

**Staff Report**



**Zoning and Land Regulation Committee**

Questions? Contact:  
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*Public Hearing:* **February 22, 2022**

*Zoning Amendment Requested:*

**CONDITIONAL USE PERMIT FOR: Communication Tower**

*Size:* **0.23 Acres**

*Survey Required:* **No**

*Reason for the request:*

**195' telecommunication tower**

**CUP 02553**

*Town/Section:*

**Primrose / Section 29**

*Owner*

**Jeffrey L Webber**

*Applicant*

**Bug Tussel Wireless / Cloud 1, LLC**

*Address:*

**9108 Ridge Drive**



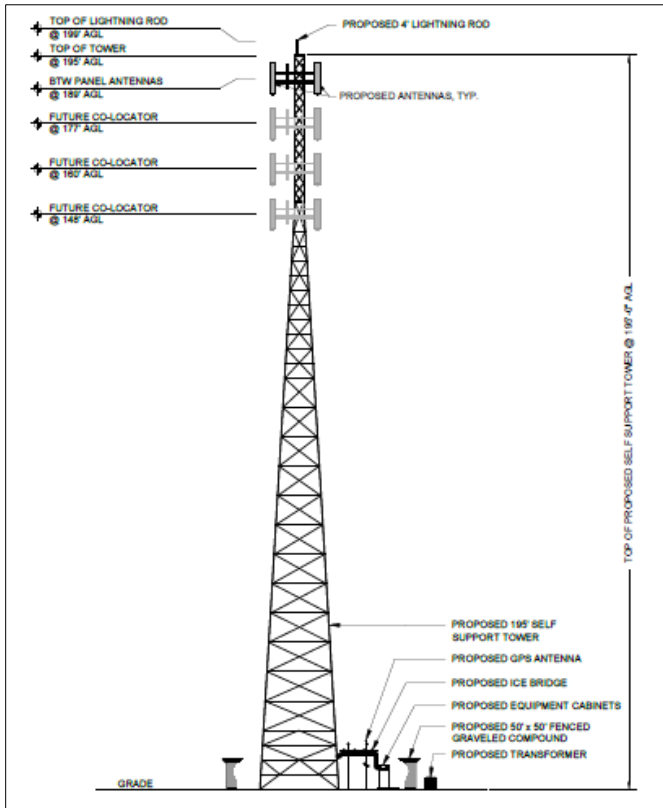
**DESCRIPTION:** Bug Tussel Wireless and Cloud 1, LLC are requesting approval of a Conditional Use Permit (CUP) for a 195' self-support lattice style communication tower (199' with lightning rod) that will allow Bug Tussel to provide its wireless internet service to the surrounding area. Applicants have negotiated a lease and easements on a ~0.23 acre area of land owned by Jeffery and Beverly Weber located approximately 200' west of the Weber's residence at 9108 Ridge Drive in section 29 of the town of Primrose. The property is part of the Weber's 182 acre farm zoned FP-35 (General Farmland Preservation).

Applicants are proposing the new tower at the proposed location due to the fact that there are no other existing towers or other collocation options within their identified 1.5 mile search ring. Note that this is a similar proposal to a prior application on a different area of the Weber property which was denied by the town of Primrose in 2021. The tower would include three collocation spots for other providers to utilize.

The proposal has been reviewed by an independent radio frequency engineering firm, CityScope Consultants. Their report is available on the county's legistar site and the findings are briefly summarized below.

Action on tower CUPs must be completed within a state-imposed 90-day timeframe – in this by case March 13 – 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.



Proposed 195' lattice tower

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 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 – in this case, section [10.220\(1\)\(a\)](#)
- 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 it finds that the standards for approval are not met, and must approve if it finds 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\(1\)](#).

#### Farmland Preservation Standards for Approval of a Conditional Use

The town board and zoning committee must find that the following standards are met before approving any conditional use permit in any Farmland Preservation zoning district:

1. The use and its location in the Farmland Preservation Zoning District are consistent with the purposes of the district.
2. The use and its location in the Farmland Preservation Zoning district are reasonable and appropriate, considering alternative locations, or are specifically approved under state or federal law.
3. The use is reasonably designed to minimize the conversion of land, at and around the site of the use, from agricultural use or open space use.
4. The use does not substantially impair or limit the current or future agricultural use of surrounding parcels of land that are zoned for or legally restricted to agricultural use.
5. Construction damage to land remaining in agricultural use is minimized and repaired, to the extent feasible.

