

**City of Goodlettsville
Board of Zoning and Sign Appeals**

MEETING AGENDA

Tuesday October 1, 2019

5:00 PM

GOODLETTSVILLE CITY HALL - MASSIE CHAMBERS

Approval of September 3, 2019 Meeting Minutes

{PUBLIC HEARING}

Item#1 Vertical Bridge request reduced setback and separation requirements from Zoning Ordinance Section 11-906 Wireless Telecommunication Towers and Antennas (F) Administratively Approved Uses (C) New Towers in Non-Residential Zoning Districts for a one hundred and thirty (130') feet cell tower at the south west corner of Church Street and Depot Street. Property is referenced as Davidson County Tax Map/Parcel# 0191301900 and is zoned IR, Industrial Restricted. Property Owner- William C. Brumett, Jr

*A government committed to operating with efficiency and integrity in all we do
as we strive to enhance the quality of life for the community we serve.*

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www.cityofgoodlettsville

OFFICIAL MINUTES OF THE GOODLETTSVILLE
BOARD OF ZONING AND SIGN APPEALS

Date: September 3, 2019

Time: 5:00 P.M.

Place: Massie Chambers- Goodlettsville City Hall

Members Present: Chairman Mike Broadwell, Cisco Gilmore, Brian Rager, Zach Young

Absent: Vice Chairman Mark Writesman

Also Present: Director of Planning and Development Services Addam McCormick, City Manager Tim Ellis, City Attorney Russell Freeman, and Rhonda Carson,

Chairman Broadwell called the meeting to order at 5:01 pm and declared a quorum. Staff stated no changes to the agenda. Zack Young made a motion to approve the minutes of the June 4, 2019 Board of Zoning and Sign Appeals meeting as written. Brian Rager seconded the motion. The motion was approved unanimously. Applicant only person in attendance and signed up for public hearing.

Item #1 {PUBLIC HEARING}

Unique Omega, LLC requests a building height variance from *Zoning Ordinance Sections 14-206. Commercial District Regulations (4) Bulk, Height, and Open Space Requirements (d) Permitted Height and (5) Other Regulations (b) Special Height Provisions* on 4.94 acres at 300 Cartwright Street, 300 and 302 East Cedar Street. Properties are referenced as Davidson County Tax Map/Parcels# 01913010300, 01913007400, 01913009700, and 0193009800 and are zoned CS, Commercial Services. One property is within the CCO, Commercial Core Overlay district.

Dean Patel- 1156 Willis Branch Road- Goodlettsville- Project Representative

Mr. Patel discussed request for two (2) additional stories and project design. Staff discussed property including four (4) properties and limitation of flood plain/floodway and stream bank buffer on south lot which equaled 26,000 sq. ft. property area or twelve (12%) percent of total development area.

Staff discussed the Board granted a setback variance in March to permit twenty (20') front building setbacks so the sky exposure plane requirement would have to be a portion of variance since setback less than fifty (50') feet. Board and staff discussed the project plans have changed including no building on south side and would any changes to original variance be needed. Staff stated no- since basis for original variance would still apply.

Staff discussed limitations with variances and intention with maximum height zoning ordinance requirements.

Zach Young discussed that additional stories beyond four could be a positive with project in area but not the entire CS zoning area.

Mr. Patel discussed project ideas including six (6) to seven (7) stories with roof top amenities. The adjacent Starbucks anticipated to open quickly has really created a lot of interest with hotel companies.

Board and staff discussed the roof top amenities would still be considered a story.

Russell Freeman, City Attorney discussed one additional story could have reviewed as a hardship but more than that really a legislative issue which is not the role of this Board.

Zach Young made a motion to approve the variance for one additional (1) story only, based on the property limitations discussed and that for the Planning Commission to review an ordinance amendment or overlay for increased story heights in select areas instead of the entire CS zoning districts. Cisco Gilmore seconded the motion. Motion was approved unanimously.

Staff discussed bed and breakfast zoning ordinance proposal includes limiting new uses to five (5) acre plus properties or historically significant properties. City Commission adopted a six (6) month moratorium in June for new ordinance amendments.

Zach Young made a motion for adjournment. Cisco Gilmore, seconded. Motion approved unanimously

The meeting adjourned at 5:30 P.M.

Mike Broadwell, Chairman

Rhonda Carson, ECD Assistant

CITY OF GOODLETTSVILLE
BOARD OF ZONING AND SIGN APPEALS
OCTOBER 1, 2019

STAFF RECOMMENDATION REPORT

ITEM#1 Vertical Bridge request reduced setback and separation requirements from Zoning Ordinance Section 11-906 Wireless Telecommunication Towers and Antennas (F) Administratively Approved Uses (C) New Towers in Non-Residential Zoning Districts for a one hundred and thirty (130') feet cell tower at the south west corner of Church Street and Depot Street. Property is referenced as Davidson County Tax Map/Parcel# 0191301900 and is zoned IR, Industrial Restricted. Property Owner- William C. Brumett, Jr

PUBLIC HEARING/NOTICE INFO:

- Advertised in *The Goodlettsville Ledger* on September 18, 2019
- Fourteen (14) adjoining property owner notices mailed September 11, 2019
- Public hearing sign- placed September 17, 2019 - Corner of Church/Depot

APPLICANT: Vertical Bridge

PROPERTY INFORMATION: 0.36 acres - 210 Church Street, Davidson County Tax Map/Parcel# 0191301900

PROPERTY ZONING: IR, Industrial Restricted

PROPERTY OWNER: William C. Brumett Jr.

REQUESTED ACTION:

Reduced Setbacks Proposed:

**Measurements per applicant's submitted plans*

Proposed one hundred thirty (130') feet tower requires seventy-five (75%) percent of tower height setbacks to property line- ninety-seven and a half (97.5') feet setback

North Property Boundary (Depot Street) 96' – 1.5 feet variance

South Property Boundary: 40'- 57.5' feet variance

West Property Boundary: 40'- 57.5' feet variance

East Property Boundary: (Church Street) 94' – 3.5' feet variance

Reduced Separation Proposed:

Proposed one hundred thirty (130') feet tower requires two hundred (200') feet or three hundred (300%) percent height of tower to single-family residential units and no separation other than setback to non-residential zoned or non-residential uses- 390' feet separation

**Measurements per applicant's submitted plans and on-line measurements- Nashville Parcel Viewer data*

Thirteen (13) single family house structures are within the 390' separation

North (Across Depot Street) CSL, Commercial Services Limited Zoning- 158' feet to closest single family residential unit

South -IR, Industrial Restricted

East (Church Street) IR, Industrial Restricted Zoning 255' to single family residential unit on Church Street

West (along Depot Street) CSL, Commercial Services Limited Zoning- 68' to closest single family residential unit

STAFF NOTES:

The City in November 1998 adopted Ordinance 98-571 which includes regulations for Wireless Telecommunications Towers and Antenna facilities.

Per the Ordinance, the proposed cellular tower within an industrial zoned property is permitted as an administrative use by the City's Planning Director. Per the Ordinance all towers in the non-residential zoning districts are required to meet defined sections of the ordinance including setbacks from towers to property lines and separations to off-site uses. The Board of Zoning Appeals has the defined ability to review requests to reduce the setbacks and separations if the goals of the ordinance would be better served by granting the reduced setback and separations.

The ordinance also includes separation distances between other towers. Staff calculated the distances to the existing monopole towers and lattice towers and the separation dimensions exceed the minimum requirements of the ordinance.

The proposed application information includes engineering data regarding the tower design and renderings showing the tower at the property. The engineering data includes a design fall radius. The purpose of the City's ordinance is included on the front page of Ordinance 98-571 (attached) and states, but is not limited to, towers and antennas being located in non-residential zoning districts and to protect residential areas and land uses from potential adverse impacts of tower and antennas including setbacks and separations. The request includes a cellular tower in an industrial zoning district which is one on the defined intentions of the City's Ordinance. A question for the Board to request the applicant to respond to is why the proposed tower could not be located on another industrial zoned property that would not require any reduced setbacks or separations. The adjacent single family residential units listed above in the **Reduced Separation**

Proposed section are legal non-conforming uses in the CSL, Commercial Services and IR, Industrial Restricted districts.

The applicant will need to submit to the Board how and why this property was selected not as a question if the tower is permitted in the specific industrial zoning district but to determine why the proposed tower could not be located on other industrial or non-residential zoned properties that would meet the required setbacks and separation requirements of the ordinance. The Board will also need to review if the proposed tower could be installed on the adjacent property to the south which is owned by the same owner which if the tower is relocated could limit the amount of reduced setbacks required to the properties containing single family residential dwelling units. The minimum separation distance would still be an issue since the house along Church street is zoned IR, Industrial Restricted and the houses along Connell Street which are zoned CSL, Commercial Services Limited would be within the separation dimension for single family residential dwelling units. Defining a minimum forty (40') reduced setbacks to future industrial buildings on the 2.6-acre property on Church Street could be defined since the engineering data submitted includes a fall radius less than or equal to forty (40') feet.

The State of Tennessee Code Annotated sections 13-24-301 through 13-24-305 includes the limitations that local government have for regulating towers. The Federal Communications Commission (FCC) Telecommunications Act of 1996 defines the limited regulations available for local communities and preempts local government regulation of tower placement, construction, and modification on the basis of the environmental effects of radio frequency emissions. The FCC regulates radio frequency emission with their permitting of towers.

The Board's decision needs to be made based on the information submitted in the application packet submitted by the applicant and the information presented at the meeting by the applicant. Staff would recommend the decision to approve or deny be based on information submitted and the basis clearly defined with the motion. Any motion for a one-month deferral in the case of additional requested information should only be upon agreement from the applicant.

The City's specific ordinance does not define a review process for reduced setbacks and separation other than "if the goals of this ordinance would be better served thereby" which is similar but different that the City's Zoning Ordinance review process defined for zoning variances. Staff would recommend the Board review the purpose of the ordinance (front page of attached Ordinance 98-571) and the City's Zoning Ordinance review criteria for variances listed below to assist in defining a basis for making a motion.

14-213. Administration and enforcement (8)

(8) Zoning Variances

(8) Zoning variances. The board of zoning appeals may grant variances where it makes findings of fact based upon the standards prescribed in this section. § 14-213(7)(h)(ii) of this chapter.

(c) Standards for variances. The board shall not grant a variance unless it makes findings based upon evidence presented to it as

follows:

- (i) The particular physical surroundings, shape, topographic conditions of the specific property involved that would result in a particular hardship upon the owner as distinguished from a mere inconvenience, if the strict application of this ordinance were carried out must be stated;
 - (ii) The conditions upon which the petition for a variance is based would not be applicable, generally, to other property within the same district;
 - (iii) The variance will not authorize activities in a zone district other than those permitted by this ordinance;
 - (iv) Financial returns only shall not be considered as a basis for granting a variance;
 - (v) The alleged difficulty or hardship has not been created by any person having an interest in the property after the effective date of this ordinance;
 - (vi) That granting the variance requested will not confer on the applicant any special privilege that is denied by this ordinance to other lands, structures, or buildings in the same districts;
 - (vii) The variance is the minimum variance that will make possible the reasonable use of the land, building, or structure;
 - (viii) The granting of the variance will not be detrimental to the public welfare or injurious to other property or improvements in the area in which the property is located; and
 - (ix) The proposed variance will not impair an adequate supply of light and air to adjacent property, substantially increase the congestion in the public streets, increase the danger of fire, endanger the public safety, or substantially diminish or impair property values within the area.
- (d) Non-conformity does not constitute grounds for granting of a variance. No non-conforming use of neighboring lands, structures, or buildings in the same district, and no permitted or nonconforming use of lands, structures, or buildings in other districts shall be considered grounds for the issuance of a variance.
- (e) Prohibition of use variances. Under no circumstances shall the board of appeals grant a variance to allow a use not permissible under the terms of this ordinance in the district involved, or any use expressly or by implication prohibited by the terms of this ordinance in said district.
- (f) Conditions and restrictions by the board. The board may impose such conditions and restrictions upon the premises benefitted by a variance as may be necessary to comply with the provisions set out in § 14-213(8)(c) above to reduce or minimize the injurious effect to such variation upon surrounding property and better carry out the general intent of this ordinance. The board may establish expiration dates as a

condition or as a part of the variances.

STAFF RECOMMENDATION:

If the applicant can prove why the property was selected and that no additional properties in the industrial zoning districts would be available, then staff would recommend approval but with the stipulation that the proposed tower location be relocated to the adjacent 2.6-acre property also zoned IR, Industrial Restricted owned by the same property owner to prevent the need for reduced setbacks to the property lines containing single family dwelling units. If the Board approval includes the staff stipulation, staff would recommend also defining a forty (40) feet setback to future industrial buildings on the 2.6-acre property based on the engineering data submitted.

