AGENDA

City of Sedona Planning and Zoning Commission Meeting

5:30 PM

Tuesday, June 18, 2019

NOTICE:

Pursuant to A.R.S. 38-431.02 notice is hereby given to the members of the Planning and Zoning Commission and to the general public that the Planning and Zoning Commission will hold a public hearing open to the public on Tuesday, June 18, 2019, at 5:30 pm in the City Hall Council Chambers.

NOTES:

- Meeting room is wheelchair accessible. American Disabilities Act (ADA) accommodations are available upon request. Please phone 928-282-3113 at least 24 hours in advance.
- Planning & Zoning Commission Meeting Agenda Packets are available on the City's website at: www.SedonaAZ.gov/planning

GUIDELINES FOR PUBLIC COMMENT

PURPOSE:

- To allow the public to provide input to the Planning and Zoning Commission on a particular subject scheduled on the agenda.
- Please note that this is not a question/answer session.

PROCEDURES:

- Fill out a "Comment Card" and deliver it to the Recording Secretary.
- When recognized, use the podium/microphone.
- State your Name and City of Residence
- Limit comments to 3 MINUTES.
- Submit written comments to the Recording Secretary.

- 1. CALL TO ORDER, PLEDGE OF ALLEGIANCE, & ROLL CALL
- 2. ANNOUNCEMENTS & SUMMARY OF CURRENT EVENTS BY COMMISSIONERS & STAFF
- 3. APPROVAL OF THE FOLLOWING MINUTES:
 - a. May 21, 2019 (R)
- 4. PUBLIC FORUM: (This is the time for the public to comment on matters not listed on the agenda. The Commission may not discuss items that are not specifically identified on the agenda. Therefore, pursuant to A.R.S. § 38-431.01(H), action taken as a result of public comment will be limited to directing staff to study the matter, responding to any criticism, or scheduling the matter for further consideration and decision at a later date.)
- 5. CONSIDERATION OF THE FOLLOWING ITEM THROUGH PUBLIC HEARING PROCEDURES:
 - a. Discussion/possible action regarding a request for Development Review for the construction of a 40 unit lodging development and 1 residential unit at 900 W State Route 89A (Ambiente: Landscape Hotel). The property is zoned Special Use (SU) and is located on the north side of W State Route 89A adjacent to the Adobe Jack Trailhead. APN: 401-70-107 Owner/Applicant: Adobe Jack LLC (Mike Stevenson) Case Number: PZ18-00009 (DEV)
 - b. Discussion/possible action regarding a request for a Conditional Use Permit to allow for the installation of six (6) back haul antennas to the existing KAZM radio tower, located at 3400 W State Route 89A. The property is zoned Commercial (CO) and is located north of the intersection of W State Route 89A and Calle Del Sol. APN: 800-20-026H Applicant: American Tower (Douglas Kearney) Case Number: PZ19-00004 (CUP)
- 6. FUTURE MEETING DATES AND AGENDA ITEMS
 - a. Tuesday, July 2, 2019; 3:30 pm (Work Session)
 - b. Tuesday, July 2, 2019; 5:30 pm (Public Hearing)
 - c. Tuesday, July 16, 2019; 3:30 pm (Work Session)
 - d. Tuesday, July 16, 2019; 5:30 pm (Public Hearing)
- 7. EXECUTIVE SESSION

If an Executive Session is necessary, it will be held in the Vultee Conference Room at 106 Roadrunner Drive. Upon a public majority vote of the members constituting a quorum, the Planning and Zoning Commission may hold an Executive Session that is not open to the public for the following purposes:

- a. To consult with legal counsel for advice on matters listed on this agenda per A.R.S. § 38-431.03(A)(3).
- b. Return to open session. Discussion/possible action on executive session items.
- 8. ADJOURNMENT

Physical Posting: June 13, 2019 By: DJ

Planning & Zoning Commission Meeting Agenda Packets are available on the City's website at: www.SedonaAZ.gov/planning or in the Community Development Office, 102 Roadrunner Drive approximately one week in advance of the meeting.

Note that members of the City Council and other City Commissions and Committees may attend the Planning and Zoning Commission meeting. While this is not an official City Council meeting, because of the potential that four or more Council members may be present at one time, public notice is therefore given for this meeting and/or event.



City Of Sedona Community Development Department

102 Roadrunner Drive Sedona, AZ 86336 (928) 282-1154 • www.sedonaaz.gov/cd

Memorandum

DATE: June 11, 2019

TO: Planning and Zoning Commission

FROM: Cari Meyer, Senior Planner

MEETING DATE: June 18, 2019

SUBJECT: Public Hearing; Ambiente: A Landscape Hotel (PZ18-00009 (DEV))

A public hearing for Ambiente: A Landscape Hotel was scheduled and noticed for June 18, 2019. However, the applicant is continuing to work with the Arizona Department of Transportation (ADOT) regarding access to the site from State Route 89A. Based on the applicant's most recent conversations with ADOT, they are proposing additional changes to the site plan to minimize the impact on the right-of-way. These changes require a resubmittal of the plans and additional review by staff, which could not be completed in time to produce a staff report and recommendation for the June 18 meeting. Therefore, Staff is recommending that the project be continued to the July 2, 2019 meeting.

If commissioners are interested in reviewing the project documents prior to the packet for the July 2, 2019 meeting being distributed, the application materials may be reviewed online at:

http://www.sedonaaz.gov/your-government/departments/community-development/projects-and-proposals/ambiente-hotel

Recommendation and Motion

Staff recommends that the public hearing for case number PZ18-00009 (DEV), Ambiente: A Landscape Hotel be continued to July 2, 2019.

Sample Motion for Commission Use

(Please note that the below motion is offered as a sample only and that the Commission may make other motions as appropriate.)

Recommended Motion

I move for continuance of the public hearing for case number PZ18-00009 (DEV), Ambiente: A Landscape Hotel, to the Planning and Zoning Commission public hearing on July 2, 2019.

Staff Report

PZ19-00004 (CUP) KAZM Tower Summary Sheet



City of Sedona Community Development Department

102 Roadrunner Drive Sedona, AZ 86336 (928) 282-1154 • www.sedonaaz.gov/cd

Meeting Date: June 18, 2019

Hearing Body: Planning and Zoning Commission

Action Requested: Approval of a Conditional Use Permit

Staff Recommendation: Approval, with conditions, of a Conditional Use Permit

Location: 3400 W. 89A

Parcel Number: 800-20-026H

Applicant: American Tower (Douglas Kearney)

Site Size: ± 9.92 acres

Zoning: Commercial/ Community Facilities (CO/CF)

Current Land Use: Radio Tower Facility

Current SCP Designation: Public Semi-Public (P/SP)

Area Zoning Area Land Uses

North, West: RS-35 Single Family Residential, Charter School

East: RM-2 Multi-Family Residential **South:** PD Single Family Residential

Report Prepared By: Matt Kessler, Associate Planner

Project Summary:

The applicant is requesting approval of a Conditional Use Permit (CUP) to allow for the installation of back haul antennas to the existing KAZM radio tower.

| Attacl | nments | Page | |
|--------|---------|--|----|
| 1. | Vicinit | ity Map | 11 |
| 2. | Applio | cation Packet | |
| | a. | Letter of Intent and Small Documents | 12 |
| | b. | Project Plans | 23 |
| | c. | Citizen Participation Report | 33 |
| 3. | Exper | rt Review analysis (Provided by CityScape) | 45 |

Staff Report PZ18-00004 (CUP) KAZM Tower

PROJECT DESCRIPTION

The applicant is requesting approval of a Conditional Use Permit (CUP) to allow for the installation of six (6) back haul antennas to the existing KAZM radio tower on site, which is approximately 180 feet in height. American Tower is proposing to utilize the existing tower as a relay facility between the existing site at the Airport and Enchantment Resort. The submitted letter of intent states that currently, Enchantment Resort, located outside of city limits, currently has poor wireless coverage due to its remote location and rugged terrain. This site acts as a mid-way point between the existing American Tower facility at the Airport and Enchantment, and would provide line of sight signal to the Resort, where it would be converted to provide improved wireless coverage at the property.

BACKGROUND

Requirement for a Conditional Use Permit

The KAZM site currently operates only as an AM/FM broadcast tower. As it is not in operation as a wireless facility, the addition of antennas for the purpose of providing wireless coverage would be considered a new wireless facility. LDC Section 4.3.B sets the approval required for Personal Wireless Service Facility (PWSF), and states:

"All applications for PWSF shall be considered by the Planning and Zoning Commission (Commission) at a public hearing as set forth in 8.4.B, Conditional Use Permit, based on potential location, aesthetic or visually related impacts as a result of the proposed antenna's height, color, size and the like[...]"

Based on this requirement, it was been determined that the proposed installation of six antennas requires a CUP.

SITE CHARACTERISTICS

- The property is located north of State Route 89A, and on the left side of Calle Del Sol (See Attachment 1).
- The property currently operates as an AM/FM broadcasting facility.

DEVELOPMENT PROPOSAL

- The applicant is applying for a CUP to allow for the installation of six back haul antennas on the existing AM/FM tower.
- All six antennas would be installed at 150 feet; the existing tower is approximately 180 feet in height.
- Project Plans and photo simulations were submitted by the applicant and are included in Attachment
 2.b.

Access, Traffic, and Parking

- Access to the site is off Calle Del Sol. This application will not impact any existing access.
- The proposed change will not impact any existing traffic flow or parking on site.

Public Input

 The applicant completed a Citizen Participation Plan and received one response from the Community Manager for the Rimstone Subdivision. A copy of the Citizen Participation Report is attached as Attachment 2.c. • Staff completed the public notification for this project. As of writing this report, Staff has not been contacted by one member of the public seeking clarification on whether the proposed antennae was related to wireless communication. No further inquiries were received.

COMMENTS AND CONCERNS

All internal and external review agencies were given an opportunity to review this application, including CityScape, the City's Wireless Consultant. Their analysis is included as Attachment 3. None of the reviewing agencies had further comments. All comments by CityScape have been incorporated into the recommended Conditions of Approval as provided at the end of this report.

REVIEW, COMMENTARY, AND ANALYSIS

The following action is requested from the Planning and Zoning Commission:

Consideration of a request for a Conditional Use Permit

Discussion (Conditional Use Permit)

Section 4.3.B of the LDC states that all applications for PWSF shall be considered by the Planning and Zoning Commission as a conditionally permitted use, and as such is subject to the findings stated in LDC Section 8.3.E(5): Approval Criteria Applicable to all Applications. The criteria as noted in Section 8.3.E(5) are:

A. Generally

- 1. Unless otherwise specified in this Code, City review and decision-making bodies shall review all development applications submitted pursuant to this article for compliance with the general review criteria stated below.
- 2. The application may also be subject to additional review criteria specific to the type of application, as set forth in sections 8.4 through 8.8.
- 3. If there is a conflict between the general review criteria in this section and the specific review criteria in sections 8.4 through 8.8, the applicable review criteria in sections 8.4 through 8.8 control.

Staff Evaluation: Staff and Reviewing Agencies has evaluated the submitted application materials. As conditioned, the proposal complies with all applicable review criteria.

B. Prior Approvals

The proposed development shall be consistent with the terms and conditions of any prior land use approval, plan, or plat approval that is in effect and not proposed to be changed. This includes an approved phasing plan for development and installation of public improvements and amenities.

Staff Evaluation: This property is associated with the State of Arizona, and has no prior land use approvals with the City of Sedona. As all proposed changes on site are to be done in one phase, no phasing plan has been reviewed or approved.

C. Consistency with Sedona Community Plan and Other Applicable Plans

- 1. Except for proposed subdivisions, the proposed development shall be consistent with the Sedona Community Plan and any other applicable plans. The decision-making authority:
- 2. Shall weigh competing plan goals, policies, and strategies; and
- 3. May approve an application that provides a public benefit even if the development is contrary to some of the goals, policies, or strategies in the Sedona Community Plan or other applicable plans.

Staff Evaluation: Staff evaluated the proposal for compliance with the Community Plan and it was found to be consistent. The subject property is not within a Community Focus Area in need of more specific planning.

D. Compliance with This Code

The proposed development shall comply with all applicable standards in this Code, unless the standard is lawfully modified or varied. Compliance with these standards is applied at the level of detail required for the subject submittal.

Staff Evaluation: The proposal is compliant with all applicable standards of the Land Development Code. No waivers or variances were requested.

E. Compliance with Other Applicable Regulations

The proposed development shall comply with all other City regulations and with all applicable regulations, standards, requirements, or plans of the federal or state governments and other relevant jurisdictions. This includes, but is not limited to, floodplain, water quality, erosion control, and wastewater regulations.

Staff Evaluation: As conditioned, the proposed CUP will comply with all City regulations, and will comply with all other applicable standards and requirements of other relevant jurisdictions.

F. Minimizes Impacts on Adjoining Property Owners

The proposed development shall not cause significant adverse impacts on surrounding properties. The applicant shall make a good-faith effort to address concerns of the adjoining property owners in the immediate neighborhood as defined in the Citizen Participation Plan for the specific development project, if such a plan is required.

Staff Evaluation: The applicant completed their required Citizen Participation Report, which is provided as Attachment 2.c. Staff completed the required noticing as well, and received no written comments from neighbors. These efforts are in compliance with this criterion.

G. Consistent with Intergovernmental Agreements

The proposed development shall be consistent with any adopted intergovernmental agreements, and comply with the terms and conditions of any intergovernmental agreements incorporated by reference into this Code.

Staff Evaluation: There are no adopted intergovernmental agreements in place that are affected by the proposed CUP. This criterion does not apply to this request.

H. Minimizes Adverse Environmental Impacts

The proposed development shall be designed to minimize negative environmental impacts, and shall not cause significant adverse impacts on the natural environment. Examples of the natural environment include water, air, noise, stormwater management, wildlife habitat, soils, and native vegetation.

Staff Evaluation: No negative environmental impacts are anticipated as a result of the proposal as the proposed use.

I. Minimizes Adverse Fiscal Impacts

The proposed development shall not result in significant adverse fiscal impacts on the City.

Staff Evaluation: No adverse fiscal impacts on the City are anticipated as a result of the proposal. The proposal is in compliance with this criterion.

J. Compliance with Utility, Service, and Improvement Standards

As applicable, the proposed development shall comply with federal, state, county, service district, City and other regulatory authority standards, and design/construction specifications for roads, access, drainage, water, sewer, schools, emergency/fire protection, and similar standards.

Staff Evaluation: The application materials were provided to review agencies for an opportunity to review. As conditioned, the proposed CUP complies with all applicable regulatory authority standards included within this criterion.

K. Provides Adequate Road Systems

Adequate road capacity must exist to serve the uses permitted under the proposed development, and the proposed uses shall be designed to ensure safe ingress and egress onto the site and safe road conditions around the site, including adequate access onto the site for fire, public safety, and EMS services.

Staff Evaluation: No change in existing site access is proposed. No increase in traffic is anticipated to the site due to the proposed tower changes. The proposal is in compliance with this criterion.

L. Provides Adequate Public Services and Facilities

Adequate public service and facility capacity must exist to accommodate uses permitted under the proposed development at the time the needs or demands arise, while maintaining adequate levels of service to existing development. Public services and facilities include, but are not limited to, roads, potable water, sewer, schools, public safety, fire protection, libraries, and vehicle/pedestrian connections and access within the site and to adjacent properties.

Staff Evaluation: Staff believes that adequate public service and facility capacity exists to accommodate the proposed conditional use on this site. The proposal is in compliance with this criterion.

M. Rational Phasing Plan

If the application involves phases, each phase of the proposed development shall contain all of the required streets, utilities, landscaping, open space, and other improvements that are required to comply with the project's cumulative development to date, and shall not depend upon subsequent phases for those improvements.

Staff Evaluation: As no new construction or alterations to the site are proposed, no phasing plan is required. The proposal is in compliance with this criterion.

