

Flight Procedures Cover Page	Task Action: FLIGHT CHECK	Task Type: SID	Estimated Chart Date: 05/16/2024	APWS Task ID: 2EC551B35A294B53880C41E1F69D14C0	APWS Project ID: DF3B7F66C56B45E89F1E4BF7FD32855D
Procedure: BARII THREE (RNAV) SID		Enroute: YES	Specialist: Mccartney, Michael		Agreement Number:
Airport ID: KDTW			Airport City: DETROIT		State: MI
Facility ID:	Facility Type:	Flight Inspection Remark Type: New FC Slot			
<div>Procedure Comments: FULL AMENDMENT.</div> <div>PENDING AIRPORT DATA FOR KYIP. ACTIVE DATA FOR ALL OTHER AIRPORTS.</div> <div>WAIVERS (2): 1. TO NOT CHART IF ALTITUDE AT IF FOR RADAR VECTORS. 2. AFS-420 MEMORANDUM "WAIVER TO FAA ORDER 8260.58C PARAGRAPH 1-2-5.C.(3), MAXIMUM BANK ANGLE" DATED 01/31/2023.</div> <div>KYIP: RWY 27 CONTROLLING OBSTACLE 903 FT MSL TOWER (26-002998) LAT/LONG CHANGED FROM 421431.78N/0833411.47W TO 421431.80N/0833411.49W (MOVED 2.52 FT NORTHWEST); TAKEOFF MINIMUMS DID NOT CHANGE.</div> <div>KVLL: RWY 28 CONTROLLING OBSTACLES CHANGED FROM 940 FT MSL BLDG 423234.20N/0831235.50W (CLIMB GRADIENT), 1749 FT MSL TOWER 422858.00N/0831219.00W (CLIMB-TO ALTITUDE) TO 905 FT MSL BUILDING (26-003210) 423232.54N/0831234.07W; RETAINED CURRENT TAKEOFF MINIMUMS TO MATCH PUBLISHED ODP.</div> <div>KMTC: RWY 19 CLIMB GRADIENT INCREASED FROM 234 FT/NM TO 235 FT/NM. CONTROLLING OBSTACLE 1246 FT MSL TOWER (26-001410) LAT/LONG CHANGED FROM 423315.00N/0825315.00W TO 423312.00N/0825315.00W (MOVED 303.71 FT SOUTH). OBSTACLE ACCURACY INCREASED FROM 5D TO 4D.</div> <div>CANCELS NOTAMS (3): FDC 2/1544, 2/1547, 3/2854.</div> <div>CONTACT: ERIC SUSKI, AJV-A431, MANAGER, (405) 954-7331.</div> <div><div>Digitally signed by <b>ERIC N SUSKI</b> Jan 26, 2024</div><div>QUALITY 20 CHECKED</div><div>QUALITY 41 CHECKED</div></div>					

<b>FIPC DME/DME FORM</b>							
<b>PROCEDURE:</b> Barii THREE (RNAV) DEPARTURE			<b>AIRPORT NAME:</b> DETROIT METRO WAYNE COUNTY		<b>AIRPORT ID:</b> KDTW	<b>SPECIAL CONTROL NO:</b> BG-01-218-24	
<b>FAC ID:</b> Barii3		<b>CITY:</b> DETROIT			<b>ST:</b> MI	<b>ORIG CHART DATE:</b> 05/16/2024	
<b>DFL TYPE:</b> PROC/D	<b>THIRD PARTY:</b> <input type="checkbox"/> YES	<b>EST. TIME ON SITE:</b> 1.0	<b>REIMB. NUMBER:</b>		<b>PTS TASK ID:</b> 2EC551B35A294B53880C41E1F69D14C0		
<b>PREFLIGHT NOTES</b>							
<b>REVIEWER:</b> scott wiebe					<b>DATE:</b> 03/07/2024		
<b>COMMENTS:</b>					<b>CHECK ONE:</b>		
					<input checked="" type="checkbox"/> FLT CK REQ <input type="checkbox"/> NFCR <input type="checkbox"/> REJECT		
							YES
					<b>CPV COMPLETE?</b>		X
<b>PROCEDURE RESULTS</b>							
<b>INSPECTION DATE:</b> 03/07/2024		<b>CREW #:</b> VN219	<b>N #:</b> N69	<b>INSTRUMENT PROCEDURE STATUS:</b> <input checked="" type="checkbox"/> SAT <input type="checkbox"/> SAT W/CHANGES <input type="checkbox"/> UNSAT		<b>ARINC CODING:</b> <input type="checkbox"/> SAT <input type="checkbox"/> SAT/GOLD <input type="checkbox"/> UNSAT	
<b>FLIGHT INSPECTOR SIGNATURE:</b> scott wiebe @ 03/07/2024 18:29			<b>PRINTED NAME:</b> WIEBE, GREGORY SCOTT			<b>NOTAM INITIATED?</b> <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
<b>FLIGHT INSPECTOR REMARKS:</b> Procedure Satisfactory for GNSS operations, DME/DME awaiting approval by the applicable AJV Operations Support Group.							
<b>DME/DME STATUS:</b> <input checked="" type="checkbox"/> SAT <input type="checkbox"/> UNSAT		<b>SPECIALIST SIGNATURE:</b> steven s-ctr rager @ 03/18/2024 13:26			<b>PRINTED NAME:</b> Steven Rager		
<b>SPECIALIST REMARKS:</b> Procedure SAT for DME/DME/IRU NAV. All DME ESV's for legs flown recorded by Inspection Aircraft all other ESV's certified by TARGETS.							
<b>IN-FLIGHT OBSTACLE REPORT</b>							
<b>OBSTRUCTION ID #:</b>	<b>COORDINATES OR LOCATION:</b>		<b>GNSS ALTITUDE (MSL):</b>		<b>BAROMETRIC ALTITUDE (MSL):</b>		<b>HEIGHT ABOVE GROUND LEVEL:</b>

<b>FIPC DME/DME FORM</b>								
<b>PROCEDURE:</b> Barii THREE (RNAV) DEPARTURE			<b>AIRPORT NAME:</b> DETROIT METRO WAYNE COUNTY		<b>AIRPORT ID:</b> KDTW	<b>SPECIAL CONTROL NO:</b> BG-01-218-24		
<b>FAC ID:</b> Barii3		<b>CITY:</b> DETROIT			<b>ST:</b> MI	<b>ORIG CHART DATE:</b> 05/16/2024		
<b>DFL TYPE:</b> PROC/D	<b>THIRD PARTY:</b> <input type="checkbox"/> YES	<b>EST. TIME ON SITE:</b> 1.0	<b>REIMB. NUMBER:</b>		<b>PTS TASK ID:</b> 2EC551B35A294B53880C41E1F69D14C0			
<b>PREFLIGHT NOTES</b>								
<b>REVIEWER:</b> scott wiebe					<b>DATE:</b> 03/07/2024			
<b>COMMENTS:</b>					<b>CHECK ONE:</b> <input checked="" type="checkbox"/> FLT CK REQ <input type="checkbox"/> NFCR <input type="checkbox"/> REJECT			
							<b>YES</b>	<b>NO</b>
					<b>CPV COMPLETE?</b>		<b>X</b>	
<b>PROCEDURE RESULTS</b>								
<b>INSPECTION DATE:</b> 03/07/2024		<b>CREW #:</b> VN219	<b>N #:</b> N69	<b>INSTRUMENT PROCEDURE STATUS:</b> <input checked="" type="checkbox"/> SAT <input type="checkbox"/> SAT W/CHANGES <input type="checkbox"/> UNSAT		<b>ARINC CODING:</b> <input type="checkbox"/> SAT <input type="checkbox"/> SAT/GOLD <input type="checkbox"/> UNSAT		
<b>FLIGHT INSPECTOR SIGNATURE:</b> scott wiebe @ 03/07/2024 18:29			<b>PRINTED NAME:</b> WIEBE, GREGORY SCOTT			<b>NOTAM INITIATED?</b> <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		
<b>FLIGHT INSPECTOR REMARKS:</b> Procedure Satisfactory for GNSS operations, DME/DME awaiting approval by the applicable AJV Operations Support Group.								
<b>DME/DME STATUS:</b> <input type="checkbox"/> SAT <input type="checkbox"/> UNSAT		<b>SPECIALIST SIGNATURE:</b>			<b>PRINTED NAME:</b>			
<b>SPECIALIST REMARKS:</b>								
<b>IN-FLIGHT OBSTACLE REPORT</b>								
<b>OBSTRUCTION ID #:</b>	<b>COORDINATES OR LOCATION:</b>		<b>GNSS ALTITUDE (MSL):</b>		<b>BAROMETRIC ALTITUDE (MSL):</b>		<b>HEIGHT ABOVE GROUND LEVEL:</b>	

**1. FLIGHT PROCEDURE IDENTIFICATION:**

**Detroit, MI (KDTW)  
BARII (RNAV) SID**

**2. WAIVER REQUIRED AND APPLICABLE STANDARD:**

Waiver required to not chart IF altitude at the IF for radar vectors (RV). Order 8260.46J Appendix E, Section 1, para 2m(3). "Document the minimum crossing altitude at the IF on RNAV Radar departure procedures as follows: CHART: MINIMUM CROSSING ALTITUDE AT (RNAV IF)-(Altitude)."

**3. REASON FOR WAIVER (JUSTIFICATION FOR NONSTANDARD TREATMENT):**

Adding unnecessary altitudes at the "IF" on procedures when they are not needed creates unnecessary workload based on the type of climb clearance that is issued. If the altitude restriction at the "IF" is to be adhered to for aircraft departing from DETROIT METRO WAYNE COUNTY AIRPORT (DTW), then after the aircraft is airborne ATC must issue "CLIMB VIA SID EXCEPT MAINTAIN (altitude)". With this procedure, it's unnecessary to add an altitude restriction at HUUTZ as the aircraft will be issued an initial departure clearance containing an altitude "AS ASSIGNED BY ATC" and will be receiving radar vectors to the waypoint HUUTZ to join the procedure. When aircraft depart, ATC must ensure they are at or above the Minimum Vectoring Altitudes (MVA), therefore the aircraft is always operating in airspace at an altitude above any terrain obstacles.

Adding an unnecessary altitude at HUUTZ creates workload for pilots as it could create a climb gradient higher than 200 feet per NM depending on where ATC vectors the aircraft before clearing them to HUUTZ and it could increase communication between ATC and pilots who will be asking questions about the altitude restriction, which ties up the radios. It also adds pilot workload once airborne when ATC issues a higher altitude by stating "CLIMB AND MAINTAIN (altitude)". The use of "CLIMB AND MAINTAIN (altitude)" deletes any published altitude restrictions, therefore pilots will be heads down deleting the restriction from the FMC.

AFS has approved other procedures within the NAS provided an evaluation has been completed. In this case, the evaluation has been accomplished and is contained under number 4 below.

**4. EQUIVALENT LEVEL OF SAFETY PROVIDED:**

With a standard climb gradient of 200 ft/nm all surfaces are clear to IF (HUUTZ) which is 15.29 nm from the closest DER. The departure route description for all runways will provide instruction for the aircraft to conduct an uninterrupted climb to an altitude "AS ASSIGNED BY ATC" which is above the MVA from the airport to the IF.

ATC will ensure aircraft departing will cross the IF at or above 3000 ft MSL. An OCS with a starting elevation of 2000 ft (3000 MVA-1000 ROC) was evaluated for the route starting at HUUTZ and the surface was clear.

**5. ALTERNATIVE ACTIONS DEEMED NOT FEASIBLE:**

Modifying all runway SIDs to replace the radar vectors segment with RNAV OTG would be incompatible with procedure efficiency in a constrained airspace and cause environmental issues and delays.

