NEVADA COUNTY ZONING ADMINISTRATOR STAFF REPORT

HEARING DATE: November 29, 2017

FILE NO: PLN17-0073, CUP17-0015, EIS17-0022

APPLICANT: AT&T Mobility dba AT&T Wireless OWNER(s): Pamela Swartz

- **PROJECT:** A Conditional Use Permit (CUP) proposing the construction/installation of an unmanned 130-foot tall mono-pine telecommunication tower and equipment facility. The project proposes a 900-square foot (30-foot by 30-foot) leased area on a 10.76-acre private parcel. The project design allows for up to two additional co-located carriers to install similar sized equipment with in the 900 square foot lease site. In addition to the 130-foot tall mono-pine communication tower, the proposed project includes nine (9) panel antennas and 18 remote radio head/units installed on the cell tower, an 80" by 80" walk-in utility cabinet, 15kW emergency backup generator with 54-gallon diesel tank located within an acoustical cabinet, two manually operated outdoor light fixtures with cut-off shields and a six (6) foot high redwood fence to enclose lease-site.
- **LOCATION:** The project is located at 19406 Burning Bush Road which is approximately a ¹/₂ mile northwest of Cooper Road in an unincorporated area outside of Nevada City on a portion of Lot 5 of Section 27, Township 17 North, Range 9 East.

ASSESSOR'S PARCEL NO: 34-090-03

PROJECT PLANNER: Coleen Shade, Senior Planner

General Plan:	Forest-40 (FOR-40)	Water:	Well	
Zoning:	Forest-40 (FR-40)	Sewage:	Septic	
Flood Zone:	0400 Zone X	Schools:	Nevada City School District	
ZDM #:	63	Recreation:	N/A	
Sup. Dist.:	IV	Fire:	Nevada County Consolidated	
Parcel Size:	10.76 acres	Date Filed:	6/30/17 Refiled : 10/19/17	
Farmland Map Designation: X-Other				

ATTACHMENTS:

- 1. Recommended Conditions of Approval & MMRP
- 2. Initial Study/Mitigated Negative Declaration
- 3. Environmental Noise Assessment Report
- 4. Radio Frequency Electromagnetic Energy Compliance Report
- 5. Project Plan Set (12 sheets)

<u>RECOMMENDATIONS</u>:

- I. Environmental Action: Adoption of Mitigated Negative Declaration
- II. Project Action: Conditional Approval of CUP17-0015

BACKGROUND, EXISTING CONDITIONS AND SURROUNDING LAND USES:

There are four new tower applications from AT&T being processed by the Nevada County Planning Department. The other new tower applications are for locations on: 20596 Golden Bear Drive in South Nevada County, approximately 21-miles to the northeast of this location; at 13083 Wild Life Lane approximately 7.8 miles to the south of this project (east of State Highway 174); and at 11797 Globe Lane approximately 19.8 miles south westerly of this project site (west of State Highway 49). The four new tower projects are being processed as part of a Federal grant given to AT&T to support their efforts in bringing service to very rural areas.

The project is within a 30-foot by 30-foot leased area within a 10.76-acre private parcel owned by Pamela Swartz, located in an unincorporated area of Nevada County at 19406 Burning Bush Road. The parcel, APN 34-090-03, is located approximately one-half mile northwest of Cooper Road. The nearest residence is located within the same parcel, approximately 200-feet from the project lease area. The subject property is developed with a residence, a two-story horse barn and other accessory buildings. The nearest neighboring residence to the project lease site is 450 feet to the southeast.

The 900-square foot project lease-site (Figure 1.) is located within an open area surrounded on three sides by vegetation dominated by ponderosa pine, incense cedar and black oak. There are no stream or riparian areas within the lease site or adjacent to it. The Biological Inventory prepared for the project site found no state or federally listed threatened or endangered plant or animal species nor are there any other special status species expected to occur due to the absence of suitable habitat.

The site lies at an approximate elevation of 3,363.5 feet above mean sea level. The general overall topography of the project lease area is moderately sloping toward the north at an average slope of 9%. Surface drainage generally flows northwesterly. Based on the Soil Survey Nevada County, California soils on the project parcel primarily consist of Cohasset-McCarthy Cobbly Loam that range between 15 and 50%. The north east corner of the project parcel, the location of the project lease-site, consists of Cohasset Cobbly Loam with 5 to 50% slopes. The Cohasset Series soils consist of well-drained soils underlain by cobbly andesitic conglomerate. The soils on ridges are undulating to hilly. Runoff is medium to rapid on these soil types and the hazard for erosion is slight to moderate depending on slope. There are no naturally occurring asbestos-containing rocks at or near the site.

A seasonal unnamed stream is located approximately 0.5 miles away, south of Cooper Road. No portion of the property is mapped as being within a floodplain according to the FEMA maps. For most of the parcel the existing stormwater runoff flows towards the southeast and is likely

collected within the seasonal creek. The lease-site drains to the northeast which drains to the upper rock Creek watershed.



Figure 1. Lease-Site

The General Plan land use designation is Forest-40, and the parcel is zoned Forest-40 with one residential unit per parcel and 40-acre parcel size limitation for new subdivisions (see Figure 2. Zoning, Vicinity and Public Notice). The FR-40 district provides areas for the protection, production and management of timber, timber support uses, including but not limited to equipment storage, temporary offices, low intensity recreation uses and open space. Single-family dwellings are an allowed use in the FR-40 district and new communication towers and facilities are permissible with a conditional use permit. The adjoining parcels range in size from 2.51 acres (two parcels to the east), 11.55 acres (the adjoining parcel to the south), 10.72 acres (the adjoining parcel to the west), and 172.64 acres (the adjoining parcel to the north). One of the adjoining parcel to the east is developed with a residence and the parcels to the north and south are developed with a residence each.



Figure 2. Zoning, Vicinity and Public Notice

PROJECT DESCRIPTION:

The proposed project (see Figure 3 below), the installation of a new unmanned telecommunication facility, consists of a 130-foot tall mono-pine communication tower with nine (9) panel antennas and 18 remote radio head/units installed on it, an 80" by 80" walk-in utility cabinet, 15kW emergency backup generator with 54-gallon diesel tank located within an acoustical cabinet, two manually operated outdoor light fixtures with cut-off shields and a six (6) foot high redwood fence to enclose the lease-site. Electrical power will be brought to the lease-site from an existing line at a joint pole location located approximately 1,500 feet south west of the lease-site. Access to the project site for construction and equipment maintenance is provided from an existing private paved driveway that comes off of Burning Bush Road.

Construction/Installation equipment and AT&T maintenance vehicles will use an existing graveled parking area at the project site for parking.

To support safe ingress and egress to the project site four (4) gravel pull outs will be installed. Two along Royal Plum Way and two along Burning Bush Road. Vegetation management to reduce fire fuels within five (5) feet on both sides of the right-of-way paved surface will also be conducted and maintained.

The PG&E will convey electrical power through a new underground conduit and line. The conduit will be installed via underground directional boring. All borings and surfacing areas will be placed away from existing oak trees in coordination with PG&E power run requirements.

The tower project site was located on the selected parcel for its optimal cell coverage, ability to obtain a land lease from the property owner, the accessibility of the site, the appropriate amount of screening (in order to address aesthetic concerns and maintain optimum cell coverage) and the ease of installation based on topography. The site selected for the proposed coverage meets the above criteria including existing tree screening and a gentle slope across the 30-foot by 30-foot lease site. The installation of the mono-pine tower (tower disguised/camouflaged to look like a pine tree) and the apparatus to support its function will need no tree or shrub removal or site grading and any cut and fill will be balanced within the 900-square foot lease area. Temporary construction best management practices for dust and soil erosion control will be employed as the conditions of approval requires.

The emergency backup generator will run at full capacity during power loss and during scheduled startup testing which will be limited to weekday mornings between 8:00 a.m. and 10:00 a.m., last for ten (10) minutes at a time and be conducted no more than once a week (more likely once every two weeks). The generator being proposed for this project is a diesel 15 kW 48 VDC. At the nearest residence (nearest sensitive receptor), 450-feet southeast of the project lease-site, the generator noise production is projected to be 39.15 dBA.

The project is in compliance with Nevada County Land Use and Development Code co-location requirements, Sec. L-II 3.8.G; "Owners of all approved towers shall be required to agree to allow future co-location by other carriers, and to provide an efficient process for handling co-location requests." The proposed project design has reserved space within their 900 square foot project lease-site to allow up to two (2) additional carriers to co-locate on the AT&T mono-pine, install same size equipment cabinet and emergency generator with 54-gallon diesel tank within an acoustical cabinet.



Figure 3. Burning Bush Site Plan, Lease-Site

STAFF COMMENT: The project location is approximately equidistant between California State Highway 20 (Hwy 20), and North Bloomfield Road, a County-maintained minor collector road. From either starting point (Hwy 20 or North Bloomfield Road) the distance is approximately three (3) miles on County local streets. 19406 Burning Bush Road, the project address, is directly accessed off of Royal Plum Way which serves a total of 12 parcels.

Access to the project lease-site is on a private paved driveway off of Burning Bush Road (a paved road). The project lease-site is adjacent to the paved driveway and adjacent to an existing graveled area the property owners use for their horse trailer parking. The project is designed to take advantage of the gravel area for access and parking for the new telecommunication facility.

The Nevada County Fire Marshall reviewed the plans. Two site visits were conducted by the Fire Planner to provide the applicant and staff conditions of approval for the project. The conditions include the management of vegetation (fuel) within the right-of-way on both sides of Royal Plumb Way, Burning Bush Road to the project property, and the driveway accessing the lease-site. Also required is the creation of four (4) turnouts designed to take advantage of existing wide dirt shoulders to be located on Royal Plum Way and Burning Bush Road (two each). Royal Plum Way and Burning Bush Road are both contained with sixty-foot right-of-ways.

<u>Visual Analysis:</u> The proposed location for the cellular facility is near the top of the northeastern corner of the project parcel at an elevation of 3,363.5. The 30-foot by 30-foot project lease site has been located within an area that is clear of vegetation and surrounded by adjacent incense cedars, ponderosa pines and black oaks with a denser conifer woodland to the north and east. The existing conifer trees surrounding the project lease-site effectively screen the mono-pine from most directions viewable by the public. The top of the proposed 130-foot mono-pine would be at approximately 3,493 feet elevation, and tree-top elevation of the surrounding cedars and pines ranges from 3,428 to 3,463 (adjacent trees range from 65' to 100').

The potential public views are from Nevada County roads (Burning Bush Road Figure 4, and Barn Hollow Road Figure 5) and from across the South Fork Yuba River Canyon to the North (1.5 to 2.2 miles away). The public views from nearby roads are all from downslope looking up through the forest, which, effectively screens and allows the mono-pine cell tower to blend in. The mono-pine tower will be seen only in profile, if at all, from a public trail (Figure 6, South Yuba Trail; 1.5 miles away) and a public road (Figure 7, North Bloomfield-Graniteville Road; 2.1 miles away) across the canyon and will blend with the profile of other conifers along the ridge line. The view from the campground (South Yuba Campground; 2.2 miles away) is completely obscured by the vegetation in the foreground and there is no view of the ridgeline looking south across the canyon.

The 10.76- acre project parcel is currently developed with a single-family home, two-story horse barn, corral/paddock, and other utility/storage structures. The adjoining parcels range in size from 2.51 acres (two parcels to the east), 11.55 acres (the adjoining parcel to the south), 10.72 acres (the adjoining parcel to the west), and 172.64 acres (the adjoining parcel to the north). The

adjoining parcel to the east is developed with a residence and the parcels to the north and south are developed with a residence each.



Figure 4. Scenic Simulation as Viewed from Burning Bush Road



Figure 5. Scenic Simulation as Viewed from Barn Hollow Road

Figure 6. Scenic View from South Yuba Trail



Figure 7. Scenic View from North Bloomfield-Graniteville Road



<u>Lighting</u>: There are existing sources of light on the subject property associated with the residence and the barn. The project proposes two new light sources that will be manually operated only when maintenance personnel are working at the cell tower site. The project's proposed lighting will consist of fixtures that employ cut-off shades that distribute light downward and keep the light from spilling beyond the project lease-site.

<u>Noise</u>: Nevada County has noise standards established for various land uses, but are only applicable when a discretionary land use is proposed. The project incorporates a 15kW emergency back-up generator for use during extended power outages. It will be located within an acoustical cabinet. The generator would be used to recharge the batteries that run the facility (normally recharged by the electrical lines) and would not be anticipated to run constantly during an extended power outage due to the complimentary use of batteries. An Environmental Noise Assessment Report was prepared by Shore 2 Shore Wireless, Inc. on October 17, 2017, to evaluate potential noise impacts that would be caused by the 15 kW backup diesel generator. The backup generator is proposed only for emergency use when electrical service is down at the site.

A test cycle of the generator occurs once every week or two, between the hours of 8AM and noon, and may last up to 10-minutes. The Lmax (maximum noise level, time weighted, root mean square sound level) dBA level in the FR zoning district is 75dBA when the noise source occurs between the hours of 7AM and 7PM. The noise assessment states that based on equipment specification and distance (modeling), the backup generator at full capacity will produce 62.67 dBA at the nearest property line (30-feet to the north and 30-feet to the east) and 39.15 dB at the nearest neighbor residence, 450 feet away measured as a single noise event level (SNEL). The assessment also states that a significant reduction in noise beyond the modeled level can be expected due to the surrounding absorbent materials (shrub and tree vegetation layers, undulating topography and the acoustical cabinet the generator operates within). Therefore, the test cycle, with a maximum dBA rating of 62.67, is an absolute worse case noise level when evaluated against Nevada County's Lmax and Leq which both rely on time weighted means and averages. The periodic testing of the generator will occur within acceptable noise limits outlined in the Land Use Code. The Land Use and Development Code, Sec. L-II 4.1.7C.8., exempts construction activities and emergency services or functions from the provisions of the Noise Ordinance, therefore, the construction of the facility and the operation of the generator during electrical power outages is exempt.

The project proposes an Heating, Ventilation and Cooling (HVAC) system that will used to manage the climate-control within the equipment cabinet. In particular, the system is essential to the cooling of the 80-square inch walk-in cabinet to ensure that the equipment does not overheat and malfunction. The project air conditioner size and type would be specified during the building permit stage. Similar to the project generators the HVAC system would be required to meet County noise standards as a condition of approval.

To ensure noise standards are met now and in the future as changes may be made due to additional carrier development or equipment replacement, the condition of approval would also

require applicants to submit a letter from a Noise Specialist certifying that any proposed equipment, in conjunction with existing equipment, would fall within the County noise standards found within Nevada County LUDC Section L-II 4.1.7 under the Rural zoning district standards.

The project site would also allow for additional carriers to be added that may include their own emergency backup generators. An additional source of noise does not double the decibel level, however, a doubling of the noise (two generators) will increase the noise level by 3 dB. Because of the exponential nature of noise, it would take a doubling again (from two (2) generators) to get an additional 3 dB. If other carriers are added to the site, it is unlikely that maintenance on the generators would occur at the same time, but if they did operate at the same time, the multiple sound sources would not significantly increase the overall sound level. If the dBA was increased to 66.17 dB (62.67 dB + 3 dB = 2 generators and a third generator would only add approximately 0.5 dB) at the nearest property line without calculating deductions in noise levels from absorbent materials, the Lmax nor the Leq under the County noise standards could not be exceeded at the property line if more than one generator is tested at one time. As part of the project's Conditions of Approval, a condition has been included to ensure generators operate under the noise limits and are tested for maintenance during daytime hours. County noise standards do not apply to the provision of emergency services or functions.

<u>Tower Setbacks</u>: The proposed tower is within a Rural zoning district (FR-40) and is therefore subject to standard setbacks of 30 feet on the side and rear property lines. The proposed tower will be approximately 41-feet from the northern boundary line, 41-feet from the western boundary line, 700-feet from the southern property line, and 640-feet from the eastern property line. All adjacent properties are zoned FR-40 and are used for both agricultural and rural residential purposes. The proposed tower site is not located adjacent to a residential zoning district and therefore is not required to be setback 100 percent of its height from the property line; however, Building Department Condition B.3 requires the applicant to submit complete structural calculations for the tower and equipment shelter at the time of building permit submittal.

<u>Site Justification</u>: LUDC Section L-II 3.8.E.1.d restricts towers from being installed within two miles of another tower unless certain screening criteria are met. AT&T's coverage improvement goals are achieved when they are able to locate a cell tower within ¹/₄ to ¹/₂ mile from the optimal coverage location (see Figure 8. Service Improvement Objective) with consideration of topography and nearby obstructions. AT&T investigated possible co-location within one-mile increments from the optimal location. They found that the nearest co-location towers, as verified by active FCC and FAA filings, are located in Nevada City on City Hall at 305 Spring Street and the Chamber of Commerce at 200 Coyote St. Both sites are located 5-miles from the proposed location.

Figure 8. Service Improvement Objective



<u>Co-Location</u>: LUDC Section L-II 3.8.G.1 requires that owners of communication towers agree to allow future co-location by other carriers, and to provide an efficient process for handling co-location requests. The applicant reserved space within the project lease-site that can accommodate up to two potential future co-location carriers. The specific locations and sizes of future co-location footprints would be negotiated between the lease holder and the future carriers. The mono-pine itself would be engineered to accommodate a minimum of two additional carriers. All additional equipment installed by the co-locating carriers will need to provide documentation that their added equipment and operations will be consistent with Nevada County noise standards.

The ordinance further requires that when a tower is readily visible from a public road it must blend with the surrounding environment so as to be effectively unnoticeable. The proposed tower is not readily visible from Burning Bush Road, Barn Hollow Road or North BloomfieldGraniteville Road. Furthermore, the monopine design is anticipated to blend with the surrounding vegetative backdrop.

The proposed project site is intended to improve signal levels in order to enhance coverage and capacity throughout the region. The project site is not in conflict with proximity standards from existing tower sites and, as discussed above, meets visual screening and setback criteria while also meeting the needs of the applicant's coverage gap.

<u>Radio Frequency Signals</u>: The Telecommunications Act of 1996, as amended, 47 USC 332(c)(7)(B)(iv) specifically prohibits "local government [from] regulat[ing] 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 the Commission's regulations concerning such emissions." A Radio Frequency – Electromagnetic Energy (RF-EME) Compliance Report was prepared by EBI Consulting. The report evaluates RF-EME exposure levels in relation to the maximum exposure levels set by the Federal Communication Commission for both general public exposure and occupational exposures. This report shows compliance with these standards. All towers are reviewed for licensing by the FCC after local jurisdiction approvals are granted. The licensing review would include a review of the project for compliance after the County's approval process has completed. Because the proposed project complies with the FCC's RF standards, the County may therefore not deny the proposed project on the basis of its RF emissions.

ZONING AND GENERAL PLAN CONSISTENCY:

The project lease site is located in the north eastern corner of a 10.76-acre parcel in a Rural Zoning district. The General Plan land use designation is FOR-40, and is in zoning district FR-40 "Forest" with one residential unit per parcel and 40-acre parcel size limitation for new subdivisions. The FR district provides areas for the protection, production and management of timber, timber support uses, including but not limited to equipment storage, temporary offices, low intensity recreation uses and open space. Single-family dwellings are an allowed use in the FR district and new communication towers and facilities are permissible with a conditional use permit. With the approval of the proposed Conditional Use Permit, the use of the project site is consistent with the existing zoning district and General Plan land use designation. Additionally, the design of the proposed project has been reviewed for consistency with the applicable comprehensive site development standards contained in the LUDC.

For uses other than the primary allowed uses in any given zoning district, a Use Permit is required when it is necessary to condition or mitigate impacts in order to ensure design and operational compatibility with the surrounding land uses. The purpose of LUDC Section L-II 3.8 is to establish standards for the siting and design of communication facilities that promote the availability of adequate public services, while ensuring compatibility with adjacent land uses. The communication tower is a permitted use in the AE zoning district with approval of a Use Permit, subject to the provisions of LUDC Section L-II 3.8. Adequate mitigation and conditions of approval, such as design standards and noise attenuation, are in place to ensure that the facility would not detract from the character of the surrounding agricultural and rural-residential uses (Attachment 1). The project meets the County's site development standards applicable to communication towers within Forest zoning districts, including applicable setback and height

standards. The proposed use is consistent with General Plan Policy 1.7.18, which seeks to "encourage and support a sustainable and technologically current high-speed broadband transmission system that reliably connects Nevada County businesses and residences to national networks as a means to reduce transportation impacts, improve air quality, enhance citizens' quality of life and promote economic development."

ENVIRONMENTAL REVIEW:

The project proposes a 130-foot tall unstaffed communication tower, equipment shelter and emergency backup generator within a 30-foot by 30-foot project-lease site. The County Planning Department prepared a draft Initial Study/Mitigated Negative Declaration (MND) for this project that was circulated for public comment November 9, 2017 through November 28, 2017 (Attachment 2). No public comments have been received as of the writing of this staff report. Two (2) mitigation measures (Attachment 1) were identified for the proposed Use Permit, a measure to reduce potential air quality impacts and a measure to avoid tribal resources impacts (3A and 17A).

Staff has estimated that the project would result in approximately 1,700 square feet of earth disturbance, which would not trigger the need for dust control permits. The Building Department is requiring the submittal of complete site, grading, and erosion control plans for review at the time of building permit issuance, which would help ensure that potential erosion impacts are avoided.

The project will not result in any tree removal, and all work would occur outside the canopy zone of landmark oaks and oak groves. The placement of aggregate base for the improvements needed to create fire turnouts is not expected to have a significant impact, though the trees may require pruning to allow equipment access. This work does not trigger the need for a Management Plan which is only required when the project proposes to "remove or disturb defined trees or groves" (LUDC Sec. L-II 4.3.15).

Staff has determined that the project's potential environmental impacts are adequately mitigated, as discussed above, and subsequently finds that a Mitigated Negative Declaration is the appropriate Environmental Document for this project.

SUMMARY:

Shore2Shore Wireless, Inc. on behalf of AT&T has applied for a Conditional Use Permit for the installation of a new tele-communications tower and support facility at 19406 Burning Bush Road, east of Nevada City. The tower and facility have been sited and camouflaged to avoid significant aesthetic impacts. With implementation of conditions of approval and mitigation recommended by Mitigated Negative Declaration (EIS17-0022) and as provided in Attachment 1, concerns with air quality and tribal resources are not anticipated to be significantly impacted. Communication towers are a permitted use in the FR-4 zoning designation with an approved Use Permit, and this use is consistent with the Forest-40 General Plan designation intended to provide for the development of uses compatible in a forest/rural-residential setting. For these reasons Staff is recommending that the ZA, after taking public testimony, reviewing, and considering the proposed project adopts the Mitigated Negative Declaration and approves the conditional use permit subject to the Mitigation, Monitoring and Reporting Program and the Conditions of Approval.

<u>RECOMMENDATION</u>: Staff recommends the Zoning Administrator take the following actions:

- I. After reviewing and considering the proposed Mitigated Negative Declaration, adopt the proposed Mitigated Negative Declaration (EIS14-005) (*Attachment 2*) and Mitigation Monitoring and Reporting Program (*Attachment 3*) pursuant to Section 15074 and 15097 of the California Environmental Quality Act Guidelines making Findings A through C:
 - A. That there is no substantial evidence in the record supporting a fair argument that the proposed project, as described, mitigated and conditioned, might have any significant adverse impact on the environment;
 - B. That the proposed Mitigated Negative Declaration reflects the independent judgment of the Zoning Administrator; and that the mitigation measures attenuating air quality concerns and avoiding Tribal Resources, will reduce potentially significant impacts to less than significant levels; and
 - C. That the location and custodian of the documents which constitute the record of these proceedings is the Nevada County Planning Department, 950 Maidu Avenue, Nevada City, California.
- II. Approve the proposed Use Permit (CUP17-0015) subject to the attached Conditions of Approval shown in Attachment 1, making findings A-L pursuant to Sections L-II 5.6.G and L-II 5.5.2.C of the Nevada County Land Use and Development Code:
 - A. That this project as conditioned and mitigated is consistent with the General Plan goals, objectives and policies, and with the Rural General Plan land use map designation applicable to this project because the project supports an interconnected telecommunication network in the County pursuant to General Plan Policy 1.7.18 and is an allowable use with an approved Use Permit;
 - B. The proposed use is allowed within and is consistent with the purposes of the "FR-40" zoning district within which the project is located, which allows communication towers with an approved use permit;
 - C. The proposed use and any facilities, as conditioned, will meet all applicable provisions of the Land Use and Development Code or a same practical effect of those provisions, because the project meets the setbacks and other standards of the Site Development Standards, mitigating the impact of the project on environmentally sensitive resources;
 - D. The site for the proposed use is adequate in size, shape and location to accommodate the proposed use and all facilities needed for that use and reasonable expansion thereof, if any, and to make appropriate transitions to

nearby properties and permitted uses thereon, without compromising site development standards, because the project is 356 feet from the western boundary line, 445 feet from the southern boundary line, 30 feet from the northern property line, and 30 feet from the eastern property line;

- E. The design of proposed facilities is consistent with the intent of the design goals, standards, and elements of the Land Use and Development Code and will be compatible with the design of existing and anticipated future onsite uses and the uses of the nearby surrounding area;
- F. The proposed use and facilities are compatible with, and not detrimental to, existing and anticipated future uses on-site, on abutting property and in the nearby surrounding neighborhood or area, because the proposed use is effectively screened from nearby properties and is in compliance with or exceeds all required setbacks;
- G. There would be no impacts on water or sanitation supply and service because the project does not need or incorporate these uses;
- H. Roads providing access to the site are adequate in width and pavement type to carry the quantity and kind of traffic generated by the proposed use, which has been determined by the Public Works Department to be an insignificant amount not requiring the payment of traffic mitigation fees;
- I. Adequate provisions exist for emergency access to the site with the recommended conditions of approval from the Nevada County Fire Marshal, including turnouts along the private driveway, turnaround areas, and the use of fire extinguishers on the site;
- J. Adequate public facilities and public services exist within the project area which will be available to serve the project without decreasing service levels to other areas to ensure that the proposed use is not detrimental to the public welfare, including public roads, public utilities, and fire service, because the project will not contribute a significant amount to traffic on public roads during the operational phase of the project; because the project is constructing connections to public utilities on the site without impacting existing onsite or offsite development; and because the project will be required to comply with all applicable Fire Codes per the recommended conditions of approval;
- K. All feasible mitigation measures have been imposed on the proposed project as provided in Attachment 1, or as may be modified at the public hearing; and

L. The conditions provided in Attachment 1 are deemed necessary to protect the public health, safety, and general welfare.

