WILLOW RUN AIRPORT
AIRPORT LAYOUT PLAN

U.S. Department of Transportation
Federal Aviation Administration

Detroit Airports District Office
Metro Airport Center
11677 S. Wayne Road, Ste. 107
Romulus, MI 48174

Mr. Chad Newton, President
Wayne County Airport Authority
Michael Berry Administration Building
11050 Rogell Drive, Bldg. #602
Detroit, MI 48242

Dear Mr. Newton:

Willow Run Airport (YIP)
Ypsilanti, MI
Airport Layout Plan Approval
Airspace Case Number 2018-AGL-4927-NRA

The Master Plan (MP) documents for the YIP Airport are acceptable from a contractual standpoint with respect FAA planning policies, applicable Advisory Circulars, and Standard Operating Procedures. The contents of the MP reflect the views of the YIP Airport, who is responsible for the accuracy of the document. The MP does not necessarily reflect the views or policies of the Federal Aviation Administration (FAA), and the determination of acceptability does not imply the FAA agrees with the MP conclusions and recommendations.

Enclosed is one conditionally approved copy of the subject Airport Layout Plan (ALP), dated December 2018. This letter cancels or supersedes all prior ALP approvals. The ALP approval is based upon recognition of and adherence to the following:

The approval is **not** considered a commitment of Federal funding for the proposed development. The FAA has concurred with the proposed development for planning purposes only based on current safety, utility, and efficiency standards. The FAA approved forecast dated August 29, 2016 recognizes the following:

1. The Critical Aircraft as the DC-9-30 for current to midterm timeframe.
2. The airfield designation based on Airplane Design Group (ADG) of Category D-III.

Actual development should comply with approved standards applicable at the time of construction. It is important to note that future projects listed below exceed FAA design standards based on the current and midterm aircraft forecast. AIP eligibility is based on current justification and design standards at the time AIP funding is sought.

- Construction of the future full parallel taxiway to runway 5R-23L to a width of 75 feet versus 50 feet.
- Reconstruction of crosswind runway 9-27 to a width of 100 feet versus 75 feet.

A design standard modifications or MOS is granted to allow the penetration of Ecorse Road of Runway 5R-23L Runway Object Free Area. FAA standard for this condition is under AC 150/5300-13A, “Table 3-5 and Table A7-10 Runway design standards matrix” for D-III runways. The standard runway Object Free Area (ROFA) is no less than 800-ft wide and 1000-ft beyond the end of the runway.” The life cycle of the granted MOS is 5 years from the approved date of December 2018.

It is FAA policy that the Runway Protection Zone (RPZ) should be acquired in fee simple. It appears that the Airport Sponsor does not currently own part of every RPZ at YIP. The Airport Sponsor should have a complete avigation easement for those portions of the RPZ where fee simple ownership is not currently identified. The Airport Sponsor should review the land use in the area and ensure that it has adequate controls in place. The Airport Sponsor should ensure there is no congregation of people within the RPZ. Submission of an RPZ alternatives analysis to the ADO with coordination of the Regional and APP-400 Offices is required in accordance with the memo dated September 27, 2012 *“Interim Guidance on Land Uses Within a Runway Protection Zone”* when the following is proposed:

1. An airfield project (e.g., runway extension, runway shift)
2. A change in the critical design aircraft that increases the RPZ dimensions
3. A new or revised instrument approach procedure that increases the RPZ dimensions
4. A local development proposal in the RPZ (either new or reconfigured)

Sheets 19 entitled *Exhibit “A” Airport Property Maps* has been included and will require a separate review and concurrence.

If any of the design critical aircraft or aircraft groups change, this ALP must be reevaluated.

Our approval does not infer or imply that the land in the airport vicinity is considered compatible with airport operations. Federal requirements stipulate:

1. All development programs should be reasonably consistent with the plans of local and state planning agencies for the development in the airport vicinity.
2. That fair consideration has been given to the interest of communities in or near the airport.
3. That development programs provide for the protection and enhancement of the environment.

The FAA offers no objection to the proposed ultimate airspace utilization as depicted on the ALP based on considerations of safe and efficient use of airspace. The ALP has the status of “Plan on File” for the purpose of 14 CFR Part 77, Obstruction Evaluation, and 14 CFR Part 152, Airport Aid Program. A review of the airside landing area development was conducted according to the following 14 CFR’s Part: -77, -152, -and –157, Notice of Construction, Alteration, Activation, and Deactivation of Airports (reference Aeronautical Study Number 2018-AGL-4927-NRA). It should be noted that FAA cannot prevent erection of any structure near an airport. Airport environs can only be protected through state and local zoning ordinances, building regulations, and like requirements.

All development depicted on this ALP must comply with the National Environmental Policy Act (NEPA) of 1969. FAA environmental approval is required for all airport development actions depicted on this ALP. This would apply to development projects, even if there was no FAA funding involved in the project. Additional requirements concerning FAA NEPA approval can be found in FAA Order 5050.4B *“National Environmental Policy Act (NEPA) Implementing Instructions for Airport Actions”*.

To avoid conflicts with future development, we recommend you utilize the ALP when preparing leases. We further recommend you provide copies to the local and state planning zoning boards and county and city officials and encourage them to adopt compatible land use criteria in and around the airport. Copies should be distributed to Fixed Base Operators (FBOs) and airport users.

The Airport and Airway Improvement Act (49 USC 47107(a)(16)(D)) requires the sponsor to eliminate any adverse effects on Federal facilities, or bear all costs to relocate those facilities, that are a result of an airport change. However, if AIP eligible construction/development items adversely affect FAA facilities, the cost of relocating the facilities may be eligible under AIP.

This approval does not include a detailed evaluation of actual construction. Prior to constructing any development on the airport, notice (FAA Form 7460-1) consistent with 14 CFR Part 77 must be filed with this office. This approval does not include approval for temporary construction equipment, which may be used during actual construction, e.g., cranes, equipment staging areas, site access routes, etc. A separate construction safety/phasing plan for any project should be reviewed by the FAA no less than 60 days prior to beginning any project.

The planned runway developments will require new FAA flight procedures. If the FAA concurs with these developments there will need to be close coordination with different FAA offices. Development on new approaches will not begin until environmental approvals have been given and the sponsor requests the FAA Flight Procedures Office to initiate design of new approaches. Publication of revised Instrument Approach Procedures (IAPs) could take from 18 months to two years, after runway data is submitted. Review of this ALP does not constitute an automatic request for amended procedures.

If development is planned without aviation trust fund investments that will change the status or geometrics of runways, taxiways, aprons, or other operating airport surfaces, notice (FAA Form 7480-1) must be filed with this office consistent with 14 CFR Part 157.

We trust this letter provides a clear explanation of the conditions and terms of our approval. If you desire further clarification, please contact this office at (734) 229-2900.

Sincerely,

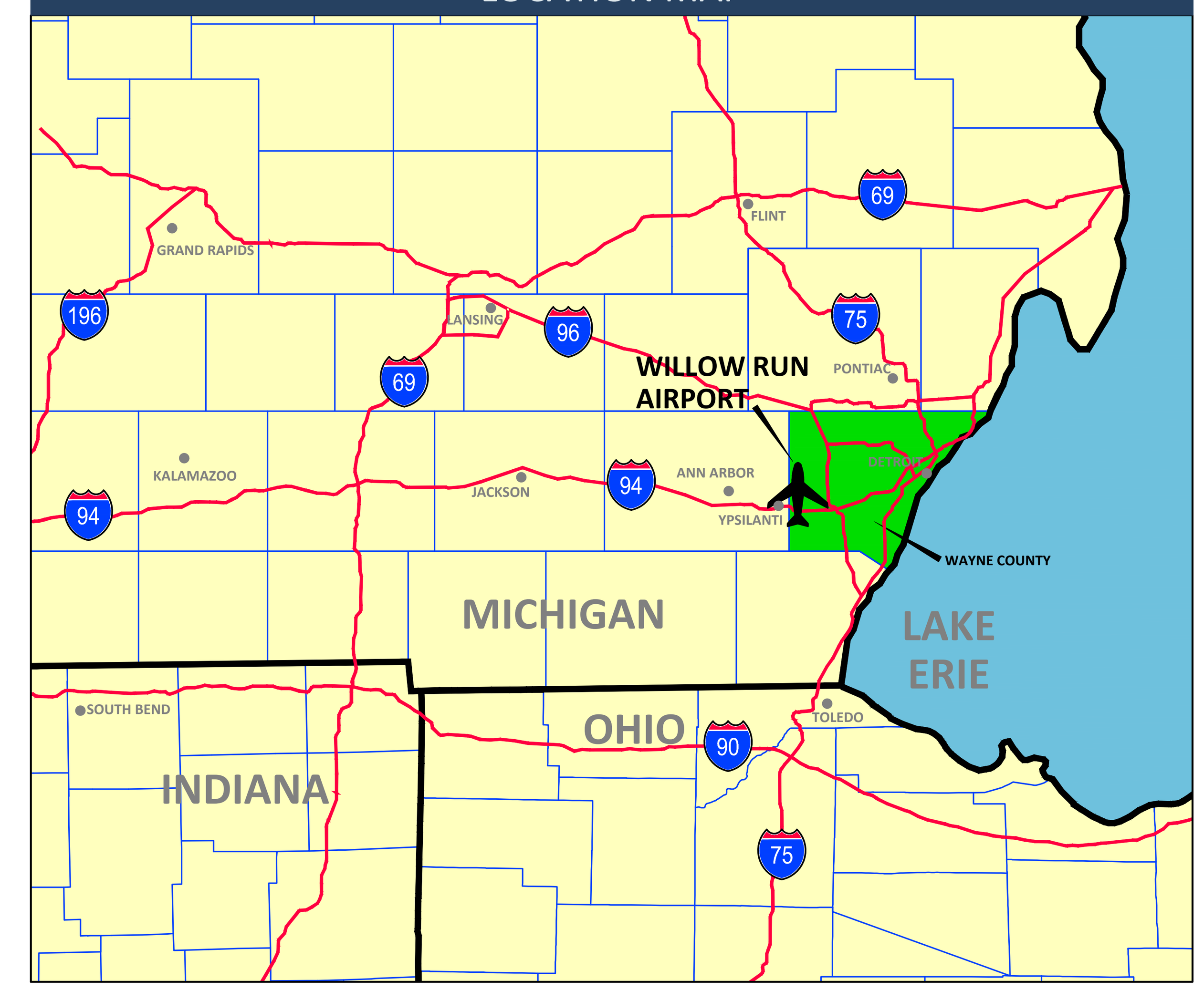
John L. Mayfield, Jr.

Manager
Detroit Airports District Office

Cc: Mead & Hunt
AGL-620
MDOT/OOA

VICINITY MAP

LOCATION MAP



DRAWING INDEX

SHEET NUMBER	SHEET NAME
1	TITLE SHEET
2	DATA SHEET
3	DATA SHEET
4	EXISTING AIRPORT LAYOUT PLAN DRAWING
5	FUTURE AIRPORT LAYOUT PLAN DRAWING
6	ULTIMATE FUTURE AIRPORT LAYOUT DRAWING
7	AIRPORT AIRSPACE DRAWING
7A	AIRPORT AIRSPACE DRAWING - ENLARGED VIEW
8	5R APPROACH - 23L DEPARTURE PLAN & PROFILE
9	23L APPROACH - 5R DEPARTURE PLAN & PROFILE
10	5L APPROACH - 23R DEPARTURE PLAN & PROFILE
11	23R APPROACH - 5L DEPARTURE PLAN & PROFILE
12	9 APPROACH - 27 DEPARTURE PLAN & PROFILE
13	27 APPROACH PLAN & PROFILE
14	27 FUTURE APPROACH PLAN & PROFILE
15	9-27 RUNWAY PLAN & PROFILE
16	5L-23R RUNWAY PLAN & PROFILE AND 5R-23L RUNWAY PLAN & PROFILE
17	TERMINAL AREA PLAN
18	LAND USE PLAN
19	EXHIBIT A PROPERTY MAP

AIRPORT APPROVAL

WILLOW RUN AIRPORT
On behalf of Wayne County Airport Authority, I hearby certify that the Willow Run Airport, Airport Layout Plans Package was prepared according to the FAA Central Region Checklist as provided by the FAA Airport District Office.

Chad Newton (signature) — 2-22-19

Chad Newton, A.A.E., Wayne County Airport Authority Interim CEO — Date

FAA DISCLAIMER

THE PREPARATION OF THIS DOCUMENT MAY HAVE BEEN SUPPORTED, IN PART, THROUGH THE AIRPORT IMPROVEMENT PROGRAM FROM THE FEDERAL AVIATION ADMINISTRATION (PROJECT NUMBER 3-31-0062-57) AS PROVIDED UNDER TITLE 49 U.S.C., SECTION 47104. THE CONTENTS DO NOT NECESSARILY REFLECT THE OFFICIAL VIEWS OR POLICY OF THE FAA OR THE (STATE) DOT. ACCEPTANCE OF THIS REPORT BY THE FAA AND (STATE) DOT DOES NOT IN ANYWAY CONSTITUTE A COMMITMENT ON THE PART OF THE UNITED STATES OR THE STATE OF MICHIGAN TO PARTICIPATE IN ANY DEVELOPMENT DEPICTED THEREIN NOR DOES IT INDICATE THAT THE PROPOSED DEVELOPMENT IS ENVIRONMENTALLY ACCEPTABLE OR WOULD HAVE JUSTIFICATION IN ACCORDANCE WITH APPROPRIATE PUBLIC LAWS.

MICHIGAN AERONAUTICS COMMISSION

Mark W. Noel (signature) — 2-12-2019

MDOT Office of Aeronautics, Planning and Development Section Manager — Date
Mark W. Noel, P.E.

CONSTRUCTION NOTICE

THESE ALP DRAWINGS ARE FOR PLANNING PURPOSES ONLY. THE DRAWING INFORMATION, INCLUDING LOCATION DETAILS AND ELEVATIONS SHOULD NOT BE USED FOR CONSTRUCTION. TO PROTECT THE AIRPORT'S OPERATIONAL SAFETY AND FUTURE DEVELOPMENT, ALL PROPOSED CONSTRUCTION ON THE AIRPORT MUST BE COORDINATED BY THE AIRPORT OWNER WITH FAA/STATE AERONAUTICS PRIOR TO CONSTRUCTION.

AN FAA FORM 7460 SHALL BE SUBMITTED TO EVALUATE THE EFFECT OF PROPOSED CONSTRUCTION ON THE AIRPORT OR ALTERATION ON AIR NAVIGATION EXCEEDING 14 CFR, PART 77. FILING THE FAA FORM 7460 DOES NOT RELIEVE THE SPONSOR FROM COMPLYING WITH OTHER FEDERAL, STATE OR LOCAL RULES AND REGULATIONS.

Colortable: JD ACAD.ctb LTScale: 1.0000 LwDefault: 0.010 Last Saved: 4/1/2019 3:42 PM Plotted On: 4/1/2019 3:45 PM
File: L:\09_PROJECTS\037_M&H\037-15-03 YIP Master Plan Update\13 - YIP ALP\02 SHEETS\TITLE SHEET Layout: SHEET1

AIRPORT DATA TABLE

ITEM		EXISTING	FUTURE
AIRPORT REFERENCE CODE (ARC)		D-IV	D-IV
MEAN MAX. TEMPERATURE (HOTTEST MONTH)		83° (JULY)	83° (JULY)
AIRPORT ELEVATION (NAVD88)		715.8 (SURVEYED)	715.8 (SURVEYED)
AIRPORT NAVIGATIONAL AIDS		ILS | VOR | RNAV (GPS) BEACON	ILS | VOR | RNAV (GPS) BEACON
AIRPORT REFERENCE POINT	LATITUDE (N)	42° 14' 24.07''	42° 14' 19.00''
	LONGITUDE (W)	-83° 31' 51.21''	-83° 31' 59.00''
	DATUMS	NAD 83, NAVD 88	NAD 83, NAVD 88
MISCELLANEOUS FACILITIES		WIND CONES, ASOS	WIND CONES, ASOS
AIRPORT CRITICAL / DESIGN AIRCRAFT TYPE		767-300	767-300
AIRPORT MAGNETIC VARIATION	DECLINATION	7°7' W	7°7' W
	ANNUAL RATE OF CHANGE	0°2'W	0°2'W
	DATE	May-16	42517
	SOURCE	National Geophysical Data Center NOAA	National Geophysical Data Center NOAA
FAA NPIAS SERVICE LEVEL		RELIEVER	RELIEVER
STATE SERVICE LEVEL		COMMERCIAL SERVICE	COMMERCIAL SERVICE
AIRPORT OWNER		WAYNE COUNTY AIRPORT AUTHORITY	WAYNE COUNTY AIRPORT AUTHORITY
AIRPORT ACREAGE		2,392	2,392

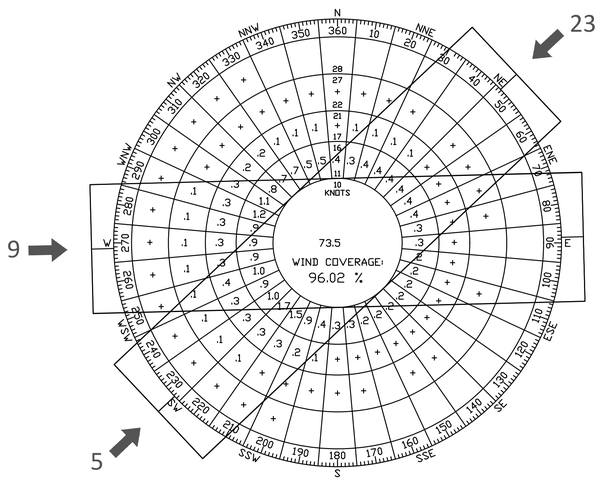
DECLARED DISTANCES

RUNWAY	5R		23L		5L		23R		9		27	
ITEM	EXISTING	FUTURE	EXISTING	FUTURE	EXISTING	FUTURE	EXISTING	FUTURE	EXISTING	FUTURE	EXISTING	FUTURE
TAKE OFF RUN AVAILABLE (TORA)	7,543	7,543	7,543	7,543	5,996	N/A	5,996	N/A	7,292	5,000	7,292	5,000
TAKE OFF DISTANCE AVAILABLE (TODA)	7,543	7,543	7,543	7,543	5,996	N/A	5,996	N/A	7,292	5,000	7,292	5,000
ACCELERATE STOP DISTANCE AVAILABLE (ASDA)	7,543	7,543	7,543	7,543	5,996	N/A	5,596	N/A	7,292	5,000	6,716	5,000
LANDING DISTANCE AVAILABLE (LDA)	7,543	7,543	7,543	7,543	5,996	N/A	5,596	N/A	6,716	5,000	6,716	5,000

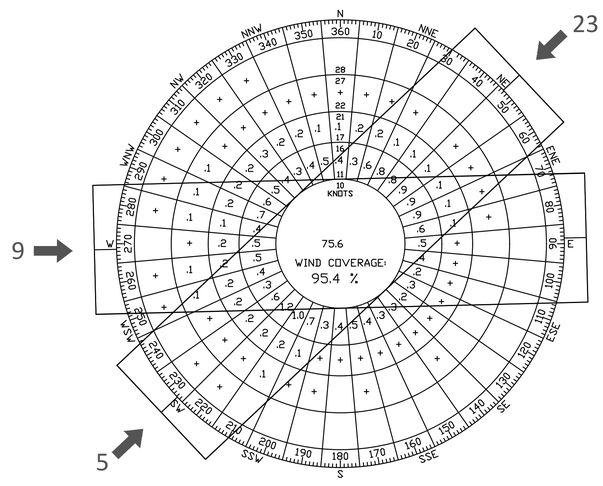
MODIFICATION OF DESIGN STANDARDS

NO.	STANDARD MODIFIED	FAA STANDARD	EXISTING CONDITION	PROPOSED ACTION	DATE APPROVED
1	RWY 5R-23L DESIGN GRADIENT	NO GRADE CHANGE FIRST AND LAST QUARTER OF RUNWAY	PROFILE OF THE RUNWAY HAS ONE GRADE CHANGE IN THE FIRST QUARTER OF THE RUNWAY ON THE 5R (SOUTHERN) END AND THREE GRADE CHANGES IN THE FIRST QUARTER OF THE RUNWAY ON THE 23L (NORTHERN) END.	NONE	
2	RWY 5R-23L TRAVERSE GRADE	TRAVERSE GRADES OF +10:1 IS PERMISSIBLE	SLOPING TRANSITIONS WITHIN THE OFA AT A RATIO OF 6:1 THAT DO NOT MEET THE CURRENT MAXIMUM SLOPE REQUIREMENT OF 10:1.	NONE	
3	OFA PENETRATIONS AT END OF RWY 23L	OFA PENETRATION	AIRFIELD SERVICE ROAD, AIRPORT PERIMETER FENCE & ECORSE ROAD WITHIN OFA	NONE	Dec-18

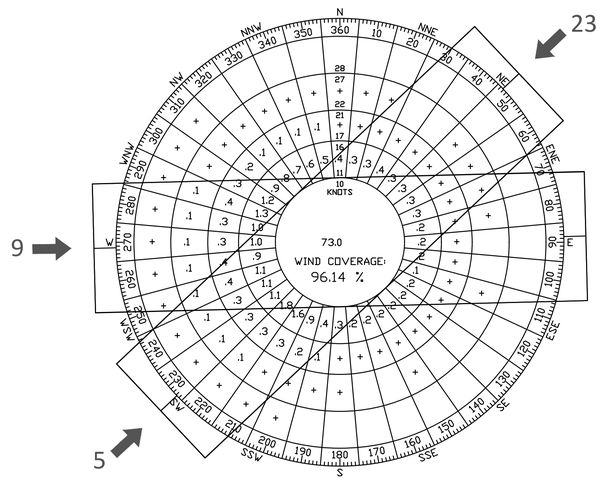
ALL WEATHER WIND ROSE



IMC WIND ROSE



VMC WIND ROSE



ALL WEATHER COVERAGE TABLE

CROSSWIND COMPONENT	RWY 5L-23R & 5R-23L	RWY 9-27
12 MPH (10.5 KNOTS)	89.80%	89.53%
	96.02%	
15 MPH (13 KNOTS)	94.31%	94.77%
	98.42%	
18 MPH (16 KNOTS)	98.20%	98.58%
	99.62%	
23 MPH (20 KNOTS)	99.59%	99.76%
	99.95%	

IMC COVERAGE TABLE

CROSSWIND COMPONENT	RWY 5L-23R & 5R-23L	RWY 9-27
12 MPH (10.5 KNOTS)	90.96%	89.00%
	95.40%	
15 MPH (13 KNOTS)	94.83%	94.01%
	97.85%	
18 MPH (16 KNOTS)	97.88%	98.07%
	99.30%	
23 MPH (20 KNOTS)	99.39%	99.63%
	99.90%	

VMC COVERAGE TABLE

CROSSWIND COMPONENT	RWY 5L-23R & 5R-23L	RWY 9-27
12 MPH (10.5 KNOTS)	89.54%	89.57%
	96.14%	
15 MPH (13 KNOTS)	94.20%	94.90%
	98.54%	
18 MPH (16 KNOTS)	98.28%	98.69%
	99.69%	
23 MPH (20 KNOTS)	99.63%	99.79%
	99.96%	

DETROIT METRO • WILLOW RUN
WAYNE COUNTY AIRPORT AUTHORITY

ALP PREPARED BY:
JACOBSEN | DANIELS
Planning, Implementation, Operations & Management
Mead & Hunt

FAA'S APPROVAL OF THIS AIRPORT LAYOUT PLAN (ALP) REPRESENTS ACCEPTANCE OF THE GENERAL LOCATION OF FUTURE FACILITIES DEPICTED (SHEET I7144C04). DURING THE PRELIMINARY DESIGN PHASE, THE AIRPORT OWNER IS REQUIRED TO RESUBMIT FOR APPROVAL THE FINAL LOCATIONS, HEIGHTS, AND EXTERIOR FINISH OF STRUCTURES. FAA'S CONCERN IS OBSTRUCTIONS, IMPACT ON ELECTRONIC AIDS, OR ADVERSE EFFECTS ON CONTROLLER VIEW OF AIRCRAFT APPROACHES AND GROUND MOVEMENT AREAS WHICH COULD ADVERSELY AFFECT THE SAFETY, EFFICIENCY, OR UTILITY OF THE AIRPORT.

DATA SOURCES:
1. MAGNETIC VARIATION FROM NOAA, NATIONAL GEOPHYSICAL DATA CENTER (NGDC) (June, 2016)
2. MEAN MAX. TEMPERATURE FROM THE WEATHER CHANNEL, MONTHLY AVERAGE/RECORD TEMPERATURES (June, 2016)
3. SURVEY CONDUCTED ON 10/23/2014 BY GEOPRO CONSULTANTS, LLC
4. WIND DATA NATIONAL CLIMATIC DATA CENTER WILLOW RUN AIRPORT, PERIOD OF RECORD 2005-2014

NOTES:
1. SURVEY PERFORMED USING MICHIGAN STATE PLANE, SOUTH ZONE, INTERNATIONAL FEET, NAVD 88 (GEOID 2012A), AND NAD 83 (2011)

N
MAGNETIC DECLINATION 7°7' WEST MAY 31, 2016

By	Date	Revisions

WILLOW RUN AIRPORT

DATA SHEET

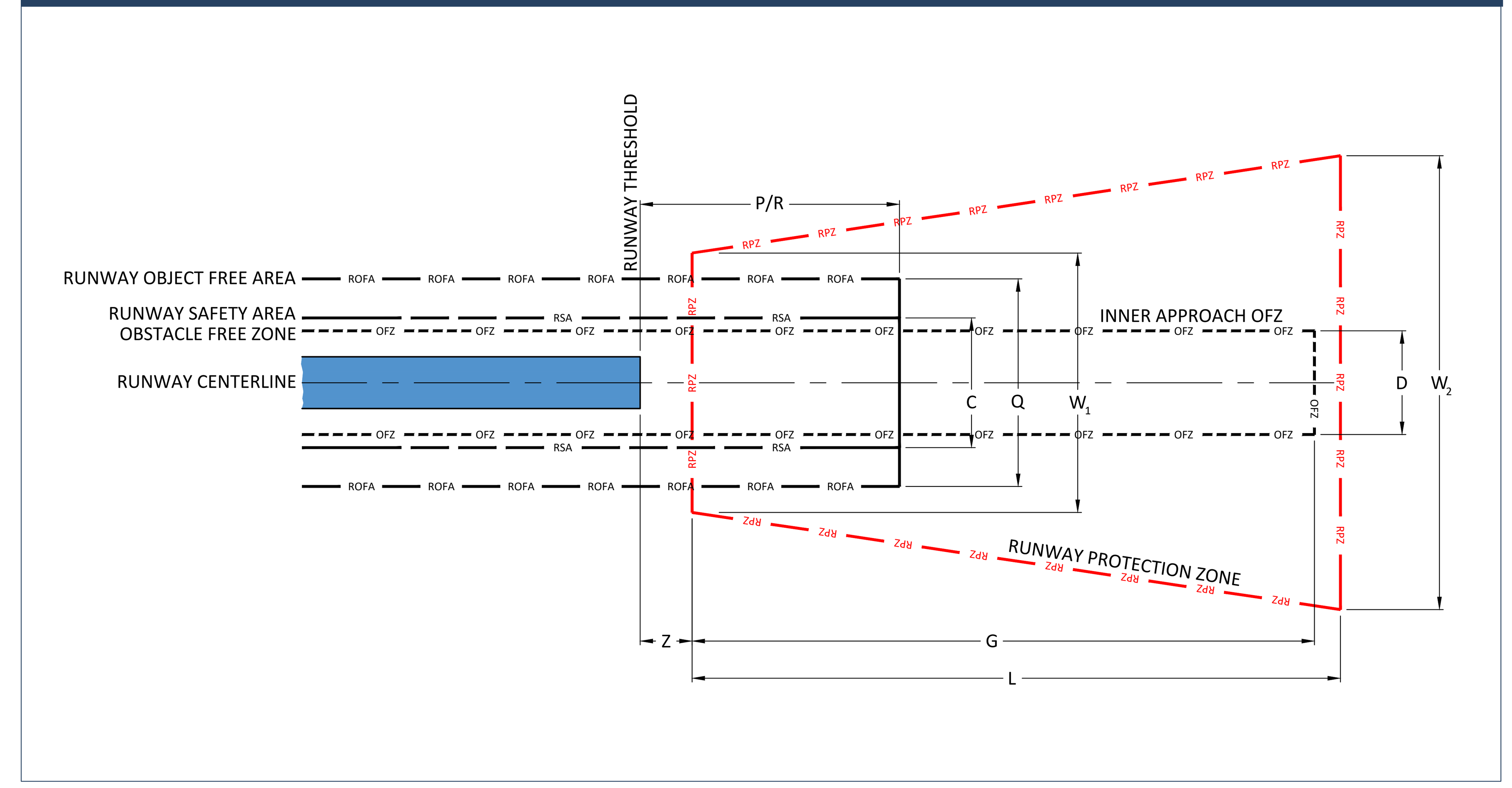
Drawn By: ST Date: 01-18-2019
Approved By: MCJ Job No: 037-15-03

Colorbable: JD ACAD.ctb LTScale: 1.0000 LwDefault: 0.010 Last Saved: 3/12/2018 1:43 PM Plotted On: 1/24/2019 11:07 AM
File: L:\06_PROJECTS\037-15-03 WAYNE\07-12-03 FP Master Plan Update\13 - FP\ALP\02-SHEETS\04-DATA SHEET 1.dwg Layout: SHEET2

