

1 **Ordinance Summary**
2 **Wireless Antennas, Towers and Equipment Facilities**
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4 This ordinance proposes to amend Chapters III of the Lake County Land Development Regulations
5 (LDR), entitled "Zoning District Regulations", to update and clarify Section 3.13.00, entitled
6 "Wireless Antennas, Towers and Equipment Facilities", to provide for regulations concerning
7 towers and antennas, towers within the Ferndale Community, towers and antennas within the
8 Pinecastle Military Operation Area, and towers within the Emergency Communication Corridor,
9 providing for examples of tower types and camouflaged towers and providing for a tower map.

10
11 Changes are shown as follows: ~~Strikethrough~~ for deletions and Underline for additions to existing
12 Code sections. Renumbering and/or relettering were added as needed.
13

14 **Ordinance No. 2013-_____**

15 **AN ORDINANCE OF THE BOARD OF COUNTY COMMISSIONERS OF LAKE COUNTY,**
16 **FLORIDA; AMENDING THE LAKE COUNTY CODE, APPENDIX E, LAND DEVELOPMENT**
17 **REGULATIONS; AMENDING CHAPTER III, ENTITLED "ZONING DISTRICT REGULATIONS",**
18 **SECTION 3.13.00, ENTITLED "WIRELESS ANTENNAS, TOWERS AND EQUIPMENT FACILITIES"**
19 **IN ORDER TO INCORPORATE REQUIREMENTS OF THE LAKE COUNTY 2030**
20 **COMPREHENSIVE PLAN PERTAINING TO COMMUNICATION TOWERS, PROVIDE FOR**
21 **REGULATIONS CONCERNING TOWERS AND ANTENNAS, PROVIDE FOR REGULATIONS FOR**
22 **TOWERS WITHIN FERNDALE, PROVIDE FOR REGULATIONS FOR TOWERS AND ANTENNAS**
23 **WITHIN THE PINECASTLE MILITARY OPERATION AREA, PROVIDE REGULATIONS FOR**
24 **TOWERS WITHIN THE EMERGENCY COMMUNICATION CORRIDOR, AND TO PROVIDE FOR A**
25 **TOWER MAP; PROVIDING FOR SEVERABILITY; PROVIDING FOR INCLUSION IN THE CODE;**
26 **PROVIDING FOR FILING WITH THE DEPARTMENT OF STATE; AND PROVIDING FOR AN**
27 **EFFECTIVE DATE.**

28 **WHEREAS**, on September 22, 2011, the Lake County 2030 Comprehensive Plan became
29 effective, requiring the Land Development Regulations to be updated; and

30 **WHEREAS**, Policy I-1.1.8 of the 2030 Comprehensive Plan requires the County to adopt
31 and maintain a set of specific and detailed Land Development Regulations that implement and
32 are consistent with the goals, objectives and policies of the Comprehensive Plan; and

33 **WHEREAS**, on November 8, 2011, the Board of County Commissioners approved the Land
34 Development Regulation Work Program; and

35 **WHEREAS**, the amendments to Chapter III of the LDR, entitled "Zoning District
36 Regulations", which includes provisions regarding Wireless Antennas, Towers and Equipment
37 Facilities, is scheduled on the second year Agenda for the Land Development Regulations Work
38 Program; and

1 **WHEREAS**, the Planning & Zoning Board, in its capacity as the Local Planning Agency,
2 considered this ordinance and recommended approval at a properly advertised public hearing
3 on March 6, 2013; and

4 **WHEREAS**, the Board of County Commissioners (the "Board") desires to amend Chapter III,
5 LDR, to amend regulations pertaining to wireless antennas, towers and equipment facilities;

6 **NOW, THEREFORE, BE IT ORDAINED** by the Board of County Commissioners of Lake
7 County, Florida, that:

8 **Section 1. Recitals.** The foregoing recitals are true and correct and incorporated herein
9 by reference.

