

# **Gadsden County Planning Commission Agenda Request**

**Date of Meeting:** August 13, 2020

**Date Submitted:** July 31, 2020

**To:** Honorable Chairman and Members of the Planning Commission

**From:** Jill Jeglie, Interim Growth Management Director

**Subject:** Public Hearing (Quasi-Judicial) – Antietam Wireless Services, LLC, SR 12, Havana Highway Communications Tower Conceptual/Preliminary Site Plan (SP-2020-04) with two deviations.

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**Statement of Issue:**

Consideration of a request for approval of a 250’ tall, self-supporting communication tower requesting two (2) deviations from setback requirements of Section 5800 Communication Towers of the Land Development Code (LDC).

**Background:**

A 250’ tall, self-supporting tower is proposed on a 100’ by 100’ (1,000 square feet) leased space located on an 87.82 acre parcel owned by Anne F. Nicholson, Trustee (Attachment #2, Sheet ). The applicant has requested two (2) deviations pursuant to Sub. 5811.F, G & H of the LDC. Communication towers are a use-by-right in the Agriculture 3 (AG 3) Future Land Use except when they do not meet the ‘Restrictions on Use by Right’ to reduce a setback (Attachments #5, pages 18-19). Deviations from the standards in Section 5800, Communication Towers shall be processed as a Class II, Type II site plan review, a quasi-judicial action per Subsection 1304 of the LDC.

All cites refer to the Land Development Code (LDC) unless otherwise noted.

**Analysis:**

**Property Owner:** Anne F. Nicholson, Trustee of the Ann F. Nicholson Revocable Trust

**Applicant:** Antietam Wireless Services, LLC, Michael Shine for Vertical Bridge Development, LLC, John E. Cooper, Jr.

**Agent:** Robert Volpe, Hopping, Green and Sams, P.A.

**Location of Property:** East side of Havana Highway, SR 12,

**Tax Parcel ID Number:** 3-06-2N-2W-0000-00220-0000

**Area of Subject Parcel:** 100’ by 100’ lease area (10,000 sf.) on an 87.82 acre parcel

*Antietam Wireless Service Communication Tower (SP 2020-04)  
 Planning Commission Agenda Request*

Current (Existing) Use: Timber II (Property Appraiser)  
Proposed Use: A 250' tall self-supporting communication tower  
Wetlands: Not Applicable  
Flood Zone: Zone X  
Available Sanitary Sewer Facilities: Not Applicable  
Available Potable Water Facilities: Not Applicable  
Electric Provider: Talquin Electric Cooperative

All cites refer to the Gadsden County Land Development Code unless otherwise noted.

**Location:**

The tower site is located on the west side of Havana Highway (SR 12), approximately 0.50± west of the Tallavana Christian School and 0.53± of Longview Drive. The 250-foot tall self-supporting tower is to be constructed within a 100' by 100' leased area. The subject property is designated 'Agriculture 3 (AG 3)' as shown on the Gadsden County Future Land Use Map (FLUM) (Attachments #3 and 11, Site Plan Sheet Z2 & Z3, pages 10, 192-192).

Table 1. FUTURE AND CURRENT (EXISTING) LAND USE		
Direction	Future Land Use Category	Current (Existing) Use & Acreage
North	Agriculture 3 (AG-3)	Timber III
East	Agriculture 3 (AG-3)	Timber III
South	Agriculture 3 (AG-3)	Timber III,
West	Agriculture 3 (AG-3)	Timber III

\*Gadsden County Geographical Information Systems (GIS) and Gadsden County Property Appraiser data.

**Location on County Owned Properties (Sub. 5805)**

The 2015 Map of County owned parcels over one (1) acre indicates that there are not any County owned parcels within several miles in the vicinity of this tower (Attachment #6, page 26).

**Concurrency and Access:**

The applicant verified that there will be no addition to peak traffic on SR 12, Havana Highway; Therefore, Level of Service will not be impacted. The communication tower is proposed to access via a 20' easement connecting to 100' wide electrical powerline easement. A 20' wide ingress/egress and utility easement will be required to connect the tower to SR 12. A FDOT

*Antietam Wireless Service Communication Tower (SP 2020-04)  
 Planning Commission Agenda Request*

driveway permit will be required to insure that the driveway is compliant with state requirements (Attachments #3, and #12, Site Plan Sheet Z-2 and Z-3, pages 10, 191-192).

**Setbacks:**

The applicant has requested two (2) deviations from setback requirements listed in Section 5800, Communication Towers as follows:

Table 2. REQUIRED AND PROPOSED SETBACKS FOR COMMUNICATION TOWERS**		
Direction	Required Setback	Proposed Setback*
North ,West and South:	Sufficient so that failure will not create a safety hazard (Sub. 5809.D)	North - 1174'± West - 1,359'± South - 357'± to the property line and 257'± to the electric easement.
East:	Must be located 2X (500') the height of the tower from County right-of-way.	765'± from SR 12 (state right-of-way)
North and East:	0.50 of a mile distance to parcels located within the Rural Residential (RR) Future Land Use Category (Sub. 5807.1)	1,174' to the north and 1,319' – 1,455' to the east'±
North and East	1,750' (7X the 250' height of tower) from property lines of parcels of land in which a residence is located.	1,174'± to the north and ; 1,350' to the north east

\*Setbacks are measured from the centerline of the tower. Therefore, will differ from site plan setbacks shown from lease area boundary.

\*\*Section 5800 Communication Towers of the Land Development Code and Sheet Z-2 of the Site Plan.

**Environmental:**

Trees greater than 20” in diameter at breast height (dbh) will be required to be preserved (Sub. 5405). The tower will not encroach on wetlands or property located within an area subject to flooding. The site is buffered by existing trees and vegetation. Subsection 5809.F requires landscaping and buffering around the perimeter of the communication tower site, except that requirements may be waived by the Growth Management Director for those sides of the tower that are located adjacent to undevelopable lands or land not in the public view (Attachment #5, page 20).

At the CBOR meeting, the location of eagles nest on or near the property was brought up as a concern. The applicant has provided a National Environmental Policy Act (NEPA) Summary Report (Attachment #12). The NEPA report provides an assessment of environmental conditions and indicates that the 100’ by 100’ lease area will not impact any endangered or protected species. The report indicates that eagles are no longer classified as endangered and are protected federally by the Bald and Golden Eagle Protection Act I16 U.S. C. 668 et seq.

**Service Providers, Co-Location, County Properties:**

Antietam Wireless Services, LLC has provided a letter indicating that the tower would be available for colocation to all providers (Sub. 5808). The County Property Location Map (2015) does not indicate County owned properties in the vicinity of the proposed tower (Attachment #6, page 26).

Verizon Wireless has provided a letter of intent to be the initial telecommunication carrier at this facility and has performed a radio frequency (RF) compliance pre-construction evaluation from the proposed site indicating that the facility will be compliant with FCC guidelines (Attachment #8, pages 168-172, 173-174).

**Deviation Requests:**

The applicant is requesting a total of two (2) deviations from Section 5800, Communication Towers of the LDC. These setbacks apply to all homesteaded parcels within the setback, not just adjacent parcels. The requested deviations are as follows:

1. A deviation from Sub. 5805.B.1, Restrictions on Use by Right, a communication tower may locate in the listed land use categories, unless the following conditions apply. The subject property is located within 0.50 miles of land that is designated Rural Residential (RR) on the land use map.

The deviation requested is to reduce the required setback to the boundary of property designated as Rural Residential from 0.50 of a mile (2,640') to 1,180' to the north and approximately 1,125' to the east (See Attachment #11, Site Plan, Sheet Z-2, page 191). The proposed tower is located on an 87.42 acre undeveloped parcel. The proposed setback reduction will reduce the 0.50 mile setback for thirty (30) parcels. However, at the nearest point the tower will be setback 1,174' to the nearest RR designated property (Table 2 and Attachment #3, page 12).

2. A deviation from Subsection 5806.B.3, Location of communication towers and their proximity to parcels of land with residences. Towers that are lit at night with red lights shall be at least 7x's the height of the tower from property lines of parcels of land in which a residence is located.

The setback from the nearest property line of a parcel with a homesteaded residence is located be reduced on it will be reduced from 1,750' to 1,174' and 1,350' (Table #2 of this report and Attachment #11, Site Plan Sheet Z-2, page 191). The tower will be located on an 87.42 acre parcel undeveloped parcel that is assessed as timber use. This setback reduction will reduce the required 1,750' setback to property lines of parcels with homesteaded residential located on them for five (5) parcels (Attachments #4, page 13).

**Criteria for Granting a Deviation from the LDC (Subsection 5811):**

Pursuant to Subsection 5811 (H) of the LDC, a granting of a deviation from the communication tower requirements may be granted only upon a finding of the Board that the criteria Subsection 5811.H are met (Attachment #5, pages 24-25). The application has addressed the criteria for approval of the deviations as summarized below (Attachment #7, pages 27-31):

*Antietam Wireless Service Communication Tower (SP 2020-04)*  
*Planning Commission Agenda Request*

1. The deviation will not be detrimental to the public good or the surrounding properties.

*Agent Response: The public will experience improved and enhanced wireless coverage as well as reliable access to emergency services.*

2. The location of existing uses, structures or other features on or adjacent to the property create a need for the deviation.

*Agent Response: As demonstrated on the provided site plans, the size, location, and configuration of the property creates a need for the requested deviations. There are wetlands and other protected features to the west and north of the proposed site location. The proposed site is the maximum distance from neighboring residential properties without impacting natural features. There are no alternative sites, structures, or locations that would meet the coverage and capacity gained by the proposed tower.*

3. The deviation sought is the minimum necessary to address the need for the deviation, subsequent subject to exploring all reasonable siting alternatives.

*Agent Response: As demonstrated on the site plans, the tower is located in the least intrusive location on the site. The deviations sought are the minimum possible deviations from the strict requirement of the Land Development Code for a location that meets the RF engineer's coverage and capacity criteria for the area. As stated above, there are natural features on the site that are avoided by the proposed location. The proposed location is the minimum deviation necessary to meet the coverage gained by the proposed tower. The site location explanation further explains the reasonable alternatives considered.*

4. The location of the proposed communication tower in relation to existing structures, trees and other visual buffers shall minimize to the greatest extent reasonably practical under the circumstances any impacts on affected residentially developed properties or parcels designated as Rural Residential on the land use map.

*Agent Response: The compound will not be visible from any public right-of-way or adjacent residential property. The site is well within an area of the matured trees, and from a distance only the top of the tower will be visible.*

5. The communication tower will be compatible to the greatest extent possible, with the existing contiguous uses or compatible with the general character and aesthetics of the neighborhood or the area, considering the design and height of the communication tower, the mitigating effects of any existing or proposed landscaping, fencing or other structures in the area, the proximity of the communication tower to existing or proposed building or structures and similar factors.

*Agent Response: As demonstrated previously provided RF Engineering Report, the tower location was selected to meet the RF engineer's coverage and capacity criteria for the area. The compound will not be visible from any public right-of-way or adjacent residential property. The site is well within an area of the matured trees, and from a distance, only the top of the tower will be visible. This provided compatibility to surrounding properties. The proposed location is the maximum distance from existing structures without impacting*

*Antietam Wireless Service Communication Tower (SP 2020-04)  
Planning Commission Agenda Request*

*natural features on the site. Compatibility is demonstrated in the previously provided site plans as well as the map attached to this letter showing the 1,750' and 0.5-mile distances from the tower site.*

*Given the size, location, and configuration of the property, the location and design of the tower is compatible with existing contiguous uses and the general character and aesthetics of the area.*

6. The strict application of the requirements of this section will constitute a substantial hardship to the applicant.

*Agent Response: Due to existing site conditions and the extensive setback requirements, without the grant of these deviations, the application cannot proceed. Strict application of the code requirements constitutes a substantial hardship to the applicant.*

7. The granting of the deviation is consistent with the general intent and purpose of the Comprehensive Plan.

*Agent Response: The location and design of the tower is compatible with the area and consistent with the intent of the Comprehensive Plan and underlying future land use designation.*

**Citizen's Growth Management and Planning Bill of Rights Meeting and Public Notice:**

A Citizen's Growth Management and Planning Bill of Rights (CBOR) Meeting was held on Friday, February 19th, 2020 at the Havana Public Library located at 203 5<sup>th</sup> Ave E., Havana, FL from 5:00 to 6:00 p.m. Thirteen (13) citizens attended the meeting. The applicant has provided a summary of the meeting discussion (Attachment #9, pages 182-185).

The public notice requirements of Subsection 1304 of the LDC have been met: An advertisement has been posted in the three (3) local papers; a public hearing notice has been mailed to all property owners within 1000 feet of the property; and, a sign has been posted.

**Options:**

1. Recommend approval of the Antietam Wireless Services, LLC Havana Highway, SR 12 Communications Tower Conceptual/Preliminary Site Plan (SP-2020-04) with two (2) deviations with the following conditions, and based on the findings provided in this agenda request, compliance with Subsection 5811.H Criteria for Deviations and testimony provided at the public hearing:
  - a. Provide a landscaping plan (Sub. 5809 and 5811).
  - b. Revise all plan sheets and reports to correctly indicate the name of the applicant.
  - c. On all plan sets label the dimension of the lease area.

*Antietam Wireless Service Communication Tower (SP 2020-04)*

*Planning Commission Agenda Request*

- d. Revise plans to indicate with a note and verify on the site plan survey that no protected trees (20” dbh or greater) are to be removed or impacted by the proposed communication tower development (Sub. 5404).
  - e. Add a note to the site plan that a FDOT driveway permit will be submitted and approved prior to submittal of Final Plan application (Sub. 5611.F & G).
  - f. Provide detail and cross-sections of driveway improvements, stabilization and pavement of driveway apron from the proposed tower to SR 12.
  - g. Under Project Notes, add a note stating that, “Prior to beginning any site work, clearing or tree removal, the Contractor shall schedule a pre-construction meeting with the County Construction Compliance Officer.”
2. Recommend denial of the Antietam Wireless Services, LLC Havana Highway, and SR 12 Communications Tower Conceptual/Preliminary Site Plan (SP-2020-04) based on findings of fact provided in this report, Subsection 5811.H Criteria for Deviations and for testimony provided at the public hearing.
  3. Discretion of the Planning Commission.

**Planning Recommendation:**

Option #1

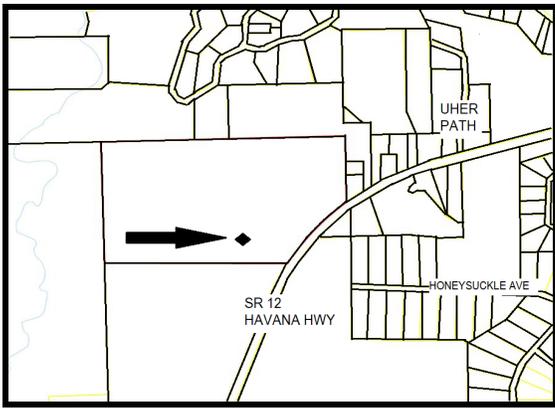
**Attachments:**

1. Newspaper Advertisement
2. Location, Future Land Use and Wetlands Maps
3. Setback Maps – Setbacks from Property Lines with Residences and from Rural Residential
4. Table - Impacted Parcels
5. Section 5800, Communication Towers
6. Gadsden County Owned Lands Map (2015) Tower Map
7. Applicants Response to Request for Requirements and Explanation for Deviation Criteria
8. Application with Attachments
9. Citizen’s Bill of Rights
10. Unimproved access to SR 12
11. Site Plan and Survey w/ e-mail
12. NEPA Summary Report
13. FAA Advisory Reports (E-mailed under separate cover).

# GADSDEN COUNTY PLANNING COMMISSION MEETING NOTICE

The Gadsden County Planning Commission will hold a meeting and public hearing on **Thursday, August 13, 2020, at 6:00 p.m.** Due to the restrictions on gatherings as a result of the COVID-19 virus, this meeting and public hearings may be viewed by accessing the Gadsden County Board of County Commissioners Facebook Page, [www.facebook.com/GadsdenCountyBOCC](https://www.facebook.com/GadsdenCountyBOCC). Those wishing to provide public testimony for the meeting and public hearings will be able to do so by accessing the Zoom platform, with virtual meeting access details that will be posted to the Gadsden County website, [www.gadsdencountyfl.gov](http://www.gadsdencountyfl.gov). Public comment for the meeting and public hearings should be submitted via email to [CitizensToBeHeard@gadsdencountyfl.gov](mailto:CitizensToBeHeard@gadsdencountyfl.gov) until noon August 13, 2020, in order to allow sufficient time for provision to the Planning Commission prior to the meeting and public hearings. Should the status of this meeting change it will be posted on the Gadsden County website, [www.gadsdencountyfl.gov](http://www.gadsdencountyfl.gov). Any comments submitted after this time will be accepted and included as part of the official record of the meeting. The proposed agenda will include the following Public Hearing:

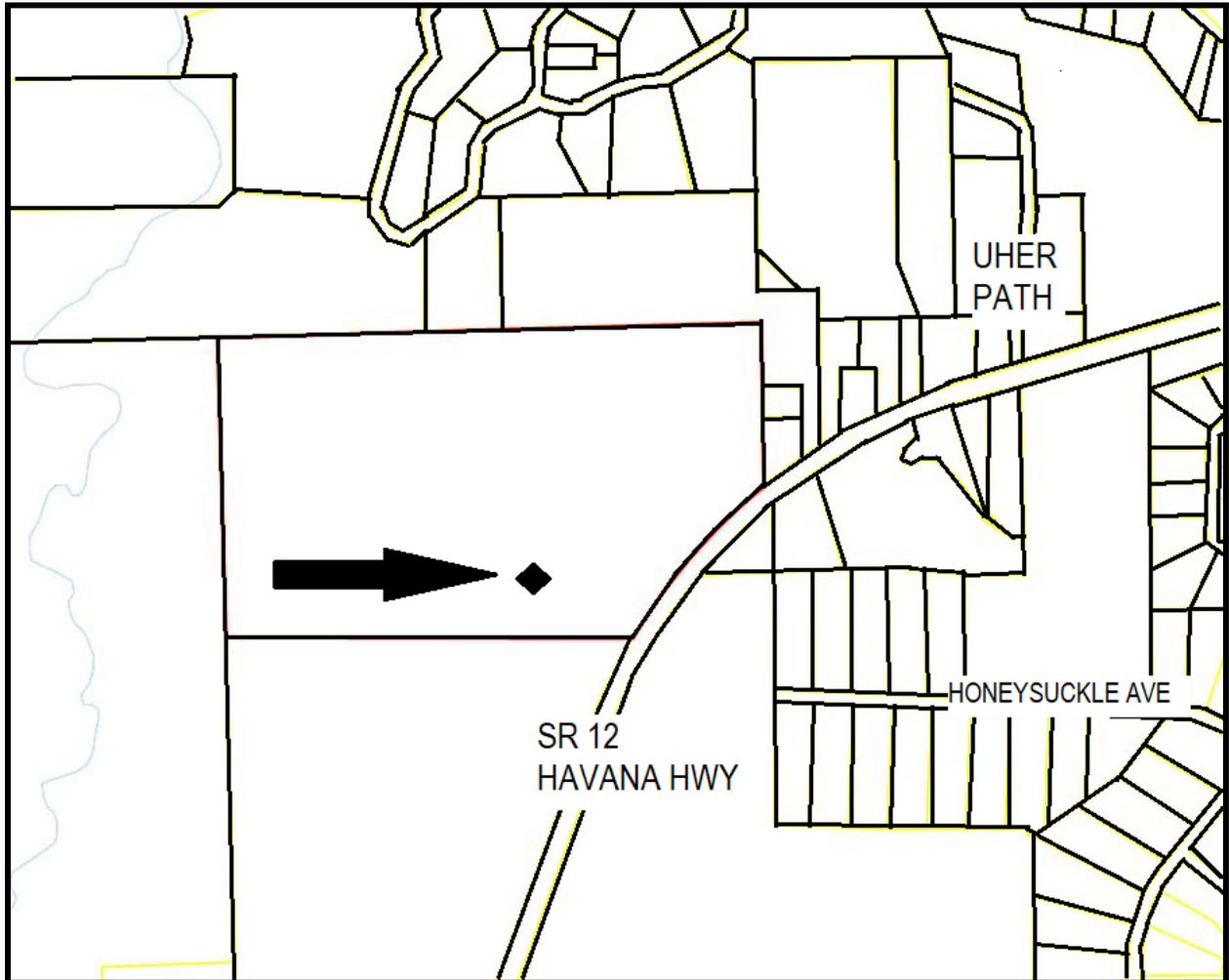
**Antietam Wireless Service, LLC, Havana Highway, SR 12 Communication Tower Conceptual/Preliminary Site Plan (SP-2020-04)** – A conceptual/preliminary site plan to construct a 250’ tall cellular communication tower on parcel located on the west side of SR 12, Havana Highway, referred to as Tax Parcel Id #3-06-2N-2W-0000-00220-0000. Two (2) deviations are requested to reduce setback requirements.



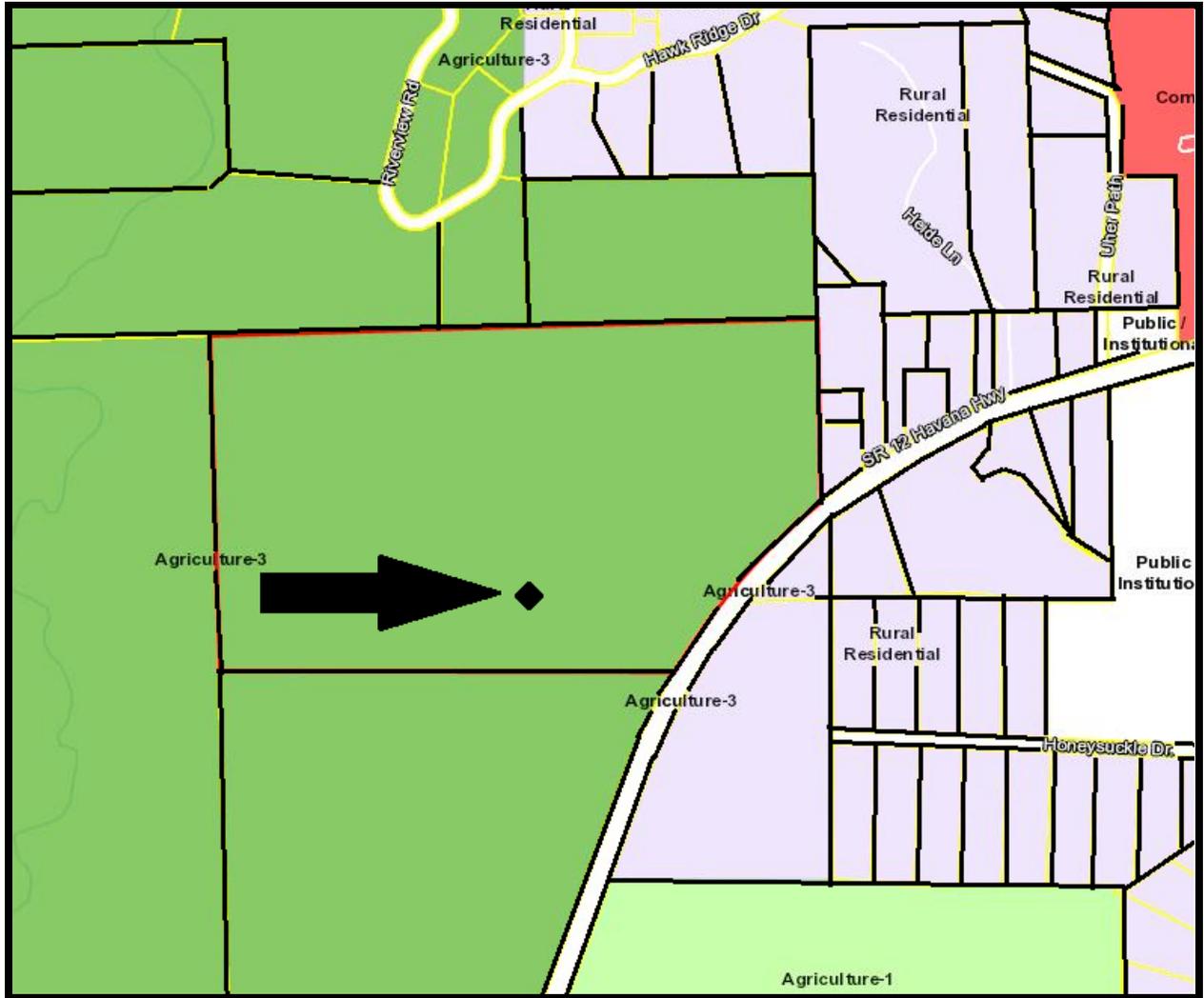
The files for the proposals are available for public inspection on the Gadsden County website at [www.gadsdencountyfl.gov](http://www.gadsdencountyfl.gov).

**In accordance with the Americans with Disabilities Act, persons needing assistance in obtaining any information from the County or virtually attending the public meeting should contact Gadsden County Public Information by calling 850-875-8650 or emailing [media@gadsdencountyfl.gov](mailto:media@gadsdencountyfl.gov) at least 2 hours prior to the meeting.**

# LOCATION MAP



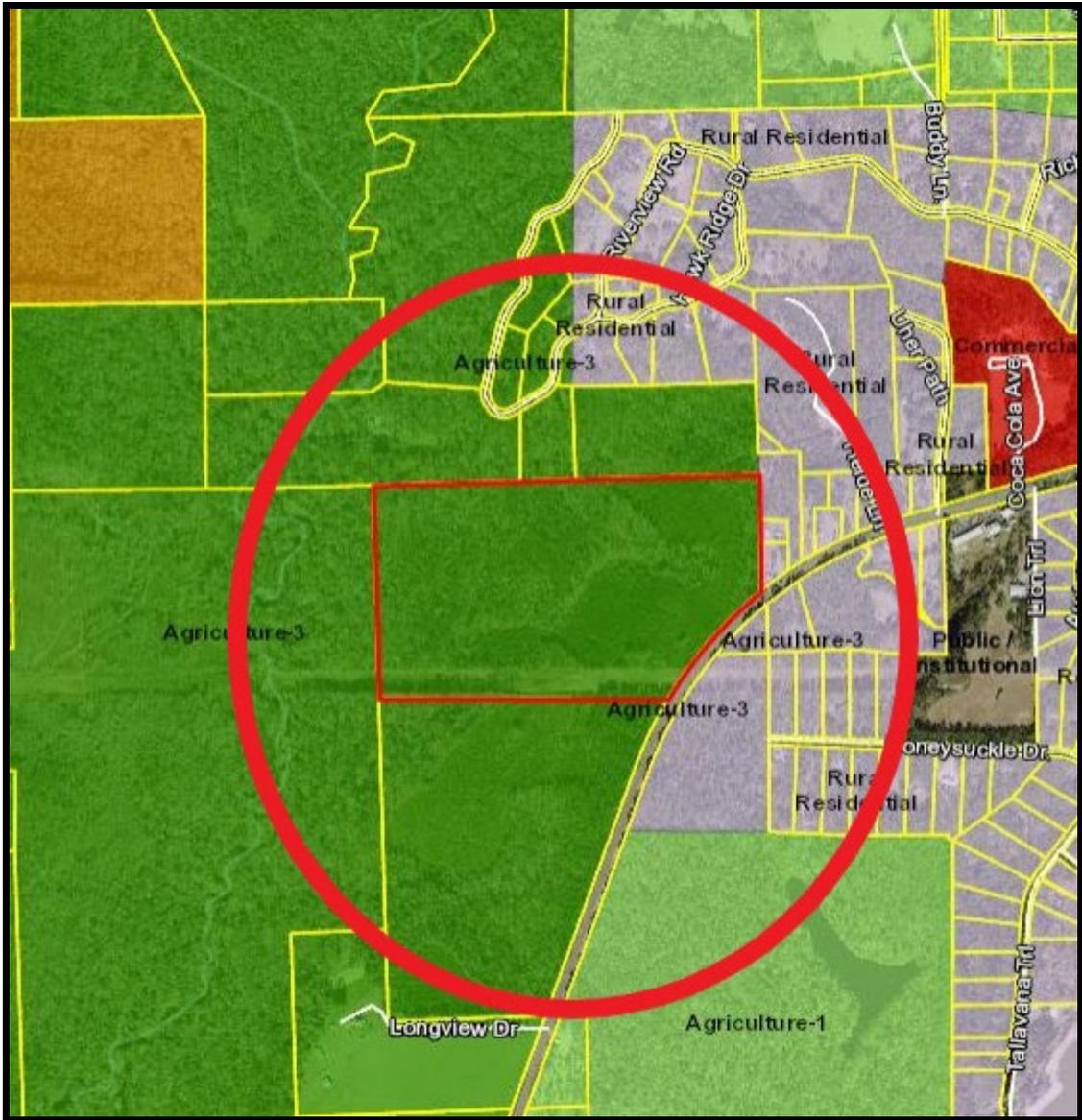
# FUTURE LAND USE MAP



# WETLANDS



0.50 of a Mile Setback  
to parcels Located in Rural Residential



1,750' (7 x 250' HEIGHT) SETBACK  
FROM PROPERTY LINES OF PARCELS CONTAINING  
HOMESTEADED RESIDENCES



PARCELS WITHIN REQUIRED SETBACKS				
TOWERS SHALL BE LOCATED AT LEAST 0.50 OF A MILE FROM LAND DESIGNATED RURAL RESIDENTIAL ON FLUM (SUBSECTION 5805.B.1 of the Land Development Code).				
	PARCEL #	ADDRESS	OWNER	USE
1	3-06-2N-2W-0000-00230-0000-0000	Havana Hwy	Bostick	Timber III
2	3-06-2N-2W-0575-000CC-0010	459 Honeysuckle Dr.	Johnson	SF, H
3	3-06-2N-2W-0575-000CC-0020	415 Honeysuckle Dr.	Loffer	SF, H
4	3-06-2N-2W-0575-000CC-030	377 Honeysuckle Dr.	Maclin	SF, H
5	3-06-2N-2W-0575-000CC-040	345 Honeysuckle Dr.	Kirkland	SF, H
6	3-06-2N-2W-0575-000FF-0030	388 Honeysuckle Dr.	Staron	SF, H
7	3-06-2N-2W-0575-000FF-0020	Honey Suckle Dr	Staron	VAC RES
8	3-06-2N-2W-0575-00FF-0010	Honey Suckle Dr	Johnson	VAC RES
9	3-06-2N-2W-0000-00224-0100	Havana Hwy	Nicholson (Trustee)	Timber III
10	3-06-2N-2W-0000-00213-0500	5650 Havana Hwy	Hall & McGlamory	SF, H
11	3-06-2N-2W-0000-214-0000	5704 Havana Hwy	Garner	MH, H
12	3-06-2N-2W-0000-214-0100	5732 Havana Hwy	Hall	SF, H
13	3-06-2N-2W-0000-00211-0100	Havana Hwy	Bruner	VAC RES
14	3-06-2N-2W-0000-00212-0800	5711 Havana Hwy	Solis	MH
15	3-06-2N-2W-0000-00212-1000	5659 Havana Hwy	Gilbar	SF, N
16	3-06-2N-2W-0000-0212-0900	5663 Havana Hwy	Quinsey	MH, H
17	3-06-2N-2W-0000-00333-0000	5635 Havana Hwy	Sokoloski	SF, H
18	3-06-2N-2W-0000-0212-0500	5587 Havana Hwy	Colvin	MH, H
19	3-06-2N-2W-0000-0212-0400	5573 Havana Hwy	Colvin	SF
20	2-31-3N-2W--0000-00341-0000	Heide Ln	Bruner	VAC
21	2-31-3N-2W-0000-00342-0000	338 Heide Ln	Bruner	MH
22	2-31-3N-2W-0000-00331-0100	147 Hawk Ridge Dr.	Betts	SF
23	2-31-3N-2W-0000-00331-0000	279 Hawk Ridge Dr	Wilson	MH, H
24	2-31-3N-2W-0000-00332-0000	355 Hawk Ridge Dr	Gammon	MH, Y

SUBSECTION 5805.B.1 LOCATED WITHIN 0.50 OF LAND DESIGNATED RURAL RESIDENTIAL ON FLUM, Continued.				
	PARCEL #	ADDRESS	OWNER	USE
25	2-31-3N-2W-0000-00332-0100	1297 Riverview Dr	Steele	MH, Y
26	2-36-3N-2W-0000-00441-0400	1264 Riverview Rd	Williamson	SF
27	2-36-3N-2W-0000-00323-0500	290 Hawk Ridge Dr	Steele	MH, Y
28	2-31-3N-2W-0000-0023-0400	1195 River Ridge Dr.	Bautista	MH, N
29	2-31-3N-2W-0000-00324-0200	Hawk Ride Dr	Merkhofer	VAC
30	2-31-3N-2W-0000-0324-0100	162 Hawk Ridge Dr.	Jubinsky	SF, Y
TOWERS THAT ARE LIT AT NIGHT WITH RED LIGHTS SHALL BE AT LEAST 7X'S (1,750 FEET) THE HEIGHT OF THE TOWER FROM PROPERTY LINES OF PARCELS OF LAND IN WHICH A RESIDENCE IS LOCATED (SUB. 5806.A.3 of the Land Development Code)				
	PARCEL #	ADDRESS	OWNER	HOMESTEADED RESIDENTIAL
1	3-06-2N-2W-0575-000CC- 0010	459 Honeysuckle Dr.	Johnson	SF, H
2	3-06-2N-2W-0000-00213-0500	5650 Havana Hwy	Hall & McGlamory	SF, H
3	3-06-2N-2W-0000-214-0000	5704 Havana Hwy	Garner	MH, H
4	3-06-2N-2W-0000-00333-0000	5635 Havana Hwy	Sokoloski	SF, H
5	3-06-2N-2W-0000-0212-0500	5587 Havana Hwy	Colvin	MH, H

## SECTION 5800. Communication Towers

**Subsection 5801. Purpose and intent.** Gadsden County has on many occasions and with increasing frequency been confronted with requests to site communication towers and antennas. Prior to adoption of this ordinance, the Land Development Code contained no provisions specifically related to siting communication towers and antennas. It is the intent of this ordinance to promote the health, safety and general welfare of the citizens of Gadsden County by regulating the siting of communication towers and antennas. It is also the purpose and intent of this ordinance to provide guidance to communication service providers in finding areas where communication towers may be sited. Accordingly, the County finds that the promulgation of this ordinance is warranted and necessary to accomplish the following purpose.

- A. To direct the location of communication towers and antennas within the unincorporated area;
- B. To protect residential areas and land uses from potential adverse impacts of communication towers;
- C. To reduce adverse visual and aesthetic impacts of communication towers through careful design, siting, landscaping and innovative aesthetic mitigation;
- D. To accommodate the growing needs for communication towers;
- E. To promote and require shared use/co-location of existing and new communication towers as the preferred option rather than construction of single-use towers;
- F. To consider the public health and safety of communication towers;
- G. To avoid or reduce potential damage to adjacent properties from the perspective of public safety, from tower failures through engineering and careful siting of tower structures.
- H. To provide guidance and certainty for communication service providers in finding areas where communication towers may be sited.
- I. To strongly encourage and provide incentives for camouflaged towers where and when appropriate.

(Ord. # 1997-002, 11-18-97) (Ord. # 2001-008, 8-7-01)

**Subsection 5802. Applicability.** All new communication antennas and communication towers in the County shall be subject to these siting and location regulations and all other applicable building and construction codes. In the event of

any conflict between other land use regulations and the regulations contained in this Section, the provision of this section shall override and supersede such other regulations unless otherwise specifically set forth herein.

It is the intent of this ordinance to further the County's communication needs while respecting the visual and physical environment. Permits will be granted for valid Radio Frequency solutions for telecommunications service providers. Tower companies will not be granted permits without a letter of commitment from a first use telecommunications carrier. "Spec" towers, or towers with no confirmed clients, will not be permitted.

(Ord. #1997-002, 11-18-97; Ord. #2001-008, 8-7-01)

**Subsection 5803. Exemptions.** The provisions of this section shall not apply to: Communication antennas and monopole communication towers not subject to lighting requirements under FCC regulations, which are located on property, rights-of-way or easements owned by the Gadsden County Board of County Commissioners.

(Ord. # 1997-002, 11-18-97; Ord. #2001-008, 8-7-01)

**Subsection 5804. Existing communication towers and existing communication antennas.**

- A. All communication towers existing of the effective date of this ordinance, shall be allowed to continue to be used as they presently exist. Routine maintenance (including modifications to accommodate the co-location of an additional user or users) shall be permitted on such existing towers. As a condition for receiving a permit for work on an existing tower, the existing tower's capacity must be increased to provide for co-location. If the existing tower already provides capacity for or actual co-location, then this requirement is not necessary. New construction, other than routine maintenance and modifications to accommodate co-location on an existing communication tower, shall comply with the requirements of this Ordinance. Routine maintenance shall not include any activity that includes structural changes.
- B. For purposes of this Section, a communication tower that has received final approval as either special exception approval or a building permit, but has not yet been constructed shall be considered an existing tower so long as such approval is valid and unexpired as of the effective date of this ordinance.

(Ord. # 1997-002, 11-18-97) (Ord. # 2001-008, 8-7-01)

**Subsection 5805. Location.**

- A. Land Use Category. A communication tower may be located in the following

land use categories as a use-by-right and shall not be subject to review by the Planning Commission or the Board of County Commissioners so long as it meets the requirements of this Code.

1. Commercial
2. Industrial
3. Agriculture 1
4. Agriculture 2
5. Agriculture 3

Prior to approval of any location after the effective date of this ordinance, the applicant must demonstrate that all opportunities have been exhausted without success to locate the communication equipment on 1) public lands owned by the Gadsden County Board of County Commissioners (public lands owned by the Gadsden County Board of County Commissioners are exempt from the location requirements for tower sites if the tower is originated by the BOCC); 2) existing towers; 3) water towers; 4) public buildings. Once the preceding has been fulfilled without success, the following will apply.

B. Restrictions on Use by Right: A communication tower may locate in the above five (5) land use categories, unless the following conditions apply:

1. The subject property is located within 0.50 miles of land that is designated Rural Residential on the land use map. A communication antenna or communication tower that is less than or equal to fifty feet (50') shall be permitted within the residential protection zone.
2. The subject property is within 0.50 miles of a parcel of land or a structure designated as Historic on the County Future Land Use Map. A communication antenna or communication tower that is less than or equal to fifty feet (50') shall be permitted within the historic protection zone.
3. A communication antenna may be located on an existing non-residential structure, provided the communication tower or communication antenna does not extend more than fifty feet (50') above the existing structure. Such structures may include, but are not limited to non-residential buildings, water towers, existing communication towers, recreation light fixtures and other public utility structures. Communication antennas that are located on the previously listed non-residential structures are not subject to the location criteria.
4. Communications towers may not locate closer than 2X the tower height from any County right of way, except as listed in Subsection 5807.

(Ord. # 1997-002, 11-18-97; Ord. # 2003-006, 8-19-03; Ord. # 2001-008, 8-7-01)

**Subsection 5806. Location of communication towers and their proximity**

**to parcels of land with residences.**

- A. Setbacks. Regardless of the land use category in which a communication tower is located, the tower shall meet the following standards regarding their location to parcels of land that have homestead exemption.
1. Camouflaged towers shall be permitted within 2X's the height of the tower from residential property lines within which there are residential structures.
  2. Tower's that are not lit shall be at least 5x's the height of the tower or four-hundred and fifty feet (450'), whichever is greater, from the property lines of the parcels of land in which a residence is located.
  3. Tower's that are lit at night with red lights shall be at least 7x's the height of the tower from property lines of parcels of land in which a residence is located.
  4. Tower's shall not be lit at night with white lights.
  5. Property owners' with tracts of land that are designated Agriculture on the county Future Land Use Map and who are petitioning the county for tower sites shall be exempt from the distance requirements as they apply to their individual residences.
- B. Measurement. Distances shall be measured from the center of the base of the communication tower to the property line.

(Ord. # 1997-002, 11-18-97; Ord. # 2001-008, 8-7-01; Ord. # 2003-006, 8-19-03)

**Subsection 5807. Location of communication towers and their proximity to Interstate 10, US 27, US 90, SR 267 and SR 12.** If a tower is to be located adjacent to the above referenced roadways, then the tower shall be subject to criteria A. above and shall be located no closer than 3X's the height of the tower to the leading edge of the ROW.

(Ord. # 2001-008, 8-7-01)

**Subsection 5808. Co-location.** Limiting unnecessary communication towers while providing service required by the market is important to Gadsden County. Therefore, to implement this objective, planning for additional capacity on existing and new towers is mandatory. All permits for structural changes on towers existing prior to the effective date of this ordinance and for all towers built after the effective date of this ordinance shall be conditioned on the applicant providing for co-location. Prior to receiving approval for a new tower after the effective date of this ordinance, the applicant will be required to sign an agreement with the County agreeing that the applicant will permit co-location of additional providers' communication equipment.

If the communication tower is 180 feet or lower, then co-location shall be provided for at least one other communication service provider. If the tower is greater than 180 feet, then co-location shall be provided for two or more additional communication service providers.

(Ord. #1997-002, 11-18-97) (Ord. #2001-008, 8-7-01)

**Subsection 5809. Design standards.**

- A. **Maximum Height.** Notwithstanding anything to the contrary in the Gadsden County Land Development Code, the maximum height of communication towers shall be two-hundred fifty feet (250'), except in the Agriculture 1 category, where no communication tower shall be greater than 150 feet in height. Measurements of communication tower height shall include the base pad, and other appurtenances and shall be measured from the natural grade of the tower site. The relationship between height and co-location shall apply as included in the section above.
- B. **Illumination.** Communication towers lighting shall not shine on the ground or be directly visible from a residence to assure human safety or as required by the Federal Aviation Administration (FAA). Lighting shall be designed to be shielded from being directly visible from residences within the location proximities listed in criteria F above.
- C. **Finished Color.** Communication towers not requiring FAA painting/markings shall have either a galvanized finish or painted sky blue, gray or black finish.
- D. **Structural Design.** Communication towers shall be designed and constructed to ensure that the structural failure or collapse of the tower will not create a safety hazard, according to latest EIA/TIA standards, to adjoining properties. Communication towers shall be constructed to the EIA/TIA standards as published by the Electronic Industries Association, all applicable Building codes and as determined necessary by the Building Official. All improvements to any existing communication towers shall meet all current construction standards.
- E. **Fencing.** A minimum six foot (6') fence or wall shall be required around all communication tower sites. Access to the communication tower shall be through a locked gate.
- F. **Landscaping.** The following landscaping and buffering shall be required around the perimeter of the communication tower site, except that the requirements may be waived by the Growth Management Director for those sides of the communication tower that are located adjacent to undevelopable lands or land not in the public view. Landscaping shall be installed on the outside of the fence. Further, existing vegetation shall be preserved to the maximum extent practicable and may be used as a substitute for or as a

credit toward meeting the landscaping requirements.

1. A row of shade trees a minimum of six feet (6') tall and a maximum of ten feet (10') apart shall be planted around the perimeter fence.
  2. A continuous hedge at least thirty inches (30") in height at planting and capable of growing to at least thirty-six inches (36") in height within eighteen (18) months shall be planted on the outside of the perimeter fence.
  3. All landscaping shall be of the evergreen, native species varieties.
  4. All landscaping shall be xeriscape tolerant or irrigated and properly maintained to ensure good health and viability.
  5. Regular maintenance of landscaping shall rest with the owner of the tower.
- G. Advertising. No advertising shall be permitted on the communication tower or communication tower site.
- H. Coverage. Tower coverage areas will be designed to provide maximum service to the local area possible for the site. Single purpose coverage towers, e.g., towers designed for Interstate service only, will not be permitted.

(Ord. # 1997-002, 11-18-97; Ord. # 2001-008, 8-7-01; Ord. # 2003-006, 8-19-03)

**Subsection 5810. Camouflaged Towers.** Camouflaged communication towers are encouraged in all land use categories, except the Rural Residential land use category. To provide an incentive for camouflaged tower's the following shall apply:

- A. Design. Camouflaged communication towers on buildings must be disguised to appear as an accessory structure that is normally associated with the principal use occupying the property. Other camouflaged communication towers must be disguised to blend in with other facilities on the property or existing vegetation. Examples of camouflaged communication towers would be a communication towers constructed in the form and shape of a tree to be part of a forested area, or a tower constructed to appear to be a component of a bell or clock tower on sites with compatible buildings or a component of a church steeple on sites with churches.
- B. Finish and Lighting. Surface finish, paint/ or markings alone are insufficient to qualify for a determination as a camouflaged communication tower. Camouflaged towers shall not be lit. Camouflaged towers shall be one-hundred fifty feet (150') in height or less.
- C. Use by Right. Camouflaged communication towers shall be permitted as a

use-by-right in all land use categories (except Rural Residential) regardless of the location standards set forth in this ordinance.

- D. Type of Review. Camouflaged communication towers shall be processed as a Class I land use and a Type I review.
- E. Setbacks. Camouflaged towers shall be permitted within 2X's the height of the tower from residential property lines within which there are residential structures.

(Ord. # 2003-006, 8-19-03)

**Subsection 5811. Procedures.** The following procedures shall be followed for the application and approval process for all new communications towers covered by this ordinance.

- A. Pre-application Conference. A pre-application conference as outlined in the Gadsden County Land Development Code shall be required.
- B. Location review. All requests for communication towers and communication antenna shall be processed as a Type I Land Use. A decision to deny an application for the siting of a communication tower or communication antenna shall be in writing. No location for placement, construction or modification of a communication tower or communication antenna shall be regulated based on the environmental effects of radio frequency emissions to the extent that the communication tower and communication antennas comply with the FCC regulations concerning such emissions. Site plan requirements pursuant to the Gadsden County Land Development Code shall be followed. Applicants requesting communication tower sites must demonstrate that the location criteria are met.
- D. Certification of Compliance with FCC (NIER) Standards. Prior to receiving final inspection, the applicant shall certify in writing submitted to the Growth Management Department that the communication tower complies with all current FCC regulations for non-ionizing electromagnetic radiation (NIER) and that the radio frequency levels meet the American National Standards Institute (ANSI) C95 guidelines for public safety. The Growth Management Director shall indicate on the site plan approval that this certification has been received.
- E. Site Plan requirements. Prior to any approval of a communication tower site, a site plan consistent with the requirements of Chapters 5 and 7 of the Gadsden County Land Development Code shall be submitted by the applicant for Department approval.
- F. Deviations from standards in this section. Deviations from the requirements of this code shall be processed as Class II land uses and reviewed according

to the criteria contained in the Gadsden County Land Development Code, and as described below.

- G. Supplemental Information Required for Deviations from the Standards in this Section. The following information shall be included with all applications requesting deviations from the standards contained in this section. The applicant may use any combination of site plans, surveys, maps, technical reports or written narratives necessary to convey the following information:
1. A scaled site plan clearly indicating the tower site, type and height of the proposed tower, the location of the accessory building, on-site land uses and land use category, adjacent land use categories, adjacent roadways, proposed means of access, distances from property lines, elevation drawings of the proposed communication tower, and any other proposed structures.
  2. A current aerial map, as maintained by the Gadsden County Property Appraiser's Office, showing the location of the proposed communication tower.
  3. A legal description of the parent tract and tower site.
  4. If the proposed communication tower site meets the required minimum distance from residential lot lines, the approximate distance between the proposed tower and the nearest residential lot line, platted residential properties, or unplatted residential properties. If the proposed tower does not meet the minimum distance requirements, then exact distances, locations and the identification of said properties shall be shown on the land use map.
  5. A landscape plan showing specific landscape materials.
  6. The method of fencing, finished color and if applicable, the method of aesthetic mitigation and illumination.
  7. If the applicant is not co-locating on the proposed communication tower of another provider, evidence that it has made diligent but unsuccessful efforts to co-locate its antenna and associated equipment on an existing structure.
  8. Evidence that the applicant has made diligent but unsuccessful efforts to locate the proposed communication tower on suitable government-owned property.
  9. The written consent by the applicant that any deviations from the standards in this section shall be conditioned upon requiring the applicant

to a) construct the proposed tower to provide sufficient excess capacity over the initial loading and b) permit at least two (2) other comparable communication provider to use the proposed tower where feasible and subject to reasonable terms. The term *where feasible*, as it applies to co-location means that utilization of a communication tower by another party would, at the time of such utilization, comply with sound engineering principles, would not materially degrade or impair the communication tower's utilization by the existing user(s), would not unduly burden the tower structurally and would not otherwise materially and adversely impact the existing user(s). *Reasonable terms* for use of a communication tower that may be imposed by the owner include a requirement for reasonable rent or fees, taking into consideration the capital cost of the communication tower and land, the incremental cost of designing and constructing the tower to accommodate the additional users, increases in maintenance expenses relating to the communication tower and a fair return on investment, provided such amounts are also consistent with rates paid by other co-locators at comparable communication tower sites;

10. With respect to deviations only, certification by the applicant that the proposed communication tower shall not be considered if it is possible to serve the same areas within additional smaller towers that meet the criteria in E - P above and is necessary to serve an adjacent or nearby residential area or areas.

11. If the applicant is requesting a deviation from the standards of this Code, then a camouflaged tower may be used to fulfill compatibility concerns by the County. The camouflaging technique shall be consistent with the definition included in this code and approved by the Board of County Commissioners.

H. Criteria for Deviations from the Standards Contained in this Section. A deviation from the requirements of this ordinance may be granted only upon a finding by the Board of County Commissioners that the following are met:

1. The deviation will not be detrimental to the public good or to the surrounding properties.
2. The location of existing uses, structures or other features on or adjacent to the property create a need for the deviation.
3. The deviation sought is the minimum necessary to address the need for the deviation, subsequent subject to exploring all reasonable siting alternatives.
4. The location of the proposed communication tower in relation to existing structures, trees and other visual buffers shall minimize to the greatest

extent reasonably practical under the circumstances any impacts on affected residentially developed or parcels designated as Rural Residential on the land use map.

5. The communication tower will be compatible to the greatest extent possible, with the existing contiguous uses or compatible with the general character and aesthetics of the neighborhood or the area, considering the design and height of the communication tower, the mitigating affects of any existing or proposed landscaping, fencing or other structures in the area, the proximity of the communication tower to existing or proposed buildings or structures and similar factors.
6. The strict application of the requirements of this section will constitute a substantial hardship to the applicant.
7. The granting of the deviation is consistent with the general intent and purpose of the Comprehensive Plan.

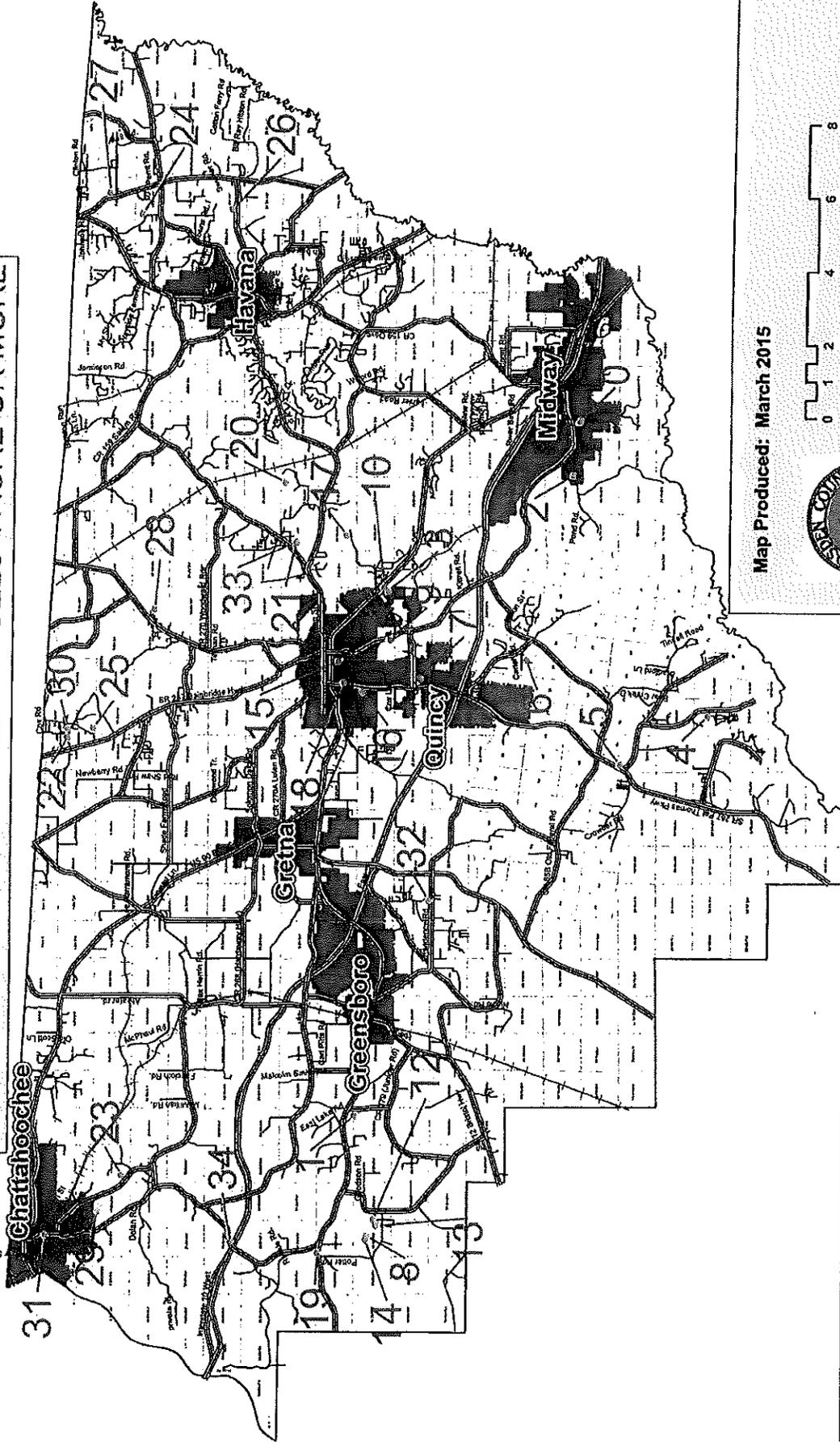
(Ord. # 1997-002, 11-18-97) (Ord. # 2001-08, 8-7-01)

**Subsection 5812. Abandonment.** In the event the use of any communication tower has been discontinued for one hundred eighty (180) consecutive days, the communication tower shall be deemed to be abandoned. Determination of the date of abandonment shall be made by the Director of Growth Management (or his/her designee), based upon documentation and/or affidavits from the communication tower owner/operator regarding the issue of communication tower usage. Upon the Director's determination of such abandonment, the owner/operator of the communication tower shall have an additional one hundred eighty (180) days to:

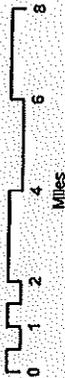
- A. Reactivate the use of the communication tower or transfer the communication tower to another owner/operator who makes actual use of the communication tower; or
- B. Dismantle and remove the tower.

(Ord. # 2001-008, 8-7-01)

GADSDEN COUNTY OWNED PARCELS 1 ACRE OR MORE



Map Produced: March 2015



Legend

County Owned Parcels 1 Acre Or More

# Hopping Green & Sams

Attorneys and Counselors

June 15, 2020

**VIA EMAIL**

Jill Jeglie  
Gadsden County  
Planning and Community Development  
1-B East Jefferson Street  
Quincy, FL 32353  
[jjeglie@gadsdencountyfl.gov](mailto:jjeglie@gadsdencountyfl.gov)

**RE: Explanation of Deviation Criteria  
Site Plan Application for New 250 ft. Telecommunications Tower & Facility.**

Dear Ms. Jeglie:

In your request for additional information email on June 11, 2020, you asked that the application provide information on the following: “6. For communication towers with deviations address each of the requirements of Subsection 5811.F, 5811.G and 5811.H and provided supplemental materials to support the deviations.” Subsections 5811.F, G, and H of the Gadsden County Land Development Code relate to deviations from standards of the Communication Towers Section (5800). As mentioned in the initial application, the Applicant is requesting two deviations:

1. Subsection 5806(A)(3) requires that towers that are lit at night with red lights shall be at least 7 times the height of the tower from property lines of parcels of land in which a residence is located. The proposed site location was selected to meet the RF engineer’s coverage and capacity criteria for the area. The proposed tower site is located as far as possible from neighboring residential uses while not impacting nearby wetlands or other natural features. The proposed location is the optimum location for both providing coverage and capacity of service and protecting the health, safety and welfare of the community.
2. Subsection 5805(B)(1) states that a tower may be located in an Agriculture 3 land use category by right, unless the tower is located within 0.5 miles of land that is designated Rural Residential. The proposed site is on land designated at Agriculture 3, which allows telecommunication towers. The proposed tower is less than 0.5 miles from Rural Residential land to the east. Antietam Wireless requests this deviation because the proposed site meets the RF engineer’s coverage and capacity criteria for the area. There are no suitable locations within the coverage area that would also meet the 0.5-mile distance from Rural Residential.

Below, on behalf of the Applicant, each of the relevant parts of Subsections 5811.F, G, and H shall be addressed with reference to previously-provided application materials or additional materials provided with this letter. The relevant code sections are shown in *italics*; the Applicant’s responses

Gadsden County  
 Planning and Community Development  
 June 15, 2020  
 Page 2 of 5

in **bold**. We ask that the Board of County Commissioners make the requisite findings and grant the requested deviations.

*Subsection 5811.G. Supplemental Information Required for Deviations from the Standards in this Section.*

*5811.G.1. A scaled site plan clearly indicating the tower site, type and height of the proposed tower, the location of the accessory building, on-site land uses and land use category, adjacent land use categories, adjacent roadways, proposed means of access, distances from property lines, elevation drawings of the proposed communication tower, and any other proposed structures.*

**RESPONSE: Provided by Applicant on June 8, 2020 as Attachment #6.**

*5811.G.2. A current aerial map, as maintained by the Gadsden County Property Appraiser's Office, showing the location of the proposed communication tower.*

**RESPONSE: Provided by Applicant on June 8, 2020 as Attachment #6, Sheet Z-1.**

*5811.G.3. A legal description of the parent tract and tower site.*

**RESPONSE: See Application Attachment #5; Also, per previous confirmation from planning director, an updated survey shall be provided by the Applicant.**

*5811.G.4. If the proposed communication tower site meets the required minimum distance from residential lot lines, the approximate distance between the proposed tower and the nearest residential lot line, platted residential properties, or unplatted residential properties. If the proposed tower does not meet the minimum distance requirements, then exact distances, locations and the identification of said properties shall be shown on the land use map.*

**RESPONSE: See Application Attachment #6, Sheet Z-2; See also 1,750' and 0.5-mile distance map enclosed herein.**

*5811.G.5. A landscape plan showing specific landscape materials.*

**RESPONSE: Per Section 5809.F., the Applicant requests that the Growth Management Director waive the landscaping requirements as the proposed site is adjacent to undevelopable lands and the site is not in the public view.**

*5811.G.6. The method of fencing, finished color and if applicable, the method of aesthetic mitigation and illumination.*

**RESPONSE: See Application Attachment #6; See also Neighborhood Plan Attachment #11.j.**

Gadsden County  
 Planning and Community Development  
 June 15, 2020  
 Page 3 of 5

*5811.G.7. If the applicant is not co-locating on the proposed communication tower of another provider, evidence that it has made diligent but unsuccessful efforts to co-locate its antenna and associated equipment on an existing structure.*

**RESPONSE: No such structure exists. See Application Attachment #6, Sheet Z-2; Application Attachment #7; Application Attachment #8**

*5811.G.8. Evidence that the applicant has made diligent but unsuccessful efforts to locate the proposed communication tower on suitable government-owned property.*

**RESPONSE: No such government-owned property exists in the coverage area.**

*5811.G.9. The written consent by the applicant that any deviations from the standards in this section shall be conditioned upon requiring the applicant to a) construct the proposed tower to provide sufficient excess capacity over the initial loading and b) permit at least two (2) other comparable communication provider to use the proposed tower where feasible and subject to reasonable terms. The term where feasible, as it applies to co-location means that utilization of a communication tower by another party would, at the time of such utilization, comply with sound engineering principles, would not materially degrade or impair the communication tower's utilization by the existing user(s), would not unduly burden the tower structurally and would not otherwise materially and adversely impact the existing user(s). Reasonable terms for use of a communication tower that may be imposed by the owner include a requirement for reasonable rent or fees, taking into consideration the capital cost of the communication tower and land, the incremental cost of designing and constructing the tower to accommodate the additional users, increases in maintenance expenses relating to the communication tower and a fair return on investment, provided such amounts are also consistent with rates paid by other co-locators at comparable communication tower sites;*

**RESPONSE: Provided by Applicant on June 8, 2020 as Attachment #9.**

*5811.G.10. With respect to deviations only, certification by the applicant that the proposed communication tower shall not be considered if it is possible to serve the same areas within additional smaller towers that meet the criteria in E - P above and is necessary to serve an adjacent or nearby residential area or areas.*

**RESPONSE: No such tower exists. See Application Attachment #6, Sheet Z-2; Application Attachment #7; Application Attachment #8**

*5811.G.11. If the applicant is requesting a deviation from the standards of this Code, then a camouflaged tower may be used to fulfill compatibility concerns by the County. The camouflaging technique shall be consistent with the definition included in this code and approved by the Board of County Commissioners.*

Gadsden County  
 Planning and Community Development  
 June 15, 2020  
 Page 4 of 5

**RESPONSE:** Technical constraints on a camouflaged tower would prevent the Applicant and carrier from achieving the service coverage and capacity needs for this site. The Applicant knows of no compatibility concerns by the County.

*Subsection 5811.H. Criteria for Deviations from the Standards Contained in this Section. A deviation from the requirements of this ordinance may be granted only upon a finding by the Board of County Commissioners that the following are met:*

*5811.H.1. The deviation will not be detrimental to the public good or to the surrounding properties.*

**RESPONSE:** The public will experience improved and enhanced wireless coverage as well as reliable access to emergency services.

*5811.H.2. The location of existing uses, structures or other features on or adjacent to the property create a need for the deviation.*

**RESPONSE:** As demonstrated on the provided site plans, the size, location, and configuration of the property creates a need for the requested deviations. There are wetlands and other protected features to the west and north of the proposed site location. The proposed site is the maximum distance from neighboring residential properties without impacting natural features. There are no alternative sites, structures, or locations that would meet the coverage and capacity gained by the proposed tower.

*5811.H.3. The deviation sought is the minimum necessary to address the need for the deviation, subsequent subject to exploring all reasonable siting alternatives.*

**RESPONSE:** As demonstrated on the site plans, the tower is located in the least intrusive location on the site. The deviations sought are the minimum possible deviations from the strict requirement of the Land Development Code for a location that meets the RF engineer's coverage and capacity criteria for the area. As stated above, there are natural features on the site that are avoided by the proposed location. The proposed location is the minimum deviation necessary to meet the coverage gained by the proposed tower. The site location explanation further explains the reasonable alternatives considered.

*5811.H.4. The location of the proposed communication tower in relation to existing structures, trees and other visual buffers shall minimize to the greatest extent reasonably practical under the circumstances any impacts on affected residentially developed or parcels designated as Rural Residential on the land use map.*

**RESPONSE:** The compound will not be visible from any public right-of-way or adjacent residential property. The site is well within an area of the matured trees, and from a distance, only the top of the tower will be visible.

*5811.H.5. The communication tower will be compatible to the greatest extent possible, with the existing contiguous uses or compatible with the general character and aesthetics of the neighborhood or the area, considering the design and height of the communication tower, the mitigating effects of any existing or proposed landscaping, fencing or other structures in the area,*

Gadsden County  
Planning and Community Development  
June 15, 2020  
Page 5 of 5

*the proximity of the communication tower to existing or proposed buildings or structures and similar factors.*

**RESPONSE:** As demonstrated previously provided RF Engineering Report, the tower location was selected to meet the RF engineer’s coverage and capacity criteria for the area. The compound will not be visible from any public right-of-way or adjacent residential property. The site is well within an area of the matured trees, and from a distance, only the top of the tower will be visible. This provides compatibility to surrounding properties. The proposed location is the maximum distance from existing structures without impacting natural features on the site. Compatibility is demonstrated in the previously provided site plans as well as the map attached to this letter showing the 1,750’ and 0.5-mile distances from the tower site.

Given the size, location, and configuration of the property, the location and design of the tower is compatible with existing contiguous uses and the general character and aesthetics of the area.

*5811.H.6. The strict application of the requirements of this section will constitute a substantial hardship to the applicant.*

**Response:** Due to existing site conditions and the extensive setback requirements, without the grant of these deviations, this application cannot proceed. Strict application of the code requirements constitutes a substantial hardship to the applicant.

*5811.H.7. The granting of the deviation is consistent with the general intent and purpose of the Comprehensive Plan.*

**RESPONSE:** The location and design of the tower is compatible with the area and consistent with the intent of the Comprehensive Plan and the underlying future land use designation.

The responses above, initial application materials, and additional materials provided along with this explanation should adequately explain the need for the requested deviations. Thank you for your consideration of this application.

Sincerely,



Robert C. Volpe  
HOPPING GREEN & SAMS

# Hopping Green & Sams

Attorneys and Counselors

June 8, 2020

**VIA ELECTRONIC DELIVERY**

Gadsden County  
 Planning and Community Development  
 Attn: Jill Jeglie  
 1-B East Jefferson Street  
 Quincy, FL 32353

**RE: Site Plan Application for New 250 ft. Telecommunications Tower & Facility**

Dear Ms. Jeglie:

This law firm serves as authorized agent for applicant Antietam Wireless Services, LLC (“Antietam”). On behalf of Antietam we respectfully submit this application for conceptual/preliminary site plan approval for a 250-foot self-supporting telecommunications tower within a 100-foot by 100-foot leased area enclosed by a 6-foot fence. The tower site is located on a parent tract on Havana Highway in Gadsden County, Florida, tax Parcel ID No. 3-06-2N-2W-0000-00220-0000, an 87.82-acre tract owned by Ann F. Nicholson, Trustee of the Ann F. Nicholson Revocable Trust Agreement. The proposed tower site has a land use designation of “Agriculture 3.” Verizon Wireless will be the initial wireless carrier on the proposed tower.

Section 5800 of the Gadsden County Land Development Code outlines the requirements for telecommunication towers in Gadsden County. As evidenced by the enclosed application materials and except for the two deviations requested below, the proposed tower meets the requirements of section 5800.

Antietam is requesting 2 deviations from the Land Development Code:

1. Subsection 5806(A)(3) requires that towers that are lit at night with red lights shall be at least 7 times the height of the tower from property lines of parcels of land in which a residence is located. The proposed site location was selected to meet the RF engineer’s coverage and capacity criteria for the area. The proposed tower site is located as far as possible from neighboring residential uses while not impacting nearby wetlands or other natural features. The proposed location is the optimum location for both providing coverage and capacity of service and protecting the health, safety and welfare of the community.

2. Subsection 5805(B)(1) states that a tower may be located in an Agriculture 3 land use category by right, unless the tower is located within 0.5 miles of land that is designated Rural Residential. The proposed site is on land designated at Agriculture 3, which allows telecommunication towers. The proposed tower is less than 0.5 miles from Rural Residential land to the east. Tarpon Towers requests this deviation because the proposed site meets the RF engineer’s coverage and capacity criteria for the area. There are no suitable locations within the coverage area that would also meet the 0.5-mile distance from Rural Residential.

Gadsden County  
 Planning and Community Development  
 Page 2 of 2

Gadsden County Citizen's Growth Management and Planning Bill of Rights:

Robert Volpe, the applicant's agent, held a Citizen's Bill of Rights meeting on Wednesday, February 19, 2020, at the Havana Public Library at 203 5th Ave E, Havana, Florida, from 5:00pm to 6:00pm. Twelve citizens attended the meeting. A Neighborhood Plan including minutes from the Citizen's Bill of Rights Meeting, considerations and concerns raised by attendees, and responses from the applicant to address those concerns are included in the application materials.

Enclosed with this letter are the following tabbed materials:

1. Class II, Type II Site Plan Application Form
2. Authorization to Represent Form
3. Property Owner Authorization
4. Land Lease Agreement
5. Title Commitment
6. Preliminary Site Plans
7. Location Explanation
8. Radio Frequency Engineering Coverage and Capacity Analysis
9. Statement of Intent to Provide Collocation
10. FAA Determination of No Hazard to Air Traffic Letter
11. Gadsden County Citizens Growth Management and Planning Bill of Rights Neighborhood Plan

The application fee of \$625 will be sent via UPS under separate cover. Please advise if any additional materials are required. Otherwise and on behalf of the landowner and Antietam, I look forward to working with the Department staff in advancing this application to consideration by the Board of County Commissioners. With kind regards, I remain

Sincerely,



Robert C. Volpe  
 HOPPING GREEN & SAMS

Enclosures

# Hopping Green & Sams

Attorneys and Counselors

July 27, 2020

**VIA ELECTRONIC DELIVERY**

Gadsden County  
 Planning and Community Development  
 Attn: Jill Jeglie  
 1-B East Jefferson Street  
 Quincy, FL 32353

**RE: Site Plan Application for New 250 ft. Telecommunications Tower & Facility  
 Parcel ID No. 3-06-2N-2W-0000-00220-0000  
 Applicant Antietam Wireless Services, LLC**

Dear Ms. Jeglie:

Pursuant to your June 24, 2020 email requesting additional information, Antietam Wireless provides the following attached documents as well as the explanation below:

1. Boundary Survey of existing parent parcel including legal description.
2. Boundary Survey of proposed site including legal description.
3. Letter of Intent from Verizon Wireless
4. Authorization to Represent from Vertical Bridge Development, LLC to Antietam Wireless Services, LLC.
5. Florida Power Corporation non-exclusive transmission line easement.

Hard copies (24" x 36") of the boundary surveys are being delivered to Gadsden County under separate cover.

Responding directly to the questions in your email, the applicant states:

1. Vertical Bridge Development LLC is involved with this project in partnership with Antietam Wireless Services, LLC and was involved in obtaining the plans and federal approvals. Antietam Wireless is the lessee of the tower site and applicant for site plan approval. For the County's assurances, Antietam provides the Authorization to Represent from Vertical Bridge Development, LLC to Antietam Wireless Services, LLC, which is attached to this letter. Maser Consulting, P.A. is the engineer of record for Antietam Wireless.
2. Please include as a condition of the permit that the access drive will meet the requirements of the Gadsden County Land Development Code. This shall be shown on the final development plans prior to approval.
3. The Florida Power Corporation non-exclusive transmission line easement is attached to this letter. The non-exclusive nature of the easement reserves for the grantor the right to convey other non-exclusive easements so long as those uses do not interfere. Accordingly, Antietam's access easement does not interfere with the powerline easement. This is

Gadsden County  
Planning and Community Development  
July 27, 2020  
Page 2 of 2

supported by the timber agreements contained in the previously submitted title report which allow access for timber harvesting through and across the property.

4. The supposed eagle's nest is not an issue. As you previously mentioned by telephone, the nest that was previously thought to be an eagle's nest is in fact an osprey nest. This was confirmed by the Florida Fish and Wildlife Conservation Commission Bald Eagles Nest database.
5. A Letter of Intent to occupy the tower from Verizon Wireless is included with this letter.

Thank you for your consideration of this application. Please do not hesitate to contact me if you have questions regarding the documents provided with this letter. I look forward to presenting this application to the Gadsden County Planning Commission and Board of County Commissioners.

Sincerely,



Robert C. Volpe  
HOPPING GREEN & SAMS

Enclosures



1-B East Jefferson Street, Post Office Box 1799, Quincy, FL 32353-1799  
 Phone: (850) 875-8663 Fax: (850) 875-7280  
 E-mail: [planning@gadsdencountyfl.gov](mailto:planning@gadsdencountyfl.gov) Web site: [www.gadsdengov.net](http://www.gadsdengov.net)

**Class II, Type 11 Site Plan**

x \_\_\_\_\_ Conceptual/Preliminary \_\_\_\_\_ Conceptual \_\_\_\_\_ Preliminary

1. APPLICANT/OWNER

NAME (Print): Antietam Wireless Services, LLC (Applicant); Ann F. Nicholson, Trustee (Owner)  
 CONTACT PERSON (If Corporation): Michael Shine  
 ADDRESS: 103 Carnegie Center, Suite 300  
 CITY: Princeton STATE: NJ ZIP: 08540  
 TELEPHONE: (973 ) 454-0302 E-MAIL: info@antietam-wireless.com

2. AUTHORIZED REPRESENTATIVE NAME: Hopping Green & Sams, P.A.

ADDRESS: 119 South Monroe St., Suite 300  
 CITY: Tallahassee STATE: FL ZIP: 32301  
 TELEPHONE: (850 ) 222-7500 E-MAIL: robertv@hgslaw.com

3. Parcel Identification Number 3-06-2N-2W-0000-00220-0000

4. Land Use Category: Agriculture 3 Existing Use: Timberland

5. Project Description: 250' Self Support Telecommunications Tower

Total Parcel Area: 87.82 acres Total Development Area: 10,000 SF tower site  
 Number of Buildings: n/a Gross Floor Area: n/a Floor Area Ratio: n/a  
 Number of Stories: n/a Height: 250' Area in Wetlands: none  
 Area of Stormwater Facilities: n/a Impervious Surface Area: n/a  
 Number of Seats for Restaurants or other places of Assembly: n/a  
 Parking & Driveway Area Paved: none Unpaved Parking Area: 12' wide access road  
 Number of Parking Spaces: n/a Number of Handicapped Spaces: n/a

6. NFIP# 12039C-0251C Flood Zone: X (Label and Locate on plans.)

7. The following plans and documents are required to complete this application for review (also see County Land Development Code (LDC) Chapter 5, Subsections 5207 and 5208 and Chapter 7, Subsection 7102 (Level I) or Subsection 7103 (Level II)):

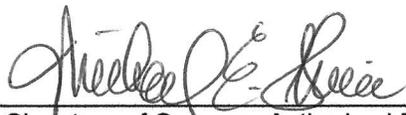
- a. \_\_\_\_\_ Two copies of this application with fee (\$400) plus concurrency, if applicable.
- b. \_\_\_\_\_ Six (6) Folded Preliminary Site Plan 24" x 36" prints, 2 signed and sealed (copies must include the signature and seal), and a .pdf copy (electronic copy). Plans shall addressing the requirements of the LDC (See Sub.5206 & 5207).
- c. \_\_\_\_\_ An up-to-date survey (signed and sealed) with legal description.
- d. \_\_\_\_\_ A title opinion (or qualifying deed) with legal descriptions (See Sub. 7103.C of the LDC).
- e. \_\_\_\_\_ Indicate FEMA Flood Zones/special flood hazard areas and environmental resources (wetlands, streams, creeks, etc.) and setbacks to be protected on plans, as applicable.

- f. \_\_\_\_\_ Authorization to Represent, if applicable.
- g. n/a Two (2) copies of an Environmental Impact Assessment per County Land Development Code Section 5400, if applicable.
- h. n/a Two (2) copies of a Certified Tree Survey as required per Subsection 5404.B.3 for protected trees, as applicable. Protected trees (greater than 20" diameter) must be shown on site plans.
- i. \_\_\_\_\_ The completed Concurrency Review Application and traffic analysis, if applicable.

I hereby certify that the information contained in this application is correct and accurate and that I am either the sole property owner of the subject property, or am the authorized representative of the property owner(s) in all regards pertaining to this application pursuant to proof and/or attached authorization.

\_\_\_\_\_ I AM THE OWNER.

X I AM THE LEGAL REPRESENTATIVE OF THE OWNER (Attach Authorization to Represent) of the property described which is the subject matter of this application.

  
 \_\_\_\_\_  
 Signature of Owner or Authorized Representative

The foregoing instrument was acknowledged before me this 16<sup>th</sup> day of March 20, by MICHAEL E. SHINE who is personally known to me, or has produced NJ DRIVER LICENSE identification and who did (did not) take an oath.

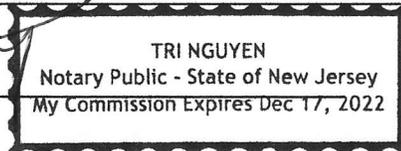
By Michael Shine  
 \_\_\_\_\_  
 Print (Owner or Authorized Representative)

SEAL:

Notary Signature

Notary Printed Name

Commission Number: \_\_\_\_\_





**AUTHORIZATION TO REPRESENT**

If the applicant is not the property owner an 'Authorization to Represent' is required.

This letter serves as notice that on this date: Mar 16, 2020

I/We, Antietam Wireless Services, LLC  
(Print name of property owner(s) and/or entity & authorized representative)

Hereby give authorization to,

Robert C. Volpe, Hoping Green & Sams, P.A.  
(Print name of authorized representative or entity. Print the name of all individuals representing the entity)

(850) 425-2258 Telephone number      robertv@hgska.com E-mail Address

To apply for an Class II, Type 11 Site Plan - Conceptual/Preliminary application(s) and all necessary permits as part of the Gadsden County, Florida review process from the Gadsden County Building & Planning & Department for the property described below:

3-06-2N-2W-0000-00220-0000  
(Parcel identification number)      \_\_\_\_\_ (E911 address)

Michael E. Shine      Michael Shine, Antietam Wireless Services, LLC  
(Signature of property owner or entity & representative)      (Print name of property owner and/or entity)

State of ~~Florida~~ NEW JERSEY <sup>(w)</sup>  
County of ~~Gadsden~~ MONMOUTH

The foregoing instrument was acknowledged before me this 16<sup>th</sup> day of MARCH, 2020  
by MICHAEL E. SHINE who is personally known to me/or has produced  
NJ DRIVER LICENSE as identification and did not take an oath.

[Signature]  
Notary Signature

Notary Seal

TRI NGUYEN  
Notary Name Printed  
Notary Public - State of New Jersey  
My Commission Expires Dec 17, 2022





RECEIVED

JUL 27 2020

PLANNING & ZONING

**AUTHORIZATION TO REPRESENT**

*If the applicant is not the property owner an 'Authorization to Represent' is required.*

This letter serves as notice that on this date: July 23rd, 2020

I/We, Vertical Bridge Development, LLC  
*(Print name of property owner(s) and/or entity & authorized representative)*

Hereby give authorization to,

Michael E. Shine, Antietam Wireless Services, LLC  
*(Print name of authorized representative or entity. Print the name of all individuals representing the entity)*

(973) 454-0302 info@antietam-wireless.com  
*Telephone number E-mail Address*

To apply for an Class II, Type 11 Site Plan - Conceptual/Preliminary application(s) and all necessary permits as part of the Gadsden County, Florida review process from the Gadsden County Building & Planning & Department for the property described below:

3-06-2N-2W-0000-00220-0000   
*(Parcel identification number) (E911 address)*

John E Cooper, Jr  
*(Signature of property owner or entity & representative) (Print name of property owner and/or entity)*

State of Pennsylvania  
County of Alleghany

The foregoing instrument was acknowledged before me this 24th day of July, 2020 by John Cooper Jr. who is personally known to me/or has produced PA Drivers License as identification and did not take an oath.

Notary Signature  
Scott Holland  
Notary Name Printed

Notary Seal  
Commonwealth of Pennsylvania - Notary Seal  
Scott Holland, Notary Public  
Allegheny County  
My commission expires March 25, 2023  
Commission number 1348695  
Member, Pennsylvania Association of Notaries

OWNER'S CONSENT

THE FOLLOWING IS TO BE COMPLETED BY THE OWNER WHERE APPLICANT IS NOT THE OWNER OF THE SUBJECT PROPERTY:

STATE OF FLORIDA)

) SS:

COUNTY OF LEON)

I, Ann F. Nicholson, OF FULL AGE, BEING DULY SWORN ACCORDING TO LAW, UPON MY OATH, DEPOSE AND SAY:

1) I AM THE OWNER IN FEE OF THE SUBJECT PROPERTY KNOWN AS PARCEL NUMBER 3-06-2N-2W-0000-00220-0000 ON THE TAX MAP OF GADSDEN COUNTY, FLORIDA (Municipality)

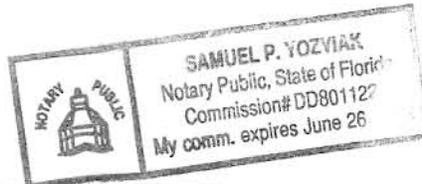
AND BEING APPROX 5 MILES WEST OF HAVANA ON HWY 12 (SR12).

(Street Address)

APPLICANT, ANTIETAM WIRELESS SERVICES, LLC, IS HEREBY AUTHORIZED TO MAKE THE WITHIN APPLICATION AND THE UNDERSIGNED HEREBY CONSENTS TO THE MAKING OF SAME.

Ann F. Nicholson, Trustee
Ann F. Nicholson, Trustee

SWORN AND SUBSCRIBED TO BEFORE ME THIS 1 DAY OF June, 2011



Samuel P. Yozviak
NOTARY PUBLIC OF THE STATE OF FLORIDA

## OPTION AND GROUND LEASE AGREEMENT

This Option and Ground Lease Agreement ("**Lease**") is entered into by and between Ann F. Nicholson, Trustee of the Ann F. Nicholson Revocable Trust Agreement with an address of 3489 Hyde Park Way, Tallahassee, FL 32309 ("**Landlord**") and Antietam Wireless Services, LLC, a Maryland limited liability company ("**Tenant**").

In consideration of the mutual covenants contained herein and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, and intending to be legally bound, the parties hereto agree as follows:

### OPTION

A. Landlord is the owner of a certain tract or parcel of land situated in Gadsden County, Florida, more fully described on Exhibit "A" attached hereto and made a part hereof (the "**Landlord's Property**"). For and in consideration of [REDACTED], paid by Tenant to Landlord upon execution of this Lease by Tenant, Landlord hereby grants to Tenant the right and option to lease (the "**Option**") the Premises (defined below in Section 1 of the Lease), in accordance with the terms and conditions hereinafter set forth. Tenant may exercise the Option, if at all, by written notice to Landlord of such exercise at any time from the date hereof through [REDACTED] (the "**Option Period**").

B. Upon fifteen (15) days' prior written notice by Tenant to Landlord, Tenant may extend the Option Period for an additional period of 12 months, through and including [REDACTED]. Tenant shall pay an additional [REDACTED] for the extension of the Option Period, within 30 days of written notice to Landlord of Tenant's desire to extend.

C. Landlord warrants that it is seized of good and marketable fee simple title to the Premises and has full and sole authority to enter into and execute this Lease. Landlord further warrants that there are no liens, judgments or encumbrances of title on the Premises and that Tenant's intended use of the Premises does not conflict with any agreements, restrictions, covenants, easements, or licenses, whether or not of record, that affect all or any part of Landlord's Property.

D. Should Tenant fail to exercise the Option within the Option Period or any extension thereof, all rights and privileges granted hereunder shall be deemed completely surrendered, the Option and this Lease shall expire, Landlord shall retain all money paid for the Option, and neither party shall have any further monetary or other liability or obligation to the other.

E. During the Option Period, and without limiting Landlord's obligations during the Term of the Lease, Landlord shall (i) cooperate with Tenant and permit Tenant access to Landlord's Property and use of the Premises to conduct such surveys, physical inspections, environmental reports and inspections, subsurface boring tests and other activities of similar nature, as Tenant may deem necessary, at the sole cost of Tenant; and (ii) cooperate with Tenant regarding Approvals as defined and set forth in Section 4(f) of the Lease. Tenant shall have the right to obtain a title report with respect to the Premises. If the state of title shows any liens or

encumbrances that interfere with Tenant's use and operation of the Premises, Tenant shall have the right to either (i) discharge such liens or encumbrances of record, if possible, and deduct the cost thereof from the payments of rent to become due under this Lease, or (ii) terminate this Lease upon written notice to Landlord, whereupon Landlord shall reimburse Tenant for its out-of-pocket costs and thereafter neither party shall have any further liability to the other. Landlord agrees to cooperate in curing title defects.

## LEASE

1. Premises and Term. In consideration of the obligation of Tenant to pay rent and the other terms, provisions and covenants hereof, and, subject to Tenant's exercise of the Option during the Option Period, Landlord hereby demises and leases to Tenant, and Tenant hereby takes from Landlord, pursuant to the terms hereof, that certain tract or parcel of land located within Landlord's Property, all as more fully described in Exhibit "B" attached hereto and made a part hereof, together with (i) all rights, privileges, easements, and appurtenances belonging or in any way pertaining thereto, (ii) the nonexclusive right of access for pedestrian and vehicular ingress and egress and utilities, 7 days a week, 24 hours a day, to and from the above described property over Landlord's Property to the nearest public street, as such access is more fully described in Exhibit "B" (the "**Right of Way**"), and (iii) any other rights or real property needed for continuous utility service, pedestrian and vehicular access and use by Tenant of the above described property (collectively, the "**Premises**"), TO HAVE AND TO HOLD the same for an initial term of five (5) years (the "**Initial Term**") commencing, if at all, at the end of the Option Period, if Tenant exercises the Option. Landlord acknowledges and agrees that Tenant shall have the right to survey the Premises, and said survey shall then become Exhibit "C" to this Lease and shall control in the event of discrepancies between it and Exhibit "B".

2. Renewal Option. Landlord hereby grants to Tenant the right and option to extend the Initial Term of this Lease for five (5) renewal terms of five (5) years each (a "**Renewal Term**"), to begin upon the expiration of the Initial Term or prior Renewal Term, as applicable. All of the terms, provisions and covenants of this Lease shall apply to each Renewal Term. Each Renewal Term option shall be deemed exercised and automatically take effect unless Tenant advises Landlord prior to the expiration of the Initial Term (or any Renewal Term, as applicable) that Tenant does not desire to renew this Lease. The word "Term" shall refer to and include the Initial Term and any Renewal Term.

3. Rent.

(a) Tenant shall pay rent to Landlord at the rate of [REDACTED] per month, commencing on the date of completion of the communications tower or pole to be constructed by Tenant on the Premises, but in no event later than two month(s) after the end of the Option Period if Tenant exercises the Option. Each monthly installment of rent shall be due and payable on or before the first day of each succeeding calendar month during the Initial Term and any Renewal Term. Rent for any fractional month shall be prorated. Rent for each Renewal Term shall be increased by an amount equal to [REDACTED] of the monthly rent for the immediately preceding Initial Term or Renewal Term, as the case may be.

(b) All payments of rent shall be made to Landlord at the address specified in Section 13 of this Lease, or at such other address as may be designated by Landlord by written notice delivered to Tenant at least thirty (30) days prior to the next ensuing rent payment date.

4. Use.

(a) The Premises are leased for the purposes of constructing, installing, operating, maintaining, and upgrading one or more communications towers, poles, guy wires and anchors, equipment shelters, buildings, utility lines, communication equipment, signs, personal property and related facilities and improvements (the "**Communications Facility**"). Tenant shall have the right to use the Communications Facility for its business purposes, which shall include, without limitation, subleasing or licensing all or any portion of the Premises and/or the Communications Facility to third parties ("**customers**"), without Landlord consent.

(b) At all times during the Term of this Lease, Tenant and its employees, agents, customers, and invitees shall have free access to the Premises seven (7) days a week, twenty-four (24) hours a day. If, at any time, access is denied, for any reason whatsoever, and such denial of access continues for two (2) consecutive days, Tenant shall have the right, in addition to other rights and remedies available to Tenant at law or in equity, to terminate this Lease with no further liability or obligation hereunder.

(c) Tenant shall have the right to construct fencing around and within the Premises and to otherwise secure the Premises and the Communications Facility. Tenant may enter upon Landlord's Property for the purpose of making surveys, conducting tests and investigations, and cutting or trimming trees, bushes, or other vegetation that interferes with the use and operation of the Communications Facility, and to construct temporary anchors and guys in connection with the construction of any communications tower or pole on the Premises. If the construction or maintenance of the Communications Facility results in damage to Landlord's Property, Tenant shall promptly repair the same to its prior condition, normal wear and tear and insured casualty excepted.

(d) At all times during the Term Tenant will, and will cause its customers to, observe and conform to, in all material respects, all laws, ordinances, orders, rules and regulations now or hereafter applicable to the Premises, the Communications Facility, and the use of either.

(e) If, at any time during the Term of this Lease, the Federal Aviation Administration, Federal Communications Commission, or other federal, state or governmental agency changes its regulations and requirements so that Tenant may no longer use the Premises for the Communications Facility, or Tenant otherwise determines in its sole discretion that the Premises are no longer appropriate for Tenant's intended use, then notwithstanding anything in this Lease to the contrary, Tenant shall have the right to terminate this Lease upon sixty (60) days' written notice to Landlord. Upon the exercise of such right by Tenant this Lease shall become null and void and neither party shall have any further liability or obligation to the other.

(f) If, at any time during the Term of this Lease, Landlord decides to subdivide, sell, change the status of the zoning of, or impose any encumbrances or restriction on, the Premises, Landlord's Property, or any other real property owned by Landlord contiguous to Landlord's

Property (a "Change"), Landlord must immediately notify Tenant of any such Change and such Changes shall be subject to Tenant's rights under this Lease. Landlord shall not initiate or consent to any Change that would prevent or limit Tenant from using the Premises for the uses intended by Tenant as set forth in this Lease. Landlord further represents, agrees and covenants that during the Term of this Lease Landlord will not use, or permit others to use, any part of any real property currently owned, or hereafter acquired, by Landlord within five (5) miles of the Communications Facility for any type of communications tower or facilities. Landlord shall execute a recordable covenant reciting this restriction upon Tenant's request, which Tenant may record among the applicable land records.

(g) This Lease is contingent upon Tenant obtaining and thereafter maintaining all consents, certificates, permits, licenses and other approvals ("**Approvals**") that may be required by any governmental or quasi-governmental authorities to enable Tenant to use the Premises for the purposes set forth in this Lease. Landlord shall cooperate with Tenant in its effort to obtain Approvals. Tenant will perform all other acts and bear all expenses associated with any zoning or other procedure necessary to obtain any Approval for the Premises that is deemed necessary and commercially reasonable by Tenant in its sole discretion. Landlord agrees to cooperate with Tenant and to execute any applications, consents or other documents as reasonably necessary for Tenant to apply for, obtain and maintain such Approvals or use of the Premises as a communications tower site. If all such Approvals are not obtained by Tenant within six (6) months from the end of the Option Period (if Tenant exercises the Option), Tenant shall thereafter have the right to terminate this Lease with no further liability or obligation arising hereunder.

(h) Tenant shall have the right, but not the obligation, to construct, maintain, repair and replace a roadway over the Right of Way.

5. Utility Services. Tenant shall pay all charges incurred for the use by Tenant of utility services at the Premises including, without limitation, gas, electricity, water, sewer and telephone. Landlord shall cooperate with Tenant in Tenant's efforts to obtain utility services along the Right of Way by signing such documents or easements as may be reasonably required by Tenant's utility service provider. Tenant shall bear the costs of any additional installations to provide utilities.

6. Insurance.

(a) Tenant will, at its own cost and expense, obtain and maintain during the Term, a policy or policies of comprehensive general liability insurance, or its equivalent, with minimum limits of not less than (a) \$1,000,000 for injury to one or more persons in any one occurrence and (b) \$1,000,000 for property damage in any one accident.

(b) The insurance coverage provided for herein may be maintained pursuant to master policies of insurance covering other tower locations of Tenant and its related business entities. All insurance policies required to be maintained by Tenant hereunder shall be with responsible insurance companies, authorized to do business in the state where the Premises are located if required by law, shall name Landlord as an additional insured, as appropriate, and shall provide for cancellation only upon ten (10) days' prior written notice to Landlord. Tenant shall evidence

such insurance coverage by delivering to Landlord, if requested, certificates issued by the insurance companies underwriting such risks.

7. Taxes. Tenant will be responsible for payment of all personal property taxes assessed directly upon the Communications Facility and arising solely from its use. Tenant will pay to Landlord any increase in real property taxes attributable solely to the Communications Facility within 60 days after receipt of satisfactory documentation indicating calculation of Tenant's share of such real estate taxes and payment of the real estate taxes by Landlord. Landlord will pay when due all real estate taxes and assessments attributable to Landlord's Property of which the Premises is a part, subject to reimbursement by Tenant as required above.

8. Liability and Indemnification. Landlord shall not be liable for any injury to person or damage to property on or about the Premises caused by the negligence or willful misconduct of Tenant, its employees, customers or agents, or of any other person entering upon Landlord's Property or the Premises under express or implied invitation of Tenant (other than Landlord or Landlord's employees, contractors, agents or invitees), or a breach of this Lease by Tenant, and Tenant agrees to indemnify and hold harmless Landlord from any loss, claim, damage, cost, or expense suffered or incurred by Landlord by reason of any such damage or injury. Tenant shall not be liable for any injury to person or damage to property on or about Landlord's Property caused by the negligence or willful misconduct of Landlord, its employees, contractors, or agents, or of any other person entering upon Landlord's Property under express or implied invitation of Landlord (other than Tenant or Tenant's employees, customers, agents or invitees), or a breach of this Lease by Landlord, and Landlord agrees to indemnify and hold harmless Tenant and its customers from any loss, claim, damage, cost, or expense suffered or incurred by Tenant or its customers by reason of any such damage or injury.

9. Quiet Enjoyment; Condition of Property.

(a) Tenant, on paying rent and performing its obligations hereunder, shall peaceably and quietly hold and enjoy the Premises for the Term of this Lease, including any Renewal Terms, without any hindrance, molestation or ejection by Landlord, its successors or assigns, or those claiming through any of them. Without limiting the foregoing, Landlord shall indemnify, defend and hold harmless Tenant from any defects in title or loss of possession or other damages (including, without limitation, court costs and reasonable attorneys' fees) arising out of or in connection with breach of Landlord's representations and warranties contained in this Lease. Landlord agrees that it will cooperate with Tenant in executing under and/or delivering any curative documents, consents or ratifications with respect to this Lease as reasonably requested by Tenant and as may be required to insure leasehold title to the Premises in favor of Tenant at regular rates.

(b) Landlord represents and warrants that Landlord's Property is in compliance with any and all applicable federal, state or local statutes, ordinances, codes, administrative orders, rules or regulations relating to or concerning hazardous, toxic or dangerous waste, substance or material, including, without limitation, the Resource Conservation and Recovery Act, as amended, the Comprehensive Environmental Response, Compensation and Liability Act, as amended, and the National Environmental Protection Agency requirements (collectively, "Environmental Laws"). Landlord further represents and warrants that Landlord's Property, the

easements and the improvements thereon are free of contaminants, oils, asbestos, PCB's, hazardous substances or wastes as defined by any Environmental Law or other materials the removal of which is required or the maintenance of which is prohibited, regulated or penalized by any federal, state or local government authority ("Hazardous Materials"). Tenant shall have the option, without limiting any other remedies available to Tenant, of terminating this Lease if Hazardous Materials are discovered to exist on the Premises through no fault of Tenant after Tenant takes possession of the Premises, and Tenant shall be entitled to a refund of all consideration given Landlord, and relief from all further liability, under this Lease.

(c) During the Term of this Lease, Landlord covenants and agrees that it will not grant, create, or suffer any claim, lien, encumbrance, easement, restriction, or other charge or exception to title to the Premises without the prior written consent of Tenant; provided, however, that it is expressly agreed and understood that Landlord may subject its interest in the Premises to a first mortgage loan if its lender shall agree for itself, its successors, and assigns, by written instrument in form and substance reasonably satisfactory to Tenant, (i) to be bound by the terms of this Lease; (ii) not to disturb Tenant's or its customers' use or possession of the Premises in the event of a foreclosure of such lien or encumbrance so long as Tenant is not in default under this Lease; and (iii) not to join Tenant or any of its customers as a party defendant in any such foreclosure proceeding taken by it.

(d) Any sale of Landlord's Property, including, without limitation, a sale in bankruptcy, shall be under and subject to this Lease.

(e) At any time and from time to time but within ten (10) days after written request by Tenant, Landlord will execute, acknowledge and deliver to Tenant an estoppel certificate certifying (i) that this Lease is valid, unmodified and in full force and effect or, if there have been modifications, that this Lease is in full force and effect, as modified, and stating the date and nature of each modification, (ii) the date, if any, to which rent and other sums payable under this Lease have been paid, (iii) that no notice has been received by Landlord of any default which has not been cured, except as to defaults specified in the certificate, (iv) that Tenant is not in default of the terms hereof, or if Tenant is in default, the nature of said default, and (v) such other matters as may be reasonably requested by Tenant, or any lender of Tenant, including such matters as are set forth in Section 18 hereof.

10. Assignment. Tenant may assign this Lease at any time without the prior written consent of Landlord. After delivery by Tenant to Landlord of an instrument of assumption by an assignee that assumes all of the obligations of Tenant under this Lease, Tenant will be relieved of all liability hereunder, without necessity of any further writing.

11. Communications Facility Ownership. The Communications Facility, when located on the Premises and even if installed on or attached to the Premises, shall not be deemed to be part of the Premises, but shall be separately owned by Tenant and/or its customers, as the case may be. At any time during the Term of this Lease, Tenant and its customers shall have the right to remove all or any portion of the Communications Facility from the Premises Tenant shall remove the Communications Facility and related improvements from the Premises within one hundred eighty (180) days of the termination this Lease, with any foundations to be removed to two (2) feet below grade. Upon termination this Lease, the Premises shall be restored as closely

as is practical to its condition existing on the date of this Lease (except for any tree, shrub or other vegetation that was removed), normal wear and tear and insured casualty excepted. Landlord shall provide Tenant with a written declaration stating that Landlord does not have an ownership interest in the Communications Facility, or any part thereof, located on the Premises and that same are owned by Tenant or its customers, as the case may be, within fifteen (15) days after receipt of a written request therefor from Tenant.

12. Right of Inspection. Upon request and in the presence of Tenant or its employee or agent, Landlord and its agents and representatives shall be entitled to enter upon and inspect the Premises at any time during normal business hours, provided only that such inspection shall not unreasonably interfere with Tenant's business and the operation of the Communications Facility.

13. Notices. All notices, demands, requests, or other communications which are required to be given, served or sent by one party to the other pursuant to this Agreement shall be in writing, and shall be mailed, postage prepaid, by certified mail, or by a reliable overnight courier service for next business day delivery and with delivery verification, to the following addresses or at such other address as may be designated in writing by either party:

***If to Landlord:***

Ann F. Nicholson  
4297 Maylor Lane  
Tallahassee, FL 32308-5770  
  
Phone # (850) 251-3936

***If to Tenant:***

Antietam Wireless Services, LLC  
ATTN: Legal Department  
103 Carnegie Center, Suite 300  
Princeton, NJ 08540  
Phone # (973) 454-0302

**With a copy to:**

Philip S. Burnham, II, Esquire  
Burnham Law Group, LLC  
8000 Sagemore Drive  
Suite 8303  
Marlton, New Jersey 08053  
Phone # (856) 751-5505

Notice given by certified mail or by reliable overnight courier shall be deemed delivered on the date of receipt (or on the date receipt is refused) as shown on the certification of receipt or on the records or manifest of the U.S. Postal Service or such courier service.

14. Right of First Refusal.

(a) If during the Term of this Lease Landlord receives a bona fide arm's length offer to purchase all or any portion of Landlord's Property, including, without limitation, the Premises, from any third party (the "**Transferee**"), Landlord shall serve a notice (the "**Transfer Notice**") upon Tenant. The Transfer Notice shall set forth the exact terms of the offer so received,

together with a copy of such offer (the "**Offer**"), and shall state Landlord's intent to accept the Offer on such terms and conditions. Tenant shall have the right and option to purchase the Property at the price and upon the terms and conditions specified in the Offer, by notice (the "**Counternotice**") to that effect to Landlord within thirty (30) days after receipt of the Transfer Notice. The closing of the purchase and sale pursuant to this option shall occur at the time set forth in the Offer, provided that Tenant shall not be required to close before the 20th business day following the date of the Counternotice. Tenant's failure to give a timely Counternotice (or its notice of refusal to purchase) shall be deemed a waiver of its rights to exercise its right of first refusal to accept the Offer but shall not be deemed a waiver of its right of first refusal with respect to any modification to the Offer or any future Offers. In the event of any transfer made by Landlord to Landlord's heirs or related family, this Section shall not apply and the Agreement shall transfer with any such assignment and Landlord shall be required to notify Landlord of such transfer within thirty (30) days of the change in title.

(b) If the Offer is not accepted by Tenant, Landlord may sell the Property to the Transferee on the terms contained in the Offer. Any such sale and transfer must be consummated within one hundred eighty (180) days following the expiration of the time provided for the acceptance of the Offer by Tenant. If the Premises are sold to the Transferee, the sale shall be subject to all of the terms and conditions of this Lease.

15. Default. Either party hereunder shall be in default ("Default") under this Lease if that party fails to perform any of its material obligations under this Lease and such failure continues for thirty (30) days ("Cure Period") after the other party gives written notice thereof to the defaulting party; provided, however, that if more than thirty (30) days shall be required in order to cure any such default, the defaulting party shall have an additional thirty (30) days to cure hereunder if the defaulting party shall have commenced and is diligently pursuing corrective action within the Cure Period.

16.  Holding Over by Tenant . Should Tenant hold over the Premises or any part thereof after the expiration of the Initial Term or any Renewal Term, unless otherwise agreed in writing, such holdover shall constitute and be construed as a tenancy from month-to-month only, but otherwise upon the same terms and conditions as are contained in this Lease.

17. Condemnation.

(a) If all of the Premises (or if less than all, if Tenant determines that the Communications Facility cannot be operated on the remaining portion as a communications tower site) shall be acquired by the right of condemnation or eminent domain for any public or quasi-public use or purpose, or transferred to a condemning authority under threat of condemnation, then the Term of this Lease shall cease and terminate as of the date of title vesting in such proceeding (or sale) and all rent shall be paid or refunded to that date, as the case may be, with no further liability or obligation arising hereunder.

(b) In the event of a partial taking or condemnation of less than a substantial portion of the Premises and Tenant determines that the Communications Facility can be operated on the remaining portion as a communications tower site, this Lease shall continue in full force and effect, but with an equitable reduction or abatement of rent.

(c) In the event of any condemnation, taking or sale, whether whole or partial, Landlord and Tenant shall each be entitled to seek, receive and retain such separate awards and portions of lump sum awards as may be allocated to their respective interests in any condemnation proceedings, or as may be otherwise agreed. Termination of this Lease shall not affect the right of the parties to such awards.

18. Mortgagee Protection; Customer Recognition.

(a) Landlord consents to the granting by Tenant of a priority lien, leasehold mortgage, and security interest in Tenant's interest in this Lease, the Communications Facility, all of Tenant's personal property and fixtures attached to the Premises, if any, and all subleases and licenses thereof to Tenant's customers (collectively, the "Collateral"), and furthermore consents to the exercise by Tenant's lienholder of its rights of foreclosure with respect to its lien and security interests. Landlord agrees to recognize Tenant's lienholder as Tenant hereunder upon any such exercise by Tenant's lienholder of its rights of foreclosure. Tenant shall give Landlord notice of the name and address of any lienholder to which Tenant has granted any such lien or security interest in the Collateral.

(b) Landlord hereby agrees to give Tenant's lienholder written notice of any breach or default of the terms of this Lease, within fifteen (15) days after the occurrence thereof, at such address as is specified by Tenant or Tenant's lienholder. Landlord further agrees that no Default under this Lease shall be deemed to have occurred unless such notice to Tenant's lienholder is also given, and Tenant's lienholder shall have the same period as Tenant, plus an additional ninety (90) days after any applicable grace period to cure or correct any such default, whether the same shall consist of the failure to pay rent or the failure to perform. Landlord agrees to accept payment or performance on the part of Tenant's lienholder as though the same had been made or performed by Tenant, and agrees to permit Tenant's lienholder access to the Premises for such purposes. Landlord agrees that it shall not exercise its right to terminate this Lease or any of its other rights under this Lease upon breach or default of the terms of this Lease without affording Tenant's lienholder the foregoing notice and periods to cure any default or breach under this Lease.

(c) Landlord hereby (i) releases any lien or security interest which it may have which arises by law or pursuant to this Lease in the Collateral, and (ii) furthermore agrees that upon an event of default under the loan documents between Tenant and a lienholder or this Lease, Tenant's lienholder shall be fully entitled to exercise its rights against the Collateral prior to the exercise by Landlord of any rights which it may have therein, including, but not limited to, entry upon the Premises and removal of the Collateral free and clear of any Landlord's lien and security interest.

(d) Landlord acknowledges that nothing contained herein shall be deemed or construed to obligate Tenant's lienholder to take any action hereunder, or to perform or discharge any obligation, duty or liability of Tenant under this Lease.

(e) Landlord agrees to provide any lienholder of Tenant with an estoppel statement regarding matters set forth in this Lease and any other information or document reasonably requested, such as a non-disturbance, subordination and attornment agreement, within ten (10)

days after Landlord receives a request to do so from Tenant or its lienholder. Landlord shall be conclusively deemed to have approved any requested estoppel statement if the same is not returned to Tenant and its lienholder within the ten (10) day period.

(f) Landlord recognizes the subleases and licenses of all of Tenant's customers now or hereafter in effect and will permit each customer of Tenant to remain in occupancy of and use the Premises notwithstanding any Default hereunder by Tenant, so long as each customer is not in default under its sublease or license with Tenant.

19. Force Majeure. The time for performance by Landlord or Tenant of any term, provision, or covenant of this Lease shall be deemed extended by time lost due to delays resulting from acts of God, strikes, civil riots, floods, material or labor restrictions, any acts or failure to act by governmental authority, and any other cause not within the control of Landlord or Tenant.

20. Recording. A short-form memorandum of this Lease, in the form attached hereto as Exhibit "D", setting forth the Initial Term, the Renewal Term options, and such other provisions hereof as Landlord or Tenant shall reasonably deem to be pertinent, which Landlord or Tenant, promptly upon request of the other party, shall execute, acknowledge and deliver to the requesting party in recordable form, may be recorded at Landlord's or Tenant's option. The requesting party agrees to provide the other party with an executed duplicate of such short-form memorandum upon written request.

21. Miscellaneous.

(a) The captions used in this Lease are for convenience only and shall not be deemed to amplify, modify, or limit the provisions hereof.

(b) Words of any gender used in this Lease shall be construed to include any other gender, and words in the singular shall include the plural and vice versa, unless the context otherwise requires.

(c) This Lease shall be binding upon and shall inure to the benefit of the parties hereto and their respective heirs, legal representatives, successors and permitted assigns.

(d) This Lease, and every Exhibit attached hereto, contains the entire agreement of the parties hereto with respect to the subject matter hereof and can be altered, amended or modified only by written instrument executed by all such parties.

(e) The unenforceability of any provision hereof shall not affect the remaining provisions of this Lease, but rather such provision shall be severed and the remainder of this Lease shall remain in full force and effect.

(f) All rights and remedies available to any party hereunder in equity or at law shall be cumulative.

(g) This Lease may be executed in any number of separate counterparts, all of which counterparts taken together shall constitute the entirety of this Lease.

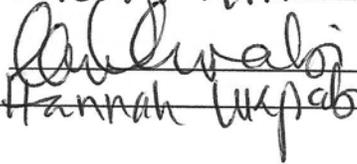
(h) This Lease shall be governed by and construed in accordance with the laws of the state of in which the Premises are located, without regard to conflict of laws.

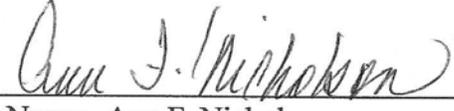
(i) This Lease shall be effective as of the date of last execution by all parties hereto.

{{SIGNATURES TO FOLLOW}}

IN WITNESS WHEREOF, the parties hereto have duly executed this Lease to be effective as of the latest date shown below.

**LANDLORD: Ann F. Nicholson,  
Trustee of the Ann F. Nicholson  
Revocable Trust Agreement**

Witness:   
Name: Kenneth Hall  
Witness:   
Name: Hannah Wpab

By:   
Print Name: Ann F. Nicholson  
Date: 2/15/18  
Tax ID/SS Number: 263-54-4650

**TENANT: Antietam Wireless Services, LLC**

Witness:   
Name: Jose Lopez  
Witness:   
Name: Najda Beyal

By:   
Name: Michael E. Shine  
Title: Member  
Date: 2/22/18

EXHIBIT "A"

## LANDLORD'S PROPERTY

A parcel of land lying in Section 1, Township 2 North, Range 3 West and Section 6, Township 2 North, Range 2 West, Gadsden County, Florida, and being more particularly described as follows:

BEGIN at the Northeast corner of said Section 1 and run;

Thence West along the Northern boundary of said Section 1 a distance of 1320 feet, more or less, to the Northwest corner of the East one half of the Northeast one quarter of said Section 1;

Thence South along the Western boundary of said East one half of the Northeast one quarter of Section 1 a distance of 1481.65 feet, more or less, to the center line of a 100 foot Florida Power Corporation Powerline Easement (Deed Book 92, page 70);

Thence continue South along said Western boundary a distance of 50.00 feet to the Southerly right of way boundary of said Powerline Easement;

Thence South 89 degrees 52 minutes 25 seconds East along said Southerly right of way boundary a distance of 2037.70 feet, more or less, to the Northwesterly right of way boundary of Havana Highway (State Road No. 12 - 100 foot right of way), said point also lying on a curve concave to the Southeast;

Thence Northeasterly along said Northwesterly right of way boundary and said curve with a radius of 2914.79 feet through a central angle of 17 degrees 53 minutes 09 seconds for an arc distance of 909.90 feet (the chord of said arc being North 41 degrees 39 minutes 17 seconds East 906.21 feet) to the Eastern boundary of the Northwest one quarter of the Northwest one quarter of said Section 6;

Thence North along said Eastern boundary a distance of 859.05 feet, more or less, to the Northeast corner of said Northwest one quarter of the Northwest one quarter;

Thence West along the Northern boundary of said Northwest one quarter of the Northwest one quarter a distance of 1320 feet, more or less, to the POINT OF BEGINNING.

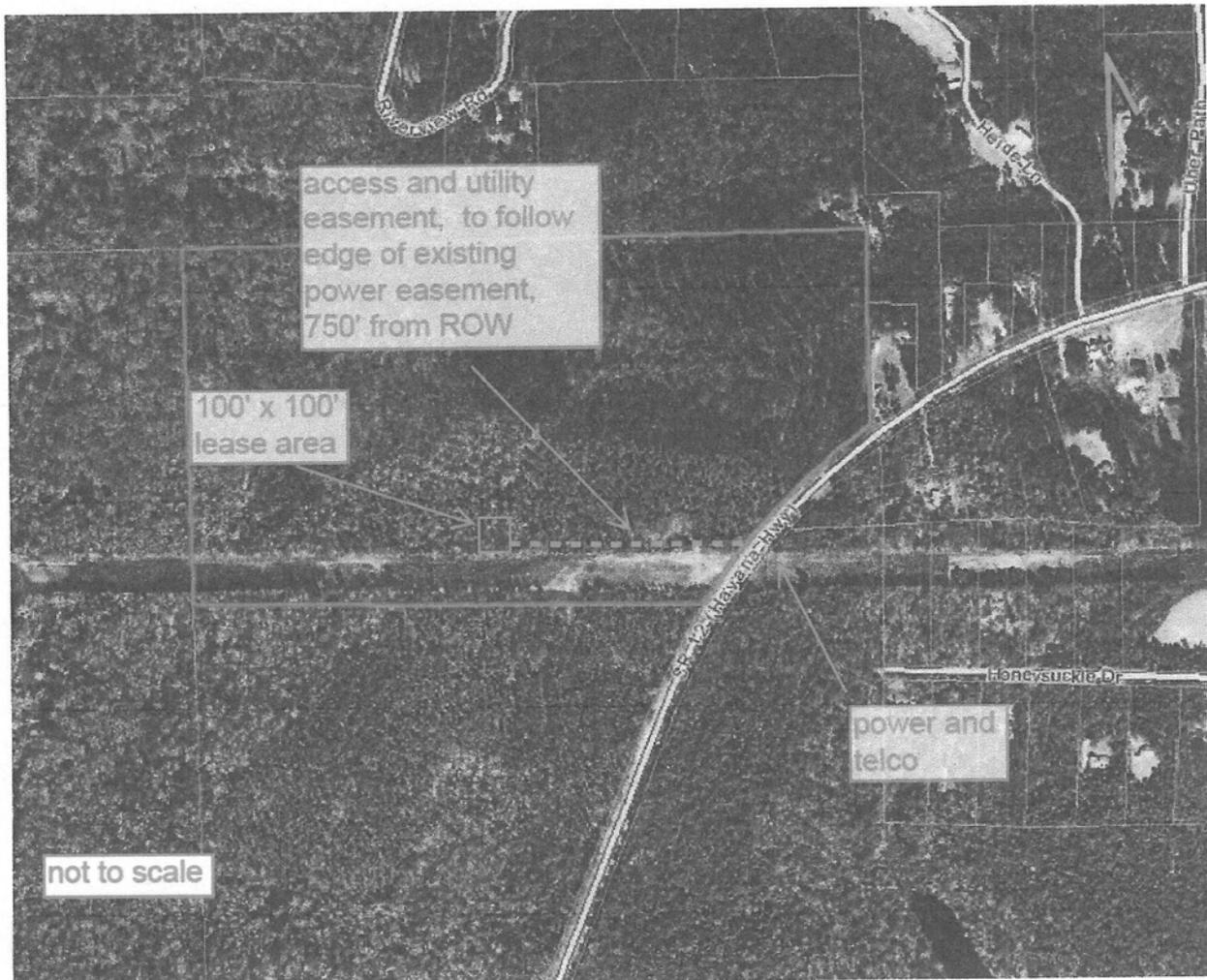
Containing 87.82 acres, more or less.

The above description was prepared from existing deeds and maps and not the result of a recent in field survey.

**EXHIBIT "B"**

**PREMISES**

[The attached sketch of the Premises (including, without limitation the Right of Way) will be replaced at Tenant's option by a scale drawing and/or legal description.]



**EXHIBIT "C"**

**SURVEY**

**[TO BE OBTAINED BY TENANT]**

**EXHIBIT "D"****Memorandum of Lease**

CLERK: Please return this document to: **Antietam Wireless Services, LLC**  
**ATTN: Legal Department**  
**103 Carnegie Center, Suite 300**  
**Princeton, NJ 08540**

This Memorandum of Lease is entered into on this 15<sup>th</sup> day of FEBRUARY, 2018, by and between Ann F. Nicholson, Trustee of the Ann F. Nicholson Revocable Trust Agreement, with an address of 4297 Maylor Lane, Tallahassee, FL 32308-5770, (hereinafter referred to as "Landlord") and Antietam Wireless Services, LLC, a Maryland limited liability company, with an address at 103 Carnegie Center, Suite 300, Princeton, NJ 08540 (hereinafter referred to as "Tenant").

1. Landlord and Tenant entered into an Option and Lease ("Lease") on the 15<sup>th</sup> day of FEBRUARY, 2018, for the purpose of installing, operating and maintaining a radio communications facility and other improvements. All of the foregoing are set forth in the Lease.
2. Upon the exercise of the Option, the term of the Lease is for five (5) years with five (5) successive five (5) year options to renew.
3. The property which is being leased to Tenant is described in **Exhibit 1** annexed hereto ("Landlord's Property"). The portion of Landlord's Property being the subject of the Lease (the "Premises") is described in **Exhibit 2** annexed hereto.

IN WITNESS WHEREOF, the parties have executed this Memorandum of Lease as of the day and year first above written.

**Landlord:** Ann F. Nicholson, Trustee of the Ann F. Nicholson Revocable Trust Agreement

Witness: [Signature]  
Name: Kenneth Hall

Witness: [Signature]  
Name: Hannah Ukpaton

By: [Signature]  
Print Name: Ann F. Nicholson  
Date: 2/15/18

Tax ID/SS Number: 208-54-4050

STATE OF Florida

COUNTY OF Leon

On the 15th day of February, 2018, personally appeared before me Ann F. Nicholson, as the Landlord named herein, and he/she acknowledged that he/she executed this Lease as his/her free act and deed in such capacity.



[Signature]  
Notary Public

My commission expires: 5/13/2020

**Tenant: Antietam Wireless Services, LLC**

Witness: [Signature]  
Name: [Signature]

Witness: [Signature]  
Name: [Signature]

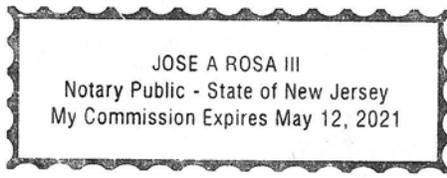
By: [Signature]  
Name: Michael E. Shine  
Title: Member  
Date: 2/22/18

STATE OF New Jersey  
COUNTY OF Mercer

On the 22 day of February, 2018, personally appeared before me Michael E. Shine, as Member of the Tenant named herein, and he acknowledged that he executed this Lease as his free act and deed in such capacity.

