



LAKE NONA TELECOMMUNICATION TOWER



Location Map



Subject Site

SUMMARY

Owner

Ralph Ireland
Lake Nona Land Co., LLC

Applicant

Heather Isaacs
Tavistock Development Co.,
LLC

Project Planner

Colandra Jones, AICP

Property Location: The subject property is located south of Laureate Boulevard, west of Hartwell Court, east of Boggy Creek Road. (±0.14 acres, District 1).

Applicant's Request: Specific Parcel Master Plan (SPMP) approval for a 165 foot monopole telecommunication tower on proposed within Lake Nona PD just south of the UCF Medical School.

Staff's Recommendation:

Approval subject to the conditions in the staff report.

Updated: August 28, 2015

FUTURE LAND USE MAP



ZONING MAP



MASTER PLAN ANALYSIS

Project Description

The subject site is generally located south of Laureate Boulevard, west of Hartwell Court, east of Boggy Creek Road and is approximately 0.14 acres. The site is currently designated Conservation on the Official Future Land Use Map and is zoned PD/AN. The subject site is undergoing a GMP amendment to change the future land use designation from Conservation to Urban Village and a PD amendment to allow for telecommunication towers within Urban Village designation. This application will be reviewed under the standards of the Urban Village future land use designation and the Airport Support High Intensity designation. This proposed SPMP depicts development of a 165 foot monopole telecommunication tower. As Lake Nona continues to develop, there is need for enhanced telecommunication facilities for the citizens in this community. The intent of this tower is to provide sufficient coverage for all residential, business, emergency operations and medical users.

Project Context

The subject property is located within the Lake Nona DRI, a community located in the southeast section of Orlando. Surrounding future land use designations include Urban Village to the north and Conservation to the east, south, and west. Existing uses include the UCF Medical School to the north, and wetlands to the east, south, and west. The proposed telecommunication tower would be compatible with the surrounding uses.

Table 1—Project Context

	Future Land Use	Zoning	Surrounding Use
North	Urban Village	PD/AN	UCF Medical School
East	Conservation	C/AN	Wetlands
South	Conservation	C/AN	Wetlands
West	Conservation	C/AN	Wetlands

Conformance with the GMP

The proposed SPMP is consistent with the GMP Policies related to the Southeast Orlando Sector Plan, including Future Land Use Element Policy 2.4.4 (Urban Village policy), Subarea Policies S.35.3 and S.35.4, along with Goal 4 and its associated goals, objectives and policies.

Conformance with the LDC—Chapter 68 Southeast Orlando Sector Plan

In order to be consistent with the Southeast Orlando Sector Plan, applications must be reviewed for compliance with LDC Chapter 68, which lays out the detailed development guidelines and standards for the Southeast Plan area. The proposed development is designated as “Airport Support District-High Intensity” in the Lake Nona DRI/PD. According to LDC Section 68.200 (c) (1), Airport Support District is described as such: *“Airport Support Districts shall be the primary employment locations within the Southeast Plan area. The Airport Support Districts have been divided into two distinct types or levels of intensity (high and medium). It is the goal of the Southeast Plan to create a community structure that will encourage people to both live and work in the community. Traditional Design standards shall not be applied in High Intensity Airport Support Districts unless desired by the property owner/developer.”*

According to LDC Figure 68-D, development in the Airport Support Districts is required to implement Conventional LDC Standards. The AC-2 zoning district standards shall apply to this development. Communication Towers are an allowable use in the Airport Support District-High Intensity designation through this SPMP process.

LDC Section 58.844—Communication Towers Separation and Site Development Standards

Separation of Off-Site Uses

Communication Towers must comply with standards for minimum separation distance from the closest required building setback line for any off-site principal use structures. The minimum separation from any single family developments or zoning districts is 200 feet or 300% height of tower, whichever is greater. The minimum separation from any multi-family developments or zoning districts is 100 feet or 100% height of tower, whichever is greater. All other zoning districts has no minimum separation requirement from off-site structures. The proposed communication tower location is surrounded by conservation land to the east, west and south and will be part of the Airport Support High Intensity designation which does not allow any residential development. Therefore, for this site, there is no minimum separation requirement.

