



Board of Adjustment Staff Report

Meeting Date: October 6, 2016

Subject: Special Use Permit Case Number SB16-004

Applicant: Verizon Wireless

Agenda Item Number: 8B

Project Summary: To construct a new wireless cellular facility consisting of a 56 foot high monopole tower utilizing a stealth design disguised as an elevated water tank and associated ground equipment, within the Southwest Truckee Meadows planning area.

Recommendation: Approval with Conditions

Prepared by: Chad Giesinger, AICP, Senior Planner
Washoe County Community Services Department
Planning and Development Division

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Description:

Special Use Permit Case Number SB16-004 (Verizon Arrowcreek Golf Course) – Hearing, discussion, and possible action to approve the construction of a new wireless cellular facility consisting of a 56 foot high tower utilizing a stealth design disguised as an elevated water tank with 4 sectors comprised of twelve 8 foot tall antennas per sector, all enclosed within the faux water tank, 12 ground mounted remote radio units (RRU), associated outdoor equipment cabinets, and surrounded by a fenced 20' x 22' lease area.

- Applicant: Verizon Wireless
c/o Epic Wireless
- Property Owner: Friends of Arrowcreek
- Location: 2905 Arrowcreek Parkway
- Assessor's Parcel Number: 152-021-03
- Parcel Size: 149 acres
- Master Plan Category: Rural Residential (RR)
- Regulatory Zone: High Density Residential (HDR)
- Area Plan: Southwest Truckee Meadows
- Citizen Advisory Board: South Truckee Meadows/Washoe Valley
- Development Code: Authorized in Article 324 Communication Facilities;
and Article 810, Special Use Permits
- Commission District: 2 – Commissioner Lucey
- Section/Township/Range: Section 23, T18N, R19E, MDM,
Washoe County, NV

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Special Use Permit

The purpose of a special use permit is to allow a method of review to identify any potential harmful impacts on adjacent properties or surrounding areas for uses that may be appropriate within a regulatory zone; and to provide for a procedure whereby such uses might be permitted by further restricting or conditioning them so as to mitigate or eliminate possible adverse impacts. The Board of Adjustment is authorized to issue special use permits under NRS 278.315 and Washoe County Code (WCC), Chapter 110, Article 810. Certain notice requirements must be met, which are discussed in this report. In approving the special use permit, the Board must consider and make five Findings of Fact, which are discussed below. [WCC Section 110.810.30] The notice requirements and findings are discussed in this report. The Board of Adjustment is allowed to grant an approval of the special use permit that is subject to Conditions of Approval. Conditions of Approval are requirements that need to be completed during different stages of the proposed project, including conditions prior to permit issuance, prior to obtaining a final inspection and/or certificate of occupancy, prior to issuance of a business license, or ongoing “operational conditions” which must be continually complied with for the life of the project.

Conditions of Approval. The Conditions of Approval for this case are attached to this staff report as Exhibit A and will be included with the Action Order.

Variances. As a part of approval of a special use permit, the Board of Adjustment may also vary standards of the Development Code as they would apply to the Project. [See WCC Section 110.810.20 (e).] In so doing, the Board must make the five findings required for variances as set out in WCC Section 110.804.25.

Special Communications Facility requirements. The proposed facility is a “communications facility” under Article 324 of the County Development Code which imposes specialized requirements and provides that when approving a special use permit, the Board must adopt the three additional findings listed in WCC Section 110.324.75 which are discussed in this staff report.

Nevada Revised Statutes (NRS) and United States Code (USC)

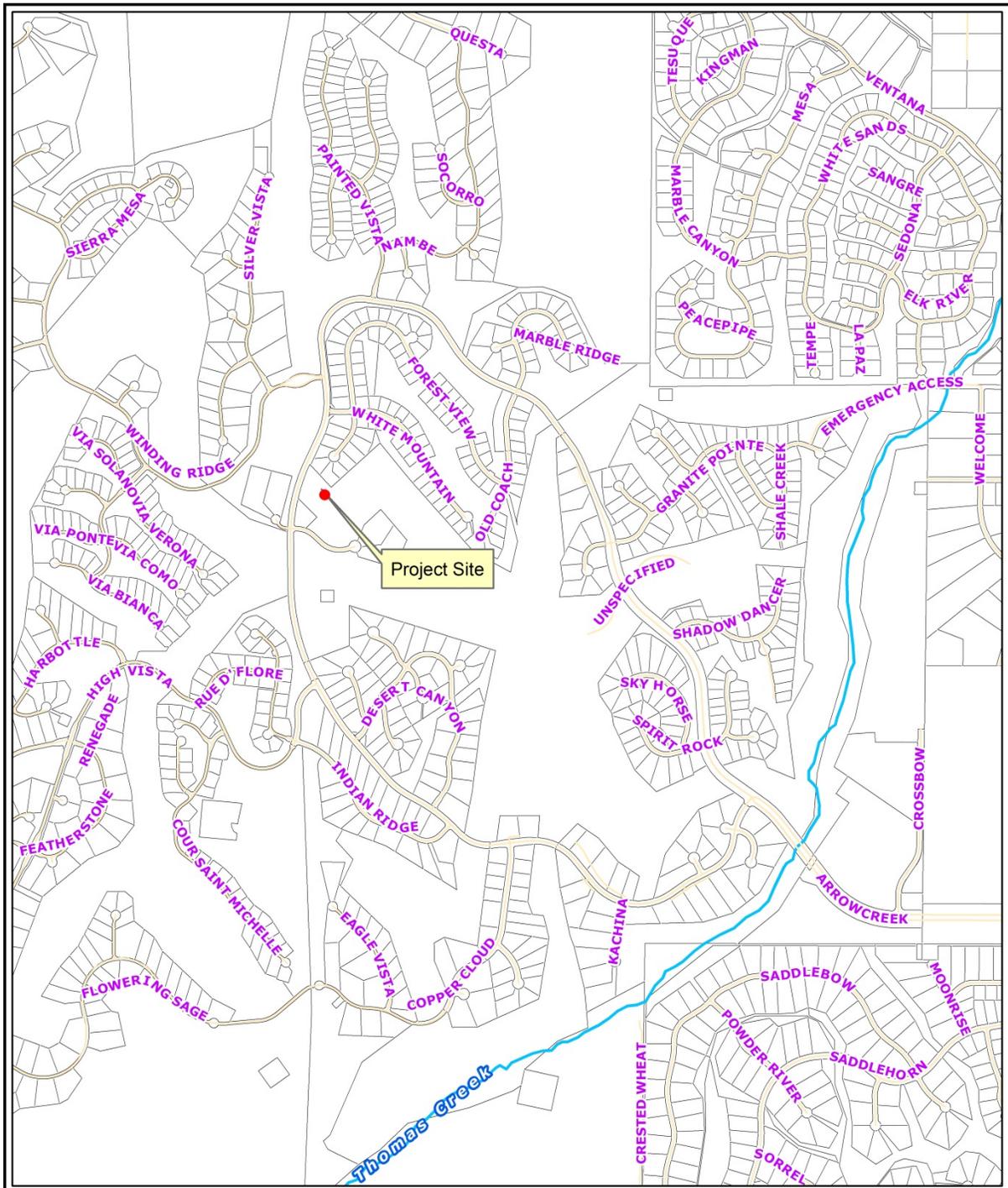
The proposed stealth monopole is a “*communications facility*” under WCC Chapter 110, Article 324, and a “*facility for personal wireless service*” under NRS 707.555 (NRS Chapter 707, *Telecommunications*) and the Federal Telecommunications Act of 1996 (TCA). This special use permit is guided by NRS 707.550 through 707.585 and 47 U.S.C. § 332 (c) (7). The state statute establishes standards and procedures for approving such wireless service facilities, and federal law provides that when considering this application, the Board of Adjustment:

1. Shall not unreasonably discriminate among providers of functionally equivalent services (per the American Tower Corp. case cited above in the discussion of “significant gap” analysis, unreasonable discrimination occurs if a provider is treated differently from other similarly situated providers in terms of the structure, placement, or cumulative impact of the facilities involved);
2. Shall not prohibit or have the effect of prohibiting the provision of personal wireless services (see above analysis); and
3. Shall not regulate the placement, construction, and modification of personal wireless service facilities on the basis of the environmental effects of radio frequency

emissions to the extent that such facilities comply with FCC regulations regarding such emissions. (NRS 707.575 (4) also prohibits the consideration of environmental effects of radio frequency emissions if the facility complies with FCC regulations.) 47 U.S.C. § 332 (c) (7) (C), **defines “personal wireless services” as commercial mobile services, unlicensed wireless services and common carrier wireless exchange access services; and “personal wireless service facilities” as facilities for the provision of personal wireless services.**

4. The Board must act within a reasonable time on applications for permits (presumed to be 150 days under FCC “shot clock” rules).
5. If the Board denies a request to place, construct, or modify personal wireless service facilities, the Board must do so in a separate writing, and the decision must be supported by substantial evidence (evidence that a reasonable mind might accept as adequate to support a conclusion) contained in a written record. State law (NRS 707.585) requires that a decision denying an application must set forth with specificity each ground on which the authority denied the approval of the application, and must describe the documents relied on by the Board in making its decision.

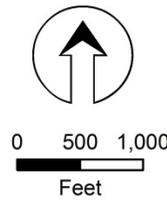
Vicinity Map



VICINITY MAP
Verizon Wireless
Arrowcreek Golf Club
APN 152-021-03

Source: Planning and Development

Date: September, 2015



Community Services
Department, Planning
and Development

WASHOE COUNTY
NEVADA

Post Office Box 11130
Reno, Nevada 89520 (775) 328-3600

Photo Simulations of Proposed Tower



view from Arrowcreek Pkwy looking northeast at site

AdvanceSim
Photo Simulation Solutions
Contact (925) 202-8507



288151 West Zolezzi
2905 Arrowcreek Pkwy, Reno, NV
Photosims Produced on 6-30-2016



view from Alpine Frost Court looking northwest at site

288151 West Zolezzi
2905 Arrowcreek Pkwy, Reno, NV
Photosims Produced on 6-30-2016

AdvanceSim
Photo Simulation Solutions
Contact (925) 202-8507



Project Evaluation

Verizon Wireless has requested this special use permit in order to construct a new wireless cellular facility consisting of a 56 foot high tower utilizing a stealth design disguised as an elevated water tank and associated ground equipment. Verizon is proposing the facility to close coverage gaps in the Arrowcreek vicinity. The project site is located at the east end of an existing metal warehouse/maintenance building off of Arrowcreek Parkway. The project site is adjacent to one of the tees on the Arrowcreek golf course and will be located within an existing maintenance yard that is surrounded by 10 foot high vegetated berms.



Project site with berms in the background

The proposed unmanned facility will be surrounded by a slated chain link fence within a 20' x 22' lease area, which is smaller than the typical lease areas proposed for new cellular facilities (typically 50'x50'). The applicant was able to reduce the size of the lease area by utilizing the water tank design concept in lieu of a monopine design. The faux elevated water tank will sit atop a lattice support base and will enclose 4 communication sectors comprised of twelve 8 foot tall antennas per sector. The supporting base will be approximately 35 feet high and the water tank portion of the facility will be approximately 21 feet high. According to the applicant, the faux tank will have enough room for future collocation of one other carrier.

Existing Conditions

The proposed project site is located on the western edge of the Arrowcreek Golf Course on a ±149 acre parcel. The project site is a previously developed maintenance yard for the golf course that includes several buildings, a parking area, offices, and various equipment storage areas (see photo below). The yard is extensively screened by 10 foot high vegetated berms and a large power line runs through the site, which is flat due to previous site improvements.



The subject site is surrounded by properties zoned High Density Rural (HDR). Existing homes are located directly to the north (but are screened from the site by existing vegetation and topography), vacant land lies to the west, and the golf course surrounds the site to the east and south.

additional 25% of pole height to the overall height. Doing the math, 25% of 45 feet allows an additional 11.25 feet of height for a total allowed height of 56.25 feet at this location.

Access/Parking:

No new access or parking spaces will be required for the unmanned facility. The facility will be accessed off Arrowcreek Parkway using the existing paved access driveway to the maintenance area/subject site. In addition, a 15 foot access easement will be dedicated to Verizon to assure permanent access to the facility.

Signage/Lighting:

Signage and lighting will be minimal except as required by FAA, FCC, or other jurisdictional entities. There will be no "advertisement signage" and staff is proposing a condition of approval prohibiting any graphics or copy display on the façade of the faux water tank. One down shielded sensor light will be placed on the outside of the equipment shelter and one small sign with Verizon's name and contact information will be attached to the fence that encloses the facility.

Landscaping:

The applicant has submitted a Director's Modification application to waive required landscaping. Directors' Modification applications are processed separately through an administrative review with a decision rendered by the Director of the Planning and Development Division. The applicant argues that landscaping in this instance is unnecessary because the project site is already extensively landscaped and screened. In addition, traffic on Arrowcreek Parkway will not be able to see the base of the site where any landscaping would presumably be installed.

Visual Impacts:

The proposed facility will not affect any significant ridgelines or slopes. The project site is located in a flat previously graded area surrounded by 10 foot high vegetated berms. While the applicant proposes to disguise the facility as an elevated water tank, the facility will nevertheless be clearly visible to surrounding residents as it will be the only such structure in the vicinity (i.e. there are no elevated water tanks in the Arrowcreek development, although there are standard ground mounted utility scale water tanks). The tower will be painted a brown color in order to blend in with the natural topography of the subject site.



view from Arrowcreek Pkwy looking northeast at site
288151 West Zolezzi
2905 Arrowcreek Pkwy, Reno, NV
Photosims Produced on 6-30-2016

AdvanceSim
Photo Simulation Solutions
Contact (925) 202-8507

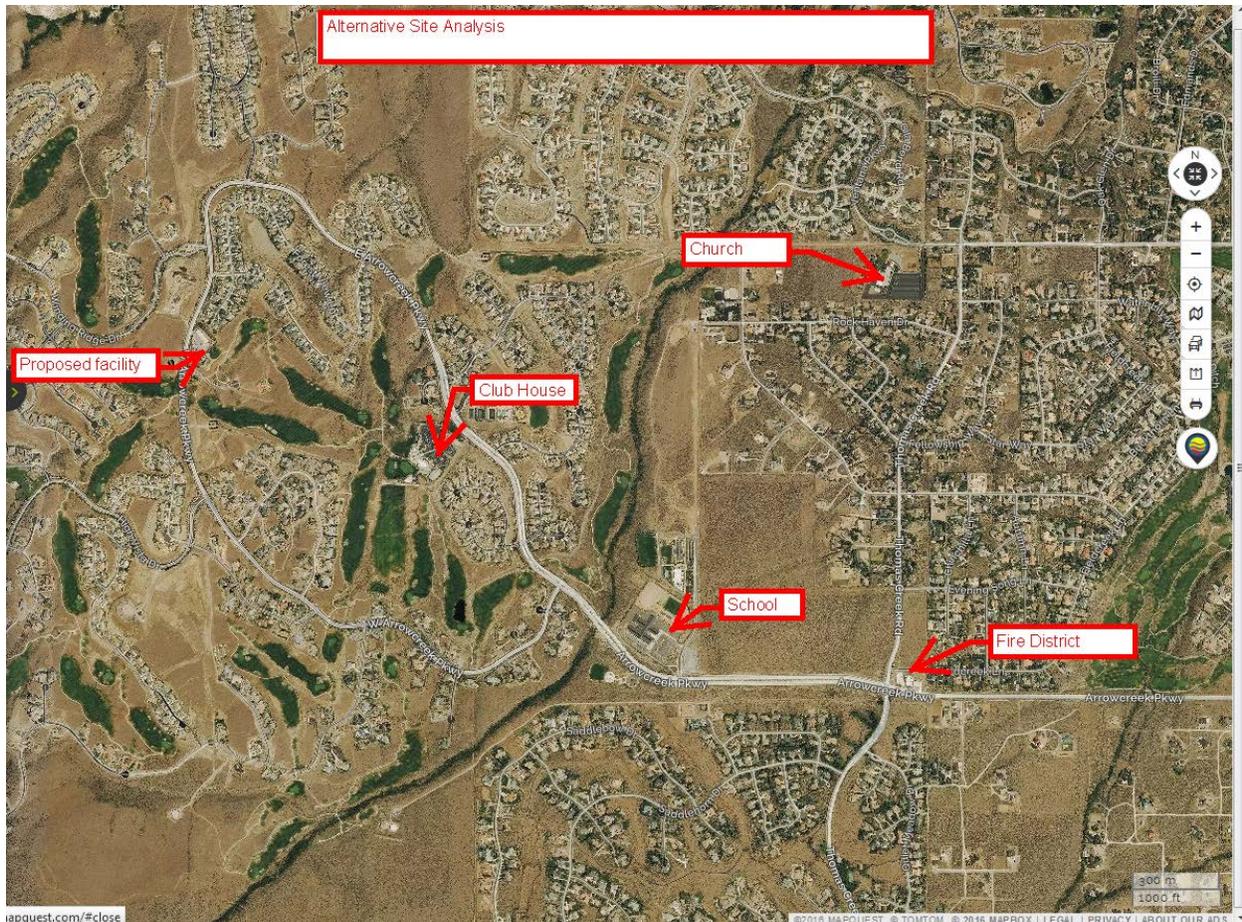


Alternative Sites Considered:

Verizon's feasibility study included an analysis of alternate sites which were not chosen over the proposed site. These alternative sites were rejected for a variety of reasons, including a lack of collocation options in the target area (that would meet service objectives), topography/height considerations, and lack of interest from contacted property owners in executing a lease/use agreement. Only sites that potentially met County regulations for a new monopole were analyzed. The applicant provided the following alternative site analysis:

The West Zolezzi search ring is located in Washoe County, Nevada west of Interstate 580 and north of Highway 431. The search ring is comprised of high-end residential properties, a private school, and a golf course. The search ring has varying topography with limited trees. Only one viable candidate was identified that would meet RF's coverage objective. A private school, Sage Ridge, was considered as an alternative candidate that would have met RF's coverage objective but the private school council ultimately decided they were not interested. Other property within the search ring consisted of a high-end, residential development that was not suitable for a new cellular facility and/or the Home Owner's Association (HOA) for that residential development. The HOA also expressed disinterest. Verizon Wireless considered the following sites, which ultimately were not suitable:

1. Fire District – This is an existing Fire House located at Thomas Creek Drive and Arrowcreek Pkwy. Ground space limitations did not allow for an ideal footprint without VZW interfering with fire operations or detrimentally decreasing the parking ratio. Further, radio engineers determined this location could not adequately cover the desired coverage and capacity gaps.
2. School (Sage Ridge) – The private school council ultimately decided they were not interested.
3. Church – This is an existing church at Thomas Creek Drive and Zolezzi Lane. Radio engineers determined that this site was too far from the desired center of the search ring and would not achieve the coverage or capacity objective.
4. Arrowcreek Golf Clubhouse – Within the Arrowcreek community, set back from the right of way with minimum visibility to the surrounding community. This was a suitable candidate from a coverage and capacity objective, with a willing landlord, and an SUP application was filed. However, some adjacent neighbors and club members expressed strong desire not to locate there after the application was filed. Further discussion with both Planning and Development and Friends of Arrowcreek ensued, from which a decision was made to propose a different location on the same parcel. Thus, the selection of a location at the maintenance building at the west end of the golf course was selected.