In addition to the approval criteria of Section 8.3.E(5) examined above, this application is also subject to the findings specific to a Conditional Use Permit, as provided in LDC Section 8.4.B(5). The findings as noted in 8.4.B(5) are:

a. The proposed location of the conditional use is in accordance with the objectives of this Code and the purpose of the zoning district in which the site is located;

Staff Evaluation: The subject property is zoned CO/CF. All PWSF, regardless of the zoning district and unless otherwise exempted, are required to complete the Conditional Use Permit process, as stated in LDC Section 4.3.B. Staff finds that the proposed conditional use meets the objectives of the Code.

- b. The granting of the conditional use permit will not be materially detrimental to the public health, safety, or welfare. The factors to be considered in evaluating this application shall include:
 - 1. Property damage or nuisance resulting from noise, smoke, odor, dust, vibration, or illumination;
 - 2. Any hazard to persons and property from possible explosion, contamination, fire or flood; and
 - 3. Any impact on surrounding area resulting from unusual volume or character of traffic;

Staff Evaluation: Staff finds that the granting of this CUP will not be detrimental to the public health, safety, or welfare of the neighborhood. By complying with the recommended conditions of approval, this CUP will comply with all federal regulations for wireless facilities.

c. The characteristics of the use as proposed and as may be conditioned are reasonably compatible with the types of use permitted in the surrounding area; and

Staff Evaluation: The subject property is surrounded by a mix of residentially zoned parcels, on which the proposed use is also conditionally allowed. Staff finds that this use is compatible with the other uses and permitted uses in the area.

d. The proposed use, as it may be conditioned, will comply with the applicable provisions of this Code, and other ordinances.

Staff Evaluation: By complying with the Conditions of Approval, staff finds this project will be in compliance with the applicable provisions of the Land Development Code.

It is Staff's opinion that this request for CUP meets the required findings listed above. The use is consistent with the purpose of the Commercial (CO) and Community Facilities (CF) zoning district and no nuisances as a result of this proposed use are anticipated.

The applicant has not requested a time frame for the CUP. Staff is recommending that this application be approved without an expiration date. If an issue arises, staff will first work to address it through the established code enforcement process. If a resolution cannot be reached, staff may initiate proceedings to revoke the CUP.

Recommendation and Motion

PZ19-00004 (CUP) KAZM Tower



Staff Recommendation

Based on compliance with all ordinance requirements and satisfaction of the Conditional Use Permit findings of the Land Development Code, staff recommends approval of case number PZ19-00004 (CUP), KAZM Tower as subject to all applicable ordinance requirements and the attached conditions of approval:

Recommended Motion for Approval

I move for approval of case number PZ19-00004 (CUP), KAZM Tower, in accordance with findings of compliance with all ordinance requirements and satisfaction of the Conditional Use Permit findings and applicable Land Development Code requirements and the conditions as outlined in the staff report.

Alternative Motion for Denial

I move for denial of case number PZ19-00004 (CUP), based on the following findings (specify findings).

(Please note that the above motions are offered as samples only and that the Commission may make other motions as appropriate.)

Conditions of Approval PZ18-00004 (CUP) KAZM Tower As proposed by Staff



- The use shall be in substantial conformance with the applicant's representations of the project, including
 the site plan, letter of intent, and all supporting documents, as reviewed, modified, and approved by the
 Planning and Zoning Commission. Proposed changes in operation or activities to the approved
 Conditional Use Permit determined to be substantial by the Community Development Director shall
 require reconsideration by the Planning and Zoning Commission at a public meeting.
- 2. The applicant shall ensure that the use is operating in compliance with the Land Development Code requirements and applicable conditions of approval. If contacted by City Staff regarding a potential violation in the operation of this use, the applicant shall work with City Staff to address the issue in a timely manner. If a satisfactory solution is not found, City Staff may initiate proceedings to revoke the CUP.
- 3. Within thirty days of approval of the Conditional Use Permit, the applicant shall apply for the required Building Permit, and diligently pursue issuance of the Certificate of Occupancy required for legal operation of this use.
- 4. The applicant shall provide the City a satisfactory structural analysis of the proposed KAZM tower to include on the construction drawings prior to issuance of the required Building Permit.
- 5. The applicant shall provide satisfactory documentation that all proposed RF equipment complies with FCC rules prior to issuance of the required Building Permit.
- 6. The wireless communication facility owner shall submit a report to the Department of Community Development certifying structural and electrical integrity, as well as continued compliance with RF exposure standards specified in OET-65, upon activation of the facility and thereafter once every two (2) years on the anniversary of the certificate of completion.
- 7. Inspections shall be conducted by an engineer licensed to practice in the State of Arizona Based upon the results of an inspection, the Director of the Department of Community Development may require repair or removal of a wireless communication facility.
- 8. The City may conduct periodic inspections with the cost of such inspection paid by the owner of the wireless communication facility as provided in the Fee Schedule of the City of Sedona to ensure structural and electrical integrity. The owner of the wireless communication facility may be required by the City to have more frequent inspections if there is evidence that the wireless communication facility has a safety problem or is exposed to extraordinary conditions.
- 9. Within thirty days of approval of the Conditional Use Permit, the property owner of record of subject property voluntarily agrees to sign and record a waiver acknowledging their waiver of any right to claim just compensation for diminution in value under A.R.S. §12-1134 related to the granting of this Conditional Use Permit.



Project Application

fillable PDF available online at:



City Of Sedona Community Development Department 102 Roadrunner Drive Sedona, AZ 86336 (928) 282-1154 •

| | | | | | | _ | |
|------------------------|----------------------------|------------------------|--|----------------|---------------------|------------------------|-------|
| Application for (| check all that app | oly): | | | | | |
| ☐ Conc | eptual Review | | ☐ Comprehensive Revie | ew 🗆 Ap | peal | ☐ Time Extension | n |
| | munity Plan Amei Change | ndment | Development Review Conditional Use Pern | | bdivision riance | ECEIVE MAR 2 8 2019 | D |
| > | Project Name | KAZM | | . | 00 | CITY OF SEPONE | 99 |
| | Project Address | 3400 V | V State Route *9A | Parcel No. (A | | | E1 61 |
| Project Information | Primary Contact | American | Tower:Douglas Kearney | Primary Phon | e 714-8 | 375-6972 | |
| | Email | douglas.ke | arney@americantower.com | Alt. Phone | DOCOCIA | Hicalloin | |
| | Address | 8620 N | l Yeager Mine Rd | City/State/ZIF | Az 86 | Hvalley 3315 | |
| office the Ook | Application No | PZ 19 | -00004 | Date Received | 13/28 | 1/2019 cup | |
| Office Use Only | Received by | CUM | | Fee Paid \$ | 1,500 | cup | |
| P\$3 | | | | \$ | 2.000 | wireles | SIX |
| Project Description | radio tower. II | nstall one e antenn | k haul antennas at 18 e inch conduit from or as. All ground equipm | ne ground e | equipment | box located on a | a |

Additional Contact Information: Please complete the following for all companies/people <u>authorized</u> to discuss the project with the City. Please attach additional sheets if necessary.

| | Company | Ameircan Tower | Contact Name | Larry McDonough |
|------------|--------------|--------------------------------------|----------------|-----------------|
| C | Project Role | Project Manager | Primary Phone | 916-990-6169 |
| Contact #1 | Email | lawrence.mcdonough@americantower.com | Alt. Phone | |
| | Address | not availabble | City/State/ZIP | |
| | Company | | Contact Name | |
| C44 #3 | Project Role | | Primary Phone | |
| Contact #2 | Email | | Alt. Phone | |
| | Address | | City/State/ZIP | |
| | Company | | Contact Name | |
| Contact #2 | Project Role | | Primary Phone | |
| Contact #3 | Email | | Alt. Phone | |
| | Address | 76 | City/State/ZIP | |



LETTER OF AUTHORIZATION

LICENSEE NAME: American Towers LLC dba American Tower

@ Site Address: 3400 W State Route 89A, Sedona, AZ 86336

| owner of the Tower Facility identified above or duly authorized agent thereof, do hereby authorize American Towers LLC, their parents, subsidiaries, affiliates, successors, assigns, contractors, and agents, to act as my non-exclusive agent for the sole purpose of filing and consummating any current or future land-use or construction permit application(s) as may be required by the applicable permitting authorities for American Towers LLC dba American Tower's proposed equipment. |
|---|
| Signature: Jom Vallack Print Name: Tom Tassage Pass Tabback Broadcasting Co., Inc. |
| State of ARIZONA) |
| On March 13, 2019, before me, Joshua Freeman personally appeared Ton Tarsback, who provide to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument. |
| I certify under PENALTY OF PERJURY under the laws of the State of |
| Witness my hand and official seal. Signature (Seal) My Commission Expires: August 11, 2020 JOSHUA FREEMAN NOTARY PUBLIC, ARIZONA YAVAPAI COUNTY My Commission Expires August 11, 2020 |

Letter of Intent

KAZM Radio Tower 3400 W State Route 89A

APN #800-20-026H

American Tower Corporation (ATC) is seeking approval of a Conditional Use Permit to install line of site antennas on the existing KAZM radio tower. This site would be a relay from the ATC site located at 235 Air Terminal Drive to a new site at Enchantment Resort, 525 Boyton Canyon Drive. Enchantment resort currently has poor wireless coverage due to the terrain and remote location.

It is important to note the antennas proposed at the KAZM and Sedona Airport site do not provide wireless coverage. They are line of site antennas. Simply stated they are equivalent to a fiber optic line via air to transmit information (data/voice) to the end point at Enchantment Resort where the signal will be converted to provide wireless coverage for the Resort (See attached antenna specification sheet).

Proposed Equipment Detail

- Install six line of sight Taran antennas at 150 feet on the existing 180 foot KAZM radio tower (antenna size 9.6"W x 11.81" H X 5.24"D)
- Install one, one inch conduit from the ground equipment box to the antennas
- Install one equipment box on new H-Frame in existing equipment are, behind an existing fence.

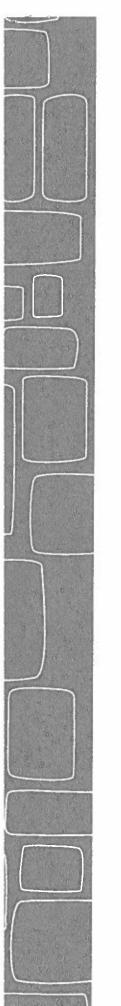
Required Findings to meet the objectives of LCD Article 4

- ATC is proposing to install the line of sight antennas on the existing KAZM radio tower to avoid building a new tower. This meets the objectives of using an existing vertical structure.
- The property is zoned commercial.
- The proposed line of sight antennas do not require a height increase of the existing tower.
- While the tower is not concealed, due to the small nature of the antennas, the visual impact to the public will be miniscule.

The wireless line of site antennas will not be providing wireless coverage and are only transmitting voice and data directly to Enchantment Resort, therefore the following requirements should not apply:

- Inventory of wireless facilities.
- Map of facilities.
- FCC standards- The antennas proposed do not provide wireless coverage.
- Radio Frequency Plots- The antennas proposed do not provide wireless coverage.

Alternative locations are not feasible as the antennas proposed are line of site and need this tower because it is the midpoint line from the Sedona Airport to the end point at Enchantment Resort.



TARANA



Solution at a Glance

Fundamental advance in wireless transport technology: industry's first truly viable alternative to expensive last-mile fiber

Breakthrough smart antenna algorithms for leveraging multipath, cancelling interference, and autonomous adaptation

Operation in 3.3 - 3.8 and 4.9 - 5.8 GHz bands depending on regulation

Delivers resilient, dedicated links up to 400 Mbps in a point-to-point (PtP) configuration over a 40 MHz channel (5 GHz FCC Only), and up to

1.2 Gbps aggregate site capacity in a concentrated multilink configuration over a 20 MHz channel

Full rate in fully-obstructed NLoS urban connections to 2+ km, and to 10s of km in clear LoS (depending on model), enabling complete siting flexibility

Unique concentrated multilink architecture with up to 6x spatial division and 60 bps/Hz spectral efficiency per POP site, for cost-effective metro-wide scaling in a single 20 MHz channel

Full complement of standard networking features including timing and MEF/CE compliance

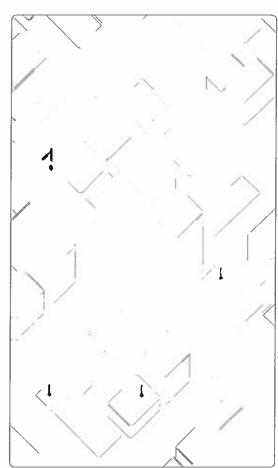
Integrated self-aligning antennas and compact, inconspicuous form factor (<10 L)

Unrivaled performance well validated by extensive tier 1 operator testing and commercial deployments — consistently redefining their vision of what's possible with NLoS wireless

Applications

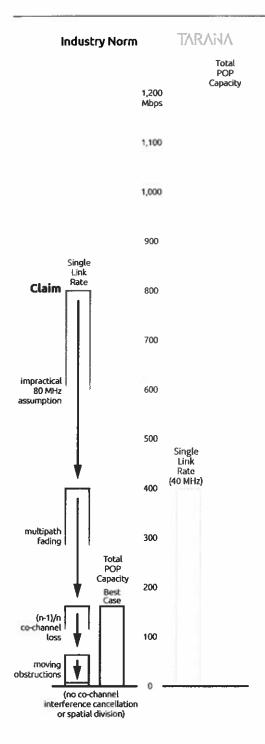
As operators of LTE and Wi-Fi networks move to add cells to meet continued urban demand growth, they face significant backhaul challenges. Getting fiber or line-of-site microwave connectivity to street-level mounting assets is difficult if not impossible in the majority of targetted locations. Operators have found conventional non-line-of-sight (NLoS) solutions to be an unreliable alternative. This dearth of backhaul options has been a significant roadblock to network expansion and densification strategies. Tarana's breakthroughs in wireless transport are now providing welcome relief to this headache across the globe.

Fixed access providers, whether incumbents or new challengers, are also struggling with the high cost of fiber deployment as they pursue network capacity growth. Especially for mid-market enterprise customers or multi-unit residential properties, where bandwidth needs exceed the capacity of existing copper solutions but fall short of justifying a dedicated fiber build, both suppliers and customers are left with no viable option. The deterministic, easy-to-deploy, and metro-scalable connections Tarana's solution provides have been embraced by operators as a perfect fit for this segment.



Naturally, a reliable, continuously self-aligning, and guaranteed wireless link with up to 400 Mbps throughput and 2+ km NLoS and 10s of km LoS range is a very useful tool in a wide variety of other segments, including oil & gas exploration, marine communication, disaster recovery, and public safety to name just a few.

Marketing v. Reality



From Tarana — offered and delivered:

400 Mbps/link (PtP)

perfect multipath equalization

100% co-channel interference cancellation

autonomous, complete adaptation to changing RF conditions, 200x/sec

1.2 Gbps/POP site

all in single channel up to 6 full-rate links per POP site enables high-density

enables high-density deployment to scale efficiently and effectively across entire metro area

Sources: Mobile & fixed operator NLoS field trials 2014-17, public vendor reports

Unique Technology

As we explain in more depth in An Introduction to Tarana, NLoS wireless applications involve significant technical challenges: abundant multipath, pervasive interference, and constant change in the radio environment. Because of the degree of difficulty these challenges represent, this is not a category where taking shortcuts in implementation gets you anything useful. It takes no small amount of genuine innovation to build a system that can complete the tough tasks the application requires: leveraging the full spread of multipath and diffraction to maintain high signal quality in any conditions, cancelling interference in highly contested spectrum, adapting rapidly to continual change, and scaling co-channel operation efficiently in a dense metro deployment — all at the same time. Tarana's solution was designed from scratch to hit all these challenges head on with a new and tightly integrated approach. By combining advanced algorithms for equalization and interference cancellation with many RF degrees of freedom and very high packaging efficiency, we achieve what our customers have called "mind-blowing" performance while still maintaining an inconspicuous and easily deployable form factor.

