



BOCA RATON AIRPORT

Airspace Obstruction Clearance Atlas



JULY 2016

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Introduction

As the owner and operator of the Boca Raton Airport (BCT or the Airport), the Boca Raton Airport Authority (BRAA) is responsible for ensuring the safe and efficient operation of the Airport and its associated infrastructure. While preserving the operational capability of the airfield is paramount, the protection of the associated airspace is also essential. This can be quite challenging, as preservation of the airspace requires restricting the height of structures and objects beyond the Airport's property boundary. Without a comprehensive zoning ordinance that ensures protection of BCT's airspace, the operational capability of the airfield can erode as development on or near the Airport encroaches on its associated airspace.

In accordance with Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace (Part 77), the Federal Aviation Administration (FAA) is responsible for reviewing proposed construction or alterations to determine if they would create a hazard to air navigation. The FAA's review considers, among other criteria, the height limitations necessary to ensure protection of the national airspace system, including those associated with approach and departure procedures at each public use airport. If encroachment of the airspace is identified, the FAA will issue a Determination of Hazard, recommending that the structure be lowered or relocated. However, the FAA lacks the authority to prevent, grant or deny the construction or alteration from occurring outside of the confines of the Airport property boundary. Should the proponent proceed with the construction or alteration, a modification to the affected flight procedure(s) may be required, which could diminish the overall capacity of the airfield.

This Airspace Obstruction Clearance Atlas document contains illustrations of the various obstacle clearance surfaces prescribed by the FAA that ensure airspace protection for aircraft that operate at BCT. Thus, the obstacle clearance limitations documented herein are prescribed in the following FAA criteria:

- **FAA Order 8260.3B, United States Standard for Terminal Instrument Procedures (TERPS)** - This document sets forth FAA Airspace design standards, including obstacle clearance requirements, for

instrument procedures established for aircraft operations conducted during instrument flight rules conditions. Encroachment of the obstacle clearance requirements prescribed under TERPS is cause for the FAA to issue a Determination of Hazard.

- **FAA Order 8260.58, United States Standard for Performance Based Navigation (PBN) Instrument Procedure Design** - This Order supplements TERPS and sets forth the design standards for instrument procedures served by the following navigation systems: global positioning system (GPS), Area Navigation (RNAV), wide area augmentation system (WAAS), and local area augmentation system (LAAS).
- **Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace (Part 77)** - This regulation establishes the requirements to provide notice to the FAA of certain proposed construction, or the alteration of existing structures. It includes a set of airport imaginary surfaces that dictate whether an object is subject to lighting and marking standards prescribed in FAA Advisory Circular 70/7460-1K, Obstruction Marking and Lighting. Exceeding the height of an airport's imaginary surfaces alone does not constitute a Determination of Hazard by the FAA.
- **FAA JO 6850.2B Visual Guidance Lighting Systems** - This Order provides criteria for installation and protection of visual navigation guidance lighting systems. The criteria associated with the Precision Approach Path Indicator (PAPI) Obstacle Clearance Surface (OCS) is contained within this Order and generally requires obstacles be clear of a plane one degree less than the aiming angle of the third Light Housing Assembly (LHA) in the PAPI system.

This document is not intended to relieve the proponent from filing FAA Form 7460, Notice of Proposed Construction or Alteration. Its primary purpose is to provide illustrations of the various obstruction clearance surfaces to convey the height limitations necessary to preserve the current operational capability of BCT. This

will provide the BRAA the ability to ensure protection of the Airport's terminal airspace when considering development both within and outside the confines of the Airport's property boundary.

The illustrations contained herein will assist the BRAA with evaluating objects, both on the Airport, throughout the City of Boca Raton, and other areas restricted by BCT's terminal airspace to estimate the height restrictions necessary to ensure protection of the current airspace procedures serving BCT. This information is supplemented by three-dimensional models that have been submitted to the BRAA in both AutoCAD® and Geographical Information System (GIS) format. These models would allow the BRAA to conduct preliminary analyses to determine the height restrictions necessary to preserve the current instrument approach and departure capabilities of BCT.

The configuration of the airspace system serving BCT and the various obstacle clearance requirements prescribed by the FAA are complex. With ten variations of current published instrument approach and departure procedures, there are a multitude of obstacle clearance surfaces prescribed by TERPS alone. Given these complexities, this document has been structured in a manner so that the overall TERPS obstacle clearance requirements associated with each final approach, missed approach, and departure procedure serving BCT is illustrated separately (**Exhibits 1 through 19**). An additional set of illustrations depicts the PAPI OCS and CFR Part 77 imaginary surfaces (**Exhibits 20 through 23**).

Some of the approach and departure procedures serving BCT extend as far as 10 miles from the Airport. To limit the lateral extents of the graphics, the TERPS departure and missed approach surfaces have been truncated at the point where the obstacle clearance surfaces reach an elevation of 1,000 feet above mean sea level. At this scale, however, the ability to ascertain the obstacle clearance requirements within the confines of the BCT property boundary is inhibited. Therefore, a series of composite TERPS height limitation maps are also presented at a larger scale in the form of an atlas that encompasses the overall Airport Property Boundary (**Exhibits 24 through 30**).

It should be noted that compliance with the obstacle clearance surfaces prescribed herein alone may not ensure that the FAA will not issue a Determination of Hazard. Other factors, such as conformance with other airfield design standards and electromagnetic interference with navigational aids and communication facilities could result in a Determination of Hazard. Potential modifications to the FAA's standard instrument approach and departure procedures serving BCT may also occur in future publications. In fact, the FAA publishes its standard instrument approach and departure procedures every 56 days, upon which it may amend or develop new procedures, or eliminate current procedures. Therefore, it is recommended that the BRAA continuously monitor the FAA's publications and update its airspace models and this document as necessary. Future changes to the BCT Airport Layout Plan (ALP) may also warrant an amendment.

When assessing obstacles, the BRAA should consider the obstacle clearance surfaces prescribed under TERPS. The BRAA may also elect to preserve the Airport imaginary surfaces prescribed under CFR Part 77, but this is not mandated by the FAA. Although not documented herein, further consideration for airfield design standards prescribed in FAA Advisory Circular 150/5300-13A, Airport Design should also be given to any proposed construction or alteration on or near the Airport. For evaluating off-airport obstacles that would have an overall elevation in excess of 1,000 feet, the BRAA should consult directly with the FAA's Orlando Airports District and/or Southern Region Offices.

The obstacle clearance surfaces presented herein reflect the Airport's ALP and instrument approach departure procedures serving BCT that were in effect at the time of publication. The ALP was approved by the FAA in 2012, while the terminal instrument procedures were issued on May 26, 2014, and effective through June 23, 2014. Copies of these terminal instrument approach and departure procedures have been included as an appendix to this document.



BOCA RATON AIRPORT

Table of Contents



TERPS DEPARTURE

| | |
|-----------------|-----------------------------|
| Exhibit 1 | Runway 5 Departure Surface |
| Exhibit 2 | Runway 23 Departure Surface |

TERPS APPROACH & MISSED APPROACH

| | |
|------------------|---|
| Exhibit 3 | Runway 5 LPV Approach Surface |
| Exhibit 4 | Runway 5 LPV Missed Approach Surface |
| Exhibit 5 | Runway 23 LPV Approach Surface |
| Exhibit 6 | Runway 23 LPV Missed Approach Surface |
| Exhibit 7 | Runway 5 LNAV/VNAV Approach Surface |
| Exhibit 8 | Runway 5 LNAV/VNAV Missed Approach Surface |
| Exhibit 9 | Runway 23 LNAV/VNAV Approach Surface |
| Exhibit 10 | Runway 23 LNAV/VNAV Missed Approach Surface |
| Exhibit 11 | Runway 23 RNP Approach Surface |
| Exhibit 12 | Runway 23 RNP Missed Approach Surface |
| Exhibit 13 | Runway 5 LNAV Approach Surface |
| Exhibit 14 | Runway 5 LNAV Missed Approach Surface |
| Exhibit 15 | Runway 23 LNAV Approach Surface |
| Exhibit 16 | Runway 23 LNAV Missed Approach Surface |
| Exhibit 17 | Runway 5 Visual Approach Surface |
| Exhibit 18 | Runway 23 Visual Approach Surface |
| Exhibit 19 | Circling Approaches |

PAPI OCS AND PART 77

| | |
|---------------------|--|
| Exhibit 20 | Runway 5 Precision Approach Path Indicator (PAPI) OCS |
| Exhibit 21 | Runway 23 Precision Approach Path Indicator (PAPI) OCS |
| Exhibit 22-23 | CFR Part 77 Airport Imaginary Surfaces |

COMPOSITE TERPS ATLAS

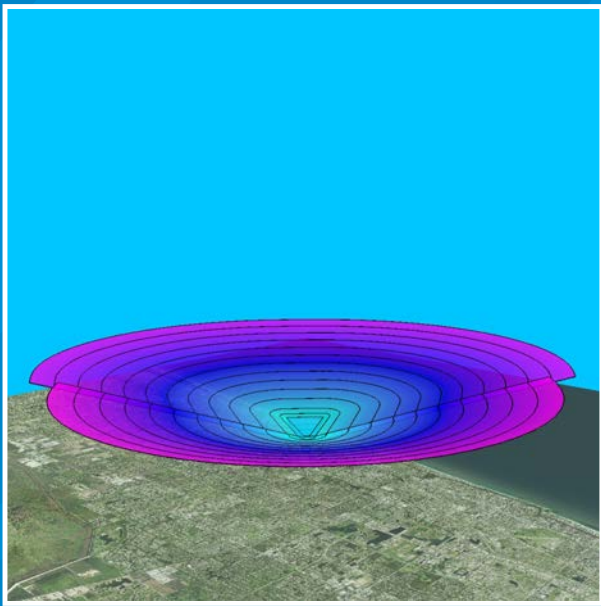
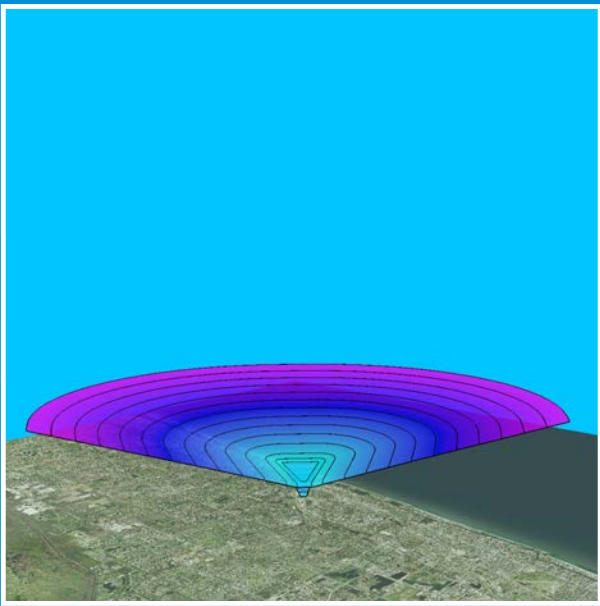
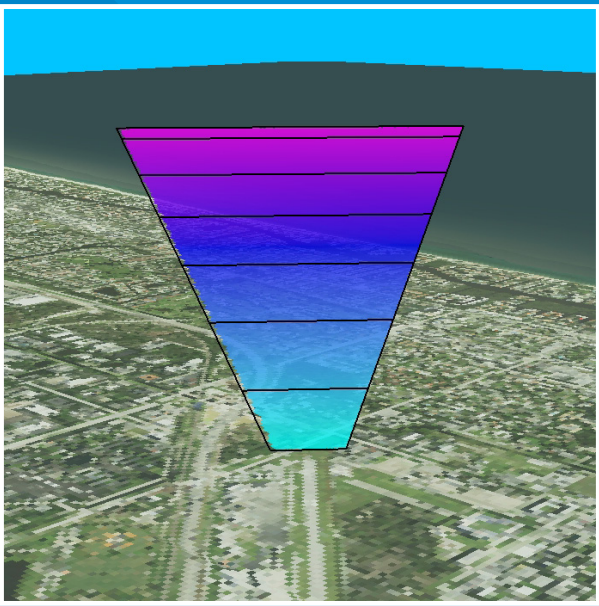
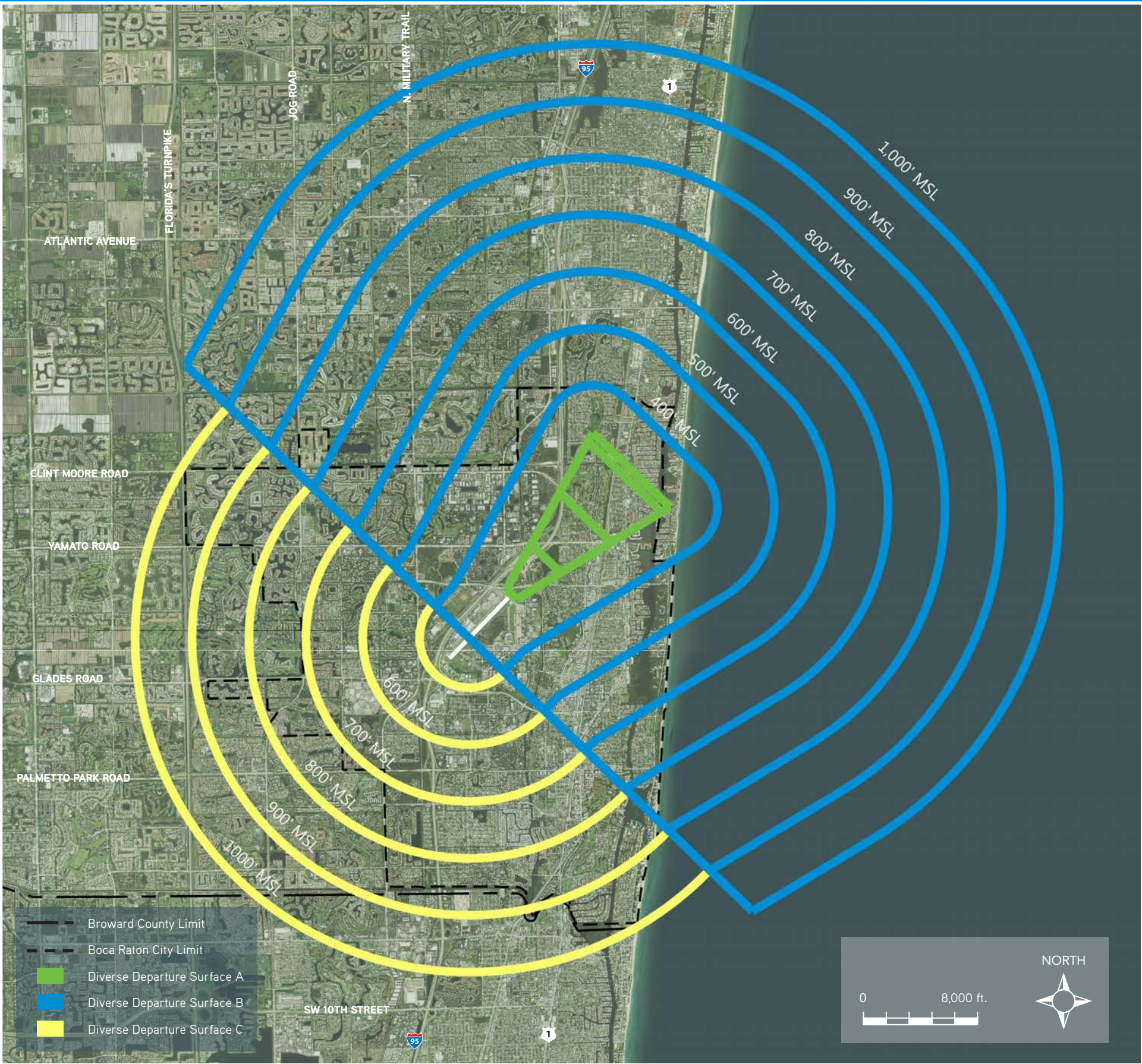
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|------------------|---|
| Exhibit 24 | Composite Departure Surfaces |
| Exhibit 25 | Composite Approach Surfaces |
| Exhibit 26 | Composite TERPS Departure and Approach Area 1 |
| Exhibit 27 | Composite TERPS Departure and Approach Area 2 |
| Exhibit 28 | Composite TERPS Departure and Approach Area 3 |
| Exhibit 29 | Composite TERPS Departure and Approach Area 4 |
| Exhibit 30 | Composite TERPS Departure and Approach Area 5 |

BCT TERMINAL PROCEDURES

ACRONYMS

Runway 5

DEPARTURE SURFACE

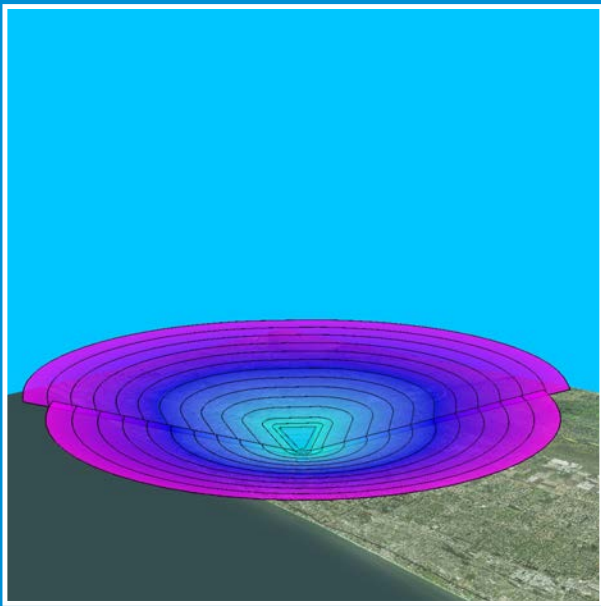
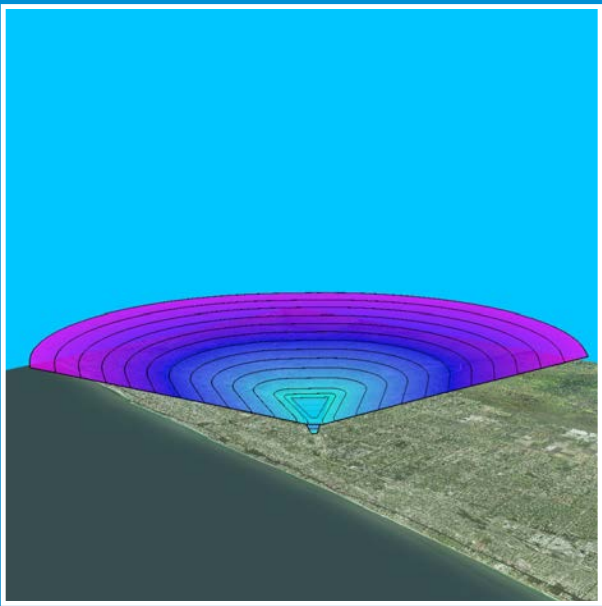
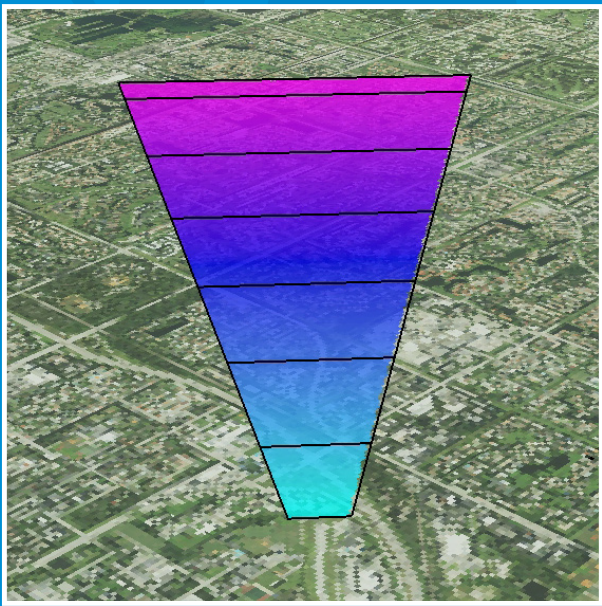
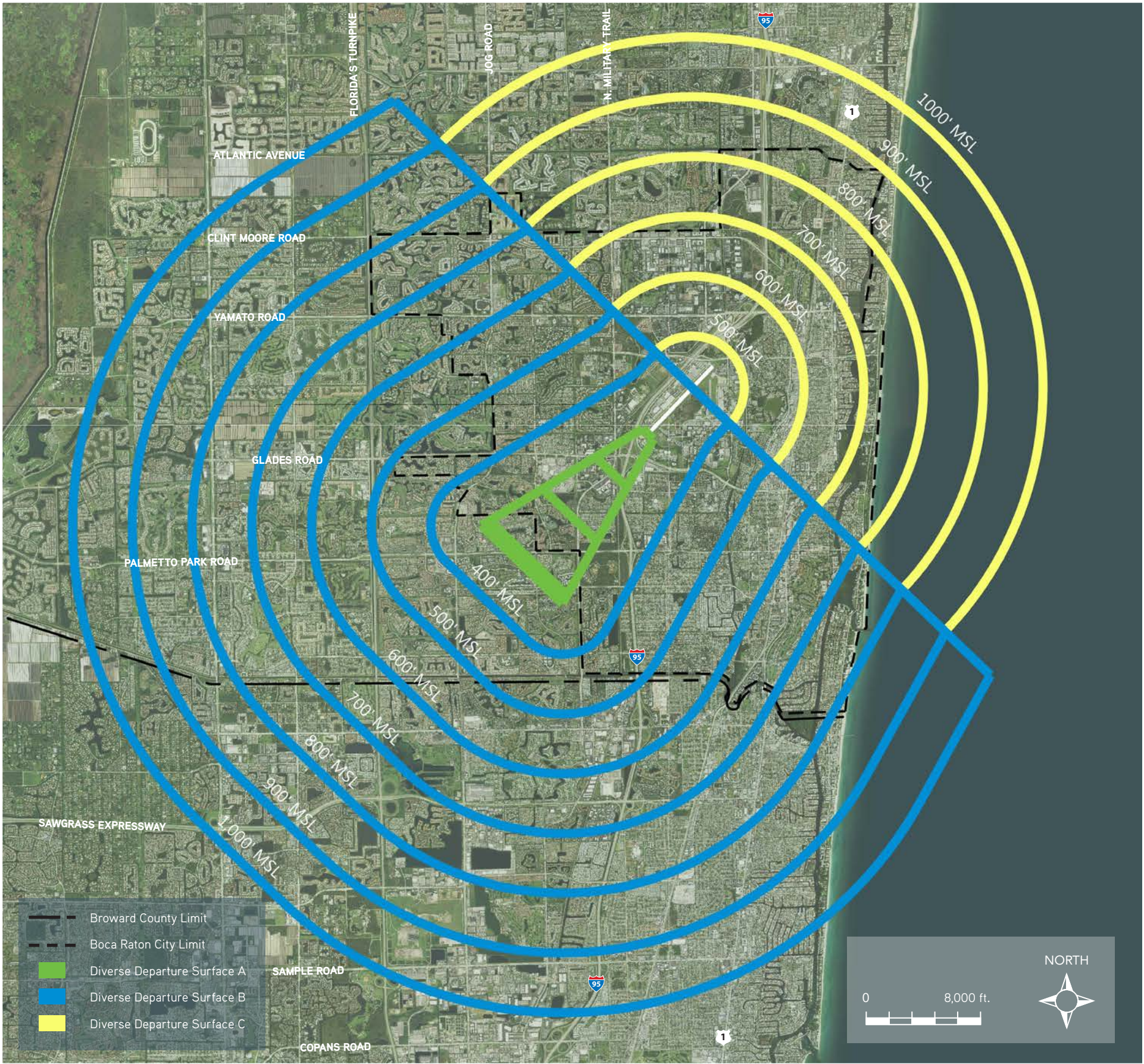


NOTES: Isometric views exaggerated 10x. Procedures subject to change.
SOURCES: 26 May 2016 To 23 Jun 2016 Takeoff Minimums, (Obstacle) Departure Procedures, and Diverse Vector Area (Radar Vectors) Se-3.
FAA Order 8260.3C United States Standard for Terminal Instrument Procedures (TERPS)
PREPARED BY: Ricondo & Associates, Inc., July 2016.



Runway 23

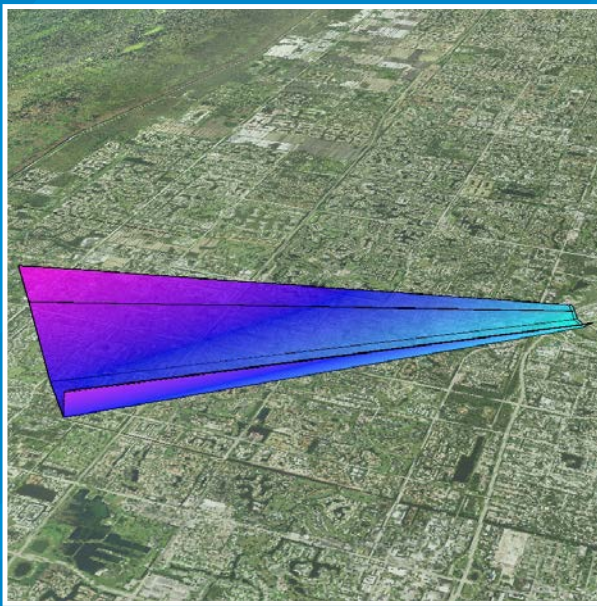
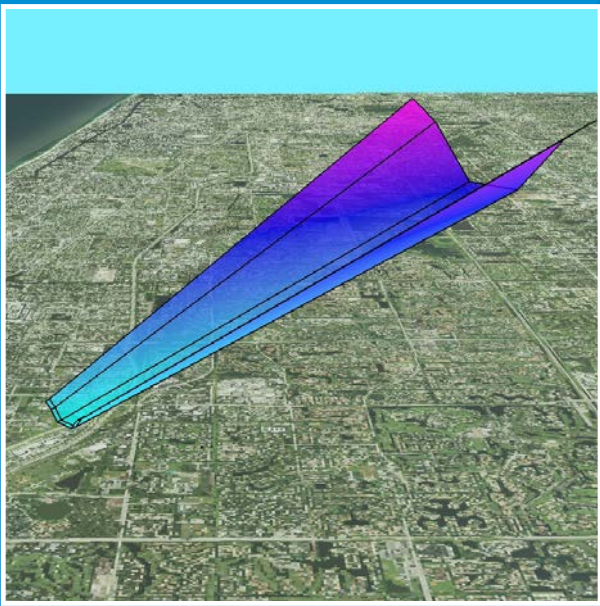
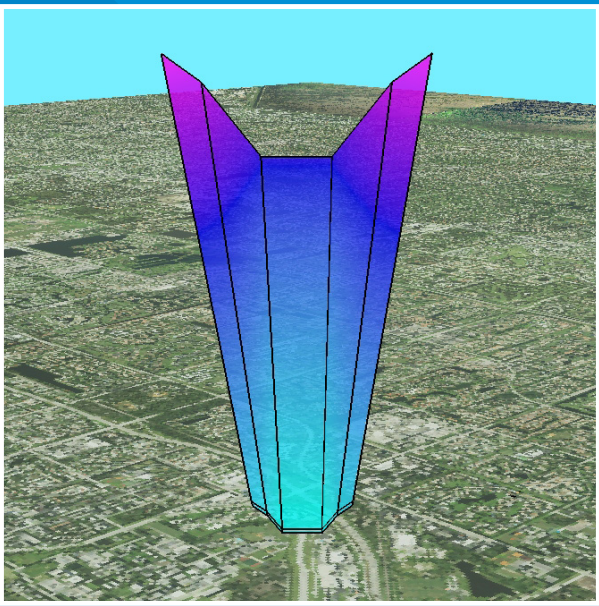
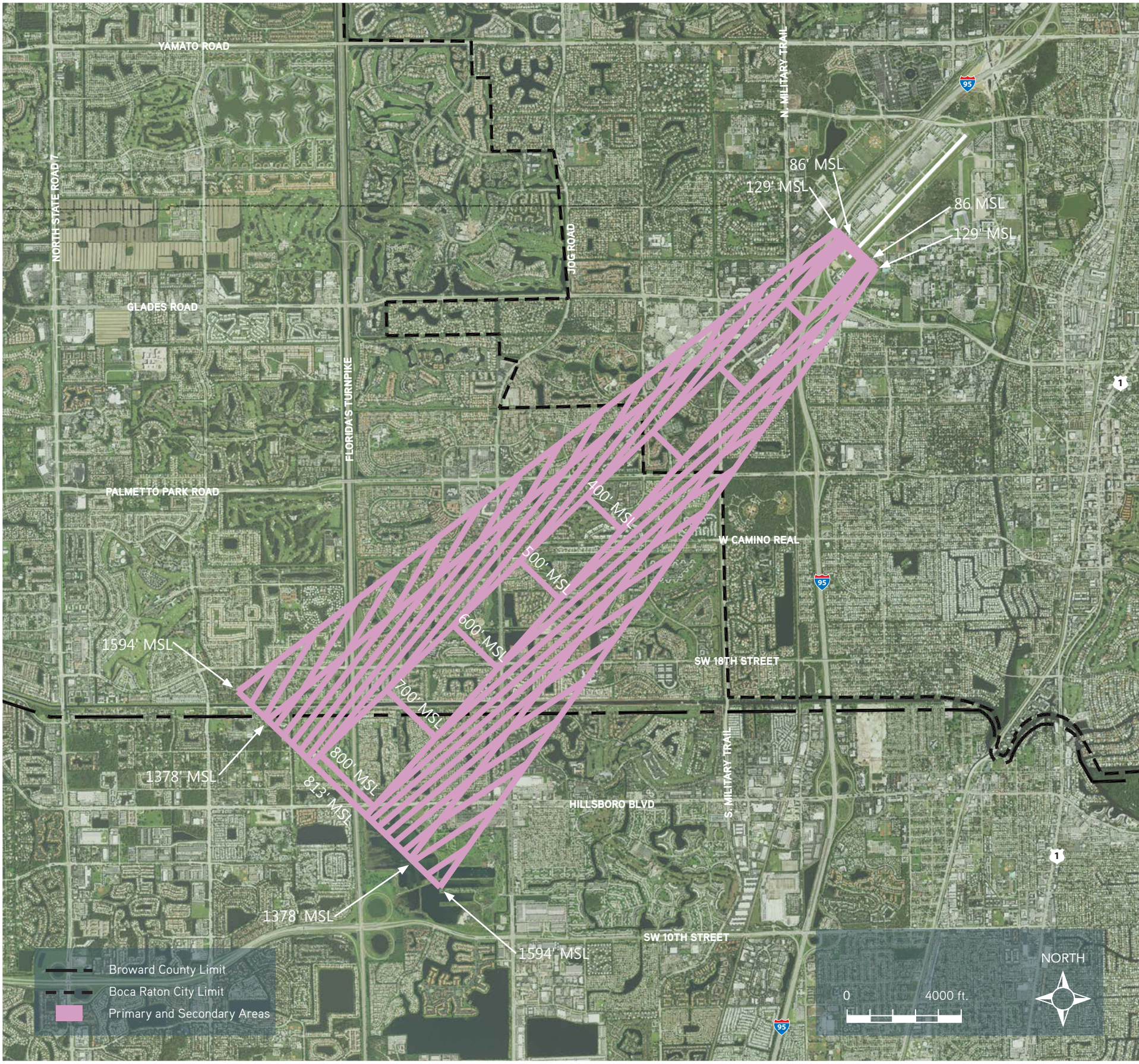
DEPARTURE SURFACE



NOTES: Isometric views exaggerated 10x. Procedures subject to change.
SOURCES: 26 May 2016 To 23 Jun 2016 Takeoff Minimums, (Obstacle) Departure Procedures, and Diverse Vector Area (Radar Vectors) Se-3.
FAA Order 8260.3C United States Standard for Terminal Instrument Procedures (TERPS)
PREPARED BY: Ricondo & Associates, Inc., July 2016.

