



Alachua County – Growth Management Staff Report

Application Z23-000007

Application Details

Staff Contact

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Staff Phone Number

352-374-5261

Planning Commission Hearing Date

December 13, 2023

Board of County Commissioners Hearing Date

January 23, 2024

Requested Action

A request for a special use permit for a Tier 3 Personal Wireless Service Facility (PWSF) on a parcel with Agricultural (A) zoning and with a future land use designation of Rural/Agriculture (1 dwelling unit/5 acres).

Property Owner

Rayonier Forest Resources LP

Property Description

Address: None. (located off of N. County Rd. 225)

Parcel Number: 07605-000-000 (portion)

Section/Township/Range: 02/08/20

Land Use: Rural/Agriculture (1 dwelling unit/ 5 acres)

Zoning: A (Agriculture)

Acreage: +/- 0.23ac (tower site), overall parcel is approx. 197 acres

Previous Requests

None.

Zoning Violation History

None.

Applicant/Agent

NexTower, Development Group II, LLC

Project Timeline

- Submitted: October 26, 2023
- Staff Report Distributed: December 7, 2023
- Planning Commission Hearing: December 13, 2023

Staff Recommendation

Staff recommends that the Board of County Commissioners **approve Z23-000007** with staff's proposed conditions and bases.

Planning Commission Recommendation

The Planning Commission recommended (7-0) that the Board of County Commissioners **approve Z23-000007** with staff's proposed conditions and bases.

Background

This application is a request for a special use permit to allow a Tier 3 personal wireless service facility (PWSF) on a 100ft. x 100 ft. portion (0.23 acres) of parcel 07605-000-000 (a large, 197-acre timberland parcel) located to the northwest of the City of Waldo. The applicant is requesting a 265' self-supporting lattice PWSF (255' tower plus 10' for lightning rod/FAA lighting).

The tower has been proposed to reduce the cell service coverage gap in this part of the county.

The site is located off of N. County Rd. 225, on a portion of a timberland parcel owned by Rayonier. The nearest residence is about ¼ of a mile from the site to

the northwest. At the proposed height (greater than 200 ft.), the tower would be required to be lit with "dual lighting" (red at night/white strobe during day) per the Federal Aviation Administration (FAA).