Location- Tower Type- Property Zoning- Separation from Proposed Monopole*

South Cartwright-280' Lattice type- IG- Industrial General- 5,400 feet

Moss Trail/Rivergate Parkway – 150' Lattice type- CSL, Commercial Services Limited -5,800 feet- Approved June 1984

Drycreek Road/Dickerson Pike/SR 11/Hwy 41- Cellular antennas on electric tower – CPUD, Commercial Planned Unit Development -10,500 feet

Springfield Highway adjacent to I-65- 200' Lattice type- CPUD, Commercial Planned Unit Development-8,700 feet- Approved June 1998

1030 Williamson Road adjacent to I-65- 285' Lattice type- A, Agricultural -11,300 feet

Alta Loma Road adjacent to I-65- 140' Monopole type- HDRPUD, High Density Residential Planned Unit Development- 9,100 feet- Approved April 1996

Alta Loma Road/Behind Rivergate Church of Christ – 120' Monopole type- CSL, Commercial Services Limited -11,200 feet -Approved May 1998

Others:

Conner Drive –Utility Communication Tower – Lattice type-6,200 feet

City Hall- Emergency Services Communication Tower – Lattice type-1,800 feet

Willis Branch (Outside City Limits) – Monopole type -11,500 feet

*Measurements based on Google Earth on-line maps

PUBLIC NOTICES MAILED 9-11-2019

PUBLIC HEARING SIGN INSTALLED AT INTERSECTION OF DEPOT/CHURCH STREET- 9-17-2019 (only place visible by utility pole- lot paved)

WILLIAM C BRUMMETT., JR.
130 DAVIS ST
PORTLAND, TN 37148

MARK & KELLEY MORRIS
307 CHURCH ST
GOODLETTSVILLE, TN 37072

ROGER D. ANGELL
117 DEPOT ST
GOODLETTSVILLE, TN 37072

ASHLEY D. & DARREN HASTON
115 DEPOT ST
GOODLETTSVILLE, TN 37072

KATHY L. ROLLINS
1015 WILLOWPARK CR
HENDERSONVILLE, TN 37075

CHAD M RAY
122 BELLA VISTA DR
GOODLETTSVILLE, TN 37072

GOODLETTSVILLE HELP CENTER, INC.
108 DEPOT ST
GOODLETTSVILLE, TN 37072

RUFUS LEE STONE JR. ETUX
110 DEPOT ST
GOODLETTSVILLE, TN 37072

JARED MATTHEW JORDAN
116 DEPOT ST
GOODLETTSVILLE, TN 37072

TOBY NEIL & STACEY O'SAILE TATE
6912 HALL RD
GREENBRIER, TN 37073

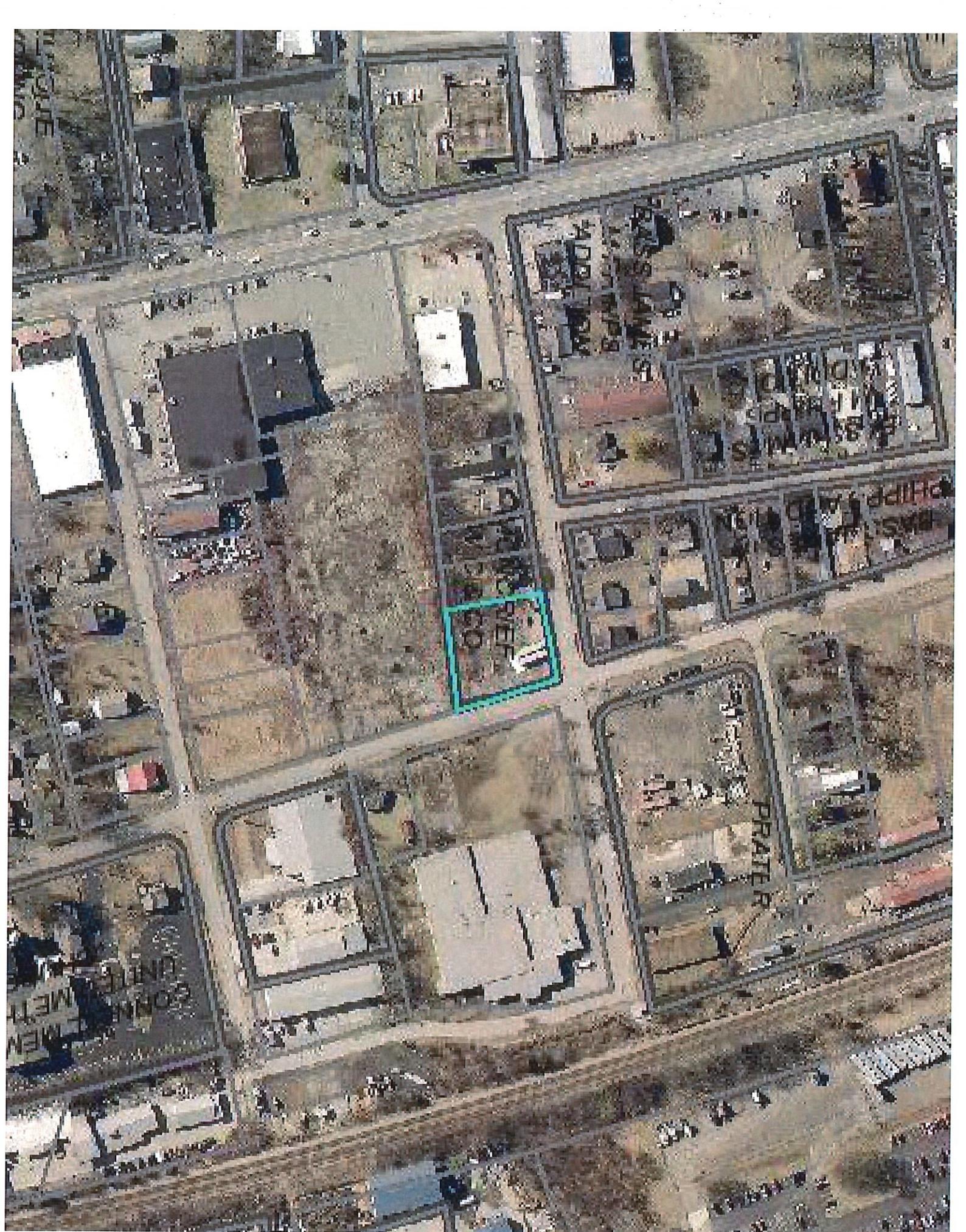
HAROLD T. ISABELL ET UX
P O BOX 349
HENDERSONVILLE, TN 37077

MARK & KELLEY MORRIS
6509 LICKTON PIKE
GOODLETTSVILLE, TN 37072

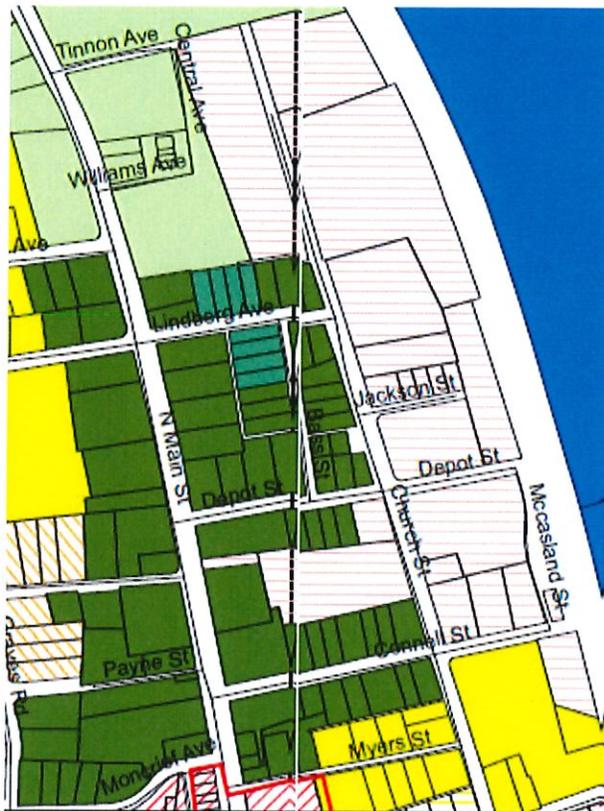
HARRY D. & ALICE FAYE HUFFINES
606 CLIFTON DR
GOODLETTSVILLE, TN 37072

BERNIST LEON MCMICHEN III
3427 AMBROSE AVE
NASHVILLE, TN 37207

JERAMIE & BOYD, DAVID F. WHITE
107 TERRY LN
COTTONTOWN, TN 37048



Goodlettsville Zoning Map Section:



Zone

-  CC
-  CG
-  CPUD
-  CPUDL
-  CS
-  CSL
-  IG
-  IR
-  HDRPUD
-  LDRPUD
-  MDRPUD
-  R10

ORDINANCE NO. 98-571

**AN ORDINANCE OF THE CITY OF GOODLETTSVILLE, TENNESSEE
PROVIDING FOR DEFINITIONS, CONDITIONS, REGULATIONS, AND
PERMITTING PROCESSES FOR WIRELESS TELECOMMUNICATIONS
TOWERS AND ANTENNAS.**

WHEREAS, the Board of Commissioners of the City of Goodlettsville, Tennessee, desires to create and establish regulations for telecommunications towers; and

WHEREAS, the City of Goodlettsville, has received or expects to receive requests to site wireless communication towers and antennas within the municipal boundaries; and

WHEREAS, the City of Goodlettsville finds that it is in the public interest and it is required by law to permit the siting of wireless communication towers and antennas within the municipal boundaries; and

WHEREAS, it is the intent of the City of Goodlettsville to protect and promote the public health, safety and welfare by regulating the siting of wireless communication towers and antennas;

NOW, THEREFORE, BE IT ENACTED BY THE BOARD OF COMMISSIONERS OF THE CITY OF GOODLETTSVILLE, AS FOLLOWS:

SECTION 1. That a new Title 11, Chapter 9, Section 906 be added to read as follows:

Section 11-906 WIRELESS TELECOMMUNICATION TOWERS AND ANTENNAS

(a) PURPOSE

The purpose of this ordinance is to establish general guidelines for the siting of wireless communication towers and antennas. The goals of this ordinance are to: (1) protect residential areas and land uses from potential adverse impacts of towers and antennas; (2) encourage the location of towers in non-residential areas; (3) minimize the total number of towers throughout the community; (4) strongly encourage the joint use of new and existing tower sites as a primary option rather than construction of additional single-use towers; (5) encourage user of towers and antennas to locate them, to the extent possible, in areas where the adverse impact on the community is minimal; (6) encourage users of towers and antennas to configure them in a way that minimizes the adverse visual impact of the towers and antennae through careful design, siting, landscape screening, and innovative camouflaging techniques; (7) enhance the ability of the providers of telecommunications services to provide such services to the community quickly, effectively, and efficiently; (8) consider the public health and safety of communication towers; and (9) avoid potential damage to adjacent

properties from tower failure through engineering and careful siting of tower structures. In furtherance of these goals, City of Goodlettsville shall give due consideration to it's master plan, zoning map, existing land uses, and environmentally sensitive areas in approving sites for the location of towers and antennae.

(b) DEFINITIONS

As used in this ordinance, the following terms shall have the meanings set forth below:

- (1) Alternative Tower Structure means man-made trees, clock towers, bell steeples, light poles and similar alternative-design mounting structures that camouflage or conceal the presence of antennas or towers.
- (2) Antenna means any exterior transmitting or receiving device mounted on a tower, building or structure and used in communications that radiate or capture electromagnetic waves, digital signals, analog signals, radio frequencies (excluding radar signals), wireless telecommunications signals or other communication signals.
- (3) Backhaul Network means the lines that connect a provider's towers/cell sites to one or more cellular telephone switching offices, and/or long distance providers, or the public switched telephone network.
- (4) FAA means the Federal Aviation Administration.
- (5) FCC means the Federal Communications Commission.
- (6) Height means, when referring to a tower or other structure, the distance measured from the finished grade of the parcel to the highest point on the tower or other structure, including the base pad and any antenna.
- (7) Tower means any structure that is designed and constructed primarily for the purpose of supporting one or more antennas for telephone, radio and similar communication purposes, including self-supporting lattice towers, guyed towers, or monopole towers. The term includes radio and television transmission towers, microwave towers, common-carrier towers, cellular telephone towers, alternative tower structures, and the like. The term includes the structure and any support thereto.

(c) APPLICABILITY

- (1) New Towers and Antennas. All new towers or antennas in the City of Goodlettsville shall be subject to these regulations, except as provided in Sections (c)(2) through (4), inclusive.

- (2) Amateur Radio Station Operator/Receive Only Antennas. This section shall not govern any tower, or the installation of any antenna, that is under forty feet in height and is owned and operated by a radio station operator or is used exclusively for receive only antennas. All other applicable regulations to towers 40' and found within this ordinance shall continue to apply.
- (3) Preexisting Towers or Antennae. Preexisting towers and preexisting antennae shall not be required to meet the requirements of this ordinance, other than the requirements of Sections (d)(6) and (d)(7).
- (4) AM Array. For purposes of implementing this ordinance, an AM array, consisting of one or more tower units and supporting ground system which functions as one AM broadcasting antenna, shall be considered one tower. Measurements for setbacks and separation distances shall be measured from the outer perimeter of the towers included in the AM array. Additional tower units may be added within the perimeter of the AM array by right.

(d) GENERAL REQUIREMENTS

- (1) Principal or Accessory Use. Antennae and towers may be considered either principal or accessory uses. A difference existing use of an existing structure on the same lot shall not preclude the installation of an antenna or tower on such lot.
- (2) Lot Size. For purposes of determining whether the installation of a tower or antenna complies with zoning district regulations including but not limited to setback requirements, lot coverage requirements, and other such requirements, the dimensions of the entire lot shall control, even though the antennas or towers may be located on leased parcels within such lot.
- (3) Inventory of Existing Sites. Each applicant for an antenna and/or tower shall provide to the Planning Director an inventory of its existing towers, antennas, or sites approved for towers or antennas, that are either within the jurisdiction of the City of Goodlettsville or within one (1) mile of the corporate limits, including specific information about the location, height, and design of each tower. The Planning Director may share such information with other applicants applying for administrative approvals or special use permits under this ordinance or other organizations seeking to locate antennas within the jurisdiction of the City of Goodlettsville, provided, however that the Planning Director is not, by sharing such information, in any way representing or warranting that such sites are available or

suitable for tower construction.

- (4) Aesthetics. Towers and antennae shall meet the following requirements.
- (a) Towers shall either maintain a galvanized steel finish, or, subject to any applicable standards of the FAA, be painted a neutral color so as to reduce visual obstructiveness.
 - (b) At a tower site, the design of the buildings and related structures shall, to the extent possible, use materials, colors, textures, screening and landscaping that will blend them into the natural setting and/or surrounding buildings.
 - (c) If an antenna is installed on a structure other than a tower, the antenna and supporting electrical and mechanical equipment must be of a neutral color that is identical to, or closely compatible with, the color of the supporting structure so as to make the antenna and related equipment as visually unobstrusive as possible.
- (5) Lighting. Towers shall not be artificially lighted, unless required by the FAA or other applicable authority. If lighting is required, the lighting alternatives and design chosen must cause the least disturbance to the surrounding views and to the surrounding building occupants.
- (6) State or Federal Requirements. All towers must meet or exceed current standards and regulations of the FAA, the FCC, and any other agency of the state or federal government with the authority to regulate towers and antennae. If such standards and regulations are changed, then the owners of the towers and antennas governed by this ordinance shall bring such towers and antennas into compliance with such revised standards and regulations within six (6) months of the effective date of such standards and regulations, unless a different compliance schedule is mandated by the controlling state or federal agency. Failure to bring towers and antennas into compliance with such revised standards and regulations shall constitute grounds for the removal of the tower or antenna at the owner's expense.
- (7) Building Codes: Safety Standards. To ensure the structural integrity of towers, the owner of a tower shall ensure by certification by a structural design engineer that it is maintained in compliance with standards contained in applicable state or local building codes, with sound engineering principles and the applicable standards for towers that are published by the Electronic Industries Association, as amended from time to time. If, upon inspection, the City

of Goodlettsville concludes that a tower fails to comply with such codes and standards and constitutes a danger to persons or property, then upon notice being provided to the owner of the tower, the owner shall have thirty (30) days to bring such tower into compliance with such standards. Failure to bring such tower into compliance within said thirty (30) days shall constitute grounds for the removal of the tower or antenna at the owner's expense.