[Signature]  
Notary Public

My commission expires: 5/12/2021



## EXHIBIT 1

### Landlord's Property

A parcel of land lying in Section 1, Township 2 North, Range 3 West and Section 6, Township 2 North, Range 2 West, Gadsden County, Florida, and being more particularly described as follows:

BEGIN at the Northeast corner of said Section 1 and run;

Thence West along the Northern boundary of said Section 1 a distance of 1320 feet, more or less, to the Northwest corner of the East one half of the Northeast one quarter of said Section 1;

Thence South along the Western boundary of said East one half of the Northeast one quarter of Section 1 a distance of 1481.65 feet, more or less, to the center line of a 100 foot Florida Power Corporation Powerline Easement (Deed Book 92, page 70);

Thence continue South along said Western boundary a distance of 50.00 feet to the Southerly right of way boundary of said Powerline Easement;

Thence South 89 degrees 52 minutes 25 seconds East along said Southerly right of way boundary a distance of 2037.70 feet, more or less, to the Northwesterly right of way boundary of Havana Highway (State Road No. 12 - 100 foot right of way), said point also lying on a curve concave to the Southeast;

Thence Northeasterly along said Northwesterly right of way boundary and said curve with a radius of 2914.79 feet through a central angle of 17 degrees 53 minutes 09 seconds for an arc distance of 909.90 feet (the chord of said arc being North 41 degrees 39 minutes 17 seconds East 906.21 feet) to the Eastern boundary of the Northwest one quarter of the Northwest one quarter of said Section 6;

Thence North along said Eastern boundary a distance of 859.05 feet, more or less, to the Northeast corner of said Northwest one quarter of the Northwest one quarter;

Thence West along the Northern boundary of said Northwest one quarter of the Northwest one quarter a distance of 1320 feet, more or less, to the POINT OF BEGINNING.

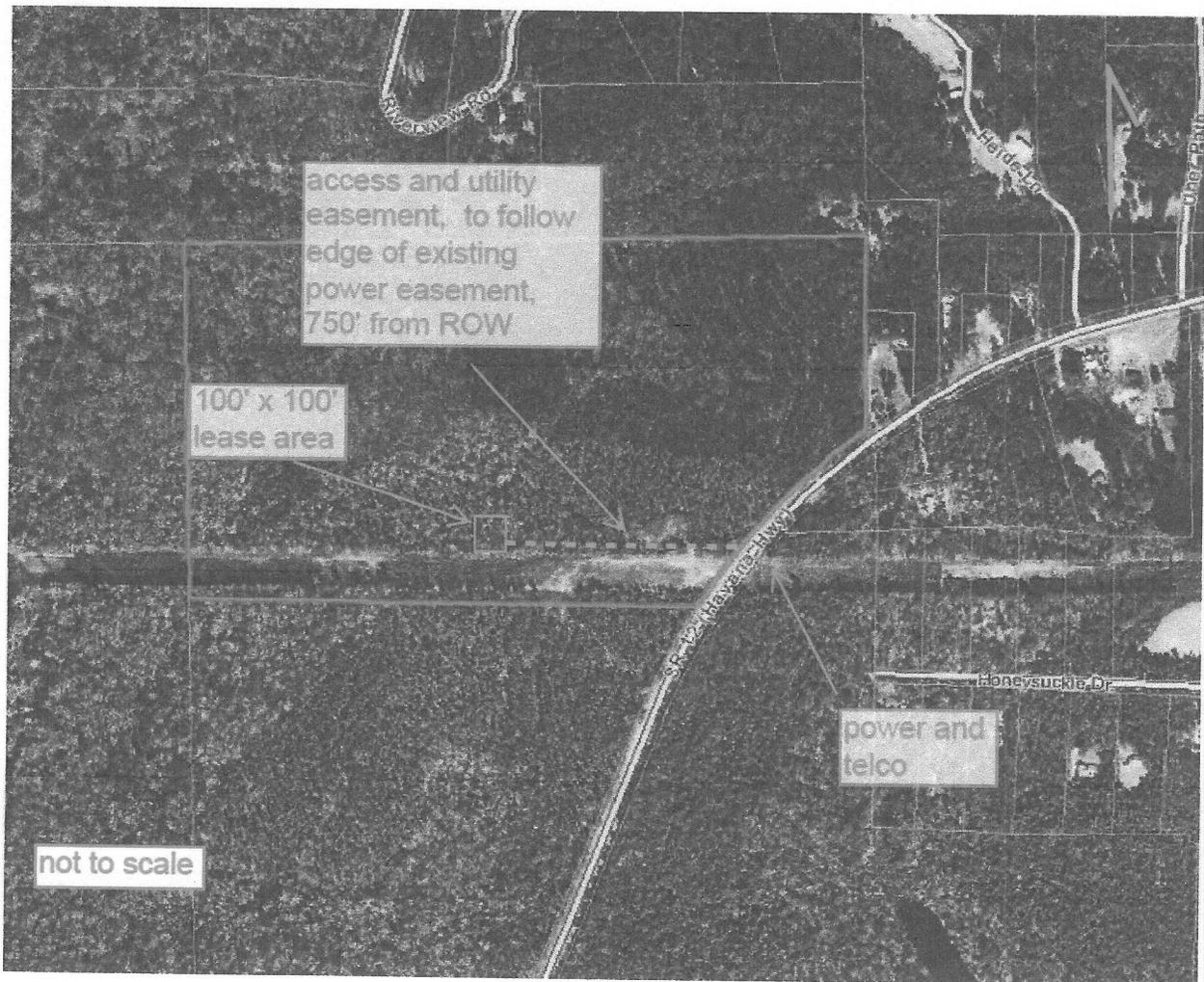
Containing 87.82 acres, more or less.

The above description was prepared from existing deeds and maps and not the result of a recent in field survey.

**EXHIBIT 2**

**Premises**

[The attached sketch of the Premises (including, without limitation, a Right of Way described in the Lease) may be replaced at Tenant's option by a scale drawing and/or legal description.]



# ALTA COMMITMENT FOR TITLE INSURANCE

Issued By:



**Fidelity National Title\***  
Insurance Company

Commitment Number:

**31269254**

### NOTICE

**IMPORTANT - READ CAREFULLY:** THIS COMMITMENT IS AN OFFER TO ISSUE ONE OR MORE TITLE INSURANCE POLICIES. ALL CLAIMS OR REMEDIES SOUGHT AGAINST THE COMPANY INVOLVING THE CONTENT OF THIS COMMITMENT OR THE POLICY MUST BE BASED SOLELY IN CONTRACT.

THIS COMMITMENT IS NOT AN ABSTRACT OF TITLE, REPORT OF THE CONDITION OF TITLE, LEGAL OPINION, OPINION OF TITLE, OR OTHER REPRESENTATION OF THE STATUS OF TITLE. THE PROCEDURES USED BY THE COMPANY TO DETERMINE INSURABILITY OF THE TITLE, INCLUDING ANY SEARCH AND EXAMINATION, ARE PROPRIETARY TO THE COMPANY, WERE PERFORMED SOLELY FOR THE BENEFIT OF THE COMPANY, AND CREATE NO EXTRACTIONAL LIABILITY TO ANY PERSON, INCLUDING A PROPOSED INSURED.

THE COMPANY'S OBLIGATION UNDER THIS COMMITMENT IS TO ISSUE A POLICY TO A PROPOSED INSURED IDENTIFIED IN SCHEDULE A IN ACCORDANCE WITH THE TERMS AND PROVISIONS OF THIS COMMITMENT. THE COMPANY HAS NO LIABILITY OR OBLIGATION INVOLVING THE CONTENT OF THIS COMMITMENT TO ANY OTHER PERSON.

### COMMITMENT TO ISSUE POLICY

Subject to the Notice; Schedule B, Part I-Requirements; Schedule B, Part II-Exceptions; and the Commitment Conditions, Fidelity National Title Insurance Company, a Florida corporation (the "Company"), commits to issue the Policy according to the terms and provisions of this Commitment. This Commitment is effective as of the Commitment Date shown in Schedule A for each Policy described in Schedule A, only when the Company has entered in Schedule A both the specified dollar amount as the Proposed Policy Amount and the name of the Proposed Insured.

If all of the Schedule B, Part I-Requirements have not been met within six (6) months after the Commitment Date, this Commitment terminates and the Company's liability and obligation end.

### Fidelity National Title Insurance Company

By:

\_\_\_\_\_  
President

Attest:

\_\_\_\_\_  
Secretary

Countersigned By:

\_\_\_\_\_  
Authorized Officer or Agent

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Transaction Identification Data for reference only:

ISSUING OFFICE:
Strategic Market Services-FNT 7130 Glen Forest Drive, Suite 300 Richmond, VA 23226 Main Phone: (866)552-0129

**Order Number:** 31269254  
**Prepared For:** Antietam Wireless Services, LLC  
**Customer Ref.:** FL 439 165

**SCHEDULE A**

1. Commitment Date: March 30, 2020
2. Policy to be issued:
  - (a) ALTA Owner's Policy 2006 (with Florida Modifications)  
 Proposed Insured: Site ID, Inc.  
 Proposed Policy Amount: \$0.00
  - (b)  
 Proposed Insured:  
 Proposed Policy Amount: \$0.00
3. The estate or interest in the Land described or referred to in this Commitment is:  
 Leasehold Estate
4. The Title is, at the Commitment Date, vested in:  
 Ann F. Nicholson, Trustee of the Ann F. Nicholson Revocable Trust Agreement dated March 24, 1998
5. The Land is described as follows:  
 SEE EXHIBIT "A" ATTACHED HERETO AND MADE A PART HEREOF

**END OF SCHEDULE A**

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## EXHIBIT "A"

### Legal Description

An interest in land, said interest being over a portion of the following described parent parcel:

A parcel of land lying in Section 1, Township 2 North, Range 3 West and Section 6, Township 2 North, Range 2 West, Gadsden County, Florida, and being more particularly described as follows:

BEGIN at the Northeast corner of said Section 1 and run;

Thence West along the Northern boundary of said Section 1 a distance of 1320 feet, more or less, to the Northwest corner of the East one half of the Northeast one quarter of said Section 1; Thence South along the Western boundary of said East one half of the Northeast one quarter of Section 1 a distance of 1481.65 feet, more or less, to the center line of a 100 foot Florida Power Corporation Powerline Easement (Deed Book 92, Page 70);

Thence continue South along said Western boundary a distance of 50.00 feet to the Southerly right of way boundary of said Powerline Easement;

Thence South 89 degrees 52 minutes 25 seconds East along said Southerly right of way boundary a distance of 2037.70 feet, more or less, to the Northwesterly right of way boundary of Havana Highway (State Road No. 12 - 100 foot right of way), said point also lying on a curve concave to the Southeast;

Thence Northeasterly along said Northwesterly right of way boundary and said curve with a radius of 2914.79 feet through a central angle of 17 degrees 53 minutes 09 seconds for an arc distance of 909.90 feet (the chord of said arc being North 41 degrees 39 minutes 17 seconds East 906.21 feet) to the Eastern boundary of the Northwest one quarter of the Northwest one quarter of said Section 6;

Thence North along said Eastern boundary a distance of 859.05 feet, more or less, to the Northeast corner of said Northwest one quarter of the Northwest one quarter;

Thence West along the Northern boundary of said Northwest one quarter of the Northwest one quarter a distance of 1320 feet, more or less, to the POINT OF BEGINNING.

Containing 87.82 acres, more or less.

AND BEING the same property conveyed to Ann F. Nicholson, Trustee of the Ann F. Nicholson Revocable Trust Agreement dated March 24, 1998 from James D. Nicholson by Warranty Deed dated November 14, 2005 and recorded November 22, 2005 in Deed Book 626, Page 358.

Tax Parcel No. 3-06-2N-2W-0000-00220-0000

Said interest being over land more particularly described by the following description:

Insert metes and bounds description of area

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**SCHEDULE B, PART I  
REQUIREMENTS**

All of the following Requirements must be met:

1. The Proposed Insured must notify the Company in writing of the name of any party not referred to in this Commitment who will obtain an interest in the Land or who will make a loan on the Land. The Company may then make additional Requirements or Exceptions.
2. Pay the agreed amount for the estate or interest to be insured.
3. Pay the premiums, fees, and charges for the Policy to the Company.
4. Documents satisfactory to the Company that convey the Title or create the Mortgage to be insured, or both, must be properly authorized, executed, delivered, and recorded in the Public Records.
5. The Company must be provided with the executed Owner's Affidavit and Agreement relating to, among other items, bankruptcy, mechanics' liens, and parties in possession.
6. Instrument(s) satisfactory to create the estate or interest to be insured must be properly executed (see Document(s) Requirement Note below), delivered and duly filed for record, including any Recorder of Deeds' or Clerks' required Cover Sheets, Affidavits or Forms:

A. Memorandum of Lease from Ann F. Nicholson, Trustee of the Ann F. Nicholson Revocable Trust Agreement dated March 24, 1998 to Site ID, Inc..

- i. Each document submitted for recording must be executed before an FNF approved Notary for acknowledgement. Properly completed and executed attached Affidavit of Notary will be sufficient evidence of compliance with FNF approved Notary requirement.
- ii. Each document involving an entity as a party, must include a statement of the state of formation for the entity and must correctly recite any mergers, name changes, fictitious names or erroneous names appearing in the title to clarify the record.
- iii. Power of Attorney ("POA") - We will not accept documents signed by an agent without prior review and approval by this office. Additional requirements will be added upon approval of a POA.
- iv. Each document received by this office for recording must be dated and executed no more than five (5) days before we receive it. In some cases a document received by our office more than five (5) days after execution, may be subject to fines or additional fees imposed by the Clerk's office. FNF-SMS is not responsible for payment or fronting of any fine or fee for tardy submission of a document and we may hold such document until we receive funds sufficient to cover the cost of recording plus the fine or fee.

7. For Ann F. Nicholson, Trustee of the Ann F. Nicholson Revocable Trust Agreement dated March 24, 1998 (hereinafter referred to as Trust):
  - A. The Company must be provided with evidence that the Trustees have full and complete power and authority to sell or encumber described property pursuant to and in accordance with the terms and provisions of the Trust Agreement under which title is held and vested and further that all provisions of the Trust have been complied with concerning the transaction and there is no violation of any of the provisions thereof.
  - B. In order to satisfy our requirements we require a current copy of Trust Agreement(s) and all amendments, or a

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**SCHEDULE B, PART I  
REQUIREMENTS**  
(continued)

current Certification of Trustee(s) preapproved by Company.

8. The Company will require the following documents for review prior to the issuance of any title insurance predicated upon a conveyance or encumbrance by the corporation named below:

Name of Corporation: Site ID, Inc.

- a) A Copy of the corporation By-laws and Articles of Incorporation
- b) An original or certified copy of a resolution authorizing the transaction contemplated herein
- c) If the Articles and/or By-laws require approval by a 'parent' organization, a copy of the Articles and By-laws of the parent
- d) A current dated certificate of good standing from the proper governmental authority of the state in which the entity was created

The Company reserves the right to add additional items or make further requirements after review of the requested documentation.

9. The actual value of the estate or interest to be insured must be disclosed to the Company, and subject to approval by the Company, entered as the amount of the policy to be issued. Until the amount of the policy to be issued shall be determined, and entered as aforesaid, it is agreed that as between the Company, the applicant for this Company, and every person relying on this Commitment, the Company cannot be required to approve any such evaluation in excess of \$100,000.00 and the total liability of the Company on account of this Commitment shall not exceed said amount.
10. In order to insure this transaction, we will require our AFFIDAVIT OF UNDERSTANDING AND INDEMNITY AND HOLD HARMLESS AGREEMENT DUE TO CORONAVIRUS PANDEMIC to be signed by all parties.

NOTE: Due to office closures related to COVID-19, we may be temporarily unable to record documents in the normal course of business.

**END OF REQUIREMENTS**

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**SCHEDULE B, PART I**

(continued)

**NOTES**

Note A: The Company must be furnished proof of payment of all real property taxes and assessments that are due and payable.

Type of Tax: County  
For the period: 2019  
In the amount of: \$230.11 annually  
Tax parcel ID #: 3-06-2N-2W-0000-00220-0000  
Paid through: 2019  
Total Assessment: \$15,165.00

Any tax delinquencies noted above must be paid at closing, plus penalties and interest.

Note B: Notice: Please be aware that due to the conflict between federal and state laws concerning the cultivation, distribution, manufacture or sale of marijuana, the Company is not able to close or insure any transaction involving Land that is associated with these activities.

Note C: For transactions this office is not acting as closing agent please send the recording package, instructions, and all documents related to the herein described transaction to the following mailing address within 24 hours prior to the anticipated closing date:

Attn: Post-Closing Department  
Strategic Market Services  
Fidelity National Title Insurance Company  
7130 Glen Forest Drive, Suite 300  
Richmond, VA 23226  
Email: SMS-PostClosing@fnf.com

**END OF SCHEDULE B, PART I**

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## SCHEDULE B, PART II EXCEPTIONS

THIS COMMITMENT DOES NOT REPUBLISH ANY COVENANT, CONDITION, RESTRICTION, OR LIMITATION CONTAINED IN ANY DOCUMENT REFERRED TO IN THIS COMMITMENT TO THE EXTENT THAT THE SPECIFIC COVENANT, CONDITION, RESTRICTION, OR LIMITATION VIOLATES STATE OR FEDERAL LAW BASED ON RACE, COLOR, RELIGION, SEX, SEXUAL ORIENTATION, GENDER IDENTITY, HANDICAP, FAMILIAL STATUS, OR NATIONAL ORIGIN.

The Policy will not insure against loss or damage resulting from the terms and provisions of any lease or easement identified in Schedule A, and will include the following Exceptions unless cleared to the satisfaction of the Company:

### General Exceptions:

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.
2. Rights or claims of parties in possession not shown by the Public Records.
3. Any encroachment, encumbrance, violation, variation, or adverse circumstance affecting the title that would be disclosed by an accurate and complete land survey of the Land.
4. Easements, or claims of easements, not shown by the Public Records.
5. Any lien, or right to a lien, for services, labor, or material heretofore or hereafter furnished, imposed by law and not shown by the Public Records.
6. Taxes or special assessments which are not shown as existing liens by the Public Records.

### Special Exceptions:

7. Taxes for the year 2020 and subsequent years, a lien not yet due and payable.
8. Easement in favor of Florida Power Corporation set forth in instrument recorded on August 28, 1950 in Deed Book 92, Page 70.
9. Right of Way in favor of The State of Florida, for the use and benefit of the State of Florida Department of Transportation set forth in instrument recorded on December 3, 1973 in Deed Book 167, Page 635.
10. Except the coal, oil, gas and other minerals underlying the surface of said land and all rights and easements in favor of the estate of said coal, oil, gas and other minerals; including, but not limited to, express or implied easements in, over and under that estate for the entry and removal of minerals. This policy should not be construed as insuring against loss or damage resulting to the surface of the land or any improvements thereon caused by surface entry or by the removal of the oil, gas, and other minerals lying thereunder. See instrument recorded in Deed Book 185, Page 196.
11. Timber Agreement dated August 1, 1984 by and between James D. Nicholson, Ann F. Nicholson and William Paul Nicholson, as Grantor, and Chipola Land and Timber Company, Incorporated a Florida corporation, as Grantee,

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**SCHEDULE B, PART II**

(continued)

recorded on August 10, 1984 in Deed Book 312, Page 318; Assignment of Timber to Great Southern Paper, a Company of Great Northern Nekoosa corporation, dated August 2, 1984 and recorded August 10, 1984 in Deed Book 312, Page 317.

12. Terms and conditions of Memorandum of Lease dated February 15, 2018 by and between Ann F. Nicholson, Trustee of the Ann F. Nicholson Revocable Trust Agreement, and Antietam Wireless Services, LLC, a Maryland limited liability company, recorded on July 9, 2018 in Deed Book 849, Page 1179; ASSIGNED to Vertical Bridge Development, LLC, a Delaware limited liability company by Assignment and Assumption of Option and Lease Agreement dated July 16, 2018, recorded September 14, 2018 in Deed Book 852, Page 1006.

**END OF SCHEDULE B, PART II**

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**COMMITMENT CONDITIONS****1. DEFINITIONS**

- (a) "Knowledge" or "Known": Actual or imputed knowledge, but not constructive notice imparted by the Public Records.
- (b) "Land": The land described in Schedule A and affixed improvements that by law constitute real property. The term "Land" does not include any property beyond the lines of the area described in Schedule A, nor any right, title, interest, estate, or easement in abutting streets, roads, avenues, alleys, lanes, ways, or waterways, but this does not modify or limit the extent that a right of access to and from the Land is to be insured by the Policy.
- (c) "Mortgage": A mortgage, deed of trust, or other security instrument, including one evidenced by electronic means authorized by law.
- (d) "Policy": Each contract of title insurance, in a form adopted by the American Land Title Association, issued or to be issued by the Company pursuant to this Commitment.
- (e) "Proposed Insured": Each person identified in Schedule A as the Proposed Insured of each Policy to be issued pursuant to this Commitment.
- (f) "Proposed Policy Amount": Each dollar amount specified in Schedule A as the Proposed Policy Amount of each Policy to be issued pursuant to this Commitment.
- (g) "Public Records": Records established under state statutes at the Commitment Date for the purpose of imparting constructive notice of matters relating to real property to purchasers for value and without Knowledge.
- (h) "Title": The estate or interest described in Schedule A.

2. If all of the Schedule B, Part I-Requirements have not been met within the time period specified in the Commitment to Issue Policy, this Commitment terminates and the Company's liability and obligation end.

3. The Company's liability and obligation is limited by and this Commitment is not valid without:

- (a) the Notice;
- (b) the Commitment to Issue Policy;
- (c) the Commitment Conditions;
- (d) Schedule A;
- (e) Schedule B, Part I-Requirements;
- (f) Schedule B, Part II-Exceptions; and
- (g) a counter-signature by the Company or its issuing agent that may be in electronic form.

**4. COMPANY'S RIGHT TO AMEND**

The Company may amend this Commitment at any time. If the Company amends this Commitment to add a defect, lien, encumbrance, adverse claim, or other matter recorded in the Public Records prior to the Commitment Date, any liability of the Company is limited by Commitment Condition 5. The Company shall not be liable for any other amendment to this Commitment.

**5. LIMITATIONS OF LIABILITY**

- (a) The Company's liability under Commitment Condition 4 is limited to the Proposed Insured's actual expense incurred in the interval between the Company's delivery to the Proposed Insured of the Commitment and the delivery of the amended Commitment, resulting from the Proposed Insured's good faith reliance to:
  - (i) comply with the Schedule B, Part I-Requirements;
  - (ii) eliminate, with the Company's written consent, any Schedule B, Part II-Exceptions; or
  - (iii) acquire the Title or create the Mortgage covered by this Commitment.
- (b) The Company shall not be liable under Commitment Condition 5(a) if the Proposed Insured requested the amendment or had Knowledge of the matter and did not notify the Company about it in writing.
- (c) The Company will only have liability under Commitment Condition 4 if the Proposed Insured would not have incurred the expense had the Commitment included the added matter when the Commitment was first delivered to the Proposed Insured.
- (d) The Company's liability shall not exceed the lesser of the Proposed Insured's actual expense incurred in good faith and described in Commitment Conditions 5(a)(i) through 5(a)(iii) or the Proposed Policy Amount.
- (e) The Company shall not be liable for the content of the Transaction Identification Data, if any.
- (f) In no event shall the Company be obligated to issue the Policy referred to in this Commitment unless all of the Schedule B, Part I-Requirements have been met to the satisfaction of the Company.
- (g) In any event, the Company's liability is limited by the terms and provisions of the Policy.

**6. LIABILITY OF THE COMPANY MUST BE BASED ON THIS COMMITMENT**

- (a) Only a Proposed Insured identified in Schedule A, and no other person, may make a claim under this Commitment.
- (b) Any claim must be based in contract and must be restricted solely to the terms and provisions of this Commitment.

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(continued)

- (c) Until the Policy is issued, this Commitment, as last revised, is the exclusive and entire agreement between the parties with respect to the subject matter of this Commitment and supersedes all prior commitment negotiations, representations, and proposals of any kind, whether written or oral, express or implied, relating to the subject matter of this Commitment.
- (d) The deletion or modification of any Schedule B, Part II-Exception does not constitute an agreement or obligation to provide coverage beyond the terms and provisions of this Commitment or the Policy.
- (e) Any amendment or endorsement to this Commitment must be in writing and authenticated by a person authorized by the Company.
- (f) When the Policy is issued, all liability and obligation under this Commitment will end and the Company's only liability will be under the Policy.

**7. IF THIS COMMITMENT HAS BEEN ISSUED BY AN ISSUING AGENT**

The issuing agent is the Company's agent only for the limited purpose of issuing title insurance commitments and policies. The issuing agent is not the Company's agent for the purpose of providing closing or settlement services.

**8. PRO-FORMA POLICY**

The Company may provide, at the request of a Proposed Insured, a pro-forma policy illustrating the coverage that the Company may provide. A pro-forma policy neither reflects the status of Title at the time that the pro-forma policy is delivered to a Proposed Insured, nor is it a commitment to insure.

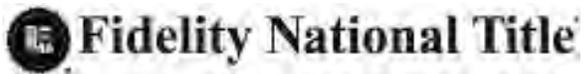
**END OF CONDITIONS**

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7130 Glen Forest Drive, Suite 300  
Richmond, VA 23226  
Phone: (866)552-0129

## ADDITIONAL INFORMATION

THIS INFORMATION IS PROVIDED AS A CONVENIENCE AND COURTESY AND IS NOT CONSIDERED TO BE PART OF THE TITLE PRODUCT.

**The following real estate tax information deemed reliable and is provided for informational purposes only.**

Real Estate Tax Type: County  
Taxes are Paid: Annual  
Due Date(s): March 31 (See Note)  
Tax Authority Name: Gadsden County Tax Collector  
Phone: 850-627-7255

**Additional notes regarding taxes, documents and/or special recordation requirements:**

· Taxes due November 1st, delinquent after March 1st

## FIDELITY NATIONAL TITLE INSURANCE COMPANY OWNER'S AFFIDAVIT AND AGREEMENT

STATE OF FLORIDA  
COUNTY OF GADSDEN

File No.: 31269254

Ann F. Nicholson, Trustee of the Ann F. Nicholson Revocable Trust Agreement dated March 24, 1998 ("Owner"), being the entity in ownership, which is represented by the individual(s) signing below in their representative capacity, or the individual owner(s) who are signing below individually; who, being duly sworn according to the law, deposes and says as follows (as the "Affiant"):

1. That Affiant, as entity representative, either has personal knowledge of the facts sworn to this affidavit, or has made statements based on reasonable inquiry of the entity personnel and agents and on a reasonable review of the entity records, and the statements are made on behalf of the entity and said Affiant is fully authorized to make this affidavit; or Affiant, as individual owner, has personal knowledge of the facts sworn to this Affidavit.
2. That Owner is the Owner of the premises described in the Commitment listed above ("the Property") and shown in Exhibit "A" of said Commitment. Ownership shall mean that interest held by the Owner in the Property, whether a fee, leasehold or easement estate, and all statements below are in reference to said interest in said Property.
3. That, to the Affiant's knowledge, there has been no work, services or labor performed or material furnished in connection with repairs or improvements on the Property within ninety (90) days (herein after referred to as "Mechanics' Lien Filing Period") prior to the date of this Affidavit; or, that in the event work has been performed, services rendered, or materials furnished in connection with construction, repair, or improvement on the Property during such Mechanics' Lien Filing Period, that all such work performed, services rendered, or materials furnished have been completed and are acceptable to the Owner(s); the Owner(s) have paid in full all contractors, laborers, and materialmen for such work performed, services rendered, or material furnished in connection with constructions, repairs, or improvements on the Property during such Mechanics' Lien Filing Period, except as shown on exhibit attached hereto.

NONE, unless specified on attached exhibit (checked box indicates an attached exhibit )

4. That, to the Affiant's knowledge there are no unrecorded tenancies, leases or other occupancies on the Property except as listed below, and that if any such unrecorded leases, tenancies or other occupancies are listed below, they contain no options to purchase, rights of renewal, or other unusual provisions except as shown on exhibit attached hereto.

NONE, unless specified on attached exhibit (checked box indicates an attached exhibit )

5. That, to the Affiant's knowledge, no other person has possession or any right to possession of the Property or any interest therein, including oil, gas or other minerals, other than those shown in Commitment referenced above.
6. I represent to Fidelity National Title Insurance Company that, to the Affiant's knowledge, the Property is now free and clear of all delinquent taxes, liens, mortgages/deeds of trust/deeds to secure debt, judgments, decrees, or other encumbrances; that, to the Affiant's knowledge, there are no unemployment compensation, federal social security, alcoholic beverage law or other delinquent state or federal taxes due and owing from the company; that, to the Affiant's knowledge, there are no unpaid or delinquent real estate taxes or assessments or unpaid or delinquent water or sewer service charges against said premises; and that, to the Affiant's knowledge, there are no unpaid or delinquent homeowner/condominium association dues (if applicable); EXCEPT THAT the matters specifically identified in the Commitment and those, if any, listed on exhibit attached hereto.

NONE, unless specified on attached exhibit (checked box indicates an attached exhibit )

7. That, to the Affiant's knowledge there are no unrecorded easements or claims of easement; no disputes, discrepancies or encroachments affecting a setback or boundary line; and no contracts, options or rights to purchase other than in the transaction for which this affidavit is given.
8. That there is not currently a proceeding in bankruptcy instituted by or against the Owner (and if a partnership, against the general partner(s) thereof), nor does the Owner currently have outstanding assignment for the benefit of creditors.
9. That, to the Affiant's knowledge, there is no action or proceeding relating to the Property in any state or federal court in the United States nor any state or federal judgment or any federal lien of any kind or nature whatsoever which now constitutes a lien or charge upon the Property.
10. That the Affiant has not received notice of any delinquent state, county, city, school district, water district, or other governmental agency taxes
  - A. due or owing against said Property and that
  - B. to the Affiant's knowledge, no tax suit has been filed by any state, county, city, school district, water district, or other governmental agency for taxes levied against the Property.

**FIDELITY NATIONAL TITLE INSURANCE COMPANY  
OWNER'S AFFIDAVIT AND AGREEMENT**

(continued)

- 11. That there has been no notice nor does Affiant have any knowledge of any
  - A. recent or future planned improvements (such as street paving, sidewalks, street lights, etc.) that would result in a special assessment against the Property
  - B. any proceeding which could result in an increase tax or assessment liability against the Property.

12. That all management fees, if any, are fully paid, except as shown on exhibit attached hereto.

NONE, unless specified on attached exhibit (checked box indicates an attached exhibit )

Owner, recognizing that funding may occur prior to the Deed, Lease, MOL, Easement, Mortgage, Deed to Secure Debt, Deed of Trust, or any Assignment being officially filed for record in the appropriate Clerk's Office, represents that there will be no further encumbrances or change of title pending the issuance of the title insurance policy which this affidavit is made to support and agrees that in consideration of Fidelity National Title Insurance Company (hereinafter "Company") issuing a policy without exception to any matters which may arise between the effective date of the commitment for title insurance and the date of the documents creating the interest being insured are filed for record, which matters may constitute an encumbrance on or affect the title (the "GAP"), to promptly defend, remove, bond or otherwise dispose of any encumbrance, lien or objectionable matter to title which may arise or be filed, as the case may be, against said Property during the GAP. Owner further agrees to hold harmless and indemnify Company against all losses, expenses, costs and fees, including, but not limited to, attorney fees, which arise out of Owner's failure to so remove, bond or otherwise dispose of any said liens, encumbrances or objectionable matters. This Affidavit is given to induce Company to issue its policy or policies of title insurance with full knowledge that the Company will rely upon the accuracy of same. The Owner does hereby indemnify and hold Company harmless of and from any and all loss, cost, damage, and expense of every kind, including attorney's fees, which Company shall suffer or incur or become liable under its said policy or policies directly or indirectly, due to its reliance on the accuracy of the statements contained herein or in connection with its enforcement of its rights under this Agreement. The undersigned agrees to fully cooperate with the Company in correcting any errors in the execution and acknowledgment of the Insured Instrument.

IN WITNESS WHEREOF, the undersigned have executed this document on the date(s) set forth below.

\_\_\_\_\_  
Print Company Name

\_\_\_\_\_  
Signature

By: \_\_\_\_\_  
Print Name

Its: \_\_\_\_\_  
Print Title

**AFFIDAVIT OF NOTARY**

STATE OF \_\_\_\_\_

**Our File No.:** 31269254

COUNTY OF \_\_\_\_\_

**Customer Ref. No.:** FL 439 165

I, \_\_\_\_\_ (please print name as commissioned), the undersigned Notary Public, do hereby affirm and attest to Strategic Market Services-FNT one (1) of the following (please check one (1)) is an accurate statement:

- I am a Bancserv notary (and by checking this box I certify I was assigned by Bancserv for this notary service); or
- I am an FNF approved notary on the FNTG Field Compliance Approved Third Party list; or
- I am a licensed attorney or a notary working under the supervision of a licensed attorney. Insert lawyer or law firm:

\_\_\_\_\_ ; or

- I am a notary working in a bank or credit union (this option is only applicable for notaries at banks {FDIC insured} and credit unions {NCUA insured} and is not applicable for notaries at mortgage companies or mortgage brokers).

Bank or credit union name: \_\_\_\_\_

Bank/credit union employee title: \_\_\_\_\_

Branch name or street address: \_\_\_\_\_

Telephone number of bank or credit union: \_\_\_\_\_

IN WITNESS WHEREOF, the undersigned have executed this document on the date(s) set forth below.

\_\_\_\_\_  
Notary Public Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Notary No. or Seal for identification purposes

Phone: \_\_\_\_\_

## FIDELITY NATIONAL FINANCIAL PRIVACY NOTICE

Effective January 1, 2020

Fidelity National Financial, Inc. and its majority-owned subsidiary companies (collectively, "FNF," "our," or "we") respect and are committed to protecting your privacy. This Privacy Notice explains how we collect, use, and protect personal information, when and to whom we disclose such information, and the choices you have about the use and disclosure of that information.

A limited number of FNF subsidiaries have their own privacy notices. If a subsidiary has its own privacy notice, the privacy notice will be available on the subsidiary's website and this Privacy Notice does not apply.

### **Collection of Personal Information**

FNF may collect the following categories of Personal Information:

- contact information (e.g., name, address, phone number, email address);
- demographic information (e.g., date of birth, gender, marital status);
- identity information (e.g. Social Security Number, driver's license, passport, or other government ID number);
- financial account information (e.g. loan or bank account information); and
- other personal information necessary to provide products or services to you.

We may collect Personal Information about you from:

- information we receive from you or your agent;
- information about your transactions with FNF, our affiliates, or others; and
- information we receive from consumer reporting agencies and/or governmental entities, either directly from these entities or through others.

### **Collection of Browsing Information**

FNF automatically collects the following types of Browsing Information when you access an FNF website, online service, or application (each an "FNF Website") from your Internet browser, computer, and/or device:

- Internet Protocol (IP) address and operating system;
- browser version, language, and type;
- domain name system requests; and
- browsing history on the FNF Website, such as date and time of your visit to the FNF Website and visits to the pages within the FNF Website.

Like most websites, our servers automatically log each visitor to the FNF Website and may collect the Browsing Information described above. We use Browsing Information for system administration, troubleshooting, fraud investigation, and to improve our websites. Browsing Information generally does not reveal anything personal about you, though if you have created a user account for an FNF Website and are logged into that account, the FNF Website may be able to link certain browsing activity to your user account.

### **Other Online Specifics**

**Cookies.** When you visit an FNF Website, a "cookie" may be sent to your computer. A cookie is a small piece of data that is sent to your Internet browser from a web server and stored on your computer's hard drive. Information gathered using cookies helps us improve your user experience. For example, a cookie can help the website load properly or can customize the display page based on your browser type and user preferences. You can choose whether or not to accept cookies by changing your Internet browser settings. Be aware that doing so may impair or limit some functionality of the FNF Website.

**Web Beacons.** We use web beacons to determine when and how many times a page has been viewed. This information is used to improve our websites.

**Do Not Track.** Currently our FNF Websites do not respond to "Do Not Track" features enabled through your browser.

Links to Other Sites. FNF Websites may contain links to unaffiliated third-party websites. FNF is not responsible for the privacy practices or content of those websites. We recommend that you read the privacy policy of every website you visit.

### **Use of Personal Information**

FNF uses Personal Information for three main purposes:

- To provide products and services to you or in connection with a transaction involving you.
- To improve our products and services.
- To communicate with you about our, our affiliates', and others' products and services, jointly or independently.

### **When Information Is Disclosed**

We may disclose your Personal Information and Browsing Information in the following circumstances:

- to enable us to detect or prevent criminal activity, fraud, material misrepresentation, or nondisclosure;
- to nonaffiliated service providers who provide or perform services or functions on our behalf and who agree to use the information only to provide such services or functions;
- to nonaffiliated third party service providers with whom we perform joint marketing, pursuant to an agreement with them to jointly market financial products or services to you;
- to law enforcement or authorities in connection with an investigation, or in response to a subpoena or court order; or
- in the good-faith belief that such disclosure is necessary to comply with legal process or applicable laws, or to protect the rights, property, or safety of FNF, its customers, or the public.

The law does not require your prior authorization and does not allow you to restrict the disclosures described above. Additionally, we may disclose your information to third parties for whom you have given us authorization or consent to make such disclosure. We do not otherwise share your Personal Information or Browsing Information with nonaffiliated third parties, except as required or permitted by law. We do share Personal Information among affiliates (other companies owned by FNF) to directly market to you. Please see "Choices with Your Information" to learn how to restrict that sharing.

We reserve the right to transfer your Personal Information, Browsing Information, and any other information, in connection with the sale or other disposition of all or part of the FNF business and/or assets, or in the event of bankruptcy, reorganization, insolvency, receivership, or an assignment for the benefit of creditors. By submitting Personal Information and/or Browsing Information to FNF, you expressly agree and consent to the use and/or transfer of the foregoing information in connection with any of the above described proceedings.

### **Security of Your Information**

We maintain physical, electronic, and procedural safeguards to protect your Personal Information.

### **Choices With Your Information**

If you do not want FNF to share your information among our affiliates to directly market to you, you may send an "opt out" request by email, phone, or physical mail as directed at the end of this Privacy Notice. We do not share your Personal Information with nonaffiliates for their use to direct market to you.

Whether you submit Personal Information or Browsing Information to FNF is entirely up to you. If you decide not to submit Personal Information or Browsing Information, FNF may not be able to provide certain services or products to you.

For California Residents: We will not share your Personal Information or Browsing Information with nonaffiliated third parties, except as permitted by California law. For additional information about your California privacy rights, please visit the "California Privacy" link on our website (<https://fnf.com/pages/californiaprivacy.aspx>) or call (888) 413-1748.

**For Nevada Residents:** You may be placed on our internal Do Not Call List by calling (888) 934-3354 or by contacting us via the information set forth at the end of this Privacy Notice. Nevada law requires that we also provide you with the following contact information: Bureau of Consumer Protection, Office of the Nevada Attorney General, 555 E. Washington St., Suite 3900, Las Vegas, NV 89101; Phone number: (702) 486-3132; email: BCPINFO@ag.state.nv.us.

**For Oregon Residents:** We will not share your Personal Information or Browsing Information with nonaffiliated third parties for marketing purposes, except after you have been informed by us of such sharing and had an opportunity to indicate that you do not want a disclosure made for marketing purposes.

**For Vermont Residents:** We will not disclose information about your creditworthiness to our affiliates and will not disclose your personal information, financial information, credit report, or health information to nonaffiliated third parties to market to you, other than as permitted by Vermont law, unless you authorize us to make those disclosures.

### **Information From Children**

The FNF Websites are not intended or designed to attract persons under the age of eighteen (18). We do not collect Personal Information from any person that we know to be under the age of thirteen (13) without permission from a parent or guardian.

### **International Users**

FNF's headquarters is located within the United States. If you reside outside the United States and choose to provide Personal Information or Browsing Information to us, please note that we may transfer that information outside of your country of residence. By providing FNF with your Personal Information and/or Browsing Information, you consent to our collection, transfer, and use of such information in accordance with this Privacy Notice.

### **FNF Website Services for Mortgage Loans**

Certain FNF companies provide services to mortgage loan servicers, including hosting websites that collect customer information on behalf of mortgage loan servicers (the "Service Websites"). The Service Websites may contain links to both this Privacy Notice and the mortgage loan servicer or lender's privacy notice. The sections of this Privacy Notice titled When Information is Disclosed, Choices with Your Information, and Accessing and Correcting Information do not apply to the Service Websites. The mortgage loan servicer or lender's privacy notice governs use, disclosure, and access to your Personal Information. FNF does not share Personal Information collected through the Service Websites, except as required or authorized by contract with the mortgage loan servicer or lender, or as required by law or in the good-faith belief that such disclosure is necessary: to comply with a legal process or applicable law, to enforce this Privacy Notice, or to protect the rights, property, or safety of FNF or the public.

### **Your Consent To This Privacy Notice; Notice Changes; Use of Comments or Feedback**

By submitting Personal Information and/or Browsing Information to FNF, you consent to the collection and use of the information in accordance with this Privacy Notice. We may change this Privacy Notice at any time. The Privacy Notice's effective date will show the last date changes were made. If you provide information to us following any change of the Privacy Notice, that signifies your assent to and acceptance of the changes to the Privacy Notice. We may use comments or feedback that you submit to us in any manner without notice or compensation to you.

### **Accessing and Correcting Information; Contact Us**

If you have questions, would like to correct your Personal Information, or want to opt-out of information sharing for affiliate marketing, send your requests to [privacy@fnf.com](mailto:privacy@fnf.com), by phone to (888) 934-3354, or by mail to:

Fidelity National Financial, Inc.  
601 Riverside Avenue,  
Jacksonville, Florida 32204  
Attn: Chief Privacy Officer



Inquire before you wire!

## WIRE FRAUD ALERT

This Notice is not intended to provide legal or professional advice.  
If you have any questions, please consult with a lawyer.

All parties to a real estate transaction are targets for wire fraud and many have lost hundreds of thousands of dollars because they simply relied on the wire instructions received via email, without further verification. **If funds are to be wired in conjunction with this real estate transaction, we strongly recommend verbal verification of wire instructions through a known, trusted phone number prior to sending funds.**

In addition, the following non-exclusive self-protection strategies are recommended to minimize exposure to possible wire fraud.

- **NEVER RELY** on emails purporting to change wire instructions. Parties to a transaction rarely change wire instructions in the course of a transaction.
- **ALWAYS VERIFY** wire instructions, specifically the ABA routing number and account number, by calling the party who sent the instructions to you. DO NOT use the phone number provided in the email containing the instructions, use phone numbers you have called before or can otherwise verify. **Obtain the number of relevant parties to the transaction as soon as an escrow account is opened.** DO NOT send an email to verify as the email address may be incorrect or the email may be intercepted by the fraudster.
- **USE COMPLEX EMAIL PASSWORDS** that employ a combination of mixed case, numbers, and symbols. Make your passwords greater than eight (8) characters. Also, change your password often and do NOT reuse the same password for other online accounts.
- **USE MULTI-FACTOR AUTHENTICATION** for email accounts. Your email provider or IT staff may have specific instructions on how to implement this feature.

For more information on wire-fraud scams or to report an incident, please refer to the following links:

**Federal Bureau of Investigation:**  
<http://www.fbi.gov>

**Internet Crime Complaint Center:**  
<http://www.ic3.gov>

### Parcel Summary

**Parcel ID** 3-06-2N-2W-0000-00220-0000  
**Location** HAVANA HWY  
**Address** HAVANA 32333  
**Brief** OR 626 P 358 OR 532 P 463-473 OR 167 P 637 & 641. OR 87, P 630; OR 147, P 692 BEGIN AT THE NEC OF SECT 1; THENCE WEST ALONG THE NORTHERN BNDY OF SECT 1 1320.00 FT, MORE OR LESS, TO THE NWC OF THE E 1/2 OF THE NE 1/4 OF SECT 1; THENCE SOUTH ALONG THE WESTERN BNDY OF SAID E 1/2 OF THE NE 1/4 OF SECT 1 1481.65 FT, MORE OR LESS, TO THE CENTER LINE OF A 100 FT FLORIDA POWER CORP POWERLINE EASEMENT; THENCE CONTINUE SOUTH ALONG SAID WESTERN BNDY 50.00 FT TO THE S/LY R/W BNDY OF SAID POWERLINE EASEMENT; THENCE S 89°52'25" E ALONG S/LY R/W BNDY 2037.70 FT MORE OR LESS, TO THE NW/LY R/W BNDY OF HAVANA HWY (SR-12) SAID POINT ALSO LYING ON A CUR VE CONCAVE TO THE SE; THENCE NE/LY ALONG SAID NW/LY R/W BNDY AND SAID CURVE WITH A RADIUS OF 2914.79 FT THROUGH A CENTRAL ANGLE OF 17°53'09" FOR AN ARC DISTANCE OF 909.90 FT (THE CHORD OF SAID ARC BEING N 41°39'17" E 906.21 FT) TO THE EASTERNBNDY OF THE NW 1/4 OF THE NW 1/4 OF SAID SECT 6; THENCE NORTH ALONG SAID EASTERN BNDY 859.05 FT, MORE OR LESS, TO THE NEC OF SAID NW 1/4 OF THE NW 1/4; THENCE WEST ALONG THE NORTHERN BNDY OF SAID NW 1/4 OF THE NW 1/4 1320.00 FT, MORE OR LESS TO THE POB. CONTAINING 87.82 ACRES, MORE OR LESS.  
**Tax Description\***

\*The Description above is not to be used on legal documents.

**Property Use Code** TIMBER II (005500)  
**Sec/Twp/Rng** 6-2N-2W  
**Tax District** GADSDEN COUNTY (District 7)  
**Millage Rate** 15.1731  
**Acreage** 87.820  
**Homestead** N

[View Map](#)

### Owner Information

**Primary Owner**  
[Nicholson Ann F \( Trustee \)](#)  
 4297 Maylor Ln  
 Tallahassee, FL 323085770

### Land Information

Code	Land Use	Number of Units	Unit Type	Frontage	Depth
199999	RES MKT1 LTD USE	25.00	AC	0	0
560029	PL LUCY	12.00	AC	0	0
561029	NAT LUCY	17.00	AC	0	0
560023	PL BONIFAY	18.00	AC	0	0
551001	NAT ALBANY	10.82	AC	0	0
551007	NAT COWARTS	5.00	AC	0	0
009911	MKT.VAL.AG MKT 1	62.82	AC	0	0

### Sales

Multi Parcel	Sale Date	Sale Price	Instrument	Book	Page	Qualification	Vacant/Improved	Grantor	Grantee
N	11/14/2005	\$100	WD	<a href="#">626</a>	<a href="#">358</a>	Unqualified (U)	Vacant	JAMES D NICHOLSON & ANN F NICHOLSON, TRUSTEE	ANN F NICHOLSON, TRUSTEE
N	08/30/2001	\$100	WD	<a href="#">532</a>	<a href="#">470</a>	Unqualified (U)	Vacant	ANN F NICHOLSON	ANN F NICHOLSON, TRUSTEE
N	08/30/2001	\$100	WD	<a href="#">532</a>	<a href="#">466</a>	Unqualified (U)	Vacant	ANN F NICHOLSON	ANN F NICHOLSON, TRUSTEE
N	08/30/2001	\$100	PR	<a href="#">532</a>	<a href="#">463</a>	Unqualified (U)	Vacant	ESTATE OF W PAUL NICHOLSON	ANN F NICHOLSON

### Valuation

	2019	2018	2017	2016
Building Value	\$0	\$0	\$0	\$0
Extra Features Value	\$0	\$0	\$0	\$0
Land Value	\$1,875	\$220,995	\$0	\$0
Land Agricultural Value	\$13,290	\$0	\$14,835	\$14,835
Agricultural (Market) Value	\$188,460	\$0	\$263,460	\$263,460
Just (Market) Value	\$190,335	\$220,995	\$263,460	\$263,460
Assessed Value	\$15,165	\$220,995	\$14,835	\$14,835
Exempt Value	\$0	\$0	\$0	\$0
Taxable Value	\$15,165	\$220,995	\$14,835	\$14,835
Save Our Homes or AGL Amount	\$0	\$0	\$0	\$0

"Just (Market) Value" description - This is the value established by the Property Appraiser for ad valorem purposes. This value does not represent anticipated selling price.

**No data available for the following modules:** Buildings, Commercial Buildings, Extra Features, Photos, Sketches.

The Property Appraiser makes every effort to produce the most accurate information possible. No warranties, expressed or implied are provided for the data herein, its use or interpretation. The assesment information is from the last certified tax roll. All other data is subject to change.

[User Privacy Policy](#)  
[GDPR Privacy Notice](#)

[Last Data Upload: 3/30/2020, 3:15:52 AM](#)

Developed by  
 Schneider  
GEOSPATIAL

[Version 2.3.49](#)

# Gadsden County Tax Collector

generated on 3/30/2020 3:49:27 PM EDT

## Tax Record

Last Update: 3/30/2020 3:49:24 PM EDT

### Ad Valorem Taxes and Non-Ad Valorem Assessments

The information contained herein does not constitute a title search and should not be relied on as such.

Account Number	Tax Type	Tax Year
3062N2W0000002200000	REAL ESTATE	2019
<b>Mailing Address</b> NICHOLSON ANN F ( TRUSTEE ) 4297 MAYLOR LN TALLAHASSEE FL 32308-5770		<b>Property Address</b> HAVANA HWY HAVANA
		<b>Folio Number</b> 112127

Exempt Amount	Taxable Value
See Below	See Below

Exemption Detail	Millage Code	Escrow Code
NO EXEMPTIONS	007	
<b>Legal Description</b> HAVANA HWY HAVANA 06-2N-2W 5500/87.82 Acres OR 626 P 358 OR 532 P 463-473 OR 167 P 637 & 641. OR 87, P 630; OR 147, P 692 BEGIN AT THE NEC OF SECT 1; THENCE WEST ALONG THE NORTHERN BNDY OF SECT1 1320.00 FT, MORE See Tax Roll For Extra Legal		

Ad Valorem Taxes					
Taxing Authority	Rate	Assessed Value	Exemption Amount	Taxable Value	Taxes Levied
GADSDEN CO BOARD OF CO COMM	8.9064	15,165	0	\$15,165	\$135.07
SCHOOL-REQUIRED LOCAL EFFORT	3.9860	15,165	0	\$15,165	\$60.45
SCHOOL-DISCRETIONARY	2.2480	15,165	0	\$15,165	\$34.09
NW FLORIDA WATER MGT DIST	0.0327	15,165	0	\$15,165	\$0.50
<b>Total Millage</b>		15.1731	<b>Total Taxes</b>		\$230.11

Non-Ad Valorem Assessments		
Code	Levying Authority	Amount
		<b>Total Assessments</b>
		\$0.00
<b>Taxes &amp; Assessments</b>		\$230.11

If Paid By	Amount Due
	\$0.00

Date Paid	Transaction	Receipt	Item	Amount Paid
11/27/2019	PAYMENT	1110359.0002	2019	\$220.91

Prior Year Taxes Due
NO DELINQUENT TAXES



### Tax Record



Last Update: 3/24/2020 8:00:04 PM ET

#### Details

- Tax Record
- Legal Desc.
- Appraiser Data
- Tax Payment

#### Payment History

- » Print View
- Print Tax Bill **NEW!**

#### Ad Valorem Taxes and Non-Ad Valorem Assessments

The information contained herein does not constitute a title search and should not be relied o

Account Number	Tax Type
3062N2W0000002200000	REAL ESTATE

Payment History				
Year	Folio	Date Paid	Receipt	Amount
<u>2019</u>	112127	11/27/2019	1110359	\$
	Owner Name	NICHOLSON ANN F ( TRUSTEE )		
	Paid By	NICHOLSON ANN F		

#### Searches

- Folio Number
- Account Number**
- Owner Name
- Property Address
- Mailing Address

Year	Folio	Date Paid	Receipt	Amount
<u>2018</u>	112118	11/26/2018	7002354	\$3,
	Owner Name	NICHOLSON ANN F ( TRUSTEE )		
	Paid By	NICHOLSON ANN F		

Year	Folio	Date Paid	Receipt	Amount
<u>2017</u>	112115	11/22/2017	7001805	\$
	Owner Name	NICHOLSON ANN F ( TRUSTEE )		
	Paid By	NICHOLSON ANN F ( TRUSTEE )		

#### Site Functions

- Welcome
- Tax Search**

Year	Folio	Date Paid	Receipt	Amount
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Overview



Legend

- Parcels
- Roads (Local)
- Roads (Major)
- Streams and River (Large)

Parcel ID	3-06-2N-2W-0000-00220-0000	Alternate ID	3N2W2060000002200000	Owner Address	NICHOLSON ANN F (TRUSTEE)
Sec/Twp/Rng	6-2N-2W	Class	TIMBER II		4297 MAYLOR LN
Property Address	HAVANA HWY HAVANA	Acreage	87.82		TALLAHASSEE, FL 32308-5770
District	7				
Brief Tax Description	OR 626 P 358				

(Note: Not to be used on legal documents)

Date created: 3/30/2020  
 Last Data Uploaded: 3/30/2020 3:15:52 AM

Developed by Schneider  
 GEOSPATIAL

Record Fee: 27.00  
DOC STAMPS .70

This instrument prepared by  
Blucher B. Lines, Lawyer  
Post Office Box 530  
Quincy, FL 32353-0550

FILE # 050013511 RCD:11/22/2005 @ 3:29 PM  
Nicholas Thomas, Clerk Circuit Court, Gadsden Co

WARRANTY DEED

THIS INDENTURE, made this 14 day of November, A.D., 2005, between James D. Nicholson, whose address is 7305 Arbor Oak Drive, Dallas, Texas 75248, and Ann F. Nicholson, Trustee of the Ann F. Nicholson Revocable Trust Agreement dated March 24, 1998, whose address is 3489 Hyde Park Way, Tallahassee, Florida 32309, both dealing in property not their homestead, hereinafter called Grantors, and Ann F. Nicholson, Trustee of the Ann F. Nicholson Revocable Trust Agreement dated March 24, 1998, whose address is 3489 Hyde Park Way, Tallahassee, Florida 32309, hereinafter called Grantee.

- W I T N E S S E T H -

That said Grantors, for and in consideration of the sum of Ten Dollars, and other good and valuable considerations to said Grantors in hand paid by said Grantee, the receipt whereof is hereby acknowledged, have granted, bargained and sold to the said Grantee, and Grantee's heirs and assigns forever, the following described land, situate, lying and being in Gadsden County, Florida, to-wit:

Parcel Number: 3-01-2N-3W-0000-00110-0000-X and 3-01-2N-3W-0000-00220-0000-X

SEE ATTACHED EXHIBIT A WHICH IS MADE A PART HEREOF.

Said Grantors do hereby fully warrant the title to said land and will defend the same against the lawful claim of all persons whomsoever.

IN WITNESS WHEREOF, Grantors have set Grantors' hands and seals the day and year first above written.

Signed, sealed and delivered  
in the presence of:

Heidi Robertt  
(signature of witness)  
Heidi Robertt  
(typed or printed name)

James D. Nicholson (SEAL)  
James D. Nicholson

Amber Flor  
(signature of witness)  
Amber Flor  
(typed or printed name)

Ann F. Nicholson (SEAL)  
Ann F. Nicholson, Trustee of the Ann F.  
Nicholson Revocable Trust Agreement  
dated March 24, 1998

Tom Henry  
(signature of witness)  
Tom Henry  
(typed or printed name)

Stephanie Schwantz  
(signature of witness)  
Stephanie Schwantz  
(typed or printed name)

STATE OF TEXAS  
COUNTY OF Dallas

The foregoing instrument was acknowledged before me this 14<sup>th</sup> day of July,  
A.D., 2005, by James D. Nicholson, who is personally known to me or who has presented  
TX-Dc as identification.

Sharon Hock  
(signature of notary)

(typed or printed name)



STATE OF FLORIDA  
COUNTY OF Leon

The foregoing instrument was acknowledged before me this 9 day of Nov.,  
A.D., 2005, by Ann F. Nicholson, Trustee of the Ann F. Nicholson Revocable Trust Agreement dated  
March 24, 1998, who is personally known to me or who has presented FL Drivers License  
as identification.

Antonia M. Henry  
(signature of notary)

(typed or printed name)

Notary Public  
My Commission Expires:



**Thomas P. Skipper**  
**Professional Surveyor and Mapper**  
**16 East Washington Street**  
**Quincy, Florida 32351**  
**(850) 627-9754**

October 19, 2005  
Legal Description for James D. Nicholson Et Al  
87.82 Acres

A parcel of land lying in Section 1, Township 2 North, Range 3 West and Section 6, Township 2 North, Range 2 West, Gadsden County, Florida, and being more particularly described as follows:

BEGIN at the Northeast corner of said Section 1 and run;

Thence West along the Northern boundary of said Section 1 a distance of 1320 feet, more or less, to the Northwest corner of the East one half of the Northeast one quarter of said Section 1;

Thence South along the Western boundary of said East one half of the Northeast one quarter of Section 1 a distance of 1481.65 feet, more or less, to the center line of a 100 foot Florida Power Corporation Powerline Easement (Deed Book 92, page 70);

Thence continue South along said Western boundary a distance of 50.00 feet to the Southerly right of way boundary of said Powerline Easement;

Thence South 89 degrees 52 minutes 25 seconds East along said Southerly right of way boundary a distance of 2037.70 feet, more or less, to the Northwesterly right of way boundary of Havana Highway (State Road No. 12 - 100 foot right of way), said point also lying on a curve concave to the Southeast;

Thence Northeasterly along said Northwesterly right of way boundary and said curve with a radius of 2914.79 feet through a central angle of 17 degrees 53 minutes 09 seconds for an arc distance of 909.90 feet (the chord of said arc being North 41 degrees 39 minutes 17 seconds East 906.21 feet) to the Eastern boundary of the Northwest one quarter of the Northwest one quarter of said Section 6;

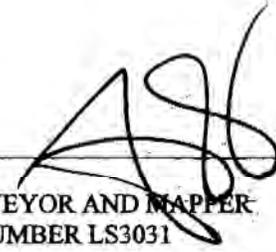
Thence North along said Eastern boundary a distance of 859.05 feet, more or less, to the Northeast corner of said Northwest one quarter of the Northwest one quarter;

Thence West along the Northern boundary of said Northwest one quarter of the Northwest one quarter a distance of 1320 feet, more or less, to the POINT OF BEGINNING.

Containing 87.82 acres, more or less.

The above description was prepared from existing deeds and maps and not the result of a recent in field survey.

THOMAS P. SKIPPER  
PROFESSIONAL SURVEYOR AND MAPPER  
FLORIDA LICENSE NUMBER LS3031



2005-148

EXHIBIT A

Record Fee: 27.00  
DOC STAMPS .70

This instrument prepared by  
Blucher B. Lines, Lawyer  
Post Office Box 550  
Quincy, FL 32353-0550

FILE # 050013512 RCD:11/22/2005 @ 3:29 PM  
Nicholas Thomas, Clerk Circuit Court, Gadsden Co

WARRANTY DEED

THIS INDENTURE, made this 14 day of November, A.D., 2005, between James D. Nicholson, whose address is 7305 Arbor Oak Drive, Dallas, Texas 75248, and Ann F. Nicholson, Trustee of the Ann F. Nicholson Revocable Trust Agreement dated March 24, 1998, whose address is 3489 Hyde Park Way, Tallahassee, Florida 32309, both dealing in property not their homestead, hereinafter called Grantors, and James D. Nicholson, whose address is 7305 Arbor Oak Drive, Dallas, Texas 75248, hereinafter called Grantee.

- W I T N E S S E T H -

That said Grantors, for and in consideration of the sum of Ten Dollars, and other good and valuable considerations to said Grantors in hand paid by said Grantee, the receipt whereof is hereby acknowledged, have granted, bargained and sold to the said Grantee, and Grantee's heirs and assigns forever, the following described land, situate, lying and being in Gadsden County, Florida, to-wit:

Parcel Number: 3-01-2N-3W-0000-00110-0000-X and 3-01-2N-3W-0000-00220-0000-X

SEE ATTACHED EXHIBIT A WHICH IS MADE A PART HEREOF.

Said Grantors do hereby fully warrant the title to said land and will defend the same against the lawful claim of all persons whomsoever.

IN WITNESS WHEREOF, Grantors have set Grantors' hands and seals the day and year first above written.

Signed, sealed and delivered  
in the presence of:

Heidi R. Zonett  
(signature of witness)  
Heidi Zonett  
(typed or printed name)

Amber Flores  
(signature of witness)  
Amber Flores  
(typed or printed name)

Tom Henry  
(signature of witness)  
Tom Henry  
(typed or printed name)

Stephanie Schwarz  
(signature of witness)  
Stephanie Schwarz  
(typed or printed name)

James D. Nicholson (SEAL)  
James D. Nicholson

Ann F. Nicholson, TRS (SEAL)  
Ann F. Nicholson, Trustee of the Ann F. Nicholson Revocable Trust Agreement dated March 24, 1998

STATE OF TEXAS  
COUNTY OF Dallas

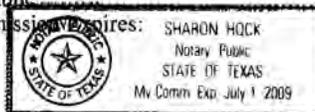
The foregoing instrument was acknowledged before me this 14<sup>th</sup> day of November  
A.D., 2005, by James D. Nicholson, who is personally known to me or who has presented  
TX DL as identification.

Sharon Hock  
(signature of notary)

(typed or printed name)

Notary Public

My Commission Expires:



STATE OF FLORIDA  
COUNTY OF LEON

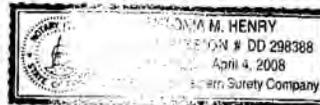
The foregoing instrument was acknowledged before me this 9 day of NOV.  
A.D., 2005, by Ann F. Nicholson, Trustee of the Ann F. Nicholson Revocable Trust Agreement dated  
March 24, 1998, who is personally known to me or who has presented FL drivers license  
as identification.

Antonia M. Henry  
(signature of notary)

(typed or printed name)

Notary Public

My Commission Expires:



**Thomas P. Skipper**  
**Professional Surveyor and Mapper**  
**16 East Washington Street**  
**Quincy, Florida 32351**  
**(850) 627-9754**

October 19, 2005

Legal Description for James D. Nicholson Et Al  
85.14 Acres

A parcel of land lying in Section 1, Township 2 North, Range 3 West and Section 6, Township 2 North, Range 2 West, Gadsden County, Florida, and being more particularly described as follows:

Commence at the Northeast corner of said Section 1 and run;

Thence West along the Northern boundary of said Section 1 a distance of 1320 feet, more or less, to the Northwest corner of the East one half of the Northeast one quarter of said Section 1;

Thence South along the Western boundary of said East one half of said Northeast one quarter a distance of 1481.65 feet, more or less, to the center line of a 100 foot Florida Power Corporation Powerline Easement (Deed Book 92, page 70);

Thence continue South along said Western boundary a distance of 50.00 feet to the Southerly right of way boundary of said Powerline Easement for the POINT OF BEGINNING.

From said POINT OF BEGINNING thence South 89 degrees 52 minutes 25 seconds East along said Southerly right of way boundary a distance of 2037.70 feet, more or less, to the Northwesterly right of way boundary of Havana Highway (State Road No. 12 - 100 foot right of way), said point also lying on a curve concave to the Southeast;

Thence Southwesterly along said Northwesterly right of way boundary and said curve with a radius of 2914.79 feet through a central angle of 12 degrees 50 minutes 06 seconds for an arc distance of 652.95 feet (the chord of said arc being South 26 degrees 17 minutes 40 seconds West 651.59 feet, more or less), for the end of said curve;

Thence continue along said Northwesterly right of way boundary South 19 degrees 52 minutes 37 seconds West 1956.24 feet, more or less to the Southern boundary of the Northeast one quarter of the Southeast one quarter of said Section 1;

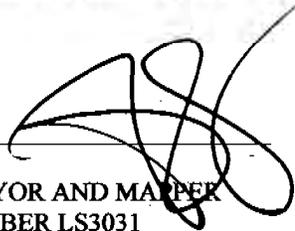
Thence West along said Southern boundary a distance of 1083.93 feet, more or less, to the Southwest corner of said Northeast one quarter of the Southeast one quarter

Thence North along the Western boundary of said Northeast one quarter of the Southeast one quarter and said Western boundary of the East one half of the Northeast one quarter a distance of 2428.36 feet, more or less, to the POINT OF BEGINNING.

Containing 85.14 acres, more or less.

The above description was prepared from existing deeds and maps and not the result of a recent in field survey.

\_\_\_\_\_  
THOMAS P. SKIPPER  
PROFESSIONAL SURVEYOR AND MAPPER  
FLORIDA LICENSE NUMBER LS3031



2005-148

OR 532 PG 0470

O.R. BOOK 532 PAGE 470-473  
REC. NICHOLAS THOMAS, CLERK  
GADSDEN CO., FLORIDA

0108667

01 SEP 21 AM 11:10

**WARRANTY DEED**

**THIS INDENTURE** is made this 30<sup>th</sup> day of August, 2001, between Ann F. Nicholson, of 315 Camellia Drive, Quincy, Florida 32351, Grantor, and Ann F. Nicholson, Trustee of the Ann F. Nicholson Revocable Trust Agreement dated March 24, 1998, ("the Trust Agreement"), whose post office address is 315 Camellia Drive, Quincy, Florida 32351, Grantee;

**WITNESSETH:** That Grantor, for and in consideration of the sum of Ten Dollars (\$10.00) and other good and valuable consideration to Grantor in hand paid by Grantee, the receipt and sufficiency of which is hereby acknowledged, does hereby grant, bargain, convey and sell to Grantee, and Grantee's heirs, legal representatives, successors and assigns forever, an undivided one-half (1/2) interest in the following described land, situate, lying and being in Gadsden County, Florida, to-wit:

The Northwest Quarter of the Northwest Quarter and Two (2) acres in the Southwest Corner of the Northwest Quarter of Southwest Quarter of Section 6, Township 2 North, Range 2 West; and East Half of Northeast Quarter and Northeast Quarter of Southeast Quarter of Section 1, Township 2 North, Range 3 West. Containing in all One Hundred Sixty-two acres (162) MORE OR LESS.

Said property being the same conveyed to W. P. Nicholson and Ann F. Nicholson, his wife, by Ann C. Nicholson, a widow, by Warranty Deed dated November 21, 1966, and recorded in OR Book 87, at Page 630 of the Public Records of Gadsden County, Florida.

Documentary Tax Pd. \$0.70  
Intangible Tax Pd.  
NICHOLAS THOMAS, CLERK, GADSDEN COUNTY  
by [Signature] Deputy Clerk  
Date 9/21/01

THIS INSTRUMENT PREPARED BY  
STUART E. GOLDBERG  
POST OFFICE BOX 12458  
TALLAHASSEE, FLORIDA 32317

OR532PG0471

together with all improvements thereon and appurtenances thereto. Grantor furnished the above legal description to the preparer hereof and no examination of title has been performed. Grantor does hereby fully warrant the title to said land, and will defend the same against the lawful claims of all persons whomsoever, except taxes for 2001 and subsequent years. Grantor does hereby further fully warrant that the above-described property does not constitute Grantor's homestead property. The terms "Grantor" and "Grantee" shall, where the context requires, include the singular and plural, and the masculine, feminine and neuter genders.

There is hereby granted to the Grantee, in addition to those powers conferred by law, the following powers to be exercised without authority from any court and in the Grantee's sole and absolute discretion, to deal with any and all property conveyed herein:

A. To retain such property regardless of whether it is of the class or diversification authorized by law for the investment of trust funds, and to abandon such property or any interest in it as may be deemed advisable.

B. To sell any such property or any interest (including undivided interests) therein, at such times and upon such terms and conditions including credit, as may be deemed advisable at public or private sale, and to exchange, grant options on or easements in or on the property or otherwise dispose of such property as may be deemed advisable.

C. To enter into a lease for any purpose as lessor of the property for such period of time and to grant such options for renewal or purchase as may be deemed advisable.

D. To borrow money from any lender as may be necessary to pay taxes or for such other purposes as may be deemed advisable, and to give notes or bonds for the sums borrowed

OR532 PG 0472

and to encumber, mortgage or pledge any property granted hereunder to secure repayment of such notes or bonds.

E. To abandon, compromise, arbitrate or otherwise deal with and settle claims in favor of or against the property as may be deemed advisable.

F. To exercise all of the powers and discretions granted herein, even after the termination of any trust under which this property is granted, until the final distribution of all property conveyed herein.

G. To do all such acts and exercise all such rights and privileges, although not specifically listed hereunder, which the Grantee deems necessary or advisable for the proper and advantageous management, investment and distribution of the property conveyed herein, and to make, execute and deliver any instruments or agreements binding the Grantee with respect to the property conveyed hereby.

It is the intention of the Grantor to vest title to the property in Grantee pursuant to the terms of Section 689.071 of the Florida Statutes (1999).

The Trust Agreement provides that, if the Trustee is unable or unwilling to serve, Paula J. Edmunds and Vicky L. Burton are appointed to act as successor co-Trustees with all power and authority granted herein.

OR532PG0473

IN WITNESS WHEREOF, Grantor has executed or caused this deed to be executed under

seal the day and year first above written.

*Stuart E. Goldberg*  
(Signature)  
Stuart E. Goldberg  
(Type/Print Name)

*Ann F. Nicholson*  
Ann F. Nicholson

*Yolanda Watkins*  
(Signature)  
Yolanda Watkins  
(Type/Print Name)

STATE OF FLORIDA  
COUNTY OF LEON

The foregoing instrument was acknowledged before me this 30<sup>th</sup> day of August, 2001, by Ann F. Nicholson,  who is personally known to me or  who has produced a Florida driver's license as identification.

*Yolanda Watkins*  
Signature  
Yolanda Watkins  
Type/Print Name  
COMMISSION # CC921712 EXPIRES  
Notary Public March 23, 2004  
BONDED THRU TROY FAIN INSURANCE, INC.  
Commission No.  
My Commission Expires:

Parcel Nos. 3-06-2N-2W-0000-00232-0100; 3-06-2N-2W-0000-00233-0100;  
3-01-2N-3W-0000-00110-0000

This instrument was prepared by Stuart E. Goldberg of Goldberg & Olive, Attorneys at Law, Post Office Box 12458, Tallahassee, Florida 32317-2458, who certifies that he prepared it from information given to him and neither the accuracy of description nor the marketability of title is guaranteed.

F:\TONASEG\NICHOLSO\trrdeed.p11

OR532PG0466

O.R. BOOK 532 PAGE 466-469  
REC. NICHOLAS THOMAS, CLERK  
GADSDEN CO., FLORIDA

0108666

01 SEP 21 AM 11:09

WARRANTY DEED

THIS INDENTURE is made this 30<sup>th</sup> day of August, 2001, between Ann F. Nicholson, of 315 Camellia Drive, Quincy, Florida 32351, Grantor, and Ann F. Nicholson, Trustee of the Ann F. Nicholson Revocable Trust Agreement dated March 24, 1998, ("the Trust Agreement"), whose post office address is 315 Camellia Drive, Quincy, Florida 32351, Grantee;

WITNESSETH: That Grantor, for and in consideration of the sum of Ten Dollars (\$10.00) and other good and valuable consideration to Grantor in hand paid by Grantee, the receipt and sufficiency of which is hereby acknowledged, does hereby grant, bargain, convey and sell to Grantee, and Grantee's heirs, legal representatives, successors and assigns forever, an undivided one-half (1/2) interest in the following described lands, situate, lying and being in Gadsden County, Florida, to-wit:

PARCEL 1:

Begin at the Northwest Corner of the Southwest quarter of the Northwest quarter of Section 6, Township 2 North, Range 2 West, Gadsden County, Florida, thence run East 893.75 feet to the West side of State Road 12; thence run along a curve South 39°13' West 100 feet; thence run South 36°03' West 200 feet; thence run West 685 feet; thence run North 243 feet to the Point of Beginning. Containing 4.38 acres more or less.

Documentary Tax Pd. \$0.70

NICHOLAS THOMAS, CLERK, GADSDEN COUNTY  
Intangible Tax Pd.

By [Signature] Deputy Clerk  
Date 9/21/01

THIS INSTRUMENT PREPARED BY  
STUART E. GOLDBERG  
POST OFFICE BOX 12458  
TALLAHASSEE, FLORIDA 32317

OR532PG0467

PARCEL 2:

Commence at the Northwest Corner of the Southwest quarter of the Northwest quarter of Section 6, Township 2 North, Range 2 West, Gadsden County, Florida, and thence run South 243 feet to the Point of Beginning. Thence run East 685 feet to the West side of State Road 12; thence run along a curve South 32°16' West 200 feet; thence run South 28°06' West 200 feet; thence run South 23°44' West 250 feet to end of curve; thence run South 20°56' West 1151.0 feet; thence run North 1645.61 feet to Point of Beginning. Containing 11.15 acres more or less.

together with all improvements thereon and appurtenances thereto. Grantor furnished the above legal description to the preparer hereof and no examination of title has been performed. Grantor does hereby fully warrant the title to said land, and will defend the same against the lawful claims of all persons whomsoever, except taxes for 2001 and subsequent years. Grantor does hereby further fully warrant that the above-described property does not constitute Grantor's homestead property. The terms "Grantor" and "Grantee" shall, where the context requires, include the singular and plural, and the masculine, feminine and neuter genders.

There is hereby granted to the Grantee, in addition to those powers conferred by law, the following powers to be exercised without authority from any court and in the Grantee's sole and absolute discretion, to deal with any and all property conveyed herein:

A. To retain such property regardless of whether it is of the class or diversification authorized by law for the investment of trust funds, and to abandon such property or any interest in it as may be deemed advisable.

B. To sell any such property or any interest (including undivided interests) therein, at such times and upon such terms and conditions including credit, as may be deemed

advisable at public or private sale, and to exchange, grant options on or easements in or on the property or otherwise dispose of such property as may be deemed advisable.

C. To enter into a lease for any purpose as lessor of the property for such period of time and to grant such options for renewal or purchase as may be deemed advisable.

D. To borrow money from any lender as may be necessary to pay taxes or for such other purposes as may be deemed advisable, and to give notes or bonds for the sums borrowed and to encumber, mortgage or pledge any property granted hereunder to secure repayment of such notes or bonds.

E. To abandon, compromise, arbitrate or otherwise deal with and settle claims in favor of or against the property as may be deemed advisable.

F. To exercise all of the powers and discretions granted herein, even after the termination of any trust under which this property is granted, until the final distribution of all property conveyed herein.

G. To do all such acts and exercise all such rights and privileges, although not specifically listed hereunder, which the Grantee deems necessary or advisable for the proper and advantageous management, investment and distribution of the property conveyed herein, and to make, execute and deliver any instruments or agreements binding the Grantee with respect to the property conveyed hereby.

It is the intention of the Grantor to vest title to the property in Grantee pursuant to the terms of Section 689.071 of the Florida Statutes (1999).

DR532PG0469

The Trust Agreement provides that, if the Trustee is unable or unwilling to serve, Paula J. Edmunds and Vicky L. Burton are appointed to act as successor co-Trustees with all power and authority granted herein.

IN WITNESS WHEREOF, Grantor has executed or caused this deed to be executed under seal the day and year first above written.

[Signature]  
(Signature)  
Stuart E. Goldberg  
(Type/Print Name)

[Signature]  
Ann F. Nicholson

[Signature]  
(Signature)  
Yolanda Watkins  
(Type/Print Name)

STATE OF FLORIDA  
COUNTY OF LEON

The foregoing instrument was acknowledged before me this 30<sup>th</sup> day of August, 2001, by Ann F. Nicholson,  who is personally known to me or  who has produced a Florida driver's license as identification.

[Signature]  
Signature  
Yolanda Watkins  
Yolanda Watkins  
Type/Print Name  
MY COMMISSION # CC921712 EXPIRES  
Notary Public March 23, 2004  
COMBONED THRU TROY FAIN INSURANCE, INC.  
Commission No.  
My Commission Expires:

Parcel ID Nos.: 3062N2W0000002320100; 306N2W0000002330100

This instrument was prepared by Stuart E. Goldberg of Goldberg & Olive, Attorneys at Law, Post Office Box 12458, Tallahassee, Florida 32317-2458, who certifies that he prepared it from information given to him and neither the accuracy of description nor the marketability of title is guaranteed.

F:\TONI\SEG\NICHOLSO\rtrdeed.2pr.fm

O.R. BOOK 532 PAGE 463-465  
REC. NICHOLAS THOMAS, CLERK  
GADSDEN CO. FLORIDA OR532 PG 0463

0108665

01 SEP 21 AM 11:08

Documentary Tax Pd. \$ 0.70  
Intangible Tax Pd.  
NICHOLAS THOMAS, CLERK, GADSDEN COUNTY  
By Gene Webb 9/21/01  
Deputy Clerk Date

**PERSONAL REPRESENTATIVE'S DEED**

THIS INDENTURE is made this 30<sup>th</sup> day of August, 2001, by and between **Ann F. Nicholson, the duly qualified and acting Personal Representative of Estate of W. Paul Nicholson, deceased**, whose address is 315 Camellia Drive, Quincy, Florida 32351, hereinafter referred to as "Grantor", and **Ann F. Nicholson**, a widow, whose address is 315 Camellia Drive, Quincy, Florida 32351, hereinafter referred to as "Grantee", the words "Grantor" and "Grantee" to include the neuter, masculine and feminine genders, the singular and the plural;

**WITNESSETH:**

FOR AND IN CONSIDERATION of the sum of Ten Dollars (\$10.00) in hand paid to Grantor by Grantee at or before the execution, sealing and delivery hereof, the receipt and sufficiency of which is hereby acknowledged, Grantor, acting under and by virtue of the Powers of Personal Representative in Article VII of the Will of W. Paul Nicholson, admitted to probate by order of the Circuit Court of Gadsden County, Florida, dated June 17, 1999, has and hereby does, grant, bargain, sell and convey unto Grantee and the respective heirs, legal representatives, successors and assigns

THIS INSTRUMENT PREPARED BY  
STUART E. GOLDBERG  
GOLDBERG & OLIVE  
POST OFFICE BOX 12458  
TALLAHASSEE, FLORIDA 32317

OR 532 PG 0464

of Grantee an undivided one-half (1/2) interest in the following described parcels in Gadsden County,

Florida, to-wit:

PARCEL 1:

Begin at the Northwest Corner of the Southwest quarter of the Northwest quarter of Section 6, Township 2 North, Range 2 West, Gadsden County, Florida, thence run East 893.75 feet to the West side of State Road 12; thence run along a curve South 39°13' West 100 feet; thence run South 36°03' West 200 feet; thence run West 685 feet; thence run North 243 feet to the Point of Beginning. Containing 4.38 acres more or less.

PARCEL 2:

Commence at the Northwest Corner of the Southwest quarter of the Northwest quarter of Section 6, Township 2 North, Range 2 West, Gadsden County, Florida, and thence run South 243 feet to the Point of Beginning. Thence run East 685 feet to the West side of State Road 12; thence run along a curve South 32°16' West 200 feet; thence run South 28°06' West 200 feet; thence run South 23°44' West 250 feet to end of curve; thence run South 20°56' West 1151.0 feet; thence run North 1645.61 feet to Point of Beginning. Containing 11.15 acres more or less.

TO HAVE AND TO HOLD said tracts or parcels of land, together with any and all rights, members and appurtenances thereof to the same being, belonging or in anywise appertaining to the only proper use, benefit and behoof of the Grantee, and the respective heirs, legal representatives, successors and assigns of Grantee, in fee simple, in as full and ample a manner as the same was held, possessed and enjoyed or might have been held, possessed and enjoyed by the said decedent.

OR532PG0465

IN WITNESS WHEREOF, the Grantor, in Grantor's fiduciary capacity as aforesaid, has signed and sealed this deed, the day and year first above written.

Signed, sealed and delivered in the presence of:

[Signature]  
(Signature)  
Stuart E. Goldberg  
(Type/Print Witness Name)

[Signature]  
Ann F. Nicholson, personal representative of the Estate of W. Paul Nicholson

[Signature]  
(Signature)  
Yolanda Watkins  
(Type/Print Witness Name)

STATE OF FLORIDA  
COUNTY OF LEON

The foregoing instrument was acknowledged before me this 30<sup>th</sup> day of August, 2001, by Ann F. Nicholson, Personal Representative of Estate of W. Paul Nicholson,  who is personally known to me or  who has produced a Florida driver's license as identification.

[Signature]  
Signature  
Yolanda Watkins  
Type/Print Notary Name  
MY COMMISSION # CC921712 EXPIRES  
March 23, 2004  
BONDED THRU TROY FAIN INSURANCE, INC.  
Notary Public  
Commission No.  
My Commission Expires:

Parcel ID Nos.: 3062N2W0000002320100; 306N2W0000002330100

This instrument was prepared by Stuart E. Goldberg of Goldberg & Olive, Attorneys at Law, Post Office Box 12458, Tallahassee, Florida 32317-2458, who certifies that he prepared it from information given to him and neither the accuracy of description nor the marketability of title is guaranteed.

FATONTSEGANICHOLSOVEADM\deedpr

U.S. 167 PAGE 641

D E E D

THIS INDENTURE, Made this 1st day of December, A.D. 1973, by and between JOHN H. THOMSON and MARY B. THOMSON, his wife, and ELIZABETH THOMSON, a single woman, of the County of Gadsden, State of Florida, parties of the first part, and JAMES D. NICHOLSON and WILLIAM P. NICHOLSON, whose postoffice address is 321 North 9th Street, Quincy, Gadsden County, Florida, parties of the second part,

- W I T N E S S E T H -

That the said parties of the first part, for and in consideration of the sum of Ten (\$10.00) Dollars and other good and valuable considerations to them in hand paid by the said parties of the second part, receipt whereof is hereby acknowledged, have bargained, granted, sold and do, by these presents, bargain, grant, sell and convey unto the said parties of the second part, their heirs and assigns forever, the following described property, situate, lying and being in the County of Gadsden, State of Florida, to-wit:

Commence at the Northwest Corner of the Southwest quarter of the Northwest quarter of Section 6, Township 2 North, Range 2 West, Gadsden County, Florida, and thence run South 243 feet to the Point of Beginning. Thence run East 685 feet to the West side of State Road 12; thence run Along a curve South 32° 16' West 200 feet; thence run South 28° 06' West 200 feet; thence run South 23° 44' West 250 feet to end of curve; thence run South 20° 56' West 1151.0 feet; thence run North 1645.61 feet to Point of Beginning. Containing 11.15 acres more or less.

AND the said parties of the first part do hereby fully warrant the full title to said lands and will defend the same against the lawful claims of all persons whomsoever.

IN WITNESS WHEREOF, the said parties of the first part have hereto set their hands and seals the day and year first above written.

Signed, Sealed and Delivered in the presence of:

Norman McMillan

Edith Ann Bennett  
As to John H. Thomson and Mary B. Thomson

Norman McMillan

Edith Ann Bennett  
As to Elizabeth Thomson

John H. Thomson (SEAL)  
JOHN H. THOMSON

Mary B. Thomson (SEAL)  
MARY B. THOMSON

Elizabeth Thomson (SEAL)  
ELIZABETH THOMSON

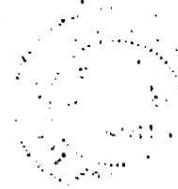
167-00641

STATE OF FLORIDA  
COUNTY OF GADSDEN

I HEREBY CERTIFY that on this day before me, an officer duly authorized by law in the State and County aforesaid to take acknowledgments, personally appeared JOHN H. THOMSON, and MARY B. THOMSON, his wife, known to me to be the persons described in and who executed the foregoing instrument, and they stated that they executed the same.

WITNESS my hand and official seal in the State and County aforesaid this 2<sup>nd</sup> day of December, A.D. 1973.

Ethel Sue Burnett  
NOTARY PUBLIC  
My Commission Expires: \_\_\_\_\_  
Notary Public, State of Florida at Large  
My Commission Expires June 20, 1977

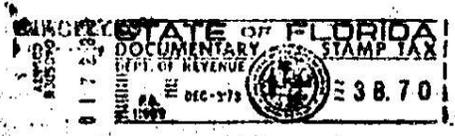


STATE OF FLORIDA  
COUNTY OF LEON

I HEREBY CERTIFY that on this day before me, an officer duly authorized by law in the State and County aforesaid to take acknowledgments, personally appeared ELIZABETH THOMSON, a single woman, known to me to be the person described in and who executed the foregoing instrument and she stated that she executed the same.

WITNESS my hand and official seal in the State and County aforesaid this 2<sup>nd</sup> day of December, A.D. 1973.

Ethel Sue Burnett  
NOTARY PUBLIC  
My Commission Expires: \_\_\_\_\_  
Notary Public, State of Florida at Large  
My Commission Expires June 20, 1977



FILED 12-27-73 2:27 PM  
IN GADSDEN COUNTY, FLORIDA  
REC. NO. 60926  
PAGE 611 AND 612  
LBY  
Tracy L. Riddle  
DAILY CLERK

This instrument was prepared by:  
Tracy L. Riddle  
Attorney at Law  
112 East Washington St.  
Quincy, Florida



O.R. 167 PAGE 637

D E E D

THIS INDENTURE, Made this 2<sup>nd</sup> day of December, A.D. 1973, by and between JOHN H. THOMSON and MARY B. THOMSON, his wife, and ELIZABETH THOMSON, a single woman, of the County of Gadsden, State of Florida, parties of the first part, and JAMES D. NICHOLSON and WILLIAM P. NICHOLSON, whose postoffice address is 321 North 9th Street, Quincy, Gadsden County, Florida, parties of the second part,

- W I T N E S S E T H -

That the said parties of the first part, for and in consideration of the sum of Ten (\$10.00) Dollars and other good and valuable considerations to them in hand paid by the said parties of the second part, receipt whereof is hereby acknowledged, have bargained, granted, sold and do, by these presents, bargain, grant, sell and convey unto the said parties of the second part, their heirs and assigns forever, the following described property, situate, lying and being in the County of Gadsden, State of Florida, to-wit:

Begin at the Northwest Corner of the Southwest quarter of the Northwest quarter of Section 6, Township 2 North, Range 2 West, Gadsden County, Florida, thence run East 893.75 feet to the West side of State Road 12; thence run along a curve South 39° 13' West 100 feet; thence run South 36° 03' West 200 feet; thence run West 685 feet; thence run North 243 feet to the Point of Beginning. Containing 4.38 acres more or less.

AND the said parties of the first part do hereby fully warrant the full title to said lands and will defend the same against the lawful claims of all persons whomsoever.

IN WITNESS WHEREOF, the said parties, of the first part have hereto set their hands and seals the day and year first above written.

Signed, Sealed and Delivered in the presence of:

Norman M. Miller

Etzel Lee Burnett  
As to John H. Thomson and Mary B. Thomson

Norman M. Miller

Etzel Lee Burnett  
As to Elizabeth Thomson

John H. Thomson (SEAL)  
JOHN H. THOMSON

Mary B. Thomson (SEAL)  
MARY B. THOMSON

Elizabeth Thomson (SEAL)  
ELIZABETH THOMSON

167

STATE OF FLORIDA  
COUNTY OF GADSDEN

I HEREBY CERTIFY that on this day before me, an officer duly authorized by law in the State and County aforesaid to take acknowledgments, personally appeared JOHN H. THOMSON and MARY B. THOMSON, his wife, known to me to be the persons described in and who executed the foregoing instrument, and they stated that they executed the same.

WITNESS my hand and official seal in the State and County aforesaid this 2<sup>nd</sup> day of December, A.D. 1973.

Estel Lee Burnett  
NOTARY PUBLIC  
My Commission Expires: \_\_\_\_\_

Notary Public, State of Florida at Large  
My Commission Expires June 20, 1977

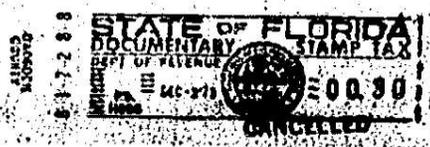
STATE OF FLORIDA  
COUNTY OF LEON

I HEREBY CERTIFY that on this day before me, an officer duly authorized by law in the State and County aforesaid to take acknowledgments, personally appeared ELIZABETH THOMSON, a single woman, known to me to be the person described in and who executed the foregoing instrument and she stated that she executed the same.

WITNESS my hand and official seal in the State and County aforesaid this 2<sup>nd</sup> day of December, A.D. 1973.

Estel Lee Burnett  
NOTARY PUBLIC  
My Commission Expires: \_\_\_\_\_

Notary Public, State of Florida at Large  
My Commission Expires June 20, 1977



This instrument was prepared by:

Tracy L. Riddle  
Attorney at Law  
112 East Washington St.  
Gaines, Florida 32601

12-3-73 2:25 PM  
IN GADSDEN COUNTY, FLORIDA  
REC. NO. 6276  
Recorded in O.N. BOOK 167  
PAGE 67 AND 68  
BETWEEN JOHN H. THOMSON AND MARY B. THOMSON  
BY Tracy L. Riddle  
Deputy Clerk

THIS INDENTURE, Made this 9<sup>th</sup> day of March, 1971, between RUTH H. NICHOLSON, of the County of Monroe, State of Alabama, party of the first part and JAMES D. NICHOLSON, of the County of Monroe, State of Alabama, party of the second part.

WITNESSETH: That the said party of the first part, for and in consideration of the sum of Ten Dollars and other good and valuable considerations to her in hand paid by the said party of the second party, the receipt whereof is hereby acknowledged, has granted, bargained and sold all of her right, title and interest unto the said party of the second part, his heirs and assigns forever, the following described real estate, situated, lying and being in the County of Gadsden, State of Florida, to-wit:

The Northwest Quarter of the Northwest Quarter, and Two Acres in the Southwest Corner of the Northwest Quarter of Southwest Quarter of Section 6, Township 2 North, Range 2 West; and East Half of Northeast Quarter and Northeast Quarter of Southeast Quarter, Section 1, Township 2 North, Range 3 West. Containing in all One Hundred Sixty-two acres, more or less.

And the said party of the first part does hereby fully warrant the title to said above described land and will defend the same against the lawful claims of all persons whomsoever.

IN WITNESS WHEREOF, the said party of the first part has caused this instrument to be signed and sealed the date first above written.

Signed, sealed and delivered in the presence of:

Ruth H. Nicholson (SEAL)

W. C. Owen  
Samuel C. Brantley

STATE OF ALABAMA  
COUNTY OF MONROE

BEFORE ME personally appeared Ruth H. Nicholson, to me well

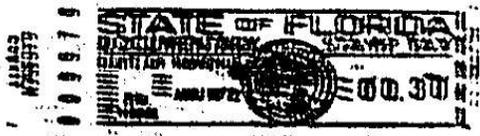
693

known and known to me to be the person described above in and foregoing instrument and she acknowledged before me that she executed the same for the purposes therein expressed.

WITNESS my hand and official seal this 11<sup>th</sup> day of March, 1971.

Henry F. [Signature]  
Notary Public  
My Commission Expires: [Date]

AUG 16 1972 No. 55644  
Filed  
Recorded in the records Gadsden:  
County, Florida and verified by:  
Edwin Baur, Clerk Circuit Court  
Allen S. [Signature] Deputy Clerk



GADSDEN COUNTY, FLORIDA  
RECEIVED AUG 16 1972 AT  
8:45 O'CLOCK P.M. AND  
RECORDED IN CR BOOK 147  
PAGE 592 AND THE RECORD  
VERIFIED.  
EDWIN BAUR, CLERK, CIRCUIT COURT  
BY Allen S. [Signature] DEPUTY CLERK

630

THIS INDENTURE, Made this 21st day of November 1966, between ANN C. NICHOLSON, a widow, of the County of Gadsden, State of Florida, party of the first part and JAMES D. NICHOLSON and his wife, RUTH H. NICHOLSON of the County of Monroe, State of Alabama, and W. P. NICHOLSON and his wife, ANN F. NICHOLSON of the County of Davidson, State of Tennessee, parties of the second part.

WITNESSETH: That the said party of the first part, for and in consideration of the sum of Ten Dollars and other good and valuable considerations to her in hand paid by the said parties of the second part, the receipt whereof is hereby acknowledged, has granted, bargained and sold all of her right, title and interest unto the said parties of the second part, their heirs and assigns forever, the following described real estate, situate, lying and being in the County of Gadsden, State of Florida, to-wit:



The Northwest Quarter of the Northwest Quarter and Two (2) Acres in the Southwest Corner of the Northwest Quarter of Southwest Quarter of Section 6, Township 2 North, Range 2 West; and East Half of Northeast Quarter and Northeast Quarter of Southeast Quarter of Section 1, Township 2 North, Range 3 West. Containing in all One Hundred Sixty-two acres (162) more or less.

AND the said party of the first part does hereby fully warrant the title to said above described land and will defend the same against the lawful claims of all persons whomsoever.

IN WITNESS WHEREOF, the said party of the first part has caused this instrument to be signed and sealed the date first above written.

Signed, sealed and delivered in the presence of:

[Signature]  
[Signature]

Ann C. Nicholson (SEAL)

STATE OF FLORIDA  
 COUNTY OF GADSDEN

BEFORE ME personally appeared ANN C. NICHOLSON, a widow, to me well known and known to me to be the person described above in the foregoing instrument and she acknowledged before me that she executed the same for the purposes therein expressed.

WITNESS my hand and official seal this 21st day of November, A.D. 1966.

NOV 22 1966  
 Filed No. 28721  
 Recorded in the records Gadsden County, Florida and verified by Edwin Baser, Clerk Circuit Court  
 Deputy  
[Signature] Clerk

[Signature]  
 Notary Public  
 My Commission Expires:  
 Notary Public, State of Florida at Large  
 My Commission expires January 21, 1967



THIS INDENTURE, made this 1st day of October, A. D. 1965 between ANN C. NICHOLSON, a widow, of the County of Gadsden and State of Florida; JAMES D. NICHOLSON, and his wife RUTH H. NICHOLSON, of the State of Alabama, County of Mobile; W. P. NICHOLSON, and his wife ANN F. NICHOLSON, of the State of Arizona, County of Maricopa, Parties of the First Part, and TROY A. NICHOLSON, of Gadsden County, Florida, Party of the Second Part.

WITNESSETH: That the said parties of the first part for and in consideration of the sum of \$1 received from the party of the second part, QUIT CLAIMS to the party of the second part all of their interest in and to the real property in Gadsden County, Florida, described as:



That part of Section 1, Township 2 North, Range 3 West, Gadsden County, Florida, more particularly described as follows, to-wit: Beginning at a point in the West line of said Section 1, 974.5 feet Southerly from the Northwest corner of said Section 1, for the point of beginning; thence running South 74°48' East a distance of 1477.80 feet to a point; thence running South 82°37' East a distance of 2763.78 feet to a point in the East line of said Section 1; thence running South along the East line of said Section 1 a distance of 50.00 feet to a point; thence running North 82°37' West a distance of 2773.42 feet to a point; thence running North 74°48' West a distance of 1486.93 feet to a point in the West line of said Section 1; thence running North along the West line of said Section 1 a distance of 50.72 feet, more or less, to the point and place of beginning, containing 4.879 acres, more or less.

SPECIFICALLY EXCLUDING THEREFROM any lands in the East Half of the Northeast Quarter, and the Northeast Quarter of the Southeast Quarter of Section 1, Township 2 North, Range 3 West.

IN WITNESS WHEREOF, the said parties of the first part have hereunto set their hands and seals the day and year first above written.

SIGNED, sealed and delivered in the presence of:

W. H. Everett;  
Ruth A. Everett

Carol J. [unclear]  
Troy A. [unclear]

James D. Nicholson (SEAL)  
Ruth H. Nicholson (SEAL)  
James D. Nicholson and his wife  
Ruth H. Nicholson  
W. P. Nicholson (SEAL)  
Ann F. Nicholson (SEAL)  
W. P. Nicholson and his wife  
Ann F. Nicholson



678

SIGNED, sealed and delivered in the presence of:

*Arnold S. Bradley*  
*Madeline J. Skinnion*

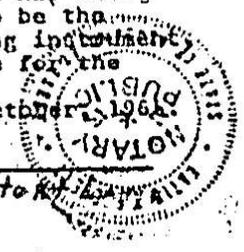
*Ann C. Nicholson* (SEAL)  
Ann C. Nicholson, a widow

STATE OF ALABAMA  
COUNTY OF MOBILE

BEFORE ME personally appeared JAMES D. NICHOLSON and his wife RUTH H. NICHOLSON, to me well known and known to me to be the individuals described in and who executed the foregoing instrument and acknowledged before me that they executed the same for the purposes therein expressed.

WITNESS my hand and official seal this 5th day of October, 1965.

*Katie J. Everett*  
Notary Public  
My commission expires: State of Alabama  
MY COMMISSION EXPIRES FEB, 27, 1968

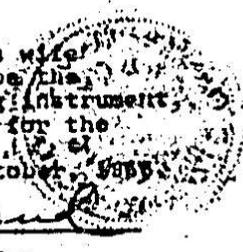


STATE OF ARIZONA  
COUNTY OF MARICOPA

BEFORE ME personally appeared W. P. NICHOLSON and his wife ANN F. NICHOLSON, to me well known and known to me to be the individuals described in and who executed the foregoing instrument and acknowledged before me that they executed the same for the purposes therein expressed.

WITNESS my hand and official seal this 11 day of October, 1965.

*Crystal Hunt*  
Notary Public  
My commission expires: My Commission Expires Oct 9, 1967



STATE OF FLORIDA  
COUNTY OF GADSDEN

BEFORE ME personally appeared ANN C. NICHOLSON, a widow, to me well known and known to me to be the individual described in and who executed the foregoing instrument, and acknowledged before me that she executed the same for the purposes therein expressed.

WITNESS my hand and official seal this 14 day of October, 1965.

*Arnold S. Bradley*  
Notary Public  
My commission expires:  
Notary Public, State of Florida at Large  
My Commission expires January 17, 1967.

OCT 18 1965  
Filed 24346  
Recorded in the records Gadsden  
County, Florida and verified by  
Edwin Bass, Clerk Circuit Court  
Deputy  
*Mary M. Bass* Clerk



679

THIS INDENTURE, made this 16th day of October, 1965, Between TROY A. NICHOLSON, an unmarried man, of Gadsden County, Florida, Party of the First Part, and B & K FARMS, INC., a Florida corporation, Party of the Second Part.

WITNESSETH: That the said party of the first part, for and in consideration of the sum of Ten Dollars and other valuable considerations to him in hand paid by the said party of the second part, the receipt whereof is hereby acknowledged, has granted, bargained, and sold unto the said party of the second part, its successors and assigns forever, the following described lands situate, lying and being in Gadsden County, Florida, to-wit:

The East Half of the Northwest Quarter; East Half of the Southwest Quarter; West Half of the Northeast Quarter; West Half of Southeast Quarter; Southeast Quarter of Southeast Quarter, all in Section One, Township Two North, Range Three West;

Northeast Quarter of Northeast Quarter, of Section Twelve, Township Two North, Range Three West;

Northwest Quarter of Northwest Quarter, Section Seven, Township Two North, Range Two West.

Said land situate, lying and being in the County of Gadsden and State of Florida.

AND the said party of the first part does hereby fully warrant the title to said land and will defend the same against the lawful claims of all persons whomsoever, SUBJECT, HOWEVER, to the following:

(1) Easements to Florida Power Corporation recorded in Deed Book "WWH", at page 257; Deed Book 92, at page 68, and Official Records Book 9, at page 558, all of the Public Records of Gadsden County, Florida;

(2) Right of Way deed to the State of Florida dated March 31, 1936, recorded in Gadsden County, Florida Deed Book "DDD", at page 29;

(3) Right of Way granted to South Georgia Natural Gas Company dated April 1, 1955, recorded in Gadsden County, Florida, Deed Book "III", at page 56;



660

Party of First Part may personally occupy and continuously live on the following described property:

Begin at a point on the West side of State Road No. 12, said point being 117.72 feet South and 715.71 feet West of the Northeast Corner of Section 12, Township 2 North, Range 3 West and thence run N82°37'W. 138.0 feet; thence run S25°11'W. 196.23 feet; thence run N66°31'E. 161.0 feet; thence run N21°41'E. along said road 161.5 feet to the point of beginning.

Said parcel of land containing 0.6 acres more or less and being a part of the Northeast Quarter of the Northeast Quarter of Section 12, Township 2 North, Range 3 West, Gadsden County, Florida.

until his death or prior abandonment by his failure to occupy and live thereon. Failure to occupy and live thereon for any cause whatsoever for at least SIX months during a calendar year shall be considered abandonment by the Party of the First part. This agreement shall be binding only between the parties hereto and shall not be binding upon a bona fide purchaser from the Party of the Second Part.

IN WITNESS WHEREOF, the party of the first part has hereunto set his hand and seal the day and year first above written.

SIGNED, sealed and delivered in our presence:

April J. Mitchell  
Richard J. Taylor

Troy A. Nicholson (SEAL)

STATE OF FLORIDA  
COUNTY OF GADSDEN

BEFORE ME personally appeared TROY A. NICHOLSON, an unmarried man, to me well known and known to me to be the individual described in and who executed the foregoing instrument, and acknowledged before me that he executed the same for the purposes therein expressed. WITNESS my hand and official seal this 16th day of October, 1965.

April J. Mitchell  
Notary Public  
My commission expires:

Notary Public, State of Florida at Large.  
My Commission expires May 9, 1967.



OCT 18 1965  
Filed No. 24347  
Recorded in the records Gadsden  
County, Florida and verified by  
Edwin Baur, Clerk Circuit Court  
Deputy  
Mary W. Dixon Clerk

THIS QUIT CLAIM DEED, Made this 9 day of January  
 A. D. 1961, between LOVE LEAF TOBACCO CORPORATION, a Florida  
 corporation with offices in Quincy, Gadsden County, Florida, herein-  
 after called the Grantor, and ANN C. NICHOLSON, of Gadsden County,  
 Florida, JAMES D. NICHOLSON and his wife, RUTH H. NICHOLSON,  
 of Mobile County, Alabama, and W. P. NICHOLSON and his  
 wife, ANN F. NICHOLSON, of Hamilton County, Tennessee,  
 hereinafter called Grantees.

WITNESSETH: That the said Grantor, for and in consideration of  
 the sum of One Dollar to the Grantor in hand paid by the Grantees, the  
 receipt of which is hereby acknowledged, has remised, released and  
 quit-claimed and by this deed does remise, release and quit-claim unto  
 the Grantees, their heirs and assigns forever, all of the right, title,  
 interest, claim and demand which the Grantor has in and to the following  
 described land, situate, lying and being in the County of Gadsden and  
 State of Florida, to-wit:



That part of Section 1, Township 2 North, Range 3 West, Gadsden  
 County, Florida, more particularly described as follows, to-wit: Be-  
 ginning at a point in the West line of said Section 1, 974.5 feet Southerly  
 from the Northwest corner of said Section 1 for the point of beginning;  
 thence running South 74°48' East a distance of 1477.80 feet to a point;  
 thence running South 82°37' East a distance of 2763.78 feet to a point in  
 the East line of said Section 1; thence running South along the East line  
 of said Section 1 a distance of 50.00 feet to a point; thence running North  
 82°37' West a distance of 2773.42 feet to a point; thence running North  
 74°48' West a distance of 1486.93 feet to a point in the West line of said  
 Section 1; thence running North along the West line of said Section One (1)  
 a distance of 50.72 feet, more or less, to the point and place of begin-  
 ning, containing 4.879 acres, more or less.

That part of Section 6, Township 2 North, Range 2 West, Gadsden  
 County, Florida, more particularly described as follows, to-wit:

Beginning at a point in the West line of said Section 6, 1302.5 feet  
 Southerly from the Northwest corner of said Section 6, for the point of  
 beginning; thence running South 82°37' East a distance of 2124.42 feet to  
 a point; thence running South 89°24' East a distance of 2852.48 feet to a  
 point; thence running North 43°52' East a distance of 84.44 feet to a point  
 in the Westerly line of State Highway No. 10 and U. S. Highway No. 90  
 right of way; thence running South 52°26' East along said Westerly right  
 of way line a distance of 50.30 feet to a point; thence running South 43°52'  
 West a distance of 106.04 feet to a point; thence running North 89°24' West  
 a distance of 2871.11 feet to a point; thence running North 82°37' West a  
 distance of 2120.36 feet to a point in the West line of said Section 6; thence  
 running North along the West line of said Section 6 a distance of 50.00  
 feet, more or less, to the point and place of beginning, containing 5.597  
 acres, more or less, and other land.

TO HAVE AND TO HOLD the same, together with all and singular the appurtenances thereunto belonging or in anywise appertaining, and all of the estate, right, title, interest and claim whatsoever of the Grantor, either in law or in equity, to the only proper use, benefit and behoof of the Grantees, their heirs and assigns forever.

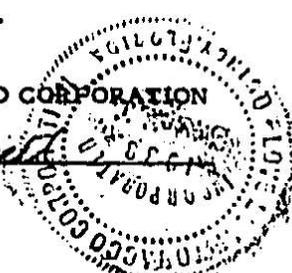
IN WITNESS WHEREOF, The Grantor has hereunto signed its name and affixed its seal the day and year first above written.

Signed, sealed and delivered in the presence of:

LOVE LEAF TOBACCO CORPORATION

J. B. Hubbard  
Robert F. Vickman

By J. L. Maxwell  
Its President



ATTEST:

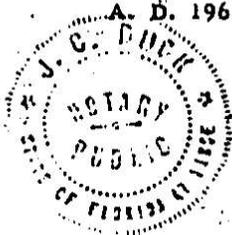
Sallie M. Maxwell  
Its Secretary

STATE OF FLORIDA  
COUNTY OF GADSDEN

I HEREBY CERTIFY, That on this day, before me, personally came and appeared J. L. Maxwell and Sallie M. Maxwell President and Secretary, respectively, of Love Leaf Tobacco Corporation, a Florida corporation, to me well known and known to me to be the persons described in and who executed the foregoing instrument and they acknowledged before me that they executed the same for the uses and purposes therein expressed as the free act and deed as such officers and that they affixed thereto the official seal of said corporation and the said instrument is the act and deed of said corporation.

WITNESS my hand and official seal this 3rd day of February

A. D. 1961.



J. G. Dick  
Notary Public, State of Florida at Large  
My Commission Expires Apr. 15, 1963

Filed FEB 7 1961 No. 6405  
Recorded in the records Gadsden  
County, Florida and verified by  
Edwin Baer, Clerk Circuit Court  
Deputy  
Mary Moses Clerk

# This Indenture.

Made this 10th

day of January

A. D. 19 59

Between Archibald Nicholson and his wife Kathleen Nicholson

of the County of Gadsden in the State of Florida  
parties of the first part, and C. D. Colvin and his wife Sallie D. Colvin

of the County of Gadsden in the State of Florida  
parties of the second part,

Witnesseth, that the said parties of the first part, for and in consideration of the sum of Ten Dollars and other valuable considerations to them in hand paid by the said parties of the second part, the receipt whereof is hereby acknowledged, have granted, bargained and sold to the said parties of the second part, their heirs and assigns forever, the following described land, situate, lying and being in the County of Gadsden, State of Florida, to wit:

Commence at an iron pin which is 1320 feet East of the Northwest Corner of Section 6, and thence run South 400 feet; thence run East 100 feet to the point of beginning; Thence from said point run East 100 feet; thence run South 340.9 feet to the North side of State Road #12, (formerly U. S. 90) thence run S54°54'W. along said road 122.23 feet; thence run North 411.18 feet to the point of beginning. Containing one acre more or less. Said land situate, lying and being in the Northeast Quarter of the Northwest Quarter of Section 6, Township 2 North, Range 2 West, Gadsden County, Florida.



And the said parties of the first part do hereby fully warrant the title to said land, and will defend the same against the lawful claims of all persons whomsoever.

In Witness Whereof, the said parties of the first part have hereunto set their hand and seal the day and year first above written.

Signed, Sealed and Delivered in Our Presence:

*Lucy Mitchell*  
*C. D. Colvin*

*Archibald Nicholson*  
*Kathleen Nicholson*

110

State of Florida,

County of GADSDEN

I HEREBY CERTIFY. That on this day personally appeared before me, an officer duly authorized to administer oaths and take acknowledgments, Archibald Nicholson and his wife Kathleen Nicholson

to me well known and known to me to be the individual described in and who executed the foregoing deed, and they acknowledged before me that they executed the same freely and voluntarily for the purposes therein expressed. AND I FURTHER CERTIFY, That the said

~~know to me to be the wife of the said~~  
~~on a separate and private examination taken and made by me, separately~~  
~~and apart from her said husband, did acknowledge that she made herself a party~~  
~~to said deed for the purpose of removing, relinquishing and conveying all her~~  
~~right, title and interest, whether of donor, homestead or of separate property,~~  
~~statutory or equitable, in and to the lands described therein, and that she executed~~  
~~the said deed freely and voluntarily and without any compulsion, constraint,~~  
~~apprehension or fear of or from her said husband.~~

WITNESS my hand and official seal at Quincy  
County of Gadsden, and State of Florida, this 10th  
day of January, A. D. 19 59.

My Commission Expires May 7, 1959

*Alvin D. Mitchell*  
Notary Public

MAR 19 1960

Filed No. 3462  
Recorded in the records Gadsden  
County, Florida and verified by  
Eckie Baur, Clerk Circuit Court  
Deputy  
*Mary E. Moore* Clerk

638

# This Indenture

Made this 10th day of January A. D. 19 59

Between C. D. Colvin and his wife Sallie D. Colvin

of the County of Gadsden in the State of Florida  
part 1<sup>st</sup> of the first part, and Archibald Nicholson

of the County of Gadsden in the State of Florida  
part 2<sup>d</sup> of the second part,

**Witnesseth**, that the said part 1<sup>st</sup> of the first part, for and in consideration of the sum of Ten Dollars and other good and valuable considerations to them in hand paid by the said part 2<sup>d</sup> of the second part, the receipt whereof is hereby acknowledged, have granted, bargained and sold to the said part 2<sup>d</sup> of the second part, heirs and assigns forever, the following described land, situate, lying and being in the County of Gadsden, State of Florida, to wit:  
Begin at an iron pin 1320 feet East of the Northwest Corner of Section 6 and thence run South 400 feet; thence run East 100 feet; thence run North 400 feet; thence run West 100 feet to the point of beginning. Containing one acre more or less. Said parcel of land, situate, lying and being a part of the Northeast Quarter of the Northwest Quarter of Section 6, Township 2 North, Range 2 West, Gadsden County, Florida.



And the said part 1<sup>st</sup> of the first part do hereby fully warrant the title to said land, and will defend the same against the lawful claims of all persons whomsoever.

In Witness Whereof, the said part 1<sup>st</sup> of the first part ha<sup>ve</sup> hereunto set their hand and seal the day and year first above written.

Signed, Sealed and Delivered in Our Presence:

*Archie Mitchell*  
*J. D. Lince*

*C. D. Colvin*  
*Sallie D. Colvin*

6339

State of Florida,

County of Gadsden

I HEREBY CERTIFY, That on this day personally appeared before me, an officer duly authorized to administer oaths and take acknowledgments,

C. D. Colvin and his wife Sallie D. Colvin to me well known and known to me to be the individual described in and who executed the foregoing deed, and they acknowledged before me that executed the same freely and voluntarily for the purposes therein expressed. AND I FURTHER CERTIFY That the said

~~known to me to be the wife of the said~~  
~~was a separate and private examination taken and made by and before me, separately and apart from her said husband, did acknowledge that she made herself a party to said deed for the purpose of renouncing, relinquishing and conveying all her right, title and interest, whether of dower, homestead or of separate property, statutory or equitable, in and to the lands described therein, and that she executed the said deed freely and voluntarily and without any compulsion, constraint, apprehension or fear of or from her said husband.~~

WITNESS my hand and official seal at Quincy  
County of Gadsden, and State of Florida, this 10th  
day of January, A. D. 19 59.

My Commission Expires May 7, 1959 *Alvin L. Mitchell*  
Notary Public

FEB 28 1959  
Filed \_\_\_\_\_ No. 24  
Recorded in the records Gadsden  
County, Florida and verified by  
Edwin Bear, Clerk Circuit Court  
Deputy  
Myrtle H. Moore Clerk

State of Florida Gadsden County...

Know all men by these presents that I, Mary Ann Rice, wife of the Grantor in the foregoing Deed of bargain and Sell do hereby acknowledge that I joined in the Execution of the Same freely and Voluntary and not from any Compulsion, Constraint apprehension or fear of or from my Said husband. In Witness whereof I have hereunto Set my hand & affixed my Seal on this 19th, day of January A. D. 1855.

In presence of  
John N. Calhoun, Seth Hardison J. P. }  
Mary Ann Rice (SEAL)

State of Florida, Gadsden County....

Be it known that Mary Ann Rice wife of the Grantor in the foregoing Deed of Conveyance this day appeared before me, and being examined by me Separately and apart from her Said husband acknowledged that She joined in the Execution of the Same freely and Voluntary and not from any compulsion, constraint apprehension or fear of her Said husband, Given under my hand & Seal on this 19th, day of January A. D. 1855.

Seth Hardison,  
Justice of the Peace (SEAL)

Recorded Jany. 28th, 1855.  
R. C. Lester, Clk.....

A. & A. Nicholson To J. & M. A. Rice Mortgage

State of Florida, Gadsden County..... ss

This Indenture made and Entered into this 19th day of January in the year of Our Lord, Eighteen hundred and fifty five 1855. Between Archibald Nicholson and Angus Nicholson of Said County and State of the first part and Joseph Rice of Barnwell District State of South Carolina, of the Second part. Witnesseth that whereas the Archibald & Angus Nicholson of the first part, hath this day made and delivered to the party of the Second part for value received, there Six Several Bonds in writing Viz: One writing obligatory for the Sum of Two thousand, three hundred and Sixty Six and 6//100, dollars made payable to Joseph Rice or Order at the Union Bank of Charleston, South Carolina on the first day of January 1856. One for the Sum of Two thousand Two hundred and fifty dollars due on the 1st, day of January 1857 One for the Sum of Two thousand One hundred and thirty three dollars and thirty three Cents due on the first day of January 1858. (Eighteen hundred and fifty Eight) One for the Sum of Two thousand and Sixteen dollar and Sixty Seven Cents due on the 1st, day of January 1859,.... One for the Sum of One thousand Nine hundred dollars due on the first day of January 1860, and one for the Sum of One thousand Seven hundred and fifty three dollars and thirty three Cents due on the first day of January 1861, all of Said writings obligatory made payable to the Said Joseph Rice or order at the Union Bank of Charleston, South Carolina and drawing Interest after due at the rate of Seven per Cent per annum, all of Said Writings obligatory bearing even date with these presents.

