

**NEVADA COUNTY ZONING ADMINISTRATOR**  
**STAFF REPORT**

**HEARING DATE:** March 27, 2019

**FILE NO:** PLN17-0074, CUP17-0016, MIS18-0012; EIS17-0023

**APPLICANT:** AT&T Mobility dba AT&T Wireless

**OWNER(s):** Michael D. Stapleton

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**PROJECT:** A combined application continued from February 27, 2019, for a Conditional Use Permit and a Petition for Exceptions to Driveway Standards for the construction of an unmanned 110-foot-tall monopine telecommunication tower and equipment facility with a 1,500-square-foot lease area. The facility would contain a 64-square-foot walk-in equipment cabinet and a backup 20-kw diesel generator with a 92-gallon fuel tank for use during power loss. Up to three additional equipment cabinets and backup generators may be installed by other carriers at a later phase in the project. 230 feet of driveway improvements would be made along an existing driveway, and there would be additional grading to construct a new 225-foot long driveway to the telecommunications facility. A Petition for Exceptions to Driveway Standards is proposed to allow a driveway grade of up to 25%, and to allow a reduced driveway width of 12 feet.

**LOCATION:** 13083 Wild Life Lane in unincorporated Nevada County—located approximately 3 miles east of the State Highway 174 and You Bet Road intersection in Grass Valley.

**ASSESSOR'S PARCEL NO(s):** 012-720-045

**PROJECT PLANNER:** Sadie Caldas, Associate Planner

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<b>General Plan:</b>	RUR-10	<b>Water:</b>	N/A
<b>Region:</b>	Rural	<b>Sewage:</b>	N/A
<b>Zoning:</b>	AG-10	<b>Fire:</b>	Peardale Chicago Park
<b>Flood Map:</b>	0675	<b>Schools:</b>	Grass Valley
<b>ZDM #:</b>	79	<b>Recreation:</b>	Grass Valley
<b>Parcel Size:</b>	2.32 acres	<b>Sup. Dist.:</b>	Heidi Hall, District I
<b>Prev. File #(s):</b>	LA91-046	<b>Date Filed:</b>	06/30/17
<b>Farmland Map Designation:</b>	X – Other	<b>Dates Resubmitted:</b>	03/06/18, 05/31/18, 12/5/18

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**ATTACHMENTS:**

1. Recommended Conditions of Approval & Mitigation Monitoring & Reporting Program

2. Initial Study/Mitigated Negative Declaration
3. Vicinity, Zoning & Public Notice Map
4. Environmental Noise Assessment Report
5. Radio Frequency Report
6. Project Improvement Plan Set

**RECOMMENDATION:**

- I. Environmental Action: Adopt Mitigated Negative Declaration (EIS17-0023)
  - II. Project Actions: Approval of the Conditional Use Permit (CUP17-0016) and the Petition for Exceptions to Driveway Standards (MIS18-0012)
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**PROJECT CONTINUANCE:** On February 27, 2019, a Zoning Administrator hearing for this project was held and continued indefinitely, due to the property owner withdrawing his authorization for the project during the public comment period at the hearing. The Zoning Administrator took no action on the adequacy of the Mitigated Negative Declaration or the Mitigation Monitoring and Reporting Program, and no action was taken toward approval or denial of the proposed Conditional Use Permit or the Petition for Exceptions to Driveway Standards. The Zoning Administrator continued the project indefinitely, to allow the property owner and applicant to work out any issues. The project would remain continued without the property owner's authorization, or it could be withdrawn by the applicant. On March 4, 2019, the project representative, Epic Wireless Group LLC, contacted the Planning Department and advised that the property owner is in support of the project and they would like to reschedule the hearing. Planning Department staff contacted the property owner, Michael Stapleton, and verbally confirmed on March 13, 2019, that he has given his authorization for this project to be scheduled for a second hearing on March 27, 2019, to seek approval. Staff asked the property owner to respond to an email, giving authorization for the project directly to the County, if there is a chance that he may not attend the public hearing to give his authorization. Staff has not yet received a written response from the property owner as of this date (March 14, 2019), but there has been no indication that the property owner's consent has changed. There have been no changes to the proposed project, or to the analysis in the rest of this staff report.

**BACKGROUND, EXISTING AND SURROUNDING LAND USES:**

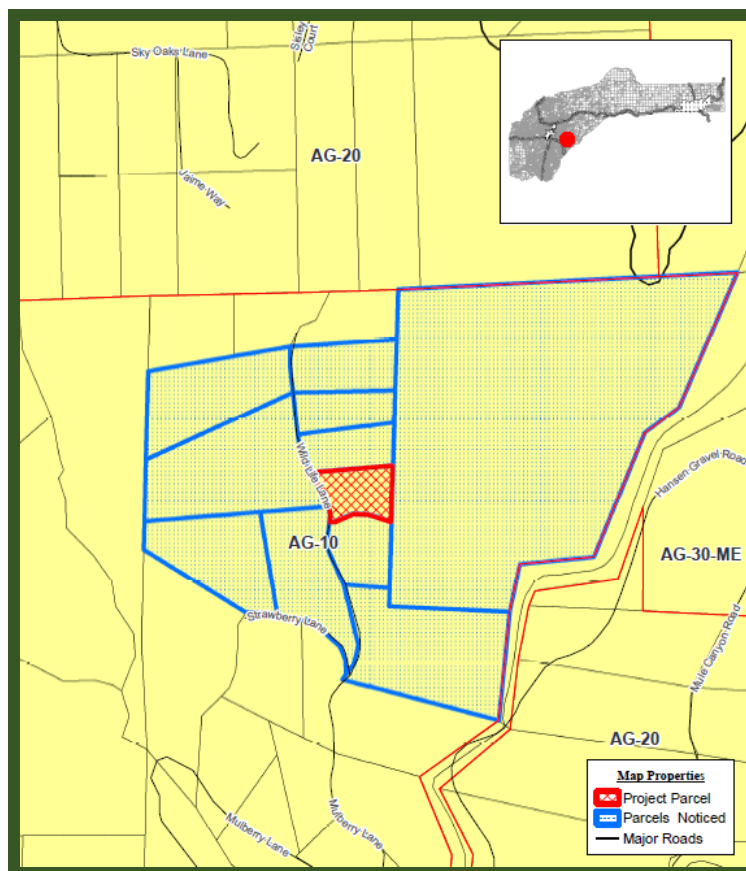
The project parcel is located on a private road that is approximately 1.3 driving miles north of You Bet Road, and 3.3 miles east of State Highway 174. The project parcel was created in 1974 by a Parcel Map that was recorded in Book 7 of Parcel Maps at Page 88. A Lot Line Adjustment was recorded in 1991 and the parcel was reduced from 2.5 acres to 2.32 acres.

This parcel and surrounding parcels are zoned General Agricultural with a 10-acre minimum parcel size (AG-10) and have a General Plan designation of Rural with a 10-acre minimum parcel size (RUR-10). Adjacent parcels and several parcels in the area range in size from 2.5 acres to 10.0 acres, with the exception of a 55.10-acre parcel to the east of the project site. The parcel has an existing access driveway that is in substandard condition that goes through the parcel and provides access to an agricultural storage building on the adjacent parcel to the north. The project parcel also has a capped well, but no other improvements. Parcels in the neighborhood generally have rural residential uses. Figure 1 on the following page shows the

zoning, a vicinity map, and the parcels that will be sent a public notice for the Zoning Administrator hearing.

The proposed monopine telecommunication facility would be located near the center of the 2.32-acre parcel, in an existing opening within a relatively dense foothill oak-pine woodland. A majority of the understory vegetation consists of young conifer trees and some manzanita shrubs. There are some smaller oak trees in the area that range from ten to twenty-four inches (10-24") at diameter breast height (dbh or 4'6"), and there is one landmark oak tree that is thirty-six inches (36") at dbh. Other than the one landmark oak tree, there are no other known sensitive resources in or adjacent to the project area. The project site does not contain any landmark oak groves. No waterways or wetlands are on or around the project parcel. The closest waterway is Greenhorn Creek, which is approximately 1,100 feet to the southeast. The terrain in the area has rolling to steep slopes and is mostly covered with vegetation, except for areas where development has occurred. A majority of the project parcel has slopes that range from approximately fifteen to twenty-five percent (15-25%).

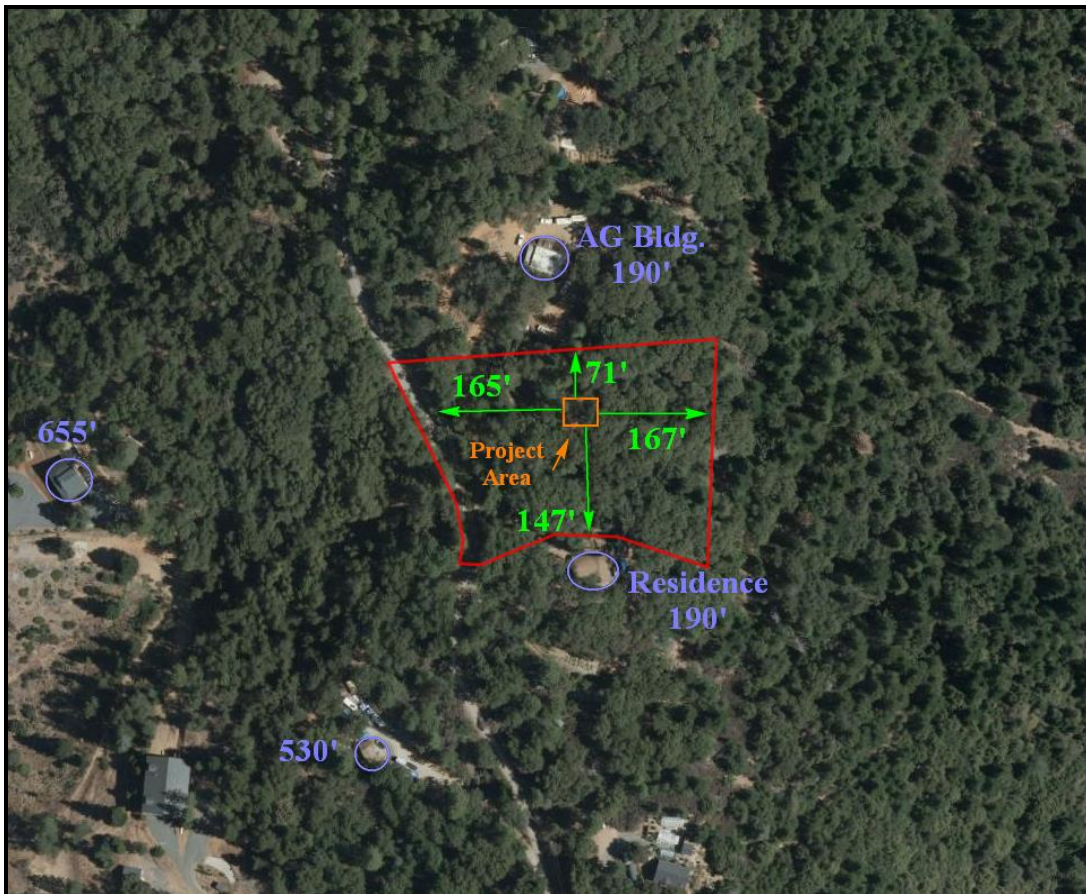
**Figure 1: Zoning, Vicinity Map & Parcels Noticed**



Two parcels to the west and south of the project site are developed with single-family residences. The residence to the south is approximately 190 feet from the project site and it has the same property owner as the project parcel. The residence directly to the west is approximately 655

feet away. Two other adjacent parcels on the east and southwest sides of the project parcel are undeveloped, and the adjacent parcel to the north is developed with an agricultural storage building that is approximately 190 feet from the telecommunications tower site. Figure 2 on the following page shows the approximate location of the proposed project and the distances to the property lines and to the structures in the area.

**Figure 2: Project Site**



**PROJECT DESCRIPTION:**

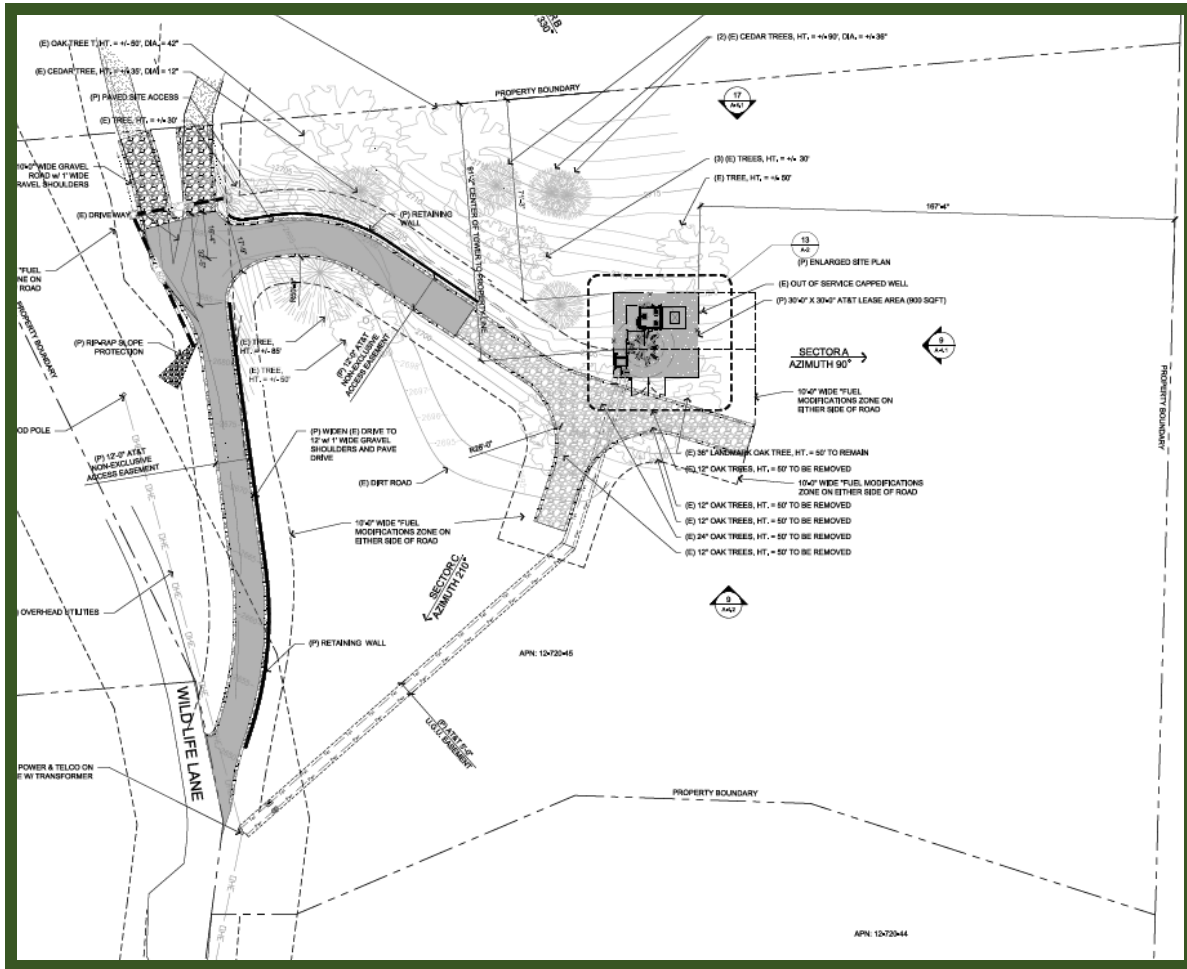
The project is a combined application proposing a Conditional Use Permit and a Petition for Exceptions to Driveway Standards for the construction of an unmanned 110-foot-tall monopine telecommunication tower and equipment facility. The project proposes a 900-square-foot lease area (30' x 30') that would be used as the tower site and equipment facility. The project includes an additional 600-square-foot area (30' x 20') adjacent to the equipment facility to reserve as a potential lease area for up to three other carriers. The proposed telecommunications tower would contain nine (9) panel antennas, eighteen (18) remote radio heads/units, and space for additional carriers. The facility would contain a 64-square-foot (8' x 8') walk-in equipment cabinet with two downward facing, fully shielded lights. A backup 20-kw diesel generator with a 92-gallon fuel tank on a concrete slab would be installed for use during power loss. Up to three additional equipment cabinets or shelters and backup generators may be installed by other carriers in the

second lease area (600 square feet) at a later phase in the project. A six-foot tall chain-link fence with three strand anti-climb barrier (totaling 7 feet in height) would initially be constructed around the 900-square-foot facility area, with potential for the same fencing to be installed around the 600-square-foot area designated as the lease area for other carriers. Figure 3 below shows a photo of the site where the lease area would be located. The project includes 230 feet of driveway improvements along an existing driveway, and additional grading to construct a new 225-foot long driveway to the telecommunications facility. Approximately 300 feet of the driveway would be paved with asphalt concrete (AC). The rest of the driveway and a new hammerhead turnaround would be gravel. Two retaining walls up to 6 feet in height would be installed along the driveway, and two 12-inch culverts would be installed across and along the existing driveway. A Petition for Exceptions to Driveway Standards is proposed to allow a driveway grade of up to 25%, and to allow a reduced driveway width of 12 feet along the existing section of driveway that would be paved, instead of the standard width of 12 feet with 1-foot shoulders for grades that exceed 16%. The driveway is accessed off an existing private road—Wild Life Lane. Power and telecommunication lines would be brought to the project site by underground conduit from an existing utility pole on Wild Life Lane. The utilities would be located in a 215-foot long and 5-foot wide easement through the project parcel. The project includes trimming for vegetation management along Wild Life Lane and the proposed driveway. For road maintenance, gravel would be added to the existing turnouts along the private roads that lead to the project site. Five oak trees that are 10-24 inches at diameter breast height (dbh or 4'6"), along with shrubs, incense cedar trees and Douglas-fir trees would be removed for the installation of the telecommunications tower site and driveway. Figure 4 on the following page shows the project site plan and proposed improvements.

**Figure 3: Project Site**



**Figure 4: Project Site Plan**



**STAFF COMMENT:**

Site Access: The project site would be accessed from an existing driveway off the private road that runs alongside the parcel—Wild Life Lane. The existing driveway is in substandard condition. The driveway is dirt and gravel, and has deep ruts from erosion. It is currently being used to access this parcel and the agricultural building on the adjacent parcel to the north. From the existing driveway, there is a path that leads to the project site. The path has is overgrown by vegetation, but it may have been previously used as an access road to the center of the parcel. To avoid substantial grading, the project has been designed to make driveway improvements along the existing driveway and path, which leads to an existing clearing that has a grade of approximately seventeen percent (17%). The existing clearing is where the 1,500-square-foot lease area is proposed. The proposed project includes a Petition for Exceptions to Driveway Standards to allow the driveway to have a grade above twenty percent (20%) and for the driveway to be twelve feet wide and paved with asphalt concrete, instead of the standard requirement of twelve feet wide with one-foot shoulders on steeper grades. The existing driveway ranges from approximately eight to eleven feet (8-11') wide and has a current grade of

approximately twenty-five percent (25%). In order to widen the driveway, two retaining walls that would vary in height from one-foot to six feet tall would be installed in two separate locations along the driveway. Closer to the lease area where the driveway grade would be less than sixteen percent (16%) and where the hammerhead turnaround is located, the surface would be graveled. The Office of the Fire Marshal has reviewed the proposed project and the Petition for Exceptions to Driveway Standards, and has determined that the proposed access and improvements are adequate and would drastically improve the existing conditions. Conditions of Approval D.3 and D4 require that a registered civil engineer shall design and certify the driveway, and that all other driveway standards shall be met. The Building Department has also reviewed the preliminary grading plans and had no adverse comments. Condition of Approval B.1 has been included to ensure that improvements plans for the building, grading, and retaining walls are submitted for review with the improvement permits, and that they shall be in conformance with Nevada County Land Use and Development Code (LUDC), Chapter 5 for Building Standards.

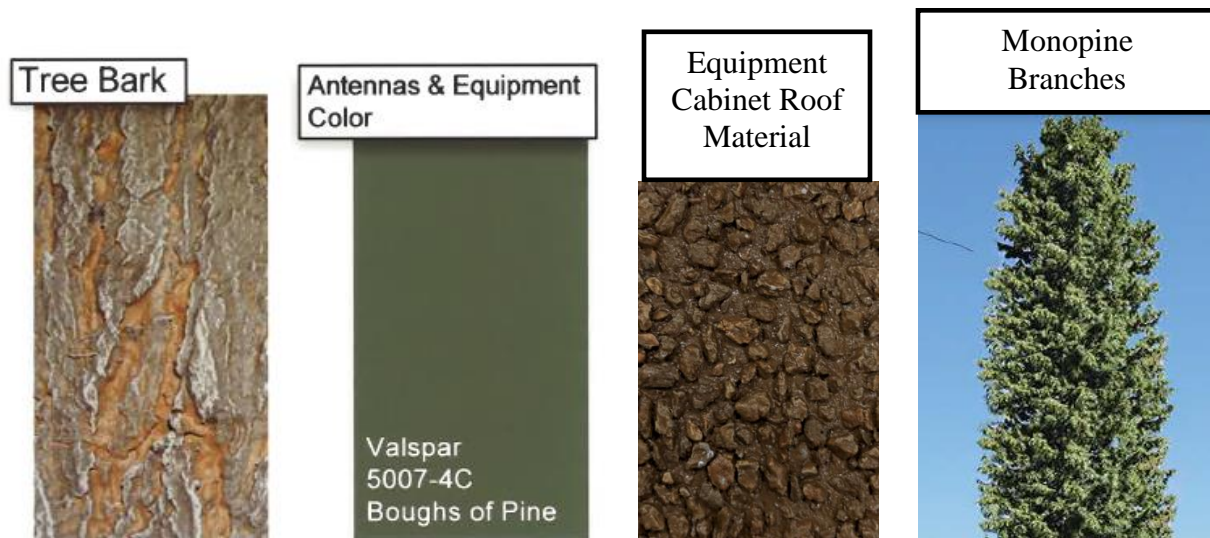
The proposed project includes an easement through the project parcel for underground electrical and telecommunication lines that is approximately 215 feet long and five feet wide. Utilities would be brought to the site from an existing utility pole along Wild Life Lane to the equipment facility.

Only a minimal increase in traffic would occur from the project. The initial phase of the project has one carrier, and only one weekly or biweekly traffic trip by a technician for equipment maintenance would be expected. If other carriers are added at a later time, there may be a slight increase of traffic to the site. The secondary lease area would be adequate in size for two other carriers, with the potential for up to three other carriers if they were conservative with the space and equipment used, or if equipment was shared. If equipment is not shared among carriers, the site has potential for up to four weekly or biweekly traffic trips. Due to the project site being on private property that is off a series of private roads, the Department of Public Works had no comments or conditions for the project

The Nevada County Deputy Fire Marshal has reviewed the project plans and completed a site visit to the area. The applicant has included maintenance work along the existing private road to improve access to the site. Gravel would be added to existing fire turnouts, and some vegetation removal is included along the road for fire clearance and fuel management. Conditions of Approval (D.2 and D.5) have been included to require fuel management along the roads and driveway, and for the improvements to the fire turnouts. There is an existing bridge along Mulberry Lane, which is a private road that leads to Wild Life Lane. The applicant has submitted structural calculations that are stamped by a registered professional engineer, to verify that the bridge can support the maximum load requirements of the California Vehicle Code. The Deputy Fire Marshal has reviewed the structural calculation and the access to the facility, and determined that with the project Conditions of Approval, the proposed access is adequate to serve the facility. Furthermore, because heavy construction equipment has potential to damage the roadway, Condition A.14 has been included to require that any damage that occurs to Wild Life Lane as a result of construction, would be repaired by the applicant. As a part of the building permit review, the applicant would be required to prepare a before and after roadway analysis to document any damage to the road, as a result from the project construction.

Visual Analysis: The proposed tower would be a monopine design, which has a bark-like color and texture to camouflage the pole, and fabricated branches with green needles to blend in with existing pine trees. Figure 5 below shows the fabricated tree bark, the colors of antennas and equipment on the tower, the material that will be used on the roof of the equipment cabinet, and an example of a monopine. The sides of the cabinet would be painted in a tan color to blend in with the background landscapes. If/when other carriers are added to the site, Condition A.6 would require that any equipment added to the tower would be non-glare materials with colors that blend in with the background landscapes.

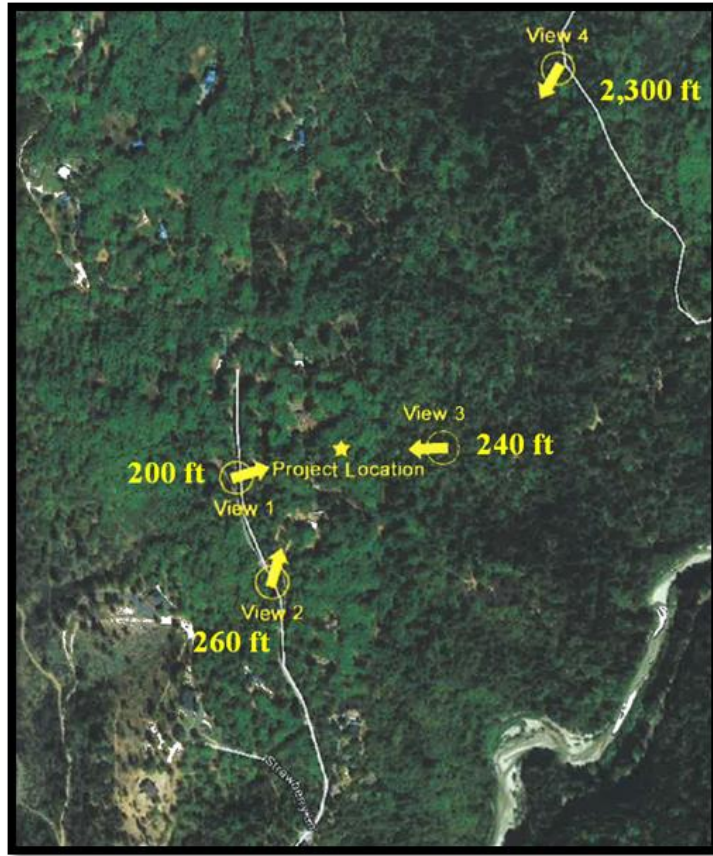
**Figure 5: Fabricated Tree Bark Tower & Equipment Colors**



The tower would be located near the center of a 2.32-acre parcel. The closest property line would be approximately seventy-seven feet (71') from the equipment facility and ninety-one feet (91') from the cell tower, and all other property lines would be 147 feet or more away. The proposed monopine would be 110 feet tall. Within 100 feet of the proposed tower, there are two cedar trees that are approximately ninety (90) feet tall. Several other oak, pine and cedar trees in the area range from approximately thirty-five to eighty-five (35-85) feet tall. Because of the terrain and existing vegetation, the proposed tower is expected to blend in with the surroundings. The figure on the following page (Figure 6) shows a map of the project location and the locations where photo simulations were created to show a view of what the tower would look like. The figure shows the approximate distance of the photo simulations from the tower. The monopine would be beyond existing vegetation from all of these views and could not be seen in any of the photo simulations. Figure 7 on the following page shows View 2, which is looking into the project parcel from Wild Life Lane. This angle has the most direct view at the project site with the least amount of topographic changes, and the photo simulation show that the tower cannot be seen past the vegetation. No other public roads are within 1,500 feet of the project area. Nevada County Planning Department staff also conducted a site inspection of the project area. Based on the terrain and thick vegetation, staff determined that the tower and equipment facility would not be in direct public view and would likely be concealed by vegetation from all public views.



**Figure 6: Map of Photo Simulations**



**Figure 7: Photo Simulation from Wild Life Lane (View 2)**



Lighting: The lighting proposed at the facility are for manually operated lights that would only be turned on when needed by technicians for servicing or repairing equipment. There would be no continuous lighting at the project site. During the initial phase of the project for construction of the tower and the primary 900 square foot equipment facility, two downward facing, fully shielded lights are proposed on the equipment cabinet. Additional lighting may be installed if additional carriers are added to the second lease area. Condition A.7 has been included to ensure that any lighting installed by future carriers would be manually operated for limited use, and also complies with County code requirements.

Noise: An Environmental Noise Assessment Report was prepared by Shore 2 Shore Wireless, Inc. on March 1, 2018, to evaluate potential noise impacts that would be caused by the 20-kW backup diesel generator and the heating, ventilation, and air conditioning (HVAC) system. The backup generator is proposed only for emergency use when electrical service is down at the site, and would infrequently operate for maintenance. Typical maintenance would occur weekly or biweekly on weekday mornings between 8:00 a.m. and 10:00 a.m., and would last for approximately ten minutes. During the time that the generator would be in use, noise levels would increase in the area. The HVAC system would be used intermittently to cool equipment in the cabinet, with peak usage during warmer months. The noise assessment states that based on equipment specification and distance, the backup generator at full capacity would produce 44.98 decibels (dB) at the nearest property line (northern), and the HVAC system would produce 22.79 dB at the nearest property line. The HVAC system would be mounted on the southern side of the equipment cabinet and although the eastern property line is further away—approximately 170 feet—the HVAC system would be slightly louder at this property line and would produce 36.61 dB. If both the HVAC system and generator were in operation at the same time, they would produce a combined noise level 65 dB, which would be 44.98 dB at the nearest property line. The Nevada County noise standard during the daytime is 55 dB Leq for an average noise level and 75 dB Lmax for peaks in noise. The generator and HVAC system combined would be under the daytime noise standards. Because the generator is not expected to be in continuous operation, unless of an emergency power outage, this noise level would only occur during the weekly or biweekly testing of approximately ten minutes at a time. The HVAC system alone, which would be a regular noise producer, is under the Nevada County noise standard for daytime, evening and nighttime noise standards (shown below). The noise predictions provided in the noise study are based on the manufacturer’s specifications for the equipment, the location, and the distance to the property line. The predictions do not include any external absorbent materials. Given that the site has heavy vegetation surrounding the project area and the noise producers, it is likely that noise levels would be further reduced at the property lines. For the Rural zoning district standards, maximum noise levels include:

- 7 a.m. to 7 p.m. – 55 dB Leq and 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

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 at the same decibel level would only add 3 dB to the noise level. Accordingly, an additional generator added to the site with the same decibel level would only increase the noise

level by 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 noise level was increased to 47.98 dB at the nearest property line without calculating deductions in noise levels from absorbent materials, it would still be under the maximum County noise limits. If three decibels were added for each additional generator, the project would still be within the noise limits for daytime standards. Condition A.15 has been included to ensure generators are used for emergency backup purposes only and that testing for routine maintenance would occur during daytime hours. If power was lost and the generator/s was in operation until power was restored, the generator would be exempt from the noise standard, under the noise exemption for projects associated with the provision of emergency services or functions (LUDC Section L-II 4.1.7.D.8).

One additional HVAC system at an equivalent decibel level could be added to the site by an additional carrier without further noise analysis. The proposed generator would produce 56 dB, which would have noise level of 36.61 dB at the property line. The nighttime noise limit is 40dB. If an equivalent HVAC system was added, the noise level would increase to 39.61 dB at the property line, which would be under the daytime, evening and nighttime noise standards. If multiple HVAC systems were to be added to the site, or if a HVAC system is proposed that produces a higher decibel level (more than 56 dB), an additional noise study would be required prior to building permit issuance. Condition A.16 requires that any additional equipment (generators and HVAC systems) added to the site would have to meet noise standards, and that a noise study shall be submitted for review if more than two HVAC systems are added to the site. It is likely that if noise predictions included the noise absorbent materials, such as the vegetation surrounding the site, additional HVAC systems may also be under the noise standards, but Condition A.16 would ensure compliance.

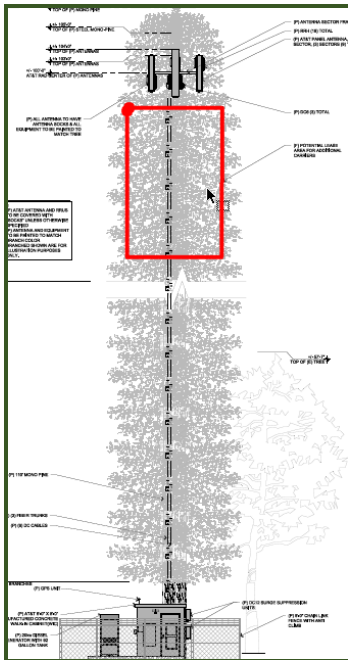
During project construction there would be a temporary increase in noise levels at the project site. To reduce the disruption to neighboring parcels, Condition A.24 has been included to limit construction activities to between 7:00 a.m. and 7:00 p.m. Additionally, construction would only be allowed to occur during the normal work week from Monday through Friday. With the recommended conditions, the project would comply with the County noise standards and impacts to adjacent parcels would be minimized.

Telecommunications Tower Setback: The proposed tower is within a Rural zoning district (AG-10) and is subject to standard setbacks of thirty (30) feet on the side and rear property lines, and twenty (20) feet from the edge of the right-of-way for Wild Life Lane. The proposed equipment facility would be approximately seventy-one feet (71') from the northern property line, and the tower would be ninety-one feet (91') from the northern property line. The equipment facility would be 167 feet from the eastern property line, 147' from the southern property line, and 165' feet from Wild Life Lane along the western property line. All surrounding properties are zoned AG-10 and are used for both agricultural and rural residential purposes. LUDC Section L-II 3.8.D.6 for Communication Towers and Facilities requires that whenever a tower is proposed that is less than 100% of its height from the property line, a structural report shall be submitted, certifying that the tower is designed to withstand maximum forces from wind, earthquakes and ice, when the tower is fully loaded with antennas and equipment. A preliminary structural report by an engineer has been provided and reviewed by the Building Department. Condition B.3

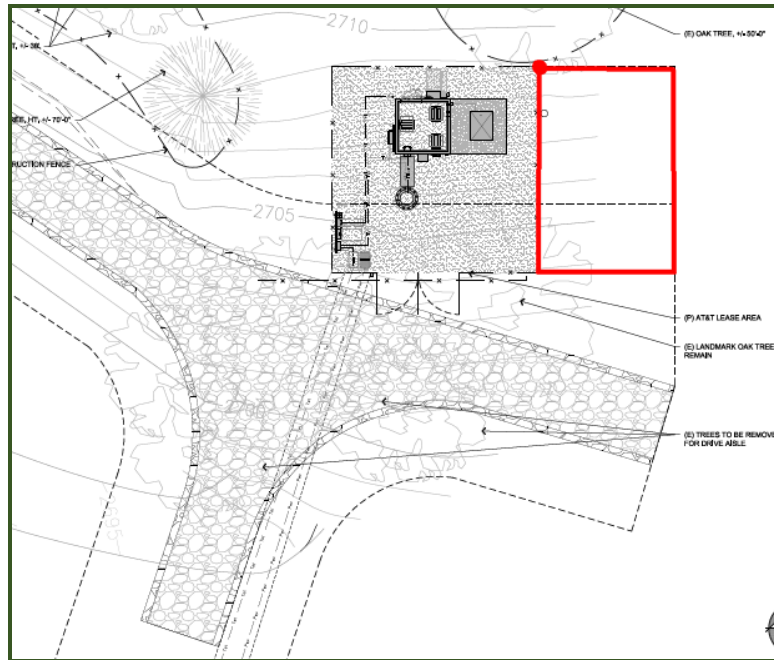
requires that a final structural report shall be submitted prior to the building permit being issued. With this condition, the proposed telecommunication tower and facility meets all setback requirements.

**Co-Location:** 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 project includes a 600-square-foot area that would be used as a second lease area for additional carriers. The secondary lease area is expected to provide enough space for two other carriers, although if equipment is shared or if carriers are conservative with the size and space used, up to three additional carriers may be added at the site. The monopine tower also has a twenty-five (25) foot vertical section designated as a lease area for additional carriers to add antennas and equipment on the tower. Figures 8 and 9 below shows the lease areas for the equipment facility and on the tower.

**Figure 8: Lease Area on Tower**



**Figure 9: Secondary Lease Area**



AT&T Mobility has a written co-location process with the steps another carrier would take to add on to an existing AT&T tower site. The lease agreement for additional carriers would be between AT&T Mobility, the parcel owner, and additional carriers. Staff concludes that the project has been adequately designed to support co-location of additional carriers. As required in LUDC Section L-II 3.8.G.1, Condition A.9 has been included to require the tower owner to agree to allow future co-location by other carriers and provide an efficient process for handling co-location requests.

**Site Justification:** LUDC Section L-II 3.8.E.1.d restricts towers from being installed within two miles of another tower unless it is designed to blend in with the environment. The closest telecommunications tower is approximately 1.5 miles away, at 14516 You Bet Road. AT&T is

already a carrier at that site. In order to provide coverage to the desired area without having gaps in service between the two towers, AT&T would need to be between 0.25 and 0.5 miles of the proposed project area. The next closest tower found by the applicant that was identified in FCC and FAA filings, is 4.0 miles from the project site. County records show approximate locations of three other tower sites that are 1.5 miles or more from the project site. All three of these sites would be out of the desired coverage area and do not appear to have active telecommunication facilities. One parcel had a Use Permit application from 1997 that was withdrawn. The other two sites do not have building permits or land use permits for cell towers or equipment. The only cell tower in the area that has been located in County records, is the tower discussed above, in which AT&T has already co-located at that site (14516 You Bet Road). That facility has a monopine that blends in with the existing setting. The proposed tower would also be a camouflaged monopine. The LUDC requires that a proposed tower within 2.0 miles from another tower shall not be installed unless it is camouflaged to blend in with the environment. The proposed and existing tower are both monopines and would be in compliance with this requirement.