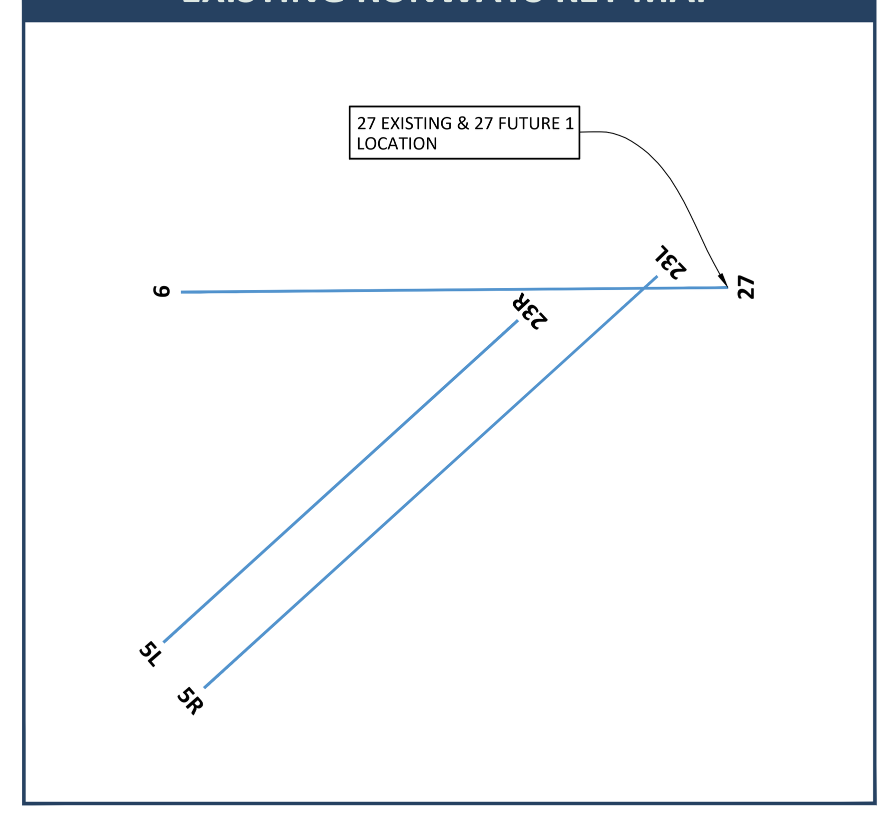
RUNWAY DATA TABLE

RUNWAY		5R		23L		5L		23R		9		27		
ITEM		EXISTING	FUTURE	EXISTING	FUTURE	EXISTING	FUTURE	EXISTING	FUTURE	EXISTING	FUTURE	EXISTING	FUTURE 1	FUTURE 2
RUNWAY DESIGN CODE (RDC)		D-IV-4000	D-IV-1200	D-IV-2400	D-IV-1200	D-IV-5000	CLOSED	D-IV-5000	CLOSED	D-IV-5000	C-II-5000	D-IV-VIS	C-II-5000	C-II-5000
RUNWAY REFERENCE CODE (RRC)		D-IV	D-IV	D-IV	D-IV	D-IV	CLOSED	D-IV	CLOSED	D-IV	C-II	D-IV	C-II	C-II
AIRCRAFT APPROACH CATEGORY		D	D	D	D	D	CLOSED	D	CLOSED	D	C	D	C	C
RUNWAY PAVEMENT STRENGTH (X 1,000 LBS)		100(S) 200(D) 89(2S) 350(2D) 800(2D2)	100(S) 200(D) 89(2S) 350(2D) 800(2D2)	100(S) 200(D) 89(2S) 350(2D) 800(2D2)	100(S) 200(D) 89(2S) 350(2D) 800(2D2)	35(S) 45(D) 90(2D)	CLOSED	35(S) 45(D) 90(2D)	CLOSED	55(S) 70(D) 89(2S) 120(2D)	55(S) 70(D) 89(2S) 120(2D)	55(S) 70(D) 89(2S) 120(2D)	55(S) 70(D) 89(2S) 120(2D)	55(S) 70(D) 89(2S) 120(2D)
RUNWAY PAVEMENT STRENGTH (PCN)		82/R/B/X/T	82/R/B/X/T	82/R/B/X/T	82/R/B/X/T	51/R/C/X/T	CLOSED	51/R/C/X/T	CLOSED	35/R/C/X/T	35/R/C/X/T	35/R/C/X/T	35/R/C/X/T	35/R/C/X/T
SURFACE TREATMENT		CONC-GRVD	CONC-GRVD	CONC-GRVD	CONC-GRVD	ASPH (GRVD)	CLOSED	ASPH (GRVD)	CLOSED	ASPH-GRVD	ASPH-GRVD	ASPH-GRVD	ASPH-GRVD	ASPH-GRVD
MAXIMUM EFFECTIVE GRADIENT (%)		0.2%	0.2%	0.2%	0.2%	0.1%	CLOSED	0.1%	CLOSED	0.2%	0.2%	0.2%	0.2%	0.2%
RUNWAY LENGTH		7,543	7,543	7,543	7,543	5,996	CLOSED	5,996	CLOSED	7,292	5,000	7,292	7,292	5,000
RUNWAY WIDTH		150	150	150	150	150	CLOSED	150	CLOSED	160	100	160	160	100
RUNWAY END ELEVATION (MSL)		714.4	714.4	701.5	701.5	715.1	CLOSED	707.3	CLOSED	715.5	715.5	699.4	699.4	707.0
RUNWAY BEARING (TRUE)		53.8	53.8	233.8	233.8	53.8	CLOSED	233.8	CLOSED	95.6	95.6	275.7	275.7	269°
DISPLACED THRESHOLD DISTANCE		N/A	N/A	N/A	N/A	N/A	CLOSED	N/A	CLOSED	575.5	N/A	N/A	N/A	N/A
DISPLACED THRESHOLD ELEVATION (MSL)		N/A	N/A	N/A	N/A	N/A	CLOSED	N/A	CLOSED	714.9	N/A	N/A	N/A	N/A
RUNWAY SAFETY AREA (RSA) LENGTH		1,000	1,000	1,000	1,000	1,000	CLOSED	1,000	CLOSED	1,000	1,000	1,000	1,000	1,000
RUNWAY SAFETY AREA (RSA) WIDTH		500	500	500	500	500	CLOSED	500	CLOSED	500	500	500	500	500
RUNWAY END COORDINATES	LATITUDE NORTH (NAD83)	42°13'50.25"	42°13'50.25	42°14'41.34"	42°14'41.34"	42°13'55.86"	CLOSED	42°14'36.46"	CLOSED	42°14'38.22"	42°14'38.22"	42°14'40.03"	42°14'39.47"	42°14'39.47"
	LONGITUDE WEST (NAVD88)	83°32'23.46"	83°32'23.46"	83°31'10.47"	83°31'10.47"	83°32'30.06"	CLOSED	83°31'32.03"	CLOSED	83°32'35.98"	83°32'35.98"	83°30'59.06"	83°31'29.52"	83°31'29.52"
DISPLACED THRESHOLD COORDINATES	LATITUDE NORTH (NAD83)	N/A	N/A	N/A	N/A	N/A	CLOSED	N/A	CLOSED	42°14'38.36"	N/A	N/A	N/A	N/A
	LONGITUDE WEST (NAVD88)	N/A	N/A	N/A	N/A	N/A	CLOSED	N/A	CLOSED	83°32'28.33"	N/A	N/A	N/A	N/A
RUNWAY LIGHTING		HIRL,CL,MASLR,TDZ	HIRL,CL,MASLR,TDZ	HIRL, CL, MALSR	HIRL, CL, MALSR	MIRL	CLOSED	MIRL	CLOSED	MIRL	MIRL	MIRL	MIRL	MIRL
APPROACH RUNWAY PROTECTION ZONE (RPZ)	LENGTH	2,500	2,500	1,700	2,500	1,700	CLOSED	1,700	CLOSED	1,700	1,700	1,700	1,700	1,700
	INNER WIDTH	1,000	1,000	1,000	1,000	500	CLOSED	500	CLOSED	500	500	500	500	500
	OUTER WIDTH	1,750	1,750	1,510	1,750	1,010	CLOSED	1,010	CLOSED	1,010	1,010	1,010	1,010	1,010
DEPARTURE RUNWAY PROTECTION ZONE	LENGTH	1,700	1,700	1,700	1,700	1,700	CLOSED	1,700	CLOSED	1,700	1,700	1,700	1,700	1,700
	INNER WIDTH	500	500	500	500	500	CLOSED	500	CLOSED	500	500	500	500	500
	OUTER WIDTH	1,010	1,010	1,010	1,010	1,010	CLOSED	1,010	CLOSED	1,010	1,010	1,010	1,010	1,010
RUNWAY MARKING		PRECISION (PI)	PRECISION (PI)	PRECISION (PI)	PRECISION (PI)	NON-PRECISION	CLOSED	NON-PRECISION	CLOSED	NON-PRECISION	NON-PRECISION	NON-PRECISION	NON-PRECISION	NON-PRECISION
FAR PART 77 APPROACH CATEGORY		50:1 | 40:1	50:1 | 40:1	50:1 | 40:1	50:1 | 40:1	34:1	CLOSED	34:1	CLOSED	34:1	34:1	20:1	34:1	34:1
FAR PART 77 APPROACH TYPE		PIR	PIR	PIR	PIR	NPI-C	CLOSED	NPI-C	CLOSED	NPI-C	NPI-C	VIS-B	NPI-C	NPI-C
FAR PART 77 APPROACH SURFACE	WIDTH OF PRIMARY SURFACE	1,000	1,000	1,000	1,000	500	CLOSED	500	CLOSED	500	500	500	500	500
	AT OUTER END	16,000	16,000	16,000	16,000	3,500	CLOSED	3,500	CLOSED	3,500	3,500	1,500	3,500	3,500
	LENGTH	50,000	50,000	50,000	50,000	10,000	CLOSED	10,000	CLOSED	10,000	10,000	5,000	10,000	10,000
VISIBILITY MINIMUMS		1/2 MILE	<1/2 MILE	3/4 MILE	<1/2 MILE	1 MILE	CLOSED	1 MILE	CLOSED	1 MILE	1 MILE	VISUAL	1 MILE	1 MILE
AERONAUTICAL SURVEY REQUIRED		VGS	VGS	VGS	VGS	N/A	CLOSED	N/A	CLOSED	NVGS	NVGS	NVGS	NVGS	NVGS
TERPS DEPARTURE SURFACE/OCS		40:1	40:1	40:1	40:1	40:1	CLOSED	40:1	CLOSED	N/A	N/A	40:1	40:1	40:1
RUNWAY OBJECT FREE AREA (ROFA) LENGTH		1,000	1,000	1,000	1,000	1,000	CLOSED	1,000	CLOSED	1,000	1,000	1,000	1,000	1,000
RUNWAY OBJECT FREE AREA (ROFA) WIDTH		800	800	800	800	800	CLOSED	800	CLOSED	800	800	800	800	800
RUNWAY OBSTACLE FREE ZONE (ROFZ) LENGTH		200	200	200	200	200	CLOSED	200	CLOSED	200	200	200	200	200
RUNWAY OBSTACLE FREE ZONE (ROFZ) WIDTH		400	400	400	400	400	CLOSED	400	CLOSED	400	400	400	400	400
PRECISION OBSTACLE FREE ZONE (POFZ) LENGTH		200	200	200	200	N/A	CLOSED	N/A	CLOSED	N/A	N/A	N/A	N/A	N/A
PRECISION OBSTACLE FREE ZONE (POFZ) WIDTH		800	800	800	800	N/A	CLOSED	N/A	CLOSED	N/A	N/A	N/A	N/A	N/A
THRESHOLD SITING SURFACE (TSS)		34:1	34:1	20:1	34:1	20:1	CLOSED	20:1	CLOSED	20:1	20:1	20:1	20:1	20:1
TSS OBJECT PENETRATION(S)		YES	YES	NO	NO	YES	CLOSED	NO	CLOSED	NO**	YES	NO	NO	NO
VISUAL APPROACH AIDS		N/A	PAPI-4	PAPI-4	PAPI-4	PAPI-4	CLOSED	PAPI-4	CLOSED	PAPI-4	PAPI-4	N/A	PAPI-4	PAPI-4
INSTRUMENT APPROACH AIDS		LOC | GS	LOC | GS	LOC | GS	LOC | GS	N/A	CLOSED	N/A	CLOSED	N/A	N/A	N/A	N/A	N/A
TOUCHDOWN ZONE ELEVATION (MSL)		715.8	TBD	710.1	710.1	715.7	CLOSED	712.2	CLOSED	715.6	715.6	708.3	TBD	TBD
ARC AND CRITICAL AIRCRAFT		D-III * (DC9-30)	D-III * (B737-900)	D-III * (DC9-30)	D-III * (B737-900)	D-III (DC9-30)	CLOSED	D-III (DC9-30)	CLOSED	D-III (DC9-30)	C-II (HAWKER-800)	D-III (DC9-30)	C-II (HAWKER-800)	C-II (HAWKER-800)

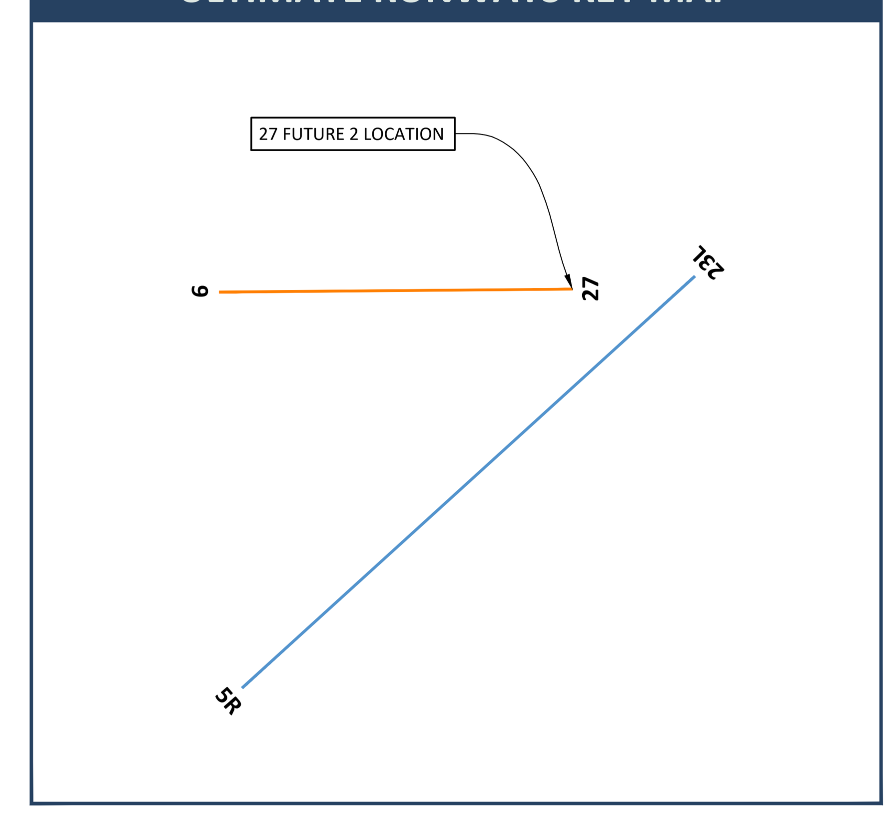
RUNWAY SAFETY AREAS



EXISTING RUNWAYS KEY MAP



ULTIMATE RUNWAYS KEY MAP



DETROIT METRO • WILLOW RUN
WAYNE COUNTY AIRPORT AUTHORITY

ALP PREPARED BY:
JACOBSEN | DANIELS
Planning, Implementation, Operations & Management
Mead & Hunt

FAA'S APPROVAL OF THIS AIRPORT LAYOUT PLAN (ALP) REPRESENTS ACCEPTANCE OF THE GENERAL LOCATION OF FUTURE FACILITIES DEPICTED (SHEET I7144C04). DURING THE PRELIMINARY DESIGN PHASE, THE AIRPORT OWNER IS REQUIRED TO RESUBMIT FOR APPROVAL THE FINAL LOCATIONS, HEIGHTS, AND EXTERIOR FINISH OF STRUCTURES. FAA'S CONCERN IS OBSTRUCTIONS, IMPACT ON ELECTRONIC AIDS, OR ADVERSE EFFECTS ON CONTROLLER VIEW OF AIRCRAFT APPROACHES AND GROUND MOVEMENT AREAS WHICH COULD ADVERSELY AFFECT THE SAFETY, EFFICIENCY, OR UTILITY OF THE AIRPORT.

DATA SOURCES:

NOTES:
1. *RUNWAY 5R-23L IS CURRENTLY DESIGNED TO AND CAPABLE OF ACCOMMODATING UNRESTRICTED D-IV OPERATIONS; HOWEVER THE CURRENT AND FUTURE CRITICAL AIRCRAFT CONDUCTING 500 OR MORE ANNUAL OPERATIONS IS ARC D-III.
2. **MALSR TOWER ONLY OBSTRUCTION; HOWEVER, OBJECT FIXED BY FUNCTION.

N
MAGNETIC DECLINATION 7°7' WEST MAY 31, 2016

By	Date	Revisions

WILLOW RUN AIRPORT

DATA SHEET

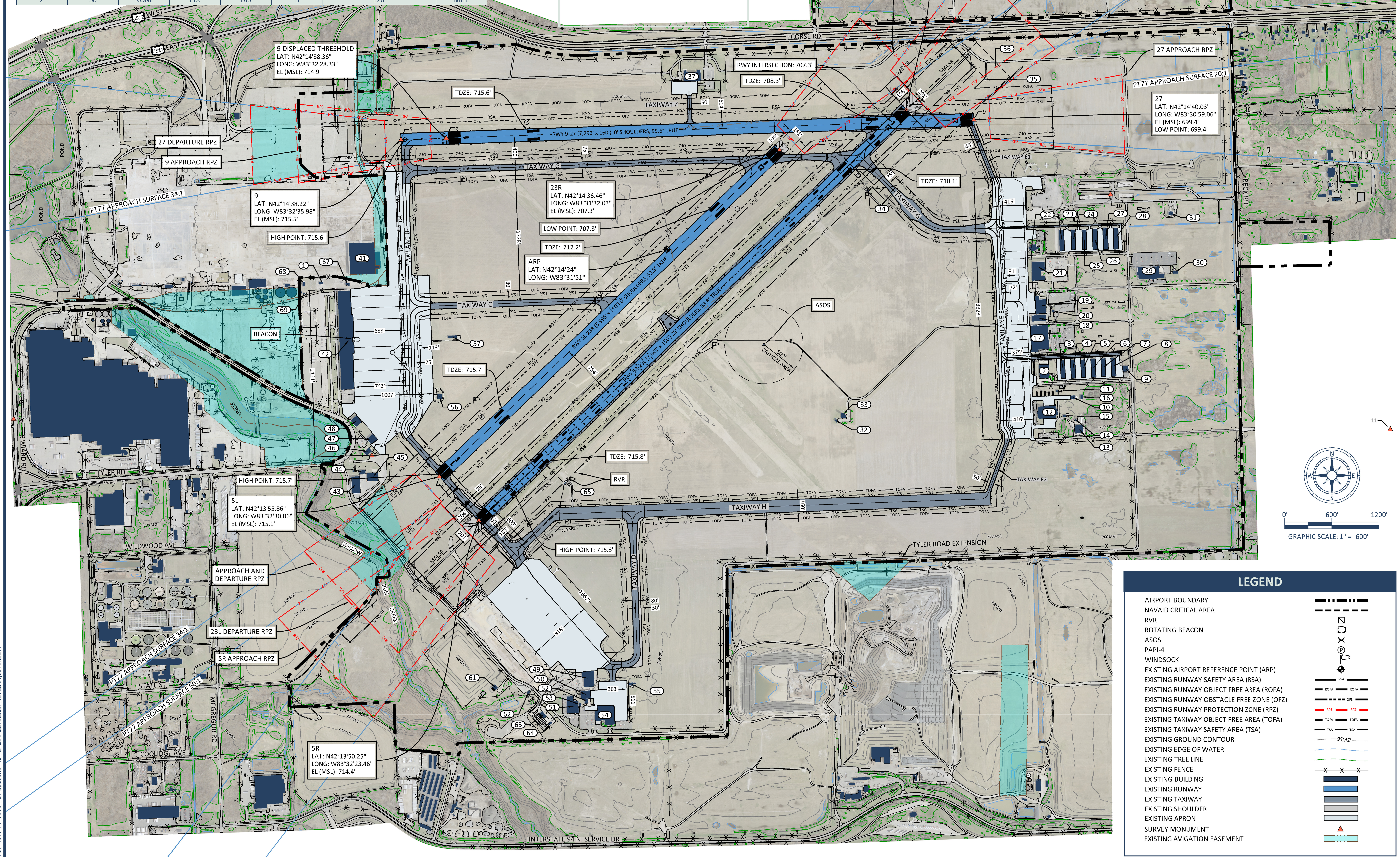
3 of 19

Drawn By: ST Date: 01-18-2019
Approved By: MCJ Job No: 037-15-03

TAXIWAY/TAXILANE DATA TABLE

NAME	DIMENSIONS					SEPARATION FROM TAXIWAY CL TO FIXED/MOVABLE OBJECT	LIGHTING
	WIDTH	SHOULDER	TSA	OFA	TDG		
B (TAXILANE)	75'	NONE	171'	225'	5	113'	MITL
C	80'	NONE	214'	320'	5	N/A	MITL
D	80'	NONE	214'	320'	5	211'	MITL
E1	48'	NONE	118'	186'	2	240'	MITL
E2	46'	NONE	118'	186'	2	N/A	MITL
E (TAXILANE)	72'	NONE	118'	162'	3	81'	MITL
G	75'	NONE	214'	320'	5	200'	MITL
H	160'	NONE	214'	320'	5	400'	MITL
Z	50	NONE	118'	186'	3	120'	MITL

RESERVED FOR FAA APPROVAL STAMP



SURVEY CONTROL POINTS

BUILDING NUMBER	NORTHING	EASTING	MSL
1	268656.39	13341363.97	731.51
2	268193.11	13345920.35	715.61
3	267925.17	13346779.86	715.06
4	267361.79	13347281.72	714.44
5	272208.10	13346292.37	715.47
6	272228.46	13346867.75	714.93
7	272077.73	13351104.10	707.30
8	272587.65	13352720.07	701.51
9	272464.17	13353579.84	699.42
10	271513.09	13355316.45	700.26
11	268523.90	13358875.64	696.25
12	279758.45	13358191.02	691.01

NOTE: SURVEY POINT NUMBER 12 IS OUTSIDE OF DRAWING VIEW

EXISTING BUILDING TABLE

BUILDING NUMBER	TOP ELEVATION	OCCUPANT
1	731.71	YIP DEFUNCT FUEL FARM ISLAND
2	726.99	AVIATION DEPOT GROUP
3	716.70	BIRD CAGE HANGARS
4	716.23	BIRD CAGE HANGARS
5	716.29	BIRD CAGE HANGARS
6	716.24	BIRD CAGE HANGARS
7	716.24	BIRD CAGE HANGARS
8	716.24	BIRD CAGE HANGARS
9	723.45	ACTIVE AERO STORAGE
10	721.41	ACTIVE AERO BUZZARD AVIATION
11	710.25	ACTIVE AERO BUZZARD AVIATION
12	755.49	PACKARD HANGAR
13	719.45	ACTIVE AERO STORAGE
14	713.19	ACTIVE AERO STORAGE
15	711.43	PUMP HOUSE
16	723.20	ACTIVE AERO BUZZARD AVIATION
17	728.20	ACTIVE AERO USA JET AIRLINES
18	721.30	ACTIVE AERO USA JET AIRLINES
19	730.26	ACTIVE AERO USA JET AIRLINES
20	713.23	PAVILION
21	715.32	FAA OFFICE BUILDING
22	722.10	AV FLIGHT TERMINAL
23	716.86	BLACK EAGLE AVIATION
24	714.58	BLACK EAGLE AVIATION
25	714.53	BLACK EAGLE AVIATION
26	716.76	BLACK EAGLE AVIATION
27	716.82	BLACK EAGLE AVIATION
28	716.82	BLACK EAGLE AVIATION
29	726.89	YANKEE AIR MUSEUM
30	714.43	YANKEE AIR MUSEUM
31	722.38	YANKEE AIR MUSEUM
32	716.87	STORAGE
33	797.58	ATC (EYE ELEVATION 785')
34	711.68	GLIDE SLOPE SHACK
35	708.87	LOCALIZER SHACK
36	706.43	DME SHACK
37	746.08	JOHNSON CONTROL HANGAR
41	781.05	YANKEE AIR MUSEUM
42	798.19	WILLOW RUN ADMIN
43	743.34	WCAA MAINTENANCE
44	740.68	WCAA SALT AND SAND
45	733.81	WCAA MAINTENANCE
46	725.63	EAGLE FLIGHT CENTER
47	740.66	ROUSH HANGAR
48	743.29	EAGLE FLIGHT HANGAR
49	735.88	KALITTA CHARTERS
50	738.35	KALITTA CHARTERS MAINTENANCE
51	752.36	KALITTA SIMULATOR
52	726.69	KALITTA CHARTERS
53	721.73	KALITTA SIM BLDG GENERATOR
54	751.34	KALITTA AIR
55	732.27	KALITTA ENGINE TEST CELL
56	733.19	FIRE HOUSE
57	734.65	AIRFIELD ELECTRICAL VAULT
61	727.94	LAND FILL
62	723.50	WCAA STORAGE
63	726.89	WCAA FUEL FARM FUELING ISLAND
64	720.66	WCAA FUEL FARM
65	720.56	GLIDE SLOPE SHACK
67	733.84	AVFLIGHT FLEET MAINT STORAGE
68	731.72	UNKNOWN
69	727.88	WCAA DEFUNCT FUEL FARM OFFICE

LEGEND

- AIRPORT BOUNDARY
- NAVAID CRITICAL AREA
- RVR
- ROTATING BEACON
- ASOS
- PAPI-4
- WINDSOCK
- EXISTING AIRPORT REFERENCE POINT (ARP)
- EXISTING RUNWAY SAFETY AREA (RSA)
- EXISTING RUNWAY OBJECT FREE AREA (ROFA)
- EXISTING RUNWAY OBSTACLE FREE ZONE (OFZ)
- EXISTING RUNWAY PROTECTION ZONE (RPZ)
- EXISTING TAXIWAY OBJECT FREE AREA (TOFA)
- EXISTING TAXIWAY SAFETY AREA (TSA)
- EXISTING GROUND CONTOUR
- EXISTING EDGE OF WATER
- EXISTING TREE LINE
- EXISTING FENCE
- EXISTING BUILDING
- EXISTING RUNWAY
- EXISTING TAXIWAY
- EXISTING SHOULDER
- EXISTING APRON
- SURVEY MONUMENT
- EXISTING AVIGATION EASEMENT

DETROIT METRO • WILLOW RUN
WAYNE COUNTY AIRPORT AUTHORITY

ALP PREPARED BY:
JACOBSEN | DANIELS
Planning, Implementation, Operations & Management
Mead & Hunt

FAA'S APPROVAL OF THIS AIRPORT LAYOUT PLAN (ALP) REPRESENTS ACCEPTANCE OF THE GENERAL LOCATION OF FUTURE FACILITIES DEPICTED (SHEET I7144C04). DURING THE PRELIMINARY DESIGN PHASE, THE AIRPORT OWNER IS REQUIRED TO RESUBMIT FOR APPROVAL THE FINAL LOCATIONS, HEIGHTS, AND EXTERIOR FINISH OF STRUCTURES. FAA'S CONCERN IS OBSTRUCTIONS, IMPACT ON ELECTRONIC AIDS, OR ADVERSE EFFECTS ON CONTROLLER VIEW OF AIRCRAFT APPROACHES AND GROUND MOVEMENT AREAS WHICH COULD ADVERSELY AFFECT THE SAFETY, EFFICIENCY, OR UTILITY OF THE AIRPORT.

DATA SOURCES:

1. AIRPORT PROPERTY BOUNDARY AND EASEMENTS OBTAINED FROM WILLOW RUN AIRPORT DRAFT EXHIBIT A, DATED 11-30-2016.

NOTES:

1. SURVEY CONDUCTED ON 10/23/2014 BY GEOPRO CONSULTANTS, LLC.
2. SURVEY PERFORMED USING MICHIGAN STATE PLANE, SOUTH ZONE, INTERNATIONAL FEET, NAVD 88 (GEOID 2012A), AND NAD 83 (2011).

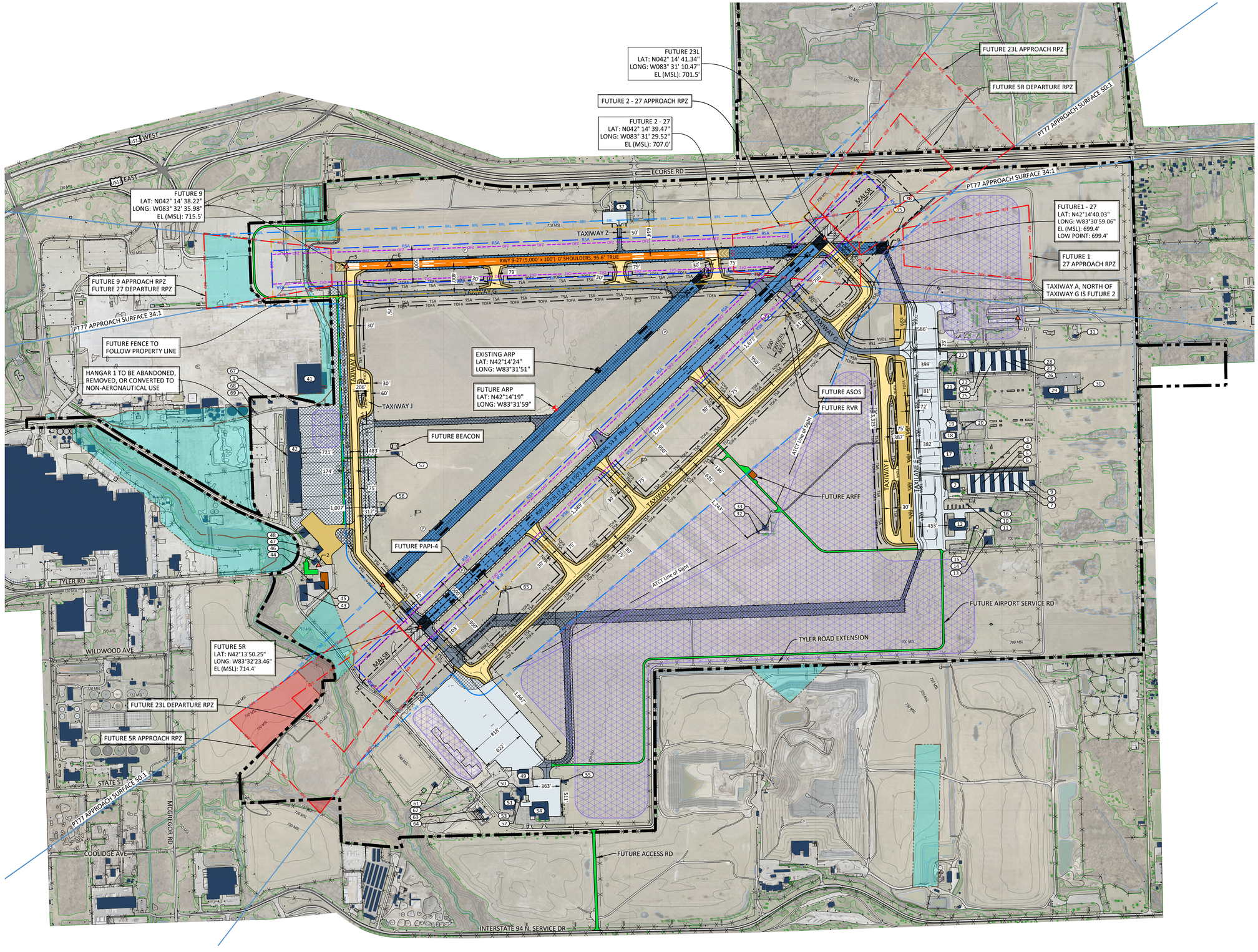
MAGNETIC DECLINATION 7°7' WEST MAY 31, 2016

By	Date	Revisions

WILLOW RUN AIRPORT

EXISTING AIRPORT LAYOUT PLAN DRAWING

Drawn By: JGH Date: 01-18-2019
Approved By: MCJ Job No: 037-15-03



RESERVED FOR
FAA APPROVAL
STAMP

N

0' 600' 1200'

GRAPHIC SCALE: 1" = 600'

LEGEND

- AIRPORT BOUNDARY
- EXISTING GROUND CONTOUR
- EXISTING EDGE OF WATER
- EXISTING TREE LINE
- EXISTING FENCE
- EXISTING BUILDING
- EXISTING RUNWAY
- EXISTING TAXIWAY
- EXISTING SHOULDER
- WETLANDS
- RVR
- ASOS
- ROTATING BEACON
- PAPI-4
- WINDSOCK
- EXISTING AIRPORT REFERENCE POINT (ARP)
- BUILDING RESTRICTION LINE
- NAVAID CRITICAL AREA
- FUTURE RUNWAY SAFETY AREA (RSA)
- FUTURE RUNWAY OBSTACLE FREE ZONE (OFZ)
- FUTURE RUNWAY PROTECTION ZONE (RPZ)
- FUTURE RUNWAY OBJECT FREE AREA (ROFA)
- FUTURE TAXIWAY OBJECT FREE AREA (TOFA)
- FUTURE TAXIWAY SAFETY AREA (TSA)
- FUTURE PRECISION OBSTACLE FREE ZONE (POFZ)
- FUTURE FENCE
- FUTURE SERVICE ROADWAY/PARKING
- FUTURE AIRPORT STRUCTURE
- FUTURE RUNWAY PAVEMENT & MARKINGS
- FUTURE TAXIWAY PAVEMENT
- FUTURE APRON PAVEMENT
- FUTURE SHOULDER PAVEMENT
- FUTURE DEMOLITION
- FUTURE AIRPORT DEVELOPMENT AREA
- FUTURE AIRPORT REFERENCE POINT (ARP)
- SURVEY MONUMENT
- EXISTING AVIGATION EASEMENT
- FUTURE AVIGATION EASEMENT

DETROIT METRO • WILLOW RUN
WAYNE COUNTY AIRPORT AUTHORITY

ALP PREPARED BY:
JACOBSEN | DANIELS
Planning, Implementation, Operations & Management
Mead & Hunt

FAA'S APPROVAL OF THIS AIRPORT LAYOUT PLAN (ALP) REPRESENTS ACCEPTANCE OF THE GENERAL LOCATION OF FUTURE FACILITIES DEPICTED (SHEET I7144C04). DURING THE PRELIMINARY DESIGN PHASE, THE AIRPORT OWNER IS REQUIRED TO RESUBMIT FOR APPROVAL THE FINAL LOCATIONS, HEIGHTS, AND EXTERIOR FINISH OF STRUCTURES. FAA'S CONCERN IS OBSTRUCTIONS, IMPACT ON ELECTRONIC AIDS, OR ADVERSE EFFECTS ON CONTROLLER VIEW OF AIRCRAFT APPROACHES AND GROUND MOVEMENT AREAS WHICH COULD ADVERSELY AFFECT THE SAFETY, EFFICIENCY, OR UTILITY OF THE AIRPORT.