And being So indebted they the Said Archibald and Angus Nicholson, desire and intend, by these presents to assume and secure to the Said Joseph Rice and his legal representatives the payment of the Said Sums of money as the Said writing obligatory shall respectively become due to their tenor and effect and the Interest to become due thereon. This Indenture therefore witnesseth that the Said Archibald and Angus Nicholson for and in consideration as well of the premises aforesaid as of the Sum of One dollar to them in hand paid by the Said Joseph Rice before the Sealing and delivery hereof the receipt whereof the Said Archibald and Angus Nicholson doth hereby acknowledge hath granted bargained and Sold and by these presents doth Grant, bargain Sell and convey unto the Said Joseph Rice and to his heirs and

assigns forever all their the Said Archibald & Angus Nicholson, right title interest and claim of to or in the following described tracts or parcels of Land Situate lying and being in the County of Gadsden aforesaid which right title interest or Claim is the three fourths of the following described tracts or parcels of Land: to wit; The North half of Section Twenty nine (29) South East quarter of the North East quarter of Section thirty (30) South East quarter of Section thirty (30) North East quarter & North East quarter of North West quarter and South half of Section thirty one (31) all in Township three (3) Range 2, North and West. The North half of Section Six, (6) Township two (2) Range Two (2) N. & West. The South East quarter of South East quarter of Section thirty Six (36) Township three (3) Range three (3) North and West. The North East half of North East quarter Section one (1) the South East half of South East quarter of Section one (1) North East quarter of South East quarter Section twelve (12) North East half of North West quarter Section twelve (12) South West half of South West quarter and the North East half of the North East quarter of Section fourteen all in Township two (2) Range three (3) North and West containing Eighteen hundred acres be the Same more or less. And all the right title and Interest of the Said Archibald Nicholson and Angus Nicholson of to or in the following described tracts or parcels of land Situate lying and being in Gadsden County aforesaid and known and designated as follows to Wit: "The South West quarter of Section thirty 30 Township threes (3) Range two (2) North and West and the South West quarter Section twenty five (25) Township three (3) Range three North and West and West, containing three hundred and Eighteen 87/100 Acres. And the South West quarter of the North West quarter Section thirty one (31) Township Three (3) Range two (2) N. & West & East half of South Wt. quarter quarter of Section (25) and South East quarter of North East quarter West half of North East quarter and East half of North West quarter of Section thirty Six (36) Township three (3) Range three (3) North and West containing three hundred and nineteen acres. And also the following tracts or parcels of Land, Situate lying & being in the County of Gadsden aforesaid and known and designated as follows to Wit: "The West half of South West quarter Sec. Six (6) Township two (2) Range Two (2) North and West, the North West quarter of North West quarter Section Seven Same township and Range, West half of North East quarter and South West quarter of South East quarter Section One (1) Township Two (2) Range three North and West and the West half of the South East quarter of Section (6) Township Two (2) Range Two (2) N. & West containing Three hundred and twenty one acres, be the Same more or less. And also the following named negro Slaves to Wit: John 35 years old, Gracy about 44 years old, Hetty 25 years old, Betsey 23 years old, Georgianna 6 years old, Ned 4 years old, Debby 2 years old, Jeff 31 years old, Phillis 36 years old, Fletta 14 years old, Jenny, 11 years old, and Leila about 19 years old, together with the future increase of Said female Slaves. To have and to hold the Said tracts or parcels of Land & their rights and appurtenances and the Said Negro Slaves & increase as aforesaid unto the Said party of the Second part his heirs and assigns forever. Provided nevertheless that if the Said party of the first their heirs Executors and Administrators do & Shall Well and truly pay each and every the aforesaid writings obligatory as they respectively become due according to their tenor and effect and all interest due or to become due to the Said party of the Second part or to the bearer of Said writings Obligatory or either of them then and from thenceforth this present Indenture and the Estate hereby granted bargained and Sold as the Said promissory Notes or Either of them Shall Cease determine and become absolutely Null and Void to all interests and purposes any thing herein contained to the contrary in anywise not withstanding.

In Witness whereof the Said Archibald & Angus Nicholson hath hereunto Set their hands & affixed their Seals the day and year first herein written.

Signed Sealed & Delivered in presence of { Angus Nicholson (SEAL)  
 John N. Calhoun, Seth Hardison, J. P. ) Archibald Nicholson (SEAL)

Recorded Jany. 28, 1855. R. O. Lester, Clk....

State of Florida Gadsden County.....

This Indenture made and Entered into this the 19th, day of January in the year of Our Lord, eighteen hundred and fifty five. Between James Nicholson of Decatur County, Ga. of the first part and Archibald Nicholson, Angus Nicholson, Malcolm Nicholson, of the State and County aforesaid, and Joseph Rice of Barnwell District, South Carolina of the other part. Witnesseth, that the Said James Nicholson for and in Consideration of the Sum of Eight hundred and twenty five dollars, and \$6/100 (\$25.86/100) in lawful money of the United States to him by the Said party of the Second part in hand paid the receipt whereof the Said James Nicholson, doth hereby acknowledge, hath granted, bargained, and Sold, and by these presents do grant, bargain Sell and convey to the Said parties of the Second part, their heirs and assigns the following described tracts or parcels of Land, Situate, lying, and being in the County and State aforesaid, and known and designated as follows to Wit; The North East 1/4 of Section Six Township 2, North of Range 2, West containing One hundred and Sixty two acres more or less. To have and to hold the Said tracts or parcels of Land and their rights, and appurtenances in the Said parties of the Second part, to the only proper use and behoof of the Said parties of the Second part, their heirs and assigns forever. And the Said James Nicholson for himself his heirs, Executors and Administrators, doth hereby Covenant and agree to and with the Said parties, of the Second part, their heirs and assigns, that that the Said James Nicholson, the Said tracts or parcels of Land with its appurtenances unto them the Said parties of the Second part, their heirs and assigns. Against him the Said James Nicholson and his heirs and against all persons whomsoever Shall and Will by these presents forever warrent and defend. In Witness whereof the Said James Nicholson hath hereunto Set my hand and affixed my Seal the date first herein written.

Signed Sealed and delivered in the presence of ) James Nicholson (SEAL)  
John N. Galhoun, Seth Hardison, Justice of the Peace }

Recorded Jany. 28th, 1855.

R. C. Lester, Clk....

Z. I. Redd To Jas. H. Gatlin Deed

Know all men by these presents that I, Zachariah I. Redd, of the County of Gadsden and State of Florida, for and in Consideration of the Sum of Five dollars to me in hand paid, the receipt whereof I do hereby acknowledge, do by these presents give, grant, bargain sell and convey to James H. Gatlin, of the County of Leon and State aforesaid, and to his heirs and assigns, a Certain parcel of land described as follows Viz; The North East quarter of the North East quarter of Section nineteen, in Township Two, North of Range three West, containing Thirty nine acres and nineteen hundredths of an acre, Situate, lying, and being in the County of Gadsden and State together / aforesaid, with all the privileges and appurtenances, to the Said land in anywise appertaining and belonging. To have and to hold the above granted premises to the Said James H. Gatlin, his heirs and assigns to his and their use and behoof forever, and I the Said Zachariah I. Redd, for myself, my heirs, executors and administrators, do covenant with the Said James H. Gatlin, his heirs and assigns that I am lawfully seized in fee of the aforegranted premises that they are free from all incumbrances, that I have good right to Sell and convey the Same to the Said James H. Gatlin, as aforesaid, and that I will and my heirs executors Administrators Shall warrent and defend the Same to the Said James H. Gatlin, his heirs and assigns forever against the lawful demands of all persons.

In Testimony whereof I the Said Zachariah I. Redd have hereunto Set my hand and Seal this the Eighteenth day of October in the year of Our Lord, One thousand, Eight hundred and fifty four, and of the Independence of the United State of America, the Seventy Eighth.

**EXHIBIT "D"**

**Memorandum of Lease**

CLERK: Please return this document to: **Antietam Wireless Services, LLC**  
**ATTN: Legal Department**  
**103 Carnegie Center, Suite 300**  
**Princeton, NJ 08540**

This Memorandum of Lease is entered into on this 15<sup>th</sup> day of FEBRUARY, 2018, by and between Ann F. Nicholson, Trustee of the Ann F. Nicholson Revocable Trust Agreement, with an address of 4297 Maylor Lane, Tallahassee, FL 32308-5770, (hereinafter referred to as "Landlord") and Antietam Wireless Services, LLC, a Maryland limited liability company, with an address at 103 Carnegie Center, Suite 300, Princeton, NJ 08540 (hereinafter referred to as "Tenant").

1. Landlord and Tenant entered into an Option and Lease ("Lease") on the 15<sup>th</sup> day of FEBRUARY, 2018, for the purpose of installing, operating and maintaining a radio communications facility and other improvements. All of the foregoing are set forth in the Lease.
2. Upon the exercise of the Option, the term of the Lease is for five (5) years with five (5) successive five (5) year options to renew.
3. The property which is being leased to Tenant is described in **Exhibit 1** annexed hereto ("Landlord's Property"). The portion of Landlord's Property being the subject of the Lease (the "Premises") is described in **Exhibit 2** annexed hereto.

IN WITNESS WHEREOF, the parties have executed this Memorandum of Lease as of the day and year first above written.

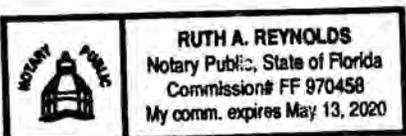
**Landlord: Ann F. Nicholson, Trustee of the Ann F. Nicholson Revocable Trust Agreement**

Witness: [Signature]  
Name: Kenneth Hall  
Witness: [Signature]  
Name: Hannah Ukpebi

By: [Signature]  
Print Name: Ann F. Nicholson  
Date: 2/15/18  
Tax ID/SS Number: [Redacted]

STATE OF Florida  
COUNTY OF Leon

On the 15<sup>th</sup> day of February, 2018, personally appeared before me Ann F. Nicholson, as the Landlord named herein, and he/she acknowledged that he/she executed this Lease as his/her free act and deed in such capacity.



[Signature]  
Notary Public

My commission expires: 5/13/2020

**Tenant: Antietam Wireless Services, LLC**

Witness: [Signature]  
Name: Jose Lopez

By: [Signature: Michael E. Shine]  
Name: Michael E. Shine  
Title: Member  
Date: 2/22/18

Witness: [Signature]  
Name: Wajidh Bayal

STATE OF New Jersey  
COUNTY OF Mercer

On the 22 day of February, 2018, personally appeared before me Michael E. Shine, as Member of the Tenant named herein, and he acknowledged that he executed this Lease as his free act and deed in such capacity.

[Signature]  
Notary Public

My commission expires: 5/12/2021



**EXHIBIT 1**

**Landlord's Property**

A parcel of land lying in Section 1, Township 2 North, Range 3 West and Section 6, Township 2 North, Range 2 West, Gadsden County, Florida, and being more particularly described as follows:

BEGIN at the Northeast corner of said Section 1 and run;

Thence West along the Northern boundary of said Section 1 a distance of 1320 feet, more or less, to the Northwest corner of the East one half of the Northeast one quarter of said Section 1;

Thence South along the Western boundary of said East one half of the Northeast one quarter of Section 1 a distance of 1481.65 feet, more or less, to the center line of a 100 foot Florida Power Corporation Powerline Easement (Deed Book 92, page 70);

Thence continue South along said Western boundary a distance of 50.00 feet to the Southerly right of way boundary of said Powerline Easement;

Thence South 89 degrees 52 minutes 25 seconds East along said Southerly right of way boundary a distance of 2037.70 feet, more or less, to the Northwesterly right of way boundary of Havana Highway (State Road No. 12 - 100 foot right of way), said point also lying on a curve concave to the Southeast;

Thence Northeasterly along said Northwesterly right of way boundary and said curve with a radius of 2914.79 feet through a central angle of 17 degrees 53 minutes 09 seconds for an arc distance of 909.90 feet (the chord of said arc being North 41 degrees 39 minutes 17 seconds East 906.21 feet) to the Eastern boundary of the Northwest one quarter of the Northwest one quarter of said Section 6;

Thence North along said Eastern boundary a distance of 859.05 feet, more or less, to the Northeast corner of said Northwest one quarter of the Northwest one quarter;

Thence West along the Northern boundary of said Northwest one quarter of the Northwest one quarter a distance of 1320 feet, more or less, to the POINT OF BEGINNING.

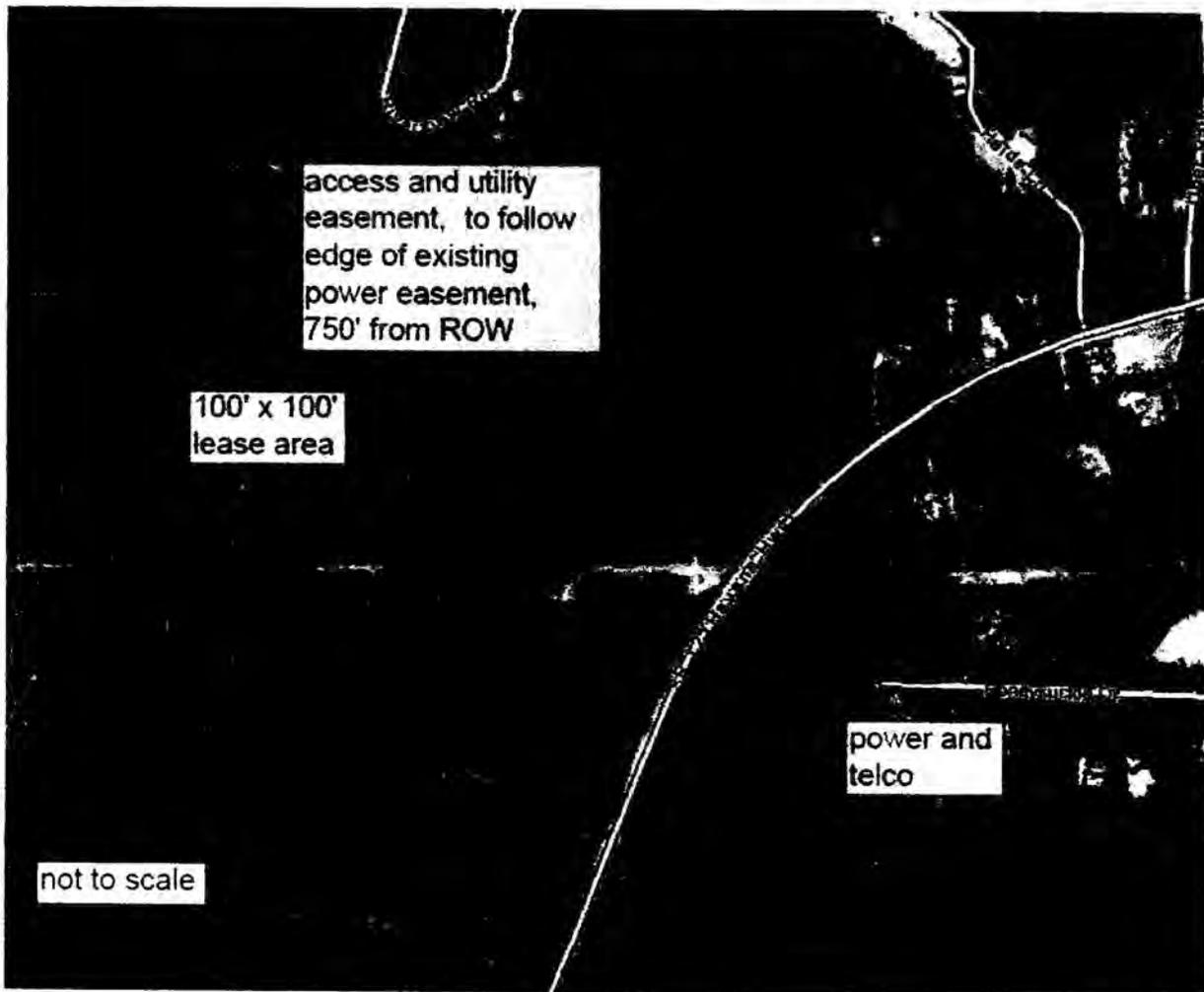
Containing 87.82 acres, more or less.

The above description was prepared from existing deeds and maps and not the result of a recent in field survey.

**EXHIBIT 2**

**Premises**

[The attached sketch of the Premises (including, without limitation, a Right of Way described in the Lease) may be replaced at Tenant's option by a scale drawing and/or legal description.]



Recording Fee: \$69.50

Prepared By, and Upon Recording  
Return to:

Vertical Bridge Development, LLC  
750 Park of Commerce Drive, Suite 200  
Boca Raton, Florida 33487  
Attn: Daniel Marinberg, Esq.

AFTER RECORDING, RETURN TO:  
Fidelity National Title Group  
7130 Glen Forest Dr., Ste. 300  
Richmond, VA 23226

(Above Space For Recorder's Use Only)

Site ID: US-FL-5052 Attn:

Site Name: FL 439 165

Commitment # 26721081

ASSIGNMENT AND ASSUMPTION OF OPTION AND LEASE AGREEMENT

**THIS ASSIGNMENT AND ASSUMPTION OF OPTION AND LEASE AGREEMENT** (this "Assignment") is entered into as of this 16<sup>th</sup> day of July, 2018 (the "Transfer Date") by and between Antietam Wireless Services, L.L.C., a Maryland limited liability company, also known of record as Antietam Wireless Services, LLC ("Assignor"), and Vertical Bridge Development, LLC, a Delaware limited liability company, its parents, affiliates, subsidiaries, successors and/or assigns (collectively, "Assignee").

**WITNESSETH**

**WHEREAS**, Assignor and Assignee have entered into a January 13, 2015 Tower Development Agreement, as may be amended (the "Development Agreement"); with capitalized terms used herein without definition having the meanings set forth therein);

**WHEREAS**, Assignor desires to assign a certain February 22, 2018 Option and Ground Lease Agreement (the "Lease") more particularly described on **Exhibit A**, that is in the process of being recorded as of the date that this Assignment is being prepared, to Assignee, and Assignee desires to take assignment of the Lease and assume all of Assignor's duties, obligations, covenants and undertakings under the Lease on and after the Transfer Date.

**NOW THEREFORE**, in consideration of the mutual agreements and covenants hereinafter set forth, and other good and valuable consideration, the sufficiency and receipt of which is hereby acknowledged, Assignor and Assignee, intending to be legally bound, hereby agree as follows:

1. Assignment of the Lease. Assignor has bargained, assigned, transferred, sold and conveyed, and by these presents does hereby assign, transfer, sell and convey unto Assignee all of the right, title and interest of Assignor as tenant in, to and under the Lease, effective as of the date of the Transfer Date, TO HAVE AND TO HOLD the same unto the Assignee for and during all the rest, residue and remainder of the term of the Lease, all as set forth in the Lease, the provisions of which are by this reference thereto incorporated herein, together with all of Assignor's interest in (a) any rights of way and utility rights and easements from and to the lease area of the premises described in the Lease (collectively, as such term

is defined in the Lease, the "**Premises**") to a public road; (b) any ground rights, leases, licenses for the Premises; and (c) such other rights of way and/or easements, if any, to run guy wires, if applicable, to such point to properly support towers and install anchors to secure said guy wires.

2. Acceptance and Assumption of the Lease. Assignee hereby accepts the assignment of the Lease and expressly assumes and covenants in favor of Assignor to pay, discharge and perform, as and when due, all obligations of Assignor under the Lease accruing, arising out of, or relating to events or occurrences on and after the Transfer Date.

3. Representations and Warranties. Reference is hereby made to the Development Agreement with respect to all representations and warranties of Assignor concerning the Lease. The terms and provisions of the Development Agreement are hereby incorporated herein by reference and Assignor hereby certifies that the representations and warranties of Assignor in the Development Agreement remain true and correct as of the Closing Date.

4. Indemnification. To the fullest extent permitted by law, Assignor shall indemnify, defend and hold harmless Assignee, its successors and assigns and their representatives, agents, employees, directors and officers from and against any and all damages, claims, losses, expenses, costs, obligations, and liabilities, including without limitation reasonable fees and expenses of attorneys arising out of or in any way related to the Lease and first accruing prior to the Transfer Date or arising out of or are in any way related to the Lease and first accruing on or after the Transfer Date on account of any fact or circumstance first occurring or existing prior to the Transfer Date. Additionally, Assignor shall defend, indemnify and save harmless Assignee against and from all liabilities, obligations, damages, penalties, claims, costs, charges and expenses, including reasonable attorneys' fees actually incurred, which may be imposed upon or incurred by or asserted against Assignee by reason of any of the following: (i) any agreement or other written instrument, whether with the landlord or any landlord parties of the Lease, or any successor of or to such landlord or landlord parties, or any other third party, pertaining to the ground rights transferred by this Assignment whether such agreement or other written instrument existed prior to, or after, the date of the Lease that would challenge the validity of the Lease or any of the rights therein; (ii) any negligence or other wrongful act or omission on the part of Assignor or any of its agents, contractors, subcontractors, servants or employees, subtenants, subsidiaries, parent company or other related entity; (iii) any failure on the part of Assignor to perform or comply with any of the covenants, agreements, terms, provisions, conditions or limitations contained in the Lease on its part to be performed, and (iv) any breach of the representation and warranties set forth herein by Assignor.

5. Survival. The representations and warranties and indemnification provisions set forth herein and made hereunder shall survive the Transfer Date.

6. Recording. Assignor and Assignee agree that this Assignment may be recorded by Assignee.

7. Severability. If any provision of this Assignment shall be invalid, illegal or unenforceable, the validity, legality or enforceability of the remaining provisions of this Assignment shall not in any way be affected or impaired thereby and shall continue in full force and effect.

8. Counterparts. This Assignment may be executed in counterparts, each of which shall be deemed to be an original, but which together shall constitute one and the same instrument.

9. Successors and Assigns. This Assignment shall inure to the benefit of and be binding upon the parties hereto, their heirs, representatives, successors and assigns.

10. Further Assurances. Each party shall, from time to time, take such actions, execute such documents and agreement, and provide such certificates, as any other party may reasonably request to carry out and fulfill the transactions, and permit the exercise and performance of the rights and obligations, as are contemplated hereunder, and to effectuate the purpose and intent of this Assignment

[Signature pages follow]

[Assignor Signature page to Assignment and Assumption of Option and Lease Agreement]

IN WITNESS WHEREOF, the parties hereto have executed and delivered this Assignment to be effective as of the date first above written.

**WITNESSES:**

**ASSIGNOR:**

[Signature]  
Name: Jose Rosa  
Jorge Luis De Sui  
Name: [Signature]

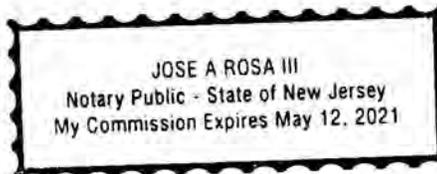
Antietam Wireless Services, L.L.C.  
a Maryland limited liability company  
By: [Signature]  
Name: Michael E. Shine  
Title: Manager  
Date: 6/21/18

STATE OF New Jersey  
COUNTY OF Meriden

The foregoing instrument was acknowledged before me this 21<sup>st</sup> day of June, 2018, by Michael E. Shine the Manager of Antietam Wireless Services, L.L.C., a Maryland limited liability company, on behalf of the company, who is personally known to me.

WITNESS my hand and Official Seal at office this 21<sup>st</sup> day of June, 2018.

[Signature]  
Notary Public  
Printed Name: Jose Rosa  
My Commission Expires: 5/12/2021



[Assignee Signature page to Assignment and Assumption of Option and Lease Agreement]

**WITNESSES:**

**ASSIGNEE:**

*Jed Neysan*  
Name: Jed Neysan  
*Rachel Williamson*  
Name: Rachel Williamson

**Vertical Bridge Development, LLC**  
a Delaware limited liability company

By: *[Signature]*  
Name: Alex Gellman  
Title: C.E.O.  
Date: 7-16-2018

**STATE OF FLORIDA**  
**COUNTY OF PALM BEACH**

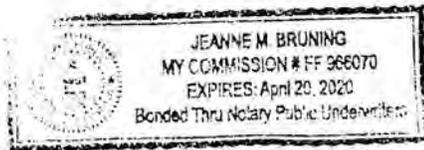
The foregoing instrument was acknowledged before me this 16<sup>th</sup> day of July, 2018, by Alex Gellman the CEO of Vertical Bridge Development, LLC, a Delaware limited liability company, on behalf of the company, who is personally known to me.

WITNESS my hand and Official Seal at office this 16<sup>th</sup> day of July, 2018.

*Jeanne M. Bruning*  
Notary Public

Printed Name: Jeanne M. Bruning

My Commission Expires:  
4-20-20



**EXHIBIT A**

**Site Number: US-FL-5052**

**Site Name: FL 439 165**

**Landlord Name: Ann F. Nicholson, Trustee of the Ann F. Nicholson Revocable Trust Agreement**

**Original Tenant Name: Antietam Wireless Services, LLC (registered as Antietam Wireless Services, L.L.C.)**

**Agreement Exe Date: February 22, 2018**

**Recording information for the Lease:**

**Lease Legal Description of the Premises: See EXHIBIT A-1**

**EXHIBIT A- 1**

Legal Description

A portion of the following parent parcel:

**A parcel of land lying in Section 1, Township 2 North, Range 3 West and Section 6, Township 2 North, Range 2 West, Gadsden County, Florida, and being more particularly described as follows:**

**BEGIN at the Northeast corner of said Section 1 and run;**

**Thence West along the Northern boundary of said Section 1 a distance of 1320 feet, more or less, to the Northwest corner of the East one half of the Northeast one quarter of said Section 1;**

**Thence South along the Western boundary of said East one half of the Northeast one quarter of Section 1 a distance of 1481.65 feet, more or less, to the center line of a 100 foot Florida Power Corporation Powerline Easement (Deed Book 92, page 70);**

**Thence continue South along said Western boundary a distance of 50.00 feet to the Southerly right of way boundary of said Powerline Easement;**

**Thence South 89 degrees 52 minutes 25 seconds East along said Southerly right of way boundary a distance of 2037.70 feet, more or less, to the Northwesterly right of way boundary of Havana Highway (State Road No. 12 – 100 foot right of way), said point also lying on a curve concave to the Southeast;**

**Thence Northeasterly along said Northwesterly right of way boundary and said curve with a radius of 2914.79 feet through a central angle of 17 degrees 53 minutes 09 seconds for an arc distance of 909.90 feet (the chord of said arc being North 41 degrees 39 minutes 17 seconds East 906.21 feet) to the Eastern boundary of the Northwest one quarter of the Northwest one quarter of said Section 6;**

**Thence North along said Eastern boundary a distance of 859.05 feet, more or less, to the Northeast corner of said Northwest one quarter of the Northwest one quarter;**

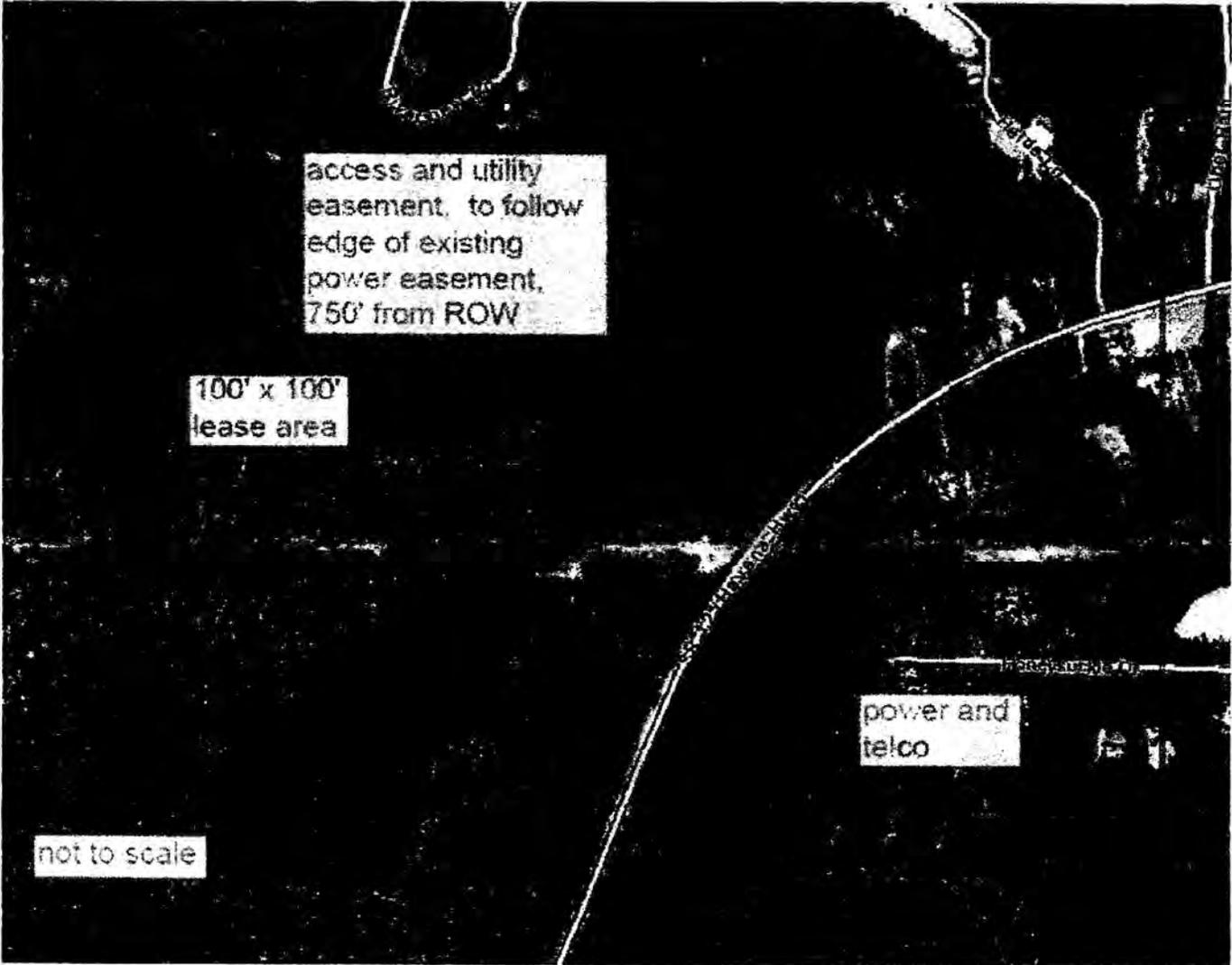
**Thence West along the Northern boundary of said Northwest one quarter of the Northwest one quarter a distance of 1320 feet, more or less, to the POINT OF BEGINNING.**

**Containing 87 82 acres, more or less.**

**The above description was prepared from existing deeds and maps and not the result of a recent in field survey.**

**EXHIBIT A- 1 Continued**

[The attached sketch of the Premises (including, without limitation, a Right of Way described in the Lease) may be replaced at Tenant's option by a scale drawing and/or legal description.]



FOR AND IN CONSIDERATION of one dollar (\$1.00) and other goods and valuable consideration in hand received from GREAT SOUTHERN PAPER, a Company of Great Northern Nekoosa Corporation, the undersigned Chipola Land and Timber Company, does hereby assign, transfer, and set over to the said GREAT SOUTHERN PAPER, a Company of Great Northern Nekoosa Corporation, all its right, title, and interest in and to the timber described in that certain timber agreement executed to wit, James D. Nicholson and William Paul Nicholson, to the said Chipola Land and Timber Co., said agreement (attached hereto) and by references is made a part hereof, subject to all the terms and conditions thereof, and do hereby remise, release, and quit claim to the said GREAT SOUTHERN PAPER, a Company of ~~Great~~ Northern Nekoosa Corporation, all its right, title, and interest in and to the said timber located in Gadsden County, Florida and described as follows:

Area I: All of the pine timber marked with two spots of white timber marking paint located on approximately 14 acres.

Area II: All pine and hardwood timber located on approximately 40.2 acres. This area is to be clearcut.

Area III: All of the pine timber marked with two spots of blue timber marking paint located on approximately 12 acres.

All of the above described areas are a part of a tract of land owned by Sellers, which tract is located in Section 1, Township 2 North, Range 3 West, and Section 6, Township 2 North, Range 2 W; Gadsden County, Florida.

(For the purpose of this document, the words timber and trees are synonymous.)

WITNESS our hands and seals this 2nd day of August,

1984.

WITNESS:

Chipola Land and Timber Co.

James B. Trauich  
Beth J. Brady  
 Notary Public

Alvin Williams

This document prepared by:

Emily Collins  
 P. O. Box 44  
 Cedar Springs, Ga. 31732

**TIMBER AGREEMENT**

STATE OF FLORIDA, GADSDEN COUNTY

THIS CONTRACT AND AGREEMENT, made and entered into this 1st day of August, 1984, by and between JAMES D. NICHOLSON of Dallas County, Texas and WILLIAM PAUL NICHOLSON, of Gadsden County, Florida, hereinafter referred to as SELLERS, and CHIPOLA LAND AND TIMBER COMPANY, INCORPORATED a Florida Corporation with an office and place of doing business in Calhoun County, Florida, hereinafter referred to as BUYER;

**W I T N E S S E T H :**

1.

That for and in consideration of the premises, the mutual covenants and conditions herein contained, and the monetary consideration herein provided, SELLERS do hereby grant, bargain, sell and convey unto BUYER the following:

The timber on the following described areas:

Area I: All of the pine timber marked with two spots of white timber marking paint located on approximately 14 acres.

Area II; All pine and hardwood timber located on approximately 40.2 acres. This area is to be clear-cut.

Area III: All of the pine timber marked with two spots of blue timber marking paint located on approximately 12 acres.

All of the above described areas are a part of a tract of land owned by SELLERS, which tract is located in Section 1, Township 2 North, Range 3 West, and Section 6, Township 2 North, Range 2 W; Gadsden County, Florida.

The sale areas are more particularly shown by a sale map which has been marked "Exhibit A", attached hereto and made an integral part of this contract.

2.

BUYER has contemporaneously with SELLERS, executing and delivering this contract, paid to SELLERS agent Charles R. Rozier, the sum of THIRTY-TWO THOUSAND, EIGHT HUNDRED AND TWENTY-SIX DOLLARS AND NINETY-THREE CENTS (\$32,826.93), the receipt and sufficiency whereof is hereby acknowledged by SELLERS as a full and total consideration for the timber hereinabove described.

\$148.05 8-10-84  
DSPAID DATE  
GADSDEN COUNTY, FLORIDA  
WAYNE HANNA, CLERK CIRCUIT COURT  
BY [Signature] D.C.

3.

BUYER'S rights under this agreement shall terminate twelve months from the date of this instrument, provided, however, should inclement weather, a union strike by BUYER'S employees or the employees of purchaser of said timber from BUYER acts of God, or other catastrophes causing a work stoppage, BUYER shall have the right to an extension upon giving prior written notice, at any time during the term of this agreement, to SELLERS agent, Charles R. Rozier, at Post Office Box 761, Bainbridge, Georgia, 31717, but in no event shall said extension exceed ninety (90) days from date of termination of the rights granted under this agreement.

4.

BUYER shall pay to SELLERS a penalty for each and every tree that may be cut or willfully or negligently damaged outside the sale areas herein described or for trees cut or willfully or negligently damaged within the sale areas but not now marked with blue or white timber marking paint and being made a part of this contract as follows:

PINE

<u>Diameter</u>	<u>Breast Height</u>	<u>Penalty</u>
6"		\$ 3.00
8"		8.63
10"		16.60
12"		52.60
14"		82.50
16"		112.50
18"		150.00
20"		210.00
22"		270.00
24"		300.00
26"		420.00

HARDWOOD

<u>Diameter Breast Height</u>	<u>Penalty</u>
8"	\$ 1.13
10"	2.40
12"	8.25
14"	15.00
16"	24.00
18" and up	37.50

5.

All timber remaining on the above described property after the expiration date of the original term or any extensions or renewals thereof, shall remain the property of SELLERS, their heirs, administrators, executors and assigns.

6.

BUYER, its successors and assigns, shall have free and uninterrupted possession of such portion of the above described property within the sale areas described in numbered paragraph one (1) of this agreement during the term of this indenture, and such rights shall extend to BUYER'S agents, employees and independent contractors for the purpose of cutting and removing the timber herein conveyed.

7.

The BUYER shall:

(a) Not leave open and unattended any gates that will permit livestock from leaving and entering the above described premises;

(b) Repair and restore fences, gates and other improvements damaged by BUYER belonging to SELLERS and the adjoining land owners to the condition or better that existed immediately prior to damage;

(c) Remove or otherwise dispose of immediately upon completion of cutting all slabs, tops, debris, and waste products from cultivating areas, firebreaks and roads on the above described property resulting from cutting and removal of said timber.

(e) Not engage in any hunting, fishing, or trapping on the above described property nor permit any of its agents, employees or servants to do so;

(f) Not remove any pine lightwood from the above described property;

(g) Locate loading zones in areas so as to minimize damage to timber not sold under this contract, the location of which shall first be approved by Charles R. Rozier, as agent for SELLERS and such approval shall not be unreasonably withheld.

(h) Maintain adequate supervision to insure that all logging and skidding operations cause a minimum amount of damage to timber not sold under this contract.

(i) Remain responsible to the SELLERS for the performance of the terms and provisions of this agreement in the event of an assignment wherein all or some portion of the timber is harvested by persons not agents, employees or servants of the BUYER.

8.

The BUYER shall have the right during the term of this indenture to cut over the same area two or more times at its discretion, and to vacate the land and later return and cut at will during the term hereof.

9.

The BUYER contracts and agrees to indemnify and save harmless the SELLERS from an injury or damage that it might cause to persons or property in the performance of this contract, due to the negligence of the BUYER, its agents, employees and contractors.

10.

The SELLERS do covenant with the BUYER, his successors and assigns, that they will forever warrant and defend the title to said timber against the lawful claims of all persons whomsoever, and all rights and privileges herein granted to the BUYER may be exercised by its successors and assigns, and in the event of any assignment by BUYER, its assignee shall be bound by all the obligations contained herein.

11.

BUYER shall have the right to remove all machinery and equipment used or needed for the cutting and removal of said timber within thirty (30) days following the termination of this contract.

12.

Time is of the essence of this agreement.

SIGNED in duplicate this 18 day of June, 1984.

WITNESSES:

Kathleen Boldman  
C.S. Mearns  
Branda H. Fletcher  
Norm C. Hoff

SELLERS:

James D. Nicholson  
JAMES D. NICHOLSON

William Paul Nicholson  
WILLIAM PAUL NICHOLSON

WITNESSES:

Norm C. Hoff  
Norm C. Hoff

BUYER:

CHIPOLA LAND AND TIMBER COMPANY, INC.  
BY: Alan Williams

STATE OF TEXAS  
COUNTY OF DALLAS

Before me, the undersigned authority, an officer duly authorized in the State and County aforesaid to administer oaths and take acknowledgements, personally appeared James D. Nicholson to me known as the person or persons described in and who executed the foregoing instrument as the SELLER and acknowledged before me that he executed the same freely and voluntarily.

WITNESS my hand and official seal in the County and State aforesaid the 18<sup>th</sup> day of June, 1984.



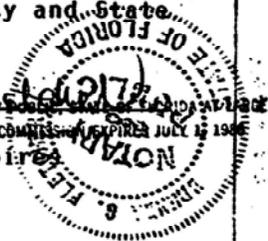
Betty L. Maschger  
NOTARY PUBLIC  
My Commission Expires June 22, 1985

STATE OF Florida  
COUNTY OF Gadsden

Before me, the undersigned authority, an officer duly authorized in the State and County aforesaid to administer oaths and take acknowledgements, personally appeared **William Paul Nicholson** to me known as the person or persons described in and who executed the foregoing instrument as the SELLER and acknowledged before me that he executed the same freely and voluntarily.

WITNESS my hand and official seal in the County and State aforesaid the 1<sup>st</sup> day of August, 1984.

*Brenda W. [Signature]*  
NOTARY PUBLIC MY COMMISSION EXPIRES JULY 12 1986  
My Commission Expires



STATE OF Ga.  
COUNTY OF Decatur

Before me, the undersigned authority, an officer duly authorized in the State and County aforesaid to administer oaths and take acknowledgements, personally appeared **Alvin Williams** to me known as the person or persons described in and who executed the foregoing instrument as the BUYER and acknowledged before me that he executed the same freely and voluntarily.

WITNESS my hand and official seal in the County and State aforesaid the 1<sup>st</sup> day of August, 1984.

*Doraldine [Signature]*  
NOTARY PUBLIC  
My Commission Expires



SELLERS CONTINUED:

Brenda D. Fletcher  
Norman Cliff

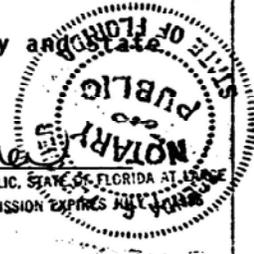
Ann F. Nicholson  
ANN F. NICHOLSON

STATE OF Florida  
COUNTY OF Gadsden

Before me, the undersigned authority, an officer duly authorized in the State and County aforesaid to administer oaths and take acknowledgements, personally appeared Ann F. Nicholson to me known as the person or persons described in and who executed the foregoing instrument as the SELLER and acknowledged before me that he executed the same freely and voluntarily.

WITNESS my hand and official seal in the County and State aforesaid the 1<sup>st</sup> day of August, 1984.

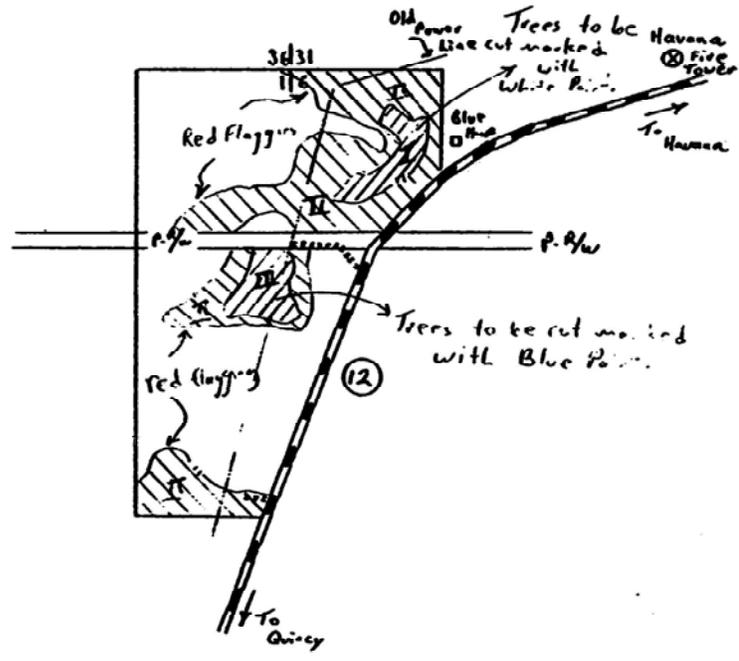
Brenda D. Fletcher  
NOTARY PUBLIC  
My Commission Expires



BOOK 312 PAGE 325

NICHOLSON TRACT

Section 1, 6-Township 2 North, Range 3 West  
Gadsden County, Florida  
173 Acres



Timber Sale  
66.2 acres

- Clearcut  Sale Boundary Red Flagg
- Thinning  Sale Boundary Blue Flagg

EXHIBIT "A"

845002

BOOK 312 PAGE 317  
WAYNE HANNA, CLERK  
GADSDEN CO., FLORIDA

'84 AUG 10 PM 12 40

WARRANTY DEED FROM CORPORATION.

O.R. 185 PAGE 196  
FAMCO FORM A-3 (PHOTOSTAT)

**This Warranty Deed** Made and executed the 19th day of December A. D. 19 74 by  
**CHIPOLA LAND COMPANY**

a corporation existing under the laws of Florida and having its principal place of business at hereinafter called the grantor, to GREAT NORTHERN NEKOOSA CORPORATION, a Maine corporation

whose postoffice address is P.O. Box 44, Cedar Springs, Georgia 31732

hereinafter called the grantees:

(Wherever used herein the terms "grantor" and "grantee" include all the parties to this instrument and the heirs, legal representatives and assigns of individuals, and the successors and assigns of corporations).

**Witnesseth:** That the grantor, for and in consideration of the sum of \$ 10.00-- and other valuable considerations, receipt whereof is hereby acknowledged, by these presents does grant, bargain, sell, alien, remise, release, convey and confirm unto the grantees, all that certain land situate in GADSDEN County, Florida, viz:

THAT LAND DESCRIBED ON THE SCHEDULE OF PROPERTY ATTACHED HERETO.

There is reserved to the Grantor the legal title to so much of the above described lands as lie within the rights of way of any dedicated public roads and power line easements of record, if any, but included in the grant to the Grantee, nevertheless, is the unimpaired right of use of such reserved lands for ingress and egress over, upon and across same to and from lands herein conveyed.

This conveyance subject to existing mortgages which the Grantees agree to assume and pay, insofar as applicable to the lands herein conveyed.

The Grantors include in this conveyance all oil, gas and mineral rights owned by the Grantor, lying under the lands herein conveyed.

The lands conveyed containing in the aggregate 2,359.235 acres more or less.

**Together** with all the tenements, hereditaments and appurtenances thereto belonging or in anywise appertaining.

**To Have and to Hold,** the same in fee simple forever.

**And** the grantor hereby covenants with said grantees that it is lawfully seized of said land in fee simple; that it has good right and lawful authority to sell and convey said land; that it hereby fully warrants the title to said land and will defend the same against the lawful claims of all persons whomsoever; and that said land is free of all encumbrances



**In Witness Whereof** the grantor has caused these presents to be executed in its name, and its corporate seal to be hereunto affixed, by its proper officers thereunto duly authorized, the day and year first above written.

ATTEST: *[Signature]*  
Secretary

CHIPOLA LAND COMPANY

Signed, sealed and delivered in the presence of:

*[Signature]*

By: *[Signature]*  
President

STATE OF FLORIDA  
COUNTY OF BAY

I HEREBY CERTIFY that on this day, before me, an officer duly authorized in the State and County aforesaid to take acknowledgments, personally appeared CAREY A. EVERETT and JIMMY HATCHER

all known to me to be the President and Secretary respectively of the corporation named as grantor in the foregoing deed, and that they severally acknowledged executing the same in the presence of two subscribing witnesses freely and voluntarily and the authority duly shown in them by said corporation and that the seal affixed therein is the true corporate seal of said corporation.

WITNESS my hand and official seal in the County and State last aforesaid this 19th day of December A. D. 19 74



This instrument prepared by:  
Address

Mayo C. Johnston  
406 Magnolia Ave.  
Panama City, Fl. 32401

*[Signature]*

D.R. 185 MC 197  
SCHEDULE OF PROPERTY  
PARCEL B  
(Gadsden County)

The Southeast Quarter (SE 1/4) of the Southwest Quarter (SW 1/4), also beginning at the Northeast corner of said Southeast Quarter (SE 1/4) of Southwest Quarter (SW 1/4), thence run North Eight and Fifty-six hundredths (8.56) chains to the center of a roadway; thence with said roadway South seventy-five (75) degrees West, Seven and Seventy-five hundredths (7.75) chains to the center of public road known as the Old Spanish Trail, thence with the center of the Old Spanish Trail Northwesterly to the West line of the Northeast Quarter of said Southwest Quarter; thence South Seventeen and Ninety-six hundredths (17.96) chains; thence East Twenty (20) chains to the point of beginning, all in Section Six (6) Township Two (2) North, Range One (1) West,

Also, all of fractional Section Eight (8) and Fractional Section Four (4). Also, the South half (1/2) and the South half (1/2) of the North half (1/2) and the North half (N 1/2) of the Northeast Quarter (NE 1/4), of Section Five (5), Township Two (2) North, Range One (1) West.

Also, the Northwest Quarter of the Northwest Quarter; The West half (W 1/2) of the Southwest Quarter (SW 1/4); The Southeast Quarter (SE 1/4); The West half (W 1/2) of the Northeast Quarter (NE 1/4); the Southeast Quarter (SE 1/4) of the Northeast Quarter (NE 1/4) of Section Six (6), Township Two (2) North, Range One (1) West.

Also, the Southeast Quarter (SE 1/4) of the Southwest Quarter (SW 1/4), the East half (E 1/2) of the Northwest Quarter; The Northeast Quarter (NE 1/4); The Northeast Quarter (NE 1/4) of the Southwest Quarter (SW 1/4); Lot Seven (7) in Fractional Section Seven (7), and all of the fractional Section Eighteen (18), Township Two (2) North, Range One (1) West.

Also, begin at Southeast Corner, run North Seventy (70) yards, West Six hundred sixty (660) yards, South Seventy (70) yards East Six Hundred Sixty (660) yards to point of beginning, being in Section Thirty-two (32), Township Three (3) North, Range One (1) West.

Also, South half (S 1/2) of the Northwest Quarter (NW 1/4), West half (W 1/2) of the Southwest Quarter (SW 1/4), and the North half (N 1/2) of the Southeast Quarter (SE 1/4) Northeast Quarter (NE 1/4) of the Southwest Quarter (SW 1/4), and the Southwest Quarter (SW 1/4) of the Southeast Quarter (SE 1/4), being in Section Thirty-three (33), Township Three (3) North, Range One (1) West.

LESS AND EXCEPT THAT PORTION THEREOF DESCRIBED AS FOLLOWS, TO-WIT:

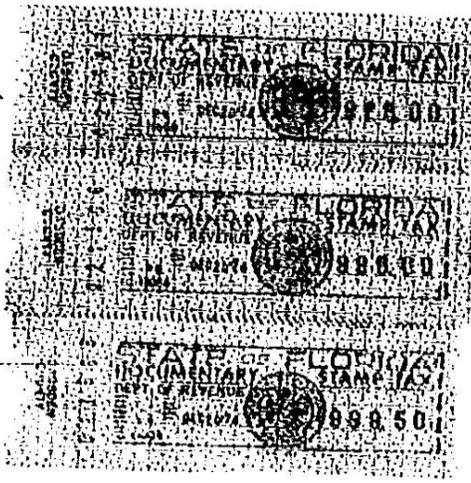
EXCEPTION NO. 1

Begin at a point on the East side of U. S. 27, said point being 2632.66 feet North and 613.74 feet East of the Southwest Corner of Section 13, Township 2 North, Range 2 West, Gadsden County, Florida and thence run S 87° 00' E 458 feet; thence run S 86° 53' E 715 feet; thence run S 86° 27' E 360 feet, thence run S 86° 47' E 340 feet, thence run S 77° 36' E 415 feet, thence run S 89° 06' E 533 feet, thence run S 89° 19' E 310 feet, thence run S 89° 41' E 500 feet; thence run S 89° 40' E 1000 feet, thence run N 88° 07' E 54 feet to the point of beginning; thence run East 600 feet; more or less to the bank of the Ochlockonee River; thence following the meanderings down the river in a Southwesterly direction to a point on the bank of said river which is 635 feet South and 453 feet East of the point of beginning; thence following the meandering of said river the following courses; S 09° 02' W 250 feet, thence S 26° 47' W 154 feet, thence S 17° 30' West 400 feet, thence S 14° 34' E 430 feet, thence S 64° 57' W 290 feet, thence S 16° 17' E 520 feet, thence S 52° 24' W 110 feet, S 70° 59' W 150 feet more or less along said river to the West boundary of Section 13, Township 2 North, Range 1 West, thence North along said Western Boundary 2505 feet more or less to the Point of Beginning.

O.R. 185 198

EXCEPTION NO. 2

Seventy-Eight and One Eights (78 1/8) acres in Northeast Corner of Section Four (4) Township Two (2) North, Range One (1) West, All lying West of Ochlockonee River, and extending to the River including any fractional parts of other sections so that the East line will be the Ochlockonee River and the West line will be a distance so that with a North and South Depth on West line of 2640 feet the land will measure out the Acreage above mentioned.



FILED 12-20-71 1:30 P.M.  
IN GADSDEN COUNTY, FLORIDA  
REC. NO. 67250  
RECORDED IN O.R. BOOK 185  
PAGE 196 AND VERIFIED  
EDWIN MAUR, Clerk of Court  
By *Allen B. Parson*  
Deputy Clerk

*Handwritten signature or initials.*

W. W. Nicholson Est.

70

KNOW ALL MEN BY THESE PRESENTS, That the undersigned in consideration of the sum of One Dollar and other valuable considerations, the receipt of which is hereby acknowledged, grant and convey to FLORIDA POWER CORPORATION, its successors and assigns, the right, privilege and easement to construct, operate and maintain for each period of time as it may use the same or until the use thereof is abandoned, a single pole, H-frame and/or tower line for the transmission and distribution of electricity, including necessary communication and other wires, poles, guys, anchors, ground connections, attachments, fixtures, equipment and accessories desirable in connection therewith over, upon and across the following described land in Gadsden County, State of Florida, to wit:

SE 1/4 of NE 1/4 of Sec. 1, Twp. 2 N., Rge. 3 West.

Right-of-way clearing is restricted to 50 feet on each side of the centerline of said power line, plus danger timber.



together with the right to patrol, inspect, alter, improve, repair, rebuild or remove such lines, equipment and accessories, including the right to increase or decrease the number of wires and voltage, together with all rights and privileges reasonably necessary or convenient for the enjoyment or use thereof for the purposes above described, including the right to trim, cut and keep clear such trees, limbs and undergrowth along said lines, and all trees adjacent thereto that may endanger the proper operation of the same, and including the reasonable right to enter upon adjoining lands of the grantors for the purpose of exercising the rights herein granted.

The grantors covenant that they have the right to convey the said easement and that the grantee, its successors and assigns shall have quiet and peaceable possession, use and enjoyment of said easement.

IN WITNESS WHEREOF, the grantors have hereunto affixed their hands and seals this 7th day of June, A. D. 1950.

Signe, sealed and delivered in presence of:

James M. Nicholson  
Ann Carraway Nicholson  
Mrs. J. F. Freeman  
Mrs. Claude K. Freeman  
Claudia D. Barber

CONSIDERATION LESS THAN \$100.00

Ann Carraway Nicholson (L.S.)  
James M. Nicholson (L.S.)  
Mrs. Florence H. Clemons (L.S.)  
Mrs. J. F. Freeman (L.S.)  
Mrs. Claude K. Freeman (L.S.)  
Claudia D. Barber (L.S.)  
Ann Nicholson (L.S.)  
Ellie D. Nicholson (L.S.)

STATE OF FLORIDA

COUNTY OF GADSDEN

I HEREBY CERTIFY that on this 7th day of June, A. D. 1950, before me the undersigned authority, personally appeared James M. Nicholson and Ann Carraway Nicholson, his wife, Florence and Claudia D. Barber, a widow, and they acknowledged before me that they executed the same.

WITNESS my signature and official seal in said County and State, the day and year last aforesaid.

(Notarial Seal)

My Commission expires:

[Signature]  
Notary Public

Notary Public, State of Florida at Large.  
My Commission Expires September 26, 1953.

STATE OF GEORGIA

COUNTY OF DECATUR

I HEREBY CERTIFY that on this 8th day of June, A. D. 1950, before me the undersigned authority, personally appeared A. M. Nicholson and Ellie D. Nicholson his wife to me known to be the persons described in and who executed the foregoing instrument and they acknowledged before me that they executed the same.

WITNESS my signature and official seal in said County and State, the day and year last aforesaid.

(Notarial Seal)

My Commission expires:

March 18, 1954

[Signature]  
Notary Public, State of Georgia at Large.

Gadsden County, Florida

Filed this 28 day of August, 1950 at 4:15 o'clock P.M. and recorded in Book 92 Page 70 and duly verified this 28 day of August, 1950.

CLERK CIRCUIT COURT

By Laura Bell Edwards D. C.

STATE OF FLORIDA  
COUNTY OF GADSDEN

I, F. F. Morgan, Clerk of the Circuit Court in and for said County, do hereby certify that the above and foregoing instrument was presented and filed for record in this office on the 28th day of August, A. D. 1950 and it being properly authenticated, I have duly recorded same this 28th day of August, A. D. 1950.

F. F. Morgan  
918 Morgan St.  
CLERK

O.R. 167 PAGE 635

(Ind. WD)

PARCEL NO. 163.1  
SECTION 50020-2506  
STATE ROAD 12  
COUNTY Gadsden  
FAP NO.

**Deed**

THIS INDENTURE made this 16<sup>th</sup> day of Nov, A. D. 1973  
between James D. Nicholson and wife, both H. Nicholson A SINGLE MAN  
W. P. Nicholson and wife, Ann F. Nicholson

as part of the first part and the STATE OF FLORIDA, for the use and benefit of the State of Florida Department of Transportation, as party of the second part.

WITNESSETH, That the said part 163 of the first part, for and in consideration of the sum of One Dollar and other valuable considerations, paid, receipt of which is hereby acknowledged, do hereby grant, bargain, sell, and convey unto the party of the second part, its successors and assigns, the following described land, situate, lying and being in the County of Gadsden State of Florida, to-wit:

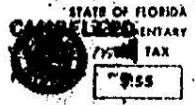
Parcel No. 163 Section 50020-2506

That part of:

The Northwest Quarter of the NW 1/4 and 2 acres in the Southwest corner of the NW 1/4 of the SW 1/4 of Section 6, Township 2 North, Range 2 West; and NE 1/4 of SE 1/4 of Section 1, Township 2 North, Range 3 West;

lying within 50 feet each side of the survey line of State Road 12, Section 50020, said survey line to be described as follows: Begin on the South line of Section 1, Township 2 North, Range 3 West, at a point 634.01 feet West of the Southeast corner of said Section 1; thence run North 19°52'37" East 1871.17 feet to the East line of said Section 1 (the West line of Section 6, Township 2 North, Range 2 West) at a point 1747.80 feet North of the Southeast corner of said Section 1 (Southwest corner of said Section 6); thence continue North 19°52'37" East 1413.66 feet to the beginning of a curve, concave Southeasterly, having a radius of 2864.79 feet; thence run Northeasterly 2712.29 feet along said curve, through a central angle of 54°14'45" to the end of curve; thence North 74°07'22" East 1512.01 feet to the North line of said Section 6 at a point 3841.21 feet East of the Northwest corner of said Section 6 and the end of survey line herein described;

Containing 0.77 of an acre, more or less, exclusive of area within existing State Road right of way.



THIS INSTRUMENT WAS PREPARED BY  
JERRY WOOD  
STATE OF FLORIDA  
DEPARTMENT OF TRANSPORTATION  
CHIPLEY, FLORIDA  
DESCRIPTION APPROVED: NOV 1 1971

O.R. 167 112 630

TO HAVE AND TO HOLD THE SAME, together with all and singular the appurtenances thereto belonging or in anywise incident or appertaining forever; and the said part 1st of the first part do hereby fully warrant the title to said land and will defend the same against the lawful claims of all persons whomsoever.

IN WITNESS WHEREOF, said part 1st of the first part has hereunto set Their hand S and seal S the date first above written.

Signed, sealed and delivered in the presence of: (Signature of TWO witnesses required by Florida Law)

Signed, sealed and delivered in the presence of: (Signature of TWO witnesses required by Florida Law)

James D. Nicholson (SEAL) Barbara E. Sims (SEAL)
Marilyn M. Stacey (SEAL)
W. P. Nicholson (SEAL) John M. Gandy (SEAL)
Dora S. Nicholson (SEAL) Jane Y. Gutterell (SEAL)
(SEAL) (SEAL)
(SEAL) (SEAL)

STATE OF Alabama
COUNTY OF Monroe

Before me personally appeared James D. Nicholson and his wife, to me well known and known to me to be the individuals described in and who executed the foregoing instrument and acknowledged before me that they executed the same for the purposes therein expressed.

WITNESS my hand and official seal this 2 day of November, A. D. 1973



FILED 12-3-73 2:22 PM
IN MONROE COUNTY, FLORIDA
REC. NO. 60929
Reviewed in O.R. BOOK 167
PAGE 625 AND VERIFIED,
EDWARD J. GIBB, Clerk Circuit Court
By Allen S. Stovall
Deputy Clerk

Ralph E. Still
Notary Public in and for the County of State at Large and State aforesaid.
My Commission expires: August 30, 1977

Before me personally appeared W.P. Nicholson and his wife, to me well known and known to me to be the individuals described in and who executed the foregoing instrument and acknowledged before me that they executed the same for the purposes therein expressed.

WITNESS my hand and official seal this 14 day of Nov, 1966

(Notarial Seal)

Notary Public, State of Florida at Large
My Commission Expires Aug. 1966
Notary Public in and for the County and State aforesaid.
My Commission expires:

IN THE CIRCUIT COURT FOR GADSDEN COUNTY, FLORIDA  
 IN RE: ESTATE OF PROBATE DIVISION  
 W. PAUL NICHOLSON, FILE NUMBER:  
 Deceased. 99-232-PRA

OR 496 PG 0349

**PETITION FOR ADMINISTRATION**  
**[testate Florida resident - single petitioner]**

Petitioner, Ann F. Nicholson, alleges:

1. Petitioner has an interest in the above estate as the surviving spouse of the decedent and the named personal representative in decedent's Last Will. Petitioner's address is 315 Camellia Drive, Quincy, Florida 32351 and the name and office address of petitioner's attorney are set forth at the end of this petition.

2. Decedent, W. Paul Nicholson, whose last known address was 315 Camellia Drive, Quincy, Florida 32351 and, if known, whose age was 64 and whose social security number is 261-50-4164, died on May 7, 1999 at Buenos Aires, Argentina, and on the date of death decedent was domiciled in Gadsden County, Florida.

3. So far as is known, the names of the beneficiaries of this estate and of the decedent's surviving spouse, if any, their addresses and relationship to decedent, and the dates of birth of any who are minors, are:

NAME	ADDRESS	RELATIONSHIP	DATE OF BIRTH (if minor)
Ann F. Nicholson	315 Camellia Drive Quincy, FL 32351	Surviving Spouse	N/A

FILED FOR RECORD  
99 JUN 17 PM 4:32

496  
 O.R. BOOK PAGE 349-351  
 REC. NICHOLAS THOMAS, CLERK  
 GADSDEN CO., FLORIDA

9906295  
 Probate-3.0100-1 of 3

99 JUN 17 PM 4:32

Ann F. Nicholson, 315 Camellia Drive Trustee N/A  
 Successor Trustee of Quincy, FL 32351  
 the W. Paul Nicholson  
 Revocable Trust  
 Agreement dated March  
 24, 1998

CA 496 PG 0350

4. Venue of this proceeding is in this county because decedent was domicile in Gadsden County, Florida, at the time of his death.

5. Ann F. Nicholson whose address is 315 Camellia Drive, Quincy, Florida 32351, and who is qualified under the laws of the State of Florida to serve as personal representative of the decedent's estate is entitled to preference in appointment as personal representative because she is the person named to act as personal representative in decedent's Last Will.

6. The nature and approximate value of the assets in this estate are: real and personal property in excess of \$100,000.00.

7. This estate will be required to file a federal estate tax return.

8. The original of the decedent's last will, dated March 24, 1998, is in the possession of the court or accompanies this petition.

9. Petitioner is unaware of any unrevoked will or codicil of decedent other than as set forth in paragraph 8.

10. As directed in Article VI of the decedent's Last Will, petitioner requests that no bond be required.

Petitioner requests that the decedent's will be admitted to probate and that Ann F. Nicholson be appointed personal representative of the estate of the decedent.

OR496PG0351

Under penalties of perjury, I declare that I have read the foregoing, and the facts alleged are true, to the best of my knowledge and belief.

Dated June 9, 1999.



Ann F. Nicholson  
Petitioner



Stuart E. Goldberg  
Fla. Bar No. 0365971  
of the law firm of  
Warfel, Goldberg, Dariotis, Waldoch & Olive, P.A.  
Post Office Box 12458  
Tallahassee, Florida 32317  
(850) 222-4000

Attorney for Petitioner

ENCLOSURES TO NICHOLSON, ANN F. ADMIN NICHOLSON

09496PG0352 99-230-PRA

# Last Will and Testament of

## W. Paul Nicholson

I, W. Paul Nicholson, domiciled in Gadsden County, Florida do make and declare this to be my Last Will and Testament, hereby revoking all wills and codicils previously made by me

FILED FOR RECORD  
99 JUN 17 02:14  
CLERK OF SUPERIOR COURT  
GADSDEN COUNTY, FLORIDA

### ARTICLE I

#### RULES OF INTERPRETATION

Section 1.1. Wife. All references herein to my Wife shall mean and refer to my Wife, Ann F. Nicholson, and to no other person.

Section 1.2. Children. All references herein to my Children shall mean and refer to my Children, Paula J. Edmunds, Vicky L. Burton, Allen Nicholson and Michael Nicholson, and to no other persons.

Section 1.3. Issue. Unless otherwise clearly indicated, the word "issue" shall mean lawful blood descendants of all degrees of the individual designated, provided that (i) persons adopted while they are minors by my issue shall be considered and treated in all respects as issue hereunder, and (ii) any child in gestation, later born alive, shall for purposes of this Will be considered as a child in being.

Page 1 of Eight Pages

WARFEL, GOLDBERG, DARIOTIS & WALDOCH, P.A.  
ATTORNEYS AT LAW  
Tallahassee, Florida

496 PAGE 352 - 359  
O.R. BOOK REC. NICHOLAS THOMAS, CLERK  
GADSDEN CO. FLORIDA

WPN

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DA 496 PG 0353

Section 1.4. Tangible Personal Property. All references in this Will to my Tangible Personal Property shall mean and refer to my automobiles, furnishings, rugs, pictures, appliances and other household goods, books, letters, manuscripts, other personal papers, silver, plate, linen, china, glassware, objects of art, clothing, jewelry, pets, boats, firearms, and all other articles of personal use and any other personal effects, but excluding cash, receivables, promissory notes, bonds, stocks, securities, and excluding such tangible personal property as may be used in the operation of a business or as a part of rental property.

## ARTICLE II

## DISPOSITION OF TANGIBLE PERSONAL PROPERTY

Section 2.1. To My Wife. All of my Tangible Personal Property (as defined in Section 1.4. of this Will) which I may own at the time of my death and not otherwise specifically bequeathed herein or in a memorandum written and executed by me pursuant to Section 2.3. of this Will, wherever said property is located, I give to my Wife, Ann F. Nicholson, if she survives me.

Section 2.2. Alternate Gift. If my Wife shall not survive me, I give all of the aforesaid property in equal shares to my Children who survive me to be determined by such Children or by my Personal Representative in the event such Children are unable to agree, and my Personal Representative's decision shall be final and binding; provided that my Personal Representative's decision shall be subject to review by the court having jurisdiction of the probate of my estate if any person serving as my Personal Representative is one of my Children. Any reasonable distribution expenses incurred with respect to my Tangible Personal Property, including but not limited to packing, shipping, storage and insurance expenses, shall be paid by my Personal Representative as an administration expense of my estate.



OR 496 PG 0354

Section 2.3. Written Statement. I may leave a written statement or a list dated and signed by me disposing of certain items of my Tangible Personal Property. Any such last dated statement or list in existence at the time of my death shall be determinative with respect to all items devised therein. If no written statement or list is found and properly identified by my Personal Representative within thirty (30) days after qualification it shall be presumed that there is no statement or list and any subsequently discovered statement or list shall be ignored.

#### ARTICLE III

##### DISPOSITION OF RESIDENCE

All right, title and interest which I shall own at the time of my death in and to any and all real property wherever situated and used by me for residential purposes together with the improvements situated thereon and used in connection therewith and any property and casualty insurance policies, including prepaid premiums, applicable thereto, I give to my Wife, Ann F. Nicholson, if she survives me.

#### ARTICLE IV

##### DISPOSITION OF RESIDUE

All the rest, residue and remainder of my property, real, personal and mixed, and wherever situated, including all lapsed gifts but excluding any property over which I may have a power of appointment, my intention being not to exercise any such power, I give to the then Trustee of the W. Paul Nicholson Revocable Trust Agreement dated March 24, 1998, as amended from time to time, to be administered according to the terms of the Trust.

OR496PG0355

ARTICLE V

ADMINISTRATIVE EXPENSES AND TAXES

I direct that all administrative expenses, including all estate, inheritance, transfer, succession and other similar taxes imposed by any jurisdiction whatsoever by reason of my death, be paid by the Trustee of the W. Paul Nicholson Revocable Trust from funds or property available to the Trustee, including property received by the Trust under Article IV of this Will except that my Personal Representative shall make claim, if and to the extent permitted by law, for death taxes assessed against my estate because of: (i) any power of appointment which I may have and (ii) the inclusion of any qualified terminable interest property, any qualified retirement benefits, the proceeds of any life insurance policy, or the corpus of any trust included in my gross estate for federal estate tax purposes; and further provided however, that no such taxes shall be paid from any property and no claim shall be made against the recipient of any property as to which the marital or charitable deduction is claimed for federal estate tax purposes by my estate. It is my intention to exonerate the property described in Articles II and III of this Will from the payment of any administrative expenses, including taxes.

ARTICLE VI

PERSONAL REPRESENTATIVE

Section 6.1. Personal Representative. I appoint my Wife, Ann F. Nicholson, to be Personal Representative of this Will. If because of death, resignation or any other reason she shall not serve or continue to serve as Personal Representative, I appoint my daughters, Paula J. Edmunds and Vicky L. Burton, both of Quincy, Florida, jointly or the survivor of them, as my Personal Representative in her place and stead.



WPN

OR 496 PG 0356

Section 6.2. No Bond/Accounting. I direct that no bond or other security be required of any person serving as my Personal Representative in any jurisdiction, nor shall such fiduciary be required to file periodic accountings in any court, but shall furnish a statement of receipts and disbursements at least annually to each person then entitled to income from my estate.

Section 6.3. Exoneration of Personal Representative. My Personal Representative shall be responsible only for due diligence in the administration and disbursement of my estate and any trust created hereunder and shall not be responsible for any loss or subject to any liability except by reason of my Personal Representative's own negligence or willful default proved by affirmative evidence and every election, determination, or other exercise by my Personal Representative of any discretion granted, expressly or by implication under this Will, or by law made in good faith, shall fully protect my Personal Representative and shall be conclusive and binding upon all persons interested in this Will.

#### ARTICLE VII

#### POWERS OF PERSONAL REPRESENTATIVE

I hereby grant to my Personal Representative, referred to in this Article as "my fiduciary," with respect to my estate, in addition to those powers conferred by law, the following powers to be exercised without authority from any court, in dealing with any and all property, real or personal, forming a part of my estate, including property held for minors: to retain such property for so long as my fiduciary may deem advisable, to abandon such property or to sell such property for cash or credit at public or private sale or to grant options, to lease real property regardless of the fact that the term of any such lease may extend beyond the period of administration of my estate, to distribute such property in cash or in kind or both and to value such property to the extent permitted by law,

  
WPN

OR496 PG 0357

to invest in any property regardless of whether authorized by law for investment of trust funds, to borrow money from any lender (including my fiduciary), to settle claims, and to do all acts although not specifically listed herein deemed necessary and advisable for the proper management, investment and distribution of such property.

ARTICLE VIII  
LAPSED GIFTS

Where a gift is conditioned upon the beneficiary surviving me and such beneficiary does not survive me, the gift to such beneficiary shall lapse and become a part of my residuary estate, unless otherwise indicated in this Will.

ARTICLE IX  
SURVIVAL

If my Wife and I die simultaneously or under circumstances creating any doubt as to the order of our deaths, then my Wife shall be conclusively presumed to have survived me and my estate shall be administered accordingly. If any beneficiary of this Will does not survive me by more than 60 days, then such beneficiary shall be conclusively presumed to have predeceased me and my estate shall be administered accordingly.

IN WITNESS WHEREOF, I sign this instrument as my Last Will and Testament, consisting of this, the following page and the preceding five typewritten pages, and for purposes of identification I have initialed my name at the bottom of each of the foregoing pages, in the presence of the persons witnessing it this 24 day of March, 1998, Tallahassee, Florida.

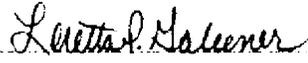
  
W. PAUL NICHOLSON, Testator

Page 6 of Eight Pages

OR496PG0358

We certify that this instrument was signed and declared by W. Paul Nicholson, to be his Last Will and Testament in our presence, and that we, in his presence and in the presence of each other have signed our names as witnesses, this 24<sup>th</sup> day of March, 1998.

 ..... residing at Tallahassee, Florida

 ..... residing at Tallahassee, Florida

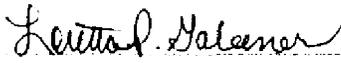
STATE OF FLORIDA  
COUNTY OF LEON

496 PG0359

We, the undersigned Testator and witnesses, respectively, whose names are signed to the foregoing instrument, having been sworn, signed and declared to the undersigned officer that the Testator in the presence of the witnesses signed the instrument as his Last Will and Testament, that he signed willingly and that each of the witnesses, in the presence of the Testator and in the presence of each other, signed the Will as a witness.

  
W. PAUL NICHOLSON, Testator

  
Witness

  
Witness

Subscribed and sworn to before me by W. Paul Nicholson, the testator, and by Stuart E. Goldberg and Loretta P. Galeener, the witnesses, on the 24<sup>th</sup> day of March 1998.

  
(Signature)

(Type Print Notary Name)  
Notary Public  
Commission Expires:  
Toni M. Singletary  
MY COMMISSION # 00000000 EXPIRES:  
November 7, 2001  
BONDED THROUGH TRISTAR INSURANCE, INC.  
My Commission Expires:

The testator is personally known to me or produced Fla driver's license as identification.

The witnesses are each personally known to me.

IN THE CIRCUIT COURT FOR GADSDEN COUNTY, FLORIDA  
 IN RE: ESTATE OF PROBATE DIVISION  
 W. PAUL NICHOLSON, FILE NUMBER:  
 Deceased. 99-232-PRA

09 496 PG 0360

**ORDER ADMITTING WILL TO PROBATE  
 AND APPOINTING PERSONAL REPRESENTATIVE  
 (self-proved)**

The instrument presented to this court as the last will of W. Paul Nicholson, deceased, having been executed in conformity with law, and made self-proved by the acknowledgment of the decedent and the affidavits of the witnesses, each made before an officer authorized to administer oaths and evidenced by the officer's certificate attached to or following the will in the form required by law, and no objection having been made to its probate, and the court finding that the decedent died on May 7, 1999 and that Ann F. Nicholson is qualified under the laws of the State of Florida to serve as personal representative, it is

ADJUDGED that the will dated March 24, 1998, and attested by Stuart E. Goldberg and Loretta P. Galeener, as subscribing and attesting witnesses, is admitted to probate according to law as the last will of the decedent, and it is further

ADJUDGED that Ann F. Nicholson is appointed personal representative of the estate of the decedent, and that upon taking the prescribed oath, filing designation of resident agent and acceptance, and entering into bond in the sum of \$ — 0 —, letters of administration shall be issued.

ORDERED this 17<sup>th</sup> day of June 1999.

*[Signature]*  
 Circuit Judge

Copies furnished to:  
 Stuart E. Goldberg  
 ENCLIENTS/TONT/SEG/NICHOLSON/EADM/NICHOL. 2

Probate-3.0420-1 of 1

496 PAGE 360  
 D.R. BOOK REC. NICHOLAS THOMAS, CLERK  
 GADSDEN COUNTY, FLORIDA

FILED FOR RECORD  
 99 JUN 17 PM 3:50  
 NICHOLAS THOMAS  
 CLERK  
 GADSDEN COUNTY, FLORIDA

9906297

99 JUN 17 PM 4:34

IN THE CIRCUIT COURT FOR GADSDEN COUNTY, FLORIDA

IN RE: ESTATE OF

PROBATE DIVISION

OR 496 PG 0361

W. PAUL NICHOLSON,

FILE NUMBER:

Deceased.

99-232-PRA

**LETTERS OF ADMINISTRATION**  
(single personal representative)

TO ALL WHOM IT MAY CONCERN

WHEREAS, W. Paul Nicholson, a resident of Quincy, Gadsden County, Florida, died on May 7, 1999, owning assets in the State of Florida, and

WHEREAS, Ann F. Nicholson has been appointed personal representative of the estate of the decedent and has performed all acts prerequisite to issuance of Letters of Administration in the estate,

NOW, THEREFORE, I, the undersigned circuit judge, declare Ann F. Nicholson duly qualified under the laws of the State of Florida to act as personal representative of the estate of W. Paul Nicholson, deceased, with full power to administer the estate according to law; to ask, demand, sue for, recover and receive the property of the decedent; to pay the debts of the decedent as far as the assets of the estate will permit and the law directs; and to make distribution of the estate according to law.

ORDERED this 17<sup>th</sup> day of June 1999.

*[Signature]*  
Circuit Judge

Stuart E. Goldberg

E:\CLIENTS\TONI\SEG-NICHOLSON\ADM-NICHOLSON

Probate-3.0700-1 of 1

FILED FOR RECORD  
99 JUN 17 P 3:50  
NICHOLAS THOMAS  
CLERK OF CIRCUIT COURT  
GADSDEN COUNTY FLA

496 PAGE 361  
O.R. BOOK REC. NICHOLAS THOMAS, CLERK  
GADSDEN CO., FLORIDA

9906298

99 JUN 17 PM 4:34

INTERNAL REVENUE SERVICE  
ATLANTA, GA. 39901

DEPARTMENT OF THE TREASURY

FILED FOR RECORD  
ESTATE TAX CLOSING LETTER  
(NOT A BILL FOR PAYMENT)  
2001 APR 4 PM 1:56

DATE: 03/16/2001

OR524PG0007

ESTATE OF :  
NICHOLSON, WILLIAM P  
DECEDENT'S SOCIAL SECURITY NUMBER :  
261-50-4164

CASE NO. 99-232 PR

NICHOLAS THOMAS  
CLERK CIRCUIT COURT  
GADSDEN COUNTY, FL

DATE OF DEATH 05/07/1999

DOMICILE FL

ANN F NICHOLSON  
315 CAMELLIA DR  
QUINCY, FL 32351

PERSON TO CONTACT :

J. KENDALL

CONTACT TELEPHONE NUMBER :

(770) 455-2712 (Eastern Time)

(NOT TOLL FREE)

Our computation of the Federal tax liability for the above estate is shown at the bottom of this letter. It does not include interest that may be charged.

If you have made a request for discharge of personal liability under Section 2204 of the Internal Revenue Code, proof of request and payment of tax will discharge you from personal liability for the tax and any deficiency which may later be found due.

This letter and proof of payment, such as cancelled checks or receipts, will establish that your personal liability for the tax has been settled.

This letter is evidence that the Federal tax return for the estate has either been accepted as filed or has been accepted after an adjustment to which you have agreed. You should keep this letter as a permanent record. Your attorney may need it to close probate proceedings for the estate.

This is not a formal closing agreement under Section 7121 of the Internal Revenue Code. We will not reopen the case, however, unless Internal Revenue Procedure 85-13 applies.

Sincerely



Director, Atlanta Customer Service Center.

0103129

TENTATIVE TAX .....		\$211,300.00
LESS: TOTAL GIFT TAXES PAYABLE	\$0.00	
(FOR GIFTS MADE AFTER 12/31/1976)		
UNIFIED CREDIT	\$211,300.00	
CREDIT FOR STATE DEATH TAXES	\$0.00	
CREDIT FOR FEDERAL GIFT TAXES	\$0.00	
CREDIT FOR FOREIGN DEATH TAXES	\$0.00	
CREDIT FOR TAX ON PRIOR TRANSFERS	\$0.00	
TOTAL SUBTRACTIONS .....		\$211,300.00
NET ESTATE TAX		\$0.00
GENERATION SKIPPING TRANSFER TAXES		\$0.00
SECTION 4980A INCREASED ESTATE TAX		\$0.00
TOTAL ESTATE TAXES .....		\$0.00

01 APR -6 PM 2:19

O.R. BOOK PAGE 524  
REC. NICHOLAS THOMAS, CLERK  
GADSDEN CO., FL CIRCUIT  
M



# NONTAXABLE CERTIFICATE AND RECEIPT FOR ESTATE TAX

OR525PG1082

TO: STUART E GOLDBERG  
WARFEL GOLDBERG WALDOCH & OLIVE, PA  
PO BOX 12458  
TALLAHASSEE FL 32317-3231

O.R. BOOK 525 PAGE 1082  
REC. NICHOLAS THOMAS, CLERK  
GADSDEN CO., FLORIDA

0104308

01 MAY 15 AM 10:10

Re: The Estate of NICHOLSON, W PAUL Case No. 99-232 PR  
Social Security No. 261-50-4164  
Date of Death: 05/07/1999  
Resident of GADSDEN  
State of FL  
Validation Date: 04/06/2001  
Issue Date: 04/19/2001

FILED FOR RECORD  
2001 MAY 10 AM 11:12  
CLERK OF COUNTY COURT  
GADSDEN COUNTY, FL

CERTIFICATE NUMBER AH10857

THIS IS TO CERTIFY, that in accordance with the provisions of Chapter 198, Florida Statutes, there has been filed with this office a sworn report or return for estate taxes as required by law, and on the basis thereof it has been ascertained that the above estate is not subject to Florida Estate Tax. The issuance of this certificate, however, shall not preclude the assessment and collection of estate taxes subsequently determined to be due the State of Florida.

If proof of nonliability by the above estate for the Florida Estate Tax is required by any person, this certificate may be exhibited as evidence of such nonliability.

Given in duplicate under my hand and the Seal of the State of Florida.



*J. Zingale*  
J. Zingale, EXECUTIVE DIRECTOR  
DEPARTMENT OF REVENUE  
STATE OF FLORIDA

OR 53 | PG | 6 | 10

FILED FOR RECORD  
2001 SEP 11 PM 2:34  
NICHOLAS THOMAS  
CLERK CIRCUIT COURT  
GADSDEN COUNTY, FL

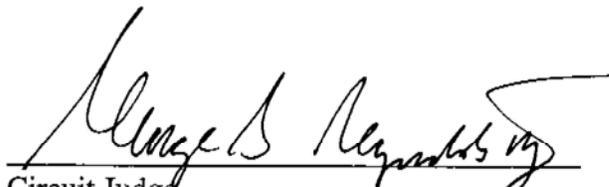
IN THE CIRCUIT COURT FOR GADSDEN COUNTY, FLORIDA  
IN RE: ESTATE OF PROBATE DIVISION  
W. PAUL NICHOLSON, FILE NUMBER: 99-232 PR  
Deceased.

**ORDER OF DISCHARGE**

On the Petition for Discharge of Ann F. Nicholson, as personal representative of the estate of W. Paul Nicholson, deceased, the court finding that the estate has been fully administered and properly distributed, that claims of creditors have been paid or otherwise disposed of, that the tax imposed by Chapter 198 of the Florida Statutes, if any, has been paid, and that the personal representative should be discharged, it therefore is

ADJUDGED that the personal representative is discharged, and the surety on the personal representative's bond, if any, is released from further liability.

ORDERED this 11 day of September 2001.

  
Circuit Judge

Copies furnished to:

Stuart E. Goldberg

O.R. BOOK 531 PAGE 1610  
REC. NICHOLAS THOMAS, CLERK  
GADSDEN CO. FLORIDA

01 SEP 12 AM 10:35

0108346

**Location analysis including explanation of why collocation on existing towers, water towers, or other facilities is not feasible**

In 2011, Antietam Wireless conducted a search of the area surrounding the proposed location for the lease of a suitable parcel where a 250' cell tower could be constructed. During the search period, Antietam only identified the subject property as suitable to accommodate this project due to:

- a. proximity to the target of the search area
- b. parcel size and ability to present better to the County ordinance; specifically with respect to setbacks.

Antietam was able to successfully negotiate with the Nicholson Trust ownership in 2012 in anticipation of moving forward with this application.

Due to the search criteria of 250', no existing structures (towers, water towers or other facilities) were considered feasible to meet the objectives of this search area.

4700 Exchange Ct  
Suite 100  
Boca Raton, FL 33431

RECEIVED

JUN 17 2020

PLANNING & ZONING

June 12, 2020

Gadsden County Board of County Commissioners  
Planning Division  
Attn: Jill A. Jeglie  
1-B East Jefferson Street  
Quincy, FL 32353

**Re: Letter of Confirmation of Involvement and Intent to Occupy**

Honorable Chairperson and Commissioners:

This letter indicates a non-binding confirmation by Verizon Wireless regarding the proposed wireless telecommunications facility located on Havana Highway, Havana, FL (Parcel ID 3-06-2N-2W-0000-00220-0000), which is the subject of the Wireless Telecommunications Facility Application from Antietam Wireless Services, LLC ("Antietam Wireless").

Upon approval and construction of the proposed telecommunications facility, Verizon intends to occupy the tower as a carrier under a forthcoming mutually acceptable lease agreement with Antietam. Verizon confirms its involvement in the proposed application as a licensed carrier and telecommunications provider and is in agreement with the proposed location as indicated by the supplied RF Analysis.

Thank you for your consideration of Antietam's application for the wireless telecommunications facility.

Sincerely,

Verizon Wireless

By: 

Name: Jhonathan Montenegro  
Sr. Manager – Real Estate

verizon<sup>✓</sup>

# HAVANA WEST

Gadsden County, FL

Prepared by Verizon Wireless RF Engineering

Jaime E. Cruz

October 24, 2019

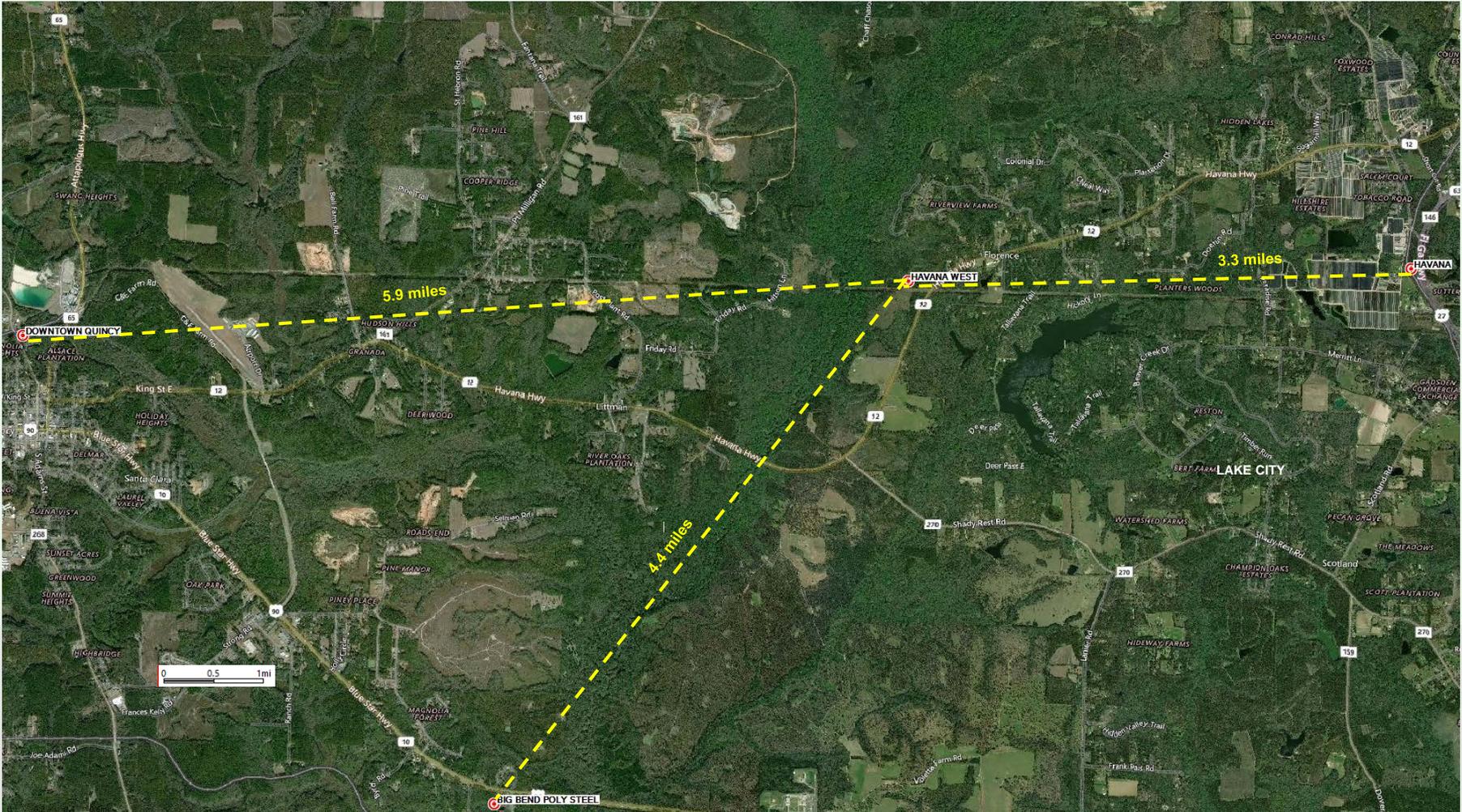
This Verizon proposed tower, Havana West is needed to improve wireless service coverage to the near by communities and roads.

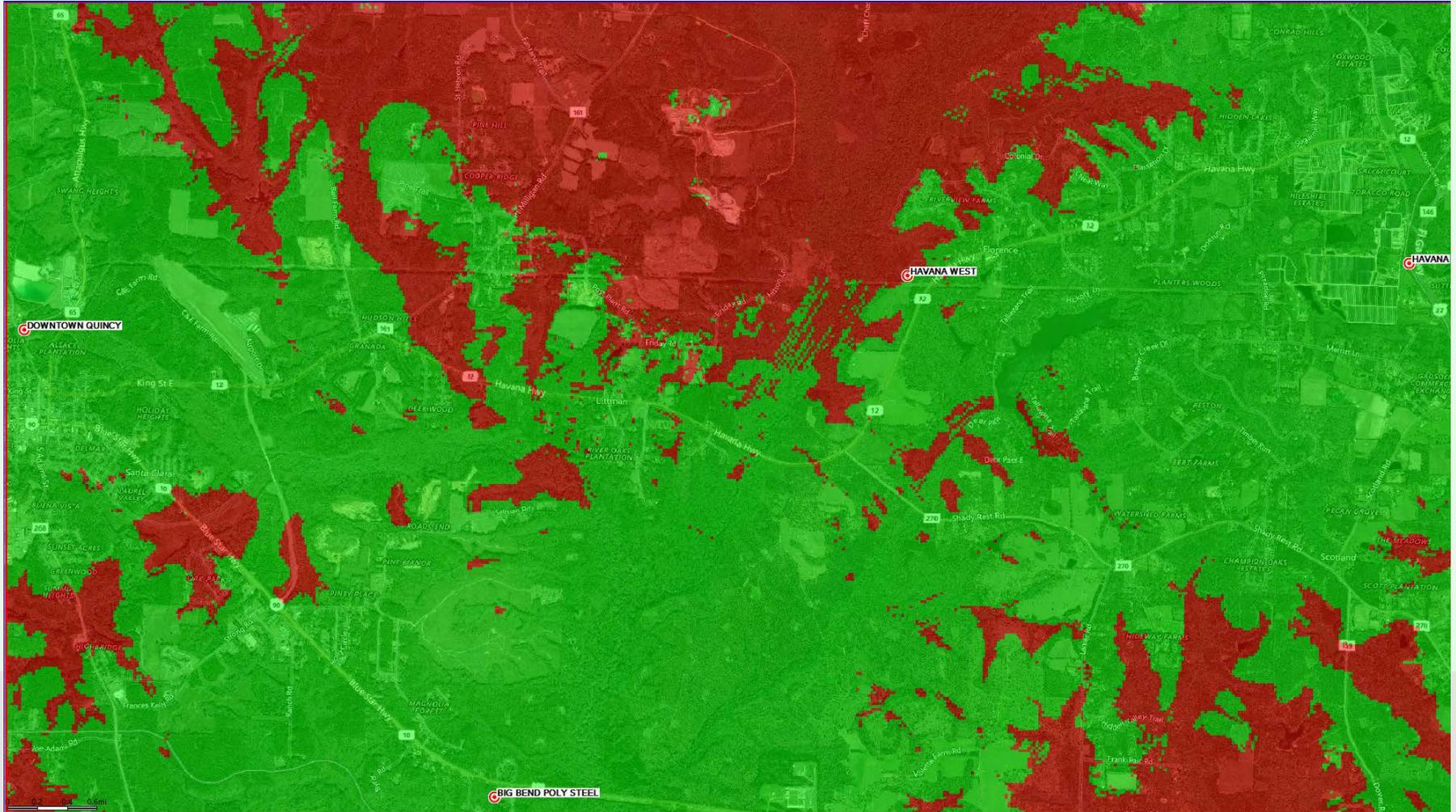
**Coverage** is the need to expand wireless service into an area that either has no service or bad service. The request for service often comes from customers or emergency personnel. Expansion of service could mean improving the signal levels in a large apartment complex or new residential community. It could also mean providing new service along a newly built highway.

**Capacity** is the need for more wireless resources. Cell sites have a limited amount of resources to handle voice calls, data connections, and data volume. When these limits are reached, user experience quickly degrades. This could mean customers may no longer be able to make/receive calls nor be able to browse the internet. It could also mean that webpages will be very slow to download.

# Verizon Wireless First Tier Handoff Sites

FCC Study/ASR#	Tower Owner	Verizon Cell Site Name	Tower Height AGL (ft)	Structure Type	Latitude	Longitude
1028196	Duke Energy Business Services, LLC	DOWNTOWN QUINCY	263	Self-support	30.597361	-84.578750
1231399	SBA Infrastructures, LLC	BIG BEND POLY STEEL	250	Self-support	30.553081	-84.524667
1026897	American Towers LLC	HAVANA	268	Self-support	30.608	-84.424611
N/A	Proposed Tower	HAVANA WEST	250	Tower	30.879519	-85.447089



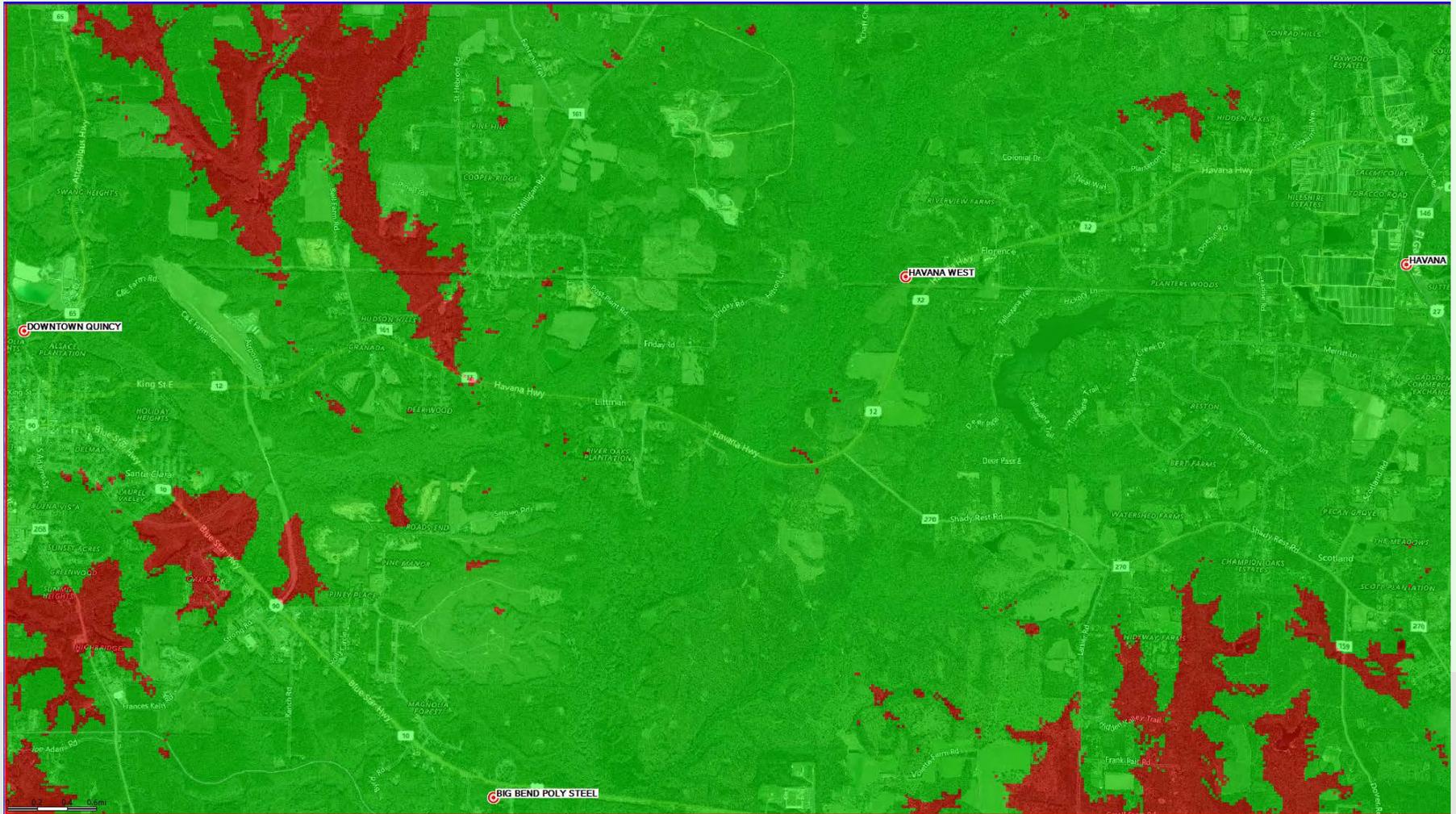


## Coverage Thresholds

■ Reliable Service

■ Not-Reliable Service





## Coverage Thresholds

■ Reliable Service

■ Not-Reliable Service





Mail Processing Center  
 Federal Aviation Administration  
 Southwest Regional Office  
 Obstruction Evaluation Group  
 10101 Hillwood Parkway  
 Fort Worth, TX 76177

Aeronautical Study No.  
 2019-ASO-31781-OE

Issued Date: 12/04/2019

Michael E. Shine  
 Antietam Wireless Services, LLC  
 103 Carnegie Center  
 Suite 300  
 Princeton, NJ 08540

**\*\* DETERMINATION OF NO HAZARD TO AIR NAVIGATION \*\***

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Antenna Tower FL 439 165 - Havana  
 Location: Havana, FL  
 Latitude: 30-36-18.80N NAD 83  
 Longitude: 84-28-50.30W  
 Heights: 160 feet site elevation (SE)  
 250 feet above ground level (AGL)  
 410 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 2, Obstruction Marking and Lighting, a med-dual system - Chapters 4,8(M-Dual),&12.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part 1)
- Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

This determination expires on 06/04/2021 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

**NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.**

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, effective 21 Nov 2007, will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA. This determination includes all previously filed frequencies and power for this structure.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Communications Commission (FCC) because the structure is subject to their licensing authority.

If we can be of further assistance, please contact our office at (817) 222-4613, or [natalie.schmalbeck@faa.gov](mailto:natalie.schmalbeck@faa.gov). On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2019-ASO-31781-OE.

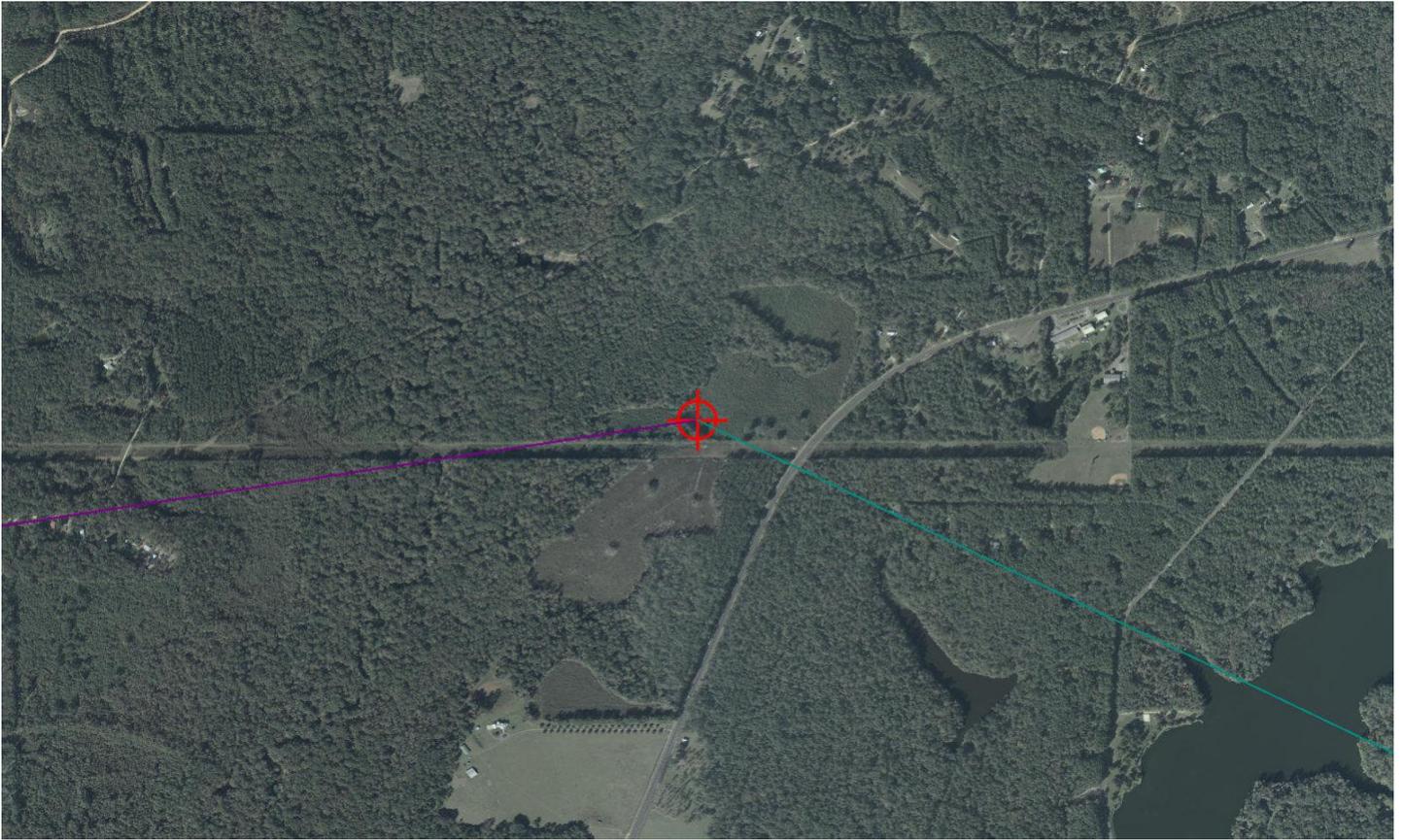
**Signature Control No: 420828129-424343886**

( DNE )

Natalie Schmalbeck  
Technician

Attachment(s)  
Map(s)

cc: FCC



# Notice of Citizen's Bill of Rights Meeting

A meeting will be held at Havana Public Library at 203 5th Ave E, Havana, FL 32333 on Wednesday, February 19, 2020 beginning at 5:00 PM ending at 6:00 PM to discuss a proposed special use application for new 250 ft. telecommunications tower and facility located on the west side of Havana Highway, 1,017 feet south of Heide Lane and 2,515 feet north of Longview Drive, which is also identified as parcel # 3-06-2N-2W-0000- 00220-0000.



If you are unable to attend or have any questions, please call:

Hopping Green & Sams, (850) 222-7500  
Ask for Robert Volpe



---

Payment receipt

You paid \$115.50

to Priority News Inc. on 1/24/2020

---

Invoice no.	6362
Invoice amount	\$115.50
Total	\$115.50

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Transaction ID	PK0270853448

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Priority News Inc.

mail@prioritynews.net

ALLEN JAMES R JR AND LESLIE S  
115 BUDDY LANE  
HAVANA, FL 32333

APERAUCH REX & ELIZABETH M  
350 HONEYSUCKLE DR  
HAVANA, FL 32333

APERAUCH REX AND  
RUSSELL ELIZABETH M  
350 HONEYSUCKLE DRIVE  
HAVANA, FL 32333

AUBIN BARBARA JEAN  
5765 HAVANA HWY  
HAVANA, FL 32333

B & C CREEKSIDE LLC  
900 RIO ST JOHNS DR  
JACKSONVILLE, FL 32211

B & K FARMS INC  
4450 HAVANA HWY  
HAVANA, FL 32333

BAKER THOMAS W AND SANDRA G  
221 HONEYSUCKLE DR  
HAVANA, FL 32333-9548

BARBREE MICHELLE  
195 TAYLOR RD  
MONTICELLO, FL 32337

BAUTISTA ANGELICA AND  
MACARIO GUILLEN  
1195 RIVERRIDE DR  
HAVANA, FL 32333

BELL ROBERT M  
145 HONEYSUCKLE DR  
HAVANA, FL 32333

BERNDGEN JOHN W & BARBARA A  
355 RIVERVIEW ROAD  
HAVANA, FL 32333

BETTS MATTHEW GARLAND  
4212 TERIDAN CT  
TALLAHASSEE, FL 32303

BLACK TRAVIS M & MADELINE R  
98 AUDUBON DR  
HAVANA, FL 32333-3815

BOSTICK WYATT KEYES ETAL  
490 DEER RUN RD  
HAVANA, FL 32333

BRIDGES MATTHEW M  
702 TALLAVANA TRL  
HAVANA, FL 32333-5687

BROWN NANCY E &  
WILLIAM T BELL JTWROS  
P O BOX 823  
HAVANA, FL 32333

BRUNER DEVIN  
1415 HILLTOP DR  
TALLAHASSEE, FL 32303

BYRD MICHAEL J AND TERRI A  
267 HONEYSUCKLE DRIVE  
HAVANA, FL 32333

CALLOWAY TERENCE  
196 AUDUBON DR  
HAVANA, FL 32333

CALVERT JEAN E  
135 HAWK RIDGE DR  
HAVANA, FL 32333

CHURCH TALLAVANA COMMUNITY INC  
5840 HAVANA HWY  
HAVANA, FL 32333

COLVIN LAMAR AND FRANCES &  
STERLING E AND MARIA COLVIN  
5587 HAVANA HWY  
HAVANA, FL 32333

COLVIN LEROY AND  
COLVIN PEGGY  
4102 ROWELING OAKS CT  
TALLAHASSEE, FL 32303-3715

CRAFT BARBARA  
499 RIVERVIEW RD  
HAVANA, FL 32333-4159

CROLEY DOUGLAS M & DIANNE M  
255 LONGVIEW LN  
HAVANA, FL 32333

CRUMPLER KATHERINE E AND  
JANE M ROTHENBERGER  
450 RIVERVIEW ROAD  
HAVANA, FL 32333

CRUZ EUSEBIO & LETICIA  
270 HITSON LANE  
QUINCY, FL 32351

DAWKINS ARNESS PATRICK & JEAN  
4134 SHADY REST RD  
HAVANA, FL 32333

DONALDSON ROBYN AND  
FARRIS JERRY RAYMOND (JTWRS)  
200 AUDUBON DR  
HAVANA, FL 32333

DRIBER ROSE AND  
ANDRES CASTELLON  
976 RIVERVIEW RD  
HAVANA, FL 32333

ENGELHARD CORPORATION  
C/O BASF TAX DEPT  
100 PARK AVE  
FLORHAM PARK, NJ 07932-1049

EVANS RUSSELL F & DARLENE W  
740 TALLAVANA TRL  
HAVANA, FL 32333

EVANS RUSSELL F  
740 TALLAVANA TRAIL  
HAVANA, FL 32333-9534

EVANS TIMOTHY JR AND  
BRITTANY SHANELL EVANS  
230 AUDUBON DR  
HAVANA, FL 32333

GADSDEN COUNTY  
PO BOX 1799  
QUINCY, FL 32353-1799

GAINES WILLIAM K AND BRENDA J  
96 HONEYSUCKLE DRIVE  
HAVANA, FL 32333

GAMMON REGINA  
355 HAWK RIDGE DR  
HAVANA, FL 32333

GARNER RANDALL S & LAURA  
5704 HAVANA HWY  
HAVANA, FL 32333-9518

GIBSON KENNETH A  
84 AUDUBON DRIVE  
HAVANA, FL 32333

GILBAR DONALD G & JEAN E  
1501 PARTIN DR N  
APT 112  
NICEVILLE, FL 32578-1463

GRANTHAM JAMES B & JEANETTE C  
546 TALLAVANA TRAIL  
HAVANA, FL 32333

GRIFFIN HARDING & JIMMIE FAY  
1165 RIVERVIEW RD  
HAVANA, FL 32333

GRIFFIN ROBERT M JR & MARLA  
410 TALLAVANA TR  
HAVANA, FL 32333

GUNN ROBERT L AND CHRISTIE B  
51 BUDDY LANE  
HAVANA, FL 32333-9520

HALL ROBERT C III AND  
MCGLAMORY RHONDA M  
5650 HAVANA HWY  
HAVANA, FL 32333

HALL ROBERT C  
5732 HAVANA HWY  
HAVANA, FL 32333

HALL VICTORIA L  
5796 HAVANA HWY  
HAVANA, FL 32333

HARRER ELIZABETH M  
452 TALAVANA TRL  
HAVANA, FL 32333

HAVANA SPRINGS HOLDING CO LLC  
200 COCA COLA AVE  
HAVANA, FL 32333

HAVANA SPRINGS RESORT LLC  
200 COCA COLA AVE  
HAVANA, FL 32333

HAYDEN ROGER L AND PATRICIA K  
152 TALLAVANA TR  
HAVANA, FL 32333-9533

HENRY DELOYE B & ANTONIA M  
39 AUDUBON DR  
HAVANA, FL 32333

HERNDON MICHELLE D  
62 AUDUBON DR  
HAVANA, FL 32333

HINES DAVID JOSEPH AND  
AMY NICOLE HINES  
16832 TALQUIN SORINGS DR  
TALLAHASSEE, FL 32310-8253

HOFMEISTER JOHN LEWIS AND  
HOFMEISTER EMMA MORAN  
1447 RIVERVIEW ROAD  
HAVANA, FL 32333

HOLLAND JANET  
854 BAHAMA DR  
TALLAHASSEE, FL 32305-7363

HOLLAND JEFFERY T & JANET C  
P O BOX 667  
HAVANA, FL 32333-0667

HUDMILL HOLDINGS LLC  
532 FRANK SHAW RD  
TALLAHASSEE, FL 32312

JENKINS RONNIE H & KATRINA W  
1040 RIVERVIEW ROAD  
HAVANA, FL 32333

JENKINS RONNIE H AND KATRINA W  
1040 RIVERVIEW RD  
HAVANA, FL 32333

JOHNSON GARY L & MARIA L (TBE)  
459 HONEYSUCKLE DR  
HAVANA, FL 32333

JOHNSON MARIA L AND GARY L  
459 HONEYSUCKLE DR  
HAVANA, FL 32333

JUBINSKY GREGORY P AND MURIEL  
P O BOX 772  
HAVANA, FL 32333

JUBINSKY GREGORY P AND  
SIMMONS MURIEL D  
P O BOX 772  
HAVANA, FL 32333

KAYE ROBERT ALLEN SR AND JOAN  
MARIE KAYE  
250 AUDUBON DR  
HAVANA, FL 32333

KELLY MURRAY L & PATRICIA J  
439 GLADE RD  
HAVANA, FL 32333

KINNETT MICHAEL & BILLIE  
557 RIVERVIEW ROAD  
HAVANA, FL 32333

KIRBY PAUL W JR  
1387 RIVERVIEW ROAD  
HAVANA, FL 32333

KIRKLAND RODGER JAY & BARBARA  
P O BOX 678  
HAVANA, FL 32333

LEDBETTER PERRY L & AMANDA R  
109 AUDUBON DR  
HAVANA, FL 32333

LESTER FRANCIS C & DEBORAH ANN  
1662 RIVERVIEW ROAD  
HAVANA, FL 32333

LISA M CASSIDY LAND TRUST  
1348 RIVERVIEW RD  
HAVANA, FL 32333

LISA M CASSIDY LAND TRUST  
1348 RIVERVIEW RD  
HAVAVA, FL 32333

LOFFER WILLIAM D AND MARILYN J  
415 HONEYSUCKLE DR  
HAVANA, FL 32333

MACLIN DEMARTIFER & STEFANIE  
377 HONEYSUCKLE DRIVE  
HAVANA, FL 32333

MARKHAM SHARRON & LLOYD H  
141 AUDUBON DR  
HAVANA, FL 32333

MAXWELL JAMES D JR  
158 AUDUBON DR  
HAVANA, FL 32333

MAYFIELD MARLON E  
P O BOX 13687  
TALLAHASSEE, FL 32317

McCLOUD MONTGOMERY W & CAROL M  
527 HITSON LANE  
QUINCY, FL 32351

MERKHOFFER D BRADLEY AND  
MERKHOFFER M SUSANNE  
1928 QUEENSWOOD DR  
TALLAHASSEE, FL 32303

MEYER PATTI LYNN  
499 RIVERVIEW ROAD  
HAVANA, FL 32333

MOSIER CHARLES A & DONNA E  
1093 RIVERVIEW ROAD  
HAVANA, FL 32333

NETTLES JOYCE L ET AL  
193 HONEYSUCKLE DR  
HAVANA, FL 32333

NEWMAN STEPHEN F AND SYLVIA B  
3020 LAKEVIEW PT RD  
QUINCY, FL 32351

NICHOLSON ANN F ( TRUSTEE )  
4297 MAYLOR LN  
TALLAHASSEE, FL 32308-5770

NICHOLSON ANN F (TRUSTEE)  
4297 MAYLOR LN  
TALLAHASSEE, FL 32308-5770

NICHOLSON ELIZABETH ANN TRUSTE  
ELIZABETH ANN NICHOLSON(% INT)  
IRREVOCABLE TRUST UTA 10/30/06 2822  
TAMPA, FL 33611

NICHOLSON MARK DURANT TRUSTEE  
MARK DURANT NICHOLSON (% INT)  
IRREVOCABLE TRUST UTA 10/30/06 1830  
TOMBALL, TX 77377-4115

QUINSEY MAURICE  
5663 HAVANA HWY  
HAVANA, FL 32333

RICH JOHN F JR  
61 RICH LN  
HAVANA, FL 32333

RICH LAWRENCE L SR  
536 RIVERVIEW RD  
HAVANA, FL 32333

RICHARDSON CLYDE FRANKLIN II &  
JENNIFER ANDES RICHARDSON  
1845 RIVERVIEW RD  
HAVANA, FL 32333

SEC OF VETERANS AFFAIRS  
3401 WEST END AVE  
SUITE 760W  
NASHVILLE, TN 37203

SKIPPER KENNETH W  
118 AUDUBON DR  
HAVANA, FL 32333

SOKOLOSKI KRISTIN E & JOSEPH M  
5635 HAVANA HWY  
HAVANA, FL 32333

SOLIS NICANDRO  
6577 HAVANA HWY  
HAVANA, FL 32333

STARON JOHN D & MARGARET J  
388 HONEYSUCKLE DR  
HAVANA, FL 32333

STEELE HIRDES & SHERRY  
1297 RIVERVIEW RD  
HAVANA, FL 32333

STRICKLAND JUSTIN  
305 HONEYSUCKLE DR  
HAVANA, FL 32333

SWAINE RICHARD S AND LINDA G  
304 9TH AVE W SUITE 18  
HAVANA, FL 32333

TALLAVANA HOMEOWNERS  
ASSOCIATION, INC.  
P O BOX 11143  
TALLAHASSEE, FL 32362

TAYLOR AMY A AND  
TAYLOR GLENN A  
662 TALLAVANA TRAIL  
HAVANA, FL 32333

TAYLOR SUSAN ANN AND ANDREW W  
929 RIVERVIEW RD  
HAVANA, FL 32333

THOMAS HEATHER KEANE  
P O BOX 552  
HYDE PARK, NY 12538-0552

TRUE BLUE PROPERTIES LLC  
2612 CENTENNIAL PLACE  
TALLAHASSEE, FL 32308

TRUE BLUE PROPERTIES LLC  
3055 HAWK LANDING DRIVE  
TALLAHASSEE, FL 32309

WARRINGTON ELIZABETH P ET AL  
192 AUDUBON DR  
HAVANA, FL 32333

WATSON PAUL T  
66 HONEYSUCKLE DR  
HAVANA, FL 32333

WHIPPLE TIMOTHY W & KAY L  
8609 FLA-GA HWY  
HAVANA, FL 32333

WILSON JULIE LANDRUM  
C/O JESSICA HULSEY  
225 HAWK RIDGE DR  
HAVANA, FL 32333-4146

WOLFE JOSEPH AND KIMBERLY  
438 HITSON RD  
QUINCY, FL 32352

WOODRUFF BERMAN LEE  
227 AUDUBON DR  
HAVANA, FL 32333

WRIGHT CHARLES E SR & MARY ANN  
624 TALLAVANA TRL  
HAVANA, FL 32333

YARBOROUGH JAMES AND REESA  
20 AUDUBON DRIVE  
HAVANA, FL 32333

# Sign in Sheet

Gadsden County – Citizen's Bill of Rights Meeting  
 Wednesday, February 19, 2020 at 5:00 PM  
 Havana Public Library at 203 5th Ave E, Havana, FL 32333

Special Use Application for New 250 ft. Telecommunications Tower & Facility on  
 Havana Highway in Gadsden County, Florida  
 (Property ID # 3-06-2N-2W-0000- 00220-0000).