Map of Alternative Sites Considered

Radio Frequency and Environmental Impacts:

Under federal law [47 U.S.C. 332 (c) (7) (B) (iv)], if the proposed telecommunications facility complies with FCC regulations, the Board cannot regulate its placement, construction, and modification based on the potential environmental effects of radio frequency emissions. Under state law [NRS 707.575 (4)] the Board “shall not consider the environmental effects of radio frequency emissions” in rendering a decision of approving or denying this special use permit.

A “*Radio Frequency - Electromagnetic Energy (RF-EME) Compliance Report*” was submitted with the application (available upon request) which summarizes the results of FR-EME modeling in relation to relevant Federal Communications Commission RF-EME compliance standards for limiting human exposure to RF-EME fields. The report concludes that there are no areas in front of the Verizon antennas that exceed the FCC standards for occupational or general public exposure. A certification of qualifications of the person who prepared this report is included at the back of the RF-EME compliance report.

Public Notice

NRS 278.315 and WCC Section 110.810.25 require a minimum 500 foot notice radius from the subject parcel and notice of the public hearing to a minimum of 30 separate property owners. The notices must be mailed at least 10 days prior to the public hearing date.

Notification of Special Use Permit Case Number SB16-004 was mailed on August 24, 2016. A minimum of 30 separate property owners located within 500 feet of the subject parcel were noticed. The notice advised of the tentatively scheduled October 6, 2016, public hearing date before the Washoe County Board of Adjustment (BOA) and of the September 8, 2016, South Truckee Meadows/Washoe Valley Citizen Advisory Board (STM/WV CAB) meeting, where the proposal was scheduled to be discussed. All notices included a telephone number and email address for the assigned staff planner (see Exhibit D).

Consistency with the Southwest Truckee Meadows Area Plan

Policy SW.2.2 requires site development plans in the Southwest Truckee Meadows Planning Area to submit a plan for the control of noxious weeds. The plan should be developed through consultation with the Washoe County Health District, the University of Nevada Cooperative Extension, and/or the Washoe-Storey Conservation District. Implementation of the control plan is on a voluntary compliance basis.

Staff Comment: Although the project will involve new site development, construction of the facility will not require new ground disturbing activities that would necessitate a plan for the control of noxious weeds. The site is already paved and developed.

Policy SW.2.3 states that applicants obtaining special use permits shall be “required to present their items to the Citizen Advisory Board (CAB) and submit a statement to staff regarding how the final proposal responds to the community input received from the CAB.”

Staff Comment: The applicant presented the project to the STM/WV CAB on September 15, 2016 as required by this policy. The CAB did not have any substantive input that required the submittal of a formal response (or changes to the project) from the applicant. The public in attendance at the CAB meeting expressed support for the project and the CAB voted unanimously to recommend approval.

Policy SW.2.10 states “The impact of development on adjacent land uses will be mitigated. The appropriate form of mitigation should be determined through a process of community consultation and cooperation. Applicants shall be prepared to demonstrate how the project conforms to this policy.”

Staff Comment: The applicant attended the STM/WV CAB to consult with the community and listen to concerns. As mentioned above, the CAB did not have any substantive input that required the submittal of a formal response (or changes to the project) from the applicant. The applicant is also attempting to mitigate the impact of the facility on adjacent land uses by utilizing a “stealth” design and disguising the tower as an elevated water tank. In addition, the site chosen for the facility is already developed and contains significant screening elements.

Policy SW.2.14 states “The approval of all special use permits and administrative permits must include a finding that the community character as described in the Character Statement can be adequately conserved through mitigation of any identified potential negative impacts.”

Staff Comment: The character statement for the Southwest Truckee Meadows Area Plan contains many references to maintaining the scenic qualities, wildlife habitat, open space, natural resources, and recreational uses of the area. Staff believes the project will not have any significant negative impacts on these character statements/elements. The proposed project site is located in a previously developed area and therefore will not impact wildlife habitat, open space, or natural resources. The scenic qualities of the area will be impacted slightly but mitigated by the stealth design of the project. Recreational resources will not be impacted by the project.

Policy SW.10.3 states “The granting of special use permits in the SWTM planning area must be accompanied by a finding that no significant degradation of air quality will occur as a result of the permit. As necessary, conditions may be placed on special use permits to ensure no significant degradation of air quality will occur. The Department of Community Development will seek the advice and input of the Air Quality Division of the Department of Health in the implementation of this policy.”

Staff Comment: There will be no air quality degradation as a result of this project. No grading is proposed and no emissions will be generated by the facility.

Policy SW.11.1 states “Development proposals, with the exception of single family homes and uses accessory to single family homes, within the Southwest Truckee Meadows planning area will include detailed soils and geo-technical studies sufficient to:

- a. Ensure structural integrity of roads and buildings.**
- b. Provide adequate setbacks from potentially active faults or other hazards.**
- c. Minimize erosion potential.**
- d. Tentative subdivision maps must identify the locations of all active faults.”**

Staff Comment: The applicant did not submit a geo-technical study with the application, likely because of the lack of earthwork necessary to construct the project. Staff feels sufficient information has been provided to comply with this policy and that a geo-technical study is not necessary. Structural integrity and potential site hazards will be assessed at the time of building permit processing.

South Truckee Meadows/Washoe Valley Citizen Advisory Board

The proposed project was sent to the Citizen Advisory Board for their review and comment and the CAB reviewed the application at its September 15, 2016 meeting (the regularly scheduled meeting had to be postponed from September 8, 2016). At this meeting, the CAB and public in attendance had the following comments:

- Is poor cellular service/coverage hampering property values in the Arrowcreek area?
- Did Verizon test the proposed site to ensure coverage will improve?
- Is co-location possible? How and where will co-location occur? Is there room for a 3rd carrier?
- What are the dimensions of the barrel/tank at the top of the facility?
- How will coverage improve compared to existing conditions?
- Will there be improved emergency 911 reliability?
- Support for improved safety.

- Support for better coverage.
- Support for the stealth design of the project.
- Support for the proposed location.
- Testimony from multiple persons about experiences with dropped calls and poor reception.
- No opposition was expressed from anyone in attendance at the meeting.

Public Comment

Staff received one call from an adjacent property owner (on Alpine Frost Court) whom expressed concern about the visual impact of the project and felt the facility would lower their property values. This property owner also thought that a monopine faux tree would have been a better stealth design than the proposed water tank concept. Other than testimony from the public at the CAB meeting, staff received no additional public comment.

Reviewing Agencies

The following agencies/Individuals received a copy of the project application for review, comments and/or conditions:

- Washoe County Planning and Development Division
- Washoe County Regional Parks and Open Space
- Washoe County Engineering and Capital Projects Division, Land Development
- Washoe County Health District
 - Air Quality Division
 - Environmental Health Services Division and Vector Control
- Truckee Meadows Fire Protection District
- Regional Transportation Commission
- Reno-Tahoe Airport Authority

The following is a brief **summary** of each agency's comments and/or recommended conditions of approval and their contact information. Only those agencies that provided comments are summarized. The Conditions of Approval document is attached to this staff report as Exhibit A and will be included with the Action Order, if the application is approved by the Board of Adjustment.

- Washoe County Planning and Development Division is recommending approval of this application subject to conditions. In addition to the standard/typical development conditions, staff is including a condition prohibiting the placement of graphics or text on the façade of the faux water tank.
Contact: Chad Giesinger, Senior Planner, 775.328.3626, cgiesinger@washoecounty.us
- Washoe County Engineering and Capitol Project Division, Land Development has the following condition of approval:

- The applicant shall obtain suitable easements for access, utilities and the site for the proposed facilities. The easements shall be recorded.

Contact: Kimble Corbridge, P.E., 775.328.2041, Kcorbridge@washoecounty.us

Staff Comment on Required Findings

Following are required findings from WCC Sections 110.324.35 and 110.810.30, and from Policy SW.2.14 of the Southwest Truckee Meadows Area Plan, a part of the Washoe County Master Plan. All of these findings must be made to the satisfaction of the Board before granting approval of the request. Staff has completed an analysis of the special use permit application, has provided comment under each of the following findings, and has determined that the proposal is in compliance with all of the following findings, provided the recommended conditions of approval are met.

Findings from WCC Section 110.810.30:

1. **Consistency.** That the proposed use is consistent with the action programs, policies, standards and maps of the Master Plan and the Southwest Truckee Meadows Area Plan.

Staff Comment: The proposed facility does not conflict with the action programs, policies, standards, and maps of the Master Plan and the Southwest Truckee Meadows Area Plan as discussed previously in this report regarding compliance with applicable area plan policies.

2. **Improvements.** That adequate utilities, roadway improvements, sanitation, water supply, drainage, and other necessary facilities have been provided, the proposed improvements are properly related to existing and proposed roadways, and an adequate public facilities determination has been made in accordance with Division Seven.

Staff Comment: Staff finds that adequate improvements and facilities have been provided to satisfy this policy. Adequate access and utility easements have been proposed and utilities can easily be extended to the site. No roadway improvements are necessary other than site specific improvements to access the facility. Sanitation and water supply are not necessary for the project. The Engineering division did not have any comments or concerns relating to drainage.

3. **Site Suitability.** That the site is physically suitable for the type of development and for the intensity of development.

Staff Comment: After conducting a site visit and analyzing the application, staff finds that the site is physically suitable for the type and intensity of development proposed. While this commercial venture is located on property with a residential regulatory zone, WCC Section 110.324.50(e) allows the proposed use subject to a special use permit. The project appears to meet all applicable code requirements.

4. **Issuance Not Detrimental.** That issuance of the permit will not be significantly detrimental to the public health, safety or welfare; injurious to the property or improvements of adjacent properties; or detrimental to the character of the surrounding area.

Staff Comment: Provided the recommended conditions of approval are met, the project will not be significantly detrimental to the public health, safety or welfare. In fact, it could be argued that approval of the facility will improve public health and safety since emergency 911 service coverage will be enhanced. Due to the project

design and location, the facility does not appear to be injurious to the property or improvements of adjacent properties, or detrimental to the character of the surrounding area.

5. **Effect on a Military Installation.** Issuance of the permit will not have a detrimental effect on the location, purpose or mission of the military installation.

Staff Comment: There is no nearby military installation within 3,000 feet of the proposed site.

Findings from WCC Section 110.324.35:

1. **Meets Standards.** That the wireless communications facility meets all the standards of Sections 110.324.40 through 110.324.60 as determined by the Director of the Planning and Development Division and/or his authorized representative;

Staff Comment: The proposed wireless communications facility meets the standards of WCC Sections 110.324.40 through 110.324.60 regarding such standards as height, location, access, photo simulations, setbacks, etc.

2. **Public Input.** That public input was considered during the public hearing review process;

Staff Comment: Public notification of Special Use Permit Case Number SB16-004 was provided per code (notice was actually provided twice as the application was initially delayed while additional materials were requested by staff and the applicant considered a different location). The application was also reviewed by the STM/WV CAB at their September 15, 2016 meeting.

3. **Impacts.** That the wireless communications facility will not unduly impact the adjacent neighborhoods or the vistas and ridgelines of the County.

Staff Comment: As mentioned previously, undue impacts to adjacent neighborhoods are subjective and depend upon one's point of view. Surrounding property owners have not commented on the project or expressed concerns. Staff has determined that the project does not impact any ridgelines or significant vistas. The applicant is proposing a stealth design in the form of an elevated water tank ("stealth" design is encouraged by County Code), has met all other standards of WCC Chapter 110, Article 324 and appears to have made a good faith effort to mitigate impacts.

Finding for Policy SW.2.14, of the Southwest Truckee Meadows Area Plan:

1. **Impact on the Community Character.** The approval of all special use permits and administrative permits must include a finding that the community character as described in the Character Statement can be adequately conserved through mitigation of any identified potential negative impacts.

Staff Comment: As noted earlier in this staff report, this is subjective and depends on one's point of view. The character statement for the SWTM Area Plan contains many references to maintaining the scenic qualities, wildlife habitat, open space, natural resources, and recreational uses of the area. While the applicant proposes to disguise the facility as an elevated water tank, the facility will nevertheless be clearly visible to surrounding residents as it will be the only such structure in the vicinity (i.e. there are no elevated water tanks in the Arrowcreek development). Staff believes, however, that the project will not have any significant negative impacts on

these character statements/elements. The proposed project site is located in a previously developed area and therefore will not impact wildlife habitat, open space, or natural resources. The scenic qualities of the area will be impacted slightly but mitigated by the stealth design of the project. Recreational resources will not be impacted by the project.

Recommendation

After a thorough analysis and review, Special Use Permit Case Number SB16-004 for Verizon Wireless (Arrowcreek Golf Course) is recommended for approval with the conditions included as Exhibit A to this staff report. Staff offers the following motion for the Board's consideration.

Motion

I move that, after considering the information contained within the staff report and the information received during the public hearing, the Washoe County Board of Adjustment approve, with the conditions included as Exhibit A in the staff report, Special Use Permit Case Number SB16-004 for Verizon Wireless, being able to make the findings required by Washoe County Code Section 110.810.30, Section 110.324.75, and the finding required by Policy SW.2.14 of the Southwest Truckee Meadows Area Plan, a part of the Washoe County Master Plan, for approval of Special Use Permits:

Findings from WCC Section 110.810.30:

1. **Consistency.** That the proposed use is consistent with the action programs, policies, standards and maps of the Master Plan and the Southwest Truckee Meadows Area Plan;
2. **Improvements.** That adequate utilities, roadway improvements, sanitation, water supply, drainage, and other necessary facilities have been provided, the proposed improvements are properly related to existing and proposed roadways, and an adequate public facilities determination has been made in accordance with Division Seven;
3. **Site Suitability.** That the site is physically suitable for a wireless communications facility and for the intensity of such a development;
4. **Issuance Not Detrimental.** That issuance of the permit will not be significantly detrimental to the public health, safety or welfare; injurious to the property or improvements of adjacent properties; or detrimental to the character of the surrounding area;
5. **Effect on a Military Installation.** That issuance of the permit will not have a detrimental effect on the location, purpose or mission of the military installation;

Findings from WCC Section 110.324.75:

1. **Meets Standards.** That the wireless communications facility meets all the standards of Sections 110.324.40 through 110.324.60 as determined by the Director of the Planning and Development Division and/or his authorized representative;
2. **Public Input.** That public input was considered during the public hearing review process; and

3. Impacts. That the proposal will not unduly impact the adjacent neighborhoods or the vistas and ridgelines of the County.

Findings from Policy SW.2.14, of the Southwest Truckee Meadows Area Plan:

1. Impact on the Community Character. That impact on the Community Character can be adequately conserved through mitigation of any identified potential negative impacts.

