

**FEDERAL AVIATION ADMINISTRATION  
FLIGHT STANDARDS SERVICE  
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE  
TITLE 14 CFR PART 97.33**

Bearings, headings, courses, tracks and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated.  
Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or feet RVR.

<u>AIRPORT ID</u> KGPZ	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 34	<u>ORIGINAL/AMENDMENT</u> 1	<u>CITY</u> GRAND RAPIDS	<u>STATE</u> MN		
<u>AIRPORT ELEVATION</u> 1356	<u>TDZE</u> 1356	<u>SUPERSEDED</u> RNAV (GPS) RWY 34	<u>ORIGINAL/AMENDMENT</u> ORIG-C	<u>DATED</u> 04/25/2019	<u>MAG VAR</u> 2E	<u>EPOCH YEAR</u> 1995
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 22 APRIL 2021	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>		

**TERMINAL ROUTES**

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
GPZ VOR/DME		ADIER		TF	FO	1.00	164.99	8.36	2900
NEBBS	IAF	ADIER	NOPT	TF	FB	1.00	007.26	7.66	2900
ADIER	IF/IAF	DIKKA		TF	FB	1.00	343.67	5.96	2900
DIKKA	FAF	RW34	MAP	TF	FO	0.30	343.63	4.68	
RW34	MAP	1556 MSL		CA			343.63		
1556 MSL		EMIDY		DF	FO	1.00			3000

**MISSED APPROACH**

**MAP:**

LPV: DA  
LNAV/VNAV: DA  
LNAV: RW34

**MISSED APPROACH INSTRUCTIONS:**

CLIMB TO 3000 DIRECT EMIDY AND HOLD.

**ALTERNATE MISSED APPROACH INSTRUCTIONS:**



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF

(IAF)

2. HOLD S ADIER, RT, 343.67 INBOUND, 2900 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAF: 343.63FAF: DIKKA

DIST FAF TO MAP: 4.68

DIST FAF TO THLD: 4.68

4. MIN ALT: ADIER 2900, DIKKA 2900

5. DIST TO THLD FROM OM:MM:IM:150 HAT:200 HAT: 0.46GS ANT:

6. MIN GP INCPT: 2900GP ALT AT FAF : DIKKA 2900OM:MM:IM:

7. GP ANGLE: 3.0034:1: IS CLEAR20:1: IS CLEARTCH: 53.0

8. MSA FROM: RW34 3200

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: CIRCLING TO RWY 5, 23 NA AT NIGHT  
CHART NOTE: CIRCLING NA FOR CAT D E OF RWY 16-34  
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -17°C OR ABOVE 54°C  
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT GPZ VOR/DME ON V430 WESTBOUND

ADDITIONAL FLIGHT DATA:

CHART VDP AT 1.23 NM TO RW34  
HOLD N, RT, 163.57 INBOUND  
FAS OBST: 1550 AAO 470831N/0932929W  
CHART 1471 TREE 471102N/0932951W  
1620 AAO 470649N/0933107W  
CHART VDP AT 1.23 NM TO RW34  
WAAS CHANNEL # 86412  
REFERENCE PATH ID: W34A  
CHART CIRCLING ICON  
LTP HAE: 384 M



**MINIMUMS:**

TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT

**ALTERNATE:** NA ☐ STANDARD - NA WHEN LOCAL WEATHER NOT AVAILABLE.

<u>CATEGORY:</u>	<u>A</u>			<u>B</u>			<u>C</u>			<u>D</u>			<u>E</u>		
<u>FINAL TYPE</u>	<u>DA/MDA</u>	<u>VIS</u>	<u>HAT/HAA</u>	<u>DA/MDA</u>	<u>VIS</u>	<u>HAT/HAA</u>	<u>DA/MDA</u>	<u>VIS</u>	<u>HAT/HAA</u>	<u>DA/MDA</u>	<u>VIS</u>	<u>HAT/HAA</u>	<u>DA/MDA</u>	<u>VIS</u>	<u>HAT/HAA</u>
LPV DA	1556	1/2	200	1556	1/2	200	1556	1/2	200	1556	1/2	200			
LNAV/VNAV DA	1747	5/8	391	1747	5/8	391	1747	5/8	391	1747	5/8	391			
LNAV MDA	1800	1/2	444	1800	1/2	444	1800	7/8	444	1800	7/8	444			
CIRCLING	1900	1	544	1900	1	544	1900	1 1/2	544	1960	2	604			

