

**Addendum 1 to the January 2025 White Paper:
Comprehensive Opposition to CUP2024-10001: Proposed Communication Tower in
Starwood PD**

**Addendum 1
Environmental, Due Diligence, Visual, and Compliance Concerns Regarding the Proposed
Communications Tower**

Prepared by: David Grau

Date: January 2025

Introduction

Since the submission of our original white paper opposing CUP2024-10001, further research, analysis, and evaluations have unveiled additional environmental, site analysis, aesthetic, governance, and technical concerns related to the proposed communication tower in Starwood PD. These findings, building on Sections 4, 8, and 10 of the original white paper, emphasize the significant risks posed to the community, including violations of key ordinances, overlooked environmental hazards, flawed technical justifications, and visual impacts that will permanently alter the character of Meridian Parks.

The original white paper raised concerns about property values, aesthetics, environmental impacts, health risks, and governance violations. This addendum strengthens those points with new evidence of physical environmental pollution and impacts, analysis of the proposed tower's proximity to sensitive wetlands and residences, enhanced visual simulations and imagery, and aesthetic evaluation. It also provides clear documentation of ordinance violations, particularly regarding setback requirements, and challenges the applicant's claims regarding the availability and accessibility of alternate sites.

Key updates include:

- **Environmental Concerns and Plastics Pollution:** This addendum introduces substantial evidence on the environmental risks posed by the proposed tower's faux foliage. Observations from a similar monopine cell tower on Commodity Circle in Orlando reveal consistent shedding of plastic components, including large fragments and potential microplastics. This type of material degradation, accelerated by Florida's intense sun and hurricane exposure, poses risks to nearby preservation land, wetlands, and recreational spaces. Supporting imagery and data are included for review.
- **Alternate Site Analysis:** The applicant has claimed both limited availability and limited access to alternate sites. However, analysis reveals multiple viable locations—including a landfill, pump station site, gas utility site, Central Florida Expressway Authority (CFX) toll plaza site, and planned commercial complex—that would minimize residential impacts while providing superior coverage. Graphics and data demonstrate how these sites are both accessible and more suitable for the proposed tower.
- **Simulation and Imagery Methodology Enhancements:** Using drone data, triangulated data, and trigonometric calculations, we analyzed the viewability of the tower from

various public and residential spaces. Images demonstrate the lack of natural screening for nearby homes and highlight the tower's impact on the community skyline.

- **Ordinance Violations:** The proposed tower sits atop planned land designated as open space. The required setback is 315 feet under Section 58.844 of the Orlando City Code. Sitting atop and abutting residential components of the PD fails to meet this standard. Graphics illustrating this violation and its impacts on nearby homes are provided.
- **Critique of RF Package Claims:** Building on Section 10 of the original white paper, this addendum critiques the RF Package's flawed geographic scope, unsupported claims of 4G LTE overload, and failure to address co-location opportunities and existing tower modifications.
- **Aesthetic Sacrifices to Meet Ordinance 58.844:** The applicant revised drawings between 11/20/24 and 01/03/25 to reduce the tower's height from 110 feet to 105 feet in an effort to address setback requirements from residential lots. However, this does not resolve the issue of the tower's placement atop a residential component in the PD. Furthermore, the revision fully exposed the antennae on the highest portion of the tower and removed previously proposed, though inadequate, camouflage. This alteration is contrary to the intent of zoning requirements and contradicts the policies of the growth management plan. Graphics illustrating this change and its impacts on camouflage are provided.

This addendum seeks to provide the Municipal Planning Board with critical, evidence-based insights to reinforce the community's opposition. By addressing the issues of environmental degradation, visual disruption, technical inaccuracies and omissions, and governance violations, it strengthens the case for rejecting CUP2024-10001 and urges a thorough reassessment of the proposed tower's location.

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A1-1. Environmental Concerns: PVC Shedding, Microplastics, and Preservation Land

Shedding of PVC Components

The proposed tower's faux foliage, constructed of polyvinyl chloride (PVC) plastic, presents significant environmental hazards. Studies have shown that prolonged exposure to sunlight, wind, and rain causes PVC materials to degrade into smaller fragments, releasing toxic microplastics into the surrounding environment. This issue has been widely documented in monopine cell towers across the U.S.

Evidence from 8553 Commodity Circle, Orlando, FL:

Faux foliage shedding was documented at a monopine cell tower at **8553 Commodity Circle, Orlando, FL**, with fallen pieces observed at the following distances from the base:

- **Site 1 - 97 feet to the Northwest**
- **Site 2 - 90 feet to the Northeast**
- **Site 3 - 50 feet to the Southeast**

Access to the West side of the tower was limited due to dense vegetation and a nearby body of water. Importantly, the faux foliage was found atop **recently maintained turf**, suggesting that shedding is a frequent occurrence. In Florida, turf maintenance in winter typically occurs once every two weeks, reinforcing the likelihood of regular shedding and accumulation of plastic litter.



Fallen faux foliage from a cell tower at 8553 Commodity Circle, Orlando, FL 32819 – Fallen Foliage locations and estimated distance from tower.



Fallen faux foliage from a cell tower at 8553 Commodity Circle, Orlando, FL 32819 – Site 1, fallen Foliage atop recently cut turf to the North of the tower. This image underscores the environmental concerns posed by synthetic materials degrading and dispersing into nearby ecosystems, including wetlands and residential areas.



Fallen faux foliage from a cell tower at 8553 Commodity Circle, Orlando, FL 32819 – Site 2, fallen Foliage atop recently cut turf to the East of the tower. This image underscores the environmental concerns posed by synthetic materials degrading and dispersing into nearby ecosystems, including wetlands and residential areas.

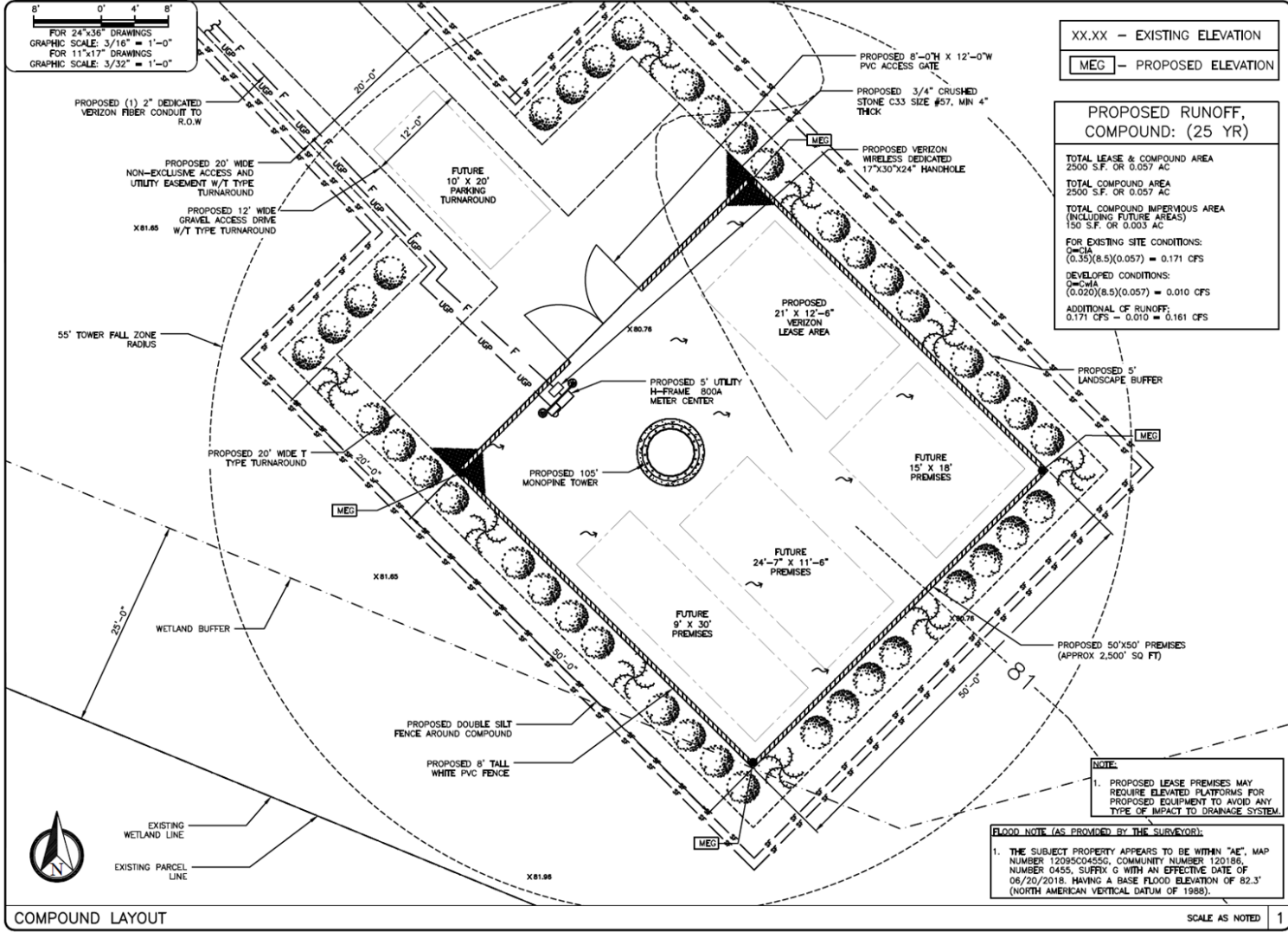


Fallen faux foliage from a cell tower at 8553 Commodity Circle, Orlando, FL 32819 – Site 3, fallen Foliage atop recently cut turf to the South of the tower This image underscores the environmental concerns posed by synthetic materials degrading and dispersing into nearby ecosystems, including wetlands and residential areas.

Proximity to Wetlands and Preservation Land

The proposed site abuts a wetland buffer. There is no runoff pond or other buffer. This proximity heightens the environmental risks:

- **Microplastic Contamination:** Wind and rain can carry microplastics into wetlands, contaminating water and soil.
- **Impact on Preservation Land:** Preservation land, designated for environmental and recreational purposes, is at risk of long-term contamination from PVC microplastics, undermining its ecological integrity.
- **Florida's Climate Exacerbates Risks:** The combination of high sun exposure, heat, and wind accelerates the degradation of PVC materials, increasing the release and spread of microplastics.



REV	DATE	DESCRIPTION
0	11/20/24	ZDS

PROJECT NO.: J184TE
 DRAWN BY: 23-2571
 PROJECT MANAGER: C. OCHOVA
 CHECKED BY: C. OCHOVA

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 TOGETHER PLANNING A BETTER TOMORROW

12074 N. TELECOM PARKWAY
 TAMPA, FLORIDA 33627
 (813) 615-1422
 CERTIFICATE OF AUTHORIZATION 33883

ANTHEMNET

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BOGGY MERIDIAN
 DOWDEN RD
 ORLANDO, FLORIDA 32832
 (ORANGE COUNTY)

SHEET NAME
 COMPOUND LAYOUT

SHEET NUMBER
 C2

This graphic, adapted from the applicant's compound drawing, illustrates the compound encroaching on wetland buffer and the tower being approximately 56 feet away from wetlands. The graphic is used here for informational and educational purposes under fair use. The close proximity raises concerns about microplastic deposition into sensitive wetland areas, highlighting potential environmental impacts.



Wetland Proximity: This image taken facing Southeast from the proposed site at an altitude of 20 feet shows extreme proximity of the tower to preserved spaces and wetlands.



Wetland Proximity: This image taken facing Southwest from the proposed site at an altitude of 60 feet shows extreme proximity of the tower to preserved spaces and wetlands.

Microplastic Hazards

The Environmental Health Trust (EHT) has extensively documented the environmental impacts of faux foliage from monopine towers. Investigators have observed widespread debris fields of PVC fragments and clumps of faux pine needles around monopine towers. A video demonstration provided by EHT highlights the extreme brittleness of PVC foliage, showing how easily the materials fragment into tiny pieces under minimal pressure.

The EHT describes monopine cell towers as “microplastic time bombs,” with large quantities of PVC needles and branches breaking off during windstorms or snowstorms and dispersing widely. Attorneys in a Lake Tahoe case emphasized the significant risks of faux foliage contamination in sensitive areas, describing these towers as sources of “prodigious quantities of microplastic PVC detritus.”

Scientific Research on Microplastics

Microplastics are defined as plastic particles smaller than 5 millimeters, and they are one of the most persistent and harmful pollutants to ecosystems. Studies have demonstrated:

- **Bioaccumulation:** Microplastics do not biodegrade and persist in ecosystems, entering the food chain and potentially impacting human health.
- **Toxicity:** PVC microplastics, in particular, are highly toxic due to their chemical composition and propensity to release harmful additives as they degrade.
- **Wildlife Impacts:** Ingested microplastics can block gastrointestinal tracts, trick organisms into feeling satiated (causing starvation), and leach toxins into their systems.
- **Environmental Persistence:** Studies published in *Science Advances* and the *Journal of Hazardous Materials* confirm that PVC microplastics cause long-term contamination of freshwater and terrestrial ecosystems, affecting organisms from algae to amphibians.
 - **Key Findings:**
 - PVC microplastics increase reactive oxygen species (ROS) generation in organisms, leading to oxidative stress and DNA damage (*Toxicology Letters*).
 - Aged PVC microplastics are more toxic than virgin materials, as degradation increases their interaction with organisms (*Science of the Total Environment*).