Appeal Process

Board of Adjustment action will be effective 10 calendar days after the written decision is filed with the Secretary to the Board of Adjustment and mailed to the applicant, unless the action is appealed to the Washoe County Board of County Commissioners, in which case the outcome of the appeal shall be determined by the Washoe County Board of County Commissioners. Any appeal must be filed in writing with the Planning and Development Division within 10 calendar days after the written decision is signed by and filed with the Secretary to the Board of Adjustment, and mailed to the applicant.

xc: Applicant: Epic Wireless Group, Inc.
dba Verizon Wireless
Attn: Buzz Lynn
650 S. Rock Blvd., #10
Reno, NV 89502

Property Owner: Friends of Arrowcreek
2905 Arrowcreek Parkway
Reno, NV 89511



Conditions of Approval

Special Use Permit Case Number SB16-004

The project approved under **Special Use Permit Case Number SB16-004 for Verizon Wireless (Arrowcreek Golf Course)** shall be carried out in accordance with the Conditions of Approval granted by the Board of Adjustment on October 6, 2016. Conditions of Approval are requirements placed on a permit or development by each reviewing agency. Conditions of Approval may require submittal of documents, applications, fees, inspections, amendments to plans and more. **Conditions of Approval do not relieve the applicant from the obligation to obtain any other approvals and licenses from relevant authorities required under any other act, nor do these conditions relieve the applicant from abiding by all other generally applicable code regulations.**

Unless otherwise specified, all conditions related to the approval of this special use permit shall be met or financial assurance must be provided to satisfy the Conditions of Approval prior to issuance of a grading or building permit. The agency responsible for determining compliance with a specific condition shall determine whether the condition must be fully completed or whether the applicant shall be offered the option of providing financial assurance. All agreements, easements, or other documentation required by these conditions shall have a copy filed with the Washoe County Engineer and Washoe County Planning and Development.

Compliance with the Conditions of Approval related to this special use permit is the responsibility of the applicant, his/her successor in interest, and all owners, assignees, and occupants of the property and their successors in interest. Failure to comply with any of the conditions imposed in the approval of this special use permit may result in the initiation of revocation procedures.

Washoe County reserves the right to review and revise the Conditions of Approval related to this special use permit should it be determined that a subsequent license or permit issued by Washoe County violates the intent of this approval. For the purpose of conditions imposed by Washoe County, “may” is permissive and “shall” or “must” is mandatory.

Conditions of Approval are usually complied with at different stages of the proposed project. Those stages are typically:

- Prior to permit issuance (i.e., grading permits, building permits, etc.)
- Prior to obtaining a final inspection and/or a certificate of occupancy
- Prior to the issuance of a business license or other permits/licenses
- Some “Conditions of Approval” are referred to as “Operational Conditions.” These conditions must be continually complied with for the life of the project or business.

THE FOLLOWING ARE CONDITIONS OF APPROVAL REQUIRED BY THE REVIEWING AGENCIES. EACH CONDITION MUST BE MET TO THE SATISFACTION OF THE ISSUING AGENCY.

Washoe County Planning and Development Division

1. The following conditions are requirements of Planning and Development, which shall be responsible for determining compliance with these conditions.

Contact: Chad Giesinger, 775.328.3626, cgiesinger@washoecounty.us

- a. The applicant shall demonstrate substantial conformance to the plans approved as part of this special use permit. Planning and Development shall determine compliance with this condition.
- b. All related utilities, including telephone and electrical lines connected with the proposed wireless communications facility and within any and all Verizon utility easements on the subject site shall be placed underground pursuant to Southwest Truckee Meadows Area Plan Policy SW.5.1.
- c. The total height of the cell tower, including all elements of the faux elevated water tank, antennas, or any other apparatus shall not exceed 56 feet from lowest grade.
- d. The applicant shall submit complete construction plans and building permits shall be issued within two years from the date of approval by Washoe County. The applicant shall complete construction within the time specified by the building permits. Compliance with this condition shall be determined by Planning and Development.
- e. Security fencing shall be erected around the entire 20 x 22 foot wireless communications facility compound (lease area). The installation of security fencing shall assure the facility is protected from climbing by unauthorized persons. Said security fencing shall be screened by the use of tan colored slats.
- f. All equipment, fencing, ground cabinet, tower, and aesthetic design shall be painted a neutral color that will blend with the character of the area. In no instance shall reflective metal materials be utilized that could result in light and glare.
- g. The applicant shall attach a copy of the action order granting approval of this project to all administrative permit applications (including building permits) applied for as part of this special use permit.
- h. There shall be no advertisements, lighting, graphics, signs, or copy (text) placed on any part of the facility, particularly the façade of the elevated portion of the faux water tank.
- i. A note shall be placed on all construction drawings and grading plans stating:

NOTE

Should any prehistoric or historic remains/artifacts be discovered during site development, work shall temporarily be halted at the specific site and the State Historic Preservation Office of the Department of Museums, Library and Arts shall be notified to record and photograph the site. The period of temporary delay shall be limited to a maximum of two working days from the date of notification.

- j. The following **Operational Conditions** shall be required for the life of the project:
 1. This Special Use Permit shall expire and become null and void within 2 years from the final date of approval if final building permits have not been issued by said date.

2. The applicant and any successors shall be responsible for maintenance/repairs of everything within the 20 x 22 foot wireless communications compound and shall be responsible for all maintenance/repairs of the entire wireless communications facility, including required maintenance of the fence (to include the slats) and replacement of any part of the faux water tank should it deteriorate or become damaged. The applicant shall take action not more than 30 days after receiving notification from Washoe County of any damage to the wireless communications facility or the fence.
3. The wireless communications facility shall be maintained by the applicant and any successors in substantially the same condition as the wireless communications facility was proposed and approved by this Special Use Permit.
4. Failure to comply with the Conditions of Approval shall render this approval null and void. Compliance with this condition shall be determined by Washoe County Planning and Development.
5. The applicant and any successors shall direct any potential purchaser/operator of the site and/or the special use permit to meet with Washoe County Planning and Development to review conditions of approval prior to the final sale of the site and/or the special use permit. Any subsequent purchaser/operator of the site and/or the special use permit shall notify the Washoe County Planning and Development of the name, address, telephone number, and contact person of the new purchaser/operator within 30 days of the final sale.
6. If the facility ceases operations, or if abandonment is contemplated, then the operator/owner of record ceasing operations or pursuing abandonment shall demolish the facility and return the project site to its pre-development condition.
7. This special use permit shall remain in effect as long as the subject wireless communications facility is in operation and remains in compliance with the conditions of approval.

Washoe County Engineering and Capital Projects Division

2. The following conditions are requirements of the Engineering and Capital Projects Division, which shall be responsible for determining compliance with these conditions.

Contact: Kimble Corbridge, P.E., 775.328.2041, Kcorbridge@washoecounty.us

- a. The applicant shall obtain suitable easements for access, utilities and the site for the proposed facilities. The easements shall be recorded.

***** End of Conditions *****

Existing



Proposed



view from Arrowcreek Pkwy looking northeast at site

verizon

288151 West Zolezzi
2905 Arrowcreek Pkwy, Reno, NV
Photosims Produced on 6-30-2016

Existing



Proposed



view from White Mountain Court looking southwest at site

Existing



Proposed



view from Alpine Frost Court looking northwest at site

verizon

288151 West Zolezzi
2905 Arrowcreek Pkwy, Reno, NV
Photosims Produced on 6-30-2016

Existing



Proposed



view from Forrest View Court looking south at site



288151 West Zolezzi
2905 Arrowcreek Pkwy, Reno, NV
Photosims Produced on 6-30-2016

AdvanceSim
Photo Simulation Solutions
Contact (925) 202-8507

SB16-004
EXHIBIT C

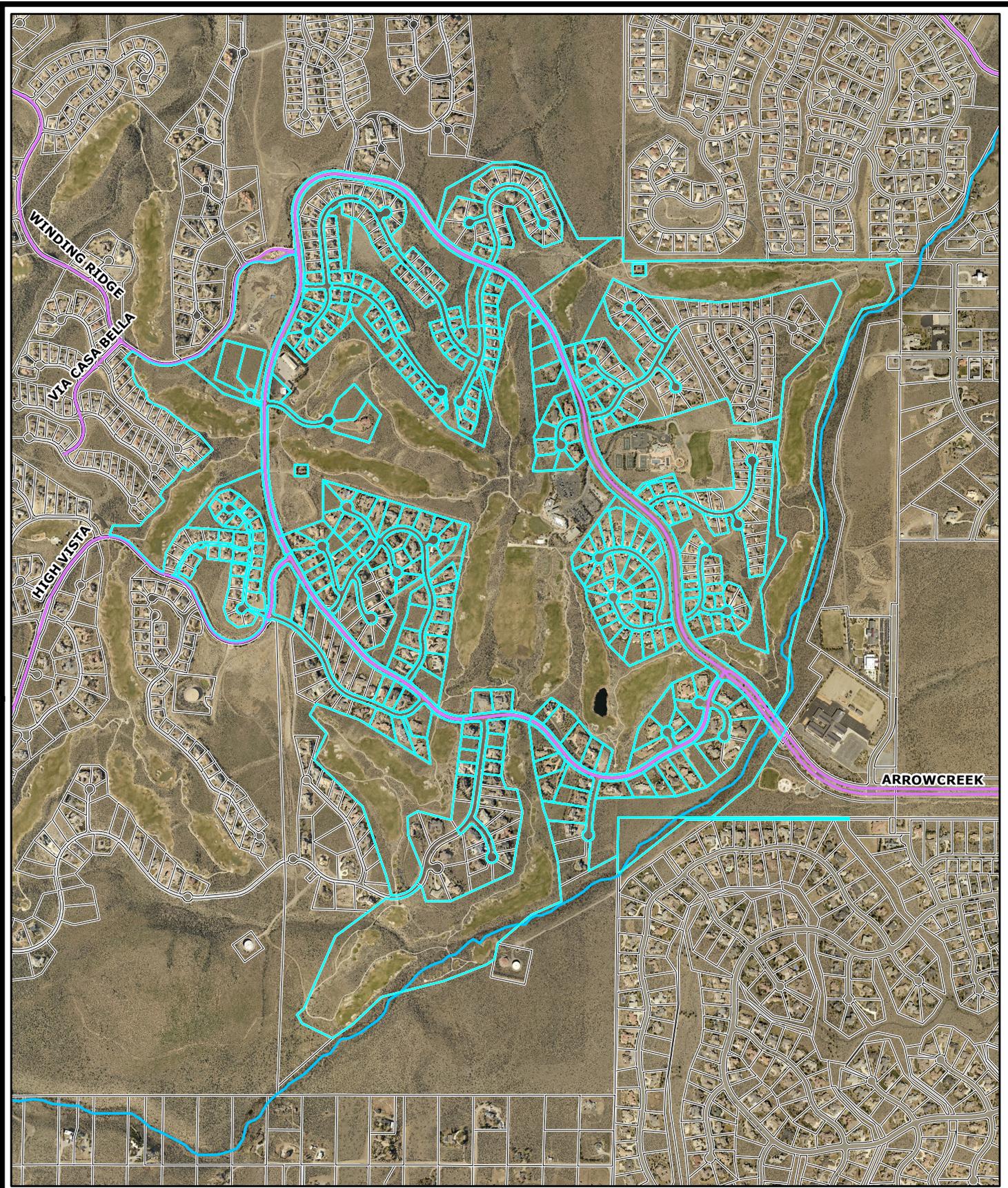
Existing



Proposed



view from Arrowcreek Pkwy looking northeast at site



SB16-004 Public Notice Map
 Parcels noticed within 500 feet of subject property

 Noticed Parcels



0 500 1,000
 Feet

**Community Services
 Department, Planning
 and Development**



Post Office Box 11130
 Reno, Nevada 89520

Community Services Department
Planning and Development
SPECIAL USE PERMIT APPLICATION



Washoe County Development Application

Your entire application is a public record. If you have a concern about releasing personal information, please contact Planning and Development staff at 775.328.3600.

Project Information		Staff Assigned Case No.: _____	
Project Name: "West Zolezzi" Verizon Wireless			
Project Description: Verizon Wireless proposes a new 56' tall faux water tower within a 20' x 22' fenced lease space to include (4) sectors with (3) antenna per sector, total of 12-8' tall antennas, and (12) RRU units, co-location capability for (1) one additional carrier.			
Project Address: 2905 ARROWCREEK PARKWAY, RENO, NV 89511			
Project Area (acres or square feet): 440 s.f.			
Project Location (with point of reference to major cross streets AND area locator): Arrowcreek Golf maintenance building: Arrowcreek Pkwy between White Mountain and Alpine Frost Cts			
Assessor's Parcel No.(s):	Parcel Acreage:	Assessor's Parcel No(s):	Parcel Acreage:
152-021-03	149 ac.		
Section(s)/Township/Range:			
Indicate any previous Washoe County approvals associated with this application: Case No.(s). N/A			
Applicant Information (attach additional sheets if necessary)			
Property Owner:		Professional Consultant:	
Name: Friends of Arrowcreek		Name: Verizon Wireless c/o Epic Wireless	
Address: 2905 Arrowcreek Pkwy		Address: 650 S. Rock Blvd., #10	
Reno, NV	Zip: 89511	Reno, NV	Zip: 89502
Phone: 775-850-4471 ex 205 Fax:		Phone: Fax:	
Email:		Email: buzz.lynn@epicwireless.net	
Cell:	Other:	Cell:	Other:
Contact Person: Jason Peterson		Contact Person: Buzz Lynn	
Applicant/Developer:		Other Persons to be Contacted:	
Name: Verizon Wireless c/o Epic Wireless		Name: N/A	
Address: 650 S. Rock Blvd., #10		Address:	
Reno, NV	Zip: 89502		Zip:
Phone: 775-852-5367	Fax:	Phone:	Fax:
Email: buzz.lynn@epicwireless.net		Email:	
Cell:	Other:	Cell:	Other:
Contact Person: Buzz Lynn		Contact Person:	
For Office Use Only			
Date Received:	Initial:	Planning Area:	
County Commission District:		Master Plan Designation(s):	
CAB(s):		Regulatory Zoning(s):	

Special Use Permit Application Supplemental Information

(All required information may be separately attached)

Chapter 110 of the Washoe County Code is commonly known as the Development Code. Specific references to special use permits may be found in Article 810, Special Use Permits.

1. What is the type of project being requested?

Wireless Cellular Communications Facility
Verizon Wireless proposes a new 56' tall faux water tower within a 20' x 22' fenced lease space to include (4) sectors with (12) 8' tall antennas per sector, (12) RRU units, and outdoor cabinets.

2. What currently developed portions of the property or existing structures are going to be used with this permit?

East end of metal warehouse/maintenance building off Arrowcreek Pkwy and associated surrounding 10' berms provide screening for all but the top of the water tank.

3. What improvements (e.g. new structures, roadway improvements, utilities, sanitation, water supply, drainage, parking, signs, etc.) will have to be constructed or installed and what is the projected time frame for the completion of each?

Power and Telephone will be required to be brought to the Premises from POC on Arrowcreek Pkwy approximately 200' to the east end of the maintenance building on the parcel. A new 56' faux water tower will be constructed along with outdoor cabinets. Total construction should take 6-8 weeks.

4. What is the intended phasing schedule for the construction and completion of the project?

Single phase construction lasting 6-8 weeks

5. What physical characteristics of your location and/or premises are especially suited to deal with the impacts and the intensity of your proposed use?

The existing site is relatively removed from adjacent development and is located on a hilltop. Both characteristics are beneficial for Verizon Wireless to offer better coverage for customers while the 10' dirt berm, associated trees on top of the berm and the existing building limits visual impact to surrounding neighbors.

6. What are the anticipated beneficial aspects or effects your project will have on adjacent properties and the community?

Verizon Wireless will be benefiting the surrounding community by offering better cell phone coverage, capacity, and higher data speeds. Enhanced wireless coverage is not only beneficial for the safety of individuals more reliant on cell phones but also promotes economic development through enhanced wireless services provided to local businesses and work-from-home residents.

7. What will you do to minimize the anticipated negative impacts or effects your project will have on adjacent properties?

Faux water tank hides all antennas and provides an aesthetic design. Installation is already partially-hidden from any public view because of the existing berms, trees, and maintenance building, which all serve to minimize visual impact to the surrounding community.

8. Please describe operational parameters and/or voluntary conditions of approval to be imposed on the project special use permit to address community impacts:

The proposed telecommunications facility is an unmanned operation. Limited site visits are required for maintenance purposes reducing the impact to the surrounding parcels.

9. How many improved parking spaces, both on-site and off-site, are available or will be provided? (Please indicate on site plan.)

N/A. Unmanned facility requires no parking

10. What types of landscaping (e.g. shrubs, trees, fencing, painting scheme, etc.) are proposed? (Please indicate location on site plan.)