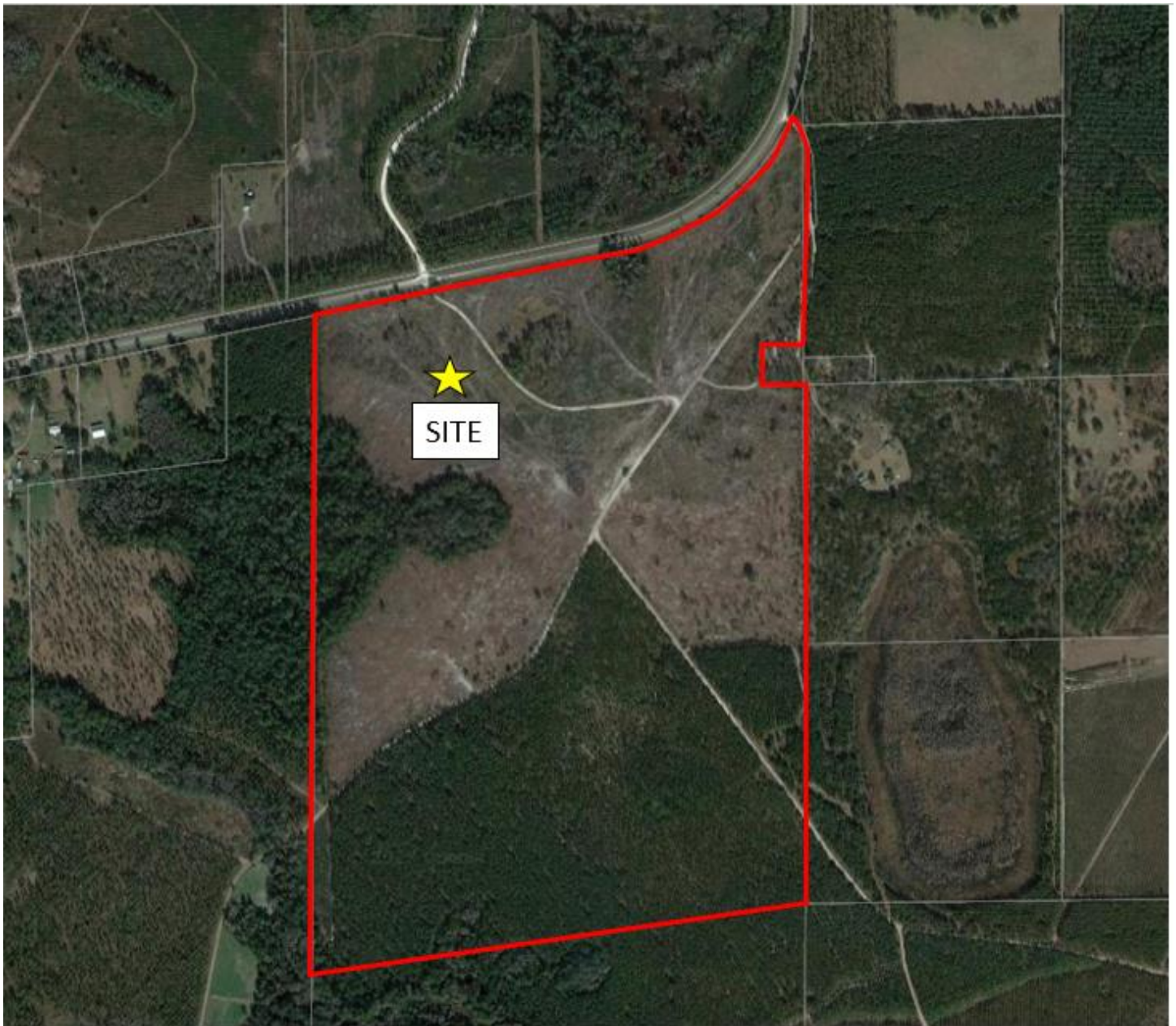


Figure 1: Aerial image of site

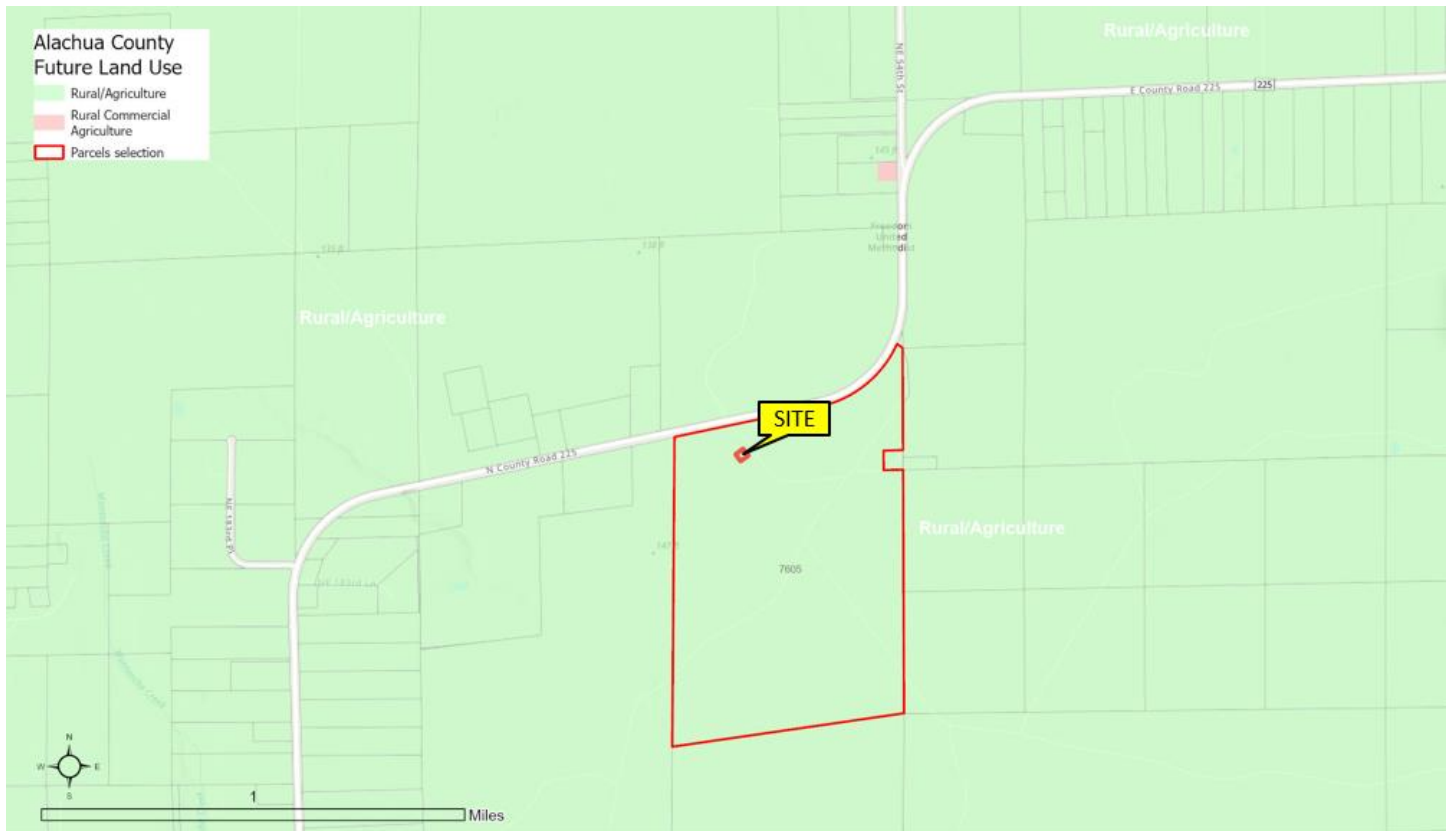


Figure 2: Land use map



Figure 3: Zoning Map

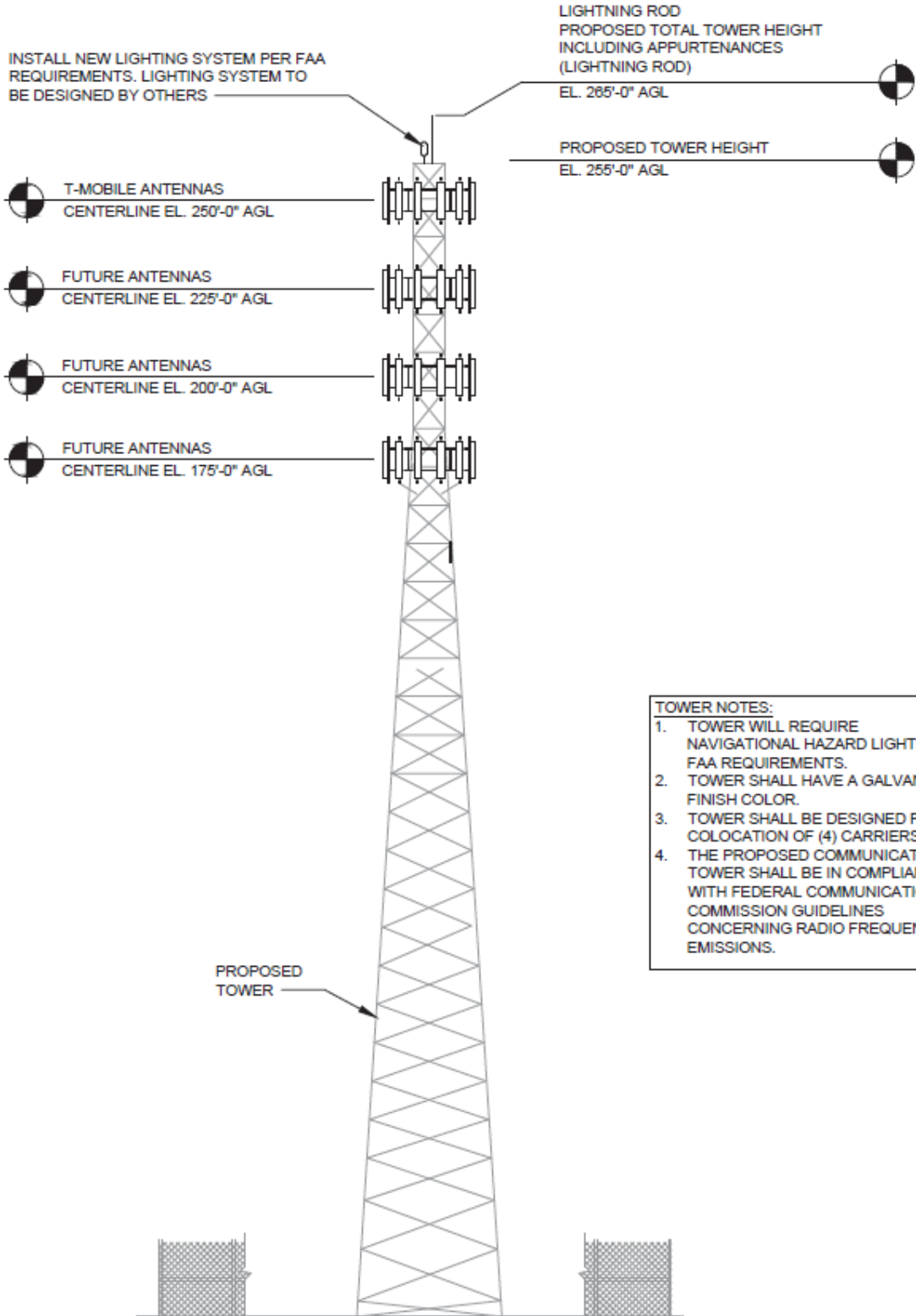


Figure 4: Proposed Elevation of 265' Monopole PWSF

Site description

The 100' x 100' site is located in the northwest portion of parcel 07605-000-000 that lies to the northwest of the City of Waldo on N. County Rd. 225. Silviculture activities occur on this site with planted pines being most recently harvested in 2020. The site lies entirely within the Northeast Flatwoods Strategic Ecosystem; however, staff from the Alachua County Environmental Protection Department have indicated that the only features present are a wetland and its associated buffer. The proposed location of the tower will be outside of the required 50' minimum/75' average wetland buffer requirement of Sec. 406.43 of the Unified Land Development Code (ULDC).



Figure 5: Wetland delineation map

To the north, south, and west of the site are large (100+ acre) timberland parcels with Rural/Agriculture (1 dwelling unit per 5 acres) future land use designation and Agriculture zoning. To the east of the site are additional timberland parcels, a single-family residence and a historic cemetery (Freedom Cemetery). These parcels also have a Rural/Agriculture (1 dwelling unit per 5 acres) future land use designation and Agriculture zoning.

Consistency with Comprehensive Plan

Levels of Service

The Alachua County Comprehensive Plan Capital Improvement Element requires that the public facilities and services needed to support development be available concurrent with the impacts of development and that issuance of a Certificate of Level of Service Compliance (CLSC) be a condition of all final development orders. ‘Concurrent’ shall mean that all adopted levels of service (LOS) standards shall be maintained or achieved within a specified timeframe. Per **Policy 1.2.4 of the Capital Improvements Element** of the Alachua County Comprehensive Plan, LOS standards have been adopted for various types of public facilities.

Traffic

This special use permit will not result in any additional impacts to the transportation network. The facility will be unmanned and only have periodic maintenance visits.

Water and Sewer

Policy 1.2.4 (e) of the Capital Improvements Element describes the minimum Level of Service standards for potable water and sewer. These are summarized in the following table:

| | Peak Residential & Non Residential | Pressure | Storage Capacity |
|----------------------|---|-----------------|-------------------------|
| Potable Water | 200 gallons/day/du | 40 p.s.i. | ½ peak day volume |

| | | | |
|-----------------------|--------------------|-----|-----|
| Sanitary Sewer | 106 gallons/day/du | N/A | N/A |
|-----------------------|--------------------|-----|-----|

The site is located outside of the Urban Cluster and will not require the installation of a well or septic tank. There will be no impact to water and sewer levels of service resulting from this request.

Drainage

Policy 1.2.4 of the Capital Improvements Element states that the minimum drainage LOS standard for non-residential development requires a floor elevation of one (1) foot above the 100-year/critical duration storm elevation or flood resistant construction. This proposed development will not cause the adopted LOS standards to be exceeded.

Emergency Services

Policy 1.2.5 (a) of the Capital Improvements Element guidelines states that the LOS standard for fire services in the area outside the urban cluster is as follows:

- Initial unit response within 12 minutes for 80% of all responses within 12 months.
- Fire protection service level of ISO (Insurance Service Office) Class Protection 10 or better.
- Development shall provide adequate water supply for fire suppression and protection and fire service compliant fire connections.

All development will be required to meet these standards.

Solid Waste

Policy 1.2.4 (c) of the Capital Improvements Element states that the minimum level of service standard for solid waste disposal used for determining the availability of disposal capacity to accommodate demand generated by existing and new development, at a minimum, shall be 0.8 tons

per person per year. LOS standards for solid waste will not be exceeded by this request.

Schools

The proposed special use permit does not authorize additional residential units and will not have an impact on the school system.

Recreation

The proposed special use permit does not authorize additional residential units and will not have an impact on the recreation system.

Institutional Policies related to the Request

Objective 5.1, Section 5.0 Institutional Policies, states that in order to promote accessibility to certain institutional uses and provide opportunities for complementary activities that could be achieved through location of such uses in close proximity to other uses, certain institutional uses are allowed in other land use categories designated on the future land use map. This shall be implemented through land development regulations.

Policy 5.1.1 *Potential locations for major future institutional uses are identified on the Future Land Use Map. Institutional uses may be allowed in other land use categories designated on the Future Land Use Map, and implemented in accordance with the guidance and policies within this Section 5.0, and within the Comprehensive Plan as a whole.*

The proposed tower is located on a parcel with the Rural/Agriculture land use designation. This is consistent with Policy 5.1.1 which states that institutional uses may be allowed in other land use categories.

Policy 5.2.1 lists the following criteria to consider when determining the appropriateness of potential institutional locations:

- a. Optimum service area.*
- b. Optimum operating size.*

c. Access to clientele.

d. Compatibility of the scale and intensity of the use in relationship to surrounding uses, taking into account impacts such as, noise, lighting, visual effect, traffic generation, odors.

e. Nature of service provision.

f. Needs of the clientele.

g. Availability and adequacy of public infrastructure to serve the particular use.

h. Preservation and strengthening of community and neighborhood character through design.

i. Consistency with the goals, objectives, and policies of the Conservation and OpenSpace Element.

As an institutional use, the seven factors noted above must be evaluated when determining the appropriateness of the proposed PWSF. These same factors also correspond with requirements detailed in the Land Development Regulations for PWSFs.

a. Optimum Service Area.

As indicated in the background materials from the applicant (see image below), one existing PWSF is located just over 2 miles away from the site of the proposed tower. However, the highest available space on that PWSF is 150', which according to the RF consultant retained by staff reviewed (see attached RF Consultant report) will provide substantially less coverage and would still require additional towers to be built to provide the same coverage as a 265' tower.

Staff also asked the RF consultant for a comparison of cell coverage if the tower were to be built at a height of 199'. The table below shows the corresponding reduction for the service area.

| Proposed tower Height of 265' | | | | | | |
|--------------------------------------|-----------------|-------------------------|-------------------|-------------------|---------------------------|---------------------|
| City / Town | Zip Code | Area (Sq. Miles) | Population | % Coverage | Population Covered | Area Covered |
| Brooker | 32622 | 85.83 | 1510 | 2.51% | 38 | 2.15 |
| Gainesville | 32609 | 137.0 | 19542 | 18.4% | 3596 | 25.2 |
| Totals: | | | | | 3634 | 27.35 |

| Alternate tower Height of 199' | | | | | | |
|---------------------------------------|-----------------|-------------------------|-------------------|-------------------|---------------------------|---------------------|
| City / Town | Zip Code | Area (Sq. Miles) | Population | % Coverage | Population Covered | Area Covered |
| Brooker | 32622 | 85.83 | 1510 | 1.44% | 22 | 1.24 |
| Gainesville | 32609 | 137.0 | 19542 | 14.47% | 2828 | 19.8 |
| Totals: | | | | | 2850 | 21.04 |

The applicant's intent and expectation is to improve cell coverage for this area of Alachua County. The RF consultant retained by staff has concluded that the proposed tower height and location is necessary to serve the intended service area.