Unique Multipoint Architecture

With more RF tools in our box than anyone else, we can operate many co-channel links in the same radio neighborhood without self-interference, enabling a unique architecture we call concentrated multipoint. In contrast to conventional point-to-multipoint solutions, where n links terminated at the same POP each end up with only 1/n of a single channel's capacity (through time and/or frequency slicing), the Tarana solution maintains full data rates for each of up to six co-channel links at the same site through spatial division.

Unrivaled Performance

Tier 1 carriers all over the world will attest that we've set a new standard for wireless transport performance (see graph at left), opening whole new possibilities in network design. In operator field tests and deployments the current crop of "technical shortcut" solutions referenced above has made a very poor showing in dealing with just the first of the multiple NLoS challenges (multipath and diffraction), achieving minority fractions of full rates and failing to make connections at all on the most challenging links. The superiority of Tarana's more advanced technology approach has been clear, as the AbsoluteAir system achieved consistent full-rate links in virtually every application. The same night-and-day differences were seen in co-channel operation, ease of alignment, and automatic adaptation to changes in the environment such as passing vehicles.

Fundamental Advances in Network Economics

The dense single-channel operation enabled by our unique concentrated multipoint architecture and deterministic full-rate links yield unprecedented 60 bps/Hz spectral efficiency. This, along with the system's complete deployment flexibility, significantly reduces site counts and costs for any network densification or extension strategy.

Easy to Use

Complete siting flexibility, powered by dependable (and unrivaled) NLoS performance

Minimal radio network planning required, given resilience and adaptability of the links to real-world conditions

Autonomous, rapid self-alignment, eliminating installation hassle

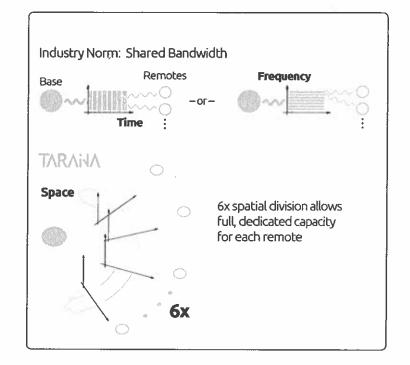
Timing and synchronization for mobile network applications, including IEEE 1588v2 and SyncE protocols

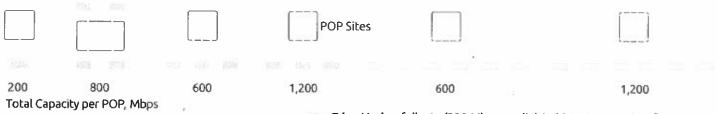
Networking compliance with MEF and Carrier Ethernet standards, including Y.1731 for operational visibility

Mobile-platform web app for straightforward unit pre-configuration, alignment on site, and post-install monitoring

Complete EMS for carrier-class network management

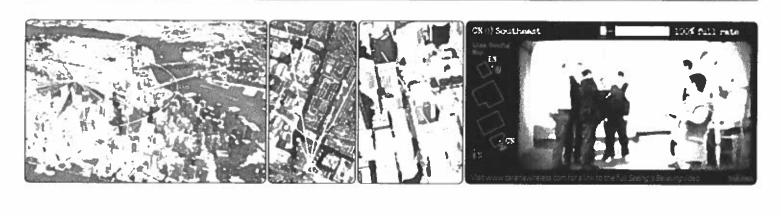
HP model only available at 3.x GHz, 40 MHz channelization only available in the FP model at 5.x GHz in a PtP configuration (FCC Only), CN3 available at both 3.x and 5.x GHz in FP model only

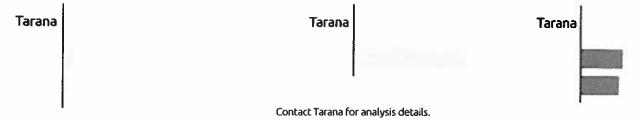




Concentrator Nodes, single or back-to-back

Edge Nodes, full rate (200 Mbps per link in 20 MHz, committed)
Edge Nodes, multiplexed (200 Mbps peak, 100 Mbps committed)





AbsoluteAir 2 Specifications

| Models | Concentrator Node | Single link per unit (CN1) in High Performance (HP) and Flat Panel (FP) configurations Multiple links per unit (CN3) in Flat Panel (FP) configuration only |
|-------------------------|----------------------------------|--|
| | Edge Node | EN Standard Performance (SP, 3 GHz only), EN-HP, and EN-FP |
| Radio | Frequency (Range) | 3.3 - 3.8 and 4.9 - 5.8 GHz |
| | Channel Width | 20 MHz: point-to-point or concentrated multilink, 40 MHz: point-to-point only |
| | Transmit Power | up to 24 dBm per antenna, per polarization, band dependent |
| | Modulation & Coding | OFDM, adaptive 256 QAM to 16 QAM |
| | Duplex | TDD |
| | Downlink/Uplink Ratio | 2:1 or 1:1 configurable (at network level) |
| | Aggregate CN Coverage Pattern | 180° field of view (HP), 90° (FP) |
| | RF Optimization and SON | Advanced equalization for multipath resolution / Precision Tx+Rx beamforming In-channel interference cancellation / Adaptive MIMO / 6x spatial division / Continuous adaptation, 200x/sec |
| Performance | Throughput | 20 MHz system can deliver 1.2 Gbps per CN3 pair in a concentrated multilink configuration 40 MHz system can deliver 400 Mbps point-to-point (5 GHz FCC Only) |
| | Range | 2+ km full-rate in true NLoS, 10s of km LoS (model dependent) |
| | System Spectral Efficiency | 60 bps/Hz |
| | Latency | 3 msec (1-way average) |
| letworking | Ethernet Ports | 2x RJ45 1000BaseT, 1x 1000Base=FX SFP |
| | Local Management | USB Type-A (multipurpose: console, management port) |
| | L2 Switching | 802.1Q (VLAN) / 802.1ad(QinQ), |
| | Carrier Ethernet | Connectivity fault management per 802.lag Deep packet buffer for TCP burst MEF Compliant |
| iming & Sync | Ethernet Synchronization | SyncE (ITU-T G.8261, G.8262) |
| | GPS Synchronization | Built-in receiver with integrated antenna at CN; holdover up to 1 hour |
| A&M | Configuration | Local access (via web UI or CLI) or EMS-driven |
| | EMS | Performance and inventory reporting / configuration management / software download and scheduled maintenance / view alarms / trail logs and threshold-based trigger |
| | NMS Integration Protocols | SNMP v2c/v3, XML |
| hysical Configuration | Topology | Point-to-point and concentrated multilink (with up to 3 ENs per CN3 unit or 6 per CN3 pair) |
| | Form Factor | Single-box outdoor unit with integrated antennas |
| | Size (WxHxD) | EN-SP: 245 x 300 x 113 mm / 9.64 x 11.81 x 4.44 in. CN and EN-HP: 280 x 300 x 133 mm / 11.02 x 11.81 x 5.24 in. CN and EN-FP (5x GHz): 362 x 324 x 112 mm / 14.2 x 12.75 x 4.4 in CN and EN-FP (3x GHz): 489 x 324 x 113 mm / 19.25 x 12.75 x 4.4 in |
| | Weight | EN-SP: 6.8 kg / 15 lbs. CN and EN-HP: 7.7 kg / 17 lbs. CN and EN-FP: 7.7 kg / 17 lbs (5 x GHz), 9.3 kg / 20.6 lbs (3 x GHz) |
| peration, Environmental | Power Consumption | 3.x GHz Options: EN-SP: 65W / EN-HP: 75W / EN-FP: 85W <> CN1-HP: 85W / CN1-FP: 85W / CN3-FP: 85W 5.x GHz Options: EN-FP: 90W <> CN1-FP: 90W / CN3-FP: 95W 5.x GHz @ 40 MHz channelization: EN-FP: 95W <> CN1-FP: 95W |
| | DC Power Input | -40 to -60 V |
| | Power over Ethernet (PoE) | PoE Combiner |
| | Operating Temperature Range | -40 to 55 ℃ |
| | Ingress Protection | łP67 |
| | Compliance | FCC C.F.R 47, Part 15, Part 27 (BRS), Part 90, RoHS, EN 302-502, EN 302-326-2 RSS-192, RSS-197, RSS-199, RSS-247 |
| | | |

Specifications subject to change without notice.



Rocket science inside Unrivaled performance outside.

See www.taranawireless.com for more info.

Legal Description

LAND# LEGAL DESCRIPTION AUS ACREAGE

17.0-N-05.0-E-15-13-031-1007 NENWNWNE SENWNWNE

5.000 acres

Citizen Participation Plan

KAZM Radio Tower 3400 W State Route 89A

APN #800-20-026H

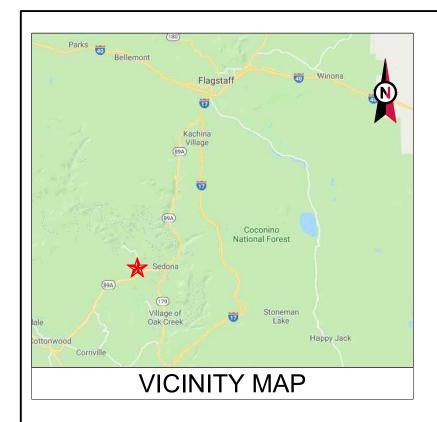
The Letter of Intent and Photo sims will be sent via mail to the adjacent property owners within 300 feet of the KAZM radio tower. If there are significant questions or opposition to the installation of the antennas, American Tower will hold an open house to address any concerns or questions.

Legal Description

LAND# LEGAL DESCRIPTION AUS ACREAGE

17.0-N-05.0-E-15-13-031-1007 NENWNWNE SENWNWNE

5.000 acres



Know what's below.

Call before you dig.



SITE NAME: KAZM

SITE NUMBER: 40103 TO 284686 HUB

SITE ADDRESS: 3400 W STATE ROUTE 89A

PREVENTION, TEMPORARY SHORING, SCAFFOLDING, TRENCH

BOXES/SLOPING, BARRIERS, ETC.

SEDONA, AZ 86336



LOCATION MAP

ENCHANTMENT RESORT BACKHAUL INSTALLATION

| COMPLIANCE CODE | PROJECT LOCATION | PROJECT NOTES | | SHEET INDEX | | |
|--|--|---|-------|--|------|--|
| COMPLIANCE CODE | PROJECT LOCATION | PROJECT NOTES | | SHEET INDEX | | |
| ALL WORK SHALL BE PERFORMED AND MATERIALS INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE | SITE ADDRESS: | ALL WORK SHALL CONFORM TO ALL CURRENT APPLICABLE FEDERAL. STATE. AND LOCAL CODES. INCLUDING | | DESCRIPTION: | REV: | |
| FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNMENT AUTHORITIES. NOTHING IN THESE PLANS IS | 3400 W STATE ROUTE 89A SEDONA. AZ 86336 | ANSI/EIA/TIA-222, AND COMPLY WITH ATC MASTER SPECS. 2. CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL | G-001 | TITLE SHEET | 2 | |
| TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES. | COUNTY: YAVAPAI | REQUIRED INSPECTIONS. 3. ALL DIMENSIONS TO, OF, AND ON EXISTING BUILDINGS. | G-002 | GENERAL NOTES | 0 | |
| INTERNATIONAL BUILDING CODE (IBC) | GEOGRAPHIC COORDINATES: | DRAINAGE STRUCTURES, AND SITE IMPROVEMENTS SHALL BE VERIFIED IN FIELD BY CONTRACTOR WITH ALL DISCREPANCIES | C-101 | SITE PLAN | 1 | |
| 2. NATIONAL ELECTRIC CODE (NEC) | LATITUDE: 34.860833 | REPORTED TO THE ENGINEER. | C-102 | TOWER ELEVATION | 2 | |
| 3. LOCAL BUILDING CODE | LONGITUDE: -111.820278 | DETAILS SHOWN ARE TYPICAL; SIMILAR DETAILS APPLY TO SIMILAR CONDITIONS UNLESS OTHERWISE NOTED. | C-103 | ANTENNA SCHEDULE | 2 | |
| 4. CITY/COUNTY ORDINANCES | GROUND ELEVATION: 4200' AMSL | 5. CONTRACTOR SHALL DETERMINE EXACT LOCATION OF | C-501 | CONSTRUCTION DETAILS | 1 | |
| PROJECT DESCRIPTION | PROJECT LOCATION DIRECTIONS | EXISTING UTILITIES, GROUNDS DRAINS, DRAIN PIPES, VENTS, ETC. BEFORE COMMENCING WORK. 6. CONTRACTOR SHALL REPAIR ANY DAMAGE CAUSED BY CONSTRUCTION OF THIS PROJECT TO MATCH EXISTING PRE-CONSTRUCTION CONDITIONS TO THE SATISFACTION OF | | GROUNDING DETAILS | 0 | |
| THE PROPOSED PROJECT INCLUDES INSTALLING ANTENNAS AND AN EQUIPMENT CABINET. | | | | ANTENNA GROUNDING AND ELECTRICAL DETAILS | 1 | |
| | TAKE 260 TO ALT 89 WEST AND LOOK FOR SIGN ON LEFT THAT SAYS TO AIRPORT. TAKE A RIGHT ONTO CALLE DEL SOL AND THE TOWER WILL BE STRAIGHT AHEAD BEHIND KAZM BUILDING. | THE ATC CONSTRUCTION MANAGER. 7. WHERE EXISTING CONDITIONS DO NOT MATCH THOSE SHOWN IN THIS PLAN SET, CONTRACTOR WILL NOTIFY THE ATC CONSTRUCTION MANAGER IMMEDIATELY. 8. CONTRACTOR SHALL REMOVE ALL RUBBISH AND DEBRIS FROM THE SITE AT THE END OF EACH DAY. 9. CONTRACTOR SHALL COORDINATE WORK SCHEDULE WITH LANDLORD AND TAKE PRECAUTIONS TO MINIMIZE IMPACT AND DISRUPTION OF OTHER OCCUPANTS OF THE FACILITY. | | | | |
| UTILITY COMPANIES | PROJECT TEAM | COORDINATE WITH ATC CONSTRUCTION MANAGER TO | | | | |
| POWER COMPANY: APS PHONE: (602) 371-7171 | TOWER OWNER: | DETERMINE IF ANY PERMITS WILL BE OBTAINED BY ATC. ALL REQUIRED PERMITS NOT OBTAINED BY ATC MUST BE | | | | |
| TELEPHONE COMPANY: N/A PHONE: N/A | JOSEPH P TABBACK PO BOX 1525 SEDONA, AZ 86339 | OBTAINED, AND PAID FOR, BY THE CONTRACTOR. 11. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED HEREIN. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL THE CONSTRUCTION MEANS, | | | | |
| 811 | PROPERTY OWNER: JOSEPH P TABBACK PO BOX 1525 SEDONA, AZ 86339 ENGINEERED BY: ATC TOWER SERVICES | METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT. 12. CONTRACTOR SHALL BE RESPONSIBLE FOR SITE SAFETY INCLUDING COMPLIANCE WITH ALL APPLICABLE OSHA STANDARDS AND RECOMMENDATIONS AND SHALL PROVIDE ALL NECESSARY SAFETY DEVICES INCLUDING PPE AND PPM AND CONSTRUCTION DEVICES SUCH AS WELDING AND FIRE | | | | |
| Know what's below. | 3500 REGENCY PARKWAY SUITE 100 | 7.1.2 33.13.1.33.13.1.32.33.30.0017.6 WEEDING / MAD 1 INC. | | | | |

