


<b>Staff Report</b>    <b>Zoning and Land Regulation Committee</b>	<i>Public Hearing:</i> <b>October 25, 2022</b>		<b>CUP 02578</b>
	<i>Zoning Amendment Requested:</i> <b>TO CUP: Communication Tower</b>		<i>Town/Section:</i> <b>DUNKIRK, Section 03</b>
	<i>Size:</i> <b>3.8 Acres</b>	<i>Survey Required:</i> <b>No</b>	<i>Applicant:</i> <b>BRETT LUNDE</b>
	<i>Reason for the request:</i> <b>195' Self-Support Communications Tower</b>		<i>Address:</i> <b>1576 SPRING RD</b>



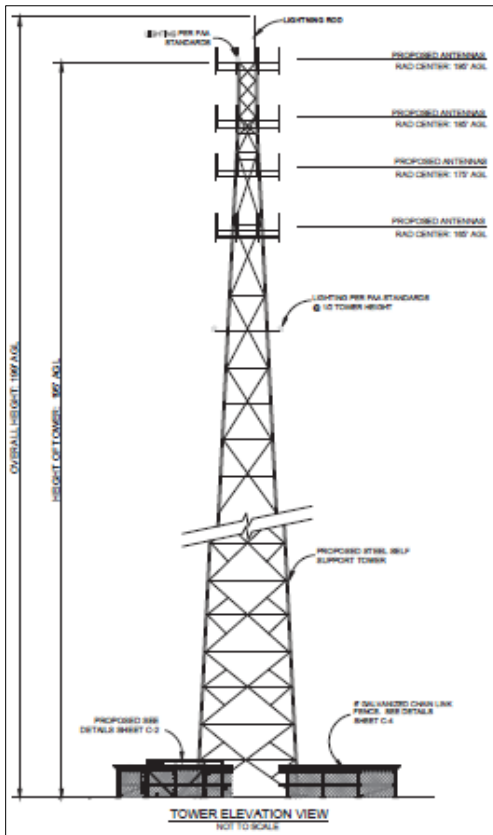
**DESCRIPTION:** Dish Wireless and Iron Mountain Towers (“TowerKing”) are requesting approval of a Conditional Use Permit (CUP) for a 195’ self-support lattice style communication tower (199’ with lightning rod) that will allow Dish to provide its cellular service to the surrounding area. Applicants have negotiated a lease agreement for a 60’x60’ (3,600 sqft) area in the southeasterly corner of the property of the ~3.8 acre RR-2 zoned parcel owned by Brett Lunde at 1576 Spring Rd in section 3 of the town of Dunkirk.

Applicants provided a sworn statement by an engineer for Dish indicating that the new tower is needed at the proposed location because there are no existing towers or other collocation options within their identified search ring. The tower would be owned and operated by TowerKing, with Dish as the anchor tenant. The tower would include three additional collocation spots for other providers to potentially utilize.

The proposal has been reviewed by a third party radio frequency engineering firm, CityScape Consultants. CityScape’s review and report focuses primarily on determining if the proposed tower meets the requirements of the county ordinance as well as other applicable state and federal laws, and is justified based on supporting technical documentation. CityScape’s findings and recommendations are summarized below, and the full report is available on the county’s [legistar file for CUP 2578](#).

Action on tower CUPs must be completed within a state-imposed 90-day timeframe – in this by case Monday, December 19th – unless extended by mutual agreement of the applicant and county.

**CONDITIONAL USE PERMIT DECISION MAKING:** Conditional uses are those uses which, because of their unusual nature and potential for impacts on neighboring lands, public facilities, the environment or general welfare, warrant special consideration and review. The zoning ordinance includes specific requirements and standards for review and approval of conditional use permits.