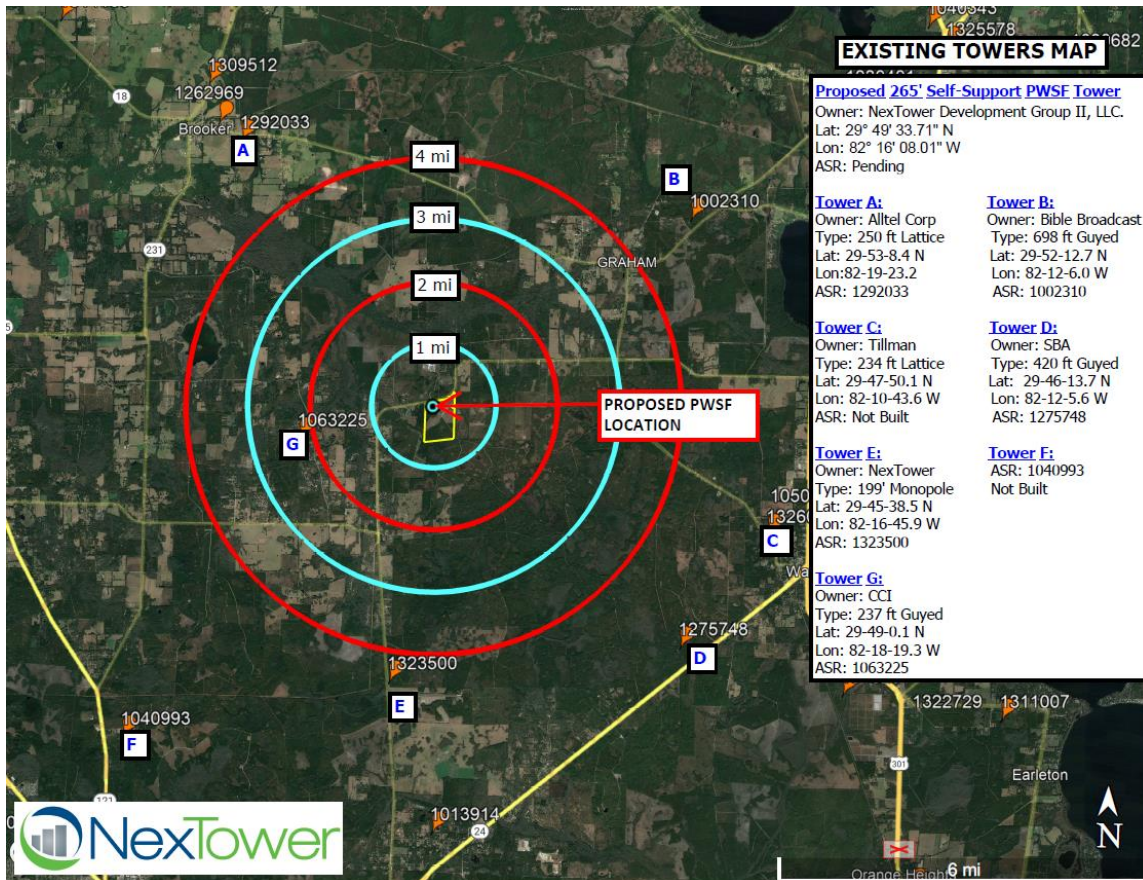


Figure 6: Proposed PWSF in relation to existing towers

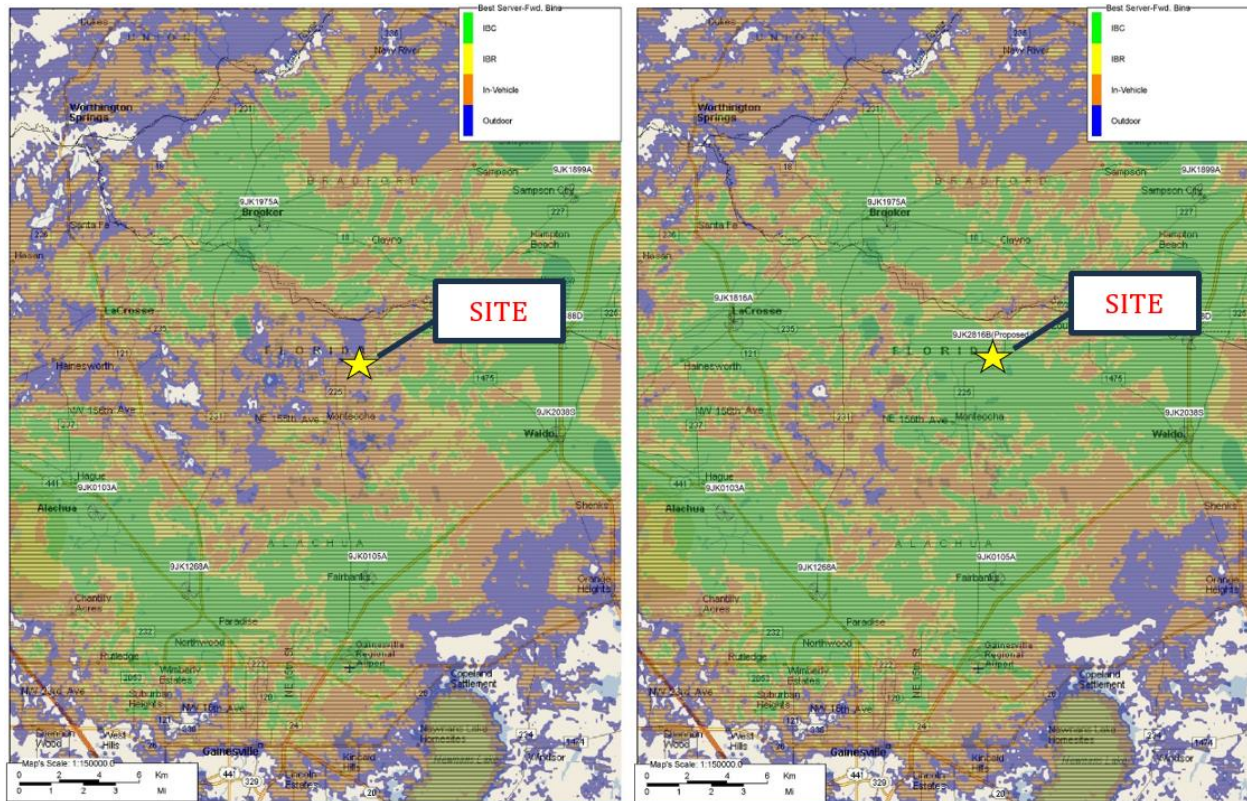


Figure 7: Current and Future Cell Coverage for T-Mobile based on proposed tower height

b. Optimum Operating Size.

The applicant has submitted data as required by the PWSF ordinance which analyzes the necessary height (which is related to the optimum service area) of the proposed antenna. The data has been analyzed by an RF consultant retained by Alachua County and has been demonstrated to show that the proposed height is justified in order to provide the service coverage desired (letter from Mr. Christopher J. Monzingo, P.E., PMP, consultant engineer, attached).

c. Access to clientele. Providing service through the proposed structure will give the clientele improved access to their cellular phones in this area.

d. **Compatibility With Surrounding Uses.** The site is located in a rural part of the county with surrounding uses including large parcels dedicated to timber harvesting, single-family residences (nearest residence approx. ¼ mile away) and a historic cemetery. Photo simulations of the tower demonstrate what the visual impact would be from different vantage points. The tower would be visible at certain locations along N. County Rd. 225, although existing trees and vegetation serve to obscure it from most locations (see Figures 8 through 10 below).

Due to the proposed height of 265' a monopole design is not feasible. Generally, the maximum feasible height of a monopole is 200 ft. Therefore, the applicant is proposing a self-supporting lattice tower. This type of tower does not require guy wires. However, due to its height it is required by the Federal Aviation Administration (FAA) to be lit. The lighting is required for safety purposes for aviation and is "dual lighting" (red at night/white strobe during day).



Figure 8: Photosim from view point "B"



Figure 9: Photosim from view point "F"

**Photo Simulation of Proposed
Tower from 1,866' looking SW.**



Figure 10: Photosim from view point "C"

- e. **Nature of Service Provision.** The applicant has submitted information indicating their need and desire to locate at this site. The applicant intends to provide service to this area of the County (Monteocha) that has an extensive cell reception coverage gap by constructing the 265 foot structure.

- f. **Needs of the Clientele.** The proposed facility should serve a demonstrated need of the clientele. The application states that the new site would provide coverage where none currently exists and thus facilitate better quality service to present and future customers. The RF consultant retained by staff provided statements that corroborated this need.
- g. **Availability and adequacy of infrastructure to serve the particular use.** The requested use has very little impact on existing infrastructure. The infrastructure to support the proposed use is adequate and in place as demonstrated by the Level of Service analysis.
- h. **Preservation and strengthening of community and neighborhood character through design.**

The proposed tower is the minimum height necessary to provide the applicant carrier's designed service to the area. An independent radio frequency (RF) consultant retained by Alachua County has corroborated this in their analysis. The proposed design is a self-supporting lattice tower which will not require the use of guy wires.

The area is rural and sparsely populated with mostly large tracts of timberland. The nearest residence is approximately ¼ mile to the northwest. The tower is proposed to be located a minimum of 350 ft. from the nearest property line and at a minimum height to eliminate the cell coverage gap in this area of the county. The location and design serve to preserve the rural community character.