- (8) Measurement. For purpose of measurement, tower setbacks and separation distances shall be calculated and applied to facilities located in the City of Goodlettsville irrespective of municipal and county jurisdictional boundaries.
- (9) Franchises. Owners and/or operators of towers or antennae shall certify that all franchises required by law for the construction and/or operation of a wireless communication system in the City of Goodlettsville have been obtained and shall file a copy of all required franchises with the city.
- (10) Public Notice. For purposes of this ordinance, any special use request, variance request, or appeal of an administratively approved used or special use shall require public notice to all abutting property owners and all property owners of properties that may be directly impacted by such request as required by the Zoning Ordinance.
- (11) Signs. No signs shall be allowed on an antenna or tower.
- (12) Buildings and Support Equipment. Buildings and support equipment associated with antennas or towers shall comply with the requirements of Section (h).
- (13) Multiple Antenna/Tower Plan. The City of Goodlettsville encourages the users of towers and antennae to submit a single application for approval of multiple sites shall be given priority in the review process.

(e) EXCEPTIONS

- (1) The provisions of this part shall not apply to:
 - (a) antennae or towers located on property owned, leased, or otherwise controlled by the city and under 40" in height.
 - (b) antennas or towers located on property owned, leased, or otherwise controlled by the city and over 40' in height, and in accordance with Section (f)(1) and (2) of this part.

(f) ADMINISTRATIVELY APPROVED USES

(1) General. The following provisions shall govern the issuance of administrative approvals for towers and antennas.

- (a) The Planning Director may administratively approve the uses listed in this Section.
- (b) Each applicant for administrative approval shall apply to the Planning Director providing the information set forth in Sections (g)(2)(a) and (g)(2)(b) of this ordinance and a nonrefundable fee as established by resolution of the City Commission to reimburse the City of Goodlettsville for the costs of reviewing the application.
- (c) The Planning Director shall review the application for administrative approval and determine if the proposed use complies with Sections (d), (g)(2)(c) and (g)(2)(d) of this ordinance.
- (d) The Planning Director shall respond to each such application within sixty (60) days after receiving it by either approving or denying the application. If the Planning Director fails to respond to the applicant within said sixty (60) days, then the applicant may file a request with the City Manager for a directed action for approval.
- (e) In connection with any such administrative approval, the Planning Director may, in order to encourage the use of monopoles, administratively allow the reconstruction of an existing tower to monopole construction.
- (f) If an administrative approval is denied, the applicant may file an application for a special use permit pursuant to Section (g) of this part and other applicable provisions of the conditional use permit found in Article IV of this ordinance.

(2) List of Administratively Approved Uses. The following uses may be approved by the Planning Director after conducting an administrative review.

- (a) Locating a tower or antenna, including the placement of additional buildings or other supporting equipment used in connection with said tower or antenna, in any Industrial District.
- (b) Locating antennae on existing structures or towers consistent with the terms of subsections (i) and (ii) below:

- (i) Antennae on existing structures. Any antenna which is not attached to a tower may be approved by the Planning Director as an accessory use to any commercial, industrial, professional, institutional, or structure located within the CS or CG or any Industrial District, provided:
- (1) The antenna does not extend more than thirty (30) feet above the highest point of the structure; and
 - (2) The antenna complies with all applicable FCC and FAA regulations; and
 - (3) The antenna complies with all applicable building codes.
- (ii) Antennae on existing towers. An antenna which is attached to an existing tower may be approved by the Planning Director and, to minimize adverse visual impacts associated with the proliferation and clustering of towers, collocation of antennae by more than one carrier on existing towers shall take precedence over the construction of new towers, provided such collocation is accomplished in a manner consistent with the following:
- (1) A tower which is modified or reconstructed to accommodate the collocation of an additional antenna shall be of the same tower type as the existing tower, unless the Planning Director allows reconstruction as a monopole.
 - (2) Height
 - (a) An existing tower may be modified or rebuilt to a taller height, not to exceed thirty (30) feet over the tower's existing height, to accommodate the collocation of an additional antenna.
 - (b) The height change referred to in subsection (2)(a) of this part may only occur one time per communication tower.
 - (c) The additional height referred to in subsection (2)(a) of this part shall not require an additional distance separation as set forth in Section (g). The tower's premodification height shall be used to calculate such distance separations.

(3) Onsite location

- (a) A tower which is being rebuilt to accommodate the collocation of an additional antenna may be moved onsite within fifty (50) feet of its existing location.
 - (b) After the tower is rebuilt to accommodate collocation, only one tower may remain on the site.
 - (c) A relocated onsite tower shall continue to be measured from the original tower location for purposes of calculating separation distances between towers pursuant to section (g)(2)(d). The relocation of a tower hereunder shall in no way be deemed to cause a violation of Section (g)(2)(d).
 - (d) The onsite relocation of a tower which comes within the separation distances to residential units or residentially zoned lands as established in Section (g)(2)(d) shall only be permitted when approved by the Planning Director.
- (c) New Towers in non-residential zoning districts. Locating any new tower in any Industrial District or the CS or CG Commercial District, provided a licensed professional engineer certifies the tower can structurally accommodate the number of shared users proposed by the applicant; the Planning Director concludes the tower is in conformity with the goals set forth in Section (a) and the requirements of Section (d); the tower meets the setback requirements in Section (g)(2)(c) and separation distances in Section (g)(2)(d) and all other provisions in Section (g); and the tower meets the following height and usage criteria:
- (i) for a single user, up to ninety (90) feet in height;
 - (ii) for two users, up to one hundred twenty (120) feet in height; and
 - (iii) for three or more users, up to one hundred (150) feet in height.
- (d) Locating any alternative tower structure in a zoning district other than industrial or heavy commercial that

in the judgment of the Planning Director is in conformity with the goals set forth in Section (a) of this ordinance.

- (e) Installing a cable microcell network through the use of multiple low-powered transmitter/receivers attached to existing wireline systems, such as conventional cable or telephone wires, or similar technology that does not require the use of towers.

(g) CONDITIONAL USE PERMITS

- (1) General. The following provisions shall govern the issuance of conditional use permits for towers or antennae by the Board of Zoning Appeals.

- (a) If the tower or antenna is not a permitted use under Section (e) of this ordinance or permitted to be approved administratively pursuant to Section (f) of this ordinance, then a conditional use permit shall be required for the construction of a tower or the placement of an antenna in all zoning district classifications.

- (b) Applications for conditional use permits under this Section shall be subject to the same procedures and requirements of all other conditional use permits as specified by Chapter 14, Section 11-1409.

- (c) In granting a conditional use permit, the Board of Zoning Appeals may impose conditions to the extent the Board of Zoning Appeals concludes such conditions are necessary to minimize adverse effects of the proposed tower on adjoining properties.

- (4) Any information of an engineering nature that the applicant submits, whether civil, mechanical, or electrical, shall be certified by a licensed professional engineer under the guidelines of the State of Tennessee for such certifications.

- (e) An applicant for a conditional use permit shall submit the information described in this Section and a non-refundable fee as established by resolution of the city council to reimburse the City of Goodlettsville for the costs of reviewing the application.

- (2) (a) Information required. In addition to any information required for applications for conditional use permits pursuant to Article IV of this ordinance, applicants for a special use permit for a tower shall submit the following information:

- (i) A site plan meeting the requirements for a site plan as specified by Chapter 14, Section 11-1406(b)(2) clearly showing the location, type and height of the proposed tower, on-site land uses and zoning, adjacent land uses and zoning (including when adjacent to other municipalities), Master Plan classification of the site and all properties within the applicable separation distances set forth in Section (g)(2)(d), adjacent roadways, proposed means of access, setbacks from property lines, elevation drawings of the proposed tower and any other structures, topography, parking and other information deemed by the Planning Director to be necessary to assess compliance with this ordinance.
- (ii) Legal description of the parent tract and leased parcel (if applicable).
- (iii) The setback distance between the proposed tower and the nearest residential unit, platted residentially zoned properties, and unplatted residentially zoned properties.
- (iv) The separation distance from other towers described in the inventory of existing sites submitted pursuant to Section (d)(3) shall be shown on an updated site plan. The applicant shall also identify the type of construction of the existing tower(s) and the owner/operator of the existing tower(s), if known.
- (vi) Method of fencing, and finished color and, if applicable, the method of camouflage and illumination.
- (vii) A description of compliance with Sections (d)(3), (4), (5), (6), (7), (10), (11), and (12), (g)(2)(d) and all applicable federal, state or local laws.
- (viii) A description of the suitability of the use of the existing towers, other structures or alternative technology not requiring the use of towers or structures to provide the services to be provided through the use of the proposed new tower.
- (ix) A description of the feasible location(s) of future towers or antennas within the City of Goodlettsville based upon existing physical, engineering, technological or geographical limitations in the event the proposed tower is erected.

(b) Factors Considered in Granting Special Use Permits for Towers. In addition to any standards for consideration of conditional use permit applications pursuant to Article IV, the Board of Zoning Appeals shall consider the following factors in determining whether to issue a special use permit, although the Board of Zoning Appeals may waive or reduce the burden on the applicant of one or more of these criteria if the Board of Zoning Appeals concludes that the goals of this ordinance are better served thereby:

- (i) Height of proposed tower;
- (ii) Proximity of the tower to residential structures and residential district boundaries;
- (iii) Nature of uses on adjacent and nearby properties;
- (iv) Surrounding topography;
- (v) Surrounding tree coverage and foliage;
- (vi) Design of the tower, with particular reference to design characteristics that have the effect of reducing or eliminating visual obtrusiveness;
- (vii) Proposed ingress and egress; and
- (viii) Availability of Suitable Existing Towers, Other Structures, or Alternative Technology. No new tower shall be permitted unless the applicant demonstrates to the reasonable satisfaction of the Board of Zoning Appeals that no existing tower, structures, or alternative technology that does not require the use of towers or structures can accommodate the applicant's proposed antenna. An applicant shall submit information requested by the Board of Zoning Appeals related to the availability of suitable existing towers, other structures or alternative technology. Evidence submitted to demonstrate that no existing tower, structure, or alternative technology can accommodate the applicant's proposed antenna may consist of any of the following:
 - (1) No existing towers or structures are located within the geographic area which meet applicant's engineering requirements.
 - (2) Existing towers or structures are not of sufficient height to meet applicant's engineering requirements.

- (3) Existing towers or structures do not have sufficient structural strength to support applicant's proposed antenna and related equipment.
- (4) The applicant's proposed antenna would cause electromagnetic interference with the antenna on the existing towers or structures, or the antenna on the existing towers or structures would cause interference with applicant's proposed antenna.
- (5) The fees, costs, or contractual provisions required by the owner in order to share an existing tower or structure or to adapt an existing tower or structure for sharing are unreasonable.
- (6) The applicant demonstrates that there are other limiting factors that render existing towers and structures unsuitable.
- (7) The applicant demonstrates that an alternative technology that does not require the use of towers or structures, such as a cable microcell network using multiple low-powered transmitters/receivers attached to a wireline system, is unsuitable. Costs of alternative technology that exceed new tower or antenna development shall not be presumed to render the technology unsuitable.

(c) **Setbacks.** The following setback requirements shall apply to all towers for which a special use permit is required provided, however, that the Board of Zoning Appeals may reduce the standard setback requirements if the goals of this ordinance would be better served thereby:

(i) Towers must be setback a distance equal to a least seventy-five percent (75%) of the height of the tower from any adjoining lot line.

(ii) Guys and accessory buildings must satisfy the minimum zoning district setback requirements.

(d) **Separation.** The following separation requirements shall apply to all towers and antennae for which a special use permit is required; provided, however, that the Board of Zoning Appeals may reduce the standard separation requirements if the goals of the ordinance would be better served thereby.

(i) Separation from off-site uses/designated areas.

- (1) Tower separation shall be measured from the base of the tower to the lot line of the off-site areas as specified in Table 1, except as otherwise provided in Table 1.
- (2) Separation requirements shall comply with the minimum standards established in Table 1.

Table 1:

Off-site Use/Designated Area	Separation Distance ¹
Single-family or duplex residential units	200 feet or 300% height of tower whichever is greater
Vacant single-family or duplex residentially zoned land which is either platted or has preliminary subdivision plan approval which is not expired.	200 feet or 300% height of tower whichever is greater.
Vacant unplatted residentially zoned lands.	200 feet or 200% height of tower whichever is greater.
Existing multi-family residential units greater than duplex units.	200 feet or 100% height of tower whichever is greater.
Non-residentially zoned lands or non-residential uses.	None; only setbacks apply.

(ii) Separation distances between towers. Separation distances between towers shall be applicable for and measured between the proposed tower and preexisting towers. The separation distances shall be measured by drawing or following a straight line between the base of the existing tower and the proposed base, pursuant to a site plan, of the proposed tower. The separation distances (listed in linear feet) shall be as shown in Table 2.

¹Separation distance is measured from base of tower to closest building setback line.

