REPORT OF THE PLANNING AND DEVELOPMENT DEPARTMENT FOR APPLICATION FOR TRACK III WIRELESS COMMUNICATIONS TOWER

NOVEMBER 4, 2020

Location:	15201 Normandy Boulevard between East Fiftone Road and Normandy Acres Drive
Real Estate Number:	001124-0000
Application Sought:	Track III, 194 foot Wireless Communication Tower
Current Zoning District:	Agriculture (AGR)
Current Land Use Category:	Agriculture-iv (AGR-iv)
Planning District:	Southeast, District 4
City Council District:	The Honorable Randy White, District 12
Applicant/Agent:	Mattaniah S. Jahn, Esq. 935 Main Street, Suite D1 Safety Harbor, Florida 34695
Tower Owner:	Diamond Communications 820 Morris Turnpike, Suite 104 Short Hills, New Jersey 07078
Land Owner:	Roy Whitehead 933 Main Street, Suite D1 Safety Harbor, Florida 34695
Staff Recommendation:	**APPROVE WITH CONDITION**

GENERAL INFORMATION

Application for Track III Wireless Communication Tower **CTW-20-01 / Ordinance 2020-578** seeks to construct a 194 foot conventional wireless communication tower. The 7.07 acre parcel contains one residential dwelling and outbuildings. The proposed tower will be located in the northwest corner of the property.

There is a companion application Waiver of Minimum Setbacks, WMS-20-01 that was heard by the Tower Review Committee (TRC) on October 27. The TRC voted to approve.

STANDARDS, CRITERIA AND FINDINGS

The Commission shall approve, deny or conditionally approve the application where it finds that the proposed tower:

(1) Is the tower consistent with the 2030 Comprehensive Plan including any subsequent plan adopted by City Council?

Yes. The tower is consistent with the following Goals, Objectives and Policies of the 2030 Comprehensive Plan.

FLUE Objective 2.5 Support and strengthen the role of Jacksonville Aviation Authority (JAA) and the United States Military in the local community, and recognize the unique requirements of the City's other airports (civilian and military) by requiring that all adjacent development be compatible with aviation-related activities in accordance with the requirements of Section 163.3177, F.S.

FLUE Policy 2.5.2 Continue to participate in reviews of development plans for Jacksonville's airports (civilian and military) and support opportunities for the development of compatible adjacent agricultural, recreational, industrial and commercial uses.2.5.7 In cooperation with the US Military and to preserve the utility of the field for simulated night carrier landings or related missions, the City has designated, through the land development regulations, a lighting regulation zone around Outlying Field (OLF) Whitehouse, requiring that all artificial lighting equipment have positive optical control so that no light is emitted above the horizontal plane. The United States Military has requested this special designation for OLF Whitehouse because of its special fleet carrier landing practice mission.

FLUE Objective 2.5 Support and strengthen the role of Jacksonville Aviation Authority (JAA) and the United States Military in the local community, and recognize the unique requirements of the City's other airports (civilian and military) by requiring that all adjacent development be compatible with aviation-related activities in accordance with the requirements of Section 163.3177, F.S..

FLUE Policy 2.5.8 Airport Height and Hazard zones (HH) exist around all military and civilian airports within the city limits of Jacksonville. The horizontal limits of the zones and limitations on heights of obstructions within these zones are defined for each military airport in Naval Facilities Engineering Command (NAVFAC) P-80.3 01/82, on file with the Planning and Development Department, and for each civilian airport in Title 14, Code of Federal Regulations (CFR), Part 77 guidelines, on file with the Planning and Development Department. In order to assure that Title 14, CFR, Part 77 guidelines and NAVFAC P-80.3 01/82 guidelines are not exceeded and that no structure or obstruction is permitted that would raise a minimal obstruction clearance altitude, a minimum vectoring descent altitude or a decision height, all cell towers and any structure or obstruction that would extend into an Airport (HH) requires, in writing, comment from the U.S. Navy. Although written documentation from the U.S. Navy for military HH and from the FAA or JAA for civilian HH is not required for proposed

structure heights below the listed height, United States Code (USC) Title 14, CFR Part 77 still applies.

The proposed tower (which is 197 feet tall) is within the 300 foot Height and Hazard Zone of Cecil Airport. No comments have been received from Jacksonville Airport Authority (JAA).

(2) Does the proposed tower comply with the tower siting and design standards and performance standards of this Part 15, Subpart A, Ordinance Code?

Yes. The maximum height for a Track III tower is 199 feet and the proposed monopole tower is 194 feet.
The tower is required to be either 250 feet or 200% of the tower height, which is greater, from a residentially zoned property. The tower is 462 feet to the nearest residential property.
The tower is required to be either 250 feet or 200% of the tower height, which is greater, from a public park or environmentally sensitive lands. The tower is 42 feet from the Loblolly Mitigation Preserve to the north and west.
There is no other conventional cell tower within 2,640 feet of the proposed tower.
The proposed tower is to provide 5 locations for wireless providers. The drawings show four locations. **If approved, a condition should be required to revise the drawings to provide a total of five locations.**
The plans show the required landscaping around all sides of the tower compound. The equipment compound will have an eight foot high wood fence on all sides.

(3) Is the proposed tower site sufficiently accessible to permit entry by fire, police, rescue and other services?

Yes. The application shows a 30 foot wide easement from Normandy Boulevard to the tower compound. The proposed road should be adequate to allow emergency vehicles to access the tower.

(4) Is the height of the proposed tower necessary to provide the wireless provider's designed service?

The applicant has indicated the tower is at the minimum height necessary to provide the required service. The applicant indicates the tower is to provide service to the existing and proposed residential dwellings in the area.

(5) There is an absence of any existing or proposed towers, buildings, or other structures that could provide technologically and structurally suitable space for collocation on commercially reasonable terms?

There are no suitable towers, buildings or structures in the area that could allow for co-location.

(6) Is the proposed communications tower compatible with the existing contiguous uses or zoning and compatible with the general character and aesthetics of the surrounding neighborhood or areas considering:

(a) The design and height of the communication tower?

Yes. The monopole tower is the most visually conspicuous design type. The antennas are easily visible. The proposed 194 foot tower will be taller than the surrounding trees and any structure in the area. The Loblolly Mitigation Preserve to the north and west, is not open to the public. The tower is setback 520 feet from Normandy Boulevard and although there are tall mature trees along the road, there are openings that will allow views of the tower. The tower will not be visible to those who live east of the tower on Normandy Acres Drive or south in the Winchester Ridge subdivision. The base of the tower will be screened by the eight foot high wood fence.

(b) Environmentally sensitive lands, historic districts or historic landmarks, public parks or transportation view corridors?

No. The Zoning Code requires a tower to be 250 feet or 200% of the tower height (388 ft.) from a public park or environmentally sensitive lands. The proposed tower is 42 feet to the Loblolly Mitigation Preserve to the north and west. However there is a companion Waiver of Minimum Setbacks (WMS-20-01) which requests to reduce the setback from 388 to 42 feet. The Department is recommending approval of the request. The Zoning Code also requires the tower to be 100% of the tower height (194 ft.) from any transportation view corridor. As stated above, the tower is 520 feet from Normandy Boulevard.

The adjacent uses, zoning and land use categories are as follows:

Adjacent Property	**Land Use Category**	**Zoning District**	**Current Use(s)**
North	AGR-iii	AGR	Loblolly Mitigation Preserve (COJ)
South	RR	RR-Acre	Undeveloped, planted pines
East	AGR-iv	AGR	Single family dwellings
West	AGR-iii	AGR	Loblolly Mitigation Preserve (COJ)

SUPPLEMENTAL INFORMATION

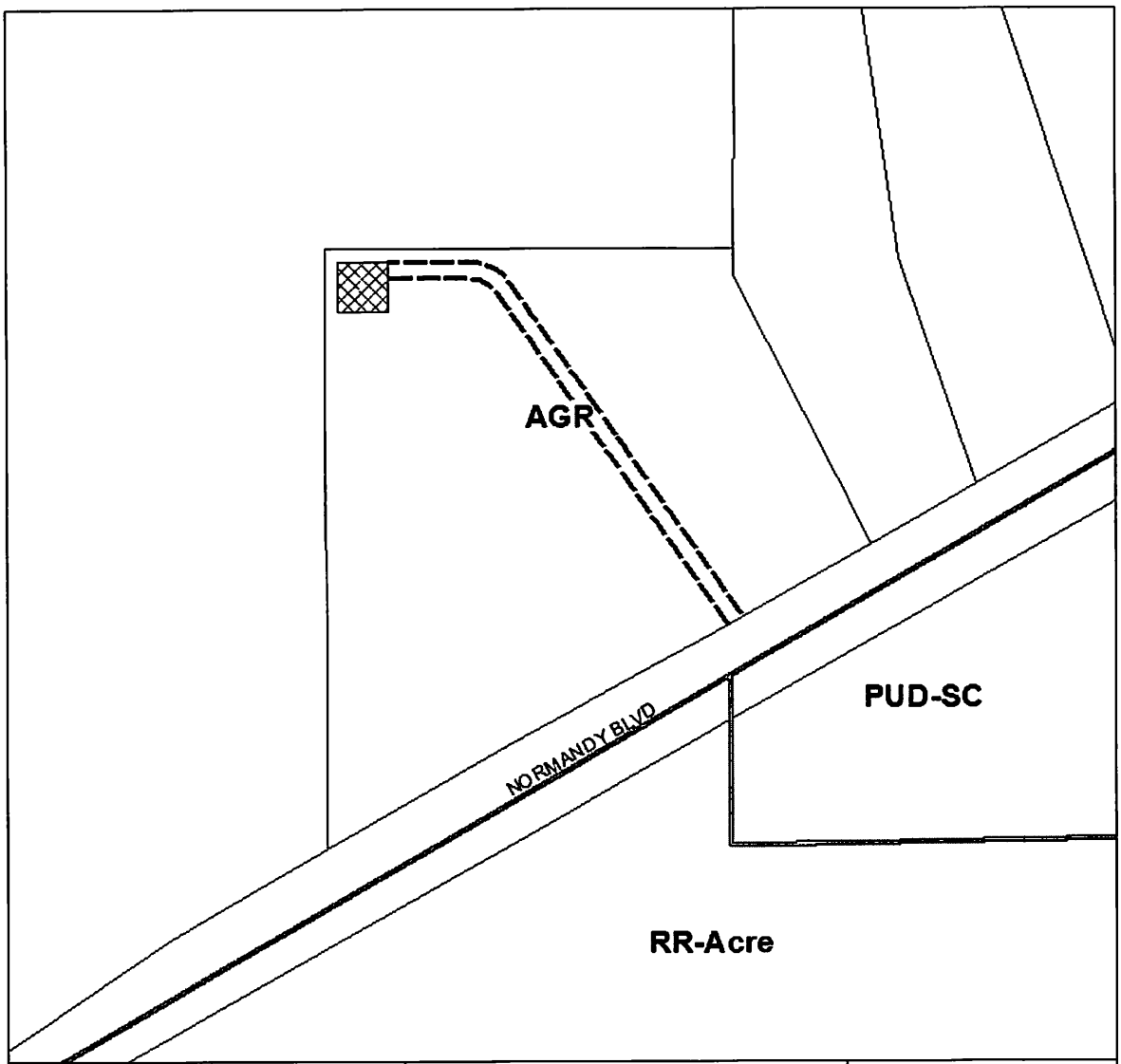
Upon visual inspection of the subject property on October 16, 2020, the required Notice of Public Hearing sign was posted.

RECOMMENDATION

Based on the foregoing, it is the recommendation of the Planning and Development Department that the application for Rezoning **2020-578 / CTW-20-01** be **APPROVED subject to the following condition:**

1. The drawings shall be revised to provide for a total of five co-locations.

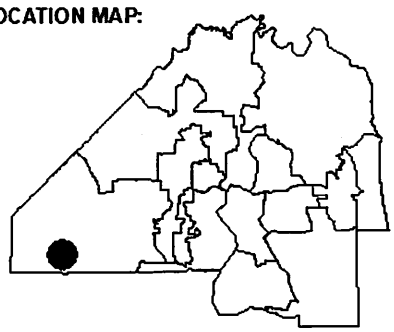
Aerial view of subject property



REQUEST SOUGHT:

TRACK II TOWER 185 FEET HIGH

LOCATION MAP:



0 65 130 260

Feet

COUNCIL DISTRICT:

12

TRACKING NUMBER

CT-20-01

EXHIBIT 2
PAGE 1 OF 1

APPLICATION FOR
TRACK III CONVENTIONAL TOWER

This application must be **typed or printed in black ink** and submitted with **seven (7) copies,** with all required attachments, to:

Planning and Development Department
Wireless Communications Coordinator
Edward Ball Building
214 North Hogan Street, Suite 300
Jacksonville, Florida 32202

Application No. CTW- **20-01**
Set for balloon test: Week of
Set for LUZ:

FOR INFORMATION REGARDING THIS FORM, CALL: **(904) 255-7800**

FOR OFFICIAL USE ONLY

1. Date Submitted:	2. Current Zoning District(s):	3. Future Land Use Map Category (FLUMs)	4. Applicable Section of Ordinance Code:
5/26/20	**AGR**	**AGR-iv**	Section 656.1507

Amount of Fee See Page 4 Council District **12** Planning District **4** Zoning Panel No. _____

TO BE COMPLETED BY APPLICANT

5. Complete Property Address: 15201 Normandy Blvd.
Jacksonville, FL 32234
Real Estate Number: 001124-0000
Lat / Long: 30°12'51.00"N; 81°57'9.83"W

6. Between Streets E. Fiftone Road
And Normandy Acres Drive

7. Current Property Use: Timber processing yard and associated residence

8. Tower Owner: Diamond Communications V, LLC

In whose name will the application be granted?
Diamond Communications V, LLC c/o Mattaniah S. Jahn, Esq.

9. Tower Height: 194' AGL

10. Height of antenna(s) to be located on tower at time of application: 185' to Antenna Tops

NOTICE TO OWNER/AGENT

Section 656.1507: Within thirty working days of notification from the Coordinator that the application is complete, the application shall be assigned a legislative bill number and scheduled for a public hearing before the appropriate committee of reference of the City Council. The Committee shall recommend shall approve, deny or conditionally approve an application to the full body of City Council.

For questions not applicable to this application, type or print NA underneath question.

1. Is the proposed conventional wireless communication tower to be located in a zoning district or land use category located outside the Urban/Suburban Area Boundary that does not allow for residential uses?

   Yes

If the answer to the above question is "NO", a conventional tower can not be located at the requested location per S.656.1507(a).

2. Is the requested vertical tower height, including any antenna or other appurtenances, less than 199 feet in height, as measured from ground level of the tower?

   Yes, the Monopole will be 194' AGL.

Any conventional tower proposed to be greater than 199 feet in height, must seek a variance from the TRC per S.656.1509(b).

3. Does the proposed tower meet or exceed setback requirements from residential properties as mandated by S.656.1507(a)(3)?

   Please see the enclosed cover letter.

Any conventional tower proposed not meeting setback requirements, must seek a waiver from the TRC per S.656.1509(b).

4. Does the distance of the tower from environmentally sensitive lands, historic districts, historic landmarks, neighborhood conservation districts, public parks and transportation view corridors meet or exceed those mandated for conventional tower designs by S.656.1507(a)(3)?

   Please see the enclosed cover letter.

Any conventional tower proposed not meeting setback requirements, must seek a waiver from the TRC per S.656.1509(b).

5. Does the tower meet the minimum separation requirements as mandated by S.656.1507(a)(4)?

   Please see the enclosed cover letter.

Any conventional tower proposed not meeting setback requirements, must seek a waiver from the TRC per S.656.1509(b).

6. Is the tower designed to accommodate the requisite number of co-locaters relative to tower height as mandated by S.656.1507(a)(5)?

   Please see the enclosed cover letter.

Any conventional tower proposed not meeting setback requirements, must seek a waiver from the TRC per S.656.1509(b).

Pursuant to Section 656.1507(d), An application for a Conventional Wireless Tower permit shall be granted only if the Council finds, from a preponderance of the record evidence, that the proposed tower meets the following standards and criteria:

1. The proposed tower shall be consistent with the Comprehensive Plan, including any subsequent plan adopted by the Council thereto; Please see the enclosed cover letter.

2. The proposed tower shall comply with both the siting and design standards for conventional wireless towers and the performance standards for all wireless communication towers;

Please see the enclosed cover letter.

3. The proposed tower site shall be sufficiently accessible to permit entry onto the property by fire, police, rescue and other services;

Please see the enclosed cover letter.

4. The height of the proposed tower shall be deemed necessary to provide the wireless provider's designed service;

Please see the enclosed cover letter.

5. The absence of any existing or proposed towers, buildings or other structures that could provide technologically and structurally suitable space for co-location on community reasonable terms;

Please see the enclosed cover letter.

6. The proposed tower shall be compatible with the existing contiguous uses or zoning and compatible with the general character and aesthetics of the surrounding neighborhood or the area, considering:

(i) The design and height of the communication tower;

Please see the enclosed cover letter.

(ii) The potential adverse impact upon any environmentally sensitive lands, historic districts or historic landmarks, public parks or transportations view corridors; and

Please see the enclosed cover letter.

(iii) The mitigating effect of any existing or proposed landscaping, fencing or other structures in the area, as well as the proximity of the communications tower to existing or proposed buildings or structures.

Please see the enclosed cover letter.

Please review your application. All spaces noted as "TO BE COMPLETED BY APPLICANT" must be filled in for the application to be accepted.

No application will be accepted as *"Complete and filed"* until all the requested information has been supplied and the required fee has been paid. The acceptance of an application as being complete does not guarantee its approval by the Land Development Committee of the Planning Commission. ***You (or your agent) must be present*** at the hearing.

The required signs ***must be posted*** on the property within five (5) working days after the filing of this application. The sign(s) must remain posted and maintained until a final determination has been made on the application.

Also, an agent's letter of authorization must be attached if the application is not signed by the owner of record and also if someone attends the meeting on the applicant's behalf without prior authorization.

FILING FEES

All Districts Base Fee:	$1000.00
Notification Costs Per Addressee 7 Notifications @ $7.00 each:	$343.00
Total Cost:	$1,343.00

Advertising Costs to be Billed to Owner / Agent

When your ***completed*** application is submitted to the Wireless Communication Coordinator, a list of property owners (addressee) within 350 feet radius of the property will be prepared by the Department.

I HEREBY CERTIFY THAT I HAVE READ AND UNDERSTAND the information contained in this application, that I am the owner or authorized agent for the owner with authority to make this application, and that all of the information contained in this application, including the attachments, is true and correct to the best of my knowledge.

PLEASE PRINT:

Name and address of Owner(s)

Name: Roy Whitehead

Address: 935 Main Street, Suite D1

City: Safety Harbor State: FL Zip: 34695

Daytime Telephone 727-773-2221

Fax Number 727-773-2616

Mattaniah S. Jahn

SIGNATURE OF OWNER(S)

Name and address of Authorized Agent(s)

Name: Mattaniah S. Jahn, Esq.

Address: 935 Main Street, Suite D1

City: Safety Harbor State: FL Zip: 34695

Daytime Telephone 727-773-2221

Fax Number 727-773-2616

Mattaniah S. Jahn

SIGNATURE OF AUTHORIZED AGENT(S)

The Agent's letter of authorization must be attached if application is not signed by the owner of record.

INSTRUCTIONS

Submittal Information: Applications to construct a Wireless Communication Tower shall contain the following information:

1. The identity of the owner(s) of the proposed tower and the land on which the tower is to be located. Applications for a Conventional Wireless Tower (Track III) shall also identify the Wireless Communication Service Provider(s) that have committed to locating on the proposed tower, as provided in Section 656.1508 (b)(16);

2. The location of the proposed tower, including street address and parcel real estate number, as well as longitude and latitude coordinates;

3. A current zoning map showing the location of the proposed tower;

4. A legal description of the parent tract and Tower Site (if applicable);

5. A description of the communications service(s) provided by any Wireless Communication Service Providers identified as actual or potential users of the proposed tower;

6. A scaled site plan clearly indicating the tower size, type and height, the location of any accessory buildings, on-site land uses and zoning, adjacent land uses and zoning, adjacent roadways, proposed means of access, distances from property lines, elevation drawings of the proposed tower, and any other proposed structures;

7. Distance between the proposed tower and the nearest residentially zoned lands;

8. Distance between the proposed tower and the nearest boundary of any public park or Environmentally Sensitive Lands located within two miles of the proposed tower;

9. A landscape plan showing specific landscape materials;

10. The method of fencing, finished color and, if applicable, the method of aesthetic mitigation and illumination;

11. A map depicting (a) all existing Wireless Communication Towers within a one-half mile radius of the proposed tower, (b) all proposed Wireless Communication Towers within a one-half mile radius of the proposed tower that are currently in the permitting process, and (c) all structures in excess of eighty feet that could reasonably support a wireless communication antenna and are located within the search ring of the proposed tower;

12. If the applicant is not co-locating on the proposed communication tower of another Wireless Communication Service Provider or other structure, written evidence that there is no technologically and structurally suitable space available on commercially reasonable terms on an existing or proposed tower or structure within the Search Ring;

13. Details of all proposed antennas and mounting equipment, including size and color;

14. A design drawing including cross section and elevation of the proposed tower. A description of the tower's capacity, including the number and type of antennas it can accommodate as well as the proposed location of all mounting positions for co-located antennas and the minimum separation distances between antennas;

15. Certified statement from a licensed professional engineer attesting to the structural integrity of the tower and its ability to accommodate additional antennas;

16. A propagation map depicting both the extent of the communication provider's existing coverage within the subject area and the service area of the proposed tower;

17. A photographic simulation of the proposed tower site in order to help the approving authority ascertain the visual impacts associated with such proposal. Where the tower does not meet the minimum setback limitations set forth in this Subpart A, the applicant shall provide a view-shed analysis showing various angles from which the tower would be visible from the nearest boundary of said lands;

18. A Wireless Communication Network Plan for each service provider committed to locating on the tower, which plan shall include:

    (i) The locations of all the provider's existing Wireless Communication Towers within the City of Jacksonville that have not previously been filed with the Coordinator, including the tower type and height, the number of co-location positions designated, occupied or vacant (along with the identity of the Wireless Communication Service Provider(s) and the respective heights of the co-location sites), the longitude and latitude coordinates of each Tower Site and real estate number prescribed by the Property Appraiser for the land on which the towers are located. Where the tower applicant is not a licensed Wireless Communication Service Provider, the applicant shall identify the locations of all other towers that it owns within the City, along with the site-specific information set forth above;

    (ii) The locations of all the provider's existing wireless communication antennas within the City of Jacksonville that have not been previously filed with the Coordinator (other than those located on towers owned by the provider), including a description of the type of structure on which the antennas are located, the height at which the antennas are located, the identity of the owner of the structure and the real estate parcel number of the land on which the structure is located;

    (iii) The structural ability of the provider's Wireless Communication Towers, or those on which the provider has either existing antennas or proposed antennas in the permitting process, to support additional antennas.

19. Any additional information deemed necessary by the Department to complete its review of the application.

LAW OFFICE OF
Mattaniah S. Jahn, P.A.

935 Main Street, Suite D1
Safety Harbor, FL 34695
Telephone: (727) 773-2221
Facsimile: (727) 773-2616

SENT VIA EMAIL ONLY

May 21, 2020

Mr. Bruce Lewis
City Planner Supervisor
Planning and Development Department
214 North Hogan Street, Suite 300
Jacksonville, Florida 32202
blewis@coj.net

RE: Diamond Communications V, LLC – Forest Trail II
Parcel 001124-0000 - 15201 Normandy Blvd.
Track III Application, with Companion Waiver Request from North and West Setbacks, for a 194' AGL Monopole Communication Tower and Related Facility

Mr. Lewis:

Enclosed herein please find the following in support of my client, Diamond Communications V, LLC (Diamond)'s, Track III, with companion Waiver of North and West tower setbacks, application to allow the installation and operation of a 194' monopole style communication tower and support facility on Parcel 001124-0000:

- Application for Track III Conventional Tower
- AOR's
  - Agent of Record from Roy Whitehead to Mattaniah S. Jahn, Esq.
  - Agent of Record from Diamond Communications V, LLC to Mattaniah S. Jahn, Esq.
  - Agent Authorization Form - Corporation – Diamond Communications V, LLC to Mattaniah S. Jahn, Esq.
  - Agent Authorization Form – Roy Whitehead to Mattaniah S. Jahn, Esq.
- Property Card
- Property Card - Aerial
- Deed
- Ground Lease
- Colocation Affidavit
- Legal descriptions on 8 ½ x 11, in Word
- 911 Call Statistics
- RF Package
  - LOI

  - Propogation Maps
  - Search Ring
  - Wireless Communication Network Plan
- Fall Zone Letter – 1 Signed and Sealed
- Draft NEPA Report
- SHPO Clearance Email
- GeoCheck
- Informal Biological Assessment
- USFWS Clearance to Proceed
- FAA Airspace Study
- Photo Simulations – 1 PDF
- Headframe Cutsheet
- Antenna Cutsheet
- Boundary and Topographic Survey – 1 PDF
- Site Plan Set - 1 Electronically Signed and Sealed Set

Project Summary

Diamond respectfully requests a Track III approval, with a companion Waiver of North and West tower setbacks, to construct a 194' AGL monopole style communication tower (Monopole) with support facility on Parcel #001124-0000 in the City of Jacksonville, Duval County, Florida. The parent parcel is used as a timber processing yard and associated residence. It consists of 7.05 acres and is zoned AGR – Agricultural, with a Future Land Use Designation of AGR IV, and is located outside the Urban/Suburban Boundary. Diamond respectfully requests partial relief from the tower setbacks to the North and West, providing a 42' setback in lieu of the required 388' setback in each direction. The Monopole will be located within a 60' x 60' leased area with an equipment compound surrounded by an 8' tall, wood fence. The compound will be surrounded by the Code required 10' landscaping buffer plantings on all sides.

Sec. 656.1507. - Conventional wireless towers ("Track III").

Applications to construct a conventional wireless tower shall be assigned for processing on a "Track III" schedule. Within 30 days of notification from the Coordinator that the application is complete, a Track III application shall be assigned a legislative bill number and scheduled for a public hearing before the appropriate committee of reference of the City Council. The committee shall recommend approval, denial, or conditional approval of the application based upon its compliance with the review criteria and the siting and design standards set forth in this Section, as well as the performance standards for all wireless communication towers set forth in this Subpart.

Siting and design standards. Conventional wireless communication towers shall only be allowed in those zoning districts and land use categories located outside the urban/suburban area boundary that do not allow for residential uses, subject to the siting and design requirements set forth in this Section.(1) Height. The maximum height of a conventional wireless tower is 199 feet.

The Monopole will be 194' AGL to the top of the lightning rod, therefore, it will meet this requirement. Please see Sheet C6.

(2) Design. All conventional wireless towers must be of a monopole design.

This tower will be a monopole design. Please see Sheets C1, C2, and C6.

(3) Setbacks. Regardless of the zoning district in which a conventional wireless tower is located, the tower shall be set back a distance of at least: (a) 250 feet or 200 percent of the tower height, whichever distance is greater, from the nearest residentially zoned parcel; provided, however, that this setback shall not be required where legal title to the nearest residential parcel is held by the owner of the tower site. In the event that the proposed tower is to be located within a mixed use Planned Unit Development (PUD), the minimum distance set forth herein shall be measured from the nearest residential use. Conventional wireless towers shall also be set back a minimum distance of 250 feet or 200 percent of the tower height, whichever distance is greater, from the nearest boundary of a public park, historic district, historic landmark, Neighborhood Conservation District or environmentally sensitive lands, and a minimum distance of 100 percent of the tower height from any transportation view corridor.

The Monopole's setbacks will be as follows:

	Required	**Provided**
North:	**388'**	**42'**
Southeast:	**194'**	**520' 7"**
East:	**388'**	**457' 7"**
West:	**388'**	**42'**

[Continued on Next Page]

The Monopole will meet Code required setbacks to the Southeast and the East. Diamond respectfully requests Waivers to the North and the West due to the fact that the parent parcel is abutted by Agriculturally zoned parcels in those directions that are part of the extreme southern portion of Loblolly Park. There are no historic districts, historic landmarks, Neighborhood Conservation Districts, or otherwise environmentally sensitive lands known to exist within 388' of the Monopole. Please see Sheets C1, C1.1, and C6 as well as the enclosed USFWS Clearance to Proceed with Communication Tower Projects and SHPO Clearance Email.

(4) Separation. No conventional wireless tower shall be permitted to be constructed within 2,640 feet of another conventional wireless tower.

The nearest existing tower is 2.9 miles (15,576 feet) to the Northwest, therefore, the Monopole will exceed the required separation. Please see Sheet C1, Note 1.

(5) Collocation. Conventional wireless towers shall be designed to accommodate collocation of antennas for multiple wireless communication service providers, as follows:

Conventional Tower Height	Total Number of Providers
< 110 feet	2
110 feet—130 feet	3
131 feet—170 feet	4
171 feet—199 feet	**5**

(**emphasis** supplied)

The proposed Monopole will be designed for 5 colocations, and, therefore, will meet this requirement of the Code. Please see the enclosed Fall Zone Letter.

(b) Public hearing. A public hearing shall be held by the Council to consider all conventional wireless tower applications. Notice of the time and place of the public hearing shall be made as provided in Section 656.124, Ordinance Code. Additionally, the

notice shall specify the proposed height of the tower and the number of wireless communications service provider(s) that can be located on the tower.
The Department shall be responsible for making an advisory recommendation to the Council on each application for a conventional wireless tower. Said recommendation shall be in writing and furnished to the assigned committee members, the Council President, the District Council Member and the applicant at least three days prior to the scheduled hearing.

Noted.

(c) Balloon test. Applications for conventional wireless towers shall be required to conduct a "balloon test," unless otherwise prohibited by law. The test shall be conducted as follows:

(1) The balloon shall be red and a minimum of four feet in diameter, anchored to the ground so that it flies at the same height and location as the proposed tower.

(2) The balloon shall be flown continuously from 7:00 a.m. until sunset for two separate days within the same week.

(3) The test shall be conducted during the week prior to the first scheduled public hearing for the conventional wireless tower before the Council committee of reference. Notice of the scheduled week of the balloon test shall be given along with the notice of the public hearing in accordance with Section 656.124, Ordinance Code.

Diamond will comply.

(d) Review criteria. An application for a conventional wireless tower permit shall be granted only if the Council finds, from a preponderance of the record evidence, that the proposed tower meets the following standards and criteria:

(1) The proposed tower shall be consistent with the Comprehensive Plan, including any subsequent plan adopted by the Council pursuant thereto;

The parent parcel is zoned AGR and has a future land use AGR-VI. The Code is the implementation of the Comprehensive Plan in regard to communication towers within the City of Jacksonville. Communication towers, such as the Monopole, are allowable under the Code on lands with these designations through the Track III process when they meet the required separations and design standards, or through the same process with a companion Waiver when those separations and standards need to be modified.

As sited, the proposed Monopole will further the sound planning objectives of protecting residentially used parcels and transportation view corridors by placing the Monopole in the

rear of the parcel. In this location, the Monopole will exceed the Code required separations from residentially developed parcels to the East and Southeast as well as Normandy Blvd. Additionally, locating the Monopole in the rear of the parcel maximizes the buffering capabilities of the mature existing trees and canopy located both on the parent parcel and in the vicinity. Finally, the developed environment in the area surrounding the parent parcel is either under, or in close proximity to, mature existing tree canopy. This canopy breaks up the area's viewsheds and further minimizes the Monopole's visibility.

As designed, Monopole maximizes compatibility under the Code by providing the minimum height of structure necessary to meet Verizon's RF objectives. Further, the Monopole's design, with no support ironworks or guy wires extending out from it, will minimize the visual profile of the structure. Additionally, the Monopole will have a dull gray finish and be completely dark at night, allowing it to further blend into the background environment.

Therefore, Diamond respectfully submits that the Monopole is consistent with the Comprehensive Plan. Please see Sheets C1, C1.1, C2, and C6, as well as the enclosed RF Package, FAA Airspace Study, and Photo Simulations.

(2) The proposed tower shall comply with both the siting and design standards for conventional wireless towers and the performance standards for all wireless communication towers;

The Monopole will comply with all design standards under the Code. The Monopole will meet all lot setback requirements as well as separation requirements from surrounding residential uses and Normandy Blvd. Diamond is requesting relief from the North and West separation requirements, which is allowable as waivers under the Code. These two waivers are requested to further the sound planning objectives of maximizing buffering and separation from neighboring residential uses to the East and Southeast, as well as the Normandy Blvd transportation view corridor. Please see Sheets C1, C1.1, C2, and C6.

(3) The proposed tower site shall be sufficiently accessible to permit entry onto the property by fire, police, rescue and other services;

The Monopole will be accessed by a 12' wide gravel driveway with a turnaround, both located within a 20' wide access easement, to sufficiently provide the access needed by fire, police, rescue, or other services. Please see Sheets C1 and C2.

(4) The height of the proposed tower shall be deemed necessary to provide the wireless provider's designed service,

The Monopole is the minimum height in order to meet Verizon's RF objectives. Please see the enclosed RF Package.

(5) The absence of any existing or proposed towers, buildings or other structures that could provide technologically and structurally suitable space for collocation on commercially reasonable terms;

There are no known structures of suitable height or possessing suitable space within the Search Ring. Please see the enclosed RF Package with search ring and statement of diligent search.

(6) The proposed tower shall be compatible with the existing contiguous uses or zoning and compatible with the general character and aesthetics of the surrounding neighborhood or the area, considering:

(i) The design and height of the communication tower;

As designed, the Monopole maximizes compatibility under the of the Code by providing the minimum height of structure necessary to meet Verizon's RF objectives. Further, the Monopole's design, with no support ironworks or guy wires extending out from it, will minimize the visual profile of the structure. Finally, the Monopole will have a dull gray finish and be completely dark at night, allowing it to further blend into the background environment. Please see Sheets C1, C1.1, C2, C6, as well as the enclosed FAA Airspace Study.

(ii) The potential adverse impact upon any environmentally sensitive lands, historic districts or historic landmarks, public parks or transportation view corridors; and

The Monopole will not create an adverse impact on any environmentally sensitive lands, historic districts or historic landmarks, public parks or transportation view corridors. Please see Sheets C1 and C1.1 as well as the enclosed Draft NEPA Report, SHPO Clearance Email, USFWS Clearance to Proceed, Informal Biological Assessment, and Photo Simulations.

(iii) The mitigating effect of any existing or proposed landscaping, fencing or other structures in the area, as well as the proximity of the communications tower to existing or proposed buildings or structures.

The Monopole will be located on disturbed land at the rear of the parcel, currently used as a timber yard, and as far away as physically possible from residential uses and the transportation view corridor in the area. Existing mature vegetation located along Normandy Blvd and the eastern edge of the parent parcel will provide buffering from residential uses and the transportation view corridor. Further, mature trees throughout the built environment break up the view sheds of the general area around the parent parcel, adding additional buffering. Finally, the Monopole will mitigate the base of the facility by providing the Code required 10' wide landscape buffer on all sides of the compound and enclosing the compound with an opaque wooden fence. Please see Sheets C1, C1.1, C2, and C6 and the enclosed Photo Simulations.

Sec. 656.1509 (b). – Tower Review Committee.

(a) ...

(b) Waiver and variance criteria. The Tower Review Committee may grant a waiver from the minimum setback and separation requirements of this Subpart A, a waiver from the landscaping requirements of this Part 15, a variance from the maximum height requirements for low impact/stealth towers, a variance from the maximum height and projections requirements for side-mount and rooftop antennas, or a variance from the other maximum height requirements in this Subpart A, only upon proof that there are no less intrusive means for siting the tower or antenna to meet the coverage needs of a Wireless Communications Service Provider. This burden may only be met where the applicant proves, by a preponderance of the evidence, that the request meets the following standards and criteria, to the extent applicable:

(1) The location of existing uses, structures or other features on or adjacent to the property create a need for the waiver or variance;

Siting the Monopole in a location that complies with the sound planning objectives of residential and view corridor separation, along with the parent parcel's use, make Waivers necessary. Even if the on-site use of the parent parcel is removed from the analysis, complying with the above stated separation requirements would necessitate the majority of the relief requested for both waivers. Please see Sheets C1, C1.1, and C6.

(2) The request is not based exclusively upon the desire to reduce the cost of developing the site or to circumvent the requirements or Chapter 656, Part 15, Subpart A (Wireless Communication Facilities);

The opposite is true, the proposed waivers are not requested for the purpose of reducing development costs or circumventing Chapter 656, Part 15, Subpart A. Rather, the relief requested is to comply with Chapter 656, Part 15, Subpart A's separation requirements from residential uses and transportation corridors, as well as to further the sound planning objective of maximizing compatibility to those off-site uses. Please see Sheets C1, C1.1, and C6.

(3) The proposed waiver or variance is the minimum necessary to address the need for the request;

Waivers are only needed for the North and West tower setbacks. These separation waivers are driven by the Monopole's height. The Monopole is the minimum height necessary to achieve Verizon's RF objectives. Therefore, the Monopole's design minimizes the relief necessary to the North and West. As discussed above, the Monopole is sited to comply with separation requirements for nearby residential uses and the Normandy Blvd. transportation view corridor. Those separations, as well as the operational requirements of the parent parcel's use, make the waivers necessary.

Even if the on-site use of the parent parcel is removed from the analysis, complying with the above stated separation requirements would necessitate the majority of the relief requested for both waivers. Therefore, the requested relief is the minimum distance reduction needed when accounting for the neighboring off-site uses, the use of the parent parcel itself, and the lack of other available locations on the parcel that would meet these constraints. Please see Sheets C1, C1.1, C2, and C6.

(4) The proposed waiver or variance will reflect, to the greatest extent reasonably practicable, the physical character, massing, scale and architecture of the surrounding land uses;

The parent parcel is a timber facility, surrounded on most sides by agriculturally zoned parcels. Residential uses exist to the East and Southeast of the parent parcel and Normandy Blvd borders the parent parcel along its Southeast lot line. The Monopole will be the minimum height necessary to meet Verizon's RF objectives. Further, the Monopole's design, with no support ironworks or guy wires extending out from it, will minimize the mass and visual profile of the structure. Additionally, the Monopole will have a dull gray finish and be completely dark at night, allowing it to further blend into the background environment.

As sited, the Monopole will take the greatest advantage of the built environment possible by placing the facility in the back of the parent parcel, behind the timber facility. In this location, the Monopole will exceed the Code required separations from residentially developed parcels to the East and Southeast as well as Normandy Blvd. Additionally, the buffering capabilities of the mature existing trees and canopy, located both on the parent parcel and in the vicinity, will be maximized. Finally, the developed environment in the area surrounding the parent parcel is located either under or in close proximity to mature existing tree canopy that breaks up the area's viewsheds and further minimizes the Monopole's visibility. Please see Sheets C1, C1.1, C2, C6, as well as the enclosed FAA Airspace Study and Photo Simulations.

(5) The proposed waiver or variance will not have a significant detrimental impact on adjacent property values;

The parent parcel is developed as a logging/timber facility. As discussed above, the Monopole is designed to minimize the visual presence of the facility as much as possible and maximize the buffering characteristics in the area. Finally, the Monopole will have the positive impact of improving wireless service in the area. In 2019, approximately 86% of all 911 calls received by the City of Jacksonville were placed via wireless phones. This shows that reliable wireless coverage is no longer a luxury, it is a necessity. Therefore, the Monopole will have no detrimental impact to adjacent property values. Please see Sheet C1.1 as well as the enclosed RF package and 911 Call Statistics.

(6) The proposed waiver or variance will be compatible with the existing contiguous uses or zoning, as well as the general character and aesthetics of the neighborhood or area, considering the design and height of the tower or antenna, the mitigating effect of any existing or proposed landscaping, fencing or other structures in the area, and for towers, the proximity of the tower to existing or proposed buildings or other structures, and similar factors; and

The parent parcel is zoned AGR and has a future land use AGR-VI. The Code is the implementation of the Comprehensive Plan in regard to communication towers within the City of Jacksonville. Communication towers, such as the Monopole, are allowable under the Code on lands with these designations through the Track III process when they meet the required separations and design standards, or through the same process with a companion Waiver when those separations and standards need to be modified.

As sited, the proposed Monopole will further the sound planning objectives of protecting residentially used parcels and transportation view corridors by placing the Monopole in the rear of the parent parcel. In this location, the Monopole will exceed the Code required separations from residentially developed parcels to the East and Southeast as well as

Normandy Blvd. Further, locating the Monopole in the rear of the parcel maximizes the buffering capabilities of the mature existing trees and canopy located both on the parent parcel and in the vicinity. Finally, the developed environment in the area surrounding the parent parcel is located under or in close proximity to mature existing tree canopy that breaks up the area's viewsheds and further minimizes the Monopole's visibility.

As designed, the Monopole maximizes compatibility under the Code by providing the minimum height of structure necessary to meet Verizon's RF objectives. Further, the Monopole's design, with no support ironworks or guy wires extending out from it, will minimize the visual profile of the structure. Additionally, the Monopole will have a dull gray finish and be completely dark at night, allowing it to further blend into the background environment.

Therefore, Diamond respectfully submits that the Monopole is consistent with the Comprehensive Plan. Please see Sheets C1, C1.1, C2, and C6, as well as the enclosed RF Package, FAA Airspace Study and Photo Simulations.

(7) The strict application of the requirements of this Section would constitute a substantial hardship to the applicant, which hardship is not self-created or self-imposed.

Verizon has conducted a Diligent Search of the area. There are no tall structures suitable for collocation and no other parcels are available that would comply with the Code and meet their RF objectives. Therefore, failure to approve the Monopole will constitute a substantial hardship upon Verizon as it would perpetuate a significant gap in its coverage. Please see the enclosed RF Package.

(c) ...

(d) ...