In order to obtain a Conditional Use Permit, an applicant must provide **substantial evidence** to demonstrate that the application, and all requirements and conditions established by the county relating to the conditional use, are or shall be satisfied. Substantial evidence means, *“facts and information, other than merely personal preferences or speculation, directly pertaining to the requirements and conditions an applicant must meet to obtain a conditional use permit and that reasonable persons would accept in support of a conclusion.”*

Prior to granting or denying a conditional use, the town board, if it chooses to act, and zoning committee shall make written findings of fact based on evidence presented and issue a determination whether the proposed conditional use, with any recommended conditions, meets all of the following standards:

- General standards for approval under s. [10.101\(7\)\(d\)](#)
- Any prescribed standards specific to the applicable zoning district – none apply in this case
- Any prescribed standards specific to the particular use under s. 10.103 – in this case, section [10.103\(9\)](#)

The town board and/or zoning committee must deny a conditional use permit if either/both find that the standards for approval are not met, and must approve if either/both find that the standards for approval are met.

The decision to approve or deny a conditional use permit must be supported by substantial evidence. Any conditions imposed must be based on substantial evidence, related to the purpose of the ordinance, reasonable, and, to the extent practicable, measurable.

The town board and zoning committee must review the proposed conditional use against all of the following standards for approval.

General Standards for Approval of a Conditional Use Permit

1. That the establishment, maintenance or operation of the conditional use will not be detrimental to or endanger the public health, safety, comfort or general welfare;
2. That the uses, values and enjoyment of other property in the neighborhood for purposes already permitted shall be in no foreseeable manner substantially impaired or diminished by establishment, maintenance or operation of the conditional use;
3. That the establishment of the conditional use will not impede the normal and orderly development and improvement of the surrounding property for uses permitted in the district;
4. That adequate utilities, access roads, drainage and other necessary site improvements have been or are being made;
5. That adequate measures have been or will be taken to provide ingress and egress so designed as to minimize traffic congestion in the public streets;
6. That the conditional use shall conform to all applicable regulations of the district in which it is located.
7. That the conditional use is consistent with the adopted town and county comprehensive plans.

8. If the conditional use is located in a Farmland Preservation Zoning district, the town board and zoning committee must also make the findings described in s. 10.220(1).

Dane County communication tower ordinance: Approval of a Conditional Use Permit is required for a new or substantially modified communication tower. In addition to the review procedures and standards for all Conditional Use permits, communication tower applications are subject to the provisions of the Dane County communication tower ordinance, section [10.103\(9\)](#). The purpose of the ordinance is to ensure that facilities are sited in a manner that:

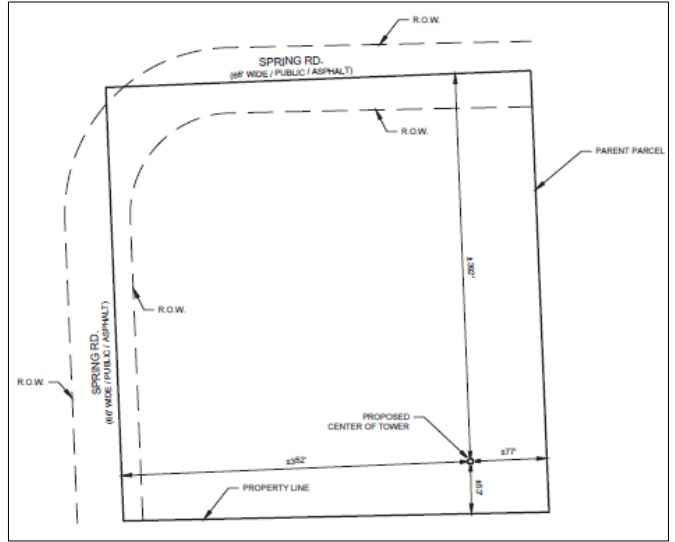
1. Protects and promotes public health, safety, community welfare and the quality of life in Dane County as set forth within the goals, objectives and policies of the Dane County Comprehensive Plan, this ordinance, and s. 66.0404 Wis. Stats;
2. Respects the rights and interests of towns, neighboring property owners, and existing land uses on adjoining properties in the decision making process;
3. Recognizes the public necessity for telecommunication facilities and the numerous benefits and opportunities a robust wireless infrastructure make possible for county residents, including improved public safety, efficient production and distribution of goods and services, access to educational resources, and economic development opportunities;
4. Allows appropriate levels of service to be obtained throughout the County, including expansion to rural areas seeking access to personal communications and broadband internet services;
5. Minimizes the number of transmission towers throughout the County;
6. Encourages the joint use of new and existing telecommunication facilities as a preferred siting option;
7. Ensures that all telecommunication facilities, including towers, antennas, and ancillary facilities are located and designed to minimize the visual and environmental impact on the immediate surroundings and throughout the county;
8. Avoids potential damage to adjacent properties from tower failure or ice falls through sound engineering and careful siting of structures; and
9. Provides a public forum to assure a balance between public concerns and private interests in establishing commercial telecommunications and related facilities.