Runway 5 LPV

APPROACH SURFACE

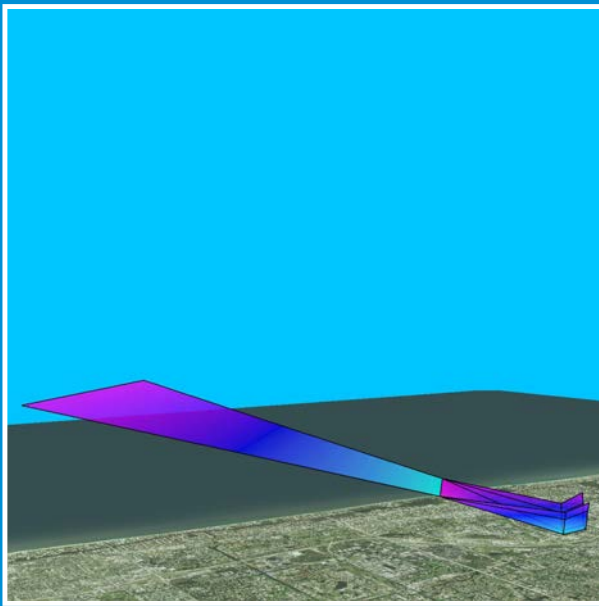
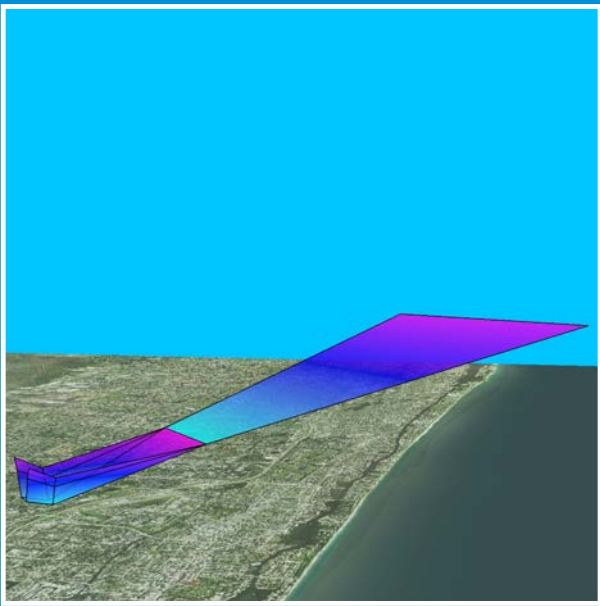
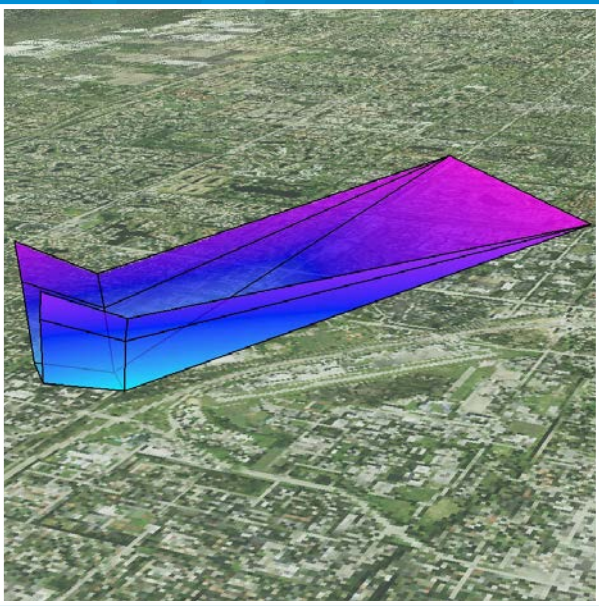
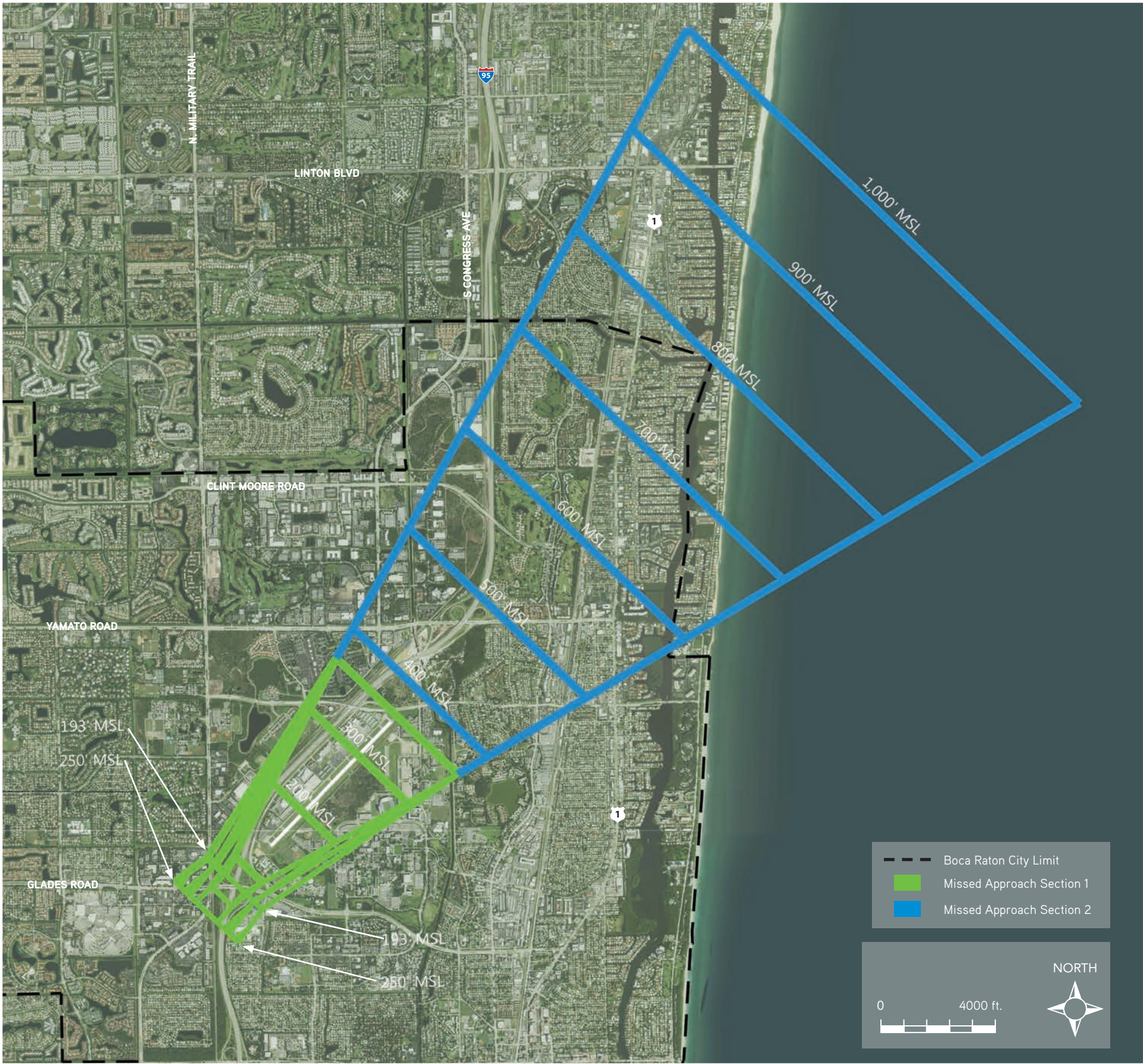


NOTES: Isometric views exaggerated 5x. Procedures subject to change.
SOURCE: SE-3, 04 FEB 2016 to 03 MAR 2016 Amendment 1-October 15, 2015. FAA ORDER 8260.58A. *United States Standard for Performance Based Navigation (PBN) Instrument Procedure Design*
PREPARED BY: Ricondo & Associates, Inc., July 2016.



Runway 5 LPV

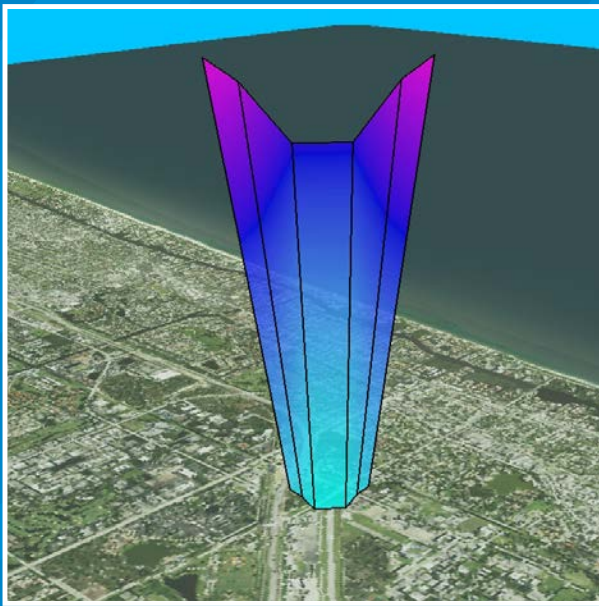
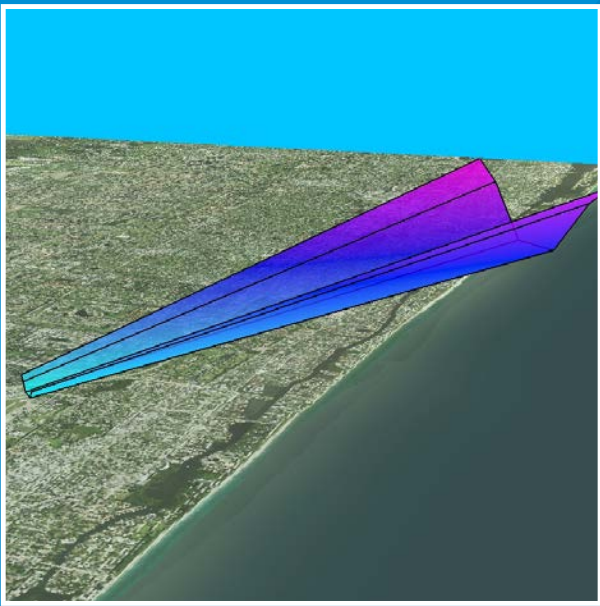
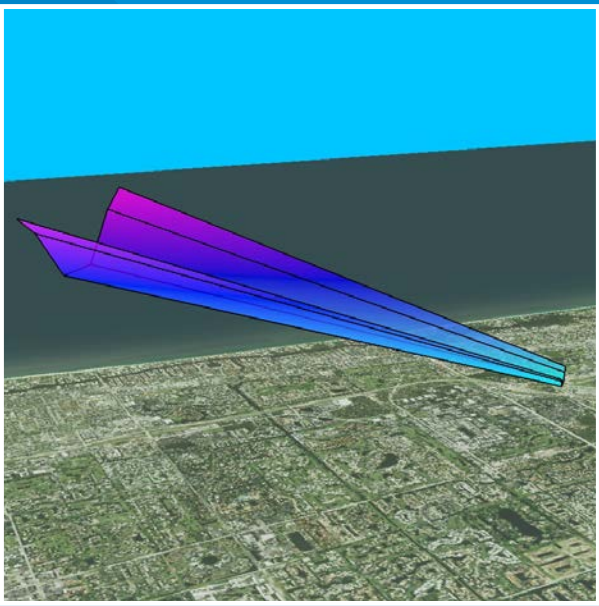
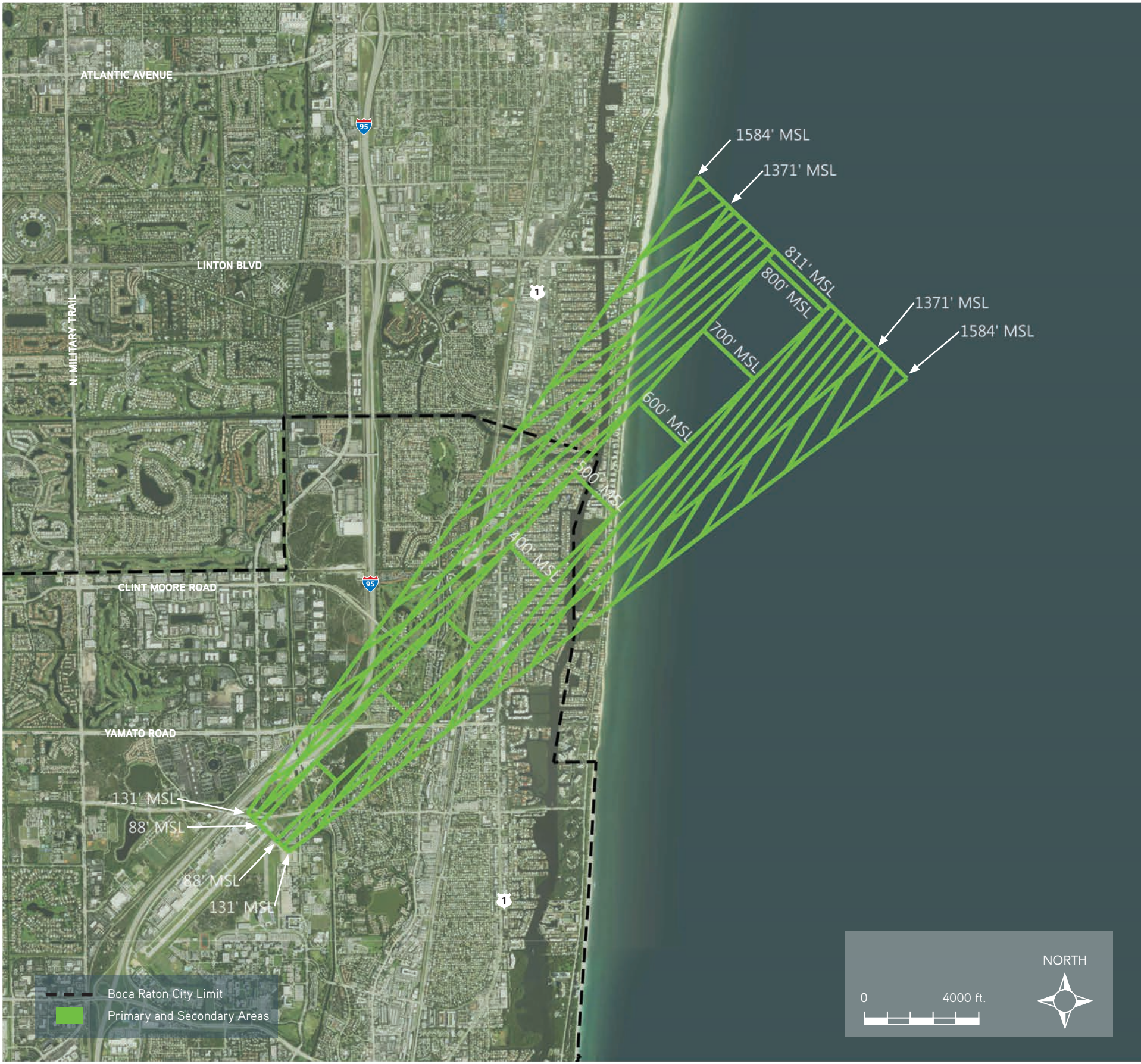
MISSSED APPROACH SURFACE



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SOURCE: SE-3, 04 FEB 2016 to 03 MAR 2016 Amendment 1-October 15, 2015. *United States Standard for Performance Based Navigation (PBN) Instrument Procedure Design*
PREPARED BY: Ricondo & Associates, Inc., July 2016.

Runway 23 LPV

APPROACH SURFACE

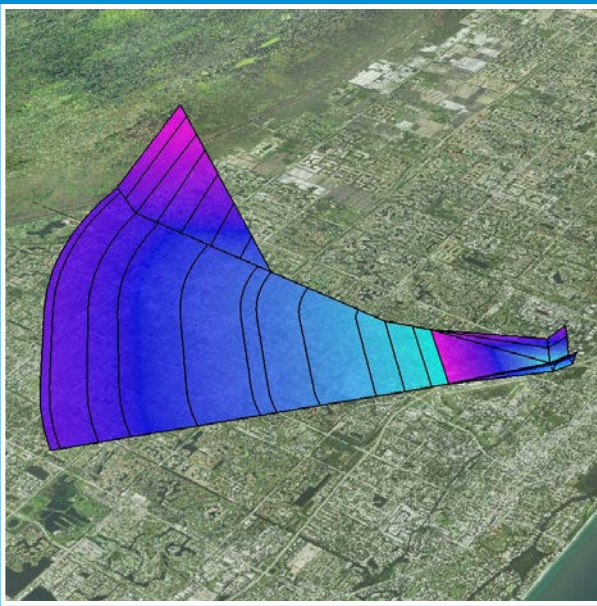
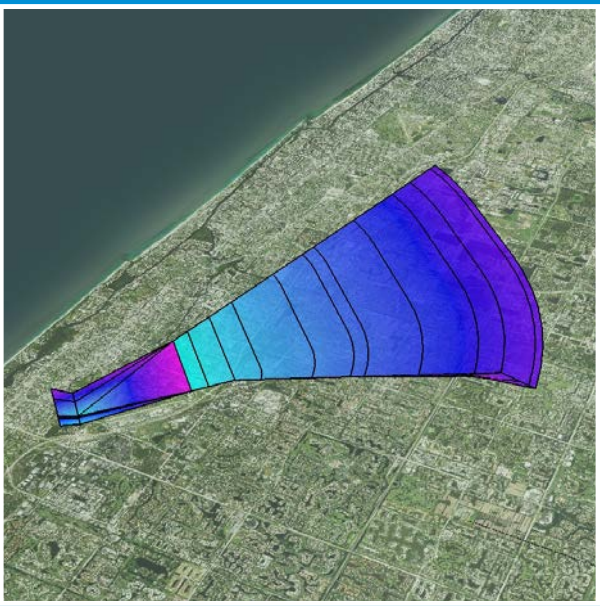
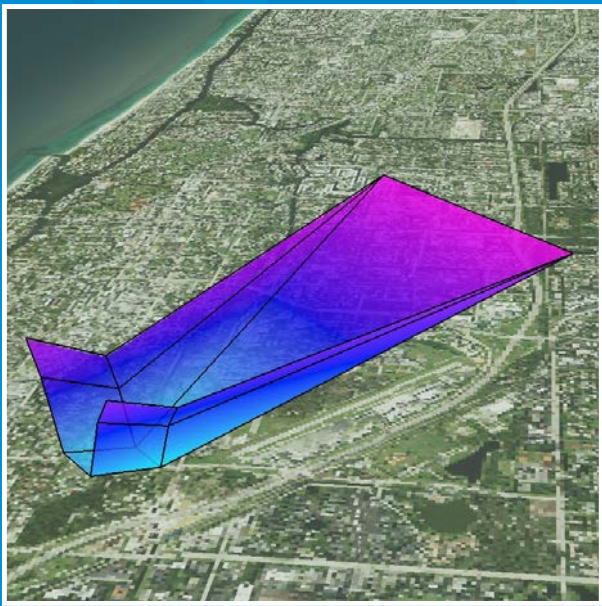
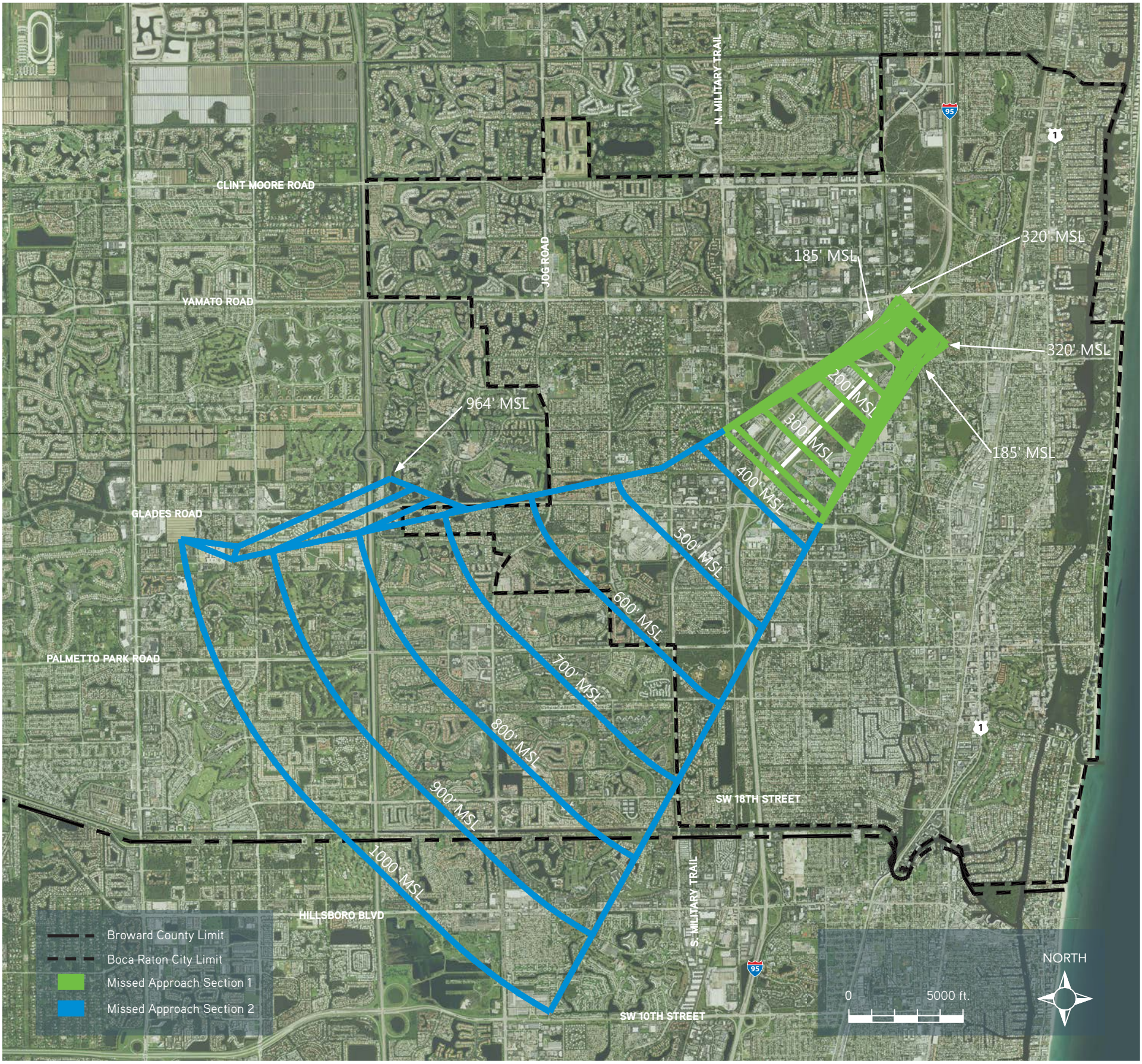