10 **Section 2. Amendment.** Section 3.13.00, Lake County Code, Appendix E, Land
11 Development Regulations, entitled "Wireless Antennas, Towers and Equipment Facilities", shall be
12 amended to read as follows:

13
14 **3.13.00 Wireless Antennas, Towers and Equipment Facilities.**

15
16 **3.13.01 Purpose and Intent.** The purpose and intent of these regulations is to:

- 17
18 A. Adapt to the growing need for wireless communication antennas and towers by being
19 able to act upon requests to place, construct and modify any Wireless Communications
20 Antenna and/or Tower within a reasonable amount of time.
21
22 B. Reasonably accommodate amateur Communications, and to represent the minimum
23 practicable Regulation thereof.
24
25 C. Protect existing Land Uses from potential adverse visual impacts through sound
26 planning, careful review of applications, proper permitting and adherence to
27 appropriate Regulations.
28
29 D. Allow for Wireless Communications competition following the adoption of the Federal
30 Telecommunications Act of 1996.
31
32 E. Preserve and enhance radio communications throughout Lake County in times of
33 emergencies that threaten the life, safety and welfare of Lake County residents,
34 businesses and properties to include the establishment of easements, covenants and
35 agreements necessary to address issues, such as fiber-optic cabling, associated with
36 the provisions of emergency communication(s).
37

38 These Regulations are intended to accomplish ~~these~~ is ~~goals~~ through careful design, Siting,
39 Landscape Screening and the encouragement of innovative camouflaging techniques.

40
41 **3.13.02 Compliance with County, State and Federal ~~Other Laws and Regulations~~.** All
42 Communications Towers, Antennas, and Equipment Shall comply with:

- 43
44 A. The Lake County Comprehensive Plan and Land Development Regulations.

- 1
2 B. All applicable fire safety codes, building codes, and technical codes adopted by Lake
3 County.
4
5 C. All applicable Federal and State Regulations.
6
7 ~~D. Evidence of compliance with FAA requirements shall be submitted where applicable.~~
8 ~~This evidence shall include a copy of the submitted FAA Form 7460-1, attachments~~
9 ~~submitted with the form, and a copy of any FAA responses.~~

10
11 **3.13.03 Structural Design.**
12

- 13 A. All Communications Towers must be designed so that in the event a Communications
14 Tower falls, it shall collapse only within the property lines of the Lot on which the
15 Communications Tower is located. No Building Permit shall be issued unless the
16 applicant provides verification of compliance from an engineer registered by the
17 State of Florida.
18
19 B. To ensure the structural integrity of Wireless Communications Towers, the owner of a
20 Wireless Communications Antenna and/or Tower shall ensure that it is constructed and
21 maintained according to TIA/EIA-Standard 222, as amended from time to time, ASCE-
22 7, as amended from time to time, and all County adopted construction/building codes.
23 No building permit shall be issued unless the applicant submits site plans sealed and
24 verified by an engineer licensed in the State of Florida that proves compliance with
25 the adopted structural codes in effect at the time of said improvement or addition.
26
27 C. Applicants for new communication towers are encouraged to reserve space to
28 accommodate the placement of any needed emergency communication apparatus
29 and/or device(s) on the structure or the ground compound as requested by the Lake
30 County Public Safety Department.
31

32 D.C. Camouflaged Wireless Communications Structures.
33

- 34 1. Camouflaged Wireless Communications Structures designed to blend in with the
35 existing built or Natural Environment are exempt from the Fencing and
36 Landscaping requirements of this Section.3.13.10 Fencing, and 3.13.11
37 Landscaping
38
39 2. Camouflaged Wireless Communications Structures shall comply with all other
40 Regulations and standards. In making the determination that a Wireless
41 Communications Structure is considered to be camouflaged, the County Manager
42 or designee shall consider:
43
44 a. Logic of design.
45 b. Height in relationship to the height of nearby Structures.
46 c. Scale in relationship to the size and proportions of nearby Structures.
47 d. Structure materials and color selection.
48 e. Compatibility with surrounding Uses.
49

1 3. There are numerous ways to camouflage a wireless communication tower. Below
2 are two examples.
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6 **3.13.04 Radiation Emission Standards.** The Communications Tower and Communication
7 Antennae must meet the radiation emission standards set by the FCC. The applicant Shall
8 provide evidence that the Communications Tower and Communication Antennae meet the
9 FCC standards where applicable.