3500 REGENCY PARKWAY SUITE 100

CARY, NC 27518

ATC TOWER SERVICES, LLC

3500 REGENCY PARKWAY SUITE 100 CARY, NC 27518 PHONE: (919) 468-0112 COA: 11430-0

THESE DRAWINGS AND/OR THE ACCOMPANYING SPECIFICATION AS INSTRUMENTS OR SERVICE ARE THE EXCLUSIVE PROPERTY OF AMERICAN TOWER. THEIR USE AND PUBLICATION SHALL BE RESTRICTED TO THE ORIGINAL SITE FOR WHICH THEY ARE PREPARED. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO AMERICAN TOWER OR THE SPECIFIED CARRIER IS STRICTLY PROHIBITED. ITILE TO THESE DOCUMENTS SHALL REMAIN THE PROPERTY OF AMERICAN TOWER WHETHER OR NOT THE PROJECT IS EXECUTED. NEITHER THE ARCHITECT NOR THE ENGINEER WILL BE PROVIDING ON-SITE CONSTRUCTION REVIEW OF THIS PROJECT. CONTRACTOR(S) MUST VERIFY ALL DIMENSIONS AND ADVISE AMERICAN TOWER OF ANY DISCREPANCIES. ANY PRIOR ISSUANCE OF THIS DRAWING IS SUPERSEDED BY THE LATEST VERSION ON FILE WITH AMERICAN TOWER. THESE DRAWINGS AND/OR THE ACCOMPANYING

| l | REV. | . DESCRIPTION | BY | DATE |
|---|---------------------|------------------|-----|----------|
| l | \triangle | FOR CONSTRUCTION | SRF | 01/09/19 |
| l | \triangle | POWER SOURCE | SF | 01/18/19 |
| l | 2 | TOWER ELEVATION | SF | 03/20/19 |
| l | $\overline{\wedge}$ | | | |
| l | | | | |

ATC SITE NUMBER:

40103 TO 284686 HUB

ATC SITE NAME:

KAZM

SITE ADDRESS: 3400 W STATE ROUTE 89A SEDONA, AZ 86336

BY:

SRF

SRF

SRF

SRF SRF

SRF

DATE:

03/20/19 01/09/19

01/18/19

03/20/19

03/20/19

01/18/19 01/09/19

| DRAWN BY: | SRF |
|--------------|----------|
| APPROVED BY: | KRF |
| DATE DRAWN: | 01/09/19 |
| ATC JOB NO: | 12635699 |
| | |

TITLE SHEET

REVISION:

G-001

GENERAL CONSTRUCTION NOTES:

- ALL WORK SHALL CONFORM TO ALL CURRENT APPLICABLE FEDERAL, STATE, AND LOCAL CODES INCLUDING ANSI/EIA/TIA-222, AND COMPLY WITH ATC MASTER SPECIFICATIONS.
- CONTRACTOR SHALL CONTACT LOCAL 811 FOR IDENTIFICATION OF UNDERGROUND UTILITIES PRIOR TO START OF CONSTRUCTION.
- CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL REQUIRED INSPECTIONS.
- ALL DIMENSIONS TO, OF, AND ON EXISTING BUILDINGS, DRAINAGE STRUCTURES, AND SITE IMPROVEMENTS SHALL BE VERIFIED IN FIELD BY CONTRACTOR WITH ALL DISCREPANCIES REPORTED TO THE ENGINEER
- DO NOT CHANGE SIZE OR SPACING OF STRUCTURAL ELEMENTS.
- DETAILS SHOWN ARE TYPICAL; SIMILAR DETAILS APPLY TO SIMILAR CONDITIONS UNLESS OTHERWISE NOTED
- THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY WHICH SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- CONTRACTOR SHALL BRACE STRUCTURES UNTIL ALL STRUCTURAL ELEMENTS NEEDED FOR STABILITY ARE INSTALLED. THESE ELEMENTS ARE AS FOLLOWS: LATERAL BRACING, ANCHOR
- CONTRACTOR SHALL DETERMINE EXACT LOCATION OF EXISTING UTILITIES, GROUNDS DRAINS, DRAIN PIPES, VENTS, ETC. BEFORE COMMENCING WORK.
- INCORRECTLY FABRICATED, DAMAGED, OR OTHERWISE MISFITTING OR NONCONFORMING MATERIALS OR CONDITIONS SHALL BE REPORTED TO THE T-MOBILE WIRELESS REP PRIOR TO REMEDIAL OR CORRECTIVE ACTION. ANY SUCH REMEDIAL ACTION SHALL REQUIRE WRITTEN APPROVAL BY THE T-MOBILE WIRELESS REP PRIOR TO PROCEEDING
- EACH CONTRACTOR SHALL COOPERATE WITH THE T-MOBILE WIRELESS REP, AND COORDINATE HIS WORK WITH THE WORK OF OTHERS.
- 12. CONTRACTOR SHALL REPAIR ANY DAMAGE CAUSED BY CONSTRUCTION OF THIS PROJECT TO MATCH EXISTING PRE-CONSTRUCTION CONDITIONS TO THE SATISFACTION OF THE T-MOBILE WIRELESS CONSTRUCTION MANAGER.
- ALL CABLE/CONDUIT ENTRY/EXIT PORTS SHALL BE WEATHERPROOFED DURING INSTALLATION USING A SILICONE SEALANT.
- WHERE EXISTING CONDITIONS DO NOT MATCH THOSE SHOWN IN THIS PLAN SET, CONTRACTOR SHALL NOTIFY THE T-MOBILE WIRELESS REP IMMEDIATELY
- 15. CONTRACTOR SHALL ENSURE ALL SUBCONTRACTORS ARE PROVIDED WITH A COMPLETE AND CURRENT SET OF DRAWINGS AND SPECIFICATIONS FOR THIS PROJECT
- 16. CONTRACTOR SHALL REMOVE ALL RUBBISH AND DEBRIS FROM THE SITE AT THE END OF EACH
- CONTRACTOR SHALL COORDINATE WORK SCHEDULE WITH LANDLORD AND TAKE PRECAUTIONS TO MINIMIZE IMPACT AND DISRUPTION OF OTHER OCCUPANTS OF THE FACILITY.
- CONTRACTOR SHALL FURNISH T-MOBILE WIRELESS WITH A PDF MARKED UP AS-BUILT SET OF DRAWINGS UPON COMPLETION OF WORK.
- PRIOR TO SUBMISSION OF BID, CONTRACTOR SHALL COORDINATE WITH T-MOBILE WIRELESS REP TO DETERMINE WHAT, IF ANY, ITEMS WILL BE PROVIDED. ALL ITEMS NOT PROVIDED SHALL BE PROVIDED AND INSTALLED BY THE CONTRACTOR. CONTRACTOR WILL INSTALL ALL ITEMS
- PRIOR TO SUBMISSION OF BID, CONTRACTOR SHALL COORDINATE WITH T-MOBILE WIRELESS REP TO DETERMINE IF ANY PERMITS WILL BE OBTAINED BY CONTRACTOR. ALL REQUIRED PERMITS NOT OBTAINED BY T-MOBILE WIRELESS MUST BE OBTAINED, AND PAID FOR, BY THE
- CONTRACTOR SHALL INSTALL ALL SITE SIGNAGE IN ACCORDANCE WITH T-MOBILE WIRELESS SPECIFICATIONS AND REQUIREMENTS.
- 22. CONTRACTOR SHALL SUBMIT ALL SHOP DRAWINGS TO T-MOBILE WIRELESS FOR REVIEW AND
- ALL EQUIPMENT SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS AND LOCATED ACCORDING TO T-MOBILE WIRELESS SPECIFICATIONS, AND AS SHOWN IN THESE
- 24. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED HEREIN. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.
- CONTRACTOR SHALL NOTIFY T-MOBILE WIRELESS REP A MINIMUM OF 48 HOURS IN ADVANCE OF POURING CONCRETE OR BACKFILLING ANY UNDERGROUND UTILITIES. FOUNDATIONS OR SEALING ANY WALL, FLOOR OR ROOF PENETRATIONS FOR ENGINEERING REVIEW AND APPROVAL
- CONTRACTOR SHALL BE RESPONSIBLE FOR SITE SAFETY INCLUDING COMPLIANCE WITH ALL APPLICABLE OSHA STANDARDS AND RECOMMENDATIONS AND SHALL PROVIDE ALL NECESSARY SAFETY DEVICES INCLUDING PPE AND PPM AND CONSTRUCTION DEVICES SUCH AS WELDING AND FIRE PREVENTION, TEMPORARY SHORING, SCAFFOLDING, TRENCH BOXES/SLOPING BARRIERS, ETC.

- 27. THE CONTRACTOR SHALL PROTECT AT HIS OWN EXPENSE, ALL EXISTING FACILITIES AND SUCH OF HIS NEW WORK LIABLE TO INJURY DURING THE CONSTRUCTION PERIOD. ANY DAMAGE CAUSED BY NEGLECT ON THE PART OF THIS CONTRACTOR OR HIS REPRESENTATIVES, OR BY THE ELEMENTS DUE TO NEGLECT ON THE PART OF THIS CONTRACTOR OR HIS REPRESENTATIVES, EITHER TO THE EXISTING WORK, OR TO HIS WORK OR THE WORK OF ANY OTHER CONTRACTOR, SHALL BE REPAIRED AT HIS EXPENSE TO THE OWNER'S SATISFACTION.
- 28. ALL WORK SHALL BE INSTALLED IN A FIRST CLASS, NEAT AND WORKMANLIKE MANNER BY MECHANICS SKILLED IN THE TRADE INVOLVED. THE QUALITY OF WORKMANSHIP SHALL BE SUBJECT TO THE APPROVAL OF THE T-MOBILE WIRELESS REP. ANY WORK FOUND BY THE T-MOBILE WIRELESS REP TO BE OF INFERIOR QUALITY AND/OR WORKMANSHIP SHALL BE REPLACED AND/OR REWORKED AT CONTRACTOR EXPENSE UNTIL APPROVAL IS OBTAINED.
- 29. IN ORDER TO ESTABLISH STANDARDS OF QUALITY AND PERFORMANCE, ALL TYPES OF MATERIALS LISTED HEREINAETER BY MANUFACTURER'S NAMES AND/OR MANUFACTURER'S CATALOG NUMBER SHALL BE PROVIDED BY THESE MANUFACTURERS AS SPECIFIED.

CONCRETE AND REINFORCING STEEL NOTES:

- DESIGN AND CONSTRUCTION OF ALL CONCRETE ELEMENTS SHALL CONFORM TO THE LATEST EDITIONS OF ALL APPLICABLE CODES INCLUDING: ACI 301 "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS. ACI 117 "SPECIFICATIONS FOR TOLERANCES FOR CONCRETE CONSTRUCTION AND MATERIALS", AND ACI 318 "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE."
- MIX DESIGN SHALL BE APPROVED BY T-MOBILE WIRELESS REP PRIOR TO PLACING CONCRETE.
- CONCRETE SHALL BE NORMAL WEIGHT, 6 % AIR ENTRAINED (+/- 1.5%) WITH A SLUMP RANGE OF 3-6" AND HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 4000 PSI UNLESS OTHERWISE
- 4. THE FOLLOWING MATERIALS SHALL BE USED:

PORTLAND CEMENT: ASTM C150, TYPE 2

REINFORCEMENT: ASTM A185. PLAIN STEEL WELDED WIRE FABRIC

REINFORCEMENT BARS: ASTM A615, GRADE 60, DEFORMED

NORMAL WEIGHT AGGREGATE: ASTM C33 WATER: ASTM C 94/C 94M

ADMIXTURES

-WATER-REDUCING AGENT: ASTM C 494/C 494M, TYPE A

-AIR-ENTERING AGENT: ASTM C 260/C 260M

-SUPERPLASTICIZER: ASTM C494. TYPE F OR TYPE G MINIMUM CONCRETE COVER FOR REINFORCING STEEL SHALL BE NO LESS THAN 3".

- -RETARDING: ASTM C 494/C 494M, TYPE B
- A 3/4" CHAMFER SHALL BE PROVIDED AT ALL EXPOSED EDGES OF CONCRETE IN ACCORDANCE WITH ACI 301 SECTION 4.2.4. UNLESS NOTED OTHERWISE
- INSTALLATION OF CONCRETE EXPANSION/WEDGE ANCHOR SHALL BE PER MANUFACTURER'S WRITTEN RECOMMENDED PROCEDURE. THE ANCHOR BOLT, DOWEL, OR ROD SHALL CONFORM TO MANUFACTURER'S RECOMMENDATION FOR EMBEDMENT DEPTH OR AS SHOWN ON THE DRAWINGS. NO REBAR SHALL BE CUT WITHOUT PRIOR T-MOBILE WIRELESS REP APPROVAL WHEN DRILLING HOLES IN CONCRETE
- ADMIXTURES SHALL CONFORM TO THE APPROPRIATE ASTM STANDARD AS REFERENCED IN "METHOD 1" OF ACL 301
- DO NOT WELD OR TACK WELD REINFORCING STEEL
- ALL DOWELS, ANCHOR BOLTS, EMBEDDED STEEL, ELECTRICAL CONDUITS, PIPE SLEEVES, GROUNDS AND ALL OTHER EMBEDDED ITEMS AND FORMED DETAILS SHALL BE IN PLACE BEFORE START OF CONCRETE PLACEMENT
- 11. REINFORCEMENT SHALL BE COLD BENT WHENEVER BENDING IS REQUIRED.
- 12. DO NOT PLACE CONCRETE IN WATER, ICE, OR ON FROZEN GROUND.
- DO NOT ALLOW REINFORCEMENT, CONCRETE OR SUBBASE TO FREEZE DURING CONCRETE CURING AND SETTING PERIOD. OR FOR A MINIMUM OF 3 DAYS AFTER PLACEMENT.
- 14. FOR COLD-WEATHER(ACI 306) AND HOT-WEATHER(ACI 301M) CONCRETE PLACEMENT, CONFORM TO APPLICABLE ACI CODES AND RECOMMENDATIONS. IN EITHER CASE, MATERIALS CONTAINING CHLORIDE, CALCIUM, SALTS, ETC. SHALL NOT BE USED. PROTECT FRESH CONCRETE FROM WEATHER FOR 7 DAYS, MINIMUM.
- 15. ALL CONCRETE SHALL HAVE A "SMOOTH FORM FINISH."
- UNLESS OTHERWISE NOTED:
 - A. ALL REINFORCING STEEL SHALL BE DEFORMED BARS CONFORMING TO ASTM A615/A 615M/A-996, GRADE 60.
 - B WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185
- SPLICING OF REINFORCEMENT IS PERMITTED ONLY AT LOCATIONS SHOWN IN THE CONTRACT DRAWINGS OR AS ACCEPTED BY THE ENGINEER. UNLESS OTHERWISE SHOWN OR NOTED REINFORCING STEEL SHALL BE SPLICED TO DEVELOP ITS FULL TENSILE CAPACITY (CLASS A) IN ACCORDANCE WITH ACI 318.