<u>Sec. 656.1512. - Performance standards.</u>

In addition to the siting and design standards set forth in this Subpart, all wireless communication towers shall satisfy the following performance standards, except towers 50 feet or less and less than the maximum height allowed of a principle structure on the site per Chapter 656 and meets the definition for "small wireless facilities", as defined in Part 4, Ch. 711, Ordinance Code, are excluded from these requirements:

(a) No advertising. The wireless communication tower shall not be used for any advertising purpose, including signage, designs or logos.

Diamond will comply. Please see Sheet N1, Advertising Note.

(b) Security wall or fence. A minimum eight-foot high finished masonry wall or wooden fence shall be required around all portions of noncamouflaged wireless communication tower sites visible from the public view. In industrial zoned sites, however, the fence may be a chain link fence or other type of security fence. For purposes of this Section, a finished masonry wall includes, but is not limited to, stucco, brick or any other decorative cover or finish.

The Monopole will be enclosed by an 8' wooden fence with 3 strands of barbed wire on top. Please see Sheets C1, C2, and C3.

(c) Landscaping. The visual impacts of wireless communication tower sites shall be mitigated through the use of a landscaping buffer outside the perimeter of the security fence or wall. The landscape buffer shall be a minimum of ten feet on all sides subject to and consisting of the following:

(1) A row of evergreen shade trees a minimum of 15 feet tall (at the time of planting) with a four-inch caliper, spaced a maximum of 15 feet apart; and

(2) A row of evergreen shrubs such as viburnum , ligustrum , holly or juniper, a minimum of four-feet tall (at the time of planting) and potted in seven-gallon containers, planted four feet on center, in order to maintain 80 percent opacity within one year of planting.

(3) The landscaping buffer shall be properly maintained through an irrigation system.

The Monopole's compound will be surrounded by a 10' wide landscape buffer consisting of Crape Myrtle and Live Oaks. Please see Sheet C2.

(d) Illumination. No signals, lights or illumination shall be permitted on any wireless communication tower, unless otherwise required by the Federal Aviation Administration or such lighting or illumination is part of the design of a camouflage scheme.

The Monopole will not be illuminated. Please see Sheet C6 as well as the enclosed FAA Airspace Study.

(e) Color. Noncamouflaged towers shall either have a dull gray or galvanized finish or have a noncontrasting finish that minimizes the visibility of the tower from public view, except where contrasting color is required by federal or state regulation.

The Monopole will have a dull, steel gray finish, which will minimize the visibility of the tower from public view. Please see Sheet C6.

(f) Required signs. The security fence or wall surrounding the tower site shall contain a sign, measuring no more than 30 inches wide by 24 inches high, identifying the primary party responsible for the operation and maintenance of the facility, the address and telephone number of that party, the FCC registration and site identification numbers of the tower and the street address of the tower site, where applicable.

Diamond will comply. Please see Sheet C5.

(g) Flags. One flag shall be allowed on each flag pole designed camouflaged tower that is located within 1,000 feet of the centerline of a designated interstate highway. This provision shall also be applicable to all previously approved flag pole designed camouflaged towers, notwithstanding any conditions to the contrary. Prior to installing a flag on an existing pole designed camouflaged tower as permitted herein, an applicant shall submit a building permit application meeting the structural requirements of the Building Inspection Division, and a copy to the Wireless Communications Coordinator, for review and approval.

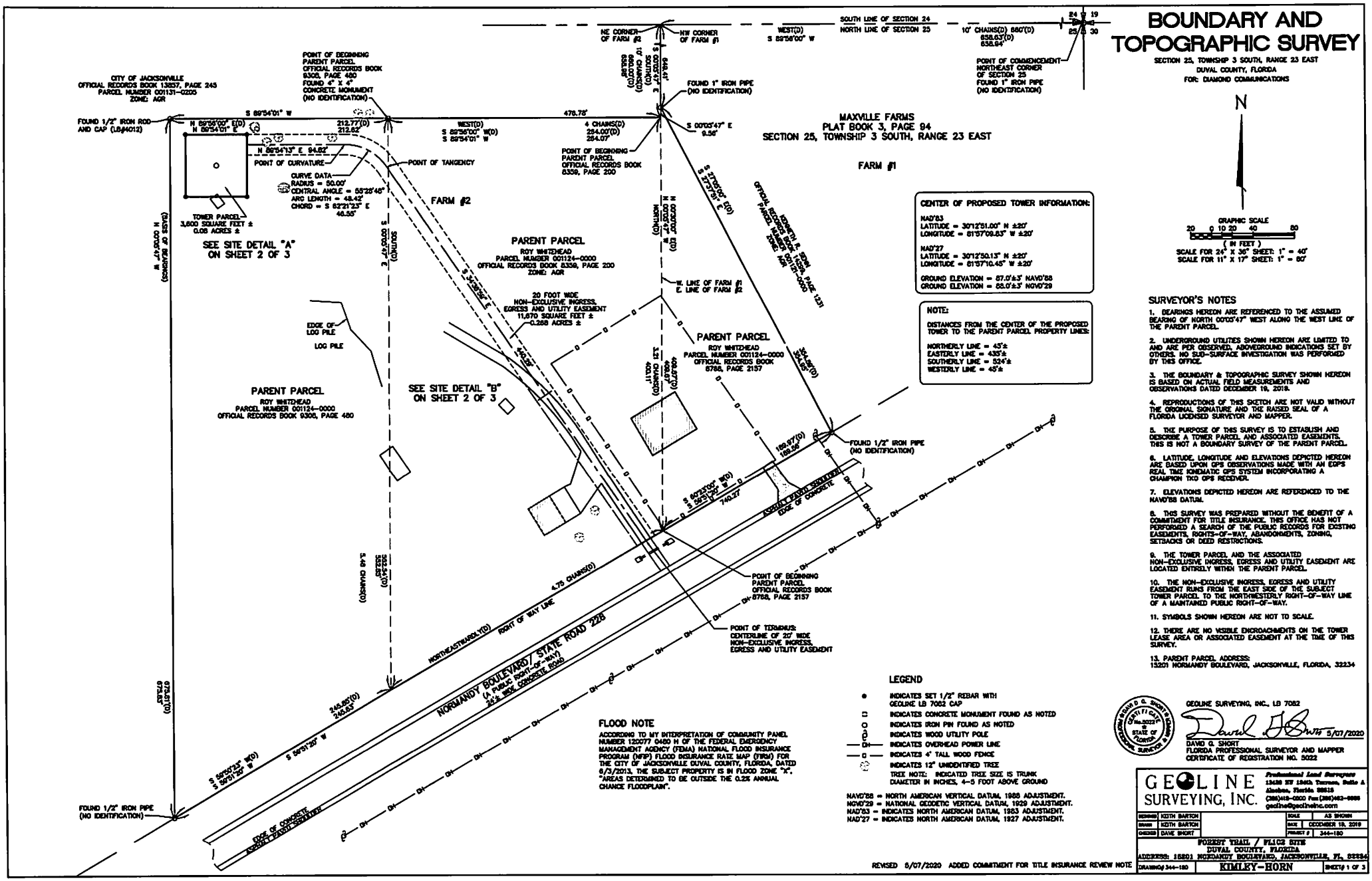
N/A. Diamond is proposing to construct a monopole style tower, therefore, no flags will be present. Please see Sheet C5.

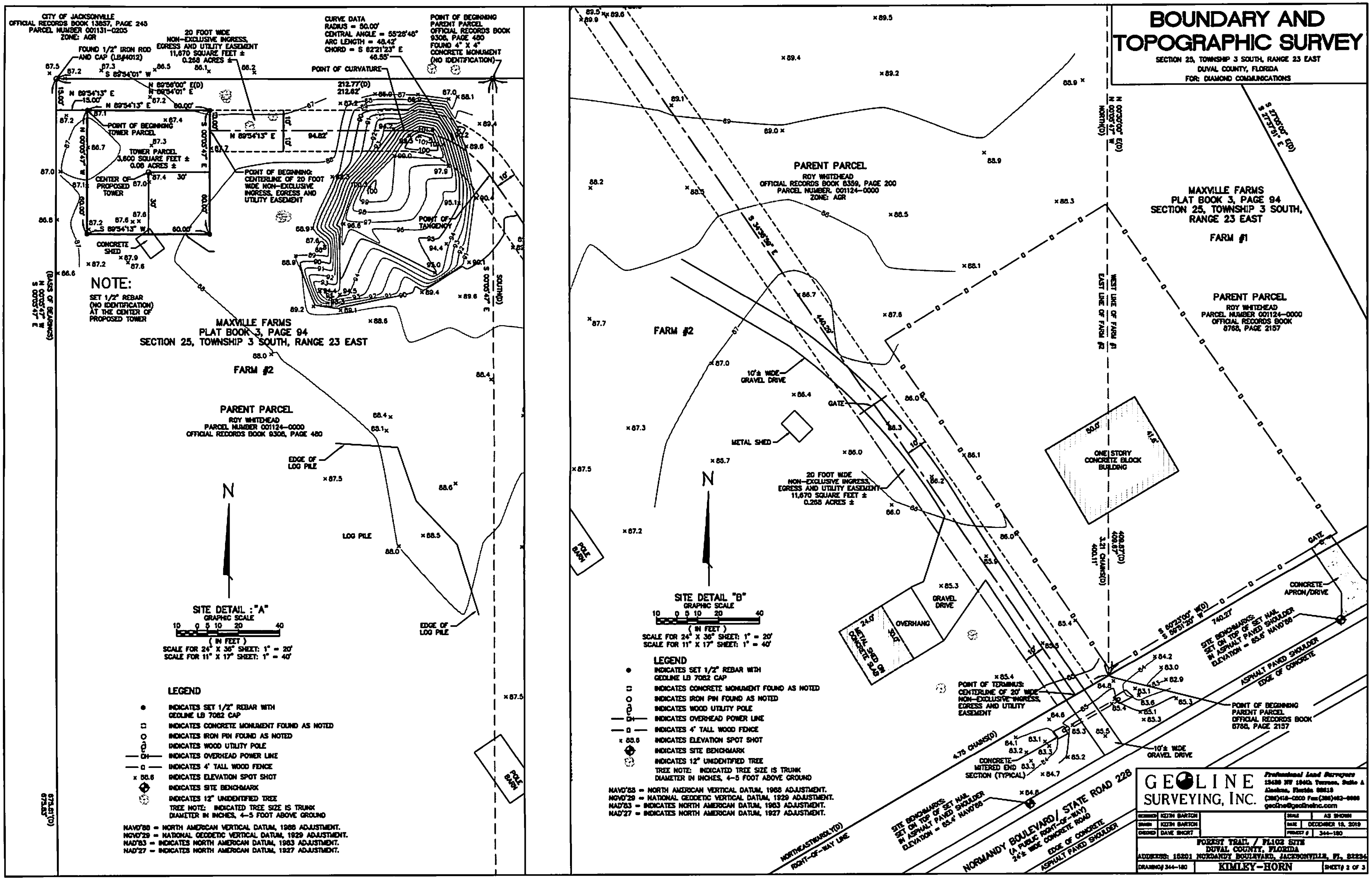
Thank you in advance for your consideration of this project. Please do not hesitate to contact me if I may provide you with additional information or to discuss this matter in more detail.

Sincerely,

Mattaniah S. Jahn, Esq.
MSJ/vlc

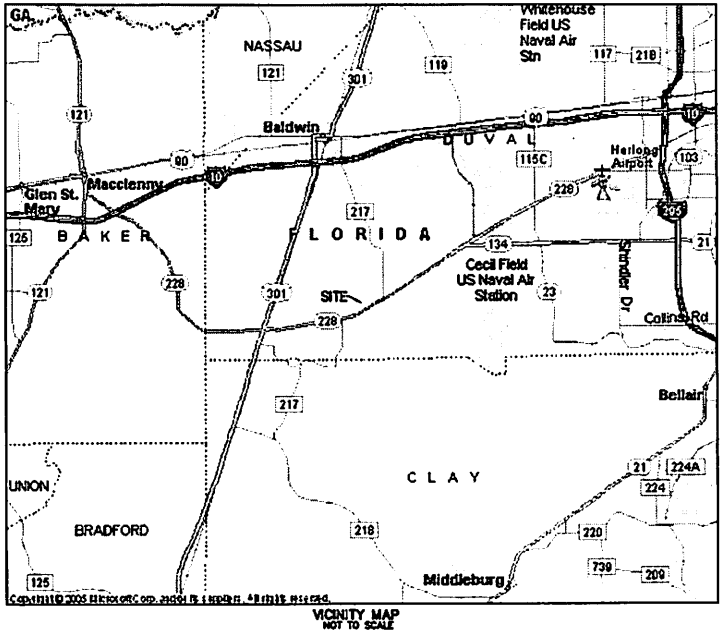
Enclosures


BOUNDARY AND TOPOGRAPHIC SURVEY
SECTION 25, TOWNSHIP 3 SOUTH, RANGE 23 EAST
DUVAL COUNTY, FLORIDA
FOR: DIAMOND COMMUNICATIONS
MAXVILLE FARMS
PLAT BOOK 3, PAGE 94
SECTION 25, TOWNSHIP 3 SOUTH, RANGE 23 EAST
FARM #1
FARM #2
PARENT PARCEL
ROY WHITEHEAD
PARCEL NUMBER 001124-0000
OFFICIAL RECORDS BOOK 8359, PAGE 200
ZONE: AGR
PARENT PARCEL
ROY WHITEHEAD
PARCEL NUMBER 001124-0000
OFFICIAL RECORDS BOOK 9305, PAGE 480
PARENT PARCEL
ROY WHITEHEAD
PARCEL NUMBER 001124-0000
OFFICIAL RECORDS BOOK 8788, PAGE 2157
CITY OF JACKSONVILLE
OFFICIAL RECORDS BOOK 13857, PAGE 245
PARCEL NUMBER 001131-0200
ZONE: AGR
POINT OF BEGINNING
PARENT PARCEL
OFFICIAL RECORDS BOOK
9305, PAGE 480
FOUND 4" X 4"
CONCRETE MONUMENT
(NO IDENTIFICATION)
FOUND 1/2" IRON ROD
AND CAP (LB#4012)
TOWER PARCEL
3,600 SQUARE FEET ±
0.08 ACRES ±
CURVE DATA
RADIUS = 50.00'
CENTRAL ANGLE = 55°28'46"
ARC LENGTH = 48.42'
CHORD = S 62°21'23" E
46.55'
POINT OF TANGENCY
POINT OF CURVATURE
SEE SITE DETAIL "A"
ON SHEET 2 OF 3
SEE SITE DETAIL "B"
ON SHEET 2 OF 3
20 FOOT WIDE
NON-EXCLUSIVE INGRESS,
EGRESS AND UTILITY EASEMENT
11,670 SQUARE FEET ±
0.268 ACRES ±
EDGE OF
LOG PILE
LOG PILE
POINT OF BEGINNING
PARENT PARCEL
OFFICIAL RECORDS BOOK
8359, PAGE 200
FOUND 1" IRON PIPE
(NO IDENTIFICATION)
POINT OF COMMENCEMENT
NORTHEAST CORNER
OF SECTION 25
FOUND 1" IRON PIPE
(NO IDENTIFICATION)
NE CORNER
OF FARM #2
NW CORNER
OF FARM #1
SOUTH LINE OF SECTION 24
NORTH LINE OF SECTION 25
W. LINE OF FARM #1
E. LINE OF FARM #2
FOUND 1/2" IRON PIPE
(NO IDENTIFICATION)
POINT OF BEGINNING
PARENT PARCEL
OFFICIAL RECORDS BOOK
8788, PAGE 2157
POINT OF TERMINUS:
CENTERLINE OF 20' WIDE
NON-EXCLUSIVE INGRESS,
EGRESS AND UTILITY EASEMENT
NORMANDY BOULEVARD / STATE ROAD 228
(A PUBLIC RIGHT-OF-WAY)
24'± WIDE CONCRETE ROAD
RIGHT OF WAY LINE
EDGE OF CONCRETE
ASPHALT PAVED SHOULDER
FOUND 1/2" IRON PIPE
(NO IDENTIFICATION)
CENTER OF PROPOSED TOWER INFORMATION:
NAD'83
LATITUDE = 30°12'51.00" N ±20'
LONGITUDE = 81°57'09.83" W ±20'
NAD'27
LATITUDE = 30°12'50.13" N ±20'
LONGITUDE = 81°57'10.45" W ±20'
GROUND ELEVATION = 67.0'±3' NAVD'88
GROUND ELEVATION = 68.0'±3' NGVD'29
NOTE:
DISTANCES FROM THE CENTER OF THE PROPOSED
TOWER TO THE PARENT PARCEL PROPERTY LINES:
NORTHERLY LINE = 45'±
EASTERLY LINE = 435'±
SOUTHERLY LINE = 524'±
WESTERLY LINE = 45'±
GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
SCALE FOR 24" X 36" SHEET: 1" = 40'
SCALE FOR 11" X 17" SHEET: 1" = 80'
LEGEND
INDICATES SET 1/2" REBAR WITH GEOLINE LB 7032 CAP
INDICATES CONCRETE MONUMENT FOUND AS NOTED
INDICATES IRON PIN FOUND AS NOTED
INDICATES WOOD UTILITY POLE
INDICATES OVERHEAD POWER LINE
INDICATES 4' TALL WOOD FENCE
INDICATES 12" UNIDENTIFIED TREE
TREE NOTE: INDICATED TREE SIZE IS TRUNK DIAMETER IN INCHES, 4-5 FOOT ABOVE GROUND
FLOOD NOTE
ACCORDING TO MY INTERPRETATION OF COMMUNITY PANEL NUMBER 12001C 0480 H OF THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) NATIONAL FLOOD INSURANCE PROGRAM (NFIP) FLOOD INSURANCE RATE MAP (FIRM) FOR THE CITY OF JACKSONVILLE DUVAL COUNTY, FLORIDA, DATED 6/3/2013, THE SUBJECT PROPERTY IS IN FLOOD ZONE "X", "AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN".
NAVD'88 = NORTH AMERICAN VERTICAL DATUM, 1988 ADJUSTMENT.
NGVD'29 = NATIONAL GEODETIC VERTICAL DATUM, 1929 ADJUSTMENT.
NAD'83 = INDICATES NORTH AMERICAN DATUM, 1983 ADJUSTMENT.
NAD'27 = INDICATES NORTH AMERICAN DATUM, 1927 ADJUSTMENT.
REVISED 5/07/2020 ADDED COMMITMENT FOR TITLE INSURANCE REVIEW NOTE
SURVEYOR'S NOTES
1. BEARINGS HEREON ARE REFERENCED TO THE ASSUMED BEARING OF NORTH 00°05'47" WEST ALONG THE WEST LINE OF THE PARENT PARCEL.
2. UNDERGROUND UTILITIES SHOWN HEREON ARE LIMITED TO AND ARE PER OBSERVED, ABOVEGROUND INDICATIONS SET BY OTHERS. NO SUB-SURFACE INVESTIGATION WAS PERFORMED BY THIS OFFICE.
3. THE BOUNDARY & TOPOGRAPHIC SURVEY SHOWN HEREON IS BASED ON ACTUAL FIELD MEASUREMENTS AND OBSERVATIONS DATED DECEMBER 19, 2019.
4. REPRODUCTIONS OF THIS SKETCH ARE NOT VALID WITHOUT THE ORIGINAL SIGNATURE AND THE RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.
5. THE PURPOSE OF THIS SURVEY IS TO ESTABLISH AND DESCRIBE A TOWER PARCEL AND ASSOCIATED EASEMENTS. THIS IS NOT A BOUNDARY SURVEY OF THE PARENT PARCEL.
6. LATITUDE, LONGITUDE AND ELEVATIONS DEPICTED HEREON ARE BASED UPON GPS OBSERVATIONS MADE WITH AN EGPS REAL TIME KINEMATIC GPS SYSTEM INCORPORATING A CHAMPION TKO GPS RECEIVER.
7. ELEVATIONS DEPICTED HEREON ARE REFERENCED TO THE NAVD'88 DATUM.
8. THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF A COMMITMENT FOR TITLE INSURANCE. THIS OFFICE HAS NOT PERFORMED A SEARCH OF THE PUBLIC RECORDS FOR EXISTING EASEMENTS, RIGHTS-OF-WAY, ABANDONMENTS, ZONING, SETBACKS OR DEED RESTRICTIONS.
9. THE TOWER PARCEL AND THE ASSOCIATED NON-EXCLUSIVE INGRESS, EGRESS AND UTILITY EASEMENT ARE LOCATED ENTIRELY WITHIN THE PARENT PARCEL.
10. THE NON-EXCLUSIVE INGRESS, EGRESS AND UTILITY EASEMENT RUNS FROM THE EAST SIDE OF THE SUBJECT TOWER PARCEL TO THE NORTHWESTERLY RIGHT-OF-WAY LINE OF A MAINTAINED PUBLIC RIGHT-OF-WAY.
11. SYMBOLS SHOWN HEREON ARE NOT TO SCALE.
12. THERE ARE NO VISIBLE ENCROACHMENTS ON THE TOWER LEASE AREA OR ASSOCIATED EASEMENT AT THE TIME OF THIS SURVEY.
13. PARENT PARCEL ADDRESS:
15201 NORMANDY BOULEVARD, JACKSONVILLE, FLORIDA, 32234
GEOLINE SURVEYING, INC., LB 7032
DAVID G. SHORT
FLORIDA PROFESSIONAL SURVEYOR AND MAPPER
CERTIFICATE OF REGISTRATION NO. 5022
5/07/2020
GEOLINE SURVEYING, INC.
Professional Land Surveyors
13438 NW 136th Terrace, Suite A
Alachua, Florida 32615
(386)418-0800 Fax:(386)462-0888
geoline@geolinelnc.com
DESIGNED KEITH BARTON
DRAWN KEITH BARTON
CHECKED DAVE SHORT
SCALE AS SHOWN
DATE DECEMBER 19, 2019
PROJECT # 344-180
FOREST TRAIL / WLCS SITE
DUVAL COUNTY, FLORIDA
ADDRESS: 15801 NORMANDY BOULEVARD, JACKSONVILLE, FL, 32234
DRAWING# 344-180
KIMLEY-HORN
SHEET# 1 OF 3

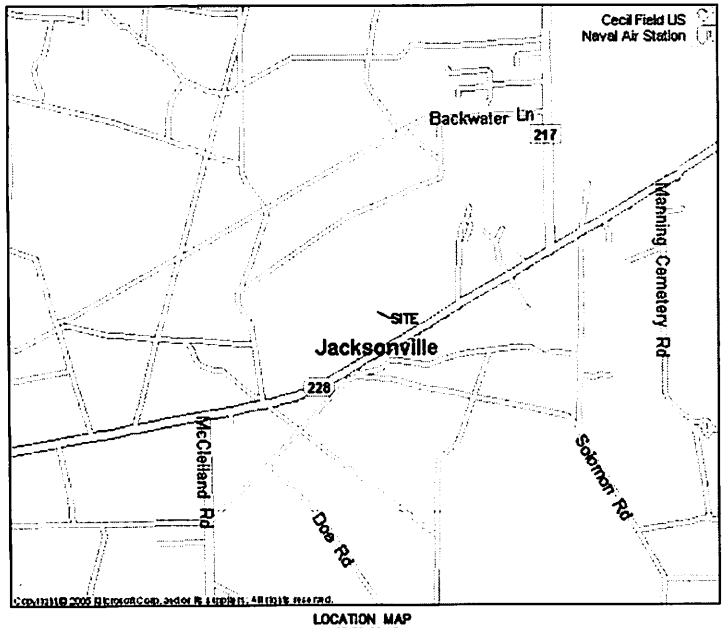

BOUNDARY AND TOPOGRAPHIC SURVEY
SECTION 25, TOWNSHIP 3 SOUTH, RANGE 23 EAST
DUVAL COUNTY, FLORIDA
FOR: DIAMOND COMMUNICATIONS
CITY OF JACKSONVILLE
OFFICIAL RECORDS BOOK 13857, PAGE 245
PARCEL NUMBER 001131-0205
ZONE: AGR
20 FOOT WIDE NON-EXCLUSIVE INGRESS, EGRESS AND UTILITY EASEMENT 11,670 SQUARE FEET ± 0.268 ACRES ±
CURVE DATA
RADIUS = 50.00'
CENTRAL ANGLE = 55°28'48"
ARC LENGTH = 48.42'
CHORD = S 62°21'23" E
46.55'
POINT OF BEGINNING PARENT PARCEL OFFICIAL RECORDS BOOK 9306, PAGE 480 FOUND 4" X 4" CONCRETE MONUMENT (NO IDENTIFICATION)
POINT OF CURVATURE
POINT OF TANGENCY
FOUND 1/2" IRON ROD AND CAP (LB#4012)
POINT OF BEGINNING TOWER PARCEL
TOWER PARCEL 3,600 SQUARE FEET ± 0.08 ACRES ±
CENTER OF PROPOSED TOWER
CONCRETE SHED
POINT OF BEGINNING: CENTERLINE OF 20 FOOT WIDE NON-EXCLUSIVE INGRESS, EGRESS AND UTILITY EASEMENT
NOTE:
SET 1/2" REBAR (NO IDENTIFICATION) AT THE CENTER OF PROPOSED TOWER
(BASIS OF BEARINGS) N 00°05'47" W S 00°05'47" E
MAXVILLE FARMS
PLAT BOOK 3, PAGE 94
SECTION 25, TOWNSHIP 3 SOUTH, RANGE 23 EAST
FARM #2
PARENT PARCEL
ROY WHITEHEAD
PARCEL NUMBER 001124-0000
OFFICIAL RECORDS BOOK 9306, PAGE 480
EDGE OF LOG PILE
LOG PILE
POLE BARN
SITE DETAIL :"A"
GRAPHIC SCALE
(IN FEET)
SCALE FOR 24" X 36" SHEET: 1" = 20'
SCALE FOR 11" X 17" SHEET: 1" = 40'
LEGEND
INDICATES SET 1/2" REBAR WITH GEOLINE LB 7062 CAP
INDICATES CONCRETE MONUMENT FOUND AS NOTED
INDICATES IRON PIN FOUND AS NOTED
INDICATES WOOD UTILITY POLE
INDICATES OVERHEAD POWER LINE
INDICATES 4' TALL WOOD FENCE
INDICATES ELEVATION SPOT SHOT
INDICATES SITE BENCHMARK
INDICATES 12" UNIDENTIFIED TREE
TREE NOTE: INDICATED TREE SIZE IS TRUNK DIAMETER IN INCHES, 4-5 FOOT ABOVE GROUND
NAVD'88 = NORTH AMERICAN VERTICAL DATUM, 1988 ADJUSTMENT.
NGVD'29 = NATIONAL GEODETIC VERTICAL DATUM, 1929 ADJUSTMENT.
NAD'83 = INDICATES NORTH AMERICAN DATUM, 1983 ADJUSTMENT.
NAD'27 = INDICATES NORTH AMERICAN DATUM, 1927 ADJUSTMENT.
PARENT PARCEL
ROY WHITEHEAD
OFFICIAL RECORDS BOOK 8359, PAGE 200
PARCEL NUMBER 001124-0000
ZONE: AGR
MAXVILLE FARMS
PLAT BOOK 3, PAGE 94
SECTION 25, TOWNSHIP 3 SOUTH, RANGE 23 EAST
FARM #1
PARENT PARCEL
ROY WHITEHEAD
PARCEL NUMBER 001124-0000
OFFICIAL RECORDS BOOK 8768, PAGE 2157
WEST LINE OF FARM #1
EAST LINE OF FARM #2
ONE STORY CONCRETE BLOCK BUILDING
10'± WIDE GRAVEL DRIVE
METAL SHED
GATE
GRAVEL DRIVE
OVERHANG
METAL SHED ON CONCRETE SLAB
CONCRETE APRON/DRIVE
POINT OF TERMINUS: CENTERLINE OF 20' WIDE NON-EXCLUSIVE INGRESS, EGRESS AND UTILITY EASEMENT
POINT OF BEGINNING PARENT PARCEL OFFICIAL RECORDS BOOK 8768, PAGE 2157
CONCRETE MITERED END SECTION (TYPICAL)
SITE BENCHMARKS: SET ON TOP OF SET NAIL IN ASPHALT PAVED SHOULDER ELEVATION = 85.6' NAVD'88
SITE BENCHMARKS: SET ON TOP OF SET NAIL IN ASPHALT PAVED SHOULDER ELEVATION = 85.4' NAVD'88
NORMANDY BOULEVARD / STATE ROAD 228 (A PUBLIC RIGHT-OF-WAY) 24'± WIDE CONCRETE ROAD
EDGE OF CONCRETE
ASPHALT PAVED SHOULDER
NORTHEASTERNLY(D) RIGHT-OF-WAY LINE
SITE DETAIL "B"
GEOLINE SURVEYING, INC.
FOREST TRAIL / FL102 SITE
DUVAL COUNTY, FLORIDA
KIMLEY-HORN
SHEET 2 OF 3

BOUNDARY AND TOPOGRAPHIC SURVEY

SECTION 25, TOWNSHIP 3 SOUTH, RANGE 23 EAST
DUVAL COUNTY, FLORIDA
FOR: DIAMOND COMMUNICATIONS



VICINITY MAP
NOT TO SCALE



LOCATION MAP
NOT TO SCALE

PROPERTY DESCRIPTIONS

PARENT PARCEL
(OFFICIAL RECORDS BOOK 9308, PAGE 480)

A PARCEL OF LAND LYING IN FARM LOT #2 IN SECTION 25, TOWNSHIP 3 SOUTH, RANGE 23 EAST OF MAXVILLE FARMS AS PER PLAT BOOK 3, PAGE 94 OF THE CURRENT PUBLIC RECORDS OF DUVAL COUNTY, FLORIDA; SAID PARCEL BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCE AT A CONCRETE MONUMENT LOCATED AT THE NORTHEAST CORNER OF SAID SECTION 25 AND RUN SOUTH 89 DEGREES 56 SECONDS 00 SECONDS WEST, ALONG THE NORTHERLY BOUNDARY THEREOF, 658.93 FEET TO A CONCRETE MONUMENT LOCATED AT THE NORTHEAST CORNER OF SAID FARM LOT #2; THENCE SOUTH 00 DEGREES 05 MINUTES 47 SECONDS EAST, ALONG THE EASTERLY BOUNDARY OF FARM LOT #2, A DISTANCE OF 660.00 FEET TO A CONCRETE MONUMENT; THENCE SOUTH 89 DEGREES 56 MINUTES 00 SECONDS WEST, PARCEL WITH SAID NORTHERLY BOUNDARY, 284.00 FEET TO A CONCRETE MONUMENT FOR THE POINT OF BEGINNING, FROM POINT OF BEGINNING THUS DESCRIBED RUN SOUTH 00 DEGREES 05 MINUTES 47 SECONDS EAST, PARALLEL WITH SAID EASTERLY BOUNDARY, 532.54 FEET TO A CONCRETE MONUMENT FOUND ON THE NORTHERLY BOUNDARY OF THE RIGHT OF WAY OF NORMANDY BOULEVARD (STATE ROAD 228); THENCE SOUTH 56 DEGREES 50 MINUTES 23 SECONDS WEST, ALONG LAST SAID NORTHERLY BOUNDARY, 245.85 FEET TO A SET IRON ROD; THENCE NORTH 00 DEGREES 05 MINUTES 47 SECONDS WEST, PARALLEL WITH SAID EASTERLY BOUNDARY OF FARM LOT #2, A DISTANCE OF 675.81 FEET TO A SET IRON ROD; THENCE NORTH 89 DEGREES 56 MINUTES 00 SECONDS EAST, PARALLEL WITH THE NORTHERLY BOUNDARY OF SAID SECTION 25, A DISTANCE OF 212.77 FEET TO THE POINT OF BEGINNING. CONTAINING 3.0 ACRES.

PARENT PARCEL
(OFFICIAL RECORDS BOOK 8359, PAGE 200)

FOR A POINT OF BEGINNING, COMMENCE AT THE NORTHEAST CORNER OF SECTION TOWNSHIP 3 SOUTH, RANGE 23 EAST, AND RUN THENCE WEST ALONG THE NORTH SECTION LINE OF SAID SECTION A DISTANCE OF TEN (10) CHAINS TO THE NORTHWEST CORNER OF FARM #1, ACCORDING TO THE PLAT OF SAID SECTION RECORDED IN PLAT BOOK 3, PAGE 94, OF THE CURRENT PUBLIC RECORDS OF SAID COUNTY; THENCE SOUTH ALONG THE WEST LINE OF SAID FARM #1, A DISTANCE OF TEN (10) CHAINS; FROM THE POINT OF BEGINNING THUS DESCRIBED, RUN WEST PARALLEL TO THE NORTH SECTION LINE A DISTANCE OF FOUR (4) CHAIN; THENCE SOUTH PARALLEL TO THE NORTH SECTION LINE A DISTANCE OF FOUR (4) CHAIN; THENCE SOUTH PARALLEL TO THE WEST LINE OF SAID FARM #1 A DISTANCE OF 5.45 CHAINS TO THE NORTHERLY RIGHT OF WAY OF STATE ROAD NO. 228 (ALSO KNOWN AS NO. 204) THENCE NORTHEASTWARDLY ALONG THE NORTHERLY RIGHT OF WAY OF SAID HIGHWAY A DISTANCE OF 4.75 CHAINS TO THE INTERSECTION THEREOF WITH THE WEST LINE OF SAID FARMS #1; THENCE NORTH ALONG THE WEST LINE OF SAID FARM #1 A INSTANCE OF 3.21 CHAINS TO THE POINT OF BEGINNING, CONTAINING 1.4 ACRES, MORE OR LESS, BEING A PART OF MAXVILLE FARM #2 IN SAID SECTION 25.

PARENT PARCEL
(OFFICIAL RECORDS BOOK 8769, PAGE 2157)

THAT CERTAIN PIECE, PARCEL OF TRACT OF LAND, SITUATE, LYING AND BEING A PART OF FARM 1, SECTION 25, TOWNSHIP 3 SOUTH, RANGE 23 EAST, AS SHOWN ON THE PLAT OF MAXVILLE FARMS, AS RECORDED IN PLAT BOOK 3, PAGE 94 OF THE CURRENT PUBLIC RECORDS OF THE CITY OF JACKSONVILLE, DUVAL COUNTY, FLORIDA, AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: BEGINNING AT THE INTERSECTION OF THE NORTHERLY RIGHT OF WAY LINE OF NORMANDY BOULEVARD AND/OR STATE ROAD NO. 228 (A 100-FOOT RIGHT OF WAY AS NOW ESTABLISHED), WITH THE WEST LINE OF SAID FARM 1; THENCE NORTH 0°30'00" EAST ALONG SAID WEST LINE OF FARM 1, A DISTANCE OF 409.87 FEET; THENCE SOUTH 27°05'00" EAST, 354.69 FEET TO SAID NORTHERLY RIGHT OF WAY LINE OF NORMANDY BOULEVARD; THENCE SOUTH 60°23'00" WEST ALONG SAID NORTHERLY RIGHT OF WAY LINE, 189.87 FEET TO THE POINT OF BEGINNING.

PROPERTY DESCRIPTIONS

TOWER PARCEL
(PREPARED BY GEOLINE SURVEYING, INC.)

THAT PART OF THE "ROY WHITEHEAD" PARCEL AS PER DESCRIPTION RECORDED IN OFFICIAL RECORDS BOOK 9308, PAGE 480 OF THE CURRENT PUBLIC RECORDS OF DUVAL COUNTY, FLORIDA, SITUATED IN THE NORTHEAST 1/4 OF SECTION 25, TOWNSHIP 3 SOUTH, RANGE 23 EAST, SAID DUVAL COUNTY, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE NORTHEAST CORNER OF SECTION 25, TOWNSHIP 3 SOUTH, RANGE 23 EAST, DUVAL COUNTY, FLORIDA; THENCE SOUTH 89°56'00" WEST ALONG THE NORTH LINE OF SAID SECTION 25 FOR 658.94 FEET TO THE NORTHEAST CORNER OF FARM #2 IN SECTION 25, TOWNSHIP 3 SOUTH, RANGE 23 EAST OF MAXVILLE FARMS AS PER PLAT THEREOF RECORDED IN PLAT BOOK 3, PAGE 94 OF THE CURRENT PUBLIC RECORDS OF SAID DUVAL COUNTY; THENCE SOUTH 00°05'47" EAST ALONG THE EAST LINE OF SAID FARM #2 FOR 658.98 FEET TO THE NORTHEAST CORNER OF THE "ROY WHITEHEAD" TRACT AS PER DESCRIPTION RECORDED IN OFFICIAL RECORD BOOK 8359, PAGE 200 OF SAID CURRENT PUBLIC RECORDS; THENCE SOUTH 89°54'01" WEST ALONG THE NORTH LINE OF SAID "ROY WHITEHEAD" TRACT FOR 284.07 FEET TO THE NORTHWEST CORNER OF SAID "ROY WHITEHEAD" TRACT AND THE NORTHEAST CORNER OF THE "ROY WHITEHEAD" PARCEL AS PER DESCRIPTION RECORDED IN OFFICIAL RECORD BOOK 9308, PAGE 480 OF SAID CURRENT PUBLIC RECORDS; THENCE CONTINUE SOUTH 89°54'01" WEST ALONG THE NORTH LINE OF SAID "ROY WHITEHEAD" PARCEL FOR 212.62 FEET TO THE NORTHWEST CORNER OF SAID "ROY WHITEHEAD" PARCEL; THENCE SOUTH 00°05'47" EAST ALONG THE WEST LINE OF SAID "ROY WHITEHEAD" PARCEL FOR 15.00 FEET; THENCE NORTH 89°54'13" EAST FOR 15.00 FEET TO THE POINT OF BEGINNING; THENCE CONTINUE NORTH 89°54'13" EAST FOR 60.00 FEET; THENCE SOUTH 00°05'47" EAST ALONG A LINE PARALLEL WITH SAID WEST LINE FOR 60.00 FEET; THENCE SOUTH 89°54'13" WEST FOR 60.00 FEET; THENCE NORTH 00°05'47" WEST ALONG A LINE PARALLEL WITH SAID WEST LINE FOR 60.00 FEET TO SAID POINT OF BEGINNING.

CONTAINING 3,600 SQUARE FEET (0.08 ACRES), MORE OR LESS.

20 FOOT WIDE NON-EXCLUSIVE INGRESS, EGRESS AND UTILITY EASEMENT
(PREPARED BY GEOLINE SURVEYING, INC.)

THAT PART OF THE "ROY WHITEHEAD" PARCEL AS PER DESCRIPTION RECORDED IN OFFICIAL RECORDS BOOK 9308, PAGE 480 OF THE CURRENT PUBLIC RECORDS OF DUVAL COUNTY, FLORIDA, AND THE "ROY WHITEHEAD" TRACT AS PER DESCRIPTION RECORDED IN OFFICIAL RECORDS BOOK 8359, PAGE 200 OF SAID CURRENT PUBLIC RECORDS, SITUATED IN THE NORTHEAST 1/4 OF SECTION 25, TOWNSHIP 3 SOUTH, RANGE 23 EAST, SAID DUVAL COUNTY, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE NORTHEAST CORNER OF SECTION 25, TOWNSHIP 3 SOUTH, RANGE 23 EAST, DUVAL COUNTY, FLORIDA; THENCE SOUTH 89°56'00" WEST ALONG THE NORTH LINE OF SAID SECTION 25 FOR 658.94 FEET TO THE NORTHEAST CORNER OF FARM #2 IN SECTION 25, TOWNSHIP 3 SOUTH, RANGE 23 EAST OF MAXVILLE FARMS AS PER PLAT THEREOF RECORDED IN PLAT BOOK 3, PAGE 94 OF THE CURRENT PUBLIC RECORDS OF SAID DUVAL COUNTY; THENCE SOUTH 00°05'47" EAST ALONG THE EAST LINE OF SAID FARM #2 FOR 658.98 FEET TO THE NORTHEAST CORNER OF THE "ROY WHITEHEAD" TRACT AS PER DESCRIPTION RECORDED IN OFFICIAL RECORD BOOK 8359, PAGE 200 OF SAID CURRENT PUBLIC RECORDS; THENCE SOUTH 89°54'01" WEST ALONG THE NORTH LINE OF SAID "ROY WHITEHEAD" TRACT FOR 284.07 FEET TO THE NORTHWEST CORNER OF SAID "ROY WHITEHEAD" TRACT AND THE NORTHEAST CORNER OF THE "ROY WHITEHEAD" PARCEL AS PER DESCRIPTION RECORDED IN OFFICIAL RECORD BOOK 9308, PAGE 480 OF SAID CURRENT PUBLIC RECORDS; THENCE CONTINUE SOUTH 89°54'01" WEST ALONG THE NORTH LINE OF SAID "ROY WHITEHEAD" PARCEL FOR 212.62 FEET TO THE NORTHWEST CORNER OF SAID "ROY WHITEHEAD" PARCEL; THENCE SOUTH 00°05'47" EAST ALONG THE WEST LINE OF SAID "ROY WHITEHEAD" PARCEL FOR 15.00 FEET; THENCE NORTH 89°54'13" EAST FOR 15.00 FEET TO THE NORTHWEST CORNER OF A 60 FOOT BY 60 FOOT TOWER PARCEL; THENCE CONTINUE NORTH 89°54'13" EAST ALONG THE NORTH LINE OF SAID TOWER PARCEL FOR 60.00 FEET TO THE NORTHEAST CORNER OF SAID TOWER PARCEL; THENCE SOUTH 00°05'47" EAST ALONG THE EAST LINE OF SAID TOWER PARCEL FOR 10.00 FEET TO THE POINT OF BEGINNING OF THE CENTERLINE OF THE HEREIN DESCRIBED 20 FOOT WIDE NON-EXCLUSIVE INGRESS, EGRESS AND UTILITY EASEMENT; THENCE NORTH 89°54'13" EAST FOR 94.62 FEET TO THE POINT OF CURVATURE OF A CURVE TO THE RIGHT, SAID CURVE HAVING A RADIUS OF 50.00 FEET, A CENTRAL ANGLE OF 53°22'48", AND A CHORD OF 46.55 FEET THAT BEARS SOUTH 62°23'23" EAST; THENCE SOUTHEASTERLY ALONG THE ARC OF SAID CURVE FOR 48.42 FEET TO A POINT OF TANGENCY; THENCE SOUTH 34°36'59" EAST FOR 440.29 FEET TO AN INTERSECTION WITH THE SOUTHEASTERLY LINE OF SAID "ROY WHITEHEAD" TRACT AND THE NORTHWESTERLY RIGHT OF WAY LINE OF NORMANDY BOULEVARD (A PUBLIC RIGHT OF WAY) AND THE POINT OF TERMINUS OF THE HEREIN DESCRIBED CENTERLINE.

