

PROJECT NARRATIVE

January 21, 2021

Re: Written Narrative for CUP Review COF Core Facility Microwave Tower
City of Flagstaff – Core Services Maintenance Facility
3200 West Route 66
Flagstaff, Arizona 86001
APN #: 112-01-001D
112-01-002

The following is a written narrative of the proposed CUP revision to the previously approved site plan for the City of Flagstaff Core Services Maintenance Facility project. This request is for CUP approval for Microwave Communications Tower to provide final dimensions for the tower height and materials. Through the design and permitting process, the final location of the communications tower has been moved from the original location approved in the drawings dated November 3, 2016. The new location is approximately 30' south of the previously approved location.

General Project Information:

The facility will include installation of a 110' free standing tower structure plus 8' lightning protection for a total height of 118' Above Finish Grade (AFG). It will be completely installed within the fenced area surrounding the public works yard, approximately 890' North of West Rt. 66, shielded from view by existing trees and foliage at the site between the site and the highway. The City of Flagstaff Microwave Radio Network is a Licensed network of point to point microwave radio systems. The reason for this CUP request is that the maximum permitted tower height of 100' will not achieve the required unobstructed line of site paths to City facilities due to surrounding pine trees and topography. However, with the requested addition of 10' tower height and the required 8' lightning protection, unobstructed line of site paths will be achieved, and the facility will help maintain critical communications pathways for City facilities and emergency services.

Findings #1 Narrative:

The conditional use is consistent with the objective of the Zoning Code and the purpose of the zone in which the site is located, as follows:

The site is located in the existing Public Facilities (PF) Zone and is a public Telecommunications Facility per 10.40.60.310. The type of use is a defined purpose within the zone in which the site is located. The conditional use request for 118 feet total height in lieu of 100 feet approved in base zoning is consistent with the objective of the Zoning Code. The additional height is required for City of Flagstaff emergency and City operations to function with efficiency and redundancy as outlined in the following paragraphs, and the intent of section 10-40.30.060.A.1 Public Facilities Zone is to allow Public Facilities to function for the good of the overall community and the intent of section 10-40.60.310 Telecommunications Facilities is to accommodate the communications needs in the City while protecting public health, safety and welfare by (per A.2) Minimizing adverse visual effects and (Per A.5) Locating telecommunications facilities away from residential neighborhoods and historical sites where feasible.

To this goal, this facility is located on the site to be as distant from historic Route 66 and historic McAllister Ranch within the overall site as was feasible. This facility is shielded from adjacent Residential by the existing flood control dam and existing tree and forest area for landscape screening. Photo exhibits are provided to demonstrate the proposed locations lack of adverse visual effect.

The site is well away from Rt. 66 corridor and is only visible from a few locations. The City of Flagstaff IT department believes this proposal to be in compliance with Flagstaff Zoning Code, Telecommunications Facilities 10-40.60.310, but with height as indicated in this narrative. The tower will be an engineered structure that meets EIA/TIA 222-G standards for the required application, in compliance with 10-40.60.310C-1 and is in full compliance with all FCC and FAA regulations. The tower has been reviewed by the FAA as project NILES-000432848-17 with an Aeronautical Study of 2017-AWP-9911-OE to evaluate any hazards to navigation and is has been cleared without any lighting or marking requirements. There is no new outdoor lighting, other than access / task lighting that is active during maintenance activity and is motion activated for security. All site lighting will be per previously approved site plan with no change. The site will have posted markings only as required by FCC Rules, specifically tower ownership identification and registration.

The tower height indicated above provides a minimum microwave path clearance to Flagstaff Law Enforcement Facility and Lake Mary Water Treatment Plant. Other paths may function correctly at lower heights and will be licensed and installed at the lower height, as long as such reduced height does not affect the function of the microwave path which requires an unobstructed line of site path with a 0.6F clearance of the first Fresnel zone (https://en.wikipedia.org/wiki/Fresnel_zone) along that path. Although the tower is located in a 'Preferred' location (10-40.60.310D-b & c) allowing a 100' height, the requested maximum height is consistent with a 'Preferred' site location (10-40.60.310C-10) with requested waiver. The tower heights were obtained by using a Crane equipped with a Personnel Basket to verify the calculated path clearances. The proposal is in compliance with 10-40-60-310D 3f located 890' from Rt. 66. The proposal is in compliance with 10-40.60.310E 1c as a Preferred location. All radio emissions are in compliance with 47 USC332 ©(B)(iv) for RF Emissions

Finding #2 Narrative:

The granting of the conditional use will not be detrimental to the public health, safety, or welfare for: Property damage or nuisance arising from noise, smoke, odor, vibration, or illumination.