10
11 **3.13.05 Towers within the Ferndale Community.** Communication towers within the
12 Ferndale Community shall be camouflaged or housed within traditional structures, such as
13 church steeples or flag poles, or otherwise disguised to protect viewscales, where
14 possible, as determined by the County Manager or designee.

15
16 **3.13.06 Towers and Antennas within the Pinacastle Military Operation Area.** The U.S.
17 Navy Pinacastle Range Complex (Range) Military Operations Area (MOA) is the special
18 use airspace designated by the Federal Aviation Administration and utilized by the U.S.
19 Military for training and exercises overlying parts of northern Lake County and
20 administered by the United States Navy. A map showing the location of the MOA is
21 located at the end of this section (Tower Map – Pinacastle Military Operation Area). The
22 following shall apply within the MOA:

- 23
24 A. Towers within the Pinacastle Operation Area shall be limited to self-supporting towers;
25 and
26
27 B. The County shall coordinate with the Navy when an application to place a tower or
28 antenna within the MOA is submitted; and
29
30 C. Written evidence from the Range that the location, height and operation of the tower
31 or antenna does not adversely affect the operations and mission of the Range will be
32 required; and
33
34 D. A tower or antenna shall not be approved by the County if the Range certifies that the
35 tower or antenna would constitute an unacceptable encroachment or interference with
36 safe operations related to the mission of the facility.

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2 **3.13.0705 Amateur Radio Station Operators/Receive Only Towers/Antennas and**
3 **Wireless (Wi-Fi) Towers.**
4

- 5 A. Wireless (Wi-Fi) Towers, or Wireless Communications Towers, Antennas and Equipment
6 Facilities owned and operated by a federally-licensed amateur radio station operator
7 or which are used exclusively for receive only antennas shall be permitted as follows:
8
9 1. Towers/Antennas up to one hundred (100) feet in height Shall be permitted in all
10 Zoning Districts.
11 2. ~~These~~ Towers/ and Antennas up to two hundred (200) feet in height Shall be
12 permitted on lots containing a minimum of five (5) acres in the ~~A, RA, A-1-20, A-1-~~
13 ~~40 Zoning Districts~~ Rural, Rural Transition, A-1-20 Receiving/Sending Areas, A-1-
14 40 Sending Area and in the Green Swamp Area of Critical State Concern Rural,
15 Rural/Conservation and Core/Conservation Future Land Use Categories.
16 ~~classifications.~~ The maximum height permitted ~~in all cases~~ is subject to FAA review
17 and approval.
18
19 B. Setbacks Shall be measured from the base of the Wireless Communications Tower to
20 the property line of the parcel on which it is located. Normal Zoning District setbacks
21 Shall apply.
22
23 C. Anti-climbing devices Shall be installed on each tower.
24
25 D. No other provisions of Section 3.13.00 Shall apply to Wi-Fi or Amateur Radio Station
26 operators/receive only antennas with the exception of 3.13.02, Compliance with
27 ~~Other Laws and~~ county, state and federal Regulations, ~~and~~ 3.13.04, Radiation
28 Emission Standards, 3.13.05 Towers Within the Ferndale Community and 3.13.06
29 Towers and Antennas within the Pinecastle Military Operation Area. ~~where~~
30 ~~applicable/~~

31
32 **3.13.0806 Measurement and Lot Size.**
33

- 34 A. Measurement. For purposes of measurement, tower setbacks and separation distances
35 Shall be calculated and applied to Facilities located in Lake County regardless
36 ~~irrespective of~~ Municipal and County jurisdictional boundaries.
37
38 B. Lot Size. For purposes of determining whether the installation of a Tower or Antenna
39 complies with ~~district~~ development regulations, including but not limited to Setback
40 Requirements, lot-coverage Requirements, and other such requirements, the dimensions
41 of the entire lot Shall control, even though the antennas or towers may be located on
42 leased parcels within such lot.
43