**6. COORDINATION WITH USER ORGANIZATIONS (SPECIFY):**

Central Service Area PBN FAA and NATCA Leads  
ZOB ARTCC  
D21 TRACON  
Detroit Metro Tower

**7. SUBMITTED BY:**

DATE	OFFICE IDENTIFICATION	TITLE
11/28/23	AJV-A431	MANAGER

**SIGNATURE**

*Digitally signed by*  
**ERIC N SUSKI**  
Jan 26, 2024

**8. FLIGHT STANDARDS ACTIONS:**

☐ **APPROVED**   ☐ **DISAPPROVED**   ☐ **NOT REQUIRED**

**COMMENTS:**

**DATE**

**ROUTING SYMBOL**

**SIGNATURE**



# Federal Aviation Administration

---

## Memorandum

Date: January 31, 2023

To: Instrument Flight Procedure Service Providers  
Digitally signed by WADE  
EK TERRELL  
WADE EK TERRELL  
Date: 2023.01.31 09:21:16  
-06'00'

From: Wade E.K. Terrell, Manager, Flight Procedures and Airspace Group

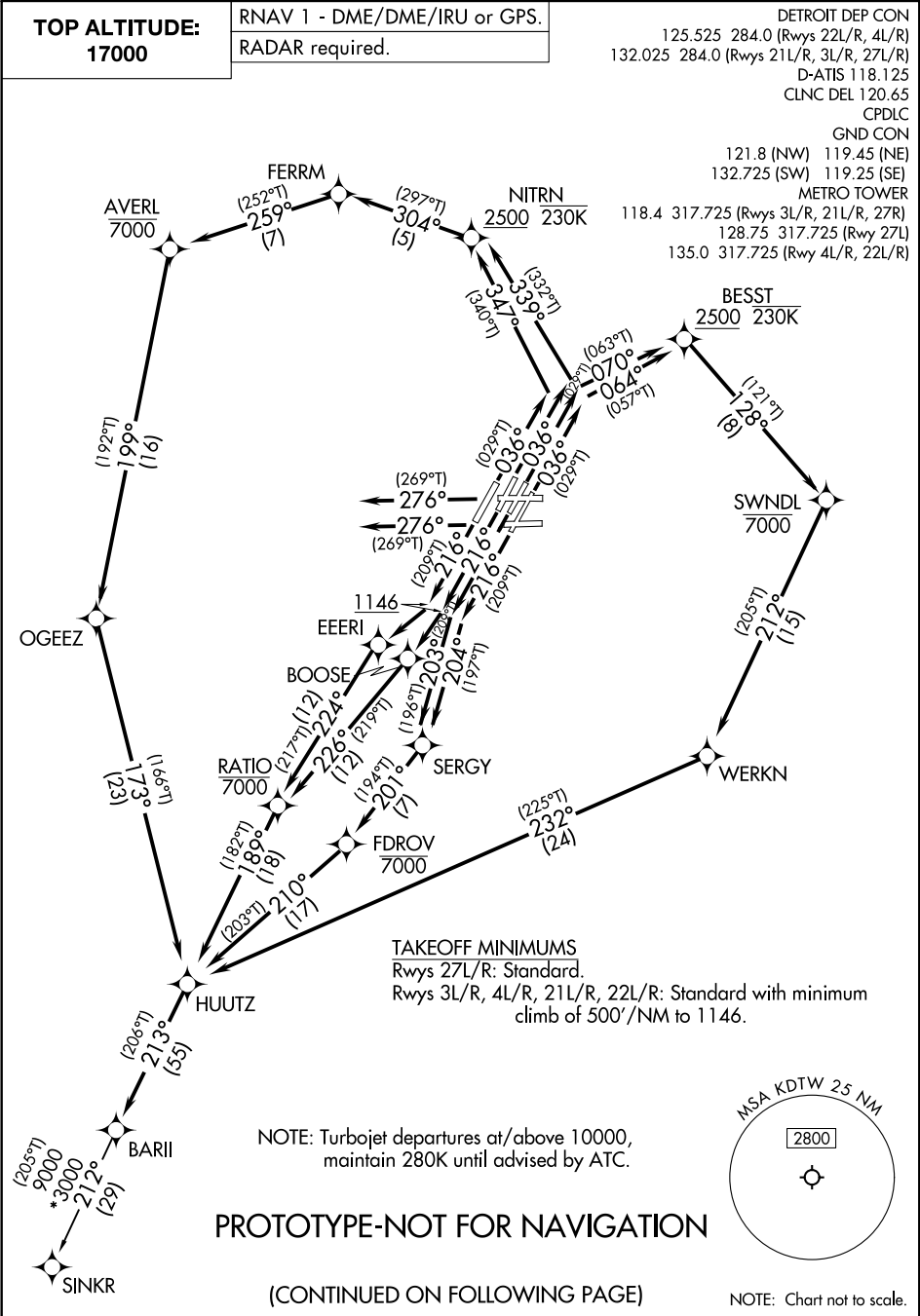
Subject: Waiver to FAA Order 8260.58C paragraph 1-2-5.c.(3), Maximum bank angle

---

**Background:** The Performance Based Navigation (PBN) Aviation Rulemaking Committee (PARC) made a recommendation that the FAA adjust the turn parameters used in PBN instrument flight procedure (IFP) design to reflect modern avionics values. The Flight Procedures and Airspace Group analyzed current avionics specifications with the help of several FAA offices and RTCA SC-227 to identify the new bank angles necessary for current IFP design. The Flight Procedures and Airspace Group then conducted an Operational Safety Review (OSR) for this amendment to bank angle criteria. The outcome of the OSR was that no new hazard is introduced into the National Aerospace System (NAS).

**Purpose:** This memorandum waives FAA Order 8260.58C, United States Standard for Performance Based Navigation (PBN) Instrument Procedure Design, paragraph 1-2-5.c.(3) and authorizes use of a maximum bank angle of 23 degrees above FL195 up to FL245 and a maximum bank angle of 16 degrees above FL245.

This waiver remains in effect until rescinded. No additional waiver request action is required. Please direct all inquiries to Thomas J. Nichols, Standards Section Manager, Flight Procedures and Airspace Group at 405-954-1171 or [thomas.j.nichols@faa.gov](mailto:thomas.j.nichols@faa.gov)



(BARI3.BARII) FIG

BARII THREE DEPARTURE (RNAV)

DETROIT, MICHIGAN

DETROIT METRO WAYNE COUNTY (DTW)



DEPARTURE ROUTE DESCRIPTION

SEE ADDITIONAL REQUIREMENTS ON AAUP

TAKEOFF RUNWAY 3L: Climb on heading 036° to intercept course 070° to cross BESST at or above 2500 and at or below 230K, then on track 128° to cross SWNDL at or below 7000, then on track 212° to WERKN, then on track 232° to HUUTZ, thence . . . .

TAKEOFF RUNWAY 3R: Climb on heading 036° to intercept course 064° to cross BESST at or above 2500 and at or below 230K, then on track 128° to cross SWNDL at or below 7000, then on track 212° to WERKN, then on track 232° to HUUTZ, thence . . . .

TAKEOFF RUNWAY 4L: Climb on heading 036° to intercept course 347° to cross NITRN at or above 2500 and at or below 230K, then on track 304° to FERRM, then on track 259° to cross AVERL at or below 7000, then on track 199° to OGEEZ, then on track 173° to HUUTZ, thence . . . .

TAKEOFF RUNWAY 4R: Climb on heading 036° to intercept course 339° to cross NITRN at or above 2500 and at or below 230K, then on track 304° to FERRM, then on track 259° to cross AVERL at or below 7000, then on track 199° to OGEEZ, then on track 173° to HUUTZ, thence . . . .

TAKEOFF RUNWAY 21L: Climb on heading 216° to intercept course 204° to SERGY, then on track 201° to cross FDROV at or below 7000, then on track 210° to HUUTZ, thence . . . .

TAKEOFF RUNWAY 21R: Climb on heading 216° to intercept course 203° to SERGY, then on track 201° to cross FDROV at or below 7000, then on track 210° to HUUTZ, thence . . . .

TAKEOFF RUNWAY 22L: Climb on heading 216° to 1146, then direct BOOSE, then on track 226° to cross RATIO at or below 7000, then on track 189° to HUUTZ, thence . . . .

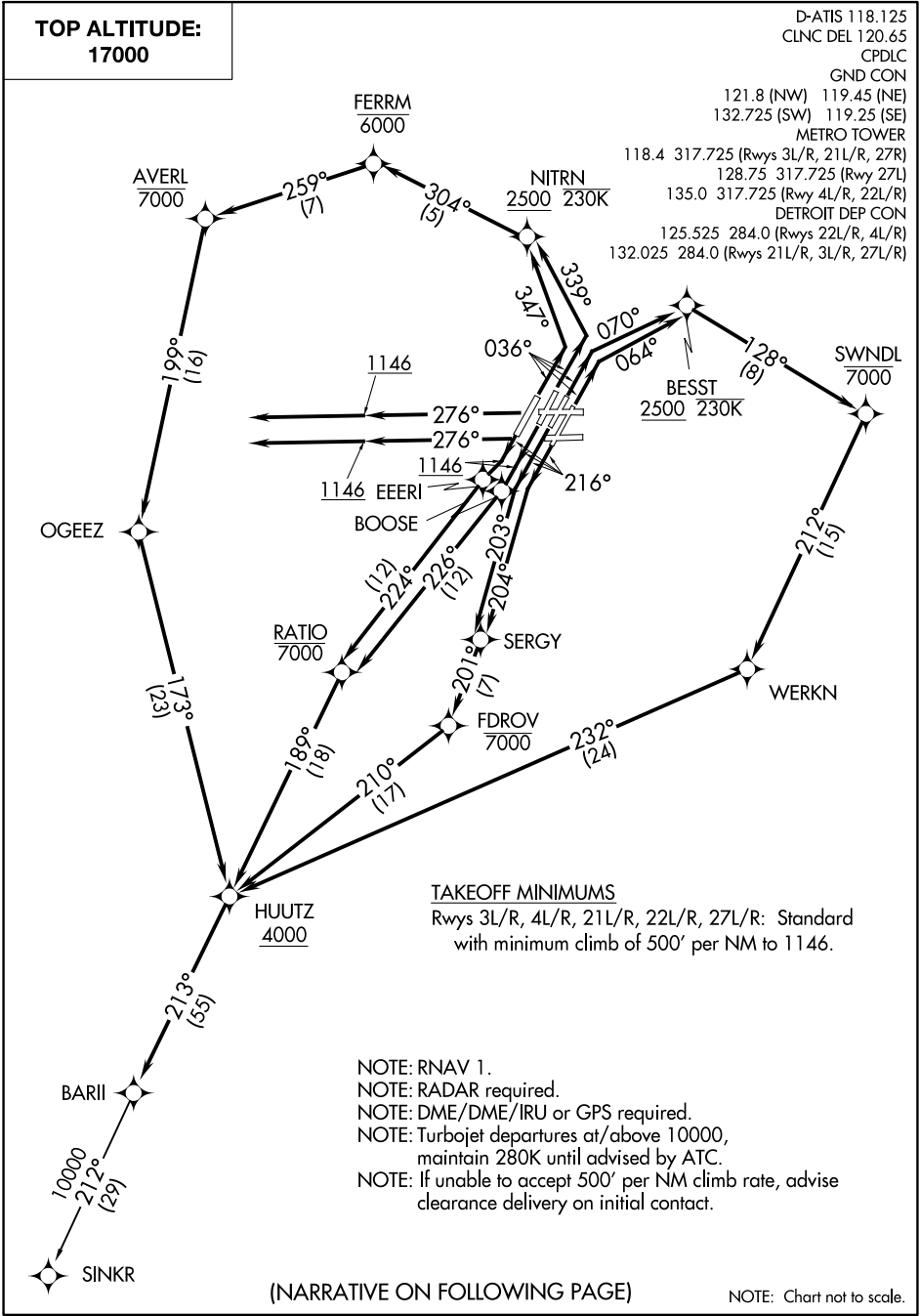
TAKEOFF RUNWAY 22R: Climb on heading 216° to 1146, then direct EEERI, then on track 224° to cross RATIO at or below 7000, then on track 189° to HUUTZ, thence . . . .