Print Name	Address	Phone
Nancy Brown	POB 823 Havana FL <sup>when fresh</sup>	(850) 539 5486
MICHAEL KINNETT	557 RIVERVIEW RD HAVANA	850-323-0115
Billie Kinnett	" " "	" " "
KEITH GAINES	96 Honeysuckle Dr. Havana	850-459-0955
Brenda Gaines	" " "	" " "
Paul Watson	66 Honeysuckle Dr. Havana	850 566 2541
Sterling Colson	5603 Havana Hwy	850-545-6132
Carol Porter	1266 Chaf Chaux Rd, Quincy	850-627-6248
E.A. Porter	" "	"
KIRBY PALM	3 WANDA'S WAY HAVANA FL 32333	850-539-7775
WANDA PALM	3 WANDA'S WAY HAVANA FL 32333	(850) 539-7775
JIM MAXWELL	158 AUDUBON DR.	850-544-3445
Doug Cruley	255 Longview Dr.	(850) 508-6377

## **Citizen's Bill of Rights Meeting - Havana North**

**DATE:** February 19, 2020

**LOCATION:** Havana Public Library, 203 5th Avenue E., Havana, Florida

**CONVENED:** 5:00 PM

**ADJOURNED:** 6:00 PM

### **DOCUMENTS PROVIDED FOR PUBLIC REVIEW:**

1. Aerial Map and Site Information from Gadsden County Property Appraiser
2. Proposed Site Plans
3. RF Engineering Support Materials
4. Tower Site Candidate Location Analysis
5. CBOR Meeting notices - published and mailed

### **IN ATTENDANCE:**

1. Robert Volpe, Hopping Green & Sams (Agent of Applicant)
2. Nancy Brown
3. Michael Kinnett
4. Keith Gaines
5. Brenda Gaines
6. Paul Watson
7. Sterling Colvin
8. Carol Porter
9. E.A. Porter
10. Kirby Palm
11. Wanda Palm
12. Jim Maxwell
13. Doug Croley

### **QUESTIONS OR CONCERNS RAISED DURING MEETING:**

1. Who does Hopping Green & Sams, P.A. represent?
2. What is the name of the company that will be submitting the application?
3. What carrier will be located on the tower?
4. Does the applicant have access?
5. Have environmental matters been addressed?
  - a. Mr. Croley stated that there were gopher tortoises in the proposed right of way, that there is a bald eagle's nest within one mile of the site, and that there are indigo snakes on the property.
6. There is a steep gradient on the site.
7. Mr. Croley stated that the community needs a tower.
8. Mr. Croley suggested moving the tower north on the property.

9. Mr. Croley mentioned that a variance will be required as the site is within ½ mile from a Rural Residential use.
10. Attendees asked about the tower design.
11. Mr. Croley asked about the generator. How often does it run? How much noise does it generate?
12. A citizen asked about lighting on the tower.
13. A citizen was concerned about health effects of the signal coming off the tower.
14. One citizen asked about lighting requirements for airports.
15. Mr. Colvin mentioned that he was in favor of having good cell service.
16. Mr. Croley mentioned relocating the proposed site further north, to a site with less gradient, more behind Mr. Colvin's property.

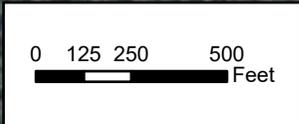
**OTHER TOPICS DISCUSSED:**

1. Mr. Croley stated that it is better to work with the community than against it, and that Mr. Volpe should remind the applicant of this.
2. Mr. Croley suggested that the Gadsden County property appraiser is considering taxing income from cell towers, and that Mr. Volpe should relay this to the property owner.
3. Mr. Croley suggested that the applicant should compensate neighbors for tapping into their powerline.

**MINUTES PREPARED BY:** Robert Volpe

**SIGNATURE:** \_\_\_\_\_





**Project Location**

REC #1 - Historic Agricultural Use  
(Site Wide)

Approx adjusted  
Croley location

750' from  
County Road

Approximate Location of Wetlands

Havana Highway  
Parcel #: 3-06-2N-2W-000-0020-0000  
Havana, FL 32333  
Gadsden County

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Prepared For:

# Aerial Map

Havana Highway US-FL-5052  
Havana, Florida 32333

Figure  
2

Prepared By: Raleigh Office  
2000 Regency Parkway Ste 295  
Cary, NC 27518  
T: 919.439.8461  
www.maserconsulting.com

Date: 9/4/2019	MC Project #: 19983002A	Drawn By: AAP
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— Project Boundary

Wetlands

Page 185 of 353



**Jill Jeglie**

---

**From:** Antietam Wireless Services, LLC <info@antietam-wireless.com>  
**Sent:** Monday, July 27, 2020 9:15 PM  
**To:** 'Mark Nicholson'; robertv@hgslaw.com  
**Cc:** 'ann nicholson'; 'Beth Nicholson'; Jill Jeglie  
**Subject:** RE: Survey Information for Nicholson Property Parcel #3-06-2N-2W-0000-00220-0000

Mark –

We have been able to successfully close the corners of the property in our boundary survey and have submitted same to the County today for Preliminary Approval. Once the process has been completed, I would be happy to share a copy of the survey with you as I believe in one of our earlier conversations, you mentioned problems with the boundary corners relating to your property and adjacent properties.

Michael

**RECEIVED**

**JUL 27 2020**

**PLANNING & ZONING**

Thank you.

Michael Shine  
 Antietam Wireless Services, LLC  
 103 Carnegie Center  
 Suite 300  
 Princeton, NJ 08540  
 Phone – (973) 454-0302  
 Fax – (732) 783-0297  
[www.antietam-wireless.com](http://www.antietam-wireless.com)

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**From:** Mark Nicholson <[mdnski@yahoo.com](mailto:mdnski@yahoo.com)>  
**Sent:** Monday, July 27, 2020 9:48 AM  
**To:** [robertv@hgslaw.com](mailto:robertv@hgslaw.com); Michael Shine <[mshine@siteidinc.com](mailto:mshine@siteidinc.com)>  
**Cc:** ann nicholson <[afnicholson13@aol.com](mailto:afnicholson13@aol.com)>; Beth Nicholson <[m.missy@gmail.com](mailto:m.missy@gmail.com)>; [jjeglie@gadsdencountyfl.gov](mailto:jjeglie@gadsdencountyfl.gov)  
**Subject:** Survey Information for Nicholson Property Parcel #3-06-2N-2W-0000-00220-0000

Dear Robert and Michael,

I am reviewing the survey sent by Michael Shine as we received notice of a hearing on Thursday, August 13 and Tuesday September 10 regarding the proposed construction of a cell phone tower.

I wanted to inform you that Ann Nicholson's property has a recent survey (Tom Skipper 2014). The topographic survey you provided was constructed from a deed description that is not an actual survey, as mentioned in the notes. You can contact Ann Nicholson or Tom Skipper in Quincy to get the correct survey to work from as there are major differences between the deed description and the actual survey.

Additionally, the adjacent landowners to the west (B&K Farms and Doug Croley) also have a survey (Nobles Consulting Group - NCG, 2003/2015) that differs from the Skipper 2014 survey. The Nicholson property shares a common boundary line with the B&K Farms property, and this line also extends to the Croley property. The Skipper survey ties into all adjacent surveys, parcels, landowners, FDOT surveys and Florida Power surveys. The NCG does not tie into the aforementioned surveys. This boundary line issue has not been resolved between

the Nicholson party and B&K Farms/Croley party. The differences between these surveys could create confusion regarding the survey provided by Antietam Wireless Services.

I bring this to your attention as the topographic survey of the tower pad site is either closer or further from the property lines of parcels with residences noted and either further or closer to parcels located in the Rural Residential Future Land Use category.

Please let me know if you need additional information.

Thank you,  
Mark Nicholson

## PROJECT NOTES

- SITE INFORMATION OBTAINED FROM THE FOLLOWING:
  - PLAN ENTITLED "CELL SITE SURVEY" PREPARED BY MASER CONSULTING, PA OF MT. LAUREL, NJ LAST REVISED 8/12/19.
  - LIMITED FIELD OBSERVATION BY MASER CONSULTING ON 04/05/19.
- THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE CODES, ORDINANCES, LAWS AND REGULATIONS OF ALL MUNICIPALITIES, UTILITY COMPANIES OR OTHER PUBLIC/GOVERNING AUTHORITIES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTIONS THAT MAY BE REQUIRED BY ANY FEDERAL, STATE, COUNTY OR MUNICIPAL AUTHORITIES.
- THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION MANAGER, IN WRITING, OF ANY CONFLICTS, ERRORS OR OMISSIONS PRIOR TO THE SUBMISSION OF BIDS OR PERFORMANCE OF WORK.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING SITE IMPROVEMENTS PRIOR TO COMMENCING CONSTRUCTION. THE CONTRACTOR SHALL REPAIR ANY DAMAGE AS A RESULT OF CONSTRUCTION OF THIS FACILITY AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER.
- THE SCOPE OF WORK FOR THIS PROJECT SHALL INCLUDE PROVIDING ALL MATERIALS, EQUIPMENT AND LABOR REQUIRED TO COMPLETE THIS PROJECT. ALL EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- THE CONTRACTOR SHALL VISIT THE PROJECT SITE PRIOR TO SUBMITTING THE BID TO VERIFY THAT THE PROJECT CAN BE CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND CONSTRUCTION DRAWINGS.
- THE CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS PRIOR TO COMMENCING ANY WORK. ALL DIMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THESE DRAWINGS MUST BE VERIFIED. THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION MANAGER OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.
- SINCE THE CELL SITE MAY BE ACTIVE, ALL SAFETY PRECAUTIONS MUST BE TAKEN WHEN WORKING AROUND HIGH LEVELS OF ELECTROMAGNETIC RADIATION. EQUIPMENT SHOULD BE SHUTDOWN PRIOR TO PERFORMING ANY WORK THAT COULD EXPOSE THE WORKERS TO DANGER. PERSONAL RF EXPOSURE MONITORS ARE REQUIRED TO BE WORN TO ALERT OF ANY POTENTIALLY DANGEROUS EXPOSURE LEVELS.
- THE PROPOSED FACILITY WILL CAUSE AN INSIGNIFICANT OR "DE-MINIMUS" INCREASE IN STORM WATER RUNOFF, THEREFORE, NO DRAINAGE STRUCTURES ARE PROPOSED.
- NO NOISE, SMOKE, DUST OR ODOR WILL RESULT FROM THIS FACILITY AS TO CAUSE A NUISANCE.
- THE FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION (NO HANDICAP ACCESS IS REQUIRED).
- THE FACILITY DOES NOT REQUIRE POTABLE WATER OR SANITARY SERVICE.
- CONTRACTOR SHALL VERIFY ANTENNA ELEVATION AND AZIMUTHS WITH RF ENGINEERING PRIOR TO INSTALLATION.
- ALL STRUCTURAL ELEMENTS SHALL BE HOT DIPPED GALVANIZED STEEL.
- CONTRACTOR MUST FIELD LOCATE ALL EXISTING UNDERGROUND UTILITIES PRIOR TO ANY EXCAVATION.
- CONSTRUCTION SHALL NOT COMMENCE UNTIL COMPLETION OF A PASSING STRUCTURAL ANALYSIS CERTIFIED BY A LICENSED PROFESSIONAL ENGINEER. THE STRUCTURAL ANALYSIS IS TO BE PERFORMED BY OTHERS.
- CONTRACTOR SHALL CONTACT STATE SPECIFIC ONE CALL SYSTEM THREE WORKING DAYS PRIOR TO ANY EARTH MOVING ACTIVITIES.



# SITE NAME: HAVANA HIGHWAY SITE NUMBER: US-FL-5052 PROPOSED 250' SELF SUPPORT TOWER

HAVANA HIGHWAY  
HAVANA, FL 32333  
GADSDEN COUNTY



## PROJECT INFORMATION

### SITE INFORMATION

LATITUDE: N 30° 36' 18.8"  
LONGITUDE: W 84° 28' 50.3"  
GROUND ELEVATION: 159.1'  
JURISDICTION: GADSDEN COUNTY  
ZONING DISTRICT: AGRICULTURE 3  
PARCEL #: 3-06-2N-2W-0000-00220-0000

### APPLICANT/LESSEE

COMPANY: VERTICAL BRIDGE DEVELOPMENT, LLC  
ADDRESS: 750 PARK OF COMMERCE DRIVE  
CITY, STATE, ZIP: BOCA RATON, FL 33487

### SITE ACQUISITION

COMPANY: SITE ID, INC.  
ADDRESS: 103 CARNEGIE CENTER, SUITE 300  
CITY, STATE, ZIP: PRINCETON, NJ 08540  
CONTACT: MICHAEL SHINE  
E-MAIL: MSHINE@SITEIDINC.COM

### ENGINEERING COMPANY

COMPANY: MASER CONSULTING P.A.  
ADDRESS: 2000 MIDLANTIC DRIVE, SUITE 100  
CITY, STATE, ZIP: MT. LAUREL, NJ 08054  
CONTACT: MATTHEW GRAUBART, P.E.  
PHONE: (856) 797-0412  
E-MAIL: MGRAUBART@MASERCONSULTING.COM

### PROPERTY OWNER:

NAME: ANN F. NICHOLSON (TRUSTEE)  
ADDRESS: 4297 MAYLOR LANE  
CITY, STATE, ZIP: TALLAHASSEE, FL 32308-5770

## LOCATION INFORMATION

### POWER PROVIDER

NAME: TALQUIN ELECTRIC  
PHONE: (850) 627-9666

### TELEPHONE PROVIDER:

NAME: AT&T  
PHONE: 1-(888) 855-2338

### POLICE

NAME: HAVANA POLICE DEPARTMENT  
ADDRESS: 121 17TH AVENUE EAST  
CITY, STATE, ZIP: HAVANA, FL 32333-1068  
PHONE: (850) 539-2801

### FIRE

NAME: COONBOTTOM VOLUNTEER FIRE DEPT.  
ADDRESS: 4838 FAIRBANKS FERRY ROAD  
CITY, STATE, ZIP: HAVANA, FL 32333  
PHONE: (850) 539-4693

IN CASE OF EMERGENCY, CALL 9-1-1

## CODE COMPLIANCE

ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THE LATEST EDITIONS OF THE FOLLOWING CODES.

- |   |  |
|---|--|
| 1. 2017 FLORIDA BUILDING CODE, SIXTH EDITION        | 8. INSTITUTE FOR ELECTRICAL AND ELECTRONICS ENGINEERS 81 IEEE C2 LATEST EDITION                                |
| 2. 2014 NATIONAL ELECTRICAL CODE - NFPA 70          | 9. TELCORDIA GR-1275   |
| 3. 2017 FLORIDA FIRE PREVENTION CODE, SIXTH EDITION | 10. ANSI T1.311  |
| 4. AMERICAN INSTITUTE OF STEEL CONSTRUCTION 360-10  | 11. PROPOSED USE: UNMANNED TELECOM FACILITY  |
| 5. AMERICAN CONCRETE INSTITUTE                      | 12. HANDICAP REQUIREMENTS: FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. HANDICAPPED ACCESS NOT REQUIRED. |
| 6. TIA-222-G  | 13. CONSTRUCTION TYPE: IIB   |
| 7. TIA 607 FOR GROUNDING                            | 14. USE GROUP: U   |

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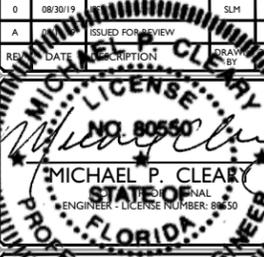
New Jersey	New York	Florida	Pennsylvania
• Clinton	• New Windsor	• Tampa	• Allentown
• Hamilton	• Westchester	• Orlando	• Philadelphia
• Englewood	• North Carolina	• Jacksonville	• Pittsburgh
• Monmouth	• Charlotte	• Virginia	• Tennessee
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SCALE: AS SHOWN JOB NUMBER: 19983002A

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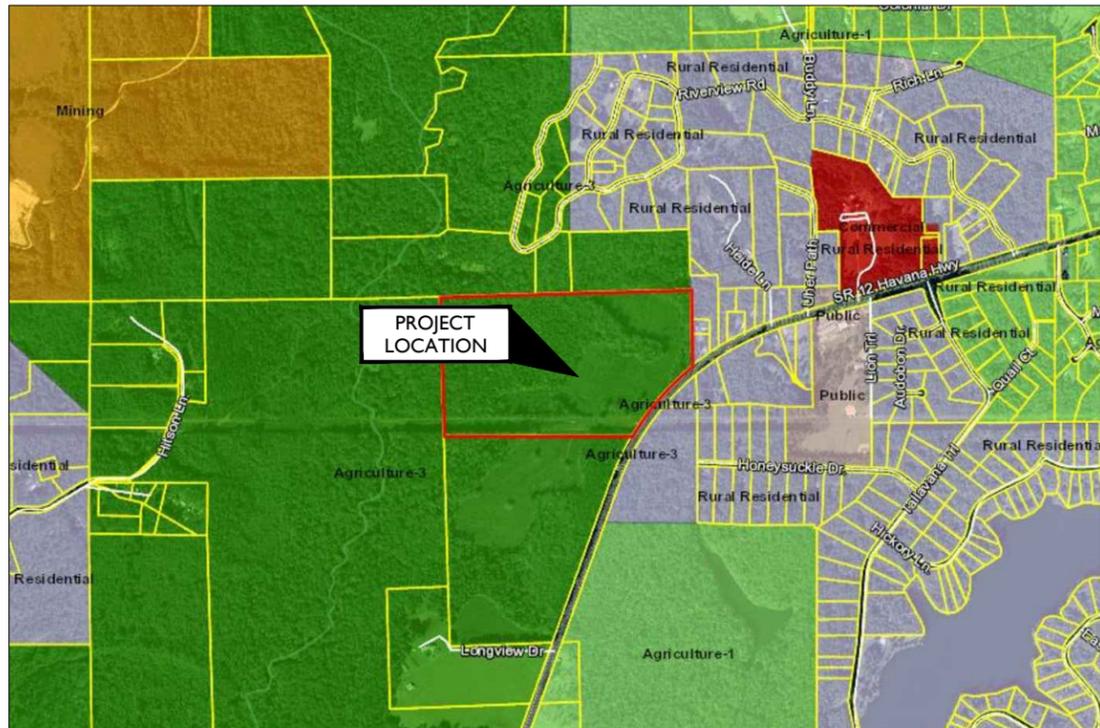
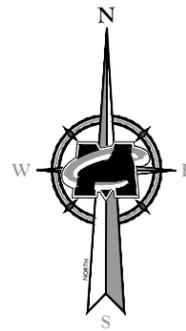
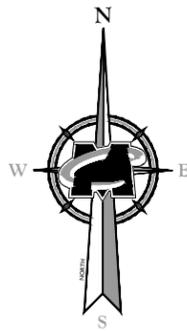
### SITE NAME:

HAVANA HIGHWAY  
US-FL-5052  
HAVANA HIGHWAY  
HAVANA, FL 32333  
GADSDEN COUNTY

MT. LAUREL OFFICE  
2000 Midlantic Drive  
Suite 100  
Mount Laurel, NJ 08054  
Phone: 856.797.0412  
Fax: 856.722.1120

TITLE SHEET

Page 189 of 353



**LEGEND**

- Parcels
- Roads (Local)
- Roads (Major)
- Future Land Use
  - Agric
  - Agriculture-1
  - Agriculture-2
  - Agriculture-3
  - Commercial
  - Conservation
  - Heavy Industrial
  - Historical
  - Lake
  - Light Industrial
  - Mining
  - Municipal
  - Public/Institutional
  - Recreational
  - Rural Residential
  - Silviculture
  - Urban Service Area
- Streams and Rivers (Large)

**ZONING MAP**



SCALE: 1" = 1000' FOR 22"X34"  
 (SCALE: 1" = 2000' FOR 11"X17")

**TAX MAP**



SCALE: 1" = 500' FOR 22"X34"  
 (SCALE: 1" = 1000' FOR 11"X17")



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• Norfolk	• Virginia	• Tennessee	• Knoxville
• Ft. Lauderdale	• Virginia	• Memphis	• Nashville
• Maryland	• New Mexico	• Norfolk	• Texas
• Columbus	• Albuquerque	• Norfolk	• Dallas
		• Norfolk	• Houston
		• Norfolk	• San Antonio

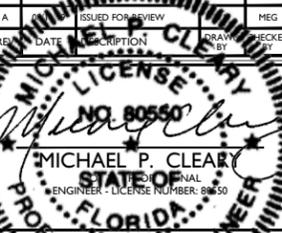
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 Call before you dig.  
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SCALE: AS SHOWN JOB NUMBER: 19983002A

NO.	DATE	DESCRIPTION	DRAWN BY	CHECKED BY
0	08/30/19		SLM	MEG
A		ISSUED FOR REVIEW		MEG



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**SITE NAME:**  
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 US-FL-5052  
 HAVANA HIGHWAY  
 HAVANA, FL 32333  
 GADSDEN COUNTY

**MT. LAUREL OFFICE**  
 2000 Midlantic Drive  
 Suite 100  
 Mount Laurel, NJ 08054  
 Phone: 856.797.0412  
 Fax: 856.722.1120

**ZONING INFORMATION**

**Page 190 of 353**

VICINITY MAP



PROJECT LOCATION

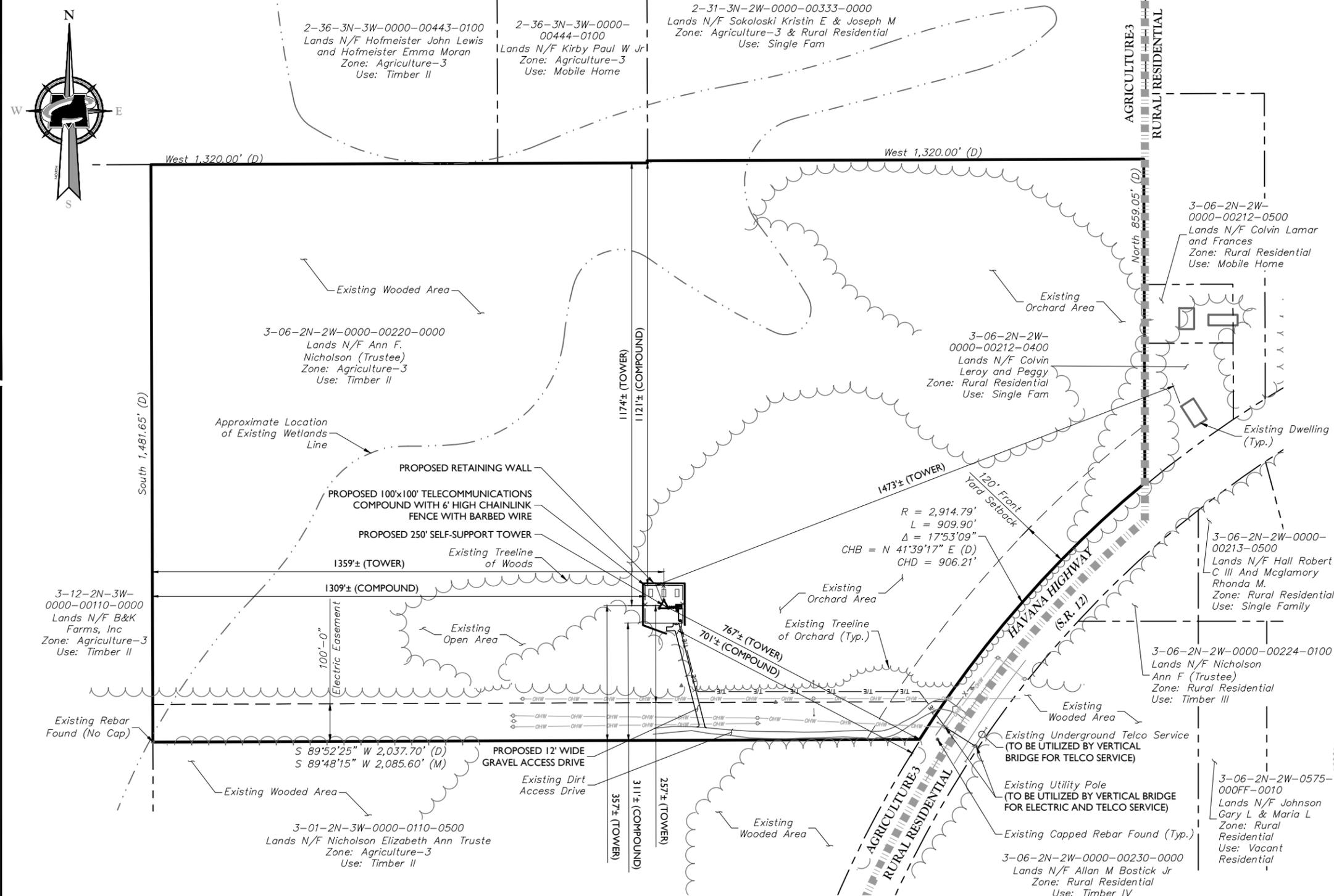
PROJECT NOTES

- THIS PROPOSAL IS FOR AN UNMANNED TELECOMMUNICATIONS FACILITY CONSISTING OF THE PLACEMENT OF PANEL ANTENNAS ON A PROPOSED SELF SUPPORT TOWER AND EQUIPMENT CABINETS AND ASSOCIATED APPURTENANCES IN A PROPOSED FENCED AREA.
- EXTERIOR SIGNS ARE NOT PROPOSED EXCEPT AS REQUIRED BY THE FCC.
- TOTAL AREA OF DISTURBANCE UNDER THIS PROPOSAL: 26,200± S.F.
- RUBBISH, STUMPS, DEBRIS, STICKS, STONES AND OTHER REFUSE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF LEGALLY.
- CONTRACTOR SHALL CONTACT STATE SPECIFIC ONE CALL SYSTEM THREE WORKING DAYS PRIOR TO ANY EARTH MOVING ACTIVITIES.
- POWER TO THE FACILITY WILL BE MONITORED BY A SEPARATE METER.
- SUBCONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS & INSPECTIONS REQUIRED FOR CONSTRUCTION.
- SUBCONTRACTOR SHALL DETERMINE EXACT ROUTE OF ANY UNDERGROUND CONDUIT, IF REQUIRED.
- THIS PROJECT WILL NOT REQUIRE STREETS OR PROPERTY TO BE DEDICATED FOR PUBLIC USE.
- THIS PROJECT WILL NOT REQUIRE PERMANENT MONUMENTS.
- ACCORDING TO THE FEMA FLOOD INSURANCE RATE MAPS OF GADSDEN COUNTY, FL (ALL JURISDICTIONS), PANEL 251 OF 383, MAP 12039C0251C DATED FEBRUARY 4, 2009, ALL PROPOSED IMPROVEMENTS ARE LOCATED WITHIN ZONE X - AREAS DETERMINED TO BE OUTSIDE THE 500 YEAR FLOODPLAIN.
- THE PROPOSED INSTALLATION WILL GENERATE ONE (1) VEHICLE TRIP FOR ROUTINE MAINTENANCE EVERY FOUR (4) TO SIX (6) WEEKS.
- DISTANCE TO NEAREST TOWERS:

OWNER	TYPE	HEIGHT	DIRECTION	DISTANCE
SBA TOWERS	LATTICE	230'	NE	6.2 MILES
AMERICAN TOWERS	LATTICE	250'	E	3.4 MILES
SBA TOWERS	LATTICE	200'	SW	4.3 MILES
ITT / AIRPORT	LATTICE	115'	W	4.2 MILES
- DISTANCE FROM SUBJECT PROPERTY TO LAND THAT IS DESIGNATED RURAL RESIDENTIAL: (FROM PROPERTY LINE / FROM BASE OF TOWER)

OWNER: COLVIN LEROY AND PEGGY (0 FT / 1,319± FT)  
 OWNER: COLVIN LAMAR AND FRANCES (0 FT / 1,455± FT)  
 OWNER: SOKOLOSKI KRISTIN E AND JOSEPH M (0 FT / 1,180± FT)
- DISTANCE FROM SUBJECT PROPERTY TO LAND THAT IS DESIGNATED RURAL RESIDENTIAL ON EAST SIDE OF HAVANA HIGHWAY (FROM PROPERTY LINE / FROM BASE OF TOWER)

OWNER: BOSTICK ALLAN M. JR (140 FT / 906± FT)  
 OWNER: NICHOLSON ANN F (TRUSTEE) (140 FT / 1,102± FT)  
 OWNER: HALL ROBERT C III AND MCGLAMORY RHONDA M. (140 FT / 1,440± FT)



- LEGEND**
- Existing Subject Property Line
  - Existing Subject Property Setback Line
  - Existing Adjoining/Adjacent Property Line
  - Existing Edge of Pavement/Road
  - Existing Structure
  - Existing Tree Line
  - Existing Zoning Boundary
  - Existing Features
  - Existing Easement
  - PROPOSED ROAD
  - PROPOSED CHAIN LINK FENCE
  - PROPOSED FEATURES
  - PROPOSED UNDERGROUND ELECTRIC/TELCO UTILITY LINES

BULK STANDARDS FOR AGRICULTURE 3 (SECTION 5203)				
PROPOSED USE: COMMUNICATION TOWER (PERMITTED)				
DESCRIPTION	REQUIRED	EXISTING	PROPOSED	REMARKS
MINIMUM LOT AREA	43,560 SF (1 ACRE)	87.82± ACRES	NO CHANGE	CONFORMING
MAXIMUM IMPERVIOUS SURFACE RATIO	0.750	N/A	0.004±	CONFORMING
MINIMUM SETBACK FROM RIGHT OF WAY LINE	120 FEET	N/A	701± FEET	CONFORMING
BULK STANDARDS COMMUNICATION TOWERS (SECTION 5800)				
MINIMUM FRONT YARD*	750 FEET	N/A	767± FEET	CONFORMING
MINIMUM SIDE YARD (AGGREGATE)	0 FEET	N/A	357± FEET	CONFORMING
MINIMUM REAR YARD	0 FEET	N/A	1,359± FEET	CONFORMING
MINIMUM SETBACK TO RESIDENTIAL USE**	1,750 FEET	N/A	1,473± FEET	NON-CONFORMING
MAXIMUM HEIGHT OF COMMUNICATION TOWER	250 FEET	N/A	250 FEET	CONFORMING
MINIMUM HEIGHT OF COMMUNICATION TOWER FENCING	6 FEET	N/A	6 FEET	CONFORMING

\* FRONT YARD SETBACK DISTANCE TO SR12 = 3 TIMES THE HEIGHT OF TOWER (3 \* 250 FEET = 750 FEET)  
 \*\* RESIDENTIAL SETBACK IS 7 TIMES THE HEIGHT OF TOWER (7 \* 250 FEET = 1,750 FEET)

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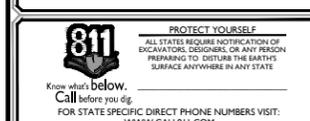
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 STATE OF FLORIDA  
 PROFESSIONAL ENGINEER

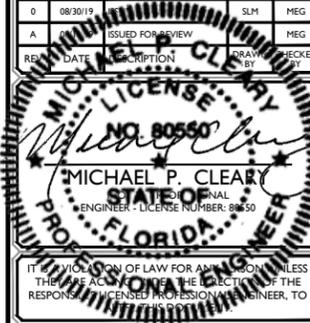
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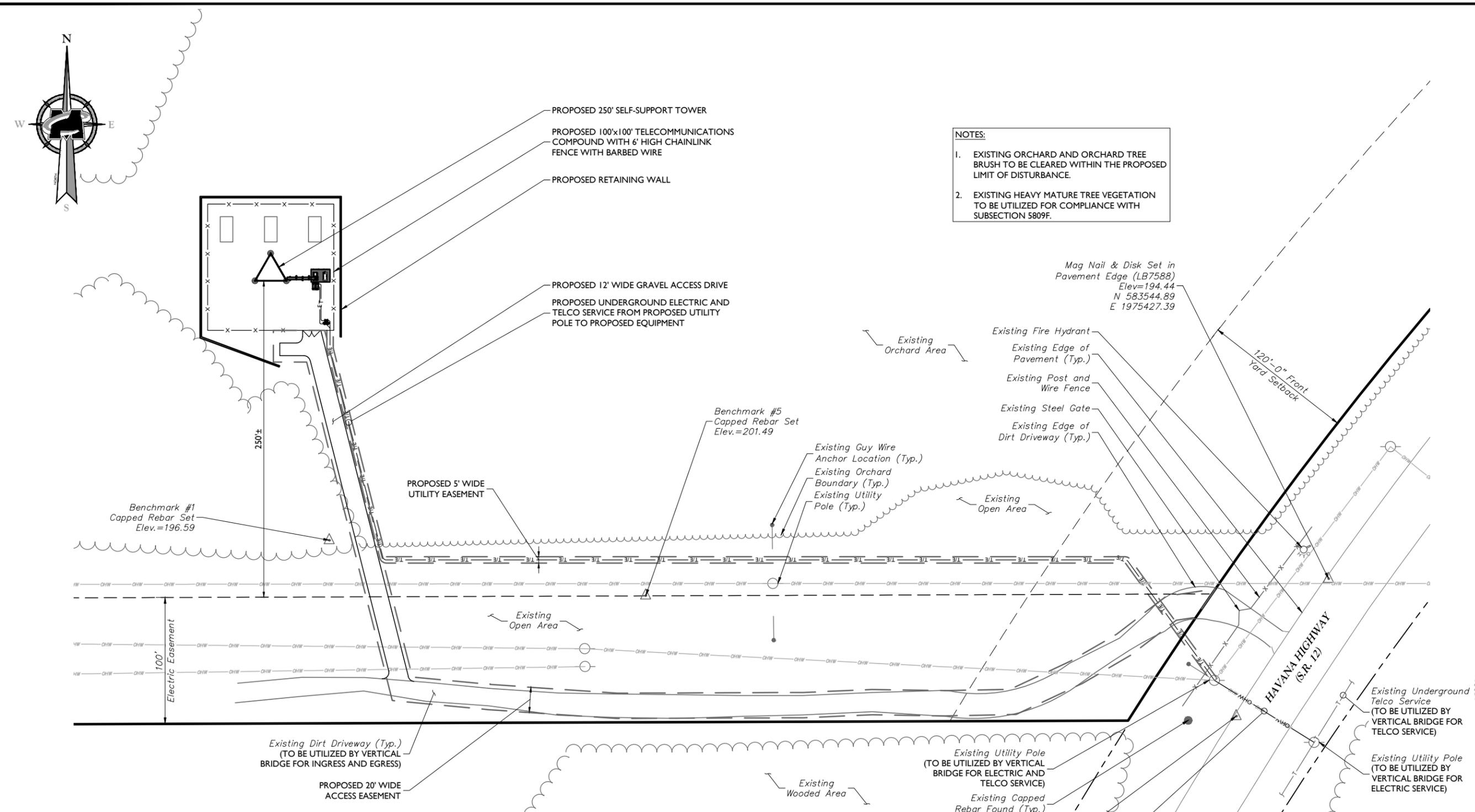


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**HAVANA HIGHWAY  
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SHEET TITLE:  
**PARTIAL SITE PLAN**

SHEET NUMBER:  
**Page 192 of 353**



- NOTES:**
- EXISTING ORCHARD AND ORCHARD TREE BRUSH TO BE CLEARED WITHIN THE PROPOSED LIMIT OF DISTURBANCE.
  - EXISTING HEAVY MATURE TREE VEGETATION TO BE UTILIZED FOR COMPLIANCE WITH SUBSECTION 5809F.

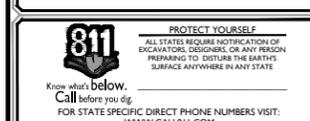
**PARTIAL SITE PLAN**  
 SCALE: 1" = 40' FOR 22"X34"  
 (SCALE: 1" = 80' FOR 11"X17")

**LEGEND**

	Existing Subject Property Line
	Existing Subject Property Setback Line
	Existing Adjoining/Adjacent Property Line
	Existing Edge of Pavement/Road
	Existing Structure
	Existing Tree Line
	Existing Features
	Existing Easement
	PROPOSED ROAD
	PROPOSED CHAIN LINK FENCE
	PROPOSED FEATURES
	PROPOSED UNDERGROUND ELECTRIC/TELCO UTILITY LINES

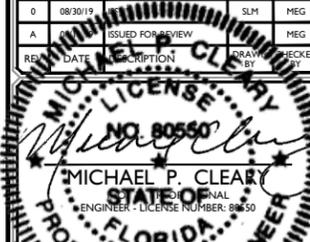
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A			MEG



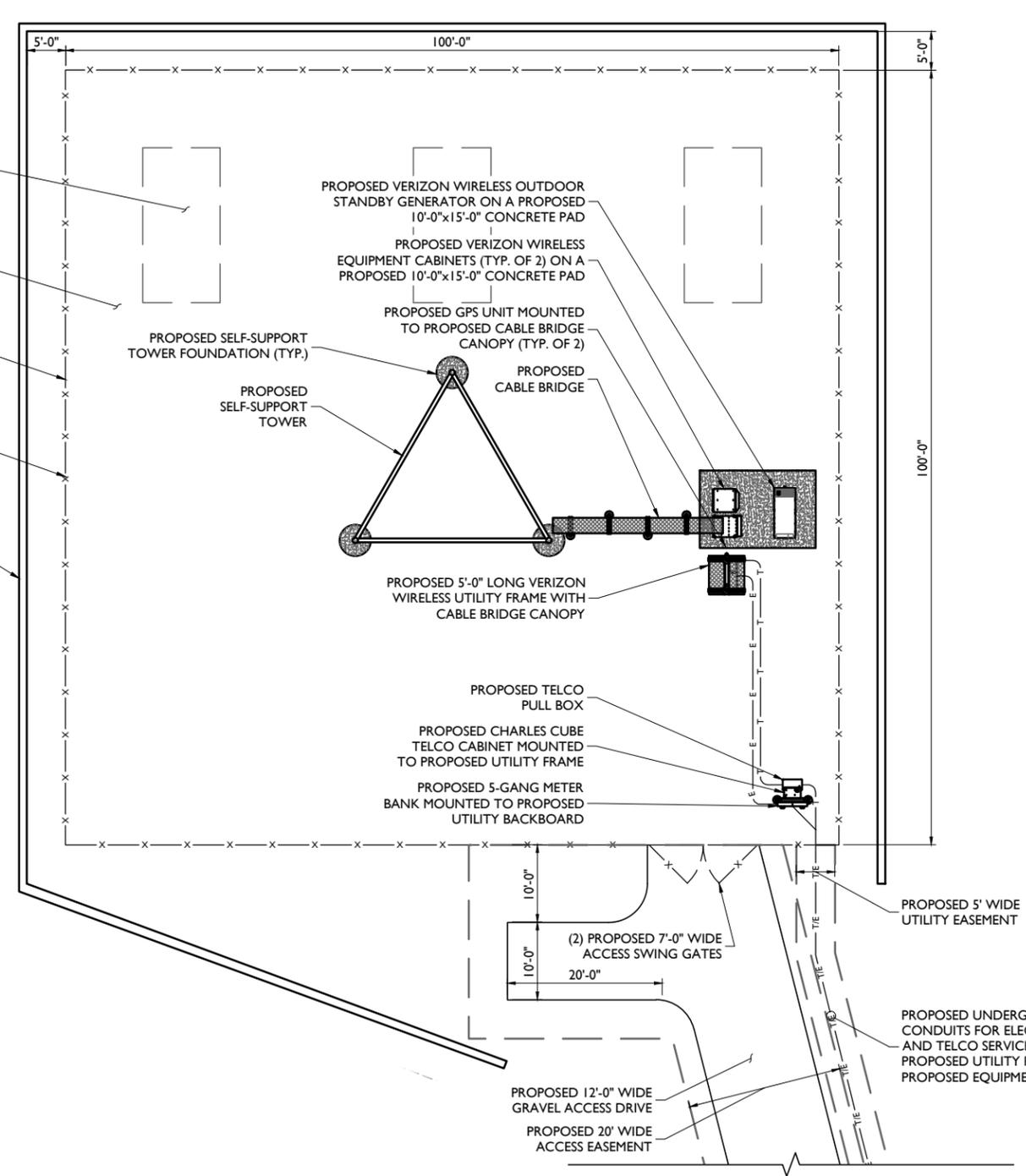
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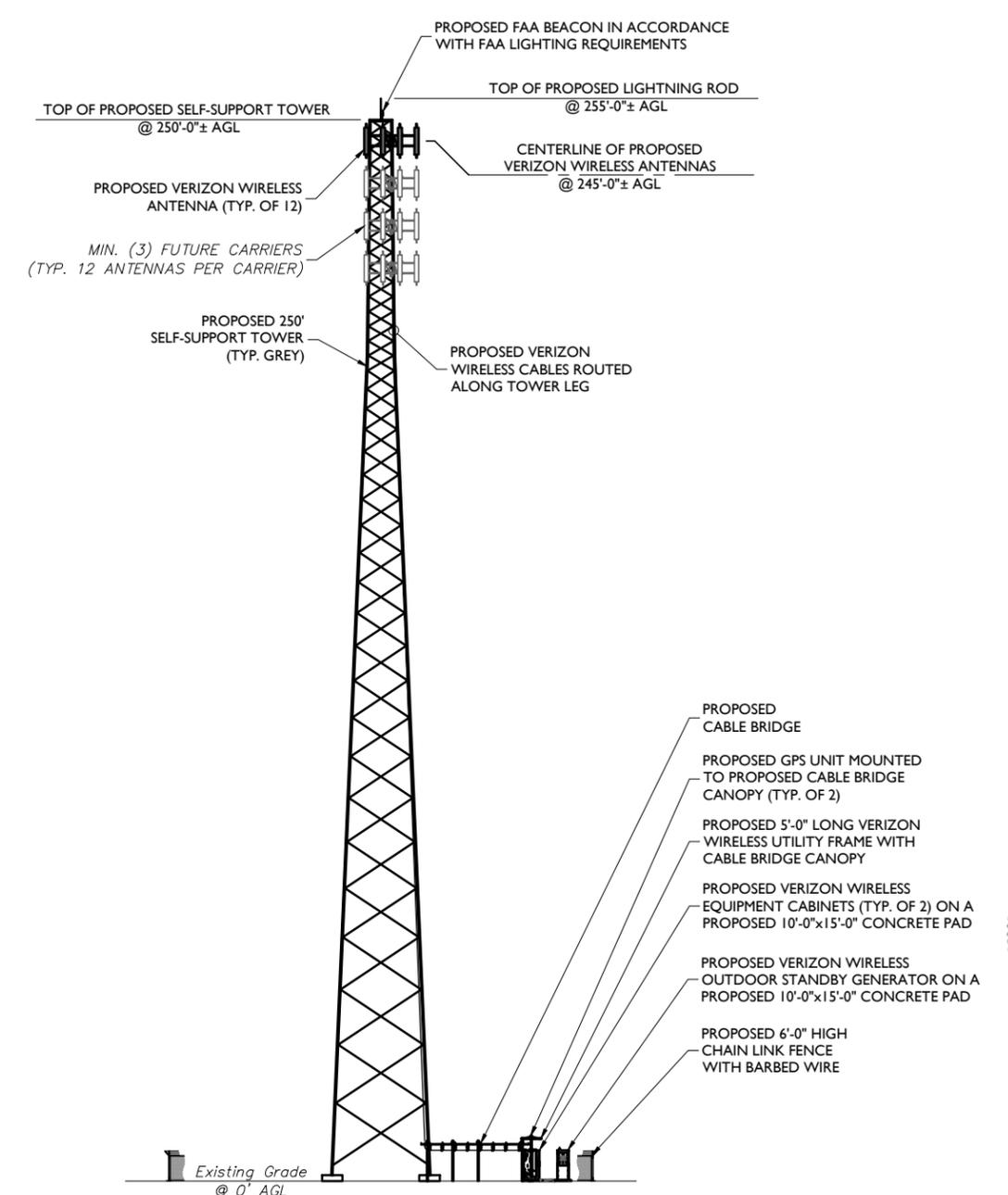
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SHEET TITLE:  
 COMPOUND PLAN AND  
 ELEVATION VIEW

SHEET NUMBER:  
 Page 194 of 353



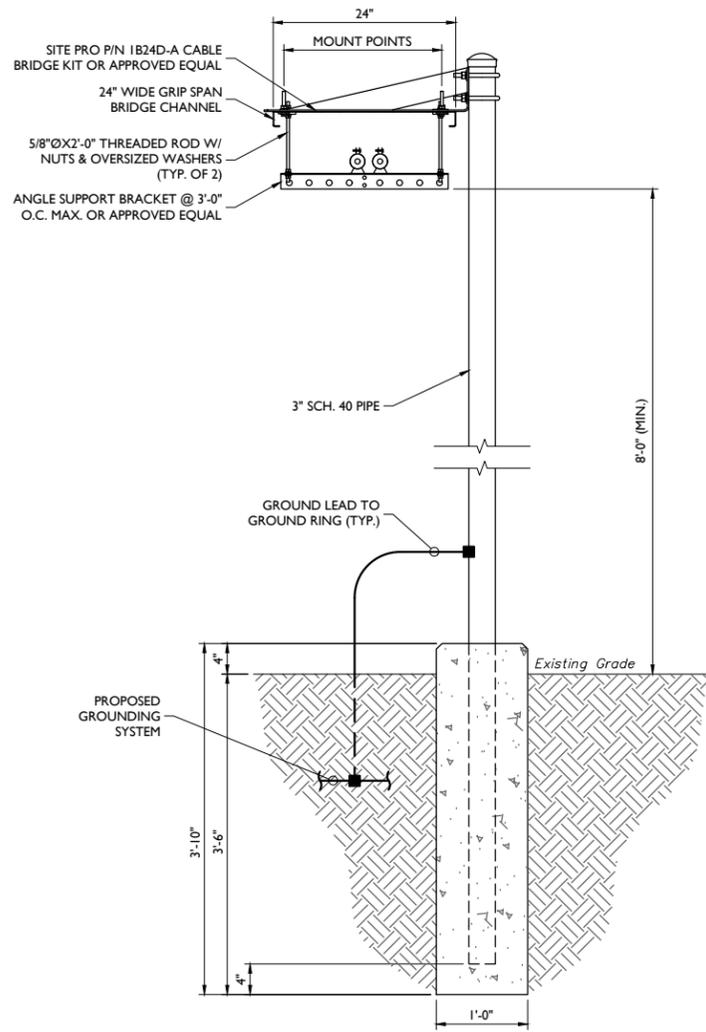
**COMPOUND PLAN**  
 SCALE : 1" = 10' FOR 22"x34"  
 (SCALE : 1" = 20' FOR 11"x17")



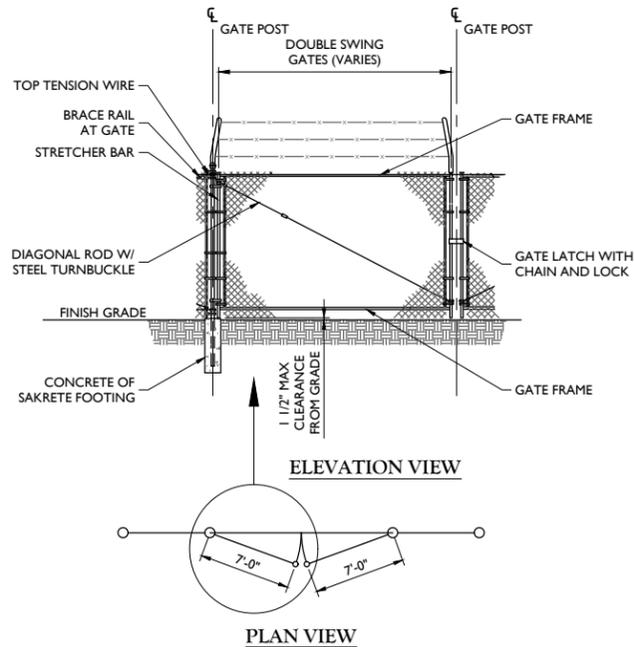
**ELEVATION PLAN**  
 SCALE : 1" = 20' FOR 22"x34"  
 (SCALE : 1" = 40' FOR 11"x17")

NOTE:  
 TOWER SHALL BE LIT IN ACCORDANCE WITH FAA REQUIREMENTS INCORPORATING DAY WHITE/NIGHT RED SYSTEM.

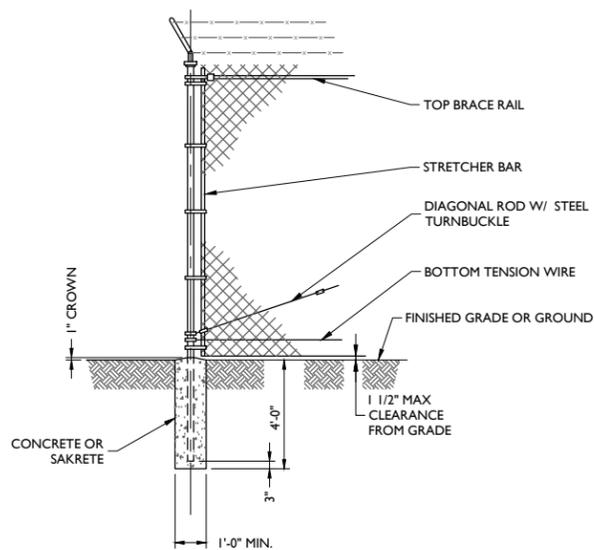
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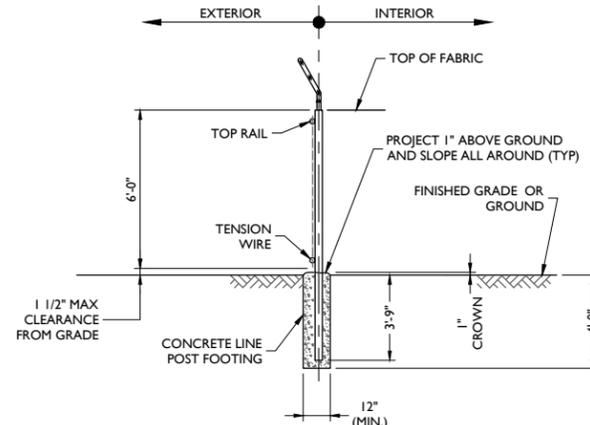
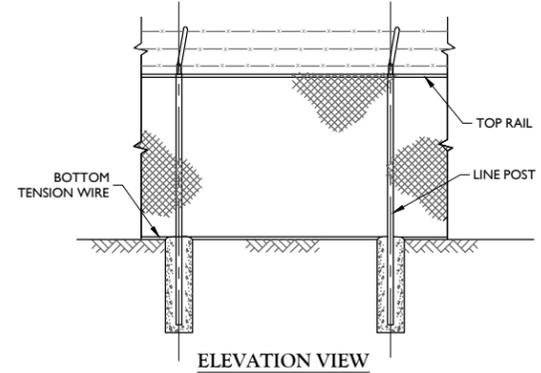
**CABLE BRIDGE DETAIL**  
NOT TO SCALE



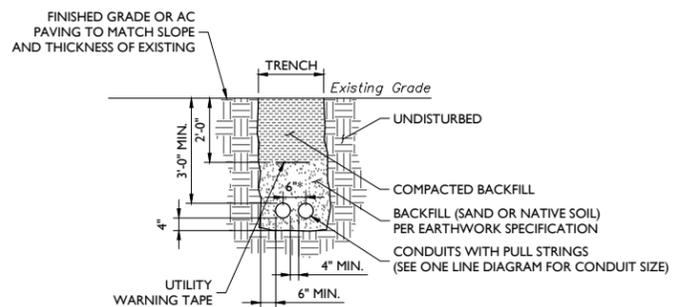
**CHAIN LINK SWING GATE, DOUBLE**  
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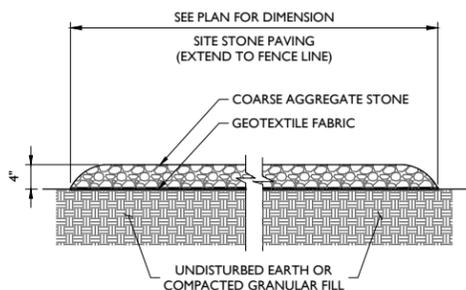
**CHAIN LINK CORNER, GATE, END, OR PULL POST**  
NOT TO SCALE



**CHAIN LINK FENCE DETAIL**  
NOT TO SCALE



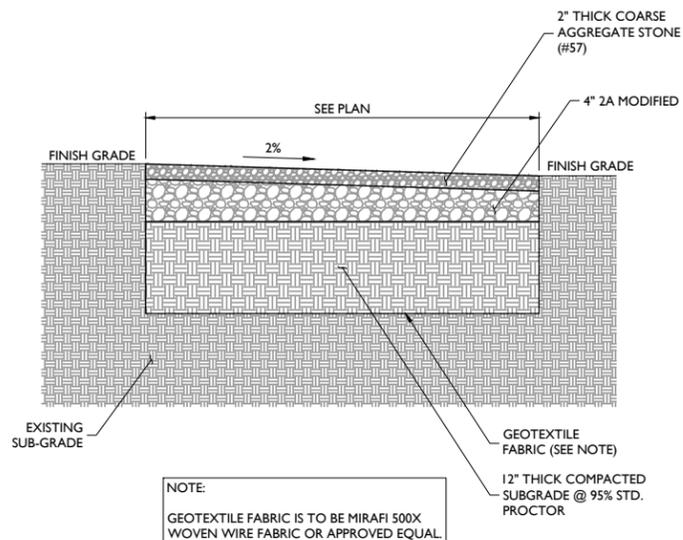
**UTILITY CONDUIT RUN**  
NOT TO SCALE



**GRAVEL SURFACING**  
NOT TO SCALE

**FENCE NOTES:**

- GATE POST, CORNER, TERMINAL OR PULL POST SHALL BE 3"Ø SCHEDULE 40 FOR GATE WIDTHS UP THROUGH 7 FEET OR 14 FEET FOR DOUBLE SWING GATE PER ASTM-F1083.
- LINE POST: 2-3/8"Ø SCHEDULE 40 PIPE PER ASTM-F1083.
- GATE FRAME: 1 1/2"Ø SCHEDULE 40 PIPE PER ASTM-F1083.
- TOP RAIL & BRACE RAIL: 1 1/4"Ø SCHEDULE 40 PIPE PER ASTM-F1083.
- FABRIC: 9 GA. CORE WIRE SIZE 2" MESH, CONFORMING TO ASTM-A392 CLASS 1.
- TIE WIRE: MINIMUM 11 GA GALVANIZED STEEL INSTALL A SINGLE WRAP TIE WIRE AT POSTS AND RAILS AT MAX. 24" INTERVALS. INSTALL HOG RINGS ON TENSION WIRE AT 24" INTERVALS.
- TENSION WIRE: 7 GA. GALVANIZED STEEL.
- BARBED WIRE: 3 STRANDS OF DOUBLE STRANDED 12-1/2 GAUGE TWISTED WIRE, 4 PT. BARBS SPACED ON APPROXIMATELY 5" CENTERS.
- GATE LATCH: 1-3/8" O.D. PLUNGER ROD W/ MUSHROOM TYPE CATCH AND LOCK.
- LOCAL ORDINANCE FOR BARBED WIRE PERMIT SHALL GOVERN INSTALLATION.
- HEIGHT = 6'-0" VERTICAL DIMENSION WITH 1'-0" BARBED WIRE.
- ALL WORK SHALL CONFORM WITH THE PROJECT SPECIFICATIONS.



**GRAVEL DRIVEWAY SURFACING**  
NOT TO SCALE

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DATE	DESCRIPTION	DRAWN BY	CHECKED BY
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A			MEG

**MICHAEL P. CLEARY**  
LICENSED PROFESSIONAL ENGINEER  
NO. 80550  
STATE OF FLORIDA  
MICHAEL P. CLEARY  
ENGINEER - LICENSE NUMBER: 80550

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**CONSTRUCTION DETAILS**





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## NEPA SUMMARY Report

(47 CFR SUBPART I, CHAPTER I, SECTION 1.1301-1.1319)

HAVANA HIGHWAY (LOCATION # US-FL-5052)  
Parcel # 3-06-2N-2W-000-0020-0000  
Havana Highway  
Havana, Gadsden County, Florida

October, 2019

*Prepared For*  
Vertical Bridge Development, LLC  
750 Park of Commerce Drive, Suite 200  
Boca Raton, Florida 33487

*Prepared By*  
Maser Consulting P.A.  
2000 Regency Parkway, Suite 295  
Cary, North Carolina 27518

MC Project No. 19983002A

## TABLE OF CONTENTS

I. INTRODUCTION.....	2
A. Purpose of Document.....	2
B. Project Description.....	3
II. SUMMARY OF FINDINGS .....	4
A. §1.1307(a)(1) Officially Designated Wilderness Areas.....	4
B. §1.1307(a)(2) Officially Designated Wildlife Preserves.....	4
C. §1.1307(a)(3) Threatened or Endangered Species and /or Designated Critical Habitats .....	5
D. §1.1307(a)(4) & (a)(5) Phase I Cultural Resources Investigation & Tribal Correspondence.....	5
E. §1.1307(a)(6) Floodplains .....	7
F. §1.1307(a)(7) Significant Changes in Surface Features .....	7
G. §1.1307(a)(8) High Intensity White Lights.....	8
H. §1.1307(b) Human Exposure to Radiofrequency Radiation.....	8
Conclusions/Recommendations.....	9
References.....	10

## APPENDICIES

- Appendix A: FCC NEPA Checklist
- Appendix B: Project Plans & USGS Map
- Appendix C: Site Plan
- Appendix D: Wilderness Areas, Wildlife Preserves and Threatened & Endangered Species
- Appendix E: Phase I Cultural Resources Investigation & Tribal Correspondence
- Appendix F: FCC Form 620
- Appendix G: Flood Plain, Wetlands, National Trails and National Wild & Scenic Rivers

## I. INTRODUCTION

### A. Purpose of Document

This report has been prepared in accordance with Subpart I – Procedures Implementing the National Environmental Policy Act of 1969 (47 CFR, Chapter 1, Subchapter A, Part 1, Subpart I, §1.1301 through §1.1319) for the purpose of determining if the proposed actions will have significant environmental, cultural or historical effects. This NEPA Screening Checklist (Appendix A) is for the proposed construction of a 100-foot by 100-foot fenced telecommunications compound that will house a new 250-foot lattice tower with a lightning rod. The proposed activities are located off of Havana Highway in Gadsden County within Havana, Florida. The proposed project is located within a larger parent parcel that is further described as Gadsden County Parcel Number 3-06-2N-2W-000-0020-0000.

This NEPA Summary Report identifies, through written and graphic materials, the possible effects of the proposed tower on physical and biological resources. According to FCC NEPA regulation §1.1307, an Environmental Assessment (EA) must be prepared if any of the following conditions are met:

- Facilities that are to be located in an officially designated wilderness area (§1.1307(a)(1)).
- Facilities that are to be located in an officially designated wildlife preserve (§1.1307(a)(2)).
- Facilities that: (i) May affect listed threatened or endangered species or designated critical habitats; or (ii) are likely to jeopardize the continued existence of any proposed endangered or threatened species or likely to result in the destruction or adverse modification of proposed critical habitats, as determined by the Secretary of the Interior pursuant to the Endangered Species Act of 1973 (§1.1307(a)(3)).
- Facilities that may affect districts, sites, buildings, structures or objects, significant in American history, architecture, archeology, engineering or culture,

that are listed, or are eligible for listing, in the National Register of Historic Places (§1.1307(a)(4)).

- Facilities that may affect Indian religious sites (§1.1307(a)(5)).
- Facilities to be located in a flood plain (§1.1307(a)(6)).
- Facilities whose construction will involve significant change in surface features (§1.1307(a)(7)).
- Antenna towers and/or supporting structures that are to be equipped with high intensity white lights which are to be located in residential neighborhoods, as defined by the applicable zoning law (§1.1307(a)(8)).
- The particular facility, operation or transmitter would cause human exposure to levels of radiofrequency radiation in excess of the limits in §§1.1310 and 2.1093. (§1.1307(b)).

## **B. Project Description**

The proposed project consists of the construction of a 100-foot by 100-foot fenced telecommunications compound that will house a new 250-foot lattice tower with a lightning rod. The proposed project is located off of Havana Highway in Gadsden County within Havana, Florida. The proposed project will be located within a larger parent parcel that is approximately 87.82 acres in size and is further described as Gadsden County Parcel Number 3-06-2N-2W-000-0020-0000. The property appears on the Havana North, FL Quadrangle of the U.S. Geological Survey (Appendix B).

The proposed project is located to the west of Havana Highway and north of an existing utility line within a forested area on the larger parent parcel.

In addition to the lattice tower, other site improvements include a new weathertight radio equipment cabinet, a cable bridge canopy, and an outdoor standby generator within the telecommunications compound. The site plan is included in Appendix C and the FCC Form 620 is located in Appendix G.

## **II. SUMMARY OF FINDINGS**

### **A. §1.1307(a)(1) Officially Designated Wilderness Areas**

In addressing the issue of officially designated wilderness areas, Maser Consulting reviewed information from the National Wilderness Preservation System (NWPS) website. The NWPS is comprised of lands designated as wilderness areas by the United States Forest Service (USFS), United States Fish and Wildlife Service (USFWS), United States Bureau of Land Management (BLM), and the National Park Service (NPS). There are currently 757 wilderness areas in the United States.

The proposed project is not located within any officially designated wilderness area according to the United States Department of Agriculture (USDA) U.S. Forest Service; therefore, no significant impact is anticipated. In addition, the proposed project is not located within a National Forest, a National Park, land managed by the Bureau of Land Management, a National Wild and Scenic River System or within a mile of a National Scenic Trail

### **B. §1.1307(a)(2) Officially Designated Wildlife Preserves**

In addressing the issue of officially designated wildlife preserves, Maser Consulting reviewed information from the USFWS National Wildlife Refuge System (NWRS) website. According to the NWRS, twenty-six (26) National Wildlife Refuges are located within the State of Florida. They consist of the St. Marks NWR, St. Vincent NWR, Lower Suwannee NWR, Cedar Keys NWR, Crystal River NWR, Chassahowitzka NWR, Pinellas NWR, Egmont Key NWR, Passage Key NWR, Island Bay NWR, J.N. “Ding” Darling NWR, Matlacha Pass NWR, Ten Thousand Islands NWR, Great White Heron NWR, Key West NWR, National Key Deer NWR, Crocodile Lake NWR, Arthur R. Marshall – Loxachatchee NWR, Hobe Sound NWR, Everglads Headwaters NWR, Pelican Island NWR, Lake Wales Ridge NWR, Archie Carr NWR, St. Johns NWR, Merritt Island NWR, and Lake Woodruff NWR.

The proposed project is not located within any officially designated wildlife preserve according to the United States Fish and Wildlife Service; therefore, no significant impact is anticipated. Supporting documentation for this section is included in Appendix D.

**C. §1.1307(a)(3) Threatened or Endangered Species and /or Designated Critical Habitats**

In addressing the issue of Threatened or Endangered Species and /or Designated Critical Habitats, Maser Consulting requested information from the United States Fish and Wildlife Service (USFWS) and the Florida Natural Areas Inventory.

According to a Biodiversity Matrix Query Results dated September 3, 2019 (Appendix D) created by the Florida Natural Areas Inventory there are no Documented Occurrences and there are no Documented-Historic Occurrences of species or communities within the project site. There is a Likely Occurrence of the wood stork (*Mycteria americana*) within one mile of the project site.

According to an email response dated September 20, 2019 (Appendix D) from the USFWS, stated that "As noted in the enclosed Informal Biological Assessment, potential habitat may be present for the Eastern Indigo Snake (*Drymarchon couperi*), which is federally listed as threatened under the Endangered Species Act of 1973. However, this species is not known to persist near the project site, and due to the small scope of the proposed impact area, we anticipate the project may affect, but is not likely to adversely affect this species."

According to the responses from the USFWS and the Florida Natural Areas Inventory the proposed project will not likely affect critical habitats; therefore, no significant impact is anticipated. Supporting documentation for this section is included in Appendix D.

**D. §1.1307(a)(4) & (a)(5) Phase I Cultural Resources Investigation & Tribal Correspondence**

In addressing the issue of Historic Districts, Sites, Buildings, Structures and /or Objects, Maser Consulting requested information from the Gadsden County Historical Society, the Town of Havana, and the Florida Division of Historical Resources (FDHR). A review of the FDHR cultural resources records via the Florida Master Site File (FMSF) system indicated one

previously recorded prehistoric archaeological site within a mile of the Havana Highway Cell Tower project area. The precontact site, Gd00022, was recorded in 1976 and is within the Tallahassee Hills. Cultural Material such as Weeden Island Pre-Columbian Pottery was uncovered from the site. Coordinates provided by the Gd00022 report place the site approximately one mile to the northeast of the proposed Havana Highway Cell Tower site.

Additionally, there is one site listed on the National Register or State Register sites within a mile radius of the APE as well. This is the Dr. Malcolm Nicholson's House, located on 200 Coca Cola Avenue, and it was added to the Register in 1994. The property was used as a steakhouse and giftshop until 1999, and then in 2014 it was reopened and is now operating as the bed and breakfast known as Havana Springs Resort (U.S. Department of the Interior National Park Service, 1994). A review of the aerial photographs and an historic map was also conducted. The 1938 historic map indicates the presence of the existing access road, as well as clearing surrounding the project area of the site.

Many of the archaeological assemblages associated with Native populations in northwestern Florida is believed to have been eroded away in the Gulf of Mexico. Those that remain are located in forests and around wetlands. Most consistently is the fact that many of these assemblages are smaller in size, and as such, the scarcity suggests that the "area was a buffer zone between the Apalachicola valley sites and those of the Tallahassee Hills" (Milanich, 2018, p. 360). The project site itself is situated between Little River to the west and Hurricane Creek to the south. Little River is located approximately 0.66 kilometers (0.4 miles) away from the site, and Hurricane Creek is 1.28 kilometers (0.8 miles) outside of the project area. However, there are no wetlands in the APE, though much of the site is within a forested region. The majority of the site has topography that consists of 15 to 45 percent well-drained slopes, that are underlain by sandy clay loams. Despite the presence of a precontact site within close vicinity to the project area, given the settlement patterns of Native populations and the location of the Havana Highway Cell Tower project area, there is a very low sensitivity for encountering archaeological materials.

The soil types documented during subsurface testing were generally consistent with expected profiles as published by Natural Resources Conservation Service (NRCS) soils surveys of

Gadsden County (NRCS 2019). No pre-contact or historic cultural materials, aside from the wire nails uncovered in STP B-6 that were most probably from the powerline construction, were recovered during archaeological testing within the project area. Given the documented settlement patterns of Native populations and the location of the Havana Highway Cell Tower project area, there is a very low sensitivity for encountering archaeological materials. As such, further investigation of this location is unlikely to provide additional information. Additionally, due to the nature of the topography, paired with the vastness and height of the tree cover in the surrounding area, it is believed that the construction of the Havana Highway Cell Tower will not compromise the historic integrity of any of the standing structures in the area. Supporting documentation for this section and tribal correspondence is included in Appendix E.

#### **E. 1.1307(a)(6) Floodplains**

In addressing the issue of floodplains, Maser Consulting reviewed information from the Federal Emergency Management Agency (FEMA) website.

According to the FEMA Flood Insurance Rate Map (FIRM) Panel number 12039C0251C (effective date February 4, 2009) the proposed project is not located within a floodplain (<https://msc.fema.gov/portal>).

The proposed project is not located within a floodplain; therefore no significant impact is anticipated. Supporting documentation for this section is included in Appendix H.

#### **F. §1.1307(a)(7) Significant Changes in Surface Features**

In addressing the issue of changes in surface features, Maser Consulting reviewed information from the USFWS National Wetlands Inventory website.

Based on the USFWS National Wetlands Inventory wetlands are not present on the property.

Due to the absence of wetlands on the property, no significant impact is anticipated. Supporting documentation for this section is included in Appendix H.

**G. §1.1307(a)(8) High Intensity White Lights**

In addressing the issue of high intensity white light, Maser Consulting reviewed the project plans for the proposed project.

High intensity white lights are not proposed for the tower. Additionally, the proposed tower is not located within a residential zone and will comply with any recommendations made by the FCC; therefore no significant impact is anticipated.

**H. §1.1307(b) Human Exposure to Radiofrequency Radiation**

Radio frequency evaluations were not performed as part of the Environmental Assessment (EA) and therefore were not included as part of this report. It is anticipated that the proposed project will be in compliance with any Local, State, and Federal Radio Frequency requirements and will not cause human exposure to levels of RF emissions in excess of FCC-adopted guidelines (47 CFR §§ 1.1307b). Maintaining compliance with any Local, State, and Federal Radio Frequency requirements will be analyzed to determine what measures, if any, will be required.

**Conclusions/Recommendations**

Based on the review of readily available published lists, files, and maps, the proposed telecommunications facility known as Havana Highway US-FL-5052 in Havana, Florida will have no impact on the FCC special interest items as outlined in 47 CFR Section 1.1307.

We appreciate the opportunity to be of service to Vertical Bridge Development, LLC for this project. If you have any questions about information in this report, or if we can be of further assistance, please do not hesitate to contact Maser Consulting P.A. at (919) 439-6082.

## References

- American Trails, *National Scenic Trails*, <http://www.americantrails.org/resources/info/National-Scenic-Trails.html>, 2014.
- Critical Habitat Portal, <http://criticalhabitat.fws.gov/crithab/>, 2019
- Federal Emergency Management Agency (FEMA), *Environmental Systems Research Institute Digital Q3 Flood Data Flood Map Store*, <http://store.msc.fema.gov>, 2019
- Florida Natural Areas Inventory, <https://www.fnai.org/biointro.cfm>, 2019
- Maser Consulting P.A., *Havana Highway, US-FL-5052, Proposed Lattice Tower, Gadsden County, Havana, FL 32333*, August 16, 2019.
- Maser Consulting P.A., *Phase 1 Archaeological Survey for Havana Highway, US-FL-5052, Havana, FL 32333, Gadsden County*, August 16, 2019.
- National Park Service, <http://www.nps.gov/>, 2019
- National Park Service, *Appalachian National Scenic Trail*, <http://www.nps.gov/appa>, 2019
- National Park Service, *National Wild and Scenic Rivers System*, <http://www.nps.gov/rivers/information.html>, 2019
- National Wilderness Preservation System,  
*NWPS*, <http://www.wilderness.net/nwps>, 2019
- United States Fish and Wildlife Service,  
*National Wetland Inventory (NWI)*, <http://www.fws.gov/wetlands/Data/Mapper.html>,  
2019  
*Endangered Species Act*, <http://www.fws.gov/Endangered/>, 2019
- USGS, *Havana South Quadrangle, 7.5 Minute Series (Topographic)*, 2012



**APPENDIX A**  
**FCC NEPA Checklist**



Engineers  
Planners  
Surveyors  
Landscape Architects  
Environmental Scientists

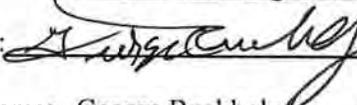
**Corporate Headquarters**  
331 Newman Springs Road, Suite 203  
Red Bank, NJ 07701  
T: 732.383.1950  
F: 732.383.1984  
www.maserconsulting.com

## NEPA LAND USE CHECKLIST

### Prepared for Vertical Bridge Development, LLC

<b>Location #:</b> US-FL-5052	<b>Site Name:</b> Havana Highway	<b>Site Address:</b> Havana Highway Havana, Florida 32333		
<b>Coordinates (NAD 83):</b> N Lat: 30.605209 W Lon: -84.480651	<b>Expert Federal / State Jurisdictional Agencies</b>	<b>Summarize any preliminary finding of positive effects</b>	<b>Check one box</b>	
<b>FCC Category</b>			YES	NO
1. Will the facility be located in an officially designated wilderness area?	National Park Service, U.S. Forest Service, Bureau of Land Management, National Wilderness Preservation System			X
2. Will the facility be located in an officially designated wildlife preserve	U.S. Dept. of Interior—Fish & Wildlife Service (USFWS), National Wildlife Refuge System			X
3. Will the facility affect listed and proposed threatened or endangered species or designated critical habitat?	United States Fish and Wildlife Service, State Wildlife Agency, New Jersey Department of Environmental Protection (NJDEP) Office of Natural Lands Management, Natural Heritage Program			X
4. Will the facility affect districts, sites, buildings, structures or objects listed, or eligible for listing, in the National Register of Historic Places?	Section 106 Review for submittal to SHPO			X
5. Will the facility affect Indian Religious sites?	Nationwide Programmatic Agreement for the Collocation of Wireless Antennas			X
6. Will the facility be located in a Flood Plain?	Federal Emergency Management Agency			X
7. Will the facility construction involve significant change in surface features?	U.S. Dept. of Interior—Fish & Wildlife Service (USFWS), Wetlands Mapper			X
8. Will the antenna towers and/or supporting structures be equipped with High Intensity White Lights?	Provided by Vertical Bridge Development			X
9. Will the facility result in human exposure to radiation in excess of the applicable safety standards?	Federal Communication Commission			X
<b>Additional Considerations</b>				
10. Will the facility be located within one mile of a National Scenic or Historic Trail?	National Park Service			X
11. Will the facility affect National Wild and Scenic Rivers?	National Wild and Scenic River System			X

Prepared by: Maser Consulting P.A. 331 Newman Springs Drive, Red Bank, New Jersey 07701

Signature:  Title: Environmental Specialist

Printed Name: George Buchholz Date: October 31, 2019



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**APPENDIX B**  
**Project Plans and**  
**USGS Map**

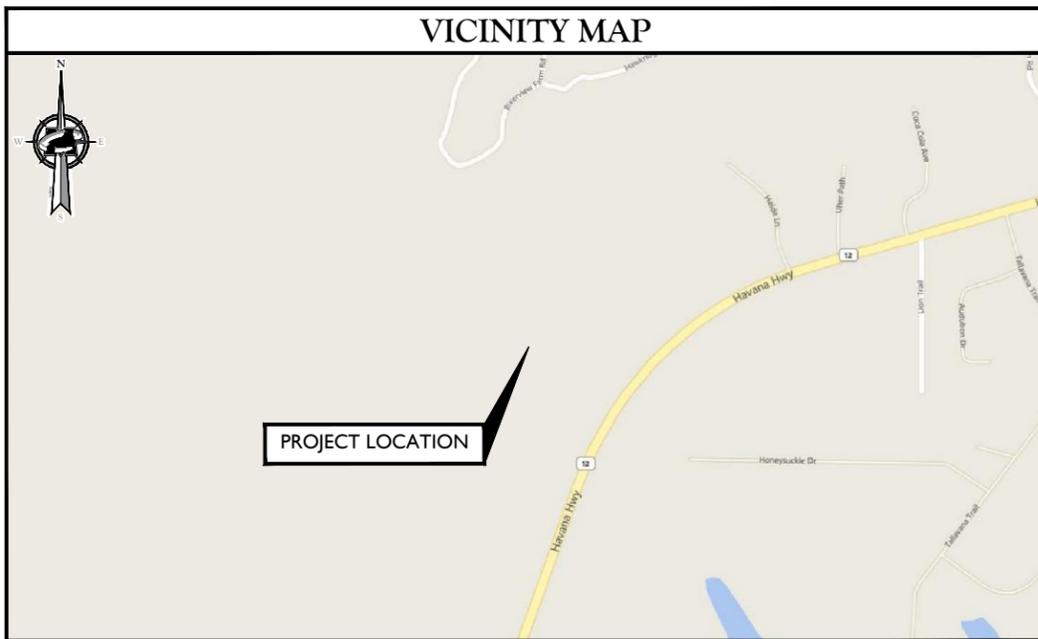
**PROJECT NOTES**

- SITE INFORMATION OBTAINED FROM THE FOLLOWING:
  - PLAN ENTITLED "CELL SITE SURVEY" PREPARED BY MASER CONSULTING, PA OF MT. LAUREL, NJ LAST REVISED 8/12/19.
  - LIMITED FIELD OBSERVATION BY MASER CONSULTING ON 04/05/19.
- THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE CODES, ORDINANCES, LAWS AND REGULATIONS OF ALL MUNICIPALITIES, UTILITY COMPANIES OR OTHER PUBLIC/GOVERNING AUTHORITIES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTIONS THAT MAY BE REQUIRED BY ANY FEDERAL, STATE, COUNTY OR MUNICIPAL AUTHORITIES.
- THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION MANAGER, IN WRITING, OF ANY CONFLICTS, ERRORS OR OMISSIONS PRIOR TO THE SUBMISSION OF BIDS OR PERFORMANCE OF WORK.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING SITE IMPROVEMENTS PRIOR TO COMMENCING CONSTRUCTION. THE CONTRACTOR SHALL REPAIR ANY DAMAGE AS A RESULT OF CONSTRUCTION OF THIS FACILITY AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER.
- THE SCOPE OF WORK FOR THIS PROJECT SHALL INCLUDE PROVIDING ALL MATERIALS, EQUIPMENT AND LABOR REQUIRED TO COMPLETE THIS PROJECT. ALL EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- THE CONTRACTOR SHALL VISIT THE PROJECT SITE PRIOR TO SUBMITTING THE BID TO VERIFY THAT THE PROJECT CAN BE CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND CONSTRUCTION DRAWINGS.
- THE CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS PRIOR TO COMMENCING ANY WORK. ALL DIMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THESE DRAWINGS MUST BE VERIFIED. THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION MANAGER OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.
- SINCE THE CELL SITE MAY BE ACTIVE, ALL SAFETY PRECAUTIONS MUST BE TAKEN WHEN WORKING AROUND HIGH LEVELS OF ELECTROMAGNETIC RADIATION. EQUIPMENT SHOULD BE SHUTDOWN PRIOR TO PERFORMING ANY WORK THAT COULD EXPOSE THE WORKERS TO DANGER. PERSONAL RF EXPOSURE MONITORS ARE REQUIRED TO BE WORN TO ALERT OF ANY POTENTIALLY DANGEROUS EXPOSURE LEVELS.
- THE PROPOSED FACILITY WILL CAUSE AN INSIGNIFICANT OR "DE-MINIMUS" INCREASE IN STORM WATER RUNOFF, THEREFORE, NO DRAINAGE STRUCTURES ARE PROPOSED.
- NO NOISE, SMOKE, DUST OR ODOR WILL RESULT FROM THIS FACILITY AS TO CAUSE A NUISANCE.
- THE FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION (NO HANDICAP ACCESS IS REQUIRED).
- THE FACILITY DOES NOT REQUIRE POTABLE WATER OR SANITARY SERVICE.
- CONTRACTOR SHALL VERIFY ANTENNA ELEVATION AND AZIMUTHS WITH RF ENGINEERING PRIOR TO INSTALLATION.
- ALL STRUCTURAL ELEMENTS SHALL BE HOT DIPPED GALVANIZED STEEL.
- CONTRACTOR MUST FIELD LOCATE ALL EXISTING UNDERGROUND UTILITIES PRIOR TO ANY EXCAVATION.
- CONSTRUCTION SHALL NOT COMMENCE UNTIL COMPLETION OF A PASSING STRUCTURAL ANALYSIS CERTIFIED BY A LICENSED PROFESSIONAL ENGINEER. THE STRUCTURAL ANALYSIS IS TO BE PERFORMED BY OTHERS.
- CONTRACTOR SHALL CONTACT STATE SPECIFIC ONE CALL SYSTEM THREE WORKING DAYS PRIOR TO ANY EARTH MOVING ACTIVITIES.



**SITE NAME: HAVANA HIGHWAY  
SITE NUMBER: US-FL-5052  
PROPOSED 250' SELF SUPPORT TOWER**

**HAVANA HIGHWAY  
HAVANA, FL 32333  
GADSDEN COUNTY**



**PROJECT INFORMATION**

**SITE INFORMATION**

LATITUDE: N 30° 36' 18.8"  
LONGITUDE: W 84° 28' 50.3"  
GROUND ELEVATION: 159.1'  
JURISDICTION: GADSDEN COUNTY  
ZONING DISTRICT: AGRICULTURE 3  
PARCEL #: 3-06-2N-2W-0000-00220-0000

**APPLICANT/LESSEE**

COMPANY: VERTICAL BRIDGE DEVELOPMENT, LLC  
ADDRESS: 750 PARK OF COMMERCE DRIVE  
CITY, STATE, ZIP: BOCA RATON, FL 33487

**SITE ACQUISITION**

COMPANY: SITE ID, INC.  
ADDRESS: 103 CARNEGIE CENTER, SUITE 300  
CITY, STATE, ZIP: PRINCETON, NJ 08540  
CONTACT: MICHAEL SHINE  
E-MAIL: MSHINE@SITEIDINC.COM

**ENGINEERING COMPANY**

COMPANY: MASER CONSULTING P.A.  
ADDRESS: 2000 MIDLANTIC DRIVE, SUITE 100  
CITY, STATE, ZIP: MT. LAUREL, NJ 08054  
CONTACT: MATTHEW GRAUBART, P.E.  
PHONE: (856) 797-0412  
E-MAIL: MGRAUBART@MASERCONSULTING.COM

**PROPERTY OWNER:**

NAME: ANN F. NICHOLSON (TRUSTEE)  
ADDRESS: 4297 MAYLOR LANE  
CITY, STATE, ZIP: TALLAHASSEE, FL 32308-5770

**LOCATION INFORMATION**

**POWER PROVIDER**

NAME: TALQUIN ELECTRIC  
PHONE: (850) 627-9666

**TELEPHONE PROVIDER:**

NAME: AT&T  
PHONE: 1-(888) 855-2338

**POLICE**

NAME: HAVANA POLICE DEPARTMENT  
ADDRESS: 121 17TH AVENUE EAST  
CITY, STATE, ZIP: HAVANA, FL 32333-1068  
PHONE: (850) 539-2801

**FIRE**

NAME: COONBOTTOM VOLUNTEER FIRE DEPT.  
ADDRESS: 4838 FAIRBANKS FERRY ROAD  
CITY, STATE, ZIP: HAVANA, FL 32333  
PHONE: (850) 539-4693

IN CASE OF EMERGENCY, CALL 9-1-1

**CODE COMPLIANCE**

ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THE LATEST EDITIONS OF THE FOLLOWING CODES.

- |   |  |
|---|--|
| 1. 2017 FLORIDA BUILDING CODE, SIXTH EDITION        | 8. INSTITUTE FOR ELECTRICAL AND ELECTRONICS ENGINEERS 81 IEEE C2 LATEST EDITION                                |
| 2. 2014 NATIONAL ELECTRICAL CODE - NFPA 70          | 9. TELCORDIA GR-1275   |
| 3. 2017 FLORIDA FIRE PREVENTION CODE, SIXTH EDITION | 10. ANSI T1.311  |
| 4. AMERICAN INSTITUTE OF STEEL CONSTRUCTION 360-10  | 11. PROPOSED USE: UNMANNED TELECOM FACILITY  |
| 5. AMERICAN CONCRETE INSTITUTE                      | 12. HANDICAP REQUIREMENTS: FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. HANDICAPPED ACCESS NOT REQUIRED. |
| 6. TIA-222-G  | 13. CONSTRUCTION TYPE: IIB   |
| 7. TIA 607 FOR GROUNDING                            | 14. USE GROUP: U   |

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Landscape Architects ■ Environmental Scientists

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• Columbia	• Albuquerque	• Houston	• Houston

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SCALE: AS SHOWN JOB NUMBER: 19983002A

REV	DATE	DESCRIPTION	ISSUED FOR	BY	CHKD
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A	08/30/19	ISSUED FOR PERMITS	PERMITS	MEG	



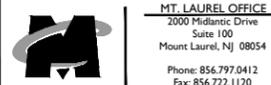
IT IS THE POLICYPOLICY OF LAW FOR AN ENGINEER, UNLESS THEY AGREE TO THE DIRECTOR OF THE RESPONSIBILITY OF THE REGISTERED PROFESSIONAL ENGINEER, TO

**SHEET INDEX**

SHEET	DESCRIPTION
T-1	TITLE SHEET
Z-1	ZONING INFORMATION
Z-2	SITE PLAN AND PROJECT NOTES
Z-3	PARTIAL SITE PLAN
Z-4	GRADING AND EROSION AND SEDIMENT CONTROL PLAN
Z-5	COMPOUND PLAN AND ELEVATION VIEW
A-1	CONSTRUCTION DETAILS
A-2	CONSTRUCTION DETAILS

**SITE NAME:**

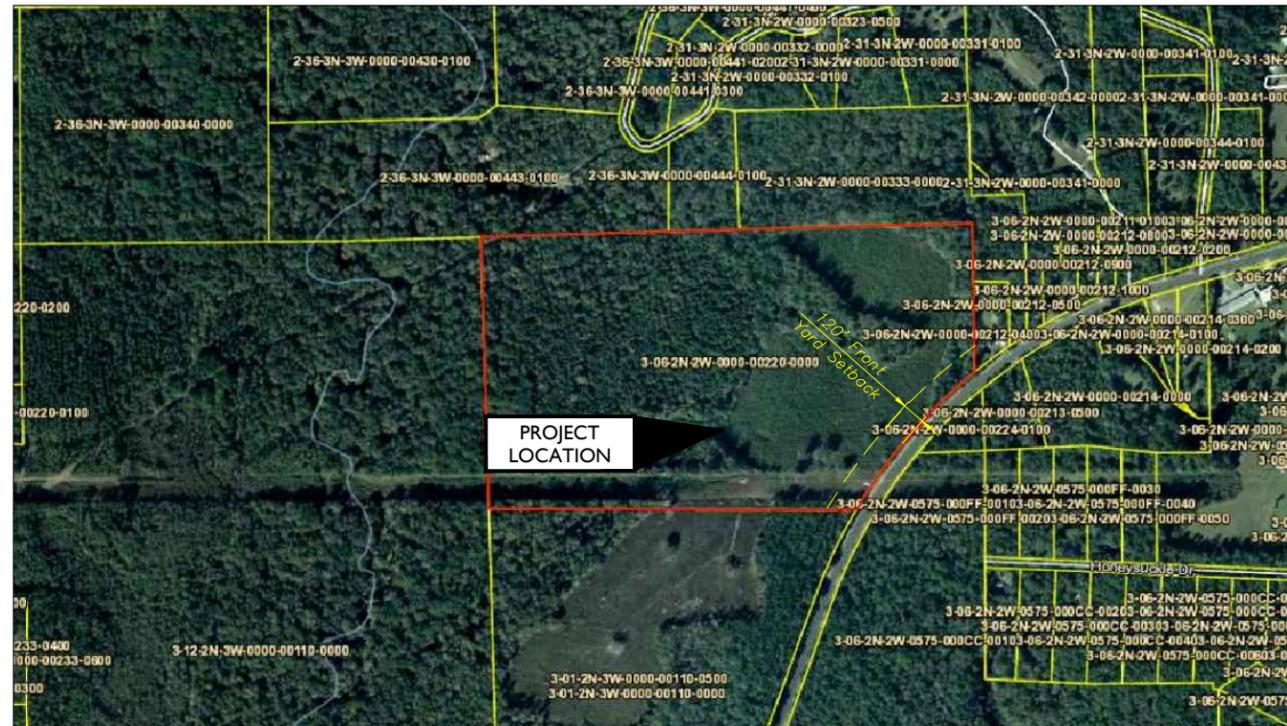
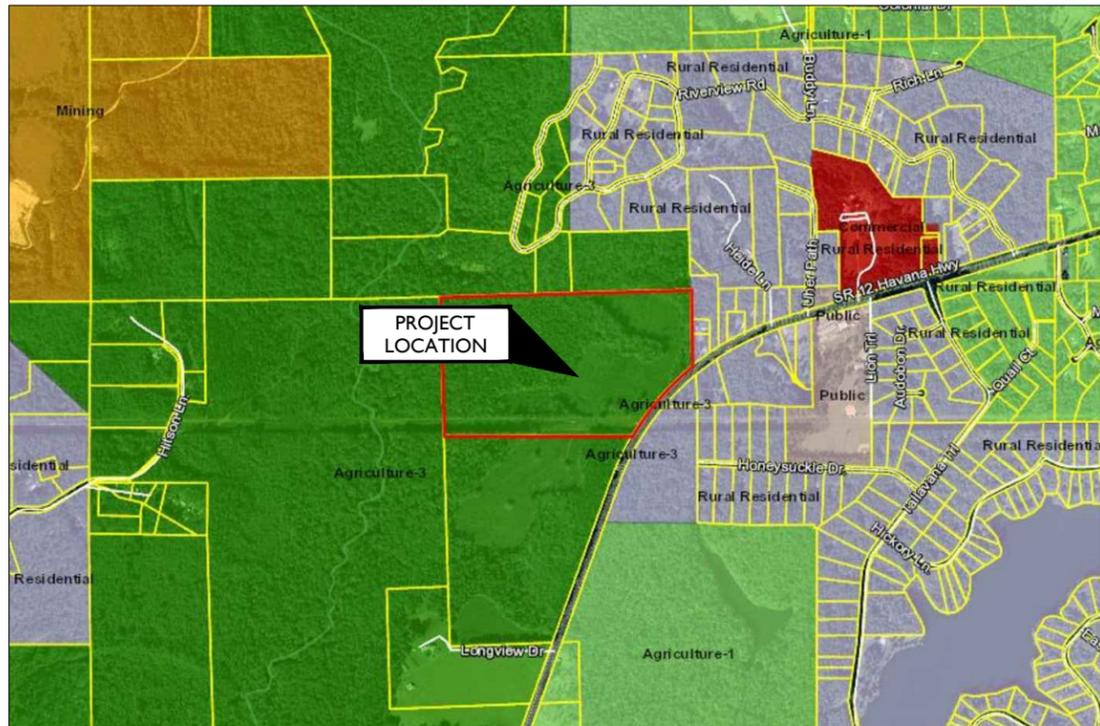
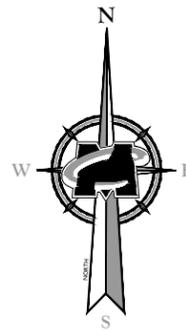
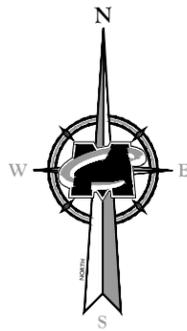
**HAVANA HIGHWAY  
US-FL-5052  
HAVANA HIGHWAY  
HAVANA, FL 32333  
GADSDEN COUNTY**



MT. LAUREL OFFICE  
2000 Midlantic Drive  
Suite 100  
Mount Laurel, NJ 08054  
Phone: 856.797.0412  
Fax: 856.722.1120

**TITLE SHEET**

SHEET NUMBER: Page 211 of 353



- LEGEND**
- Parcels
  - Roads (Local)
  - Roads (Major)
  - Future Land Use
    - Agric
    - Agriculture-1
    - Agriculture-2
    - Agriculture-3
    - Commercial
    - Conservation
    - Heavy Industrial
    - Historical
    - Lake
    - Light Industrial
    - Mining
    - Municipal
    - Public/Institutional
    - Recreational
    - Rural Residential
    - Silviculture
    - Urban Service Area
    - Streams and Rivers (Large)

**ZONING MAP**

SCALE : 1" = 1000' FOR 22"X34"  
 (SCALE : 1" = 2000' FOR 11"X17")

**TAX MAP**

SCALE : 1" = 500' FOR 22"X34"  
 (SCALE : 1" = 1000' FOR 11"X17")



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SCALE: AS SHOWN JOB NUMBER: 19983002A

NO.	DATE	DESCRIPTION	BY
0	08/30/19	ISSUED FOR PERMIT	MEG
A	08/30/19	ISSUED FOR PERMIT	MEG
REV	DATE	DESCRIPTION	BY



**SITE NAME:**

HAVANA HIGHWAY  
 US-FL-5052  
 HAVANA HIGHWAY  
 HAVANA, FL 32333  
 GADSDEN COUNTY

**MT. LAUREL OFFICE**  
 2000 Midlantic Drive  
 Suite 100  
 Mount Laurel, NJ 08054  
 Phone: 856.797.0412  
 Fax: 856.722.1120

**ZONING INFORMATION**

VICINITY MAP

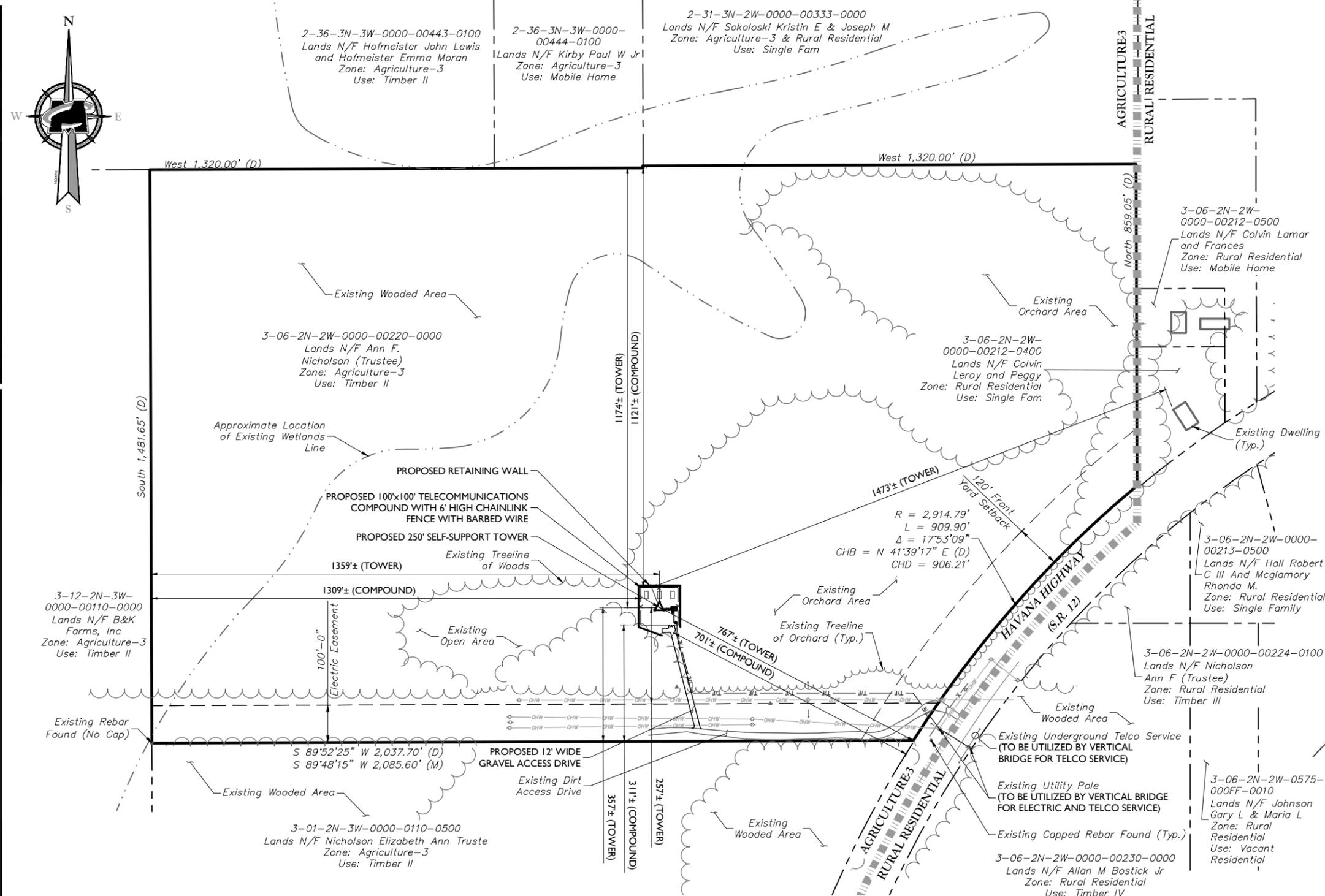


PROJECT LOCATION

PROJECT NOTES

- THIS PROPOSAL IS FOR AN UNMANNED TELECOMMUNICATIONS FACILITY CONSISTING OF THE PLACEMENT OF PANEL ANTENNAS ON A PROPOSED SELF SUPPORT TOWER AND EQUIPMENT CABINETS AND ASSOCIATED APPURTENANCES IN A PROPOSED FENCED AREA.
- EXTERIOR SIGNS ARE NOT PROPOSED EXCEPT AS REQUIRED BY THE FCC.
- TOTAL AREA OF DISTURBANCE UNDER THIS PROPOSAL: 26,200± S.F.
- RUBBISH, STUMPS, DEBRIS, STICKS, STONES AND OTHER REFUSE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF LEGALLY.
- CONTRACTOR SHALL CONTACT STATE SPECIFIC ONE CALL SYSTEM THREE WORKING DAYS PRIOR TO ANY EARTH MOVING ACTIVITIES.
- POWER TO THE FACILITY WILL BE MONITORED BY A SEPARATE METER.
- SUBCONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS & INSPECTIONS REQUIRED FOR CONSTRUCTION.
- SUBCONTRACTOR SHALL DETERMINE EXACT ROUTE OF ANY UNDERGROUND CONDUIT, IF REQUIRED.
- THIS PROJECT WILL NOT REQUIRE STREETS OR PROPERTY TO BE DEDICATED FOR PUBLIC USE.
- THIS PROJECT WILL NOT REQUIRE PERMANENT MONUMENTS.
- ACCORDING TO THE FEMA FLOOD INSURANCE RATE MAPS OF GADSDEN COUNTY, FL (ALL JURISDICTIONS), PANEL 251 OF 383, MAP 12039C0251C DATED FEBRUARY 4, 2009, ALL PROPOSED IMPROVEMENTS ARE LOCATED WITHIN ZONE X - AREAS DETERMINED TO BE OUTSIDE THE 500 YEAR FLOODPLAIN.
- THE PROPOSED INSTALLATION WILL GENERATE ONE (1) VEHICLE TRIP FOR ROUTINE MAINTENANCE EVERY FOUR (4) TO SIX (6) WEEKS.
- DISTANCE TO NEAREST TOWERS:
 

OWNER	TYPE	HEIGHT	DIRECTION	DISTANCE
SBA TOWERS	LATTICE	230'	NE	6.2 MILES
AMERICAN TOWERS	LATTICE	250'	E	3.4 MILES
SBA TOWERS	LATTICE	200'	SW	4.3 MILES
ITT / AIRPORT	LATTICE	115'	W	4.2 MILES
- DISTANCE FROM SUBJECT PROPERTY TO LAND THAT IS DESIGNATED RURAL RESIDENTIAL: 0 FEET  
 OWNER: COLVIN LEROY AND PEGGY  
 OWNER: COLVIN LAMAR AND FRANCES  
 OWNER: SOKOLOSKI KRISTIN E AND JOSEPH M
- DISTANCE FROM SUBJECT PROPERTY TO LAND THAT IS DESIGNATED RURAL RESIDENTIAL ON EAST SIDE OF HAVANA HIGHWAY: 140 FEET  
 OWNER: BOSTICK ALLAN M. JR  
 OWNER: NICHOLSON ANN F (TRUSTEE)  
 OWNER: HALL ROBERT C III AND MCGLAMORY RHONDA M.



LEGEND

- Existing Subject Property Line
- Existing Subject Property Setback Line
- Existing Adjoining/Adjacent Property Line
- Existing Edge of Pavement/Road
- Existing Structure
- Existing Tree Line
- Existing Zoning Boundary
- Existing Features
- Existing Easement
- PROPOSED ROAD
- PROPOSED CHAIN LINK FENCE
- PROPOSED FEATURES
- PROPOSED UNDERGROUND ELECTRIC/TELCO UTILITY LINES

BULK STANDARDS FOR AGRICULTURE 3 (SECTION 5203)

PROPOSED USE: COMMUNICATION TOWER (PERMITTED)				
DESCRIPTION	REQUIRED	EXISTING	PROPOSED	REMARKS
MINIMUM LOT AREA	43,560 SF (1 ACRE)	87.82± ACRES	NO CHANGE	CONFORMING
MAXIMUM IMPERVIOUS SURFACE RATIO	0.750	N/A	0.004±	CONFORMING
MINIMUM SETBACK FROM RIGHT OF WAY LINE	120 FEET	N/A	701± FEET	CONFORMING

BULK STANDARDS COMMUNICATION TOWERS (SECTION 5800)

DESCRIPTION	REQUIRED	EXISTING	PROPOSED	REMARKS
MINIMUM FRONT YARD*	750 FEET	N/A	767± FEET	CONFORMING
MINIMUM SIDE YARD (AGGREGATE)	0 FEET	N/A	357± FEET	CONFORMING
MINIMUM REAR YARD	0 FEET	N/A	1,359± FEET	CONFORMING
MINIMUM SETBACK TO RESIDENTIAL USE**	1,750 FEET	N/A	1,473± FEET	NON-CONFORMING
MAXIMUM HEIGHT OF COMMUNICATION TOWER	250 FEET	N/A	250 FEET	CONFORMING
MINIMUM HEIGHT OF COMMUNICATION TOWER FENCING	6 FEET	N/A	6 FEET	CONFORMING

\* FRONT YARD SETBACK DISTANCE TO SR12 = 3 TIMES THE HEIGHT OF TOWER (3 \* 250 FEET = 750 FEET)  
 \*\* RESIDENTIAL SETBACK IS 7 TIMES THE HEIGHT OF TOWER (7 \* 250 FEET = 1,750 FEET)

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**verizon**

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 Know what's below. Call before you dig.  
 FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

SCALE:	JOB NUMBER:
AS SHOWN	19983002A

**MICHAEL P. CLEARY**  
 STATE OF FLORIDA  
 ENGINEER - LICENSE NUMBER: 80550

SITE NAME:  
**HAVANA HIGHWAY US-FL-5052**  
**HAVANA HIGHWAY**  
**HAVANA, FL 32333**  
**GADSDEN COUNTY**

**MT. LAUREL OFFICE**  
 2000 Midlantic Drive  
 Suite 100  
 Mount Laurel, NJ 08054  
 Phone: 856.797.0412  
 Fax: 856.722.1120

SHEET TITLE:  
**SITE PLAN AND PROJECT NOTES**

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**811**  
 Know what's below.  
 Call before you dig.  
 FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT:  
 WWW.CALL811.COM

SCALE:	AS SHOWN	JOB NUMBER:	19983002A
DATE:	08/30/19	ISSUED FOR:	FEW
REVISION:		DESCRIPTION:	

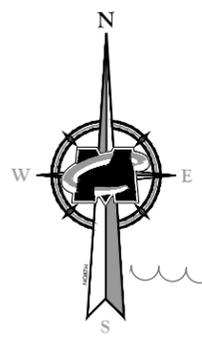
**PROFESSIONAL ENGINEER**  
 MICHAEL P. CLEARY  
 LICENSE NUMBER: 80550  
 STATE OF FLORIDA  
 ENGINEER - LICENSE NUMBER: 80550

**SITE NAME:**  
 HAVANA HIGHWAY  
 US-FL-5052  
 HAVANA HIGHWAY  
 HAVANA, FL 32333  
 GADSDEN COUNTY

**MT. LAUREL OFFICE**  
 2000 Midlantic Drive  
 Suite 100  
 Mount Laurel, NJ 08054  
 Phone: 856.797.0412  
 Fax: 856.722.1120

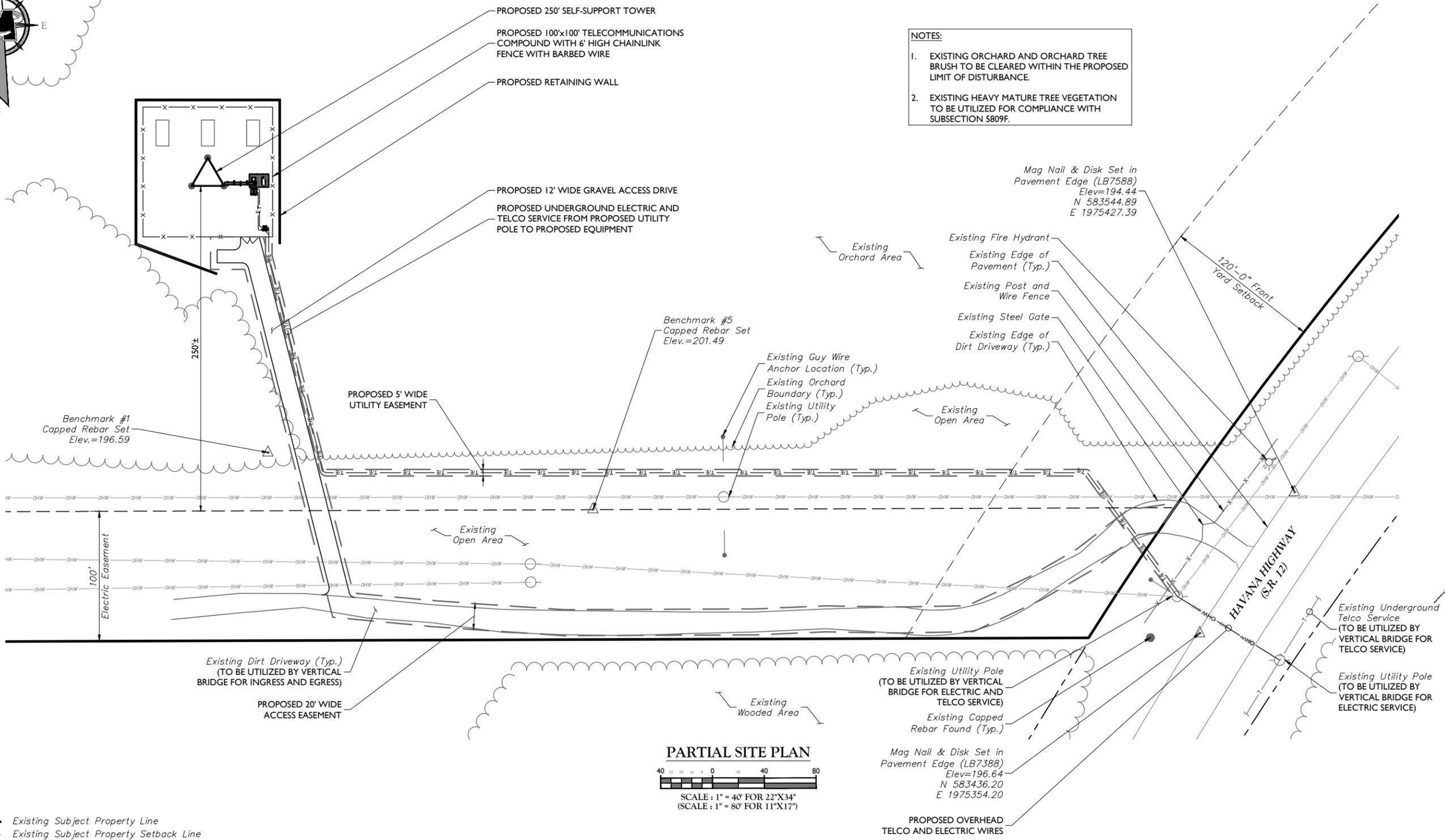
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 PARTIAL SITE PLAN

**SHEET NUMBER:**  
 Page 214 of 353



**NOTES:**

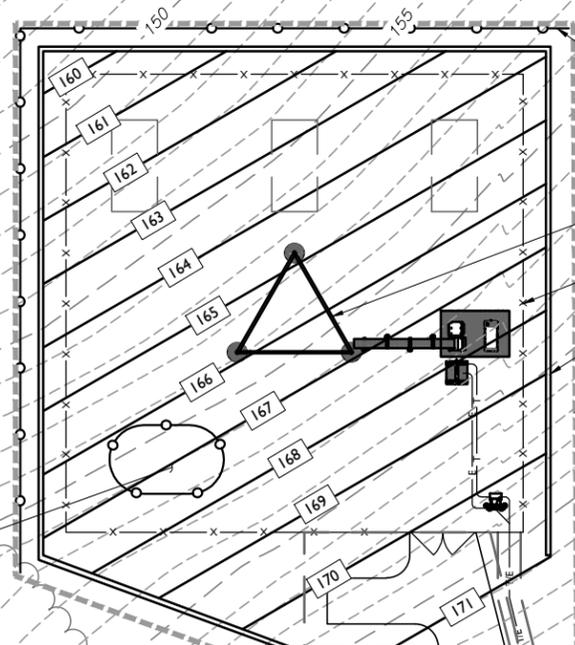
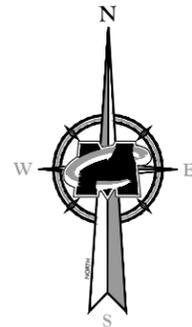
- EXISTING ORCHARD AND ORCHARD TREE BRUSH TO BE CLEARED WITHIN THE PROPOSED LIMIT OF DISTURBANCE.
- EXISTING HEAVY MATURE TREE VEGETATION TO BE UTILIZED FOR COMPLIANCE WITH SUBSECTION 5809F.



**PARTIAL SITE PLAN**  
 SCALE: 1" = 40' FOR 22"X34"  
 (SCALE: 1" = 80' FOR 11"X17")

- LEGEND**
- Existing Subject Property Line
  - - - Existing Subject Property Setback Line
  - - - Existing Adjoining/Adjacent Property Line
  - - - Existing Edge of Pavement/Road
  - Existing Structure
  - ~ Existing Tree Line
  - ~ Existing Features
  - - - Existing Easement
  - PROPOSED ROAD
  - x - x - PROPOSED CHAIN LINK FENCE
  - PROPOSED FEATURES
  - - - T/E - PROPOSED UNDERGROUND ELECTRIC/TELCO UTILITY LINES

P:\Projects\25491-1022\22 Rev 01.dwg 2/23/2019 10:00 AM



PROPOSED SILT FENCE (TYP.)  
(240± LF)

PROPOSED 250' SELF-SUPPORT TOWER

PROPOSED 100'x100' TELECOMMUNICATIONS COMPOUND  
WITH 6" HIGH CHAIN LINK FENCE WITH BARBED WIRE

PROPOSED RETAINING WALL

PROPOSED LIMIT OF DISTURBANCE /  
LIMIT OF CLEARING (26,200± S.F.)