Separation Between Communication Towers

A minimum separation of 1,500 feet for monopole towers greater than 75 feet in height is required from other communication towers. This proposal is for 165 ft. high monopole tower, and there are no communication towers within the 1,500 feet radius.

Anchor Location

All communication tower supports and peripheral anchors shall be located entirely within the boundaries of the development site and shall be set back from the development site perimeter a minimum distance of 5 feet, or the minimum setback of the zoning district in which the communication tower is located, whichever is greater. According to the site plan, the communication tower area is enclosed in a 20 ft. x 173 ft. area. It does not depict the communication tower supports and anchors, therefore it shall be required to meet the 5 foot setback condition.

Equipment Buildings

For this proposal, all communication tower equipment buildings and structures over 100 square feet shall conform to the AC-2 zoning district setback requirement. The AC-2 zoning district requires a front, side, and street side yard setback of 0 ft. and a rear yard of 10 feet. According to the site plan, there are 4 cell provider equipment structures that are 600 square feet each. There is a 217 foot setback from Laureate Boulevard, a 0 foot setback on the sides, and a 13 foot setback in the rear. There is also a 13 foot distance between structures on the opposite sides of the cell tower. And there is a 26 foot separation between the two interior structures and the cell tower. This meets the requirement for equipment buildings.

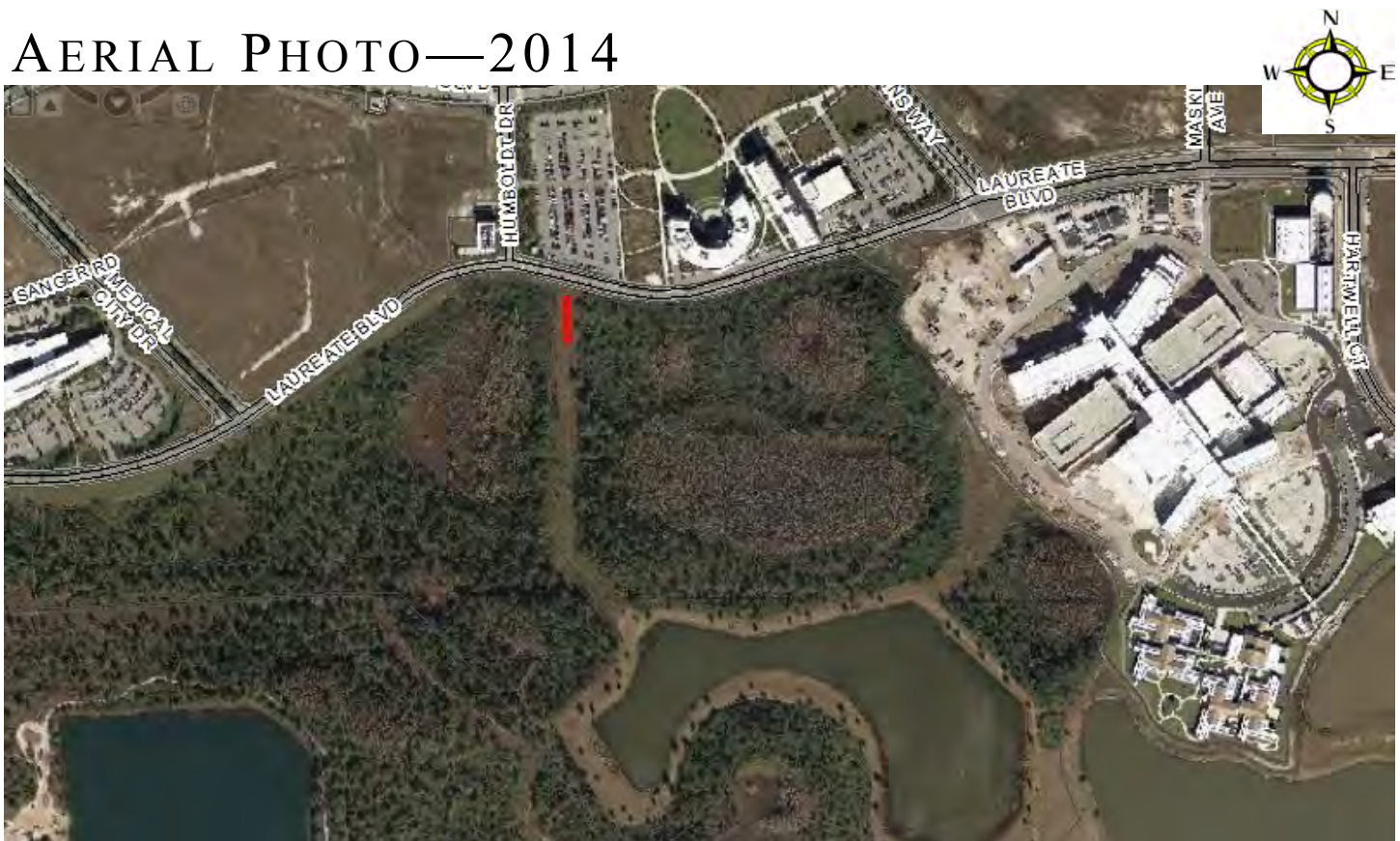
Fencing and Walls

According to LDC Section 58.844(f), a fence or masonry wall not less than 8 feet in height from finished grade shall be provided around the perimeter of all communication tower sites for ground-mounted communication towers. The fence shall be constructed of chain link, wire mesh, metal picket, or an alternative material. Access to the communication tower site shall be through a locked gate. The proposed site plan depicts an 8 foot chain link fence surrounding the site. There are five 12 foot double chain link gates, one for each cell provider and the cell tower area which are on the at the west side of the site, which meets this requirement.