Respectfully submitted,

Tyler Barrington, Principal Planner

ATTACHMENT 1

AT&T BURNING BUSH ROAD TELE-COMMUNICATION TOWER USE PERMIT

CONDITIONS OF APPROVAL & MITIGATION, MONONITORING AND REPORTING PLAN (MMRP) CUP17-0015, EIS17-0022

A. <u>PLANNING DEPARTMENT</u>

1. This Use Permit (U17-0015) authorizes the applicant to construct a 130-foot mono-pine communication tower along with nine (9) panel antennas and 18 remote radio head/units installed on the mono-pine, an 80" by 80" walk-in utility cabinet, 15kW emergency backup generator with 54-gallon diesel tank located within an acoustical cabinet, two manually operated outdoor light fixtures with cut-off shields and a six (6) foot high redwood fence to enclose the lease-site. Access to the project site for construction and equipment maintenance is provided from an existing private paved driveway that comes off of Burning Bush Road. Construction/Installation equipment and AT&T maintenance vehicles will use an existing graveled parking area adjacent to the project lease-site for parking. The project lease-site is 900-square feet and located within the northeastern corner of a 10.76-acre parcel, APN 34-090-03.

To support safe ingress and egress to the project site four (4) gravel turnouts will be installed. Two along Royal Plum Way and two along Burning Bush Road. Vegetation management to reduce fire fuels within five (5) feet on both sides of the right-of-way paved surface will also be conducted and maintained.

The PG&E will convey electrical power through a new underground conduit and line. The conduit will be installed via underground directional boring. All borings and surfacing areas will be placed away from existing oak trees in coordination with PG&E power run requirements. Electrical power will be brought to the lease-site from an existing line at a joint pole location located approximately 1,500 feet south west of the lease-site.

The generator approved for this project is a Diesel 15 kW 48 VDC. A test cycle of the generator occurs once every week or two, between the hours of 8AM and noon, and may last up to 10-minutes. The Lmax (maximum noise level, time weighted, root mean square sound level) dBA level in the FR zoning district is 75dBA when the noise source occurs between the hours of 7AM and 7PM. The noise assessment states that based on equipment specification and distance (modeling), the backup generator at full capacity will produce 62.67 dBA at the nearest property line (30-feet to the north and 30-feet to the east) and 39.15 dB at the nearest neighbor residence, 450 feet away measured as a single noise event level (SNEL). A significant reduction in noise beyond the modeled level can be expected due to the surrounding absorbent materials (shrub and tree vegetation layers, undulating topography and the acoustical cabinet the generator operates within). Therefore, the test cycle, with a maximum dBA rating of 62.67, is an absolute worse-case noise level when evaluated against Nevada County's Lmax and Leq which both rely on time weighted means

and averages. The periodic testing of the generator will occur within acceptable noise limits outlined in the Land Use Code. The Land Use and Development Code, Sec. L-II 4.1.7C.8., exempts construction activities and emergency services or functions from the provisions of the Noise Ordinance, therefore, the construction of the facility and the operation of the generator during electrical power outages is exempt.

The project is in compliance with Nevada County Land Use and Development Code colocation requirements, Sec. L-II 3.8.G; "Owners of all approved towers shall be required to agree to allow future co-location by other carriers, and to provide an efficient process for handling co-location requests." The proposed project design has reserved space within the 900-square foot project lease-site to allow up to two (2) additional carriers to co-locate and install similar size equipment and emergency generator within an acoustical cabinet.

- 2. Pursuant to the requirements of the Land Use and Development Code, the applicant is hereby notified that this project is not valid until the expiration of the ten (10) day appeal period from the date of the Zoning Administrator's final action on the project, December 11, 2017.
- 3. Construction pursuant to this permit approval must be completed and the use commenced thereon within three (3) years from the effective date of the approval of the Use Permit (December 11, 2020) (i.e. Final Project Action), unless an extension of time for reasonable cause is requested prior to the expiration date, and granted by the Zoning Administrator pursuant to Section 5.10 of the Nevada County Land Use and Development Code. If no extension is granted, the permit shall become null and void, as to the portion of the approved use not completed.
- 4. Within 15 days after project approval the applicant shall sign and file with the Nevada County Planning Department the attached Defense and Indemnity Agreement. No further permits or approvals shall be issued for the project, unless and until the applicant has fully complied with this condition.
- 5. Prior to permit finalization, the applicant shall contact the Planning Department for a field inspection to verify all Conditions of Approval and ordinance requirements have been satisfied. Fees for such inspection shall be applicable on the project building permit.
- 6. Prior to issuance of building permits, improvement plans shall include a note that the communication tower and supporting equipment shall be finished and maintained in nonglare colors and finished consistent with the material samples provided and kept on file with the Planning Department that minimize their visibility to the greatest extent possible, including bark treatment, antenna socks and branches, and sand/pebble treatment of the equipment shelter. Equipment attached to the tower shall match the color of the tower. Equipment attached to the tower shall match the color of the tower.
- 7. To ensure noise standards are met now and in the future, as changes may be made due to additional carrier development or equipment replacement, this condition of approval also requires applicants to submit specification sheets and a letter from a Noise Specialist

certifying that any proposed equipment, in conjunction with existing equipment, would fall within the County noise standards found within Nevada County LUDC Section L-II 4.1.7 under the Rural zoning district standards at the building permit review stage. Specifically, 7 a.m. to 7 p.m. – 55 dB Leq and maximum 75 dB Lmax 7 p.m. to 10 p.m. – 50 dB Leq and 65 dB Lmax 10 p.m. to 7 a.m. – 40 dB Leq and 55 dB Lmax

Equipment testing of generators will only occur during weekdays and between the hours of 8:00 a.m. and noon.

- 8. This approval is for two fully shielded, downward facing light fixtures as shown in preliminary plans and in compliance with Nevada County Land Use & Development Code Section L-II 4.2.8. All outdoor light fixtures shall be located within the lease area. Fixtures shall be fully shielded and directed downward to prevent light trespass and to prevent the light source or lens from being visible from adjacent residential uses and roadways. Improvement plans shall depict the location, height and positioning of all light fixtures and shall provide a description of the type and style of lighting proposed. Fixtures shall have high efficiency lamps. High pressure sodium, and mercury vapor light fixtures are prohibited. Lighting shall be on manual controls with no motion sensors so as to be fully controlled by the maintenance technician.
- 9. A permanent, weatherproof, facility identification sign, no more than 12 inches by 24 inches in size, identifying the facility operator and a 24-hour phone number, shall be placed on the fence or tower base. If larger signage is required by the FCC, the applicant shall provide proof of the requirement, and signage shall not exceed the required size. Signage shall be limited to required address and facility identification signs and emergency and safety hazard signage as contained herein.
- 10. The mono-pine communication tower shall be engineered to accommodate a minimum of two (2) additional carriers in addition to AT&T. The communication tower shall be designed to accommodate the co-location of all proposed devices associated with the antennas, transmitters, cables, array structures, and radios on this tower. The tower owner shall allow future co-location by other carriers and shall provide an efficient process for handling co-location requests if an agreement is reached by the carriers and technologically feasible, avoiding signal interference issues between the carriers.
- 11. Pursuant to Land Use and Development Code Sec. L-II 3.8.G, prior to issuance of improvement and building permits, the applicant shall provide a Facility Maintenance/Removal Agreement to the Planning Director, binding the developer and successors in interest, to an agreement to maintain the facility as approved and notify the County of intent to vacate the site, agreeing that the applicant will remove all facilities within 12 months unless the site is occupied by a successor; or the applicant shall provide a cash bond equal in cost to removing the tower and associated facilities.
- 12. Pursuant to Land Use and Development Code Sec. L-II 3.8.F.5, the applicant shall include a note on all improvement plans as follows: "Existing trees and other screening vegetation

in the vicinity of the facility and along the access or utility easements, shall be protected from damage during construction. All areas disturbed during project construction shall be replanted with vegetation compatible with vegetation in the surrounding area unless the County Fire Marshal requires fuel modification. Native trees are the preferred vegetation."

- 13. The facility shall comply with all Federal Communications Commission regulations concerning radio frequency emissions.
- 14. Include a roadway condition inventory of Burning Bush Road photo-documenting the pavement conditions prior to construction of the tower facility as part of the building permit submittal for Planning Department review. At the request for permit final, a follow-up photo-documentation of pavement conditions from the same pre-project locations is required to be submitted showing that any impacts to Burning Bush Road that may have occurred as a result of the construction of the communication tower facility, were returned to pre-construction conditions by the applicant.
- 15. In compliance with both State and local air quality requirements, the applicant shall use reasonable precautions to minimize dust generation. Such methods shall be noted on the improvement plans prior to approval.
- 16. All equipment must be in compliance with Nevada County LUDC Section L-II 4.1.7, Rural zoning district noise standards. Include HVAC and generator specification sheets as part of the building permit submittal for Planning Department review, showing equipment compliance with these standards.
- 17. All equipment operators and employees involved in any form of ground disturbance at any phase of project improvements shall be advised of the remote possibility of encountering subsurface cultural resources. If such resources are encountered or suspected, work shall be halted immediately and the Nevada County Planning Department shall be contacted. A professional archaeologist shall be retained by the developer and consulted to access any discoveries and develop appropriate management recommendations for archaeological resource treatment. If bones are encountered and appear to be human, California Law requires that the Nevada County Coroner and the Native American Heritage Commission be contacted and, if Native American resources are involved, Native American organizations and individuals recognized by the County shall be notified and consulted about any plans for treatment. A note to this effect shall be included on the Supplemental Data Sheet prior to recordation of each phase of the project.
- 18. **Native American Monitoring (Mitigation Measure 17A).** Prior to project construction, the contractor must contact the United Auburn Indian Community of the Auburn Rancheria for project monitoring. Paid Native American monitors from culturally affiliated Native American Tribes must be invited to monitor the vegetation grubbing, stripping, grading or other ground-disturbing activities in the project area to determine the presence or absence of any cultural resources. Native American representatives from cultural affiliated Native American Tribes act as a representative of their Tribal government and shall be consulted

before any cultural studies or ground-disturbing activities begin. Native American representatives and Native American monitors have the authority to identify sites or objects of significance to Native Americans and to request that work be stopped, diverted or slowed if such sites or objects are identified within the direct impact area. Only a Native American representative can recommend appropriate treatment of such sites or objects.

Timing: Prior to issuance of permits for construction *Reporting:* Approval of construction permits *Responsible Agency:* Planning Department

B. <u>BUILDING DEPARTMENT</u>

- 1. The applicant shall provide complete site, grading and erosion control plans for review at time of building/grading permit submittal in conformance with Nevada County Land-Use Code Chapter V, Article 19.
- 2. The applicant shall provide two sets of wet stamped/signed complete geotechnical evaluation reports at the time of building/grading permit submittal.
- 3. The applicant shall provide two sets of wet stamped/signed complete structural calculations for the tower and equipment shelter at the time of building permit submittal.
- 4. The applicant shall provide complete electrical plans shall be included as part of the building permit submittal.
- 5. Complete and submit the special inspection and testing agreement for all project special inspections including grading, foundation excavation, concrete, steel reinforcement, welding and high-strength bolting.
- 6. An available fault current letter from the electrical service provider shall be submitted at time of building permit application submittal.
- 7. The applicant shall provide verification that building permits have been obtained and finalized all structures onsite including storage containers.

C. <u>ENVIRONMENTAL HEALTH</u>

1. This project results in a facility with hazardous material quantities (diesel fuel) above the thresholds stated in. Prior to final building permit, and in compliance with California Health and Safety Code, Sections 25500-25519, the applicant must apply for an obtain a permit for the storage of hazardous materials from the Nevada County Department of Environmental Health, Certified Unified Program Agency. The operator shall secure and annually review the permit for this facility within 30 days of becoming subject to applicable regulations. The applicant must adhere to all applicable codes and regulations regarding the storage of hazardous materials and the generation of hazardous waste set forth in California Health and Safety Code Section 25500-25519 and 25100-25258.2

including the electronic reporting requiring to the California Environmental Reporting System.

2. Minor plan check by the Environmental Health Department will be required prior to building permit issuance. The applicant shall provide applicable fees and a minimum of one set of plans/drawings (reduced to 11x17) for the above ground storage tank specifications.

D. <u>NEVADA COUNTY FIRE MARSHAL</u>

- 1. Turnouts shall be improved along Royal Plum Way and Burning Bush Road at specified locations and shall be designed in compliance with Title 14, Section 1273.06. Contact the Fire Marshal's Office to specific locations.
- 2. Access from Burning Bush Road leading to the Project Lease-Site shall meet all Driveway standards including the following elements of Title 14, Section 1273.01, 1273.02, 1273.05, 1273.10, & the Fire Safety Regulations of Nevada County.
- 3. Driveway
- a. The new section of driveway leading to the Project Lease-Site shall support the imposed load of at least 75,000lbs
- Surface width shall be ten (10) feet minimum with one (1) foot shoulders for driveway grades up to sixteen percent (16%).
- A Turnaround shall be provided within 50' of the Proposed Lease Parcel.

Vegetation Management along Royal Plum Way, Burning Bush Road, and the driveway accessing the Project Lease-Site shall be maintained within a "Fuel Modification Area". Trees may be limbed and remain within this zone as long as they do not impede into the traffic lane. All brush and understory shall be removed. Nevada County Public Works, Standard Drawings C-1.

5. Provide a 2-A:10-B:C portable Fire Extinguisher in an "All Weather" shelter. The extinguisher shall be mounted in an approved location within fenced area of the leased parcel. CFC-Section 906.

E. NORTHERN SIERRA AIR QUALITY MANAGEMENT DISTRICT

1. Authority to Construct Permit (Mitigation Measure 3A). Building, altering, replacing, or operating any source of air contaminants, whether portable or stationary (but not mobile), may require an Authority to Construct permit from the Air Pollution Control Officer, unless the Northern Sierra Air Quality Management District (NSAQMD) determines that such equipment is exempt from permitting or unless such equipment is currently registered with CARB under the Portable Equipment Registration Program. The applicant shall contact Joe Fish of NSAQMD at (530) 274-9360 x103 (or email at joe@myairdistrict.com) in order to determine whether or not the generator's engine requires permitting from the NSAQMD. The results of that contact shall be documented

and provided to the Planning Department prior to issuance of any improvement permits, and an Authority to Construct permit obtained if applicable. *Timing:* Prior to building permit issuance *Reporting:* Agency approval of permits or plans *Responsible Agency:* Planning Department and Northern Sierra Air Quality Management District

F. <u>CALIFORNIA DEPARTMENT OF FISH & WILDLIFE</u>

1. Pursuant to Section 21089 of the California Public Resource Code and Section 711.4 et. seq. of the California Fish & Wildlife Code, a fee in the amount of \$2,216.25 must be paid as a condition of filing the Notice of Determination for this project. This fee must be submitted to the Planning Department within 5 days of the permit approval with the check made payable to the County Clerk, County of Nevada. Without payment of this fee, the 30-day Statute of Limitations on court challenges to this project's approved environmental document will remain open, which could affect the permit validity. This fee is required to be collected on behalf of the State Department of Fish & Wildlife.

NEVADA COUNTY, CALIFORNIA INITIAL STUDY

TO:	Nevada County H	Building Dept	Nevada County Council*				
	Nevada County I	OPW	Native American Heritage Commission				
	Environmental H	lealth Dept	AT&T				
Nevada County C N Sierra Air Qual		Consolidated F. D.	PG&E				
		llity Mgt Dist	United Auburn Indian Community				
	Nevada County I	Fire Protection Planner	Commissioner Ricki Heck, 1 st District				
CA Fish & Wild		life	Supervisor Heidi Hall, 1 st District				
	Central Valley W	Vater Quality Board	Tyler Barrington, Principal Planner				
	*receives full rep	port, others receive NOA or	ly with report available online.				
Date:		November 09, 2017					
Prepared by:		Coleen Shade, Senior Pla	nner				
		Nevada County Planning Department					
		950 Maidu Avenue, Suite	e 170				
		Nevada City, CA 95959					
		(530) 470-2526					
		Email: coleen.shade@co	.nevada.ca.us				
File Number(s):		PLN17-0073, CUP17-0015, EIS17-0022					
Assessor	's Parcel Number:	34-090-03					
Applicar	nt:	AT&T Wireless					
		ATTN: Sara King					
		P.O. Box 6043 Avenue					
		Folsom, CA 95763					
		Telephone: (916) 296-20	11				
Property Owner:		Pamela Swartz					
		P.O. Box 344					
		Nevada City, CA 95959					
Zoning I	District(s):	Forest-40 (FR-40)					
General	Plan:	Forest-40 (FOR-40)					
Project I	Location:	The project is located on a portion of Lot 5 of Section 27, Township 17 North, Range 9 East. The address for the project parcel is 19406 Burning Bush Road which is approximately a ¹ / ₂ mile northwest of Cooper Road in an unincorporated area outside of Nevada City.					

Project Site and Surrounding Land Uses: The proposed project is within a 30-foot by 30-foot leased area on a 10.76-acre private parcel owned by Pamela Swartz, located in an unincorporated area of Nevada County at 19406 Burning Bush Road. The parcel, APN 34-090-03, is located approximately one-half mile northwest of Cooper Road. The project site is located within zoning district Forest (FR-40).

The nearest residence is located within the same parcel, approximately 200-feet from the project lease area. The subject property is developed with a residence, a two-story horse barn and other accessory buildings. The nearest neighboring residence to this location is 450 feet to the southeast.



Figure 1. Burning Bush Vicinity Map



Figure 2. Burning Bush Site Plan, Lease-Site

Figure 3. Burning Bush Vicinity Aerial



Figure 4. Burning Bush Location



Project Description: The proposed project, the installation of a new unmanned telecommunication facility, consists of a 130-foot tall mono-pine communication tower with nine (9) panel antennas and 18 remote radio head/units installed on it, an 80" by 80" walk-in utility cabinet, 15kW emergency backup generator with 54 gallon diesel tank located within an acoustical cabinet, two manually operated outdoor light fixtures with cut-off shields and a six (6) foot high redwood fence to enclose lease-site. Electrical power will be brought to the lease-site from an existing line at a joint pole location located approximately 1,500 feet south west of the lease-site. Access to the project site for construction and equipment maintenance is provided from an existing private paved driveway that comes off of Burning Bush Road. Construction/Installation equipment and AT&T maintenance vehicles will use an existing graveled parking area at the project site for parking.

To support safe ingress and egress to the project site four (4) gravel pull outs will be installed. Two along Royal Plum Way and Two along Burning Bush Road. Vegetation management to reduce fire fuels within five (5) feet on both sides of the right-of-way paved surface will also be conducted and maintained.

The PG&E will convey electrical power through a new underground conduit and line. The conduit will be installed via underground directional boring. All borings and surfacing areas will be placed away from existing oak trees in coordination with PG&E power run requirements.

The tower project site was located on the selected parcel for its optimal cell coverage, ability to obtain a land lease from the property owner, the accessibility of the site, the appropriate amount of screening (in order to address aesthetic concerns and maintain optimum cell coverage) and the ease of installation based on topography. The site selected for the proposed coverage meets the above criteria including existing tree screening and a gentle slope across the 30-foot by 30-foot lease site. The installation of the

mono-pine tower (tower disguised/camouflaged to look like a pine tree) and the apparatus to support its function will need no tree or shrub removal or site grading and any cut and fill will be balanced within the 30 square foot lease area. Temporary construction best management practices for dust and soil erosion control will be employed as the conditions of approval requires.



Figure 5. Lease-Site at 19406 Burning Bush Road, Nevada City

The emergency backup generator will run at full capacity during power loss and during scheduled startup testing which, according to the application, will be limited to weekday mornings between 8:00 a.m. and 10:00 a.m. and last for ten (10) minutes at a time. The generator being proposed for this project, Polar Power 8220-100-D-15 Diesel 15 kW 48 VDC, maintains an average 65 dB noise level at full load. Based on acoustic modeling performed for this generator and for this site, the projected noise produced by the generator is 62.67 dBA at the nearest property line, thirty feet to the east. At the nearest residence (450 feet south east) the generator noise production is projected to be 39.15 dBA (Hatch, 2017).

The project is in compliance with Nevada County Land Use and Development Code co-location requirements, Sec. L-II 3.8.G; "Owners of all approved towers shall be required to agree to allow future co-location by other carriers, and to provide an efficient process for handling co-location requests." The proposed project design has reserved space within their 900 square foot project lease-site to allow up to two (2) additional carriers to co-locate on the AT&T mono-pine, install same size equipment cabinet and emergency generator with 54-gallon diesel tank within an acoustical cabinet.

Other Permits Which May Be Necessary: Based on initial comments received, the following permits <u>may be</u> required from the designated agencies:

1. Building and grading permits – Nevada Co Building Dept (530) 265-1222

Relationship to Other Projects: There are four new tower applications from AT&T being processed at this time. The other new tower applications are for locations on: 20596 Golden Bear Drive in South Nevada County, approximately 4.3 miles to the northeast of this location (lying west of Perimeter Road); at 13083 Wild Life Lane approximately 13.6 miles to the northeast of this project (east of State Highway 174); and at 11797 Globe Lane approximately 19.8 miles south westerly of this project site (south of State Highway 20).

SUMMARY OF IMPACTS and PROPOSED MITIGATION MEASURES

Environmental Factors Potentially Affected: All of the following environmental factors have been considered. Those environmental factors checked below would be potentially affected by this project, involving at least one impact that is "Less Than Significant with Mitigation" as indicated by the checklist on the following pages.

 1. Aesthetics		2. Agriculture / Forestry Resources	<u> </u>	3. Air Quality
 4. Biological Resources		5. Cultural Resources		6. Geology / Soils
 7. Greenhouse Gas Emissions		8. Hazards / Hazardous Materials		9. Hydrology / Water Quality
 10. Land Use / Planning		11. Mineral Resources		12. Noise
 13. Population / Housing		14. Public Services		15. Recreation
 16. Transportation / Circulation	<u>~</u>	17. Tribal Cultural Resources		18. Utilities / Service Systems
19. Mandatory Findings of Significance				

Impacts and Recommended Mitigation Measures: The following measures shall be implemented and included as a notes on construction plans as outlined in each.

3. <u>AIR QUALITY</u>: To offset potentially adverse air quality impacts associated with the installation and operation activities, for following mitigation measure shall be required:

Mitigation Measure 3A: Authority to Construct Permit: Building, altering, replacing, or operating any source of air contaminants, whether portable or stationary (but not mobile), may require an Authority to Construct permit from the Air Pollution Control Officer, unless the Northern Sierra Air Quality Management District (NSAQMD) determines that such equipment is exempt from permitting or unless such equipment is currently registered with CARB under the Portable Equipment Registration Program. The applicant shall contact Joe Fish of NSAQMD at (530) 274-9360 x103 (or email at joe@myairdistrict.com) in order to determine whether or not the generator's engine requires permitting from the NSAQMD. The results of that contact shall

be documented and provided to the Planning Department prior to issuance of any improvement permits, and an Authority to Construct permit obtained if applicable.

Timing: Prior to building/grading permit issuance

Reporting: Agency approval of permits or plans

Responsible Agency: Planning Department and Northern Sierra Air Quality Management District

17. <u>**TRIBAL CULTURAL RESOURCES**</u>: To offset potentially adverse cultural or historical resources impacts associated with the construction activities, the following mitigation measure shall be required:

Mitigation Measure 17A: Native American Monitoring. Prior to project construction, the contractor must contact the United Auburn Indian Community of the Auburn Rancheria for project monitoring. Paid Native American monitors from culturally affiliated Native American Tribes must be invited to monitor the vegetation grubbing, stripping, grading or other ground-disturbing activities in the project area to determine the presence or absence of any cultural resources. Native American representatives from cultural affiliated Native American Tribes act as a representative of their Tribal government and shall be consulted before any cultural studies or ground-disturbing activities begin. Native American representatives and Native American monitors have the authority to identify sites or objects of significance to Native Americans and to request that work be stopped, diverted or slowed if such sites or objects are identified within the direct impact area. Only a Native American representative can recommend appropriate treatment of such sites or objects.