DATA SOURCES:
1. AIRPORT PROPERTY BOUNDARY AND EASEMENTS OBTAINED FROM WILLOW RUN AIRPORT DRAFT EXHIBIT A, DATED 11-30-2016.

NOTES:
1. SEE EXISTING AIRPORT LAYOUT DRAWING FOR THE EXISTING BUILDING TABLE AND THE SURVEY CONTROL POINTS TABLE.
2. RPZ ANALYSIS CONDUCTED FOR FUTURE RUNWAY 9/27 CONFIGURATION. FAA CONCURRED WITH PROPOSED CONFIGURATION ON NOVEMBER 6, 2017.

N
MAGNETIC DECLINATION 7°7' WEST MAY 31, 2016

By	Date	Revisions

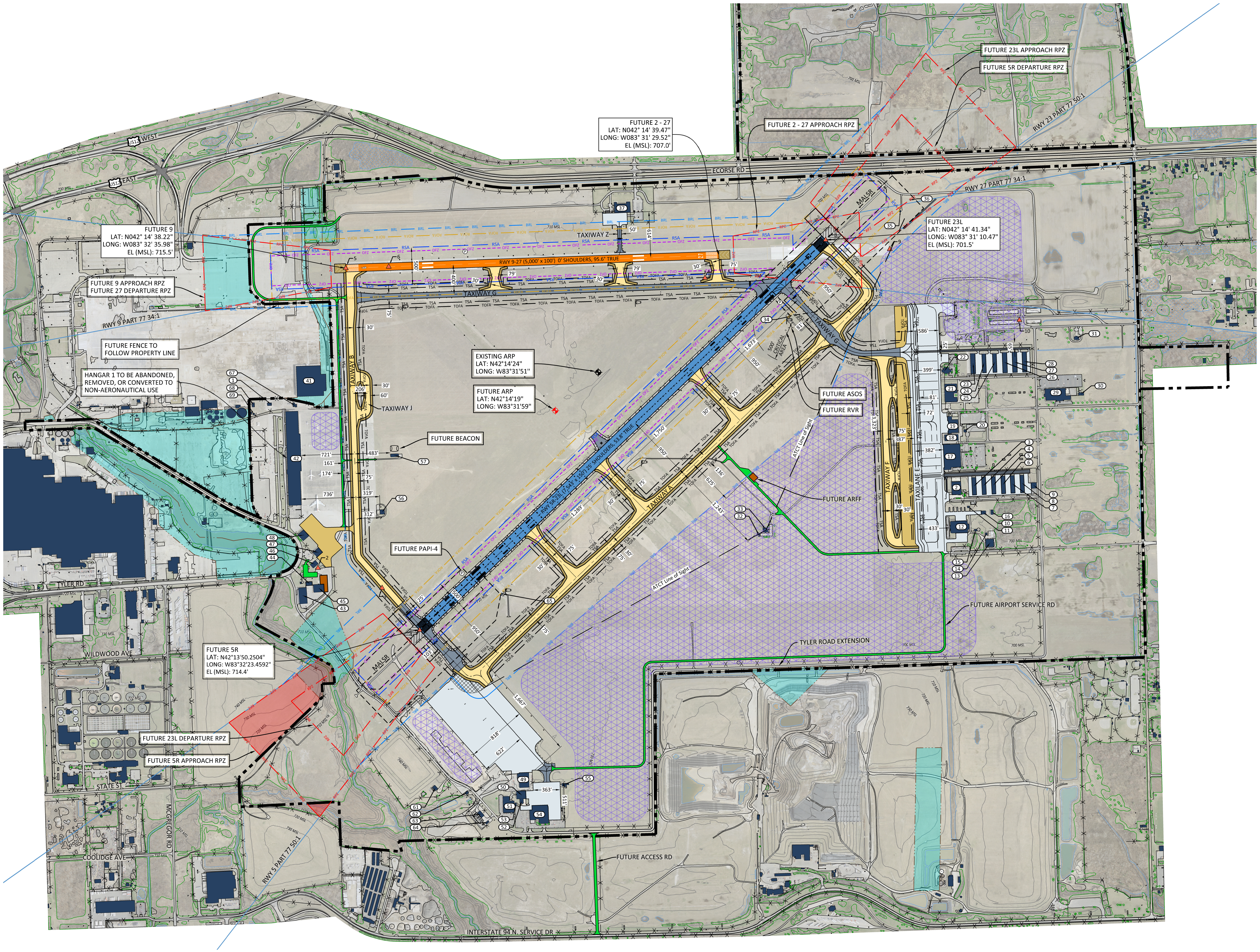
WILLOW RUN AIRPORT

FUTURE AIRPORT LAYOUT PLAN DRAWING

5 of 19

Drawn By: JGH Date: 01-18-2019
Approved By: MCJ Job No: 037-15-03

Colorable; JD ACAD.ctb LTScale: 1.0000 LwDefault: 0.007 Last Saved: 1/28/2019 10:06 AM Plotted On: 1/28/2019 1:35 PM
File: I:\06_PROJECTS\2037_MI\4037-15-03 WP Master Plan Update\13 - WP ALP\02 SHEETS\01 FUTURE ALP\Layout SHEETS



RESERVED FOR FAA APPROVAL STAMP

0' 600' 1200'
GRAPHIC SCALE: 1" = 600'

LEGEND

- AIRPORT BOUNDARY
- EXISTING GROUND CONTOUR
- EXISTING EDGE OF WATER
- EXISTING TREE LINE
- EXISTING FENCE
- EXISTING BUILDING
- EXISTING RUNWAY
- EXISTING TAXIWAY
- EXISTING SHOULDER
- WETLANDS
- RVR
- ASOS
- ROTATING BEACON
- PAPI-4
- WINDSOCK
- EXISTING AIRPORT REFERENCE POINT (ARP)
- BUILDING RESTRICTION LINE
- NAVAID CRITICAL AREA
- FUTURE RUNWAY SAFETY AREA (RSA)
- FUTURE RUNWAY OBSTACLE FREE ZONE (OFZ)
- FUTURE RUNWAY PROTECTION ZONE (RPZ)
- FUTURE RUNWAY OBJECT FREE AREA (ROFA)
- FUTURE TAXIWAY OBJECT FREE AREA (TOFA)
- FUTURE TAXIWAY SAFETY AREA (TSA)
- FUTURE PRECISION OBSTACLE FREE ZONE (POFZ)
- FUTURE FENCE
- FUTURE SERVICE ROADWAY/PARKING
- FUTURE AIRPORT STRUCTURE
- FUTURE RUNWAY PAVEMENT & MARKINGS
- FUTURE TAXIWAY PAVEMENT
- FUTURE APRON PAVEMENT
- FUTURE SHOULDER PAVEMENT
- FUTURE DEMOLITION
- FUTURE AIRPORT DEVELOPMENT AREA
- FUTURE AIRPORT REFERENCE POINT (ARP)
- SURVEY MONUMENT
- EXISTING AVIGATION EASEMENT
- FUTURE AVIGATION EASEMENT

DETROIT METRO • WILLOW RUN
WAYNE COUNTY AIRPORT AUTHORITY

ALP PREPARED BY:
JACOBSEN | DANIELS
Planning, Implementation, Operations & Management
Mead & Hunt

FAA'S APPROVAL OF THIS AIRPORT LAYOUT PLAN (ALP) REPRESENTS ACCEPTANCE OF THE GENERAL LOCATION OF FUTURE FACILITIES DEPICTED (SHEET I7144C04). DURING THE PRELIMINARY DESIGN PHASE, THE AIRPORT OWNER IS REQUIRED TO RESUBMIT FOR APPROVAL THE FINAL LOCATIONS, HEIGHTS, AND EXTERIOR FINISH OF STRUCTURES. FAA'S CONCERN IS OBSTRUCTIONS, IMPACT ON ELECTRONIC AIDS, OR ADVERSE EFFECTS ON CONTROLLER VIEW OF AIRCRAFT APPROACHES AND GROUND MOVEMENT AREAS WHICH COULD ADVERSELY AFFECT THE SAFETY, EFFICIENCY, OR UTILITY OF THE AIRPORT.

DATA SOURCES:
1. AIRPORT PROPERTY BOUNDARY AND EASEMENTS OBTAINED FROM WILLOW RUN AIRPORT DRAFT EXHIBIT A, DATED 11-30-2016.

NOTES:
1. SEE EXISTING AIRPORT LAYOUT DRAWING FOR THE EXISTING BUILDING TABLE AND THE SURVEY CONTROL POINTS TABLE.

MAGNETIC DECLINATION 7°7' WEST MAY 31, 2016

By	Date	Revisions

WILLOW RUN AIRPORT

ULTIMATE FUTURE AIRPORT LAYOUT DRAWING

Drawn By: SRG Date: 01-18-2019
Approved By: MCJ Job No: 037-15-03

AIRPORT ELEVATION: 715.8 MSL
HORIZONTAL SURFACE ELEVATION: 865.8 MSL

RWY 23L
EL. 701.5'

RWY 23R
EL. 707.3'

RWY 9
EL. 715.5'

RWY 5L
EL. 715.1'

RWY 27
EL. 699.4'

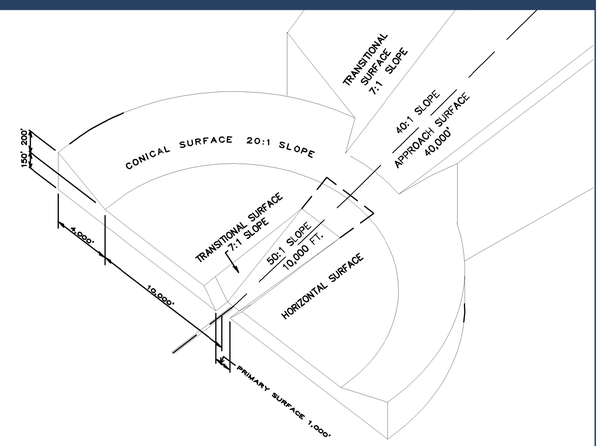
RWY 5R
EL. 714.4'

20:1 CONICAL SURFACE

7:1 TRANSITIONAL SURFACE

40:1 APPROACH SURFACE

PROFILE VIEW



NOTE:
INDIVIDUAL RUNWAY PROFILES, EXTENDED RUNWAY COMPOSITE PROFILES, AND INNER APPROACH SURFACE PROFILES ARE SHOWN ON SHEETS 8-16 OF THIS ALP SET OF DRAWINGS.

0' 4,500' 9,000'
GRAPHIC SCALE: 1" = 4,500'

DETROIT METRO • WILLOW RUN
WAYNE COUNTY AIRPORT AUTHORITY

ALP PREPARED BY:
JACOBSEN | DANIELS
Planning, Implementation, Operations & Management
Mead & Hunt

FAA'S APPROVAL OF THIS AIRPORT LAYOUT PLAN (ALP) REPRESENTS ACCEPTANCE OF THE GENERAL LOCATION OF FUTURE FACILITIES DEPICTED (SHEET 17144C04). DURING THE PRELIMINARY DESIGN PHASE, THE AIRPORT OWNER IS REQUIRED TO RESUBMIT FOR APPROVAL THE FINAL LOCATIONS, HEIGHTS, AND EXTERIOR FINISH OF STRUCTURES. FAA'S CONCERN IS OBSTRUCTIONS, MPACT ON ELECTRONIC AIDS, OR ADVERSE EFFECTS ON CONTROLLER VIEW OF AIRCRAFT APPROACHES AND GROUND MOVEMENT AREAS WHICH COULD ADVERSELY AFFECT THE SAFETY, EFFICIENCY, OR UTILITY OF THE AIRPORT.

DATA SOURCES:
1. DRAWING BASE MAP PROVIDED BY UNITED STATES GEOLOGICAL SURVEY.

NOTES:
1. OBSTRUCTIONS TO PART 77 SURFACES ARE SHOWN ON SHEET 7A OF THIS ALP SET AT AN ENLARGED SCALE FOR CLARITY.

MAGNETIC DECLINATION 7°7' WEST MAY 31, 2016

By	Date	Revisions

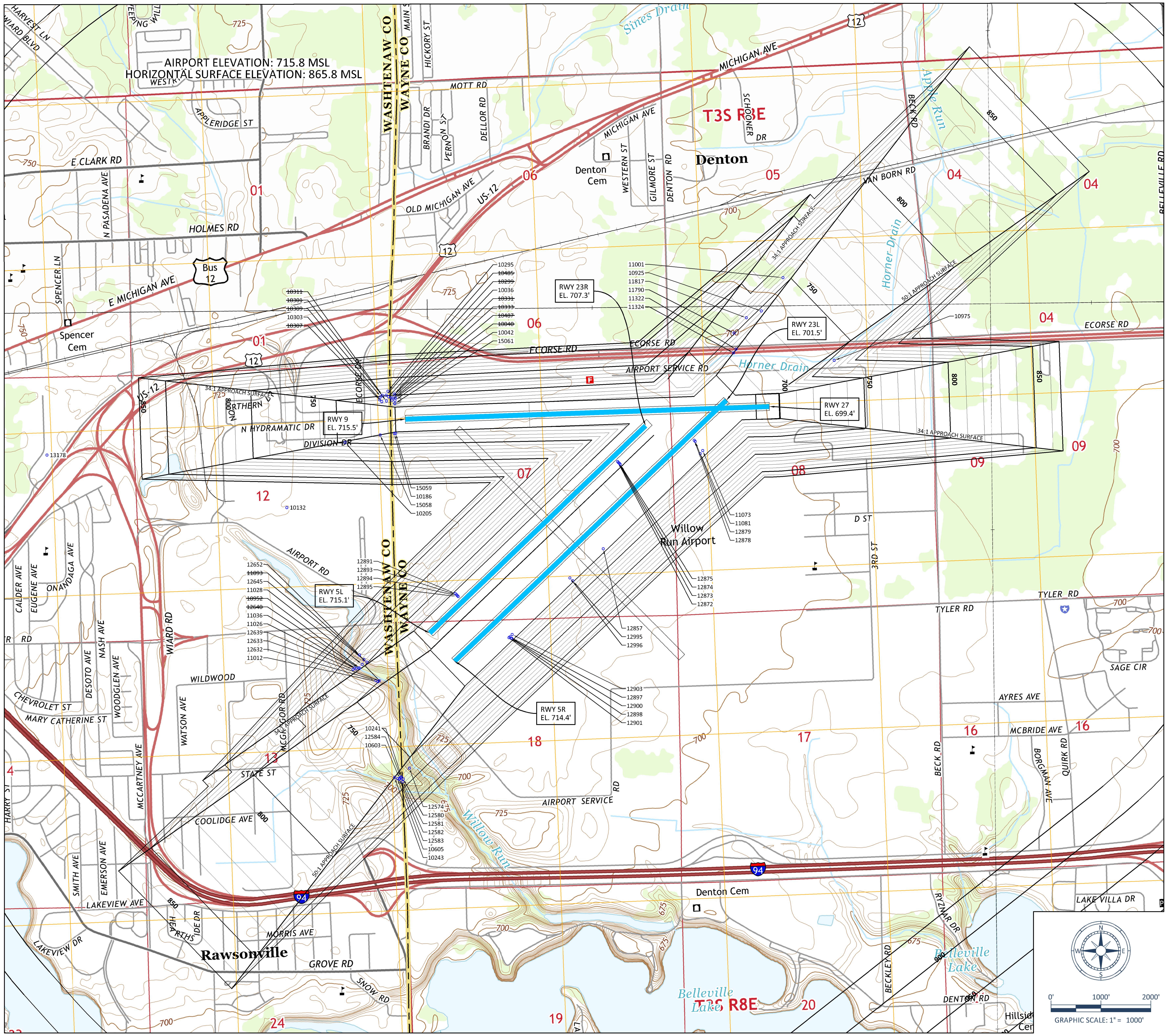
WILLOW RUN AIRPORT

AIRPORT AIRSPACE DRAWING

7 of 19

Drawn By: JGH Date: 01-18-2019
Approved By: MCJ Job No: 037-15-03

Coordinate: JD ACAD.ctb LTScale: 1.0000 LwDefault: 0.010 Last Saved: 1/24/2019 5:17 PM Plotted On: 1/28/2019 12:19 PM
File: L:\06_PROJECTS\037_ALP\07-15-03 ALP Manual Plan Update\13 - PDF ALPs\2-SHEETS\ADO\07 AIRSPACE Layout SHEET7



PART 77 OBSTRUCTION DATA

POINT NO.	OBJECT	RUNWAY END	SURFACE	TOP ELEV (MSL)	PART77 PENETRATION	RESOLUTION
10036	TREE	9	P77TS	768.72	15.7912	TBR
~~10040~~	~~TREE~~	~~9-27~~	~~P77TS~~	~~745.2~~	~~3.9966~~	~~TBR~~
10042	TREE	9-27	P77TS	737.77	2.941	TBR
10132	BUILDING	-	P77HS	868.55	2.78	TBD
10186	FENCE	9	P77TS	720.73	0.4093	TBD
10205	LIGHT SUPPORT STRUCTURE	9	P77TS	759.12	10.667	TBD
10241	TREE	05R	P77TS	790.78	16.5272	TBR
10243	TREE	05R	P77TS	789.88	29.2951	TBR
10295	TREE	9	P77TS	767.56	4.8779	TBR
~~10299~~	~~TREE~~	~~9~~	~~P77TS~~	~~767.83~~	~~21.3823~~	~~TBR~~
~~10301~~	~~TREE~~	~~9~~	~~P77TS~~	~~744.65~~	~~9.7823~~	~~TBR~~
10303	TREE	9	P77TS	740.56	6.2031	TBR
~~10307~~	~~TREE~~	~~9~~	~~P77TS~~	~~770.91~~	~~30.8654~~	~~TBR~~
~~10309~~	~~TREE~~	~~9~~	~~P77TS~~	~~759.39~~	~~11.0168~~	~~TBR~~
~~10311~~	~~TREE~~	~~9~~	~~P77TS~~	~~761.13~~	~~8.9821~~	~~TBR~~
~~10331~~	~~TREE~~	~~9~~	~~P77TS~~	~~762.55~~	~~19.7443~~	~~TBR~~
~~10333~~	~~TREE~~	~~9~~	~~P77TS~~	~~763.62~~	~~21.4951~~	~~TBR~~
~~10485~~	~~TREE~~	~~9~~	~~P77TS~~	~~757.74~~	~~6.1272~~	~~TBR~~
~~10487~~	~~TREE~~	~~9~~	~~P77TS~~	~~754.99~~	~~18.9732~~	~~TBR~~
10603	TREE	05R	P77TS	789.47	16.8885	TBR
10605	TREE	05R	P77TS	788.72	20.1357	TBR
10925	TREE	23L	P77TS	752.17	9.2552	TBR
~~10952~~	~~TREE~~	~~05L~~	~~P77TS~~	~~780.32~~	~~24.4923~~	~~TBR~~
10975	TREE	23L	P77TS	759.41	0.2565	TBR
11001	TREE	23L	P77TS	769.17	1.8414	TBR
11012	TREE	05R	P77TS	754.98	3.5749	TBR
11026	TREE	05L	P77TS	773.5	6.3446	TBR
11028	TREE	05L	P77TS	758.91	1.1461	TBR
11036	TREE	05L	P77TS	769.35	7.1121	TBR
11073	NAVAID	23L	P77PS	741.39	37.3955	TBD
11081	NAVAID	23L	P77PS	709.53	5.3762	TBD
~~11093~~	~~TREE~~	~~05L~~	~~P77TS~~	~~766.18~~	~~2.0774~~	~~TBR~~
11322	PUBLIC ROAD PLUS 15FT	23L	P77TS	716.08	0.9523	TBD
11324	PUBLIC ROAD PLUS 15FT	23L	P77TS	716.28	3.3375	TBD
11790	TREE	23L	P77TS	752.08	0.0025	TBR
11817	TREE	23L	P77TS	760.09	1.3794	TBR
12574	TREE	05R	P77TS	774.87	3.6853	TBR
12580	TREE	05R	P77TS	784.07	3.2015	TBR
12581	TREE	05R	P77TS	789.91	4.0709	TBR
12582	TREE	05R	P77TS	786.11	6.172	TBR
12583	TREE	05R	P77TS	785.97	12.1689	TBR
12584	TREE	05R	P77TS	779.54	7.6518	TBR
12632	TREE	05R	P77TS	760.93	2.9133	TBR
12633	TREE	05R	P77TS	751.3	0.9009	TBR
12639	TREE	05L	P77TS	774.51	7.1521	TBR
~~12640~~	~~TREE~~	~~05L~~	~~P77TS~~	~~776.55~~	~~17.6748~~	~~TBR~~
12645	TREE	05L	P77TS	757.94	5.5241	TBR
12652	TREE	05L	P77TS	782.18	0.2392	TBR
12857	NAVAID	05R-23L	P77PS	725.6	14.0857	TBD
12872	NAVAID	23R	P77PS	710.03	1.6781	TBD
12873	NAVAID	23R	P77PS	710.03	1.6781	TBD
12874	NAVAID	23R	P77PS	710.03	1.6778	TBD
12875	NAVAID	23R	P77PS	710.03	1.6781	TBD
12878	NAVAID	05R-23L	P77PS	704.49	0.5361	TBD
12879	NAVAID	05R-23L	P77PS	704.24	0.2859	TBD
12891	NAVAID	23R	P77PS	715.9	1.1489	TBD
12893	NAVAID	23R	P77PS	715.86	1.1096	TBD
12894	NAVAID	23R	P77PS	715.79	1.0394	TBD
12895	NAVAID	23R	P77PS	715.68	0.9294	TBD
12897	BUILDING	05R-23L	P77PS	725.34	10.2078	TBD
12898	NAVAID	05R-23L	P77PS	722.64	7.5041	TBD
12900	NAVAID	05R-23L	P77PS	715.45	0.3242	TBD
12901	NAVAID	05R-23L	P77PS	759.32	44.1569	TBD
12903	NAVAID	05R-23L	P77PS	720.01	4.9585	TBD
12995	DIRT PILE	05R-23L	P77PS	715.29	2.3149	TBD
12996	DIRT PILE	05R-23L	P77PS	714.2	1.2209	TBD
13178	COMMUNICATION TOWER	-	P77CS	891.58	25.81	TBD
15058	PUBLIC ROAD PLUS 15FT	9	P77TS	731.71	6.9067	TBD
15059	PRIVATE ROAD PLUS 10FT	9	P77TS	724.72	5.3482	TBD
15061	PRIVATE ROAD PLUS 10FT	9	P77TS	725.52	0.0683	TBD

NOTES:
1. TBD = TO BE DETERMINED.
2. TBR = TO BE REMOVED.
3. OBSTRUCTION POINT LABELS WHICH HAVE A LINE DRAWN THROUGH THEM ARE TREES WHICH HAVE BEEN REMOVED AFTER THE DATE OF SURVEY.

DETROIT METRO • WILLOW RUN
WAYNE COUNTY AIRPORT AUTHORITY

ALP PREPARED BY:
JACOBSEN | DANIELS
Planning, Implementation, Operations & Management
Mead & Hunt

FAA'S APPROVAL OF THIS AIRPORT LAYOUT PLAN (ALP) REPRESENTS ACCEPTANCE OF THE GENERAL LOCATION OF FUTURE FACILITIES DEPICTED (SHEET I7144C04). DURING THE PRELIMINARY DESIGN PHASE, THE AIRPORT OWNER IS REQUIRED TO RESUBMIT FOR APPROVAL THE FINAL LOCATIONS, HEIGHTS, AND EXTERIOR FINISH OF STRUCTURES. FAA'S CONCERN IS OBSTRUCTIONS, IMPACT ON ELECTRONIC AIDS, OR ADVERSE EFFECTS ON CONTROLLER VIEW OF AIRCRAFT APPROACHES AND GROUND MOVEMENT AREAS WHICH COULD ADVERSELY AFFECT THE SAFETY, EFFICIENCY, OR UTILITY OF THE AIRPORT.

DATA SOURCES:

NOTES:
1. ALL PENETRATIONS OF THE FIRST 500 FEET CAN BE FOUND ON THE PLAN AND PROFILE SHEETS.
2. SURVEY CONDUCTED ON 10/23/2014 BY GEOPRO CONSULTANTS, LLC.
3. SURVEY PERFORMED USING MICHIGAN STATE PLANE, SOUTH ZONE, INTERNATIONAL FEET, NAVD88 (GEOID 2012A), AND NAD (2011).
4. OBSTRUCTION POINT LABELS IN PLAN VIEW WHICH HAVE A LINE DRAWN THROUGH THEM ARE TREES WHICH HAVE BEEN REMOVED AFTER THE DATE OF SURVEY.

MAGNETIC DECLINATION 7°7' WEST MAY 31, 2016

By	Date	Revisions

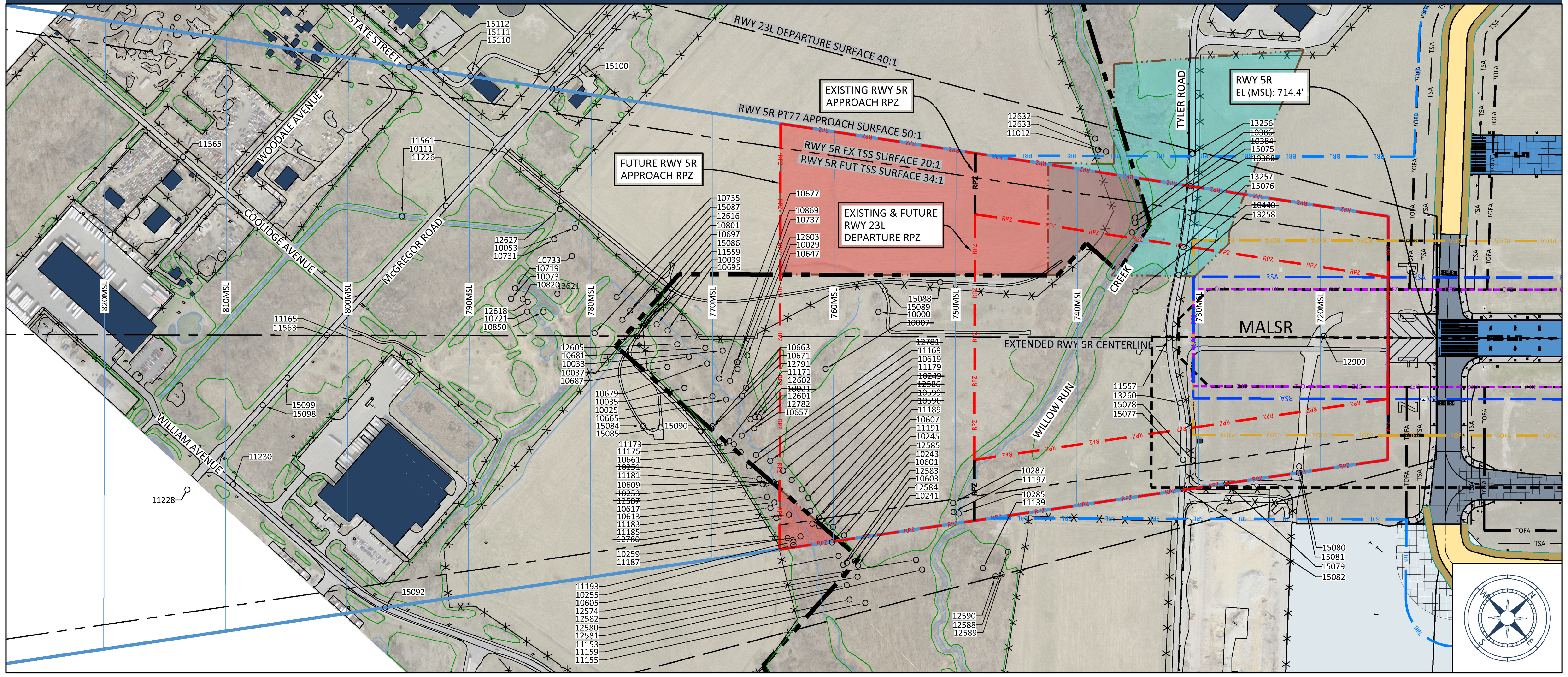
WILLOW RUN AIRPORT

AIRPORT AIRSPACE DRAWING ENLARGED VIEW

7A of 19

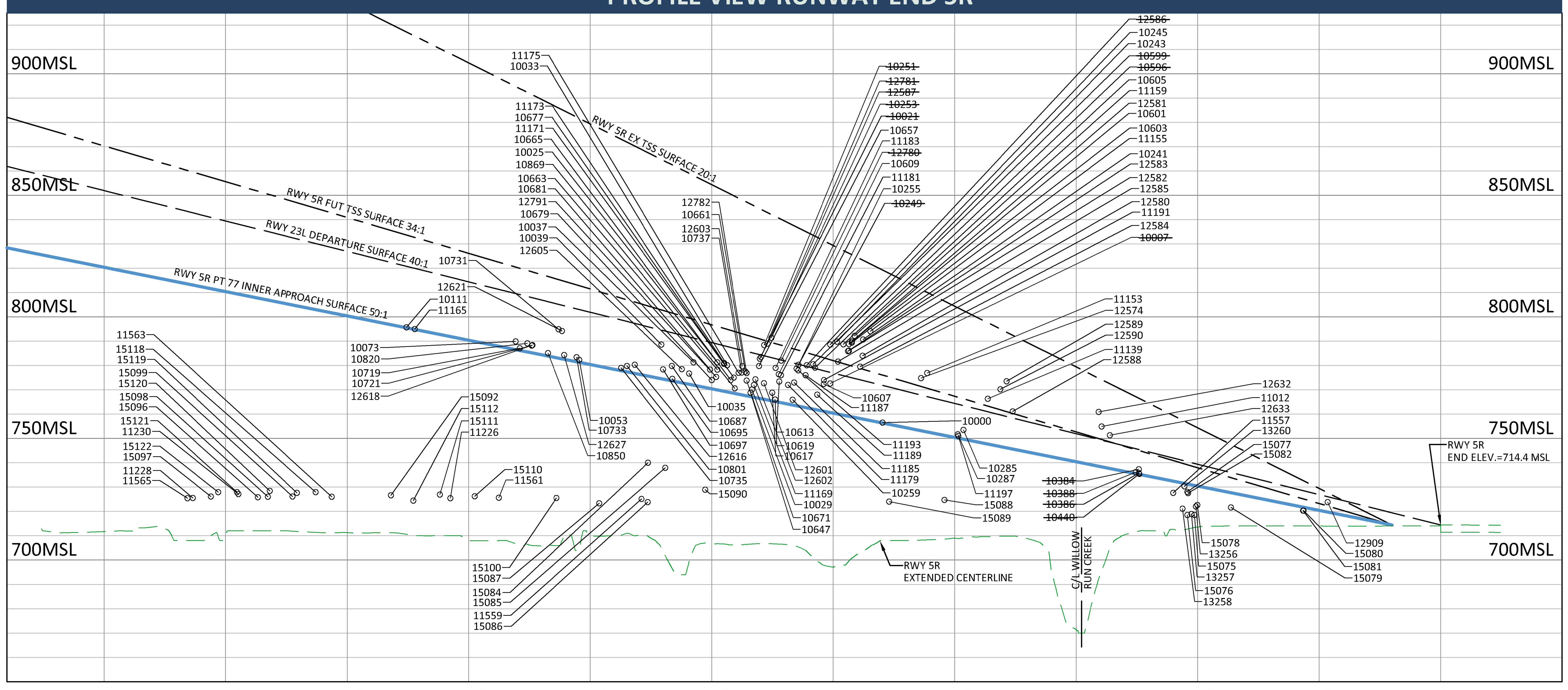
Drawn By: JGH | Date: 01-18-2019
Approved By: MCJ | Job No: 037-15-03