TAKEOFF RUNWAYS 27L/R: Climb on heading 276° or as assigned by ATC, for RADAR vectors to HUUTZ, thence . . . .

. . . . on track 213° to BARII, then on (transition). Maintain 17000, expect filed altitude 10 minutes after departure.

SINKR TRANSITION (BARI3.SINKER)

PROTOTYPE-NOT FOR NAVIGATION



EC-1, 05 OCT 2023 to 02 NOV 2023

EC-1, 05 OCT 2023 to 02 NOV 2023



DEPARTURE ROUTE DESCRIPTION

NOTE: See additional requirements in RNAV departure AAUP.

TAKEOFF RWY 3L: Climb on heading 036° to intercept course 070° to cross BESST at or above 2500 and at or below 230K, then on track 128° to cross SWNDL at or below 7000, then on track 212° to WERKN, then on track 232° to cross HUUTZ at or above 4000, thence....

TAKEOFF RWY 3R: Climb on heading 036° to intercept course 064° to cross BESST at or above 2500 and at or below 230K, then on track 128° to cross SWNDL at or below 7000, then on track 212° to WERKN, then on track 232° to cross HUUTZ at or above 4000, thence....

TAKEOFF RWY 4L: Climb on heading 036° to intercept course 347° to cross NITRN at or above 2500 and at or below 230K, then on track 304° to cross FERRM at or below 6000, then on track 259° to cross AVERL at or below 7000, then on track 199° to OGEEZ, then on track 173° to cross HUUTZ at or above 4000, thence....

TAKEOFF RWY 4R: Climb on heading 036° to intercept course 339° to cross NITRN at or above 2500 and at or below 230K, then on track 304° to cross FERRM at or below 6000, then on track 259° to cross AVERL at or below 7000, then on track 199° to OGEEZ, then on track 173° to cross HUUTZ at or above 4000, thence....

TAKEOFF RWY 21L: Climb on heading 216° to intercept course 204° to SERGY, then on track 201° to cross FDROV at or below 7000, then on track 210° to cross HUUTZ at or above 4000, thence....

TAKEOFF RWY 21R: Climb on heading 216° to intercept course 203° to SERGY, then on track 201° to cross FDROV at or below 7000, then on track 210° to cross HUUTZ at or above 4000, thence....

TAKEOFF RWY 22L: Climb on heading 216° to 1146, then direct BOOSE, then on track 226° to cross RATIO at or below 7000, then on track 189° to cross HUUTZ at or above 4000, thence....

TAKEOFF RWY 22R: Climb on heading 216° to 1146, then direct EEERI, then on track 224° to cross RATIO at or below 7000, then on track 189° to cross HUUTZ at or above 4000, thence....

TAKEOFF RWY 27L/R: Climb on heading 276° to 1146, then on heading 276° or as assigned for RADAR vectors to cross HUUTZ at or above 4000, thence....

....on track 213° to BARII, then on (transition). Maintain 17000 or as assigned by ATC, expect filed altitude 10 minutes after departure.

SINKR TRANSITION (BARII2.SINKR):

EC-1, 05 OCT 2023 to 02 NOV 2023

EC-1, 05 OCT 2023 to 02 NOV 2023

ATTENTION ALL USERS PAGE (AAUP)

SIMULTANEOUS RNAV DEPARTURES

The purpose of this briefing is to provide guidance, safe operating practices, and phraseology that will help ensure heightened awareness when conducting parallel RNAV departures at the Detroit Metro Wayne County Airport (DTW). Where applicable, pilots should comply with established company procedures for RNAV operations.

- 1. PREFLIGHT:** Expect clearance for RNAV Standard Instrument Departure (SID), if capable of terminal RNAV procedures. If unable to accept the assigned RNAV SID, advise Clearance Delivery on initial contact. Upon assignment of an RNAV SID, crosscheck the charted RNAV SID with the aircraft navigation system against the ATC clearance. Consider the following cross items:
  - Ensure correct departure runway is loaded
  - Ensure all transitions are loaded correctly
  - Ensure sequence of waypoints match the appropriate charts
  - Use the LEGS page to verify routing (for navigation systems with ROUTE and LEGS pages)
  - Ensure altitude set in the altitude window matches the TOP ALTITUDE of the SID (unless amended by ATC)
  - Do not modify or manually construct RNAV procedures
  - Advise ATC prior to takeoff if unable verify correct loading or if unable to comply with the SID
- 2. BEFORE TAKEOFF:** Ensure the departure runway assigned on taxi is depicted by the navigation system.
  - Verify all modifications, including runway changes, in the navigation system with the RNAV SID
  - Verify aircraft symbol relative to the runway symbol, lateral track, and depicted route agree with the ATC clearance (electronic navigation map displays)
- 3. LINE UP/TAKEOFF:** Expect a takeoff clearance that will include "RNAV to" the first waypoint on the SID, or a heading. If issued a heading, do not delete the SID from the navigation system.
  - Clearance: "Delta 123, RNAV to SAAMS, Runway 22L, Cleared for Takeoff"
  - Response: "Delta 123, RNAV to SAAMS, Runway 22L, Cleared for Takeoff"
  - Verify the correct runway and SID are loaded and the correct lateral navigation mode is available and ready for use after takeoff
  - If the takeoff clearance does not match the planned/loaded procedure, request an initial heading from tower or refuse the takeoff clearance until the discrepancy is resolved.
- 4. AFTER TAKEOFF:** Unless issued a heading, engage lateral navigation flight guidance as soon as practical and fly the departure precisely.
  - Parallel RNAV departures must not encroach on the airspace between parallel runway centerlines without specific ATC clearance
  - When possible, track the runway centerline until reaching the departure end of runway
  - Strict compliance with the lateral and vertical tracks and charted speed restrictions is imperative
  - Once established on the procedure, maintain route centerline, as depicted by onboard lateral navigation indicators and/or flight guidance
  - Manually intervene if necessary, to stay on track to avoid transgressing in the direction of a parallel runway, track, or aircraft
  - If unable to comply with the SID profile, either laterally or vertically, immediately notify ATC

(CONTINUED ON FOLLOWING PAGE)

### ATTENTION ALL USERS PAGE (AAUP)

(CONTINUED FROM PREVIOUS PAGE)

**5. SPECIFIC INFORMATION:** Runway assignments will be issued on initial contact with Ground Control and will be based on traffic conditions, runway closures, and other operational requirements.

For planning purposes, pilots can anticipate a runway assignment based upon the information below.

#### Runway Assignment for Dual Departure Operations

##### Departing Runways 22L/R, 21L/R

SNDRS, CCOBB, KAYLN, MIGGY, TRMML, ZETTR - Expect Runway 22L

HHOWE, PAVYL, LIDDS, BARII, CLVIN - Expect Runway 21R

##### Departing Runways 4L/R, 3L/R

SNDRS, CCOBB, KAYLN, MIGGY, TRMML, ZETTR - Expect Runway 04R

HHOWE, PAVYL, LIDDS, BARII, CLVIN - Expect Runway 03L

##### Departing Runways 27L/R (not depicted below)

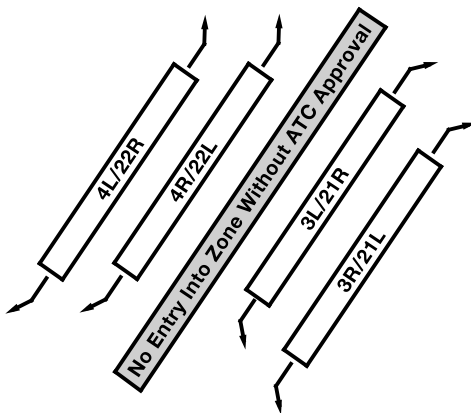
KAYLN, MIGGY, TRMML, ZETTR, HHOWE - Expect Runway 27R