Table 2:

Existing Towers -Types

	Lattice	Guyed	Monopole 75 feet or higher.	Monopole less than 75 feet.
Lattice	5000	5000	1500	750
Guyed	5000	5000	1500	750
Monopole 75 feet or higher	1500	1500	1500	750
Monopole less than 75 feet.	750	750	750	750

- (e) Security fencing. Towers shall be enclosed by security fencing not less than six feet in height and shall also be equipped with an appropriate anti-climbing device; provided however, that the Board of Zoning Appeals may waive such requirements, as it deems appropriate.
- (f) Landscaping. The following requirements shall governing the landscaping surrounding towers for which a special use permit is required; provided, however, that the Board of Zoning Appeals may waive such requirements if the goals of this ordinance would be better served thereby.
 - (i) Tower facilities shall be landscaped with a buffer of plant materials that effectively screens the the view of the tower compound from property used for residences. The standard buffer shall consist of a landscaped strip at least twenty-five (25) feet wide outside the perimeter of the compound.
 - (ii) In locations where the visual impact of the tower would be minimal, the landscaping requirement may be reduced or waived.
 - (iii) Existing mature tree growth and natural land forms on the site shall be preserved to the maximum extent possible. In some cases, such as towers sited on large, wooded lots, natural growth around the property perimeter may be sufficient buffer.
- (h) BUILDINGS OR OTHER EQUIPMENT STORAGE
 - (1) Antennae mounted on Structures or Rooftops. The

equipment cabinet or structure used in association with antennae shall comply with the following:

- (a) The cabinet or structure shall not contain more than 100 square feet of gross floor area or be more than 12 feet in height. In addition, for buildings and structures which are less than sixty-five (65) feet in height, the related unmanned equipment structure, if over 100 square feet of gross floor area or 12 feet in height, shall be located on the ground and shall not be located on the roof of the structure.
 - (b) If the equipment structure is located on the roof of a building, the area of the equipment structure and other equipment and structures shall not occupy more than 10 percent of the roof area and shall exceed the design roof load.
 - (c) Equipment storage buildings or cabinets shall comply with all applicable building codes.
- (2) Antennae mounted on Utility Poles or Light Poles. The equipment or cabinet structure used in association with antennae shall be located in accordance with the following:
- (a) In residential districts, the equipment cabinet or structure may be located:
 - (i) In a front or side yard provided the cabinet or structure is no greater than four (4) feet in height or 50 square feet of gross floor areas and the cabinet/structure shall be screened by an evergreen hedge with an ultimate height of at least 42-48 inches and a planted height of at least 36 inches and ornamental trees.
 - (ii) In a rear yard, provided the cabinet or structure is no greater than 12 feet in height or 100 square feet in gross floor area. The cabinet/structure shall be screened by an evergreen hedge with an ultimate height of eight (8) feet and planted height of at least 36 inches and ornamental trees.
 - (b) In non-residential districts the equipment cabinet or structure shall be no greater than 15 feet in height or 200 square feet in gross floor area. The structure or cabinet shall be screened by an evergreen hedge with an ultimate height of eight

(8) feet and a planted height of at least 36 inches and ornamental and shade trees. In all other instances, structures or cabinets shall be screened from view of all residential properties which abut or are directly across the street from the structure or cabinet by a solid fence 6 feet in height or an evergreen hedge with ultimate height of 12 feet and a planted height of at least 36 inches and ornamental and shade trees.

- (3) Antennae Located on Towers. The related unmanned equipment structure shall not contain more than 100 square feet of gross floor area or be more than 12 feet in height, and shall be located no closer than 40 feet from all lot lines.
- (4) Modification of Building Size Requirements. The requirements of Section 8(a) through (c) may be modified by the Planning Director in case of administratively approved uses or by the Board of Zoning Appeals in case of uses permitted by conditional use to encourage collocation.

(i) REMOVAL OF ABANDONED ANTENNAE AND TOWERS

Any antennae or tower that is not operated for a continuous of twelve (12) months shall be considered abandoned, and the owner of such antenna or tower shall remove the same within the ninety (90) days of receipt of notice from the City of Goodlettsville notifying the owner of such abandonment. Failure to remove an abandoned antenna or tower within said ninety (90) days shall be grounds to remove the tower or antenna at the owner's expense. If there are two or more users of a single tower, then this provision shall not become effective until all users abandon the tower.

(j) NONCONFORMING USES

- (1) No Expansion of Nonconforming Use. Towers that are constructed, and antennae installed, in accordance with the provisions of this ordinance shall not be deemed to constitute the expansion as a nonconforming use or structure.
- (2) Preexisting Towers. Preexisting towers shall be allowed to continue their usage as they presently exist. Routine maintenance (including replacement with a new tower of like construction and height) shall be permitted on such preexisting tower shall comply with the requirements of this ordinance.
- (3) Rebuilding Damaged or Destroyed Nonconforming Towers or

Antennae. Notwithstanding Section (i), bona fide towers or antennae that are damaged or destroyed may be rebuilt without having to first obtain administrative approval or a conditional use permit and without having to meet the separation requirements in Sections (g)(2)(c) and (g)(2)(d). The type, height, and location of the tower onsite shall be of the same type and intensity as the original facility approval. Building permits to rebuild the facility shall comply with the then applicable building codes and shall be obtained within 180 days from the date the facility shall comply with the then applicable building codes and shall be obtained within 180 codes form the date the facility is damaged or destroyed. If no permit is obtained or if said permit expires, the tower or antenna shall be deemed abandoned as specified in Section (i).

(k) SEVERABILITY

The various parts, sections and clauses of this part are hereby declared to be severable. If any part, sentence, paragraph, section of clause is adjudged unconstitutional or invalid by a court of competent jurisdiction, the remainder of the Ordinance shall not be affected thereby.

(l) REPEALER

Any ordinances or parts thereof in conflict with the provisions of this Ordinance are hereby repealed to the extent of such conflict.

(m) PENALTIES

In addition to other remedies provided herein, any violation of this ordinance may be punishable by penalty of up to \$500.00. Each day shall constitute a separate violation hereof.

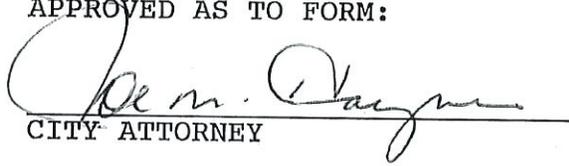
(n) EFFECTIVE DATE

This ordinance shall be effective from and after its final passage, the public welfare requiring it.


MAYOR


CITY RECORDER

APPROVED AS TO FORM:


CITY ATTORNEY

Passed 1st Reading: 10-8-98

Passed 2nd Reading: 11-12-98

GOODLETTSVILLE BOARD OF ZONING APPEALS AND SIGN APPEALS
GOODLETTSVILLE CITY HALL – 105 SOUTH MAIN STREET
GOODLETTSVILLE, TENNESSEE 37072

APPLICATION FOR A ZONING ORDINANCE VARIANCE

Applicant Vertical Bridge AM, LLC

Case No. _____

Owner William C. Brummett Jr.

Map No. 0191-3

Address 103 Foxcross Road Hendersonville, TN 37075

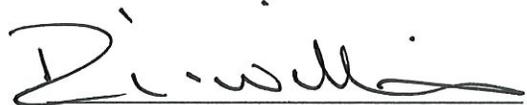
Parcel No. 19.00

Based on the powers and jurisdiction of the Goodlettsville Board of Zoning Appeals as set forth in Title 14, Section 14-1408 of the Municipal Code, a variance is hereby requested for an exception to the zoning regulations as follows:

at (physical address) 410 Church Street Goodlettsville, TN 37072

The undersigned agrees to appear at the public hearing for the request and shall furnish all required plans and data.

Owner Signature (if Different from Applicant)



Applicant (Signature)

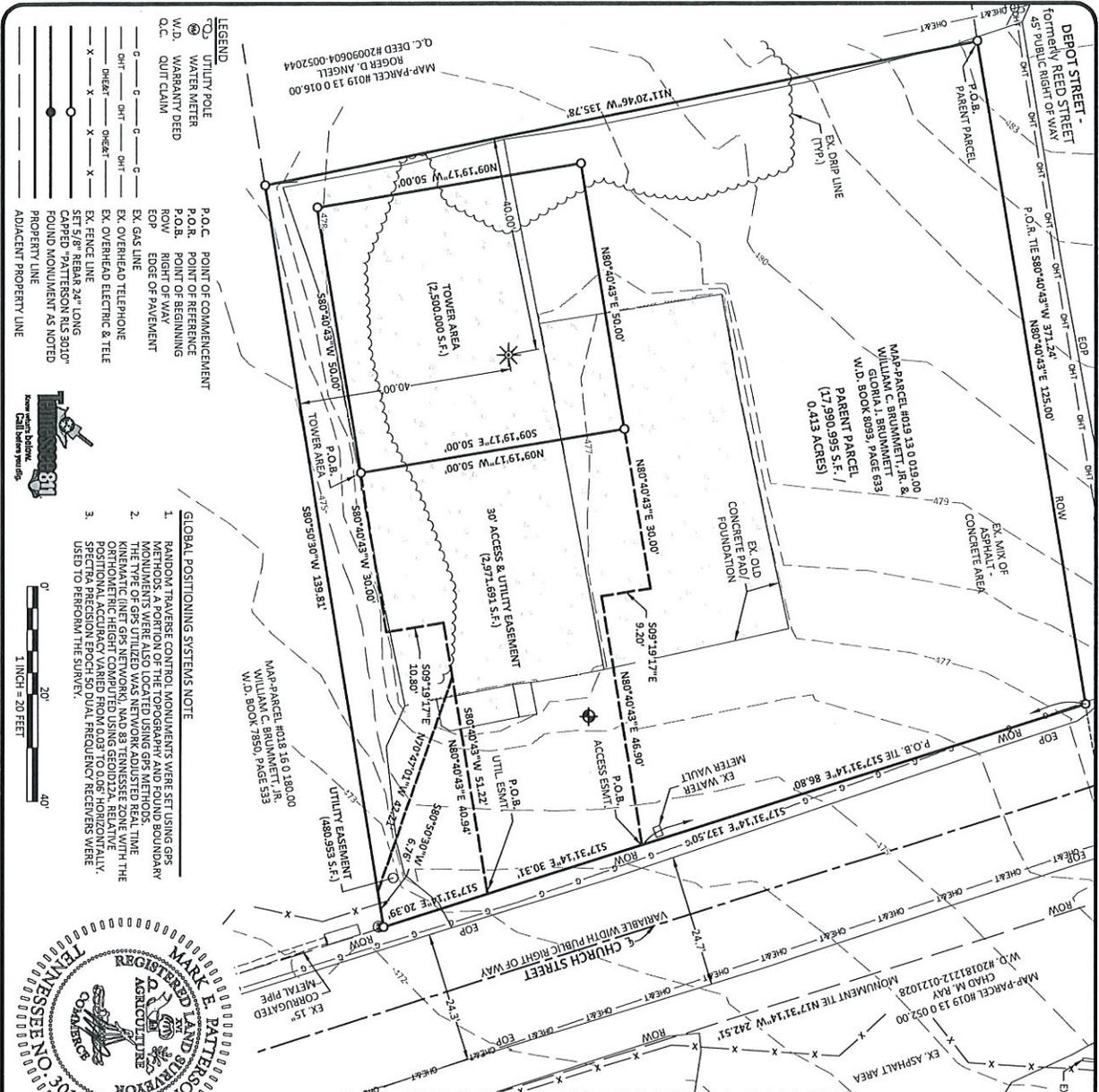
130 Blackburn Avenue
Address

Nashville TN 37205
City ST Zip

615-351-2639
Phone (Daytime)

1. REQUIRED APPLICATION FEE \$200.00
2. ATTACH ALL REQUIRED PLANS AND SUPPORTING DOCUMENTS.
3. THE APPLICANT WILL BE NOTIFIED BY MAIL/FAX OF APPEALS BOARD MEETING DATE.

ACTION TAKEN: _____ DATE: _____



GENERAL NOTES

NO SEARCH OF PUBLIC RECORDS HAS BEEN COMPLETED BY POD GROUP TO DETERMINE ANY DEFECTS AND/OR AMBIGUITIES IN THE TITLE OF THE PARENT PARCEL.

THIS SURVEY IS FOR THE TOWER AREA, THE 30' ACCESS & UTILITY EASEMENT, THE UTILITY EASEMENT AND THE BOUNDARY OF THE PARENT TRACT. THERE ARE NO VISIBLE ENCROACHMENTS AFFECTING THE TOWER AREA, THE 30' ACCESS & UTILITY EASEMENT, THE UTILITY EASEMENT OR THE BOUNDARY OF THE PARENT TRACT, AT THE TIME THE SURVEY WAS COMPLETED.

THE TOWER AREA IS CONTIGUOUS ALONG ITS COMMON BOUNDARIES TO THE 30' ACCESS AND UTILITY EASEMENT, WHICH IN TURN IS CONTIGUOUS ALONG ITS COMMON BOUNDARIES OF CHURCH STREET, WHICH IS A PUBLIC RIGHT OF WAY. THE UTILITY EASEMENT IS CONTIGUOUS ALONG ITS COMMON BOUNDARIES OF CHURCH STREET AND THE 30' ACCESS & UTILITY EASEMENT.

TOWER AREA, THE 30' ACCESS AND UTILITY EASEMENT AND THE UTILITY EASEMENT ARE ENTITLED WITHIN THE PARENT PARCEL AS DESCRIBED IN MAP-PARCEL #019 13 0 019.00 W.D. BOOK 8093, PAGE 633.

THE WORD "CERTIFICATE" OR "CERTIFICATION" AS SHOWN AND USED HEREON MEANS AN EXPRESSION OF PROFESSIONAL OPINION REGARDING THE FACTS EXPRESSED OR IMPLIED.

A PORTION OF THIS SURVEY WAS CONDUCTED BY METHOD OF RANDOM TRAVEL WITH SHOTS UNADJUSTED. CLOSURE EQUALS 0.00". FOR A PRECISION OF 1:53,457 AND HAS NOT BEEN ADJUSTED.

THIS PROPERTY IS SUBJECT TO ANY RECORDED EASEMENTS AND/OR RIGHTS OF WAY SHOWN HEREON OR NOT.

UNDERGROUND UTILITIES SHOWN HEREON ARE BASED ON OBSERVATION ABOVE GROUND EVIDENCE AND UTILITY MARKINGS. UNDERGROUND UTILITIES ARE APPROXIMATE AND THE EXACT LOCATION OF UNDERGROUND FEATURES CANNOT BE ACCURATELY COMPLETED AND RELIABLY DEPICTED. NEITHER THE SURVEYOR NOR HIS REPRESENTATIVES HAVE VERIFIED OR OBSERVED THE ACTUAL INSTALLATION OF ALL UTILITIES.

THE PARENT PARCEL, TOWER AREA, THE 30' ACCESS AND UTILITY EASEMENT AND THE UTILITY EASEMENT ARE LOCATED IN ZONE X WHICH IS NOT IN A 100-YEAR FLOOD PLAIN PER FLOOD HAZARD BOUNDARY MAP, COMMUNITY PANEL NUMBER 499 00215H, DATED APRIL 5, 2017.

CERTIFICATE OF ACCURACY (SURVEYOR'S CERTIFICATE)

I HEREBY CERTIFY TO: VERTICAL BRIDGE RET, LLC A DELAWARE LIMITED LIABILITY COMPANY, ITS SUBSIDIARIES, AND THEIR RESPECTIVE SUCCESSORS AND/OR ASSIGNS; TOWN OF HOLLAND, INC. AS BORROWER, AND VERTICAL BRIDGE HOLLAND PARENT, LLC AS PARENT, AS MAY BE AMENDED, RESTATED, MODIFIED OR RENEWED, THEIR SUCCESSORS AND ASSIGNS AS THEIR INTERESTS MAY APPEAR AND TITLE CO. (TBO). I, MARK E. PATTERSON, A TENNESSEE REGISTERED LAND SURVEYOR, ALSO CERTIFY THAT THE INFORMATION SHOWN HEREON WAS OBTAINED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT THE FIELD SURVEY AND THE COMPILATION OF INFORMATION SHOWN HEREON WERE CONDUCTED IN COMPLIANCE WITH CURRENT TENNESSEE MINIMUM STANDARDS OF PRACTICE FOR A CATEGORY 1 SURVEY.