Timing: *Prior to issuance of permits for construction* **Reporting:** *Approval of construction permits* **Responsible Agency:** *Planning Department*

MEASURE	MONITORING AUTHORITY	WHEN IMPLEMENTED
17A	Planning Department	Prior to building/grading permit issuance
3A	Planning Department	Prior to building/grading permit issuance and Northern Sierra Air Quality
		Management District

Mitigation Monitoring Matrix:

INITIAL STUDY AND CHECKLIST

Introduction:

This checklist is to be completed for all projects that are not exempt from environmental review under the California Environmental Quality Act (CEQA). The information, analysis and conclusions contained in the checklist are the basis for deciding whether an Environmental Impact Report (EIR) or Negative Declaration is to be prepared. If an EIR is determined to be necessary based on the conclusions of the Initial Study, the checklist is used to focus the EIR on the effects determined to be potentially significant. This Initial Study uses the following terms to describe the level of significance of adverse impacts. These terms are defined as follows.

- No Impact: An impact that would result in no adverse changes to the environment.
- Less than Significant Impact: An impact that is potentially adverse but does not exceed the thresholds of significance as identified in the impact discussions. Less than significant impacts do not require mitigation.

- Less than Significant with Mitigation: An environmental effect that may cause a substantial adverse change in the environment without mitigation, but which is reduced to a level that is less than significant with mitigation identified in the Initial Study.
- **Potentially Significant Impact:** An environmental effect that may cause a substantial adverse change in the environment; either additional information is needed regarding the extent of the impact to make the significance determination, or the impact would or could cause a substantial adverse change in the environment. A finding of a potentially significant impact would result in the determination to prepare an EIR.

1. <u>AESTHETICS</u>

Existing Setting: The existing visual character of the site is that of a lower elevation mixed confer forest. Adjacent to the cell tower site is a residential paved driveway, a two-story horse barn with fenced corral/paddock. The proposed cell tower and equipment is designed to be located in the northeast corner of the property in a location where there are currently no shrubs or trees. The 30-foot by 30-foot lease site is surrounded on three sides (east, north and west) by large pine and cedar trees that provide screening of the cell tower and equipment.

Would the proposed project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact	Reference Source (Appendix A)
a. Result in demonstrable, negative, aesthetic effects on scenic vistas or views open to the public?			\checkmark		
b. Substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway?				~	
c. Substantially degrade the existing visual character or quality of the site and its surroundings?				\checkmark	
d. Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?				~	
e. Create a visually incompatible structure within a designated historic district?				\checkmark	

Impact Discussion:

- 1a. Based on the submitted visual simulations, the mono-pine cell tower will not be visible from Barn Hollow Road (Figure 5 Photo Simulation from Barn Hollow Road looking West) and Cooper Road due to existing vegetation screening the tower. The top of the tower will be visible from Burning Brush Road (Figure 4 Photo Simulation from Burning Bush Road and Access Driveway) at the entrance to the project property, however, the mono-pine tower will blend with the natural vegetation. The applicant also provided views of the project site from across the canyon to the north/northeast at three locations; a public trail (1.5 miles away), a public campground (2.2 miles away) and a public dirt road (2.1 miles away). The mono-pine tower will be seen only in profile from a distance and will blend with the profile of other conifers along the ridge line. The view from the campground is completely obscured by the vegetation in the foreground and there is no view of the ridgeline across the canyon. The project, as described, will have a *less than significant impact* aesthetic effect on scenic vistas or views open to the public.
- *1b-e.* The project proposes two new light sources that will be manually operated only when maintenance personnel are working at the cell tower site. The project's proposed lighting will consist of fixtures that employ cut-off shades that distribute light downward and keep the light

from spilling beyond the project site. There are existing sources of light on the subject property associated with the residence and the barn.

The project, as proposed, will create no impact based on the visual simulations and photo points provided by the applicant. The project site is not located within a scenic highway and is not located within an historic district.

The existing conifer trees surrounding the project site effectively screen or blend with the monopine from all directions viewable by the public. The applicant is proposing a solid 6-foot tall redwood perimeter fence to surround the lease area, to be constructed in a style that is consistent with standard residential-type fencing and will not be seen from any public view-sheds. The mono-pine itself blends with the surrounding vegetation and is designed to be visually unobtrusive. The new light fixtures are designed with cut-offs to down cast the light and avoid any spillage of light beyond the property boundaries.

Given the surrounding vegetation and the proposed mono-pine and lighting design the new cellular facility will not have a visual impact on scenic vistas or views open to the public. The project will not create a new source of substantial light or glare that would adversely affect day or nighttime views. The project as described will have *no impact* on aesthetic resources.

Mitigation Measures: None required.

Figure 6. Photo Simulation From Burning Bush and Driveway Access


Figure 7. Photo Simulation From Barn Hollow Road Looking West



2. <u>AGRICULTURAL/FORESTRY RESOURCES</u>

Existing Setting: The project site is mapped as "Other" as the farmland designation by the California Department of Conservation (2016). The site nor any neighboring sites have been determined to contain any Important Farmlands. There are no known agricultural resources in the vicinity of the project. The project site does not contain any land within a Williamson Act contract, nor is the parcel within a Timberland Production Zone.

Would the proposed project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact	Reference Source (Appendix A)
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Department of Conservation's Division of Land Resource Protection, to non-agricultural use?				~	А
b. Conflict with existing zoning for agricultural use or conflict with a Williamson Act contract?				✓	А
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resource Code section 12220(g)), timberland zoned Timberland Production Zone (per Section L-II 2.3.C of the Nevada County Land Use and Development Code)?				✓	А
d. Result in the loss of forest land or conversion of forest land to non-forest use?				~	А
e. Involve other changes in the existing environment, which due to their location or nature, could result in conversion of Farmland to non- agricultural use or conversion of forest land to non- forest use?				~	22

Impact Discussion:

2a-e. The project site does not contain any Important Farmlands as identified by the Farmland Mapping and Monitoring Program, and does not have a recent history of agricultural use. The current property owner does keep horses on the parcel for their own personal use. Neither a Williamson Act contract nor TPZ zoning exists on the site, and the site is not surrounded by any active agricultural or timber land uses. The proposed project will have *no impact*.

Mitigation Measures: None required.

3. <u>AIR QUALITY</u>

Existing Setting: Nevada County is located in the Northern Sierra Air Quality Management District (NSAQMD). The overall air quality in Nevada County has improved over the past decade, largely due to vehicles becoming cleaner. State and Federal air quality standards have been established for specific "criteria" air pollutants including ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, lead, and particulate matter. In addition, there are State standards for visibility reducing particles, sulfates, hydrogen sulfide, and vinyl chloride. State standards are called California Ambient Air Quality Standards

(CAAQS) and federal standards are called National Ambient Air Quality Standards (NAAQS). NAAQS are composed of health-based primary standards and welfare-based secondary standards.

Based on these standards, Nevada County's 1995 General Plan, Chapter 14 Air Quality Element, identifies ozone and suspended particulate matter (PM-10) as known problems for the County's air quality. Ozone is created by the interaction of Nitrogen Oxides and Reactive Organic Gases (also known as Volatile Organic Compounds) in the presence of sunlight, especially when the temperature is high. Ozone is mainly a summertime problem, with the highest concentrations generally observed in July and August, especially in the late afternoon and evening hours. Particulate matter is identified by the maximum particle size in microns as either PM-2.5 or PM-10. PM-2.5 is mostly smoke and aerosol particles resulting from woodstoves and fireplaces, vehicle engines, wildfires and open burning. PM-10 is a mixture of dust, combustion particles (smoke) and aerosols from sources such as surface disturbances, road sand, vehicle tires, and leaf blowers.

Although western Nevada County is designated as Marginal Nonattainment for ozone pollution mainly due to ozone transported to the area by wind from the Sacramento area, eastern Nevada County has not exceeded NAAQS for ozone. However, eastern Nevada County has been historically close to exceeding standards for PM. Major contributors include residential wood burning, burns for forest management, dust from construction and excavation, vehicle traffic, and windblown dust.

Ultramafic rock and its altered form, serpentine rock (or serpentinite), both typically contain asbestos, a cancer-causing agent. Ultramafic rock and serpentine exist in several locations in Nevada County, mainly in the western half, but it is unlikely that these materials exist in the project area (Northern Sierra Air Quality Management District). The USGS National Geologic Map does not identify this site as having ultramafic rock.

An evaluation of project impacts related to greenhouse gas emissions is provided in Section 7 of this Initial Study.

Would the proposed project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact	Reference Source (Appendix A)
a. Result in substantial air pollutant emissions or deterioration of ambient air quality?		~			F
b. Violate any air quality standard or contribute to an existing or projected air quality violation?			~		F
c. Expose sensitive receptors to substantial pollutant concentrations?			~		F
d. Create objectionable smoke, ash, or odors?			~		F
e. Generate dust?			~		F
f. Exceed any potentially significant thresholds adopted in County Plans and Goals?				~	F
g. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?				~	F

Impact Discussion:

3a. As part of the operational phase of this project the applicant is proposing a 15kW emergency diesel generator. Less than 50 horsepower (37kW) are recognized as producing emissions low

enough to not require any permitting through the Northern Sierra Air Quality Management District. However, if and when an additional carrier co-locates at the site combined diesel generator emissions could exceed the 50 horsepower threshold. Although a permit from NSAQMD is not required for the 15-kW generator, the project proposal includes space within the lease-area for additional carriers that may also require backup generators. Because the engine size and type of the generators used may require a permit through NSAQMD, Mitigation Measure 3A requiring the applicant to contact NSAQMD to determine if a permit is required, has been included. With the additional of mitigation 3A, impacts to air quality standards will be *less than significant with mitigation*.

- *3b-e.* The construction phase of this project will entail some disturbance for turnouts and facilities installation. Serpentine soils or ultramafic rock are not mapped on the project site or adjacent areas. The NSAQMD requires a Dust Control Permit only when site disturbance will meet or exceed one acre. An existing paved driveway serving the residence on this parcel will serve as access for the proposed project site. The electrical power will be supplied to the project site underground via a directional bore resulting in insignificant dust production. The total project disturbance is anticipated to be approximately 1,700 square feet. The area of disturbance is therefore expected to amount to less than an acre based on the site plan's depiction of the access driveway and lease area. While disturbance is expected to be minimal, best management practices to keep dust from being a nuisance will be employed and are required through standard conditions of approval. With the compliance of the required conditions of approval (dust and erosion temporary best management practices), the potential adverse impact on the generation of substantial pollutant concentrations or air quality violations would be *less than significant*.
- *3f-g.* The project lease-site is accessible directly from the existing paved driveway and graveled parking area. The 900 square foot lease-site is devoid of trees and shrubs and will need no burning of cleared vegetation to implement the proposed project and up to two (2) future co-located carriers.

Because of the relatively small scale of improvements, the detailed quantification of the emissions from construction activities is not required. The proposed project would result in an unstaffed communication facility that would, on average, result in the addition of a maximum of 12 new vehicle trips per month (information supplied by applicant's representative). The net change to the overall increase in pollutants will not substantially be increased beyond the existing, and the potential impact of the incremental pollutant increase is anticipated to result in *no impact*.

Mitigation Measures: To offset potentially adverse air quality impacts associated with the project activities, the following mitigation measure shall be required:

Mitigation Measure 3A: Authority to Construct Permit. Building, altering, replacing, or operating any source of air contaminants, whether portable or stationary (but not mobile), may require an Authority to Construct permit from the Air Pollution Control Officer, unless the Northern Sierra Air Quality Management District (NSAQMD) determines that such equipment is exempt from permitting or unless such equipment is currently registered with CARB under the Portable Equipment Registration Program. The applicant shall contact Joe Fish of NSAQMD at (530) 274-9360 x103 (or email at joe@myairdistrict.com) in order to determine whether or not the generator's engine requires permitting from the NSAQMD. The results of that contact shall be documented and provided to the Planning Department prior to issuance of any improvement permits, and an Authority to Construct permit obtained if applicable.

Timing: Prior to building permit issuance

Reporting: Agency approval of permits or plans

Responsible Agency: Planning Department and Northern Sierra Air Quality Management District

4. <u>BIOLOGICAL RESOURCES</u>

Existing Setting: The project parcel is developed with a single-family residence, a well, a septic system, a two-story horse barn, fenced arena/paddock and multiple accessory structures. The 900 square foot project lease-site is located within an open area surrounded on three sides by (Refer to Figure 3, Lease-Site) vegetation dominated by Ponderosa pine, Incense cedar and Black Oak. There are no stream or riparian areas within the lease site or adjacent to it. The Biological Inventory (Beedy, 2017) prepared for the project site found no state or federally listed threatened or endangered plant or animal species or any other special status species are expected to occur due to the absence of suitable habitat.

Would the proposed project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact	Reference Source (Appendix A)
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				~	17
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service?				~	17
c. Result in a substantial reduction in the extent, diversity, or quality of native vegetation, including brush removal for fire prevention and flood control improvements?				~	17
d. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				~	17
e. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				~	17
f Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				~	17
g. Introduce any factors (light, fencing, noise, human presence and/or domestic animals), which could hinder the normal activities of wildlife?			~		A, 17

Impact Discussion:

4a-f. In compliance with Nevada County Land Use and Development Code Sec. L-II 4.3.12 the project area was surveyed by a qualified biologist, Edward Beedy, PhD, on May 25, 2017 (Beedy, 2017). The Inventory evaluated the potential for Special Status plant and wildlife, landmark trees or oak

groves and Waters of the U.S. to occur on or adjacent to the project site, as well as reviewing the property for locally protected resources per the requirements of Nevada County General Plan. No state or federally listed threatened or endangered plant or animal species or any other special status species is expected to occur due to the absence of suitable habitat. Waters of the U.S., riparian habitat or other sensitive natural communities identified by local, State or Federal agencies were also absent from the lease site and adjacent area. The cell tower and associated equipment installation requires no tree or shrub removal. The proposed project does include vegetation management to reduce fire fuels within five (5) feet of the existing paved county road. In compliance with Nevada County Fire Marshall's conditions of approval, vegetation is proposed to be managed, not substantially reduced or removed, so that it does not impede access by emergency vehicles due to overhanging vegetation lower than eight (8) feet. Four improved turnout areas are proposed along Royal Plum Way (2 turnouts) and Burning Bush Road (2 turnouts) that are approximately five (5) feet wide by 40 feet long. Consistent with California Department of Forestry and Fire Protection (Cal-Fire), the applicant proposes to locate the turnouts where existing roadway sections already have wide shoulders. The proposed project encompasses a relatively small area comprising of approximately 900 square feet (that includes the primary lease area and space for future co-location) within a 10.76 acre developed parcel. The proposed project will have *no impact* upon biological resources.

4g. Included in the proposed project are two new manually operated light fixtures and a redwood solid fence to enclose the cell tower and supporting equipment. The parcel is developed with a single-family residence, a well, a septic system, a two-story horse barn, fenced arena/paddock and multiple accessory structure. The portion of the parcel nearest the single-family, is currently enclosed by an existing fence. The proposed redwood fence is within the existing fenced area. The barn, utility building (supports the solar installation on-site) and residence all have existing external light fixtures. The proposed light fixtures, although a new source of light, are designed and conditioned with cut-off shades that direct light downward and focus the light on-site with no spillage off-site as is required by Nevada County (L-II 4.2.8. D.2.). The new light fixtures are manually operated and will only be used when there is a need for facility maintenance. The changes on site due to the new light source and fence will have *a less than significant impact* on normal activities of wildlife.

Mitigation Measures: None required.

5. <u>CULTURAL RESOURCES</u>

Existing Setting: Pre-historic era cultural resources in the project vicinity come from Native American people known as Nisenan or Southern Maidu, whose habitation sites are primarily found adjacent to streams or on ridges or knolls, especially those with a southern exposure. Historic-era cultural resources are generally from immigrants who came into the local area in or after 1848 due to the Gold Rush. The project site is currently developed with a residence, horse-barn, horse coral/paddock and accessory structures.

Would the proposed project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact	Reference Source (Appendix A)
a. Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5 of the CEQA Guidelines?				~	A, I, 22
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to				~	A, I, 22

Would the proposed project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact	Reference Source (Appendix A)
Section 15064.5 of the CEQA Guidelines?					
c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				~	A, I, 22
d. Disturb any human remains, including those interred outside of formal cemeteries?			\checkmark		A, I, 22

5a-d. A records search at the North Central Information Center (CSU-Sacramento) has been prepared for this project site. The results of that search indicated there were no recorded prehistoric or historical period cultural resources. In the response letter, signed by Dr. Nathan Hallam, Coordinator of the North Central Information Center, there is low potential for locating prehistoric-period cultural resources in the immediate vicinity of the proposed project site. This conclusion is based on the extent of known cultural resources and patterns of local history for the area. This area is considered not to be sensitive for cultural and historic resources. The construction, operation and maintenance of this cell tower facility is anticipated to have *no impact*.

Given that there is some amount of ground disturbance required for this project, there is a potential for unanticipated discovery of cultural resources, including historic, prehistoric, and paleontological resources, during project construction. Consistent with Nevada County Land Use Code Section L-II 4.3.6.C.5., the conditional use permit is required to include the following: *Any person who, in the process of project activities, discovers any cultural resources and/or human remains within the project area shall cease from all project activities within at least 200 feet of the discovery. A qualified professional shall be notified to assess any discoveries and develop appropriate management recommendations for cultural resource treatment. In the event that human remains are encountered, the sheriff-coroner shall be notified immediately upon discovery. In the event that Native American human remains are encountered, the buried individual(s) who are qualified to represent Native American interests shall be contacted. Specific treatment of Native American human remains shall occur consistent with State law.*

The compliance with the Code section stated above, the construction, operation and maintenance of this cell tower facility is anticipated to have a *less than significant* affect upon human remains that are very unlikely to be encountered at this site.

Mitigation Measures: None required.

6. <u>GEOLOGY / SOILS</u>

Existing Setting: The site lies at an approximate elevation of 3,363.5 feet above mean sea level (AMSL). The general overall topography of the project lease area is moderately sloping toward the north at an average slope of 9%. The site is developed with a single-family residence, a two-story horse barn, corral/paddock, accessory structures, and a 420-foot long paved driveway that affords direct access to the lease-site. Surface drainage generally flows northwesterly. Based on the Soil Survey Nevada County, California (USDA; Soil Conservation Service and Forest Service, 1983) soils on the project parcel primarily consist of Cohasset-McCarthy Cobbly Loam that range between 15 and 50%. The north east

corner of the project parcel, the location of the project lease-site, consists of Cohasset Cobbly Loam with 5 to 50% slopes.

The Cohasset Series soils consist of well-drained soils underlain by cobbly andesitic conglomerate. The soils on ridges are undulating to hilly. Runoff is medium to rapid on these soil types and the hazard for erosion is slight to moderate depending on slope. There are no naturally occurring asbestos-containing rocks at or near the site.

The project site is in Seismic Zone I, the Low Intensity Zone of the Modified Mercalli scale, meaning the site has a low risk for strong ground motion. The site is located approximately 9-miles from a 130,000 to 1.6 million year old fault that crosses the Bear River to the South.

Would the proposed project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact	Reference Source (Appendix A)
a. Result in exposure to or production of unstable earth conditions such as landslides, earthquakes,					
liquefaction, soil creep, mudslides, ground failure (including expansive, compressible, collapsible				~	A, 6, 9
soils), or similar hazards?					
b. Result in disruption, displacement, compaction, or over-covering of the soil by cuts,				~	А
nils, or extensive grading?					
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off- site landslide, lateral spreading, subsidence, liquefaction or collapse?				~	5, 6, 8, 9, &10
d. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				~	С
e. Result in any increase in wind or water erosion of soils, on or off the site?				✓	А
f. Changes in siltation, deposition or erosion, which may modify the channel of a river, or stream, or the bed any bay, inlet or lake?				~	A, 9, 11
g. Result in excessive grading on slopes of over 30 percent?				\checkmark	A, 9

Impact Discussion:

6a-c. The proposed tower and equipment shelter site is relatively level. All of the access driveway proposed to serve the cell tower is currently paved and serves the single-family residence. A small amount of ground disturbing activity is anticipated to install the tower site and the four (4) turnouts. The grading improvements will be located in areas that are currently fairly level and are disturbed. No significant cuts and fills are anticipated to be necessary. All structures, including the tower and the equipment shelter, must comply with the California Building Code (CBC) and the Nevada County Land Use and Development Code requirements to ensure protection during seismic events and or soil compatibility issues. No specific potential hazards have been identified for the project site. The project is anticipated to have *no impacts* associated with unstable earth conditions.

- 6d. The project is currently developed with a residence and various accessory structures. The existing septic system (location shown on Figure 2.) will not be impacted by the proposed tower site and equipment shelter pad location. The project creates *no impact* on wastewater disposal needs.
- 6e-g. Site improvements for the cell tower and equipment shelter and for the proposed access improvements including the access road turnouts will require a small amount of grading disturbing approximately 1,700 square feet (1,300 square feet on-site and 400 square feet offsite). These improvements will take place more than 0.5 mile from any surface drainages based on the USGS Quad map. The required grading will take place on fairly shallow slopes and are not anticipated to involve extensive grading and are therefore not anticipated to create significant erosion impacts. Due to the limited amount of disturbance (less than 50 cubic yards) and the distance of improvements to a water course, any potential impacts will be avoided with compliance of Nevada County grading standards outlined in Land Use and Development Code Section V, Article 19. These standards will be required as a condition of approval for temporary construction erosion control anywhere the construction activities will result in land disturbance. There are no slopes in the area of project disturbance that are in excess of 30 percent. The project construction activities will result in a *no impact* related to steep slopes, grading and erosion.

Mitigation Measures: None required.

7. <u>GREENHOUSE GAS EMISSIONS</u>

Existing Setting: Greenhouse gases (GHG) are those gases that trap heat in the atmosphere. GHG are emitted by natural and industrial processes, and the accumulation of GHG in the atmosphere regulates the earth's temperature. Greenhouse gases (GHGs) include carbon dioxide (CO2), methane, halocarbons (HFCs), and nitrous oxide (NO2). CO2 emissions, stemming largely from fossil fuel combustion, comprise about 87% of California emissions. In California, approximately 43% of the CO2 emissions come from cars and trucks. The adverse impacts of global warming include impacts to air quality, water supply, sea level rise (flooding), fire hazards, and an increase in health related problems. AB32 establishes a state goal of reducing GHG emissions to 1990 levels by the year 2020 (a 10% reduction from today's levels).

Currently, there are no federal laws regulating GHGs, but on April 17, 2009, the federal EPA formally declared that GHGs are a public health and safety issue, clearing the way for their identification as criteria pollutants that could be regulated under the Clean Air Act.

Would the proposed project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact	Reference Source (Appendix A)
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			\checkmark		A, F, 20
b. Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?				~	A, F, 20

Impact Discussion:

7*a.* Short-Term (Construction) GHG Emissions. Construction activities, such as site preparation, site grading, and motor vehicles transporting the construction materials and crew would produce

combustion emissions from various sources. During construction of the proposed project, GHGs would be emitted through the operation of construction equipment and from worker vehicles, each of which typically use fossil-based fuels to operate. The combustion of fossil-based fuels creates GHGs such as carbon dioxide (CO2), methane (CH4), and nitrous oxide (N2O). Furthermore, CH4 is emitted during the fueling of heavy equipment. Exhaust emissions from onsite construction activities would vary daily as construction activity levels change. Construction is anticipated to be completed within six (6) weeks. These potential impacts would be limited to the duration of construction activities and small number of construction vehicles and GHG generation would halt once the proposed project is completed. Therefore, the generation of GHG emissions during construction would be less than significant, and no mitigation is required.

Long-Term (Operational) GHG Emissions. Staff often run the California Emissions Estimator Model (CalEEMod) for proposed projects. However, this model does not provide adequate inputs for unmanned communication tower facilities. As a result, many default inputs have to be used which result in gross overestimation of emissions. For this reason, the model has not been used and rather, the proposed project, as described with the emergency backup batteries and smaller generator are anticipated to not create CO2 levels that are considered to be substantially significant because the project facility will be unmanned and will not contribute to substantially more vehicle trips than under existing conditions. The project is not expected to contribute to a substantial increase in traffic during the operational phase of the project because fewer than four (4) new trips per month is anticipated for site maintenance with the proposed project and potentially three (3) times that if up to two (2) new carriers co-locate.

The communication facility will utilize one (1) 15kW emergency standby generator. The California Environmental Protection Agency has adopted "Tier IV" emission standards for diesel engines that are manufactured in a manner that decreases exhaust emissions by more than 90%. The spec sheet provided for the proposed generator indicates compliance with this "Tier IV" standard. The generator emissions compliance is certified by both the U.S. EPA and California Air Resources Board (CARB) (Project Specs Page A-5.1 for Polar Power 8220-100 series, 2017). The proposed project will not trigger Northern Sierra Air Quality Management District stationary source review for the emergency backup 15kW diesel generator nor dust control for construction as site disturbance would be limited to approximately 0.04 acres, well under the 1-acre threshold.

Additionally, the project includes installation of backup generator(s) to power the facility if electrical service is lost. When power is lost, the facility would be powered by battery units. Once the battery units reach a fifty percent charge, the backup generator would turn on until the batteries were charged. The backup generator would turn back off until the batteries were drained down again. This process would continue until electrical service is restored at the site. The telecommunication facility will initially install one 15-kW diesel generator for power outages. The existing lease-area will accommodate addition carriers that may be added to the site. As part of the project Conditions of Approval, any additional backup generators added to the site would be required to meet permit requirements by the Nevada County Building Department and the Northern Sierra Air Quality Management District, and would also be designated for limited use. Other than weekly maintenance of ten minutes or less, the generator(s) is unlikely to be used. Given the limited use of the generator and intermittent visits by service vehicles, greenhouse gas emissions would be *less than significant*.