- i. **Consistency with the goals, objectives, and policies of the Conservation and Open Space Element.**

The tower, as conditioned, will be consistent with the goals, objectives, and policies of the Conservation and Open Space Elements. The proposed PWSF will not be located in environmentally sensitive or passive recreation areas of the County. Staff from the Alachua County Environmental Protection Department have indicated that while the site

is located within the Northeast Flatwoods Strategic Ecosystem, the only natural resource features associated with the parcel are the wetland and wetland buffer, located to the southwest of the site.

5.5 PUBLIC UTILITY, COMMUNICATION, OR INFRASTRUCTURE SERVICES

Infrastructure and utility structures, such as communication towers, personal wireless service facilities, radio and television antennas, water and sewer, and energy generation and distribution facilities shall be designed and located to eliminate or minimize adverse visual impacts on the landscape.

Consistency: This policy requires designing and locating personal wireless service facilities, among other institutional uses, to eliminate or minimize adverse visual impacts. This tower is proposed to be located in a wooded area in a rural part of the County. The tower is not likely to be seen from most of N. County Road 225 and residential areas due to the presence of tall trees lining the road and surrounding the 197-acre parent tract.

5.8 PERSONAL WIRELESS SERVICE FACILITIES

Policy 5.8.1 *The County shall facilitate the deployment of personal wireless services and facilities (PWSFs) in a manner that balances needs for economic development, environmental protection, and minimization of adverse visual impacts in Alachua County. PWSFs should:*

a. use existing structures not originally built as antenna mounts, including, but not limited to rooftops, utility poles, and church steeples.

Consistency: The applicant states that no existing structures in the area would work for their service needs; therefore the applicant is building a new structure. Review from the RF consultant has verified that the height is needed to close the existing coverage gap.

b. use the least obtrusive mount for deploying service, including minimizing the height and silhouette to have the minimum visual impact possible;

Consistency: The proposed design is intended to be as short as possible for the coverage desired. The RF review concludes that the requested tower height of 265 ft. feet meets the technical requirements of the Code. The applicant has proposed a self-support lattice design since the feasibility of a monopole design greater than 200 ft. is greatly diminished.

c. be located, sited, and designed in a way that minimizes the adverse visual impact on the community.

Consistency: Staff's proposed conditions minimize the adverse visual impact.

d. be located in such a way as to avoid impacting view corridors, vistas, and viewsheds.

Consistency: The tower will not be impacting view corridors, vistas, or viewsheds.

e. if ground-mounted, not be located in environmentally sensitive areas or passive recreation areas within Alachua County parks.

Consistency: The proposed PWSF will not be located in environmentally sensitive or passive recreation areas of the County. Staff from the Alachua County Environmental Protection Department have indicated that the tower site is approximately 400 ft. distant from the nearest wetland and expect no significant impacts to strategic ecosystem resources.

f. not be placed or constructed on a historic structure, landmark or site that is eligible for listing in the National Register of Historic Places or is deemed of historic value by the State of Florida or Alachua County.

Consistency: The tower will not be placed on a historic structure, landmark or site that is eligible for listing in the National Register of Historic Places or deemed of historic value by the State of Florida or Alachua County.

g. not be located in conservation areas.

Consistency: The proposed PWSF will not be located in a conservation area.

h. not be located where the potential for bird kills is shown to exist.

Consistency: The proposed PWSF will not be located in an area where the potential for bird kills is shown to exist.

Policy 7.1.2 of the Future Land Use Element

Policy 7.1.2 of the Future Land Use Element states that:

Proposed changes in the zoning map shall consider:

a. consistency with the goals, objectives, policies and adopted maps of the Comprehensive Plan

The proposed special use permit is consistent with the goals, objectives, policies and adopted maps of the Comprehensive Plan. The site has a future land use designation of Rural/Agriculture and is in the Agriculture zoning district. Institutional uses may be allowed in other land use categories, pursuant to Policy 5.1.1. of the Future Land Use Element.

b. the availability and capacity of public facilities required to serve the development. When considering a rezoning, this includes availability and capacity of existing public facilities and timing of future facilities based on capital plans. Specific determinations for any exceptions to the requirement to connect

to a centralized potable water and sanitary sewer system will be made at the stage of development plan review, as detailed in Policy 2.1 of the Potable Water and Sanitary Sewer Element.

The site is located outside of the Urban Cluster and is not required to be served by a centralized potable water and sanitary sewer system. This special use permit is not expected to result in any additional impacts to the transportation network.

- c. the relationship of the proposed development to existing development in the vicinity and considerations relating to environmental justice and redevelopment opportunities.*

The site is mostly surrounded by large, vacant timberland parcels. The nearest residence is approximately ¼ mile to the northwest in an otherwise sparsely populated area. Staff has not identified any environmental justice or redevelopment issues that would result from the approval of this application.

- d. those factors identified by law, including that as a general matter an applicant is not entitled to a particular density or intensity within the range of densities and intensities permitted by the Comprehensive Plan, given due consideration of legitimate public purposes relating to health, safety, and welfare.*

This special use permit request for a Tier 3 PWSF will not alter the allowable density or intensity range of the site. Staff has not identified any adverse impacts to public health, safety or welfare that would result from the approval of this request.

Unified Land Development Code (ULDC) Consistency

Sec. 402.124. – Criteria for approval of special use permit applications.

The Board of County Commissioners shall, as part of a decision to approve an application for a special use permit, make a finding that an application complies with both the general criteria and the review factors listed below:

(a)The proposed use is consistent with the comprehensive plan and ULDC;

The proposed use of a personal wireless service facility (PWSF) is consistent with the Institutional (public utility, communication or infrastructure services) policies of the Comprehensive Plan and PWSF standards of the ULDC. The proposed tower has been located and designed to minimize adverse visual impacts on the landscape.

(b)The proposed use is compatible with the existing land use pattern and future uses designated by the comprehensive plan;

The existing land use pattern of the site and surrounding area is marked by large timberland parcels on agriculturally zoned parcels and a medical cannabis cultivation site to the north. Institutional uses such as PWSF are allowed in all land use categories through the special use permit process. As conditioned by staff, the proposed use is compatible with the existing land use pattern and future land uses of the Rural/Agriculture land use category.

(c)The proposed use shall not adversely affect the health, safety, and welfare of the public; and

Staff has not identified any adverse effects to the health, safety or welfare of the public that would result from the approval of this application.

(d) Satisfactory provisions and arrangements have been made concerning the following matters, where applicable:

(1) Ingress and egress to the property and proposed structures thereon with particular reference to automotive, bicycle, and pedestrian safety and convenience, traffic flow and control and access in case of fire or catastrophe;

The ingress and egress to the site is from a 30' wide easement road off of N. County Rd. 225. The site will not generate any traffic as the tower does not have a permanent staff presence but only periodic maintenance checks.

(2) Off-street parking and loading areas where required, with particular attention to item (1) above;

The tower will be unmanned. No parking or loading areas will be required.

(3) The noise, glare or odor effects of the special use permit on surrounding properties;

The tower will not generate any noise, glare or odor effects.

(4) Refuse and service areas, with particular reference to location, screening and items (1) and (2) above;

No refuse or service areas will be associated with the PWSF.

(5) Utilities, with reference to location and availability;

The PWSF will connect to the existing electric utility line on N. County Rd. 225.

(6) Screening and buffering with reference to type, dimensions and character;

Existing vegetation will serve as buffering to the greatest extent possible. The PWSF will be required to be consistent with the landscaping standards as found in Sec. 404.54(d)(5) of the ULDC.

(7) Signs, if any, and proposed exterior lighting with reference to glare, traffic safety and compatibility with surrounding properties;

No signs or exterior lighting are proposed.

(8) Required yards and other open space;

The proposed PWSF meets the required yard and open space requirements. The nearest the tower compound is to any property line is 350' (northern property line), with other setbacks much more distant.

(9) General compatibility with surrounding properties; and

The tower has been conditioned to have minimal impact to surrounding properties.

(10) Any special requirements set forth in this ULDC for the particular use involved.

The proposed tower meets the standards of Tier 3 PWSF as identified in Sec. 404.54 of the ULDC.

Sec. 404.54. – Criteria for approval of special use permit applications

Tier three PWSF reviews are subject to the following review criteria:

(c) (1) *Location.*

a. The proposed PWSF shall be located in an area where the adverse visual impact on the community is minimized, as demonstrated by the visual impact analysis report described in [section 404.56\(c\)](#).

As demonstrated in the applicant's visual impact analysis report the proposed tower is located in an area where adverse visual impact to the community is minimized. The proposed location of the tower is set back approximately 350 feet from the nearest property line of parcel 07605-000-000.

b. The location of a proposed PWSF shall minimize environmental impacts. Ground-mounted PWSFs should not be located in preservation areas, conservation areas, or passive recreation areas of county parks as defined by this ULDC and the comprehensive plan.

The proposed PWSF is not located in a preservation, conservation or passive recreation area of a county park.

c. PWSFs greater than 200 feet in height should not be located in areas where the increased potential for bird kills is shown to exist.

The proposed PWSF is greater than 200 feet in height but is not located in an area where the increased potential for bird kills has been shown to exist.

d. Lighted towers using guy-wires are prohibited in conservation areas as defined by this ULDC and the Comprehensive Plan.

The proposed PWSF will be lit (as required by FAA regulations) but will not use guy-wires and is not in a conservation area.

e. Proposed PWSFS should not be visible from any designated scenic road or corridor or roads designated Old Florida Heritage Highway.

The proposed PWSF is not visible from any designated scenic road or corridor or road designated as Old Florida Heritage Highway.

(2) *Design.* All PWSFs should be designed in such a way to minimize the adverse visual impact on the community. This may include reducing the height and silhouette in order to create the least adverse visual impact. The minimum height necessary to provide the applicant carrier's designed service to the area should be utilized, as verified by an independent radio frequency

(RF) analysis. In general, a monopole tower or concealed tower is considered to have less visual impact than alternative tower designs.

Alachua County has retained an independent radio frequency (RF) engineer as required by the ULDC for Tier 3 PWSF. The consulting engineer has stated that the proposed height is the minimum necessary to provide the applicant carrier's designed service area. Due to the proposed height of 265', the monopole design is infeasible. The alternative design is a self-support lattice tower. However, the proposed tower will not require guy wires.