44 **3.13.0907 Setbacks.**
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- 46 A. Equipment facility and guyed support structures shall ~~have to~~ meet a setback of
47 twenty-five (25) feet from property lines or the Zoning District setback, whichever is
48 greater.
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- B. Towers Shall be:
1. ~~C~~entered within the boundaries of the Property recognized as the parent parcel on the official zoning map; ~~by the Department of Growth Management,~~
 2. ~~m~~Maintain a minimum setback of one hundred (100) feet from the Property Line;
 3. ~~Be and be~~ measured and reported using Global Position System coordinates for the center of the Tower;~~z~~ and
 4. ~~if applicable,~~ Shall meet ~~both~~ the requirements in Table 1 below:

Tower Table 1 - Additional Tower Setbacks

	From R1, R2, R3, R4, R6, R7, R10, RP, RMRP, RM, <u>Residential or PUD Zoned Lands (or similar municipal zonings) in the Urban Low, Urban Medium, Urban High, Mt. Plymouth-Sorrento Main Street, Mt. Plymouth-Sorrento Receiving Area or Green Swamp Ridge Future Land Use Categories, and in similar municipal zonings and land use categories. Urban, Urban Expansion, Rural Village, Mount Plymouth-Sorrento Urban Compact Node, Ridge, Transitional</u>	From any Single-Family or Duplex Residential Unit
Lattice	1320 feet	1320 feet
Guyed	1320 feet	1320 feet
Monopole	330 feet	400% of the tower height
Camouflage	100 feet	100 feet

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If the Owner of the Property where the Tower is to be located owns Residential units thereon or on surrounding properties (or if such properties are owned by his or her parents or children and they have consented in writing), those units Shall not be taken into consideration when calculating the Setback requirements of this section.

3.13.1009 Separation between Towers.

- A. Wireless Communications Tower separation Shall be measured using Global Position System (GPS) coordinates for the center of the Tower. Wireless Communications Towers Shall meet the following separation requirements:

Tower Table 2 - Wireless Communications Tower Separation
Proposed Tower Type

Existing Tower Type	Proposed Tower Type			
	Lattice or Self-Supporting	Guyed	Monopole >150	Monopole 150 or less
Lattice or Self-Supporting	5,000 feet	5,000 feet	3,500 feet	500 feet

Guyed	5,000 feet	5,000 feet	3,500 feet	500 feet
Monopole > 150	3,500 feet	3,500 feet	1,500 feet	500 feet
Monopole 150 or less	2,500 feet	2,500 feet	1,000 feet	500 feet

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Exempt from this requirement are ~~Antennas and Towers~~ that are recognized camouflaged structures. ~~and In determining separation distances,~~ Amateur Radio Station Operators/Receive Only Antennas. ~~will not be included in the calculations.~~

Typical Lattice Tower Typical Mono-Pole Tower Typical Guyed Wire Tower



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B. Wireless Communications Towers designed to accommodate four (4) or more service providers Shall be granted a reduction in the separation distances between Communications Towers as shown below:

Tower Table 3 - Co-Location Reduction

Number of Service Providers on Tower	Reduction in Separation Requirements
Four (4)	Fifteen (15) percent
Five (5)	Twenty-five (25) percent
Six (6)	Thirty-five (35) percent

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Prior to issuance of building permit, the owner/operator Shall submit executed co-location agreements for each additional co-location in a form acceptable to the County Manager or designee that Shall provide that each of the additional Users will be utilizing the Tower upon its completion.

3.13.11 Towers within the Emergency Telecommunication Corridor

All proposed towers or antennas being located within Lake County shall be reviewed by the Public Safety Department to determine the impact, if any, on the transmission of

1 emergency communications.

2
3 If the Public Safety Department determines that the proposed tower would create
4 interference within emergency communication corridors, the applicant shall be required to
5 mitigate the interference prior to the issuance of a certificate of completion.

