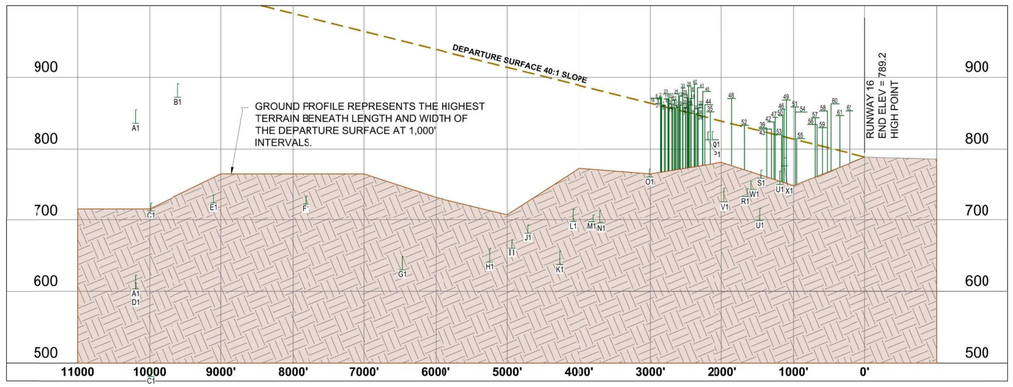
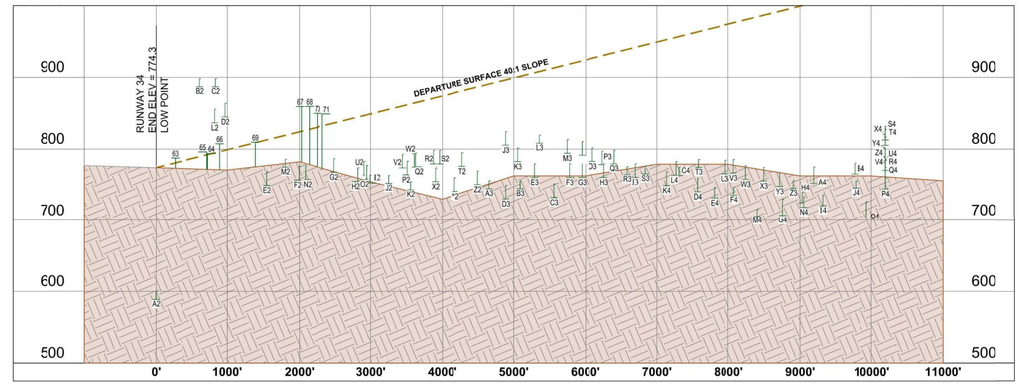


RUNWAY DEPARTURE SURFACE - PLAN AND PROFILE VIEW

SCALE: 1" = 1,000' (HORIZ)
SCALE: 1" = 100' (VERT)





RUNWAY 16 - VERTICAL ROAD CLEARANCE CHART

OBJECT NO.	OBJECT DESCRIPTION	ELEVATION (MSL)	PART 77 SURFACE EXISTING	PENETRATION EXISTING	MITIGATION EXISTING
A1	STONE ROAD + 15 FEET	851	1054	-203	NA
B1	STONE ROAD + 15 FEET	892	1040	-148	NA
C1	PRIVATE ROAD + 10 FEET	725	1048	-323	NA
D1	PLEASANT VALLEY ROAD + 15 FEET	608	1054	-446	NA
E1	PRIVATE ROAD + 10 FEET	736	1028	-292	NA
F1	PRIVATE ROAD + 10 FEET	734	995	-261	NA
G1	PLEASANT VALLEY ROAD + 15 FEET	647	962	-315	NA
H1	INDIAN VALLEY TRAIL + 15 FEET	657	930	-273	NA
I1	PRIVATE ROAD + 10 FEET	670	923	-253	NA
J1	PRIVATE ROAD + 10 FEET	697	917	-220	NA
K1	INDIAN VALLEY TRAIL + 15 FEET	657	907	-250	NA
L1	PLEASANT VALLEY ROAD + 15 FEET	716	902	-186	NA
M1	PRIVATE ROAD + 10 FEET	707	894	-187	NA
N1	CONNOLLY DRIVE + 15 FEET	714	893	-179	NA
O1	PRIVATE ROAD + 10 FEET	772	874	-102	NA
P1	PRIVATE ROAD + 10 FEET	824	854	-30	NA
Q1	PRIVATE ROAD + 10 FEET	824	853	-29	NA
R1	PRIVATE ROAD + 10 FEET	795	840	-45	NA
S1	PRIVATE ROAD + 10 FEET	771	836	-65	NA
T1	PINCH VALLEY ROAD + 15 FEET	769	829	-60	NA
U1	PINCH VALLEY ROAD + 15 FEET	714	836	-122	NA
V1	PINCH VALLEY ROAD + 15 FEET	746	848	-102	NA
W1	PRIVATE ROAD + 10 FEET	755	838	-83	NA
X1	PRIVATE ROAD + 10 FEET	788	827	-39	NA

RUNWAY 34 - VERTICAL ROAD CLEARANCE CHART

OBJECT NO.	OBJECT DESCRIPTION	ELEVATION (MSL)	PART 77 SURFACE EXISTING	PENETRATION EXISTING	MITIGATION EXISTING
A2	PRIVATE ROAD - 10 FEET	800	789	11	RELOCATE RUNWAY
B2	PRIVATE ROAD - 10 FEET	894	815	79	RELOCATE RUNWAY
C2	PRIVATE ROAD - 10 FEET	894	820	74	RELOCATE RUNWAY
D2	LITTLESTOWN PIKE + 15 FEET	809	824	-15	NA
E2	MEADOW BRANCH ROAD + 15 FEET	769	838	-69	NA
F2	LITTLESTOWN PIKE + 15 FEET	771	849	-78	NA
G2	CORPORATE CENTER COURT + 15 FEET	783	861	-78	NA
H2	CORPORATE CENTER COURT + 15 FEET	769	870	-101	NA
I2	PRIVATE ROAD - 10 FEET	759	874	-115	NA
J2	PRIVATE ROAD - 10 FEET	758	881	-123	NA
K2	PRIVATE ROAD - 10 FEET	750	887	-137	NA
L2	MEADOW BRANCH ROAD + 15 FEET	801	820	-19	NA
M2	PRIVATE ROAD - 10 FEET	781	844	-63	NA
N2	KRIDERS CHURCH ROAD + 15 FEET	772	851	-79	NA
O2	WYNDTRYST DRIVE + 15 FEET	773	874	-101	NA
P2	DUNROVIN AVENUE + 15 FEET	778	887	-109	NA
Q2	VIRGINIA AVENUE + 15 FEET	790	890	-100	NA
R2	COLLEGE VIEW BOULEVARD + 15 FEET	794	896	-102	NA
S2	COLLEGE VIEW BOULEVARD + 15 FEET	794	898	-104	NA
T2	LITTLESTOWN PIKE RAMP + 15 FEET	790	906	-116	NA
U2	SNOWFALL WAY + 15 FEET	778	873	-95	NA
V2	WILDLIFE COURT + 15 FEET	788	886	-98	NA
W2	W. SUNSHINE WAY + 15 FEET	789	889	-100	NA
X2	SUNFLOWER COURT + 15 FEET	769	897	-128	NA
Y2	SKYLINE COURT + 15 FEET	756	904	-148	NA
Z2	SULLIVAN ROAD + 15 FEET	765	911	-146	NA

RUNWAY 34 - VERTICAL ROAD CLEARANCE CHART

OBJECT NO.	OBJECT DESCRIPTION	ELEVATION (MSL)	PART 77 SURFACE EXISTING	PENETRATION EXISTING	MITIGATION EXISTING
A3	PRIVATE ROAD + 10 FEET	751	916	-165	NA
B3	PRIVATE ROAD + 10 FEET	751	927	-176	NA
C3	W. SUNSHINE WAY + 15 FEET	748	938	-190	NA
D3	SULLIVAN ROAD + 15 FEET	745	921	-176	NA
E3	GENEVA DRIVE + 15 FEET	775	932	-157	NA
F3	MARSHALL DRIVE + 15 FEET	775	944	-169	NA
G3	HAHN ROAD + 15 FEET	775	947	-172	NA
H3	MONTEREY DRIVE + 15 FEET	775	956	-181	NA
I3	BARONETS COURT + 15 FEET	775	967	-192	NA
J3	PENNSYLVANIA AVENUE + 15 FEET	820	922	-102	NA
K3	SULLIVAN ROAD + 15 FEET	803	926	-123	NA
L3	PRIVATE ROAD + 10 FEET	815	934	-119	NA
M3	WINTERS STREET + 15 FEET	808	944	-136	NA
N3	WARD AVENUE + 15 FEET	806	948	-142	NA
O3	WARD AVENUE + 15 FEET	802	953	-151	NA
P3	HERSH AVENUE + 15 FEET	798	956	-158	NA
Q3	HERSH AVENUE + 15 FEET	799	958	-159	NA
R3	PRIVATE ROAD + 10 FEET	771	964	-193	NA
S3	PRIVATE ROAD + 10 FEET	772	970	-198	NA
T3	PRIVATE ROAD + 10 FEET	782	989	-207	NA
U3	23RD STREET + 15 FEET	780	998	-218	NA
V3	MATHIAS LANE + 15 FEET	782	1002	-220	NA
W3	CARROLL STREET + 15 FEET	773	1000	-227	NA
X3	18TH STREET + 15 FEET	770	1012	-242	NA
Y3	JOHN STREET + 15 FEET	763	1017	-254	NA
Z3	PRIVATE ROAD + 10 FEET	752	1023	-271	NA

RUNWAY 34 - VERTICAL ROAD CLEARANCE CHART

OBJECT NO.	OBJECT DESCRIPTION	ELEVATION (MSL)	PART 77 SURFACE EXISTING	PENETRATION EXISTING	MITIGATION EXISTING
A4	RAILROAD + 23 FEET	771	1029	-258	NA
B4	LOCUST STREET + 15 FEET	776	1044	-268	NA
C4	PRIVATE ROAD + 10 FEET	770	982	-212	NA
D4	ENGLAR ROAD + 15 FEET	755	988	-233	NA
E4	CLIFTON BOULEVARD + 15 FEET	743	994	-251	NA
F4	PRIVATE ROAD + 10 FEET	728	1001	-273	NA
G4	RAILROAD + 23 FEET	726	1018	-292	NA
H4	MANCHESTER ROAD + 15 FEET	736	1025	-289	NA
I4	MANCHESTER ROAD RAMP + 15 FEET	732	1033	-301	NA
J4	PRIVATE ROAD + 10 FEET	751	1044	-293	NA
K4	SUNSHINE WAY + 15 FEET	764	978	-214	NA
L4	LONDON COURT + 15 FEET	778	981	-203	NA
M4	PRIVATE ROAD + 10 FEET	711	1009	-298	NA
N4	MANCHESTER ROAD + 15 FEET	734	1026	-292	NA
O4	N. CRANBERRY ROAD + 15 FEET	706	1048	-342	NA
P4	N. CRANBERRY ROAD + 15 FEET	755	1054	-299	NA
Q4	GENTRY COURT + 15 FEET	770	1054	-284	NA
R4	SHAGBARK DRIVE + 15 FEET	779	1054	-275	NA
S4	LOGAN DRIVE + 15 FEET	833	1054	-221	NA
T4	LOGAN DRIVE + 15 FEET	828	1054	-226	NA
U4	PRIVATE ROAD + 10 FEET	781	1054	-273	NA
V4	PRIVATE ROAD + 10 FEET	777	1054	-277	NA
W4	BALTIMORE BOULEVARD + 15 FEET	771	1054	-283	NA
X4	KEY STREET + 15 FEET	820	1054	-234	NA
Y4	EMERALD HILL LANE + 15 FEET	802	1054	-252	NA
Z4	LONGWELL AVENUE + 15 FEET	784	1054	-270	NA

NOTES

1. IDENTIFIED OBJECT LOCATIONS AND ELEVATIONS ARE BASED ON AERIAL SURVEYS CONDUCTED BY WOOLPERT, INC., DECEMBER 18, 2013.
2. ALL ELEVATIONS ARE IN FEET ABOVE MEAN SEA LEVEL.
3. NATURAL GROWTH OBJECTS WITHIN 10 FEET OF THE PART 77 SURFACE ARE DEPICTED AS OBSTRUCTIONS.
4. GROUND SURVEYS ARE RECOMMENDED TO VERIFY ACCURACY OF ELEVATION DATA PRIOR TO OBSTRUCTION REMOVAL.
5. 14 CFR PART 77 REQUIRES THE FOLLOWING CLEARANCES:
   - 10 FEET ABOVE PRIVATE ROADS
   - 15 FEET ABOVE PUBLIC ROADS
   - 17 FEET ABOVE INTERSTATE HIGHWAYS
   - 23 FEET ABOVE RAILROADS

   ELEVATION = ACTUAL ROADWAY ELEVATION + PART 77 CLEARANCE.
6. ONLY OBJECTS PENETRATING PART 77 PRIMARY AND APPROACH SURFACES ARE DEPICTED ON THE APPROACH PROFILE VIEW.
7. PROFILE INDICATES TALLEST OBSTRUCTIONS LOCATED FOR EACH SPECIFIED GROUP WITHIN LATERAL LIMITS OF PRIMARY AND APPROACH SURFACES.
8. EXISTING OBSTRUCTION ANALYSIS DATA TABLE WAS COMPILED BY INFORMATION PROVIDED BY WOOLPERT, INC., DECEMBER 18, 2013.
9. LEGEND ELEMENTS REPRESENT DEPICTIONS ON DRAWING, BUT MAY VARY IN SIZE DUE TO SCALING ON DRAWING.
10. SURVEY DATA PREPARED BY WOOLPERT, INC., JANUARY 9, 2014 AND THE AERIAL IMAGERY PREPARED BY WOOLPERT, INC., FEBRUARY 6, 2014.
11. OBSTRUCTION DATA INFORMATION TABLE SHOWN ON SHEET 13.