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. As noted above, this technical information is reviewed and fact checked by a 3<sup>rd</sup> party engineering firm. The application must also include 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.

## RELEVANT FACTS & INFORMATION

Location, size, existing use and characteristics of subject property: The subject property is a ~182 acre farm located in section 29, the southwest area of the town of Primrose lying north of Ridge Drive and east of County Highway G. The tower site is located approximately 1,250' north of Ridge Drive in a small wooded area immediately west of the owner's residence. The CUP area is at an approximate elevation of 1,106 feet above mean sea level. Existing use of the property is open space/woods.

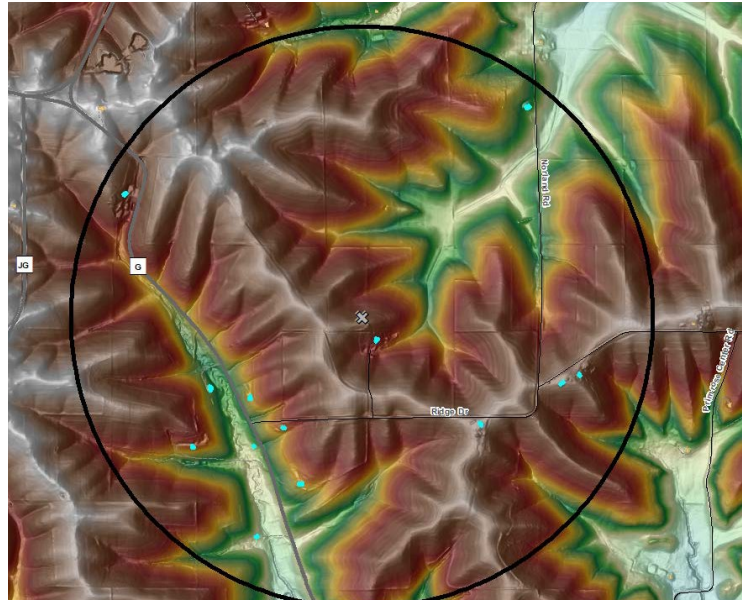
Current zoning and applicable district regulations: The property is zoned FP-35 (General Farmland Preservation). Communication towers are available as a conditional use in this district. All conditional uses are subject to the additional farmland preservation conditional use standards noted above.

Surrounding land uses / neighborhood: Surrounding land uses include agriculture / open space and scattered rural residences. There are 13 residences located within 4,500' of the proposed site, and 95 residences within 2 miles.

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

The property is located in a designated farmland preservation area per the Town of Primrose and Dane County comprehensive plans.

Utilities, access, drainage, and other necessary site improvements: The applicant proposes a 50' x 50' fenced gravel compound around the tower site. Access would be via the existing driveway servicing the residence at 9108 Ridge Drive, as well as a planned new gravel extension of approximately 210' to the tower site. No structural development, signage, or onsite waste disposal is proposed.



Residences within 4,500' of tower site

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 Primrose 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's density policy applies to all nonfarm development, including, "...non-farm commercial development..." created after the date of town adoption of the comprehensive plan (May 18, 2010). The plan outlines two density options that landowners may choose from when proposing new development. The options allow for different density limitations based on different development siting criteria. Density option "A" allows for 1 nonfarm use or "density unit" per 35 acres owned as of April 28, 1981, with development and related infrastructure barred from being located on, or crossing, cropland. Density option "B" allows for 1 nonfarm use per 70 acres owned as of April 28, 1981, with an allowance for a driveway up to 300' in length to cross cropland in order to reach a development site on pasture or woodland.

The applicant's previous proposal for a tower site on the Webber property was located on an area of agricultural land and therefore density option "B" applied. The current proposal is located in a wooded area and so appears to qualify for density option "A". As indicated on the attached density study report, the property remains eligible for 2 density units under option "A".