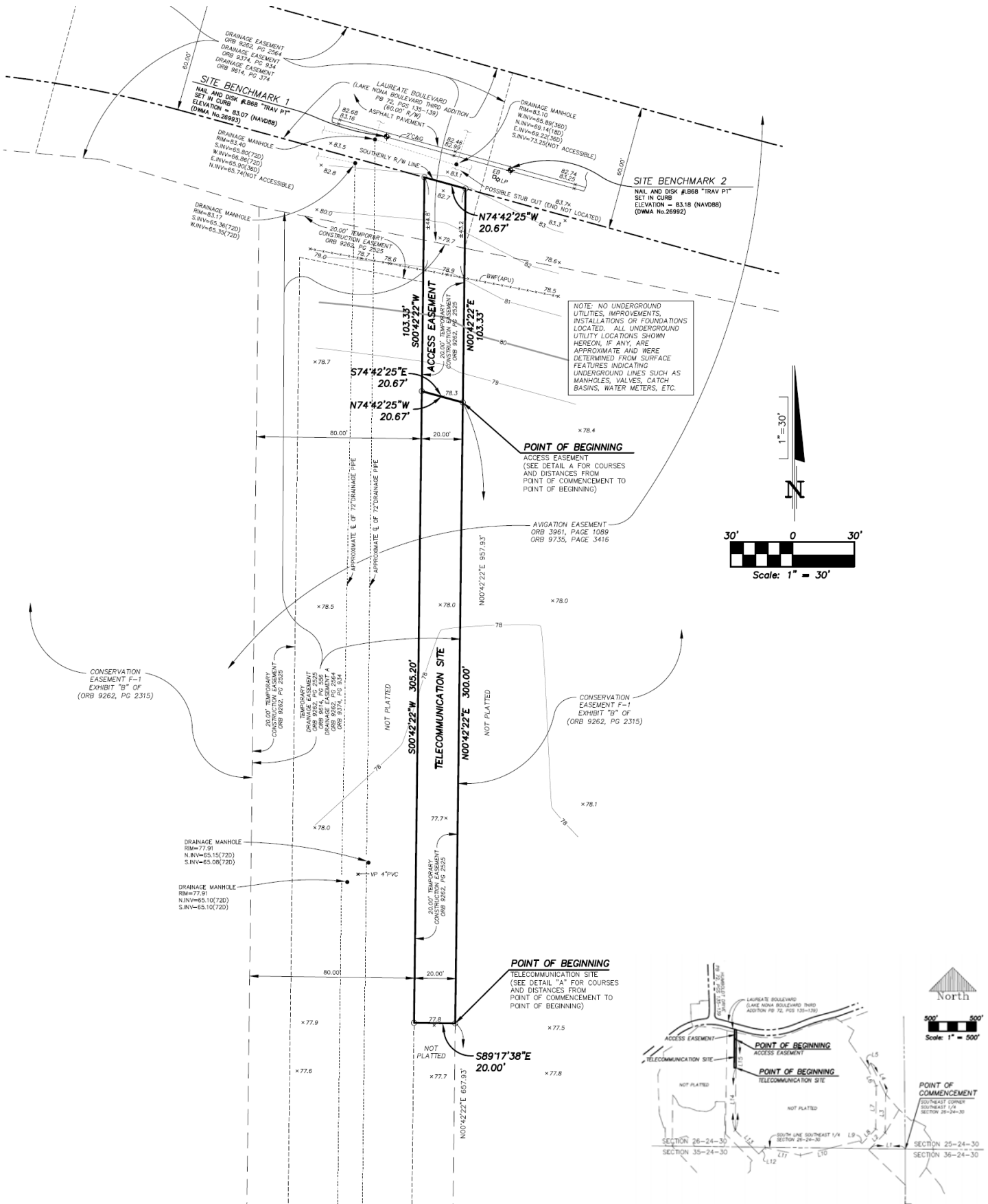
Landscaping

According to LDC Section 58.844(g)(1), landscaping shall be installed on the outside of the perimeter fence. For a fence, a hedge shall be planted in a plant bed at least 5 feet in width along the outside perimeter of the entire fence, except at the gate or doorway. The applicant did not provide a landscape plan with the application, however has indicated that it will comply with the landscaping requirements of LDC Section 58.844(g)(1).

AERIAL PHOTO—2014



BOUNDARY & TOPOGRAPHIC SURVEY



SITE BENCHMARK 1
NAIL AND RISK #8088 TRAV PY
SET IN CURB
ELEVATION = 83.07 (NAVD88)
(DMA No. 28983)

EXISTING ASPHALT ROAD

12" CONCRETE RIBBON CURB, REFER TO DETAIL

20' DOUBLE CHAIN-LINK GATE

PRIVATE GRAVEL DRIVE

APPROVED STABILIZED ACCESS ROAD

12' DOUBLE CHAIN-LINK GATE (TYP)

12" Ø CELL TOWER
MONOPOLE CELL TOWER (CENTER)
N: 1465876.17
E: 565452.06
BASE ELEV. 78.30' (NAVD88)