PLAN VIEW RUNWAY END 5R



0' 300'
GRAPHIC SCALE: 1"=300'

PROFILE VIEW RUNWAY END 5R



0' 300'
GRAPHIC SCALE: 1"=300'

0' 30'
GRAPHIC SCALE: 1"=30'

SURFACE OBSTRUCTION TABLES

POINT No.	OBJECT	MSL	EX & FUT PT 77	EX TSS (20:1)	FUT TSS (34:1)	EX & FUT 23L DEPARTURE (40:1)	RESOLUTION
10000	TREE	756.56	0.20	-62.69	-19.53	-15.28	TBR
~~10007~~	~~TREE~~	~~772.63~~	~~11.95~~	~~-57.41~~	~~-9.81~~	~~-4.61~~	~~TBR~~
~~10021~~	~~TREE~~	~~782.82~~	~~16.36~~	~~-61.68~~	~~-8.13~~	~~-1.65~~	~~TBR~~
10025	TREE	781.32	11.34	-71.97	-14.80	-7.55	TBR
10029	TREE	770.11	2.99	-76.03	-21.80	-15.18	TBR
10033	TREE	780.13	10.97	-71.12	-14.79	-7.72	TBR
10035	TREE	776.70	4.40	-82.38	-22.82	-15.06	TBR
10037	TREE	781.31	9.39	-76.84	-17.67	-9.99	TBR
10039	TREE	788.65	14.08	-76.12	-14.22	-5.96	TBR
10053	TREE	782.34	1.01	-99.33	-30.47	-20.71	TBR
10073	TREE	789.95	3.38	-104.82	-30.56	-19.65	TBR
10111	TREE	795.75	0.21	-121.44	-37.96	-25.07	TBR
10241	TREE	790.78	16.53	-	-	16.92	TBR
10243	TREE	789.88	29.30	-	-	13.34	TBR
10245	TREE	788.61	27.94	-	-	11.39	TBR
~~10249~~	~~TREE~~	~~778.75~~	~~15.30~~	~~-58.22~~	~~-7.77~~	~~-1.95~~	~~TBR~~
~~10251~~	~~TREE~~	~~788.46~~	~~22.34~~	~~-55.18~~	~~-1.98~~	~~4.42~~	~~TBR~~
~~10253~~	~~TREE~~	~~791.39~~	~~25.87~~	~~-50.74~~	~~1.84~~	~~8.10~~	~~TBR~~
10255	TREE	780.30	17.00	-	-	-0.21	TBR
10259	TREE	765.90	2.13	-	-	-15.20	TBR
10285	TREE	753.53	3.82	-	-	-10.00	TBR
10287	TREE	751.78	1.62	-	-	-12.31	TBR
~~10384~~	~~TREE~~	~~737.35~~	~~2.09~~	~~-29.15~~	~~-7.71~~	~~-8.12~~	~~TBR~~
~~10386~~	~~TREE~~	~~735.78~~	~~0.52~~	~~-30.72~~	~~-9.28~~	~~-9.69~~	~~TBR~~
~~10388~~	~~TREE~~	~~736.18~~	~~0.65~~	~~-30.98~~	~~-9.27~~	~~-9.62~~	~~TBR~~
~~10440~~	~~TREE~~	~~735.49~~	~~0.26~~	~~-30.92~~	~~-9.52~~	~~-9.94~~	~~TBR~~
~~10596~~	~~TREE~~	~~779.16~~	~~17.24~~	~~-53.98~~	~~-5.11~~	~~0.37~~	~~TBR~~
~~10599~~	~~TREE~~	~~780.56~~	~~18.46~~	~~-53.03~~	~~-3.97~~	~~1.55~~	~~TBR~~
10601	TREE	788.80	29.67	-	-	13.50	TBR
10603	TREE	789.47	16.89	-	-	14.47	TBR
10605	TREE	788.72	20.14	-	-	12.85	TBR
10607	TREE	772.43	11.22	-58.94	-10.79	-5.48	TBR
10609	TREE	776.46	11.55	-64.16	-12.21	-6.07	TBR
10613	TREE	773.44	8.58	-67.06	-15.15	-9.03	TBR
10617	TREE	768.85	3.39	-73.14	-20.62	-14.37	TBR
10619	TREE	766.03	0.82	-75.33	-23.07	-16.87	TBR
10647	TREE	768.88	1.65	-77.54	-23.20	-16.55	TBR
10657	TREE	779.81	13.27	-64.88	-11.25	-4.75	TBR
10661	TREE	777.49	9.85	-69.96	-15.19	-8.46	TBR
10663	TREE	778.33	8.35	-74.95	-17.78	-10.53	TBR
10665	TREE	774.08	5.21	-76.43	-20.40	-13.39	TBR
10671	TREE	773.86	6.31	-73.34	-18.68	-11.96	TBR
10677	TREE	780.77	11.34	-71.13	-14.53	-7.40	TBR
10679	TREE	774.04	3.61	-80.38	-22.74	-15.39	TBR
10681	TREE	778.30	7.73	-76.46	-18.68	-11.30	TBR
10687	TREE	779.81	6.11	-82.79	-21.78	-13.71	TBR
10695	TREE	774.49	0.81	-88.04	-27.06	-19.00	TBR
10697	TREE	778.47	4.05	-85.92	-24.18	-15.95	TBR
10719	TREE	787.16	0.93	-106.77	-32.86	-22.02	TBR
10721	TREE	788.23	2.98	-103.23	-30.34	-19.72	TBR
10731	TREE	794.97	11.94	-90.94	-20.34	-10.21	TBR
10733	TREE	783.43	1.88	-98.80	-29.71	-19.90	TBR

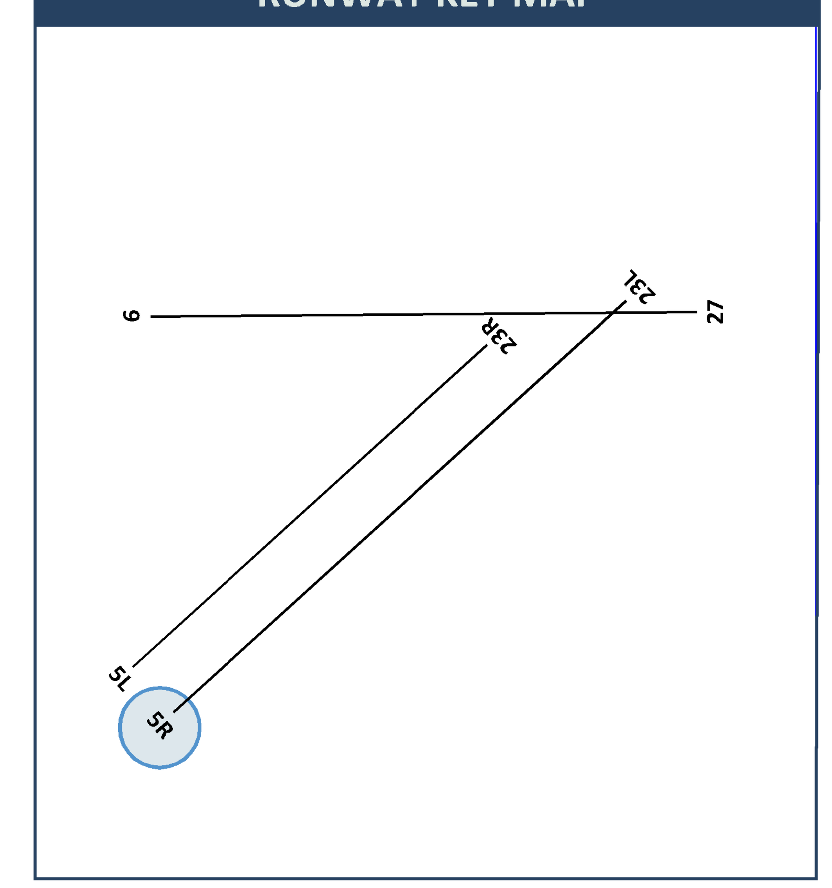
POINT No.	OBJECT	MSL	EX & FUT PT 77	EX TSS (20:1)	FUT TSS (34:1)	EX & FUT 23L DEPARTURE (40:1)	RESOLUTION
10735	TREE	779.05	1.16	-94.00	-28.69	-19.70	TBR
10737	TREE	777.10	9.15	-71.12	-16.04	-9.23	TBR
10801	TREE	779.86	2.45	-92.00	-27.18	-18.29	TBR
10820	TREE	789.17	3.57	-103.18	-29.92	-19.23	TBR
10850	TREE	785.09	1.19	-103.01	-31.50	-21.18	TBR
10869	TREE	770.61	2.07	-79.07	-23.38	-16.45	TBR
11012	TREE	754.98	3.57	-	-	5.68	TBR
11139	TREE	766.34	-10.09	-	-	5.32	TBR
11153	TREE	776.98	-0.01	-	-	9.72	TBR
11155	TREE	794.12	-2.15	-	-	21.01	TBR
11159	TREE	792.26	-2.00	-	-	17.52	TBR
11165	TREE	795.00	0.12	-120.54	-37.73	-24.99	TBR
11169	TREE	772.00	5.04	-73.73	-19.67	-13.09	TBR
11171	TREE	775.00	6.39	-74.86	-19.10	-12.15	TBR
11173	TREE	781.00	11.58	-70.88	-14.29	-7.16	TBR
11175	TREE	777.00	8.79	-71.86	-16.51	-9.65	TBR
11179	TREE	772.00	7.85	-66.72	-15.55	-9.58	TBR
11181	TREE	776.00	11.27	-64.17	-12.40	-6.30	TBR
11183	TREE	779.00	13.82	-62.29	-10.06	-3.86	TBR
11185	TREE	773.00	9.35	-64.48	-13.81	-7.96	TBR
11187	TREE	776.00	13.28	-	-	-3.79	TBR
11189	TREE	768.00	6.25	-	-	-10.57	TBR
11191	TREE	774.00	12.82	-	-	-3.87	TBR
11193	TREE	778.00	14.70	-	-	-2.52	TBR
11197	TREE	751.00	0.87	-	-	-13.05	TBR
12574	TREE	774.87	3.69	-	-	6.99	TBR
12580	TREE	784.07	3.20	-	-	10.17	TBR
12581	TREE	789.91	4.07	-	-	14.90	TBR
12582	TREE	786.11	6.17	-	-	10.80	TBR
12583	TREE	785.97	12.17	-	-	10.58	TBR
12584	TREE	779.54	7.65	-	-	5.38	TBR
12585	TREE	781.59	21.55	-	-	5.15	TBR
~~12586~~	~~TREE~~	~~780.13~~	~~17.52~~	~~-54.75~~	~~-5.15~~	~~0.47~~	~~TBR~~
~~12587~~	~~TREE~~	~~789.03~~	~~23.21~~	~~-53.87~~	~~-0.97~~	~~5.36~~	~~TBR~~
12588	TREE	761.15	-5.83	-	-	2.70	TBR
12589	TREE	773.56	-6.59	-	-	14.48	TBR
12590	TREE	770.20	-11.03	-	-	10.46	TBR
12601	TREE	772.70	6.56	-70.98	-17.76	-11.36	TBR
12602	TREE	774.30	7.46	-71.14	-17.20	-10.64	TBR
12603	TREE	779.71	11.79	-68.43	-13.37	-6.58	TBR
12605	TREE	778.54	5.66	-82.00	-21.84	-13.95	TBR
12616	TREE	780.29	3.52	-89.98	-25.82	-17.07	TBR
12618	TREE	788.40	3.22	-102.90	-30.07	-19.47	TBR
12621	TREE	794.24	11.48	-91.00	-20.67	-10.60	TBR
12627	TREE	784.37	1.80	-100.39	-30.26	-20.23	TBR
12632	TREE	760.93	2.91	-	-	11.34	TBR
12633	TREE	751.30	0.90	-	-	2.84	TBR
~~12780~~	~~TREE~~	~~782.03~~	~~17.33~~	~~-58.07~~	~~-6.33~~	~~-0.24~~	~~TBR~~
~~12781~~	~~TREE~~	~~783.49~~	~~17.11~~	~~-60.80~~	~~-7.33~~	~~-0.87~~	~~TBR~~
12782	TREE	776.92	9.37	-70.30	-15.63	-8.91	TBR
12791	TREE	775.32	5.24	-78.21	-20.94	-13.67	TBR
12909	NAVAID	723.86	4.14	-3.79	1.65	-2.18	TBD

NOTES:
1. TBD = TO BE DETERMINED.
2. TBR = TO BE REMOVED.
3. OBSTRUCTION POINT LABELS WHICH HAVE A LINE DRAWN THROUGH THEM ARE TREES WHICH HAVE BEEN REMOVED AFTER THE DATE OF SURVEY.

LEGEND

- AIRPORT BOUNDARY
- EXISTING GROUND CONTOUR (95MSL)
- EXISTING EDGE OF WATER
- EXISTING TREE LINE
- EXISTING FENCE
- EXISTING BUILDING
- EXISTING RUNWAY
- EXISTING TAXIWAY
- EXISTING SHOULDER
- FUTURE TAXIWAY SAFETY AREA (TSA)
- NAVAID CRITICAL AREA
- FUTURE RUNWAY SAFETY AREA (RSA)
- FUTURE RUNWAY OBSTACLE FREE ZONE (OFZ)
- FUTURE RUNWAY PROTECTION ZONE (RPZ)
- FUTURE RUNWAY OBJECT FREE AREA (ROFA)
- FUTURE TAXIWAY OBJECT FREE AREA (TOFA)
- FUTURE PRECISION OBSTACLE FREE ZONE (POFZ)
- FUTURE TAXIWAY PAVEMENT
- FUTURE SHOULDER PAVEMENT
- FUTURE DEMOLITION
- EXISTING AVIGATION EASEMENT
- FUTURE AVIGATION EASEMENT

RUNWAY KEY MAP



DETROIT METRO • WILLOW RUN
WAYNE COUNTY AIRPORT AUTHORITY

ALP PREPARED BY:
JACOBSEN | DANIELS
Planning, Implementation, Operations & Management
Mead & Hunt

FAA'S APPROVAL OF THIS AIRPORT LAYOUT PLAN (ALP) REPRESENTS ACCEPTANCE OF THE GENERAL LOCATION OF FUTURE FACILITIES DEPICTED (SHEET I7144C04). DURING THE PRELIMINARY DESIGN PHASE, THE AIRPORT OWNER IS REQUIRED TO RESUBMIT FOR APPROVAL THE FINAL LOCATIONS, HEIGHTS, AND EXTERIOR FINISH OF STRUCTURES. FAA'S CONCERN IS OBSTRUCTIONS, IMPACT ON ELECTRONIC AIDS, OR ADVERSE EFFECTS ON CONTROLLER VIEW OF AIRCRAFT APPROACHES AND GROUND MOVEMENT AREAS WHICH COULD ADVERSELY AFFECT THE SAFETY, EFFICIENCY, OR UTILITY OF THE AIRPORT.

DATA SOURCES:
1. AIRPORT PROPERTY BOUNDARY AND EASEMENTS OBTAINED FROM WILLOW RUN AIRPORT DRAFT EXHIBIT A, DATED 11-30-2016.

NOTES:
1. SURVEY CONDUCTED ON 10/23/2014 BY GEOPRO CONSULTANTS, LLC.
2. SURVEY PERFORMED USING MICHIGAN STATE PLANE, SOUTH ZONE, INTERNATIONAL FEET, NAVD 88 (GEOID 2012A), AND NAD 83 (2011).
3. OBSTRUCTION POINT LABELS IN PLAN VIEW WHICH HAVE A LINE DRAWN THROUGH THEM ARE TREES WHICH HAVE BEEN REMOVED AFTER THE DATE OF SURVEY.

N
MAGNETIC DECLINATION 7°7' WEST MAY 31, 2016

By	Date	Revisions

WILLOW RUN AIRPORT

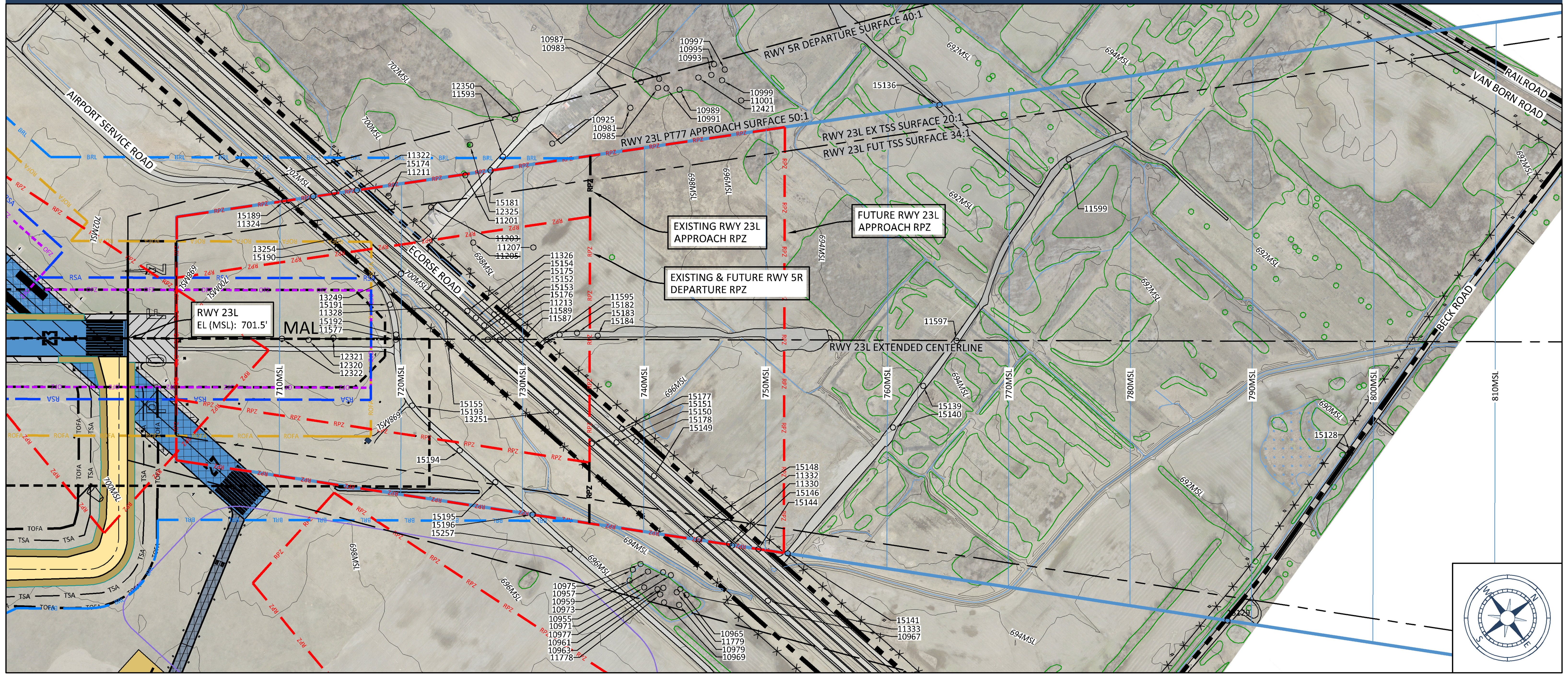
5R APPROACH & 23L DEPARTURE PLAN & PROFILE

8 of 19

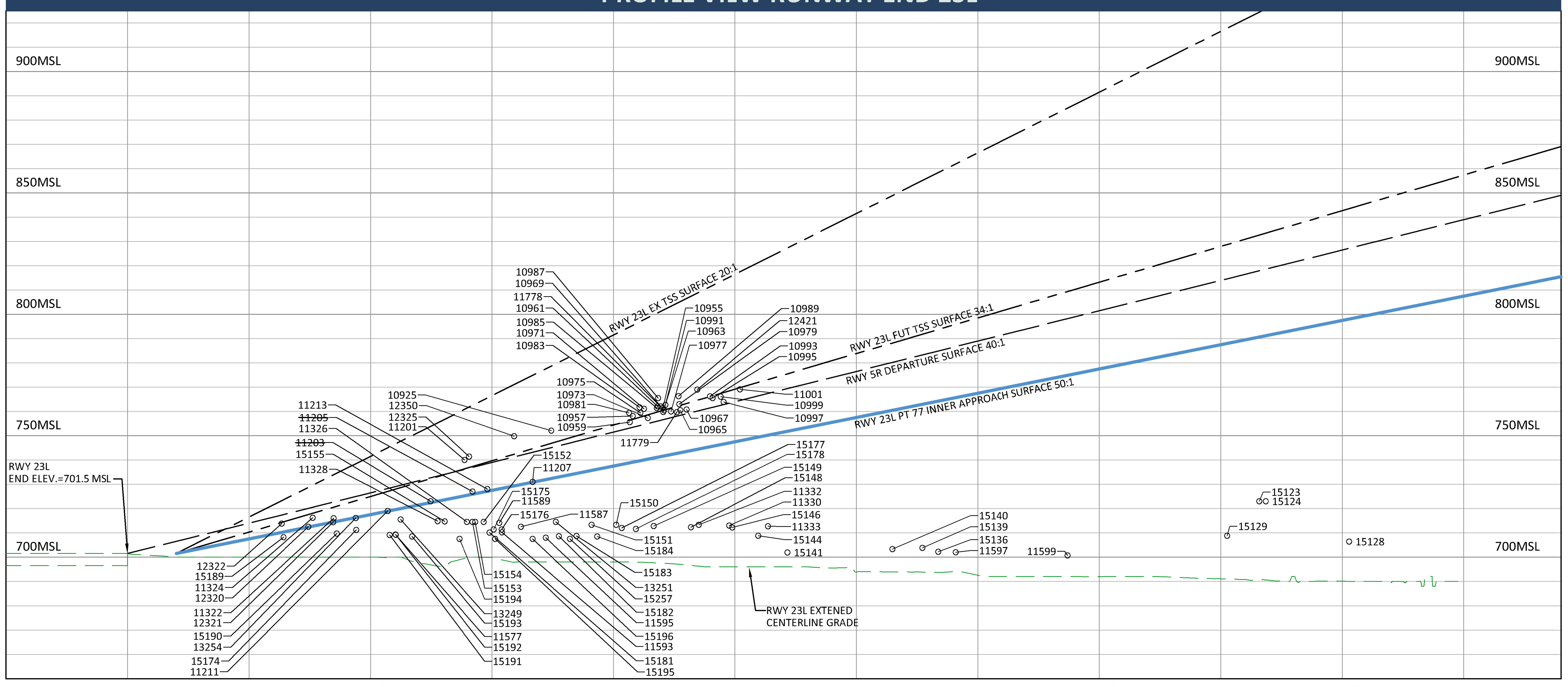
Drawn By: SRG Date: 01-18-2019
Approved By: MCJ Job No: 037-15-03

Colortable: JD ACAD.ctb LTScale: 1.0000 LwDefault: 0.010 Last Saved: 3/13/2018 11:34 AM Plotted On: 1/25/2019 3:50 PM
File: L:\09_PROJECTS\037_M&H\037-15-03 YIP Master Plan Update\13 - YIP ALP\02 SHEETS\PLANPROFILE-5R Layout: SHEET8

PLAN VIEW RUNWAY END 23L



PROFILE VIEW RUNWAY END 23L



SURFACE OBSTRUCTION TABLES

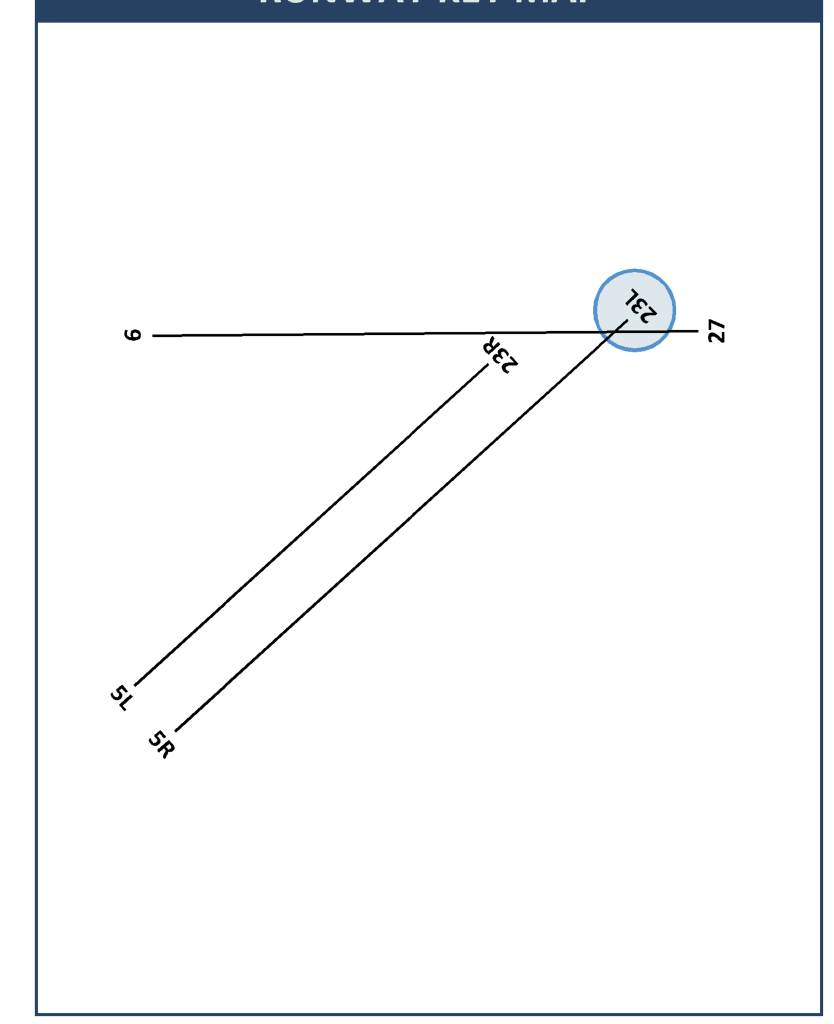
POINT NO.	OBJECT	TOP ELEV (MSL)	EX & FUT PT 77	EX TSS (20:1)	FUT TSS (34:1)	EX & FUT DEPARTURE (40:1)	RESOLUTION
10925	TREE	752.17	9.26	-	-	7.04	TBR
10955	TREE	761.42	-2.43	-	-	4.80	TBR
10957	TREE	758.09	-4.34	-	-	4.60	TBR
10959	TREE	755.67	-13.23	-	-	2.49	TBR
10961	TREE	762.18	-11.70	-	-	6.12	TBR
10963	TREE	759.85	-13.04	-	-	3.21	TBR
10965	TREE	760.51	-13.08	-	-	2.11	TBR
10967	TREE	760.81	-16.15	-	-	1.78	TBR
10969	TREE	760.55	-20.88	-	-	3.81	TBR
10971	TREE	761.12	-11.61	-	-	6.45	TBR
10973	TREE	757.36	-6.16	-	-	2.29	TBR
10975	TREE	759.41	0.26	-	-	5.12	TBR
10977	TREE	760.03	-5.37	-	-	2.60	TBR
10979	TREE	763.00	-19.87	-	-	4.71	TBR
10981	TREE	759.39	-4.11	-	-	6.27	TBR
10983	TREE	761.74	-16.85	-	-	7.55	TBR
10985	TREE	761.43	-13.68	-	-	5.44	TBR
10987	TREE	765.53	-14.90	-	-	9.42	TBR
10989	TREE	766.29	-7.55	-	-	8.08	TBR
10991	TREE	762.73	-12.03	-	-	5.88	TBR
10993	TREE	766.22	-16.16	-	-	4.78	TBR
10995	TREE	765.55	-23.13	-	-	3.83	TBR
10997	TREE	763.89	-21.55	-	-	1.06	TBR
10999	TREE	766.11	-13.12	-	-	3.57	TBR
11001	TREE	769.17	1.84	-	-	4.64	TBR
11201	TREE	740.00	14.75	-	-	3.81	TBR
~~11203~~	~~TREE~~	~~723.00~~	~~0.55~~	~~-30.85~~	~~-9.30~~	~~-9.68~~	~~TBR~~
~~11205~~	~~TREE~~	~~727.00~~	~~1.09~~	~~-35.51~~	~~-10.39~~	~~-10.01~~	~~TBR~~
11207	TREE	731.00	0.14	-43.88	-13.67	-12.19	TBR
11211	TREE	719.00	0.06	-	-	-9.30	TBR
11213	TREE	728.00	0.86	-37.59	-11.20	-10.55	TBR
11322	PUBLIC ROAD PLUS 15FT	716.08	0.95	-	-	-6.63	TBD
11324	PUBLIC ROAD PLUS 15FT	716.28	3.34	-	-	-4.28	TBD
11778	TREE	762.11	-14.75	-	-	5.78	TBR
11779	TREE	759.73	-15.70	-	-	1.69	TBR
12320	NAVAID	712.55	0.16	-16.15	-4.96	-7.56	TBD
12321	NAVAID	714.49	0.06	-19.32	-6.02	-8.17	TBD
12322	NAVAID	713.83	3.63	-9.40	-0.46	-3.54	TBD
12325	TREE	741.43	-1.11	-	-	4.77	TBR
12350	TREE	749.86	-7.22	-	-	8.57	TBR
12421	TREE	769.01	-11.87	-	-	8.89	TBR

NOTES:
1. TBD = TO BE DETERMINED.
2. TBR = TO BE REMOVED.
3. OBSTRUCTION POINT LABELS WHICH HAVE A LINE DRAWN THROUGH THEM ARE TREES WHICH HAVE BEEN REMOVED AFTER THE DATE OF SURVEY.

LEGEND

- AIRPORT BOUNDARY
- EXISTING GROUND CONTOUR
- EXISTING EDGE OF WATER
- EXISTING TREE LINE
- EXISTING FENCE
- EXISTING BUILDING
- EXISTING RUNWAY
- EXISTING TAXIWAY
- EXISTING SHOULDER
- EXISTING WINDSOCK
- FUTURE TAXIWAY SAFETY AREA (TSA)
- FUTURE NAVAID CRITICAL AREA
- FUTURE RUNWAY SAFETY AREA (RSA)
- FUTURE RUNWAY OBSTACLE FREE ZONE (OFZ)
- FUTURE RUNWAY PROTECTION ZONE (RPZ)
- FUTURE RUNWAY OBJECT FREE AREA (ROFA)
- FUTURE TAXIWAY OBJECT FREE AREA (OFA)
- FUTURE PRECISION OBSTACLE FREE ZONE (POFZ)
- FUTURE SERVICE ROADWAY
- FUTURE AIRPORT STRUCTURE
- FUTURE RUNWAY PAVEMENT & MARKINGS
- FUTURE TAXIWAY PAVEMENT
- FUTURE APRON PAVEMENT
- FUTURE SHOULDER PAVEMENT
- FUTURE DEMOLITION

RUNWAY KEY MAP



GRAPHIC SCALE: 1"=30'

DETROIT METRO • WILLOW RUN
WAYNE COUNTY AIRPORT AUTHORITY

ALP PREPARED BY:
JACOBSEN | DANIELS
Planning, Implementation, Operations & Management
Mead & Hunt

FAA'S APPROVAL OF THIS AIRPORT LAYOUT PLAN (ALP) REPRESENTS ACCEPTANCE OF THE GENERAL LOCATION OF FUTURE FACILITIES DEPICTED (SHEET I7144C04). DURING THE PRELIMINARY DESIGN PHASE, THE AIRPORT OWNER IS REQUIRED TO RESUBMIT FOR APPROVAL THE FINAL LOCATIONS, HEIGHTS, AND EXTERIOR FINISH OF STRUCTURES. FAA'S CONCERN IS OBSTRUCTIONS, IMPACT ON ELECTRONIC AIDS, OR ADVERSE EFFECTS ON CONTROLLER VIEW OF AIRCRAFT APPROACHES AND GROUND MOVEMENT AREAS WHICH COULD ADVERSELY AFFECT THE SAFETY, EFFICIENCY, OR UTILITY OF THE AIRPORT.