Both the town and county plans include objectives and policies that support expansion and improvement of broadband internet access, particularly in rural and underserved areas.

**3<sup>rd</sup> PARTY ENGINEERING REVIEW:** The County relies on a 3rd party radio frequency engineering consultant to provide an independent and unbiased technical review of communication tower proposals. CityScape Consultants has reviewed the proposal for consistency with the county's tower ordinance, as well as other applicable state and federal laws. CityScape has found that the proposal meets the county tower ordinance requirements. According to the consultant's report:

CityScape has determined that the area of Dane County Bug Tussel intends to serve also has a demonstrable lack of personal wireless service from any provider, and the primary interest is in providing state-of-the-art wireless communications services to a rural unserved area, both fixed and mobile. Currently, as stated by the Applicant and verified by CityScape, the area's existing infrastructure is insufficient to address the wireless communications service needs of the citizens in the area.

The CityScape report includes the following recommendations:

Should the Zoning and Land Regulation Committee ("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 Applicant shall provide a new fall-zone certification letter for a 195-foot tower; and,
4. The proposed structure shall not be lighted nor shall it be painted a color incompatible with the environment.

#### **STAFF ANALYSIS**

Staff has been aware of Bug Tussel's interest in siting a tower in the SW portion of Primrose since 2016. Initial applications for the current site proposed a tower of 300' in height. Towers over 195' in height may be permitted approval of a waiver from the zoning committee, provided the applicant either demonstrate "unique transmission condition problems" which cannot be overcome by other means, or some other reason that the committee deems will serve the public interest. The applicant revised the initial request to 195' after consulting with CityScape on alternative technical options that would achieve essentially the same fixed wireless service coverage objectives.

CityScape's review finds the proposal to be consistent with the technical requirements of the county tower ordinance.

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 #2553.

*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 (see page 69 of application packet).

*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. The applicant has submitted an engineering analysis documenting that, should a catastrophic fall down event occur, the tower would fall within a radius of 97.5' of the base of the tower. The Webber's residence is located approximately 200' from the tower location. While ice fall is a possibility with all towers, the likelihood of damage is low due to the lack of development near the tower.

*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 14 residences within ¼ mile of the site. The closest is the owner's residence at 200', with the next closest approximately 1,900' away from the proposed tower. The site is somewhat concealed by existing tree cover, but the tower will undoubtedly be visible from the surrounding area. The tower would not be lighted for nighttime operations. The applicant has submitted 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.

*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.

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. Town / county plan goals, objectives, and policies emphasize the preservation of farmland and rural character while also calling for robust wireless communication services.

As noted above, the proposed tower would be subject to the [town comprehensive plan policies](#) limiting the density and siting of nonfarm development. The proposed tower site is not located on cropland and therefore the less restrictive "1 per 35" density option "A" would apply. As indicated on the attached density study, the property remains eligible for 2 density units under density option "A". The proposal appears consistent with density option A.

Town siting criteria are designed to protect the rural character of the town, including the [following](#):

- c) *Buildings are to be sited and designed to minimize visual impact when viewed from existing houses and public roads. Buildings are to be hidden from Town roads whenever possible.*

The criteria are designed primarily for residential and accessory structures. There is no way to completely hide a 195' tower from view of the surrounding area. However, there are options for addressing visual aesthetics, including tower design and painting the tower a color that blends with the surrounding environment. As noted above, aesthetics can be a subjective issue to navigate, and 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.

Other applicable town/county plan policies support the expansion of high speed internet service to underserved areas of the county.

**TOWN:** The town of Primrose has not completed its review and action on the petition. The town public hearing is scheduled for Monday, February 28<sup>th</sup>, and the town board will take it up at their meeting on Monday, March 7.

## 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 service to all areas of the county.

[Dane County Comprehensive Plan Telecommunications Policies](#)

**STAFF UPDATE 3/3/22:** The petition was postponed at the 2/22 ZLR Committee public hearing due to no town action. No opposition was presented at the ZLR hearing. The town board is scheduled to meet on Monday, March 7<sup>th</sup> to take action.