- 18. REINFORCING BAR DEVELOPMENT LENGTHS, AS COMPUTED IN ACCORDANCE WITH ACI 318, FORM THE BASIS FOR BAR EMBEDMENT LENGTHS AND BAR SPLICED LENGTHS SHOWN IN THE DRAWINGS. APPLY APPROPRIATE MODIFICATION FACTORS FOR TOP STEEL, BAR SPACING. COVER AND THE LIKE.
- DETAILING OF REINFORCING STEEL SHALL CONFORM TO "ACI MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES" (ACI 315).
- 20. ALL SLAB CONSTRUCTION SHALL BE CAST MONOLITHICALLY WITHOUT HORIZONTAL CONSTRUCTION JOINTS, UNLESS SHOWN IN THE CONTRACT DRAWINGS.
- LOCATION OF ALL CONSTRUCTION JOINTS ARE SUBJECT TO THE REQUIREMENTS OF THE CONTRACT DOCUMENTS, CONFORMANCE WITH ACI 318, AND ACCEPTANCE OF THE ENGINEER. DRAWINGS SHOWING LOCATION OF DETAILS OF THE PROPOSED CONSTRUCTION JOINTS SHALL BE SUBMITTED WITH REINFORCING STEEL PLACEMENT DRAWINGS
- 22. SPLICES OF WWF, AT ALL SPLICED EDGES, SHALL BE SUCH THAT THE OVERLAP MEASURED BETWEEN OUTERMOST CROSS WIRES OF EACH FABRIC SHEET IS NOT LESS THAN THE SPACING OF THE CROSS WIRE PLUS 2 INCHES, NOR LESS THAN 6"
- 23. BAR SUPPORTS SHALL BE ALL-GALVINIZED METAL WITH PLASTIC TIPS.
- 24. ALL REINFORCEMENT SHALL BE SECURELY TIED IN PLACE TO PREVENT DISPLACEMENT BY CONSTRUCTION TRAFFIC OR CONCRETE. TIE WIRE SHALL BE OF SUFFICIENT STRENGTH FOR INTENDED PURPOSE, BUT NOT LESS THAN NO. 18 GAUGE.
- 25. SLAB ON GROUND:
 - A. COMPACT STRUCTURAL FILL TO 95% DENSITY AND THEN PLACE 6" GRAVEL BENEATH
 - PROVIDE VAPOR BARRIER BENEATH SLAB ON GROUND.

STRUCTURAL STEEL NOTES:

- STRUCTURAL STEEL SHALL CONFORM TO THE LATEST EDITION OF THE AISC "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS."
- STRUCTURAL STEEL ROLLED SHAPES, PLATES AND BARS SHALL CONFORM TO THE FOLLOWING
 - A. ASTM A-572, GRADE 50 ALL W SHAPES, UNLESS NOTED OR A992 OTHERWISE
 - B. ASTM A-36 ALL OTHER ROLLED SHAPES, PLATES AND BARS UNLESS NOTED OTHERWISE
 - C. ASTM A-500, GRADE B HSS SECTION (SQUARE, RECTANGULAR, AND ROUND)
 - D. ASTM A-325, TYPE SC OR N ALL BOLTS FOR CONNECTING STRUCTURAL MEMBERS
 - E. ASTM F-1554 07 ALL ANCHOR BOLTS, UNLESS NOTED OTHERWISE
- ALL EXPOSED STRUCTURAL STEEL MEMBERS SHALL BE HOT-DIPPED GALVANIZED AFTER FABRICATION PER ASTM A123. EXPOSED STEEL HARDWARE AND ANCHOR BOLTS SHALL BE GALVANIZED PER ASTM A153 OR B695
- ALL FIELD CUT SURFACES, FIELD DRILLED HOLES AND GROUND SURFACES WHERE EXISTING PAINT OR GALVANIZATION REMOVAL WAS REQUIRED SHALL BE REPAIRED WITH (2) BRUSHED COATS OF ZRC GALVILITE COLD GALVANIZING COMPOUND PER ASTM A780 AND MANUFACTURER'S RECOMMENDATIONS.
- DO NOT DRILL HOLES THROUGH STRUCTURAL STEEL MEMBERS EXCEPT AS SHOWN AND DETAILED ON STRUCTURAL DRAWINGS.
- 6 CONNECTIONS:
 - ALL WELDING TO BE PERFORMED BY AWS CERTIFIED WELDERS AND CONDUCTED IN ACCORDANCE WITH THE LATEST EDITION OF THE AWS WELDING CODE D1.1.
 - ALL WELDS SHALL BE INSPECTED VISUALLY. 25% OF WELDS SHALL BE INSPECTED WITH DYE PENETRANT OR MAGNETIC PARTICLE TO MEET THE ACCEPTANCE CRITERIA OF AWS D1.1 REPAIR ALL WELDS AS NECESSARY
 - C. INSPECTION SHALL BE PERFORMED BY AN AWS CERTIFIED WELD INSPECTOR.
 - D. IT IS THE CONTRACTORS RESPONSIBILITY TO PROVIDE BURNING/WEI DING PERMITS AS REQUIRED BY LOCAL GOVERNING AUTHORITY AND IF REQUIRED SHALL HAVE FIRE DEPARTMENT DETAIL FOR ANY WELDING ACTIVITY
 - ALL ELECTRODES TO BE LOW HYDROGEN, MATCHING FILLER METAL, PER AWS D1.1, UNLESS NOTED OTHERWISE.
 - F. MINIMUM WELD SIZE TO BE 0.1875 INCH FILLET WELDS, UNLESS NOTED OTHERWISE.
 - PRIOR TO FIELD WELDING GALVANIZING MATERIAL. CONTRACTOR SHALL GRIND OFF GALVANIZING 1/2" BEYOND ALL FIELD WELD SURFACES. AFTER WELD AND WELD INSPECTION IS COMPLETE, REPAIR ALL GROUND AND WELDED SURFACES WITH ZRC. GALVILITE COLD GALVANIZING COMPOUND PER ASTM A780 AND MANUFACTURERS RECOMMENDATIONS.



CARY, NC 27518

PHONE: (919) 468-0112

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FOR WHICH THEY ARE PREPARED. ANY USE OR DISCLOSURE
OTHER THAN THAT WHICH RELATES TO AMERICAN TOWER OR
THE SPECIFIED CARRIER IS STRICTLY PROHIBITED. TITLE TO
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ATC SITE NUMBER:

40103 TO 284686 HUB

ATC SITE NAME

KAZM

SITE ADDRESS 3400 W STATE ROUTE 89A SEDONA, AZ 86336

SEAL

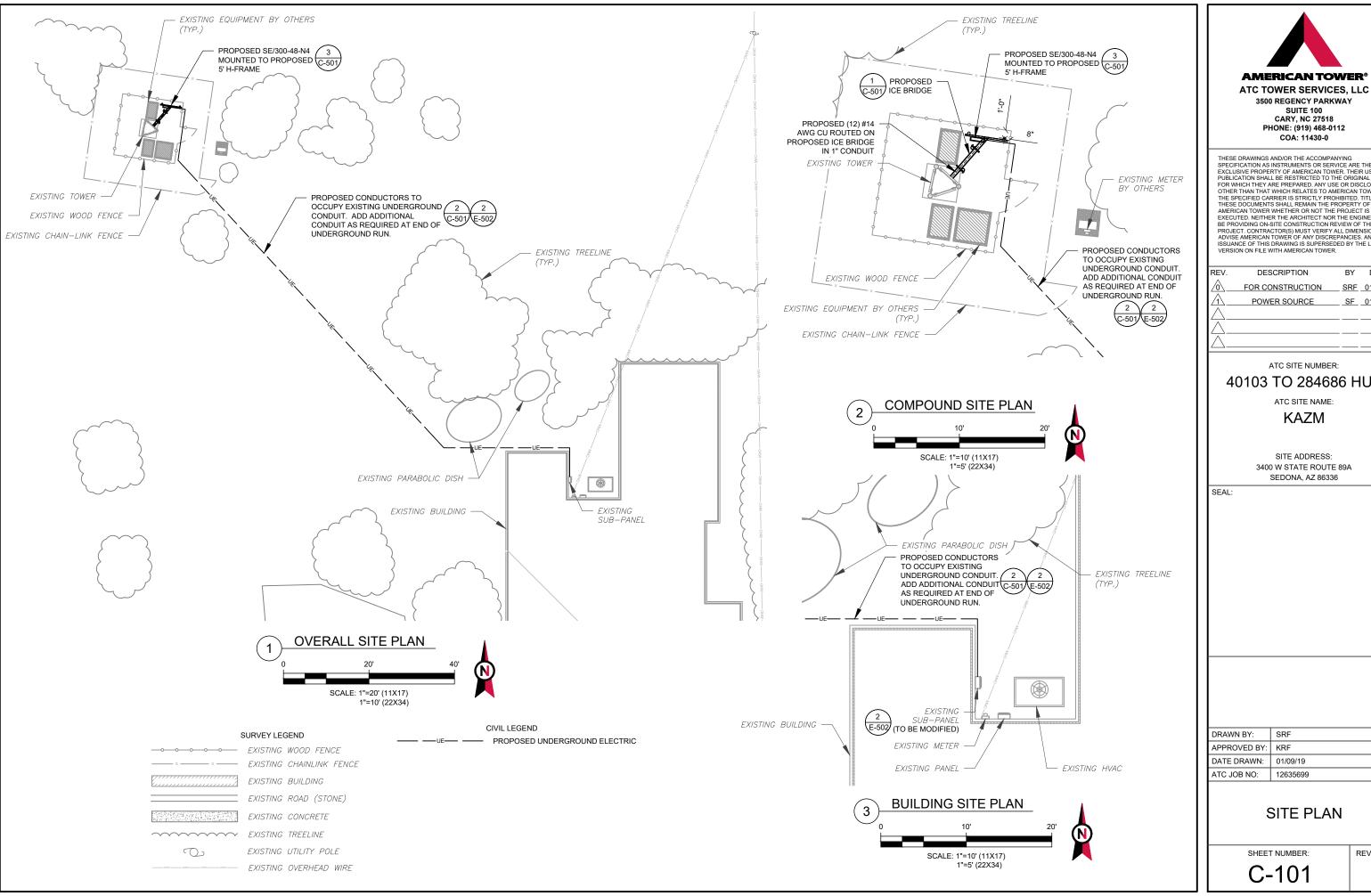
| DRAWN BY: | SRF |
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| APPROVED BY: | KRF |
| DATE DRAWN: | 01/09/19 |
| ATC JOB NO: | 12635699 |

GENERAL NOTES

SHEET NUMBER

G-002

REVISION 0





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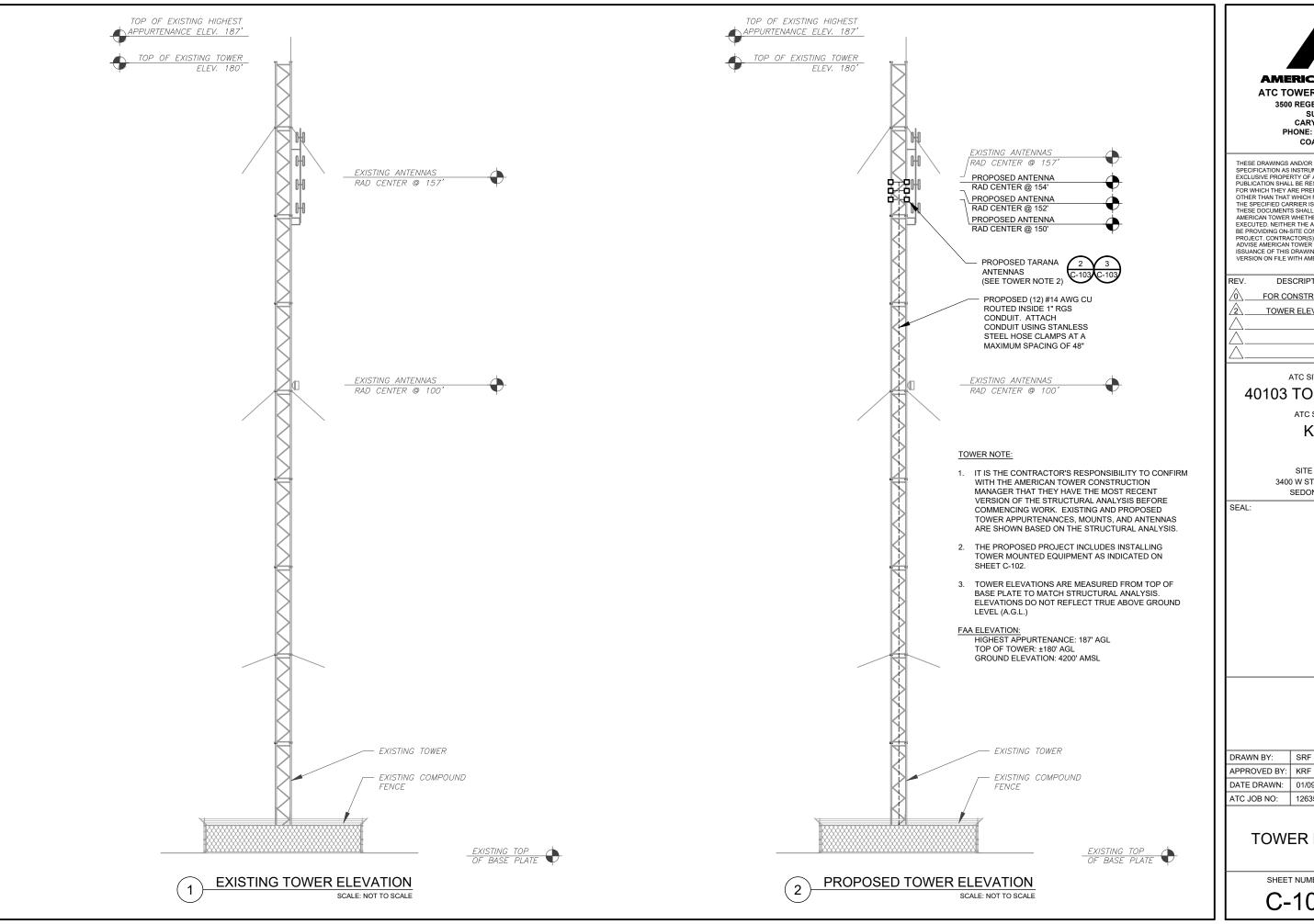
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40103 TO 284686 HUB

3400 W STATE ROUTE 89A

| DRAWN BY: | SRF |
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| APPROVED BY: | KRF |
| DATE DRAWN: | 01/09/19 |
| ATC JOB NO: | 12635699 |

REVISION





ATC TOWER SERVICES, LLC

3500 REGENCY PARKWAY SUITE 100 **CARY, NC 27518** PHONE: (919) 468-0112 COA: 11430-0

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| 2 | TOWER ELEVATION | _SF_ | 03/20/19 |
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ATC SITE NUMBER:

40103 TO 284686 HUB

ATC SITE NAME:

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SITE ADDRESS: 3400 W STATE ROUTE 89A SEDONA, AZ 86336

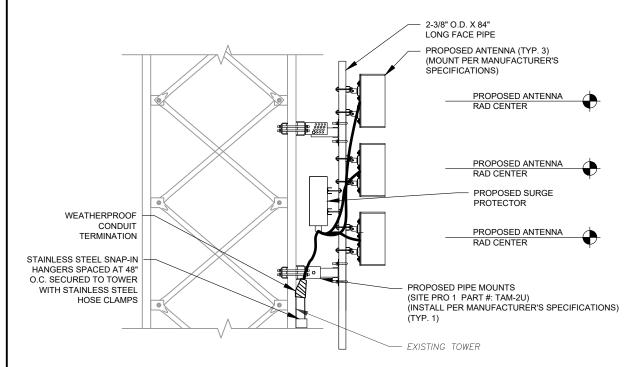
SRF DATE DRAWN: 01/09/19 12635699

TOWER ELEVATION

SHEET NUMBER:

REVISION:

C-102



PROPOSED ANTENNA MOUNTING DETAIL (ELEVATION)

PROPOSED PIPE MOUNTS
(SITE PRO 1 PART #: TAM-2U)
(INSTALL PER MANUFACTURER'S SPECIFICATIONS)
(TYP. 2)

EXISTING TOWER

EXISTING DIPOLE
BY OTHERS

NOTES:

 ALL PROPOSED EQUIPMENT INCLUDING ANTENNAS, COAX, ETC. SHALL BE MOUNTED IN ACCORDANCE WITH THE TOWER STRUCTURAL ANALYSIS ON FILE WITH THE ATC CM.