PREPARED BY:

 11400 N. U.S. 90, BOCA RATON, FL 33433
 561-948-6367

verticalbridge
 750 PARK OF COMMERCE DRIVE
 BOCA RATON, FLORIDA 334487
 (561) 948-6367

PROPERTY OWNER:
 WILLIAM C. BRUNNETT, JR. &
 GLOMA C. BRUNNETT
 580 DAVIS STREET
 PORTLAND, TN 37248

TAX PARCEL NUMBER:
 019 13 0 019.00

SITE INFORMATION:
 410 CHURCH STREET
 GOODLETTSVILLE, TN 37072
 DAVIDSON COUNTY

PROPERTY OWNER:
 WILLIAM C. BRUNNETT, JR. &
 GLOMA C. BRUNNETT
 580 DAVIS STREET
 PORTLAND, TN 37248

SOURCE OF TITLE:
 W.D. BOOK 8093, PAGE 633

SITE NUMBER:
 US-TN-5087

POD NUMBER:
 13-33066

DRAWN BY:
 N/C/D/APP

CHECKED BY:
 MEF

SURVEY DATE:
 6/26/19

PLAT DATE:
 8/11/19

SHEET TITLE:
 BOUNDARY SURVEY

PLAT REPRESENTS A BOUNDARY SURVEY OF THE PARENT PARCEL AND COMPLETS WITH A CATEGORY 1 SURVEY.

SHEET NUMBER: (3 pages)
B-1.1

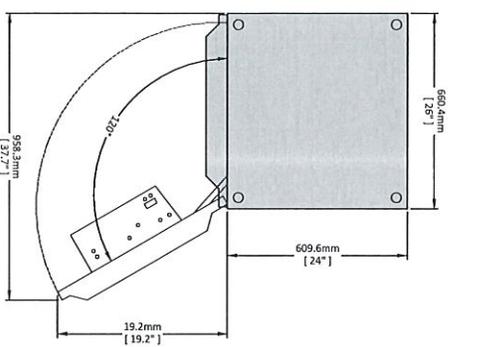
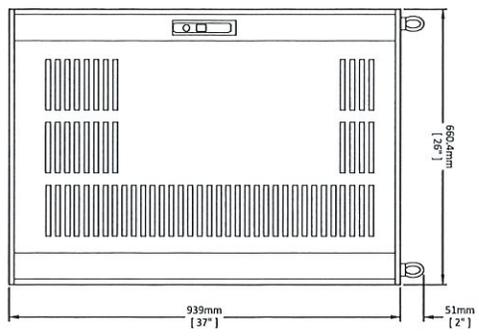
- LEGEND**
- UTILITY POLE
 - ⊗ WATER METER
 - ⊙ VARIABILITY DEED
 - ⊘ QUIT CLAIM
- P.O.C. POINT OF COMMENCEMENT**
- P.O.B. POINT OF BEGINNING
 - P.O.R. POINT OF REFERENCE
 - ROW RIGHT OF WAY
 - EOP EDGE OF PAVEMENT
 - EX. GAS LINE
 - EX. OVERHEAD TELEPHONE
 - EX. OVERHEAD ELECTRIC & TELE
 - EX. FENCE LINE
 - SET 5/8" BARS 24" LONG
 - CAPED PATTERSON RIS 3010
 - FOUND MONUMENT AS NOTED
 - PROPERTY LINE
 - ADJACENT PROPERTY LINE

- GLOBAL POSITIONING SYSTEMS NOTE**
1. RANDOM TRAVERSE CONTROL MONUMENTS WERE SET USING GPS METHODS. A PORTION OF THE TOPOGRAPHY AND FOUND BOUNDARY MONUMENTS WERE ALSO LOCATED USING GPS METHODS. TIME KINEMATIC (NET GPS NETWORK), NAD 83 TENNESSEE ZONE WITH THE POSITIONAL ACCURACY VARIED FROM 0.03" TO 0.06" HORIZONTALY. SPEED TO PRECISION TECHNIQUE FREQUENCY RECEIVERS WERE USED TO PERFORM THE SURVEY.



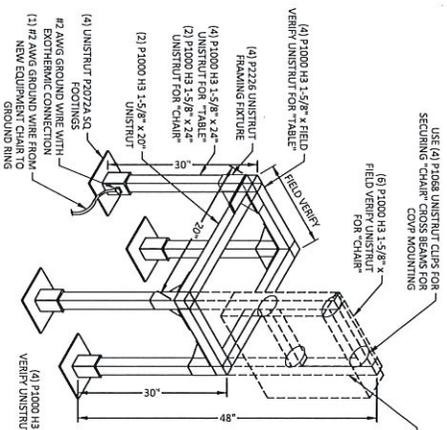
REGISTERED LAND SURVEYOR
MARK E. PATTERSON
 0100 TENNESSEE BOULEVARD
 COVINGTON, TN 38019

Mark Patterson
 8/30/2019
 DATE

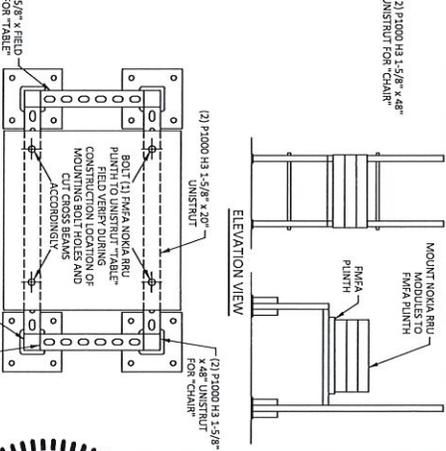


DELTA SMALL SUPPORT CABINET
SCALE: NOT TO SCALE

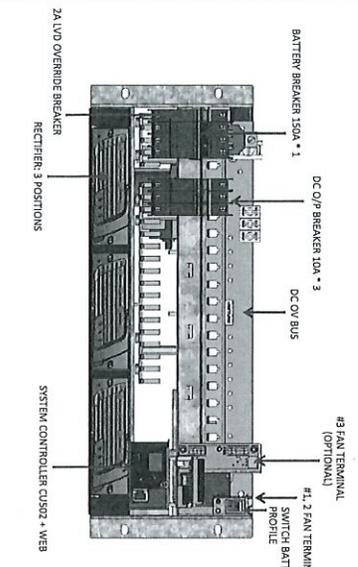
DELTA SMALL SUPPORT CABINET SPECS	
GENERAL	ELECTRICAL REQUIREMENTS
CONSTRUCTION	SINGLE LAYER ALUMINUM ENCLOSURE TYPE 3R
DIMENSIONS (W x H x D)	28" x 37" x 24"
FINISH	POURER POWER PAINT (SUBSTRATE INSTALLED)
DOOR LATCH	3-POINT LATCHING PAD LOCKABLE
	OPERATING TEMPERATURE
	STORAGE TEMPERATURE
	RELATIVE HUMIDITY
	ALTITUDE
	DC INPUT VOLTAGE
	DC OUTPUT VOLTAGE



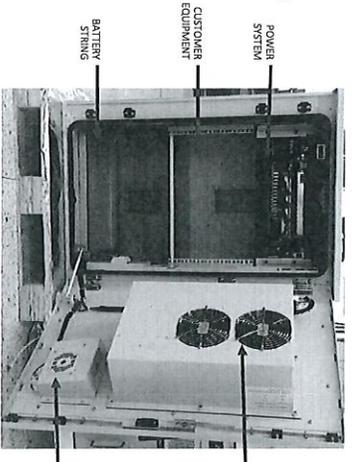
NOKIA MFMA PLINTH DETAIL
SCALE: NOT TO SCALE



CHAIR MOUNT DETAIL
SCALE: NOT TO SCALE



SSC POWER SYSTEM DETAIL
SCALE: NOT TO SCALE



SSC INTERIOR DETAIL
SCALE: NOT TO SCALE

- POWER SYSTEM FEATURES:**
- THREE (3) RECTIFIER SLOTS
 - AN LVD MANUAL OVERRIDE PROTECTED BY AN LVD LOW VOLTAGE DISCONNECT
 - LOAD BREAKER POSITIONS
 - BATTERY SELECT SWITCH
 - BATTERY SYSTEM
 - BATTERY BREAKER POSITIONS
 - BATTERY SELECT SWITCH

POD NUMBER:	18-2757
DRAWN BY:	KDP
CHECKED BY:	MEP
DATE:	7.26.19
SHEET TITLE:	CABINET DETAILS
SHEET NUMBER:	C-7

PREPARED BY: **POD**
POWER OF DESIGN
11400 BLUESHAWK PARKWAY
MEMPHIS, TN 38117-5232

PREPARED FOR: **vertical bridge**

PREPARED FOR: **Mobile**

REGISTERED ENGINEER
MARK EDWARDS
No. 11650-001
AGRICULTURE
TENN. REG. NO. 000000020

CONSTRUCTION DRAWINGS

REV	DATE	DESCRIPTION
A	7.26.19	ISSUED FOR REVIEW
B	8.2.19	TOWER LOCATION
0	8.30.19	ISSUED AS FINAL

Proposed View

Description: General overview (looking south) showing proposed tower location and immediately surrounding setting.

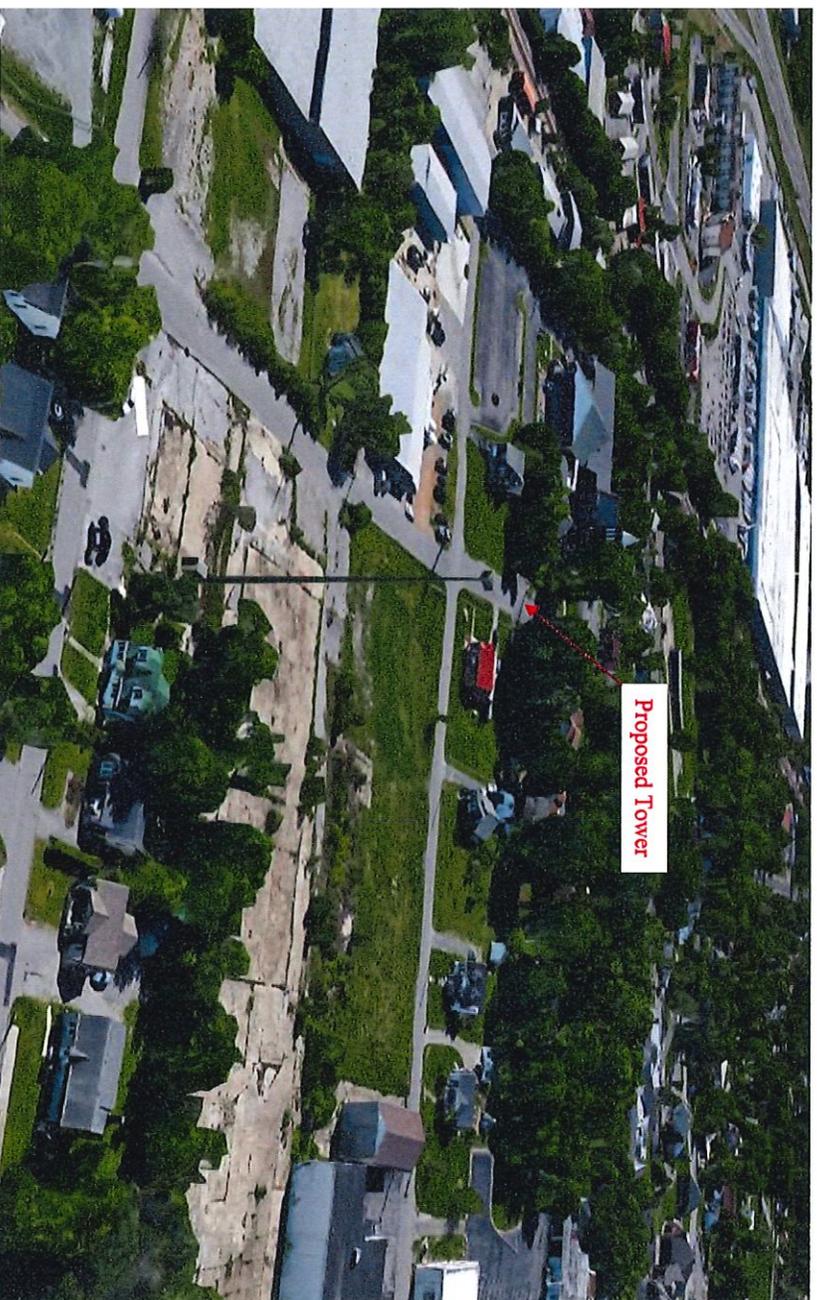
DISCLAIMER: This photo simulation is an artist's depiction of a future installation. The actual construction may vary slightly in size, layout, color and texture from this simulation.

US-TN-5087 Goodlettsville Cellular Tower Site

210 Church Street
Goodlettsville, TN

Tower Lat/Long: 36.326506, -86.712134

Tower Height: 140 ft (42.67 m)



Prepared on behalf of Lotis
Engineering Group, P.C.