CONTAINING 11,870 SQUARE FEET (0.238 ACRES), MORE OR LESS.

COMMITMENT FOR TITLE INSURANCE REVIEW NOTE

I HAVE REVIEWED THE COMMITMENT FOR TITLE INSURANCE UNDERWRITTEN BY OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY, COMMITMENT NO. 01-17053312-017, WITH A COMMITMENT DATE OF 07/10/2017 AT 7:00 A.M., AND FIND AS FOLLOWS WITH RESPECT TO THE FOLLOWING EXCEPTIONS LISTED ON SCHEDULE B-II OF SAID COMMITMENT:

1. ANY DEFECT, LIEN, ENCUMBRANCE, ADVERSE CLAIM, OR OTHER MATTER THAT APPEARS FOR THE FIRST TIME IN THE PUBLIC RECORDS OR IS CREATED, ATTACHES, OR IS DISCLOSED BETWEEN THE COMMITMENT DATE AND THE DATE ON WHICH ALL OF THE SCHEDULE B, PART I-REQUIREMENTS ARE MET. NOT THE TYPE TO BE DEPICTED HEREON.

2 FACTS WHICH WOULD BE DISCLOSED BY A COMPREHENSIVE SURVEY OF THE PREMISES HEREIN DESCRIBED. AS DEPICTED HEREON.

3 RIGHTS OR CLAIMS OF PARTIES IN POSSESSION. NOT THE TYPE TO BE DEPICTED HEREON.

4. MECHANICS', CONTRACTORS' OR MATERIAL MEN'S LIENS AND LIEN CLAIMS, IF ANY, WHERE NO NOTICE THEREOF APPEARS OF RECORD. NOT THE TYPE TO BE DEPICTED HEREON.

5 ANY CHANGES IN TITLE OCCURRING SUBSEQUENT TO THE EFFECTIVE DATE OF THIS COMMITMENT AND PRIOR TO THE DATE OF ISSUANCE OF THE TITLE POLICY. NOT THE TYPE TO BE DEPICTED HEREON.

6 RESTRICTIVE COVENANTS, CONDITIONS, RESTRICTIONS, (AND ANY LIENS CREATED THEREIN), ANY EASEMENTS, SERVITUDES, LEASE, GRANT, EXCEPTION OR RESERVATION OF MINERALS OR MINERAL RIGHTS, IF ANY, APPEARING IN THE PUBLIC RECORDS, BUT, HOWEVER, DELETING ANY COVENANT, CONDITION OR RESTRICTION INDICATING A PREFERENCE, LIMITATION OR DISCRIMINATION BASED ON RACE, COLOR, RELIGION, SEX, HANDICAP, FAMILIAL STATUS OR NATIONAL ORIGIN TO THE EXTENT SUCH MATTERS VIOLATE 42 USC 3604(C). NOT THE TYPE TO BE DEPICTED HEREON.

NOTE: THE POLICY ISSUED HEREUNDER WILL INSURE AGAINST LOSS OR DAMAGE ARISING FROM THE PROVISIONS OF THE REFERENCED COVENANTS, CONDITIONS OR RESTRICTIONS UNDER WHICH THE LIEN OF THE INSURED MORTGAGE CAN BE EXTINGUISHED, SUBORDINATED, OR IMPAIRED. NOT THE TYPE TO BE DEPICTED HEREON.

7 QUANTITY OF ACREAGE/SQUARE FOOTAGE AS SET FORTH IN SCHEDULE A, IF ANY. NOT THE TYPE TO BE DEPICTED HEREON.

8. TAXES AND SPECIAL ASSESSMENTS FOR CURRENT TAX YEAR AND ALL SUBSEQUENT YEARS. NOT THE TYPE TO BE DEPICTED HEREON.

9. DECLARATION OF RESTRICTIONS, RECORDED 06/22/2010, IN BOOK 15288, PAGE 1748 OF THE DUVAL COUNTY RECORDS. DOES NOT INCLUDE THE PARENT PARCEL. NOT THE TYPE TO BE DEPICTED HEREON.

GEOLINE SURVEYING, INC.
Professional Land Surveyors
13450 NW 154th Terrace, Suite A
Alachua, Florida 32615
(386)462-0800 Fax (386)462-0888
geoline@geolinehc.com

DESIGNED	KEITH BARTON	SCALE	AS SHOWN
DRAWN	KEITH BARTON	DATE	DECEMBER 19, 2017
CHECKED	DAVE SHORT	PROJECT #	344-180

FOREST TRAIL / WLCS SITE
DUVAL COUNTY, FLORIDA
ADDRESS: 15801 NORMANDY BOULEVARD, JACKSONVILLE, FL, 32234

DRAWING# 344-180 | KIMLEY-HORN | SHEET# 3 OF 3

Diamond Communications LLC

verizon

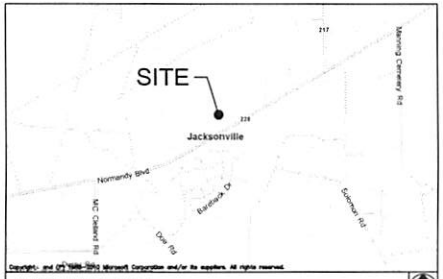
FOREST TRAIL

SITE ADDRESS (E-911 TBD)

15201 NORMANDY BLVD
JACKSONVILLE, FL 32234
DUVAL COUNTY
LATITUDE: 30° 12' 51.00" N
LONGITUDE: 81° 57' 09.83" W
TAX/PIN #: 001124-0000
ZONING: AGR-AGRICULTURAL
AT&T SITE ID: TBD
AT&T FA #:TBD
DIAMOND SITE #: FL 102

JACKSONVILLE POLICE DEPARMENT
501 E BAY ST
JACKSONVILLE, FL 32202
PHONE: (904) 630-7600
ATTN.: CUSTOMER SERVICE

JACKSONVILLE FIRE STATION 32
8140 LENOX AVE
JACKSONVILLE, FL 32221
PHONE: (904) 630-0434
ATTN.: CUSTOMER SERVICE



VICINITY MAP

FROM DIAMOND COMMUNICATIONS OFFICE: HEAD SOUTHWEST TOWARD MORRIS TURNPIKE 154 FT; TURN RIGHT ONTO MORRIS TURNPIKE 0.6 MI; TURN LEFT ONTO HOBART GAP RD 217 FT; TURN LEFT AT THE 1ST CROSS STREET ONTO MORRIS TURNPIKE 230 FT; USE THE LEFT LANE TO TAKE THE RAMP ONTO NJ-24 E 0.2 MI; MERGE ONTO NJ-24 E 1.2 MI; MERGE ONTO I-78E TOWARD NEWARK 3.9 MI; TAKE EXIT 52 FOR GARDEN STATE PARKWAY S 0.9 MI; MERGE ONTO GARDEN STATE PKWY 12.9 MI; TAKE EXIT 129 FOR I-95/ US-9/ NJ TURNPIKE 0.3 MI; KEEP LEFT, FOLLOWNG SIGNS FOR NEW JERSEY TURNPIKE S 0.8 MI; KEEP LEFT AT THE FORK AND MERGE ONTO I-95S 39.6 MI; CONTINUE ONTO NJ TURNPIKE S 48.8 MI; KEEP LEFT AT THE FORK 0.5 MI; MERGE ONTO NJ TURNPIKE S 1.5 MI; CONTINUE ONTO US-40W/ NJ TURNPIKE S 0.5 MI; MERGE ONTO I-295S 6.7 MI; MERGE ONTO I-95S 8.8 MI; KEEP LEFT AT THE FORK TO STAY ON I-95S 55.1 MI; KEEP LEFT TO STAY ON I-95S 28.7 MI; TAKE EXIT 27W TO MERGE ONTO I-495W TOWARD SILVER SPRING 18.5 MI; TAKE THE I-495S EXIT 0.2 MI; CONTINUE ONTO 495 EXPRESS LANES 10.2 MI; 495 EXPRESS LANES TURNS SLIGHTLY LEFT AND BECOMES I-495S 1.1 MI; MERGE ONTO I-395S 0.3 MI; MERGE ONTO I-95S 8.0 MI; KEEP RIGHT TO STAY ON I-95S 86.0 MI; KEEP LEFT AT THE FORK TO STAY ON I-95S 202 MI; KEEP LEFT AT THE FORK TO STAY ON I-95S 226 MI; KEEP LEFT TO STAY ON I-95S 161 MI; TAKE EXIT 362B FOR I-295W 0.5 MI; MERGE ONTO I-295S 13.8 MI; TAKE EXIT 21B FOR I-10W TOWARD LAKE CITY 0.4 MI; MERGE ONTO I-10W 5.6 MI; TAKE EXIT 350 FOR FL-23S TOWARD CECIL COMMERCE CENTER PKWY 0.4 MI; KEEP LEFT AT THE FORK TO CONTINUE TOWARD FL-23 1.3 MI; CONTINUE ONTO FL-23 1.1 MI; TAKE THE EXIT TOWARD NEW WORLD AVE 0.4 MI; KEEP RIGHT AT THE FORK AND MERGE ONTO NEW WORLD AVE 2.2 MI; TURN RIGHT ONTO NORMANDY BLVD 4.6 MI; ARRIVE AT DESTINATION ON THE RIGHT.

DRIVING DIRECTIONS

MUNICIPALITY:
CITY OF JACKSONVILLE

STATE:
FLORIDA

TOWER TYPE:
MONOPOLE

TOWER HEIGHT:
185' (194' TO HIGHEST APPURTENANCE)

NUMBER OF CARRIERS:
1 PROPOSED, 3 FUTURE

USE:
PROPOSED TELECOMMUNICATIONS TOWER AND UNMANNED EQUIPMENT

FLOOD INFO
SITE IS LOCATED WITHIN FEMA FLOOD MAP AREA 12031C0480H DATED 06/03/2013 WITHIN FLOOD ZONE X.

PROJECT SUMMARY

DEVELOPER
DIAMOND COMMUNICATIONS
820 MORRIS TURNPIKE, STE 104
SHORT HILLS, MJ 07078
ATTN: RICH HUBER

SURVEYOR
GEOLINE SURVEYING, INC
13430 NW 104TH TERRACE, SUITE A
ALACHUA, FL 32615
PHONE: (386) 418-0500
ATTN: SEAN BARNES

POWER COMPANY
JEA ELECTRIC
PHONE: (904) 665-6250
ATTN.: CUSTOMER SERVICE

PROPERTY OWNER
ROY WHITEHEAD
15201 NORMANDY BLVD
JACKSONVILLE, FL 32234
PHONE: N/A
ATTN.: N/A

CONSULTANT
KIMLEY-HORN AND ASSOCIATES, INC.
11720 AMBER PARK DRIVE, SUITE 600
ALPHARETTA, GEORGIA 30009
PHONE: (770) 545-6105
ATTN.: DAVID FRANKLIN

CONTACTS

DESIGN CODES:

1.) FLORIDA BUILDING CODE, 2017 EDITION

2.) ANSI/TIA 222-G-05

3.) 125 MPH WIND WITH 3-SEC GUST LOAD REQUIREMENTS

SHEET NO.	SHEET TITLE
T1	COVER SHEET
--	SITE SURVEY (SHEET 1 OF 5)
--	SITE SURVEY (SHEET 2 OF 5)
--	SITE SURVEY (SHEET 3 OF 5)
--	SITE SURVEY (SHEET 4 OF 5)
--	SITE SURVEY (SHEET 5 OF 5)
N1	GENERAL NOTES
C1	OVERALL SITE PLAN
C1.1	OVERALL AERIAL
C2	SITE PLAN
C3	FENCE, GATE, AND COMPOUND DETAILS
C4	ACCESS ROAD DETAILS
C5	SITE SIGNAGE DETAILS
C6	ANTENNA AND TOWER ELEVATION DETAILS
C7	SCOPE OF WORK SUMMARY

SHEET INDEX

CITY OF JACKSONVILLE PLANNING & DEVELOPMENT
214 NORTH HOGAN ST, SUITE 300
JACKSONVILLE, FL 32202
PHONE: (904) 255-7800
ATTN.: CUSTOMER SERVICE

PERMIT INFORMATION

Diamond Communications LLC

PROJECT INFORMATION:

SITE NAME:
FOREST TRAIL
SITE #: FL102
15201 NORMANDY BLVD
JACKSONVILLE, FL 32234
DUVAL COUNTY
PIN # 001124-0000

PLANS PREPARED BY:

Kimley»Horn
11720 AMBER PARK DRIVE, SUITE 600
ALPHARETTA, GA 30009
PHONE: 770-619-4280
WWW.KIMLEY-HORN.COM

REV:	DATE:	ISSUED FOR:	BY:
7			
6			
5			
4			
3			
2			
1	03/18/20	ZONING	RRJ
0	03/16/20	ZONING	RRJ
A	03/06/20	ZONING	RRJ

LICENSER:

This item has been electronically signed and sealed by Richard Johnson, P.E., on the date shown on the time stamp using a digital signature. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

KHA PROJECT NUMBER:
013541003

DRAWN BY: MWD | CHECKED BY: CDS

SHEET TITLE:
COVER SHEET

SHEET NUMBER:
T1

1.00 GENERAL NOTES

□NO ADVERTISING. THE WIRELESS COMMUNICATION TOWER SHALL NOT BE USED FOR ANY ADVERTISING PURPOSE, INCLUDING SIGNAGE, DESIGNS OR LOGOS.

□ILLUMINATION. NO SIGNALS, LIGHTS OR ILLUMINATION SHALL BE PERMITTED ON ANY WIRELESS COMMUNICATION TOWER, UNLESS OTHERWISE REQUIRED BY THE FEDERAL AVIATION ADMINISTRATION OR SUCH LIGHTING OR ILLUMINATION IS PART OF THE DESIGN OF A CAMOUFLAGE SCHEME.

□COLOR. NONCAMOUFLAGED TOWERS SHALL EITHER HAVE A DULL GRAY OR GALVANIZED FINISH OR HAVE A NONCONTRASTING FINISH THAT MINIMIZES THE VISIBILITY OF THE TOWER FROM PUBLIC VIEW, EXCEPT WHERE CONTRASTING COLOR IS REQUIRED BY FEDERAL OR STATE REGULATION.

□REQUIRED SIGNS. THE SECURITY FENCE OR WALL SURROUNDING THE TOWER SITE SHALL CONTAIN A SIGN, MEASURING NO MORE THAN 30 INCHES WIDE BY 24 INCHES HIGH, IDENTIFYING THE PRIMARY PARTY RESPONSIBLE FOR THE OPERATION AND MAINTENANCE OF THE FACILITY, THE ADDRESS AND TELEPHONE NUMBER OF THAT PARTY, THE FCC REGISTRATION AND SITE IDENTIFICATION NUMBERS OF THE TOWER AND THE STREET ADDRESS OF THE TOWER SITE, WHERE APPLICABLE.

□ABANDONMENT.

(a) DISCONTINUATION OF USE. IN THE EVENT THAT THE USE OF ANY WIRELESS COMMUNICATION TOWER IS DISCONTINUED FOR A PERIOD OF 180 CONSECUTIVE DAYS, THE TOWER SHALL BE DEEMED TO BE ABANDONED. UPON DETERMINATION THAT A TOWER HAS BEEN ABANDONED, THE COORDINATOR SHALL PROVIDE WRITTEN NOTICE OF SAME, BY CERTIFIED MAIL, TO THE OWNER OF THE TOWER AND ALL WIRELESS COMMUNICATION SERVICE PROVIDERS LOCATED ON SAID TOWER, AS EVIDENCED BY THE RECORDS OF THE COORDINATOR.

(b) EVIDENCE OF ABANDONMENT. THE FOLLOWING SHALL CONSTITUTE PRIMA FACIE EVIDENCE THAT A WIRELESS COMMUNICATION TOWER HAS BEEN ABANDONED:

O (1) FAILURE OR REFUSAL OF THE TOWER OWNER TO RESPOND WITHIN 20 DAYS TO THE NOTICE OF DETERMINATION OF ABANDONMENT;

O (2) FAILURE OF THE TOWER OWNER TO SUBMIT THE ANNUAL REGISTRATION OR CERTIFICATION STRUCTURAL INTEGRITY; OR

O (3) DISCONTINUATION OF THE USE OF THE TOWER FOR A PERIOD OF 180 CONSECUTIVE DAYS.

(c) RESPONSE TO NOTICE OF ABANDONMENT. UPON RECEIPT OF THE NOTICE OF DETERMINATION OF ABANDONMENT, THE TOWER OWNER SHALL HAVE 90 DAYS WITHIN WHICH TO:

O (1) ACTIVATE THE USE OF THE TOWER;

O (2) TRANSFER THE TOWER TO ANOTHER OWNER WHO SHALL MAKE ACTUAL USE OF THE TOWER WITHIN THE 90-DAY PERIOD; OR

O (3) DISMANTLE AND REMOVE THE TOWER.

(d) REMOVAL OF ABANDONED TOWER. AN ABANDONED WIRELESS COMMUNICATION TOWER AND ALL ASSOCIATED EQUIPMENT SHALL BE REMOVED BY THE TOWER OWNER WITHIN 90 DAYS OF RECEIPT OF A NOTICE OF DETERMINATION OF ABANDONMENT. IF THE TOWER IS NOT REMOVED WITHIN 180 DAYS OF THE DATE OF ABANDONMENT, THE CITY MAY REMOVE THE TOWER AND ALL ASSOCIATED EQUIPMENT USING THE FUNDS POSTED AS SECURITY FOR THE TOWER IN ACCORDANCE WITH THIS SUBPART.

□REGISTRATION AND REPORTING REQUIREMENTS.

(a) ANNUAL REGISTRATION. ON OR BEFORE JUNE 1 OF EACH CALENDAR YEAR, THE OWNER OF EVERY WIRELESS COMMUNICATION TOWER WITHIN THE CITY SHALL FILE WITH THE COORDINATOR A DECLARATION AS TO THE CONTINUING OPERATION OF THE FACILITY, AS WELL AS THE NAME AND ADDRESS OF THE TOWER OWNER AND THE REAL ESTATE NUMBER FOR THE SUBJECT PARCEL, INCLUDING IDENTIFICATION OF ALL WIRELESS COMMUNICATION SERVICE PROVIDERS LOCATED ON THE TOWER, COMPLETE WITH NAMES, ADDRESSES, AND PHONE NUMBERS OF THE RESPECTIVE CONTACT PERSONS.

(b) CERTIFICATION OF STRUCTURAL INTEGRITY. EVERY FIVE YEARS AFTER ISSUANCE OF THE INITIAL PERMIT, OR AS OTHERWISE REQUESTED BY THE CITY, THE OWNER OF EVERY WIRELESS COMMUNICATION TOWER WITHIN THE CITY SHALL FILE WITH THE COORDINATOR A "CERTIFICATION OF STRUCTURAL INTEGRITY." THIS CERTIFICATION SHALL BE PREPARED BY A LICENSED PROFESSIONAL ENGINEER, WHO SHALL ATTEST THAT A THOROUGH AND COMPLETE INSPECTION OF THE TOWER WAS CONDUCTED AND THAT THE TOWER AND ACCESSORY STRUCTURES ARE CONTINUING TO PERFORM AS ORIGINALLY DESIGNED.

(c) NONCOMPLIANCE. FAILURE TO TIMELY FILE EITHER THE ANNUAL DECLARATION OR CERTIFICATION OF STRUCTURAL INTEGRITY SHALL RESULT IN A PRESUMPTION THAT THE TOWER IS EITHER UNUSED OR UNSAFE, THEREBY SUBJECTING THE TOWER TO REMOVAL UNDER THE ABANDONMENT PROVISIONS OF THIS SUBPART.

1.00 GENERAL NOTES

1.01 ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE DRAWINGS AND SPECIFICATIONS. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST EDITION OF THE STATE, LOCAL AND NATIONAL CODES, ORDINANCES AND OR REGULATIONS APPLICABLE TO THIS PROJECT.

1.02 THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE WORK OF ALL TRADES AND SHALL CHECK ALL DIMENSIONS. ALL DISCREPANCIES SHALL BE CALLED TO THE ATTENTION OF THE PROJECT MANAGER AND/OR ENGINEER AND BE RESOLVED BEFORE PROCEEDING WITH WORK. WHERE THERE IS A CONFLICT BETWEEN DRAWING AND AT&T SPECIFICATIONS, THE DIAMOND COMMUNICATIONS PROJECT ENGINEER SHOULD BE CONTACTED FOR CLARIFICATION.

1.03 ALL INFORMATION SHOWN ON THE DRAWINGS RELATIVE TO EXISTING CONDITIONS IS GIVEN AS THE BEST PRESENT KNOWLEDGE, BUT WITHOUT GUARANTEE OF ACCURACY. WHERE ACTUAL CONDITIONS CONFLICT WITH THE DRAWINGS, THEY SHALL BE REPORTED TO THE PROJECT MANAGER AND/OR ENGINEER SO THAT PROPER REVISIONS MAY BE MADE. MODIFICATION OF DETAILS OF CONSTRUCTION SHALL NOT BE MADE WITHOUT WRITTEN APPROVAL OF THE PROJECT MANAGER AND/OR ENGINEER.

1.04 CONTRACTOR SHALL REVIEW AND BE FAMILIAR WITH SITE CONDITIONS AS SHOWN ON THE ATTACHED SITE PLAN AND/OR SURVEY DRAWINGS.

1.05 WAVEGUIDE BRIDGE AND EQUIPMENT CABINETS ARE SHOWN FOR REFERENCE ONLY. REFER TO SEPARATE DRAWINGS FOR SPECIFIC INFORMATION.

1.06 ALL FINISHED GRADES SHALL SLOPE MINIMUM 1/4 IN./FT. AWAY FROM EQUIPMENT IN ALL DIRECTIONS. CONTRACTOR SHALL SLOPE SWALES AS REQUIRED ALONG EXISTING TERRAIN TO DRAIN AWAY FROM COMPOUND AND ACCESS DRIVE.

1.07 THE PROPOSED TOWER AND TOWER FOUNDATIONS WERE DESIGNED BY OTHERS. TOWER INFORMATION PROVIDED ON THESE PLANS ARE PROVIDED FOR REFERENCE PURPOSES ONLY. NOTIFY ENGINEER OR PROJECT MANAGER OF ANY CONFLICTS OR DISCREPANCIES. CONTRACTOR TO OBTAIN COPY OF TOWER DESIGN DRAWINGS, IF AVAILABLE, FROM DIAMOND COMMUNICATIONS PROJECT MANAGER TO CONFIRM COAX ROUTING AND ANTENNA MOUNT INFORMATION.

1.08 THE CONTRACTOR SHALL PROVIDE ADEQUATE EXCAVATION SLOPING, SHORING, BRACING, AND GUYS IN ACCORDANCE WITH ALL NATIONAL, STATE, AND LOCAL SAFETY ORDINANCES.

1.09 UPON COMPLETION OF CONSTRUCTION, CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE CAUSED BY CONSTRUCTION ACTIVITIES TO THE EXISTING ACCESS ROAD AND COMPOUND GRAVEL AREAS. ANY NEW FILL MATERIALS SHALL BE COMPACTED.

1.10 THE CONTRACTOR IS HEREBY NOTIFIED THAT PRIOR TO COMMENCING CONSTRUCTION, HE IS RESPONSIBLE FOR CONTACTING THE UTILITY COMPANIES INVOLVED AND SHALL REQUEST A VERIFICATION AT THE CONSTRUCTION SITE OF THE LOCATIONS OF THEIR UNDERGROUND UTILITIES AND WHERE THEY MAY POSSIBLY CONFLICT WITH THE PLACEMENT OF IMPROVEMENTS AS SHOWN ON THESE PLANS. THE CONTRACTOR OR ANY SUBCONTRACTOR FOR THIS CONTRACT WILL BE REQUIRED TO NOTIFY "SUNSHINE 811" 48 HOURS IN ADVANCE OF PERFORMING ANY WORK BY CALLING THE TOLL FREE NUMBER (800) 432-4770 (OR 811). ANY UTILITIES DAMAGED BY CONSTRUCTION ACTIVITIES SHALL BE REPAIRED BY THE CONTRACTOR, AT NO EXPENSE TO THE OWNER.

1.11 CONTRACTOR TO PROVIDE DUMPSTER AND PORTABLE TOILET FACILITY DURING CONSTRUCTION.

1.12 CONTRACTOR TO PROVIDE STYMIE LOCK OR EQUIVALENT AS APPROVED BY DIAMOND COMMUNICATIONS PROJECT MANAGER.

1.13 CONTRACTOR TO PROVIDE ANY NECESSARY SIGNAGE PER DIAMOND COMMUNICATIONS PROJECT MANAGER'S INSTRUCTIONS. SEE DETAIL ON SHEET C4.

Diamond

PROJECT INFORMATION:

SITE NAME:
FOREST TRAIL
SITE #: FL102
15201 NORMANDY BLVD
JACKSONVILLE, FL 32234
DUVAL COUNTY
PIN # 001124-0000

PLANS PREPARED BY:

Kimley»Horn
11720 AMBER PARK DRIVE, SUITE 600
ALPHARETTA, GA 30009
PHONE: 770-619-4280
WWW.KIMLEY-HORN.COM

REV: | DATE: | ISSUED FOR: | BY:

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0	03/16/20	ZONING	RRJ
A	03/06/20	ZONING	RRJ

LICENSER:

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KHA PROJECT NUMBER:
013541003

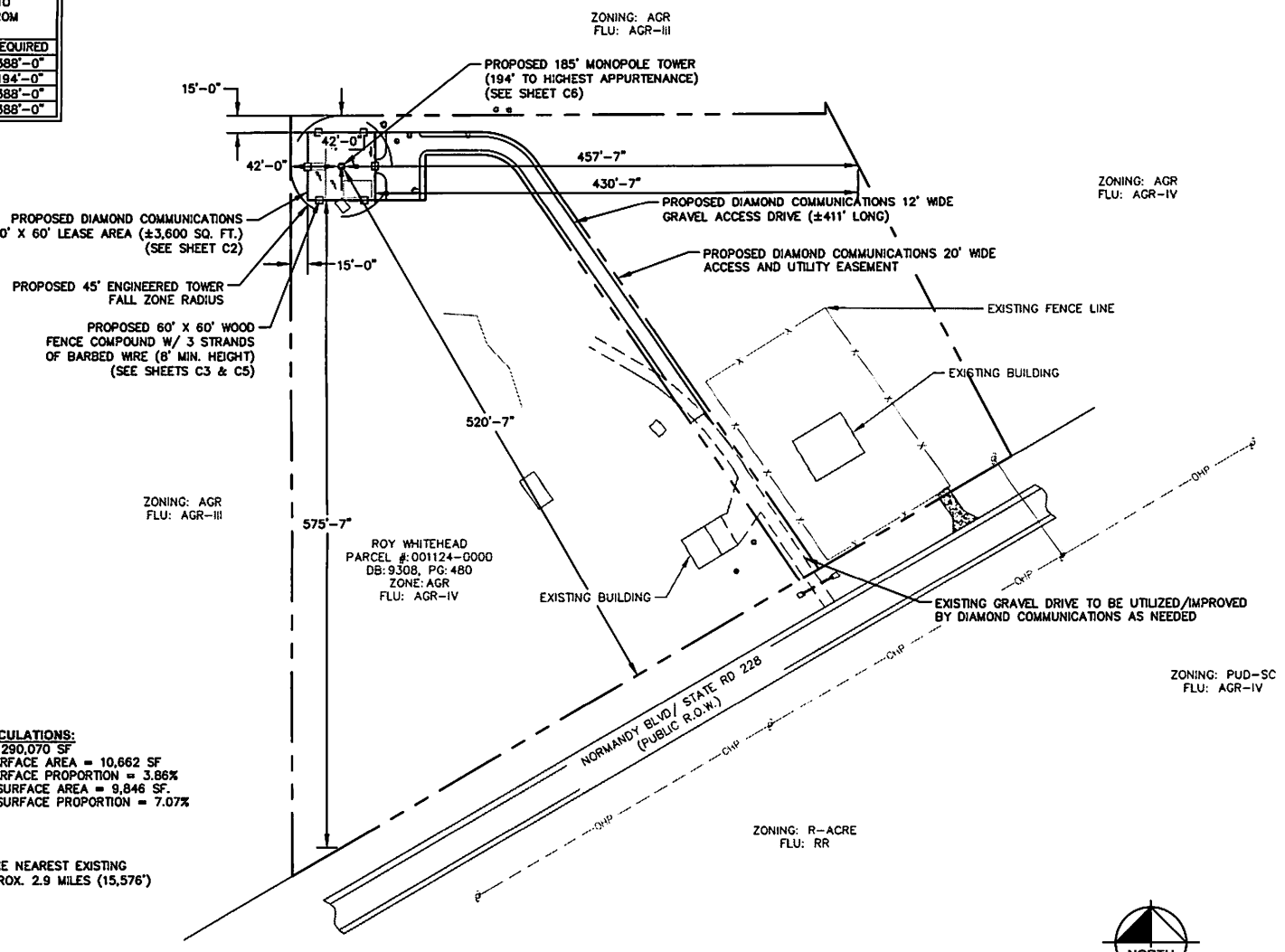
DRAWN BY:	CHECKED BY:
MWD	CDS

SHEET TITLE:
GENERAL NOTES

SHEET NUMBER:
N1

TOWER SETBACKS TO PROPERTY LINES (FROM EDGE OF TOWER)		
	PROVIDED	REQUIRED
NORTH	42'-0"	388'-0"
SOUTHEAST	520'-7"	194'-0"
EAST	457'-7"	388'-0"
WEST	42'-0"	388'-0"

SETBACKS FROM LOT LINES TO EDGE OF COMPOUND FENCE	
NORTH	15'-0"
SOUTH	575'-7"
EAST	430'-7"
WEST	15'-0"



IMPERVIOUS AREA CALCULATIONS:
TOTAL PARCEL AREA = 290,070 SF
EXISTING IMPERVIOUS SURFACE AREA = 10,662 SF
EXISTING IMPERVIOUS SURFACE PROPORTION = 3.86%
PROPOSED IMPERVIOUS SURFACE AREA = 9,846 SF.
PROPOSED IMPERVIOUS SURFACE PROPORTION = 7.07%

NOTE:
1. PER THE FCC ASR THE NEAREST EXISTING TOWER IS LOCATED APPROX. 2.9 MILES (15,576') NW AT COORDINATES:
LAT: 30° 14' 00.4"N
LONG: 81° 54' 30.7"W

FLOOD ZONE:
SITE IS LOCATED WITHIN FEMA FLOOD MAP AREA 12031C0480H DATED 06/03/2013 WITHIN FLOOD ZONE X

SURVEY NOTE:
1. DIAMOND COMMUNICATIONS STAFF SHALL COORDINATE WITH THE PROPERTY OWNER TO OBTAIN THE PROPER EASEMENT AGREEMENTS TO CONSTRUCT AND MAINTAIN EQUIPMENT IN AND AROUND THE TOWER COMPOUND.
2. PROPOSED COMPOUND LAYOUT BASED ON SURVEY PROVIDED BY GEOLINE SURVEYING, INC. DATED 12/19/2019 AND SITE VISIT ON 11/26/2019.

1/C1 OVERALL SITE PLAN
SCALE: 1" = 100'

0 50 100 200
GRAPHIC SCALE: 1" = 100'

Diamond

PROJECT INFORMATION:

SITE NAME:
FOREST TRAIL
SITE #: FL102
15201 NORMANDY BLVD
JACKSONVILLE, FL 32234
DUVAL COUNTY
PIN # 001124-0000

PLANS PREPARED BY:

Kimley»Horn
11720 AMBER PARK DRIVE, SUITE 600
ALPHARETTA, GA 30009
PHONE: 770-619-4280
WWW.KIMLEY-HORN.COM

REV:	DATE:	ISSUED FOR:	BY:
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1	03/18/20	ZONING	RRJ
0	03/16/20	ZONING	RRJ
A	03/06/20	ZONING	RRJ

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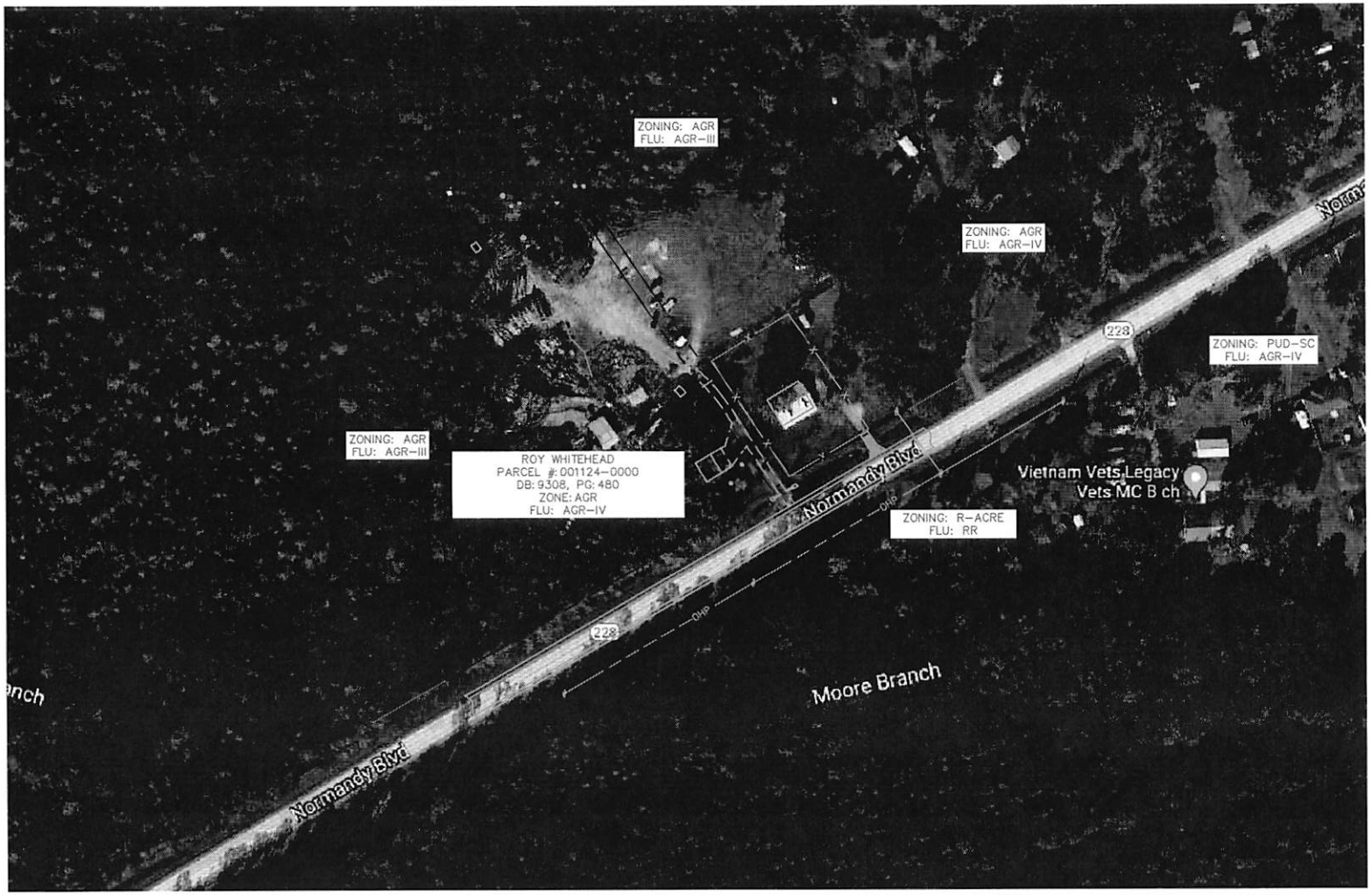
013541003

DRAWN BY:	CHECKED BY:
MWD	CDS

SHEET TITLE:
OVERALL SITE PLAN

SHEET NUMBER:
C1



NOTE:
1. PER THE FCC ASR THE NEAREST EXISTING TOWER IS LOCATED APPROX. 2.9 MILES (15,576') NW AT COORDINATES:
LAT: 30° 14' 00.4"N
LONG: 81° 54' 30.7"W

1 / C1.1 OVERALL SITE PLAN
SCALE: 1" = 150'

NORTH

0 75 150 300
GRAPHIC SCALE: 1" = 150'

Diamond

PROJECT INFORMATION:

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FOREST TRAIL
SITE #: FL102
15201 NORMANDY BLVD
JACKSONVILLE, FL 32234
DUVAL COUNTY
PIN # 001124-0000

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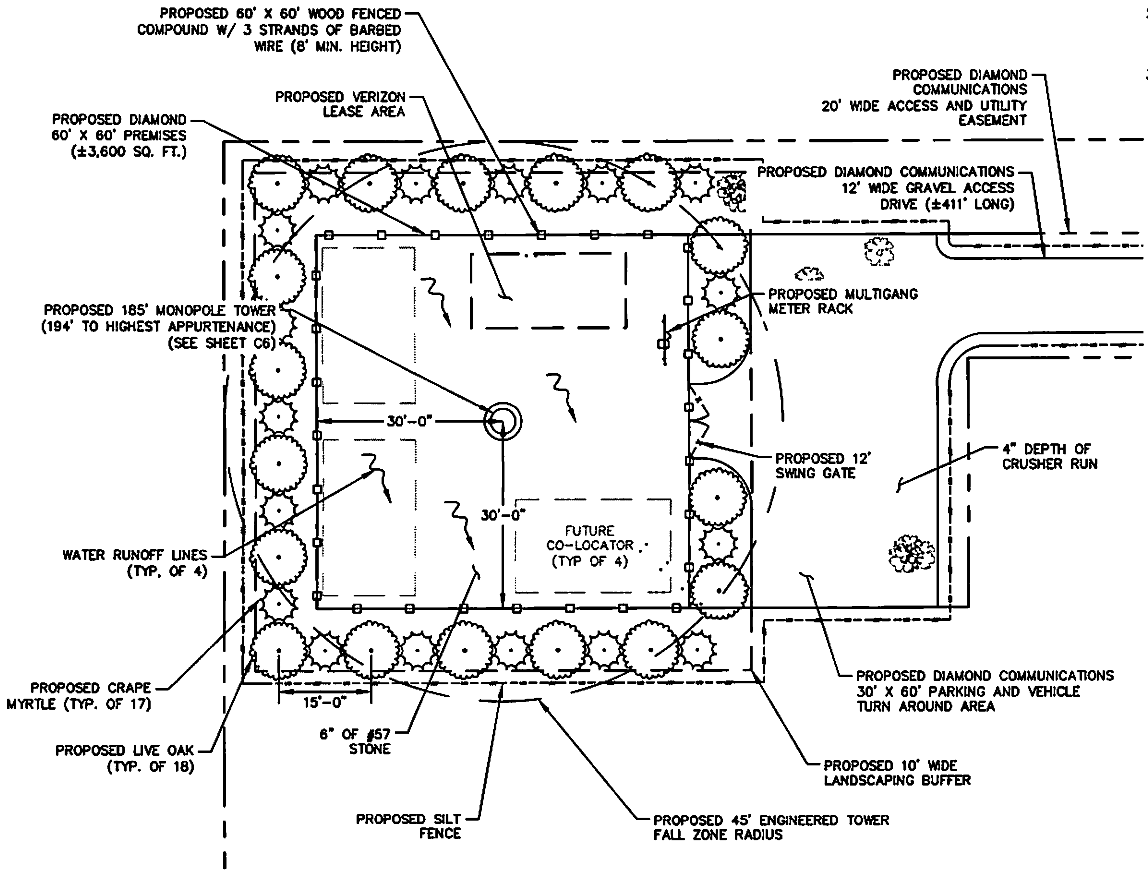
KHA PROJECT NUMBER:
013541003

DRAWN BY:	CHECKED BY:
MWD	CDS

SHEET TITLE:
OVERALL AERIAL

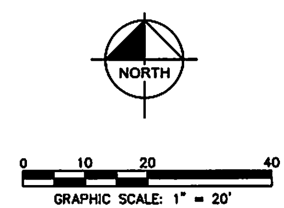
SHEET NUMBER:
C1.1



1
C2
SITE PLAN
SCALE: 1" = 20'

SITE NOTES:

1. DIAMOND COMMUNICATIONS STAFF SHALL COORDINATE WITH THE PROPERTY OWNER TO OBTAIN THE PROPER EASEMENT AGREEMENTS TO CONSTRUCT AND MAINTAIN EQUIPMENT IN AND AROUND THE TOWER COMPOUND.
2. PROPOSED COMPOUND LAYOUT BASED ON SURVEY PROVIDED BY GEOLINE SURVEYING, INC. DATED 12/19/2019 AND SITE VISIT ON 11/26/2019.
3. TOWER DIMENSIONS SHOWN ON THIS PLAN ARE FOR TOWER CENTER LOCATION. CONTRACTOR TO OBTAIN COPY OF TOWER ERECTION DRAWINGS FROM DIAMOND COMMUNICATIONS CONSTRUCTION MANAGER PRIOR TO DRILLING TOWER FOUNDATIONS. CASSIONS AND TOWER SHOWN ON THIS PLAN ARE ILLUSTRATIVE, SEE DESIGN DRAWING BY OTHERS. DO NOT SCALE.



Diamond

PROJECT INFORMATION:

SITE NAME:
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SITE #: FL102
15201 NORMANDY BLVD
JACKSONVILLE, FL 32234
DUVAL COUNTY
PIN # 001124-0000

PLANS PREPARED BY:

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KHA PROJECT NUMBER: 013541003

DRAWN BY: MWD
CHECKED BY: CDS

SHEET TITLE: SITE PLAN

SHEET NUMBER: C2

FENCE NOTES:

1. USE 3000-PSI CONCRETE, FULLY CONSOLIDATED AROUND THE POST.

2. WHERE THE POST IS SET IN ROCK OR CONCRETE, CORE A HOLE 12" DEEP AND 1" LARGER IN DIAMETER THAN THE POST. SET THE POST AND GROUT IN PLACE USING NON-SHRINK GROUT.