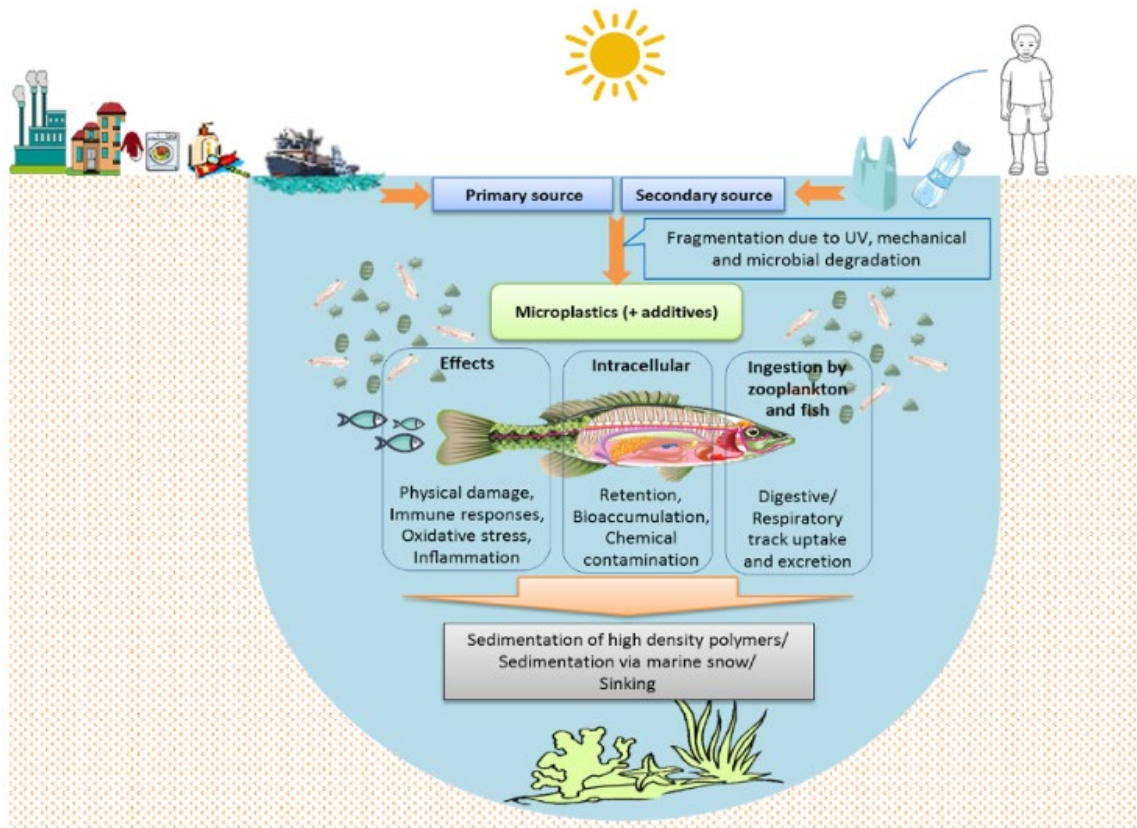
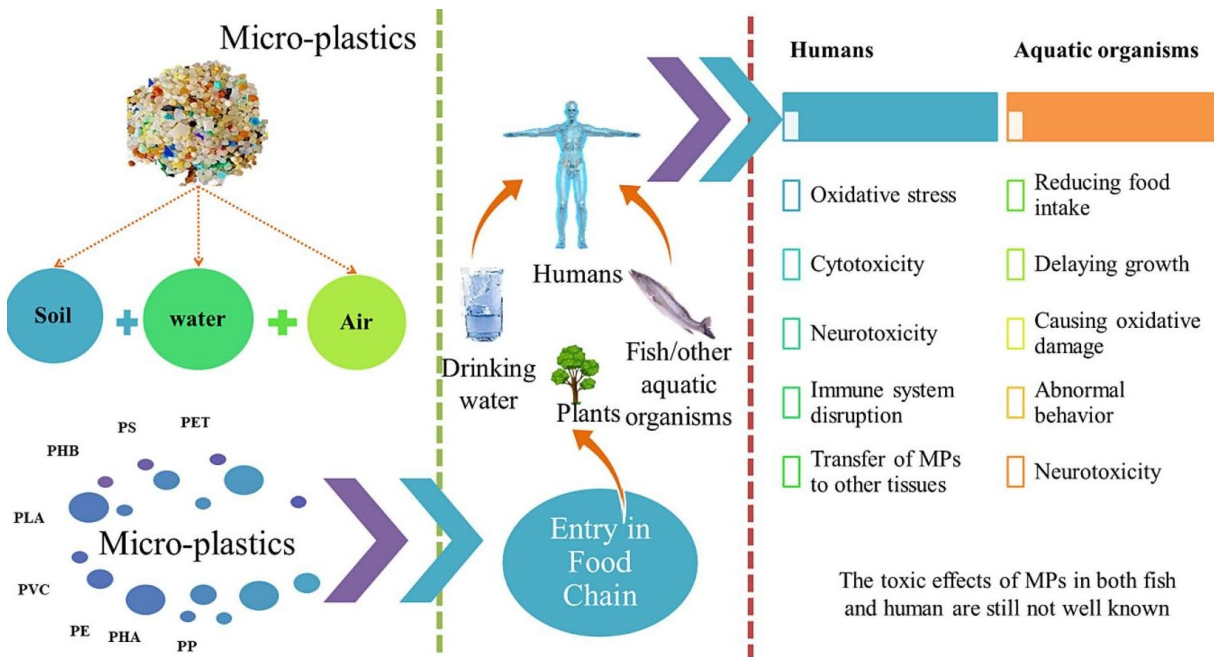


Figure 1: Conceptual model of the potential routes for the transport of microplastics in marine environment, and their bioavailability and toxicity.

This graphic, adapted from Makhdoumi et al. (2022), illustrates the impacts of microplastic pollution on marine life. It is used here for informational and educational purposes under fair use, to raise awareness about the environmental and ecological implications of microplastics. Source: Makhdoumi P, Hossini H, Pirsahab M. A review of microplastic pollution in commercial fish for human consumption. Rev Environ Health. 2022;38(1):97-109. doi: 10.1515/reveh-2021-0103.



This graphic, adapted from Naveen Chand and Surindra Suthar (2024), illustrates the transfer of microplastics through the food chain and their toxic effects on humans and aquatic organisms. It is used here for informational and educational purposes under fair use, to raise awareness about the ecological and health risks posed by microplastics. Source: Chand N, Suthar S. Source, fate, toxicity, and remediation of micro-plastic in wetlands: A critical review. *Watershed Ecology and the Environment*. 2024;6:41-53. doi: 10.1016/j.wsee.2024.02.001.

Impacts on Wetlands and Preservation Land

Adjacent wetlands and preservation land are critical ecosystems for flood control, water filtration, and wildlife habitats. Contamination from PVC microplastics jeopardizes these functions:

- **Waterways:** Microplastics have been found to permeate groundwater systems and aquifers (*Science of the Total Environment*).
- **Wildlife and Plants:** Studies have shown reduced growth in algae, DNA damage in aquatic species, and developmental abnormalities in amphibians exposed to PVC microplastics.

Supporting References

- **Lake Tahoe Case:** Legal briefs cited the widespread environmental contamination caused by monopine towers, calling them “metallurgical monstrosities”, and highlighting the risks of microplastic dispersal into sensitive ecosystems.
[Read the article on EHTrust.org](#)
- **University of Nottingham Research:** Emphasized the dangers of microplastics for riverine and aquatic ecosystems, noting bioaccumulation and associated toxins.

- **EHT Documentation:** Video footage and reports from multiple sites illustrate the extent of PVC degradation and its environmental consequences. Video footage demonstrates the brittle nature of faux pine needle material. [Watch the video](#)



Visual Image courtesy of Kids Care 2018, used for informational purposes under fair use – Fallen faux foliage from a cell tower in Marietta, Georgia, held against the backdrop of the tower. This image underscores the environmental concerns posed by synthetic materials degrading and dispersing into nearby ecosystems, including wetlands and residential areas.

[View the video on YouTube.](#)

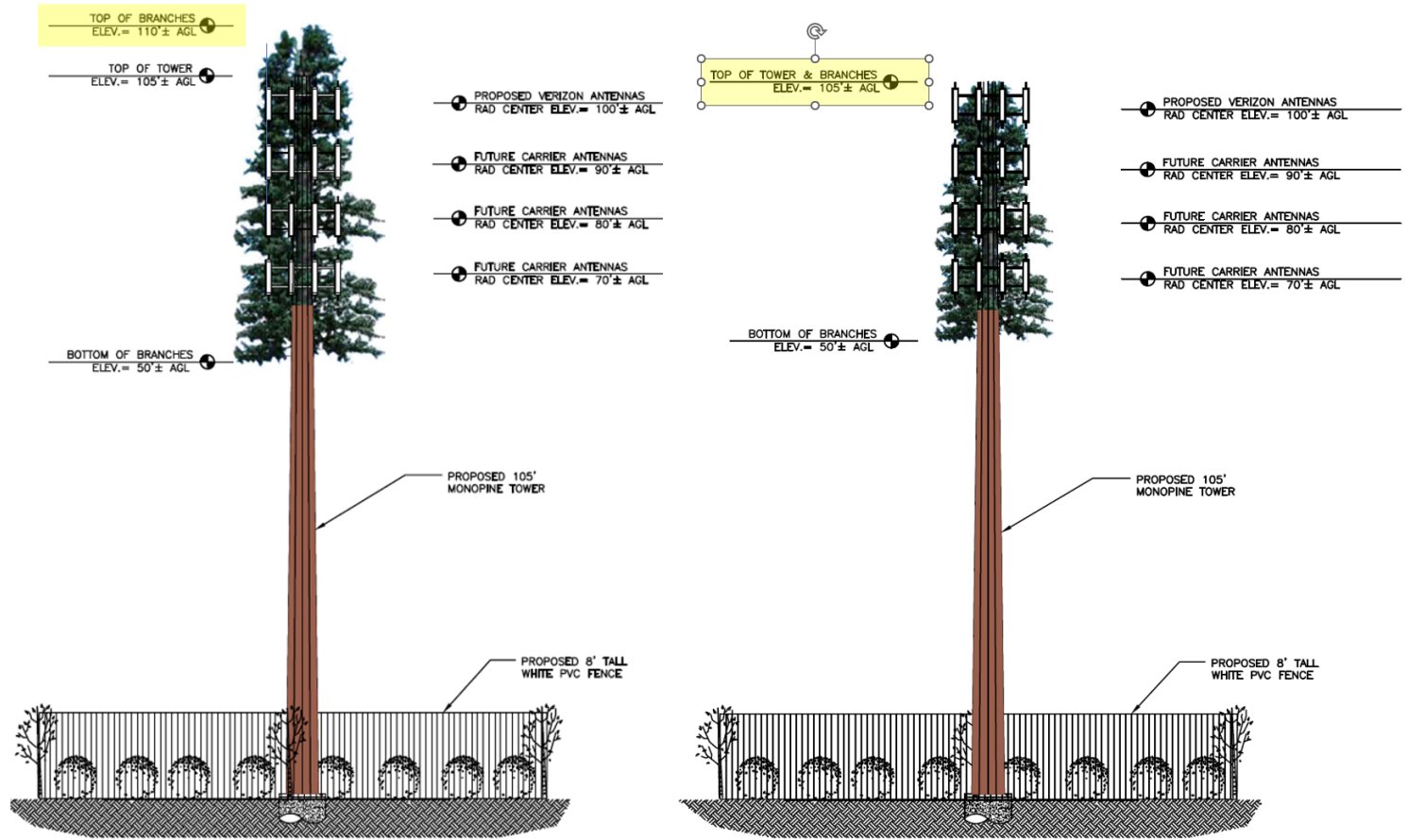


Visual Image courtesy of Environmental Health Trust, used for informational purposes under fair use – Fallen faux foliage from a cell tower in Lake Tahoe, CA. This image underscores the environmental concerns posed by synthetic materials degrading and dispersing into nearby ecosystems, including wetlands and residential areas.

Conclusion

The proximity of the proposed site to wetlands and preservation land amplifies the environmental risks posed by the tower. The evidence of microplastic contamination from similar monopine towers, combined with Florida's climate conditions, underscores the incompatibility of this project with sustainable development and environmental stewardship.

Visual Evidence of Aesthetic Sacrifices:



110 Foot Tower Design (left) and Revised 105 Foot Tower Design (Right), used for informational purposes under fair use. The reduction from a 110-foot to a 105-foot tower significantly alters the appearance and efficacy of the faux foliage design. The shorter tower reduces the volume of foliage at all levels, exposing the uppermost antennas entirely and making antennas at lower levels more visible. This reduction not only compromises the tower's attempt to blend into the environment but also increases its visual impact from both near and distant viewpoints. The sparse foliage fails to adequately screen the structural components, amplifying the industrial appearance of the tower within the natural and residential landscape

A1-2. Alternate Site Access, Comparison, and Additional Analysis

The applicant has claimed that there are limited alternative sites and that accessing such sites is prohibitively difficult. However, this assertion is inaccurate and unsupported by substantial evidence. Through thorough analysis and community feedback, several viable alternative locations have been identified. These sites, including the Orange County Landfill, the pump station, nearby gas utilities, CFX toll plaza site, and the planned commercial area within the Starwood Planned Development (PD), are all accessible, appropriate, and far less intrusive than the proposed site.

Potential Alternate Sites Identified

1. Orange County Landfill

- **Distance from Residential Areas:** Over 2,500 feet from residential properties.
- **Access:** Maintained access paths exist, and multiple points of entry can be created. Coordination with Orange County revealed the landfill areas along the 528 are accessed regularly with vehicles.
- **Use and Use Request:** FDOT and Orange County confirmed they have not been contacted by Anthemnet with a request for use of FDOT/Orange County property for access to the landfill or for a cell tower site. Coordination with CFX was not possible at the time of this addendum. It is noted that both FDOT and Orange County indicated a willingness to review use requests. Further, Orange County indicated a willingness to collaborate on potential sites. The applicant should submit a request for land use to Orange County, FDOT, and CFT.
- **Compliance:** This site aligns with Growth Management Policies 1.1.1, 1.6.5, and 1.7.3 by preserving residential character and leveraging non-residential areas for infrastructure.

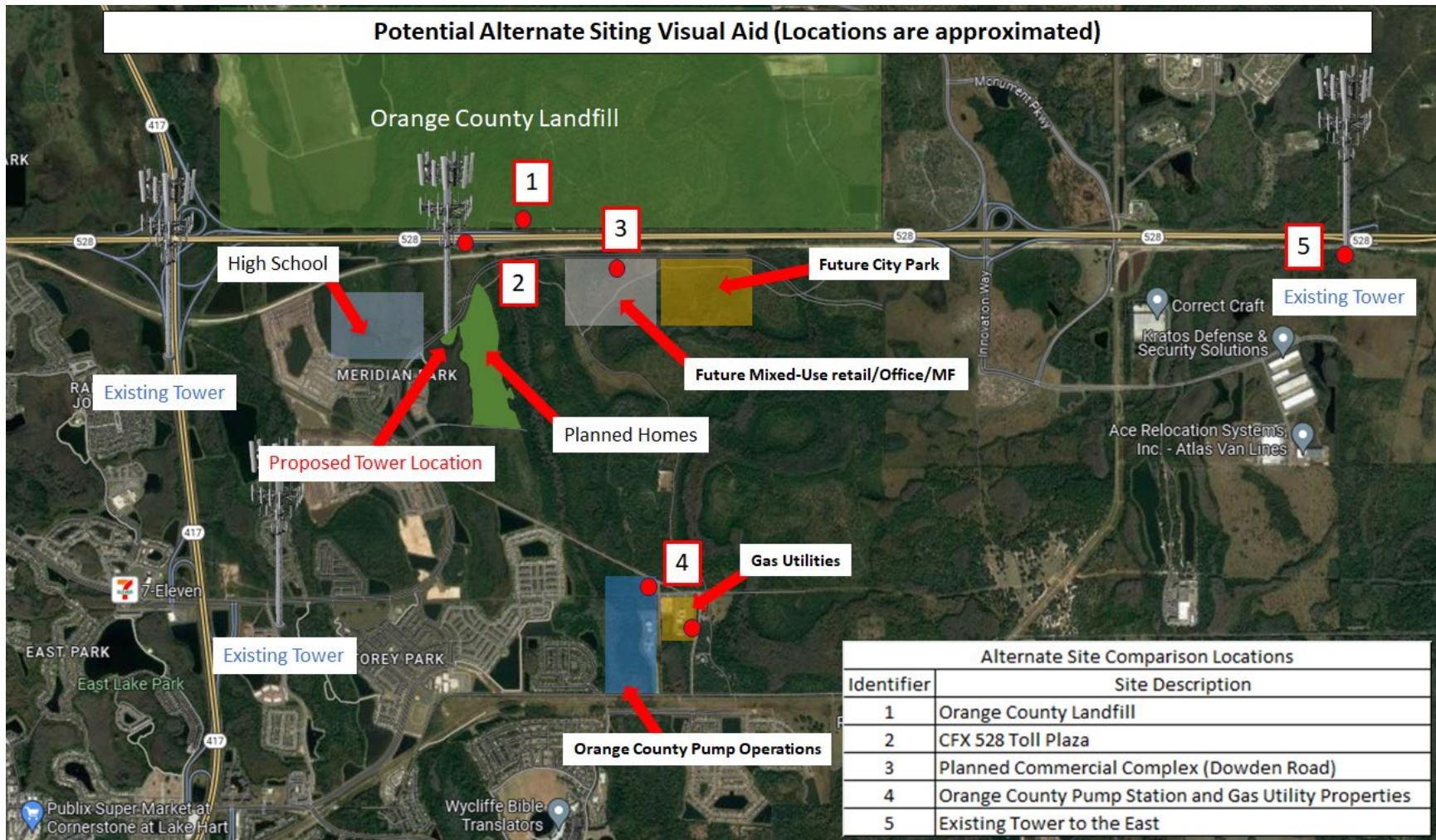
2. Central Florida Expressway Authority 528 Toll Plaza (28.451006, -81.208273)

- **Distance from Residential Areas:** Over 1300 feet of separation from residences.
- **Access:** Direct road access exists, as this site is part of existing FOD road right-of-way.
- **Use and Use Request:** The applicant should submit a request for land use to CFX.
- **Compliance:** This site aligns with Growth Management Policies 1.1.1, 1.6.5, and 1.7.3 by preserving residential character and leveraging non-residential areas for infrastructure.

3. Planned Commercial Complex (Dowden Road)

- **Distance from Residential Areas:** Can be configured to maintain over 1,500 feet of separation from residential properties.
- **Access:** Direct road access exists, as this site is part of the Starwood PD's future development plans.
- **Use and Use Request:** The applicant should submit a request for land use to Carlsbad LLC Orlando.