PROPOSED GRAVEL ACCESS DRIVE TO BE  
GRADED TO MATCH EXISTING GRADE

PROPOSED 50'-0" STONE  
CONSTRUCTION ENTRANCE

Edge of Existing  
Dirt Driveway

**LEGEND**

- Existing Subject Property Line
- - - Existing Subject Property Setback Line
- - - Existing Adjoining/Adjacent Property Line
- Existing Edge of Pavement/Road
- Existing Structure
- Existing Tree Line
- Existing Zoning Boundary
- Existing Features
- - - Existing Easement
- PROPOSED ROAD
- x - x - PROPOSED CHAIN LINK FENCE
- T/E - PROPOSED FEATURES
- PROPOSED UNDERGROUND ELECTRIC/TELCO UTILITY LINES
- PROPOSED SILT FENCE
- - - PROPOSED LIMIT OF DISTURBANCE
- 171 PROPOSED CONTOUR

**GRADING PLAN AND EROSION AND  
SEDIMENT CONTROL PLAN**



SCALE : 1" = 20' FOR 22"x34"  
SCALE : 1" = 40' FOR 11"x17"

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A	09/03/19	ISSUED FOR PERMIT	MEG
REV	DATE	DESCRIPTION	DRAWN BY / CHECKED BY

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STATE OF FLORIDA  
REGISTERED PROFESSIONAL ENGINEER - LICENSE NUMBER: 80550

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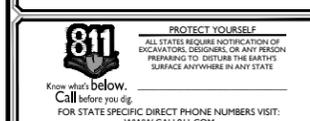
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US-FL-5052  
  
HAVANA HIGHWAY  
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Fax: 856.722.1120

SHEET TITLE:  
**GRADING PLAN AND  
EROSION AND SEDIMENT  
CONTROL PLAN**

SHEET NUMBER:  
**Page 215 of 353**

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SCALE: AS SHOWN	JOB NUMBER: 19983002A
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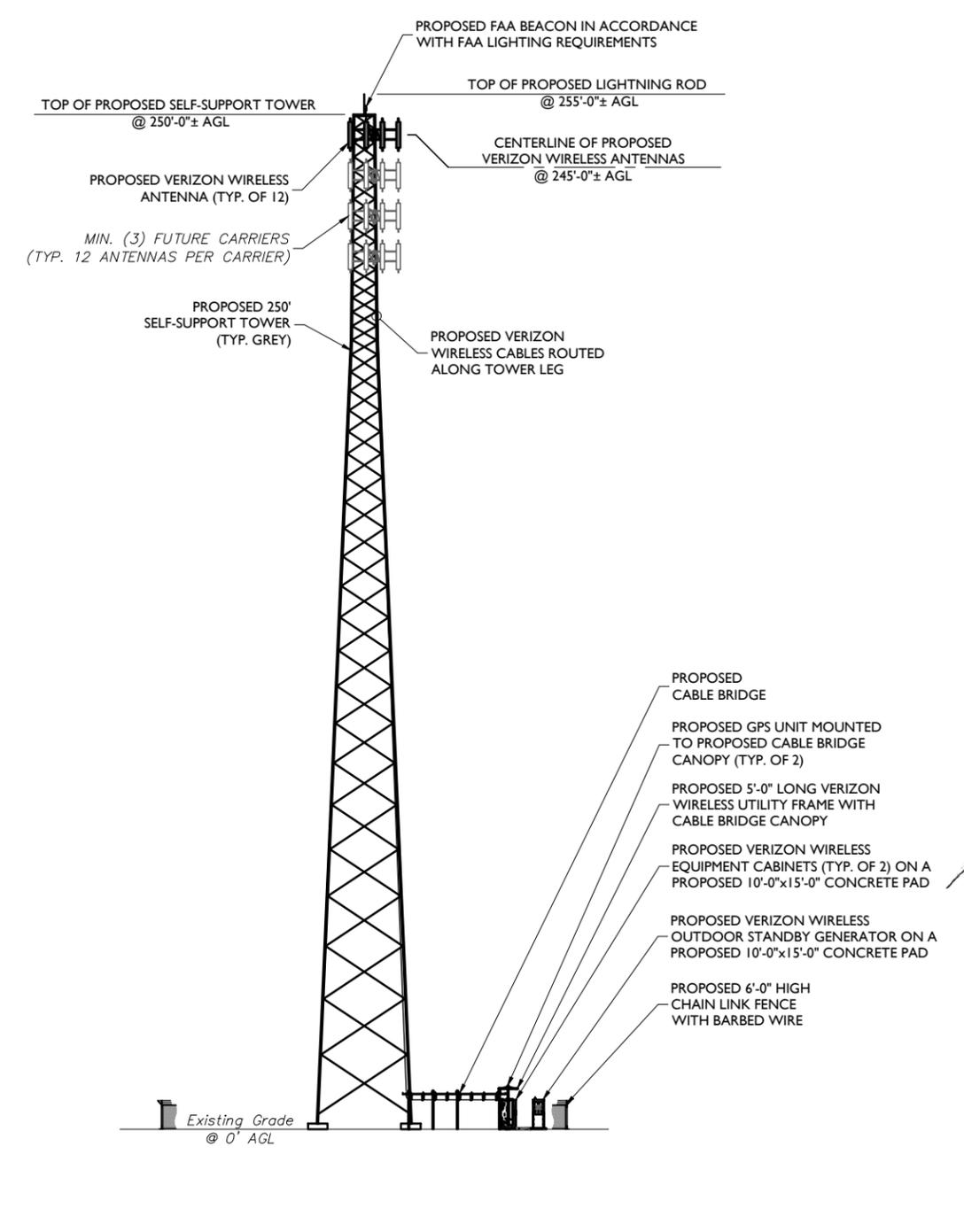
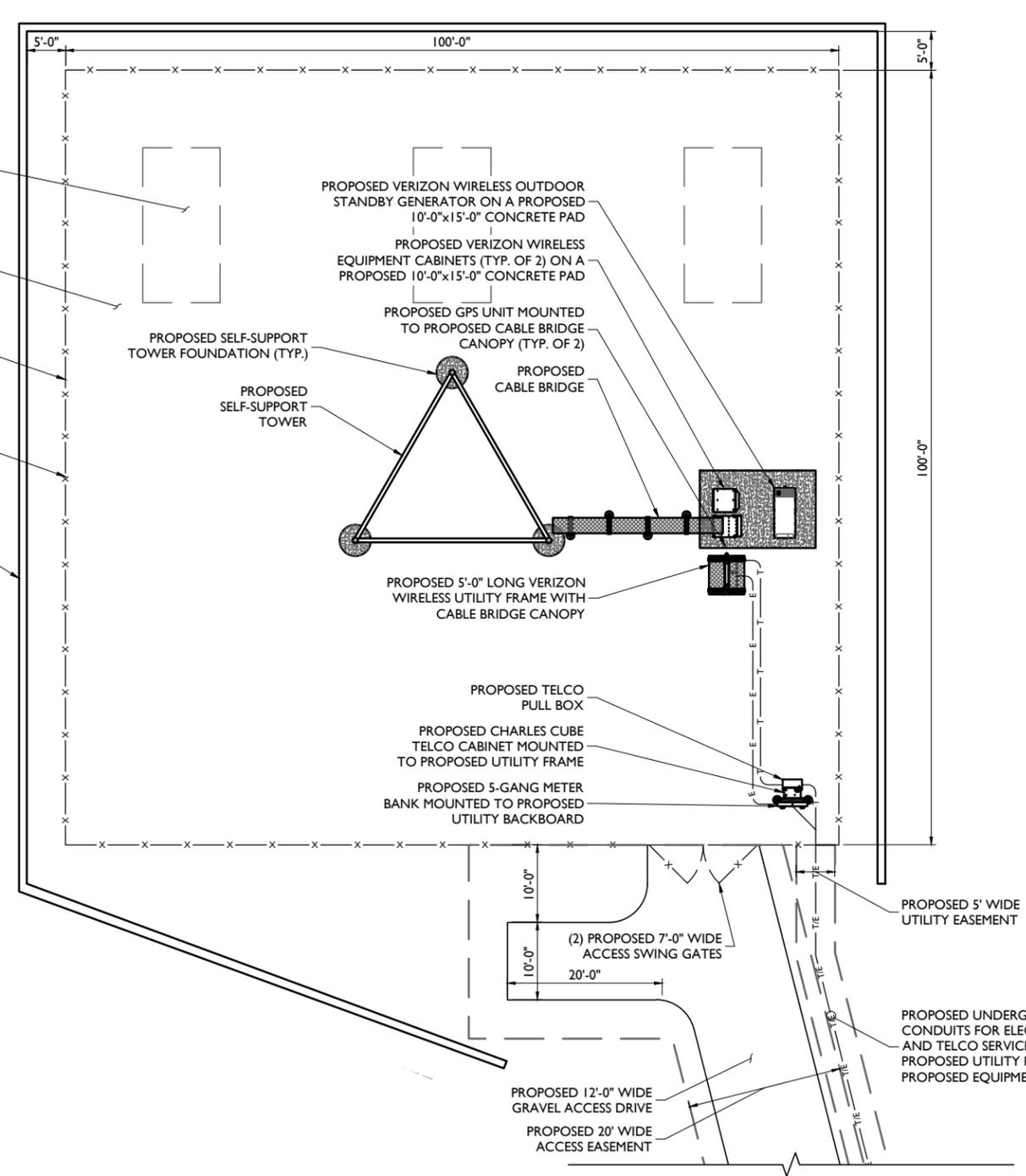
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REV	DATE	DESCRIPTION	BY

**MICHAEL P. CLEARLY**  
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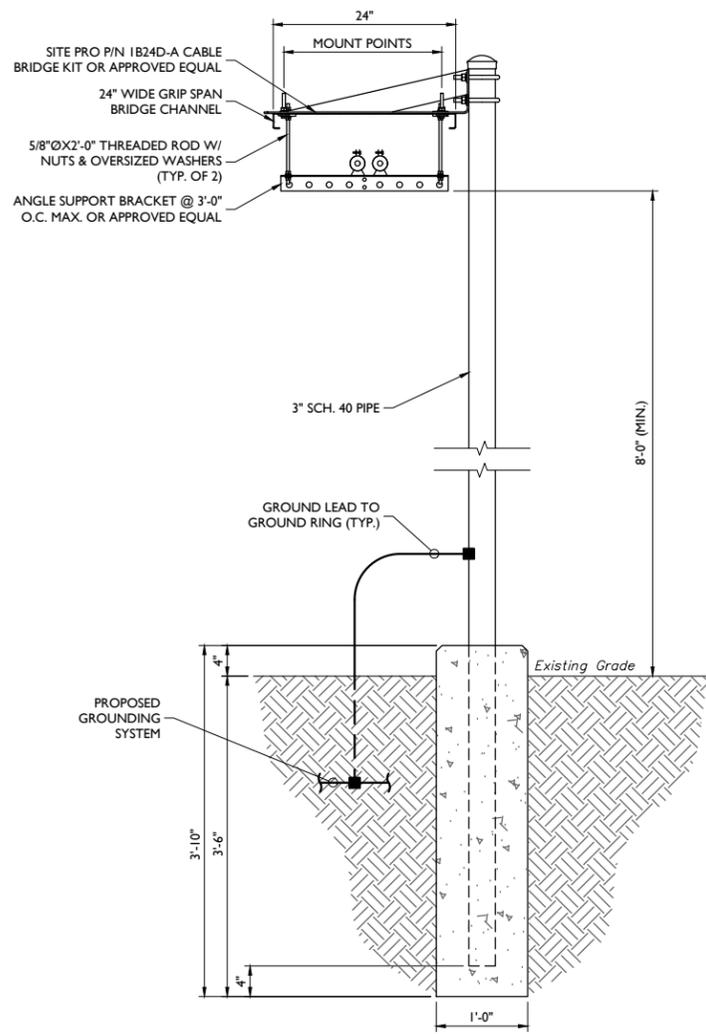
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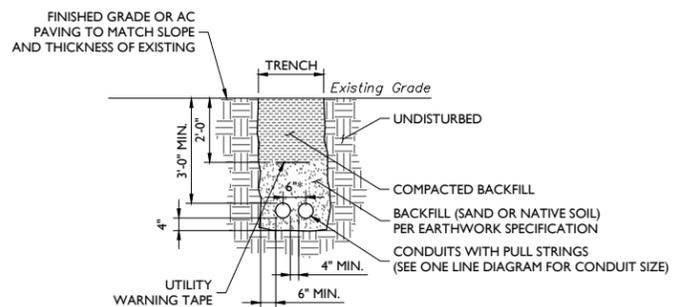


**NOTE:**  
 TOWER SHALL BE LIT IN ACCORDANCE WITH FAA REQUIREMENTS INCORPORATING DAY WHITE/NIGHT RED SYSTEM.

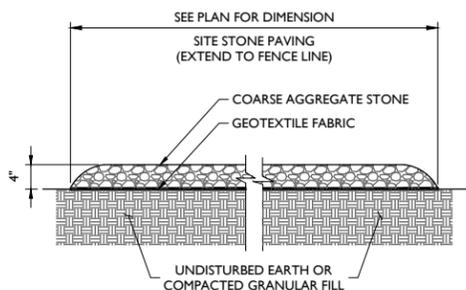
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 By: PML/LEPN



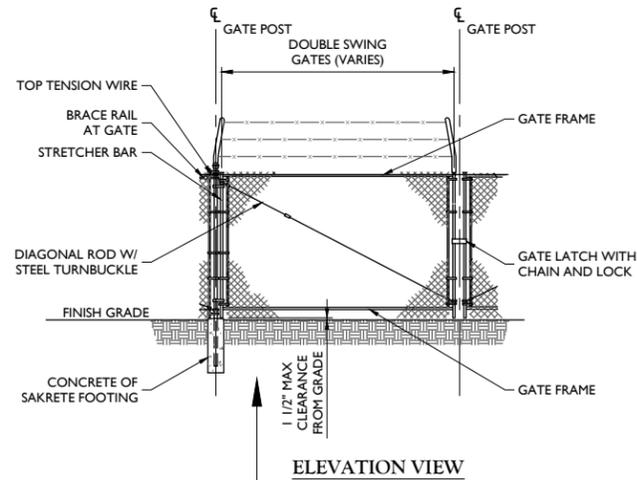
**CABLE BRIDGE DETAIL**  
NOT TO SCALE



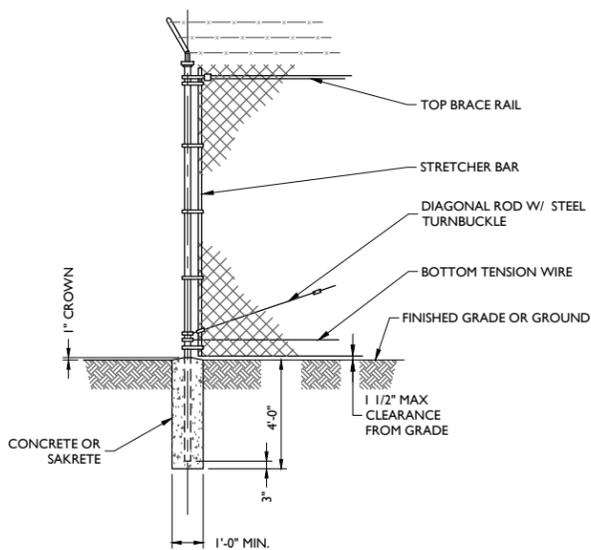
**UTILITY CONDUIT RUN**  
NOT TO SCALE



**GRAVEL SURFACING**  
NOT TO SCALE



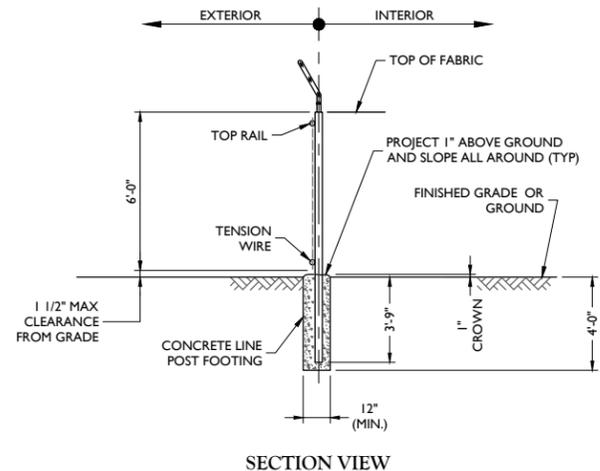
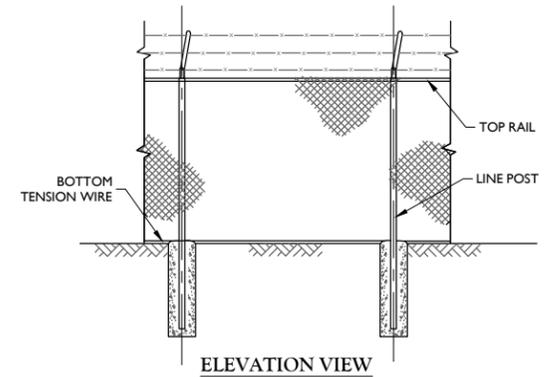
**CHAIN LINK SWING GATE, DOUBLE**  
NOT TO SCALE



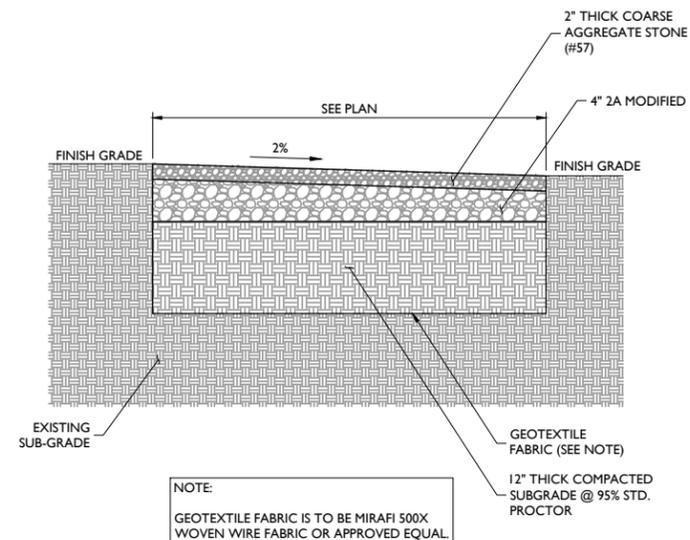
**CHAIN LINK CORNER, GATE, END, OR PULL POST**  
NOT TO SCALE

**FENCE NOTES:**

- GATE POST, CORNER, TERMINAL OR PULL POST SHALL BE 3"Ø SCHEDULE 40 FOR GATE WIDTHS UP THROUGH 7 FEET OR 14 FEET FOR DOUBLE SWING GATE PER ASTM-F1083.
- LINE POST: 2-3/8"Ø SCHEDULE 40 PIPE PER ASTM-F1083.
- GATE FRAME: 1 1/2"Ø SCHEDULE 40 PIPE PER ASTM-F1083.
- TOP RAIL & BRACE RAIL: 1 1/4"Ø SCHEDULE 40 PIPE PER ASTM-F1083.
- FABRIC: 9 GA. CORE WIRE SIZE 2" MESH, CONFORMING TO ASTM-A392 CLASS 1.
- TIE WIRE: MINIMUM 11 GA GALVANIZED STEEL INSTALL A SINGLE WRAP TIE WIRE AT POSTS AND RAILS AT MAX. 24" INTERVALS. INSTALL HOG RINGS ON TENSION WIRE AT 24" INTERVALS.
- TENSION WIRE: 7 GA. GALVANIZED STEEL.
- BARBED WIRE: 3 STRANDS OF DOUBLE STRANDED 12-1/2 GAUGE TWISTED WIRE, 4 PT. BARBS SPACED ON APPROXIMATELY 5" CENTERS.
- GATE LATCH: 1-3/8" O.D. PLUNGER ROD W/ MUSHROOM TYPE CATCH AND LOCK.
- LOCAL ORDINANCE FOR BARBED WIRE PERMIT SHALL GOVERN INSTALLATION.
- HEIGHT = 6'-0" VERTICAL DIMENSION WITH 1'-0" BARBED WIRE.
- ALL WORK SHALL CONFORM WITH THE PROJECT SPECIFICATIONS.



**CHAIN LINK FENCE DETAIL**  
NOT TO SCALE



**GRAVEL DRIVEWAY SURFACING**  
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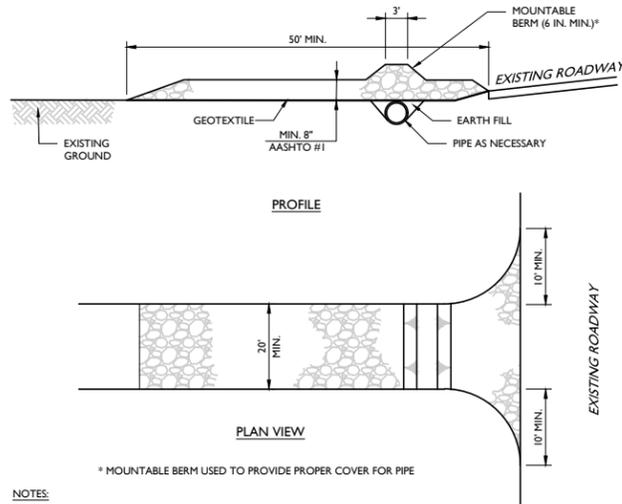
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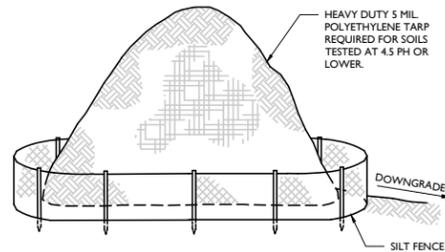
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**CONSTRUCTION DETAILS**



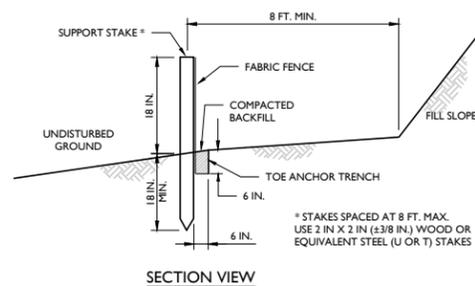
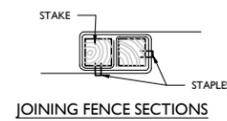
- NOTES:
1. REMOVE TOPSOIL PRIOR TO INSTALLATION OF ROCK CONSTRUCTION ENTRANCE. EXTEND ROCK OVER FULL WIDTH OF ENTRANCE.
  2. RUNOFF SHALL BE DIVERTED FROM ROADWAY TO A SUITABLE SEDIMENT REMOVAL BMP PRIOR TO ENTERING ROCK CONSTRUCTION ENTRANCE.
  3. MOUNTABLE BERM SHALL BE INSTALLED WHEREVER OPTIONAL CULVERT PIPE IS USED AND PROPER PIPE COVER AS SPECIFIED BY MANUFACTURER IS NOT OTHERWISE PROVIDED. PIPE SHALL BE SIZED APPROPRIATELY FOR SIZE OF DITCH BEING CROSSED.
  4. MAINTENANCE: ROCK CONSTRUCTION ENTRANCE THICKNESS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK. A STOCKPILE SHALL BE MAINTAINED ON SITE FOR THIS PURPOSE. ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE IMMEDIATELY. IF EXCESSIVE AMOUNTS OF SEDIMENT ARE BEING DEPOSITED ON ROADWAY, EXTEND LENGTH OF ROCK CONSTRUCTION ENTRANCE BY 50 FOOT INCREMENTS UNTIL CONDITION IS ALLEVIATED OR INSTALL WASH RACK, WASHING THE ROADWAY OR SWEEPING THE DEPOSITS INTO ROADWAY DITCHES, SEWERS, CULVERTS, OR OTHER DRAINAGE COURSES IS NOT ACCEPTABLE.

**STONE CONSTRUCTION ENTRANCE**  
NOT TO SCALE



- NOTES:
1. ALL STOCKPILES SHALL NOT TO BE LOCATED WITHIN 50 FEET OF A FLOODPLAIN, SLOPE, ROADWAY OR DRAINAGE FACILITY.

**TOPSOIL STOCKPILE WITH SILT FENCE**  
NOT TO SCALE



- NOTES:
1. FABRIC SHALL HAVE THE MINIMUM PROPERTIES AS SHOWN IN TABLE 4.3 OF THE PA DEP EROSION CONTROL MANUAL.
  2. FABRIC WIDTH SHALL BE 30 IN. MINIMUM. STAKES SHALL BE HARDWOOD OR EQUIVALENT STEEL (U OR T) STAKES.
  3. SILT FENCE SHALL BE PLACED AT LEVEL EXISTING GRADE. BOTH ENDS OF THE FENCE SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT.
  4. SEDIMENT SHALL BE REMOVED WHEN ACCUMULATIONS REACH HALF THE ABOVE GROUND HEIGHT OF THE FENCE.
  5. ANY SECTION OF SILT FENCE WHICH HAS BEEN UNDERMINED OR TOPPED SHALL BE IMMEDIATELY REPLACED WITH A ROCK FILTER OUTLET (STANDARD CONSTRUCTION DETAIL # 4-6).
  6. FENCE SHALL BE REMOVED AND PROPERLY DISPOSED OF WHEN TRIBUTARY AREA IS PERMANENTLY STABILIZED.

**STANDARD SILT FENCE (18\"/>**

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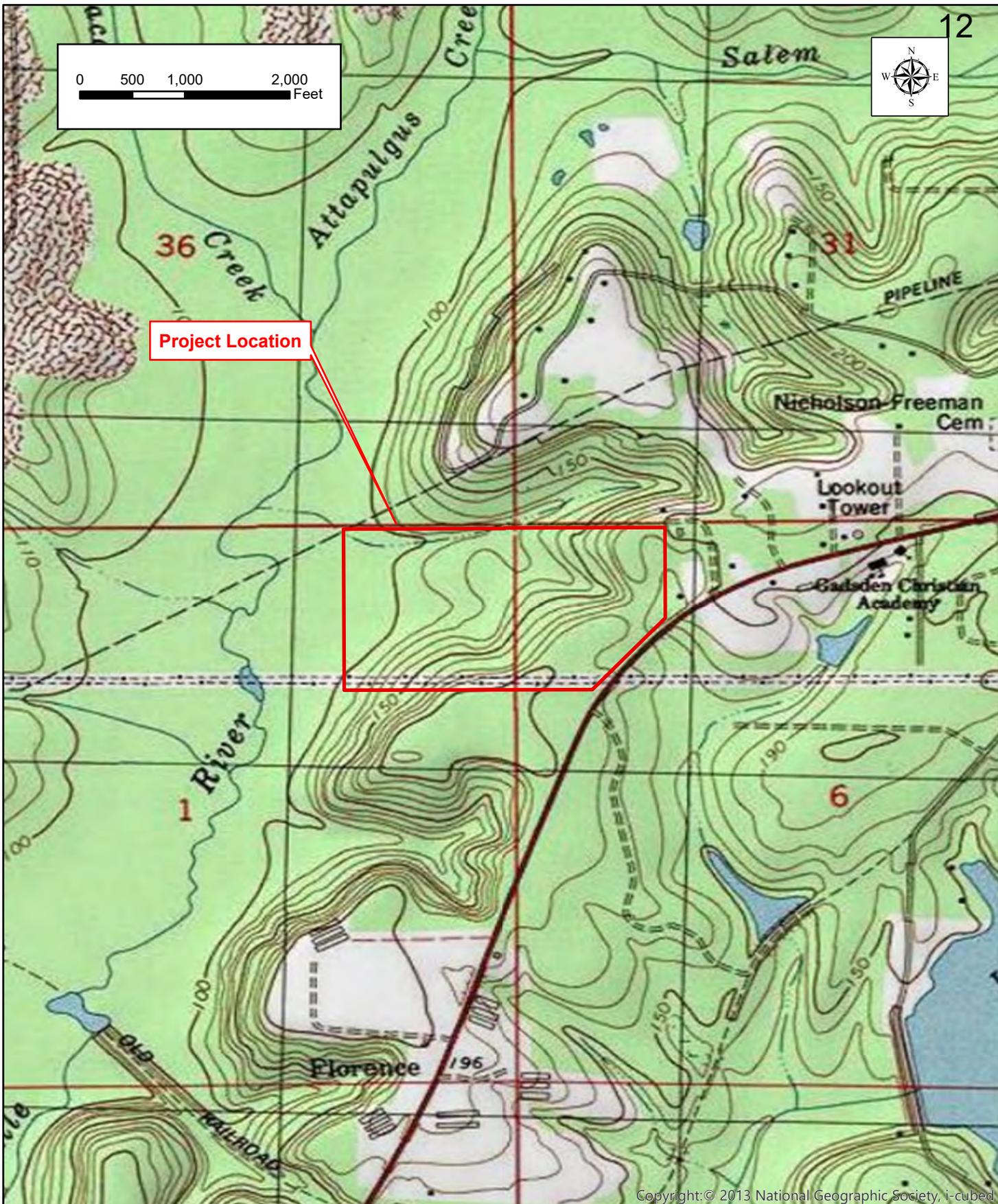
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**SHEET TITLE:**  
CONSTRUCTION DETAILS

**SHEET NUMBER:**  
Page 248 of 353

By: P101110101



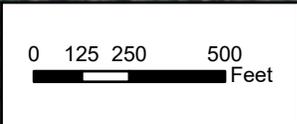
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Prepared For: 	<h2>Project Location Map</h2> <p>Havana Highway US-FL-5052 Havana, Florida 32333</p>		<h2>Figure 1</h2>
Prepared By: Raleigh Office 2000 Regency Parkway Ste 295 Cary, NC 27518 T: 919.439.8461 <a href="http://www.maserconsulting.com">www.maserconsulting.com</a> 	Date: 9/4/2019	MC Project #: 19983002A	Drawn By: AAP

 Project Boundary  
Page 219 of 353



**APPENDIX C**  
**Site Plan**



**Project Location**



**Approximate Location of Wetlands**

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Prepared For:



Prepared By:

Raleigh Office  
2000 Regency Parkway Ste 295  
Cary, NC 27518  
T: 919.439.8461  
www.maserconsulting.com



## Aerial Map

Havana Highway US-FL-5052  
Havana, Florida 32333

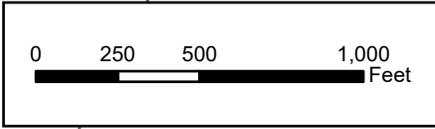
Date:	MC Project #:	Drawn By:
9/4/2019	19983002A	AAP

Figure  
2

— Project Boundary

Wetlands

Page 221 of 353



**Project Location**

PARCEL ID  
306-2N-2W-0000-00220-0000

Prepared For:



Prepared By:

**Raleigh Office**  
2000 Regency Parkway Ste 295  
Cary, NC 27518  
T: 919.439.8461  
www.maserconsulting.com



## Municipal Tax Map

**Parcel ID: 3-06-2N-2W-0000-00220-0000**

Havana Highway US-FL-5052  
Havana, Florida 32333

Figure  
3

Date:

9/4/2019

MC Project #:

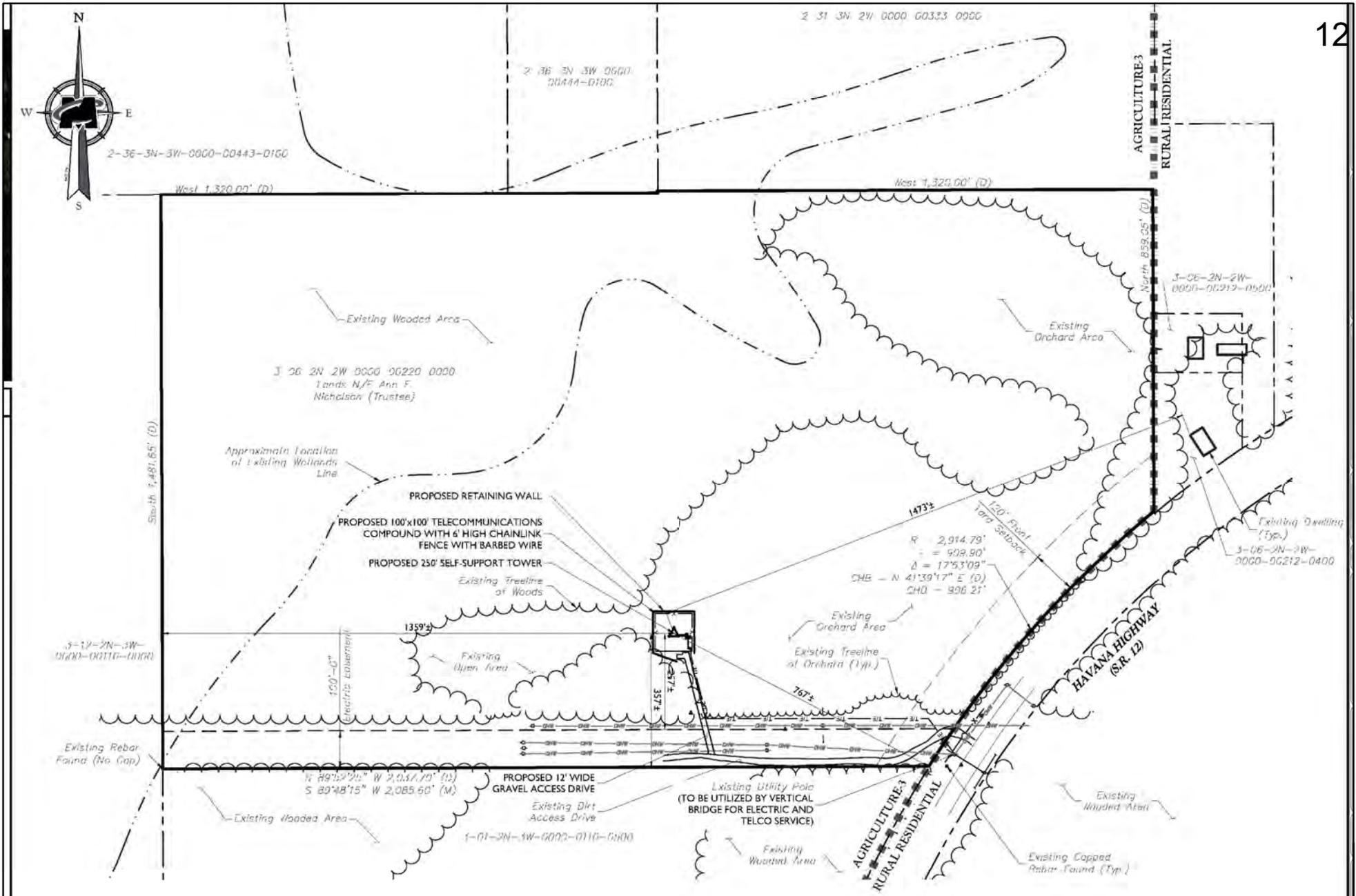
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Drawn By:

AAP

 Project Parcel

 Parcels



Prepared For:



Prepared By:

Raleigh Office  
2000 Regency Parkway Ste 295  
Cary, NC 27518  
T: 919.439.8461



# Site Plan

Havana Highway US-FL-5052  
Havana, Florida 32333

Figure  
4

NOT TO SCALE  
Page 223 of 353

Date:  
9/4/2019

MC Project #:  
19983002A

Drawn By:  
AAP



---

**APPENDIX D**  
**Wilderness Areas, Wildlife Preserves and**  
**Threatened & Endangered Species**



## United States Department of the Interior



FISH AND WILDLIFE SERVICE  
 Panama City Ecological Services Field Office  
 1601 Balboa Avenue  
 Panama City, FL 32405-3792  
 Phone: (850) 769-0552 Fax: (850) 763-2177  
<http://www.fws.gov/panamacity/specieslist.html>  
<http://www.fws.gov/panamacity/pcdata.html>

In Reply Refer To:

August 22, 2019

Consultation Code: 04EF3000-2019-SLI-0300

Event Code: 04EF3000-2019-E-00517

Project Name: Havanna Hwy Proj (19983002A)

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan ([http://www.fws.gov/windenergy/eagle\\_guidance.html](http://www.fws.gov/windenergy/eagle_guidance.html)). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office. All correspondence should be submitted to [panamacityregs@fws.gov](mailto:panamacityregs@fws.gov).

Attachment(s):

- Official Species List

## Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

**Panama City Ecological Services Field Office**

1601 Balboa Avenue

Panama City, FL 32405-3792

(850) 769-0552

## Project Summary

Consultation Code: 04EF3000-2019-SLI-0300

Event Code: 04EF3000-2019-E-00517

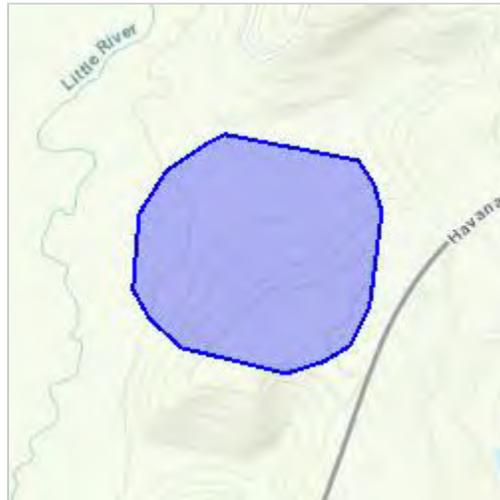
Project Name: Havana Hwy Proj (19983002A)

Project Type: OIL OR GAS

Project Description: New towers being installed

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/30.605228217368587N84.48229185158476W>



Counties: Gadsden, FL

## Endangered Species Act Species

There is a total of 3 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries<sup>1</sup>, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

- 
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

### Birds

NAME	STATUS
Wood Stork <i>Mycteria americana</i> Population: AL, FL, GA, MS, NC, SC No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/8477">https://ecos.fws.gov/ecp/species/8477</a>	Threatened

### Reptiles

NAME	STATUS
Eastern Indigo Snake <i>Drymarchon corais couperi</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/646">https://ecos.fws.gov/ecp/species/646</a>	Threatened
Gopher Tortoise <i>Gopherus polyphemus</i> Population: eastern No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/6994">https://ecos.fws.gov/ecp/species/6994</a>	Candidate

### Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.



## Florida Natural Areas Inventory

### Biodiversity Matrix Query Results

#### UNOFFICIAL REPORT

Created 9/3/2019

(Contact the FNAI Data Services Coordinator at 850.224.8207 or [kbrinegar@fnai.fsu.edu](mailto:kbrinegar@fnai.fsu.edu) for information on an official Standard Data Report)

NOTE: The Biodiversity Matrix includes only rare species and natural communities tracked by FNAI.

#### Report for 1 Matrix Unit: 12204

	<p><b>Descriptions</b></p> <p><b>DOCUMENTED</b> - There is a documented occurrence in the FNAI database of the species or community within this Matrix Unit.</p> <p><b>DOCUMENTED-HISTORIC</b> - There is a documented occurrence in the FNAI database of the species or community within this Matrix Unit; however the occurrence has not been observed/reported within the last twenty years.</p> <p><b>LIKELY</b> - The species or community is <i>known</i> to occur in this vicinity, and is considered likely within this Matrix Unit because:</p> <div style="border: 1px solid black; padding: 5px;"> <ol style="list-style-type: none"> <li>1. documented occurrence overlaps this and adjacent Matrix Units, but the documentation isn't precise enough to indicate which of those Units the species or community is actually located in; <i>or</i></li> <li>2. there is a documented occurrence in the vicinity and there is suitable habitat for that species or community within this Matrix Unit.</li> </ol> </div> <p><b>POTENTIAL</b> - This Matrix Unit lies within the known or predicted range of the species or community based on expert knowledge and environmental variables such as climate, soils, topography, and landcover.</p>
--	--

**Matrix Unit ID: 12204**

0 **Documented** Elements Found

0 **Documented-Historic** Elements Found

3 **Likely** Elements Found

Scientific and Common Names	Global Rank	State Rank	Federal Status	State Listing
<i>Mesic flatwoods</i>	G4	S4	N	N
	G4	S2	LT	FT

<a href="#">Mycteria americana</a> Wood Stork	G5	S3	N	N
<i>Upland hardwood forest</i>				

**Matrix Unit ID: 12204****44 Potential** Elements for Matrix Unit 12204

Scientific and Common Names	Global Rank	State Rank	Federal Status	State Listing
<i>Agrimonia incisa</i> Incised Groove-bur	G3	S2	N	T
<a href="#">Ambystoma cingulatum</a> Frosted Flatwoods Salamander	G2	S2	LT	FT
<i>Amphiuma pholeter</i> One-toed Amphiuma	G3	S3	N	N
<i>Andropogon arctatus</i> Pine-woods Bluestem	G3	S3	N	T
<a href="#">Asplenium heteroresiliens</a> Wagner's Spleenwort	GNA	S1	N	N
<i>Baptisia megacarpa</i> Apalachicola Wild Indigo	G2	S1	N	E
<a href="#">Brickellia cordifolia</a> Flyr's Brickell-bush	G2G3	S2	N	E
<i>Calamintha dentata</i> Toothed Savory	G3	S3	N	T
<a href="#">Conradina glabra</a> Apalachicola Rosemary	G1	S1	LE	E
<a href="#">Corvynorhinus rafinesquii</a> Rafinesque's Big-eared Bat	G3G4	S2	N	N
<a href="#">Croomia pauciflora</a> Croomia	G3	S2	N	E
<i>Croton elliotii</i> Elliott's Croton	G2G3	SH	N	N
<a href="#">Drymarchon couperi</a> Eastern Indigo Snake	G3	S3	LT	FT
<a href="#">Gopherus polyphemus</a> Gopher Tortoise	G3	S3	C	ST
<a href="#">Heterodon simus</a> Southern Hognose Snake	G2	S2	N	N
<a href="#">Linum westii</a> West's Flax	G1	S1	N	E
<a href="#">Litsea aestivalis</a> Pondspice	G3?	S2	N	E
<a href="#">Lythrum curtissii</a> Curtiss' Loosestrife	G1	S1	N	E
<a href="#">Magnolia ashei</a> Ashe's Magnolia	G2	S2	N	E
<a href="#">Matelea alabamensis</a> Alabama Spiny-pod	G2	S2	N	E
<i>Matelea floridana</i> Florida Spiny-pod	G2	S2	N	E
<i>Mustela frenata olivacea</i> Southeastern Weasel	G5T4	S3?	N	N
<a href="#">Myotis austroriparius</a> Southeastern Bat	G3G4	S3	N	N
<i>Oxypolis greenmanii</i> Giant Water-dropwort	G3	S3	N	E
<i>Peucaea aestivalis</i> Bachman's Sparrow	G3	S3	N	N
	G3	S2	LE	FE

<a href="#">Picooides borealis</a> Red-cockaded Woodpecker				
<a href="#">Pinguicula primuliflora</a> Primrose-flowered Butterwort	G3G4	S3	N	E
<a href="#">Pituophis melanoleucus muigitus</a> Florida Pine Snake	G4T3	S3	N	SSC
<a href="#">Pityopsis flexuosa</a> Zigzag Silkgrass	G3	S3	N	E
<a href="#">Platanthera integra</a> Yellow Fringeless Orchid	G3G4	S3	N	E
<a href="#">Pycnanthemum floridanum</a> Florida Mountain-mint	G3	S3	N	T
<a href="#">Rhexia parviflora</a> Small-flowered Meadowbeauty	G2	S2	N	E
<a href="#">Rhododendron austrinum</a> Florida Flame Azalea	G3	S3	N	E
<a href="#">Rhododendron chapmanii</a> Chapman's Rhododendron	G1	S1	LE	E
<a href="#">Ruellia noctiflora</a> Nightflowering Wild Petunia	G2	S2	N	E
<a href="#">Sarracenia leucophylla</a> White-top Pitcherplant	G3	S3	N	E
<a href="#">Schisandra glabra</a> Bay Star-vine	G3	S2	N	E
<a href="#">Taxus floridana</a> Florida Yew	G2	S2	N	E
<a href="#">Torreya taxifolia</a> Florida Torreya	G1	S1	LE	E
<a href="#">Trillium lancifolium</a> Narrow-leaved Trillium	G3	S2	N	E
<a href="#">Ursus americanus floridanus</a> Florida Black Bear	G5T2	S2	N	N
<a href="#">Uvularia floridana</a> Florida Merrybells	G3	S1	N	E
<a href="#">Xyris longisejala</a> Karst Pond Xyris	G2G3	S2S3	N	E
<a href="#">Xyris scabrifolia</a> Harper's Yellow-eyed Grass	G3	S3	N	T

**Disclaimer**

The data maintained by the Florida Natural Areas Inventory represent the single most comprehensive source of information available on the locations of rare species and other significant ecological resources statewide. However, the data are not always based on comprehensive or site-specific field surveys. Therefore, this information should not be regarded as a final statement on the biological resources of the site being considered, nor should it be substituted for on-site surveys. FNAI shall not be held liable for the accuracy and completeness of these data, or opinions or conclusions drawn from these data. FNAI is not inviting reliance on these data. Inventory data are designed for the purposes of conservation planning and scientific research and are not intended for use as the primary criteria for regulatory decisions.

**Unofficial Report**

These results are considered unofficial. FNAI offers a [Standard Data Request](#) option for those needing certifiable data.



# Migratory Bird Program

## Conserving the Nature of America

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### The Migratory Bird Program - Conserving America's Birds

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Avocets Credit: Donna A. Dewhurst

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United States Department of Interior  
Fish and Wildlife Service  
Washington, DC 20240

September 14, 2000

**To:** Regional Directors

**From:** Director /s/ Jamie Rappaport Clark

**Subject:** Service Guidance on the Siting, Construction, Operation and Decommissioning of Communications Towers

Construction of communications towers (including radio, television, cellular, and microwave) in the United States has been growing at an exponential rate, increasing at an estimated 6 percent to 8 percent annually. According to the Federal Communication Commission's *2000 Antenna Structure Registry*, the number of lighted towers greater than 199 feet above ground level (AGL) currently number over 45,000 and the total number of towers over 74,000. Non-compliance with the registry program is estimated at 24 percent to 38 percent, bringing the total to 92,000 to 102,000. By 2003, all television stations must be digital, adding potentially 1,000 new towers exceeding 1,000 feet AGL.

The construction of new towers creates a potentially significant impact on migratory birds, especially some 350 species of night-migrating birds. Communications towers are estimated to kill 4-5 million birds per year, which violates the spirit and the intent of the Migratory Bird Treaty Act and the Code of Federal Regulations at Part 50 designed to implement the MBTA. Some of the species affected are also protected under the Endangered Species Act and Bald and Golden Eagle Act.

Service personnel may become involved in the review of proposed tower sitings and/or in the evaluation of tower impacts on migratory birds through National Environmental Policy Act review; specifically, Sections 1501.6, opportunity to be a cooperating agency, and 1503.4, duty to comment on federally-licensed activities for agencies with jurisdiction by law, in this case the MBTA, or because of special expertise. Also, the National Wildlife Refuge System Improvement Act requires that any activity on Refuge lands be determined as compatible with the Refuge system mission and the Refuge purpose(s). In addition, the Service is required by the ESA to assist other Federal agencies in ensuring that any action they authorize, implement, or fund will not jeopardize the continued existence of any Federally endangered or threatened species.

A Communication Tower Working Group composed of government agencies, industry, academic researchers and NGO's has been formed to develop and implement a research protocol to determine the best ways to construct and operate towers to prevent bird strikes. Until the research study is completed, or until research efforts uncover significant new mitigation measures, all Service personnel involved in the review of proposed tower sitings and/or the evaluation of the impacts of towers on migratory birds should use the attached interim guidelines when making recommendations to all companies, license applicants, or licensees proposing new tower sitings. These guidelines were developed by

Service personnel from research conducted in several eastern, midwestern, and southern states, and have been refined through Regional review. They are based on the best information available at this time, and are the most prudent and effective measures for avoiding bird strikes at towers. We believe that they will provide significant protection for migratory birds pending completion of the Working Group's recommendations. As new information becomes available, the guidelines will be updated accordingly.

Implementation of these guidelines by the communications industry is voluntary, and our recommendations must be balanced with Federal Aviation Administration requirements and local community concerns where necessary. Field offices have discretion in the use of these guidelines on a case by case basis, and may also have additional recommendations to add which are specific to their geographic area.

Also attached is a [Tower Site Evaluation Form](#) which may prove useful in evaluating proposed towers and in streamlining the evaluation process. Copies may be provided to consultants or tower companies who regularly submit requests for consultation, as well as to those who submit individual requests that do not contain sufficient information to allow adequate evaluation. This form is for discretionary use, and may be modified as necessary.

The Migratory Bird Treaty Act (16 U.S.C. 703-712) prohibits the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests, except when specifically authorized by the Department of the Interior. While the Act has no provision for allowing unauthorized take, it must be recognized that some birds may be killed at structures such as communications towers even if all reasonable measures to avoid it are implemented. The Service's Division of Law Enforcement carries out its mission to protect migratory birds not only through investigations and enforcement, but also through fostering relationships with individuals and industries that proactively seek to eliminate their impacts on migratory birds. While it is not possible under the Act to absolve individuals or companies from liability if they follow these recommended guidelines, the Division of Law Enforcement and Department of Justice have used enforcement and prosecutorial discretion in the past regarding individuals or companies who have made good faith efforts to avoid the take of migratory birds.

Please ensure that all field personnel involved in review of FCC licensed communications tower proposals receive copies of this memorandum. Questions regarding this issue should be directed to Dr. Benjamin Tuggle, Chief, Division of Habitat Conservation, at (703)358-2161, or Jon Andrew, Chief, Division of Migratory Bird Management, at (703)358-1714. These guidelines will be incorporated in a Director's Order and placed in the Fish and Wildlife Service Manual at a future date.

### **Service Interim Guidelines For Recommendations On**

#### **Communications Tower Siting, Construction, Operation, and Decommissioning**

1. Any company/applicant/licensee proposing to construct a new communications tower should be strongly encouraged to collocate the communications equipment on an existing communication tower or other structure (e.g., billboard, water tower, or building mount). Depending on tower load factors, from 6 to 10 providers may collocate on an existing tower.
2. If collocation is not feasible and a new tower or towers are to be constructed, communications service providers should be strongly encouraged to construct towers no more than 199 feet above ground level (AGL), using construction techniques which do not require guy wires (e.g., use a lattice structure, monopole, etc.). Such towers should be unlighted if Federal Aviation Administration regulations permit.

3. If constructing multiple towers, providers should consider the cumulative impacts of all of those towers to migratory birds and threatened and endangered species as well as the impacts of each individual tower.
4. If at all possible, new towers should be sited within existing “antenna farms” (clusters of towers). Towers should not be sited in or near wetlands, other known bird concentration areas (e.g., state or Federal refuges, staging areas, rookeries), in known migratory or daily movement flyways, or in habitat of threatened or endangered species. Towers should not be sited in areas with a high incidence of fog, mist, and low ceilings.
5. If taller (>199 feet AGL) towers requiring lights for aviation safety must be constructed, the minimum amount of pilot warning and obstruction avoidance lighting required by the FAA should be used. Unless otherwise required by the FAA, only white (preferable) or red strobe lights should be used at night, and these should be the minimum number, minimum intensity, and minimum number of flashes per minute (longest duration between flashes) allowable by the FAA. The use of solid red or pulsating red warning lights at night should be avoided. Current research indicates that solid or pulsating (beacon) red lights attract night-migrating birds at a much higher rate than white strobe lights. Red strobe lights have not yet been studied.
6. Tower designs using guy wires for support which are proposed to be located in known raptor or waterbird concentration areas or daily movement routes, or in major diurnal migratory bird movement routes or stopover sites, should have daytime visual markers on the wires to prevent collisions by these diurnally moving species. (For guidance on markers, see *Avian Power Line Interaction Committee (APLIC). 1994. Mitigating Bird Collisions with Power Lines: The State of the Art in 1994. Edison Electric Institute, Washington, D.C., 78 pp*, and *Avian Power Line Interaction Committee (APLIC). 1996. Suggested Practices for Raptor Protection on Power Lines. Edison Electric Institute/Raptor Research Foundation, Washington, D.C., 128 pp*. Copies can be obtained via the Internet at <http://www.eei.org/resources/pubcat/enviro/>, or by calling 1-800/334-5453).
7. Towers and appendant facilities should be sited, designed and constructed so as to avoid or minimize habitat loss within and adjacent to the tower “footprint”. However, a larger tower footprint is preferable to the use of guy wires in construction. Road access and fencing should be minimized to reduce or prevent habitat fragmentation and disturbance, and to reduce above ground obstacles to birds in flight.
8. If significant numbers of breeding, feeding, or roosting birds are known to habitually use the proposed tower construction area, relocation to an alternate site should be recommended. If this is not an option, seasonal restrictions on construction may be advisable in order to avoid disturbance during periods of high bird activity.
9. In order to reduce the number of towers needed in the future, providers should be encouraged to design new towers structurally and electrically to accommodate the applicant/licensee’s antennas and comparable antennas for at least two additional users (minimum of three users for each tower structure), unless this design would require the addition of lights or guy wires to an otherwise unlighted and/or unguyed tower.
10. Security lighting for on-ground facilities and equipment should be down-shielded to keep light within the boundaries of the site.
11. If a tower is constructed or proposed for construction, Service personnel or researchers from the Communication Tower Working Group should be allowed access to the site to evaluate bird use, conduct dead-bird searches, to place net catchments below the towers but above the ground, and to place radar, Global Positioning System, infrared, thermal imagery, and acoustical monitoring equipment

as necessary to assess and verify bird movements and to gain information on the impacts of various tower sizes, configurations, and lighting systems.

12. Towers no longer in use or determined to be obsolete should be removed within 12 months of cessation of use.

In order to obtain information on the extent to which these guidelines are being implemented, and to identify any recurring problems with their implementation which may necessitate modifications, letters provided in response to requests for evaluation of proposed towers should contain the following request:

“In order to obtain information on the usefulness of these guidelines in preventing bird strikes, and to identify any recurring problems with their implementation which may necessitate modifications, please advise us of the final location and specifications of the proposed tower, and which of the measures recommended for the protection of migratory birds were implemented. If any of the recommended measures can not be implemented, please explain why they were not feasible.”



Last updated: April 11, 2012

## George Buchholz

---

**From:** Ackley, Jeffrey <jeffrey\_ackley@fws.gov>  
**Sent:** Friday, September 20, 2019 10:03 AM  
**To:** George Buchholz  
**Subject:** Re: [EXTERNAL] FW: Havana Highway – Telecommunications Tower; Havana, North Carolina; USFWS Initial Scoping Letter; 19983002A

Thank you for the additional information, it is helpful to us if that is provided in the cover letter along with a reference to the federal agency involved (FCC I assume?). We do not comment on no effect determinations, that is an internal decision by the agency involved.

the gopher tortoise isn't listed yet federally (just by the state of FL, from which you will probably need to get a separate signature). You will need to verify that the federal tortoise listing is still pending prior to beginning construction, and be able to complete the construction before the listing gets finalized (if that happens). If the listing happens first, please reach out to us for a concurrence at that point.

In order to expedite the approval process, we apply a concurrence "stamp" to the applicant's cover letter, but that requires that the letter not request us to concur officially on things we do not have the authority to regulate. It should only specifically reference the indigo snake, as that is the only species with the potential for impacts that is currently listed in the ESA.

The last two paragraphs of the cover letter should read something like this. If this works for you, please send me a revised version so I can stamp it:

"As noted in the enclosed Informal Biological Assessment, potential habitat may be present for the Eastern Indigo Snake (*Drymarchon couperi*), which is federally listed as threatened under the Endangered Species Act of 1973. However, this species is not known to persist near the project site, and due to the small scope of the proposed impact area, we anticipate the project may affect, but is not likely to adversely affect this species.

the project will use the **STANDARD PROTECTION MEASURES FOR THE EASTERN INDIGO SNAKE:**

[https://www.fws.gov/northflorida/IndigoSnakes/20130812\\_Eastern\\_indigo\\_snake\\_Standard\\_Protection\\_Measures.htm](https://www.fws.gov/northflorida/IndigoSnakes/20130812_Eastern_indigo_snake_Standard_Protection_Measures.htm)

In the unlikely event that an indigo snake is found on the project site, work will cease and we will notify USFWS. The conditions for resuming work are listed in the protection measures. We are requesting concurrence from the US Fish & Wildlife Service with our determination that the project "may affect, but is not

likely to adversely affect" the Eastern Indigo Snake."

Dr. Jeffrey W. Ackley, Ecologist

U.S. Fish & Wildlife Service

1601 Balboa Avenue, Panama City, FL 32405

On Thu, Sep 19, 2019 at 3:46 PM George Buchholz <[GBuchholz@maserconsulting.com](mailto:GBuchholz@maserconsulting.com)> wrote:

A field review was conducted on September 16, 2019 for the subject property and within the project site. Based on field reconnaissance, the project site is comprised of a mixed mesic hardwood forest comprised of early successional hardwood species, such quercus alba, quercus nigra, Acer rubrum, liquidambar styraciflua, carya ovata. Pinus taeda is also present but not the dominant species. The existing forest stand within the project site is less than 20 years old due to timbering activities. Field reconnaissance confirmed the historical aerial photographs. The subject property also contains PFO1A wetlands located in the western section, northwestern section, and northern section of the property.

Based on the Official Species List generated by iPAC, it is believed that for the wood stork a biological conclusion of "No Effect" should be rendered for the project site. In addition, it is believed that a biological conclusion of "May Affect, May Not Adversely Affect" should be rendered for the gopher tortoise and the eastern indigo snake. We would appreciate comment from the USFWS of these Biological Conclusions for the species listed within the Official Species List.

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From: Ackley, Jeffrey

Sent: Thursday, September 19, 3:31 PM

Subject: Re: [EXTERNAL] FW: Havana Highway – Telecommunications Tower; Havana, North Carolina; USFWS Initial Scoping Letter; 19983002A

Cc: George Buchholz

Dear George Buchholz

In this situation, a federal agency like the FCC, or their representative makes a determination as to what level of affect the project will have on the listed species in the area, and then requests the equivalent level of ESA consultation with USFWS. The goal of the IPAC-generated species list is to allow for additional project planning and development before we comment on it.

If you have a specific concern, I am happy to address it.

cheers,

jeff

Dr. Jeffrey W. Ackley, Ecologist

U.S. Fish & Wildlife Service

1601 Balboa Avenue, Panama City, FL 32405

On Thu, Sep 19, 2019 at 11:58 AM Tucker, Larry <[larry\\_tucker@fws.gov](mailto:larry_tucker@fws.gov)> wrote:

Jeff...

FYI

**George Buchholz, REM, PWS**

Project Manager

Connect with Us:



**Maser Consulting P.A.**

2000 Regency Parkway | Suite 295 | Cary, NC 27518

C: 919-475-3874 P: 919-439-6082 ext: 5707

[www.maserconsulting.com](http://www.maserconsulting.com)

**From:** George Buchholz

**Sent:** Monday, September 9, 2019 4:58 PM

To: [panamacityregs@fws.gov](mailto:panamacityregs@fws.gov)

**Subject:** FW: Havana Highway – Telecommunications Tower; Havana, North Carolina; USFWS Initial Scoping Letter; 19983002A

To whom it may concern:

I was told earlier today, to forward the attachment and the below on to this email.

Please let me know if I can assist any further.

On behalf of Vertical Bridge, Maser Consulting is conducting a threatened and endangered species initial scoping review for a proposed construction of a 100-foot by 100-foot fenced telecommunications compound that will house a new 250-foot lattice tower with a lightning rod. The proposed activities are located off of Havana Highway in Gadsden County within Havana, Florida (LAT: 30.605209, LONG: -84.480651). For your use are exhibits showing the proposed project and an official species lists received from the USFWS Information for Planning and Consultation (IPaC) database. At this time, we are requesting comment from the U.S. Fish Wildlife Service.

**George Buchholz, REM, PWS**

Project Manager

Connect with Us:



**Maser Consulting P.A.**

2000 Regency Parkway | Suite 295 | Cary, NC 27518

C: 919-475-3874 P: 919-439-6082 ext: 5707

[www.maserconsulting.com](http://www.maserconsulting.com)

**From:** George Buchholz

**Sent:** Monday, August 26, 2019 5:23 PM

**To:** [jay\\_herrington@fws.gov](mailto:jay_herrington@fws.gov)

**Subject:** Havana Highway – Telecommunications Tower; Havana, North Carolina; USFWS Initial Scoping Letter; 19983002A

Jay,

On behalf of Vertical Bridge, Maser Consulting is conducting a threatened and endangered species initial scoping review for a proposed construction of a 100-foot by 100-foot fenced telecommunications compound that will house a new 250-foot lattice tower with a lightning rod. The proposed activities are located off of Havana Highway in Gadsden County within Havana, Florida (LAT: 30.605209, LONG: -84.480651). For your use are exhibits showing the proposed project and an official species lists received from the USFWS Information for Planning and Consultation (IPaC) database. At this time, we are requesting comment from the U.S. Fish Wildlife Service.

**George Buchholz, REM, PWS**

Project Manager

Connect with Us:



**Maser Consulting P.A.**

2000 Regency Parkway | Suite 295 | Cary, NC 27518

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[www.maserconsulting.com](http://www.maserconsulting.com)



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**APPENDIX E**  
**Phase I Cultural Resources Investigation and**  
**Tribal Correspondence**



## Phase I Archaeological Survey

FOR

Havana Highway

SITE NUMBER: US-FL-5052

Havana, FL 32333

Gadsden County

September 2019

*Prepared For*

VERTICAL BRIDGE DEVELOPMENT, LLC

750 PARK OF COMMERCE DRIVE

BOCA RATON, FL 33487

*Prepared By*

Maser Consulting P.A.

331 Newman Springs Road, Suite 203

Red Bank, NJ 07701

732.383.1950

MC Project No. 19983002A

## TABLE OF CONTENTS

Contents	Page
1.0 INTRODUCTION .....	1
1.1 Purpose and Goals of the Investigation.....	1
1.2 Project Location.....	1
1.3 Project Description.....	3
1.4 Archaeological Survey Area (Area of Potential Effect) .....	3
1.5 Project Personnel .....	3
2.0 BACKGROUND RESEARCH.....	4
2.1 Sources Reviewed.....	4
2.2 Geology and Soils.....	4
2.3 Previously Recorded Cultural Resources.....	4
2.4 Project Area Archaeological Sensitivity.....	7
3.0 PHASE I FIELD INVESTIGATION .....	8
3.1 Archaeological Survey Methods.....	8
3.1.1 Visual Reconnaissance.....	8
3.1.2 Subsurface Testing.....	8
3.1.3 Data Recording Procedures.....	8
3.1.4 Architectural History Survey Procedures.....	9
3.2 Archaeological Survey Results .....	9
3.2.1 Reconnaissance Survey Results .....	9
3.2.2 Archaeological Fieldwork Results .....	9
3.2.3 Architectural History Results.....	10
4.0 CONCLUSIONS AND RECOMMENDATIONS .....	13
4.1 Summary and Conclusions.....	13
4.2 Recommendations.....	13
5.0 REFERENCES CITED.....	14

**List of Tables**

Table 1: Soil Descriptions for the Project Area .....	4
---	---

**List of Figures**

Figure 1: USGS 7.5-minute Quad Map, Havana (South), Florida .....	2
Figure 2: Aerial Photograph of Sites within One-Mile Radius of Project Area (FDHR, 2019.....)	5
Figure 3: EDR 1938 Historic Aerial.....	6
Figure 4: Wire Nails Uncovered from STP B-6.....	10
Figure 5: Historic Photographs of Dr. Malcolm Nicholson’s Home, 1977 (U.S. Department of the Interior, National Park Service).....	11
Figure 6: Aerial Photograph of Project Site and Dr. Malcolm Nicholson House (2019, Google Earth).....	12

**List of Appendices**

Appendix A: Site Photograph Locations Map
Appendix B: Site Photographs
Appendix C: Architectural Structures Photograph Map and Photographs
Appendix D: Architectural Structure Log
Appendix E: Shovel Test Map
Appendix F: Shovel Test Log
Appendix G: Representative Shovel Test Profiles
Appendix H: Project Plans
Appendix I: Resume
Appendix J: Tribal Correspondences

## **1.0 INTRODUCTION**

### **1.1 Purpose and Goals of the Investigation**

Maser Consulting P.A. has been retained by Vertical Bridge Development, LLC to provide telecommunication design services for the proposed Havana Highway Cell Tower site. As part of these services, Maser Consulting is requesting the Eastern Shawnee Tribe of Oklahoma and Jena Band of Choctaw Indians to conduct a project review.

Additionally, local historic and governmental agencies such as the Gadsden County Historical Society and the Town of Havana, were contacted and promptly notified of all scheduled activities. These agencies were asked to partake and act as an additional consulting party. The Havana History and Heritage Society submitted a response to the notification and offered their support for the project, along with assistance on an as-needed basis.

The purpose of this Phase I archaeological investigation was to identify archaeological or historic sites within the Area of Potential Effect (APE). The Phase I archaeological investigation was conducted in accordance with the *Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation Activities* (Federal Register 1983), as well as the standards and procedures for conducting archaeological investigations proposed by the Eastern Shawnee Tribe of Oklahoma (2019).

### **1.2 Project Location**

The Havana Highway Cell Tower site is located in Havana, Gadsden County, Florida. The project location is approximately 262.7 meters (861.88 feet) west of Havana Highway (I-12) along an existing powerline corridor (Figure 1).

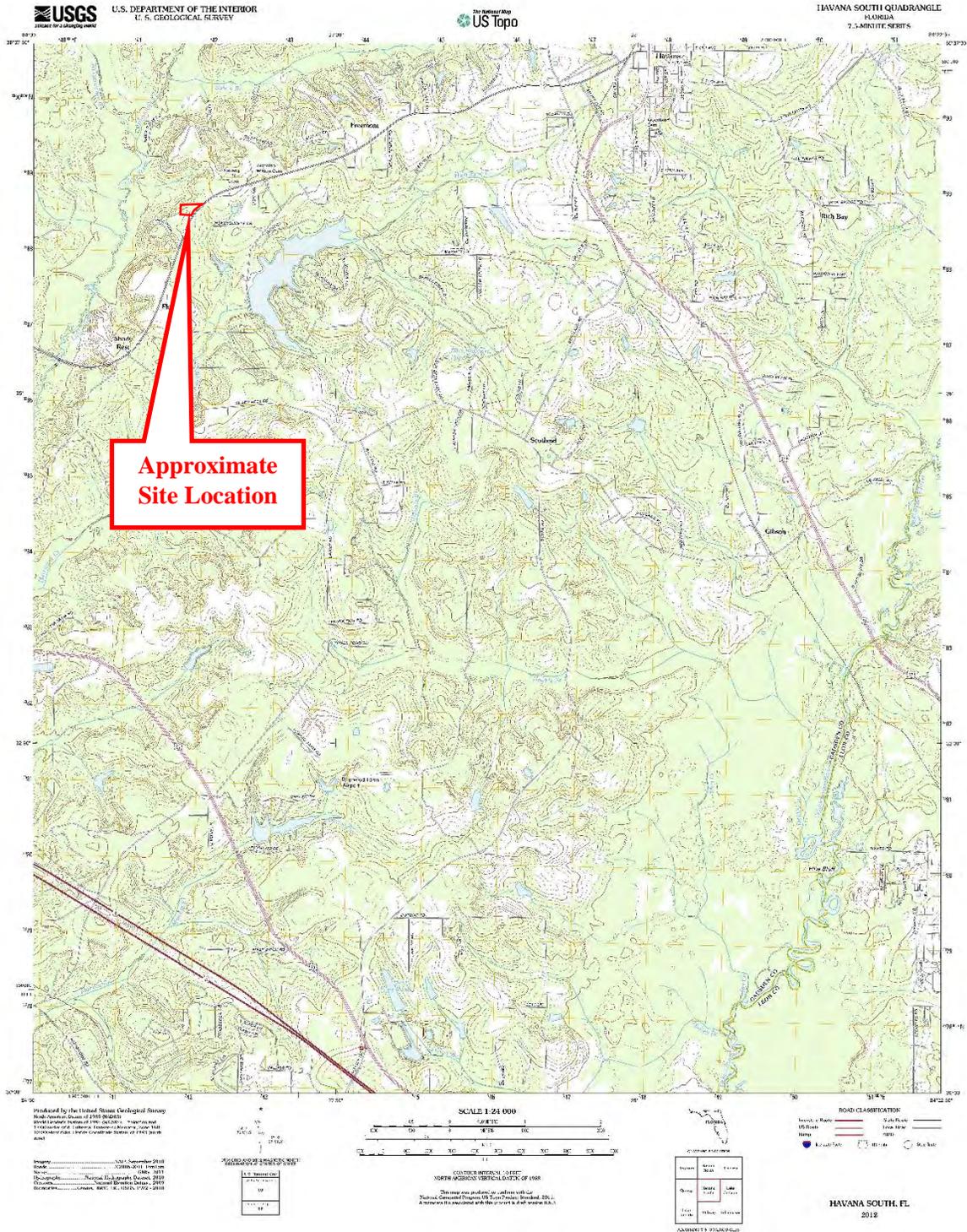


Figure 1: USGS 7.5-minute Quad Map, Havana (South), Florida

### **1.3 Project Description**

The proposed improvements consist of a 250-foot tall self-supported lattice telecommunications tower. A 5-foot lightening rod is proposed for the top of tower. An equipment shelter is also being considered as part of the proposed improvements. The proposed cell tower compound is 100 feet by 100 feet and will be surrounded by a chain link fence; refer to Appendix G for project plans. Access to the cell tower compound is an existing 20-foot wide access easement leading to a proposed 12-foot wide gravel access drive.

### **1.4 Archaeological Survey Area (Area of Potential Effect)**

The total area of disturbance for the proposed cell tower compound is approximately 26,200 square feet. This includes approximately 262 meters of access road, 177 meters of which is already existing and in use as part of the present powerline corridor.

### **1.5 Project Personnel**

Field investigations were conducted during the week of September 16, 2019 with Margaret Stone serving as Principal Investigator. The resume is provided in Appendix H. Literature review, fieldwork, data analysis and report preparation were conducted by Margaret Stone and reviewed by Thomas W. Bailey, RPA. Report graphics were prepared by Margaret Stone and Maser Consulting's GIS Department.

## **2.0 BACKGROUND RESEARCH**

### **2.1 Sources Reviewed**

Background research consisted of a review of cultural resources on file at the Florida Division of Historical Resources (FDHR). Cultural resource records and reports on file on the FDHR were accessed through Florida Master Site File (FMSF) including a site radius map, positive radius letter, and a cultural resources roster. Environmental resources consulted included the Florida Geological Survey Geological Map (2019) and the United States Department of Agriculture (USDA) Soils Survey of Gadsden County, Florida (2007).

### **2.2 Geology and Soils**

The Havana Highway Cell Tower project area is within the Tallahassee Hills of the Northern Highlands in Florida's Northern Zone physiographic province (Puri and Vernon 1964). The Tallahassee Hills is a topographic characterization that spans from southern Georgia to the Florida Gulf Coast Lowlands (Rupert, 1990). The elevations for the part of the region closer to the Georgia-Florida state line, where the APE is, is typically 330 feet above mean sea level (MSL). The stratigraphic makeup of the soils consists of silts, clays, and clayey sands on hilltops, with fluvial sediments from the alluvial terrace of Lake Talquin's floodplains and Ochlockonee River Valley Lowlands (Hendry and Sproul, 1966) (Rupert, 1990).

The APE is located within the Sunderland/Okefenokee marine terrace which are defined by their "step-like surfaces of erosion representing shorelines developed by advances and retreats of the sea during the Pleistocene Epoch" (Rupert, 1990). The elevation of this marine terrace is between 100 and 170 feet above MSL.

The site is located within close proximity (643.738 meters) of the Little River where the soils are characterized by the fluvial erosion which took place that has stripped the soils of its reddish siliciclastic sediments, and the banks of the river consist Holocene alluvium underlain by Hawthorn Group sandy clays (Gremillion, 1964) (Rupert, 1990).

**Table 1: Soil Descriptions for the Project Area**

<b>Soil</b>	<b>Soil Name</b>	<b>Slope %</b>	<b>Drainage</b>	<b>Landform</b>
36	Lucy-Orangeburg-Cowarts Complex	15-45	Well drained	Hillslopes on marine terraces
77	Bonifay-Fuquay Complex	0-5	Well drained	Knolls on marine terraces

### **2.3 Previously Recorded Cultural Resources**

A review of the FDHR cultural resources records via the FMSF system indicated one previously recorded prehistoric archaeological site within a mile of the Havana Highway Cell Tower project area. The precontact site, Gd00022, was recorded in 1976 and is within the Tallahassee Hills. Cultural Material such as Weeden Island Pre-Columbian Pottery was uncovered from the site (Figure 2). Coordinates provided by the Gd00022 report place the site approximately one mile to the northeast of the proposed Havana Highway Cell Tower site.

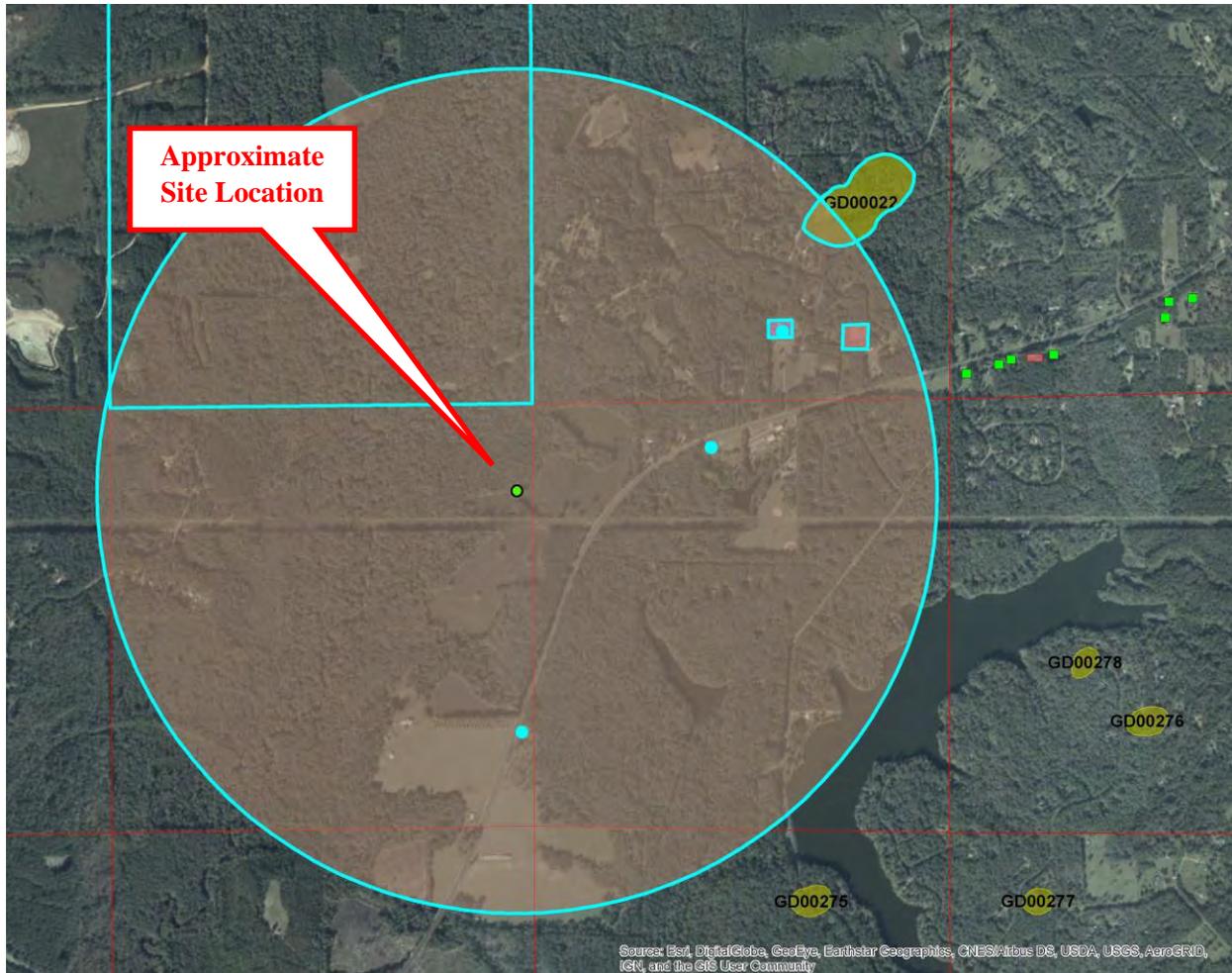


Figure 2: Aerial Photograph of Sites within One-Mile Radius of Project Area (FDHR, 2019)

Additionally, there is one site listed on the National Register or State Register sites within a mile radius of the APE as well. This is the Dr. Malcolm Nicholson's House, located on 200 Coca Cola Avenue, and it was added to the Register in 1994. The property was used as a steakhouse and giftshop until 1999, and then in 2014 it was reopened and is now operating as the bed and breakfast known as Havana Springs Resort (U.S. Department of the Interior National Park Service, 1994).

A review of the aerial photographs and an historic map was also conducted. The 1938 historic map indicates the presence of the existing access road, as well as clearing surrounding the project area of the site (Figure 3).



Figure 3: EDR 1938 Historic Aerial

#### **2.4 Project Area Archaeological Sensitivity**

Many of the archaeological assemblages associated with Native populations in northwestern Florida is believed to have been eroded away in the Gulf of Mexico. Those that remain are located in forests and around wetlands. Most consistently is the fact that many of these assemblages are smaller in size, and as such, the scarcity suggests that the “area was a buffer zone between the Apalachicola valley sites and those of the Tallahassee Hills” (Milanich, 2018, p. 360).

The project site itself is situated between Little River to the west and Hurricane Creek to the south. Little River is located approximately 0.66 kilometers (0.4 miles) away from the site, and Hurricane Creek is 1.28 kilometers (0.8 miles) outside of the project area. However, there are no wetlands in the APE, though much of the site is within a forested region. The majority of the site has topography that consists of 15 to 45 percent well-drained slopes, that are underlain by sandy clay loams.

Despite the presence of a precontact site within close vicinity to the project area, given the settlement patterns of Native populations and the location of the Havana Highway Cell Tower project area, there is a very low sensitivity for encountering archaeological materials.

### **3.0 PHASE I FIELD INVESTIGATION**

#### **3.1 Archaeological Survey Methods**

The APE investigated was a 100-foot by 100-foot area, or 26,200 square feet. The project area was analyzed further through historic aerial images. All portions of the APE were inspected through the survey methods as outlined below. The shovel tests were excavated on a 15-meter interval system along the access road and mapped in accordingly using an iPad GPS mapping system. In addition to the shovel tests along the proposed access road, as per the Eastern Shawnee Tribe of Oklahoma's requirements, the four corners and center of the proposed compound were excavated.

##### **3.1.1 Visual Reconnaissance**

Areas of the APE assigned to the subsurface testing sample were visually inspected for surface historic features prior to subsurface testing. Observations included natural landscape features (topography, field conditions, and hydrology), vegetational anomalies (ornamental plantings, groves of trees, and hedge rows), cultural landscape features (historic land disturbance, standing structures, surface artifact scatters, and foundations) and ground-surface anomalies (mounds, depressions or ridges, paths, and fence lines). Walkover procedures consisted of spaced, parallel transects to document possible surface sheet litter, historic features, and natural topography and hydrology.

##### **3.1.2 Subsurface Testing**

Shovel tests were 0.5 meters (19.7 inches) in diameter, with straight walls to avoiding coning, as per the state of Florida's regulations. Shovel tests were terminated after reaching a depth of one meter (39.37 inches), or until subsoil and noncultural bearing horizons were reached. Soil from the shovel tests was screened through 0.25-inch mesh hardware cloth. No shovel tests were excavated in areas that were characterized by standing water or marsh, areas that exhibited evidence of previous disturbance, or areas that were characterized by exposed bedrock, or areas in which the topography showed a slope greater than 15 percent. Photographs of representative shovel tests are included for context in Appendix F.

##### **3.1.3 Data Recording Procedures**

Standardized forms recorded soil level and depth, distance and angle of alignment between subsurface tests, Munsell Soil Color code, soil texture and inclusions, presence or absence of artifacts in each soil level, and artifact classes and counts for each subsurface test. Field notes recorded photographic logs, field conditions, research design alterations and justifications, surface cultural features observed, topography and hydrology, and extent and severity of disturbances. Digital photographs were used to document the general conditions of the project area and the locations of the subsurface tests. Photographic angles were recorded on a field survey map and described in photographic logs. The location of all shovel tests was plotted through iPads which tracked the location of the tests through its GPS features. These points were translated onto the field survey map and the master concept plan.

### **3.1.4 Architectural History Survey Procedures**

A sample of the standing structures within a one-mile radius of the APE were surveyed and recorded with the intention of documenting the structures that were over 50 years old to see how the construction of the proposed tower could affect the historical integrity of the buildings. Photographs of the sample are provided in Appendix C.

## **3.2 Archaeological Survey Results**

The 26,200 S.F. project area, which constituted the APE, was subjected to both visual inspection and subsurface testing. Photo-documentation was also conducted. Locations and directional views of the photographs can be found on the aerial photograph in Appendix A.

### **3.2.1 Reconnaissance Survey Results**

Vertical Bridge, LLC will use an existing road for ingress/egress up to the project area. The beginning of the proposed access way cuts through a powerline corridor into a wood line, and from there, the vast majority of the road is cut across a slope that ranges from 17 to 34 percent (Appendix B). Much of the project area is within a wooded area that still has vegetation including those typically consistent with wetlands. Although there are no wetlands in the area, this type of vegetation is due to the slope of the terrain which may characterize areas of previously existing wetlands (Appendix B).

### **3.2.2 Archaeological Fieldwork Results**

The APE is characterized by two distinct topographies—a clearing and slope, both of which are overlain with compact loamy sands and sand. Along the proposed access road, 23 total shovel tests were marked, with 14 along the existing dirt path of the access road and the other nine shovel tests where the proposed gravel part of the access way is planned to be. There were another eight shovel tests within the compound, totaling to 31 shovels tests within the APE. However, due to the slope of the terrain within the wood line only 19 were tested along the access road (those outside of the wood line), and five within the compound (four corners and center of the compound) were able to be excavated. Therefore, a total of 24 shovel tests were excavated within the APE (Appendix D; Shovel Test Map).

The shovel tests were excavated to one meter (39.37 inches) or sterile subsoil was reached. Individual shovel test profiles are presented in Appendix D. The general soil profile for all shovel tests for the clearing portion of the access road (STP A-1 to A-18), barring A-18, were consistent; a bright light yellowish-brown compact loamy sand mix. Shovel Test A-17 (Appendix F) is representative of shovel tests A-1 to A-18. Likewise, the shovel tests within the woods were consistent as well (A-19 to A-23 and B-1 to B-8). Shovel Test A-21 is a representative shovel test for A-19 to B-8. All of the shovel tests were negative for pre-contact cultural material; however, six wire nails were uncovered from the first level of shovel test B-6 (Figure 4). These wire nails were likely from the construction of the powerline that runs through the access corridor of the APE.



Figure 4: Wire nails uncovered from STP B-6

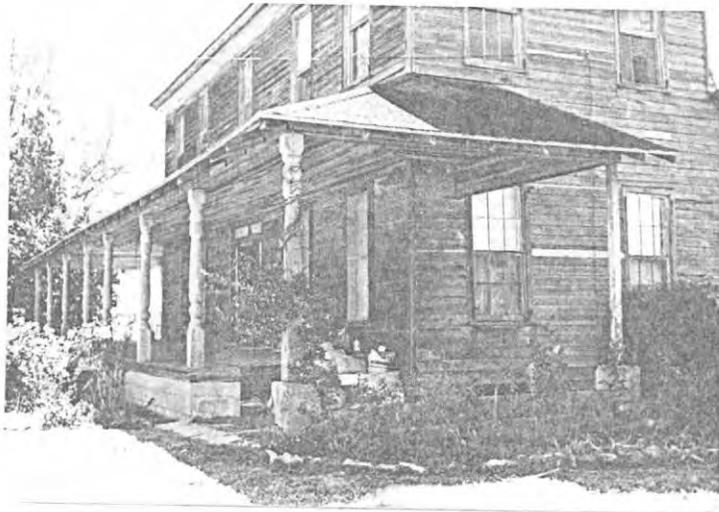
### 3.2.3 Architectural History Results

Roadside digital photographs were taken of the standing structures within a one-mile radius of the APE. However, due to the tree cover of the area and the restrictions of some of the properties, photographs and visuals of the structures were limited. Many of these structures bordering the site were residential and were of relatively new construction; nonetheless, there were a few homes along Havana Highway that were constructed in the 1950's (Appendix C).

There was one standing structure within the mile radius that was listed on the National Register of Historic Places. The Dr. Malcolm Nicholson Home was originally built in 1828, and it lies approximately 0.7 miles outside of the APE (Figure 5 and 6). The nearly 200-year-old structure was once the home and farm of Dr. Malcolm Nicolson, who was one of the commissioners tasked with finding a site for the State Capitol in 1821 (National Register Listing GD00178). Currently, the structure and its respective property are operating as a local bed and breakfast, but a sign commemorating property's prior usage stands at the entrance of the property, along Havana Highway.



FRONT FACADE-FACES NORTHEAST



NORTH SIDE OF PORCH, SHOWING CARPORT

Figure 5: Historic Photographs of Dr. Malcolm Nicholson's Home, 1977  
(U.S. Department of the Interior, National Park Service)



Figure 6: Aerial Photograph of Project Site and Dr. Malcolm Nicholson House (2019, Google Earth)

## **4.0 CONCLUSIONS AND RECOMMENDATIONS**

### **4.1 Summary and Conclusions**

The soil types documented during subsurface testing were generally consistent with expected profiles as published by Natural Resources Conservation Service (NRCS) soils surveys of Gadsden County (NRCS 2019). No pre-contact or historic cultural materials, aside from the wire nails uncovered in STP B-6 that were most probably from the powerline construction, were recovered during archaeological testing within the project area. Given the documented settlement patterns of Native populations and the location of the Havana Highway Cell Tower project area, there is a very low sensitivity for encountering archaeological materials. As such, further investigation of this location is unlikely to provide additional information.

Additionally, due to the nature of the topography, paired with the vastness and height of the tree cover in the surrounding area, it is believed that the construction of the Havana Highway Cell Tower will not compromise the historic integrity of any of the standing structures in the area.

### **4.2 Recommendations**

The current Phase I archaeological resource identification survey has concluded that the proposed construction may proceed as planned without any impact to cultural resources. No archaeological sites were identified within the APE. Maser recommends no further work be undertaken for the purpose of archaeological resource identification.

## 5.0 REFERENCES CITED

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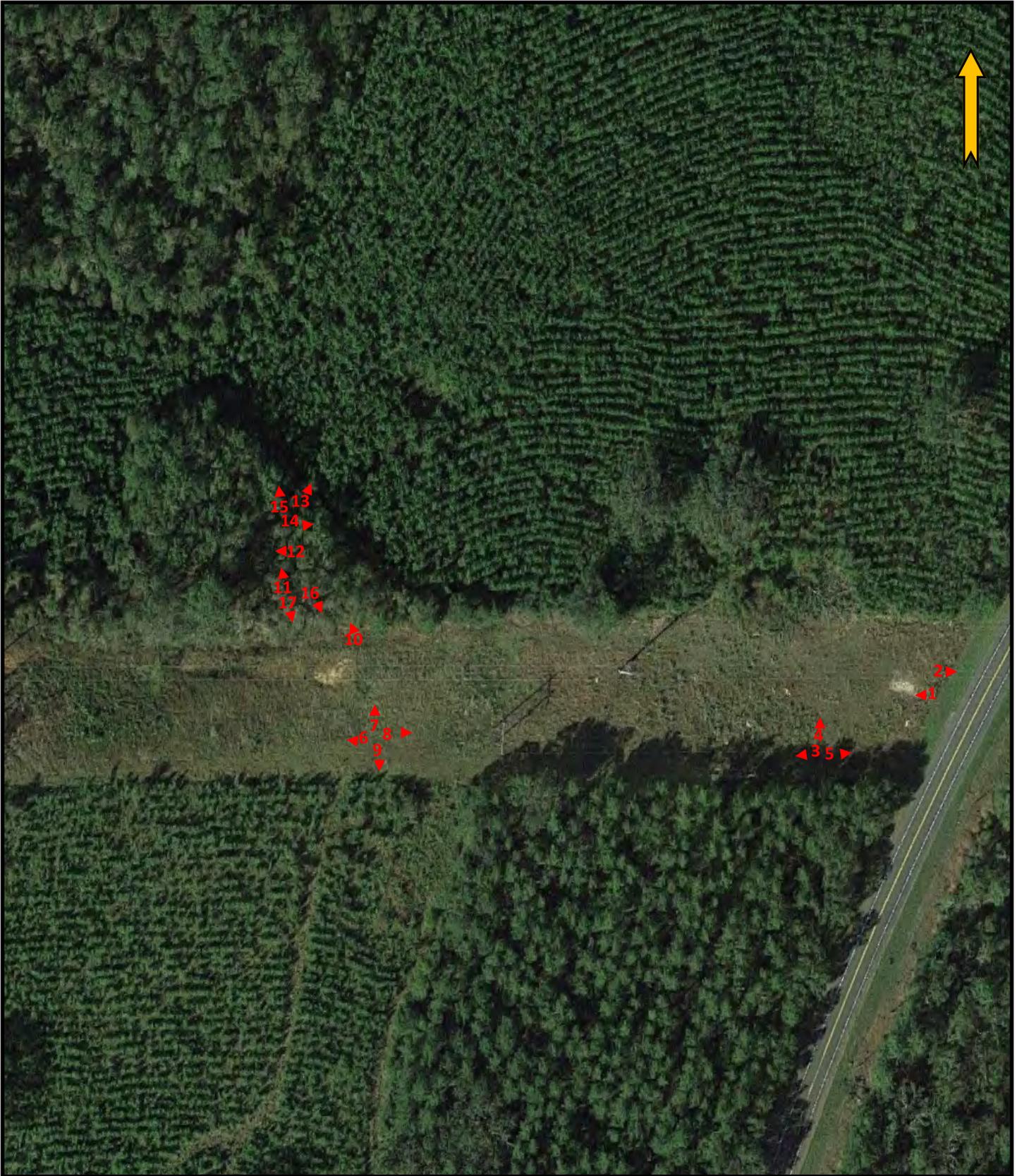
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**Appendix A**  
**Site Photograph Locations Map**



**Corporate Headquarters**  
 331 Newman Springs Road  
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**Site Photograph Locations Map**  
**Havana, Gadsden County, Florida**

Scale: Not to Scale

Date: September 20, 2019

MC Project No. 19983002A

**Appendix B**  
**Site Photographs**



 <p><b>Corporate Headquarters</b> 331 Newman Springs Road Suite 203 Red Bank, NJ 07701 T: 732.383.1950 F: 732.383.1984 <a href="http://www.maserconsulting.com">www.maserconsulting.com</a></p>	<b>Site Photo 1: APE Corridor View from A-2</b>	<b>Scale: Not to Scale</b>
	<b>Havana Highway Cell Tower</b>	<b>Date: September 16, 2019</b>
	<b>Havana, Gadsden County, Florida</b>	<b>MC Project No. 19983002A</b>



 <p><b>Corporate Headquarters</b> 331 Newman Springs Road Suite 203 Red Bank, NJ 07701 T: 732.383.1950 F: 732.383.1984 <a href="http://www.maserconsulting.com">www.maserconsulting.com</a></p>	<b>Site Photo 2: APE Fence View from A-2</b>	<b>Scale: Not to Scale</b>
	<b>Havana Highway Cell Tower</b>	<b>Date: September 16, 2019</b>
	<b>Havana, Gadsden County, Florida</b>	<b>MC Project No. 19983002A</b>



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	<b>View from A-5</b>	<b>Date: September 16, 2019</b>
	<b>Havana Highway Cell Tower</b>	<b>MC Project No. 19983002A</b>
	<b>Havana, Gadsden County, Florida</b>	



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	<b>Havana Highway Cell Tower</b>	<b>Date: September 16, 2019</b>
	<b>Havana, Gadsden County, Florida</b>	<b>MC Project No. 19983002A</b>



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	<b>Havana Highway Cell Tower</b>	<b>Date: September 16, 2019</b>
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		<p>Date: September 16, 2019</p>
		<p>MC Project No. 19983002A</p>



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	<b>5</b>	
	<b>Havana Highway Cell Tower</b> <b>Havana, Gadsden County, Florida</b>	<b>Date: September 16, 2019</b>
		<b>MC Project No. 19983002A</b>



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	<b>Havana Highway Cell Tower</b>	<b>Date: September 16, 2019</b>
	<b>Havana, Gadsden County, Florida</b>	<b>MC Project No. 19983002A</b>



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	<b>Havana Highway Cell Tower</b>	<b>Date: September 16, 2019</b>
	<b>Havana, Gadsden County, Florida</b>	<b>MC Project No. 19983002A</b>



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	<b>Havana Highway Cell Tower</b>	<b>Date: September 16, 2019</b>
	<b>Havana, Gadsden County, Florida</b>	<b>MC Project No. 19983002A</b>



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	<b>Havana Highway Cell Tower</b>	Date: September 16, 2019
	<b>Havana, Gadsden County, Florida</b>	MC Project No. 19983002A



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	<b>Havana Highway Cell Tower</b>	Date: September 16, 2019
	<b>Havana, Gadsden County, Florida</b>	MC Project No. 19983002A



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	<b>Havana Highway Cell Tower</b>	<b>Date: September 16, 2019</b>
	<b>Havana, Gadsden County, Florida</b>	<b>MC Project No. 19983002A</b>



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	<b>Havana Highway Cell Tower</b>	<b>Date: September 16, 2019</b>
	<b>Havana, Gadsden County, Florida</b>	<b>MC Project No. 19983002A</b>

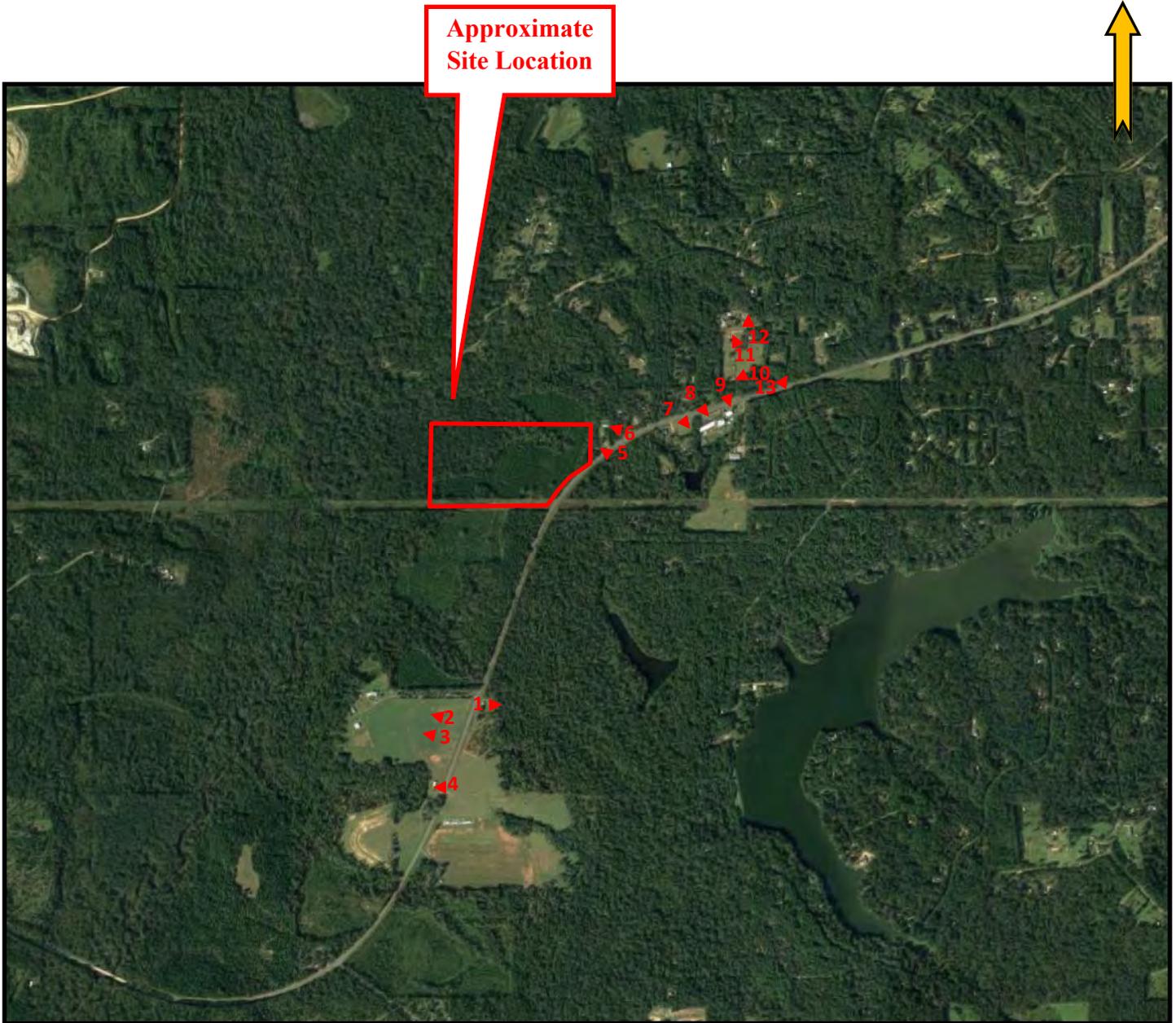


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	<b>Havana Highway Cell Tower</b>	<b>Date: September 16, 2019</b>
	<b>Havana, Gadsden County, Florida</b>	<b>MC Project No. 19983002A</b>



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	<b>Havana Highway Cell Tower</b>	<b>Date: September 16, 2019</b>
	<b>Havana, Gadsden County, Florida</b>	<b>MC Project No. 19983002A</b>

**Appendix C**  
**Architectural Structures Photograph Map and Photographs**



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	<p><b>Photograph Locations</b></p>	<p>Date: September 20, 2019</p>
	<p><b>Havana, Gadsden County, Florida</b></p>	<p>MC Project No. 19983002A</p>



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	<p><b>Havana Highway Cell Tower</b></p>	<p><b>Date: September 19, 2019</b></p>
	<p><b>Havana, Gadsden County, Florida</b></p>	<p><b>MC Project No. 19983002A</b></p>



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**Architectural Structure Photo 2:**  
**Longview Lane Home**  
**Havana Highway Cell Tower**  
**Havana, Gadsden County, Florida**

<b>Scale: Not to Scale</b>
<b>Date: September 19, 2019</b>
<b>MC Project No. 19983002A</b>



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		<p><b>Date: September 19, 2019</b></p>
		<p><b>MC Project No. 19983002A</b></p>



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	<p><b>Havana Hwy Structure South of APE</b></p>	<p><b>Date: September 19, 2019</b></p>
	<p><b>Havana Highway Cell Tower</b></p> <p><b>Havana, Gadsden County, Florida</b></p>	<p><b>MC Project No. 19983002A</b></p>



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**Architectural Structure Photo 5:**  
**5573 Havana Hwy (1954)**  
**Havana Highway Cell Tower**  
**Havana, Gadsden County, Florida**

**Scale: Not to Scale**

**Date: September 19, 2019**

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**Architectural Structure Photo 6: 5659**

**Havana Hwy (1958)**

**Havana Highway Cell Tower**

**Havana, Gadsden County, Florida**

**Scale: Not to Scale**

**Date: September 19, 2019**

**MC Project No. 19983002A**



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	<p><b>Tallavana Christian School (1971)</b></p>	<p><b>Date: September 19, 2019</b></p>
	<p><b>Havana Highway Cell Tower</b></p> <p><b>Havana, Gadsden County, Florida</b></p>	<p><b>MC Project No. 19983002A</b></p>



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	<p><b>Tallavana Christian School (1971)</b></p>	<p><b>Date: September 19, 2019</b></p>
	<p><b>Havana Highway Cell Tower</b></p> <p><b>Havana, Gadsden County, Florida</b></p>	<p><b>MC Project No. 19983002A</b></p>



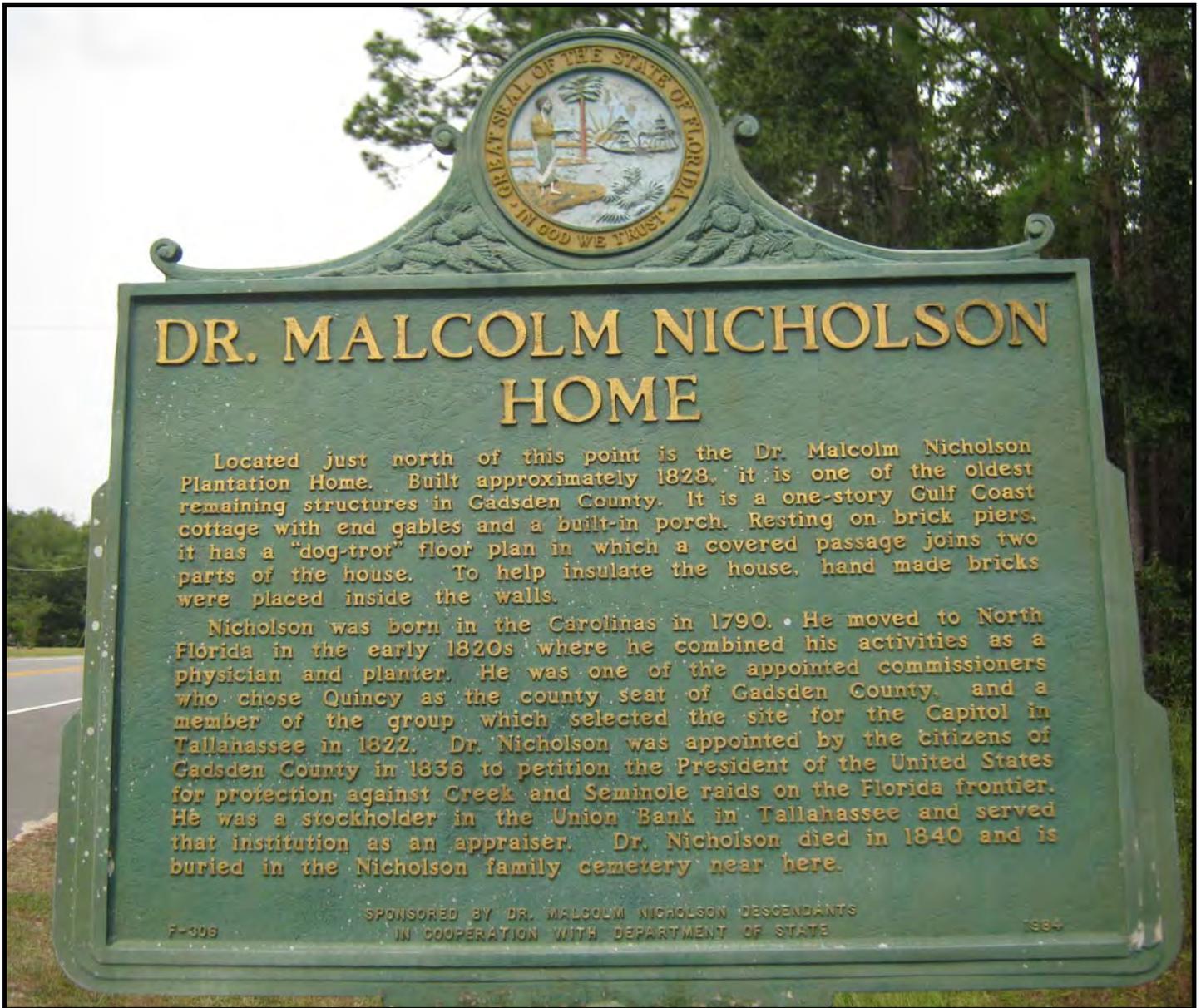
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**Architectural Structure Photo 9:**  
**Tallavana Christian School (1971)**  
**Havana Highway Cell Tower**  
**Havana, Gadsden County, Florida**

**Scale: Not to Scale**

**Date: September 19, 2019**

**MC Project No. 19983002A**



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	<p><b>Dr. Malcolm Nicholson Home Sign</b></p> <p>Havana Highway Cell Tower</p>	<p>Date: September 19, 2019</p>
	<p>Havana, Gadsden County, Florida</p>	<p>MC Project No. 19983002A</p>



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	<p><b>Dr. Malcolm Nicholson Home—Bed and Breakfast (1828)</b></p>	<p><b>Date: September 19, 2019</b></p>
	<p>Havana Highway Cell Tower Havana, Gadsden County, Florida</p>	<p><b>MC Project No. 19983002A</b></p>



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	<p><b>Dr. Malcolm Nicholson Home—Bed and Breakfast (1828)</b></p>	<p><b>Date: September 19, 2019</b></p>
	<p><b>Havana Highway Cell Tower          Havana, Gadsden County, Florida</b></p>	<p><b>MC Project No. 19983002A</b></p>



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**Appendix D**  
**Architectural Structure Log**

Architectural History Log

Structure Photo	Address	Construction Date	Eligibility
	4874 Havana Highway, Little River Hunt Club		
	Longview Lane Home		
	Longview Lane Structures		
	5659 Havana Hwy	1958	
	5659 Havana Hwy	1958	
	5840 Havana Hwy, Tallavana Christian School	1971	
	5840 Havana Hwy, Tallavana Christian School	1971	

	<p>5840 Havana Hwy, Tallavana Christian School</p>	<p>1971</p>	
	<p>200 Coca Cola Ave, Dr. Malcolm Nicholson Sign</p>	<p>1828</p>	<p>Listed</p>
	<p>200 Coca Cola Ave, Dr. Malcolm Nicholson Home</p>	<p>1828</p>	<p>Listed</p>
	<p>200 Coca Cola Ave, Dr. Malcolm Nicholson Home</p>	<p>1828</p>	<p>Listed</p>
	<p>200 Coca Cola Ave, Dr. Malcolm Nicholson Home</p>	<p>1828</p>	<p>Listed</p>

**Appendix E**  
**Shovel Test Map**



Project Location

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Prepared By:

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 Charlotte, NC 28217  
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 www.maserconsulting.com



- Legend**
- Project Location
  - Soil Test Profile Results**
  - Unexcavated
  - Negative
  - Positive

**Plan View Map**

Havana Highway US-FL-5052  
 Havana, Florida 32333

Date:	MC Project #:	Drawn By:
October 4th, 2019	19983002A	PWE



Figure  
1

Page 300 of 353

**Appendix F**  
**Shovel Test Log**

## Shovel Test Record

Transect	Location	STP #	Stratum	Level	Depth (cm)	Munsell	Texture	Abbreviation	Cultural Materials	Comments
A	access road- clearing	1	Ap	1	0-22cm	10YR 7/2	Loamy Sand	lo sa	No Cultural Material (NCM)	
A	access road- clearing		E	2	22-60cm	10YR 6/2	Loamy Sand	lo sa	NCM	
A	access road- clearing		Bt	3	60-100cm	10YR 8/4	Sandy Clay Loam	sa cl lo	NCM	
A	access road- clearing	2	Ap	1	0-23cm	10YR 7/2	Loamy Sand	lo sa	NCM	
A	access road- clearing		E	2	23-59cm	10YR 6/2	Loamy Sand	lo sa	NCM	
A	access road- clearing		Bt	3	59-102cm	10YR 8/4	Sandy Clay Loam	sa cl lo	NCM	
A	access road- clearing	3	Ap	1	0-21cm	10YR 7/2	Loamy Sand	lo sa	NCM	
A	access road- clearing		E	2	21-62cm	10YR 6/2	Loamy Sand	lo sa	NCM	
A	access road- clearing		Bt	3	62-101cm	10YR 8/4	Sandy Clay Loam	sa cl lo	NCM	
A	access road- clearing	4	Ap	1	0-18cm	10YR 7/2	Loamy Sand	lo sa	NCM	
A	access road- clearing		E	2	18-48cm	10YR 6/2	Loamy Sand	lo sa	NCM	
A	access road- clearing		Bt	3	48-100cm	10YR 8/4	Sandy Clay Loam	sa cl lo	NCM	
A	access road- clearing	5	Ap	1	0-21cm	10YR 7/2	Loamy Sand	lo sa	NCM	
A	access road- clearing		E	2	21-56cm	10YR 6/2	Loamy Sand	lo sa	NCM	
A	access road- clearing		Bt	3	56-100cm	10YR 8/4	Sandy Clay Loam	sa cl lo	NCM	PHOTO
A	access road- clearing	6	Ap	1	0-16cm	10YR 7/2	Loamy Sand	lo sa	NCM	
A	access road- clearing		E	2	16-63cm	10YR 6/2	Loamy Sand	lo sa	NCM	
A	access road- clearing		Bt	3	63-103cm	10YR 8/4	Sandy Clay Loam	sa cl lo	NCM	
A	access road- clearing	7	Ap	1	0-18cm	10YR 7/2	Loamy Sand	lo sa	NCM	
A	access road- clearing		E	2	18-59cm	10YR 6/2	Loamy Sand	lo sa	NCM	
A	access road- clearing		Bt	3	59-101cm	10YR 8/4	Sandy Clay Loam	sa cl lo	NCM	
A	access road- clearing	8	Ap	1	0-22cm	10YR 7/2	Loamy Sand	lo sa	NCM	
A	access road- clearing		E	2	22-66cm	10YR 6/2	Loamy Sand	lo sa	NCM	2 rodent holes, 10YR 4/3 in N/w sides of profile in Lvl 2 (6cm diameter, 42 cm deep)
A	access road- clearing		Bt	3	66-100cm	10YR 8/4	Sandy Clay Loam	sa cl lo	NCM	
A	access road- clearing	9	Ap	1	0-35cm	10YR 5/3	Loamy Sand	lo sa	NCM	
A	access road- clearing		E	2	35-67cm	10YR 6/2	Loamy Sand	lo sa	NCM	
A	access road- clearing		Bt	3	67-100cm	10YR 8/4	Sandy Clay Loam	sa cl lo	NCM	
A	access road- clearing	10	Ap	1	0-20cm	10YR 5/3	Loamy Sand	lo sa	NCM	
A	access road- clearing		E	2	20-65cm	10YR 6/2	Loamy Sand	lo sa	NCM	
A	access road- clearing		Bt	3	65-101cm	10YR 8/4	Sandy Clay Loam	sa cl lo	NCM	
A	access road- clearing	11	Ap	1	0-19cm	10YR 5/3	Loamy Sand	lo sa	NCM	
A	access road- clearing		E	2	19-64cm	10YR 6/2	Loamy Sand	lo sa	NCM	
A	access road- clearing		Bt	3	64-101cm	10YR 8/4	Sandy Clay Loam	sa cl lo	NCM	
A	access road- clearing	12	Ap	1	0-48cm	10YR 5/3	Loamy Sand	lo sa	NCM	
A	access road- clearing		E	2	48-68cm	10YR 6/2	Loamy Sand	lo sa	NCM	
A	access road- clearing		Bt	3	68-102cm	10YR 8/4	Sandy Clay Loam	sa cl lo	NCM	
A	access road- clearing	13	Ap	1	0-20cm	10YR 5/3	Loamy Sand	lo sa	NCM	
A	access road- clearing		E	2	20-48cm	10YR 6/2	Loamy Sand	lo sa	NCM	
A	access road- clearing		Bt	3	62-102cm	10YR 8/4	Sandy Clay Loam	sa cl lo	NCM	
A	access road- clearing	14	Ap	1	0-20cm	10YR 5/3	Loamy Sand	lo sa	NCM	
A	access road- clearing		E	2	20-69cm	10YR 6/2	Loamy Sand	lo sa	NCM	
A	access road- clearing		Bt	3	69-100cm	10YR 8/4	Sandy Clay Loam	sa cl lo	NCM	
A	beginning of proposed gravel access way	15	Ap	1	0-17cm	10YR 5/3	Loamy Sand	lo sa	NCM	
A	access road- proposed gravel		E	2	17-61cm	10YR 6/3	Loamy Sand	lo sa	NCM	
A	access road- proposed gravel within woods		Bt	3	61-101cm	10YR 8/4	Sandy Clay Loam	sa cl lo	NCM	
A	access road- proposed gravel within woods	16	Ap	1	0-35cm	10YR 4/3	Loamy Sand	lo sa	NCM	
A	access road- proposed gravel within woods		E	2	35-72cm	10YR 5/4	Loamy Sand	lo sa	NCM	
A	access road- proposed gravel within woods		Bt	3	72-100cm	10YR 8/4	Sandy Clay Loam	sa cl lo	NCM	compact
A	access road- proposed gravel within woods	17	Ap	1	0-36cm	10YR 4/3	Loamy Sand	lo sa	NCM	
A	access road- proposed gravel within woods		E	2	36-88cm	10YR 5/6-5/8	Loamy Sand	lo sa	NCM	
A	access road- proposed gravel within woods		Bt	3	88-100cm	10YR 8/4	Sandy Clay Loam	sa cl lo	NCM	compact-- PHOTO
A	access road- proposed gravel within woods	18	Ap	1	0-10cm	5Y 7/8	Loamy Sand	lo sa	NCM	
A	access road- proposed gravel within woods		Fill	2	10-15cm	10YR 8/4	Loamy Sand	lo sa	NCM	terminated due to extreme compaction
A	access road- proposed gravel within woods	19								25% slope, no dig
A	access road- proposed gravel within woods	20								20-25% slope, no dig
A	access road- proposed gravel within woods	21	A	1	0-37cm	10YR 4/3	Loamy Sand	lo sa	NCM	
A	access road- proposed gravel within woods		E	2	37-78cm	7.5YR 7/8	Loamy Sand	lo sa	NCM	
A	access road- proposed gravel within woods		Bt	3	78-101cm	10YR 8/4	Sandy Clay Loam	sa cl lo	NCM	PHOTO
A	access road- proposed gravel within woods	22								20% slope, no dig
A	access road- proposed gravel within woods	23								15-20% slope, no dig
B	SW corner, compound	1	A	1	0-40cm	10YR 4/3	Loamy Sand	lo sa	NCM	
B	SW corner, compound		E	2	40-60cm	7.5YR 7/8	Loamy Sand	lo sa	NCM	
B	SW corner, compound		Bt	3	60-91cm	10YR 8/4	Sandy Clay Loam	sa cl lo	NCM	

B	West Side, compound	2								15% slope, no dig
B	NW corner, compound	3	A	1	0-21cm	10YR 4/3	Loamy Sand	lo sa	NCM	
B	NW corner, compound		E	2	21-56cm	7.5YR 7/8	Loamy Sand	lo sa	NCM	
B	NW corner, compound		Bt	3	56-80cm	10YR 8/4	Sandy Clay Loam	sa cl lo	NCM	terminated due to compaction
B	North Side, compound	4								15% slope, no dig
B	NE corner, compound	5	A	1	0-25cm	10YR 5/3	Loamy Sand	lo sa	NCM	
B	NE corner, compound		E	2	25-62cm	7.5YR 7/8	Loamy Sand	lo sa	NCM	
B	NE corner, compound		Bt	3	62-100cm	10YR 8/4	Sandy Clay Loam	sa cl lo	NCM	
B	East Side, compound	6	Fill	1	0-28cm	10YR 5/3	Loamy Sand	lo sa	wire nails	
B	East Side, compound		E	2	28-40cm	7.5YR 7/8	Loamy Sand	lo sa	NCM	terminated due to compaction
B	SE corner, compound	7	A	1	0-27cm	10YR 5/3	Loamy Sand	lo sa	NCM	
B	SE corner, compound		E	2	27-60cm	7.5YR 7/8	Loamy Sand	lo sa	NCM	
B	SE corner, compound		Bt	3	60-90cm	10YR 8/4	Sandy Clay Loam	sa cl lo	NCM	
B	Center, compound	8	A	1	0-30cm	10YR 5/3	Loamy Sand	lo sa	NCM	
B	Center, compound		E	2	30-59cm	7.5YR 7/8	Loamy Sand	lo sa	NCM	
B	Center, compound		Bt	3	59-100cm	10YR 8/4	Sandy Clay Loam	sa cl lo	NCM	

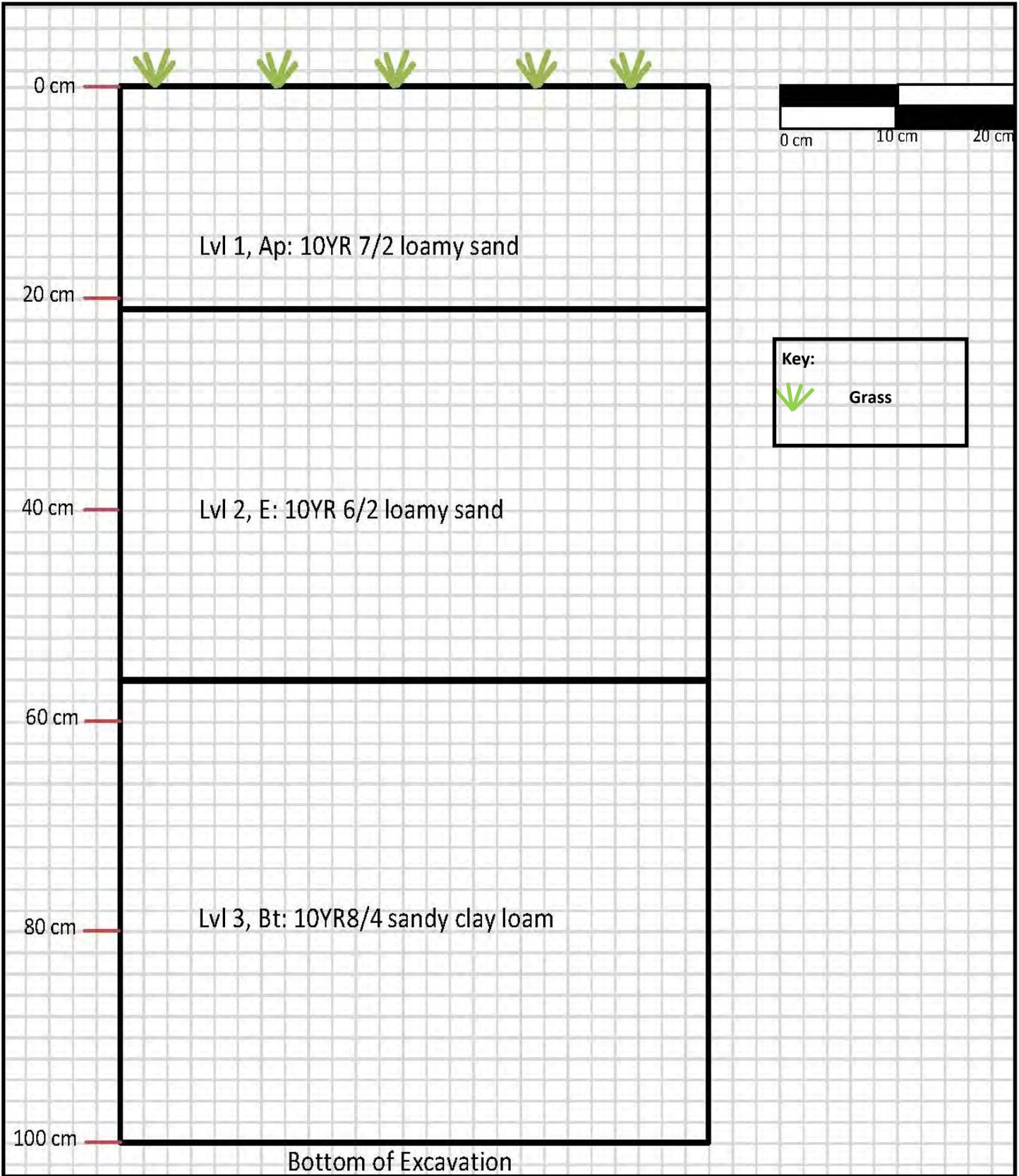
**Appendix G**  
**Representative Shovel Test Profiles**



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	<b>Havana Highway Cell Tower</b>	Date: September 16, 2019
	<b>Havana, Gadsden County, Florida</b>	MC Project No. 19983002A



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**STP A-5 Profile**  
**Havana Highway Cell Tower**  
**Havana, Gadsden County, Florida**

Scale: Not to Scale

Date: October 7, 2019

MC Project No. 19983002A



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**STP A-17 Aerial**  
**Havana Highway Cell Tower**  
**Havana, Gadsden County, Florida**

**Scale: Not to Scale**

**Date: September 18, 2019**

**MC Project No. 19983002A**



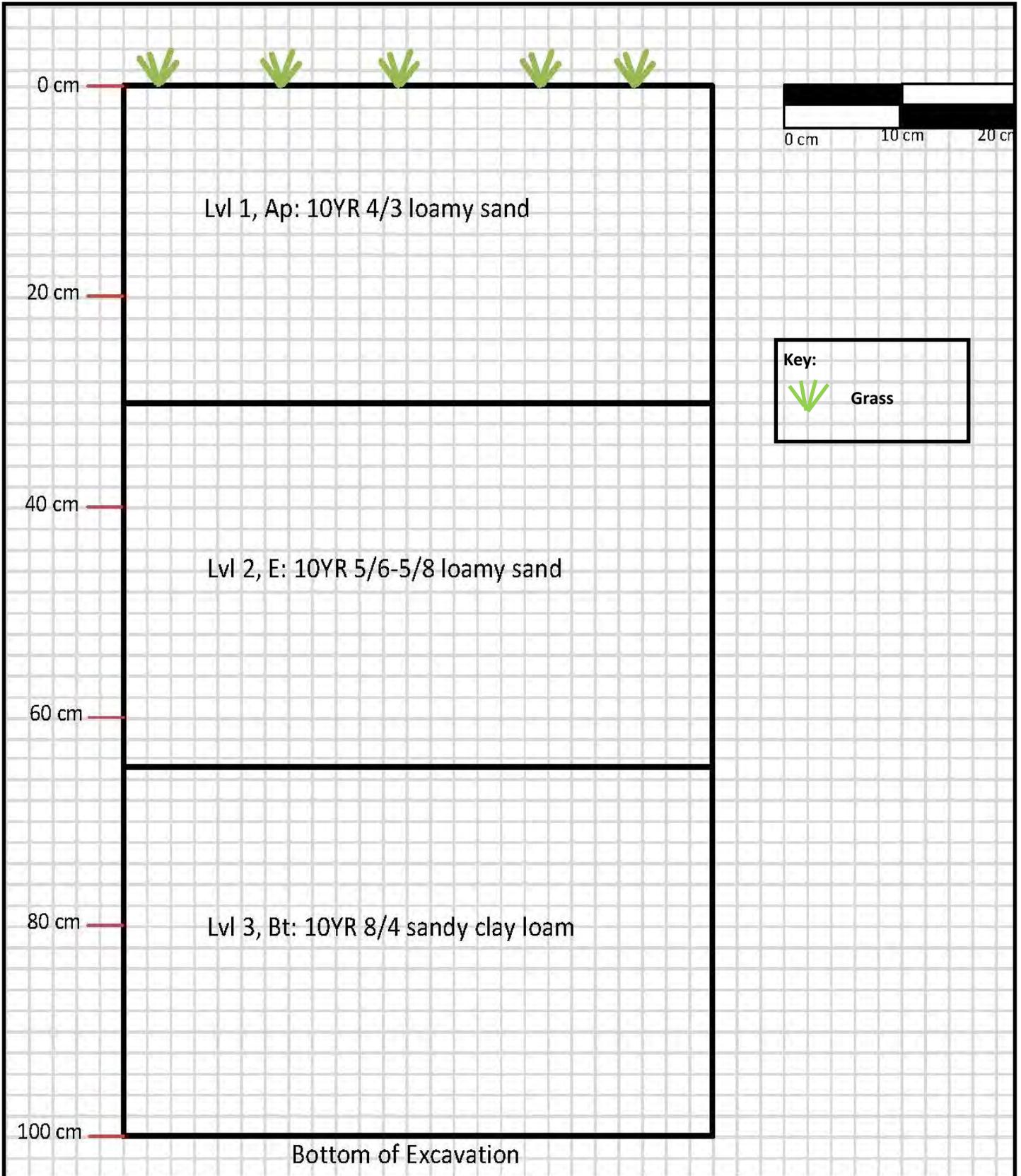
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**STP A-17 Profile**  
**Havana Highway Cell Tower**  
**Havana, Gadsden County, Florida**

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**Date: September 18, 2019**

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**STP A-17 Profile**  
**Havana Highway Cell Tower**  
**Havana, Gadsden County, Florida**

**Scale: Not to Scale**

**Date: October 7, 2019**

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	<b>Havana Highway Cell Tower</b>	<b>Date: September 18, 2019</b>
	<b>Havana, Gadsden County, Florida</b>	<b>MC Project No. 19983002A</b>



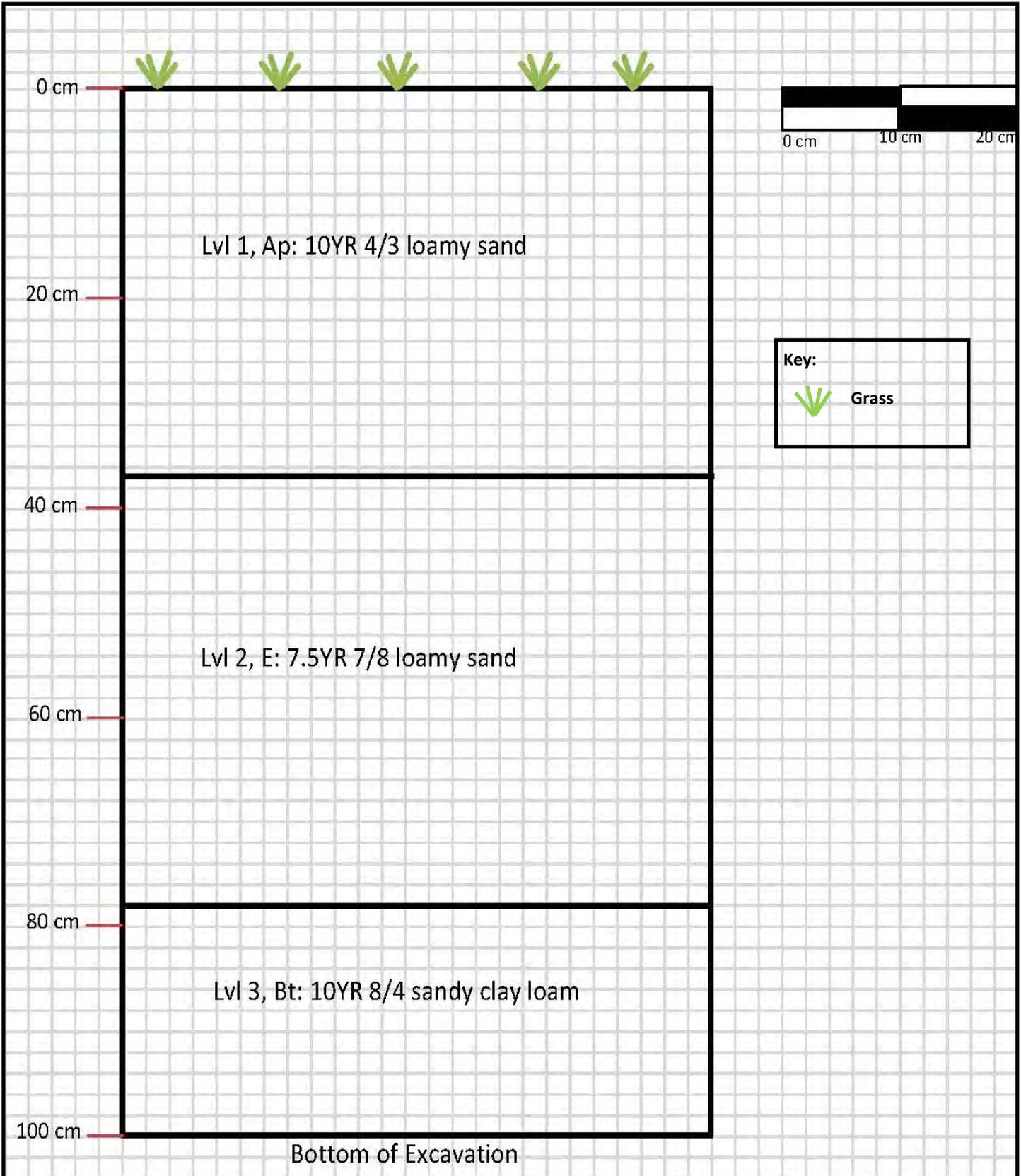
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**STP A-21 Profile**  
**Havana Highway Cell Tower**  
**Havana, Gadsden County, Florida**

**Scale: Not to Scale**

**Date: September 18, 2019**

**MC Project No. 19983002A**



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**Figure : STP A-21 Profile**  
**Havana Highway Cell Tower**  
**Havana, Gadsden County, Florida**

Scale: Not to Scale

Date: October 7, 2019

MC Project No. 19983002A

**Appendix H  
Project Plans**

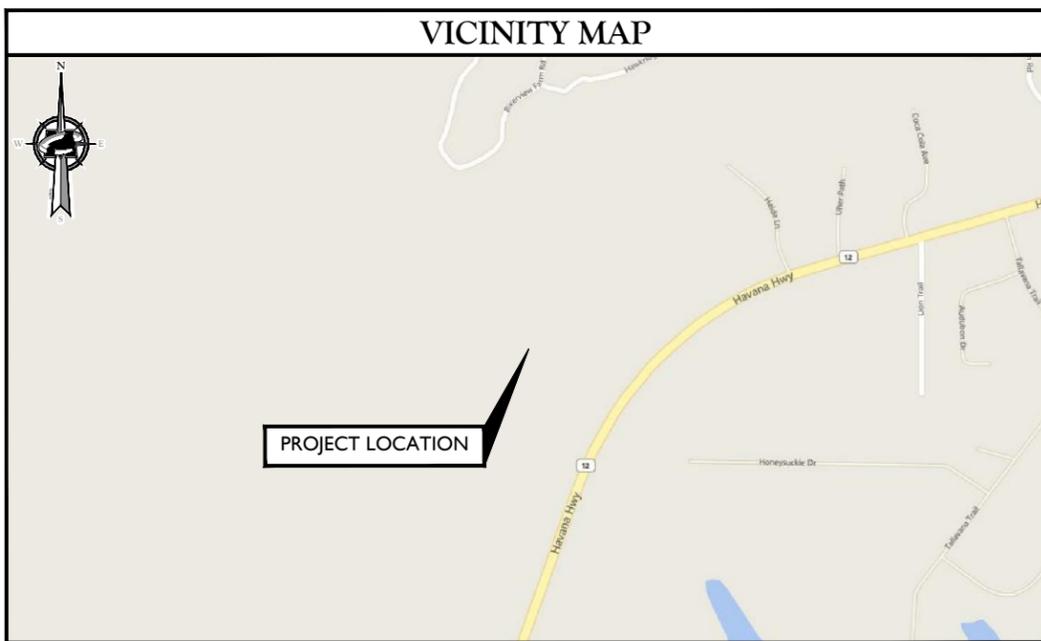
## PROJECT NOTES

- SITE INFORMATION OBTAINED FROM THE FOLLOWING:
  - PLAN ENTITLED "CELL SITE SURVEY" PREPARED BY MASER CONSULTING, PA OF MT. LAUREL, NJ LAST REVISED 8/12/19.
  - LIMITED FIELD OBSERVATION BY MASER CONSULTING ON 04/05/19.
- THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE CODES, ORDINANCES, LAWS AND REGULATIONS OF ALL MUNICIPALITIES, UTILITY COMPANIES OR OTHER PUBLIC/GOVERNING AUTHORITIES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTIONS THAT MAY BE REQUIRED BY ANY FEDERAL, STATE, COUNTY OR MUNICIPAL AUTHORITIES.
- THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION MANAGER, IN WRITING, OF ANY CONFLICTS, ERRORS OR OMISSIONS PRIOR TO THE SUBMISSION OF BIDS OR PERFORMANCE OF WORK.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING SITE IMPROVEMENTS PRIOR TO COMMENCING CONSTRUCTION. THE CONTRACTOR SHALL REPAIR ANY DAMAGE AS A RESULT OF CONSTRUCTION OF THIS FACILITY AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER.
- THE SCOPE OF WORK FOR THIS PROJECT SHALL INCLUDE PROVIDING ALL MATERIALS, EQUIPMENT AND LABOR REQUIRED TO COMPLETE THIS PROJECT. ALL EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- THE CONTRACTOR SHALL VISIT THE PROJECT SITE PRIOR TO SUBMITTING THE BID TO VERIFY THAT THE PROJECT CAN BE CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND CONSTRUCTION DRAWINGS.
- THE CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS PRIOR TO COMMENCING ANY WORK. ALL DIMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THESE DRAWINGS MUST BE VERIFIED. THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION MANAGER OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.
- SINCE THE CELL SITE MAY BE ACTIVE, ALL SAFETY PRECAUTIONS MUST BE TAKEN WHEN WORKING AROUND HIGH LEVELS OF ELECTROMAGNETIC RADIATION. EQUIPMENT SHOULD BE SHUTDOWN PRIOR TO PERFORMING ANY WORK THAT COULD EXPOSE THE WORKERS TO DANGER. PERSONAL RF EXPOSURE MONITORS ARE REQUIRED TO BE WORN TO ALERT OF ANY POTENTIALLY DANGEROUS EXPOSURE LEVELS.
- THE PROPOSED FACILITY WILL CAUSE AN INSIGNIFICANT OR "DE-MINIMUS" INCREASE IN STORM WATER RUNOFF, THEREFORE, NO DRAINAGE STRUCTURES ARE PROPOSED.
- NO NOISE, SMOKE, DUST OR ODOR WILL RESULT FROM THIS FACILITY AS TO CAUSE A NUISANCE.
- THE FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION (NO HANDICAP ACCESS IS REQUIRED).
- THE FACILITY DOES NOT REQUIRE POTABLE WATER OR SANITARY SERVICE.
- CONTRACTOR SHALL VERIFY ANTENNA ELEVATION AND AZIMUTHS WITH RF ENGINEERING PRIOR TO INSTALLATION.
- ALL STRUCTURAL ELEMENTS SHALL BE HOT DIPPED GALVANIZED STEEL.
- CONTRACTOR MUST FIELD LOCATE ALL EXISTING UNDERGROUND UTILITIES PRIOR TO ANY EXCAVATION.
- CONSTRUCTION SHALL NOT COMMENCE UNTIL COMPLETION OF A PASSING STRUCTURAL ANALYSIS CERTIFIED BY A LICENSED PROFESSIONAL ENGINEER. THE STRUCTURAL ANALYSIS IS TO BE PERFORMED BY OTHERS.
- CONTRACTOR SHALL CONTACT STATE SPECIFIC ONE CALL SYSTEM THREE WORKING DAYS PRIOR TO ANY EARTH MOVING ACTIVITIES.