Utilize existing berms, trees, and buildings to minimize visual impact. A Director's Waiver application regarding landscaping is concurrently made with this SUP, and has been previously reviewed by Community Development

11. What type of signs and lighting will be provided? On a separate sheet, show a depiction (height, width, construction materials, colors, illumination methods, lighting intensity, base landscaping, etc.) of each sign and the typical lighting standards. (Please indicate location of signs and lights on site plan.)

Emergency contact signs to be displayed on the lease compound fencing. See Drawings.

12. Are there any restrictive covenants, recorded conditions, or deed restrictions (CC&Rs) that apply to the area subject to the special use permit request? (If so, please attach a copy.)

<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
------------------------------	--

13. Community Sewer

<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
------------------------------	--

Community Water

<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
------------------------------	--

Existing



Proposed



view from Arrowcreek Pkwy looking northeast at site

verizon

288151 West Zolezzi
2905 Arrowcreek Pkwy, Reno, NV
Photosims Produced on 6-30-2016

Existing



Proposed



view from White Mountain Court looking southwest at site

Existing



Proposed



Proposed Verizon Installation

view from Alpine Frost Court looking northwest at site



288151 West Zolezzi
2905 Arrowcreek Pkwy, Reno, NV
Photosims Produced on 6-30-2016

Existing



Proposed



view from Forrest View Court looking south at site

Existing



Proposed



view from Arrowcreek Pkwy looking northeast at site

PUBLIC HEARING APPLICATION AND MEETING DATES								
PLANNING COMMISSION		BOARD OF ADJUSTMENT		AGENCY COMMENTS	ADMINISTRATIVE PERMITS		PARCEL MAP REVIEW COMMITTEE	
Intake Date	Meeting Date	Intake Date	Meeting Date	Due Date	Intake Date	BOA Mtg Date	Intake Date	Meeting Date
11/16/2015	01/05/2016			12/08/2015			12/01/2015	01/14/2016
12/15/2015	02/02/2016	12/15/2015	02/04/2016	01/05/2016	01/04/2016	02/04/2016	01/04/2016	02/11/2016
01/15/2016	03/01/2016			02/02/2016			02/01/2016	03/10/2016
02/16/2016	04/05/2016	02/16/2016	04/07/2016	03/08/2016	03/01/2016	04/07/2016	03/01/2016	04/14/2016
03/15/2016	05/03/2016			04/05/2016			04/01/2016	05/12/2016
04/15/2016	06/07/2016	04/15/2016	06/02/2016	05/05/2016	05/02/2016	06/02/2016	05/02/2016	06/09/2016
05/16/2016	07/05/2016			06/07/2016			06/01/2016	07/14/2016
06/15/2016	08/02/2016	06/15/2016	08/04/2016	07/05/2016	07/01/2016	08/04/2016	07/01/2016	08/11/2016
07/15/2016	09/06/2016			08/09/2016			08/01/2016	09/08/2016
08/15/2016	10/04/2016	08/15/2016	10/06/2016	09/06/2016	09/01/2016	10/06/2016	09/01/2016	10/13/2016
09/15/2016	11/01/2016			10/04/2016			10/03/2016	11/10/2016
10/17/2016	12/06/2016	10/17/2016	12/01/2016	11/03/2016	11/01/2016	12/01/2016	11/01/2016	12/08/2016
11/15/2016	01/03/2017			12/06/2016			12/01/2016	01/12/2017
12/15/2016	02/07/2017	12/15/2016	02/02/2017	01/05/2017	01/03/2017	02/02/2017	01/03/2017	02/09/2017

APPLICATIONS	COMMUNITY SERVICES DEPARTMENT FEES					HEALTH FEES		TOTAL
	Planning					Health District		
	PLANNING	NOTICING	ENGINEERING	PARKS	UTILITIES	ENVIRON.	VECTOR	
REVERSION TO ACREAGE (See Note 5)								
Not Tahoe	\$51	-	\$215	-	\$26	-	-	\$292
Tahoe	\$51	-	\$215	-	-	-	-	\$266
SIGN PERMIT INSPECTION - (Permanent or Temporary)	To Be Determined							
SPECIAL USE PERMIT								
Residential								
Not Tahoe	\$1,162	\$200	\$65	-	\$203	\$244	\$118	\$1,992
Tahoe	\$1,162	\$200	\$65	-	-	\$244	\$118	\$1,789
With Environmental Impact Statement	\$1,162	-	-	-	-	-	-	\$1,162
Commercial, Industrial, Civic								
Minor (See Note 7)	\$2,165	\$200	\$130	-	\$203	\$244	\$118	\$3,060
Major (See Note 7)	\$2,165	\$200	\$520	-	\$203	\$244	\$118	\$3,450
Tahoe Minor (See Note 7)	\$2,165	\$200	\$130	-	-	\$244	\$118	\$2,857
Tahoe Major (See Note 7)	\$2,165	\$200	\$520	-	-	\$244	\$118	\$3,247
With Environmental Impact Statement	\$2,240	-	-	-	-	-	-	\$2,240
TENTATIVE PARCEL MAP/PARCEL MAP WAIVER (See Note 5)								
No System	\$803	\$200	\$345	-	\$68	\$776	\$269	\$2,461
1 System (Sewer)	\$803	\$200	\$345	-	\$153	\$331	\$269	\$2,101
1 System (Water)	\$803	\$200	\$345	-	\$153	\$776	\$269	\$2,546
2 Systems	\$803	\$200	\$345	-	\$203	\$331	\$269	\$2,151
Tahoe (Sewer)	\$803	\$200	\$345	-	-	\$331	\$269	\$1,948
Sun Valley (No WC Utilities)	\$803	\$200	\$345	-	\$51	\$331	\$269	\$1,999
TENTATIVE SUBDIVISION MAP (See Notes 5 & 6)								
No System	\$2,422	\$200	\$1,299	\$129	-	\$1,016	\$193	\$5,259
1 System (Sewer)	\$2,422	\$200	\$1,299	\$129	\$2,039	\$374	\$193	\$6,656
1 System (No Sewer)	\$2,422	\$200	\$1,299	\$129	\$1,019	\$1,016	\$193	\$6,278
2 Systems	\$2,422	\$200	\$1,299	\$129	\$3,059	\$374	\$193	\$7,676
Tahoe (Sewer)	\$2,422	\$200	\$1,299	\$129	-	\$374	\$193	\$4,617
With Hillside Ordinance - ADD	\$2,422	-	-	-	-	-	-	\$2,422
With Significant Hydrologic Resource - ADD	\$2,422	-	-	-	-	-	-	\$2,422
With Common Open Space - ADD	\$2,422	-	-	-	-	-	-	\$2,422

**Verizon Wireless • Proposed Base Station (Site No. 288151 “West Zolezzi”)
2905 Arrowcreek Parkway • Reno, Nevada**

Statement of Hammett & Edison, Inc., Consulting Engineers

The firm of Hammett & Edison, Inc., Consulting Engineers, has been retained on behalf of Verizon Wireless, a personal wireless telecommunications carrier, to evaluate the base station (Site No. 288151 “West Zolezzi”) proposed to be located at 2905 Arrowcreek Parkway in Reno, Nevada, for compliance with appropriate guidelines limiting human exposure to radio frequency (“RF”) electromagnetic fields.

Executive Summary

Verizon proposes to install directional panel antennas within a tall structure to be sited at 2905 Arrowcreek Parkway in Reno. The proposed operation will comply with the FCC guidelines limiting public exposure to RF energy.

Prevailing Exposure Standards

The U.S. Congress requires that the Federal Communications Commission (“FCC”) evaluate its actions for possible significant impact on the environment. A summary of the FCC’s exposure limits is shown in Figure 1. These limits apply for continuous exposures and are intended to provide a prudent margin of safety for all persons, regardless of age, gender, size, or health. The most restrictive FCC limit for exposures of unlimited duration to radio frequency energy for several personal wireless services are as follows:

Wireless Service	Frequency Band	Occupational Limit	Public Limit
Microwave (Point-to-Point)	5–80 GHz	5.00 mW/cm ²	1.00 mW/cm ²
WiFi (and unlicensed uses)	2–6	5.00	1.00
BRS (Broadband Radio)	2,600 MHz	5.00	1.00
WCS (Wireless Communication)	2,300	5.00	1.00
AWS (Advanced Wireless)	2,100	5.00	1.00
PCS (Personal Communication)	1,950	5.00	1.00
Cellular	870	2.90	0.58
SMR (Specialized Mobile Radio)	855	2.85	0.57
700 MHz	700	2.40	0.48
[most restrictive frequency range]	30–300	1.00	0.20

General Facility Requirements

Base stations typically consist of two distinct parts: the electronic transceivers (also called “radios” or “channels”) that are connected to the traditional wired telephone lines, and the passive antennas that send the wireless signals created by the radios out to be received by individual subscriber units. The transceivers are often located at ground level and are connected to the antennas by coaxial cables. A small antenna for reception of GPS signals is also required, mounted with a clear view of the sky.



**Verizon Wireless • Proposed Base Station (Site No. 288151 “West Zolezzi”)
2905 Arrowcreek Parkway • Reno, Nevada**

Because of the short wavelength of the frequencies assigned by the FCC for wireless services, the antennas require line-of-sight paths for their signals to propagate well and so are installed at some height above ground. The antennas are designed to concentrate their energy toward the horizon, with very little energy wasted toward the sky or the ground. This means that it is generally not possible for exposure conditions to approach the maximum permissible exposure limits without being physically very near the antennas.

Computer Modeling Method

The FCC provides direction for determining compliance in its Office of Engineering and Technology Bulletin No. 65, “Evaluating Compliance with FCC-Specified Guidelines for Human Exposure to Radio Frequency Radiation,” dated August 1997. Figure 2 describes the calculation methodologies, reflecting the facts that a directional antenna’s radiation pattern is not fully formed at locations very close by (the “near-field” effect) and that at greater distances the power level from an energy source decreases with the square of the distance from it (the “inverse square law”). The conservative nature of this method for evaluating exposure conditions has been verified by numerous field tests.

Site and Facility Description

Based upon information provided by Verizon, including zoning drawings by Borges Architectural Group, Inc., dated July 13, 2016, it is proposed to install twelve Andrew Model SBNHH-1D45C directional panel antennas within a cylindrical enclosure, configured to resemble a water tank, on a structure to be sited behind the large storage building in the maintenance yard* for the Arrowcreek Country Club golf course located at 2905 Arrowcreek Parkway in Reno. The antennas would employ up to 4° downtilt, would be mounted at an effective height of about 52 feet above ground, and would be oriented in groups of three toward 0°T, 70°T, 140°T, and 210°T. The maximum effective radiated power in any direction would be 17,980 watts, representing simultaneous operation at 8,210 watts for AWS, 6,760 watts for PCS, and 3,010 watts for 700 MHz service; no operation on cellular frequencies is presently proposed from this site. There are reported no other wireless telecommunications base stations at the site or nearby, although the drawings indicate that additional antennas for another carrier could be accommodated at a lower elevation within the enclosure.

Study Results

For a person anywhere at ground, the maximum RF exposure level due to the proposed Verizon operation is calculated to be 0.017 mW/cm², which is 2.7% of the applicable public exposure limit. The maximum calculated exposure level on the roof of the adjacent building is 1.3% of the public

* Located off Arrowcreek Parkway north of Alpine Frost Court.



**Verizon Wireless • Proposed Base Station (Site No. 288151 “West Zolezzi”)
2905 Arrowcreek Parkway • Reno, Nevada**

exposure limit. The maximum calculated level at the second-floor elevation of any nearby residence[†] is 1.0% of the public exposure limit. It should be noted that these results include several “worst-case” assumptions and therefore are expected to overstate actual power density levels from the proposed operation.

No Recommended Mitigation Measures

Due to their mounting location and height, the Verizon antennas would not be accessible to unauthorized persons, and so no mitigation measures are necessary to comply with the FCC public exposure guidelines. It is presumed that Verizon will, as an FCC licensee, take adequate steps to ensure that its employees or contractors receive appropriate training and comply with FCC occupational exposure guidelines whenever work is required near the antennas themselves.

Conclusion

Based on the information and analysis above, it is the undersigned’s professional opinion that operation of the base station proposed by Verizon Wireless at 2905 Arrowcreek Parkway in Reno, Nevada, will comply with the prevailing standards for limiting public exposure to radio frequency energy and, therefore, will not for this reason cause a significant impact on the environment. The highest calculated level in publicly accessible areas is much less than the prevailing standards allow for exposures of unlimited duration. This finding is consistent with measurements of actual exposure conditions taken at other operating base stations.

Authorship

The undersigned author of this statement is a qualified Professional Engineer, holding California Registration Nos. E-13026 and M-20676, which expire on June 30, 2017. This work has been carried out under his direction, and all statements are true and correct of his own knowledge except, where noted, when data has been supplied by others, which data he believes to be correct.

August 12, 2016



William F. Hammett

William F. Hammett, P.E.
707/996-5200

[†] Located at least 140 feet away, based on photographs from Google Maps.

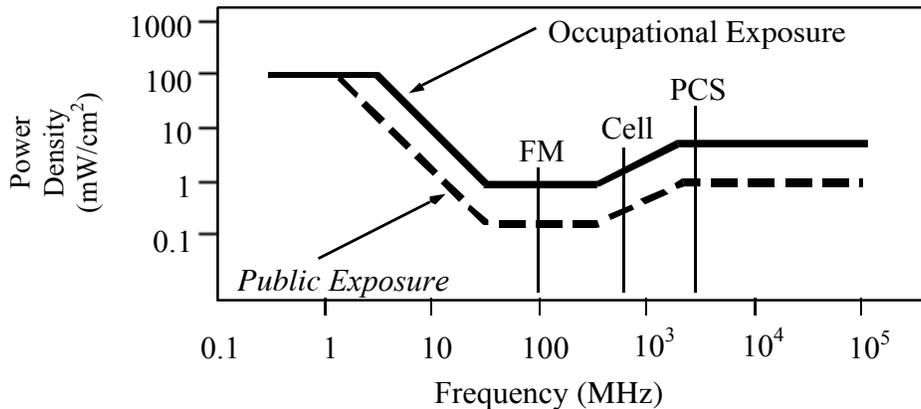


FCC Radio Frequency Protection Guide

The U.S. Congress required (1996 Telecom Act) the Federal Communications Commission (“FCC”) to adopt a nationwide human exposure standard to ensure that its licensees do not, cumulatively, have a significant impact on the environment. The FCC adopted the limits from Report No. 86, “Biological Effects and Exposure Criteria for Radiofrequency Electromagnetic Fields,” published in 1986 by the Congressionally chartered National Council on Radiation Protection and Measurements (“NCRP”). Separate limits apply for occupational and public exposure conditions, with the latter limits generally five times more restrictive. The more recent standard, developed by the Institute of Electrical and Electronics Engineers and approved as American National Standard ANSI/IEEE C95.1-2006, “Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz,” includes similar limits. These limits apply for continuous exposures from all sources and are intended to provide a prudent margin of safety for all persons, regardless of age, gender, size, or health.

As shown in the table and chart below, separate limits apply for occupational and public exposure conditions, with the latter limits (in *italics* and/or dashed) up to five times more restrictive:

Frequency Applicable Range (MHz)	Electromagnetic Fields (f is frequency of emission in MHz)					
	Electric Field Strength (V/m)		Magnetic Field Strength (A/m)		Equivalent Far-Field Power Density (mW/cm ²)	
0.3 – 1.34	614	<i>614</i>	1.63	<i>1.63</i>	100	<i>100</i>
1.34 – 3.0	614	<i>823.8/f</i>	1.63	<i>2.19/f</i>	100	<i>180/f²</i>
3.0 – 30	1842/f	<i>823.8/f</i>	4.89/f	<i>2.19/f</i>	900/f ²	<i>180/f²</i>
30 – 300	61.4	<i>27.5</i>	0.163	<i>0.0729</i>	1.0	<i>0.2</i>
300 – 1,500	3.54√f	<i>1.59√f</i>	√f/106	<i>√f/238</i>	f/300	<i>f/1500</i>
1,500 – 100,000	137	<i>61.4</i>	0.364	<i>0.163</i>	5.0	<i>1.0</i>



Higher levels are allowed for short periods of time, such that total exposure levels averaged over six or thirty minutes, for occupational or public settings, respectively, do not exceed the limits, and higher levels also are allowed for exposures to small areas, such that the spatially averaged levels do not exceed the limits. However, neither of these allowances is incorporated in the conservative calculation formulas in the FCC Office of Engineering and Technology Bulletin No. 65 (August 1997) for projecting field levels. Hammett & Edison has built those formulas into a proprietary program that calculates, at each location on an arbitrary rectangular grid, the total expected power density from any number of individual radio sources. The program allows for the description of buildings and uneven terrain, if required to obtain more accurate projections.