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Runway 23 LPV

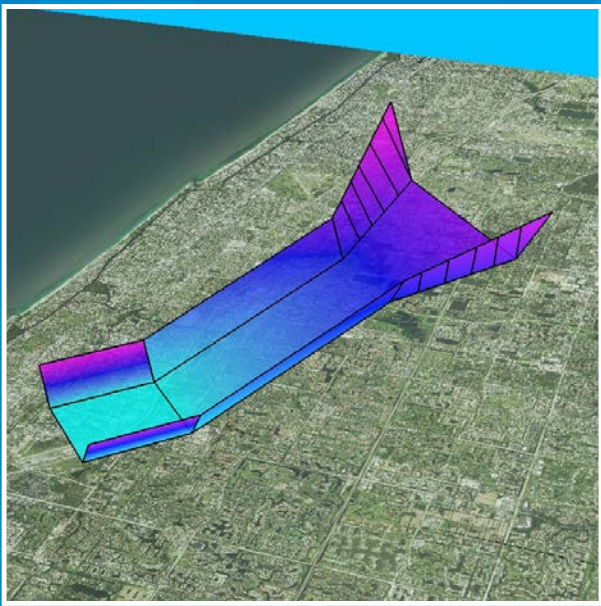
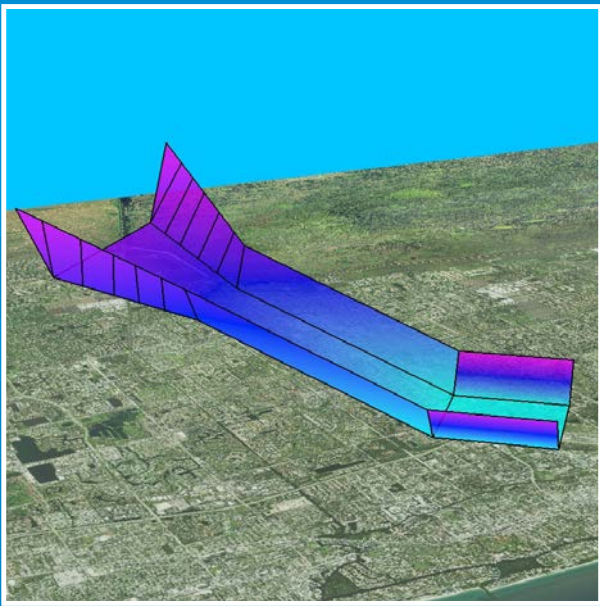
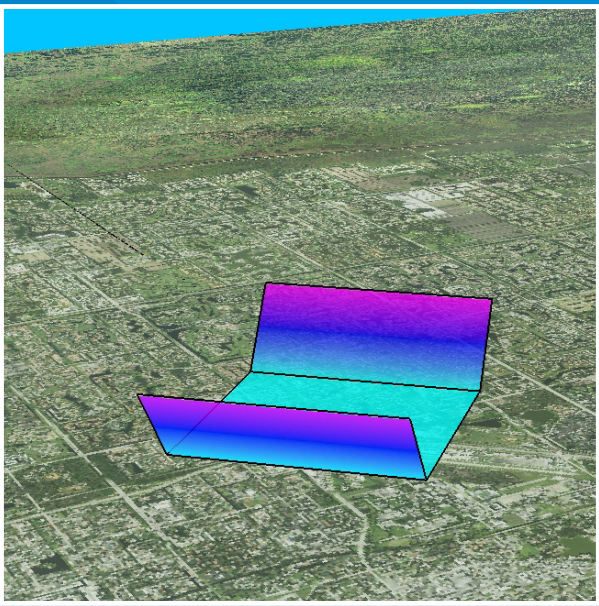
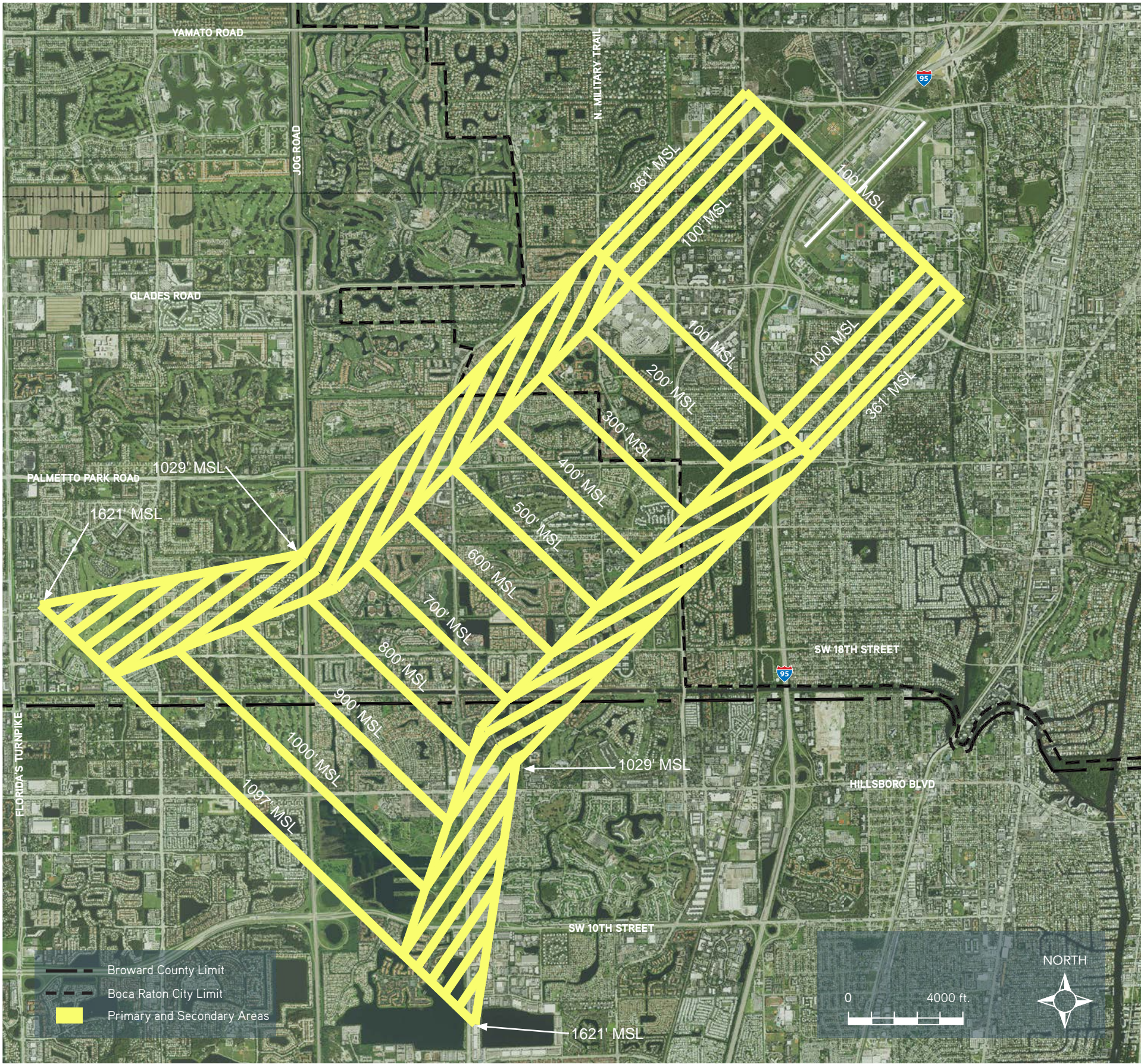
MISSED APPROACH SURFACE



NOTES: Isometric views exaggerated 10x. Procedures subject to change.
SOURCE: SE-3, 04 FEB 2016 to 03 MAR 2016 Amendment 1-October 15, 2015. *United States Standard for Performance Based Navigation (PBN) Instrument Procedure Design.*
PREPARED BY: Ricondo & Associates, Inc., July 2016.

Runway 5 LNAV/VNAV

APPROACH SURFACE

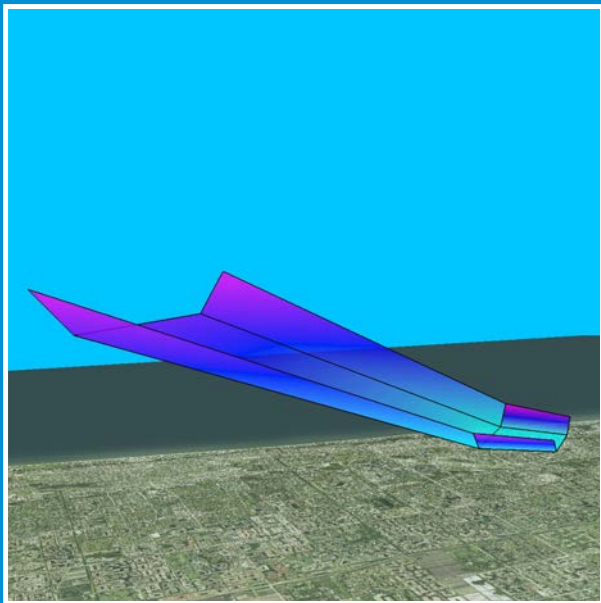
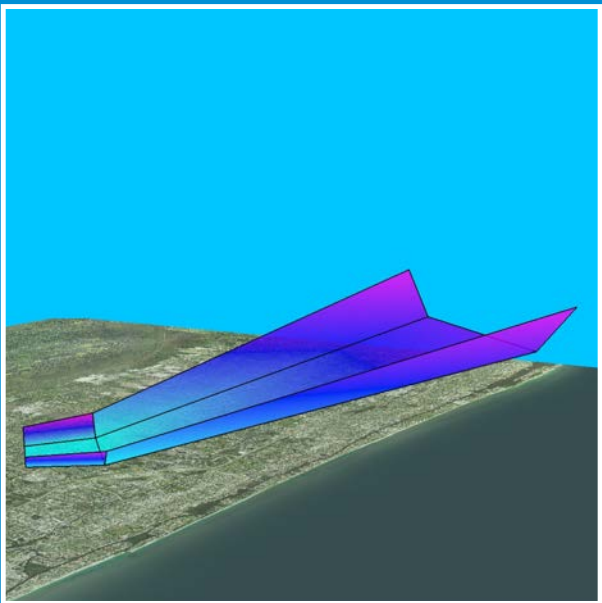
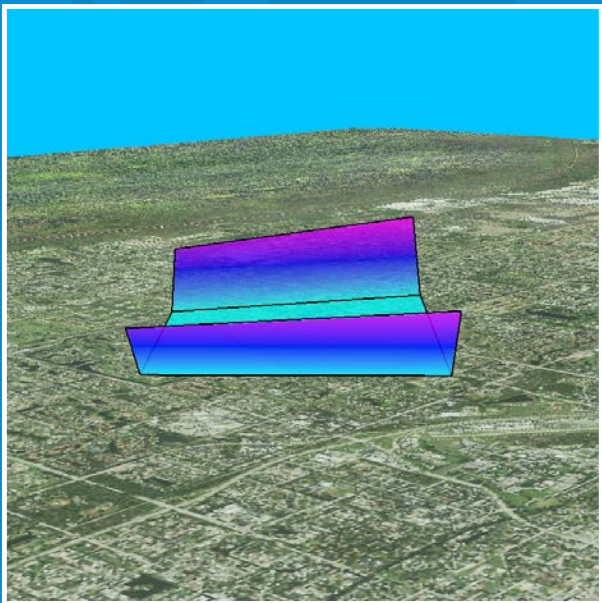
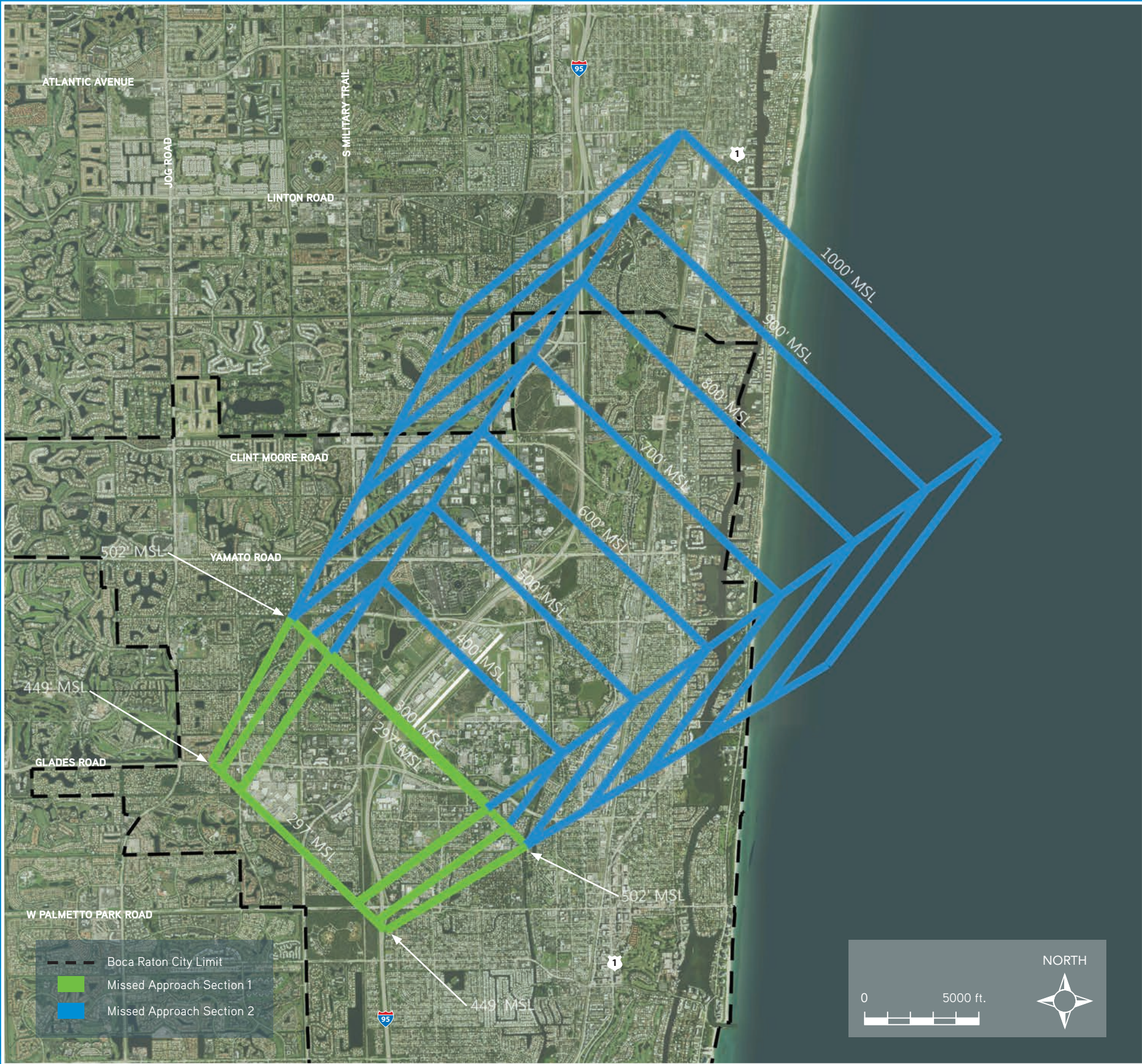


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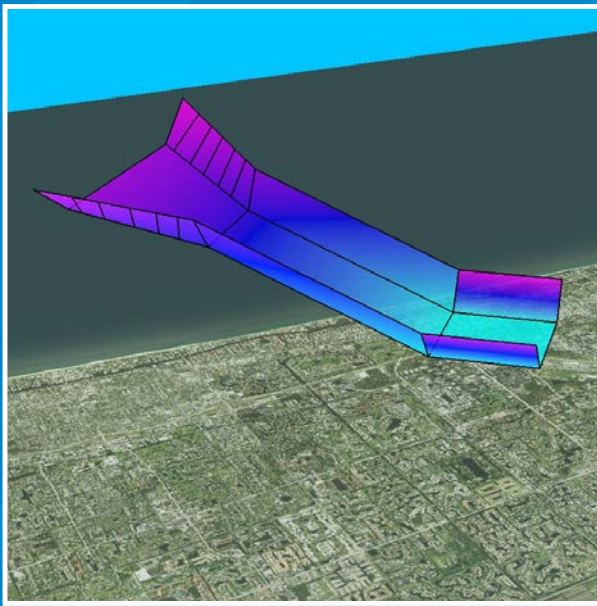
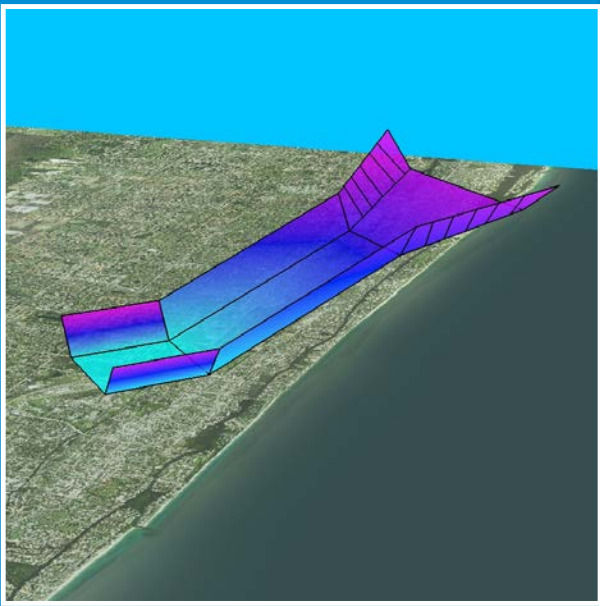
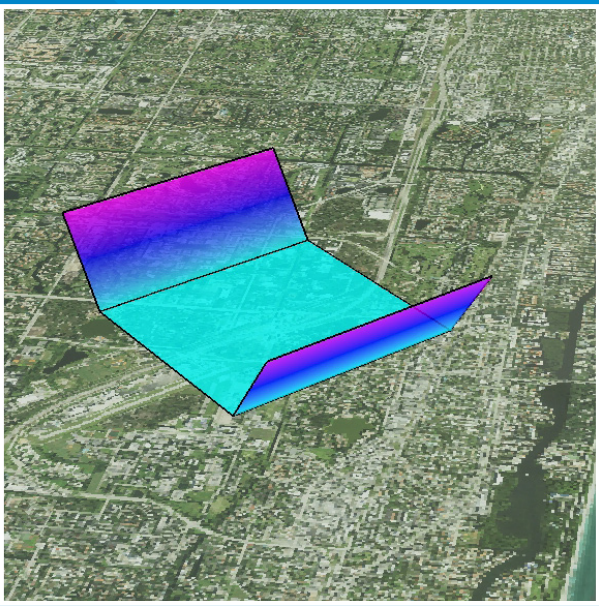
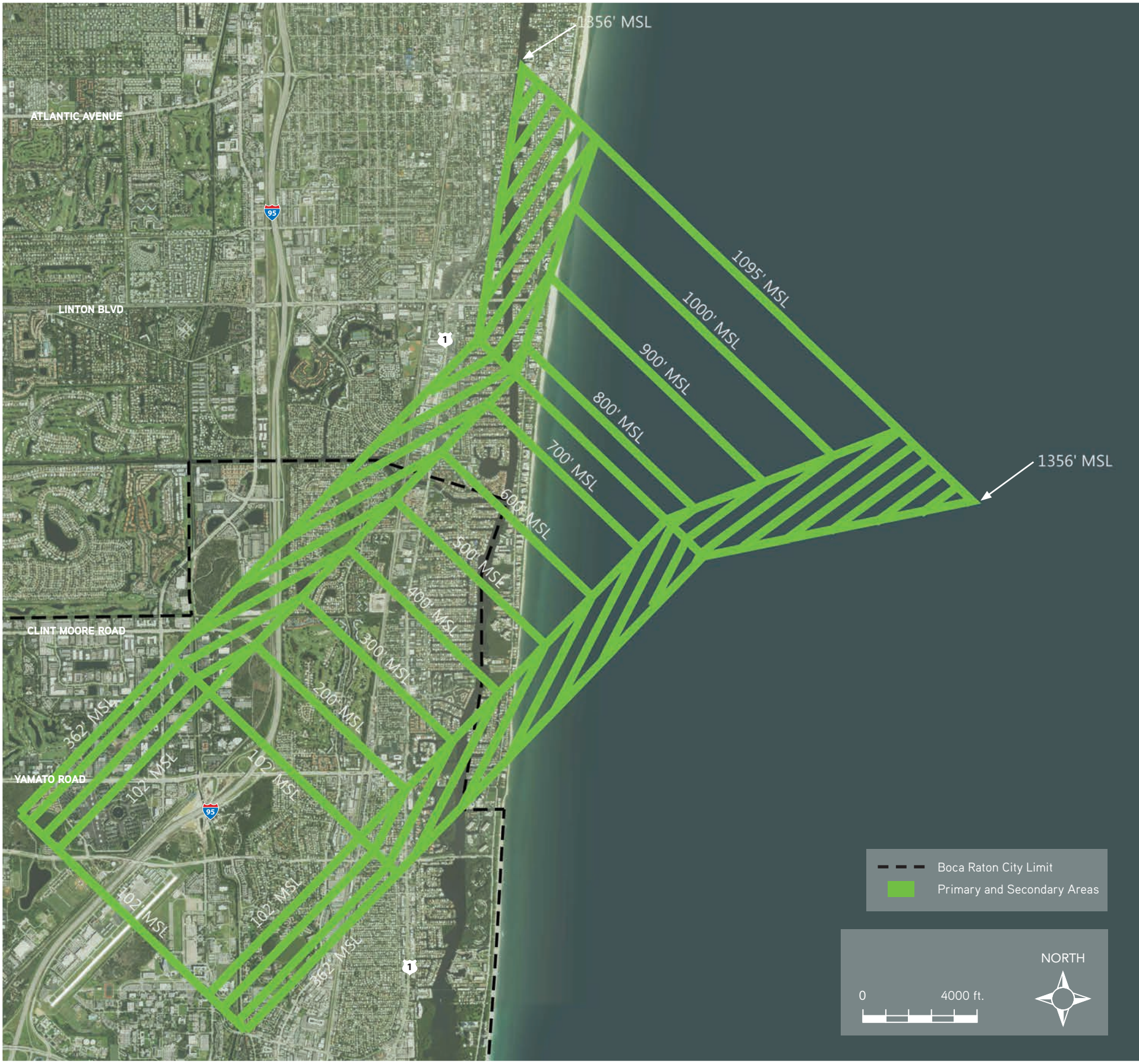
MISSSED APPROACH SURFACE



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SOURCE: SE-3, 04 FEB 2016 to 03 MAR 2016 Amendment 1-October 15, 2015. *United States Standard for Performance Based Navigation (PBN) Instrument Procedure Design.*
PREPARED BY: Ricondo & Associates, Inc., July 2016.

Runway 23 LNAV/VNAV

APPROACH SURFACE

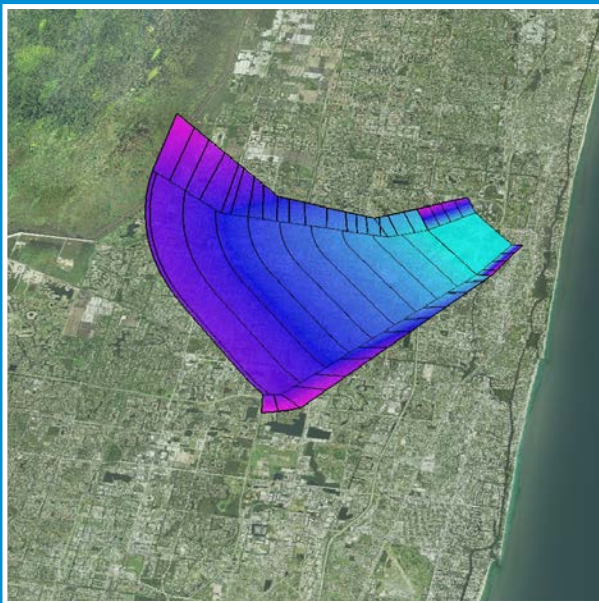
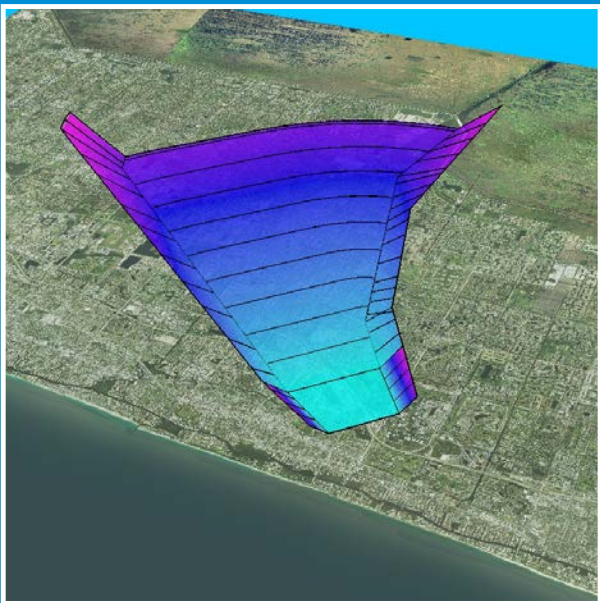
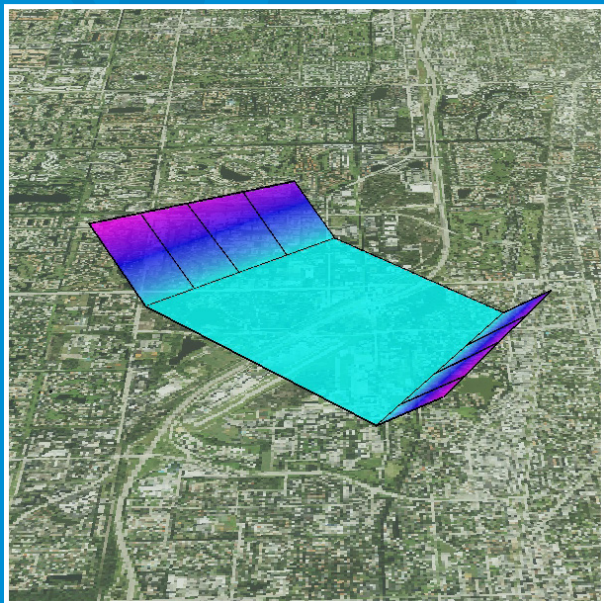
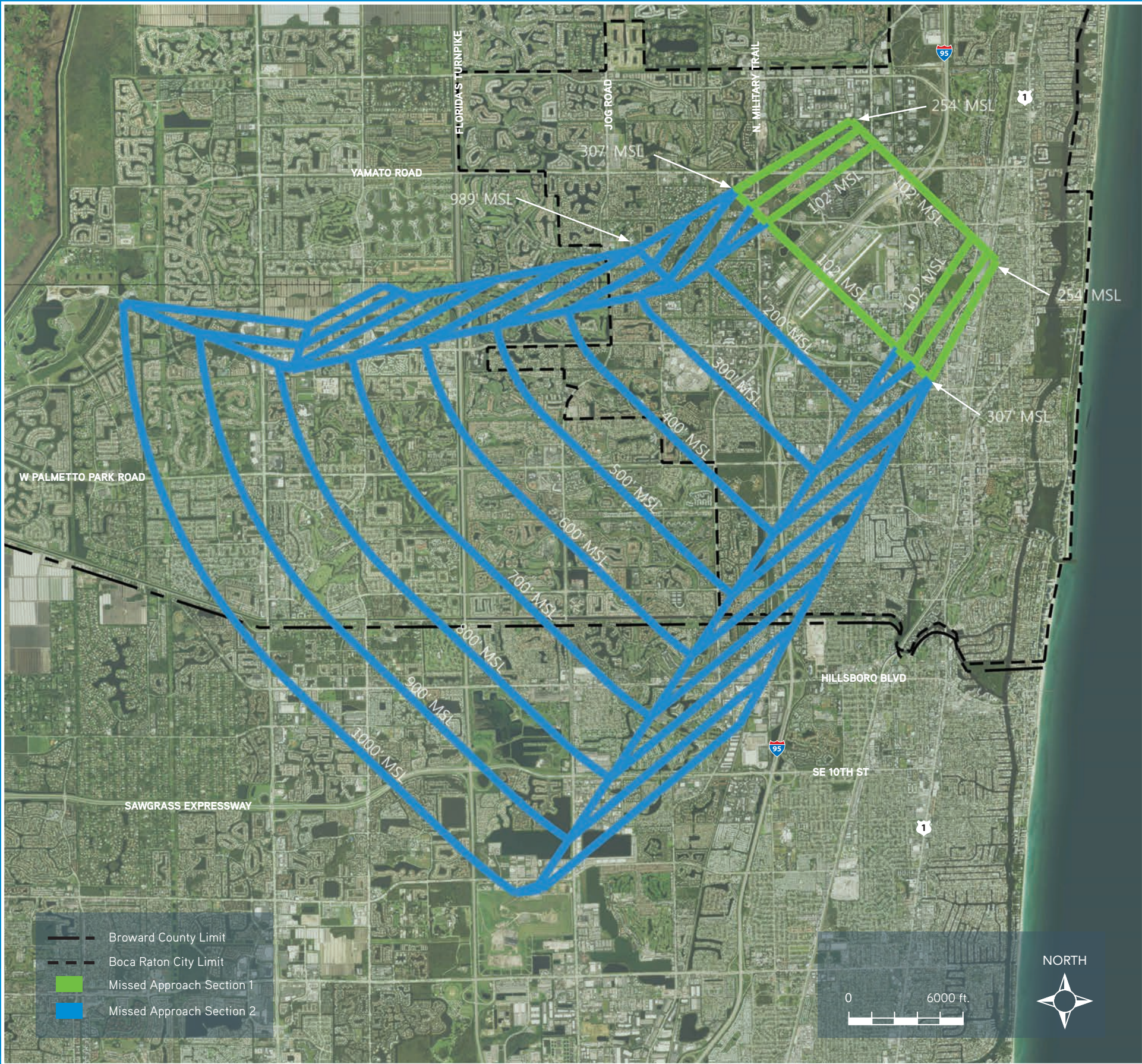


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PREPARED BY: Ricondo & Associates, Inc., July 2016.