Proposed View

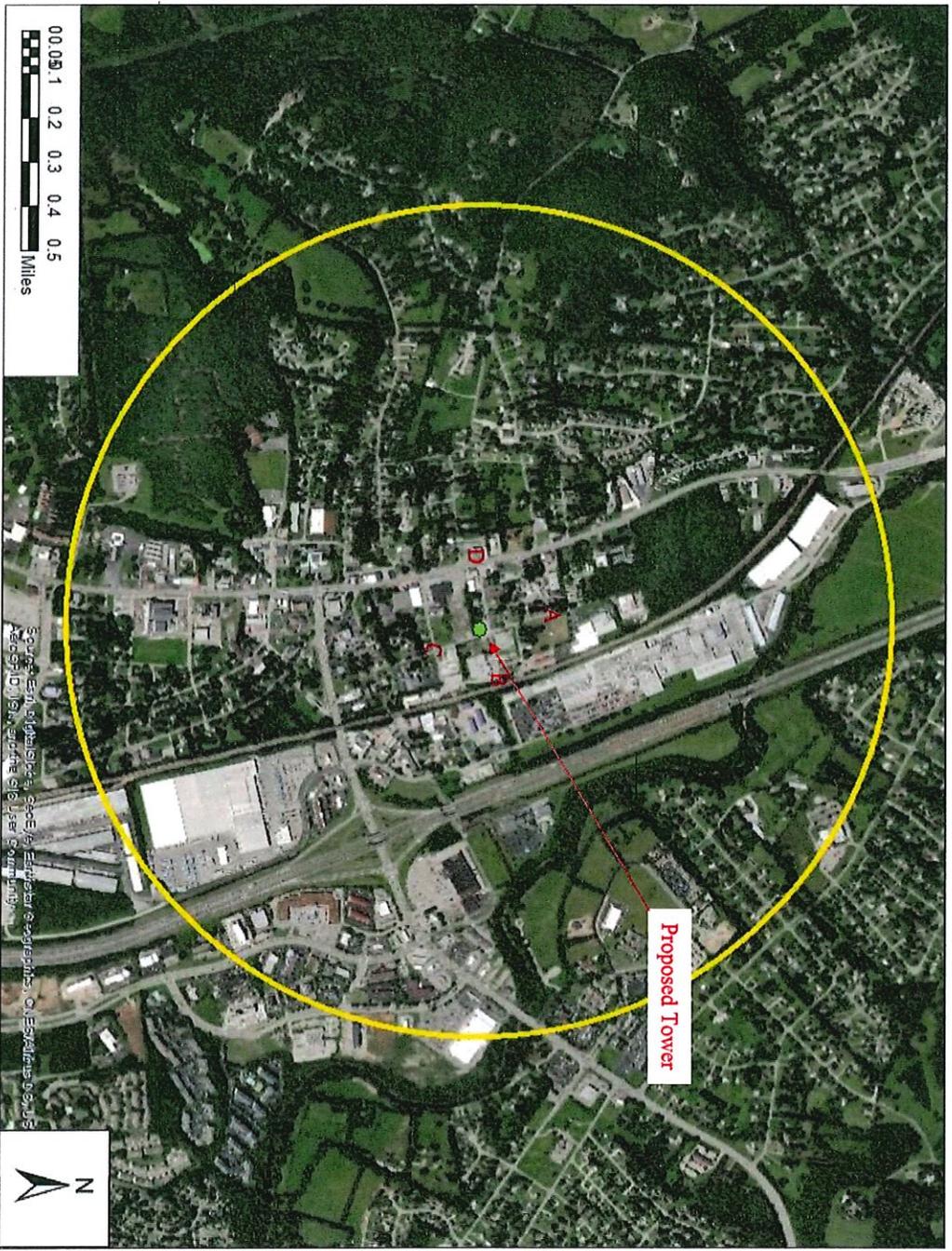
Description: Aerial view showing the 0.75-mile APE for Indirect Effects (yellow circle). Image points are indicated by red letters.

DISCLAIMER: This photo simulation is an artist's depiction of a future installation. The actual construction may vary slightly in size, layout, color and texture from this simulation.



Prepared on behalf of Lotis Engineering Group, P.C.

US-TN-5087 Goodlettsville Cellular Tower Site
210 Church Street
Goodlettsville, TN
Tower Lat/Long: 36.326506, -86.712134
Tower Height: 140 ft (42.67 m)



Source: Esri, DigitalGlobe, GeoEye, Earthstar (imagery), CNES/Airbus DS, USDA, AeroGRID, IGN, and the GIS User Community

Proposed View

Description: View from Image

Point A toward the proposed tower from the intersection of Church Street and Lindbergh Avenue (looking south).

Distance to tower is approximately 700 feet.

DISCLAIMER: This photo simulation is an artist's depiction of a future installation. The actual construction may vary slightly in size, layout, color and texture from this simulation.

US-TN-5087 Goodlettsville Cellular Tower Site

210 Church Street
Goodlettsville, TN

Tower Lat/Long: 36.326506, -86.712134

Tower Height: 140 ft (42.67 m)

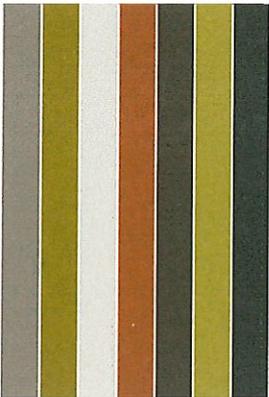


Prepared on behalf of Lotis
Engineering Group, P.C.

Proposed View

Description: View from Image Point B toward the proposed tower from the intersection of Depot Street and McCasland Street (looking west) Distance to tower is approximately 550 feet.

DISCLAIMER: This photo simulation is an artist's depiction of a future installation. The actual construction may vary slightly in size, layout, color and texture from this simulation.



US-TN-5087 Goodlettsville Cellular Tower Site

210 Church Street
Goodlettsville, TN
Tower Lat/Long: 36.326506, -86.712134
Tower Height: 140 ft (42.67 m)



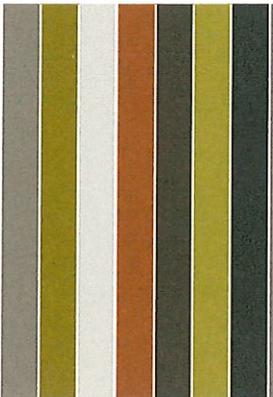
Prepared on behalf of Lotis
Engineering Group, P.C.

Proposed View

Description: View from Image Point C toward the proposed tower from the intersection of Church Street and Connell Street (looking north-northwest).

Distance to tower is approximately 550 feet.

DISCLAIMER: This photo simulation is an artist's depiction of a future installation. The actual construction may vary slightly in size, layout, color and texture from this simulation.



US-TN-5087 Goodlettsville Cellular Tower Site

210 Church Street
Goodlettsville, TN

Tower Lat/Long: 36.326506, -86.712134

Tower Height: 140 ft (42.67 m)



Prepared on behalf of Lotis
Engineering Group, P.C.

Proposed View

Description: View from Image Point D toward the proposed tower from the intersection of Hwy 11 and Depot Street (looking east). Distance to tower is approximately 600 feet.

DISCLAIMER: This photo simulation is an artist's depiction of a future installation. The actual construction may vary slightly in size, layout, color and texture from this simulation.

US-TN-5087 Goodlettsville Cellular Tower Site

210 Church Street
Goodlettsville, TN
Tower Lat/Long: 36.326506, -86.712134
Tower Height: 140 ft (42.67 m)



Prepared on behalf of Lotis
Engineering Group, P.C.



July 10, 2019

POD Project #: 18-27756

VERTICAL BRIDGE

1A Letter

Site Name: **Goodlettsville**
Site Number: **US-TN-5087**
Site Address: **410 Church Street**
Goodlettsville, TN 37072
County: **Davidson**
USGS Quad Map: **Goodlettsville, TN**

Site Coordinates:

NAD 83

Latitude: **36° 19' 35.44"**
Longitude: **-86° 42' 43.67"**

Site Elevation (NAVD88): **477'± AMSL**

The horizontal coordinates are per the North American Datum of 1983 (2011) Tennessee State Plane Zone. Coordinates are shown as degrees, minutes and seconds which were derived from iNET GPS RTK Network.

The vertical elevations are per the North American Vertical Datum of 1988, which were derived from iNET GPS RTK Network.

I hereby certify that the horizontal and vertical locations are accurate to within 1A reporting requirements (20'± horizontally and 3'± feet vertically). The type of GPS survey utilized was network adjusted real time kinematic (iNET GPS RTK Network) with the orthometric height computed using GEOID12A.

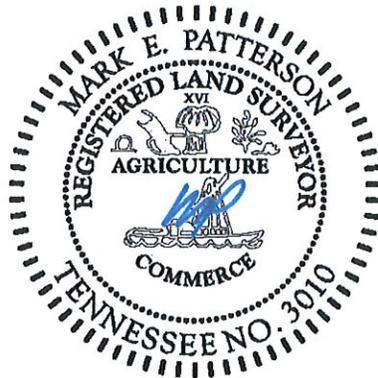
The above-mentioned coordinates were established using "Spectra Precision Epoch 50 receivers" and are tied to the National Geodetic Reference System established by the National Geodetic Survey.

Consultant

A handwritten signature in blue ink that reads "Mark E. Patterson".

7/10/2019

Mark E. Patterson, RLS 3010
Power of Design Group, LLC
11490 Bluegrass Parkway
Louisville, KY 40299





Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 10101 Hillwood Parkway
 Fort Worth, TX 76177

Aeronautical Study No.
 2019-ASO-22112-OE

Issued Date: 08/21/2019

Richard Hickey
 Vertical Bridge Development, LLC
 750 Park of Commerce Drive
 Suite 200
 Boca Raton, FL 33487

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Monopole oyd US-TN-5087 Goodlettsville
 Location: Goodlettsville, TN
 Latitude: 36-19-35.44N NAD 83
 Longitude: 86-42-43.67W
 Heights: 477 feet site elevation (SE)
 140 feet above ground level (AGL)
 617 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part 1)
- Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 L Change 2.

This determination expires on 02/21/2021 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, effective 21 Nov 2007, will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA. This determination includes all previously filed frequencies and power for this structure.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Communications Commission (FCC) because the structure is subject to their licensing authority.

If we can be of further assistance, please contact our office at (718) 553-2611, or angelique.eersteling@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2019-ASO-22112-OE.

Signature Control No: 411276939-414989627

(DNE)

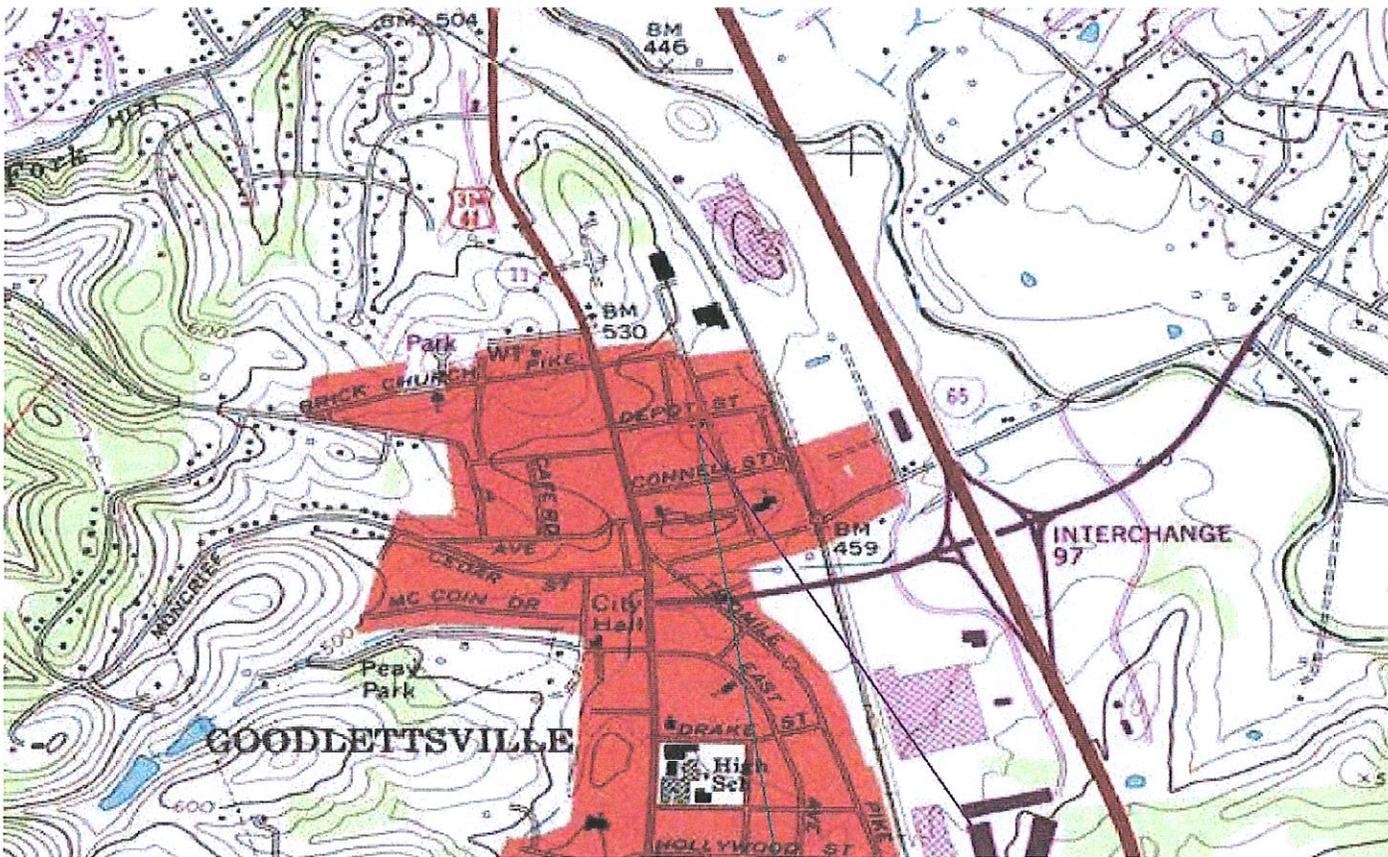
Angelique Eersteling
Technician

Attachment(s)
Frequency Data
Map(s)