(d)Development standards for tier two and tier three. All applications for tier two or tier three review shall comply with the following standards:

(1)Setbacks and separation. All new towers and accessory structures shall comply with standard zoning district setbacks for a primary structure or other setbacks described in this Article, whichever is greater. All non-concealed PWSFs shall be located behind the principal building line. If the PWSF is mounted on a building, it shall not be visible from the front of the building at the pedestrian level.

The proposed ground mounted PWSF is on an undeveloped parcel and complies with the setbacks of the Agriculture zoning district.

(2)Security barrier. All ground mounted equipment for PWSF facilities shall be secured with locked gate and chain-link fence or masonry wall of at least six feet in height from finished grade. The security barrier shall be maintained by the operator of the PWSF or tower for the life of the installation.

The proposed ground mounted PWSF be secured with a locked gate and chain-link fence at least six feet in height from finished grade.

(3)Airport impacts. All PWSFs must comply with Alachua County Airport Impact Regulations found in article VII of [chapter 405](#).

The proposed PWSF complies with the Alachua County Airport Impact Regulations.

(4)*Signs.* Signs for site identification and contact information are required. In addition, for public safety purposes, each PWSF shall have a weather-proof plaque mounted at eye level at or near the PWSF or structure identifying the carriers and dates of permit approval for all antennas on the structure and the location of the county office where further information can be obtained. Such information for PWSFs mounted on buildings may be maintained by the building superintendent or similar agent provided such information is readily accessible on reasonable demand during normal business hours. Any signs required by the FCC or FAA are also allowed. No other signage shall be permitted on any PWSF.

The proposed PWSF complies with these signage requirements.

(5)*Landscape buffers.* Existing natural vegetation shall be undisturbed to the greatest extent practicable and may be counted toward the buffer requirement. Landscaping materials shall consist of xeric or drought-resistant native species and shall be maintained by the operator of the PWSF for the life of the installation.

a. Landscape buffers shall be required around any ground-mounted security barrier. Landscape buffers, located outside and within ten feet of the fence, shall include one non-deciduous tree for every 20 linear feet of fence and a continuous row of shrubs spaced not more than three feet apart. The trees shall be at least ten feet in height and the shrubs shall be at least two feet in height at time of planting.

b. Ground-mounted accessory equipment for PWSFs mounted on structures not originally intended as PWSF mounts shall be concealed from view within existing structures or shall be limited to 12 feet in height and shall be buffered by a continuous row of shrubs spaced not more than three feet apart.

c. The DRC may waive the landscaping requirement if the applicant can demonstrate that the site will not be visible from adjacent lots or rights-of-way.

d. For tier three applications, natural vegetative buffers on the perimeter of the property may be required to be retained to reduce the adverse visual impact of the facility on surrounding residences.

The proposed PWSF will comply with these landscaping requirements.

(6)*Access.* A 12-foot wide stabilized access driveway and turn-around area are acceptable unless staff determines, based on public safety concerns, that circumstances require paved access.

The proposed PWSF has a 14-foot wide stabilized access driveway and turn-around area within a 30-foot access easement.

(7)*Occupancy.* Communication towers and accessory structures shall be unoccupied.

The proposed PWSF will be unoccupied.

(8)*Modifications.* All modifications that, when viewed from ground level from surrounding properties, appear to be of a different size, type or appearance than what currently exists on or associated with the PWSF, as determined by the director, must comply with the design standards of this article. For the purposes of this subsection, a co-location shall not be considered a modification. All modifications must comply with any conditions or provisions of an existing permit, including special use permits, for the property or structure.

No PWSF currently exists on site. Any future modifications will comply with this section.

Staff Recommendation

Staff recommends that the Board of County Commissioners **approve Z23-000007** with staff's proposed conditions and bases shown below.

Conditions

1. This Special Use Permit is issued to allow construction and operation of a personal wireless service facility (PWSF) up to 265 feet in height within a portion of parcel number 07605-000-000 (as described in the attached legal description) on approximately 0.23 acres located on N. County Rd. 225. The limit on 265 feet shall not preclude any height modifications that are not deemed to be a "substantial change" as interpreted by the Federal Communications Commission (FCC).
2. The PWSF shall have a self-support lattice design.
3. Landscaping buffering of the site shall meet the requirements of Sec. 404.54(d)(5) of the ULDC.
4. The applicant shall comply with all federal, state, and local laws, rules, regulations, and ordinances, including Chapter 404, Article 12 of the Alachua County Unified Land Development Regulations, now and hereafter in force, which may be applicable to the use of the site. Any violation of the above conditions shall be grounds for suspension or revocation of this Special Use Permit by the Alachua County Board of County Commissioners.
5. The owner or operator of this tower shall provide for and conduct an inspection of the tower at least once every five (5) years. A statement shall be provided to the Alachua County Office of Code Administration verifying structural integrity and tenants on the tower.

6. In the event that this PWSF is not operated for a continuous period of eighteen (18) months it shall be considered abandoned, and the owner shall remove it within ninety (90) days of notice to the Alachua County Office of Code Administration that the PWSF is abandoned. If such PWSF is not removed within said ninety (90) days, the County may have the PWSF removed at the PWSF owner's expense.

Bases

1. **Policy 5.2.1 of the Future Land Use Element** lists criteria that shall be used to determine the appropriateness of potential locations for institutional uses including compatibility of the scale and intensity of the use in relationship to surrounding uses, taking into account impacts such as, noise, lighting, visual effect, traffic generation, and odors. The Personal Wireless Service Facility (PWSF) ordinance implementing the Comprehensive Plan requires that the applicant submit information on proposed or built adjacent cell sites in order to analyze the necessary height of the proposed antenna. This information has been submitted and analyzed. The RF review shows that the proposed height of the PSWF is justified and will give the carrier (T-Mobile) the coverage they seek. The height of the PSWF at 265 total feet will be required to be lit per FAA regulations. There will be no noise, traffic or odors generated from this site.
2. **Objective 5.5 of the Future Land Use Element** requires designing and locating personal wireless service facilities, among other institutional uses, to eliminate or minimize adverse visual impacts. This tower is proposed to be located in a sparsely populated rural setting with existing vegetation obscuring the tower (as seen in the photo simulations provided with the application). The tower has been designed and located to minimize adverse visual impacts (guy wires not

required) and will remove the need for additional future towers to be built in order to serve the same coverage area.

3. Policy 5.8.1 of the Future Land Use Element states that “the County shall facilitate the deployment of personal wireless services and facilities (PWSFs) in a manner that balances needs for economic development, environmental protection, and minimization of adverse visual impacts in Alachua County. PWSFs should: ...use the least obtrusive mount for deploying service, including minimizing the height and silhouette to have the minimum visual impact possible.” The proposed tower height of 265’ must use a self-support lattice design as a monopole design is not feasible. However, the tower will not require guy wires. The deployment of this tower balances the needs for economic development, environmental protection and minimization of adverse visual impacts in Alachua County. This single proposed tower would be able to serve a coverage area instead of multiple towers being required to achieve the same coverage. Other tenants will be able to collocate on this tower, further reducing the need for additional towers. Therefore, the overall visual impact is lessened. The tower site is located outside of the wetlands/wetland buffer (approx. 400 ft. distant) and staff from the Alachua County Environmental Protection Department have indicated that there will be no significant impacts to strategic ecosystem resources. The RF review concludes that the requested height of 265 feet is justified to give the applicant the stated need in coverage.

4. Policy 7.1.2 of the Future Land Use Element states that proposed changes to the zoning map shall consider consistency with the Comprehensive Plan, availability and capacity of public facilities, the relationship of the proposed development to existing development in the vicinity and environmental justice issues. There are adequate public facilities to serve the proposed PWSF. There are no environmental justice issues associated with this special use permit request. The Comprehensive Plan requires designing and locating personal wireless service facilities in the least visually intrusive manner and to minimize

or eliminate adverse visual impact. The applicant has justified the proposed height of the tower with their RF information according to the County's independent RF consultant's review.

5. Policies 1.2.4 and 1.2.5 of the Capital Improvements Element require public facilities to be available concurrent with new development. There are adequate public facilities to serve the proposed PWSF. The proposed tower is expected to have only a couple of trips a month for maintenance, which is considered to be a *de minimus* traffic impact (fewer than 10 average annual daily trips). The cell tower has no impact on schools, water and sewer, and will not cause the LOS for Emergency Services to be exceeded.

6. Section 404.54 (c) of the Unified Land Development Code states that "proposed PWSFs shall be located in an area where the adverse visual impact on the community is minimized, as demonstrated by the Visual Impact Analysis Report described in §404.57(c)." The applicant's Visual Impact Analysis and photo simulations demonstrate that the tower will not be visible from most of the surrounding areas. The site is in a sparsely populated rural part of the county and is set back from the nearest road by 350 feet. The nearest residential structure is located over ¼ mile distant from the proposed tower location. The equipment compound should not be visible from N. County Rd. 225. In addition, the applicant has submitted RF information that demonstrates that this height is necessary for service. This request is consistent with Section 404.54(c).

7. Section 404.54(c) of the Unified Land Development Code (ULDC) states that "all PWSFs should be designed in such a way to minimize the adverse visual impact on the community. This may include reducing the height and silhouette in order to create the least adverse visual impact. The minimum height necessary to provide the applicant carrier's designed service to the area should be utilized, as verified by an independent radio frequency (RF) analysis. In general, a monopole tower or concealed tower is considered to have less visual impact than

alternative tower designs.” The applicant has proposed a self-support lattice design since a monopole design is not feasible at this proposed height. As shown by the applicant and the independent RF consultant retained by staff, a reduction of height from the requested height will result in considerable reduction of the service area. The photo simulations demonstrate that the tower will not be visible from most views in the photo simulations. The RF review has confirmed that the requested tower height of 265 feet is justified.