Runway 23 LNAV/VNAV

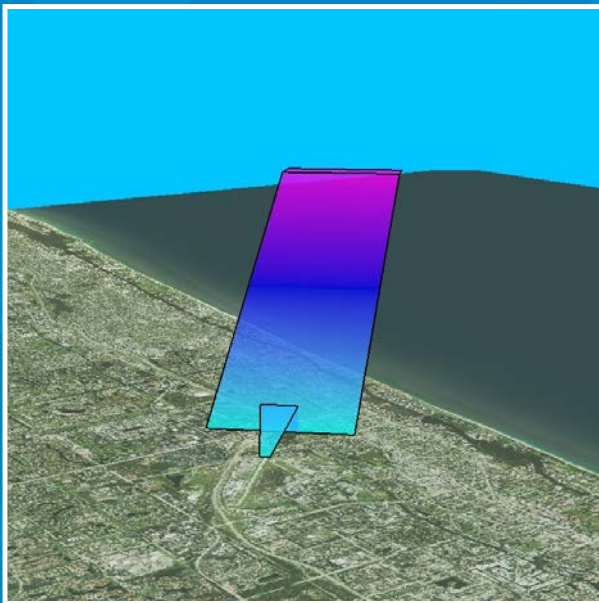
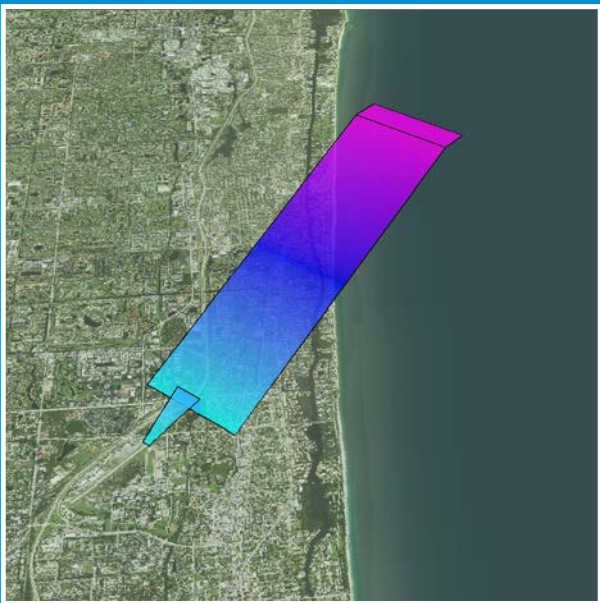
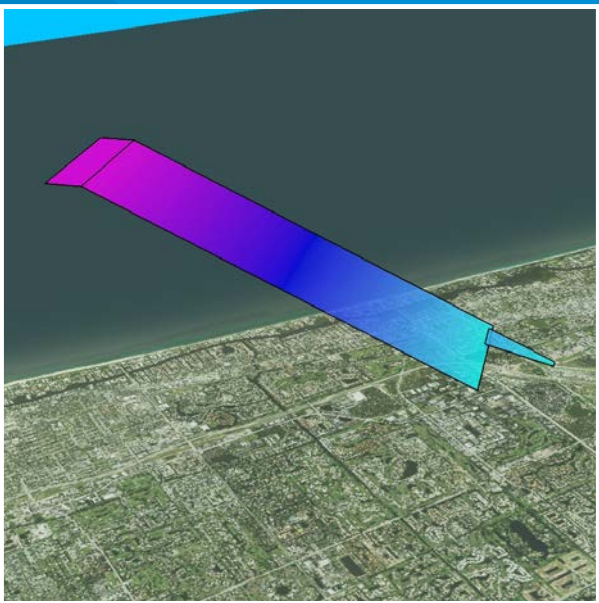
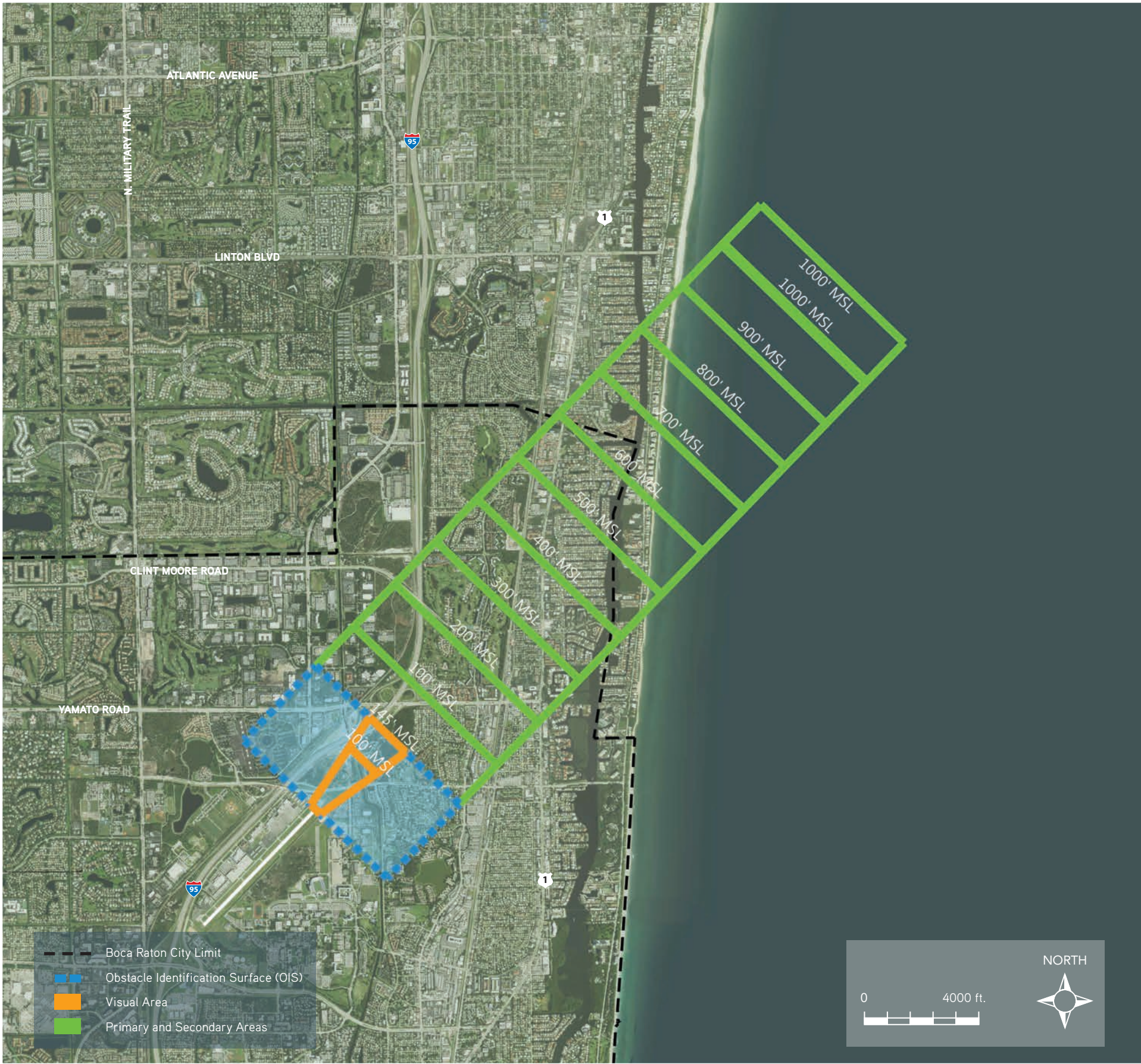
MISSSED APPROACH SURFACE



NOTES: Isometric views exaggerated 10x. Procedures subject to change.
SOURCE: SE-3, 04 FEB 2016 to 03 MAR 2016 Amendment 1-October 15, 2015. *United States Standard for Performance Based Navigation (PBN) Instrument Procedure Design.*
PREPARED BY: Ricondo & Associates, Inc., July 2016.

Runway 23 RNP

APPROACH SURFACE



NOTES: Isometric views exaggerated 10x. Procedures subject to change. All TERPS RNP Obstacle Clearance Surfaces (OCS) and Obstacle Identification Surfaces (OIS) have been depicted. It is assumed that the existing RNP approach procedure accounts for existing objects in the OIS area and they have been evaluated by the FAA. Any new objects proposed in the OIS area will require further review by the FAA and may cause increases to the approach minimums.

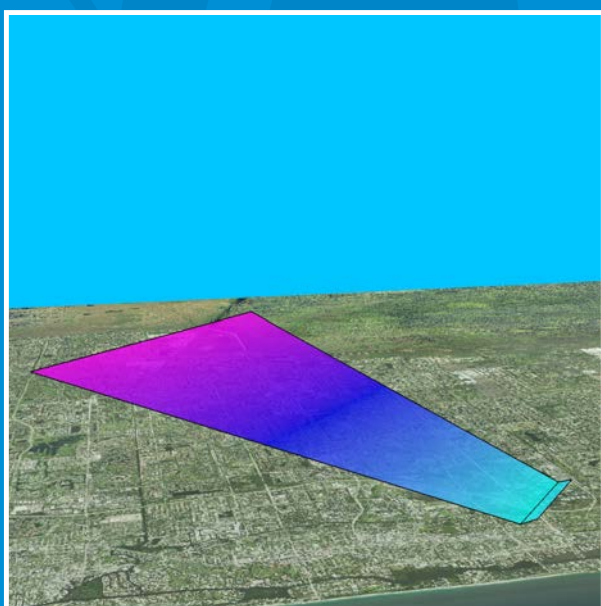
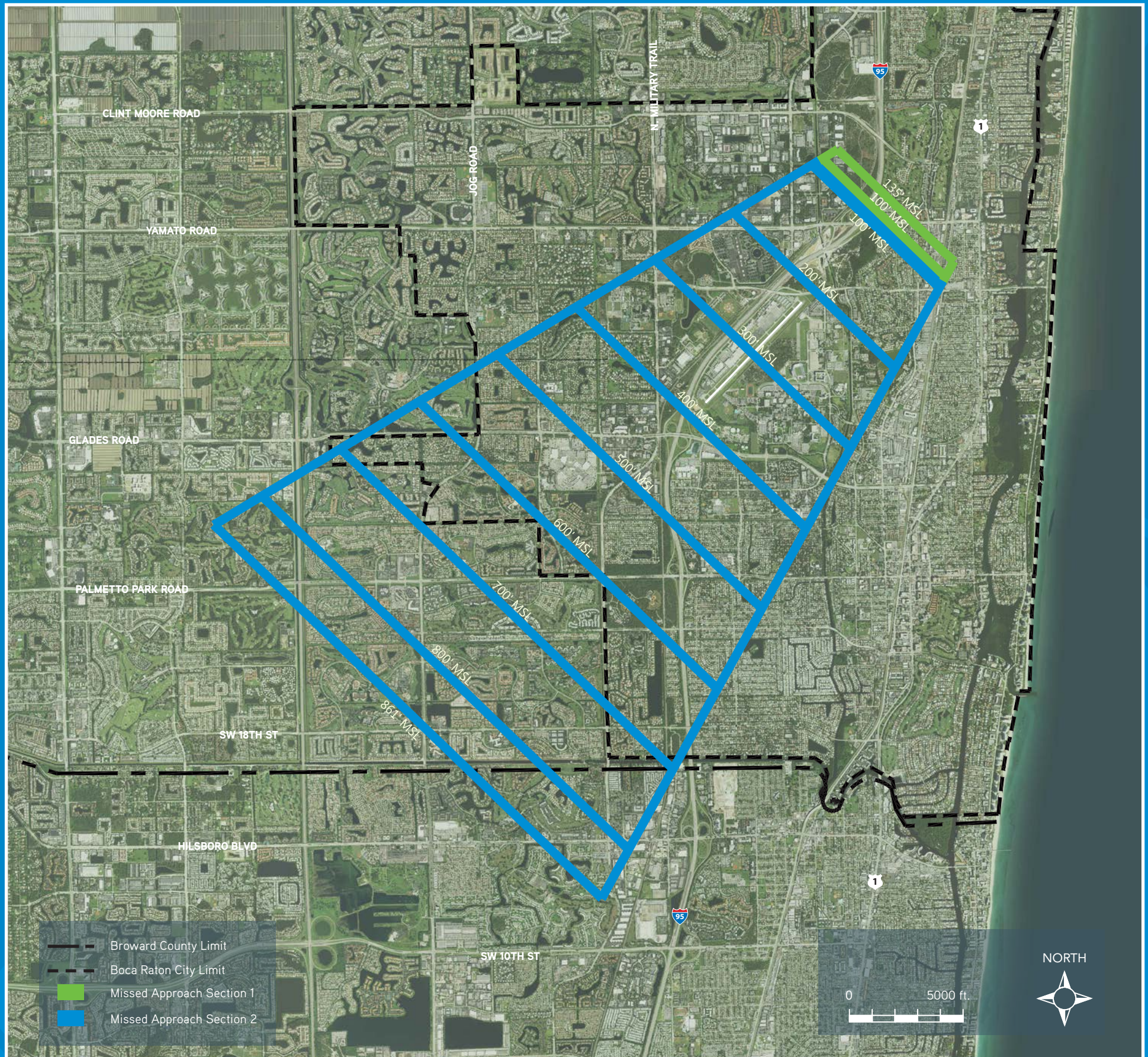
SOURCE: SE-3, 04 FEB 2016 to 03 MAR 2016 Amendment 1-October 15, 2015. *United States Standard for Performance Based Navigation (PBN) Instrument Procedure Design.*

PREPARED BY: Ricondo & Associates, Inc., July 2016.



Runway 23 RNP

MISSSED APPROACH SURFACE



NOTES: Isometric views exaggerated 10x. Procedures subject to change.

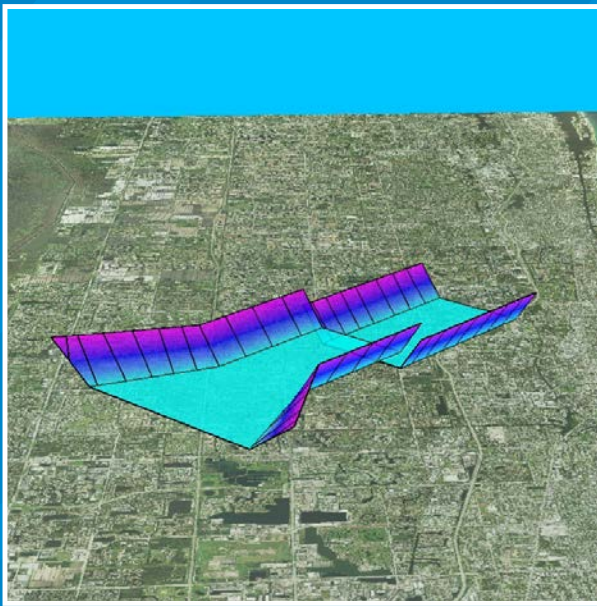
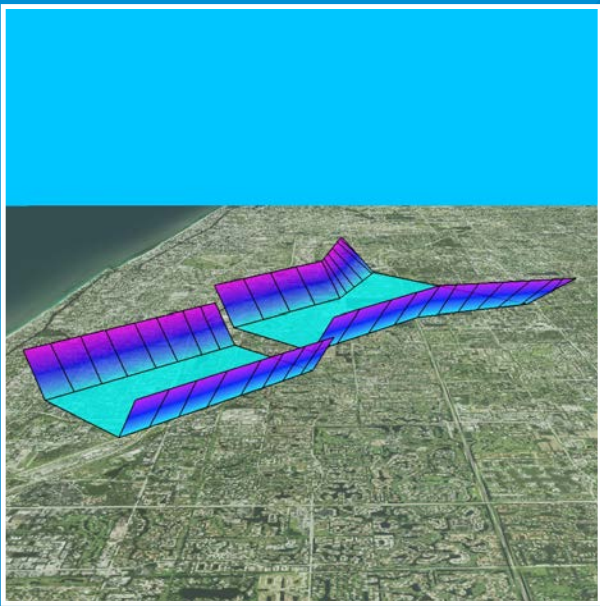
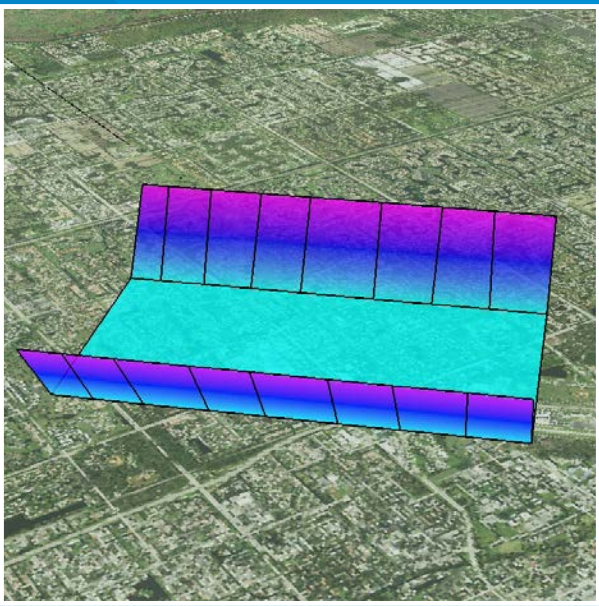
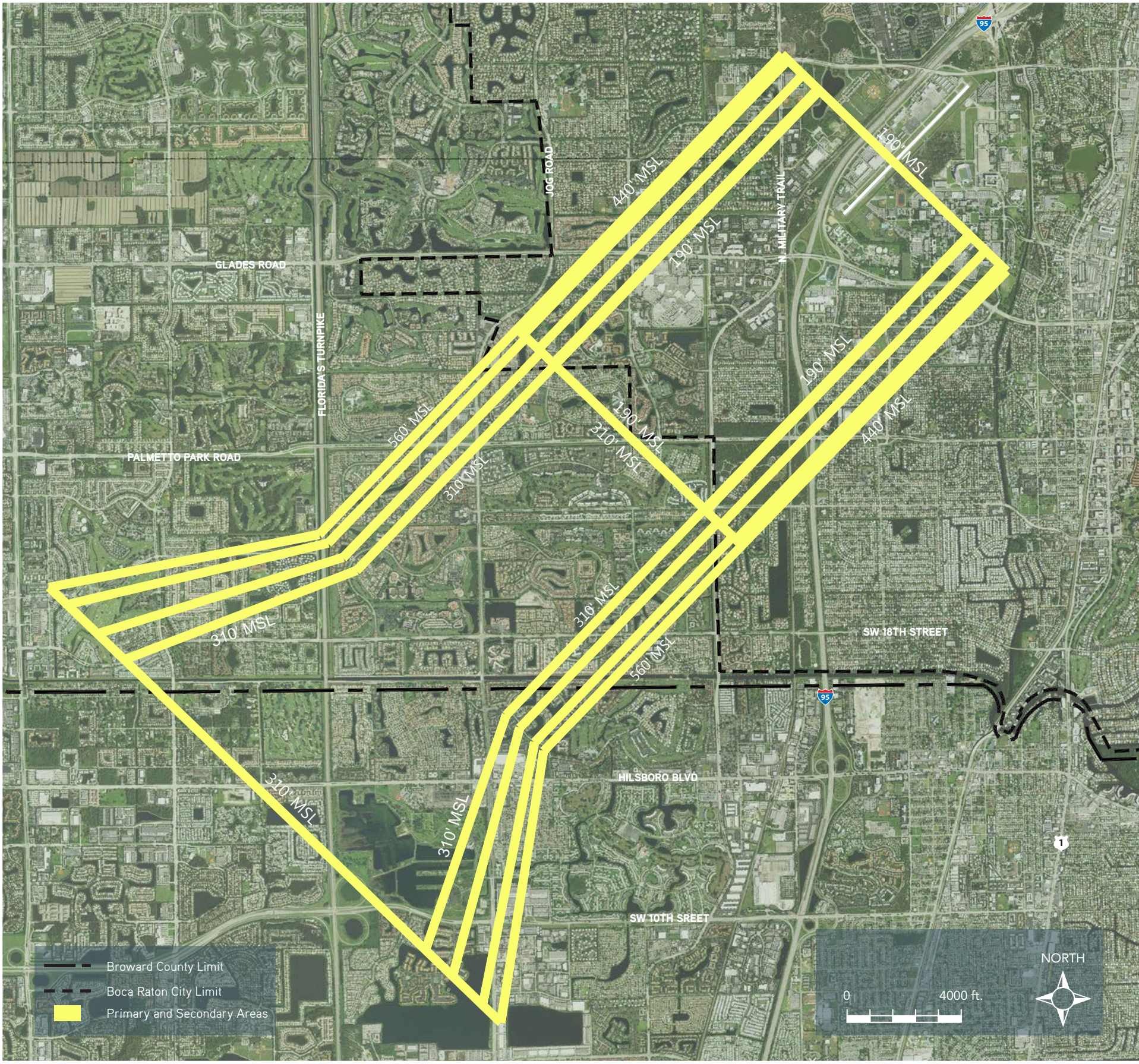
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PREPARED BY: Ricondo & Associates, Inc., July 2016.

BOCA RATON AIRPORT

Runway 5 LNAV

APPROACH SURFACE

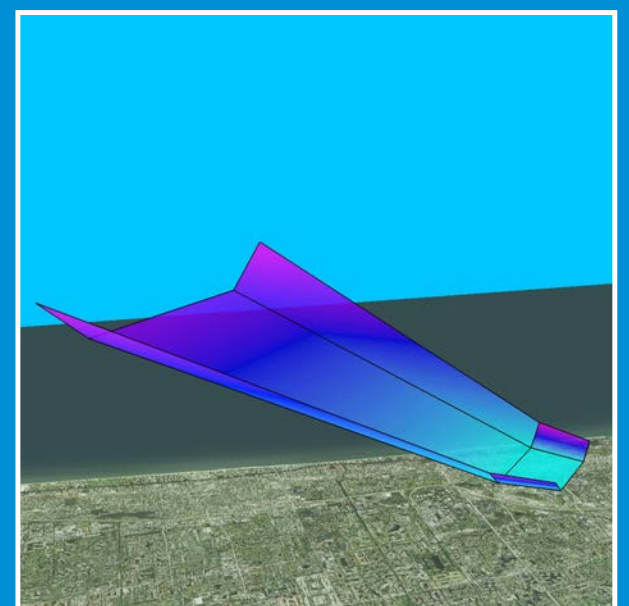
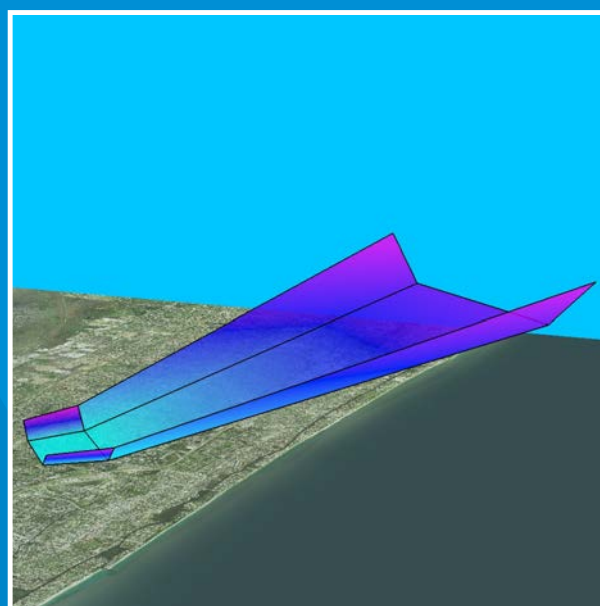
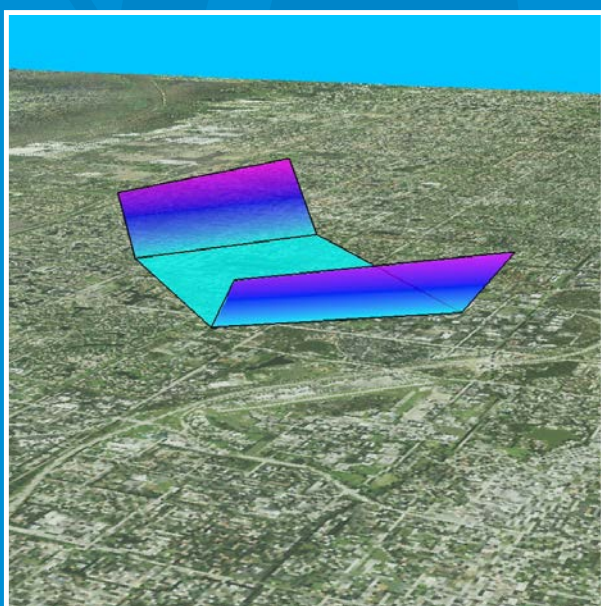
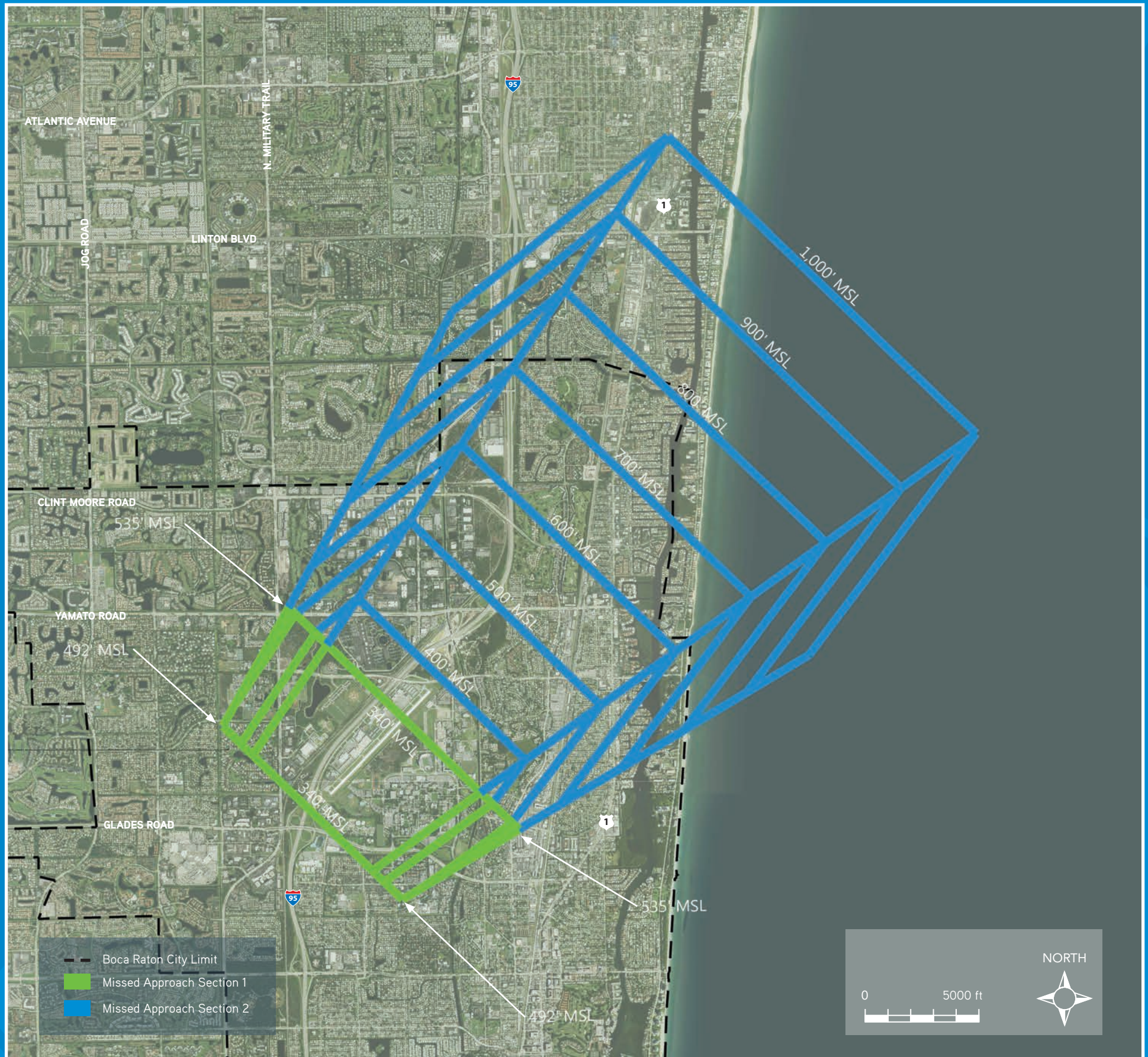


NOTES: Isometric views exaggerated 10x. Procedures subject to change.
SOURCE: SE-3, 04 FEB 2016 to 03 MAR 2016 Amendment 1-October 15, 2015. *United States Standard for Performance Based Navigation (PBN) Instrument Procedure Design*.
PREPARED BY: Ricondo & Associates, Inc., July 2016.



Runway 5 LNAV

MISSED APPROACH SURFACE



NOTES: Isometric views exaggerated 10x. Procedures subject to change.