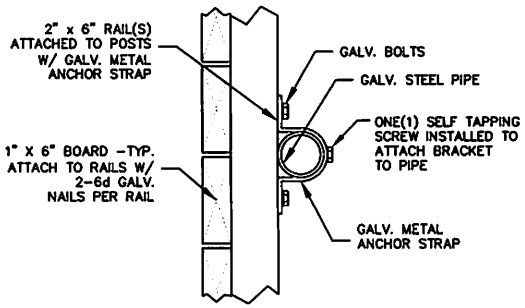
3. ALL POSTS MUST BE PLUMB AND ALIGNED WITH ONE ANOTHER IN BOTH HORIZONTAL AND VERTICAL PLANES.

4. CORNER AND GATEPOSTS FOR CHAIN LINK FENCES SHALL EXTEND ABOVE THE TOP STRAND OF BARBED WIRE TO PROVIDE TENSIONING FOR THE BARBED WIRE.

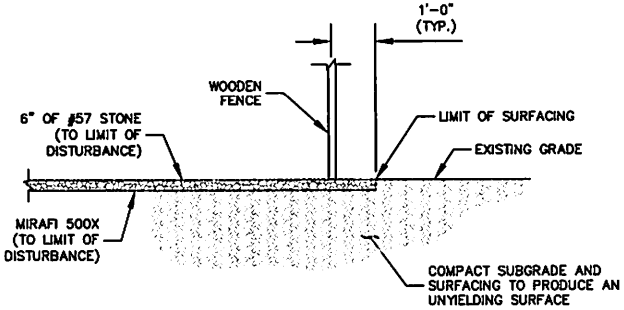
5. PROVIDE MIDRAILS AND BRACING AT ALL CORNER POSTS WHERE THE FENCE CHANGES DIRECTION BY MORE THAN 30 DEGREES.

6. THE GRADE OF THE SITE AND INSTALLATION OF THE FENCE SHALL PROVIDE FOR NO MORE THAN A 3" GAP BETWEEN THE BOTTOM OF THE FENCE MATERIAL AND FINISH GRADE.

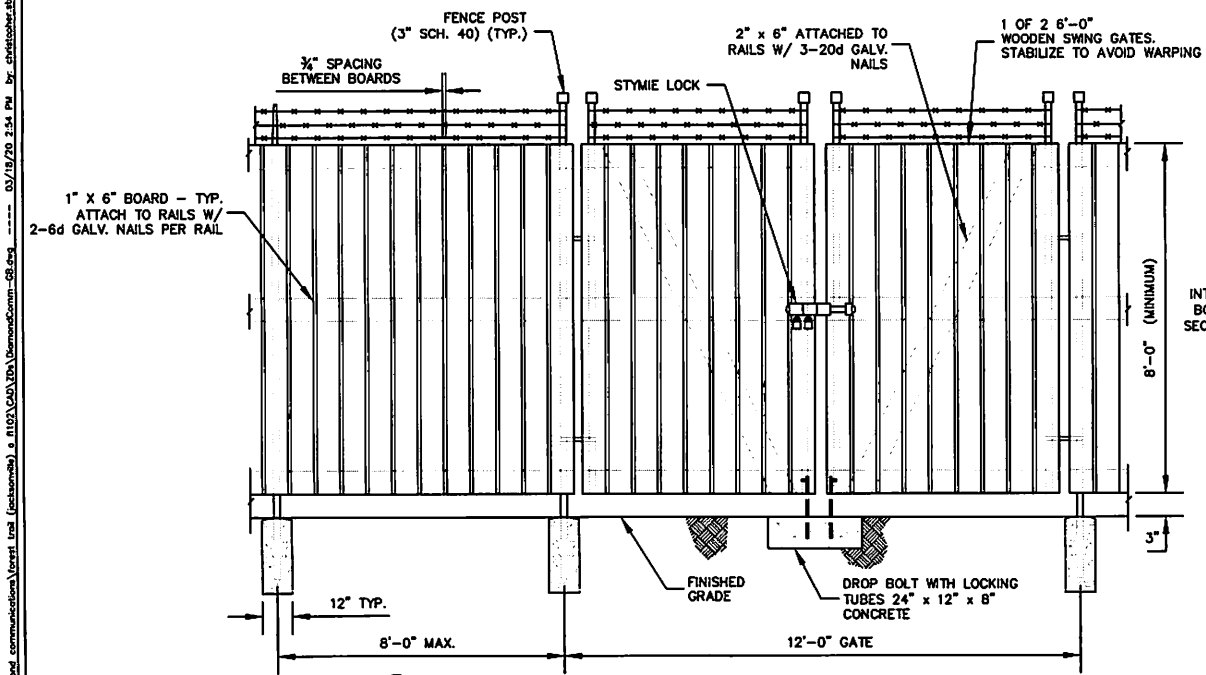
7. CONTRACTOR SHALL PROVIDE HOLD OPEN DEVICES FOR ALL GATES AT THE SPECIFIED OPEN POSITIONS. DRIVEN PIPE TYPE RECEIVERS ARE NOT AUTHORIZED.



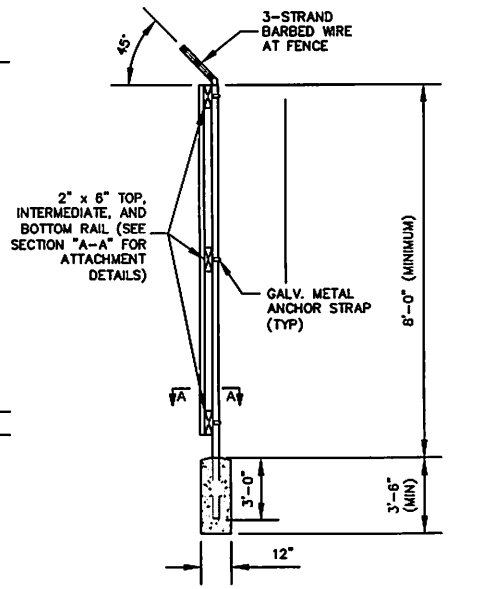
SECTION "A-A"
NOT TO SCALE



3 / C3 SITE COMPOUND SURFACE DETAIL
NOT TO SCALE



1 / C3 WOODEN FENCE AND GATE ELEVATION
NOT TO SCALE



2 / C3 SECTION AT FENCE
NOT TO SCALE

Diamond

PROJECT INFORMATION:

SITE NAME:
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SITE #: FL102
15201 NORMANDY BLVD
JACKSONVILLE, FL 32234
DUVAL COUNTY
PIN # 001124-0000

PLANS PREPARED BY:

Kimley»Horn
11720 AMBER PARK DRIVE, SUITE 600
ALPHARETTA, GA 30009
PHONE: 770-619-4280
WWW.KIMLEY-HORN.COM

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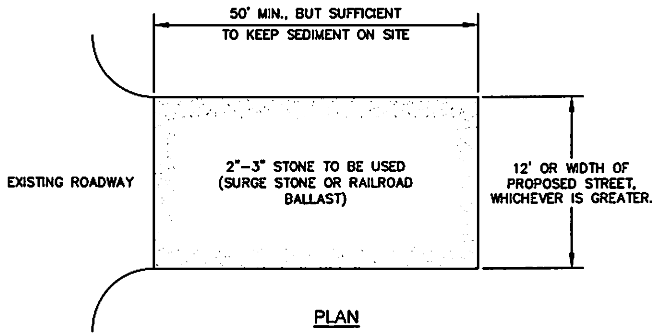
KHA PROJECT NUMBER:
013541003

DRAWN BY:	CHECKED BY:
MWD	CDS

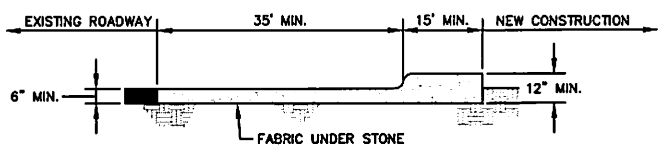
SHEET TITLE:
FENCE, GATE, AND COMPOUND DETAILS

SHEET NUMBER:
C3



PLAN

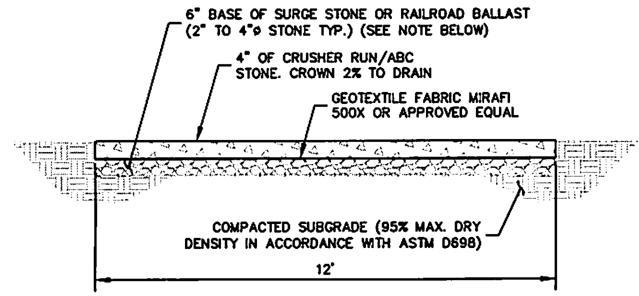
NOTES:
1. PUT SILT FENCE OR TREE PROTECTION FENCE UP TO ENSURE CONSTRUCTION ENTRANCE IS USED.
2. IF CONSTRUCTION ON THE SITES ARE SUCH THAT THE MUD IS NOT REMOVED BY THE VEHICLE TRAVELING OVER THE STONE, THEN THE TIRES OF THE VEHICLES MUST BE WASHED BEFORE ENTERING THE PUBLIC ROAD.
3. IF A PROJECT CONTINUES TO PULL MUD AND DEBRIS ON TO THE PUBLIC ROAD, THE GOVERNING AUTHORITY WILL CLEAN THE AREA AND INVOICE THE FINANCIALLY RESPONSIBLE PERSON AS INDICATED ON THE FINANCIAL RESPONSIBILITY FORM.



CROSS SECTION

1 / C4 CONSTRUCTION ENTRANCE

NOT TO SCALE



NOTE:
IF DETERMINED NECESSARY DURING GRADING AND CONSTRUCTION OF THE ACCESS ROAD BY DIAMOND COMMUNICATIONS PROJECT MANAGER, THE CONTRACTOR SHALL INSTALL 6" BASE OF SURGE STONE OR RAILROAD BALLAST (2" TO 4"ø STONE TYP.)

2 / C4 STANDARD ACCESS ROAD AND TURN-AROUND DETAIL

NOT TO SCALE

Diamond

PROJECT INFORMATION:

SITE NAME:
FOREST TRAIL
SITE #: FL102
15201 NORMANDY BLVD
JACKSONVILLE, FL 32234
DUVAL COUNTY
PIN # 001124-0000

PLANS PREPARED BY:

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11720 AMBER PARK DRIVE, SUITE 600
ALPHARETTA, GA 30009
PHONE: 770-619-4280
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KHA PROJECT NUMBER: 013541003

DRAWN BY: MWD CHECKED BY: CDS

SHEET TITLE:
ACCESS ROAD DETAILS

SHEET NUMBER:
C4

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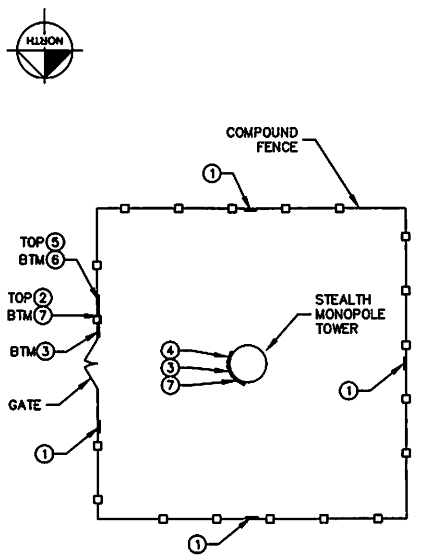
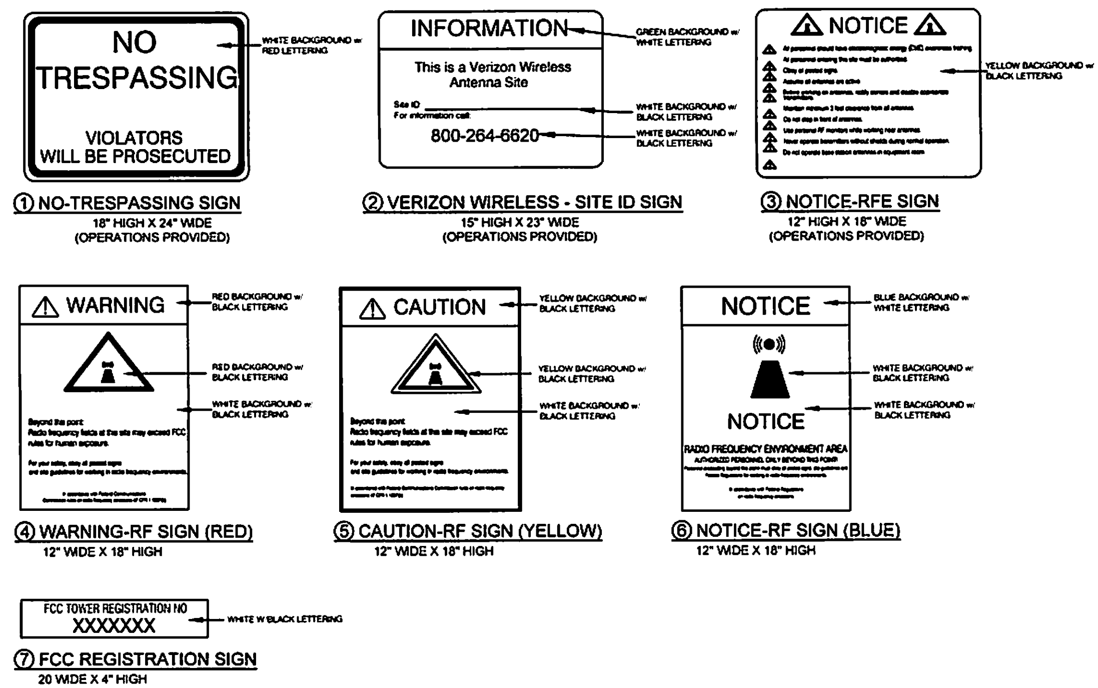
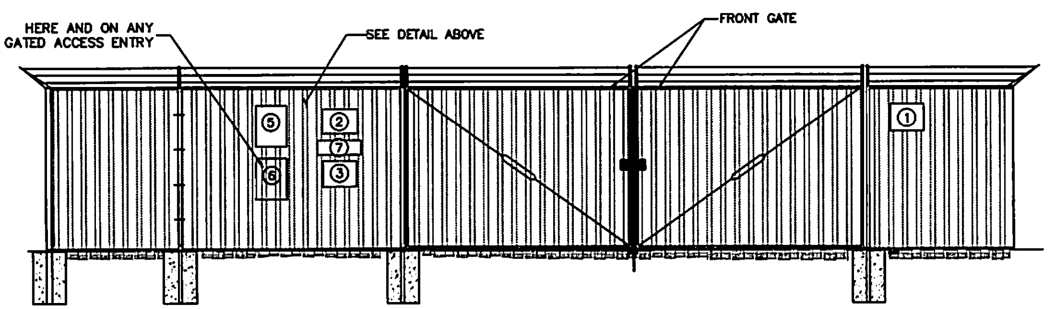


1 / C5 SIGN PLACEMENT PLAN VIEW
NOT TO SCALE



2 / C5 TYPICAL SIGNS AND SPECIFICATIONS
NOT TO SCALE



3 / C5 SIGN PLACEMENT FRONT GATE VIEW
NOT TO SCALE

SIGNAGE NOTES:
1. SIGNS SHALL BE FABRICATED FROM CORROSION RESISTANT PRESSED METAL, AND PAINTED WITH LONG LASTING UV RESISTANT COATINGS.
2. SIGNS (EXCEPT WHERE NOTED OTHERWISE) SHALL BE MOUNTED TO THE TOWER, GATE, AND FENCE USING A MINIMUM OF 9 GAUGE ALUMINUM WIRE, HOG RINGS (AS UTILIZED IN FENCE INSTALLATIONS) OR BRACKETS WHERE NECESSARY. BRACKETS SHALL BE OF SIMILAR METAL AS THE STRUCTURE TO AVOID GALVANIC CORROSION.

Diamond

PROJECT INFORMATION:
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FOREST TRAIL
SITE #: FL102
15201 NORMANDY BLVD
JACKSONVILLE, FL 32234
DUVAL COUNTY
PIN # 001124-0000

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KHA PROJECT NUMBER: 013541003
DRAWN BY: MWD
CHECKED BY: CDS
SHEET TITLE: SITE SIGNAGE DETAILS
SHEET NUMBER: C5

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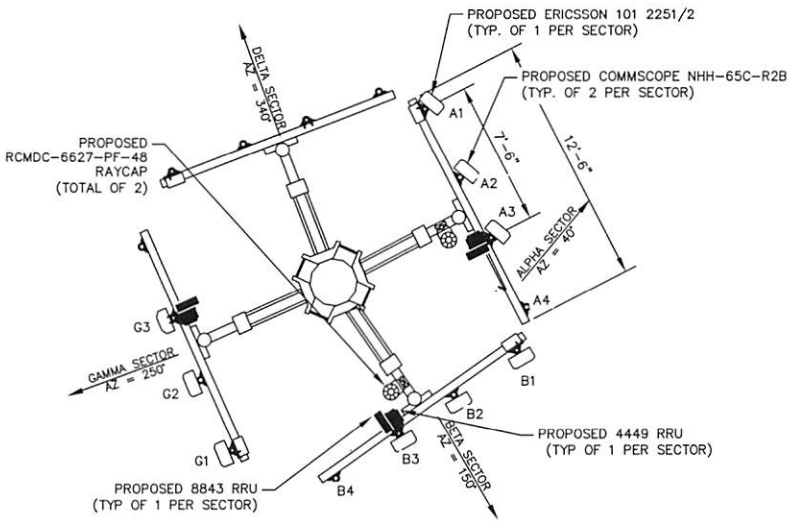
ANTENNA SECTOR	AZIMUTH IN DEGREES	MECHANICAL DOWN TILT	RAD CENTER	LICENSED FREQUENCY	ANTENNA* (QTY) MAKE/MODEL	REMOTE RADIO UNIT	SURGE PROTECTOR	COMPOSITION CABLES	
								COAX	
								QTY	SIZE
A1	40°	0°	180'-0"	3.5 GHZ	(1) ERICSSON/ KRE 101 2251/2	–	(2) RAYCAP/ RCMDC-6627-PF-48	(2) 1⅝" HYBRID CABLES	
A2	40°	0°		700/ 1900	COMMSCOPE/ NHH-65C-R2B	(1) ERICSSON 4449			
A3	40°	0°		700/ 1900	COMMSCOPE/ NHH-65C-R2B	(1) ERICSSON 8843			
A4	–	–		–	–	–			
B1	150°	0°	180'-0"	3.5 GHZ	(1) ERICSSON/ KRE 101 2251/2	–			
B2	150°	0°		700/ 1900	COMMSCOPE/ NHH-65C-R2B	(1) ERICSSON 4449			
B3	150°	0°		700/ 1900	COMMSCOPE/ NHH-65C-R2B	(1) ERICSSON 8843			
B4	–	–		–	–	–			
G1	250°	0°	180'-0"	3.5 GHZ	(1) ERICSSON/ KRE 101 2251/2	–			
G2	250°	0°		700/ 1900	COMMSCOPE/ NHH-65C-R2B	(1) ERICSSON 4449			
G3	250°	0°		700/ 1900	COMMSCOPE/ NHH-65C-R2B	(1) ERICSSON 8843			
G4	–	–		–	–	–			

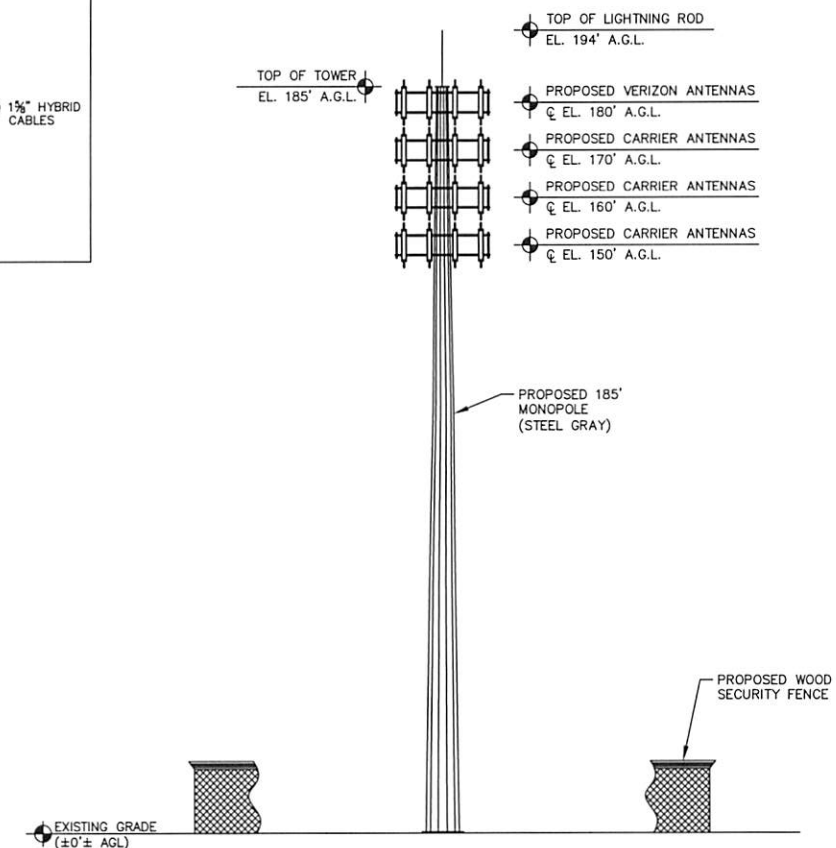
2 / C6 ANTENNA ORIENTATION PLAN

NOT TO SCALE



3 / C6 ANTENNA ORIENTATION PLAN

NOT TO SCALE



1 / C6 MONOPOLE TOWER ELEVATION

NOT TO SCALE

NOTES:

1. ALL PROPOSED ATTACHMENTS TO TOWER BASED ON TOWER DESIGN DRAWINGS BY OTHERS (SEE GENERAL NOTE 1.07, SHEET N1).
2. THE TOWER ELEVATION SHOWN IS FOR REFERENCE ONLY.
3. PROPOSED TOWER WILL BE GALVANIZED STEEL-GRAY IN COLOR.

Diamond Communications LLC

PROJECT INFORMATION:

SITE NAME:
FOREST TRAIL
SITE #: FL102

15201 NORMANDY BLVD
JACKSONVILLE, FL 32234
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LICENSER:

FOR ILLUSTRATIVE PURPOSES ONLY- NO SIGNATURE REQUIRED

KHA PROJECT NUMBER:

013541003

DRAWN BY:	CHECKED BY:
MWD	CDS

SHEET TITLE:

ANTENNA AND TOWER ELEVATION DETAILS

SHEET NUMBER:

C6

k:\atl_wireless\diamond_communications\forest trail (jacksonville) a fl102\CAD\Zds\DiamondComm-08.dwg ---- 03/16/20 2:54 PM by christopher.strange

EQUIPMENT REPLACEMENT SUMMARY SCHEDULE		
EQUIPMENT	QUANTITY	DESCRIPTION
EXISTING EQUIPMENT		
ANTENNAS		
FEEDLINES		
OTHER EQUIPMENT		
EQUIPMENT TO BE REMOVED		
ANTENNAS		
FEEDLINES		
OTHER EQUIPMENT		
EQUIPMENT TO BE INSTALLED		
ANTENNAS	6	COMMSCOPE / NHH-65C-R2B
	3	ERICSSON/ KRE 101 2251/2 W/ INTERGRATED 2208 KRY901369
FEEDLINES	2	1-5/8" HYBRID FIBER
OTHER EQUIPMENT	3	ERICSSON 4449
	3	ERICSSON 8843
	2	OVP BOX/ RCMDC-6627-PF-48
FINAL CONFIGURATION		
ANTENNAS	6	COMMSCOPE / NHH-65C-R2B
	3	ERICSSON/ KRE 101 2251/2 W/ INTERGRATED 2208 KRY901369
FEEDLINES	2	1-5/8" HYBRID FIBER
OTHER EQUIPMENT	3	ERICSSON 4449
	3	ERICSSON 8843
	2	OVP BOX/ RCMDC-6627-PF-48

1 / C7 SCOPE OF WORK SUMMARY

NOT TO SCALE

Diamond

PROJECT INFORMATION:

SITE NAME:
FOREST TRAIL
SITE #: FL102
15201 NORMANDY BLVD
JACKSONVILLE, FL 32234
DUVAL COUNTY
PIN # 001124-0000

PLANS PREPARED BY:

Kimley»Horn
11720 AMBER PARK DRIVE, SUITE 600
ALPHARETTA, GA 30009
PHONE: 770-619-4280
WWW.KIMLEY-HORN.COM

REV:	DATE:	ISSUED FOR:	BY:
7			
6			
5			
4			
3			
2			
1			
0	03/16/20	ZONING	RRJ
A	03/06/20	ZONING	RRJ

LICENSER:

This item has been electronically signed and sealed by Richard Johnson, P.E., on the date shown on the time stamp using a digital signature. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

KHA PROJECT NUMBER:
013541003

DRAWN BY:	CHECKED BY:
MWD	CDS

SHEET TITLE:
SCOPE OF WORK SUMMARY

SHEET NUMBER:
C7

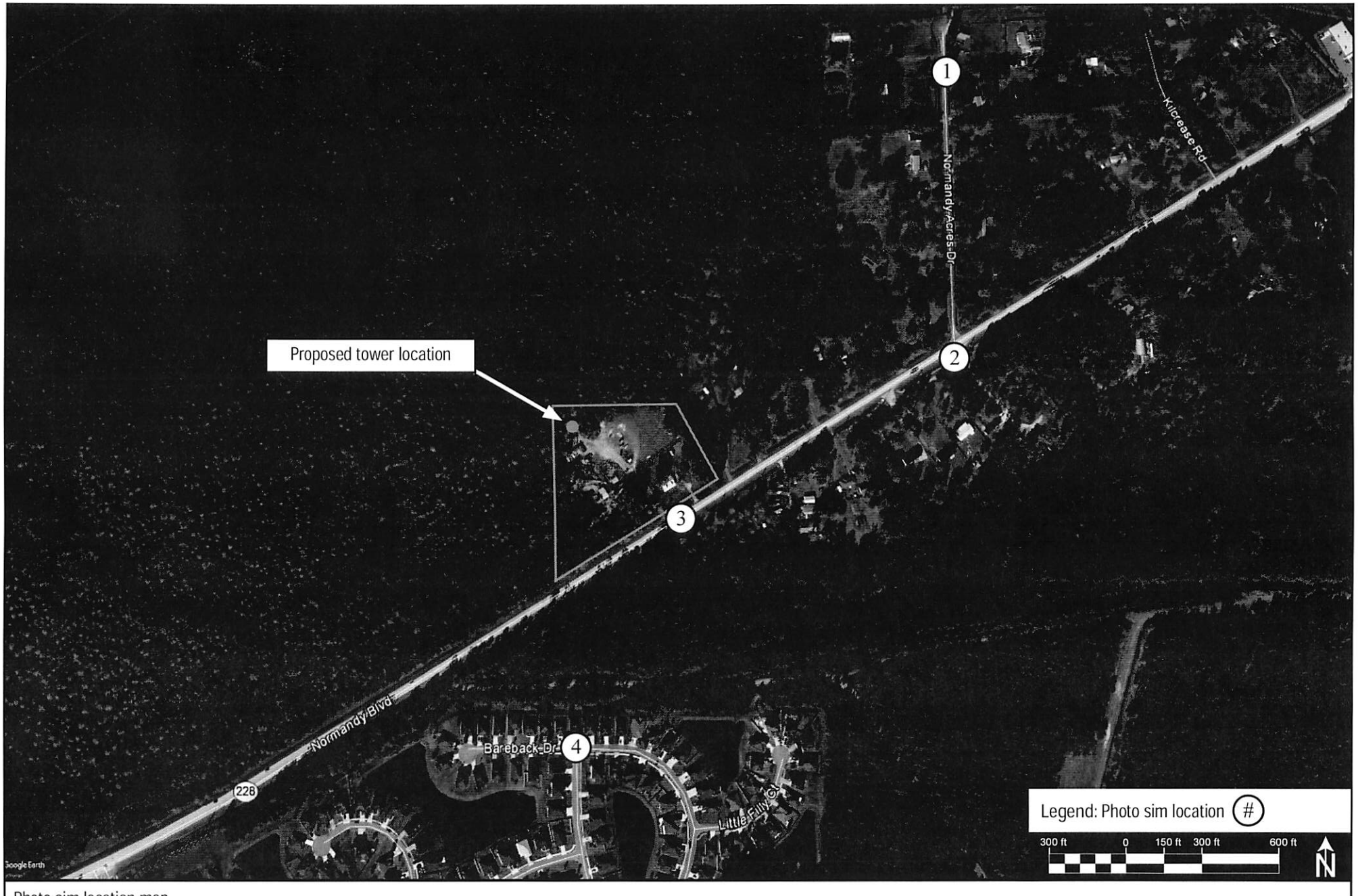


Photo sim location map

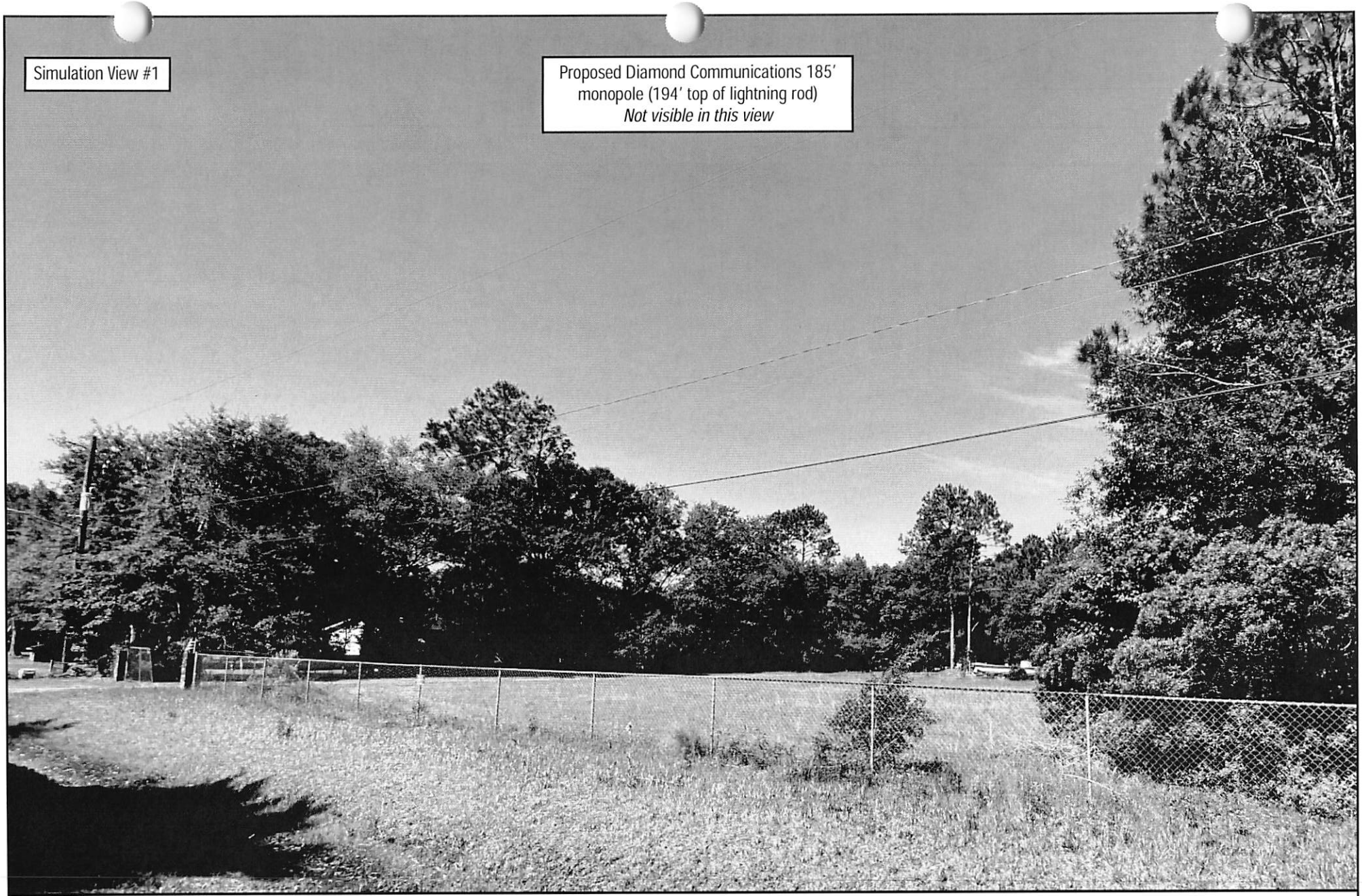
Kimley»Horn

Diamond Communications - Forest Trail
15201 Normandy Blvd
Jacksonville, FL 32234
Duval County

Diamond Communications LLC

Simulation View #1

Proposed Diamond Communications 185' monopole (194' top of lightning rod)
Not visible in this view



View looking southwestfrom Normandy Acres Drive

Existing

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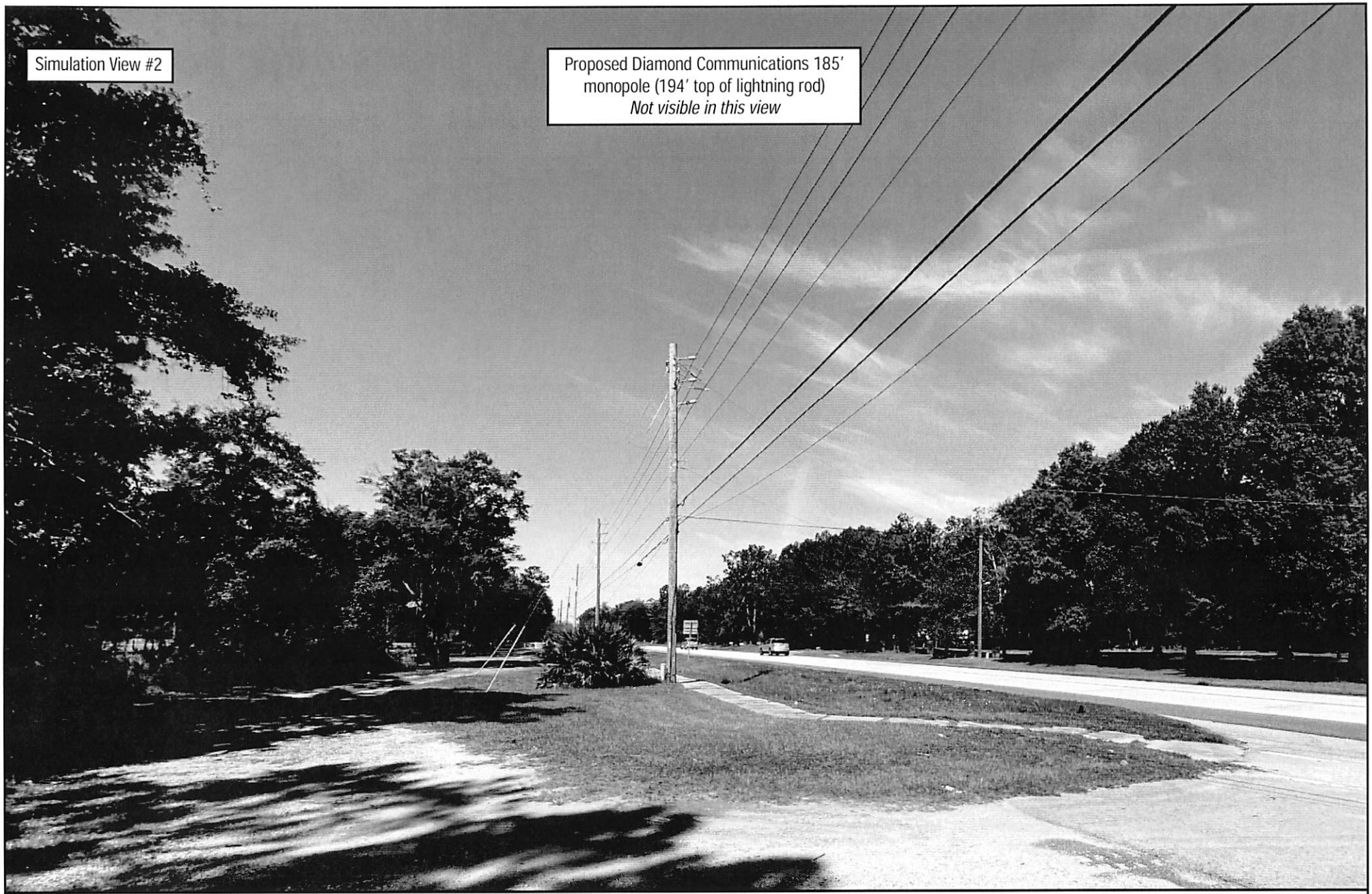
Diamond Communications - Forest Trail
15201 Normandy Blvd
Jacksonville, FL 32234
Duval County

Diamond Communications LLC



View looking west from Normandy Boulevard near Normandy Acres Drive

Existing

Kimley»Horn

Diamond Communications - Forest Trail
15201 Normandy Blvd
Jacksonville, FL 32234
Duval County

Diamond Communications LLC

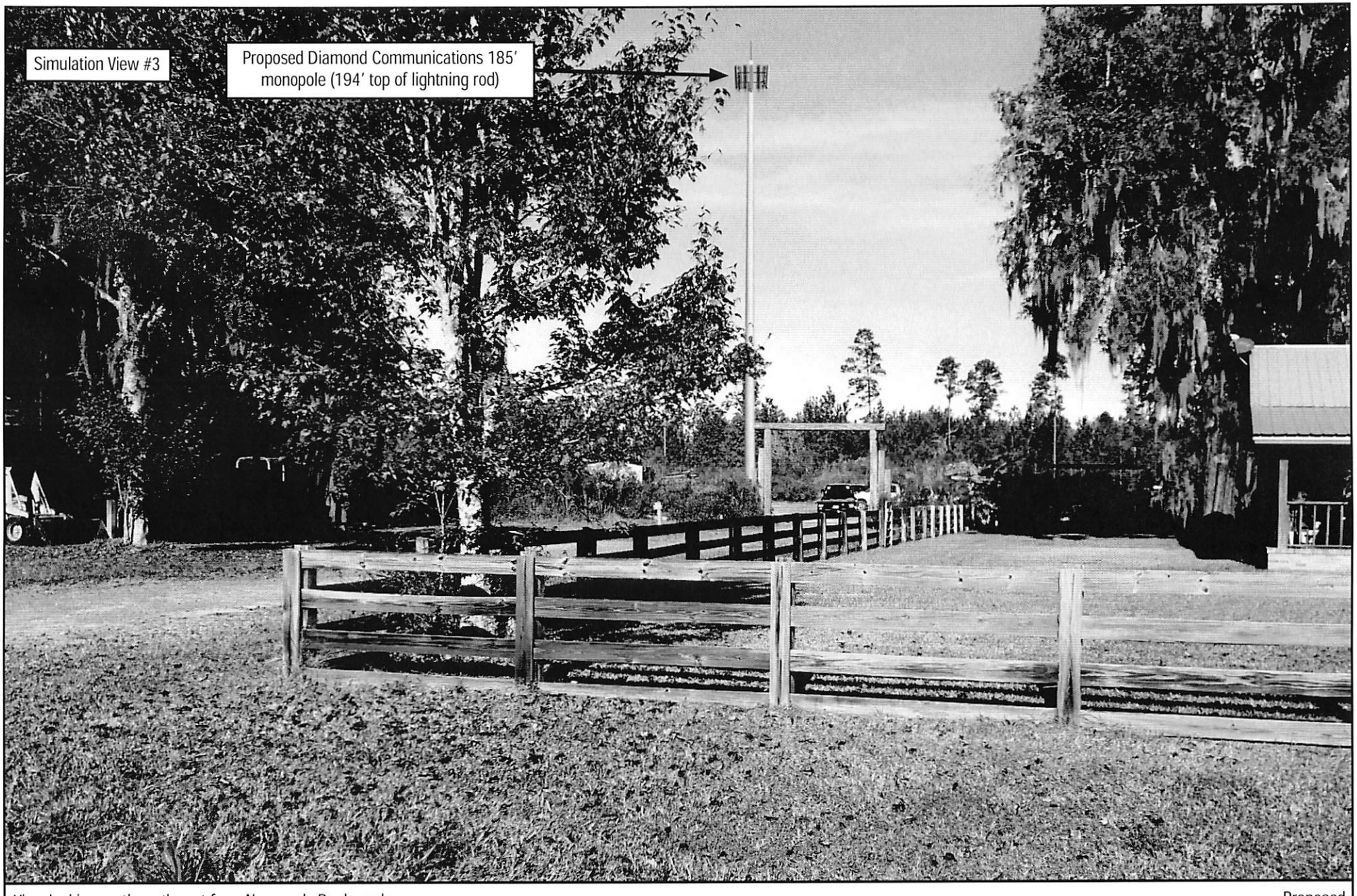
View looking north northwest from Normandy Boulevard

Existing

Kimley»Horn

Diamond Communications - Forest Trail
15201 Normandy Blvd
Jacksonville, FL 32234
Duval County