7b. Short-Term (Construction) GHG Emissions. Construction activities, such as site preparation, Nevada County has not adopted a climate action plan. However, the CEQA clearance for discretionary projects do follow and comply with State Guideline plans. The proposed project will not conflict with any State or regional plan, policy, or regulation of an agency adopted for the purpose of reducing GHG emissions. As discussed in Response 7a above, the proposed project's short-term construction and long-term operational GHG emissions would not result in significant impacts. Therefore, because the proposed project is consistent with all applicable plans, policies, and regulations adopted to reduce GHG emissions, *no impacts* would occur.

Mitigation Measures: None required.

8. <u>HAZARDS / HAZARDOUS MATERIALS</u>

Existing Setting: The property is not within or adjacent to any hazardous materials sites compiled pursuant to Government Code Section 65962.5 (Department of Toxic Substances Control 2010). The project area is in a Very High Fire Hazard Severity Zone as designated by Cal-Fire.

Would the proposed project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact	Reference Source (Appendix A)
a. Create a significant hazard to the public or the					
environment through the routine transport, use, or			\checkmark		C, 29
disposal of hazardous materials?					
b. Create a significant hazard to the public or the					
environment through reasonably foreseeable upset			1		C 29
and accident conditions involving the release of			·		C, 29
hazardous materials into the environment?					
c. Emit hazardous emissions or handle hazardous					
or acutely hazardous materials, substances, or waste				\checkmark	A C
within one-quarter mile of an existing or proposed					А, С
school?					
d. Be located on a site which is included on a list					
of hazardous materials sites compiled pursuant to					
Government Code Section 65962.5 and, as a result,				\checkmark	A, C, 26
create a significant hazard to the public or the					
environment?					
e. For a project located within an airport land use					
plan or, where such a plan has not been adopted,					
within two miles of a public airport or public use				✓	А, К
airport, would the project result in a safety hazard					
for people residing or working in the project area?					
f. For a project within the vicinity of a private					
airstrip, would the project result in a safety hazard				✓	А, К
for people residing or working in the project area?					
g. Impair implementation of or physically interfere					
with an adopted emergency response plan or				✓	A, 15
emergency evacuation plan?					
h. Expose people or structures to a significant risk					
of loss, injury or death involving wildland fires,					
including where wildlands are adjacent to urbanized				✓	A, 4
areas or where residences are intermixed with					
wildlands?					

Impact Discussion

8a-b. The proposed project would not result in the routine transport, use, or disposal of hazardous materials other than the use and transport of diesel fuel for the proposed standby generator which employs a 54-gallon fuel tank. Hazardous material storage must comply with the California

Health and Safety Code Chapter 6.95, and the applicant will be required as a condition of approval to file a chemical business plan and inventory with the Environmental Health Department within 30 days of triggering threshold quantities. Consistent with Nevada County Department of Environmental Health requirements, prior to the Building Permit final, the applicant must apply for and obtain a permit for the storage of hazardous materials from the Nevada County Department of Environmental Health (NCDEH), Certified Unified Program Agency (CUPA). The operator shall secure and annually renew the permit for this facility within 30 days of becoming subject to applicable regulations. The applicant must adhere to all applicable codes and regulations regarding the storage of hazardous materials and the generation of hazardous wastes set forth in California Health and Safety Code Section 25500 – 25519 and 25100 – 25258.2 including the electronic reporting requirement to the California Environmental Reporting System (CERS).

Small quantities of hazardous materials would be stored, used, and handled during construction. The hazardous materials anticipated for use are small volumes of petroleum hydrocarbons and their derivatives (e.g., gasoline, oils, lubricants, and solvents) required to operate the construction equipment. These relatively small quantities would be below reporting requirements for hazardous materials business plans and would not pose substantial public health and safety hazards through release of emissions or risk of upset. Safety risks to construction workers for the proposed project would be reduced by compliance with Occupational Safety and Health Administration (OSHA) standards. Additionally, the amount of heptafluropropane stored for the fire-supression system will only be enough to cover the 200 square foot equipment shelter and is not anticipated to be a large quantity. Extinguishing bottles are required to be clearly labeled with the potential hazards, as well as handling procedures. Release and use of this agent must comply with all existing Occupational Safety and Health Administration (OSHA) regulations.

Radiofrequency (RF) radiation emanates from antenna on cellular towers and is generated by the movement of electrical charges in the antenna. The energy levels it generates are not great enough to ionize, or break down, atoms and molecules, so it is known as "non-ionizing" radiation.

The Federal Communications Commission (FCC) is the government agency responsible for the authorization and licensing of facilities such as cellular towers that generate RF radiation. For guidance in health and safety issues related to RF radiation, the FCC relies on other agencies and organizations for guidance, including the EPA, FDA, the National Institute for Occupational Safety and Health (NIOSH) and OSHA, which have all been involved in monitoring and investigating issues related to RF exposure. The FCC has developed and adopted guidelines for human exposure to RF radiation using the recommendations of the National Council on Radiation Protection and Measurements (NCRP) and the Institute of Electrical and Electronics Engineers (IEEE), with the support of the EPA, FDA, OSHA and NIOSH. According to the FCC, both the NCRP exposure criteria and the IEEE standard were developed by expert scientists and engineers after extensive reviews of the scientific literature related to RF biological effects. The exposure guidelines are based on thresholds for known adverse effects, and they incorporate wide safety margins. In addition, under the National Environmental Policy Act (NEPA) the FCC is required to evaluate transmitters and facilities for significant impacts on the environment, including human exposure to RF radiation. When an application is submitted to the FCC for construction or modification of a transmitting facility or renewal of a license, the FCC evaluates it for compliance with the RF exposure guidelines which were previously evaluated under NEPA. Failure to show compliance with the FCC's RF exposure guidelines in the application process could lead to the additional environmental review and eventual rejection of an application.

The proposed wireless facility is subject to the FCC exposure guidelines, and must fall under the FCC's American National Standards Institute (ANSI) public limit standard of .58 mW/cm².

Finally, it should be noted that Section 704 of the Telecommunications Act of 1996 states that, "No State or local government or instrumentality thereof may 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 the Commission's regulations concerning such emissions." Because the proposed facility would operate under federally mandated limits on RF radiation for cellular towers and is regulated by the FCC in this respect, the County may not regulate the placement or construction of this facility based on the RF emissions.

Although, the county cannot regulate radiofrequency radiation, because the project involves the storage of heptafluoropropane, impacts related to hazardous materials released from or generated by this project is *less than significant*.

8c-h. The project site is not located adjacent to, or within a quarter mile of, any schools. The project site is not on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, so there would be. The project site is not located within an airport land use plan and is approximately 6.7-miles north/northeast of the nearest airport, Nevada County Airport. Therefore, the project will not result in a safety hazard for people residing or working in the project area and there will be *no impact*.

There is currently no adopted emergency response plan for the project area. The proposed project would result in the installation of an unmanned cellular tower facility used for wireless communications. Thus, the project will not impair implementation of, or physically interfere with, adopted emergency response plans and *no impact* on any emergency response plan will occur as a result of the project.

The project site is currently developed with one single family residence, a two-story horse barn and accessory structures. The applicant will be required as a condition of approval to provide four (4) turnouts and defensible space around all of the proposed cellular tower facility consistent with PRC 4291, which requires up to 100 feet of fuels treatment or to the property line, whichever is closer. Nevada County Land Use and Development Code L-II 4.3.18 requires as a condition of approval that all development comply with the applicable fire protection-related provisions including but not limited to defensible space, access, driveway configurations, and fuels management. The proposed project with conditions of approval will not increase the exposure of people or structures to wildland fires, and therefore will have *no impact*.

9. <u>HYDROLOGY / WATER QUALITY</u>

Existing Setting: A seasonal creek (unnamed) is approximately 0.5 miles away, to the south of Cooper Road. No portion of the property is mapped as being within a floodplain according to the FEMA maps. Existing stormwater runoff (surface drainage) generally flows toward the southeast and is likely collected within the seasonal creek. The project is situated within the upper Rock Creek watershed and there is no flood hazard or designated flood zone on the project site.

Would the proposed project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact	Reference Source (Appendix A)
a. Violate any water quality standards or waste				\checkmark	

Would the proposed project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact	Reference Source (Appendix A)
discharge requirements?		~			
b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level, which would not support existing land uses or planned uses for which permits have been granted)?				✓	A, H, 11, & 14
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site?				~	A, H, 11 & 14
d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner, which would result in flooding on- or off- site?				~	A, H, 11 & 14
e. Create or contribute to runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?				~	А, В
f. Otherwise substantially degrade water quality?				~	A, H, C
g. Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				~	11
h. Place within a 100-year flood hazard area structures that would impede or redirect flood flows?				✓	11
i. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				~	11
j. Create inundation by mudflow?				\checkmark	A, D, 10

9a-j. The project, as proposed, is consistent with all water quality standards and waste discharge requirements. No additional permanent water supply is proposed for the project site. Grading for the project is very minimal and will not significantly modify the topography nor have cause to affect existing drainage patterns. The project would result in a minimal amount of additional impervious surface increase within the project site. The footprint of the project lease area is 900 square feet and is relatively level. Four (4) new 200-square foot turnouts will be designed and constructed (two on-site and two off-site) at existing disturbed dirt shoulder locations as a conditional of approval. The lease area is accessed by a paved driveway and a gravel area that is currently used for parking. The surface runoff on this area is moderate and the driveway. The implementation of the project will result in the surfacing or compaction of approximately 1,700 square feet (conservative estimate). This is less than one half of one percent of the entire parcel and will not substantially increase the overall surface water runoff from the project site.

Likewise, the proposed project would not result in direct or indirect impacts to a levee or dam, and would not substantially contribute to storm water flows near a floodplain.

The future potential co-location for up to two (2) new carriers will be contained within the existing 900 square-foot lease site. The access safety improvements and infrastructure improvements will have already been installed and no new significant disturbances are anticipated. Therefore, *no impact* to existing drainage patterns, increase in erosion potential, mudflow risks or increased flooding impacts are anticipated.

Mitigation Measures: None required.

10. LAND USE / PLANNING

Existing Setting: The project lease site is located in the north eastern corner of a 10.76-acre parcel in a Rural district. The General Plan land use designation is For-40, and is zoned FR-40 "General Agriculture" with one residential unit per parcel and 40-acre parcel size limitation for new subdivisions. The FR district provides areas for the protection, production and management of timber, timber support uses, including but not limited to equipment storage, temporary offices, low intensity recreation uses and open space. Single-family dwellings are an allowed use in the FR district and new communication towers and facilities are permissible with a conditional use permit. The adjoining parcels range in size from two adjoining 2.51 acre parcels to the east, one adjoining 11.55 acre parcel to the south, one adjoining 10.72 acre parcel to the west, and one adjoining 172.64 acre parcel to the north. One adjoining parcel to the east is developed with a residence and the parcels to the north and south are developed with a residence each.

Would the proposed project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact	Reference Source (Appendix A)
a. Result in structures and/or land uses incompatible with existing land uses?				\checkmark	A, 15 & 16
b. The induction of growth or concentration of population?				\checkmark	A, 15 & 16
c. The extension of sewer trunk lines or access roads with capacity to serve new development beyond this proposed project?				~	A, B, C, & D
d. Result in the loss of open space?				✓	A, 15 & 16
e. Substantially alter the present or planned land use of an area, or conflict with a general plan designation or zoning district?				~	A, 15, & 16
f. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?				V	A, 15, & 16
g. Disrupt or divide the physical arrangement of an established community, including a low-income or minority community?				~	A, 15, & 16

Impact Discussion:

10a-g. The subject property is currently developed with a single-family residence, a two-story horse barn, a corral/paddock and various accessory structures. The proposed project would develop the

small lease area for use by AT&T and provide a future potential for a co-location by other cellular providers. The proposed mono-pine cell tower and facility is consistent with the applicable Nevada County Land Use Code Section L-II 3.8, Communication Towers and Facilities. The cell tower provides coverage for a relatively small area due to the topography and will not induce growth or a concentration of population due to the FR-40 zoning for this area. The property is currently served by a septic system and the project proposes no bathroom facilities. The cell tower and equipment have been designed to fit into a small open area (30-feet by 30-feet) that is partly and currently being used as parking for a horse trailer. Therefore, the project is consistent with all existing land use plans, policies, and regulations. The project will have no negative effect on open space, existing uses, plans or foreseeable programs. Therefore, the project has *no impact*.

Mitigation Measures: None required.

11. <u>MINERAL RESOURCES</u>

Existing Setting: The project site is not mapped within an Important Mineralized Area (MRZ-2) designated by the State Department of Mines and Geology and is not located near mapped areas. There is no evidence of previous mining activity on the site. The nearest mineral extraction zone is approximately 1,000 feet to the north of the project site.

Would the proposed project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact	Reference Source (Appendix A)
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				~	A, 1
b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				~	A, 1

Impact Discussion:

11a-b. There is no record of significant mineral deposits or previous mining activity on the project site and therefore the project is anticipated to have *no impact* on the loss of or access to mineral resources.

Mitigation Measures: None required.

12. <u>NOISE</u>

Existing Setting: The project site is located within a FOR-40 land use designation. Adjacent land uses are primarily residential in nature. The closest residence is on site approximately 200-feet away from the lease-site. The closest neighboring residence is 450-feet away. The Nevada County Land Use and Development Code Sec. L-II 4.1.7 establishes noise standards for Rural land use categories at an average 55 dB Leq and maximum 75 dB Lmax from 7 a.m. to 7 p.m. and 50 dB Leq and 65 dB Lmax from 7 p.m. to 7 a.m. Other than natural noises, ambient noise sources include the occasional vehicle traveling pass down-slope.

The Land Use and Development Code Sec. L-II 4.1.7.C.8., states that the above standards shall not apply to those activities associated with the actual construction of a project or to those projects with the provision of emergency services or functions.

Would the proposed project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact	Reference Source (Appendix A)
a. Expose persons to or generate noise levels in excess of the County's adopted standards established in the General Plan and Land Use and Development Code?			V		A, 15, 16 & 21
b. Expose persons to or generate excessive ground borne vibration or ground borne noise levels (e.g., blasting)?			\checkmark		A, 15, 16 & 21
c. Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?			~		A, 15, 16 & 21
d. Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?			~		A, 15, 16 & 21
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				✓	A, 15, 16 & 21
f. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				~	A, 15, 16 & 21

Impact Discussion:

12a-d Nevada County has noise standards established for various land uses, but are only applicable when a discretionary land use is proposed. The project incorporates a 15kW emergency back-up generator for use during extended power outages. It will be located within an acoustical cabinet. The generator would be used to recharge the batteries that run the facility (normally recharged by the electrical lines) and would not be anticipated to run constantly during an extended power outage due to the complimentary use of batteries. An Environmental Noise Assessment Report was prepared by Shore 2 Shore Wireless, Inc. on October 17, 2017, to evaluate potential noise impacts that would be caused by the 15 kW backup diesel generator (Hatch, 2017). The backup generator is proposed only for emergency use when electrical service is down at the site.

A test cycle of the generator occurs once every 2-weeks, between the hours of 10AM and noon, and may last up to 10-minutes. The maximum dBA level in the FR zoning district is 75dBA when the noise source occurs between the hours of 7AM and 7PM. The noise assessment states that based on equipment specification and distance (modeling), the backup generator at full capacity will produce 62.67 dBA at the nearest property line (30-feet to the north and 30-feet to the east) (Hatch, 2017) and 39.15 dBA at the nearest residence, 450 feet away. During the 10 minute tests that the generator will be in use, noise levels will increase in the area. The assessment also states that a significant reduction in noise beyond the modeled level can be expected due to the surrounding absorbent materials (shrub and tree vegetation layers, undulating

topography and the acoustical cabinet the generator operates within). Therefore, the test cycle, with a maximum dBA rating of 62.67, will occur within acceptable noise limits outlined in the Land Use Code. The Land Use and Development Code, L-II 4.1.7C.8., exempts construction activities and emergency services or functions from the provisions of the Noise Ordinance.

The project site would also allow for additional carriers to be added that may include their own emergency backup generators. The noise assessment reports that an additional source of sound pressure will not double the decibel level (Hatch, 2017). An example illustrating the addition of an equivalent dB noise source provided in the Noise Assessment Report shows that one source being 70 dB and the addition of another source at 70 dB, will have a 3 dB increase for a total 73 dB. If other carriers are added to the site, it is unlikely that maintenance on the generators would occur at the same time, but if they did operate at the same time, the multiple sound sources would not significantly increase the overall sound level. If the dBA was increased to 68.67 dBA at the nearest property line without calculating deductions in noise levels from absorbent materials, it would still be under the County noise threshold of 75 dBA at the property line if more than one generator is tested at a time. As part of the project's Conditions of Approval, a condition has been included to ensure generators operate under the noise limits and are tested for maintenance during daytime hours. County noise standards do not apply to the provision of emergency services or functions. Grading is not proposed for this project, although there will be some ground disturbance to install the tower, utility lines and surfacing for the site. No blasting or excessive ground disturbance is proposed. The infrequent noise caused by backup generators and the temporary noise caused during construction will have *less than significant impacts*.

12e-f. The proposed project is not located within 2 miles of any public or private airport. The closest airport is the Nevada County Airport which is located approximately 6.6 miles from the project site. Further, the facility will be unmanned. Therefore, the development of this cellular site would not expose any future occupants to excessive airport noise levels. There will be **no** *impacts* related to airport noise.

Mitigation Measures: None required.

13. <u>POPULATION / HOUSING</u>

Existing Setting: The subject property is currently developed with a single family residence, two-story horse barn, corral/paddock and accessory structures. The project site is zoned FR-40. Residential uses are allowed but only at one unit per 40 acres for new subdivisions.

Would the proposed project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact	Reference Source (Appendix A)
a. Induce substantial population growth in an area,					
either directly (for example, by proposing new				✓	A. 15. 16
homes and businesses) or indirectly (for example,					,,
through extension of roads or other infrastructure)?					
b. Displace substantial numbers of existing					
housing, necessitating the construction of				\checkmark	A, 15, 16
replacement housing elsewhere?					
c. Displace substantial numbers of people,					
necessitating the construction of replacement				✓	A, 15, 16
housing elsewhere?					

13a-c. The proposed project would continue the same general type of land use currently developed and designated for this site and would not result in population growth or displacement of housing or people. Therefore, the proposed project would have *no impact* related to these issues.

Mitigation Measures: None required.

14. <u>PUBLIC SERVICES</u>

Existing Setting: The following public services are provided to this site:

<u>Fire</u>: The Nevada County Consolidated Fire District provides fire protection services to this site. <u>Police</u>: The Nevada County Sheriff provides law enforcement services.

<u>Water & Sewer</u>: There is no public water or sewer service available in this area.

Schools: The Nevada City School districts provide school services to this site.

Would the proposed project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact	Reference Source (Appendix A)
a. Result in substantial adverse physical impacts associated with the provision of or need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following the public services:					
1) Fire protection?				✓	G, L
2) Police protection?				✓	А
3) Schools?				\checkmark	A
4) Parks?				\checkmark	А
5) Other public services or facilities?				\checkmark	A

Impact Discussion:

14a(1-5). The cell tower project is not anticipated to have significant impacts on fire protection services, law enforcement services, schools, or public recreational facilities because the project would not result in a permanent or substantial temporary increase or decrease in population that could impact these services. Therefore, there is *no impact*.

Mitigation Measures: None required.

15. <u>RECREATION</u>

Existing Setting: There are no recreation facilities in the project vicinity. The project is located in the Grass Valley/Nevada City Recreation benefit zone.

Would the proposed project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact	Reference Source (Appendix A)
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Would the proposed project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact	Reference Source (Appendix A)
a. Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				✓	А
b. Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?				\checkmark	А
c. Conflict with established recreation uses of the area, including biking, equestrian and/or hiking trails?				~	А, В

15a-c. The project would not adversely impact recreation facilities because they are not on or near the project site. Therefore, the proposed project would have *no impact* related to these issues.

Mitigation Measures: None required.

16. <u>TRANSPORTATION / CIRCULATION</u>

Existing Setting: Access to the project site is predominantly on Nevada County roads. The project site can be reached from North Bloomfield, to Cooper Road, to Royal Plum Way, to Burning Bush Road. The project can also be accessed from State Highway 20 north to Conservation Road, to Cooper Road, to Royal Plum Way, to Burning Bush Road.

Would the proposed project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact	Reference Source (Appendix A)
a. Result in an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume-to- capacity ratio on roads, or congestion at intersections)?				~	A, B
b. Result in a need for private or public road maintenance, or new roads?				\checkmark	A, B
c. Result in effects on existing parking facilities, or demand for new parking?				\checkmark	A, B
d. Substantially increase hazards due to a design feature (e.g., a sharp curve or dangerous intersection) or incompatible uses (e.g., farm equipment)?				~	В
e. Result in a substantial impact upon existing transit systems (e.g., bus service) or alteration of present patterns of circulation or movement of people and/or goods?				~	В
f. Result in an alteration of waterborne, rail, or air traffic patterns or levels?				\checkmark	В
g. Result in an increase in traffic hazards to motor vehicles, bicyclists, or pedestrians, including short-				\checkmark	В

Would the proposed project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact	Reference Source (Appendix A)
term construction and long-term operational traffic?					
h. Result in inadequate:					
Sight distance?					
Ingress/egress?				\checkmark	B, G & L
General road capacity?					
Emergency access (4290 Standard)?					
i. Result in inconsistency with adopted policies					
supporting the provision of transit alternatives to					
automobile transportation on an equitable basis with				1	ΛD
roadway improvements, e.g. clustered development,				·	A, D
commuter-oriented transit, bus turnouts, sidewalks,					
paths, and bicycle racks?					

16a-i. The proposed project with two potential future co-located carriers would add approximately 12 trips per month to the existing developed site (conservatively estimating one maintenance trip per week per carrier (3 carriers x 4 weeks/ month). The Public Works Department will not require that a road improvement fee be levied on the project based on the low number of additional vehicle trips generated by the project. Burning Bush Road (essentially a one-lane road) is being improved with the addition of two graveled turnouts to increase safety. The proposed project is in an area of the County that is not served by transit, waterborne, rail or air carriers and therefore will have no effect on these types of transportation services. Because the site has existing adequate parking and would not affect any policies supporting transit alternatives, circulation patterns, sight distance, or access as no changes are proposed to or near any existing roadways there will be *no impact* related to these issues.

Mitigation Measures: None required.

17. TRIBAL CULTURAL RESOURCES

Existing Setting: Assembly Bill 52 (Chapter 532, Statutes 2014) required an update to Appendix G (Initial Study Checklist) of the CEQA Guidelines to include questions related to impacts to tribal cultural resources. Changes to Appendix G were approved by the Office of Administrative Law on September 27, 2016. Tribal Cultural Resources include sites, features, and places with cultural or sacred value to California Native American Tribes. Both the Washoe Tribe and United Auburn Indian Community of the Auburn Rancheria (UAIC) have contacted the County to request consultation on projects falling within their delineated ancestral lands. The subject cellular telecommunication facility is proposed within UAIC lands. See Section 5 for additional information regarding cultural resources.

Would the proposed project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact	Reference Source (Appendix A)
 a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or 		v			I & 22
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.		~			I & 22

17a.i-ii Nevada County Staff sent an invitation to United Auburn Indian Community (UAIC) to begin AB 52 consultation for the project because the mono-pine cellular telecommunication facility is located in the western portion of Nevada County and was determined to fall within the area identified by the UAIC as ancestral lands. While records reviews and field surveys provided negative results for prehistoric and historic-period resources, UAIC provided a proposed mitigation measure that requires project monitoring in the unlikely event that there is a discovery of cultural resources, including historic, prehistoric, tribal, and paleontological resources, during project construction. No mitigations for a specific sacred site or area of cultural value were proposed. In compliance with Section 15064.5 of the CEQA Guidelines, with the inclusion of proposed Mitigation Measure, impacts to these Tribal Cultural Resources will be *less than significant with mitigation*.

Mitigation Measures: To offset potentially adverse cultural or historical resources impacts associated with the construction activities in compliance with, the following mitigation measure shall be required:

Mitigation Measure 17A: Native American Monitoring. Prior to project construction, the contractor must contact the United Auburn Indian Community of the Auburn Rancheria for project monitoring. Paid Native American monitors from culturally affiliated Native American Tribes must be invited to monitor the vegetation grubbing, stripping, grading or other ground-disturbing activities in the project area to determine the presence or absence of any cultural resources. Native American representatives from cultural affiliated Native American Tribes act as a representative of their Tribal government and shall be consulted before any cultural studies or ground-disturbing activities begin. Native American representatives and Native American monitors have the authority to identify sites or objects of significance to Native Americans and to request that work be stopped, diverted or slowed if such sites or objects are identified within the

direct impact area. Only a Native American representative can recommend appropriate treatment of such sites or objects.

Timing: Prior to issuance of permits for construction *Reporting:* Approval of construction permits *Responsible Agency:* Planning Department

18. <u>UTILITIES / SERVICE SYSTEMS</u>

Existing Setting: The site is currently served by an on-site well and septic system for its water and sewage disposal requirements. The residence and out-buildings' electrical needs are served by solar arrays with battery storage. Pacific Gas and Electric will provide new electrical service via the extension of an existing power supply 1,500 linear feet south of the project site. The conduit with power line will be installed via underground direct boring to the lease-site. The power service will be installed for this project within a new underground utility easement (U.G.U.) 5-foot wide power easement. The alignment of the power easement will be along the eastern property boundary.