DATA SOURCES:
1. AIRPORT PROPERTY BOUNDARY AND EASEMENTS OBTAINED FROM WILLOW RUN AIRPORT DRAFT EXHIBIT A, DATED 11-30-2016.

NOTES:
1. SURVEY CONDUCTED ON 10/23/2014 BY GEOPRO CONSULTANTS, LLC.
2. SURVEY PERFORMED USING MICHIGAN STATE PLANE, SOUTH ZONE, INTERNATIONAL FEET, NAVD 88 (GEOID 2012A), AND NAD 83 (2011).
3. OBSTRUCTION POINT LABELS IN PLAN VIEW WHICH HAVE A LINE DRAWN THROUGH THEM ARE TREES WHICH HAVE BEEN REMOVED AFTER THE DATE OF SURVEY.

N
MAGNETIC DECLINATION 7°7' WEST MAY 31, 2016

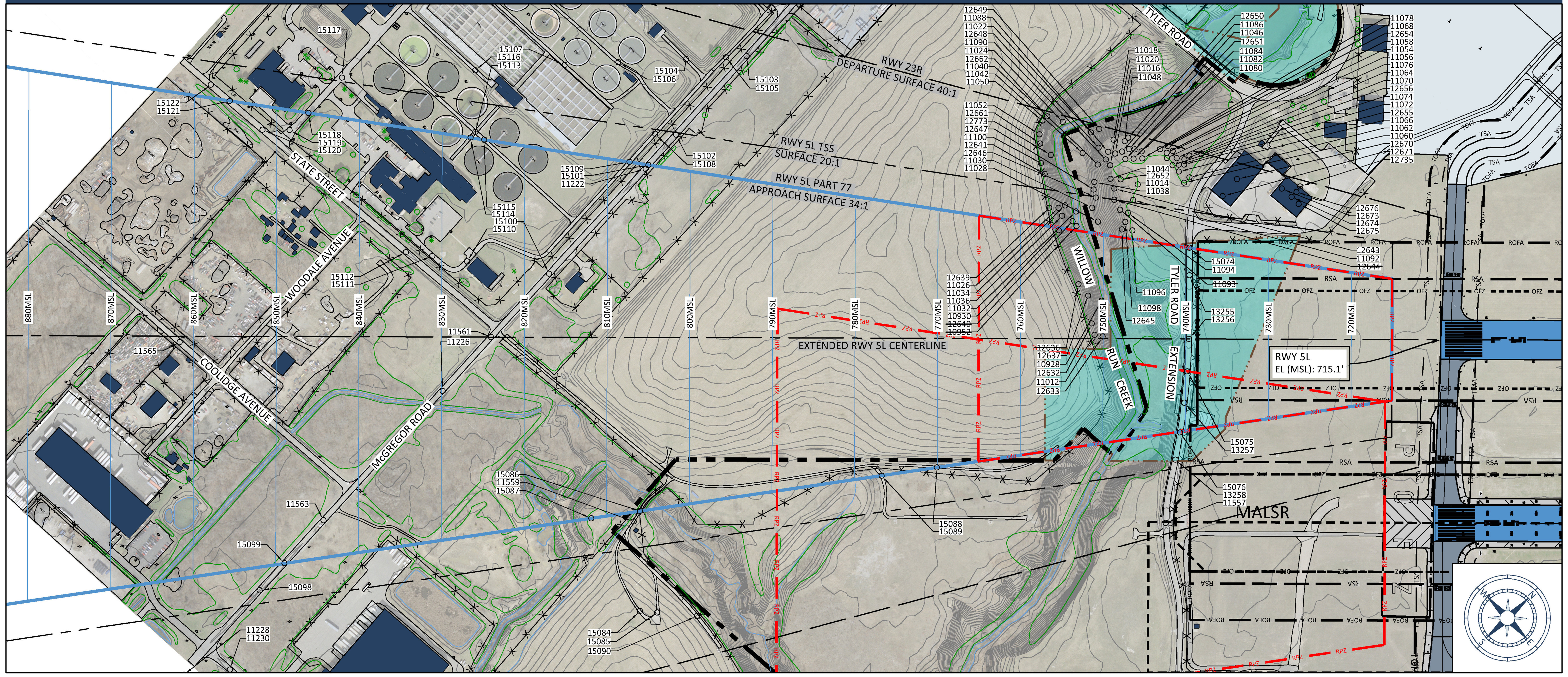
By	Date	Revisions

WILLOW RUN AIRPORT

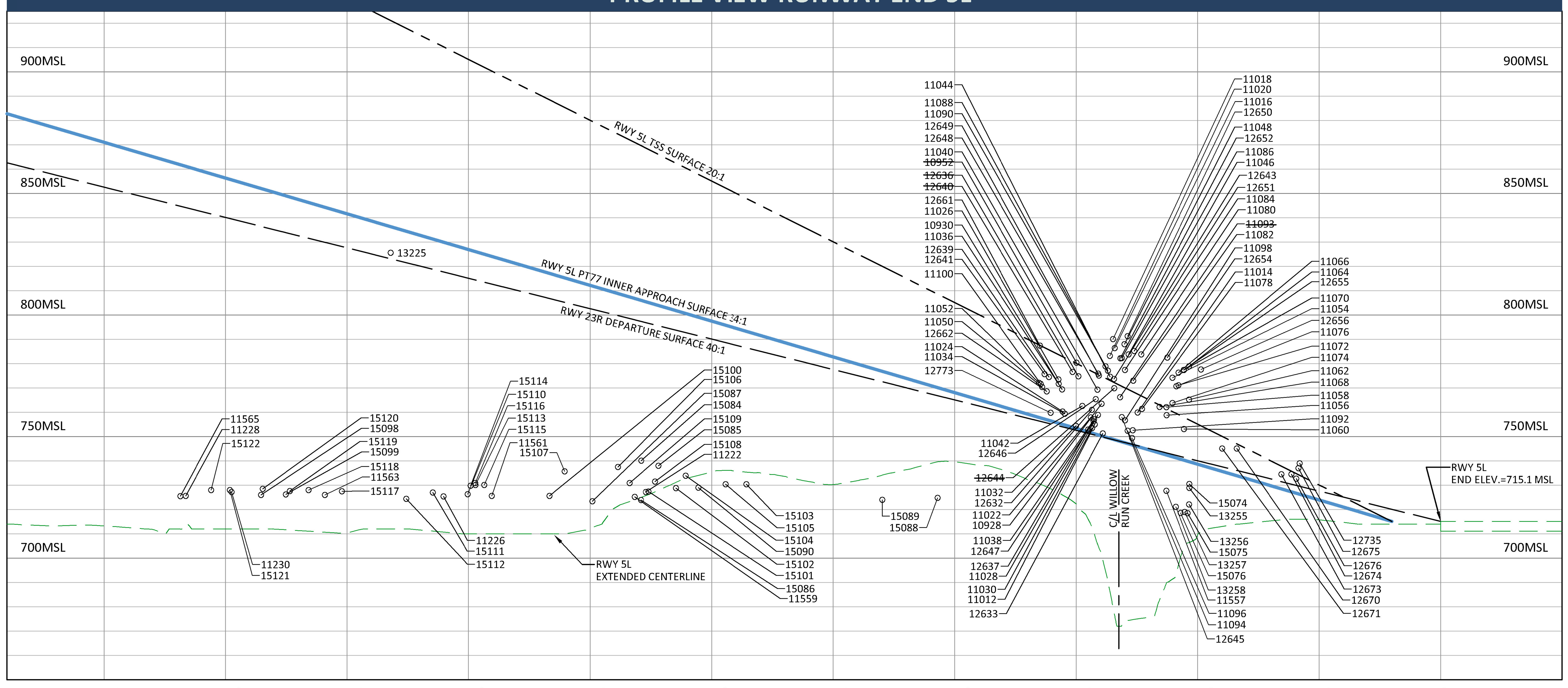
23L APPROACH & 5R DEPARTURE PLAN & PROFILE

Drawn By: SRG Date: 01-18-2019
Approved By: MCJ Job No: 037-15-03

PLAN VIEW RUNWAY END 5L



PROFILE VIEW RUNWAY END 5L



SURFACE OBSTRUCTION TABLES

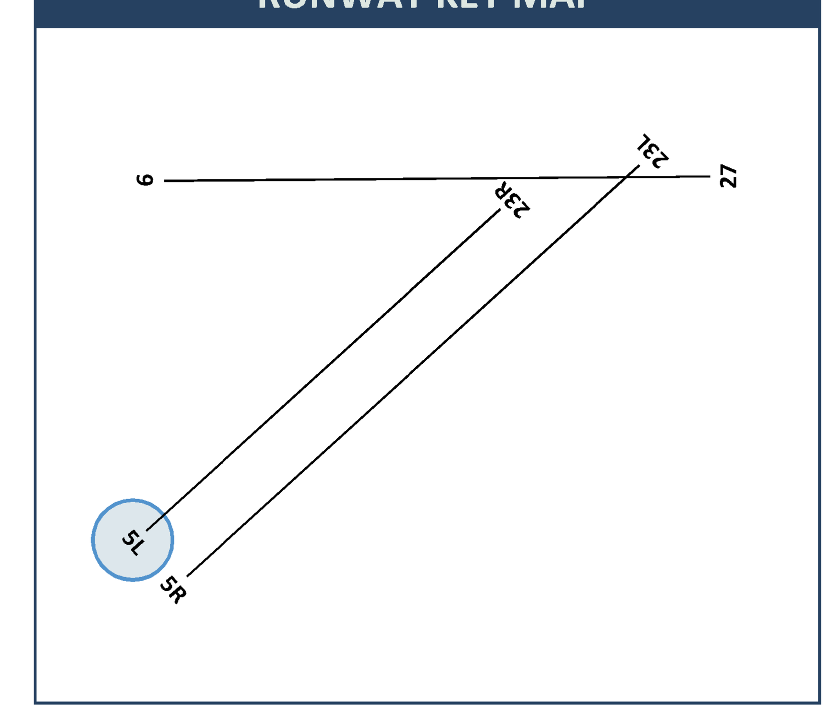
POINT No.	OBJECT	TOP ELEV (MSL)	EX PT 77	EX TSS (20:1)	EX DEPARTURE (40:1)	RESOLUTION
10928	TREE	763.44	13.25	-11.34	13.52	TBR
10930	TREE	771.67	16.27	-11.97	17.32	TBR
~~10952~~	~~TREE~~	~~780.32~~	~~24.49~~	~~0.32~~	~~27.79~~	~~TBR~~
11012	TREE	754.98	3.95	-21.22	4.35	TBR
11014	TREE	759.91	-18.47	-	13.67	TBR
11016	TREE	786.39	-10.78	-	37.82	TBR
11018	TREE	790.04	-15.34	-	41.29	TBR
11020	TREE	783.19	-7.31	-	34.12	TBR
11022	TREE	757.90	-52.45	-	6.84	TBR
11024	TREE	760.29	-57.15	-	6.33	TBR
11026	TREE	773.50	6.34	-10.20	19.12	TBR
11028	TREE	758.91	1.15	-16.63	8.61	TBR
11030	TREE	753.49	-12.64	-23.28	2.58	TBR
11032	TREE	754.40	-10.06	-25.72	1.81	TBR
11034	TREE	759.38	-9.04	-23.00	5.66	TBR
11036	TREE	769.35	7.11	-13.61	15.34	TBR
11038	TREE	757.10	-24.07	-	6.40	TBR
11040	TREE	769.28	-22.11	-	18.93	TBR
11042	TREE	762.61	-35.94	-	10.68	TBR
11044	TREE	774.57	-7.95	-	25.51	TBR
11046	TREE	783.80	-15.59	-	36.64	TBR
11048	TREE	788.00	-16.14	-	40.42	TBR
11050	TREE	770.40	-48.41	-	14.33	TBR
11052	TREE	772.09	-38.83	-	15.72	TBR
11054	TREE	774.17	-22.87	-	31.52	TBR
11056	TREE	758.73	-34.32	-	15.46	TBR
11058	TREE	762.08	-33.95	-	18.79	TBR
11060	TREE	753.06	-24.93	-	11.59	TBR
11062	TREE	765.17	-15.69	-	24.23	TBR
11064	TREE	778.86	-14.77	-	37.93	TBR
11066	TREE	776.23	-8.46	-	34.20	TBR
11068	TREE	762.15	-36.18	-	18.18	TBR
11070	TREE	777.32	-14.31	-	35.86	TBR
11072	TREE	771.09	-17.56	-	29.05	TBR
11074	TREE	763.78	-24.87	-	21.11	TBR
11076	TREE	770.68	-21.95	-	28.43	TBR
11078	TREE	761.40	-32.06	-	15.61	TBR
11080	TREE	783.79	-13.92	-	37.94	TBR
11082	TREE	772.97	-20.62	-	26.29	TBR
11084	TREE	777.38	-16.27	-	29.84	TBR
11086	TREE	782.26	-15.85	-	34.39	TBR
11088	TREE	777.02	-21.41	-	27.73	TBR
11090	TREE	778.82	-15.24	-	29.29	TBR
11092	TREE	752.53	-16.84	-	5.81	TBR
~~11093~~	~~TREE~~	~~766.18~~	~~2.08~~	~~-4.82~~	~~18.15~~	~~TBR~~
11094	TREE	752.38	-9.60	-17.06	5.13	TBR
11096	TREE	749.37	-2.18	-19.16	2.57	TBR
11098	TREE	756.62	-0.18	-13.37	9.10	TBR
11100	TREE	771.70	-22.20	-	15.50	TBR
12632	TREE	760.93	9.56	-15.87	10.00	TBR
12633	TREE	751.30	1.26	-23.23	1.50	TBR
~~12636~~	~~TREE~~	~~774.80~~	~~21.78~~	~~-4.79~~	~~22.48~~	~~TBR~~
12637	TREE	752.83	0.98	-24.77	1.50	TBR
12639	TREE	774.51	7.15	-11.13	19.16	TBR
~~12640~~	~~TREE~~	~~776.55~~	~~17.67~~	~~-4.26~~	~~23.61~~	~~TBR~~
12641	TREE	775.68	-11.71	-	19.87	TBR
12643	TREE	773.63	-3.10	-	24.98	TBR
~~12644~~	~~TREE~~	~~769.91~~	~~-0.16~~	~~-2.30~~	~~21.28~~	~~TBR~~
12645	TREE	757.94	5.52	-12.73	10.08	TBR
12646	TREE	765.39	-6.61	-10.62	14.85	TBR
12647	TREE	756.26	-20.52	-	5.49	TBR
12648	TREE	775.90	-25.34	-	25.62	TBR
12649	TREE	775.09	-37.10	-	24.88	TBR
12650	TREE	791.23	-14.84	-	43.98	TBR
12651	TREE	785.17	-13.92	-	38.60	TBR
12652	TREE	782.18	0.24	-	34.18	TBR
12654	TREE	782.47	-17.58	-	39.28	TBR
12655	TREE	777.36	-11.30	-	35.89	TBR
12656	TREE	777.58	-16.63	-	37.88	TBR
12661	TREE	787.36	-18.12	-	31.08	TBR
12662	TREE	768.52	-52.71	-	12.95	TBR
12670	BUILDING	745.02	-33.36	-	8.98	TBD
12671	BUILDING	745.02	-23.80	-	7.49	TBD
12673	BUILDING	734.51	-36.90	-	3.08	TBD
12674	BUILDING	734.51	-31.74	-	4.09	TBD
12675	BUILDING	736.99	-24.96	-	7.30	TBD
12676	BUILDING	732.68	-36.32	-	2.77	TBD
12735	POLE	738.97	-33.16	-	9.41	TBD
12773	TREE	759.72	-38.66	-	4.55	TBR
13225	CHIMMNEY/SMOKESTACK	825.59	-	-	2.53	TBD

NOTES:
1. TBD = TO BE DETERMINED.
2. TBR = TO BE REMOVED.
3. OBSTRUCTION POINT LABELS WHICH HAVE A LINE DRAWN THROUGH THEM ARE TREES WHICH HAVE BEEN REMOVED AFTER THE DATE OF SURVEY.

LEGEND

- AIRPORT BOUNDARY
- EXISTING GROUND CONTOUR
- EXISTING EDGE OF WATER
- EXISTING TREE LINE
- EXISTING FENCE
- EXISTING BUILDING
- EXISTING RUNWAY
- EXISTING TAXIWAY
- EXISTING SHOULDER
- EXISTING RUNWAY SAFETY AREA (RSA)
- EXISTING RUNWAY OBJECT FREE AREA (ROFA)
- EXISTING RUNWAY OBSTACLE FREE ZONE (OFZ)
- EXISTING TAXIWAY OBJECT FREE AREA (TOFA)
- EXISTING TAXIWAY SAFETY AREA (TSA)
- NAVAID CRITICAL AREA
- FUTURE RUNWAY PROTECTION ZONE (RPZ)
- FUTURE PRECISION OBSTACLE FREE ZONE (POFZ)
- EXISTING AVIGATION EASEMENT

RUNWAY KEY MAP



DETROIT METRO • WILLOW RUN
WAYNE COUNTY AIRPORT AUTHORITY

ALP PREPARED BY:
JACOBSEN | DANIELS
Planning, Implementation, Operations & Management
Mead & Hunt

FAA'S APPROVAL OF THIS AIRPORT LAYOUT PLAN (ALP) REPRESENTS ACCEPTANCE OF THE GENERAL LOCATION OF FUTURE FACILITIES DEPICTED (SHEET I7144C04). DURING THE PRELIMINARY DESIGN PHASE, THE AIRPORT OWNER IS REQUIRED TO RESUBMIT FOR APPROVAL THE FINAL LOCATIONS, HEIGHTS, AND EXTERIOR FINISH OF STRUCTURES. FAA'S CONCERN IS OBSTRUCTIONS, IMPACT ON ELECTRONIC AIDS, OR ADVERSE EFFECTS ON CONTROLLER VIEW OF AIRCRAFT APPROACHES AND GROUND MOVEMENT AREAS WHICH COULD ADVERSELY AFFECT THE SAFETY, EFFICIENCY, OR UTILITY OF THE AIRPORT.

DATA SOURCES:
1. AIRPORT PROPERTY BOUNDARY AND EASEMENTS OBTAINED FROM WILLOW RUN AIRPORT DRAFT EXHIBIT A, DATED 11-30-2016.

NOTES:
1. SURVEY CONDUCTED ON 10/23/2014 BY GEOPRO CONSULTANTS, LLC.
2. SURVEY PERFORMED USING MICHIGAN STATE PLANE, SOUTH ZONE, INTERNATIONAL FEET, NAVD 88 (GEOID 2012A), AND NAD 83 (2011).
3. OBSTRUCTION POINT LABELS IN PLAN VIEW WHICH HAVE A LINE DRAWN THROUGH THEM ARE TREES WHICH HAVE BEEN REMOVED AFTER THE DATE OF SURVEY.

N
MAGNETIC DECLINATION
7°7' WEST
MAY 31, 2016

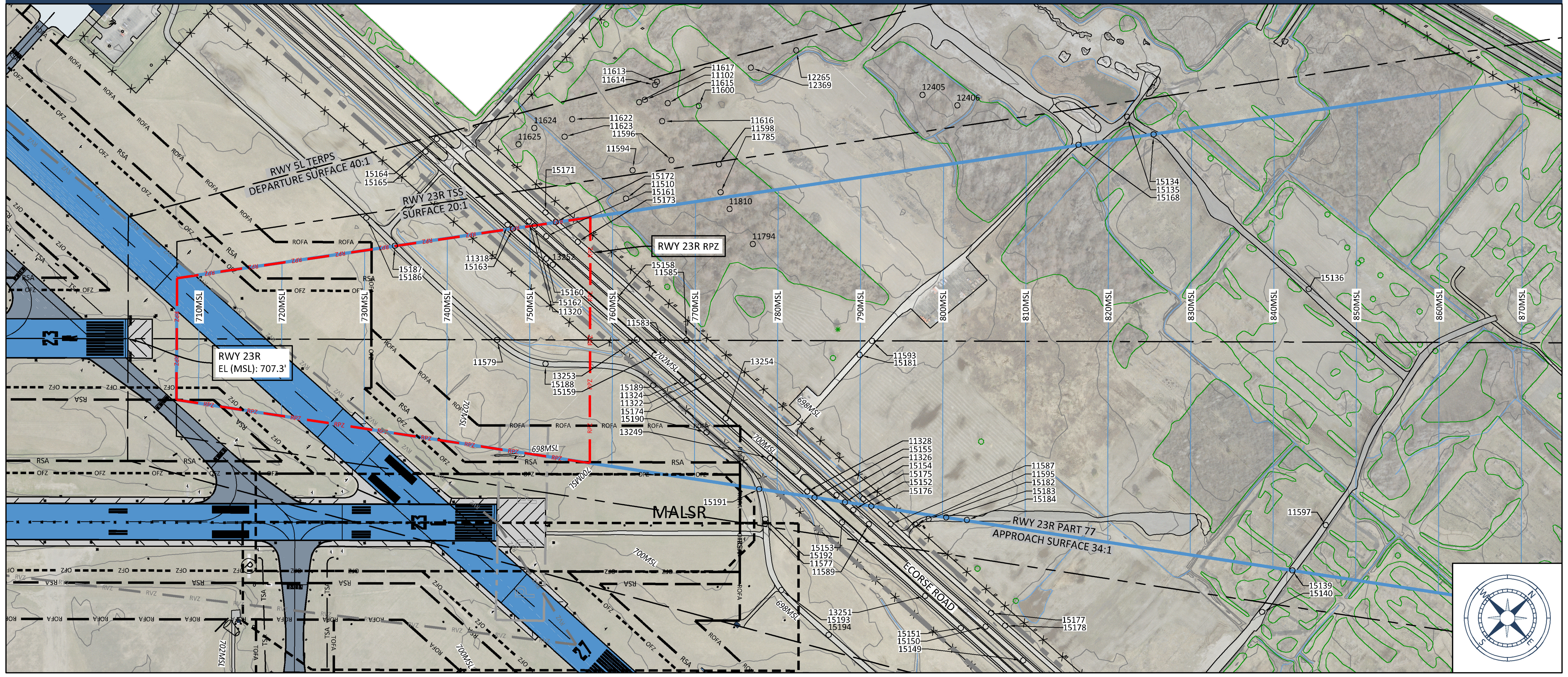
By	Date	Revisions

WILLOW RUN AIRPORT

5L APPROACH & 23R DEPARTURE PLAN & PROFILE

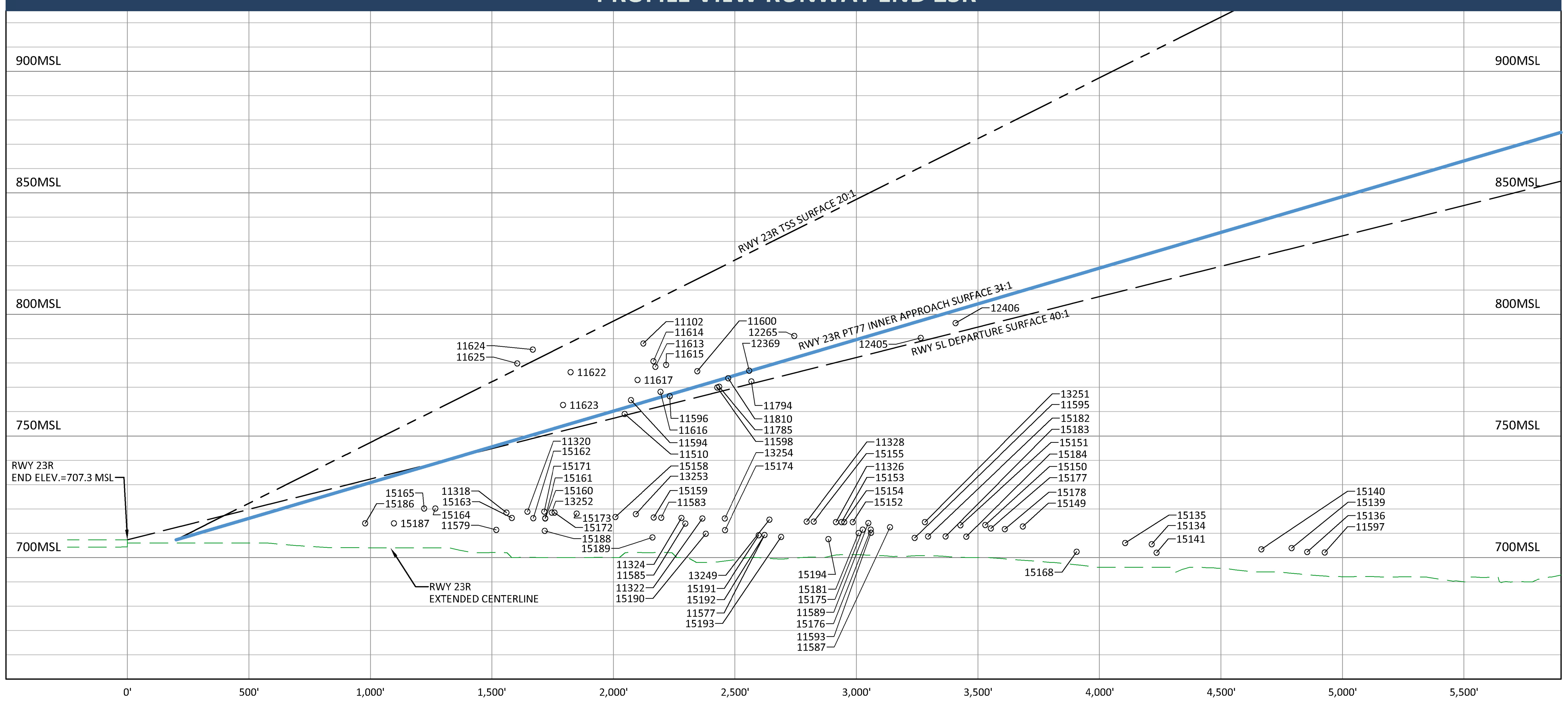
Drawn By: JGH
Date: 01-18-2019
Approved By: MCJ
Job No: 037-15-03

PLAN VIEW RUNWAY END 23R



GRAPHIC SCALE: 1"=300'

PROFILE VIEW RUNWAY END 23R



GRAPHIC SCALE: 1"=300'

GRAPHIC SCALE: 1"=30'

SURFACE OBSTRUCTION TABLES

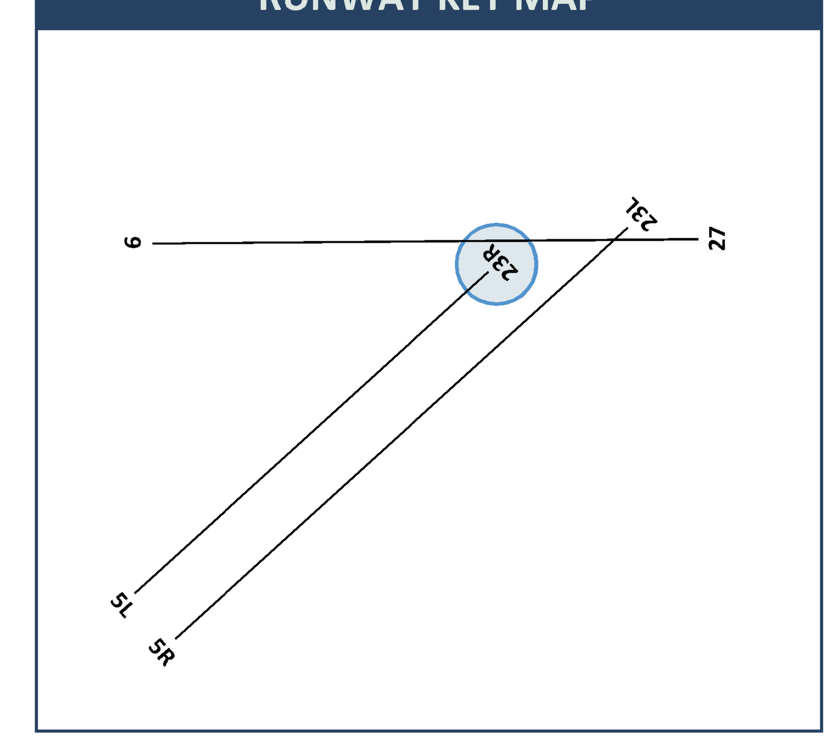
POINT NO.	OBJECT	TOP ELEV (MSL)	EX & FUT PT 77	EX TSS (20:1)	EX 5L DEPARTURE (40:1)	RESOLUTION
11102	TREE	788.01	-40.03	-	27.62	TBR
11510	TREE	759.1	-10.31	-40.53	0.64	TBR
11594	TREE	764.75	-21.50	-	5.64	TBR
11596	TREE	766.33	-27.31	-	3.22	TBR
11598	TREE	769.94	-22.89	-48.74	1.95	TBR
11600	TREE	776.63	-49.71	-	10.71	TBR
11613	TREE	778.48	-60.58	-	16.85	TBR
11614	TREE	780.77	-56.42	-	19.34	TBR
11615	TREE	779.27	-47.57	-	16.53	TBR
11616	TREE	768.18	-47.88	-	6.02	TBR
11617	TREE	773.02	-53.46	-	13.25	TBR
11622	TREE	776.28	-37.86	-	23.36	TBR
11623	TREE	762.73	-40.94	-	10.60	TBR
11624	TREE	785.52	-22.14	-	36.52	TBR
11625	TREE	779.89	-17.68	-	32.50	TBR
11785	TREE	770.29	-6.10	-48.77	2.11	TBR
11794	TREE	772.49	-4.47	-53.24	0.98	TBR
11810	TREE	773.73	-0.41	-47.20	4.62	TBR
12265	TREE	791.11	-71.18	-	15.19	TBR
12369	TREE	776.85	-73.77	-	5.58	TBR
12405	TREE	790.33	-50.25	-	1.40	TBR
12406	TREE	796.46	-39.11	-	3.96	TBR

NOTES:
1. TBD = TO BE DETERMINED.
2. TBR = TO BE REMOVED.

LEGEND

- AIRPORT BOUNDARY
- EXISTING GROUND CONTOUR
- EXISTING EDGE OF WATER
- EXISTING TREE LINE
- EXISTING FENCE
- EXISTING RUNWAY
- EXISTING TAXIWAY
- EXISTING SHOULDER
- EXISTING RUNWAY SAFETY AREA (RSA)
- EXISTING RUNWAY OBJECT FREE AREA (ROFA)
- EXISTING RUNWAY OBSTACLE FREE ZONE (OFZ)
- EXISTING TAXIWAY OBJECT FREE AREA (TOFA)
- EXISTING TAXIWAY SAFETY AREA (TSA)
- PAPI-4
- WINDSOCK
- NAVAID CRITICAL AREA
- FUTURE RUNWAY PROTECTICN ZONE (RPZ)
- FUTURE PRECISION OBSTACLE FREE ZONE (POFZ)

RUNWAY KEY MAP



DETROIT METRO • WILLOW RUN
WAYNE COUNTY AIRPORT AUTHORITY

ALP PREPARED BY:
JACOBSEN | DANIELS
Planning, Implementation, Operations & Management
Mead & Hunt

FAA'S APPROVAL OF THIS AIRPORT LAYOUT PLAN (ALP) REPRESENTS ACCEPTANCE OF THE GENERAL LOCATION OF FUTURE FACILITIES DEPICTED (SHEET I7144C04). DURING THE PRELIMINARY DESIGN PHASE, THE AIRPORT OWNER IS REQUIRED TO RESUBMIT FOR APPROVAL THE FINAL LOCATIONS, HEIGHTS, AND EXTERIOR FINISH OF STRUCTURES. FAA'S CONCERN IS OBSTRUCTIONS, IMPACT ON ELECTRONIC AIDS, OR ADVERSE EFFECTS ON CONTROLLER VIEW OF AIRCRAFT APPROACHES AND GROUND MOVEMENT AREAS WHICH COULD ADVERSELY AFFECT THE SAFETY, EFFICIENCY, OR UTILITY OF THE AIRPORT.