CCOBB, SNDRS, BARII, CLVIN, LIDDS, PAVYL - Expect Runway 27L

#### DTW Dual RNAV Departures

Expect Rwy 22L or 4R

ZETTR  
TRMML  
MIGGY  
KAYLN  
CCOBB  
SNDRS \*



HHOWE  
PAVYL  
LIDDS  
CLVIN \*  
BARII \*

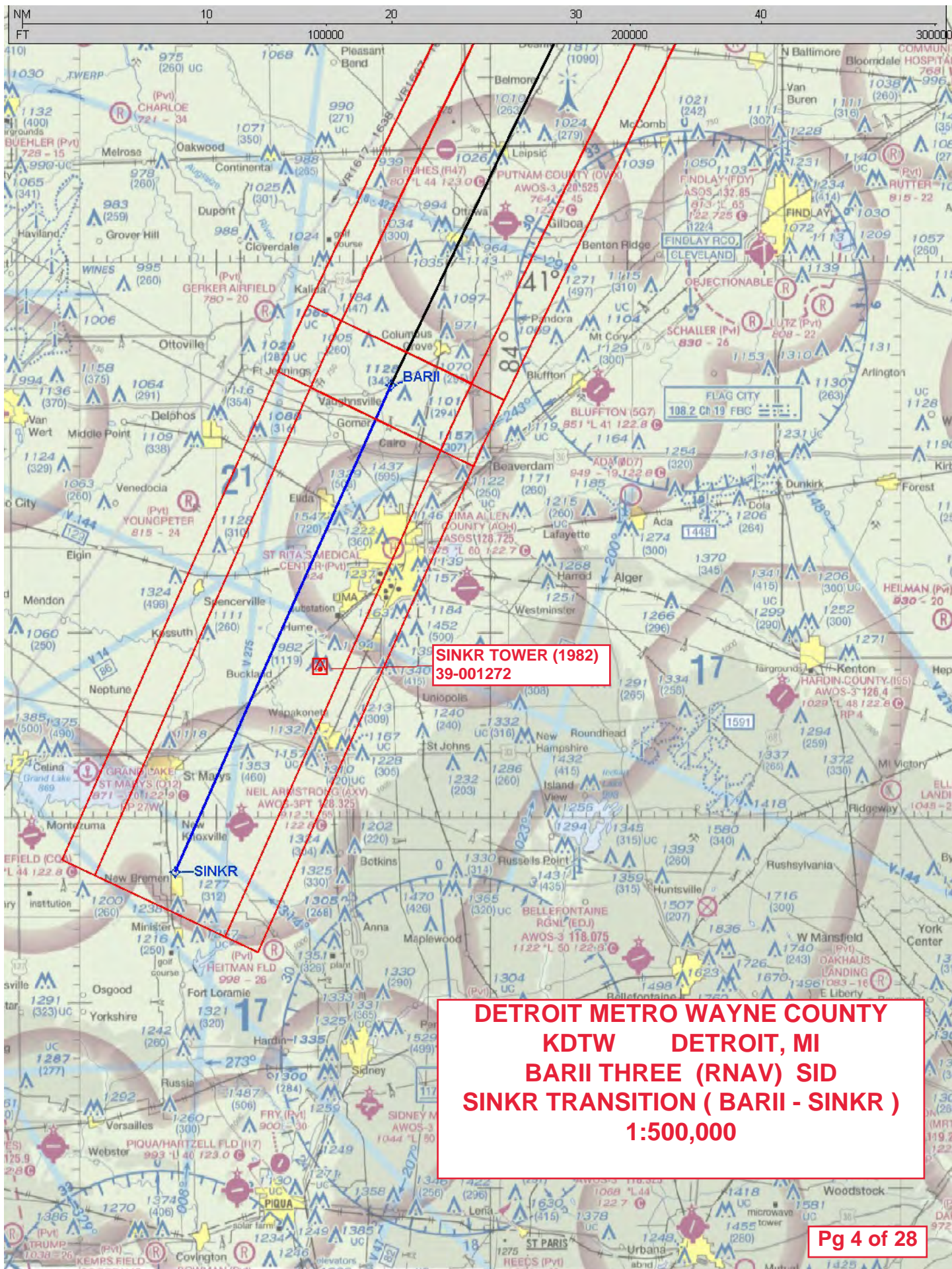
Expect Rwy 21R or 3L

\* Runway assignment may vary depending on traffic and runway closures