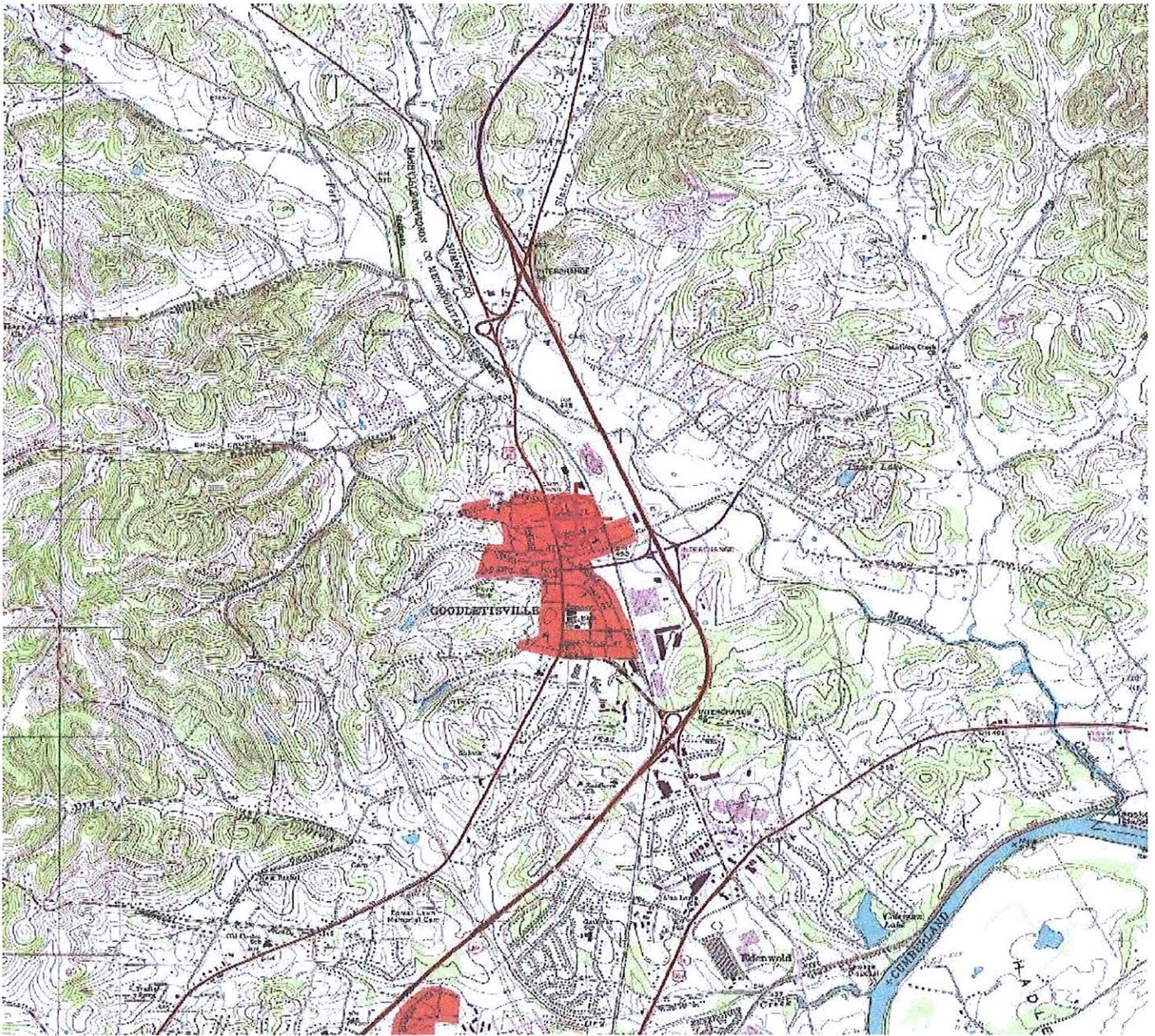
cc: FCC

Frequency Data for ASN 2019-ASO-22112-OE

LOW FREQUENCY	HIGH FREQUENCY	FREQUENCY UNIT	ERP	ERP UNIT
6	7	GHz	55	dBW
6	7	GHz	42	dBW
10	11.7	GHz	55	dBW
10	11.7	GHz	42	dBW
17.7	19.7	GHz	55	dBW
17.7	19.7	GHz	42	dBW
21.2	23.6	GHz	55	dBW
21.2	23.6	GHz	42	dBW
614	698	MHz	1000	W
614	698	MHz	2000	W
698	806	MHz	1000	W
806	901	MHz	500	W
806	824	MHz	500	W
824	849	MHz	500	W
851	866	MHz	500	W
869	894	MHz	500	W
896	901	MHz	500	W
901	902	MHz	7	W
929	932	MHz	3500	W
930	931	MHz	3500	W
931	932	MHz	3500	W
932	932.5	MHz	17	dBW
935	940	MHz	1000	W
940	941	MHz	3500	W
1670	1675	MHz	500	W
1710	1755	MHz	500	W
1850	1910	MHz	1640	W
1850	1990	MHz	1640	W
1930	1990	MHz	1640	W
1990	2025	MHz	500	W
2110	2200	MHz	500	W
2305	2360	MHz	2000	W
2305	2310	MHz	2000	W
2345	2360	MHz	2000	W
2496	2690	MHz	500	W



TOPO Map for ASN 2019-ASO-22112-OE



August 5, 2019

Mr. Dave Smith
Vertical Bridge

RE: 130 ft Sabre Monopole for US-TN-5087 Goodlettsville, TN

Dear Mr. Smith,

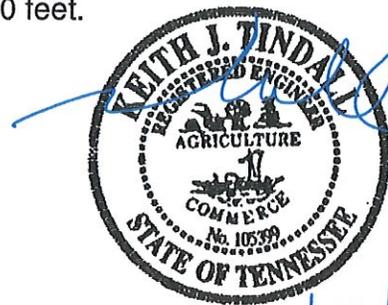
Upon receipt of order, we propose to supply the above referenced Sabre monopole designed for an Ultimate Basic Wind Speed of 105 mph with no ice and 30 mph with 1-1/2" ice, Structure Class II, Exposure Category C, and Topographic Category 1, in accordance with the Telecommunications Industry Association Standard ANSI/TIA-222-G.

When designed according to this standard, the wind pressures and steel strength capacities include several safety factors, resulting in an overall minimum safety factor of 25%. Therefore, it is highly unlikely that the monopole will fail structurally in a wind event where the design wind speed is exceeded within the range of the built-in safety factors.

Should the wind speed increase beyond the capacity of the built-in safety factors, to the point of failure of one or more structural elements, the most likely location of the failure would be within the monopole shaft, above the base plate. Assuming that the wind pressure profile is similar to that used to design the monopole, the monopole will buckle at the location of the highest combined stress ratio within the monopole shaft. This is likely to result in the portion of the monopole above leaning over and remaining in a permanently deformed condition. ***Please note that this letter only applies to the above referenced monopole designed and manufactured by Sabre Towers & Poles.*** This would effectively result in a fall radius less than or equal to 40 feet.

Sincerely,

Keith J. Tindall, P.E., S.E.
Vice President, Telecom Engineering



8/5/19

TCA Sections

13-24-301. Telephone and telegraph services -- Exclusion from local regulation.

No municipal, county or regional planning commission or any municipal or county legislative body shall, by ordinance or otherwise, exclude the location or relocation of any facility used to provide telephone or telegraph services to the public

13-24-302. Facilities included.

Such facilities include those essential to the provision of telephone and telegraph services such as central office exchanges and microwave towers which require a specific location in order to provide the most efficient service to the public.

13-24-303. Regulations allowed.

The exclusion of location from local regulation does not preclude the exercise of reasonable municipal and county police powers including, but not limited to, permit requirements, landscaping, off-street parking or set-back lines as an exercise of police powers.

13-24-304. Planning for and regulating the siting of wireless telecommunications support structures.

A municipal, county or regional planning commission or any municipal or county legislative body, referred to as an authority in this section and § 13-24-305, that has adopted planning and zoning regulations, may plan for and regulate the siting of wireless telecommunications support structures in accordance with locally adopted planning or zoning regulations and this chapter.

13-24-305. Limits on regulation of wireless telecommunications support structures.

In regulating the placement of a wireless telecommunications support structure, an authority may not:

- (1) Regulate the placement of an antenna or related equipment for an existing wireless telecommunications support structure; provided, however, that, if the placement of an antenna on an existing wireless telecommunications support structure requires an extension, such placement may be regulated, if such extension would require the wireless telecommunications support structure to have lighting or if such extension exceeds the height limitation of the authority. If a co-location occurs, such co-location may not be considered an expansion, and the appropriate authority may not impose additional costs or operating restrictions on the applicant for such co-location, unless such support structure is owned by the authority;
- (2) Require the applicant to provide any sort of justification for radio frequency need; or
- (3) Act to prohibit or have the effect of prohibiting the provision of personal wireless services.



April 23, 1996

FEDERAL COMMUNICATIONS COMMISSION

FACT SHEET

Information provided by the Wireless Telecommunications Bureau

NEW NATIONAL WIRELESS TOWER SITING POLICIES

The Telecommunications Act of 1996 contains important provisions concerning the placement of towers and other facilities for use in providing personal wireless services. Most state and local communities have worked closely with cellular and other wireless service providers on such placement plans, but this new law establishes new responsibilities for communities and for the Federal Communications Commission (FCC). The rapid expansion in the wireless industry makes these issues even more important.

This fact sheet is intended to explain the new provisions and to help state and local governments as they deal with the complex issues of facilities siting in their local communities. At the end of this fact sheet, you will find names of contacts for additional information about this area and other issues before the FCC.

Section 704 of the Telecommunications Act of 1996 (the "1996 Act") governs federal, state and local government oversight of siting of "personal wireless service" facilities. The 1996 Act establishes a comprehensive framework for the exercise of jurisdiction by state and local zoning authorities over the construction, modification and placement of facilities such as towers for cellular, personal communications service (PCS), and specialized mobile radio (SMR) transmitters:

- The new law preserves local zoning authority, but clarifies when the exercise of local zoning authority may be preempted by the FCC.
- Section 704 prohibits any action that would discriminate between different providers of personal wireless services, such as cellular, wide-area SMR and broadband PCS. It also prohibits any action that would ban altogether the construction, modification or placement of these kinds of facilities in a particular area.
- The law also specifies procedures which must be followed for acting on a request to place these kinds of facilities, and provides for review in the courts or the FCC of any decision by a zoning authority that is inconsistent with Section 704.

- Finally, Section 704 requires the federal government to take steps to help licensees in spectrum-based services, such as PCS and cellular, get access to preferred sites for their facilities. Federal agencies and departments will work directly with licensees to make federal property available for this purpose, and the FCC is directed to work with the states to find ways for states to accommodate licensees who wish to erect towers on state property, or use state easements and rights-of-way.

The attachments to this fact sheet seek to provide information concerning tower siting for personal wireless communications services. They include a summary of the provisions of Section 704 of the 1996 Act, the actual text of Section 704, and a technical information summary that describes the cellular, wide-area SMR and broadband PCS technologies that underlie the majority of requests for new tower sites.

Questions about the Telecommunications Act of 1996 generally may be addressed to Sheryl Wilkerson in the FCC's Office of Legislative and Intergovernmental Affairs, 202-418-1902 (e-mail: swilkers@fcc.gov). Questions about tower siting, licensing issues or technical matters may be addressed to Steve Markendorff, Deputy Chief, Commercial Wireless Division in the Wireless Telecommunications Bureau, 202-418-0620, (e-mail: smarkend@fcc.gov).

This Fact Sheet is available on our fax-on-demand system. The telephone number for fax-on demand is 202-418-2830. The Fact Sheet may also be found on the World Wide Web at <http://www.fcc.gov/wtb/wirehome.html>.

SUMMARY OF SECTION 704 OF THE TELECOMMUNICATIONS ACT OF 1996

The following is a summary of key provisions. The text of Section 704 is reproduced in its entirety as an attachment to this summary.

1. Local Zoning Authority Preserved

Section 704(a) of the 1996 Act amends Section 332(c) of the Communications Act ("Mobile Services") by adding a new paragraph (7). It preserves the authority of state and local governments over decisions regarding the placement, construction, and modification of personal wireless service facilities, except as provided in the new paragraph (7).

2. Exceptions

a. States and Localities May Not Take Discriminatory or Prohibiting Actions

Section 704(a) of the 1996 Act states that the regulation of the placement, construction, and modification of personal wireless service facilities by any State or local government or instrumentality thereof shall not unreasonably discriminate among providers of functionally equivalent services and shall not prohibit or have the effect of prohibiting the provision of personal wireless services. 47 U.S.C. §332(c)(7)(B)(i).

Review: Any person that is adversely affected by a state or local government's action or failure to act that is inconsistent with Section 332(c)(7) may seek expedited review in the courts. 47 U.S.C. §332(c)(7)(B)(v).

b. Procedures for Ruling on Requests to Place, Construct or Modify Personal Wireless Service Facilities

Section 704(a) also requires a State or local government to act upon a request for authorization to place, construct, or modify personal wireless service facilities within a reasonable time. Any decision to deny a request must be made in writing and be supported by substantial evidence contained in a written record. 47 U.S.C. §332(c)(7)(B)(ii), (iii).

c. Regulations Based On Environmental Effects of RF Emissions Preempted

Section 704(a) of the 1996 Act expressly preempts state and local government regulation of the placement, construction, and modification of personal wireless service facilities on the basis of the environmental effects of radio frequency emissions to the extent that such facilities comply with the FCC's regulations concerning such emissions. 47 U.S.C. §332(c)(7)(B)(iv).

Review: Parties may seek relief from the FCC if they are adversely affected by a state or local government's final action or failure to act that is inconsistent with this provision. 47 U.S.C. § 332(c)(7)(B)(v).

3. Federal Guidelines Concerning RF Emissions

Section 704(b) requires the FCC to prescribe and make effective new rules regarding the environmental effects of radio frequency emissions, which are under consideration in ET Docket 93-62, within 180 days of enactment of the 1996 Act.

NOTE: The pendency of this proceeding before the FCC does not affect the rules which currently are in effect governing the environmental effects of radio frequency emissions. Section 704(b) gives preemptive effect to these existing rules. See related attachments to the Fact Sheet.

4. Use of Federal or State Government Property

a. Federal Property

Section 704(c) of the 1996 Act requires the President (or his designee) to prescribe procedures by which the federal government may make available on a fair, reasonable and nondiscriminatory basis, property, rights-of-way and easements under their control, for the placement of new spectrum-based telecommunications services.

b. State Property

With respect to facilities siting on state property, Section 704(c) of the 1996 Act requires the FCC to provide technical support to States to encourage them to make property, rights-of-way and easements under their jurisdiction available for the placement of new spectrum-based telecommunications services.

NOTE: Information concerning technical support for tower siting which the FCC is making available to state and local governments is attached to the Fact Sheet.

5. Definitions

"Personal wireless services" include commercial mobile services, unlicensed wireless services, and common carrier wireless exchange access services. 47 U.S.C. §332(c)(7)(C)(i).

"Commercial mobile services" are defined in Section 332 of the Communications Act and the FCC's rules, and include cellular telephone services regulated under Part 22 of the FCC's rules, SMR services regulated under Part 90 of the FCC's rules, and PCS regulated under Part 24 of the FCC's rules. 47 C.F.R. §20.9.

"Unlicensed wireless services" are defined as the offering of telecommunications services using duly authorized devices which do not require individual licenses; direct-to-home satellite services are excluded from this definition. 47 U.S.C. §332(c)(7)(C)(iii).

COMPLETE TEXT OF SEC. 704 OF THE TELECOMMUNICATIONS ACT OF 1996

SEC. 704. FACILITIES SITING; RADIO FREQUENCY EMISSION STANDARDS.