- **Compliance:** This site aligns with Policy 1.7.3, which encourages infrastructure placement in areas of compatible land use, minimizing visual and environmental impacts on residential areas.
4. **Orange County Pump Station and Gas Utility Properties**
- **Distance from Residential Areas:** Both sites are over 2,000 feet from nearby homes.
 - **Use and Use Request:** The applicant should submit a request for land use to Orange County.
 - **Access:** These sites are already operational utility properties with maintained access routes.
 - **Compliance:** These locations ensure minimal disruption to residential areas and align with Policy 1.6.5, which emphasizes the use of industrial or utility lands for infrastructure to protect natural and community resources.
5. **Existing Tower to the East**
- **Distance from Settlement Areas:** Over 2000 feet of separation from department of corrections facilities.
 - **Use and Use Request:** The applicant should coordinate with the tower owner (Tower registration number 1007877) and explore adjustment and additions to the tower.
 - **Access:** The existing tower mentioned in Anthemnet’s application requires access via a combination of 2 miles of dirt roads and 2 miles of jeep trails. This surpasses the challenges of accessing landfill or pump station sites, undermining claims that alternate locations are infeasible.
 - **Compliance:** Exploring modifications and additions to this site aligns with all Growth Management Policies and induces no impacts on communities.



Map illustrating the Starwood PD and surrounding area with approximate locations of key features and six identified potential alternate sites for the proposed cell tower. Each site is labeled and categorized in the key, emphasizing viable options for further exploration that align with community preservation goals and reduce environmental and residential impacts Note, site identifier 4 is associated with 2 sites.

Analysis of Alternate Site Benefits

1. Distance Advantages

- All identified alternate sites are located significantly farther from residential areas, reducing visual impacts, property value declines, and community disruptions.
- By moving the tower away from homes, these sites provide additional buffer zones, aligning with **Ordinance 58.844**, which mandates appropriate setbacks.

2. Coverage and Network Efficiency

- Due to differing setback requirements, a taller tower at an alternate site may ultimately provide better coverage and network efficiency, as increased height can enhance signal reach and reduce the need for additional infrastructure.
- Review of coverage maps shows that placing the tower at the landfill or commercial complex could be a path to optimize network infrastructure while avoiding redundancy with existing towers. Placing the tower at the orange county pump station or gas utility site would provide areas with less than in-building coverage with significant improvement. A details analysis should be performed.
- The landfill site offers an opportunity to provide enhanced coverage to currently underserved areas along the Sunbridge Parkway.

3. Growth Management Compliance

- Unlike the proposed site, which violates multiple Growth Management Policies, these alternative sites align with key objectives:
 - **Policy 1.1.1:** Protection of community character and compatible land use.
 - **Policy 1.6.5:** Prioritizing infrastructure in areas that preserve green spaces and community aesthetics.
 - **Policy 1.7.3:** Ensuring that development enhances, rather than detracts from, public spaces and residential areas.
 - **Policy 2.4.9:** Safeguarding natural features and recreation facilities by directing industrial uses to more suitable areas.

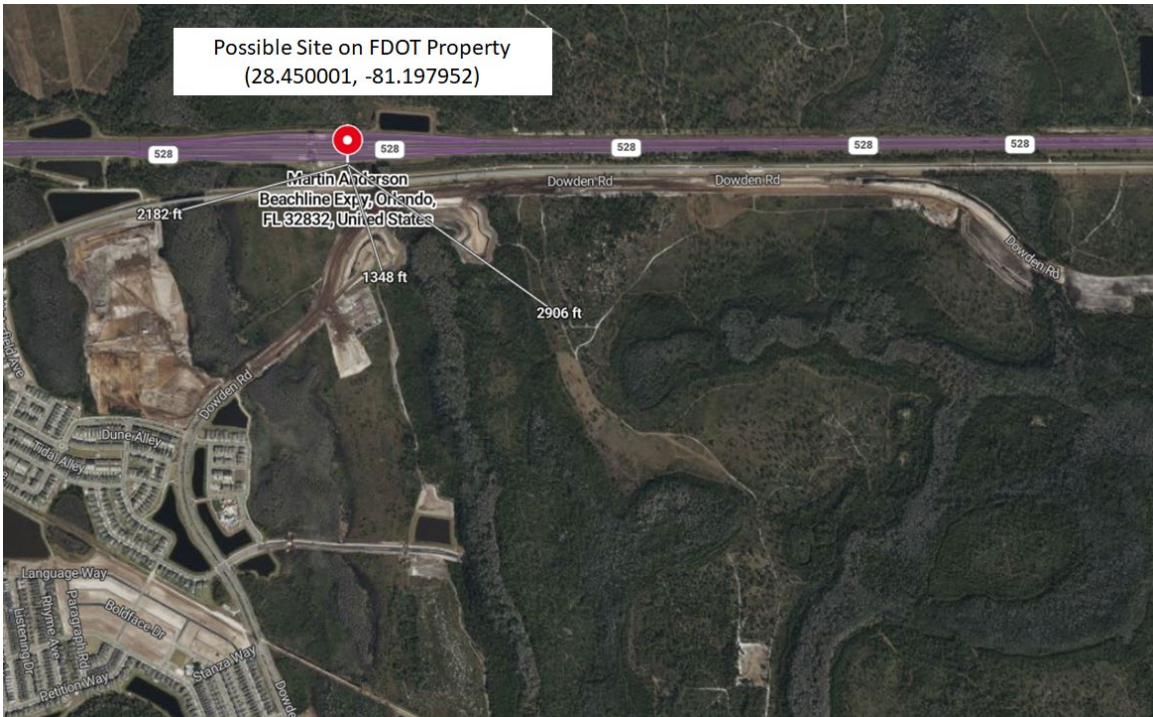
Graphics Supporting Alternate Sites

To reinforce the feasibility and advantages of these alternate locations, the following graphics are included:

- **Graphics of Alternate Sites and Distances:** Illustrates the distances from identified sites to residences, highlighting their superior separation compared to the proposed site.



Approximate distances from an example landfill site (Visual Aid Identifier 1) to nearby residences exceed 2,200 feet, providing significant separation and minimizing visual and community impacts.



The CFX 528 Toll Booth Site (Visual Aid Identifier 2) maintains a separation of more than 1,300 feet from residential properties, balancing ease of accessibility with community intrusion.



The future commercial site (Visual Aid Identifier 3) is located over 1,500 feet from residential areas, strategically balancing centrality to future high-demand locations with ease of accessibility and minimal residential disruption.



The Orange County Pump Station (Visual Aid Identifier 4) is located over 2,000 feet from the nearest residences, offering an ideal buffer zone while supporting infrastructure needs



Distances from the gas utility site (Visual Aid Identifier 4) to nearby residential areas exceed 2,000 feet, ensuring reduced disruption and maintaining residential character.

- **Access Pathways to Landfill Sites:** Displays five potential access routes, including potential paths from 528.



Illustration of potential access routes to the Orange County landfill site (Visual Aid Identifier 1), including existing maintenance roads and potential gated easements from the 528 Toll Road.

- **Access Pathways to Utility Sites:** Displays direct access to utility sites



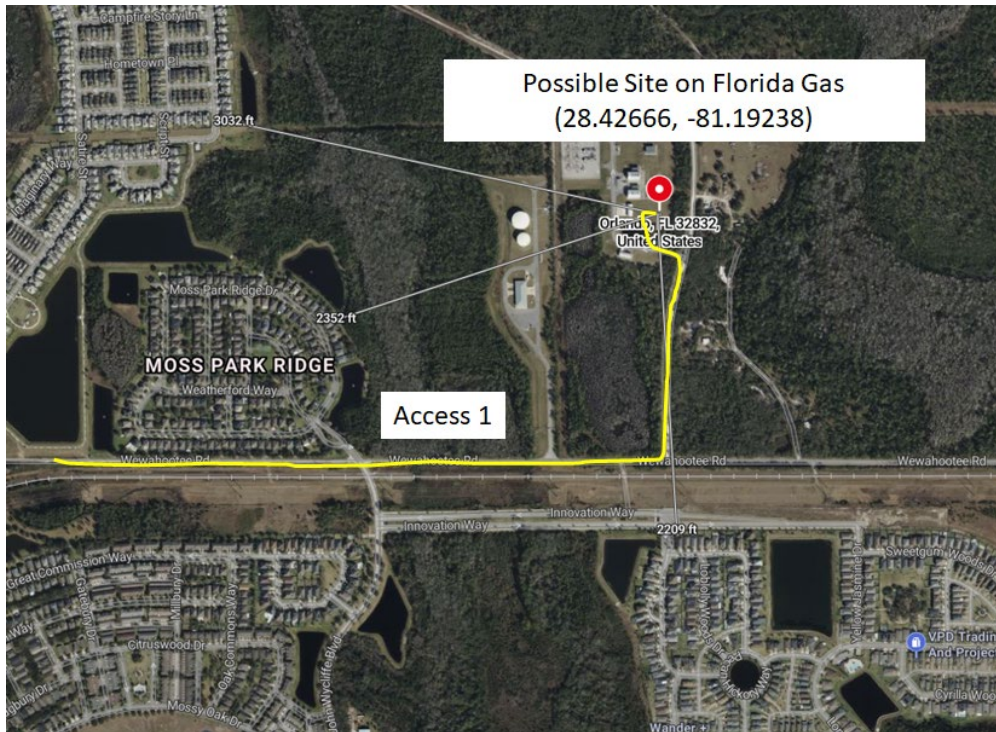
Visual representation of direct access pathways to the CFX 528 Toll Booth site (Visual Aid Identifier 2).



Visual representation of direct access pathways to the planned commercial complex (Visual Aid Identifier 3).

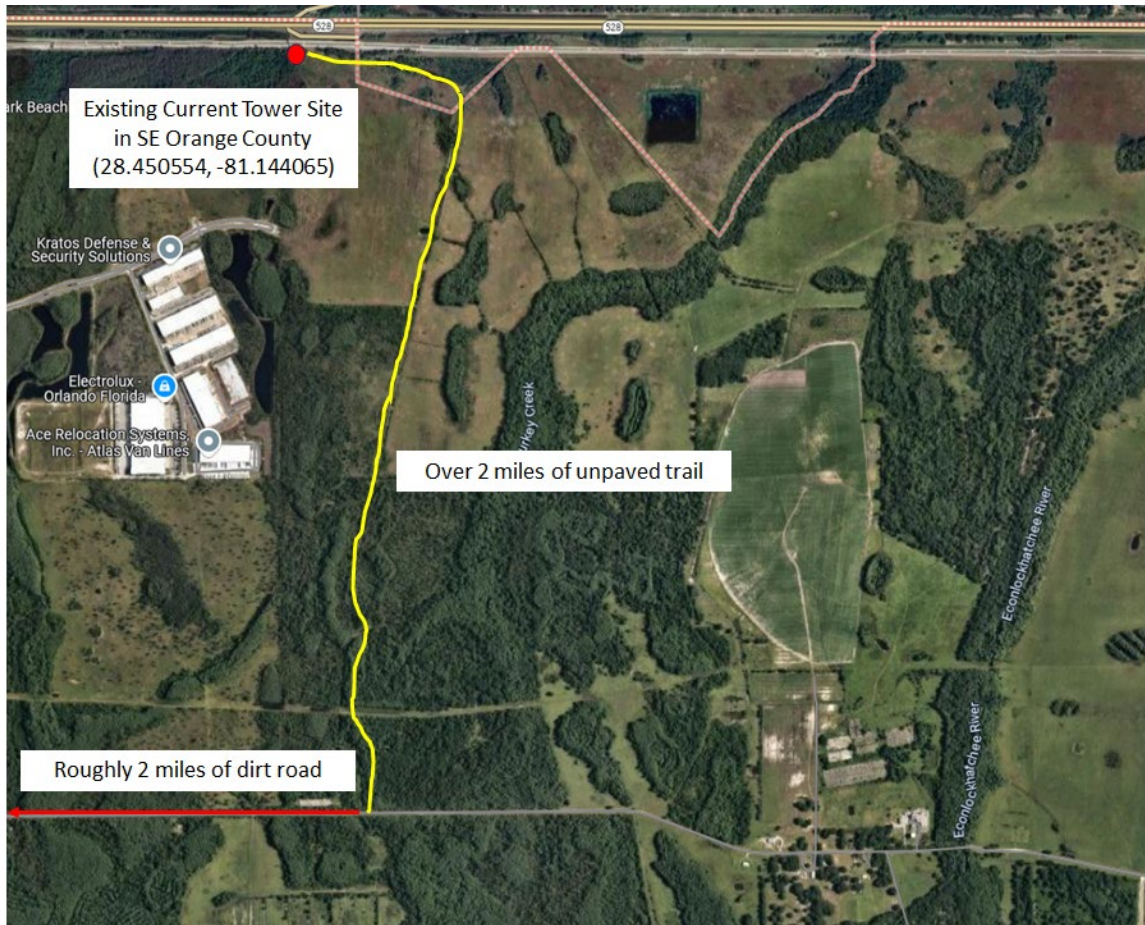


Visual representation of direct access pathways to the Orange County pump station site (Visual Aid Identifier 4), showcasing its operational infrastructure and existing roadways for easy access.



Detailed map of accessible routes to the gas utility site (Visual Aid Identifier 4), highlighting its proximity to major roadways and suitability for minimal-impact infrastructure development.

- **Comparison of Proposed Site to Existing Tower Access Challenges:** Demonstrates that alternate site access paths are shorter and more feasible than those currently serving an existing tower, referenced in the application, to the East.

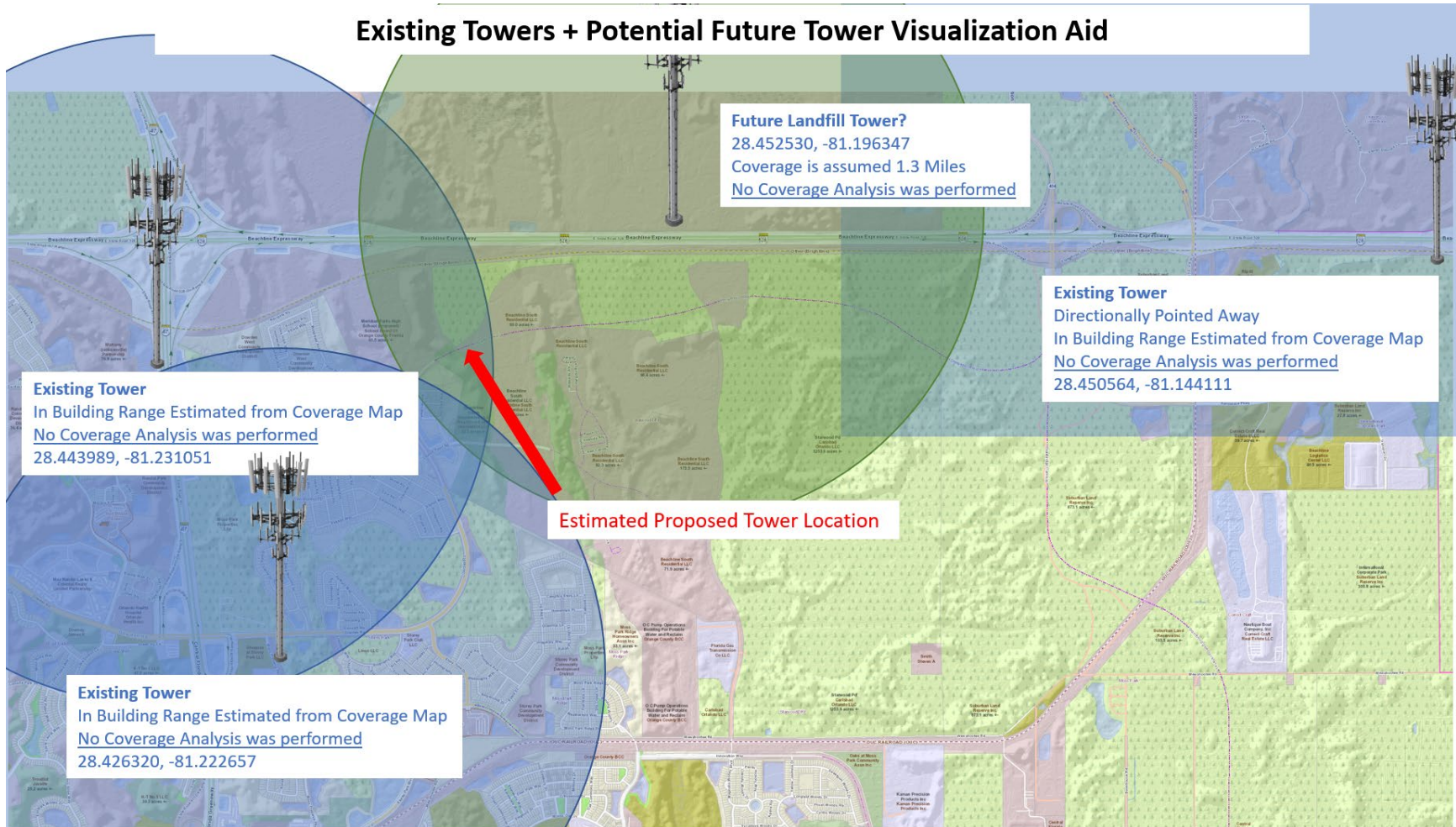


Example Service Route for Existing Tower (Visual Aid Identifier 5): This route demonstrates the extensive access requirements for an existing cell tower, involving 2 miles on dirt roads and 2 miles on jeep trails—significantly longer and more challenging than the proposed access routes for any identified alternate site.