LEGEND

DESCRIPTION	EXISTING
OBSTRUCTION	1
VERTICAL ROAD/ RAILROAD CLEARANCE	A
AIRPORT PROPERTY LINE	
DEPARTURE SURFACE	
EASEMENT/ ENCUMBERANCE	
GROUND ELEVATION CONTOURS	
INTERIOR PARCEL LINES	
OBJECT FREE ZONE (OFZ)	OFZ
RUNWAY OBJECT FREE AREA (ROFA)	ROFA
RUNWAY PROTECTION ZONE (RPZ)	RPZ

LEGEND

DESCRIPTION	EXISTING
RUNWAY SAFETY AREA (RSA)	RSA
TERRAIN (PROFILE VIEW)	

1000 0 1000 2000
SCALE: 1"=1000' FEET

NO.	REVISIONS	BY	APP.	DATE

RUNWAY DEPARTURE SURFACE (EXISTING)

CARROLL COUNTY REGIONAL AIRPORT
WESTMINSTER, MARYLAND

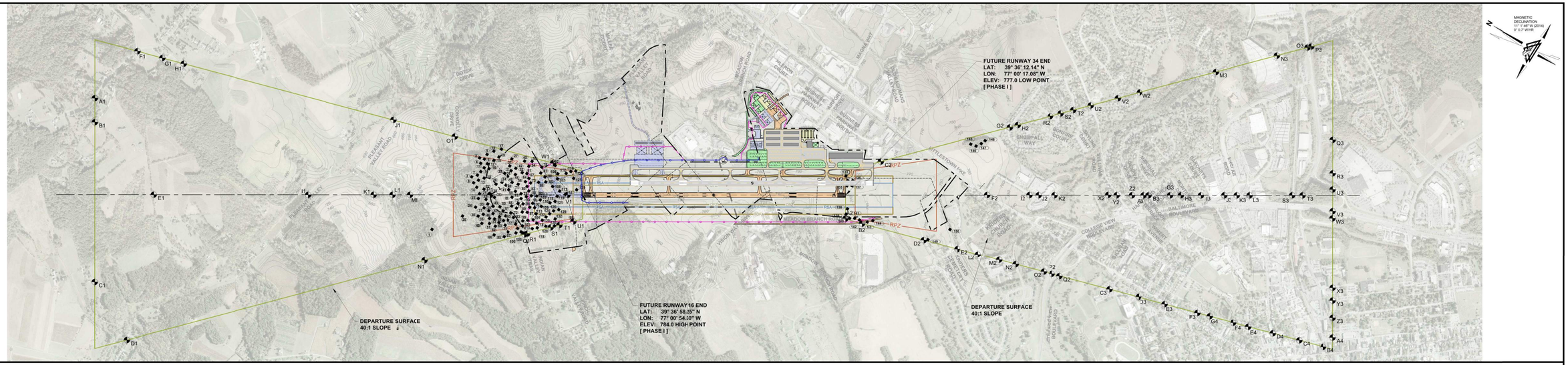
DELTA AIRPORT CONSULTANTS, INC.
www.deltaairport.com

DRAWN BY: RWW
CHECKED BY: RGL
SCALE: H: 1"=1000'; V: 1"=100'
DATE: MARCH 2015

SHEET 11 OF 17

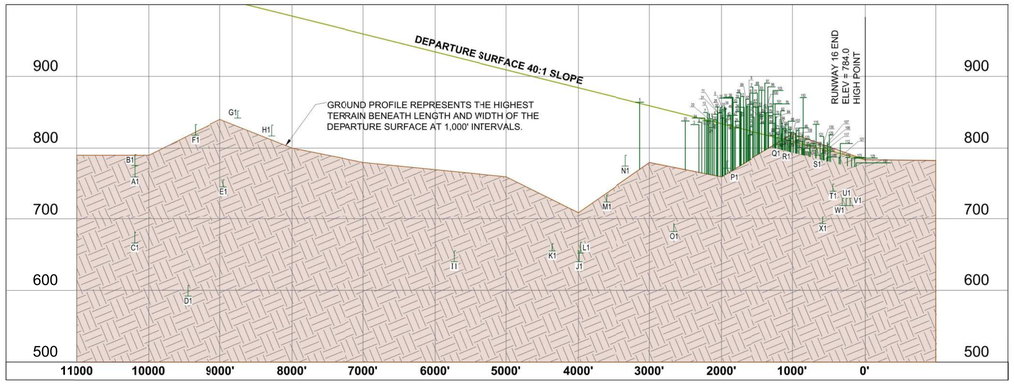
DRAWING: 13063-rdx-ex.dwg LAYOUT: EXIST RDS
XREFS: 13063_DMW_CarrollCountyAirport.dwg; 13063-north-arrow.dwg; 13063 property-line-ex.dwg; 13063 topo-ex.dwg; 13063 plan-ex.dwg; 13063-RSA-OFZ-ex.dwg IMAGES: 73719_DMW_CarrollCountyAirport.sid

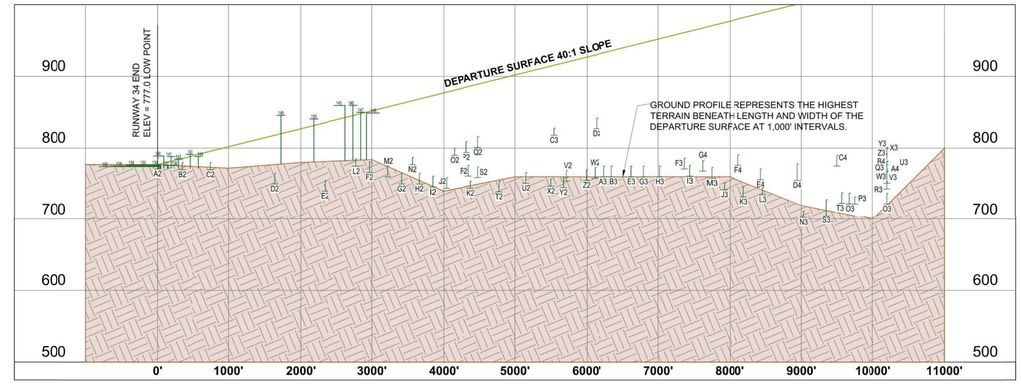
N:\13063\04 CAD\13063-rdx-ex.dwg, EXIST RDS, 4/15/2015 9:52:47 AM, rww



FUTURE RUNWAY DEPARTURE SURFACE - PLAN AND PROFILE VIEW

SCALE: 1" = 1,000' (HORIZ)
SCALE: 1" = 100' (VERT)





RUNWAY 16 - VERTICAL ROAD CLEARANCE CHART

OBJECT		ELEVATION (MSL)	PART 77 SURFACE	PENETRATION	MITIGATION
DESCRIPTION			FUTURE	FUTURE	FUTURE
A1	STONE ROAD + 15FEET	760	1068	-308	NA
B1	HUGHES SHOP ROAD + 15 FEET	776	1068	-292	NA
C1	HUGHES SHOP ROAD + 15 FEET	667	1068	-401	NA
D1	HUGHES SHOP ROAD + 15 FEET	611	1040	-429	NA
E1	PRIVATE ROAD + 10 FEET	746	1025	-279	NA
F1	STONE ROAD + 15FEET	824	1042	-218	NA
G1	PRIVATE ROAD + 10 FEET	846	1025	-179	NA
H1	MOREAU DRIVE + 15 FEET	820	1007	-187	NA
I1	PLEASANT VALLEY ROAD + 15 FEET	640	935	-295	NA
J1	PLEASANT VALLEY ROAD + 15 FEET	654	880	-226	NA
K1	PRIVATE ROAD + 10 FEET	655	890	-235	NA
L1	INDIAN VALLEY TRAIL + 15 FEET	652	889	-237	NA
M1	PRIVATE ROAD + 10 FEET	725	878	-153	NA
N1	INDIAN VALLEY TRAIL + 15 FEET	709	861	-152	NA
O1	CONNOLLY DRIVE + 15 FEET	726	841	-115	NA
P1	PRIVATE ROAD + 10 FEET	772	818	-46	NA
Q1	PRIVATE ROAD + 10 FEET	816	798	18	CLOSE AT AIRPORT PROPERTY LINE
R1	PRIVATE ROAD + 10 FEET	821	797	24	CLOSE AT AIRPORT PROPERTY LINE
S1	PRIVATE ROAD + 10 FEET	787	783	4	CLOSE AT AIRPORT PROPERTY LINE
T1	PRIVATE ROAD + 10 FEET	764	775	-11	NA
U1	PINCH VALLEY ROAD + 15 FEET	756	768	-12	NA
V1	PINCH VALLEY ROAD + 15 FEET	720	772	-52	NA
W1	PINCH VALLEY ROAD + 15 FEET	723	779	-56	NA

RUNWAY 34 - VERTICAL ROAD CLEARANCE CHART

OBJECT		ELEVATION (MSL)	PART 77 SURFACE	PENETRATION	MITIGATION
DESCRIPTION			FUTURE	FUTURE	FUTURE
A2	MEADOW BRANCH ROAD + 15 FEET	780	777	3	RELOCATE ROAD
B2	MEADOW BRANCH ROAD + 15 FEET	771	813	-42	NA
C2	PRIVATE ROAD + 10 FEET	770	831	-61	NA
D2	PRIVATE ROAD + 10 FEET	770	849	-79	NA
E2	KRIDERS CHURCH ROAD + 15 FEET	750	872	-122	NA
F2	LITTLESTOWN PIKE + 15 FEET	766	890	-124	NA
G2	SNOWFALL WAY + 15 FEET	750	902	-152	NA
H2	FALLING LEAF COURT + 15 FEET	750	909	-159	NA
I2	CORPORATE CENTER COURT + 15 FEET	746	915	-169	NA
J2	CORPORATE CENTER COURT + 15 FEET	744	921	-177	NA
K2	PRIVATE ROAD + 10 FEET	744	932	-188	NA
L2	PRIVATE ROAD + 10 FEET	740	884	-144	NA
M2	WYNDTRYST DRIVE + 15 FEET	760	906	-146	NA
N2	PRIVATE ROAD + 10 FEET	777	914	-137	NA
O2	PRIVATE ROAD + 10 FEET	790	922	-132	NA
P2	COLLEGE VIEW BOULEVARD + 15 FEET	794	925	-131	NA
Q2	LITTLESTOWN PIKE RAMP + 15 FEET	801	932	-131	NA
R2	W. SUNSHINE WAY + 15 FEET	761	935	-174	NA
S2	SUNFLOWER COURT + 15 FEET	759	938	-179	NA
T2	SKYLINE WAY + 15 FEET	739	943	-204	NA
U2	SULLIVAN ROAD + 15 FEET	751	954	-203	NA
V2	GARDEN WAY + 15 FEET	754	970	-216	NA
W2	W. SUNSHINE WAY + 15 FEET	758	982	-224	NA
X2	PRIVATE ROAD + 10 FEET	747	964	-217	NA
Y2	SULLIVAN ROAD + 15 FEET	745	968	-223	NA
Z2	GENEVA DRIVE + 15 FEET	755	977	-222	NA

RUNWAY 34 - VERTICAL ROAD CLEARANCE CHART

OBJECT		ELEVATION (MSL)	PART 77 SURFACE	PENETRATION	MITIGATION
DESCRIPTION			FUTURE	FUTURE	FUTURE
A3	HAHN ROAD + 15 FEET	760	985	-225	NA
B3	OVERLOOK TERRACE + 15 FEET	760	988	-228	NA
C3	PRIVATE ROAD + 10 FEET	818	938	-120	NA
D3	T STREET + 15 FEET	827	921	-94	NA
E3	PENNSYLVANIA AVENUE + 15 FEET	807	932	-125	NA
F3	DUTTERER WAY + 15 FEET	771	944	-173	NA
G3	HIGHLAND ROAD + 15 FEET	760	1002	-242	NA
H3	MONTEREY DRIVE + 15 FEET	760	1009	-249	NA
I3	BARONETS COURT + 15 FEET	761	1021	-260	NA
J3	PRIVATE ROAD + 10 FEET	742	1035	-293	NA
K3	ENGLAR ROAD + 15 FEET	732	1043	-311	NA
L3	PRIVATE ROAD + 10 FEET	735	1050	-315	NA
M3	SUNSHINE WAY + 15 FEET	758	1030	-272	NA
N3	PRIVATE ROAD + 10 FEET	702	1068	-366	NA
O3	MANCHESTER ROAD + 15 FEET	722	1086	-364	NA
P3	OLD MANCHESTER ROAD + 15 FEET	712	1107	-395	NA
Q3	PRIVATE ROAD + 10 FEET	758	1107	-349	NA
R3	PRIVATE ROAD + 10 FEET	743	1107	-364	NA
S3	RAILROAD + 23 FEET	705	1077	-372	NA
T3	RAILROAD AVENUE + 15 FEET	723	1084	-361	NA
U3	BALTIMORE BOULEVARD RAMP + 15 FEET	762	1107	-345	NA
V3	BALTIMORE BOULEVARD + 15 FEET	752	1107	-355	NA
W3	RAILROAD AVENUE RAMP + 15 FEET	751	1107	-356	NA
X3	TUC ROAD + 15 FEET	791	1107	-316	NA
Y3	PRIVATE ROAD + 10 FEET	792	1107	-315	NA
Z3	EMERALD HILL LANE + 15 FEET	775	1107	-332	NA

RUNWAY 34 - VERTICAL ROAD CLEARANCE CHART

OBJECT		ELEVATION (MSL)	PART 77 SURFACE	PENETRATION	MITIGATION
DESCRIPTION			FUTURE	FUTURE	FUTURE
A4	PRIVATE ROAD + 10 FEET	761	1107	-346	NA
B4	RAILROAD + 23 FEET	755	1095	-340	NA
C4	PRIVATE ROAD + 10 FEET	772	1107	-335	NA
D4	RAILROAD + 23 FEET	755	1095	-340	NA
E4	JOHN STREET + 15 FEET	756	1080	-324	NA
F4	CARROLL STREET + 15 FEET	776	1065	-289	NA
G4	LITTLESTOWN PIKE + 15 FEET	768	1050	-282	NA

NOTES

1. IDENTIFIED OBJECT LOCATIONS AND ELEVATIONS ARE BASED ON AERIAL SURVEYS CONDUCTED BY WOOLPERT, INC., DECEMBER 18, 2013.
2. ALL ELEVATIONS ARE IN FEET ABOVE MEAN SEA LEVEL.
3. NATURAL GROWTH OBJECTS WITHIN 10 FEET OF THE PART 77 SURFACE ARE DEPICTED AS OBSTRUCTIONS.
4. GROUND SURVEYS ARE RECOMMENDED TO VERIFY ACCURACY OF ELEVATION DATA PRIOR TO OBSTRUCTION REMOVAL.
5. 14 CFR PART 77 REQUIRES THE FOLLOWING CLEARANCES:
   - 10 FEET ABOVE PRIVATE ROADS
   - 15 FEET ABOVE PUBLIC ROADS
   - 17 FEET ABOVE INTERSTATE HIGHWAYS
   - 23 FEET ABOVE RAILROADS

   ELEVATION = ACTUAL ROADWAY ELEVATION + PART 77 CLEARANCE.
6. ONLY OBJECTS PENETRATING PART 77 APPROACH SURFACES ARE DEPICTED ON THE APPROACH PROFILE VIEW.
7. PROFILE INDICATES ALL OBSTRUCTIONS WITHIN LATERAL LIMITS OF APPROACH SURFACES.
8. EXISTING OBSTRUCTION ANALYSIS DATA TABLE WAS COMPILED BY INFORMATION PROVIDED BY WOOLPERT, INC., DECEMBER 18, 2013.
9. LEGEND ELEMENTS REPRESENT DEPICTIONS ON DRAWING, BUT MAY VARY IN SIZE DUE TO SCALING ON DRAWING.
10. SURVEY DATA PREPARED BY WOOLPERT, INC., JANUARY 9, 2014 AND THE AERIAL IMAGERY PREPARED BY WOOLPERT, INC., FEBRUARY 6, 2014.
11. OBSTRUCTION DATA LOCATED ON SHEET 15.