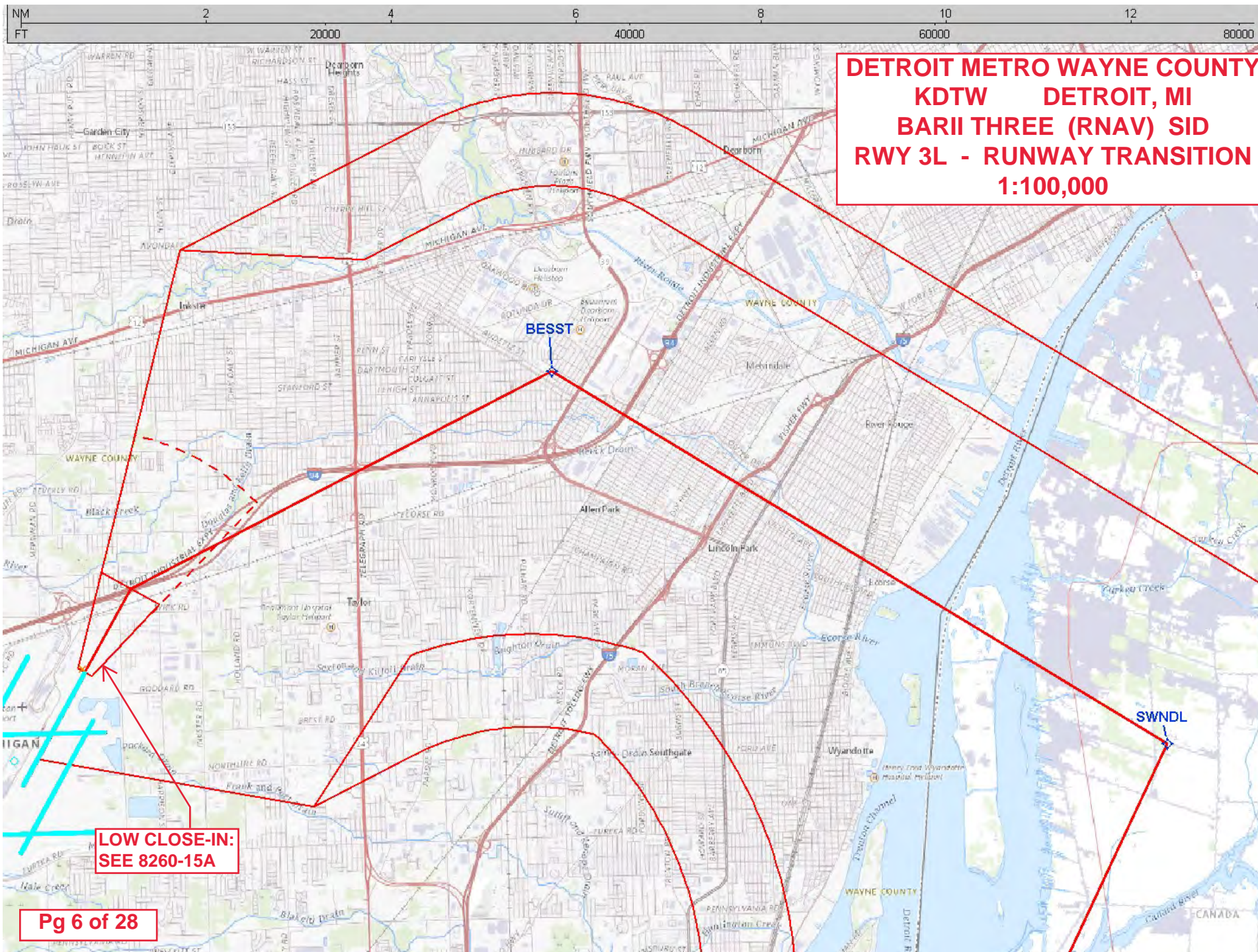


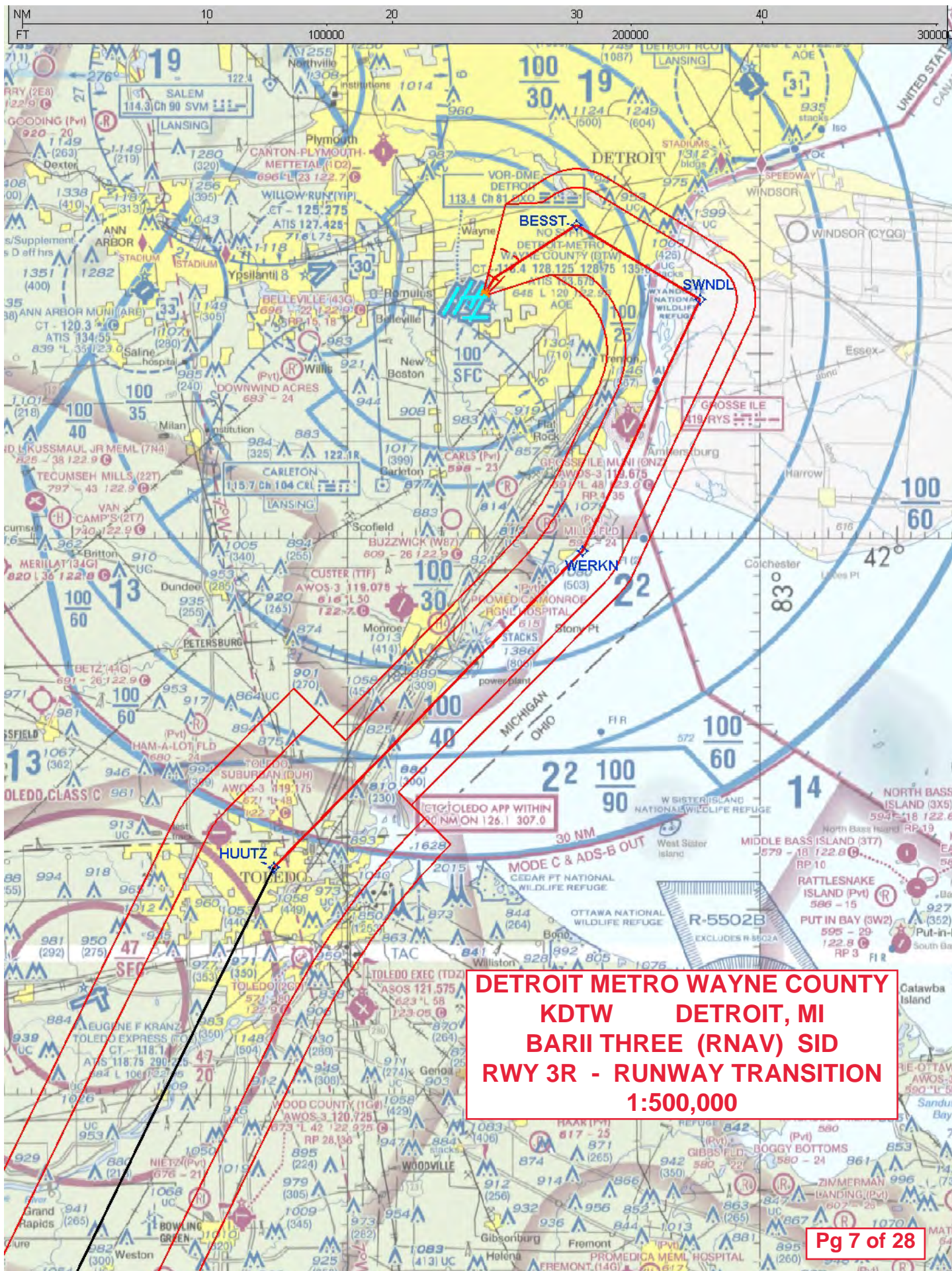


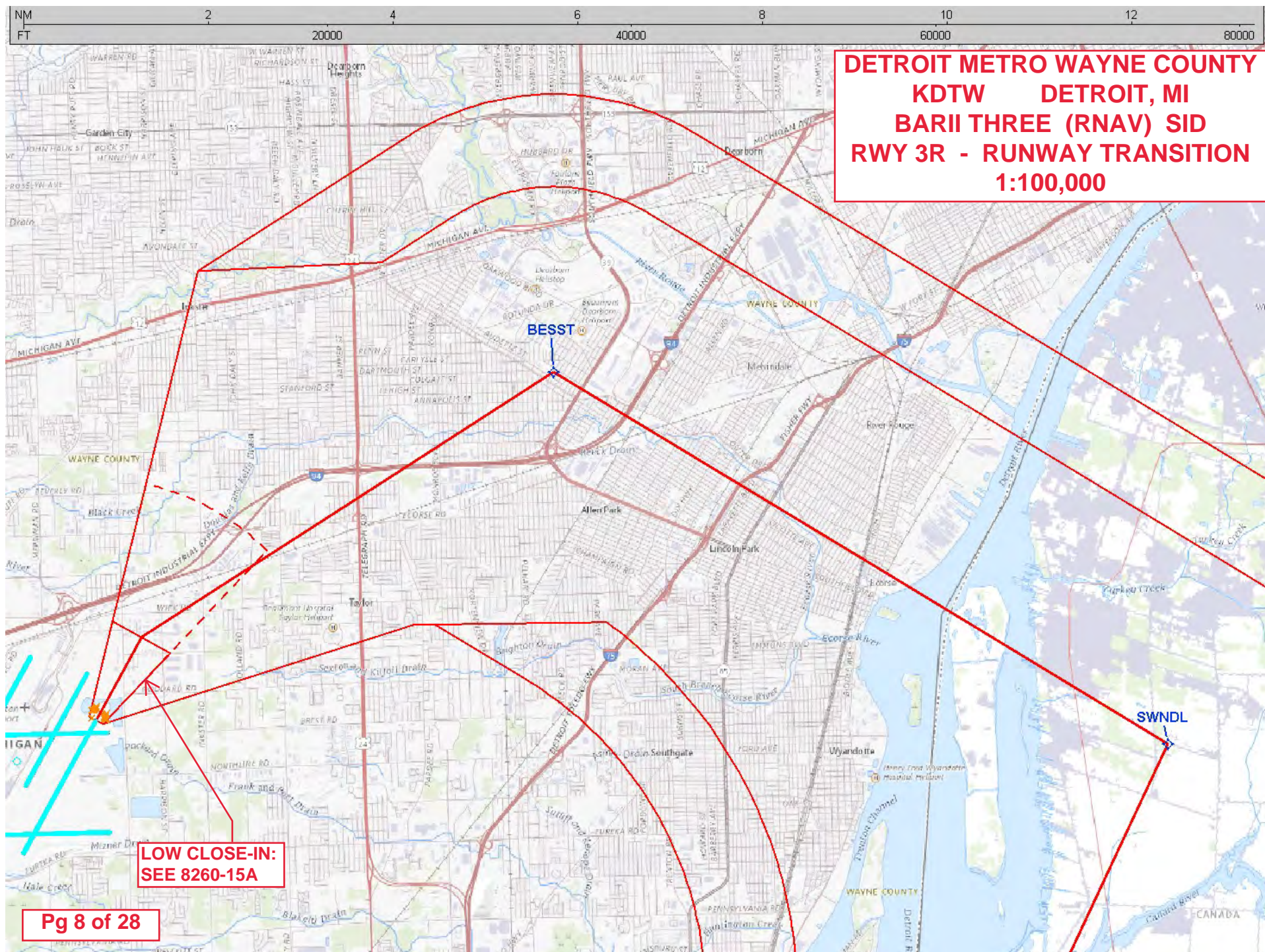






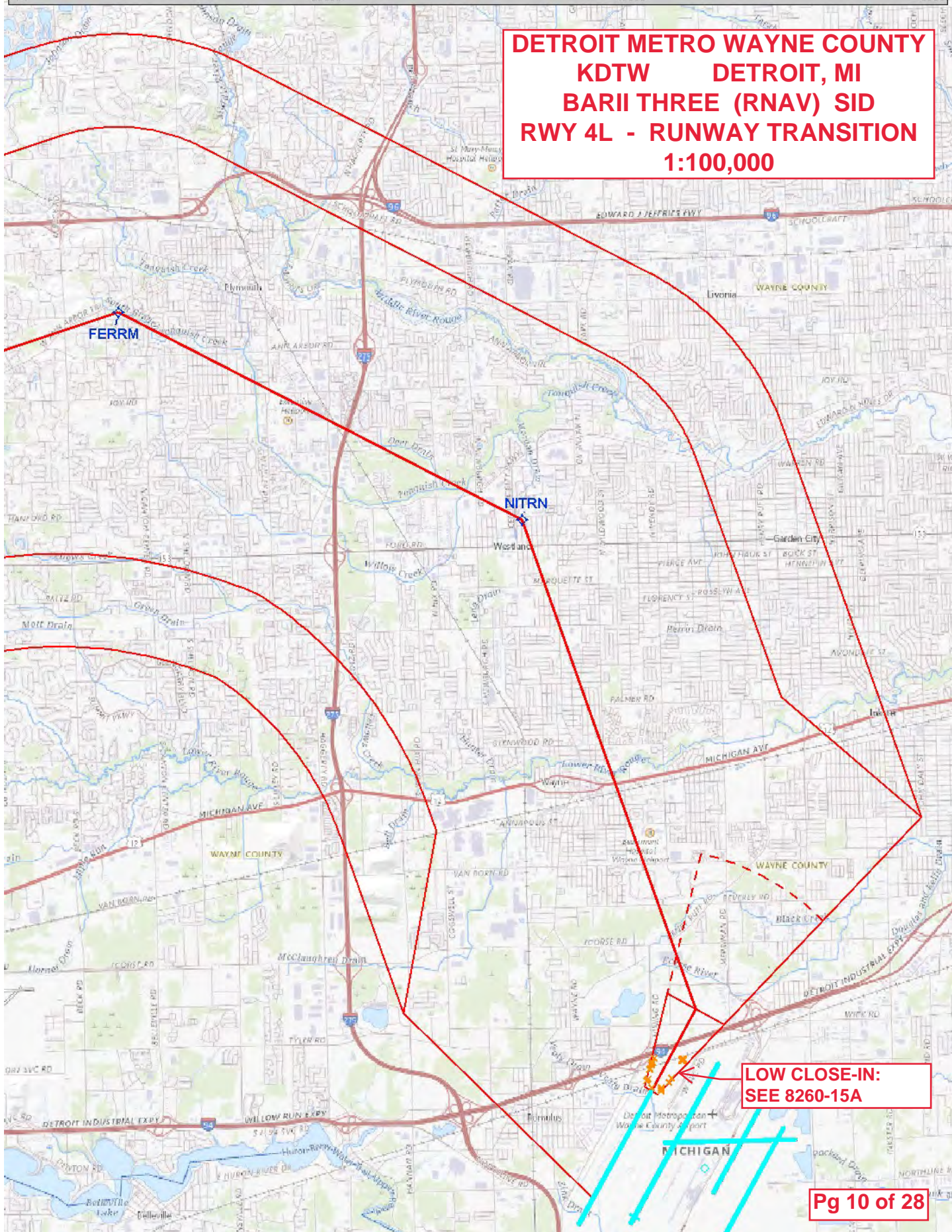








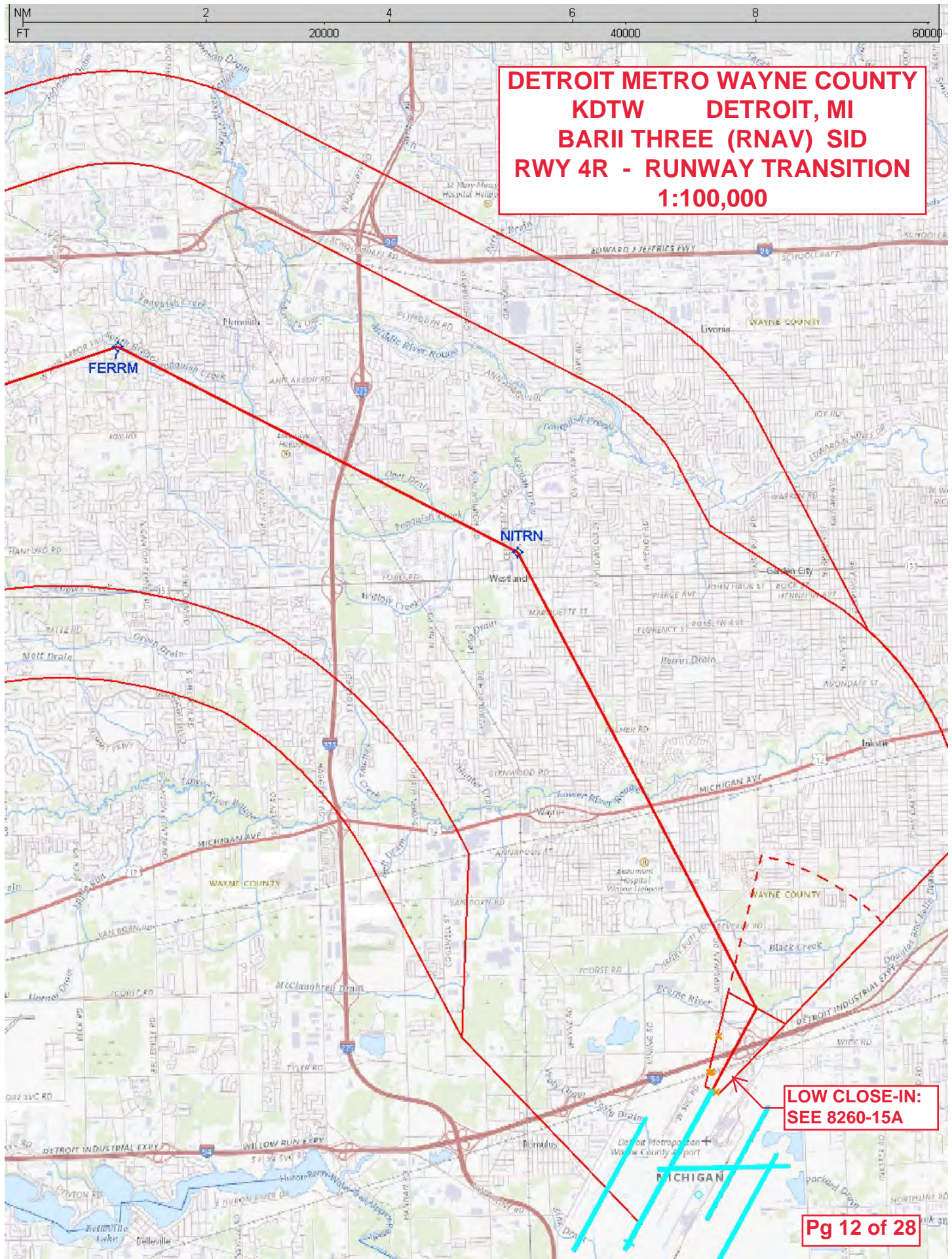
**DETROIT METRO WAYNE COUNTY  
KDTW DETROIT, MI  
BARI THREE (RNAV) SID  
RWY 4L - RUNWAY TRANSITION  
1:100,000**