- **Coverage Analysis of Alternate Sites:** **No coverage analysis of the primary site or alternate sites was provided by the applicant.** Further comments are provided on this fact in section A1-5. We DID NOT perform a coverage analysis.

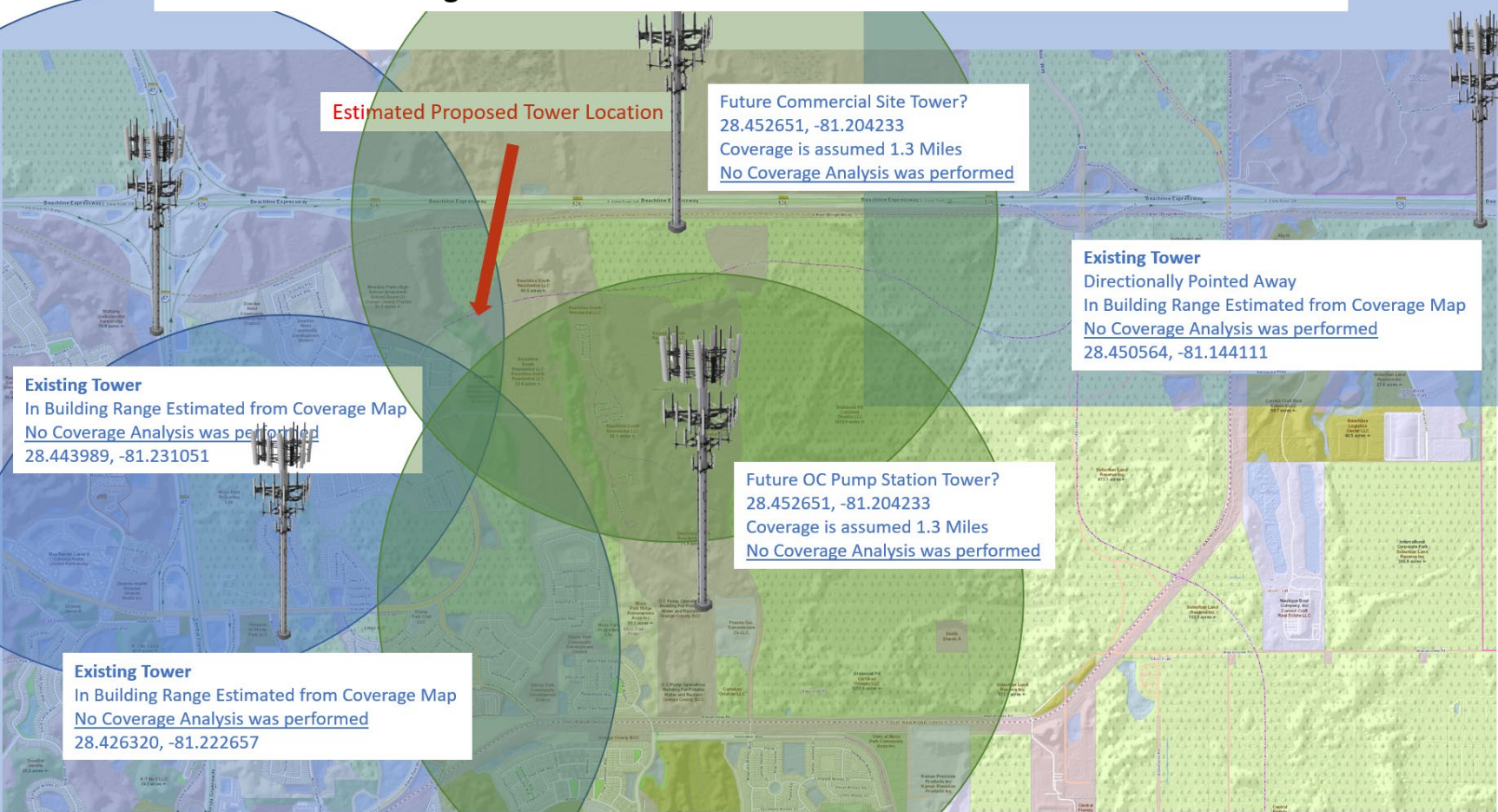
Noting that the law does not require in-building coverage, in an attempt to address the applicants desired coverage improvements, the following graphics provide visual aids for potential in-building network coverage improvements from certain alternative locations.

Existing Towers + Potential Future Tower Visualization Aid



Existing cell array with three towers, including estimated in-building coverage ranges, and an example of possible coverage after strategically placing a cell tower at the landfill site. Note, NO COVERAGE ANALYSIS WAS PERFORMED.

Existing Towers + Potential Future Towers Visualization Aid



Existing cell array with three towers, including estimated in-building coverage ranges, and an example of in-building coverage after placing two cell towers at each the future commercial site and Orange County Pump Station. Note, NO COVERAGE ANALYSIS WAS PERFORMED

List of Immediate Area Landowners

According to the Orange County Property Appraiser and the Orange County Infomap, the following entities own undeveloped land in the Starwood property:

- Beachline South Residential LLC
- Carlsbad Orlando LLC
- Dowden West Community Development District

Undeveloped land directly adjacent to the Starwood property is owned by the following:

- Florida Gas Transmission Co LLC
- Orange County BCC
- Smith Steven A
- Suburban Land Reserve Inc
- City of Orlando Utilities Commission
- Moss Park Properties LLLP
- Central Florida Expressway Authority (CFX)

No alternate site analysis was provided by the applicant. Therefore, it is uncertain if these landowners have been contacted about possible alternate sites that are less impactful to residents, community, and environment.

Additional Correspondence Supporting Alternate Site Feasibility

As part of the due diligence in exploring alternative sites for the proposed cell tower, two critical emails have been received from representatives of the Florida Department of Transportation (FDOT) and Orange County, which confirm their willingness to assess the possibility of siting the tower on their respective properties.

1. **Orange County Correspondence:** A division manager from Orange County expressed a willingness to locate alternative sites on county-managed property, including landfill locations. They further confirmed that, to their knowledge, no outreach or contact has been initiated by Anthemnet to evaluate these locations for the proposed tower.
2. **FDOT Correspondence:** Although not the CFX, the FDOT representative indicated that a formal request for land use would need to be submitted for consideration. The communication confirmed an established process exists for roadway and transportation property use, and transportation agency openness to exploring alternate siting opportunities on their managed property.

These emails substantiate the community's concerns regarding the lack of due diligence on the part of Anthemnet in exploring alternative sites. Despite over a year of different requests from residents for documented evidence of alternate site exploration and analysis, the applicant has not contacted key landowners to evaluate viable, less impactful alternatives.

This omission undermines the applicant's claim that no other suitable sites exist within a reasonable distance. The CFX and Orange County properties provide credible and accessible alternatives that warrant thorough investigation. Additionally, the timeliness of the Orange County response and willingness to collaborate highlights the feasibility of alternative locations that preserve the residential character of Meridian Parks and protect community spaces from unnecessary industrial intrusion.

From: "Gregory, David" <David.Gregory@ocfl.net>
Date: January 14, 2025 at 3:54:01 PM EST
To: David Grau <David.Grau@preserveorlando.com>
Cc: "Rao Ruiz, Rafiq D" <Rafiq.RaoRuiz@ocfl.net>, "Pacheco-Camacho, Ada" <Ada.Pacheco-Camacho@ocfl.net>, "Miranda-Rodriguez, Ricardo" <Ricardo.Miranda-Rodriguez@ocfl.net>, "District4, Mail" <District4@ocfl.net>, PMP <preservemeridianparks@gmail.com>, "District4, Mail" <District4@ocfl.net>, "De Toledo, Phillip A" <Phillip.DeToledo@ocfl.net>, "Kates, Kerry" <Kerry.Kates@ocfl.net>
Subject: RE: Urgent Inquiry Regarding Proposed Cell Phone Tower and Potential Landfill Site Restrictions

Mr. Grau:

To follow-up on our conversation earlier today, Orange County's Solid Waste Management Division has not been approached by anyone about locating a cellular tower on landfill property.

While the landfill encompasses a large area, development of any particular area may be restricted by conservation easements, set-back requirements, future needs, or other restrictions. That said, not knowing just what land commitment possibly might be needed for an alternate tower location that could benefit area residents, the division is not opposed to considering alternatives. Especially an alternative that would not impact other facets of our commitments and responsibilities. Any final decision would need to be based on the actual impacts and other considerations and would need to be evaluated by County experts and administrators. The final decision on any such matter would rest with the Board of County Commissioners.

All that said, please keep in touch if I may be of further assistance.

David Gregory
Division Manager

Orange County Utilities

Solid Waste Division
9150 Curry Ford Road | Orlando, FL | 32825
O: 407-254-9622 | C: 407-473-1004
[Email](#) | [Website](#) | [Social](#)
Innovating for a Sustainable Tomorrow

Email from Orange County: Reconfirms that no inquiries or requests have been made by Anthemnet or its representatives regarding the use of county-owned property for a cell tower and demonstrates the potential to locate a less impactful site on the landfill.

From: "Wines, Kaitlynn" <Kaitlynn.Wines@dot.state.fl.us>
Date: January 14, 2025 at 11:03:10 AM EST
To: David Grau <David.Grau@preserveorlando.com>
Cc: "Clifton, Lauren" <Lauren.Clifton@dot.state.fl.us>
Subject: RE: Just FOIA Follow up

Hello Mr. Grau,

I have looked further into this area and the pond highlighted in red(possible option 2) is not owned by FDOT. According to the property appraiser site it looks like Orange County owns that pond/parcel so Anthemnet would need to submit any request to the county not FDOT.

For the pond highlighted in purple(possible option 1), I would need to confirm that it is owned by FDOT, but if Anthemnet wanted to inquire about placing a tower in this area, they would need to submit a request.



As for your question inquiring if Anthemnet has contacted FDOT, I can confirm that they have not contacted me or the District 5 Right of Way Department, but we are a very large district so they very well could have spoken to someone else, and I just don't know it yet.

Please let me know if you have any further questions and I will be happy to assist. 😊

Thank you!

Kaitlynn Wines
GAI Consultants, Inc.
Consultant for Florida Department of Transportation – District Five
Right of Way Property Management Agent
Kaitlynn.Wines@dot.state.fl.us
Phone: 386-943-5507

Email from FDOT District 5: Confirms no record of a request for property use or access for a cell tower from Anthemnet or its representatives. This omission highlights the lack of due diligence in exploring viable alternate sites requiring coordination with FDOT.

Conclusion

The analysis unequivocally shows that the proposed site is not the most suitable option for the cell tower. **Alternate sites are not only accessible but also comply with city ordinances, align with Growth Management Policies, and minimize impacts on residents and the environment.** These findings directly contradict the applicant's claims and reinforce the necessity of exploring alternative locations before considering approval of CUP2024-10001.

A1-3. Visual Impacts: Updated Assessment

New simulation analysis and visual evidence demonstrate the significant visibility of the proposed 105-foot cell tower across multiple locations in the community. These updated analyses emphasize the intrusive nature of the tower, which disrupts the aesthetic and recreational value of the neighborhood. The applicant's design revision to reduce the tower height from 110 feet to 105 feet has not mitigated these concerns and, in fact, has introduced additional aesthetic sacrifices that further harm the community.

Key Observations:

- **High Visibility from Close Ranges:** Locations F, G, and H show that over 75% of the tower is visible above the tree line, significantly disrupting the skyline.
- **Persistent Impact from Greater Distances:** Locations A and D reveal that 35–40% of the tower remains visible, even from farther vantage points.
- **Aesthetic Sacrifices to Meet Ordinance 58.844:** The applicant's height reduction fully exposed the antennae on the tower, removing even the previously proposed, though inadequate, camouflage. This design decision increases the visual disruption for nearby homes and public spaces and directly contradicts the intent of zoning ordinances to balance infrastructure needs with community aesthetics.

These findings illustrate that, regardless of distance, the tower's height and placement render it a dominant feature of the community skyline, significantly impacting residents' views and the area's natural character.

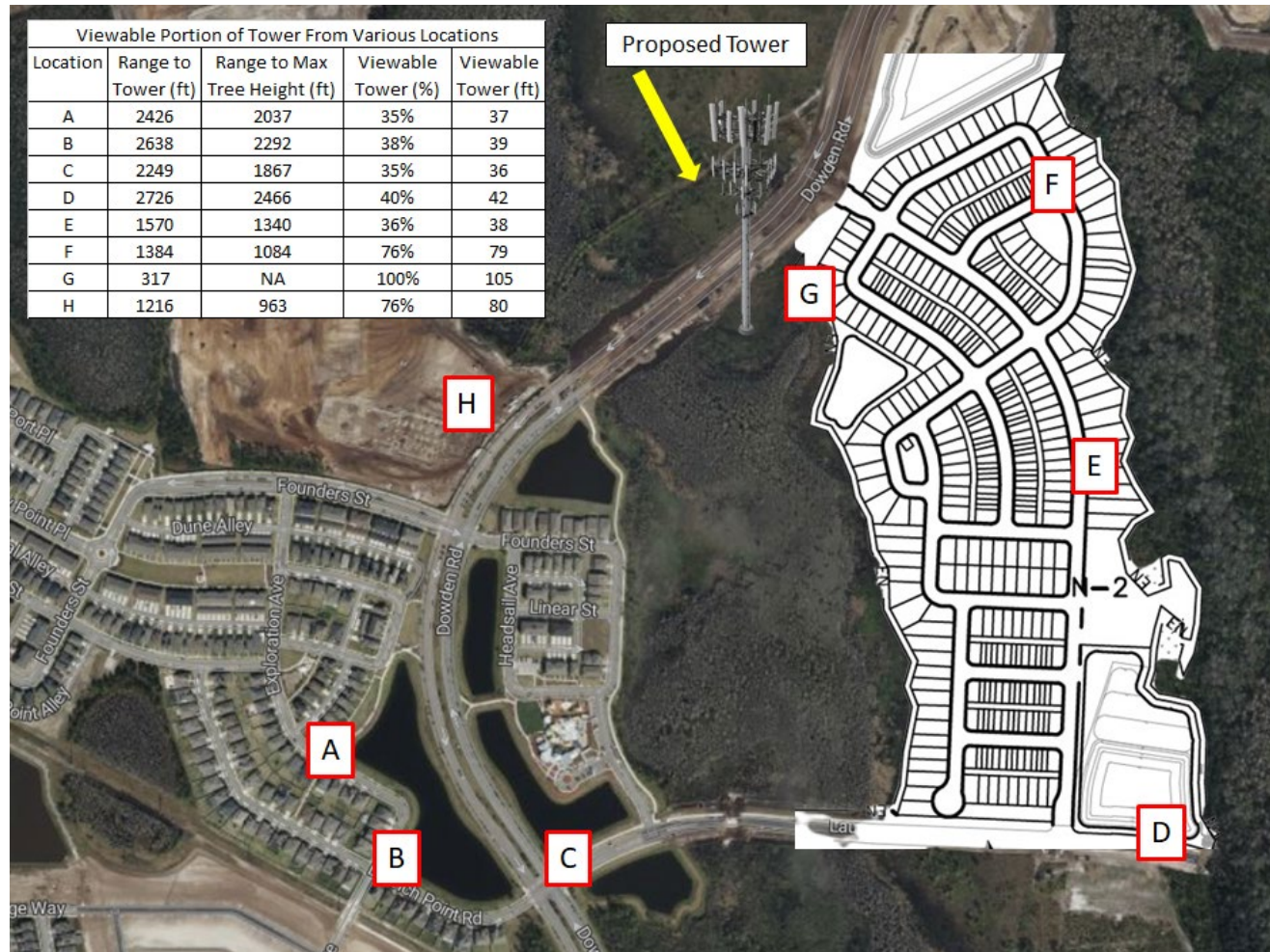
Visual Analysis

The visual analysis reveals the significant impact of the proposed tower on the community skyline:

- **High Visibility from Close Ranges:** Locations F, G, and H show that over 75% of the tower is visible above the tree line, significantly disrupting the skyline.
- **Persistent Impact from Greater Distances:** Locations A and D reveal that 35–40% of the tower remains visible, even from farther vantage points.
- **Enhanced Methodology for Analysis:**
 - **Tree Height Verification:** Measurements of tree line heights were calculated using trigonometry and verified with drone altitude data for accuracy.
 - **Triangulation:** Tree and tower heights were triangulated with verified data to analyze visibility from key public spaces.
 - **Simulated Altitudes:** Images were captured from a drone at multiple altitudes to confirm visibility across large areas.
 - **Community Impact Analysis:** Highlights the lack of natural screening for homes closest to the tower.