- 8. Section 402.124 of the ULDC** describes the criteria for review of special use permits. The Board of County Commissioners shall, as part of a decision to approve an application for a special use permit, make a finding that the proposed use is consistent with the Comprehensive Plan and Unified Land Development Code (ULDC) and is compatible with the existing and future land use pattern, and that the use will not adversely affect the health, safety, and welfare of the public. As shown in the above bases, the application is consistent with both the Comprehensive Plan and the ULDC. The tower, with staff’s proposed conditions, is compatible with the surrounding land uses and the use will not adversely affect the health, safety, or welfare of the public.

Staff and Agency Comments

Department of Environmental Protection:

Comment: The proposed tower location is approximately 400 feet away from wetlands and therefore outside of the regulated 75 ft. wetland buffer [Article 6, Chapter 406, ULDC]. The wetlands as mapped on GIS are sufficient to demonstrate compliance with wetland buffer protections.

Comment: Due to the small area of impact, location within an industrial silviculture operation, and sufficient distance from wetlands, in staff’s opinion, there will be no significant impacts to strategic ecosystem resources [Article 5, Chapter 406, ULDC].

Department of Public Works

No comment.

Transportation

No comment.

RF CONSULTANT REPORT

Re: Alachua County Z23-00007 SUP Review Report

Chris Monzingo <cmonzingo@ocg-usa.com>

Mon 11/20/2023 3:05 PM

To: Mehdi Benkhatar <mhenkhatar@alachuacounty.us>

 1 attachments (3 MB)

20231120 NexTower - Applications Review Report-Z23-000007.pdf;

Mehdi,

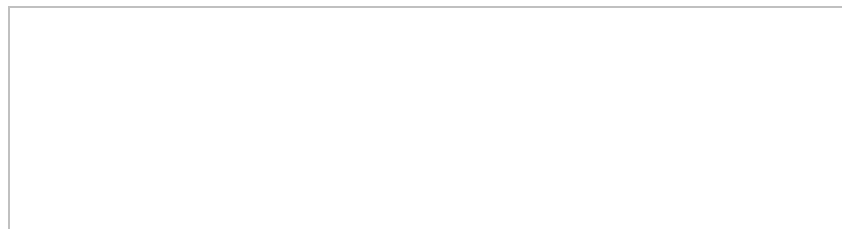
Attached is an updated report. I have included the coparion coverage of the proposed tower site at the proposed height of 265' and reduced to 199'. Reducing the tower height to 199' would result in approximately 23% less coverage. T-Mobile is also preparing additional coverage maps but I have not received them as of yet.

Ultimately, if the tower height is reduced T-Mobile most likely will need four towers to complete the coverage in this area. The proposed tower at 199', the existing tower (ASR 1063225), another new tower northeast in the Graham area (there is one large guyed tower in the area that may work ASR:1002310), finally a fourth tower (new) to the southwest around the NW156 Ave. and 231 intersection.

With the proposed height it looks as though T-Mobile would only need to add one additional new tower to the southwest around the NW156 Ave. and 231 intersection.

Please let me know if you have any questions or comments

Best Regards,



On Tue, Nov 14, 2023 at 11:44 AM Mehdi Benkhatar <mhenkhatar@alachuacounty.us> wrote:

Chris, I'm going to be out of the office from this Thursday and all next week. Yes, I would like to see what the coverage would be if T-Mobile co-located on that existing tower 2 miles away at the highest available height (150ft?) in conjunction with a 199' tower at the proposed site.

What does that coverage look like versus a new 265' tower? Could it accomplish roughly the same level of coverage?

Best,

Mehdi



November 20, 2023

**OMNICOM CONSULTING GROUP, INC.
TECHNICAL REVIEW REPORT**

**Personal Wireless Service Facility (PWSF)
for
ALACHUA COUNTY
for
NexTower Development Group II, LLC
265' Self-Supporting Tower**

This report is in response to the Alachua County request to perform Consulting Services related to the NexTower Development Group II, LLC (NexTower) application to construct a 265' self-supporting tower located off County Road 225 on a 197-acre parcel 07605-000-000. NexTower will build and own this tower while T-Mobile Wireless will be the anchor tenant. Omnicom Consulting Group, Inc. (OCG) has been contracted to review, analyze and evaluate the application for compliance with Alachua County's Land Development Code requirements, specifically the section that requires that:

"All PWSFs should be designed in such a way to minimize the adverse visual impact on the community. This may include reducing the height and silhouette in order to create the least adverse visual impact. The minimum height necessary to provide the applicant carrier's designed service to the area should be utilized, as verified by an independent radio frequency (RF) analysis. In general, a monopole tower or concealed tower is considered to have less visual impact than alternative tower designs."

Upon review of the application OCG would recommend approval of the special use application.

As part of OCG's due diligence a search for existing tower sites, public structures or other appropriate support structures in the immediate area of the proposed tower site was performed. OCG performed this search using the FCC ASR database, Google Earth and other available tower databases. OCG was able to locate one existing tower structure just over 2 miles from the proposed location.

OCG requested that the applicant submit additional information as to why this existing tower was not suitable to meet T-Mobile's need. T-Mobile submitted a supplemental RF package with a comparison of the existing tower to the proposed tower. Given that the existing tower only had a maximum height of 150' available the coverage provided was substantially less. If this tower is utilized by T-Mobile an additional tower would still need to be constructed in the area to provide the same coverage as the single 265' tower.

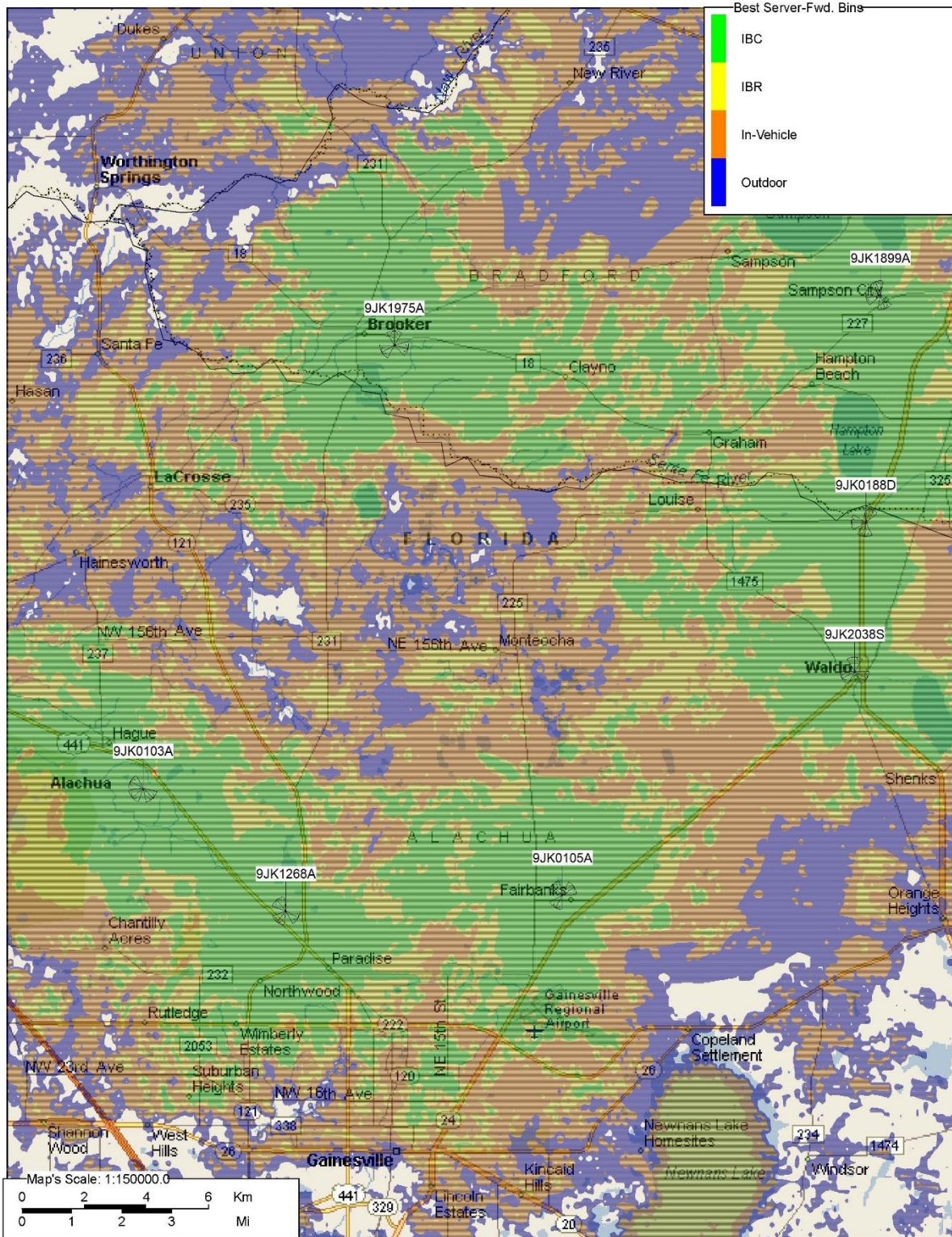
OCG reviewed and analyzed the RF Package(s) submitted by T-Mobile Wireless as part of the overall NexTower application. The T-Mobile package(s) included information on the existing towers being utilized by the T-Mobile network in the immediate area of the proposed tower. T-Mobile provided coverage maps showing coverage in the area without and with the proposed/planned towers. OCG is in agreement with the provided T-Mobile coverage maps and that the proposed tower height is the minimum required to gain noticeable improved coverage in the area of need.