Dane County's ordinance has robust application requirements for communication tower proposals. In addition to providing a detailed statement of intent, site and operations plans, and responses demonstrating how the proposal satisfies the standards for approval of a CUP, applicants must provide technical documentation verifying the need for the tower at the requested height and location. This technical information is provided directly to, reviewed and fact checked by the 3<sup>rd</sup> party engineering firm, CityScape Consultants. The application also includes [photo simulations](#) to help decision makers and other interested parties assess the potential aesthetic impact of the proposed tower. The application packet is available on the county's legistar website, [here](#).



**RELEVANT FACTS & INFORMATION**

Location, size, existing use and characteristics of subject property: The subject property is a ~3.8 acre parcel located at 1576 Spring Road in section 3 of the town of Dunkirk. The property is located along the town line between Dunkirk and the neighboring township to the north, Pleasant Springs. The property is within a mile of the city of Stoughton municipal boundary. Principal existing use of the property is rural residential, including the owner’s residence and several accessory buildings. The easterly ~2 acres of the property where the tower is proposed are in agriculture / open space use. The 3,600 sqft lease area is at an approximate elevation of 888 feet above mean sea level. The center of the tower would be setback from the southerly property line by 53’ and the easterly property line by 77’.

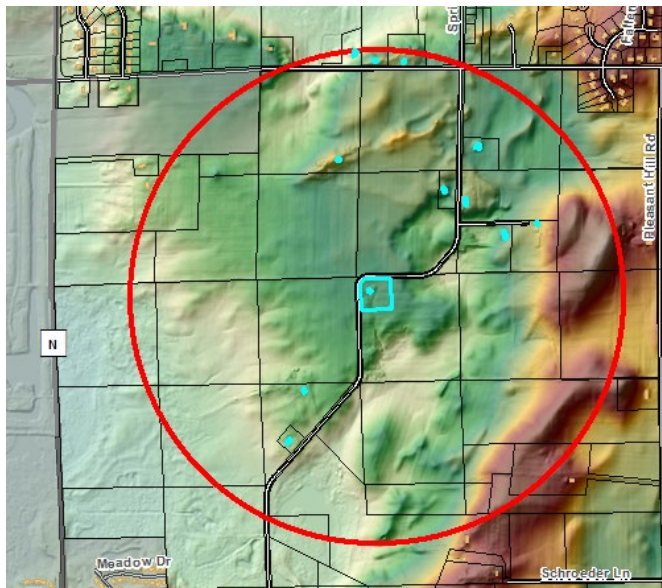


Current zoning and applicable district regulations: The property is zoned RR-2 (Rural Residential, 2-4 acres). Communication towers are listed as a conditional use in this district. Conditional uses are subject to the General standards for approval under s. 10.101(7)(d), along with any prescribed standards specific to the particular use under s. 10.103 - in this case, section 10.103(9)

Surrounding land uses / neighborhood: Surrounding land uses include agriculture / open space and scattered rural residences. There are 12 residences, including the owner of the subject property, located within 3,000’ of the proposed site.