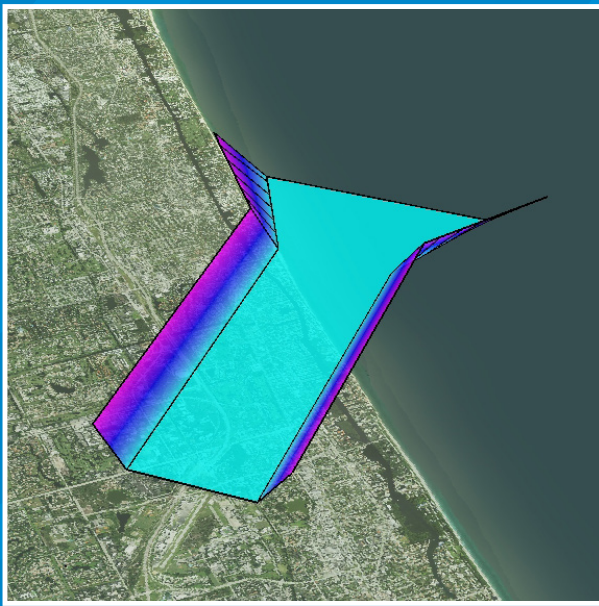
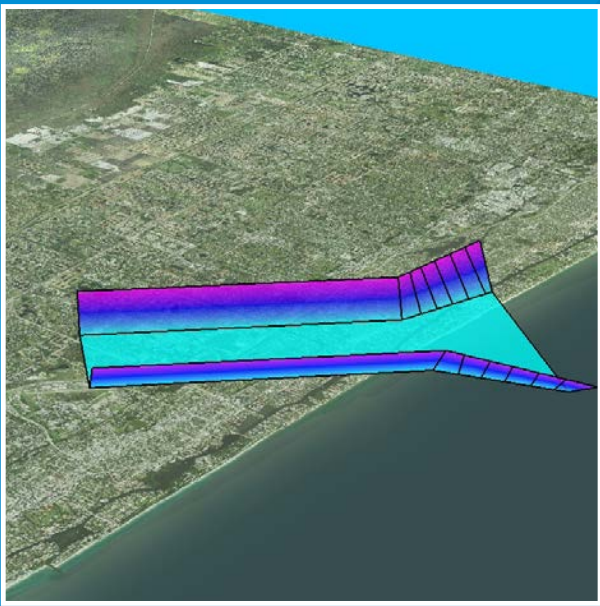
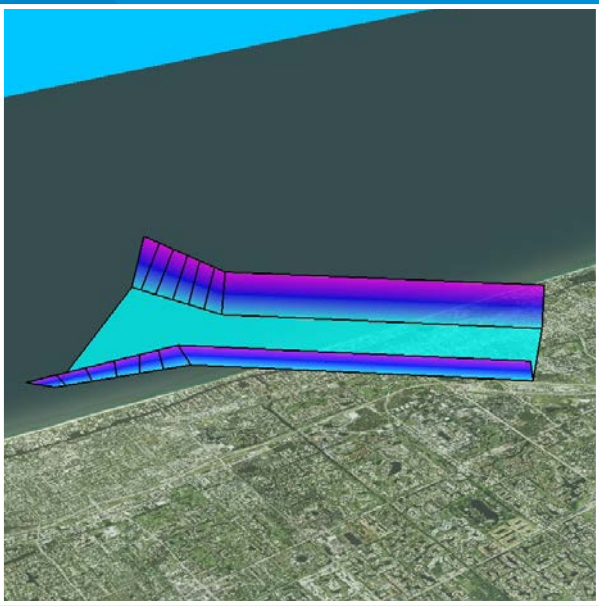
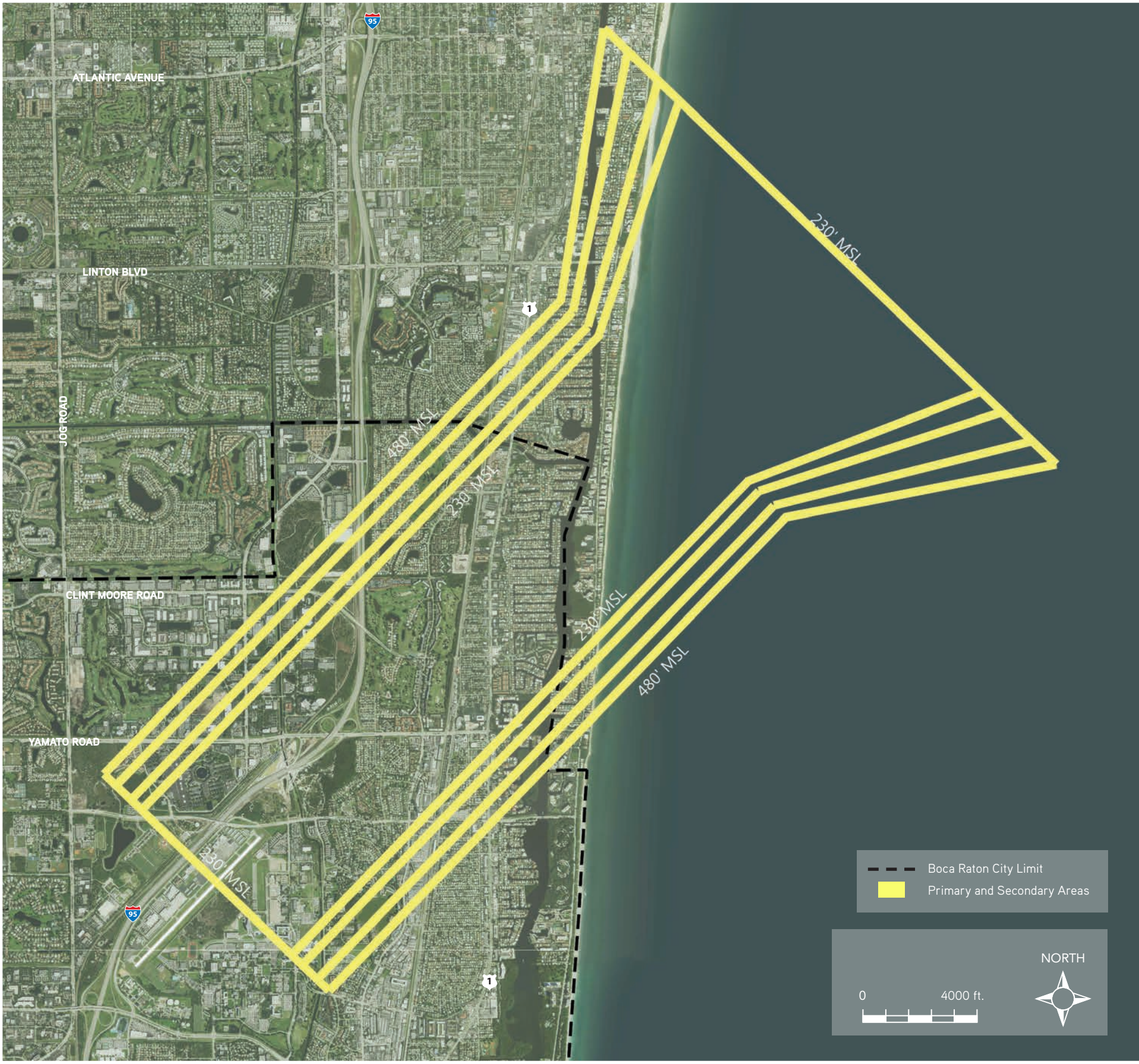
SOURCE: SE-3, 04 FEB 2016 to 03 MAR 2016 Amendment 1-October 15, 2015. *United States Standard for Performance Based Navigation (PBN) Instrument Procedure Design.*

PREPARED BY: Ricondo & Associates, Inc., July 2016.

BOCA RATON AIRPORT

Runway 23 LNAV

APPROACH SURFACE



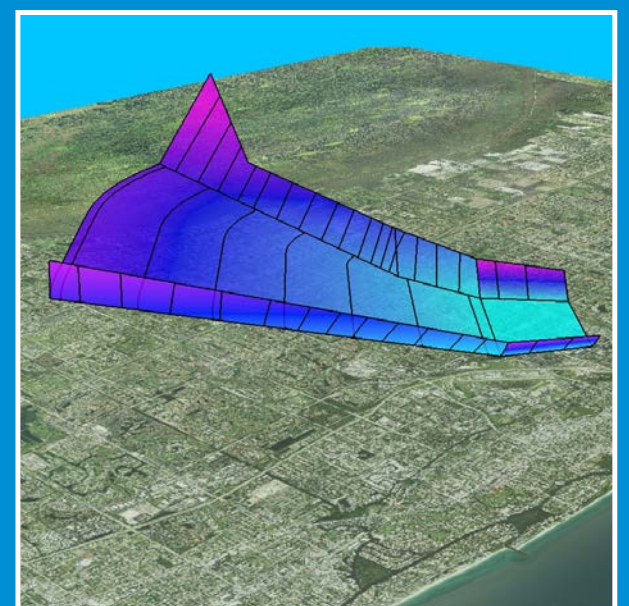
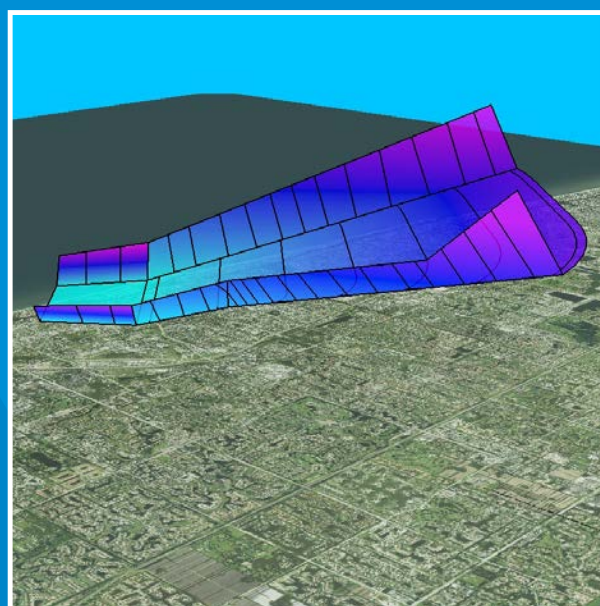
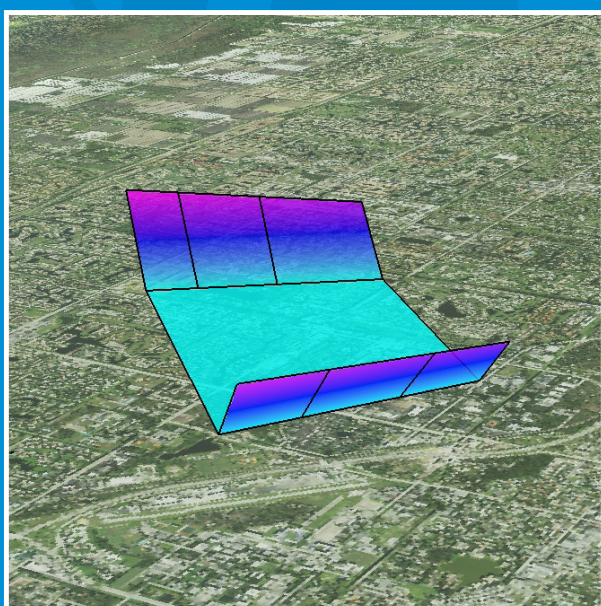
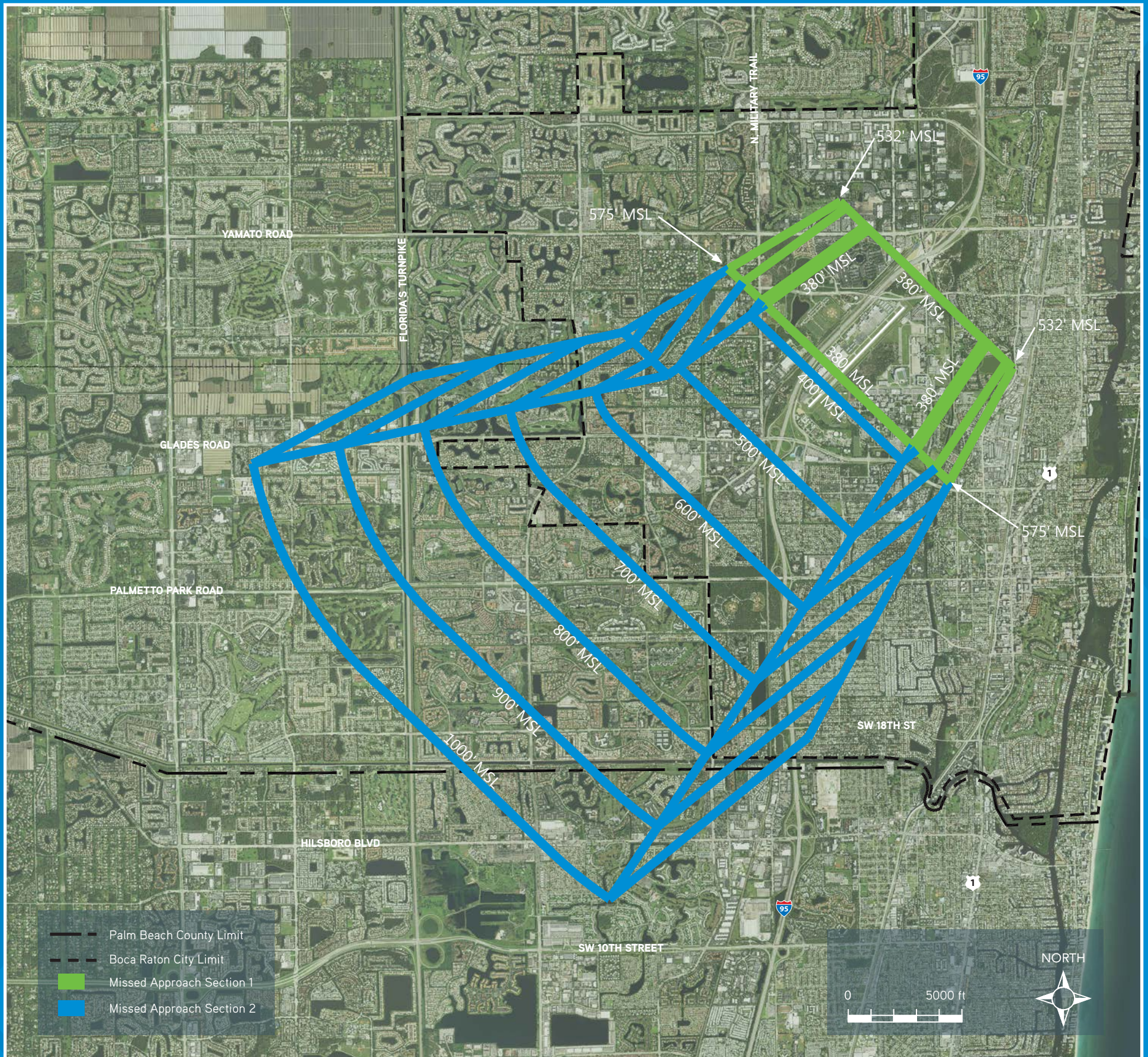
NOTES: Isometric views exaggerated 10x. Procedures subject to change.
SOURCE: SE-3, 04 FEB 2016 to 03 MAR 2016 Amendment 1-October 15, 2015. *United States Standard for Performance Based Navigation (PBN) Instrument Procedure Design*.
PREPARED BY: Ricondo & Associates, Inc., July 2016.



RICONDO
& ASSOCIATES

Runway 23 LNAV

MISSSED APPROACH SURFACE



NOTES: Isometric views exaggerated 10x. Procedures subject to change.

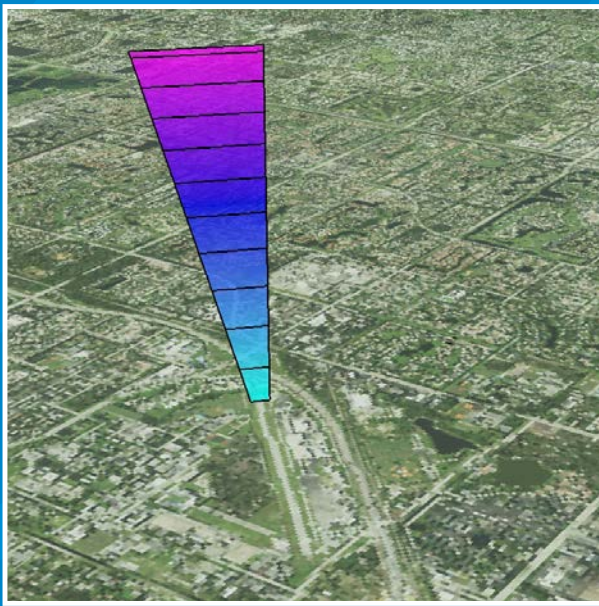
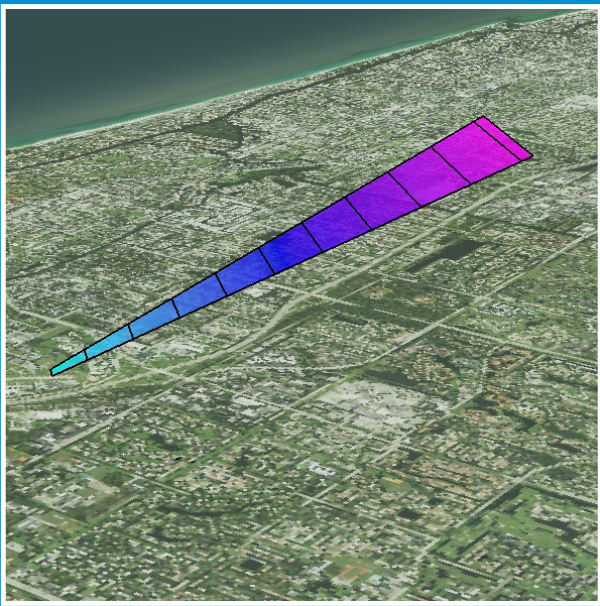
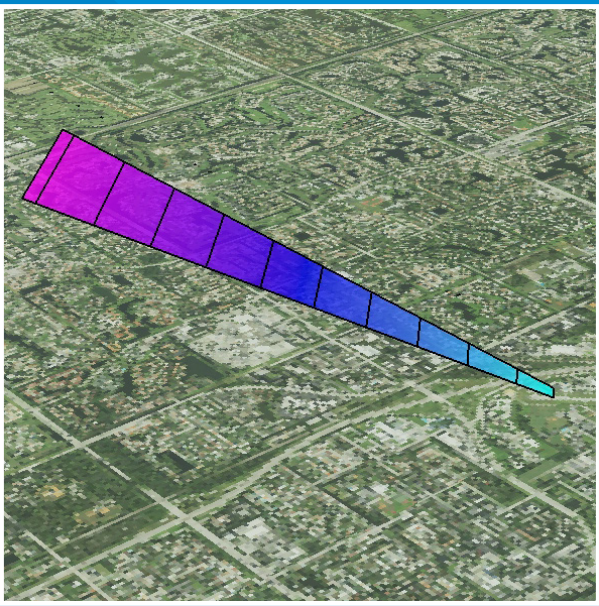
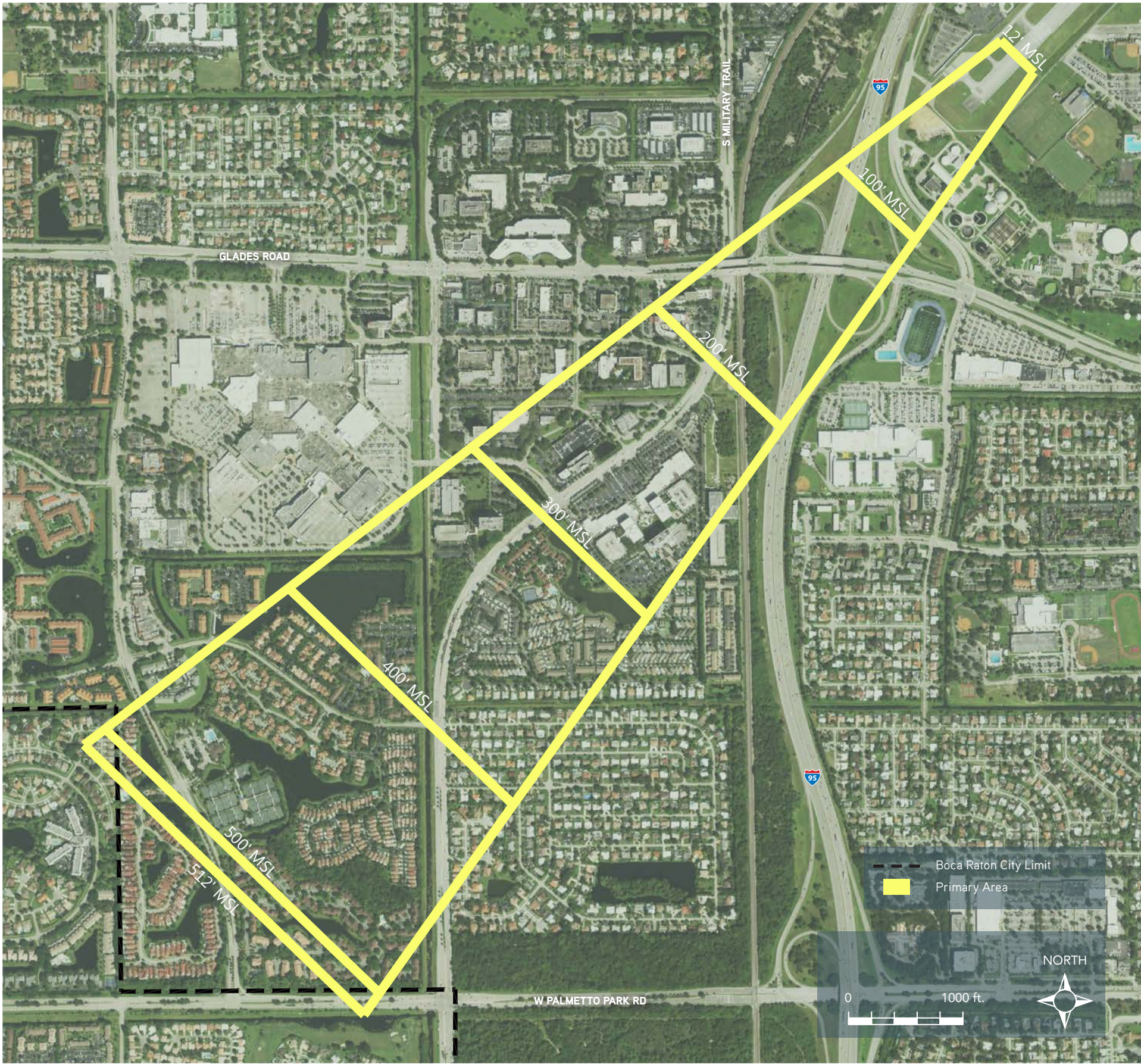
SOURCE: SE-3, 04 FEB 2016 to 03 MAR 2016 Amendment 1-October 15, 2015. *United States Standard for Performance Based Navigation (PBN) Instrument Procedure Design.*

PREPARED BY: Ricondo & Associates, Inc., July 2016.

BOCA RATON AIRPORT

Runway 5

VISUAL APPROACH SURFACE



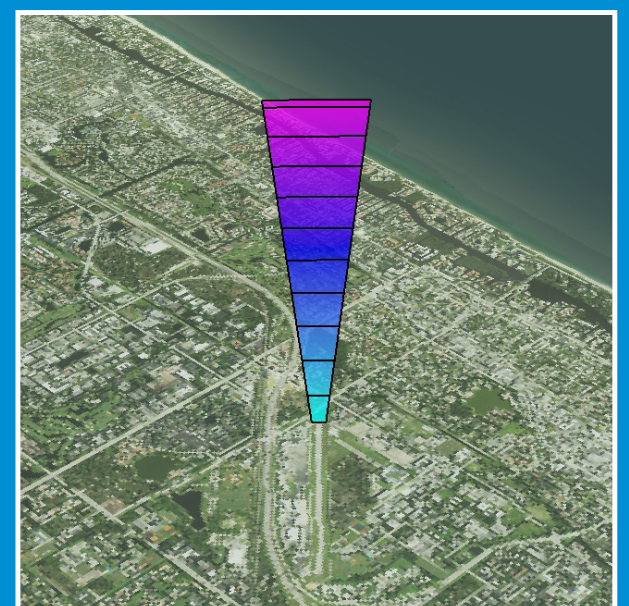
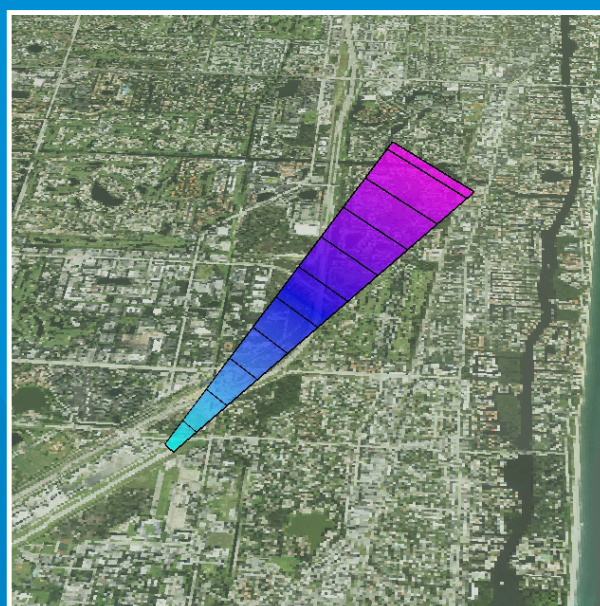
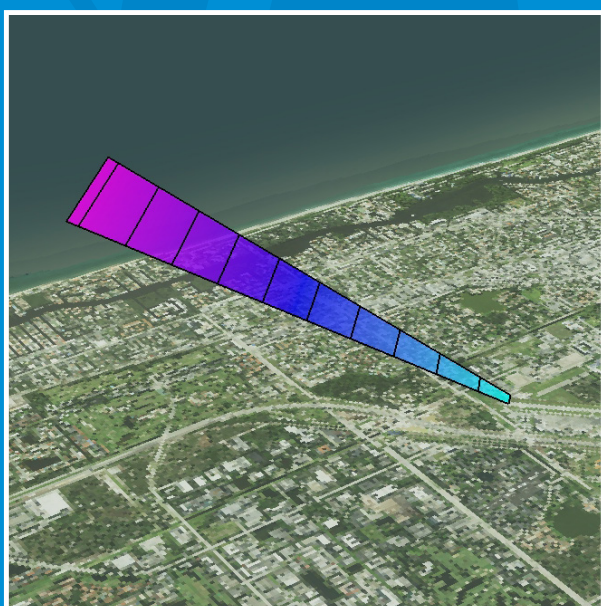
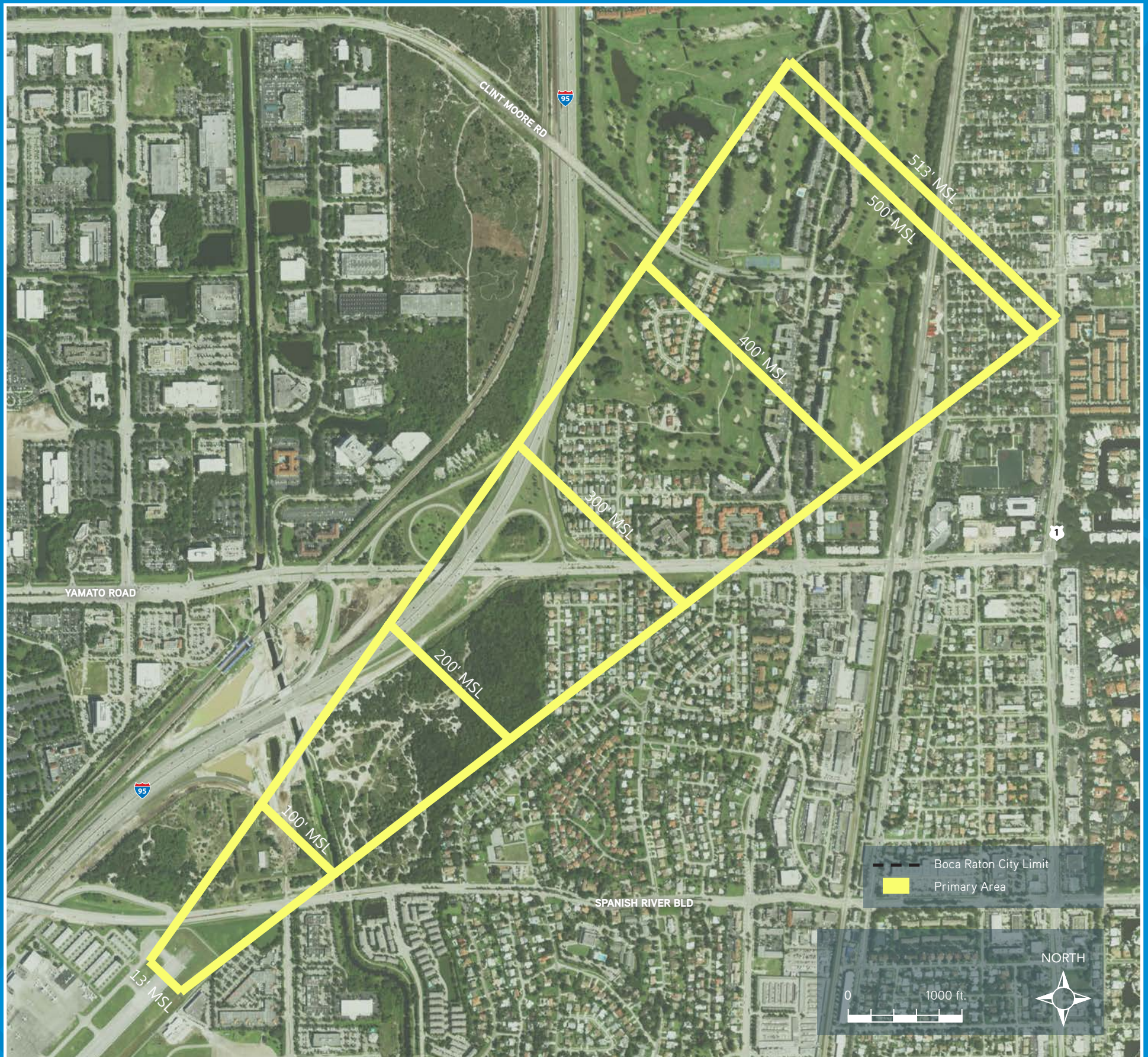
NOTES: Isometric views exaggerated 10x. Procedures subject to change.
SOURCE: SE-3, 04 FEB 2016 to 03 MAR 2016 Amendment 1-October 15, 2015. UFAA Order 8260.3C *United States Standard for Terminal Instrument Procedures (TERPS)*.
PREPARED BY: Ricondo & Associates, Inc., July 2016.



RICONDO
& ASSOCIATES

Runway 23

VISUAL APPROACH SURFACE



NOTES: Isometric views exaggerated 10x. Procedures subject to change.