**LOW CLOSE-IN:  
SEE 8260-15A**

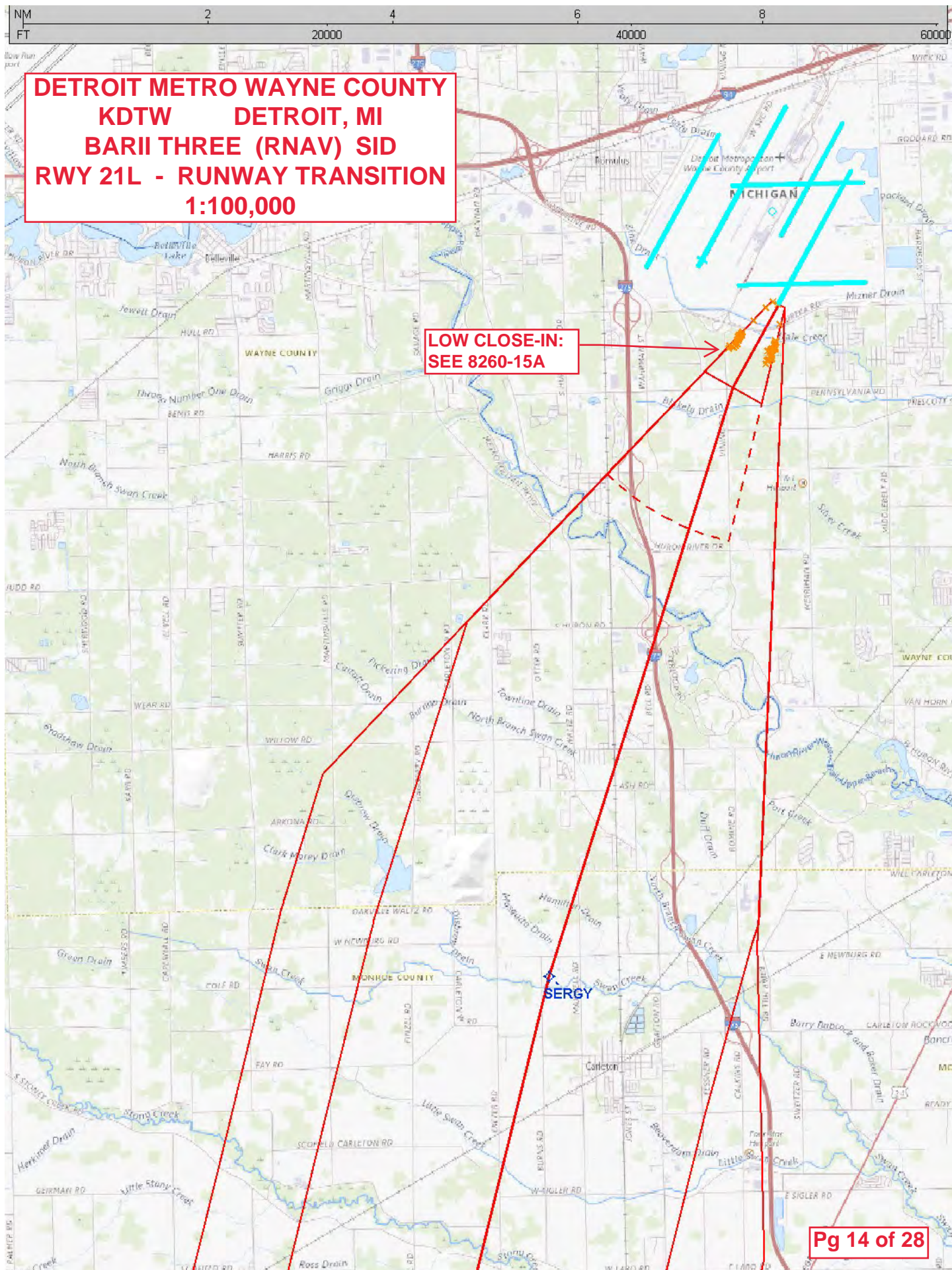


**DETROIT METRO WAYNE COUNTY  
KDTW DETROIT, MI  
BARI THREE (RNAV) SID  
RWY 4R - RUNWAY TRANSITION  
1:100,000**

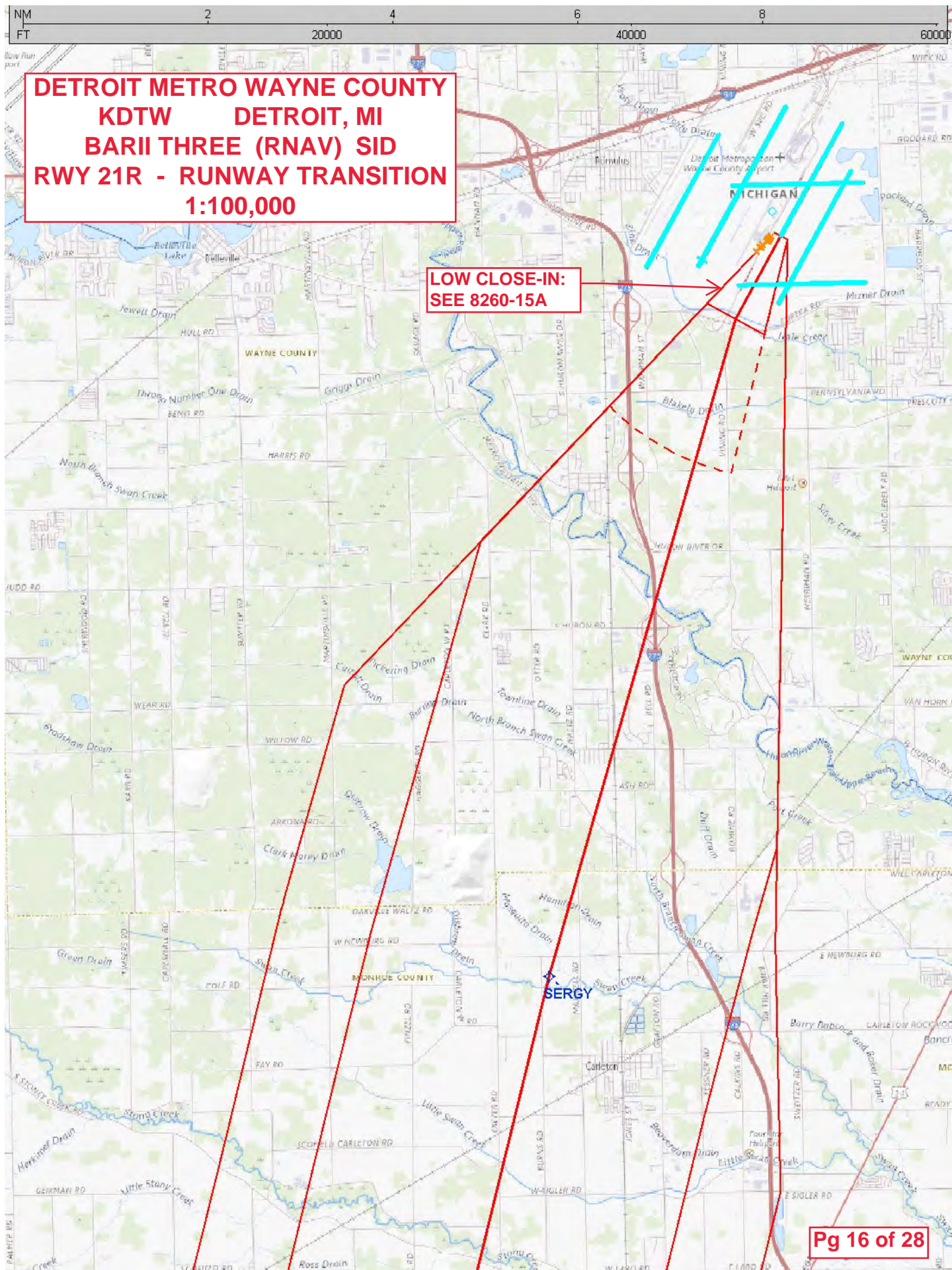


**LOW CLOSE-IN:  
SEE 8260-15A**