CELL PROVIDER

CELL PROVIDER

CELL PROVIDER

CELL PROVIDER

Dimensions: 336.86, 20.00, 13.33, 26.17, 13.33, 21.88, 70.00, 20.00, 13.33, 43.00, 20.00, 77.5, 77.7, 77.8, 78.0, 78.1, 78.2, 78.3, 78.4, 78.5, 78.6, 78.7, 78.8, 78.9, 79.0, 79.1, 79.2, 79.3, 79.4, 79.5, 79.6, 79.7, 79.8, 79.9, 80.0, 80.1, 80.2, 80.3, 80.4, 80.5, 80.6, 80.7, 80.8, 80.9, 81.0, 81.1, 81.2, 81.3, 81.4, 81.5, 81.6, 81.7, 81.8, 81.9, 82.0, 82.1, 82.2, 82.3, 82.4, 82.5, 82.6, 82.7, 82.8, 82.9, 83.0, 83.1, 83.2, 83.3, 83.4, 83.5, 83.6, 83.7, 83.8, 83.9, 84.0, 84.1, 84.2, 84.3, 84.4, 84.5, 84.6, 84.7, 84.8, 84.9, 85.0, 85.1, 85.2, 85.3, 85.4, 85.5, 85.6, 85.7, 85.8, 85.9, 86.0, 86.1, 86.2, 86.3, 86.4, 86.5, 86.6, 86.7, 86.8, 86.9, 87.0, 87.1, 87.2, 87.3, 87.4, 87.5, 87.6, 87.7, 87.8, 87.9, 88.0, 88.1, 88.2, 88.3, 88.4, 88.5, 88.6, 88.7, 88.8, 88.9, 89.0, 89.1, 89.2, 89.3, 89.4, 89.5, 89.6, 89.7, 89.8, 89.9, 90.0, 90.1, 90.2, 90.3, 90.4, 90.5, 90.6, 90.7, 90.8, 90.9, 91.0, 91.1, 91.2, 91.3, 91.4, 91.5, 91.6, 91.7, 91.8, 91.9, 92.0, 92.1, 92.2, 92.3, 92.4, 92.5, 92.6, 92.7, 92.8, 92.9, 93.0, 93.1, 93.2, 93.3, 93.4, 93.5, 93.6, 93.7, 93.8, 93.9, 94.0, 94.1, 94.2, 94.3, 94.4, 94.5, 94.6, 94.7, 94.8, 94.9, 95.0, 95.1, 95.2, 95.3, 95.4, 95.5, 95.6, 95.7, 95.8, 95.9, 96.0, 96.1, 96.2, 96.3, 96.4, 96.5, 96.6, 96.7, 96.8, 96.9, 97.0, 97.1, 97.2, 97.3, 97.4, 97.5, 97.6, 97.7, 97.8, 97.9, 98.0, 98.1, 98.2, 98.3, 98.4, 98.5, 98.6, 98.7, 98.8, 98.9, 99.0, 99.1, 99.2, 99.3, 99.4, 99.5, 99.6, 99.7, 99.8, 99.9, 100.0



Example of Proposed Telecommunication Tower

FINDINGS

Subject to the conditions contained herein, the proposal is consistent with the requirements for approval of the proposed Specific Parcel Master Plan applications contained in Section 65.336 of the Land Development Code (LDC) :

1. The proposal is consistent with the State Comprehensive Plan (Chapter 187, Florida Statutes).
2. The proposal is consistent with the East Central Florida Strategic Policy Plan.
3. The proposal is consistent with the provisions of Chapter 163, Part II, Florida Statutes.
4. The proposal is consistent with the objectives and policies of the City's adopted Growth Management Plan (GMP); particularly, Future Land Use Policy 2.4.4, Figure LU-1, Goal 4 and its associated objectives, policies, and figures.
5. The proposal is consistent with and implements the Southeast Orlando Sector Plan, Chapter 68 of the Land Development Code.
6. The proposal is consistent with the requirements of the Lake Nona DRI/PD.
7. The proposal is compatible with the surrounding development and neighborhood pattern.
8. The proposal will not result in demands on public facilities and services that exceed the capacity of such facilities and services since it is subject to Chapter 59 of the City Code, the Concurrency Management Ordinance.

Staff recommends approval of the Specific Parcel Master Plan subject to the conditions below:

CONDITIONS OF APPROVAL

City Planning

1. *GROWTH MANAGEMENT PLAN AND PD AMENDMENTS EFFECTIVE*

The proposed telecommunication tower shall not be developed prior to the effective date of the pending GMP amendment for the property that changes the future land use designation from Conservation to Urban Village (Case #GMP2015-00026) and the amendment to the Lake Nona PD (Case #ZON2015-00023).