6
7 **3.13.1209A Communication Antenna Co-location.**

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9 A. Use of Existing Conforming Structures. Wireless Communication Antenna placement is
10 Permitted with Site Plan Review, and approval by the County Manager or designee
11 on any existing conforming non-residential Structure other than Communication Towers
12 if the Communication Antenna does not cause the combined height of the Structure and
13 Antenna to exceed one hundred fifty (150) percent of the height of the Structure. ~~No~~
14 ~~CUP or rezoning to CFD~~ is not required for this type of placement.

15
16 B. Use of Existing Towers. Lake County encourages the use of existing Towers for the
17 location of additional antennas. Additional Antennas, including emergency
18 communication(s) antennas, may be placed on existing conforming towers, excluding
19 Amateur Radio Towers and Receive Only Antennas, without Site Plan Review provided
20 there is not an increase in height. Applications for co-location Shall include written
21 permission from the Tower owner accompanied by sealed and verified testimony by
22 an engineer licensed in the State of Florida that the Tower can hold the additional
23 equipment and maintain compliance with the adopted Structural codes in effect at the
24 time of said improvement or addition. Additional Antennas placed on camouflaged
25 towers shall be placed so as to match with the existing camouflaged structure.

26
27 **3.13.1310 Fencing.** A chain link fence or wall not less than six (6) feet from finished
28 grade Shall be provided around each communications Tower and support facilities. In
29 commercial and industrial Zoning Districts, barbed wire or other appropriate anti-climbing
30 device Shall be used along the top of the fence or wall. The area to be fenced Shall
31 surround and enclose as a single entity or individually, the tower, all supporting Structures
32 including guyed grounding points, and equipment facilities. Access to the Communications
33 Tower Shall be through a locked gate.

34
35 **3.13.1411 Landscaping.**

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37 A. The visual impact of a communications tower Shall be mitigated for nearby viewers
38 through landscaping at the base of the Communications Tower and ancillary structures.
39 Landscaping Shall be installed on the outside of fences or walls except ~~in~~
40 ~~agricultural zoned lands as follows:~~ areas.

41
42 ~~B.1. A Type A Buffer (Section 9.01.06.B, Table 2) shall be used; the Existing~~
43 ~~vegetation Shall be preserved to the maximum extent practicable and may be~~
44 ~~used as a substitute of or in supplement toward meeting the Type A Buffer~~
45 ~~requirements. following landscaping requirements:~~

46
47 ~~1. A row of shade trees a minimum of ten (10) feet tall, two and one-half (2 1/2)~~
48 ~~inches in diameter measured at breast height and a maximum of twenty (20) feet~~
49 ~~apart Shall be planted around the perimeter of the fence.~~

- ~~2. A continuous hedge of at least twenty four (24) inches high at planting of sufficient health and quality capable of growing at least thirty six (36) inches in height within eighteen (18) months Shall be planted in front of the tree line referenced above.~~
- ~~3. All landscaping Shall be of the evergreen variety.~~
- ~~4. All landscaping Shall be drought tolerant and suited to the site Soil conditions (xeriscape) or irrigated and properly maintained to ensure good health and viability.~~

BC. At the public hearing at which the CFD zoning or Conditional Use Permit is approved, the Board of County Commissioners may waive all or part of the landscaping requirements if the Board ~~it~~ finds it is not necessary to mitigate the visual impact for nearby viewers.

3.13.1512 Modification or Rebuilding. Existing conforming Communications Towers, excluding Amateur Radio Towers and Receive Only Antennas, may be modified or rebuilt to accommodate co-location of additional communications Antennas without a public hearing provided there is not an increase in height. The modified or rebuilt tower must be the same type as the previously existing tower and there must be an executed written agreement showing there will be at least one (1) additional user utilizing the Tower upon rebuild or modification.