Radio Frequency Signals: 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 (Attachment 5) 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 with the FCC emission standards, which would ensure that the project remains in 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.

### **ENVIRONMENTAL REVIEW:**

The project proposes a 110-foot tall unstaffed telecommunication tower and equipment cabinet, with room for up to three additional carriers. The County Planning Department prepared a draft Initial Study/Mitigated Negative Declaration (MND) for this project that was circulated for public comment from February 4 through February 24, 2019 (Attachment 2). No public comments have been received as of the writing of this staff report. Nine mitigation measures (Attachment 1) were identified for the proposed Conditional Use Permit, including measures to reduce potential air quality (3A-3C); for the protection of biological resources, including native vegetation, nesting birds that have potential to occur on the property, and a landmark oak tree (4A-4C); for the protection of cultural resources and tribal cultural resources if encountered during construction (5A); for noise attenuation (13A); and to appropriately dispose of construction waste (19A).

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.

**ZONING AND GENERAL PLAN CONSISTENCY:**

The Rural (RUR-10) General Plan designation and General Agricultural (AG-10) zoning district in which the project is located are intended to provide for the development of uses compatible in an agricultural and rural-residential setting. 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 AG 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 General Agricultural 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."

**SUMMARY:**

The objective of the project is to construct a new telecommunications tower for improved service to the rural area. Construction would occur on an undeveloped parcel with a capped well and an access road. 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 (EIS17-0023) and as provided in Attachment 1, concerns with air quality, biological impacts, cultural and tribal cultural resources, noise, and utilities and service systems are not anticipated to significantly impact the surrounding community. Communication towers are a permitted use in the AG zoning designation with an approved Use Permit, and this use is consistent with the Rural General Plan designation intended to provide for the development of uses compatible in an agricultural/rural-residential setting.

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**RECOMMENDATION:**

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 (EIS17-0023) (*Attachment 2*) and Mitigation Monitoring and Reporting Program (*Attachment 1*) 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 mitigated and conditioned, including visual screening and limits on construction times and generator use, 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, impacts to nesting birds or native vegetation, impacts to a landmark oak tree, potential cultural or tribal cultural resource discovery, construction noise impacts, and disposal of waste during construction, 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 Petition for Exceptions to Driveway Standards (MIS18-0012) subject to the attached Conditions of Approval in Attachment 1, making findings A-E pursuant to Section L-XVI 3.4 of the Nevada County Land Use and Development Code:
- A. There are special circumstances or conditions affecting said property due to the topography and vegetation at the site;
  - B. The exception is necessary for the preservation of a substantial property right of the petitioner, by working with the existing setting to prevent a substantial amount of grading and vegetation removal at the site;
  - C. The granting of the exception will not be detrimental or injurious to other property in the territory in which said property is located, and will include improvements to an existing driveway;
  - D. The granting of the exception will not constitute a grant of special privileges inconsistent with the limitations upon similar property, due to the Petition for Exceptions being necessary to make driveway improvements without substantially altering the site; and
  - E. The exceptions will provide the same practical effect of fire protection and is supported by an entity responsible for assuring compliance with Public Resources Code Section 4290, in which the Petition for Exceptions is supported by the Nevada County Deputy Fire Marshal and will improve communication in the area for emergency responders, and will also substantially improve access to two parcels and provide an additional turnaround in the area.
- III. Approve the proposed Conditional Use Permit (CUP17-0016) 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 “AG-10” 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 approximately 71 feet from the northern property line, 167 feet from the eastern property line, 147 feet from the southern property line, and 165 feet from the Wild Life Lane right-of-way along the western 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 it 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. The amount of traffic generated by the proposed use has been determined by the Department of Public Works to be an insignificant amount, which would not require the payment of traffic mitigation fees;
- I. 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, and adequate



provisions exist for emergency access to the site, which has been determined Nevada County Fire Marshal, and include fire turnouts, adequate driveway width, fuel management, 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,



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Tyler Barrington, Principal Planner

**Attachment 1**  
**Conditions of Approval and**  
**Mitigation Monitoring and Reporting Plan (MMRP)**  
Conditional Use Permit and Petition for Exceptions to Driveway Standards  
AT&T – Wild Life Lane – Telecommunications Tower and Facility  
(PLN17-0074; CUP17-0016; MIS18-0012; EIS17-0023)

**A. PLANNING DEPARTMENT**

1. Project Description: This Conditional Use Permit and Petition for Exceptions to Driveway Standards authorizes the applicant to construct and operate an unmanned 110-foot-tall monopine telecommunications tower and equipment facility at 13083 Wild Life Lane in Grass Valley, CA 95945 (APN 012-720-045). The project proposes a 900-square-foot lease area (30' x 30') that would be used as the tower site and equipment facility. The project includes an additional 600-square-foot area (30' x 20') adjacent to the equipment facility to reserve as a potential lease area for up to three other carriers. The proposed telecommunications tower would contain nine (9) panel antennas, eighteen (18) remote radio heads/units, and space for additional carriers. The facility would contain a 64-square-foot (8' x 8') walk-in equipment cabinet with two downward facing, fully shielded lights. A backup 20-kw diesel generator with a 92-gallon fuel tank on a concrete slab would be installed for use during power loss. Up to three additional equipment cabinets or shelters and backup generators may be installed by other carriers in the second lease area (600 square feet) at a later phase in the project. A six-foot tall chain-link fence with three strand anti-climb barrier (totaling 7 feet in height) would initially be constructed around the 900-square-foot facility area, with potential for the same fencing to be installed around the 600-square-foot area designated as the lease area for other carriers.

The project includes 230 feet of driveway improvements along an existing driveway, and additional grading to construct a new 225-foot long driveway to the telecommunications facility. Approximately 300 feet of the driveway would be paved with asphalt concrete (AC). The rest of the driveway and a new hammerhead turnaround would be gravel. Two retaining walls up to 6 feet in height would be installed along the driveway, and two 12-inch culverts would be installed across and along the existing driveway. A Petition for Exceptions to Driveway Standards is to allow a driveway grade of up to 25%, and to allow a reduced driveway width of 12 feet along the existing section of driveway that would be paved, instead of the standard width of 12 feet with 1-foot shoulders for grades that exceed 16%. The driveway is accessed off an existing private road—Wild Life Lane. Power and telecommunication lines would be brought to the project site by underground conduit from an existing utility pole on Wild Life Lane. The utilities would be located in a 215-foot long and 5-foot wide easement through the project parcel. The project includes trimming for vegetation management along Wild Life Lane and the proposed driveway. For road maintenance, gravel would be added to the existing turnouts along the private roads that lead to the project site. Five oak trees that are 10-24 inches at diameter breast height (dbh or 4'6"), along with shrubs, incense cedar trees and Douglas-fir trees would be removed for the installation of the telecommunications tower site and driveway.

2. Appeal Period: Pursuant to the requirements of the Land Use and Development Code, you are 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.
3. Timeline: 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 (March 11, 2019), 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. Defense and Indemnification Agreement: 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. Field Inspection: 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. Color and Materials: 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 non-glare colors and finished consistent with the materials 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 natural tan colored paint on the equipment cabinets. Equipment attached to the tower shall match the color of the tower.
7. Lighting: Lighting shall be 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 have manually operated with no motion sensors, to allow it to be fully controlled by the maintenance technician.
8. Signage: 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.

9. Co-Location: The monopine communication tower shall be engineered to accommodate a minimum of three (3) 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.
10. Facility Maintenance/Removal Agreement: 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.
11. Screening/Vegetation: Pursuant to Nevada County 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 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 except where the County Fire Marshal requires fuel modification. Native trees are the preferred vegetation."
12. FCC Regulations: The facility shall comply with all Federal Communications Commission regulations concerning radio frequency emissions.
13. Fencing: All future lease areas shall be enclosed with fencing similar to that of the AT&T lease area. Fencing details shall be included with improvement plans and approved by the Planning Department prior to issuance of building permits.
14. Roadway Analysis: As part of the building permit submittal, include a roadway analysis for the Planning Department that shows photos of Wild Life Lane and documents the condition of road prior to construction of the tower facility. At the request for permit final, a follow-up analysis of Wild Life Lane is required to be submitted, with photos showing that any impacts to Wild Life Lane that may have occurred as a result of the construction of the telecommunication tower facility, have been repaired by the applicant.
15. Generators: All generators at the site shall be used as emergency backup generators to provide power to the site during electrical outages, and are authorized to operate for maintenance testing and to make necessary repairs. Routine maintenance testing shall occur on weekdays from 8:00 a.m. to 5:00 p.m.
16. Noise Standards: 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 or a noise study as part of the building permit submittal for Planning

Department review, showing equipment compliance with these standards. For the Rural zoning district standards, maximum noise levels include:

- 7 a.m. to 7 p.m. – 55 dB Leq and 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

The revised March 1, 2018, Environmental Noise Assessment submitted with this application would allow for a total of 4 emergency generators at the site, that produce 65 dB or less. The Noise Assessment would also allow for a total of 2 HVAC systems, mounted on the southern wall of equipment cabinets, which produce 56 dB or less. If more than 2 HVAC systems are added to the project site, additional noise analysis would be required to ensure compliance with nighttime noise standards at the property line.

17. **Building Permits:** Prior to construction, obtain all required building permits for all site improvements, including grading, the installation of the tower and equipment facility, and all equipment.
18. **Fire Protection Plan:** Prior to building permit issuance, a Fire Protection Plan in compliance with the Nevada County Land Use and Development Code Section L-II 4.3.18 shall be reviewed and approved by the Nevada County Fire Marshal.
19. **Minimize dust emissions (Mitigation Measure 3C):** The applicant shall use reasonable precautions to minimize dust generation, including but not limited to watering the vehicle traffic area, watering any stockpiled material, and limiting traffic speeds. Such methods shall be noted on the improvement plans prior to approval.  
*Timing: Prior to issuance of grading or improvement permits and during construction*  
*Reporting: Agency approval of permits or plans*  
*Responsible Agency: Planning Department*
20. **Implement Best Management Practices (Mitigation Measure 4A):** Implement Best Management Practices to protect native vegetation.
  - a. If straw bales are used for erosion control, or if straw is broadcast over seeded areas, only certified weed-free straw or rice straw shall be utilized to minimize the risk of introducing or spreading noxious weeds such as Scotch Broom, yellow star thistle, or Italian thistle.
  - b. Inspect all construction equipment to ensure that they do not transport noxious weeds into the project area.
  - c. The applicant shall distribute copies of these mitigation measures and any other permit requirements to the contractors, prior to construction commencing.*Timing: Prior to issuance of grading or improvement permits and during construction*  
*Reporting: Agency approval of permits or plans*  
*Responsible Agency: Planning Department and Building Department*

21. **Conduct a pre-construction nesting survey to determine if active avian nests are present on the site (Mitigation Measure 4B):** If construction activities will occur during non-breeding season (September 1-January 31), a survey is not required and no further studies are required. If construction activities will occur during the nesting season (February 1- August 31), a pre-construction survey shall be required. The survey shall be conducted by a qualified biologist no more than 14 days prior to the onset of construction activities. If construction does not commence within 14 days of the pre-construction survey, or halts for more than 14 days, an additional survey is required prior to starting work. If active nests are found on or within 500 feet of the site, disturbance or removal of the nest shall be avoided until the young have fledged and the nest is no longer active. The project biologist shall recommend a buffer based on the species, site conditions, and the proposed construction activities near the active nest, and the sighting shall be reported to California Department of Fish and Wildlife and the California Natural Diversity Database. Typically, a 500-foot buffer is recommended for raptor nests, and smaller buffers are recommended for other species.  
*Timing: Prior to issuance of grading or improvement permits*  
*Reporting: Approval of the grading and improvement permits*  
*Responsible Agency: Planning Department and Building Department*
22. **Oak Protection (Measures Mitigation Measure 4C):** The following mitigation measures shall be implemented during the construction and shall be shown on all improvement plans:
- a. Establish the area with the landmark oak tree as an Environmentally Sensitive Area (ESA) during construction. The boundary of the ESA shall be 10 feet from the base of the landmark oak tree, on all sides. The ESA boundaries shall be shown on improvement plans.
  - b. The 10-foot non-disturbance buffer from the base of the tree shall be delineated on the ground with temporary construction fencing.
  - c. The improvement plans shall require contractors to stay outside of the ESA with a provision for penalties if the landmark oak tree is damaged or removed.
  - d. No vehicles, construction equipment, mobile offices, or materials should be parked or located within the ESA.
  - e. Soil shall not be removed within the ESA, and fill shall not be placed within the ESA.
- Timing: Prior to issuance of grading or improvement permits and during construction*  
*Reporting: Approval of the grading and improvement permits*  
*Responsible Agency: Planning Department and Building Department*
23. **Halt work and contact the appropriate agencies if human remains, cultural materials, or paleontological resources are discovered during project construction (Mitigation Measure 5A):** Prior to issuance of grading permits or improvement plans, all plans shall incorporate, at a minimum, the following cultural resources protection measures, which shall be implemented in the field: 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 or paleontological 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 grading and construction plans for each phase of this project.

**Timing:** *Prior to issuance of grading or improvement permits and during construction*

**Reporting:** *Approval of grading or improvement permits*

**Responsible Agency:** *Planning Department*

24. **Limit construction activities to reduce noise impacts (Mitigation Measure 13A):**

Hours of operation for construction activities shall be limited to the hours of 7 a.m. to 7 p.m. Monday through Friday. These limited hours of operation shall be noted on grading and building plans, which shall be reviewed and approved by the Planning Department prior to permit issuance.

**Timing:** *Prior to issuance of grading or improvement permits and during construction*

**Reporting:** *Agency approval of permits and by complaint*

**Responsible Agency:** *Planning Department and Code Compliance*

25. **Appropriately dispose of toxic waste (Mitigation Measure 19A):**

Industrial toxic waste (petroleum and other chemical products) is not accepted at the McCourtney Road transfer station and if encountered, shall be properly disposed of in compliance with existing regulations and facilities. This mitigation measure shall be included as a note on all improvement plans, which shall be reviewed and approved by the Planning Department prior to permit issuance.

**Timing:** *Prior to issuance of grading or improvement permits and during construction*

**Reporting:** *Agency approval of permits or plans*

**Responsible Agency:** *Nevada County Planning Department*

**B. BUILDING DEPARTMENT**

1. **Site/Grading/Erosions Control Plans:** Complete construction, site, grading and erosion control plans shall be submitted for review at time of building/grading permit submittal in conformance with Nevada County Land-Use and Development Code, Chapter V.

2. **Geotechnical Evaluation Reports:** Two sets of wet stamped/signed complete geotechnical evaluation reports shall be submitted at time of building/grading permit submittal. A grading and foundation design review letter from the geotechnical firm shall accompany the plan submittal.

3. **Structural Calculations:** Two sets of wet stamped/signed complete structural calculations for the tower and equipment shelter shall be submitted at time of building permit submittal.

4. **Electrical Plans:** Complete electrical plans shall be included as part of the building permit submittal.

5. Special Inspection and Testing: 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. Fault Current Letter: An available fault current letter from the electrical service provider shall be submitted at time of building permit application submittal.
7. Cut Slopes: Cut slopes may be at a slope gradient of 1.5 horizontal to 1 vertical provided that it is not intended to support structures or surcharges, it is adequately protected against erosion, and it is not more than 8ft in height.
8. Drainage Report: Prior to building permit issuance, submit a drainage report, including calculations and an exhibit, demonstrating that the site has adequate capacity to design and mitigate all additional or altered stormwater runoff caused by the project. The project may not result in additional net stormwater runoff or concentrated flows from the site that could affect off-site properties. All stormwater drainage must be designed by a registered civil engineer, and the designer shall utilize County standard plans and specifications.

**C. ENVIRONMENTAL HEALTH**

1. Hazardous Materials: Prior to the building permit being finalized, 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. Routine compliance inspections, conducted by NCDEH inspectors, will occur at the facility once every three years. Compliance inspections are typically unannounced inspections during regular business hours: Monday-Friday, 8:00 a.m. to 5:00 p.m., and will occur once every three years. 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).
2. Capped Well: Prior to building permits being issued, a permit shall be obtained from the Nevada County Department of Environmental Health to formally abandon the capped well in the project area. This permit shall be finalized prior to building permit issuance.

**D. NEVADA COUNTY OFFICE OF THE FIRE MARSHAL**

1. One-Lane Bridge: Access along Mulberry Lane via the one lane bridge across Little Greenhorn Creek shall meet compliance with the standards for bridge crossings within Title 14, Section 1273.07.



- a. Where a bridge or an elevated surface is part of a fire apparatus access road, the bridge shall be constructed and maintained in accordance with the American Association of State and Highway Transportation Officials Standard Specifications for Highway Bridges, 17th Edition, published 2002 (known as AASHTO HB-17), hereby incorporated by reference. Bridges and elevated surfaces shall be designed for a live load sufficient to carry the imposed loads of fire apparatus. Vehicle load limits shall be posted at both entrances to bridges when required by the local authority having jurisdiction. Where elevated surfaces designed for emergency vehicle use are adjacent to surfaces which are not designed for such use, barriers, or signs, or both, as approved by the local authority having jurisdiction, shall be installed and maintained. A bridge with only one traffic lane may be authorized by the local jurisdiction; however, it shall provide for unobstructed visibility from one end to the other and turnouts at both ends.
2. Turnouts: Turnouts shall be improved along Mulberry Lane and Wild Life Lane at specified locations and shall be designed in compliance with Title 14, Section 1273.06. Please coordinate with the Fire Marshal's Office for the specific locations.
  3. Driveway Standards: Access from Wild Life Lane leading to the Proposed Lease Parcel 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.
    - a. All driveways shall support the imposed load of at least 75,000 lbs.
    - b. Surface width shall be ten (10) feet minimum with one (1) foot shoulders for driveway grades up to sixteen percent (16%). For grades between sixteen point one percent (16.1%) and twenty percent (20%), a twelve (12) foot minimum surface width with one (1) foot shoulders is required.
    - c. Driveways and segments thereof that are sixteen point one percent (16.1%) grade and above, shall be designed and certified by a registered civil engineer. Prior to foundation inspection, the engineer shall provide stamped and signed written verification to the County Fire Marshal or his or her appointed designee that the rough grade complies with the site plan. Prior to, or concurrent with, final inspection, the engineer shall provide stamped and signed written verification that the final driveway complies with the site plan.
    - d. Driveways between sixteen point one percent (16.1%) and twenty percent (20.0%) grade shall be engineered with an all-weather surface.
    - e. Petition for Exception will be required for all grades exceeding 20%.
    - f. No part of the driveway shall have a horizontal inside radius of curvature of less than 50 feet and additional surface width of 4 feet shall be added to curves of 50-100 feet radius; 2 feet to those from 100-200 feet.

- g. A Turnaround shall be provided within 50' of the "Proposed Lease Parcel.
4. Petition for Exceptions: Due to topographic constraints, the first 160 feet of driveway off Wild Life Lane shall be no less than 12 feet wide, paved with asphalt concrete, and engineered to support a minimum of 75,000 lbs. The grade of the driveway shall not exceed 25% in any area, and shall be designed and certified by a registered civil engineer. Prior to, or concurrent with the final inspection, the engineer shall provide stamped and signed written verification that the final driveway complies with the site plan. All other driveway standards (Condition D.3) shall be satisfied.
  5. Fuel Modification Area: Vegetation Management along Mulberry Lane, Wild Life Lane and the driveway accessing the lease site shall be maintained within a "Fuel Modification Area". This area shall be 10' wide measured from the shoulder of the roadway and on each side of the roadway. 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 may be used as a reference for the fuel modification area.
  6. Defensible Space: Pursuant to Land Use and Development Code L-II 4.3.18.C.2, prior to approval of the building permit, the applicant shall remove and reduce brush, flammable vegetation or combustible growth consistent with the provisions of Public Resources Code 4291 and the Nevada County Defensible Space Standard described under the policies of General Plan Goal FP-10.11. These policies require a firebreak free of flammable vegetation 30 to 100 feet around the structure and a fuel break with spatially separated vegetation 30 feet from the structure, as well as clearance around driveways of 10 feet on the sides and 15 feet overhead. Flammable vegetation is defined by General Plan Policy FP-10.11.2 as any live or dead vegetation that is combustible during normal summer weather. Vegetation which is pruned, limbed, cultivated, or considered ornamental shrubbery or plants, provided it is maintained and/or irrigated and does not form a means of rapidly transmitting a fire from the surrounding wildlands, is not considered flammable vegetation and is permissible to be retained.
  7. Fire Extinguisher: Provide a 2-A:10-B:C portable Fire Extinguisher in an "All Weather" shelter, as required by California Fire Code Section 906. The extinguisher shall be mounted in an approved location within fenced area of the leased parcel.
- E. NORTHERN SIERRA AIR QUALITY MANAGEMENT DISTRICT (NSAQMD)**
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](mailto: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 issuance of grading or improvement permits*

**Reporting:** *Agency approval of permits or plans*

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

2. **Mitigate any asbestos discovered during construction (Mitigation Measure 3B):** Prior to issuance of grading permits or improvement plans, all plans shall incorporate, at a minimum, the following asbestos control measures, which shall be implemented in the field: If serpentine, ultramafic rock or naturally occurring asbestos are discovered during construction or grading, the Northern Sierra Air Quality Management District shall be notified within 24 hours, and specific requirements contained in Section 93105 of Title 17 of the California Code of Regulations must be strictly complied with.

**Timing:** *Prior to issuance of grading or improvement permits and during construction*

**Reporting:** *Approval of grading or improvement permits and as applicable*

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

## **F. CALIFORNIA DEPARTMENT OF FISH & WILDLIFE**

1. **Notice of Determination (Optional):** If a Notice of Determination is not filed for the environmental document on this project, 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. 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 \$2,354.75 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. This fee is required to be collected for the Notice of Determination, on behalf of the State Department of Fish & Wildlife.

**NEVADA COUNTY, CALIFORNIA  
INITIAL STUDY**

<b>To:</b>	Building Department Department of Public Works Environmental Health Department Ag Commissioner Peardale Chicago Park Fire Protection Nevada County Fire Protection Planner Northern Sierra Air Quality Mgmt Dist CA Department of Fish and Wildlife U.S. Fish & Wildlife Red Dog – You Bet Association Native American Heritage Commission Gold Country Broadband Consortium General Plan Defense Fund	Tsi-Akim Maidu United Auburn Indian Community PG&E Air Resources Control Board C.A. Native Plant Society- Redbud Chapter Federal Communications Commission Federal Aviation Administration Kevin Johnston Commissioner Coleman-Hunt, District I Friends of Nevada City Supervisor Heidi Hall, District I Tyler Barrington, Principal Planner County Counsel*
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*\*receives full report, others receive NOA only with report available online.*

**Date:** February 1, 2019

**Prepared by:** Sadie Caldas, Associate Planner  
Nevada County Planning Department  
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Email: [sadie.caldas@co.nevada.ca.us](mailto:sadie.caldas@co.nevada.ca.us)

**File Number(s):** PLN17-0074, CUP17-0016, MIS18-0012, EIS17-0023

**Assessor's Parcel Numbers:** 012-720-045

**Applicant/Representative:** Sara King for Epic Wireless Group LLC/ AT&T Mobility  
605 Coolidge Drive, Suite 100  
Folsom, CA 95630  
Telephone: (916) 296-2011

**Property Owner:** Michael D. Stapleton

**Zoning District:** AG-10 (General Agricultural, 10-acre minimum parcel size)

**General Plan Designation:** RUR-10 (Rural, 10-acre minimum parcel size)

**Project Location:** 13083 Wild Life Lane—located approximately 3 miles east of the State Highway 174 and You Bet Road intersection.

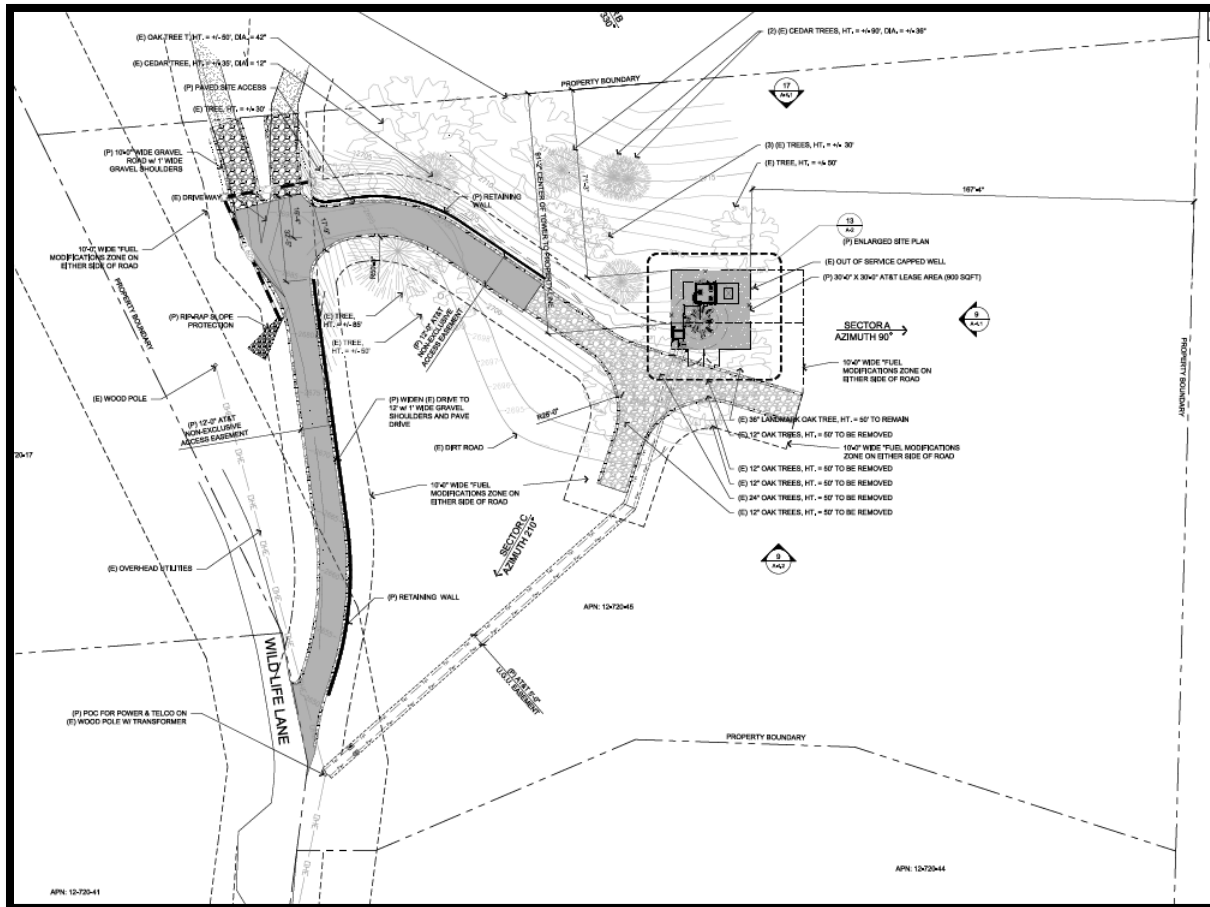
**Project Description:** The project is a combined application to the Zoning Administrator proposing a Conditional Use Permit and a Petition for Exceptions to Driveway Standards for the construction of an unmanned 110-foot-tall monopine telecommunication tower and equipment facility. The project proposes a 900-square-foot lease area (30' x 30') that would be used as the tower site and equipment facility. The project includes an additional 600-square-foot area (30' x 20') adjacent to the equipment facility to reserve as a potential lease area for up to three other carriers. The proposed telecommunications tower would contain nine (9) panel antennas, eighteen (18) remote radio heads/units, and space for additional carriers. The facility would contain a 64-square-foot (8' x 8') walk-in equipment cabinet with two downward facing, fully shielded lights. A backup 20-kw diesel generator with a 92-gallon fuel tank on a concrete slab would

be installed for use during power loss. Up to three additional equipment cabinets or shelters and backup generators may be installed by other carriers in the second lease area (600 square feet) at a later phase in the project. A six-foot tall chain-link fence with three strand anti-climb barrier (totaling 7 feet in height) would initially be constructed around the 900-square-foot facility area, with potential for the same fencing to be installed around the 600-square-foot area designated as the lease area for other carriers. Figure 1 below shows a photo of the site where the lease area would be located. The project includes 230 feet of driveway improvements along an existing driveway, and additional grading to construct a new 225-foot long driveway to the telecommunications facility. Approximately 300 feet of the driveway would be paved with asphalt concrete (AC). The rest of the driveway and a new hammerhead turnaround would be gravel. Two retaining walls up to 6 feet in height would be installed along the driveway, and two 12-inch culverts would be installed across and along the existing driveway. A Petition for Exceptions to Driveway Standards is proposed to allow a driveway grade of up to 25%, and to allow a reduced driveway width of 12 feet along the existing section of driveway that would be paved, instead of the standard width of 12 feet with 1-foot shoulders for grades that exceed 16%. The driveway is accessed off an existing private road—Wild Life Lane. Power and telecommunication lines would be brought to the project site by underground conduit from an existing utility pole on Wild Life Lane. The utilities would be located in a 215-foot long and 5-foot wide easement through the project parcel. The project includes trimming for vegetation management along Wild Life Lane and the proposed driveway. Five oak trees that are 10-24 inches at diameter breast height (dbh or 4'6"), along with shrubs, incense cedar trees and Douglas-fir trees would be removed for the installation of the telecommunications tower site and driveway. Figure 2 on the following page shows the project site plan and proposed improvements.

**Figure 1: Project Site**



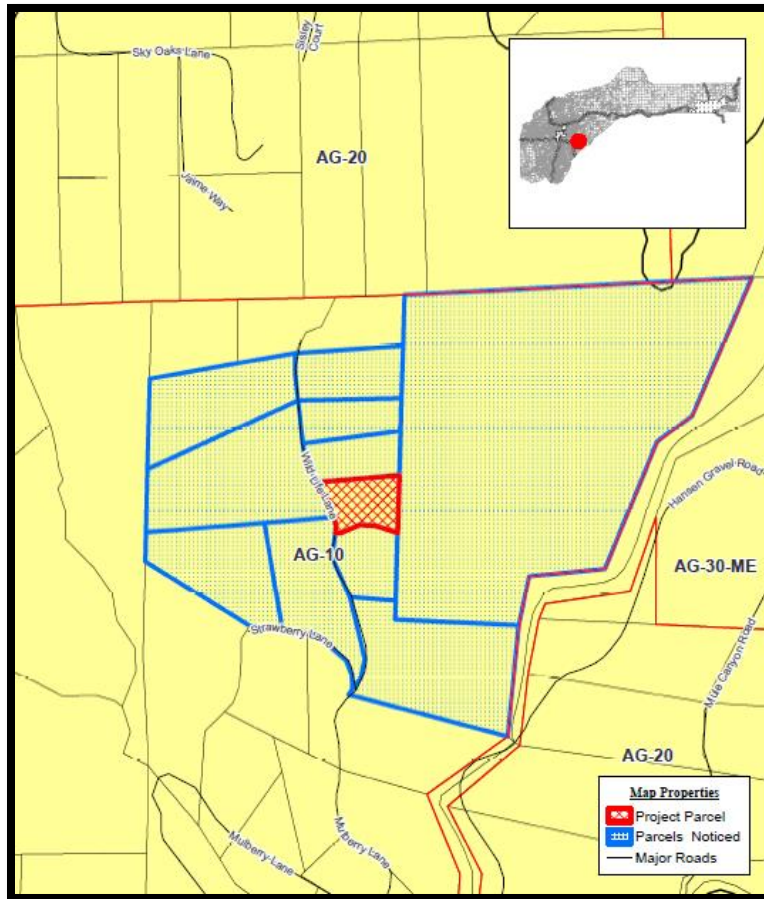
Figure 2: Project Site Plan



**Project Site and Surrounding Land Uses:** The proposed monopine telecommunication facility would be located near the center of a 2.32-acre parcel in an unincorporated area of Nevada County. The site is located on a private road that is approximately 1.3 driving miles north of You Bet Road, and 3.3 miles east of State Highway 174. The proposed telecommunications tower and lease area would be located in an existing opening within a relatively dense foothill oak-pine woodland. A majority of the understory vegetation consists of young conifer trees and some manzanita shrubs.

This parcel and surrounding parcels are zoned General Agricultural with a 10-acre minimum parcel size (AG-10) and have a General Plan designation of Rural with a 10-acre minimum parcel size (RUR-10). Adjacent parcels and several parcels in the area range in size from 2.5 acres to 10.0 acres, with the exception of a 55.10-acre parcel to the east of the project site. Figure 3 on the following page shows the zoning and configuration of the project parcel and surrounding parcels. The project parcel is undeveloped with no improvements, other than a capped well and an existing access driveway that goes through the project parcel. Two parcels to the west and south of the project site are developed with single-family residences. Another two parcels on the east and west sides of the project site are undeveloped, and one northern parcel is developed with an agricultural building. Parcels in the neighborhood generally have rural residential uses.

**Figure 3: Zoning, Noticed Parcels & Vicinity Map**



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

1. Building Permits- Nevada County Building Department
2. Hazardous Materials Storage Permit- Nevada County Environmental Health Department
3. Well Abandonment- Nevada County Environmental Health Department
4. Authority to Construct Permit- Northern Sierra Air Quality Management District

**Relationship to Other Projects:** Since the beginning of 2017, AT&T has applied for four other Conditional Use Permits to install new telecommunications towers in rural areas of Nevada County. All four projects have been approved.

**Tribal Consultation:** Have California Native American Tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code Section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

California Native American Tribes with ancestral land within the project area were routed the project during distribution. The United Auburn Indian Community (UAIC) requested consultation on March 15, 2018, and closed consultation on May 21, 2018. The California Native American Tribes will be sent a Notice of Availability for Public Review and Notice of Intent to Adopt a Mitigated Negative Declaration for this

project, which will allow the California Native American Tribes the opportunity to comment on the analysis of environmental impacts. Mitigation has been included in Sections 5 and 18 of this initial study to address a plan for further consultation, if needed.

### 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	✓	3. Air Quality
✓	4. Biological Resources	✓	5. Cultural Resources	—	6. Energy
✓	7. Geology / Soils	—	8. Greenhouse Gas Emissions	—	9. Hazards / Hazardous Materials
—	10. Hydrology / Water Quality	—	11. Land Use / Planning	—	12. Mineral Resources
✓	13. Noise	—	14. Population / Housing	—	15. Public Services
—	16. Recreation	—	17. Transportation	✓	18. Tribal Cultural Resources
✓	19. Utilities / Service Systems	—	20. Wildfire	✓	21. Mandatory Findings of Significance

**Summary of Impacts and Recommended Mitigation Measures:**

- 3. **AIR QUALITY:** To offset potentially adverse air quality impacts associated with the project activities, the following mitigation measures 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](mailto: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 issuance of grading or improvement permits

**Reporting:** Agency approval of permits or plans

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



**Mitigation Measure 3B: Mitigate any asbestos discovered during construction.** Prior to issuance of grading permits or improvement plans, all plans shall incorporate, at a minimum, the following asbestos control measures, which shall be implemented in the field: If serpentine, ultramafic rock or naturally occurring asbestos are discovered during construction or grading, the Northern Sierra Air Quality Management District shall be notified within 24 hours, and specific requirements contained in Section 93105 of Title 17 of the California Code of Regulations must be strictly complied with.

*Timing:* Prior to issuance of grading or improvement permits and during construction

*Reporting:* Approval of grading or improvement permits and as applicable

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

**Mitigation Measure 3C: Minimize dust emissions.** The applicant shall use reasonable precautions to minimize dust generation, including but not limited to watering the vehicle traffic area, watering any stockpiled material, and limiting traffic speeds. Such methods shall be noted on the improvement plans prior to approval.

*Timing:* Prior to issuance of grading or improvement permits and during construction

*Reporting:* Agency approval of permits or plans

*Responsible Agency:* Planning Department

4. **BIOLOGICAL RESOURCES:** To reduce potential construction impacts to sensitive species, the following mitigation measures are recommended:

**Mitigation Measure 4A: Implement Best Management Practices** to protect native vegetation.

- a. If straw bales are used for erosion control, or if straw is broadcast over seeded areas, only certified weed-free straw or rice straw shall be utilized to minimize the risk of introducing or spreading noxious weeds such as Scotch Broom, yellow star thistle, or Italian thistle.
- b. Inspect all construction equipment to ensure that they do not transport noxious weeds into the project area.
- c. The applicant shall distribute copies of these mitigation measures and any other permit requirements to the contractors, prior to construction commencing.