PROPOSED ANTENNA PLAN

2. SPACING OF PROPOSED EQUIPMENT SHALL BE CONFIRMED FOR TOWER CONFLICTS AND PROPOSED MOUNTS SHALL NOT IMPEDE TOWER CLIMBING PEGS.

| | FINAL ANTENNA/ COAX SCHEDULE | | | | | | | | |
|--------|------------------------------|----------------------|----------------------|-----------------|-----------------|-----------------|------------------------------------|------------------------------|--|
| SECTOR | ANT. | PANEL MODEL# | RAD CENTER | AZIMUTH (TN) | MECH. D-TILT | ELEC. D-TILT | ADDITIONAL TOWER MOUNTED EQUIPMENT | ANTENNA CABLE DESCRIPTION | |
| ALPHA | A1 A2 A3 | TARANA ABSOLUTEAIR 2 | 150' 152' 154' | 331.9°± | - | - | (1) SURGE PROTECTOR | (6) #14 AWG CU (180'±) | |
| ВЕТА | B1 B2 B3 | TARANA ABSOLUTEAIR 2 | 150' 152' 154' | 105.0°± | - | - | (1) SURGE PROTECTOR | (6) #14 AWG CU (180'±) | |

3 ANTENNA SCHEDULE



ATC TOWER SERVICES, LLC 3500 REGENCY PARKWAY

SUITE 100 CARY, NC 27518 PHONE: (919) 468-0112 COA: 11430-0

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| | 2 | TOWER ELEVATION | SF_ | 03/20/19 |
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ATC SITE NUMBER:

40103 TO 284686 HUB

ATC SITE NAME:

KAZM

SITE ADDRESS: 3400 W STATE ROUTE 89A SEDONA, AZ 86336

SEAL:

| DRAWN BY: | SRF |
|--------------|----------|
| APPROVED BY: | KRF |
| DATE DRAWN: | 01/09/19 |
| ATC JOB NO: | 12635699 |

ANTENNA SCHEDULE

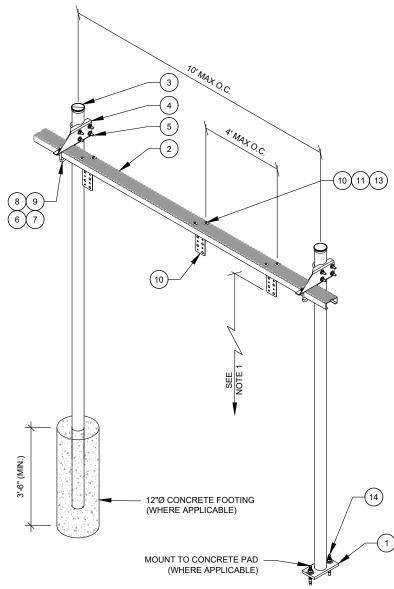
SHEET NUMBER:

C-103

REVISION:

CONSTRUCTION NOTE:

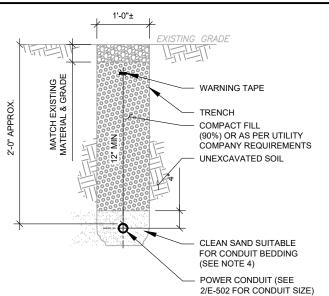
 INSTALL ICE BRIDGE TO ALLOW 7 FEET CLEARANCE ABOVE GRADE TO LOWEST APPURTENANCE OR MINIMUM 1 FOOT OF CLEARANCE ABOVE ANY EXISTING STRUCTURE THE ICE BRIDGE AND HYBRID CABLES ARE BEING ROUTED ABOVE.



| WB | WB-K0510-S WAVEGUIDE BRIDGE KIT - BILL OF MATERIALS (INCLUDED WITH KIT UNLESS NOTED OTHERWISE) | | | | | | |
|------|--|--|------|----------------|---|--|--|
| ITEM | PART NUMBER | DESCRIPTION | ITEM | PART NUMBER | DESCRIPTION | | |
| 1 | MF126.01 | BASE SHOE | 8 | GWL-04 | 1/2" GALV LOCK WASHER | | |
| 2 | WB-CY0510 | SAFETY GRATING 5" X 10' | 9 | GN-04 | 1/2" GALV HEX NUT | | |
| 3 | PC-034 | PIPE CAP 3-1/2" | 10 | ZBV601 | SINGLE 6 CABLE BRACKET | | |
| 4 | WBLB0501 | 5" WAVEGUIDE BRIDGE SUPPORT BRACKET | 11 | MT-387 | SQUARE WASHER, 1-1/2" X 1-1/2" W/ 7/16" HOLE | | |
| 5 | GUB-4356 | 1/2" X 3-5/8" X 6" GALV U-BOLT | 12 | GWF-03 | 3/8" GALV FLAT WASHER | | |
| 6 | WB-JB-6 | 1/2" J-BOLT | 13 | GB-03205 | 3/8" X 2" GALV BOLT KIT | | |
| 7 | GWF-04 | 1/2" GALV FLAT WASHER | 14 | MT-287 | 3/4" x 7" WEDGE ANCHOR | | |
| | | | | | | | |

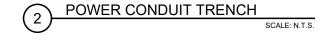
NOTE: CONTRACTOR SHALL USE PARTS MANUFACTURED BY COMMSCOPE AS SHOWN OR APPROVED EQUIVALENT.

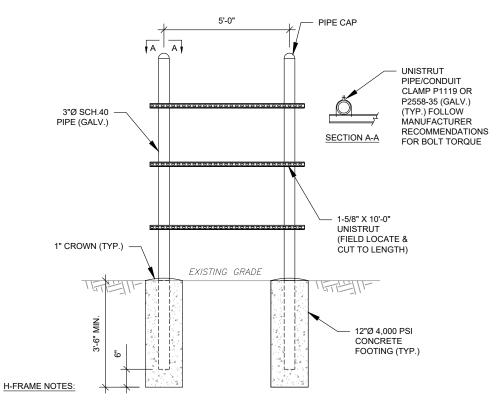
5" WAVEGUIDE BRIDGE KIT SCALE: NOT TO SCALE



TRENCH NOTES:

- IF FREE OF ORGANIC OR OTHER DELETERIOUS MATERIAL, EXCAVATED MATERIAL MAY BE USED FOR BACKFILL.
- IF NOT, PROVIDE CLEAN, COMPACTIBLE MATERIAL. COMPACT IN 8" LIFTS.
 REMOVE ANY LARGE ROCKS PRIOR TO BACKFILLING. CONTRACTOR TO VERIFY
 LOCATION OF EXISTING U/G UTILITIES PRIOR TO DIGGING.
- IF CURRENT AS-BUILT DRAWINGS ARE NOT AVAILABLE CONTRACTOR SHALL HAND DIG U/G TRENCHING.
- 4. CONCRETE ENCASE CONDUIT WHEN TRENCHING UNDER SITE ACCESS ROAD.





- 1. IF IT IS NECESSARY TO EXTEND THE H-FRAME, AN ADDITIONAL POST WILL ALWAYS BE REQUIRED.
- 2. PROPOSED UNISTRUTS TO BE FIELD CUT AND SHOULD NOT EXTEND MORE THAN 6 INCHES BEYOND THE LAST POST.
- SPRAY ENDS OF UNISTRUT WITH COLD GALVANIZING SPRAY PAINT, ALLOW TO DRY, THEN COVER WITH RUBBER PROTECTIVE CAPS FOR SAFETY.
- 4. UNISTRUT TO BE CUT FLUSH WITH NO SHARP OR JAGGED EDGES.
- 5. ALL PROPOSED HARDWARE TO BE MOUNTED PER MANUFACTURERS SPECS.





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ATC SITE NUMBER:

40103 TO 284686 HUB

ATC SITE NAME:

KAZM

SITE ADDRESS: 3400 W STATE ROUTE 89A SEDONA. AZ 86336

SEAL

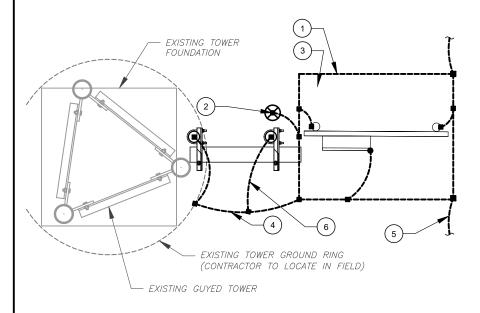
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| APPROVED BY: | KRF |
| DATE DRAWN: | 01/09/19 |
| ATC JOB NO: | 12635699 |

CONSTRUCTION DETAILS

SHEET NUMBER:

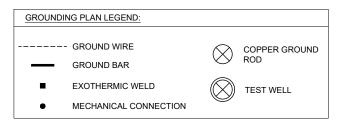
C-501

REVISION



GROUNDING KEYED NOTES:

- #2 AWG SBTC EQUIPMENT PAD GROUND RING.
- 5/8Ø" X 10 FT GROUND ROD.
- GROUNDING CONDUCTOR BETWEEN GROUND RING AND EQUIPMENT GROUNDING LUG EXOTHERMIC WELD TO GROUND RING AND ATTACH TO EQUIPMENT WITH A MECHANICAL CONNECTION.
- #2 AWG SBTC BOND FROM TOWER GROUND RING TO EQUIPMENT PAD
- BOND TO EXISTING GROUND RING (TYP.) (2) PLACES) (VERIFY IN
- #2 AWG SBTC BOND FROM ICE BRIDGE AND H-FRAME POSTS TO EQUIPMENT PAD GROUND RING (TYP. EVERY POST).

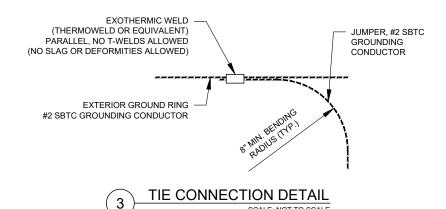


#2 SBTC **EXOTHERMIC WELD** COPPER CLAD STEEL GROUND ROD

DETAILED GROUNDING PLAN

SCALE: NOT TO SCALE

- SEPARATION DIMENSION TO BE VERIFIED WITH LOCAL UTILITY COMPANY REQUIREMENTS.
- 2. COORDINATE UTILITY, LOCATE BEFORE DIGGING
- CONDUIT TRENCHING DEPTHS AT 36" OR 6" BELOW FROST LINE, WHICHEVER IS GREATER.
- 4. ALL RING AND RADIAL DEPTHS AT 30" OR 6" BELOW FROST LINE, WHICHEVER IS GREATER.



GROUNDING NOTES

ALL EQUIPMENT ENCLOSURES, DEVICES AND CONDUITS SHALL BE GROUNDED TO CONFORM WITH THE LATEST REQUIREMENTS OF THE NEC BY THE INSTALLATION OF A SEPARATE, GREEN, INSULATED GROUND CONDUCTOR FOR ALL FEEDER AND BRANCH CIRCUITS. GROUND CONDUCTORS SHALL BE OF THE SIZE INDICATED ON THE DRAWINGS. GROUND CONDUCTORS SHALL BE CONTINUOUS IN LENGTH AND SHALL BE BONDED TO EACH ENCLOSURE THEY PASS THROUGH. CONDUIT SHALL NOT BE USED AS A GROUNDING CONDUCTOR.

2. GROUNDING CONDUCTORS SHALL:

- A. BE #2 AWG SOLID BARE TINNED COPPER (SBTC) FOR ALL GROUNDING SYSTEM WIRE UNLESS OTHERWISE NOTED, OR OTHERWISE REQUIRED BY CODE.
- B. BE MINIMUM 12" BEND RADIUS. KEEP NUMBER OF BENDS TO A MINIMUM
- C. AVOID LONG BONDING CONNECTION RUNS. MAKE DIRECT AS POSSIBLE.
- D. NOT HAVE ANY U-SHAPED RUNS.
- E. BE IN NON-METALLIC CONDUIT ONLY, IF IN CONDUIT.
- BE PLACED THROUGH NON-METALLIC SLEEVES IN FLOORS, WALLS, CEILINGS, ETC.
- G. PROTECTED IN NON-METALLIC CONDUIT WHERE EXPOSED ABOVE GRADE.
- INSTALL ALL GROUNDING RINGS AND RADIALS WITH CONDUCTIVE CEMENT, SANKOSHA AS DISTRIBUTED BY ELECTRIC MOTION COMPANY, INC., WINSTED, CT 06098, OR AS SPECIFICALLY INDICATED. INSTALL PER MANUFACTURER'S SPECIFICATIONS.

3. GROUND RINGS SHALL BE:

- A. MINIMUM 30" BELOW GRADE, OR BELOW FROST LINE WHICHEVER IS
- MINIMUM 2' FROM FOUNDATIONS, FOOTINGS, OTHER GROUNDING SYSTEMS AND ALL CONDUCTIVE OBJECTS.
- C. WITH MINIMUM 12" BEND RADII.
- D. WITH ALL CONNECTIONS IN CONTACT WITH EARTH, BONDED BY
- EXOTHERMIC WELDING.
- E. BONDED TO A SINGLE POINT GROUND (SPG) WITH A SINGLE WIRE AS INDICATED ON DRAWINGS.

GROUND RODS SHALL BE

- A. MINIMUM 5/8" DIAMETER.
- B. MINIMUM 10' LONG.
- C. COPPER-CLAD GALVANIZED STEEL OR STAINLESS STEEL.
- D. PLACED IN UNDISTURBED SOIL AND BELOW THE FROST LINE.
- E. INSTALLED WITH MINIMUM SEPARATION DISTANCE OF TWICE THE DEPTH OF THE ROD(S) OR AS INDICATED ON DRAWINGS.
- MINIMUM TWO (2) RODS ON THE TOWER RING OR ONE (1) PER LEG WHICHEVER IS LARGER, MINIMUM FOUR (4) RODS ON EVERY EQUIPMENT BUILDING RING WITH ONE AT EACH CORNER OR AS INDICATED, MINIMUM ONE (1) ROD FOR POWER SERVICE GROUNDING ELECTRODE, AND MINIMUM ONE (1) ROD AT END OF EACH RADIAL
- CONDUCTIVE OBJECTS, SUCH AS FENCES, SHALL BE BONDED TO THE GROUNDING SYSTEM IF WITHIN 20' OF THE TOWER GROUNDING SYSTEM, OR 5' OF ANY OTHER GROUNDED



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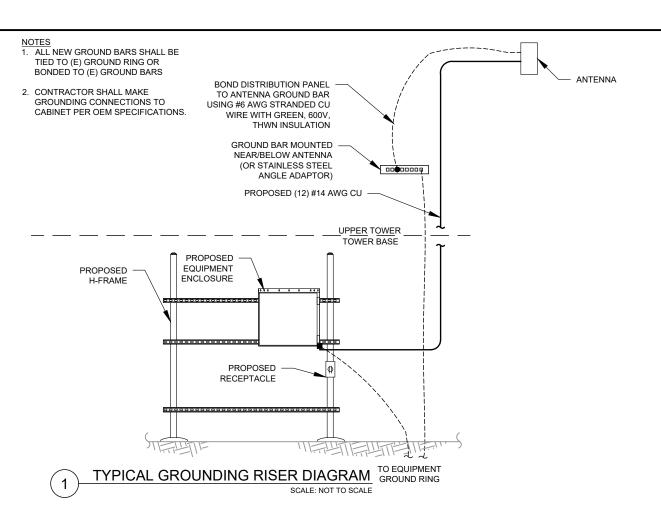
SRF DRAWN BY: APPROVED BY: KRF DATE DRAWN: 01/09/19 ATC JOB NO: 12635699