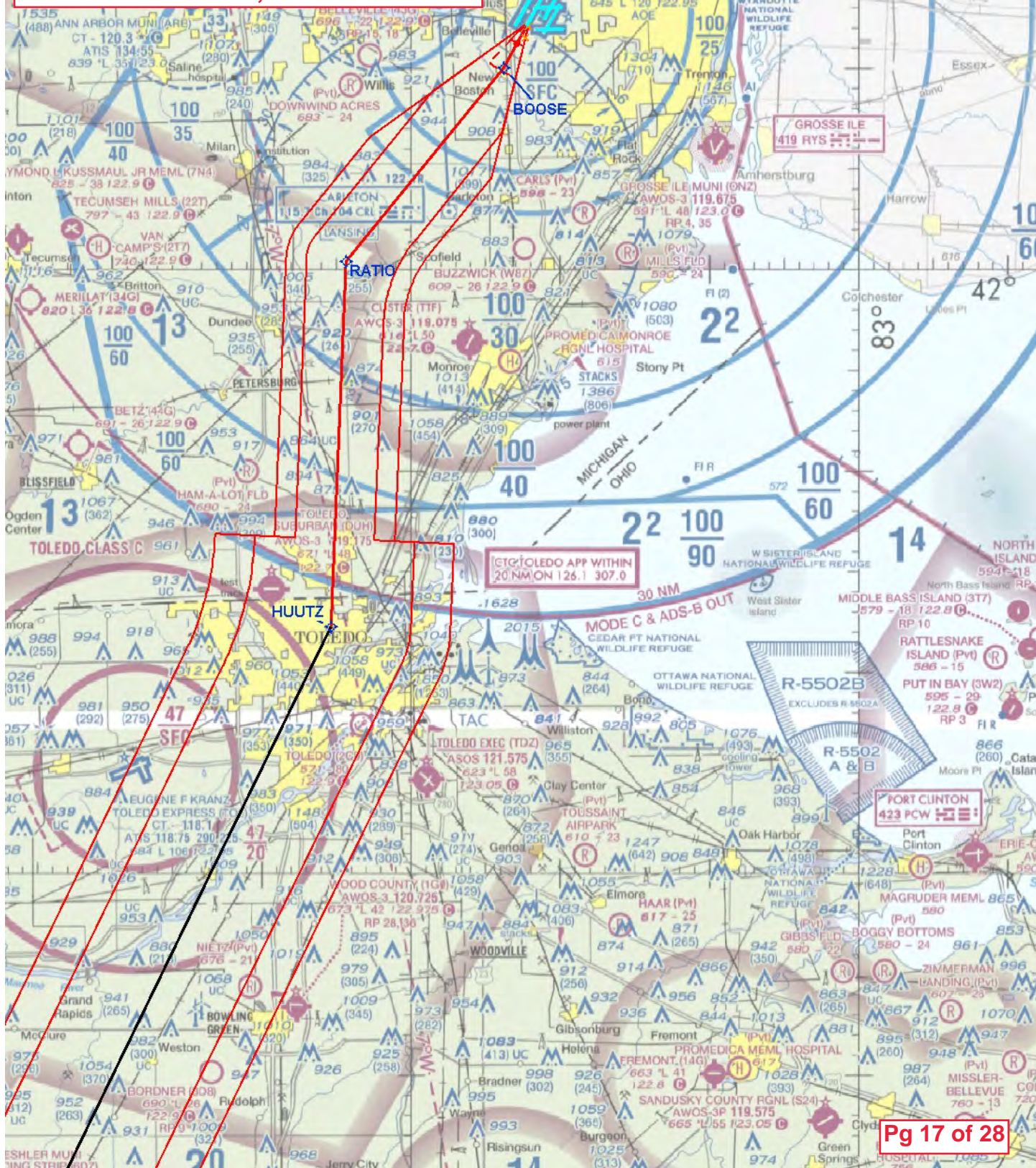


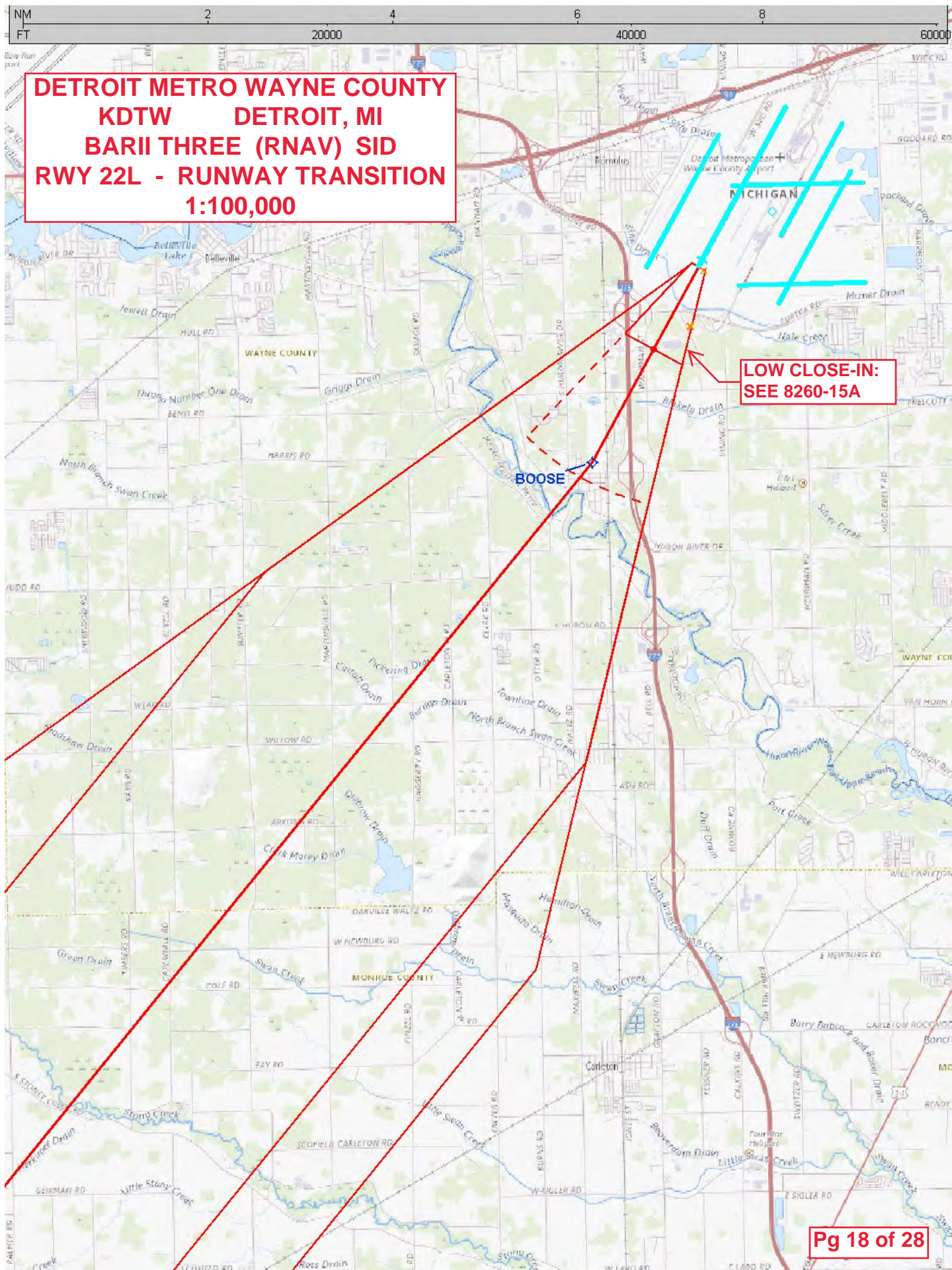




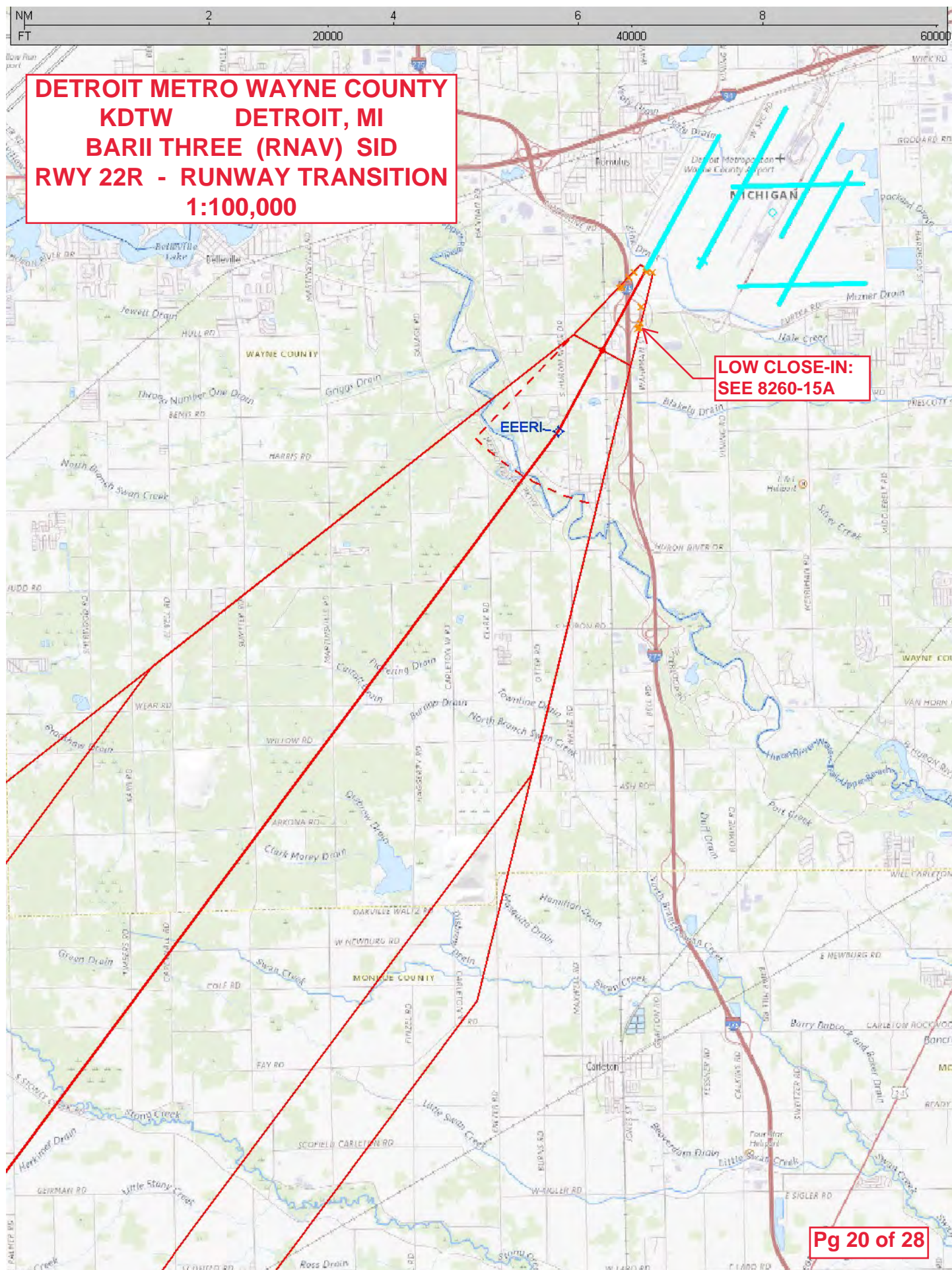


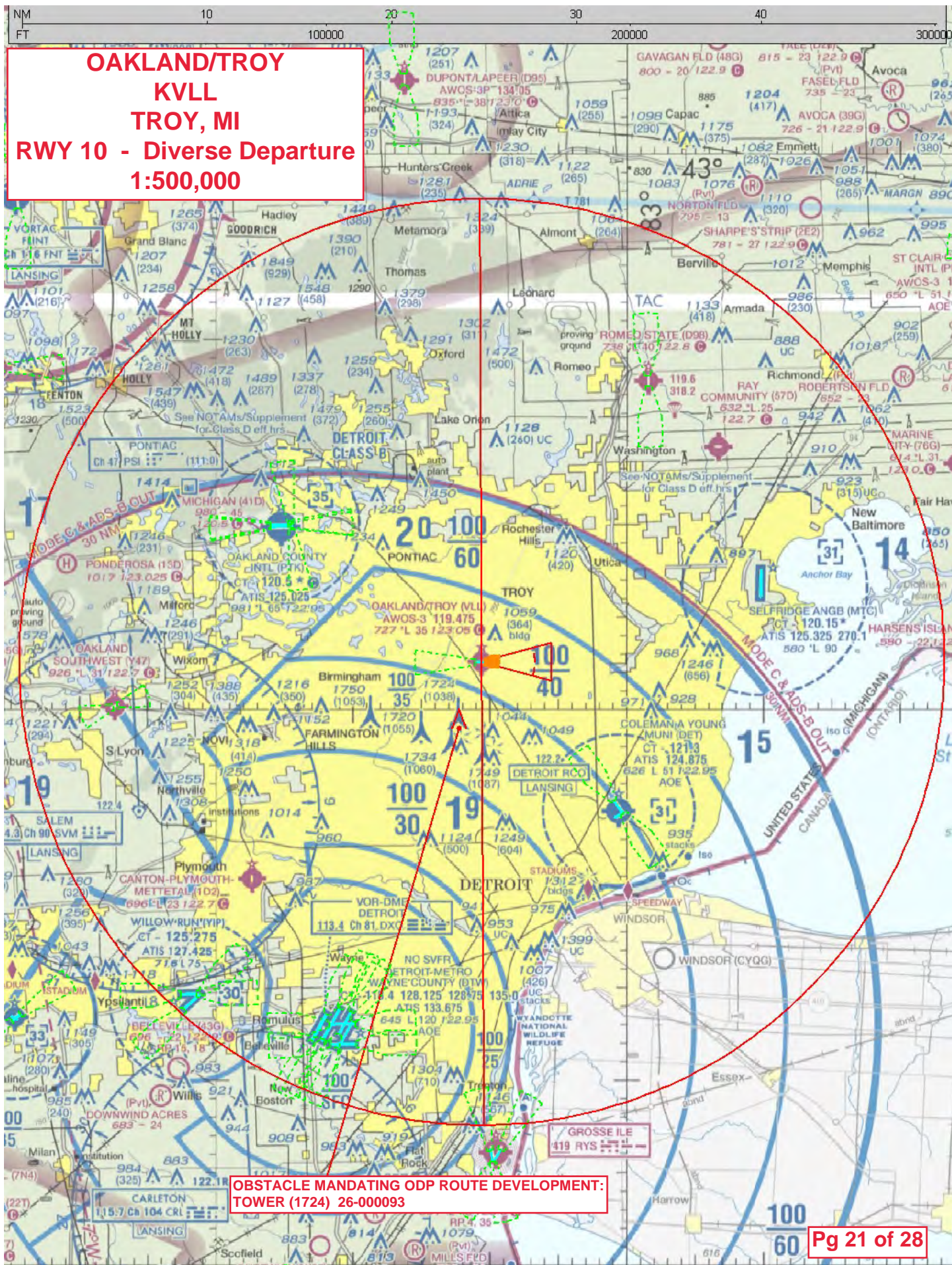
**DETROIT METRO WAYNE COUNTY  
 KDTW DETROIT, MI  
 BARI THREE (RNAV) SID  
 RWY 22L - RUNWAY TRANSITION  
 1:500,000**