**CHANGES - REASONS**

1. CHANGED FEEDER SEGMENT COURSE AND DISTANCE: FROM 165.11/8.37 TO 164.99/8.36 - NEW TARGETS RESULTS SET.
2. CHANGED INTERMEDIATE SEGMENT DISTANCE: FROM 6.04 TO 5.96 - NEW FAF LOCATION.
3. CHANGED DIKKA FIX COORDINATES: FROM 470730.31N/0932846.30W TO 470725.80N/0932844.56W - FIX MOVED 473 FT SOUTHEAST - CO-LOCATED FAF FOR ILS AND RNAV PER .19H 4-6-2 (B).
4. CHANGED PROFILE LINE 3: FROM FAC: 343.64 TO FAC: 343.63 AND FROM DIST FAF TO MAP AND DIST FAF TO THLD: 4.60 TO DIST FAF TO MAP AND DIST FAF TO THLD: 4.68 - FAF DIKKA FIX MOVED.
5. CHANGED PROFILE LINE 5: FROM DIST TO THLD FROM 327 HAT: 0.83 TO DISTANCE TO THLD FROM 200 HAT: 0.46 - LOWERED LPV MINIMUMS.
6. CHANGED PROFILE LINE 7: FROM GP ANGLE 3.04 TO 3.00 AND FROM TCH 60 TO TCH 53 - FAF DIKKA FIX MOVED/MATCH ILS ANGLE AND TCH.
7. REMOVED CHART NOTE: CIRCLING NA TO RWYS 10 AND 28 - RUNWAYS NO LONGER EXIST.
8. CHANGED CHART NOTE: FROM CIRCLING RWY 5 NA AT NIGHT TO CIRCLING RWY 5, 23 NA AT NIGHT - NEW 20:1 OBSTACLES.
9. CHANGED CHART NOTE: FROM FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -17° C OR ABOVE 49° C TO FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -17°C OR ABOVE 54°C - NEW ACT CALCULATION.
10. REMOVED CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT - NEW GS AND TCH.
11. REMOVED CHART NOTE: FROM FOR INOP ALS, INCREASE LPV ALL CATS VISIBILITY TO 1 SM, INCREASE LNAV/VNAV ALL CATS VISIBILITY TO 1 5/8 SM, INCREASE LNAV CATS C AND D VISIBILITY TO 1 3/8 SM - NEW VIS CALCULATIONS/INOP TABLE APPLIES.
12. ALTERNATE MINIMUMS: ADDED NA WHEN LOCAL WEATHER NOT AVAILABLE - NEW CRITERIA./ .19I 8-6-11 B. (4).
13. CHANGED CHART NOTE: FROM CHART VDP AT 1.41 NM TO RW34\* (LNAV ONLY) TO CHART VDP AT 1.23 NM TO RW34 - LOWER MINS.
14. CHANGED ADDITIONAL FLIGHT DATA: FROM FAS OBSTACLE 1550 AAO 470826N/0932935W TO FAS OBST: 1550 AAO 470831N/0932929W - NEW TARGETS RESULTS SET/MAP STUDY.
15. CHANGED ADDITIONAL FLIGHT DATA: FROM 1600 AAO 470736N/0932925W TO 1620 AAO 470649N/0932951W - NEW TARGETS RESULTS SET/MAP STUDY/7:1 EXCLUDED.
16. ADDED ADDITIONAL FLIGHT DATA: CHART 1471 TREE 471102N/0932951W - NEW TARGETS RESULTS SET.
17. LOWERED MINIMUMS: LPV DA/HAT FROM 1683/327 TO 1556/200 - NEW VERTICALLY GUIDED SURVEY/TARGETS RESULTS SET.
18. LOWERED MINIMUMS: LNAV/VNAV DA/HAT/VISIBILITY FROM 1928/572/ 1 1/2 TO 1747/392/5/8 - NEW VERTICALLY GUIDED SURVEY/TARGETS RESULTS SET/VIS CALCULATIONS.
19. LOWERED MINIMUMS: LNAV MDA/HAT FROM 1860/504 TO 1800/444 AND CAT C AND D VISIBILITY FROM 1 SM TO 7/8 SM - NEW VERTICALLY GUIDED SURVEY/TARGETS RESULTS SET/VIS CALCULATIONS.
20. LOWERED MINIMUMS: CIRCLING CAT D MDA/HAA FROM 2000/644 TO 1960/604 - NEW CONTROLLING OBSTACLE.
21. CRC REMAINDER CHANGED FROM 49D8A493 TO 27019921 - FPAP LAT/LONG CHANGED FROM 471324.0945N/0933059.2455W TO 471324.0915N/0933059.2600W, TCH CHANGED FROM 60 TO 53 AND GLIDEPATH ANGLE CHANGED FROM 3.04 TO 3.00.



**AIRPORT ID**  
KGPZ

**PROCEDURE NAME**  
RNAV (GPS) RWY 34

**ORIGINAL/AMENDMENT**  
1

**CITY**  
GRAND RAPIDS

**STATE**  
MN

**COORDINATED WITH:**

**A4A** ☐ **ALPA** ☒ **AOPA** ☒ **APA** ☐ **HAI** ☐ **NBAA** ☒ **OTHER:** ZMP, AMGR

**FLIGHT CHECKED BY**  
GLEN B FREEMAN

*Digitally signed by* **OFFICE**  
**JON DENTON**  
FICO

**DATE**  
3/9/2021

**DEVELOPED BY**  
JON DENTON (APRIL SARMENTO)

*Digitally signed by* **OFFICE**  
**JON DENTON**  
AJV-A432  
Mar 11, 2021

**DATE**  
12/03/2020

**APPROVED BY**  
LONNIE EVERHART

*Digitally signed by* **OFFICE**  
**JON DENTON**  
AJV-A430  
Mar 11, 2021

**DATE**  
**TITLE**  
MANAGER

QUALITY  
16  
CHECKED

FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KGPZ
RUNWAY	RW34
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W34A
LTP/FTP LATITUDE	471157.8295N
LTP/FTP LONGITUDE	0933026.7815W
LTP/FTP ELLIPSOIDAL HEIGHT	+03840
FPAP LATITUDE	471324.0915N
FPAP LONGITUDE	0933059.2600W
THRESHOLD CROSSING HEIGHT (TCH)	00053.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0992
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0
CRC REMAINDER	27019921

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+04132
FPAP ORTHOMETRIC HEIGHT	+04132