GROUNDING DETAILS

SHEET NUMBER

REVISION E-501

GROUND ROD DETAIL SCALE: NOT TO SCALE



| PA NEL | | TYPE: | LIGHTING & APPLIANCE | SYSTEM: | 120/208V, 3Ø, 4W, 24 CKT | LOCATION: | EXSTING BLDG EXTERIOR WALL | |
|--------------|----------------------|------------|----------------------|---------------------|--------------------------|--------------|----------------------------|--|
| DESIGNATION: | Existing Owner Panel | MOUNTING: | SURFACE | MAIN BREAKER (MB): | MLO | | | |
| _ | | ENCLOSURE: | NEMA 3R | MA IN BUS RATING: | 60A | PANEL NOTES: | EXISTING SUB-PANEL | |
| | | | | MIN. A.I.C. RATING: | 22,000 | _ | | |

| CO | NNECTE | ΞD | | | FEEDER OR BRANCH CIRCUIT | | | | | | | FEEDER OR BRANCH CIRCUIT | | | | | | | | CONNECTED | | |
|------|--------|------|-----------------------------------|------|--------------------------|------|---------|-------|------|-----------|-----|--------------------------|------|-------|---------|---------|--------|------|----------------------------------|------------|------|-----|
| LO | AD(kV | A) | BRIEF DESCRIPTION | BRE | AKER | | CIRCUIT | • | POLE | CIR C. | 1 | C IR C . | POLE | | CIRCUIT | - | BRE | AKER | BRIEF DESCRIPTION | LOAD (kVA) | | |
| Α | В | С | | AMPS | POLES | WIRE | GND | COND. | NO. | N O T E S | | N O T E S | NO. | COND. | GND | WIRE | POLES | AMPS | | Α | В | С |
| 0.00 | | | | | | | | | 1 | | | 2, 3 | 2 | 4" | #12 | 2-#12 | 1 | 20 | GFCI RECEPTACLE | 1.92 | | |
| | 0.00 | | | | | | | | 3 | | | 2, 3 | 4 | 1 ' | #12 | 2-#12 | 1 | 15 | UPS #1 | | 1.44 | |
| | | 0.00 | EXISTING BREAKER (TO BE REMOVED) | 20 | 2 | | | | 5 | 1 | | | 6 | | | | 1 | 20 | EXISTING A/C | | | 1.9 |
| .00 | | | EXISTING BREAKER (TO BE REVIOVED) | 20 | | | | | 7 | ' | | | 8 | | | | 1 | 20 | EXISTING LIGHTS | 1.92 | | |
| | 0.00 | | | | | | | | 9 | | | | 10 | | | | 1 | | | | 0.00 | |
| | | 0.00 | EXISTING BREAKER (TO BE REMOVED) | 20 | 1 | | | | 11 | 1 | | | 12 | | | | | | | | | 0.0 |
| 00 | | | EXISTING BREAKER (TO BE REMOVED) | 20 | 1 | | | | 13 | 1 | |] 1 | 14 | | | | 3 | 50 | EXISTING BREAKER (TO BE REMOVED) | 0.00 | | |
| | 0.00 | | | | | | | | 15 | | | 1 | 16 | 1 | | | | | | | 0.00 | |
| | | 0.00 | EXISTING BREAKER (TO BE REMOVED) | 1 | 1 | | | | 17 | 1 | | | 18 | | | | | | | | | 0.0 |
| .00 | | | EXISTING BREAKER (TO BE REMOVED) | 20 | 1 | | | | 19 | 1 | | 1 | 20 | | | | 3 | 30 | SURGE PROTECTION | 0.00 | | |
| | 0.00 | | | | | | | | 21 | | | 1 | 22 | 1 | | | | | | | 0.00 | |
| | | 0.00 | | | | | | | 23 | | | 2, 3 | 24 | 1" | #12 | 2-#12 | 1 | 15 | UPS #2 | | | 1.4 |
| .0 | 0.0 | 0.0 | | • | • | | • | | | Α | В | С | TC | TAL | | • | • | - | | 3.8 | 1.4 | 3. |
| | | | - | | | | | | | 3.8 | 1.4 | 3.4 | 3 | 3.6 | | CTED LO | DAD(kV | ۹) | | | • | |
| | | | | | | | | | | 3.8 | 1.4 | 3.4 | 1 , | 3.6 | | ID LOAD |) (k\/ | | DERATING FACTOR | (80%) | | |

CIRCUIT NOTES

- (1) EXISTING EQUIPMENT NO LONGER IN SERVICE, REMOVE BREAKER AND UPDATE PANEL SCHEDULE PER NEC 408.4
- (2) NEW CIRCUIT BREAKER IN EXISTING SPACES
- (3) NEW CIRCUITS FED BY BREAKERS 2, 4 & 24 TO SHARE THE EXISTING CONDUIT ROUTED TOWARDS TOWER. GC TO CONFIRM SIZE, 1" MINIMUM SIZE ALLOWED.

2 PANEL SCHEDULE

SCALE: NOT TO SCALE



ATC TOWER SERVICES, LLC

3500 REGENCY PARKWAY SUITE 100 CARY, NC 27518 PHONE: (919) 468-0112 COA: 11430-0

THESE DRAWINGS AND/OR THE ACCOMPANYING SPECIFICATION AS INSTRUMENTS OR SERVICE ARE THE EXCLUSIVE PROPERTY OF AMERICAN TOWER. THEIR USE AND PUBLICATION SHALL BE RESTRICTED TO THE ORIGINAL SITE FOR WHICH THEY ARE PREPARED. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO AMERICAN TOWER OR THE SPECIFIED CARRIER IS STRICTLY PROHIBITED. TITLE TO THESE DOCUMENTS SHALL REMAIN THE PROPERTY OF AMERICAN TOWER WHETHER OR NOT THE PROPERTY OF EXECUTED. NEITHER THE ARCHITECT NOT THE ENGINEER WILL BE PROVIDING ON-SITE CONSTRUCTION REVIEW OF THIS PROJECT. CONTRACTOR(S) MUST VERIFY ALL DIMENSIONS AND ADVISE AMERICAN TOWER OF ANY DISCREPANCIES. ANY PRIOR ISSUANCE OF THIS DRAWING IS SUPERSEDED BY THE LATEST VERSION ON FILE WITH AMERICAN TOWER.

| REV. | DESCRIPTION | BY | DATE |
|---------------|------------------|-----|----------|
| \triangle _ | FOR CONSTRUCTION | SRF | 01/09/19 |
| 1 | POWER SOURCE | SF | 01/18/19 |
| | | | |
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ATC SITE NUMBER:

40103 TO 284686 HUB

ATC SITE NAME:

KAZM

SITE ADDRESS: 3400 W STATE ROUTE 89A SEDONA, AZ 86336

SEAL:

DEMANDLOAD: 30.0 AMPS

| DRAWN BY: | SRF |
|--------------|----------|
| APPROVED BY: | KRF |
| DATE DRAWN: | 01/09/19 |
| ATC JOB NO: | 12635699 |

ANTENNA GROUNDING AND ELECTRICAL DETAILS

LICET NI IMPED:

E-502

REVISION:



EXISTING VIEW FROM LOCATION 1



PHOTO RENDERING BY TOWER ENGINEERING PROFESSIONALS, INC.



KAZM Radio 3400 W State Route 89A Sedona, AZ 86336 (Yavapai County)

PROPOSED VIEW FROM LOCATION 1



PHOTO RENDERING BY TOWER ENGINEERING PROFESSIONALS, INC.

Citizens Participation Report

American Tower Antenna Install
KAZM Radio Tower 3400 W State Route 89A

- May 14th- Letter and Photo Simulation mailed to adjacent property owners within 300 feet from the radio tower. (see attached)
- May 22nd- Received inquiry from Nicole Brooks, CAAM Community Manager (see attached correspondence)
- May 23rd- To date no other inquiries have been received.

May 14th, 2019

To Whom It May Concern:

Re: Project Description -KAZM Radio Tower 3400 W State Route 89A

American Tower LLC (ATC) is seeking approval of a Conditional Use Permit to install line of site antennas on the existing KAZM radio tower. This site would be a relay from an ATC site located at 235 Air Terminal Drive to a new site at Enchantment Resort, 525 Boyton Canyon Drive. Enchantment resort currently has poor wireless coverage due to the terrain and remote location.

The antennas proposed at the KAZM and Sedona Airport site will not provide wireless coverage to the surrounding area. They are line of site antennas only and simply stated they are equivalent to a fiber optic line via air to transmit information (data/voice) to the end point at Enchantment Resort, where the signal will be converted to provide wireless coverage for the Resort.

Proposed Equipment Detail

- Install six line of sight antennas at 150 feet on the existing 180 foot KAZM radio tower (antenna size 9.6"W x 11.81" H X 5.24"D) (see attached P-Sim)
- Install one, one inch conduit from the ground equipment box to the antennas
- Install one equipment box on new H-Frame in existing equipment are, behind an existing fence.

The wireless line of site antennas will not be providing wireless coverage and are only transmitting voice and data directly to Enchantment Resort.

Alternative locations are not feasible as the antennas proposed are line of site and need this tower because it is the midpoint line from the Sedona Airport to the end point at Enchantment Resort.

Should you have any questions feel free to contact me at -

714-875-6972

Douglas.Kearney@Americantower.com

Sincerely,

Douglas Kearney

Project Manager, Site Development

American Tower Corporation



EXISTING VIEW FROM LOCATION 1

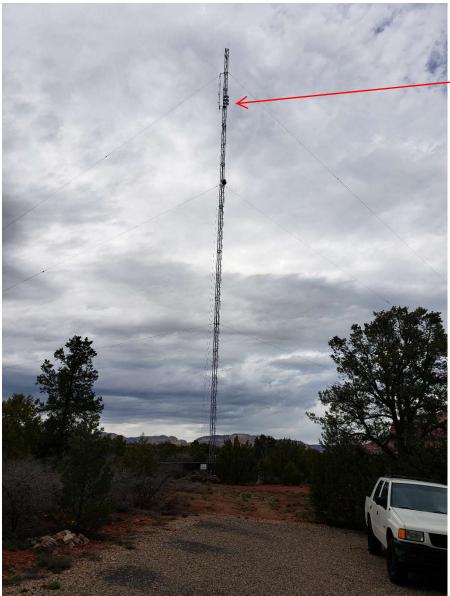


PHOTO RENDERING BY TOWER ENGINEERING PROFESSIONALS, INC.



KAZM Radio 3400 W State Route 89A Sedona, AZ 86336 (Yavapai County)

PROPOSED VIEW FROM LOCATION 1



Proposed Antennas

PHOTO RENDERING BY TOWER ENGINEERING PROFESSIONALS, INC.

Citizens Participation Report

American Tower Antenna Install
KAZM Radio Tower 3400 W State Route 89A

- May 14th- Letter and Photo Simulation mailed to adjacent property owners within 300 feet from the radio tower. (see attached)
- May 22nd- Received inquiry from Nicole Brooks, CAAM Community Manager (see attached correspondence)
- May 23rd- To date no other inquiries have been received.

 From:
 Douglas Kearney

 To:
 Nicole Brooks

 Subject:
 RE: KAZM Radio Tower

Date: Wednesday, May 22, 2019 3:32:00 PM

Correct, adding the small antennas and ground equipment inside the existing equipment compound

Douglas Kearney

Project Manager, Site Development

American Tower Corporation

714-875-6972 mobile

douglas.kearney@americantower.com

Customer input is important to American Tower. Click here to submit your feedback.

From: Nicole Brooks [mailto:nbrooks@AssociatedAsset.com]

Sent: Wednesday, May 22, 2019 3:24 PM

To: Douglas Kearney

Subject: RE: KAZM Radio Tower

Hello again,

Just to clarify, all you are doing is adding a tiny antenna to the existing right? The photos in color make a huge difference, I will send this info out to Rimstone residents tomorrow. Thank you!

Sincerely,

Nicole Brooks, CAAM

Community Manager AAM, LLC 928.771.1225 x1012 (direct line) 928.708.0971 (direct fax) NBrooks@AssociatedAsset.com

From: Douglas Kearney [mailto:Douglas.Kearney@AmericanTower.com]

Sent: Wednesday, May 22, 2019 12:20 PM

To: Nicole Brooks <nbrooks@AssociatedAsset.com>

Cc: albertdbarton@icloud.com; Brenda Hearty
 Sbearty@AssociatedAsset.com>; cjlit@outlook.com; Michael Bluff <mbluff@courts.az.gov>; Michael Givler - Chair <mcgivler@ameritech.net>; Peter Fagan, President <creativefin@aol.com>

Subject: RE: KAZM Radio Tower

Mimecast Attachment Protection has deemed this file to be safe, but always exercise caution when opening files.

Dear Nicole,

Regarding some of the Rimstone residents not receiving the Citizens Participation notification, the notification radius required by the City is 300ft from the radio tower and some of the residences are beyond the 300 feet noticing requirement. The project should be scheduled for a hearing on June 18th. The City will be sending out a separate hearing notice to all residents within a 300 foot radius of the tower.

Please feel to contact me with any additional questions or items I can clarify for the Rimstone residents.

I have attached a clearer copy of the letter and photo simulation of the proposed equipment on the tower for your reference.

Douglas Kearney

Project Manager, Site Development

American Tower Corporation
714-875-6972 mobile
douglas.kearney@americantower.com

Customer input is important to American Tower. Click here to submit your feedback.

From: Nicole Brooks [mailto:nbrooks@AssociatedAsset.com]

Sent: Wednesday, May 22, 2019 10:34 AM

To: Douglas Kearney

Cc: albertdbarton@icloud.com; Brenda Hearty; cilit@outlook.com; Michael Bluff; Michael Givler - Chair;

Peter Fagan, President

Subject: FW: KAZM Radio Tower

Hello Douglas,

I am the Community Manager for the Rimstone neighborhood in Sedona. It seems that not all of our residents have received this notice. I am happy to send this information onto our residents via email, however I will need you to confirm if there is a zone board hearing date/ location as well as the proposed installation date please.