DATA SOURCES:
1. AIRPORT PROPERTY BOUNDARY AND EASEMENTS OBTAINED FROM WILLOW RUN AIRPORT DRAFT EXHIBIT A, DATED 11-30-2016.

NOTES:
1. SURVEY CONDUCTED ON 10/23/2014 BY GEOPRO CONSULTANTS, LLC.
2. SURVEY PERFORMED USING MICHIGAN STATE PLANE, SOUTH ZONE, INTERNATIONAL FEET, NAVD 88 (GEOID 2012A), AND NAD 83 (2011).

N
MAGNETIC DECLINATION 7°7' WEST MAY 31, 2016

By	Date	Revisions

WILLOW RUN AIRPORT

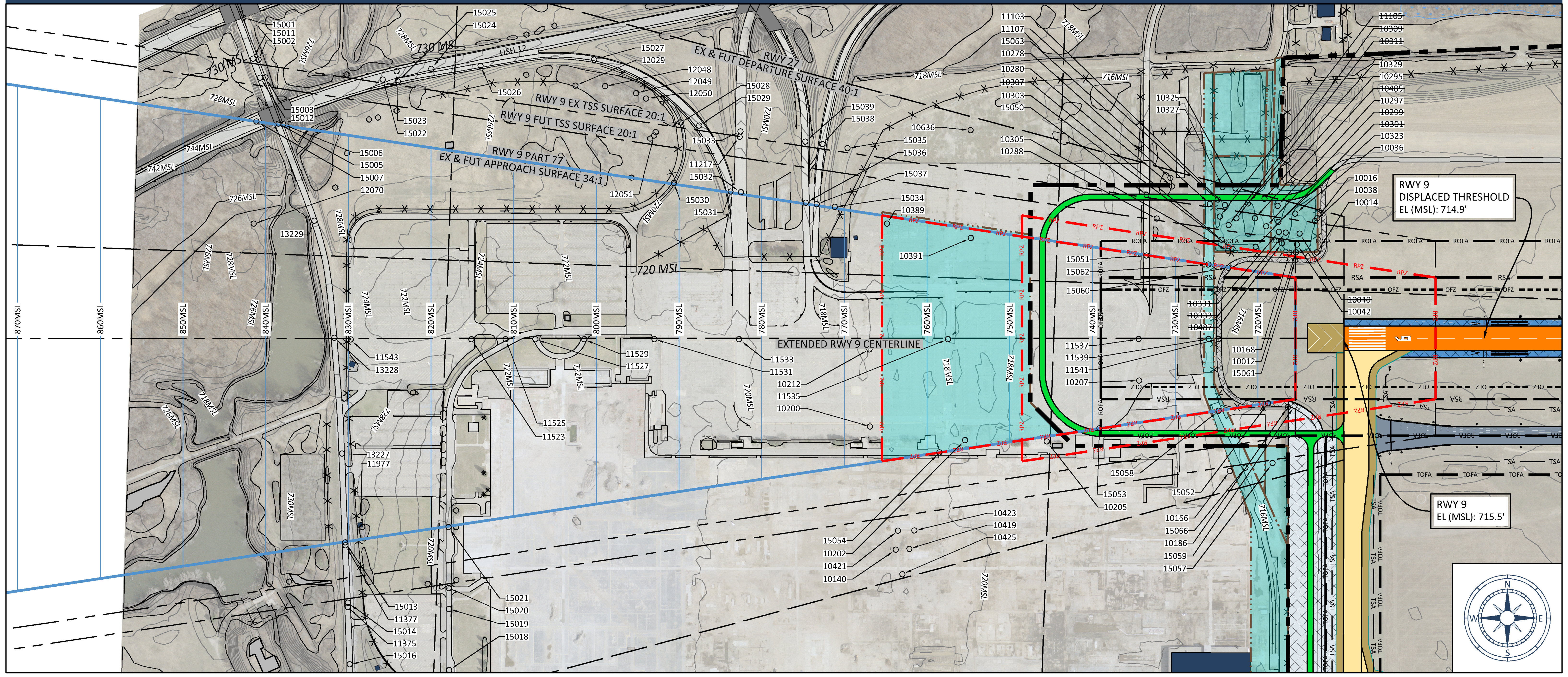
23R APPROACH & 5L DEPARTURE PLAN & PROFILE

11 of 19

Drawn By: SRG | Date: 01-18-2019
Approved By: MCJ | Job No: 037-15-03

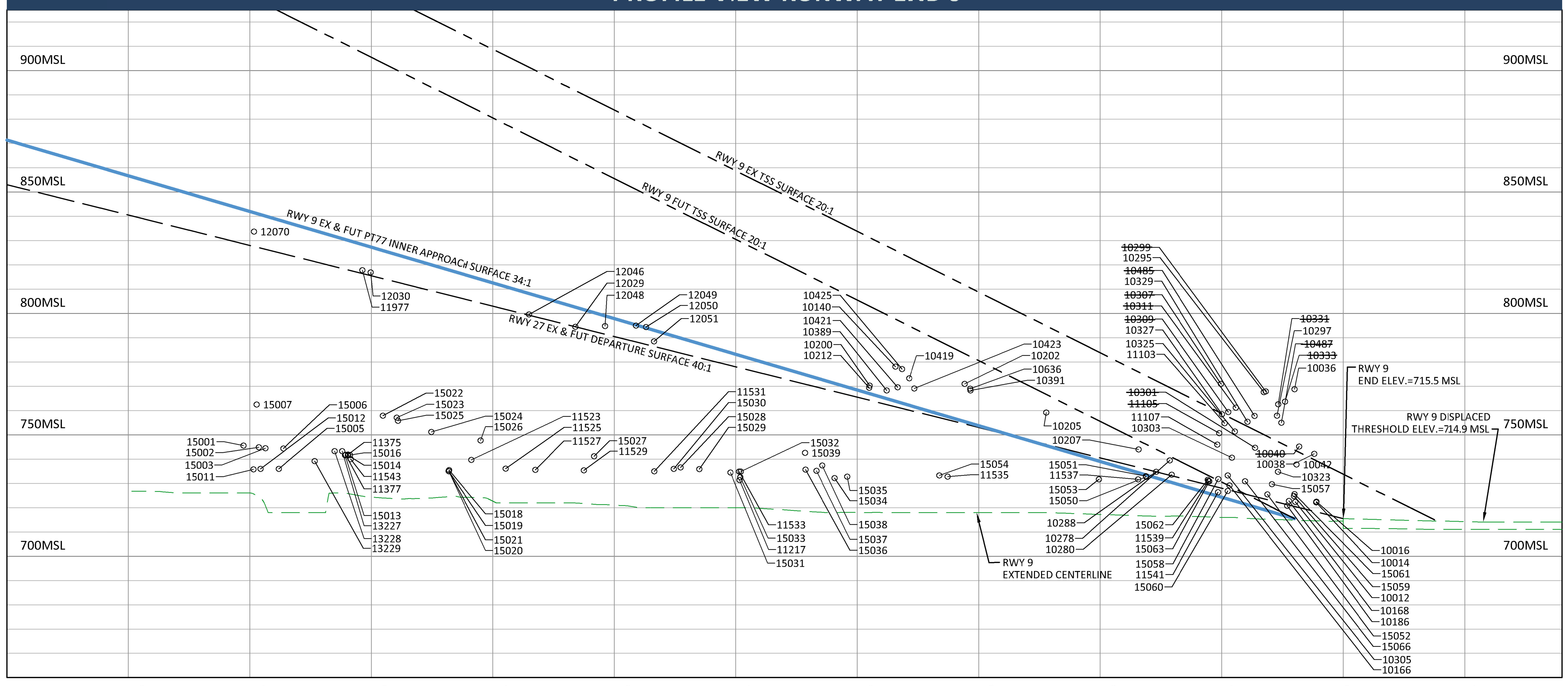
Colortable: JD ACAD.ctb LTScale: 1.0000 LwDefault: 0.010 Last Saved: 1/25/2019 4:17 PM Plotted On: 1/25/2019 4:20 PM
File: L:\09_PROJECTS\037_M&H\037-15-03 YIP Master Plan Update\13 - YIP ALP\02 SHEETS\PLANPROFILE-23R Layout: SHEET11

PLAN VIEW RUNWAY END 9



0' 300'
GRAPHIC SCALE: 1"=300'

PROFILE VIEW RUNWAY END 9



0' 300'
GRAPHIC SCALE: 1"=300'

SURFACE OBSTRUCTION TABLES

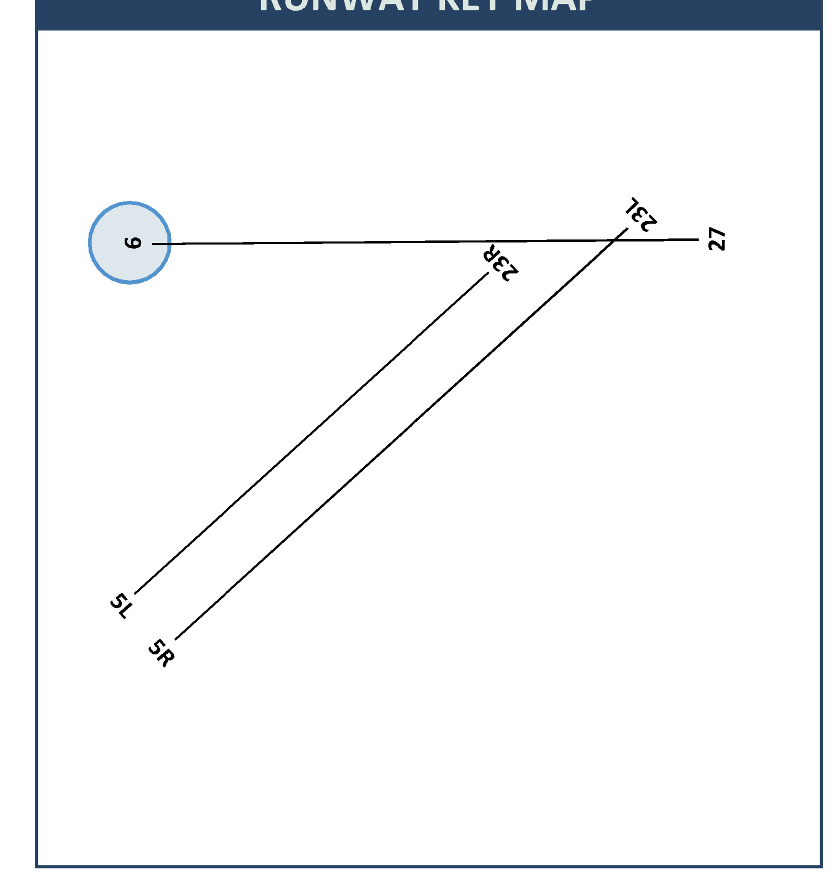
POINT No.	OBJECT	TOP ELEV (MSL)	EX & FUT PT 77	EX TSS (20:1)	FUT TSS (20:1)	EX & FUT DEPARTURE (40:1)	RESOLUTION
10012	FENCE	722.36	-7.82	-21.23	-	1.95	TBD
10014	FENCE	722.16	-8.00	-17.11	-	3.92	TBD
10016	FENCE	722.46	-27.82	-	-	4.24	TBD
10036	TREE	768.72	15.79	-	-	48.25	TBR
10038	TREE	742.12	-6.41	-	-	23.67	TBR
~~10040~~	~~TREE~~	~~745.20~~	~~4.00~~	~~2.40~~	~~-~~	~~25.19~~	~~TBR~~
10042	TREE	737.77	2.94	-5.58	-	17.48	TBR
10076	VERTICAL POINT	716.19	-29.79	-	-	0.03	TBD
10140	BUILDING	778.10	-38.90	-	-	16.54	TBD
10166	DIRT PILE	729.20	-30.58	-	-	2.01	TBD
10168	FENCE	722.77	-7.56	-22.12	6.13	1.71	TBD
10186	FENCE	720.73	0.41	-24.49	3.76	-0.49	TBD
10200	LIGHT SUPPORT STRUCTURE	770.24	3.34	-60.91	-32.66	6.05	TBD
10202	LIGHT SUPPORT STRUCTURE	770.98	15.56	-40.66	-12.41	16.55	TBD
10205	LIGHT SUPPORT STRUCTURE	759.12	10.67	-35.70	-7.45	13.10	TBD
10207	LIGHT SUPPORT STRUCTURE	743.98	9.62	-31.85	-3.60	7.46	TBD
10212	LIGHT SUPPORT STRUCTURE	769.37	2.40	-61.90	-33.66	5.12	TBD
10278	TREE	739.42	-38.62	-	-	6.10	TBR
10280	TREE	733.52	-39.50	-	-	0.38	TBR
10288	TREE	734.73	-19.85	-37.50	-	0.00	TBR
10295	TREE	767.56	4.88	-	-	43.91	TBR
10297	TREE	757.85	-0.28	-	-	35.57	TBR
~~10299~~	~~TREE~~	~~767.83~~	~~21.38~~	~~18.14~~	~~-~~	~~44.37~~	~~TBR~~
~~10301~~	~~TREE~~	~~744.65~~	~~9.78~~	~~-7.21~~	~~21.03~~	~~20.11~~	~~TBR~~
10303	TREE	740.56	6.20	-16.06	12.18	13.64	TBR
10305	TREE	733.26	-0.08	-24.23	4.01	5.90	TBR
~~10307~~	~~TREE~~	~~770.91~~	~~30.87~~	~~12.02~~	~~40.27~~	~~42.86~~	~~TBR~~
~~10309~~	~~TREE~~	~~759.39~~	~~11.02~~	~~1.99~~	~~-~~	~~32.08~~	~~TBR~~
~~10311~~	~~TREE~~	~~761.13~~	~~8.98~~	~~5.31~~	~~-~~	~~34.61~~	~~TBR~~
10323	TREE	734.73	-13.84	-12.42	-	12.54	TBR
10325	TREE	751.36	-18.38	-	-	24.73	TBR
10327	TREE	758.46	-12.51	-	-	30.51	TBR
10329	TREE	755.38	-5.09	-	-	30.04	TBR
~~10331~~	~~TREE~~	~~762.55~~	~~19.74~~	~~15.47~~	~~-~~	~~40.40~~	~~TBR~~
~~10333~~	~~TREE~~	~~763.62~~	~~21.50~~	~~17.93~~	~~-~~	~~42.17~~	~~TBR~~
10389	POLE	768.24	3.38	-59.44	-31.19	5.79	TBD
10391	POLE	768.24	13.52	-42.19	-13.95	14.41	TBD
10419	BUILDING	773.27	-42.76	-	-	13.14	TBD
10421	BUILDING	769.58	-36.09	-	-	8.26	TBD
10423	BUILDING	769.05	-36.07	-	-	9.44	TBD
10425	BUILDING	777.09	-54.02	-	-	16.21	TBD
~~10485~~	~~TREE~~	~~757.74~~	~~6.13~~	~~5.73~~	~~-~~	~~33.12~~	~~TBR~~
~~10487~~	~~TREE~~	~~754.99~~	~~18.97~~	~~8.53~~	~~36.78~~	~~33.15~~	~~TBR~~
10636	POLE	768.91	-43.68	-	-	15.06	TBD
11103	TREE	754.72	-5.55	-	-	27.03	TBR
~~11105~~	~~TREE~~	~~750.66~~	~~-3.05~~	~~-8.58~~	~~-~~	~~22.43~~	~~TBR~~
11107	TREE	745.96	-17.77	-	-	17.52	TBR
11539	PUBLIC ROAD PLUS 15FT	730.91	4.98	-30.59	-2.35	1.55	TBD
11541	PRIVATE ROAD PLUS 10FT	726.38	1.64	-33.09	-4.85	-1.97	TBD
11977	POWER TRANSMISSION LINE	817.75	-10.57	-117.82	-89.57	1.35	TBD
12029	TREE	794.50	-57.27	-	-	0.02	TBR
12030	TREE	816.85	N/A	-	-	1.31	TBR
12046	TREE	799.60	N/A	-	-	0.36	TBR
12048	TREE	794.80	-55.61	-	-	3.39	TBR
12049	TREE	794.95	-50.40	-	-	6.72	TBR
12050	TREE	794.35	-47.52	-	-	7.15	TBR
12051	TREE	788.50	-31.43	-87.02	-	2.13	TBR
12070	TREE	833.65	-7.79	-124.21	-95.96	6.11	TBR
15052	PRIVATE ROAD PLUS 10FT	725.45	6.68	-23.88	4.36	2.17	TBD
15057	PUBLIC ROAD PLUS 15FT	729.61	-24.09	-	-	6.81	TBD
15058	PUBLIC ROAD PLUS 15FT	731.71	6.91	-27.74	0.51	3.38	TBD
15059	PRIVATE ROAD PLUS 10FT	724.72	5.35	-19.13	9.12	4.18	TBD
15060	PRIVATE ROAD PLUS 10FT	726.85	3.29	-30.62	-2.38	-0.50	TBD
15061	PRIVATE ROAD PLUS 10FT	725.52	0.07	-18.20	10.04	5.05	TBD
15062	PUBLIC ROAD PLUS 15FT	731.43	5.45	-30.16	-1.91	2.03	TBD
15063	PUBLIC ROAD PLUS 15FT	730.87	-30.62	-	-	1.62	TBD
15066	PUBLIC ROAD PLUS 15FT	730.90	-26.47	-	-	5.31	TBD

NOTES:
1. TBD = TO BE DETERMINED.
2. TBR = TO BE REMOVED.
3. OBSTRUCTION POINT LABELS WHICH HAVE A LINE DRAWN THROUGH THEM ARE TREES WHICH HAVE BEEN REMOVED AFTER THE DATE OF SURVEY.

LEGEND

- AIRPORT BOUNDARY
- EXISTING GROUND CONTOUR
- EXISTING EDGE OF WATER
- EXISTING TREE LINE
- EXISTING FENCE
- EXISTING BUILDING
- EXISTING RUNWAY
- EXISTING TAXIWAY
- EXISTING SHOULDER
- EXISTING RUNWAY SAFETY AREA (RSA)
- EXISTING RUNWAY OBJECT FREE AREA (ROFA)
- EXISTING RUNWAY OBSTACLE FREE ZONE (OFZ)
- EXISTING TAXIWAY OBJECT FREE AREA (TOFA)
- EXISTING TAXIWAY SAFETY AREA (TSA)
- FUTURE RUNWAY PROTECTION ZONE (RPZ)
- FUTURE SERVICE ROADWAY
- FUTURE RUNWAY PAVEMENT & MARKINGS
- FUTURE TAXIWAY PAVEMENT
- FUTURE APRON PAVEMENT
- FUTURE SHOULDER PAVEMENT
- FUTURE DEMOLITION
- EXISTING AVIGATION EASEMENT

RUNWAY KEY MAP



DETROIT METRO • WILLOW RUN
WAYNE COUNTY AIRPORT AUTHORITY

ALP PREPARED BY:
JACOBSEN | DANIELS
Planning, Implementation, Operations & Management
Mead & Hunt

FAA'S APPROVAL OF THIS AIRPORT LAYOUT PLAN (ALP) REPRESENTS ACCEPTANCE OF THE GENERAL LOCATION OF FUTURE FACILITIES DEPICTED (SHEET I7144C04). DURING THE PRELIMINARY DESIGN PHASE, THE AIRPORT OWNER IS REQUIRED TO RESUBMIT FOR APPROVAL THE FINAL LOCATIONS, HEIGHTS, AND EXTERIOR FINISH OF STRUCTURES. FAA'S CONCERN IS OBSTRUCTIONS, IMPACT ON ELECTRONIC AIDS, OR ADVERSE EFFECTS ON CONTROLLER VIEW OF AIRCRAFT APPROACHES AND GROUND MOVEMENT AREAS WHICH COULD ADVERSELY AFFECT THE SAFETY, EFFICIENCY, OR UTILITY OF THE AIRPORT.

DATA SOURCES:
1. AIRPORT PROPERTY BOUNDARY AND EASEMENTS OBTAINED FROM WILLOW RUN AIRPORT DRAFT EXHIBIT A, DATED 11-30-2016.

NOTES:
1. SURVEY CONDUCTED ON 10/23/2014 BY GEOPRO CONSULTANTS, LLC.
2. SURVEY PERFORMED USING MICHIGAN STATE PLANE, SOUTH ZONE, INTERNATIONAL FEET, NAVD 88 (GEOID 2012A), AND NAD 83 (2011).
3. OBSTRUCTION POINT LABELS IN PLAN VIEW WHICH HAVE A LINE DRAWN THROUGH THEM ARE TREES WHICH HAVE BEEN REMOVED AFTER THE DATE OF SURVEY.

N
MAGNETIC DECLINATION
7°7' WEST
MAY 31, 2016

By	Date	Revisions

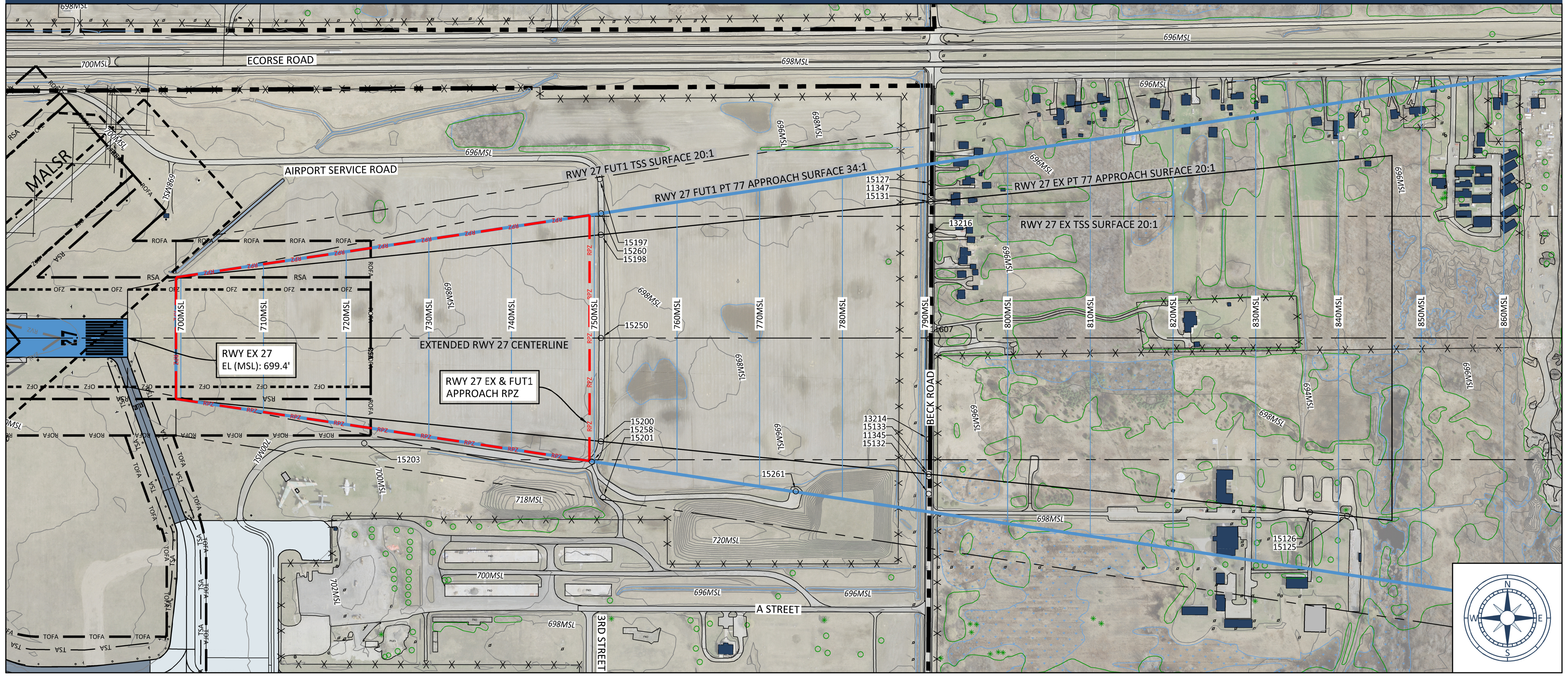
WILLOW RUN AIRPORT

9 APPROACH & 27 DEPARTURE PLAN & PROFILE

12 of 19

Drawn By: JGH Date: 01-18-2019
Approved By: MCJ Job No: 037-15-03

PLAN VIEW RUNWAY END 27

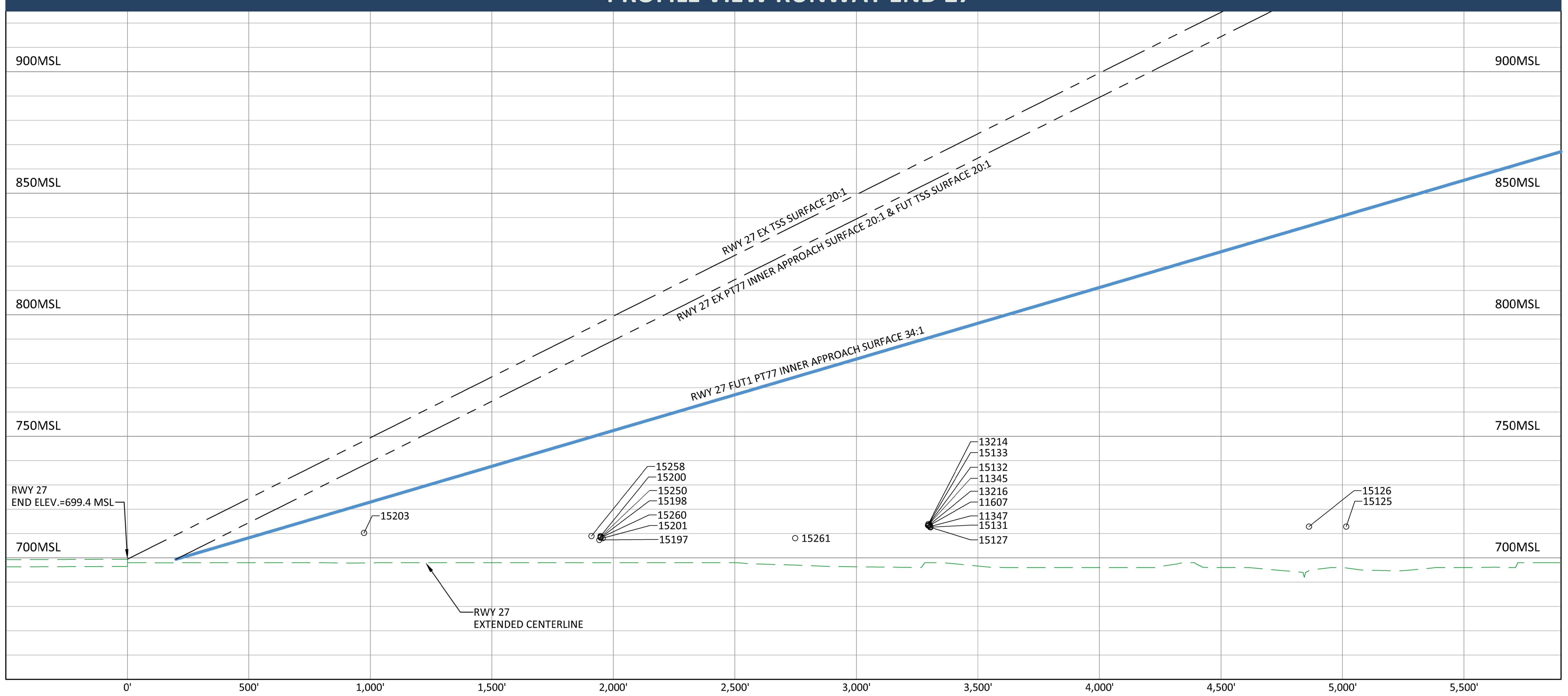


0' 300'
GRAPHIC SCALE: 1"=300'

SURFACE OBSTRUCTION TABLES

THERE ARE NO PENETRATIONS TO ANY SURFACE SHOWN ON THIS SHEET, THEREFORE, THERE IS NO TABLE.

PROFILE VIEW RUNWAY END 27



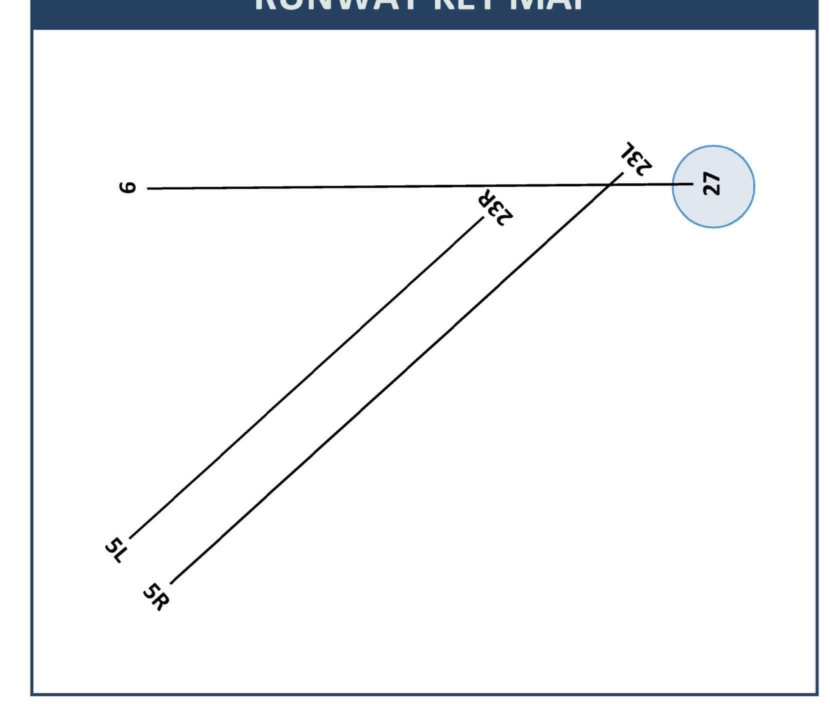
0' 300'
GRAPHIC SCALE: 1"=300'

0' 30'
GRAPHIC SCALE: 1"=30'

LEGEND

AIRPORT BOUNDARY	
EXISTING GROUND CONTOUR	95MSL
EXISTING EDGE OF WATER	
EXISTING TREE LINE	
EXISTING FENCE	X
EXISTING BUILDING	
EXISTING RUNWAY	
EXISTING TAXIWAY	
EXISTING SHOULDER	
EXISTING RUNWAY SAFETY AREA (RSA)	RSA
EXISTING RUNWAY OBJECT FREE AREA (ROFA)	ROFA ROFA
EXISTING RUNWAY OBSTACLE FREE ZONE (OFZ)	OFZ OFZ
EXISTING TAXIWAY OBJECT FREE AREA (TOFA)	TOFA TOFA
EXISTING TAXIWAY SAFETY AREA (TSA)	TSA TSA
NAVAID CRITICAL AREA	
FUTURE RUNWAY PROTECTION ZONE (RPZ)	RPZ RPZ

RUNWAY KEY MAP



DETROIT METRO • WILLOW RUN
WAYNE COUNTY AIRPORT AUTHORITY

ALP PREPARED BY:

JACOBSEN | DANIELS
Planning, Implementation, Operations & Management

Mead & Hunt

FAA'S APPROVAL OF THIS AIRPORT LAYOUT PLAN (ALP) REPRESENTS ACCEPTANCE OF THE GENERAL LOCATION OF FUTURE FACILITIES DEPICTED (SHEET I7144C04). DURING THE PRELIMINARY DESIGN PHASE, THE AIRPORT OWNER IS REQUIRED TO RESUBMIT FOR APPROVAL THE FINAL LOCATIONS, HEIGHTS, AND EXTERIOR FINISH OF STRUCTURES. FAA'S CONCERN IS OBSTRUCTIONS, IMPACT ON ELECTRONIC AIDS, OR ADVERSE EFFECTS ON CONTROLLER VIEW OF AIRCRAFT APPROACHES AND GROUND MOVEMENT AREAS WHICH COULD ADVERSELY AFFECT THE SAFETY, EFFICIENCY, OR UTILITY OF THE AIRPORT.