2. *SUBJECT TO CODES –ZONING*

Except as provided herein, the development is subject to all codes and ordinances of the State of Florida, City of Orlando, and all other applicable regulatory agencies.

3. *DEVELOPMENT REQUIREMENTS*

Except as modified herein, the project shall be developed in accordance with the requirements of the Growth Management Plan, Chapter 68 of the Land Development Code, the Lake Nona DRI/PD, and any other pertinent provisions of the Conventional LDC, the Lake Nona DRI/PD, the Southeast Orlando Development Plan Agreement, the 1994 Lake Nona Developer's Agreement, and all previous agreements between the City and property owner.

4. *APPROVAL*

Approval of the Specific Parcel Master Plan by City Council shall grant the applicant authority to submit an application for site plan/master plan review for a building permit. The application must be submitted within thirty-six (36) months of approval of the Specific Parcel Master Plan (by the City Council) or the Master Plan shall expire. However, upon written application filed 30 days prior to the expiration date, the Planning Official may renew the Master Plan for one period of up to 12 months providing good cause is shown.

5. *LANDSCAPING PLAN*

The landscaping plan shall be developed in accordance with LDC Section 58.844(g)(1), landscaping shall be installed on the outside of the perimeter fence. A hedge shall be planted in a plant bed at least 5 feet in width along the outside perimeter of the entire fence, except at the gate. The landscaping shall be included in the Urban Village area only.

6. *ILLUMINATION*

This communication tower shall not be artificially lighted except as required for public safety purposes, or by the Federal Aviation Administration (FAA).

7. *SIGNAGE*

No signage shall be allowed on the communication tower, except as required for public safety purposes, or by the Federal Communications Commission (FCC).

8. *ANCHOR LOCATION*

The communication tower supports and peripheral anchors shall be located entirely within the boundaries of the development site and shall be set back from the development site perimeter a minimum distance of 5 feet.

9. *WETLAND SETBACK*

The minimum building setback from the wetland shall be 50 ft. from the boundary.

INFORMATIONAL COMMENTS

Transportation Planning

The Transportation Planning Division supports the applicant's request without further condition or comment.

Transportation Engineering

1. *WORK WITHIN ROAD R-O-W*

For any construction work planned or required within a public right-of-way or City sidewalk easement adjacent to a public right-of-way (including but not limited to: irrigation, drainage, utility, cable, sidewalk, driveway, road construction/reconstruction or landscaping), the Owner/Applicant shall submit the following: Maintenance of traffic plans (M.O.T.) (For more information/detailed requirements contact the Office of Special Events & Permits at 407-246-3704)

2. *DRIVEWAY DESIGN*

The proposed driveway shall meet Orlando Land Development Code (LDC), Chapter 61 (Sections 61.240-61.242), and Engineering Standards Manual (ESM), Section 8.11, design requirements including, but not limited to the following:

1. Driveway width; 2. Spacing (driveway spacing from other driveways); 3. Number and location of driveways; 4. Angle; 5. Radii; and 6. Grade

3. *PARKING SURFACES*

All parking lots, loading areas, and vehicular use areas shall have a durable all-weather surface with drainage and surface water control as required by the City Engineer, in accordance with Chapter 61 of the Orlando Land Development Code (LDC). Stone shall be permitted only to meet tree protection requirements, and only where minimum parking requirements would otherwise go unmet, as approved by the City Engineer. Where stone is permitted, the Owner/Applicant shall pave the driveway/driving aisle within the first 15 feet of the driveway measured from the street right-of-way (R-O-W) line. Coarse aggregate, such as gravel, smaller than standard size #4 (in accordance with the Florida Department of Transportation's Standard Specifications for Road and Bridge Construction, Section 901) is not permitted.