*Timing:* Prior to issuance of grading or improvement permits and during construction

*Reporting:* Agency approval of permits or plans

*Responsible Agency:* Planning Department and Building Department

**Mitigation Measure 4B: Conduct a pre-construction nesting survey to determine if active avian nests are present on the site.** If construction activities will occur during non-breeding season (September 1-January 31), a survey is not required and no further studies are required. If construction activities will occur during the nesting season (February 1- August 31), a pre-construction survey shall be required. The survey shall be conducted by a qualified biologist no more than 14 days prior to the onset of construction activities. If construction does not commence within 14 days of the pre-construction survey, or halts for more than 14 days, an additional survey is required prior to starting work. If active nests are found on or within 500 feet of the site, disturbance or removal of the nest shall be avoided until the young have fledged and the nest is no longer active. The project biologist shall recommend a buffer based on the species, site conditions, and the proposed construction activities near the active nest, and the sighting shall be reported to California Department of Fish and Wildlife and the California Natural Diversity Database. Typically, a 500-foot buffer is recommended for raptor nests, and smaller buffers are recommended for other species.

*Timing:* Prior to issuance of grading or improvement permits

**Reporting:** Approval of the grading and improvement permits  
**Responsible Agency:** Planning Department and Building Department

**Mitigation Measure 4C: Oak Protection Measures.** The following mitigation measures shall be implemented during the construction and shall be shown on all improvement plans:

- a. Establish the area with the landmark oak tree as an Environmentally Sensitive Area (ESA) during construction. The boundary of the ESA shall be 10 feet from the base of the landmark oak tree, on all sides. The ESA boundaries shall be shown on improvement plans.
- b. The 10-foot non-disturbance buffer from the base of the tree shall be delineated on the ground with temporary construction fencing.
- c. The improvement plans shall require contractors to stay outside of the ESA with a provision for penalties if the landmark oak tree is damaged or removed.
- d. No vehicles, construction equipment, mobile offices, or materials should be parked or located within the ESA.
- e. Soil shall not be removed within the ESA, and fill shall not be placed within the ESA.

**Timing:** Prior to issuance of grading or improvement permits and during construction

**Reporting:** Approval of the grading and improvement permits

**Responsible Agency:** Planning Department and Building Department

5. **CULTURAL RESOURCES:** To offset potentially adverse cultural or historical resources impacts associated with the construction activities, the following mitigation measure shall be required:

**Mitigation Measure 5A: Halt work and contact the appropriate agencies if human remains, cultural materials, or paleontological resources are discovered during project construction.**

Prior to issuance of grading permits or improvement plans, all plans shall incorporate, at a minimum, the following cultural resources protection measures, which shall be implemented in the field: 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 or paleontological 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 grading and construction plans for each phase of this project.

**Timing:** Prior to issuance of grading or improvement permits and during construction

**Reporting:** Approval of grading or improvement permits

**Responsible Agency:** Planning Department

7. **GEOLOGY / SOILS:** To offset potentially adverse geological impacts associated with the construction activities, the following mitigation measure shall be required:

**Mitigation:** See Mitigation Measure 5A.

13. **NOISE: Mitigation Measures:** To reduce potentially significant impacts associated with construction noise, the following mitigation measure shall be noted on improvement plans:

**Mitigation Measure 13A: Limit construction activities to reduce noise impacts.** Hours of operation for construction activities shall be limited to the hours of 7 a.m. to 7 p.m. Monday through Friday. These limited hours of operation shall be noted on grading and building plans, which shall be reviewed and approved by the Planning Department prior to permit issuance.

**Timing:** *Prior to issuance of grading or improvement permits and during construction*

**Reporting:** *Agency approval of permits and by complaint*

**Responsible Agency:** *Planning Department and Code Compliance*

18. **TRIBAL CULTURAL RESOURCES: Mitigation Measures:** To offset potentially adverse tribal cultural resource impacts associated with the construction activities, the following mitigation measure shall be required:

**Mitigation:** See Mitigation Measure 5A.

19. **UTILITIES/SERVICE SYSTEMS:** To offset potentially adverse impacts related to construction waste, the following mitigation measure is recommended:

**Mitigation Measure 19A: Appropriately dispose of toxic waste:** Industrial toxic waste (petroleum and other chemical products) is not accepted at the McCourtney Road transfer station and if encountered, shall be properly disposed of in compliance with existing regulations and facilities. This mitigation measure shall be included as a note on all improvement plans, which shall be reviewed and approved by the Planning Department prior to permit issuance.

**Timing:** *Prior to issuance of grading or improvement permits and during construction*

**Reporting:** *Agency approval of permits or plans*

**Responsible Agency:** *Nevada County Planning Department*

**Mitigation Monitoring Matrix:**

MEASURE #	MONITORING AUTHORITY	IMPLEMENTATION TIMING
3A	Planning Department and Northern Sierra Air Quality Management District	Prior to issuance of grading or improvement permits
3B	Planning Department and Northern Sierra Air Quality Management District	Prior to issuance of improvement permits and during construction
3C	Planning Department and Building Department	Prior to issuance of improvement permits and during construction
4A	Planning Department and Building Department	Prior to approval of improvement permits and during construction
4B	Planning Department	Prior to the issuance of improvement permits
4C	Planning Department and Building Department	Prior to issuance of grading or improvement permits and during construction
5A	Planning Department	Prior to issuance of improvement permits and during construction
13A	Planning Department and Code Compliance	Prior to issuance of grading or improvement permits and during construction
19A	Planning Department	Prior to issuance of grading or improvement permits and during construction

## 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. AESTHETICS

**Existing Setting:** The proposed monopine telecommunications tower and facility would be located near the northern central area of a 2.32-acre parcel within a relatively dense foothill oak-pine woodland. There are some large-stature black oak trees in the area with thick understory vegetation consisting mostly of young conifer trees and manzanita shrubs. The terrain in the area has rolling and steep slopes, with a slope that ranges from approximately sixteen percent (16%) to thirty-three percent (33%) in and around the project area. A majority of the surrounding parcels have similar conditions with thick vegetation and steep terrain, with patches of vegetation cleared where development has occurred. The project site is undeveloped with a capped well, no septic system and no structures. Surrounding parcels range from 2.5 to 55.1 acres. Two neighboring parcels are undeveloped, one parcel contains an agricultural building and the other two parcels are developed with single-family residences.

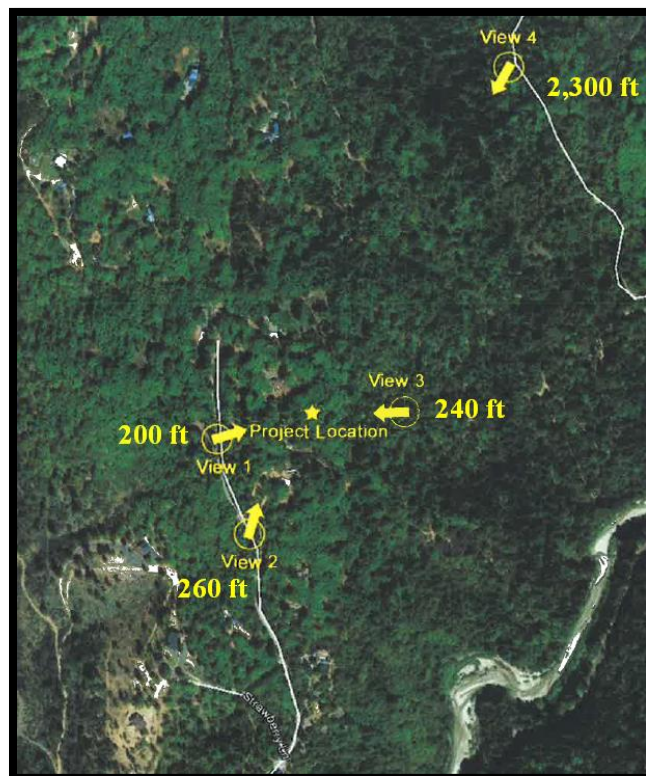
Except as provide in Public Resources Code Section 21099, would the proposed project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact	Reference Source (Appendix A)
a. Have a substantial adverse effect on a scenic vista?			✓		A, L
b. Substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway?				✓	A, L,28
c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area,			✓		A

Except as provide in Public Resources Code Section 21099, would the proposed project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact	Reference Source (Appendix A)
would the project conflict with applicable zoning and other regulations governing scenic quality?					
d. Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?			✓		A, 18

**Impact Discussion:**

1a,c,d The proposed tower would be a ‘monopine’ design which has a bark-like color and texture to camouflage the pole, and fabricated branches with green needles to blend in with existing pines. Vegetation in the project area is thick and there are many surrounding trees. Within 100 feet of the proposed tower, there are two cedar trees that are approximately ninety (90) feet tall. Several other oak, pine and cedar trees in the area range from approximately thirty-five to eighty-five (35-85) feet tall. Because of the terrain and existing vegetation, the proposed tower is expected to blend in with the surroundings. The figure below (Figure 4) shows a map of the project location and the locations where photo simulations were created to show a view of what the tower would look like. The figure shows the approximate distance of the photo simulations from the tower. The monopine would be beyond existing vegetation from all of these views and could not be seen in the photo simulations. No other public roads are within 1,500 feet of the project area. Nevada County Planning Department staff also conducted a site inspection of the project area. Based on the terrain and thick vegetation, staff determined that the tower would not be in direct public view and would likely be concealed by vegetation from all public views.

**Figure 4: Map of Photo Simulations**



Although the closest photo simulation is from View 1 off Wild Life Lane, this area of Wild Life Lane has steep banks along the side of the road. The tower would be located up the hillside and approximately 200 feet to the east. The proposed tower and equipment facility would not be able to be seen from View 1. Figure 5 below shows the photo simulations from View 2, which is a view looking into the project parcel from Wild Life Lane. The project area would be located beyond the existing vegetation and approximately 260 feet from this location. As shown below, the proposed tower is not visible in this photo simulation.

**Figure 5: Photo Simulation from Wild Life Lane**



The nearest residence to the project area is approximately 190 feet south of the project area. The steep terrain and thick vegetation would likely block views of the monopine. An agricultural building is located on the parcel to the north of the project parcel and is approximately 190 feet away. The vegetation surrounding the project area would be expected to block all views of the equipment facility. If vegetation is cleared or if there are openings on neighboring parcels, the monopine may be seen at a distance, but it would not be clearly visible or in direct view. If the monopine could be seen at all from public views or a neighboring residence, it is anticipated that because of the design, the monopine would blend in with the vegetation.

The project includes two lights on the equipment cabinet that would be fully shielded and downward facing. The lighting would be manually operated and only used when needed by maintenance technicians. There would be no continuous lighting at the project site. Additional lighting may be installed if additional carriers are added to the second lease area. A condition in the recommended Conditions of Approval for the project would require that all lighting at the site shall meet lighting standards to prevent light trespass or pollution. Due to the concealed location of the project area and the limited amount of lighting, impacts of public views, scenic vistas and light glare are anticipated to be *less than significant*.

1b,e There are no state scenic highways are in the vicinity of the project area. State Highway 174 is approximately 1.8 direct miles (as the crow flies) from the project area, which is considered an eligible state scenic highway by the California Department of Transportation (2011). Several hills are between State highway 174 and the project area. No visibility of the monopine or equipment facility from the highway are anticipated. Therefore, the proposed project would result in **no impact** on state scenic highways.

**Mitigation:** None required.

**2. AGRICULTURAL/FORESTRY RESOURCES**

**Existing Setting:** The project site is designated “Other Land” by the Farmland Mapping and Monitoring Program of the California Department of Conservation. Although the parcel is zoned AG-10, it does not contain any Important Farmlands and the project parcel is not being used for agriculture. The parcel is mostly undisturbed, with a capped well and an access road.

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?				✓	A, L, 7
b. Conflict with existing zoning for agricultural use or conflict with a Williamson Act contract?			✓		A, 18
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 (as defined by Government Code Section 51104(g))?				✓	A, L, 18
d. Result in the loss of forest land or conversion of forest land to non-forest use?				✓	L, 18
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?			✓		A, L, 7

**Impact Discussion:**

2a,c,d The project parcel does not contain any Important Farmlands as identified by the Farmland Mapping and Monitoring Program by the California Department of Conservation. The site is not zoned in Forest or the Timber Production Zone designations and does not propose any changes to the zoning designation. No forest land is involved in the project; therefore, there would be no loss of forest land or conversion of forest land to non-forest use. The proposed project would result in **no impact** to Important Farmland or forest land.

2b,e The California Land Conservation Act of 1965 (Williamson Act) enables counties and cities to designate agricultural preserves and offer preferential taxation based on a property's agricultural-use value rather than on its market value. The project site is not under a Williamson Act contract. The proposed project would not directly or indirectly affect the adjoining parcel's ability to comply with the Williamson Act contract, nor would it prevent agricultural uses on or offsite. The total lease area of 1,500 square feet and the driveway to access the lease area would be a small portion of the 2.32-acre parcel that would no longer have the potential to be used for agriculture. Communication towers are allowable on AG zoned properties with an approved Use Permit and there is no Important Farmland on this parcel. With no Williamson Act contract and a small area of property used for the project site, the proposed project impacts would be *less than significant* to existing zoning for agricultural use or a Williamson Act contract.

**Mitigation:** None required.

### 3. AIR QUALITY

**Existing Setting:** Nevada County is located in the Mountain Counties Air Basin. 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.

Western Nevada County is classified as a Serious Nonattainment Area for the 2008 ozone NAAQS and Moderate Nonattainment for the 2015 ozone NAAQS. It is also Nonattainment for the ozone CAAQS. The area is also Marginal Nonattainment for the 2008 ozone NAAQS and is Nonattainment for the ozone CAAQS. Most of western Nevada County's ozone is transported to the area by wind from the Sacramento area and, to a lesser extent, the San Francisco Bay Area. 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.

Nevada County is also Nonattainment for the PM10 CAAQS, but Unclassified for the PM10 NAAQS due to lack of available recent data. The number after "PM" refers to maximum particle size in microns. PM10 is a mixture of dust, combustion particles (smoke) and aerosols, whereas PM2.5 is mostly smoke and aerosol particles. PM2.5 sources include woodstoves and fireplaces, vehicle engines, wildfires and open burning. PM10 sources include the PM2.5 plus dust, such as from surface disturbances, road sand, vehicle tires, and leaf blowers. Some pollen and mold spores are also included in PM10, but most are larger than 10 microns. All of Nevada County is Unclassifiable/Attainment for the PM2.5 NAAQS and Unclassified for the PM2.5 CAAQS (US Environmental Protection Agency, 2015).

Ultramafic rock and its altered form, serpentine rock (or serpentinite), both typically contain asbestos, a cancer-causing agent. Ultramafic rock and serpentine are likely to exist in several areas of western Nevada County; however, the area of the project site is not mapped as an area that is likely to contain natural occurrences of asbestos (California Department of Conservation, 2000). A Biological Inventory of the project site also found that no serpentine or gabbro-derived soils in the Rescue, Secca, or Chaix variant soil series are mapped near the project area (Beedy, 2018).



An evaluation of project impacts related to greenhouse gas emissions is provided in Section 8 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. Conflict with or obstruct implementation of the applicable air quality plan.				✓	A,G
b. 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?			✓		A,G
c. Expose sensitive receptors to substantial pollutant concentrations?			✓		A,G,L
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?		✓			A,G
e. Generate substantial smoke ash or dust?		✓			A,G

**Impact Discussion:**

- 3a The proposed project would not conflict with or obstruct implementation of an applicable air quality plan; therefore, *no impact* is anticipated on the potential adoption or implementation of an air quality plan.
- 3b Western Nevada County is in non-attainment for the Federal 8-hour ozone standard, and the entirety of Nevada County is in non-attainment for the State 1- and 8-hour ozone standards and PM10 standards. While most of the ozone in the County is transported from urban areas to the southwest, PM10 sources primarily come from within the County. PM10 violations in winter are largely due to wood smoke from the use of woodstoves and fireplaces, while summer and fall violations often occur during forest fires or periods of open burning. The proposed project would result in a temporary but incrementally small net increase in pollutants due to vehicle and equipment emissions. Therefore, this impact is *less than significant*.
- 3c The project proposes a backup generator that would only be in operation for maintenance and testing, and for use during power outages at the site. The backup generator would not cause substantial air pollutant emissions or objectionable smoke, ash, or odors. The facility would be unmanned, with minimal traffic generated by technicians that would service equipment at the site. No sensitive receptors are in the immediate area of the project and substantial pollutant concentrations are not expected. The closest school in Nevada County is approximately 4.0 direct miles from the project site, and the adjacent county is approximately 2.6 direct miles the project parcel. The closest residence is approximately 190 feet south of the project area. Therefore, impacts to exposing sensitive receptors to substantial pollutant concentrations are anticipated to be *less than significant*.
- 3d The proposed project includes a 20-kW backup diesel generator during the initial phase of construction. The Northern Sierra Air Quality Management District (NSAQMD) has indicated that a backup generator with an engine that is less than fifty (50) horsepower does not require an air pollution permit in this air district. The generator proposed for the 900 square foot lease area has an engine that is approximately 44.5 horsepower (33.5-kW). This generator does not require an

Air Pollution permit from NSAQMD, but Mitigation Measure 3A has been included to require an Air Pollution permit for any future generators at the site that would not be exempt from a permit.

Additionally, the construction phase of this project will entail some ground disturbance. Serpentine soils or ultramafic rock are not mapped on the project site, although there is still potential for these materials to be encountered during construction. The NSAQMD requires notification in the event that ground disturbance yields serpentine, ultramafic rock or naturally occurring asbestos, as outlined in Mitigation Measure 3B. With the addition of Mitigation Measure 3A and 3B, impacts from emissions would be *less than significant with mitigation*.

- 3e NSAQMD requires a Dust Control Permit when site disturbance will meet or exceed one acre. Total site disturbance for this project includes approximately 0.5 acres of disturbance for construction of the lease area, trenching for the utility lines, and driveway improvements. Although this amount of disturbance would not result in the need for a Dust Control Permit, Mitigation Measure 3C to minimize dust emissions is recommended to reduce dust impacts in a way commensurate with the amount of grading being proposed. Reasonable precautions may include watering vehicle traffic areas, as well as any stockpiled material, and limiting traffic speeds. Such methods will be required to be noted on the improvement plans prior to approval. With the compliance of the required mitigation measure, the potential adverse impact on the generation of substantial dust would be *less than significant with mitigation*.

**Mitigation Measures:** To offset potentially adverse air quality impacts associated with the project activities, the following mitigation measures 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](mailto: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 issuance of grading or improvement permits*

**Reporting:** *Agency approval of permits or plans*

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

**Mitigation Measure 3B: Mitigate any asbestos discovered during construction.** Prior to issuance of grading permits or improvement plans, all plans shall incorporate, at a minimum, the following asbestos control measures, which shall be implemented in the field: If serpentine, ultramafic rock or naturally occurring asbestos are discovered during construction or grading, the Northern Sierra Air Quality Management District shall be notified within 24 hours, and specific requirements contained in Section 93105 of Title 17 of the California Code of Regulations must be strictly complied with.

**Timing:** *Prior to issuance of grading or improvement permits and during construction*

**Reporting:** *Approval of grading or improvement permits and as applicable*

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

**Mitigation Measure 3C: Minimize dust emissions.** The applicant shall use reasonable precautions to minimize dust generation, including but not limited to watering the vehicle traffic area, watering any stockpiled material, and limiting traffic speeds. Such methods shall be noted on the improvement plans prior to approval.

**Timing:** *Prior to issuance of grading or improvement permits and during construction*

**Reporting:** *Agency approval of permits or plans*

**Responsible Agency:** *Planning Department and Building Department*

**4. BIOLOGICAL RESOURCES**

**Existing Setting:** A biological inventory of the site was prepared by Edward Beedy, as a consultant for Geist Engineering and Environmental Group, Inc. on May 17, 2018. A previous inventory of the site was completed by Edward Beedy on June 7, 2017, and was revised to correspond with changes to the proposed project. Pre-field investigations and surveys were conducted by the biologist (Beedy) in May 2017 and April 2018 to determine the existing setting and assess habitats in and around the project area in. Based on information from the biological inventory, the environmental setting and resources are described below.

The proposed project site is in a relatively dense foothill oak-pine woodland. Most of the understory vegetation is dominated by young conifer trees and some manzanita shrubs. There are some large-stature black oak (*Quercus kelloggii*) trees that range from twenty to twenty-five (20-25) inches at diameter breast height (dbh or 4'6") that are adjacent to the project area. One landmark oak tree that is thirty-six (36) inches at dbh is located in the project area. No landmark oak groves exist in or adjacent to the project area. Small Douglas-fir (*Pseudotsuga menziesii*) and incense cedar (*calocedrus decurrens*) trees, along with manzanita (*Arctostaphylos* sp.) shrubs are located in the area of the proposed access road. The equipment facility and telecommunications tower would be situated in an existing clearing with only a few trees and shrubs. No waterways or wetlands occur in or near the project area.

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?				✓	K,19
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?		✓			A,K,L,19
c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				✓	A,K,L,19
d. 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?		✓			19

Would the proposed project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact	Reference Source (Appendix A)
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?		✓			A,19
f. Conflict with the provisions of an adopted Habitat Conservation Plan, or other approved local, regional, or state habitat conservation plan?				✓	A,19
g. Introduce any factors (light, fencing, noise, human presence and/or domesticated animals) which could hinder the normal activities of wildlife?			✓		A,19

**Impact Discussion:**

4a,c The project area was surveyed by biologist Edward Beedy in May 2017 and April 2018, in order to complete the biological inventory of the site. The surveys included the lease area, driveway, and utility corridor. The biological inventory included a records search of the California Department of Fish and Wildlife’s (CDFW) California Natural Diversity Database (2018), U.S. Fish and Wildlife Service (USFWS 2018), and the California Native Plant Society Electronic Inventory (2018) for special-status species with potential to occur in the vicinity of the project area. Beedy’s pre-field investigation also included a review of the Nevada County Natural Resources Report (Beedy and Brussard 2002) for information on the extent of habitats and the relationship between habitats and special-status species in a local and regional context. The pre-field investigation determined that there are special-status plants and animals within range of the project site that are of concern to CDFW and USFWS. The field surveys determined that no suitable habitat exists in or near the project area to support listed and other special-status animals known from the region, and there is no suitable habitat present within the project area to support the listed plants known from the region. The bird species that were observed in the area of the project site are common to the western foothills of the Sierra Nevada and no amphibians, reptiles, or mammals were observed in the project area during the surveys.

In addition, the project area does not contain any wetlands or water features. Wetlands have not been mapped on the project parcel or on any of the adjacent parcels, and the biological inventory determined that wetlands are not present at or near the project area. Due to the project not having a suitable habitat to support special-status plants or animals, and because there are no wetlands present in the project area, the project would have *no impact* on these protected habitats or species.

4b There are no riparian habitats or sensitive plant species identified in or around the project area. The closest waterway is Greenhorn Creek, which is approximately 1,100 feet to the southeast of the project site. A seasonal stream that flows into Greenhorn Creek is located approximately 1,200 feet to the northeast. There project includes soil disturbance during construction of the tower and facility site, and to extend the driveway and make improvements along the existing driveway. Complete grading and erosion control plans will be required when the building permit is applied for, and the project will have to comply with the Nevada County grading standards outlined in Land Use and Development Code Section V, Article 13, which requires erosion control in place for any grading and/or soil disturbance. To prevent the introduction of noxious weeds to the site during construction, the biological inventory included a recommended requirement for certified weed-free erosion control for ground disturbance. Mitigation Measure 4A is recommended to require certified weed-free erosion control and inspections of construction equipment, to minimize the risk of introducing and spreading noxious weeds to the project area. With Mitigation Measure 4A, the

anticipated impacts to the diversity or quality of native vegetation would be *less than significant with mitigation*.

- 4d The equipment facility and telecommunications tower site would be located in a 900-square-foot lease area. The secondary lease area for additional carriers would only be an additional 600 square feet. The 900-square-foot primary equipment area would be fenced during the first phase of construction. If/when additional carriers are added to the site, the 600-square-foot lease area would also be fenced. Due to the size of the lease area, any impacts to the movement of wildlife would be minimal. However, the biological inventory identified possible impacts to nesting birds if construction starts during breeding and nesting season, and recommended that a preconstruction survey should be conducted if construction begins during February<sup>1</sup> through September 1. Mitigation Measure 4B is recommended to ensure impacts are *less than significant with mitigation* for movement of wildlife species, or the use or interference of native wildlife nursery sites.
- 4e Nevada County has a number of local policies and ordinances that protect biological resources, including deer habitat; rare, threatened, and endangered species and their habitats; timber resources; and watercourses, wetlands, and riparian areas. Many of the protected resources are not present in the project area, with the exception of one landmark oak tree. Section L-II 4.3.15 of the Land Use and Development Code identifies resource standards for landmark oak trees and landmark oak groves that are applied to Use Permit projects. The biological inventory determined that there are no landmark oak groves in or around the project area, but there is one landmark oak tree that is thirty-six (36) inches at diameter breast height (dbh). This section states that projects shall be approved only when the project does not remove or disturb defined trees or groves, unless a Management Plan is prepared. For this project, the hammerhead turnaround has been surveyed and designed to avoid the landmark oak tree. The biological inventory recognizes the tree in the project area and includes that as the project is proposed, no gravel will be placed within ten (10) feet from the base of the tree. Planning Department staff also discussed this tree and the project with the biologist. The biologist explained that even if gravel was within ten (10) feet of the base of the tree there still may not be an impact to the tree, but with a 10-foot buffer, no impacts would be anticipated. To ensure that there is no disturbance to the landmark oak tree, Mitigation Measure 4C has been included, which identifies the 10-foot buffer of the base of the tree as an Environmentally Sensitive Area and requires oak protection measures during construction. With Mitigation Measure 4C, conflicts with local policies and ordinances are expected to be *less than significant with mitigation*.
- 4f The project site is not part of a Habitat Conservation Plan or any other adopted conservation plans; therefore, there project would have no impacts or conflicts with adopted conservation plans.
- 4g Given that the site would be unstaffed, any noise and light disturbances would be infrequent. The proposed lighting would be manually operated and only used while a technician is at the site. The backup generator(s) would be turned on and tested for maintenance or would operate during power outages. The project site would only have an initial fenced area of 900 square feet, with the potential of enclosing an additional 600 square feet at later date if an additional carrier is added. With limited use and the modest project area, impacts to normal wildlife activities would be *less than significant*.

**Mitigation:** To reduce potential construction impacts to biological resources, the following mitigation measure is required:

**Mitigation Measure 4A: Implement Best Management Practices** to protect native vegetation.

- a. If straw bales are used for erosion control, or if straw is broadcast over seeded areas, only certified weed-free straw or rice straw shall be utilized to minimize the risk of introducing or spreading noxious weeds such as Scotch Broom, yellow star thistle, or Italian thistle.
- b. Inspect all construction equipment to ensure that they do not transport noxious weeds into the project area.
- c. The applicant shall distribute copies of these mitigation measures and any other permit requirements to the contractors, prior to construction commencing.

**Timing:** *Prior to issuance of grading or improvement permits and during construction*

**Reporting:** *Agency approval of permits or plans*

**Responsible Agency:** *Planning Department and Building Department*

**Mitigation Measure 4B: Conduct a pre-construction nesting survey to determine if active avian nests are present on the site.** If construction activities will occur during non-breeding season (September 1-January 31), a survey is not required and no further studies are required. If construction activities will occur during the nesting season (February 1- August 31), a pre-construction survey shall be required. The survey shall be conducted by a qualified biologist no more than 14 days prior to the onset of construction activities. If construction does not commence within 14 days of the pre-construction survey, or halts for more than 14 days, an additional survey is required prior to starting work. If active nests are found on or within 500 feet of the site, disturbance or removal of the nest shall be avoided until the young have fledged and the nest is no longer active. The project biologist shall recommend a buffer based on the species, site conditions, and the proposed construction activities near the active nest, and the sighting shall be reported to California Department of Fish and Wildlife and the California Natural Diversity Database. Typically, a 500-foot buffer is recommended for raptor nests, and smaller buffers are recommended for other species.

**Timing:** *Prior to issuance of grading or improvement permits and during construction*

**Reporting:** *Approval of the grading and improvement permits*

**Responsible Agency:** *Planning Department*

**Mitigation Measure 4C: Oak Protection Measures.** The following mitigation measures shall be implemented during the construction and shall be shown on all improvement plans:

- a. Establish the area with the landmark oak tree as an Environmentally Sensitive Area (ESA) during construction. The boundary of the ESA shall be 10 feet from the base of the landmark oak tree, on all sides. The ESA boundaries shall be shown on improvement plans.
- b. The 10-foot non-disturbance buffer from the base of the tree shall be delineated on the ground with temporary construction fencing.
- c. The improvement plans shall require contractors to stay outside of the ESA with a provision for penalties if the landmark oak tree is damaged or removed.
- d. No vehicles, construction equipment, mobile offices, or materials should be parked or located within the ESA.
- e. Soil shall not be removed within the ESA, and fill shall not be placed within the ESA.

**Timing:** *Prior to issuance of grading or improvement permits and during construction*

**Reporting:** *Approval of the grading and improvement permits*

**Responsible Agency:** *Planning Department and Building Department*

## 5. CULTURAL RESOURCES

**Existing Setting:** The project vicinity was home to the Nisenan or Southern Maidu Native American people. The Nisenan had permanent settlements along major rivers in the Sacramento Valley and foothills, and would travel yearly into higher elevations to hunt or gather seasonal plant resources. In the project vicinity, prehistoric-period habitation sites are primarily found adjacent to streams or on ridges or knolls, especially those with a southern exposure. The project area is about 1,100 feet northwest of Greenhorn Creek.

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 pursuant to § 15064.5?		✓			J,22
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?		✓			J,22
c. Disturb any human remains, including those interred outside of formal cemeteries?		✓			J,22

### Impact Discussion:

5a-c A records search of the California Historic Resources Information System (CHRIS) was conducted by the North Central Information Center (NCIC) on May 25, 2017, for cultural resource site records and survey reports within a quarter of a mile radius of the proposed project area. No cultural resources were found in the records search. It was determined that there is a low potential for prehistoric or historic sites in the immediate vicinity of the project area and further archival research and/or field study was not recommended. However, given that there may be some ground disturbance for this project, there is a potential for unanticipated discovery of cultural resources, including historic, prehistoric, tribal, and paleontological resources, during project construction. Due to a chance of resources being encountered Mitigation Measure 5A has been included, which requires that work shall be halted and proper notification and consultation shall be required if any artifacts or cultural resources are discovered during construction. With the implementation of Mitigation Measure 5A, impacts to cultural resources are expected to be *less than significant with mitigation*.

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

**Mitigation Measure 5A: Halt work and contact the appropriate agencies if human remains, cultural materials, or paleontological resources are discovered during project construction.**

Prior to issuance of grading permits or improvement plans, all plans shall incorporate, at a minimum, the following cultural resources protection measures, which shall be implemented in the field: 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 or paleontological 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 grading and construction plans for each phase of this project.

**Timing:** *Prior to issuance of grading or improvement permits and during construction*

**Reporting:** *Approval of grading or improvement permits*

**Responsible Agency:** *Planning Department*

## 6. ENERGY

**Existing Setting:** The project site is undeveloped with a capped well. There is a utility pole for electrical service along Wild Life Lane, located on the project parcel. Currently, the project parcel does not contain electrical utilities.

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 potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during construction or operation?			✓		A
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?				✓	A,D

### Impact Discussion:

6a The proposed telecommunication tower and equipment facility would be unmanned. Technicians would only be on-site for testing and maintenance of equipment. A backup generator would be installed for emergency use during power outages. The testing period of the generator would be for approximately ten minutes at a time. The only structure proposed during the initial phase of construction would be sixty-four (64) square feet for the cell tower equipment. Up to three additional carriers may be added to the site, which would likely have comparable backup generators and equipment cabinets. The site would be powered by electric service that is already established in the area. Due to the minimal size of the project area, the construction period is not expected to be over a long duration. The project does not include energy resources beyond what is required to operate the telecommunications tower and facility. Due to the scale of the project, the use of energy resources would not be excessive and therefore, the project would have a *less than significant impact*.

6b The telecommunications tower and equipment facility would not conflict with any state or local plans for renewable energy or energy efficiency. Building permits would be required in order to construct the project. As part of the building permit review, all equipment and structures would be required to meet energy standards identified in the California Building Code. Likewise, the project would not obstruct or prevent plans for renewable energy or efficiency. Therefore, the project would have *no impact* to state or local plans for renewable energy or energy efficiency.

**Mitigation:** None Required.



## 7. GEOLOGY / SOILS

**Existing Setting:** The project site lies on the upper portion of a hillside on the southern side. The lease areas of the project site slopes downhill to the south, from approximately 2,709 to 2,704 feet in elevation. The site is in the Clipper Creek Watershed, which is a tributary of the Bear River (Beedy, 2018). The soil association in the project area is mapped as the Josephine series that has well-drained soils under slate, shale and metamorphic rock. (USDA Soil Conservation Service, 1993). Specifically, the soil at the site is mapped as Josephine loam, thirty to fifty percent slopes (JoE), which is steep soils on mountainous uplands with a high erosion hazard, and runoff that is medium to rapid (USDA Soil Conservation Service, 1993). However, the grade of the existing driveway ranges from approximately twelve to twenty-five percent (12-25%) and the proposed lease area has an average slope of approximately seventeen percent (17%). Drainage flows downhill to the southwest side of the project area.

The Alquist-Priolo Earthquake Fault Zoning Act was adopted in 1972 to prevent the construction of buildings in areas where active faults have surface expression. Ground or fault rupture is generally defined as the displacement that occurs along the surface of a fault during an earthquake. The project site is not within an Alquist-Priolo Earthquake Fault Zone, and is approximately 1.3 miles to the west of a major fault line (Nevada County, 1991). The project site is located within Seismic Zone I—the Low Intensity Zone of the Modified Mercalli scale—meaning the site has a low risk for strong ground motion (Nevada County, 1991).

Would the proposed project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact	Reference Source (Appendix A)
a. Directly or indirectly cause potential substantial adverse effects, including risk of loss, injury or death involving: <ul style="list-style-type: none"> <li>i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.</li> <li>ii. Strong seismic ground shaking?</li> <li>iii. Seismic-related ground failure including liquefaction?</li> <li>iv. Landslides?</li> </ul>			✓		A,L,12,31
b. Result in substantial soil erosion or the loss of topsoil?			✓		D
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?			✓		D,12
d. Be located on expansive soil creating substantial direct or indirect risks to life or property?			✓		D
e. 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?				✓	A

Would the proposed project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact	Reference Source (Appendix A)
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		✓			A
g. Result in substantial grading on slopes over 30 percent?			✓		A,L,9

**Impact Discussion:**

7a-d The telecommunication facility site is on a slope of approximately seventeen percent. Grading is proposed to improve the existing driveway and extend the driveway to the telecommunications tower site. There will be some additional grading to construct a hammerhead turnaround and the equipment facility. During the initial phase of the project, the equipment facility would only be 900 square feet, with the potential to expand the facility by another 600 square feet if additional carriers are added to the site. The Petition for Exceptions to Driveway Standards has been applied for to allow a twelve-foot paved driveway in steeper areas, with a grade up to twenty-five percent (25%). For a grade above sixteen percent (16%), the typical standard is to have a twelve-foot wide driveway with one-foot shoulders. The driveway standards also has a twenty percent (20%) grade limit, with an increase of up to twenty-five percent (25%) with support by the County Fire Marshal and approval of the Petition for Exceptions by the Planning Department. The driveway would be surfaced with gravel in areas that are less than sixteen percent (16%) grade. The project would require building permits for the grading and site improvements, which would require compliance with the Nevada County grading standards outlined in Land Use and Development Code Section V, Article 13. The building permits would also require engineered grading plans and erosion control plans for the soil disturbance. Additionally, 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. The project application included a structural report that is certified by a registered professional engineer, Simon Leland, to ensure that the monopine is structurally safe and anchored adequately. The structural report also includes a seismic analysis of the project site. As part of the project improvements and site inspections by the Building Department, soil compaction testing would be required for the grading at the site along the driveway and where the telecommunications tower would be installed. Furthermore, the project area is not in an area that is mapped with high landslide activity (U.S. Geological Service, 1970).

No specific potential hazards have been identified for the project site. According to the California Department of Conservation (2010), Nevada County is not in an Alquist-Priolo Earthquake Fault Zone. There may be some minor ground vibrations caused by the construction activities at the project site, but ground shaking is not expected to be substantial. Due to the project site and standard building permit requirements, impacts associated with unstable earth conditions are expected to be *less than significant*.

7e The facility would be unstaffed and would not necessitate the need for a bathroom or other facility requiring wastewater disposal. Therefore, there would be *no impact* related to wastewater disposal.

7f There are no known paleontological resources or unique geological features in or around the project site. Being that there will be ground disturbance for grading and the installation of the telecommunications tower and equipment facility, Mitigation Measure 5A would require work to

halt in the event that there is an unanticipated discovery of paleontological resources. Direct or indirect damage to paleontological resources is anticipated to be *less than significant with mitigation*.

7g Grading will occur along an existing access driveway that has slopes of approximately twenty-five percent (25%). Retaining walls will also be installed along the driveway to allow widening to improve the accessibility. The telecommunications tower site has a grade of approximately seventeen percent (17%). Because of the improvements to the driveway, there may be some steep areas along the driveway where the retaining walls would be installed, but the project proposes to improve an area that is already disturbed with substandard grading. Excessive grading in steep slopes is expected to be *less than significant*.