DATA SOURCES:

1. AIRPORT PROPERTY BOUNDARY AND EASEMENTS OBTAINED FROM WILLOW RUN AIRPORT DRAFT EXHIBIT A, DATED 11-30-2016.

NOTES:

1. SURVEY CONDUCTED ON 10/23/2014 BY GEOPRO CONSULTANTS, LLC.
2. SURVEY PERFORMED USING MICHIGAN STATE PLANE, SOUTH ZONE, INTERNATIONAL FEET, NAVD 88 (GEOID 2012A), AND NAD 83 (2011).

N
MAGNETIC DECLINATION
7°7' WEST
MAY 31, 2016

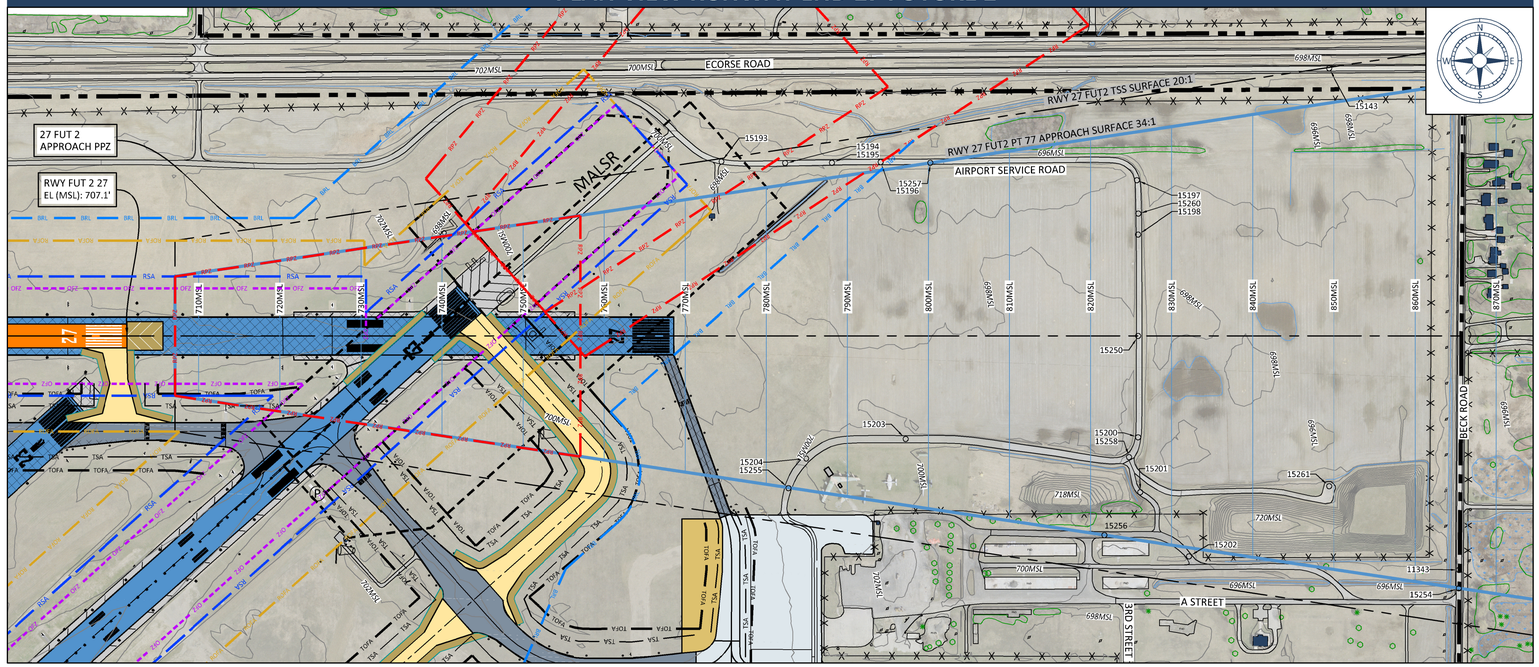
By	Date	Revisions

WILLOW RUN AIRPORT

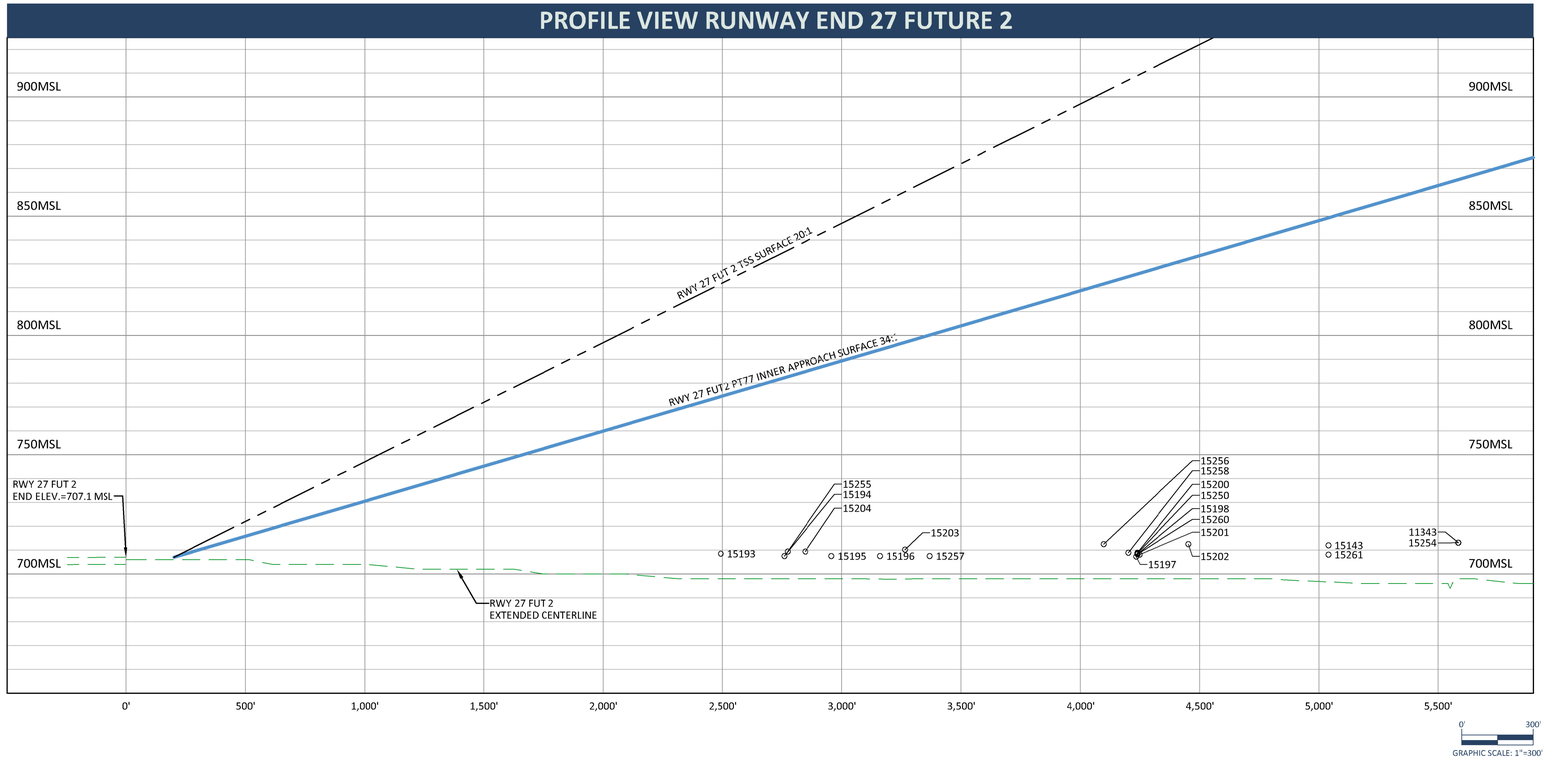
27 APPROACH PLAN & PROFILE

Drawn By: JGH
Date: 01-18-2019
Approved By: MCJ
Job No: 037-15-03

PLAN VIEW RUNWAY END 27 FUTURE 2



PROFILE VIEW RUNWAY END 27 FUTURE 2



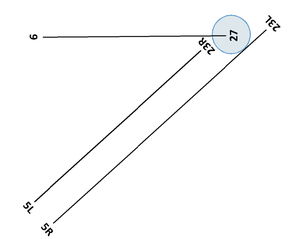
SURFACE OBSTRUCTION TABLES

THERE ARE NO PENETRATIONS TO ANY SURFACE SHOWN ON THIS SHEET, THEREFORE, THERE IS NO TABLE.

LEGEND

- AIRPORT BOUNDARY
- EXISTING GROUND CONTOUR (95MSL)
- EXISTING EDGE OF WATER
- EXISTING TREE LINE
- EXISTING FENCE (X)
- EXISTING BUILDING
- EXISTING RUNWAY
- EXISTING TAXIWAY
- EXISTING SHOULDER
- EXISTING TAXIWAY SAFETY AREA (TSA)
- PAPI-4 (P)
- WINDSOCK
- NAVAID CRITICAL AREA
- FUTURE RUNWAY SAFETY AREA (RSA)
- FUTURE RUNWAY OBSTACLE FREE ZONE (OFZ)
- FUTURE RUNWAY PROTECTION ZONE (RPZ)
- FUTURE RUNWAY OBJECT FREE AREA (ROFA)
- FUTURE TAXIWAY OBJECT FREE AREA (TOFA)
- FUTURE PRECISION OBSTACLE FREE ZONE (POFZ) P O F Z
- FUTURE RUNWAY PAVEMENT & MARKINGS
- FUTURE TAXIWAY PAVEMENT
- FUTURE APRON PAVEMENT
- FUTURE SHOULDER PAVEMENT
- FUTURE DEMOLITION

RUNWAY KEY MAP



DETROIT METRO • WILLOW RUN
WAYNE COUNTY AIRPORT AUTHORITY

ALP PREPARED BY:
JACOBSEN | DANIELS
Planning, Implementation, Operations & Management
Mead & Hunt

FAA'S APPROVAL OF THIS AIRPORT LAYOUT PLAN (ALP) REPRESENTS ACCEPTANCE OF THE GENERAL LOCATION OF FUTURE FACILITIES DEPICTED (SHEET I7144C04). DURING THE PRELIMINARY DESIGN PHASE, THE AIRPORT OWNER IS REQUIRED TO RESUBMIT FOR APPROVAL THE FINAL LOCATIONS, HEIGHTS, AND EXTERIOR FINISH OF STRUCTURES. FAA'S CONCERN IS OBSTRUCTIONS, IMPACT ON ELECTRONIC AIDS, OR ADVERSE EFFECTS ON CONTROLLER VIEW OF AIRCRAFT APPROACHES AND GROUND MOVEMENT AREAS WHICH COULD ADVERSELY AFFECT THE SAFETY, EFFICIENCY, OR UTILITY OF THE AIRPORT.

DATA SOURCES:

1. AIRPORT PROPERTY BOUNDARY AND EASEMENTS OBTAINED FROM WILLOW RUN AIRPORT DRAFT EXHIBIT A, DATED 11-30-2016.

NOTES:

1. SURVEY CONDUCTED ON :0/23/2014 BY GEOPRO CONSULTANTS, LLC.
2. SURVEY PERFORMED USING MICHIGAN STATE PLANE, SOUTH ZONE, INTERNATIONAL FEET, NAVD 88 (GEOID 2012A), AND NAD 83 (2011).

N
MAGNETIC DECLINATION 7°7' WEST MAY 31, 2016

By	Date	Revisions

WILLOW RUN AIRPORT

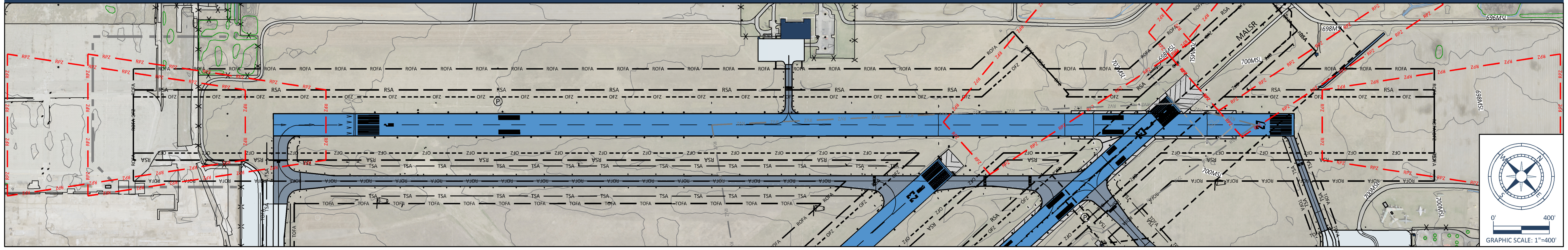
27 FUTURE 2 APPROACH PLAN & PROFILE

14 of 19

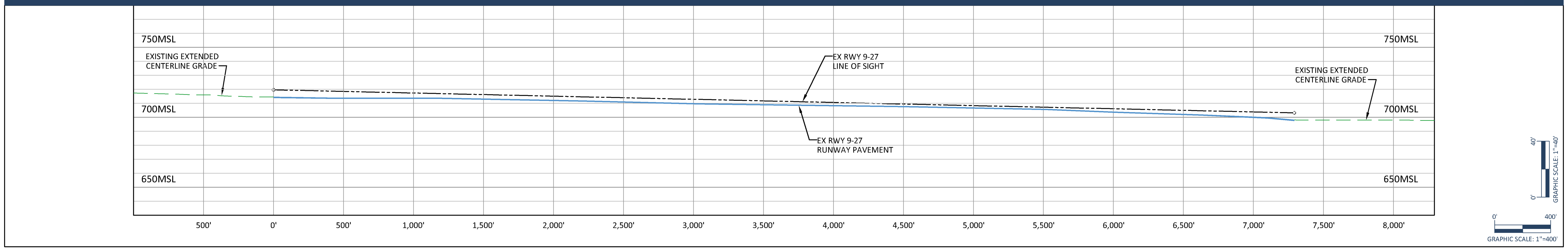
Drawn By: SRG Date: 01-18-2019
Approved By: MCJ Job No: 037-15-03

Colorstable: JD ACAD.ctb LTScale: 1.0000 LwDefault: 0.010 Last Saved: 3/12/2019 5:04 PM Plotted On: 1/23/2019 2:26 PM
File: L:\00_PROJECTS\037-15-03 WYA Master Plan Update\03 - WYA\ACAD\SHEETS\PLAN\PROFILE\27 FUT1.dwg Layout: SHEET14

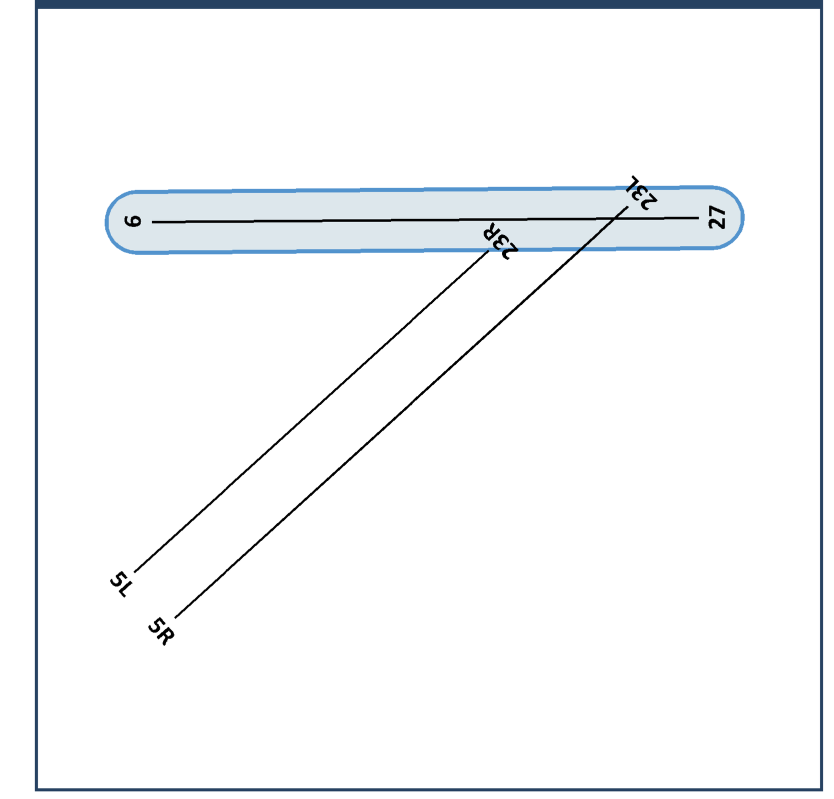
PLAN VIEW EXISTING RUNWAY 9-27



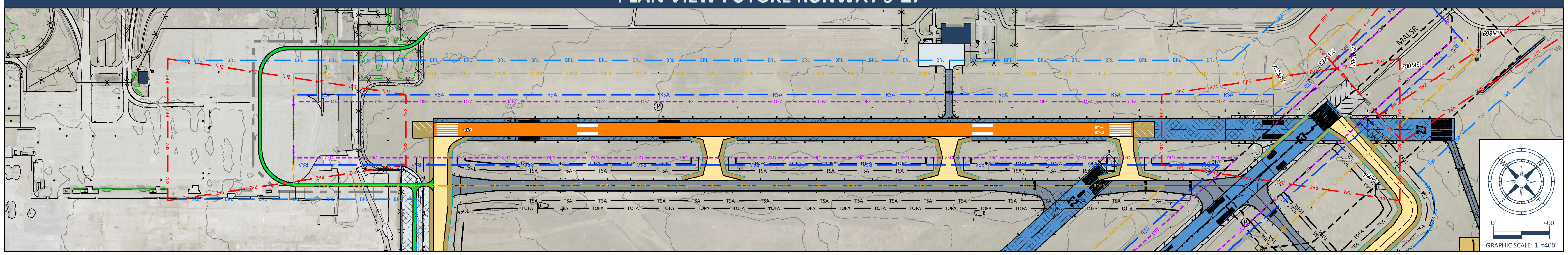
PROFILE VIEW EXISTING RUNWAY 9-27



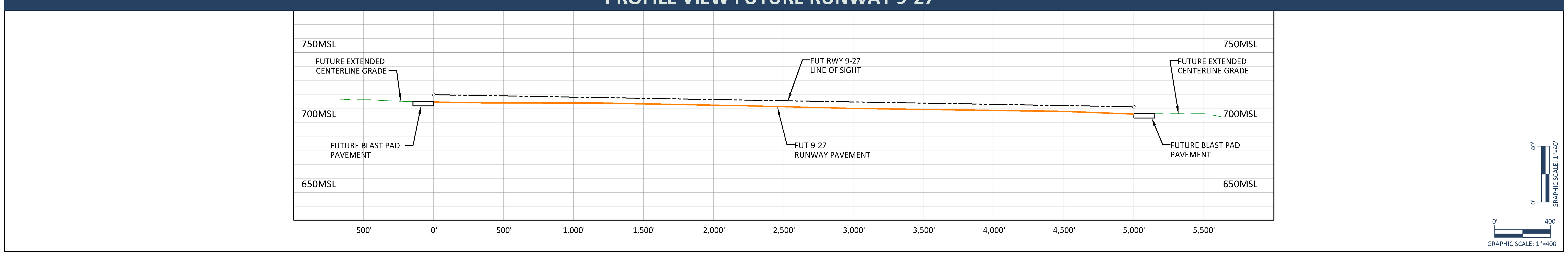
RUNWAY KEY MAP



PLAN VIEW FUTURE RUNWAY 9-27



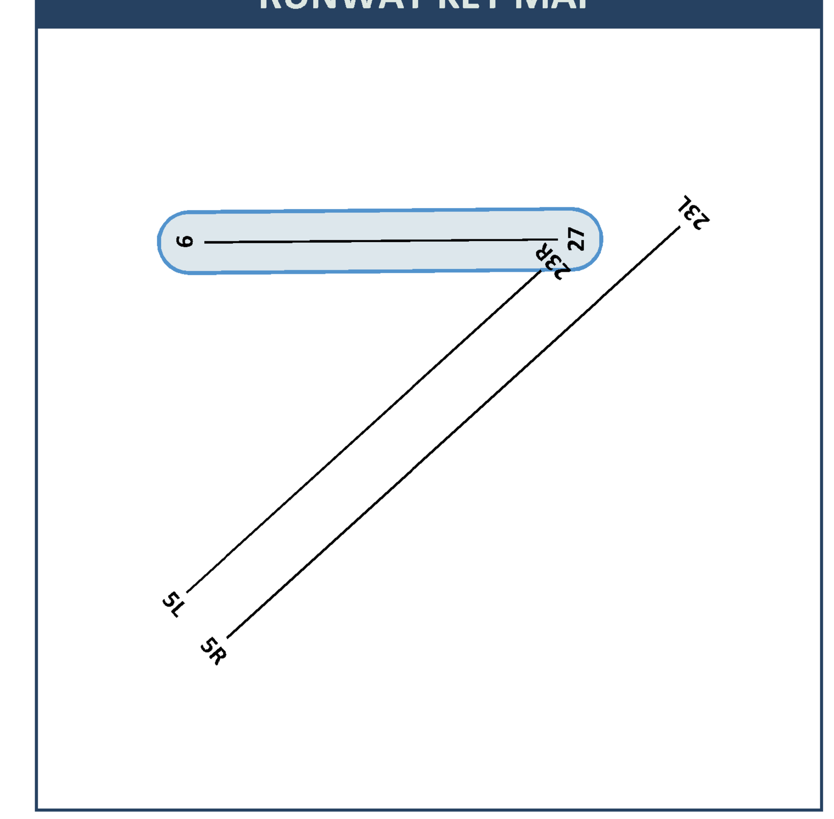
PROFILE VIEW FUTURE RUNWAY 9-27



LEGEND

- EXISTING GROUND CONTOUR
- EXISTING EDGE OF WATER
- EXISTING TREE LINE
- EXISTING FENCE
- EXISTING BUILDING
- EXISTING RUNWAY
- EXISTING TAXIWAY
- EXISTING SHOULDER
- EXISTING RUNWAY SAFETY AREA (RSA)
- EXISTING RUNWAY OBJECT FREE AREA (ROFA)
- EXISTING RUNWAY OBSTACLE FREE ZONE (OFZ)
- EXISTING RUNWAY PROTECTION ZONE (RPZ)
- EXISTING TAXIWAY OBJECT FREE AREA (TOFA)
- EXISTING TAXIWAY SAFETY AREA (TSA)
- PAPI-4
- WINDSOCK
- NAVAID CRITICAL AREA
- FUTURE RUNWAY SAFETY AREA (RSA)
- FUTURE RUNWAY OBSTACLE FREE ZONE (OFZ)
- FUTURE RUNWAY PROTECTION ZONE (RPZ)
- FUTURE RUNWAY OBJECT FREE AREA (ROFA)
- FUTURE TAXIWAY OBJECT FREE AREA (TOFA)
- FUTURE PRECISION OBSTACLE FREE ZONE (POFZ)
- FUTURE SERVICE ROADWAY
- FUTURE AIRPORT STRUCTURE
- FUTURE RUNWAY PAVEMENT & MARKINGS
- FUTURE TAXIWAY PAVEMENT
- FUTURE APRON PAVEMENT
- FUTURE SHOULDER PAVEMENT
- FUTURE DEMOLITION

RUNWAY KEY MAP



DETROIT METRO • WILLOW RUN
WAYNE COUNTY AIRPORT AUTHORITY

ALP PREPARED BY:
JACOBSEN | DANIELS
Planning, Implementation, Operations & Management
Mead & Hunt

FAA'S APPROVAL OF THIS AIRPORT LAYOUT PLAN (ALP) REPRESENTS ACCEPTANCE OF THE GENERAL LOCATION OF FUTURE FACILITIES DEPICTED (SHEET I7144C04). DURING THE PRELIMINARY DESIGN PHASE, THE AIRPORT OWNER IS REQUIRED TO RESUBMIT FOR APPROVAL THE FINAL LOCATIONS, HEIGHTS, AND EXTERIOR FINISH OF STRUCTURES. FAA'S CONCERN IS OBSTRUCTIONS, IMPACT ON ELECTRONIC AIDS, OR ADVERSE EFFECTS ON CONTROLLER VIEW OF AIRCRAFT APPROACHES AND GROUND MOVEMENT AREAS WHICH COULD ADVERSELY AFFECT THE SAFETY, EFFICIENCY, OR UTILITY OF THE AIRPORT.

DATA SOURCES:
1. AIRPORT PROPERTY BOUNDARY AND EASEMENTS OBTAINED FROM WILLOW RUN AIRPORT DRAFT EXHIBIT A, DATED 11-30-2016.

NOTES:
1. SURVEY CONDUCTED ON 10/23/2014 BY GEOPRO CONSULTANTS, LLC.
2. SURVEY PERFORMED USING MICHIGAN STATE PLANE, SOUTH ZONE, INTERNATIONAL FEET, NAVD 88 (GEOID 2012A), AND NAD 83 (2011)

N
MAGNETIC DECLINATION 7°7' WEST MAY 31, 2016

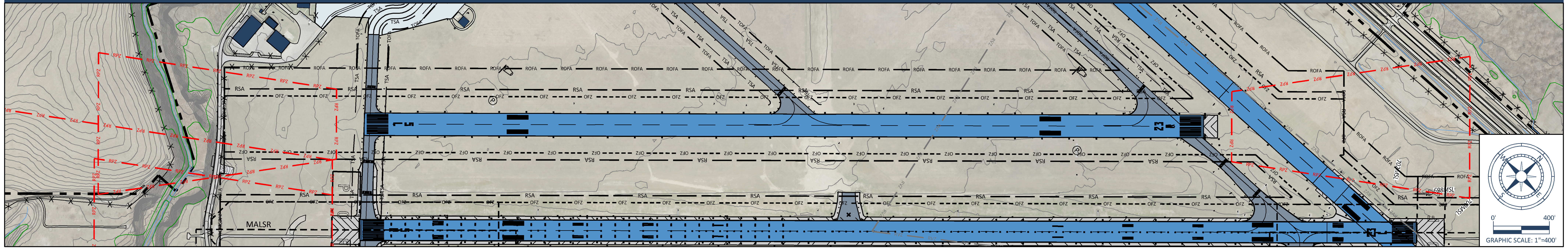
By	Date	Revisions

WILLOW RUN AIRPORT

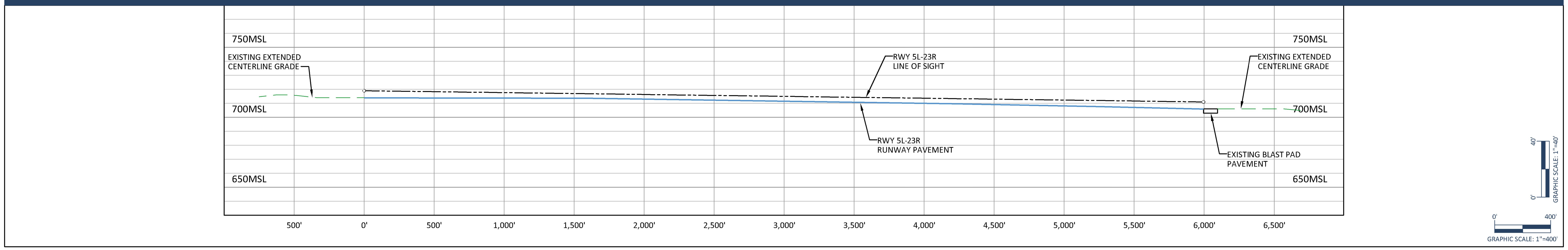
9-27 RUNWAY PLAN & PROFILE

Drawn By: SRG
Date: 01-18-2019
Approved By: MCJ
Job No: 037-15-03

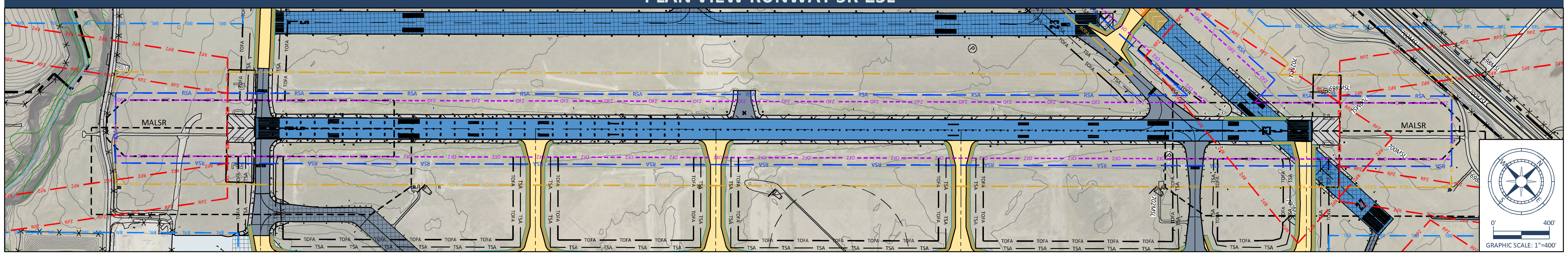
PLAN VIEW RUNWAY 5L-23R



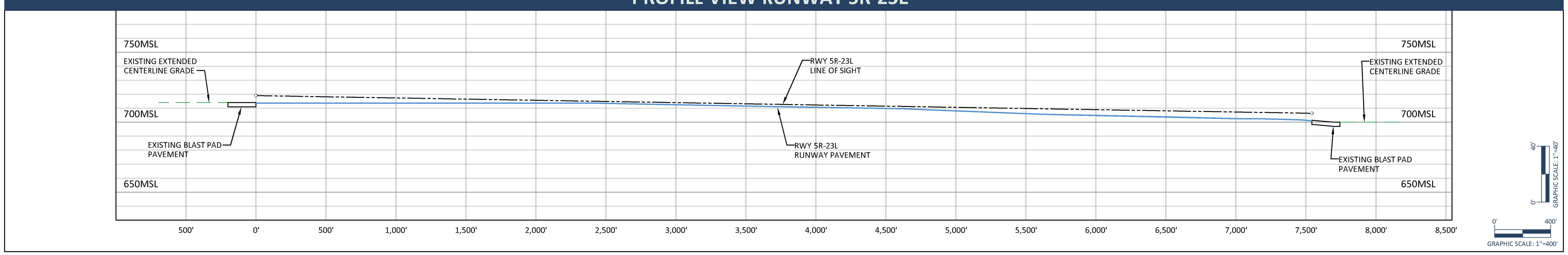
PROFILE VIEW RUNWAY 5L-23R



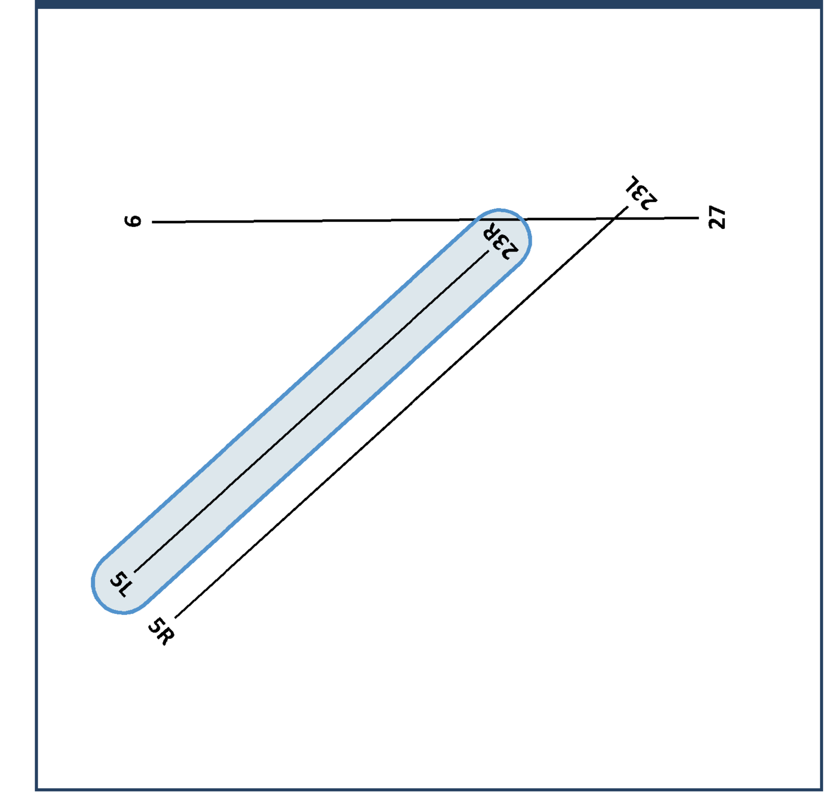
PLAN VIEW RUNWAY 5R-23L



PROFILE VIEW RUNWAY 5R-23L



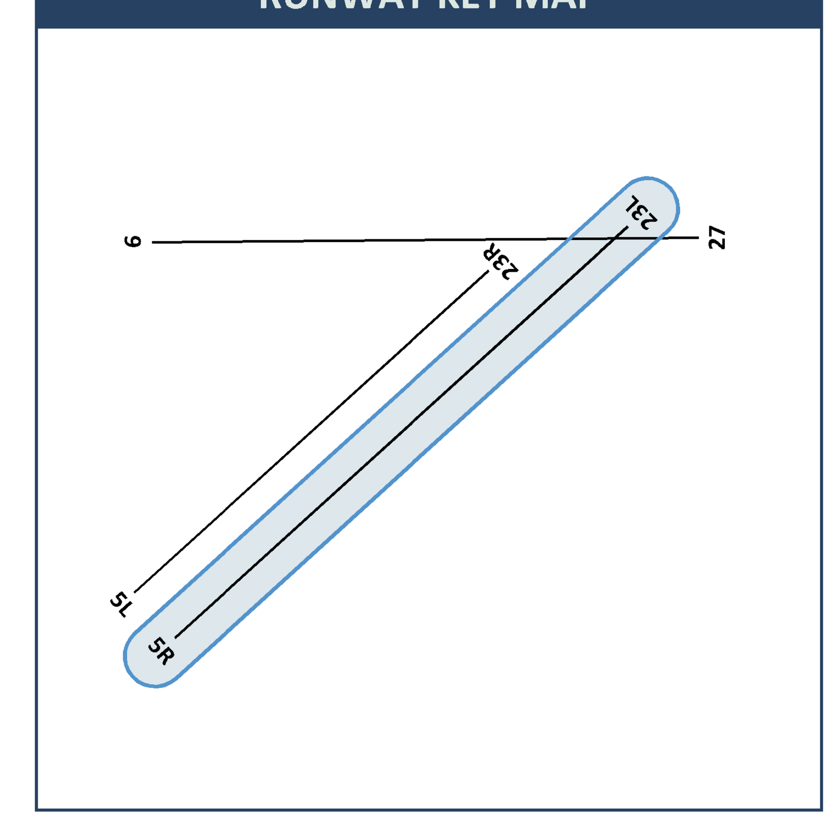
RUNWAY KEY MAP



LEGEND

AIRPORT BOUNDARY	
EXISTING GROUND CONTOUR	95MSL
EXISTING EDGE OF WATER	
EXISTING TREE LINE	
EXISTING FENCE	x
EXISTING BUILDING	
EXISTING RUNWAY	
EXISTING TAXIWAY	
EXISTING SHOULDER	
EXISTING RUNWAY SAFETY AREA (RSA)	RSA
EXISTING RUNWAY OBJECT FREE AREA (ROFA)	ROFA ROFA
EXISTING RUNWAY OBSTACLE FREE ZONE (OFZ)	OFZ OFZ
EXISTING RUNWAY PROTECTION ZONE (RPZ)	RPZ RPZ
EXISTING TAXIWAY OBJECT FREE AREA (TOFA)	TOFA TOFA
EXISTING TAXIWAY SAFETY AREA (TSA)	TSA TSA
PAPI-4	P
WINDSOCK	
NAVAID CRITICAL AREA	
FUTURE RUNWAY SAFETY AREA (RSA)	RSA
FUTURE RUNWAY OBSTACLE FREE ZONE (OFZ)	OFZ OFZ
FUTURE RUNWAY PROTECTION ZONE (RPZ)	RPZ RPZ
FUTURE RUNWAY OBJECT FREE AREA (ROFA)	ROFA ROFA
FUTURE TAXIWAY OBJECT FREE AREA (OFA)	TOFA TOFA
FUTURE PRECISION OBSTACLE FREE ZONE (POFZ)	P O F Z
FUTURE SERVICE ROADWAY	
FUTURE AIRPORT STRUCTURE	
FUTURE RUNWAY PAVEMENT & MARKINGS	
FUTURE TAXIWAY PAVEMENT	
FUTURE APRON PAVEMENT	
FUTURE SHOULDER PAVEMENT	
FUTURE DEMOLITION	