LEGEND

DESCRIPTION	EXISTING
OBSTRUCTION	1
VERTICAL ROAD/ RAILROAD CLEARANCE	A
AIRPORT PROPERTY LINE	
DEPARTURE SURFACE	
EASEMENT/ ENCUMBERANCE	
GROUND ELEVATION CONTOURS	
INTERIOR PARCEL LINES	
OBJECT FREE ZONE (OFZ)	OFZ
RUNWAY OBJECT FREE AREA (ROFA)	ROFA
RUNWAY PROTECTION ZONE (RPZ)	RPZ

LEGEND

DESCRIPTION	EXISTING
RUNWAY SAFETY AREA (RSA)	RSA
STREAM	
TERRAIN (PROFILE VIEW)	

1000 0 1000 2000
SCALE: 1"=1000' FEET

NO.	REVISIONS	BY	APP.	DATE

RUNWAY DEPARTURE SURFACE (FUTURE)

CARROLL COUNTY REGIONAL AIRPORT WESTMINSTER, MARYLAND

DELTA AIRPORT CONSULTANTS, INC.
www.deltaairport.com

DRAWN BY: RWW
CHECKED BY: RGL
SCALE: H: 1"=1000'; V: 1"=100'
DATE: MARCH 2015

SHEET 12 OF 17

DRAWING: 13063-dep-pro.dwg, LAYOUT: PROPOSED RDS
XREFS: 13063_DWM_CarrollCountyAirport.dwg, 13063-arrow.dwg, 13063 property-line-ex.dwg, 13063c logo-ex.dwg, 13063 plan-ex.dwg, 13063-geo-pro.dwg, 13063-approach-pro.dwg IMAGES: 73719_DMW_CarrollCountyAirport.sid:
N:\13063\04 CAD\13063-rdp-pro.dwg, PROPOSED RDS, 4/15/2015 9:54:46 AM, rww

EXISTING PART 77 OBSTRUCTION CHART
(SEE SHEET 7 & 8)

OBJECT		TOP ELEV	SURFACE ELEV		PENETRATION	MITIGATION
NO.	DESCRIPTION					
1	TREE	871	869	TRANSITION	2	REMOVE
2	TREE	870	867	APPROACH	2	REMOVE
3	TREE	870	864	APPROACH	6	REMOVE
4	TREE	857	857	APPROACH	0	REMOVE
5	TREE	871	867	APPROACH	4	REMOVE
6	TREE	858	856	APPROACH	2	REMOVE
7	TREE	856	853	APPROACH	3	REMOVE
8	TREE	868	862	APPROACH	6	REMOVE
9	TREE	877	875	TRANSITION	2	REMOVE
10	TREE	877	871	TRANSITION	6	REMOVE
11	TREE	888	856	APPROACH	32	REMOVE
12	TREE	876	861	TRANSITION	15	REMOVE
13	PRIMARY ROAD	858	852	APPROACH	6	RELOCATE RWY
14	PRIMARY ROAD	862	850	APPROACH	12	RELOCATE RWY
15	TREE	885	883	TRANSITION	2	REMOVE
16	PRIMARY ROAD	852	847	APPROACH	5	RELOCATE RWY
17	TREE	881	874	TRANSITION	6	REMOVE
18	TREE	844	835	TRANSITION	10	REMOVE
19	TREE	871	838	APPROACH	33	REMOVE
20	TREE	865	838	TRANSITION	26	REMOVE
21	TREE	833	833	APPROACH	0	REMOVE
22	TREE	820	818	APPROACH	2	REMOVE
23	TREE	852	848	TRANSITION	3	REMOVE
24	TREE	834	827	TRANSITION	7	REMOVE
25	TREE	853	824	TRANSITION	29	REMOVE
26	TREE	865	861	TRANSITION	5	REMOVE
27	TREE	863	842	TRANSITION	22	REMOVE
28	TREE	876	857	TRANSITION	19	REMOVE
29	TREE	879	875	TRANSITION	4	REMOVE
30	TREE	867	848	TRANSITION	19	REMOVE
31	TREE	853	824	TRANSITION	29	REMOVE
32	TREE	855	843	TRANSITION	12	REMOVE
34	TREE	888	861	TRANSITION	28	REMOVE
35	TREE	897	838	TRANSITION	59	REMOVE
36	TREE	817	817	TRANSITION	0	REMOVE
37	TREE	896	889	TRANSITION	8	REMOVE
38	TREE	909	850	TRANSITION	59	REMOVE
39	TREE	904	896	TRANSITION	8	REMOVE
40	TREE	940	939	HORIZONTAL	1	REMOVE
41	TREE	922	877	TRANSITION	45	REMOVE
42	TREE	945	939	HORIZONTAL	6	REMOVE
44	TREE	943	939	HORIZONTAL	4	REMOVE
45	TREE	961	939	HORIZONTAL	22	REMOVE
47	TREE	943	939	HORIZONTAL	4	REMOVE
49	TREE	942	939	HORIZONTAL	3	REMOVE
50	TREE	979	939	HORIZONTAL	40	REMOVE
51	TREE	982	939	HORIZONTAL	42	REMOVE
52	TREE	946	939	HORIZONTAL	7	REMOVE
53	TREE	948	939	HORIZONTAL	8	REMOVE
54	TREE	986	939	HORIZONTAL	47	REMOVE
55	ANTENNA	959	939	HORIZONTAL	20	LIGHT
56	TREE	972	939	HORIZONTAL	33	REMOVE
57	TREE	957	939	HORIZONTAL	18	REMOVE
58	TREE	958	939	HORIZONTAL	18	REMOVE
60	TREE	947	939	HORIZONTAL	7	REMOVE
61	TREE	940	939	HORIZONTAL	0	REMOVE
63	TREE	952	939	HORIZONTAL	13	REMOVE
64	TREE	963	939	HORIZONTAL	24	REMOVE
65	TREE	852	841	TRANSITION	10	REMOVE
67	TREE	850	816	TRANSITION	33	REMOVE
68	TREE	943	939	HORIZONTAL	4	REMOVE
69	TREE	1008	939	HORIZONTAL	69	REMOVE
70	TREE	847	808	TRANSITION	39	REMOVE
71	TREE	994	939	HORIZONTAL	54	REMOVE
73	TREE	839	805	TRANSITION	34	REMOVE
74	TREE	840	831	TRANSITION	9	REMOVE
75	TREE	810	810	TRANSITION	0	REMOVE

PURPOSELY OMITTED FROM COUNT: 33, 43, 46, 48, 59, 62, 66, 72.

EXISTING RUNWAY DEPARTURE SURFACE OBSTRUCTION CHART
(SEE SHEET 11)

OBJECT		TOP ELEV	SURFACE ELEV	PENETRATION	MITIGATION
NO.	DESCRIPTION				
1	TREE	861	859	2	RELOCATE RWY
2	TREE	873	861	12	RELOCATE RWY
3	TREE	863	858	5	RELOCATE RWY
4	TREE	870	858	12	RELOCATE RWY
5	TREE	861	859	1	RELOCATE RWY
6	TREE	871	861	11	RELOCATE RWY
7	TREE	853	852	1	RELOCATE RWY
8	TREE	870	861	9	RELOCATE RWY
9	TREE	861	854	7	RELOCATE RWY
10	TREE	872	857	15	RELOCATE RWY
11	TREE	870	858	12	RELOCATE RWY
12	TREE	871	851	20	RELOCATE RWY
13	TREE	874	854	20	RELOCATE RWY
14	TREE	871	850	20	RELOCATE RWY
15	TREE	861	851	11	RELOCATE RWY
16	TREE	857	852	5	RELOCATE RWY
17	TREE	857	856	1	RELOCATE RWY
18	TREE	871	860	11	RELOCATE RWY
19	TREE	858	851	7	RELOCATE RWY
20	TREE	856	849	7	RELOCATE RWY
21	TREE	864	860	3	RELOCATE RWY
22	TREE	868	856	12	RELOCATE RWY
23	TREE	877	858	19	RELOCATE RWY
24	NATURAL HIGH POINT	850	849	1	RELOCATE RWY
25	TREE	877	854	22	RELOCATE RWY
26	TREE	888	851	37	RELOCATE RWY
27	TREE	858	856	2	RELOCATE RWY
28	NATURAL HIGH POINT	847	846	1	RELOCATE RWY
29	TREE	876	851	25	RELOCATE RWY
30	TREE	858	855	3	RELOCATE RWY
31	PRIMARY ROAD	858	848	10	RELOCATE RWY
32	PRIMARY ROAD	862	846	16	RELOCATE RWY
33	TREE	885	853	32	RELOCATE RWY
34	PRIMARY ROAD	849	848	1	RELOCATE RWY
35	PRIMARY ROAD	852	843	9	RELOCATE RWY
36	TREE	881	850	31	RELOCATE RWY
37	TREE	861	855	6	RELOCATE RWY
38	TREE	863	853	10	RELOCATE RWY
39	TREE	830	823	6	RELOCATE RWY
40	TREE	891	849	42	RELOCATE RWY
41	TREE	886	848	38	RELOCATE RWY
42	TREE	838	821	17	RELOCATE RWY
43	TREE	828	822	6	RELOCATE RWY
44	TREE	862	845	17	RELOCATE RWY
45	TREE	880	846	34	RELOCATE RWY
46	TREE	856	817	38	RELOCATE RWY
47	TREE	844	821	24	RELOCATE RWY
48	TREE	871	836	35	RELOCATE RWY
49	TREE	868	817	52	RELOCATE RWY
50	TREE	847	818	29	RELOCATE RWY
51	TREE	859	814	45	RELOCATE RWY
52	TREE	833	831	2	RELOCATE RWY
53	TREE	820	818	2	RELOCATE RWY
54	TREE	852	814	38	RELOCATE RWY
55	TREE	815	813	2	RELOCATE RWY
56	TREE	834	806	28	RELOCATE RWY
57	TREE	844	807	37	RELOCATE RWY
58	TREE	853	803	51	RELOCATE RWY
59	TREE	830	804	26	RELOCATE RWY
60	TREE	863	801	62	RELOCATE RWY
61	TREE	847	798	49	RELOCATE RWY
62	TREE	853	795	59	RELOCATE RWY
63	BUILDING	788	781	7	RELOCATE RWY
64	PARKING LOT	794	792	1	RELOCATE RWY
65	TREE	796	792	4	RELOCATE RWY
66	POLE	807	797	11	RELOCATE RWY
67	TREE	860	825	35	RELOCATE RWY
68	TREE	860	828	32	RELOCATE RWY
69	TREE	810	809	1	RELOCATE RWY
70	TREE	850	831	19	RELOCATE RWY
71	TREE	849	832	17	RELOCATE RWY

NO.	REVISIONS	BY	APP.	DATE

OBSTRUCTION CHARTS (EXISTING)

CARROLL COUNTY REGIONAL AIRPORT
WESTMINSTER, MARYLAND

DELTA AIRPORT CONSULTANTS, INC.
www.deltaairport.com

DRAWN BY: RWW | SCALE: NONE
CHECKED BY: RGL | DATE: MARCH 2015

SHEET 13 OF 17

N:\13063\04 CAD\13063-obst-charts.dwg, Exist P77 RDS, 4/15/2015 9:56:08 AM, rww
DRAWING: 13063-obst-charts.dwg LAYOUT: Exist P77 RDS
XREFS: IMAGES

FUTURE P77 OBSTRUCTION CHART (SEE SHEET 9 & 10)