**Mitigation:** See Mitigation Measure 5A.

## 8. GREENHOUSE GAS EMISSIONS

**Existing Setting:** Greenhouse gases (GHGs) are those gases that trap heat in the atmosphere. GHGs are emitted by natural and industrial processes, and the accumulation of GHGs in the atmosphere regulates the earth's temperature. GHGs that are regulated by the State and/or EPA are carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF<sub>6</sub>) and nitrous oxide (NO<sub>2</sub>). CO<sub>2</sub> emissions are largely from fossil fuel combustion. In California, approximately 43 percent of the CO<sub>2</sub> emissions come from cars and trucks. Electricity generation is another important source of CO<sub>2</sub> emissions. Agriculture is a major source of both methane and NO<sub>2</sub>, with additional methane coming primarily from landfills. Most HFC emissions come from refrigerants, solvents, propellant agents and industrial processes, and persist in the atmosphere for longer periods of time and have greater effects at lower concentrations compared to CO<sub>2</sub>. The adverse impacts of global warming include impacts to air quality, water supply, ecosystem balance, sea level rise (flooding), fire hazards, and an increase in health related problems.

Assembly Bill 32 (AB 32), the California Global Warming Solutions Act, was adopted in September 2006 and requires that statewide GHG emissions be reduced to 1990 levels by the year 2020. This reduction will be accomplished through regulations to reduce emissions from stationary sources and from vehicles. The California Air Resources Board (ARB) is the State agency responsible for developing rules and regulations to cap and reduce GHG emissions. In addition, the Governor signed Senate Bill 97 in 2007 directing the California Office of Planning and Research to develop guidelines for the analysis and mitigation of the effects of greenhouse gas emissions and mandating that GHG impacts be evaluated in CEQA documents. CEQA Guidelines Amendments for GHG Emissions were adopted by OPR on December 30, 2009. The Northern Sierra Air Quality Management District (NSAQMD) has prepared a guidance document, *Guidelines for Assessing Air Quality Impacts of Land Use Projects*, which includes mitigations for general air quality impacts that can be used to mitigate GHG emissions.

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?			✓		A, G
b. Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?			✓		A, G, 20

**Impact Discussion:**

8a-b Carbon dioxide (CO2) is the main component of greenhouse gases. The California Emissions Estimator Model (CalEEMod) does not provide adequate inputs for unstaffed communication tower facilities. Use of default inputs generally results in a gross overestimation of emissions. For this reason and because the project is relatively small and would result in a very short construction period and very few operational vehicle trips, CalEEMod was not used for this study. For the proposed project, it is anticipated that CO2 levels would not be substantially significant because the project facility would be unstaffed and would 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 less than one new trip per day is anticipated for site maintenance. The project would also not trigger NSAQMD dust control standards during construction as site disturbance would be well under the one-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 would initially install one 20-kW diesel generator for power outages. The second lease area (600 square feet) would 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 approximately ten minutes, 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*.

**Mitigation:** None required.

**9. HAZARDS/HAZARDOUS MATERIALS**

**Existing Setting:** The property is not within or adjacent to any hazardous materials sites compiled pursuant to Government Code Section 65962.5 (California Department of Toxic Substances Control, 2019). The project area is in a very high fire hazard severity zone as designated by CalFire. The closest school in Nevada County is approximately 4.0 direct miles from the project site, and the adjacent county (Placer County) is approximately 2.6 direct miles (as the crow flies) from the project parcel. There closest airport is the Nevada County Airport, which is approximately 3.5 direct miles from 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. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			✓		C,29
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			✓		C,29

Would the proposed project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact	Reference Source (Appendix A)
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				✓	A,L
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, create a significant hazard to the public or the environment?				✓	C,25
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 result in a safety hazard or excessive noise for people residing or working in the project area?				✓	L
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				✓	H,K
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?			✓		H,K

**Impact Discussion:**

9a-b Despite popular misconceptions, the lower frequency radiation from cellular towers does not pose a significant hazard. 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 and 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.

Operation of the proposed project would not result in the routine transport, use, or disposal of hazardous materials; however, the equipment cabinet would contain battery units and the emergency backup generator uses diesel fuel from a 92-gallon tank. Additionally, 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. As a standard project Condition of Approval, the Nevada County Department of Environmental Health (NCDEH) and Certified Unified Program Agency (CUPA) require that the applicant/facility shall secure and annually renew a permit for the storage of hazardous materials and the generation of

hazardous waste. Due to the minimal amount of hazardous waste and generation on the site the project would have *less than significant impacts* to the public or the environment.

- 9c The proposed project would be about 4.0 miles from Chicago Park Community Charter School, which is the closest school in Nevada County. The project area is approximately 2.6 direct mile to the County line; thus there are no schools within at least a 2.6-mile radius. Due to the distance from the nearest school, *no impact* is anticipated.
- 9d The project site is not on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5; therefore, there would be *no impact*.
- 9e The project site is not located within an airport land use plan and is approximately 3.5 miles southeast of the nearest airport—the Nevada County Airport. the distance from the nearest airport, along with the unstaffed nature of the proposed facility, the project is not anticipated to result in a safety hazard for people residing or working in the project area and there would be *no impact*.
- 9f There is currently no adopted emergency response plan for the project area. As part of the project’s Conditions of Approval, a Fire Protection Plan shall be approved by the Office of the Fire Marshal before improvement permits can be issued. The Fire Protection Plan would identify a feasible evacuation plan for the occupants of the project, although the project is for an unstaffed cellular tower facility that would not have full-time occupants. The project would not impair implementation of, or physically interfere with, adopted emergency response plans, and *no impact* on any emergency response plan would occur as a result of the project.
- 9g As a condition in the project Conditions of Approval, the applicant would be required to provide defensible space around all of the proposed cellular tower facility consistent with California Public Resources Code 4291, which requires up to 100 feet of fuels treatment or to the property line, whichever is closer. The proposed project would not expose people or structures to wildland fires and would improve access to the site and the adjacent parcel that uses the existing driveway, and therefore there would be a *less than significant* impact.

**Mitigation:** None required.

**10. HYDROLOGY / WATER QUALITY**

**Existing Setting:** The project site is located in the Clipper Creek Watershed, which is a tributary of the Bear River (Beedy, 2018). The project is not located in or near a floodplain, with the closest floodplain being approximately 1,050 feet away. Drainage on the property flows to the south and southwest toward Greenhorn Creek, which is the closest waterway to the project site and is approximately 1,100 feet to the southeast. A seasonal stream that flows into Greenhorn Creek is located approximately 1,200 feet to the northeast.

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 discharge requirements or otherwise substantially degrade surface or ground water quality?			✓		A,D

Would the proposed project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact	Reference Source (Appendix A)
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?				✓	A,C
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would: <ul style="list-style-type: none"> <li>i. result in substantial erosion or siltation on- or off-site;</li> <li>ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?</li> <li>iii. create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or</li> <li>iv. impeded or redirect flood flows?</li> </ul>			✓	A,D,9,19	
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				✓	L,9,13
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?				✓	A,D
f. 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?				✓	L,9,13
g. Place within a 100-year flood hazard area structures that would impede or redirect flood flows?				✓	L,13

**Impact Discussion:**

10a,c The project would result in a minimal amount of additional impervious surface increase on the site. Approximately 300 feet of driveway would be asphalt concrete, and there would be additional impervious surface coverage for the generator pad and equipment cabinet (64 square feet). Three additional carriers may be added to the site at a future time with similar equipment that would add a minimal amount of impervious surface coverage. The total lease area is 1,500 square feet, for the primary equipment facility and secondary lease area for additional carriers. With the exception of the equipment, the rest of the lease area would be covered with gravel (pervious surface). The project improvements would not substantially increase the overall surface water runoff. As part of the proposed road improvements, the project includes the installation of two twelve-inch culverts across and along the access driveway. The project Conditions of Approval requires that a drainage report with calculations and an exhibit shall be required with the application for the building permits. All additional drainage caused by the project will be required to be kept on site, without causing additional net stormwater runoff or concentrated flows that that would impact off-site properties. The drainage design is required to be designed and certified by a registered civil

engineer, and it will be reviewed by the Building Department prior to improvement permits being issued. Additionally, as noted in Section 7 *Geology/Soils*, all projects must implement erosion control during construction under Land Use and Development Code Section V, Article 13. The project area has a capped well that is not being used. When a well is no longer in use, it is required to be formally abandoned with a permit from the Environmental Health Department. As a Condition of Approval, a permit would be required to formally abandon the well prior to the start of construction. Abandoning the well would avoid possible contamination to groundwater. With implementation of the standard requirements, the project would not violate any water quality standards or substantially degrade water quality. Therefore, impacts related to drainage, erosion, and mudflow would be *less than significant*.

10b The proposed communication tower facility is unstaffed and does not have any water need. The proposed project will therefore have *no impact* on the existing wells on this or any of the adjacent parcels.

10d-g There is no flood hazard or designated flood zone on the project site. Furthermore, the project is not in a tsunami or seiche zone, and it does not include housing, or conflict or obstruct the implementation of a water quality control plan. Therefore, there would be *no impact* associated with the placement of the telecommunications tower and equipment facility on flood zones or water quality control plans.

**Mitigation:** None required.

**11. LAND USE / PLANNING**

**Existing Setting:** The subject property is a 2.32-acre parcel in an unincorporated area of western Nevada County. The parcel is located southeast of State Highway 174, off You Bet Road and a series of private roads. The zoning is General Agricultural with a ten-acre minimum parcel size (AG-10) and the General Plan designation is Rural with a ten-acre minimum parcel size (RUR-10). All adjacent parcels have the same zoning and General Plan designations. Adjacent parcels and several parcels in the area range in size from 2.5 acres to 10.0 acres, with the exception of a 55.10-acre parcel to the east of the project site. The project parcel is undeveloped with no improvements or existing uses, although there is an existing access road that enters the project parcel. Two parcels to the west and south of the project site are developed with single-family residences. The closest residence is approximately 190 feet south of the project area. Another two parcels on the east and west sides of the project site are undeveloped, and one northern parcel is developed with an agricultural building. Parcels in the neighborhood generally have rural residential uses.

Would the proposed project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact	Reference Source (Appendix A)
a. Physically divide an established community?				✓	A,L
b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?			✓		A,18,19



**Impact Discussion:**

- 11a The project is located in a rural area and it would not physically divide an established community. The project takes place on a 2.32-acre parcel with a total lease area of 1,500 square feet for the telecommunications tower site and facility; therefore, there would be *no impact* to the physical divide of a community from this project.
  
- 11b The AG zoning district provides areas for a range of agricultural uses and support services and facilities. This district allows for more intensive uses, as long as they are not determined to be incompatible with agriculture. Communications towers are an allowable use with an approved Use Permit in AG zoning districts. The development of the tower and facility would not interfere with any future agricultural uses on the site or the surrounding area. The proposed facility would be seventy-one (71) feet from the nearest property line (northern) and it would be approximately 145 feet or more from all other property lines, which provides for a large buffer to other land uses. The site and surrounding area has dense vegetation and would only require occasional traffic trips by technicians performing maintenance and testing at the site. Potential conflicts with applicable land use plans, policies, or regulations that could result in physical impacts are identified within this Initial Study and are found to be less than significant. Therefore, impacts related to land use policy inconsistency and land use incompatibility are considered *less than significant*.

**Mitigation:** None required.

**12. MINERAL RESOURCES**

**Existing Setting:** The project area is not mapped within a Mineral Resource Zone (MRZ), or area of known valuable mineral deposits.

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:**

- 12a-b The proposed project is not mapped within a known mineral resource area or MRZ and would not change existing land uses on the project site. Therefore, the project would have *no impact* on mineral resources.

**Mitigation:** None Required.

### 13. NOISE

**Existing Setting:** The project site is located approximately 165 feet from Wild Life Lane and seventy-two (72) feet from the nearest property line. The site has dense vegetation and is surrounded by rural residential land use. A majority of the surrounding area is undeveloped and appears to be undisturbed land.

The Nevada County General Plan (1995, revised in 2014) establishes noise standards based upon zoning districts. The noise standards for rural zoning districts are as follows:

- Daytime Noise Standard (7 a.m. to 7 p.m.)— 55 dB Leq and 75 dB Lmax
- Evening Noise Standard (7 p.m. to 10 p.m.)— 50 dB Leq and 65 dB Leq
- Nighttime Noise Standard (10 p.m. to 7 a.m.)— 40 dB Leq and 55 dB Lmax

Would the proposed project result in:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact	Reference Source (Appendix A)
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess standards established in the local General Plan or noise ordinance, or applicable standards of other agencies?		✓			A,17,18,24
b. Generation of excessive ground borne vibration or ground borne noise levels?			✓		A
c. For a project located within the vicinity of a private airstrip or 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,L

#### Impact Discussion:

13a An Environmental Noise Assessment Report was prepared by Shore 2 Shore Wireless, Inc. on March, 1, 2018, to evaluate potential noise impacts that would be caused by the backup diesel generator and the heating, ventilation, and air conditioning (HVAC) system (Hatch, 2018). The backup generator is proposed only for emergency use when electrical service is down at the site. The generator would infrequently operate for maintenance. Typical maintenance would occur weekly or biweekly on weekday mornings between 8:00 a.m. and 10:00 a.m. During the time that the generator would be in use, noise levels would increase in the area. The noise assessment states that based on equipment specification and distance, the backup generator at full capacity would produce 44.98 decibels (dB) at the nearest property line (northern), and the HVAC system would produce 22.79 dB at the nearest property line (Hatch, 2018). The HVAC system would be mounted on the southern side of the equipment cabinet and although the eastern property line is further away—approximately 170 feet—the HVAC system would be slightly louder at this property line and would produce 36.61 dB. The HVAC system would operate intermittently to cool the equipment in the cabinet, with peak usage during warmer weather. If both the HVAC system and generator were in operation at the same time, they would produce a combined noise level 65 dB, which would be 44.98 dB at the nearest property line. The Nevada County noise standard during the daytime is 55 dB Leq for an average noise level and 75 dB Lmax for peaks in noise. The generator and HVAC system combined would be under the daytime noise standards. Because the generator is not expected to be in continuous operation, unless of an emergency power outage, this

noise level would only occur during the weekly or biweekly testing of approximately ten minutes at a time. The HVAC system alone, which would be a regular noise producer, is under the Nevada County noise standard for daytime, evening and nighttime noise standards. The noise predictions provided in the noise study are based on the manufacturer's specifications for the equipment, the location, and the distance to the property line. The predictions do not include any external absorbent materials. Given that the site has heavy vegetation surrounding the project area and the noise producers, it is likely that noise levels would be further reduced at the property lines.

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 would not double the decibel level. An example provided shows that one source being 70 dB and the addition of another source at 70 dB, will have a combination of 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 noise level was increased to 47.98 dB at the nearest property line without calculating deductions in noise levels from absorbent materials, it would still be under the maximum County noise limits. If three decibels were added for each additional generator, the project would still be within the noise limits for daytime standards. As part of the projects Conditions of Approval, a recommended 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.

During the project construction there would be a temporary increase in noise levels. If additional carriers are added to the site, there may be additional construction at a later phase in the project. Mitigation Measure 13A has been added below, which establishes reasonable hours for construction activities. After the completion of the tower construction project, the ongoing operation of the facility would be less than significant as noted above. With Mitigation Measure 13A, any construction noise impacts would be reduced to a level that is *less than significant with mitigation*.

- 13b The project includes grading for improvements to the existing driveway and to extend the driveway to the telecommunications tower and facility. Trenching to install utility lines would create some ground disturbance, but no blasting or excessive ground disturbance is proposed to construct the facility. Any ground borne noise or vibrations would have *less than significant impacts*.
- 13c The proposed project is an unstaffed communication facility. No private airstrips or public airports are in the project vicinity, and therefore would have *no impacts* on exposing people residing or working in the project area to excessive noise levels.

**Mitigation Measures:** To reduce potentially significant impacts associated with construction noise, the following mitigation measure shall be noted on improvement plans:

**Mitigation Measure 13A: Limit construction activities to reduce noise impacts.** Hours of operation for construction activities shall be limited to the hours of 7 a.m. to 7 p.m. Monday through Friday. These limited hours of operation shall be noted on grading and building plans, which shall be reviewed and approved by the Planning Department prior to permit issuance.

**Timing:** *Prior to issuance of grading or improvement permits and during construction*

**Reporting:** *Agency approval of permits and by complaint*

**Responsible Agency:** *Planning Department and Code Compliance*

**14. POPULATION / HOUSING**

**Existing Setting:** The project site is zoned AG-10—a rural district with agricultural use as the primary use and residential as a supporting use, with a maximum density of one unit per ten acres. The parcel is undeveloped and has a capped well. The closest residence is approximately 190 feet south of the project area. Most of the area on the project parcel and nearby parcels are undisturbed/undeveloped. Directly to the north, which is the closest property to the project parcel, the property is developed with an agricultural storage building.

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 unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				✓	A
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				✓	A

**Impact Discussion:**

14a-b The project area would continue the same residential and agricultural uses currently in practice 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:** None required.

**15. PUBLIC SERVICES**

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

The following public services are provided to this site:

Fire: The Peardale-Chicago Park Fire District provides fire protection services to this site.

Police: The Nevada County Sheriff provides law enforcement services.

Schools: The Grass Valley and Nevada Joint Union School Districts provides education for the area.

Parks: The Grass Valley Park and Recreation districts provide recreational facilities and opportunities.

Water & Sewer: N/A

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?			✓		H, M
2. Police protection?				✓	A
3. Schools?				✓	A, P
4. Parks?				✓	A
5. Other public services or facilities?				✓	A

**Impact Discussion:**

15a.1 The project is not anticipated to have significant impacts on fire protection services. It would include the installation of electrical services to the project site, generators and fuel storage. As discussed in Section 9 *Hazards/Hazardous Materials*, defensible space would be required to reduce fire fuels around the project site. There would not be any alterations required for fire protection facilities and no new facilities are proposed. Because there would be a possible need for fire protection services, but there would be no alteration in fire facilities, the impact is considered to be *less than significant*.

15a.2-5 The project facility is unstaffed and not anticipated to impact law enforcement services, schools, public recreational facilities, or public services. As noted in Section 14 *Population/Housing* above, the project would not result in a permanent or substantial temporary increase in population that could impact these services. The project would not impact sewer services or water services because the project does not require these services. The shelter and tower would utilize PG&E electrical service. Power and a telephone line would be connected at an existing utility pole on the project parcel. No comments have been received from PG&E regarding this project. *No impacts* are anticipated for police protection, schools, parks and public utility services.

**Mitigation:** None required.

**16. RECREATION**

**Existing Setting:** The project site is located within the Grass Valley Recreation Benefit Zone, but no recreational facilities occur onsite or in close proximity to the project area.

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?				✓	A

Would the proposed project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact	Reference Source (Appendix A)
b. Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?				✓	A
c. Conflict with established recreation uses of the area, including biking, equestrian and/or hiking trails?				✓	A, L

**Impact Discussion:**

16a-c The project would not adversely affect recreation facilities because they are not on or near the project site. The facility would be unstaffed and would therefore not create demand for recreational services or increase the use of existing recreational facilities. Therefore, the proposed project would have *no impact* related to these issues.

**Mitigation:** None required.

**17. TRANSPORTATION**

**Existing Setting:** The proposed project includes improvements to an existing access driveway, and the extension of the driveway, off an existing private road—Wild Life Lane. The driveway improvements would also include the addition of a hammerhead turnaround.

Would the proposed project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact	Reference Source (Appendix A)
a. Conflict with a program plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle or pedestrian facilities?				✓	A,B
b. Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?			✓		A,B
c. Substantially increase hazards due to a geometric design feature (e.g., a sharp curve or dangerous intersection) or incompatible uses (e.g., farm equipment)?			✓		A,H,M
d. Result in inadequate emergency access:			✓		H,M
e. Result in an increase in traffic hazards to motor vehicles, bicyclists, or pedestrians, including short-term construction and long-term operational traffic?			✓		A,H,M

**Impact Discussion:**

17a The site would not conflict with any policies regarding transit, roadway, bicycle or pedestrian facilities. Existing transit service are not available in this area and would not be affected by the project. The project would have *no impact* regarding these policies or services.

17b-e The project is not expected to contribute to a substantial increase in traffic during the operational phase of the project. A technician for each carrier is expected to travel to the site once a week or once every two weeks. The initial phase of the project only has one carrier and only one weekly

trip would be expected. If three more carriers are added to the site, the most vehicle miles traveled would be for four roundtrip traffic trips to the site per week. The site would be traveled to on existing roads and would only require an access driveway that would be surfaced with asphalt concrete along grades that exceed sixteen percent (16%), up to twenty-five percent (25%). The hammerhead turnaround and the section of driveway with a grade less than sixteen percent (16%) would be surfaced with gravel. The project includes a Petition for Exceptions to Driveway Standards to allow the driveway to have a grade above twenty percent (20%) and for the driveway to be twelve feet wide and paved with asphalt concrete instead of the standard requirement of twelve feet wide with one-foot shoulders on steeper grades. The existing access driveway that is used to access this parcel and the parcel to the north of the project site is in substandard condition. The driveway is dirt and gravel, and has deep ruts from erosion. Figure 6 below shows the current condition of the access driveway. Because of the terrain and steep banks along the side of the existing driveway, additional widening along this area would substantially increase the amount of grading into the hillside. The Office of the Fire Marshal has reviewed the proposed project and the Petition for Exceptions to Driveway Standards, and has determined that the proposed access and improvements are adequate and would drastically improve the existing conditions. In addition, the project would add gravel to the existing turnouts along the private roads that lead to the site. The project does not propose sharp driveway curves that are below the driveway standards, and it would not add incompatible uses that would create additional hazards. Temporarily, the site would create more traffic due to construction activities, but the construction is not expected to interfere with the operation of traffic. Due to the limited traffic generated by the project and the improvements proposed to access the site, impacts to traffic hazards and emergency access are anticipated to be *less than significant*.

**Figure 6: Existing Driveway**



**Mitigation:** None required.

## 18. 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. See Section 5 for additional information regarding tribal resources.

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 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: <ul style="list-style-type: none"> <li>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</li> <li>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.</li> </ul>		✓			J,22

### Impact Discussion:

18a The project was determined to fall within the areas identified by both the Tsi Akim Maidu and the United Auburn Indian Community (UAIC) as ancestral lands. An initial distribution of the project application and the records search results from the North Central Information Center were sent to both organizations on March 7, 2018, and to the Native American Heritage Commission on July 5, 2017. On March 15, 2018, an email was sent to the Planning Department from the UAIC, requesting consultation and providing a list of recommendations to be incorporated into the project. On May 21, 2018, a second email was sent to the Planning Department from the UAIC, advising that the UAIC has no additional comments and that they would like to close consultation. No known tribal cultural resources are located at the project site. As discussed in Section 5, a records search of the California Historic Resources Information System (CHRIS) was conducted by the North Central Information Center (NCIC) on May 25, 2017, for cultural resource site records and survey reports within a quarter of a mile radius of the proposed project area. No cultural resources were found in the records search. It was determined that there is a low potential for prehistoric or historic sites in the immediate vicinity of the project area and further archival research and/or field study was not recommended. However, as discussed in Section 5, there is a chance that onsite grading could uncover cultural resources of importance to the UAIC. As recommended by the UAIC, Mitigation Measure 5A has been included, which requires work to halt if cultural resources



are discovered and for local tribes to be notified. With this protection in place, impacts to Tribal Cultural Resources would be *less than significant with mitigation*.

**Mitigation:** See Mitigation Measure 5A.

**19. UTILITIES / SERVICE SYSTEMS**

**Existing Setting:** The lease area site is not currently served by any utilities, but a utility pole for electrical service exists on the subject property, along the right-of-way for Wild Life Lane. The utility pole is located approximately 215 feet from the proposed lease area.

Would the proposed project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact	Reference Source (Appendix A)
a. Require or result in the relocation or the construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas or telecommunication facilities, the construction or relocation of which could cause significant environmental effects?			✓		A,D
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?				✓	A
c. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste goals?		✓			C
d. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?			✓		C

**Impact Discussion:**

19a The proposed project would not create a need for the extension of natural gas, public water or wastewater treatment facilities, the expansion of existing facilities, or additional water supplies. Any additional storm drainage runoff generated by the project would be required to be kept on site and would not affect any off-site drainage facilities. The project would require extensions of electrical power and communication systems to the equipment facility. Electrical utilities and telecommunication lines would be brought to the project site through a utility easement through the project parcel. The easement would be 5-feet wide and approximately 215 feet long to the lease area. Additionally, the project itself is an extension of communication systems to the site and all impacts from that extension are evaluated within this Initial Study. Therefore, there would be a *less than significant* impact related to these issues.

19b The project would not require water service and therefore, would have *no impact* on sufficient water supplies to serve the project.

19c The operational phase of the proposed project would not result in the production of increased solid waste from baseline conditions. Construction activities, however, could produce solid waste in the form of construction materials or industrial toxic waste like glues, paint, and petroleum products.

Construction of the proposed project could thus result in potentially adverse landfill and solid waste disposal impacts. Impacts would be *less than significant with mitigation* as identified in Mitigation Measure 19A below.

19d The development and operation of the proposed cellular telecommunication facility is not anticipated to result in significant amounts of solid waste; however, any waste generated would be required to comply with federal, state and local statutes and regulations related to solid waste. Therefore, project related impacts to these regulations are anticipated to be *less than significant*.

**Mitigation:** To offset potentially adverse impacts related to construction waste, the following mitigation measure is recommended:

**Mitigation Measure 19A: Appropriately dispose of toxic waste:** Industrial toxic waste (petroleum and other chemical products) is not accepted at the McCourtney Road transfer station and if encountered, shall be properly disposed of in compliance with existing regulations and facilities. This mitigation measure shall be included as a note on all improvement plans, which shall be reviewed and approved by the Planning Department prior to permit issuance.

**Timing:** *Prior to issuance of grading or improvement permits and during construction*

**Reporting:** *Agency approval of permits or plans*

**Responsible Agency:** *Nevada County Planning Department*

**20. WILDFIRE**

**Existing Setting:** The project parcel is in the Peardale-Chicago Park Fire District and is in a very high fire severity zone. The project site is approximately 1.2 miles along private roads that dead-end approximately 0.2 miles past the project site. There are several residences along the private road—Wild Life Lane—and not many opportunities for vehicles to turnaround or pullover in the event of an emergency. The area has dense vegetation with rolling to steep slopes.

If located in or near state responsibility areas or lands classified as very high fire severity hazard zones, would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact	Reference Source (Appendix A)
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?				✓	A,H,M,23
b. Due to slope, prevailing winds, or other factor, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrollable spread of wildfire?			✓		A,B,H,M, 18
c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?			✓		A,H,M
d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?			✓		A,H,M,12

## Impact Discussion

- 20a The Safety Element of the Nevada County General Plan addresses wildlife hazards in Nevada County and has several policies to improve fire safety. The Safety Element discusses the importance of ingress and egress by roadways, and Policy FP-10.7.3 requires that a condition of development is to maintain private roads, including the roadside vegetation. Nevada County has also adopted a Local Hazard Mitigation Plan (LHMP) that was updated in August 2017. Objective 3.6 of the LHMP is to improve communities' capabilities to prevent/mitigate hazards by increasing the use of technologies. Goal 4 of the LHMP is to reduce fire severity and intensity, with Objective 4.4 to promote the implementation of fuel management on private and public lands. The proposed telecommunications tower and facility would improve existing fire turnouts and perform maintenance vegetation management along the private roads that lead to the project site. Drastic improvements to the existing access driveway to the property, including fuel management would also be included. The project would increase technology and provide more coverage for communication in the rural area. The proposed project complies with adopted plans for emergencies and does not pose conflicts; therefore, the project would have *no impact* on impairing emergency plans.
- 20b,c The installation of the telecommunications tower and facility would not substantially alter slopes that would increase wildfire risks. There would be some grading to make driveway improvements, to construct a hammerhead turnaround, and to construct the tower and facility. The existing setting has dense vegetation on rolling to steep terrain in the area. The primary and secondary lease area is a total of 1,500 square feet and would be on an average slope of seventeen percent (17%). The access driveway would be paved in the steeper areas, which would have up to a twenty-five percent (25%) grade. The driveway would be surfaced with gravel in areas that are less than sixteen percent (16%) grade. The project proposes to improve an existing, substandard driveway that is dirt and gravel, with a driveway that would be widened and paved. The proposed improvements for the extension of the driveway and facility location have been designed in areas where the slopes are not as steep and less grading would be required. In addition, electric service and telecommunication lines that would be brought to the project site from the existing utility pole would be installed underground, instead of by overhead power lines. All improvements would require building permits and conformance with Chapter V of the LUDC for building and grading standards. The project would also improve turnouts and add a hammerhead turnaround with a design that has been reviewed and approved by the Office of the Fire Marshal. As part of the project Conditions of Approval, a Fire Protection Plan shall be submitted and approved by the Fire Marshal before improvement permits can be issued. The Fire Protection Plan would include an evacuation plan, a fuels management plan, identification of emergency water supplies, and other fire protection measures. With the standard Conditions of Approval, the project would have a *less than significant impact* on the spread of wildfire and fire risks.
- 20d The project would require building permits for the grading and site improvements, which would require compliance with the Nevada County grading standards outlined in Land Use and Development Code Section V, Article 13. The building permits would require grading and erosion control plans for the soil disturbance, and a drainage analysis to ensure no additional runoff leaves the project site. As part of the project improvements and site inspections by the Building Department, soil compaction testing would be required for the grading at the site along the driveway and where the telecommunications tower would be installed. Furthermore, the project area is not in an area that is mapped with high landslide activity (U.S. Geological Service, 1970).

With the soil compaction testing, erosion control measures, and due to the area not having high landslide activity, and no waterways in the project area, the project would have a *less than significant impact* on flooding, landslides, runoff, and slope instability.

**Mitigation:** None required.

**21. 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 substantially 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, substantially 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?		✓			
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.)			✓		
c. Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?		✓			

**Impact Discussion:**

21a,c As discussed in Sections 1 through 20 above, development of the proposed project would comply with all local, state, and federal laws governing general welfare and environmental protection. Project implementation during construction and operation would result in potentially adverse impacts to air quality, biological resources, cultural resources, geological services, noise, tribal cultural resources, and utilities/service systems. Due to the possible impacts to nesting birds, mitigation has been added to reduce potential impacts if construction occurs during nesting season. Mitigation has also been included to avoid the introduction of noxious weeds to the project area and to prevent impacts to a landmark oak tree. Although cultural, tribal cultural, and paleontological resources are not known in the project area, mitigation has been added to halt work if resources are discovered. To minimize the disruption to surrounding parcels during the construction phase of the project, mitigation has been included to limit construction to daytime hours on Monday through Friday. Each of the potential adverse impacts are mitigated to levels that are *less than significant levels with mitigation*, as outlined in each section.

21b 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. Reasonably foreseeable projects that could have similar impacts to the proposed project include other anticipated projects within the project vicinity that could be constructed or operated

within the same timeframe as the project. However, because most of the project impacts would be short-term construction impacts that are not anticipated to be substantially adverse with mitigation, the proposed project is not anticipated to considerably contribute to cumulative impacts. Additionally, all of the proposed project's impacts, including operational impacts, can be reduced to a less-than-significant level with implementation of the mitigation measures identified in this Initial Study and compliance with existing federal, state, and local regulations. Therefore, the proposed project would have *less than significant* environmental effects that are individually limited but cumulatively considerable.

**Mitigation Measures:** To offset potentially adverse impacts to air quality, biological and cultural resources, geological resources, noise, tribal cultural resources, and possible impacts utilities/services systems, see Mitigation Measures 3A-3C, 4A-4C, 5A, 13A, and 19A.

### 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.

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.

  
Sadie Caldas, Associate Planner

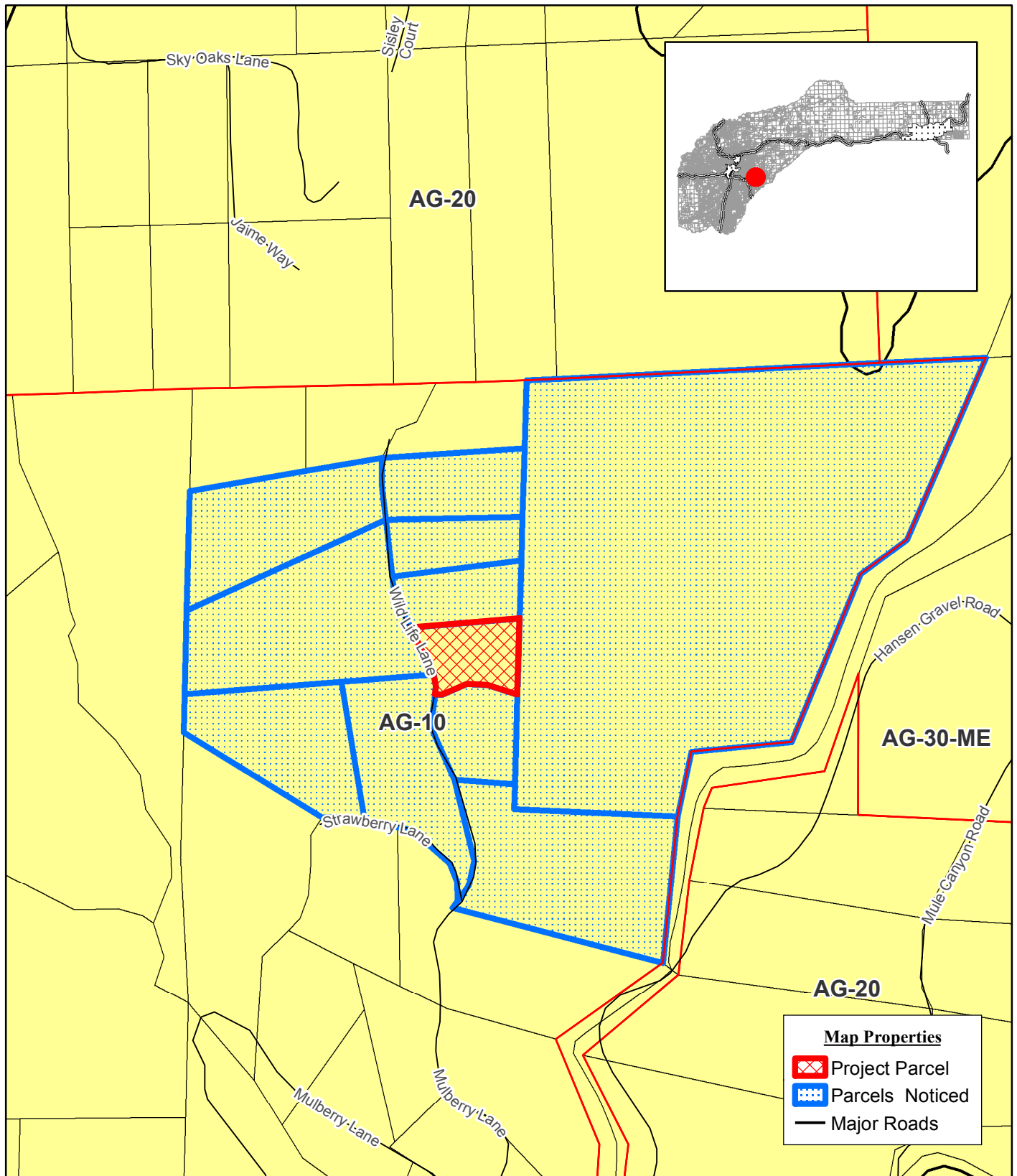
2/1/19  
Date

## **APPENDIX A – REFERENCE SOURCES**




- A. Planning Department
  - B. Department of Public Works
  - C. Environmental Health Department
  - D. Building Department
  - E. Nevada Irrigation District
  - F. Natural Resource Conservation Service/Resource Conservation District
  - G. Northern Sierra Air Quality Management District
  - H. Peardale-Chicago Park Fire District
  - I. Regional Water Quality Control Board (*Central Valley Region*)
  - J. North Central Information Service, Anthropology Department, CSU Sacramento
  - K. California Department of Fish & Wildlife
  - L. Nevada County Geographic Information Systems
  - M. California Department of Forestry and Fire Protection (Cal Fire)
  - N. Nevada County Transportation Commission
  - O. Nevada County Agricultural Advisor Commission
  - P. Grass Valley/ Nevada Joint Union School District
  - Q. Gold Country Stagecoach
- 
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](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.
  7. 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. State Dept. of Forestry & Fire Protection. *Nevada County Hardwood Rangelands*, 1993.
  9. U.S.G.S, *7.5 Quadrangle Topographic Maps*, as updated.
  10. U.S. Fish and Wildlife Service. *National Wetlands Inventory*, December 1995.
  11. 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](http://soildatamart.nrcs.usda.gov/manuscripts/CA619/0/nevada_a.pdf).
  12. 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.
  13. Federal Emergency Management Agency. *Flood Insurance Rate Maps*, as updated.
  14. Northern Sierra Air Quality Management District. *Guidelines for Assessing Air Quality Impacts of Land Use Projects*, 2000.
  15. County of Nevada. *Nevada County General Plan Noise Contour Maps*, 1993.
  16. Nevada County. 1991. *Nevada County Master Environmental Inventory*. Prepared by Harland Bartholomew & Associates, Inc. (Sacramento, CA). Nevada County, CA.
  17. 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.
  18. Nevada County. *Nevada County Zoning Regulations*, adopted July 2000, and as amended.
  19. Edward C. Beedy, Geist Engineering and Environmental Group, Inc. *Biological Inventory*, August 23, 2017.