No sensitive environmental features or resource protection areas located on the proposed CUP site.

There are two existing communication towers located within approximately 1.5 miles of the subject property.



*Residences within 3,000’ of tower site*

Utilities, access, drainage, and other necessary site improvements: The applicant proposes a 50’ x 50’ fenced compound around the tower site. Access would be via the existing driveway servicing the residence at 1576 Spring Road, as well as a planned new gravel extension of approximately 200’ to the tower site. No structural development, signage, or onsite waste disposal is proposed.

Applicable additional standards: In addition to the noted county code standards and requirements, other state and federal regulations apply to siting of communication towers.

**TOWN / COUNTY PLAN:** The property is within a designated agricultural preservation area in the Town of Dunkirk and Dane County Comprehensive Plans. Within designated agricultural preservation areas, plan policies focus on preserving both farmland and the town’s rural character by strictly limiting the density and siting of development.

The town plan requires that new towers comply with the county's tower ordinance. The county comprehensive plan includes policies that promote well planned cellular infrastructure and shared facilities, where feasible.

**3<sup>rd</sup> PARTY ENGINEERING REVIEW – UPDATED 12/9/22:** The County relies on a the services of CityScape, a 3rd party radio frequency engineering consultant, to provide an independent and unbiased technical review of communication tower proposals. In addition to evaluating proposals for compliance with local, state, and federal regulations, CityScape also analyzes whether a particular site and tower height is justified based on the provided technical documentation, and if collocation on any existing tower facilities is feasible.

At CityScape's request, the applicant provided summary confirmation from a Dish network engineer that collocation was not an option on either of two existing communication towers located within about 1.5 miles of the subject property because of signal overlap with other sites within the network. That summary confirmation is included in an updated notarized affidavit. CityScape's report includes the following statement regarding the feasibility of collocation on the 2 nearby towers:

*“Collocation on existing structures is not feasible because collocating on either of the two nearest existing tall towers, which are both about 1.5 miles from the center of the search ring, would “create too much overlap in coverage” with an adjacent DISH facility and would “create a gap in coverage...which would require an additional tower to provide adequate service.”*

CityScape's report notes some deficiencies with the photo simulations provided with the application and also notes some concerns with the search rings provided by the applicant. As noted on page 5, below, the applicant has submitted updated [photo simulations](#). A search ring is a map showing the general location within which a mobile service provider must locate its facilities in order to provide services to a targeted area. Although concerns were raised about the search rings, CityScape nonetheless provided the summary finding and recommendations:

*“...[A] need has been demonstrated for a new antenna support structure of one hundred ninety five (195) feet in the immediate vicinity of the proposed site to fill a gap in DISH Wireless's service coverage.”*

*Should the Committee approve the Conditional Use Permit application, CityScape recommends the following conditions:*

- 1. At time of permitting, the Applicant shall provide an approved and stamped tower design from a Wisconsin-licensed Structural Engineer certifying that the tower will support the antennas and equipment of at least three (3) total wireless carriers; and,*
- 2. The Applicant shall provide visual screening and/or landscaping to minimize the aesthetic impact of the tower and compound; and,*
- 3. The proposed structure shall not be lighted nor shall it be painted a color incompatible with the environment.*

### **STAFF ANALYSIS – Updated 12/9/22**

Dish and its subsidiaries are obligated to provide certain minimum levels of 5G service within the geographic areas covered by their FCC licenses. As indicated in the applicant's submittal, this site is being proposed because there is no existing tower in the area where Dish Wireless needs a facility to meet its network objectives within the greater Stoughton area.

Common Tower Related Issues. There are a number of issues that are commonly associated with the siting, operation, and maintenance of communication towers. Below is a brief synopsis of these issues in the context of the tower proposed under CUP #2578.