OBJECT		TOP ELEV	SURFACE ELEV	SURFACE	PENETRATION	MITIGATION
NO.	DESCRIPTION					
1	TREE	844	838	APPROACH	6	REMOVE
2	TREE	847	836	APPROACH	10	REMOVE
3	TREE	837	827	APPROACH	9	REMOVE
4	TREE	838	837	APPROACH	1	REMOVE
5	TREE	838	827	APPROACH	11	REMOVE
6	TREE	848	836	APPROACH	12	REMOVE
7	TREE	835	824	APPROACH	11	REMOVE
8	TREE	847	835	APPROACH	12	REMOVE
9	TREE	823	816	APPROACH	7	REMOVE
10	TREE	824	820	APPROACH	4	REMOVE
11	TREE	838	833	APPROACH	6	REMOVE
12	TREE	833	824	APPROACH	8	REMOVE
13	TREE	837	836	APPROACH	0	REMOVE
14	TREE	826	821	APPROACH	5	REMOVE
15	TREE	864	833	APPROACH	31	REMOVE
16	TREE	823	816	APPROACH	7	REMOVE
17	TREE	841	813	APPROACH	28	REMOVE
18	TREE	846	834	APPROACH	12	REMOVE
19	TREE	826	823	APPROACH	3	REMOVE
20	TREE	829	819	APPROACH	11	REMOVE
21	TREE	829	816	APPROACH	13	REMOVE
22	TREE	820	820	APPROACH	0	REMOVE
23	TREE	821	819	APPROACH	2	REMOVE
24	TREE	833	817	APPROACH	16	REMOVE
25	TREE	838	813	APPROACH	25	REMOVE
26	TREE	858	821	TRANSITION	37	REMOVE
27	TREE	849	811	APPROACH	38	REMOVE
28	TREE	850	814	APPROACH	35	REMOVE
29	TREE	827	824	APPROACH	4	REMOVE
30	TREE	831	817	APPROACH	14	REMOVE
31	TREE	836	816	APPROACH	20	REMOVE
32	TREE	870	856	TRANSITION	14	REMOVE
33	TREE	844	813	APPROACH	31	REMOVE
34	TREE	861	843	TRANSITION	17	REMOVE
35	TREE	871	831	TRANSITION	40	REMOVE
36	TREE	850	811	APPROACH	38	REMOVE
37	TREE	842	810	APPROACH	32	REMOVE
38	TREE	848	814	APPROACH	34	REMOVE
39	TREE	822	817	APPROACH	5	REMOVE
40	TREE	825	823	APPROACH	2	REMOVE
41	TREE	838	815	APPROACH	23	REMOVE
42	TREE	870	807	APPROACH	62	REMOVE
43	TREE	852	809	APPROACH	42	REMOVE
44	TREE	872	837	TRANSITION	35	REMOVE
45	TREE	857	811	APPROACH	46	REMOVE
46	TREE	818	817	APPROACH	1	REMOVE
47	TREE	870	814	TRANSITION	56	REMOVE
48	TREE	829	819	APPROACH	9	REMOVE
49	TREE	838	820	APPROACH	17	REMOVE
50	TREE	874	841	TRANSITION	33	REMOVE
51	TREE	813	807	APPROACH	6	REMOVE
52	TREE	829	813	APPROACH	15	REMOVE
53	TREE	820	820	APPROACH	0	REMOVE
54	TREE	847	812	APPROACH	36	REMOVE
55	TREE	871	859	TRANSITION	12	REMOVE
56	TREE	840	814	APPROACH	27	REMOVE
57	BUSH	804	803	APPROACH	1	REMOVE
58	TREE	835	822	APPROACH	14	REMOVE
59	TREE	825	817	APPROACH	8	REMOVE
60	TREE	842	815	APPROACH	27	REMOVE
61	TREE	861	841	TRANSITION	21	REMOVE
62	BUSH	810	804	APPROACH	7	REMOVE
63	TREE	856	811	APPROACH	46	REMOVE
64	TREE	837	807	APPROACH	31	REMOVE
65	TREE	835	835	TRANSITION	0	REMOVE
66	TREE	845	808	TRANSITION	37	REMOVE
67	TREE	844	809	APPROACH	36	REMOVE
68	TREE	828	816	APPROACH	11	REMOVE
69	NATURAL HIGH POINT	818	803	APPROACH	15	REMOVE
70	TREE	833	814	APPROACH	19	REMOVE
71	TREE	850	812	APPROACH	38	REMOVE
72	TREE	857	801	APPROACH	57	REMOVE
73	TREE	854	810	APPROACH	44	REMOVE
74	TREE	857	804	APPROACH	53	REMOVE
75	TREE	839	812	APPROACH	28	REMOVE
76	TREE	871	807	APPROACH	64	REMOVE
77	TREE	858	800	APPROACH	58	REMOVE
78	NATURAL HIGH POINT	832	801	APPROACH	31	REMOVE
79	TREE	857	810	APPROACH	48	REMOVE
80	TREE	832	812	APPROACH	20	REMOVE
81	TREE	856	798	APPROACH	58	REMOVE
82	TREE	846	808	APPROACH	38	REMOVE
83	TREE	818	813	APPROACH	6	REMOVE
84	NATURAL HIGH POINT	815	803	APPROACH	11	REMOVE
85	NATURAL HIGH POINT	834	798	APPROACH	36	REMOVE
86	FENCE	837	802	APPROACH	35	RELOCATE
87	TREE	819	802	TRANSITION	17	REMOVE
88	TREE	855	809	APPROACH	46	REMOVE
89	TREE	846	808	APPROACH	38	REMOVE
90	NATURAL HIGH POINT	846	800	APPROACH	47	REMOVE
91	TREE	851	805	APPROACH	46	REMOVE
92	TREE	840	809	APPROACH	31	REMOVE
93	TREE	816	794	APPROACH	22	REMOVE
94	NATURAL HIGH POINT	818	795	APPROACH	22	REMOVE
95	TREE	864	807	APPROACH	56	REMOVE
96	FENCE	845	800	APPROACH	45	RELOCATE
97	TREE	807	802	TRANSITION	5	REMOVE
98	NATURAL HIGH POINT	845	797	APPROACH	48	REMOVE
99	NATURAL HIGH POINT	831	801	APPROACH	30	REMOVE
100	TREE	868	804	APPROACH	65	REMOVE
101	TREE	877	805	APPROACH	72	REMOVE
102	NATURAL HIGH POINT	850	798	APPROACH	52	REMOVE
103	NATURAL HIGH POINT	806	793	APPROACH	13	REMOVE
104	TREE	828	807	APPROACH	21	REMOVE
105	TREE	850	805	APPROACH	44	REMOVE
106	NATURAL HIGH POINT	827	794	APPROACH	33	REMOVE
107	FENCE	843	799	APPROACH	44	RELOCATE
108	TREE	877	803	APPROACH	74	REMOVE
109	TREE	833	820	TRANSITION	13	REMOVE
110	NATURAL HIGH POINT	812	793	APPROACH	19	REMOVE
111	TREE	888	800	APPROACH	88	REMOVE
112	TREE	858	803	APPROACH	54	REMOVE
113	NATURAL HIGH POINT	847	796	APPROACH	51	REMOVE
114	NATURAL HIGH POINT	827	793	APPROACH	34	REMOVE
115	TREE	876	800	APPROACH	76	REMOVE
116	NATURAL HIGH POINT	811	792	APPROACH	19	REMOVE
117	TREE	858	803	APPROACH	55	REMOVE

FUTURE P77 OBSTRUCTION CHART (SEE SHEET 9 & 10)

OBJECT		TOP ELEV	SURFACE ELEV	SURFACE	PENETRATION	MITIGATION
NO.	DESCRIPTION					
118	PRIMARY ROAD	858	797	APPROACH	61	CLOSE AT AIRPORT PROPERTY LINE
119	PRIMARY ROAD	862	796	APPROACH	66	CLOSE AT AIRPORT PROPERTY LINE
120	TREE	885	801	APPROACH	84	REMOVE
121	TREE	800	787	APPROACH	12	REMOVE
122	PRIMARY ROAD	849	798	APPROACH	52	CLOSE AT AIRPORT PROPERTY LINE
123	NATURAL HIGH POINT	825	793	APPROACH	32	REMOVE
124	TREE	809	788	APPROACH	22	REMOVE
125	PRIMARY ROAD	852	794	APPROACH	58	CLOSE AT AIRPORT PROPERTY LINE
126	TREE	881	799	APPROACH	82	REMOVE
127	NATURAL HIGH POINT	843	795	APPROACH	48	REMOVE
128	TREE	861	825	TRANSITION	36	REMOVE
129	TREE	828	789	APPROACH	40	REMOVE
130	TREE	863	812	TRANSITION	52	CLOSE AT AIRPORT PROPERTY LINE
131	PRIMARY ROAD	838	792	APPROACH	46	REMOVE
132	NATURAL HIGH POINT	835	795	APPROACH	39	REMOVE
133	TREE	795	786	APPROACH	9	REMOVE
134	TREE	891	798	APPROACH	93	REMOVE
135	PRIMARY ROAD	824	789	APPROACH	35	CLOSE AT AIRPORT PROPERTY LINE
136	NATURAL HIGH POINT	833	792	APPROACH	41	REMOVE
137	TREE	804	786	APPROACH	19	REMOVE
138	NATURAL HIGH POINT	826	791	APPROACH	35	REMOVE
139	NATURAL HIGH POINT	834	793	APPROACH	41	REMOVE
140	TREE	886	801	TRANSITION	84	REMOVE
141	NATURAL HIGH POINT	823	795	APPROACH	28	REMOVE
142	TREE	849	815	TRANSITION	34	REMOVE
143	NATURAL HIGH POINT	787	786	APPROACH	0	REMOVE
144	TREE	823	819	TRANSITION	4	REMOVE
145	TREE	862	795	APPROACH	67	REMOVE
146	NATURAL HIGH POINT	822	790	APPROACH	32	REMOVE
147	NATURAL HIGH POINT	801	788	APPROACH	13	REMOVE
148	NATURAL HIGH POINT	827	793	APPROACH	34	REMOVE
149	NATURAL HIGH POINT	794	787	APPROACH	8	REMOVE
150	TREE	880	812	TRANSITION	69	REMOVE
151	TREE	805	781	APPROACH	25	REMOVE
152	TREE	848	830	TRANSITION	18	REMOVE
153	TREE	856	843	TRANSITION	12	REMOVE
154	TREE	807	781	APPROACH	27	REMOVE
155	TREE	804	783	APPROACH	22	REMOVE
156	TREE	844	811	TRANSITION	33	REMOVE
157	NATURAL HIGH POINT	821	790	APPROACH	31	REMOVE
158	TREE	871	787	APPROACH	83	REMOVE
159	NATURAL HIGH POINT	822	791	APPROACH	31	REMOVE
160	TREE	835	825	TRANSITION	11	REMOVE
161	TREE	807	777	APPROACH	29	REMOVE
162	NATURAL HIGH POINT	813	802	TRANSITION	11	REMOVE
163	TREE	859	842	TRANSITION	15	REMOVE
164	NATURAL HIGH POINT	816	789	APPROACH	27	REMOVE
165	TREE	865	816	TRANSITION	48	REMOVE
166	TREE	833	784	APPROACH	49	REMOVE
167	TREE	819	786	TRANSITION	33	REMOVE
168	TREE	820	794	TRANSITION	26	REMOVE
169	TREE	787	775	APPROACH	12	REMOVE
170*	TREE	852	838	TRANSITION	14	REMOVE
171	TREE	802	780	APPROACH	22	REMOVE
172	TREE	852	827	TRANSITION	24	REMOVE
173	NATURAL HIGH POINT	812	800	TRANSITION	12	REMOVE
174	TREE	788	781	APPROACH	7	REMOVE
175	NATURAL HIGH POINT	813	787	APPROACH	25	REMOVE
176	TREE	816	782	APPROACH	35	REMOVE
177	NATURAL HIGH POINT	806	786	APPROACH	21	REMOVE
178	NATURAL HIGH POINT	812	791	TRANSITION	21	REMOVE
179	TREE	787	774	PRIMARY	13	REMOVE
180	TREE	804	792	TRANSITION	12	REMOVE
181	NATURAL HIGH POINT	797	784	APPROACH	13	REMOVE
182	TREE	786	774	PRIMARY	12	REMOVE
183	TREE	815	805	TRANSITION	10	REMOVE
184	TREE	793	782	APPROACH	10	REMOVE
185	TREE	787	778	APPROACH	9	REMOVE
186	NATURAL HIGH POINT	804	796	TRANSITION	8	REMOVE
187	TREE	775	774	PRIMARY	1	REMOVE
188	TREE	818	780	APPROACH	38	REMOVE
189	TREE	777	774	PRIMARY	2	REMOVE
190	TREE	808	782	APPROACH	26	REMOVE
191	TREE	831	815	TRANSITION	17	REMOVE
192	TREE	780	774	PRIMARY	5	REMOVE
193	TREE	800	795	TRANSITION	5	REMOVE
194	TREE	834	776	PRIMARY	58	REMOVE
195	TREE	844	776	PRIMARY	67	REMOVE
196	NATURAL HIGH POINT	781	779	PRIMARY	1	REMOVE
197	TREE	816	807	TRANSITION	9	REMOVE
198	TREE	825	821	TRANSITION	4	REMOVE
199	TREE	853	777	PRIMARY	76	REMOVE
200	NATURAL HIGH POINT	784	780	PRIMARY	4	REMOVE
201	TREE	830	777	PRIMARY	53	REMOVE
202	TREE	838	782	TRANSITION	56	REMOVE
203	NATURAL HIGH POINT	782	779	PRIMARY	2	REMOVE
204	TREE	865	777	PRIMARY	89	REMOVE
205	NATURAL HIGH POINT	785	780	PRIMARY	6	REMOVE
206	TREE	827	801	TRANSITION	26	REMOVE
207	NATURAL HIGH POINT	786	780	PRIMARY	6	REMOVE
208	TREE	863	778	PRIMARY	86	REMOVE
209	NATURAL HIGH POINT	785	780	PRIMARY	5	REMOVE
210	TREE	868	793	TRANSITION	74	REMOVE
211	NATURAL HIGH POINT	786	783	TRANSITION	3	REMOVE
212	TREE	876	778	PRIMARY	98	REMOVE
214	TREE	847	778	PRIMARY	68	REMOVE
215	TREE	879	790	TRANSITION	89	REMOVE
217	NATURAL HIGH POINT	786	785	TRANSITION	2	REMOVE
218	NATURAL HIGH POINT	784	782	PRIMARY	2	REMOVE
219	NATURAL HIGH POINT	787	781	PRIMARY	5	REMOVE
220	TREE	853	779	PRIMARY	74	REMOVE
221	TREE	880	778	PRIMARY	101	REMOVE
222	NATURAL HIGH POINT	788	781	PRIMARY	7	REMOVE
223	NATURAL HIGH POINT	781	781	PRIMARY	1	REMOVE
224	TREE	875	795	TRANSITION	80	REMOVE
225	TREE	855	779	PRIMARY	76	REMOVE
226	NATURAL HIGH POINT	800	780	PRIMARY	20	REMOVE
227	NATURAL HIGH POINT	784	782	PRIMARY	2	REMOVE
229	TREE	858	816	TRANSITION	42	REMOVE
230	TREE	888	779	PRIMARY	109	REMOVE
231	TREE	882	780	PRIMARY	102	REMOVE
232	TREE	868	791	TRANSITION	77	REMOVE
233	NATURAL HIGH POINT	782	781	PRIMARY	1	REMOVE
234	NATURAL HIGH POINT	785	782	PRIMARY	3	REMOVE

PURPOSELY OMITTED FROM COUNT: 212, 216, 228

FUTURE P77 OBSTRUCTION CHART (SEE SHEET 9 & 10)