Would the proposed project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact	Reference Source (Appendix A)
a. Result in a need for the extension of electrical power or natural gas?			\checkmark		А
b. Require the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				~	С
c. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				~	С
d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?				~	A, C
e. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				~	В
f. Be served by a landfill or transfer station with sufficient permitted capacity to accommodate the project's solid waste disposal needs?				~	В
g. Comply with federal, state, and local statutes and regulations related to solid waste?				✓	A, C
h. Require a need for the extension of communication systems?			\checkmark		А

- 18a&h. The proposed project includes the extension of electrical power 1,500 feet within a U.G.U. power easement via underground directional boring. The new line will extend from an existing PG&E utility service on Cooper Road. The new cell tower communication facility expands the existing AT&T communication coverage in the localized area. The extension of electrical power and communication systems will have a *less than significant impact*.
- 18b-g The proposed project would not create a need for the extension of natural gas, public water or wastewater treatment facilities, or expansion of existing facilities, additional water supplies, or storm drainage facilities. The operational phase of the proposed project would not result in the production of increased solid waste from baseline conditions. The proposed project's construction activities include pre-fabricated structural materials such as the mono-pine tower, the walk-in modular cabinet, and generator/fuel modular cabinet unit that will be transported to the site for installation. The redwood fence to be built to enclose the facility may produce scrap lumber which is accepted at the Nevada County transfer station. The lease-site is devoid of trees and shrubs requiring the disposal of stumps, slash, etc. This project will result in *no impacts* on the existing public utilities.

Mitigation Measures: None required.

19. MANDATORY FINDINGS OF SIGNIFICANT ENVIRONMENTAL EFFECT

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact	Reference Source (Appendix A)
a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of major periods of California's history or prehistory?			✓		A, 2, 3, & 17
b. Does the project have environmental effects that are individually limited but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of the project are considered when viewed in connection with the effects of past, current, and probable future projects.)			V		A, B, C
c. Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?			✓		A, B, C
d. Does the project require the discussion and evaluation of a range of reasonable alternatives, which could feasibly attain the basic objectives of the project?			~		А

Impact Discussion:

19a. Compliance with existing federal, state, and local regulations, as well as the mitigation measures identified in this Initial Study, will reduce all potential impacts of the proposed project to a less-

than-significant level, including potential impacts to cultural and biological resources. Therefore, the proposed project would not have the potential to substantially degrade the quality of the environment related to those resources, and this impact is *less than significant*.

- 19b. A project's cumulative impacts are considered significant when the incremental effects of the project are "cumulatively considerable," meaning that the project's incremental effects are considerable when viewed in connection with the effects of past, current, and probable future projects. However, because most of this project's impacts would be short-term construction impacts that are not anticipated to be substantially adverse with mitigation, the proposed project is not anticipated to contribute to cumulative impacts. Therefore, the proposed project would have *less than significant* environmental effects that are individually limited but cumulatively considerable.
- *19c.* Project construction and grading could result in temporary minor disturbance to human beings through local noise levels being minimally increased for a short period of time. However, with the required compliance with existing federal, state, and local regulations, and with the recommended mitigation offered to minimize these potential noise impacts, the proposed project would have a *less than significant impact* on human beings as a result of project approval.
- 19d. The basic objective of the project is to construct a new communications tower for improved service to the North Bloomfield Coopers Road areas. Construction would occur on a developed parcel and has been sited and camouflaged (mono-pine cell tower) to avoid significant aesthetic impacts. The project does not require the discussion of feasible alternatives to this siting that would achieve the same objective due to the minimal impact of this project proposal. Therefore, impacts associated with this project's feasibility and potential alternatives are considered *less than significant*.

RECOMMENDATION OF THE PROJECT PLANNER:

On the basis of this initial evaluation:

- _ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- X I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- _____ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have a "potentially significant impact" or a "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Coleen L. Shade, Senior Manner

Nov. 9 2017

APPENDIX A – REFERENCE SOURCES

- A. Planning Department
- B. Department of Public Works
- C. Environmental Health Department
- D. Building Department
- E. Nevada Irrigation District
- F. Northern Sierra Air Quality Management District
- G. Nevada County Consolidated Fire District
- H. Regional Water Quality Control Board (*Central Valley* Region)
- I. North Central Information Service, Anthropology Department, CSU Sacramento
- J. California Department of Fish & Wildlife
- K. Nevada County Geographic Information Systems
- L. California Department of Forestry and Fire Protection (Cal Fire)
 - 1. State Division of Mines and Geology. *Mineral Classification Map*, 1990.
 - 2. State Department of Fish and Game. *Migratory Deer Ranges*, 1988.
 - 3. State Department of Fish and Game. Natural Diversity Data Base Maps, as updated.
 - 4. Cal Fire. *Fire Hazard Severity Zone Map for Nevada County*, 2007. Adopted by CalFire on November 7, 2007. Available at: http://www.fire.ca.gov/wildland_zones_maps.php.
 - 5. State Division of Mines and Geology. *Geologic Map of the Chico, California Quadrangle,* 1992.
 - 6. State Division of Mines and Geology. Fault Map of California, 1990.
 - California Department of Conservation, Division of Land Resource Protection. 2016. Nevada County Important Farmland Data. Available at: ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2016/nev16.pdf.
 - 8. U.S.G.S, 7.5 Quadrangle Topographic Maps, as updated.
 - 9. Natural Resources Conservation Service. 2007. Official Soil Series Descriptions (OSD) with series extent mapping capabilities. Available at
 - $http://soildatamart.nrcs.usda.gov/manuscripts/CA619/0/nevada_a.pdf.$
 - 10. U.S. Geological Service. *Nevada County Landslide Activity Map*, 1970, as found in the Draft Nevada County General Plan, Master Environmental Inventory, December 1991, Figure 8-3.
 - 11. Federal Emergency Management Agency. Flood Insurance Rate Maps, as updated.
 - 12. Northern Sierra Air Quality Management District. Guidelines for Assessing Air Quality Impacts of Land Use Projects, 2000.
 - 13. County of Nevada. Nevada County General Plan Noise Contour Maps, 1993.
 - 14. Nevada County. 1991. *Nevada County Master Environmental Inventory*. Prepared by Harland Bartholomew & Associates, Inc. (Sacramento, CA). Nevada County, CA.
 - 15. Nevada County. 1995. Nevada County General Plan: Volume 1: Goals, Objectives, Policies, and Implementation Measures. Prepared with the assistance of Harland Bartholomew & Associates, Inc. (Sacramento, CA). Nevada County, CA.
 - 16. Nevada County. Nevada County Zoning Regulations, adopted July 2000, and as amended.
 - 17. Edward C. Beedy, Geist Engineering and Environmental Group, Inc. *Biological Inventory*, June 27, 2017.
 - 18. California Attorney General's Office. "Addressing Climate Change at the Project Level." January 6, 2010.
 - 19. US Environmental Protection Agency. *Current Non-Attainment Counties for All Criteria Pollutants*. January 31, 2015. www.epa.gov/oaqps001/greenbk/ancl.html.
 - 20. California Air Pollution Control Officers Association, 2013. *CalEEMod 2013* (Version 2.2) [Computer Program]. Available at <u>http://www.capcoa.org/caleemod/</u> (Ran November 11, 2016).
 - 21. Chris Hatch, Shore 2 Shore Wireless Inc. Environmental Noise Assessment Report. October 17, 2017
 - 22. Dr. Nathan Hallam, North Central Information Center (CHRIS Search). May 25, 2017.

- 23. USDA Soil Conservation Service. "Soil Survey of Nevada County Area, California." Soil Survey, Reissued 2016.
- 24. California Department of Conservation, Division of Mines & Geology. "Report 2000-19: A General Location Guide for Ultramafic Rocks in California -- Areas More Likely to Contain Naturally Occurring Asbestos." 2000.
- 25. California Department of Conservation, California Geological Survey. "Fault Activity Map of California. 2010. Accessed November 01, 2017: <u>http://maps.conservation.ca.gov/cgs/fam/</u>.
- 26. EBI Consulting. Radio Frequency- Electromagnetic Energy (RF-EME) Compliance Report. June 20, 2017.
- 27.
- 27. Nevada County. Land Use and Development Code Section 5, Article 13, Grading. Amended December 2016.
- 28. Nevada County. 1991. *Nevada County Master Environmental Inventory*. Prepared by Harland Bartholomew & Associates, Inc. (Sacramento, CA). Nevada County, CA.

Environmental Noise Assessment Report

Site Number: CVL01762 19406 Burning Bush Rd., Nevada City, CA 95959

October 17, 2017



Prepared for:



AT&T Mobility, LLC

5001 Executive Parkway 4W550C

San Ramon, CA 94583

Prepared by:



Shore 2 Shore Wireless Inc.

1.0 EXECUTIVE SUMMARY

AT&T proposes to locate an emergency back-up generator at an unstaffed wireless telecommunications facility at site number CVL01762. This site is located at 19406 Burning Bush Rd., Nevada City, CA 95959. This study evaluates potential noise impacts from the proposed emergency generator in vicinity to the project location. Acoustic modeling was performed to predict sound level impacts from the proposed equipment installation at the property line based on the Inverse Square Law of propagation. Based on the results of this study, S2S concludes that the emergency generator proposed for installation at CVL01762 will produce 62.67 dBA at the nearest property line when running at full capacity during power loss and during scheduled startup testing which is limited weekday mornings between 8am and 10am and lasts for 10 minutes at a time.

2.0 BACKGROUND

All sounds originate from a source. The sound energy, produced by a source, creates variations in air pressure which travel in all directions much like a wave ripples across the water. The "loudness" or intensity of a sound is a function of the sound pressure level, defined as the ratio of two pressures: the measured sound pressure from the source divided by a reference pressure (i.e. threshold of human hearing). Should level measurements are most commonly expressed using the decibel (dB) scale. The decibel scale is logarithmic to accommodate the wide range of sound intensities the human ear is capable of responding to. On this scale, the threshold of human hearing is equal to 0 dB, while levels above 140 dB can cause immediate hearing damage. For reference, a quiet rural area has an average noise level of 30 dB, with bird calls registering around 44 dB, and the average ambient noise of a suburban neighborhood at around 50 dB.

One property of the decibel scale is that the combined sound pressure level of separate sound sources is not simply the sum of the contributing sources. For example, if the sound of one source of 70 dB is added to another source of 70 dB, the total is only 73 dB, not a doubling to 140 dB. In terms of human perception of sound, a 3 dB difference is the minimum perceptible change for broadband sounds (i.e. sounds that include all frequencies). A difference of 10 dB represents a perceived halving or doubling of loudness.

3.0 Modeled Post Construction Noise Levels

The nearest property line to the proposed noise source is measured at 30' due North of the project location as referenced in Exhibit 1. The nearest neighboring residence to this location is 450' South East. The areas between the proposed location include the proposed equipment shelter, existing trees, and dense undergrowth. These obstructions are dB absorbent, which is to say, they offer additional reduction to noise levels year-round / day and night. The generator proposed is listed on the following page in Exhibit 2 and maintains an average 65 dB noise level under full load. The resultant Modeling Results are attached in Exhibit 3.

Exhibit 1



4.0 RESULTS AND CONCLUSIONS

As shown in Exhibit 3, worst-case predictive modeling indicates that the proposed emergency back-up generator will produce 62.67 dBA at the nearest property line, a property that consists of an unoccupied mountain slope on forestry land, and 39.15 dBA at the nearest residence. Significant reduction in noise beyond the modeled level can be expected due to the surrounding absorbent materials. Worst-case modeling methodologies are based on the manufacturer-provided equipment specifications and distance to the property alone and do not include external absorbent materials, however this will account for a measured drop well below the theoretical average noise level of the background environment at the neighboring residence. Manufacturer specifications include a decibel rating, which reflects the maximum decibel output the equipment will produce when running at full capacity. The Polar 15kW DC generator is assumed to run only during equipment testing (daytime only) or during a loss of power.

5.0 LIMITATIONS

This report was prepared for the use of AT&T Mobility. The conclusions provided by Shore 2 Shore are based solely on the information provided by the client. The observations in this report are valid on the date and time of the investigation. Reported noise levels contained herein are a factor of meteorological and environmental conditions present at the time of the site survey, and represent "typical" site noise levels. Measurement and calculations contained in this report should be considered accurate to within one decibel. Any additional information that becomes available concerning the site should be provided to Shore 2 Shore so that our conclusions may be revised and modified, if necessary. This report has been prepared in accordance with Standard Conditions for Engagement and authorized proposal, both of which are integral parts of this report and has been designed to address the noise contributions of the proposed emergency back-up generator at the nearest property line.

6.0 REVIEWER CERTIFICATION

I, Chris Hatch, state that:

I am a representative of Shore 2 Shore Wireless Inc. which provides acoustic survey and engineering management services to the wireless communications industry. I have reviewed the data collected during the site survey which is incorporated into this Site Compliance Report such that the information contained in this report is true and accurate to the best of my knowledge.

Sincerely, By Shore 2 Shore Wireless

Chris Hatch Engineering Manager



All Weather Enclosure for 6 kW to 15 kW Polar Power's DC Generators

Telecommunications Prime Power Solar Hybrid Power Systems Uninterrupted Power Systems





Description

In foul weather a generator is needed the most; utility power can be interrupted or the solar and wind power can diminish in capacity. This is the time when telecommunications are needed the most to support emergency services and keep families in contact with each other. Polar's unique All Weather Enclosure is designed to keep the generator operational in high winds, rain, snow, and extreme temperatures.

Screens and baffles are in place to keep the weather elements out, along with rodents and other animals, who can interfere with the operation of the generator.

Polar's All Weather Enclosure keeps the generator noise to a minimum. The noise level is dependent on the engine and power level selected. Using our electric radiator, the typical noise level for the diesel engine is 65 dBa at 7 meters.

All aluminum construction is used for corrosion resistance and long service life. We used thick aluminum sheets of 2.3 mm (0.090") for strength.

Polar's light weight enclosure facilitates transportation to the site via small vehicle, helicopter, or multiperson carry.

The aluminum enclosure accepts Polar's electric radiator or the engine belt driven fan assembly. The electric radiator reduces fuel consumption by up to 15% and noise by up to 30%.

Polar Power Inc. 249 E. Gardena Blvd Gardena, CA 90248 USA Tel: (310) 830 - 9153 sales@polarpowerinc.com







All Weather Enclosure for Polar Power's DC Generators

Features

Forklift slots serve as helicopter/crane lifting points.

The enclosure design is designed to retain spilled oil, fuel, and coolant as required at certain installation sites.

The fuel tank is optional to our All Weather Enclosure. A 54 gal. fuel tank can mounted under the enclosure. Customers have installed on site fuel tanks ranging from 20 to 1,000 gallons according to their site refueling requirements. Certain installations even prefer that the fuel tank is remote to the enclosure.

Oil drain is accessible from the outside of the enclosure depending on engine style.

The Power Terminal is accessible through the external junction box.

Fuel connections are accessible through standard 1/4" NPT fittings.

Dual Access: Operators can gain access to the DC generator either through the bolt-on side panels or the hinged top.



Propane or Natural Gas model

Dimensions 15 kW diesel



Polar Power Inc. 249 E. Gardena Blvd Gardena, CA 90248 USA Tel: (310) 830 - 9153 sales@polarpowerinc.com

www.polarpower.com



Exhibit 3																	
					Prope	rty Liı	ne Me	odelin	g Results								
SOURCE									-								
Name	М.	ID	F	Result. PV	VL		Lw/Li		Attenuation	Freq.	Direct	Height	t	(Coordinate	S	
			Day	Evening	Night	Туре	Value	Norm.						х	Y	Z	
			(dBA)	(dBA)	(dBA)			dB(A)		(Hz)		(Ft.)		(Ft.)	(Ft.)	(Ft.)	
Generac DG035 35kW Generator		S1	65.0	65.0	65.0	Lw/Li	108		20	500	1	3.00	g	0.00	0.00		0.00
Reciever																	
Name	М.	ID	Lev	el Lr	Limit.	/alue		Land	Use Height			Coordinates					
			Day	Night	Day	Night	Туре	Auto	Noise Type		(Ft.)			х	Y	Z	
Nearest Property Line		R1	62.67	62.67	0.00	0.00		x	Total			5.00	r	0.00	-30.00		0.00
Nearest Residence		R2	39.15	39.15	0.00	0.00		х	Total			5.00	r	250.00	-388.00		0.00

Radio Frequency – Electromagnetic Energy (RF-EME) Compliance Report

USID# 179030 Site No. CVL01762 Burning Bush 19406 Burning Bush Road Nevada City, Nevada 95959 Nevada County 39.312917; -120.947258 NAD83 Monotree

EBI Project No. 6217002589 June 20, 2017



Prepared for:

AT&T Mobility, LLC 1265 North Van Buren Street Anaheim, CA 92807


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- Appendix D RoofView® Graphic
- Appendix E Compliance/Signage Plan

EXECUTIVE SUMMARY

Purpose of Report

EnviroBusiness Inc. (dba EBI Consulting) has been contracted by AT&T Mobility, LLC to conduct radio frequency electromagnetic (RF-EME) modeling for AT&T Site CVL01762 located at 19406 Burning Bush Road in Nevada City, Nevada to determine RF-EME exposure levels from proposed AT&T wireless communications equipment at this site. As described in greater detail in Section 2.0 of this report, the Federal Communications Commission (FCC) has developed Maximum Permissible Exposure (MPE) Limits for general public exposures and occupational exposures. This report summarizes the results of RF-EME modeling in relation to relevant FCC RF-EME compliance standards for limiting human exposure to RF-EME fields.

This report contains a detailed summary of the RF EME analysis for the site, including the following:

- Antenna Inventory
- Site Plan with antenna locations
- Antenna inventory with relevant parameters for theoretical modeling
- Graphical representation of theoretical MPE fields based on modeling
- Graphical representation of recommended signage and/or barriers

This document addresses the compliance of AT&T's transmitting facilities independently and in relation to all collocated facilities at the site.

Statement of Compliance

A site is considered out of compliance with FCC regulations if there are areas that exceed the FCC exposure limits <u>and</u> there are no RF hazard mitigation measures in place. Any carrier which has an installation that contributes more than 5% of the applicable MPE must participate in mitigating these RF hazards.

As presented in the sections below, based on worst-case predictive modeling, there are no modeled exposures on any accessible ground walking/working surface related to ATT's proposed antennas that exceed the FCC's occupational and/or general public exposure limits at this site.

AT&T Recommended Signage/Compliance Plan

AT&T's RF Exposure: Responsibilities, Procedures & Guidelines document, dated October 28, 2014, requires that:

- I. All sites must be analyzed for RF exposure compliance;
- 2. All sites must have that analysis documented; and
- 3. All sites must have any necessary signage and barriers installed.

Site compliance recommendations have been developed based upon protocols presented in AT&T's RF Exposure: Responsibilities, Procedures & Guidelines document, dated October 28, 2014, additional guidance provided by AT&T, EBI's understanding of FCC and OSHA requirements, and common industry practice. Barrier locations have been identified (when required) based on guidance presented in AT&T's RF Exposure: Responsibilities, Procedures & Guidelines document, dated October 28, 2014. The following signage is recommended at this site:

- Green INFO I sign posted on or next to the access gate.
- Yellow Tower CAUTION sign posted at the base of the monotree climbing ladder.

The signage proposed for installation at this site complies with AT&T's RF Exposure: Responsibilities, Procedures & Guidelines document and therefore complies with FCC and OSHA requirements. Barriers are not recommended on this site. More detailed information concerning site compliance recommendations is presented in Section 5.0 and Appendix E of this report.

I.0 SITE DESCRIPTION

This project involves the proposed installation of up to nine (9) wireless telecommunication antennas on a monotree in Nevada City, Nevada. There are three Sectors (A, B, and C) proposed at the site, with three (3) proposed antennas per sector. For modeling purposes, it is assumed that there will be two (1) LTE antenna in each sector transmitting in the 700 and 1900 MHz frequency ranges, one (1) LTE antenna in each sector transmitting in the 2300 MHz frequency range, and one (1) LTE antenna in each sector transmitting in the 2300 MHz frequency range. The Sector A antennas will be oriented 90° from true north. The Sector B antennas will be oriented 330° from true north. The Sector C antennas will be oriented 210° from true north. The bottoms of the LTE 700/1900 and LTE 2300 antennas will be 116 feet above ground level and the bottoms of the LTE 700/850/2100 antennas will be 115 feet above ground level. Appendix B presents an antenna inventory for the site.

Access to this site is accomplished via a gate in the fence surrounding the monotree. Workers must be elevated to antenna level to access them, so these antennas are not accessible to the general public.

Modeling results were generated based on information from the following materials:

- RFDS CVL01762 RFDS v1.00.02 dated 3/29/2017
- CDs CVL01762 100 ZD Approval Set dated 6/14/2017

2.0 FEDERAL COMMUNICATIONS COMMISSION (FCC) REQUIREMENTS

The FCC has established Maximum Permissible Exposure (MPE) limits for human exposure to Radiofrequency Electromagnetic (RF-EME) energy fields, based on exposure limits recommended by the National Council on Radiation Protection and Measurements (NCRP) and, over a wide range of frequencies, the exposure limits developed by the Institute of Electrical and Electronics Engineers, Inc. (IEEE) and adopted by the American National Standards Institute (ANSI) to replace the 1982 ANSI guidelines. Limits for localized absorption are based on recommendations of both ANSI/IEEE and NCRP.

The FCC guidelines incorporate two separate tiers of exposure limits that are based upon occupational/controlled exposure limits (for workers) and general public/uncontrolled exposure limits for members of the general public.

Occupational/controlled exposure limits apply to situations in which persons are exposed as a consequence of their employment and in which those persons who are exposed have been made fully aware of the potential for exposure and can exercise control over their exposure. Occupational/ controlled exposure limits also apply where exposure is of a transient nature as a result of incidental passage through a location where exposure levels may be above general public/uncontrolled limits (see below), as long as the exposed person has been made fully aware of the potential for exposure and can exercise control over this or her exposure by leaving the area or by some other appropriate means.

General public/uncontrolled exposure limits apply to situations in which the general public may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Therefore, members of the general public would always be considered under this category when exposure is not employment-related, for example, in the case of a telecommunications tower that exposes persons in a nearby residential area.

Table I and Figure I (below), which are included within the FCC's OET Bulletin 65, summarize the MPE limits for RF emissions. These limits are designed to provide a substantial margin of safety. They vary by frequency to take into account the different types of equipment that may be in operation at a particular

facility and are "time-averaged" limits to reflect different durations resulting from controlled and uncontrolled exposures.

The FCC's MPEs are measured in terms of power (mW) over a unit surface area (cm²). Known as the power density, the FCC has established an occupational MPE of 5 milliwatts per square centimeter (mW/cm²) and an uncontrolled MPE of 1 mW/cm² for equipment operating in the 1900 MHz frequency range. For the AT&T equipment operating at 850 MHz, the FCC's occupational MPE is 2.83 mW/cm² and an uncontrolled MPE of 0.57 mW/cm². For the AT&T equipment operating at 700 MHz, the FCC's occupational MPE is 2.33 mW/cm² and an uncontrolled MPE of 0.47 mW/cm². These limits are considered protective of these populations.

Table I: Limits for Maximum Permissible Exposure (MPE)									
(A) Limits for Occupational/Controlled Exposure									
Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm ²)	Averaging Time [E] ² , [H] ² , or S (minutes)					
0.3-3.0	614	1.63	(100)*	6					
3.0-30	1842/f	4.89/f	(900/f ²)*	6					
30-300	61.4	0.163	1.0	6					
300-1,500			f/300	6					
1,500-100,000			5	6					
(B) Limits for Gene	eral Public/Uncontro	olled Exposure							
Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm ²)	Averaging Time [E] ² , [H] ² , or S (minutes)					
0.3-1.34	614	1.63	(100)*	30					
1.34-30	824/f	2.1 9 /f	(180/f ²)*	30					
30-300	27.5	0.073	0.2	30					
300-1,500			f/1,500	30					
1,500-100,000			1.0	30					
f = Frequency in (MHz	<u>z)</u>	•	•	-					

* Plane-wave equivalent power density



Figure 1. FCC Limits for Maximum Permissible Exposure (MPE)

Based on the above, the most restrictive thresholds for exposures of unlimited duration to RF energy for several personal wireless services are summarized below:

Personal Wireless Service	Approximate Frequency	Occupational MPE	Public MPE
Personal Communication (PCS)	I,950 MHz	5.00 mW/cm ²	1.00 mW/cm ²
Cellular Telephone	870 MHz	2.90 mW/cm ²	0.58 mW/cm ²
Specialized Mobile Radio	855 MHz	2.85 mW/cm ²	0.57 mW/cm ²
Long Term Evolution (LTE)	700 MHz	2.33 mW/cm ²	0.47 mW/cm ²
Most Restrictive Freq, Range	30-300 MHz	I.00 mW/cm ²	0.20 mW/cm ²

MPE limits are designed to provide a substantial margin of safety. 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.

Personal Communication (PCS) facilities used by AT&T in this area operate within a frequency range of 700-1900 MHz. Facilities typically consist of: 1) electronic transceivers (the radios or cabinets) connected to wired telephone lines; and 2) antennas that send the wireless signals created by the transceivers to be received by individual subscriber units (PCS telephones). Transceivers are typically connected to antennas by coaxial cables.