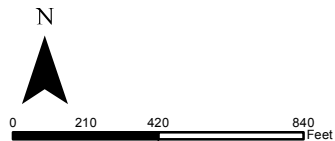
20. California Attorney General's Office. "Addressing Climate Change at the Project Level." January 6, 2010.
21. US Environmental Protection Agency. *Current Nonattainment Counties for All Criteria Pollutants*. January 31, 2015. [www.epa.gov/oaqps001/greenbk/ancl.html](http://www.epa.gov/oaqps001/greenbk/ancl.html).
22. North Central Information Center, CHRIS search, May 25, 2017.
23. Nevada County. *Local Hazard Mitigation Plan Update*. August 2017.  
<https://www.mynevadacounty.com/DocumentCenter/View/19365/Nevada-County-LHMP-Update-Complete-PDF?bidId=>
24. Chris Hatch, Shore 2 Shore Wireless Inc. *Environmental Noise Assessment Report*. Revised March 1, 2018.
25. California Department of Toxic Substances Control. Accessed January 24, 2019:  
<http://www.envirostor.dtsc.ca.gov/public/>
26. USDA Soil Conservation Service. "Soil Survey of Nevada County Area, California." Soil Survey, Reissued 1993.
27. 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.
28. California Department of Transportation. *California Scenic Highway Mapping System*. September 7, 2011. [http://www.dot.ca.gov/hq/LandArch/16\\_livability/scenic\\_highways/index.htm](http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/index.htm)
29. EBI Consulting. Radio Frequency- Electromagnetic Energy (RF-EME) Compliance Report. May 15, 2017.
30. Nevada County. *Land Use and Development Code Section 5, Article 13, Grading*. Amended December 2016.
31. California Department of Conservation, California Geological Survey. 2010. Accessed January 25, 2019. <https://www.conservation.ca.gov/cgs/Pages/Earthquakes/affected.aspx>

# AT&T Conditional Use Permit 13083 Wild Life Lane Zoning, Parcels Noticed & Vicinity Map



**Map Properties**

-  Project Parcel
-  Parcels Noticed
-  Major Roads



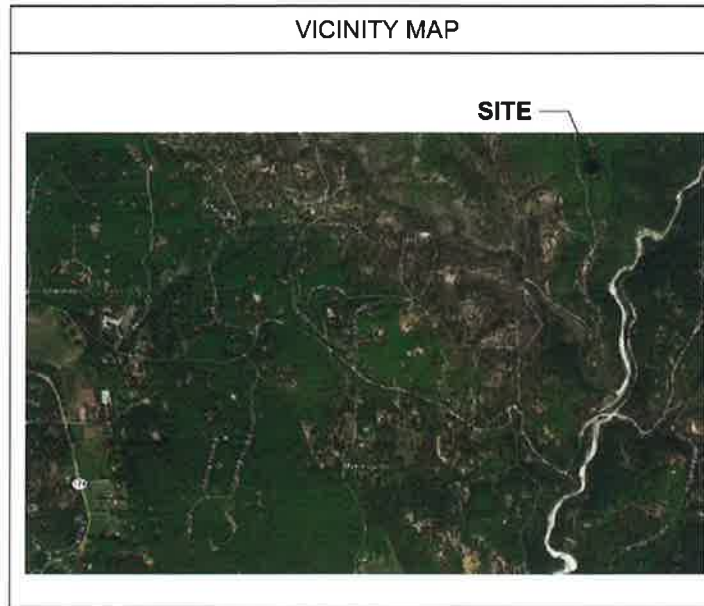
Every reasonable effort has been made to assure the accuracy of the maps and data provided; nevertheless, some information may not be accurate. The County of Nevada assumes no responsibility arising from use of this information. THE MAPS AND ASSOCIATED DATA ARE PROVIDED WITHOUT WARRANTY OF ANY KIND, either expressed or implied, including but not limited to, the implied warranties of merchantability and fitness for a particular purpose. Before making decisions using the information provided on this map, contact the Nevada County Public Counter staff to confirm the validity of the data provided.



# Environmental Noise Assessment Report

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Site Number: CVL02122  
13083 Wild Life Lane, Grass Valley, CA 95945  
March 01, 2018



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 CVL02122. This site is located at 13083 Wild Life Lane, Grass Valley, CA 95945. 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 CVL02122 will produce 44.98 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. The HVAC unit would generate 22.79 dBA to the same point, and 36.61 dBA to the Eastern property line as there is no calculated screening between the HVAC and the Eastern Property Line.

### **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.

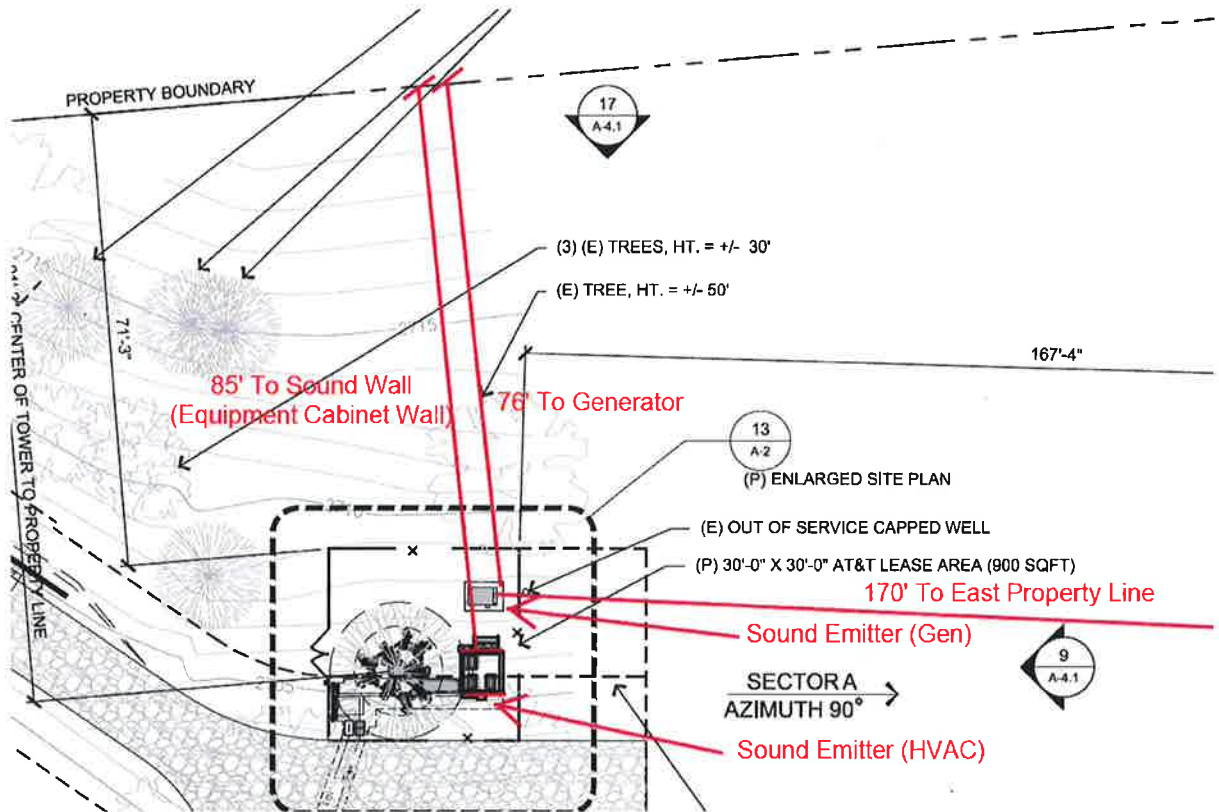
One property of the decibel scale is that the combined sound pressure level of separate sound sources is not simply the sum of the contributing sources. For example, if the sound of one source of 70 dB is added to another source of 70 dB, the total is only 73 dB, not a doubling to 140 dB. In terms of 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 76' North with a second Eastern property line measured 170' East of the project location as referenced in Exhibit 1. The areas between the proposed location include the proposed equipment cabinet, 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 (Leq) of 65 dB under full load during daytime testing. The HVAC unit attached to the equipment cabinet which operates occasionally during night and day at an average (Leq) of 56 dB. As neither sound emitter operates at the same frequency, the results of each average (Leq) are not additive, and result in a maximum equipment noise level (Lmax) of 65 dBA during daytime hours, and 56 dBA at night. This noise level is immediately reduced 39% to the Northern property line by equipment

cabinet itself as the HVAC unit is mounted on the southern face of the cabinet, and further reduced due to normal sound propagation loss. The resultant Modeling Results are attached in Exhibit 3.

**Exhibit 1**



**4.0 RESULTS AND CONCLUSIONS**

The Generator and HVAC unit proposed (See Exhibit 2) have a combined average daytime ( $L_{eq}$ ) of 65 dB noise level under full load. With a resultant ( $L_{max}$ ) (See Exhibit 3) of 44.98 dB at the nearest property line. The Nevada County maximum daytime noise level standard is 75 dB ( $L_{max}$ ) predictive modeling indicates that the proposed emergency back-up generator and HVAC unit will produce an ( $L_{max}$ ) of 44.98 dBA at the nearest property line which is 30.02 dB below the daytime noise threshold.

During nighttime hours the Generator will be restricted from testing and maintenance. Thus the HVAC unit will be the only active source with an average nighttime ( $L_{eq}$ ) of 56 dB noise level under full load/ Note that this unit will run intermittently, not continually, to cool the cabinet, with peak usage during day time hours during the hot summer months. The unit has a resultant ( $L_{max}$ ) (See Exhibit 3) of 22.79 dB at the nearest property line and 36.61 dB to the Eastern property line. The Nevada County maximum nighttime noise level standard is 40 dB ( $L_{max}$ ) predictive modeling indicates that the proposed emergency back-up generator and HVAC unit will produce an ( $L_{max}$ ) of 36.61 dBA at the Eastern property line which is 3.39 dB below the nighttime noise threshold. The noise level is reduced below 40 dBA to the North by the cabinet, the resultant noise level at the nearest property line is below ambient noise levels at a calculated 22.79 dB.

Significant reduction in noise beyond the modeled ( $L_{max}$ ) levels can be expected due to the reflective equipment structure and surrounding absorbent materials.  $L_{max}$  modeling methodologies are based on the manufacturer-provided equipment specifications and distance to the property alone using a mathematical calculation of dB loss over distance using Inverse Square Law (Learn more about this formula at [https://www.engineeringtoolbox.com/inverse-square-law-d\\_890.html](https://www.engineeringtoolbox.com/inverse-square-law-d_890.html) ), and do not include external absorbent materials. However this will account for a measured drop well below the theoretical average noise level ( $L_{max}$ ) 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 ( $l_{eq}$ ).

#### 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

Environmental Noise Assessment Report  
 Site: CVL02122

Exhibit 3

Property Line Modeling Results

SOURCE REFERENCE

Source	ID	Reference Noise Level			Averaged Maximum Level			Attenuation	Freq. (Hz)	Direct	Height (Ft.)	Coordinates			
		Day	Evening	Night	Day	Evening	Night					X	Y	Z	
		(Leq) dBA	(Leq) dBA	(Leq) dBA	(Lmax) dBA	(Lmax) dBA	(Lmax) dBA					(Ft.)	(Ft.)	(Ft.)	
Generac DG035 35kW Generator	S1	65.0	65.0	0.0	65.0	65.0	0.0	20	500	1	3.00	g	-21.00	0.00	0.00
Marvafr AVPA12AC	S1	56.0	56.0	56.0	56.0	56.0	56.0	20	900	1	3.00	g	-21.00	0.00	0.00

NOISE EXPOSURE AT SOUND WALL (i.e. Northern Equipment Cabinet Wall, HVAC mounted on South Wall)

Source	ID	Source Level		Absorbtion % STC	Modeled Level		Freq. (Hz)	Direct	Height (Ft.)	Coordinates			
		Day	Night		Day	Night				X	Y	Z	
		(L <sub>eq</sub> )	(L <sub>eq</sub> )		(L <sub>max</sub> )	(L <sub>max</sub> )				(Ft.)	(Ft.)	(Ft.)	
HVAC Only (North Face Emitter)	R1	56.00	56.00	39%	34.16	34.16	500	1	5.00	r	0.00	-3.00	0.00
HVAC Only (Bare Emitter no sound wall)	R2	56.00	56.00	0%	56.00	56.00	500	1	5.00	r	0.00	-3.00	0.00
Generator Only	R3	65.00	0.00	0%	39.65	0.00	900	1	5.00	r	0.00	-3.00	0.00
Combined	RT	65.00	56.00	39%	65.00	34.16	500 / 900	1	5.00	r	0.00	-3.00	0.00

\* Generator restricted to daytime testing and operation outside of Emergency use, reference and modeling noise level for night time use reduced to 0.00 to reference this restriction

NOISE EXPOSURE AT PROPERTY LINE

Source	ID	Modeled Level		Limit Value		Limit Test			Freq. (Hz)	Direct	Height (Ft.)	Coordinates			
		Day	Night	Day	Night	(Model L <sub>max</sub> < Limit L <sub>max</sub> )						X	Y	Z	
		(L <sub>max</sub> )	(L <sub>max</sub> )	(L <sub>max</sub> )	(L <sub>max</sub> )	Day	Night	Pass / Fail				(Ft.)	(Ft.)	(Ft.)	
Nearest Property Line HVAC Only	R1	22.79	22.79	75.00	40.00	-52.21	-17.21	Pass	500	1	5.00	r	0.00	85.00	0.00
East Property Line HVAC Only	R2	36.61	36.61	75.00	40.00	-38.39	-3.39	Pass	500	1	5.00	r	170.00	0.00	0.00
Nearest Property Line Generator Only	R3	44.98	0.00	75.00	40.00	-30.02	-40.00	Pass	900	1	5.00	r	0.00	76.00	0.00
Nearest Property Line Combined	R1	44.98	22.79	75.00	40.00	-30.02	-17.21	Pass	500 / 900	1	5.00	r	0.00	76.00	0.00
East Property Line Combined	R1	44.98	36.61	75.00	40.00	-30.02	-3.39	Pass	500 / 900	1	5.00	r	0.00	76.00	0.00

\* Generator restricted to daytime testing and operation outside of Emergency use, reference and modeling noise level for night time use reduced to 0.00 to reference this restriction

Approximate sound transmission loss values for common materials.

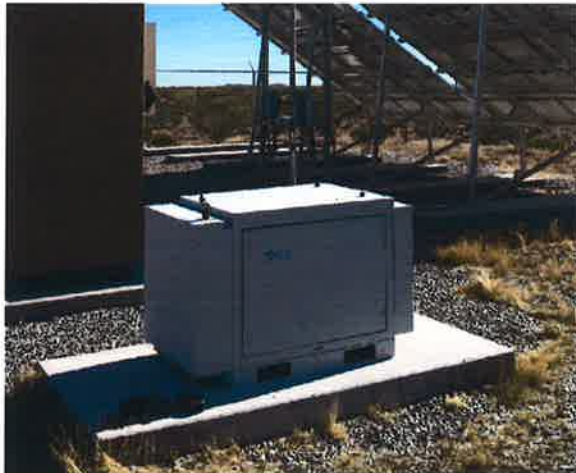
Material	Thickness mm (Inches)	Weight kg/m <sup>2</sup> (lbs)	% Transmission Loss (dB(A))
Concrete Block, 200mm x 200mm x 405 (8" x 8" x 16")	200mm (8")	151 (31)	34
Dense Concrete	100mm (4")	244 (50)	40
Light Concrete	150mm (6")	244 (50)	39
Light Concrete	100mm (4")	161 (33)	36
Insulated Structure (with two R13 walls)	12mm (0.5")	8.3 (1.7)	39
Wood, Fir	25mm (1.0")	16.1(3.3)	21
Wood, Fir	50mm (2.0")	32.7 (6.7)	24
Wood, Redwood	12mm (0.5")	8.3 (1.7)	19
Wood, Redwood	25mm (1.0")	16.1(3.3)	22
Wood, Redwood	50mm (2.0")	32.7 (6.7)	26



# 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 multi-person 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%.



# Exhibit 2



# 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 be 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.

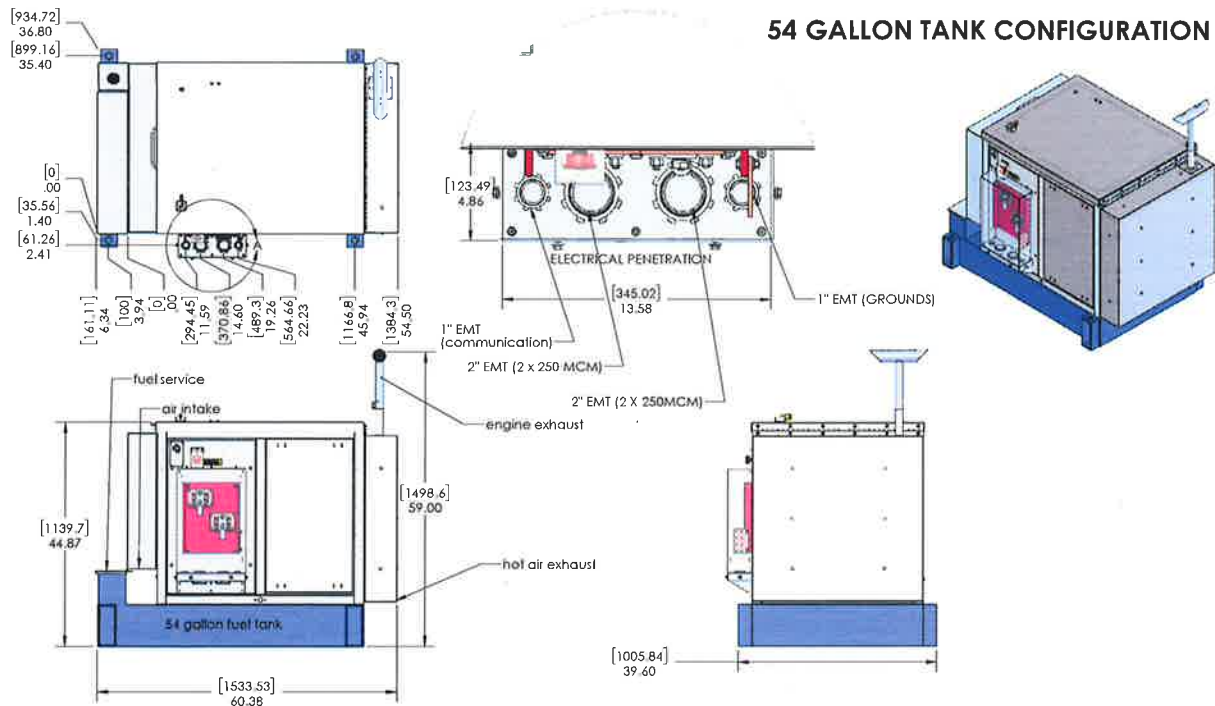
Fuel connections are accessible through standard 1/4" NPT fittings.

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



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## ComPac® I & ComPac® II 2 to 6 Ton Vertical Wall Mount Air Conditioners

R-410A Refrigerant

**Models AVPA24-30-36-42-48-60-72 (Single Stage Compressor)**

**Models AVPSA36-42-48-60 (2-Stage Compressor)**

**Models HVEA24-30-36-42-49-60 (Single Stage Compressor)**

**Models HVESA36-42-49-60 (2-Stage Compressor)**

### General Description

The Marvair® ComPac® I and ComPac® II air conditioners are used primarily to cool electronic and communication equipment shelters. Due to the high internal heat load, these shelters require cooling even when outside temperatures drop below 60°F (15°C). The ComPac I and ComPac II air conditioners have the necessary controls and components for operation during these (less than 60°F [15°C]) temperatures. All models use the non-ozone depleting R-410A refrigerant.

The primary difference between the ComPac I and the ComPac II units is that the ComPac® II air conditioner has a factory installed economizer. When cool and dry, the economizer uses outside air to cool the shelter. The economizer provides temperature control, energy cost savings, and increased reliability by decreasing the operating hours of the compressor and the condenser fan. The ComPac I and ComPac II air conditioners are problem solvers for a wide range of conditions and applications. To insure proper operation and optimum performance, all economizers are non-removable, factory installed and tested. In addition, factory and field installed accessories can be used to meet specific requirements.



AVPA36ACA-100C



The HVEA and HVESA models are Marvair's most efficient wall mount air conditioners. Electronically commutated outdoor fan motors combined with highly efficient scroll compressors result in Energy Efficiency Ratios (EER's) of up to 13.1.

Models AVPSA36-42-48-60 and HVESA36-42-49-60 have a 2-stage compressor with first stage cooling approximately 65% of the total cooling capacity. The 2-stage compressor provides lower start-up amps which can be critical when operating with a generator. The two stage compressor can also reduce energy costs and is able to more precisely match the cooling capacity of the air conditioner with the heat load in the shelter. Both ComPac I and ComPac II units are available with 2 stage compressors. See page 3 for a description of the operation of the 2-stage units when they are used with the CommStat 3 SCT™ thermostat/controller in a lead/lag installation.

### Safety Listed and Energy Certified

All ComPac air conditioners are built to UL standard 1995, 2nd edition and CAN/CSA C22, No. 236-5, 2nd edition. For energy efficiency and performance, the units are tested and rated in accordance to the ANSI/ARI (Air-Conditioning and Refrigeration Institute) Standard 390- 2003 (Single Package Vertical Units). All units meet or exceed the efficiency requirements of ANSI/ASHRAE/IESNA 90.1.2007. The ComPac I and ComPac II air conditioners are commercial units and are not intended for use in residential applications.

\*ComPac® II air conditioner only



## Exhibit 2

### Standard Features

#### Designed for Operation in Low Ambient Conditions

- Low ambient control cycles condenser fan to maintain proper refrigerant pressures. Allows operation in mechanical cooling (compressor) down to 0°F (-18°C). Note: low temperature operation is affected by ambient conditions, e.g. wind and humidity.
- Three minute by-pass of the low pressure switch for start-up of compressor when outdoor temperatures are below 55°F (13°C).
- Factory built-in economizer.\*

#### High Efficiency

- High efficiency compressor.
- Lanced fins and rifled tubing on many condenser & evaporator coils.

#### Built-in Reliability

- High pressure switch and low pressure switch with lockout protects refrigerant circuit.

\*ComPac® II air conditioner only

- Three minute delay on make for short cycle protection.

#### Remote Alarm Capability

- Dry contacts can be used for remote alarm or notification upon air conditioner lockout.

#### Ease of Installation

- Sloped top with flashing eliminates need of rainhood.
- Built-in mounting flanges facilitate installation and minimize chance of water leaks.
- Supply and return openings exactly match previous models.
- Factory installed disconnect on all 208/230v units, optional 460V units.

#### Rugged Construction

- Copper tube, aluminum fin evaporator & condenser coils.
- Factory installed heaters on discharge side of evaporator coil (optional)
- Baked on neutral beige finish over

galvanneal steel for maximum cabinet life. (Other finishes are available.)

#### Ease of Service

- Service access valves are standard.
- Standard 2" (50 mm) pleated filter changeable from outside.
- All major components are readily accessible.
- Front Control Panel allows easy access and complies with NEC clearance codes on redundant side-by-side systems.
- LEDs indicate operational status and fault conditions.

### A Marvair® First – Factory Installed Economizer

Marvair's ComPac® II air conditioner has been the industry standard since its introduction in 1986. Tens of thousands of ComPac II air conditioners are in operation from the metropolitan areas of North America to the deserts of the Mid-East to the Siberian tundra. Here's how the economizer works:

On a signal from the wall mounted indoor thermostat that cooling is required, either mechanical cooling with the compressor or free cooling with the economizer is provided. A factory installed enthalpy controller determines whether the outside air is sufficiently cool and dry to be used for cooling. If suitable, the compressor is locked out and the economizer damper opens to bring in outside air. Integral pressure relief allows the interior air to exit the shelter, permitting outside air to enter the shelter. The temperature at which the economizer opens is adjustable from 53°F (12°C) at 50% Relative Humidity to 78°F (26°C) at 50% Relative Humidity.

After the enthalpy control has activated and outside air is being brought into the building, the mixed air sensor measures the temperature of the air entering the indoor blower and then modulates the economizer damper to mix the right proportion of cool outside air with warm indoor air to maintain 50-56°F (10 - 13°C) air being delivered to the building. This prevents shocking the electronic components with cold outside air. The compressor is not permitted to operate when the economizer is functioning.

If the outside air becomes too hot or humid, the economizer damper closes completely, or to a minimum open position with an optional minimum position potentiometer, and mechanical cooling is activated.

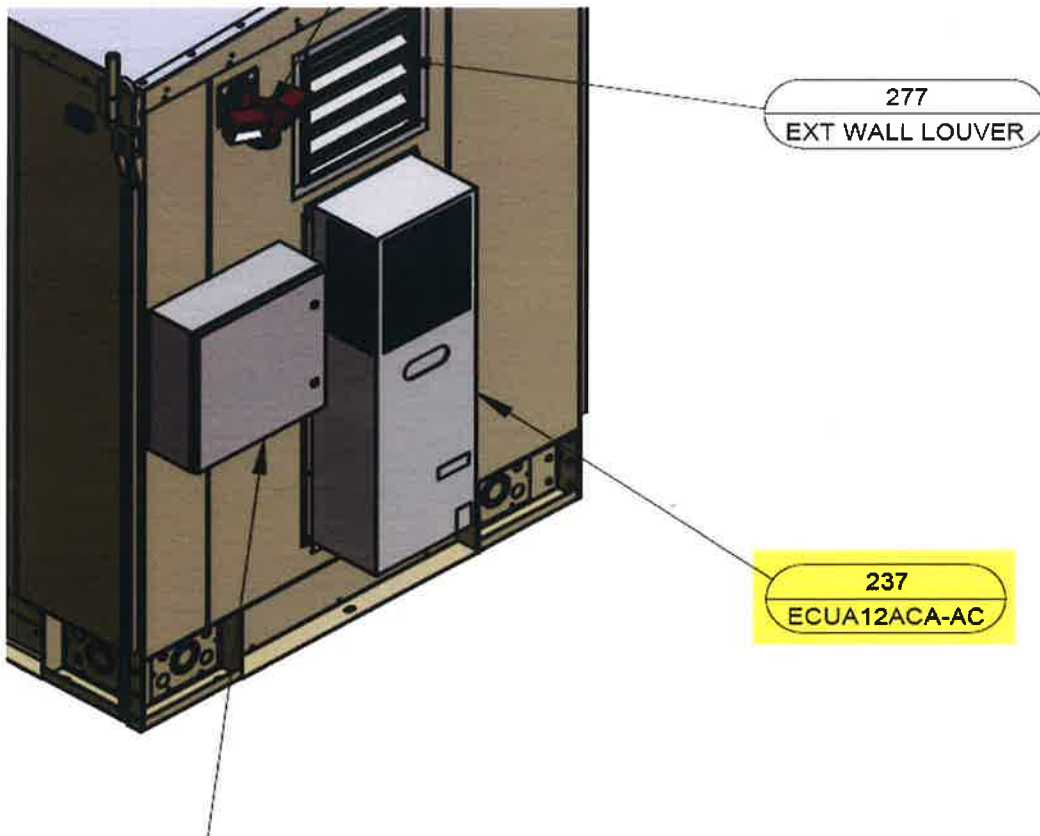
# Marvair

156 Seedling Drive  
 Cordele, Georgia 31015  
 229-273-8058

Marvair Outdoor Sound Data for the ComPac I/II Air Conditioners (dBA)

Distance From Unit (Feet)	Model Number						
	AVPA12AC*	AVPA24AC*	AVPA36AC*	AVPA42AC*	AVPA48AC*	AVPA60AC*	AVPA72AC*
5	66	66	70	70	70	70	69
10	63	63	67	66	67	66	64
20	58	58	63	62	64	63	60
30	56	56	60	60	62	60	58
40	54	54	58	59	60	59	56
50	53	53	57	57	58	57	55
60	52	52	57	56	57	56	53
70							
80							

- Notes: (1) Test Date: Feb-March 2011  
 (2) Background Sound Level: 30-33 dBA  
 (3) Sound Level Meter 1 Meter Above Ground Directly in Line with Outdoor Coil  
 (4) All units - 410A Refrigerant  
 \* All Voltages



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

---

USID# 173482  
Site No. CVL02122  
Wild Life Lane  
13083 Wild Life Lane  
Grass Valley, California 95945  
Nevada County  
39.197567; -120.942254 NAD83  
Monotree  
EBI Project No. 6217001995  
May 15, 2017



Prepared for:

AT&T Mobility, LLC  
c/o Shore 2 Shore Wireless, Inc  
5550 Merrick Road, Suite 302  
Massapequa, NY 11758

Prepared by:



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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 CVL02122 located at 13083 Wild Life Lane in Grass Valley, California 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 and 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 rooftop or 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:

1. 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 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.

## 1.0 SITE DESCRIPTION

This project involves the proposed installation of up to nine (9) wireless telecommunication antennas on a monotree in Grass Valley, California. 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 one (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 700, 850, and 2100 MHz frequency ranges. 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 Sector B and C antennas will be 97 feet above ground level. The bottoms of the Sector A antennas will be 86.5 feet above the equipment shelter rooftop. 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 – CVL02122 RFDS v1.00.02 - 04-05-17 dated 4/5/2017
- CDs – CVL02122 100 ZD - DRM Review - 05-01-17 dated 4/10/2017

## 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 his 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.

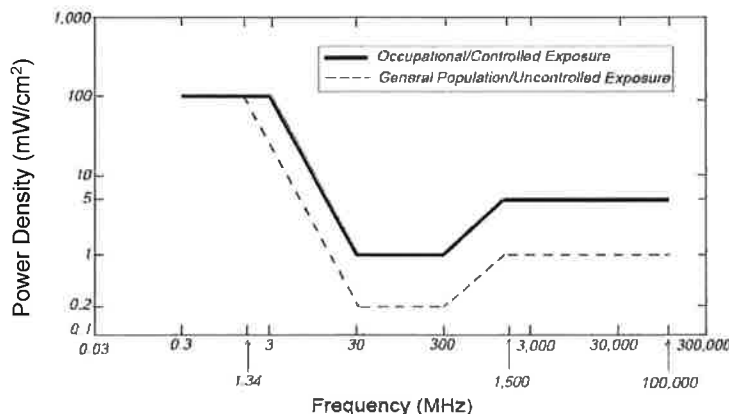
The FCC’s MPEs are measured in terms of power (mW) over a unit surface area (cm<sup>2</sup>). Known as the power density, the FCC has established an occupational MPE of 5 milliwatts per square centimeter (mW/cm<sup>2</sup>) and an uncontrolled MPE of 1 mW/cm<sup>2</sup> for equipment operating in the 1900 MHz frequency range. For the AT&T equipment operating at 850 MHz, the FCC’s occupational MPE is 2.83 mW/cm<sup>2</sup> and an uncontrolled MPE of 0.57 mW/cm<sup>2</sup>. For the AT&T equipment operating at 700 MHz, the FCC’s occupational MPE is 2.33 mW/cm<sup>2</sup> and an uncontrolled MPE of 0.47 mW/cm<sup>2</sup>. 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 <sup>2</sup> )	Averaging Time [E] <sup>2</sup> , [H] <sup>2</sup> , or S (minutes)
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842/f	4.89/f	(900/f <sup>2</sup> )*	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 General Public/Uncontrolled Exposure				
Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm <sup>2</sup> )	Averaging Time [E] <sup>2</sup> , [H] <sup>2</sup> , or S (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f <sup>2</sup> )*	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)

\* Plane-wave equivalent power density

Figure 1. FCC Limits for Maximum Permissible Exposure (MPE)  
 Plane-wave Equivalent Power Density





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

<b>Personal Wireless Service</b>	<b>Approximate Frequency</b>	<b>Occupational MPE</b>	<b>Public MPE</b>
Personal Communication (PCS)	1,950 MHz	5.00 mW/cm <sup>2</sup>	1.00 mW/cm <sup>2</sup>
Cellular Telephone	870 MHz	2.90 mW/cm <sup>2</sup>	0.58 mW/cm <sup>2</sup>
Specialized Mobile Radio	855 MHz	2.85 mW/cm <sup>2</sup>	0.57 mW/cm <sup>2</sup>
Long Term Evolution (LTE)	700 MHz	2.33 mW/cm <sup>2</sup>	0.47 mW/cm <sup>2</sup>
Most Restrictive Freq. Range	30-300 MHz	1.00 mW/cm <sup>2</sup>	0.20 mW/cm <sup>2</sup>

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:

1. 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 rooftop and 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 rooftop or 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 3.50 percent of the FCC's general public limit (0.70 percent of the FCC's occupational limit). The composite exposure level from all carriers on this site is approximately 3.50 percent of the FCC's general public limit (0.70 percent of the FCC's occupational limit) at the nearest walking/working surface to each antenna. Based on worst-case predictive modeling, there are no areas at ground level related to the proposed AT&T antennas that exceed the FCC's occupational or general public exposure limits at this site. At ground level, the maximum power density generated by the antennas is approximately 3.00 percent of the FCC's general public limit (0.60 percent of the FCC's occupational limit).



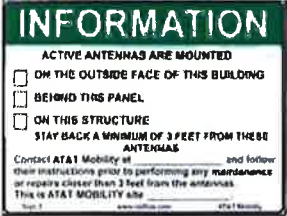





The inputs used in the modeling are summarized in the RoofView® export file presented in Appendix C. A graphical representation of the RoofView® modeling results is presented in Appendix D. It should be noted that RoofView® is not suitable for modeling microwave dish antennas; however, these units are 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 aware of the potential risks prior to entering the affected area.

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

Informational Signs		Alerting Signs	
	INFO 1		NOTICE
	INFO 2		CAUTION - ROOFTOP
	INFO 3		CAUTION - TOWER
	INFO 4		WARNING

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 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 13083 Wild Life Lane in Grass Valley, California.

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 rooftop or 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:



sealed 17may2017

---

Michael McGuire  
Electrical Engineer

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.

---

EBI Consulting

## Preparer Certification

I, Ian Swanson, 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.