*Air navigation.* The potential for impacts to air navigation, including nearby private airports, is a concern handled through the FAA. The applicant has provided a copy of the FAA’s “determination of no hazard to air navigation” for this site.

*Fall-down and ice-fall.* Catastrophic tower collapse as well as ice fall from towers can be a concern for towers located in developed areas or near occupied buildings. The tower would be located approximately 285’ from the property owner’s residence. The applicant has provided an [engineering certification](#) indicating an anticipated fall down radius of 52’ or less. While ice fall is a possibility with all towers, the likelihood of damage is relatively low given the rural location and prevailing winds coming from the west.

*Visual aesthetics.* Aesthetics is a highly subjective issue and one of the most significant points of contention often associated with new communication tower requests, particularly those that would involve nighttime lighting. There are 12 residences within 3,000 feet of the site. The closest is the owner’s residence at 285’, with the next closest approximately 1,529’ away from the proposed tower. Given the lack of topography and comparatively small site (3.8 acre lot), the tower will undoubtedly be visible from the surrounding area. The tower would not be lighted.

Photo Location Directly West – (After)



The applicant has submitted *updated photo simulations* that illustrate the potential visual impact from a few locations surrounding the property. Under applicable state law, aesthetics cannot be the *sole* determining factor in denying a new tower proposal. In its review, CityScape noted that the initially submitted photo simulations did not include mounted antenna arrays atop the tower and therefore did not depict the tower as it would appear. The updated photo simulations do show the antenna arrays, however, it is unclear if the simulations are to scale, as no scale is listed.

*Electromagnetic radiation.* The issue of electromagnetic radiofrequency (RF) emissions is commonly raised in response to communication tower proposals. Given the rural location of the site and lack of nearby residential structures, RF emissions should not be an issue. CityScape has requested a letter from Dish confirming that the facility will be in compliance with the RF energy human exposure guidelines and FCC rules regarding interference to other communications services.

Consistency with adopted town / county comprehensive plan: To be approved, a proposed conditional use must be found to meet the standards in section 10.101(7)(d)1. This includes a finding that the proposed conditional use is consistent with the adopted town and county comprehensive plans.

As noted above, the property is in a designated agricultural preservation area. Town / county planning goals, objectives, and policies emphasize the preservation of farmland and rural character. The town of Dunkirk comprehensive plan’s overarching land use goal states: *“Create a pattern of development that includes a variety of land uses, minimizes potential conflicts between incompatible land uses, and maintains our rural character.”*

The plan lists the following supporting objectives for that overarching goal:

1. *Maintain the Town’s rural character.*
2. *Reduce and prevent land use conflicts with residents and other land users.*

#### **Telecommunications**

##### *Policies and Programs*

1. Encourage Dane County communities to adopt enforceable guidelines for siting and removing telecommunications facilities.
2. Strengthen consideration of aesthetics in the building of towers (e.g., education, design competition, exhibits).
3. Maximize coordination of telecommunication facility needs with existing structures, buildings, water towers, etc.
4. Adopt ordinance requiring feasibility study of alternatives before allowing new tower construction.
5. Because Internet communication has become necessary in the conduct of commerce and provision of services in the county, promote countywide wireless Internet service (WiFi).
6. Encourage exploration of municipally owned telecommunication facilities to furnish wireless

[Dane County Comprehensive Plan Telecommunications Policies](#)

3. *Protect and maintain public health, safety, and general welfare.*

The majority of the land use criteria for siting new development found in the town plan are intended primarily for residential and accessory structures.

For communication towers, the town plan includes the following policy:

*“Ensure that development of new cellular towers is consistent with Dane County’s ordinance regarding the procedure and standards for the placement, construction, or modification of communication towers.”*

Impacts to rural character and aesthetics can be difficult issues for decision makers to navigate. Particularly in the context of siting facilities that play a critical role in the delivery of services town and county residents utilize on a daily basis. Understandably, there is no way to completely hide a 195’ tower from view of the surrounding area. There are certainly options for addressing visual aesthetics, including tower design and painting the tower a color that blends with the surrounding environment. However, tower design alternatives involve tradeoffs. For example, a monopole tower may be less visually obtrusive than a self-support lattice tower, but more expensive to construct and less sturdy and adaptable to the needs to potential collocators.