RFR.CALC™ Calculation Methodology

Assessment by Calculation of Compliance with FCC Exposure Guidelines

The U.S. Congress required (1996 Telecom Act) the Federal Communications Commission (“FCC”) to adopt a nationwide human exposure standard to ensure that its licensees do not, cumulatively, have a significant impact on the environment. The maximum permissible exposure limits adopted by the FCC (see Figure 1) apply for continuous exposures from all sources and are intended to provide a prudent margin of safety for all persons, regardless of age, gender, size, or health. Higher levels are allowed for short periods of time, such that total exposure levels averaged over six or thirty minutes, for occupational or public settings, respectively, do not exceed the limits.

Near Field.

Prediction methods have been developed for the near field zone of panel (directional) and whip (omnidirectional) antennas, typical at wireless telecommunications base stations, as well as dish (aperture) antennas, typically used for microwave links. The antenna patterns are not fully formed in the near field at these antennas, and the FCC Office of Engineering and Technology Bulletin No. 65 (August 1997) gives suitable formulas for calculating power density within such zones.

For a panel or whip antenna, power density $S = \frac{180}{\theta_{BW}} \times \frac{0.1 \times P_{net}}{\pi \times D \times h}$, in mW/cm²,

and for an aperture antenna, maximum power density $S_{max} = \frac{0.1 \times 16 \times \eta \times P_{net}}{\pi \times h^2}$, in mW/cm²,

- where θ_{BW} = half-power beamwidth of the antenna, in degrees, and
 P_{net} = net power input to the antenna, in watts,
 D = distance from antenna, in meters,
 h = aperture height of the antenna, in meters, and
 η = aperture efficiency (unitless, typically 0.5-0.8).

The factor of 0.1 in the numerators converts to the desired units of power density.

Far Field.

OET-65 gives this formula for calculating power density in the far field of an individual RF source:

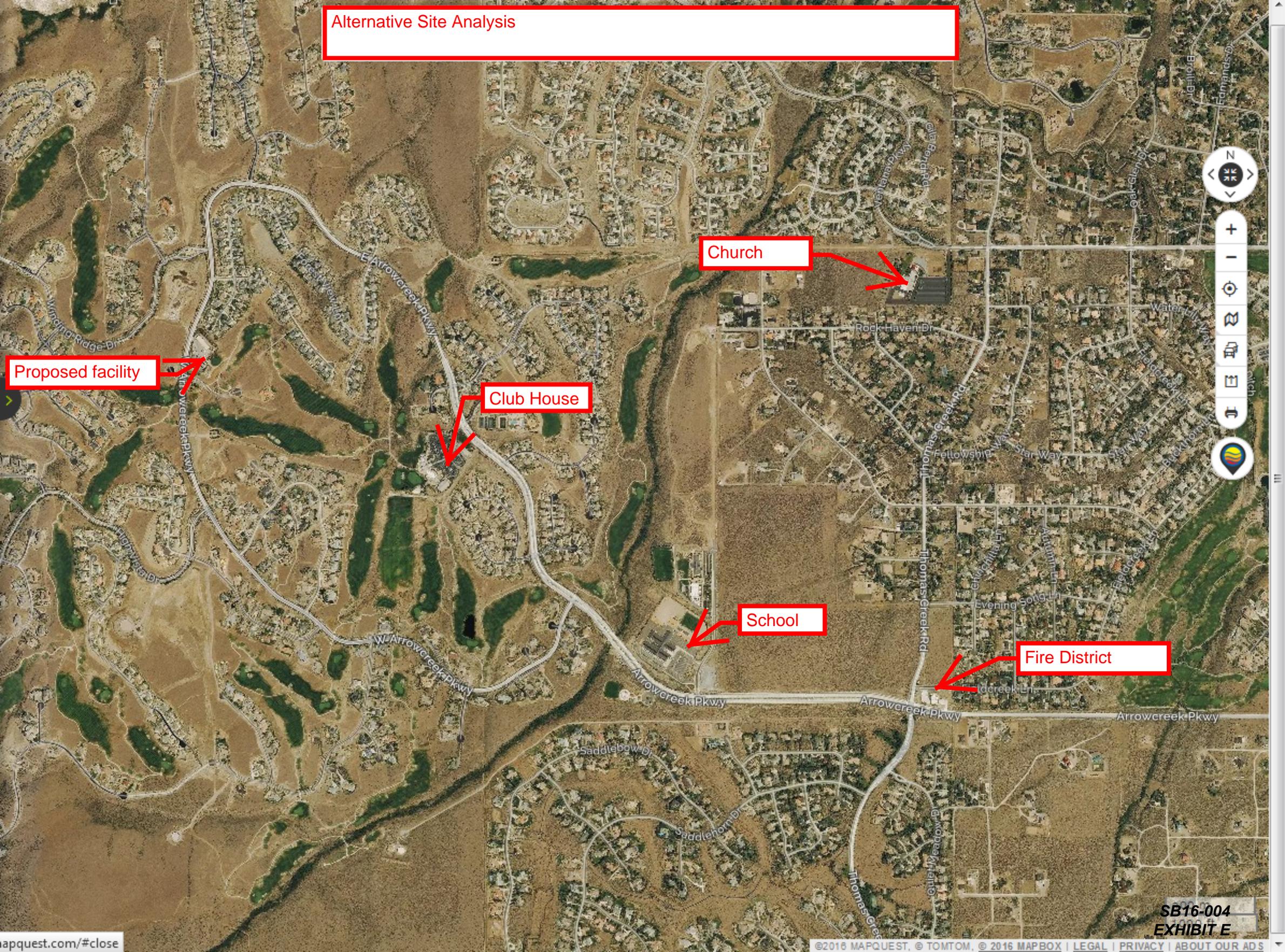
power density $S = \frac{2.56 \times 1.64 \times 100 \times RFF^2 \times ERP}{4 \times \pi \times D^2}$, in mW/cm²,

- where ERP = total ERP (all polarizations), in kilowatts,
RFF = relative field factor at the direction to the actual point of calculation, and
D = distance from the center of radiation to the point of calculation, in meters.

The factor of 2.56 accounts for the increase in power density due to ground reflection, assuming a reflection coefficient of 1.6 (1.6 x 1.6 = 2.56). The factor of 1.64 is the gain of a half-wave dipole relative to an isotropic radiator. The factor of 100 in the numerator converts to the desired units of power density. This formula has been built into a proprietary program that calculates, at each location on an arbitrary rectangular grid, the total expected power density from any number of individual radiation sources. The program also allows for the description of uneven terrain in the vicinity, to obtain more accurate projections.



Alternative Site Analysis



Proposed facility

Church

Club House

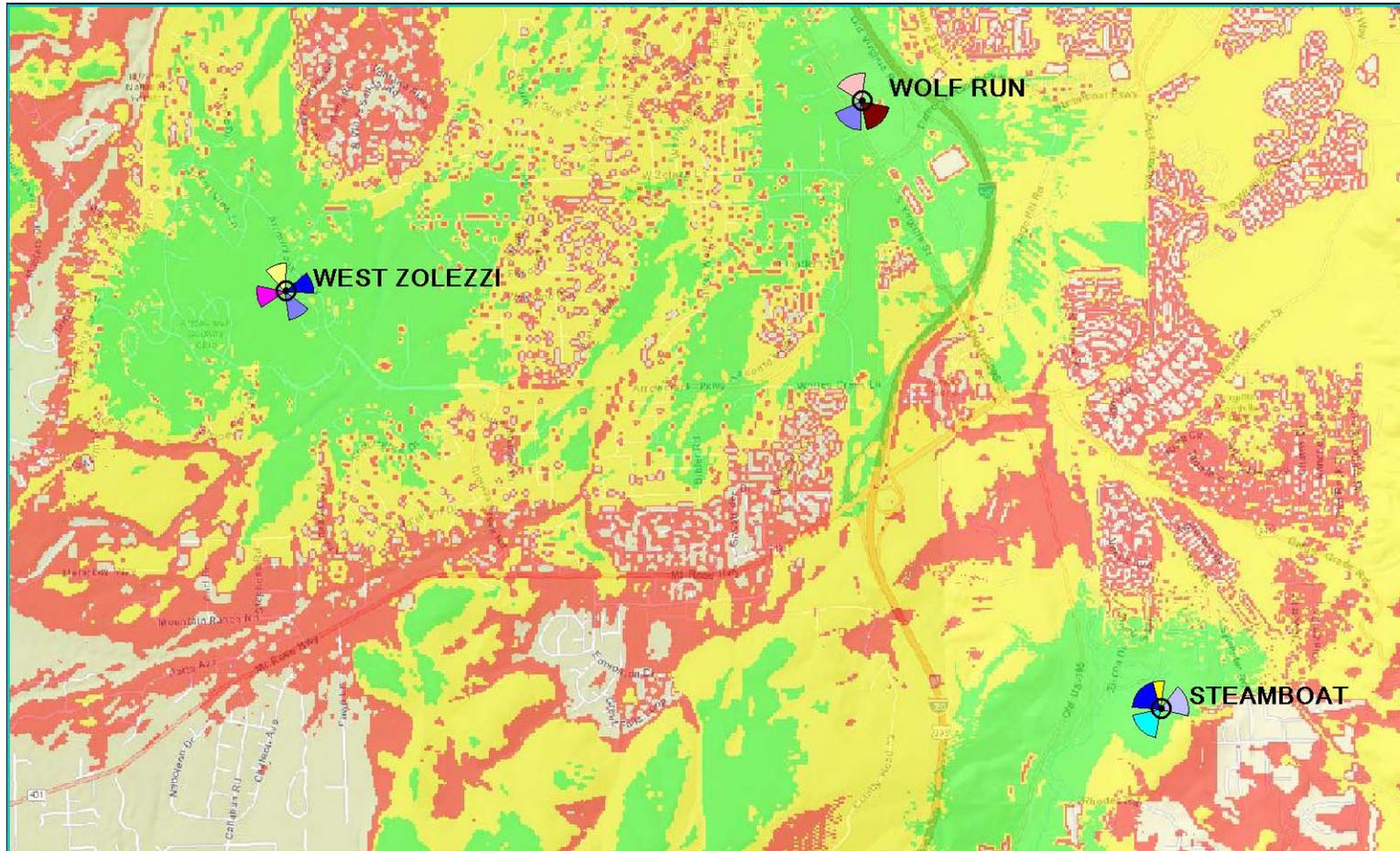
School

Fire District

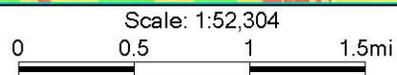
WEST ZOLEZZI Coverage Maps



AFTER COVERAGE



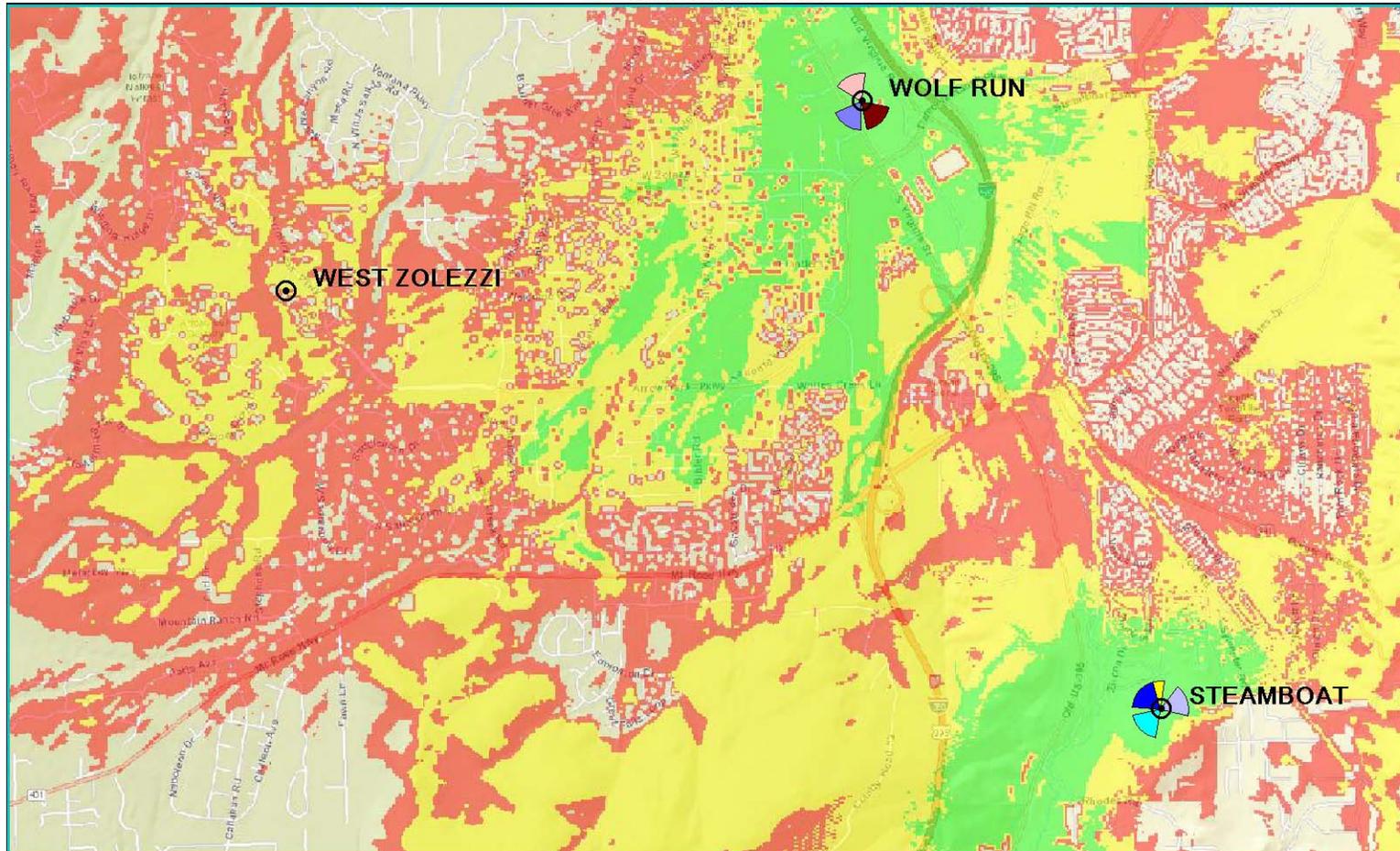
- LTE: RSRP - After Coverage
- Best Signal Level (dBm) ≥ -80
 - Best Signal Level (dBm) ≥ -90
 - Best Signal Level (dBm) ≥ -100



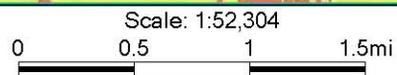
WEST ZOLEZZI Coverage Maps



BEFORE COVERAGE



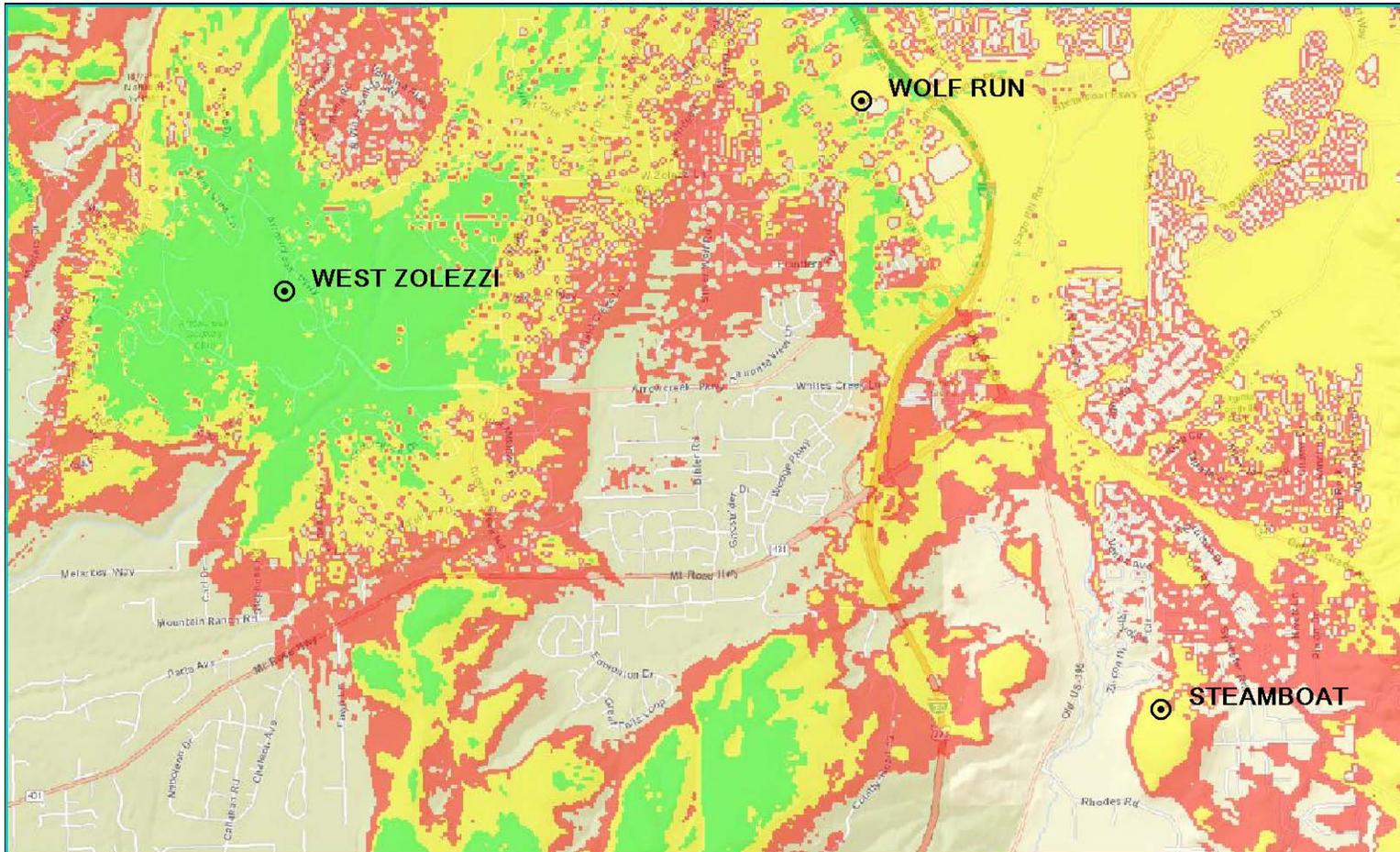
- LTE: RSRP - Existing Coverage
- Best Signal Level (dBm) ≥ -80
- Best Signal Level (dBm) ≥ -90
- Best Signal Level (dBm) ≥ -100



WEST ZOLEZZI Coverage Maps



SITE COVERAGE



LTE: RSRP - Site Coverage

- Best Signal Level (dBm) ≥ -80
- Best Signal Level (dBm) ≥ -90
- Best Signal Level (dBm) ≥ -100

Scale: 1:52,304



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Federal Communications Commission
Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: CELLCO PARTNERSHIP

ATTN: REGULATORY
CELLCO PARTNERSHIP
1120 SANCTUARY PKWY, #150 GASA5REG
ALPHARETTA, GA 30009-7630

Table with Call Sign (KNLH442), File Number, and Radio Service (CW - PCS Broadband).