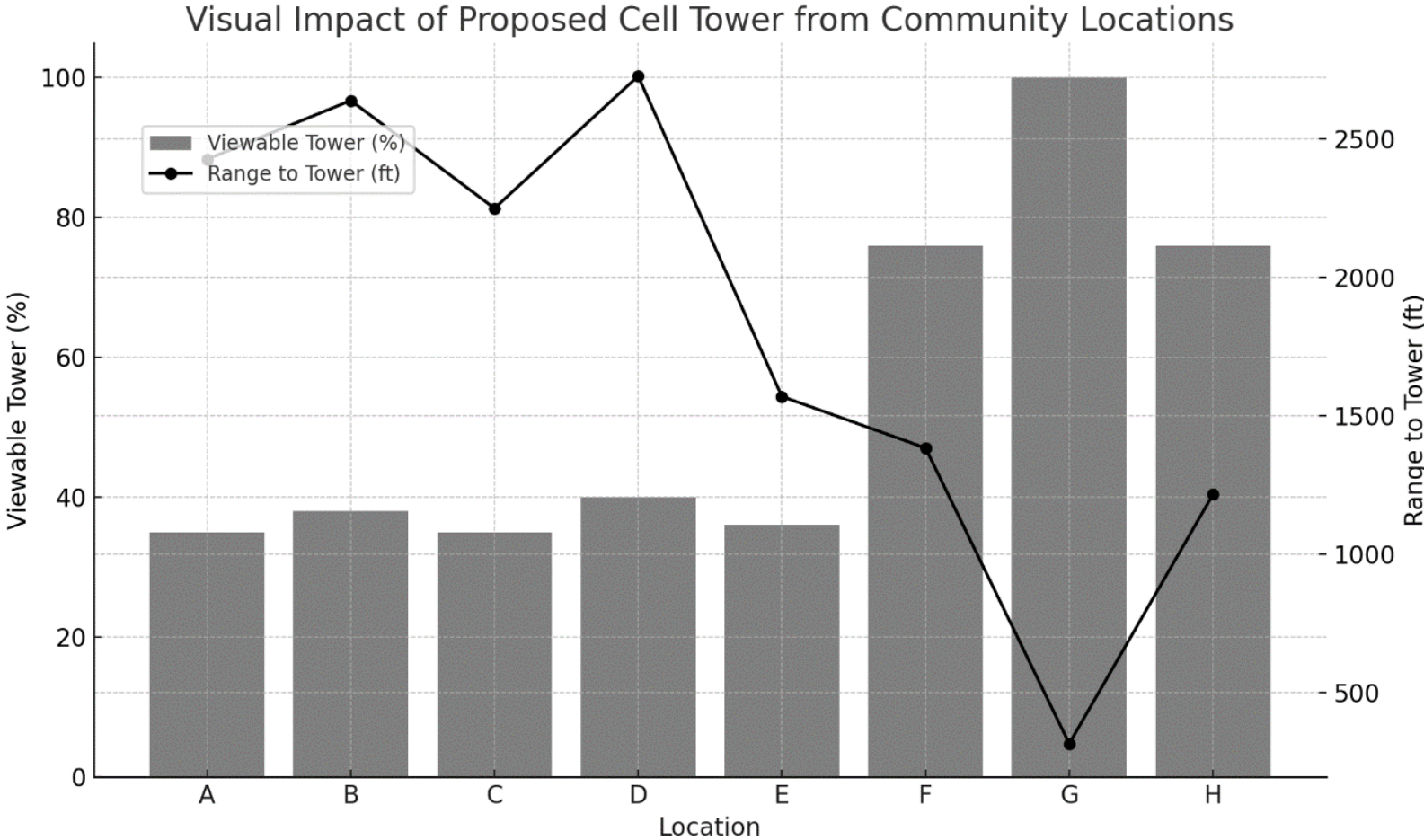
The following graphics represent the findings of the visual analysis.

- **Community Map with Visual Impact Data:** Locates observation points and quantifies visibility across the neighborhood.



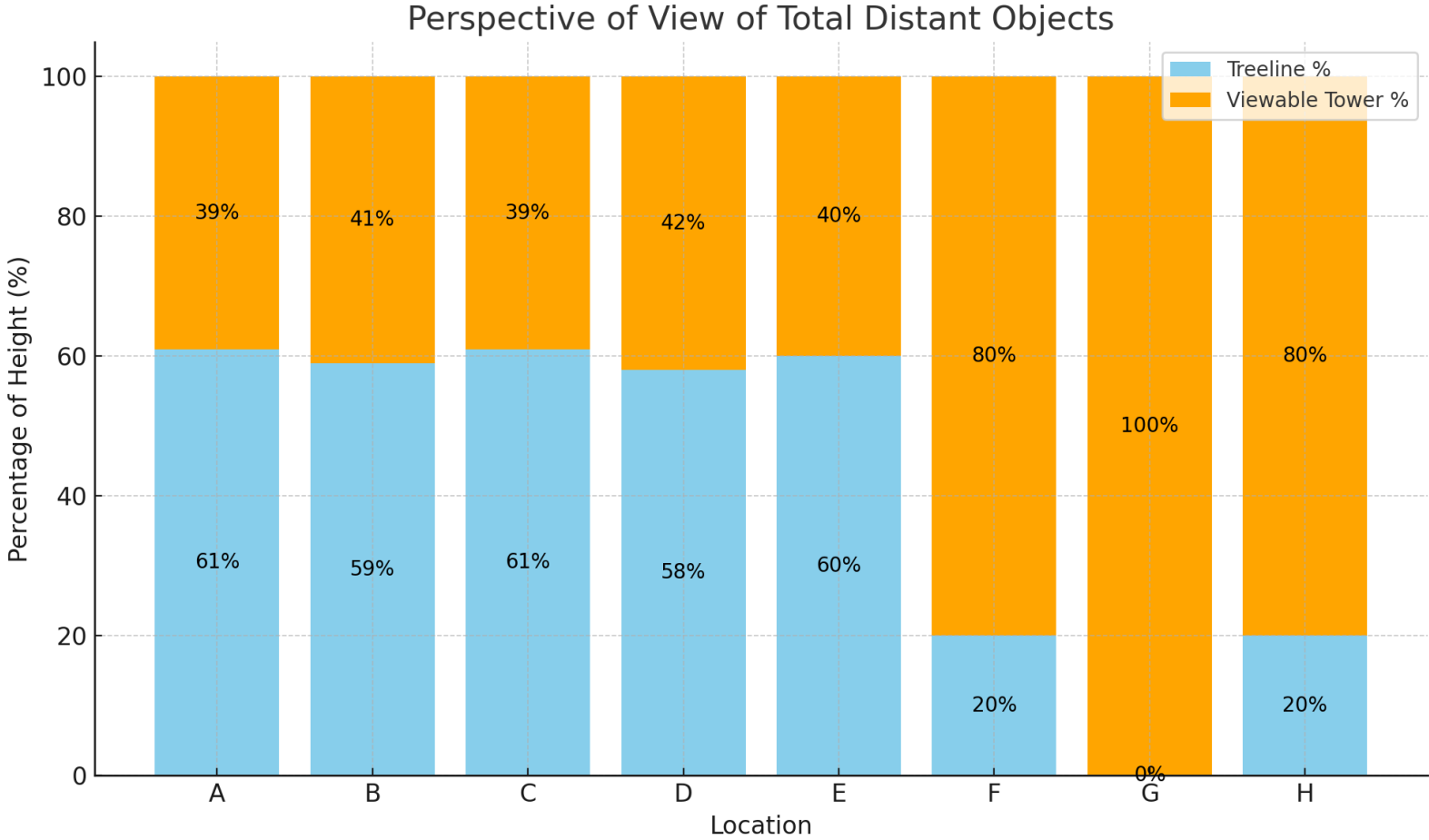
Visibility Analysis of Proposed Cell Tower: This graphic illustrates the extent to which the proposed 105-foot tower would be visible from various key locations within the community, highlighting the significant visual impact on residential areas, recreational and open spaces, and public thoroughfares.

- Visual Impact of Tower from Various Locations:** Illustrates the percentage of the tower visible above the tree line, or other assumed foreground object, across different observation points.



Percentage of the Proposed Tower Visible from Various Locations: This chart illustrates the percentage of the proposed cell tower visible from eight key locations within the Meridian Parks community, highlighting its significant visual impact. The visibility of the tower ranges from 36% to 100%, with the highest visibility from locations closest to the tower.

- Perspective of View of Distant Objects:** Compares tree line, or other assumed foreground object, and visible tower percentages for all observation points, emphasizing the tower's disproportionate height.



Tree line, or Other Assumed Foreground Object, and Tower Visibility Comparison by Location: This stacked bar chart compares the tree line height and viewable portion of the proposed tower from eight locations within the community. The data emphasizes how the tower exceeds natural tree line heights, creating a stark and intrusive visual impact in many areas.

- **Residence Map Overlay Highlighting Minimal Screening for Homes and Residential Areas:** The below graphics presents a map overlay identifying the homes and spaces closest to the proposed tower site. These homes lack any significant natural buffer, leaving the entire tower fully visible from their yards and windows. The graphics also illustrates that the proposed site is part of a connected residential component, emphasizing the impact on the surrounding community.



Proximity Impact: Homes closest to the proposed tower, mapping site G, face minimal natural buffering, leaving the entire structure fully visible and imposing significant visual and environmental impacts on these properties.



Unobstructed Visibility: The proposed tower will be fully visible from nearby schools and major thoroughfares, creating a prominent and intrusive visual impact on public spaces and daily commutes.

Photographic Evidence

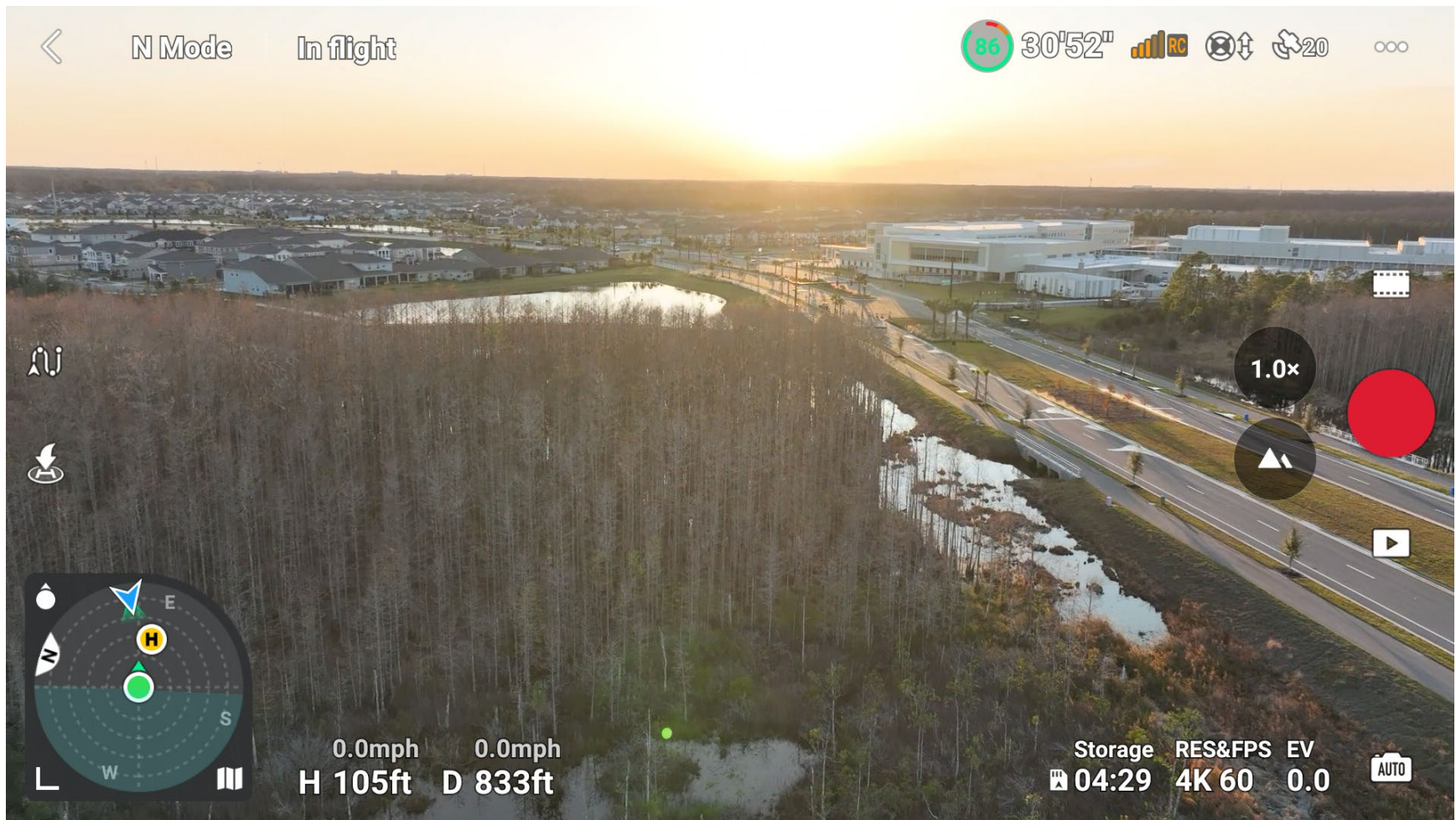
To support the findings, the following images illustrate the tower's visual impact and verify the lack of natural buffering for residences, communal spaces, thoroughfares, and the nearby school:



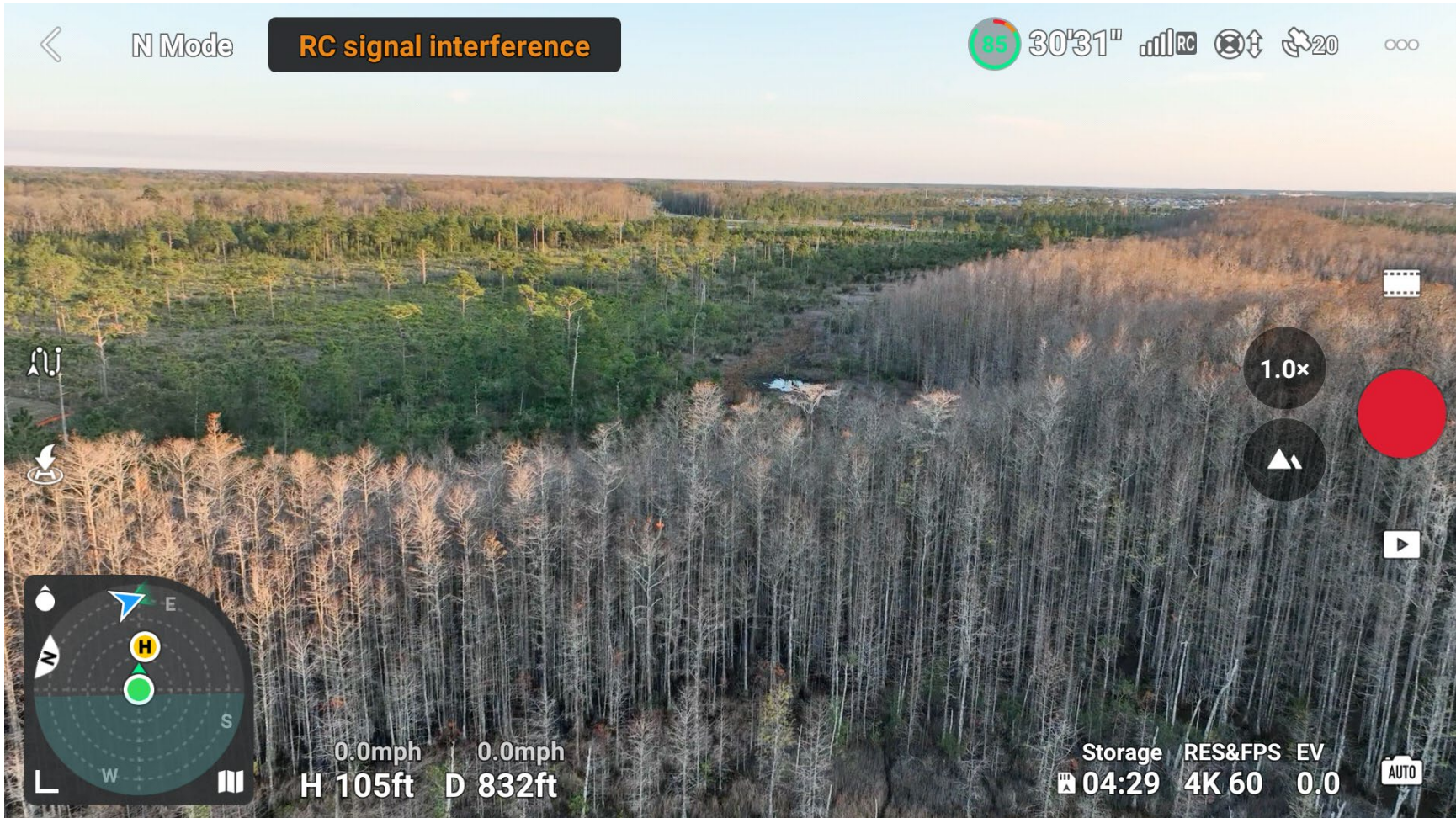
Unobstructed Visibility: This image taken facing West, mapping location H in view, from the proposed site at an altitude of 20 feet demonstrates full tower visibility from the nearby school and major thoroughfares, creating a prominent and intrusive visual impact on public spaces and daily commutes



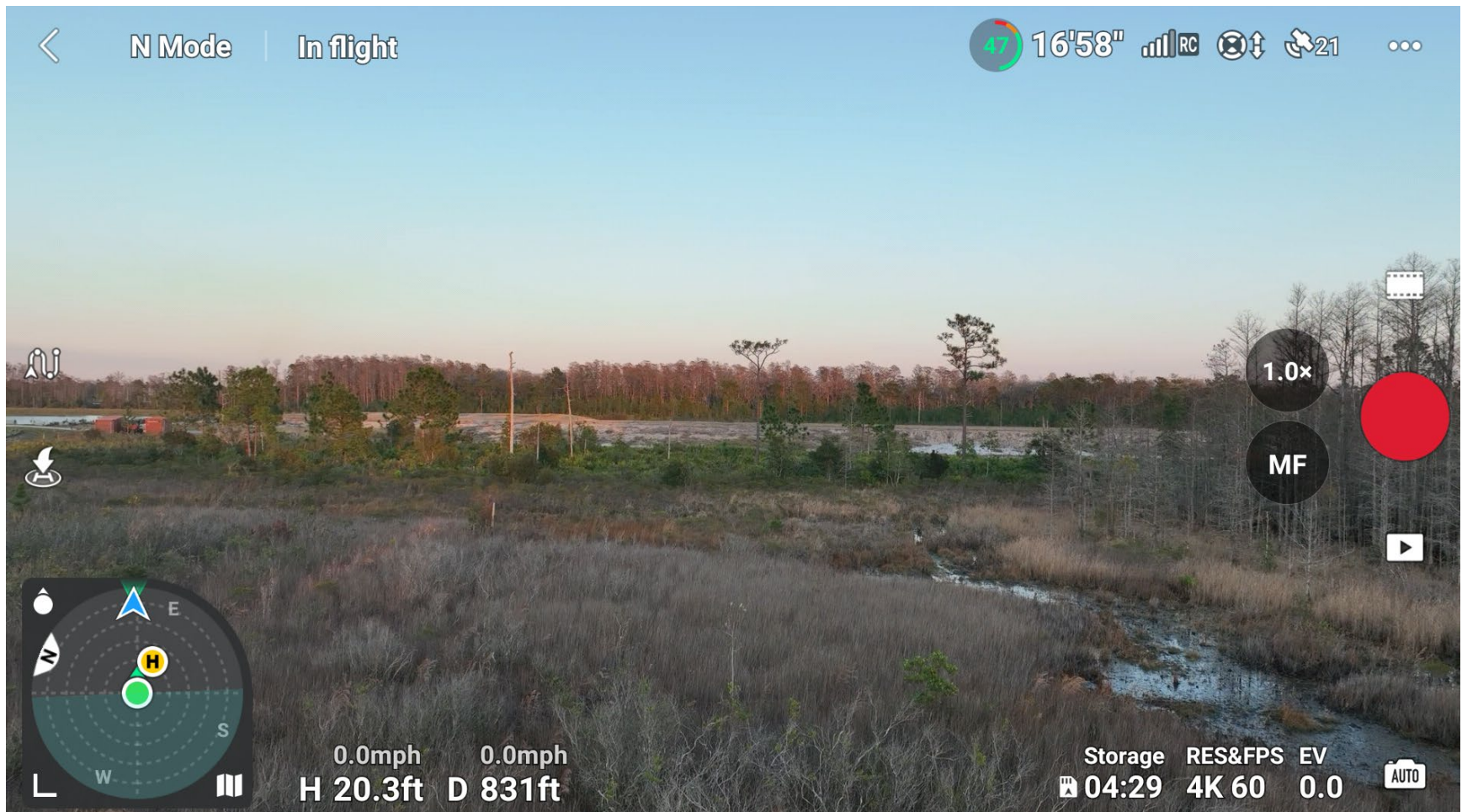
Tree Height Verification: This image taken facing Southwest, directionally facing mapping location A, B, C, and H, from the proposed site at an altitude of 60 feet verifies analytically derived tree heights and assumptions.



Unobstructed Visibility: This image taken facing Southwest, mapping locations A, B, C, and H in view, from the proposed site at an altitude of 105 feet demonstrates significant tower visibility from the nearby residences, park spaces, amenity center, and major thoroughfares, creating a prominent and intrusive visual impact on residences, public spaces, and daily commutes.



Unobstructed Visibility: This image taken facing Southeast, mapping locations D and E in view, at an altitude of 105 feet at the proposed site demonstrates significant tower visibility from future nearby residences, park spaces, amenity center, major thoroughfares, creating a prominent and intrusive visual impact on public spaces and daily commutes.



Unobstructed Visibility: This image taken facing East, mapping location F and G in view, at an altitude of 20 feet at the proposed site demonstrates full tower visibility from the nearby planned residences and major thoroughfares, creating a prominent and intrusive visual impact on public spaces and daily commutes.



Unobstructed Visibility: This image taken facing East, mapping location F and G in view, at an altitude of 105 feet at the proposed site demonstrates full tower visibility from the nearby planned residences, creating a prominent and intrusive visual impact on public spaces.

Aesthetic Sacrifices

The applicant's decision to reduce the tower height from 110 feet to 105 feet, while intended to address setback requirements under Ordinance 58.844, has introduced significant new aesthetic concerns:

- **Exposed Antennae:** The removal of a significant volume of previously proposed camouflage has fully exposed the antennae, amplifying the tower's industrial appearance.
- **Loss of Camouflage Functionality:** While the original camouflage was inadequate, its removal eliminates any attempt to blend the highest part of the structure with its natural surroundings. Correcting this deficiency by adding longer faux foliage stems at the top would not resolve the issue but instead exacerbate the tower's unnatural appearance, as elongated foliage would distort proportions and highlight its artificial nature.
- **Amplified Visual Disruption:** The tower's exposed design makes it a more dominant and intrusive feature in the community skyline, impacting both residential and public spaces.
- **Contradiction of Ordinance Intent:** By further exposing the industrial components of the tower, the design revision undermines the zoning ordinance's broader goal of minimizing visual impact in residential areas.

A1-4. Ordinance 58.844: Setback Violations and Governance Implications

As detailed in Section 8 of the January 2025 White Paper, Ordinance 58.844 requires a minimum setback of 300% of the tower height from any residential component of a Planned Development (PD). This regulation aims to mitigate safety concerns, minimize visual disruption, and preserve the character of residential areas. The proposed placement of the cell tower within designated open space abutting residential properties violates both the letter and intent of this ordinance, as well as critical policies outlined in the City of Orlando's Recreation and Open Space Goals.

Violations of Ordinance 58.844

The proposed 105-foot cell tower requires a 315-foot setback from residential components to comply with Ordinance 58.844. However, the applicant's revised plans fail to meet this standard in several significant ways:

1. Placement on Designated Open Space Abutting Residential Areas

- **Original Designation and Function:** The proposed site is in the Starwood Planned Development (PD) zoning district on designated open space approved as part of the Meridian Parks N-2 neighborhood by the Municipal Planning Board (MPB) on April 16, 2024 (Case number MPL2024-10009). This open space was designated to serve recreational, environmental, and aesthetic purposes, contributing to the residential character of the community. As outlined in Policy 1.1.1 of the Recreation and Open Space Goals, the City of Orlando prioritizes parks and open spaces as essential components of sustainable and healthy communities.
- **Role of Open Space as a Residential Component:**
 - Open spaces within a PD, especially those designated as buffers or green spaces, directly support residential life, consistent with Policy 1.2.2, which emphasizes preserving open spaces for neighborhood cohesion, aesthetics, and environmental health.
 - Ordinance 58.844 applies setback requirements to all residential components, including shared open spaces. The applicant's placement of the tower ignores this standard, eliminating the functional buffer the open space provides to the surrounding residential lots.
- **Standard Interpretation of "Residential Component":** Ordinance 58.844's protections extend to elements like parks and open spaces that are integral to residential neighborhoods. Ignoring this interpretation undermines the ordinance's intent to safeguard residential areas from adverse industrial impacts.
- **Examples of Zoning Determinations of Similar Properties:** Within the Starwood Planned Development (PD), multiple parcels of land are designated open space with the land use code "0019 - Res Vacant H.O.A." This designation is used for open spaces that serve a residential function, including recreational areas, environmental buffers, and green spaces that enhance neighborhood cohesion and aesthetics. These

parcels are directly comparable to the open space where the cell tower is proposed to be built, as they serve similar purposes and provide the same community benefits.

The land use code "0019 - Res Vacant H.O.A." identifies these properties as integral residential components, reinforcing their role in maintaining the quality of life in Starwood's neighborhoods. These spaces are designed to function as shared community assets, contributing to the residential character of the area and supporting goals outlined in the City of Orlando's Recreation and Open Space policies.

To illustrate this point, several examples of similarly designated properties within the Starwood PD will be provided. Images from the Orange County Property Appraiser, Orange County Infomap, and satellite views will demonstrate the shared land use code "0019 - Res Vacant H.O.A." and the comparable purposes these spaces fulfill. These visuals will highlight how these parcels, like the proposed cell tower site, are residential in nature and intended to be preserved for the benefit of the surrounding community.

By analyzing these comparable parcels, it becomes clear that the proposed cell tower site is not an exception but part of a broader pattern of open spaces within Starwood PD that are zoned and utilized as residential components. Repurposing this space for industrial infrastructure contradicts its established residential designation, violates Ordinance 58.844, and undermines the community's planning framework.

Launch Point Rd 33-23-31-1996-14-000

Name(s): DOWDEN WEST COMMUNITY DEVELOPMENT DISTRICT	Physical Street Address: Launch Point Rd	Property Use: 0900 - Common Elements
Mailing Address On File: 219 E Livingston St Orlando, FL 32801-1508 Incorrect Mailing Address?	Postal City and Zip: Orlando, FL 32832	Municipality: Orlando

[View 2024 Property Record Card](#)

[PROPERTY FEATURES](#)
[VALUES, EXEMPTIONS AND TAXES](#)
[SALES](#)
[MARKET STATS](#)
[LOCATION](#)

2025 Values will be available in August of 2025. To see the certified values, go to the Values, Exemptions and Taxes Tab.

Property Description

STARWOOD PHASE N-1A 97/149 TRACT N (OPEN SPACE)

Total Land Area

25,877 sqft (+/-) | 0.59 acres (+/-)

GIS Calculated

Notice

Land

Land Use Code	Zoning	Land Units	Unit Price	Land Value
0019 - Res Vacant H.o.a.	ORL-PD	1 Code Undefined	Working Value...	Working Value...

This image, sourced from the Orange County Property Appraiser, shows Parcel ID 33-23-31-1996-14-000. The property is designated with the land use code "0019 - Res Vacant H.O.A." and described as "open space", underscoring its residential purpose to provide buffers, recreational areas, and aesthetic enhancements within the Starwood Planned Development.



Navigation Identification Search Selection Reports Markup Tasks

Zoom In Zoom Out Pan Previous Extent Next Extent Initial View Bookmarks Plot Coordinates

Parcel - 312333199614000

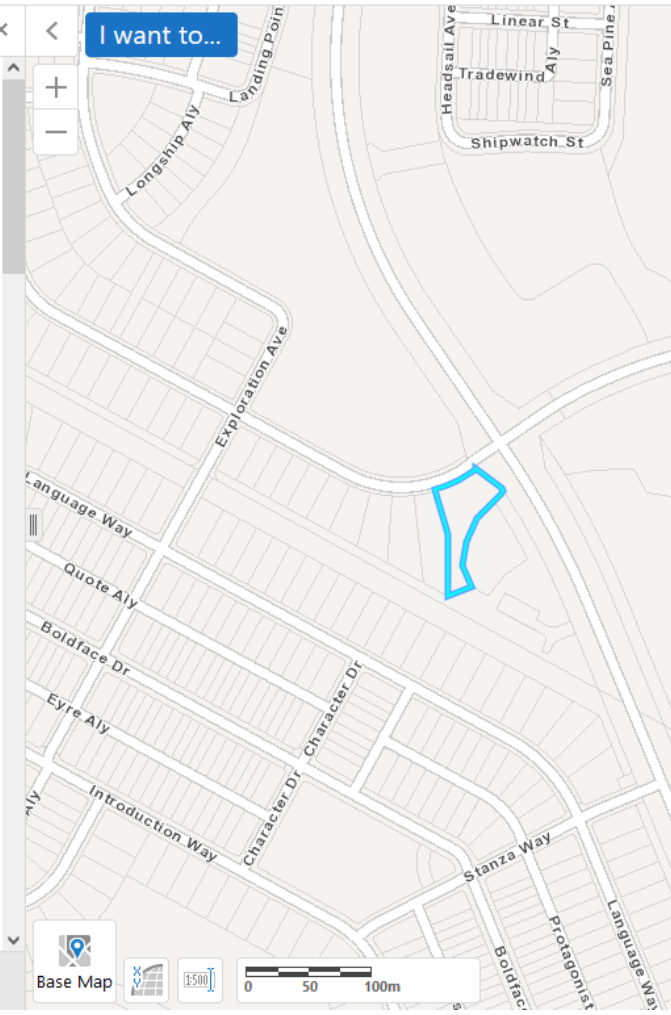
I want to...