**UPDATED STAFF RECOMMENDATION:** In consultation with the county's 3<sup>rd</sup> party radio frequency engineer, CityScape Consultants, staff finds that the applicant has provided substantial evidence demonstrating the need for the proposed telecommunications tower at the requested location and proposed height in compliance with the county's communication tower ordinance. Staff also believes that the proposal satisfies the other applicable standards for approval of a Conditional Use Permit found in sections 10.101(7) and 10.220(1).

If, upon considering the evidence and information provided by the applicant in support of the petition, the town and ZLR Committee find that the applicable standards for approval are, or can be met, staff have assembled the following list of recommended conditions of approval.

1. The primary use of the self-support lattice style communication tower permitted under Conditional Use Permit No. 2553 shall be for the provision of fixed wireless internet service. Other cellular/PCS wireless voice / data communications, and related telecommunications equipment are also permitted via collocation on the tower.
2. Final site plan(s) and design drawings for the proposed tower are subject to review and approval by the Town of Primrose prior to installation of the tower. The final site plan(s) and design drawings reviewed and approved by the Town of Primrose are fully incorporated herein and continued effectiveness of Conditional Use Permit No. 2553 is expressly conditioned upon compliance with those plans.
3. The Applicant shall provide visual screening and/or landscaping to minimize the aesthetic impact of the tower and compound, to be reviewed and approved by the town of Primrose. Any such screening requirements shall be incorporated in the final approved site plans.
4. The physical development and operation of the conditional use must conform, in all respects, to the final approved site and operations plans.
5. The tower shall not exceed 195' in height (199' with lighting rod).
6. The tower shall not be lighted nor shall it be painted a color incompatible with the environment.
7. The communication tower placed, constructed or modified under Conditional Use Permit No. 2553 shall accommodate the collocation of telecommunications equipment for at least two (2) additional telecommunications providers. The two required collocation spots must be made available above a height of 150' above ground level per section 10.103(9)(d). A Wisconsin-licensed Structural Engineer shall approve and stamp the tower design, and certify that the tower can support at least three users.
8. Collocation sites required hereunder shall, upon request, be made available by the holder of Conditional Use Permit No. 2553 for the mounting of technologically compatible antenna arrays and equipment at the prevailing market rate in the region and upon contractual provisions which are standard in the industry.
9. The Applicant shall provide a new fall-zone certification letter for a 195-foot tower revised for the proposed center of radiation antenna heights of 189, 177, 160 and 148 feet for the Applicant and future collocators.
10. 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, either directly or indirectly, the owner or lessee from entering into agreements, leases, or subleases with other providers or prohibit collocation of other providers.
11. The holder of Conditional Use Permit No. 2553 shall, through ownership, lease, option or other means, at all times have the right to use the land associated with the permitted tower for uses related to the use of the collocation sites required hereunder.
12. 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.

13. If at any time the communication tower permitted under Conditional Use Permit No. 2553 ceases to be used for the primary use, as identified in condition #1 above, for a continuous period of 12 months the permit holder shall, upon notification by the committee, dismantle and remove the tower. If the tower is not removed within 60 days of such notification, Dane County may enter upon the premises and remove the tower at the expense of the holder of the conditional use permit.
14. Prior to issuance of the requested conditional use permit, and as a condition of its continued validity, applicant shall provide Dane County with a bond, or evidence of an existing bond, in the amount of \$20,000 ensuring performance of applicant'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 accordance with condition 17, above. 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.
15. If not already completed, the applicant shall file a Notice of Proposed Construction on Form 7460-1 to the FAA to assure that the tower will not impact air traffic.
16. Contact with Wisconsin DOT Bureau of Aeronautics should be made prior to construction, if it has not already been done, to determine whether notification to that agency is required.
17. All tower components, appurtenances and transmission lines should be securely bonded and grounded to prevent RF interference caused by stray signals.
18. 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. A Wisconsin-licensed Structural Engineer shall approve and stamp the tower design.
19. 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.
20. 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.
21. All vehicles and equipment must access the site only at approved locations identified in the site plan and operations plan.
22. 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.
23. 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.



24. 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.
25. 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.
26. 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.