FCC Registration Number (FRN): 0003290673

Table with columns: Grant Date, Effective Date, Expiration Date, Print Date, Market Number, Channel Block, Sub-Market Designator, Market Name, 1st Build-out Date, 2nd Build-out Date, 3rd Build-out Date, 4th Build-out Date.

Waivers/Conditions:

This authorization is subject to the condition that, in the event that systems using the same frequencies as granted herein are authorized in an adjacent foreign territory (Canada/United States), future coordination of any base station transmitters within 72 km (45 miles) of the United States/Canada border shall be required to eliminate any harmful interference to operations in the adjacent foreign territory and to ensure continuance of equal access to the frequencies by both countries.

This authorization is subject to the condition that the remaining balance of the winning bid amount will be paid in accordance with Part 1 of the Commission's rules, 47 C.F.R. Part 1.

Conditions:

Pursuant to §309(h) of the Communications Act of 1934, as amended, 47 U.S.C. §309(h), this license is subject to the following conditions: This license shall not vest in the licensee any right to operate the station nor any right in the use of the frequencies designated in the license beyond the term thereof nor in any other manner than authorized herein.

This license may not authorize operation throughout the entire geographic area or spectrum identified on the hardcopy version. To view the specific geographic area and spectrum authorized by this license, refer to the Spectrum and Market Area information under the Market Tab of the license record in the Universal Licensing System (ULS).

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**Federal Communications Commission
Wireless Telecommunications Bureau**

RADIO STATION AUTHORIZATION

LICENSEE: SACRAMENTO VALLEY LIMITED PARTNERSHIP

ATTN: REGULATORY
SACRAMENTO VALLEY LIMITED PARTNERSHIP
1120 SANCTUARY PKWY, #150 GASAS5REG
ALPHARETTA, GA 30009-7630

Call Sign KNKA462	File Number
Radio Service CL - Cellular	
Market Numer CMA171	Channel Block B
Sub-Market Designator 0	

FCC Registration Number (FRN): 0002972149

Market Name Reno, NV				
Grant Date 02-05-2008	Effective Date 10-04-2012	Expiration Date 01-22-2018	Five Yr Build-Out Date	Print Date

Site Information:

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
-----------------	-----------------	------------------	----------------------------------	--------------------------------------	---

1 39-35-02.7 N 119-48-09.7 W

Address: SUN VALLEY AND 1ST AVENUE

City: RENO **County:** WASHOE **State:** NV **Construction Deadline:**

Antenna: 1 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	33.400	240.200	187.100	226.200	275.300	145.000	-314.400	125.200
Transmitting ERP (watts)	62.000	62.000	62.000	62.000	62.000	62.000	62.000	62.000

Conditions:

Pursuant to §309(h) of the Communications Act of 1934, as amended, 47 U.S.C. §309(h), this license is subject to the following conditions: This license shall not vest in the licensee any right to operate the station nor any right in the use of the frequencies designated in the license beyond the term thereof nor in any other manner than authorized herein. Neither the license nor the right granted thereunder shall be assigned or otherwise transferred in violation of the Communications Act of 1934, as amended. See 47 U.S.C. § 310(d). This license is subject in terms to the right of use or control conferred by §706 of the Communications Act of 1934, as amended. See 47 U.S.C. §606.

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Federal Communications Commission
Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: CELLCO PARTNERSHIP

ATTN: REGULATORY
CELLCO PARTNERSHIP
1120 SANCTUARY PKWY, #150 GASA5REG
ALPHARETTA, GA 30009-7630

Table with Call Sign (WQGB213), File Number, and Radio Service (AW - AWS) details.

FCC Registration Number (FRN): 0003290673

Table with columns: Grant Date, Effective Date, Expiration Date, Print Date, Market Number, Channel Block, Sub-Market Designator, Market Name, 1st-4th Build-out Dates.

Waivers/Conditions:

This authorization is conditioned upon the licensee, prior to initiating operations from any base or fixed station, making reasonable efforts to coordinate frequency usage with known co-channel and adjacent channel incumbent federal users...

Conditions:

Pursuant to §309(h) of the Communications Act of 1934, as amended, 47 U.S.C. §309(h), this license is subject to the following conditions: This license shall not vest in the licensee any right to operate the station nor any right in the use of the frequencies designated in the license beyond the term thereof...

This license may not authorize operation throughout the entire geographic area or spectrum identified on the hardcopy version. To view the specific geographic area and spectrum authorized by this license, refer to the Spectrum and Market Area information under the Market Tab of the license record in the Universal Licensing System (ULS).

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Federal Communications Commission
Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: CELLCO PARTNERSHIP

ATTN: REGULATORY
CELLCO PARTNERSHIP
1120 SANCTUARY PKWY, #150 GASA5REG
ALPHARETTA, GA 30009-7630

Call Sign WQJQ694	File Number
Radio Service WU - 700 MHz Upper Band (Block C)	

FCC Registration Number (FRN): 0003290673

Grant Date 11-26-2008	Effective Date 07-27-2016	Expiration Date 06-13-2019	Print Date
Market Number REA006	Channel Block C	Sub-Market Designator 0	
Market Name West			
1st Build-out Date 06-13-2013	2nd Build-out Date 06-13-2019	3rd Build-out Date	4th Build-out Date

Waivers/Conditions:

If the facilities authorized herein are used to provide broadcast operations, whether exclusively or in combination with other services, the licensee must seek renewal of the license either within eight years from the commencement of the broadcast service or within the term of the license had the broadcast service not been provided, whichever period is shorter in length. See 47 CFR §27.13(b).

This authorization is conditioned upon compliance with section 27.16 of the Commission's rules

Conditions:

Pursuant to §309(h) of the Communications Act of 1934, as amended, 47 U.S.C. §309(h), this license is subject to the following conditions: This license shall not vest in the licensee any right to operate the station nor any right in the use of the frequencies designated in the license beyond the term thereof nor in any other manner than authorized herein. Neither the license nor the right granted thereunder shall be assigned or otherwise transferred in violation of the Communications Act of 1934, as amended. See 47 U.S.C. § 310(d). This license is subject in terms to the right of use or control conferred by §706 of the Communications Act of 1934, as amended. See 47 U.S.C. §606.

This license may not authorize operation throughout the entire geographic area or spectrum identified on the hardcopy version. To view the specific geographic area and spectrum authorized by this license, refer to the Spectrum and Market Area information under the Market Tab of the license record in the Universal Licensing System (ULS). To view the license record, go to the ULS homepage at <http://wireless.fcc.gov/uls/index.htm?job=home> and select "License Search". Follow the instructions on how to search for license information.

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Federal Communications Commission
Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: CELLCO PARTNERSHIP

ATTN: REGULATORY
CELLCO PARTNERSHIP
1120 SANCTUARY PKWY #150 - GASA5REG
ALPHARETTA, GA 30009

Call Sign WQVP219	File Number
Radio Service AT - AWS-3 (1695-1710 MHz, 1755-1780 MHz, and 2155-2180 MHz)	

FCC Registration Number (FRN): 0003290673

Grant Date 04-08-2015	Effective Date 04-16-2015	Expiration Date 04-08-2027	Print Date
Market Number BEA151	Channel Block J	Sub-Market Designator 0	
Market Name Reno, NV-CA			
1st Build-out Date 04-08-2021	2nd Build-out Date 04-08-2027	3rd Build-out Date	4th Build-out Date

Waivers/Conditions:

NONE

Conditions:

Pursuant to §309(h) of the Communications Act of 1934, as amended, 47 U.S.C. §309(h), this license is subject to the following conditions: This license shall not vest in the licensee any right to operate the station nor any right in the use of the frequencies designated in the license beyond the term thereof nor in any other manner than authorized herein. Neither the license nor the right granted thereunder shall be assigned or otherwise transferred in violation of the Communications Act of 1934, as amended. See 47 U.S.C. § 310(d). This license is subject in terms to the right of use or control conferred by §706 of the Communications Act of 1934, as amended. See 47 U.S.C. §606.

This license may not authorize operation throughout the entire geographic area or spectrum identified on the hardcopy version. To view the specific geographic area and spectrum authorized by this license, refer to the Spectrum and Market Area information under the Market Tab of the license record in the Universal Licensing System (ULS). To view the license record, go to the ULS homepage at <http://wireless.fcc.gov/uls/index.htm?job=home> and select "License Search". Follow the instructions on how to search for license information.

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Federal Communications Commission
Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: CELLCO PARTNERSHIP

ATTN: REGULATORY
CELLCO PARTNERSHIP
1120 SANCTUARY PKWY #150 - GASA5REG
ALPHARETTA, GA 30009

Table with Call Sign (WQVP252), File Number, and Radio Service (AT - AWS-3) details.

FCC Registration Number (FRN): 0003290673

Table with columns: Grant Date, Effective Date, Expiration Date, Print Date, Market Number, Channel Block, Sub-Market Designator, Market Name, 1st Build-out Date, 2nd Build-out Date, 3rd Build-out Date, 4th Build-out Date.

Waivers/Conditions:

NONE

Conditions:

Pursuant to §309(h) of the Communications Act of 1934, as amended, 47 U.S.C. §309(h), this license is subject to the following conditions: This license shall not vest in the licensee any right to operate the station nor any right in the use of the frequencies designated in the license beyond the term thereof nor in any other manner than authorized herein.

This license may not authorize operation throughout the entire geographic area or spectrum identified on the hardcopy version. To view the specific geographic area and spectrum authorized by this license, refer to the Spectrum and Market Area information under the Market Tab of the license record in the Universal Licensing System (ULS).

Alternative Site Analysis

DEVELOPMENT APPLICATION FOR VERIZON SITE “WEST ZOLEZZI”

APN 152-021-03

2905 ARROWCREEK PARKWAY, RENO, NV 89511

The West Zolezzi search ring is located in Washoe County Nevada west of Interstate 580 and north of Highway 431. The search ring is comprised of high-end residential properties, a private school, and a golf course. The search ring has varying topography with limited trees. Only one viable candidate was identified that would meet RF's coverage objective. A private school, Sage Ridge, was considered as an alternative candidate that would have met RF's coverage objective but the private school council ultimately decided they were not interested. Other property within the search ring consisted of high-end residential development that was not suitable for a new cell facility and the Home Owners Association (HOA) for that residential development. The HOA also expressed disinterest. Verizon Wireless considered multiple other sites, which ultimately did not work. To wit:

- 1) Fire District – This is an existing Fire House located at Thomas Creek Dr. and Arrowcreek Pkwy. Ground space limitations did not allow for an ideal foot print without VZW interfering with fire operations or detrimentally decreasing the parking ratio. Further, radio engineers determined this location could not adequately cover the desired coverage and capacity gaps.
- 2) School (Sage Ridge) – The private school council ultimately decided they were not interested.
- 3) Church – This is an existing church at Thomas Creek Dr. and Zolezzi Ln. Radio engineers determined that this site was too far from the desired center of the search ring and would not achieve the coverage or capacity objective.
- 4) Arrowcreek Golf Clubhouse – Within the Arrowcreek community, set back from the rights of way with minimum visibility to the surrounding community. This was a suitable candidate from a coverage and capacity objective, with willing a willing landlord, and an SUP application was filed. However, some adjacent neighbors and club members expressed strong desire not to locate there after the application was filed. Further discussion with both Community Development and Friends of Arrowcreek ensued, from which a decision was made to propose a different location on the same parcel.

Thus, the selection of a location at the maintenance building at the west end of the golf course was selected.

PROJECT SUPPORT STATEMENT

DEVELOPMENT APPLICATION FOR VERIZON SITE "WEST ZOLEZZI"

APN 152-021-03

2905 ARROWCREEK PARKWAY, RENO, NV 89511

INTRODUCTION

Verizon Wireless is seeking to improve communications service in the Reno Nevada region north of Highway 431 and west of Interstate 580, and for purposes of this application specifically in the Arrowcreek community. Verizon would like to increase coverage and capacity in the area by locating a new telecommunications facility in order to increase and improve coverage and capacity for both current and potential customers. Additionally, this network development will increase public safety within these areas and bring wireless service to areas that currently have poor capacity service.

This tower will help alleviate an area of poor coverage within this service area, which causes reoccurring lost calls, ineffective service, and slow data speeds. To remedy these problems, Verizon proposes to develop a wireless facility at 2905 Arrowcreek Parkway. The proposed location of the tower is set within an unutilized portion of this parcel and will be designed to comply with Washoe County wireless design guidelines. The proposed Verizon communications facility will be located within a 20' x 22' fenced compound including: outdoor equipment cabinets and a 56' faux water tower design that will accommodate (4) sectors with (2) antennas per sector, (8) remote radio units (RRU's) and (2) microwave dishes. The tower will also accommodate (1) future carrier's antenna centerline.

This unmanned facility will provide service to area travelers, residents and businesses 24 hours a day, 7 days a week. This site will also serve as a back up to the existing landline service in the area and will provide improved mobile communications, essential to modern day commerce, recreation, and public safety.

SAFETY BENEFITS OF IMPROVED WIRELESS SERVICE

Mobile phone use has become an extremely important system for public safety. Along roads and highways without public call boxes, mobile phones are often the only means for emergency roadside communication. Motorists with disabled vehicles (or worse) can use their phone to call in and request appropriate assistance. With good cellular coverage along important roadways, emergency response is just a phone call away. Furthermore, as a back up system to traditional landline phone service, mobile phones have proven to be extremely important during natural disasters and other catastrophes.

CONVENIENCE BENEFITS OF IMPROVED WIRELESS SERVICE

Modern day life has become increasingly dependent on instant communications. Whether it is a parent calling their child, spouse calling a spouse, or general contractor ordering materials to the jobsite, wireless phone service is no longer just a convenience. It has become a way of life and a way of business.

COMPLIANCE WITH COUNTY DEVELOPMENT STANDARDS

This project has been carefully designed to comply with applicable standards. Verizon Wireless is requesting approval of their proposed facility without further landscaping requirements under an associated Director's Modification. The location of the facility is at the top of Arrow Creek Country Club

golf course lot at the western edge of the 149 ac. parcel, adjacent the golf course maintenance building, making ground-level and bottom-half of the proposed monopine invisible to the public. Existing landscape and trees present on the existing berm that surrounds the facility. Verizon is proposing to use a stucco-faced equipment wall to better blend with the established buildings on the parcel and surroundings.

COMPLIANCE WITH FCC STANDARDS

This project will not interfere with any TV, radio, telephone, satellite, or any other signals. Any interference would be against the Federal Law and would be a violation Verizon Wireless' FCC License. In addition, this project will conform to all FCC standards.

TECHNOLOGY AND CONSUMER SERVICES THE CARRIER WILL PROVIDE ITS CUSTOMERS

Verizon offers its customers multiple services such as, voice calls, text messaging, mobile email, picture/video messaging, mobile web, navigation, broadband access. Wireless service enhances public safety and emergency communications in the community. In rural areas such as the subject location, cellular phone service can cover much larger geographic areas than traditional landline phone service.