Submitted by:

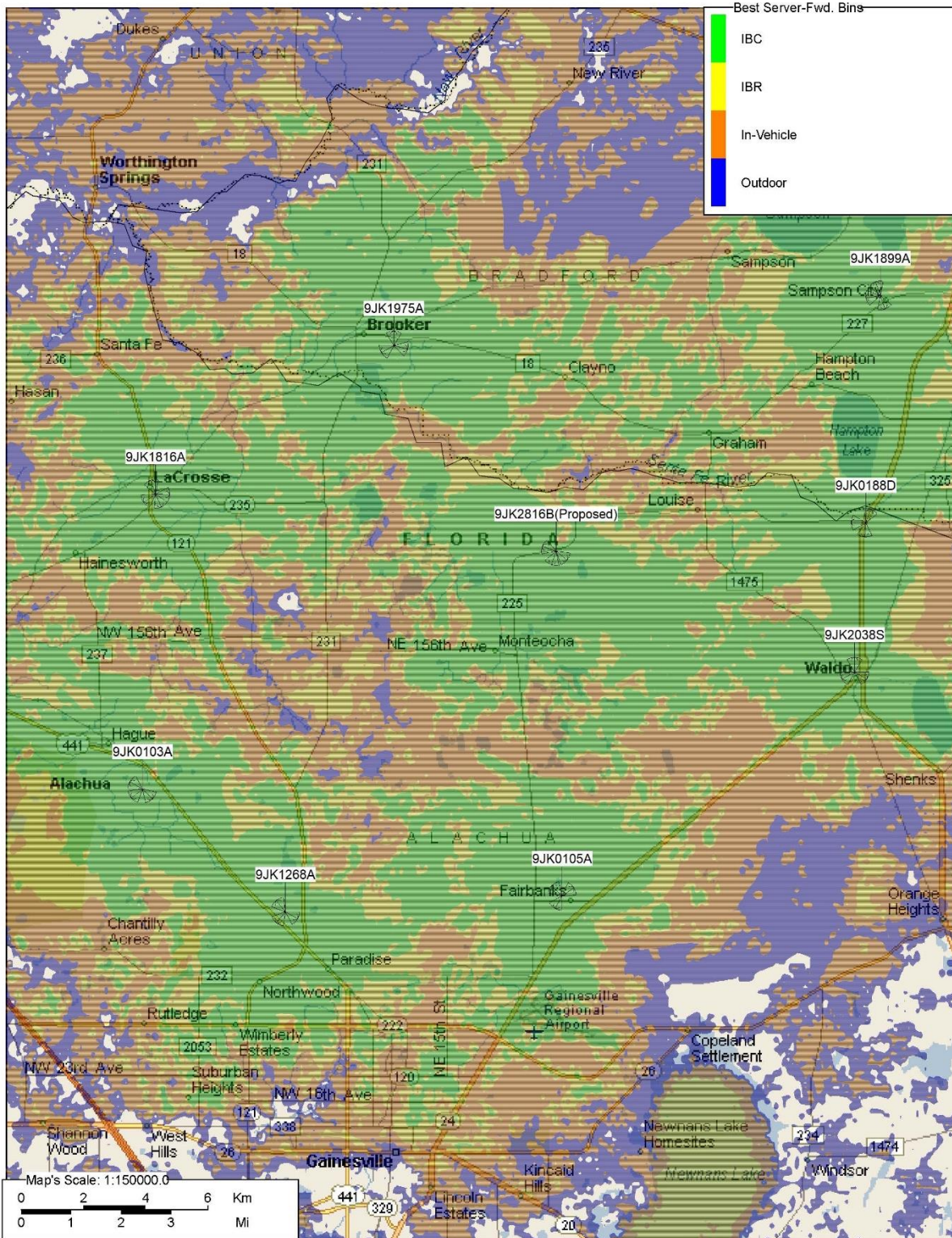
Christopher J. Monzingo, P.E., PMP
Vice President