Description

Parcel 312333199614000
Name
Acreage 0.5941
Exemption
Owner Name DOWDEN WEST COMMUNITY DEVELOPMENT DISTRICT
DOR Code 0019
Situs Address LAUNCH POINT RD
Owner Zip Code 32801
Owner Address C/O GOVERNMENTAL MNGT SVCS LLC
219 E LIVINGSTON ST
Link to Parcel

Details

Parcel 312333199614000
NAME1 DOWDEN WEST COMMUNITY DEVELOPMENT DISTRICT
NAME2 N/A
Property Name N/A
MILL_CODE 26
DOR_CODE 0019



Layers Parcel - 312333199614... Base Map 1:500 0 50 100m

This image, taken from Orange County's Infomap system, highlights Parcel ID 33-23-31-1996-14-000.



This satellite image of Parcel ID 33-23-31-1996-14-000 highlights its role as an open space within the Starwood Planned Development. Adjacent to Parcel ID 33-23-31-1996-15-000, identified as wetland by the Orange County Property Appraiser, this parcel features green areas and open land that are aesthetically comparable to the site proposed for the cell tower. Designated with the land use code "0019 - Res Vacant H.O.A.," it serves as a critical buffer between residential lots and other land uses, reinforcing its purpose as a shared community space and residential component integral to the neighborhood's residential character, aesthetics, and quality of life.

Archway Aly 34-23-31-2005-04-011

Name(s): BEACHLINE SOUTH RESIDENTIAL LLC	Physical Street Address: Archway Aly	Property Use: 0900 - Common Elements
Mailing Address On File: 4901 Vineland Rd Ste 450 Orlando, FL 32811-7229 Incorrect Mailing Address?	Postal City and Zip: Orlando, FL 32832	Municipality: Orlando

[View 2024 Property Record Card](#)

i PROPERTY FEATURES \$ VALUES, EXEMPTIONS AND TAXES SALES MARKET STATS LOCATION

2025 Values will be available in August of 2025. To see the certified values, go to the Values, Exemptions and Taxes Tab.

Property Description

STARWOOD PHASE N - 4 114/119 TRACT 4K (OPEN SPACE)

Total Land Area GIS Calculated Notice

56,799 sqft (+/-) | 1.30 acres (+/-)

Land

Land Use Code	Zoning	Land Units	Unit Price	Land Value
0019 - Res Vacant H.o.a.	ORL-PD	1 Code Undefined	Working Value...	Working Value...

This image, sourced from the Orange County Property Appraiser, shows Parcel ID 34-23-31-2005-04-011. The property is designated with the land use code "0019 - Res Vacant H.O.A." and described as "open space", underscoring its residential purpose to provide buffers, recreational areas, and aesthetic enhancements within the Starwood Planned Development.



Navigation Identification Search Selection Reports Markup Tasks

Zoom In Zoom Out Pan Previous Extent Next Extent Initial View Bookmarks Plot Coordinates

Parcel - 312334200504011

I want to...

NEXT_YEAR_LAND_UNIT_PRICE	0
LAND_VALUE_CHANGE_PCT	0
BLDG_VALUE_CHANGE_PCT	0
VALUE_METHOD_CODE	M
PARCEL_CATEGORY	R
SEC_TWN_RNG	34-23-31-2005-04-011
CDD_NAME	DOWDEN WEST CDD
NBHD_DESC	STARWOOD
DEEDED_SQFT	N/A
SITUS_ZIP	32832
SITUS_CITY	Orlando
SHAPE_Length	2044.9934
SHAPE_Area	56826.3158

Layers Parcel - 312334200504...

Base Map

0 30 60m

This image, taken from Orange County's Infomap system, highlights Parcel ID 34-23-31-2005-04-011.



This satellite image of Parcel ID 34-23-31-2005-04-011 highlights its role as an open space within the Starwood Planned Development. Adjacent to Parcel ID 34-23-31-2005-04-005, identified as wetland by the Orange County Property Appraiser, this parcel features green areas and open land that are aesthetically comparable to the site proposed for the cell tower. Designated with the land use code "0019 - Res Vacant H.O.A.," it serves as a critical buffer between residential lots and other land uses, reinforcing its purpose as a shared community space and residential component integral to the neighborhood's residential character, aesthetics, and quality of life

2. Proximity to Residential Properties

- **Flawed Distance Calculation:** While the applicant calculates the distance to the nearest residential lot at 317 feet, narrowly exceeding the 315-foot setback requirement on paper:
 - This calculation disregards the adjacency of the open space to residential lots, making it an integral part of the neighborhood's residential fabric.
 - The placement undermines the ordinance's goal of providing meaningful separation between industrial structures and residential areas, violating Policy 1.1.2, which mandates maintaining adequate open spaces to support residential quality of life.

3. Noncompliance Despite Height Reduction

- **Inadequate Height Adjustment:** The applicant reduced the tower height from 110 feet to 105 feet, thereby lowering the setback requirement from 330 feet to 315 feet. However:
 - This adjustment fails to address the core issue of placing the tower within designated open space directly adjacent to residential lots.
 - The height reduction exacerbates visual disruption, as the removal of camouflage foliage exposes the tower’s industrial structure and uppermost antennae, violating the aesthetic protections outlined in Policy 1.2.2, which prioritizes preserving green space and visual harmony.

Contradiction of Ordinance Intent and Recreation Policies

Ordinance 58.844, supported by the City of Orlando’s Recreation and Open Space Goals, was designed to protect residential communities from the adverse impacts of industrial infrastructure. The placement of the proposed tower on designated open space and residential components abutting residential properties undermines these objectives:

1. Undermining Recreational and Environmental Protections

- The open space was approved to function as a buffer zone, consistent with Policy 1.2.2, which emphasizes preserving open spaces as buffers, recreational areas, and contributors to neighborhood quality of life. Repurposing this space for industrial use directly conflicts with its intended role.

2. Failure to Maintain Protective Buffers

- By eliminating the functional buffer provided by the open space, the applicant disregards the ordinance’s goal of maintaining substantial separation between industrial structures and residential communities, as required under Policy 1.1.1, which promotes compatibility in land use.

3. Exacerbating Visual and Community Impacts

- The applicant’s removal of camouflage foliage worsens the visual intrusion of the tower, violating Policy 1.2.2 and Policy 1.7.3, which emphasize enhancing green spaces and maintaining their aesthetic value for surrounding communities.

Supporting Visual Representation

In addition to other imagery and analysis, below are graphics illustrating the required 315-foot setback under Ordinance 58.844 and current designations of the space. These visuals demonstrate how the placement of the tower fails to preserve the protective buffer intended by the ordinance, compromising both the functional and aesthetic integrity of the neighborhood.

Sec. 58.844. - Separation and Site Development Standards.

(a) *Separation from Off-Site Uses.* Communications Towers shall be located so as to comply with the following standards for the minimum separation distance from the closest required building setback line for any off-site principal use structure:

Off-Site Uses/Zoning	Minimum Separation from required building setback
Any residential zoning district R-3A or less, any similar residential zoning districts in Orange County, any O-1 office and residential district, and any residential component in a PD	200 feet or 300% height of tower, whichever is greater
Any multi-family zoning district R-3B and above, mixed use district (MXD, MU), activity center district (AC), office and residential district (O-2 and O-3), any public use district (P), and similar uses in Orange County.	100 feet or 100% height of tower, whichever is greater
All other zoning districts	None

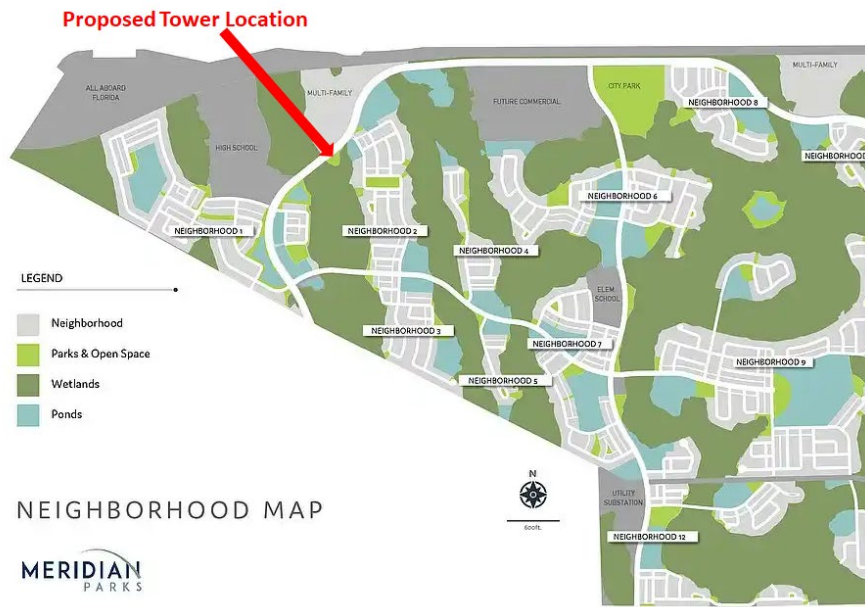
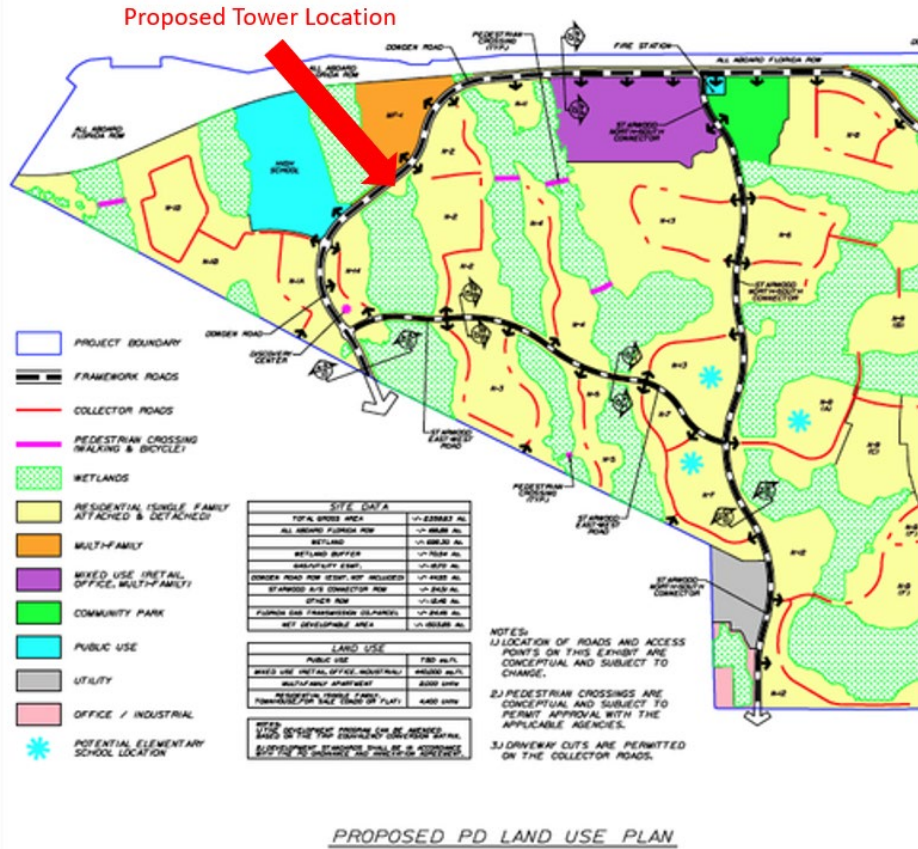
Ordinance 58.844: This image highlights the City of Orlando’s requirement that cell towers maintain a minimum setback of 300% of their height from any residential component of a Planned Development (PD). The proposed tower’s placement in open space, with a residential use code, in a PD, and abutting residential properties fails to uphold this standard, undermining the ordinance’s intent to protect residential areas from industrial impacts.



Meridian Parks Neighborhood 2 Master Plan

Case Number	MPL2024-10009
Parcel ID	34-23-31-0000-00-002
Zoning District	Starwood Planned Development (PD)
Future Land Use	OFFICE-LOW (Office Low Intensity)
Application Received	February 19, 2024
Tentative Hearing Date	April 16, 2024, 08:30 AM
Board	Municipal Planning Board

City of Orlando documentation confirming that the Meridian Parks N-2 neighborhood is located within a Planned Development (PD) zoning district.



Visual Graphics from Developer – used in approved city planning, used for informational purposes under fair use. The images illustrate the planned use of the proposed site and immediately adjacent land as “Residential Single Family” (Top) and “Parks and Open Space” (Bottom).

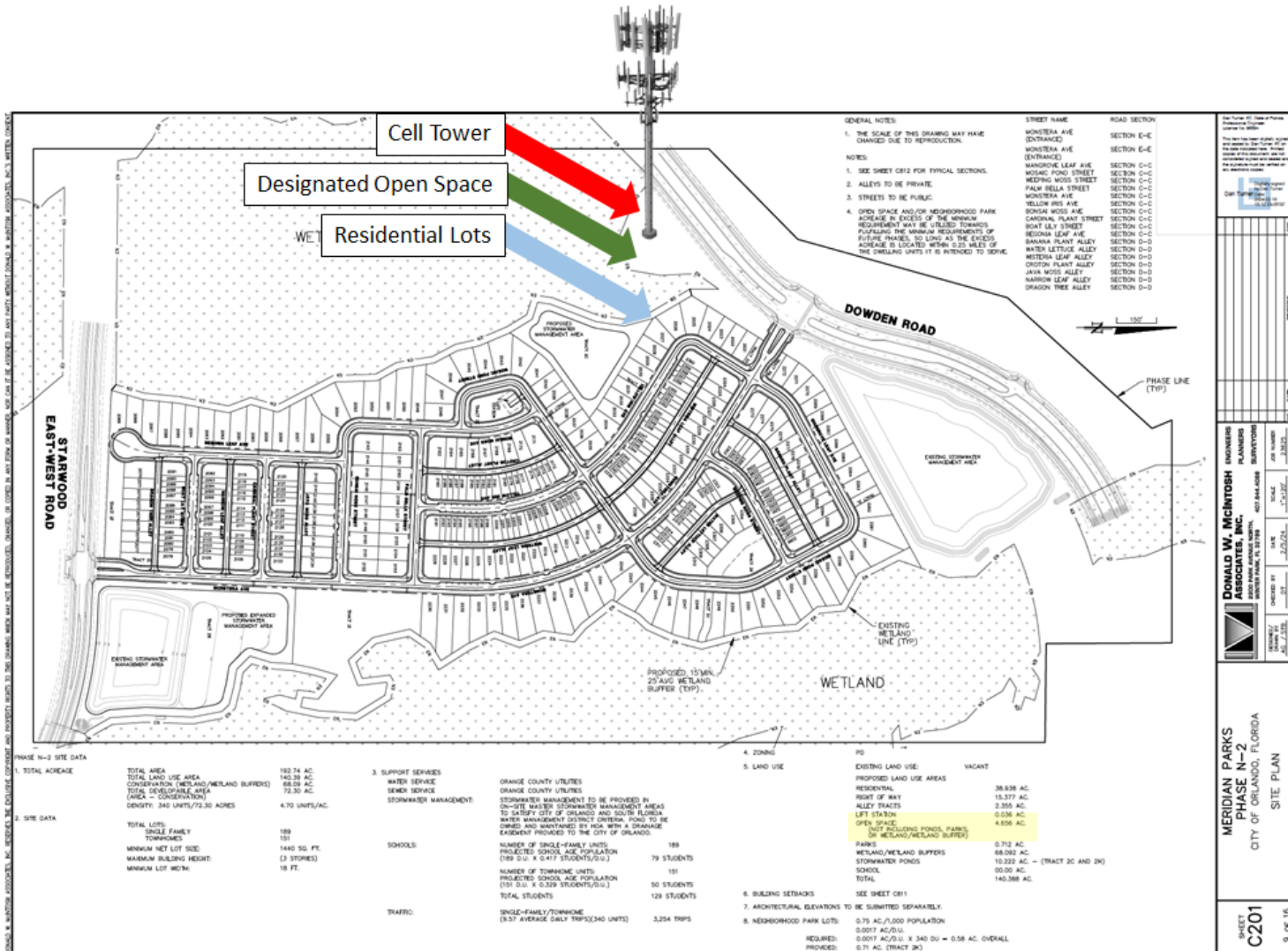


Illustration of Ordinance 58.844 Setback Requirement, used for informational purposes under fair use t: A 105-foot tower requires a 315-foot setback from any residential component of a Planned Development (PD). This image highlights the proximity of the proposed tower to adjacent residential properties and designated open spaces, underscoring its noncompliance with the ordinance's intent to protect residential area.