The proposed installation of additional height beyond the approved tower, will not create any noise, smoke, odor, dust, vibration, or illumination beyond the already approved current site uses.

Hazard to persons or property from possible explosion, contamination, fire or flood.

The proposed installation of additional height beyond the approved tower, will not create any additional hazard to persons or property beyond the already approved current site uses. The additional height requested is a total of 118 feet. The property line of the parcel is over 195 feet away from the tower.

Impact on surrounding areas arising from unusual volume or character of traffic.

The proposed installation of additional height beyond the approved tower will not create any additional traffic in volume or character.

Finding #3 Narrative:

The characteristics of the conditional use as proposed are reasonably compatible with the types of uses permitted in the surrounding area, in the following ways:

- a. Access, traffic, and pedestrian, bicycle and vehicular circulation; The tower facility is located within the City of Flagstaff Core Maintenance Facility (Public Works Yard) with full vehicular access to the location. It is sited so that it does not obstruct any adjacent traffic, pedestrian, bicycle and/or vehicular circulation
- b. Adequacy of site and open space provisions, including resource protection standards, where applicable; The tower facility is sited in a location that is allowed with the ordinance. This request is for a conditional use permit for a new Telecommunications Tower, including additional height of the tower. Within the Core Services site, we have located the tower facility to be as far from Route 66 as is possible

within the developed site, so that historic viewsheds are maintained, and site undeveloped open space is not additionally disturbed.

- c. Noise, light, visual and other pollutants; This facility will add no additional noise or light pollutants to the site or surrounding area. Visual influence of this CUP request is limited to 18' at the top of the tower including the 8' lighting protection device. A description of this use is as described in the preceding paragraphs. The proposed tower, and its visual influence on the site is consistent with the existing cell tower on site and is located on a preferred site for the use. Both are visually recognizable as tower elements and are both visually screened by the surrounding landscape to a great extent as shown in the attached viewshed renderings.
- d. Proposed style and siting of structure(s), and relationship to the surrounding neighborhood; The tower style and structure is a classic triangular lattice tower, galvanized steel finish. Visually, the requested tower height approval will blend with the sky and clouds to a great degree. Visual representations of the proposed location are included with this request, to demonstrate this relationship. The tower is sited on the existing public works yard, within a campus of similar utility type buildings and vehicles.
- e. Landscaping and screening provisions, including additional landscaping in excess of otherwise applicable minimum requirements; Native landscaping and existing tree buffer zones at the edges of the proposed site are proposed to remain, as screening for the tower. Visual representations of the proposed location, from multiple directions, have been provided to demonstrate the full extent of how the tower will be set back and screened from Route 66 and other adjacent properties.
- f. Impact on public utilities; This CUP proposal will have no adverse impact on public utilities and will greatly increase the ability of the City of Flagstaff critical communications network to function properly for the citizens. The additional height requested is a vital component of maintaining critical communications pathways for City facilities and emergency services to function properly for the community benefit.
- g. Signage and outdoor lighting; No additional signage or outdoor lighting is a part of this CUP request.
- h. Dedication and development of streets adjoining the property; No additional street development is impacted or proposed as part of this CUP request.
- i. Impacts on historical, prehistoric or natural resources. The proposed additional height will not impact visibility from Historic Route 66 or surrounding historic areas. No adverse impact is anticipated to prehistoric or natural resources. The tower will be sited on previously developed land within the Core Services Public Works yard site. The new location of the communications tower does not impact any of the trees in the previously approved resource protection plan – no changes are proposed to vegetation or natural resources. Previous building setbacks, building footprints and heights will remain unchanged within the developed site area of the Core Services facility.

Thank you for your time reviewing this submittal. Please contact us if you have any questions.

Sincerely,

APMI, Inc.



Will Reilly, AIA, LEED AP BD+C
Principal

Attachments: None
cc: File