Because of the short wavelength of PCS services, the antennas require line-of-site paths for good propagation, and are typically installed above ground level. Antennas are constructed to concentrate energy towards the horizon, with as little energy as possible scattered towards the ground or the sky. This design, combined with the low power of PCS facilities, generally results in no possibility for exposure to approach Maximum Permissible Exposure (MPE) levels, with the exception of areas directly in front of the antennas.

3.0 AT&T RF EXPOSURE POLICY REQUIREMENTS

AT&T's RF Exposure: Responsibilities, Procedures & Guidelines document, dated October 28, 2014, requires that:

- I. All sites must be analyzed for RF exposure compliance;
- 2. All sites must have that analysis documented; and
- 3. All sites must have any necessary signage and barriers installed.

Pursuant to this guidance, worst-case predictive modeling was performed for the site. This modeling is described below in Section 4.0. Lastly, based on the modeling and survey data, EBI has produced a Compliance Plan for this site that outlines the recommended signage and barriers. The recommended Compliance Plan for this site is described in Section 5.0.

4.0 WORST-CASE PREDICTIVE MODELING

In accordance with AT&T's RF Exposure policy, EBI performed theoretical modeling using RoofView® software to estimate the worst-case power density at the site ground-level resulting from operation of the antennas. RoofView® is a widely-used predictive modeling program that has been developed by Richard Tell Associates to predict both near field and far field RF power density values for roof-top and tower telecommunications sites produced by vertical collinear antennas that are typically used in the cellular, PCS, paging and other communications services. The models utilize several operational

specifications for different types of antennas to produce a plot of spatially-averaged power densities that can be expressed as a percentage of the applicable exposure limit.

For this report, EBI utilized antenna and power data provided by AT&T and compared the resultant worst-case MPE levels to the FCC's occupational/controlled exposure limits outlined in OET Bulletin 65. The assumptions used in the modeling are based upon information provided by AT&T and information gathered from other sources. There are no other wireless carriers with equipment installed at this site.

Based on worst-case predictive modeling, there are no modeled exposures on any accessible ground walking/working surface related to ATT's proposed antennas that exceed the FCC's occupational and/or general public exposure limits at this site.

At the nearest walking/working surfaces to the AT&T antennas, the maximum power density generated by the AT&T antennas is approximately 2.70 percent of the FCC's general public limit (0.54 percent of the FCC's occupational limit). The composite exposure level from all carriers on this site is approximately 2.70 percent of the FCC's general public limit (0.54 percent of the FCC's occupational limit) at the nearest walking/working surface to each antenna.

The inputs used in the modeling are summarized in the RoofView® export file presented in Appendix C. A graphical representation of the RoofView® modeling results is presented in Appendix D. It should be noted that RoofView® is not suitable for modeling microwave dish antennas; however, these units are designed for point-to-point operations at the elevations of the installed equipment rather than ground-level coverage. Based on AT&T's RF Exposure: Responsibilities, Procedures & Guidelines document, dated October 28, 2014, microwave antennas are considered compliant if they are higher than 20 feet above any accessible walking/working surface. There are no microwaves installed at this site.

5.0 RECOMMENDED SIGNAGE/COMPLIANCE PLAN

Signs are the primary means for control of access to areas where RF exposure levels may potentially exceed the MPE. As presented in the AT&T guidance document, the signs must:

- Be posted at a conspicuous point;
- Be posted at the appropriate locations;
- Be readily visible; and
- Make the reader <u>aware</u> of the potential risks <u>prior</u> to entering the affected area.

The table below presents the signs that may be used for AT&T installations.



Based upon protocols presented in AT&T's RF Exposure: Responsibilities, Procedures & Guidelines document, dated October 28, 2014, and additional guidance provided by AT&T, the following signage is recommended on the site:

Recommended Signage:

- Green INFO I sign posted on or next to the access gate.
- Yellow Tower CAUTION sign posted at the base of the monotree climbing ladder.

No barriers are required for this site. Barriers should be constructed of weather-resistant plastic or wood fencing. Barriers may consist of railing, rope, chain, or weather-resistant plastic if no other types are permitted or are feasible. Painted stripes should only be used as a last resort and only in regions where there is little chance of snowfall. If painted stripes are selected as barriers, it is recommended that the stripes and signage be illuminated. The signage and any barriers are graphically represented in the Signage Plan presented in Appendix E.

6.0 SUMMARY AND CONCLUSIONS

EBI has prepared this Radiofrequency Emissions Compliance Report for the proposed AT&T telecommunications equipment at the site located at 19406 Burning Bush Road in Nevada City, Nevada.

EBI has conducted theoretical modeling to estimate the worst-case power density from AT&T antennas to document potential MPE levels at this location and ensure that site control measures are adequate to meet FCC and OSHA requirements, as well as AT&T's corporate RF safety policies. As presented in the preceding sections, based on worst-case predictive modeling, there are no modeled exposures on any accessible ground walking/working surface related to ATT's proposed antennas that exceed the FCC's occupational and/or general public exposure limits at this site.

Signage is recommended at the site as presented in Section 5.0 and Appendix E. Posting of the signage brings the site into compliance with FCC rules and regulations and AT&T's corporate RF safety policies.

7.0 LIMITATIONS

This report was prepared for the use of AT&T Mobility, LLC to meet requirements outlined in AT&T's corporate RF safety guidelines. It was performed in accordance with generally accepted practices of other consultants undertaking similar studies at the same time and in the same locale under like circumstances. The conclusions provided by EBI are based solely on the information provided by the client. The observations in this report are valid on the date of the investigation. Any additional information that becomes available concerning the site should be provided to EBI so that our conclusions may be revised and modified, if necessary. This report has been prepared in accordance with Standard Conditions for Engagement and authorized proposal, both of which are integral parts of this report. No other warranty, expressed or implied, is made.

Appendix A

Certifications

Reviewed and Approved by:



Note that EBI's scope of work is limited to an evaluation of the Radio Frequency – Electromagnetic Energy (RF-EME) field generated by the antennas and broadcast equipment noted in this report. The engineering and design of the building and related structures, as well as the impact of the antennas and broadcast equipment on the structural integrity of the building, are specifically excluded from EBI's scope of work.

Preparer Certification

I, David Keirstead, state that:

- I am an employee of EnviroBusiness Inc. (d/b/a EBI Consulting), which provides RF-EME safety and compliance services to the wireless communications industry.
- I have successfully completed RF-EME safety training, and I am aware of the potential hazards from RF-EME and would be classified "occupational" under the FCC regulations.
- I am familiar with the FCC rules and regulations as well as OSHA regulations both in general and as they apply to RF-EME exposure.
- I have been trained in on the procedures outlined in AT&T's RF Exposure: Responsibilities, Procedures & Guidelines document (dated October 28, 2014) and on RF-EME modeling using RoofView® modeling software.
- I have reviewed the data provided by the client and incorporated it into this Site Compliance Report such that the information contained in this report is true and accurate to the best of my knowledge.

Doved Keinstead

Appendix B

Antenna Inventory

RF-EME Compliance Report EBI Project No. 6217002589

Antenna		Antenna	TX Freq	ERP	Gain	Antenna	Azimuth	Length	Horizontal Beamwidth			
Number	Operator	Туре	(MHz)	(Watts)	(dBd)	Model	(deg.)	(feet)	(Degrees)	Χ	Y	Z
ΑΤΤ ΑΙ	AT&T	Panel	LTE 700	394.59	8.85	Quintel QS6656-3	90	6.0	69	40	32	116.0
ΑΤΤ ΑΙ	AT&T	Panel	LTE 1900	3936.59	14.65	Quintel QS6656-3	90	6.0	70	40	32	116.0
ATT A2	AT&T	Panel	LTE 2300	4688.13	17.45	CCI HBSA-M65R- KU-H6	90	5.7	28	40	36	116.2
ATT A3	AT&T	Panel	LTE 700	654.86	11.05	Rosenberger MB- A64O9X65V-01	90	8.0	65	40	40	115.0
ATT A3	AT&T	Panel	LTE 850	1413.13	11.45	Rosenberger MB- A64O9X65V-01	90	8.0	65	40	40	115.0
ATT A3	AT&T	Panel	LTE 2100	5690.10	16.25	Rosenberger MB- A64O9X65V-01	90	8.0	65	40	40	115.0
ATT BI	AT&T	Panel	LTE 700	394.59	8.85	Quintel QS6656-3	330	6.0	69	37	42	116.0
ATT BI	AT&T	Panel	LTE 1900	3936.59	14.65	Quintel QS6656-3	330	6.0	70	37	42	116.0
ATT B2	AT&T	Panel	LTE 2300	9376.27	17.45	CCI HBSA-M65R- KU-H6	330	5.7	28	33	40	116.2
ATT B3	AT&T	Panel	LTE 700	654.86	11.05	Rosenberger MB- A64O9X65V-01	330	8.0	65	30	38	115.0
ATT B3	AT&T	Panel	LTE 850	1413.13	11.45	Rosenberger MB- A64O9X65V-01	330	8.0	65	30	38	115.0
ATT B3	AT&T	Panel	LTE 2100	5690.10	16.25	Rosenberger MB- A64O9X65V-01	330	8.0	65	30	38	115.0
ATT CI	AT&T	Panel	LTE 700	394.59	8.85	Quintel QS6656-3	210	6.0	69	30	34	116.0
ATT CI	AT&T	Panel	LTE 1900	3936.59	14.65	Quintel QS6656-3	210	6.0	70	30	34	116.0
ATT C2	AT&T	Panel	LTE 2300	9376.27	17.45	CCI HBSA-M65R- KU-H6	210	5.7	28	33	32	116.2
ATT C3	AT&T	Panel	LTE 700	654.86	11.05	Rosenberger MB- A64O9X65V-01	210	8.0	65	37	30	115.0
ATT C3	AT&T	Panel	LTE 850	1413.13	11.45	Rosenberger MB- A64O9X65V-01	210	8.0	65	37	30	115.0
ATT C3	AT&T	Panel	LTE 2100	5690.10	16.25	Rosenberger MB- A64O9X65V-01	210	8.0	65	37	30	115.0

I. Note there are only 3 AT&T antennas per sector at this site. For clarity, the different frequencies for each antenna are entered on separate lines.

Appendix C Roofview® Export File

StartMap	Definition																			
Roof Max	NRoof Max	« УМар Мах Ү М	lap Max	XY Offset	X Offs	et Number	of envelope													
12	0 12	0 120	120)	10	10	1 \$AE\$81:\$	D \$AE\$81:\$	\$DZ\$200											
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Standard	Method	Uptime S	cale Facto	o Low Thr	Low C	olor Mid Thr	Mid Colo	r Hi Thr	Hi Color	Over Cold	or Ap Ht Mult A	p Ht Method								
	4	2 1	1	1	00	1 50	00	4 500	00	2	3 1.5	1								
StartAnte	nnaData	It is advisable	e to provi	ide an ID	(ant 1) fo	r all antennas														
		(MHz) T	rans	Trans	Coax	Coax	Other	Input	Calc		(ft) (ft)	(f	t)		(ft)	dBd	BWdth	Uptime	ON
ID	Name	Freq P	ower	Count	Len	Туре	Loss	Power	Power	Mtg	Model X	Y	Z	: T	ype	Aper	Gain	Pt Dir	Profile	flag
ATTAL	LIE	700	30)	2	10 1/2 LDF	0.5			Quintel	Q\$6656-3	40	32	116			6	8.85 69;90		ON•
ATTAL	LIE	1900	40		4	10 1/2 LDF	0.5			Quintei	Q56656-3	40	32	116			6 1	4.65 70;90		ON•
ATTA2	LIE	2300	25	•	4	10 1/2 LDF	0.5			December	HBSA-IVI65	40	30	110.1025		5.67	0 1	1.05 65:00		ON•
ATT A3	LIE	700	50	, 1	2	10 1/2 LDF	0.5			Rosenber	rgiMB-A64O9	40	40	115			8 1	1 45 65:90		
ATT A3	ITE	2100	40	, 1	1	10 1/2 LDF	0.5			Rosenber	rg/MB-A64O9	40	40	115			8 1	6 25 65:90		ON•
ATT B1	ITE	700	30	, 1	2	10 1/2 LDF	0.5			Quintel	0\$6656-3	37	40	115			6	8 85 69:330		ON•
ATT B1	LTF	1900	40	,	4	10 1/2 LDF	0.5			Quintel	056656-3	37	42	116			6 1	4.65 70:330		ON•
ATT B2	LTE	2300	25		8	10 1/2 LDF	0.5			CCI	HBSA-M65	33	40	116.1625		5.67	5 1	7.45 28:330		ON•
ATT B3	LTE	700	30)	2	10 1/2 LDF	0.5			Rosenber	rg(MB-A64O9	30	38	115			8 1	1.05 65;330		ON•
ATT B3	LTE	850	60)	2	10 1/2 LDF	0.5			Rosenber	rg(MB-A64O9	30	38	115			8 1	1.45 65;330		ON•
ATT B3	LTE	2100	40)	4	10 1/2 LDF	0.5			Rosenber	rg(MB-A64O9	30	38	115			8 1	6.25 65;330		ON•
ATT C1	LTE	700	30)	2	10 1/2 LDF	0.5			Quintel	Q\$6656-3	30	34	116			6	8.85 69;210		ON•
ATT C1	LTE	1900	40)	4	10 1/2 LDF	0.5			Quintel	Q\$6656-3	30	34	116			6 1	4.65 70;210		ON•
ATT C2	LTE	2300	25	;	8	10 1/2 LDF	0.5			CCI	HBSA-M65	33	32	116.1625		5.67	5 1	7.45 28;210		ON•
ATT C3	LTE	700	30)	2	10 1/2 LDF	0.5			Rosenber	rg MB-A64O9	37	30	115			8 1	1.05 65;210		ON•
ATT C3	LTE	850	60)	2	10 1/2 LDF	0.5			Rosenber	rg(MB-A64O9	37	30	115			8 1	1.45 65;210		ON•
ATT C3	LTE	2100	40)	4	10 1/2 LDF	0.5			Rosenber	rg(MB-A6409	37	30	115			8 1	.6.25 65;210		ON•
StartSym	oolData																			
Sym	Map Mar	keRoof X R	oot Y	Map Lat	bel Descr	iption (notes i	for this table	only)												
Sym		5	35	AC Unit	Samp	ie symbols														
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List Of Area \$AE\$81:\$D

Appendix D Roofview® Graphics





Appendix E Compliance/Signage Plan



AT&T Antennas

Report Date: June 20, 2017



J&J

PROJECT DESCRIPTION

CONSTRUCTION OF AN UNMANNED TELECOMMUNICATIONS FACILITY.

- INSTALL POWER / TELCO / FIBER TO SITE LOCATION
- INSTALL 80" x 80" PRE-MANUFACTURED WALK IN CABINET(WIC) INSTALL NEW GPS UNIT
- INSTALL 130' MONO-PINE
- INSTALL (3) ANTENNAS PER SECTOR, FOR A TOTAL OF (9)
- INSTALL (18) RRH 6 INSTALL (3) SURGE SUPPRESSORS
- INSTALL (3) FIBER TRUNK, (8) DC CABLES INSTALLED INSIDE TOWER
- INSTALL 6'-0" TALL REDWOOD SITE FENCING
- 10. INSTALL 15kw POLAR DIESEL GENERATOR WITH 54 GALLON TANK

***NO GRADING REQUIRED**

CODE COMPLIANCE

ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES.

- 1) 2016 CALIFORNIA ADMINISTRATIVE CODE, CHAPTER 10, PART 1, TITLE 24 CODE OF REGULATIONS
- 2) 2016 CALIFORNIA BUILDING CODE (CBC) WITH CALIFORNIA AMENDMENTS, BASED ON THE 2015 IBC (PART 2, VOL 1-2)
- 3) 2016 CALIFORNIA RESIDENTIAL CODE (CRC) WITH APPENDIX H, PATIO COVERS, BASED ON THE 2015 IRC (PART 2.5)
- 4) 2016 CALIFORNIA GREEN BUILDINGS STANDARDS CODE (CALGREEN) (PART 11) (AFFECTED ENERGY PROVISIONS ONLY
- 5) 2016 CALIFORNIA FIRE CODE (CFC), BASED ON THE 2015 IFC, WITH CALIFORNIA AMENDMENTS (PART 9)
- 6) 2016 CALIFORNIA MECHANICAL CODE (CMC), BASED ON THE 2015 UMC (PART 4)
- 7) 2016 CALIFORNIA PLUMBING CODE (CPC), BASED ON THE 2015 UPC (PART 5)
- 8) 2016 CALIFORNIA ELECTRICAL CODE (CEC) WITH CALIFORNIA AMENDMENTS, BASED ON THE 2015 NEC (PART 3)
- 9) 2016 CALIFORNIA ENERGY CODE (CEC)
- 10) ANSI / EIA-TIA-222-H
- 11) 2015 NFPA 101, LIFE SAFETY CODE
- 12) 2016 NFPA 72, NATIONAL FIRE ALARM CODE
- 13) 2016 NFPA 13, FIRE SPRINKLER CODE

OCCUPANCY AND CONSTRUCTION TYPE

OCCUPANCY : U (UNMANNED)

- CONSTRUCTION TYPE: V-B
- DISABLED ACCESS REQUIREMENTS

FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION, ACCESSIBILITY ACCESS IS NOT REQUIRED, IN ACCORDANCE WITH CALIFORNIA BUILDING CODE, CODE OF REGULATIONS, TITLE 24, PART 2, VOLUME 1, CHAPTER 11B, DIVISION 2, SECTION 11B-203.5

PROJECT INFORMATION

Property Information: Site Name: Blue Tent - BURNING BUSH

- Site Number: CVL01762
- Search Ring: Blue Tent
- FA#: 13787692
- Site Address: 19406 Burning Bush Road Nevada City, CA 95959
- A.P.N. Number: 34-090-03
- Current Use:
- Proposed Use: TELECOMMUNICATIONS FACILITY
- Jurisdiction: COUNTY OF NEVADA
- Latitude: N 39° 18' 46.50" (39.312917) Longitude: W 120° 56' 50.13" (-120.947258)
- Ground Elevation: 3,633.5 FT

VICINITY MAP



SPECIAL INSPECTIONS

P.O. BOX 344

Power Agency: PG&E CORPORATION 1 MARKET STREET, SPEAR TOWER SAN FRANCISCO, CA 94105-1126 ph: (800) 743-5000

SITE NUMBER: CVL01762 SITE NAME: BLUE TENT - BURNING BUSH

19406 BURNING BUSH ROAD NEVADA CITY, CA 95959 **JURISDICTION: COUNTY OF NEVADA**

SITE TYPE: MONO-PINE / WIC

Property Owner: PAMELA SWARTZ NEVADA CITY, CA 95959-0344

Telephone Agency: AT&T CALIFORNIA **525 MARKET STREET** SAN FRANCISCO, CA 94105 ph: (800) 310-2355

PROJECT

PROJECT TEAM		SHEET INDEX			
Applicant / Lessee:Architect:AT&T MOBILITYBORGES ARCHITE5001 EXECUTIVE PARKWAY, 4W550H1478 STONE POINTSAN RAMON, CA 94583ROSEVILLE, CA 956contact: BRADLEY HEADcontact: BRIAN K. Wemail: bh497a@att.comemail: brian@borgesoffice ph: (925) 963-7370ph: (916) 782-7200	CTURAL GROUP, INC. ⁻ DRIVE, SUITE 350 661 /INSLOW sarch.com	T-1 TITLE SHEET GN-2 SITE SIGNAGE	C C		
PROPERTY DEVELOPMENT:SHORE 2 SHORE WIRELESS INC.3553 S. COLVIN DRIVELOOMIS, CA 95650contact: CARL JONESemail: carl@s2swireless.comcell: (916) 798-2275Construction Manager:SAC Wireless1401 Willow Pass, Suite 350Concord, CA 94519contact: WARREN BELLISemail: warren.bellis@sacw.comoffice ph: (510) 821-1520	neer: RUCTURAL ENGINEER /D 528 1EEL com	 LS-1 SITE SURVEY A-1.1 OVERALL SITE PLAN A-1.2 ENLARGED SITE & DRAINAGE PLAN A-2 ENLARGED EQUIPMENT PLAN A-3 ENLARGED ANTENNA PLAN & DETAILS A-4.1 ELEVATIONS A-4.2 ELEVATIONS A-5.1 EMERGENCY BACKUP GENERATOR SPECS A-5.2 PROPOSED GENERATOR FOUNDATION DETAILS E-2 POWER SINGLE LINE DIAGRAM & PANEL SCHEDULE 			
 DIRECTIONS FROM AT&T'S OFFICE AT 2600 CAMINO RAMON, SAN R GET ON I-680 N FROM CAMINO RAMON AND BOLLINGER CANYON RD HEAD SOUTHEAST ON CAMINO RAMON TOWARD BISHOP DR CONTINUE STRAIGHT TO STAY ON CAMINO RAMON TURN RIGHT ONTO BOLLINGER CANYON RD USE THE RIGHT 2 LANES TO MERGE ONTO I-680 N VIA THE RAMP TO SACE FOLLOW I-680 N AND I-80 E TO AUBURN. TAKE EXIT 119B FROM I-80 E MERGE ONTO I-680 N KEEP LEFT AT THE FORK TO STAY ON I-680 N KEEP LEFT AT THE FORK TO STAY ON I-680 N KEEP LEFT AT THE FORK TO STAY ON I-680 N KEEP LEFT AT THE FORK TO STAY ON I-680 N KEEP LEFT AT THE FORK TO STAY ON I-680 N KEEP LEFT AT THE FORK TO STAY ON I-680 N KEEP LEFT AT THE FORK TO STAY ON I-80 E KEEP LEFT AT THE FORK TO STAY ON I-80 E KEEP LEFT AT THE FORK TO STAY ON I-80 E KEEP LEFT AT THE FORK TO STAY ON I-80 E, FOLLOW SIGNS FOR RENO TAKE EXIT 119B FOR CA-49 TOWARD GRASS VALLEY/PLACERVILLE FOLLOW CA-49 N AND CA-20 E/STATE HWY 20 E TO BURNING BUSH RD IN USE THE LEFT 2 LANES TO TURN LEFT ONTO CA-193 W/CA-49 N/GRASS V/L CONTINUE ONTO CONSERVATION RD TURN RIGHT ONTO ROYAL PLUM WAY CONSERVATION RD TURNS LEFT AND BECOMES ROCK CREEK RD TURN LEFT ONTO COOPER RD TURN RIGHT ONTO ROYAL PLUM WAY TURN RIGHT ONTO BURNING BUSH RD 	RAMON, CA RAMENTO NEVADA COUNTY ALLEY HWY				
APPROVALS		GENERAL CONTRACTOR NOTES	[
APPROVED BY: II &T: NDOR: E.: ASING / LANDLORD: NING: NING: NSTRUCTION: NING:	NITIALS: DATE:	DO NOT SCALE DRAWINGS THESE DRAWINGS ARE FORMATTED TO BE FULL SIZE AT 24" x 36". CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOBSITE AND SHALL IMMEDIATELY NOTIFY THE ARCHITECT/ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR MATERIAL ORDERS OR BE RESPONSIBLE FOR THE SAME.	GALERT		

- HEAD SOUTHEAST ON CAMINO RAMON TOWAR
- CONTINUE STRAIGHT TO STAY ON CAMINO RAM TURN RIGHT ONTO BOLLINGER CANYON RD
- USE THE RIGHT 2 LANES TO MERGE ONTO I-680
- FOLLOW I-680 N AND I-80 E TO AUBURN. TAKE E
- MERGE ONTO I-680 N KEEP LEFT TO STAY ON I-680 N
- KEEP LEFT AT THE FORK TO STAY ON I-680 N
- 10. KEEP LEFT AT THE FORK TO CONTINUE ON I-68 11. USE ANY LANE TO TAKE EXIT 71A TOWARD I-80
- 12. MERGE ONTO I-80 E
- 13. KEEP LEFT AT THE FORK TO STAY ON I-80 E 14. KEEP RIGHT AT THE FORK TO STAY ON I-80 E,
- 15. TAKE EXIT 119B FOR CA-49 TOWARD GRASS VA
- 16. FOLLOW CA-49 N AND CA-20 E/STATE HWY 20 E 17. USE THE LEFT 2 LANES TO TURN LEFT ONTO CA
- 18. CONTINUE TO FOLLOW CA-49 N
- 19. CONTINUE ONTO CA-20 E/STATE HWY 20 E
- 20. TURN LEFT ONTO CONSERVATION RD 21. TURN RIGHT TO STAY ON CONSERVATION RD
- 22. CONSERVATION RD TURNS LEFT AND BECOME
- 23. TURN LEFT ONTO COOPER RD 24. TURN LEFT TO STAY ON COOPER RD
- 25. TURN RIGHT ONTO ROYAL PLUM WAY
- 26. TURN RIGHT ONTO BURNING BUSH RD 27. DESTINATION WILL BE ON THE LEFT
- 28. 19406 BURNING BUSH RD

APPRO

APPROVED BY:	INITIALS:	DATE:
-&T:		
NDOR:		
F.:		
ASING / LANDLORD:		
DNING:		
DNSTRUCTION:		
OWER / TELCO:		
G&E:		





0/13/2017 4:07:17 PM File NameT:\2015\T-15515_Shore 2 Shore_AT&T NSB\CVL01762-18\CVL01762 Blue Tent\Sheets\GN-2 Site Signage.dwg Plotted By:Brendan M