4. *DRIVEWAY GATES*

The driveway gates shall be positioned to allow a minimum storage of the length of one standard size vehicle between the gate (gate controller) and the right-of-way (R-O-W) line/sidewalk which is 19 feet. Gates shall be designed to swing IN to the property only, or slide gates shall be used. Gates shall be equipped with optical sensor or approved lock boxes for fire department access. Entrances for gated communities shall be designed to allow the length of at least two design vehicles to be stored between the gate controller and the R-O-W line/sidewalk, and shall provide a turn-around area for denied or errant entries. Show the location of the actuation device(s), and show driver's clear sight distance. The minimum width for the divided section of an entrance shall be 20 feet on both sides of the median(s) to allow for emergency vehicle access.

5. *DRIVEWAYS:SIGHT DISTANCE*

At all project entrances, clear sight distances for drivers and pedestrians shall not be blocked by signs, buildings, building columns, landscaping, or other visual impediments. No structure, fence, wall, or other visual impediment shall obstruct vision between 3 feet and 8 feet in height above street level. The street corner / driveway visibility area shall be shown and noted on construction plans and any future site plan submittals. The applicant shall design the site plan as necessary to comply with the Florida Greenbook and the FDOT Design Standard Index.

Engineering/Zoning

1. *PLAT*

This property is required to plat in accordance with Section 65.401 of the City's Land Development Code prior to the issuance of building permits.

2. *ENGINEERING/ZONING-MISC.*

In accordance with Section 61.303 (a) (2) the first fifteen feet of the driveway/access approach needs to be paved or concrete.

3. *ENGINEERING STANDARDS MANUAL*

The City Council Adopted the Engineering Standards Manual (ESM), Fourth Edition on March 9, 2009. All plans must conform to the ESM and all construction must be accomplished in accordance to the ESM.

4. *STORM-WATER MANAGEMENT DISTRICT*

The owner/developer is required to design and construct an on-site storm water system in accordance with Chapter Seven (7), Stormwater Management, The Engineering Standard Manual 4th Edition. The system is to be privately owned and maintained, needs to be tract shown on the face of the plat.

INFORMATIONAL COMMENTS

Police

1. *CPTED REVIEW*

The Orlando Police Department has reviewed the paperwork for Lake Nona Cell Tower located southeast of Laureate Blvd. and Humboldt Dr., utilizing CPTED (Crime Prevention Through Environmental Design) principles. CPTED emphasizes the proper design and effective use of a created environment to reduce crime and enhance the quality of life. There are four overlapping strategies in CPTED that apply to any development: Natural Surveillance, Natural Access Control, Territorial Reinforcement and Target Hardening.

2. *NATURAL SURVEILLANCE*

Design the site to keep intruders easily observable. This is promoted by features that maximize visibility of people, parking areas and building entrances; doors and windows that look out onto streets and parking areas; pedestrian-friendly sidewalks and street; porches or patios and adequate nighttime lighting.

- Appropriate lighting should be included so critical functions may be accessed after-dark.
- Lighting fixtures should be reliable, easy to maintain, withstand the elements, and be vandal-resistant.
- Landscaping is another crucial aspect of CPTED. Low-growing shrubs are an excellent means for defining an area that requires visual surveillance.
 - Shrubs should be kept trimmed to no higher than 2 ½ feet and should not block windows.
 - Tree branches should be kept trimmed to a minimum of 6 feet from the ground; branches should be kept away from roof of any structures; tree canopies should not interfere with lighting or mechanical surveillance.
 - A maintenance plan is essential in landscaping.

3. *NATURAL ACCESS CONTROL*

Design the site to decrease crime opportunity by denying access to crime targets and creating in offenders, a perception of risk. This can be accomplished by designing street, sidewalks, building and parking lot entrances to clearly indicate public routes and discourage access to private areas with structural and landscape elements.

- Entrances should be clearly defined by roadways, signs, and landscaping. Landscaping used around entrances should create clear way-finding, be well lit and not block entrances or create ambush points.
- There should be no easy access to the roof of any building.
- Signage on the property should indicate that this is area is for authorized users only.