Diamond
Communications LLC



View looking north northwest from Normandy Boulevard

Proposed

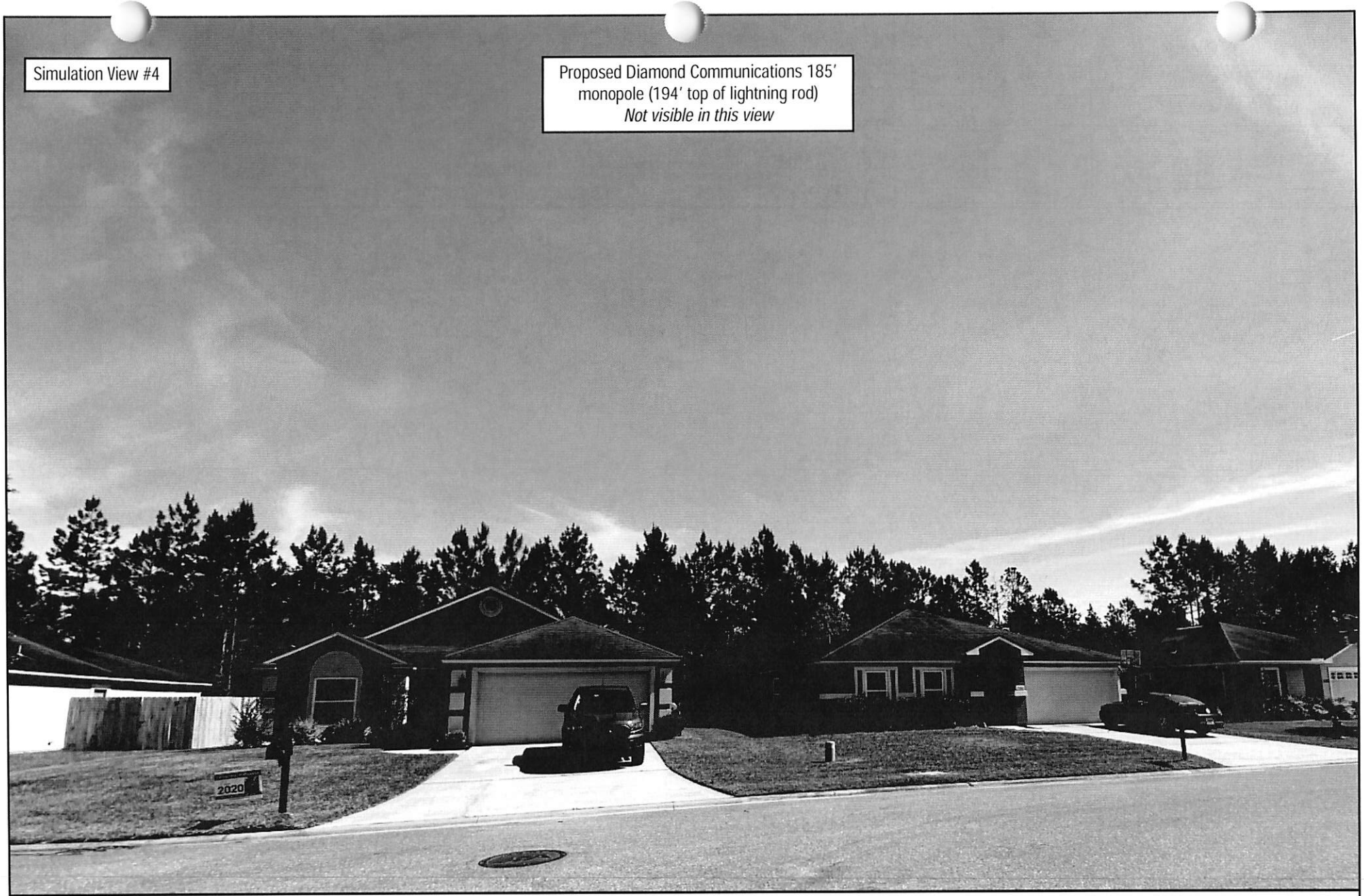
Kimley»Horn

Diamond Communications - Forest Trail
15201 Normandy Blvd
Jacksonville, FL 32234
Duval County

Diamond Communications LLC

Simulation View #4

Proposed Diamond Communications 185' monopole (194' top of lightning rod)
Not visible in this view



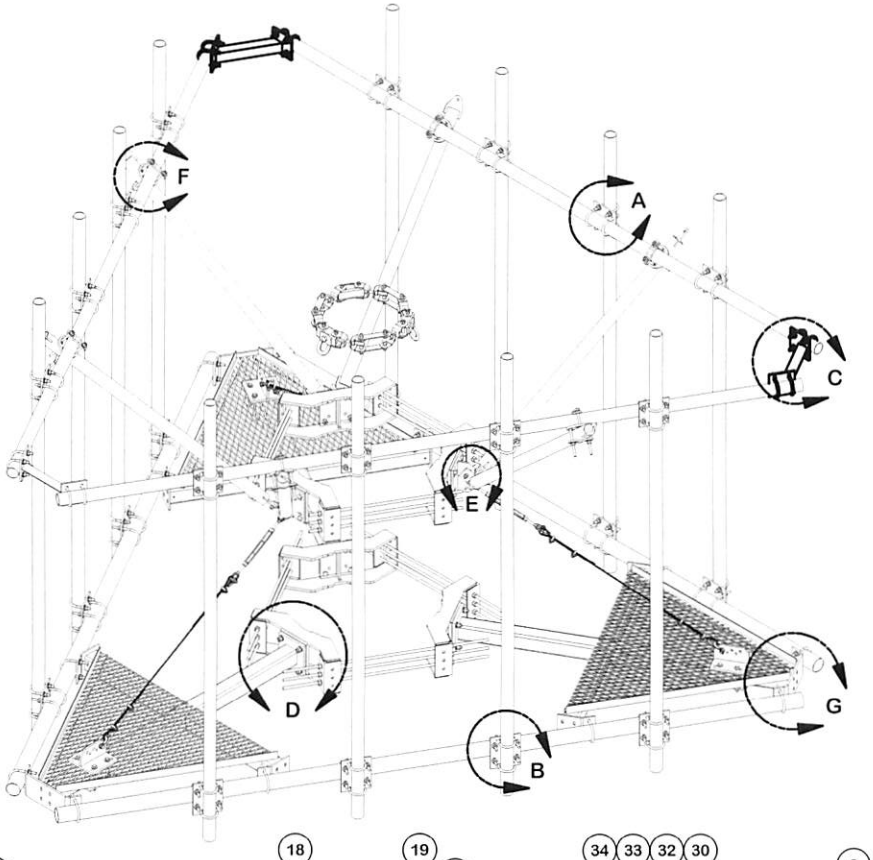
View looking north from Bareback Drive

Existing

Kimley»Horn

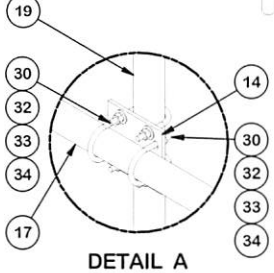
Diamond Communications - Forest Trail
15201 Normandy Blvd
Jacksonville, FL 32234
Duval County

Diamond Communications LLC



PARTS LIST

ITEM	QTY	PART NO.	PART DESCRIPTION	LENGTH	UNIT WT.	NET WT.
1	6	X-LWRM	RING MOUNT WELDMENT		68.81	412.85
2	3	X-SV196L	LONG PLATFORM WELDMENT		230.94	692.81
3	6	X-TBW	T-BRACKET WELDMENT		13.60	81.60
4	6	SHCM-T	CHAIN MOUNT TIGHTENER BRACKET	3 in	1.86	11.15
5	6	X-VSKL	LONG SUPPORT WELDMENT FOR VSK REINFORCEMENTS		37.05	222.33
6	6	X-127594	FLAT DISK CLAMP PLATE 4" CENTERS (GALV.)		2.51	15.04
7	12	X-100064	CLAMP (4" V-CLAMP) GALVANIZED		0.92	11.06
8	3	320751-I	1/2" CHAIN SHACKLE		0.76	2.29
9	3	320601-I	5/8" TURNBUCKLE		2.63	7.89
10	6	320777-I	5/16" THIMBLE		0.06	0.36
11	12	320152-I	5/16" WIRE ROPE CLIP		1.32	15.78
12	3	AC516-10	5/16" AIRECRAFT CABLE		1.25	3.76
13	15	SCX4	CROSSOVER PLATE	8 1/2 in	6.02	90.32
14	12	SCX2	CROSSOVER PLATE	7 in	4.80	57.56
15	3	X-AHCP	ANGLE HANDRAIL CORNER PLATE		12.92	38.76
17	3	P30174	2-7/8" O.D. x 174" SCH. 40 PIPE	174 in	84.20	252.59
18	3	P3174	3-1/2" X 174" SCH 40 GALVANIZED PIPE	174 in	109.97	329.90
19	12	P30120	2-7/8" x 120" (2-1/2" SCH. 40) GALVANIZED PIPE	120 in	58.07	696.79
20	18	G58R-48	5/8" x 48" THREADED ROD (HDG.)		4.18	75.27
20	18	G58R-24	5/8" x 24" THREADED ROD (HDG.)		2.09	37.63
21	12	A582114	5/8" x 2-1/4" HDG A325 HEX BOLT	2 1/4 in	0.31	3.75
22	12	A58234	5/8" x 2-3/4" HDG A325 HEX BOLT	2 3/4 in	0.36	4.27
23	12	A58FW	5/8" HDG A325 FLATWASHER		0.03	0.41
24	60	G58LW	5/8" HDG LOCKWASHER		0.03	1.57
25	60	G58NUT	5/8" HDG HEAVY 2H HEX NUT		0.13	7.79
26	6	G12112	1/2" x 1-1/2" HDG HEX BOLT GR5	1/2 in	0.15	0.89
27	3	G12212	1/2" x 2-1/2" HDG HEX BOLT GR5	2 1/2 in	0.20	0.61
28	12	G1204	1/2" x 4" HDG HEX BOLT GR5 FULL THREAD	4 in	0.27	3.24
29	24	G12065	1/2" x 6-1/2" HDG HEX BOLT GR5 FULL THREAD	5 1/2 in	0.41	9.83
30	84	X-UB1300	1/2" X 3" X 5" X 2" U-BOLT (HDG.)		0.67	56.19
31	36	X-UB1306	1/2" X 3-5/8" X 6" X 3" U-BOLT (HDG.)		0.83	29.82
32	288	G12FW	1/2" HDG USS FLATWASHER	3/32 in	0.03	9.82
33	285	G12LW	1/2" HDG LOCKWASHER	1/8 in	0.01	3.96
34	285	G12NUT	1/2" HDG HEAVY 2H HEX NUT		0.07	20.41
35	1	HALO40	5,000 LB. MAINTENANCE TIE-OFF POINT		41.12	41.12
					TOTAL WT. #	3249.41



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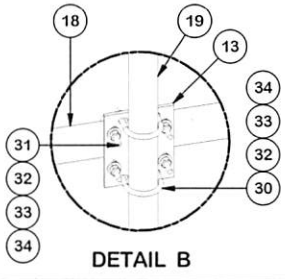
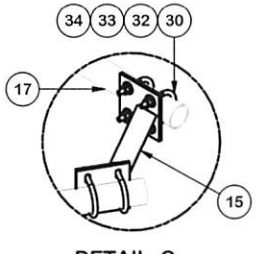


DETAIL B



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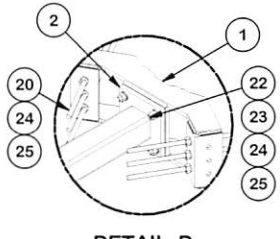

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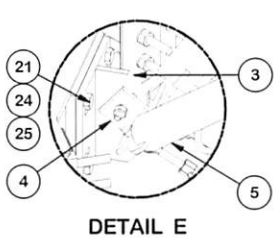
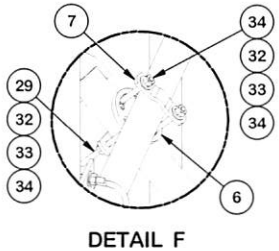
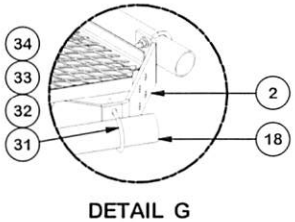


DETAIL E



DETAIL F



DETAIL G

TOLERANCE NOTES

TOLERANCES ON DIMENSIONS, UNLESS OTHERWISE NOTED ARE:
SAWED, SHEARED AND GAS CUT EDGES (± 0.030")
DRILLED AND GAS CUT HOLES (± 0.030") - NO CONING OF HOLES
LASER CUT EDGES AND HOLES (± 0.010") - NO CONING OF HOLES
BENDS AND ANGLES ARE ± 1/2 DEGREE
ALL OTHER MACHINING (± 0.030")
ALL OTHER ASSEMBLY (± 0.060")

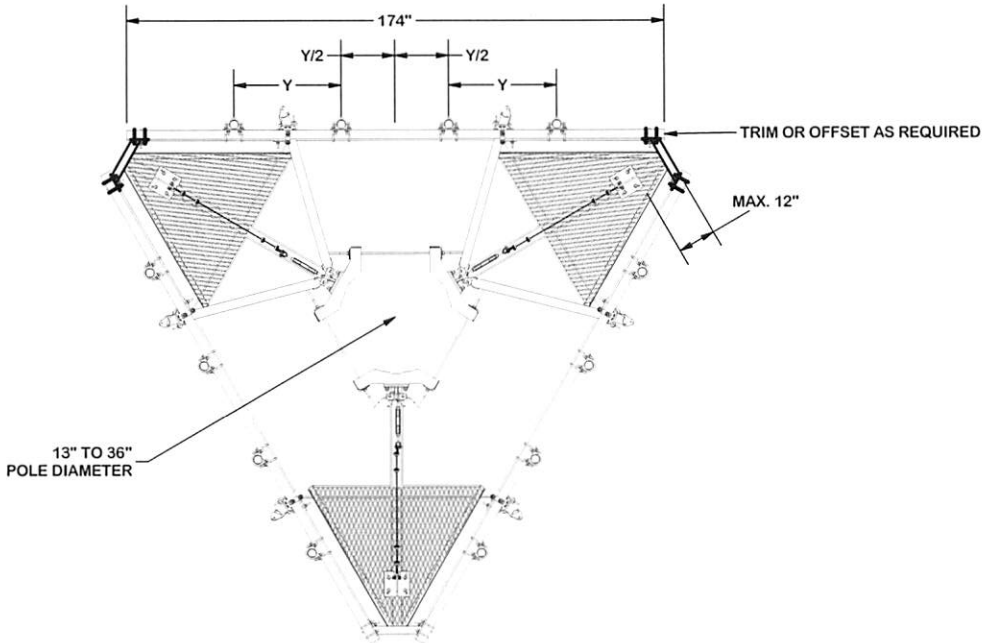
DESCRIPTION
14' 6" LOW PROFILE PLATFORM
WITH TWELVE 2-7/8" ANTENNA MOUTING
PIPES, REINFORCED HANDRAIL, AND CABLE

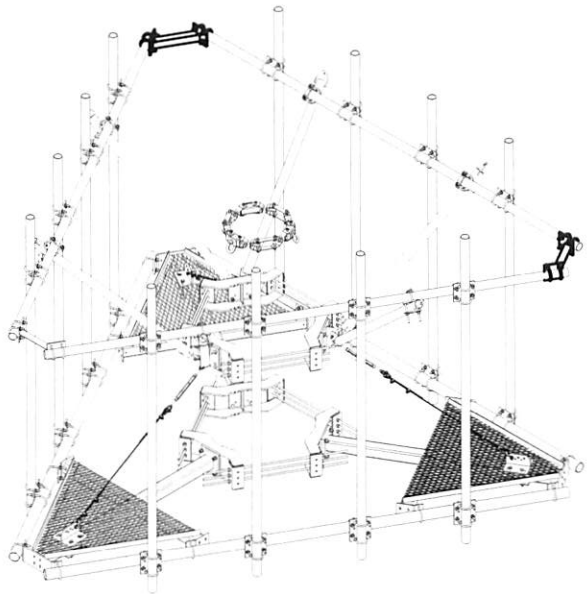
SITE PRO 1 — A valmont COMPANY

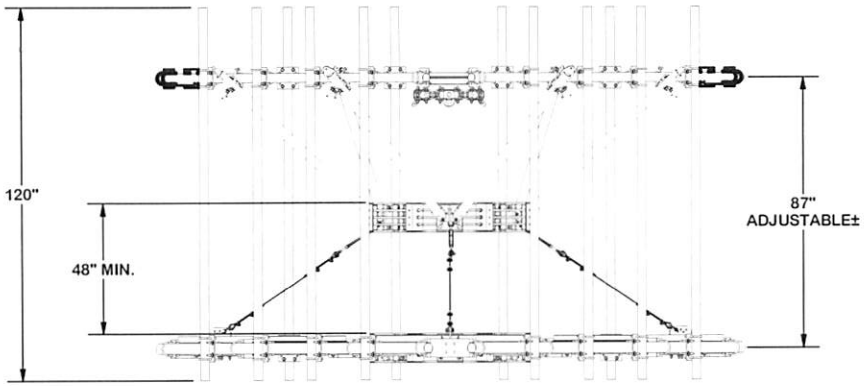
Engineering Support Team: 1-888-753-7446

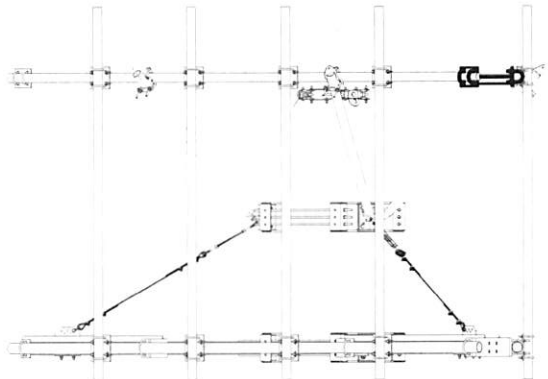
Locations: New York, NY; Atlanta, GA; Los Angeles, CA; Plymouth, IN; Salem, OR; Dallas, TX; Tampa, FL

CPD NO.		DRAWN BY	ENG. APPROVAL	PART NO.	
		CSL 10/17/2019	10/18/2019	RMQLP-4120-H10	
CLASS	SUB	DRAWING USAGE	CHECKED BY	DWG. NO.	
87	02	CUSTOMER	BMC 10/18/2019	RMQLP-4120-H10	









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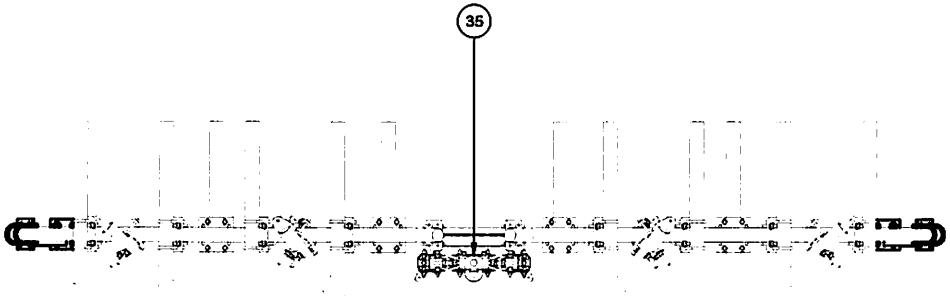
PIPES, REINFORCED HANDRAIL, AND CABLE

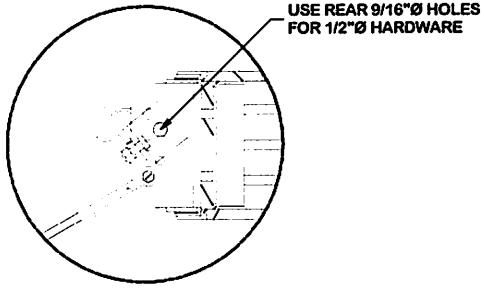
SITE PRO 1
A valmont COMPANY

Engineering
Support Team:
1-888-753-7446

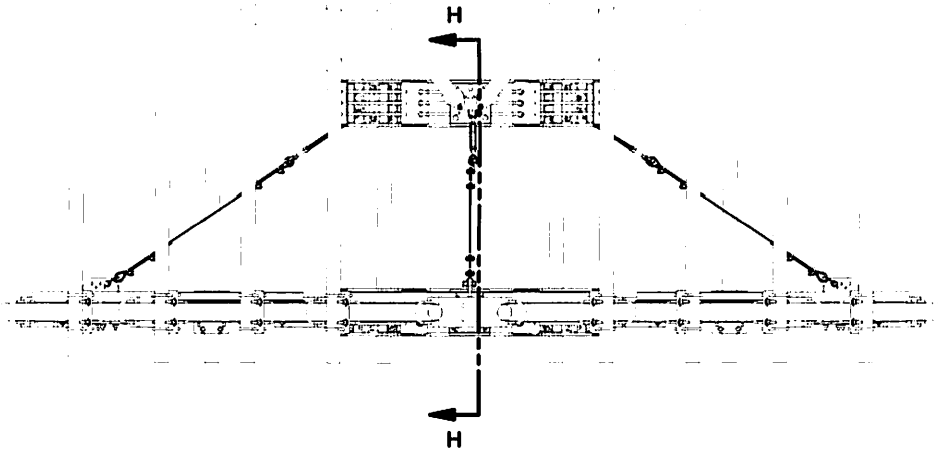
Locations:
New York, NY
Atlanta, GA
Los Angeles, CA
Plymouth, IN
Salem, OR
Dallas, TX
Tampa, FL

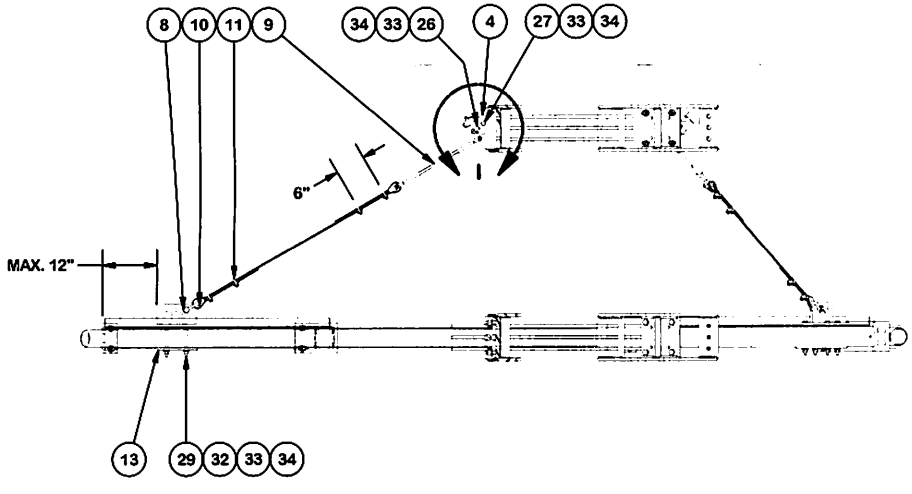
CPD NO.		DRAWN BY	ENG. APPROVAL	PART NO.	
		CSL 10/17/2019	10/18/2019	RMQLP-4120-H10	
CLASS	SUB	DRAWING USAGE	CHECKED BY	DWG. NO.	
87	02	CUSTOMER	BMC 10/18/2019	RMQLP-4120-H10	





DETAIL I





SECTION H-H

NOTE:
SOME OBJECTS ARE TRANSPARENT FOR CLARITY

TOLERANCE NOTES

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WITH TWELVE 2-7/8" ANTENNA MOUTING
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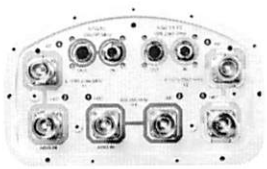
CPD NO.	DRAWN BY	ENG. APPROVAL	PART NO.
	CSL 10/17/2019	10/18/2019	RMQLP-4120-H10

CLASS	SUB	DRAWING USAGE	CHECKED BY	DWG. NO.
87	02	CUSTOMER	BMC 10/18/2019	RMQLP-4120-H10

NHH-65C-R2B



6-port sector antenna, 2x 698–896 and 4x 1695–2360 MHz, 65° HPBW, 2x RET. Both high bands share the same electrical tilt.

- Interleaved dipole technology providing for attractive, low wind load mechanical package
- Internal SBT on low and high band allow remote RET control from the radio over the RF jumper cable
- Separate RS-485 RET input/output for low and high band
- One RET for low band and one RET for both high bands to ensure same tilt level for 4x Rx or 4x MIMO

General Specifications

Antenna Type	Sector
Band	Multiband
Color	Light gray
Effective Projective Area (EPA), frontal	0.37 m^2 | 3.983 ft^2
Effective Projective Area (EPA), lateral	0.31 m^2 | 3.337 ft^2
Grounding Type	RF connector body grounded to reflector and mounting bracket
Performance Note	Outdoor usage | Wind loading figures are validated by wind tunnel measurements described in white paper WP-112534-EN
RF Connector Interface	7-16 DIN Female
RF Connector Location	Bottom
RF Connector Quantity, high band	4
RF Connector Quantity, low band	2
RF Connector Quantity, total	6

Remote Electrical Tilt (RET) Information, General

RET Interface	8-pin DIN Female | 8-pin DIN Male
RET Interface, quantity	2 female | 2 male

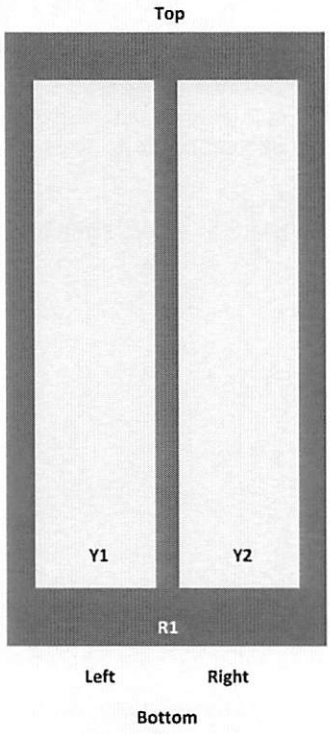
Dimensions

Width	301 mm | 11.85 in
Length	2438 mm | 95.984 in
Depth	180 mm | 7.087 in

Array Layout

NHH-65C-R2B

NHH



Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
R1	698-896	1-2	1	ANxxxxxxxxxxxxxxxx1
Y1	1695-2360	3-4	2	ANxxxxxxxxxxxxxxxx2
Y2	1695-2360	5-6		

View from the front of the antenna

(Sizes of colored boxes are not true depictions of array sizes)

Electrical Specifications

Operating Frequency Band	1695 – 2360 MHz | 698 – 896 MHz
Total Input Power, maximum	500 W @ 50 °C

Remote Electrical Tilt (RET) Information, Electrical

Protocol	3GPP/AISG 2.0 (Single RET)
Power Consumption, idle state, maximum	2 W
Power Consumption, normal conditions, maximum	13 W
Input Voltage	10–30 Vdc
Internal Bias Tee	Port 1 | Port 3
Internal RET	High band (1) | Low band (1)

NHH-65C-R2B

Electrical Specifications

Frequency Band, MHz	698–806	806–896	1695–1880	1850–1990	1920–2200	2300–2360
Gain, dBi	16	16.1	17.3	17.7	18.3	18.2
Beamwidth, Horizontal, degrees	65	62	74	66	62	59
Beamwidth, Vertical, degrees	9	7.9	5.6	5.2	4.9	4.5
Beam Tilt, degrees	0–11	0–11	0–7	0–7	0–7	0–7
USLS (First Lobe), dB	21	18	19	20	22	18
Front-to-Back Ratio at 180°, dB	35	31	33	29	29	30
Isolation, Cross Polarization, dB	25	25	25	25	25	25
Isolation, Inter-band, dB	30	30	30	30	30	30
VSWR | Return loss, dB	1.5 | 14.0	1.5 | 14.0	1.5 | 14.0	1.5 | 14.0	1.5 | 14.0	1.5 | 14.0
PIM, 3rd Order, 2 x 20 W, dBc	-153	-153	-153	-153	-153	-153
Input Power per Port, maximum, watts	400	400	350	350	350	300

Electrical Specifications, BASTA

Frequency Band, MHz	698–806	806–896	1695–1880	1850–1990	1920–2200	2300–2360
Gain by all Beam Tilts, average, dBi	15.8	15.9	16.9	17.5	18	17.9
Gain by all Beam Tilts Tolerance, dB	±0.4	±0.4	±0.4	±0.3	±0.6	±0.4
Gain by Beam Tilt, average, dBi	0 ° | 15.9 5 ° | 15.9 11 ° | 15.5	0 ° | 15.8 5 ° | 16.0 11 ° | 15.7	0 ° | 16.9 4 ° | 17.0 7 ° | 16.9	0 ° | 17.4 4 ° | 17.5 7 ° | 17.4	0 ° | 17.9 4 ° | 18.0 7 ° | 18.0	0 ° | 17.8 4 ° | 17.9 7 ° | 17.9
Beamwidth, Horizontal Tolerance, degrees	±1.2	±1.6	±5.3	±3.4	±6	±3.1
Beamwidth, Vertical Tolerance, degrees	±0.6	±0.4	±0.3	±0.2	±0.2	±0.2
USLS, beampeak to 20° above beampeak, dB	15	14	17	16	17	15
Front-to-Back Total Power at 180° ± 30°, dB	25.6	23.8	28	25	25	24
CPR at Boresight, dB	18	26	20	25	20	17
CPR at Sector, dB	15	9	11	10	8	2

Material Specifications

Radiator Material	Copper | Low loss circuit board
Radome Material	Fiberglass, UV resistant

NHH-65C-R2B

Reflector Material	Aluminum

Mechanical Specifications

Wind Loading at Velocity, frontal	393.0 N @ 150 km/h | 88.8 lbf @ 150 km/h
Wind Loading at Velocity, lateral	330.0 N @ 150 km/h | 74.2 lbf @ 150 km/h
Wind Loading at Velocity, maximum	170.2 lbf @ 150 km/h | 757.0 N @ 150 km/h
Wind Speed, maximum	241 km/h | 149.75 mph

Packaging and Weights

Width, packed	409 mm | 16.102 in
Depth, packed	299 mm | 11.772 in
Length, packed	2561 mm | 100.827 in
Net Weight, without mounting kit	23.4 kg | 51.588 lb
Weight, gross	36.1 kg | 79.587 lb

Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Above maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
REACH-SVHC	Compliant as per SVHC revision on www.commscope.com/ProductCompliance
ROHS	Compliant/Exempted

50 ISO 9001:2015

Included Products

BSAMNT-3 — Wide Profile Antenna Downtilt Mounting Kit for 2.4 - 4.5 in (60 - 115 mm) OD round members. Kit contains one scissor top bracket set and one bottom bracket set.

* Footnotes

Performance Note	Severe environmental conditions may degrade optimum performance

AIRSPACE®

Federal Aviation Regulations Part 77 Sub-Part C
Obstruction Analysis Report

Diamond Communications LLC
Sarah Schaaf
245 Regency Ct., Suite 101
Brookfield, WI 53045

E-mail: SBerry@diamondcomm.com
Phone: 2626494429 Fax:2396560881

Site Identification: Forest Trail 186
Nearest City: Baldwin, FL

Site Information (Coordinate Datum - NAD83)

Latitude:	30° - 12' - 50.5"	**Decimal Degrees:** 30.21402777777778°
Longitude:	81° - 57' - 9.4"	**Decimal Degrees:** 81.9526111111111°
Ground Elevation:	83 feet AMSL	
Structure Height:	186 feet AGL	
Overall Height:	269 feet AMSL	

FAA Number: Null
Airspace Study #: 2020-APS-111-OE

Analyzed on: 1/16/2020. Using Airspace® 19.11.443. Airspace® Data Date: 11/15/2019

This Airspace Analysis was completed under all obstacle evaluation rules specified in Federal Aviation Regulations (FAR) Part 77 sub-Part C.

Approved,

Ashley A Pittman-Long, Lead Airspace Specialist
Federal Airways and Airspace®
1423 S. Patrick Drive
Satellite Beach, FL 32937
(321) 777-1266

Clyde J Pittman, Aerospace Engineer

Date Printed: 01-20-2020

AIRSPACE®

Site ID Number: Forest Trail 186

AERONAUTICAL RECOMMENDATIONS

Notice to the FAA is not required at the analyzed height and location.

TERPS® analysis has been completed for the proposed site. **The maximum allowable height identified is 340 feet AMSL based upon Category D Circling at VQQ.**

The proposed structure does not penetrate obstruction standards. An aeronautical analysis by the Federal Aviation Administration would likely find no adverse aeronautical impact. An extended study will not be required. **The maximum not to exceed height to avoid an extended study by the FAA is 340 feet AMSL based upon FAR 77.17(a)(3).**

Marking and Lighting are not normally required for structures 200 feet or less. However, it may become a requirement based upon the outcome of the aeronautical study conducted by the FAA. It will then become part of the determination and a requirement of the determination.

No adverse impact to low altitude federal airways are identified.

No impact to VFR Traffic Pattern Airspace.

No Potential FCC Licensed AM Broadcast Station interference identified.

No impact to an Air Navigation Facility has been identified.

Date Printed: 01-20-2020

AIRSPACE®

Site ID Number: Forest Trail 186

LANDING FACILITY INFORMATION

The nearest public use landing facility to the proposed location is:
CECI (Ident: VQQ)

The distance to the nearest runway of this landing facility is 19259 feet or 3.6 statute miles. The true bearing is 85.74° to this landing facility.

Private landing facilities are exempt from review by the FAA under FAR Part 77. However, locating near a private landing facility may affect aircraft operations during take-off and landing.

The nearest private landing facility is: FL13: SPEN
The proposed structure is located 52923 feet or 10 statute miles.
The true bearing to this landing facility is 183 degrees.

The proposed structure is not within 3 nautical miles (3.45 statute miles) of the private landing facility. The likely hood of adverse impact to aircraft operations at the private facility is remote.

FAA NOTICE REQUIREMENTS

Notice to the FAA is not required because the proposed structure
1) is less than 200 feet above ground level [FAR Part 77.9(a)].
2) does not exceed runway slope criteria [FAR Part 77.9(b)].
3) is not a traverse way (road) [FAR 77.9(c)].
4) is not within a protected instrument procedure area [FAR 77.9 IFR].
5) is not on airport property [FAR 77.9(d)].
6) is not near an air navigation facility [FAR 77.9 IFR].

Date Printed: 01-20-2020

AIRSPACE®

Site ID Number: Forest Trail 186

AERONAUTICAL IMPACT

FAR Part 77 Subpart-C Obstruction Standards

The proposed structure would not violate or exceed obstruction standards as defined by FAR Part 77.17(a)(1), 77.17(a)(2) and 77.19.

Terminal Instrument Procedure Standards - FAR Part 77.17(a)(3)

No adverse impact with a US Terminal Approach or Departure Procedure has been identified.

Minimum Obstacle Clearance Altitude (MOCA) - FAR Part 77.17(a)(4)

The proposed structure is not located within a low altitude airway area or will not impact aircraft using any airway.

VFR Traffic Pattern Airspace

The proposed structure is not located within a VFR Traffic Pattern Airspace or is below the allowable height. It will not impact aircraft circling to land.

FCC Licensed AM Broadcast Station Proof-of-Performance

The proposed structure is not located within the specified range of an FCC Licensed AM radio and will not require Proof-of-Performance analysis.

Date Printed: 01-20-2020

****
* Federal Airways & Airspace *
* Summary Report: New Construction *
* Antenna Structure *
****

File: 2020-APS-111-OE

Location: Baldwin, FL

Latitude: 30°-12'-50.5" Longitude: 81°-57'-9.4"

SITE ELEVATION AMSL..... 83 ft.
STRUCTURE HEIGHT.....186 ft.
OVERALL HEIGHT AMSL.....269 ft.

NOTICE CRITERIA
FAR 77.9(a): NNR (DNE 200 ft AGL)
FAR 77.9(b): NNR (DNE Notice Slope)
FAR 77.9(c): NNR (Not a Traverse Way)
FAR 77.9: NR Exceeds VQQ Rwy 09R, TERPS analysis required.
NNR TERPS® Analysis Complete, DNE VQQ Rwy 09R.
FAR 77.9: NNR FAR 77.9 IFR Notice Criteria for HEG
FAR 77.9(d): NNR (Off Airport Construction)

NR = Notice Required
NNR = Notice Not Required
PNR = Possible Notice Required (depends upon actual IFR procedure)
Review Air Navigation Facilities at bottom of this report.

Notice is not required because a TERPS® analysis has been conducted. The structure, at the anlayzed height and location, is below the maximum allowable TERPS height.

NR = Notice Required
NNR = Notice Not Required
PNR = Possible Notice Required

OBSTRUCTION STANDARDS
FAR 77.17(a)(1): DNE 499 ft AGL
FAR 77.17(a)(2): DNE - Airport Surface
FAR 77.19(a): DNE - Horizontal Surface
FAR 77.19(b): DNE - Conical Surface
FAR 77.19(c): DNE - Primary Surface
FAR 77.19(d): DNE - Approach Surface
FAR 77.19(e): DNE - Approach Transitional Surface
FAR 77.19(e): DNE - Abeam Transitional Surface

VFR TRAFFIC PATTERN AIRSPACE FOR: VQQ: CECIL
Type: A RD: 19259.38 RE: 76.6
FAR 77.17(a)(1): DNE
FAR 77.17(a)(2): DNE - Height No Greater Than 200 feet AGL.
VFR Horizontal Surface: DNE
VFR Conical Surface: DNE
VFR Primary Surface: DNE
VFR Approach Surface: DNE
VFR Transitional Surface: DNE

VFR TRAFFIC PATTERN AIRSPACE FOR: HEG: HERLONG RECREATIONAL
Type: A RD: 48539.69 RE: 70.1
FAR 77.17(a)(1): DNE
FAR 77.17(a)(2): DNE - Greater Than 5.99 NM.

VFR Horizontal Surface: DNE
VFR Conical Surface: DNE
VFR Primary Surface: DNE
VFR Approach Surface: DNE
VFR Transitional Surface: DNE

TERPS DEPARTURE PROCEDURE (FAA Order 8260.3, Volume 4)
FAR 77.17(a)(3) Departure Surface Criteria (40:1)
DNE Departure Surface

MINIMUM OBSTACLE CLEARANCE ALTITUDE (MOCA)
FAR 77.17(a)(4) MOCA Altitude Enroute Criteria
The Maximum Height Permitted is 900 ft AMSL

PRIVATE LANDING FACILITIES
No Private Landing Facilites Are Within 6 NM

AIR NAVIGATION ELECTRONIC FACILITIES

FAC IDNT	TYPE	ST AT	FREQ	VECTOR	DIST (ft)	DELTA ELEVA	ST	LOCATION	GRND ANGLE	APCH BEAR
VQQ	VOR	R	117.9	91.14	19500	+192	FL	CECIL	.56	

Alert! IFR Notice is not Required for this structure.
Predict within Final Segment of Approach plus Fix Error Area. Predict within FAR 77.9 IFR Notice Requirement Area for VQQ: VOR RWY 09R
The maximum IFR No Notice Height for new construction is: 350' AMSL.

NZC	ATCT	ON	A/G	83.02	22928	-12	FL	CECIL FIELD NAS	-.03	
VQQ	LOCALIZER	I	109.5	70.57	26288	+190	FL	RWY 36R CECIL	.41	5
NEN	RADAR ARSR	Y	1288.0	27.32	54010	+82	FL	White House	.09	

No Impact. This structure does not require Notice based upon EMI.
The studied location is within 20 NM of a Radar facility.
The calculated Radar Line-Of-Sight (LOS) distance is: 37 NM.
This location and height is within the Radar Line-Of-Sight.

NIP	RADAR	ON		84.98	87086	+208	FL	JACKSONVILLE NAS	.14	

No Impact. This structure does not require Notice based upon EMI.
The studied location is within 20 NM of a Radar facility.
The calculated Radar Line-Of-Sight (LOS) distance is: 30 NM.
This location and height is within the Radar Line-Of-Sight.

NIP	TACAN	R	108.2	85.00	87990	+259	FL	JACKSONVILLE	.17	
NIP	ATCT	ON	A/G	86.62	90292	+247	FL	JACKSONVILLE NAS	.16	
KJAX	RADAR WXL	Y		38.73	126244	+138	FL	JACKSONVILLE WXL	.06	
JAX	RADAR	ON	2735.	38.84	130545	+174	FL	JACKSONVILLE INTL	.08	
JAX	ATCT	ON	A/G	39.95	132249	+78	FL	JACKSONVILLE INTL	.03	
JAX	CO	Y	A/G	38.1	133245	+186	FL	JAX RTR #1	.08	
JAX	CO	Y	A/G	38.54	134955	+187	FL	JAX RTR #2	.08	
CRG	ATCT	ON	A/G	71.95	145096	+147	FL	CRAIG MUNI	.06	
CRG	VORTAC	I	114.5	71.89	146939	+227	FL	CRAIG	.09	
NRB	TACAN	R	111.4	69.06	178782	+262	FL	MAYPORT	.08	
NRB	ATCT	ON	A/G	68.79	180987	+169	FL	MAYPORT NS (ADM D	.05	
NRB	RADAR	ON		69.37	187559	+185	FL	MAYPORT NS (ADM D	.06	
ZJX	CO	Y	A/G	266.31	202810	+82	FL	LAKE CITY	.02	
GNV	CO	Y	A/G	221.32	204316	+106	FL	GAINESVILLE RCAG	.03	
SGJ	CO	Y	A/G	134.01	233074	+176	FL	SAINT AUGUSTINE	.04	

CFR Title 47, §1.30000-§1.30004
AM STUDY NOT REQUIRED: Structure is not near a FCC licensed AM station. Movement Method Proof as specified in §73.151(c) is not required. Please review 'AM Station Report' for details.

Nearest AM Station: WOKV @ 10500 meters.

Airspace® State Summary Version 19.11.443

01-16-2020
08:33:39

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*********************************************
*      F.A.R. 77  OBSTRUCTION ANALYSIS      *
*********************************************

FILE: 2020-APS-111-OE

LATITUDE: 30°-12'-50.5"          LONGITUDE: 81°-57'-9.4"

SITE ELEVATION AMSL.....     83 ft.
STRUCTURE HEIGHT.........   186 ft.
OVERALL HEIGHT AMSL......   269 ft.