CAUTION AND WARNING SIGN

rename me to this view <u>"dwg"</u> name

SIGNAGE AND STRIPING INFORMATION

- .. THE FOLLOWING INFORMATION IS A GUIDELINE w/ RESPECT TO PREVAILING STANDARDS LIMITING HUMAN EXPOSURE TO RADIO FREQUENCY ENERGY AND SHOULD BE USED AS SUCH. IF THE SITE'S EMF REPORT OR ANY LOCAL, STATE OR FEDERAL GUIDELINES OR REGULATIONS SHOULD BE IN CONFLICT w/ ANY PART OF THESE NOTES OR PLANS, THE MORE RESTRICTIVE GUIDELINE OR REGULATION SHALL BE FOLLOWED AND OVERRIDE THE LESSER.
- THE PUBLIC LIMIT OF RF EXPOSURE ALLOWED BY AT&T IS 1mWcm*2 AND THE OCCUPATIONAL LIMIT OF RF EXPOSURE ALLOWED BY AT&T IS 5mWcm*2
 IF THE BOTTOM OF THE ANTENNA IS MOUNTED (8) EIGHT FEET ABOVE THE
- GROUND OR WORKING PLATFORM LINE OF THE PERSONAL COMMUNICATION SYSTEM (PCS) AND DOES NOT EXCEED THE PUBLIC LIMIT OF RF EXPOSURE LIMIT THEN NO STRIPING OR BARRICADES SHOULD BE NEEDED.
- 4. IF THE PUBLIC LIMIT OF RF EXPOSURE ON THE SITE IS EXCEEDED AND THE AREA IS PUBLICLY ACCESSIBLE (e.g. ROOF ACCESS DOOR THAT CANNOT BE LOCKED, OR FIRE EGRESS) THEN BOTH BARRICADES AND STRIPING SHALL BE PLACED AROUND THE ANTENNAS. THE EXACT EXTENT OF THE BARRICADES AND STRIPING SHALL BE DETERMINED BY THE EMF REPORT FOR THE SITE DONE BEFORE OR SHORTLY AFTER COMPLETION OF SITE CONSTRUCTION. USE THE PLANS AS A GUIDELINE FOR PLACEMENT OF SUCH BARRICADES AND STRIPING.
- 5. IF THE PUBLIC LIMIT OF RF EXPOSURE ON THE SITE IS EXCEEDED AND THE AREA IS PUBLICLY ACCESSIBLE (e.g. ROOF ACCESS DOOR THAT CANNOT BE LOCKED, OR FIRE EGRESS) THEN BOTH BARRICADES AND STRIPING SHALL BE PLACED AROUND THE ANTENNAS. THE EXACT EXTENT OF THE BARRICADES AND STRIPING SHALL BE PLACED AROUND THE ANTENNAS. THE EXACT EXTENT OF THE BARRICADES & STRIPING SHALL BE DETERMINED BY THE EMF REPORT FOR THE SITE DONE BEFORE OR SHORTLY AFTER COMPLETION OF SITE CONSTRUCTION. USE THE PLANS AS A GUIDELINE FOR PLACEMENT OF SUCH BARRICADES AND STRIPING.
- 6. ALL TRANSMIT ANTENNAS REQUIRE A THREE LANGUAGE WARNING SIGN WRITTEN IN ENGLISH, SPANISH, AND CHINESE. THIS SIGN SHALL BE PROVIDED TO THE CONTRACTOR Y THE AT&T CONSTRUCTION PROJECT MANAGER AT THE TIME OF CONSTRUCTION. THE LARGER SIGN SHALL BE PLACED IN PLAIN SIGHT AT ALL ROOF ACCESS LOCATIONS AND ON ALL BARRICADES. THE SMALLER SIGN SHALL BE PLACED ON THE ANTENNA ENCLOSURES IN A MANNER THAT IS EASILY SEEN BY ANY PERSON ON THE ROOF. WARNING SIGNS SHALL COMPLY W/ ANSI C95.2 COLOR, SYMBOL, AND CONTENT CONVENTIONS. ALL SIGNS SHALL HAVE AT&T'S NAME AND THE COMPANY CONTACT INFORMATION (e.g. TELEPHONE NUMBER) TO ARRANGE FOR ACCESS TO THE RESTRICTED AREAS. THIS TELEPHONE NUMBER SHALL BE PROVIDED TO THE CONTRACTOR BY THE AT&T CONSTRUCTION PROJECT MANAGER AT THE TIME OF CONSTRUCTION.
- 7. PHOTOS OF ALL STRIPING, BARRICADES & SIGNAGE SHALL BE PART OF THE CONTRACTORS CLOSE OUT PACKAGE & SHALL BE TURNED INTO THE AT&T CONSTRUCTION PACKAGE & SHALL BE TURNED INTO THE AT&T CONSTRUCTION PROJECT MANAGER AT THE END OF CONSTRUCTION. STRIPING SHALL BE DONE w/ FADE RESISTANT YELLOW SAFETY PAINT IN A CROSS-HATCH PATTERN AS DETAILED BY THE CONSTRUCTION DRAWINGS. ALL BARRICADES SHALL BE MADE OF AN RF FRIENDLY MATERIAL SO AS NOT TO BLOCK OR INTERFERE w/ THE OPERATION OF THE ANTENNAS. BARRICADES SHALL BE PAINTED w/ FADE RESTRAINT YELLOW SAFETY PAINT. THE CONTRACTOR SHALL PROVIDE ALL RF FRIENDLY BARRICADES NEEDED, & SHALL PROVIDE THE AT&T CONSTRUCTION PROJECT MANAGER w/ A DETAILED SHOP DRAWING OF EACH BARRICADE. UPON CONSTRUCTION COMPLETION.

GENERAL NOTES

INTS



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2. ALL BOUNDARY INFORMATION SHOWN HEREON HAS BEEN COMPILED FROM RECORD DATA. THIS IS NOT A

PREPARED BY FIDELITY NATIONAL TITLE INSURANCE COMPANY HAS BEEN PROVIDED, ANY EASEMENTS OR OTHER TITLE RELATED ISSUES NOT INCLUDED IN SAID REPORT WHICH ARE PART OF THE TITLE PROCESS MAY OR MAY NOT HAVE BEEN ADDRESSED, TIMOTHY F. SCHAD, L.S. ACCEPTS NO RESPONSIBILITY OR LIABILITY FOR BOUNDARY OR TITLE ITEMS ADDRESSED HEREON. THIS IS

DATE OF SURVEY:	MARCH 2, 2017
SITE NUMBER / NA	ME: CVL01762 / BL
TYPE:	PROPOSED RA
SITE ADDRESS:	19406 BURNING
	NEVADA CITY, C

<u>LEGEND</u>

	PROPERTY LINE
·	FLOW LINE
TEL TEL	TELEPHONE LINE
—— E —— E ——	ELECTRIC LINE
——— E&T ——— E&T ———	ELEC. & TEL. LINE
x x	FENCE
	ADJOINER
OG	ORIGINAL GROUND
TC	TOP OF CURB
TW	TOP OF WALL
BW	BOTTOM OF WALL
TBW	TOP BACK OF WALK
\bigcirc	GROUND WELL
C/L	CENTERLINE

LEGAL DESCRIPTION

PARENT PARCEL

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE UNINCORPORATED AREA IN COUNTY OF NEVADA, STATE OF CALIFORNIA AND IS DESCRIBED AS FOLLOWS:

A PORTION OF LOT 5 OF SECTION 27, TOWNSHIP 17 NORTH, RANGE 9 EAST, M.D.B.& M. DESCRIBED AS FOLLOWS: BEGINNING AT A POINT ON THE LINE COMMON TO THE AFORESAID

LOTS AND THE LAST CHANCE PLACER CLAIM FROM WHICH THE SOUTHEAST CORNER OF SAID LOT5 BEARS SOUTH 1356.98 FEET AND SOUTH 87° 53' 30" EAST 1230.61 FEET; THENCE FROM SAID POINT OF BEGINNING AND ALONG THE AFOREDESCRIBED COMMON LINE NORTH 83° 39' 20" EAST 288.00 FEET TO THE SOUTHEAST CORNER OF THE LAST CHANCE PLACER CLAIM; THENCE ALONG THE LINE COMMON TO SAID LOT 5 AND THE GREEN CASTLE MINING CLAIM NORTH 70° 30' 30" EAST 415 08 FEET TO A POINT FROM WHICH THE NORTHEAST CORNER OF THE AFOREDESCRIBED LOT 5 BEARS NORTH 70° 30' 30" EAST 585.00 FEET; THENCE LEAVING THE LAST DESCRIBED COMMON LINE SOUTH 755.83 FEET; THENCE SOUTH 83° 04' 30' WEST 682.52 FEET; THENCE NORTH 667.79 FEET TO THE POINT OF BEGINNING.

NOTE: AS AN APPURTENANT TO THE LAND HEREIN DESCRIBED, THE FOLLOWING SHOULD BE INCLUDED ON THE DEED OR DEED OF TRUST TO BE RECORDED. THIS APPURTENANCE IS SHOWN FOR INFORMATION PURPOSES ONLY AND IS NOT TO BE CONSTRUED AS PART OF THIS REPORT. IN THE EVENT TITLE INSURANCE IS REQUESTED, AN EXAMINATION WILL BE MADE TO DETERMINE THE INSURABILITY OF SAID APPURTENANCES AND EXTRA PARCEL FEES WILL BE CHARGED. UNLESS REQUEST IS MADE IN WRITING AND THE INSURABILITY IS DETERMINED, SAID APPURTENANCES WILL NOT APPEAR ON ANY POLICY OF TITLE INSURANCE.

TOGETHER WITH AN EASEMENT OVER THE EXISTING ROADWAY FOR INGRESS AND EGRESS PURPOSES 60.00 FEET IN WIDTH LOCATED IN THE NORTHEAST 1/4 OF SECTION 27, TOWNSHIP 17 NORTH, RANGE 9 EAST, M.D.B.& M., THE CENTERLINE OF WHICH IS DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT IN THE CENTERLINE OF COOPER ROAD (COUNTY ROAD 417) FROM WHICH POINT THE EAST QUARTER CORNER OF THE AFOREDESCRIBED SECTION 27 BEARS SOUTH 55° 49' 40" EAST 45.74 FEET; THENCE FROM SAID POINT OF BEGINNING THE FOLLOWING 10 CONSECUTIVE COURSES AND DISTANCES ALONG THE EXISTING ROAD CENTERLINE: NORTH 64° 51' 20" WEST 324.78 FEET, NORTH 44° 11' 30" WEST 100.42 FEET, NORTH 24° 33' 20" WEST 127.53 FEET, NORTH 14° 02' 10" WEST 239.14 FEET, NORTH 29° 11' 50" WEST 80.77 FEET, NORTH 55° 18' 20" WEST 83.43 FEET, SOUTH 63° 56' 50" WEST 250.45 FEET, SOUTH 84° 40' 00" WEST 75.33 FEET, NORTH 74° 53' 30" WEST 207.16 FEET, NORTH 50° 04' 00" EAST 198.66 FEET TO THE SOUTH LINE OF THE ABOVE DESCRIBED PARCEL AND THE POINT OF ENDING,

34-090-03

LEASE AREA

COMMENCING AT THE NORTHEAST CORNER OF THE PREVIOUSLY DESCRIBEDD PARENT PARCEL; THENCE SOUTH 24° 51' 21" WEST, 45.98 FEET TO THE TRUE POINT OF BEGINNING. THENCE THE FOLLOWING FOUR (4) COURSES:

1: SOUTH 0° 00' 00" EAST, 30.00 FEET, 2: SOUTH 90° 00' 00" WEST, 30.00 FEET, 3: NORTH 0° 00' 00" EAST, 30.00 FEET, 4: SOUTH 90° 00' 00" EAST, 30.00 FEET,

TO THE TRUE POINT OF BEGINNING AND ENCOMPASSING 900.0 SQUARE FEET, MORE OR LESS.

TOGETHER WITH THE RIGHTS OF INGRESS AND EGRESS BETWEEN THE PREVIOUSLY DESCRIBED LEASE AREA AND THE PUBLIC RIGHT OF WAY AND THE RIGHT TO INSTALL AND MAINTAIN UTILITIES NECESSARY FOR THE OPERATION OF THE FACILITY TO BE INSTALLED WITHIN THE PREVIOUSLY DESCRIBED LEASE AREA.

NOTE:

- 1. DRIVEWAYS WILL MEET DRIVEWAY STANDARD TITLE 14, SECTION 1273.10, 1273.02, AND 1273.05
- 2. DRIVEWAYS WILL MEET LOAD REQUIREMENT OF 75,000LBS
- 3. DRIVEWAYS WILL BE 10' MIN WITH 1 FOOT SHOULDER FOR UP TO 16% GRADES, 12' MIN WITH 1 FOOT SHOULDERS FOR 16-20% GRADES.
- 4. ANY ROAD GRADE ABOVE 16% WILL BE DESIGNED AND CERTIFIED BY A REGISTERED CIVIL ENGINEER AND MUST HAVE AN ALL-WEATHER SURFACE.
- 5. ANY GRADES EXCEEDING 20% WILL REQUIRE PETITION FOR APPROVAL.
- 6. NO PART OF THE DRIVEWAY WILL HAVE A HORIZONTAL INSIDE RADIUS OF CURVATURE LESS THAN 50' AND ADDITIONAL SURFACE WIDTH OF 4' WILL BE ADDED TO CURVES OF 50-100' RADIUS, 2' ADDED TO THOSE FROM 100-200'.
- 7. VEGETATION MANAGEMENT ALONG ROYAL PLUM WAY AND BURNING BUSH ROAD SHALL BE PERFORMED ON 10' ON EITHER SIDE OF THE ROAD
- 8. FIRE EXTINGUISHER WILL BE MOUNTED IN AN ALL WEATHER SHELTER
- 9. (E) TREES AND OTEHR SCREENING VEGETATION IN THE VICINITY OF THE FACILITY THAT ARE NOT REMOVED DURING CONSTRUCTION SHALL BE PROTECTED FROM DAMAGE DURING CONSTRUTION

NORTH

40'

20'

1"=40'-0"

HATCH LEGEND CONCRETE GRAVEL W/ WEED BARRIER COMPACT ROAD BASE NATIVE GROUND (P) AT&T LEASE AREA 30' X 30' (900 SQFT) (P) POTENTIAL FUTURE LEASE AREA -13 ENLARGED EQUIPMENT LAYOUT

- (14) (P) SHELTER ACCESS DOOR
- (13) (P) DOWNSHIELDED TECH LIGHT
- (12) (P) CIENA CABINET
- (1) (P) GPS UNIT
- (1) (P) 200A CAM-LOK
- (P) 200 AMP POWER METER
- (P) 42 CIRCUIT LOAD CENTER WITH MANUAL & AUTOMATIC TRANSFER SWITCH
- 7 (P) TELCO CAN
- 6 (P) 12'x20' TECH PARKING
- 5 (P) CABLE PORT
- (4) (P) POWERPLANT RACK w/ (2) STRINGS OF BATTERIES
- (P) TELCO RACK
- 2 (P) LTE RACK
- **KEYNOTES** () (P) AT&T 80"x80" WALK-IN CABINET(WIC) ON PIER FOUNDATION

	(27) (P) TREE DRIP LINE (28) (2) (E) 36" CEDAR TREE, HT. +/- 100)'	5001 Executive Parkway	:&t
			Architect: Architect: Boorgesarch.com 1478 STONE POINT DRIVE, SU ROSEVILLE CA 95661 916 782 7200 TEL	94583 ROUP S
			AT&T SITE NO: CV PROJECT NO: T- DRAWN BY: B.I CHECKED BY: B.I	/L01762 15515-18 P.M. K.W.
 (P) AT&T 5'-0" U.G.U. EASEMENT			B 10/13/17 100% ZD \$	SUBMITTAL
	NOTE: ALL UNDERGROUND UTILITIES IN AREA TO BE VERIFIED PRIOR TO TRENCHING NO GRADING REQUIRED		A 03/21/17 90% ZD S REV DATE DESCR	UBMITIAL
			IT IS A VIOLATION OF LAW F PERSON, UNLESS THEY ARE UNDER THE DIRECTION OF A PROFESSIONAL ENGINEER, T THIS DOCUMENT.	FOR ANY E ACTING LICENSED TO ALTER
		PLAN NORTH	10/13/1 100% ZD Sub	7 mittal
4' 2'	0 4' 8'	NORTH	ENLARGE EQUIPMENT SHEET NUMBER:	ED PLAN
	1/4"=1'-0"	 	A-2)

- (P) TREE DRIP LINE
- 26) (P) H-FRAME
- 25) (P) KNOX BOX
- (P) 2A:20BC RATED FIRE EXTINGUISHER
- (P) DOUBLE SWING WOOD FENCE GATE
- ② (P) 6'-0" TALL RED WOOD FENCE
- (P) U.G POWER RUN- ± 1525'
- 20 5'-0" UG UTILITY EASEMENT FOR POWER

- (P) 130' MONO-PINE

- (P) GENERATOR PAD
- (7) (P) 15kW DISIEL GENERATOR WITH 54 GALLON TANK

AT&T Site ID:

Consultant:

CVL01762

BLUE TENT -

BURNING BUSH

2 Shore Wirel

5550 Merrick Road, #302 Massapequa, NY 11758

PREPARED FOR

- (15) (P) HVAC
- (16) (P) ICE BRIDGE

RF	SCHEDULE

RRH	TMA	FIBER LENGTH	COAX LENGTH	COAX DIA.	NO.
RUS 32 / (1) RRUS 11	NA	± 162'-0''	±10'-0"	1/2"	2
RUS 32	NA	± 162'-0''	±10'-0''	1/2"	2
RUS 32 / (1) RRUS 11 / (1) RRUS 12	NA	± 162'-0''	±10'-0''	1/2"	2
RUS 32 / (1) RRUS 11	NA	± 162'-0''	±10'-0"	1/2"	2
RUS 32	NA	± 162'-0''	±10'-0''	1/2"	2
RUS 32 / (1) RRUS 11 / (1) RRUS 12	NA	± 162'-0''	±10'-0''	1/2"	2
RUS 32 / (1) RRUS 11	NA	± 162'-0''	±10'-0''	1/2"	2
RUS 32	NA	± 162'-0''	±10'-0''	1/2"	2
RUS 32 / (1) RRUS 11 / (1) RRUS 12	NA	± 162'-0''	±10'-0''	1/2"	2

Date: 10/13/2017 4:41:38 PM File NameT:/2015/T-15515_Shore 2 Shore_AT&T NSB\CVL01762-18\CVL01762 Blue TentiSheets\A-4.2 Proposed Elevations.dwg Plotted By:Brendan McNulty

	/ (P) ANTENNA SECTOR FRAME	AT&T Site ID:
	(P) RRH (18) TOTAL	CVL01762
	(P) AT&T PANEL ANTENNA, (3) PER SECTOR, (3) SECTORS (9) TOTAL	BLUE TENT -
		Consultant:
		Shure 2 Shore Wireless Inc
		5550 Merrick Road. #302
	(P) AT&T SURGE SUPPRESION UNIT,	Massapequa, NY 11758
	TYP. OF (3)	
		II 😂 at&t 🛛
		5001 Executive Parkway San Ramon, California 94583
	NOTES:	Architect:
	WITH "SOCKS" UNLESS OTHERWISE SPECIFIED 2. BRANCHES SHOWN ARE FOR ILLUSTRATION PURPOSES ONLY NOT TO SCALE	
	3. (P) ANTENNAS AND EQUIPMENT TO BE PAINTED TO MATCH BRANCH COLOR	Dorges
		borgesarch.com 1478 STONE POINT DRIVE, SUITE 350
		ROSEVILLE CA 95661 916 782 7200 TEL 916 773 3037 FAX
		AT&T SITE NO: CVL01762
		PROJECT NO: T-15515-18
		DRAWN BY: B.P.M.
		CHECKED BY: B.K.W.
1. (1985)		
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		B 10/13/17 100% ZD SUBMITTAL
# ^T ##+ ^T ¹² # ¹⁴ / ₂ , ¹ , ¹⁴ / ₂ ¹⁴ , ¹⁴ , ¹⁴ / ₂		A 03/21/17 90% ZD SUBMITTAL REV DATE DESCRIPTION
	(P) (3) FIBER TRUNKS	Licensor:
	(P) (8) DC CABLES	
	(P) 130' MONO PINE	
		IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED
	AT&T 80'' X 80'' WALK-IN	PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.
CAI		Issued For:
/- (P) 1	5kw DIESEL GENERATOR	10/13/17
	WITH 54 GALLON TANK	100% ZD Submittal
T		SHEET TITLE:
		ELEVATIONS
		SHEET NUMBER:
		<u> </u>
	3/16 = 1-0	

8220-100 series **Rugged Power**

Prime Power DC Generator Set

Founded in 1979 Polar Power specialized in solar photovoltaic systems, solar air conditioning and refrigeration. We developed and provided photovoltaic charging controls for telecommunications in the 1980s along with DC generators for the military. In 1994 we were first to provide DC generators with remote control and monitoring to the telecommunications industry.

Polar's success is based on engineering generators to meet the very specific needs of each application. Telecom site optimization is best met with the DC generator technology as the loads and batteries are DC. It makes no sense to install an AC generator and convert the output to DC. The AC generators are designed for a wide range of applications and they are not specifically produced for telecom applications so there are issues with reliability, space, and fuel efficiency. Polar can save you considerable time and cost in permitting, installing,

purchasing, and maintaining a backup generator. We reduce CAPEX and OPEX costs while improving backup reliability.

Intertek 4003706 Conforms to UL STD 2200 Certified to CSA STD C22.2 No. 100

Meets EPA Emission Regulations CA/MA Emissions Compliant

2 year standard warranty

The concepts and features behind Polar's Hybrid application generator for telecommunications include:

SMALL FOOTPRINT. Polar's DC generator is considerably smaller RODENT RESISTANT. Small animals can quickly destroy a generator in size than an AC generator. You can now backup sites that could set by gnawing on wires, fuel lines, radiator hoses, etc. Cooling not accommodate an AC generator. Smaller also means less cost air inlets and outlets have perforated aluminum screens to keep for space leasing.

LOW MAINTENANCE. Due to oversized oil sump, and oil/fuel filtration system.

LOW ACOUSTIC NOISE. <62 dBA @ 7 meters for diesel, and low vibration so as not to disturb the local residents or building landlords.

LIGHTWEIGHT. Up to 1/3 the weight of a comparable AC generator.

hardware for low maintenance, and long service life. FUEL EFFICIENT. Up to 85% fuel savings due to smaller engine dis- ADVANCED MONITORING. Remote diagnostics, control, and mon-

tion.

small rodents and large insects out. Stainless steel wire braid is placed over fuel and radiator lines to prevent damage.

SUPERCAPACITOR STARTER. Failure to start is the number one problem plaguing generator reliability and typically this is caused by a bad starting battery. Polar unique design has replaced the starting battery with a Super Capacitor. Capacitors are more reliable and last longer than batteries (10-15 year life).

LONG LIFE. Controls and wire harnesses are designed to exceed a 20 year life. Higher grade, longer life electrical wire (UL 3173), CORROSION RESISTANT. All-aluminum enclosure with stainless weather tight connectors, gold plated connector pins on signal circuits. No transfer switches are required.

placement, high efficiency alternator, and variable speed opera- itoring. Ethernet and RS232 standard, with optional SNMP.