RUNWAY KEY MAP



Colortable: JD ACAD.ctb LTScale: 1.0000 LwDefault: 0.010 Last Saved: 3/13/2018 10:31 AM Plotted On: 1/25/2019 3:02 PM
File: L:\09_PROJECTS\037_M&H\037-15-03 YIP Master Plan Update\13 - YIP ALP\02 SHEETS\RWY PP 5-23 Layout: SHEET16

DETROIT METRO • WILLOW RUN
WAYNE COUNTY AIRPORT AUTHORITY

ALP PREPARED BY:
JACOBSEN | DANIELS
Planning, Implementation, Operations & Management
Mead & Hunt

FAA'S APPROVAL OF THIS AIRPORT LAYOUT PLAN (ALP) REPRESENTS ACCEPTANCE OF THE GENERAL LOCATION OF FUTURE FACILITIES DEPICTED (SHEET I7144C04). DURING THE PRELIMINARY DESIGN PHASE, THE AIRPORT OWNER IS REQUIRED TO RESUBMIT FOR APPROVAL THE FINAL LOCATIONS, HEIGHTS, AND EXTERIOR FINISH OF STRUCTURES. FAA'S CONCERN IS OBSTRUCTIONS, IMPACT ON ELECTRONIC AIDS, OR ADVERSE EFFECTS ON CONTROLLER VIEW OF AIRCRAFT APPROACHES AND GROUND MOVEMENT AREAS WHICH COULD ADVERSELY AFFECT THE SAFETY, EFFICIENCY, OR UTILITY OF THE AIRPORT.

DATA SOURCES:

1. AIRPORT PROPERTY BOUNDARY AND EASEMENTS OBTAINED FROM WILLOW RUN AIRPORT DRAFT EXHIBIT A, DATED 11-30-2016.

NOTES:

1. SURVEY CONDUCTED ON 10/23/2014 BY GEOPRO CONSULTANTS, LLC.
2. SURVEY PERFORMED USING MICHIGAN STATE PLANE, SOUTH ZONE, INTERNATIONAL FEET, NAVD 88 (GEOID 2012A), AND NAD 83 (2011).

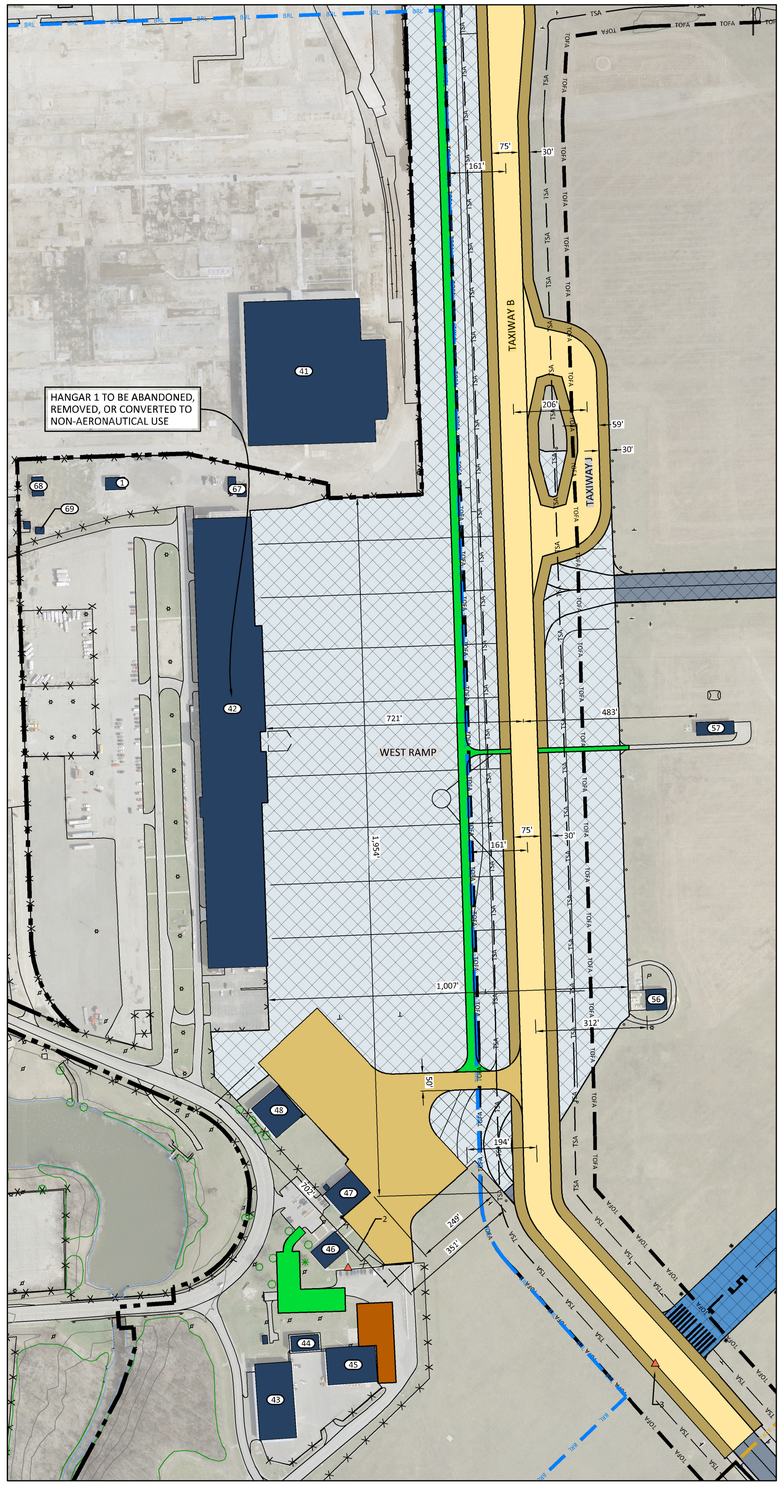
N
MAGNETIC DECLINATION
7°7' WEST
MAY 31, 2016

By	Date	Revisions

WILLOW RUN AIRPORT

5L-23R RUNWAY PLAN & PROFILE
5R-23L RUNWAY PLAN & PROFILE

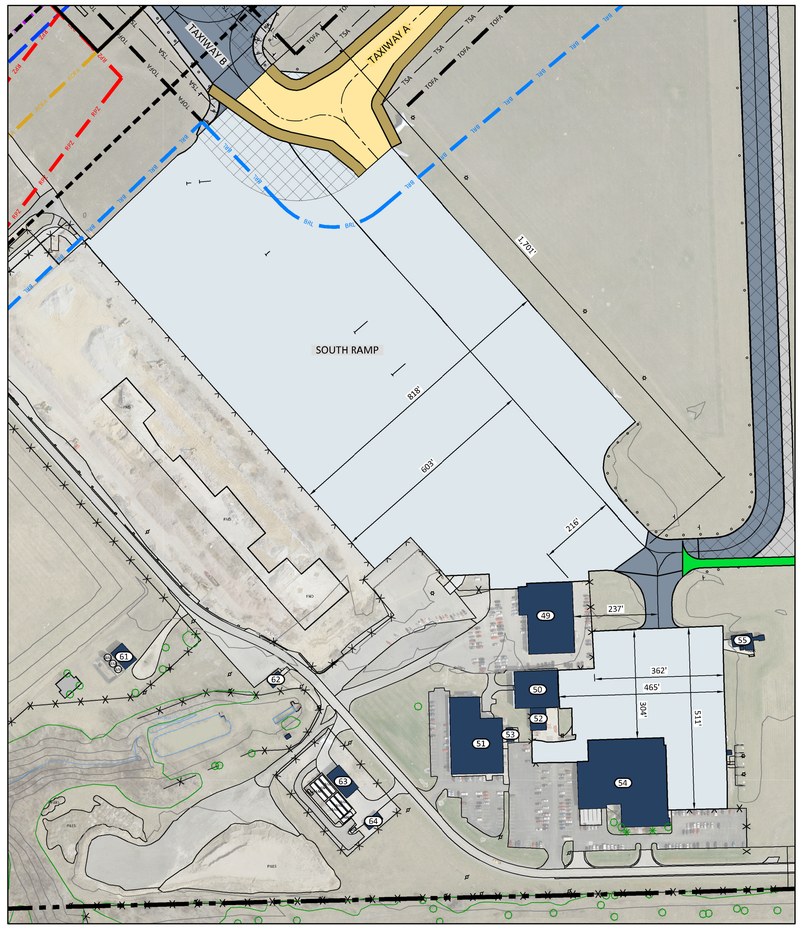
Drawn By: SRG
Date: 01-18-2019
Approved By: MCJ
Job No: 037-15-03



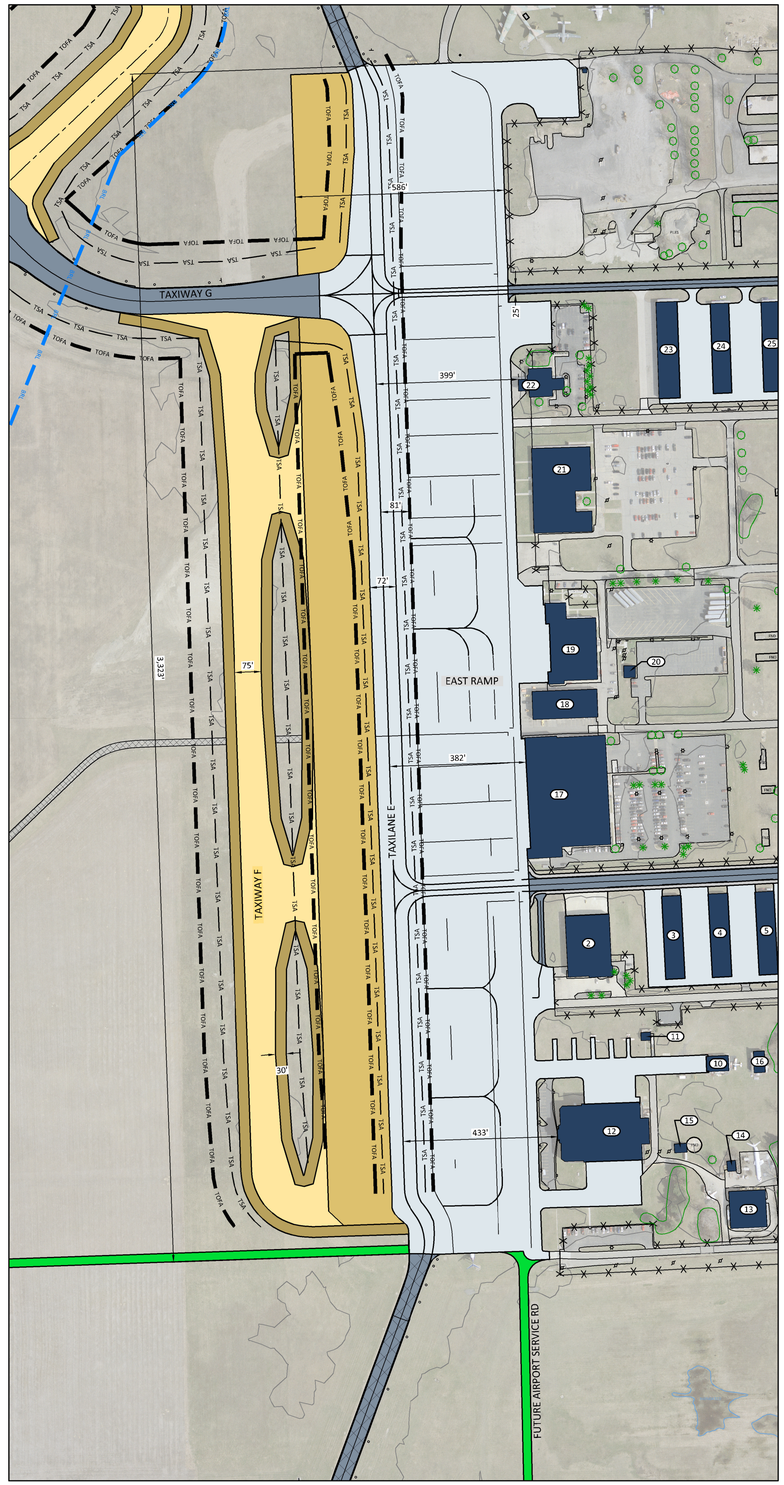
WEST RAMP

LEGEND

- AIRPORT BOUNDARY
- EXISTING GROUND CONTOUR (95MSL)
- EXISTING EDGE OF WATER
- EXISTING TREE LINE
- EXISTING FENCE
- EXISTING BUILDING
- EXISTING RUNWAY
- EXISTING TAXIWAY
- EXISTING SHOULDER
- PAPI-4
- WINDSOCK
- NAVAID CRITICAL AREA
- FUTURE RUNWAY SAFETY AREA (RSA)
- FUTURE RUNWAY OBSTACLE FREE ZONE (OFZ)
- FUTURE RUNWAY PROTECTION ZONE (RPZ)
- FUTURE RUNWAY OBJECT FREE AREA (ROFA)
- FUTURE TAXIWAY OBJECT FREE AREA (OFA)
- FUTURE TAXIWAY SAFETY AREA (TSA)
- FUTURE SERVICE ROADWAY/PARKING
- FUTURE AIRPORT STRUCTURE
- FUTURE TAXIWAY PAVEMENT
- FUTURE APRON PAVEMENT
- FUTURE SHOULDER PAVEMENT
- FUTURE DEMOLITION
- SURVEY MONUMENT



SOUTH RAMP



EAST RAMP

DETROIT METRO • WILLOW RUN
WAYNE COUNTY AIRPORT AUTHORITY

ALP PREPARED BY:
JACOBSEN | DANIELS
Planning, Implementation, Operations & Management
Mead & Hunt

FAA'S APPROVAL OF THIS AIRPORT LAYOUT PLAN (ALP) REPRESENTS ACCEPTANCE OF THE GENERAL LOCATION OF FUTURE FACILITIES DEPICTED (SHEET I7144C04). DURING THE PRELIMINARY DESIGN PHASE, THE AIRPORT OWNER IS REQUIRED TO RESUBMIT FOR APPROVAL THE FINAL LOCATIONS, HEIGHTS, AND EXTERIOR FINISH OF STRUCTURES. FAA'S CONCERN IS OBSTRUCTIONS, MPACT ON ELECTRONIC AIDS, OR ADVERSE EFFECTS ON CONTROLLER VIEW OF AIRCRAFT APPROACHES AND GROUND MOVEMENT AREAS WHICH COULD ADVERSELY AFFECT THE SAFETY, EFFICIENCY, OR UTILITY OF THE AIRPORT.

DATA SOURCES:
1. AIRPORT PROPERTY BOUNDARY ANDEASEMENTS OBTAINED FRDM WILLOW RUN AIRPORT DRAFT EXHIBIT A, DATED 11-30-2016.

NOTES:
1. SEE EXISTING AIRPORT LAYOUT DRAWING FOR THE EXISTING BUILDING TABLE AND THE SURVEY CONTROL POINTS TABLE.

N
MAGNETIC DECLINATION 7°7' WEST MAY 31, 2016

By	Date	Revisions

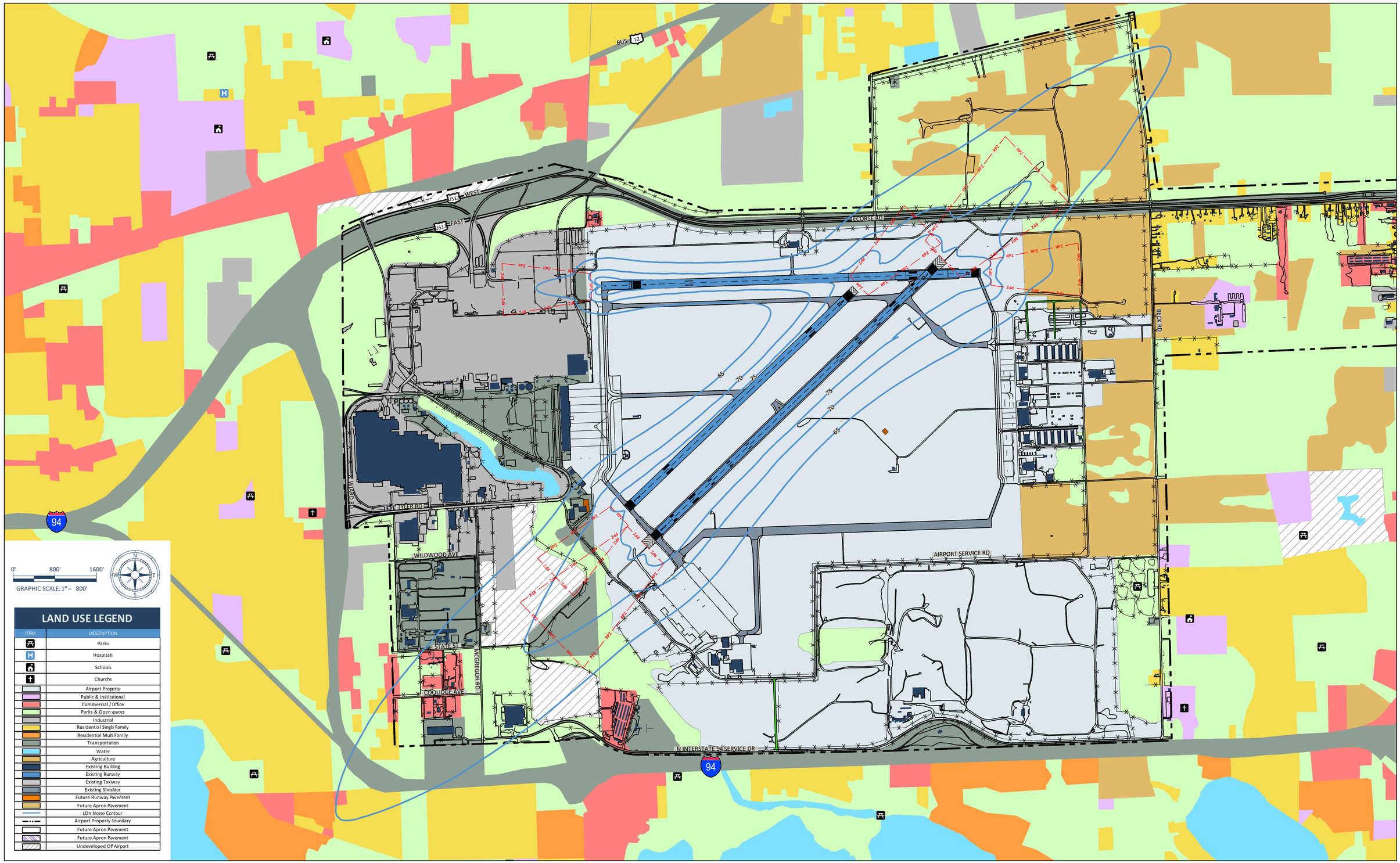
WILLOW RUN AIRPORT

TERMINAL AREA PLAN

17 of 19

Drawn By: SRG
Approved By: MCJ
Date: 01-18-2019
Job No: 037-15-03

Colorstable: JD ACAD.ctb LTScale: 1.0000 LwDefault: 0.010 Last Saved: 3/12/2018 3:33 PM Plotted On: 1/31/2019 1:30 PM
File: L:\06_PROJECTS\037-15-03 YIP Airport Pavt. Update\13_YIP ALP\CAD SHEETS\TERMINAL AREA PLAN.dwg Layout: SHEET17



LAND USE LEGEND

ITEM	DESCRIPTION
	Parks
H	Hospitals
	Schools
	Churchs
	Airport Property
	Public & Institutional
	Commercial / Office
	Parks & Open spaces
	Industrial
	Residential Singh Family
	Residential Multi Family
	Transportation
	Water
	Agriculture
	Existing Building
	Existing Runway
	Existing Taxiway
	Existing Shoulder
	Future Runway Pavement
	Future Apron Pavement
	LDn Noise Costour
	Airport Property Boundary
	Future Apron Pavement
	Future Apron Pavement
	Undeveloped Of Airport

DETROIT METRO • WILLOW RUN
WAYNE COUNTY AIRPORT AUTHORITY

ALP PREPARED BY:
JACOBSEN | DANIELS
Planning, Implementation, Operations & Management
Mead & Hunt

FAA'S APPROVAL OF THIS AIRPORT LAYOUT PLAN (ALP) REPRESENTS ACCEPTANCE OF THE GENERAL LOCATION OF FUTURE FACILITIES DEPICTED (SHEET I7144C04). DURING THE PRELIMINARY DESIGN PHASE, THE AIRPORT OWNER IS REQUIRED TO RESUBMIT FOR APPROVAL THE FINAL LOCATIONS, HEIGHTS, AND EXTERIOR FINISH OF STRUCTURES. FAA'S CONCERN IS OBSTRUCTIONS, IMPACT ON ELECTRONIC AIDS, OR ADVERSE EFFECTS ON CONTROLLER VIEW OF AIRCRAFT APPROACHES AND GROUND MOVEMENT AREAS WHICH COULD ADVERSELY AFFECT THE SAFETY, EFFICIENCY, OR UTILITY OF THE AIRPORT.

DATA SOURCES:

NOTES:

N
MAGNETIC DECLINATION 7°7' WEST MAY 31, 2016

By	Date	Revisions

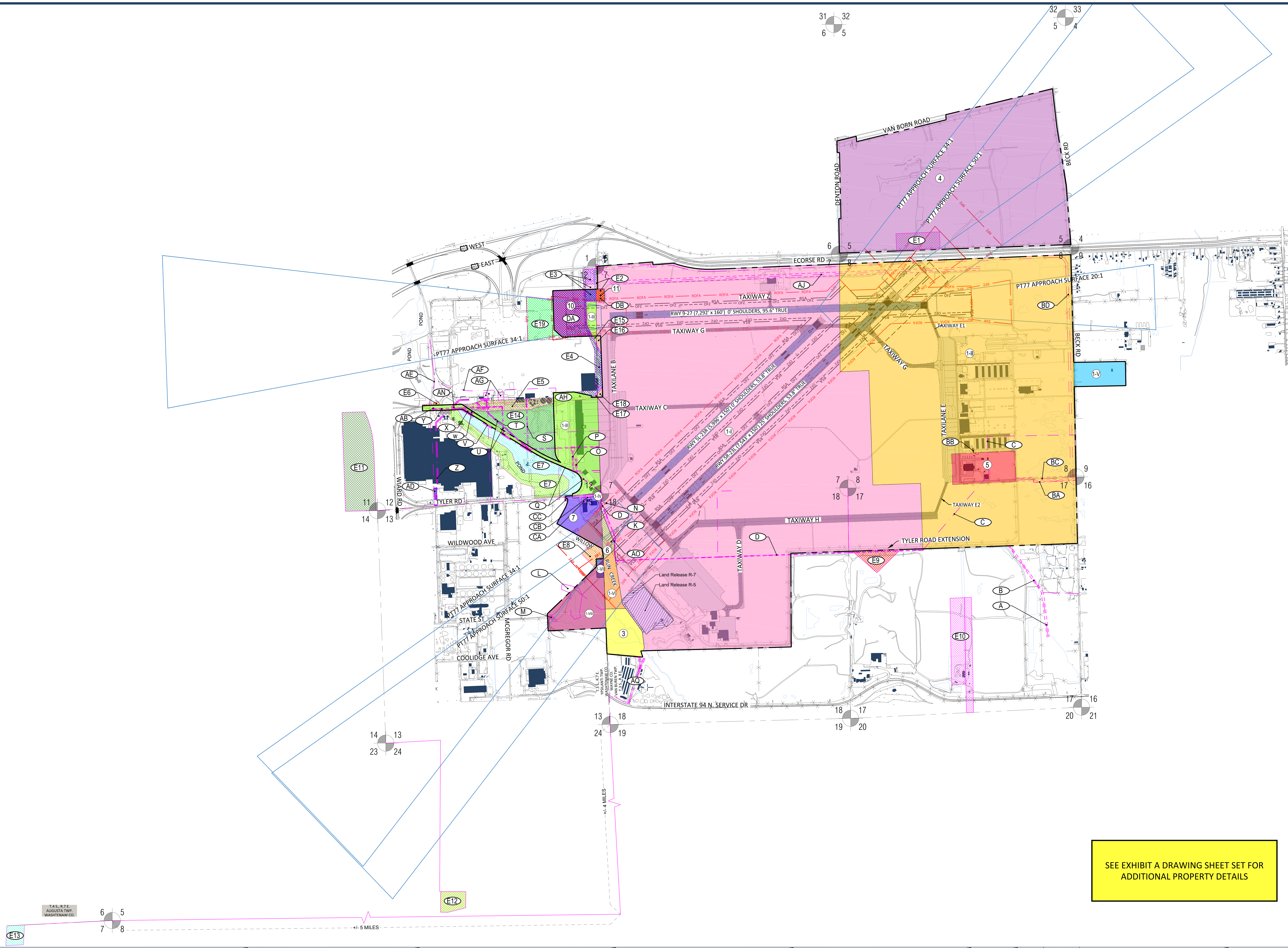
WILLOW RUN AIRPORT

LAND USE PLAN

18 of 19

Drawn By: ST Date: 01-18-2019
Approved By: MCJ Job No: 037-15-03

Colorstable: JD ACAD.ctb LTScale: 1.0000 LwDefault: 0.010 Last Saved: 1/25/2019 1:40 PM Plotted On: 1/28/2019 10:50 AM
File: L:\09_PROJECTS\037-15-03 Master Plan Update\10_ALP\ACAD\SHEETS\LAND USE Layout SHEET.dwg



GRAPHIC SCALE:

1 Inch = 1000 Feet

0 500 1000 2000

MAG. DEC.

SEE EXHIBIT A DRAWING SHEET SET FOR ADDITIONAL PROPERTY DETAILS

LEGEND

EXISTING	
	ROAD
	ROAD RIGHT-OF-WAY (R.O.W.)
	EXISTING RUNWAY, TAXIWAY, PARKING
RPZ	RUNWAY PROTECTION ZONE
RSA	RUNWAY SAFETY AREA
ROFA	RUNWAY OBJECT FREE AREA
	AIRPORT PROPERTY LINE
	PROPERTY PARCEL
	SECTION LINE
(1)	FEE TITLE PROPERTY
(E1)	AVIGATION EASEMENT
(A)	EASEMENT INTEREST
4 1 / 3 2	SECTION CORNERS

DETROIT METRO • WILLOW RUN
WAYNE COUNTY AIRPORT AUTHORITY

Mead & Hunt
2605 Port Lansing Road
Lansing, MI 48906
Phone: 517-321-8334
meadhunt.com

NOTES:

1. SURVEY CONDUCTED ON 10/23/2014 BY GEOPRO CONSULTANTS, LLC.
2. SURVEY PERFORMED USING MICHIGAN STATE PLANE, SOUTH ZONE, INTERNATIONAL FEET, NAVD 88 (GEOID 2012A), AND NAD 83 (2011)

By	Date	Revisions

WILLOW RUN AIRPORT

EXHIBIT A PROPERTY MAP
(COMPLETE VIEW)

2 of 21

Drawn By: LSJ
Date: 01-09-2018
Approved By: SW
Job No: 141529.01

ALP 19 of 19

Colortable: JD ACAD.ctb LTScale: 1.0000 LwDefault: 0.010 Last Saved: 1/9/2018 3:05 PM Plotted On: 1/9/2018 3:12 PM
File: X:\29618000\141529.01\TECH\CAD\Exhibit A\DRAWINGS\2018-01-09 YIP Willow Exhibit A Layout: Exhibit A 2