3.13.1613 Illumination. Communications Towers Shall not be ~~required to be~~ artificially lighted except to assure human safety or as required by the Federal Aviation Administration. ~~If the FAA requires lighting and there are residential uses found within a distance that is three hundred (300) percent of the height of the Communications Tower, dual mode lighting Shall be requested from the FAA.~~

3.13.1714 Finished Color. Communications Towers not requiring FAA painting/markings Shall have a galvanized finish or be painted in a neutral color.

3.13.1815 Signage.

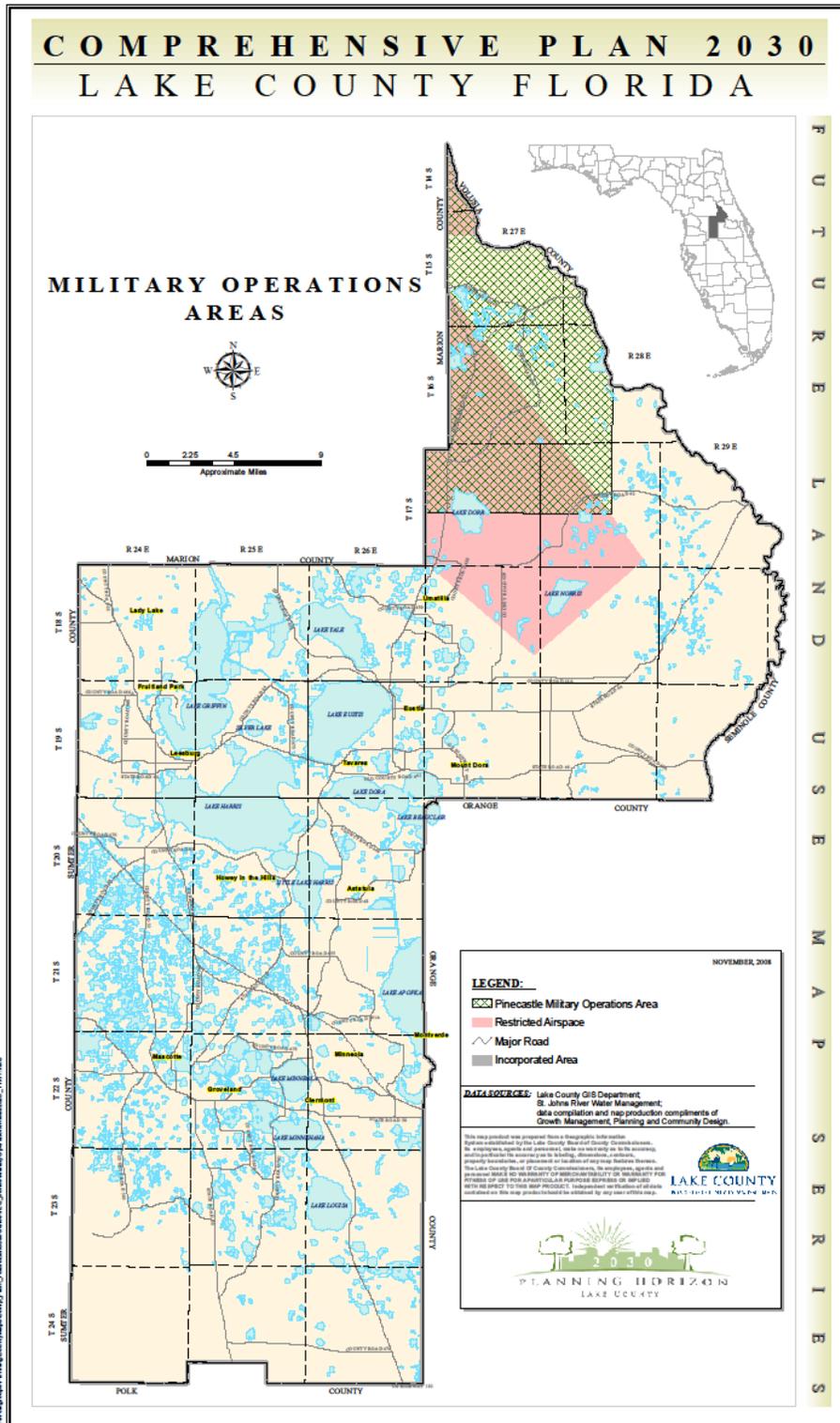
1. Signage unless otherwise required by law on perimeter fences Shall be limited to:
 - a. Federal Communications Commission (FCC) registration.
 - b. Trespassing, danger/warning, or emergency directions.
 - c. One sign not to exceed four (4) square feet in size providing Tower owner and leasing information.
2. Each User Shall be permitted two (2) square feet of signage on equipment facilities providing ownership information and/or emergency directions.
3. No signage Shall be Permitted on Towers or Antennas.