A1-5. Updated Critique of the Anthemnet Proposal Package

Failure to Adhere to Communication Tower Checklist Requirements and Due Diligence

The City's Communication Tower Checklist includes the requirement that the applicant provide: "A written affidavit stating why the proposed site is necessary for their communications service (e.g., for coverage, capacity, hole-filling, etc.) and a statement that there are no existing alternative sites within the provided search area, and there are no alternative technologies available which could provide the proposed service enhancement without the tower. City staff will use the service of a registered professional engineer to confirm the statements made in this item." The applicant has failed to provide the required written affidavit, and City staff have not fulfilled their obligation to engage a registered professional engineer to independently verify the claims made in this application. Furthermore, City staff have not sought the expertise of independent professional RF engineers to assess the purported need for this project, explore the availability or feasibility of alternative sites, or evaluate whether alternative technologies—such as small cell deployments—could achieve the proposed service enhancements without constructing the tower. This lack of due diligence is deeply concerning and undermines the credibility of the review process.

Lack of Transparency and Errors in the RF Package

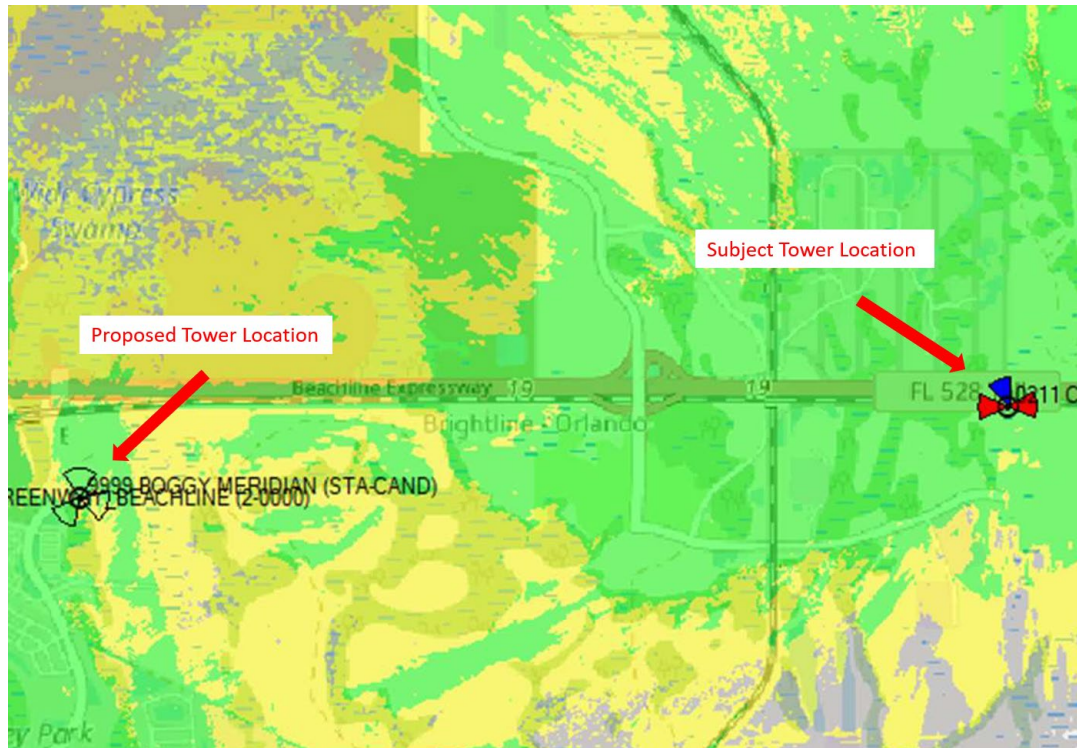
The Verizon RF package submitted with the application contains significant errors and lacks the transparency necessary to support claims of necessity and site suitability. These deficiencies highlight the need for a thorough review of the entire proposal, as the RF package forms the technical foundation of the application.

- **Sunbridge Community Error:** The RF package inaccurately states, "The primary objective for this project is to improve service quality in the residential and commercial properties of the new community of Sunbridge." However, Sunbridge is located approximately 7 miles from the proposed site, making this claim fundamentally flawed. This error casts doubt on the validity of the RF package's analysis and its alignment with the goals of the Starwood PD community.
- **Coverage Claims and Evidence Gaps:** While the RF package asserts that existing cell sites are experiencing 4G data overload, it provides no objective evidence to substantiate this claim, such as performance metrics, dropped call data, or network congestion analysis. The absence of such data undermines the case for a new tower at this location.
- **Future Needs:** The applicant's justification focuses on future demands in planned areas of the Starwood PD. However, this rationale fails to address why a tower must be placed near residential areas, especially when applicant proposed coverage could be better met by towers farther away.

Lack of Exploration of Co-Location Opportunities

The RF package asserts that no viable co-location opportunities exist for the proposed tower but provides no documentation of efforts to verify this claim.

- **Existing Tower (registration number 1007877) at N28.450538, W81.144085:** Located approximately 4 miles from the proposed site, and 3 miles from the center of the location with least coverage, this tower has antennas pointed in directions that exclude coverage to the Starwood PD. However, there is no evidence that the applicant assessed whether additional antennas could be redirected, replaced, or co-located on this structure to provide the desired coverage, or improve coverage. This omission suggests a failure to explore all reasonable alternatives, as required by due diligence.



Service map of the existing cell tower to the East, illustrating antennas oriented north, east, and west, leaving the desired coverage area not considered. This highlights the potential for co-locating additional antennas or reconfiguring existing ones to better address coverage needs without constructing a new tower.

Methodological Shortcomings

The RF package and accompanying proposal lack transparency in key areas:

- **No Environmental Review:** The package includes no assessment of potential environmental impacts, such as the risks of PVC microplastic contamination, proximity to preservation lands, or impacts on local ecosystems. Given the evidence of plastic shedding and proximity to wetlands, this omission is a critical oversight.
- **Inadequate Coverage Analysis:** The package fails to include technical documentation to justify the need for a new tower based on current coverage needs, and future needs are centered well over a mile from the proposed site.

Noncompliance with Growth Management Policies

The RF package and proposal fail to align with the City of Orlando's Growth Management Plan policies. While noncompliance with policies such as 1.1.1, 1.6.5, and 1.7.3 is addressed elsewhere in the addendum, this critique emphasizes how these violations stem directly from deficiencies in the RF package.

- **Policy 2.4.9 – Natural Features Protection:** The failure to assess environmental impacts conflicts with Policy 2.4.9, which prioritizes safeguarding natural features and park and recreation facilities.
- **Policy 1.7.3 – Enhancing Public Spaces:** By proposing a tower on designated open space and recreational land, the RF package directly contradicts this policy, which seeks to preserve and enhance community spaces.

Lack of Community Engagement

Despite repeated community inquiries and requests for transparency, the applicant has failed to provide adequate responses:

- **Unanswered Resident Requests:** Residents have repeatedly asked for data to support claims of necessity, availability of alternate sites, and the potential for co-location. These requests remain unanswered, further eroding trust in the application process.

A1-6. Request for Action

Considering the substantial evidence presented in this addendum, we respectfully request the following actions from the City of Orlando:

1. **Deny the Conditional Use Permit (CUP2024-10001):**
The significant environmental, aesthetic, health, and governance impacts of the proposed tower are incompatible with the Starwood PD and broader community goals. The application does not meet the necessary criteria for approval.
2. **Mandate a Comprehensive Environmental Review:**
Require the applicant to conduct a thorough environmental impact assessment, including the evaluation of microplastic pollution risks, proximity to wetlands and preservation land, and potential harm to wildlife and nearby ecosystems.
3. **Reevaluate the Proposed Site:**
Given the non-compliance with setback ordinances, proximity to residential areas, and conflicts with growth management policies, alternative locations must be prioritized.
4. **Explore and Publicly Document Alternate Sites:**
Require the applicant to evaluate and report on the feasibility of alternative locations, including at least the Orange County landfill, CFX site, pump station, gas utilities, and the planned commercial site. Public transparency in this process is critical.
5. **Mandate an Independent Visual Impact Study:**
Engage a third-party expert, selected by the City of Orlando, to conduct a transparent and unbiased visual impact analysis of the proposed tower and alternative sites, ensuring the results are publicly accessible.
6. **Review Ordinance and Policy Analysis and Require Waiver Exemptions:**
The applicant must waive their ability to increase tower height in the future and demonstrate compliance with all applicable height and setback regulations.
7. **Protect Residential Open Space:**
Preserve the designated residential open space and parkland, aligning with ordinance intentions and policy goals, and ensuring these areas remain free of industrial infrastructure.

A1-7. Conclusion and Recommendations

The proposed cell tower near **N28.444932, W81.210124**, within the Starwood Planned Development, presents substantial environmental, visual, and governance issues that render its approval detrimental to the Meridian Parks community and broader Starwood PD.

Summary of Key Findings

- **Environmental Impacts:** The tower's PVC faux foliage represents a significant microplastic pollution risk, particularly given its proximity to wetlands and designated preservation lands. Florida's intense sun exposure, high temperatures, and frequent storm/hurricane activity accelerate the degradation of PVC materials, leading to shedding and widespread dispersal of plastic debris. This concern is not theoretical: the author personally observed and documented evidence of significant shedding at a similar monopine tower located at 8553 Commodity Circle in Orlando, FL. During this site visit, pieces of faux foliage were found scattered across maintained turf at varying distances from the tower base, highlighting the regularity of this issue. Such shedding poses **long-term environmental risks, including contamination of nearby water sources and soil, which could severely impact the delicate ecosystems in surrounding wetlands and preservation areas.** Supporting photographs and field data reinforce these concerns.
- **Failure to Explore Alternate Sites:** The applicant's claims regarding the unavailability and inaccessibility of alternate sites and co-location, as well as the omission of potential array adjustments, are contradicted by clear evidence of viable options at the landfill, pump station, utility sites, planned commercial area, 528 CFX land, and existing infrastructure. **Orange County has indicated a willingness to assess and consider requests for landfill land use, further emphasizing the feasibility of these alternatives.** Sites on the landfill better align with land-use policies, minimize environmental and visual impacts, and enhance network infrastructure planning.
- **Visual Disruption:** Updated visual simulations and imagery, along with the removal of camouflage to address setback ordinances, highlight the tower's intrusive and overwhelming presence across community spaces, residential areas, schools, and recreational trails. **The absence of natural buffering for nearby homes, the 35-40% visibility of the tower from many community spaces, and the unobstructed views from adjacent residences and thoroughfares further underscore its incompatibility with the neighborhood.**
- **Noncompliance with Ordinances and Policies:** **The proposed site, in open space, with a residential use code, in a PD, and abutting residential properties violates Ordinance 58.844 by failing to maintain the required setback from residential components.** Additionally, the proposal conflicts with several Growth Management Plan policies, including Policies 1.1.1, 1.6.5, 1.7.3, 2.4.9, and S.40.8, as well as Recreation Policy 1.1.2. These policies emphasize the preservation of community character, protection of green spaces, and sustainable development. The incompatibility of the proposal with these goals underscores the necessity of rejecting the application.

- **Noncompliance with application requirements:** The RF package contains errors and omissions, including unsupported claims of network overload, inaccurate project objectives, and a lack of environmental review. Additionally, **the applicant has failed to provide the required affidavit explaining the necessity of the proposed site and to demonstrate the unavailability of alternative technologies. City staff have compounded this issue by not engaging an independent professional RF engineer to verify these claims, as outlined in the City’s Communication Tower Checklist.** This lack of due diligence undermines the credibility of the application review process.

Recommendations

1. **Deny the Conditional Use Permit (CUP):** The City of Orlando should deny **CUP2024-10001**, as substantial evidence demonstrates the proposed site’s incompatibility with the community, violation of environmental regulations, and violation of city policies, ordinances, and sustainable development practices.
2. **Mandate Exploration of Alternate Sites:** Require the applicant to provide documented exploration, assessments, and analysis of **alternate sites**, including:
 - **Landfill, CFX, and Utility Properties:** These options offer greater distance from residential areas, lower visual impact, and compliance with city policies.
 - **Planned Commercial Area:** A centrally located site within Starwood PD provides opportunities for appropriate infrastructure integration while protecting green spaces and residential character.
 - **Co-location and Array Antenna Changes:** Adjustments and additions to current antenna structures provides opportunities for additional coverage while preventing any impacts to the community or environment.
 - **Other Lands:** Due diligence requires exploring all less impactful options.
3. **Coordinate with Other Municipalities**
Partner with neighboring cities and counties to:
 - Share findings from environmental assessments on comparable cell towers.
 - Develop regional guidelines for the use of faux foliage and synthetic materials on communication towers.
 - Implement joint initiatives for addressing microplastic pollution and improving maintenance standards.
4. **Require an Environmental Impact Review:** Environmental review should focus on:
 - Risks to wetlands, preservation lands, and recreational spaces.
 - Potential contributions to plastic and microplastic pollution.
 - Long-term environmental and community impacts.
5. **Address Noncompliance in the Application:** Require the applicant to resolve all deficiencies and omissions in the application process,

Appeal to the City of Orlando Municipal Planning Board

The evidence presented in this addendum reinforces the conclusion that the proposed site for the communication tower doesn’t comply with required governance and is unsuitable and incompatible with the community’s priorities, environmental health, and aesthetic character. The

City of Orlando has the authority, supported by municipal policies and legal precedents, to deny this application and direct the applicant toward more suitable alternatives.

By rejecting this proposal, the city can uphold its commitment to **sustainable urban development, environmental preservation, and community well-being**, setting a precedent that prioritizes long-term planning over short-term convenience.

A1-8. Additional Supporting Materials

The following is a copy of an email regarding access to the proposed site for the purpose of performing resident reviews.

From: Chuck Bell <Chuck.Bell@mattamycorp.com>
Date: January 14, 2025 at 8:15:02 AM EST
To: David Grau <David.Grau@preserveorlando.com>
Subject: RE: [EXTERNAL] URGENT: Access to Dowden Road East for Cell Tower Assessment

Mr. Grau,

Thank you for your inquiry, however we are unable to grant your request. Access to the site is through an on-going construction zone. Dowden Road has not been turned over to the City of Orlando, therefore that portion of the road is not open to the public.

Best regards,

Chuck



Chuck Bell, PE (FL), PSM (FL)
Director of Land Development – Orlando Division
O (407) 215-6261 | C (407) 607-8718
chuck.bell@mattamycorp.com

Mattamy Homes USA
Division Office: 2450 Maitland Center Parkway, Suite
300, Maitland, FL 32751

Connect with us:

Notice: This email is intended for use of the party to whom it is addressed and may contain confidential information. If you have received this email in error, please inform me and delete it. Thank you.

Email confirming access denial: Despite prior access being granted for Anthemnet's team to execute simulations at the proposed site, subsequent requests for additional access were denied. This discrepancy raises concerns about transparency and the thoroughness of the applicant's site assessments.