OBJECT		TOP ELEV	SURFACE ELEV	SURFACE	PENETRATION	MITIGATION
NO.	DESCRIPTION					
235	NATURAL HIGH POINT	784	783	PRIMARY	1	REMOVE
236*	TREE	901	886	TRANSITION	15	REMOVE
237	TREE	817	781	PRIMARY	36	REMOVE
238	TREE	904	780	PRIMARY	124	REMOVE
239	NATURAL HIGH POINT	788	783	PRIMARY	5	REMOVE
240	TREE	883	822	TRANSITION	61	REMOVE
241	TREE	896	807	TRANSITION	89	REMOVE
242	NATURAL HIGH POINT	784	782	PRIMARY	2	REMOVE
243	NATURAL HIGH POINT	788	783	PRIMARY	5	REMOVE
244	NATURAL HIGH POINT	784	784	PRIMARY	0	REMOVE
245	NATURAL HIGH POINT	826	781	PRIMARY	45	REMOVE
246	NATURAL HIGH POINT	788	783	PRIMARY	4	REMOVE
247	TREE	913	781	PRIMARY	132	REMOVE
248	NATURAL HIGH POINT	788	783	PRIMARY	4	REMOVE
249	TREE	894	818	TRANSITION	76	REMOVE
250	NATURAL HIGH POINT	788	784	PRIMARY	3	REMOVE
251	NATURAL HIGH POINT	803	782	PRIMARY	21	REMOVE
252	NATURAL HIGH POINT	825	782	PRIMARY	43	REMOVE
253	TREE	912	781	PRIMARY	131	REMOVE
254	NATURAL HIGH POINT	788	784	PRIMARY	4	REMOVE
255	NATURAL HIGH POINT	784	784	PRIMARY	0	REMOVE
256	TREE	904	816	TRANSITION	88	REMOVE
257	NATURAL HIGH POINT	837	782	PRIMARY	55	REMOVE
258	NATURAL HIGH POINT	806	783	PRIMARY	23	REMOVE
259*	TREE	922	912	TRANSITION	10	REMOVE
260	NATURAL HIGH POINT	787	785	PRIMARY	2	REMOVE
261*	TREE	904	884	TRANSITION	21	REMOVE
262	NATURAL HIGH POINT	787	785	PRIMARY	3	REMOVE
263	NATURAL HIGH POINT	833	783	PRIMARY	51	REMOVE
264	NATURAL HIGH POINT	841	784	TRANSITION	57	REMOVE
265	TREE	922	798	TRANSITION	124	REMOVE
267	TREE	919	819	TRANSITION	100	REMOVE
269	NATURAL HIGH POINT	787	785	PRIMARY	2	REMOVE
270	NATURAL HIGH POINT	826	783	PRIMARY	43	REMOVE
271	NATURAL HIGH POINT	838	783	PRIMARY	56	REMOVE
272	NATURAL HIGH POINT	847	796	TRANSITION	51	REMOVE
273	NATURAL HIGH POINT	807	784	PRIMARY	23	REMOVE
274	NATURAL HIGH POINT	847	811	TRANSITION	36	REMOVE
275	NATURAL HIGH POINT	788	785	PRIMARY	3	REMOVE
276	NATURAL HIGH POINT	832	783	PRIMARY	49	REMOVE
277	TREE	943	934	TRANSITION	9	REMOVE
278	NATURAL HIGH POINT	820	784	PRIMARY	37	REMOVE
279	NATURAL HIGH POINT	786	785	PRIMARY	1	REMOVE
280*	TREE	899	854	TRANSITION	44	REMOVE
281	NATURAL HIGH POINT	842	795	TRANSITION	48	REMOVE
282	NATURAL HIGH POINT	809	785	PRIMARY	24	REMOVE
283	NATURAL HIGH POINT	786	785	PRIMARY	1	REMOVE
284	NATURAL HIGH POINT	814	784	PRIMARY	30	REMOVE
285	NATURAL HIGH POINT	852	823	TRANSITION	29	REMOVE
286	NATURAL HIGH POINT	836	793	TRANSITION	43	REMOVE
287	NATURAL HIGH POINT	824	784	PRIMARY	40	REMOVE
288	NATURAL HIGH POINT	808	785	PRIMARY	23	REMOVE
289*	TREE	913	879	TRANSITION	34	REMOVE
290	NATURAL HIGH POINT	847	806	TRANSITION	41	REMOVE
291	NATURAL HIGH POINT	809	785	PRIMARY	24	REMOVE
293	NATURAL HIGH POINT	857	834	TRANSITION	24	REMOVE
294	NATURAL HIGH POINT	805	785	PRIMARY	20	REMOVE
295	NATURAL HIGH POINT	818	785	PRIMARY	33	REMOVE
296	NATURAL HIGH POINT	787	785	PRIMARY	2	REMOVE
297	NATURAL HIGH POINT	844	808	TRANSITION	35	REMOVE
298	NATURAL HIGH POINT	803	785	PRIMARY	18	REMOVE
299	NATURAL HIGH POINT	802	785	PRIMARY	17	REMOVE
300	NATURAL HIGH POINT	802	785	PRIMARY	17	REMOVE
301*	NATURAL HIGH POINT	859	847	TRANSITION	12	REMOVE
302	NATURAL HIGH POINT	822	795	TRANSITION	27	REMOVE
304	NATURAL HIGH POINT	808	785	PRIMARY	23	REMOVE
305	NATURAL HIGH POINT	787	785	PRIMARY	2	REMOVE
306	NATURAL HIGH POINT	833	810	TRANSITION	23	REMOVE
307	NATURAL HIGH POINT	846	824	TRANSITION	22	REMOVE
308	NATURAL HIGH POINT	797	785	PRIMARY	12	REMOVE
309	NATURAL HIGH POINT	855	837	TRANSITION	18	REMOVE
310	NATURAL HIGH POINT	796	785	PRIMARY	11	REMOVE
311	NATURAL HIGH POINT	799	785	PRIMARY	14	REMOVE
312	NATURAL HIGH POINT	787	785	PRIMARY	2	REMOVE
313*	NATURAL HIGH POINT	860	850	TRANSITION	10	REMOVE
314	NATURAL HIGH POINT	816	806	TRANSITION	11	REMOVE
315	NATURAL HIGH POINT	787	785	PRIMARY	2	REMOVE
316	NATURAL HIGH POINT	802	793	TRANSITION	8	REMOVE
317	NATURAL HIGH POINT	831	820	TRANSITION	11	REMOVE
318	NATURAL HIGH POINT	842	834	TRANSITION	8	REMOVE
319	NATURAL HIGH POINT	792	785	PRIMARY	7	REMOVE
320	NATURAL HIGH POINT	787	785	PRIMARY	2	REMOVE
321	NATURAL HIGH POINT	794	791	TRANSITION	2	REMOVE
322	NATURAL HIGH POINT	787	785	PRIMARY	2	REMOVE
323	NATURAL HIGH POINT	793	785	PRIMARY	8	REMOVE
324	FENCE	796	785	PRIMARY	11	RELOCATE
325	NATURAL HIGH POINT	787	785	PRIMARY	2	REMOVE
326	NATURAL HIGH POINT	790	788	TRANSITION	1	REMOVE
327	NATURAL HIGH POINT	790	785	PRIMARY	5	REMOVE
328	NATURAL HIGH POINT	786	785	PRIMARY	1	REMOVE
329	NATURAL HIGH POINT	787	785	PRIMARY	2	REMOVE
330	FENCE	795	785	PRIMARY	10	RELOCATE
331	NATURAL HIGH POINT	787	785	PRIMARY	2	REMOVE
332	NATURAL HIGH POINT	788	785	PRIMARY	3	REMOVE
333	NATURAL HIGH POINT	787	785	PRIMARY	2	REMOVE
334	NATURAL HIGH POINT	786	785	PRIMARY	1	REMOVE
335	NATURAL HIGH POINT	787	785	PRIMARY	2	REMOVE
336	NATURAL HIGH POINT	786	785	PRIMARY	1	REMOVE
337	FENCE	795	785	PRIMARY	10	RELOCATE
338	NATURAL HIGH POINT	787	785	PRIMARY	2	REMOVE
339	NATURAL HIGH POINT	786	785	PRIMARY	1	REMOVE
340	NATURAL HIGH POINT	786	785	PRIMARY	1	REMOVE
341	NATURAL HIGH POINT	785	785	PRIMARY	0	REMOVE
342	NATURAL HIGH POINT	786	785	PRIMARY	1	REMOVE
343	TREE	838	820	TRANSITION	18	REMOVE
345*	TREE	933	916	TRANSITION	18	REMOVE
346*	TREE	911	883	TRANSITION	27	REMOVE
347*	TREE	922	899	TRANSITION	23	REMOVE
348*	TREE	857	851	TRANSITION	6	REMOVE
349*	TREE	909	876	TRANSITION	33	REMOVE
350*	TREE	928	914	TRANSITION	14	REMOVE
351*	TREE	902	865	TRANSITION	37	REMOVE

PURPOSELY OMITTED FROM COUNT: 266, 268, 292, 303, 344

FUTURE P77 OBSTRUCTION CHART (SEE SHEET 9 & 10)

OBJECT		TOP ELEV	SURFACE ELEV	SURFACE	PENETRATION	MITIGATION
NO.	DESCRIPTION					
352	NATURAL HIGH POINT	786	785	PRIMARY	1	REMOVE
354*	TREE	909	893	TRANSITION	16	REMOVE
355*	TREE	902	885	TRANSITION	17	REMOVE
356*	TREE	919	913	TRANSITION	6	REMOVE
357	NATURAL HIGH POINT	785	785	PRIMARY	0	REMOVE
358	NATURAL HIGH POINT	785	785	PRIMARY	0	REMOVE
359	NATURAL HIGH POINT	785	785	PRIMARY	0	REMOVE
360	NATURAL HIGH POINT	785	785	PRIMARY	0	REMOVE
361	TREE	835	830	TRANSITION	4	REMOVE
362	NATURAL HIGH POINT	785	785	PRIMARY	0	REMOVE
363	NATURAL HIGH POINT	785	785	PRIMARY	0	REMOVE
364	NATURAL HIGH POINT	785	785	PRIMARY	0	REMOVE
365	NATURAL HIGH POINT	785	785	PRIMARY	0	REMOVE
366	TREE	819	785	PRIMARY	34	REMOVE
367	NATURAL HIGH POINT	785	785	PRIMARY	0	REMOVE
368	TREE	853	785	PRIMARY	68	REMOVE
369	AIRPORT SIGN	788	785	PRIMARY	3	REMOVE
370	TREE	824	785	PRIMARY	39	REMOVE
371	NATURAL HIGH POINT	785	785	PRIMARY	0	REMOVE
372	TREE	845	785	PRIMARY	60	REMOVE
373	TREE	802	787	TRANSITION	15	REMOVE
374	NATURAL HIGH POINT	785	784	PRIMARY	0	REMOVE
375	BUILDING	794	785	PRIMARY	9	REMOVE
376	TREE	850	785	PRIMARY	65	REMOVE
377	NATURAL HIGH POINT	785	785	PRIMARY	1	REMOVE
379	BUILDING	791	785	PRIMARY	6	REMOVE
381	TREE	848	785	PRIMARY	63	REMOVE
382	BUILDING	791	785	PRIMARY	6	REMOVE
383	PARKING LOT	786	785	PRIMARY	1	REMOVE
384	NATURAL HIGH POINT	784	782	PRIMARY	2	REMOVE
385	TREE	841	785	PRIMARY	56	REMOVE
386	NATURAL HIGH POINT	785	783	PRIMARY	2	REMOVE
387	TREE	840	785	PRIMARY	55	REMOVE
388	TREE	804	785	PRIMARY	19	REMOVE
390	NATURAL HIGH POINT	784	782	PRIMARY	2	REMOVE
391	TREE	825	784	PRIMARY	41	REMOVE
392	NATURAL HIGH POINT	783	781	PRIMARY	3	REMOVE
393	TREE	834	784	PRIMARY	50	REMOVE
394	NATURAL HIGH POINT	783	781	PRIMARY	2	REMOVE
395	NATURAL HIGH POINT	783	780	PRIMARY	3	REMOVE
396	NATURAL HIGH POINT	782	780	PRIMARY	2	REMOVE
397	NATURAL HIGH POINT	782	779	PRIMARY	3	REMOVE
398	NATURAL HIGH POINT	782	779	PRIMARY	3	REMOVE
399	TREE	824	794	TRANSITION	29	REMOVE
400	NATURAL HIGH POINT	778	778	PRIMARY	0	REMOVE
401	NATURAL HIGH POINT	781	779	PRIMARY	2	REMOVE
402	NATURAL HIGH POINT	781	778	PRIMARY	3	REMOVE
403	TREE	819	814	TRANSITION	5	REMOVE
404	NATURAL HIGH POINT	777	777	PRIMARY	0	REMOVE
405	NATURAL HIGH POINT	781	778	PRIMARY	3	REMOVE
406	TREE	811	786	TRANSITION	26	REMOVE
407	TREE	845	802	TRANSITION	43	REMOVE
408	TREE	848	805	TRANSITION	43	REMOVE
410	NATURAL HIGH POINT	780	776	PRIMARY	3	REMOVE
411	PRIMARY ROAD	783	780	PRIMARY	3	RELOCATE

FUTURE RUNWAY DEPARTURE SURFACE OBSTRUCTION CHART (SEE SHEET 12)

OBJECT NO.	OBJECT DESCRIPTION	TOP ELEV	SURFACE ELEV	PENETRATION	MITIGATION
1	TREE	864	853	11	REMOVE
2	TREE	841	828	13	REMOVE
3	TREE	833	832	1	REMOVE
4	TREE	838	828	10	REMOVE
5	TREE	858	824	33	REMOVE
6	TREE	849	826	23	REMOVE
7	TREE	850	829	20	REMOVE
8	TREE	836	831	5	REMOVE
9	TREE	844	828	17	REMOVE
10	TREE	871	821	50	REMOVE
11	TREE	850	826	24	REMOVE
12	TREE	842	824	18	REMOVE
13	TREE	848	829	19	REMOVE
14	TREE	838	830	8	REMOVE
15	TREE	870	821	49	REMOVE
16	TREE	852	823	29	REMOVE
17	TREE	872	817	55	REMOVE
18	TREE	857	826	32	REMOVE
19	TREE	870	818	52	REMOVE
20	TREE	838	837	1	REMOVE
21	TREE	829	828	1	REMOVE
22	TREE	847	826	21	REMOVE
23	TREE	840	829	12	REMOVE
24	TREE	842	830	12	REMOVE
25	TREE	856	825	31	REMOVE
26	TREE	837	820	18	REMOVE
27	TREE	845	811	34	REMOVE
28	TREE	844	822	22	REMOVE
29	NATURAL HIGH POINT	818	815	3	REMOVE
30	TREE	833	829	4	REMOVE
31	TREE	850	826	24	REMOVE
32	TREE	857	812	45	REMOVE
33	TREE	854	824	30	REMOVE
34	TREE	857	817	41	REMOVE
35	TREE	839	826	13	REMOVE
36	TREE	871	820	50	REMOVE
37	TREE	858	811	47	REMOVE
38	NATURAL HIGH POINT	832	813	19	REMOVE
39	TREE	857	823	34	REMOVE
40	TREE	832	827	6	REMOVE
41	NATURAL HIGH POINT	830	814	15	REMOVE
42	TREE	856	809	47	REMOVE
43	TREE	846	821	24	REMOVE
44	NATURAL HIGH POINT	834	809	25	REMOVE
45	TREE	819	804	15	REMOVE
46	TREE	855	823	32	REMOVE
47	TREE	846	821	25	REMOVE
48	NATURAL HIGH POINT	846	811	36	RELOCATE
49	FENCE	843	813	31	REMOVE
50	TREE	851	818	33	REMOVE
51	TREE	840	823	17	REMOVE
52	NATURAL HIGH POINT	818	806	12	REMOVE
53	TREE	864	820	43	REMOVE
54	TREE	805	802	3	REMOVE
55	TREE	807	801	6	REMOVE
56	NATURAL HIGH POINT	845	808	38	REMOVE
57	TREE	868	816	52	REMOVE
58	TREE	877	818	59	REMOVE
59	NATURAL HIGH POINT	850	809	41	REMOVE
60	FENCE	844	811	34	RELOCATE
61	NATURAL HIGH POINT	806	803	3	REMOVE
62	TREE	828	820	8	REMOVE
63	TREE	850	818	32	REMOVE
64	NATURAL HIGH POINT	827	804	23	REMOVE
65	TREE	877	815	62	REMOVE
66	TREE	833	821	12	REMOVE
67	NATURAL HIGH POINT	812	802	9	REMOVE
68	TREE	888	811	77	REMOVE
69	TREE	858	816	42	REMOVE
70	NATURAL HIGH POINT	847	806	41	REMOVE
71	NATURAL HIGH POINT	827	803	24	REMOVE
72	TREE	876	812	65	REMOVE
73	NATURAL HIGH POINT	811	801	10	REMOVE
74	TREE	858	815	43	REMOVE
75	PRIMARY ROAD	858	808	50	CLOSE AT AIRPORT PROPERTY LINE