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	6 - 10 kW	15 kW
System coolant capacity (gal/L)	2.2/8.3	
Maximum operation air temperature on radiator (°C/°F)	50/122	57/135
Maximum ambient temperature (°C/°F)	60/140	60/140
COMBOSTION REQUIREMENTS	6 - 10 kW	15 kW
Flow at rated power (cfm/cmm)	47/1.34	68/1.92
EXHAUST		
	6 - 10 kW	15 kW
Exhaust flow at rated output (cfm/cmm)	90/2.55	135/3.82
Exhaust temperature at rated output (°C/°F)	480/9	900
CONTROLLER FEATURES		
Controller Type		Supra Model 2
1-Line Plain Text LCD Display	Simple user inter	face for ease of operation
Engine Run Hours Indication		Standa
Programmable Start Delay		Standa
Run/Alarm/Maintenance Logs		Standa
Engine Start Sequence	.Cyclic cranking: 5 sec on, 45 sec re	est (3 attempts maximu
Starter Supercapacitor Charger		Standa
Automatic Voltage Regulation with Over and Under Voltage Protection		Standa
Automatic Low Oil Pressure/High Oil Temperature Shutdown		Standa
Overcrank/Overspeed		Standa
Dvercrank/Overspeed Automatic High Engine Temperature Shutdown		Standa Standa
Overcrank/Overspeed Automatic High Engine Temperature Shutdown Field Upgradeable Firmware		StandaStanda StandaStanda Standa
Overcrank/Overspeed Automatic High Engine Temperature Shutdown Field Upgradeable Firmware Glow Plug Delay	Auto	StandaStandaStanda StandaStanda Standa omatic With Temperatu
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Overcrank/Overspeed Automatic High Engine Temperature Shutdown Field Upgradeable Firmware Glow Plug Delay Engine Start Delay Return to Utility Delay.	Auto	StandaStanda StandaStanda Standa Matic With Temperatu Adjustable, Set at 60 s Adjustable, Set at 60 s
Overcrank/Overspeed Automatic High Engine Temperature Shutdown Field Upgradeable Firmware Glow Plug Delay Engine Start Delay Return to Utility Delay Engine Cooldown	Auto	StandaStanda Standa Standa Matic With Temperatu Adjustable, Set at 60 s Adjustable, Set at 60 s Adjustable, Set at 60 s
Overcrank/Overspeed. Automatic High Engine Temperature Shutdown Field Upgradeable Firmware Glow Plug Delay Engine Start Delay Return to Utility Delay Engine Cooldown Exerciser.	Auto Program	StandaStandaStandaStandaStanda StandaStanda omatic With Temperatu Adjustable, Set at 60 s Adjustable, Set at 60 s mable, weekly/bi-weel
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Dvercrank/Overspeed Automatic High Engine Temperature Shutdown Field Upgradeable Firmware Glow Plug Delay Engine Start Delay Return to Utility Delay Engine Cooldown Exerciser WARNING ALARMS Low Diesel Fuel Level	Auto	StandaStandaStandaStandaStanda Standa omatic With Temperatu Adjustable, Set at 60 s Adjustable, Set at 60 s mable, weekly/bi-weel Standa
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Overcrank/Overspeed Automatic High Engine Temperature Shutdown Field Upgradeable Firmware Glow Plug Delay Engine Start Delay Return to Utility Delay Engine Cooldown Exerciser WARNING ALARMS Low Diesel Fuel Level Diesel Fuel Level Diesel Fuel Tank Rapture Basin Low/High Supercapacitor Voltage	Auto	StandaStandaStandaStandaStandaStandaStandaStandaStandaStandaStandaAdjustable, Set at 60 s Adjustable, Set at 60 s Adjustable, Set at 60 s mable, weekly/bi-weel StandaStanda StandaStanda
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Overcrank/Overspeed Automatic High Engine Temperature Shutdown Field Upgradeable Firmware Glow Plug Delay Engine Start Delay Return to Utility Delay Engine Cooldown Exerciser WARNING ALARMS Low Diesel Fuel Level Diesel Fuel Tank Rapture Basin Low/High Supercapacitor Voltage High Water Temperature Low Oil Pressure	Auto	Standa Standa Standa omatic With Temperatu Adjustable, Set at 60 s Adjustable, Set at 60 s mable, weekly/bi-weel Standa Standa Standa Standa
Dvercrank/Overspeed	Auto	Standa Standa Standa Standa omatic With Temperatu Adjustable, Set at 60 s Adjustable, Set at 60 s mable, weekly/bi-weel Standa Standa Standa Standa
Dvercrank/Overspeed. Automatic High Engine Temperature Shutdown. Field Upgradeable Firmware. Glow Plug Delay Engine Start Delay. Return to Utility Delay. Engine Cooldown. Engine Cooldown. Exerciser. WARNING ALARMS Low Diesel Fuel Level. Diesel Fuel Level. Diesel Fuel Tank Rapture Basin. Low/High Supercapacitor Voltage. High Water Temperature. Low Oil Pressure. CONTACT CLOSURE FOR REMOTE INDICATION Shutdown Alarm. Warning Alarm.	Auto	Standa Standa Standa Standa omatic With Temperatu Adjustable, Set at 60 s Adjustable, Set at 60 s mable, weekly/bi-weel Standa Standa Standa Standa Standa
Overcrank/Overspeed	Auto	Standa Standa Standa Standa omatic With Temperatu Adjustable, Set at 60 s Adjustable, Set at 60 s mable, weekly/bi-weel Standa Standa Standa Standa Standa Standa
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COMPARING THE COST OF AC vs DC

	AC	DC
Transfer switch required	Yes	No
Rectifier	Yes	No
Permitting costs	\$\$	\$
Shipping to site and installation cost	\$\$	\$
Site preparation/reinforcing structures	\$\$\$	\$
Ethernet/RS232 remote control and monitoring	Extra	Standard

8220 ALTERNATOR FEATURES

No mechanical adjustments

- Very lightweight
- High quality electrical output
- Voltage and current regulation
- Up to 94% efficiency

8220 ALTERNATOR SPECIFICATIONS

Туре	Permanent Magnets, NdFeB
Weight (lb/kg)	46.5/21
Regulation Type	Variable engine speed operation over 500 RPM range
Stator	3 phase/32 poles
Overcurrent Protection (A)	10 kW - 250 15 kW - 350
Disconnect Means	Fused Disconnect, sized for each generator size.
Voltage Range (VDC)	44 to 62
Alternator Exhaust Flow (cfm/cmm)	130 to 180 or 3.68 to 5.1
MTBF (hr)	100,000+

ENCLOSURE

Model	88-25-0100
Туре	Weather Protective
Materials	Marine Grade Aluminum
Door Hardware	Pad Locked with Removable Side Panels
Mounting	Secure Mounting Tabs

PERMITTING IS FACILITATED

- Small engine horsepower • DC generator is fully isolated from the utility grid
- Low acoustic noise
- Incorporates all requirements made by local Fire Marshals
- -40° to 70° C operational range

- Class 220 C insulation
- Anodized type III process for aluminum parts
- Nickel plating for steel parts
- Stator is varnished

STARTER SUPERCAPACITOR SPECIFICATIONS

Model	20-16-000
Storage Rating (Farads)	500
Voltage (VDC)	13-14.4
Weight (lb/kg)	12.1/5.5
Operating Temperature (°C/°F)	-40 to 65 or -40 to 149
Service Life (year)	10 to 15

CHARGER SPECIFICATIONS

Model	00-10-0015
Input Voltage (VDC)	28.8 to 60
Output Voltage (VDC)	14 to 14.4
Recharge time from 0 VDC (min)	10
Recharge time from 8 VDC (min)	2
Weight (lb/kg)	2.2/1

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ENGINE SPECIFICATIONS: 6 - 10 KW DIESEL Engine Model Isuzu 3CA1 or Yanmar 3TNV74 Cylinders 3 In-line 0.993 Displacement (L) 2.91/74 Bore (in./mm) 3.03/77 Stroke (in./mm) Intake Air System Naturally Aspirated Engine HP 18 Emissions Compliance EPA and CARB Certified Variable RPM 2300 to 2600 ENGINE SPECIFICATIONS: 15 KW DIESEL Engine Model Yanmar 3TNV88 Cylinders 3 In-line Displacement (L) 1.642 3.4/88 Bore (in./mm) 3.5/90 Stroke (in./mm) Naturally Aspirated Intake Air System Engine HP 24 Emissions Compliance EPA and CARB Certified Variable RPM 1500 to 1850 ENVIRONMENTAL Operating Temperature (°C/°F) -40 to 72 or -40 to 162 **Operating Humidity %** 100 Cold Start Aids Glow Plugs

DIESEL FUEL SYSTEM

Туре	Diesel
Fuel Pump Type	Electrical
Injector Type	Mechanical
Fuel Filtering	Paper element

POWER ADJUSTMENT FOR AMBIENT CONDITIONS Temperature Deration

Altitude Deration

WEIGHTS AND DIMENSIONS

Dry Weight (lb/kg) Dimensions (LxWxH) (in/cm)

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ENGINE LUBRICATION SYSTEM

Oil Filter Type	Full flow spin-on canister
Oil Capacity	2.8 L - 3CA1/3TNV74 14 L (optional) - 3CA1/3TNV74 6.7 L - 3TNV88
Oil Pressure Switch	Yes
Oil Pressure Transducer	Optional

ENGINE COOLING SYSTEM

Туре	Pressurized Aluminum Radiator
Water Pump	Belt-driven, Pre-lubed, self-sealing
Fan Type	12 V Electric Fans
Fan Quantity	6
CFM	1300
M³/hr.	2200
Fan Mode	Pusher
Temperature Switch	Yes

DIESEL ENGINE FUEL CONSUMPTION

		Output (kW)	gal/hr	L/hr
		4	0.35	1.32
		5	0.44	1.66
9 162	3CA1/3TNV74	6	0.53	2
		7	0.615	2.33
		8	0.7	2.65
		9	0.79	2.99
		10	0.88	3.33
Diesel	3TNV88	15	1.02	3.86
lectrical			100000	1.11.11.11.11

SOUND EMISSIONS

Contact us for current sound data.

1% derate for every 5.6 °C (10 °F) above 25 °C (77 °F) 3% derate for every 300 m (1000 ft) above 91 m (300 ft)

6 - 10 kW Diesel	15 kW Diesel
665/302	759/345
54 x 38 x 38/3	137 x 97 x 97

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CVL01762								
BURNING BUSH								
Consultant:								
Consultant:								
Share 2 Shore Wireless Inc.								
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Massapequa, NT 11700								
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ELECTRICAL INSTALLATION METHODS:

- 1. This installation shall comply with the currently adopted edition of the National Electrical Code and with utility company and local
- code requirements.
 Install sufficient lengths of LFMC including all conduit fittings (nuts, reducing bushings, elbows, couplings, etc) necessary for connection from IMC or PVC conduit to the interior of the BTS
- cabinet.
 Power, control and equipment ground wiring in tubing or conduit shall be single conductor (#14 AWG and larger), 600V, oil resistant THHN or THWN-2, Class B stranded copper cable rated for 90°C (wet and dry) operation; listed or labeled for the location and raceway system used.
- Cut, coil and tape a 3 foot pigtail from end of LFMC for terminating by BTS equipment manufacturer.
- Supplemental equipment ground wiring located indoors shall be single conductor (#6 AWG and larger), 600V, oil resistant THHN or THWN-2 green insulation, Class B stranded copper cable rated for 90° C (wet and dry) operation, listed or labeled for the location and raceway system used.
- 6. Supplemental equipment ground wiring located outdoors or below grade shall be single conductor #2 AWG solid, tinned, copper cable.
- Power and control wiring, not in tubing or conduit, shall be multi-conductor, Type TC. Cable (#14 AWG and larger), 600V, oil resistant THHN or THWN-2, Class B, Stranded copper cable rated for 90° C (Wet or Dry) operation, with outer jacket listed or labeled for the location used.
- Cables shall not be routed through ladder-style cable tray rungs.
 Raceway and cable tray shall be listed or labeled for electrical use in accordance with NEMA, UL, ANSI/IEEE and NEC.
- New raceway or cable tray shall match the existing installation where possible.
- 11. All power and grounding connections shall be crimp style, compression, wire lugs and wirenuts by Thomas and Betts (or equal). Lugs and wirenuts shall be rated for operation at no less than 75°C.
- 12. Each end of every power, grounding and T1 conductor and cable shall be labeled with color coded insulation or electrical tape. The identification method shall conform with NEC & OSHA and match existing installation requirements.
- All electrical components shall be clearly labeled with engraved laminated plastic labels. All equipment shall be labeled with their voltage rating, phase configuration, wire configuration, power or ampacity rating and branch circuit ID numbers (panelboard and circuit identification).
- All tie wraps shall be cut flush with approved cutting tool to remove sharp edges.
 Rigid nonmetallic conduit (PVC Schedule 40 or PVC Schedule 80)
- shall be used underground, direct buried in areas of occasional light vehicle traffic or encased in reinforced concrete in areas of heavy vehicle traffic.
- All conduit run above ground or exposed shall be LFMC, IMC or Rigid Steel.
 Electrical metallic tubing (EMT) shall be used for concealed indoor
- locations.
- 18. Liquid tight flexible metallic conduit shall be used indoors and outdoors where vibration occurs or flexibility is needed.
- 19. Conduit and tubing fittings shall be threaded or compression type and approved for the location used. Setscrew fittings are not acceptable.
- 20. Cabinets, boxes and wireways shall be listed or labeled for electrical use in accordance with NEMA, UL, ANSI/IEEE and NEC.
- Cabinets, boxes and wireways shall match the existing installation where possible.
 Provide necessary tagging on the breakers, cables and distribution
- panels in accordance with applicable codes and standards to safeguard life and property.
- 23. The subcontractor shall review and inspect the existing facility grounding system and lightning protection system (as designed and installed) for strict compliance with the NEC. The site specific lightning protection code and general compliance with Telcordia and TIA grounding standards. The subcontractor shall report any violations or adverse findings to the contractor for resolution.
- 24. All electrode systems (including telecommunication, radio, lightning protection and AC power GES's) shall be bonded together at or below grade by two or more copper bonding conductors in accordance with the NEC.
- 25. Perform IEEE fall-of-potential resistance to earth testing (per IEEE 1100 and 81) for new ground electrode systems. The subcontractor shall furnish and install supplemental ground
- electrodes as needed to achieve a test result of 5 ohms or less.
 26. Metal raceway shall not be used as the NEC required equipment ground conductor. Stranded copper conductors with green insulation sized in accordance with the NEC shall be furnished and installed with the power circuits to BTS equipment.
- 27. Each indoor BTS cabinet frame shall be directly connected to the master ground bar with supplemental equipment ground wires #6 or larger.
- 28. Exothermic welds shall be used for all grounding connections
- below grade. 29. Approved antioxidant coatings (i.e. conductive gel or paste) shall
- be used on all compression and bolted ground connections.
- 30. ICE bridge bonding conductors shall be exothermically bonded or bolted to the bridge and the tower ground bar.31. Surfaces to be connected to ground conductors shall be cleaned
- to a bright surface at all connections.
- 32. Exposed ground connections shall be made with compression connectors which are then bolted to equipment using stainless steel hardware. Installation torque shall be per manufacturer's
- requirements. 33. DC power cables shall be Cobra COP-FLEX 2000, Flexible Class B or approved equal.

NOTES:

ALL WIRE TO BE #12 THHN/THWN UNLESS NOTED

OTHERWISE. COLOR CODE:

- A∅ = BLACK • B∅ = RED
- NEUTRAL = WHITEGROUND = GREEN
- 2. ALL WORK TO CONFORM TO N.E.C. LATEST STATE
- ADOPTED EDITION. 3. LABEL SERVICE DISCONNECT WITH A RED TAG.
- 4. SWITCH LEG CONDUCTORS SHALL BE THE SAME
- COLOR AS CIRCUIT CONDUCTORS.
- 5. PULL WIRES TO END OF FLEXIBLE NONMETALLIC CONDUIT. COIL 3'-0" AT END OF FLEXIBLE NONMETALLIC CONDUIT & TAG.
- 6. PULL ONE GROUND CONDUCTOR PER FLEXIBLE NONMETALLIC CONDUIT. FOR ALL OTHER CIRCUITS PULL A SEPARATE CONDUCTOR.
- 7. ALL GFCI RECEPTACLES TO HAVE A DEDICATED GROUND WIRE.
- 8. EQUIPMENT TERMINATION LUGS AND CONDUCTORS ARE RATED AT A MINIMUM OF 75°C.

 $\frac{\text{KEY:}}{\text{PC}} = \text{PHOTOCELL}$ M = MOTION DETECTOR

- = CONDUIT GROUND
- # = NON-DEDICATED GROUND
- (#) = DEDICATED GROUND
- <#> = ISOLATED GROUND

	LOAD		loa[Phasi	D PER E (VA)	COLOR	LOADS ONTINUOUS	LOADS I-CONTINUOUS	JB-PANEL	WIRE SIZE	JUNDING WIRE SIZE	TRIP	RIP	
		<u></u>	UNIT KVA	. PHASE				/IRE (DS SI	Ë
	DESCRIPTION	Ø		Α	В	5	U	V Z	LOA		GRO		
1		1	1.000	1.000		BLK	~			0	(10)	20	20
3	SHELF & SHELF 3 - PCU #1	1	1.000		1.000	RED	~			8	(10)	30	20
5		1	1.000	1.000		BLK	V			0	(10)	20	30
7	SHELF I & SHELF 3 - PCU #3	1	1.000		1.000	RED	^			8	(10)	30	30
9		1	1.000	1.000		BLK	~				(10)	30	- 30
11		1	1.000		1.000	RED	^			0			30
13	SPACE					BLK							30
15	SPACE					RED							
17	SPACE					BLK							
19	SPACE					RED							
21	SPACE					BLK							
23	SPACE					RED							
25		1	3.6	3.6		BLK	v			0	(10)	20	
27		1	3.6		3.6	RED	^			0	(10)	20	20
29	APPLIANCE OUTLETS	1	1.000	1.000		BLK	Х			12	12	20	
		S CC	ubtotal Intinuous	7.600	6.600								
		SL NON-C	JBTOTAL CONTINUOUS										
		-	-										
ΡA	NEL DESIGNATION: ELECTR	RICAL PA	anel (Item 1)	•		•							
MA	MAIN LUGS: N/A MAIN BREAKER: 200 AMP MAIN BREAKER A.I.C RATING: 22,000 A.I.C												
	DLIAGE, 120/240 CIC	,LE, 6(VIRES.	3				503.	200 A		INEUT

			4	AB N.T.S.		AGC AGC AGC AGC AGC AGC AGC AGC	AUIOM BARE C BASE TF CONDI EQUIPN FUTURE FIRE ALL GENER ISOLATI INTERM LIQUID MILLIOI MECHA SEE ME NEW NATION NIGHT I PROVIS POLYVI RELOC. RELAY 1 TYPICA UNLESS WEATH GROUN SYMBO PART O	ATTIC GENERA COPPER WIRE RANSCEIVER ST UIT G AENT GROUND ATOR ED GROUND IEDIATE METAL TIGHT FLEXIBLE N CIRCULAR M ANICAL INTERLO CHANICAL INTERLO CON FOR FUTUI INTL CHLORIDE ATE TO MONITOR U L OTHERWISE NA ERPROOF ND FAULT CIRCO SIS INDICATED OF THESE DRAW	L PANEL CONDUL METAL C ILLS DCK ANS & SP L MANU TO BE U RE BREAK CONDU GENERATI TILITY PC DTED UIT INTER ABOVE <i>N</i> INGS IF N	IT CONDUIT ECIFICATIONS FACTURER'S ASSOCIATION NSWITCHED CER JIT OR POWER WER RUPTER MAY NOT NECESSARILY APP NOT REQUIRED.	PEAR AS
OW	ER										
	ZE	PANEL	S NUOUS	s ous	LOR	LOAI	D PER E (VA)			LOAD	
SIZE	WIRE SIZE	LOADS SUB-PANEL	LOADS JON-CONTINUOUS	LOADS Continuous	WIRE COLOR	LOAI PHASI PH/	D PER E (VA) ASE B	UNIT KVA	QTY.	LOAD	
C 2 SIZE	MIRE SIZE	LOADS SUB-PANEL	× LOADS NON-CONTINUOUS	× LOADS CONTINUOUS	D A WIRE COLOR	LOAI PHASI PH/ A .72	D PER E (VA) ASE B 1.000	UNIT KVA 0.180 1.000	N N N N N N N N N N N N N N N N N N N	LOAD DESCRIPTION EXTIGECI OUTLET	2
((([']) SIZE	MIRE SIZE 8	LOADS SUB-PANEL	× LOADS NON-CONTINUOUS	X X LOADS CONTINUOUS	A TA A A WIRE COLOR	LOAI PHASI PH/ A .72 1.000	D PER E (VA) ASE B 1.000 1.000	UNIT KVA 0.180 1.000 1.000 1.000 1.000	N. N	LOAD DESCRIPTION EXT GFCI OUTLET SHELF 1 & SHELF 3 - PCL SHELF 2 & SHELF 4 - PCL	2 J #2 6 J #2 8 10
	NIKE SIZE 8 8	LOADS SUB-PANEL	× LOADS NON-CONTINUOUS	X X CONTINUOUS	MIRE COLOR MARKE COLOR	LOAE PHASI PH/ A 1.000 1.000	D PER E (VA) ASE 1.000 1.000	UNIT KVA 0.180 1.000 1.000 1.000 1.000 1.000 1.000	LØ 1 1 1 1 1	LOAD DESCRIPTION EXT GFCI OUTLET SHELF 1 & SHELF 3 - PCL SHELF 2 & SHELF 4 - PCL SHELF 1 & SHELF 3 - PCL	2 J #2 4 J #2 6 J #2 10 J #4 12 14
) ())))))))))))))))))	NIKE SIZE 8 8 8	LOADS SUB-PANEL	× LOADS NON-CONTINUOUS	X X CONTINUOUS	N N <td>LOAE PHASI PH/ A 1.000 1.000</td> <td>D PER E (VA) ASE B 1.000 1.000</td> <td>UNIT KVA 0.180 1.000 1.000 1.000 1.000 1.000</td> <td>LQ 1 1 1 1 1</td> <td>LOAD DESCRIPTION EXT GFCI OUTLET SHELF 1 & SHELF 3 - PCL SHELF 2 & SHELF 4 - PCL SHELF 1 & SHELF 3 - PCL SHELF 1 & SHELF 3 - PCL SPACE</td> <td>2 J #2 6 J #2 6 J #2 10 J #4 12 14 14 16 18 20</td>	LOAE PHASI PH/ A 1.000 1.000	D PER E (VA) ASE B 1.000 1.000	UNIT KVA 0.180 1.000 1.000 1.000 1.000 1.000	LQ 1 1 1 1 1	LOAD DESCRIPTION EXT GFCI OUTLET SHELF 1 & SHELF 3 - PCL SHELF 2 & SHELF 4 - PCL SHELF 1 & SHELF 3 - PCL SHELF 1 & SHELF 3 - PCL SPACE	2 J #2 6 J #2 6 J #2 10 J #4 12 14 14 16 18 20
	AILE SIZE 8 8 8	LOADS SUB-PANEL	x LOADS	X X CONTINUOUS	D D D D D D D D D D D D D D D D D D D	LOAI PHASI PH/ A 1.000 1.000	D PER E (VA) ASE B 1.000 1.000	UNIT KVA 0.180 1.000 1.000 1.000 1.000 1.000		LOAD DESCRIPTION EXT GFCI OUTLET SHELF 1 & SHELF 3 - PCU SHELF 2 & SHELF 4 - PCU SHELF 1 & SHELF 3 - PCU SHELF 1 & SHELF 3 - PCU SHELF 1 & SHELF 3 - PCU SPACE SPACE SPACE SPACE SPACE SPACE	2 J #2 6 J #2 6 J #2 10 14 14 16 18 20 22 24
	12 8 8 8 8 12 12 12	LOADS SUB-PANEL	X NON-CONTINUOUS	X X CONTINUOUS	REDICION REPORTED IN THE COLOR REPORTED INTENTION	LOAI PHASI PH/ A 1.000 1.000	D PER E (VA) ASE 1.000 1.000 1.000	UNIT KVA 0.180 1.000 1.000 1.000 1.000 1.000 1.000	→EØ 1 1 1 1 1 1 1 1 1 1 1 1 1	LOAD DESCRIPTION EXT GFCI OUTLET SHELF 1 & SHELF 3 - PCL SHELF 2 & SHELF 4 - PCL SHELF 1 & SHELF 3 - PCL SHELF 1 & SHELF 3 - PCL SPACE SPACE SPACE SPACE SPACE SPACE SPACE SPACE SPACE SPACE	2 J #2 4 6 J #2 6 10 12 14 16 18 20 22 24 26 1TS 28
	12 8 8 8		x NON-CONTINUOUS	X X CONTINUOUS	BLK D S S S S S S S S S S S S S S S S S S	LOAI PHASI PH/ A 1.000 1.000 1.000	D PER E (VA) ASE 1.000 1.000 1.000 3.000	UNIT KVA 0.180 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000	LØ 1 1 1 1 1 1 1 1 1 1 1 1 1	LOAD DESCRIPTION EXT GFCI OUTLET SHELF 1 & SHELF 3 - PCL SHELF 2 & SHELF 4 - PCL SHELF 1 & SHELF 3 - PCL SHELF 1 & SHELF 3 - PCL SPACE SPACE SPACE SPACE SPACE SPACE SPACE SPACE SPACE SPACE SPACE	2 4 5 4 6 8 10 12 14 16 18 20 22 24 16 18 20 22 24 12 14 16 18 20 22 24 26 115 28 30 25.25
	AIKE SIZE 8 8 8 12	LOADS SUB-PANEL	x NON-CONTINUOUS	X X X X X X X X X X X X X X X X X X X	A D D D D D D D D D D D D D D D D D D D	LOAI PHASI PH/ A 1.000 1.000 1.000	D PER E (VA) ASE B 1.000 1.000 1.000 1.000 1.000 3.00 3.00	UNIT KVA 0.180 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	LOAD DESCRIPTION EXT GFCI OUTLET SHELF 1 & SHELF 3 - PCL SHELF 2 & SHELF 4 - PCL SHELF 1 & SHELF 3 - PCL SHELF 1 & SHELF 3 - PCL SHELF 1 & SHELF 3 - PCL SPACE	2 J #2 3 J #2 4 6 10 14 16 18 20 21 14 16 18 20 22 24 24 26 115 28 30 25.25 1.44
	12 8 8 8	- TOADS SUB-PANEL	X NON-CONTINUOUS	X X X X X CONTINUOUS	MIRE COLOR MIRE COLOR MIRE COLOR	LOAI PHASI PH/ A 1.000 1.000 1.000	D PER E (VA) ASE B 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000	UNIT KVA 0.180 1.000	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	LOAD DESCRIPTION EXT GFCI OUTLET SHELF 1 & SHELF 3 - PCL SHELF 2 & SHELF 4 - PCL SHELF 1 & SHELF 3 - PCL SHELF 1 & SHELF 3 - PCL SHELF 1 & SHELF 3 - PCL SPACE SPA	2 J #2 6 J #2 6 J #2 10 14 16 18 20 22 24 14 16 18 20 22 24 26 115 28 30 25.25 1.44 - 26.69

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