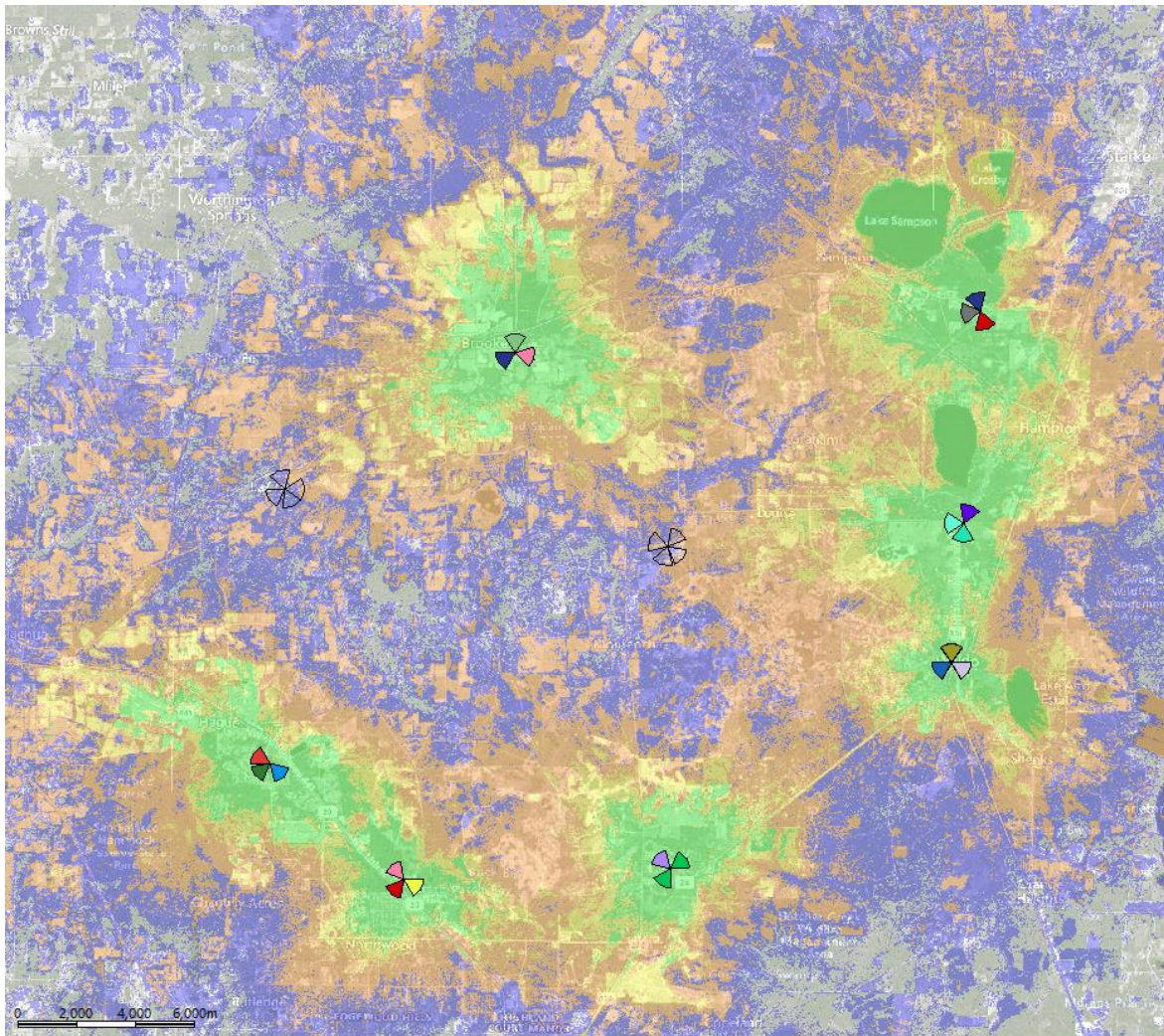
ASR Search Results



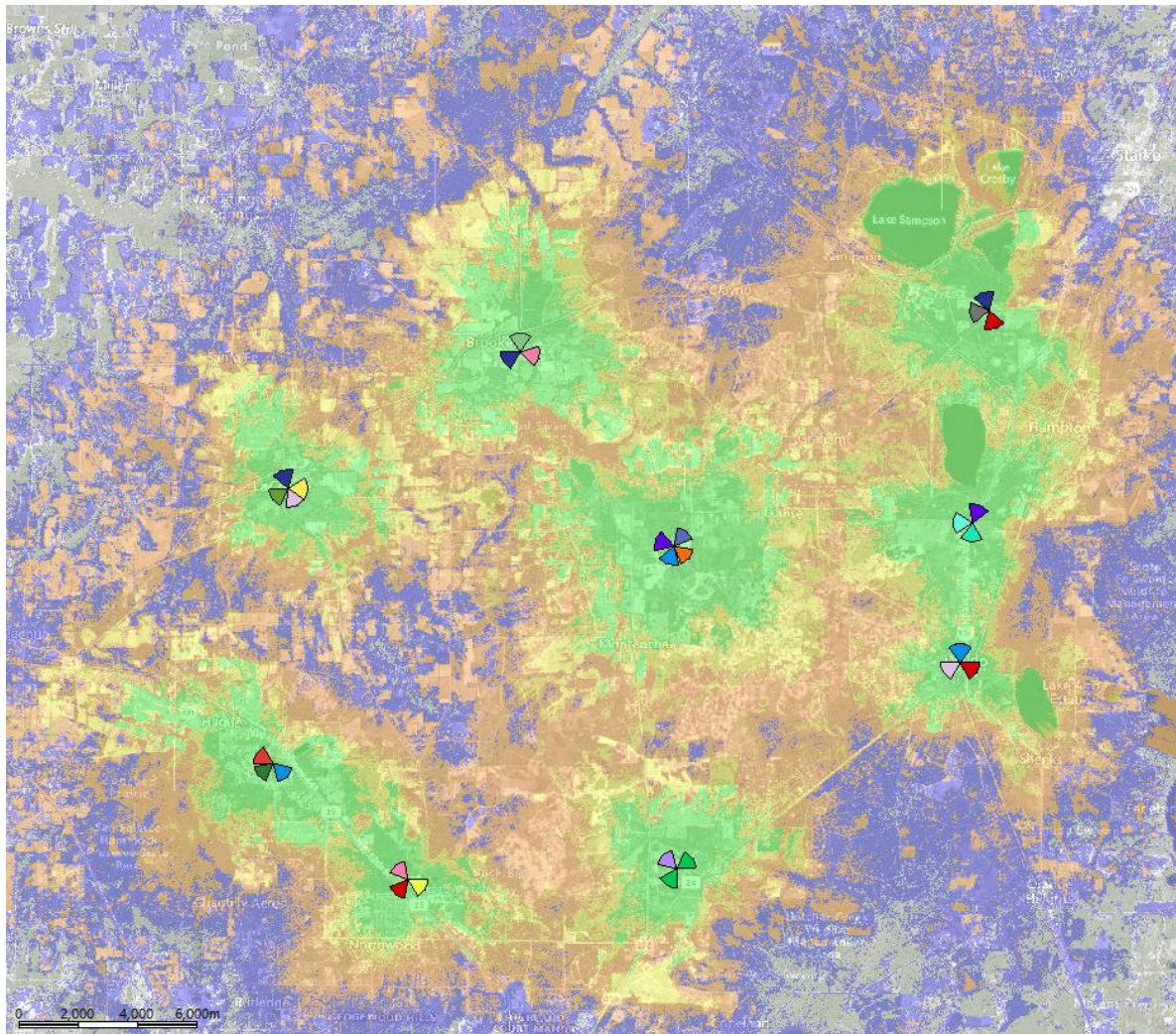
Coverage Without Proposed Tower



Coverage With Proposed Tower



T-Mobile Provided Coverage Without Proposed Tower



T-Mobile Provided Coverage With Proposed/Planned Towers



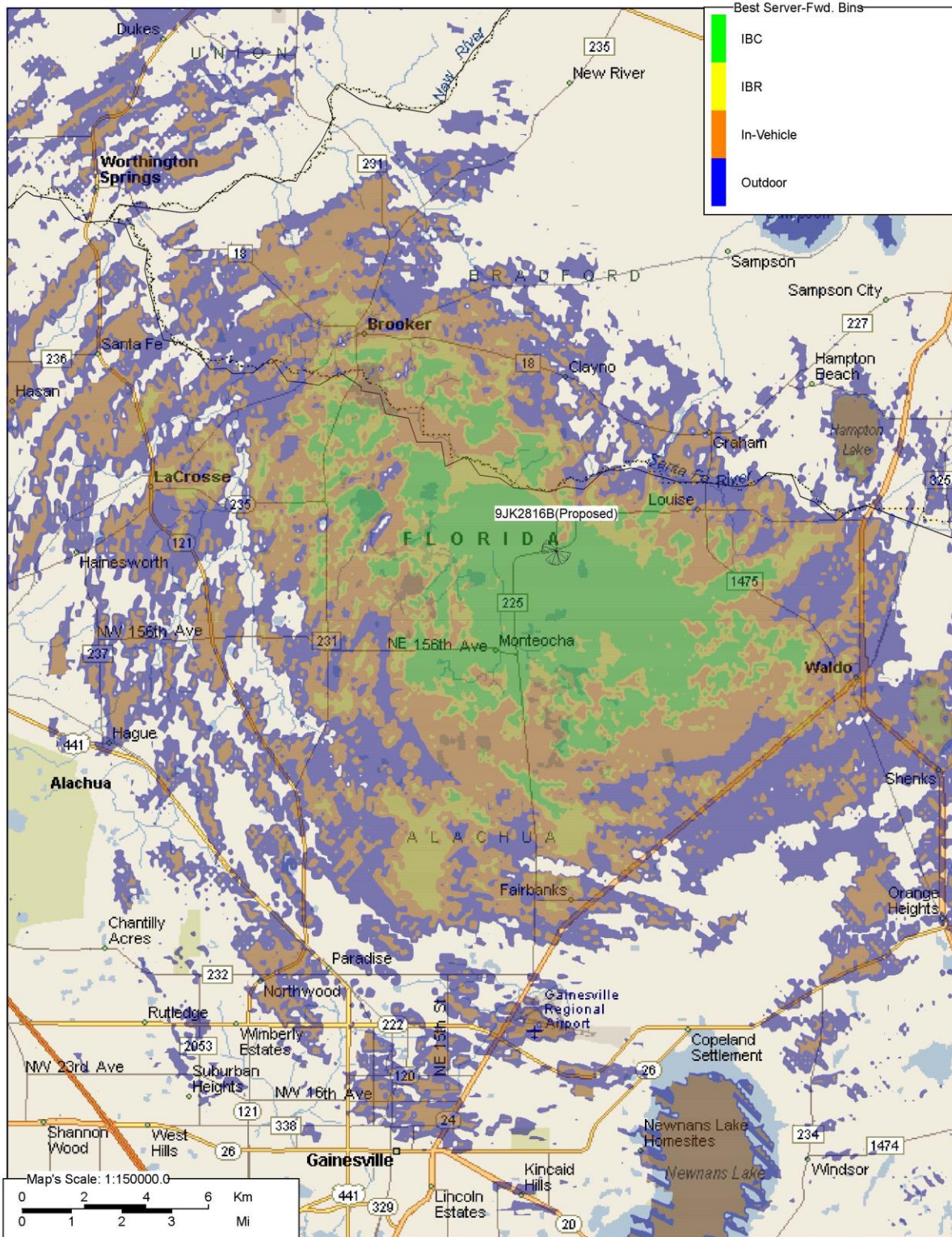
Comparison of the proposed tower height 265' with 199' tower:

| Proposed tower Height of 265' | | | | | | |
|--------------------------------------|-----------------|-------------------------|-------------------|-------------------|---------------------------|---------------------|
| City / Town | Zip Code | Area (Sq. Miles) | Population | % Coverage | Population Covered | Area Covered |
| Brooker | 32622 | 85.83 | 1510 | 2.51% | 38 | 2.15 |
| Gainesville | 32609 | 137.0 | 19542 | 18.4% | 3596 | 25.2 |
| Totals: | | | | | 3634 | 27.35 |

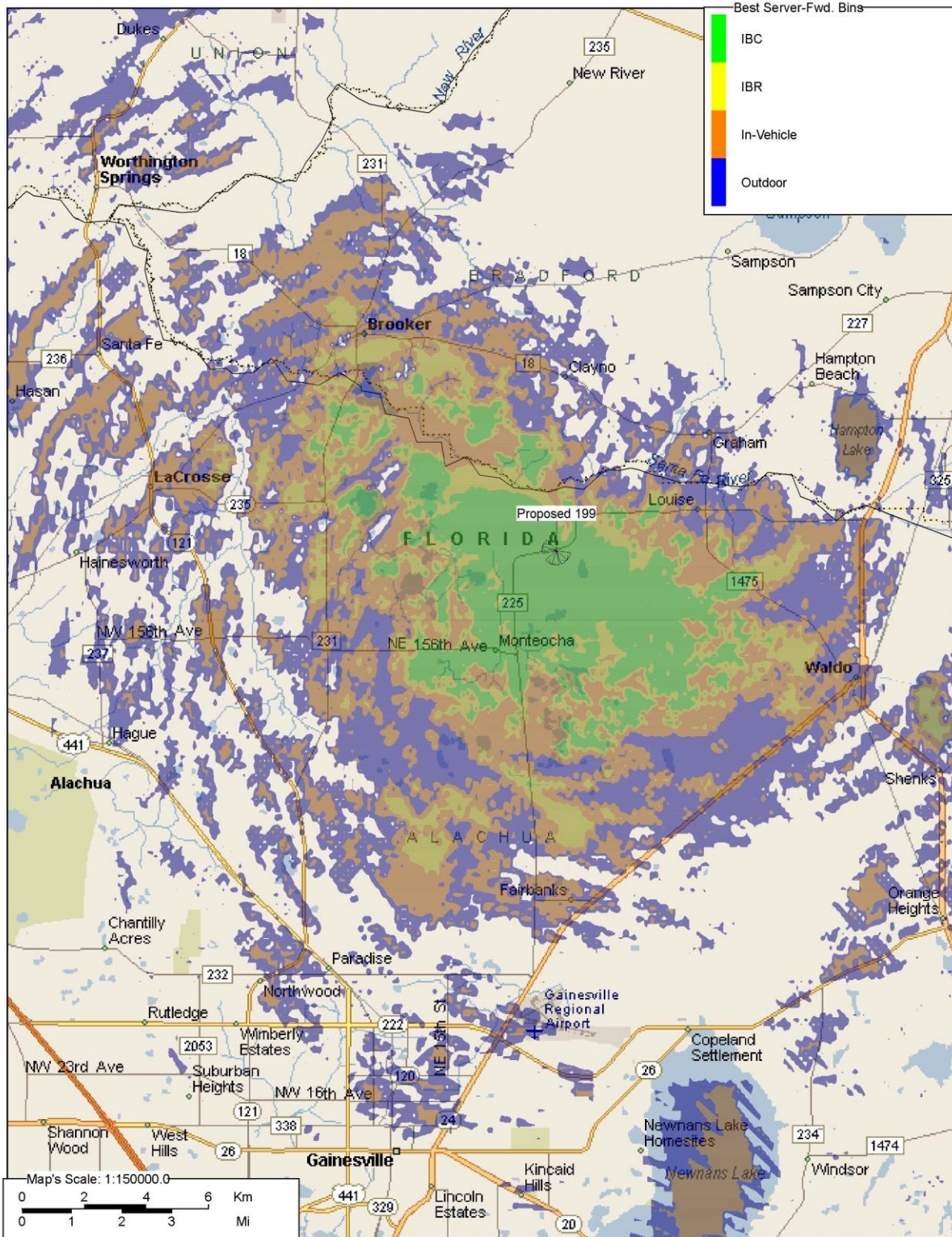
| Alternate tower Height of 199' | | | | | | |
|---------------------------------------|-----------------|-------------------------|-------------------|-------------------|---------------------------|---------------------|
| City / Town | Zip Code | Area (Sq. Miles) | Population | % Coverage | Population Covered | Area Covered |
| Brooker | 32622 | 85.83 | 1510 | 1.44% | 22 | 1.24 |
| Gainesville | 32609 | 137.0 | 19542 | 14.47% | 2828 | 19.8 |
| Totals: | | | | | 2850 | 21.04 |

The reduction in tower height from 265' to 199' would result in approximately 23% less coverage, a reduction of 784 in population coverage and 6.31 sq. miles of coverage.

The following pages show the coverage maps of the site at the proposed height of 265' and the alternate tower height of 199'.



Coverage at proposed height 265'



Coverage at alternate height 199'