                  ***************
                  *** CAUTION ***
                  ***************

        > SPECIFIED HEIGHT ABOVE  GROUND IS <
        > 200  FEET  OR  LESS,  BUT GREATER <
        > THAN 180 FEET. VERIFY THE HEIGHT. <
        > INCLUDE ALL  APPURTENANCES,  SUCH <
        > AS,  ANTENNAS,  FLAG POLLS,  etc. <
        > ** IMPORTANT  AIR SAFETY ISSUE ** <


77.17(a)(1) A height more than 499 ft. Above Ground Level (AGL).

          ************* DOES NOT EXCEED *************

          THE MAXIMUM ALLOWABLE HEIGHT IS:..... 582  ft. AMSL

          THE GROUND ELEVATION AT THE SITE IS:... 83  ft. AMSL

          THE OVERALL CASE ELEVATION IS:......... 269  ft. AMSL

          THE CASE IS BELOW THE ALLOWABLE BY:.... 313  ft.

          *********************************************
                 BEGIN AIRPORT ANALYSIS FOR VQQ
          *********************************************

77.17(a)(2) A height AGL or airport elevation, whichever is higher.

          ************* DOES NOT EXCEED *************

          BECAUSE: Proposed height does not exceed 200 feet Above Ground Level.

          THE REFERENCE AIRPORT IDENT IS:........ VQQ

          THE AIRPORT ELEVATION IS:.............. 80  ft. AMSL

          THE DISTANCE FROM THE CASE TO ARP IS:.. 3.93  NAUTICAL MILES
```

THE BEARING AIRPORT TO CASE IS:..... 265.735 DEGREES

THE CASE HEIGHT AGL IS:..... 186 ft.

ALLOWABLE HEIGHT..... 376 ft. AMSL

77.19(a) A height exceeding a horizontal surface 150 ft. above airport elevation within a radius of >> VQQ <<.

********** DOES NOT EXCEED **********

NOT WITHIN SPECIFIED HORIZONTAL SURFACE AREA

77.19(b) A height exceeding a conical surface (a slope outward 4000 ft. from the horizontal surface at 20/1 ratio).

********** DOES NOT EXCEED **********

NOT WITHIN SPECIFIED CONICAL SURFACE AREA

****
* BEGIN RUNWAY ANALYSIS *
****

RUNWAY 09L/27R
EXISTING RUNWAY 09L/27R

77.19(c) A height exceeding runway primary surface.

********** DOES NOT EXCEED **********

NOT WITHIN SPECIFIED RUNWAY PRIMARY SURFACE

77.19(e) A height exceeding a transitional surface abeam runway.

********** DOES NOT EXCEED **********

NOT WITHIN SPECIFIED RUNWAY ABEAM TRANSITIONAL SURFACE

77.19(d) A height exceeding an approach surface of RUNWAY 09L.

THE BEARING TO THE CASE FROM THE THRESHOLD IS..... 266.117 degrees

THE NORMAL BEARING TO THE CENTERLINE IS..... 179.56 degrees

THE CENTERLINE OUTBOUND TRUE BEARING IS..... 269.56 degrees

THE ABEAM DISTANCE TO CENTERLINE FROM CASE IS..... 1135.19 ft.

THE RUNWAY THRESHOLD ELEVATION IS..... 79.6 ft. AMSL

THE DISTANCE FROM THRESHOLD + 200' TO THE CASE IS... 19088.041 ft.

THE DISTANCE FROM THRESHOLD + 200' TO NB IS..... 19053.7 ft.

THE CRITICAL WIDTH OF HALF THE APPROACH IS..... 2155.365 ft.

********** DOES NOT EXCEED **********

CASE IS BEYOND APPROACH SURFACE, OUT BY..... 9053.65 ft.

THE SLOPE OF RUNWAY 09L IS: 20 TO 1.

The FAA has defined this runway as a non-utility runway. It has a visual approach. The obstacle surface extends 5000 feet (20:1 Slope) symmetrically centered along the runway centerline extended. This airport may have a circling approach. Please review the US Terminal Procedures volume associated with this airport. If a procedure for this airport and/or this runway exist use Terps® Professional software to determine the height limits (if any) the procedure will have on the proposed structure. A circling approach to the airport or any runway can extend out up to 4.5 NM from every runway end.

****
* BEGIN RUNWAY ANALYSIS *
****

RUNWAY 09R/27L
EXISTING RUNWAY 09R/27L

77.19(c) A height exceeding runway primary surface.

********** DOES NOT EXCEED **********

NOT WITHIN SPECIFIED RUNWAY PRIMARY SURFACE

77.19(e) A height exceeding a transitional surface abeam runway.

********** DOES NOT EXCEED **********

NOT WITHIN SPECIFIED RUNWAY ABEAM TRANSITIONAL SURFACE

77.19(d) A height exceeding an approach surface of RUNWAY 09R.

THE BEARING TO THE CASE FROM THE THRESHOLD IS..... 268.218 degrees

THE NORMAL BEARING TO THE CENTERLINE IS..... 179.55 degrees

THE CENTERLINE OUTBOUND TRUE BEARING IS..... 269.55 degrees

THE ABEAM DISTANCE TO CENTERLINE FROM CASE IS..... 434.36 ft.

THE RUNWAY THRESHOLD ELEVATION IS..... 76.6 ft. AMSL

THE DISTANCE FROM THRESHOLD + 200' TO THE CASE IS... 19059.431 ft.

THE DISTANCE FROM THRESHOLD + 200' TO NB IS..... 19054.3 ft.

THE CRITICAL WIDTH OF HALF THE APPROACH IS..... 3108.138 ft.

********** DOES NOT EXCEED **********

CASE IS BEYOND APPROACH SURFACE, OUT BY..... 9054.25 ft.

THE SLOPE OF RUNWAY 09R IS: 34 TO 1.

The FAA has defined this runway as a non-utility runway. It has a non-precision approach. The obstacle surface extends 10,000 feet (34:1 Slope) symmetrically centered along the runway centerline extended. Please review the US Terminal Procedures volume associated with this airport. If a procedure for this airport and/or runway exist use Terps® Professional software to determine the height limits (if any) the procedure will have on the proposed structure. Non-precision instrument procedures can extend 10 NM from the runway and a circling approach to the airport or runway can extend out up to 4.5 NM from every runway end.

****
* BEGIN RUNWAY ANALYSIS *
****

RUNWAY 18L/36R
EXISTING RUNWAY 18L/36R

77.19(c) A height exceeding runway primary surface.

********** DOES NOT EXCEED **********

NOT WITHIN SPECIFIED RUNWAY PRIMARY SURFACE

SITE GREATER THAN 500 FT FROM RUNWAY CENTERLINE.

SITE RUNWAY CENTERLINE OFFSET DISTANCE IS 24856 FT.

77.19(e) A height exceeding a transitional surface abeam runway.

********** DOES NOT EXCEED **********

SITE GREATER THAN 10,000 FT FROM RUNWAY CENTERLINE

77.19(d) A height exceeding an approach surface of RUNWAY 36R.

********** DOES NOT EXCEED **********

OUTSIDE APPROACH ANGULAR CRITERIA FOR THIS RUNWAY.

****
* BEGIN RUNWAY ANALYSIS *
****

RUNWAY 18R/36L
EXISTING RUNWAY 18R/36L

77.19(c) A height exceeding runway primary surface.

********** DOES NOT EXCEED **********

NOT WITHIN SPECIFIED RUNWAY PRIMARY SURFACE

SITE GREATER THAN 250 FT FROM RUNWAY CENTERLINE.

SITE RUNWAY CENTERLINE OFFSET DISTANCE IS 24156 FT.

77.19(e) A height exceeding a transitional surface abeam runway.

********** DOES NOT EXCEED **********

SITE GREATER THAN 10,000 FT FROM RUNWAY CENTERLINE

77.19(d) A height exceeding an approach surface of RUNWAY 36L.

********** DOES NOT EXCEED **********

OUTSIDE APPROACH ANGULAR CRITERIA FOR THIS RUNWAY.

****
* BEGIN RUNWAY ANALYSIS *
****

RUNWAY 35/17
PROPOSED RUNWAY 35/17

77.19(c) A height exceeding runway primary surface.

********** DOES NOT EXCEED **********

NOT WITHIN SPECIFIED RUNWAY PRIMARY SURFACE

77.19(e) A height exceeding a transitional surface abeam runway.

********** DOES NOT EXCEED **********

NOT WITHIN SPECIFIED RUNWAY ABEAM TRANSITIONAL SURFACE

77.19(d) A height exceeding an approach surface of RUNWAY 17.

THE BEARING TO THE CASE FROM THE THRESHOLD IS..... 267.893 degrees

THE NORMAL BEARING TO THE CENTERLINE IS..... 269.57 degrees

THE CENTERLINE OUTBOUND TRUE BEARING IS..... 179.57 degrees

THE ABEAM DISTANCE TO CENTERLINE FROM CASE IS..... 30618.58 ft.

THE RUNWAY THRESHOLD ELEVATION IS..... 70 ft. AMSL

THE DISTANCE FROM THRESHOLD + 200' TO THE CASE IS... 30630.933 ft.

THE DISTANCE FROM THRESHOLD + 200' TO NB IS..... 896.22 ft.

THE CRITICAL WIDTH OF HALF THE APPROACH IS..... 384.426 ft.

********** DOES NOT EXCEED **********

BEYOND DEFINED APPROACH & TRANSITIONAL AREAS.

RUNWAY CENTERLINE OFFSET IS..... 30618.58 ft.

DISTANCE FROM THE THRESHOLD TO OFFSET IS..... 1096.17 ft.

THE SLOPE OF RUNWAY 17 IS: 34 TO 1.

The FAA has defined this runway as a non-utility runway. It has a non-precision approach. The obstacle surface extends 10,000 feet (34:1 Slope) symmetrically centered along the runway centerline extended. Please review the US Terminal Procedures volume associated with this airport. If a procedure for this airport and/or runway exist use Terps® Professional software to determine the height limits (if any) the procedure will have on the proposed structure. Non-precision instrument procedures can extend 10 NM from the runway and a circling approach to the airport or runway can extend out up to 4.5 NM from every runway end.

****
BEGIN AIRPORT ANALYSIS FOR HEG
****

77.17(a)(2) A height AGL or airport elevation, whichever is higher.

********** DOES NOT EXCEED **********

BECAUSE: Location studied is further than 5.99 nm. from ARP.

77.19(a) A height exceeding a horizontal surface 150 ft. above airport elevation within a radius of >> HEG <<.

********** DOES NOT EXCEED **********

NOT WITHIN SPECIFIED HORIZONTAL SURFACE AREA

77.19(b) A height exceeding a conical surface (a slope outward 4000 ft. from the horizontal surface at 20/1 ratio).

********** DOES NOT EXCEED **********

NOT WITHIN SPECIFIED CONICAL SURFACE AREA

****
* BEGIN RUNWAY ANALYSIS *
****

RUNWAY 07/25
EXISTING RUNWAY 07/25

77.19(c) A height exceeding runway primary surface.

********** DOES NOT EXCEED **********

NOT WITHIN SPECIFIED RUNWAY PRIMARY SURFACE

77.19(e) A height exceeding a transitional surface abeam runway.

********** DOES NOT EXCEED **********

NOT WITHIN SPECIFIED RUNWAY ABEAM TRANSITIONAL SURFACE

77.19(d) A height exceeding an approach surface of RUNWAY 07.

THE BEARING TO THE CASE FROM THE THRESHOLD IS..... 242.421 degrees

THE NORMAL BEARING TO THE CENTERLINE IS..... 154.66 degrees

THE CENTERLINE OUTBOUND TRUE BEARING IS..... 244.66 degrees

THE ABEAM DISTANCE TO CENTERLINE FROM CASE IS..... 1852.82 ft.

THE RUNWAY THRESHOLD ELEVATION IS..... 73.4 ft. AMSL

THE DISTANCE FROM THRESHOLD + 200' TO THE CASE IS... 48839.438 ft.

THE DISTANCE FROM THRESHOLD + 200' TO NB IS..... 48802.09 ft.

THE CRITICAL WIDTH OF HALF THE APPROACH IS..... 5130.205 ft.

********** DOES NOT EXCEED **********

CASE IS BEYOND APPROACH SURFACE, OUT BY..... 38802.05 ft.

THE SLOPE OF RUNWAY 07 IS: 20 TO 1.

The FAA has defined this runway as a non-utility runway. It has a visual approach. The obstacle surface extends 5000 feet (20:1 Slope) symmetrically centered along the runway centerline extended. This airport may have a circling approach. Please review the US Terminal Procedures volume associated with this airport. If a procedure for this airport and/or this runway exist use Terps® Professional software to determine the height limits (if any) the procedure will have on the proposed structure. A circling approach to the airport or any runway can extend out up to 4.5 NM from every runway end.

****
* BEGIN RUNWAY ANALYSIS *
****

RUNWAY 11/29
EXISTING RUNWAY 11/29

77.19(c) A height exceeding runway primary surface.

********** DOES NOT EXCEED **********

NOT WITHIN SPECIFIED RUNWAY PRIMARY SURFACE

77.19(e) A height exceeding a transitional surface abeam runway.

********** DOES NOT EXCEED **********

NOT WITHIN SPECIFIED RUNWAY ABEAM TRANSITIONAL SURFACE

77.19(d) A height exceeding an approach surface of RUNWAY 11.

THE BEARING TO THE CASE FROM THE THRESHOLD IS..... 242.755 degrees

THE NORMAL BEARING TO THE CENTERLINE IS..... 199.68 degrees

THE CENTERLINE OUTBOUND TRUE BEARING IS..... 289.68 degrees

THE ABEAM DISTANCE TO CENTERLINE FROM CASE IS..... 37439.95 ft.

THE RUNWAY THRESHOLD ELEVATION IS..... 86.7 ft. AMSL

THE DISTANCE FROM THRESHOLD + 200' TO THE CASE IS... 51315.035 ft.

THE DISTANCE FROM THRESHOLD + 200' TO NB IS..... 35044.99 ft.

THE CRITICAL WIDTH OF HALF THE APPROACH IS..... 3629.495 ft.

********** DOES NOT EXCEED **********

BEYOND DEFINED APPROACH & TRANSITIONAL AREAS.

RUNWAY CENTERLINE OFFSET IS..... 37439.95 ft.

DISTANCE FROM THE THRESHOLD TO OFFSET IS..... 35244.95 ft.

THE SLOPE OF RUNWAY 11 IS: 20 TO 1.

The FAA has defined this runway as a utility runway. It has a visual approach. The obstacle surface extends 5000 feet (20:1 Slope) symmetrically centered along the runway centerline extended. This airport may have a circling approach. Please review the US Terminal Procedures volume associated with this airport. If a procedure for this airport and/or this runway exist, use Terps® Professional software to determine the height limits (if any) the procedure will have on the proposed structure. A circling approach to the airport or any runway can extend out up to 4.5 NM from every runway end.

****
* BEGIN RUNWAY ANALYSIS *
****

RUNWAY 07/25
PROPOSED RUNWAY 07/25

77.19(c) A height exceeding runway primary surface.

********** DOES NOT EXCEED **********

NOT WITHIN SPECIFIED RUNWAY PRIMARY SURFACE

77.19(e) A height exceeding a transitional surface abeam runway.

********** DOES NOT EXCEED **********

NOT WITHIN SPECIFIED RUNWAY ABEAM TRANSITIONAL SURFACE

77.19(d) A height exceeding an approach surface of RUNWAY 07.

THE BEARING TO THE CASE FROM THE THRESHOLD IS..... 242.399 degrees

THE NORMAL BEARING TO THE CENTERLINE IS..... 154.66 degrees