**SITE NAME: HAVANA HIGHWAY**  
**SITE NUMBER: US-FL-5052**

**HAVANA HIGHWAY**  
**HAVANA, FL 32333**  
**GADSDEN COUNTY**



## CODE COMPLIANCE

- ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THE LATEST EDITIONS OF THE FOLLOWING CODES.
- |   |  |
|---|--|
| 1. 2017 FLORIDA BUILDING CODE, SIXTH EDITION        | 8. INSTITUTE FOR ELECTRICAL AND ELECTRONICS ENGINEERS 81 IEEE C2 LATEST EDITION                                |
| 2. 2014 NATIONAL ELECTRICAL CODE - NFPA 70          | 9. TELCORDIA GR-1275   |
| 3. 2017 FLORIDA FIRE PREVENTION CODE, SIXTH EDITION | 10. ANSI T1.311  |
| 4. AMERICAN INSTITUTE OF STEEL CONSTRUCTION 360-10  | 11. PROPOSED USE: UNMANNED TELECOM FACILITY  |
| 5. AMERICAN CONCRETE INSTITUTE                      | 12. HANDICAP REQUIREMENTS: FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. HANDICAPPED ACCESS NOT REQUIRED. |
| 6. TIA-222-G  | 13. CONSTRUCTION TYPE: IIB   |
| 7. TIA 607 FOR GROUNDING                            | 14. USE GROUP: U   |

## PROJECT INFORMATION

### SITE INFORMATION

LATITUDE: N 30° 36' 18.8"  
 LONGITUDE: W 84° 28' 50.3"  
 GROUND ELEVATION: 159.1'  
 JURISDICTION: GADSDEN COUNTY  
 ZONING DISTRICT: AGRICULTURE 3  
 PARCEL #: 3-06-2N-2W-0000-00220-0000

### APPLICANT/LESSEE

COMPANY: VERTICAL BRIDGE DEVELOPMENT, LLC  
 ADDRESS: 750 PARK OF COMMERCE DRIVE  
 CITY, STATE, ZIP: BOCA RATON, FL 33487

### SITE ACQUISITION

COMPANY: SITE ID, INC.  
 ADDRESS: 103 CARNEGIE CENTER, SUITE 300  
 CITY, STATE, ZIP: PRINCETON, NJ 08540  
 CONTACT: MICHAEL SHINE  
 E-MAIL: MSHINE@SITEIDINC.COM

### ENGINEERING COMPANY

COMPANY: MASER CONSULTING P.A.  
 ADDRESS: 2000 MIDLANTIC DRIVE, SUITE 100  
 CITY, STATE, ZIP: MT. LAUREL, NJ 08054  
 CONTACT: MATTHEW GRAUBART, P.E.  
 PHONE: (856) 797-0412  
 E-MAIL: MGRAUBART@MASERCONSULTING.COM

### PROPERTY OWNER:

NAME: ANN F. NICHOLSON (TRUSTEE)  
 ADDRESS: 4297 MAYLOR LANE  
 CITY, STATE, ZIP: TALLAHASSEE, FL 32308-5770

## LOCATION INFORMATION

### POWER PROVIDER

NAME: TALQUIN ELECTRIC  
 PHONE: (850) 627-9666

### TELEPHONE PROVIDER:

NAME: COMCAST  
 PHONE: (855) 518-7823

### POLICE

NAME: HAVANA POLICE DEPARTMENT  
 ADDRESS: 121 17TH AVENUE EAST  
 CITY, STATE, ZIP: HAVANA, FL 32333-1068  
 PHONE: (850) 539-2801

### FIRE

NAME: COONBOTTOM VOLUNTEER FIRE DEPT.  
 ADDRESS: 4838 FAIRBANKS FERRY ROAD  
 CITY, STATE, ZIP: HAVANA, FL 32333  
 PHONE: (850) 539-4693

IN CASE OF EMERGENCY, CALL 9-1-1

## SHEET INDEX

SHEET	DESCRIPTION
T-1	TITLE SHEET
Z-1	ZONING INFORMATION
Z-2	SITE PLAN AND PROJECT NOTES
Z-3	PARTIAL SITE PLAN
Z-4	GRADING AND EROSION AND SEDIMENT CONTROL PLAN
Z-5	COMPOUND PLAN AND ELEVATION VIEW
A-1	CONSTRUCTION DETAILS
A-2	CONSTRUCTION DETAILS
A-3	CONSTRUCTION DETAILS
A-4	CONSTRUCTION DETAILS

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 FLORIDA PROFESSIONAL ENGINEER - LICENSE NUMBER: 80550

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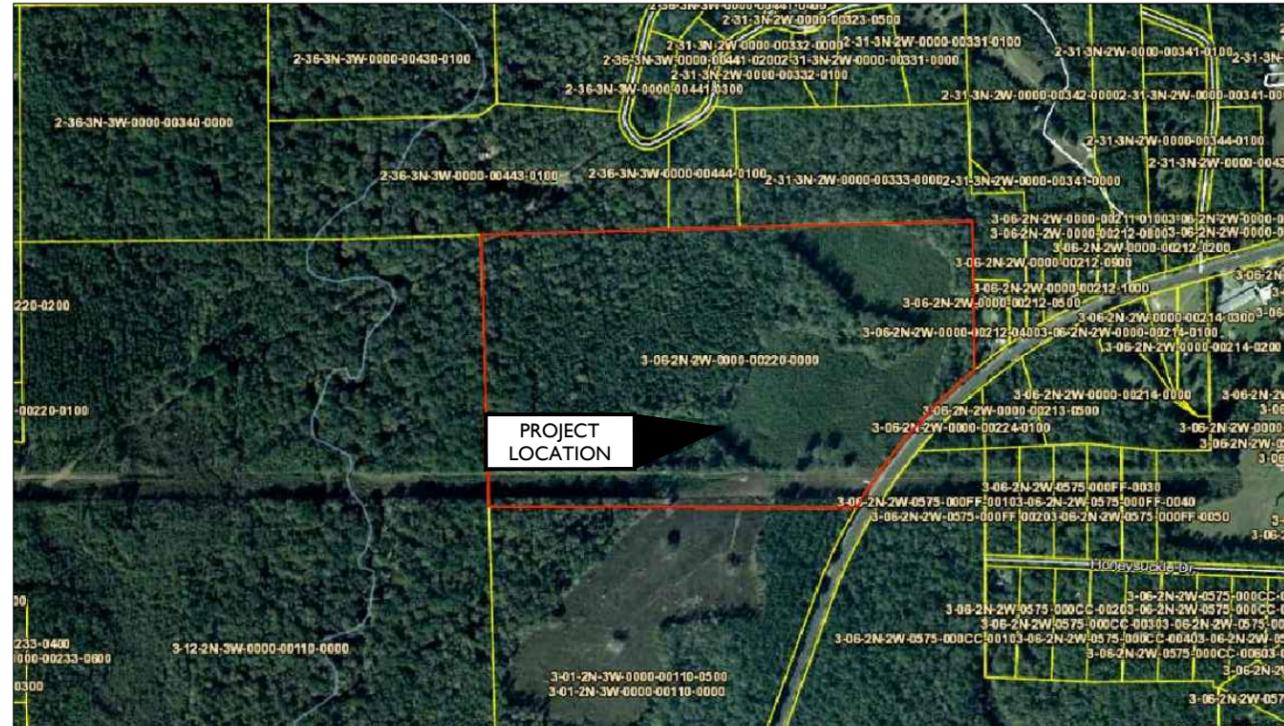
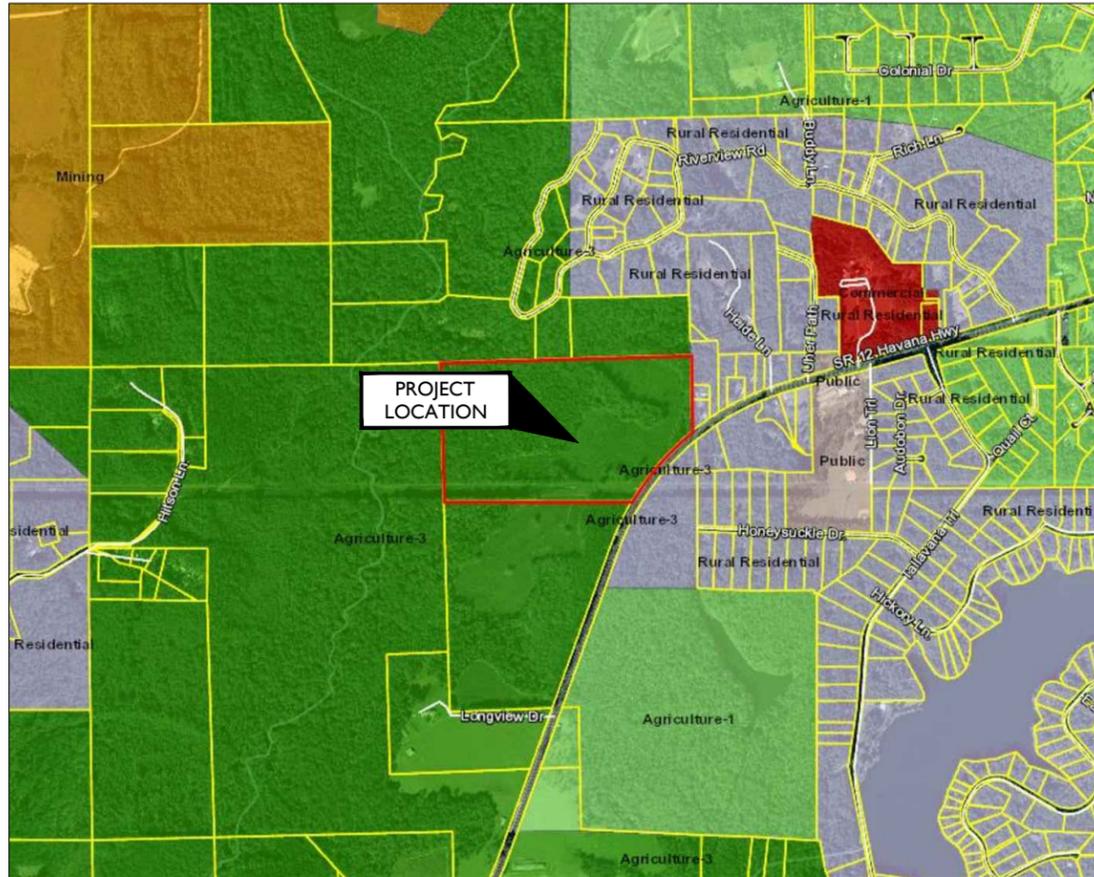
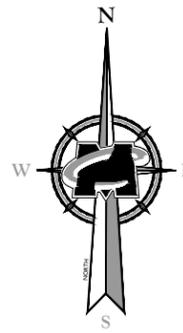
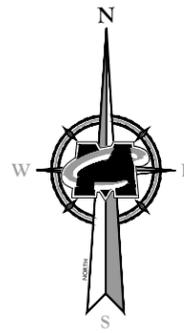
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TITLE SHEET

Page 315 of 353



**LEGEND**

- Parcels
- Roads (Local)
- Roads (Major)
- Future Land Use
- Agric
- Agriculture-1
- Agriculture-2
- Agriculture-3
- Streams and Rivers (Large)

**ZONING MAP**



SCALE : 1" = 1000' FOR 22"X34"  
(SCALE : 1" = 2000' FOR 11"X17")

**TAX MAP**



SCALE : 1" = 500' FOR 22"X34"  
(SCALE : 1" = 1000' FOR 11"X17")

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• Raleigh	• New Mexico	• Norfolk	• Houston
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SHEET TITLE:  
**ZONING INFORMATION**

SHEET NUMBER:  
**Page 316 of 353**

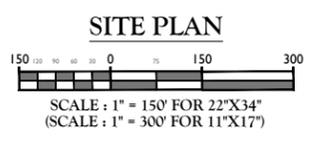
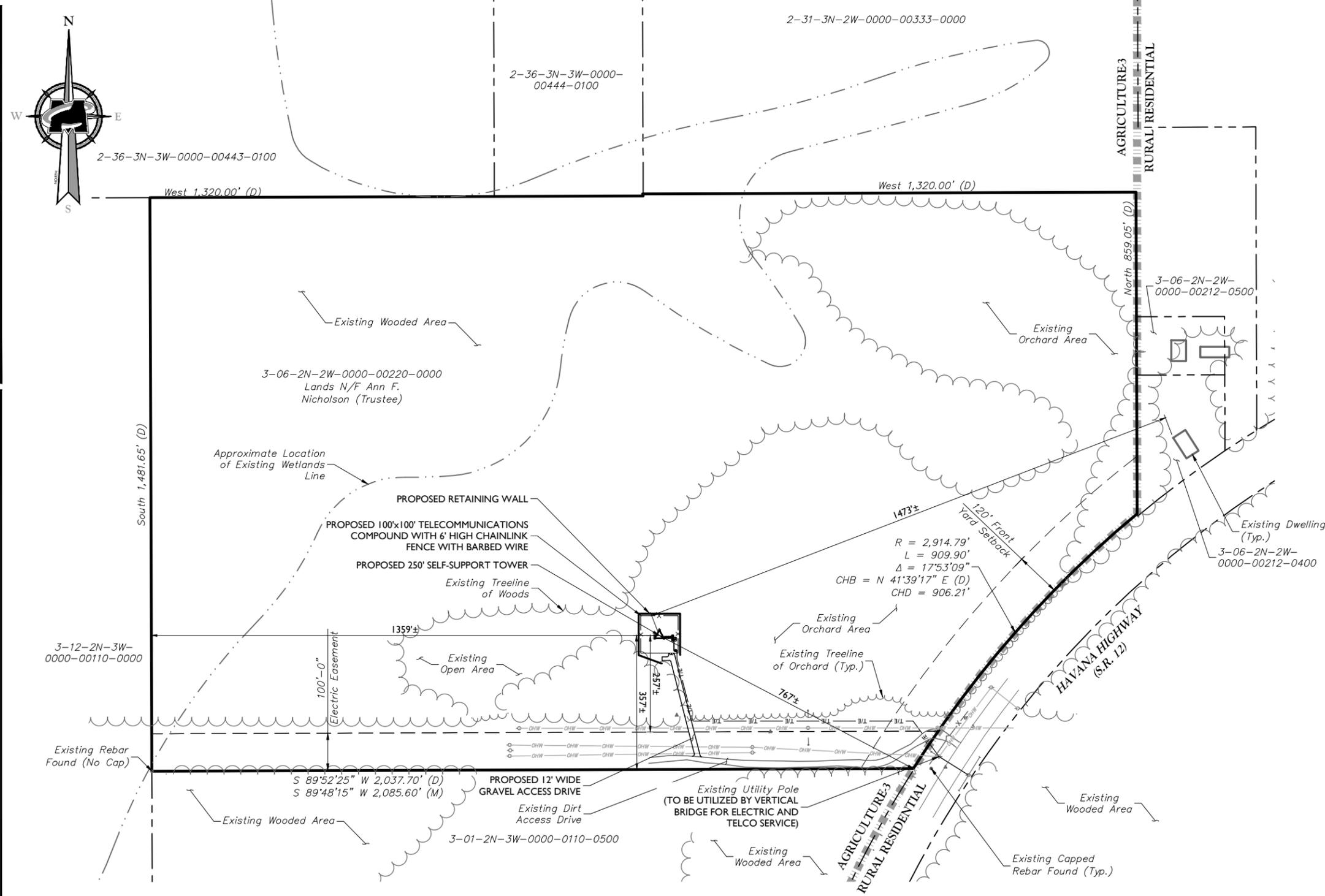
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**PROJECT NOTES**

- THIS PROPOSAL IS FOR AN UNMANNED TELECOMMUNICATIONS FACILITY CONSISTING OF THE PLACEMENT OF PANEL ANTENNAS ON A PROPOSED SELF SUPPORT TOWER AND EQUIPMENT CABINETS AND ASSOCIATED APPURTENANCES IN A PROPOSED FENCED AREA.
- EXTERIOR SIGNS ARE NOT PROPOSED EXCEPT AS REQUIRED BY THE FCC.
- TOTAL AREA OF DISTURBANCE UNDER THIS PROPOSAL: 26,200± S.F.
- RUBBISH, STUMPS, DEBRIS, STICKS, STONES AND OTHER REFUSE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF LEGALLY.
- CONTRACTOR SHALL CONTACT STATE SPECIFIC ONE CALL SYSTEM THREE WORKING DAYS PRIOR TO ANY EARTH MOVING ACTIVITIES.
- POWER TO THE FACILITY WILL BE MONITORED BY A SEPARATE METER.
- SUBCONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS & INSPECTIONS REQUIRED FOR CONSTRUCTION.
- SUBCONTRACTOR SHALL DETERMINE EXACT ROUTE OF ANY UNDERGROUND CONDUIT, IF REQUIRED.
- THIS PROJECT WILL NOT REQUIRE STREETS OR PROPERTY TO BE DEDICATED FOR PUBLIC USE.
- THIS PROJECT WILL NOT REQUIRE PERMANENT MONUMENTS.
- ACCORDING TO THE FEMA FLOOD INSURANCE RATE MAPS OF GADSDEN COUNTY, NJ (ALL JURISDICTIONS), PANEL 251 OF 383, MAP 12039C0251C DATED FEBRUARY 4, 2009, ALL PROPOSED IMPROVEMENTS ARE LOCATED WITHIN ZONE X - AREAS DETERMINED TO BE OUTSIDE THE 500 YEAR FLOODPLAIN.
- THE PROPOSED INSTALLATION WILL GENERATE ONE (1) VEHICLE TRIP FOR ROUTINE MAINTENANCE EVERY FOUR (4) TO SIX (6) WEEKS.

- LEGEND**
- Existing Subject Property Line
  - Existing Subject Property Setback Line
  - Existing Adjoining/Adjacent Property Line
  - Existing Edge of Pavement/Road
  - Existing Structure
  - Existing Tree Line
  - Existing Zoning Boundary
  - Existing Features
  - Existing Easement
  - PROPOSED ROAD
  - PROPOSED CHAIN LINK FENCE
  - PROPOSED FEATURES
  - PROPOSED UNDERGROUND ELECTRIC/TELCO UTILITY LINES



BULK STANDARDS FOR AGRICULTURE 3 (SECTION 5203)				
PROPOSED USE: COMMUNICATION TOWER (PERMITTED)				
DESCRIPTION	REQUIRED	EXISTING	PROPOSED	REMARKS
MINIMUM LOT AREA	43,560 SF (1 ACRE)	87.82± ACRES	NO CHANGE	CONFORMING
MAXIMUM IMPERVIOUS SURFACE RATIO	0.750	N/A	0.004±	CONFORMING
MINIMUM LOT SETBACK FROM RIGHT OF WAY LINE	120 FEET	N/A	N/A	CONFORMING
BULK STANDARDS COMMUNICATION TOWERS (SECTION 5800)				
MINIMUM FRONT YARD*	750 FEET	N/A	767± FEET	CONFORMING
MINIMUM SIDE YARD (AGGREGATE)	0 FEET	N/A	357± FEET	CONFORMING
MINIMUM REAR YARD	0 FEET	N/A	1,359± FEET	CONFORMING
MINIMUM SETBACK TO RESIDENTIAL USE**	1,750 FEET	N/A	1,473± FEET	NON-CONFORMING
MAXIMUM HEIGHT OF COMMUNICATION TOWER	250 FEET	N/A	257 FEET	CONFORMING
MINIMUM HEIGHT OF COMMUNICATION TOWER FENCING	6 FEET	N/A	6 FEET	CONFORMING

\* FRONT YARD SETBACK IS DISTANCE TO SR12 = 3 TIMES THE HEIGHT OF TOWER (3 \* 250 FEET = 750 FEET)  
 \*\* RESIDENTIAL SETBACK IS 7 TIMES THE HEIGHT OF TOWER (7 \* 250 FEET = 1,750 FEET)

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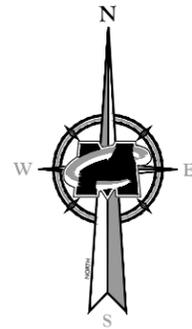
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**SHEET TITLE:**  
 SITE PLAN AND PROJECT NOTES





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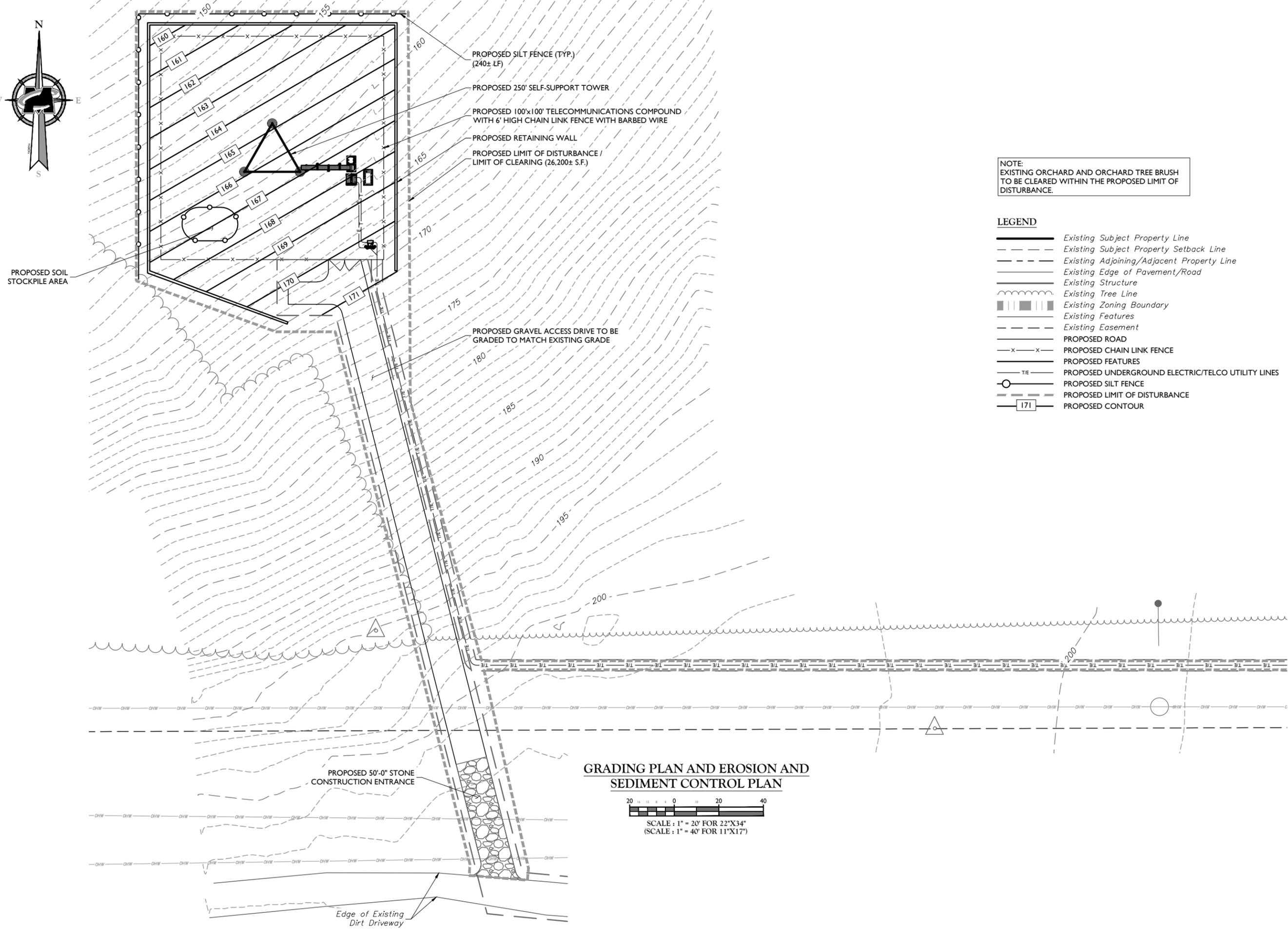
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**SHEET TITLE:**  
GRADING PLAN AND  
EROSION AND SEDIMENT  
CONTROL PLAN

**SHEET NUMBER:**  
Page 319 of 353



**NOTE:**  
EXISTING ORCHARD AND ORCHARD TREE BRUSH TO BE CLEARED WITHIN THE PROPOSED LIMIT OF DISTURBANCE.

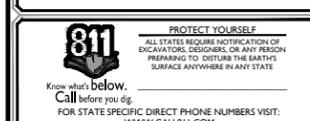
- LEGEND**
- Existing Subject Property Line
  - - - Existing Subject Property Setback Line
  - - - Existing Adjoining/Adjacent Property Line
  - Existing Edge of Pavement/Road
  - Existing Structure
  - Existing Tree Line
  - █ Existing Zoning Boundary
  - Existing Features
  - - - Existing Easement
  - PROPOSED ROAD
  - x - x - PROPOSED CHAIN LINK FENCE
  - T/E - PROPOSED FEATURES
  - PROPOSED UNDERGROUND ELECTRIC/TELCO UTILITY LINES
  - PROPOSED SILT FENCE
  - - - PROPOSED LIMIT OF DISTURBANCE
  - 171 PROPOSED CONTOUR

**GRADING PLAN AND EROSION AND SEDIMENT CONTROL PLAN**



SCALE : 1" = 20' FOR 22"x34"  
SCALE : 1" = 40' FOR 11"x17"

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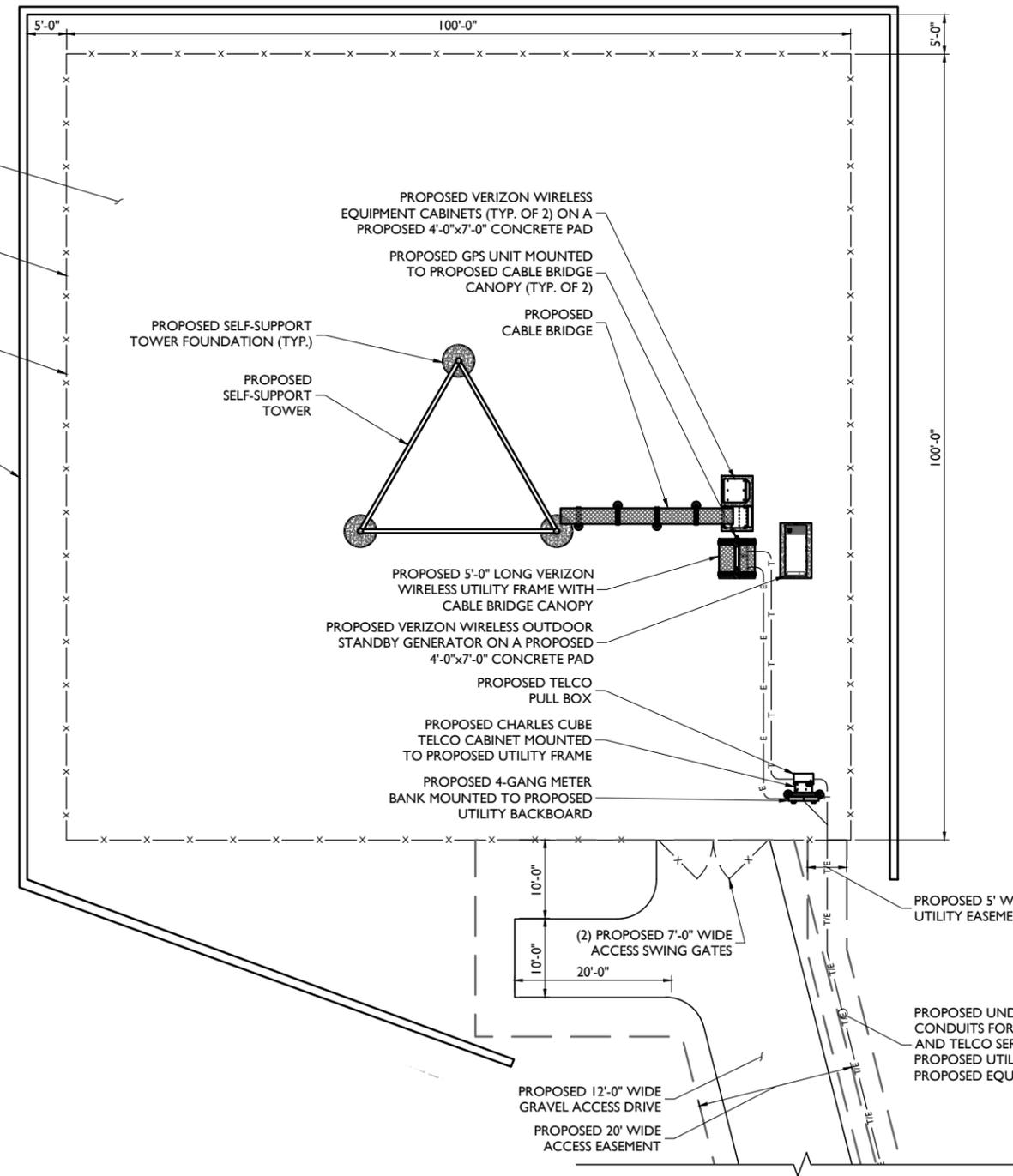
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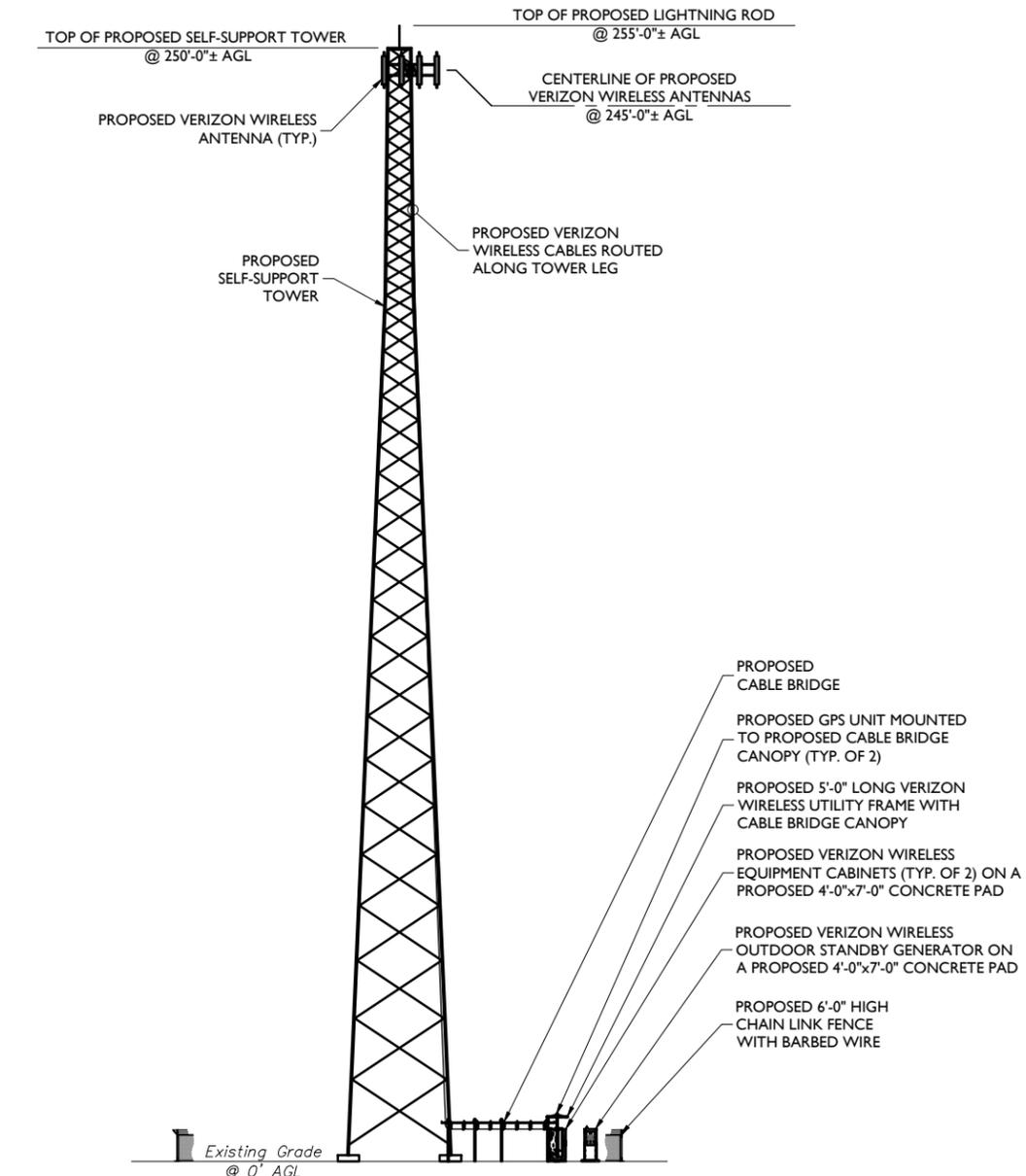
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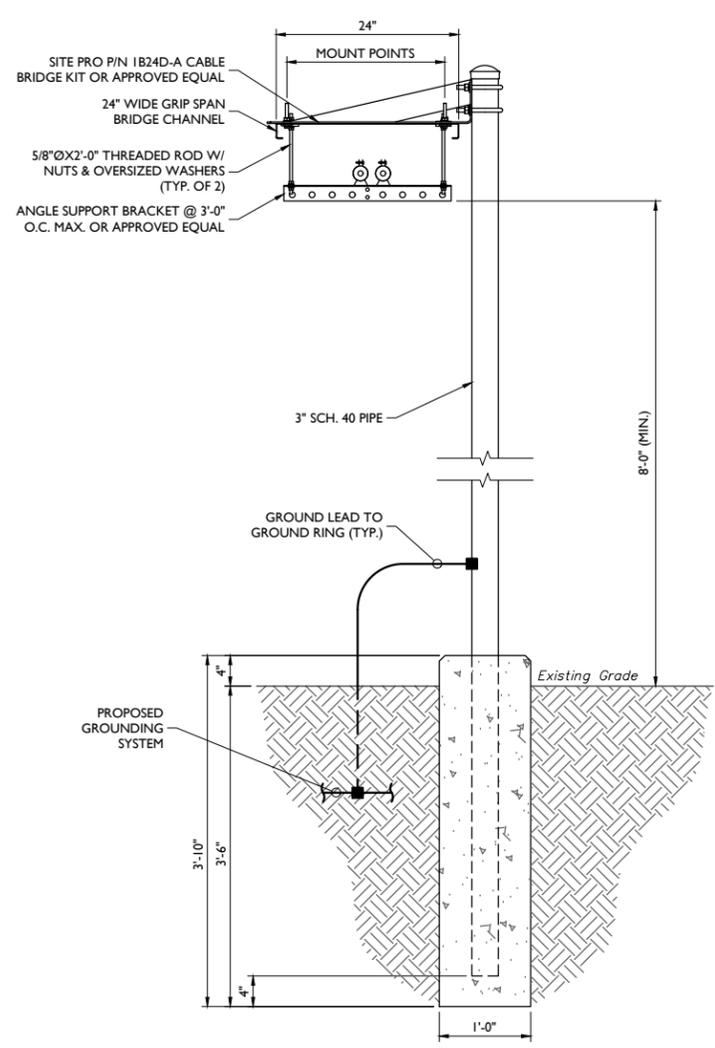
**COMPOUND PLAN**  
 SCALE: 1" = 10' FOR 22"x34"  
 (SCALE: 1" = 20' FOR 11"x17")



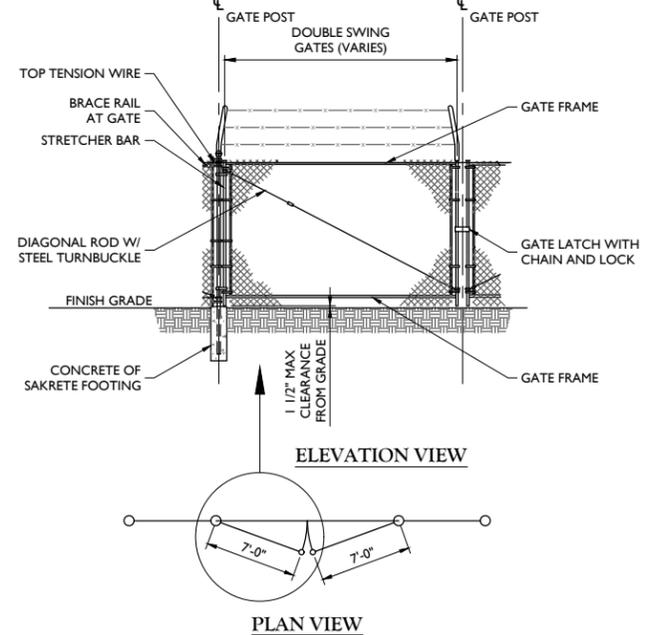
**ELEVATION PLAN**  
 SCALE: 1" = 20' FOR 22"x34"  
 (SCALE: 1" = 40' FOR 11"x17")

NOTE:  
 TOWER SHALL BE LIT IN ACCORDANCE WITH FAA REQUIREMENTS.

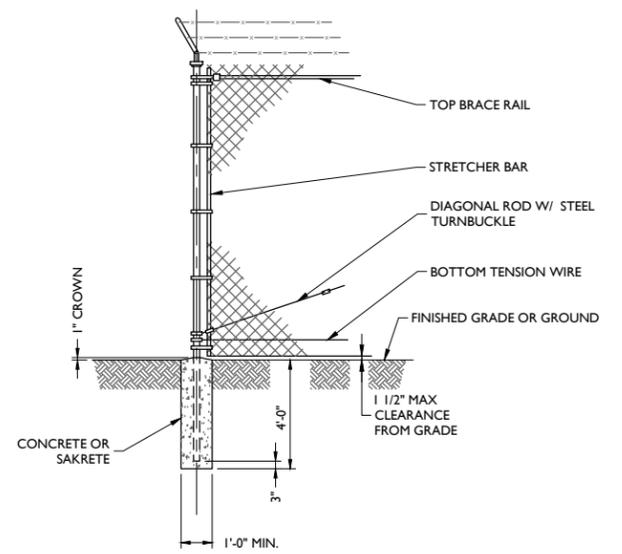
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**CABLE BRIDGE DETAIL**  
NOT TO SCALE



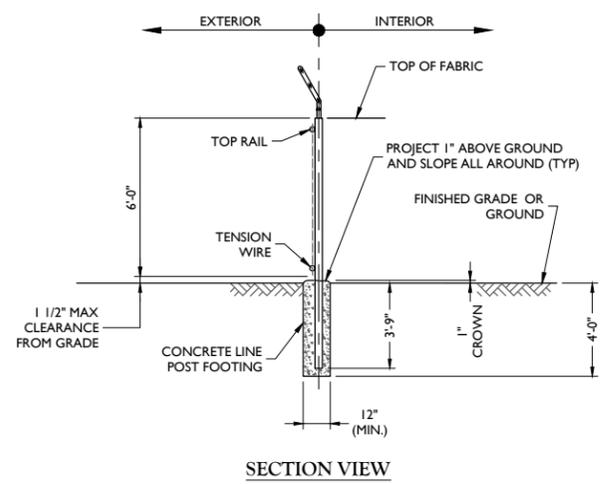
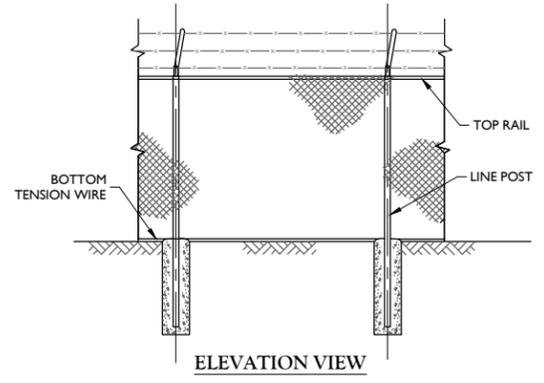
**CHAIN LINK SWING GATE, DOUBLE**  
NOT TO SCALE



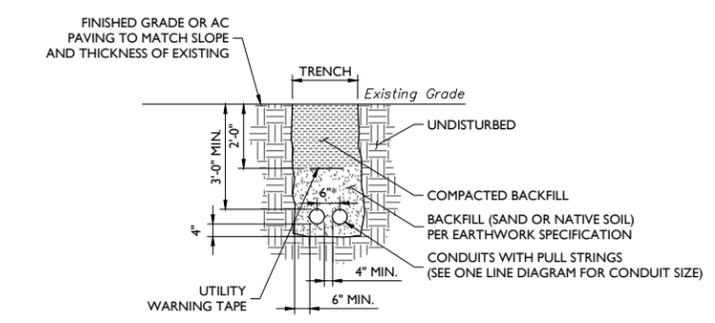
**CHAIN LINK CORNER, GATE, END, OR PULL POST**  
NOT TO SCALE

**FENCE NOTES:**

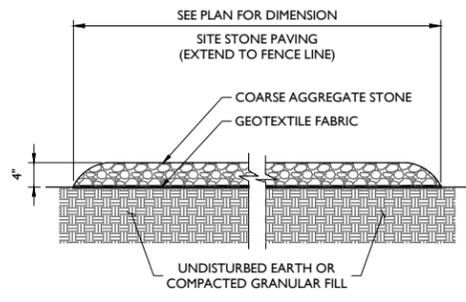
1. GATE POST, CORNER, TERMINAL OR PULL POST SHALL BE 3"Ø SCHEDULE 40 FOR GATE WIDTHS UP THROUGH 7 FEET OR 14 FEET FOR DOUBLE SWING GATE PER ASTM-F1083.
2. LINE POST: 2-3/8"Ø SCHEDULE 40 PIPE PER ASTM-F1083.
3. GATE FRAME: 1 1/2"Ø SCHEDULE 40 PIPE PER ASTM-F1083.
4. TOP RAIL & BRACE RAIL: 1 1/4"Ø SCHEDULE 40 PIPE PER ASTM-F1083.
5. FABRIC: 9 GA. CORE WIRE SIZE 2" MESH, CONFORMING TO ASTM-A392 CLASS 1.
6. TIE WIRE: MINIMUM 11 GA GALVANIZED STEEL INSTALL A SINGLE WRAP TIE WIRE AT POSTS AND RAILS AT MAX. 24" INTERVALS. INSTALL HOG RINGS ON TENSION WIRE AT 24" INTERVALS.
7. TENSION WIRE: 7 GA. GALVANIZED STEEL.
8. BARBED WIRE: 3 STRANDS OF DOUBLE STRANDED 12-1/2 GAUGE TWISTED WIRE, 4 PT. BARBS SPACED ON APPROXIMATELY 5" CENTERS.
9. GATE LATCH: 1-3/8" O.D. PLUNGER ROD W/ MUSHROOM TYPE CATCH AND LOCK.
10. LOCAL ORDINANCE FOR BARBED WIRE PERMIT SHALL GOVERN INSTALLATION.
11. HEIGHT = 6'-0" VERTICAL DIMENSION WITH 1'-0" BARBED WIRE.
12. ALL WORK SHALL CONFORM WITH THE PROJECT SPECIFICATIONS.



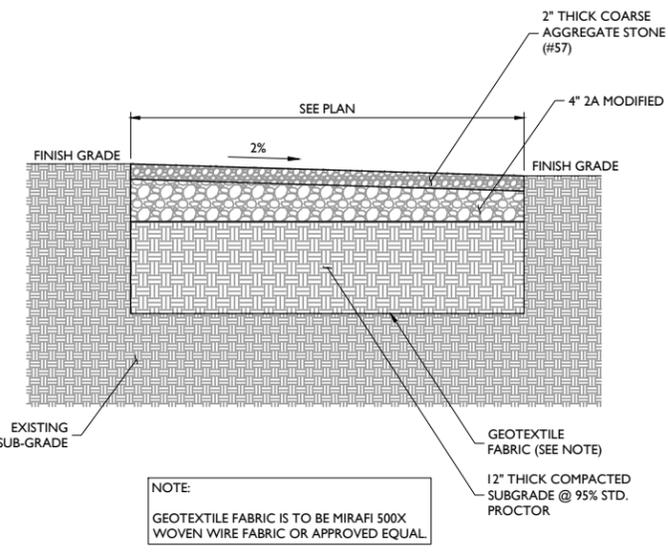
**CHAIN LINK FENCE DETAIL**  
NOT TO SCALE



**UTILITY CONDUIT RUN**  
NOT TO SCALE



**GRAVEL SURFACING**  
NOT TO SCALE



**GRAVEL DRIVEWAY SURFACING**  
NOT TO SCALE

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ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE  
Know what's below. Call before you dig.  
FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

SCALE:	AS SHOWN	JOB NUMBER:	19983002A
REV	DATE	DESCRIPTION	DRAWN BY / CHECKED BY
A	08/15/19	ISSUED FOR REVIEW	SLM / MEG

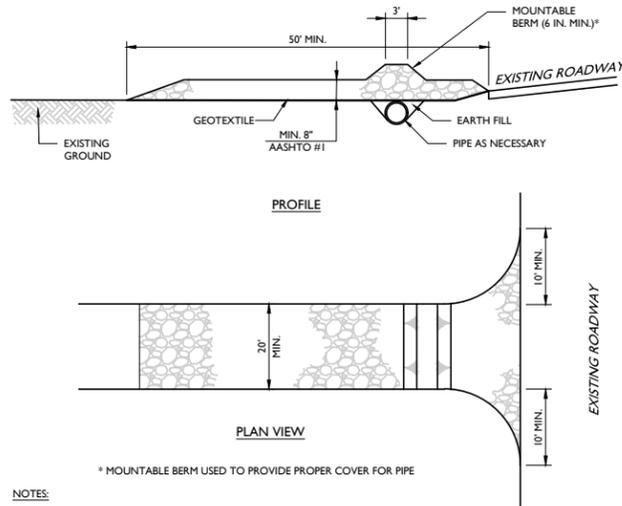
**MICHAEL P. CLEARY**  
FLORIDA PROFESSIONAL ENGINEER - LICENSE NUMBER: 80550

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF THE RESPONSIBLE LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

**SITE NAME:**  
**HAVANA HIGHWAY**  
US-FL-5052  
**HAVANA HIGHWAY**  
HAVANA, FL 32333  
GADSDEN COUNTY

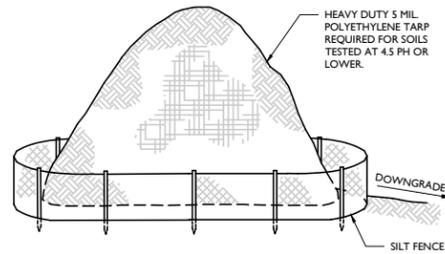
**MT. LAUREL OFFICE**  
2000 Midlantic Drive  
Suite 100  
Mount Laurel, NJ 08054  
Phone: 856.797.0412  
Fax: 856.722.1120

**CONSTRUCTION DETAILS**



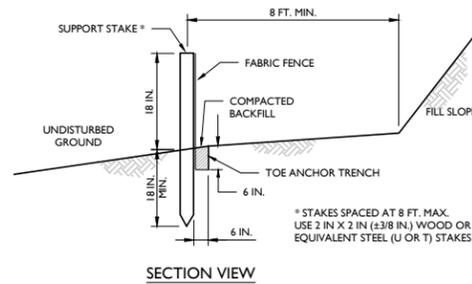
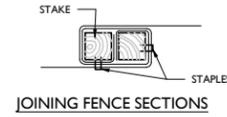
- NOTES:**
1. REMOVE TOPSOIL PRIOR TO INSTALLATION OF ROCK CONSTRUCTION ENTRANCE. EXTEND ROCK OVER FULL WIDTH OF ENTRANCE.
  2. RUNOFF SHALL BE DIVERTED FROM ROADWAY TO A SUITABLE SEDIMENT REMOVAL BMP PRIOR TO ENTERING ROCK CONSTRUCTION ENTRANCE.
  3. MOUNTABLE BERM SHALL BE INSTALLED WHEREVER OPTIONAL CULVERT PIPE IS USED AND PROPER PIPE COVER AS SPECIFIED BY MANUFACTURER IS NOT OTHERWISE PROVIDED. PIPE SHALL BE SIZED APPROPRIATELY FOR SIZE OF DITCH BEING CROSSED.
  4. MAINTENANCE: ROCK CONSTRUCTION ENTRANCE THICKNESS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK. A STOCKPILE SHALL BE MAINTAINED ON SITE FOR THIS PURPOSE. ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE IMMEDIATELY. IF EXCESSIVE AMOUNTS OF SEDIMENT ARE BEING DEPOSITED ON ROADWAY, EXTEND LENGTH OF ROCK CONSTRUCTION ENTRANCE BY 50 FOOT INCREMENTS UNTIL CONDITION IS ALLEVIATED OR INSTALL WASH RACK, WASHING THE ROADWAY OR SWEEPING THE DEPOSITS INTO ROADWAY DITCHES, SEWERS, CULVERTS, OR OTHER DRAINAGE COURSES IS NOT ACCEPTABLE.

**STONE CONSTRUCTION ENTRANCE**  
NOT TO SCALE



- NOTES:**
1. ALL STOCKPILES SHALL NOT TO BE LOCATED WITHIN 50 FEET OF A FLOODPLAIN, SLOPE, ROADWAY OR DRAINAGE FACILITY.

**TOPSOIL STOCKPILE WITH SILT FENCE**  
NOT TO SCALE



- NOTES:**
1. FABRIC SHALL HAVE THE MINIMUM PROPERTIES AS SHOWN IN TABLE 4.3 OF THE PA DEP EROSION CONTROL MANUAL.
  2. FABRIC WIDTH SHALL BE 30 IN. MINIMUM. STAKES SHALL BE HARDWOOD OR EQUIVALENT STEEL (U OR T) STAKES.
  3. SILT FENCE SHALL BE PLACED AT LEVEL EXISTING GRADE. BOTH ENDS OF THE FENCE SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT.
  4. SEDIMENT SHALL BE REMOVED WHEN ACCUMULATIONS REACH HALF THE ABOVE GROUND HEIGHT OF THE FENCE.
  5. ANY SECTION OF SILT FENCE WHICH HAS BEEN UNDERMINED OR TOPPED SHALL BE IMMEDIATELY REPLACED WITH A ROCK FILTER OUTLET (STANDARD CONSTRUCTION DETAIL # 4-6).
  6. FENCE SHALL BE REMOVED AND PROPERLY DISPOSED OF WHEN TRIBUTARY AREA IS PERMANENTLY STABILIZED.

**STANDARD SILT FENCE (18" HIGH)**  
NOT TO SCALE

**MASER CONSULTING P.A.**  
Customer Loyalty Through Client Satisfaction  
We're in a better position than ever before.  
Engineers ■ Planners ■ Surveyors  
Landscape Architects ■ Environmental Scientists

Office Locations:

<b>New Jersey</b>	<b>New York</b>	<b>Florida</b>	<b>Pennsylvania</b>
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• Camden	• New Windsor	• Orlando	• Erie
• Hamilton	• Westchester	• Miami	• Philadelphia
• High Bridge	• North Carolina	• Jacksonville	• Pittsburgh
• Morristown	• Charlotte	• Virginia	• Tennessee
• Mt. Airy	• Raleigh	• Norfolk	• Knoxville
• Maryland	• New Mexico	• Houston	• Texas
• Columbia	• Albuquerque	• Irving	• Irving

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SCALE:	JOB NUMBER:
AS SHOWN	19983002A

REV	DATE	DESCRIPTION	DRAWN BY	CHECKED BY
A	08/15/19	ISSUED FOR REVIEW	SLM	MEG

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**SITE NAME:**  
  
HAVANA HIGHWAY  
US-FL-5052  
  
HAVANA HIGHWAY  
HAVANA, FL 32333  
GADSDEN COUNTY

**MT. LAUREL OFFICE**  
2000 Midlantic Drive  
Suite 100  
Mount Laurel, NJ 08054  
Phone: 856.797.0412  
Fax: 856.722.1120

SHEET TITLE:  
**CONSTRUCTION DETAILS**

SHEET NUMBER:  
**Page 322 of 353**

M:\Projects\25561-FL-002\2019\Drawings\2 - By: PKL\111819

**Appendix I**  
**Resume**

## MARGARET STONE

Archaeologist/Ecological Services

### EXPERIENCE

#### EDUCATION

- M.A. Public Anthropology, American University, 2016
- B.A. Anthropology, American University, 2016
- A.S. Rowan College at Burlington County, 2014

#### PROFESSIONAL TRAINING

- OSHA-10 Construction Training
- Site Safety Leader Training (SSL)
- New Jersey Historic Preservation Office Research Training

Ms. Stone is an archaeologist with experience in anthropological research, ethnography, archaeological excavation, and labwork. She has conducted research for and performed Phase I, II, and III archaeological excavations with tasks ranging from shovel tests to unit excavations, including soil and artifact analysis.

### PROJECTS

#### **Phase I, II, and III Archaeological Survey Various Locations in NJ**

Planned, performed, and lead Phase I, II, III archaeological excavations on various sites across New Jersey with a team of five to ten archaeologists. Responsibilities included coordinating and planning the project with the Project Manager, Tribes (if applicable), and Historic Societies; following Natural Environmental Preservation Act (NEPA) requirements; conducting research prior to going on site; excavations; leading and performing shovel tests and unit excavations; as well as soil and artifact analysis. Research work was conducted with the New Jersey Historic Preservation Office in the Department of Environmental Preservation. Locations:

- Manalapan Rt 33, Phase I Archaeology
- East Windsor, Phase I & II
- Gale Dam, Phase I
- Manalapan Rt 33, Phase II
- Logan Township, Phase II
- Havana Highway Cell Tower TCNS #188894, Phase I
- Washington 1 Cell Tower TCNS #188895, Phase I

#### **Deed and Title Research Various Locations, NJ**

Performed preliminary research prior to going on site. Including on site research at the New Jersey State Historic Preservation Office (SHPO); county clerks' offices; and historic societies to gain information on prior land owners and property uses pertaining to the sites. This information would give context to cultural material uncovered on the sites. After the excavations were completed, used research and excavation findings to write the reports delivered to Department of Environmental Protection (DEP). Locations:

- Rt 322 Wastewater & Conveyance System Project, Gloucester County
- Wellington Farms
- East Windsor Phase I
- Gale Dam
- Manalapan Rt 33 Phase II
- Havana Highway Cell Tower Site
- Washington 1 Cell Tower Site

## **Wetlands**

### **Cape May, NJ and Warwick, NY**

Performed background research using NJ GEOWEB, among other databases, for wetlands delineation, then coordinated with another ecologist to flag and delineate the wetlands. Assisted in application writing, Environmental Impact Statements delivered to Department of Environmental Protection (DEP).

### **Adjunct Professor, Rowan College at Burlington County**

#### **Mt. Laurel Township, Burlington County, NJ**

Instructed Introduction to Cultural Anthropology course on site in classroom of 30+ students weekly. This included making and following lesson plans, giving and grading assignments, and helping and further educating students.

## **E2PM**

### **Various Locations, NJ**

Archaeologist - Performed Phase I and Phase II archaeological excavations on various sites across New Jersey with a team of two to five archaeologists. Jobs ranged from performing shovel tests to unit excavations, as well as soil and artifact analysis. Additional tasks included performing architectural history documentation prior to Trenton to Burlington powerline construction.

### **Thunderbird Archaeology**

#### **Various Locations Across Greater DC/Maryland/Virginia Region**

Archaeologist - Performed Phase I, II, III archaeological excavations on various sites across the greater DC-Maryland-Virginia (DMV) region. Jobs ranged from performing shovel tests to unit excavations, as well as soil and artifact analysis for investigation prior to powerline and metro construction. Phase III Data Recovery project was performed on a colonial merchant ship and warehouse found along the banks of the Potomac. Built and repaired field equipment.

### **Richard Grubb & Associates**

#### **Various Locations Across NJ and PA**

Archaeologist - Performed Phase I, II, and III archaeological excavations on various sites across New Jersey and Pennsylvania. Jobs ranged from performing shovel tests to unit excavations, as well as soil and artifact analysis for both prehistoric and historic sites throughout New Jersey. Utilized technology such as iPads for recording documentation of the excavation. Locations:

- Mullica Hill, NJ, Phase I
- Old Bridge, NJ, Phase III
- Toms River, NJ, Phase I
- Manalapan, NJ Rt 33, Phase I
- Logan Township, Phase II & III

### **Dovetail Cultural Resources**

#### **St Mary County, MD and Milford, DE**

Archaeologist - Performed Phase I and Phase II archaeological excavations for the Delaware and Maryland Department of Transportation. Jobs ranged from performing shovel tests to unit excavations, as well as soil and artifact analysis.

## **AECOM**

### **Various Locations Across Greater D.C. Region**

Archaeologist - Performed lab work and Phase I and Phase II archaeological excavations on various sites across greater D.C. region for the Maryland Department of Transportation. Jobs ranged from performing shovel tests to unit excavations, as well as soil and artifact analysis. Locations:

- Virginia Tech, Blacksburg, VA, Ph I
- Springfield Hospital Center, Sykesville, MD, Phase I
- Ashburn, VA, Phase I

**Tetra Tech****Various Locations Greater Pittsburg, PA and Mid-Atlantic Region**

Archaeologist - Performed Phase I and Phase II archaeological excavations on various sites across the greater Pittsburgh, PA and Mid-Atlantic region. Excavations took place as a preliminary measure prior to pipeline and powerplant construction and were predominately on prehistoric sites. Jobs ranged from performing shovel tests to unit excavations, as well as soil and artifact analysis. Also trained in survey work involving the use of Trimble and wetlands delineation. Locations:

- Mountain Valley Pipeline (MVP), Various Locations WV, VA, Phase I, II & III
- Mansfield, Tioga County, PA, Phase I
- Jefferson County, OH, Phase I
- Guernsey Power Station, Cambridge, OH, Phase I

## VOLUNTEER EXPERIENCE

**Adelphi University's Anthropological Archaeology Field School****Crete, Greece**

Performed forensic bio-archaeology (bone analysis) of Minoan 3B site and archaeological excavation of Byzantine Era site, both onsite and in lab.

**American University's Archaeology Field School****Delta Borough, York County, PA**

Assisted PhD candidate in archaeological excavation of early 20th century Great Depression Era hobo site.

**Alexandria Archaeology Museum****Alexandria, VA**

Performed research for the colonial merchant ship that was uncovered along the Potomac in Alexandria. Assisted in the preservation efforts.

**American University Archaeology Lab****Washington, DC**

Washed, sorted, and cataloged middle/late woodland artifacts from site 18FR14 (Briggs Ford), Maryland, and researched food disparities throughout the site based on large mammal bone count and analysis.

**New Jersey State Museum****City of Trenton, Mercer County, NJ**

Guided tours of the archaeological exhibit and engaged in educational activities for children visiting the museum.

**Appendix J**  
**Tribal Correspondences**

**From:** [Lillie Williamson](mailto:Lillie.Williamson@jenachoctaw.org)  
**To:** [tribalresponse@fcc.gov](mailto:tribalresponse@fcc.gov)  
**Cc:** [Margaret Stone](mailto:Margaret.Stone@jenachoctaw.org)  
**Subject:** NOTICE OF INTEREST---JENA BAND OF CHOCTAW INDIANS  
**Date:** Wednesday, August 28, 2019 1:39:53 PM

---

### To Whom It May Concern:

By this email, I am indicating the Tribe's interest for the following projects:

TCNS# 188894---GADSDEN COUNTY, FLORIDA---1 PTC wayside facility east of FL-12, Havana, FL 32333

All FCC correspondence should be sent electronically to the e-mail [lwilliamson@jenachoctaw.org](mailto:lwilliamson@jenachoctaw.org).

Since the proposed project falls within our area of interest, please submit maps and any pertinent information as they become available.

If you have any comments or questions, please feel free to contact me at the information listed below.

Thank you

Lillie Williamson  
TCNS Representative  
Jena Band of Choctaw Indians  
P. O. Box 14  
Jena, LA 71342  
PH: 318-992-8258  
FAX: 318-992-8244  
email: [lwilliamson@jenachoctaw.org](mailto:lwilliamson@jenachoctaw.org)

**From:** [towernotifyinfo@fcc.gov](mailto:towernotifyinfo@fcc.gov)  
**To:** [Margaret Stone](#)  
**Cc:** [tcns.fccarchive@fcc.gov](mailto:tcns.fccarchive@fcc.gov); [lwilliamson@jenachoctaw.org](mailto:lwilliamson@jenachoctaw.org)  
**Subject:** Reply to Proposed Tower Structure (Notification ID: 188894) - Email ID #6434023  
**Date:** Wednesday, October 2, 2019 3:29:07 PM

---

Dear Vertical Bridge Deve LCC,

Thank you for using the Federal Communications Commission's (FCC) Tower Construction Notification System (TCNS). The purpose of this email is to inform you that an authorized user of the TCNS has replied to a proposed tower construction notification that you had submitted through the TCNS.

The following message has been sent to you from TCNS Representative Lillie Williamson of the Jena Band of Choctaw Indians in reference to Notification ID #188894:

To Whom It May Concern:

We are unaware of any sacred sites or significant cultural resources in this area. However, if the applicant discovers archaeological remains or resources during construction, the Applicant should immediately stop construction and notify the appropriate Federal Agency and the Tribe.

If you have any comments or questions, please feel free to contact me. Refer to the information below.

Thank you.

Lillie Williamson  
TCNS Representative  
Jena Band of Choctaw Indians  
P. O. Box 14  
Jena, LA 71342  
ph: 318-992-8258  
fax: 318-992-8244  
email: [lwilliamson@jenachoctaw.org](mailto:lwilliamson@jenachoctaw.org)

For your convenience, the information you submitted for this PTC notification is detailed below.

Positive Train Control Filing Subject to Expedited Treatment Under Program Comment

Notification Received: 08/21/2019  
Notification ID: 188894  
Tower Owner Individual or Entity Name: Maser Consulting, PA  
Consultant Name: Margaret Stone  
Street Address: 1000 Water View Drive, Ste. 201  
City: Hamilton  
State: NEW JERSEY  
Zip Code: 08691  
Phone: 609-444-6939  
Email: [mstone@maserconsulting.com](mailto:mstone@maserconsulting.com)

Structure Type: LTOWER - Lattice Tower

Latitude: 30 deg 36 min 18.8 sec N  
Longitude: 84 deg 28 min 50.3 sec W  
Location Description: Havana Highway  
City: Havana  
State: FLORIDA  
County: GADSDEN  
Number of Poles subject to Program Comment: 1  
Detailed Description of Project: East of FL-12, Havana, FL 32333  
Ground Elevation: 0.0 meters  
Support Structure: 250.0 meters above ground level  
Overall Structure: 255.0 meters above ground level  
Overall Height AMSL: 255.0 meters above mean sea level

**From:** [towernotifyinfo@fcc.gov](mailto:towernotifyinfo@fcc.gov)  
**To:** [Margaret Stone](#)  
**Subject:** Reply to Proposed Tower Structure (Notification ID: 188894) - Email ID #6403224  
**Date:** Friday, August 30, 2019 12:30:52 PM

---

Dear Vertical Bridge Deve LCC,

Thank you for using the Federal Communications Commission's (FCC) Tower Construction Notification System (TCNS). The purpose of this email is to inform you that an authorized user of the TCNS has replied to a proposed tower construction notification that you had submitted through the TCNS.

The following message has been sent to you from Cell Tower Coordinator Kelly Nelson of the Eastern Shawnee Tribe of Oklahoma in reference to Notification ID #188894:

The Cultural Preservation Office of the Eastern Shawnee Tribe of Oklahoma requires the following information regarding all proposed FCC projects.

**DO NOT EMAIL DOCUMENTATION; IT WILL BE DELETED WITHOUT BEING OPENED.**

Submit by US postal mail or other parcel carrier all the following information for all telecommunication projects to:

Eastern Shawnee Tribe of Oklahoma  
 Attn: Kelly Nelson  
 70500 E. 128 Rd.  
 Wyandotte, OK 74370

1. Provide a 1-page cover letter with the following information:

- a. TCNS Number
  - b. Company Name
  - c. Project Name, City, County, State
  - d. Project type
  - e. Project coordinates
  - f. Total area surveyed in acres
  - g. Contact information.

2. Professional cultural/archaeological resource survey report.

3. Aerial and/or USGS topographic maps showing general project location (small scale).

4. Aerial, color USGS topographic, or planimetric maps showing project area (large scale).

5. Project site plan map depicting labeled shovel test locations.

6. Shovel Test Log.

7. Site photographs.

We request the opportunity to review and comment on scopes of work for projects whose purpose is to evaluate or mitigate archaeological sites discovered during a telecom project survey, and we also request to review the final reports for those projects.

NOTE: The 30 day review period begins when we, The Eastern Shawnee Tribe of Oklahoma, receive ALL required documentation for the TCNS submittal, not when it is sent out. We suggest sending TCNS submissions with a tracking number to reference and confirm when we receive it in our office.

The Eastern Shawnee Procedures document is recommended for guidance, send an email to Kelly Nelson at:

celltower@estoo.net to request the most current copy.

For your convenience, the information you submitted for this PTC notification is detailed below.

Positive Train Control Filing Subject to Expedited Treatment Under Program Comment

Notification Received: 08/21/2019  
Notification ID: 188894  
Tower Owner Individual or Entity Name: Maser Consulting, PA  
Consultant Name: Margaret Stone  
Street Address: 1000 Water View Drive, Ste. 201  
City: Hamilton  
State: NEW JERSEY  
Zip Code: 08691  
Phone: 609-444-6939  
Email: mstone@maserconsulting.com

Structure Type: LTOWER - Lattice Tower  
Latitude: 30 deg 36 min 18.8 sec N  
Longitude: 84 deg 28 min 50.3 sec W  
Location Description: Havana Highway  
City: Havana  
State: FLORIDA  
County: GADSDEN  
Number of Poles subject to Program Comment: 1  
Detailed Description of Project: East of FL-12, Havana, FL 32333  
Ground Elevation: 0.0 meters  
Support Structure: 250.0 meters above ground level  
Overall Structure: 255.0 meters above ground level  
Overall Height AMSL: 255.0 meters above mean sea level



**EASTERN SHAWNEE TRIBE OF OKLAHOMA  
CULTURAL PRESERVATION DEPARTMENT**



**Consultation Procedures for Telecommunications Projects**

January 2019

In an effort to facilitate the National Historic Preservation Act Section 106 review process for all telecommunication projects identified as undertakings by the Federal Communications Commission, the Cultural Preservation Department of the Eastern Shawnee Tribe of Oklahoma requests the following information be sent by US mail or other postal carrier.

**Documentation Requirements**

1. Cover letter with the following information:
  - a. TCNS number (please include on all correspondence)
  - b. Company Name
  - c. Project name, city, county, and state
  - d. Project type (for example, new-build, co-location, PTC pole) and brief summary, including current land use, access and utility easements, explanation of ground disturbance (or if there will be no ground disturbance)
  - e. Project coordinates
  - f. Total area surveyed in acres
  - g. Contact information including name, address, phone number, and email
  
2. The project area must be surveyed (including the excavation of shovel tests) by a professional archaeologist, with the results presented in a professional cultural resource survey report. The footprint of ALL proposed construction disturbance must be surveyed.
  - a. The field work must be conducted or supervised on-site by an archaeologist with an MA or MS in anthropology with an emphasis in archaeology. Field crew members must possess at least a BA or BS in anthropology with an emphasis in archaeology. Field crew who only possess a BA or BS must be accompanied in the field by a supervisor who possesses an MA or MS in anthropology with an emphasis in archaeology.
  - b. At a minimum, the individual who interprets the results of the field survey, determines the cultural resource recommendations, and produces the cultural resource survey report must possess an MA or MS in anthropology with an emphasis in archaeology.
  - c. Pedestrian surveys should include shovel tests unless mitigating circumstances exist. At a minimum, shovel tests need to be excavated at the center and four corners of the lease compound, all guy anchor locations, and at 15 m intervals throughout access and utility easements and staging areas. Shovel tests must be at least 40 cm x 40 cm, and should be dug to 80 cm below ground surface or to sterile soil, whichever is encountered first. If shovel tests are terminated before sterile soil is reached, please provide an explanation.

Shovel test soils must be screened using a ¼ inch mesh screen and dug in stratigraphic or 10 cm levels.

Please note that while many state historic preservation offices (SHPOs) list a percentage of ground visibility above which shovel tests are not required, ESTO has no such “percentage provision”. We will not accept surveys where no shovel tests were done solely because of a particular percentage of ground visibility. Even where an area has been plowed and ground visibility is good, if subsurface soil horizons could contain cultural resources, visual inspection alone is not sufficient.

There are some conditions that preclude the excavation of shovel tests (for instance: steep slopes, existing access roads, previously strip-mined or quarried areas, or areas with buried utilities). This should be explained in the report text and supported by photographs.

3. Small-scale aerial and/or color USGS topographic maps locating the project within the state and county.
4. Aerial and/or color USGS topographic maps identifying the direct effects APE, the visual effects APE, and any archaeological/historic sites within said APEs. At least one map should be at a large enough scale to depict the actual shape of the direct-effects APE, including the lease compound, access and utility easements, guy anchors, and staging areas. Any maps depicting archaeological site locations can be included as an appendix or separate pages after the report, due to confidentiality concerns.
5. Project site plan map depicting labeled shovel test locations.
6. Table listing shovel test locations, dimensions (including depth), soils, and results.
7. Labeled, color photographs including the tower location, guy anchor locations, access and utility easements, staging areas, and at least one representative shovel test. For small cell/DAS nodes and collocations with no ground disturbance, a single photo of the location or host structure will suffice. Photographs must be at least 3 x 5”.
8. The Eastern Shawnee Tribe does require \$550.00 per TCNS project for administration, data processing, handling, research and review. Make the check payable to the Eastern Shawnee Tribe of Oklahoma. On the memo line write all TCNS numbers that may be associated with each check. Invoices can be sent upon request.

*\*NOTE: All public safety tower projects are exempt from this fee.*

**Exceptions to the above documentation requirements:**

- A. Collocations that do not involve any ground disturbance: For these types of projects, please submit the application information from items 1, 3, 4, 7, and 8.
- B. Collocations involving ground disturbance and new towers that involve ground disturbance, but that are in locations that have been previously substantially disturbed (i.e. previous disturbance exceeds 2' below the newly proposed construction depth): For these types of projects, please submit the applicable information from items 1, 3, 4, 7, and 8. Please note that substantial disturbance needs to be fully explained and documented (using photographs, maps, etc.) or else we will require that the area be surveyed.
- **DO NOT EMAIL DOCUMENTATION**; we are not equipped to handle emailed documentation. Mail one printed color copy of the requested documentation. Multiple projects may be included in a single packet, as long as each project's documentation is kept separate by stapling or binding and is clearly labeled.
  - The 30-day review period begins when we, The Eastern Shawnee Tribe of Oklahoma, receive ALL required documentation for the TCNS submittal, not when it is sent out. We suggest sending TCNS submissions with a tracking number to reference and confirm when we receive it in our office.

**Use the following contacts and address:**

Kelly Nelson, TCNS Coordinator  
 Eastern Shawnee Tribe of  
 Oklahoma 70500 East 128 Road  
 Wyandotte, OK 74370

Email: knelson@estoo.net  
 Phone: 918-666-2435, ext. 1861

Brett Barnes, THPO  
 Email: thpo@estoo.net  
 Phone: 918-666-2435, ext. 1845

## Standards for Cultural Resource Survey Reports

The following outlines the documentation required in a cultural resource survey report that will enable the Cultural Preservation Department of the Eastern Shawnee Tribe of Oklahoma to efficiently evaluate the information gathered for a proposed project in a coherent, standardized format. Please include in all reports:

### 1. Abstract

Executive summary of project, survey results, and recommendations

### 2. Introduction

Introduce project and project design

### 3. Environmental Setting

Specific location, legal description, composition of project site

General location, geomorphology, landform, soils, vegetation, hydrology

### 4. Cultural History

Brief overview of cultural occupation represented in locale. The general area background may be omitted for negative reports, but please still include a brief discussion of the specific project area's documented history of occupation as gleaned from historic maps or other archival research in order to contextualize the current condition and use of the parent property, as well as assess its potential for intact cultural deposits. The sensitivity of the project area for both historic and prehistoric sites should be addressed.

### 5. State Site File Search, Previous Surveys, and Background Research

Results of file search in state database for previously conducted archaeological surveys, previously recorded archaeological sites, and review of pertinent maps, i.e. aerial photography, GLO maps, transportation maps, allotment records, etc.

### 6. Field Methods and Analytical Techniques

How field survey and analysis were conducted

### 7. Results of Archaeological Field Investigations

Discussion of the survey findings

### 8. Recommendations

Summarize archaeological sites identified, NRHP determinations, and project recommendations

### 9. References Cited

**From:** [towernotifyinfo@fcc.gov](mailto:towernotifyinfo@fcc.gov)  
**To:** [Margaret Stone](#)  
**Cc:** [tcns.fccarchive@fcc.gov](mailto:tcns.fccarchive@fcc.gov); [THPOcompliance@semtribe.com](mailto:THPOcompliance@semtribe.com)  
**Subject:** Reply to Proposed Tower Structure (Notification ID: 188894) - Email ID #6433735  
**Date:** Wednesday, October 2, 2019 9:33:54 AM

---

Dear Vertical Bridge Deve LCC,

Thank you for using the Federal Communications Commission's (FCC) Tower Construction Notification System (TCNS). The purpose of this email is to inform you that an authorized user of the TCNS has replied to a proposed tower construction notification that you had submitted through the TCNS.

The following message has been sent to you from Compliance Review Supervisor THPO Compliance of the Seminole Tribe of Florida in reference to Notification ID #188894:

We have no interest in this site. However, if the Applicant discovers archaeological remains or resources during construction, the Applicant should immediately stop construction and notify the appropriate Federal Agency and the Tribe.

For your convenience, the information you submitted for this PTC notification is detailed below.

Positive Train Control Filing Subject to Expedited Treatment Under Program Comment

Notification Received: 08/21/2019  
 Notification ID: 188894  
 Tower Owner Individual or Entity Name: Maser Consulting, PA  
 Consultant Name: Margaret Stone  
 Street Address: 1000 Water View Drive, Ste. 201  
 City: Hamilton  
 State: NEW JERSEY  
 Zip Code: 08691  
 Phone: 609-444-6939  
 Email: mstone@maserconsulting.com

Structure Type: LTOWER - Lattice Tower  
 Latitude: 30 deg 36 min 18.8 sec N  
 Longitude: 84 deg 28 min 50.3 sec W  
 Location Description: Havana Highway  
 City: Havana  
 State: FLORIDA  
 County: GADSDEN  
 Number of Poles subject to Program Comment: 1  
 Detailed Description of Project: East of FL-12, Havana, FL 32333  
 Ground Elevation: 0.0 meters  
 Support Structure: 250.0 meters above ground level  
 Overall Structure: 255.0 meters above ground level  
 Overall Height AMSL: 255.0 meters above mean sea level



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**APPENDIX F**  
**FCC Form 620**

## New Tower (“NT”) Submission Packet

### FCC FORM 620

#### Introduction

The **NT Submission Packet** is to be completed by or on behalf of Applicants to construct new antenna support structures by or for the use of licensees of the Federal Communications Commission (“FCC”). **The Packet (including Form 620 and attachments) is to be submitted to the State Historic Preservation Office (“SHPO”) or to the Tribal Historic Preservation Office (“THPO”), as appropriate, before any construction or other installation activities on the site begin. Failure to provide the Submission Packet and complete the review process under Section 106 of the National Historic Preservation Act (“NHPA”)<sup>1</sup> prior to beginning construction may violate Section 110(k) of the NHPA and the Commission’s rules.**

The instructions below should be read in conjunction with, and not as a substitute for, the “Nationwide Programmatic Agreement for Review of Effects on Historic Properties for Certain Undertakings Approved by the Federal Communications Commission,” dated September 2004, (“Nationwide Agreement”) and the relevant rules of the FCC (47 C.F.R. §§ 1.1301-1.1319) and the Advisory Council on Historic Preservation (“ACHP”) (36 C.F.R. Part 800).<sup>2</sup>

#### Exclusions and Scope of Use

**The NT Submission Packet should not be submitted for undertakings that are excluded from Section 106 Review.** The categories of new tower construction that are excluded from historic preservation review under Section 106 of the NHPA are described in Section III of the Nationwide Agreement.

Where an undertaking is to be completed but no submission will be made to a SHPO or THPO due to the applicability of one or more exclusions, the Applicant should retain in its files documentation of the basis for each exclusion should a question arise as to the Applicant’s compliance with Section 106.

<sup>1</sup> 16 U.S.C. § 470f.

<sup>2</sup> Section II.A.9. of the Nationwide Agreement defines a “historic property” as: “Any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian Organization that meet the National Register criteria.”

**NT SUBMISSION PACKET – FCC FORM 620**

Approved by OMB  
3060-1039  
Estimated Time Per Response:  
.5 to 10 hours

**The NT Submission Packet is to be used only for the construction of new antenna support structures.** Antenna collocations that are subject to Section 106 review should be submitted using the Collocation (“CO”) Submission Packet (FCC Form 621).

**General Instructions: NT Submission Packet**

Fill out the answers to Questions 1-5 on Form 620 and provide the requested attachments. Attachments should be numbered and provided in the order described below.

For ease of processing, provide the Applicant’s Name, Applicant’s Project Name, and Applicant’s Project Number in the lower right hand corner of each page of Form 620 and attachments.<sup>3</sup>

**1. Applicant Information**

Full Legal Name of Applicant: Vertical Bridge Development, LLC

Name and Title of Contact Person: \_\_\_\_\_

Address of Contact Person (including Zip Code):  
750 Park of Commerce Drive, Boca Raton, Florida, 33487

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_

E-mail address: \_\_\_\_\_

**2. Applicant's Consultant Information**

Full Legal Name of Applicant's Section 106 Consulting Firm:

Maser Consulting P.A.

Name of Principal Investigator: Margaret Stone

Title of Principal Investigator: Archaeologist

Investigator’s Address: 1000 Water View Drive Suite 201

<sup>3</sup> Some attachments may contain photos or maps on which this information can not be provided.

Applicant’s Name: Vertical Bridge Development, LLC  
Project Name: US-FL-5052  
Project Number: 19983002A

NT SUBMISSION PACKET – FCC FORM 620

Approved by OMB  
3060-1039  
Estimated Time Per Response:  
.5 to 10 hours

City: Hamilton State New Jersey Zip Code 08691

Phone: 609-587-8200 ext. 4362 Fax: \_\_\_\_\_

E-mail Address: mstone@maserconsulting.com

Does the Principal Investigator satisfy the Secretary of the Interior’s Professional Qualification Standards?<sup>4</sup> **YES** / NO.

Areas in which the Principal Investigator meets the Secretary of the Interior’s Professional Qualification Standards: Archaeology

Other “Secretary of the Interior qualified” staff who worked on the Submission Packet (provide name(s) as well as well as the area(s) in which they are qualified):

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**3. Site Information**

a. Street Address of Site: Havana Highway (FL-12) City \_\_\_\_\_  
or Township: Havana

County / Parish: Gadsden County State: FL Zip Code: 32333

b. Nearest Cross Roads: Coca Cola Ave / Havana Highway (FL-12)

c. NAD 83 Latitude/Longitude coordinates (to tenth of a second):

N 30 ° 36 ’ 18.8”; W 84 ° 28 ’ 50.3”

<sup>4</sup> The Professional Qualification Standards are available on the cultural resources webpage of the National Park Service, Department of the Interior: <[http://www.cr.nps.gov/local-law/arch\\_stnds\\_9.htm](http://www.cr.nps.gov/local-law/arch_stnds_9.htm)>. The Nationwide Agreement requires use of Secretary-qualified professionals for identification and evaluation of historic properties within the APE for direct effects, and for assessment of effects. The Nationwide Agreement encourages, but does not require, use of Secretary-qualified professionals to identify historic properties within the APE for indirect effects. See Nationwide Agreement, §§ VI.D.1.d, VI.D.1.e, VI.D.2.b, VI.E.5.

Applicant’s Name: Vertical Bridge Development, LLC  
Project Name: US-FL-5052  
Project Number: 19983002A

## NT SUBMISSION PACKET – FCC FORM 620

Approved by OMB  
3060-1039Estimated Time Per Response:  
.5 to 10 hoursd. Proposed tower height above ground level:<sup>5</sup> 255 feet; 77.72 meters

e. Tower type:

 guyed lattice tower  self-supporting lattice  monopole other (briefly describe tower) \_\_\_\_\_**4. Project Status:<sup>6</sup>**a.  Construction not yet commenced;b.  Construction commenced on [date] \_\_\_\_\_; or,c.  Construction commenced on [date] \_\_\_\_\_ and was completed on [date] \_\_\_\_\_.**5. Applicant's Determination of Effect:**a. **Direct Effects** (check one):

- i.  No Historic Properties in Area of Potential Effects ("APE") for direct effects;
- ii.  "No effect" on Historic Properties in APE for direct effects;
- iii.  "No adverse effect" on Historic Properties in APE for direct effects;
- iv.  "Adverse effect" on one or more Historic Properties in APE for direct effects.

b. **Visual Effects** (check one):

- i.  No Historic Properties in Area of Potential Effects ("APE") for visual effects;
- ii.  "No effect" on Historic Properties in APE for visual effects;
- iii.  "No adverse effect" on Historic Properties in APE for visual effects;
- iv.  "Adverse effect" on one or more Historic Properties in APE for visual effects.

<sup>5</sup> Include top-mounted attachments such as lightning rods.<sup>6</sup> Failure to provide the Submission Packet and complete the review process under Section 106 of the NHPA prior to beginning construction may violate Section 110(k) of the NHPA and the Commission's rules. See Section X of the Nationwide Agreement.Applicant's Name: Vertical Bridge Development, LLCProject Name: US-FL-5052Project Number: 19983002A

NT SUBMISSION PACKET – FCC FORM 620

Approved by OMB  
3060-1039  
Estimated Time Per Response:  
.5 to 10 hours

**Certification and Signature**

I certify that all representations on this FCC Form 620 and the accompanying attachments are true, correct, and complete.



09/30/2019

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

Margaret Stone

09/30/2019

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Title

WILLFUL FALSE STATEMENTS MADE ON THIS FORM OR ANY ATTACHMENTS ARE PUNISHABLE BY FINE AND/OR IMPRISONMENT (U.S. Code, Title 18, Section 1001) AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. Code, Title 47, Section 312(a)(1) AND/ OR FORFEITURE (U.S. Code, Title 47, Section 503).

Applicant's Name: Vertical Bridge Development, LLC  
Project Name: US-FL-5052  
Project Number: 19983002A

## NT SUBMISSION PACKET – FCC FORM 620

Approved by OMB  
3060-1039  
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.5 to 10 hours

## Attachments

**Provide the following attachments in this order and numbered as follows:**

### **Attachment 1.      Résumés / Vitae.**

Provide a current copy of the résumé or curriculum vitae for the Principal Investigator and any researcher or other person who contributed to, reviewed, or provided significant input into the research, analysis, writing or conclusions presented in the Submission Packet for this proposed facility.

### **Attachment 2.      Additional Site Information**

Describe any additional structures, access roads, utility lines, fences, easements, or other construction planned for the site in conjunction with the proposed facility.

### **Attachment 3.      Tribal and NHO Involvement**

At an early stage in the planning process, the Nationwide Agreement requires the Applicant to gather information from appropriate Indian Tribes or Native Hawaiian Organizations (“NHOs”) to assist in the identification of historic properties of religious and cultural significance to them. Describe measures taken to identify Indian tribes and NHOs that may attach religious and cultural significance to historic properties that may be affected by the undertaking within the Areas of Potential Effects (“APE”) **for direct and visual effects**. If such Indian tribes or NHOs were identified, list them and provide a summary of contacts by either the FCC, the Applicant, or the Applicant’s representative. Provide copies of relevant documents, including correspondence. If no such Indian tribes or NHOs were identified, please explain.

### **Attachment 4.      Local Government**

- a. Has any local government agency been contacted and invited to become a consulting party pursuant to Section V.A. of the Nationwide Agreement? If so, list the local government agencies contacted. Provide a summary of contacts and copies of any relevant documents (e.g., correspondence or notices).
- b. If a local government agency will be contacted but has not been to date, explain why and when such contact will take place.

## NT SUBMISSION PACKET – FCC FORM 620

Approved by OMB  
3060-1039  
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.5 to 10 hours

**Attachment 5. Public Involvement**

Describe measures taken to obtain public involvement in this project (e.g., notices, letters, or public meetings). Provide copies of relevant documentation.

**Attachment 6. Additional Consulting Parties**

List additional consulting parties that were invited to participate by the Applicant, or independently requested to participate. Provide any relevant correspondence or other documents.

**Attachment 7. Areas of Potential Effects**

- a. Describe the APE for direct effects and explain how this APE was determined.
- b. Describe the APE for visual effects and explain how this APE was determined.

**Attachment 8. Historic Properties Identified in the APE for Visual Effects**

- a. Provide the name and address (including U.S. Postal Service ZIP Code) of each property in the APE for visual effects that is listed in the National Register, has been formally determined eligible for listing by the Keeper of the National Register, or is identified as considered eligible for listing in the records of the SHPO/THPO, pursuant to Section VI.D.1.a. of the Nationwide Agreement.<sup>7</sup>
- b. Provide the name and address (including U.S. Postal Service ZIP Code) of each Historic Property in the APE for visual effects, not listed in Attachment 8a, identified through the comments of Indian Tribes, NHOs, local governments, or members of the public. Identify each individual or group whose comments led to the inclusion of a Historic Property in this attachment. For each such property, describe how it satisfies the criteria of eligibility (36 C.F.R. Part 63).
- c. For any properties listed on Attachment 8a that the Applicant considers no longer eligible for inclusion in the National Register, explain the basis for this recommendation.

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<sup>7</sup> Section VI.D.1.a. of the Nationwide Agreement requires the Applicant to review publicly available records to identify within the APE for visual effects: i) properties listed in the National Register; ii) properties formally determined eligible for listing by the Keeper of the National Register; iii) properties that the SHPO/THPO certifies are in the process of being nominated to the National Register; iv) properties previously determined eligible as part of a consensus determination of eligibility between the SHPO/THPO and a Federal Agency or local government representing the Department of Housing and Urban Development (HUD); and, v) properties listed in the SHPO/THPO Inventory that the SHPO/THPO has previously evaluated and found to meet the National Register criteria, and that are identified accordingly in the SHPO/THPO Inventory.

## NT SUBMISSION PACKET – FCC FORM 620

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3060-1039  
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.5 to 10 hours

**Attachment 9. Historic Properties Identified in the APE for Direct Effects**

- a. List all properties identified in Attachment 8a or 8b that are within the APE for direct effects.
- b. Provide the name and address (including U.S. Postal Service ZIP Code) of each property in the APE for direct effects, not listed in Attachment 9a, that the Applicant considers to be eligible for listing in the National Register as a result of the Applicant's research. For each such property, describe how it satisfies the criteria of eligibility (36 C.F.R. Part 63). For each property that was specifically considered and determined not to be eligible, describe why it does not satisfy the criteria of eligibility.
- c. Describe the techniques and the methodology, including any field survey, used to identify historic properties within the APE for direct effects.<sup>8</sup> If no archeological field survey was performed, provide a report substantiating that: i) the depth of previous disturbance exceeds the proposed construction depth (excluding footings and other anchoring mechanisms) by at least 2 feet; or, ii) geomorphological evidence indicates that cultural resource-bearing soils do not occur within the project area or may occur but at depths that exceed 2 feet below the proposed construction depth.<sup>9</sup>

**Attachment 10. Effects on Identified Properties**

For each property identified as a Historic Property in Attachments 8 and 9:

- a. Indicate whether the Applicant believes the proposed undertaking would have a) no effect; b) no adverse effect; or, c) an adverse effect. Explain how each such assessment was made. Provide supporting documentation where necessary.
- b. Provide copies of any correspondence and summaries of any oral communications with the SHPO/THPO.
- c. Describe any alternatives that have been considered that might avoid, minimize, or mitigate any adverse effects. Explain the Applicant's conclusion regarding the feasibility of each alternative.

---

<sup>8</sup> Pursuant to Section VI.D.2.a. of the Nationwide Agreement, Applicants shall make a reasonable and good faith effort to identify above ground and archeological historic properties, including buildings, structures, and historic districts, that lie within the APE for direct effects. Such reasonable and good faith efforts may include a field survey where appropriate.

<sup>9</sup> Under Section VI.D.2.d. of the Nationwide Agreement, an archeological field survey is required even if one of these conditions applies, if an Indian tribe or NHO provides evidence that supports a high probability of the presence of intact archeological Historic Properties within the APE for direct effects.

## NT SUBMISSION PACKET – FCC FORM 620

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3060-1039  
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.5 to 10 hours

**Attachment 11. Photographs**

Except in cases where no Historic Properties were identified within the Areas of Potential Effects, submit photographs as described below. Photographs should be in color, marked so as to identify the project, keyed to the relevant map (see Item 12 below) or text, and dated; the focal length of the lens should be noted. The source of any photograph included but not taken by the Applicant or its consultant (including copies of historic images) should be identified on the photograph.

- a. Photographs taken from the tower site showing views from the proposed location in all directions. The direction (*e.g.*, north, south, etc.) should be indicated on each photograph, and, as a group, the photographs should present a complete (360 degree) view of the area around the proposed tower.
- b. Photographs of all listed and eligible properties within the Areas of Potential Effects.
- c. If any listed or eligible properties are visible from the proposed tower site, photographs looking at the tower site from each historic property. The approximate distance in feet (meters) between the site and the historic property should be included.
- d. Aerial photos of the APE for visual effects, if available.

**Attachment 12. Maps**

Include one or more 7.5-minute quad USGS topographical maps that:

- a. Identify the Areas of Potential Effects for both direct and visual effects. If a map is copied from the original, include a key with name of quad and date.
- b. Show the location of the proposed tower site and any new access roads or other easements including excavations.
- c. Show the locations of each property listed in Attachments 8 and 9.
- d. Include keys for any symbols, colors, or other identifiers.

**Attribution and Bibliographic Standards.** All reports included in the Submission Packet should be footnoted and contain a bibliography of the sources consulted.

- a. Footnotes may be in a form generally accepted in the preparer's profession so long as they identify the author, title, publisher, date of publication, and pages referenced for published materials. For archival materials/documents/letters, the citation should

**NT SUBMISSION PACKET – FCC FORM 620**

Approved by OMB

3060-1039

Estimated Time Per Response:

.5 to 10 hours

include author, date, title or description and the name of the archive or other agency holding the document.

- b. A bibliography should be appended to each report listing the sources of information consulted in the preparation of the report. The bibliography may be in a form generally accepted in the preparer's profession.

**FCC NOTICE TO INDIVIDUALS REQUIRED BY THE PRIVACY ACT AND THE PAPERWORK REDUCTION ACT**

The FCC is authorized under the Communications Act of 1934, as amended, to collect the personal information we request in this form. We will use the information provided in the application to determine whether approving this application is in the public interest. If we believe there may be a violation or potential violation of a FCC statute, regulation, rule or order, your application may be referred to the Federal, state or local agency responsible for investigating, prosecuting, enforcing or implementing the statute, rule, regulation or order. In certain cases, the information in your application may be disclosed to the Department of Justice or a court or adjudicative body when (a) the FCC; (b) any employee of the FCC; or (c) the United States Government is a party to a proceeding before the body or has an interest in the proceeding. In addition, all information provided in this form will be available for public inspection.

If you owe a past due debt to the federal government, any information you provide may also be disclosed to the Department of Treasury Financial Management Service, other federal agencies and/or your employer to offset your salary, IRS tax refund or other payments to collect that debt. The FCC may also provide this information to these agencies through the matching of computer records when authorized.

If you do not provide the information requested on this form, the application may be returned without action having been taken upon it or its processing may be delayed while a request is made to provide the missing information. Your response is required to obtain the requested authorization.

We have estimated that each response to this collection of information will take an average of .50 to 10 hours. Our estimate includes the time to read the instructions, look through existing records, gather and maintain the required data, and actually complete and review the form or response. If you have any comments on this estimate, or on how we can improve the collection and reduce the burden it causes you, please write the Federal Communications Commission, AMD-PERM, Paperwork Reduction Project (3060-1039), Washington, DC 20554. We will also accept your comments via the Internet if you send them to Judith-B.Herman@fcc.gov. Please **DO NOT SEND COMPLETED APPLICATIONS TO THIS ADDRESS**. Remember - you are not required to respond to a collection of information sponsored by the Federal government, and the government may not conduct or sponsor this collection, unless it displays a currently valid OMB control number of if we fail to provide you with this notice. This collection has been assigned an OMB control number of 3060-1039.



**APPENDIX G**  
**Flood Plain, Wetlands, National Trails and**  
**National Wild & Scenic Rivers**

NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The community map repository should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where Base Flood Elevations (BFEs) and/or Floodways have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Coastal Base Flood Elevations shown on this map apply only landward of 0' 0" North American Vertical Datum of 1988 (NAVD 88). Users of this FIRM should be aware that coastal flood elevations are also provided in the Summary of Stillwater Elevations tables in the Flood Insurance Study report for this jurisdiction. Elevations shown in the Summary of Stillwater Elevations tables should be used for construction and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

Boundaries of the floodways were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by flood control structures. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study report for information on flood control structures for this jurisdiction.

The projection used in the preparation of this map was Florida State Plane HARN north zone. The horizontal datum was NAD 83. Differences in datum, spheroid, projection or State Plane zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same vertical datum. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at <http://www.ngs.noaa.gov> or contact the National Geodetic Survey at the following address:

Spatial Reference System Division  
National Geodetic Survey, NOAA  
Silver Spring Metro Center  
1315 East-West Highway  
Silver Spring, Maryland 20910  
(301) 713-3191

To obtain current elevation, description, and/or location information for bench marks shown on this map, please contact the Information Services Branch of the National Geodetic Survey at (301) 713-3242, or visit its website at <http://www.ngs.noaa.gov>.

Base map information shown on this FIRM was derived from Florida Department of Revenue aerials produced at a scale of 1:200 from photography dated June 4, 2007.

Based on updated topographic information, this map reflects more detailed and up-to-date stream channel configurations and floodplain delineations than those shown on the previous FIRM for this jurisdiction. As a result, the Flood Profiles and Floodway Data tables in the Flood Insurance Study Report (which contains authoritative hydraulic data) may reflect stream channel distances that differ from what is shown on this map. Also, the road to floodplain relationships for unreviewed streams may differ from what is shown on previous maps.

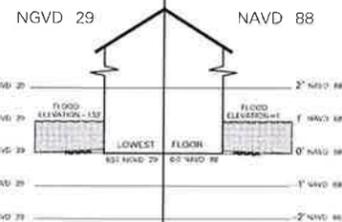
Corporate limits shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Please refer to the separately printed Map Index for an overview map of the county showing the layout of map panels; community map repository addresses; and a listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community is located.

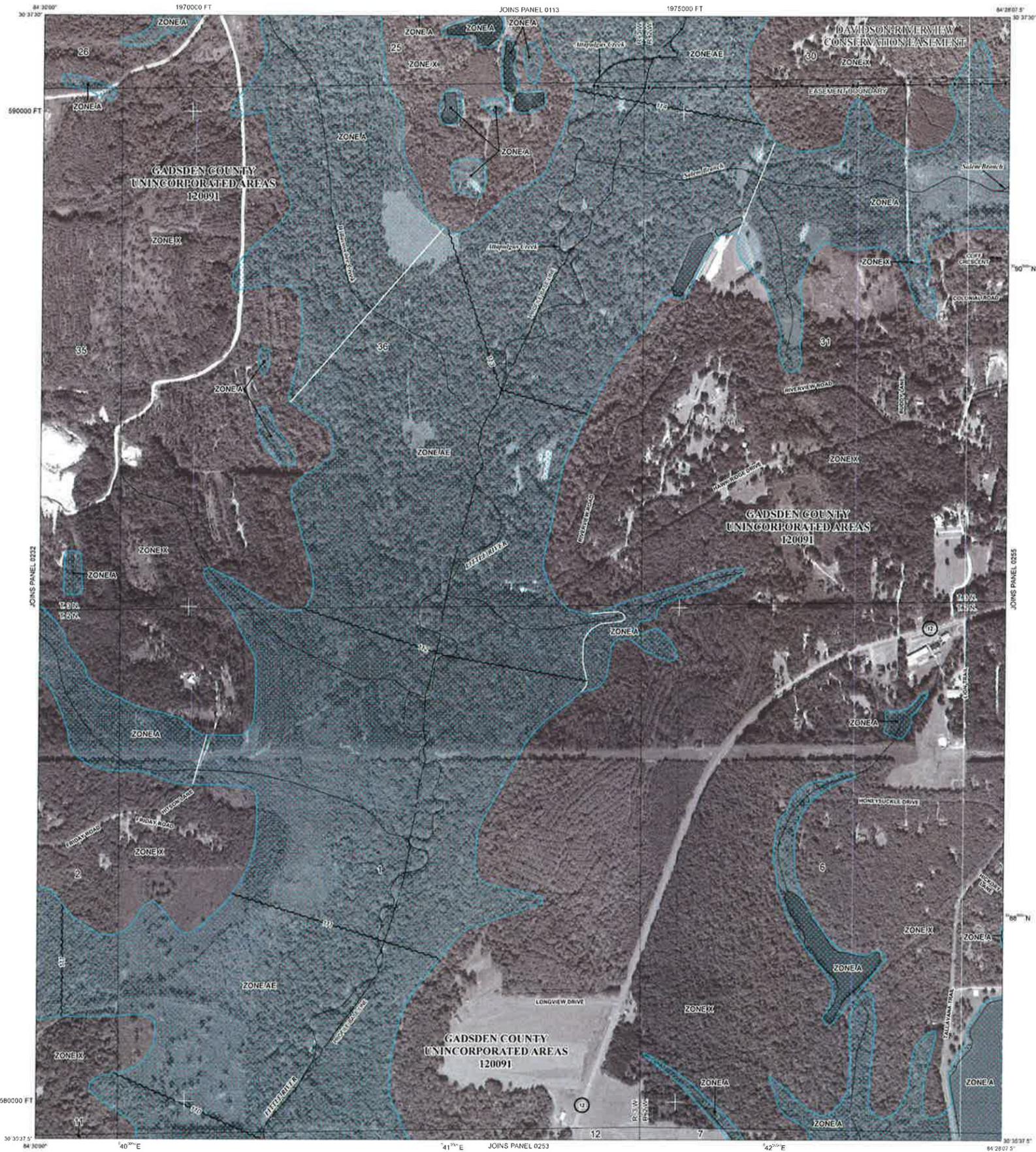
Contact the FEMA Map Service Center at 1-800-358-9616 for information on available products associated with this FIRM. Available products may include previously issued Letters of Map Change, a Flood Insurance Study report, and/or digital versions of this map. The FEMA Map Service Center may also be reached by Fax at 1-800-358-9620 and its website at <http://msc.fema.gov>.

If you have questions about this map or questions concerning the National Flood Insurance Program in general, please call 1-877-FEMA-MAP (1-877-336-2827) or visit the FEMA website at <http://www.fema.gov>.

DATUM CONVERSION SCHEMATIC



This Flood Insurance Rate Map was developed in cooperation between Federal Emergency Management Agency and Northwest Florida Water Management District.



LEGEND

**SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD**

The 1% annual flood (100 year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zone A, AE, AH, AD, AR, AR9, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

- ZONE A** - No Base Flood Elevations determined.
- ZONE AE** - Base Flood Elevations determined. Flood depths of 1 to 3 feet (usually areas of ponding). Base Flood Elevation determined.
- ZONE AD** - Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain), average depths determined. For areas of alluvial fan flooding, velocities also determined.
- ZONE AR** - Special Flood Hazard Area formerly protected from the 1% annual chance flood by a flood control system that was subsequently determined to be inadequate. Zone AR indicates that the former flood control system is being retained to provide protection from the 1% annual chance or greater flood.
- ZONE AR9** - Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.
- ZONE V** - Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.
- ZONE VE** - Coastal flood zone with velocity hazard (wave action); Base Flood Elevation determined.

**FLOODWAY AREAS IN ZONE AE**

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachments so that the 1% annual chance flood can be conveyed without substantial increases in flood heights.

**OTHER FLOOD AREAS**

- ZONE X** - Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from the 1% annual chance flood.
- ZONE D** - Areas determined to be outside the 0.2% annual chance floodplain. Areas in which flood hazards are undetermined, but possible.

**COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS**

**OTHERWISE PROTECTED AREAS (OPAs)**

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

- 1% annual chance floodplain boundary
- 0.2% annual chance floodplain boundary
- Floodway boundary
- Zone-D boundary
- CBRS and OPA boundary
- Boundary dividing Special Flood Hazard Area Zones and boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or flood velocities
- Base Flood Elevation line and value; elevation in feet\*
- Base Flood Elevation value where uniform within zone; elevation in feet\*

\* Referenced to the North American Vertical Datum of 1988

- Cross section line
- Transverse line
- Geographic coordinates referenced to the North American Datum of 1983 (NAD 83), WGS84 Hemisphere
- 1000 meter Universal Transverse Mercator grid values; zone 18
- 5000-foot grid ticks; Florida State Plane coordinate system, North zone (FIPSZONE 0503), Lambert Conformal Conic projection
- DX5510 x Bench mark (see explanation in Notes to Users section of this FIRM panel)
- M 1.5 River Mile

**MAP REPOSITORY**  
Refer to listing of Map Repositories on Map Index

**EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP**  
February 4, 2009

**EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL**

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6622.

**NATIONAL FLOOD INSURANCE PROGRAM**

PANEL 0251C

**FIRM**

**FLOOD INSURANCE RATE MAP**

**GADSDEN COUNTY, FLORIDA AND INCORPORATED AREAS**

PANEL 251 OF 383  
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS

COMMUNITY	SUBMER	PANEL	SUFFIX
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Notice to User: The Map Number shown below should be used when placing map orders. The Community Number shown above should be used on insurance applications for the subject community.

**MAP NUMBER**  
12039C0251C

**EFFECTIVE DATE**  
FEBRUARY 4, 2009

Federal Emergency Management Agency

**National Wetlands Inventory**  
surface waters and wetlands

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- Areas of Interest 2
- FWS Managed Lands 1 2
- Historic Wetland Data 1 2

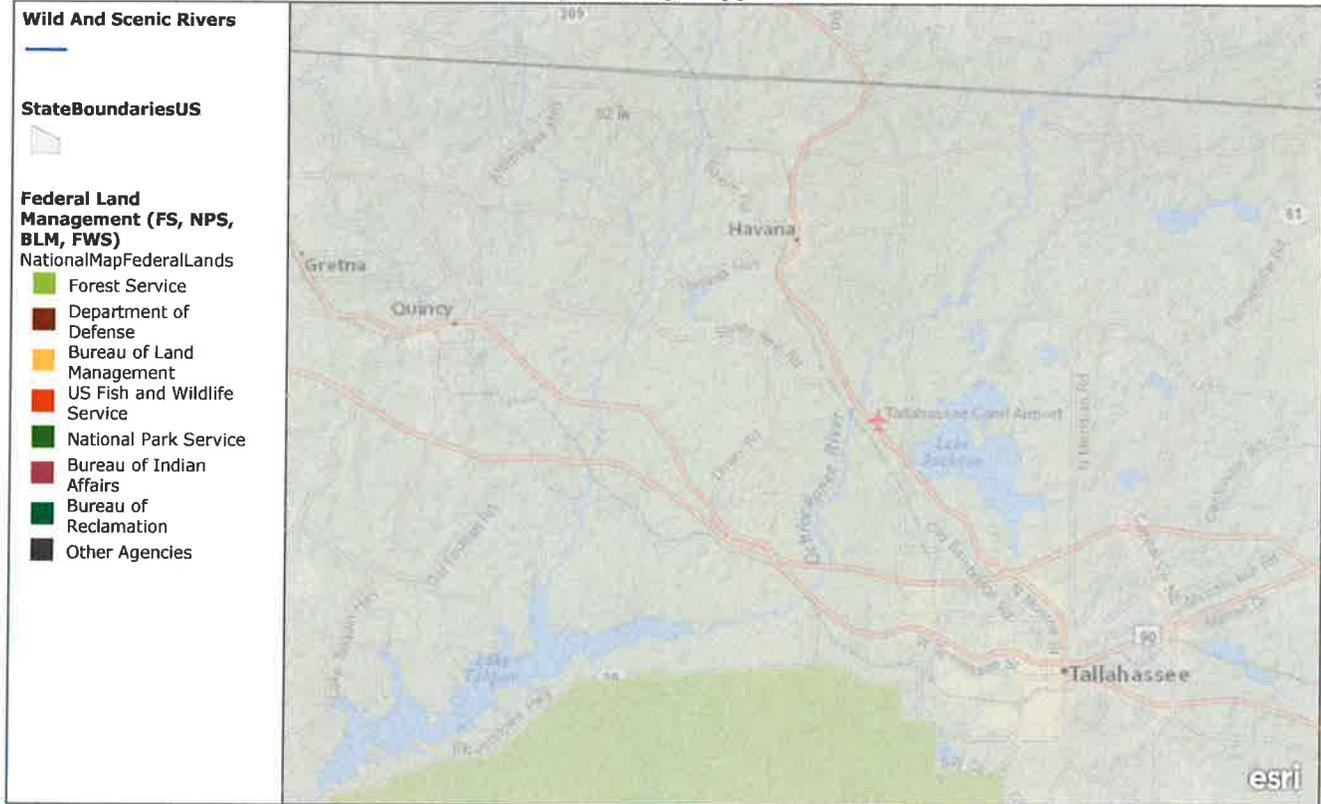
Measure

PFO6C Little River PFO64C PFO6C L1UBHh

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Wild and Scenic Rivers in the United States, derived from high resolution NHD (1:24,000-scale or better; USGS).