1 **3.13.1916 Removal of Abandoned Antennas and Towers.** Any Antenna or Tower that is
2 not operated (all users cease using the tower) for a continuous period of twelve (12)
3 months Shall be considered abandoned, and the owner of such antenna or tower Shall
4 remove the same within ninety (90) days of receipt of notice from Lake County notifying
5 the owner of such abandonment. Failure to remove an abandoned Antenna or Tower
6 within said ninety (90) days Shall be grounds to remove the Tower or Antenna at the
7 owner's expense. ~~If there are two (2) or more users of a single Tower, then this provision~~
8 ~~Shall not become effective Until all Users cease using the Tower.~~
9

10 **3.13.2017 Conditional Use and Community Facility District (CFD) Criteria.** In
11 determining a Conditional Use or CFD request for a Communication Tower in addition to
12 those criteria set forth in Lake County Code, ~~Section 14.05.06,~~ the Board of County
13 Commissioners Shall take into consideration whether or not the proposed Tower will have
14 a substantial adverse aesthetic impact on neighboring Residential lands and compatibility
15 of a camouflaged Tower in a given area. The Board of County Commissioners'
16 determination Shall be based on relevant and competent evidence, documentation, and
17 testimony received at the public hearing from the staff, the applicant and any party in
18 support or opposition, or their respective representatives. The Board of County
19 Commissioners Shall utilize the following criteria:
20

- 21 A. The following non-comprehensive list of items shall be considered when reviewing for
22 Aesthetic impacts: This means view of a Tower that is not camouflaged. Aesthetic
23 impact Shall take into consideration, but not be limited to, the amount of the Tower
24 that can be viewed from surrounding Residential Zones in conjunction with its proximity
25 (distance) to the residential zone, mitigation—landscaping, existing character of
26 surrounding area, or and any other visual options proposed by the applicant. The
27 tower may be placed, designed or camouflaged to assist with mitigating the overall
28 aesthetic impact.
29
- 30 B. ~~Compatibility. This means †~~The degree to which a Tower is designed and located in
31 order to be compatible with the nature and character of ~~other~~ Land Uses and/or with
32 the environment within which the Tower is proposeds to be located. The tower may be
33 placed, designed, or camouflaged to assist with compatibility~~mitigating the overall~~
34 ~~aesthetic impact of a tower.~~ A camouflaged tower ~~agent~~ Shall be designed to be
35 compatible with the surrounding Land Uses and the environment.
36
- 37 C. ~~Minimum Standards. In addition to the above, †~~The minimum performance standards
38 with respect to separation between Towers, separation between residential uses and
39 Towers, etc., as referenced in Section 3.13.00 herein, Shall be met. ~~These standards,~~
40 ~~however, are minimum standards, †~~The Board of County Commissioners is empowered
41 to may impose more restrictive Conditions to a Conditional Use Permit or CFD request
42 in order to ~~recommend approval so as to~~ achieve the desired protection with respect
43 to aesthetic impact and harmony and compatibility with the surrounding community.
44 The determination by the Board of County Commissioners to impose more restrictive
45 conditions Shall be based on substantial competent evidence ~~that supports the~~
46 ~~modification and consistency of the modification with the purpose and intent of this~~
47 ~~section.~~
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Tower Map - Pinecastle Military Operation Area



FUTURE LAND USE MAP SERIES