THE CENTERLINE OUTBOUND TRUE BEARING IS..... 244.66 degrees

THE ABEAM DISTANCE TO CENTERLINE FROM CASE IS..... 1852.47 ft.

THE RUNWAY THRESHOLD ELEVATION IS..... 70.1 ft. AMSL

THE DISTANCE FROM THRESHOLD + 200' TO THE CASE IS... 48339.836 ft.

THE DISTANCE FROM THRESHOLD + 200' TO NB IS..... 48302.16 ft.

THE CRITICAL WIDTH OF HALF THE APPROACH IS..... 7495.318 ft.

********** DOES NOT EXCEED **********

CASE IS BEYOND APPROACH SURFACE, OUT BY..... 38302.12 ft.

THE SLOPE OF RUNWAY 07 IS: 34 TO 1.

The FAA has defined this runway as a non-utility runway. It has a non-precision approach. The obstacle surface extends 10,000 feet (34:1 Slope) symmetrically centered along the runway centerline extended. Please review the US Terminal Procedures volume associated with this airport. If a procedure for this airport and/or runway exist use Terps® Professional software to determine the height limits (if any) the procedure will have on the proposed structure. Non-precision instrument procedures can extend 10 NM from the runway and a circling approach to the airport or runway can extend out up to 4.5 NM from every runway end.

Airspace Data Version: 2019.11.443

01-16-2020
08:33:23

****
* PUBLIC AIRPORTS IN PROXIMITY OF CASE *
****

File: 2020-APS-111-OE

OVERALL ELEVATION (AMSL): 269
LATITUDE: 30°-12'-50.5"
LONGITUDE: 81°-57'-9.4"

FACIL IDENT	TYP	NAME	BEARING To FACIL	DISTANCE IN N.M.	DELTA ARP ELEVATION	FAR P77
VQQ	AIR	CECIL	85.74	3.93	+189.4	YES

This facility has at least one runway over 3,200 feet in length.

Your structure DNE FAR 77.9(a) or 77.9(b) Notice Criteria for this airport. However, you may EXCEED other Notice Standards. As a minimum, please review reports for FAR Part 77 Obstruction Surfaces, Air Navigation and Communication facilities.

Below FAR 77.9(b)(2) Notice Criteria by: 0 feet.

You are 19259 feet from the nearest runway threshold and the threshold elevation is 77 feet. Please review runway analysis for remaining airport surfaces.

This facility has a circling approach procedure. Circling procedures have a Straight-In segment. The site can be out of the circling approach area and still be in the straight in approach segment. Please review published US Terminal Procedures for this landing facility to determine what impact (if any) this site has on the procedure(s) and/or airport.

Possible Exceeds FAR 77.9 IFR for VQQ Rwy 09R, TERPS analysis required.

Category 'A' Circling Area extends 1.30 NM from all runways.
Category 'B' Circling Area extends 1.84 NM from all runways.
Category 'C' Circling Area extends 2.89 NM from all runways.
Category 'D' Circling Area extends 3.78 NM from all runways.
Category 'E' Circling Area extends 4.73 NM from all runways.

FACIL IDENT	TYP	NAME	BEARING To FACIL	DISTANCE IN N.M.	DELTA ARP ELEVATION	FAR P77
HEG	AIR	HERLONG RECREATIONAL	63.39	8.529	+183.1	YES

This facility has at least one runway over 3,200 feet in length.

Your structure DNE FAR 77.9(a) or 77.9(b) Notice Criteria for this airport.

However, you may EXCEED other Notice Standards. As a minimum, please review reports for FAR Part 77 Obstruction Surfaces, Air Navigation and Communication facilities.

You are 48539 feet from the nearest runway threshold and the threshold elevation is 70 feet. Please review runway analysis for remaining airport surfaces.

This facility has a circling approach procedure. Circling procedures have a Straight-In segment. The site can be out of the circling approach area and still be in the straight in approach segment. Please review published US Terminal Procedures for this landing facility to determine what impact (if any) this site has on the procedure(s) and/or airport.

DNE 77.9 IFR Notice Criteria HEG

Category 'A' Circling Area extends 1.30 NM from all runways.
Category 'B' Circling Area extends 1.84 NM from all runways.
Category 'C' Circling Area extends 2.89 NM from all runways.
Category 'D' Circling Area extends 3.78 NM from all runways.
Category 'E' Circling Area extends 4.73 NM from all runways.

FACIL IDENT	TYP	NAME	BEARING To FACIL	DISTANCE IN N.M.	DELTA ARP ELEVATION	FAR P77
NEN	AIR	WHITEHOUSE NOLF	28.75	9.247	+172	YES

This facility has at least one runway over 3,200 feet in length.

Your structure DNE FAR 77.9(a) or 77.9(b) Notice Criteria for this airport. However, you may EXCEED other Notice Standards. As a minimum, please review reports for FAR Part 77 Obstruction Surfaces, Air Navigation and Communication facilities.

You are 56415 feet from the nearest runway threshold and the threshold elevation is 0 feet. Please review runway analysis for remaining airport surfaces.

This facility has a circling approach procedure. Circling procedures have a Straight-In segment. The site can be out of the circling approach area and still be in the straight in approach segment. Please review published US Terminal Procedures for this landing facility to determine what impact (if any) this site has on the procedure(s) and/or airport.

DNE 77.9 IFR Notice Criteria NEN

Category 'A' Circling Area extends 1.30 NM from all runways.
Category 'B' Circling Area extends 1.84 NM from all runways.
Category 'C' Circling Area extends 2.89 NM from all runways.
Category 'D' Circling Area extends 3.78 NM from all runways.
Category 'E' Circling Area extends 4.73 NM from all runways.

Airspace® State Data Version 2019.11.443

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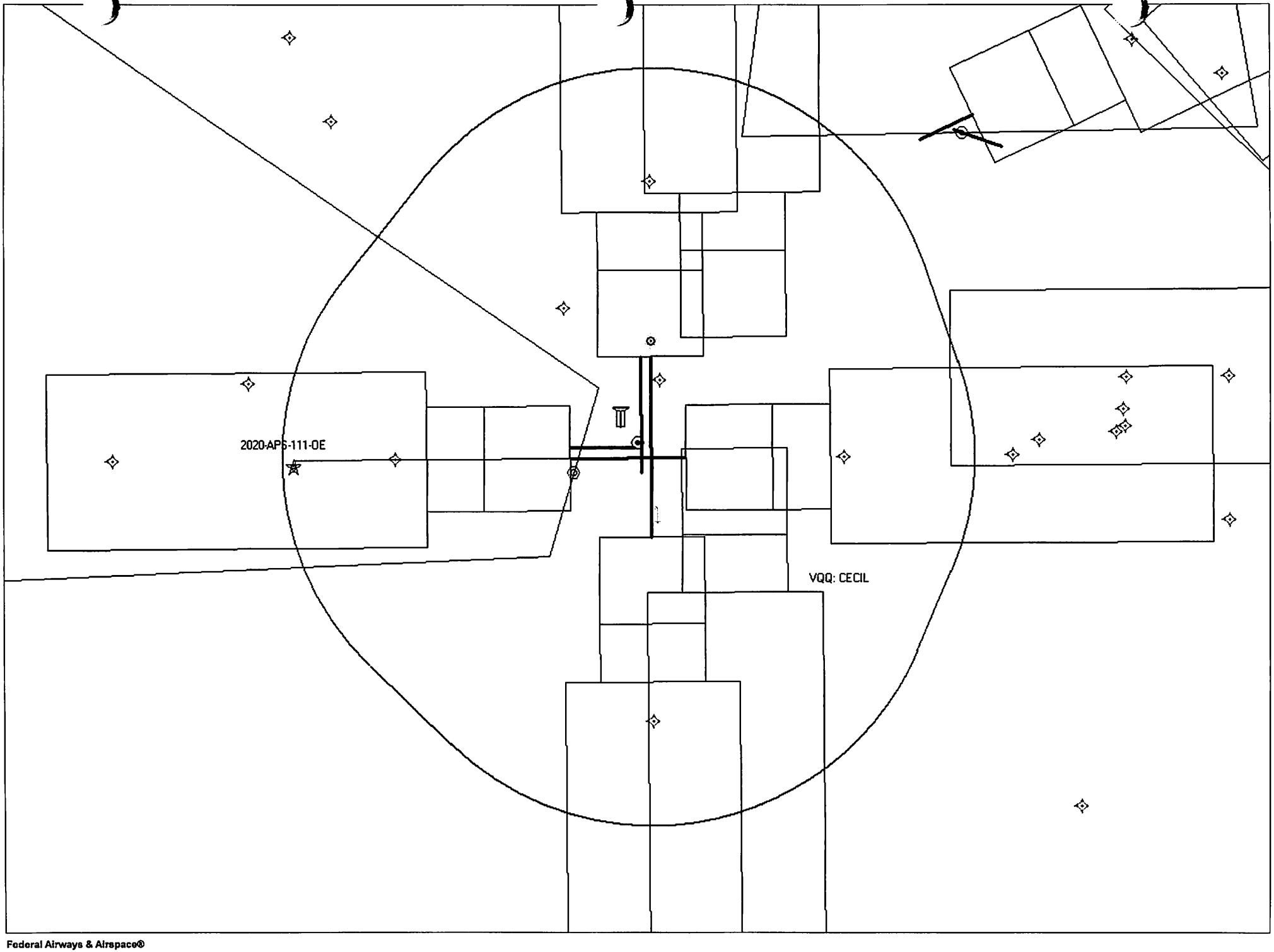
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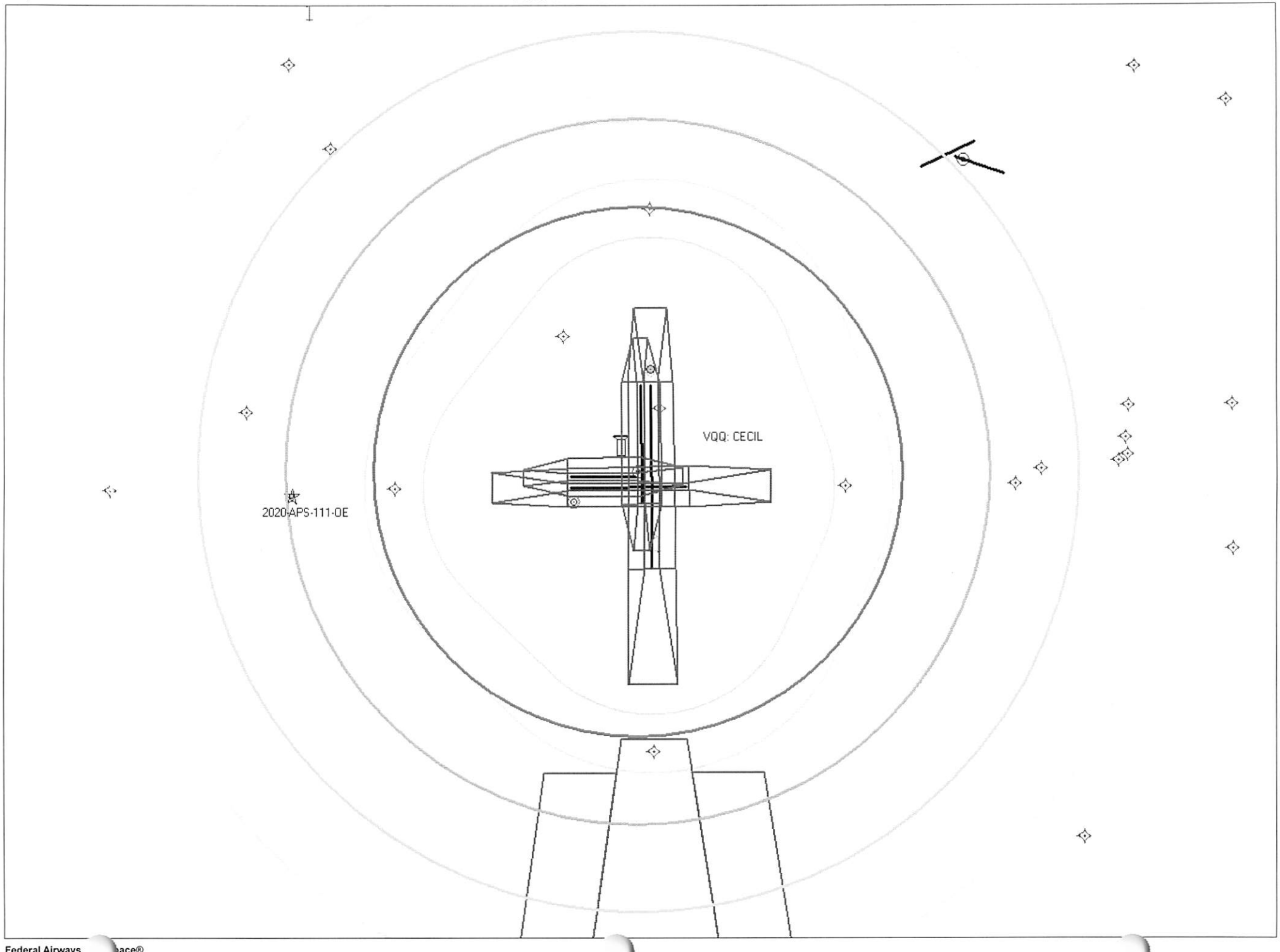
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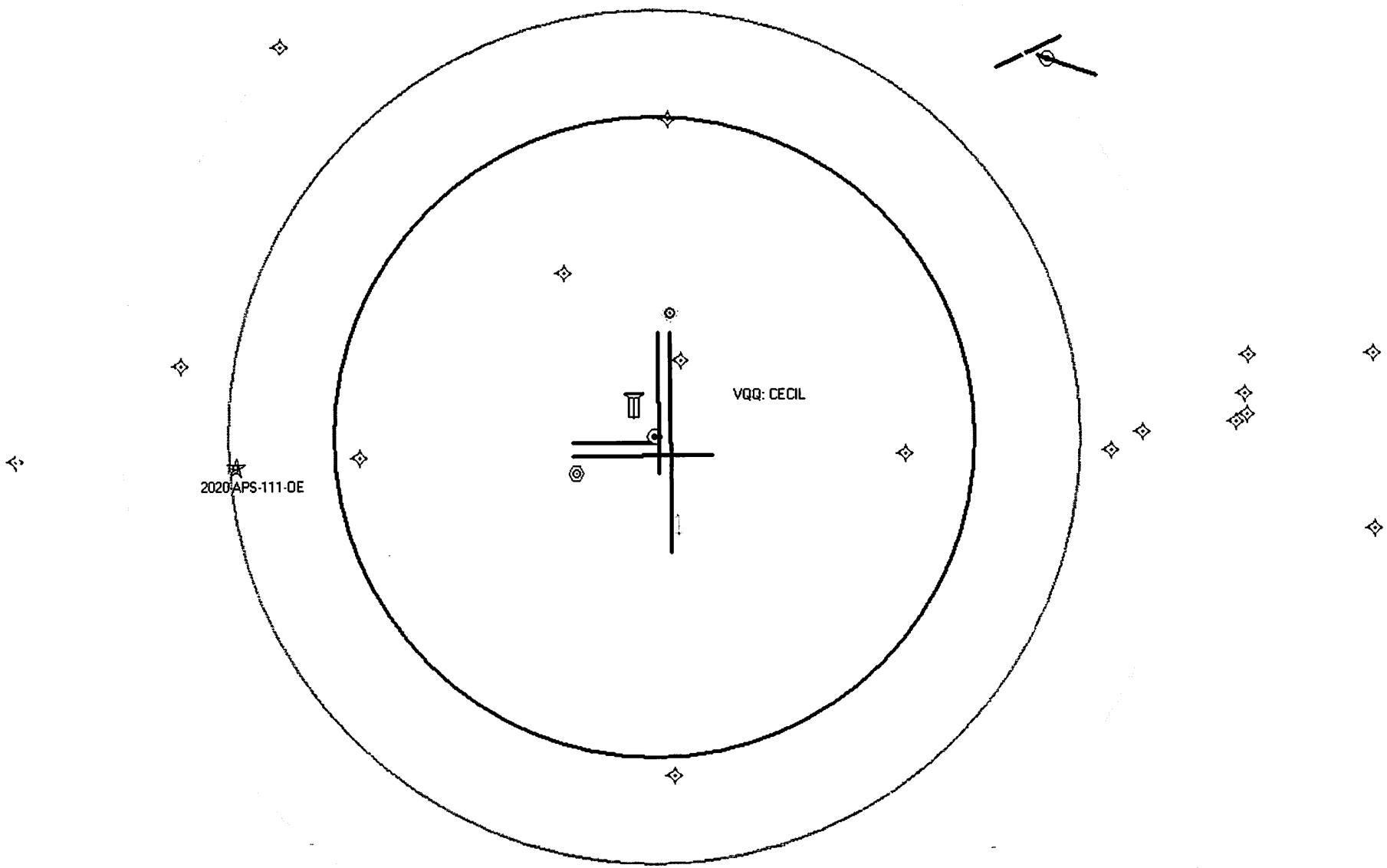
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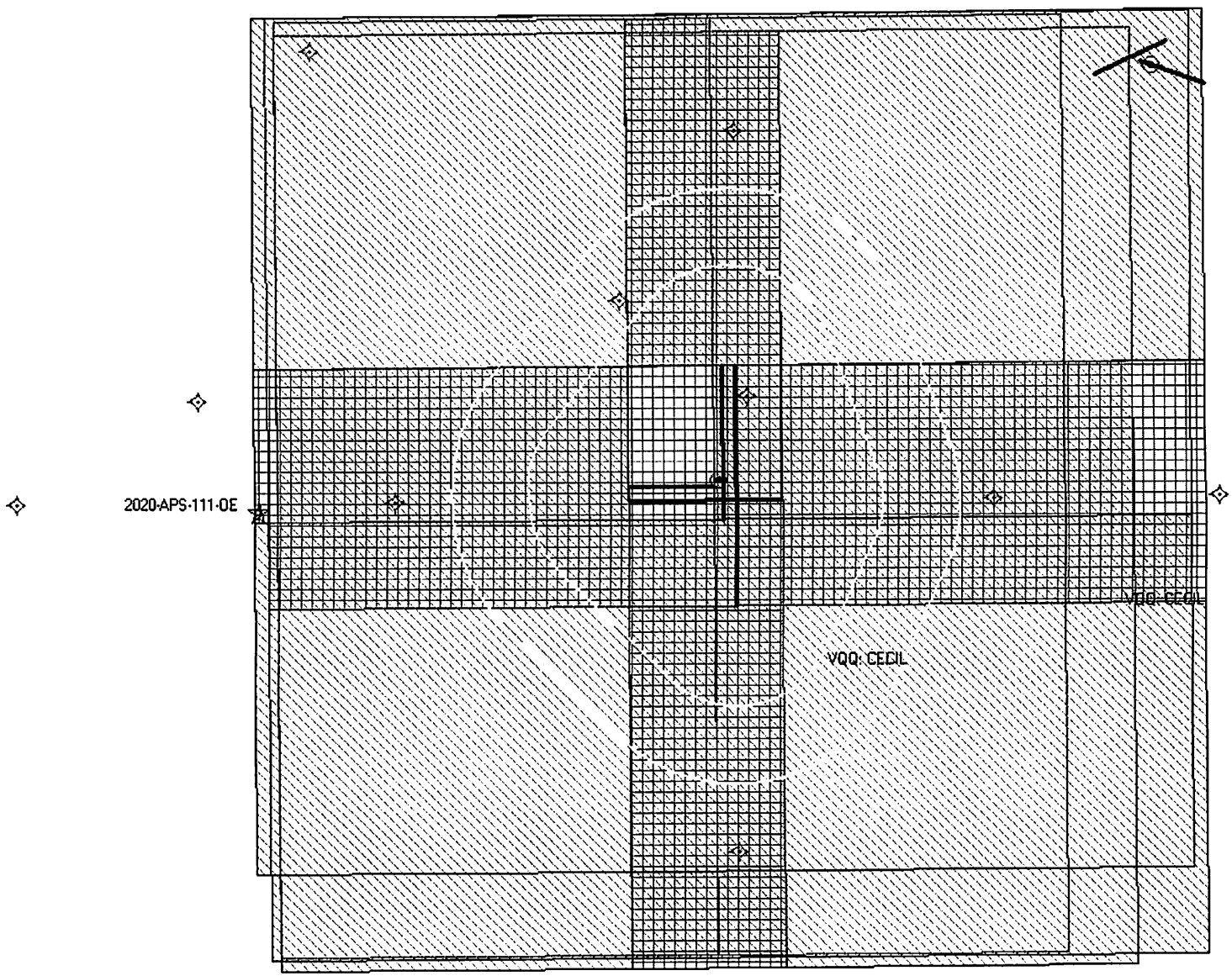
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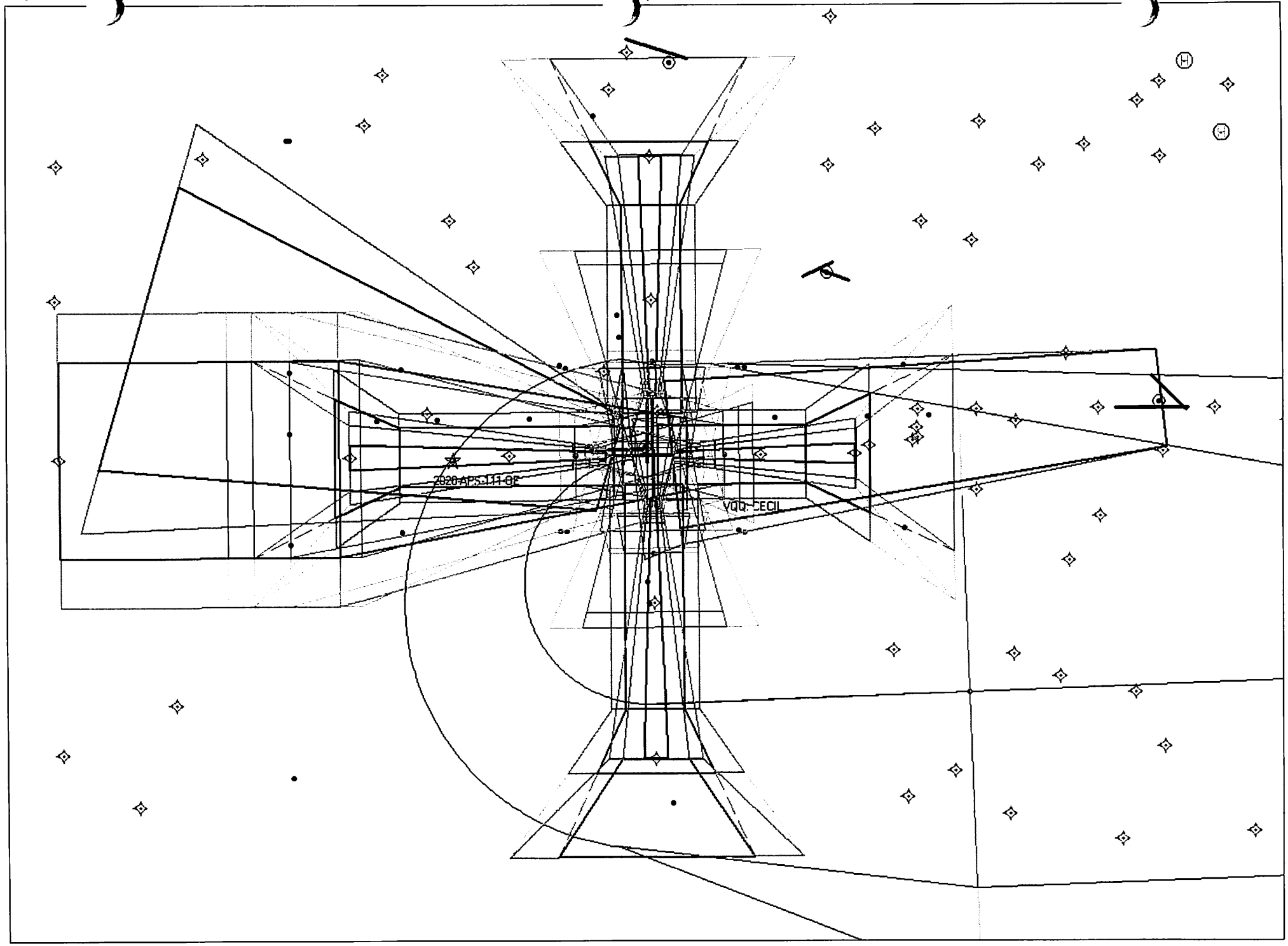
2020 APS-111-0E
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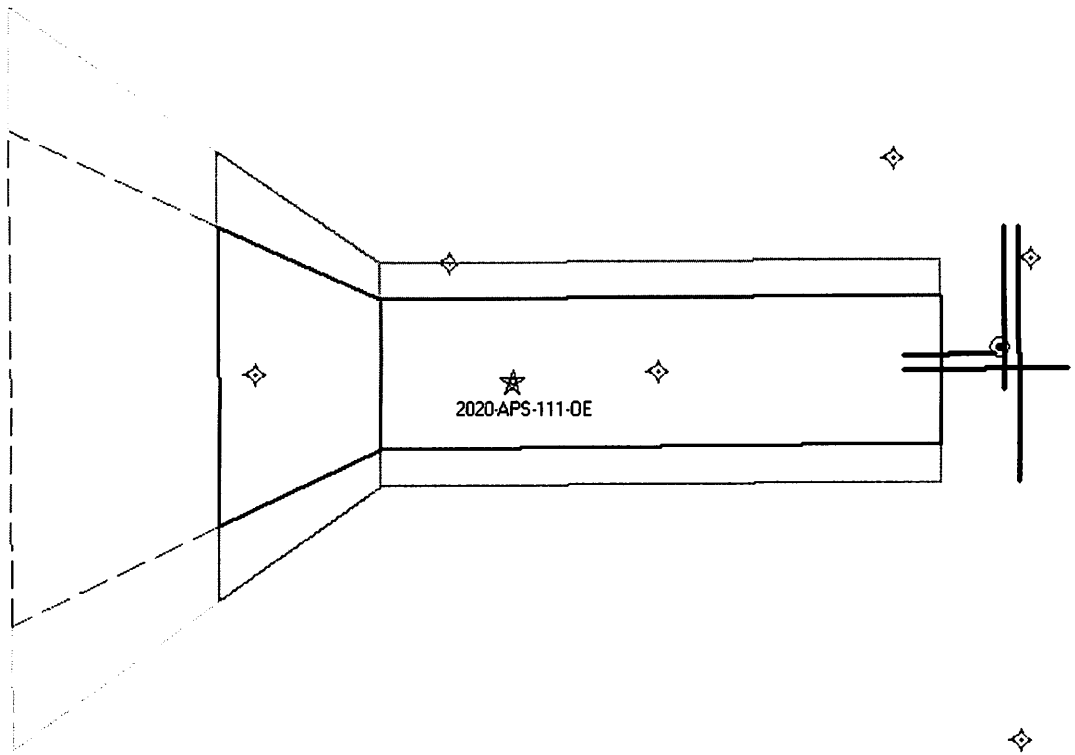

VQQ: CECIL
2020-APS-111-OE

VQQ: LNAV RWY 09R

***** 2020-APS-111-OE *****

CECIL - Runway: 09R

Date: 01-16-2020 Time: 10:19:05

STUDY OBJECT DATA

Study Latitude: 30° 12' 50.5" N
Study Longitude: 81° 57' 9.4" W
Ground Elevation: 83' AMSL ft.
AGL Height: 186' AGL ft.
Overall Elevation: 269' AMSL ft.

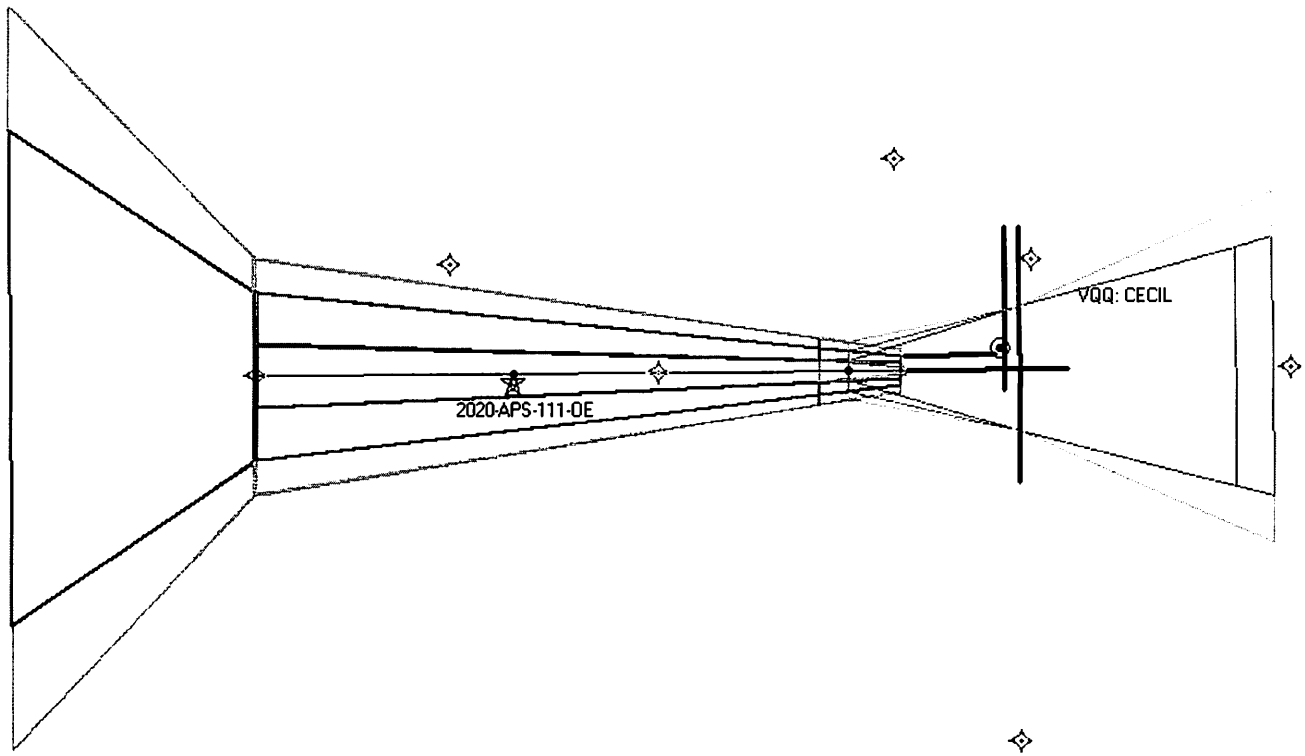
INSTRUMENT APPROACH PROCEDURE (IAP) ANALYSIS

ATX Distance: 21080 ft.
ABM Distance: 413 ft.
MDA: 760 MSL ft.
ROC: 250 ft.

PROCEDURE: Straight-In Area: Primary
Maximum Allowable Height (AMSL): 510 ft.

PROCEDURE: Visual Segment Area: Outside
Maximum Allowable Height (AMSL): DNE ft.

The mathematical algorithms used by this program are derived directly from Federal Aviation Administration (FAA) Orders on Instrument Flight Procedures.


VQQ: CECIL
2020-APS-111-OE

PRECISION LANDING SYSTEM - PROCEDURE ANALYSIS

***** 2020-APS-111-OE *****

CECIL - Runway: 09R

Date: 01-16-2020 Time: 10:20:51

STUDY OBJECT DATA

Latitude: 30° 12' 50.5" Longitude: 81° 57' 9.4"
Ground Elevation: 83' AMSL
AGL Height: 186' AGL
Overall Elevation: 269' AMSL

PRECISION INSTRUMENT APPROACH PROCEDURE ANALYSIS

ATX Distance: 19255.05 feet.
ABM Distance: 398.3 feet.
PROCEDURE: DNE 'W' Surface: (640' AMSL)

MISSED APPROACH PROCEDURE (MAP) ANALYSIS

ATX Distance: feet.
ABM Distance: feet.
MISSED APPROACH: DNE MAS

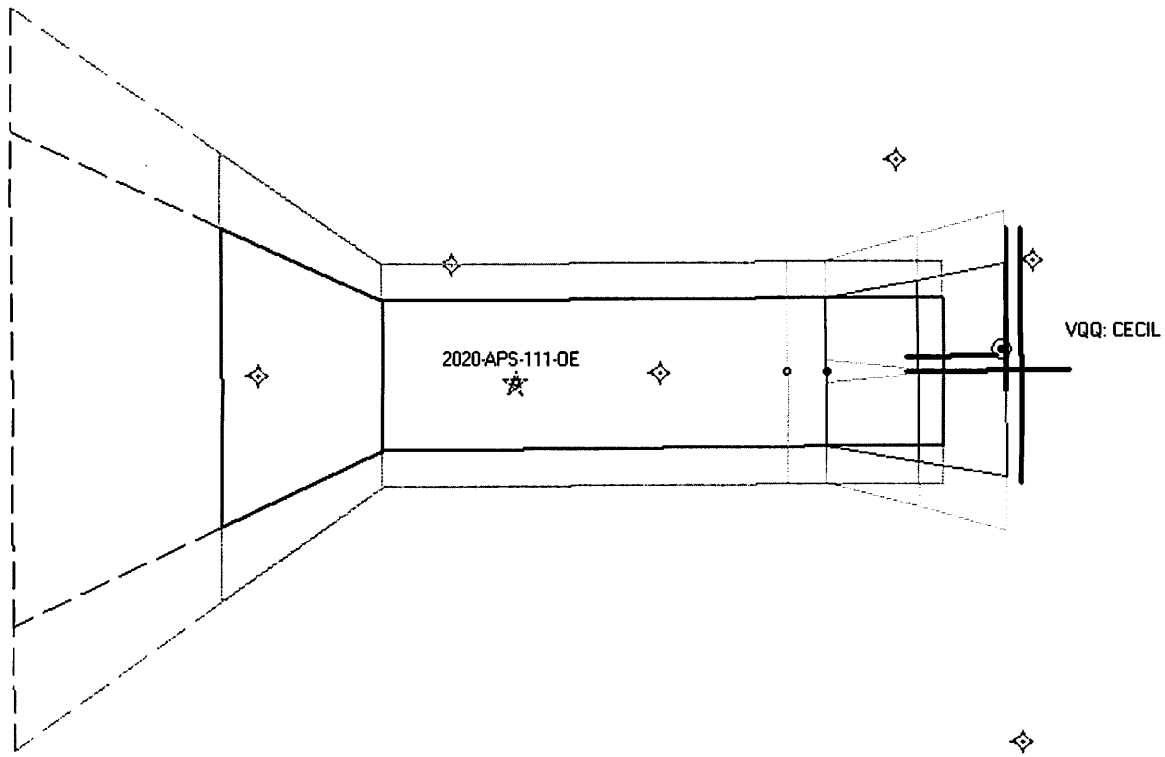
PRECISION PROCEDURE DATA

OCS Origin Latitude: 30° 12' 56"
OCS Origin Longitude: 81° 53' 32.28"
FAF Latitude: 30° 12' 53.71"
FAF Longitude: 81° 59' 33.25"
Course Heading (T): 94.5°
Distance to FAF: 5.3

DECISION ALTITUDE (DA) DATA

DA Latitude: 30° 12' 55.9633"
DA Longitude: 81° 54' 18.0588"
TDZE: 77'AMSL
Decision Height: 351' AMSL
TCH: 53 feet
Glide Slope Angle: 3.00 degrees
LTP Elevation: 76.6' AMSL
GPI: 1011.3 feet

Calculated DA: NC feet
Maximum AMSL: 640 feet


2020-APS-111-OE
VQQ: CECIL

VNAV Procedure

***** 2020-APS-111-OE *****

VQQ Runway: 09R

Date: 01-16-2020 Time: 10:26:16

STUDY OBJECT DATA

Study Latitude: 30° 12' 50.5"
Study Longitude: 81° 57' 9.4"
Ground Elevation: 83' AMSL
AGL Height: 186' AGL
Overall Elevation: 269' AMSL

INSTRUMENT APPROACH PROCEDURE (IAP) ANALYSIS

Along Track Distance: 19254.7 feet.
Abeam Distance: 414.46 feet.

PROCEDURE: Maximum AMSL: 737.8 ft
PROCEDURE: FAS: Max AMSL 737.8' AMSL.
PROCEDURE: Object not within FSL Extension Area.
PROCEDURE: DNE GQS
PROCEDURE: OCS Slope: 23.424:1

MISSED APPROACH PROCEDURE (MAP) ANALYSIS

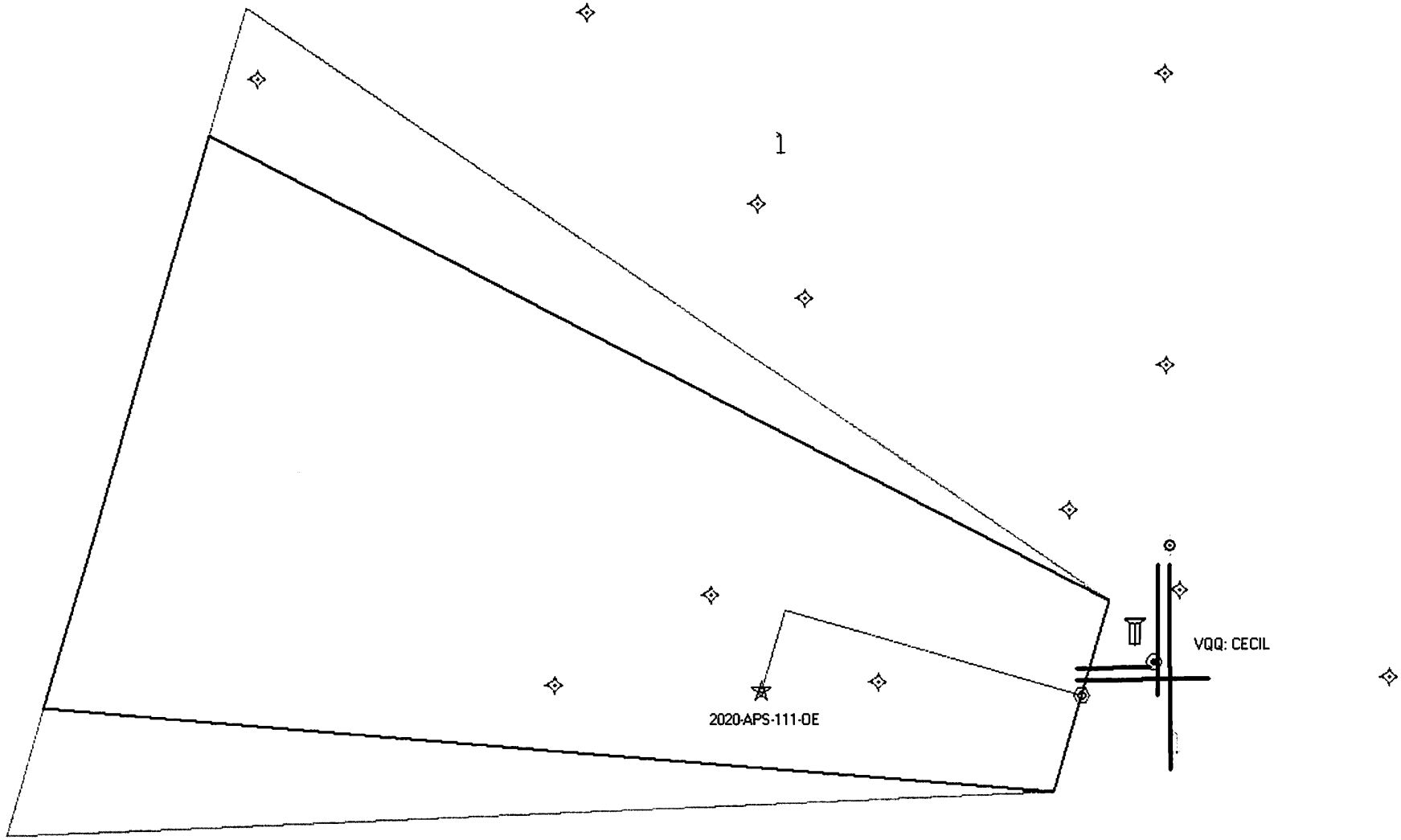
MAP Along Track Distance: feet.
Abeam Distance: feet.
Flat Surface Length: 4559.42 feet FSL Altitude: 177 feet AMSL.
MISSED APPROACH: DNE MAS

PROCEDURE DATA

OCS Origin Latitude: 30° 12' 56.484"
OCS Origin Longitude: 81° 53' 9.204"
FAF Latitude: 30° 12' 53.71"
FAF Longitude: 81° 59' 33.25"
In Bound Course Heading: 94.5°
Distance to FAF: 5.3 NM
Distance to Docs: 5860.7' feet

DECISION HEIGHT (DH) DATA

DH Latitude: 30° 12' 55.984"
DH Longitude: 81° 54' 15.325"
TDZE: 77'AMSL
Decision Height: 338' AMSL
TCH: 53 feet
Glide Slope Angle: 3.00°
Rwy Threshold Elevation: 76.6' AMSL
GPI: 3976 feet
Aircraft Category: D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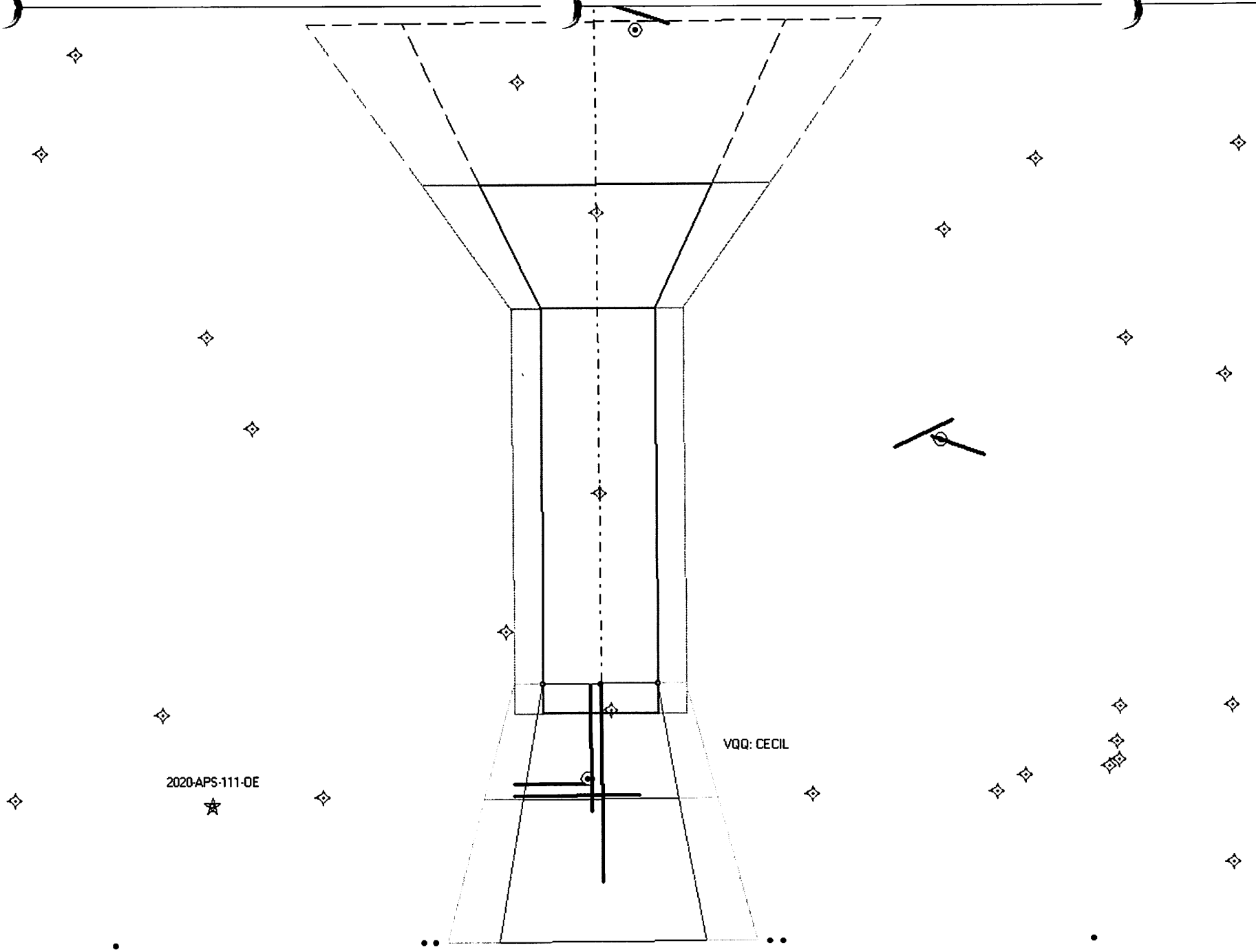
VQQ: CECIL
2020-APS-111-OE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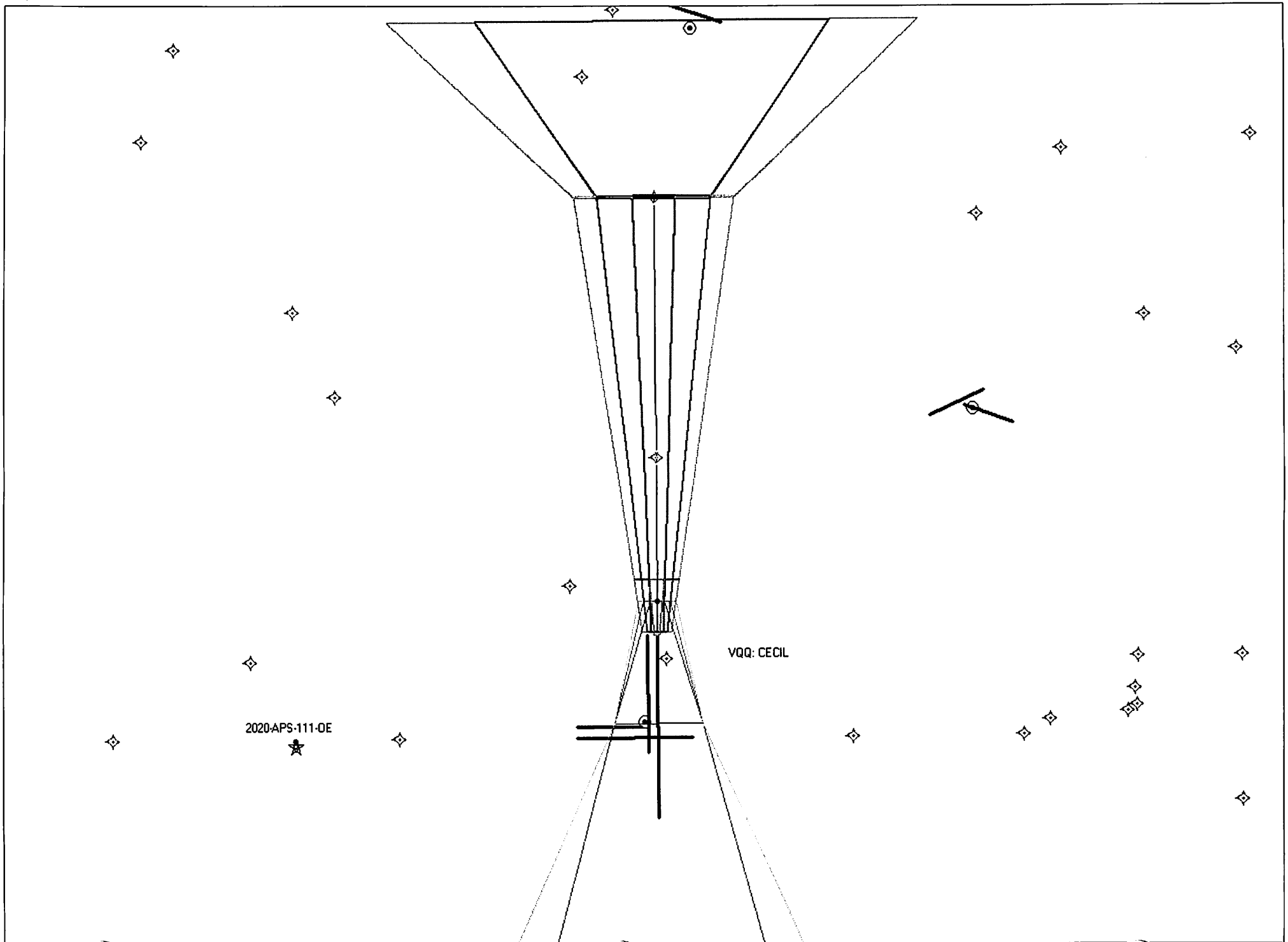
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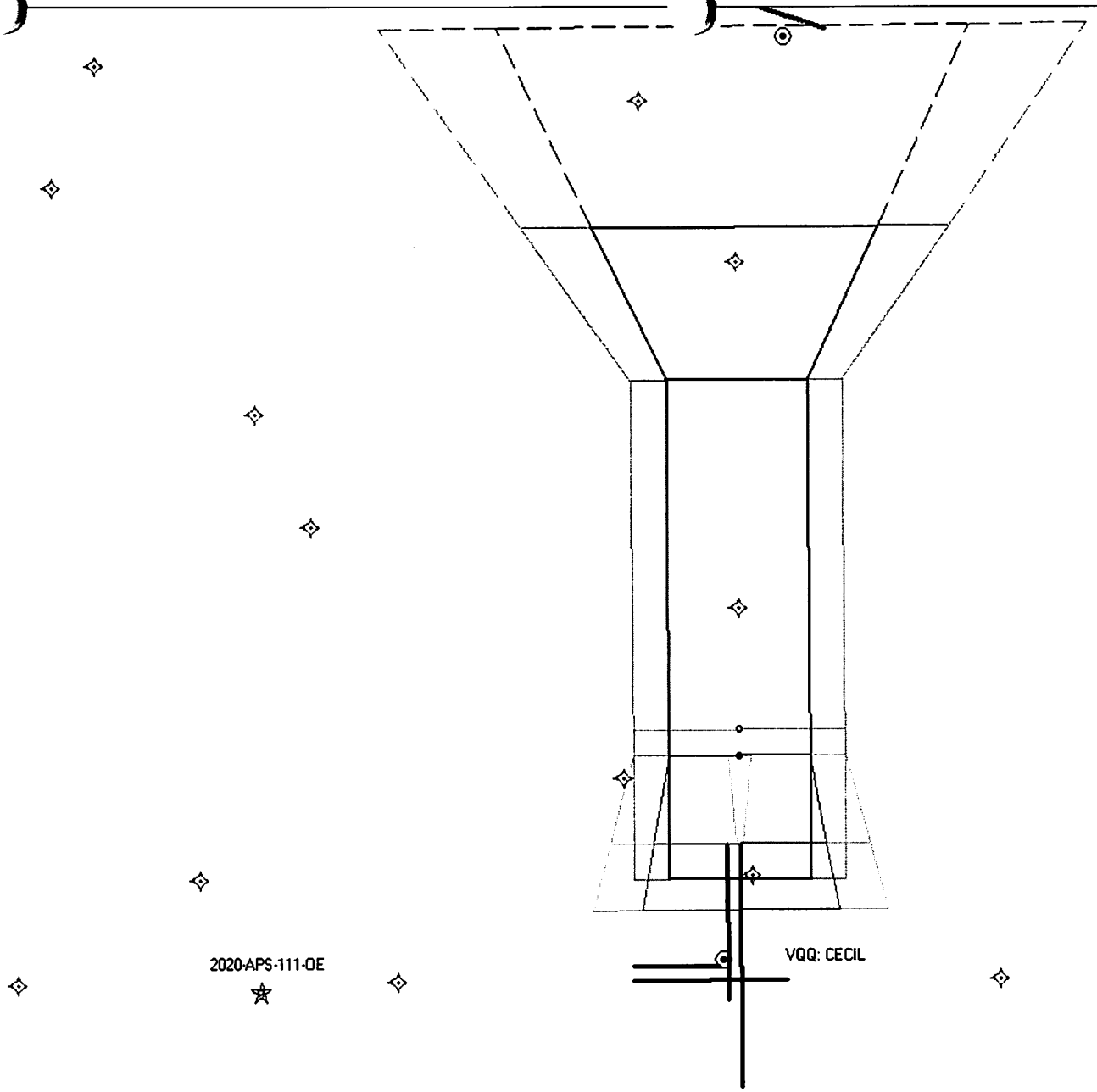
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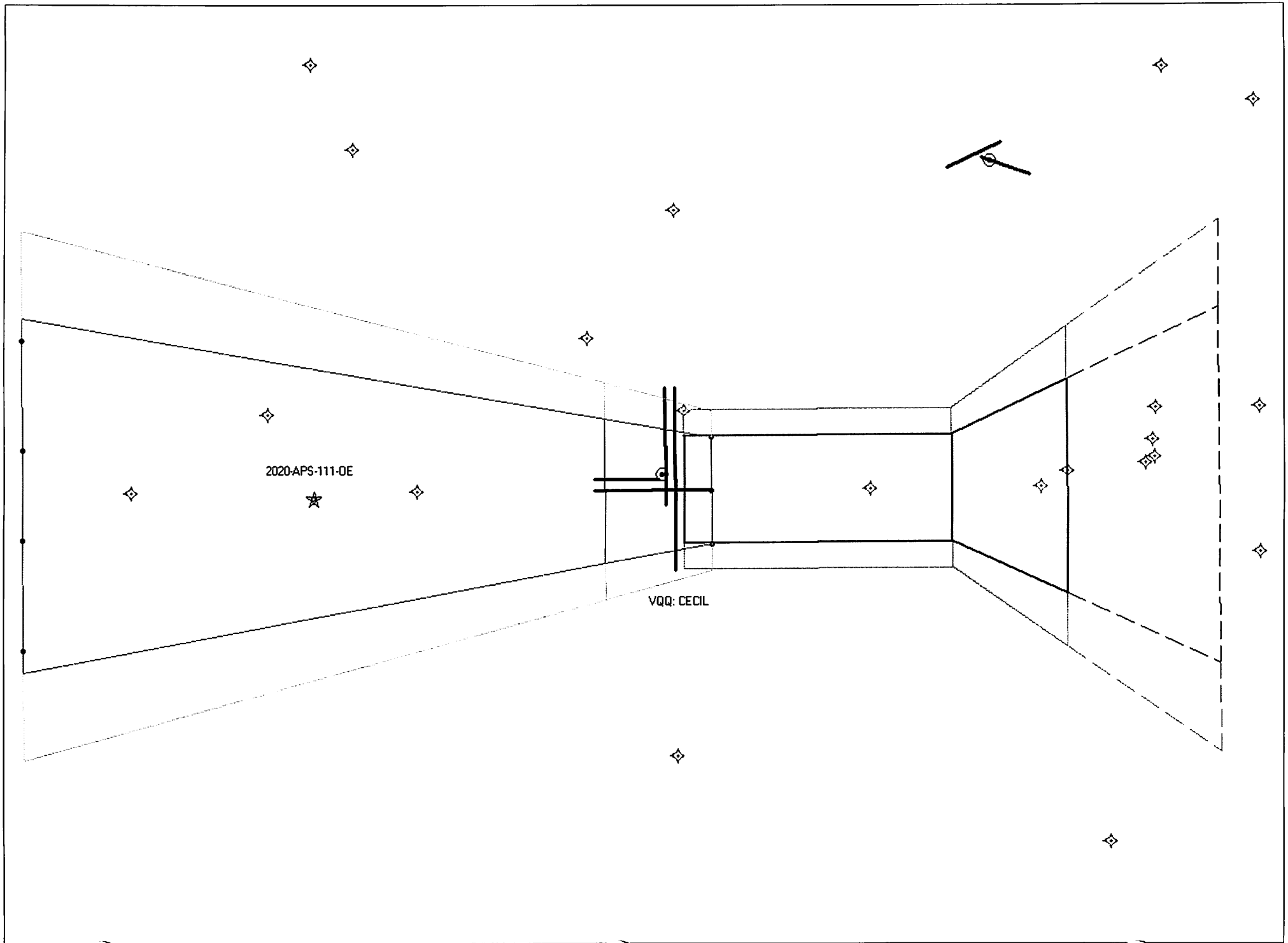
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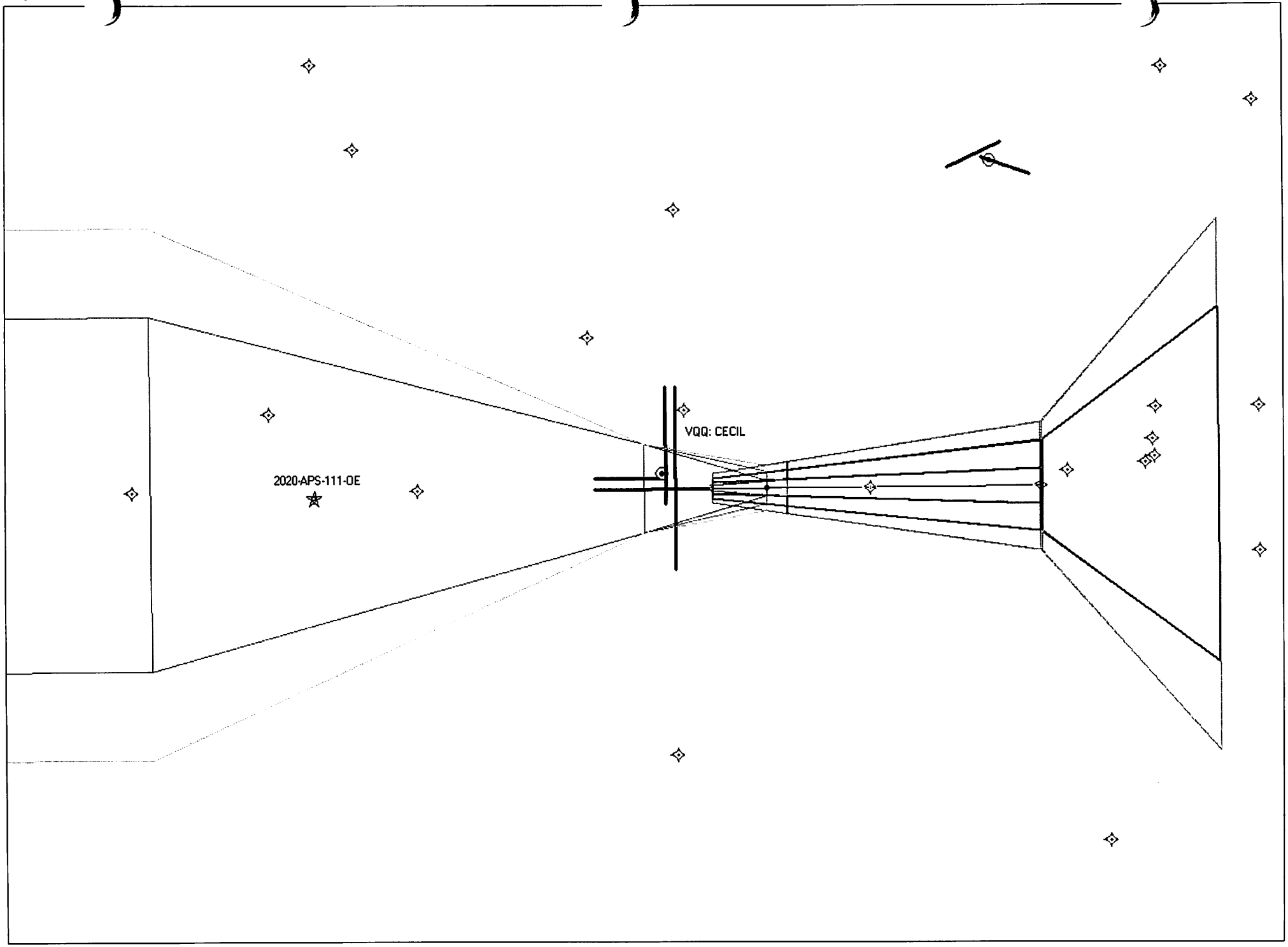
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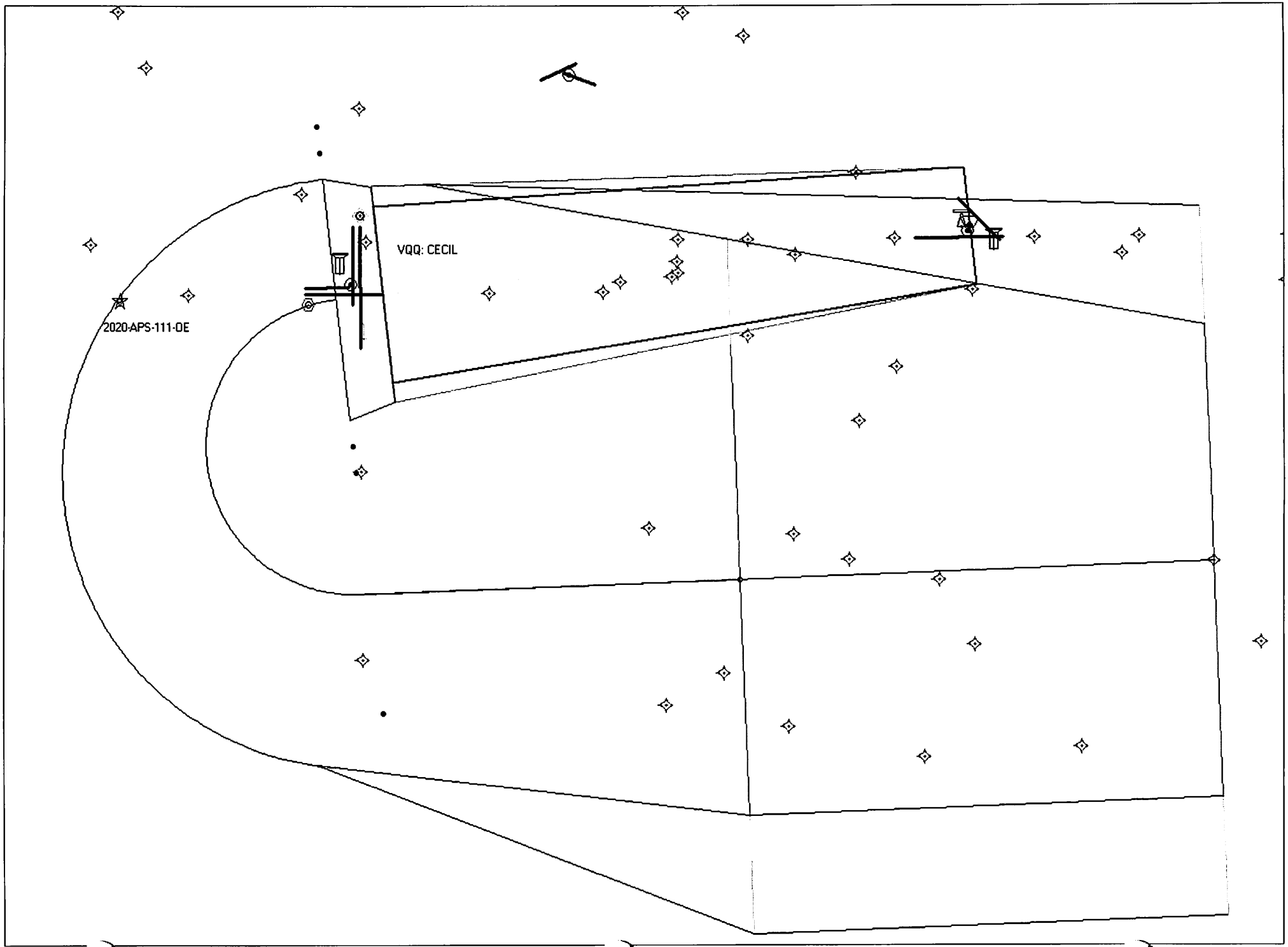
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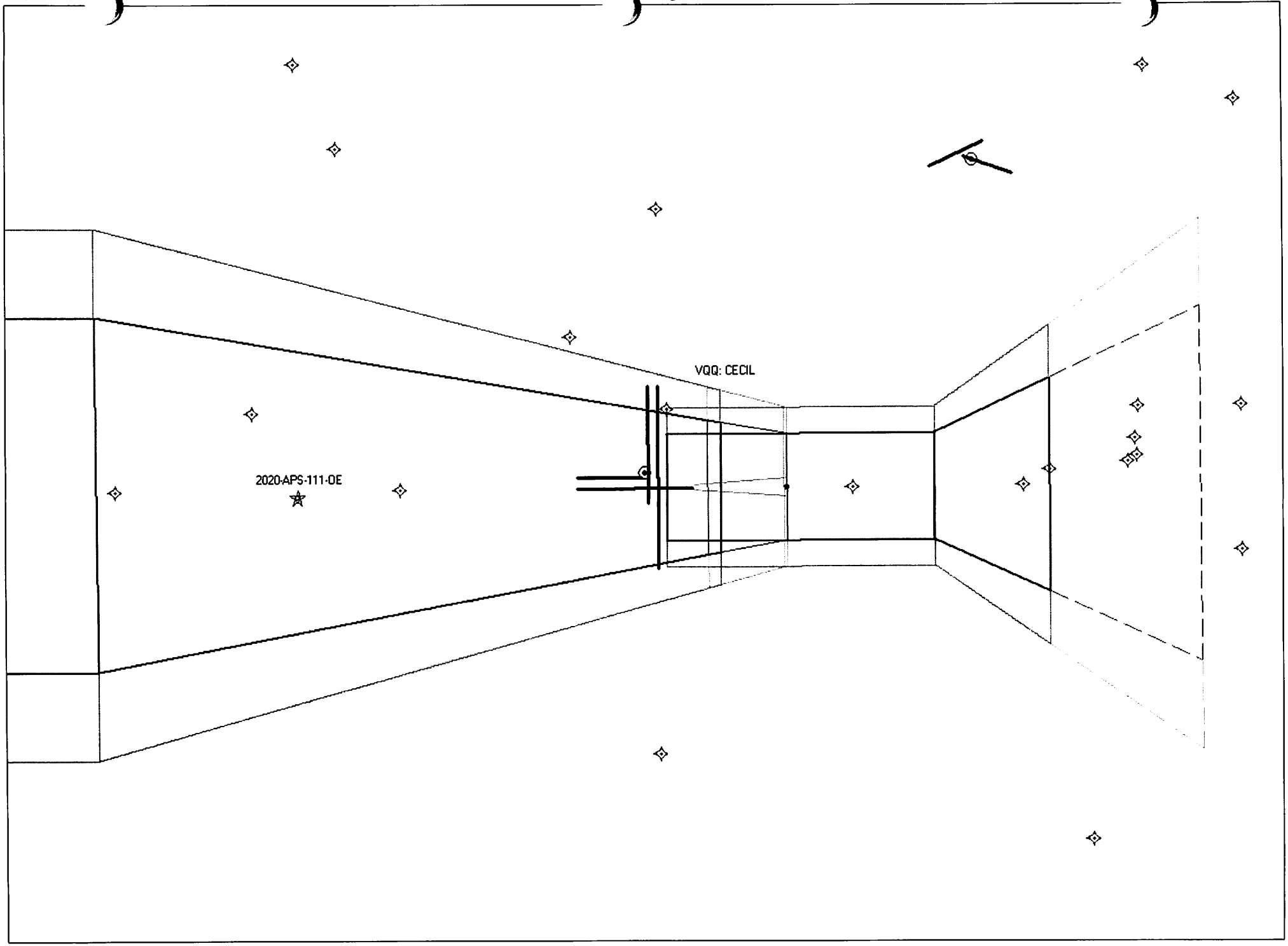

VQQ: CECIL
2020-APS-111-OE

VNAV Procedure

***** 2020-APS-111-OE *****

VQQ Runway: 27L

Date: 01-16-2020 Time: 15:04:05

STUDY OBJECT DATA

Study Latitude: 30° 12' 50.5"
Study Longitude: 81° 57' 9.4"
Ground Elevation: 83' AMSL
AGL Height: 186' AGL
Overall Elevation: 269' AMSL

INSTRUMENT APPROACH PROCEDURE (IAP) ANALYSIS

Along Track Distance: 0 feet.
Abeam Distance: 0 feet.

PROCEDURE: Maximum AMSL: 1019 ft
PROCEDURE: FAS: DNE
PROCEDURE: Object not within FSL Extension Area.
PROCEDURE: DNE GQS
PROCEDURE: OCS Slope: 23.424:1

MISSED APPROACH PROCEDURE (MAP) ANALYSIS

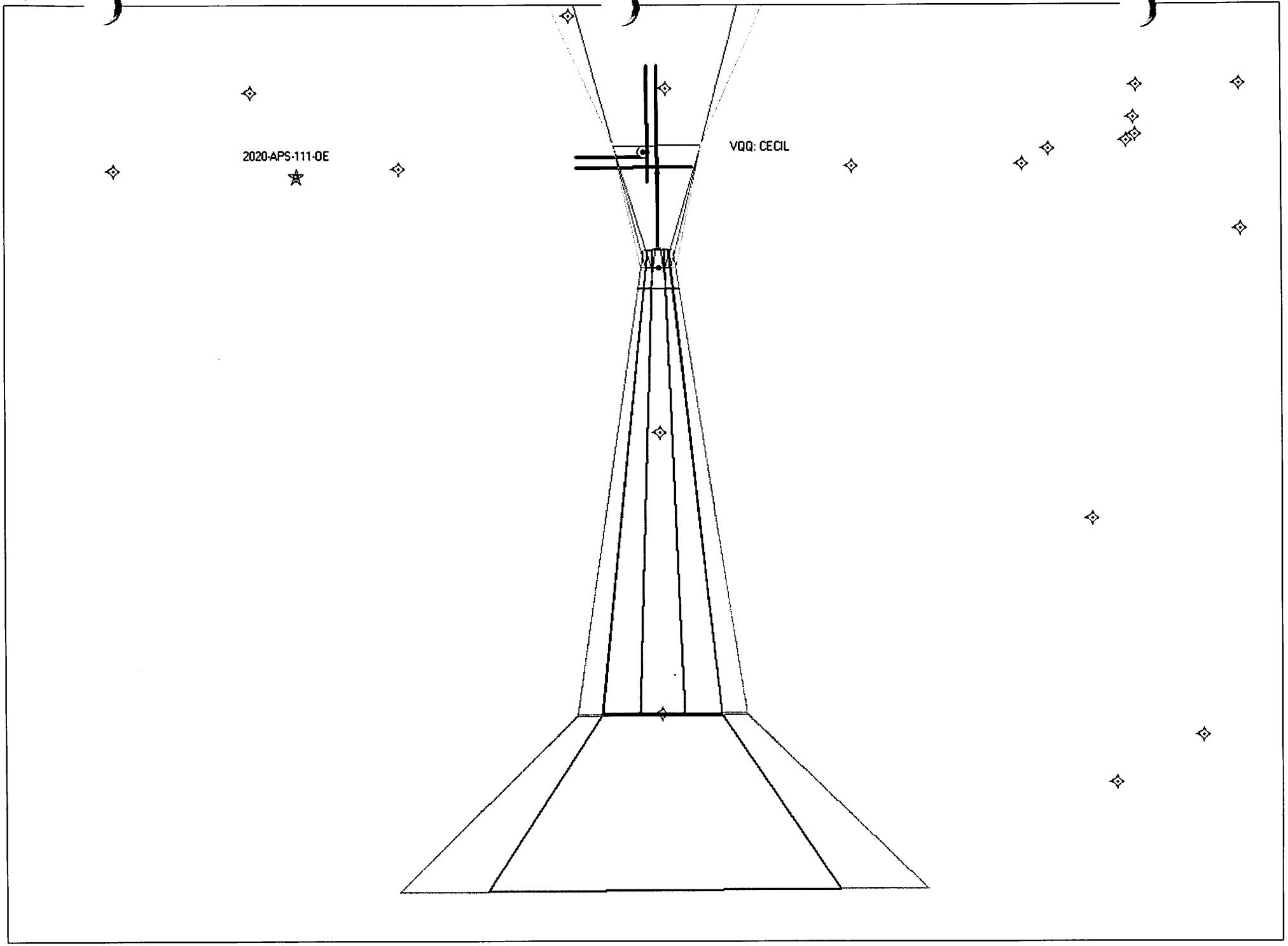
MAP Along Track Distance: 33690.78 feet.
Abeam Distance: 354.66 feet.
Flat Surface Length: 4566.65 feet FSL Altitude: 290 feet AMSL.
MISSED APPROACH: MAS Max AMSL: 1018.57' AMSL (Primary).

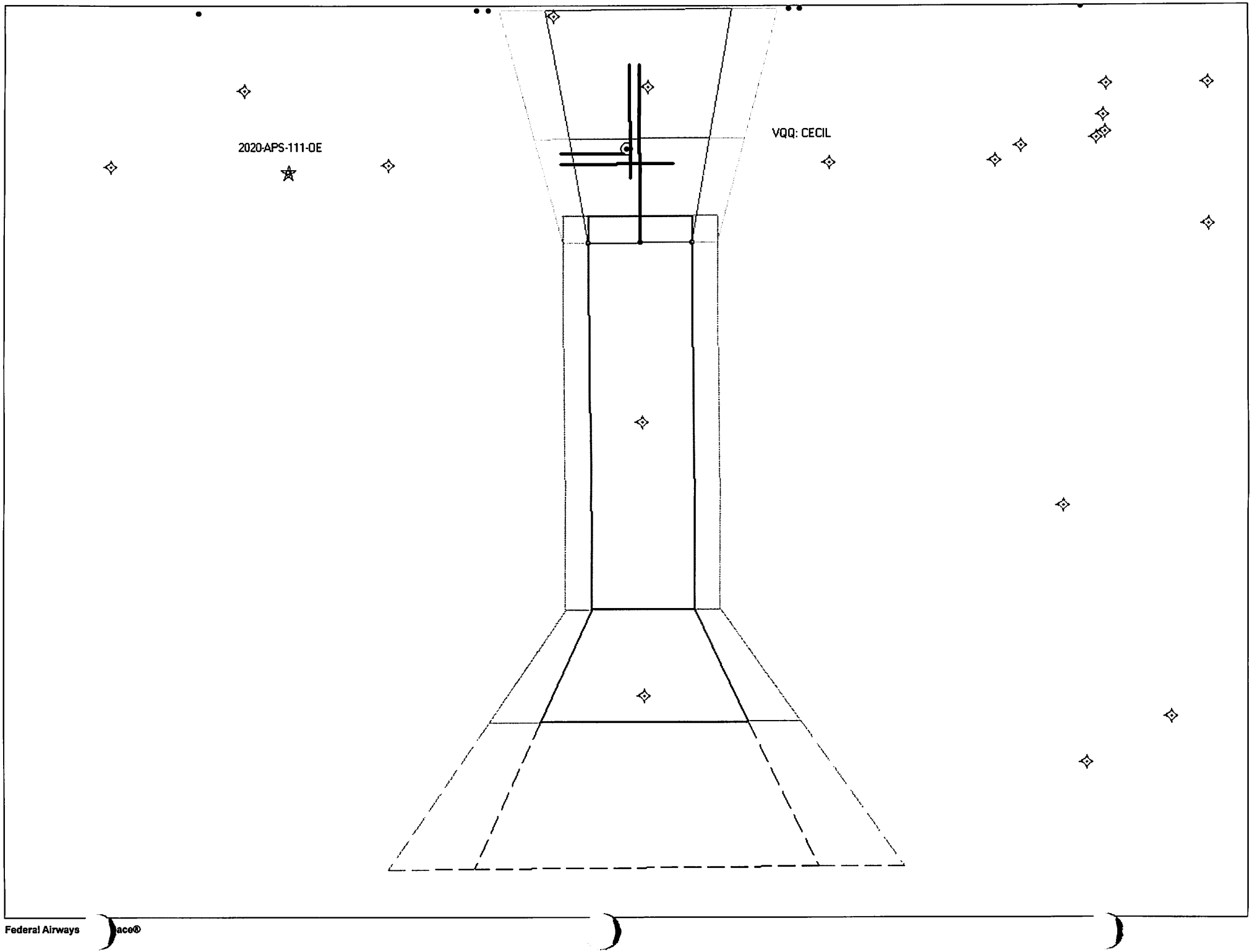
PROCEDURE DATA

OCS Origin Latitude: 30° 12' 56.808"
OCS Origin Longitude: 81° 52' 19.56"
FAF Latitude: 30° 12' 58.55"
FAF Longitude: 81° 47' 40.87"
In Bound Course Heading: 274.6°
Distance to FAF: 3.7 NM
Distance to Docs: 6245.2' feet

DECISION HEIGHT (DH) DATA

DH Latitude: 30° 12' 57.41"
DH Longitude: 81° 50' 45.489"
TDZE: 72'AMSL
Decision Height: 451' AMSL
TCH: 50 feet
Glide Slope Angle: 3.00°
Rwy Threshold Elevation: 63.9' AMSL
GPI: 6432 feet
Aircraft Category: D


2020-APS-111-OE
VQQ: CECIL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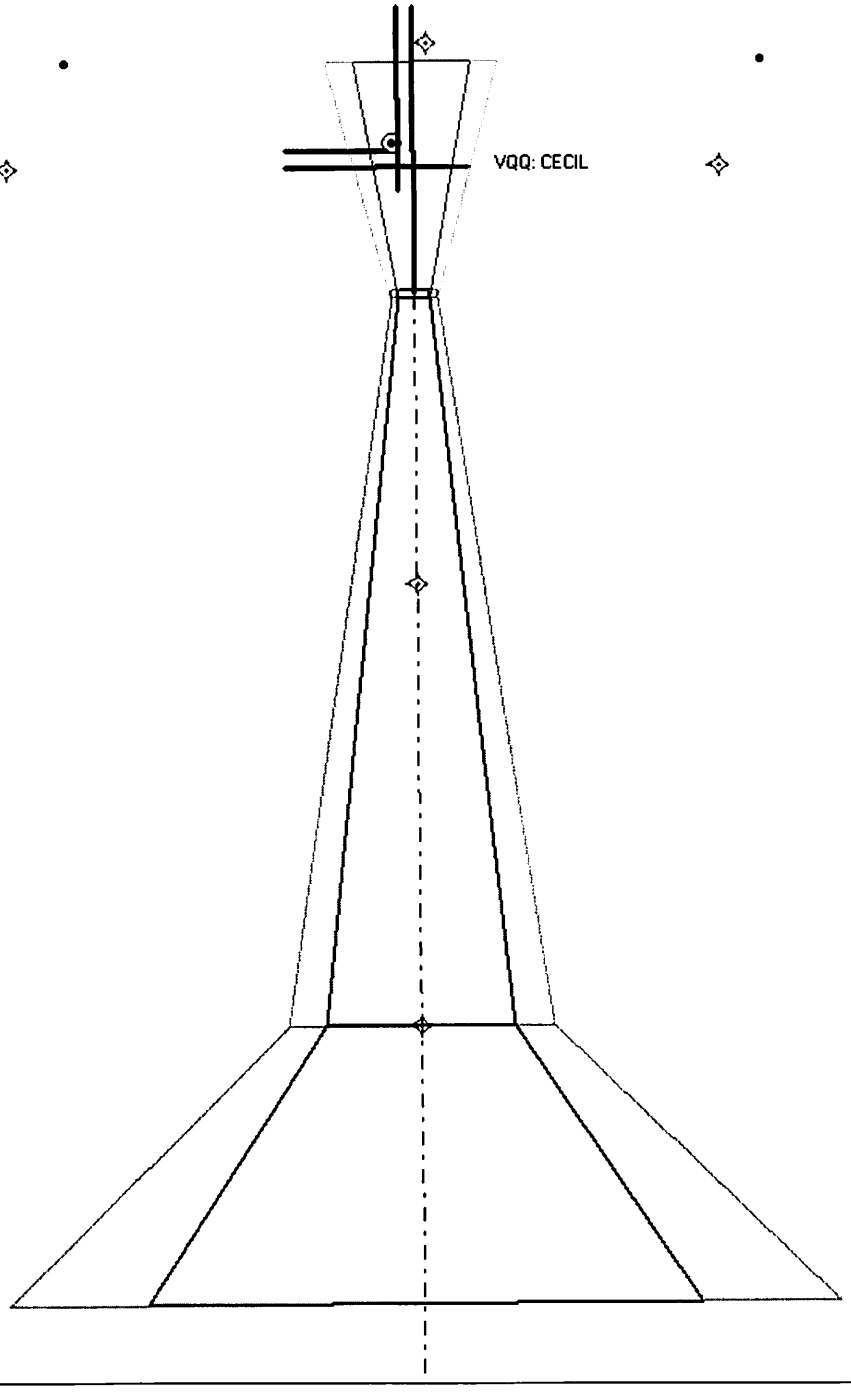

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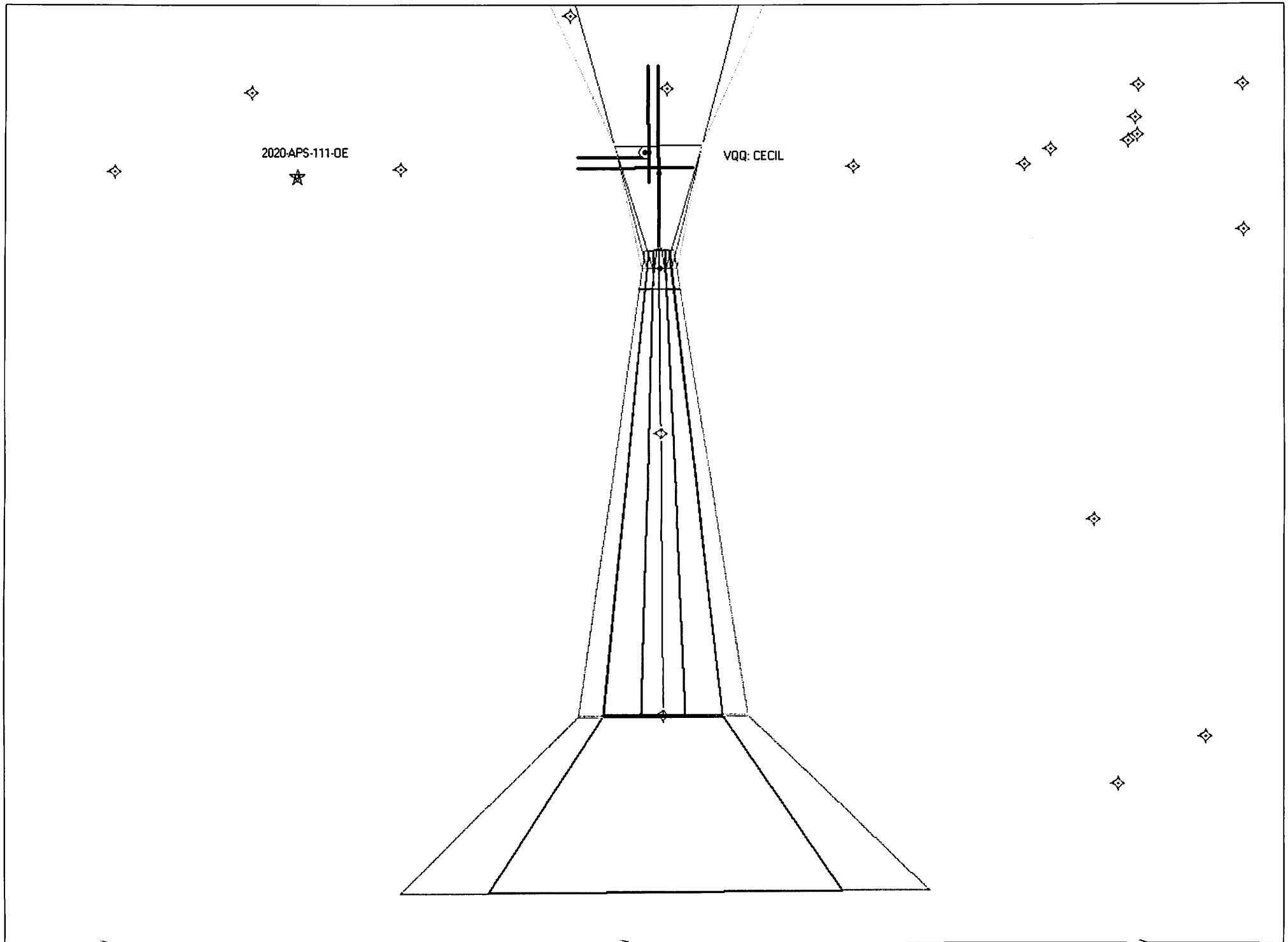
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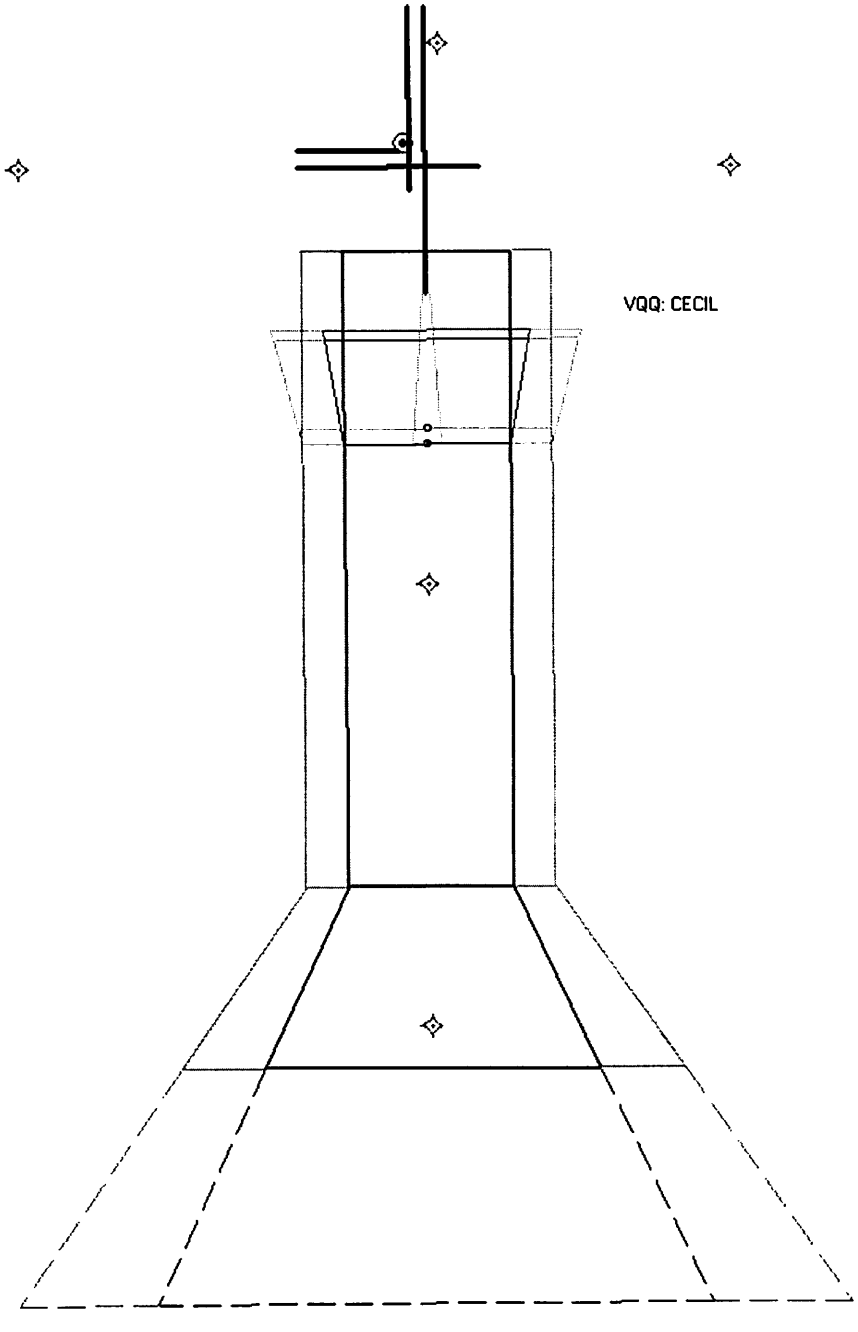
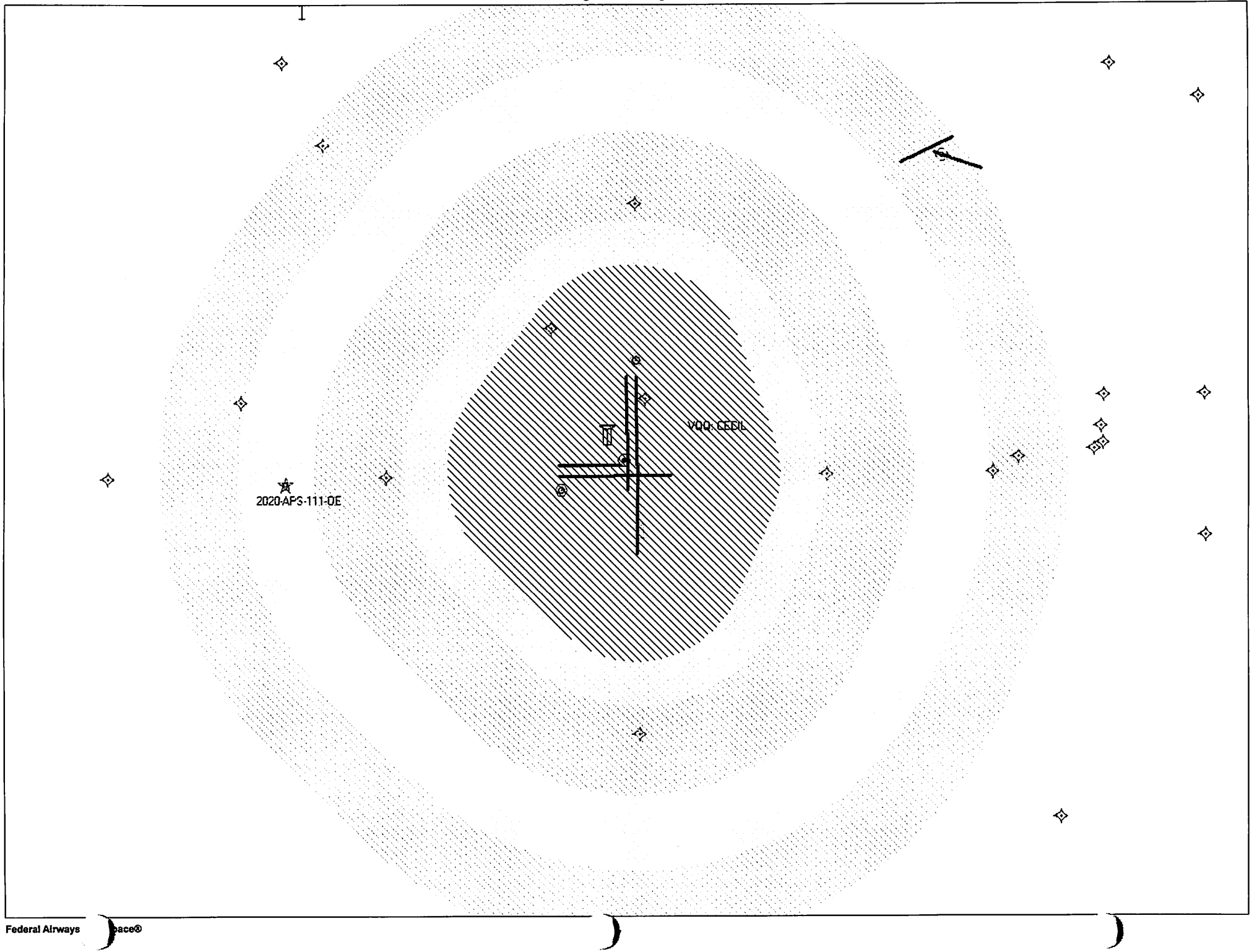
2020-APS-111-OE

VQQ: CECIL



VQQ: Cat A - E Circling - Max Height: 340' AMSL



Circling Approach Area Analysis

***** 2020-APS-111-OE *****

CECIL

Date: 01-20-2020 Time: 11:10:23

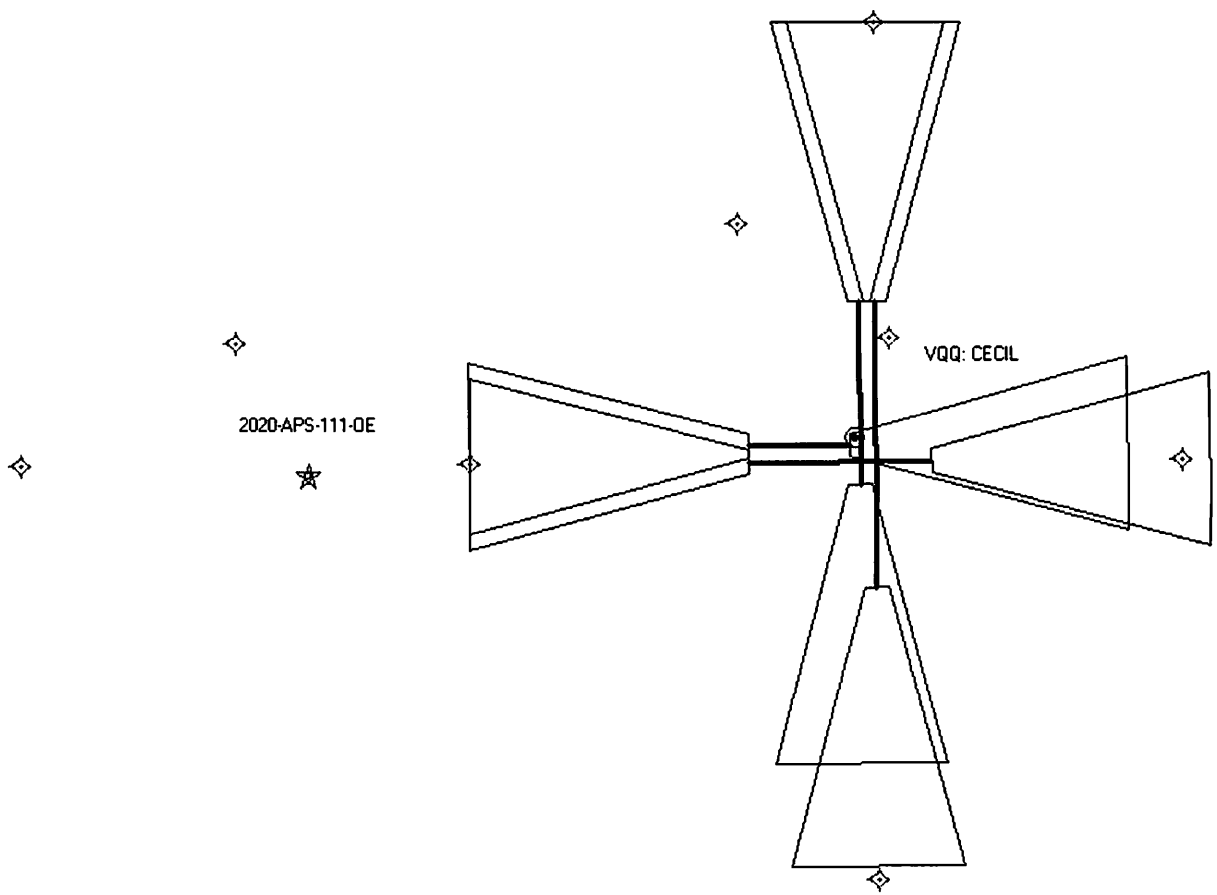
STUDY OBJECT DATA

Study Latitude:	30° 12' 50.5" N
Study Longitude:	81° 57' 9.4" W
Ground Elevation:	83' AMSL ft.
AGL Height:	186' AGL ft.
Overall Elevation:	269' AMSL ft.

INSTRUMENT APPROACH PROCEDURE (IAP) ANALYSIS

Distance:	19259 ft.
Aircraft Category:	D
Circling MDA:	640
Vkias:	165 knots
Vktas:	171.9787 knots
Bank Angle:	20°
Straight Segment:	0.6 NM
Expanded CAA:	True
Turn Radius:	3.7 NM
Maximum AMSL:	340

The mathematical algorithms used by this program are derived directly from Federal Aviation Administration (FAA) Orders on Instrument Flight Procedures.


VQQ: CECIL
2020-APS-111-OE

Departure Runway 27L

***** 2020-APS-111-OE *****

CECIL - Runway: 27L

Date: 01-16-2020 Time: 16:32:19

STUDY OBJECT DATA

Study Latitude: 30° 12' 50.5" N
Study Longitude: 81° 57' 9.4" W
Ground Elevation: 83' AMSL ft.
AGL Height: 186' AGL ft.
Overall Elevation: 269' AMSL ft.

INSTRUMENT DEPARTURE ANALYSIS

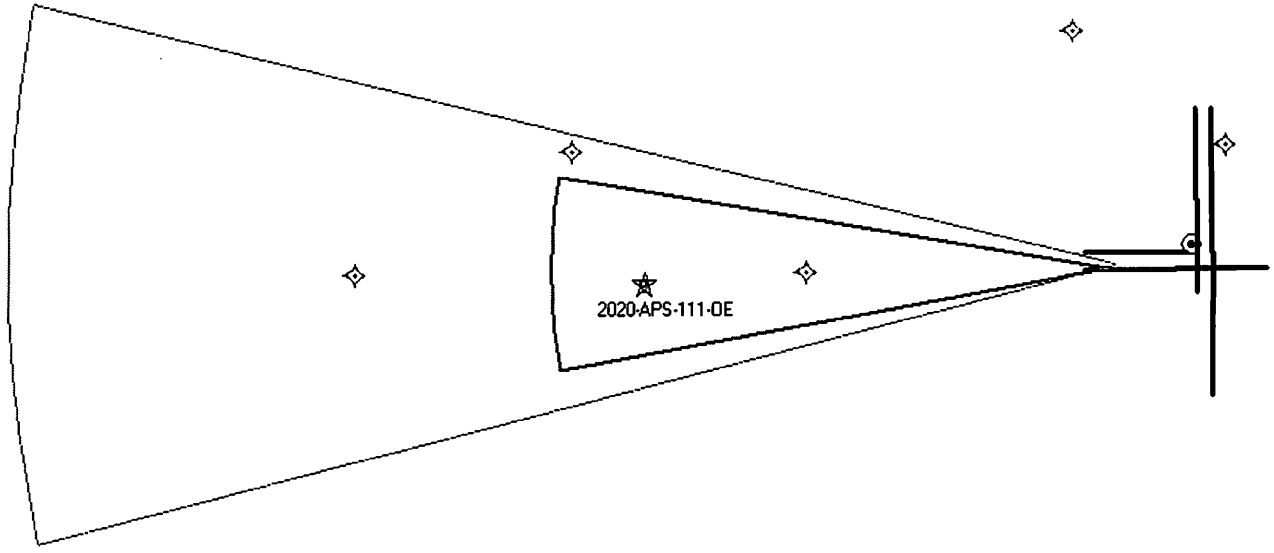
Initial Climb Area (ICA): DNE ICA

Diverse Departure A Inside Diverse A - Max Hgt: 558 ft

Diverse Departure B Not in Diverse B - DNE Diverse B