FUTURE COLLOCATION OPPORTUNITIES

The proposed site has been designed to allow for future co-location opportunities with other carriers. The land lease provides sufficient space for additional service providers and the tower and its foundation are designed for future equipment. This tower will eliminate the need for multiple towers within the same general vicinity as it has been designed to accommodate up to (1) carrier and its associated ground equipment.

LIGHTING

Unless tower lighting is required by the FAA there will be no additional lighting.

NOISE

De minimus white noise from electronic devices within the fenced Premises is expected. A backup generator, quiet as it is (63db at 23'), is not being requested in this application. Non-native noise will be nearly undetectable.

HAZARDOUS MATERIAL

A Hazardous Material Business Plan will also be submitted upon project completion, and stored on site after construction

ENVIRONMENTAL SETTING

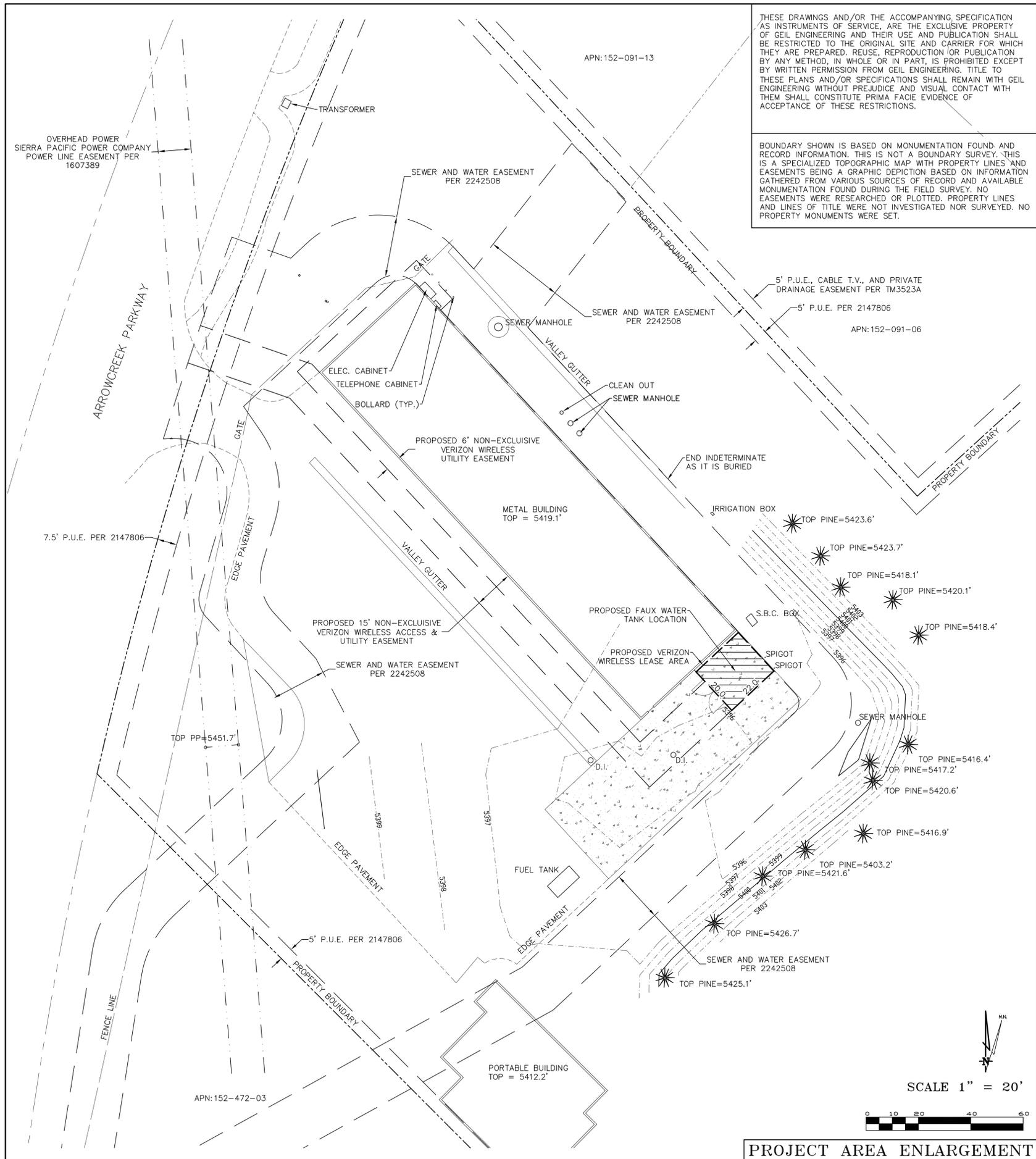
Verizon Wireless is proposing to build a monopine tower to look like a natural pine tree to blend in with the existing trees and buildings adjacent the Arrowcreek Country Club clubhouse and cart storage/repair facility at the confluence of existing landscape and parking lot.

MAINTENANCE AND STANDARD GENERATOR TESTING

Verizon will not be installing a standby diesel generator at this cell site.

CONSTRUCTION SCHEDULE

The construction of the facility will be in compliance with all local rules and regulations. The typical duration is two months. The crew size will range from two to ten individuals.



THESE DRAWINGS AND/OR THE ACCOMPANYING SPECIFICATION AS INSTRUMENTS OF SERVICE, ARE THE EXCLUSIVE PROPERTY OF GEIL ENGINEERING AND THEIR USE AND PUBLICATION SHALL BE RESTRICTED TO THE ORIGINAL SITE AND CARRIER FOR WHICH THEY ARE PREPARED. REUSE, REPRODUCTION OR PUBLICATION BY ANY METHOD, IN WHOLE OR IN PART, IS PROHIBITED EXCEPT BY WRITTEN PERMISSION FROM GEIL ENGINEERING. TITLE TO THESE PLANS AND/OR SPECIFICATIONS SHALL REMAIN WITH GEIL ENGINEERING WITHOUT PREJUDICE AND VISUAL CONTACT WITH THEM SHALL CONSTITUTE PRIMA FACIE EVIDENCE OF ACCEPTANCE OF THESE RESTRICTIONS.

BOUNDARY SHOWN IS BASED ON MONUMENTATION FOUND AND RECORD INFORMATION. THIS IS NOT A BOUNDARY SURVEY. THIS IS A SPECIALIZED TOPOGRAPHIC MAP WITH PROPERTY LINES AND EASEMENTS BEING A GRAPHIC DEPICTION BASED ON INFORMATION GATHERED FROM VARIOUS SOURCES OF RECORD AND AVAILABLE MONUMENTATION FOUND DURING THE FIELD SURVEY. NO EASEMENTS WERE RESEARCHED OR PLOTTED. PROPERTY LINES AND LINES OF TITLE WERE NOT INVESTIGATED NOR SURVEYED. NO PROPERTY MONUMENTS WERE SET.

Geil Engineering
Engineering * Surveying * Planning
1226 High Street
Auburn, California 95603-5015
Phone: (530) 885-0426 * Fax: (530) 823-1309

Verizon Wireless
Project Name: WEST ZOLEZZI
Project Site Location: 2905 Arrowcreek Parkway
Reno, NV 89511
Washoe County

Date of Observation: 06-16-16

Equipment/Procedure Used to Obtain Coordinates: Trimble Pathfinder Pro XL post processed with Pathfinder Office software.

Type of Antenna Mount: Proposed Faux Water Tank

Coordinates (Tank)
Latitude: N 39° 24' 56.10" (NAD83) N 39° 24' 56.42" (NAD27)
Longitude: W 119° 49' 07.79" (NAD83) W 119° 49' 04.11" (NAD27)

ELEVATION of Ground at Structure (NAVD88) 5396.5' AMSL

CERTIFICATION: I, the undersigned, do hereby certify elevation listed above is based on a field survey done under my supervision and that the accuracy of those elevations meet or exceed 1-A Standards as defined in the FAA ASAC Information Sheet 91.003, and that they are true and accurate to the best of my knowledge and belief.

Kenneth D. Geil Nevada PLS 13385

DATE OF SURVEY: 06-16-16
SURVEYED BY OR UNDER DIRECTION OF: KENNETH D. GEIL, P.L.S.13385.

LOCATED IN THE COUNTY OF WASHOE, STATE OF NEVADA
BEARINGS SHOWN ARE BASED UPON MONUMENTS FOUND AND RECORD INFORMATION. THIS IS NOT A BOUNDARY SURVEY.

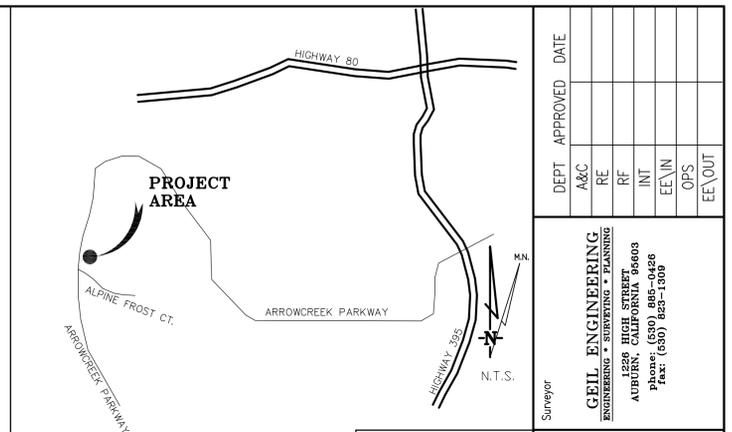
ELEVATIONS SHOWN ON THIS PLAN ARE BASED UPON U.S.G.S. N.A.V.D. 88 DATUM. ABOVE MEAN SEA LEVEL UNLESS OTHERWISE NOTED.

N.G.V.D. 1929 CORRECTION: SUBTRACT 3.74' FROM ELEVATIONS SHOWN.

CONTOUR INTERVAL: 1'

ASSESSOR'S PARCEL NUMBER: 152-021-03

LANDLORD(S): FRIENDS OF ARROWCREEK LLC
2905 ARROWCREEK PARKWAY
RENO, NV 89511



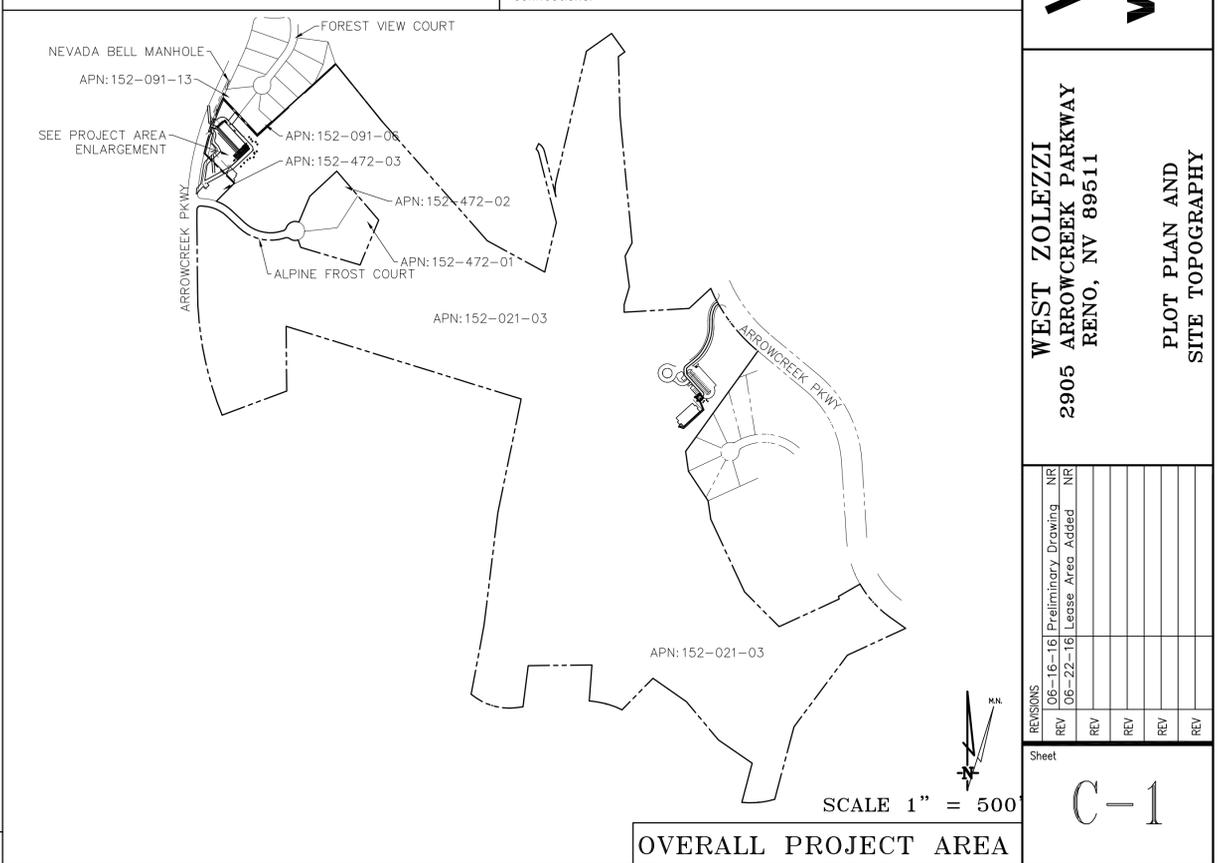
RENO, NV

Lease Area Description
All that certain lease area being a portion of Parcel 2E as is shown on that certain Record of Survey filed in the Office of the County Recorder of Washoe County, Nevada, as Record of Survey No. 4889, and being located in the City of Washoe, County of Washoe, State of Nevada, and being a portion of Section 23, Township 18 North, Range 19 East, M.D.B. & M., being more particularly described as follows:

Commencing at a standard monument in box set at the centerline intersection of Arrowcreek Parkway and Alpine Frost Court from which a 5/8" rebar and cap set at the most southerly corner of Lot 224 as is shown on that certain Tract Map filed in the Office of the County Recorder of Washoe County, Nevada, as Tract Map No. 3523A, bears North 44°31'26" East 547.09 feet; thence from said point of commencement North 42°46'56" East 440.58 feet to the true point of beginning; thence from said point of beginning North 47°05'53" East 22.00 feet; thence South 42°54'07" East 20.00 feet; thence South 47°05'53" West 22.00 feet; thence North 42°54'07" West 20.00 feet to the point of beginning.

Together with a non-exclusive easement for access and utility purposes being fifteen feet in width the centerline of which is described as follows: beginning at a point which bears South 42°54'07" East 12.50 feet from the most Westerly corner of the above described lease area and running thence South 47°05'53" West 35.34 feet; thence North 42°54'07" West 196.28 feet; thence North 70°58'32" West 43.2 feet more or less to the public right of way more commonly known as Arrowcreek Parkway.

Also together with a non-exclusive easement for utility purposes being six feet in width the centerline of which is described as follows: beginning at a point which bears South 42°54'07" East 2.00 feet from the most Westerly corner of the above described lease area and running thence South 47°05'53" West 30.84 feet; thence North 42°54'07" West 186.37 feet; thence North 47°05'53" East 56.15 feet; thence South 42°54'07" East 17.50 feet more or less to the existing utility service connections.