---

## **Appendix B**

### **Antenna Inventory**



Antenna Number	Operator	Antenna Type	TX Freq (MHz)	ERP (Watts)	Gain (dBd)	Antenna Model	Azimuth (deg.)	Length (feet)	Horizontal Beamwidth (Degrees)	X	Y	Z
ATT A1	AT&T	Panel	LTE 700	701.70	11.35	Quintel QS6656-3	90	6.0	69	106	96	86.5
ATT A1	AT&T	Panel	LTE 1900	3936.59	14.65	Quintel QS6656-3	90	6.0	70	106	96	86.5
ATT A2	AT&T	Panel	LTE 2300	6950.72	16.15	Rosenberger MB-A64O9X65V-01	90	8.0	65	106	100	85.5
ATT A3	AT&T	Panel	LTE 700	625.39	10.85	Quintel QS6658-3	90	6.0	66	106	103	86.5
ATT A3	AT&T	Panel	LTE 850	1549.46	11.85	Quintel QS6658-3	90	6.0	64	106	103	86.5
ATT A3	AT&T	Panel	LTE 2100	2851.81	13.25	Quintel QS6658-3	90	6.0	70	106	103	86.5
ATT B1	AT&T	Panel	LTE 700	701.70	11.35	Quintel QS6656-3	330	6.0	69	103	105	97.0
ATT B1	AT&T	Panel	LTE 1900	3936.59	14.65	Quintel QS6656-3	330	6.0	70	103	105	97.0
ATT B2	AT&T	Panel	LTE 2300	6950.72	16.15	Rosenberger MB-A64O9X65V-01	330	8.0	65	100	103	96.0
ATT B3	AT&T	Panel	LTE 700	625.39	10.85	Quintel QS6658-3	330	6.0	66	97	101	97.0
ATT B3	AT&T	Panel	LTE 850	1549.46	11.85	Quintel QS6658-3	330	6.0	64	97	101	97.0
ATT B3	AT&T	Panel	LTE 2100	2851.81	13.25	Quintel QS6658-3	330	6.0	70	97	101	97.0
ATT C1	AT&T	Panel	LTE 700	701.70	11.35	Quintel QS6656-3	210	6.0	69	97	98	97.0
ATT C1	AT&T	Panel	LTE 1900	3936.59	14.65	Quintel QS6656-3	210	6.0	70	97	98	97.0
ATT C2	AT&T	Panel	LTE 2300	6950.72	16.15	Rosenberger MB-A64O9X65V-01	210	8.0	65	100	96	96.0
ATT C3	AT&T	Panel	LTE 700	625.39	10.85	Quintel QS6658-3	210	6.0	66	103	94	97.0
ATT C3	AT&T	Panel	LTE 850	1549.46	11.85	Quintel QS6658-3	210	6.0	64	103	94	97.0
ATT C3	AT&T	Panel	LTE 2100	2851.81	13.25	Quintel QS6658-3	210	6.0	70	103	94	97.0

1. 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**

Start Map Definition  
 Roof Max Y Roof Max X Map Max Y Map Max X Y Offset X Offset Number of envelope  
 160 160 160 160 0 0 1 \$K\$61:\$FN \$K\$61:\$FN\$220

List Of Area  
 \$K\$61:\$FN:

Start Settings Data  
 Standard Method Uptime Scale Factor Low Thr Low Color Mid Thr Mid Color HI Thr HI Color Over Color Ap Ht Mult Ap Ht Method  
 4 2 1 1 100 1 500 4 5000 2 3 1.5 1

Start Antenna Data  
 It is advisable to provide an ID (ant 1) for all antennas

ID	Name	Map Mark	Freq (MHz)	Power	Trans Count	Coax Len	Coax Type	Other Loss	Input Power	Calc Power	Mfg	Model	(ft) X	(ft) Y	(ft) Z	Type	(ft) Aper	dBd Gain	BWdth Pt Dir	Uptime Profile	ON flag
ATT A1	LTE		700	30	2	10 1/2	LDF	0.5		51.42227	Quintel	QS6656-3	106	96	86.5		6	11.35	69;90		ON*
ATT A1	LTE		1900	40	4	10 1/2	LDF	0.5		134.9336	Quintel	QS6656-3	106	96	86.5		6	14.65	70;90		ON*
ATT A2	LTE		2300	25	8	10 1/2	LDF	0.5		168.667	Rosenberg	MB-A6409	106	100	85.5		8	16.15	65;90		ON*
ATT A3	LTE		700	30	2	10 1/2	LDF	0.5		51.42227	Quintel	QS6658-3	106	103	86.48		6.04	10.85	66;90		ON*
ATT A3	LTE		850	60	2	10 1/2	LDF	0.5		101.2002	Quintel	QS6658-3	106	103	86.48		6.04	11.85	64;90		ON*
ATT A3	LTE		2100	40	4	10 1/2	LDF	0.5		134.9336	Quintel	QS6658-3	106	103	86.48		6.04	13.25	70;90		ON*
ATT B1	LTE		700	30	2	10 1/2	LDF	0.5		51.42227	Quintel	QS6656-3	103	105	97		6	11.35	69;330		ON*
ATT B1	LTE		1900	40	4	10 1/2	LDF	0.5		134.9336	Quintel	QS6656-3	103	105	97		6	14.65	70;330		ON*
ATT B2	LTE		2300	25	8	10 1/2	LDF	0.5		168.667	Rosenberg	MB-A6409	100	103	96		8	16.15	65;330		ON*
ATT B3	LTE		700	30	2	10 1/2	LDF	0.5		51.42227	Quintel	QS6658-3	97	101	96.98		6.04	10.85	66;330		ON*
ATT B3	LTE		850	60	2	10 1/2	LDF	0.5		101.2002	Quintel	QS6658-3	97	101	96.98		6.04	11.85	64;330		ON*
ATT B3	LTE		2100	40	4	10 1/2	LDF	0.5		134.9336	Quintel	QS6658-3	97	101	96.98		6.04	13.25	70;330		ON*
ATT C1	LTE		700	30	2	10 1/2	LDF	0.5		51.42227	Quintel	QS6656-3	97	98	97		6	11.35	69;210		ON*
ATT C1	LTE		1900	40	4	10 1/2	LDF	0.5		134.9336	Quintel	QS6656-3	97	98	97		6	14.65	70;210		ON*
ATT C2	LTE		2300	25	8	10 1/2	LDF	0.5		168.667	Rosenberg	MB-A6409	100	96	96		8	16.15	65;210		ON*
ATT C3	LTE		700	30	2	10 1/2	LDF	0.5		51.42227	Quintel	QS6658-3	103	94	96.98		6.04	10.85	66;210		ON*
ATT C3	LTE		850	60	2	10 1/2	LDF	0.5		101.2002	Quintel	QS6658-3	103	94	96.98		6.04	11.85	64;210		ON*
ATT C3	LTE		2100	40	4	10 1/2	LDF	0.5		134.9336	Quintel	QS6658-3	103	94	96.98		6.04	13.25	70;210		ON*

Start Symbol Data

Sym	Map Mark	Roof X	Roof Y	Map Label	Description ( notes for this table only )
Sym		5	35	AC Unit	Sample symbols
Sym		14	5	Roof Access	
Sym		45	5	AC Unit	
Sym		45	20	Ladder	

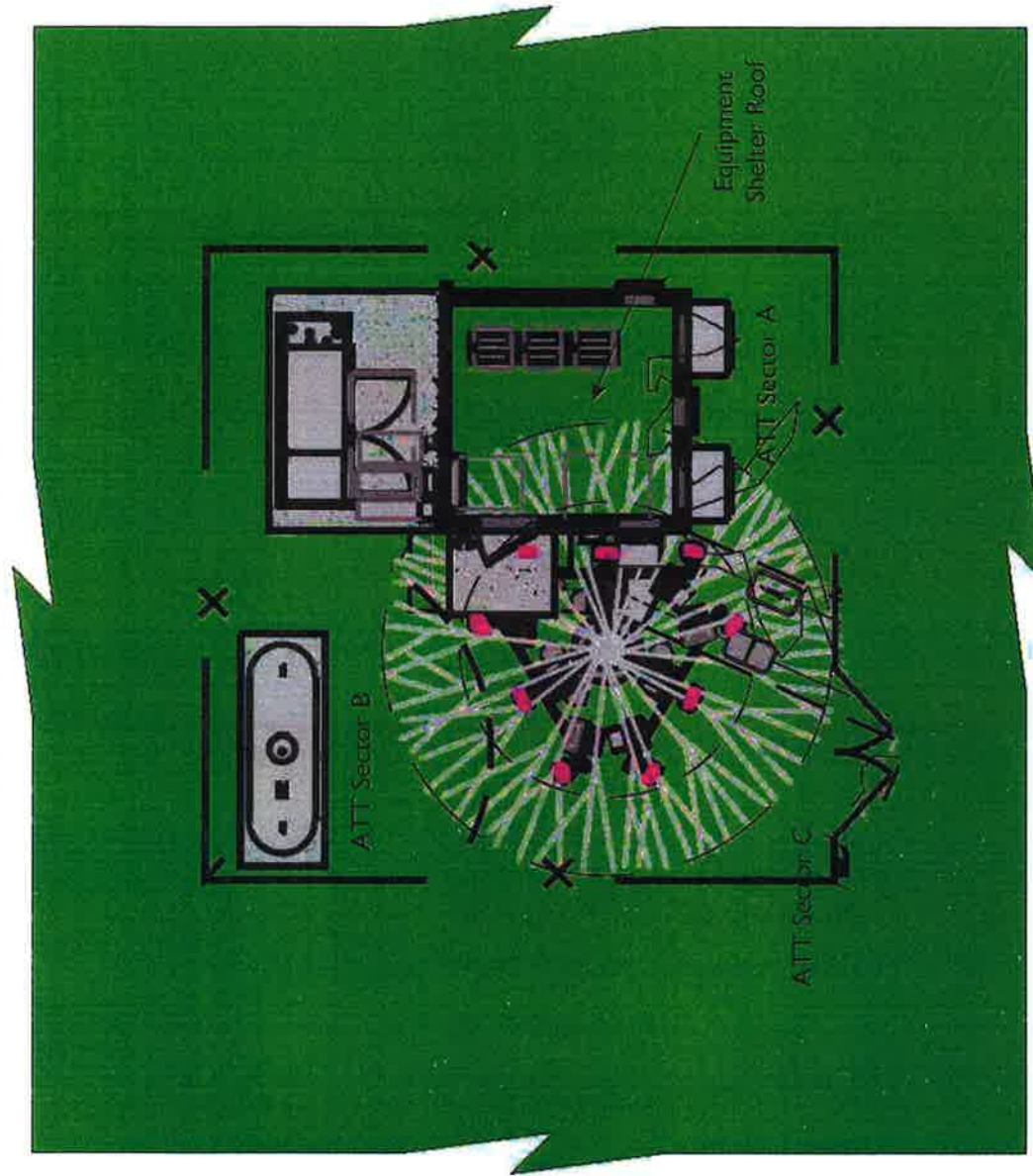
## **Appendix D**

### **Roofview® Graphics**

**AT&T Antennas**



**\*Equipment Shelter Roof Level Simulation**



% FCC Public Exposure Limit	
	Exposure Level $\geq$ 5,000
	500 < Exposure Level $\leq$ 5,000
	100 < Exposure Level $\leq$ 500
	Exposure Level $\leq$ 100

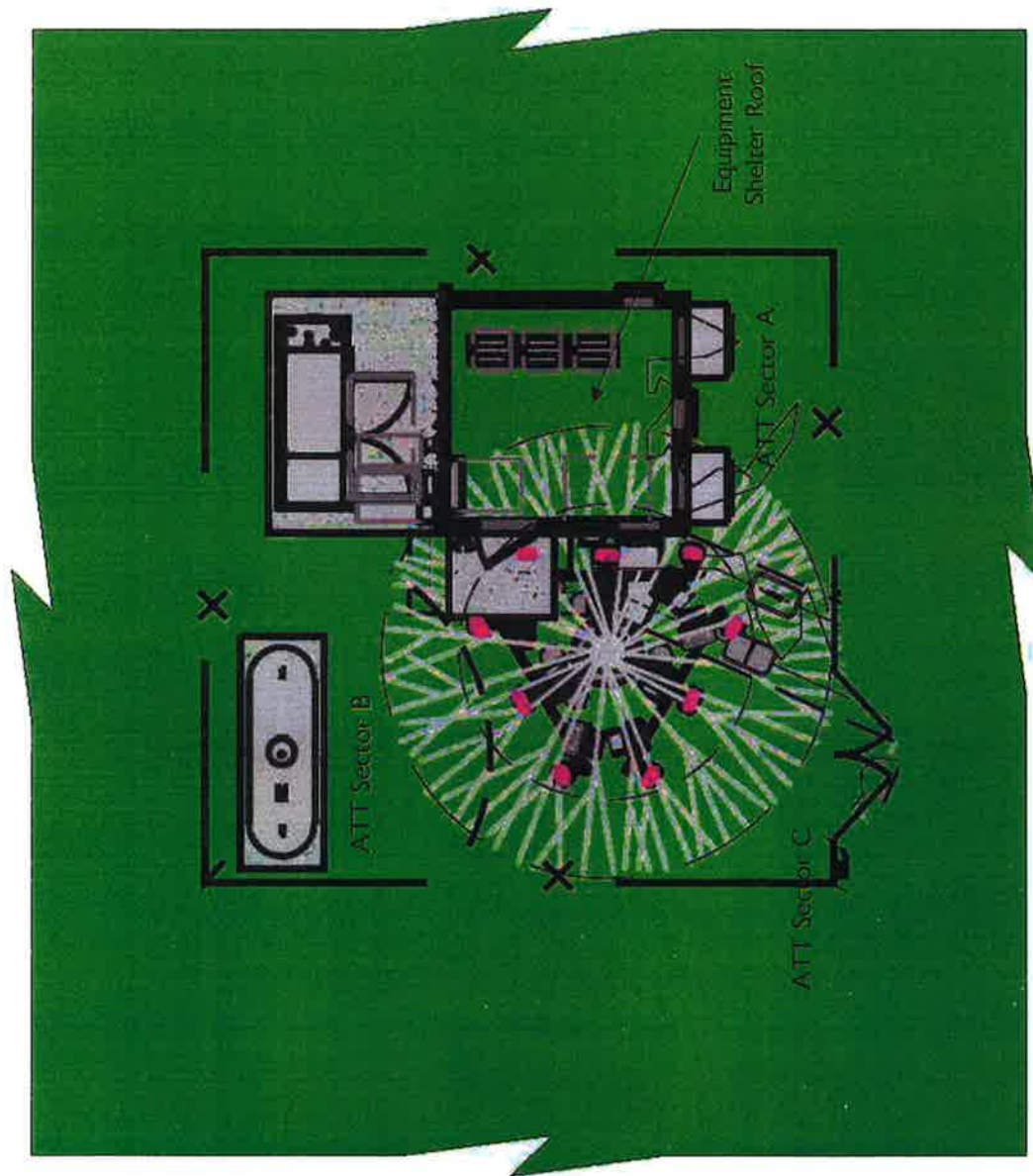
0' 9' 18'



**Roofview: Composite Exposure Levels**  
Facility Operator: AT&T Mobility  
Site Name: Wild Life Lane  
AT&T Site Number: CVL02122  
USID Number: 173482  
Report Date: May 15, 2017



AT&T Antenna:



% FCC Public Exposure Limit	
	Exposure Level $\geq$ 5,000
	500 < Exposure Level $\leq$ 5,000
	100 < Exposure Level $\leq$ 500
	Exposure Level $\leq$ 100

0' 9' 18'



**Roofview: Composite Exposure Levels**

Facility Operator: AT&T Mobility

Site Name: Wild Life Lane

AT&T Site Number: CVL02122

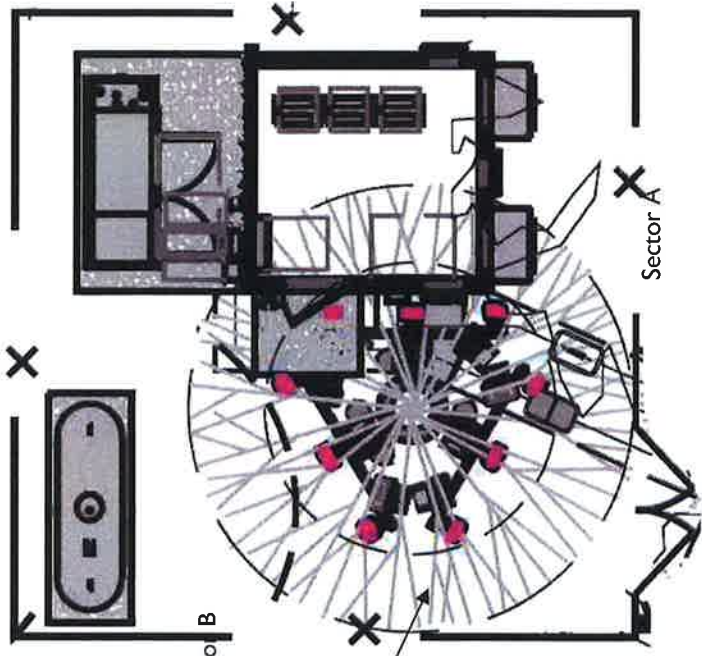
USID Number: 173482

Report Date: May 15, 2017

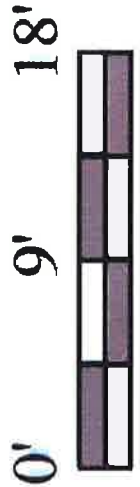


## **Appendix E**

### **Compliance/Signage Plan**



Post on Base of Monotree near the Climbing Ladder



Access Gate

AT&T Antennas

Sign Identification Legend	
	Denotes AT&T NOTICE Sign
	Denotes AT&T CAUTION Sign
	Denotes AT&T CAUTION Tower Sign
	Denotes AT&T WARNING Sign

**Compliance/Signage Plan**  
 Facility Operator: AT&T Mobility  
 Site Name: Wild Life Lane  
 AT&T Site Number: CVL02122  
 USID Number: 173482  
 Report Date: May 15, 2017







at&t

SITE NUMBER: CVL02122
SITE NAME: COLEMAN - WILD LIFE LANE

13083 WILD LIFE LANE
GRASS VALLEY, CA 95945
JURISDICTION: COUNTY OF NEVADA

SITE TYPE: MONO-PINE / WIC

CVL02122
COLEMAN W/LIFE LANE



Main project information table with columns: PROJECT DESCRIPTION, PROJECT INFORMATION, PROJECT TEAM, SHEET INDEX, REV. Includes details on construction, project location, team members, and sheet contents.

AT&T SITE NO CVL02122
PROJECT NO T3850002
DRAWN BY JES:JC
CHECKED BY MJD:JC

Revision table with columns: REV, DATE, DESCRIPTION. Shows revisions for 11/29/18, 08/14/18, and 03/23/17.

IT IS A VIOLATION OF LAW FOR ANY PERSON UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER TO ALTER THIS DOCUMENT.

11/17/18
100% CD REV 1

SHEET TITLE
TITLE SHEET

SHEET NUMBER
T-1



This Site Operated by:  
**AT&T MOBILITY**  
 5001 EXECUTIVE PARKWAY  
 SAN RAMON, CA 94583  
 IN CASE OF FIRE AND THE NEED FOR SHUTDOWN  
 TO DEACTIVATE ANTENNAS CALL THE  
 FOLLOWING NUMBER:  
 For 24 Hour Emergency Contact and Access Please Call:  
 (800)832-6662

Reference Sign#: CVL02122  
 Site Address: 13085 WILD LIFE LANE GRASS VALLEY, CA 95945

**INFORMATION SIGN 1-1**  
 SCALE: 1" = 1'-0"

**INFORMATION SIGN 1-2**  
 SCALE: 1" = 1'-0"

ACTIVE ANTENNAS ARE LOCATED:  
 ON THE OUTSIDE FACE OF THIS BUILDING  
 ON THE STRUCTURE  
 STAR BACK MOUNTED 6 FEET ABOVE THESE ANTENNAS

CONTACT AT&T MOBILITY AT 800-832-6662 & FOLLOW THEIR INSTRUCTIONS PRIOR TO PERFORMING ANY MAINTENANCE OR REPAIRS CLOSER THAN 3 FEET FROM THE ANTENNAS.  
 THIS IS AT&T MOBILITY SITE

**INFORMATION SIGN 1-3**  
 SCALE: 1" = 1'-0"

**INFORMATION SIGN 1-4**  
 SCALE: 1" = 1'-0"

- SIGNAGE AND STRIPING INFORMATION**
- THE FOLLOWING INFORMATION IS A GUIDELINE W/ RESPECT TO PREVAILING STANDARDS LIMITING HAZARD EXPOSURE TO RADIO FREQUENCY ENERGY AND SHOULD BE USED AS SUCH. IF THE SITES EMPLOYEE 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 10mW/m<sup>2</sup> AND THE OCCUPATIONAL LIMIT OF RF EXPOSURE ALLOWED BY AT&T IS 10mW/m<sup>2</sup>.
  - IF THE BOTTOM OF THE ANTENNA IS MOUNTED (E) 8 FEET REST 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.
  - 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 EMP 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.
  - 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 EMP 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.
  - ALL TRANSMIT ANTENNAS REQUIRE A THREE LANGUAGE WARNING SIGN WRITTEN IN ENGLISH, SPANISH, AND CHINESE. THIS SIGN SHALL BE PROVIDED TO THE CONTRACTOR BY 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 ENCLOSED IN A MANNER THAT IS EASILY SEEN BY ANY PERSON ON THE ROOF. WARNING SIGNS SHALL COMPLY W/ ANSI Z39.2 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.
  - PHOTOS OF ALL STRIPING, BARRICADES & SIGNAGE SHALL BE PART OF THE CONTRACTOR'S CLOSE OUT 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 IMPERMEABLE MATERIAL SO AS NOT TO BLOCK OR INTERFERE W/ THE OPERATION OF THE ANTENNAS. BARRICADES SHALL BE PAINTED W/ FADE RESISTANT YELLOW SAFETY PAINT. THE CONTRACTOR SHALL PROVIDE ALL RF FRIENDLY BARRICADES NEEDED. B SHALL PROVIDE THE AT&T CONSTRUCTION PROJECT MANAGER W/ A DETAILED SHOP DRAWING OF EACH BARRICADE, UPON CONSTRUCTION COMPLETION.

AT&T SIGN#  
**CVL02122**  
 COLEMAN C/WILD  
 LICE LANE

VENDOR  
**EPIC**  
 WIRELESS GROUP LLC  
 Connecting a Different World

PREPARED FOR  
  
 5001 EXECUTIVE PARKWAY  
 SAN RAMON, CA 94583

DATE: 11/29/18  
 DRAWN BY: J.E.S.D.  
 CHECKED BY: M.T.D.D.

**20 FENCED COMPOUND SIGNAGE**  
 N.T.S.

**10 INFORMATION SIGNAGE**  
 N.T.S.

Federal Communications Commission  
 Tower Registration Number

1 2 3 4 5 7

Posted in accordance with Federal Communications Commission rules and antenna tower registration 47CFR 17.41(g).

- A INFORMATION SIGN 1-1**  
 SCALE: 1" = 1'-0"
- B INFORMATION SIGN 1-2**  
 SCALE: 1" = 1'-0"
- C INFORMATION SIGN 1-3**  
 SCALE: 1" = 1'-0"
- D INFORMATION SIGN 1-4**  
 SCALE: 1" = 1'-0"

**19 FENCED COMPOUND SIGNAGE**  
 N.T.S.

**15 FCC ASR SIGNAGE**  
 N.T.S.

Property of AT&T  
**Authorized Personnel Only**

No Trespassing  
 Violators will be Prosecuted

In case of emergency, or prior to performing maintenance on this site, call 800-832-6662 and reference cell site number 020122.

- 11 INFORMATION SIGNAGE**  
 N.T.S.
- NOTE:  
 1. CONTRACTOR SHALL INSTALL ALL INFORMATION SIGNAGE IN ACCORDANCE W/ AT&T WRITTEN DOCUMENT #114504, RF EXPOSURE POLICY AND RF SAFETY COMPLIANCE PROGRAM LATEST EDITION.  
 2. CONTRACTOR SHALL CONTACT AT&T FOR GUIDANCE ON THE LEVEL AND IN-LOCATION OF SIGNAGE

**3 GENERAL NOTES**  
 N.T.S.

REV	DATE	DESCRIPTION
C	11/29/18	100% CD REV1
B	08/14/18	100% CD SUBMITTAL
A	03/23/17	100% CD SUBMITTAL

AT&T SITE NO: CVL02122  
 PROJECT NO: T-850-003  
 DRAWN BY: J.E.S.D.  
 CHECKED BY: M.T.D.D.

**18 DOOR / EQUIPMENT SIGN**  
 N.T.S.

**14 GATE SIGNAGE**  
 N.T.S.

Property of AT&T  
**Authorized Personnel Only**

In case of emergency, or prior to performing maintenance on this site, call 800-832-2822 and reference cell site number CVL02122.

**WARNING**

AT&T Beyond This Point RF Exposure may exceed FCC Occupational Exposure Limit.

CONTACT AT 800-832-2822 FOR MORE INFORMATION

**CAUTION**

AT&T Beyond This Point RF Exposure may exceed FCC Occupational Exposure Limit.

CONTACT AT 800-832-2822 FOR MORE INFORMATION

**NOTICE**

AT&T Beyond This Point RF Exposure may exceed FCC Occupational Exposure Limit.

CONTACT AT 800-832-2822 FOR MORE INFORMATION

**9 CAUTION AND WARNING SIGN**  
 N.T.S.

**7 NOTICE SIGN**  
 N.T.S.

DATE: 11/29/18  
 DRAWN BY: J.E.S.D.  
 CHECKED BY: M.T.D.D.

IT IS A VIOLATION TO TAKE OR HAVE ANY PERSON OR OBJECT THERE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER TO ALTER THIS DOCUMENT

DATE: 11/17/18  
 100% CD REV1

SHEET TITLE  
**SITE SIGNAGE**

SHEET NUMBER  
**GN-2**

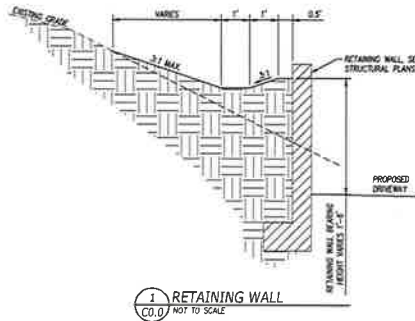


**GENERAL CONSTRUCTION NOTES:**

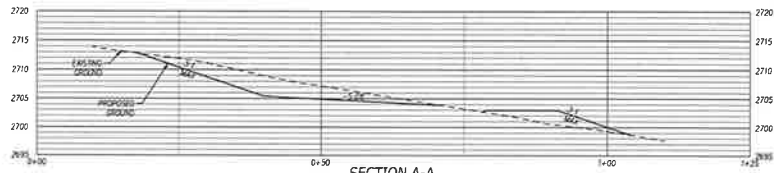
- ALL GRADING SHALL CONFORM TO NEVADA COUNTY GRADING STANDARDS CODE (TITLE 3, CHAPTER 5, ARTICLE 1.3)
- FOR SITE PREPARATION, SUITABLE FILL MATERIAL, GRADING AND EARTHWORK ACTIVITIES, FOUNDATION, SEBRANDS AND OTHER GEOTECHNICAL RECOMMENDATIONS REFER TO THE GEOTECHNICAL INVESTIGATION REPORT PREPARED BY GEOPLUS PARTNERS, DATED NOVEMBER 9, 2017.



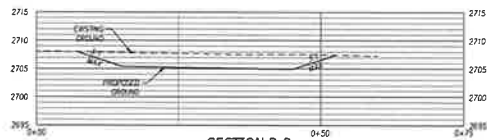
VICINITY MAP  
NOT TO SCALE



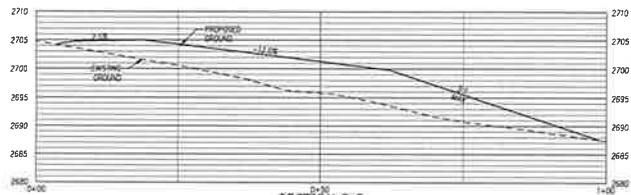
RETAINING WALL  
CO.0  
NOT TO SCALE



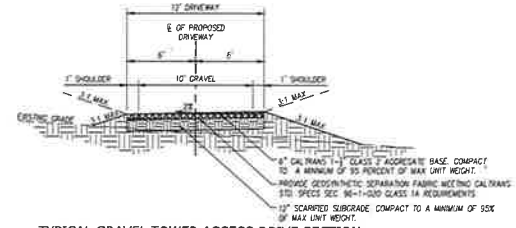
SECTION A-A  
HORIZONTAL SCALE: 1"=10'  
VERTICAL SCALE: 1"=10'



SECTION B-B  
HORIZONTAL SCALE: 1"=10'  
VERTICAL SCALE: 1"=10'

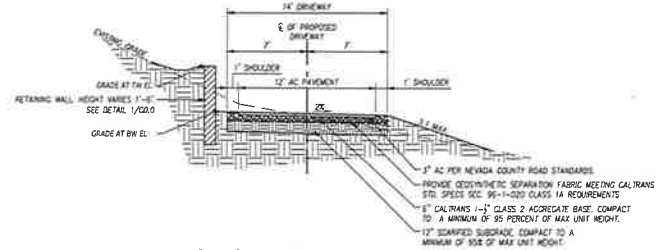


SECTION C-C  
HORIZONTAL SCALE: 1"=10'  
VERTICAL SCALE: 1"=10'

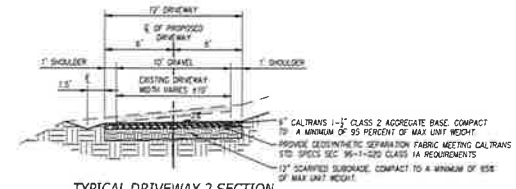


TYPICAL GRAVEL TOWER ACCESS DRIVE SECTION  
STA: 1+00 TO STA: 2+10

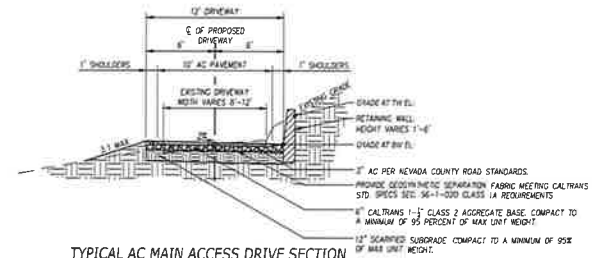
TYPICAL GRAVEL MAIN ACCESS DRIVE SECTION  
STA: 11+90 TO STA: 12+30  
NOT TO SCALE



TYPICAL AC TOWER ACCESS DRIVE SECTION  
STA: 0+80 TO STA: 1+00  
NOT TO SCALE



TYPICAL DRIVEWAY 2 SECTION  
STA: 0+53 TO STA: 0+88  
NOT TO SCALE



TYPICAL AC MAIN ACCESS DRIVE SECTION  
STA: 10+04 TO STA: 11+85  
NOT TO SCALE

**CANTWRIGHT**  
ENGINEERS  
1000 W. JAMES ST. SUITE 200  
GRASS VALLEY, CA 95945  
TEL: 530.276.0001  
WWW.CANTWRIGHTENGINEERS.COM

REVISIONS		
NO.	DATE	DESCRIPTION

CVL02122 - COLEMAN - WILD LIFE LANE  
13083 WILD LIFE LANE  
GRASS VALLEY, CA 95945  
NEVADA COUNTY  
APN: 12-720-45

PROJECT #	217125
SCALE	NOTED
DATE	11/27/2018
APPROVALS	
DESIGNED BY	JDC
DRAWN BY	SMH
CHECKED BY	JDC(S)

SHEET TITLE  
PRELIMINARY GENERAL  
NOTES, DETAILS AND  
TYPICAL SECTIONS

SHEET NUMBER  
**C0.0**

**SITE CONSTRUCTION NOTES:**

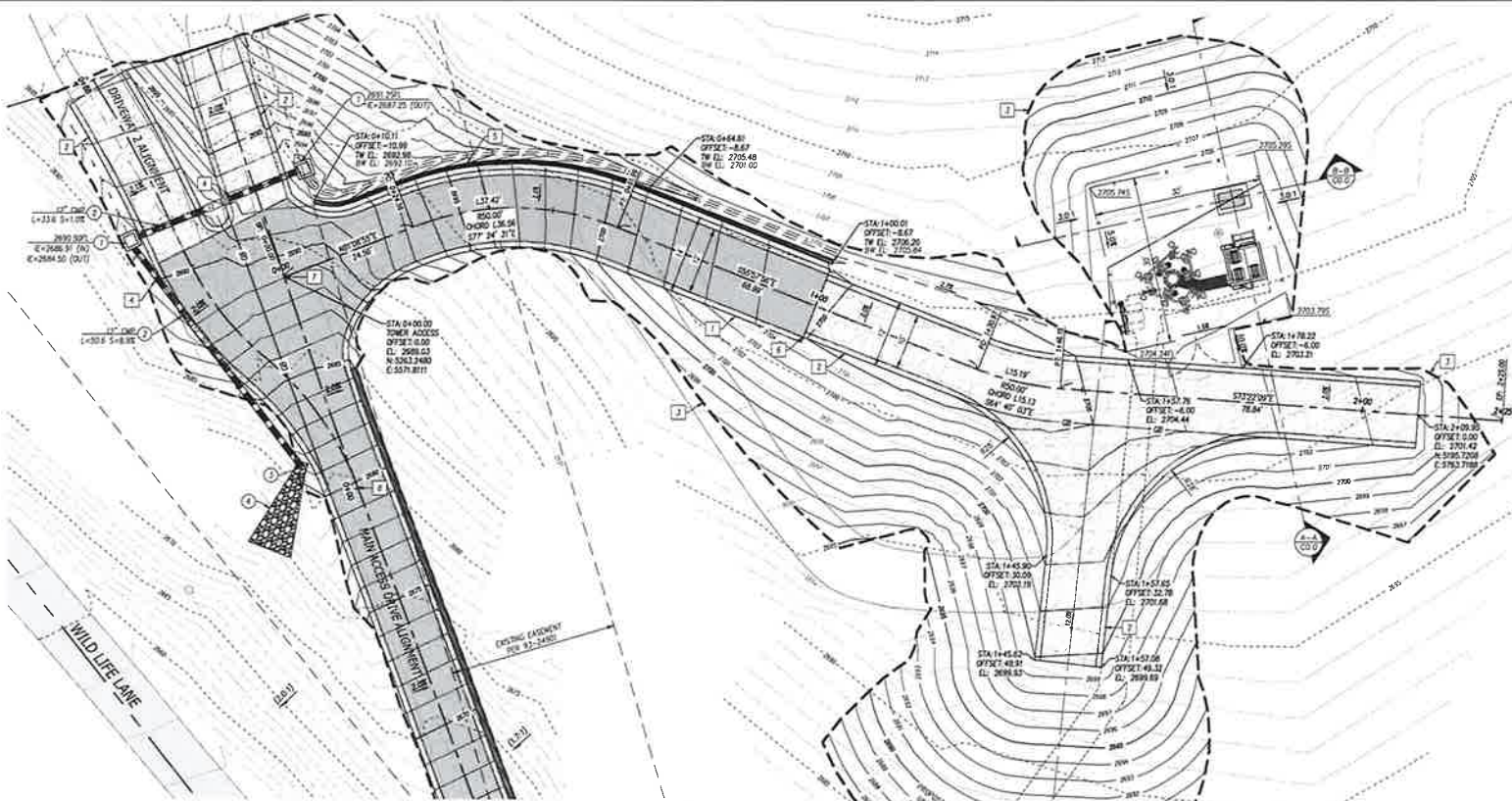
- 1 CONSTRUCT 12' WIDE AC ROAD WITH 1' WIDE GRAVEL SHOULDER(S)
- 2 CONSTRUCT 10' WIDE GRAVEL ROAD WITH 1' WIDE GRAVEL SHOULDERS
- 3 LIMITS OF DISTURBANCE GARLIGHT MAX 3:1
- 4 PROPOSED 12" CORRUGATED METAL PIPE CULVERT
- 5 CONSTRUCT RETAINING WALL. SEE TYPICAL SECTION ON SHEET C0.0 FOR DETAILS
- 6 TRANSITION FROM 12' WIDE AC ROAD TO 10' WIDE GRAVEL ROAD
- 7 STA 0+00.00 OFF: 0.00 = TOWER ACCESS DRIVE
- 8 STA 1+44.98 OFF: 0.00 = MARK ACCESS DRIVE
- 9 STA 0+00.00 OFF: 0.00 = DRIVEWAY 2 ALIGNMENT
- 10 STA 1+44.98 OFF: 0.00 = MARK ACCESS DRIVE

**STORM DRAIN NOTES:**

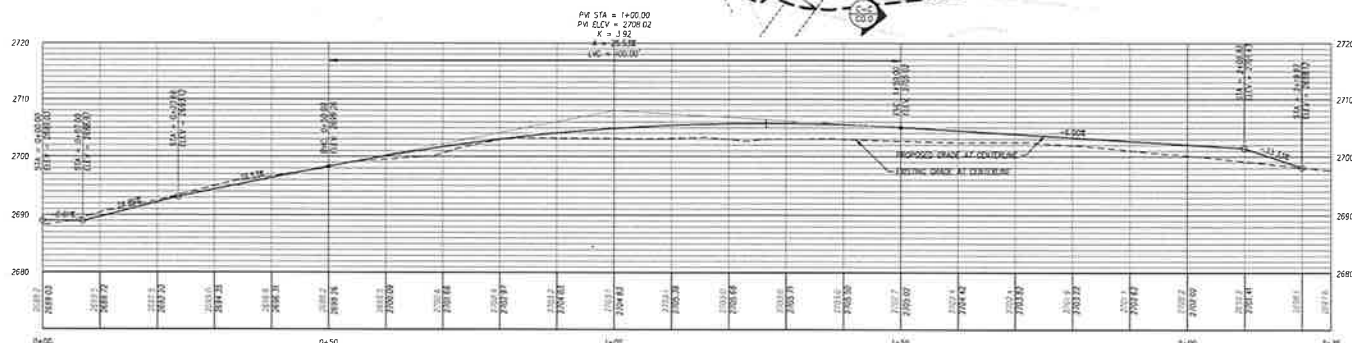
- 1 STORM DRAIN INLET, FLOWLINE AND INVERT PER PLAN
- 2 STORM DRAIN PIPE, LENGTH AND SLOPE AS PER PLAN
- 3 STORM DRAIN OUTFALL STRUCTURE E+2680.00
- 4 R/R - RAP SLOPE PROJECTION

**LEGEND**

- 75R ----- EXISTING 1'-FT CONTOUR
- 25S ----- EXISTING 5'-FT CONTOUR
- 25P ----- PROPOSED 1'-FT CONTOUR
- 25S ----- PROPOSED 5'-FT CONTOUR
- BW EL: XXXX.XX BOTTOM OF WALL ELEVATION
- TW EL: XXXX.XX TOP OF WALL ELEVATION
- - - - - PROPOSED EASEMENT
- CENTERLINE
- - - - - LIMITS OF DISTURBANCE
- OB ----- GRADE BREAK
- PROPOSED AC ACCESS DRIVE
- PROPOSED GRAVEL ACCESS DRIVE/PURCHASE



**PLAN VIEW - TOWER ACCESS DRIVE**  
HORIZONTAL SCALE: 1"=10'



**PROFILE - TOWER ACCESS DRIVE**  
HORIZONTAL SCALE: 1"=10'  
VERTICAL SCALE: 1"=4'



**REVISIONS**

NO.	DATE	DESCRIPTION

CVL02122 - COLEMAN - WILD LIFE LANE  
13083 WILD LIFE LANE  
GRASS VALLEY, CA 95945  
NEVADA COUNTY  
APN: 12-720-45

PROJECT # 217125

SCALE 1"=10'