Regarding concerns about aesthetic impacts to rural character, the county zoning ordinance provides the [following](#):

3. *The committee may require, unless it is shown to be unreasonable, modifications to the tower design, including but not limited to visual screening or landscaping, that it deems necessary to minimize the aesthetic impact of the tower.*

Modifications to the tower design (e.g., monopole, landscaping, paint color) may be required if the town and/or county zoning committee determine it necessary to support findings that the proposed conditional use satisfies one or more [standards of approval](#).

**TOWN:** The town of Dunkirk approved the CUP with the following two conditions:

1. Must landscape – suggested to use Hedgeline type fencing and to plant approximately 3 trees.
2. Must abide by county rules for continual use of tower.

**STAFF RECOMMENDATION – Updated 12/9/22:** As noted above on page 2 of this report, prior to granting or denying a conditional use, the town board, if it chooses to act, and the county zoning committee, must make written findings of fact based on evidence presented and issue a determination whether the proposed conditional use, with any recommended conditions, meets all of the applicable standards for approval of a CUP found in sections [10.101\(7\)\(d\)1](#) and [10.103\(9\)\(c\)](#) of the zoning code. The town board and/or zoning committee must deny a conditional use permit if either/both find that the standards for approval are not met, and must approve if either/both find that the standards for approval are met.

Should the ZLR Committee ultimately find that the proposal meets the applicable standards for approval of a Conditional Use Permit, staff recommends that the following conditions be required. Please note that the list below incorporates the two conditions specified by the town of Dunkirk.

Conditions applicable to all CUPs from section [10.101\(7\)\(d\)2.a.](#):

1. Any conditions required for specific uses listed under s. [10.103](#). (See below)
2. The physical development and operation of the conditional use must conform, in all respects, to the approved site plan, operational plan and phasing plan.

3. New and existing buildings proposed to house a conditional use must be constructed and maintained to meet the current requirements of the applicable sections of the Wisconsin Commercial Building Code or Uniform Dwelling Code.
4. The applicant shall apply for, receive and maintain all other legally required and applicable local, county, state and federal permits. Copies of approved permits or other evidence of compliance will be provided to the zoning administrator upon request.
5. Any ongoing business operation must obtain and continue to meet all legally required and applicable local, county, state and federal licensing requirements. Copies of approved licenses or other evidence of compliance will be provided to the zoning administrator upon request.
6. Existing onsite wastewater sewage disposal systems, if any, serving the conditional use must be inspected by a licensed plumber to determine its suitability for the proposed or expanded use. Deficient systems must be brought, at the owner's expense, into full compliance with the current requirements for new development of the state plumbing code and Chapter 46, Dane County Code.
7. All vehicles and equipment must access the site only at approved locations identified in the site plan and operations plan.
8. Off-street parking must be provided, consistent with s. [10.102\(8\)](#).
9. If the Dane County Highway, Transportation and Public Works Department or the town engineer determine that road intersection improvements are necessary to safely accommodate the conditional use, the cost of such improvements shall be borne by the landowner. Costs borne by the landowner shall be proportional to the incremental increase in traffic associated with the proposed conditional use.
10. The Zoning Administrator or designee may enter the premises of the operation in order to inspect those premises and to ascertain compliance with these conditions or to investigate an alleged violation. Zoning staff conducting inspections or investigations will comply with any applicable workplace safety rules or standards for the site.
11. The owner must post, in a prominent public place and in a form approved by the zoning administrator, a placard with the approved Conditional Use Permit number, the nature of the operation, name and contact information for the operator, and contact information for the Dane County Zoning Division.
12. The owner or operator must keep a copy of the conditional use permit, including the list of all conditions, on the site, available for inspection to the public during business hours.
13. Failure to comply with any imposed conditions, or to pay reasonable county costs of investigation or enforcement of sustained violations, may be grounds for revocation of the conditional use permit. The holder of a conditional use permit shall be given a reasonable opportunity to correct any violations prior to revocation.