DEPT	APPROVED	DATE
ARC		
RE		
RF		
INT		
EE\IN		
OPS		
EE\OUT		

Surveyor
GEIL ENGINEERING
ENGINEERING * SURVEYING * PLANNING
1226 HIGH STREET
AUBURN, CALIFORNIA 95603
Phone: (530) 885-0426
Fax: (530) 823-1309

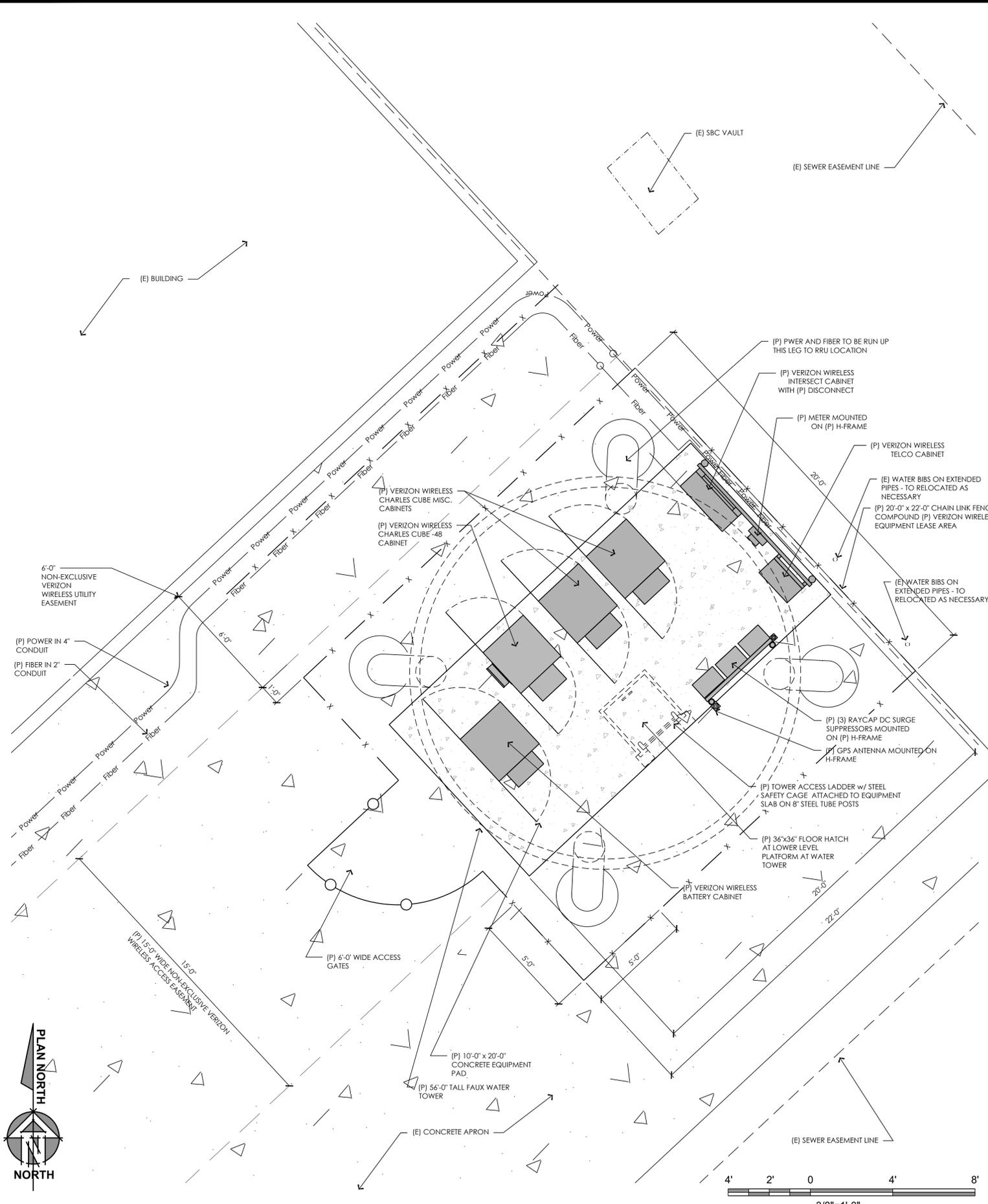
Architect
verizon wireless

WEST ZOLEZZI
2905 ARROWCREEK PARKWAY
RENO, NV 89511

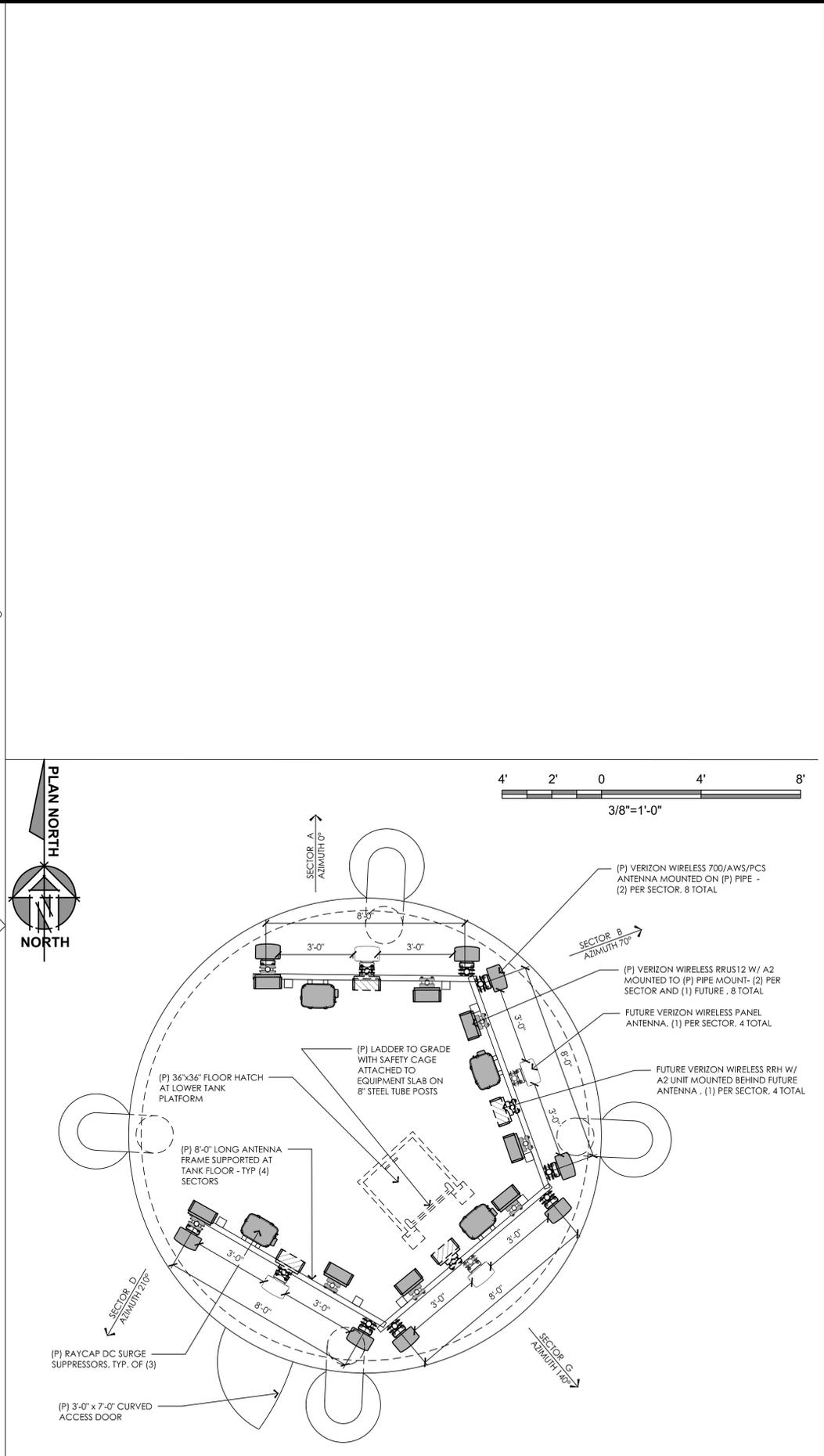
PLOT PLAN AND
SITE TOPOGRAPHY

REVISIONS	REV	DATE	DESCRIPTION
	06-16-16		Preliminary Drawing
	06-22-16		Lease Area Added

Sheet
C-1



17 ENLARGED EQUIPMENT PLAN
3/8" = 1'-0"



5 ENLARGED ANTENNA PLAN
3/8" = 1'-0"

PREPARED FOR
verizon
295 Parkshore Drive
Folsom, California 94630

Vendor:
EPIC WIRELESS GROUP INC.
8700 Auburn Folsom Road, Suite 400
Granite Bay, California 95746

Project Address:
2905 Arrowcreek Pkwy
Reno, NV 89511

Architect:
Borges ARCHITECTURAL GROUP
ARCHITECTURE PLANNING INTERIORS
4400 STONE HOLLOW DRIVE, SUITE 200
ROSELAND, CA 94668
PHONE: 916-778-2200
FAX: 916-778-2217
BORGESARCHITECT.COM

PROJECT NO: 20141021630
LOCATION NO: 288151
DRAWN BY: B.K.W.
CHECKED BY: B.K.W.

REV	DATE	DESCRIPTION
B	08/03/16	100% ZD Submittal
A	07/13/16	90% ZD Submittal

Licensor:

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Issued For:
08/03/16
100% ZD Submittal

SHEET TITLE:
ENLARGED EQUIPMENT & ANTENNA PLANS

SHEET NUMBER:
A-2

Plot Date: 8/03/2016 4:32:48 PM File Name: \\S01A11-14002-44-Ver Wireless\VP\114002-44-Ver Wireless\A-2 Enlarged Equipment & Antenna Plans.dwg Plotted By: Brian Winkler

14002-44

PREPARED FOR



295 Parkshore Drive
Folsom, California 94630

Vendor:



Project Address:

2905 Arrowcreek Pkwy
Reno, NV 89511

Architect:



PROJECT NO: 20141021630

LOCATION NO: 288151

DRAWN BY: B.K.W.

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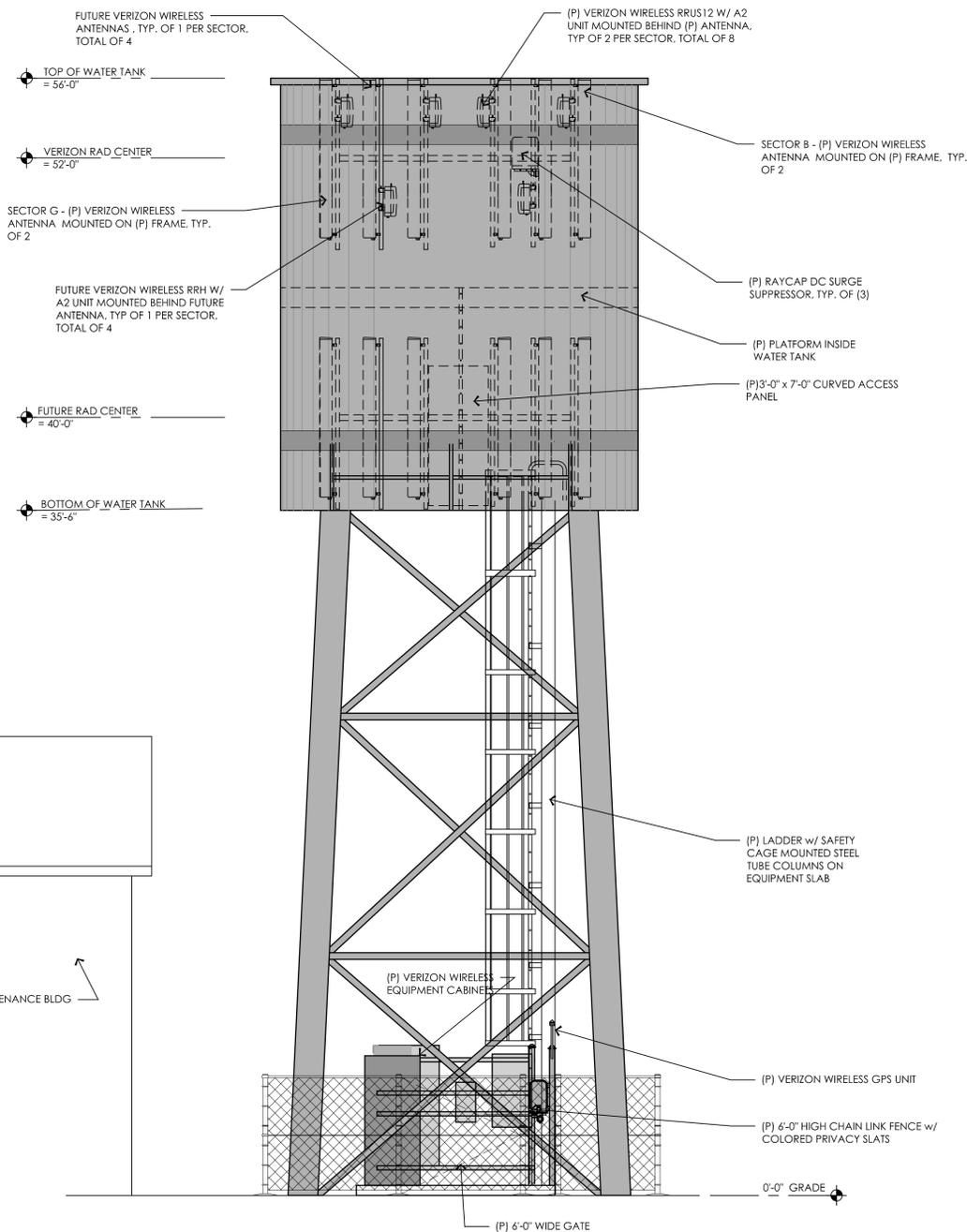
08/03/16
100% ZD Submittal

SHEET TITLE:

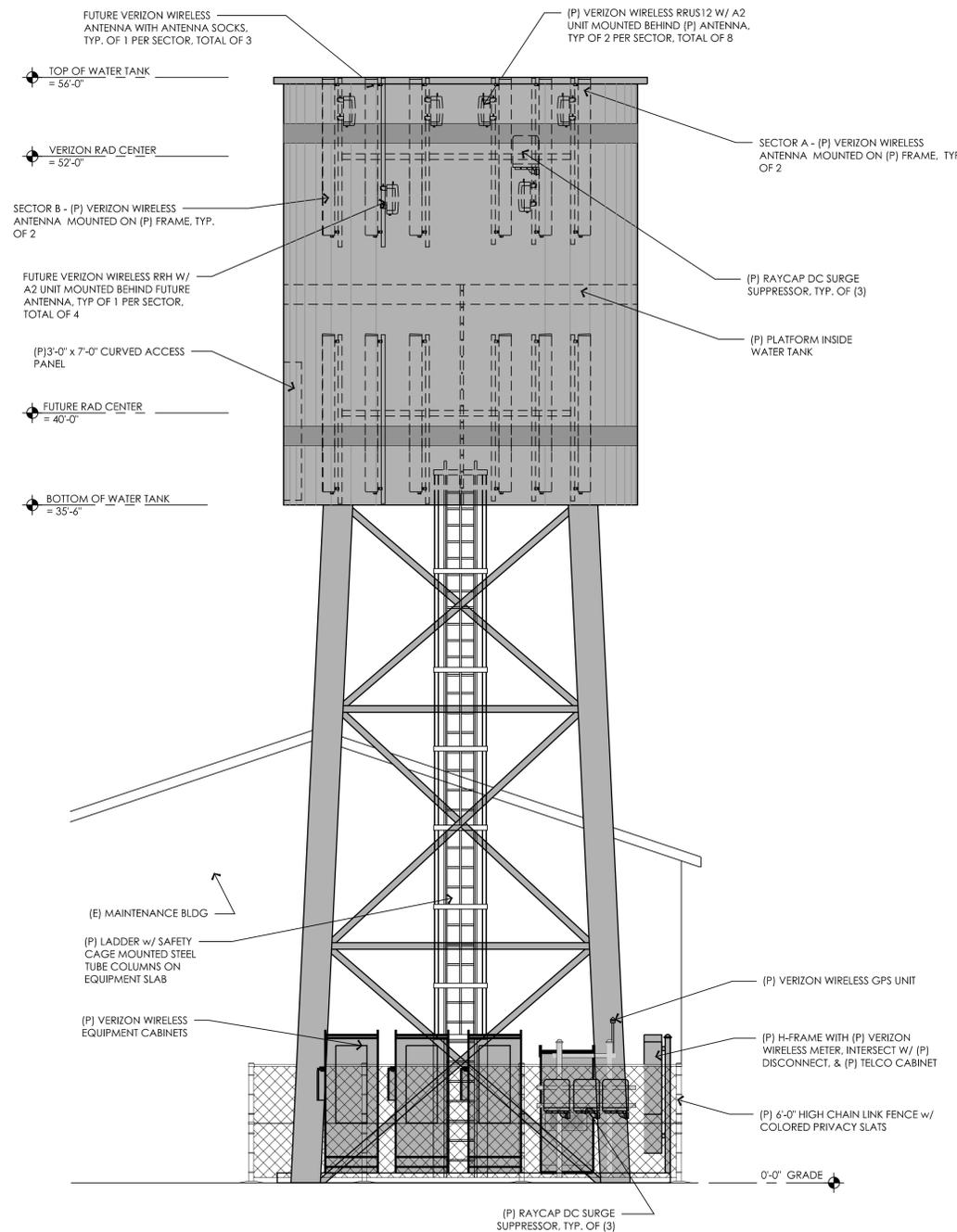
ELEVATIONS

SHEET NUMBER:

A-3.1



17 PROPOSED SOUTH ELEVATION
1/4" = 1'-0"



9 PROPOSED EAST ELEVATION
1/4" = 1'-0"

Plot Date: 8/03/2016 8:32:37 PM File Name: S:\2014\14002-44\West Tower\14002-44\West Tower.dwg Plotter: HP DesignJet 5000 Series Plot Size: A

14002-44

SB16-004 EXHIBIT E

PREPARED FOR



295 Parkshore Drive
Folsom, California 94630

Vendor:



8700 Auburn Folsom Road, Suite 400
Granite Bay, California 95746

Project Address:

2905 Arrowcreek Pkwy
Reno, NV 89511

Architect:



PROJECT NO: 20141021630

LOCATION NO: 288151

DRAWN BY: B.K.W.

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08/03/16
100% ZD Submittal

SHEET TITLE:

ELEVATIONS

SHEET NUMBER:

A-3.2