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## FEDERAL AVIATION ADMINISTRATION ADVISORY CIRCULARS

- FAA Advisory Circulars provided by the applicant have been e-mailed to each Planning Commissioners and will be posted on the Gadsden County website for this agenda item.
- This information is quite lengthy and describes FAA standards for communication towers.



U.S. Department  
of Transportation  
**Federal Aviation  
Administration**

# Advisory Circular

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**Subject:** Obstruction Marking and Lighting

**Date:** 08/17/18      **AC No.** 70/7460-1L

**Initiated By:** AJV-15      **Change:** 2

1. **Purpose.** This Advisory Circular (AC) sets forth standards for marking and lighting obstructions that have been deemed to be a hazard to air navigation. The change number and date of the change material are located at the top of the page. Advisory Circular 70/7460-1L is effective September 6, 2018.
2. **Principal Changes.**
  - a. Page 5-2. Addition of Paragraph 2. In response to the *Safety Risk Assessment of Light Emitting Diode (LED) Lighting in Aircraft Operations* report, which summarizes the results of a safety risk assessment on the use of LED lighting technology across the National Airspace System (NAS), the FAA has published specifications for LED-based red obstruction lights. This paragraph cross-references the new lighting specification and associated Engineering Brief.
  - b. **Reporting Requirements.** Updated All Figures in Appendix A, Pages A-1 to A-30.
3. **Application.**

The FAA recommends the guidelines and standards in this AC for determining the proper way to light and mark obstructions affecting navigable airspace. This AC does not constitute a regulation and, in general, is not mandatory. However, a sponsor proposing any type of construction or alteration of a structure that may affect the National Airspace System (NAS) is required under the provisions of Title 14 Code of Federal Regulations to notify the FAA by completing the Notice of Proposed Construction or Alteration form (FAA Form 7460-1). These guidelines may become mandatory as part of the FAA's determination and should be followed on a case-by-case basis, as required.
4. **Comments or Suggestions.**

Direct comments or suggestions regarding this AC to:  
Manager, Obstruction Evaluation Group  
Federal Aviation Administration  
ATTN: AJV-15  
800 Independence Avenue, S.W.  
Washington, DC 20591

08/17/2018

AC 70/7460-1L CHG 2

**Page Control Chart**

	<b>Dated</b>	<b>Insert Pages</b>	<b>Dated</b>
5-2	10/08/16	5-2	09/06/18
A-1 to A-30	10/08/16	A-1 to A-30	09/06/18

*Maurice Hoffman*

Maurice Hoffman  
Director, Airspace Services  
Mission Support Services

10/8/2016

AC 70/7460-1L CHG1



U.S. Department  
of Transportation  
**Federal Aviation  
Administration**

# Advisory Circular

**Subject:** Obstruction Marking and Lighting

**Date:** 10/8/2016

**AC No.** 70/7460-1L

**Initiated By:** AJV-15

**Change:** 1

1. **Purpose.** This Advisory Circular (AC) sets forth standards for marking and lighting obstructions that have been deemed to be a hazard to air navigation. The change number and date of the change material are located at the top of the page.
2. **Effective Date.** This change is effective October 8, 2016.
3. **Explanation of Changes.**
  - a. Page 2-2. Paragraph 2.4.3 Note 2 stated NOTAMS were automatically deleted from the system after 15 days and the sponsor was responsible for calling outage reporting to extend the outage date or to report a return to service date. This paragraph has been deleted. Tower owners now have the option to select the amount of time their NOTAMS remain active.
  - b. Page A-1. Appendix A, Specifications for Obstruction Lighting Equipment Classification, Table A-1 FAA-Approved Obstruction Lighting Fixtures indicated:
    - L-885 – *Low Intensity Flashing* – RED
    - It has been changed to L-885 Flashing Obstruction Light (60 FPM) – RED
  - c. Entire publication. Additional editorial/format changes were made where necessary. Revision bars were not used because of the insignificant nature of these changes.

Gary A. Norek  
Director, Airspace Services



U.S. Department  
of Transportation  
Federal Aviation  
Administration

# Advisory Circular

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**Subject:** Obstruction Marking and Lighting

**Date:** 12/04/15

**AC No:** 70/7460-IL

**Initiated By:** AJV-15

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1. **Purpose.**

This Advisory Circular (AC) sets forth standards for marking and lighting obstructions that have been deemed to be a hazard to navigable airspace.

2. Advisory Circular 70/7460-1L is effective immediately. However, flashing L-810 lighting has a delayed effective date and becomes mandatory on September 15, 2016.

3. **Cancellation.**

Advisory Circular 70/7460-1K, Obstruction Lighting and Marking, dated February 1, 2007, is cancelled.

4. **Principal Changes.**

The principal changes in this AC are:

1. The height of a structure identified as an obstruction has been lowered from 500 feet above ground level (AGL) to 499 feet above ground level, by amendment to Title 14 Code of Federal Regulations (14 CFR) Part 77, *Safe, Efficient Use, and Preservation of the Navigable Airspace* (75 Federal Register 42303, July 21, 2010). Accordingly, all structures that are above 499 feet AGL are considered obstructions and the Federal Aviation Administration (FAA) will study them to determine their effect on the navigable airspace. This will ensure that all usable airspace at and above 500 feet AGL is addressed during an aeronautical study and that this airspace is protected from obstructions that may create a hazard to air navigation.
2. Standards for voluntary marking of meteorological evaluation towers (METs), less than 200 feet above ground level (AGL), has been added to provide recommendations towards increasing conspicuity of these structures, particularly

12/04/15

AC 70/7460-1L

for low-level agricultural flight operations. These standards include those for lighting and marking of the tower and associated guy wires.

3. A new Chapter 14, Aircraft Detection Lighting Systems, has been added to provide performance standards for these types of systems.
  4. New lighting and marking standards are provided to reduce impact on migratory bird populations.
  5. Medium-intensity white and medium-intensity dual obstruction light are now authorized on towers up to and including 700 feet AGL.
  6. Editorial changes have been made.
5. **Related Reading Material.**
1. Advisory Circular 150/5345-43, Specification of Obstruction Marking and Lighting.
  2. 14 CFR Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace.

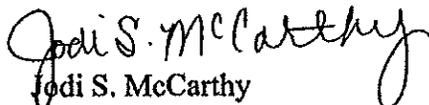
6. **Application.**

The FAA recommends the guidelines and standards in this AC for determining the proper way to light and mark obstructions affecting navigable airspace. This AC does not constitute a regulation and, in general, is not mandatory. However, a sponsor proposing any type of construction or alteration of a structure that may affect the National Airspace System (NAS) is required under the provisions of Title 14 Code of Federal Regulations to notify the FAA by completing the Notice of Proposed Construction or Alteration form (FAA Form 7460-1). These guidelines may become mandatory as part of the FAA's determination and should be followed on a case-by-case basis, as required.

7. **Comments or Suggestions.**

Direct comments or suggestions regarding this AC to:

Manager, Obstruction Evaluation Group  
Federal Aviation Administration  
ATTN: AJV-15  
800 Independence Avenue, S.W.  
Washington, DC 20591

  
Jodi S. McCarthy  
Director, Airspace Services

CONTENTS

Paragraph	Page
<b>CHAPTER 1. ADMINISTRATIVE AND GENERAL PROCEDURES .....</b>	<b>1-1</b>
1.1 Reporting Requirements.....	1-1
1.2 Preconstruction Notice.....	1-1
1.3 FAA Acknowledgement.....	1-1
1.4 Supplemental Notice Requirement.....	1-1
1.5 Modifications and Deviations.....	1-2
1.6 Additional Notification.....	1-3
<b>CHAPTER 2. GENERAL .....</b>	<b>2-1</b>
2.1 Structures to be Marked and Lighted.....	2-1
2.2 Guyed Structures.....	2-1
2.3 Marking and Lighting Equipment.....	2-1
2.4 Light Failure Notification.....	2-2
2.5 Notification of Restoration.....	2-2
2.6 Federal Communications Commission (FCC) Requirement.....	2-2
2.7 Voluntary Marking of Meteorological Evaluation Towers (METs) Less Than 200 Feet (61 m) AGL.....	2-3
2.8 Obstruction Height Definition Changed to 499 Feet AGL.....	2-3
<b>CHAPTER 3. MARKING GUIDELINES .....</b>	<b>3-1</b>
3.1 Purpose.....	3-1
3.2 Paint Colors.....	3-1
3.3 Paint Standards.....	3-1
3.4 Paint Patterns.....	3-2
3.5 Unlighted Markers.....	3-5
3.6 Unusual Complexities.....	3-7
3.7 Omission or Alternatives to Marking.....	3-7
<b>CHAPTER 4. LIGHTING GUIDELINE .....</b>	<b>4-1</b>
4.1 Purpose.....	4-1
4.2 Standards.....	4-1
4.3 Lighting Systems.....	4-1

4.4	Lighted Spherical Markers.....	4-2
4.5	Inspection, Repair, and Maintenance.....	4-3
4.6	Nonstandard Lights.....	4-3
4.7	Placement Factors.....	4-3
4.8	Monitoring Obstruction Lights.....	4-4
4.9	Ice Shields.....	4-5
4.10	Light Shields.....	4-5
4.11	Distraction.....	4-5
<b>CHAPTER 5. RED OBSTRUCTION LIGHT SYSTEM.....</b>		<b>5-1</b>
5.1	Purpose.....	5-1
5.2	Standards.....	5-1
5.3	Control Device.....	5-2
5.4	Poles, Towers, and Similar Skeletal Structures.....	5-2
5.5	Chimneys, Flare Stacks, and Similar Solid Structures.....	5-3
5.6	Group of Obstructions.....	5-4
5.7	Alternate Method of Displaying Obstruction Lights.....	5-5
5.8	Prominent Buildings, Bridges, and Similar Extensive Obstructions.....	5-5
<b>CHAPTER 6. MEDIUM-INTENSITY FLASHING WHITE OBSTRUCTION LIGHT SYSTEMS.....</b>		<b>6-1</b>
6.1	Purpose.....	6-1
6.2	Standards.....	6-1
6.3	Radio and Television Towers and Similar Skeletal Structures.....	6-1
6.4	Control Device.....	6-2
6.5	Chimneys, Flare Stacks, and Similar Solid Structures.....	6-3
6.6	Group of Obstructions.....	6-3
6.7	Special Cases.....	6-3
6.8	Prominent Buildings and Similar Extensive Obstructions.....	6-3
<b>CHAPTER 7. HIGH-INTENSITY FLASHING WHITE OBSTRUCTION LIGHT SYSTEMS</b>		<b>7-1</b>
7.1	Purpose.....	7-1
7.2	Standards.....	7-1
7.3	Control Device.....	7-1

7.4 Units per Level.....7-1

7.5 Installation Guidance.....7-2

7.6 Antenna or Similar Appurtenance Light.....7-3

7.7 Chimneys, Flare Stacks, and Similar Solid Structures.....7-4

7.8 Radio and Television Towers and Similar Skeletal Structures.....7-4

7.9 Hyperbolic Cooling Towers.....7-4

7.10 Prominent Buildings and Similar Extensive Obstructions.....7-6

**CHAPTER 8. DUAL LIGHTING WITH RED/MEDIUM-INTENSITY FLASHING WHITE LIGHT SYSTEMS ..... 8-1**

8.1 Purpose.....8-1

8.2 Installation.....8-1

8.3 Operation.....8-1

8.4 Control Device.....8-1

8.5 Antenna or Similar Appurtenance Light.....8-1

8.6 Omission of Marking.....8-2

**CHAPTER 9. DUAL LIGHTING WITH RED/HIGH-INTENSITY FLASHING WHITE LIGHT SYSTEMS ..... 9-1**

9.1 Purpose.....9-1

9.2 Installation.....9-1

9.3 Operation.....9-1

9.4 Control Device.....9-1

9.5 Antenna or Similar Appurtenance Light.....9-2

9.6 Omission of Marking.....9-2

**CHAPTER 10. MARKING AND LIGHTING OF CATENARY AND CATENARY SUPPORT STRUCTURES ..... 10-1**

10.1 Purpose.....10-1

10.2 Catenary Marking Standards.....10-1

10.3 Catenary Lighting Standards.....10-3

10.4 Control Device.....10-4

10.5 Area Surrounding Catenary Wire Support Structures.....10-5

10.6 Three or More Catenary Wire Support Structures.....10-5

10.7 Adjacent Catenary Structures.....10-5

**CHAPTER 11. MARKING AND LIGHTING MOORED BALLOONS AND KITES..... 11-1**

11.1 Purpose..... 11-1

11.2 Standards..... 11-1

11.3 Marking..... 11-1

11.4 Purpose..... 11-1

11.5 Operational Characteristics..... 11-2

**CHAPTER 12. MARKING AND LIGHTING EQUIPMENT AND INFORMATION..... 12-1**

12.1 Purpose..... 12-1

12.2 Paint Standard..... 12-1

12.3 Availability of Specifications..... 12-2

12.4 Lights and Associated Equipment..... 12-2

12.5 Availability..... 12-4

**CHAPTER 13. MARKING AND LIGHTING WIND TURBINES ..... 13-1**

13.1 Purpose..... 13-1

13.2 General Standards..... 13-1

13.3 Wind Turbine Configurations..... 13-1

13.4 Marking Standards..... 13-1

13.5 Lighting Standards..... 13-2

13.6 Wind Turbines Above 499 Feet..... 13-4

13.7 Wind Turbines at or Above 699 Feet (213 m)..... 13-4

13.8 Lighting of Wind Turbines During Construction Phase..... 13-5

13.9 Lighting and Marking of Airborne Wind Turbines..... 13-5

13.10 Lighting and Marking of Offshore Wind Turbines..... 13-5

**CHAPTER 14. AIRCRAFT DETECTION LIGHTING SYSTEMS ..... 14-1**

14.1 Purpose..... 14-1

14.2 General Standards..... 14-1

14.3 Voice/Audio Option..... 14-3

**APPENDIX A ..... A-1**

**APPENDIX B ..... B-1**

## CHAPTER 1. ADMINISTRATIVE AND GENERAL PROCEDURES

### 1.1 Reporting Requirements.

A sponsor proposing any type of construction or alteration of a structure that may affect the NAS as required under the provisions of Title 14 Code of Federal Regulations (CFR) Part 77, Construction or alteration requiring notice, is to notify the Federal Aviation Administration (FAA) by completing the Notice of Proposed Construction or Alteration form (FAA Form 7460-1). This form should be filed electronically at <https://oeaaa.faa.gov>.

### 1.2 Preconstruction Notice.

The notice must be submitted:

1. At least 45 days prior to the date of proposed construction or alteration is to begin.
2. On or before the date an application for a construction permit is filed with the Federal Communications Commission (FCC). (The FCC advises its applicants to file with the FAA well in advance of the 45-day period to expedite FCC processing.)

### 1.3 FAA Acknowledgement.

The FAA will acknowledge, in writing, each FAA Form 7460-1 notice received.

### 1.4 Supplemental Notice Requirement.

1. If required, the FAA will include a statement requiring the filing of FAA Form 7460-2, Notice of Actual Construction or Alteration, on the determination. All FAA Forms 7460-2 should be filed electronically at <http://oeaaa.faa.gov>.
2. FAA Form 7460-2 Part 1 is to be completed and sent to the FAA at least 10 days prior to starting the actual construction or alteration of a structure. Part 2 shall be submitted within 5 days after the structure has reached its greatest height. The form should be filed electronically at <http://oeaaa.faa.gov>.
3. In addition, a supplemental notice shall be submitted upon abandonment of construction.
4. Letters are acceptable in cases where the construction/alteration is temporary or a proposal is abandoned. This notification process gives the FAA the necessary time to change effected procedures and/or minimum flight altitudes and to otherwise alert airmen of the structure's presence.

**Note:** Notification, as required in the determination, is critical to aviation safety.

## 1.5 Modifications and Deviations.

Requests for modification or deviation from the standards outlined in this AC must be submitted to the FAA Obstruction Evaluation Group (OEG). The sponsor is responsible for adhering to approved marking and/or lighting limitations, and/or recommendations given, and should notify the FAA and FCC (for those structures regulated by the FCC) prior to removal of marking and/or lighting. A request received after a determination is issued may require a new study and could result in a new determination.

1. Modification Examples. Modifications will be based on whether they impact aviation safety. Examples of modifications are as follows:
  - a. Marking and/or Lighting Only a Portion of an Object. The object may be located with respect to other objects or terrain that only a portion of it needs to be marked or lighted.
  - b. No Marking and/or Lighting. The object may be located with respect to other objects or terrain, removed from the general flow of air traffic, or may be so conspicuous by its shape, size or color that marking or lighting would serve no useful purpose.
  - c. Voluntary Marking and/or Lighting. The object may be located with respect to other objects or terrain that the sponsor feels increased conspicuity would better serve aviation safety. Sponsors who desire to voluntarily mark and/or light their structure should do so in accordance with this AC.
  - d. Marking or Lighting an Object in Accordance with the Standards for an Object of Greater Height or Size. The object may present such an extraordinary hazard potential that higher standards may be recommended for increased conspicuity to ensure aviation safety.
2. Deviations. The assigned Obstruction Evaluation Specialist will conduct an aeronautical study of the proposed deviation(s) and forward their recommendation to FAA Headquarters, OEG Manager, in Washington, DC, for final approval. Examples of deviations that may be considered:
  - a. Colors of objects.
  - b. Dimensions of color bands or rectangles.
  - c. Colors/types of lights.
  - d. Basic signals and intensity of lighting.
  - e. Night/day lighting combinations.
  - f. Flash rate.

08/17/2018

AC 70/7460-1L CHG 2

3. The FAA strongly recommends that owners become familiar with the different types of lighting systems and to specifically request the type of lighting system desired when submitting FAA Form 7460-1. Information on these systems is given in Table A-1 in Appendix A. While the FAA will make every effort to accommodate the structure sponsor's request, sponsors should also request information from system manufacturers to determine which system best meets their needs based on purpose, installation, and maintenance costs.

#### 1.6 Additional Notification.

Any change to the submitted information on which the FAA has based its determination, including modification, deviation, or optional upgrade to white lighting on structures, may require notice to the FCC prior to making the change for proper authorization and annotations of obstruction marking and lighting. These structures may be subject to inspection and enforcement of marking and lighting requirements by the FCC. FCC Forms and Bulletins can be obtained from the FCC's National Call Center at 1-888-CALL-FCC (1-888-225-5322) or online at <https://www.fcc.gov/edgetkey.net/licensing-databases/forms>. Upon completion of the actual change, complete the "Add Supplemental Notice (7460-2 Form)" at the <http://oeaaa.faa.gov> website. You may also mail the FAA Form 7460-2 to:

FAA Aeronautical Information Services  
1305 E W Hwy  
Silver Spring, MD 20910  
1-800-626-3677

## CHAPTER 2. GENERAL

### 2.1 Structures to be Marked and Lighted.

Any temporary or permanent structure, including all appurtenances, that exceeds an overall height of 200 feet (61 m) above ground level (AGL) or exceeds any obstruction standard contained in 14 CFR Part 77 should be marked and/or lighted. However, an FAA aeronautical study may reveal that the absence of marking and/or lighting will not impair aviation safety. Conversely, the object may present such an extraordinary hazard potential that higher standards may be recommended for increased conspicuity to ensure aviation safety. In general, commercial outside lighting should not be used in lieu of FAA-recommended marking and/or lighting. Recommendations on marking and/or lighting structures can vary, depending on terrain features, weather patterns, geographic location, and in the case of wind turbines, the number of structures and overall design layout. The FAA may also recommend marking and/or lighting a structure that does not exceed 200 (61 m) feet AGL or 14 CFR Part 77 standards because of its particular location. The marking and lighting configurations are illustrated in Appendix A, Figures A-1 through A-27.

### 2.2 Guyed Structures.

The guys of a 2,000-foot (610-m) skeletal tower are anchored between 1,600 feet (488 m) and 2,000 feet (610 m) from the base of the structure. This places a portion of the guys 1,500 feet (458 m) from the tower at a height of between 125 feet (38 m) and 500 feet (153 m) AGL. Title 14 CFR Part 91, Section 119, requires pilots, when operating over other than congested areas, to remain at least 500 feet (153 m) from man-made structures. Therefore, the tower must be cleared by 2,000 feet (610 m) horizontally to avoid all guy wires. Properly maintained marking and lighting are important for increased conspicuity because the guys of a structure are difficult to see until the aircraft is dangerously close.

### 2.3 Marking and Lighting Equipment.

Considerable effort and research was expended to determine the minimum marking and lighting systems or quality of materials that will produce an acceptable level of aviation safety. The FAA will recommend only those marking and lighting systems that meet established technical standards. While additional lights may be desirable to identify an obstruction to air navigation and may, on occasion, be recommended, the FAA will recommend minimum standards in the interest of safety, economy, and related concerns. Therefore, to provide an adequate level of safety, obstruction lighting systems should be installed, operated, and maintained in accordance with the recommended standards herein. Table A-1 in Appendix A contains descriptions of each FAA-approved obstruction lighting fixture that is referred to in this AC.

08/17/2018

AC 70/7460-1L CHG 2

## 2.4 **Light Failure Notification.**

2.4.1 Sponsors should consider that conspicuity is achieved only when all recommended lights are working. Partial equipment outages decrease the margin of safety. Any outage should be corrected as soon as possible. Failure of steady-burning side or intermediate lights should be corrected as soon as possible, but notification is not required.

2.4.2 Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately by calling Outage Reporting and Notice to Airmen (NOTAM) 877-487-6867, or for Alaska 800-478-3576, so a NOTAM can be issued. Lights that are voluntary (not required by an FAA determination) do not require a NOTAM. For structures that are regulated by the FCC, the FCC advises that noncompliance with notification procedures could subject the sponsor to penalties or monetary forfeitures.

2.4.3 The following information should be specified for outage reporting:

1. Name of persons or organizations reporting the light failures, including any title, address, and telephone number.
2. The type of structure.
3. Location of structure (including latitude and longitude, if known, prominent structures, landmarks, etc.).
4. Height of structure AGL/above mean sea level (AMSL) if known.
5. A return to service date.
6. FCC Antenna Structure Registration Number (for structures that are regulated by the FCC).

**Note:** When the primary lamp in a double obstruction light fails, and the secondary lamp comes on, no report is required.

## 2.5 **Notification of Restoration.**

As soon as normal operation is restored, notify outage reporting. For structures that are regulated by the FCC, the FCC advises that noncompliance with notification procedures could subject the sponsor to penalties or monetary forfeitures.

## 2.6 **Federal Communications Commission (FCC) Requirement.**

The use of a high-intensity flashing white lighting system on structures located in residential neighborhoods (as defined by applicable zoning laws) trigger requirements for FCC licenses and an environmental assessment.

08/17/2018

AC 70/7460-IL CHG 2

## 2.7 **Voluntary Marking of Meteorological Evaluation Towers (METs) Less Than 200 Feet (61 m) AGL.**

### 2.7.1 Recommendation.

The FAA recommends voluntary marking of METs less than 200 feet (61 m) AGL in accordance with marking guidance contained in this advisory circular (AC). Historically, this guidance has not been applied. However, the FAA recognizes the need to address safety impacts to low-level agricultural flight operations, and it believes that voluntarily marking METs less than 200 feet (61 m) AGL in remote and rural areas enhance the conspicuity of these structures.

### 2.7.2 Painting.

METs should be painted in accordance to the criteria contained in Chapter 3, paragraphs 3.1 through 3.4, specifically, with alternate bands of aviation orange and white paint. In addition, paragraph 3.5 states that all markings should be replaced when faded or otherwise deteriorated.

### 2.7.3 High-Visibility Sleeves.

It is recommended that several high-visibility sleeves be installed on the MET's outer guy wires. One high-visibility sleeve should be installed on each guy wire, as close to the anchor point as possible, but at a height well above the crop or vegetation canopy. A second sleeve should be installed on the same outer guy wires midway between the location of the lower sleeve and the upper attachment point of the guy wire to the MET.

### 2.7.4 Spherical Markers.

It is also recommended that high-visibility aviation orange spherical marker (or cable) balls be attached to the guy wires. Spherical markers should be installed and displayed in accordance to Chapter 3, paragraph 3.5. The FAA, however, recognizes various weather conditions and manufacturing placement standards may affect the placement and use of high-visibility sleeves and/or spherical markers. Thus, some flexibility is allowed when determining sleeve length and marker placement on METs.

## 2.8 **Obstruction Height Definition Changed to 499 Feet AGL.**

Because of changes made to 14 CFR Part 77, *Safe, Efficient Use, and Preservation of the Navigable Airspace*, on July 21, 2010, the height of a structure (identified as an obstruction) was lowered to 499 feet AGL from 500 feet AGL. Consequently, all structures that are above 499 feet AGL will be designated as obstructions. The FAA will conduct an aeronautical study to determine the effect on navigable airspace. This will ensure all usable airspace at and above 500 feet AGL is addressed during the study and the airspace is safe for air navigation.

10/8/2016

AC 70/7460-1L CHG I

## CHAPTER 3. MARKING GUIDELINES

### 3.1 Purpose.

This chapter provides recommended guidelines to make certain structures conspicuous to pilots during daylight hours. One way to achieve this conspicuity is to paint and/or mark these structures. Recommendations on marking structures can vary, depending on terrain features, weather patterns, geographic location, and the number of structures. Specific marking guidelines for wind turbines are contained in Chapter 13.

### 3.2 Paint Colors.

Alternate sections of aviation orange and white paint should be used as the contrast in colors provides maximum visibility of an obstruction. Specific paint standards are contained in Chapter 12.

### 3.3 Paint Standards.

To be effective, the paint used should meet specific color requirements when freshly applied to a structure. Because all outdoor paints deteriorate with time, and it is not practical to give a maintenance schedule for all climates, surfaces should be repainted when the color changes noticeably or its effectiveness is reduced by scaling, oxidation, chipping, or layers of contamination. The subsequent standards should be followed.

#### 3.3.1 Materials and Application.

The FAA recommends that quality paint and materials be selected to maximize years of service. The paint should be appropriate for the surfaces to be painted, including any previous coatings, and suitable for the environmental conditions. Surface preparation and paint application should follow the manufacturer's recommendations.

**Note:** In-Service Aviation Orange Color Tolerance Charts are available from private suppliers for determining when repainting is required. The color should be sampled on the upper half of the structure, since weathering is greater there.

#### 3.3.2 Surfaces not Requiring Paint.

Ladders, decks, and walkways of steel towers and similar structures do not need to be painted if a smooth surface presents a potential hazard to maintenance personnel. Painting may also be omitted from precision or critical surfaces if the paint would have an adverse effect on the transmission or radiation characteristics of a signal. However, the structure's overall marking effect should not be reduced.

#### 3.3.3 Skeletal Structures.

Complete all marking/painting prior to or immediately upon completion of construction. This applies to catenary support structures, radio and television towers, and similar

10/8/2016

AC 70/7460-1L CHG 1

skeletal structures. To be effective, paint should be applied to all inner and outer surfaces of the framework.

### 3.4 **Paint Patterns.**

Various types of paint patterns are used to mark structures. The pattern is determined by the size and shape of the structure. The following patterns are recommended.

#### 3.4.1 Solid Pattern.

Obstacles should be painted aviation orange if the structure's horizontal and vertical dimensions do not exceed 10.5 feet (3.2 m).

#### 3.4.2 Checkerboard Pattern.

Alternating rectangles of aviation orange and white are normally displayed on the following structures:

1. Water, gas, and grain storage tanks.
2. Buildings, as required.
3. Large structures exceeding 10.5 feet (3.2 m) across, having a horizontal dimension that is equal to or greater than the vertical dimension.

#### 3.4.3 Size of Patterns.

The sides of the checkerboard pattern should measure not less than 5 feet (1.5 m) or more than 20 feet (6 m) and should be as nearly square as possible. However, if it is impractical because of the size or shape of a structure, the sides of the patterns may be less than 5 feet (1.5 m). When possible, the corner surfaces should be painted aviation orange. (See Figures A-15 and A-16 in Appendix A.)

#### 3.4.4 Alternate Bands.

Alternate bands of aviation orange and white are normally displayed on the following structures:

1. Communication towers and catenary support structures.
2. Poles.
3. Smokestacks.
4. Skeletal framework of storage tanks and similar structures.
5. Structures that appear narrow from a side view are 10.5 feet (3.2 m) or more across, and the horizontal dimension is less than the vertical dimension.

10/8/2016

AC 70/7460-1L CHG 1

6. Coaxial cable, conduits, and other cables attached to the face of a tower.

3.4.5 Color Band Characteristics.

Bands for structures of any height should be:

1. Equal in width, provided each band is not less than 1 1/2 feet (0.5 m) or more than 100 feet (31 m) wide.
2. Perpendicular to the vertical axis with the bands at the top and bottom painted orange.
3. An odd number of bands on the structure.
4. Approximately one-seventh the height, if the structure is equal to or less than 700 feet (214 m) AGL. For each additional 200 feet (61 m) or fraction thereof, add one (1) additional orange and one (1) additional white band. Table 3-1 shows the required band widths based on the height of the structure.
5. Equal and in proportion to the structure's AGL height.

**Table 3-1. Structure Height to Bandwidth Ratio**

<b>If a structure is:</b>		<b>Then Band Width:</b>
<b>Greater Than</b>	<b>Equal to or Less Than</b>	<b>Band Width</b>
10.5 feet (3.2 m)	700 feet (214 m)	1/7 of height
700 feet (214 m)	900 feet (275 m)	1/9 of height
900 feet (275 m)	1,100 feet (336 m)	1/11 of height
1,100 feet (336 m)	1,300 feet (397 m)	1/13 of height

3.4.6 Structures With a Cover or Roof.

If the structure has a cover or roof, the highest orange band should be continued to cover the entire top of the structure. (See Figures A-15 and A-16 in Appendix A.)

3.4.7 Skeletal Structures Atop Buildings.

10/8/2016

AC 70/7460-1L CHG I

If a flagpole, skeletal structure, or similar object is erected on top of a building, the combined height of the object and building will determine whether marking is recommended. However, only the height of the object filed with the FAA determines the width of the color bands.

#### 3.4.8 Partial Marking.

If marking is recommended for only a portion of a structure because the structure is shielded by other objects or terrain, the width of the bands should be determined by the overall height of the structure. A minimum of three bands should be displayed on the upper portion of the structure.

#### 3.4.9 Teardrop Pattern.

Spherical water storage tanks with a single, circular standpipe support may be marked in a teardrop-striped pattern. The tank should show alternate stripes of aviation orange and white. The stripes should extend from the top center of the tank to its supporting standpipe. The width of the stripes should be equal, and the width of each stripe at the greatest girth of the tank should not be less than 5 feet (1.5 m) nor more than 15 feet (4.6 m). (See Figure A-17 in Appendix A.)

10/8/2016

AC 70/7460-1L CHG I

**3.4.10 Community Names.**

If it is desirable to paint the name of the community on the side of a tank, the stripe pattern may be broken to serve this purpose. This open area should have a maximum height of 3 feet (0.9 m). (See Figure A-17 in Appendix A.)

**3.4.11 Exceptions.**

Structural designs not conducive to standard markings may be marked as follows:

1. If it is not practical to paint the roof of a structure in a checkerboard pattern, it may be painted solid orange.
2. If a spherical structure is not suitable for an exact checkerboard pattern, the shape of the rectangles may be modified to fit the shape of the surface.
3. Storage tanks not suitable for a checkerboard pattern may have alternating bands of aviation orange and white or a limited checkerboard pattern applied to the upper one-third of the structure.
4. The skeletal framework of certain water, gas, and grain storage tanks may be excluded from the checkerboard pattern.

**3.5 Unlighted Markers.**

Unlighted markers are used to identify structures and to make them more conspicuous when it is impractical to paint them. Unlighted markers may also be used in addition to aviation orange and white paint when additional conspicuity is necessary for aviation safety. Unlighted markers should be displayed in conspicuous positions on or adjacent to the structures so as to retain the general definition of the structure. They should be recognizable in clear, daytime visibility from a distance of at least 4,000 feet (1,219 m) and in all directions from which aircraft are likely to approach. Unlighted markers should be distinctively shaped, i.e., spherical or cylindrical, so that they are not mistaken for items that are used to convey other information. They should be replaced when faded or otherwise deteriorated.

**3.5.1 Spherical Markers.**

Spherical markers are used to identify overhead wires and catenary transmission lines that are less than 69 kV. Markers may be of another shape, i.e., cylindrical, provided the projected area of such markers is not less than that presented by a spherical marker.

**1. Size and Color.**

The diameter of the markers used on extensive catenary wires (catenary wires that cross canyons, lakes, rivers, etc.) should not be less than 36 inches (91 cm). Smaller 20-inch (51-cm) spheres are permitted on less extensive catenary wires or on power lines below 50 feet (15 m) AGL and within 1,500 feet (458 m) of an airport runway end. Each marker should be a solid color, specifically aviation orange, white, or yellow.

10/8/2016

AC 70/7460-1L CHG 1

## 2. Installations.

- a. Spacing. Unlighted markers should be spaced equally along the wire at approximately 200-foot (61-m) intervals, or fraction thereof. There should be less space between markers in critical areas near runway ends [i.e., 30 feet to 50 feet (10 m to 15 m)]. They should be displayed on the highest wire or by another means at the same height as the highest wire. Where there is more than one wire at the highest point, the markers may be installed alternately along each wire if the distance between adjacent markers meets the spacing standard of 200 feet or less. This method distributes the weight and wind-loading factors. (See Figure A-1 in Appendix A.)
- b. Pattern. An alternating color scheme provides the most conspicuity against all backgrounds. Unlighted markers should be installed by alternating solid-colored markers of aviation orange, white, and yellow. Normally, an orange marker is placed at each end of a line and the spacing is adjusted [not to exceed 200 feet (61 m)] to accommodate the rest of the markers. When less than four markers are used, they should all be aviation orange. (See Figure A-1 in Appendix A.)
- c. Wire Sag. Wire Sag, or droop, will occur due to temperature, wire weight, wind, etc. Twenty-five (25) feet (7.62 m) is the maximum allowable distance between the highest wire installed with marker balls and the highest wire without marker balls, and shall not violate the sag requirements of the transmission line design.
- d. Adjacent Lines. Catenary crossings with multiple transmission lines require appropriate markers when the adjacent catenary structure's outside lines are greater than 200 feet (61 m) away from the center of the primary structure. (See Figure A-2 in Appendix A.) If the outside lines of the adjacent catenary structure are within 200 feet (61 m) or less from the center of the primary structure, markers are not required on the adjacent lines. (See Figure A-3 in Appendix A.)

### 3.5.2 Flag Markers.

Flags are used to mark certain structures or objects when it is technically impractical to use spherical markers or paint. Some examples are temporary construction equipment, cranes, derricks, oil and other drilling rigs. Catenaries should use spherical markers.

1. Minimum Size. Each side of the flag marker should be at least 2 feet (0.6 m) in length.
2. Color Patterns. Flags should be colored as follows:
  - a. Solid. Aviation orange.

10/8/2016

AC 70/7460-1L CHG 1

- b. Orange and White. Arrange two triangular sections, one aviation orange and the other white to form a rectangle.
  - c. Checkerboard. Flags 3 feet (0.9 m) or larger should be a checkerboard pattern of aviation orange and white squares, each 1 foot (0.3 m) plus or minus 10 percent.
3. Shape. Flags should be rectangular in shape and have stiffeners to keep them from drooping in calm wind.
  4. Display. Flag markers should be displayed around, on top, or along the highest edge of the obstruction. When flags are used to mark extensive or closely grouped obstructions, they should be displayed approximately 50 feet (15 m) apart. The flag stakes should be strong enough to support the flags and be higher than the surrounding ground, structures, and/or objects of natural growth.

### 3.6 Unusual Complexities.

The FAA may also recommend appropriate marking in an area in which grouped obstructions present a common obstruction to air navigation.

### 3.7 Omission or Alternatives to Marking.

The alternatives listed below require FAA review and concurrence.

#### 3.7.1 High-Intensity Flashing White Lighting Systems.

High-intensity flashing white lighting systems are more effective than aviation orange and white paint and therefore can be recommended instead of paint marking. This is particularly true under certain ambient light conditions involving the position of the sun relative to the direction of flight. When high-intensity lighting systems are operated during daytime and twilight, other methods of marking may be omitted. When operated 24 hours a day, other methods of marking and lighting may be omitted.

#### 3.7.2 Medium-Intensity Flashing White Lighting Systems.

When medium-intensity flashing white lighting systems are operated during daytime and twilight on structures 700 feet (213 m) AGL or less, other methods of marking may be omitted.

**Note:** Sponsors must ensure that alternatives to marking are coordinated with the FCC for structures under its jurisdiction prior to making the change.

## CHAPTER 4. LIGHTING GUIDELINE

### 4.1 Purpose.

This chapter describes the various obstruction lighting systems used to identify structures that have been determined to require added conspicuity. The lighting standards in this AC are the minimum necessary for aviation safety. Recommendations on lighting structures can vary, depending on terrain features, weather patterns, geographic location, and number of structures. Specific lighting guidelines for wind turbines are contained in Chapter 13.

### 4.2 Standards.

The standards outlined in this AC are based on using light units that meet specified intensities, beam patterns, color, and flash rates as stated in AC 150/5345-43, *Specification for Obstruction Lighting Equipment*. These standards may be obtained from: [www.faa.gov/airports/resources/advisory\\_circulars/](http://www.faa.gov/airports/resources/advisory_circulars/)

### 4.3 Lighting Systems.

Obstruction lighting may be displayed on structures as follows:

1. Aviation Red Obstruction Lights. Use flashing lights and/or steady-burning lights during nighttime. Tower structures are typically marked with flashing red lights. Buildings and smaller obstructions located near airports should be marked with steady-burning red lights. (See Chapter 5).
2. Medium-Intensity Flashing White Obstruction Lights. Medium-intensity flashing white obstruction lights may be used during daytime and twilight with automatically selected reduced intensity for nighttime operation. When this system is used on structures 700 feet (213 m) AGL or less, other methods of marking and lighting the structure may be omitted. Aviation orange and white paint is always required for daytime marking on structures exceeding 700 feet (213 m) AGL. This system is not normally recommended on structures 200 feet (61 m) AGL or less.
3. High-Intensity Flashing White Obstruction Lights. High-intensity flashing white obstruction lights may be used during daytime with automatically selected reduced intensities for twilight and nighttime operations. When this system is used, other methods of marking and lighting the structure may be omitted. This system should not be used on structures 700 feet (213 m) AGL or less, unless an FAA aeronautical study shows otherwise.
 

**Note:** All flashing lights on a structure should flash simultaneously except for catenary support structures, which have a distinct flashing sequence between the levels of lights (see paragraph 4.4).
4. Dual Lighting. This system consists of red lights for nighttime and high- or medium-intensity flashing white obstruction lights for daytime and twilight. When

10/8/2016

AC 70/7460-1L CHG I

a dual lighting system incorporates medium-intensity flashing white lights on structures 700 feet (213 m) AGL or less or high-intensity flashing white lights on structures greater than 700 feet (213 m) AGL, other methods of marking the structure may be omitted.

5. Obstruction Lights During Construction. As the height of the structure exceeds each level at which permanent obstruction lights would be recommended, two or more lights of the type specified in the determination should be installed at that level. Temporary high or medium-intensity flashing white lights, as recommended in the determination, should be operated 24 hours a day until all permanent lights are in operation. In either case, two or more lights should be installed on the uppermost part of the structure any time it exceeds the height of the temporary construction equipment. They may be turned off for periods when they could interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level.
6. Obstruction Lights in Urban Areas. When a structure is located in an urban area where there are numerous other white lights (e.g., streetlights) red obstruction lights with painting or a medium-intensity dual system is recommended. Medium-intensity lighting is not normally recommended on structures less than 200 feet (61 m).
7. Temporary Construction Equipment Lighting. Since there is such a variance in construction cranes, derricks and other drilling rigs, each case should be considered individually. Lights should be installed according to the standards given in Chapters 5, 6, 7, or 8, as they would apply to permanent structures.

#### 4.4 **Lighted Spherical Markers.**

- 4.4.1 Lighted markers are available for increased night conspicuity of high-voltage (69 kV or greater) transmission line catenary wires. These markers should be used on transmission line catenary wires near airports, heliports, across rivers, canyons, lakes, etc. The lighted markers should be manufacturer-certified as recognizable from a minimum distance of 4,000 feet (1,219 m) under nighttime conditions, minimum Visual Flight Rule (VFR) conditions or having a minimum intensity of at least 32.5 candelas. The lighting unit should emit a steady-burning, red light.
- 4.4.2 Lighted markers should be installed on the highest energized line. If the lighted markers are installed on a line other than the highest catenary, then markers specified in Chapter 3 paragraph 3.5 should be used in addition to the lighted markers. The maximum distance between the line energizing the lighted markers and the highest catenary above the lighted marker should be no more than 25 feet (7.62 m) and shall not violate the sag requirements of the transmission line design.

10/8/2016

AC 70/7460-1L CHG 1

4.4.3 Lighted markers should be distinctively shaped, (i.e., spherical or cylindrical) so they are not mistaken for items that are used to convey other information. They should be visible in all directions from which aircraft are likely to approach. The area in the immediate vicinity of the supporting structure's base should be clear of all items and/or objects of natural growth that could interfere with the line-of-sight between a pilot and the structure's lights (See Figure A-4 in Appendix A). When a catenary wire crossing requires three or more supporting structures, the inner structures should be equipped with enough light units per level to provide full coverage from which aircraft are likely to approach.

#### 4.5 **Inspection, Repair, and Maintenance.**

To ensure the proper candela output for fixtures with incandescent lamps, the voltage provided to the lamp filament should not vary more than plus or minus three percent of the lamp's rated voltage. The input voltage should be measured at the closest disconnecting means to the lamp fixture with the lamp operating during the hours of normal operation. (For strobes, the input voltage of the power supplies should be within 10 percent of rated voltage.) Lamps should be replaced after being in operation for approximately 75 percent of their rated life or immediately upon failure. Flashtubes in a light unit should be replaced immediately upon failure, when the peak effective intensity falls below specification limits or when the fixture begins skipping flashes, or at the manufacturer's recommended intervals. Due to the effects of harsh environments, light fixture lenses should be visually inspected every 24 months, or when the light fixture fails, for ultraviolet (UV) damage, cracks, crazing, dirt buildup, etc., to ensure the certified light output has not deteriorated. (See Chapter 2 paragraph 2.4 for reporting requirements in case of failure.) Lenses that have cracks, UV damage, crazing, or excessive dirt buildup should be cleaned or replaced.

#### 4.6 **Nonstandard Lights.**

Moored balloons, chimneys, church steeples, and similar obstructions may be floodlighted by fixed search light projectors installed at three or more equidistant points around the base of each obstruction. The searchlight projectors should provide an average illumination of at least 15 foot-candles (161.45 lux) over the top one-third of the obstruction.

#### 4.7 **Placement Factors.**

The height of the structure AGL determines the number of light levels. The light levels may be adjusted slightly, but not to exceed 10 feet (3 m) when necessary to accommodate guy wires and personnel who replace or repair light fixtures. Except for catenary wire support structures, the following factors should be considered when determining the placement of obstruction lights on a structure.

1. Red Obstruction Lighting Systems. The structure's overall height, including all appurtenances, such as rods, antennas, and obstruction lights, determines the number of light levels.

10/8/2016

AC 70/7460-IL CHG I

2. Medium-Intensity Flashing White Obstruction Lighting Systems. The structure's overall height, including all appurtenances such as rods, antennas, and obstruction lights, determines the number of light levels.
3. High-Intensity Flashing White Obstruction Lighting Systems. The main structure's overall height, excluding all appurtenances, such as rods, antennas, and obstruction lights, determines the number of light levels.
4. Dual Obstruction Lighting Systems. The structure's overall height, including all appurtenances, such as rods, antennas, and obstruction lights, is used to determine the number of light levels for a medium-intensity white obstruction light/red obstruction dual lighting system. The structure's overall height, excluding all appurtenances, is used to determine the number of light levels for a high-intensity white obstruction light/red obstruction dual lighting system.
5. Adjacent Structures. The elevation of the tops of adjacent buildings in congested areas may be used as the equivalent of ground level to determine the correct number of light levels required.
6. Shielded Lights. If an adjacent structure or object blocks the visibility of an obstruction light, the light's horizontal placement should be adjusted or additional lights should be mounted on that object to retain or contribute to the definition of the obstruction.
7. Nesting of Lights. Care should be taken to ensure that obstruction lights do not become blocked or "nested" as new antennas, hardware, or appurtenances are added to the top of a structure. If new equipment is added that blocks the obstruction light's visibility, the light fixtures must be relocated and/or raised so that it is not blocked by the new equipment. For example, when new larger cellular antenna panels are fitted to older towers, the obstruction light will need to be raised so that it is not blocked by the larger antenna panels. The widest structure, appurtenance, lightning rod, or antenna that can be placed in front of an obstruction light (excluding the L-810 light) without significantly blocking the obstruction light's visibility should be no wider than 7/8 of an inch. Due to their smaller size, L-810 lights should not be blocked by any structure.

#### 4.8 **Monitoring Obstruction Lights.**

Obstruction lighting systems should be closely monitored by visual or automatic means. It is extremely important to visually inspect obstruction lighting in all operating intensities at least once every 24 hours on systems without automatic monitoring. In the event a structure is not readily accessible for visual observation, a properly maintained automatic monitor should be used. This monitor should be designed to register the malfunction of any light on the obstruction regardless of its position or color. When using remote monitoring devices, the system's communication and operational status should be confirmed at least once every 24 hours. The monitor (aural or visual) should be located in an area generally occupied by the responsible personnel. In some cases,

10/8/2016

AC 70/7460-1L CHG 1

this may require a remote monitor in an attended location. For each structure, a log should be maintained in which the lighting system's daily operations status is recorded. Light fixture lenses should be replaced if serious cracks, hazing, dirt buildup, etc., has occurred.

#### 4.9 **Ice Shields.**

Where icing is likely to occur, metal grates or similar protective ice shields should be installed directly over each light unit to prevent falling ice or accumulation from damaging the light units. The light should be mounted in a manner to ensure an unobstructed view of at least one light by a pilot approaching from any direction.

#### 4.10 **Light Shields.**

In general, light shields are not permitted because of the adverse effects they have on the obstruction light fixture's photometrics. In addition, these shields can promote undesired snow accumulation, bird nesting, and wind loading.

#### 4.11 **Distraction.**

When obstruction lights are in proximity to a navigable waterway, they may distract vessel operators. To avoid interference with marine navigation, coordinate with the Office of Navigation Systems, United States (U.S.) Coast Guard before installing the lighting system. The contact information for the U.S. Coast Guard is:

Commandant (CG-NAV-1)  
U.S. Coast Guard  
2703 Martin Luther King Jr. Ave SE STOP 7418  
Washington, DC 20593-7418  
202-372-1546

9/6/2018

AC 70/7460-1L CHG I

## CHAPTER 5. RED OBSTRUCTION LIGHT SYSTEM

### 5.1 Purpose.

Red obstruction lights are used to increase conspicuity during nighttime. Daytime and twilight marking is required. Recommendations on lighting structures can vary, depending on terrain features, weather patterns, geographic location, and number of structures. Specific lighting guidelines for wind turbines are contained in Chapter 13.

### 5.2 Standards.

The red obstruction light system is composed of flashing omnidirectional lights (L-864) and/or steady-burning or flashing (L-810) lights. When one or more levels are comprised of flashing lights, the lights should flash simultaneously. The number of light levels needed is shown in Figure A-6 in Appendix A.

Note: In response to a Safety Risk Assessment of LED Lighting in Aircraft Operations, the FAA has established IR specifications for LED-based red obstruction lights. Specifications are contained in Airport Engineering Brief 98, *Infrared Specifications for Aviation Obstruction Light Compatibility with Night Vision Goggles (NVGs)*, published December 18, 2017, and AC 150/5345-43H, *Specification for Obstruction Lighting Equipment*, dated September 28, 2016.

1. Single Obstruction Light. A single red obstruction light (L-810) may be used when more than one obstruction light is required either vertically or horizontally, or when maintenance is needed, and can be installed within a reasonable time.
  - a. Top Level. A single steady-burning light (L-810) may be used to identify low structures, such as airport instrument landing system buildings, as well as long horizontal structures, such as perimeter fences and building roof outlines.
  - b. Intermediate Level. Single flashing or steady-burning lights (as appropriate for size and type of structure) may be used on skeletal and solid structures when more than one level of lights is installed, and there are two or more single lights per level.
2. Double Obstruction Light. A double steady-burning (L-810) light should be installed when used as a top light, at each end of a row of single obstruction lights, and in areas or locations where the failure of a single unit could cause an obstruction to be totally unlighted.
  - a. Top Level. Structures 150 feet (46 m) AGL or less should have one or more double steady-burning lights installed at the highest point and operating simultaneously.

10/8/2016

AC 70/7460-1L CHG 1

- b. Intermediate Level. Double flashing or steady-burning lights (as appropriate for size and type of structure) should be installed at intermediate levels when a malfunction of a single light could create an unsafe condition and in remote areas where maintenance cannot be performed within a reasonable time. Both units may operate simultaneously, or a transfer relay may be used to switch to a spare unit should the active system fail.
- c. Lowest Level. The lowest level of light units may be installed at a higher elevation than normal on a structure if the surrounding terrain, trees, or adjacent building(s) would obscure the lights. In certain instances, as determined by the FAA, the lowest level of lights may be eliminated.

### 5.3 Control Device.

Red obstruction lights should be operated by an acceptable control device (e.g., photocell, timer, etc.) adjusted so the lights will be turned on when the northern sky illuminance reaching a vertical surface falls below a level of 60 foot-candles (645.8 lux) but before reaching a level of 35 foot-candles (376.7 lux). The control device should turn the lights off when the northern sky illuminance rises to a level of not more than 60 foot-candles (645.8 lux). The lights may also remain on continuously. The sensing device should, if practical, face the northern sky in the Northern Hemisphere. (See AC 150/5345-43.)

### 5.4 Poles, Towers, and Similar Skeletal Structures.

The following standards apply to radio and television towers, supporting structures for overhead transmission lines, and similar structures.

#### 1. Top-Mounted Obstruction Light.

- a. Structures 150 Feet (46 m) AGL or Less. Two or more steady-burning red (L-810) lights should be installed in a manner to ensure an unobstructed view of one or more lights by a pilot.
- b. Structures Exceeding 150 Feet (46 m) AGL. At least one red flashing (L-864) light should be installed in a manner to ensure an unobstructed view of one or more lights by a pilot.
- c. Appurtenances 40 Feet (12 m) or Less. If a rod, antenna, or other appurtenance 40 feet (12 m) or less in height is incapable of supporting a red flashing light, then it may be placed at the base of the appurtenance. If the mounting location does not allow an unobstructed view of the light by a pilot, then additional lights should be added.
- d. Appurtenances Exceeding 40 Feet (12 m). If a rod, antenna, or other appurtenance exceeding 40 feet (12 m) in height is incapable of supporting a red flashing light, a supporting mast with one or more lights should be installed adjacent to the appurtenance. Adjacent installations should not exceed the

10/8/2016

AC 70/7460-1L CHG I

appurtenance's height and be within 40 feet (12 m) of the tip to allow the pilot an unobstructed view of at least one light. If the rod, antenna, or other appurtenance is 7/8 inch wide or more, at least two lights must be installed on the supporting mast to provide the necessary unobstructed view.

2. Mounting Intermediate Levels. The number of light levels is determined by the height of the structure, including all appurtenances, as shown in Figure A-6 in Appendix A. The number of lights on each level is determined by the shape and height of the structure. These lights should be mounted to ensure an unobstructed view of at least one light by a pilot.
  - a. Steady-Burning Lights (L-810).
    - i. Structures 150 Feet (46 m) AGL or Less. Two or more steady-burning (L-810) lights should be installed diagonally or on diametrically opposite positions.
    - ii. Structures Exceeding 150 Feet (46 m) AGL. These structures do not require steady-burning (L-810) lights.
  - b. Flashing Lights (L-810). For structures exceeding 151 feet (46 m) but not more than 350 feet (107 m) at intermediate levels, two or more flashing (L-810) lights should be mounted outside at diagonally opposite positions of intermediate levels. These lights should be configured to flash simultaneously with the L-864 flashing light on the top of the structure at a rate of 30 flashes per minute (fpm) ( $\pm 3$  fpm).
  - c. Flashing Lights (L-864).
    - i. Structures 350 Feet (107 m) AGL or Less. These structures do not require flashing (L-864) lights at intermediate levels.
    - ii. Structures Exceeding 350 Feet (107 m) AGL. At intermediate levels, as shown in Figure A-6 in Appendix A, two (L-864) lights should be mounted outside at diagonally opposite positions.

## 5.5 Chimneys, Flare Stacks, and Similar Solid Structures.

### 5.5.1 Number of Light Units.

The number of units recommended depends on the diameter of the structure at the top. The number of lights recommended below is the minimum.

1. Structures 20 Feet (6 m) or Less in Diameter. Three light units per level (see Figure A-20 in Appendix A).
2. Structures Exceeding 20 Feet (6 m) but not More Than 100 Feet (31 m) in Diameter. Four light units per level (see Figure A-20 in Appendix A).

10/8/2016

AC 70/7460-1L CHG I

3. Structures Exceeding 100 Feet (31 m) but not More Than 200 Feet (61 m) in Diameter. Six light units per level (see Figure A-21 in Appendix A).
4. Structures Exceeding 200 Feet (61 m) in Diameter. Eight light units per level.

#### 5.5.2 Top-Mounted Obstruction Lights.

1. Structures 150 Feet (46 m) AGL or Less. L-810 lights should be installed horizontally at regular intervals at or near the top.
2. Structures Exceeding 150 Feet (46 m) AGL. At least three L-864 lights should be installed.
3. Chimneys, Cooling Towers, and Flare Stacks. Lights may be displayed as low as 20 feet (6-m) below the top (see Figure A-13 in Appendix A) to avoid the obscuring effect of deposits and heat generally emitted by this type of structure. It is important that these lights are readily accessible for cleaning and lamp replacement. It is understood that with flare stacks, as well as any other structures associated with the petrol-chemical industry, normal lighting requirements may not be necessary. This could be due to the location of the flare stack/structure within a large, well-lighted, petrol-chemical plant, or the fact that the flare, or working lights surrounding the flare stack/structure, is as conspicuous as obstruction lights.

#### 5.5.3 Mounting Intermediate Levels.

The number of light levels is determined by the height of the structure including all appurtenances. For cooling towers 600 feet (183 m) AGL or less, intermediate light levels are not necessary. Structures between 150 feet and 350 feet AGL or less should have a second level of steady-burning red light units installed approximately at the midpoint of the structure and in a vertical line with the top level of lights. Structures exceeding 350 feet (107 m) AGL should have a second level of flashing light units.

1. Steady-Burning (L-810) Lights. The recommended number of light levels is shown in Figure A-15 in Appendix A. At least three lights should be installed on each level.
2. Flashing (L-864) Lights. The recommended number of light levels is shown in Figure A-6 in Appendix A. At least three lights should be installed on each level.
  - a. Structures 350 Feet (107 m) AGL or Less. These structures do not need intermediate levels of flashing lights.
  - b. Structures Exceeding 350 Feet (107 m) AGL. At least three flashing (L-864) lights should be installed on each level in a manner, allowing an unobstructed view of at least one light.

#### 5.6 Group of Obstructions.

10/8/2016

AC 70/7460-1L CHG I

When individual objects, except wind turbines, within a group of obstructions are not the same height and are spaced a maximum of 150 feet (46 m) apart, the prominent objects within the group should be lighted in accordance with the standards for individual obstructions of a corresponding height. If the outer structure is shorter than the prominent object, the outer structure should be lighted in accordance with the standards for individual obstructions of a corresponding height. Light units should be placed to ensure that the light is visible to a pilot approaching from any direction. In addition, at least one flashing light should be installed at the top of a prominent center obstruction or on a special tower located near the center of the group. For the purpose of marking and lighting obstructions other than wind turbines, a group of obstructions is considered to be three (3) or more structures.

#### 5.7 **Alternate Method of Displaying Obstruction Lights.**

The FAA may recommend that lights be placed on poles equal to the height of the obstruction and installed on or adjacent to the structure instead of installing lights on the obstruction.

#### 5.8 **Prominent Buildings, Bridges, and Similar Extensive Obstructions.**

When objects within a group of obstructions are approximately the same overall height above the surface and are located a maximum of 150 feet (46 m) apart, the group of obstructions may be considered an extensive obstruction. Light units should be installed on the same horizontal plane at the highest portion, or edge, of the prominent obstructions. Light units should be placed to ensure the light is visible to a pilot approaching from any direction. If the structure is a bridge and is over navigable water, the sponsor must obtain prior approval of the lighting installation from the Commander of the District Office of the U.S. Coast Guard to avoid interference with marine navigation. Steady-burning lights should be displayed to indicate the extent of the obstruction, as follows:

1. Structures 150 Feet (46 m) or Less in Any Horizontal Direction. If the structure/bridge/extensive obstruction is 150 feet (46 m) or less horizontally, at least one steady-burning light (L-810) should be displayed on the highest point at each end of the obstruction's major axis. If this is impractical because of the overall shape, display a double obstruction light in the center of the highest point.
2. Structures Exceeding 150 Feet (46 m) in at Least One Horizontal Direction. If the structure/bridge/extensive obstruction exceeds 150 feet (46 m) horizontally, at least one steady-burning light should be displayed for each 150 feet (46 m), or fraction thereof, of the overall length of the major axis. At least one of these lights should be displayed on the highest point at each end of the obstruction. Additional lights should be displayed at approximately equal intervals, not to exceed 150 feet (46 m) on the highest points along the edge between the end lights. If an obstruction is located near a landing area and two or more edges are the same height, the edge nearest the landing area should be lighted.

10/8/2016

AC 70/7460-1L CHG 1

3. Structures Exceeding 150 Feet (46 m) AGL. Steady-burning red obstruction lights should be installed on the highest point at each end. At intermediate levels, steady-burning red lights should be displayed for each 150 feet (46 m), or fraction thereof. The vertical position of these lights should be equidistant between the top lights and the ground level, as the shape and type of obstruction will permit. A steady-burning red light should be displayed at each outside corner on each level with the remaining lights evenly spaced between the corner lights.
4. Exceptions. Flashing red lights (L-864) may be used instead of steady-burning lights if early or special warning is necessary. These lights should be displayed on the highest points of an extensive obstruction at intervals not exceeding 3,000 feet (915 m). At least three lights should be displayed on one side of the extensive obstruction to indicate a line of lights. (See Figure A-22 in Appendix A.)
5. Ice Shields. See paragraph 4.9.

10/8/2016

AC 70/7460-1L CHG I

**CHAPTER 6. MEDIUM-INTENSITY FLASHING WHITE OBSTRUCTION LIGHT SYSTEMS****6.1 Purpose.**

Medium-intensity flashing white (L-865) obstruction lights may provide conspicuity both day and night. Recommendations on lighting structures can vary, depending on terrain features, weather patterns, geographic location, and number of structures.

**6.2 Standards.**

6.2.1 The medium-intensity flashing white light system is normally composed of flashing omnidirectional lights. Medium-intensity flashing white obstruction lights may be used during daytime and twilight with automatically selected, reduced intensity for nighttime operation. When this system is used on structures 700 feet (213 m) AGL or less, other methods of marking and lighting the structure may be omitted. (Aviation orange and white paint is always required for daytime marking on structures exceeding 700 feet (213 m) AGL. This system is not normally recommended on structures 200 feet (61 m) AGL or less. The number of light levels needed is shown in Figure A-7 in Appendix A.

6.2.2 Using a 24-hour, medium-intensity, flashing white light system in urban/populated areas is not normally recommended due to their tendency to blend with the background lighting in these areas at night. This makes it extremely difficult for some types of aviation operations, i.e., medical-evacuation (medevac) and police helicopters to see these structures. Using this type of system in urban and rural areas often results in complaints. In addition, this system is not recommended on structures within 3 nautical miles (NM) of an airport.

**6.3 Radio and Television Towers and Similar Skeletal Structures.****6.3.1 Mounting Lights.**

The number of levels recommended depends on the height of the structure, including antennas and similar appurtenances.

1. Top Levels. One or more lights should be installed at the highest point to provide 360-degree coverage, ensuring an unobstructed view by a pilot approaching from any direction.
2. Appurtenances 40 Feet (12 m) or Less. If a rod, antenna, or other appurtenance 40 feet (12 m) or less in height is incapable of supporting the medium-intensity flashing white light, then it may be placed at the base of the appurtenance. If the mounting location does not allow an unobstructed view of the medium-intensity flashing white light by a pilot approaching from any direction, then additional lights should be added.
3. Appurtenances Exceeding 40 Feet (12 m). If a rod, antenna, or other appurtenance exceeds 40 feet (12 m) above the tip of the main structure, a medium-intensity

10/8/2016

AC 70/7460-1L CHG 1

flashing white light should be placed within 40 feet (12 m) from the top of the appurtenance. If the appurtenance (such as a whip antenna) is incapable of supporting the light, one or more lights should be mounted on a pole adjacent to the appurtenance. Adjacent installations should not exceed the height of the appurtenance and be within 40 feet (12 m) of the tip to allow the pilot an unobstructed view of at least one light. If the rod, antenna, or other appurtenance is 7/8 of an inch wide or more, at least two lights must be installed on the supporting mast to provide the necessary unobstructed view.

#### 6.3.2 Intermediate Levels.

At intermediate levels, two or more lights (L-865) should be mounted outside at diagonally or diametrically opposite positions of intermediate levels. The lowest light level should not be less than 200 feet (61 m) AGL.

#### 6.3.3 Lowest Levels.

The lowest level of light units may be installed at a higher elevation than normal on a structure if the surrounding terrain, trees, or adjacent building(s) would obscure the lights. In certain instances, as determined by the FAA, the lowest level of lights may be eliminated.

#### 6.3.4 Structures 700 Feet (213 m) AGL or Less.

When medium-intensity flashing-white lights are used during nighttime and twilight only, marking is required for daytime. When operated 24 hours a day, other methods of marking and lighting are not required.

#### 6.3.5 Structures Exceeding 700 Feet (213 m) AGL.

The lights should be used during nighttime and twilight and may be used 24 hours a day. Marking is always required for daytime.

#### 6.3.6 Ice Shields.

See paragraph 4.9.

### 6.4 Control Device.

The light intensity is controlled by a device (photocell) that changes the light's intensity when the ambient light changes. The system should automatically change intensity steps when, in the Northern Hemisphere, the northern sky illumination reaching a north-facing vertical surface is as follows:

1. Twilight-to-Night. This should not occur before the illumination drops below 5 foot-candles (53.8 lux) but should occur before it drops below 2 foot-candles (21.5 lux).

10/8/2016

AC 70/7460-1L CHG 1

2. Night-to-Day. The intensity changes listed in subparagraph 6.4 1 above should be reversed when changing from the night-to-day mode.

#### 6.5 Chimneys, Flare Stacks, and Similar Solid Structures.

The number of light units recommended depends on the diameter of the structure at the top. Normally, the top level is on the highest point of a structure. However, the top level of chimney lights may be installed as low as 20 feet (6 m) below the top to minimize deposit build-up due to emissions. (See Figure A-13 in Appendix A.) The number of lights recommended below is the minimum, as shown in Figure A-20 in Appendix A.

1. Structures 20 Feet (6 m) or Less in Diameter. Three light units per level. (See Figure A-20 in Appendix A.)
2. Structures Exceeding 20 Feet (6 m) but not More Than 100 Feet (31 m) in Diameter. Four light units per level. (See Figure A-20 in Appendix A.)
3. Structures Exceeding 100 Feet (31 m) but not More Than 200 Feet (61 m) in Diameter. Six light units per level. (See Figure A-21 in Appendix A.)
4. Structures Exceeding 200 Feet (61 m) in Diameter. Eight light units per level.

#### 6.6 Group of Obstructions.

When individual objects within a group of obstructions are not the same height and are spaced a maximum of 150 feet (46 m) apart, the prominent objects within the group should be lighted in accordance with the standards for individual obstructions of a corresponding height. If the outer structure is shorter than the prominent object, the outer structure should be lighted in accordance with the standards for individual obstructions of a corresponding height. Light units should be placed to ensure that the light is visible to a pilot approaching from any direction. In addition, at least one medium-intensity flashing white light should be installed at the top of a prominent center obstruction or on a special tower located near the center of the group.

#### 6.7 Special Cases.

When lighting systems are installed on structures located near highways, waterways, airport approach areas, etc., caution should be exercised to ensure that the lights do not distract or otherwise cause a hazard to motorists, vessel operators, or pilots on an approach to an airport. In these cases, shielding may be necessary. This shielding should not derogate the lighting system's intended purpose.

#### 6.8 Prominent Buildings and Similar Extensive Obstructions.

When objects within a group of obstructions are approximately the same overall height above the surface and are located a maximum of 150 feet (46 m) apart, the group of obstructions may be considered an extensive obstruction. Light units should be

10/8/2016

AC 70/7460-1L CHG 1

installed on the same horizontal plane at the highest portion, or edge, of the prominent obstructions. Light units should be placed to ensure that the light is visible to a pilot approaching from any direction. Lights should be displayed to indicate the extent of the obstruction as follows:

1. Structures 150 Feet (46 m) or Less in Any Horizontal Direction. If the structure/extensive obstruction is 150 feet (46 m) or less horizontally, at least one light should be displayed on the highest point at each end of the obstruction's major axis. If this is impractical because of the overall shape, display a double obstruction light in the center of the highest point.
2. Structures Exceeding 150 Feet (46 m) in at Least One Horizontal Direction. If the structure/extensive obstruction exceeds 150 feet (46 m) horizontally, at least one light should be displayed for each 150 feet (46 m), or fraction thereof, of the overall length of the major axis. At least one of these lights should be displayed on the highest point at each end of the obstruction. Additional lights should be displayed at approximately equal intervals not to exceed 150 feet (46 m) on the highest points along the edge between the end lights. If an obstruction is located near a landing area and two or more edges are the same height, the edge nearest the landing area should be lighted.
3. Structures Exceeding 150 Feet (46 m) AGL. Lights should be installed on the highest point at each end. At intermediate levels, lights should be displayed for each 150 feet (46 m), or fraction thereof. The vertical position of these lights should be equidistant between the top lights and the ground level as the shape and type of obstruction will permit. One such light should be displayed at each outside corner on each level with the remaining lights evenly spaced between the corner lights.

## CHAPTER 7. HIGH-INTENSITY FLASHING WHITE OBSTRUCTION LIGHT SYSTEMS

### 7.1 Purpose.

High-intensity (L-856) flashing white obstruction lights provides the highest degree of conspicuity both day and night. Recommendations on lighting structures can vary, depending on terrain features, weather patterns, geographic location, and number of structures.

### 7.2 Standards.

High-intensity flashing white obstruction lights should be used during daytime with automatically selected, reduced intensities for twilight and nighttime operations. When high-intensity white obstruction lights are operated 24 hours a day, other methods of marking and lighting may be omitted. This system should not be recommended on structures 700 feet (213 m) AGL or less unless an FAA aeronautical study shows otherwise. The number of light levels needed is shown in Figures A-8 and A-9 in Appendix A.

### 7.3 Control Device.

7.3.1 Light intensity is controlled by a device (photocell) that changes the light's intensity when the ambient light changes. Using a 24-hour, high-intensity flashing white light system in urban/populated areas is not normally recommended due to their tendency to merge with background lighting in these areas at night. This makes it extremely difficult for some types of aviation operations (i.e., medevac) and police helicopters to see these structures. Using this type of system in urban and rural areas often results in complaints.

7.3.2 The system should automatically change intensity steps when, in the Northern Hemisphere, the northern sky illuminance reaching a north-facing vertical surface is as follows:

1. Day-to-Twilight. This should not occur before the illumination drops to 60 foot-candles (645.8 lux) but should occur before it drops below 35 foot-candles (376.7 lux). The illuminance-sensing device should, if practical, face the northern sky in the Northern Hemisphere.
2. Twilight-to-Night. This should not occur before the illumination drops below 5 foot-candles (53.8 lux) but should occur before it drops below 2 foot-candles (21.5 lux).
3. Night-to-Day. The intensity changes listed in subparagraphs 7.3.2.1 and 7.3.2.2 above should be reversed when changing from the night-to-day mode.

### 7.4 Units per Level.

One or more light units are needed to obtain the desired horizontal coverage. The number of light units recommended per level (except for the supporting structures of catenary wires and buildings) depends upon the average outside diameter of the specific structure and the horizontal beam width of the light fixture. Light units should be installed to ensure an unobstructed view of the system by a pilot approaching from **any** direction. The number of lights recommended below is the minimum.

1. Structures 20 Feet (6 m) or Less in Diameter. Three light units per level.
2. Structures Exceeding 20 Feet (6 m) but not More Than 100 Feet (31 m) in Diameter. Four light units per level.
3. Structures Exceeding 100 Feet (31 m) in Diameter. Six light units per level.

### 7.5 Installation Guidance.

On most obstruction high-intensity light fixtures, the effective peak intensity of the light beam can be adjusted from 0 to 8 degrees above the horizon. Standard installation should place the top light at 0 degrees to the horizontal and all other light units installed in accordance with Table 7-1.

**Table 7-1. Light Unit Elevation Above the Horizontal**

Height of Light Unit Above Terrain	Degrees of Elevation Above the Horizontal
Exceeding 500 feet AGL	0
Above 400 feet to 500 feet AGL	1
Above 300 feet to 400 feet AGL	2
300 feet AGL or less	3

1. Vertical Aiming. When terrain, nearby residential areas, or other situations dictate, the light beam may be further elevated above the horizontal. The main beam of light at the lowest level should not strike the ground closer than 3 statute miles (5 km) from the structure. If additional adjustments are necessary, the lights may be individually adjusted upward, in 1-degree increments, starting at the bottom.

Excessive elevation may reduce its conspicuity by raising the beam above a collision course flight path.

2. Special Cases. When lighting systems are installed on structures located near highways, waterways, airport approach areas, etc., caution should be exercised to ensure that the lights do not distract or otherwise cause a hazard to motorists, vessel operators, or pilots on an approach to an airport. In these cases, shielding or adjusting the aim of the vertical or horizontal light may be necessary. This adjustment should not derogate the lighting system's intended purpose. Such adjustments may require an additional review, as described in Chapter 1 paragraph 1.5.
3. Relocation or Omission of Light Units. Light units should not be installed in such a manner that the light pattern/output is disrupted by the structure.
  - a. Lowest Level. The lowest level of light units may be installed at a higher elevation than normal on a structure if the surrounding terrain, trees, or adjacent building(s) would obscure the lights. In certain instances, as determined by the FAA, the lowest level of lights may be eliminated.
  - b. Two Adjacent Structures. When two structures are within 500 feet (153 m) of each other and the light units are installed at the same levels, the sides of the structures facing each other do not need be lighted. (See Figures A-18 and A-19.) However, all lights on both structures must flash simultaneously, except for adjacent catenary support structures. Vertical placement of the lights should be adjusted to either or both structures' intermediate levels to place the lights on the same horizontal plane. If one structure is higher than the other, a complete level(s) of lights should be installed on the higher structure that extends above the top of the lower structure. If the structures are of such heights that the levels of lights cannot be placed in identical horizontal planes, then the light units should be placed so that the center of the horizontal beam patterns do not face toward the adjacent structure. For example, structures situated north and south of each other should have the light units on both structures installed on a northwest/southeast and northeast/southwest orientation.
  - c. Three or More Adjacent Structures. The treatment of a cluster of structures as an individual or a complex of structures will be determined by the FAA, taking into consideration the location, heights, and spacing of other structures.

#### 7.6 **Antenna or Similar Appurtenance Light.**

When a structure lighted by a high-intensity, flashing white light system is topped with an antenna or similar appurtenance exceeding 40 feet (12 m) in height, a medium-intensity flashing white light (L-865) should be placed within 40 feet (12 m) from the tip of the appurtenance. This light should operate 24 hours a day and flash simultaneously with the rest of the lighting system. The location of the appurtenance

light is shown in Figure A-9 in Appendix A. Structures with an appurtenance 40 feet (12 m) or less in height should be lit in accordance with Figure A-8.

#### 7.7 Chimneys, Flare Stacks, and Similar Solid Structures.

The number of light levels depends on the height of the structure, excluding appurtenances. Three or more lights should be installed on each level to ensure an unobstructed view by the pilot. Normally, the top level is on the highest point of a structure. However, the top level of chimney lights may be installed as low as 20 feet (6 m) below the top to minimize deposit buildup due to emissions.

#### 7.8 Radio and Television Towers and Similar Skeletal Structures.

1. Mounting Lights. The number of levels recommended depends on the height of the structure, including antennas and similar appurtenances. At least three lights should be installed on each level and mounted to ensure that the effective intensity of the full horizontal beam coverage is not impaired by the structural members.
2. Top Level. One level of lights should be installed at the highest point of the structure. If the highest point is a rod or antenna incapable of supporting a lighting system, then the top level of lights should be installed at the highest portion of the main skeletal structure. If guy wires come together at the top, it may be necessary to install this level of lights as low as 10 feet (3 m) below the top. If the rod or antenna exceeds 40 feet (12 m) above the main structure, a medium-intensity, flashing white light (L-865) should be mounted on the highest point. (See Figure A-9 in Appendix A.) If the appurtenance (such as a whip antenna) is incapable of supporting a medium-intensity light, one or more lights should be installed on a pole adjacent to the appurtenance. The adjacent installation should not exceed the height of the appurtenance and be within 40 feet (12 m) of the top, allowing a pilot an unobstructed view of at least one light. If the rod, antenna, or other appurtenance is 7/8 of an inch wide or more, at least two lights must be installed on the supporting mast to provide the necessary unobstructed view.
3. Ice Shields. See paragraph 4.9.

#### 7.9 Hyperbolic Cooling Towers.

Light units should be installed to ensure an unobstructed view of at least two lights by a pilot approaching from any direction.

1. Number of Light Units. The number of units recommended depends on the diameter of the structure at the top, as shown in Figure A-21 in Appendix A. The number of lights recommended below is the minimum.
  - a. Structures 20 Feet (6 m) or Less in Diameter. Three light units per level.
  - b. Structures Exceeding 20 Feet (6 m) but not More Than 100 Feet (31 m) in Diameter. Four light units per level.

10/8/2016

AC 70/7460-1L CHG 1

- c. Structures Exceeding 100 Feet (31 m) but not More Than 200 Feet (61 m) Diameter. Six light units per level.
  - d. Structures Exceeding 200 Feet (61 m) in Diameter. Eight light units per level.
2. Structures Exceeding 600 Feet (183 m) AGL. Structures exceeding 600 feet (183 m) AGL should have a second level of light units installed approximately at the midpoint of the structure and in a vertical line with the top level of lights.

### 7.10 Prominent Buildings and Similar Extensive Obstructions.

When objects within a group of obstructions are approximately the same overall height above the surface and are located not more than 150 feet (46 m) apart, the group of obstructions may be considered an extensive obstruction. Light units should be installed on the same horizontal plane at the highest portion, or edge, of the prominent obstructions. Light units should be placed to ensure that the light is visible to a pilot approaching from **any** direction. These lights may require shielding, such as louvers, to ensure minimum adverse impact on local communities. Use extreme caution when using high-intensity flashing white lights.

1. If the obstruction is 200 feet (61 m) or less in either horizontal dimension, three or more light units should be installed at the highest portion of the structure to ensure that at least one light is visible to a pilot approaching from any direction. Light units may be mounted on a single pedestal at or near the center of the obstruction. If the light units are placed more than 10 feet (3 m) from the center point of the structure, use a minimum of four light units.
2. If the obstruction exceeds 200 feet (61 m) in one horizontal dimension, but is 200 feet (61 m) or less in the other, two light units should be placed on each of the shorter sides. These light units may be installed either adjacent to each other at the midpoint of the obstruction's edge or at (near) each corner, with the light unit aimed to provide 180 degrees of coverage at each edge. One or more light units should be installed along the overall length of the major axis. These lights should be installed at approximately equal intervals, not to exceed a distance of 100 feet (31 m) from the corners or from each other.
3. If the obstruction exceeds 200 feet (61 m) in both horizontal dimensions, the light units should be equally spaced along the overall perimeter of the obstruction at intervals of 100 feet (31 m), or fraction thereof.

## CHAPTER 8. DUAL LIGHTING WITH RED/MEDIUM-INTENSITY FLASHING WHITE LIGHT SYSTEMS

### 8.1 Purpose.

This dual lighting system includes red lights (L-864) for nighttime and medium-intensity, flashing white lights (L-865) for daytime and twilight use. This lighting system may be used in lieu of operating a medium-intensity flashing white lighting system at night. There may be some populated areas where nighttime use of medium-intensity light systems may cause significant environmental concerns. Using the dual lighting system should reduce/mitigate those concerns. Recommendations on lighting structures can vary, depending on terrain features, weather patterns, geographic location, and number of structures.

### 8.2 Installation.

The light units should be installed as specified in Chapters 4, 5, and 6. The number of light levels needed is dependent on the height of the obstruction, as shown in Figure A-10 in Appendix A.

### 8.3 Operation.

Light systems should be operated as specified in Chapter 3. Both systems should not be operated at the same time; however, there should be no more than a 2-second delay when changing from one system to the other. Outage of the uppermost red light shall cause the white obstruction light system to activate and operate in its specified "night" step intensity.

### 8.4 Control Device.

The light system is controlled by a device (photocell) that changes the light's intensity when the ambient light changes. The system should automatically change steps when, in the Northern Hemisphere, the northern sky illuminance reaching a north-facing vertical surface is as follows:

1. Twilight-to-Night. This should not occur before the illumination drops below 5 foot-candles (53.8 lux) but should occur before it drops below 2 foot-candles (21.5 lux).
2. Night-to-Day. The intensity changes listed in subparagraph 8.4 1 above should be reversed when changing from the night-to-day mode.

### 8.5 Antenna or Similar Appurtenance Light.

When a structure equipped with a dual lighting system is topped with an antenna or similar appurtenance exceeding 40 feet (12 m) in height, a medium-intensity flashing white (L-865) and a flashing red light (L-864) should be placed within 40 feet (12 m) from the tip of the appurtenance. The white light should operate during daytime and

10/8/2016

AC 70/7460-1L CHG 1

twilight and the red light during nighttime. These lights should flash simultaneously with the rest of the lighting system.

**8.6 Omission of Marking.**

When medium-intensity white obstruction lights are operated on structures 700 feet (213 m) AGL or less during daytime and twilight, other methods of marking may be omitted.

## CHAPTER 9. DUAL LIGHTING WITH RED/HIGH-INTENSITY FLASHING WHITE LIGHT SYSTEMS

### 9.1 Purpose.

This dual lighting system includes red lights (L-864) for nighttime and high-intensity flashing white lights (L-856) for daytime and twilight use. This lighting system may be used in lieu of operating a flashing white lighting system at night. There may be some populated areas where nighttime use of high-intensity lights may cause significant environmental concerns and complaints. Using the dual lighting system should reduce/mitigate those concerns. Recommendations on lighting structures can vary, depending on terrain features, weather patterns, geographic location, and number of structures.

### 9.2 Installation.

The light units should be installed as specified in Chapters 4, 5, and 7. The number of light levels needed is shown in Figures A-11 and A-12 in Appendix A.

### 9.3 Operation.

Lighting systems should be operated as specified in Chapters 4, 5, and 7. These systems should not be operated at simultaneously; however, there should be no more than a 2-second delay when changing from one system to the other. Outage of the uppermost red light shall cause the white obstruction lighting system to activate and operate in its specified "night" step intensity.

### 9.4 Control Device.

9.4.1 The light intensity is controlled by a device (photocell) that changes the light intensity when the ambient light changes.

9.4.2 The system should automatically change intensity steps when, in the Northern Hemisphere, the northern sky illuminance reaching a north-facing vertical surface is as follows:

1. Day-to-Twilight. This should not occur before the illumination drops to 60 foot-candles (645.8 lux) but should occur before it drops below 35 foot-candles (376.7 lux). The illuminance-sensing device should, if practical, face the northern sky in the Northern Hemisphere.
2. Twilight-to-Night. This should not occur before the illumination drops below 5 foot-candles (53.8 lux) but should occur before it drops below 2 foot-candles (21.5 lux).
3. Night-to-Day. The intensity changes listed in subparagraph 9.4.2 1 and 9.4.2.2 above should be reversed when changing from the night to day mode.

**9.5 Antenna or Similar Appurtenance Light.**

When a structure using this dual lighting system is topped with an antenna or similar appurtenance exceeding 40 feet (12 m) in height, a medium-intensity flashing white light (L-865) and a red flashing light (L-864) should be placed within 40 feet (12 m) from the tip of the appurtenance. (See Figure A-11 in Appendix A.) The white light should operate during daytime and twilight and the red light during nighttime. Structures with an appurtenance 40 feet (12 m) or less in height should be lit in accordance with Figure A-12 in Appendix A.

**9.6 Omission of Marking.**

When high-intensity white obstruction lights are operated during daytime and twilight, other methods of marking may be omitted.

## CHAPTER 10. MARKING AND LIGHTING OF CATENARY AND CATENARY SUPPORT STRUCTURES

### 10.1 Purpose.

This chapter provides guidelines for marking and lighting catenary and catenary support structures. For the purpose of marking and lighting, catenary is defined as suspended wires (or lines) kept at a defined mechanical tension by supporting structures. These wires may be either energized or non-energized and are used for transmission, distribution, or for other purposes, as defined. The recommended marking and lighting of both the structures and wires provides day and night conspicuity and assists pilots in identifying and avoiding catenary wires and associated support structures.

### 10.2 Catenary Marking Standards.

Catenary wires should be marked with lighted or unlighted marker balls to make the wires more visible to pilots approaching the hazard. High-voltage (69 kV or greater) transmission lines are typically mounted on large catenary support structures and should be fitted with lighted markers to provide sufficient conspicuity in both day and nighttime conditions. Transmission lines that are less than 69 kV are typically mounted on smaller catenary support structures and should be fitted with unlighted markers that provide daytime conspicuity.

#### 10.2.1 Catenary Markers.

Lighted markers provide increased nighttime conspicuity of high-voltage (69 kV or greater) transmission line catenary wires. However, since lighted markers require a minimum line load to operate, it should be noted that the lights may not be operational under certain transmission system conditions, such as power outages or line maintenance. These lighted markers should be used on transmission line catenary wires near airports, heliports, across rivers, canyons, lakes, areas of known risk to aviation, etc. The lighted markers should be manufacturer-certified as (1) recognizable from a minimum distance of 4,000 feet (1,219 m) under nighttime conditions, (2) minimum VFR conditions, or (3) have a minimum intensity of at least 32.5 candelas. The lighting unit should emit a steady-burning red light. Lighted markers should be used on the highest energized line. If the lighted markers are installed on a line other than the highest catenary wire, then the unlighted markers specified in Chapter 3 paragraph 3.5 should be used in addition to the lighted markers. The maximum sag distance between the line energizing the lighted markers and the highest catenary wire above the lighted markers should be no more than 25 feet (7.6 m), and it should not violate the sag requirements of the transmission line design. (See Figure A-5 in Appendix A.) Markers should be distinctively shaped, i.e., spherical or cylindrical, so that they are not mistaken for items used to convey other information. They should be visible to a pilot approaching from any direction. The area in the immediate vicinity of the supporting structure's base should be clear of all items and/or objects of natural growth that could interfere with the line-of-sight between a pilot and the structure's markers.

#### 10.2.1.1 Size and Color.

The diameter of the markers (lighted and unlighted) used on extensive catenary wires that cross canyons, lakes, rivers, etc., should not be less than 36 inches (91 cm). Preferred 20-inch (51-cm) markers, or smaller 12-inch (30.48-cm) markers, are permitted on less extensive catenary wires or on power lines below 50 feet (15 m) above the ground and within 1,500 feet (458 m) of an airport runway end. Each lighted marker should be a solid color; specifically aviation orange, white, or yellow. For transmission lines that are configured in a “double-bundled” arrangement and would typically require the larger 36-inch markers, the next smaller size marker may be used to prevent the marker from rubbing against the parallel transmission line.

#### 10.2.1.2 Installation.

1. Spacing. Lighted markers should be spaced equally along the wire at intervals of approximately 200 feet (61 m), or a fraction thereof. Intervals between markers should be less in critical areas near runway ends, i.e., 30 feet to 50 feet (10 m to 15 m). If the lighted markers are installed on a line other than the highest catenary wire, then unlighted markers specified in Chapter 3 paragraph 3.5 should be used in addition to the lighted markers. The maximum distance between the line energizing the lighted markers and the highest catenary wire above the line with the lighted markers can be no more than 25 feet (7.62 m), so long as the requirement does not violate the transmission line design’s droop requirement. The lighted markers may be installed alternately along each wire if the distance between adjacent markers meets the 200-foot (61m) spacing standard. This method allows the weight and wind loading factors to be distributed. (See Figure A-5 in Appendix A.)
2. Pattern. An alternating color scheme provides the most conspicuity against all backgrounds. Lighted and unlighted markers should be installed by alternating solid-colored markers of aviation orange, white, and yellow. Normally, an orange marker is placed at each end of a line and the spacing is adjusted [not to exceed 200 feet (61 m)] to accommodate the rest of the markers. When less than four markers are used, they should all be aviation orange. (See Figure A-5 in Appendix A.)
3. Wire Sag. Wire sag or droop will occur due to temperature, wire weight, wind, etc. Twenty-five (25) feet (7.62 m) is the maximum allowable distance between the highest wire installed with marker balls and the highest wire without marker balls, and it should not violate the transmission line design’s sag requirements. (See Figure A-5 in Appendix A.)

4. Adjacent Lines. Catenary crossings with multiple transmission lines require appropriate markers when the adjacent catenary structure's outside lines are greater than 200 ft (61 m) away from the center of the primary structure. (See Figure A-2 in Appendix A.) If the outside lines of the adjacent catenary structure are within 200 ft (61m) or less from the center of the primary structure, markers are not required on the adjacent lines. (See Figure A-3 in Appendix A.)

### 10.3 Catenary Lighting Standards.

When using medium-intensity flashing white (L-866), high-intensity flashing white (L-857), dual medium-intensity (L-866/L-885), or dual high-intensity (L-857/L-885) lighting systems operated 24 hours a day, other marking of the support structure is not necessary.

1. Levels. A system of three levels of sequentially flashing light units should be installed on each supporting structure or adjacent terrain. One level should be installed at the top of the structure, one at the height of the lowest point in the catenary wire, and one level approximately midway between the other two light levels. In general, the middle level should be at least 50 feet (15 m) from the other two levels. The middle light unit may be omitted when the distance between the top and the bottom light levels is less than 100 feet (30 m).
  - a. Top Levels. One or more lights should be installed at the top of the structure to provide 360-degree coverage, ensuring an unobstructed view. If the installation presents a potential danger to maintenance personnel or inhibits lightning protection, the top level of lights may be mounted as low as 20 feet (6 m) below the highest point of the structure.
  - b. Horizontal Coverage. The light units at the middle and bottom levels should be installed to provide a minimum of 180-degree coverage, centered perpendicularly to the flyway. When a catenary crossing is situated near a bend in a river, canyon, etc., or is not perpendicular to the flyway, the horizontal beam should be directed to provide the most effective light coverage to warn pilots approaching from either direction of the catenary wires.
  - c. Variation. The vertical and horizontal arrangements of the lights may be subject to the structural limits of the towers and/or adjacent terrain. A tolerance of 20 percent from uniform spacing of the bottom and middle light is allowed. If the base of the supporting structure(s) is higher than the lowest point in the catenary, such as a canyon crossing, one or more lights should be installed on the adjacent terrain at the level of the lowest point in the span. These lights should be installed on the structure or terrain at the height of the lowest point in the catenary. (See Figure A-4 in Appendix A).
2. Flash Sequence and Duration. The flash sequence for catenary wire support structures should be middle, top, and bottom with all lights on the same level

flashing simultaneously. This pattern of flashes is designed to present a unique signal that pilots should interpret as a warning that catenary wires are in the vicinity of the lights. The time intervals for the sequence and duration of the flash pattern are outlined in FAA AC 150/5345-43, Specification for Obstruction Lighting Equipment. If Light-Emitting Diode (LED) obstruction light fixtures are used to light catenary wires, a slower flash rate of 40 fpm is allowed to enable each light fixture to make a well-defined flash so that the middle-top-bottom flash pattern will be easily recognized. Field experience has shown that LED fixtures flashing at 60 fpm, as specified in AC 150/5345-43, do not have enough time to turn off in between flash cycles, and appear as if they are steady-burning. Slowing the flash rate to 40 fpm promotes a cleaner, crisper presentation for the pilot to recognize. In the event there are only two levels of lights, the lights should simply alternate at the same flash rate/duration as if there were three lights.

3. Synchronization. Although not required, it is preferred that the corresponding light levels on associated supporting towers of a catenary crossing flash simultaneously.
4. Structures 700 feet (213 m) AGL or Less. When medium-intensity white lights (L-866) are operated 24 hours a day or when a dual red/medium-intensity light system (L-866 daytime and twilight/L-885 nighttime) is used, marking can be omitted. When using a medium-intensity white light (L-866) or a flashing red light (L-885) during twilight or nighttime only, paint should be used for daytime marking.
5. Structures Exceeding 700 Feet (213 m) AGL. When high-intensity white lights (L-857) are operated 24 hours a day or when a dual red/high-intensity system (L-857 daytime and twilight/L-885 nighttime) is used, marking can be omitted. This system should not be used on structures 700 feet (153 m) or less unless an FAA aeronautical study shows otherwise. When a flashing red obstruction light (L-885), a medium-intensity (L-866) flashing white lighting system, or a high-intensity white lighting system (L-857) is used for nighttime and twilight only, paint should be used for daytime marking.

#### 10.4 Control Device.

The light intensity is controlled by a device (photocell) that changes the intensity when the ambient light changes. The lighting system should automatically change intensity steps when, in the Northern Hemisphere, the northern sky illuminance reaching a north-facing vertical surface is as follows:

1. Day-to-Twilight (L-857 System). This should not occur before the illumination drops to 60 foot-candles (645.8 lux) but should occur before it drops below 35 foot-candles (376.7 lux). The illuminance-sensing device should, if practical, face the northern sky in the Northern Hemisphere.

10/8/2016

AC 70/7460-1L CHG I

2. Twilight-to-Night (L-857 System). This should not occur before the illumination drops below 5 foot-candles (53.8 lux) but should occur before it drops below 2 foot-candles (21.5 lux).
3. Night-to-Day. The intensity changes listed in subparagraph 10.4.1 and 10.4.2 above should be reversed when changing from the night-to-day mode.
4. Day-to-Night (L-866 or L-885/L-866). This should not occur before the illumination drops below 5 foot-candles (53.8 lux) but should occur before it drops below 2 foot-candles (21.5 lux).
5. Night-to-Day. The intensity changes listed in subparagraph 10.4.4 above should be reversed when changing from the night-to-day mode.
6. Red Obstruction (L-885). The red lights should not turn on until the illumination drops below 60 foot-candles (645.8 lux) but should occur before reaching a level of 35 foot-candles (367.7 lux). Lights should not turn off before the illumination rises above 35 foot-candles (367.7 lux) but should occur before reaching 60 foot-candles (645.8 lux).

#### 10.5 **Area Surrounding Catenary Wire Support Structures.**

The area in the immediate vicinity of the supporting structure's base should be clear of all items and/or objects of natural growth that could interfere with the line-of-sight between a pilot and the structure's lights.

#### 10.6 **Three or More Catenary Wire Support Structures.**

Where a catenary wire crossing requires three or more supporting structures, the inner structures should be equipped with enough light units per level to provide full 360-degree coverage across rivers, canyons, lakes, areas of known risk to aviation, etc.

#### 10.7 **Adjacent Catenary Structures.**

Where an adjacent catenary wire crossing requires three or more supporting structures, the inner structures should be equipped with enough light units per level to provide full 360-degree coverage across rivers, canyons, lakes, areas of known risk to aviation, etc.

## CHAPTER 11. MARKING AND LIGHTING MOORED BALLOONS AND KITES

### 11.1 Purpose.

The purpose of marking and lighting moored balloons, kites, and their cables or mooring lines is to indicate the presence and general definition of these objects to pilots when approaching from **any** direction.

### 11.2 Standards.

These marking and lighting standards pertain to all moored balloons and kites that require marking and lighting under 14 CFR Part 101.

### 11.3 Marking.

Flag markers should be used on mooring lines to warn pilots of their presence during daylight hours.

1. Display. Markers should be displayed at no more than 50-foot (15-m) intervals and should be visible for at least 1 statute mile.
2. Shape. Markers should be rectangular in shape and not less than 2 feet (0.6 m) on a side. Stiffeners should be used in the borders to expose a large area and to prevent drooping in calm wind or wrapping around the cable.
3. Color Patterns. One of the following color patterns should be used:
  - a. Solid Color. Aviation orange.
  - b. Orange and White. Two triangular sections, one of aviation orange and the other white, combined to form a rectangle.
  - c. Refer to paragraph 12.2 Paint Standard.

### 11.4 Purpose.

Flashing obstruction lights should be used on moored balloons or kites and their mooring lines to warn pilots of their presence during the hours between sunset and sunrise and during periods of reduced visibility. These lights may be operated 24 hours a day.

1. Systems. Flashing red (L-864) or white lights (L-865) may be used to light moored balloons or kites. High-intensity lights (L-856) are not recommended.
2. Display. Flashing lights should be displayed on the top, nose section, tail section, and on the tether cable approximately 15 feet (4.6 m) below the craft to define the extremes of size and shape. Additional lights should be equally spaced along the cable's overall length for each 350 feet (107 m), or fraction thereof.

10/8/2016

AC 70/7460-1L CHG I

3. Exceptions. When the requirements of this paragraph cannot be met, floodlights may be used.

#### 11.5 **Operational Characteristics.**

The light intensity is controlled by a device (photocell) that changes the intensity when the ambient light changes. The system should automatically turn the lights on and change intensities as ambient light conditions change. The reverse order should apply in changing from nighttime-to-daytime operation. The lights should flash simultaneously.

## CHAPTER 12. MARKING AND LIGHTING EQUIPMENT AND INFORMATION

### 12.1 Purpose.

This chapter lists documents relating to obstruction marking and lighting systems and where they may be obtained.

### 12.2 Paint Standard.

12.2.1 Paint and aviation colors/gloss, referred to in this AC, with the exception of wind turbines, should conform to Federal Standard FED-STD-595. Wind turbines shall meet the standards in Chapter 13 paragraph 13.4 of this AC.

12.2.2 Approved colors shall be formulated without using lead, zinc chromate, or other heavy metals to match international aviation orange, white, and yellow, as listed in Table 12-1. All coatings shall be manufactured and labeled to meet Federal Environmental Protection Act Volatile Organic Compound(s) guidelines, including the National Volatile Organic Compound Emission Standards for architectural coatings.

1. Exterior Acrylic Waterborne Paint. Coatings should be ready-mixed, 100 percent acrylic, exterior latex formulated for application directly to galvanized surfaces. Ferrous iron and steel or nongalvanized surfaces shall be primed with a manufacturer-recommended primer compatible with the finish coat.
2. Exterior Solvent-Borne Alkyd-Based Paint. Coatings should be ready-mixed, alkyd-based, exterior enamel for application directly to nongalvanized surfaces, such as ferrous iron and steel. Galvanized surfaces shall be primed with a manufacturer-recommended primer compatible with the finish coat.

**Table 12-1. Federal Standard FED-STD-595**

Color	Number
Orange	12197
White	17875
Yellow	13538

10/8/2016

AC 70/7460-1L CHG I

**12.3 Availability of Specifications.**

Federal specifications describing the technical characteristics of various paints and their application techniques may be obtained from:

GSA - Specification Branch  
301 7<sup>th</sup> Street NW  
Room 6109  
Washington, DC 20407  
Telephone: (202) 619-8925

URL: <https://gsafas.secure.force.com>

**12.4 Lights and Associated Equipment.**

The lighting equipment referred to in this AC should conform to the latest edition of one of the following specifications, as applicable:

**1. Obstruction Lighting Equipment.**

- a. AC 150/5345-43, *FAA Specification for Obstruction Lighting Equipment.*
- b. Military Specifications MIL-L-6273, *Light, Navigational, Beacon, Obstacle or Code, Type G-1.*
- c. Military Specifications MIL-L-7830, *Light Assembly, Markers, Aircraft Obstruction.*

**2. Certified Equipment.**

- a. AC 150/5345-53, *Airport Lighting Certification Program*, lists the manufacturers that have demonstrated compliance with the specification requirements of AC 150/5345-43.
- b. Other manufacturers' equipment may be used provided the equipment meets the specification requirements of AC 150/5345-43.

**3. Airport Lighting Installation and Maintenance.**

AC 150/5340-30, *Design and Installation Details for Airport Visual Aids.*

**4. Vehicles.**

- a. AC 150/5210-5, *Painting, Marking, and Lighting of Vehicles Used on an Airport*, contains provisions for marking vehicles principally used on airports.
- b. FAA Facilities. Obstruction marking for FAA facilities shall conform to FAA Drawing Number D-5480, referenced in FAA Standard FAA-STD-003, *Paint Systems for Structures.*

10/8/2016

AC 70/7460-1L CHG 1

10/8/2016

AC 70/7460-1L CHG I

**12.5 Availability.**

The standards and specifications listed above may be obtained from:

1. Military Specifications: Copies of Military standards and specification may be obtained from:

DAP/DODSSP  
Building 4, Section D.  
700 Robbins Ave.  
Philadelphia, PA 19111-5094  
Tel; (215)697-2179  
FAX: (215)697-1460  
URL: <https://acc.dau.mil/DoDSSP>

2. FAA Advisory Circulars: Copies of FAA ACs may be obtained online at:

[http://www.faa.gov/airports/resources/advisory\\_circulars/](http://www.faa.gov/airports/resources/advisory_circulars/)

## CHAPTER 13. MARKING AND LIGHTING WIND TURBINES

### 13.1 Purpose.

This chapter provides guidelines for the marking and lighting of wind turbine farms. These guidelines are applicable to single wind turbines and wind turbine farms. For the purpose of this AC, wind turbine farms are defined as a wind turbine development that contains more than three turbines. The recommended marking and lighting of these structures is intended to provide day and night conspicuity and to assist pilots in identifying and avoiding these obstacles.

### 13.2 General Standards.

The development of wind turbine farms is a very dynamic process, which changes based on the terrain. Each wind turbine farm is unique. Therefore, it is important that a lighting plan be developed that provides sufficient safety for air traffic. Proximity to airports and VFR routes, extreme terrain where heights may vary widely, and local flight activity should be considered when developing a lighting plan. The following guidelines are recommended for wind turbines.

### 13.3 Wind Turbine Configurations.

Prior to marking and lighting the wind turbine farm, the configuration and the terrain of the wind turbine farm should be determined. The following is a description of the most common configurations.

1. Linear—wind turbine farms in a direct, consecutive configuration, often located along a ridge line, the face of a mountain, or along borders of a mesa or field. The line may be ragged in shape or be periodically broken, and may vary in size from just a few turbines to many turbines forming a line that is several miles long.
2. Cluster—wind turbine farms arranged in circular configuration. A cluster is typically characterized by having a pronounced perimeter, with various turbines placed inside the circle at various, erratic distances throughout the center of the circle.
3. Grid—wind turbine farms arranged in a geographical shape, such as a square or a rectangle, in which the turbines are placed a consistent distance from each other in rows, giving the appearance that they are part of a square pattern.

### 13.4 Marking Standards.

- 13.4.1 Wind turbines should be painted white or light grey, as these colors have been shown to be the most effective method for providing daytime conspicuity. Wind turbine manufacturers typically use a European color-matching system that is referred to as the RAL Color Standard. Unlike the Federal Specification 595, the RAL system used a four-digit code to identify a specific color of paint. For example, an RAL 9xxx code would represent a color in the white/black range, and an RAL 6xxx code would be in

the grey range. Most wind turbines currently produced are painted light grey, RAL 7035, which is the darkest acceptable off-white paint allowed. The preferred white paint color is pure white, RAL 9010, or an equivalent. Any shade of white between these two RAL specifications is strongly recommended. See Table 13-1.

**Table 13-1. Wind Turbine Paint Standard Colors**

Color	RAL Number
Pure White	9010
Light Grey (Darkest Acceptable)	7035

- 13.4.2 In geographic areas that experience lengthy periods of snow cover (i.e., Alaska), and where it is deemed necessary, the mast of the turbine may be painted alternating bands of aviation orange and white to provide additional contrast against the snow. The nacelle and blades of the turbine shall remain solid white or light grey. (See Figure A-24 in Appendix A.)
- 13.4.3 Blades or blade tips shall not be painted or manufactured in colors to camouflage wind turbines with the surrounding terrain. (See Figure A-25 in Appendix A.)
- 13.4.4 For turbines that are constructed with lattice-type masts, the mast structure shall be painted with alternating bands of aviation orange and white, in accordance with Chapter 3. The turbine's nacelle and blades shall remain solid white or light grey.
- 13.5 **Lighting Standards.**
- 13.5.1 Nighttime wind turbine obstruction lighting should consist of FAA L-864 aviation red flashing, strobe, or pulsed obstruction lights. Studies have shown that red lights provide the most conspicuity to pilots.
- 13.5.2 In most cases, not all wind turbine units within a wind turbine farm need to be lighted. Obstruction lights should be placed along the perimeter of the wind turbine farm so that there are no unlit separations or gaps more than 1/2 statute mile (sm) (804 m). Wind turbines within a grid or cluster should not have an unlighted separation or gap of more than 1 sm (1.6 km) across the interior of a grid or cluster of turbines. (See Figure A-26 in Appendix A.)
- 13.5.3 Any array of flashing, strobe, or pulsed obstruction lighting should be synchronized to flash simultaneously (within  $\pm 1/20$  second (0.05 second) of each other).

10/8/2016

AC 70/7460-1L CHG 1

- 13.5.4 Should any lighting fixture or the lighting system synchronization fail, a lighting outage report should be prepared in accordance with Chapter 2 paragraph 2.4.
- 13.5.5 Light fixtures should be placed as high as possible on the turbine nacelle so they are visible by a pilot approaching from **any** direction. (See Figure A-23 in Appendix A.)
- 13.5.6 Daytime lighting of wind turbines is not required. See paragraph 13.4 for daytime marking requirements.
- 13.5.7 When developing lighting plans for wind turbine farms, it is best to use an aerial-view map or diagram of the turbine farm to plan the location of the required lighting. This way, a certain degree of strategy plan can be applied, which, in many instances, results in a minimal number of lights.
- 13.5.8 For linear turbine configurations, lights should be placed on the turbine positioned at each end of a line or string of turbines. Lights should also be placed along the line of turbines so that there is no more than a 1/2-sm (2,640-foot (805-m)) gap between the lighted turbines. In the event the gap between lights on the last segment of turbines is significantly short, it may be appropriate to move the lights on the turbine string back toward the starting point to present a well-balanced string of lights. High concentrations of lights should be avoided. (See Figure A-26 in Appendix A.)
- 13.5.9 For cluster turbine configurations, a turbine should be selected as a starting point along the outer perimeter of the cluster. The turbine should be lighted, and a light should be placed on the next turbine along the perimeter of the cluster (clockwise or counterclockwise) so that no more than a 1/2-sm (2,640-foot (805-m)) gap exists. This pattern should be continued around the perimeter of the cluster until the starting point is reached. In the event that the gap between the lights on the last segment of turbines is significantly short, it may be appropriate to move the lights along the perimeter of the cluster back toward the starting point to present a well-balanced perimeter of lights. If the distance across the cluster is greater than 1 sm, additional lights should be placed on other turbines throughout the center of the cluster so that there are no unlighted gaps across the cluster. (See Figure A-26 in Appendix A.) (Example: If the distance across a wind turbine farm is 1.8 sm (2.9 km), a light should be placed on a turbine at approximately every 0.9 sm (1.4 km).
- 13.5.10 For grid turbine configurations, turbines on the corners of the farm should be lit, and then use the same concept for selecting which turbines should be lit as outlined in paragraph 13.5.9.
- 13.5.11 Special Considerations.
- 13.5.11.1 Occasionally, some wind turbines may be located apart from the main group of turbines. If one or two wind turbines protrude from the general limits of the turbine farm, these turbines should be lighted in addition to those identified in the main group.

- 13.5.11.2 Additional lighting may be necessary on wind turbines located on the interior of a cluster or grid configuration whose height is 100 feet (30 m) or higher than the other wind turbines located within the farm.

### 13.6 Wind Turbines Above 499 Feet.

- 13.6.1 For wind turbines with a rotor tip height, while at top dead center, greater than 499 feet (153 m) AGL, but less than 699 feet AGL, the turbines should be lighted in accordance with paragraph 13.5. In addition to these requirements, the top of the turbine's nacelle should be equipped with a second L-864 flashing red light. (See Figure A-23 in Appendix A.)
- 13.6.2 The two obstruction lights should be arranged horizontally, positioned on opposite sides of the nacelle, visible to a pilot approaching from **any** direction, and flash simultaneously. (See Figure A-23 in Appendix A.) This lighting configuration ensures the turbines in this size category are always lighted.
- 13.6.3 In the event one of the two obstruction lights fails, no light failure notification is required; however, the light should be restored to service as soon as possible.
- 13.6.4 All turbines within this size category should be illuminated, regardless of their location within a wind turbine farm, and should be configured to flash simultaneously with the other turbines in the same farm. This requirement ensures the pilots operating at 500 feet AGL have sufficient warning that a wind turbine obstruction may be within their flight path.

### 13.7 Wind Turbines at or Above 699 Feet (213 m).

- 13.7.1 For wind turbines with a rotor tip height, while at top dead center, at or above 699 feet (213 m) AGL, additional lighting is required. All wind turbines of this size, regardless of number or configuration should be lighted.
- 13.7.2 In addition to the lighting identified in paragraph 13.6, an additional level of lights is required at a point midway between the top of the nacelle and ground level. The location of the additional lights may be adjusted as necessary to allow mounting at a seam within the turbine's mast.
- 13.7.2.1 The additional level of lights should consist of a minimum of three L-810 flashing red lights configured to flash in unison with the two L-864 red flashing lights located at the top of the nacelle at a rate of 30 fpm ( $\pm 3$  fpm). The L-810s should be spaced at equal distances around the mast. The light should be installed to ensure a pilot approaching from **any** direction has an

unobstructed view of at least two of the lights. (See Figure A-23 in Appendix A.)

- 13.7.2.2 For wind turbine structures with a mast diameter greater than 20 feet (6 m), four L-810 red lights should be used.
- 13.7.2.3 All turbines within this size category should be illuminated, regardless of their location within a turbine farm, and should be configured to flash simultaneously with the other turbines in the same farm. This requirement ensures the pilots operating at 500 feet AGL have sufficient warning that a wind turbine obstruction may be within their flight path.

### 13.8 **Lighting of Wind Turbines During Construction Phase.**

To ensure proper conspicuity of turbines at night during construction, all turbines should be lighted with temporary lighting once they reach a height of 200 feet (61 m) or greater until the permanent lighting configuration is turned on. As the structure's height continues to increase, the temporary lighting should be relocated to the structure's uppermost height. The temporary lighting may be turned off for short periods if they interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An L-810 steady-burning red light shall be used to light the structure during the construction phase, if the permanent L-864 flashing-red lights are not in place. If power is not available, turbines should be lighted with a self-contained, solar-powered, LED, steady-burning red light that meets the photometric requirements of an FAA L-810 lighting system. The lights should be positioned to ensure a pilot has an unobstructed view of at least one light at each level. Using a NOTAM (D) to justify not lighting the turbines until the entire project is completed is prohibited.

### 13.9 **Lighting and Marking of Airborne Wind Turbines.**

The FAA is currently conducting research to develop special lighting and marking standards for Airborne Wind Turbines. Sponsors should consult with their respective FAA OE Specialists for updated information.

### 13.10 **Lighting and Marking of Offshore Wind Turbines.**

FAA lighting and marking recommendations apply to structures out to 12 NM from the coast of the United States, which is the extent of the territorial seas. The Bureau of Ocean Energy Management (BOEM), which maintains jurisdiction of land leases beyond the 12 NM, may also require compliance with the marking and/or lighting recommendations identified in this AC.

## CHAPTER 14. AIRCRAFT DETECTION LIGHTING SYSTEMS

### 14.1 Purpose.

Aircraft Detection Lighting Systems (ADLS) are sensor-based systems designed to detect aircraft as they approach an obstruction or group of obstructions; these systems automatically activate the appropriate obstruction lights until they are no longer needed by the aircraft. This technology reduces the impact of nighttime lighting on nearby communities and migratory birds and extends the life expectancy of obstruction lights.

### 14.2 General Standards.

14.2.1 The system should be designed with sufficient sensors to provide complete detection coverage for aircraft that enter a three-dimensional volume of airspace, or coverage area, around the obstruction(s) (see Figure A-27 in Appendix A), as follows:

1. Horizontal detection coverage should provide for obstruction lighting to be activated and illuminated prior to aircraft penetrating the perimeter of the volume, which is a minimum of 3 NM (5.5 km) away from the obstruction or the perimeter of a group of obstructions.
2. Vertical detection coverage should provide for obstruction lighting to be activated and illuminated prior to aircraft penetrating the volume, which extends from the ground up to 1,000 feet (304 m) above the highest part of the obstruction or group of obstructions, for all areas within the 3 NM (5.5 km) perimeter defined in subparagraph 14.2.1.1 above.
3. In some circumstances, it may not be possible to meet the volume area defined above because the terrain may mask the detection signal from acquiring an aircraft target within the 3 NM (5.5 km) perimeter. In these cases, the sponsor should identify these areas in their application to the FAA for further evaluation.
4. In some situations, lighting not controlled by the ADLS may be required when the 3 NM (5.5 km) perimeter is not achievable to ensure pilots have sufficient warning before approaching the obstructions.

14.2.2 The ADLS should activate the obstruction lighting system in sufficient time to allow the lights to illuminate and synchronize to flash simultaneously prior to an aircraft penetrating the volume defined above. The lights should remain on for a specific time period, as follows:

1. For ADLSs capable of continuously monitoring aircraft while they are within the 3 NM/1,000 foot (5.5 km/304 m) volume, the obstruction lights should stay on until the aircraft exits the volume. In the event detection of the aircraft is lost while being continuously monitored within the 3 NM/1,000 foot (5.5 km/304 m) volume, the ADLS should initiate a 30-minute timer and keep the obstruction lights on until the timer expires. This should provide the untracked aircraft sufficient time to exit the area and give the ADLS time to reset.

10/8/2016

AC 70/7460-1L CHG 1

2. For ADLSs without the capability of monitoring aircraft targets in the 3 nm/1,000 foot (5.5 km/304 m) volume, the obstruction lights should stay on for a preset amount of time, calculated as follows:
  - a. For single obstructions: 7 minutes.
  - b. For groups of obstructions: (the widest dimension in nautical miles + 6) x 90 seconds equals the number of seconds the light(s) should remain on.
- 14.2.3 Acceptance of ADLS applications will be on a case-by-case basis and may be modified, adjusted, or denied based on proximity of the obstruction or group of obstructions to airports, low-altitude flight routes, military training areas, or other areas of frequent flight activity. It may be appropriate to keep certain obstructions closest to these known activity areas illuminated during the nighttime hours, while the remainder of the group's obstruction lighting is controlled by the ADLS.
- 14.2.4 Project sponsors requesting ADLS use should include in their application maps or diagrams indicating the location of the proposed sensors, the range of each sensor, and a visual indication showing how each sensor's detection arc provides the full horizontal and vertical coverage, as required under paragraph 14.2.1. In the event that detection coverage is not 100 percent due to terrain masking, project sponsors should provide multiple maps or diagrams that indicate coverage at the affected altitudes. A sample diagram is shown in Figure A-27 in Appendix A.
- 14.2.5 Types of ADLS Component or System Failure Events.
  1. In the event of an ADLS component or system failure, the ADLS should automatically turn on all the obstruction lighting and operate in accordance with this AC as if it was not controlled by an ADLS. The obstruction lighting must remain in this state until the ADLS and its components are restored.
  2. In the event that an ADLS component failure occurs and an individual obstruction light cannot be controlled by the ADLS, but the rest of the ADLS is functional, that particular obstruction light should automatically turn on and operate in accordance with this AC as if it was not controlled by an ADLS, and the remaining obstruction lights can continue to be controlled by the ADLS. The obstruction lighting will remain in this state until the ADLS and its components are restored.
  3. Complete light failure should be addressed in accordance with Chapter 2 paragraph 2.4.
- 14.2.6 The ADLS's communication and operational status shall be checked at least once every 24 hours to ensure both are operational.
- 14.2.7 The ADLS should be able to detect an aircraft with a cross-sectional area of 1 square meter or more within the volume, as required in subparagraphs 14.2.1 1 and 14.2.1 2.

10/8/2016

AC 70/7460-1L CHG 1

14.2.8 Each ADLS installation should maintain a log of activity data for a period of no less than the previous 15 days. This data should include, but not be limited to, the date, time, duration of all system activations/deactivations, track of aircraft activity, maintenance issues, system errors, communication and operational issues, lighting outages/issues, etc.

14.2.9 Operational Frequencies.

1. Unlicensed devices (including FCC Part 15) devices cannot be used for this type of system.
2. Any frequency used for the operation of ADLS must be individually licensed through the FCC.

14.3 **Voice/Audio Option.**

14.3.1 ADLS may include an optional voice/audio feature that transmits a low-power, audible warning message to provide pilots additional information on the obstruction they are approaching.

14.3.2 The audible transmission should be in accordance with appropriate FAA and FCC regulations.

14.3.3 The audible transmission should be over an aviation frequency licensed by the FCC and authorized under the Code of Federal Regulations Title 47- Part 87.483 (excluding 121.5 MHz).

**Note:** Using air traffic control frequencies in the 117.975-MHz to 137-MHz frequency band is prohibited for this operation.

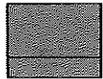
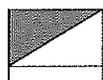
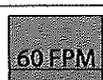
14.3.4 The audible message should consist of three quick tones, followed by a verbal message that describes the type of obstruction the system is protecting. Appropriate terms to be used include tower(s), wind turbine(s), or power line(s).

14.3.5 The audible message should be repeated three times or until the system determines the aircraft is no longer within the audible warning area defined in the following paragraph.

14.3.6 The audible message should be considered as a secondary, final warning and should be activated when an aircraft is within 1/2 NM (926 m) horizontally and 500 feet (152 m) vertically of the obstruction. The use of, or variation to, the audible warning zone may occur, depending on site-specific conditions or obstruction types.