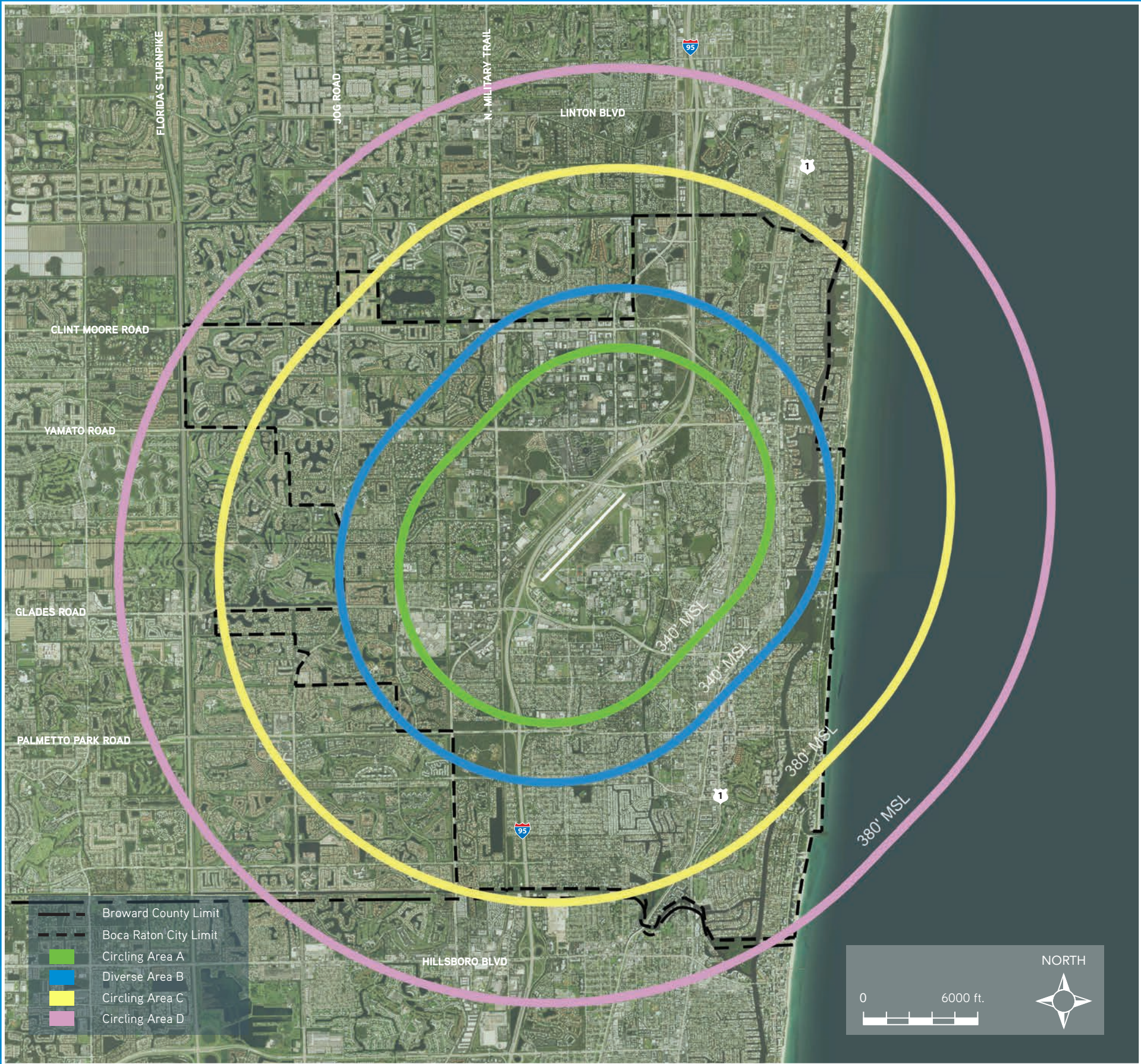
SOURCE: SE-3, 04 FEB 2016 to 03 MAR 2016 Amendment 1-October 15, 2015. UFAA Order 8260.3C *United States Standard for Terminal Instrument Procedures (TERPS)*.

PREPARED BY: Ricondo & Associates, Inc., July 2016.

BOCA RATON AIRPORT



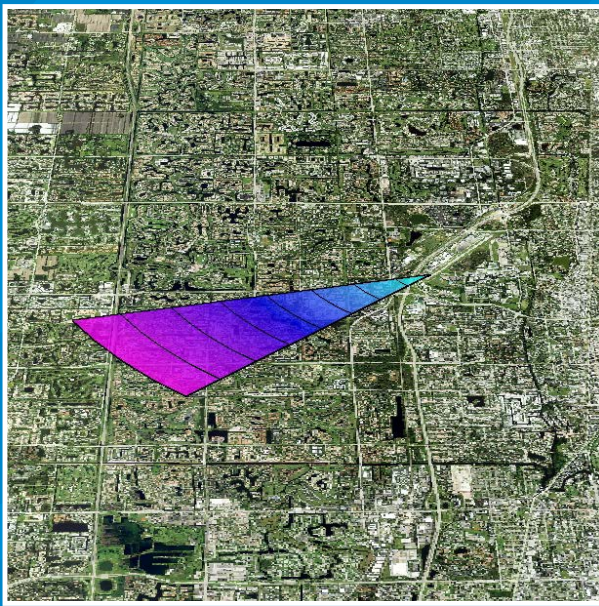
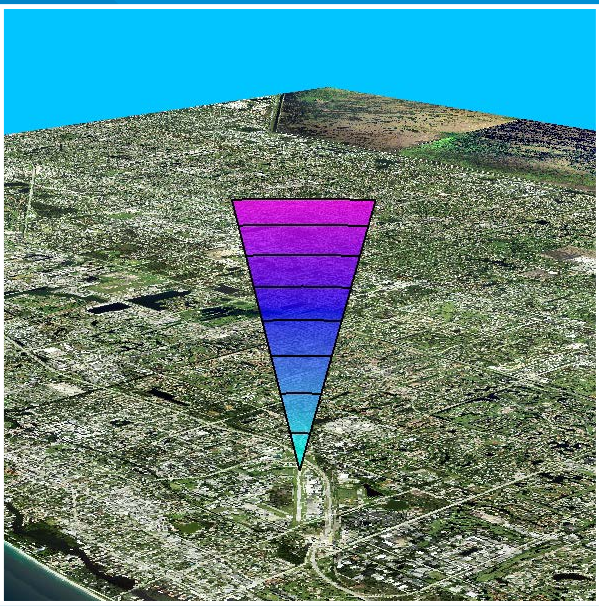
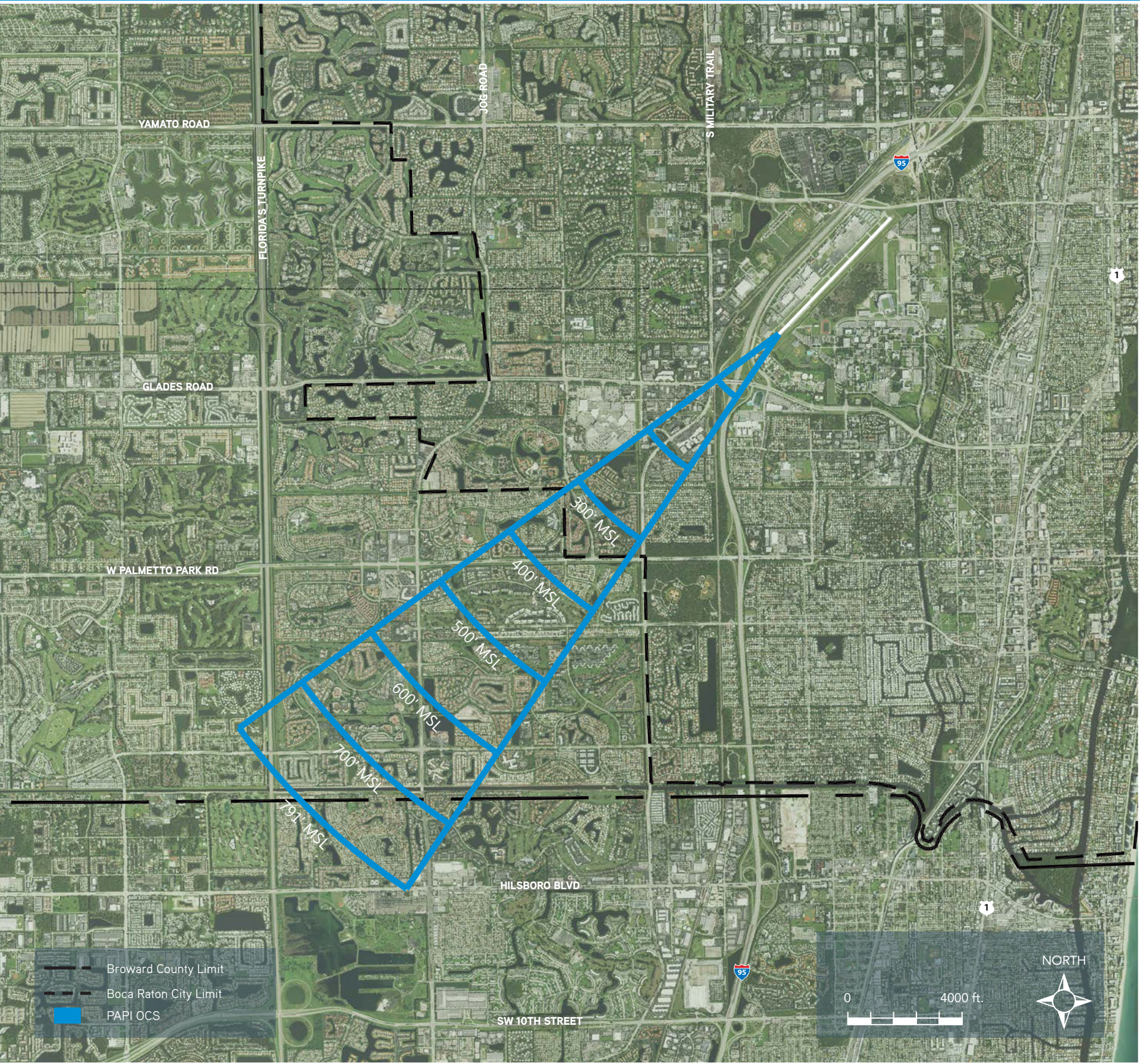
Circling Approach Areas



NOTES: All surfaces are comprised of a horizontal surface with an elevation as noted.
SOURCE: FAA Terminal Procedure Charts Effective 26 MAY 2016 to 23 JUN 2016. FAA Order 8260.3C *United States Standard for Terminal Instrument Procedures (TERPS)*.
PREPARED BY: Ricondo & Associates, Inc., July 2016.

Runway 5

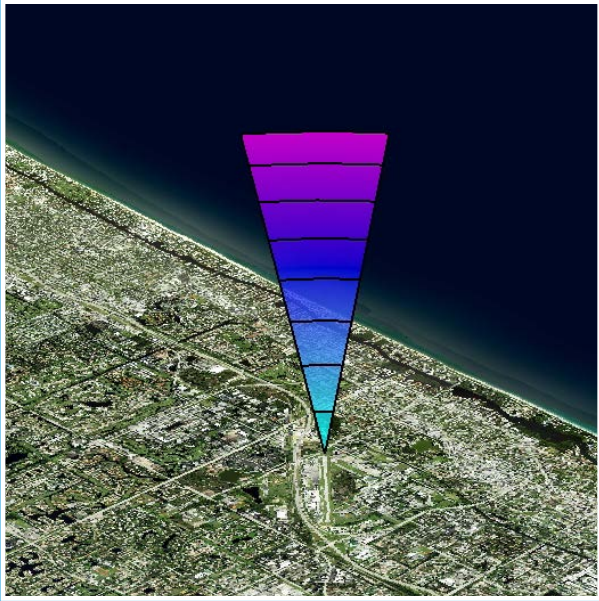
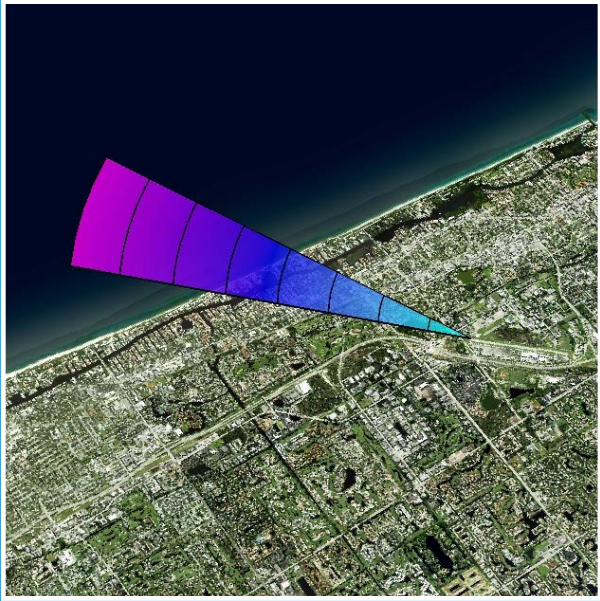
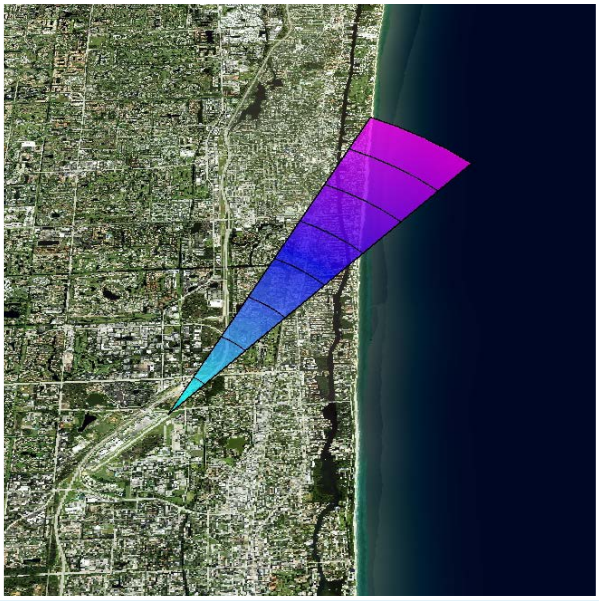
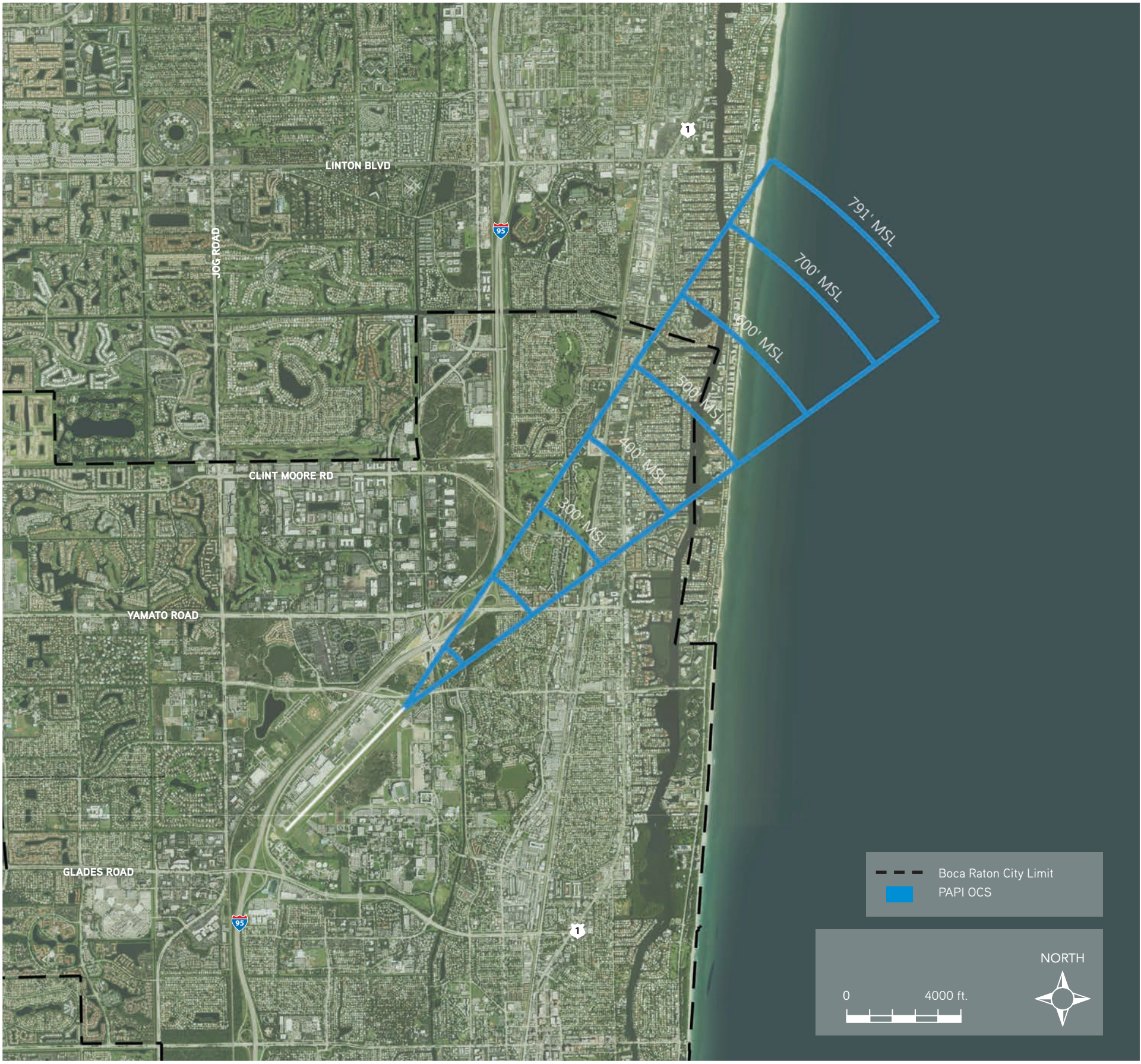
PRECISION APPROACH PATH INDICATOR (PAPI) OCS



NOTES: Isometric views exaggerated 10x. Procedures subject to change.
SOURCE: FAA JO 6850.2B Visual Guidance Lighting Systems, August 20, 2010.
PREPARED BY: Ricondo & Associates, Inc., July 2016.

Runway 23

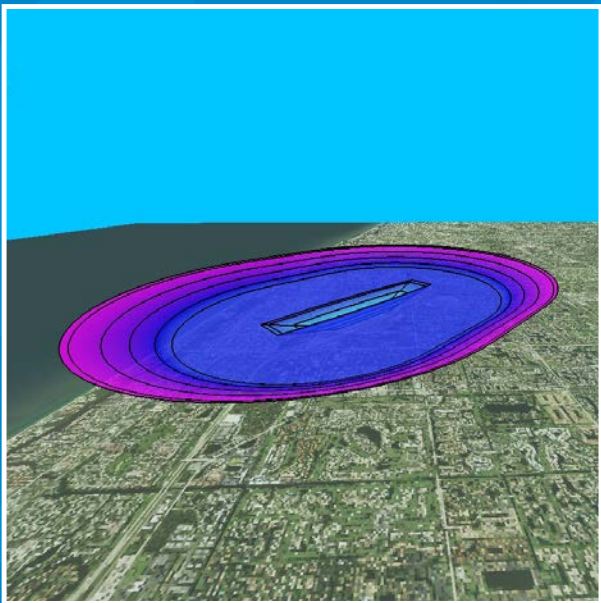
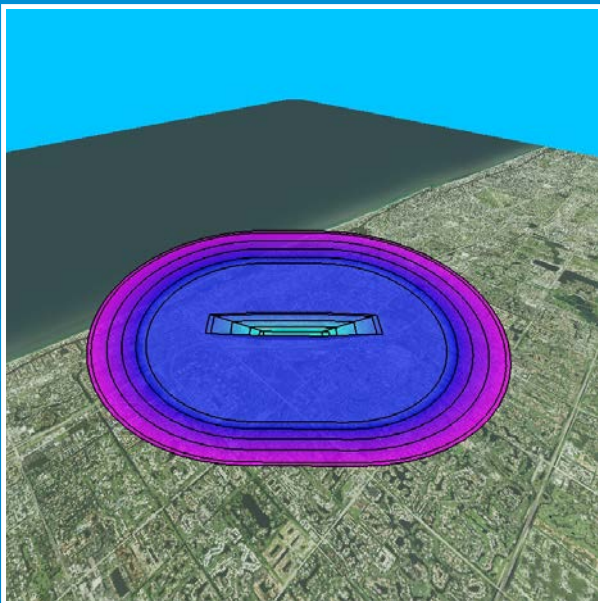
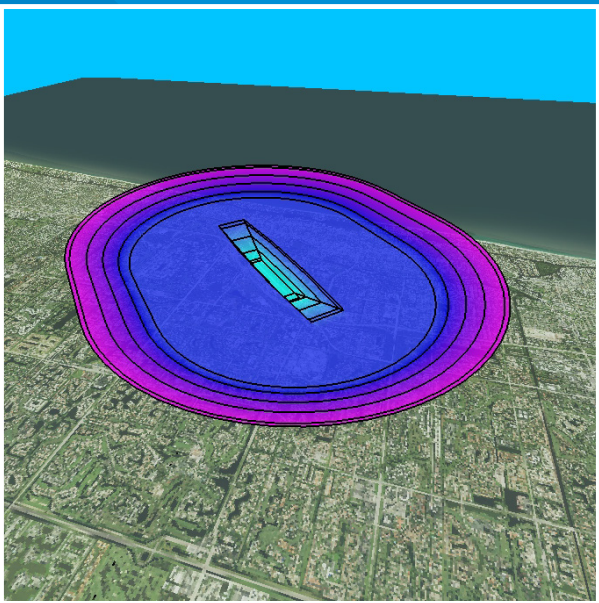
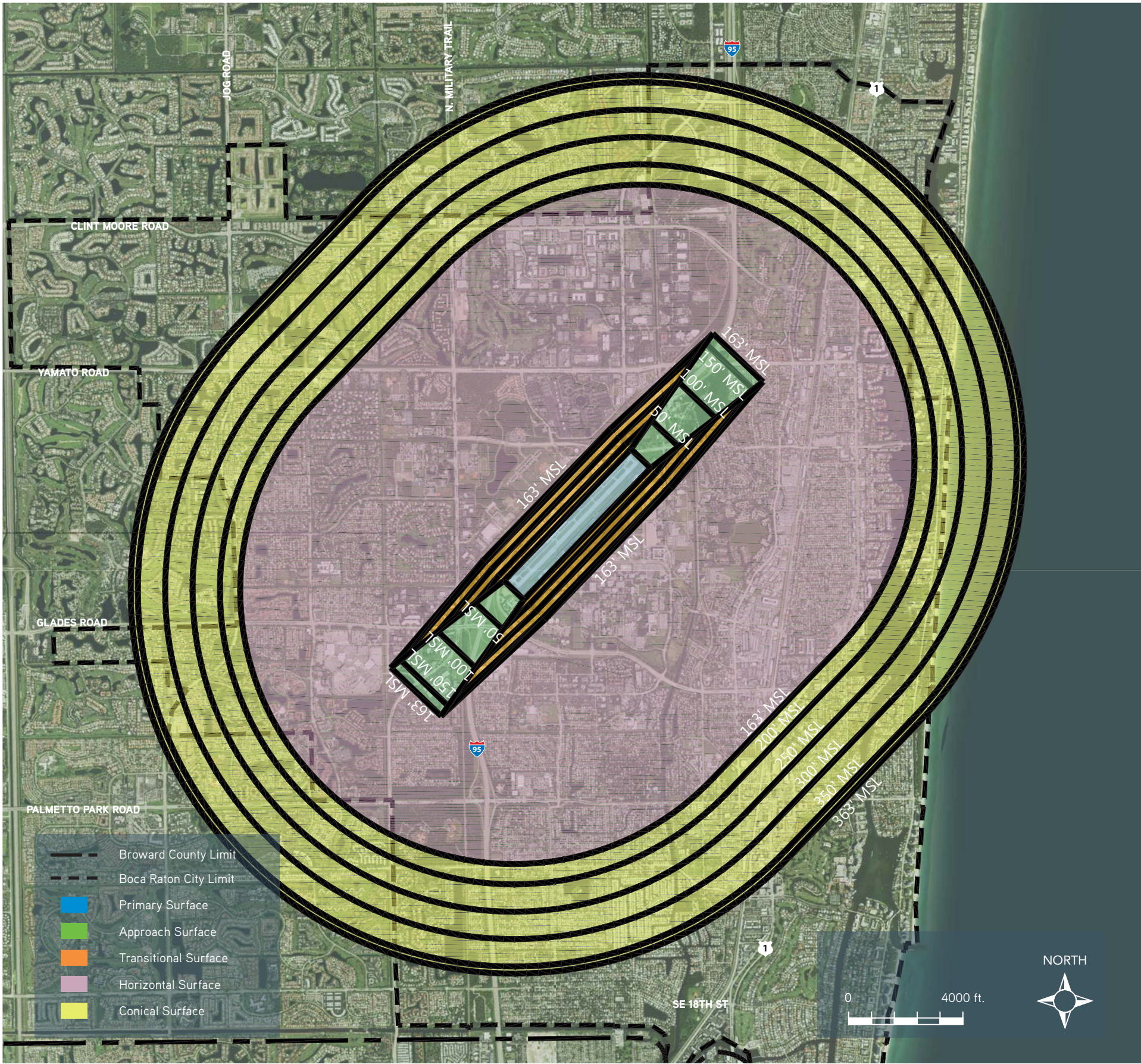
PRECISION APPROACH PATH INDICATOR (PAPI) OCS



NOTES: Isometric views exaggerated 10x. Procedures subject to change.
SOURCE: FAA JO 6850.2B Visual Guidance Lighting Systems, August 20, 2010.
PREPARED BY: Ricondo & Associates, Inc., July 2016.

CFR Part 77

AIRPORT IMAGINARY SURFACES

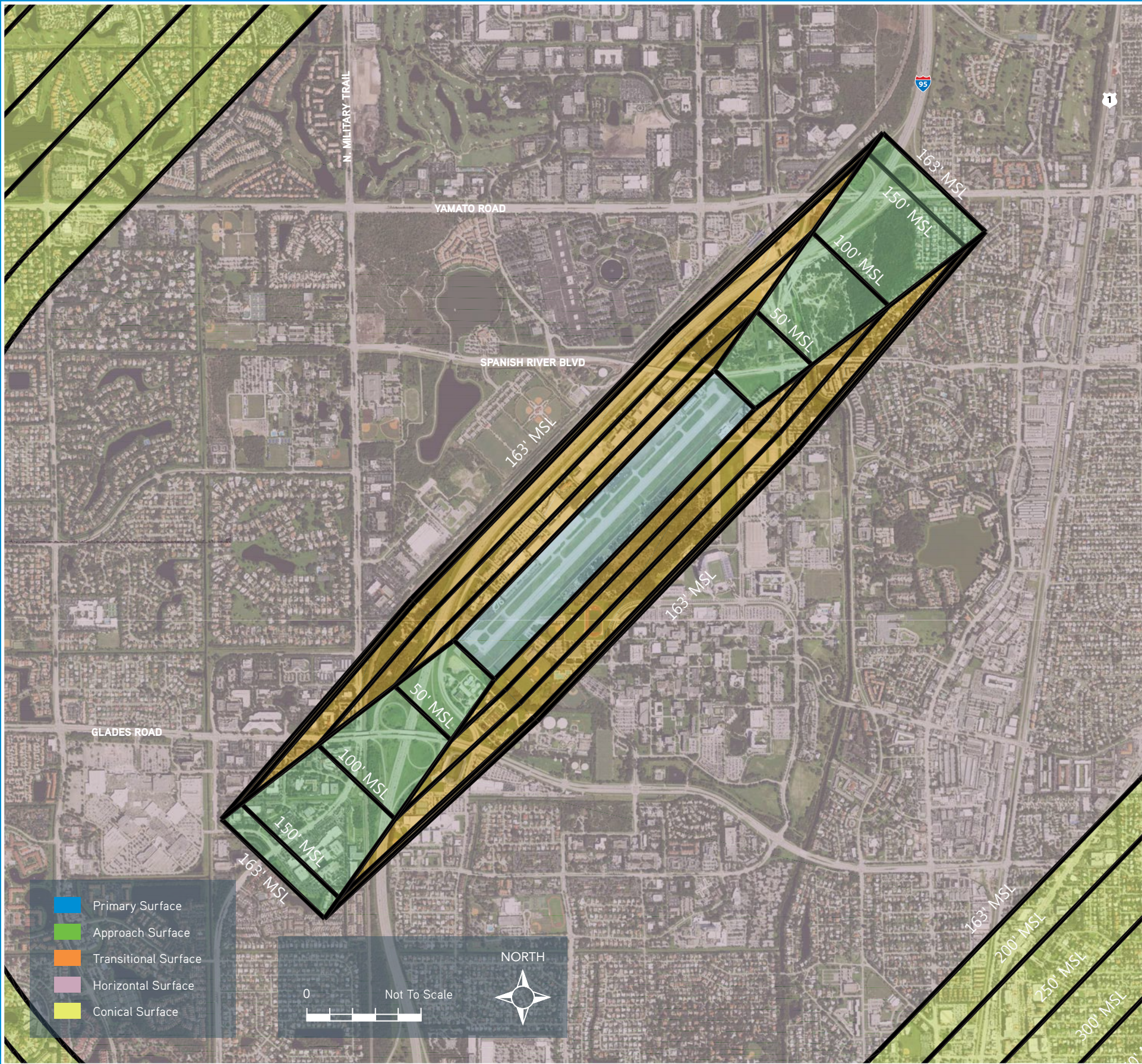


NOTES: Isometric views exaggerated 10x. Procedures subject to change.
SOURCE: Title 14 Of The Code of Federal Regulations (14Cfr) Part 77-Safe, Efficient Use And Preservation of The Navigable Airspace.
PREPARED BY: Ricondo & Associates, Inc., July 2016.