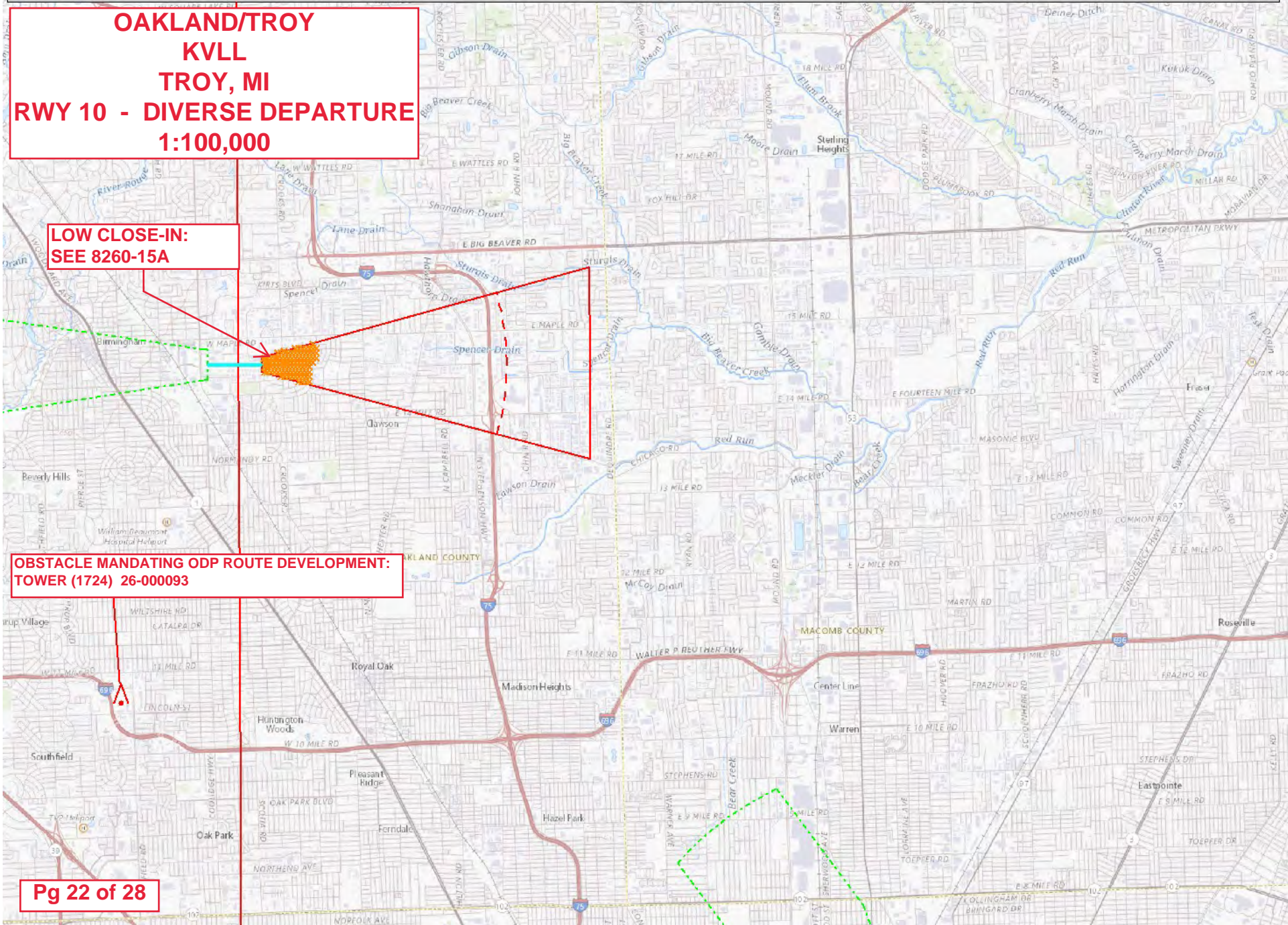


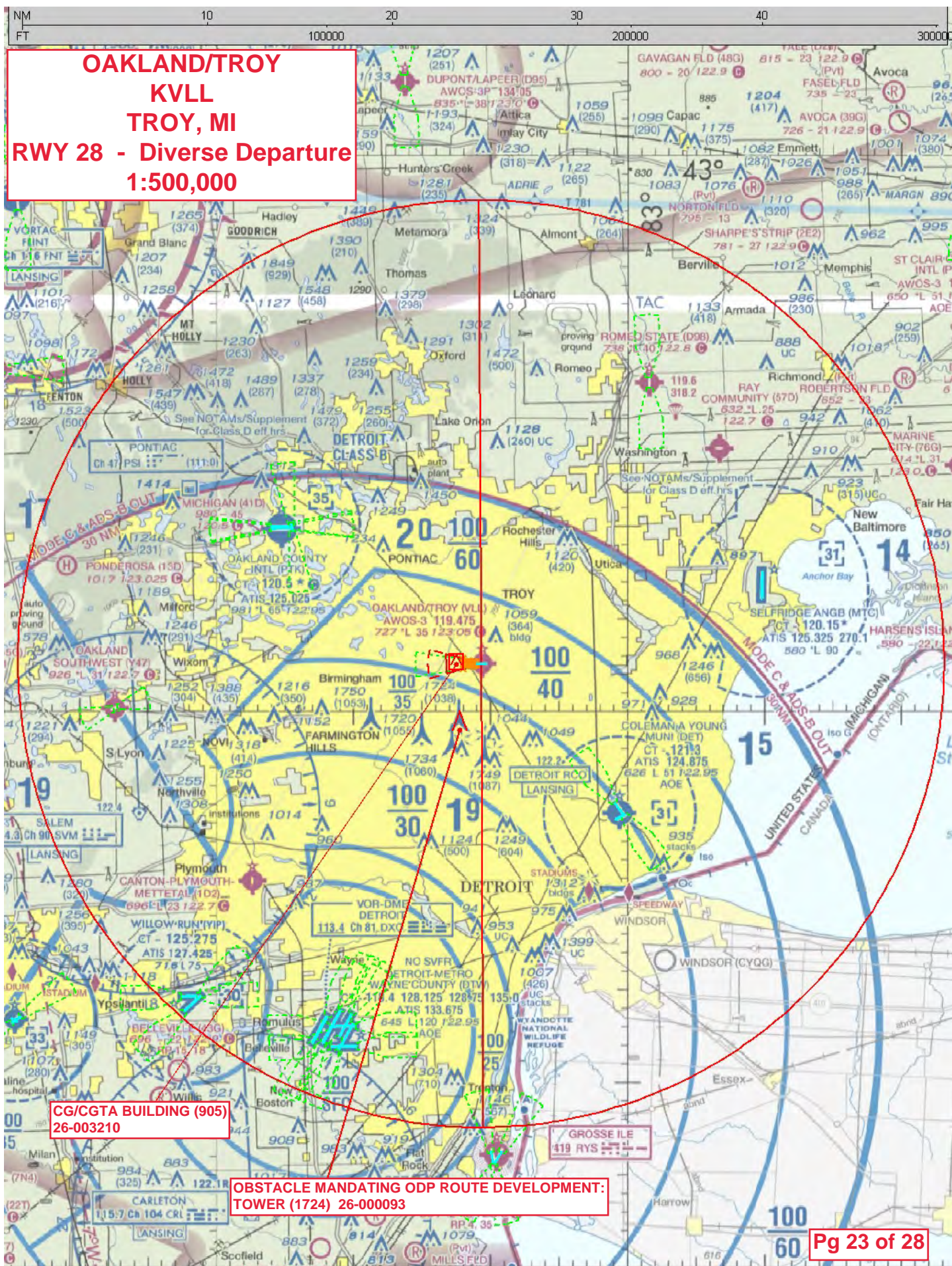


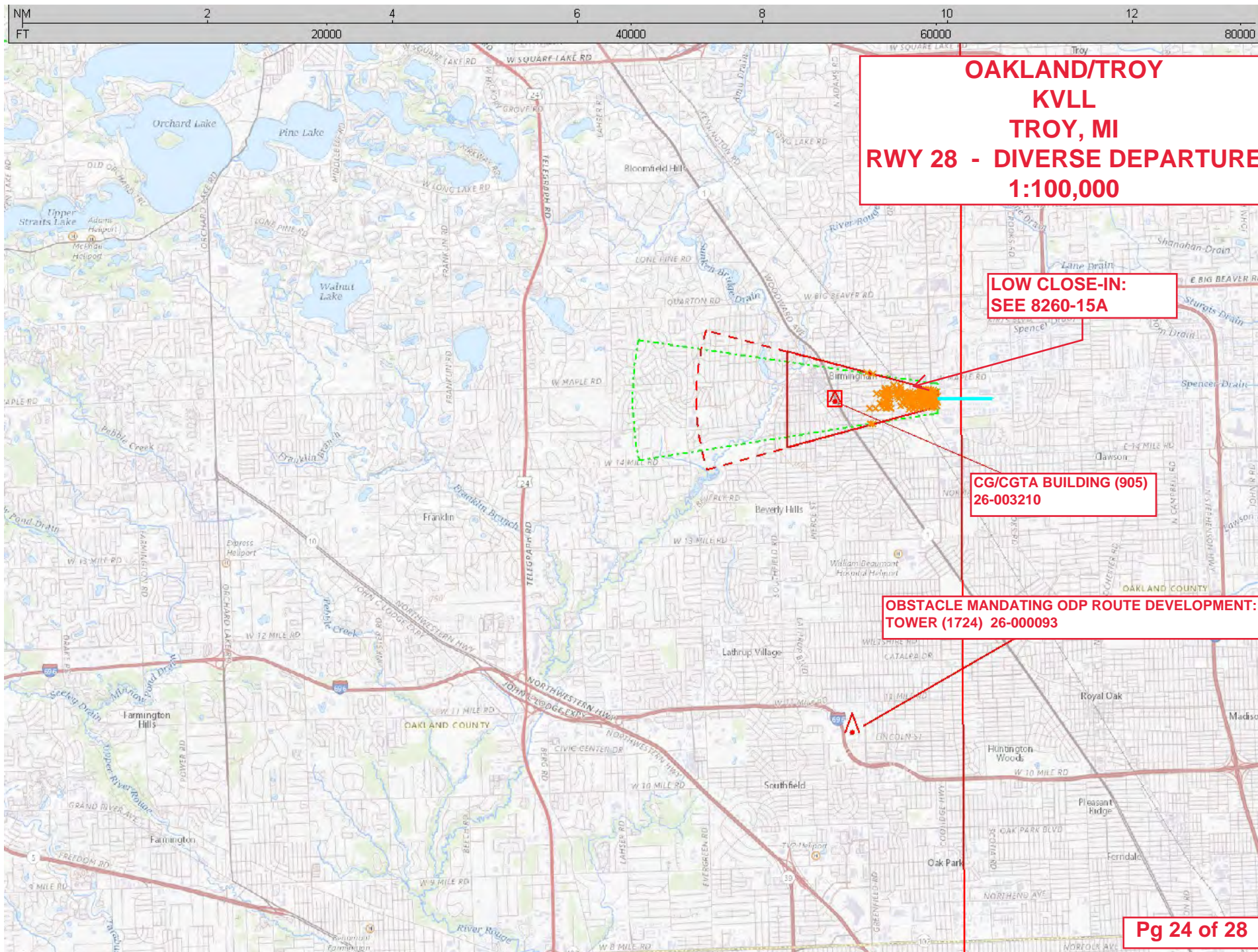
**OAKLAND/TROY  
KVLL  
TROY, MI  
RWY 10 - DIVERSE DEPARTURE  
1:100,000**

**LOW CLOSE-IN:  
SEE 8260-15A**

**OBSTACLE MANDATING ODP ROUTE DEVELOPMENT:  
TOWER (1724) 26-000093**



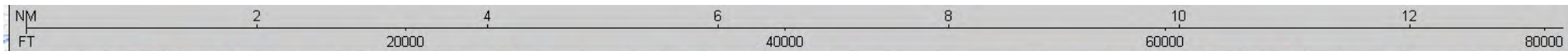






**WILLOW RUN  
KYIP  
DETROIT, MI  
RWY 27 - Diverse Departure  
1:500,000**

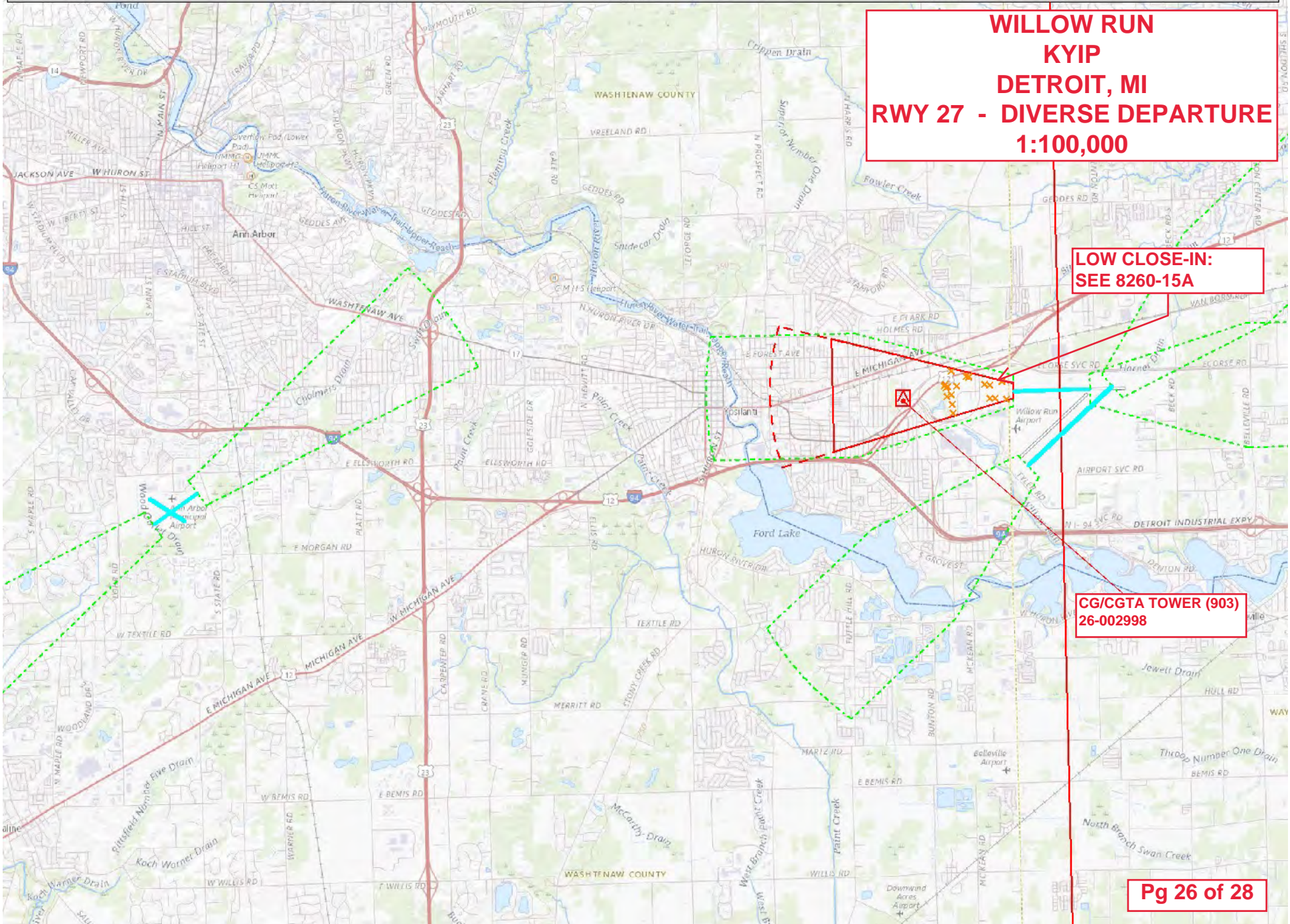
**CG/CGTA TOWER (903)  
26-002998**



**WILLOW RUN  
KYIP  
DETROIT, MI  
RWY 27 - DIVERSE DEPARTURE  
1:100,000**

**LOW CLOSE-IN:  
SEE 8260-15A**

**CG/CGTA TOWER (903)  
26-002998**



**SELFRIDGE ANGB  
KMTK  
MOUNT CLEMENS, MI  
RWY 19 - Diverse Departure  
1:500,000**