The above analysis is in accordance with FAA Order 8260.3B Change 26. This analysis used a 200 ft/NM climb gradient (CG) and an Obstacle Clearance Surface (OCS) that provides 47 feet of obstacle clearance at 1 NM from the Departure End of Runway (DER). Some runways have published climb gradients greater than 200 ft/NM. A specified climb gradient greater than standard (200 ft/NM) is sometimes necessary to allow acceptable obstacle clearance. Should your location exceed the value indicated above you may need to determine if there is a published CG and conduct additional calculations to determine if the CG will provide proper clearance for your proposed structure.

The mathematical algorithms used by this program are derived directly from Federal Aviation Administration (FAA) Orders on Instrument Flight Procedures.


VQQ: CECIL
2020-APS-111-OE

PRECISION APPROACH PATH INDICATOR (PAPI) OCS ANALYSIS

***** 2020-APS-111-OE *****

CECIL - Runway: 09R

Date: 01-20-2020 Time: 11:15:11

STUDY OBJECT DATA

Study Latitude:	30° 12' 50.5"
Study Longitude:	81° 57' 9.4"
Ground Elevation:	83' AMSL
AGL Height:	186' AGL
Overall Elevation:	269' AMSL

VGI - VISUAL GUIDANCE INDICATOR OCS ANALYSIS

DER to VGI Equipment:	1336.2 feet.
OCS Origin Distance:	20295 feet.
OCS Height (AMSL):	725 feet.
OCS Allowable Height AGL:	642 feet.

PROCEDURE DATA

OCS Origin Latitude:	30° 12' 56.41"
OCS Origin Longitude:	81° 53' 18.2"
In Bound Course Heading:	94.55 deg M
Runway Threshold Elevation:	76.6' AMSL

The mathematical algorithms used by this program are derived directly from Federal Aviation Administration (FAA) Orders on Visual Guidance Lighting Systems.

TERPS ANALYSIS SUMMARY

*** 2020-APS-111-OE ***

STUDY OBJECT DATA

Study Latitude: 30° 12' 50.5"
Study Longitude: 81° 57' 9.4"
Ground Elevation: 83' AMSL
AGL Height: 186' AGL
Overall Elevation: 269' AMSL

AIRSPACE/TERPS LIMIT: 340' AMSL --- Category D Circling

VQQ IAP RWY 09R LNAV Amdt 1A	510
VQQ IAP RWY 09R LPV Amdt 1A	640
VQQ IAP RWY 09R VNAV Amdt 1A	737
VQQ IAP RWY 09R VOR Amdt 1A	400
VQQ IAP RWY 18L LNAV Amdt 1A	10000
VQQ IAP RWY 18L LPV Amdt 1A	10000
VQQ IAP RWY 18L VNAV Amdt 1A	10000
VQQ IAP RWY 27L LNAV Amdt 1A	10000
VQQ IAP RWY 27L LPV Amdt 1A	10000
VQQ IAP RWY 27L TAC Orig-A	10000
VQQ IAP RWY 27L VNAV Amdt 1A	1018
VQQ IAP RWY 36R ILS19 28MAY15	10000
VQQ IAP RWY 36R LNAV Amdt 1A	10000
VQQ IAP RWY 36R LOC19 Amdt 3A	10000
VQQ IAP RWY 36R LPV Amdt 1A	10000
VQQ IAP RWY 36R VNAV Amdt 1A	10000
VQQ DEP Runway 27L Diverse A	558
VQQ CIR Category D Circling Expanded	340

Date: 01-20-2020 Time: 11:12:33

POINT ELEVATION DATA

SRTM GROUND ELEVATION DATA
North American Datum 1983
North American Vertical Datum 1988 - NAVD88

2020-APS-111-OE
Forest Trail 186

Latitude: 30° - 12' - 50.5" N **Decimal Degrees:** 30.2140277777778°
Longitude: 81° - 57' - 9.4" W **Decimal Degrees:** 81.9526111111111°

Ground Elevation: 82.74 Feet AMSL

This certifies the Digital Elevation Model (DEM) value for the specified latitude/longitude point was obtained from the SRTM Endeavour radar mission of February 2000. NASA has released the finished version edited by the National Intelligence Agency. The elevation value meets vertical accuracy criteria as specified by FAA Order 8260.19C, Appendix 2, Obstacle Accuracy Standards, Codes And Sources, paragraph 101 for Code 'C'. The elevation value for the specified latitude/longitude is accurate to within ±20 feet vertically.

Date Printed: 01-16-2020

United States Department of the Interior

U. S. FISH AND WILDLIFE SERVICE

7915 BAYMEADOWS WAY, SUITE 200
JACKSONVILLE, FLORIDA 32256-7517

IN REPLY REFER TO:

USFWS Clearance to Proceed with Communication Tower Projects

Revised and Updated: July 15, 2016

Background

The U.S. Fish and Wildlife Service is the lead Federal Agency charged with the protection and conservation of Federal Trust Resources, such as threatened and endangered species and migratory birds, in accordance with section 7 of the Endangered Species Act of 1973, as amended (ESA)(87 Stat. 884; 16 U.S.C. 1531et seq.), the Bald and Golden Eagle Protection Act (Eagle Act)(16 U.S.C. 668-668d), and the Migratory Bird Treaty Act (40 Stat. 755; 16 U.S.C. 701et seq.). Included in this mandate is the review of projects involving communication towers. The Federal Communications Commission (FCC) authorizes such projects, and as part of its authorization and obligations under the ESA and National Environmental Policy Act (NEPA), requires a project environmental impact review. Such projects primarily involve new tower construction, co-location of antennas on existing communication towers or other structures, and the repair, maintenance or relicensing of existing structures.

With the recent and continuing advances in cellular communication technology, and resulting widespread consumer demand for this service, the North Florida Ecological Services Field Office has experienced a significant increase in the number of requests for review of these projects. To fulfill our ESA statutory obligations in a timely and consistent manner, and to assist communication companies in addressing FCC and NEPA environmental impact review requirements, we provide the following guidance and clearance. The guidance is largely based on the *Revised Voluntary Guidelines for Communication Tower Design, Siting, Construction, Operation, Retrofitting, and Decommissioning* guidance letter from the Division of Migratory Bird Management. This document is posted on our national web site, and may be reviewed and downloaded by accessing: http://go.usa.gov/xC4c3.

Federally Listed Species Assessment

For new tower construction and related activities, applicants are responsible for conducting an initial assessment and possible site survey to determine if any federally listed species occur within, or in proximity to, the project footprint.

Our office web site, http://www.fws.gov/northflorida contains information on such species, including the location of wood stork *(Mycteria americana)* nesting colonies, as well as survey protocols for scrub- jays *(Aphelocoma coerulescens)* and sand skinks *(Neoseps reynoldsi).*

Information on known bald eagle *(Haliaeetus leucocephalus)* nests is available via a link on our web site or through http://myfwc.com/wildlifehabitats/managedlbald-eagle/.

For projects located in suitable nesting or foraging habitat for the red-cockaded woodpecker *(Picoides borealis)* that are on public lands, contact the land owner/manager for location information. On private lands, go to http://www.fws.gov/rcwrecovery/recovery_plan.html for the survey protocol.

To further assist you with project analysis, we recommend that you consult the following additional electronic sources of information.

- The Federal Communications Commission memo regarding reducing bird collisions with communications towers and reducing lighting costs (http://wireless.fcc.gov/migratory-birds/Light_Changes_Information_Update_120415.pdf);

- The Florida Natural Areas Inventory website provides information on major feeding sites and congregations of large numbers of migratory and resident birds (http://www.fnai.org/);

- The Service's migratory bird website provides useful information concerning migratory birds, and for bald eagles - the National Bald Eagle Management Guidelines (http://www.fws.gov/migratorybirds); and

- Locations of wading bird breeding colonies (see Waterbird Colony Locator) can be obtained at http://myfwc.com/research/wildlife/.

If the site assessment and/or survey results show listed species are present within the project footprint, the project should be forwarded to our office (jaxregs@fws.gov) for further evaluation and possible consultation.

Project Design & Maintenance

If an assessment or survey does not detect federally-listed species within the project footprint, we have determined that the following types of projects and project specifications are not likely to adversely affect listed species and/or not likely to have significant adverse impacts on migratory birds. **For projects that meet the criteria listed below, NO further coordination with the Service is necessary.** This guidance may also be used as a general clearance for all future projects meeting these criteria.

1. The construction of lattice or monopole design communication towers less than 200 feet in total height that do not contain guy wires. The tower must be located in previously disturbed, urbanized or developed areas or areas that do not represent potential habitat for federally listed species. In addition, the tower must be located at least 2500 feet from any known active wood stork or other wading bird colony.

2. The construction of lattice, monopole, or guyed communication towers between 200 and 400 feet tall, located as (a) above, and in the case of guyed towers, they are equipped with bird diverter devices. All towers should be lighted with a white or red strobe light operating at the minimum allowable intensity. This type of lighting is far less attractive to migratory birds than continuous or pulsating, incandescent red or white lights, regardless of their intensity or frequency or duration of pulsation. The same provisions in (a) regarding bald eagle nests and wood stork and other wading bird breeding colonies applies.

3. The co-location of a new antenna on an existing communication tower or mounting of a new antenna on an existing structure (e.g., light pole, billboard, water tower, building). Such work shall not increase the tower height above 400 feet, require the construction of a new access road, nor result in the additional disturbance of the site; and

4. The repair, maintenance, or replacement of an existing communication tower, provided that the activity does not increase the height of the tower above 400 feet or increase its footprint into natural vegetative communities, and is conducted outside of the October 1-May 15 nesting season of any bald eagle nesting on the structure.

   Please Note: The bald eagle was removed from the protections of the ESA (delisted) in August 2007; however, a final rule that implements a permit program designed to protect bald and golden eagle populations in the future was published in the *Federal Register* on September 11, 2009. These final regulations authorize the limited take of bald and golden eagles through the issuance of permits under the Eagle Act where the take to be authorized is associated with otherwise lawful activities. These regulations also establish permit provisions for intentional take of eagle nests where necessary to ensure public health and safety, and in other limited circumstances. Please refer to the following website link for more information and application procedures: http://www .fws.gov/migratorybirds/baldeagle.htm.

   Please Note: Ospreys (*Pandion haliaetus*) frequently nest on communication towers, and the nesting in Florida may extend throughout all months of the year. Confirmed nests that are inactive (no eggs or young in nesting) have no special protections under the Migratory Bird Treaty Act, and although nest removal is allowed, we recommend nest removal only be undertaken if there are no alternative to the required work. Where the proposed work is associated with an existing tower supporting an active osprey nest, refer to our national migratory bird website, and/or contact our Southeastern Regional Division of Migratory Birds in Atlanta, GA, at (404) 679-7049 or at http://www.fws.gov/southeast/BIRDS/ for further guidance prior to any work.

For existing towers that do **not** include any modification, footprint expansion or construction, **and** meet the criteria below, **no** further coordination with the Service is necessary. This includes those projects for relicensing of existing towers. Therefore, this guidance may also be used as a general clearance for all existing projects meeting these criteria.

1. The existing lattice or monopole design communication towers less than 200 feet in total height and do not contain guy wires.

2. The existing lattice communication towers or guyed communications towers between 200 and 400 feet tall, provided the guy wires are equipped with bird diverter devices and the tower is lighted with white strobe lights with the maximum off period between flashes (3 seconds is current maximum allowable). This type of lighting is far less attractive to migratory birds than continuous or pulsating, incandescent red or white lights, regardless of their intensity or frequency or duration of pulsation.

For those projects that do not meet these criteria, our only available recommendations are:

1. Reduce the height of the tower,

2. Light the tower with a white or red strobe light operating at the minimum allowable intensity: as noted in item 2 above.

Our agency appreciates your cooperation in the protection of Federally-listed species in Florida.

Sincerely,

Jay B. Herrington
Field Supervisor