4. *TERRITORIAL REINFORCEMENT*

Design can create or extend a sphere of influence, where users develop a sense of territorial control, while potential offenders are discouraged. This is promoted by incorporating features that define property lines and distinguish private spaces from public spaces such as; landscape plantings, pavement designs, gateway treatments and fences.

- We support the use of a chain link fence and landscape buffer together to delineate between public and private space. Hostile vegetation should be a considered plant material to discourage potential offenders.
- Maintenance is an important aspect of territorial reinforcement. A well-maintained area sends the message that people notice and care about what happens in an area. This in turn discourages vandalism and other crimes.
- Access control onto and within the site should be strictly enforced.

5. *TARGET HARDENING*

This can be accomplished by features that prohibit entry or access such as window locks, dead bolts for doors and interior door hinges.

- If an alarm or security system is installed, it should be regularly tested and maintained.
- A security camera system (CCTV) capable of recording and retrieving an image to assist in offender identification and apprehension should be considered. Security cameras should be mounted at an optimal height to capture offender identification ("aiming" down at a sharp angle often results in images of the offender's hat).
- Commercial grade locks should be placed on all access points to any equipment, buildings, or rooms on the site. They should remain locked at all times unless access is needed by authorized personnel or when maintenance is being conducted.

Additional precautions may be discussed with OPD's Crime Prevention Unit Officer Edgar Malave, 407.246.2513.

INFORMATIONAL COMMENTS

6. CONSTRUCTION SITE PROTECTION

Due to the continued trend of theft of building materials and equipment from construction sites, Orlando Police Department's Crime Prevention Unit strongly recommends that the developer institute the following crime prevention/security measures at this project site:

- Post signs at the site that theft from the site or trespassing on a construction site is a felony under Florida Law and that the developer will prosecute.
- To improve visibility of potential offenders by OPD patrol officers, perimeter lighting should be installed at a minimum of 150 foot intervals and at a height not less than fifteen (15') from the ground. The light source used should have a minimum light output of 2,000 lumens, shall be protected by a vandal resistant cover, and shall be lighted during the hours of darkness.
- In addition to lighting, one of the following physical security measures should be installed:
 - Fencing, not less than six (6') feet in height, which is designed to preclude human intrusion, should be installed along the perimeter boundaries of the site and should be secured with chain and fire department padlocks for emergency vehicle access; post in a clear area, an emergency contact person and phones numbers for after hours, in case of an emergency; or
 - A uniformed security guard should be hired to continually patrol the construction site during the hours when construction work has ceased.
- Valuable construction materials and tools should be protected in a secondary fenced, locked cage.
- Post in a clean, open area, the name and numbers of an emergency contact person for OPD in case of a night-time emergency.

If you have any questions, please call the Crime Prevention Unit, Officer Edgar Malave, 407.246.2513.

CONTACT INFORMATION

City Planning

For questions regarding City Planning review, please contact Colandra Jones at 407.246.3415 or colandra.jones@cityoforlando.net.

Transportation Planning

For questions regarding Transportation Planning plan review, please contact John Rhoades at 407-246-2293 or john.rhoades@cityoforlando.net

Transportation Engineering

For questions regarding Transportation Engineering review, please contact Lauren Torres at 407-246-3220 or lauren.torres@cityoforlando.net

Engineering/Zoning

For questions regarding Engineering or Zoning contact Keith Grayson at (407)246-3234 or keith.grayson@cityoforlando.net.

Police

For questions regarding the Orlando Police Department plan review, please contact Audra Nordaby at 407.246.2454 or Audra.Nordaby@cityoforlando.net.

REVIEW/APPROVAL PROCESS—NEXT STEPS

1. SETDRC minutes scheduled for review and approval by City Council.
2. Lake Nona GMP amendment and PD becomes effective (Case #GMP2015-00026 & ZON2015-00023).
3. Building permits.