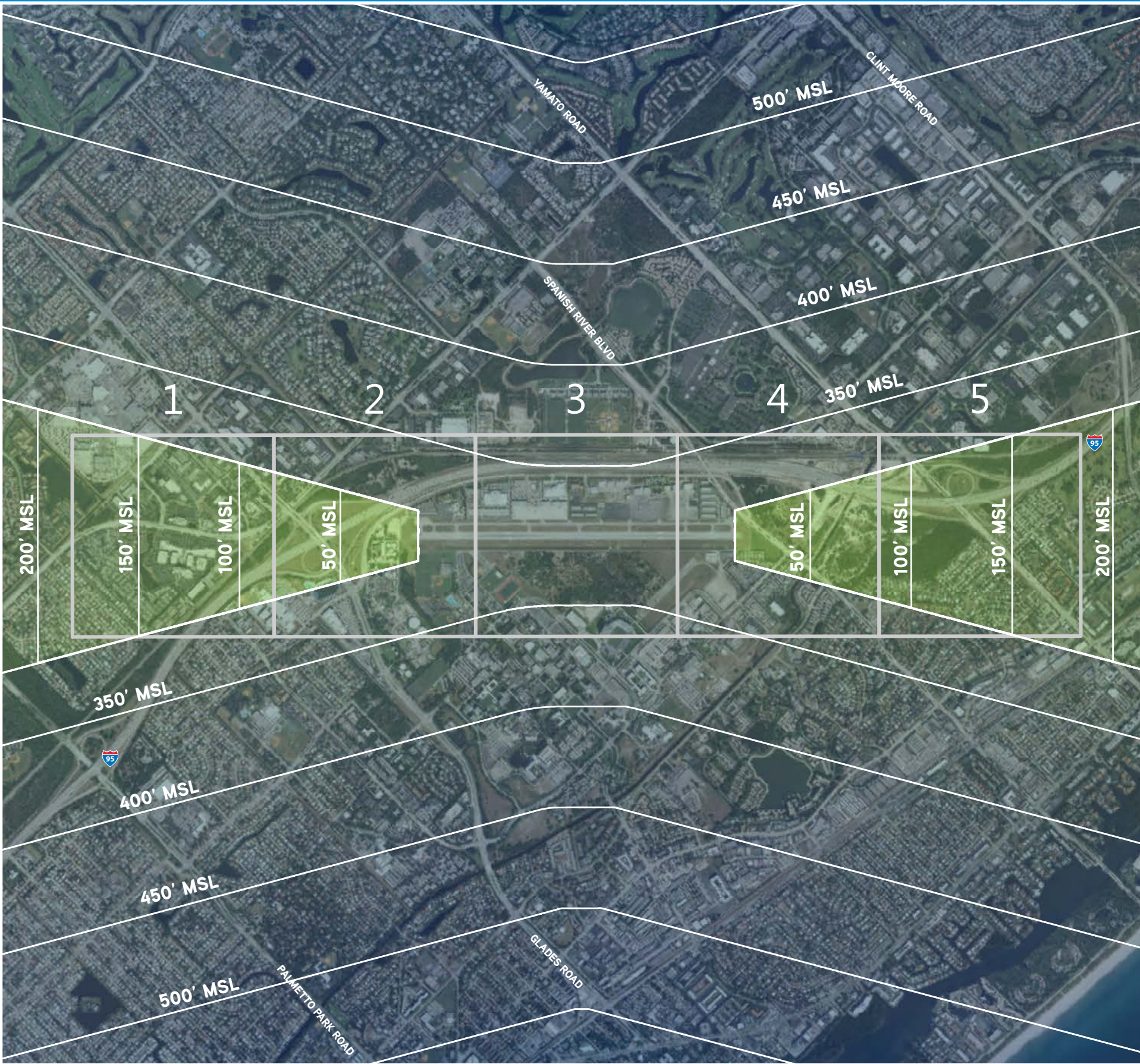
CFR Part 77

AIRPORT IMAGINARY SURFACES



NOTES: Isometric views exaggerated 10x. Procedures subject to change.
SOURCE: Title 14 Of The Code Of Federal Regulations(14Cfr) Part 77- Safe, Efficient Use And Preservation Of The Navigable Airspace.
PREPARED BY: Ricondo & Associates, Inc., July 2016.

Composite
DEPARTURE SURFACES



0 Not To Scale

11 565

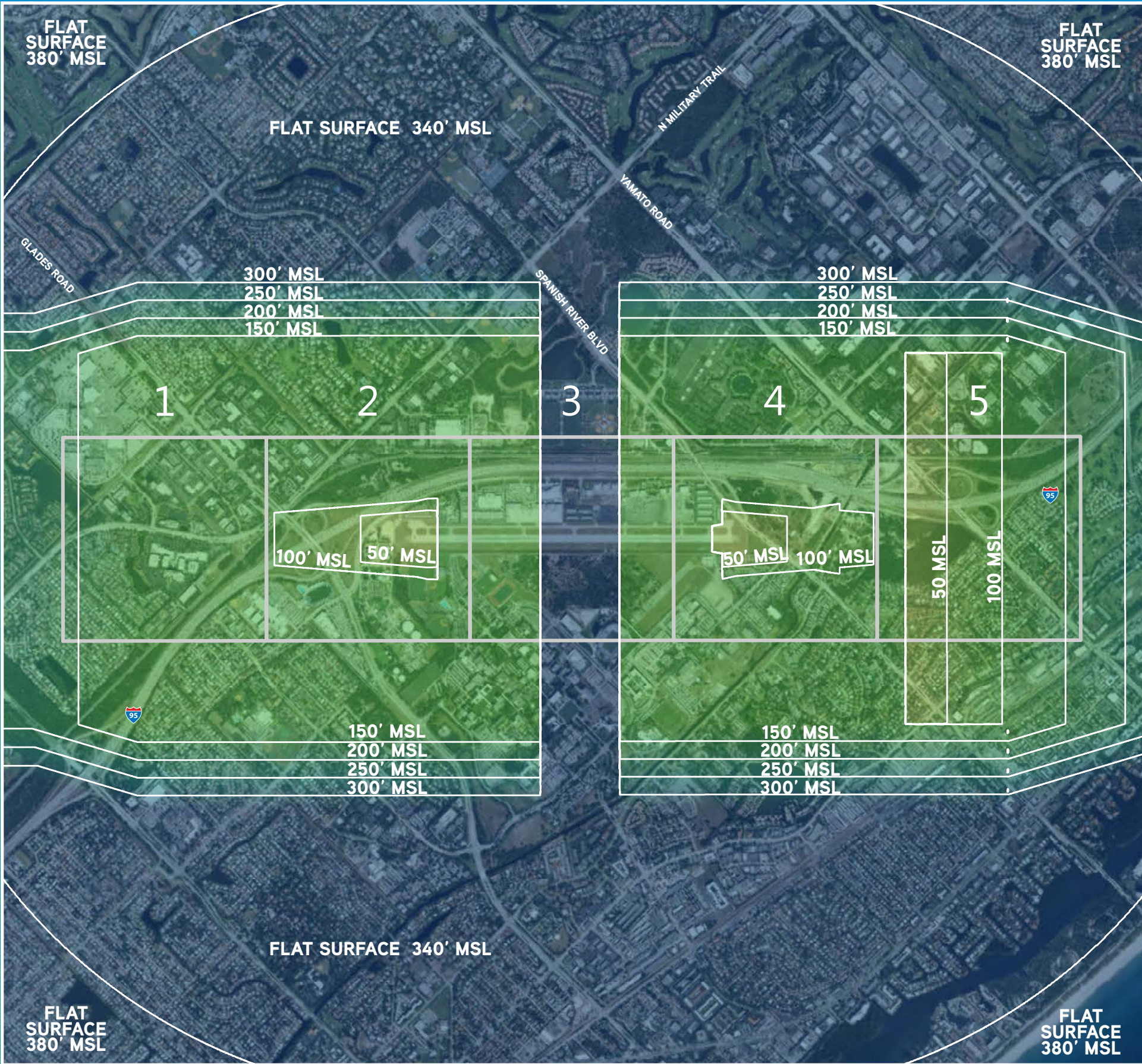
NORTH

NOTES: Procedures subject to change.
SOURCE: Ricondo & Associates, Inc., July 2016.
PREPARED BY: Ricondo & Associates, Inc., July 2016.



Composite

APPROACH SURFACES



0 Not To Scale

NORTH

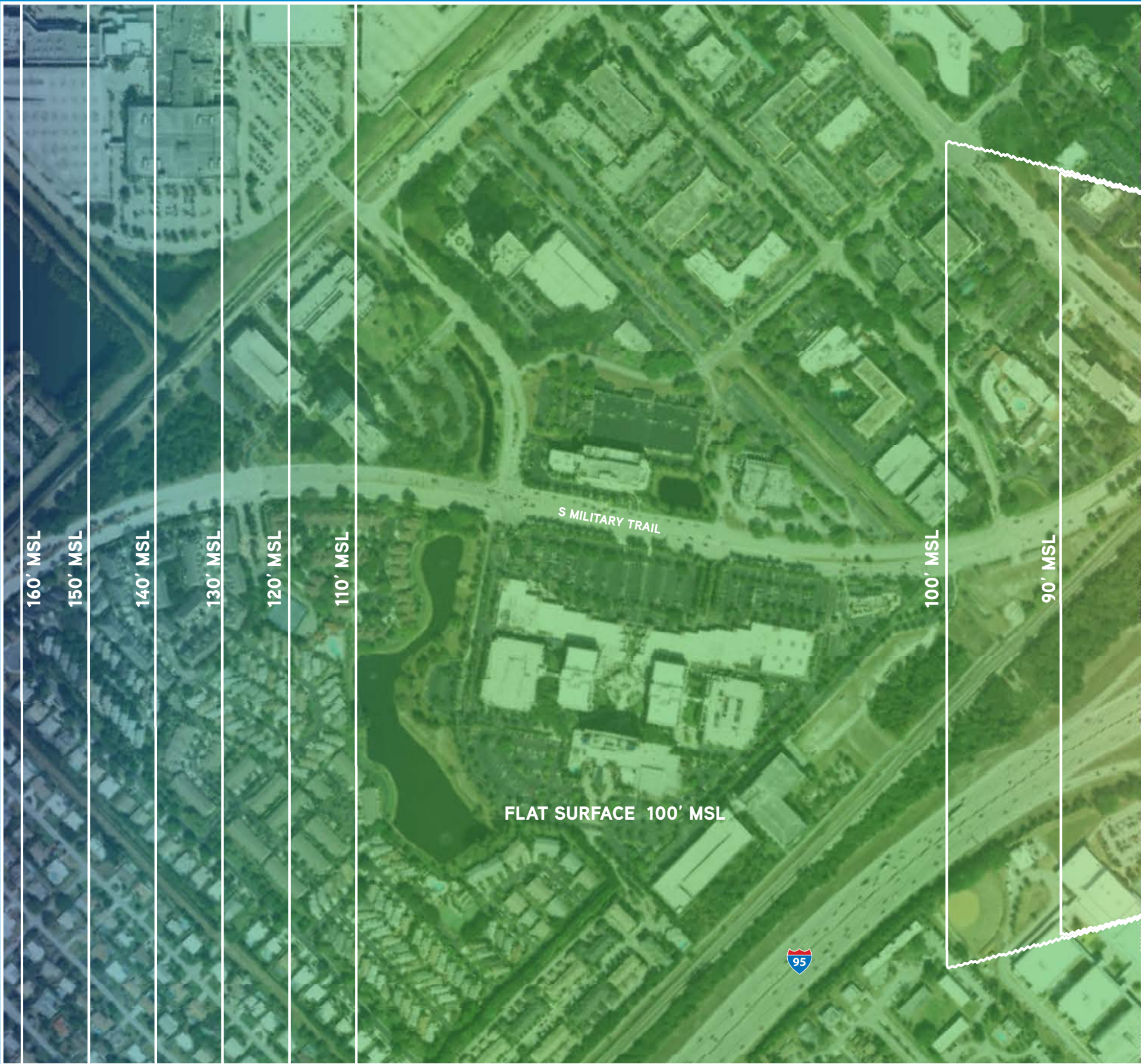
11 380

NOTES: Procedures subject to change.

SOURCE: Ricondo & Associates, Inc., July 2016.

PREPARED BY: Ricondo & Associates, Inc., July 2016.

Area 1
COMPOSITE TERPS APPROACH & DEPARTURE SURFACE

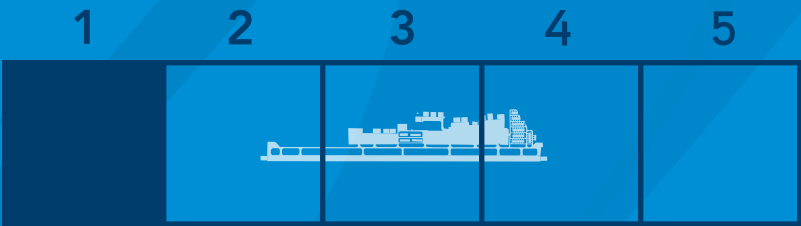


0 Not To Scale

83 163

NORTH

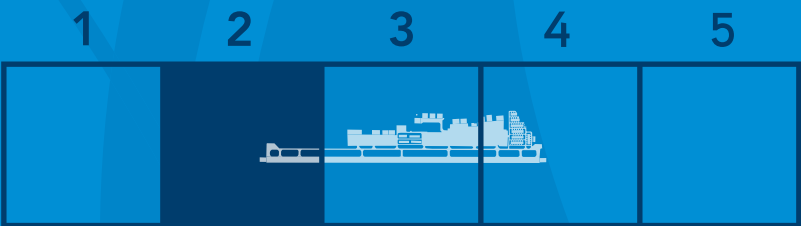
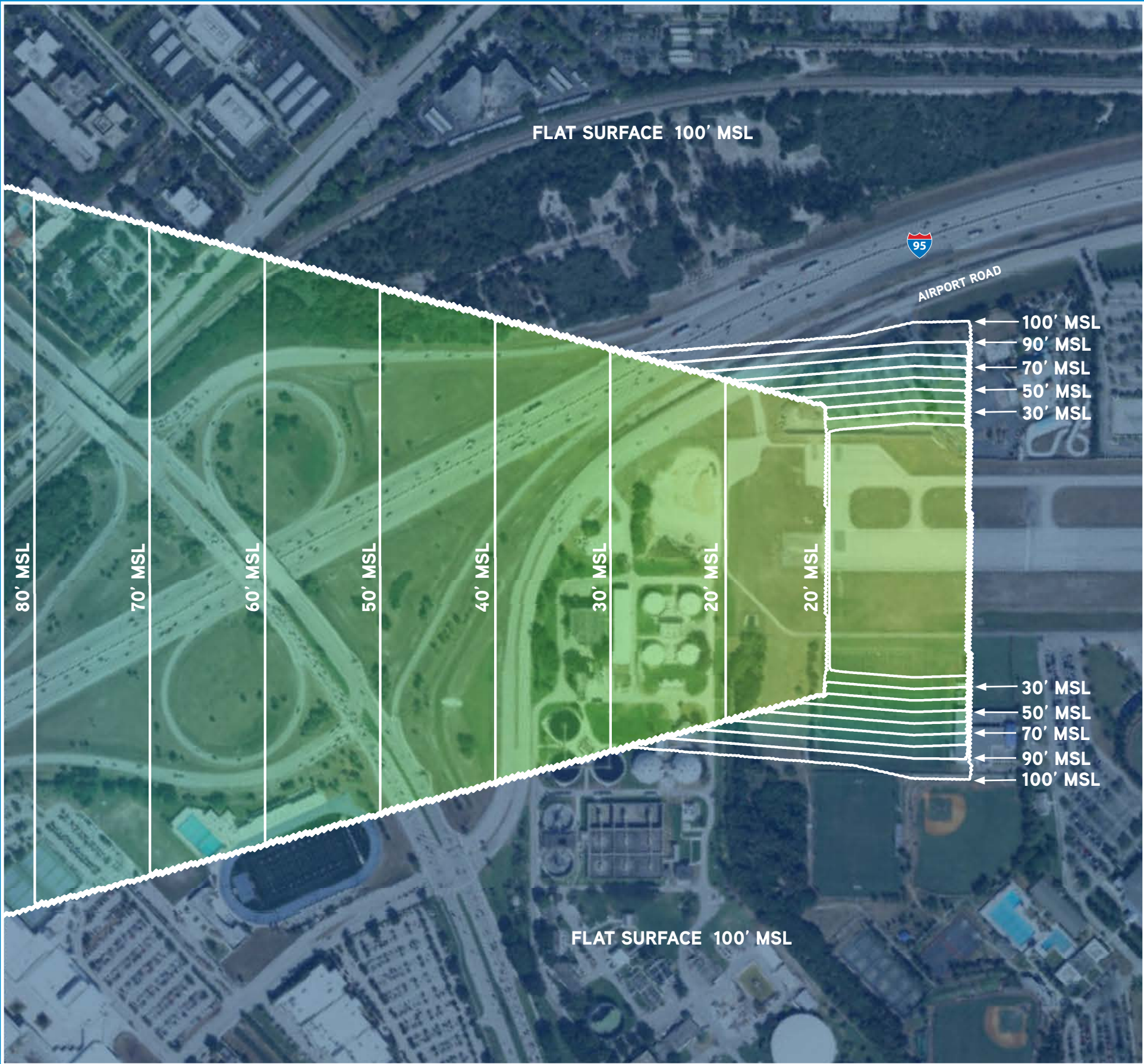
NOTES: Procedures subject to change.
SOURCE: Ricondo & Associates, Inc., July 2016.
PREPARED BY: Ricondo & Associates, Inc., July 2016.





Area 2

COMPOSITE TERPS APPROACH & DEPARTURE SURFACE



0 Not To Scale

11 100

NORTH

NOTES: Procedures subject to change.
SOURCE: Ricondo & Associates, Inc., July 2016.
PREPARED BY: Ricondo & Associates, Inc., July 2016.

Area 3
COMPOSITE TERPS APPROACH & DEPARTURE SURFACE



0 Not To Scale

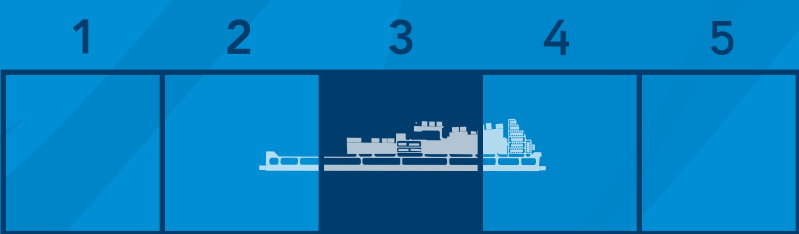
100 102

NORTH

NOTES: Procedures subject to change.

SOURCE: Ricondo & Associates, Inc. July 2016.

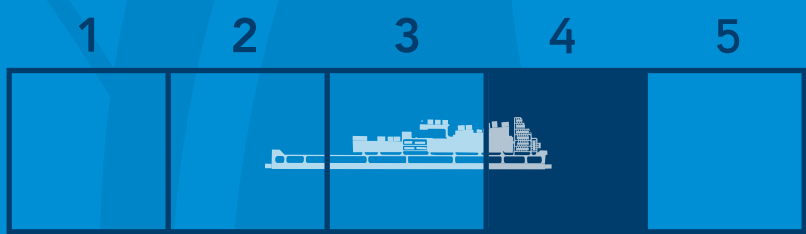
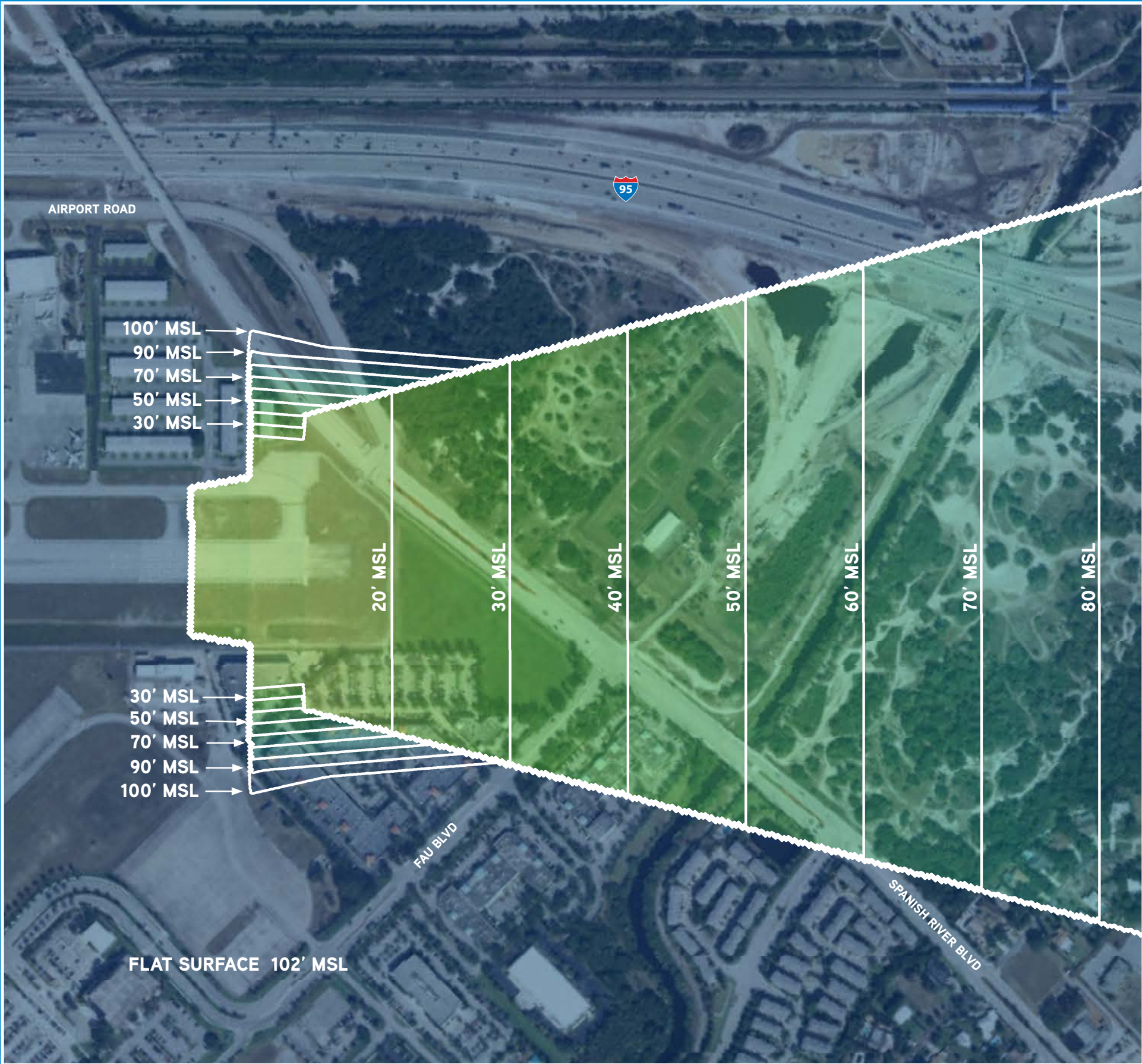
PREPARED BY: Ricondo & Associates, Inc., July 2016.





Area 4

COMPOSITE TERPS APPROACH & DEPARTURE SURFACE



0 Not To Scale

13 102

NOTES: Procedures subject to change.
SOURCE: Ricondo & Associates, Inc., July 2016.
PREPARED BY: Ricondo & Associates, Inc., July 2016.

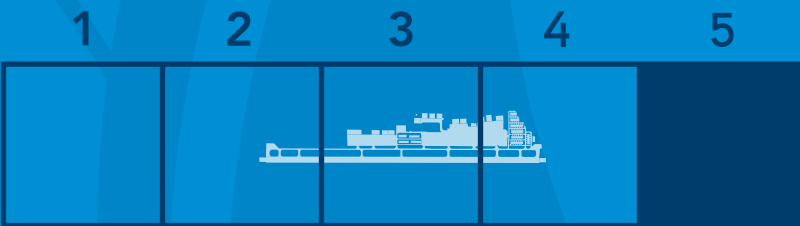
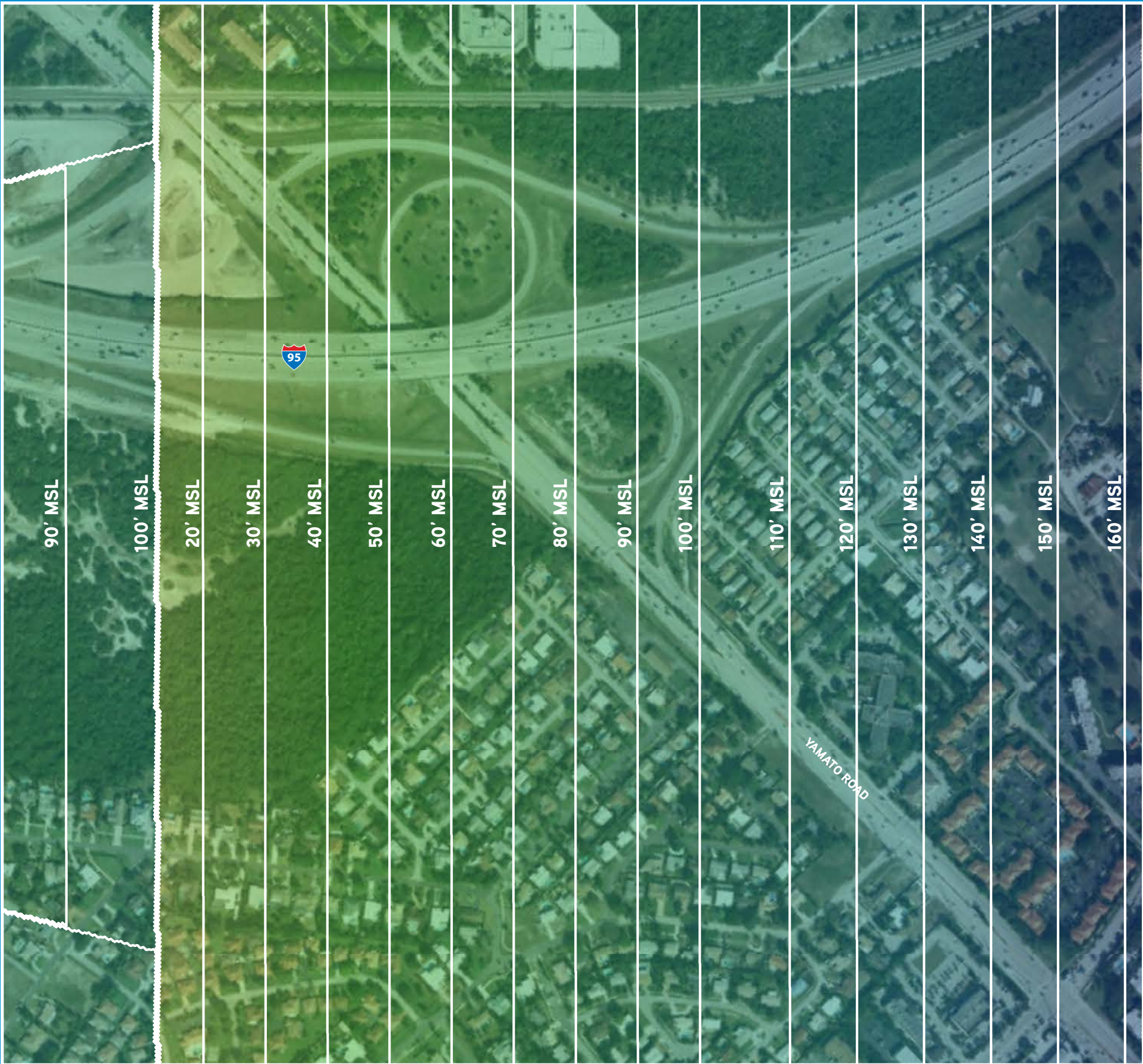


BOCA RATON AIRPORT



Area 5

COMPOSITE TERPS APPROACH & DEPARTURE SURFACE



0 Not To Scale

NORTH

13 163

NOTES: Procedures subject to change.
SOURCE: Ricondo & Associates, Inc., July 2016.
PREPARED BY: Ricondo & Associates, Inc., July 2016.