FUTURE RUNWAY DEPARTURE SURFACE OBSTRUCTION CHART (SEE SHEET 12)

OBJECT NO.	OBJECT DESCRIPTION	TOP ELEV	SURFACE ELEV	PENETRATION	MITIGATION
76	PRIMARY ROAD	861	806	55	CLOSE AT AIRPORT PROPERTY LINE
77	TREE	885	813	72	REMOVE
78	TREE	799	795	4	REMOVE
79	PRIMARY ROAD	849	808	40	CLOSE AT AIRPORT PROPERTY LINE
80	NATURAL HIGH POINT	824	802	22	REMOVE
81	TREE	809	796	13	REMOVE
82	PRIMARY ROAD	852	803	48	REMOVE
83	TREE	880	810	70	REMOVE
84	NATURAL HIGH POINT	843	805	38	REMOVE
85	TREE	861	815	45	REMOVE
86	TREE	828	797	30	REMOVE
87	TREE	863	813	50	REMOVE
88	PRIMARY ROAD	837	800	36	CLOSE AT AIRPORT PROPERTY LINE
89	NATURAL HIGH POINT	834	805	29	REMOVE
90	TREE	794	793	1	REMOVE
91	TREE	890	808	81	REMOVE
92	TREE	789	788	1	REMOVE
93	PRIMARY ROAD	824	798	26	CLOSE AT AIRPORT PROPERTY LINE
94	NATURAL HIGH POINT	832	801	31	REMOVE
95	TREE	804	793	10	REMOVE
96	NATURAL HIGH POINT	825	800	25	REMOVE
97	NATURAL HIGH POINT	834	803	31	REMOVE
98	TREE	885	807	77	REMOVE
99	NATURAL HIGH POINT	823	805	17	REMOVE
100	TREE	848	808	39	REMOVE
101	TREE	861	805	56	REMOVE
102	NATURAL HIGH POINT	821	799	22	REMOVE
103	NATURAL HIGH POINT	800	796	4	REMOVE
104	NATURAL HIGH POINT	826	802	23	REMOVE
105	TREE	880	806	74	REMOVE
106	TREE	805	787	18	REMOVE
107	TREE	807	787	19	REMOVE
108	TREE	804	789	14	REMOVE
109	NATURAL HIGH POINT	820	798	22	REMOVE
110	TREE	870	795	74	REMOVE
111	NATURAL HIGH POINT	822	799	22	REMOVE
112	TREE	806	782	23	REMOVE
113	NATURAL HIGH POINT	813	800	12	REMOVE
114	NATURAL HIGH POINT	815	798	17	REMOVE
115	TREE	833	791	41	REMOVE
116	TREE	786	780	6	REMOVE
117	TREE	802	786	15	REMOVE
118	NATURAL HIGH POINT	811	797	14	REMOVE
119	TREE	787	787	0	REMOVE
120	NATURAL HIGH POINT	812	795	17	REMOVE
121	TREE	816	788	27	REMOVE
122	NATURAL HIGH POINT	806	793	13	REMOVE
123	TREE	787	777	9	REMOVE
124	NATURAL HIGH POINT	796	791	5	REMOVE
125	TREE	786	779	7	REMOVE
126	TREE	792	789	3	REMOVE
127	TREE	786	783	3	REMOVE
128	NATURAL HIGH POINT	803	793	10	REMOVE
129	TREE	818	786	31	REMOVE
130	TREE	807	788	19	REMOVE
131	TREE	779	777	2	REMOVE
132	TREE	799	788	10	REMOVE
133	NATURAL HIGH POINT	774	772	1	REMOVE
134	NATURAL HIGH POINT	776	773	3	REMOVE
135	NATURAL HIGH POINT	776	773	3	REMOVE
136	NATURAL HIGH POINT	776	776	0	REMOVE
137	NATURAL HIGH POINT	775	775	0	REMOVE
138	NATURAL HIGH POINT	775	773	1	REMOVE
139	NATURAL HIGH POINT	776	772	3	REMOVE
140	PRIMARY ROAD	789	774	14	RELOCATE
141	PRIMARY ROAD	788	777	11	RELOCATE
142	PRIMARY ROAD	784	779	5	RELOCATE
143	TREE	791	783	7	REMOVE
144	TREE	788	786	1	REMOVE
145	TREE	859	838	21	REMOVE
146	TREE	859	840	18	REMOVE
147	TREE	849	843	6	REMOVE
148	TREE	849	845	3	REMOVE
149	TREE	845	815	30	REMOVE
150	TREE	840	826	13	REMOVE

FUTURE HORIZONTAL AND CONICAL SURFACES OBSTRUCTION CHART (SEE SHEET 5)

OBJECT NO.	OBJECT DESCRIPTION	TOP ELEV	SURFACE ELEV	PENETRATION	MITIGATION
1	TREE	941	935	6	REMOVE
2	TREE	937	935	2	REMOVE
3	TREE	937	935	2	REMOVE
4	TREE	935	936	1	REMOVE
5	TREE	940	937	5	REMOVE
6	TREE	941	938	6	REMOVE
7	TREE	938	939	3	REMOVE
8	TREE	945	940	10	REMOVE
9	TREE	937	941	2	REMOVE
10	TREE	943	942	8	REMOVE
11	TREE	961	943	26	REMOVE
12	TREE	943	944	8	REMOVE
13	TREE	938	945	3	REMOVE
14	TREE	938	946	3	REMOVE
15	TREE	942	947	7	REMOVE
16	TREE	979	948	44	REMOVE
17	TREE	982	949	47	REMOVE
18	TREE	946	950	11	REMOVE
19	TREE	938	951	3	REMOVE
20	TREE	948	952	13	REMOVE
21	TREE	938	953	3	REMOVE
22	TREE	986	954	51	REMOVE
23	ANTENNA	959	955	24	LIGHT
24	TREE	972	956	37	REMOVE
25	TREE	958	957	23	REMOVE
26	TREE	935	958	1	REMOVE
27	TREE	936	959	1	REMOVE
28	TREE	947	960	12	REMOVE
29	TREE	940	961	5	REMOVE
30	TREE	952	962	17	REMOVE
31	TREE	963	963	28	REMOVE
32	TREE	943	964	8	REMOVE
33	TREE	1008	965	73	REMOVE
34	TREE	994	966	59	REMOVE
35	TREE	944	967	9	REMOVE
36	TREE	963	968	28	REMOVE
37	TREE	976	969	41	REMOVE
38	TREE	978	970	43	REMOVE
39	TREE	946	971	11	REMOVE
40	WATER TOWER	972	972	37	LIGHT
41	BUILDING	944	973	9	LIGHT
42	TOWER	1058	961	97	LIGHT
43	TOWER	1062	964	98	LIGHT

NO.	REVISIONS	BY	APP.	DATE

OBSTRUCTION CHARTS - RUNWAY DEPART, HORIZ, CONICAL (FUTURE)

CARROLL COUNTY REGIONAL AIRPORT
WESTMINSTER, MARYLAND

DELTA AIRPORT CONSULTANTS, INC.
www.deltaairport.com

DRAWN BY:	RWW	SCALE:	NONE
CHECKED BY:	RGL	DATE:	MARCH 2015

SHEET 15 OF 17

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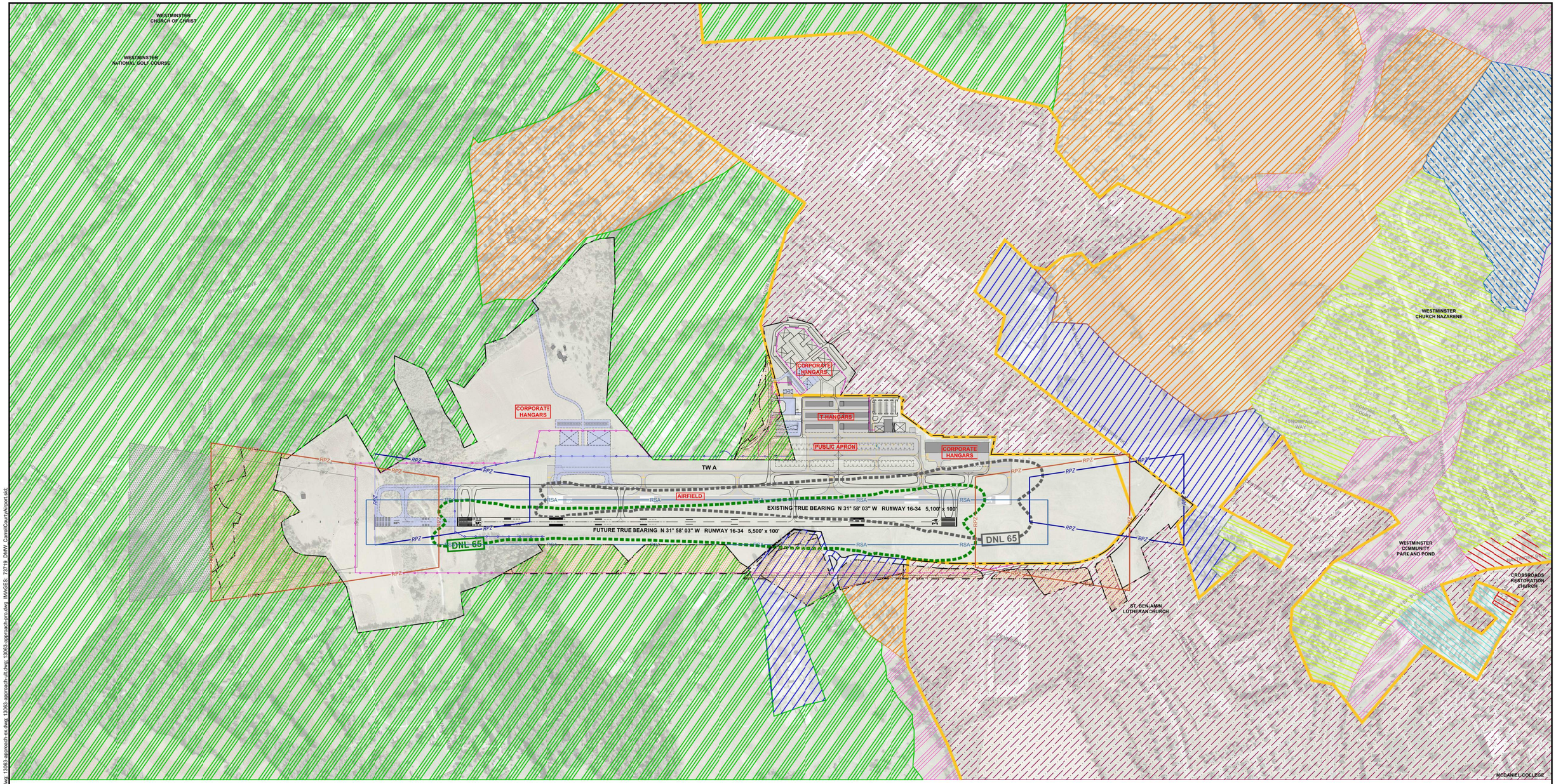
USER: RWWES



NOTES

1. DAY NIGHT LEVEL (DNL) IS THE LEVEL OF NOISE EXPRESSED IN DECIBELS AS A 24 HOUR AVERAGE. NIGHTTIME NOISE, BETWEEN THE HOURS OF 10:00 P.M. AND 7:00 A.M., IS WEIGHTED 10 DECIBELS TO COMPENSATE FOR SLEEP INTERFERENCE AND OTHER DISRUPTIONS CAUSED BY NIGHTTIME NOISE.
2. THE CARROLL COUNTY ZONING ORDINANCE (§158.054) INSTILLS HEIGHT RESTRICTIONS FOR COMMUNICATIONS TOWERS TO PROTECT FEDERAL AVIATION REGULATIONS (FAR) PART 77 SURFACES.
3. CARROLL COUNTY DOES NOT PERMIT "ON-AIRPORT FARMING" THEREFORE NO CROP RESTRICTION LINE IS DEPICTED.

SOURCES

1. AERIAL IMAGERY PREPARED BY WOOLPERT, INC., DATED DECEMBER 20, 2013.
2. LAND USE OBTAINED FROM THE GENERALIZED ZONING MAP PREPARED BY THE CARROLL COUNTY DEPARTMENT OF LAND USE, PLANNING & DEVELOPMENT DATED MARCH 12, 2013.
3. NOISE ANALYSIS TECHNICAL APPENDIX REPORT PREPARED BY KB ENVIRONMENTAL SCIENCES, INC., DATED AUGUST 12, 2014.