Sincerely,

Nicole Brooks, CAAM

Community Manager
AAM, LLC
928.771.1225 x1012 (direct line)
928.708.0971 (direct fax)
NBrooks@AssociatedAsset.com

AssociatedAsset.com | HomeownerResources.com

AssociatedAsset.com | HomeownerResources.com

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| Citizents Participation F | | | | | | | | |
|---------------------------|---|---|--|--|--|--|--|--|
| Adjacent Owner Repsonse | | Comment | | | | | | |
| Date | Name | | | | | | | |
| | Nicole Brooks, CAAM Community Manager AAM, LLC 928.771.1225 x1012 (direct line) 928.708.0971 (direct fax) NBrooks@AssociatedAsset.com | Inquired about date for public hearing-see attached email | | | | | | |
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408-00-002 Joseph Tabback Po Box 4259 Sedona AZ 86340

408-02-002R James Walters Po Box 620 Sedona AZ 86339

408-02-003C Stephen Williamson 255 Kachina Dr Sedona AZ 86336

408-02-005 Craig Sperling 2625 S Quail Run Cottonwood AZ 86326

408-02-077F Sedona Charter School 165 Kachina Dr Sedona AZ 86336

408-11-088E Scott Haebich Po Box 310 Ada MI 49301

408-11-088H Monica Whitaker 3385 Calle Del Sol Sedona AZ 86336

408-11-088L Charles Fechter 701 N Sparkle Ct Oswego IL 60543

408-11-088P Terry Cole 31541 Melvin St Menifee CA 92584

408-11-088S Michael Mcmaster 383 Pulse Ave Henderson NV 89011 408-02-002P James Walters Po Box 620 Sedona AZ 86339

408-02-002S Moki Sedona Llc 1160 Burns Rd Milford MI 48381

408-02-004C
Palisades Sedona Llc
1160 Burns Rd
Milford MI 48381

408-02-006 Fred Schimer Po Box 777 Sedona AZ 86339

408-11-088C Gerald Urbanek 3385 Calle Del Sol 1 Sedona AZ 86336

408-11-088F Joni Hudson 1724 W Hampson Ave Coeur D Alene ID 83815

408-11-088J Miles Russell 60 Calla Lily Ln Wells ME 4090

408-11-088M Debra Barnes 94 Garibaldi St Lake Oswego OR 97035

408-11-088Q Eric Avery 11230 Stoney Meadow Dr Houston TX 77095

408-11-088T Harry Tate 3385 Calle Del Sol 16 Sedona AZ 86336 408-02-002Q James Walters Po Box 620 Sedona AZ 86339

408-02-003B Billy Harms 3490 Moki Dr Sedona AZ 86336

408-02-004D Walters James Curtis Ui Po Box 620 Sedona AZ 86339

408-02-008 Jeffrey Olson 6212 E Mescal St Scottsdale AZ 85254

408-11-088D Vincent Scaduto 8386 S Spratling Dr West Jordan UT 84081

408-11-088G Mel Blakeslee 3385 Calle Del Sol 5 Sedona AZ 86336

408-11-088K Steven Peist 39510 N Bent Creek Ct Anthem AZ 85086

408-11-088N James Burgos 4904 W Adare Dr Muncie IN 47304

408-11-088R Yujung Skibo 3553 E Jaeger Cir Mesa AZ 85213

408-11-088U Return Capital 22004 N 36Th Way Phoenix AZ 85050



label size 1" x 2 5/8" compatible with Avery @5160/8160 Étiquette do format 25 mm x 67 mm compatible avec Avery @5160/8160

SELAPLES®

408-11-088V Return Capital 22004 N 36Th Way Phoenix AZ 85050

408-11-148 Barry Goldberg 40 Calle Del Medio Sedona AZ 86336

408-11-151 Janelle Davis 10307 Woodridge Ln Omaha NE 68124

408-11-154 Wesley Little 85 Calle Del Medio Sedona AZ 86336

408-11-157 Dennis Stephens 1307 Glenhilshire Dr Houston TX 77055

408-11-160 Thomas Jepperson Po Box 2090 Sedona AZ 86339

408-11-163 Marshall Parsons 15195 Southfork Rd Sweet Sweet Springs MO 65351

408-11-166 James Pryke 40 Calle Del Oeste 13B Sedona AZ 86336

408-11-169 Randy Dent 3660 Dianna Way Wenatchee WA 98801

408-11-172 Steven Carnow 5731 E Blue Sky Dr Scottsdale AZ 85266 408-11-088W Piedras Del Rojo Property Owners 3504 S 157Th Way Gilbert AZ 85297

408-11-149 Latch Phyllis L Trust 70 Fresno St Paso Robles CA 93446

408-11-152 Patricia Wilson 300 Red Rock Dr Sedona AZ 86351

408-11-155 Gregory Tamburello 362 Panoramic Dr Silt CO 81652

408-11-158 David York 614 Silver Springs Cir Cottonwood AZ 86326

408-11-161 Gabriel Wolf 1360 Arbor Ave Highland Park IL 60035

408-11-164 Tommy Turner 20 Calle Del Oeste Sedona AZ 86336

408-11-167 Susan Gennrich 10 Thornapple Ct Saginaw MI 48603

408-11-170 Thomas Keskitalo 859 Starwick Dr Ann Arbor MI 48105

408-11-173
Spotlight Properties Iii Llc
1209 E Lone Shore Dr
Eagle ID 83616

408-11-088X
Piedras Del Rojo Property Owners
3504 S 157Th Way
Gilbert AZ 85297

408-11-150
Del Sol Properties Llc
8636 Forrest Dr
Highlands Ranch CO 80126

408-11-153 James Meyers 107 Moylan Ct Folsom CA 95630

408-11-156 Robert Fiore 65 Calle Del Medio 8A Sedona AZ 86336

408-11-159 William Massey 16 Sea Ln Savannah GA 31419

408-11-162 David Cooper 5 Calle Del Medio Sedona AZ 86336

408-11-165 Carol Small Po Box 10582 Sedona AZ 86339

408-11-168 Margaret Morasca 2245 17Th Ave San Francisco CA 94116

408-11-171 Alfonso Rendon 8502 Calle Carabe St Rancho Cucamonga CA 91730

408-11-174 Jeffrey Wagner 8580 Orr Rd Girard PA 16417

label size 1" x 2 5/8" compatible with Avery @5160/8160 Étiquette do format 25 mm x 67 mm compatible avec Avery @5160/8160



408-11-346 William Oldt Jr 3340 W State Route 89A 1 Sedona AZ 86336

408-11-349 Steven Welch 4364 Fairlawn Dr La Canada Ca 91011

408-11-352 Adam Gifford 3340 W State Route 89A 7 Sedona AZ 86336

408-11-538 Michael Bluff Po Box 25 Camp Verde AZ 86322

408-11-541 Roger Malin 24430 N 20Th Dr Phoenix AZ 85085

408-11-544 Dennis Matheson 3470 Navoti Dr Sedona AZ 86336

408-11-547 John Lange Po Box 16061 Golden CO 80402

408-11-550 Patricia Hennessy 1000 Crown Ridge Rd Sedona AZ 86351

408-11-553
Mesquite Hills Investments Llc
Po Box 2470
Cottonwood AZ 86326

408-11-347 Mark Crounse 5851 Gardner Rd Altamont NY 12009

Cheryl Love 3864 S Ox Bow Loop Flagstaff AZ 86005

408-11-350

408-11-353 Melanie Aicard 481 Casner Dr Clarkdale AZ 86324

408-11-539 Anthony Winkel Po Box 4149 Sedona AZ 86340

408-11-542 Jack Swendsen 3440 Navoti Dr Sedona AZ 86336

408-11-545 David Murrill 3480 Navoti Dr Sedona AZ 86336

408-11-548 Harvey Bershader 25 Rimsone Cir Sedona AZ 86336

408-11-551
Conlin Charles & Carol Trust
4436 Chelford St
San Diego CA 92117

408-11-554 Craig Lumsden 7215 N Via De La Montana Scottsdale AZ 85258 408-11-348 Bglb Llc Po Box 1081 Sedona AZ 86339

408-11-351 Donald Harms 3340 W State Route 89A 6 Sedona AZ 86336

408-11-535 Harold Brockwell 3485 Navoti Dr Sedona AZ 86336

408-11-540 Michael Bluff Po Box 25 Camp Verde AZ 86322

408-11-543

Rex Cooley

The second secon

6245 E Broadway Blvd 400

408-11-546 Robert Murdock 5 Rimstone Cir

Sedona AZ 86336

Tucson AZ 85711

408-11-549 Alan Bernard 35 Rimstone Cir Sedona AZ 86336

408-11-552 Robert Olson 3190 N State Route 89A Sedona AZ 86336

408-11-555 Gregory Koss 30 Emerald Ct Sedona AZ 86336

408-11-575A Rimstone Homeowners Association 1600 W Broadway Rd 200 Tempe AZ 85282

City of Sedona, Arizona

Telecommunications Site Review
Addition of Equipment on AM Tower



7050 W. Palmetto Park Road #15-652 Boca Raton, FL 33433-3483 Tel: 877.438.2851 Fax: 877.220.4593

April 26, 2019

Ms. Cari Meyer, Senior Planner City of Sedona, Community Development 102 Roadrunner Drive (Bldg 104) Sedona, AZ 86336

RE: KAZM Radio/American Tower Company

Dear Ms. Meyer,

At your request, on behalf of the City of Sedona, Arizona ("City"), CityScape Consultants, Inc. ("CityScape") in its capacity as telecommunications consultant for the City, has considered the merits of the above referenced Conditional Use Permit application submitted by American Tower Company ("ATC" or "Applicant") to install line of sight antennas on one of the existing KAZM AM radio towers. An initial path analysis conducted by CityScape verified two issues with a single and direct communications path from the building on Air Terminal Drive direct to the Enchantment Resort; 1) the distance would have excessive signal loss, and 2) the terrain path has considerable obstructions. Adding another send/receive facility between the proposed two locations would provide greater path stability and assure better signal quality. Therefore, the reasonable location would be utilizing one of the existing towers of KAZM Radio as proposed in this application, see *figure 1*.

CityScape's understanding of all types of wireless telecommunications, point-to-point microwave links, AM Radio and terrain factors allows for the understanding of the purpose and intent of this application. The proposed application is not for cellular type services but for data links serving as backhaul for a stated new facility to be at the Enchantment Resort. Therefore, much of the submittal requirements in the Sedona ordinance are not applicable as recognized by the applicant. The application proposes to install six (6) antennas at the 150-foot level of the northern KAZM 180-foot tower, see *figure 2*.

Using AM Radio towers for attachments can be complex, but because there is an existing attachment already on this tower those complexities would have already been addressed, making

City of Sedona KAZM Radio American Tower Company Page 2



the subject tower a logical choice to use. AM Radio Stations are the only communications service which the tower is also the operating antenna. That is contrary to all other types of towers, which are merely support structures on which antennas are attached. Adding the proposed antennas to this AM tower will require KAZM to document to the FCC there will be no adverse impact to the operating parameters of KAZM. There are additional technical considerations for KAZM but as they are unrelated to the applicant purpose, CityScape will defer all AM radio technical compliance to the KAZM licensee. The City of Sedona has no jurisdiction regarding operation of KAZM; therefore, the operating parameters of KAZM are not relevant to the City or this application. The proposed installation will use unlicensed radio equipment, but the type of equipment was not documented in this application. The FCC requires all equipment that operates radio frequency services must be FCC type approved or type accepted equipment.

Additionally, the application indicates the use of a building located at 235 Air Terminal Drive on airport property (referenced Point A), see *figure 3*, where it appears the Applicant will add antenna to facilitate a link with the KAZM Tower. The Applicant proposes to mount six (6) antennas at the 150-foot level of the North KAZM tower, referred to as Site #4 in the City of Sedona wireless inventory, see *figure 4*. The antenna arrangement will be three antennas aimed 105 degrees toward 235 Air Terminal Drive, Point A, three antennas aimed 231.9 degrees toward the Enchantment Resort at 525 Boynton Canyon Road, (referenced Point B), see *figure 5*.

Generally, structural analysis and FCC compliance statements are included with wireless communication applications, however in this instance CityScape finds it acceptable that the FCC compliance statement is not initially included, but will recommend receipt of same prior to final adjudication of the application. Cityscape believes there should be a tower structural analysis submitted with this application. There is a cursory reference in the construction drawings that states the equipment shall be mounted in accordance with the tower structural analysis on file with "ATC" but no further information is provided.

City of Sedona KAZM Radio American Tower Company Page 3



Conclusion

It is the opinion of the undersigned that this application for a telecommunications link submitted by American Tower Company should be approved with the following conditions:

- 1. The Applicant shall provide the City a satisfactory structural analysis of the proposed KAZM tower to include the attachment of all existing equipment and proposed Tararna Antennas as shown on the construction drawings; and,
- 2. The Applicant shall provide satisfactory documentation that all proposed RF equipment complies with FCC rules.

I certify that to the best of my knowledge all the information included herein is accurate at the time of this report. CityScape only works for public entities and has unbiased opinions. All recommendations are based on technical merits without prejudice per prevailing laws and codes.

Respectfully submitted,

Richard L. Edwards

FCC Licensed PCIA Certified

CityScape Consultants, Inc.



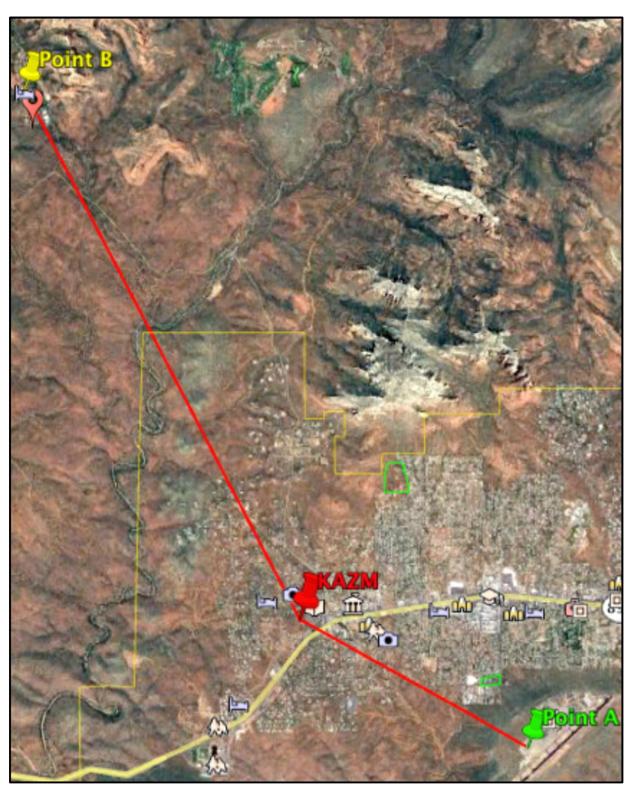
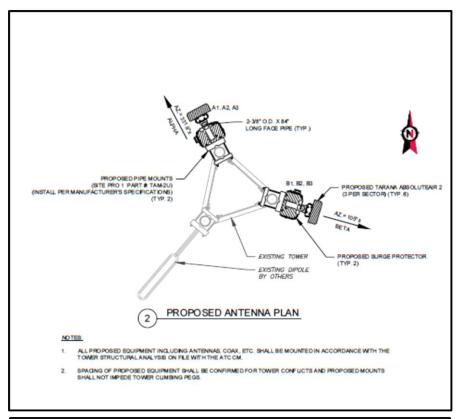
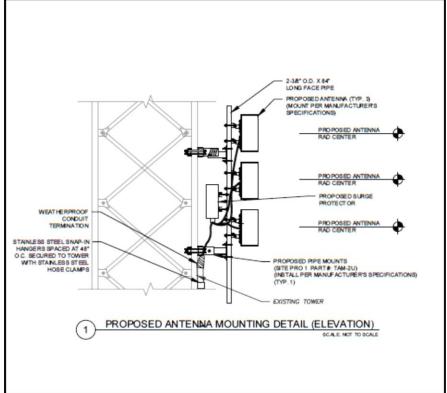


Figure 1 – Signal Path







 $Figure\ 2-Antenna\ Mounting\ Configuration$





Figure 3 – 235 Air Terminal Drive





Figure 4 – KAZM Towers



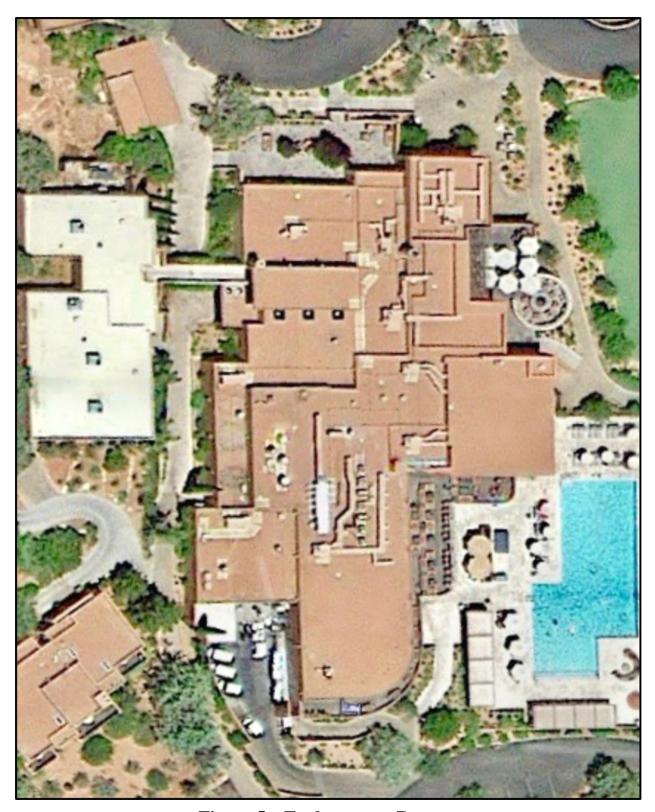


Figure 5 – Enchantment Resort