Conditions of approval specific to communications towers (derived in part from section [10.103\(9\)\(d\)](#)).

1. The communication tower approved under CUP 2578 is intended to support installation of mobile service facility(ies) as defined under sec. 66.0404, Wisconsin Statutes, and shall be designed to support, without substantial modification, at least four users (the primary user and three collocation sites). Such collocation sites shall be made available at a minimum height of 150 feet above ground level or higher. A Wisconsin-licensed Structural Engineer shall approve and stamp the tower design, and certify that the tower can support at least four users.
2. Visual screening and/or landscaping shall be installed around the fenced tower compound to minimize the aesthetic impact of the tower and compound area. The compound area shall be fenced with hedgeline style fencing and a minimum of 3 trees shall be planted. The permit holder must present plans for the fencing and tree plantings to the Zoning Administrator for review and approval prior to installation. Any trees planted shall be maintained in viable growing conditions.
3. The proposed structure shall not be lighted nor shall it be painted a color incompatible with the environment.



4. The tower owner shall make the collocation sites required hereunder available for the placement of technologically compatible antenna arrays and equipment upon contractual provisions which are standard in the industry and at prevailing market rates allowing the permit holder to recoup the cost of providing the collocation sites and a fair return on investment.
5. No lease or deed restriction on property that is proposed for the location of a mobile service support structure or mobile service facility shall preclude the owner or lessee from entering into agreements, leases, or subleases with other providers or prohibit collocation of other providers.
6. Upon written inquiry by the committee, the holder of a Conditional Use Permit issued under this section shall have the burden of presenting to the committee credible evidence establishing to a reasonable certainty the continued compliance with all applicable standards and conditions placed upon the conditional use permit. Failure to establish compliance with the standards and conditions shall be grounds for revocation of the permit. In the event the committee determines that it is necessary to consult with a third party to ascertain compliance with the standards and conditions, all reasonable costs and expenses, except travel expenses, associated with such consultation shall be borne by the holder of said conditional use permit. Failure to pay such costs and expenses or provide information requested by the committee shall be grounds for revocation of the conditional use permit.
7. Within 90 days of approval of the conditional use permit, or prior to issuance of a zoning permit for construction of the approved communication tower, whichever comes first, the tower owner shall provide Dane County with a bond, or evidence of an existing bond, in the amount of \$20,000 ensuring performance of owner's obligation to remove any communication tower, array or any other equipment or structure placed or erected pursuant to the conditional use permit, including payment for such removal by Dane County or its agent, in the event the permit is revoked or the use permitted thereunder ceases for a continuous period of 12 months. Said bond shall expressly state that it will remain in full force and effect for a period of at least six months after the surety provides Dane County written notification of expiration or termination of the surety's obligation under the bond. Applicant shall remove any communication tower, array or any other equipment or structure placed or erected pursuant to the conditional use permit no less than 60 days prior to the termination or expiration of the bond required hereunder.
8. If the mobile service facility(ies) to be provided from the communication tower are not installed within 1 year of the date of conditional use permit approval, or if the mobile service facility(ies) are later removed, or cease to be used for a continuous period of 12 months, the county zoning committee may take action to revoke the conditional use permit. In the event the permit is revoked, the tower owner shall remove the tower within 60 days of the county zoning committee action. If the tower is not removed within the 60 days, the county may enter upon the premises and remove the tower at the expense of the tower owner.

Any questions about this proposal, please contact Majid Allan at: [allan@countyofdane.com](mailto:allan@countyofdane.com), or 608-267-2536 (office), or 608-720-0167 (cell).