RNAV (GPS) Runway 5
BCT TERMINAL PROCEDURES



BOCA RATON, FLORIDA AL-560 (FAA) 15288
RNAV (GPS) RWY 5
BOCA RATON (BCT)

Baro-VNAV NA when using Palm Beach Intl altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Palm Beach Intl altimeter setting and increase all DA 43 feet and all MDA 60 feet and increase LPV all Cats and LNAV/VNAV all Cats and LNAV Cats C and D visibility 1/8 mile and Circling Cats C and D visibility 1/4 mile. In minimum visibility conditions bright lights on highway 1/4 mile north of airport may be mistaken for runway lights. Helicopter visibility reduction below 3/4 SM NA.
MISSED APPROACH: Climb to 2000 direct KISEC and hold.

Table with 6 columns: AWOS-3, PALM BEACH APP CON, BOCA RATON TOWER, GND CON, CLNC DEL, UNICOM. Values include frequencies like 121.125, 125.2, 118.425, 121.8, 127.35, 118.425.

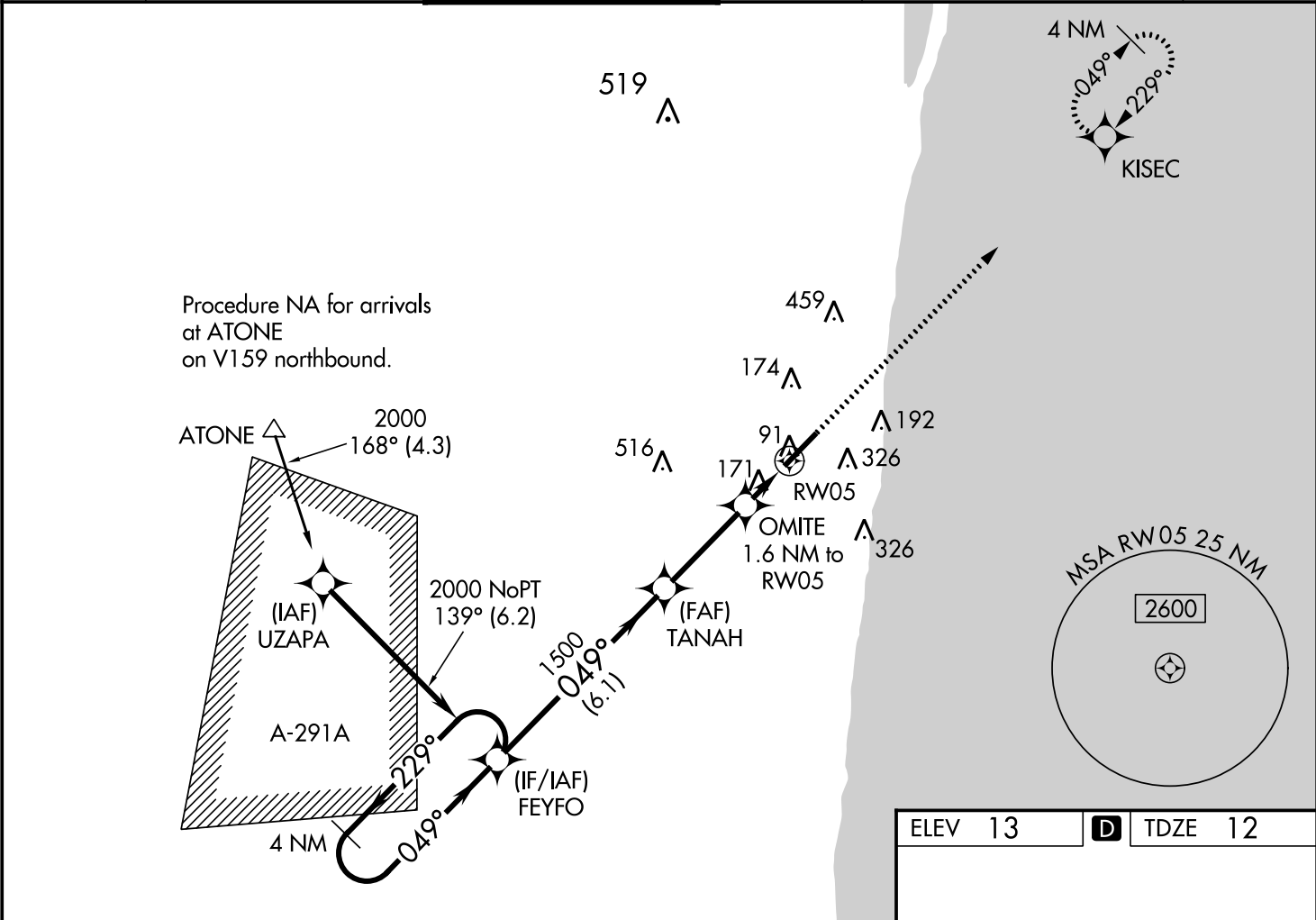


Table with 5 columns (A, B, C, D) and 5 rows (LPV DA, LNAV/VNAV DA, LNAV MDA, CIRCLING). It contains various altitude and distance values for different approach categories.

BOCA RATON, FLORIDA Amdt 1 15OCT15 26°23'N-80°06'W BOCA RATON (BCT) RNAV (GPS) RWY 5

SE-3, FEBRUARY 4, 2016 TO MARCH 3, 2016
AMENDMENT 1 - OCTOBER 15, 2015



RNAV (GPS) Runway 23

BCT TERMINAL PROCEDURES

BOCA RATON, FLORIDA

AL-560 (FAA)

15288

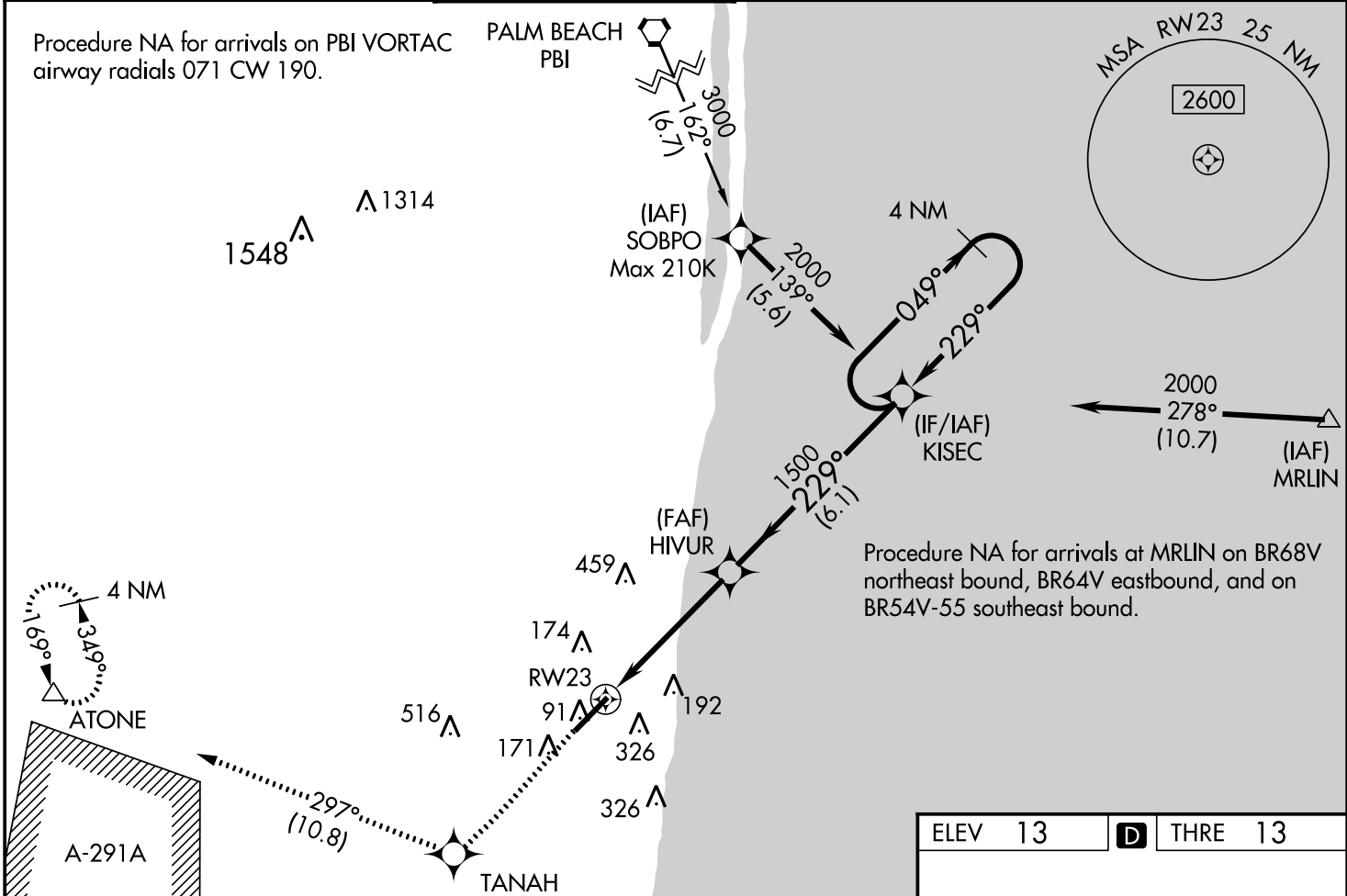
| | | | |
|--|------------------------|-----------------------------|---------------------------------------|
| WAAS CH 42801 W23A | APP CRS 229° | Rwy Idg THRE Apt Elev | 5898 13 13 |
|--|------------------------|-----------------------------|---------------------------------------|

RNAV (GPS) Y RWY 23

BOCA RATON (BCT)

| | |
|---|---|
| <p>▼ Baro-VNAV NA when using Palm Beach Intl altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. Night Landing: Rwy 23, operational VGSI required, remain on or above VGSI glidepath until threshold. When local altimeter setting not received, use Palm Beach Intl altimeter setting: increase LPV and LNAV/VNAV DA to 306; increase all MDA 60 feet and LNAV Cats C/D visibility 1/8 mile and Circling Cats C/D visibility 1/4 mile. Helicopter visibility reduction below 1 SM NA. In minimum visibility conditions, bright lights on highway 1/4 mile north of airport may be mistaken as runway lights.</p> | <p>MISSED APPROACH: Climb to 2000 direct TANAH and on track 297° to ATONE and hold.</p> |
|---|---|

| | | | | |
|--------------------------|--|--|-------------------------|---|
| AWOS-3 121.125 | PALM BEACH APP CON 125.2 343.6 | BOCA RATON TOWER★ 118.425 (CTAF) | GND CON 121.8 | CLNC DEL 121.8 127.35 (when tower closed) |
|--------------------------|--|--|-------------------------|---|



| | | | | | |
|--------------|-------|-------------|------------------------------|---|------------------------------------|
| 2000 | TANAH | tr 297° | ATONE | VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 40). | 4 NM Holding Pattern |
| | | | | | |
| CATEGORY | A | B | C | D | |
| LPV DA | 263-1 | 250 (300-1) | | | |
| LNAV/VNAV DA | 263-1 | 250 (300-1) | | | |
| LNAV MDA | 480-1 | 467 (500-1) | 480-1 3/8 | 467 (500-1 3/8) | |
| CIRCLING | 640-1 | 627 (700-1) | 680-1 3/4 667 (700-1 3/4) | 880-2 3/4 867 (900-2 3/4) | MIRL Rwy 5-23 REIL Rwy 5 and 23 |

BOCA RATON, FLORIDA
Amdt 1 24JUL14

26°23'N-80°06'W

RNAV (GPS) Y RWY 23

BOCA RATON (BCT)

SE-3, FEBRUARY 4, 2016 TO MARCH 3, 2016
AMENDMENT 1 - JULY 24, 2014

BCT TERMINAL PROCEDURES



BOCA RATON, FLORIDA

AL-560 (FAA)

15288

| | | |
|------------------------|-----------------------------|---------------------------------------|
| APP CRS 229° | Rwy Idg THRE Apt Elev | 5898 13 13 |
|------------------------|-----------------------------|---------------------------------------|

RNAV (RNP) Z RWY 23

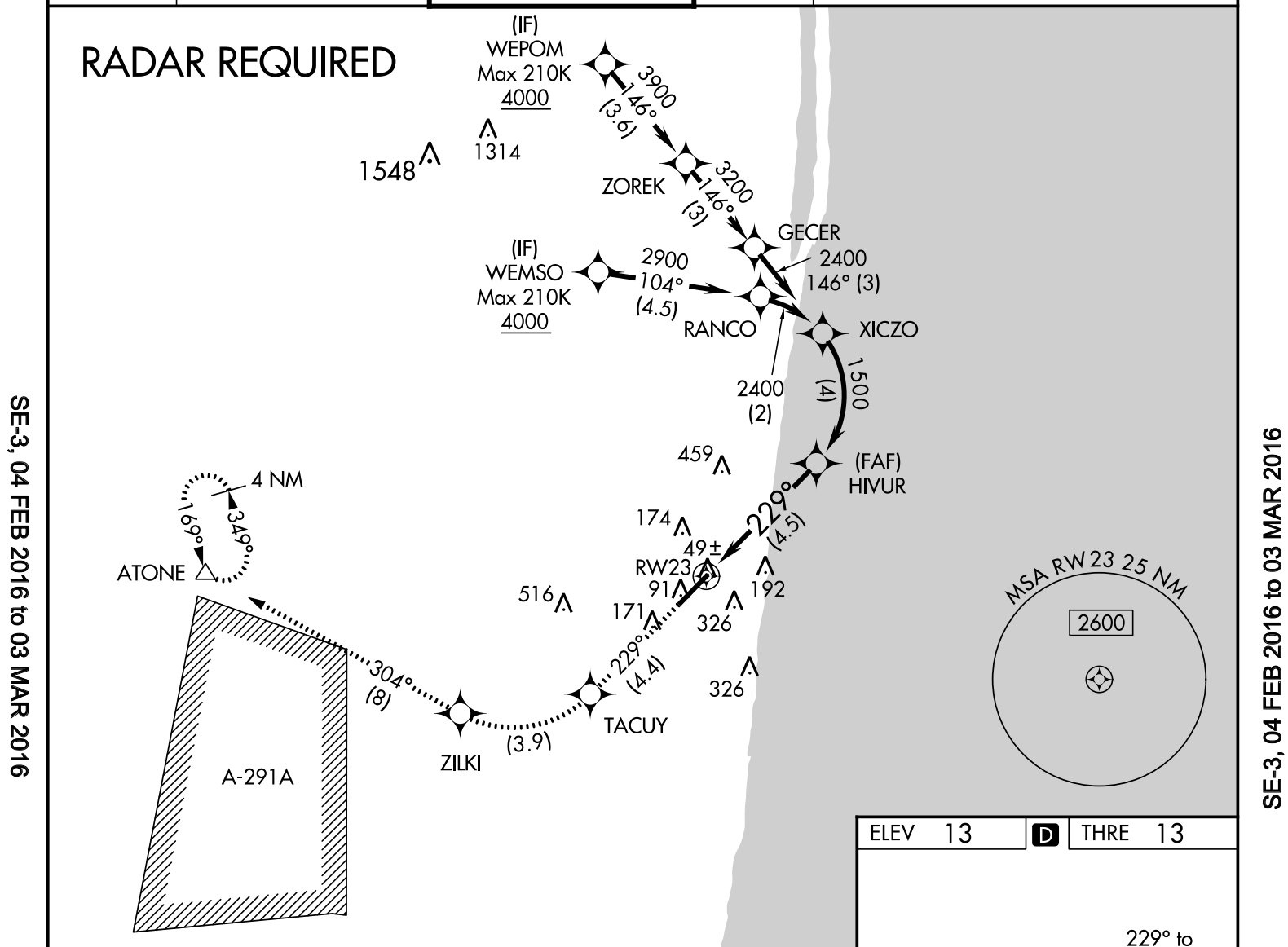
BOCA RATON (BCT)

T For uncompensated Baro-VNAV systems, procedure NA below -15°C (5°F) or above 54°C (130°F). Night Landing: RWY23, operational VGSI required, remain on or above VGSI glidepath until threshold. RF required. GPS required.

MISSED APPROACH: Climb to 2000 on track 229° to TACUY, right turn to ZILKI, and on track 304° to ATONE and hold.

| | | | | |
|--------------------------|--|--|-------------------------|---|
| AWOS-3 121.125 | PALM BEACH APP CON 125.2 343.6 | BOCA RATON TOWER★ 118.425 (CTAF) | GND CON 121.8 | CLNC DEL 121.8 127.35 (when tower closed) |
|--------------------------|--|--|-------------------------|---|

RADAR REQUIRED



| | | | | |
|--|------------------------|-----------------------|------------|---|
| 2000 ↑ tr 229° | TACUY ✱ ↗ | ZILKI ✱ tr 304° | ATONE △ | See planview for multiple IF locations. |
| <p>VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 40).</p> <p>RW23 HIVUR XICZO</p> <p>229° 1500 2400</p> <p>4.5 NM 4 NM</p> <p>GP 3.00° TCH 55</p> | | | | |
| CATEGORY | A | B | C | D |
| RNP 0.30 DA | 406-1¼ 393 (400-1¼) | | | |
| <h1 style="text-align: center;">AUTHORIZATION REQUIRED</h1> | | | | |

ELEV 13 D THRE 13

229° to RW23

56

TWR

6276 X 150

MRL Rwy 5-23
REIL Rws 5 and 23

BOCA RATON, FLORIDA
Orig 24JUL14

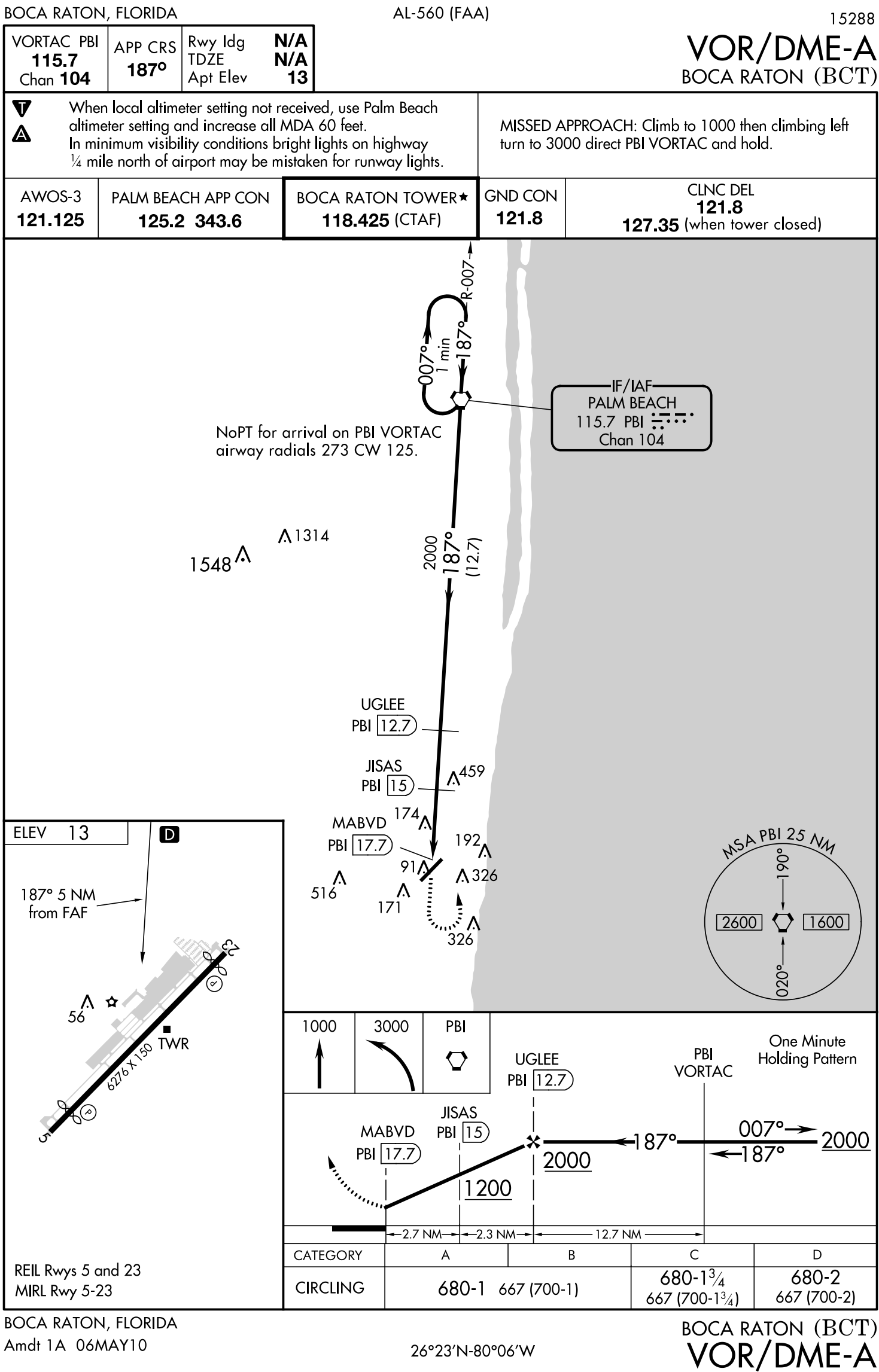
26°23'N-80°06'W

BOCA RATON (BCT)
RNAV (RNP) Z RWY 23

SE-3, FEBRUARY 4, 2016 TO MARCH 3, 2016
ORIGINAL - JULY 24, 2014



VOR/DME-A
BCT TERMINAL PROCEDURES



SE-3, FEBRUARY 4, 2016 TO MARCH 3, 2016
AMENDMENT 1A - MAY 6, 2010

BOCA RATON AIRPORT

Minimums & Obstacles Departure Procedures

BCT TERMINAL PROCEDURES



TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)



APOPKA, FL

ORLANDO APOPKA (X04)
TAKEOFF MINIMUMS AND (OBSTACLE)
DEPARTURE PROCEDURES
ORIG 12264 (FAA)

TAKEOFF MINIMUMS: **Rwy 15**, 300-2 or std. w/min.
climb of 263' per NM to 400. **Rwy 33**, 400-1¾ or std.
w/min. climb of 325' per NM to 600.

NOTE: **Rwy 15**, trees beginning at DER, 173' left of
centerline, up to 100' AGL/229' MSL. Railroad and
vehicles beginning at DER, 181' left of centerline, up to
23' AGL/152' MSL. Trees beginning 214' from DER, 61'
552' right of centerline, up to 100' AGL/189' MSL.
Poles beginning 230' from DER, 239' left of centerline,
up to 49' AGL/178' MSL. Tower 5781' from DER, 1326'
left of centerline, 199' AGL/317' MSL. **Rwy 33**, trees
beginning 2' from DER, 183' left of centerline, up to
100' AGL/249' MSL. Poles beginning 7' from DER, 61'
right of centerline, up to 49' AGL/198' MSL. Railroad
and vehicles beginning 36' from DER, 90' right of
centerline, up to 23' AGL/172' MSL. Antenna 1166'
from DER, 539' left of centerline, 29' AGL/173' MSL.
Tower 1.2 NM from DER, 2338' left of centerline, 350'
AGL/421' MSL.

ARCADIA, FL

ARCADIA MUNI (X06)
TAKEOFF MINIMUMS AND (OBSTACLE)
DEPARTURE PROCEDURES
ORIG 14149 (FAA)

NOTE: **Rwy 5**, trees beginning 6' from DER, 107' left of
centerline, up to 20' AGL/81' MSL. **Rwy 23**, vehicle on
road 234' from DER, 538' right of centerline 15'
AGL/74' MSL. Trees beginning 315' from DER, 120'
left of centerline, up to 50' AGL/109' MSL. Trees
beginning 340' from DER, 435' right of centerline, up to
40' AGL/95' MSL. Building 449' from DER, 409' left of
centerline, 25' AGL/84' MSL.

AVON PARK, FL

AVON PARK EXECUTIVE (AVO)
TAKEOFF MINIMUMS AND (OBSTACLE)
DEPARTURE PROCEDURES
AMDT 1 09351 (FAA)

TAKEOFF MINIMUMS: **Rwy 5**, 300-1 or std. w/ min.
climb of 430' per NM to 500.

NOTE: **Rwy 5**, trees beginning 219' from DER, 84' left
of centerline, up to 100' AGL/284' MSL. Trees
beginning 1007' from DER, 298' right of centerline, up
to 100' AGL/289' MSL. Building 327' from DER, 431'
right of centerline, 21' AGL/182' MSL. **Rwy 10**,
buildings beginning 293' from DER, 251' left of
centerline, up to 30' AGL/285' MSL. Line of trees
beginning 298' from DER, 149' right to 229' left of
centerline, up to 100' AGL/269' MSL. **Rwy 23**, trees
beginning 52' from DER, 118' right of centerline, up to
26' AGL/186' MSL. Trees beginning 23' from DER, 93'
left of centerline, up to 38' AGL/198' MSL. Power lines
beginning 2691' from DER, 1019' left to 2034' right of
centerline, up to 79' AGL/235' MSL. **Rwy 28**,
numerous trees beginning 371' from DER, 218' right of
centerline, up to 100' AGL/259' MSL. Buildings and
light poles beginning 1491' from DER, 187' left of
centerline, up to 40' AGL/194' MSL. Power pylons
beginning 2082' from DER, 935' left to 252' right of
centerline, up to 79' AGL/233' MSL.

BARTOW, FL

BARTOW MUNI (BOW)
TAKEOFF MINIMUMS AND (OBSTACLE)
DEPARTURE PROCEDURES
ORIG 08157 (FAA)

NOTE: **Rwy 5**, trees beginning 816' from DER, 7' left of
centerline, up to 79' AGL/198' MSL. Trees beginning 164'
from DER, 9' right of centerline, up to 65' AGL/184' MSL.
Rwy 9L, vehicles on roadway and trees beginning 16'
from DER, 19' left of centerline, up to 55' AGL/174' MSL.
Trees beginning 49' from DER, 54' right of centerline, up
to 54' AGL/173' MSL. **Rwy 9R**, trees beginning 637' from
DER, 113' left of centerline, up to 64' AGL/173' MSL.
Trees beginning 1311' from DER, 253' right of centerline,
up to 69' AGL/178' MSL. **Rwy 23**, trees beginning 143'
from DER, 87' left of centerline, up to 72' AGL/191' MSL.
Trees beginning 419' from DER, 33' right of centerline, up
to 100' AGL/239' MSL. **Rwy 27L**, trees beginning 939'
from DER, 644' left of centerline, up to 100' AGL/249'
MSL. Trees beginning 2007' from DER, 517' right of
centerline, up to 36' AGL/175' MSL. Tower 2880' from
DER, 1015' left of centerline, 50' AGL/188' MSL. **Rwy**
27R, trees beginning 2433' from DER, 1069' left of
centerline, up to 100' AGL/249' MSL. Vehicles on
roadway, poles and multiple trees beginning 1179' from
DER, 260' right of centerline, up to 100' AGL/249' MSL.

BOCA RATON, FL

BOCA RATON (BCT)
TAKEOFF MINIMUMS AND (OBSTACLE)
DEPARTURE PROCEDURES
ORIG 06271 (FAA)

TAKEOFF MINIMUMS: **Rwy 23**, 300-1, or std. w/ a min.
climb of 230' per NM to 300. Alternatively, with standard
takeoff minimums and a normal 200'/NM climb gradient,
takeoff must occur no later than 1700' prior to DER.

NOTE: **Rwy 5**, numerous trees and poles beginning 185'
from DER, 20' left of centerline, up to 35' AGL/49' MSL.
Numerous trees and poles beginning 6' from DER, 267'
right of centerline, up to 28' AGL/45' MSL. **Rwy 23**,
numerous trees, poles, and buildings beginning 278' from
DER, 41' left of centerline, up to 137' AGL/154' MSL.
Numerous trees, poles and buildings beginning 626' from
DER, 171' right of centerline, up to 154' AGL/171' MSL.

BONIFAY, FL

TRI COUNTY (1J0)
TAKEOFF MINIMUMS AND (OBSTACLE)
DEPARTURE PROCEDURES
ORIG 88098 (FAA)

DEPARTURE PROCEDURE: **Rwys 1, 19**, climb runway
heading to 2000 before turning west.

23 JUN 2016 to 21 JUL 2016

23 JUN 2016 to 21 JUL 2016

16175



TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)



L2

SE-3

SE-3, FEBRUARY 4, 2016 TO MARCH 3, 2016



Acronyms

| | |
|------|---|
| DME | Distance Measuring Equipment |
| GPS | Global Positioning System |
| LNAV | Lateral Navigation |
| LPV | Localizer with Provided Vertical Guidance |
| MSL | Mean Sea Level |
| OCS | Obstacle Clearance Surface |
| OIS | Obstacle Identification Surface |
| PAPI | Precision Approach Path Indicator |
| RNAV | Area Navigation |
| RNP | Required Navigation Performance |
| VNAV | Vertical Navigation |
| VOR | Very High Frequency Omni-Directional Range Beacon |



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