DATE: 11/27/2018

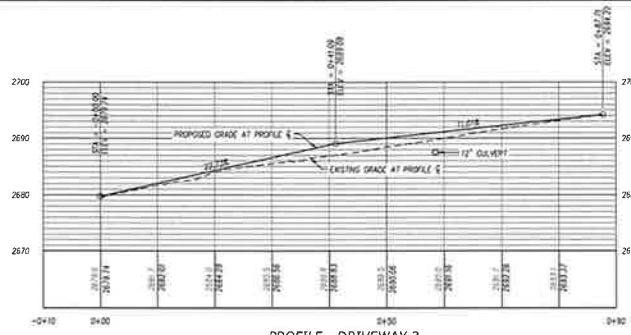
**APPROVALS**

DESIGNED BY	IOC
DRAWN BY	SDHJ
CHECKED BY	IOC/SJ

**SHEET TITLE**  
PRELIMINARY TOWER  
ACCESS DRIVE  
PLAN AND PROFILE

**SHEET NUMBER**

**C1.0**



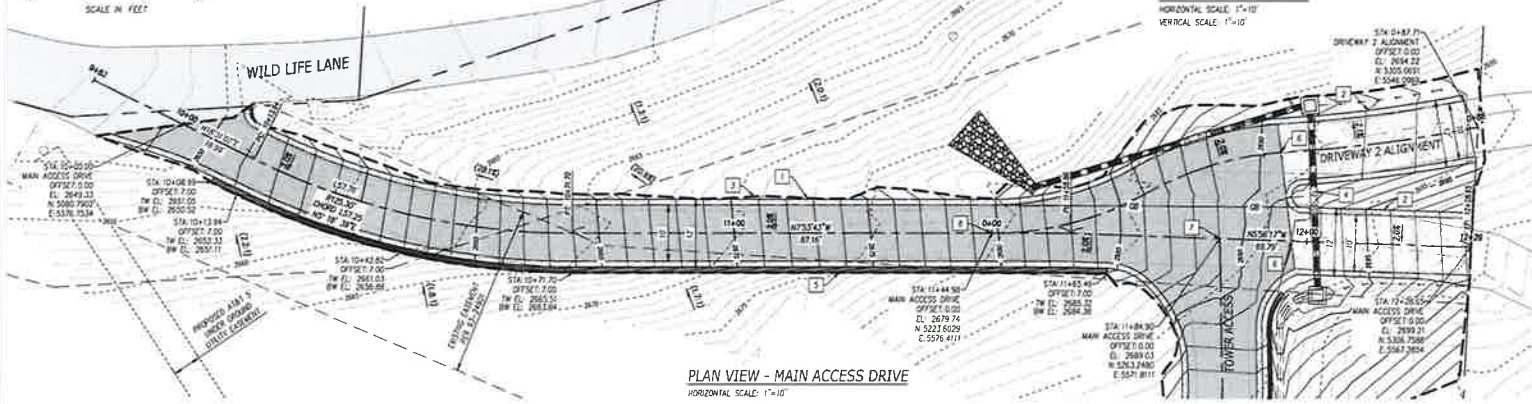
**PROFILE - DRIVEWAY 2**  
 HORIZONTAL SCALE: 1"=10'  
 VERTICAL SCALE: 1"=10'

**SITE CONSTRUCTION NOTES:**

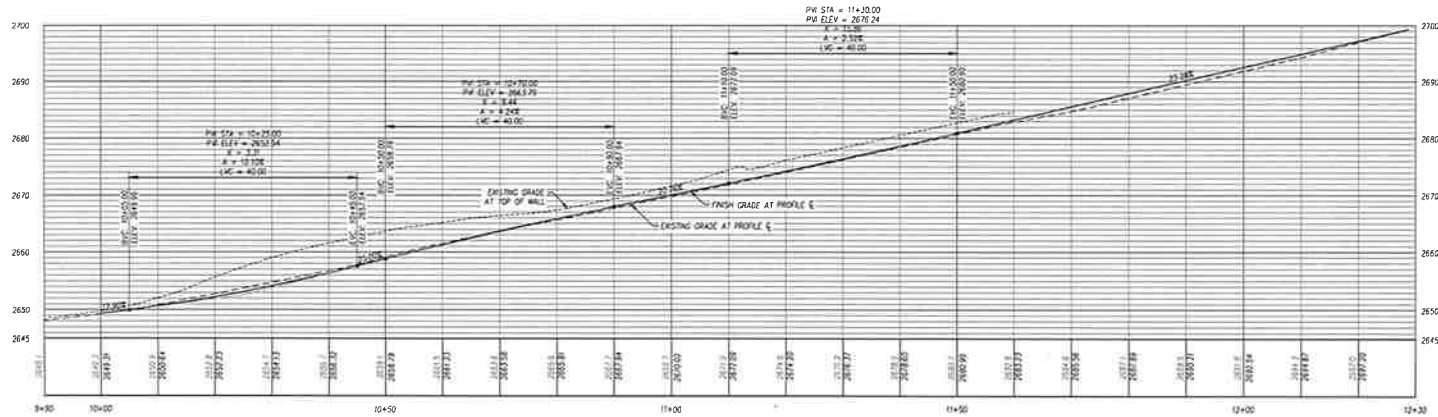
- 1. CONSTRUCT 12' WIDE AC ROAD WITH 1' WIDE GRAVEL SHOULDERS
- 2. CONSTRUCT 10' WIDE GRAVEL ROAD WITH 1' WIDE GRAVEL SHOULDERS
- 3. LIMITS OF DISTURBANCE, DAYLIGHT MAX 3:1
- 4. PROPOSED 12" CORRUGATED METAL PIPE CULVERT
- 5. CONSTRUCT RETAINING WALL SEE TYPICAL SECTION ON SHEET C0 D FOR DETAILS
- 6. TRANSITION FROM 12' WIDE AC ROAD TO 10' WIDE GRAVEL ROAD
- 7. STA. 0+00.00 OFF. 0.00 = TOWER ACCESS  
 STA. 1+84.90 OFF. 0.00 = MAIN ACCESS DRIVE
- 8. STA. 0+00.00 OFF. 0.00 = DRIVEWAY 2 ALIGNMENT  
 STA. 1+44.88 OFF. 0.00 = MAIN ACCESS DRIVE

**LEGEND**

- 750 --- EXISTING 1'-FT CONTOUR
- 255 --- EXISTING 5'-FT CONTOUR
- 256 --- PROPOSED 1'-FT CONTOUR
- 255 --- PROPOSED 5'-FT CONTOUR
- XX.XXX --- BOTTOM OF WALL ELEVATION
- XX.XXX --- TOP OF WALL ELEVATION
- --- PROPOSED CASHEMENT
- --- CENTERLINE
- --- LIMITS OF DISTURBANCE
- GB --- GRADE BREAK
- --- PROPOSED AC ACCESS DRIVE
- --- PROPOSED GRAVEL ACCESS DRIVE/TURNAROUND



**PLAN VIEW - MAIN ACCESS DRIVE**  
 HORIZONTAL SCALE: 1"=10'



**PROFILE - MAIN ACCESS DRIVE**  
 HORIZONTAL SCALE: 1"=10'  
 VERTICAL SCALE: 1"=10'



REVISIONS		
NO.	DATE	DESCRIPTION

CV102122 - COLEMAN - WILD LIFE LANE  
 13083 WILD LIFE LANE  
 GRASS VALLEY, CA 95945  
 NEVADA COUNTY  
 APN: 12-720-45

PROJECT # 217125

SCALE 1"=10'

DATE: 11/27/2018

APPROVALS	
DESIGNED BY: JDC	
DRAWN BY: SDR	
CHECKED BY: JDC SL	

**SHEET TITLE**  
 PRELIMINARY MAIN ACCESS DRIVE PLAN AND PROFILE

**SHEET NUMBER**

C1.1

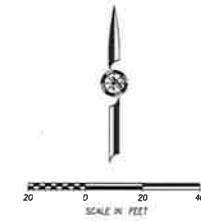
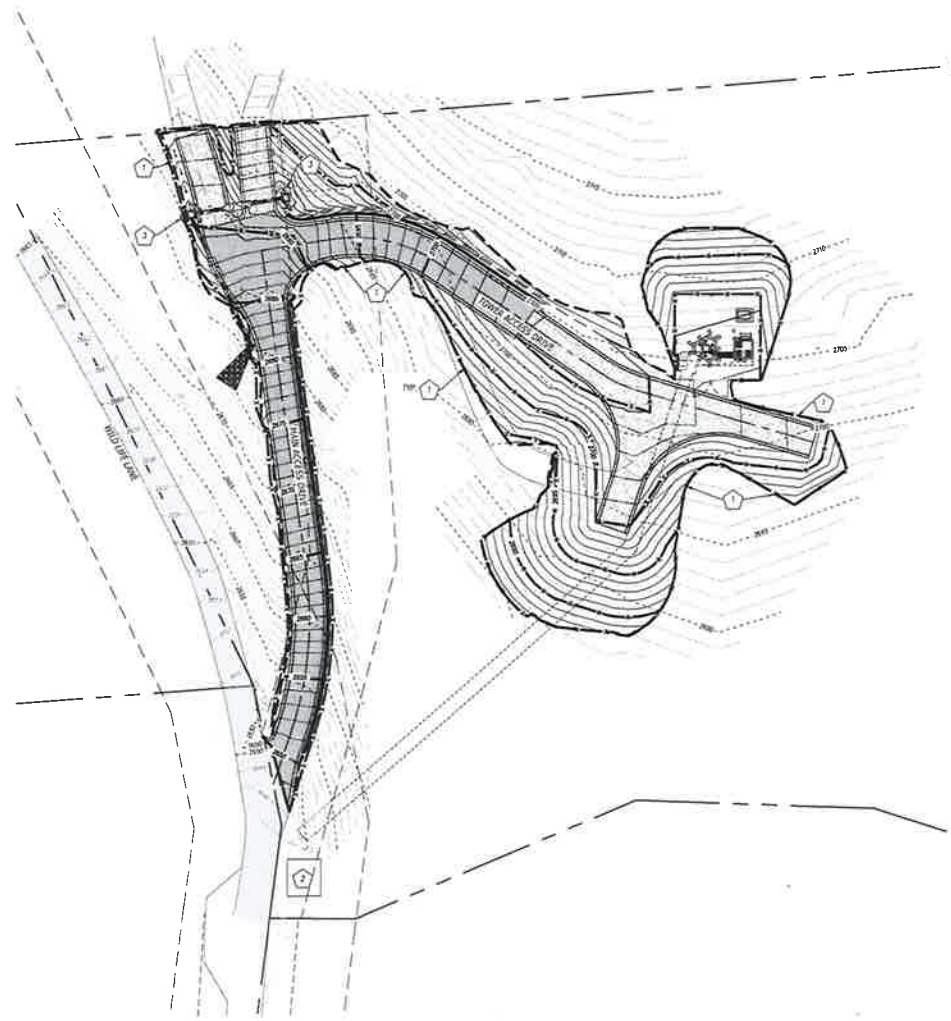
**LEGEND**

- FIBER ROLL PER CASQA 3E-5
- - - - - 35-ft EXISTING 1-FT CONTOUR
- - - - - 25-ft EXISTING 5-FT CONTOUR
- - - - - 25-ft PROPOSED 1-FT CONTOUR
- - - - - 25-ft PROPOSED 5-FT CONTOUR
- - - - - LIMITS OF DISTURBANCE
- ◻ PROPOSED AC ACCESS DRIVE/TURNAROUND
- ◻ PROPOSED GRAVEL ACCESS DRIVE/TURNAROUND
- PROPOSED INLET PROTECTION

**EROSION AND SEDIMENT CONTROL NOTES:**

1. CONSTRUCT PERIMETER EROSION CONTROL - UTILIZE FIBER ROLLS PER CASQA STD. DWG. 9E-5
2. PROPOSED SITE CONCRETE WASHOUT PER CASQA STD. DWG. 1A-B
3. INSTALL INLET SEDIMENT CONTROL PROTECTION DEVICE

NOTE: ALL AREAS THAT ARE DISTURBED SHALL BE STABILIZED WITH PERMANENT EROSION CONTROL MEASURES PRIOR TO CONTRACT CLOSEOUT.



CIVIL ENGINEERS  
 4188 Pogden Blvd., Suite 200  
 Concord, CA 94520  
 (916) 776-4000  
 www.curtwrightengineers.com

**CURTWRIGHT**  
 ENGINEERS

4188 Pogden Blvd., Suite 200  
 Concord, CA 94520  
 (916) 776-4000  
 www.curtwrightengineers.com

REVISIONS	
NO.	DESCRIPTION

CV/02122 - COLEMAN - WILD LIFE LANE  
 13083 WILD LIFE LANE  
 GRASS VALLEY, CA 95945  
 NEVADA COUNTY  
 APN: 12-720-45

PROJECT #: 217125

SCALE: 1"=20'

DATE: 11/27/2019

**APPROVALS**

DESIGNED BY:	IDC
DRAWN BY:	ESND
CHECKED BY:	ISE/JS

**SHEET TITLE**

PRELIMINARY EROSION AND SEDIMENT CONTROL PLAN

**SHEET NUMBER**

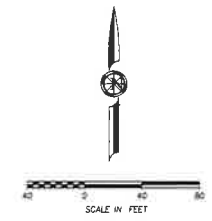
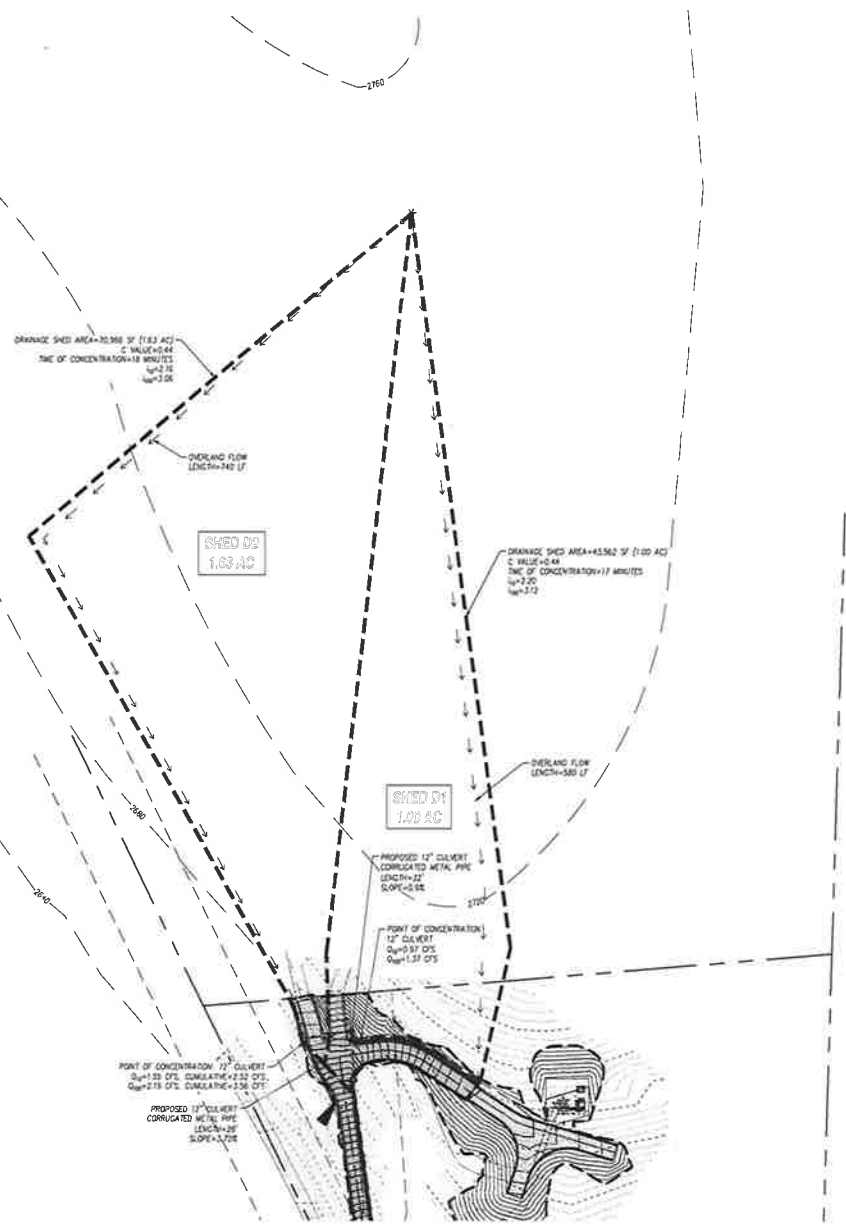
C2.0

**LEGEND**

---	220	EXISTING 20-FT CONTOUR
---	258	EXISTING 1-FT CONTOUR
---	255	EXISTING 5-FT CONTOUR
---	258	PROPOSED 1-FT CONTOUR
---	255	PROPOSED 5-FT CONTOUR
---		DRAINAGE SHED BOUNDARY

**SHED D2**  
1.63 AC

**DRAINAGE SHED ID**



**CANTWRIGHT ENGINEERS**  
 4180 Popple Blvd., Suite 200  
 Grass Valley, CA 95945  
 Phone: (709) 978-9031  
 www.Cantwright.com

**REVISIONS**

MARK	DATE	DESCRIPTION

CV102122 - COLEMAN - WILD LIFE LANE  
 13083 WILD LIFE LANE  
 GRASS VALLEY, CA 95945  
 NEVADA COUNTY  
 APN: 12-720-45

PROJECT #: 217125

SCALE: 1"=40'

DATE: 11/27/2018

**APPROVALS**

DESIGNED BY:	IST
DRAWN BY:	3093
CHECKED BY:	IST

**SHEET TITLE**  
 PRELIMINARY DRAINAGE SHED MAP

**SHEET NUMBER**

C3.0

Cantwright Engineers, Inc., 4180 Popple Blvd., Suite 200, Grass Valley, CA 95945, is the registered professional engineer responsible for the design and construction of the project. The engineer's registration number is 16813. The project was completed on 11/27/2018.



NOTE: THIS SIGN TO BE PLACED AT EACH END OF THE BRIDGE

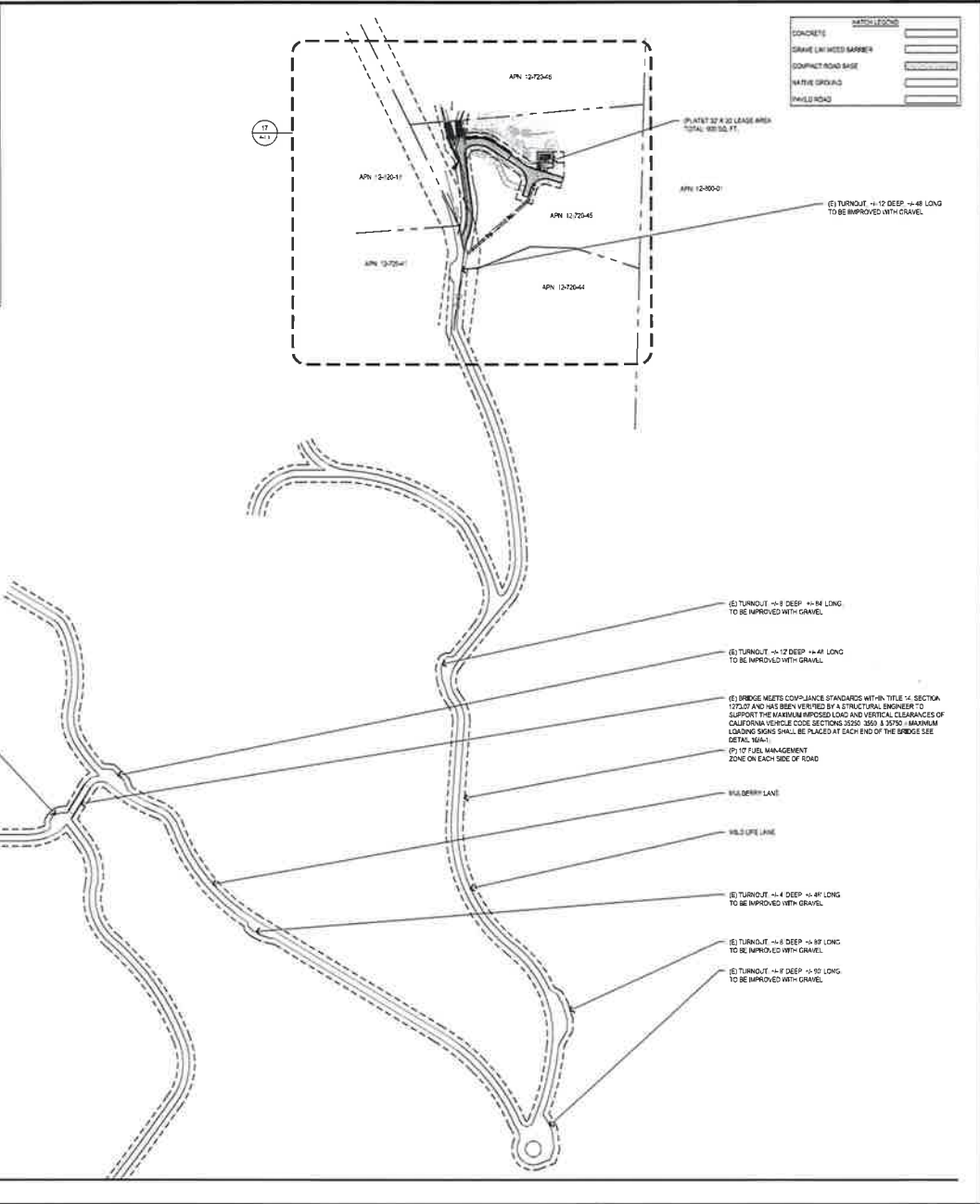
# WEIGHT LIMIT 37.5 TONS

BRIDGE CAPACITY TO BE DETERMINED BY THE DESIGNER. THIS SIGN SHALL BE PLACED AT EACH END OF THE BRIDGE.

16 R12-1 SIGN

NOTE:  
1. DRAWINGS WILL MEET DRIVEWAYS STANDARD TITLE 14, SECTION 1773.10, 1773.22 AND 1773.25.  
2. DRIVEWAYS WILL MEET LOAD REQUIREMENT OF 75,000 POUNDS.  
3. DRIVEWAYS WILL BE A MINIMUM WIDTH OF 10 FEET WITH 1 FOOT SHOULDER FOR UP TO 1% GRADES AND A MINIMUM WIDTH OF 12 FEET WITH 1 FOOT SHOULDER FOR 1-5% GRADES.  
4. ANY GRADES EXCEEDING 2% WILL REQUIRE A PERMIT FOR APPROVAL.  
5. 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 OF CURVATURE AND ADDITIONAL SURFACE WIDTH OF 2' WILL BE ADDED TO THOSE FROM 100-200' RADIUS OF CURVATURE.  
6. VEGETATION MANAGEMENT ALONG WILDLIFE LANE AND WILDERY LANE SHALL BE PERFORMED FOR 75' ON EITHER SIDE OF THE ROAD.  
7. EXISTING TREES AND OTHER SCREEN VEGETATION IN THE VICINITY OF THE FACILITY THAT ARE NOT REMOVED DURING CONSTRUCTION SHALL BE PROTECTED FROM DAMAGE DURING CONSTRUCTION.

17 OVERALL FIRE ACCESS PLAN



MATERIALS	
CONCRETE	
GRAVEL (4" MAX) BARRIER	
COMPACT ROAD BASE	
WASTE GRAVEL	
PAVEMENT	

AT&T SITE NO  
**CVL02122**  
COLEMAN CMILD  
LICE LANE

100% SUBMITTAL

**EPIC**  
WIRELESS GROUP LLC  
100% SUBMITTAL

PREPARED FOR  
**at&t**  
100% SUBMITTAL

100% SUBMITTAL

**Borges**  
100% SUBMITTAL

AT&T SITE NO CVL02122  
PROJECT NO T0850702  
DRAWN BY JESD  
CHECKED BY M7IDD

REV	DATE	DESCRIPTION
C	11/29/18	100% 2D REV 1
B	08/14/18	100% 2D SUBMITTAL
A	03/23/17	100% 2D SUBMITTAL

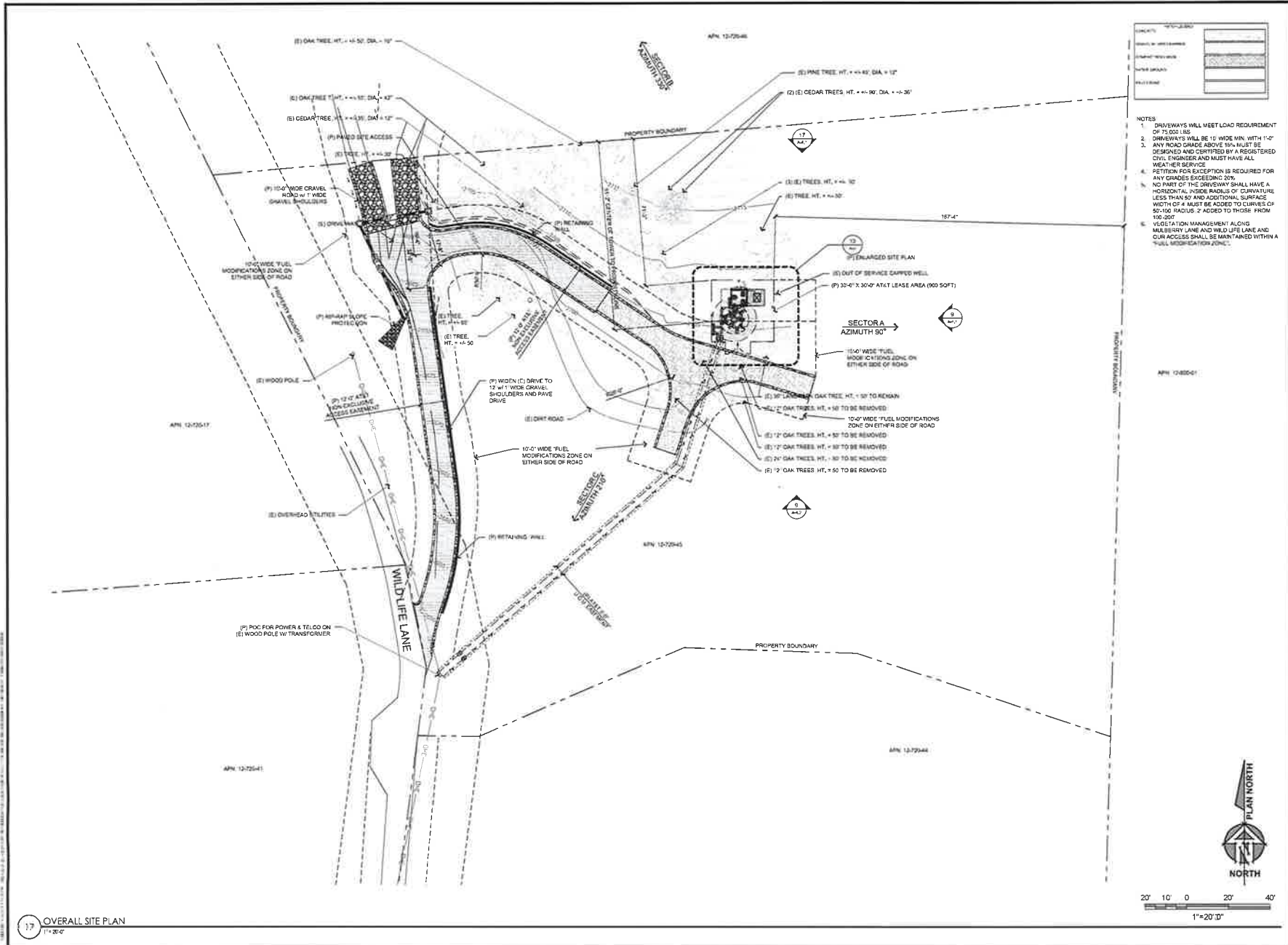
100% SUBMITTAL

IF IN VIOLATION OF LAW OR ANY PROFESSIONAL ENGINEER'S ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER ALTER THIS DOCUMENT

FOLDER NO  
**11/1 18**  
100% 2D REV 1

SHEET TITLE  
**OVERALL FIRE ACCESS PLAN**

SHEET NUMBER  
**A-1**



AT&T SITE NO  
**CVL02122**  
COLEMAN WILD LIFE LANE

PREPARED FOR  
**at&t**  
5001 E. CENTURY BLVD. SUITE 1000  
DENVER, CO 80231

**Borges**

AT&T SITE NO  
**CVL02122**  
PROJECT NO  
**T03850302**  
DRAWN BY  
**JJE/SJC**  
CHECKED BY  
**MT/DD**

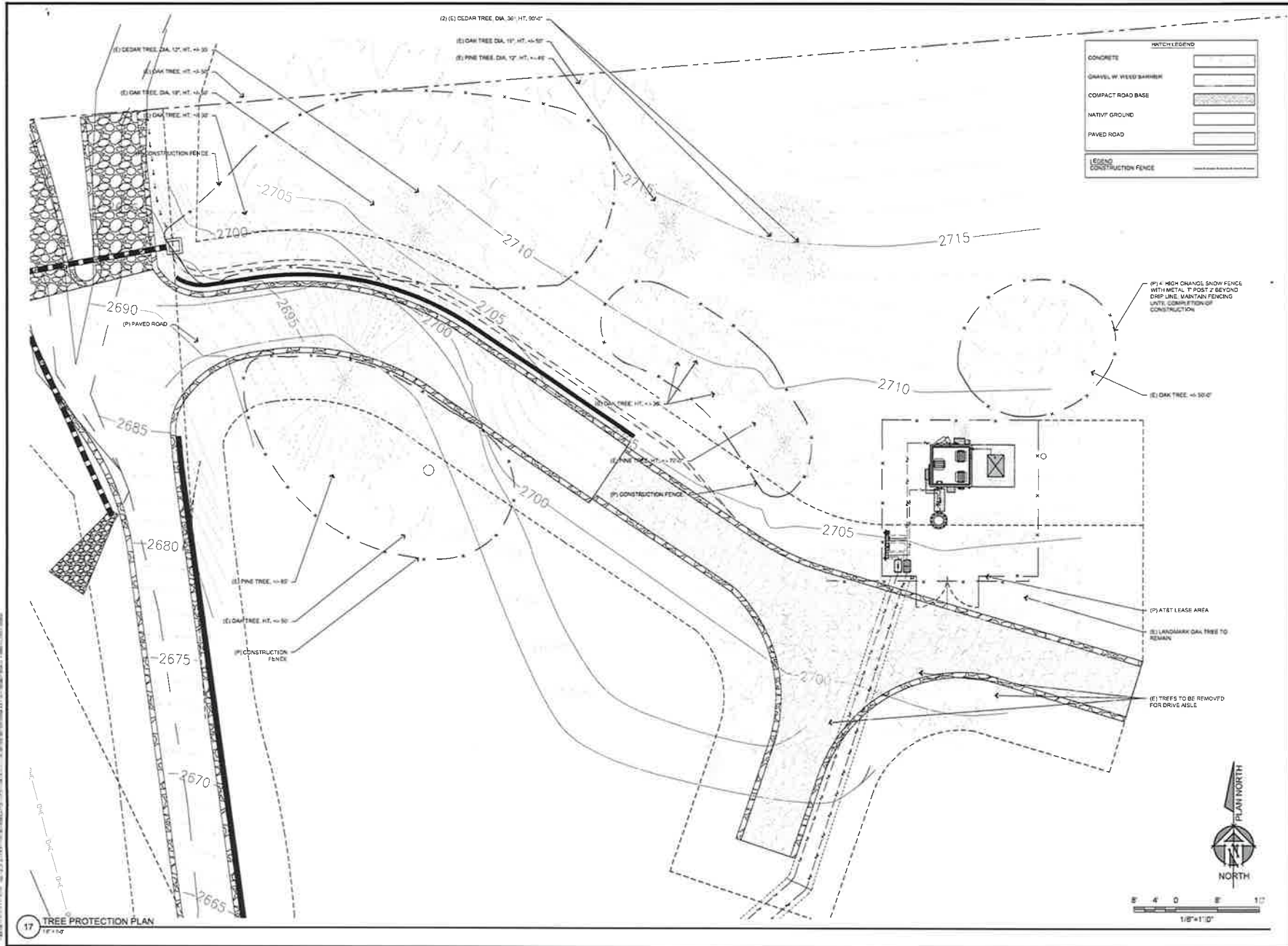
REV	DATE	DESCRIPTION
C	11/26/18	100% ZD REV 1
B	08/14/18	100% ZD SUBMITTAL
A	03/23/17	90% ZD SUBMITTAL

IT IS A VIOLATION OF LAW FOR ANY PROFESSIONAL ENGINEER ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER TO ACT IN THIS DOCUMENT.