LEGEND

AIRPORT PROPERTY LINE	COMMERCIAL
COUNTY/ TOWNSHIP BOUNDARY	CONSERVATION
EXISTING NOISE CONTOURS (2012)	CORPORATE
FUTURE NOISE CONTOURS (2033)	INDUSTRIAL
DNL DAY NIGHT LEVEL	RESIDENTIAL (HIGH)
BUILDINGS	RESIDENTIAL (MEDIUM-HIGH)
PAVEMENT	RESIDENTIAL (MEDIUM)
AIRPORT RESTRICTED INDUSTRIAL	RESIDENTIAL (LOW)
AGRICULTURAL	

MAGNETIC DECLINATION
11° 1' 46" W (2014)
0° 0.7' W/YR

500 0 500 1000
SCALE: 1"=500' FEET

NO.	REVISIONS	BY	APP.	DATE

LAND USE

CARROLL COUNTY REGIONAL AIRPORT
WESTMINSTER, MARYLAND

DELTA AIRPORT CONSULTANTS, INC.
www.deltaairport.com

DRAWN BY:	RWW	SCALE:	1" = 500'
CHECKED BY:	RGL	DATE:	MARCH 2015

SHEET 16 OF 17

DRAWING: 13063-lu.dwg LAYOUT: L1
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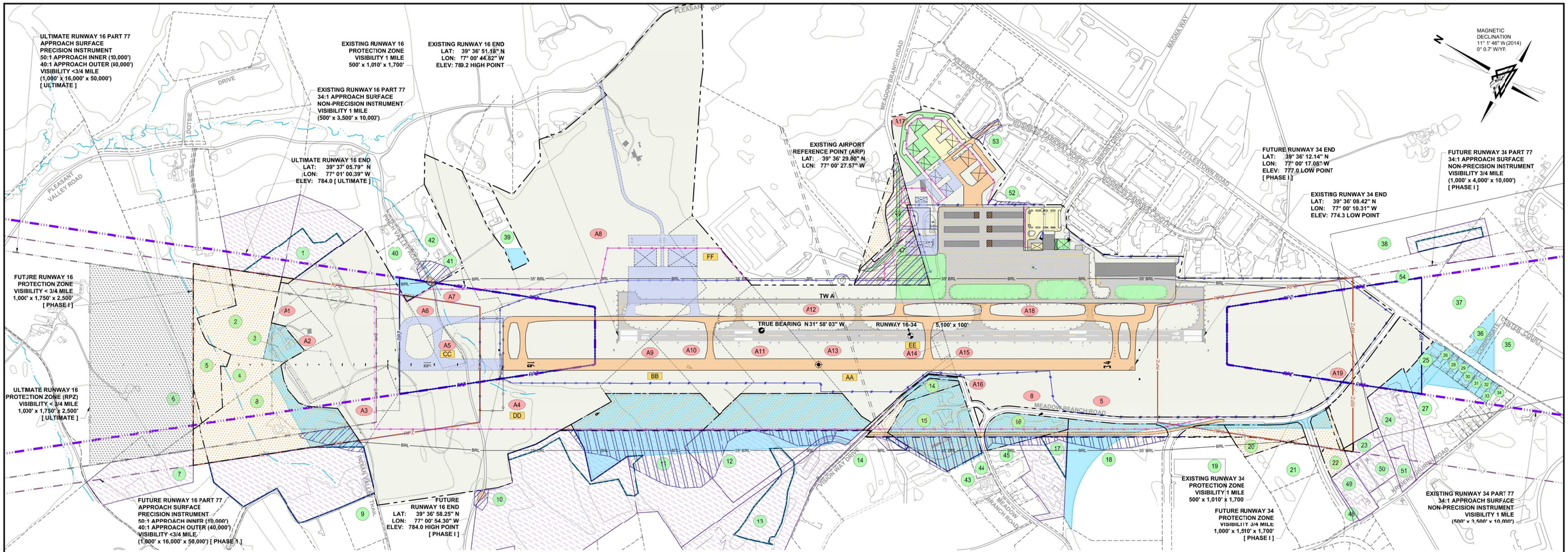

EXISTING PROPERTY ACQUISITION TABLE

REF #	PREVIOUS APM "PARCEL" #	DEED-PLAT BOOK / PAGE	PREVIOUS OWNER(S) / GRANTOR(S)	ACREAGE	DATE OF PURCHASE	GRANT	PURPOSE
A1	33	DB 1477 / 169	EDWARDS, GARY AND NANCY	1.7±	06/28/1993	AIP 09	ORIGINAL PURCHASE OF PARCEL
A2	31	DB 1522 / 262	REDMOND, JOHN W.	1.7±	11/01/1993	AIP 09	--
A3	30A	DB 1634 / 908	CARROLL COUNTY COMMISSIONERS	6.1±	09/08/1994	AIP 09	--
A4	17	DB 1350 / 472	STARNER, JR., ARTHUR D.	62.8±	04/28/1992	AIP 08	-
A5	9	DB 1259 / 437	LITTLE, WALTER W. AND LINDA L.	1.7±	12/18/1998	AIP 08	--
A6	36	DB 1400 / 207	STARNER, ROBERT LEE	1.7±	10/29/1992	AIP 09	--
A7	18	DB 1393 / 881	STARNER, JR., ARTHUR E.	3.7±	10/08/1992	AIP 08	--
A8	8	DB 1419 / 131	BYERS, PAULINE M.	102.4±	01/06/1993	AIP 09 & 12	--
A9	6B	DB 1283 / 57	MILLER, CLARA	5.8±	07/03/1991	AIP 07	
A10	4	DB 1227 / 459	MARTIN, ROBERT AND JANET	13.4±	08/16/1990	AIP 06	--
A11	6A	DB 1283 / 57	MILLER, CLARA	13.5±	07/03/1991	AIP 07	--
A12	2	DB 750 / 559	RANOULL, ELLIS C. AND CATHERINE I.	52.5±	09/14/1979	N/A	--
A13	7	DB 1283 / 54	MILLER, JR. CHARLES J.	14.4±	07/01/1991	AIP 07	--
A14	3	DB 13 / 240	BROWN, JOSEPH AND IROS	0.4±	05/22/1980	AIP 06	--
A15	16C	DB 2153 / 800	MILLER, CLARA	0.3±	01/29/1999	AIP 07	--
A16	16B	DB 2152 / 579	MILLER, JR. CHARLES	0.2±	02/20/1998	AIP 07	OVER FLIGHT & FAR PART 77 (7:1) TRANSITIONAL SURFACE
A17	40	DB 3995 / 223	WESTMINSTER BUSINESS PARK	13.9±	05/24/2004	AIP 21	--
A18	1	DB 454 / 374	B.F. SHIVER COMPANY, INC.	121.8±	05/06/1969	N/A	--
A19	14	DB 1309/836 - PB 34/161	KRIDERS UNITED CHURCH OF CHRIST	5.5±	11/26/1991	AIP 09	--

EXISTING AVIGATIONAL EASEMENT TABLE

REF #	PREVIOUS REF #	TAX PARCEL ID	OWNER(S)	ACREAGE	PURPOSE
3	44 / 34	30/394	WISNER, THOMAS & MELANIE	1.8±	RUNWAY PROTECTION ZONE
8	30B, 41, & 45	30/545	CARROLL COUNTY COMMISSIONERS	4.3±	RUNWAY PROTECTION ZONE
11	6C	38/676	MILLIR, JR. CHARLES J., TRACT 1 - 2ND AMENDED PLAT OF LIFE'S DREAM	13.6±	RUNWAY PROTECTION ZONE
12	46		MILLSR, JR. CHARLES J., TRACT 2 - 2ND AMENDED PLAT OF LIFE'S DREAM	13.3±	RUNWAY PROTECTION ZONE
13	-	38/676	MILLIR, JR. CHARLES J., LOT 6B - 4TH AMENDED PLAT OF LIFE'S DREAM	0.1±	RUNWAY PROTECTION ZONE
14	4B & 16A	38/676	MILLIR, JR. CHARLES J., TRACT 3 - 4TH AMENDED PLAT OF LIFE'S DREAM	1.4±	RUNWAY PROTECTION ZONE
15	47 & 15A	38/197	TRIPLE M, LLC	8.5±	RUNWAY PROTECTION ZONE
16	39	38/759	TRIPLE M, LLC / PARCEL "O" -PLAT OF MEADOW BRANCH RD RELOCATION	3.4±	RUNWAY PROTECTION ZONE
18	5 & 38	114/6784	TRIPLE M, LLC / LOT 2-MEADOW BRANCH INDUS"RIAL PARK	5.2±	RUNWAY PROTECTION ZONE
19	-	114/6784	DLH ,IMITED LIABILITY PARTNERSHIP / LOT 3 - MEADOW BRANCH IND. PARK	0.2±	RUNWAY PROTECTION ZONE
20	49		TRIPLE M, LLC / LOT 4 - MEADOW BRANCH INDUSTRIAL PARK	0.5±	RUNWAY PROTECTION ZONE
22	49		TRIPLE M, LLC / LOT 1 - MEADOW BRANCH INDUSTRIAL PARK	0.5±	RUNWAY PROTECTION ZONE
24	35		CCR) - CARROLL COUNTY ASSOC. FOR RETARDED CITIZENS, INC.	0.7±	RUNWAY PROTECTION ZONE
25	10	39/381	FESSER ETAL, R.E. (COMMERCIAL)	1.2±	RUNWAY PROTECTION ZONE
26	11	39/446	SCHISTER, JOHN J., JR. & DIANE E.	0.9±	RUNWAY PROTECTION ZONE
27	29	39/93	NEWLIFE FOR GIRLS, INC.	0.5±	RUNWAY PROTECTION ZONE
28	12	39/382	SULLIVAN, MICHAEL & JOLENE	0.3±	RUNWAY PROTECTION ZONE
29	23	39/309	KINNA, WILLIAM & SHARON	0.3±	RUNWAY PROTECTION ZONE
30	24		FESSER, R. F.	0.3±	RUNWAY PROTECTION ZONE
31	25	39/194	ECKERD, LISA R.	0.4±	RUNWAY PROTECTION ZONE
32	26	39/437	SULIIVAN, MICHAEL & JOLENE	0.4±	RUNWAY PROTECTION ZONE
33	27	39/384	WHALEY, KOREEN	0.3±	RUNWAY PROTECTION ZONE
34	28	39/444	BAUGHER, NATHAN	0.3±	RUNWAY PROTECTION ZONE
35	22		NATCNAL INSTRUMENT COMPANY	0.5±	RUNWAY PROTECTION ZONE
36	13	38/516	THE MAYOR AND COMMON COUNCIL OF WESTMINSTER	1.4±	RUNWAY PROTECTION ZONE
39	37		BYEES, DAVIS & TINA	0.6±	RUNWAY PROTECTION ZONE
40	32		BANKERT, SAMUEL O. & ETHEL	0.9±	RUNWAY PROTECTION ZONE

EXISTING UTILITY EASEMENT / ENCUMBRANCE TABLE

REF #	PARCELS AFFECTED	PREVIOUS APM PARCEL #'S	OWNER(S)	DATE	DEED BOOK/PAGE	ENCUMBRANCE
AA	A11 & A12	2, 2A, 7	ALTLANTIC TELEPHONE & TELEGRAPH COMPANY	02/14/1973	538 / 416	UTILITY ACCESS
BB	A9, A10 & A11	6A, 6B	CONSOLIDATED GAS, ELECTRIC AND POWER CO.	07/03/1991	1283 / 57	UTILITY ACCESS
CC	A5	9	CONSOLIDATED GAS, ELECTRIC AND POWER CO. AND BALTIMORE GAS & ELECTRIC	12/18/1998	1259 / 437	UTILITY ACCESS
DD	A4	17	CONSOLIDATED GAS, ELECTRIC AND POWER CO.	04/28/1992	1350 / 472	UTILITY ACCESS
EE	A13	3	CONSOLIDATED GAS, ELECTRIC AND POWER CO. AND BALTIMORE GAS & ELECTRIC	06/22/1989	13 / 241	UTILITY ACCESS
FF	A9 & A10	4	CONSOLIDATED GAS, ELECTRIC AND POWER CO. AND AT & T	08/16/1990	1227 / 460	UTILITY ACCESS