**APPENDIX A: Specifications for Obstruction Lighting Equipment Classification**

**Table A-1. FAA-Approved Obstruction Lighting Fixtures**

Type	Symbol	Description
L-810		Steady-Burning - RED Single Obstruction Light
L-810		Steady-Burning - RED Double Obstruction Light
L-856		High-Intensity Flashing - WHITE Obstruction Light (40 FPM)
L-857		High-Intensity Flashing - WHITE Catenary Light (60 FPM)
L-864		Medium-Intensity Flashing - RED Obstruction Light (20-40 FPM)
L-865		Medium-Intensity Flashing - WHITE Obstruction Light (40-FPM)
L-866		Medium-Intensity Flashing - WHITE Catenary Light (60-FPM)
L-864/L-865		Medium-Intensity Flashing Dual - RED / WHITE Obstruction Light (20-40 FPM) Obstruction Light (40 FPM)
L-885		Flashing Obstruction Light - RED Obstruction Light (60 FPM)

FPM = Flashes Per Minute

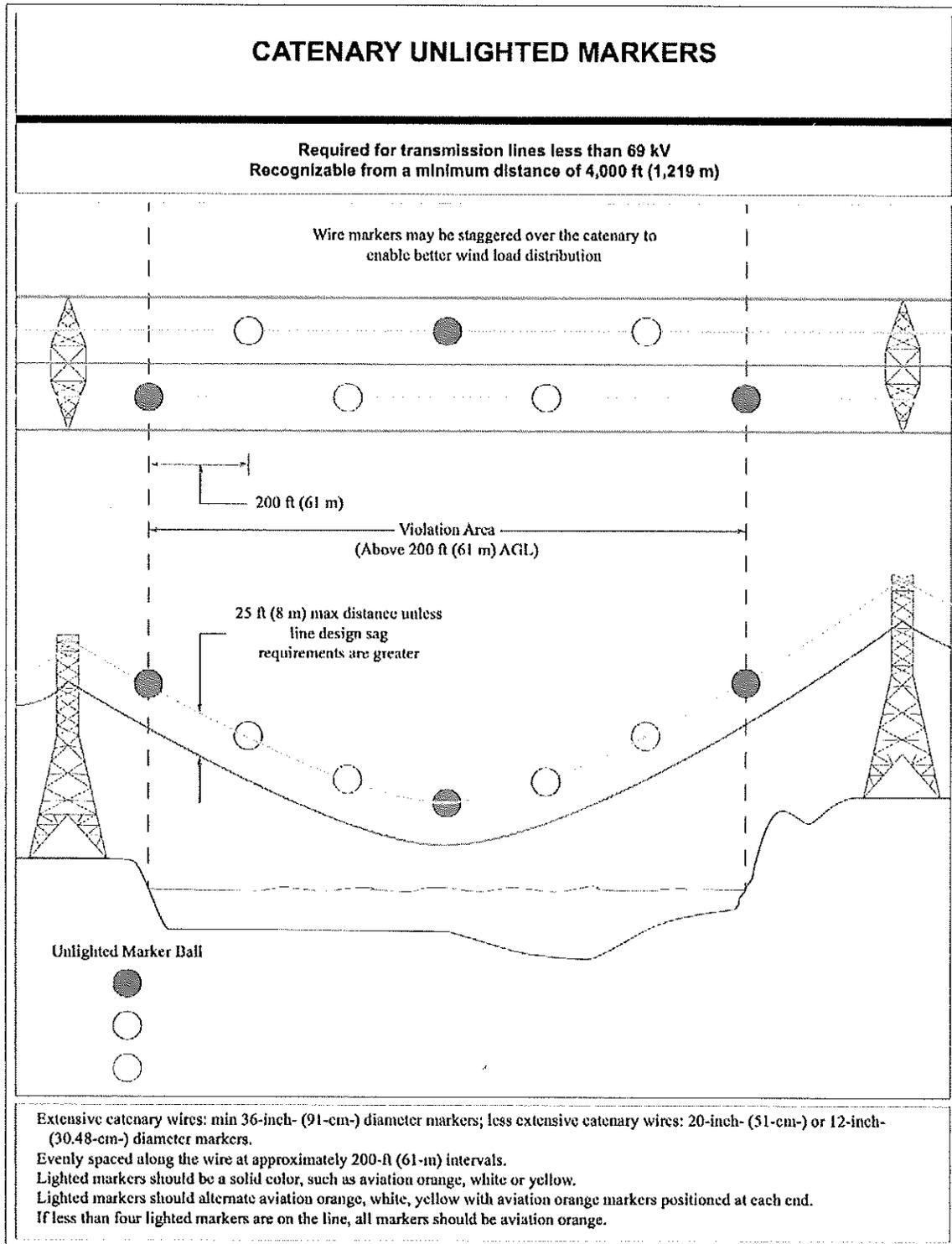


Figure A-2. Catenary Unlighted Markers

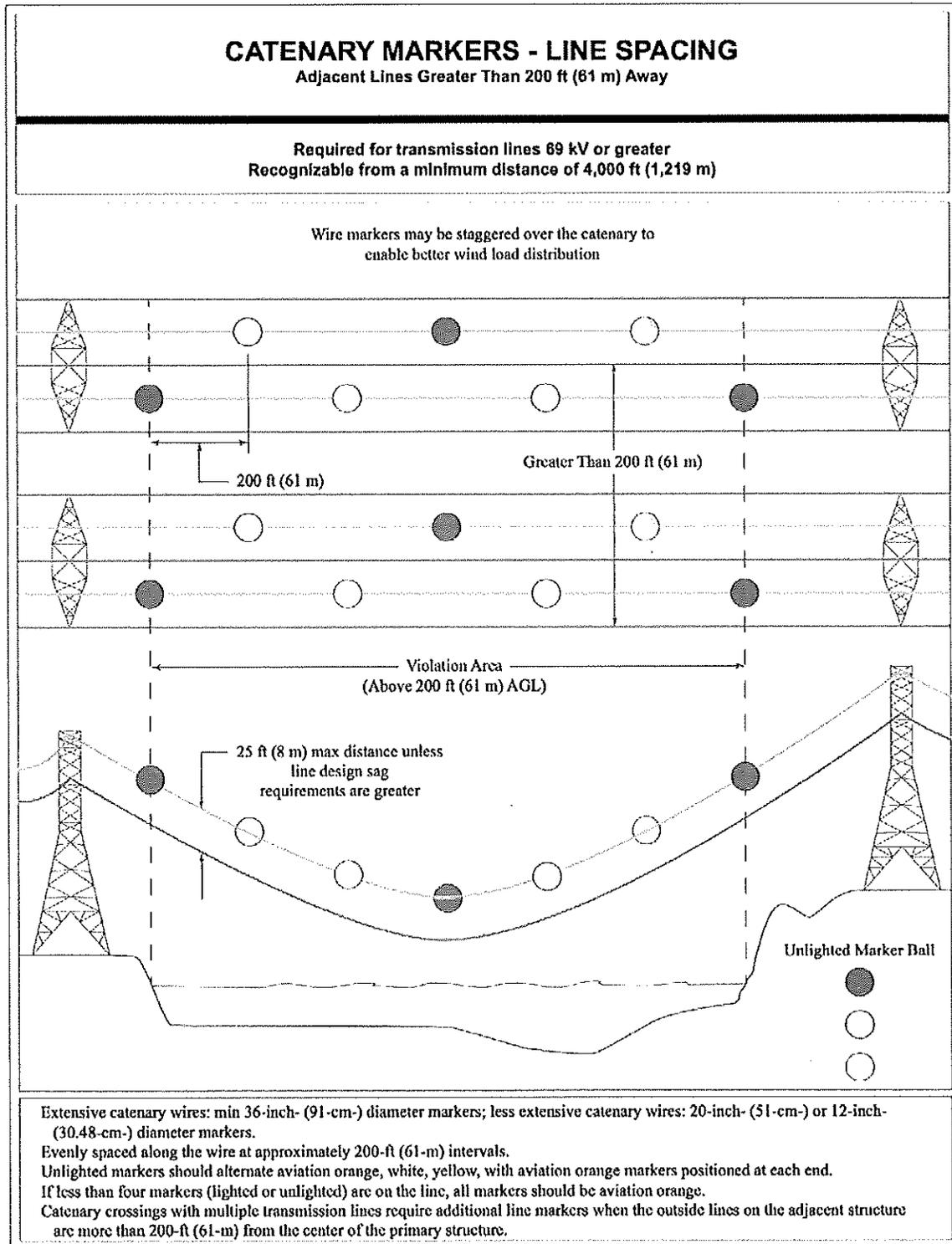


Figure A-3. Catenary Markers - Line Spacing (Adjacent Lines Greater Than 200 ft (61 m) Away)

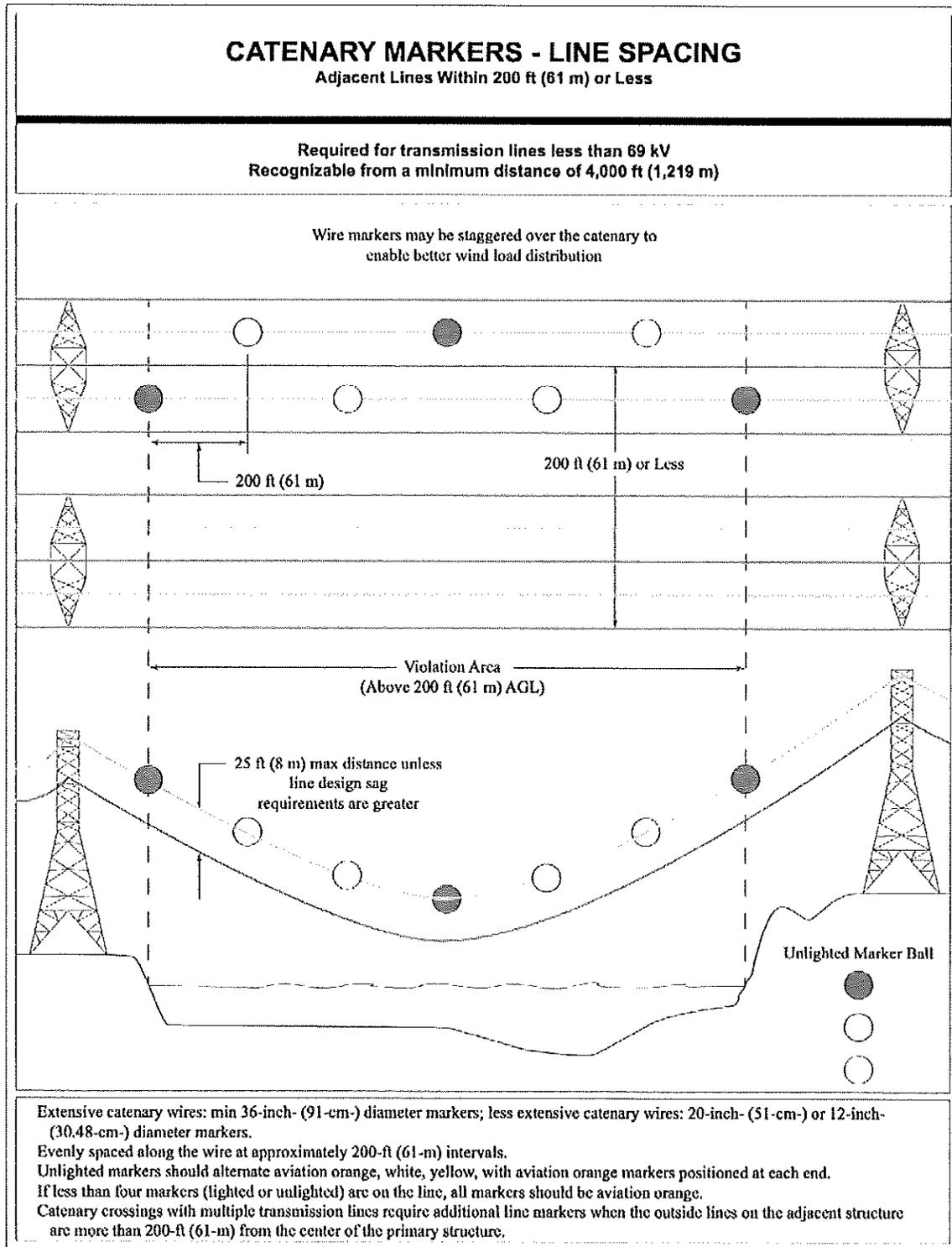


Figure A-4. Catenary Markers – Line Spacing (Adjacent Lines Within 200 ft (61 m) or Less

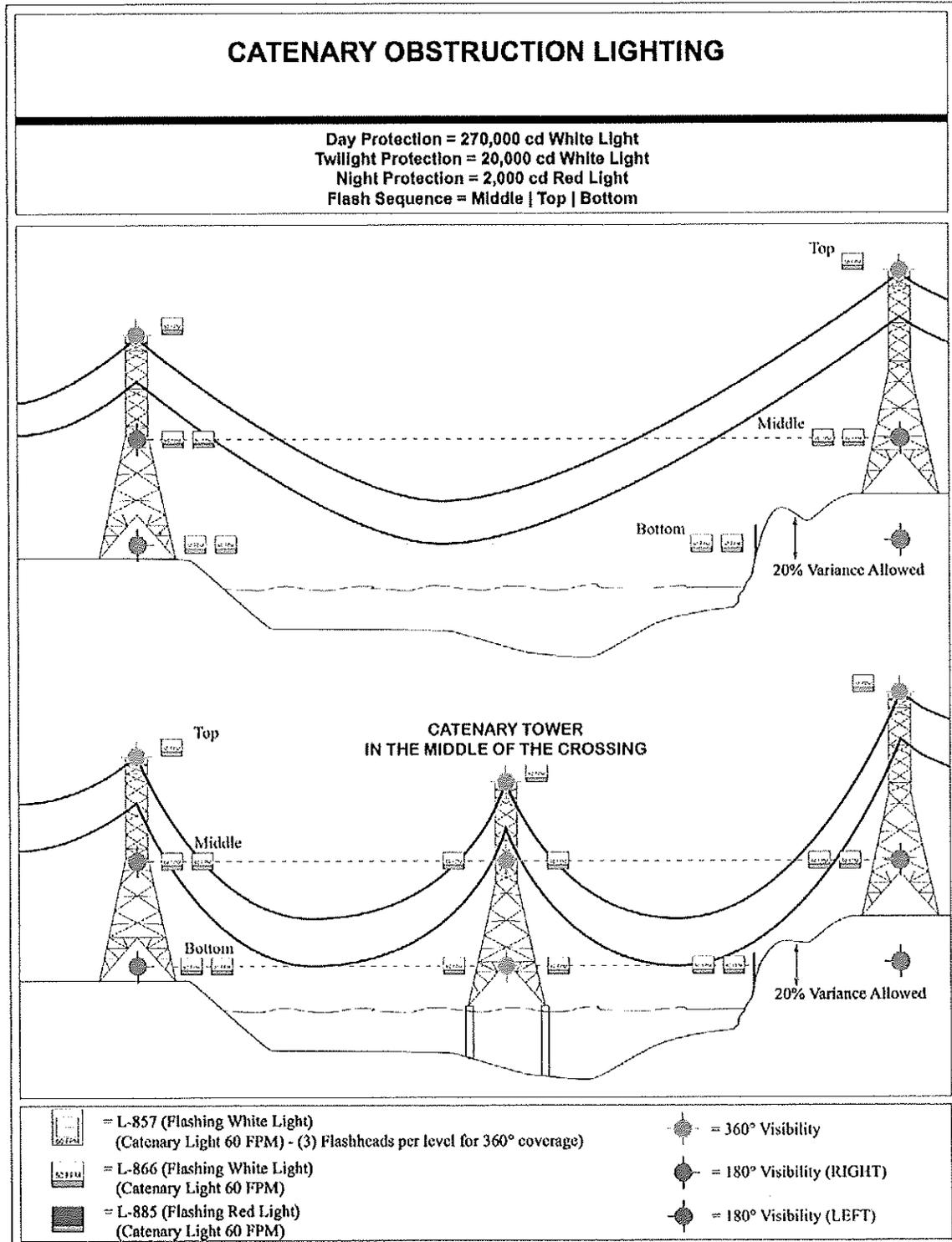


Figure A-5. Catenary Obstruction Lighting

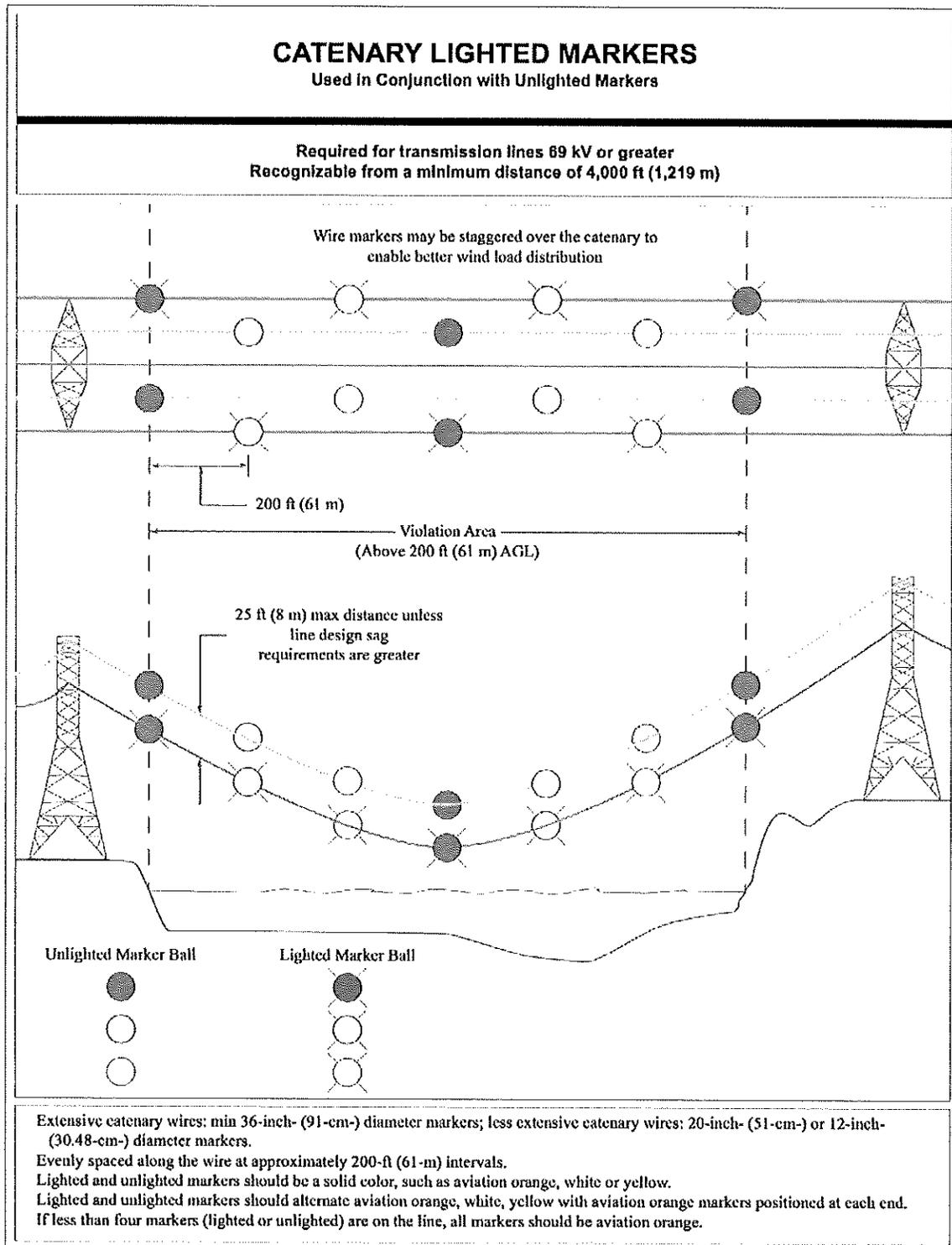


Figure A-6. Catenary Lighted Markers

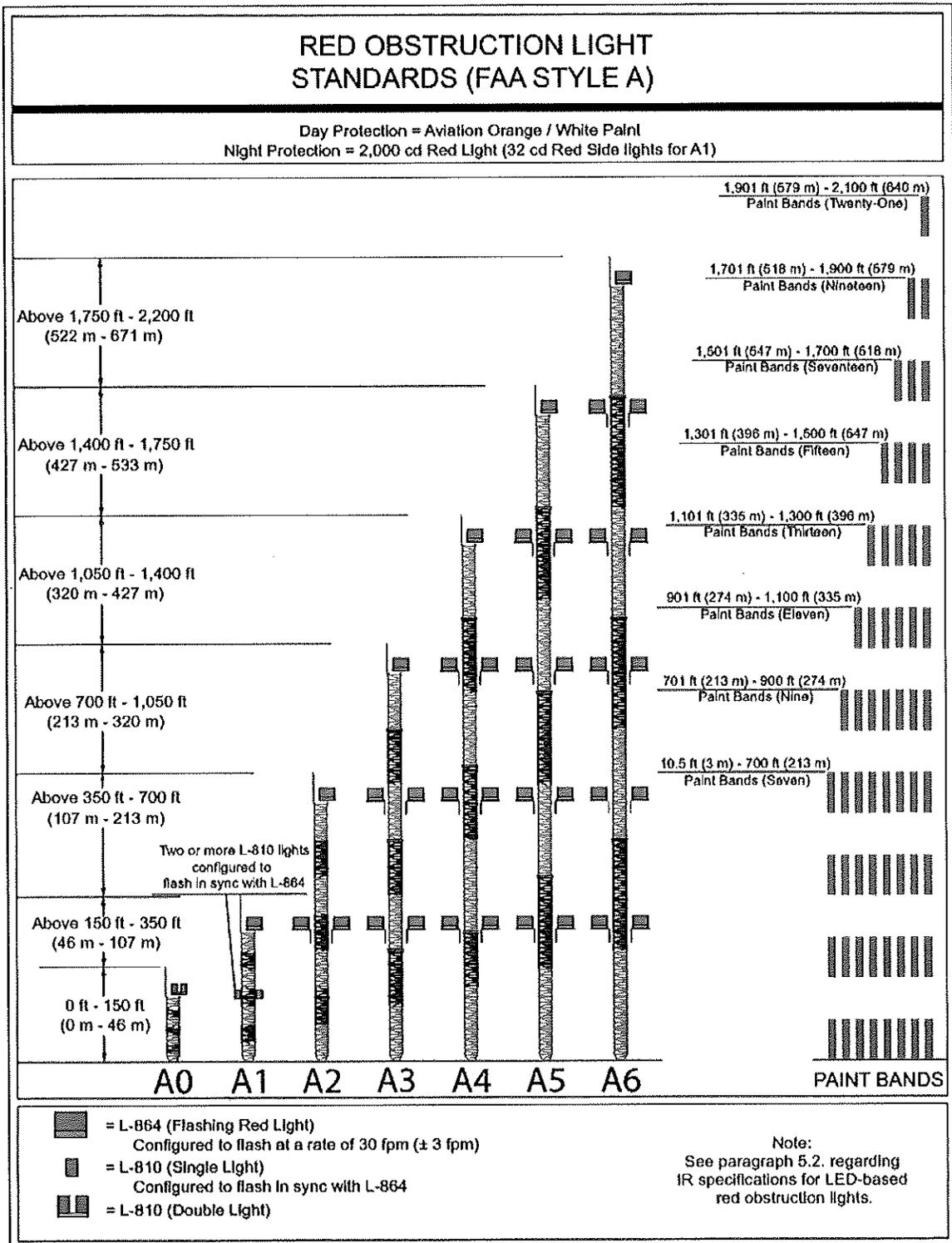


Figure A-7. Red Obstruction Light Standards

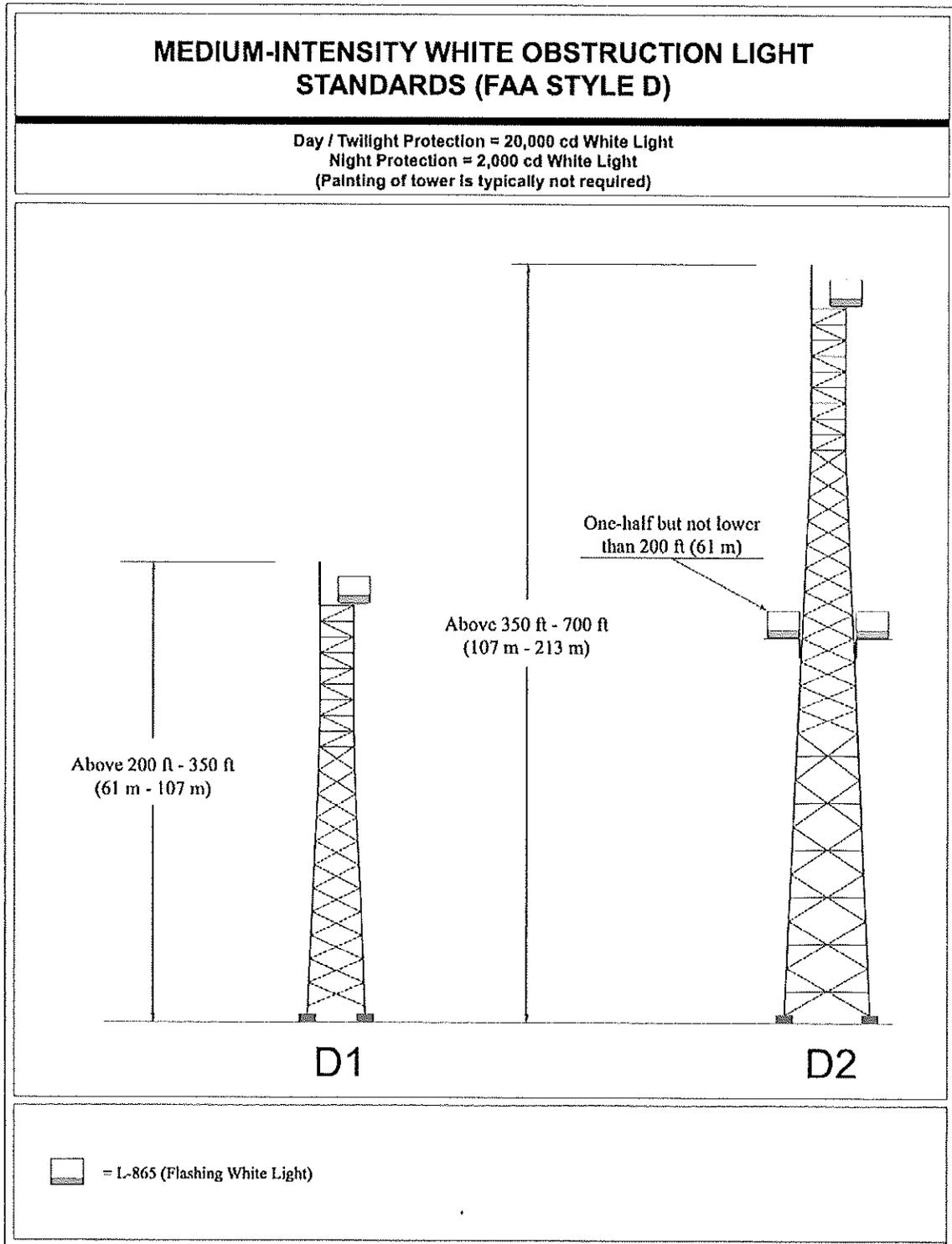
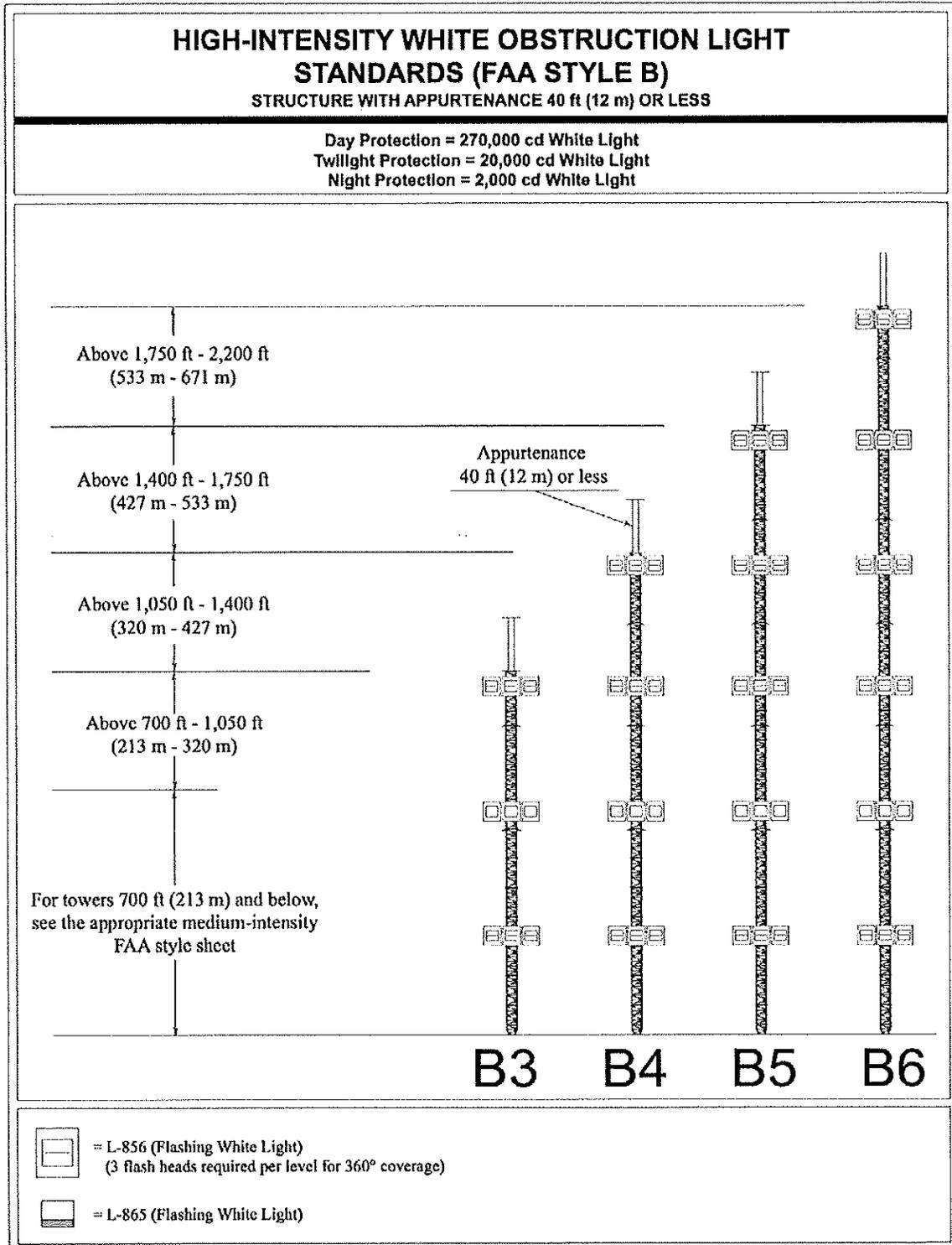


Figure A-8. Medium-Intensity White Obstruction Light Standards



**Figure A-9. High-Intensity White Obstruction Light Standards—Structures With Appurtenance 40 Feet or Less**

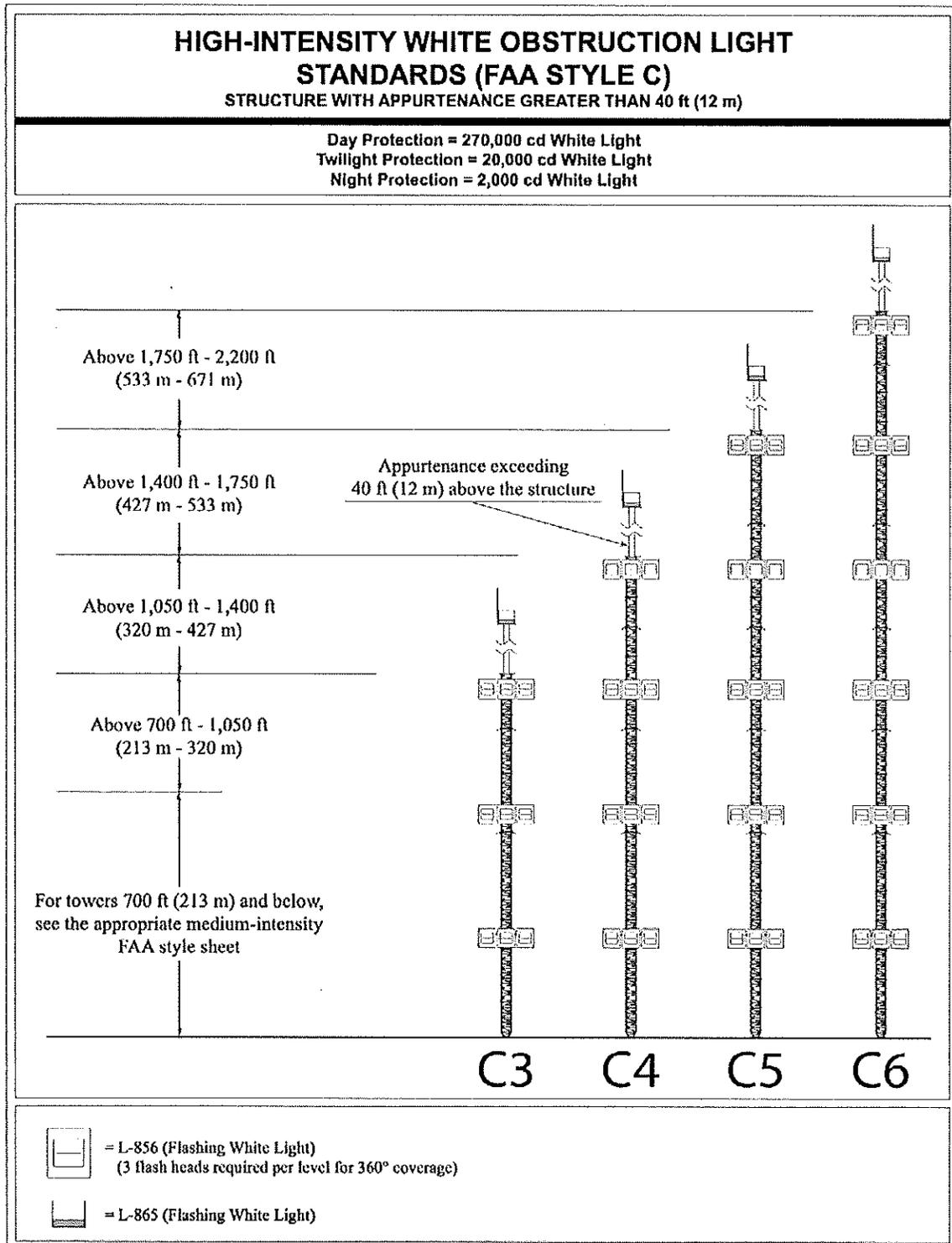


Figure A-10. High-Intensity Obstruction Lighting Standards—Structures With Appurtenance Over 40 Feet High

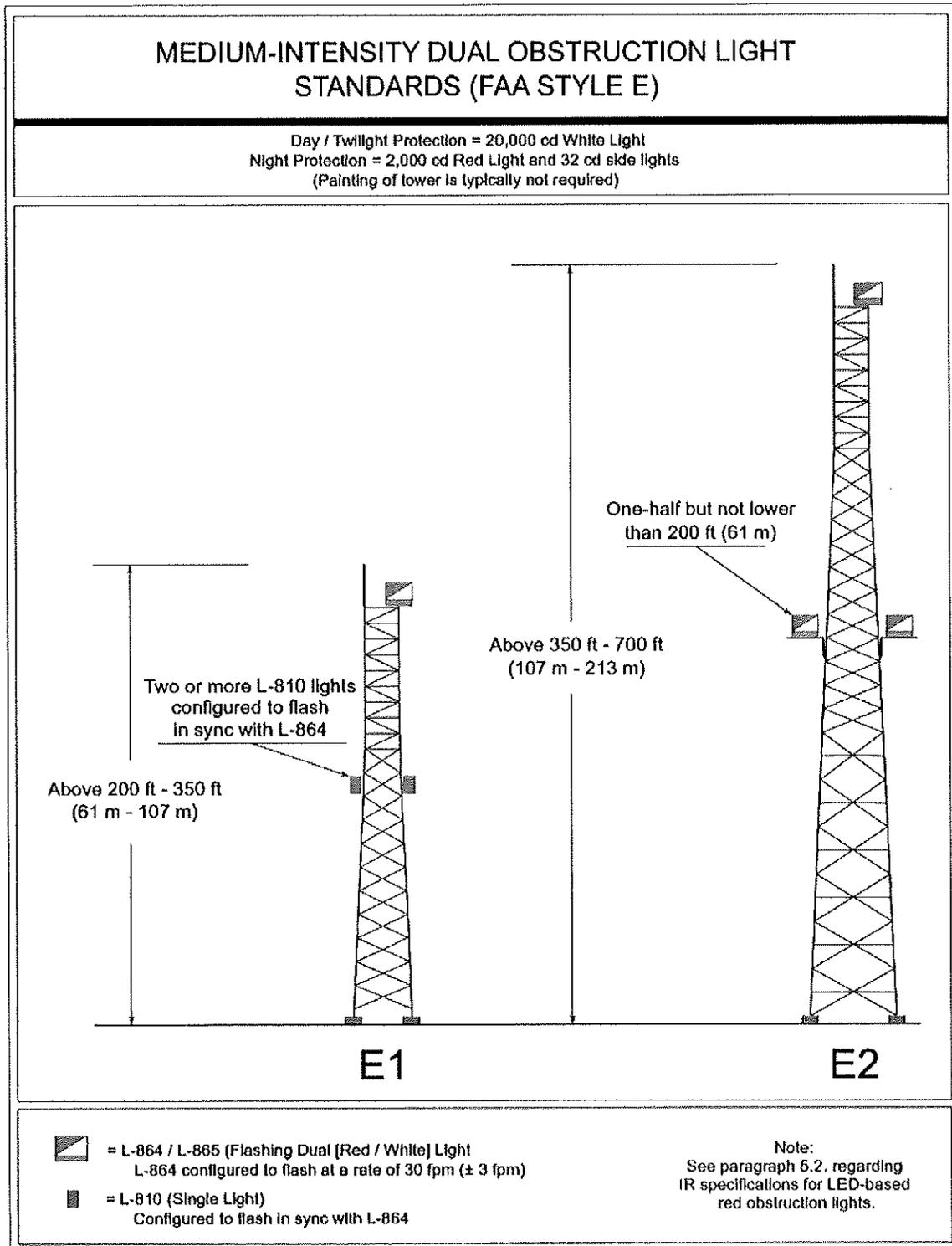
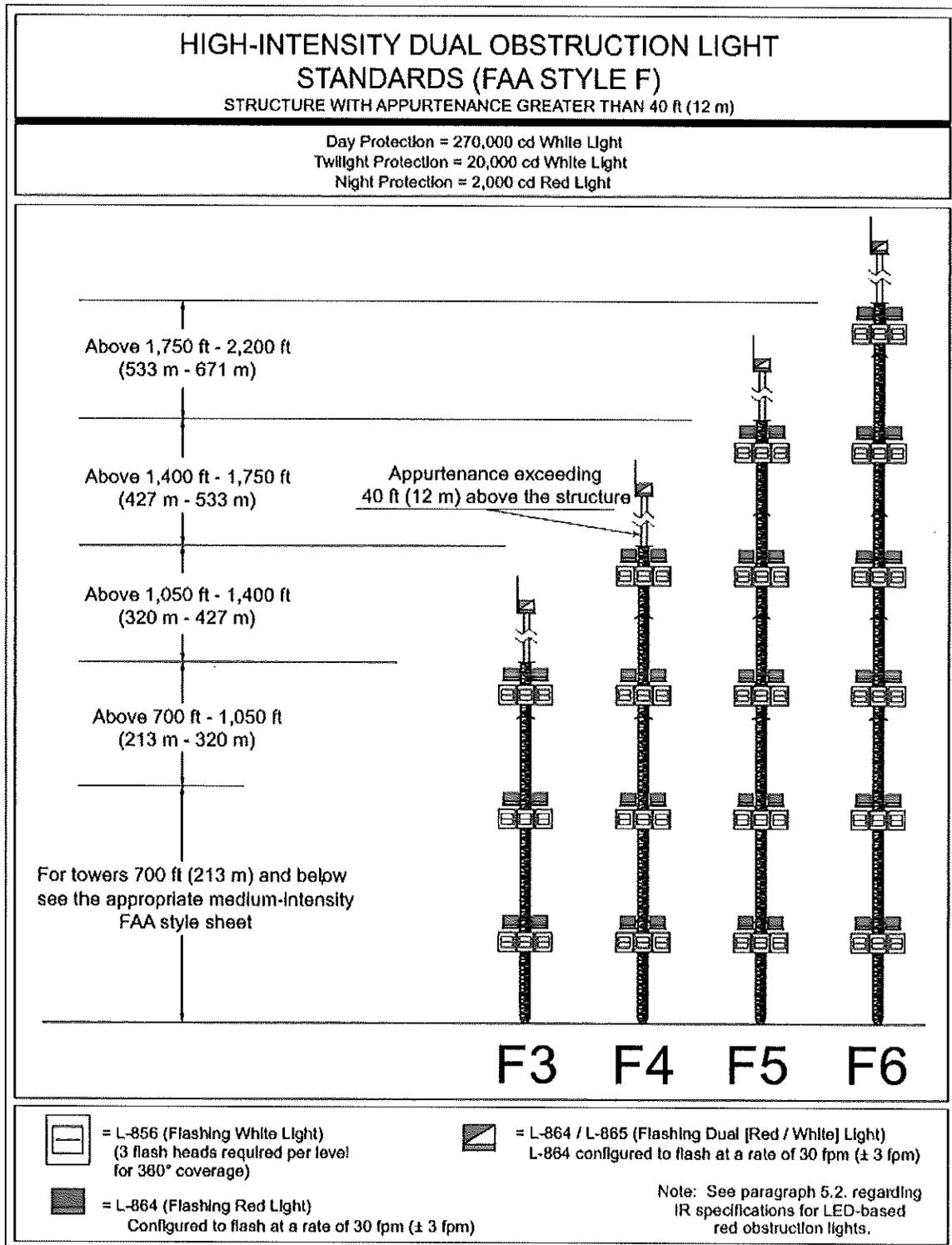
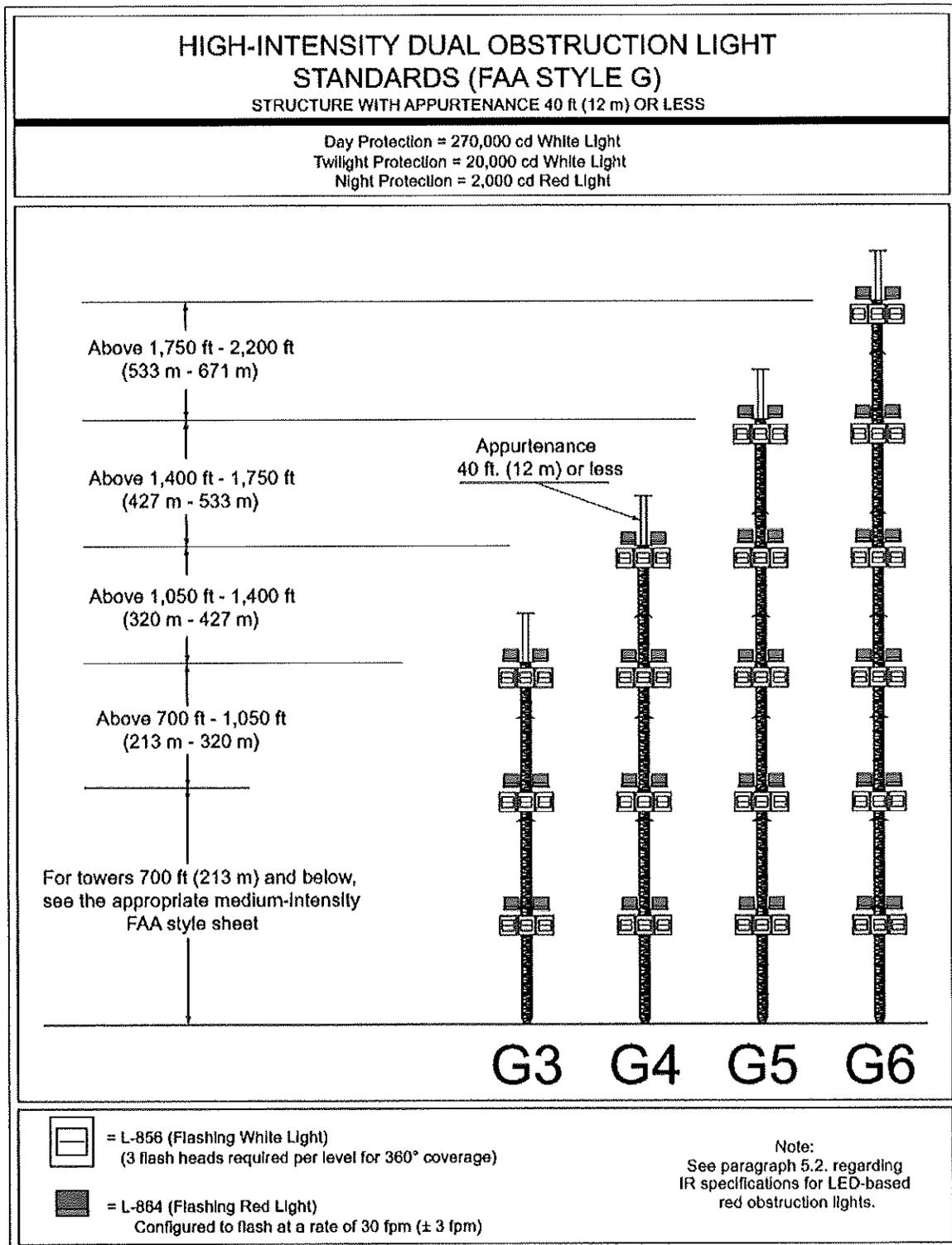


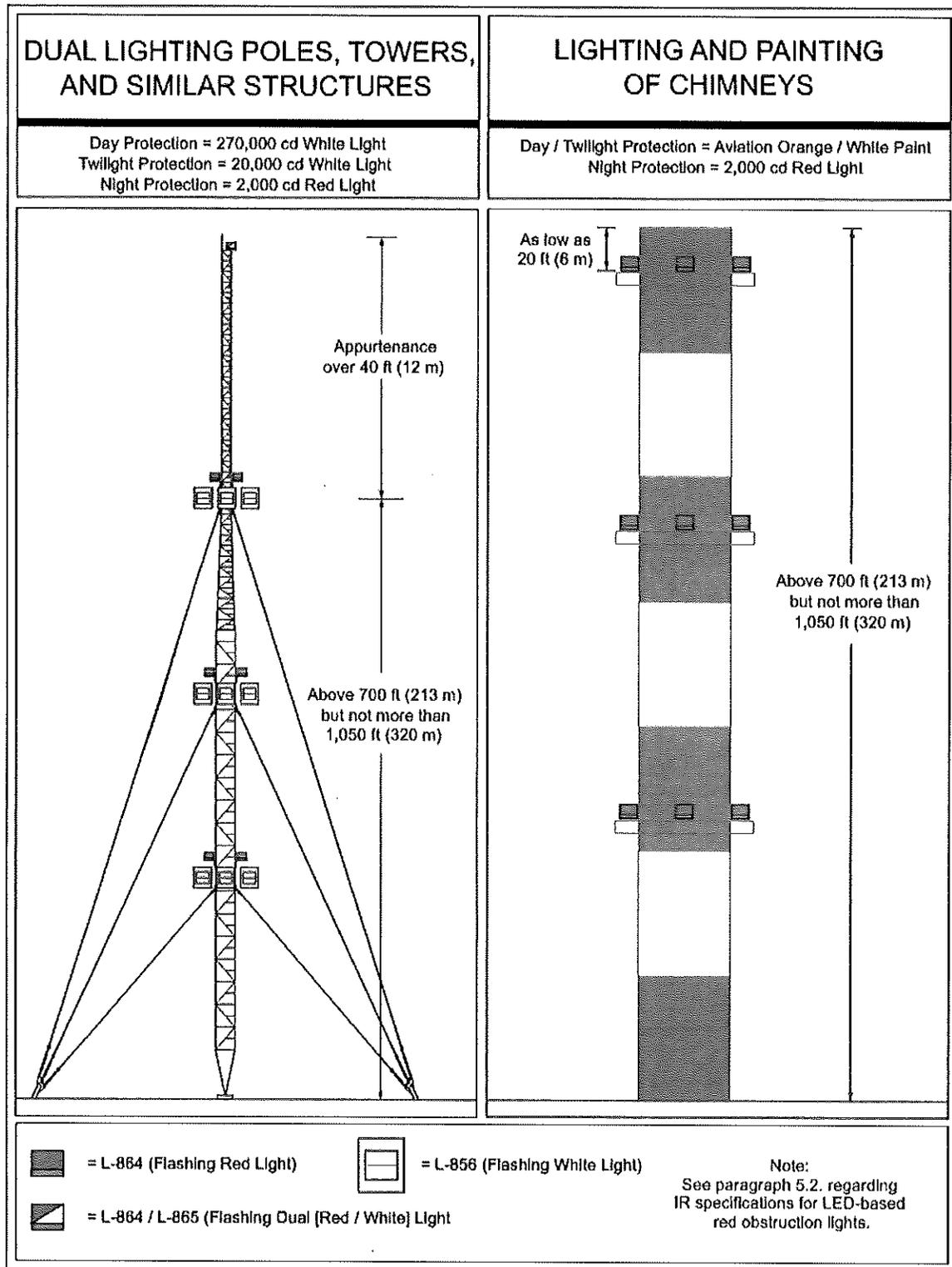
Figure A-11. Medium-Intensity Dual Obstruction Lighting Standards



**Figure A-12. High-Intensity Dual Obstruction Lighting Standards—Structures With Appurtenance Over 40 Feet High**



**Figure A-13. High-Intensity Dual Obstruction Lighting Standards—Structures With Appurtenance 40 Feet or Less**



**Figure A-14. Painting and/or Dual Lighting of Chimneys, Poles, Towers, and Similar Structures**

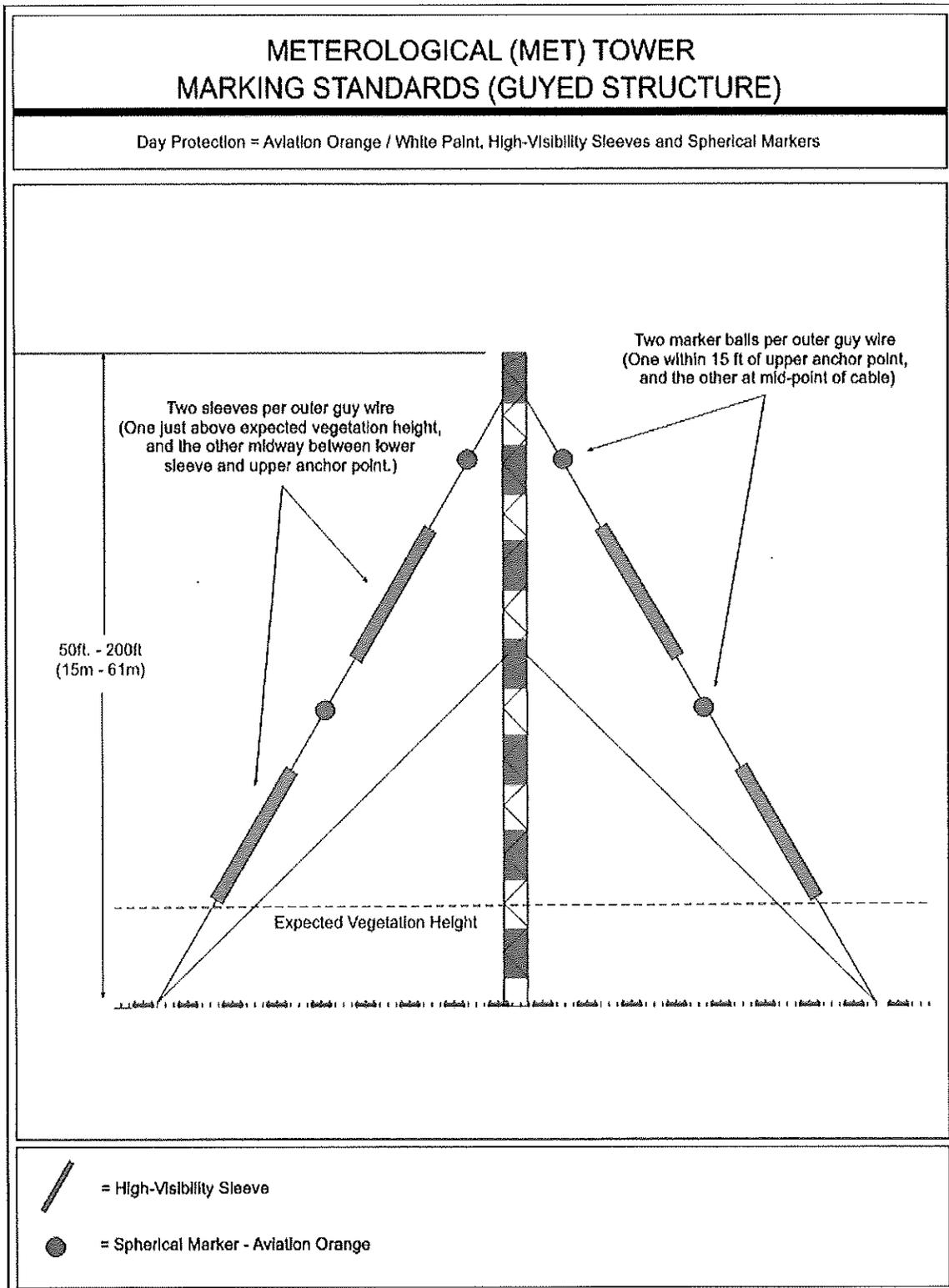


Figure A-15. Meteorological (MET) Tower Marking Standards (Guyed Structure)

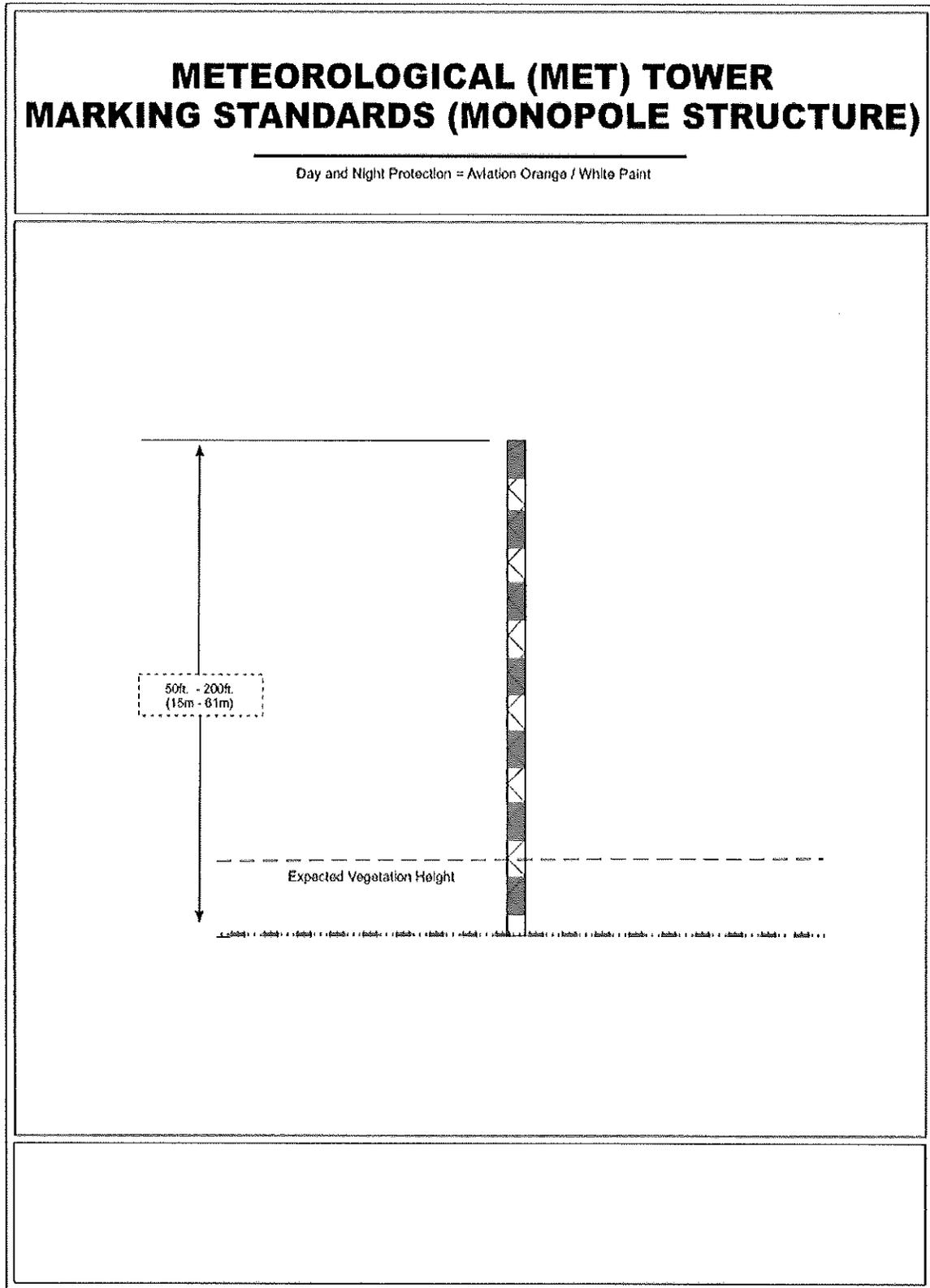


Figure A-16. Meteorological (MET) Tower Marking Standards (Monopole Structure)

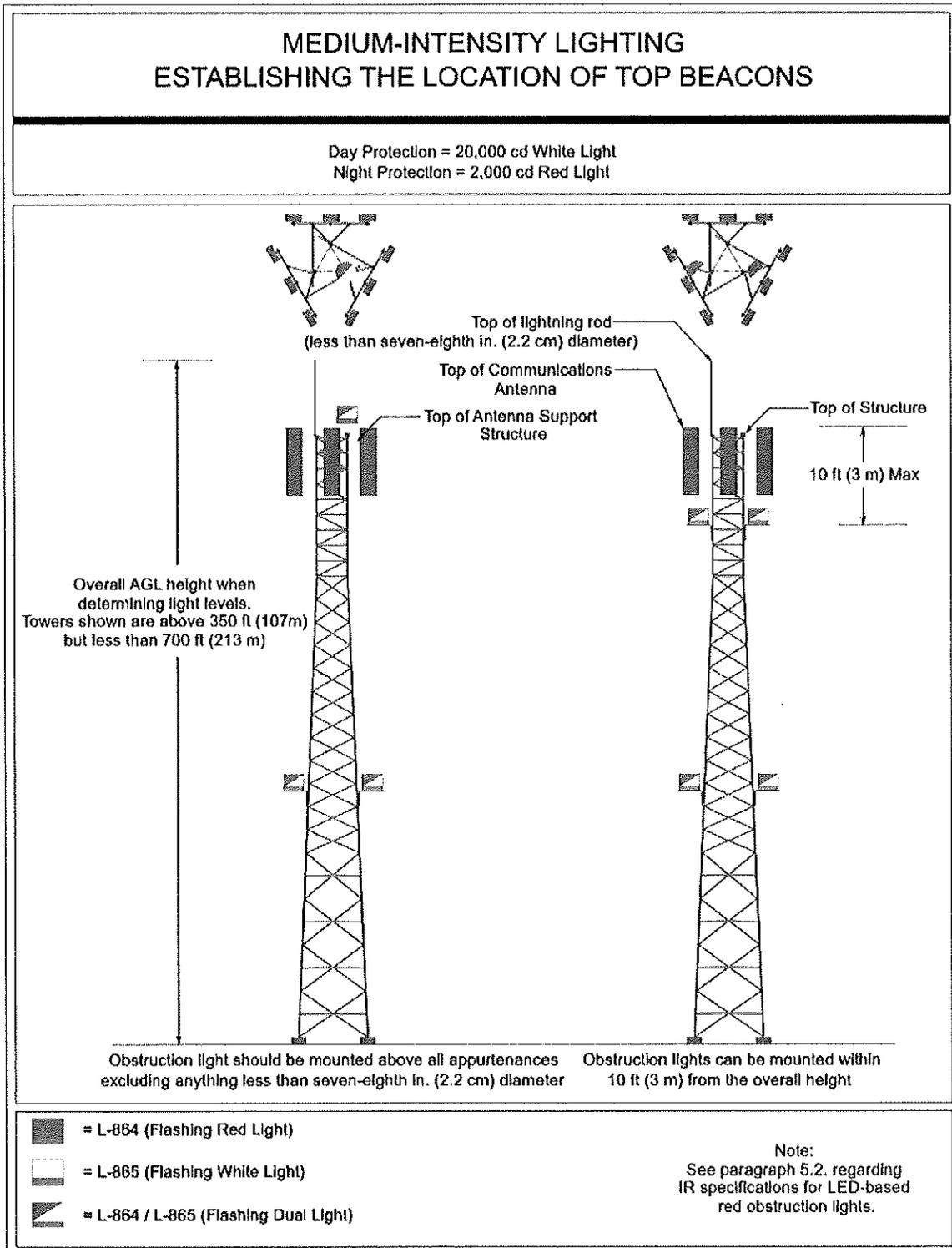
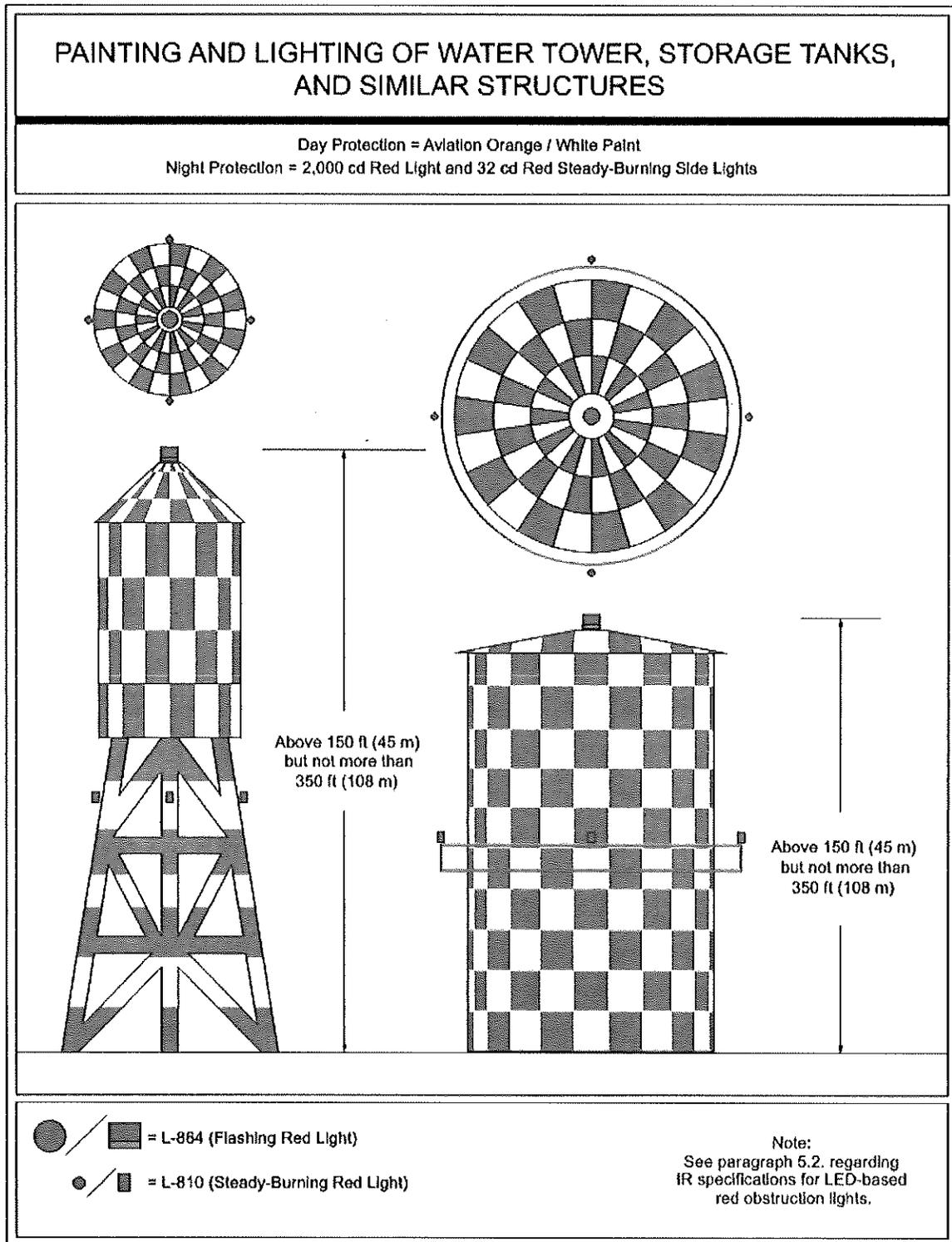
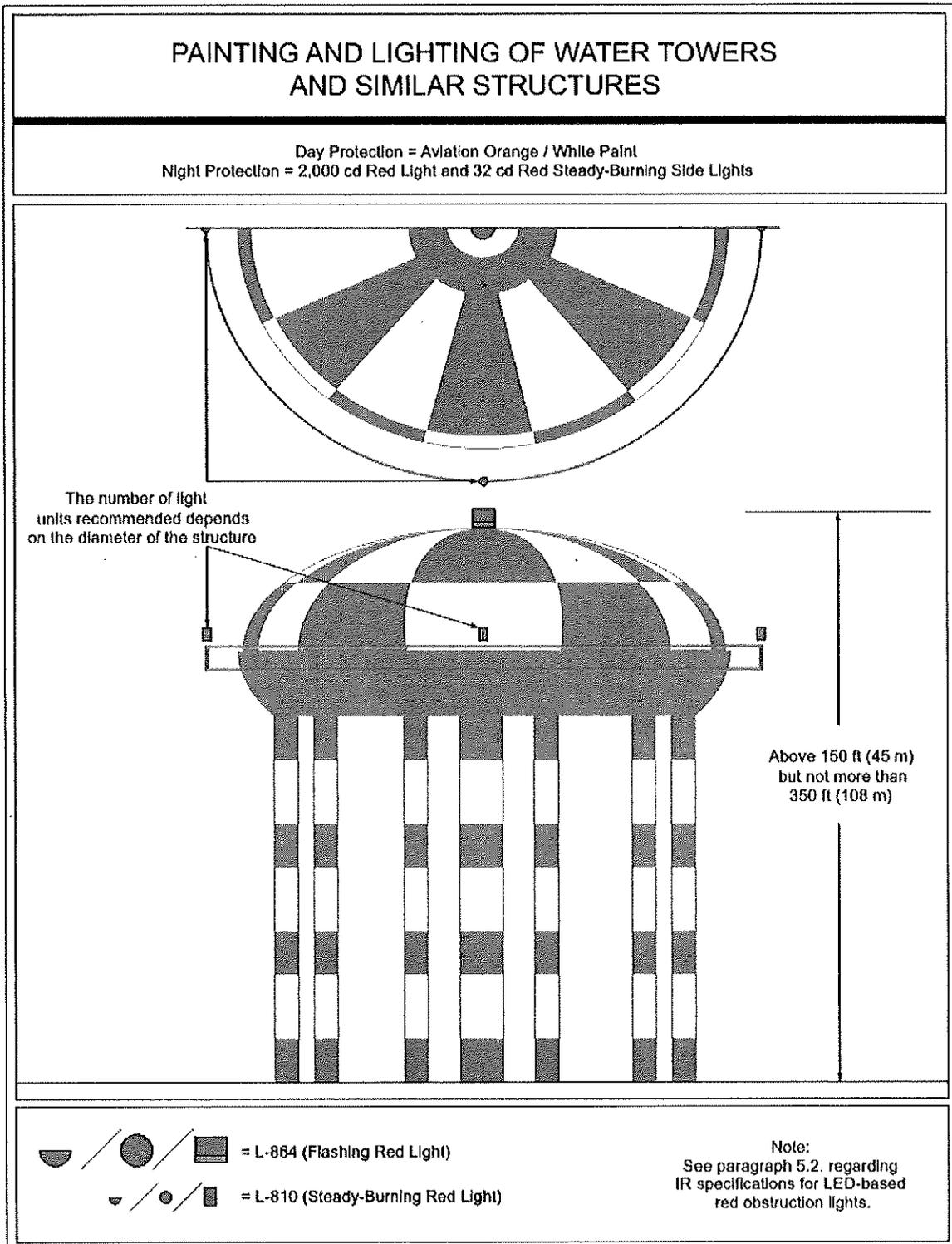


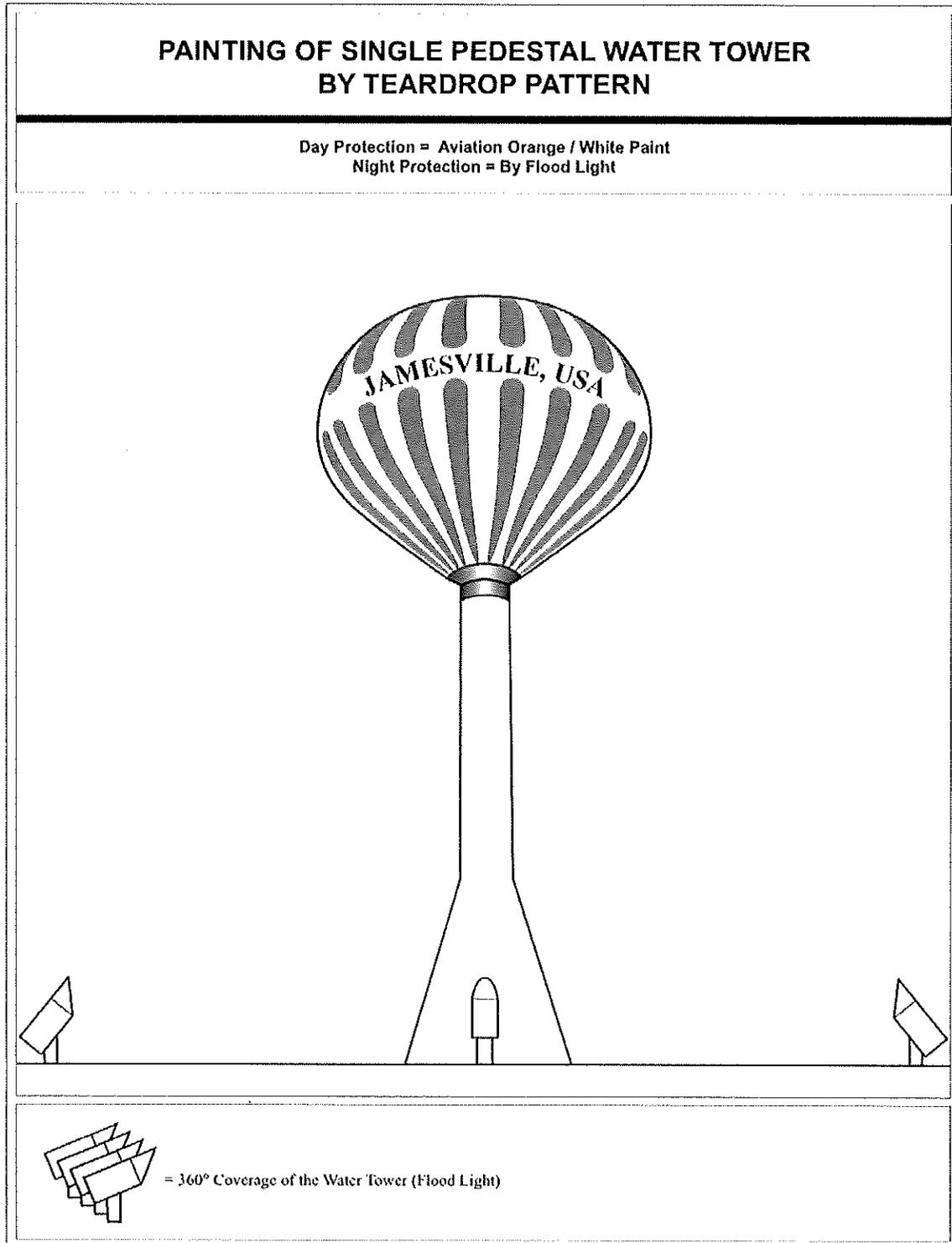
Figure A-17. Medium-Intensity Lighting—Establishing the Location of Top Beacons



**Figure A-18. Painting and Lighting of Water Towers, Storage Tanks, and Similar Structures**



**Figure A-19. Painting and Lighting of Water Towers and Similar Structures**



**Figure A-20. Painting a Single Pedestal Water Tower Using the Teardrop Pattern**

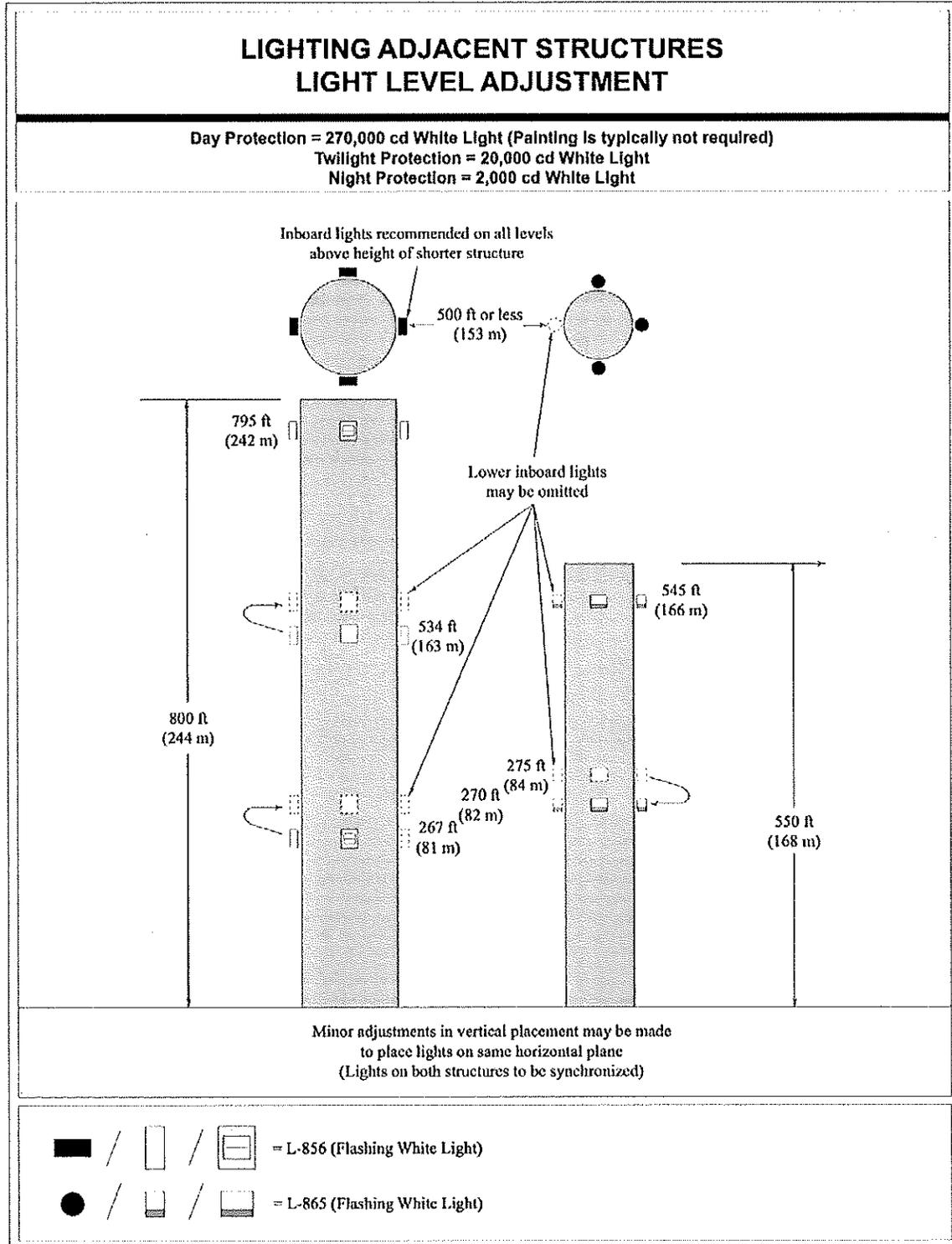


Figure A-21. Lighting Adjacent Structures—Light Level Adjustment

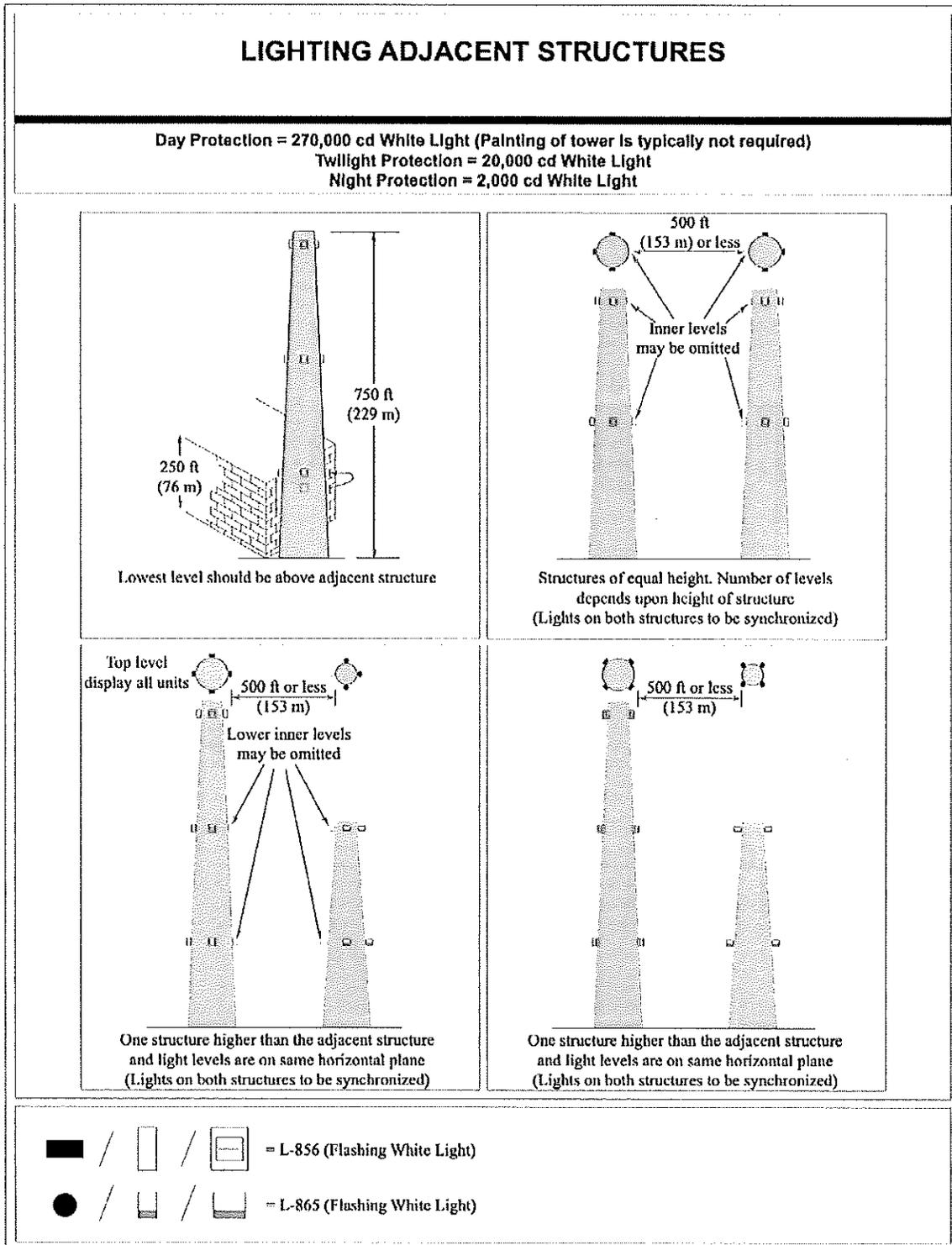


Figure A-22. Lighting Adjacent Structures

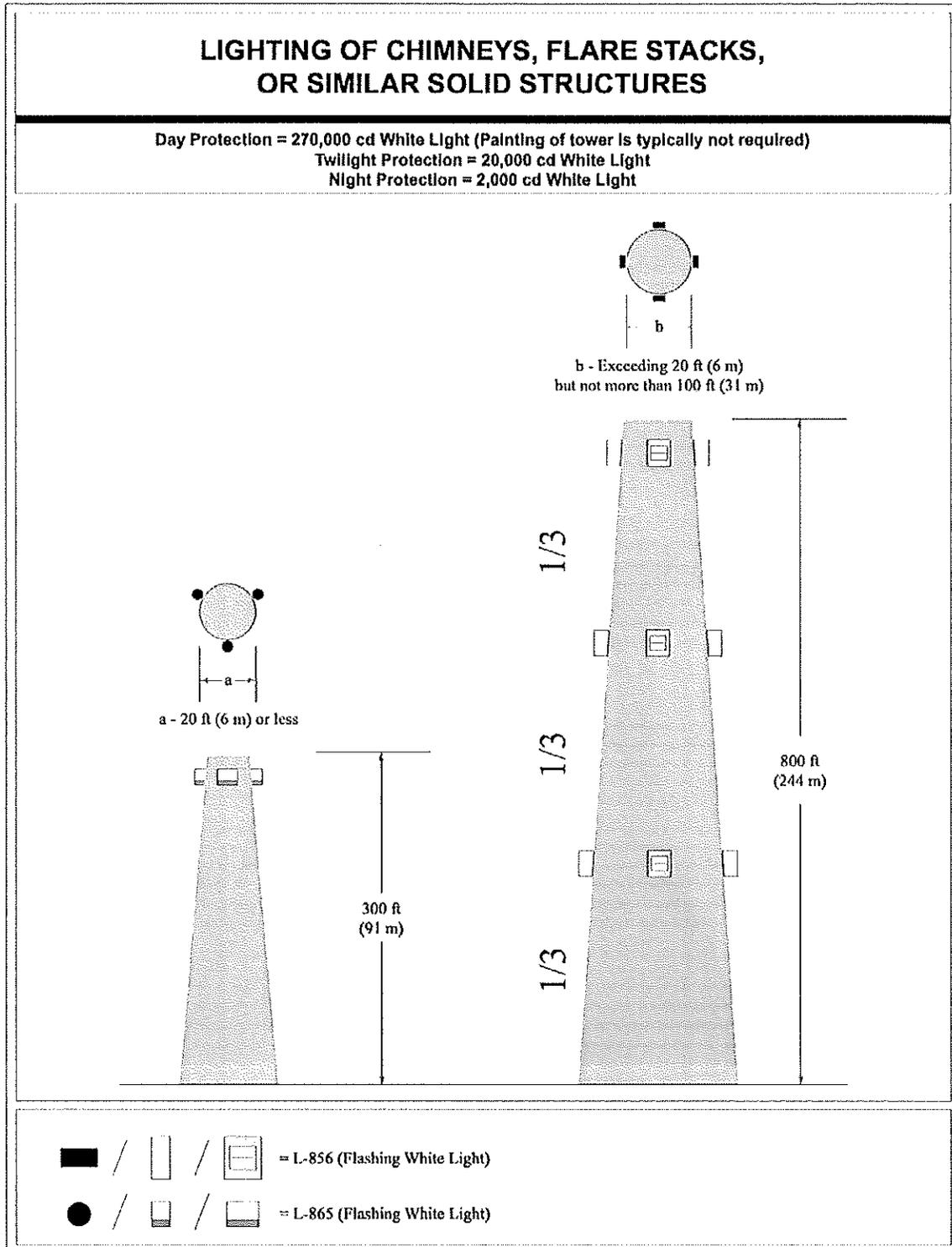


Figure A-23. Lighting of Chimneys, Flare Stacks, or Similar Solid Structures

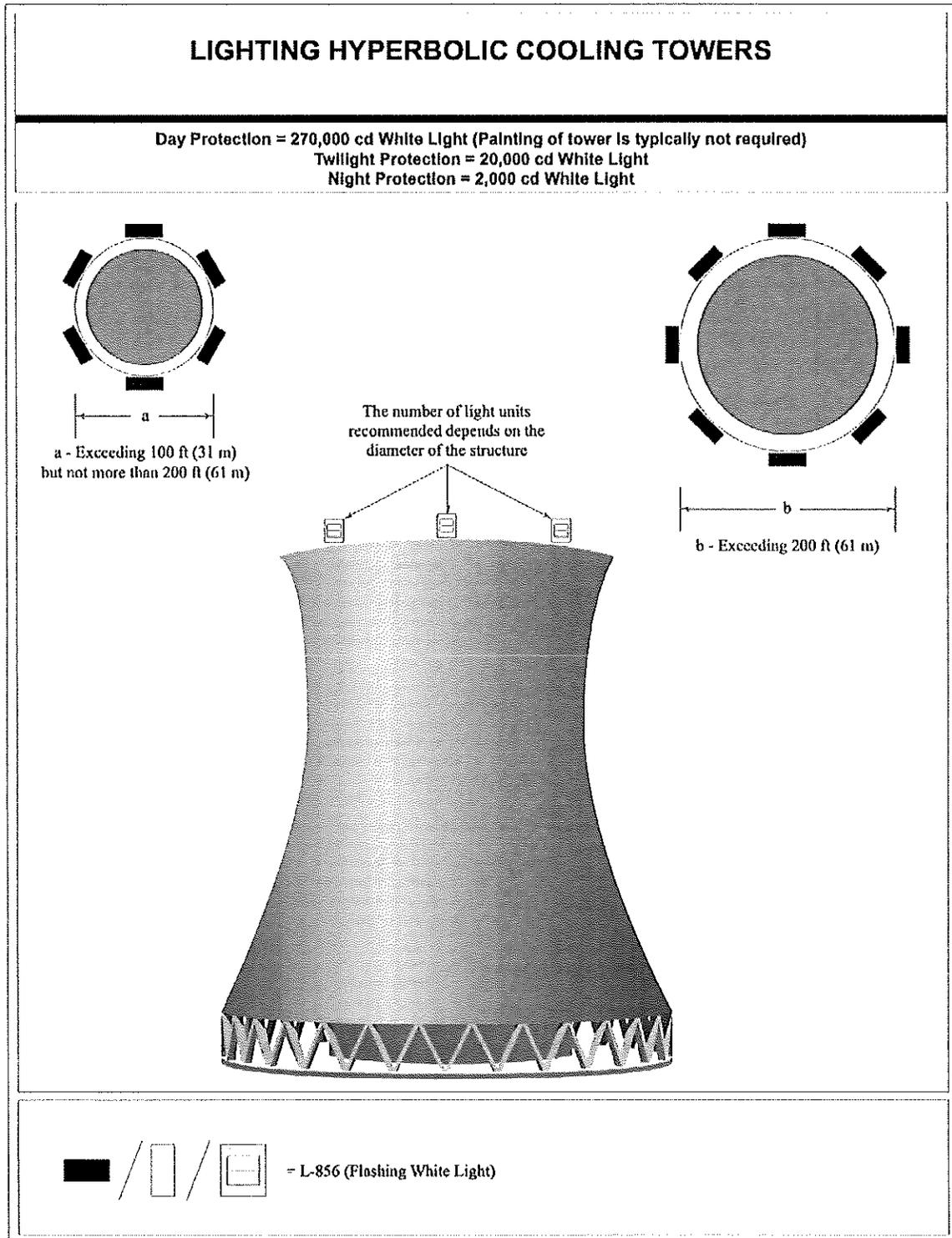


Figure A-24. Hyperbolic Cooling Tower

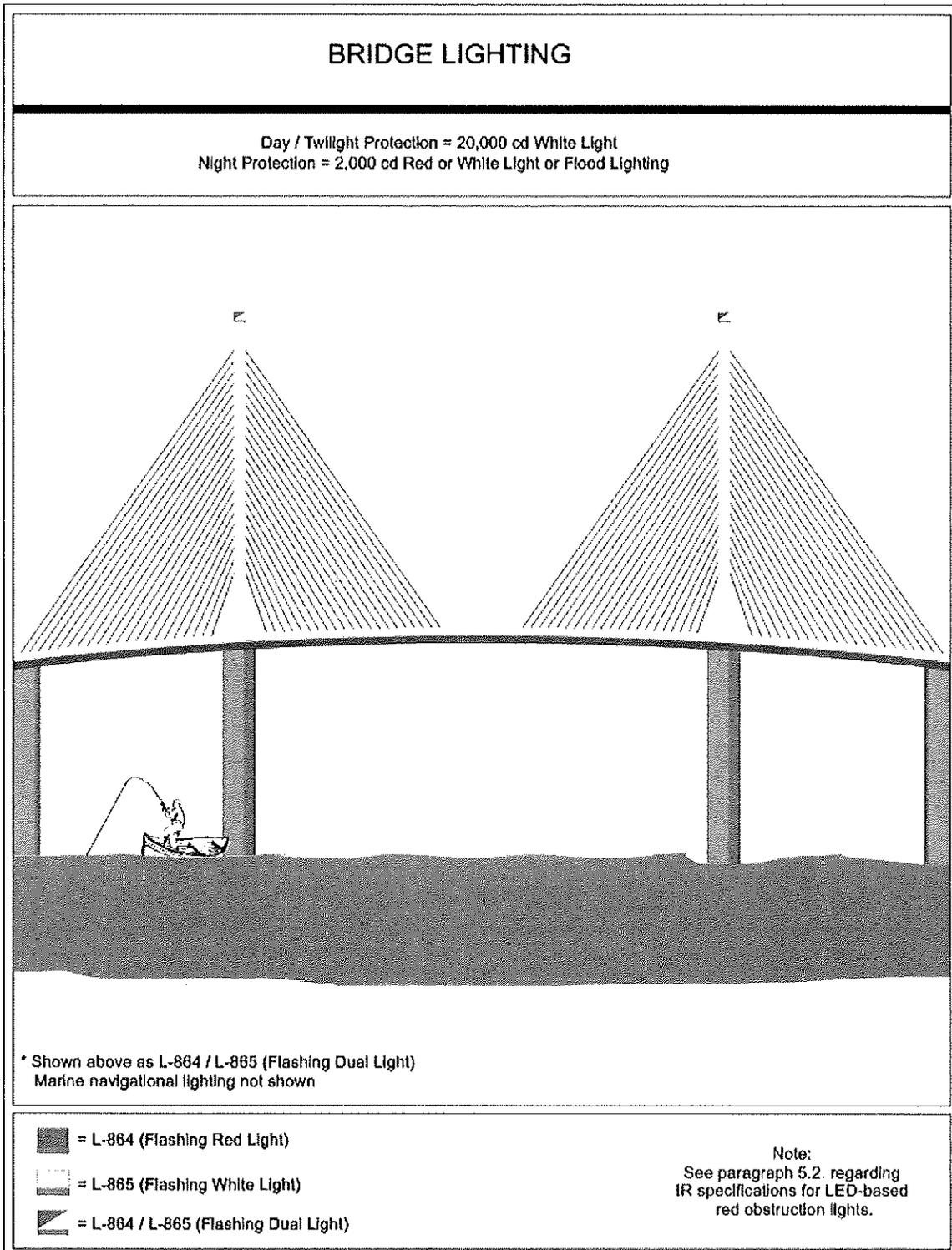


Figure A-25. Bridge Lighting

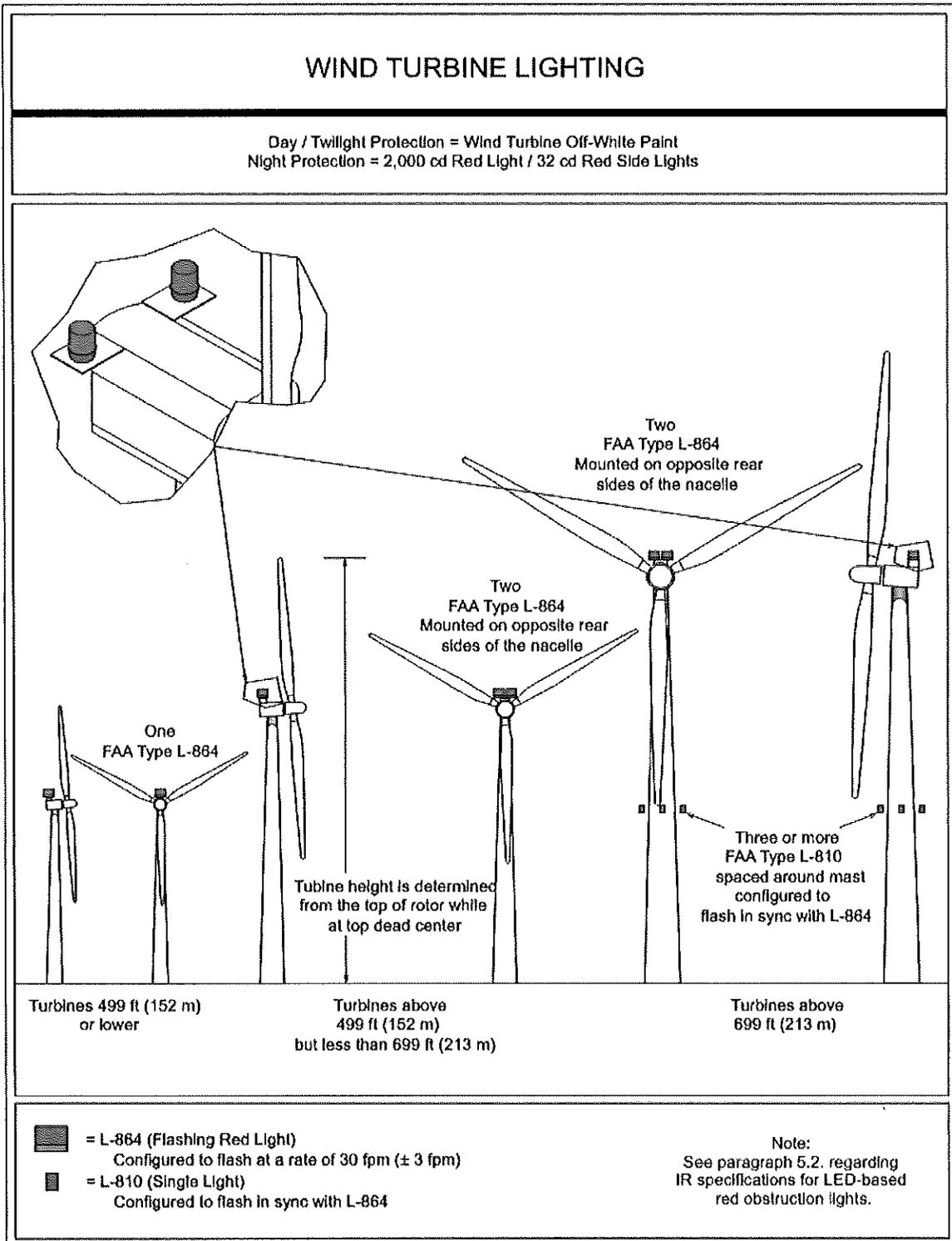
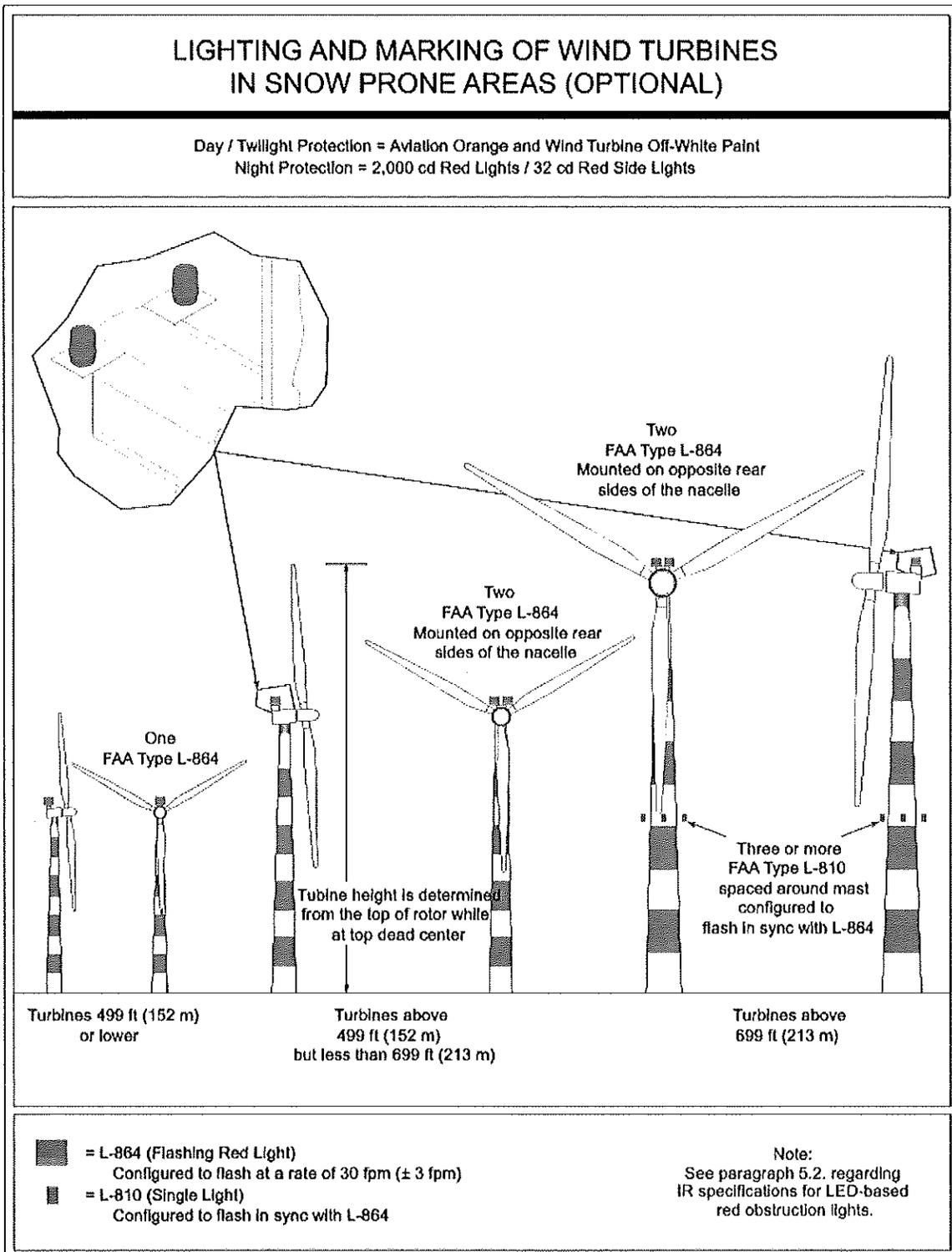


Figure A-26. Wind Turbine Lighting



**Figure A-27. Wind Turbine Lighting and Marking in Snow Prone Areas (Optional)**

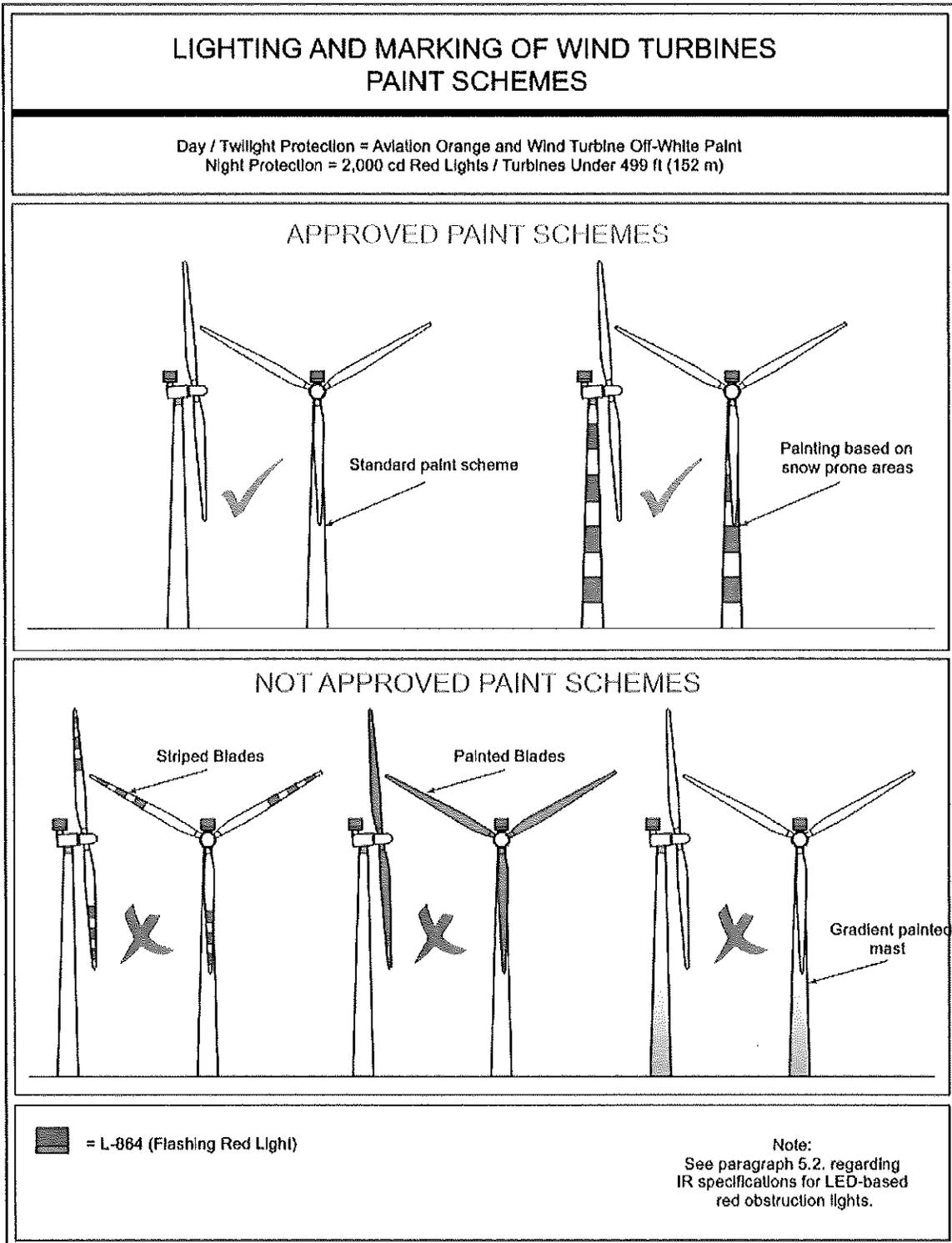


Figure A-28. Lighting and Marking of Wind Turbines – Paint Schemes

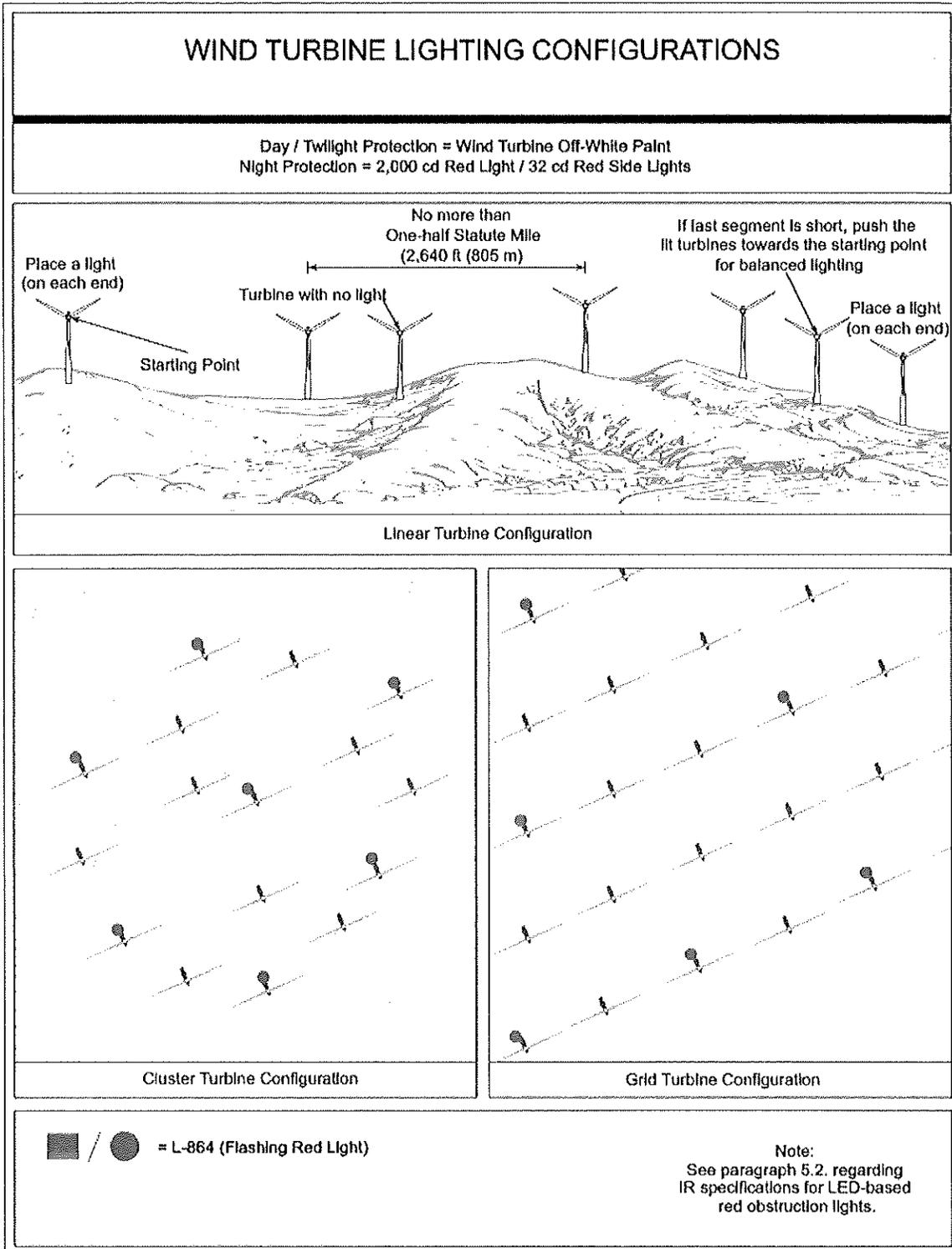
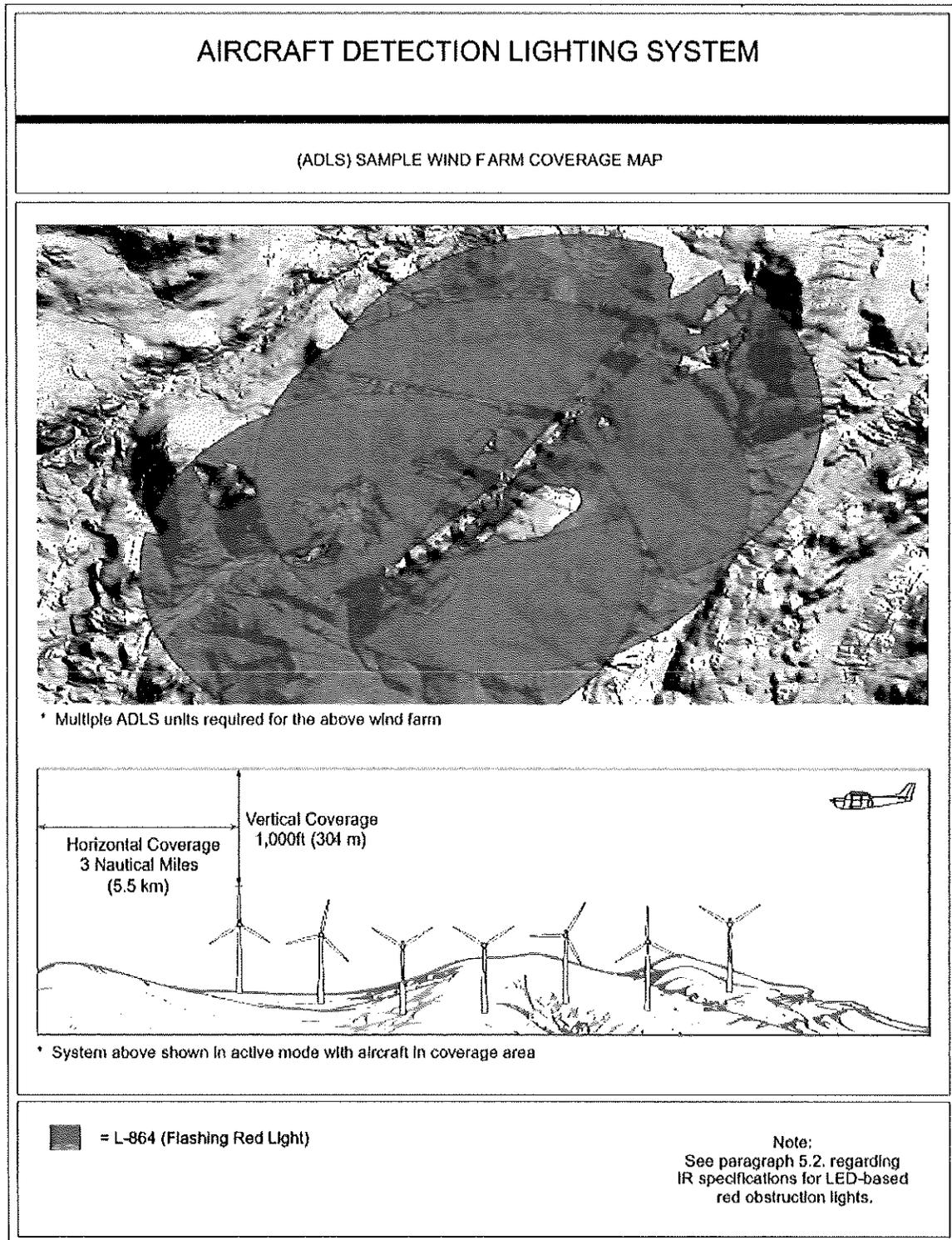


Figure A-29. Wind Turbine Lighting Configurations



**Figure A-30. Sample of Aircraft Detection Lighting System Coverage Map**

10/8/2016

AC 70/7460-1L CHG 1  
Appendix B**APPENDIX B: MISCELLANEOUS****B-1 Rationale for Obstruction Light Intensities.**

Sections 91.117, 91.119 and 91.155 of 14 CFR Part 91, *General Operating and Flight Rules*, prescribe aircraft speed restrictions, minimum safe altitudes, and basic visual flight rules (VFR) weather minimums for governing the operation of aircraft, including helicopters, within the United States.

**B-2 Distance Versus Intensities.**

Table B-1 shows the distance the various intensities are visible under 1 and 3 statute miles meteorological visibilities:

**Table B-1. Distance and Intensity**

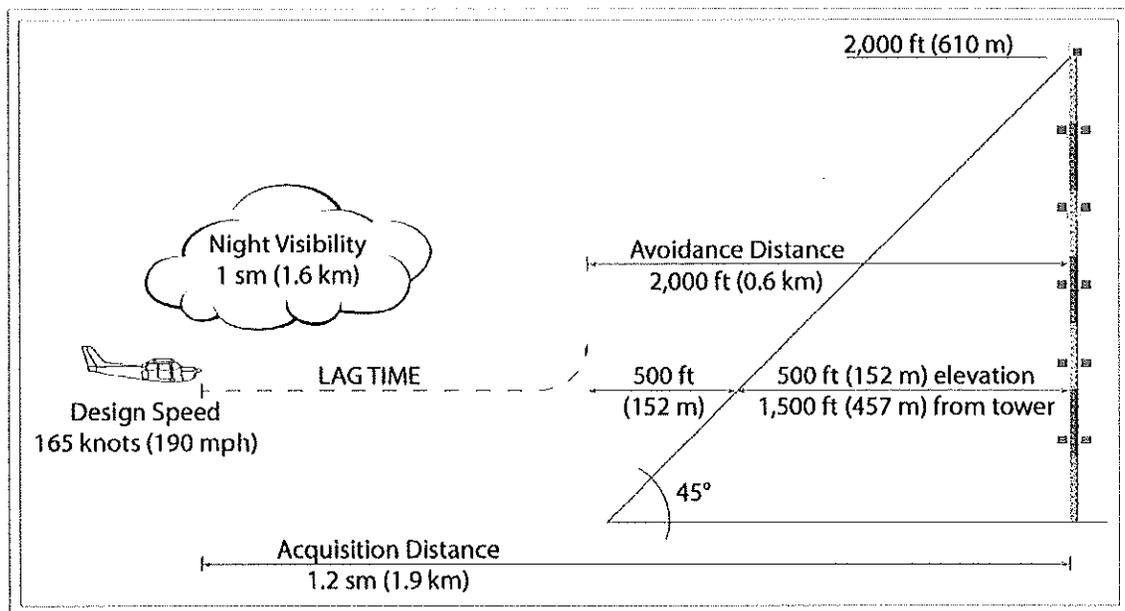
<b>Time Period</b>	<b>Meteorological Visibility Statute Miles</b>	<b>Distance Statute Miles</b>	<b>Intensity Candelas</b>
Night		2.9 (4.7 km)	1,500 ( $\pm 25\%$ )
	3 (4.8 km)	3.1 (4.9 km)	2,000 ( $\pm 25\%$ )
		1.4 (2.2 km)	32
Day		1.5 (2.4 km)	200,000
	1 (1.6 km)	1.4 (2.2 km)	100,000
		1.0 (1.6 km)	20,000 ( $\pm 25\%$ )
Day		3.0 (4.8 km)	200,000
	3 (4.8 km)	2.7 (4.3 km)	100,000
		1.8 (2.9 km)	20,000 ( $\pm 25\%$ )
Twilight	1 (1.6 km)	1.0 (1.6 km) to 1.5 (2.4 km)	20,000 ( $\pm 25\%$ )
Twilight	3 (4.8 km)	1.8 (2.9 km) to 4.2 (6.7 km)	20,000 ( $\pm 25\%$ )

**Note:** Distance calculated for north sky illuminance.

10/8/2016

AC 70/7460-1L CHG 1  
Appendix B**B-3 Conclusion.**

Aircraft pilots travelling at 165 kt (190 mph/306 kph) or less should be able to see obstruction lights in sufficient time to avoid the structure by at least 2,000 feet (610 m) horizontally under all conditions of operation, provided the pilot is operating in accordance with 14 CFR Part 91. Pilots operating 250 kt (288 mph/463 kph) aircraft should be able to see the obstruction lights unless the weather deteriorates to 1 statute mile (1.6 km) visibility at night, during which time period 2,000 candelas enables the light to be seen at 1.2 statute miles (1.9 km). To provide an acquisition distance of 1.5 statute miles, a higher intensity of 20,000 candelas would be required. This light, with 3-statute mile visibility at night, could generate a residential annoyance factor. In addition, aircraft at these speeds can normally be expected to operate under instrument flight rules (IFR) at night when the visibility is 1 statute mile (1.6 km).



**Note:** The 2,000-foot avoidance distance comes from the guy wires of a 2,000-foot structure. The guy wires at a 45-degree angle would be at a distance of 1,500 feet from the structure at a 500-foot elevation. Since the aircraft is to be 500 feet clear of obstacles (the guy wire), the distance of avoidance from the structure is  $1,500 + 500 = 2,000$  feet. (See Figure B-1.)

**Figure B-1. Illustration of Acquisition Distance Calculation**

**B-4 Definitions.****B-4.1 Flight Visibility.**

The average forward horizontal distance, from the cockpit of an aircraft in flight, at which prominent unlighted objects may be seen and identified by day and prominent lighted objects may be seen and identified by night.

10/8/2016

AC 70/7460-1L CHG I  
Appendix B

Reference: *Airman's Information Manual Pilot/Controller Glossary.*

B-4.2 Meteorological Visibility.

A term that denotes the greatest distance, expressed in statute miles, that selected objects (visibility markers) or lights of moderate intensity (25 candelas) can be seen and identified under specified conditions of observation.

B-5 **Lighting System Configuration.**

1. Configuration A. Red Obstruction Lighting System.
2. Configuration B. High-Intensity White Obstruction Lights for structures with appurtenance 40 feet or less.
3. Configuration C. High-Intensity White Obstruction Lights for structures with appurtenance greater than 40 feet.
4. Configuration D. Medium-Intensity White Obstruction Lights.
5. Configuration E. Medium-Intensity Dual White and Red Obstruction Lights.
6. Configuration F. High-Intensity Dual Obstruction Lights for structures with appurtenance greater than 40 feet.
7. Configuration G. High-Intensity Dual Obstruction Lights for structures with appurtenance 40 feet or less.

**Example:** "Configuration B 3" denotes a high-intensity lighting system with three levels of light.