(a) NATIONAL WIRELESS TELECOMMUNICATIONS SITING POLICY- Section 332(c) (47 U.S.C. 332(c)) is amended by adding at the end the following new paragraph:

`(7) PRESERVATION OF LOCAL ZONING AUTHORITY-

`(A) GENERAL AUTHORITY- Except as provided in this paragraph, nothing in this Act shall limit or affect the authority of a State or local government or instrumentality thereof over decisions regarding the placement, construction, and modification of personal wireless service facilities.

`(B) LIMITATIONS-

`(i) The regulation of the placement, construction, and modification of personal wireless service facilities by any State or local government or instrumentality thereof--

`(I) shall not unreasonably discriminate among providers of functionally equivalent services; and

`(II) shall not prohibit or have the effect of prohibiting the provision of personal wireless services.

`(ii) A State or local government or instrumentality thereof shall act on any request for authorization to place, construct, or modify personal wireless service facilities within a reasonable period of time after the request is duly filed with such government or instrumentality, taking into account the nature and scope of such request.

`(iii) Any decision by a State or local government or place,

construct, or modify personal wireless service facilities shall be in writing and supported by substantial evidence contained in a written record.

`(iv) No State or local government or instrumentality thereof may regulate the placement, construction, and modification of personal wireless service facilities on the basis of the environmental effects of radio frequency emissions to the extent that such facilities comply with the Commission's regulations concerning such emissions.

`(v) Any person adversely affected by any final action or failure to act by a State or local government or any instrumentality thereof that is inconsistent with this subparagraph may, within 30 days after such action or failure to act, commence an action in any

court of competent jurisdiction. The court shall hear and decide such action on an expedited basis. Any person adversely affected by an act or failure to act by a State or local government or any instrumentality thereof that is inconsistent with clause (iv) may petition the Commission for relief.

(C) DEFINITIONS- For purposes of this paragraph--

(i) the term 'personal wireless services' means commercial mobile services, unlicensed wireless services, and common carrier wireless exchange access services;

(ii) the term 'personal wireless service facilities' means facilities for the provision of personal wireless services; and

(iii) the term 'unlicensed wireless service' means the offering of telecommunications services using duly authorized devices which do not require individual licenses, but does not mean the provision of direct-to-home satellite services (as defined in section 303(v)).'

(b) RADIO FREQUENCY EMISSIONS- Within 180 days after the enactment of this Act, the Commission shall complete action in ET Docket 93-62 to prescribe and make effective rules regarding the environmental effects of radio frequency emissions.

(c) AVAILABILITY OF PROPERTY- Within 180 days of the enactment of this Act, the President or his designee shall prescribe procedures by which Federal departments and agencies may make available on a fair, nondiscriminatory basis, property, rights-of-way, and easements under their control for the placement of new telecommunications services that are dependent, in whole or in part, upon the utilization of Federal spectrum rights for the transmission or reception of such services. These procedures may establish a presumption that requests for the use of property, rights-of-way, and easements by duly authorized providers should be granted absent unavoidable direct conflict with the department or agency's mission, or the current or planned use of the property, rights-of-way, and easements in question. Reasonable fees may be charged to providers of such telecommunications services for use of property, rights-of-way, and easements. The Commission shall provide technical support to States to encourage them to make property, rights-of-way, and easements under their jurisdiction available for such purposes.

TECHNICAL INFORMATION CONCERNING CELLULAR, SPECIALIZED MOBILE RADIO AND PERSONAL COMMUNICATIONS SERVICES

April 1996

Cellular Information

The FCC established rules and procedures for licensing cellular systems in the United States and its Possessions and Territories. These rules designated 306 Metropolitan Statistical Areas and 428 Rural Service Areas for a total of 734 cellular markets and spectrum was allocated to license 2 systems in each market. Cellular is allocated spectrum in the 824-849 and 869-894 MHz ranges. Cellular licensees are generally required to license only the tower locations that make up their outer service contour. Licensees desiring to add or modify any tower locations that are within an already approved and licensed service area do not have to submit an application for that location to be added to their cellular license, although they may need FCC approval if the antenna would constitute a major environmental action (See question 2, below) or would exceed the criteria specified in Part 17 of the FCC's Rules ("Construction, Marking and Lighting of Antenna Structures"). Part 17 includes criteria for determining when construction or placement of a tower would require prior notification to the Federal Aviation Administration (FAA). (See question 3, below.)

A cellular system operates by dividing a large geographical service area into cells and assigning the same frequencies to multiple, non-adjacent cells. This is known in the industry as frequency reuse. As a subscriber travels across the service area the call is transferred (handed-off) from one cell to another without noticeable interruption. All the cells in a cellular system are connected to a Mobile Telephone Switching Office (MTSO) by landline or microwave links. The MTSO controls the switching between the Public Switched Telephone Network (PSTN) and the cell site for all wireline-to-mobile and mobile-to-wireline calls.

Specialized Mobile Radio (SMR) Information

Specialized Mobile Radio (SMR) service licensees provide land mobile communications on a commercial (*i.e.*, for profit) or private basis. A traditional SMR system consists of one or more base station transmitters, one or more antennas and end user radio equipment which often consists of a mobile radio unit either provided by the end user or obtained from the SMR operator. The base station receives either telephone transmissions from end users or low power signals from end user mobile radios.

SMR systems operate in two distinct frequency ranges: 806-821/851-866 MHz (800 MHz) and 896-901/935-940 MHz (900 MHz). 800 MHz SMR services have been licensed by the FCC on a site-by-site basis, so that the SMR provider must approach the FCC and receive a license for each and every tower/base site. In the future the FCC will license this band on a wide-area market approach. 900 MHz SMR was originally licensed in 46 Designated Filing Areas (DFAs) comprised of only the top 50 markets in the country. The Commission is in the process of auctioning the remainder of the United States and its Possessions and Territories in the Rand McNally defined 51 Major Trading Areas.

PCS Information

Broadband PCS systems are very similar to the cellular systems but operate in a higher frequency band, in the 1850-1990 MHz range. One other difference is that the FCC used different market areas for licensing purposes. The FCC used the Rand McNally definitions for 51 Major Trading Areas (MTAs) and 493 Basic Trading Areas (BTAs). PCS was allocated spectrum for six Broadband PCS systems and 26 Narrowband systems. The six Broadband PCS systems will be licensed as follows: two Broadband PCS licenses will be issued for each of the 51 MTAs and four for each of the 493 BTAs. The 26 Narrowband systems will be licensed as follows: eleven Narrowband PCS licenses will be issued for nationwide systems, six for each of five regional areas, seven for each of the 51 MTAs and two for each of the 493 BTAs.

PCS licensees are issued a blanket license for their entire market area and are not required to submit applications to license individual cell sites unless construction of the facility would be a major environmental action or would require FAA notification. Major environmental actions are defined by the National Environmental Policy Act of 1969 that is discussed in question 2, below. Therefore, the FCC has no technical information on file concerning PCS base stations.

Frequently asked questions concerning tower siting for personal wireless services.

1. Do local zoning authorities have any authority to deny a request for tower siting?

Answer: Yes. The Telecommunications Act of 1996 specifically leaves in place the authority that local zoning authorities have over the placement of personal wireless facilities. It does prohibit the denial of facilities siting based on RF emissions if the licensee has complied with the FCC's regulations concerning RF emissions. It also requires that denials be based on a reasoned approach, and prohibits discrimination and outright bans on construction, placement and modification of personal wireless facilities.

2. What requirements do personal wireless communications licensees have to determine whether a site is in a flood plain? A historical sites must also comply with the National Environmental Policy Act of 1969 (NEPA). as well as other mandatory federal environmental statutes. The FCC's rules that implement the federal environmental statutory provisions are contained in sections 1.1301-1.1319. The FCC's environmental rules place the responsibility on each applicant to investigate all the potential environmental effects, and disclose any significant effects on the environment in an Environmental Assessment (EA), as outlined in section 1.1311, prior to constructing a tower. The applicant is required to consult section 1.1307 to determine if its proposed antenna structure will fall under any of the listed categories that may significantly affect the environment. If it does, the applicant must provide an EA prior to proceeding with the tower construction and. under section 1.1312, must await FCC approval before commencing any such construction even if FCC approval is not otherwise required for such construction. The FCC places all proposals that may significantly impact the environment on public notice for a period of 30 days, seeking any public comments on the proposed structures.

The categories set forth in section 1.1307 include:

Wilderness Area
Wildlife Preserve
Endangered Species
Historical Site
Indian Religious Site
Flood Plain
Wetlands
High Intensity White Lights in Residential Neighborhoods
Excessive Radiofrequency Radiation Exposure

3. Are there any FCC regulations that govern where towers can or cannot be placed?

Answer: The FCC mandates that personal wireless companies build out their systems so that adequate service is provided to the public. In addition, all antenna structures used for communications must be approved by the FCC in accordance with Part 17 of the FCC Rules. The FCC must determine if there is a reasonable possibility that the structure may constitute a menace to air navigation. The tower height and its proximity to an airport or flight path will be considered when making this determination. If such a determination is made the FCC will specify appropriate painting and lighting requirements. Thus, the FCC does not mandate where towers must be placed, but it may prohibit the placement of a tower in a particular location without adequate lighting and marking.

4. Does the FCC maintain any records on tower sites throughout the United States? How does the public get this information (if any)?

Answer: The FCC maintains a general tower database on the following structures: (1) any towers over 200 feet, (2) any towers over 20 feet on an existing structure (such as a building, water tower, etc.) and (3) towers that are close to airports that may cause potential hazards to air navigation. The FCC's licensing databases contain some base site information for Cellular and SMR systems. The general tower database and the Cellular and SMR data that may be on file with the FCC is available in three places:

(1) Cellular licensing information is available in the Public Reference Room of the Wireless Telecommunications Bureau's Commercial Wireless Division. The Public Reference Room is located on the fifth floor of 2025 M Street, NW, Washington, DC 20554, telephone (202)418-1350. On-line database searches of cellular licensing information along with queries of the FCC's general tower database can also be accomplished at the Public Reference Room.

(2) People who would like to obtain general tower information through an on-line public access database should call or write Interactive Systems, Inc., 1601 North Kent St., Suite 1103, Arlington, VA 22209, telephone 703-812-8270.

(3) The FCC does not duplicate these records, but has contracted with International Transcription Service, Inc. to provide this service. Requests for copies of information should be addressed to International Transcription Service, Inc. (ITS, Inc.), 2100 M St., NW, Suite 140, Washington, DC 20037, telephone 202-857-3800.

5. Why do Cellular and PCS providers require so many tower sites?

Answer: Low powered transmitters are an inherent characteristic of Cellular Radio and Broadband PCS. As these systems mature and more subscribers are added, the effective radiated power of the cell site transmitters is reduced so frequencies can be reused at closer intervals thereby increasing subscriber capacity. There are over 30 million mobile/portable cellular units and more than 22 thousand cell sites operating within the United States and its Possessions and Territories. PCS is just beginning to be offered around the country. Due to the fact that Broadband PCS is located in a higher frequency range, PCS operators will require more tower sites as they build their systems to provide coverage in their service areas as compared to existing Cellular carriers. Therefore, due to the nature of frequency reuse and the consumer demand for services, Cellular and PCS providers must build numerous base sites.

6. Can Cellular, SMR and PCS providers share tower structures?

Answer: Yes, it is technologically possible for these entities to share tower structures. However, there are limits to how many base station transmitters a single tower can hold and different tower structures have different limits. Moreover, these providers are competitors in a more and more competitive marketplace and may not be willing to share tower space with each other. Local zoning authorities may wish to retain a consulting engineer to evaluate the proposals submitted by wireless communications licensees. The consulting engineer may be able to determine if there is some flexibility as to the geographic location of the tower.

7. Is the Federal government helping to find ways to accommodate multiple licensees of personal wireless services?

Answer: Yes. The FCC has designated Steve Markendorff, Chief, Broadband Branch, Commercial Wireless Division, Wireless Telecommunications Bureau, FCC to ask and respond to questions concerning tower siting issues. His telephone number is 202-418-0620. Also, President Clinton issued an Executive Memorandum on August 10, 1995 directing the Administrator of General Services (GSA), in coordination with other Government departments and agencies, to develop procedures to facilitate appropriate access to Federal property for the siting of mobile services antennas. GSA recently released "Government-Wide Procedures for Placing Commercial Antennas," 61 Fed Reg 14,100 (March 29, 1996). For further information contact James Herbert, Office of Property Acquisition and Realty Services, Public Building Service, General Services Administration, 18th & F Streets, NW, Washington, DC 20405, telephone 202-501-0376.

8. Have any studies been completed on potential hazards of locating a tower/base site close to residential communities?

Answer: In connection with its responsibilities under NEPA, the FCC considers the potential effects of radiofrequency (RF) emissions from FCC-regulated transmitters on human health and safety. Since the FCC is not the expert agency in this area, it uses standards and guidelines developed by those with the appropriate expertise. For example, in the absence of a uniform federal standard on RF exposure, the FCC has relied since 1985 on the RF exposure guidelines issued in 1982 by the American National Standards Institute (ANSI C95.1-1982). In 1991, the Institute of Electrical and Electronic Engineers (IEEE) issued guidelines designed to replace the RF ANSI exposure guidelines. These guidelines (ANSI/IEEE C95.1-1992) were adopted by ANSI. The Telecommunications Act of 1996 mandates that the FCC complete its proceeding in ET Docket 93-62, in which it is considering updating the RF exposure guidelines, no later than early August 1996. Copies of this proceeding can be obtained from the International Transcription Service, Inc. (ITS), telephone 202-857-3800. Presently, RF emission requirements are contained in Section 1.1307(b) of the FCC's rules, 47 C.F.R. §1.1307(b), for all services. PCS has service specific RF emission provisions in Section 24.52 of the FCC's rules, 47 C.F.R. § 24.52.

Additional information concerning RF emission hazards can be obtained through a variety of sources:

- (1) Information concerning RF hazards can be obtained on the World Wide Web at <http://www.fcc.gov/oet/faqs>. RF safety questions are answered and further RF documents and information are contained under the Cellular Telephony Section.
- (2) OET Bulletins 56 and 65 concerning effects and potential RF hazards can be requested through the Radiofrequency Safety Program at 202-418-2464. Additionally, any specific questions concerning RF hazards can be answered by contacting the FCC at this phone number.

The FCC maintains a Communications and Crisis Management Center which is staffed 24 hours a day, seven days a week. In the event of an emergency, such as a radiofrequency hazard threatening public safety or health, you may call 202-632-6975. The watch officer who answers at that number can contact our compliance personnel in your area and dispatch them within a matter of hours.