ADJACENT PROPERTY TABLE

REF #	PREVIOUS AFM "PARCEL" #	TAX PARCEL ID	DEED BOOK / PAGE	OWNER(S)	ACREAGE
1	--	30/74	6116/23	RICHARDSON, STEPHANIE ANN	33.7±
2	--	30/20	7601/53	ABDELMOMIN, MOHAMED	29.5±
3	44 / 34	30/394	2188/156	WISNER, THOMAS ROBERT	1.8±
4	42	30/276	979/473	PATTERSON, DONALD M.	2.9±
5	--	30/482	6808/397	LAWLESS, DOUGLAS M.	21.6±
6	43	30/573	6855/372	OSBOURN, STEVEN D. & O'CONNOR KATHLEEN M.	79.2±
7	--	30/258	3981/4 8	TANSILL, MARY (CRONE, LAWRENCE ET AL)	79.1±
8	30B, 41, & 45	30/35	2007/6 2	CARROLL COUNTY COMMISSIKNERS	28.2±
9	--	30/416	5286/4 9	BUCZKOWSKI, RONALD D.	3.0±
10	--	30/101	1419/111	CARROLL COUNTY COMMISSIKNERS	102.4±
11	6C	38/676	7565/B	MILLER, KATHERINE E. (TRUSTEE) TRACT 1 -2ND AMENDED PLAT OF LIFE'S DREAM	25.2±
12	46	38/676	7585/245	MILLER, KATHERINE E. (TRUSTEE) TRACT 2 - 2ND AMENDED PLATOF LIFE'S DREAM	18.8±
13	--	38/676	7626/1 6	MILLER, KATHERINE E. (TRUSTEE) LOT 6B, 4TH AMENDED PLAT O" LIFE'S DREAM	28.8±
14	4B & 16A	38/798	7626/122	MILLER, KATHERINE E. (TRUSTEE) TRACT 3 - 4TH AMENDED PLATOF LIFE'S DREAM	119.8±
15	47 & 15A	38/197	2275/420	TRIPLE M, LLC	8.4±
16	39	38/759	3134/11	TRIPLE M, LLC, PARCEL "O" - PLAT OF MEADOW BRANCH ROAD RELOCATION	3.4±
17	--	38/462	495/71 (PB10/9)	WETZEL, KENNETH E. & WETZIL FRANCES E.	5.0±
18	5 & 38	114/6784	3134/16 & 2/34/16 (PB 48/113-120)	TRIPLE M, LLC, LOT 2-MEADOW BRANCH INDUSTRIAL PARK	19.7±
19	--	114/6784	4024/599 (PB 49/177-120)	DLH LIMITED LIABILITY PARTNERSHIP LOT 3 - MEADOW BRANCH INDISTRIAL PARK	25.2±
20	49	114/6784	2367/669 & 1134/16 (PB 48/113-120)	TRIPLE M, LLC, LOT 4 - MEADOV BRANCH INDUSTRIAL PARK	2.9±
21	49	114/6784	2367/669 & 1134/16 (PB 48/113-120)	TRIPLE M, LLC, LOT 5 - MEADOV BRANCH INDUSTRIAL PARK	3.9±
22	49	114/6784	2367/669 & 1134/16 (PB 48/113-120)	TRIPLE M, LLC, LOT 1 - MEADOV BRANCH INDUSTRIAL PARK	2.5±
23	50	38/661	900/714	BENJAMIN KRIDERS UNITED CHURCH OF CHRIST	1.1±
24	35	38/646	1441/2 5	CARROLL COUNTY COMMISSIONERS	6.0±
25	10	39/381	1889/7f	FESSER ETAL, R.E. (COMMERCIAL)	1.2±
26	11	39/446	4984/98	SCHUSTER, JOHN J., JR. & DIANE E.	0.3±
27	29	39/750	4246/320	ARC OF CARROLL COUNTY, INC.	5.7±
28	12	39/382	1714/596	SULLIVAN, MICHAEL J. & JOLENE G.	0.4±
29	23	39/309	6215/2:7	KINNA, WILLIAM DONALD, JR.	0.2±
30	24	39/383	253/148	FESSER, DORIS V.	0.4±
31	25	39/194	5657/	ECKERD, LISA R.	0.4±
32	26	39/437	1714/541	SULLIVAN, MICHAEL J. & JOLENE G.	0.3±
33	27	39/384	1713/6-3	WHALEY, KOREEN K.	0.3±
34	28	39/444	1743/680	BAUGHER, NATHAN A.	0.3±
35	22	114/4966	2425/191	CORPORATE CENTER LEASING, LLC	3.9±
36	13	38/516	2223/144	THE MAYOR AND COMMON COUNCIL OF WESTMINSTER	2.4±
37	--	114/4966	6044/327	R&E I, LLC	12.7±
38	--	39/312	6146/425	BISH, CARROLL F. (TRUSTEE)	89.8±
39	37	341/30	1701/365	SHILTS, WENDALL J. & LAURIE REBECCA	3.5±
40	32	30/501	2092/425	BANKERT, SAMUEL O., BANKERT, ETHEL M., ET AL	3.1±
41	--	3/500	6351/294	BANKERT, RAYMOND I. & PATRICIA	1.45±
42	--	30/499	6351/294	BANKERT, RAYMOND I. & PATRICIA	6.1±
43	--	38/449	4031/2 3	MCINTIRE, LATRICIA & LAFOLLETTE, HOLLY	1.9±
44	--	38/177	6470/349	YU, YUN SANG	0.5±
45	--	38/462	3805/367	EVANS, DAVID PAUL	1.0±
46	--	30/36	1395/5*	CARROLL COUNTY COMMISSIONERS	63.1±
47	--	38/600	750/559	CARROLL COUNTY COMMISSIONERS	52.5±
48	--	114/6784	3529/643	JACOBS RIDGE, LLC	0.2±
49	--	38/460	7488/412	EMMERT, DAVID G.	2.0±
50	--	38/817	70/511	BENJAMINS REFORMED CHURCH OF CARROLL COUNTY	3.2±
51	--	38/646	938/398	CARROLL COUNTY ASOCIATION FOR RETARDED CITIZENS, INC.	6.0±
52	--	113/6803	1310/382	HULL, STEVEN G. (TRUSTEE)	3.3±
53	--	113/6805	4497/232	SKYWATER WESTMINTER, LLC	2.5±
54	--	114/4966	613/1	COUNTY COMMISSIONERS OF CARROLL COUNTY	6.5±

FUTURE ACQUISITION TABLE

REF #	OWNER(S)	ACREAGE	PURPOSE
1	RICHARDSON, STEPHANIE ANN	0.1±	FUTURE RUNWAY PROTECTION ZONE, OBSTRUCTION REMOVAL
2	ABDELMOMIN, MOHAMED	7.7±	FUTURE RUNWAY PROTECTION ZONE, OBSTRUCTION REMOVAL
3	WISNER, THOMAS ROBEIT	1.8±	FUTURE RUNWAY PROTECTION ZONE
4	PATTERSON, DONALD M.	2.9±	FUTURE RUNWAY PROTECTION ZONE
5	LAWLESS, DOUGLAS M.	11.1±	FUTURE RUNWAY PROTECTION ZONE
6	OSBOURN, STEVEN D. & O'CONNOR KATHLEEN M.	28.3±	FUTURE RUNWAY PROTECTION ZONE
7	TANSILL, MARY (CRONE, ,AWRENCE ET AL)	2.2±	FUTURE RUNWAY PROTECTION ZONE, OBSTRUCTION REMOVAL
8	CARROLL COUNTY COMMISSIONERS	13.8±	FUTURE RUNWAY PROTECTION ZONE, OBSTRUCTION REMOVAL
10	CARROLL COUNTY COMMISSIONERS	0.1±	FUTURE AIRPORT DEVELOPMENT
11	MILLER, KATHERINE E. (TRUSTEE) TRACT 1-2ND AMENDED PLAT OF LIFE'S DREAM	7.5±	PRIMARY SURFACE, FUTURE AIRPORT DEVELOPMENT
12	MILLER, KATHERINE E. (TRUSTEE) TRACT 2 - 2ND AMENDEDPLAT OF LIFE'S DREAM	8.6±	PRIMARY SURFACE, FUTURE AIRPORT DEVELOPMENT
13	MILLER, KATHERINE E. (TRUSTEE) LOT 6B, 4TH AMENDED PLAT OF LIFE'S DREAM	0.3±	PRIMARY SURFACE, FUTURE AIRPORT DEVELOPMENT, OBSTRUCTION REMOVAL
14	MILLER, KATHERINE E. (TRUSTEE) TRACT 3 - 4TH AMENDEDPLAT OF LIFE'S DREAM	1.7±	PRIMARY SURFACE, FUTURE AIRPORT DEVELOPMENT, OBSTRUCTION REMOVAL
15	TRIPLE M, LLC	8.4±	PRIMARY SURFACE, FUTURE AIRPORT DEVELOPMENT
16	TRIPLE M, LLC, PARCEL "O" PLAT OF MEADOW BRANCH ROAD RELOCATION	3.4±	PRIMARY SURFACE, FUTURE AIRPORT DEVELOPMENT
17	WETZEL, KENNETH E. & WETZEL FRANCES E.	0.2±	PRIMARY SURFACE, FUTURE AIRPORT DEVELOPMENT, OBSTRUCTION REMOVAL
18	TRIPLE M, LLC, LOT 2-MEADOW BRANCH INDUSTRIAL PARK	2.4±	PRIMARY SURFACE, FUTURE AIRPORT DEVELOPMENT
19	DLH LIMITED LIABILITY PARTNERSHIP LOT 3 - MEADOW BRANCH INDUSTRIAL PARK	0.8±	PRIMARY SURFACE, FUTURE RUNWAY PROTECTION ZONE
20	TRIPLE M, LLC, LOT 4 - MEADOW BRANCH INDUSTRIAL PARK	2.9±	FUTURE RUNWAY PROTECTION ZONE
21	TRIPLE M, LLC, LOT 5 - MEADOW BRANCH INDUSTRIAL PARK	0.1±	FUTURE RUNWAY PROTECTION ZONE
22	TRIPLE M, LLC, LOT 1 - MEADOW BRANCH INDUSTRIAL PARK	2.5±	FUTURE RUNWAY PROTECTION ZONE
23	BENJAMIN KRIDERS UNITED CHURCH OF CHRIST	0.1±	FUTURE RUNWAY PROTECTION ZONE, OBSTRUCTION REMOVAL
40	BANKERT, SAMUEL O.	0.1±	FUTURE RUNWAY PROTECTION ZONE
46	CARROLL COUNTY COMMISSIONERS	2.7±	PRIMARY SURFACE, FUTURE AIRPORT DEVELOPMENT
47	CARROLL COUNTY COMMISSIONERS	4.1±	PRIMARY SURFACE, FUTURE AIRPORT DEVELOPMENT

FUTURE AVIGATIONAL EASEMENT TABLE

REF #	OWNER(S)	ACREAGE	PURPOSE
1	RICHARDSON, STEPHANIE ANN	6.0±	OBSTRUCTION REMOVAL
2	ABDELMOMIN, MOHAMED	7.7±	OBSTRUCTION REMOVAL
7	TANSILL, MARY (CRONE, ,AWRENCE ET AL)	6.3±	OBSTRUCTION REMOVAL
8	CARROLL COUNTY COMMISSIONERS	14.3±	OBSTRUCTION REMOVAL
10	CARROLL COUNTY COMMISSIONERS	25.6±	OBSTRUCTION REMOVAL
11	MILLER, KATHERINE E. (TRUSTEE) TRACT 1-2ND AMENDED PLAT OF LIFE'S DREAM	11.6±	OBSTRUCTION REMOVAL
12	MILLER, KATHERINE E. (TRUSTEE) TRACT 2 - 2ND AMENDEDPLAT OF LIFE'S DREAM	5.4±	OBSTRUCTION REMOVAL
13	MILLER, KATHERINE E. (TRUSTEE) LOT 6B - 4TH AMENDED PLAT OF LIFE'S DREAM	15.6±	OBSTRUCTION REMOVAL
14	MILLER, KATHERINE E. (TRUSTEE) TRACT 3 - 4TH AMENDED PLAT OF LIFE'S DREAM	0.5±	OBSTRUCTION REMOVAL
17	WETZEL, KENNETH E. & WETZEL FRANCES E.	4.9±	OBSTRUCTION REMOVAL
23	BENJAMIN KRIDERS UNITED CHURCH OF CHRIST	1.0±	OBSTRUCTION REMOVAL
24	CARROLL COUNTY COMMISSIONERS	5.6±	OBSTRUCTION REMOVAL
37	R&E I, LLC	1.3±	OBSTRUCTION REMOVAL
38	BISH, CARROLL F. (TRUSTEE)	2.5±	OBSTRUCTION REMOVAL
48	JACOBS RIDGE, LLC	0.2±	OBSTRUCTION REMOVAL
49	EMMERT, DAVID G.	2.1±	OBSTRUCTION REMOVAL
50	BENJAMINS REFORMED CHURCH OF CARROLL COUNTY	2.2±	OBSTRUCTION REMOVAL
51	CARROLL COUNTY ASOCATION FOR RETARDED CITIZENS, INC.	1.2±	OBSTRUCTION REMOVAL

LEGEND

DESCRIPTION	EXISTING	FUTURE	ULTIMATE
AIRPORT BUILDINGS			
AIRPORT PROPERTY			
AVIGATIONAL EASEMENT			NA
GRADING EASEMENT (TEMPORARY)	NA		NA
LAND ACQUISITION	NA		
PAVEMENT			
RUNWAY CENTERLINE			
TAXIWAY/ TAXILANE MARKING			
ADJACENT PARCEL LINE		SAME	SAME
EASEMENT LINE		NA	NA
FENCE		NA	NA
FENCE (8 FT PERIMETER)		NA	NA
FENCE (12 FT PERIMETER)	NA		
INTERIOR PROPERTY MAP		SAME	SAME
OBSTRUCTION REMOVAL LINE	NA		NA
PART 77 APPROACH SURFACE			
RUNWAY PROTECTION ZONE (RPZ)	RPZ	RPZ	RPZ
STREAM		NA	NA
TREE LINE		NA	NA

PARCEL/EASEMENT LEGEND

A1	INTERIOR PARCEL
1	ADJACENT PARCEL
AA	EASEMENT/ ENCUMBRANCE

NOTES

1. AIRPORT PROPERTY LINE AND ADJACENT PROPERTY OWNERS INFORMATION IS COMPILED FROM COUNTY TAX MAPS, EXISTING DRAWINGS, AND ACTUAL PROPERTY SURVEYS, BASED UPON PREVIOUS AIRPORT PROPERTY MAP DATED DECEMBER 2007, AS "REPARED BY URS CORPORATION.
2. INTERIOR PROPERTY MAP PIEPARED WITHOUT THE BENEFIT OF A TITLE REPORT AND DOES NOT CLAIM TO LIST ALL EASIMENTS AND ENCUMBRANCES.
3. SEE "AIRPORT PROPERTY MAP TABLES" FOR COORDINATING PROPERT" OWNER AND EASEMENT INFORMATION NOTED ABOVE.
4. LEGEND ELEMENTS REPREIENT DEPICTIONS ON DRAWING BUT MAY VARY IN SIZE DUE TO SCALING ON DRAWING.

PROPERTY RELEASE TABLE

REF #	PREVIOUS APM "PARCEL" #	OWNER(S)	DATE OF RELEASE	REMARK(S)
3	34	WISNER, THOMAS & MELANIE	08/09/1995	RELEASE OF PARCEL 34
16	39	TRIPLE M, LLC / PARCEL "O"	11/14/2002	RELEASE OF PARCEL 1
18	38	TRIPLE M, LLC / LOT 2	11/14/2002	RELEASE OF PARCEL 5
28	12	SULLIVAN, MICHAEL & JOLENE	08/04/1995	RELEASE OF PARCEL 12
29	23	KINNA, WILLIAM & SHARON	07/17/1995	RELEASE OF PARCEL 23
32	26	SULLIVAN, MICHAEL & JOLENE	08/04/1995	RELEASE OF PARCEL 26
33	27	WHALEY, KOREEN	08/01/1995	RELEASE OF PARCEL 27
34	28	BAUGHER, NATHAN	10/18/1995	RELEASE OF PARCEL 28
37	--	CORPORATE CENTER LEASING LLC	UNKNOWN	RELEASE PROPERTY

400 0 400 800

SCALE: 1"=400' FEET

NO.	REVISIONS	BY	APP.	DATE

AIRPORT PROPERTY MAP

CARROLL COUNTY REGIONAL AIRPORT
WESTMINSTER, MARYLAND

DELTA AIRPORT CONSULTANTS, INC.
www.deltaairport.com

DRAWN BY: RWW | SCALE: 1" = 400' | SHEET 17 OF 17

CHECKED BY: RGL | DATE: MARCH 2015

DRAWING: 13063-apm.dwg, L1, 4/15/2015 9:58:23 AM, rww
XREFS: 13063-northmap.dwg; 13063-plan-ex.dwg; 13063-gno-pro.dwg; 13063 property-line-ex.dwg; 13063-approach-ex.dwg; 13063-approach-pro.dwg; 13063-approach-ult.dwg; IMAGES: 51-047.tiff;

N:\13063\04 CAD\13063-apm.dwg, L1, 4/15/2015 9:58:23 AM, rww