11/1/18  
100% ZD R001

SHEET TITLE  
**SITE PLAN**

SHEET NUMBER  
**A-1.1**



**MATCH LEGEND**

CONCRETE	[Symbol]
GRAVEL W/ WEED BARRIER	[Symbol]
COMPACT ROAD BASE	[Symbol]
NATIVE GROUND	[Symbol]
PAVED ROAD	[Symbol]
LEGEND CONSTRUCTION FENCE	[Symbol]

AT&T SITE ID  
**CVL02122**  
 COLEMAN WILD  
 LICE LANE

VISION  
  
**EPIC**  
 WIRELESS GROUP LLC  
 006 031812 0812100  
 000100100000000000

PREPARED FOR  
  
 000 031812 0812100  
 000100100000000000

ARCHITECT  
  
**Borges**  
 1408 STONE POINT DRIVE SUITE 100  
 ROCKVILLE, VA 22060  
 (703) 792-7000 FAX  
 (703) 792-8000

AT&T SITE NO CVL02122  
 PROJECT NO T33850122  
 DRAWN BY JIE SD  
 CHECKED BY MIT DC

REV	DATE	DESCRIPTION
C	11/29/18	100% CD REV1
B	08/14/18	100% CD SUBMITTAL
A	03/23/17	90% CD SUBMITTAL

LEGEND

(P) AT&T LEASE AREA  
 (S) LANDMARK OAK TREE TO REMAIN  
 (E) TREES TO BE REMOVED FOR DRIVE ADLE

IT IS A VIOLATION OF LAW FOR ANY PERSON UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER TO ALTER THIS DOCUMENT

DATE OF  
**11/1/18**  
 1000 CD R001

SHEET TITLE  
**TREE PROTECTION PLAN**

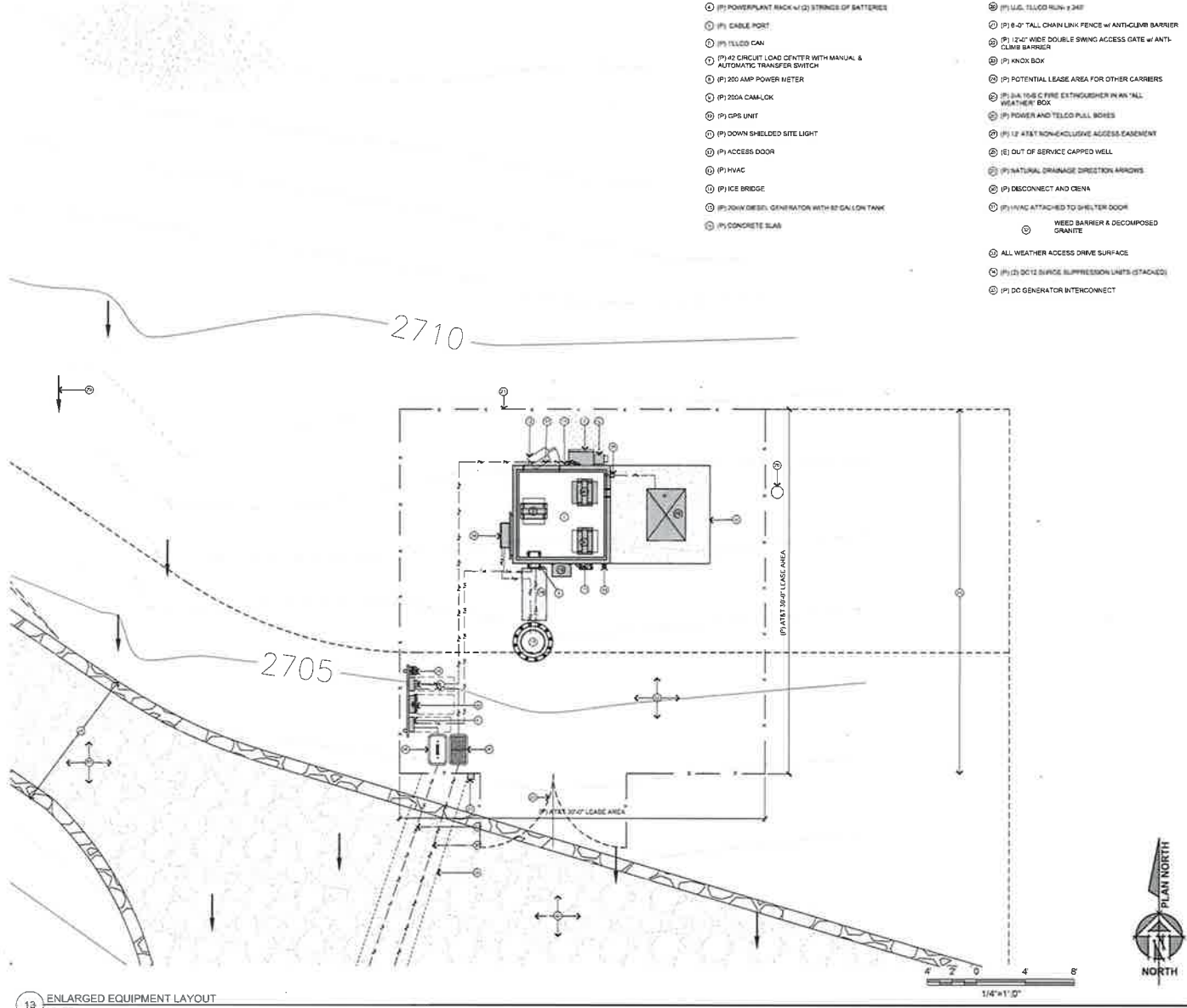
SHEET NUMBER  
**A-1.2**

DATE: 03/22/17
DESIGNER: JES/D
CHECKER: MTD/D
SCALE: 1/4" = 1'-0"

NOTE:  
ALL UNDERGROUND UTILITIES IN AREA  
TO BE VERIFIED PRIOR TO TRENCHING.  
NO GRADING REQUIRED

KEYNOTES

- ⊙ (P) AT&T 8'-0" X 8'-0" PRE-MANUFACTURED CONCRETE WALKIN CABINET(W/C)
- ⊙ (P) 1/2" RACK
- ⊙ (P) TELCO RACK
- ⊙ (P) POWERPLANT RACK w/ (2) STRINGS OF BATTERIES
- ⊙ (P) CABLE PORT
- ⊙ (P) TELCO CAN
- ⊙ (P) 42 CIRCUIT LOAD CENTER WITH MANUAL & AUTOMATIC TRANSFER SWITCH
- ⊙ (P) 200 AMP POWER METER
- ⊙ (P) 200A CAME-LOCK
- ⊙ (P) GPS UNIT
- ⊙ (P) DOWN SHIELDED SITE LIGHT
- ⊙ (P) ACCESS DOOR
- ⊙ (P) HVAC
- ⊙ (P) ICE BRIDGE
- ⊙ (P) 200W DIESEL GENERATOR WITH 87 GALLON TANK
- ⊙ (P) CONCRETE SLAB
- ⊙ (P) 1/2" MONO-PHASE TRENCH
- ⊙ 3'-0" UG UTILITY CASEMENT FOR POWER AND TELCO
- ⊙ (P) U/G POWER RUN - 125'
- ⊙ (P) U/G TELCO RUN - 240'
- ⊙ (P) 8'-0" TALL CHAIN LINK FENCE w/ ANTI-CLIMB BARRIER
- ⊙ (P) 12'-0" WIDE DOUBLE SWING ACCESS GATE w/ ANTI-CLIMB BARRIER
- ⊙ (P) KNOX BOX
- ⊙ (P) POTENTIAL LEASE AREA FOR OTHER CARRIERS
- ⊙ (P) 3/4" DIA. 1/2" C/PINE EXTINGUISHER IN AN "ALL WEATHER" BOX
- ⊙ (P) POWER AND TELCO PULL BOXES
- ⊙ (P) 12' AT&T NON-EXCLUSIVE ACCESS CASEMENT
- ⊙ (E) OUT OF SERVICE CAPPED WELL
- ⊙ (P) NATURAL DRAINAGE DIRECTION ARROWS
- ⊙ (P) DISCONNECT AND OPEN
- ⊙ (P) HVAC ATTACHED TO SHELTER DOOR
- ⊙ WEED BARRIER & DECOMPOSED GRANITE
- ⊙ ALL WEATHER ACCESS DRIVE SURFACE
- ⊙ (P) (2) DC12 SURGE SUPPRESSION UNITS (STACKED)
- ⊙ (P) DG GENERATOR INTERCONNECT



13 ENLARGED EQUIPMENT LAYOUT  
1/4" = 1'-0"

AT&T SITE NO  
**CVL02122**  
COLEMAN DR/OLD  
LICE LANE

VELOCITY  
**EPIC**  
WIRELESS GROUP LLC  
OPERATING IN WIRELESS WORLD  
DESIGNER: JES/D 100  
CHECKER: MTD/D 100

PREPARED FOR  
**at&t**  
5001 BRIDGEPORT  
DRIVE, FORT WORTH, TX 76104

PROJECT NO  
**Borges**  
1478 STONE POINT DRIVE SUITE 100  
ROCKFORD, IL 60087  
TEL: 815.937.1300

AT&T SITE NO CVL02122  
PROJECT NO T03850102  
DRAWN BY JES/D  
CHECKED BY MTD/D

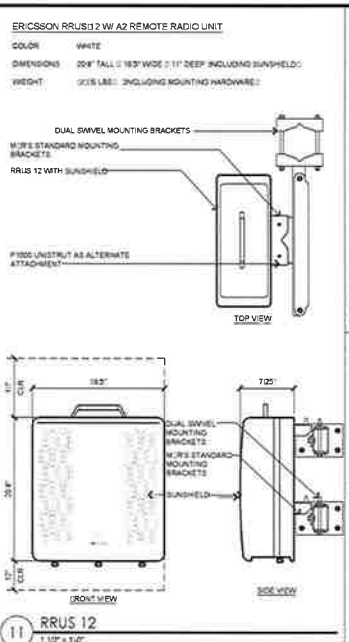
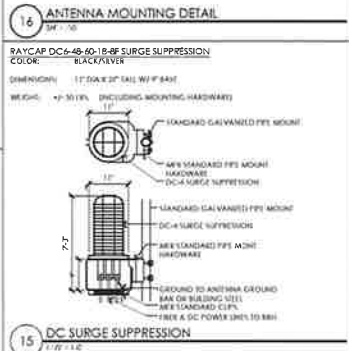
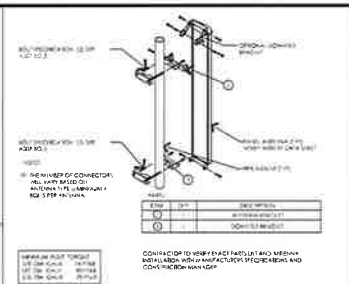
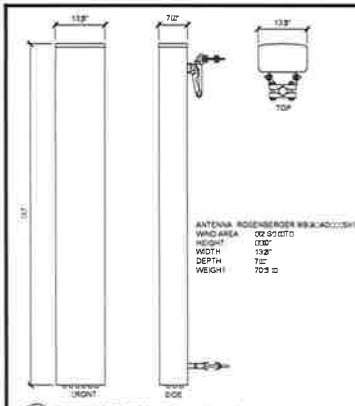
REV	DATE	DESCRIPTION
C	11/29/18	100% CD REV 1
B	08/14/18	100% CD SUBMITTAL
A	03/22/17	100% CD SUBMITTAL

IF IT IS A VIOLATION OF LAW OR ANY  
PROFESSIONAL ENGINEER IS ACTING  
UNDER THE DIRECTION OF A LICENSED  
PROFESSIONAL ENGINEER AFTER  
THIS DOCUMENT

ISSUE DATE  
**11/14/18**  
100% CD REV 1

SHEET TITLE  
**ENLARGED  
EQUIPMENT  
DRAINAGE PLAN**

SHEET NUMBER  
**A-2**

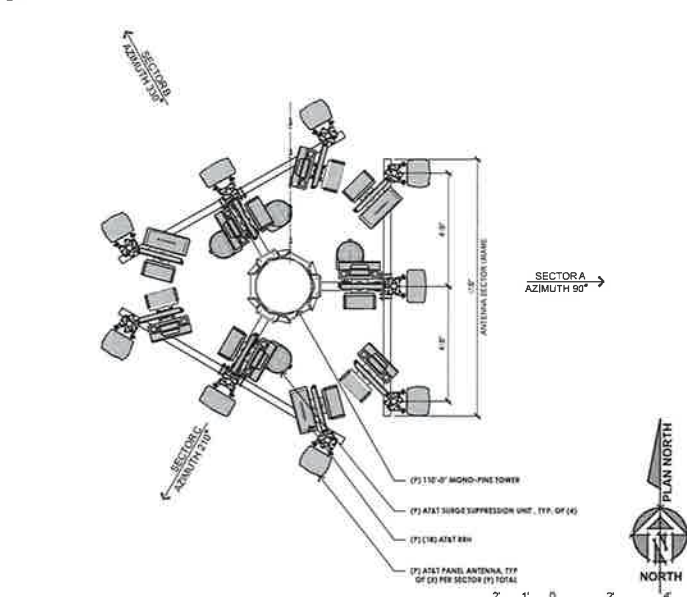
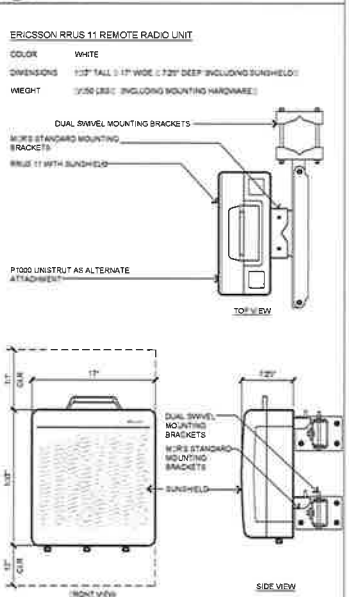
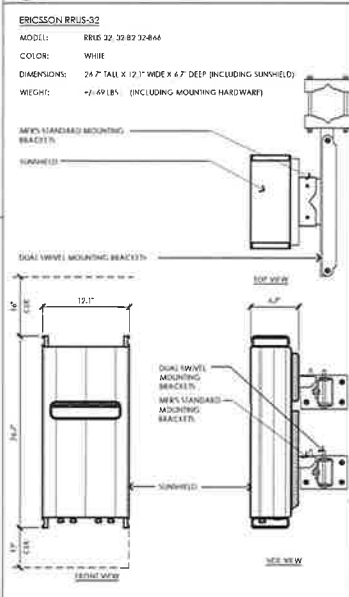
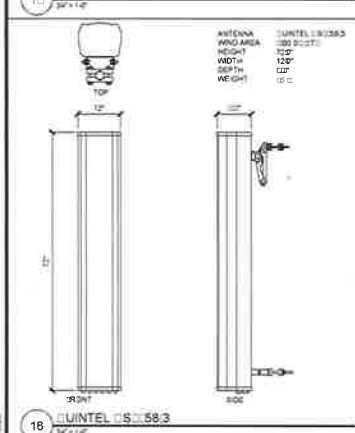


**RF SCHEDULE**

SECTION	ANTENNA MODEL NO.	ADJACENT	ADJ CENTER	RF	FAA	FREE LENGTH	CABLE LENGTH	CABLE DIA.	NO.
A	A1	QUINTEL Q5158.3	72"	8 1/2" O-D	100 MHz	NA	8 1/2" O-D	1/2"	3
A	A2	ROSENBERGER MB A 40 15V D1	72"	8 1/2" O-D	100 MHz	NA	8 1/2" O-D	1/2"	3
A	A3	QUINTEL Q5158.3	72"	8 1/2" O-D	100 MHz	NA	8 1/2" O-D	1/2"	3
B	B1	QUINTEL Q5158.3	30"	8 1/2" O-D	100 MHz	NA	8 1/2" O-D	1/2"	3
B	B2	ROSENBERGER MB A 40 15V D1	30"	8 1/2" O-D	100 MHz	NA	8 1/2" O-D	1/2"	3
B	B3	QUINTEL Q5158.3	30"	8 1/2" O-D	100 MHz	NA	8 1/2" O-D	1/2"	3
C	C1	QUINTEL Q5158.3	30"	8 1/2" O-D	100 MHz	NA	8 1/2" O-D	1/2"	3
C	C2	ROSENBERGER MB A 40 15V D1	30"	8 1/2" O-D	100 MHz	NA	8 1/2" O-D	1/2"	3
C	C3	QUINTEL Q5158.3	30"	8 1/2" O-D	100 MHz	NA	8 1/2" O-D	1/2"	3

**7 DC 12 SURGE SUPPRESSION**  
1 1/2" x 1 1/4"

RAYCAP DC12M12D12SE DBER DC POWER CONNECTION  
COLOR: LIGHT TAN  
DIMENSIONS: 3 1/2" WIDE X 2 1/2" TALL X 8 1/2" DEEP  
WEIGHT: +/- 35 LBS (INCLUDING MOUNTING HARDWARE)



AT&T STUDIO  
**CVL02122**  
COLEMAN C/WLD  
LIFE LANE

VENDOR  
**EPIC**  
WIRELESS GROUP LLC  
Serving a Wireless World

PREPARED FOR  
**at&t**  
5001 EUBANK ROAD, SUITE 100, DUBLIN, GA 30135

PROJECT NO. **CVL02122**  
PROJECT NO. **TQ85022**  
DRAWN BY **JES/D**  
CHECKED BY **MJD/D**

AT&T SITE NO. **CVL02122**  
PROJECT NO. **TQ85022**  
DRAWN BY **JES/D**  
CHECKED BY **MJD/D**

REVISIONS

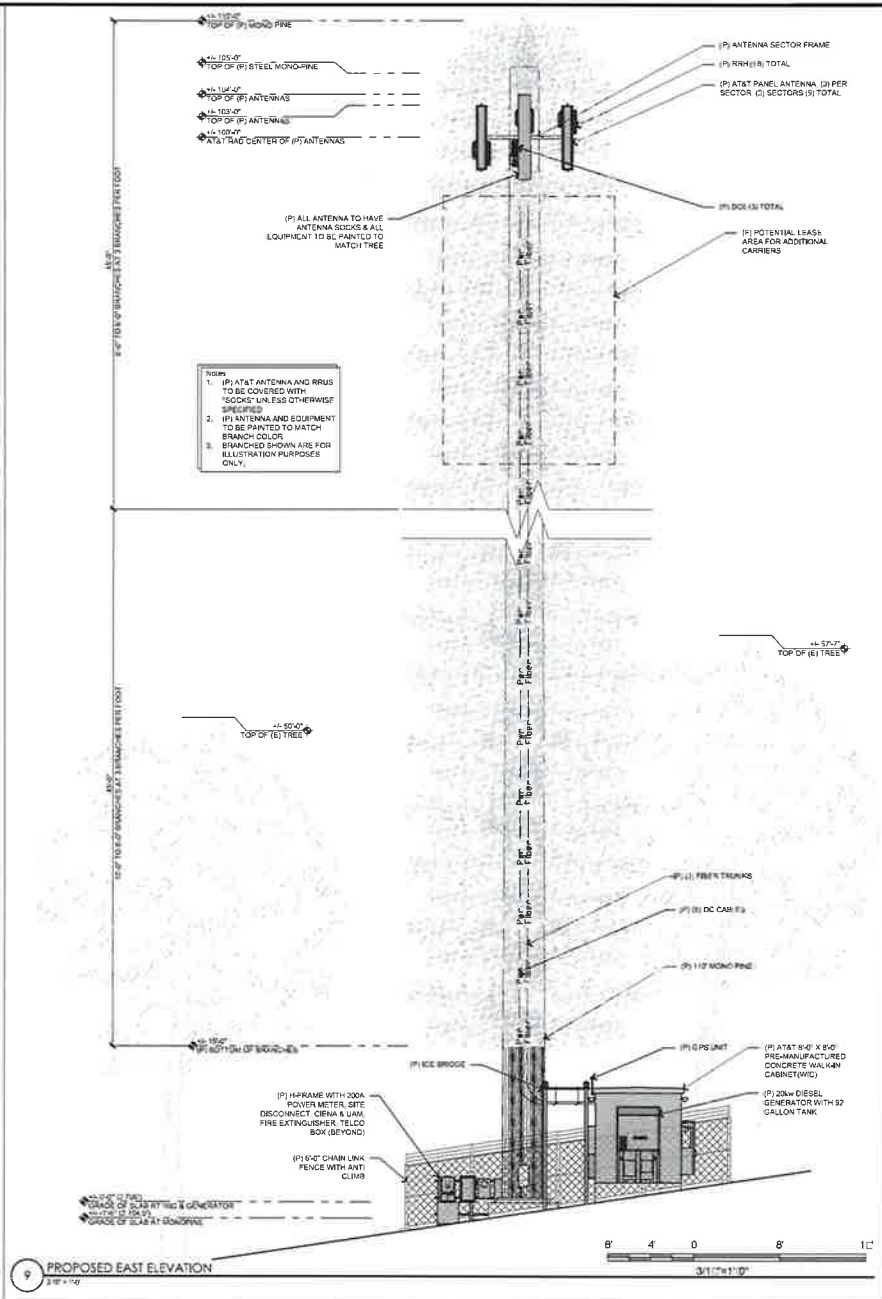
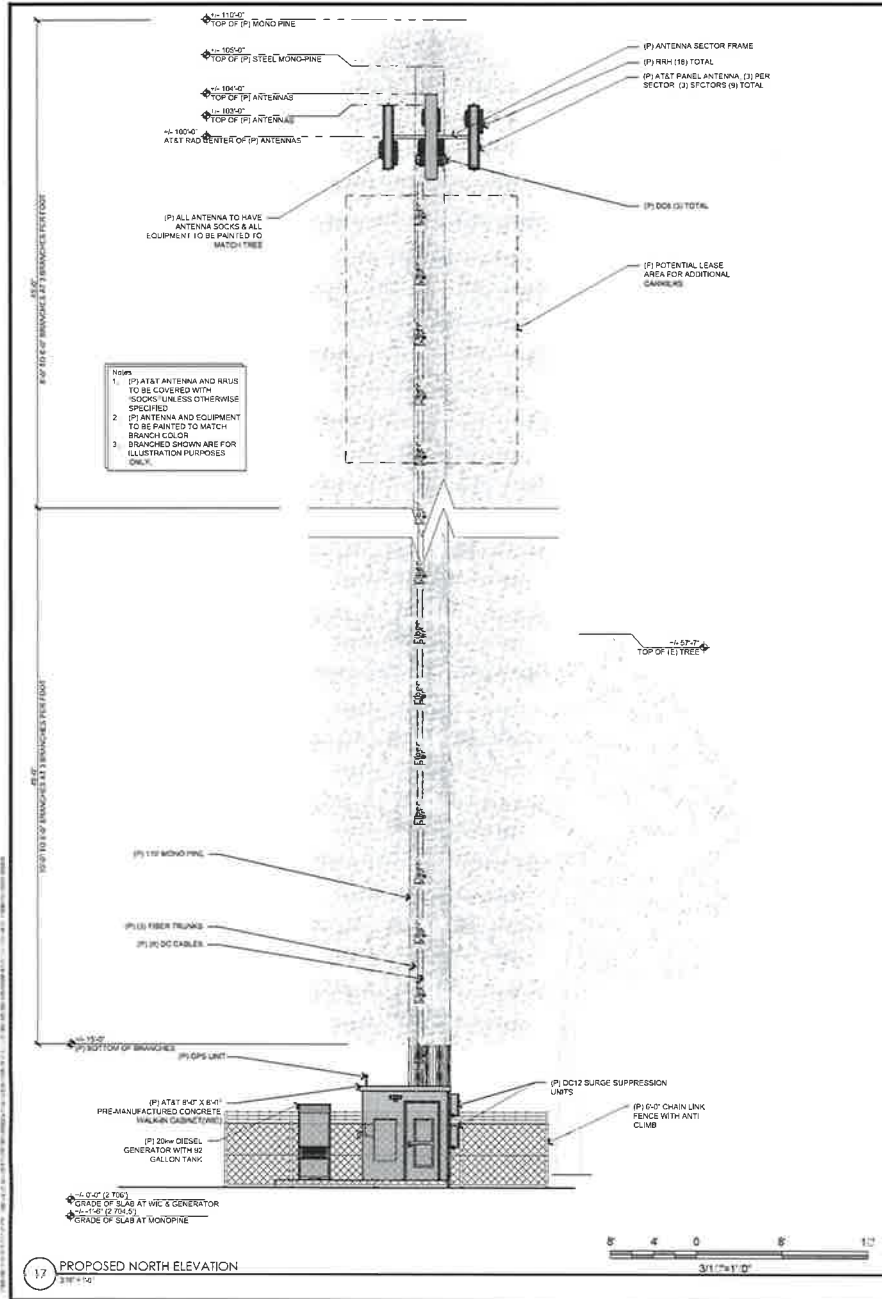
REV	DATE	DESCRIPTION
C	11/09/16	100% TO REV 1
B	08/14/18	100% TO SUBMITTAL
A	03/23/17	50% TO SUBMITTAL

IT IS A VIOLATION OF LAW FOR ANY PERSON WHOSE NAME IS LISTED ON THESE PLANS TO REPRODUCE OR TRANSMIT THESE PLANS IN ANY MANNER WITHOUT THE WRITTEN PERMISSION OF AT&T INTELLECTUAL PROPERTY. ANY SUCH VIOLATION WILL BE PROSECUTED TO THE FULL EXTENT OF THE LAW.

11/1/18  
100% CD R01

SHEET TITLE  
**ENLARGED ANTENNA PLANS - DETAILS**

SHEET NUMBER  
**A-3**



AT&T SITE ID: **CVL02122**  
**COLEMAN CWLD**  
**LICE LANE**

VIEW 1

**EPIC**  
 WIRELESS GROUP LLC  
 10000 GARDEN ROAD  
 SUITE 100  
 GARDEN GROVE, CA 92640

PREPARED FOR  
**at&t**

6001 BLOSSOM RD SUITE 200  
 GARDEN GROVE, CA 92643

AT&T SITE ID: **CVL02122**

PROJECT NO: **TJ3850002**

DRAWN BY: **JIE/SO**

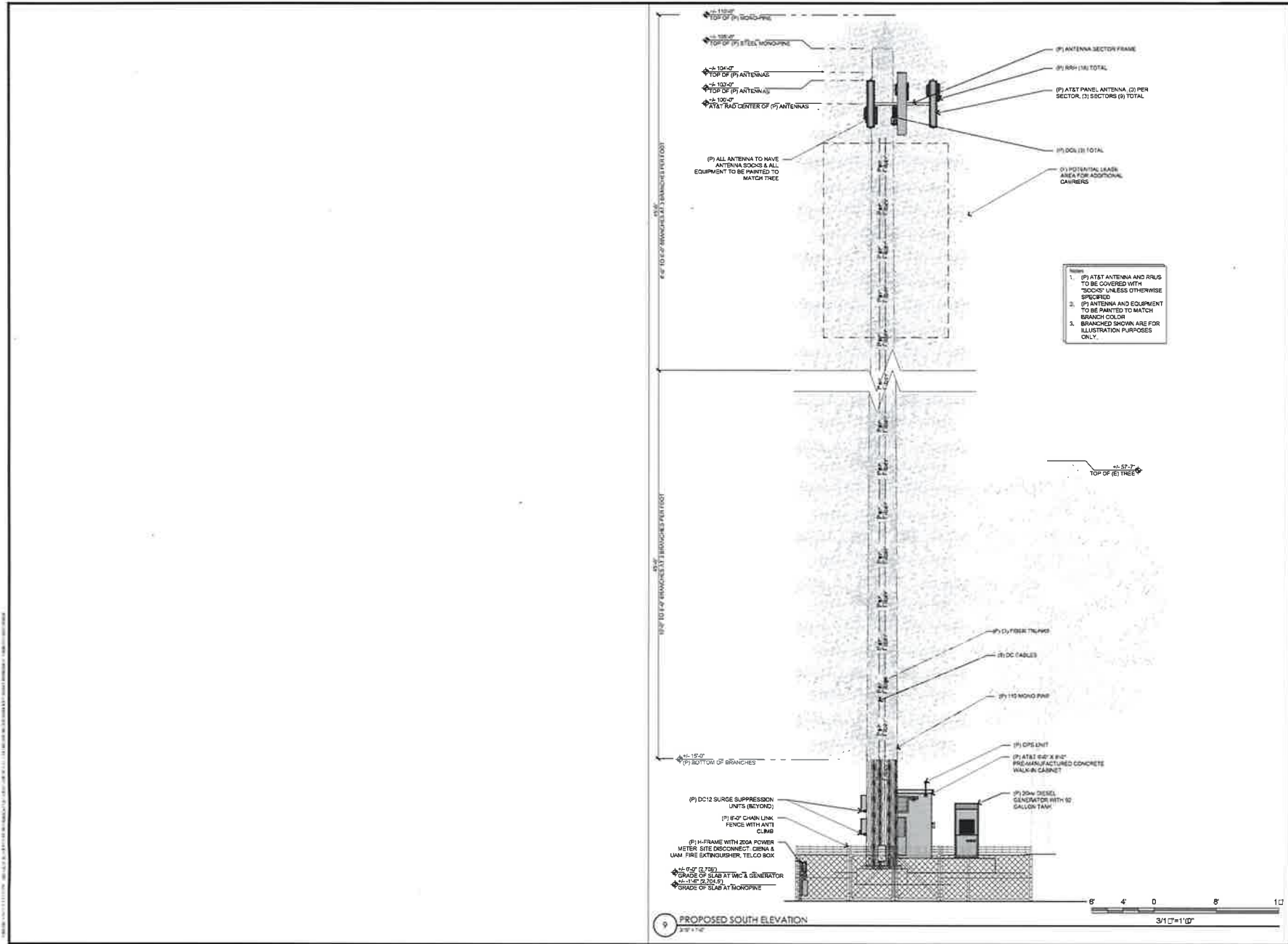
CHECKED BY: **MJD/D**

REV	DATE	DESCRIPTION
C	11/22/16	100% 2D REV 1
B	08/14/16	100% 2D SUBMITTAL
A	03/23/17	90% 2D SUBMITTAL

DATE: 11/11/18  
 100% CD REV 1

SHEET TITLE  
**ELEVATIONS**

SHEET NUMBER  
**A-4.1**



AT&T SMD ID  
**CVL02122**  
 COLEMAN WILD  
 LICE LANE



PROJECT NO. CVL02122  
 PROJECT NO. TR850322  
 DRAWN BY J.E.S.  
 CHECKED BY MIT/D.



C 11/29/18 100% 2D REV 1  
 B 06/14/18 100% 2D SUBMITTAL  
 A 03/23/17 80% 2D SUBMITTAL

REV	DATE	DESCRIPTION

L122377

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11/1/18  
 100% DD R001

SHEET TITLE  
 ELEVATIONS

SHEET NUMBER  
**A-4.2**

SDC20 | 2.5L | 20 kW - AC  
INDUSTRIAL DIESEL GENERATOR SET  
EPA Certified Stationary Emergency

GENERAC INDUSTRIAL  
Model 001709-0 (Stand)

Standard Power Rating  
20 kW AC 60 Hz



Codes and Standards

Generac products are designed to the following standards:

UL2200, UL508, UL142, UL1491

NFPA 77, 70, 99, 110

NECT90, 701, 702, 708

ISO 3048, 7837, 8526, 9001

NEMA ICS12, ICS1, 250, ICS16, AS1

ANSI C82.41

Powering Ahead

For over 50 years, Generac has provided industrial design and superior manufacturing.

Our vast resources ensure quality by engineering and manufacturing most of our portable components, including alternators, enclosures and basic frame, control systems and communications systems.

Our wide product line is a result of skilled engineers, craftsmen and technicians. Working as one team, they create every model of portable power system.

Our vast resources ensure the highest quality portable power for generators. We choose only the best materials from the best suppliers to ensure application-specific system reliability.

Our vast resources ensure our generators provide support wherever you need it. Our products are designed for superior performance.

SDC20 | 2.5L | 20 kW - AC  
INDUSTRIAL DIESEL GENERATOR SET  
EPA Certified Stationary Emergency

GENERAC INDUSTRIAL  
Model 001709-0 (Stand)

STANDARD FEATURES

ENGINE SYSTEM

- 1 x 2.5L Diesel Engine
- 1 x Cooling Fan System
- 1 x 1500 RPM Generator
- 1 x 20 kW AC Output

Fuel System

- 1 x Fuel Tank
- 1 x Fuel Filter
- 1 x Fuel Gauge
- 1 x Fuel Shut-off Valve

Cooling System

- 1 x Cooling Fan System
- 1 x Cooling Fan Controller
- 1 x Cooling Fan Relay
- 1 x Cooling Fan Motor

Electrical System

- 1 x Battery Charge Controller
- 1 x Battery Charger
- 1 x Battery Monitor
- 1 x Battery Disconnect

CONTROL SYSTEM

- 1 x Diesel Engine Controller
- 1 x Diesel Engine Monitor
- 1 x Diesel Engine Relay
- 1 x Diesel Engine Motor
- 1 x Diesel Engine Switch

ALTERNATOR SYSTEM

- 1 x AC Output
- 1 x AC Voltage
- 1 x AC Frequency
- 1 x AC Amperage

FUEL TANK

- 1 x Fuel Tank
- 1 x Fuel Filter
- 1 x Fuel Gauge
- 1 x Fuel Shut-off Valve

GENERATOR SET

- 1 x Generator
- 1 x Voltage Regulator
- 1 x Voltage Controller
- 1 x Voltage Monitor

CONTROL SYSTEM

- 1 x Diesel Engine Controller
- 1 x Diesel Engine Monitor
- 1 x Diesel Engine Relay
- 1 x Diesel Engine Motor
- 1 x Diesel Engine Switch

ENCLOSURE

- 1 x Enclosure
- 1 x Door
- 1 x Lock
- 1 x Key

FUEL TANK

- 1 x Fuel Tank
- 1 x Fuel Filter
- 1 x Fuel Gauge
- 1 x Fuel Shut-off Valve

GENERATOR SET

- 1 x Generator
- 1 x Voltage Regulator
- 1 x Voltage Controller
- 1 x Voltage Monitor

CONTROL SYSTEM

- 1 x Diesel Engine Controller
- 1 x Diesel Engine Monitor
- 1 x Diesel Engine Relay
- 1 x Diesel Engine Motor
- 1 x Diesel Engine Switch

SDC20 | 2.5L | 20 kW - AC  
INDUSTRIAL DIESEL GENERATOR SET  
EPA Certified Stationary Emergency

GENERAC INDUSTRIAL  
Model 001709-0 (Stand)

APPLICATION AND CONSTRUCTION DATA

ENGINE SPECIFICATIONS

Model	2.5L
Displacement (Liters)	2.5
Power (kW)	20
Speed (RPM)	1500
Rated Voltage (V)	120
Rated Frequency (Hz)	60
Rated Amperage (A)	100
Rated Efficiency (%)	85
Rated Power Factor (PF)	1.0
Rated Service Factor	1.0

ALTERNATOR SPECIFICATIONS

Rated Voltage (V)	120
Rated Frequency (Hz)	60
Rated Amperage (A)	100
Rated Power (kW)	20
Rated Efficiency (%)	85
Rated Power Factor (PF)	1.0
Rated Service Factor	1.0

RATING DEFINITIONS

The rating is based on the following conditions: ambient temperature 40°C, altitude 3000m, 50% duty cycle.

ATOT SITE NO  
CVL02122  
COLEMAN CUILD  
LIVE LANE

WIRELESS GROUP LLC  
100 COLLEGE BLDG. 100  
COLEDGE, IA 52002

PREPARED FOR  
at&t  
5000 RIVERVIEW DRIVE  
SUITE 1000 DES MOINES IA 50319

Borges  
4475 STATE ROUTE 90  
P.O. BOX 100  
DES MOINES IA 50319

ATOT SITE NO CVL02122  
PROJECT NO T2650002  
DRAWN BY JES:SO  
CHECKED BY MIT:DD

REV	DATE	DESCRIPTION
A	11/23/18	100% ZD REV 1
B	08/14/18	100% ZD SUBMITTAL
C	03/23/17	80% ZD SUBMITTAL

IT IS A VIOLATION OF LAW FOR ANY PERSON UNLESS THEY ARE LISTED UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR ARCHITECT TO REPRODUCE THESE DOCUMENTS.

11/11/18  
100% ZD REV 1  
SHEET TITLE  
EMERGENCY  
BACKUP  
GENERATOR SPECS

SHEET NUMBER  
A-5.1

SDC20 | 2.5L | 20 kW - AC  
INDUSTRIAL DIESEL GENERATOR SET  
EPA Certified Stationary Emergency

GENERAC INDUSTRIAL  
Model 001709-0 (Stand)

OPERATING DATA

POWER OUTPUT	Single Phase (V/30°C) at 1500 RPM	THP	Amps @120V
100%	208V	17.0	100

FUEL CONSUMPTION RATES*	Rated (g/hr)	Standby (g/hr)
100%	1742 (0.48)	111 (0.31)
75%	1308 (0.36)	80 (0.22)
50%	874 (0.24)	53 (0.15)
25%	440 (0.12)	27 (0.08)

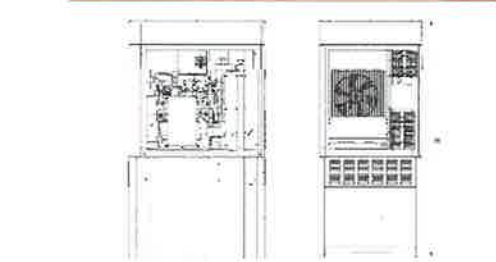
COOLING	Rated (gpm)	Standby (gpm)
100%	11 (0.3)	6 (0.2)
75%	8 (0.2)	4 (0.1)
50%	5 (0.1)	2 (0.1)
25%	3 (0.05)	1 (0.03)

COMBUSTION AIR REQUIREMENTS	Rated (CFM)	Standby (CFM)
100%	110	65
75%	75	45
50%	50	30
25%	25	15

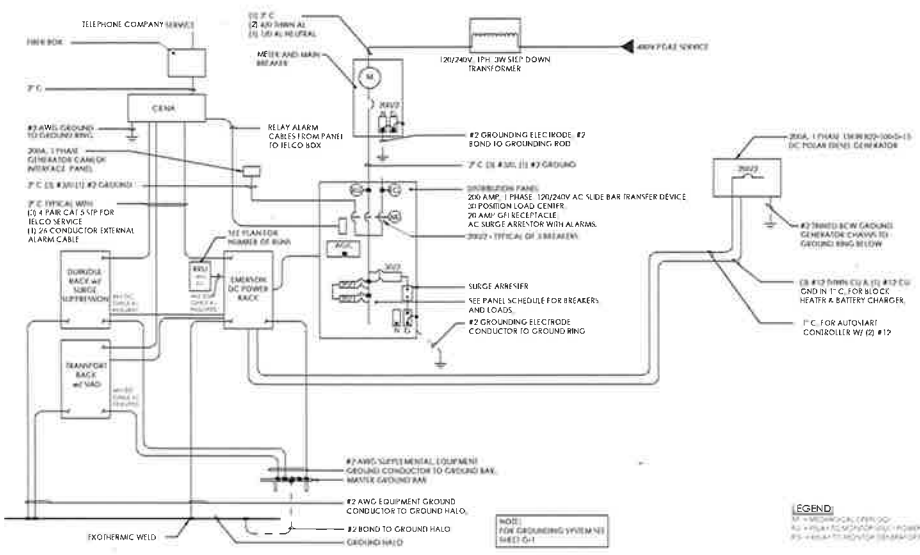
SDC20 | 2.5L | 20 kW - AC  
INDUSTRIAL DIESEL GENERATOR SET  
EPA Certified Stationary Emergency

GENERAC INDUSTRIAL  
Model 001709-0 (Stand)

DIMENSIONS AND WEIGHTS







15 SINGLE LINE DIAGRAM

- NOTES**
- ALL WIRE TO BE #12 UNIFORM UNLESS NOTED OTHERWISE.  
COLOR CODE:  
+ AM + BLACK  
+ BM + BLUE  
+ NU + NEUTRAL WHITE  
+ GR + GROUND GREEN
  - ALL WORK TO CONFORM TO N.E.C. LATEST STATE ADOPTED EDITION.
  - LEADS SERVICE CONDUCTORS WITH A REEF END.
  - WIRING (E.G. CONDUCTORS) SHALL BE THE SAME COLOR AS CIRCUIT CONDUCTOR.
  - PULL WIRES TO END OF FLEXIBLE NONMETALLIC CONDUIT, CODE 30 AT END OF FLEXIBLE NONMETALLIC CONDUIT A.M.G.
  - PULL ONE STRAND OF CONDUCTOR PER FLEXIBLE NONMETALLIC CONDUIT FOR ALL OTHER CIRCUITS PER APPROPRIATE CONDUCTOR.
  - ALL GFCI RECEPTACLES TO HAVE A DEDICATED GROUND WIRE.
  - EQUIPMENT TERMINATION LUGS AND CONDUCTORS ARE RATED AT A MINIMUM OF 75°C.

- LEGEND**
- PROTECTIVE
  - MOTION DETECTOR
  - NON-DISCONNECTED GROUND
  - DEDICATED GROUND
  - ISOLATED GROUND

13 SHELTER A/C PANEL SCHEDULE

DESCRIPTION	QTY	UNIT	LOAD PER PHASE (VA)		WIRE COLOR	WIRE SIZE	WIRE TYPE	EXTERMINATING WIRE	RIP	LOADS ON PANEL	WIRE COLOR	WIRE SIZE	LOADS PER PHASE (VA)	UNIT	DESCRIPTION
			A	B											
WEP 1 A WEP 3-FCU #1	1	1000	1000	0	BLK	#12	30	12	12	BLK	#12	1000	1	WEP 3-FCU #1	2
WEP 1 A WEP 3-FCU #2	1	1000	1000	0	BLK	#12	30	12	12	BLK	#12	1000	1	WEP 3-FCU #2	4
WEP 1 A WEP 3-FCU #3	1	1000	1000	0	BLK	#12	30	12	12	BLK	#12	1000	1	WEP 3-FCU #3	8
WEP 3 A WEP 4-FCU #1	1	1000	1000	0	BLK	#12	30	12	12	BLK	#12	1000	1	WEP 4-FCU #1	10
SPACE														SPACE	12
SPACE														SPACE	14
SPACE														SPACE	16
SPACE														SPACE	18
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